EAU

PROJECT ID: **8630-03-82**

WITH: 8630-05-82, 8630-05-83

COUNTY: **ST CROIX & DUNN**

DECEMBER 2020

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (Includes Erosion Control Plans)
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 480

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

GLENWOOD CITY - COLFAX

STH 128 TO STH 79

STH 170

ST CROIX & DUNN COUNTIES

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8630-03-82	WISC 2021049	1

STATE PROJECT NUMBER
8630-03-82

DESIGN DESIGNATION 8630-03-82

A.A.D.T.	2015	=	VARIES 1,300 - 3,500
A.A.D.T.	2041	=	VARIES 1,900 - 4,200
D.H.V.		=	VARIES 215 - 475
D.D.		=	60/40
T.		=	VARIES 6.9% - 7.2%
DESIGN SPEED		=	VARIES 25 - 55 MPH
ESALS		=	700,000

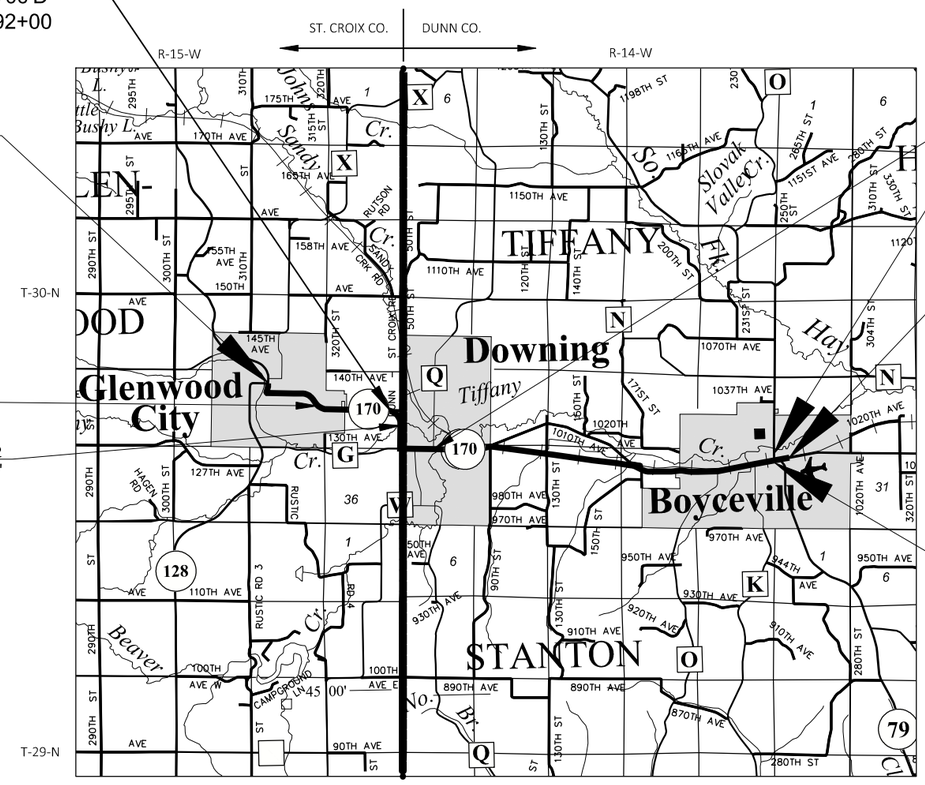
EQUATION

STATION EQUATION
AHEAD: 2092+00'D'
BACK: 192+00

BEGIN PROJECT 8630-03-82
STA 99+49.39
Y=373,213.75
X=662,159.44

NET EXCEPTION TO CL LENGTH
B-55-205, STA 148+58 - STA 148+98

STRUCTURE B-17-132
STA 2110+36'D'



NET EXCEPTION TO CL LENGTH
B-17-17, STA 2152+70'D' - STA 2154+08'D'

END CONSTRUCTION
STA 502+55.50'S'

END PROJECT
STA 2398+00.00'D'

BEGIN CONSTRUCTION
STA 500+67.41'S'
Y=231,796.93
X=133,454.56

LAYOUT
SCALE 0 2 MILES

TOTAL NET LENGTH OF CENTERLINE = 7.514 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), ST CROIX & DUNN COUNTIES, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'FB')
- 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
- GRADE ELEVATION (LABEL 95.36)
- CULVERT (Profile View)

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

ACCEPTED FOR
CITY OF GLENWOOD CITY
Date 07-13-2020 (Signature and Title of Official)

ACCEPTED FOR
VILLAGE OF DOWNING
Date 7/9/2020 Gregery J Holden (Signature and Title of Official)

ACCEPTED FOR
VILLAGE OF BOYCEVILLE
Date 7/14/20 (Signature and Title of Official)

ORIGINAL PLANS PREPARED BY
KL Engineering
[A] Better Experience

WISCONSIN
JEFFREY D. SMITH
E-36291
VERONA, WI
PROFESSIONAL ENGINEER

DATE: 7/28/20 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NW REGION/KL ENGINEERING
Designer	KL ENGINEERING
Project Manager	TYLER RONGSTAD
Regional Examiner	TOU YANG
Regional Supervisor	JAMES KOENIG

APPROVED FOR THE DEPARTMENT
DATE: 7/20/20 Tyler Rongstad (Signature)

E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\010101-TI (IN 2018).DWG PLOT DATE : 7/5/2020 1:16 PM PLOT BY : KL ENGINEERING PLOT NAME :

ABBREVIATIONS

A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC
B.A.D.	BASE AGGREGATE DENSE
C.E.	COMMERCIAL ENTRANCE
C/L	CENTERLINE
C.P.S.	CULVERT PIPE STEEL
C.S.C.P.	CORRUGATED STEEL CULVERT PIPE
CY	CUBIC YARD
D.D.	DAILY DIRECTIONAL SPLIT (TRAFFIC VOLUME)
D.H.V.	DAILY HOURLY TRAFFIC
E.A.T.	ENERGY ABSORBING TERMINAL
EL.	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
FE	FIELD ENTRANCE
FO	FIBER OPTIC
INV.	INVERT
LB	POUND
LF	LINEAR FEET
LT.	LEFT
MAX.	MAXIMUM
MGS	MIDWEST GUARDRAIL SYSTEM
MIN.	MINIMUM
NOR.	NORMAL
NPZ	NO PASSING ZONE
OH	OVERHEAD
P.E.	PRIVATE ENTRANCE
P.I.	POINT OF INTERSECTION
R	RADIUS
REQ'D	REQUIRED
R/L	REFERENCE LINE
RT.	RIGHT
RW	RIGHT OF WAY
S.D.D.	STANDARD DETAIL DRAWING
SE	SUPERELEVATION
STA.	STATION
SF	SQUARE FOOT
STH	STATE HIGHWAY
SY	SQUARE YARD
T.	PERCENT OF TRUCK TRAFFIC
TYP.	TYPICAL
VAR.	VARIES

UTILITIES

COMMUNICATIONS

CELECT COMMUNICATIONS LLC
JEFF DEMARCE
5131 MCKAY AVE.
SPRING VALLEY, WI 54767
(715) 495-2931
celecttower@celectcom.net

CENTURYLINK
KYLE SCHLAMPP
20 S. WILSON AVE.
RICE LAKE, WI 54868
(715) 234-5573
kyle.schlampp@centurylink.com

CLEAR LAKE TELEPHONE COMPANY LLC
BRETT ANDERSON
316 3RD AVE.
CLEAR LAKE, WI 54005
(715) 263-2755
brett.anderson@cltcomm.net

ELECTRICITY - TRANSMISSION

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

XCEL ENERGY
TRAVIS WERLEIN
320 HELLER RD
MENOMONIE, WI 54751
(715) 232-7415
travis.a.werlein@xcelenergy.com

GAS/PETROLEUM

WE ENERGIES
STEVEN CHAVERS
104 W. SOUTH STREET
RICE LAKE, WISCONSIN 54868
(715) 234-9605 (OFFICE)
(715) 213-4327 (MOBILE)
steven.chavers@we-energies.com

WE ENERGIES
24-HOUR EMERGENCY (GAS)
(800) 261-5325

WATER & SEWER

BOYCEVILLE WASTEWATER TREATMENT FACILITY
BOYCEVILLE WATER DEPARTMENT
DON ROSE, PUBLIC WORKS DIRECTOR
1233 CHARLOTTE ST
BOYCEVILLE, WI 54725
(715) 643-2678 SHOP
(715) 702-2593 CELL
waterworks54725@yahoo.com

VILLAGE OF DOWNING
GREG HOLDEN, VILLAGE PRESIDENT
5131 MCKAY AVE
SPRING VALLEY, WI 54767
(715) 465-2931
gjholden@celectcom.net

GLENWOOD & EMERALD SANITARY DISTRICT #1
GLENWOOD CITY MUNICIPAL WATER UTILITY
DAVID CARESS, PUBLIC WORKS DIRECTOR
217 W PINE ST.
GLENWOOD CITY, WI 54013
(715) 265-4928
cityshop@glenwoodcitywi.com

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

GENERAL NOTES

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

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

UTILITY REFERENCE LINES ON THE CROSS SECTIONS ARE FOR APPROXIMATE HORIZONTAL REFERENCE ONLY.

REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALT SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE ENGINEER.

EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. THE ENGINEER MAY MODIFY LOCATIONS AS NEEDED. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

DISTURBED AREAS WITHIN THE RIGHT OF WAY SHALL BE RESTORED AS DIRECTED BY THE ENGINEER.

EXCAVATION BELOW SUBGRADE (EBS) LOCATIONS WILL BE DETERMINED BY THE ENGINEER.

RADIUS DIMENSIONS FOR CURB AND GUTTER ARE TO THE FLANGE LINE UNLESS OTHERWISE NOTED.

CONTRACTOR IS RESPONSIBLE FOR RESHAPING AND FINISHING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY THEIR OPERATION OUTSIDE THE PLAN CONSTRUCTION LIMITS.

THE EXACT LOCATION OF DRIVEWAYS IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER. ALL DRIVEWAYS ARE TO BE REPLACED IN KIND.

ALL GRADES PROVIDED ALONG RADII ARE ALONG THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

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

THE CONTRACTOR SHALL MILL AND PAVE TO THE POINT OF TANGENCY ALONG THE CURB ON SIDE ROADS UNLESS OTHERWISE NOTED.

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

HMA PAVEMENT WHEN INDICATED ON THE PLANS, SHALL CONSIST OF COURSES AS FOLLOWS UNLESS OTHERWISE NOTED ON THE PLANS.

LOCATION	TOTAL DEPTH	LAYERS	GRADATION	TRAFFIC	BINDER	DESIGNATION
STH 170 (URBAN)	3 1/4-INCH	1 3/4-INCH (UPPER LAYER)	4	MT	58-34	V
		1 1/2-INCH (LOWER LAYER)	5	MT	58-34	V
STH 170 (PARKING)	1 3/4-INCH	1 3/4-INCH (UPPER LAYER)	4	MT	58-34	V
STH 170 (RURAL)	3 1/4-INCH	1 3/4-INCH (UPPER LAYER)	4	MT	58-34	V
		1 1/2-INCH (LOWER LAYER)	5	MT	58-34	V
STH 170 (STA. 131+24 - STA. 134+28)	5 1/4-INCH	2 1/4-INCH (UPPER LAYER)	4	MT	58-34	V
		3-INCH (LOWER LAYER)	4	MT	58-34	V
STH 170/STH 79 (INTERSECTION)	5 1/4-INCH	2 1/4-INCH (UPPER LAYER)	4	MT	58-34	V
		3-INCH (LOWER LAYER)	4	MT	58-34	V

	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	0.70 - 0.95											
CONCRETE	0.80 - 0.95											
BRICK	0.70 - 0.80											
DRIVES, WALKS	0.75 - 0.85											
ROOFS	0.75 - 0.95											
GRAVEL ROADS, SHOULDERS	0.40 - 0.60											

TOTAL PROJECT AREA = 101.6 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 37.2 ACRES

ORDER OF DETAIL SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
CURB RAMP DETAILS
INTERSECTION DETAILS
EROSION CONTROL
PAVEMENT MARKING PLANS
TRAFFIC SIGNAL PLANS
TRAFFIC CONTROL PLANS
DETOUR PLANS
PLAN DETAILS
PLAN & PROFILE DETAILS

DNR LIASON

AMY LESIK
ENVIRONMENTAL ANALYSIS AND REVIEW SPECIALIST
DEPARTMENT OF NATURAL RESOURCES
1300 W. CLAIREMONT AVE.
EAU CLAIRE, WI 54701
715-836-6571
Amy.Lesik@wisconsin.gov

AIRPORT FACILITY

BOYCEVILLE MUNICIPAL AIRPORT
DAR LEE
P.O. BOX 368
BOYCEVILLE, WI 54725
(715) 643-2351

RAILROAD

JACKIE MACEWICZ
WISCONSIN CENTRAL LTD. (CANADIAN NATIONAL)
3192 S. POKEGAMA RD
SUPERIOR, WI 54880
715-345-2503
Jackie.Macewicz@cn.ca

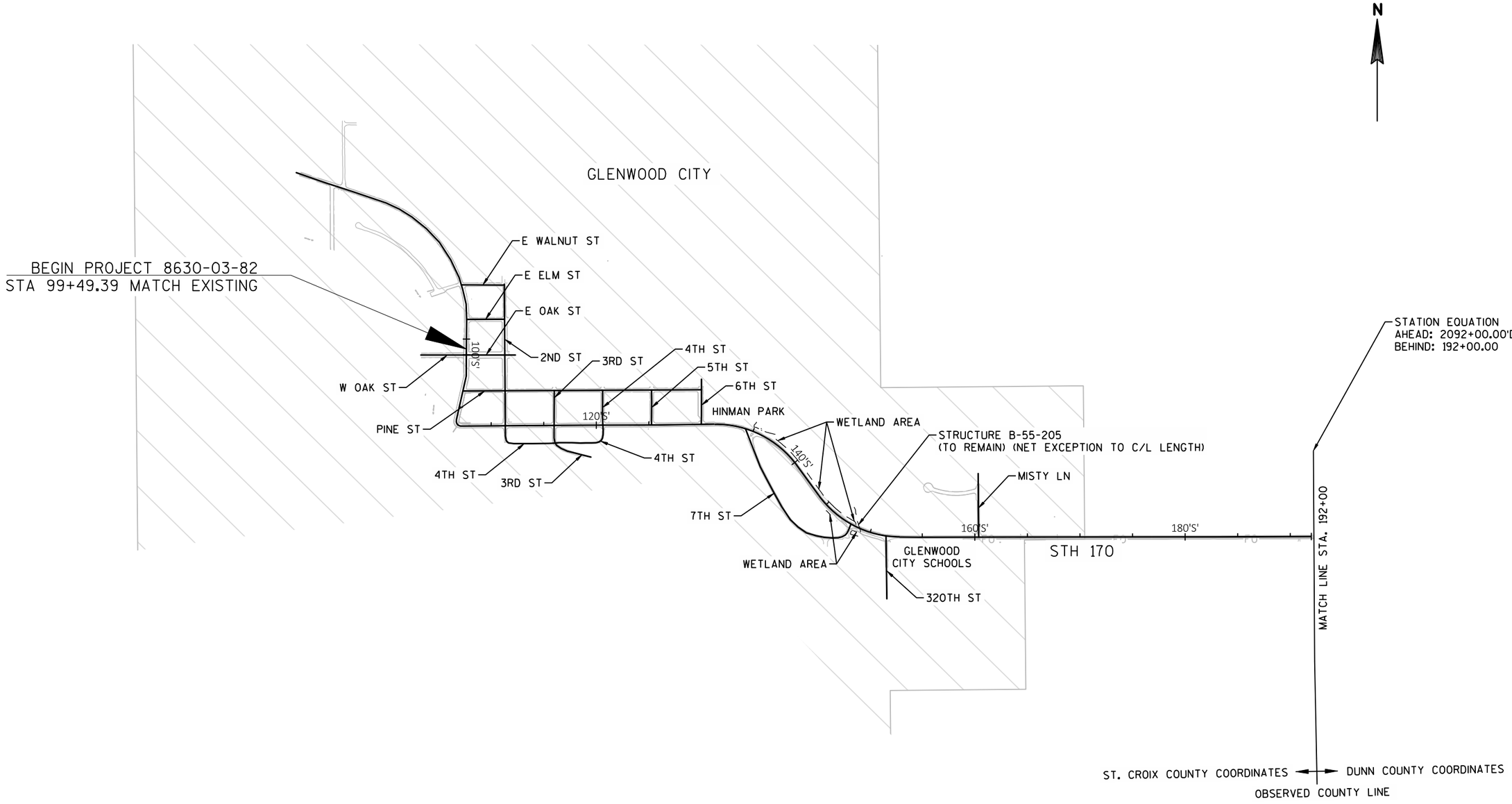
DESIGN CONTACT

JEFF SMITH, P.E.
KL ENGINERRING, INC.
5400 KING JAMES WAY
SUITE 200
MADISON, WI 53719
608-663-1218
jsmith@klengineering.com

WISDOT

TYLER RONGSTAD, P.E.
WISDOT PROJECT MANAGER
WISDOT NW REGION (EAU CLAIRE)
718 W. CLAIREMONT AVE.
EAU CLAIRE, WI 54701
715-461-0372
Tyler.Rongstad@dot.wi.gov

2



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: PROJECT OVERVIEW	SHEET 3	E

2

OBSERVED COUNTY LINE

ST. CROIX COUNTY COORDINATES

DUNN COUNTY COORDINATES

ACTUAL COUNTY LINE

MATCH LINE STA. 2092+00'D'

135TH AVE

WETLAND AREA

50TH ST

WETLAND AREA

STRUCTURE B-17-132
(SEE STRUCTURE PLANS)

VILLAGE OF
DOWNING

DOWNING

WETLAND AREA

STATION EQUATION
AHEAD: 2092+00'D'
BEHIND: 192+00

2120+00'D'

FOREST ST

NELSON ST

WILSON ST

CHESTNUT ST

ASH ST

CONNORSVILLE RD

STRUCTURE B-17-17
(TO REMAIN) (NET EXCEPTION TO C/L LENGTH)

CTH G

2140+00'D'

2160+00'D'

2180+00'D'

1ST ST

SUMMIT ST

TAINTER ST

FOREST ST

WILSON ST

PINE ST

CHESTNUT ST

TAINTER ST

ASH ST

WETLAND AREA

STH 170

ROWLEY RD

1010TH AVE

2200+00'D'

90TH ST

CANADIAN NATIONAL RAILROAD

130TH ST

2220+00'D'

2240+00'D'

WETLAND AREA

WETLAND AREA

MATCH LINE STA. 2255+00'D'

N

MATCH LINE STA. 2255+00'D'

2260+00'D'

2280+00'D'

WETLAND AREA

1010TH AVE

CANADIAN NATIONAL RAILROAD

2300+00'D'

2320+00'D'

DUFFY ST

LYNITA LN

SMITH ST

2340+00'D'

STH 170

180TH ST

VILLAGE OF
BOYCEVILLE

BEGIN RECONSTRUCTION
STA 2388+48'D'

2360+00'D'

2380+00'D'

CENTER ST

WETLAND AREA

MAIN ST

ST JOHN ST

WEST ST

CTH K

1ST ST

RACE ST

WINTER ST

STH 79 NB/EAST ST

END RECONSTRUCTION
STA 502+55.50'S'

END RECONSTRUCTION
STA 2391+50'D'

WETLAND AREA

STH 79 SB/
370TH ST

2400+00'D'

MOBILE AVE

EAST ST

BEGIN RECONSTRUCTION
STA 500+67.41'S'

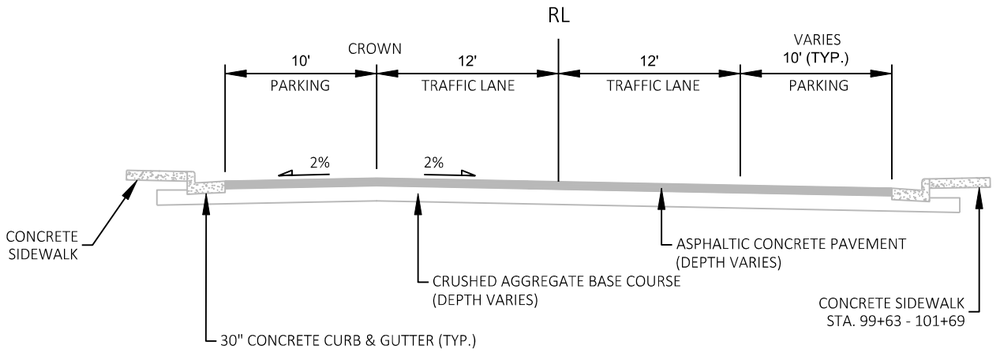
END PROJECT 8630-03-82
STA 2398+00'D' MATCH EXISTING

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: PROJECT OVERVIEW	SHEET 4	E

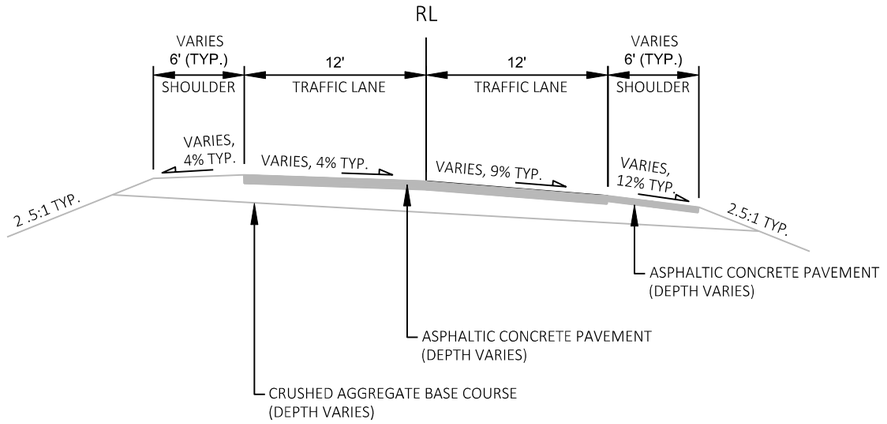
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - DUNN COUNTY

PLOT DATE : 7/5/2020 1:18 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:1000 FT

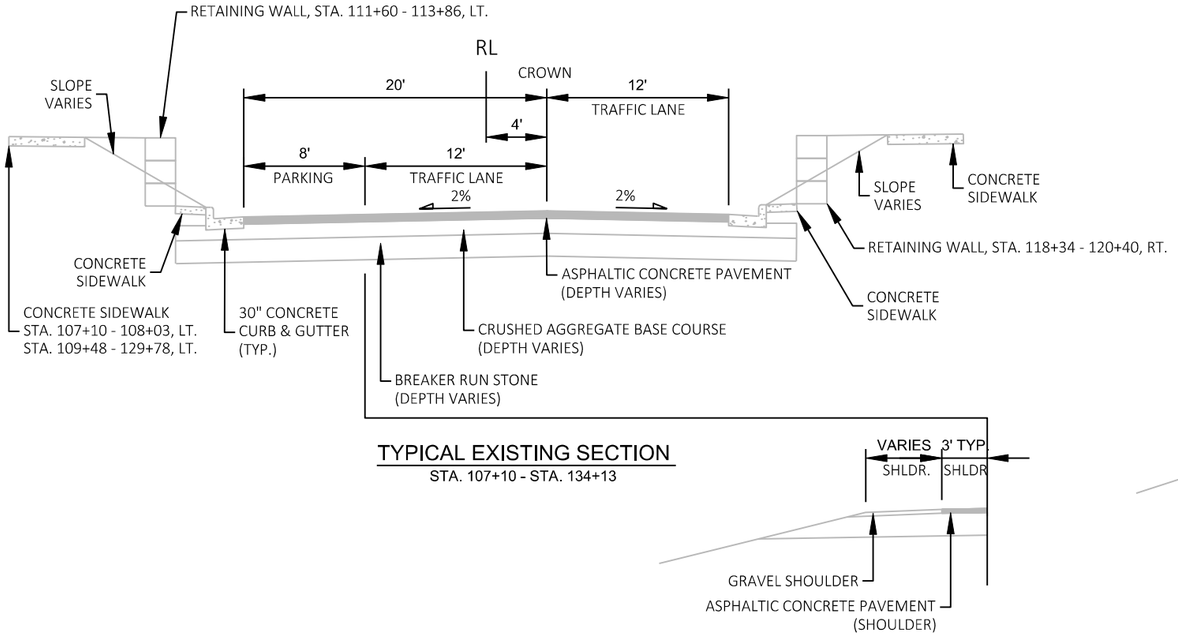
WISDOT/CADDS SHEET 42



TYPICAL EXISTING SECTION
STA. 99+49.39 - STA. 107+10

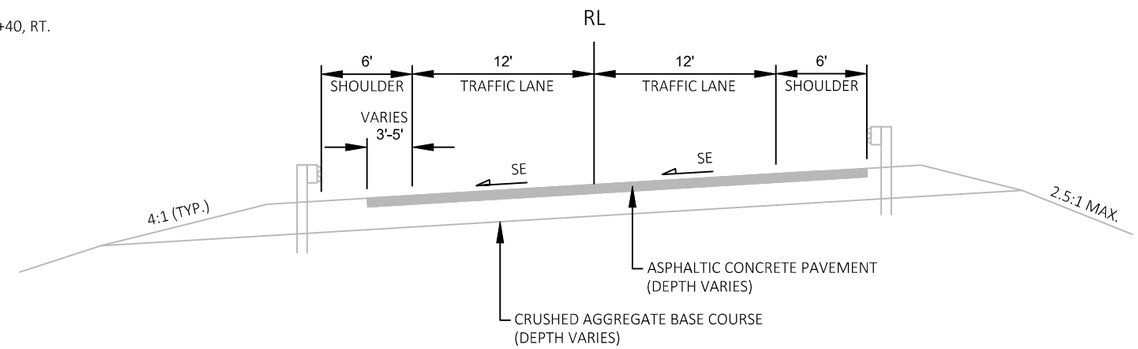


TYPICAL EXISTING SECTION
STA 134+13 - STA. 146+50



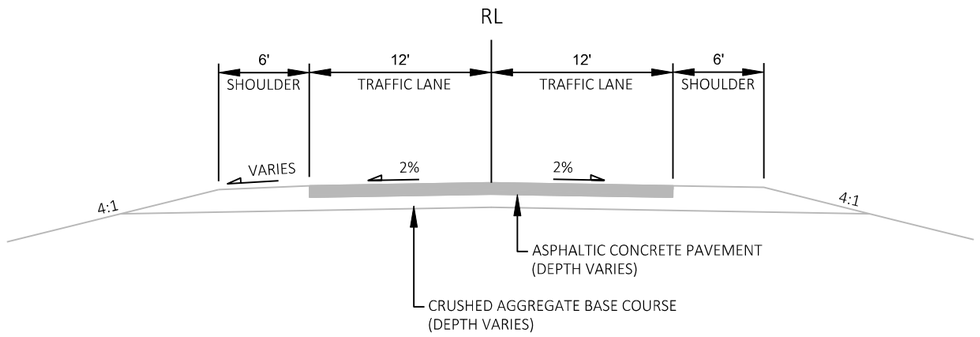
TYPICAL EXISTING SECTION
STA. 107+10 - STA. 134+13

TYPICAL EXISTING SECTION
STA. 131+32 - STA. 134+13

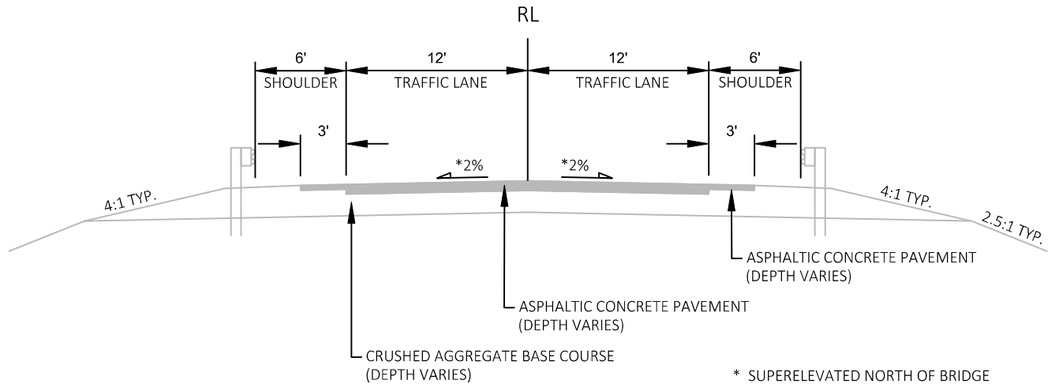


TYPICAL EXISTING SECTION
STA. 146+50 - STA. 151+55

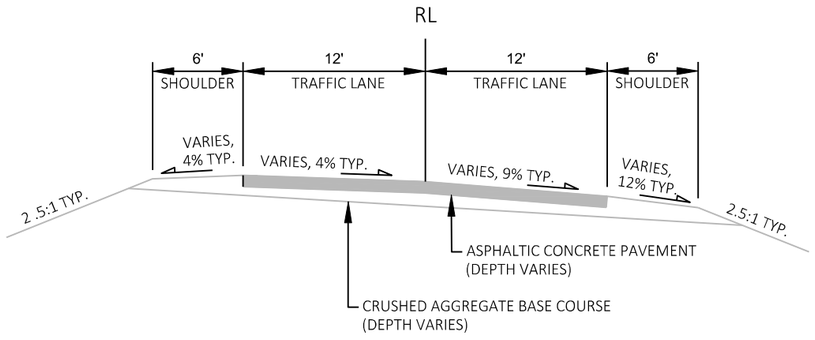
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	EXISTING TYPICAL SECTIONS	SHEET 5	E



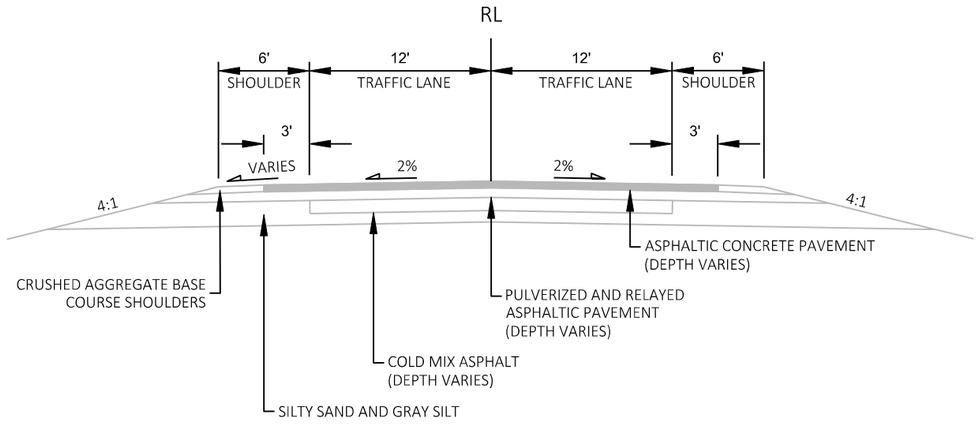
TYPICAL EXISTING SECTION
STA. 151+55 - STA. 192+00



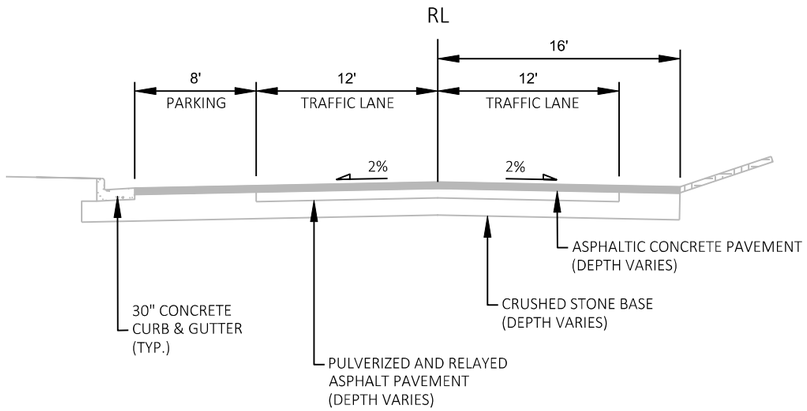
TYPICAL EXISTING SECTION
STA. 2109+00'D' - STA. 2111+80'D'



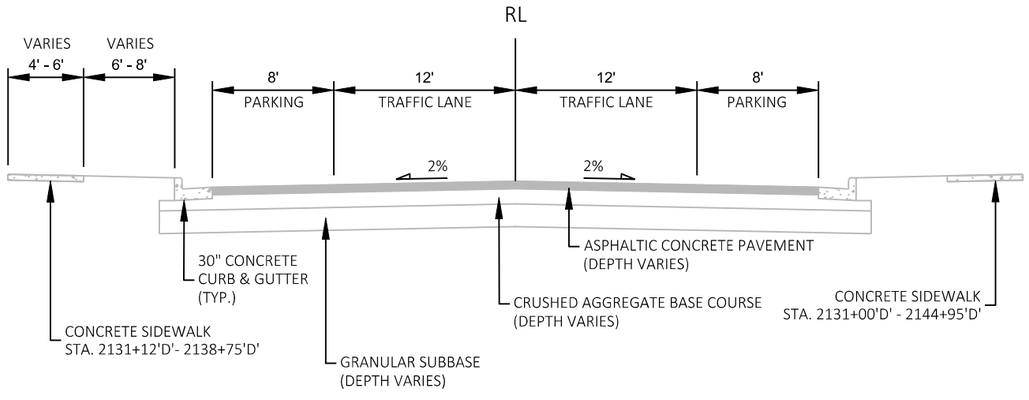
TYPICAL EXISTING SECTION
STA. 2092+00'D' - STA. 2109+00'D'



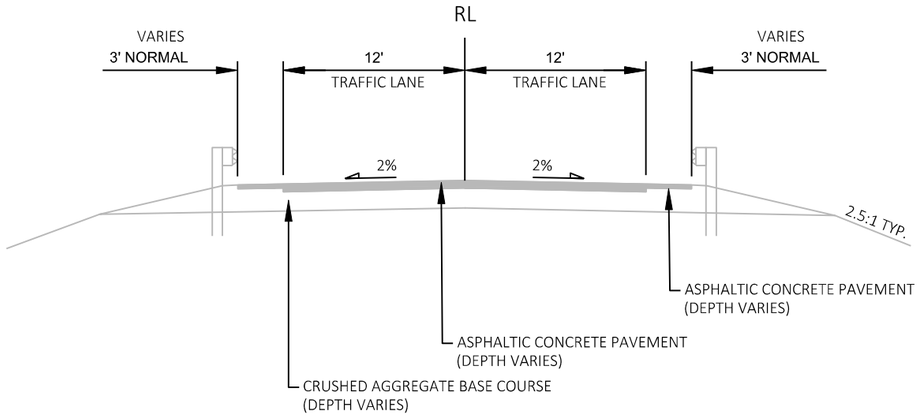
TYPICAL EXISTING SECTION
STA. 2111+80'D' - STA. 2126+50'D'



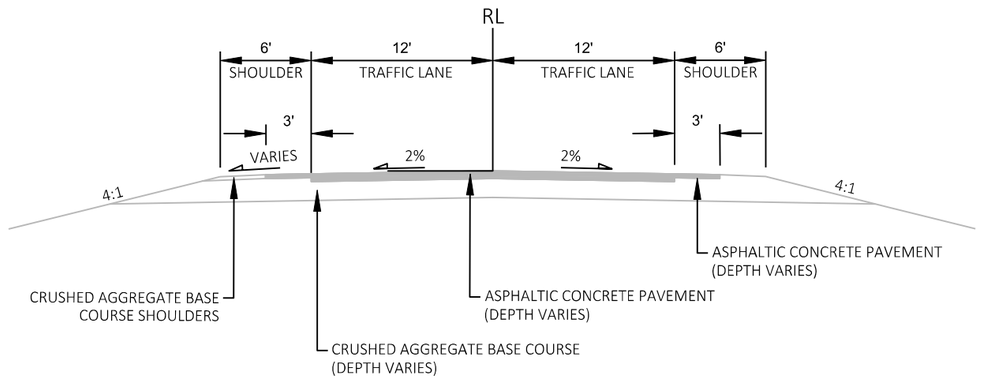
TYPICAL EXISTING SECTION
STA. 2126+50'D' - STA. 2131+00'D'



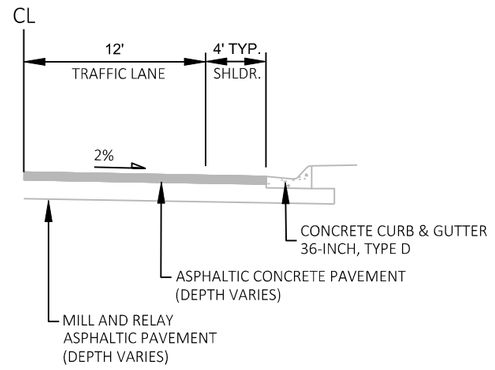
TYPICAL EXISTING SECTION
STA. 2131+00'D' - STA. 250+63'D'



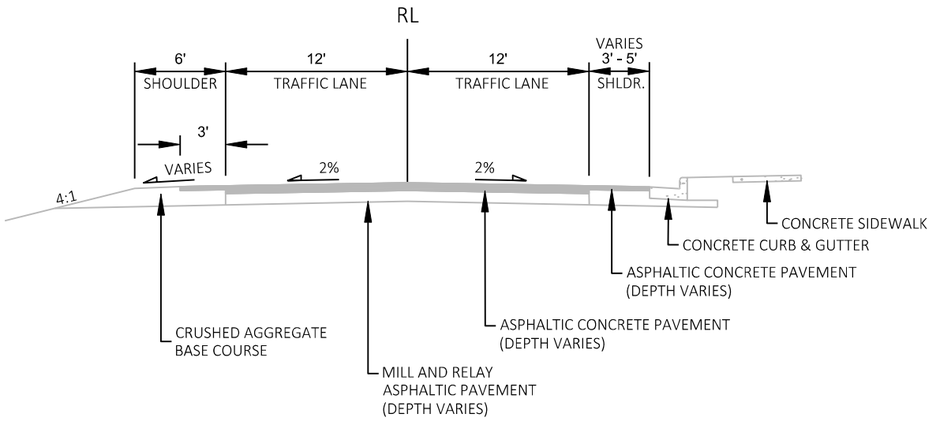
TYPICAL EXISTING SECTION
STA. 2150+63'D' - STA. 2154+91'D'



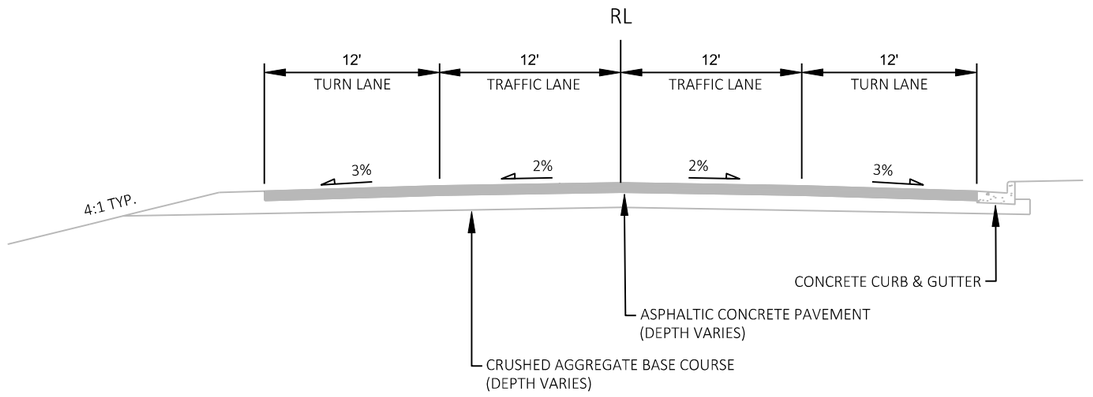
TYPICAL EXISTING SECTION
STA. 2154+91'D' - STA. 2366+73



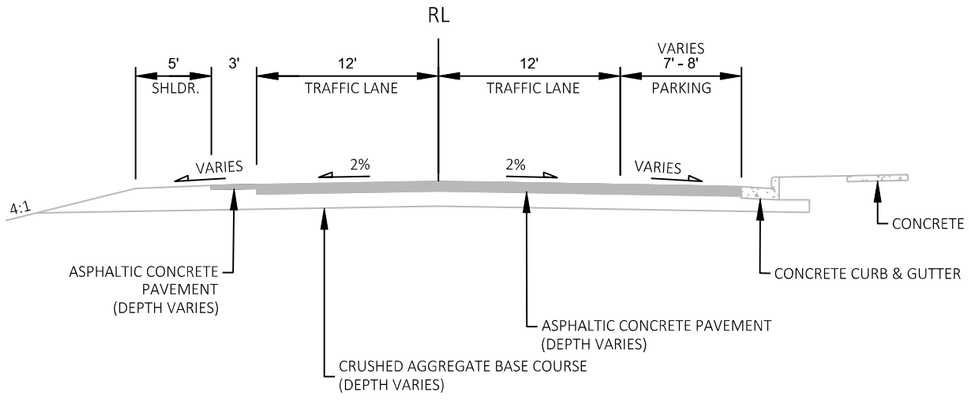
TYPICAL EXISTING HALF SECTION
STA. 2173+60'D' - STA. 2176+83'D', LT.
STA. 2321+77'D' - STA. 2325+83'D', LT.
STA. 2321+77'D' - STA. 2328+44'D', RT.



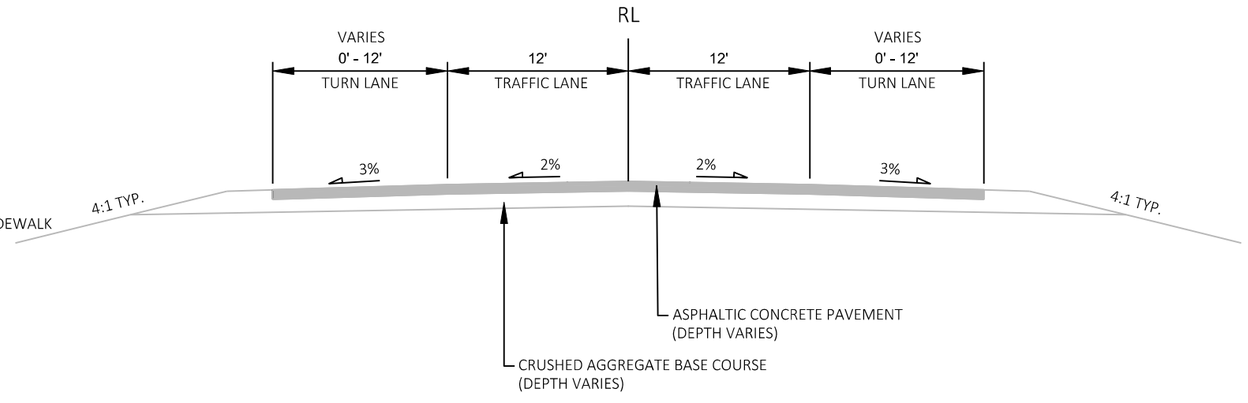
TYPICAL EXISTING SECTION
STA. 2366+75'D' - STA. 2376+50'D'



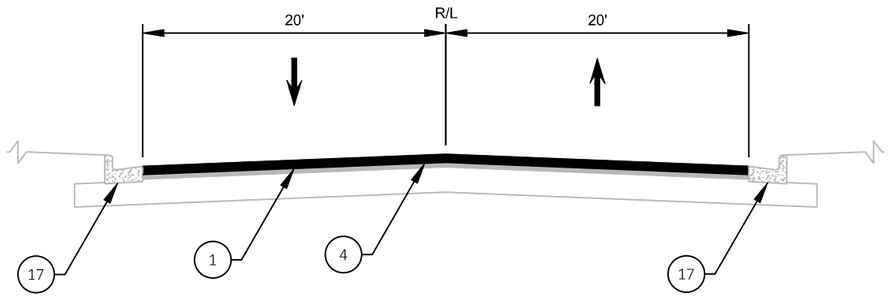
TYPICAL EXISTING SECTION
STA. 2390+50'D' - STA. 2391+32'D'



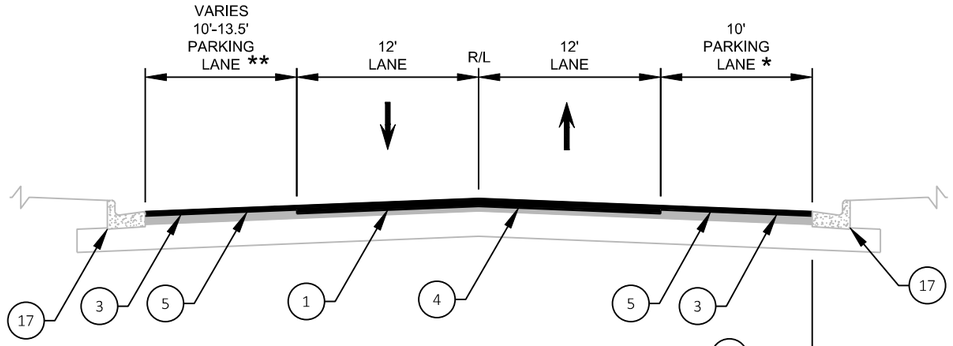
TYPICAL EXISTING SECTION
STA. 2376+50'D' - STA. 2389+50'D'



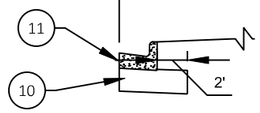
TYPICAL EXISTING SECTION
STA. 2391+32'D' - STA. 2398+00'D'



TYPICAL FINISHED SECTION - STH 170
STA. 99+49.39 - STA. 99+75



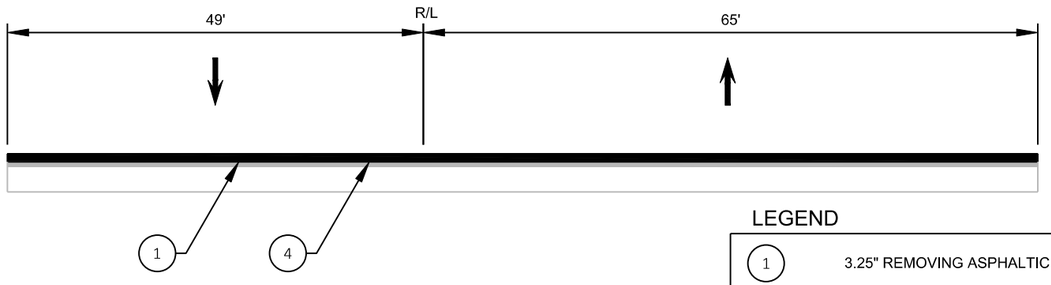
TYPICAL FINISHED SECTION - STH 170
STA. 100+25 - STA. 107+00



PARTIAL FINISHED SECTION
STA. 101+69 - STA. 103+27

* PARKING LANE STA. 100+25 - STA. 105+75, RT

** PARKING LANE STA. 100+25 - STA. 106+00, LT

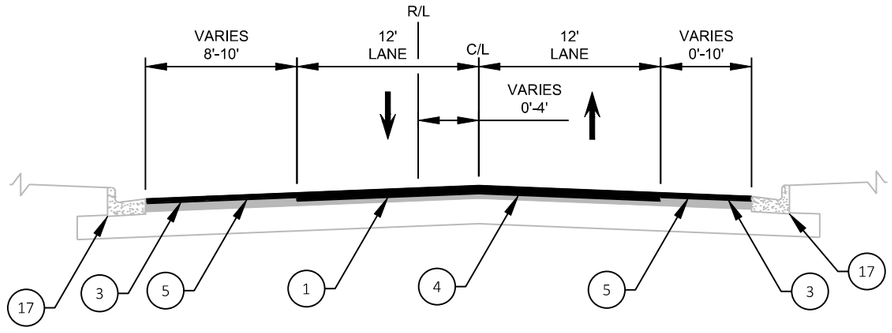


TYPICAL FINISHED SECTION - STH 170
STA. 99+75 - STA. 100+25

LEGEND

1	3.25" REMOVING ASPHALTIC SURFACE MILLING
3	1.75" REMOVING ASPHALTIC SURFACE MILLING
4	3.25" HMA PAVEMENT 1.75" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 1.5" LOWER LAYER HMA PAVEMENT 5 MT 58-34V
5	1.75" HMA PAVEMENT 4 MT 58-34V
10	12" BASE AGGREGATE DENSE 1 1/4-INCH
11	CONCRETE CURB & GUTTER 30-INCH TYPE D
17	EXISTING CURB & GUTTER TO REMAIN UNLESS OTHERWISE NOTED ELSEWHERE IN PLANS

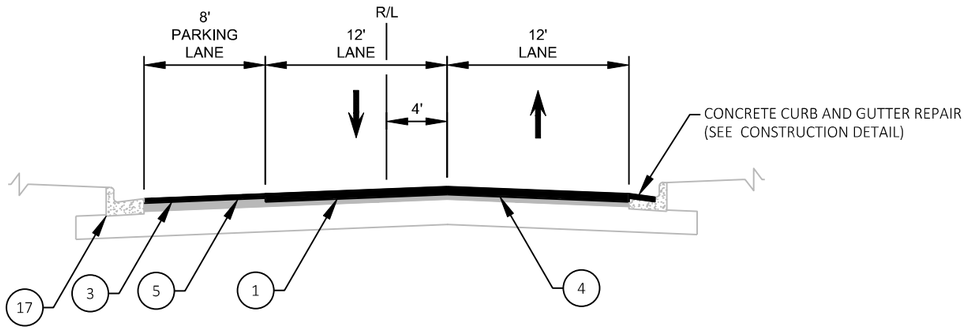
NOTE: MATCH EXISTING PAVEMENT SLOPES UNLESS SHOWN ELSEWHERE IN PLANS.



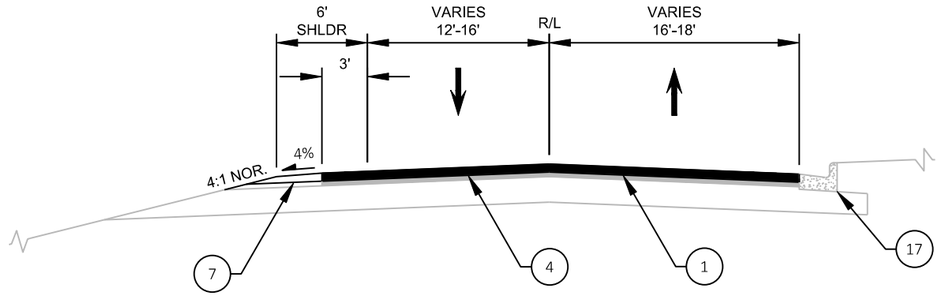
TYPICAL FINISHED SECTION - STH 170
STA. 107+00 - STA. 107+40

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	FINSIHED TYPICAL SECTIONS	SHEET 9	E

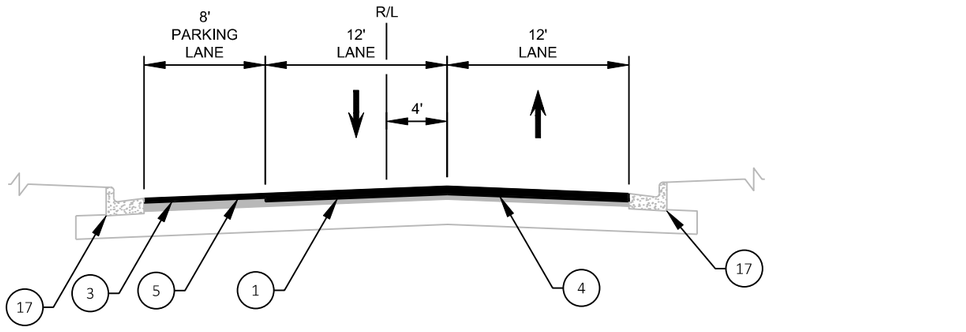
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\020301-TS_PROPOSED.DWG
LAYOUT NAME - SHEET 1
PLOT DATE : 7/5/2020 1:09 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT



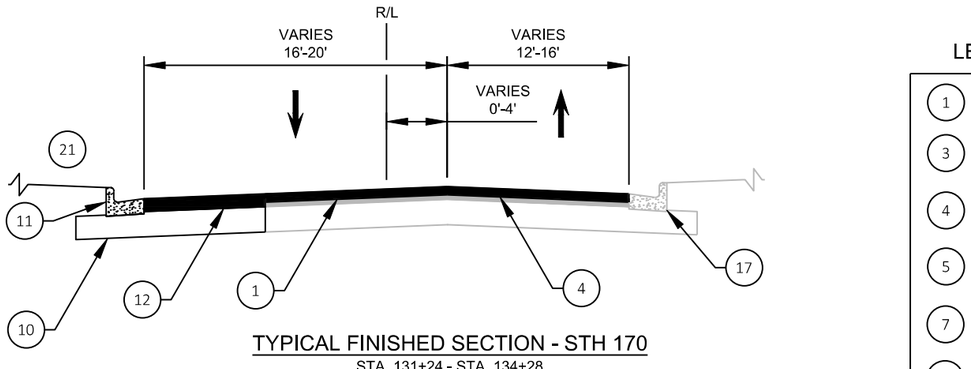
TYPICAL FINISHED SECTION - STH 170
STA. 107+40 - STA. 115+85



TYPICAL FINISHED SECTION - STH 170
STA. 134+28 - STA. 135+86



TYPICAL FINISHED SECTION - STH 170
STA. 115+85 - STA. 131+24



TYPICAL FINISHED SECTION - STH 170
STA. 131+24 - STA. 134+28

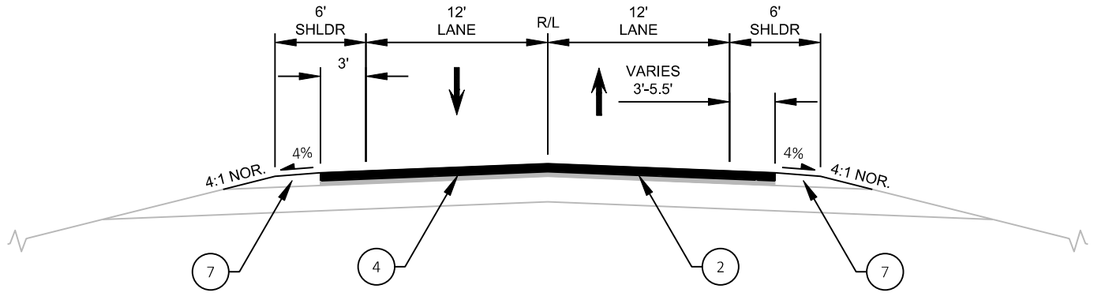
LEGEND

1	3.25" REMOVING ASPHALTIC SURFACE MILLING	9	3.25" BASE AGGREGATE DENSE 3/4-INCH
3	1.75" REMOVING ASPHALTIC SURFACE MILLING	10	12" BASE AGGREGATE DENSE 1 1/4-INCH
4	3.25" HMA PAVEMENT 1.75" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 1.5" LOWER LAYER HMA PAVEMENT 5 MT 58-34V	11	CONCRETE CURB & GUTTER 30-INCH TYPE D
5	1.75" HMA PAVEMENT 4 MT 58-34V	12	5.25" HMA PAVEMENT 2.25" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 3" LOWER LAYER HMA PAVEMENT 4 MT 58-34V
7	SHAPING SHOULDERS	17	EXISTING CURB & GUTTER TO REMAIN UNLESS OTHERWISE NOTED ELSEWHERE IN PLANS
8	MGS GUARDRAIL 3	21	SALVAGED TOPSOIL, SEED MIXTURE #40, FERTILIZER TYPE B, AND MULCHING

NOTE: MATCH EXISTING PAVEMENT SLOPES UNLESS SHOWN ELSEWHERE IN PLANS.

2

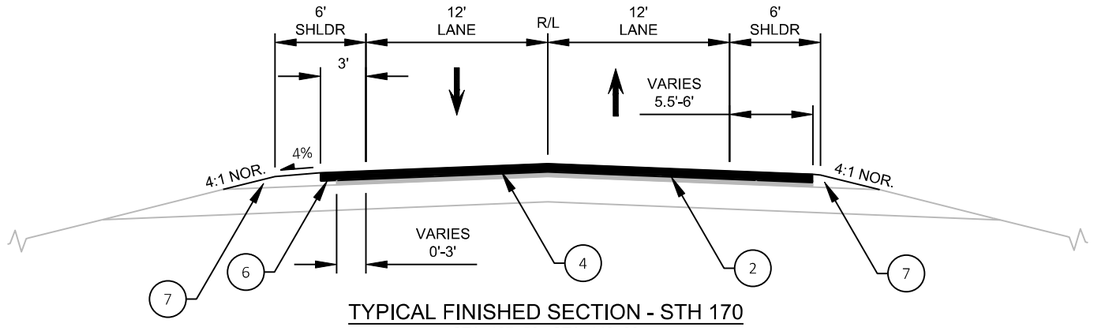
NOTE: ROADWAY PROFILE TO INCREASE BY APPROXIMATELY 1". BASE AGGREGATE DENSE 3/4-INCH TO BE USED TO BUILD UP THE SHOULDER TO THE PROPOSED ROADWAY HEIGHT.



TYPICAL FINISHED SECTION - STH 170

STA. 135+86 - STA. 137+50

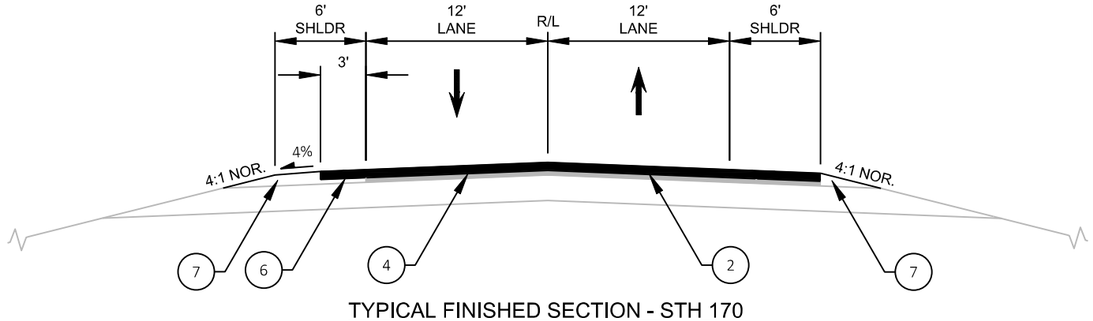
NOTE: ROADWAY PROFILE TO INCREASE BY APPROXIMATELY 1". BASE AGGREGATE DENSE 3/4-INCH TO BE USED TO BUILD UP THE SHOULDER TO THE PROPOSED ROADWAY HEIGHT.



TYPICAL FINISHED SECTION - STH 170

STA. 137+50 - STA. 140+20

NOTE: ROADWAY PROFILE TO INCREASE BY APPROXIMATELY 1". BASE AGGREGATE DENSE 3/4-INCH TO BE USED TO BUILD UP THE SHOULDER TO THE PROPOSED ROADWAY HEIGHT.



TYPICAL FINISHED SECTION - STH 170

STA. 140+20 - STA. 144+50

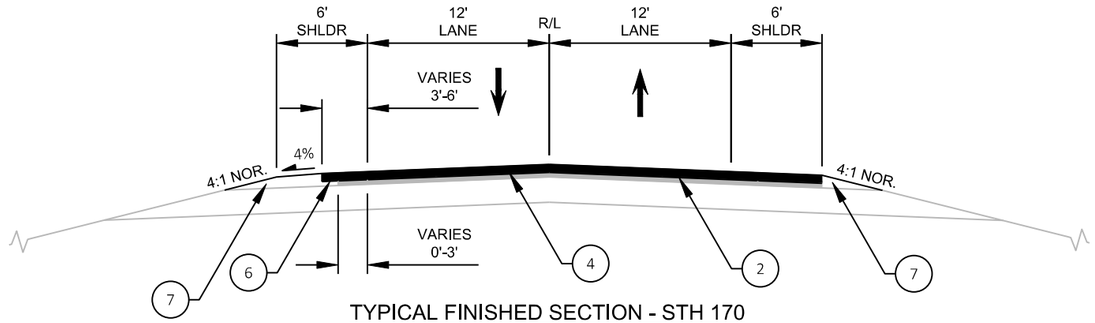
LEGEND

2	2.25" REMOVING ASPHALTIC SURFACE MILLING
4	3.25" HMA PAVEMENT 1.75" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 1.5" LOWER LAYER HMA PAVEMENT 5 MT 58-34V
6	PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
7	SHAPING SHOULDERS

NOTE: MATCH EXISTING PAVEMENT SLOPES UNLESS SHOWN ELSEWHERE IN PLANS.

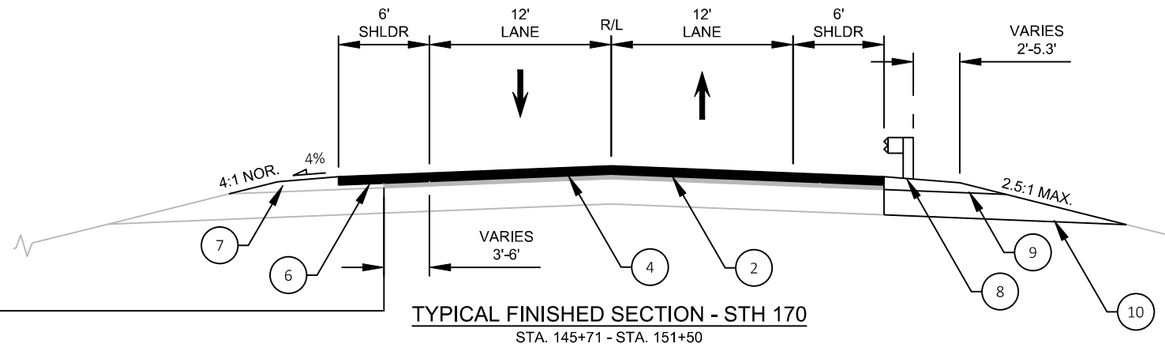
2

NOTE: ROADWAY PROFILE TO INCREASE BY APPROXIMATELY 1". BASE AGGREGATE DENSE 3/4-INCH TO BE USED TO BUILD UP THE SHOULDER TO THE PROPOSED ROADWAY HEIGHT.

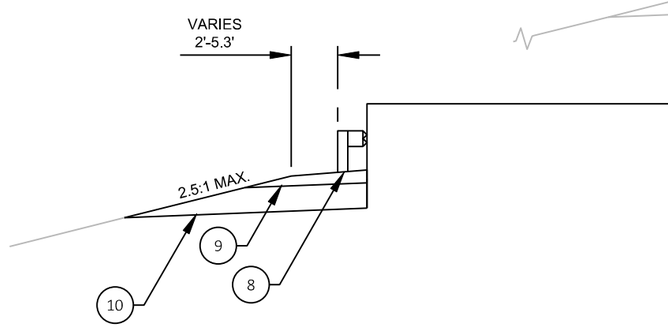


TYPICAL FINISHED SECTION - STH 170
STA. 144+50 - STA. 145+71

NOTE: ROADWAY PROFILE TO INCREASE BY APPROXIMATELY 1". BASE AGGREGATE DENSE 3/4-INCH TO BE USED TO BUILD UP THE SHOULDER TO THE PROPOSED ROADWAY HEIGHT.

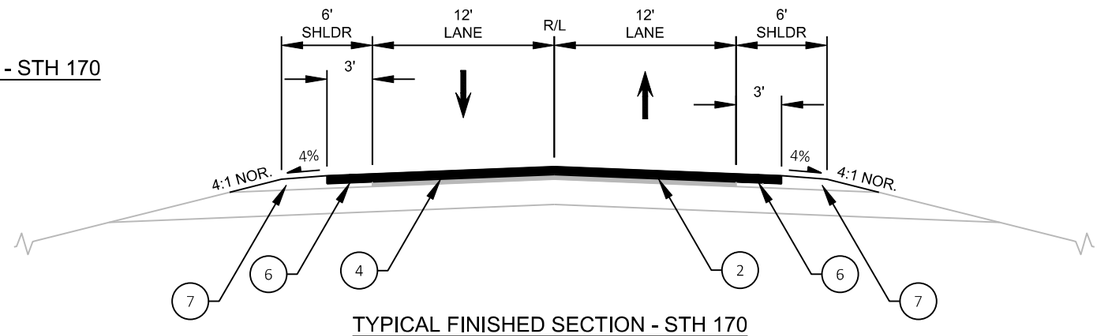


TYPICAL FINISHED SECTION - STH 170
STA. 145+71 - STA. 151+50



PARTIAL FINISHED SECTION - PROPOSED BEAMGUARD - STH 170
STA. 146+62 - STA. 150+76

NOTE: ROADWAY PROFILE TO INCREASE BY APPROXIMATELY 1". BASE AGGREGATE DENSE 3/4-INCH TO BE USED TO BUILD UP THE SHOULDER TO THE PROPOSED ROADWAY HEIGHT.



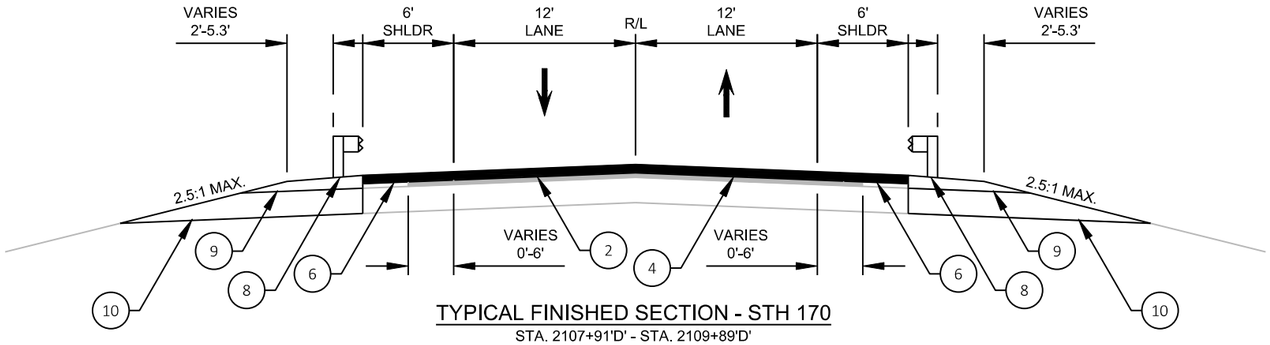
TYPICAL FINISHED SECTION - STH 170
STA. 151+50 - STA. 192+00
STA. 2092+00'D'- STA. 2107+91'D'
STA. 2112+49'D' - STA. 2126+00'D'

LEGEND

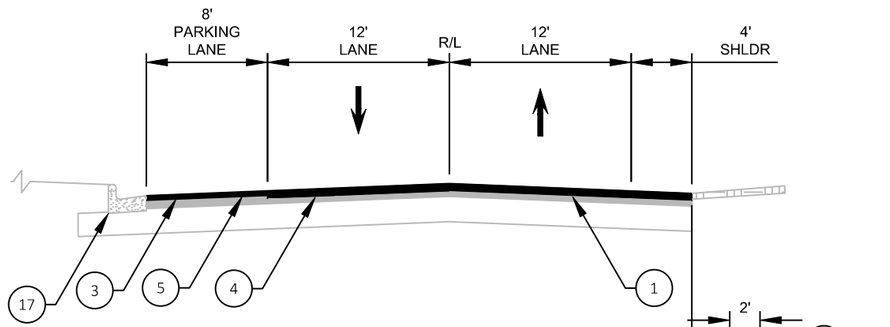
2	2.25" REMOVING ASPHALTIC SURFACE MILLING
4	3.25" HMA PAVEMENT 1.75" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 1.5" LOWER LAYER HMA PAVEMENT 5 MT 58-34V
6	PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
7	SHAPING SHOULDERS
8	MGS GUARDRAIL 3
9	3.25" BASE AGGREGATE DENSE 3/4-INCH
10	12" BASE AGGREGATE DENSE 1 1/4-INCH

NOTE: MATCH EXISTING PAVEMENT SLOPES UNLESS SHOWN ELSEWHERE IN PLANS.

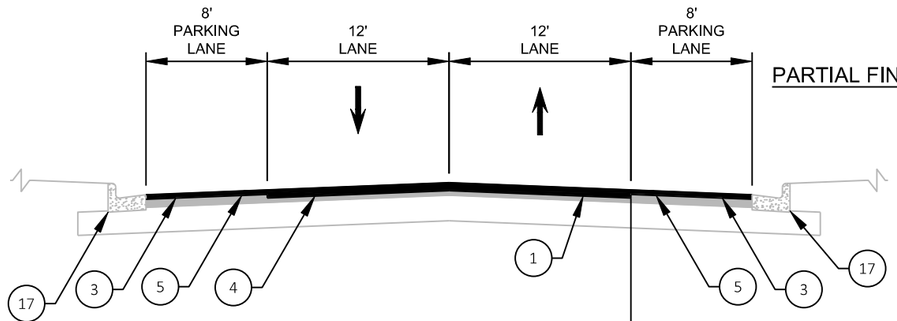
NOTE: ROADWAY PROFILE TO INCREASE BY APPROXIMATELY 1". BASE AGGREGATE DENSE 3/4-INCH TO BE USED TO BUILD UP THE SHOULDER TO THE PROPOSED ROADWAY HEIGHT.



TYPICAL FINISHED SECTION - STH 170
STA. 2107+91'D' - STA. 2109+89'D'
STA. 2110+87'D' - STA. 2112+49'D'

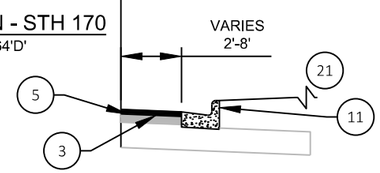


TYPICAL FINISHED SECTION - STH 170
STA. 2126+00'D' - STA. 2131+00'D'



TYPICAL FINISHED SECTION - STH 170
STA. 2131+00'D' - STA. 2150+64'D'

PARTIAL FINISHED SECTION - CURB EXTENSION - STH 170
STA. 2126+94'D' - STA. 2127+40'D'



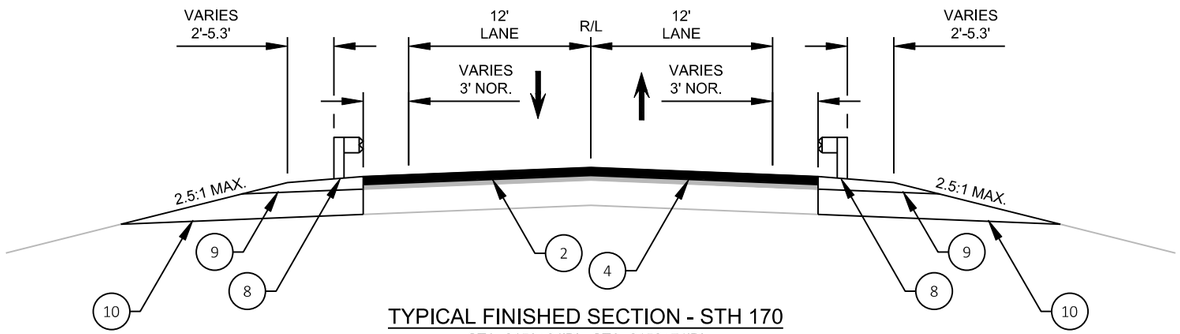
PARTIAL FINISHED SECTION - CURB BUMP-OUT - STH 170
STA. 2136+12'D' - STA. 2136+70'D'
STA. 2137+05'D' - STA. 2137+74'D'

LEGEND

1	3.25" REMOVING ASPHALTIC SURFACE MILLING
2	2.25" REMOVING ASPHALTIC SURFACE MILLING
3	1.75" REMOVING ASPHALTIC SURFACE MILLING
4	3.25" HMA PAVEMENT 1.75" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 1.5" LOWER LAYER HMA PAVEMENT 5 MT 58-34V
5	1.75" HMA PAVEMENT 4 MT 58-34V
6	PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
7	SHAPING SHOULDERS
8	MGS GUARDRAIL 3
9	3.25" BASE AGGREGATE DENSE 3/4-INCH
10	12" BASE AGGREGATE DENSE 1 1/4-INCH
11	CONCRETE CURB & GUTTER 30-INCH TYPE D
17	EXISTING CURB & GUTTER TO REMAIN UNLESS OTHERWISE NOTED ELSEWHERE IN PLANS
21	SALVAGED TOPSOIL, SEED MIXTURE #40, FERTILIZER TYPE B, AND MULCHING

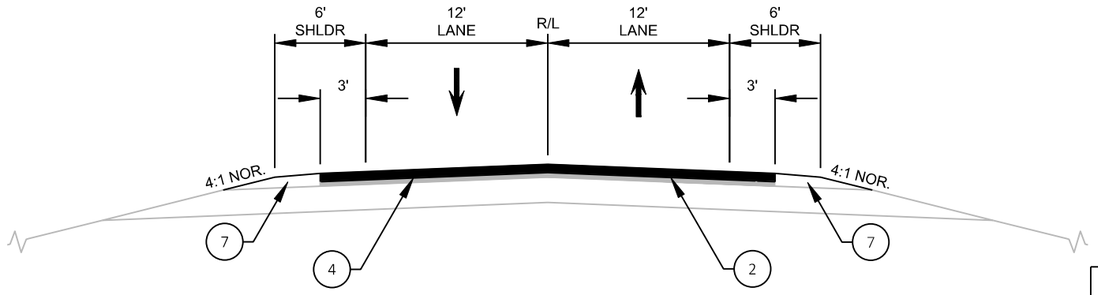
NOTE: MATCH EXISTING PAVEMENT SLOPES UNLESS SHOWN ELSEWHERE IN PLANS.

NOTE: ROADWAY PROFILE TO INCREASE BY APPROXIMATELY 1". BASE AGGREGATE DENSE 3/4-INCH TO BE USED TO BUILD UP THE SHOULDER TO THE PROPOSED ROADWAY HEIGHT.

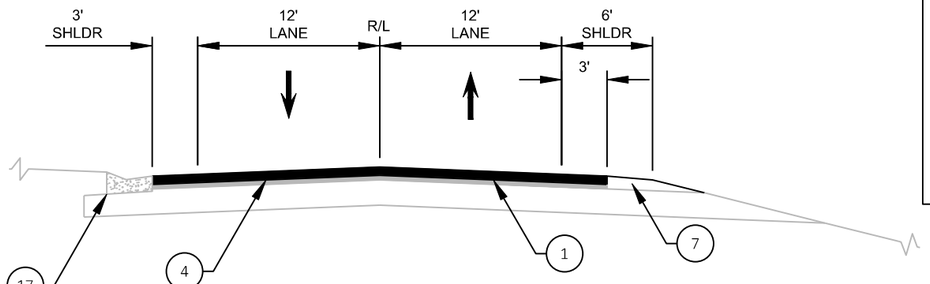


TYPICAL FINISHED SECTION - STH 170
STA. 2150+64'D' - STA. 2152+71'D'
STA. 2154+09'D' - STA. 2156+00'D'

NOTE: ROADWAY PROFILE TO INCREASE BY APPROXIMATELY 1". BASE AGGREGATE DENSE 3/4-INCH TO BE USED TO BUILD UP THE SHOULDER TO THE PROPOSED ROADWAY HEIGHT.



TYPICAL FINISHED SECTION - STH 170
STA. 2156+00'D' - STA. 2173+60'D'
STA. 2176+83'D' - STA. 2321+77'D'
STA. 2328+44'D' - STA. 2366+73'D'
STA. 2398+00'D' - STA. 2399+00'D'



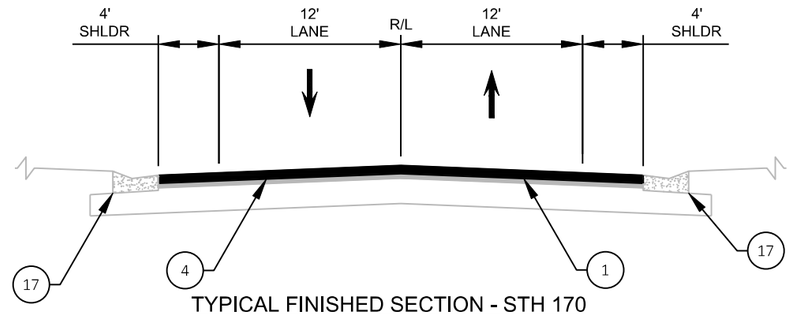
TYPICAL FINISHED SECTION - STH 170
STA. 2173+60'D' - STA. 2176+83'D'

LEGEND

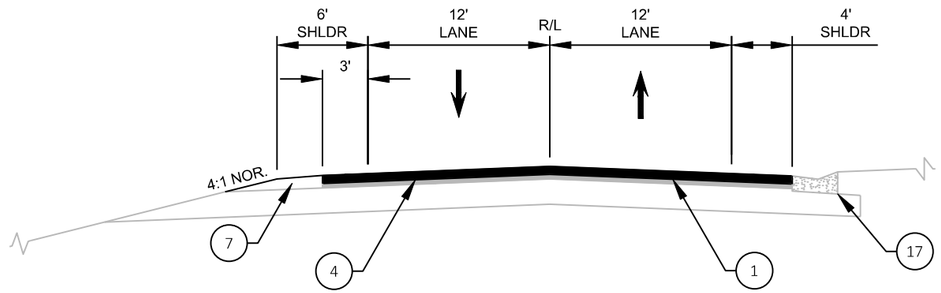
1	3.25" REMOVING ASPHALTIC SURFACE MILLING
2	2.25" REMOVING ASPHALTIC SURFACE MILLING
4	3.25" HMA PAVEMENT 1.75" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 1.5" LOWER LAYER HMA PAVEMENT 5 MT 58-34V
7	SHAPING SHOULDERS
8	MGS GUARDRAIL 3
9	3.25" BASE AGGREGATE DENSE 3/4-INCH
10	12" BASE AGGREGATE DENSE 1 1/4-INCH
17	EXISTING CURB & GUTTER TO REMAIN UNLESS OTHERWISE NOTED ELSEWHERE IN PLANS

NOTE: MATCH EXISTING PAVEMENT SLOPES UNLESS SHOWN ELSEWHERE IN PLANS.

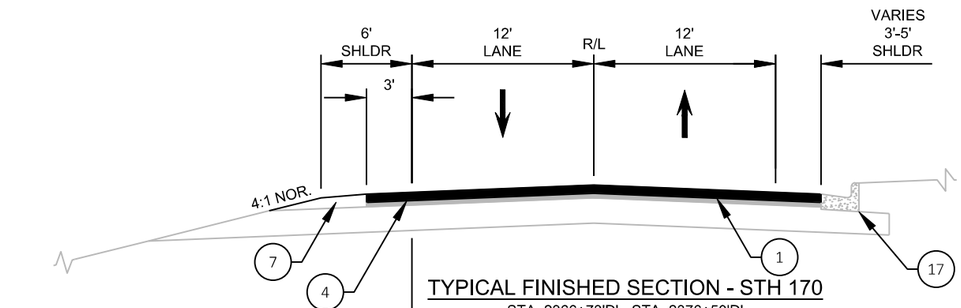
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	FINSIHED TYPICAL SECTIONS	SHEET 14	E



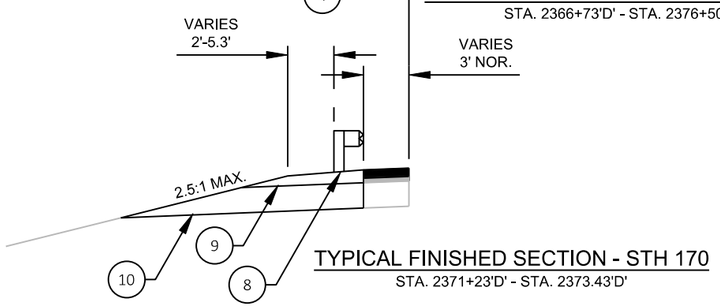
TYPICAL FINISHED SECTION - STH 170
STA. 2321+77'D' - STA. 2325+83'D'



TYPICAL FINISHED SECTION - STH 170
STA. 2325+83'D' - STA. 2328+44'D'



TYPICAL FINISHED SECTION - STH 170
STA. 2366+73'D' - STA. 2376+50'D'



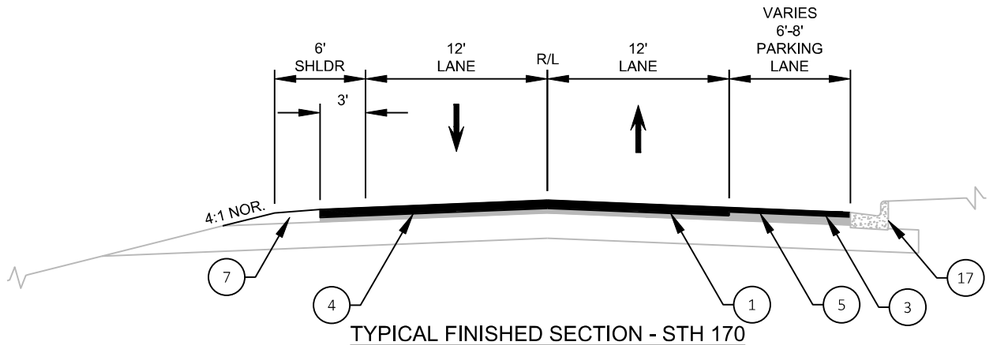
TYPICAL FINISHED SECTION - STH 170
STA. 2371+23'D' - STA. 2373.43'D'

LEGEND

1	3.25" REMOVING ASPHALTIC SURFACE MILLING
4	3.25" HMA PAVEMENT 1.75" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 1.5" LOWER LAYER HMA PAVEMENT 5 MT 58-34V
7	SHAPING SHOULDERS
8	MGS GUARDRAIL 3
9	3.25" BASE AGGREGATE DENSE 3/4-INCH
10	12" BASE AGGREGATE DENSE 1 1/4-INCH
17	EXISTING CURB & GUTTER TO REMAIN UNLESS OTHERWISE NOTED ELSEWHERE IN PLANS

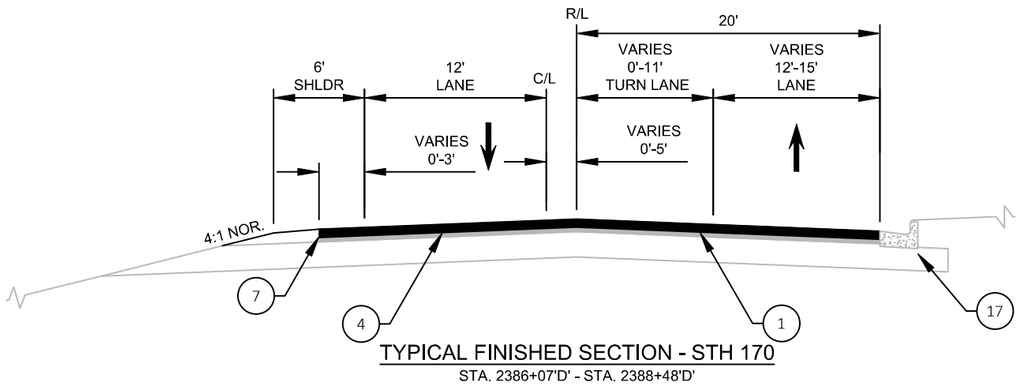
NOTE: MATCH EXISTING PAVEMENT SLOPES UNLESS SHOWN ELSEWHERE IN PLANS.

2



TYPICAL FINISHED SECTION - STH 170

STA. 2376+50'D' - STA. 2386+07'D'



TYPICAL FINISHED SECTION - STH 170

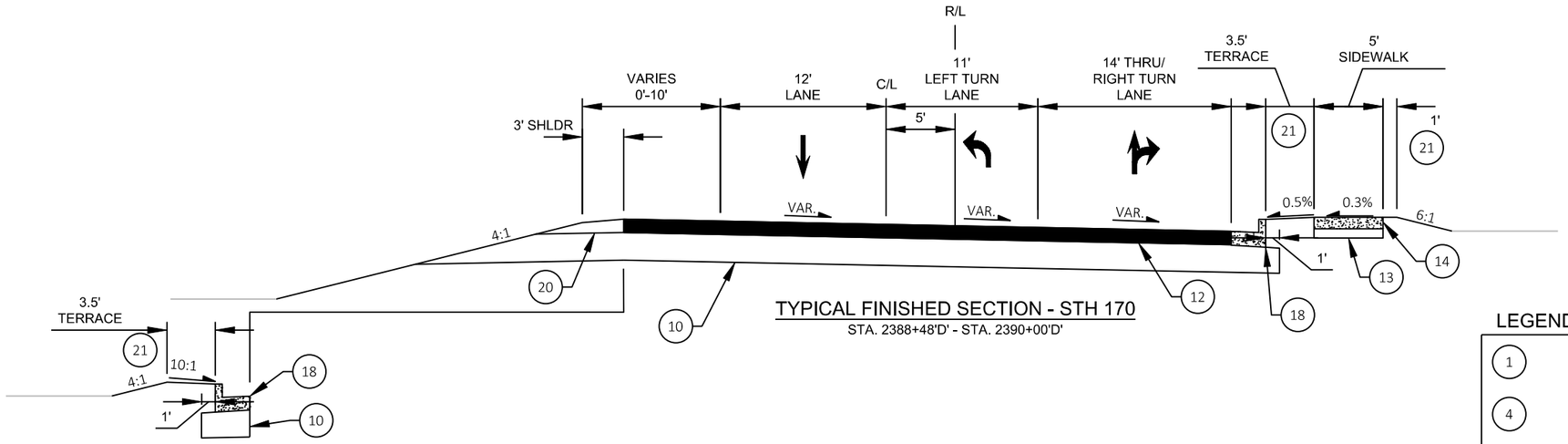
STA. 2386+07'D' - STA. 2388+48'D'

LEGEND

1	3.25" REMOVING ASPHALTIC SURFACE MILLING
3	1.75" REMOVING ASPHALTIC SURFACE MILLING
4	3.25" HMA PAVEMENT 1.75" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 1.5" LOWER LAYER HMA PAVEMENT 5 MT 58-34V
5	1.75" HMA PAVEMENT 4 MT 58-34V
7	SHAPING SHOULDERS
8	MGS GUARDRAIL 3
17	EXISTING CURB & GUTTER TO REMAIN UNLESS OTHERWISE NOTED ELSEWHERE IN PLANS

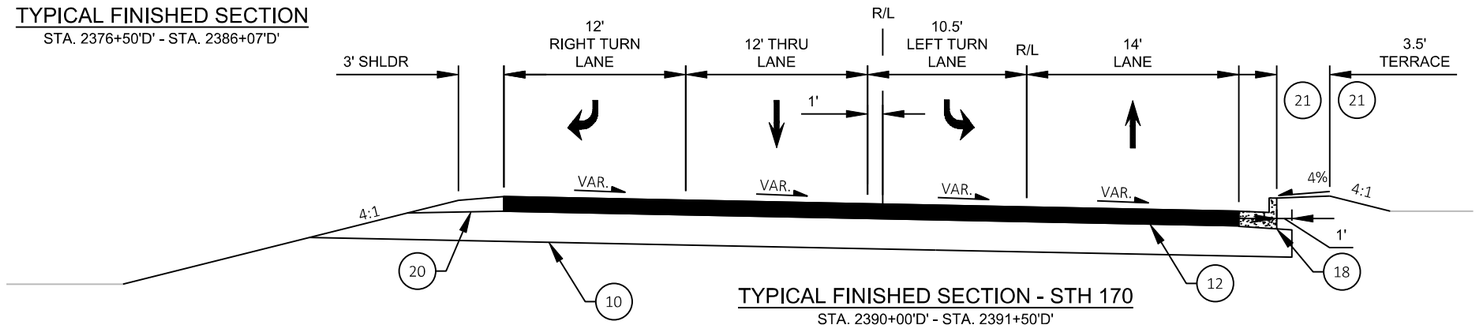
NOTE: MATCH EXISTING PAVEMENT SLOPES UNLESS SHOWN ELSEWHERE IN PLANS.

2

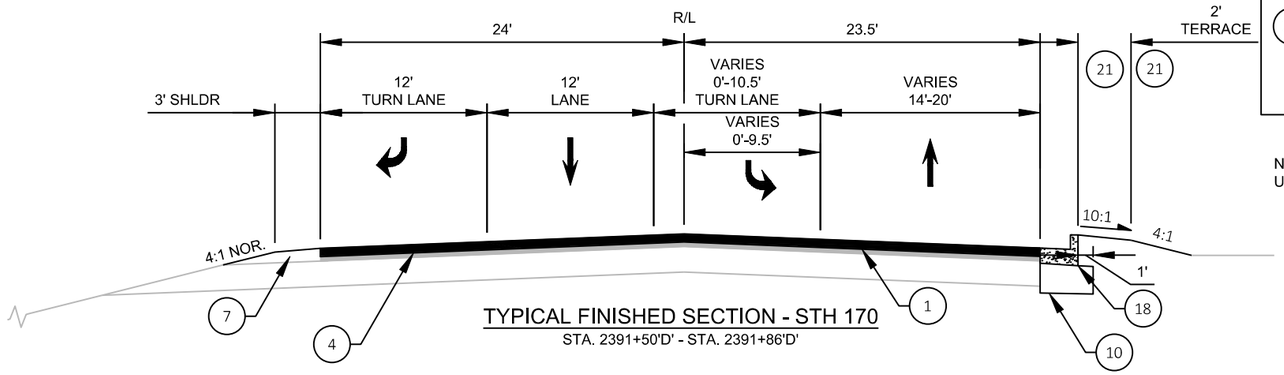


TYPICAL FINISHED SECTION - STH 170
STA. 2388+48'D' - STA. 2390+00'D'

TYPICAL FINISHED SECTION
STA. 2376+50'D' - STA. 2386+07'D'



TYPICAL FINISHED SECTION - STH 170
STA. 2390+00'D' - STA. 2391+50'D'



TYPICAL FINISHED SECTION - STH 170
STA. 2391+50'D' - STA. 2391+86'D'

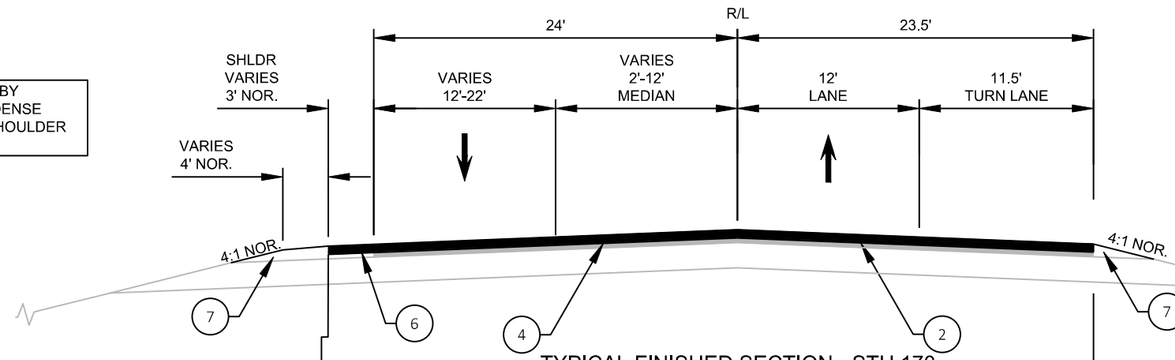
LEGEND

1	3.25" REMOVING ASPHALTIC SURFACE MILLING
4	3.25" HMA PAVEMENT 1.75" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 1.5" LOWER LAYER HMA PAVEMENT 5 MT 58-34V
7	SHAPING SHOULDERS
8	MGS GUARDRAIL 3
10	12" BASE AGGREGATE DENSE 1 1/4-INCH
12	5.25" HMA PAVEMENT 2.25" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 3" LOWER LAYER HMA PAVEMENT 4 MT 58-34V
13	4" BASE AGGREGATE DENSE 1 1/4-INCH
14	5" CONCRETE SIDEWALK
18	CONCRETE CURB & GUTTER 30-INCH TYPE D
20	5.25" BASE AGGREGATE DENSE 3/4-INCH
21	SALVAGED TOPSOIL, SEED MIXTURE #40, FERTILIZER TYPE B, AND MULCHING

NOTE: MATCH EXISTING PAVEMENT SLOPES
UNLESS SHOWN ELSEWHERE IN PLANS.

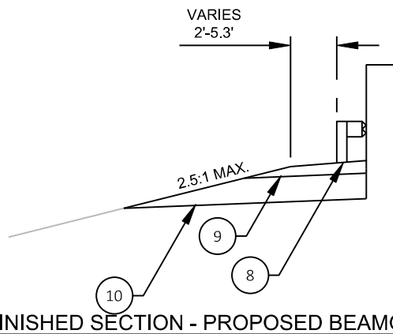
2

NOTE: ROADWAY PROFILE TO INCREASE BY APPROXIMATELY 1". BASE AGGREGATE DENSE 3/4-INCH TO BE USED TO BUILD UP THE SHOULDER TO THE PROPOSED ROADWAY HEIGHT.



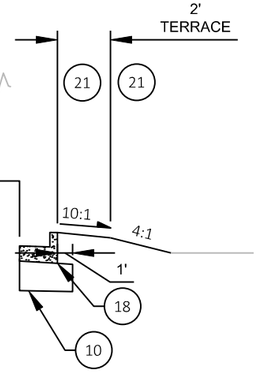
TYPICAL FINISHED SECTION - STH 170

STA. 2391+86'D' - STA. 2394+50'D'



PARTIAL FINISHED SECTION - PROPOSED BEAMGUARD - STH 170

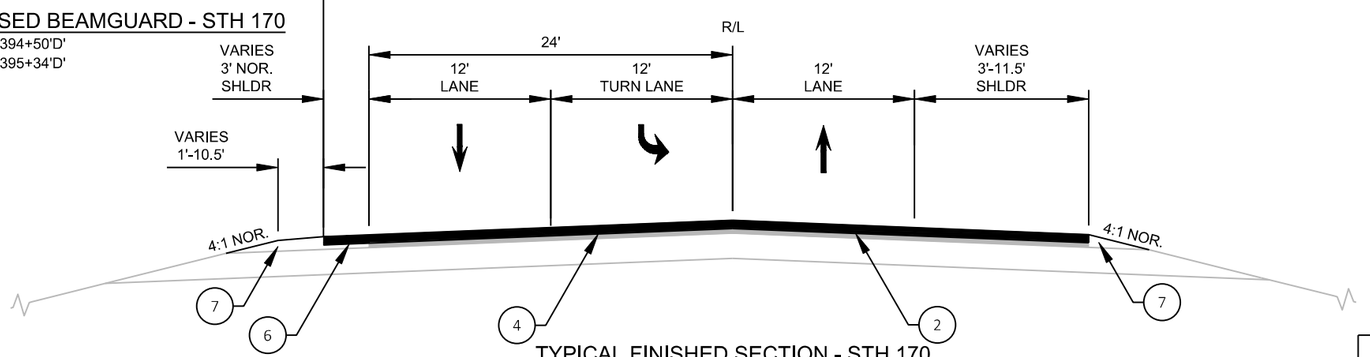
STA. 2392+40'D' - STA. 2394+50'D'
STA. 2394+50'D' - STA. 2395+34'D'



PARTIAL FINISHED SECTION - STH 170

STA. 2391+86'D' - STA. 2392+85'D'

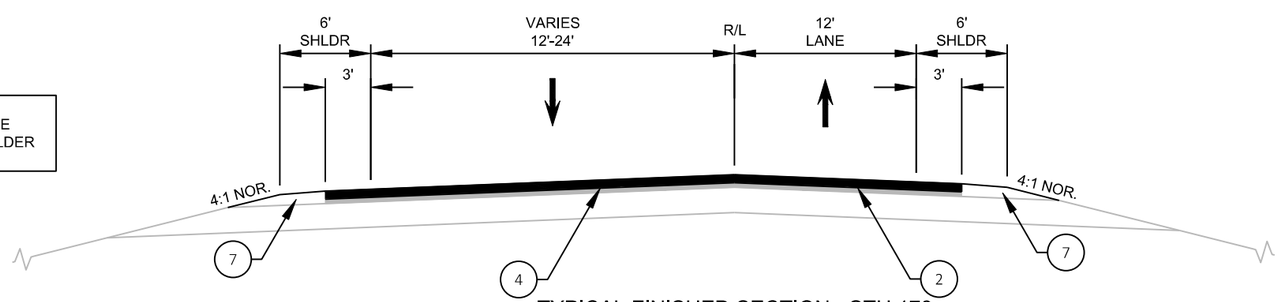
NOTE: ROADWAY PROFILE TO INCREASE BY APPROXIMATELY 1". BASE AGGREGATE DENSE 3/4-INCH TO BE USED TO BUILD UP THE SHOULDER TO THE PROPOSED ROADWAY HEIGHT.



TYPICAL FINISHED SECTION - STH 170

STA. 2394+50'D' - STA. 2396+00'D'

NOTE: ROADWAY PROFILE TO INCREASE BY APPROXIMATELY 1". BASE AGGREGATE DENSE 3/4-INCH TO BE USED TO BUILD UP THE SHOULDER TO THE PROPOSED ROADWAY HEIGHT.



TYPICAL FINISHED SECTION - STH 170

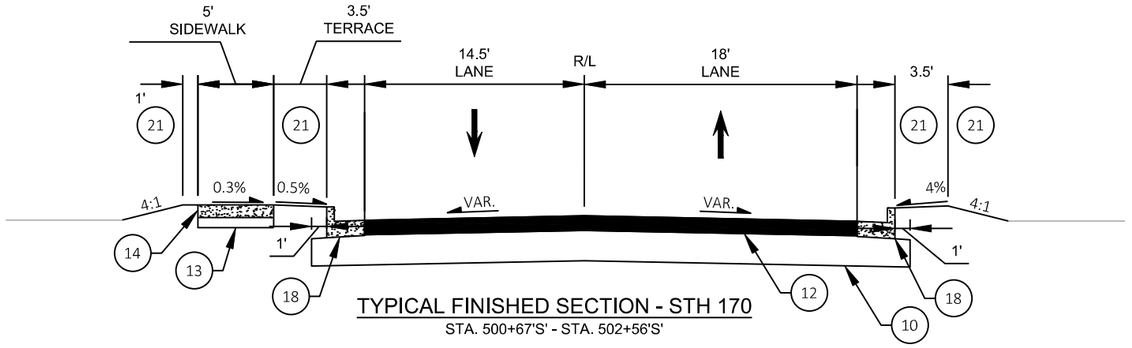
STA. 2396+00'D' - STA. 2398+00'D'

LEGEND

NOTE: MATCH EXISTING PAVEMENT SLOPES UNLESS SHOWN ELSEWHERE IN PLANS.

2	2.25" REMOVING ASPHALTIC SURFACE MILLING
4	3.25" HMA PAVEMENT 1.75" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 1.5" LOWER LAYER HMA PAVEMENT 5 MT 58-34V
6	PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
7	SHAPING SHOULDERS
8	MGS GUARDRAIL 3
9	3.25" BASE AGGREGATE DENSE 3/4-INCH
10	12" BASE AGGREGATE DENSE 1 1/4-INCH
18	CONCRETE CURB & GUTTER 30-INCH TYPE D
21	SALVAGED TOPSOIL, SEED MIXTURE #40, FERTILIZER TYPE B, AND MULCHING

2

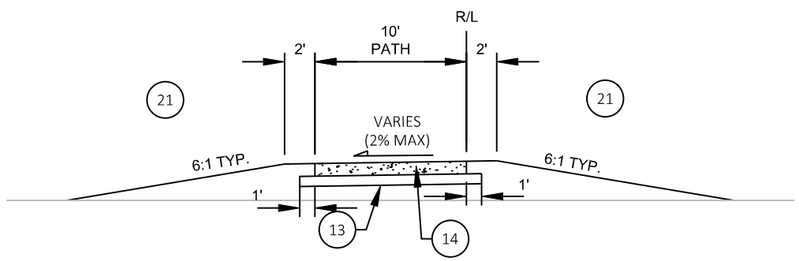


TYPICAL FINISHED SECTION - STH 170

STA. 500+67'S' - STA. 502+56'S'

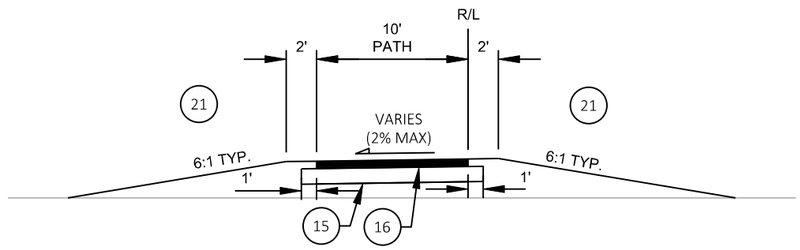
LEGEND

10	12" BASE AGGREGATE DENSE 1 1/4-INCH
12	5.25" HMA PAVEMENT 2.25" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 3" LOWER LAYER HMA PAVEMENT 4 MT 58-34V
13	4" BASE AGGREGATE DENSE 3/4-INCH
14	5" CONCRETE SIDEWALK
15	6" BASE AGGREGATE DENSE 1 1/4-INCH
16	3" ASPHALTIC SURFACE
18	CONCRETE CURB & GUTTER 30-INCH TYPE D
20	5.25" BASE AGGREGATE DENSE 3/4-INCH
21	SALVAGED TOPSOIL, SEED MIXTURE #40, FERTILIZER TYPE B, AND MULCHING



TYPICAL FINISHED SECTION - HINMAN PARK PATH

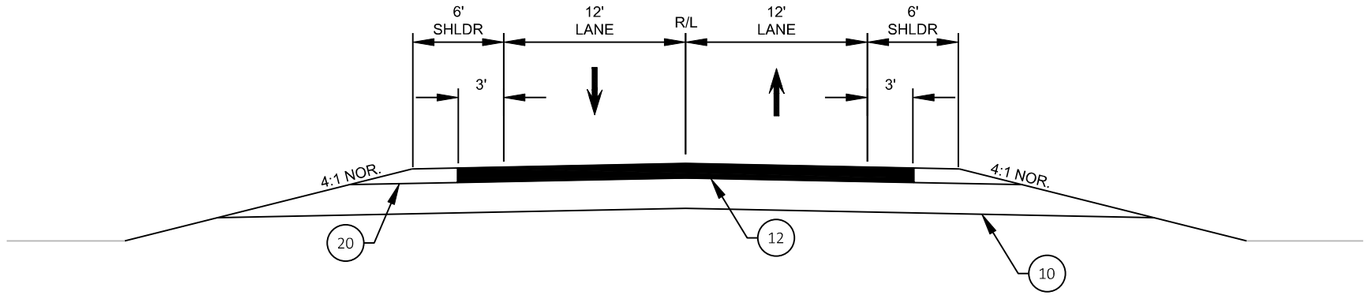
STA. 0+2.50'BP' - STA. 0+7.66'BP'



TYPICAL FINISHED SECTION - HINMAN PARK PATH

STA. 0+7.66'BP' - STA. 100+00'BP'

2



TYPICAL FINISHED SECTION - CULVERT REPLACEMENT - STH 170

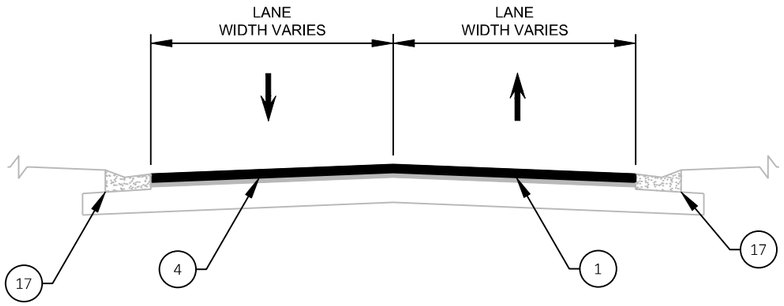
STA. 176+89
STA. 2107+57'D'
STA. 2112+42'D'
STA. 2234+30'D'

LEGEND

1	3.25" REMOVING ASPHALTIC SURFACE MILLING
2	2.25" REMOVING ASPHALTIC SURFACE MILLING
4	3.25" HMA PAVEMENT 1.75" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 1.5" LOWER LAYER HMA PAVEMENT 5 MT 58-34V
7	SHAPING SHOULDERS
10	12" BASE AGGREGATE DENSE 1 1/4-INCH
12	5.25" HMA PAVEMENT 2.25" UPPER LAYER HMA PAVEMENT 4 MT 58-34V 3" LOWER LAYER HMA PAVEMENT 4 MT 58-34V
17	EXISTING CURB & GUTTER TO REMAIN UNLESS OTHERWISE NOTED ELSEWHERE IN PLANS
20	5.25" BASE AGGREGATE DENSE 3/4-INCH

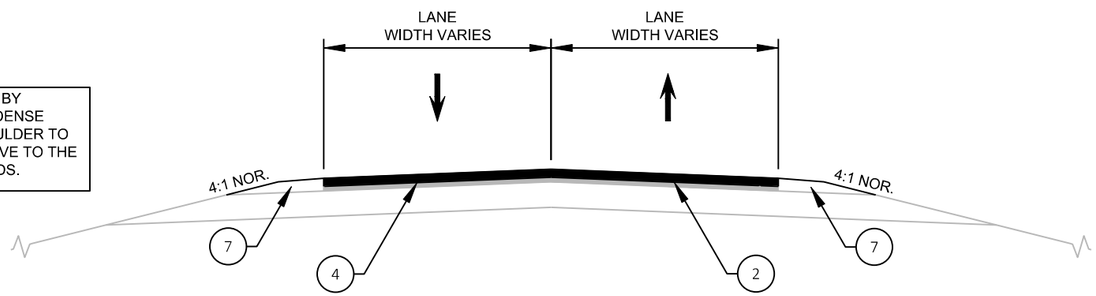
NOTE: MATCH EXISTING PAVEMENT SLOPES UNLESS SHOWN ELSEWHERE IN PLANS.

NOTE: MILL AND PAVE TO THE CURB POINT OF TANGENCY ON SIDEROADS.



TYPICAL FINISHED SECTION - STH 170 - URBAN SIDEROADS

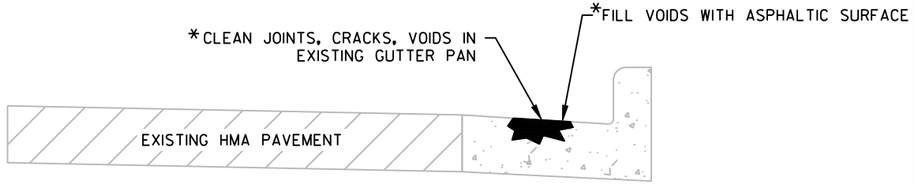
NOTE: ROADWAY PROFILE TO INCREASE BY APPROXIMATELY 1". BASE AGGREGATE DENSE 3/4-INCH TO BE USED TO BUILD THE SHOULDER TO THE PROPOSED ROADWAY. MILL AND PAVE TO THE CURB POINT OF TANGENCY ON SIDEROADS.



TYPICAL FINISHED SECTION - STH 170 - RURAL SIDEROADS

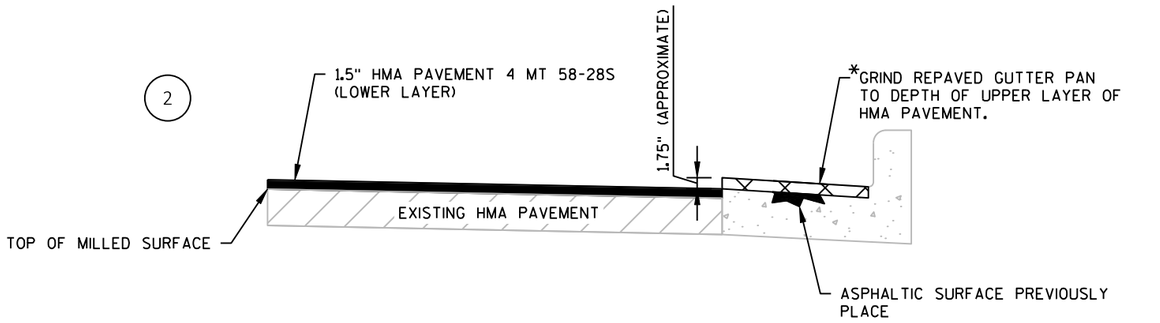
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	FINSIHED TYPICAL SECTIONS	SHEET 20	E

1



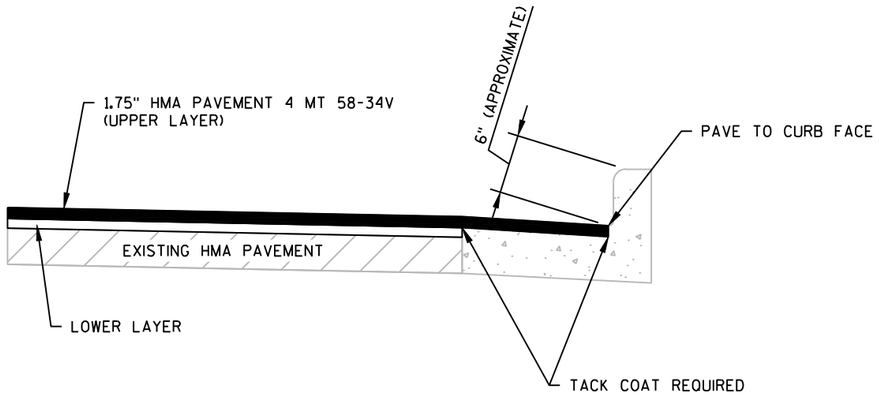
* PAID FOR AS "CONCRETE CURB & GUTTER REPAIR"

2



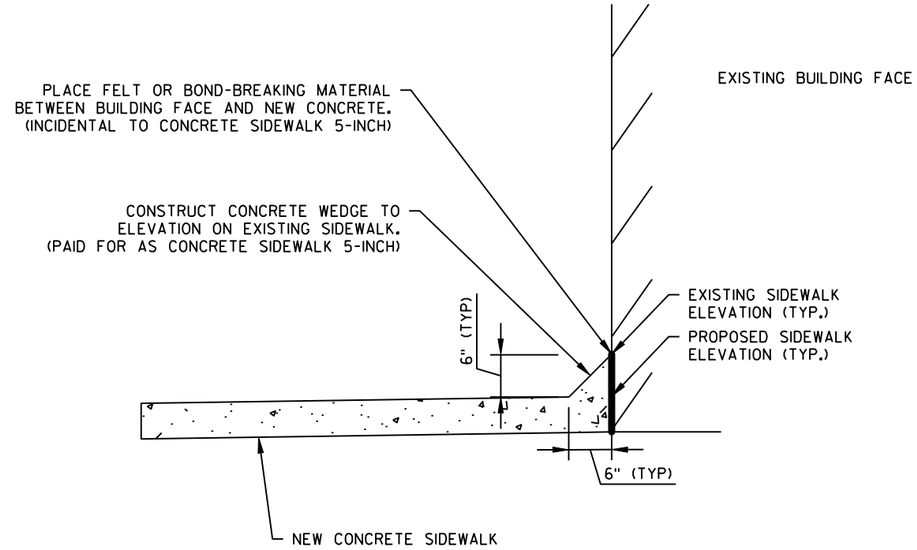
* PAID FOR AS "CONCRETE CURB & GUTTER REPAIR"

3



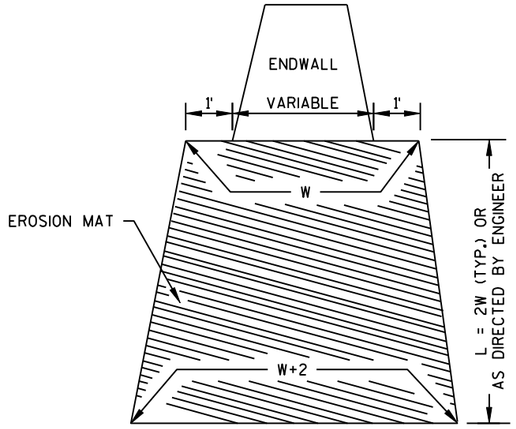
CONCRETE CURB & GUTTER REPAIR DETAIL

(SEE TYPICAL SECTIONS FOR LOCATIONS)



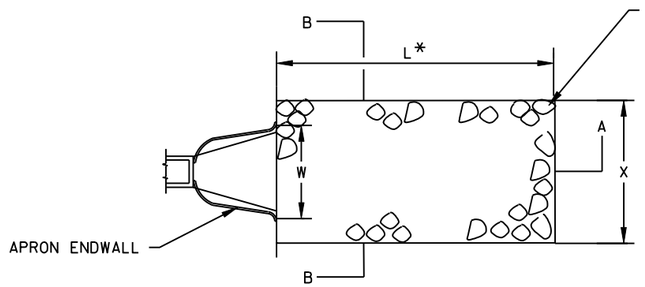
CONCRETE SIDEWALK WEDGE TRANSITION DETAIL

(SEE CURB RAMP DETAILS FOR LOCATIONS)

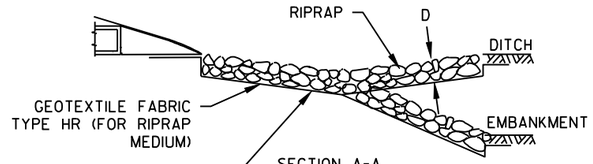


EROSION MAT TREATMENT AT ENDWALLS

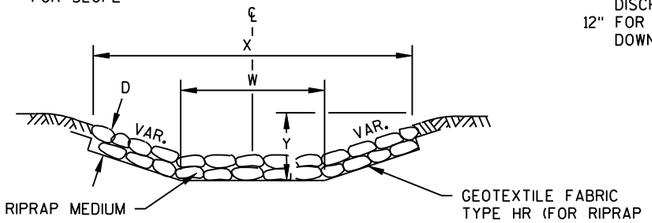
(SEE EROSION CONTROL PLAN FOR LOCATIONS)



PLAN VIEW



SECTION A-A



SECTION B-B

L* = 3 x W (NOR.) OR 10' MIN. OR
AS INDICATED IN THE PLANS OR
AS DIRECTED BY THE ENGINEER.

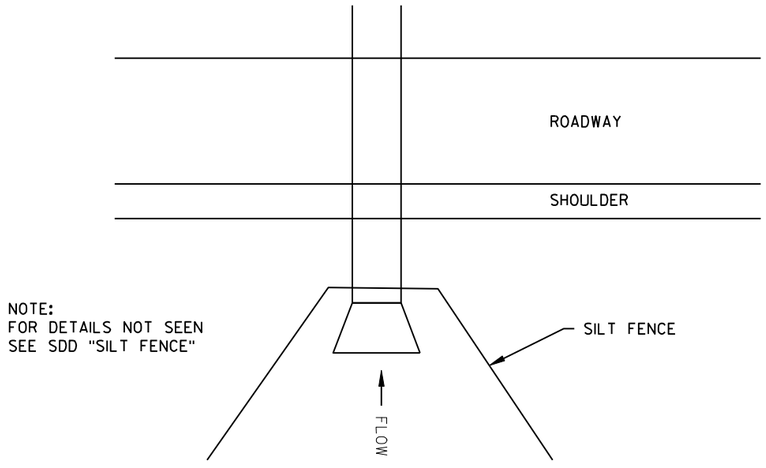
D = 18" FOR RIPRAP MEDIUM

X = W+2' FOR TYPICAL CULVERT
DISCHARGE INTO DITCH
W+5' FOR CULVERT DISCHARGE
DOWN EMBANKMENT SLOPE

Y = 0' FOR TYPICAL CULVERT
DISCHARGE INTO DITCH
12" FOR CULVERT DISCHARGE
DOWN EMBANKMENT SLOPE

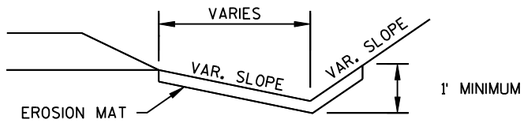
RIPRAP TREATMENT AT PIPE ENDWALLS

(SEE EROSION CONTROL PLAN FOR LOCATIONS)



TYPICAL SILT FENCE DETAIL AT PIPE INLET

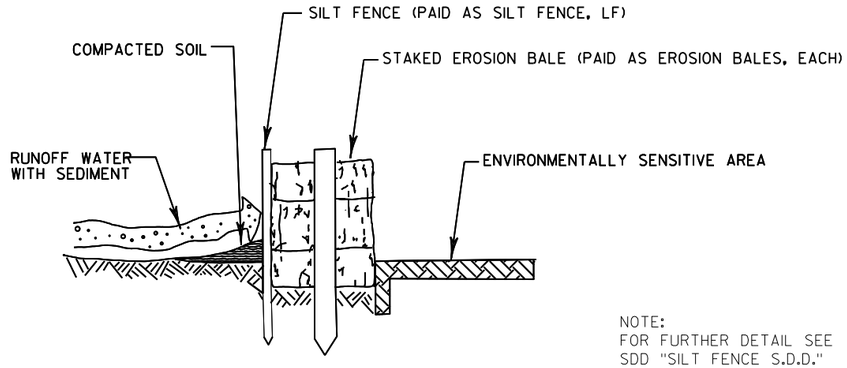
(SEE EROSION CONTROL PLAN FOR LOCATIONS)



EROSION MAT DETAIL FOR DITCHES

(SEE EROSION CONTROL PLAN FOR LOCATIONS)

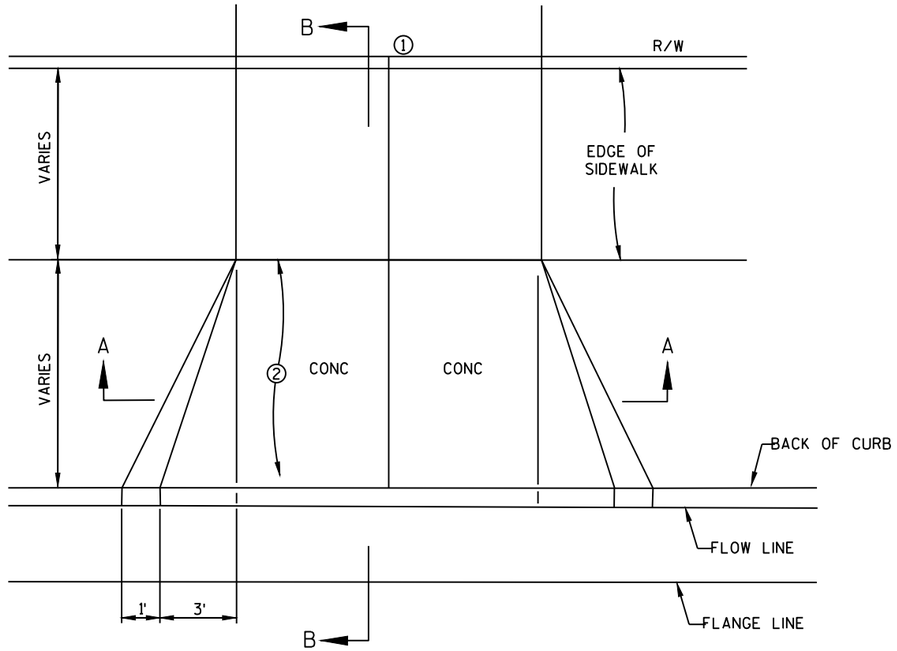
2



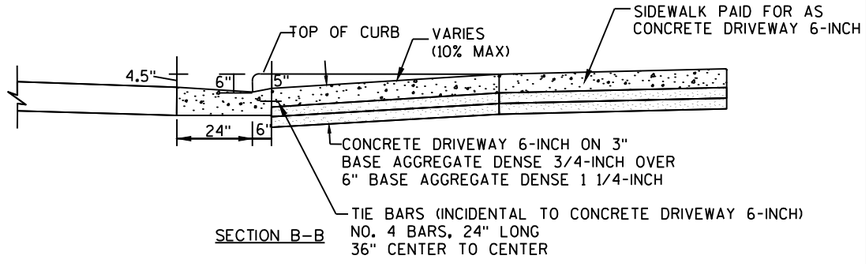
NOTE:
FOR FURTHER DETAIL SEE
SDD "SILT FENCE S.D.D."

SILT FENCE & EROSION BALE BARRIER DETAIL

(SEE EROSION CONTROL PLAN FOR LOCATIONS)



PLAN VIEW

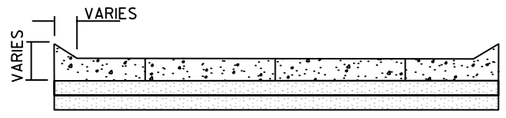


SECTION B–B

NOTES:

① DRIVEWAY WIDTHS
COMMERCIAL 35' MAX 12' MIN
NON-COMMERCIAL 24' MAX 12' MIN

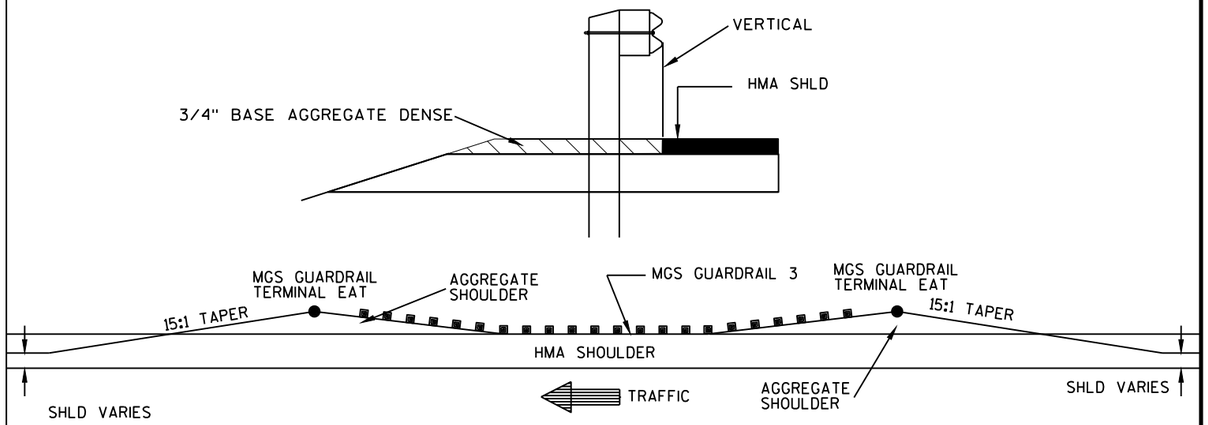
② ALL DRIVEWAY APPROACHES SHALL BE CONCRETE DRIVEWAY 6-INCH OVER 3" BASE AGGREGATE DENSE 3/4-INCH OVER 6" BASE AGGREGATE DENSE 1 1/4-INCH



SECTION A-A

URBAN DRIVEWAY DETAIL

(SEE PLAN DETAIL SHEET FOR LOCATION)

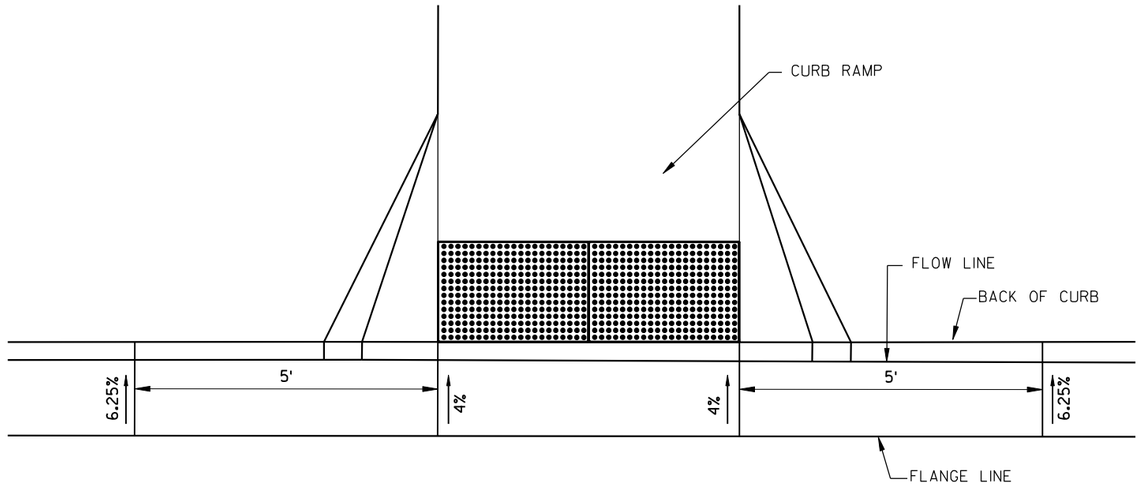


DETAIL FOR ASPHALTIC OR CONCRETE SHOULDER AT BEAM GUARD

(SEE PLAN AND PROFILES FOR LOCATIONS)

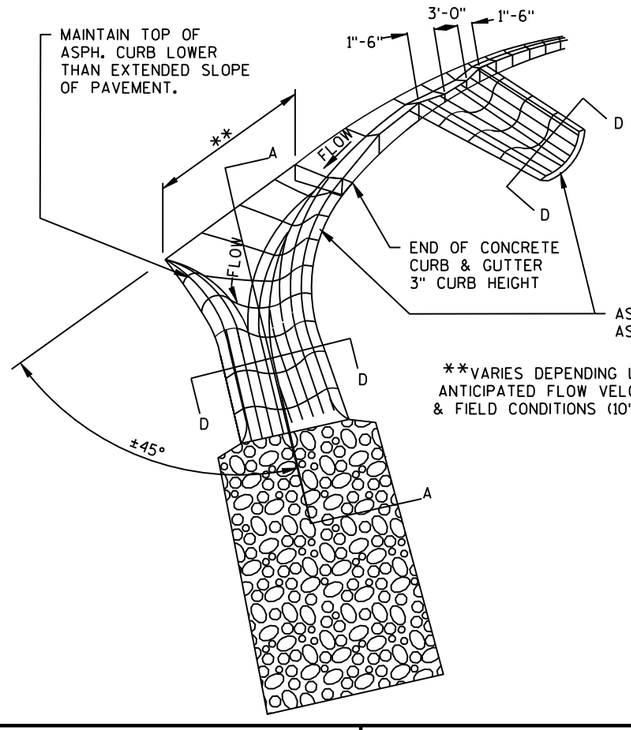
SEE S.D.D. "MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL",
"MIDWEST GUARDRAIL SYSTEM (MGS) EAT",
"MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION",
"MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL"
FOR DETAILS NOT SHOWN.

2

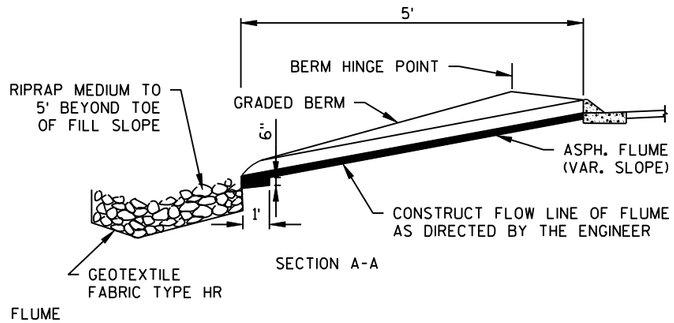


GUTTER PAN TRANSITION AT CURB RAMPS

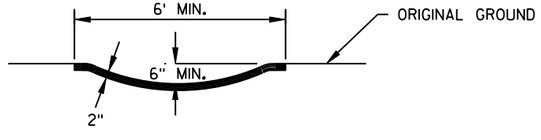
(6.25% TO 4%)
(SEE PLAN DETAILS FOR LOCATIONS)



**VARIES DEPENDING UPON ANTICIPATED FLOW VELOCITY & FIELD CONDITIONS (10' MIN.)



SECTION A-A

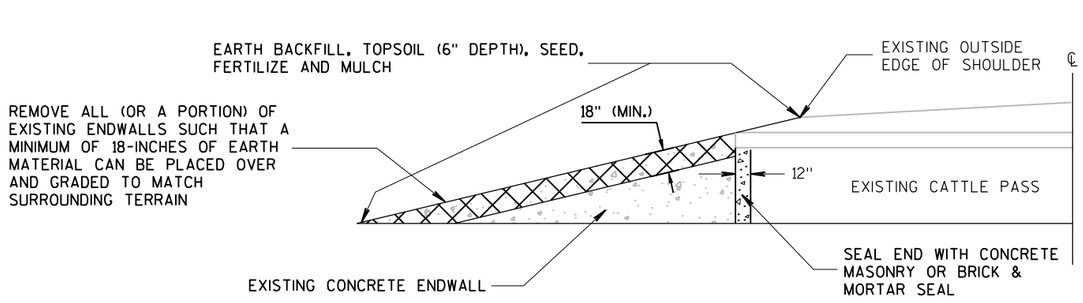


SECTION D-D

ASPHALTIC FLUME DETAIL

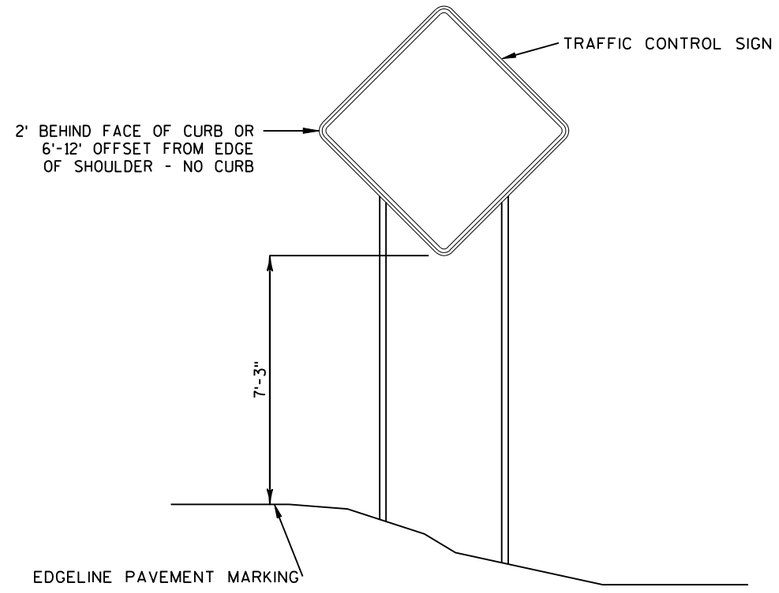
SEE PLAN DETAILS FOR LOCATIONS.

SEE SDD "CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES" FOR DETAILS NOT SHOWN.



ABANDONING CATTLE PASS

TYPICAL 1/2 SECTION, SYMMETRICAL ABOUT CENTERLINE
STA. 170+28



TYPICAL TEMPORARY TRAFFIC CONTROL SIGN DETAIL MOUNTING ON FIXED SUPPORT

NOTE:
1) LONG TERM 7 DAYS OR MORE
2) SEE SDD "TEMPORARY TRAFFIC CONTROL SIGN MOUNTING" FOR DETAILS NOT SHOWN.

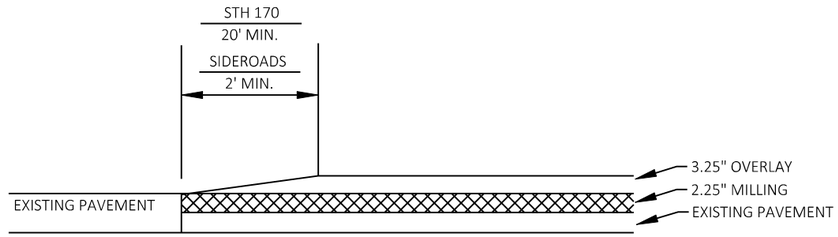
2

MILLING AND OVERLAY - URBAN

PAID FOR AS REMOVING ASPHALTIC SURFACE MILLING

REQUIRED AT BEGIN AND END PAVING LOCATIONS

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

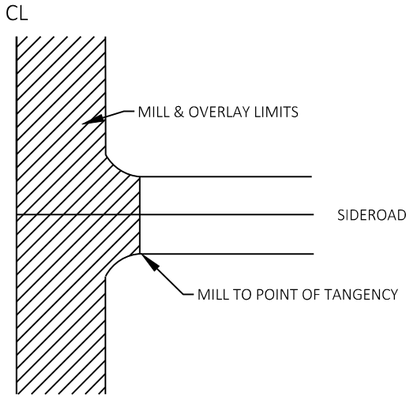


MILLING AND OVERLAY - RURAL

PAID FOR AS REMOVING ASPHALTIC SURFACE MILLING

REQUIRED AT BEGIN AND END PAVING LOCATIONS

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

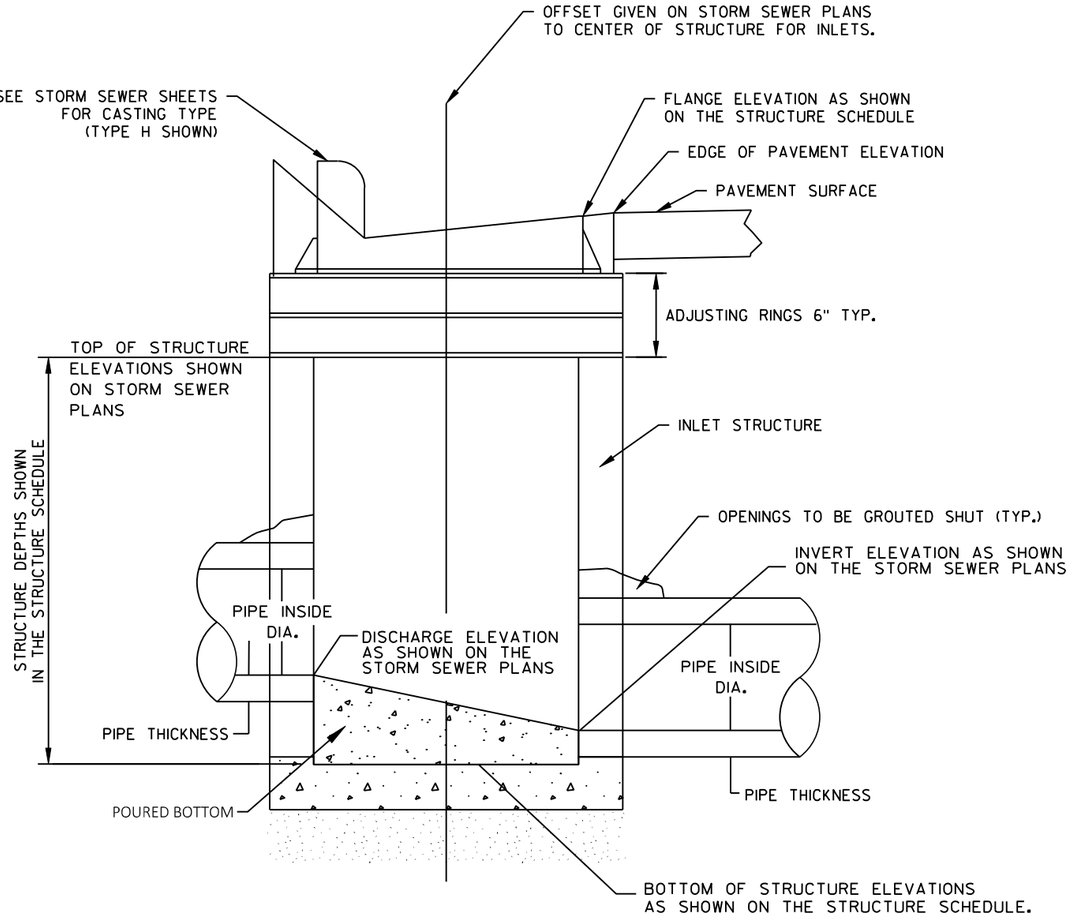


SIDEROAD DETAIL

GENERAL NOTES:

GRANULAR BACKFILL REQUIRED AROUND INLET
(INCIDENTAL TO CONSTRUCTION OF INLET)

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, APPLICABLE SPECIAL PROVISIONS, AND S.D.D. FOR INLETS 2x3-FT



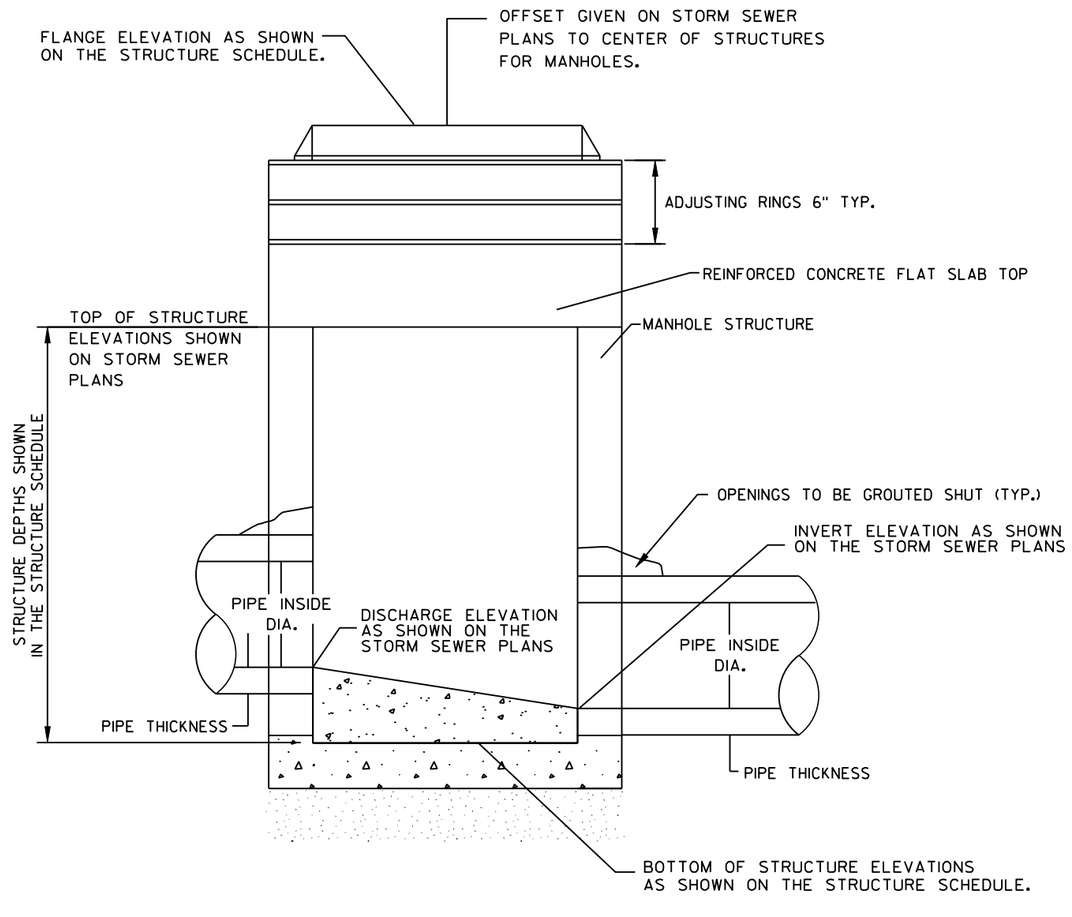
DETAIL OF INLET W/CASTING

(SEE STORM SEWER PLANS FOR LOCATIONS)

GENERAL NOTES:

GRANULAR BACKFILL REQUIRED AROUND MANHOLE
(INCIDENTAL TO CONSTRUCTION OF MANHOLE)

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, APPLICABLE SPECIAL PROVISIONS, AND S.D.D. FOR MANHOLES 8-FT DIAMETER.



DETAIL OF MANHOLE W/CASTING

(SEE STORM SEWER PLANS FOR LOCATIONS)

2

2

XCEL ENERGY
ELECTRIC (OVERHEAD)

CENTURYLINK
(TELEPHONE/FIBER OPTIC)

WE ENERGIES (GAS)

CAUTION

CAUTION

WE ENERGIES (GAS)

961
1030.925
CP NL

106+50

MATCH EXISTING SIDEWALK GRADE

106+44.00, -25.59' LT

106+43.00, -29.31' LT

106+46.12, -42.08' LT

106+43.96, -23.09' LT

PLACE CONCRETE SIDEWALK 5-INCH

R19.0'

106+86.84, -31.50' LT

MATCH EXISTING SIDEWALK GRADE

106+83.18, -26.66' LT

106+83.88, -24.18' LT

REMOVE EXISTING SLOPED CURB & GUTTER.
REPLACE WITH CONCRETE CURB & GUTTER 30-INCH TYPE D

STH 170

107+00

107+50

CENTURYLINK
(TELEPHONE/FIBER OPTIC)

GLENWOOD CITY
(WATER)

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	STH 170 - GLENWOOD CITY SIDEWALK REPLACEMENT	SHEET 29	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021001-CD-SIDEWALK REPLACEMENT GLENWOOD CITY.DWG
LAYOUT NAME - Sheet 1

PLOT DATE : 7/5/2020 1:27 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

2

2

N

BEGIN RECONSTRUCTION
STA 131+14.41
SAWCUT REQUIRED
MATCH EXISTING

EXISTING R/W (TYP.)

SLOPE INTERCEPT (TYP.)

CONCRETE DRIVEWAY 6-INCH

+14.41
-16.00'LT
1024.95
1024.59
1023.97
1023.47
1023.08
1022.67
1022.14
1021.61
1021.04
+19.26
-23.50'LT
+17.29
-16.00'LT
+48.69
-23.50'LT
+50.73
-16.00'LT
1020.45
1019.85
1019.40
1020.96
1020.38
1019.77
1019.32
+00.00
-12.00'LT
1021.51
1022.54
1022.02
25'
8'
4'
+14.41
-8.00'LT
1025.27
1024.87
1024.14
1023.52
1023.02
131+00
132+00
133+00
134
MATCH LINE STA. 134+00

STH 170

GLENWOOD CITY (WATER)

XCEL ENERGY ELECTRIC
(OVERHEAD)

CELECT COMMUNICATIONS
(FIBER OPTIC)

WE ENERGIES (GAS)

CAUTION

INL

SIGN

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CONSTRUCTION DETAIL: GLENWOOD CITY CURB EXTENSION	SHEET 30	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021001-CD-GLENWOOD CITY CURB EXTENSION.DWG
LAYOUT NAME - Sheet 1
PLOT DATE : 7/5/2020 1:26 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 44

2

N

GRADE EXISTING PATH
TO MATCH PROPOSED BIKE PATH

EXISTING R/W (TYP.)

CENTURYLINK
(TELEPHONE/FIBER OPTIC)

ASPHALTIC FLUME REQUIRED

1019.09
+27.76
-16.00'LT
1018.95
1019.01
1018.87
1018.66
1018.61
1018.38
1018.36
1018.12
1018.11
1017.98
+14.46
-12.00'LT

MATCH LINE STA. 134+00

+00

25'

SLOPE INTERCEPT (TYP.)

GLENWOOD CITY (WATER)

GLENWOOD CITY
(SANITARY)

END RECONSTRUCTION
STA 135+14.46
SAWCUT REQUIRED
MATCH EXISTING

135+00

3'
3'

136+00

WE ENERGIES (GAS)

CAUTION

CELECT COMMUNICATIONS
(FIBER OPTIC)

XCEL ENERGY ELECTRIC
(OVERHEAD)

NEXTGEN COMMUNICATIONS
(FIBER OPTIC)

CLEAR LAKE TELEPHONE
(FIBER OPTIC)

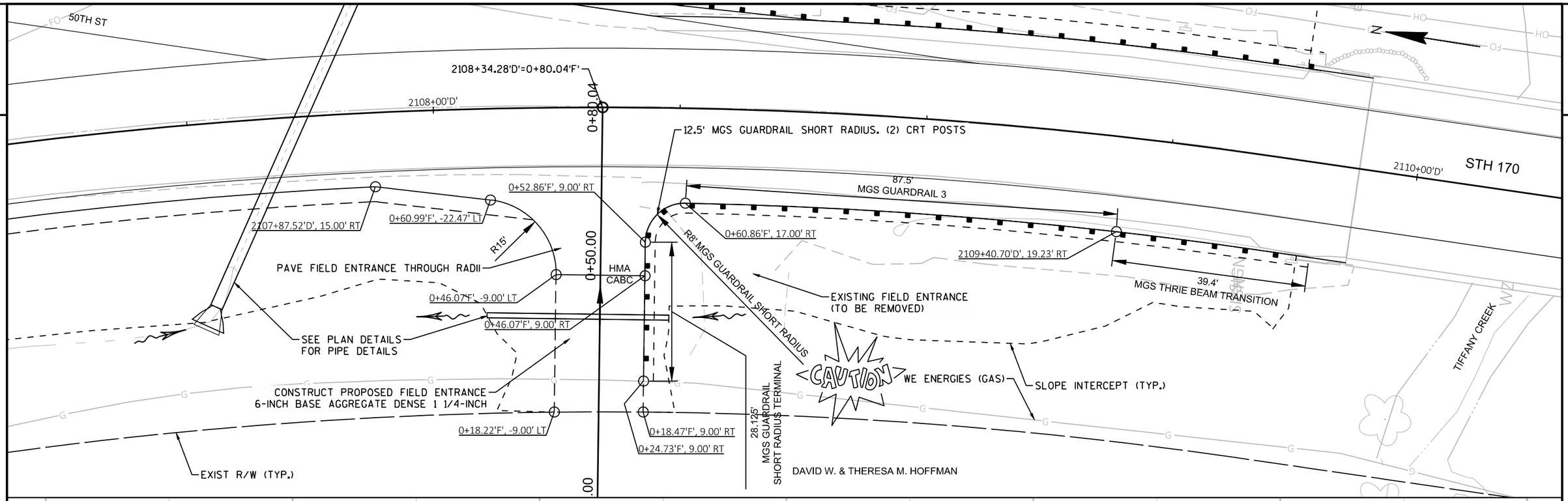
XCEL ENERGY ELECTRIC
(OVERHEAD)

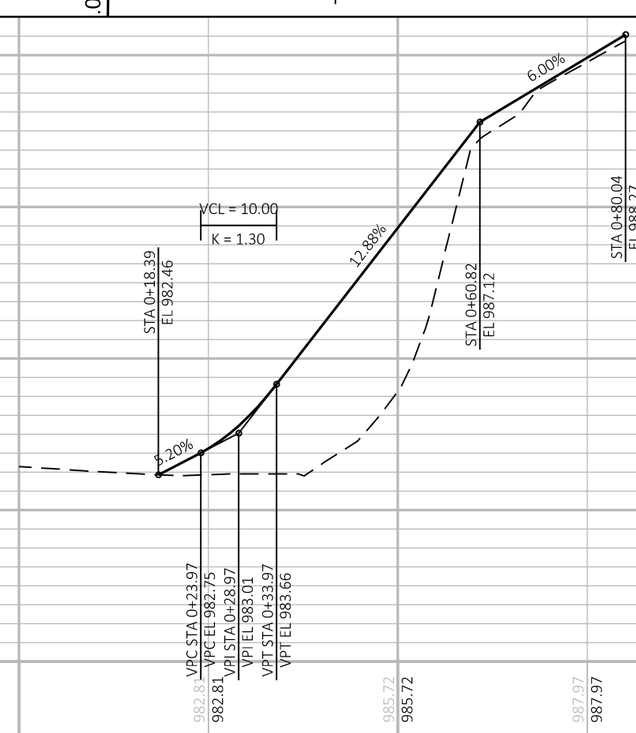
7TH ST

STH 170

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CONSTRUCTION DETAIL: GLENWOOD CITY CURB EXTENSION	SHEET 31	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021001-CD-GLENWOOD CITY CURB EXTENSION.DWG
LAYOUT NAME - Sheet 2
PLOT DATE : 7/5/2020 1:26 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 44





PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	STH 170 - FIELD ENTRANCE	SHEET 32	E

2

CTH G

XCEL ENERGY
ELECTRIC (OVERHEAD)

CENTURYLINK (FIBER OPTIC)

WE ENERGIES (GAS)

CAUTION

STH 170

N

2126+75'D'

2127+00'D'

2127+25'D'

2127+50'D'

2127+75'D'

STA. 2126+94'D' - STA. 2127+40'D'
46 LF CONCRETE CURB & GUTTER 30-INCH TYPE D REQ'D

WE ENERGIES (GAS)

CAUTION

WE ENERGIES (GAS)

CAUTION

MH

+94.15'D', 17.86' RT
993.71

R121.2'

INVERT: 990.85

+40.34'D', 15.43' RT
993.08

INVERT: 990.38

1.1 STA 2127+30, 17.0' RT
INLET 2X3-FT WITH INLET COVER TYPE H-S

XCEL ENERGY
ELECTRIC (OVERHEAD)

LOW POINT ELEV: 993.00'

INSTALL 47 LF STORM SEWER PIPE REINFORCED
CONCRETE CLASS III 18-INCH

1.0 STA 2126+84, 24.6' RT
EXISTING INLET

EXISTING POLE TO REMAIN

EXISTING INLET ELEV: 993.48'

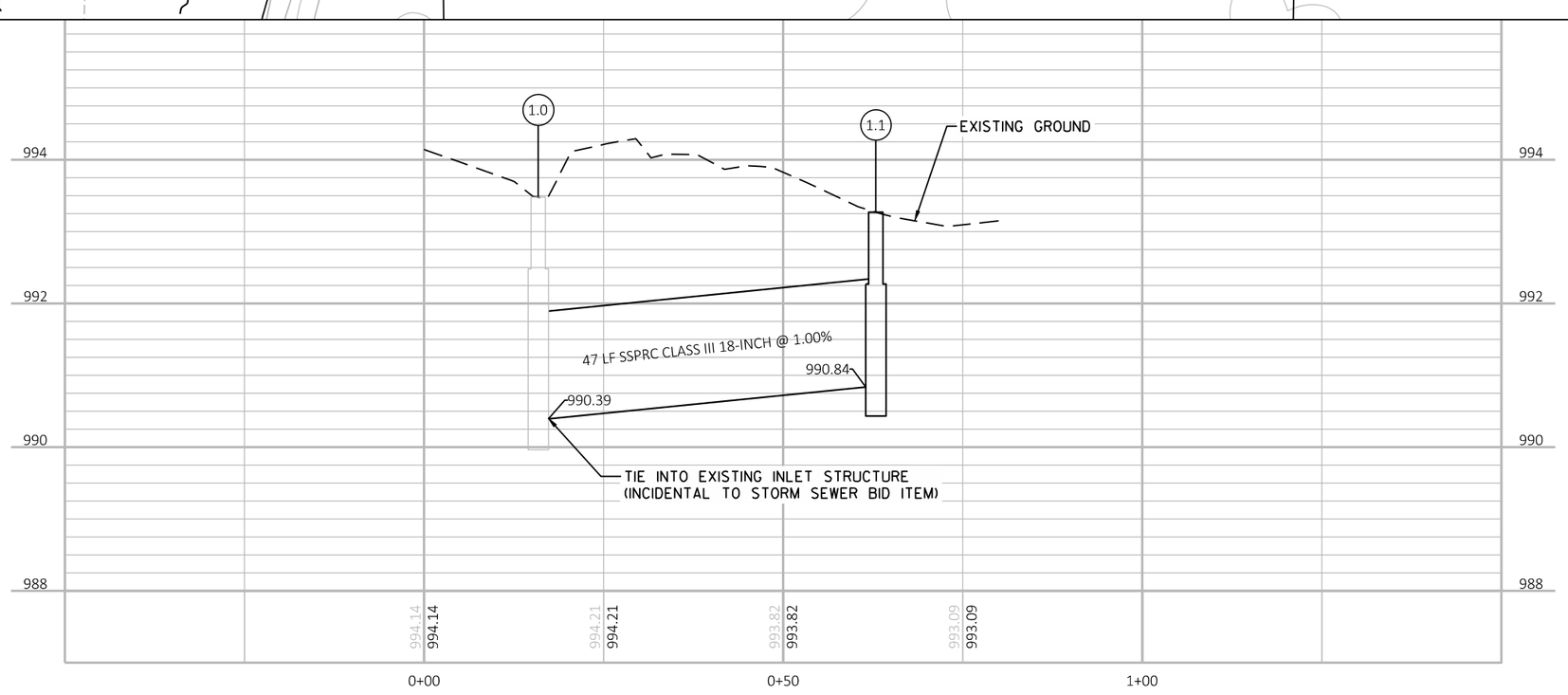
INLET 2X3-FT WITH
INLET COVER TYPE H-S REQ'D

GUY

MH

EXIST R/W (TYP.)

IP



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	STH 170 - CTH G DRAINAGE	SHEET 33	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021001-CD-STH 170 AND CTH G INTERSECTION.DWG
LAYOUT NAME - Sheet 1

PLOT DATE : 7/5/2020 1:29 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 44

VILLAGE OF BOYCEVILLE

BOYCEVILLE (SANITARY)

2388+75'D'

2388+50'D'

(2) 10 LF STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH

2389+00'D'

2.2 STA 2389+20, 6.4' RT
CONCRETE COLLAR FOR PIPE

STA 2389+00, 6.4' RT
CONCRETE COLLAR FOR PIPE 2.3

STH 170

2.1 STA 2389+10, 6.4' RT
MANHOLES 6-J

15 LF STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH

2.4 STA 2389+10, 21.1' RT
INLETS 2x3-H-S

CAUTION

BOYCEVILLE (WATER)

WE ENERGIES (GAS)

XCEL ENERGY
ELECTRIC (OVERHEAD)

EAST ST

N

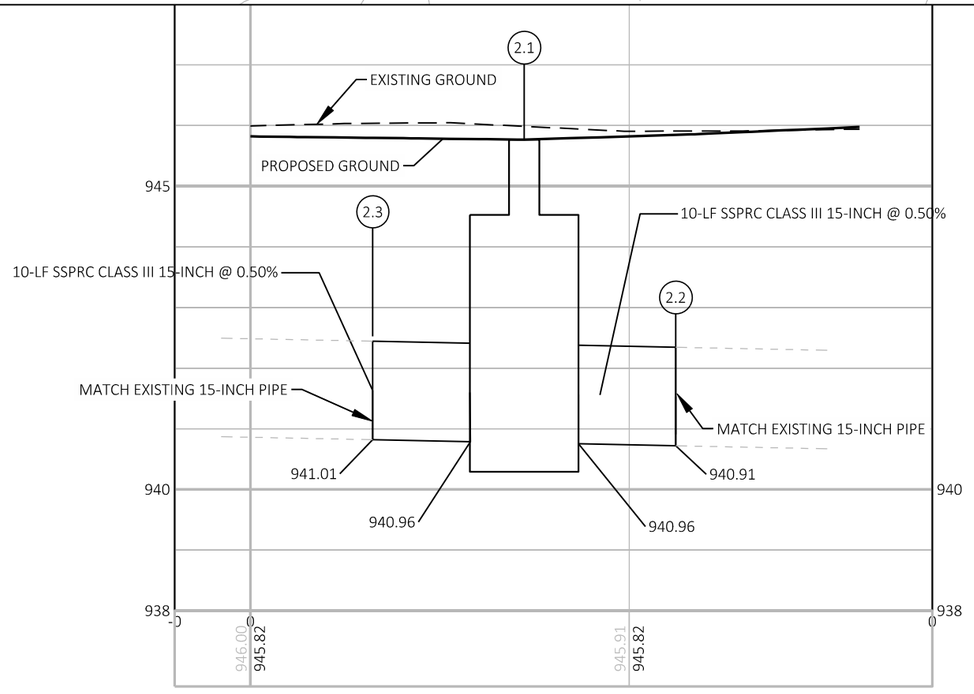
EXISTING R/W (TYP.)

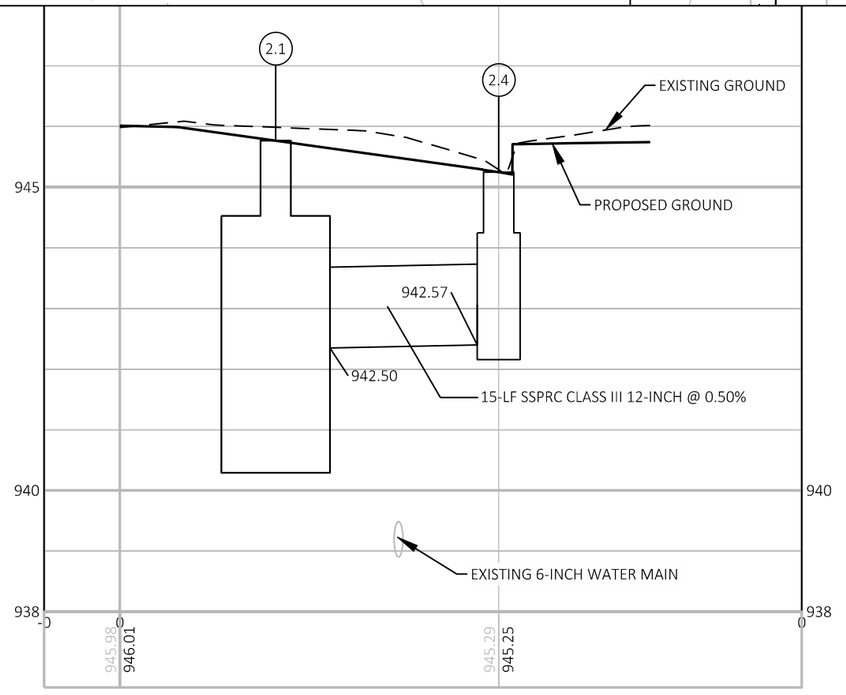
PROPOSED R/W (TYP.)

SLOPE INTERCEPT (TYP.)

TEMPORARY EASEMENT (TYP.)

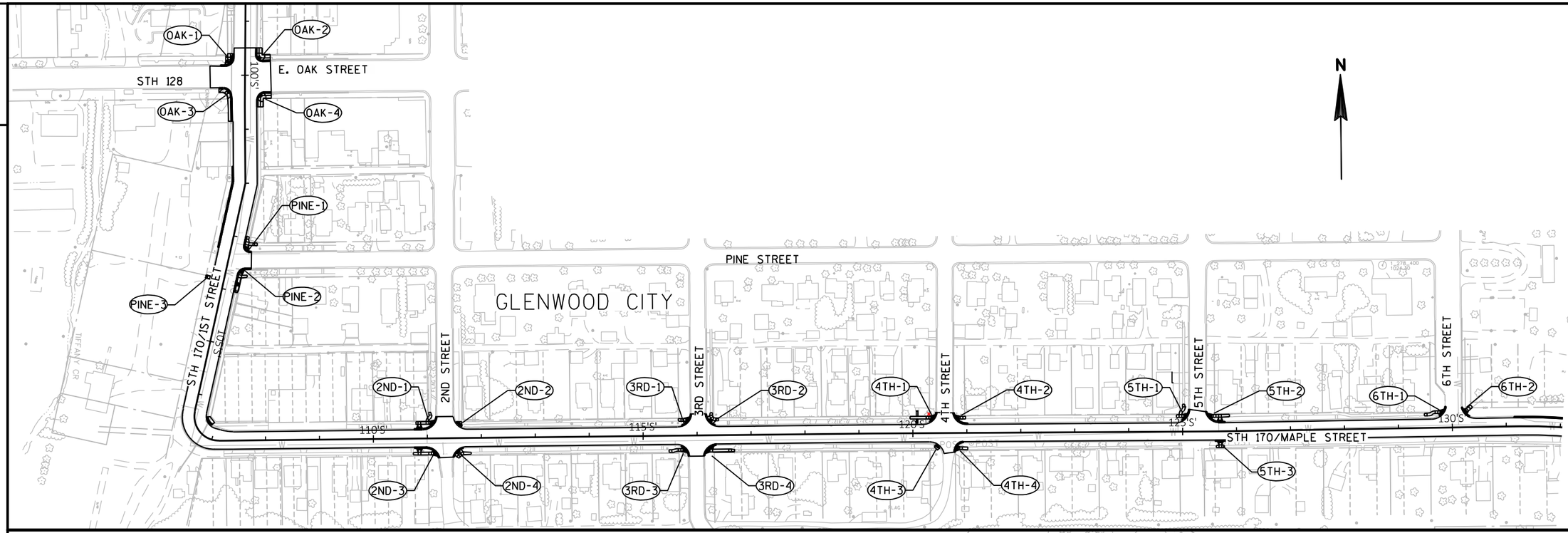
NOTE: SS MANHOLE AT STA. 2390+76'D' WAS FIELD INVESTIGATED.
MANHOLE AT STA. 2388+35'D' WAS UNABLE TO BE FIELD INVESTIGATED.
TO DETERMINE THE ELEVATION OF THE PROPOSED MANHOLE,
IT WAS ASSUMED THAT THE 15-INCH PIPE EXTRUDING FROM THE KNOWN
MANHOLE HAD A SLOPE OF 0.5%

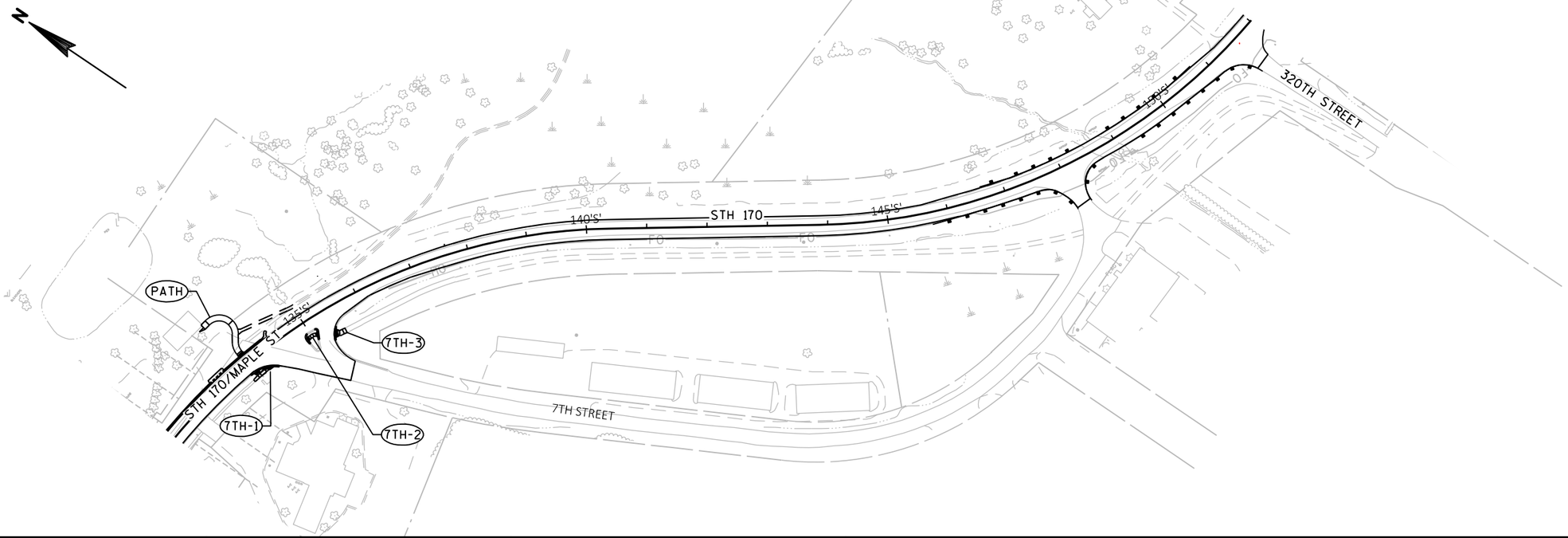




PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	STH 170 - STH 79 STORM SEWER	SHEET 34	E

2





PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: CURB RAMP OVERVIEW - GLENWOOD CITY	SHEET 35	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\ST. CROIX\021301-CR_ST. CROIX CURB RAMP OVERVIEW.DWG
LAYOUT NAME - STA 100+00 -152+00

PLOT DATE : 7/5/2020 1:45 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:200 FT

OAK-1
NW QUADRANT

N

DENNIS R. &
MARGARET A. OHMAN

EXIST R/W (TYP.)

XCEL ENERGY
ELECTRIC (OVERHEAD)

MATCH EXISTING STEPS

ADJUSTING INLET COVERS

CURB RAMP TYPE 2
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R16.5'

XCEL ENERGY
ELECTRIC (OVERHEAD)

STH 128

<CAUTION>

WE ENERGIES (GAS)

STH 170/1ST STREET

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

OAK-2
NE QUADRANT

N

XCEL ENERGY
ELECTRIC (OVERHEAD)

EXIST R/W (TYP.)

GLENWOOD CITY WATER

ASHLESON PROPERTIES, LLC.
A WISCONSIN LIMITED LIABILITY COMPANY

CONCRETE SIDEWALK WEDGE TRANSITION
(SEE CONSTRUCTION DETAIL)

PERMANENT EASEMENT

CURB RAMP TYPE 1
2 2-FTx2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R12.0'

ADJUSTING INLET COVERS

STH 170/1ST STREET

E. OAK ST

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

2

OAK-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
1	99+83.88	45.96' RT	1035.37	Flange
2	99+82.51	30.84' RT	1036.34	Flange
2.1	99+83.76	36.94' RT	1035.88	PT
2.2	99+67.30	20.65' RT	1036.75	PT
2.3	99+67.27	37.15' RT	1036.82	Radius Center
3	99+72.87	21.64' RT	1036.69	Flange
4	99+60.14	20.64' RT	1036.87	Flange
5	99+81.26	36.70' RT	1036.77	Top of Curb
6	99+80.23	31.81' RT	1036.27	Top of Curb
7	99+80.66	31.61' RT	1036.26	Flowline
8	99+77.11	26.50' RT	1036.37	Flowline
9	99+76.77	26.87' RT	1036.41	Top of Curb
10	99+72.01	23.45' RT	1036.61	Flowline
11	99+71.79	23.90' RT	1036.63	Top of Curb
12	99+66.78	22.65' RT	1036.68	Flowline
13	99+66.78	23.15' RT	1036.69	Top of Curb
14	99+66.79	23.98' RT	1036.70	Sidewalk Grade
15	99+61.78	23.14' RT	1037.19	Top of Curb
16	99+60.13	23.18' RT	1037.19	Top of Curb
17	99+76.87	31.87' RT	1036.32	Sidewalk Grade
18	99+72.01	31.97' RT	1036.66	Sidewalk Grade
19	99+71.84	26.98' RT	1036.76	Sidewalk Grade
20	99+66.86	27.08' RT	1036.79	Sidewalk Grade
21	99+67.01	32.08' RT	1036.75	Sidewalk Grade
22	99+73.46	35.76' RT	1036.65	Match Existing Sidewalk
23	99+67.14	35.95' RT	1036.90	Match Existing Sidewalk
24	99+64.76	36.03' RT	1036.91	Match Existing Sidewalk

OAK-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
25	99+64.68	32.13' RT	1036.80	Sidewalk Grade
26	99+60.32	32.22' RT	1037.34	Match Existing Sidewalk
27	99+60.21	27.22' RT	1037.25	Match Existing Sidewalk
28	99+49.39	19.51' LT	1037.39	Flange
29	99+68.27	20.82' LT	1037.31	Flange
29.1	99+62.54	31.37' LT	1037.67	Radius Center
29.2	99+60.81	19.38' LT	1037.31	PT
29.3	99+74.54	31.78' LT	1037.42	PT
30	99+74.03	46.68' LT	1037.62	Flange
31	99+67.31	22.58' LT	1037.23	Flowline
32	99+71.11	26.22' LT	1037.27	Flowline
33	99+49.40	22.02' LT	1037.80	Top of Curb
34	99+59.41	21.90' LT	1037.77	Top of Curb
35	99+67.07	23.02' LT	1037.27	Top of Curb
36	99+70.68	26.48' LT	1037.31	Top of Curb
37	99+72.01	32.22' LT	1037.77	Top of Curb
38	99+71.53	46.59' LT	1037.93	Top of Curb
39	99+49.33	25.47' LT	1037.88	Match Existing Sidewalk
40	99+59.33	25.67' LT	1037.66	Sidewalk Grade
41	99+64.07	26.01' LT	1037.57	Sidewalk Grade
42	99+67.56	29.59' LT	1037.62	Sidewalk Grade
43	99+67.70	36.52' LT	1037.74	Sidewalk Grade
44	99+67.50	46.51' LT	1038.11	Match Existing Sidewalk
45	99+49.22	30.96' LT	1038.05	Match Existing Sidewalk
46	99+49.21	31.62' LT	1038.04	Match Existing Building
47	99+59.22	31.17' LT	1037.71	Sidewalk Grade
48	99+62.31	31.22' LT	1037.67	Sidewalk Grade

She		
POINT NUMBER	STATION	OFFS
49	99+62.20	36.40
50	99+62.00	46.40

2

OAK-3
SW QUADRANT

N

CAUTION

STH 128

WE ENERGIES (GAS)

ADJUSTING INLET COVERS

CURB RAMP TYPE 1A
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R13.0'

R15.0'

R53.25'

CONCRETE CURB PEDESTRIAN
MARKING CURB PAINT YELLOW

EXIST R/W (TYP.)

PERMANENT EASEMENT

BONNIE PELIKAN & ANTON O. PELIKAN

XCEL ENERGY
ELECTRIC (OVERHEAD)

XCEL ENERGY
ELECTRIC (OVERHEAD)

STH 170/1ST STREET

51 55 51.2 57 52 54 56 58 51.1 63 64 51.5 59 51.3 65 60 51.6 66 51.4 51.7 67 61 68 53 62

100+00'S'

OAK-4
SE QUADRANT

2

N

GLENWOOD CITY (WATER)

E. OAK ST

CURB RAMP TYPE 1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

ADJUSTING INLET COVERS

R10.5'

R16.0'

CONCRETE SIDEWALK WEDGE TRANSITION
(SEE CONSTRUCTION DETAIL)

XCEL ENERGY
ELECTRIC (OVERHEAD)

STH 170/1ST STREET

EXIST R/W (TYP.)

SCOTT A. HEINBUCH

69.4 76 69.5 78 71 79 77 * 70 74 75 83 84 85 82 88 89 90 69.1 73 69.3 93 94 95 87 69.2 81 92 69 72 80 86 91

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: CURB RAMPS-STH 128/E. OAK ST. INTERSECTION	SHEET 38	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\ST. CROIX\021301-CR_ST. CROIX CURB RAMPS.DWG
LAYOUT NAME - STH 128-OAK ST (2)

PLOT DATE : 7/5/2020 1:48 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

OAK-3				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
51	100+23.61	48.30' RT	1035.50	Flange
51.1	100+23.44	39.50' RT	1035.93	PT
51.2	100+24.41	34.33' RT	1036.05	PT
51.3	100+34.36	25.54' RT	1036.20	PT
51.4	100+47.19	23.69' RT	1036.17	PT
51.5	100+36.44	39.26' RT	1036.45	Radius Center
51.6	100+38.29	40.01' RT	1036.40	Radius Center
51.7	100+48.32	76.93' RT	1035.02	Radius Center
52	100+26.31	30.99' RT	1036.13	Flange
53	100+85.13	23.34' RT	1035.80	Flange
54	100+26.11	48.25' RT	1035.47	Top of Curb
55	100+25.97	41.17' RT	1035.94	Top of Curb
56	100+27.91	32.19' RT	1036.05	Flowline
57	100+28.31	32.49' RT	1036.06	Top of Curb
58	100+31.81	28.75' RT	1036.12	Flowline
59	100+32.06	29.18' RT	1036.13	Top of Curb
60	100+40.02	26.86' RT	1036.12	Top of Curb
61	100+62.18	26.00' RT	1035.90	Top of Curb
62	100+85.14	25.84' RT	1035.84	Top of Curb
63	100+32.11	48.12' RT	1035.86	Match Existing Sidewalk
64	100+33.24	38.07' RT	1036.16	Sidewalk Grade
65	100+36.43	34.13' RT	1036.23	Sidewalk Grade
66	100+44.19	31.59' RT	1036.34	Sidewalk Grade
67	100+62.19	30.56' RT	1036.10	Sidewalk Grade
68	100+85.17	30.65' RT	1035.95	Match Existing Sidewalk

OAK-4				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
69	100+58.81	22.00' LT	1036.45	Flange
69.1	100+41.31	34.98' LT	1036.93	Radius Center
69.2	100+45.89	38.03' LT	1037.39	Radius Center
69.3	100+45.96	22.03' LT	1036.70	PT
69.4	100+32.57	29.16' LT	1036.92	PT
69.5	100+30.81	34.81' LT	1037.01	PT
70	100+38.05	24.08' LT	1036.83	Flange
71	100+30.58	48.84' LT	1037.21	Flange
72	100+58.84	24.50' LT	1036.85	Top of Curb
73	100+44.54	24.59' LT	1037.26	Top of Curb
74	100+39.03	25.82' LT	1036.75	Flowline
75	100+39.27	26.26' LT	1036.76	Top of Curb
76	100+35.01	29.22' LT	1036.82	Flowline
77	100+35.44	29.48' LT	1036.83	Top of Curb
78	100+33.32	34.55' LT	1037.33	Top of Curb
79	100+33.08	48.88' LT	1037.54	Top of Curb
80	100+58.88	28.78' LT	1036.92	Match Existing Sidewalk
81	100+48.46	28.82' LT	1036.96	Sidewalk Grade
82	100+41.68	28.86' LT	1036.84	Sidewalk Grade
83	100+37.79	32.02' LT	1036.90	Sidewalk Grade
84	100+37.38	38.93' LT	1037.00	Sidewalk Grade
85	100+37.24	48.95' LT	1037.67	Match Existing Sidewalk
86	100+58.93	33.78' LT	1037.10	Match Existing Sidewalk
87	100+48.44	33.82' LT	1036.99	Sidewalk Grade
88	100+42.46	33.80' LT	1036.94	Sidewalk Grade
89	100+42.38	39.01' LT	1037.03	Sidewalk Grade
90	100+42.23	49.02' LT	1037.79	Match Existing Sidewalk
91	100+58.94	34.28' LT	1037.12	Match Building
92	100+48.44	34.32' LT	1037.19	Match Building
93	100+42.95	34.30' LT	1037.35	Match Building
94	100+42.88	39.01' LT	1037.46	Match Building
95	100+42.73	49.03' LT	1037.80	Match Building

2

PINE-1
NE QUADRANT

N

STH 170/1ST STREET

GLENWOOD CITY (WATER)

EXIST R/W (TYP.)

EMMANUEL PROPERTIES WI #2, LLC,
A WISCONSIN LIMITED LIABILITY COMPANY

PROPOSED R/W

ADJUSTING INLET COVERS

WE ENERGIES (GAS)

CAUTION

CURB RAMP TYPE 4A1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R11.0'

SLOPE INTERCEPT (TYP.)

ADJUSTING INLET COVERS

PINE STREET

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

PINE-2
SE QUADRANT

N

STH 170/1ST STREET

GLENWOOD CITY (WATER)

ADJUSTING INLET COVERS

PINE STREET

CURB RAMP TYPE 4A1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R14.0'

SLOPE INTERCEPT (TYP.)

CENTURYLINK (FIBER OPTIC)
AND (TELEPHONE)

CURB RAMP TYPE 7A
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

CONCRETE CURB PEDESTRIAN

WE ENERGIES (GAS)

CAUTION

TEMPORARY EASEMENT

SHEM RASCHKE

EXIST R/W (TYP.)

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

2

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: CURB RAMPS-PINE ST. INTERSECTION	SHEET 40	E

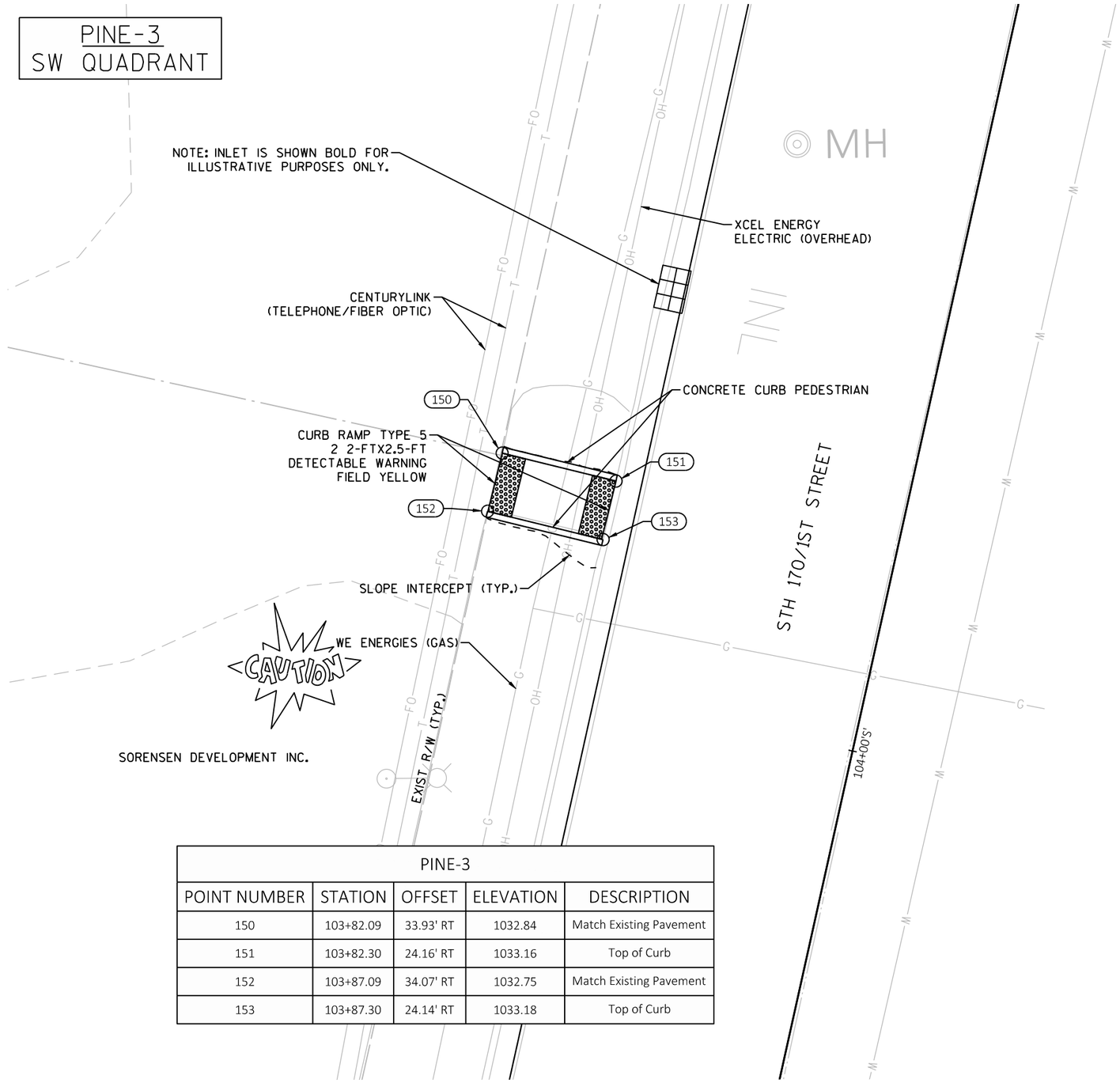
PINE-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
96	103+05.69	21.89' LT	1034.98	Flange
96.1	103+13.02	32.88' LT	1035.73	Radius Center
96.2	103+13.01	21.88' LT	1034.92	PT
96.3	103+23.75	35.28' LT	1035.52	PT
97	103+17.99	23.07' LT	1035.26	Flange
98	103+17.08	24.85' LT	1035.18	Flowline
99	103+16.86	25.30' LT	1035.19	Top of Curb
100	103+21.69	30.46' LT	1035.21	Flowline
101	103+21.20	30.59' LT	1035.22	Top of Curb
102	103+21.49	33.58' LT	1035.72	Top of Curb
103	103+22.94	38.94' LT	1035.69	Flange
104	102+95.68	24.40' LT	1035.23	Top of Curb
105	102+95.67	28.57' LT	1035.45	Match Existing Sidewalk
106	103+00.59	24.39' LT	1035.21	Top of Curb
107	103+00.63	28.58' LT	1035.45	Sidewalk Grade
108	103+05.68	24.39' LT	1035.29	Top of Curb
109	103+05.66	30.56' LT	1035.41	Sidewalk Grade
110	103+10.68	24.48' LT	1035.25	Top of Curb
111	103+10.66	30.57' LT	1035.37	Sidewalk Grade
112	103+16.85	30.59' LT	1035.29	Sidewalk Grade
113	103+09.05	41.49' LT	1036.53	Sidewalk Grade
114	103+08.64	46.53' LT	1035.29	Match Existing Sidewalk
115	103+04.41	40.48' LT	1036.59	Sidewalk Grade
116	103+03.37	45.38' LT	1037.05	Match Existing Sidewalk

PINE-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
125	104+01.04	24.54' LT	1034.42	Top of Curb
125.1	103+67.49	22.12' LT	1034.75	PT
125.2	103+53.89	32.94' LT	1035.09	PT
125.3	103+67.52	36.12' LT	1036.30	Radius Center
126	103+98.36	24.55' LT	1034.50	Top of Cur b
127	104+00.99	22.04' LT	1034.00	Flange
128	103+88.36	24.59' LT	1034.28	Top of Curb
129	103+88.35	24.07' LT	1034.29	Flowline
130	103+83.36	24.58' LT	1034.37	Top of Curb
131	103+83.35	24.08' LT	1034.36	Flowline
132	103+73.17	24.60' LT	1035.01	Top of Curb
133	103+68.14	24.61' LT	1035.11	Top of Curb
134	103+62.14	25.95' LT	1034.95	Top of Curb
135	103+61.94	25.48' LT	1034.94	Flowline
136	103+61.05	23.69' LT	1035.02	Flange
137	103+57.41	30.65' LT	1034.97	Top of Curb
138	103+56.97	30.41' LT	1034.96	Flowline
139	103+56.35	33.40' LT	1035.47	Top of Curb
140	103+51.11	44.86' LT	1035.82	Flange
141	103+62.15	30.64' LT	1035.04	Sidewalk Grade
142	103+68.15	30.63' LT	1035.15	Sidewalk Grade
143	103+65.39	40.24' LT	1036.39	Match Existing Sidewalk
144	103+73.19	30.62' LT	1035.13	Sidewalk Grade
145	103+69.56	41.14' LT	1036.40	Match Existing Sidewalk
146	103+83.48	30.09' LT	1034.48	Sidewalk Grade
147	103+88.48	30.08' LT	1034.40	Sidewalk Grade
148	103+98.49	30.56' LT	1034.50	Sidewalk Grade
149	104+01.15	29.23' LT	1034.52	Match Existing Sidewalk

2

N

PINE-3
SW QUADRANT



PINE-3				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
150	103+82.09	33.93' RT	1032.84	Match Existing Pavement
151	103+82.30	24.16' RT	1033.16	Top of Curb
152	103+87.09	34.07' RT	1032.75	Match Existing Pavement
153	103+87.30	24.14' RT	1033.18	Top of Curb

2

N

2ND-1
NW QUADRANT

CRAIG W. ANDERSON
&
JULIE A. ANDERSON

XCEL ENERGY
ELECTRIC (OVERHEAD)

EXIST R/W (TYP.)

2ND STREET

ADJUSTING INLET COVERS

TEMPORARY EASEMENT

156.2

PROPOSED R/W

183 184 185 186 171 170 178 175 169 172 176 180 182 168 174 181 179 167 173 177 164 166 165* 160 162 163 157 159 156 158* 161 156.1*

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

SLOPE INTERCEPT (TYP.)

R27.5'

CURB RAMP TYPE 3
2 2-FTX2.5-FT
DETECTABLE
WARNING
FIELD YELLOW

WE ENERGIES (GAS)

CAUTION

STH 170/MAPLE STREET

111+00'S'

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

GLENWOOD CITY (WATER)

N

2ND-2
NE QUADRANT

2ND STREET

GREGORY L. CHERMACK

EXIST R/W (TYP.)

NOTE: INLET IS SHOWN BOLD FOR ILLUSTRATIVE PURPOSES ONLY.

EXISTING ROCK/CONCRETE
RETAINING WALL (TO REMAIN)

EXISTING SIDEWALK (TO REMAIN)

EXISTING CURB & GUTTER (TO REMAIN)

NOTE: INLET IS SHOWN BOLD FOR ILLUSTRATIVE PURPOSES ONLY.

4 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

EXCEPTION TO MAKE RAMP NOT FULLY ADA COMPLIANT. MAKE AS CLOSE TO COMPLIANT AS POSSIBLE

EXISTING BLOCK WALL
(TO REMAIN)

STH 170/MAPLE STREET

112+00'S'

GLENWOOD CITY (WATER)

2

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: CURB RAMPS-2ND ST. INTERSECTION	SHEET 43	E

2ND-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
156	110+75.85	15.98' LT	1043.75	Flange
156.1	110+90.72	15.94' LT	1044.30	PT
156.2	110+90.78	43.44' LT	1045.95	Radius Center
157	110+79.86	18.47' LT	1044.64	Top of Curb
158	110+82.86	15.96' LT	1044.18	Flange
159	110+82.86	17.96' LT	1044.10	Flowline
160	110+82.86	18.46' LT	1044.14	Top of Curb
161	110+87.86	17.95' LT	1044.20	Flowline
162	110+87.86	18.45' LT	1044.24	Top of Curb
163	110+90.86	18.44' LT	1044.74	Top of Curb
164	111+06.67	24.14' LT	1046.52	Top of Curb
165	111+10.70	24.48' LT	1046.09	Flange
166	111+09.25	25.86' LT	1046.01	Flowline
167	111+08.88	26.20' LT	1046.02	Top of Curb
168	111+13.05	31.01' LT	1046.05	Flowline
169	111+12.58	31.21' LT	1046.06	Top of Curb
170	111+13.89	33.91' LT	1046.56	Top of Curb
171	111+18.07	40.03' LT	1046.68	Flange
172	110+79.13	31.19' LT	1044.86	Match Existing Sidewalk
173	110+79.14	26.41' LT	1044.86	Match Existing Sidewalk
174	110+82.88	26.11' LT	1044.69	Sidewalk Grade
175	110+82.86	31.11' LT	1044.79	Sidewalk Grade
176	110+87.86	31.13' LT	1044.83	Sidewalk Grade
177	110+87.88	26.13' LT	1044.79	Sidewalk Grade
178	110+97.86	31.16' LT	1045.66	Sidewalk Grade
179	110+97.88	26.16' LT	1045.62	Sidewalk Grade
180	111+02.86	31.15' LT	1045.76	Sidewalk Grade
181	111+02.88	26.18' LT	1045.72	Sidewalk Grade
182	111+08.86	31.20' LT	1046.12	Sidewalk Grade
183	111+03.36	48.42' LT	1046.52	Match Existing Sidewalk
184	111+06.61	48.43' LT	1046.43	Match Existing Sidewalk
185	111+03.43	43.42' LT	1046.31	Sidewalk Grade
186	111+08.43	43.43' LT	1046.38	Sidewalk Grade

2

STH 170/MAPLE STREET

2ND-3
SW QUADRANT

N

WE ENERGIES (GAS)

111+00'S'

CURB RAMP TYPE 3
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

ADJUSTING INLET COVERS

GLENWOOD CITY (WATER)

WE ENERGIES (GAS)

CAUTION

R26.75'

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

SLOPE INTERCEPT (TYP.)

TEMPORARY EASEMENT

NOTE: INLET IS SHOWN BOLD FOR ILLUSTRATIVE PURPOSES ONLY.

EXIST R/W (TYP.)

2ND STREET

ANNETTA M. WALDON, VENDOR
AND LAURIE L. STEWART, PURCHASER
UNDER LAND CONTRACT RECORDED
9/16/2015 AS DOCUMENT NO. 1018619

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

2ND-4
SE QUADRANT

N

112+00'S'

STH 170/MAPLE STREET

GLENWOOD CITY (WATER)

WE ENERGIES (GAS)

CAUTION

R25.6'

CURB RAMP TYPE 1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

SLOPE INTERCEPT (TYP.)

TEMPORARY EASEMENT

NOTE: INLETS ARE SHOWN BOLD FOR ILLUSTRATIVE PURPOSES ONLY.

EXIST R/W (TYP.)

2ND STREET

BENJAMIN T. HELLER
&
LISA A. HELLER

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: CURB RAMPS-2ND ST. INTERSECTION	SHEET 45	E

2

2ND-3				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
187	110+75.82	15.80' RT	1044.03	Flange
187.1	110+96.39	15.81' RT	1044.89	PT
187.2	110+96.37	42.56' RT	1045.34	Radius Center
188	110+79.81	18.30' RT	1044.96	Top of Curb
189	110+82.82	15.80' RT	1044.50	Flange
190	110+82.81	17.80' RT	1044.42	Flowline
191	110+82.81	18.30' RT	1044.46	Top of Curb
192	110+87.81	17.81' RT	1044.49	Flowline
193	110+87.81	18.31' RT	1044.53	Top of Curb
194	110+90.81	18.31' RT	1045.03	Top of Curb
195	111+11.17	23.35' RT	1046.76	Top of Curb
196	111+15.05	23.43' RT	1046.33	Flange
197	111+13.76	24.94' RT	1046.25	Flowline
198	111+13.43	25.33' RT	1046.26	Top of Curb
199	111+17.73	30.05' RT	1046.29	Flowline
200	111+17.32	30.33' RT	1046.30	Top of Curb
201	111+18.66	33.01' RT	1046.80	Top of Curb
202	111+22.31	36.00' RT	1046.73	Flange
203	110+73.62	26.08' RT	1044.33	Match Existing Sidewalk
204	110+82.81	25.29' RT	1044.95	Sidewalk Grade
205	110+73.60	30.10' RT	1044.27	Match Existing Sidewalk
206	110+82.81	30.29' RT	1045.02	Sidewalk Grade
207	110+87.81	25.31' RT	1045.02	Sidewalk Grade
208	110+87.81	30.30' RT	1045.09	Sidewalk Grade
209	111+02.25	25.31' RT	1046.03	Sidewalk Grade
210	111+02.25	30.32' RT	1046.10	Sidewalk Grade
211	111+07.25	25.32' RT	1046.13	Sidewalk Grade
212	111+07.25	30.32' RT	1046.17	Sidewalk Grade
213	111+13.43	30.33' RT	1046.36	Sidewalk Grade

2ND-4				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
214	111+46.70	35.02' RT	1047.21	Flange
214.1	111+50.98	30.96' RT	1047.76	Top of Curb
214.2	111+71.40	41.83' RT	1048.85	Radius Center
215	111+52.06	25.02' RT	1047.30	Flange
216	111+66.28	16.73' RT	1047.72	Flange
217	111+53.57	26.34' RT	1047.22	Flowline
218	111+57.29	22.89' RT	1047.25	Flowline
219	111+53.94	26.67' RT	1047.26	Top of Curb
220	111+57.63	23.27' RT	1047.28	Top of Curb
221	111+62.00	20.71' RT	1047.78	Top of Curb
222	111+54.18	34.84' RT	1047.63	Sidewalk Grade
223	111+58.59	37.19' RT	1047.73	Sidewalk Grade
224	111+57.24	30.68' RT	1047.62	Sidewalk Grade
225	111+60.43	34.58' RT	1047.72	Sidewalk Grade
226	111+61.22	27.65' RT	1047.59	Sidewalk Grade
227	111+64.46	31.60' RT	1047.69	Sidewalk Grade
228	111+66.15	25.78' RT	1047.68	Sidewalk Grade
229	111+67.19	30.67' RT	1047.72	Sidewalk Grade
230	111+81.14	26.55' RT	1048.87	Match Existing Sidewalk
231	111+81.15	30.09' RT	1048.88	Match Existing Sidewalk

2

3RD-1
NW QUADRANT

N

3RD STREET

XCEL ENERGY
ELECTRIC (OVERHEAD)

OH

HSE

EXIST R/W (TYP.)

LOUIS J. HOOSER JR

232.1

ADJUSTING INLET COVERS

240

239

237

238

241

243

245

247

244

246

242

234

235

236*

233

232

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

SLOPE INTERCEPT (TYP.)

R25.5'

MH

116+00'S'

STH 170/MAPLE STREET

GLENWOOD CITY (WATER)

W

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

3RD-2
NE QUADRANT

N

3RD STREET

FO T TV

EXIST R/W (TYP.)

THOMAS J. SCHUG

XCEL ENERGY
ELECTRIC (OVERHEAD)

ADJUSTING INLET COVERS

257

258

248.1

TEMPORARY EASEMENT

248

260

259

261

262

265

R26.5'

249

263

267

250

264

266

268

251

*

252

253

CURB RAMP TYPE 1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

254

254.1*

255

256

NOTE: INLET IS SHOWN BOLD FOR
ILLUSTRATIVE PURPOSES ONLY.

SLOPE INTERCEPT (TYP.)

CENTURYLINK (TELEPHONE,
FIBER OPTIC, AND TELEVISION)

CAUTION

WE ENERGIES (GAS)

00'S'

STH 170/MAPLE STREET

GLENWOOD CITY (WATER)

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

2

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: CURB RAMPS-3RD ST. INTERSECTION	SHEET 47	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\ST. CROIX\021301-CR_ST. CROIX CURB RAMPS.DWG
LAYOUT NAME - 3RD (1)

PLOT DATE : 7/5/2020 1:49 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

3RD-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
232	115+71.86	17.65' LT	1064.14	Flange
232.1	115+64.35	42.02' LT	1064.89	Radius Center
233	115+79.41	24.63' LT	1065.12	Top of Curb
234	115+81.54	26.74' LT	1064.62	Top of Curb
235	115+81.89	26.37' LT	1064.61	Flowline
236	115+83.26	24.91' LT	1064.69	Flange
237	115+84.93	31.74' LT	1064.67	Top of Curb
238	115+85.36	31.48' LT	1066.66	Flowline
239	115+86.09	34.51' LT	1065.17	Top of Curb
240	115+89.76	39.88' LT	1064.93	Flange
241	115+65.53	31.74' LT	1064.42	Match Existing Sidewalk
242	115+65.55	26.87' LT	1064.36	Match Existing Sidewalk
243	115+70.54	31.72' LT	1064.62	Sidewalk Grade
244	115+70.54	26.72' LT	1064.52	Sidewalk Grade
245	115+75.54	31.73' LT	1064.66	Sidewalk Grade
246	115+75.54	26.73' LT	1064.62	Sidewalk Grade
247	115+81.54	31.74' LT	1064.72	Sidewalk Grade

3RD-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
248	116+15.06	39.96' LT	1065.69	Flange
248.1	116+41.44	42.52' LT	1067.09	Radius Center
249	116+19.43	32.93' LT	1066.71	Top of Curb
250	116+21.97	28.48' LT	1066.21	Top of Curb
251	116+21.56	28.19' LT	1066.17	Flowline
252	116+19.93	27.02' LT	1066.25	Flange
253	116+25.30	24.75' LT	1066.22	Top of Curb
254	116+24.96	24.38' LT	1066.19	Flowline
254.1	116+23.62	22.91' LT	1066.27	Flange
255	116+29.42	21.74' LT	1066.69	Top of Curb
256	116+33.05	17.38' LT	1066.73	Flange
257	116+24.97	41.87' LT	1066.42	Match Existing Sidewalk
258	116+28.85	41.87' LT	1066.54	Match Existing Sidewalk
259	116+23.85	36.88' LT	1066.57	Sidewalk Grade
260	116+28.85	36.85' LT	1066.57	Sidewalk Grade
261	116+29.60	34.17' LT	1066.60	Sidewalk Grade
262	116+25.36	31.52' LT	1066.53	Sidewalk Grade
263	116+31.42	32.45' LT	1066.65	Sidewalk Grade
264	116+29.00	28.07' LT	1066.54	Sidewalk Grade
265	116+35.09	31.82' LT	1066.72	Sidewalk Grade
266	116+35.10	26.83' LT	1066.72	Sidewalk Grade
267	116+40.09	31.33' LT	1066.92	Match Existing Sidewalk
268	116+40.09	26.93' LT	1066.87	Match Existing Sidewalk

STH 170/MAPLE STREET

3RD-3
SW QUADRANT

N

116+00'S'

GLENWOOD CITY (WATER)

SLOPE INTERCEPT (TYP.)

WE ENERGIES (GAS)

CAUTION

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R23.25'

269 270 271* 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 269.1

ADJUSTING INLET COVERS

XCEL ENERGY
ELECTRIC (OVERHEAD)

CELECT COMMUNICATIONS
(FIBER OPTIC)

JENNIFER M. ANDERSON

EXIST R/W (TYP.)

3RD STREET

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

3RD-4
SE QUADRANT

N

STH 170/MAPLE STREET

CENTURYLINK (TELEPHONE,
FIBER OPTIC, AND TELEVISION)

WE ENERGIES (GAS)

CAUTION

GLENWOOD CITY (WATER)

NOTE: INLET IS SHOWN BOLD FOR
ILLUSTRATIVE PURPOSES ONLY.

CURB RAMP TYPE 2
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R25.5'

287 287.1 288 289 290 291 292 293* 294 295 296* 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312

ADJUSTING INLET COVERS

WE ENERGIES (GAS)

SLOPE INTERCEPT (TYP.)

CELECT COMMUNICATIONS
(FIBER OPTIC)

TEMPORARY EASEMENT

CARLTON DEWITT
&
PAULA DEWITT

EXIST R/W (TYP.)

3RD STREET

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: CURB RAMPS-3RD ST. INTERSECTION	SHEET 49	E

2

3RD-3				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
269	115+70.70	18.01' RT	1064.62	Flange
269.1	115+62.23	39.66' RT	1066.79	Radius Center
270	115+73.37	22.15' RT	1065.88	Top of Curb
271	115+77.32	21.97' RT	1065.42	Flange
272	115+76.09	23.55' RT	1065.34	Flowline
273	115+75.78	23.94' RT	1065.38	Top of Curb
274	115+80.42	28.67' RT	1065.41	Flowline
275	115+80.00	28.93' RT	1065.42	Top of Curb
276	115+81.36	31.60' RT	1065.92	Top of Curb
277	115+85.44	38.30' RT	1066.51	Flange
278	115+47.87	25.97' RT	1065.62	Match Existing Sidewalk
279	115+52.86	25.82' RT	1065.91	Sidewalk Grade
280	115+47.87	30.92' RT	1065.68	Match Existing Sidewalk
281	115+52.88	30.94' RT	1066.01	Sidewalk Grade
282	115+64.78	23.97' RT	1065.83	Sidewalk Grade
283	115+69.78	23.96' RT	1065.80	Sidewalk Grade
284	115+64.79	28.97' RT	1065.86	Sidewalk Grade
285	115+69.79	28.96' RT	1065.83	Sidewalk Grade
286	115+75.79	28.94' RT	1065.48	Sidewalk Grade

3RD-4				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
287	116+11.20	38.06' RT	1067.38	Flange
287.1	116+36.45	41.53' RT	1071.12	Radius Center
288	116+16.09	30.84' RT	1067.30	Top of Curb
289	116+15.66	30.57' RT	1067.29	Flowline
290	116+13.95	29.53' RT	1067.37	Flange
291	116+19.64	25.83' RT	1067.35	Top of Curb
292	116+19.28	25.49' RT	1067.32	Flowline
293	116+17.82	24.13' RT	1067.40	Flange
294	116+23.48	22.54' RT	1067.33	Top of Curb
295	116+23.20	22.13' RT	1067.30	Flowline
296	116+22.09	20.46' RT	1067.38	Flange
297	116+28.50	19.95' RT	1067.29	Top of Curb
298	116+28.32	19.48' RT	1067.28	Flowline
299	116+27.63	17.61' RT	1067.36	Flange
300	116+35.05	16.09' RT	1067.34	Flange
301	116+19.65	30.83' RT	1067.35	Sidewalk Grade
302	116+23.46	25.82' RT	1067.54	Sidewalk Grade
303	116+23.43	30.82' RT	1067.62	Sidewalk Grade
304	116+28.48	22.57' RT	1067.33	Sidewalk Grade
305	116+28.46	25.81' RT	1067.54	Sidewalk Grade
306	116+28.43	30.81' RT	1067.62	Sidewalk Grade
307	116+58.43	25.74' RT	1069.75	Sidewalk Grade
308	116+63.43	25.73' RT	1069.85	Sidewalk Grade
309	116+58.43	30.74' RT	1069.82	Sidewalk Grade
310	116+63.43	30.73' RT	1069.89	Sidewalk Grade
311	116+69.19	26.66' RT	1070.29	Match Existing Sidewalk
312	116+69.17	30.53' RT	1070.57	Match Existing Sidewalk

2

4TH-1
NW QUADRANT

N

RONNIE L. GILBERTSON

EXIST R/W (TYP.)

4TH STREET

325 326 TEMPORARY EASEMENT 314.1 REMOVE EXISTING TREE 322 321 320 319 318* 323 329 331 327 328 333 324 332 316 317 330 315 314

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

SLOPE INTERCEPT (TYP.)

REMOVE CARRIAGE WALK
(PAID FOR AS REMOVING
CONCRETE SIDEWALK)

R26.25'

WE ENERGIES (GAS)

CAUTION

120+00'S'

STH 170/MAPLE STREET

GLENWOOD CITY (WATER)

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

4TH STREET

OH

4TH-2
NE QUADRANT

N

EXIST R/W (TYP.)

DAVID C. LOCH

XCEL ENERGY
ELECTRIC (OVERHEAD)

334.2

334 335 336 337 338 343 344 346 348 345 347 349 339 340 341

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

SLOPE INTERCEPT (TYP.)

R24.75'

334.1 342

121+00'S'

STH 170/MAPLE STREET

GLENWOOD CITY (WATER)

2

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: CURB RAMPS-4TH ST. INTERSECTION	SHEET 51	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\ST. CROIX\021301-CR_ST. CROIX CURB RAMPS.DWG
LAYOUT NAME - 4TH (1)

PLOT DATE : 7/5/2020 1:49 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

4TH-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
314	120+31.65	19.83' LT	1072.52	Flange
314.1	120+18.71	42.67' LT	1073.95	Radius Center
315	120+33.69	24.24' LT	1072.50	Top of Curb
316	120+35.89	26.27' LT	1072.00	Top of Curb
317	120+36.28	25.95' LT	1071.96	Flowline
318	120+41.73	30.06' LT	1071.92	Flange
319	120+39.98	31.02' LT	1071.84	Flowline
320	120+39.54	31.26' LT	1071.85	Top of Curb
321	120+40.81	33.98' LT	1072.35	Top of Curb
322	120+44.60	38.30' LT	1071.17	Flange
323	119+94.89	31.41' LT	1074.74	Match Existing Sidewalk
324	119+94.85	26.54' LT	1074.63	Match Existing Sidewalk
325	120+06.72	41.60' LT	1074.49	Match Existing Sidewalk
326	120+09.65	41.48' LT	1074.37	Match Existing Sidewalk
327	120+06.58	31.36' LT	1073.84	Sidewalk Grade
328	120+09.67	31.35' LT	1073.60	Sidewalk Grade
329	120+24.89	31.33' LT	1072.42	Sidewalk Grade
330	120+24.89	26.31' LT	1072.46	Sidewalk Grade
331	120+29.91	31.29' LT	1072.32	Sidewalk Grade
332	120+29.87	26.29' LT	1072.42	Sidewalk Grade
333	120+35.91	31.27' LT	1071.90	Sidewalk Grade

4TH-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
334	120+74.25	37.50' LT	1069.74	Flange
334.1	120+99.21	16.06' LT	1069.18	PT
334.2	120+98.78	40.80' LT	1068.94	Radius Center
335	120+77.63	33.90' LT	1070.29	Top of Curb
336	120+78.75	31.12' LT	1069.79	Top of Curb
337	120+78.30	30.90' LT	1069.78	Flowline
338	120+76.48	30.03' LT	1069.86	Flange
339	120+82.07	26.11' LT	1069.88	Top of Curb
340	120+81.70	25.78' LT	1069.87	Flowline
341	120+84.20	23.99' LT	1070.38	Top of Curb
342	121+02.22	16.11' LT	1068.97	Flange
343	120+82.09	31.11' LT	1069.84	Sidewalk Grade
344	120+88.09	31.09' LT	1069.42	Sidewalk Grade
345	120+88.07	26.09' LT	1069.46	Sidewalk Grade
346	120+93.09	31.07' LT	1069.35	Sidewalk Grade
347	120+93.07	26.07' LT	1069.39	Sidewalk Grade
348	120+98.09	30.89' LT	1069.20	Match Existing Sidewalk
349	120+98.07	25.97' LT	1069.24	Match Existing Sidewalk

2

4TH-3
SW QUADRANT

STH 170/MAPLE STREET

120+00'S'

N

WE ENERGIES (GAS)

GLENWOOD CITY (WATER)

EXISTING STEPS (TO REMAIN)

EXISTING WALL (TO REMAIN)

2 2-FTX2.5-FT DETECTABLE WARNING FIELD YELLOW

EXISTING CURB & GUTTER (TO REMAIN)

WE ENERGIES (GAS)

EXISTING SIDEWALK (TO REMAIN)

EXCEPTION TO MAKE RAMP NOT FULLY ADA COMPLIANT. MAKE AS CLOSE TO COMPLIANT AS POSSIBLE

CELECT COMMUNICATIONS (FIBER OPTIC)

EXIST R/W (TYP.)

4TH STREET

LUCILLE A. TRUST OBERMUELLER

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

XCEL ENERGY ELECTRIC (OVERHEAD)

4TH-4
SE QUADRANT

121+00'S'

STH 170/MAPLE STREET

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R167

GLENWOOD CITY (WATER)

NOTE: INLET IS SHOWN BOLD FOR ILLUSTRATIVE PURPOSES ONLY.

SLOPE INTERCEPT (TYP.)

WE ENERGIES (GAS)

CELECT COMMUNICATIONS (FIBER OPTIC)

EXISTING WALL (TO REMAIN)

EXIST R/W (TYP.)

4TH STREET

WILLIAM E. HARRINGTON

4TH-4				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
351	120+75.58	35.38' RT	1072.53	Flange
351.1	120+76.54	30.22' RT	1072.09	PT
351.2	120+93.11	32.40' RT	1071.40	Radius Center
352	120+78.48	33.47' RT	1072.52	Top of Curb
353	120+79.02	30.51' RT	1072.02	Top of Curb
354	120+78.53	30.44' RT	1072.01	Flowline
355	120+80.68	25.51' RT	1071.94	Top of Curb
356	120+80.26	25.24' RT	1071.93	Flowline
357	120+78.57	24.15' RT	1072.01	Flange
358	120+82.40	23.06' RT	1072.44	Top of Curb
359	120+92.72	15.69' RT	1069.79	Flange
360	120+80.66	30.51' RT	1072.04	Sidewalk Grade
361	120+86.68	25.54' RT	1071.49	Sidewalk Grade
362	120+86.66	30.54' RT	1071.59	Sidewalk Grade
363	120+91.68	25.56' RT	1071.45	Sidewalk Grade
364	120+91.66	30.56' RT	1071.49	Sidewalk Grade
365	121+01.67	25.91' RT	1070.71	Match Existing Sidewalk
366	121+01.65	30.96' RT	1070.78	Match Existing Sidewalk

2

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: CURB RAMPS-4TH ST. INTERSECTION	SHEET 53	E

2

5TH-1
NW QUADRANT

N

WILLIAM J. MITCH
&
VICKIE SCHMIDT

5TH STREET

EXIST R/W (TYP.)

TEMPORARY EASEMENT

PROPOSED R/W

NOTE: INLET IS SHOWN BOLD FOR ILLUSTRATIVE PURPOSES ONLY.

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R26.25'

SLOPE INTERCEPT (TYP.)

383 384 385 386 375 374 376 380 382 373 372* 378 377 381 379 369 371 370 368

125+00'S'

GLENWOOD CITY (WATER)

STH 170/MAPLE STREET

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

5TH-2
NE QUADRANT

N

XCEL ENERGY
ELECTRIC (OVERHEAD)

5TH STREET

MICHAEL D. LARSON
&
AMANDA R. LARSON

EXIST R/W (TYP.)

TEMPORARY EASEMENT

CURB RAMP TYPE 4
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

CURB RAMP TYPE 3
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R27.2'

SLOPE INTERCEPT (TYP.)

387 388 403 404 406 408 410 412 389 390 405 407 409 411 413 391 392 *393 394 395 398 401 399 396 397 400* 402 387.1 387.2

126+00'S'

GLENWOOD CITY WATER

STH 170/MAPLE STREET

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

2

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: CURB RAMPS-5TH ST. INTERSECTION	SHEET 54	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\ST. CROIX\021301-CR_ST. CROIX CURB RAMPS.DWG
LAYOUT NAME - 5TH

PLOT DATE : 7/5/2020 1:50 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

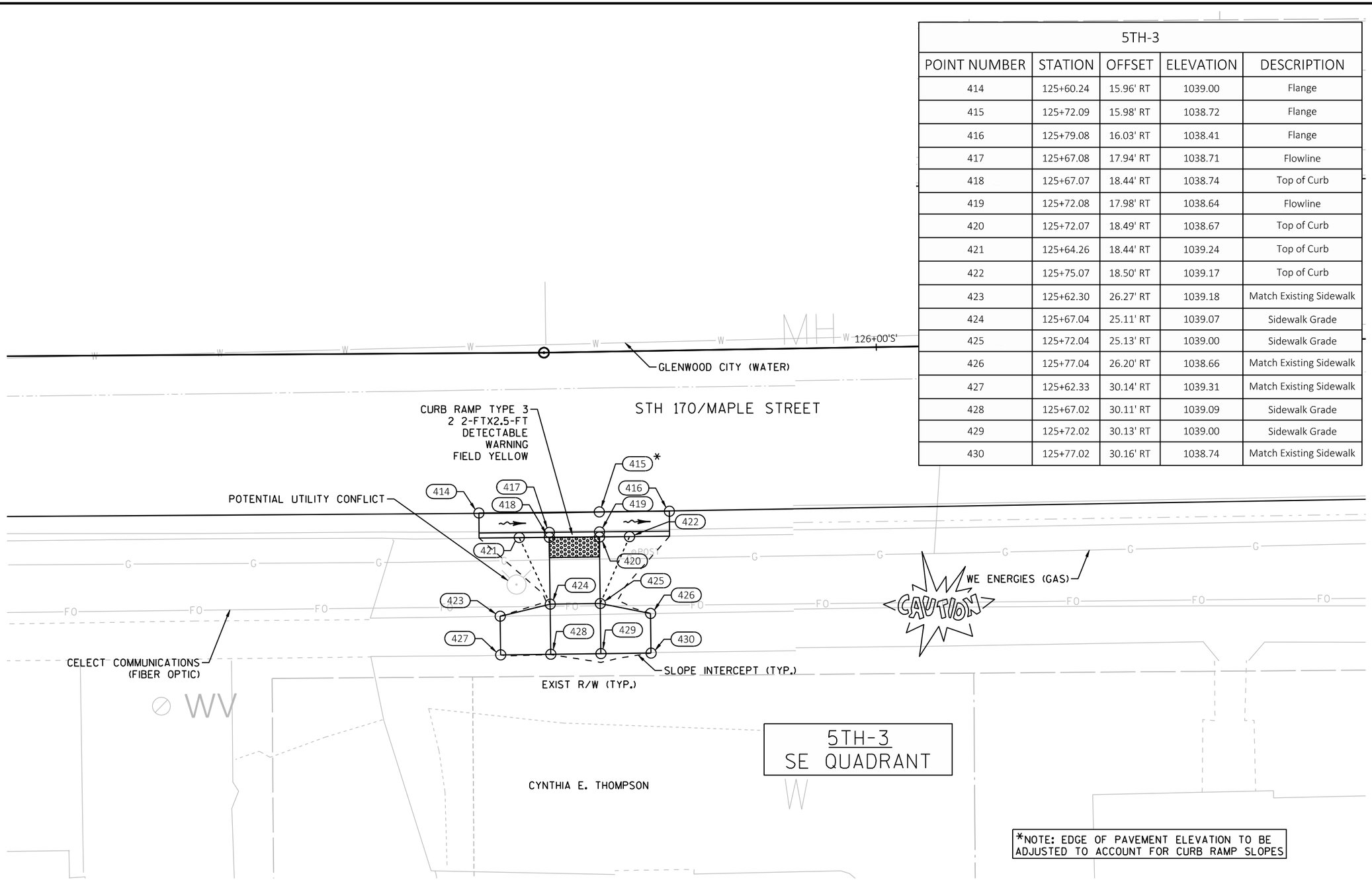
2

5TH-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
368	125+00.38	19.82' LT	1040.83	Flange
368.1	124+87.05	42.43' LT	1041.38	Radius Center
369	125+02.42	24.34' LT	1040.98	Top of Curb
370	125+04.93	26.05' LT	1040.44	Flowline
371	125+04.53	26.35' LT	1040.48	Top of Curb
372	125+10.25	30.16' LT	1040.40	Flange
373	125+08.48	31.10' LT	1040.32	Flowline
374	125+09.28	34.07' LT	1040.33	Top of Curb
375	125+13.26	40.97' LT	1040.01	Flange
376	124+88.62	31.21' LT	1041.07	Match Existing Sidewalk
377	124+88.63	26.24' LT	1040.99	Match Existing Sidewalk
378	124+93.62	31.36' LT	1040.92	Sidewalk Grade
379	124+93.63	26.33' LT	1040.92	Sidewalk Grade
380	124+98.62	31.34' LT	1040.88	Sidewalk Grade
381	124+98.63	26.34' LT	1040.90	Sidewalk Grade
382	125+04.62	31.35' LT	1040.38	Sidewalk Grade
383	125+00.13	50.53' LT	1040.28	Match Existing Sidewalk
384	125+04.04	50.56' LT	1040.16	Match Existing Sidewalk
385	125+00.12	45.54' LT	1040.34	Sidewalk Grade
386	125+05.11	45.56' LT	1040.30	Sidewalk Grade

5TH-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
387	125+42.33	36.88' LT	1039.03	Flange
387.1	125+69.56	15.92' LT	1038.19	PT
387.2	125+69.22	43.10' LT	1037.90	Radius Center
388	125+45.99	33.66' LT	1039.49	Top of Curb
389	125+47.31	30.97' LT	1038.89	Top of Curb
390	125+46.84	30.78' LT	1038.98	Flowline
391	125+51.00	26.01' LT	1038.94	Top of Curb
392	125+50.64	25.66' LT	1038.93	Flowline
393	125+49.18	24.30' LT	1039.01	Flange
394	125+53.21	23.98' LT	1039.44	Top of Curb
395	125+64.06	18.90' LT	1038.70	Top of Curb
396	125+67.22	18.50' LT	1038.20	Top of Curb
397	125+67.18	18.01' LT	1038.19	Flowline
398	125+72.22	18.43' LT	1038.13	Top of Curb
399	125+72.22	17.93' LT	1038.12	Flowline
400	125+72.22	15.93' LT	1038.20	Flange
401	125+75.21	18.44' LT	1038.63	Top of Curb
402	125+79.02	15.94' LT	1037.94	Flange
403	125+50.94	31.01' LT	1039.04	Sidewalk Grade
404	125+56.86	31.08' LT	1038.62	Sidewalk Grade
405	125+57.00	26.08' LT	1038.52	Sidewalk Grade
406	125+61.94	31.14' LT	1038.52	Sidewalk Grade
407	125+62.00	26.14' LT	1038.48	Sidewalk Grade
408	125+67.27	31.20' LT	1038.10	Sidewalk Grade
409	125+67.25	26.17' LT	1038.06	Sidewalk Grade
410	125+72.27	31.22' LT	1038.00	Sidewalk Grade
411	125+72.25	26.22' LT	1037.96	Sidewalk Grade
412	125+87.31	31.27' LT	1036.88	Match Existing Sidewalk
413	125+87.25	26.46' LT	1036.76	Match Existing Sidewalk

2

5TH-3				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
414	125+60.24	15.96' RT	1039.00	Flange
415	125+72.09	15.98' RT	1038.72	Flange
416	125+79.08	16.03' RT	1038.41	Flange
417	125+67.08	17.94' RT	1038.71	Flowline
418	125+67.07	18.44' RT	1038.74	Top of Curb
419	125+72.08	17.98' RT	1038.64	Flowline
420	125+72.07	18.49' RT	1038.67	Top of Curb
421	125+64.26	18.44' RT	1039.24	Top of Curb
422	125+75.07	18.50' RT	1039.17	Top of Curb
423	125+62.30	26.27' RT	1039.18	Match Existing Sidewalk
424	125+67.04	25.11' RT	1039.07	Sidewalk Grade
425	125+72.04	25.13' RT	1039.00	Sidewalk Grade
426	125+77.04	26.20' RT	1038.66	Match Existing Sidewalk
427	125+62.33	30.14' RT	1039.31	Match Existing Sidewalk
428	125+67.02	30.11' RT	1039.09	Sidewalk Grade
429	125+72.02	30.13' RT	1039.00	Sidewalk Grade
430	125+77.02	30.16' RT	1038.74	Match Existing Sidewalk



2

6TH-1
NW QUADRANT

N

6TH STREET

EXIST R/W (TYP.)

MICHAEL F. KORTUEM
&
LINDA L. KORTUEM

XCEL ENERGY
ELECTRIC (OVERHEAD)

TEMPORARY EASEMENT

431.1

439
438
435
444
446
436
448
447
445
437*
440
442
433
441
443
434
432
431

R27.4'

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

SLOPE INTERCEPT (TYP.)

NOTE: INLET IS SHOWN BOLD FOR
ILLUSTRATIVE PURPOSES ONLY.

GLENWOOD CITY (WATER)

130+00'S'

STH 170/MAPLE STREET

*NOTE: EDGE OF PAVEMENT TO BE ADJUSTED
TO ACCOUNT FOR CURB RAMP SLOPES

6TH-2
NE QUADRANT

N

6TH STREET

EXIST R/W (TYP.)

CITY OF GLENWOOD, A MUNICIPAL CORPORATION

CENTURYLINK
(TELEPHONE)

XCEL ENERGY
ELECTRIC (OVERHEAD)

XCEL ENERGY
ELECTRIC (OVERHEAD)

CENTURYLINK
TELEPHONE (OVERHEAD)

449.1
461
463
449
464
TEMPORARY EASEMENT
450
459
462
SLOPE INTERCEPT (TYP.)
451
460
452
453
458
CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW
455
454
456
ADJUSTING INLET COVERS
457
R26.5'

WE ENERGIES (GAS)

CAUTION

GLENWOOD CITY (WATER)

STH 170/MAPLE STREET

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: CURB RAMPS-6TH ST. INTERSECTION	SHEET 57	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\ST. CROIX\021301-CR_ST. CROIX CURB RAMPS.DWG
LAYOUT NAME - 6TH

PLOT DATE : 7/5/2020 1:50 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

6TH-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
431	129+76.86	20.77' LT	1029.26	Flange
431.1	129+62.10	43.87' LT	1029.78	Radius Center
432	129+77.42	24.23' LT	1029.19	Top of Curb
433	129+79.67	26.21' LT	1028.73	Top of Curb
434	129+80.03	25.86' LT	1028.69	Flowline
435	129+83.55	31.19' LT	1028.57	Top of Curb
436	129+83.99	30.96' LT	1028.56	Flowline
437	129+85.77	30.07' LT	1028.63	Flange
438	129+84.91	33.85' LT	1029.07	Top of Curb
439	129+89.08	38.97' LT	1027.80	Flange
440	129+48.68	27.02' LT	1030.63	Match Existing Sidewalk
441	129+48.64	22.14' LT	1030.44	Match Existing Sidewalk
442	129+53.68	27.04' LT	1030.39	Sidewalk Grade
443	129+53.64	22.18' LT	1030.25	Sidewalk Grade
444	129+68.70	31.28' LT	1029.15	Sidewalk Grade
445	129+68.67	26.28' LT	1029.19	Sidewalk Grade
446	129+73.70	31.25' LT	1029.05	Sidewalk Grade
447	129+73.67	26.25' LT	1029.15	Sidewalk Grade
448	129+79.70	31.21' LT	1028.63	Sidewalk Grade

6TH-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
449	130+17.07	36.98' LT	1027.64	Flange
449.1	130+42.95	42.66' LT	1027.23	Radius Center
450	130+20.67	33.74' LT	1028.19	Top of Curb
451	130+21.96	31.03' LT	1027.69	Top of Curb
452	130+21.53	30.79' LT	1027.68	Flowline
453	130+19.75	29.87' LT	1027.76	Flange
454	130+25.50	26.18' LT	1027.78	Top of Curb
455	130+25.14	25.85' LT	1027.77	Flange
456	130+27.69	24.14' LT	1028.28	Top of Curb
457	130+31.93	18.56' LT	1027.61	Flange
458	130+25.74	26.38' LT	1027.79	Sidewalk Grade
459	130+26.61	34.82' LT	1027.78	Sidewalk Grade
460	130+30.39	30.19' LT	1027.88	Sidewalk Grade
461	130+30.49	37.98' LT	1027.74	Sidewalk Grade
462	130+34.27	33.33' LT	1027.78	Sidewalk Grade
463	130+34.32	41.20' LT	1027.45	Match Existing Sidewalk
464	130+38.08	36.58' LT	1027.47	Match Existing Sidewalk

7TH-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
465	133+77.83	16.20' RT	1017.66	Flange
465.1	133+82.99	16.13' RT	1017.60	PT
465.2	134+00.42	19.21' RT	1017.14	PT
465.3	133+83.75	59.06' RT	1019.08	Radius Center
465.4	133+73.95	80.81' RT	1019.67	Radius Center
466	133+82.96	18.63' RT	1017.93	Top of Curb
467	133+86.02	18.68' RT	1017.43	Top of Curb
468	133+86.05	18.19' RT	1017.42	Flowline
469	133+91.13	19.25' RT	1017.34	Top of Curb
470	133+91.22	18.76' RT	1017.30	Flowline
471	133+91.56	16.79' RT	1017.38	Flange
472	133+94.13	19.87' RT	1017.84	Top of Curb
473	134+03.17	23.07' RT	1017.46	Top of Curb
474	134+05.94	24.39' RT	1016.96	Top of Curb
475	134+06.21	23.96' RT	1016.95	Flowline
476	134+13.95	29.08' RT	1016.93	Top of Curb
477	134+14.25	28.67' RT	1016.92	Flowline
478	134+16.45	30.85' RT	1017.43	Top of Curb
479	134+25.17	34.88' RT	1016.85	Flange
480	133+75.86	26.52' RT	1018.45	Match Existing Sidewalk
481	133+75.85	30.29' RT	1018.47	Match Existing Sidewalk
482	133+86.11	24.89' RT	1017.79	Sidewalk Grade
483	133+86.19	29.89' RT	1017.86	Sidewalk Grade
484	133+86.03	19.34' RT	1017.44	Sidewalk Grade
485	133+91.25	24.80' RT	1017.72	Sidewalk Grade
486	133+91.35	29.80' RT	1017.81	Sidewalk Grade
487	134+01.51	24.54' RT	1017.02	Sidewalk Grade
488	134+01.67	29.53' RT	1017.11	Sidewalk Grade

NOTE: SEE PATH DETAIL FOR FULL CURB RAMP DETAILS

N

7TH-1
SW QUADRANT

STH 170/MAPLE STREET

134+00'S'

CELECT COMMUNICATIONS (FIBER OPTIC)

CAUTION

WE ENERGIES (GAS)

GLENWOOD CITY (WATER)

GLENWOOD CITY (SANITARY)

CURB RAMP TYPE 3
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R42.9'

ADJUSTING INLET COVERS

CURB RAMP TYPE 4B1
DETECTABLE WARNING
FIELD RADIAL YELLOW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES:
RADIUS (BOC)= 64.0'
LONG CHORD=9.09'
'XR' DISTANCE= 11.91'

R66.5'

XCEL ENERGY
ELECTRIC (OVERHEAD)

SLOPE INTERCEPT (TYP.)

7TH STREET

EXIST R/W (TYP.)

HOLY CROSS LUTHERAN CHURCH

*NOTE: EDGE OF PAVEMENT TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

2

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: CURB RAMPS-7TH ST. INTERSECTION	SHEET 59	E

2

7TH-2
ISLAND

N

STH 170/MAPLE STREET

135+00'S

GLENWOOD CITY (WATER)

GLENWOOD CITY (SANITARY)

R8.5'

495 494 493 492 489.1 491 489 490 503 489.2 505 504 506 502 R4.25' 489.4 489.3 500 501 497 498 499 496

CURB RAMP TYPE 6
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

XCEL ENERGY
ELECTRIC (OVERHEAD)

CAUTION

WE ENERGIES (GAS)

7TH STREET

7TH-3
SE QUADRANT

N

STH 170/MAPLE STREET

2

NEXTGEN COMMUNICATIONS
(FIBER OPTIC)

CLEAR LAKE TELEPHONE
(FIBER OPTIC)

XCEL ENERGY
ELECTRIC (OVERHEAD)

R40.5'

CURB RAMP TYPE 4B1
2 2-FTX2-FT
DETECTABLE WARNING
FIELD YELLOW

515 513 512 511 514 *510.1 510 509 516 518 519 507 508 521 517 520 522

SLOPE INTERCEPT (TYP.)

7TH STREET

WE ENERGIES (GAS)

CELECT COMMUNICATIONS
(FIBER OPTIC)

CAUTION

507.1

GLENWOOD STORAGE, LLC

*NOTE: EDGE OF PAVEMENT TO BE ADJUSTED
TO ACCOUNT FOR CURB RAMP SLOPES

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: CURB RAMPS-7TH ST. INTERSECTION	SHEET 60	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\ST. CROIX\021301-CR_ST. CROIX CURB RAMPS.DWG
LAYOUT NAME - 7TH (2)

PLOT DATE : 7/5/2020 1:51 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

7TH-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
489	134+89.44	35.79' RT	1015.86	Flange
489.1	134+88.21	27.44' RT	1015.92	PT
489.2	134+96.86	26.21' RT	1015.90	Radius Center
489.3	135+14.39	24.55' RT	1015.95	PT
489.4	135+10.41	22.82' RT	1016.40	Radius Center
490	134+91.10	29.39' RT	1015.82	Top of Curb
491	134+90.58	29.42' RT	1015.81	Flowline
492	134+90.99	24.39' RT	1015.88	Top of Curb
493	134+90.50	24.24' RT	1015.87	Flowline
494	134+88.63	23.40' RT	1015.95	Flange
495	134+94.57	18.01' RT	1016.01	Flange
496	135+08.16	38.01' RT	1015.82	Flange
497	135+08.32	31.58' RT	1015.82	Top of Curb
498	135+08.80	31.77' RT	1015.81	Flowline
499	135+10.67	32.63' RT	1015.89	Flange
500	135+10.45	27.00' RT	1015.87	Top of Curb
501	135+10.90	27.24' RT	1015.86	Flowline
502	135+10.42	18.56' RT	1016.09	Flange
503	134+97.46	24.11' RT	1015.95	Sidewalk Grade
504	135+02.58	23.86' RT	1015.95	Sidewalk Grade
505	134+97.73	29.10' RT	1015.89	Sidewalk Grade
506	135+02.85	28.86' RT	1015.87	Sidewalk Grade

7TH-3				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
507	135+29.63	52.86' RT	1015.57	Flange
507.1	135+71.30	63.31' RT	1014.80	Radius Center
508	135+33.63	49.61' RT	1016.00	Top of Curb
509	135+34.94	46.87' RT	1015.52	Top of Curb
510	135+34.48	46.63' RT	1015.51	Flowline
510.1	135+32.64	45.70' RT	1015.59	Flange
511	135+39.48	40.11' RT	1015.48	Top of Curb
512	135+39.09	39.78' RT	1015.46	Flowline
513	135+37.51	38.47' RT	1015.54	Flange
514	135+41.52	37.84' RT	1015.98	Top of Curb
515	135+42.79	33.18' RT	1015.50	Flange
516	135+35.66	47.23' RT	1015.53	Sidewalk Grade
517	135+41.49	50.05' RT	1015.66	Sidewalk Grade
518	135+45.27	42.91' RT	1015.73	Sidewalk Grade
519	135+50.47	43.37' RT	1015.66	Sidewalk Grade
520	135+49.98	51.35' RT	1015.50	Sidewalk Grade
521	135+55.90	43.86' RT	1015.51	Match Existing Sidewalk
522	135+55.23	52.14' RT	1015.30	Match Existing Sidewalk

2

PATH

PI STA = 1+13.94
Y = 372533.976
X = 664865.908
DELTA = 135°21'20"
D = 179°02'58"
T = 77.94'
L = 75.60'
R = 32.00'
PC STA = 0+36.00
PT STA = 1+11.60

GRADE EXISTING GRAVEL FOOT PATH TO CONNECT TO PAVED PATH

GLENWOOD CITY (SANITARY)

GLENWOOD CITY (WATER)

523.2

523.1

550 549 548 547

530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 523 524 525 526 527 528 529

0+50'BP'

PC: 0+36.00'BP'

PT: 0+21.03'BP'

PC: 0+07.66'BP'

BP: 0+00.00'BP'

1+00'BP'

PT: 1+11.60'BP'

EP: 1+23.35'BP'

1.50%

-2.46%

14.97'
N55° 11' 07"E

11.75'
N80° 10' 13"W

134+00'S

ASPHALTIC SURFACE, 3-INCH

HMA PATH TO BE FUNDED BY GLENWOOD CITY

BEGIN ALIGNMENT
Y=372462.365
X=664780.6725

CURB RAMP TYPE 4B1
4 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

PI STA = 0+14.56
Y = 372476.444
X = 664784.393
DELTA = 34°49'18"
D = 260°26'07"
T = 6.90'
L = 13.37'
R = 22.00'
PC STA = 0+07.66
PT STA = 0+21.03

SLOPE INTERCEPT (TYP.)

CONCRETE SIDEWALK 5-INCH

MATCH EXISTING PAVEMENT AT SHELTER

STH 170/1ST STREET

EXIST R/W (TYP.)

HINMAN PARK

EXISTING PARKING AREA

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	PLAN DETAILS: CURB RAMPS-HINMAN PARK PATH	SHEET 62	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\ST. CROIX\021301-CR_ST. CROIX CURB RAMPS.DWG
LAYOUT NAME - PATH

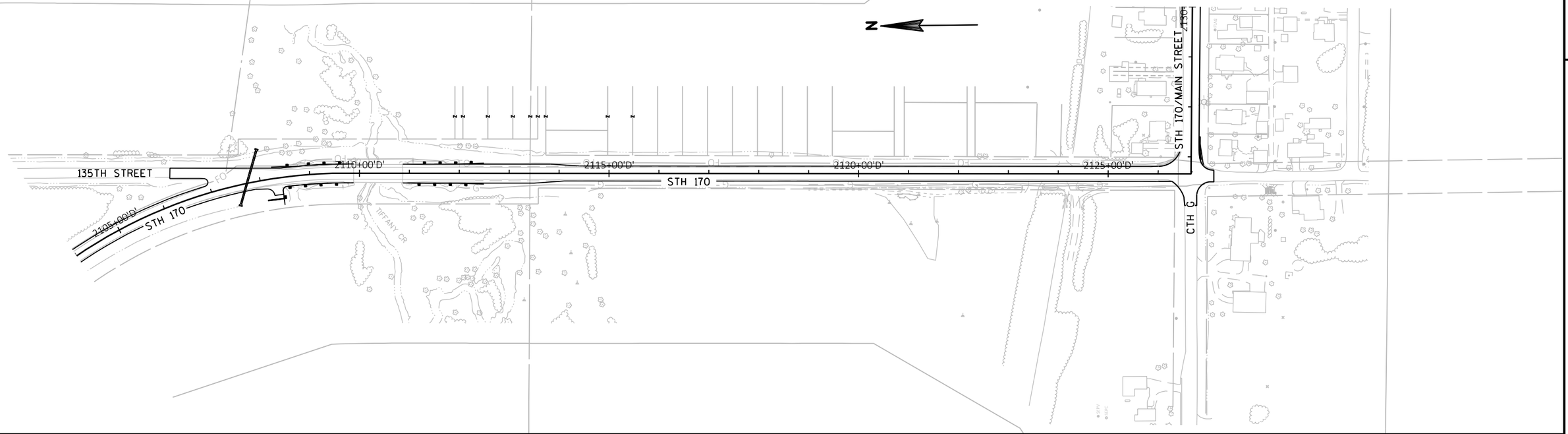
PLOT DATE : 7/5/2020 1:51 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

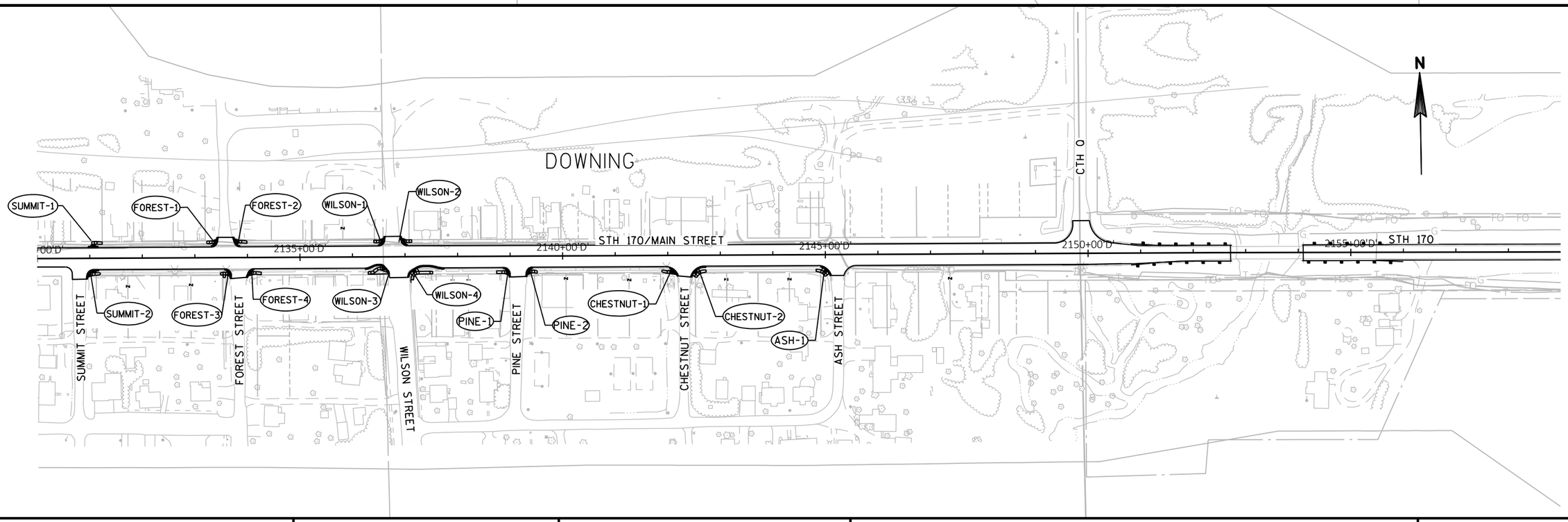
WISDOT/CADDS SHEET 42

PATH				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
523	1+21.60*	0.00'	1018.94	Match Existing Pavement
523.1	0+36.00*	32.00' LT	1019.07	Radius Center
523.2	0+23.25*	21.89' RT	1018.54	Radius Center
524	1+21.60*	6.00' LT	1018.96	Match Existing Pavement
525	1+21.60*	10.00' LT	1018.65	Sidewalk Grade
526	1+11.60*	0.00'	1018.64	Sidewalk Grade
527	1+11.60*	10.00' LT	1018.79	Sidewalk Grade
528	1+00.00*	0.00'	1018.34	Sidewalk Grade
529	1+00.00*	10.00' LT	1018.49	Sidewalk Grade
530	0+75.00*	0.00'	1017.79	Sidewalk Grade
531	0+75.00*	10.00' LT	1017.94	Sidewalk Grade
532	0+61.00*	0.00'	1017.74	Sidewalk Grade
533	0+61.00*	10.00' LT	1017.89	Sidewalk Grade
534	0+50.00*	0.00'	1017.83	Sidewalk Grade
535	0+50.00*	10.00' LT	1017.98	Sidewalk Grade
536	0+25.00*	0.00'	1018.48	Sidewalk Grade
537	0+25.00*	10.00' LT	1018.63	Sidewalk Grade
538	0+07.66*	0.00' LT	1019.04	Sidewalk Grade
539	0+07.66*	10.00' LT	1019.19	Sidewalk Grade
540	0+02.50*	0.00'	1019.09	Top of Curb
541	0+02.00*	0.00'	1019.10	Flowline
542	0+02.66*	10.00' LT	1019.14	Top of Curb
543	0+01.94	9.99' LT	1019.13	Flowline
544	0+00.00	0.00'	1019.18	Flange
545	133+82.02	16.00' LT	1019.21	Flange
547	133+50.73	16.06' LT	1019.84	Flange
548	133+66.77	16.00' LT	1019.53	Flange
549	134+10.87	16.00' LT	1019.00	Flange
550	134+27.75	16.00' LT	1018.93	Flange

* BASED OFF OF PATH ALIGNMENT

2



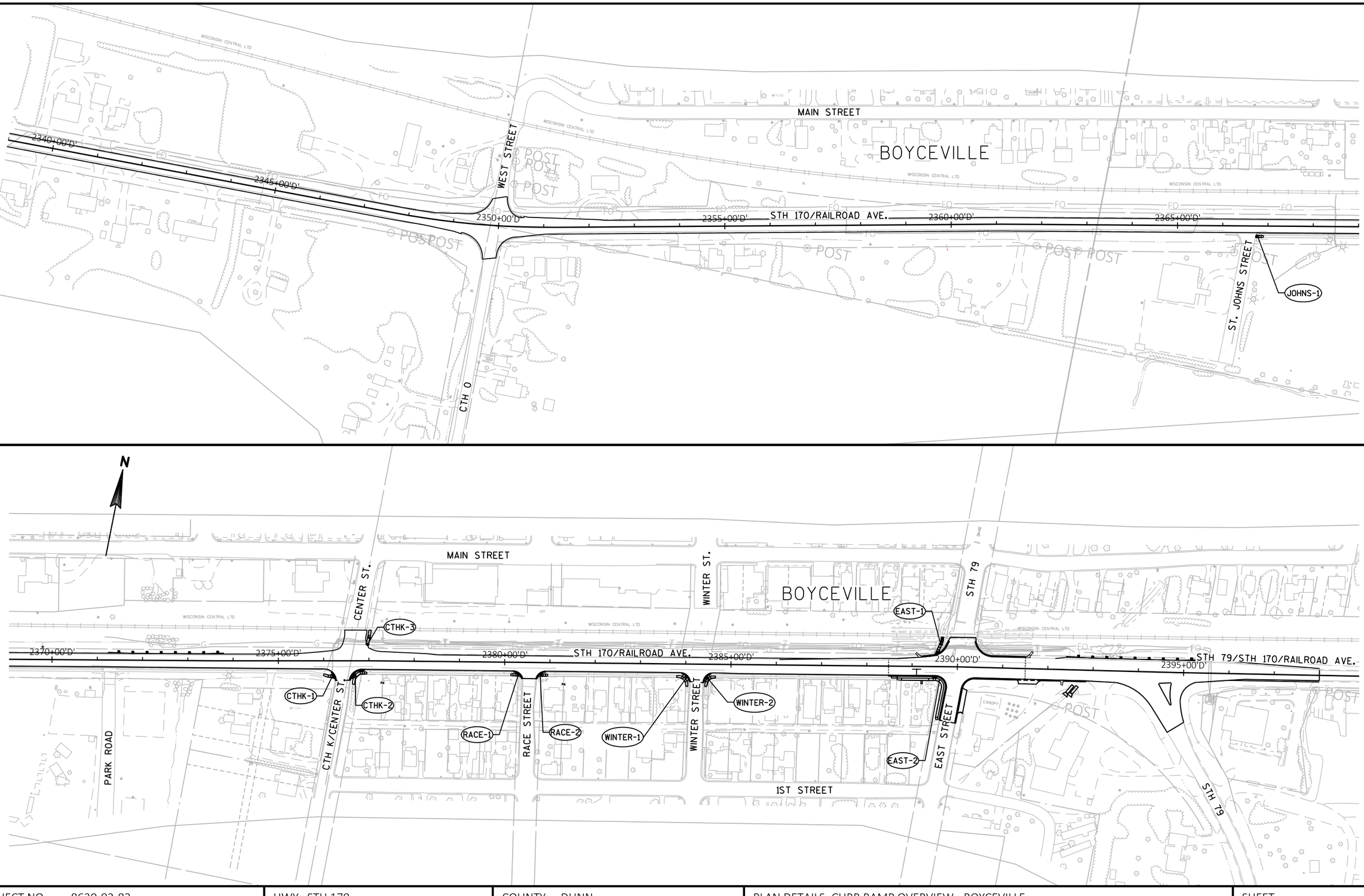


PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: CURB RAMP OVERVIEW - DOWNING	SHEET 64	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021301-CR_DUNN CURB RAMPS_OVERVIEW.DWG
LAYOUT NAME - STA 2104+00 - 2159+00

PLOT DATE : 7/5/2020 1:54 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:200 FT

2



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: CURB RAMP OVERVIEW - BOYCEVILLE	SHEET 65	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021301-CR_DUNN CURB RAMPS_OVERVIEW.DWG
LAYOUT NAME - STA 2339+00 - 2399+00

PLOT DATE : 7/5/2020 1:54 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : ############

2

SUMMIT-1
NE QUADRANT

N

JAKE C LUEPKE

JAKE C LUEPKE

XCEL ENERGY
ELECTRIC (OVERHEAD)

TEMPORARY EASEMENT

SLOPE INTERCEPT (TYP.)

NEXTGEN COMMUNICATIONS
(FIBER OPTIC)

<CAUTION>

WE ENERGIES (GAS)

CENTURYLINK (TELEPHONE/FIBER OPTIC)

CURB RAMP TYPE 3
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

STH 170/MAIN STREET

2131+00'D'

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

MH

SUMMIT-2
SE QUADRANT

N

2131+00'D'

STH 170/MAIN STREET

CURB RAMP TYPE 2
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R130'

XCEL ENERGY
ELECTRIC (OVERHEAD)

EXIST R/W (TYP.)

TEMPORARY EASEMENT

SLOPE INTERCEPT (TYP.)

TIMOTHY J FENSTRA

SUMMIT STREET

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

MH

2

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: CURB RAMPS-SUMMIT ST. INTERSECTION	SHEET 66	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021301-CR_DUNN CURB RAMPS.DWG
LAYOUT NAME - SUMMIT

PLOT DATE : 7/5/2020 1:57 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

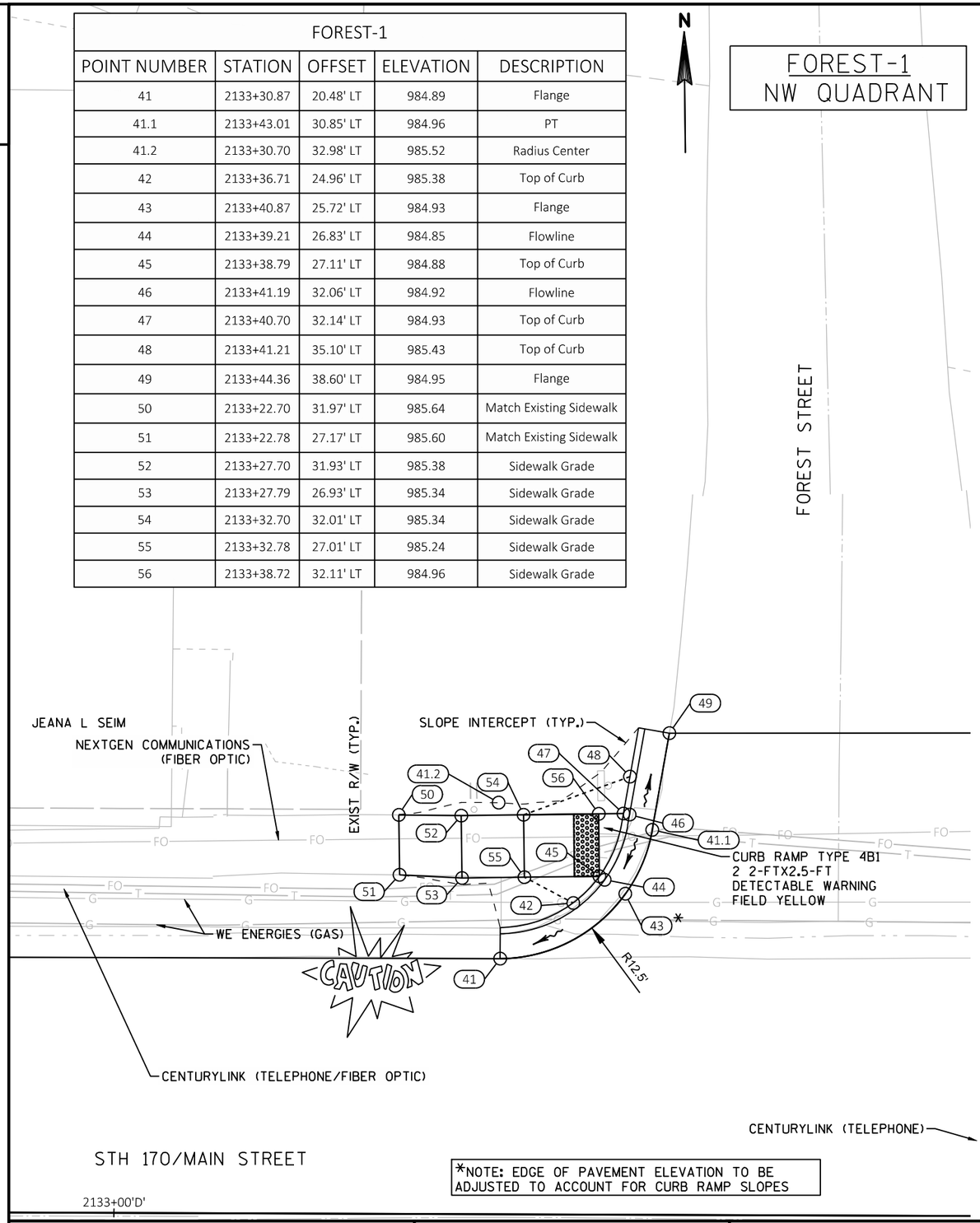
2

SUMMIT-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
1	2130+96.95	20.35' LT	989.52	Flange
2	2131+08.94	20.36' LT	989.32	Flange
3	2131+15.95	20.37' LT	989.14	Flange
4	2131+03.95	22.37' LT	989.31	Flowline
5	2131+08.95	22.36' LT	989.24	Flowline
6	2131+03.94	22.86' LT	989.35	Top of Curb
7	2131+08.95	22.86' LT	989.28	Top of Curb
8	2131+00.95	22.85' LT	989.85	Sidewalk Grade
9	2131+11.95	22.87' LT	989.78	Sidewalk Grade
10	2131+03.89	26.77' LT	989.62	Sidewalk Grade
11	2131+08.89	26.85' LT	989.55	Sidewalk Grade
12	2131+03.81	31.77' LT	989.69	Sidewalk Grade
13	2131+08.81	31.85' LT	989.65	Sidewalk Grade
14	2131+13.80	31.93' LT	989.69	Sidewalk Grade
15	2131+13.89	26.93' LT	989.65	Sidewalk Grade
16	2131+23.80	26.83' LT	989.53	Match Existing Sidewalk
17	2131+23.80	30.81' LT	989.56	Match Existing Sidewalk

SUMMIT-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
19	2130+93.07	39.25' RT	989.93	Flange
19.1	2130+94.03	32.59' RT	989.70	PT
19.2	2131+06.91	21.44' RT	989.17	PT
19.3	2131+06.89	34.44' RT	989.86	Radius Center
20	2130+96.13	35.65' RT	990.13	Top of Curb
21	2130+96.54	32.68' RT	989.63	Top of Curb
22	2130+96.05	32.57' RT	989.62	Flowline
23	2130+98.89	27.64' RT	989.57	Top of Curb
24	2130+98.53	27.29' RT	989.55	Flowline
25	2130+97.07	25.92' RT	989.63	Flange
26	2131+00.31	26.26' RT	990.07	Top of Curb
27	2131+04.72	24.17' RT	989.18	Top of Curb
28	2131+04.62	23.68' RT	989.14	Flowline
29	2131+09.72	23.94' RT	989.08	Top of Curb
30	2131+09.71	23.44' RT	989.04	Flowline
31	2131+12.72	23.95' RT	989.58	Top of Curb
32	2131+16.72	21.45' RT	988.98	Flowline
33	2130+98.97	32.64' RT	989.67	Sidewalk Grade
34	2131+04.78	27.55' RT	989.39	Sidewalk Grade
35	2131+04.86	32.54' RT	989.46	Sidewalk Grade
36	2131+09.78	27.46' RT	989.32	Sidewalk Grade
37	2131+09.86	32.46' RT	989.39	Sidewalk Grade
38	2131+19.78	27.51' RT	989.69	Match Existing Sidewalk
39	2131+19.84	31.27' RT	989.67	Match Existing Sidewalk

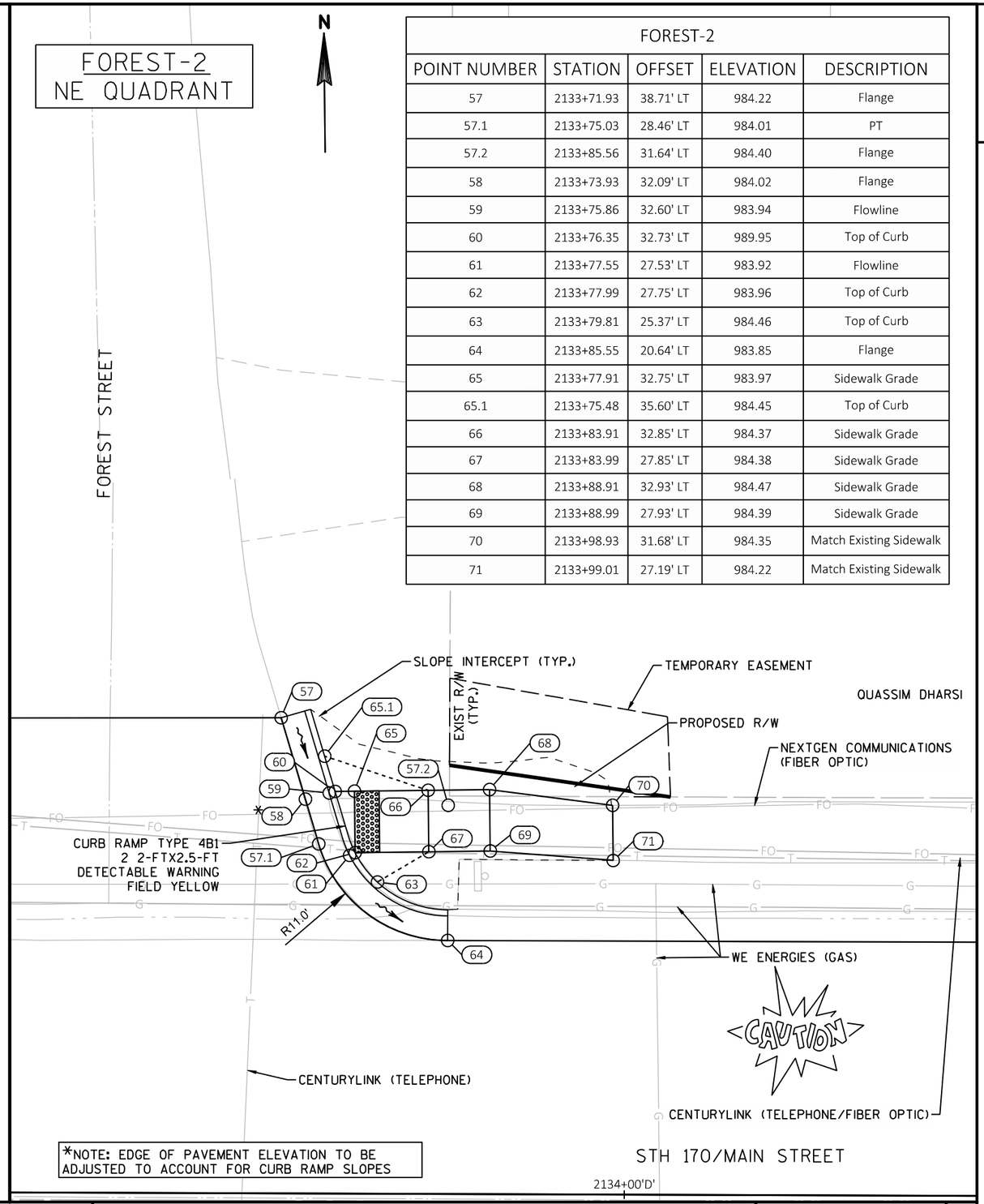
2

FOREST-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
41	2133+30.87	20.48' LT	984.89	Flange
41.1	2133+43.01	30.85' LT	984.96	PT
41.2	2133+30.70	32.98' LT	985.52	Radius Center
42	2133+36.71	24.96' LT	985.38	Top of Curb
43	2133+40.87	25.72' LT	984.93	Flange
44	2133+39.21	26.83' LT	984.85	Flowline
45	2133+38.79	27.11' LT	984.88	Top of Curb
46	2133+41.19	32.06' LT	984.92	Flowline
47	2133+40.70	32.14' LT	984.93	Top of Curb
48	2133+41.21	35.10' LT	985.43	Top of Curb
49	2133+44.36	38.60' LT	984.95	Flange
50	2133+22.70	31.97' LT	985.64	Match Existing Sidewalk
51	2133+22.78	27.17' LT	985.60	Match Existing Sidewalk
52	2133+27.70	31.93' LT	985.38	Sidewalk Grade
53	2133+27.79	26.93' LT	985.34	Sidewalk Grade
54	2133+32.70	32.01' LT	985.34	Sidewalk Grade
55	2133+32.78	27.01' LT	985.24	Sidewalk Grade
56	2133+38.72	32.11' LT	984.96	Sidewalk Grade



*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

FOREST-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
57	2133+71.93	38.71' LT	984.22	Flange
57.1	2133+75.03	28.46' LT	984.01	PT
57.2	2133+85.56	31.64' LT	984.40	Flange
58	2133+73.93	32.09' LT	984.02	Flange
59	2133+75.86	32.60' LT	983.94	Flowline
60	2133+76.35	32.73' LT	989.95	Top of Curb
61	2133+77.55	27.53' LT	983.92	Flowline
62	2133+77.99	27.75' LT	983.96	Top of Curb
63	2133+79.81	25.37' LT	984.46	Top of Curb
64	2133+85.55	20.64' LT	983.85	Flange
65	2133+77.91	32.75' LT	983.97	Sidewalk Grade
65.1	2133+75.48	35.60' LT	984.45	Top of Curb
66	2133+83.91	32.85' LT	984.37	Sidewalk Grade
67	2133+83.99	27.85' LT	984.38	Sidewalk Grade
68	2133+88.91	32.93' LT	984.47	Sidewalk Grade
69	2133+88.99	27.93' LT	984.39	Sidewalk Grade
70	2133+98.93	31.68' LT	984.35	Match Existing Sidewalk
71	2133+99.01	27.19' LT	984.22	Match Existing Sidewalk



*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

2

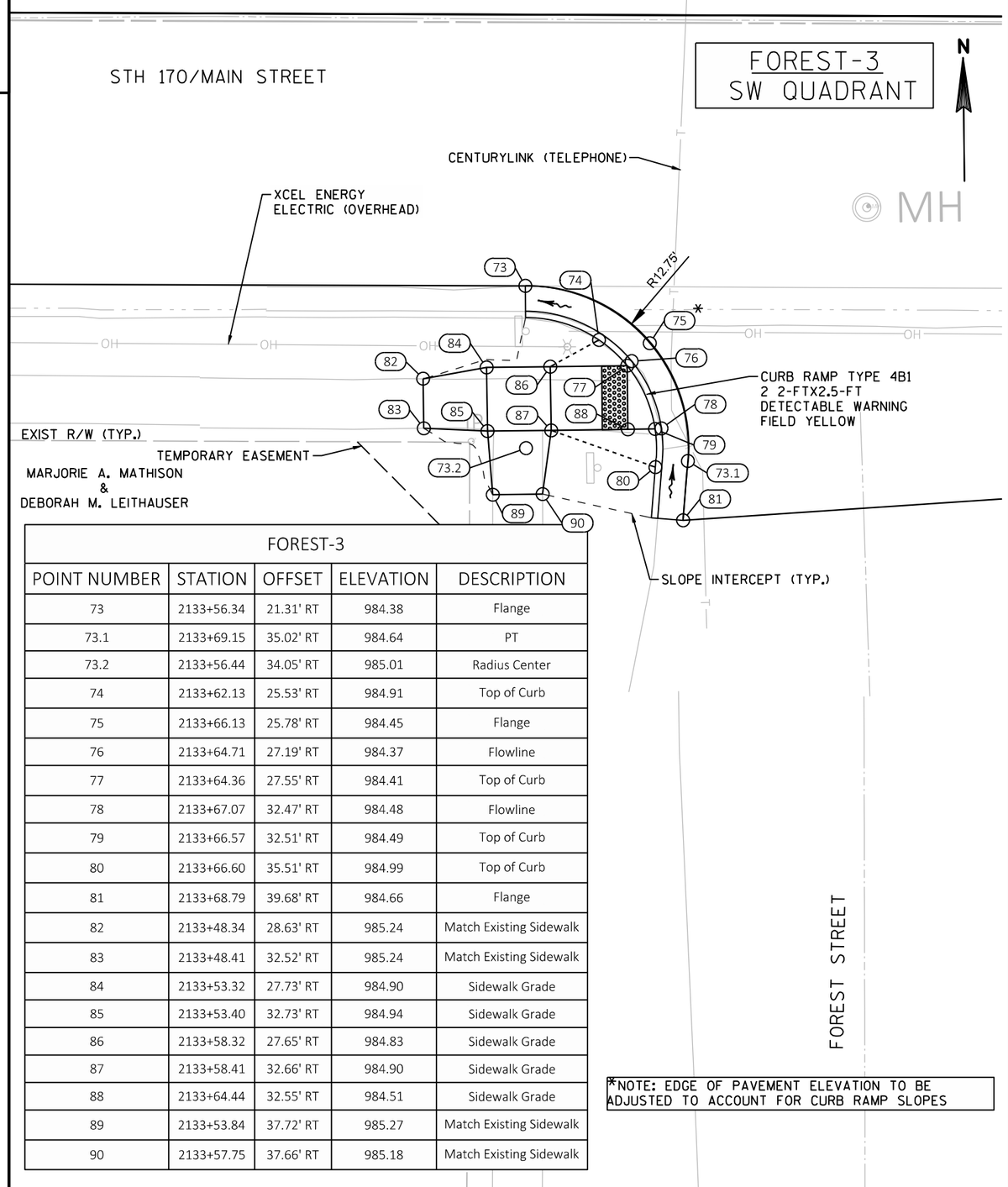
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: CURB RAMPS-FOREST ST. INTERSECTION	SHEET 68	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021301-CR_DUNN CURB RAMPS.DWG
LAYOUT NAME - FOREST (1)
PLOT DATE : 7/5/2020 1:58 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

STH 170/MAIN STREET

FOREST-3
SW QUADRANT

N



FOREST-3				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
73	2133+56.34	21.31' RT	984.38	Flange
73.1	2133+69.15	35.02' RT	984.64	PT
73.2	2133+56.44	34.05' RT	985.01	Radius Center
74	2133+62.13	25.53' RT	984.91	Top of Curb
75	2133+66.13	25.78' RT	984.45	Flange
76	2133+64.71	27.19' RT	984.37	Flowline
77	2133+64.36	27.55' RT	984.41	Top of Curb
78	2133+67.07	32.47' RT	984.48	Flowline
79	2133+66.57	32.51' RT	984.49	Top of Curb
80	2133+66.60	35.51' RT	984.99	Top of Curb
81	2133+68.79	39.68' RT	984.66	Flange
82	2133+48.34	28.63' RT	985.24	Match Existing Sidewalk
83	2133+48.41	32.52' RT	985.24	Match Existing Sidewalk
84	2133+53.32	27.73' RT	984.90	Sidewalk Grade
85	2133+53.40	32.73' RT	984.94	Sidewalk Grade
86	2133+58.32	27.65' RT	984.83	Sidewalk Grade
87	2133+58.41	32.66' RT	984.90	Sidewalk Grade
88	2133+64.44	32.55' RT	984.51	Sidewalk Grade
89	2133+53.84	37.72' RT	985.27	Match Existing Sidewalk
90	2133+57.75	37.66' RT	985.18	Match Existing Sidewalk

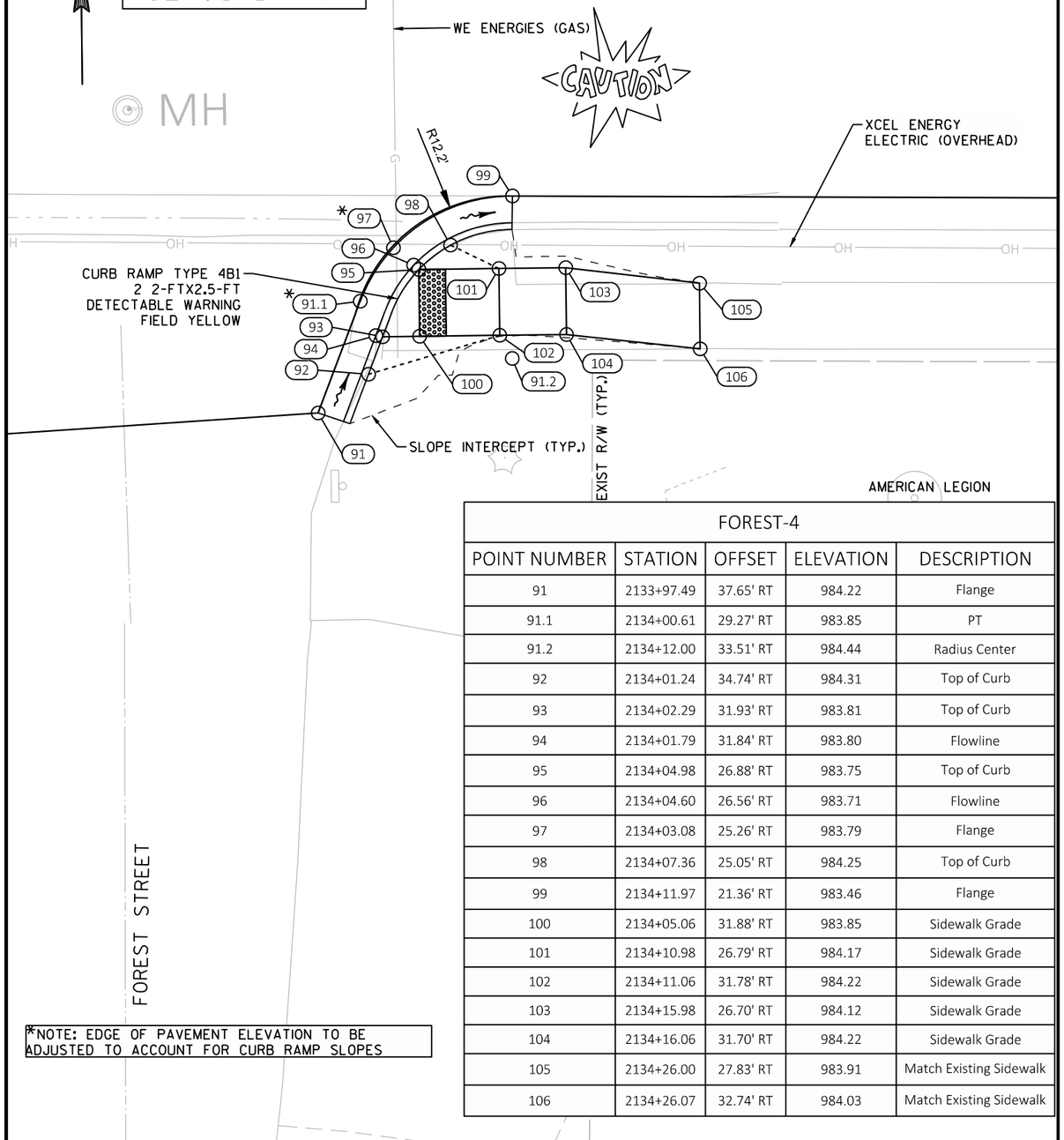
*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

2134+00'D'

FOREST-4
SE QUADRANT

N

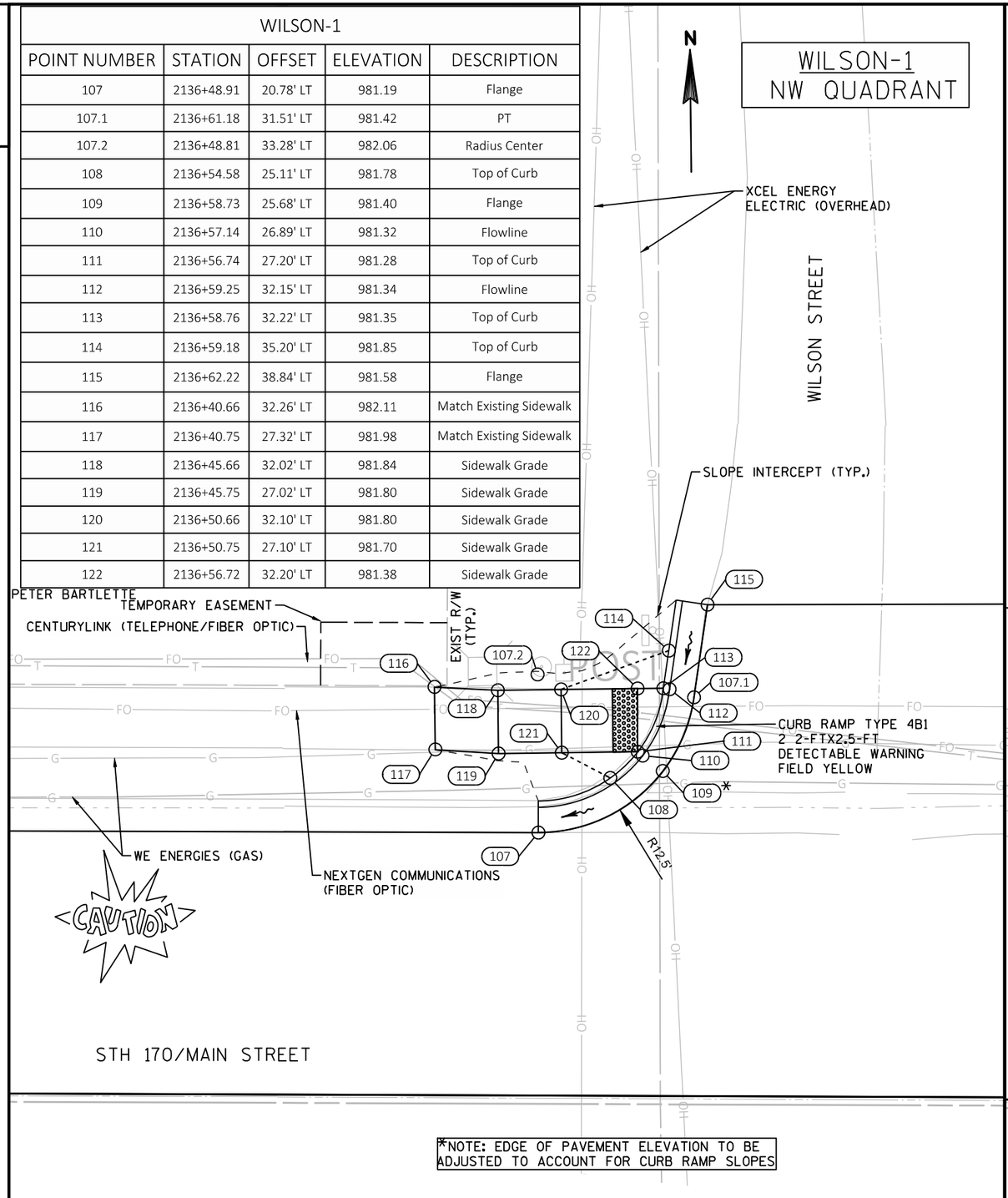
STH 170/MAIN STREET



FOREST-4				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
91	2133+97.49	37.65' RT	984.22	Flange
91.1	2134+00.61	29.27' RT	983.85	PT
91.2	2134+12.00	33.51' RT	984.44	Radius Center
92	2134+01.24	34.74' RT	984.31	Top of Curb
93	2134+02.29	31.93' RT	983.81	Top of Curb
94	2134+01.79	31.84' RT	983.80	Flowline
95	2134+04.98	26.88' RT	983.75	Top of Curb
96	2134+04.60	26.56' RT	983.71	Flowline
97	2134+03.08	25.26' RT	983.79	Flange
98	2134+07.36	25.05' RT	984.25	Top of Curb
99	2134+11.97	21.36' RT	983.46	Flange
100	2134+05.06	31.88' RT	983.85	Sidewalk Grade
101	2134+10.98	26.79' RT	984.17	Sidewalk Grade
102	2134+11.06	31.78' RT	984.22	Sidewalk Grade
103	2134+15.98	26.70' RT	984.12	Sidewalk Grade
104	2134+16.06	31.70' RT	984.22	Sidewalk Grade
105	2134+26.00	27.83' RT	983.91	Match Existing Sidewalk
106	2134+26.07	32.74' RT	984.03	Match Existing Sidewalk

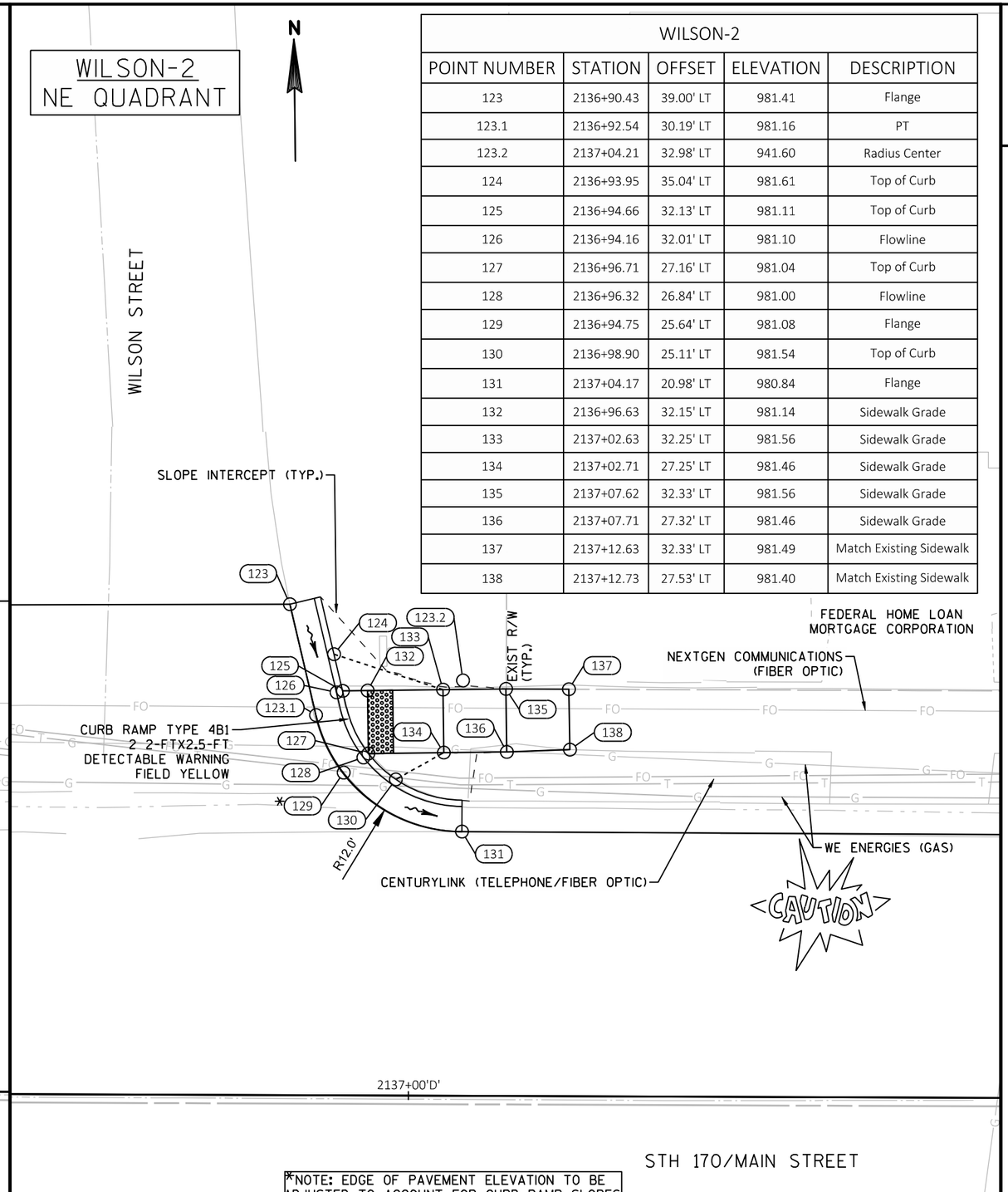
*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

WILSON-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
107	2136+48.91	20.78' LT	981.19	Flange
107.1	2136+61.18	31.51' LT	981.42	PT
107.2	2136+48.81	33.28' LT	982.06	Radius Center
108	2136+54.58	25.11' LT	981.78	Top of Curb
109	2136+58.73	25.68' LT	981.40	Flange
110	2136+57.14	26.89' LT	981.32	Flowline
111	2136+56.74	27.20' LT	981.28	Top of Curb
112	2136+59.25	32.15' LT	981.34	Flowline
113	2136+58.76	32.22' LT	981.35	Top of Curb
114	2136+59.18	35.20' LT	981.85	Top of Curb
115	2136+62.22	38.84' LT	981.58	Flange
116	2136+40.66	32.26' LT	982.11	Match Existing Sidewalk
117	2136+40.75	27.32' LT	981.98	Match Existing Sidewalk
118	2136+45.66	32.02' LT	981.84	Sidewalk Grade
119	2136+45.75	27.02' LT	981.80	Sidewalk Grade
120	2136+50.66	32.10' LT	981.80	Sidewalk Grade
121	2136+50.75	27.10' LT	981.70	Sidewalk Grade
122	2136+56.72	32.20' LT	981.38	Sidewalk Grade



*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

WILSON-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
123	2136+90.43	39.00' LT	981.41	Flange
123.1	2136+92.54	30.19' LT	981.16	PT
123.2	2137+04.21	32.98' LT	941.60	Radius Center
124	2136+93.95	35.04' LT	981.61	Top of Curb
125	2136+94.66	32.13' LT	981.11	Top of Curb
126	2136+94.16	32.01' LT	981.10	Flowline
127	2136+96.71	27.16' LT	981.04	Top of Curb
128	2136+96.32	26.84' LT	981.00	Flowline
129	2136+94.75	25.64' LT	981.08	Flange
130	2136+98.90	25.11' LT	981.54	Top of Curb
131	2137+04.17	20.98' LT	980.84	Flange
132	2136+96.63	32.15' LT	981.14	Sidewalk Grade
133	2137+02.63	32.25' LT	981.56	Sidewalk Grade
134	2137+02.71	27.25' LT	981.46	Sidewalk Grade
135	2137+07.62	32.33' LT	981.56	Sidewalk Grade
136	2137+07.71	27.32' LT	981.46	Sidewalk Grade
137	2137+12.63	32.33' LT	981.49	Match Existing Sidewalk
138	2137+12.73	27.53' LT	981.40	Match Existing Sidewalk



*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: CURB RAMPS-WILSON ST. INTERSECTION	SHEET 70	E

2

N

WILSON-3
SW QUADRANT

STH 170/MAIN STREET

161.1

XCEL ENERGY
ELECTRIC (OVERHEAD)

R22.5'

143 139 144

R10.0'

ASPHALTIC SURFACE

142

147 145

R17.5'

141 158 146

140

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

157.3 156 148

161.3 159

152 154 151.1

157.4

157.2 160 149

157.1

R10.5'

150

SLOPE INTERCEPT (TYP.)

161 151

157

161.4

153 155 161.2

XCEL ENERGY
ELECTRIC (OVERHEAD)

SAWING CONCRETE (TYP.)

TEMPORARY EASEMENT

NOTE: CURB RAMP IS ADJACENT TO GAS STATION DRIVEWAY.

JOHN W. BLASER

EXIST R/W (TYP.)

WILSON STREET (CTH Q)

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

37+00'D'

189.4

N

WILSON-4
SE QUADRANT

STH 170/MAIN STREET

WE ENERGIES (GAS)

CAUTION

R40.0'

CURB RAMP TYPE 1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R30.0'

171 172 173 174 175 176

170.1 170 169 167 167.1 166 165 164 162

178 168 180 177.4 177.3 177.2 177 177.1 179 181 189.1

182 183 184 185

R15.0'

186 187 188 189

XCEL ENERGY
ELECTRIC (OVERHEAD)

SLOPE INTERCEPT (TYP.)

PROPOSED R/W

189.2

GERALDINE L. LUEPKE

189.3

WILSON STREET (CTH Q)

EXIST R/W (TYP.)

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: CURB RAMPS-WILSON ST. INTERSECTION	SHEET 71	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021301-CR_DUNN CURB RAMPS.DWG
LAYOUT NAME - WILSON (2)

PLOT DATE : 7/5/2020 1:59 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

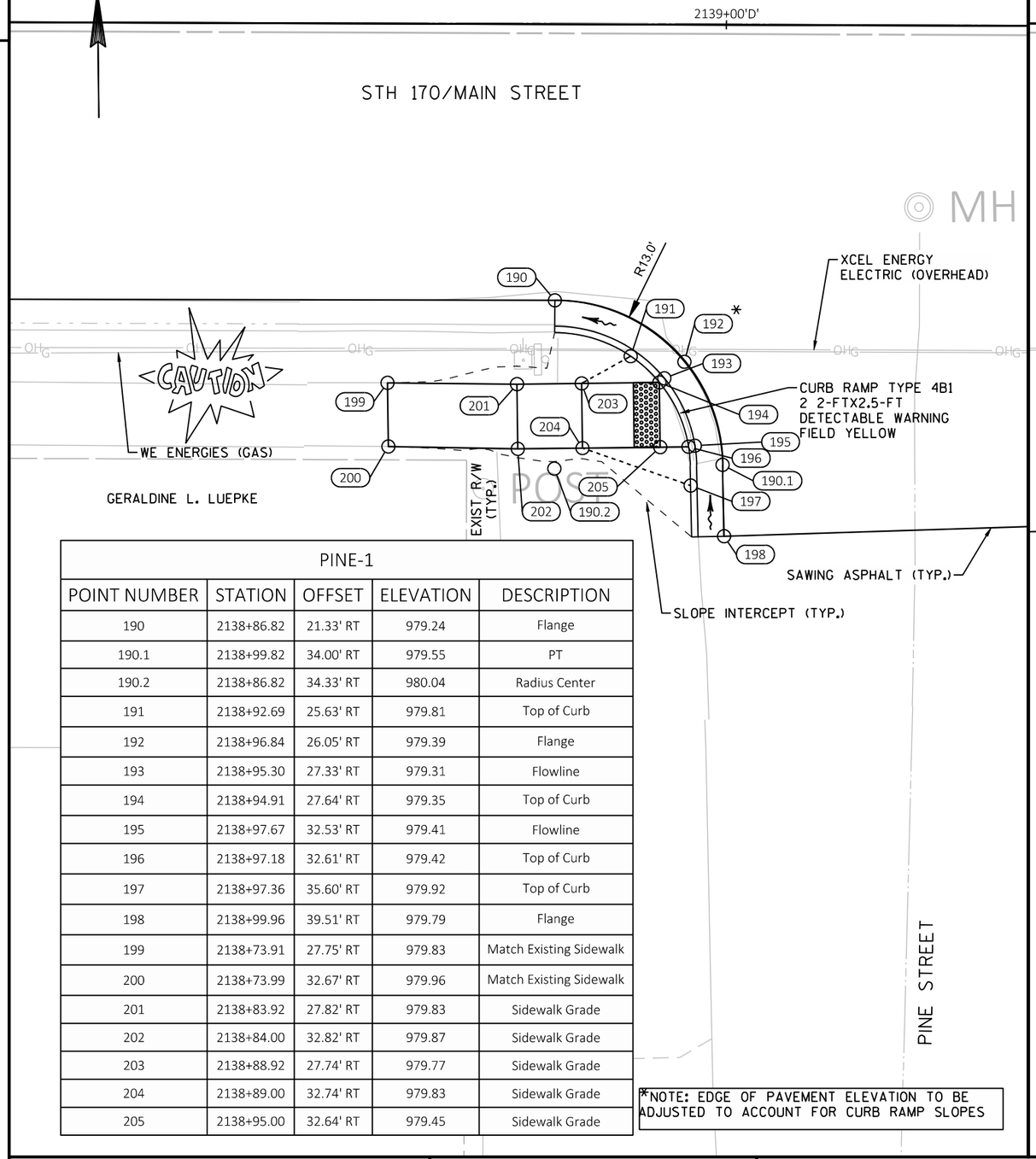
WISDOT/CADDS SHEET 42

WILSON-3				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
139	2136+52.74	16.50' RT	981.86	Top of Curb
140	2136+24.00	21.30' RT	981.58	Flange
141	2136+30.82	19.88' RT	981.55	PT
142	2136+40.26	15.83' RT	981.51	PT
143	2136+49.14	14.00' RT	981.48	PT
144	2136+52.74	14.00' RT	981.45	PT
145	2136+60.33	17.49' RT	981.42	PT
146	2136+60.66	17.87' RT	981.42	Flange
147	2136+59.14	19.17' RT	981.34	Flowline
148	2136+63.43	24.17' RT	981.32	Flowline
149	2136+67.19	25.48' RT	981.39	PT
150	2136+66.70	29.48' RT	981.83	Top of Curb
151	2136+69.72	32.15' RT	981.35	Flange
151.1	2136+64.95	22.87' RT	981.40	Flange
152	2136+29.64	27.85' RT	982.27	Match Existing Sidewalk
153	2136+29.74	32.68' RT	982.44	Match Existing Sidewalk
154	2136+34.64	27.58' RT	982.22	Sidewalk Grade
155	2136+34.74	32.58' RT	982.29	Match Existing Sidewalk
156	2136+52.76	19.50' RT	981.55	Sidewalk Grade
157	2136+41.97	30.14' RT	982.23	Sidewalk Grade
157.1	2136+38.95	26.16' RT	982.16	Sidewalk Grade
157.2	2136+48.90	24.90' RT	981.67	Sidewalk Grade
157.3	2136+45.89	20.92' RT	981.65	Sidewalk Grade
157.4	2136+52.76	24.50' RT	981.63	Sidewalk Grade
158	2136+58.76	19.50' RT	981.36	Top of Curb
159	2136+58.76	24.50' RT	981.39	Sidewalk Grade
160	2136+63.05	24.50' RT	981.33	Top of Curb
161	2136+56.92	32.58' RT	982.00	Match Existing Sidewalk
161.1	2136+23.92	3.80' RT	982.06	Radius Center
161.2	2136+49.14	36.50' RT	982.16	Radius Center
161.3	2136+52.74	24.00' RT	981.62	Radius Center
161.4	2136+59.22	32.32' RT	981.89	Radius Center

WILSON-4				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
162	2137+04.70	39.00' RT	981.06	Flange
164	2137+10.18	30.68' RT	981.23	Top of Curb
165	2137+14.07	27.50' RT	980.73	Top of Curb
166	2137+13.81	27.07' RT	980.71	Flowline
167	2137+12.67	25.39' RT	980.79	Flange
167.1	2137+11.31	26.35' RT	980.80	PT
168	2137+18.21	24.70' RT	980.69	Top of Curb
169	2137+17.95	24.27' RT	980.66	Flowline
170	2137+16.81	22.63' RT	980.74	Flange
170.1	2137+18.17	21.71' RT	980.73	PT
171	2137+23.99	18.66' RT	980.71	PT
172	2137+34.92	16.57' RT	980.68	PT
173	2137+44.64	16.55' RT	980.65	PT
174	2137+54.60	17.80' RT	980.59	PT
175	2137+64.26	20.26' RT	980.44	PT
176	2137+74.22	21.51' RT	980.35	Flange
177	2137+19.43	34.84' RT	981.02	Sidewalk Grade
177.1	2137+17.13	37.38' RT	981.07	Sidewalk Grade
177.2	2137+12.90	34.71' RT	981.02	Sidewalk Grade
177.3	2137+16.36	30.90' RT	980.94	Sidewalk Grade
177.4	2137+20.79	28.52' RT	980.95	Sidewalk Grade
178	2137+22.47	22.07' RT	981.16	Top of Curb
179	2137+22.38	33.25' RT	981.03	Sidewalk Grade
180	2137+26.29	27.73' RT	981.03	Sidewalk Grade
181	2137+26.31	32.73' RT	981.09	Sidewalk Grade
182	2137+47.20	27.73' RT	981.09	Sidewalk Grade
183	2137+52.20	27.88' RT	980.97	Match Existing Sidewalk
184	2137+47.21	32.72' RT	981.17	Sidewalk Grade
185	2137+52.21	32.72' RT	981.07	Match Existing Sidewalk
186	2137+10.62	43.84' RT	981.44	Sidewalk Grade
187	2137+15.61	43.59' RT	981.52	Sidewalk Grade
188	2137+10.88	48.84' RT	981.40	Match Existing Sidewalk
189	2137+14.92	48.63' RT	981.60	Match Existing Sidewalk
189.1	2137+19.70	38.78' RT	981.55	Radius Center
189.2	2137+34.96	46.57' RT	981.66	Radius Center
189.3	2137+44.70	56.55' RT	981.54	Radius Center
189.4	2137+74.16	18.49' LT	980.38	Radius Center

2

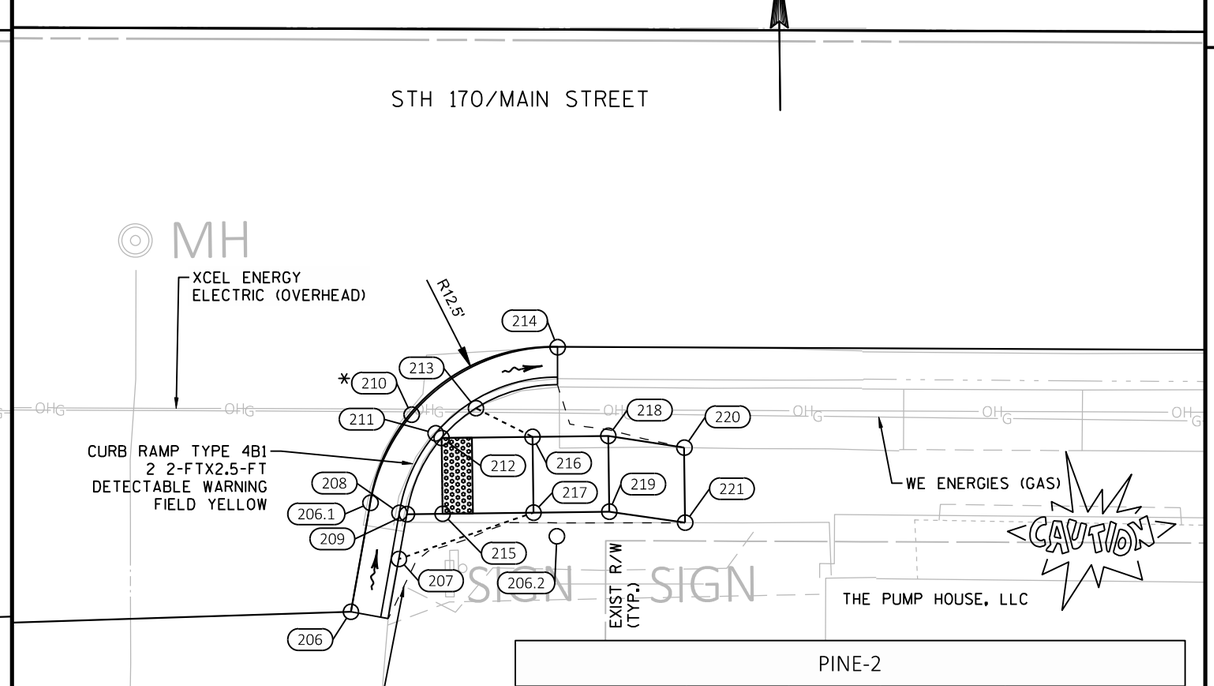
PINE-1
SW QUADRANT



PINE-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
190	2138+86.82	21.33' RT	979.24	Flange
190.1	2138+99.82	34.00' RT	979.55	PT
190.2	2138+86.82	34.33' RT	980.04	Radius Center
191	2138+92.69	25.63' RT	979.81	Top of Curb
192	2138+96.84	26.05' RT	979.39	Flange
193	2138+95.30	27.33' RT	979.31	Flowline
194	2138+94.91	27.64' RT	979.35	Top of Curb
195	2138+97.67	32.53' RT	979.41	Flowline
196	2138+97.18	32.61' RT	979.42	Top of Curb
197	2138+97.36	35.60' RT	979.92	Top of Curb
198	2138+99.96	39.51' RT	979.79	Flange
199	2138+73.91	27.75' RT	979.83	Match Existing Sidewalk
200	2138+73.99	32.67' RT	979.96	Match Existing Sidewalk
201	2138+83.92	27.82' RT	979.83	Sidewalk Grade
202	2138+84.00	32.82' RT	979.87	Sidewalk Grade
203	2138+88.92	27.74' RT	979.77	Sidewalk Grade
204	2138+89.00	32.74' RT	979.83	Sidewalk Grade
205	2138+95.00	32.64' RT	979.45	Sidewalk Grade

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

PINE-2
SE QUADRANT



PINE-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
206	2139+29.24	38.47' RT	979.52	Flange
206.1	2139+30.50	31.28' RT	979.34	PT
206.2	2139+42.82	33.44' RT	979.70	Radius Center
207	2139+32.39	34.98' RT	979.77	Top of Curb
208	2139+32.42	31.94' RT	979.26	Flowline
209	2139+32.91	32.02' RT	979.27	Top of Curb
210	2139+33.20	25.46' RT	979.25	Flange
211	2139+34.78	26.68' RT	979.17	Flowline
212	2139+35.18	26.99' RT	979.21	Top of Curb
213	2139+37.44	25.01' RT	979.71	Top of Curb
214	2139+42.82	20.97' RT	978.94	Flange
215	2139+35.26	31.98' RT	979.31	Sidewalk Grade
216	2139+41.18	26.89' RT	979.63	Sidewalk Grade
217	2139+41.26	31.89' RT	979.68	Sidewalk Grade
218	2139+46.18	26.81' RT	979.54	Sidewalk Grade
219	2139+46.26	31.80' RT	979.64	Sidewalk Grade
220	2139+51.21	27.56' RT	979.51	Match Existing Sidewalk
221	2139+51.27	32.51' RT	979.64	Match Existing Sidewalk

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	PLAN DETAILS: CURB RAMPS-PINE ST. INTERSECTION	SHEET 73	E

2142+00'D'

2143+00'D

2

2

N

N

STH 170/MAIN STREET

STH 170/MAIN STREET

CHESTNUT-1
SW QUADRANT

CHESTNUT-2
SE QUADRANT

NOTE: INLETS ARE SHOWN BOLD FOR ILLUSTRATIVE PURPOSES ONLY.

XCEL ENERGY ELECTRIC (OVERHEAD)

WE ENERGIES (GAS)

CAUTION

ANDREW P. DAHL

EXIST R/W (TYP.)

R25.25'

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

SLOPE INTERCEPT (TYP.)

222.1

222 223 224 225 226 227 227.1 228 229 230 231 232 233 234 235 236 237

CHESTNUT STREET

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTING TO ACCOUNT FOR CURB RAMP SLOPES

WE ENERGIES (GAS)

CAUTION

XCEL ENERGY ELECTRIC (OVERHEAD)

R27.0'

ADJUSTING INLET COVERS

CURB RAMP TYPE 1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

TEMPORARY EASEMENT

DENZIL E. DAYTON JR.

PROPOSED R/W

SLOPE INTERCEPT (TYP.)

238.2

238.1 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256

CHESTNUT STREET

EXIST R/W (TYP.)

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: CURB RAMPS-CHESTNUT ST. INTERSECTION	SHEET 74	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021301-CR_DUNN CURB RAMPS.DWG
LAYOUT NAME - CHESTNUT

PLOT DATE : 7/5/2020 2:00 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

CHESTNUT-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
222	2142+04.00	22.93' RT	978.21	Flange
222.1	2141+95.82	46.81' RT	977.00	Radius Center
223	2142+07.09	27.05' RT	978.66	Top of Curb
224	2142+11.19	26.78' RT	978.20	Flange
225	2142+09.90	28.31' RT	978.12	Flowline
226	2142+09.59	28.70' RT	978.16	Top of Curb
227	2142+14.78	33.36' RT	978.18	Flowline
227.1	2142+16.42	32.24' RT	978.18	Flowline
228	2142+14.35	33.63' RT	978.19	Top of Curb
229	2142+15.94	36.18' RT	978.69	Top of Curb
230	2142+19.86	39.08' RT	978.27	Flange
231	2141+88.58	27.67' RT	978.66	Match Existing Sidewalk
232	2141+88.64	31.65' RT	978.71	Match Existing Sidewalk
233	2141+98.60	28.88' RT	978.63	Sidewalk Grade
234	2142+03.60	28.80' RT	978.58	Sidewalk Grade
235	2141+98.68	33.89' RT	978.62	Sidewalk Grade
236	2142+03.68	33.81' RT	978.60	Sidewalk Grade
237	2142+09.68	33.71' RT	978.26	Sidewalk Grade

CHESTNUT-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
238	2142+43.05	41.26' RT	978.28	Flange
238.1	2142+67.59	20.78' RT	978.39	PT
238.2	2142+69.26	47.73' RT	977.39	Radius Center
239	2142+47.18	37.12' RT	978.80	Top of Curb
240	2142+49.87	32.76' RT	978.30	Top of Curb
241	2142+49.48	32.44' RT	978.29	Flowline
242	2142+47.97	31.10' RT	978.37	Flange
243	2142+53.31	29.13' RT	978.31	Top of Curb
244	2142+52.96	28.78' RT	978.30	Flowline
245	2142+57.50	26.24' RT	978.81	Top of Curb
246	2142+72.47	20.68' RT	978.47	Flange
247	2142+50.56	40.38' RT	978.44	Sidewalk Grade
248	2142+55.20	42.25' RT	978.47	Sidewalk Grade
249	2142+53.09	35.88' RT	978.34	Sidewalk Grade
250	2142+56.73	39.39' RT	978.44	Sidewalk Grade
251	2142+56.56	32.28' RT	978.39	Sidewalk Grade
252	2142+60.20	35.79' RT	978.44	Sidewalk Grade
253	2142+60.97	29.59' RT	978.49	Sidewalk Grade
254	2142+63.01	34.15' RT	978.51	Sidewalk Grade
255	2142+72.73	27.98' RT	978.59	Match Existing Sidewalk
256	2142+72.77	31.93' RT	978.56	Match Existing Sidewalk

N

ASH-1
SW QUADRANT

2

2145+00'D'

2146+00'D'

STH 170/MAIN STREET

CENTURYLINK (TELEPHONE/FIBER OPTIC)

XCEL ENERGY
ELECTRIC (OVERHEAD)

NOTE: INLET IS SHOWN BOLD FOR
ILLUSTRATIVE PURPOSES ONLY.

CURB RAMP TYPE 1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R26.5'

257 258 259* 260 261 262* 263 264 265 266 267 268 269 270 271 272 273 274 275 276

PROPOSED R/W

257.1

SLOPE INTERCEPT (TYP.)

WE ENERGIES (GAS)

CAUTION

ASH STREET

EXIST R/W (TYP.)

DUSTIN RASSBACH

MH GUY POST GV IP

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

ASH-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
257	2144+91.02	21.38' RT	979.35	Flange
257.1	2144+85.47	47.29' RT	979.64	Flange
258	2144+95.31	25.40' RT	979.85	Top of Curb
259	2145+01.24	26.02' RT	979.39	Flange
260	2145+00.02	27.59' RT	979.31	Flowline
261	2144+99.71	27.98' RT	979.35	Top of Curb
262	2145+05.28	29.69' RT	979.42	Flange
263	2145+03.78	31.02' RT	979.34	Flowline
264	2145+03.41	31.35' RT	979.37	Top of Curb
265	2145+06.38	35.52' RT	979.87	Top of Curb
266	2145+10.78	39.47' RT	979.46	Flange

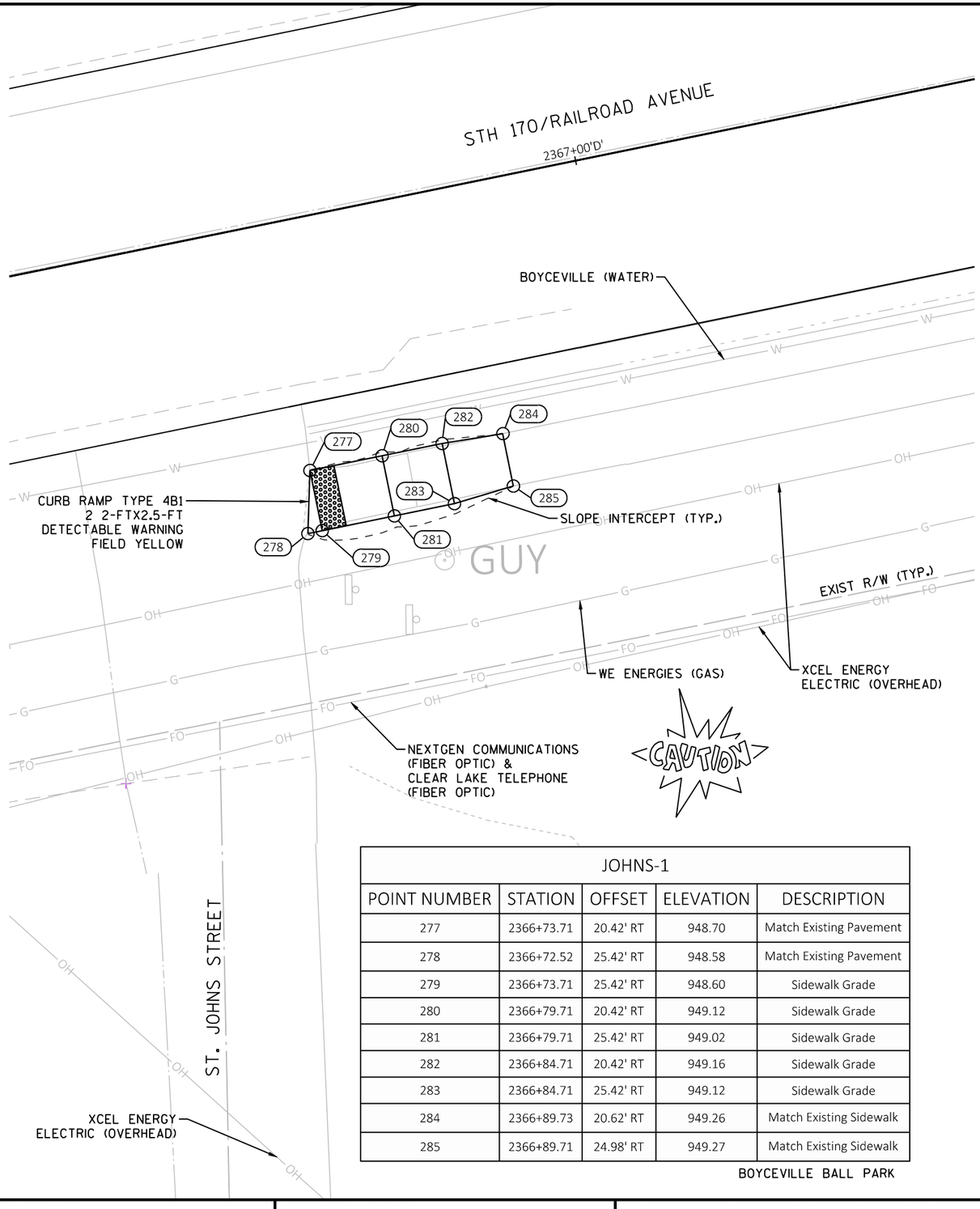
ASH-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
267	2144+82.16	27.53' RT	979.46	Match Existing Sidewalk
268	2144+82.19	31.47' RT	979.53	Match Existing Sidewalk
269	2144+92.05	29.02' RT	979.76	Sidewalk Grade
270	2144+90.33	33.71' RT	979.75	Sidewalk Grade
271	2144+96.63	31.40' RT	979.66	Sidewalk Grade
272	2144+93.25	35.16' RT	979.73	Sidewalk Grade
273	2145+00.35	34.75' RT	979.59	Sidewalk Grade
274	2144+96.97	38.50' RT	979.69	Sidewalk Grade
275	2145+03.20	39.06' RT	979.69	Sidewalk Grade
276	2144+98.71	41.26' RT	979.75	Sidewalk Grade

2

2

JOHNS-1
SE QUADRANT

N



NOTE: ST. JOHNS STREET SERVES AS A DRIVEWAY TO A PARKING LOT

JOHNS-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
277	2366+73.71	20.42' RT	948.70	Match Existing Pavement
278	2366+72.52	25.42' RT	948.58	Match Existing Pavement
279	2366+73.71	25.42' RT	948.60	Sidewalk Grade
280	2366+79.71	20.42' RT	949.12	Sidewalk Grade
281	2366+79.71	25.42' RT	949.02	Sidewalk Grade
282	2366+84.71	20.42' RT	949.16	Sidewalk Grade
283	2366+84.71	25.42' RT	949.12	Sidewalk Grade
284	2366+89.73	20.62' RT	949.26	Match Existing Sidewalk
285	2366+89.71	24.98' RT	949.27	Match Existing Sidewalk

BOYCEVILLE BALL PARK

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: CURB RAMPS-ST. JOHNS ST. INTERSECTION	SHEET 77	E

2

CTH K-1
SW QUADRANT

N

STH 170/RAILROAD AVENUE

2376+00'D'

BOYCEVILLE (SANITARY)

BOYCEVILLE (WATER)

286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301

R27.0'

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

SLOPE INTERCEPT (TYP.)

<CAUTION>

WE ENERGIES (GAS)

286.1

NEXTGEN COMMUNICATIONS
(FIBER OPTIC) &
CLEAR LAKE TELEPHONE
(FIBER OPTIC)

CLEAR LAKE TELEPHONE
(TELEPHONE) &
CENTURYLINK (TELEPHONE/FIBER OPTIC)

EXIST R/W (TYP.)

JEAN M. & DANIEL R. BLACKLEY

BOYCEVILLE (WATER)

CTH K/CENTER STREET

CTH K-2
SE QUADRANT

N

STH 170/RAILROAD AVENUE

2

BOYCEVILLE (WATER)

310.05 302.1 310.06 310.07 310.04 310.14 310 310.11 310.02 310.13 310.03 310.01 310.08 318 309 308 306 307 316 319 310.09 310.10 310.12 317 314 305 313 315 304 303 302 312 311

WE ENERGIES (GAS)

<CAUTION>

CURB RAMP TYPE 3
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

R29.0'

302.2

SLOPE INTERCEPT (TYP.)

CONCRETE CURB PEDESTRIAN.
TOP OF CURB TO MATCH EXISTING GROUND

DOUGLAS A. & KENDRA C. HANKINS

EXISTING SANITARY MANHOLE IS LOCATED
UNDER EXISTING TOP LAYER OF PAVEMENT.
VILLAGE OF BOYCEVILLE TO LOCATE AND
EXPOSE MANHOLE PRIOR TO WORK IN THIS AREA.

EXIST R/W (TYP.)

CTH K/CENTER STREET

XCEL ENERGY
ELECTRIC (OVERHEAD)

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: CURB RAMPS-CTH K/CENTER ST. INTERSECTION	SHEET 78	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021301-CR_DUNN CURB RAMPS.DWG
LAYOUT NAME - CTH K (1)

PLOT DATE : 7/5/2020 2:01 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

CTH K-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
286	2376+18.03	24.36' RT	947.98	Flange
286.1	2376+00.88	45.22' RT	948.14	Radius Center
287	2376+19.30	29.07' RT	948.41	Top of Curb
288	2376+23.20	30.02' RT	947.95	Flange
289	2376+21.54	31.15' RT	947.87	Flowline
290	2376+21.14	31.44' RT	947.91	Top of Curb
291	2376+24.21	36.23' RT	947.83	Flowline
292	2376+23.75	36.44' RT	947.84	Top of Curb
293	2376+24.65	39.30' RT	948.34	Top of Curb
294	2376+27.82	43.39' RT	947.86	Flange
295	2376+00.54	28.63' RT	948.50	Match Existing Sidewalk
296	2375+99.64	33.04' RT	948.58	Match Existing Sidewalk
297	2376+10.14	31.44' RT	948.36	Sidewalk Grade
298	2376+10.14	36.44' RT	948.40	Sidewalk Grade
299	2376+15.14	31.44' RT	948.33	Sidewalk Grade
300	2376+15.14	36.44' RT	948.30	Sidewalk Grade
301	2376+21.14	36.44' RT	947.88	Sidewalk Grade

CTH K-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
302	2376+56.69	42.75' RT	947.86	Flange
302.1	2376+86.05	18.51' RT	947.86	PT
302.2	2376+85.33	47.50' RT	947.86	Radius Center
303	2376+60.09	39.44' RT	948.27	Top of Curb
304	2376+61.25	36.44' RT	947.78	Top of Curb
305	2376+60.79	36.23' RT	947.77	Flowline
306	2376+62.26	29.92' RT	947.83	Flange
307	2376+64.25	31.44' RT	947.79	Top of Curb
308	2376+63.85	31.14' RT	947.75	Flowline
309	2376+66.92	28.44' RT	948.29	Top of Curb
310	2376+80.17	18.96' RT	947.71	Flange
310.01	2376+77.55	22.17' RT	948.17	Top of Curb
310.02	2376+80.52	20.93' RT	947.63	Flowline
310.03	2376+80.61	21.42' RT	947.67	Top of Curb
310.04	2376+85.68	18.50' RT	947.66	Flange
310.05	2376+85.66	20.50' RT	947.58	Flowline
310.06	2376+85.65	21.00' RT	947.59	Top of Curb
310.07	2376+90.67	18.63' RT	947.58	Flange
310.08	2376+85.45	24.00' RT	947.76	Sidewalk Grade
310.09	2376+85.32	28.99' RT	947.86	Sidewalk Grade
310.10	2376+90.33	29.12' RT	947.97	Sidewalk Grade
310.11	2376+90.46	24.12' RT	947.87	Sidewalk Grade
310.12	2376+95.33	29.24' RT	948.17	Match Existing Sidewalk
310.13	2376+95.43	25.28' RT	948.07	Match Existing Sidewalk
310.14	2376+88.65	21.08' RT	948.09	Top of Curb
311	2376+63.48	51.59' RT	948.27	Match Existing Sidewalk
312	2376+68.48	51.93' RT	948.38	Match Existing Sidewalk
313	2376+64.25	36.44' RT	947.84	Sidewalk Grade
314	2376+66.45	36.44' RT	947.99	Sidewalk Grade
315	2376+70.88	38.75' RT	948.07	Sidewalk Grade
316	2376+69.96	31.44' RT	948.08	Sidewalk Grade
317	2376+73.64	34.83' RT	948.10	Sidewalk Grade
318	2376+80.42	24.26' RT	947.86	Sidewalk Grade
319	2376+81.43	29.16' RT	947.95	Sidewalk Grade

2

CTH K-3
NE QUADRANT

N

CTH K-3				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
444	2376+97.83	32.69' LT	948.02	Match Existing Pavement
445	2376+93.63	36.57' LT	948.18	Match Pavement
446	2376+98.34	56.08' LT	949.31	Sidewalk Grade
447	2377+03.27	55.19' LT	949.41	Sidewalk Grade
448	2376+99.73	67.69' LT	949.54	Match Existing Sidewalk
449	2377+04.10	67.66' LT	949.51	Match Existing Sidewalk
450	2376+98.48	35.40' LT	948.08	Sidewalk Grade

CTH K/CENTER STREET

CANADIAN NATIONAL RAILROAD

SOO LINE RAILROAD

449

448

446

447

450

445

444

SLOPE INTERCEPT (TYP.)

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

BOYCEVILLE (WATER)

CENTURYLINK
(TELEPHONE/FIBER OPTIC)

WE ENERGIES (GAS)

EXIST R/W (TYP.)

CAUTION

BOYCEVILLE (SANITARY)

STH 170/RAILROAD AVENUE

2377+00'D'

2

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: CURB RAMPS-CTH K/CENTER ST. INTERSECTION	SHEET 80	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021301-CR_DUNN CURB RAMPS.DWG
LAYOUT NAME - CTH K (2)

PLOT DATE : 7/5/2020 2:01 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

RACE-1
SW QUADRANT

N

STH 170/RAILROAD AVENUE

2380+00'D'

BOYCEVILLE (SANITARY)

EXISTING HYDRANT AND WATER VALVE TO BE RELOCATED (BY OTHERS)

R21.5'

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

<CAUTION>

WE ENERGIES (GAS)

320 321 322* 323 324 325 326 327 328 329 330 331 332 333 334 335 336

NOTE: INLETS ARE SHOWN BOLD FOR ILLUSTRATIVE PURPOSES ONLY.

PROPOSED R/W

TEMPORARY EASEMENT

SLOPE INTERCEPT (TYP.)

320.1

XCEL ENERGY
ELECTRIC (OVERHEAD)

EXIST R/W (TYP.)

RACE STREET

TOM L. HARRIS
&
JOAN R. BISSON-HARRIS

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

RACE-2
SE QUADRANT

N

STH 170/RAILROAD AVENUE

2381+00'D'

BOYCEVILLE (SANITARY)

BOYCEVILLE (STORM SEWER)

BOYCEVILLE (WATER)

R22.0'

CURB RAMP TYPE 4B1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

WE ENERGIES (GAS)

<CAUTION>

339 340 341 342 343 344 345 346 347 348 349 350 351 352

PROPOSED R/W

TEMPORARY EASEMENT

SLOPE INTERCEPT (TYP.)

337 337.1 338

NOTE: INLET IS SHOWN BOLD FOR ILLUSTRATIVE PURPOSES ONLY.

EXIST R/W (TYP.)

RACE STREET

WILLARD TRONRUD
&
ADELINE M. TRONRUD

2

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: CURB RAMPS-RACE ST. INTERSECTION	SHEET 81	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021301-CR_DUNN CURB RAMPS.DWG
LAYOUT NAME - RACE

PLOT DATE : 7/5/2020 2:02 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

RACE-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
320	2380+19.47	19.32' RT	946.53	Flange
320.1	2380+18.92	40.79' RT	947.85	Flange
321	2380+26.91	23.55' RT	947.02	Top of Curb
322	2380+31.06	23.01' RT	946.57	Flange
323	2380+29.83	24.63' RT	946.49	Flowline
324	2380+29.52	25.02' RT	946.52	Top of Curb
325	2380+36.62	28.64' RT	946.59	Flange
326	2380+35.00	29.75' RT	946.51	Flowline
327	2380+34.57	30.02' RT	946.52	Top of Curb
328	2380+36.08	32.62' RT	947.02	Top of Curb
329	2380+39.79	35.63' RT	946.52	Flange
330	2380+13.52	25.44' RT	947.07	Match Existing Sidewalk
331	2380+13.53	29.42' RT	947.21	Match Existing Sidewalk
332	2380+18.52	25.02' RT	946.92	Sidewalk Grade
333	2380+18.52	30.02' RT	947.02	Sidewalk Grade
334	2380+23.52	25.02' RT	946.89	Sidewalk Grade
335	2380+23.52	30.02' RT	946.98	Sidewalk Grade
336	2380+29.52	30.02' RT	946.56	Sidewalk Grade

RACE-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
337	2380+68.90	35.92' RT	946.40	Flange
337.1	2380+90.27	41.15' RT	947.53	Flange
338	2380+72.74	32.62' RT	946.89	Top of Curb
339	2380+72.18	28.64' RT	946.46	Flange
340	2380+73.84	29.75' RT	946.38	Flowline
341	2380+74.25	30.03' RT	946.39	Top of Curb
342	2380+78.99	24.63' RT	946.47	Flowline
343	2380+79.29	25.03' RT	946.51	Top of Curb
344	2380+81.89	23.54' RT	947.01	Top of Curb
345	2380+90.26	19.14' RT	946.52	Flange
346	2380+79.29	30.03' RT	946.47	Sidewalk Grade
347	2380+85.29	25.03' RT	946.93	Sidewalk Grade
348	2380+85.29	30.03' RT	946.89	Sidewalk Grade
349	2380+90.29	25.02' RT	946.93	Sidewalk Grade
350	2380+90.29	30.03' RT	946.99	Sidewalk Grade
351	2380+95.29	25.64' RT	946.97	Match Existing Sidewalk
352	2380+95.29	29.52' RT	947.06	Match Existing Sidewalk

2

WINTER-1
SW QUADRANT

N

BOYCEVILLE (SANITARY)

2384+00'D'

STH 170/RAILROAD AVENUE

BOYCEVILLE (STORM SEWER)

BOYCEVILLE (WATER)

WE ENERGIES (GAS)

CAUTION

R22.25'

CURB RAMP TYPE 1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

PROPOSED R/W

NOTE: INLETS ARE SHOWN BOLD FOR ILLUSTRATIVE PURPOSES ONLY.

SLOPE INTERCEPT (TYP.)

WINTER STREET

EXIST R/W (TYP.)

JEREMY M. & ASHLEY J. WAHL

*NOTE: EDGE OF PAVEMENT ELEVATION TO BE ADJUSTED TO ACCOUNT FOR CURB RAMP SLOPES

WINTER-2
SE QUADRANT

N

2

BOYCEVILLE (STORM SEWER)

STH 170/RAILROAD AVENUE

BOYCEVILLE (SANITARY)

BOYCEVILLE (WATER)

EXISTING HYDRANT AND WATER VALVE TO BE RELOCATED (BY OTHERS)

WE ENERGIES (GAS)

CAUTION

R23.5'

CURB RAMP TYPE 1
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

CONCRETE CURB PEDESTRIAN
TEMPORARY EASEMENT
PROPOSED R/W
SLOPE INTERCEPT (TYP.)

LARRY G. & ANDREA B. RINECK

NOTE: INLET IS SHOWN BOLD FOR ILLUSTRATIVE PURPOSES ONLY.

WINTER STREET

EXIST R/W (TYP.)

XCEL ENERGY
ELECTRIC (OVERHEAD)

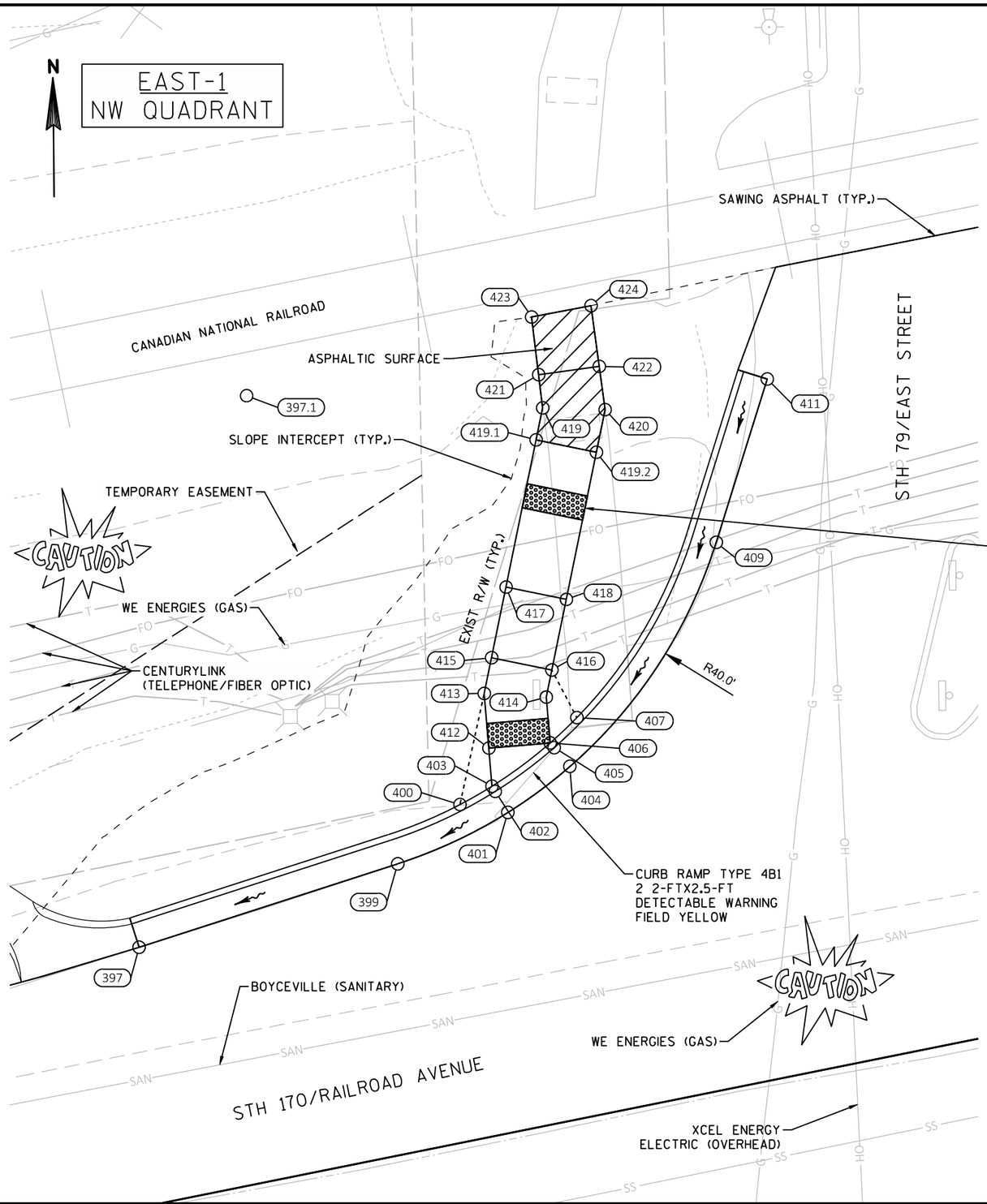
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: CURB RAMPS-WINTER ST. INTERSECTION	SHEET 83	E

2

WINTER-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
353	2383+91.35	19.47' RT	945.57	Flange
353.1	2383+87.95	41.46' RT	946.86	Radius Center
354	2383+95.87	23.40' RT	945.93	Top of Curb
355	2384+01.84	24.17' RT	945.47	Flange
355.1	2384+05.83	28.22' RT	945.45	Flange
356	2384+00.62	25.66' RT	945.39	Flowline
357	2384+00.31	26.05' RT	945.43	Top of Curb
358	2384+04.18	29.35' RT	945.37	Flowline
359	2384+03.78	29.65' RT	945.41	Top of Curb
360	2384+06.28	34.20' RT	945.91	Top of Curb
361	2384+10.02	38.73' RT	945.42	Flange
362	2383+80.34	25.81' RT	946.12	Match Existing Sidewalk
363	2383+80.28	29.82' RT	946.25	Match Existing Sidewalk
364	2383+92.17	27.01' RT	945.87	Sidewalk Grade
365	2383+90.22	31.62' RT	945.90	Sidewalk Grade
366	2383+96.67	29.61' RT	945.77	Sidewalk Grade
367	2383+93.04	33.15' RT	945.85	Sidewalk Grade
368	2384+00.29	33.07' RT	945.71	Sidewalk Grade
369	2383+96.70	36.57' RT	945.81	Sidewalk Grade
370	2384+03.05	37.36' RT	945.81	Sidewalk Grade
371	2383+98.55	39.53' RT	945.84	Sidewalk Grade
372	2384+00.59	49.32' RT	946.19	Match Existing Sidewalk
373	2384+04.67	49.45' RT	946.11	Match Existing Sidewalk

WINTER-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
374	2384+38.17	40.70' RT	945.36	Flange
374.1	2384+61.64	41.96' RT	947.12	Radius Center
375	2384+41.55	35.85' RT	945.89	Top of Curb
376	2384+43.66	31.10' RT	945.39	Top of Curb
377	2384+43.24	30.84' RT	945.35	Flowline
378	2384+41.51	29.79' RT	945.43	Flange
379	2384+46.75	27.17' RT	945.43	Top of Curb
380	2384+46.34	26.85' RT	945.39	Flowline
381	2384+50.76	24.00' RT	945.93	Top of Curb
382	2384+55.01	19.41' RT	945.51	Flange
383	2384+42.60	49.34' RT	946.22	Match Existing Sidewalk
384	2384+46.57	49.48' RT	946.31	Match Existing Sidewalk
385	2384+47.79	46.49' RT	946.56	Match Existing Sidewalk
386	2384+47.94	43.65' RT	946.31	Match Existing Sidewalk
387	2384+43.93	37.85' RT	945.73	Sidewalk Grade
388	2384+48.63	39.55' RT	945.76	Sidewalk Grade
389	2384+50.28	36.37' RT	945.73	Sidewalk Grade
390	2384+46.31	33.32' RT	945.63	Sidewalk Grade
391	2384+52.89	33.52' RT	945.76	Sidewalk Grade
392	2384+49.72	29.66' RT	945.70	Sidewalk Grade
393	2384+56.18	31.51' RT	945.83	Sidewalk Grade
394	2384+54.23	26.91' RT	945.80	Sidewalk Grade
395	2384+65.97	29.62' RT	946.25	Match Existing Sidewalk
396	2384+65.96	25.86' RT	646.06	Match Existing Sidewalk

2



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: CURB RAMPS-EAST ST. INTERSECTION	SHEET 85	E

N

EAST-2
SW QUADRANT

BOYCEVILLE (STORM SEWER)

BOYCEVILLE (WATER)

CAUTION

WE ENERGIES (GAS)

STH 170/RAILROAD AVENUE

XCEL ENERGY
ELECTRIC (OVERHEAD)

R25.0'

CURB RAMP TYPE 3
2 2-FTX2.5-FT
DETECTABLE WARNING
FIELD YELLOW

SLOPE INTERCEPT (TYP.)

PROPOSED R/W

TEMPORARY EASEMENT

EXIST R/W (TYP.)

EAST STREET

HARRY A. JOLES JR

425 426 427 428 429 430 431 432 433 434 434.1 434.2 434.3 434.4 435 436 436.1 436.2 436.3 436.4 436.5 437 438 438.1 438.2 440 441 442 442.1 442.2 442.3 442.4 425.1 439 439.1 439.2 439.3 443

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: CURB RAMPS-EAST ST. INTERSECTION	SHEET 86	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021301-CR_DUNN CURB RAMPS.DWG
LAYOUT NAME - EAST (2)

PLOT DATE : 7/5/2020 2:03 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

EAST-1				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
397	2389+22.52	20.77' LT	946.33	Flange
397.1	2389+39.95	63.01' LT	947.33	Radius Center
399	2389+44.48	23.27' LT	946.72	PT
400	2389+50.39	26.99' LT	947.25	Top of Curb
401	2389+54.07	25.60' LT	946.88	Flange
402	2389+53.41	27.47' LT	946.80	Flowline
403	2389+53.23	27.94' LT	946.81	Top of Curb
404	2389+59.75	28.28' LT	946.94	Flange
405	2389+58.81	30.02' LT	946.86	Flowline
406	2389+58.56	30.45' LT	946.87	Top of Curb
407	2389+61.10	32.05' LT	947.40	Top of Curb
409	2389+75.03	43.78' LT	947.32	PT
411	2389+81.71	55.98' LT	947.56	Flange
412	2389+53.59	31.03' LT	946.85	Sidewalk Grade
413	2389+54.11	35.46' LT	946.91	Sidewalk Grade
414	2389+58.99	34.17' LT	946.88	Sidewalk Grade
415	2389+55.27	38.20' LT	946.94	Sidewalk Grade
416	2389+59.87	36.25' LT	946.89	Sidewalk Grade
417	2389+57.55	43.59' LT	947.05	Sidewalk Grade
418	2389+62.16	41.64' LT	947.11	Sidewalk Grade
419	2389+63.35	57.29' LT	947.58	Sidewalk Grade
419.1	2389+62.32	54.84' LT	947.48	Sidewalk Grade
419.2	2389+66.92	52.89' LT	947.55	Sidewalk Grade
420	2389+68.30	56.15' LT	947.68	Sidewalk Grade
421	2389+63.56	60.00' LT	947.74	Sidewalk Grade
422	2389+68.53	59.69' LT	947.81	Sidewalk Grade
423	2389+63.93	64.71' LT	947.79	Match Existing Sidewalk
424	2389+68.85	64.66' LT	947.86	Match Existing Sidewalk

EAST-2				
POINT NUMBER	STATION	OFFSET	ELEVATION	DESCRIPTION
425	2388+47.98	19.97' RT	945.43	Match Existing Curb
425.1	2389+51.35	45.00' RT	946.01	Radius Center
426	2388+53.97	22.50' RT	946.12	Top of Curb
427	2388+55.10	26.34' RT	945.74	Match Existing Sidewalk
428	2388+67.09	26.05' RT	945.81	Match Existing Sidewalk
429	2388+67.89	22.50' RT	945.94	Top of Curb
430	2388+67.07	30.15' RT	945.93	Match Existing Sidewalk
431	2388+77.09	26.04' RT	945.84	Top of Curb
432	2388+77.09	31.00' RT	945.85	Flowline
433	2389+36.84	26.00' RT	946.09	Flange
434	2389+36.84	31.00' RT	946.11	Top of Curb
434.1	2389+19.87	31.00' RT	945.82	Top of Curb
434.2	2389+22.80	31.00' RT	945.86	Top of Curb
434.3	2389+19.84	38.18' RT	946.11	Top of Curb
434.4	2389+22.80	38.12' RT	946.17	Top of Curb
435	2389+51.22	20.00' RT	945.91	PT
436	2389+47.67	22.50' RT	945.78	Top of Curb
436.1	2389+47.67	22.00' RT	945.77	Flowline
436.2	2389+52.80	22.56' RT	945.83	Top of Curb
436.3	2389+52.85	22.05' RT	945.82	Flowline
436.4	2389+52.97	20.05' RT	945.90	Flange
436.5	2389+47.67	20.00' RT	945.85	Flange
437	2389+46.84	31.00' RT	945.80	Flange
438	2389+75.84	50.02' RT	945.62	PT
438.1	2389+70.01	48.60' RT	946.05	Flange
438.2	2389+65.10	47.65' RT	946.07	Flange
439	2389+52.67	116.80' RT	945.35	Match Existing Sidewalk
439.1	2389+52.73	111.73' RT	945.47	Sidewalk Grade
439.2	2389+57.65	112.61' RT	945.46	Sidewalk Grade
439.3	2389+57.59	117.67' RT	945.36	Match Existing Sidewalk
440	2389+44.69	22.50' RT	946.22	Top of Curb
441	2389+55.80	22.94' RT	946.29	Top of Curb
442	2389+46.84	26.00' RT	945.78	Sidewalk Grade
442.1	2389+51.98	26.01' RT	945.83	Sidewalk Grade
442.2	2389+51.81	31.01' RT	945.85	Sidewalk Grade
442.3	2389+58.78	33.13' RT	946.16	Sidewalk Grade
442.4	2389+61.43	28.90' RT	946.26	Sidewalk Grade
443	2389+62.61	118.56' RT	945.94	Match Existing Curb

2

CANADIAN NATIONAL RAILROAD

SEE PLAN & PROFILES FOR DETAILS NOT SHOWN.

SEE CURB RAMP DETAILS FOR DETAILS NOT SHOWN

CENTURYLINK (TELEPHONE/FIBER OPTIC)

WE ENERGIES (GAS)

CAUTION

TEMPORARY EASEMENT

ASPHALTIC SURFACE

STA. 2389+39.95'D' 63.0' LT

CURB RAMP DETECTABLE WARNING FIELD YELLOW

CONCRETE SIDEWALK 5-INCH

CONCRETE CURB & GUTTER 30-INCH TYPE D

STA. 2389+22.53'D' 20.8' LT

ASPHALTIC FLUME REQ'D

40' R

947.67 947.69 947.68 947.52 947.62 947.59 947.56 947.52 947.55 947.39 947.58 947.14 947.11 947.23 947.07 947.51 947.44 946.77 946.33 946.00 945.82 945.66

+44.48'D' -23.27'LT

+75.03'D' -43.78'LT

STA. 2389+81.71'D' 56.0' LT

CONCRETE ISLAND (TO BE REMOVED)

STH 79 NB/EAST ST

END RECONSTRUCTION
STA 502+55.50'S'
MATCH EXISTING

STA. 2390+76.85'D' 63.9' LT

TEMPORARY EASEMENT

+37.43'D' -57.19'LT

40' R

TYPE A2 INTERSECTION. SEE SDD FOR INFORMATION NOT SHOWN

+76.84'D' -24.00'LT

N

SAWING ASPHALT (TYP.)

12' 8' 12'

946.83 946.94 946.72 946.48 946.57 946.69 946.92 946.76 946.87 946.97 946.59 946.71 946.81 946.52 946.40 946.32 946.11 946.02 946.03 946.09 946.29 946.24 946.52 946.18 946.10 945.94 945.84 945.75 945.82 945.33 945.46 945.41 945.86 945.78

100°23'34"

502+00'S'

2390+00'D'

STA. 2389+99.25'D' = STA. 501+90.54'S'

947.20 947.11

BOYCEVILLE (WATER)

WE ENERGIES (GAS)

BOYCEVILLE (SANITARY)

25'

5'

3.5'

+51.22'D' 20.00'RT

+39.25'D' 23.50'RT

946.47 946.57 946.40 946.50 946.15 946.26 946.34 946.16

MATCH LINE STA. 2390+80'D'

STH 170/RAILROAD AVE

WE ENERGIES (GAS)

BEGIN RECONSTRUCTION
STA 2388+48'D'
SAWCUT REQUIRED

SLOPE INTERCEPT (TYP.)

R30'

CONCRETE DRIVEWAY 6-INCH
STA. 2388+60.93'D'
22.5" RT

(2) 10 LF STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH, AND 15 LF STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH, AND INLET 2X3-FT WITH INLET COVER TYPE H-S, AND MANHOLE 6-FT DIAMETER WITH MANHOLE COVER TYPE J, AND (2) CONCRETE COLLARS FOR PIPE

CURB RAMP DETECTABLE WARNING FIELD YELLOW

STA. 2389+51.18'D' 45.0' RT

XCEL ENERGY (ELECTRIC OVERHEAD)

+44.01'S' 17.97'RT

+37.50'S' -14.32'LT

945.76 945.66 945.95 945.77

STA. 2390+39.25'D' 53.5' RT

CONCRETE CURB & GUTTER 30-INCH TYPE D

CONCRETE SIDEWALK 5-INCH

945.42 14.5' 945.72 18' 945.36

3.5'

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

CONCRETE CURB & GUTTER 30-INCH TYPE D

945.18 945.48 945.13

501+00'S'

EAST ST

BEGIN RECONSTRUCTION
STA 500+67.41'S'
SAWCUT REQUIRED
MATCH EXISTING

944.94 945.25 944.90

HARRY A. JOLES, JR.

EVENSON AND VENSON

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	INTERSECTION DETAILS	SHEET 88	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - Sheet 1
PLOT DATE : 7/22/2020 12:01 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 44

SEE PLAN & PROFILES FOR DETAILS NOT SHOWN.

SEE CURB RAMP DETAILS FOR DETAILS NOT SHOWN

CANADIAN NATIONAL RAILROAD

CENTURYLINK (TELEPHONE/FIBER OPTIC)

XCEL ENERGY (ELECTRIC OVERHEAD)

ASPHALTIC FLUME REQ'D

MGS GUARDRAIL 3
(2) MGS GUARDRAIL TERMINAL EAT REQ'D

MATCH LINE STA. 2390+80'D'

947.14 946.74 946.30

12'

947.04 946.80

12'

946.94 946.86

8'

946.78 25' 946.70

12'

946.54 946.46

3.5'

946.47 946.39

946.54

SAWING ASPHALT (TYP.)

STH 170/RAILROAD AVE

946.78

2392+00'D'

946.62

END RECONSTRUCTION
STA 2391+50'D'
SAWCUT REQUIRED

946.38

946.71

946.22

CONCRETE CURB & GUTTER
30-INCH TYPE D

946.21

946.20

STA. 2392+25.51'D'
23.5' RT

946.30

946.44

946.29

CONCRETE CURB & GUTTER
30-INCH TYPE D

STA. 2392+84.59'D'
23.5' RT

STA. 2391+85.79'D'
23.5' RT

STA. 2392+37.51'D'
23.5' RT

ASPHALTIC FLUME REQ'D

CONCRETE CURB & GUTTER
30-INCH TYPE D

STA. 2391+32.61'D'
23.5' RT

ADJUSTING INLET COVERS

ASPHALTIC SURFACE
DRIVEWAYS AND FIELD ENTRANCES

SLOPE INTERCEPT (TYP.)

BOYCEVILLE (SANITARY)

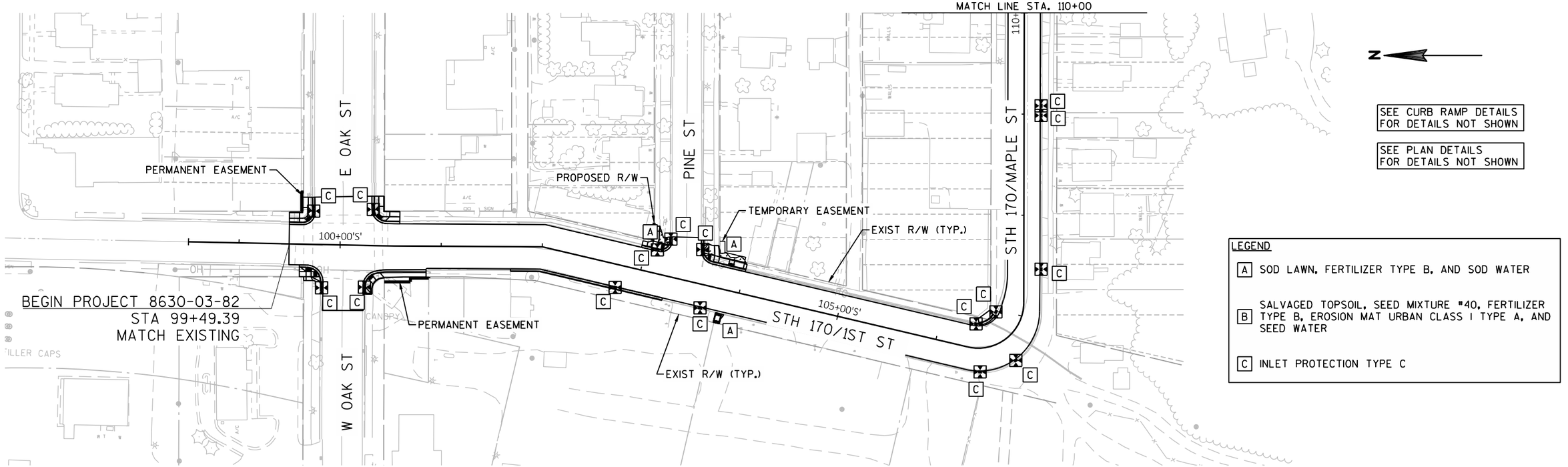
(2) 21 LF PIPE ARCH CORRUGATED STEEL 71X47-INCH, AND
(2) APRON ENDWALLS FOR PIPE ARCH STEEL 71X47-INCH REQUIRED,
AND (2) CONCRETE COLLARS FOR PIPE

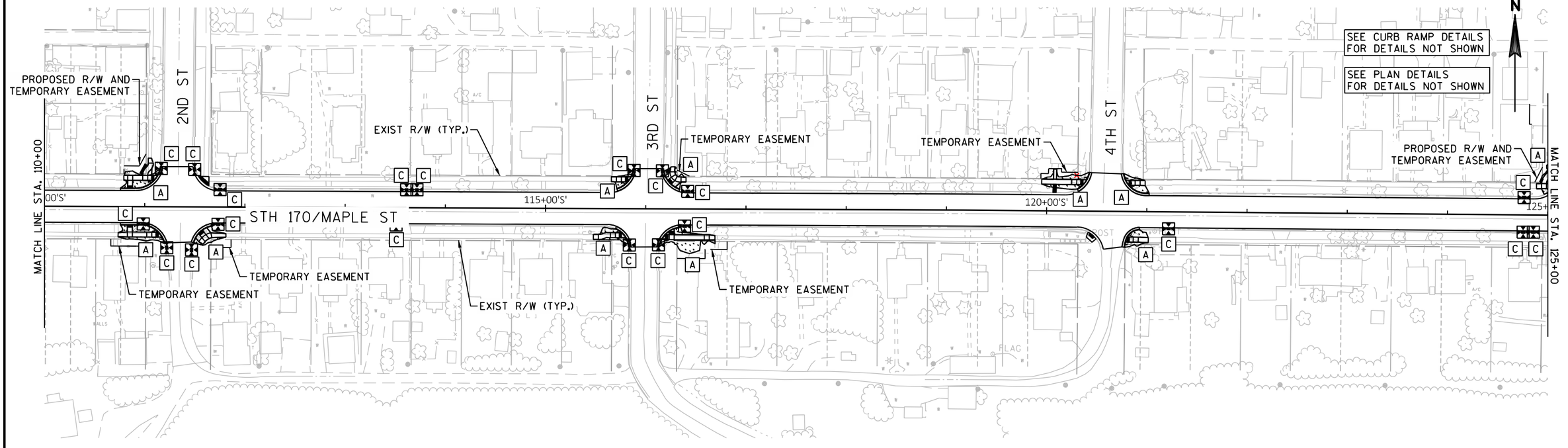
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	INTERSECTION DETAILS	SHEET 89	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - Sheet 2

PLOT DATE : 7/22/2020 12:02 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

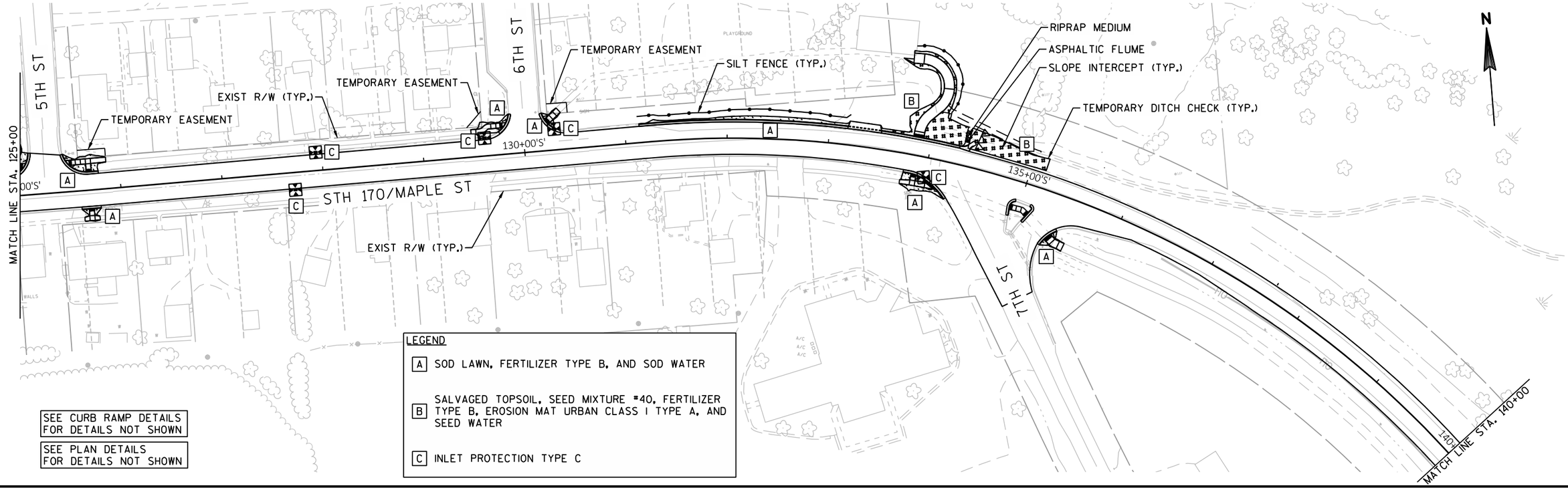
WISDOT/CADDS SHEET 44

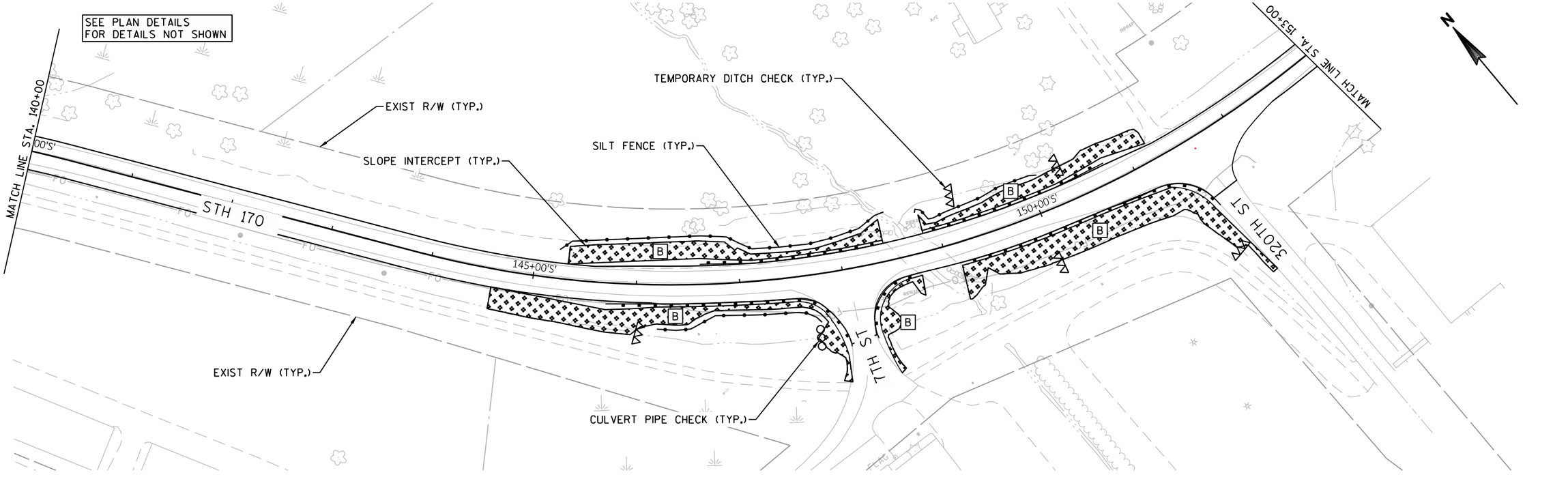




PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	EROSION CONTROL: ST. CROIX COUNTY	SHEET 90	E

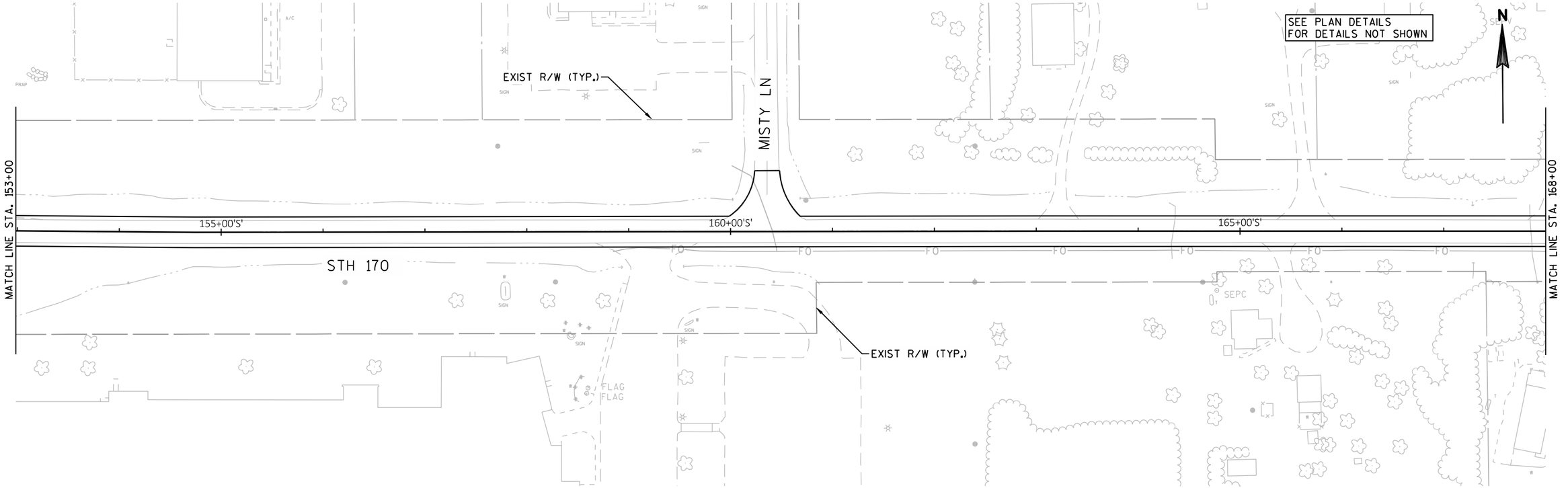
2

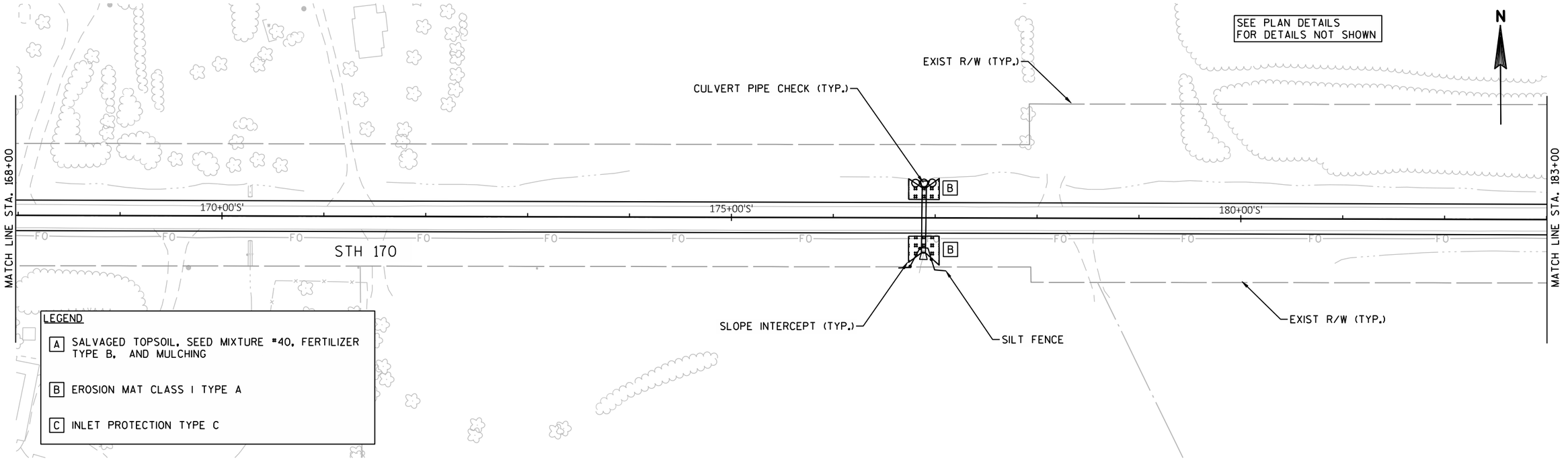




PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	EROSION CONTROL: ST. CROIX COUNTY	SHEET 91	E

2

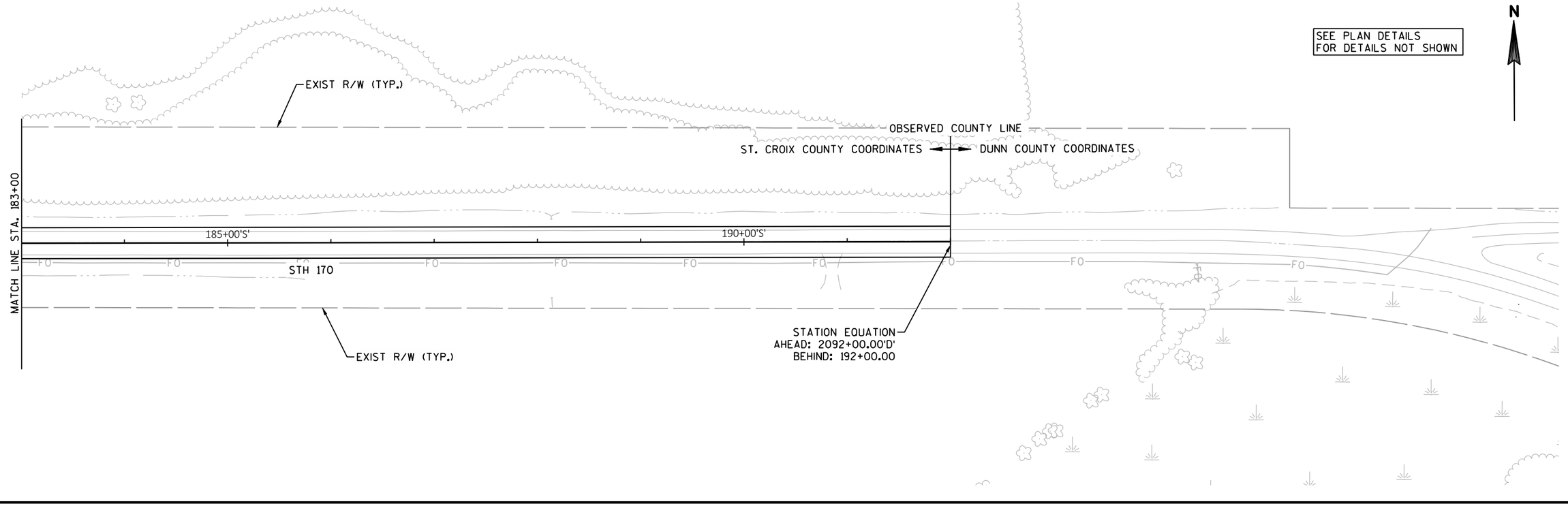




PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	EROSION CONTROL: ST. CROIX COUNTY	SHEET 92	E

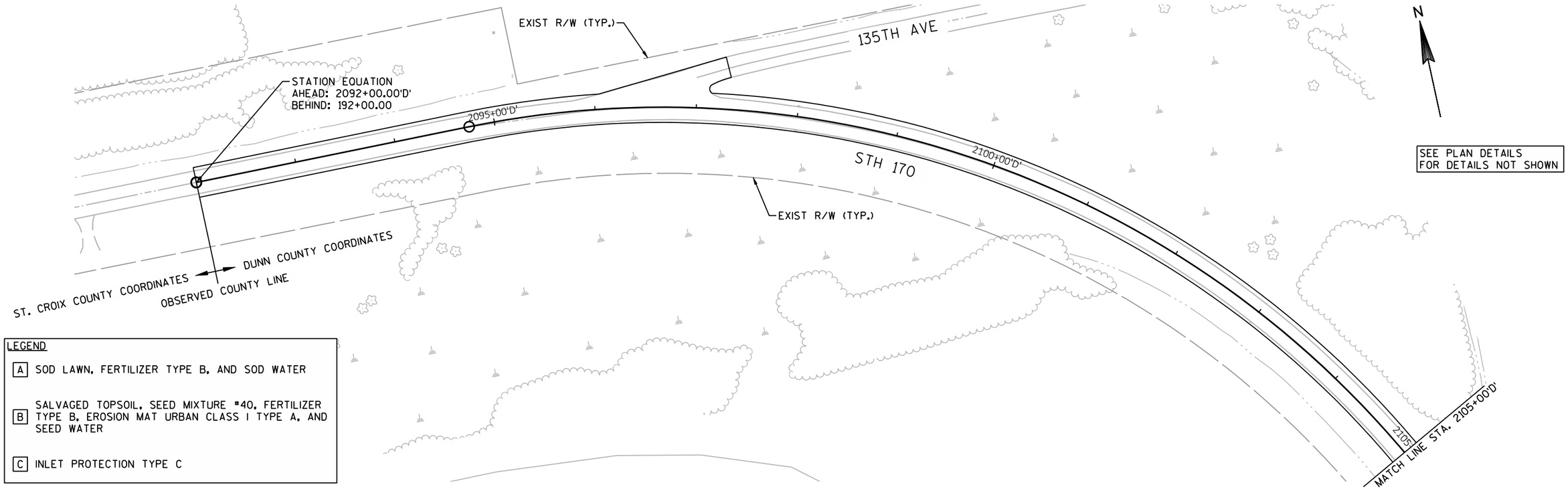
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\ST. CROIX\022001-EC_ST. CROIX.DWG
LAYOUT NAME - STA 153+00 - STA 183+00
PLOT DATE : 7/5/2020 1:34 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



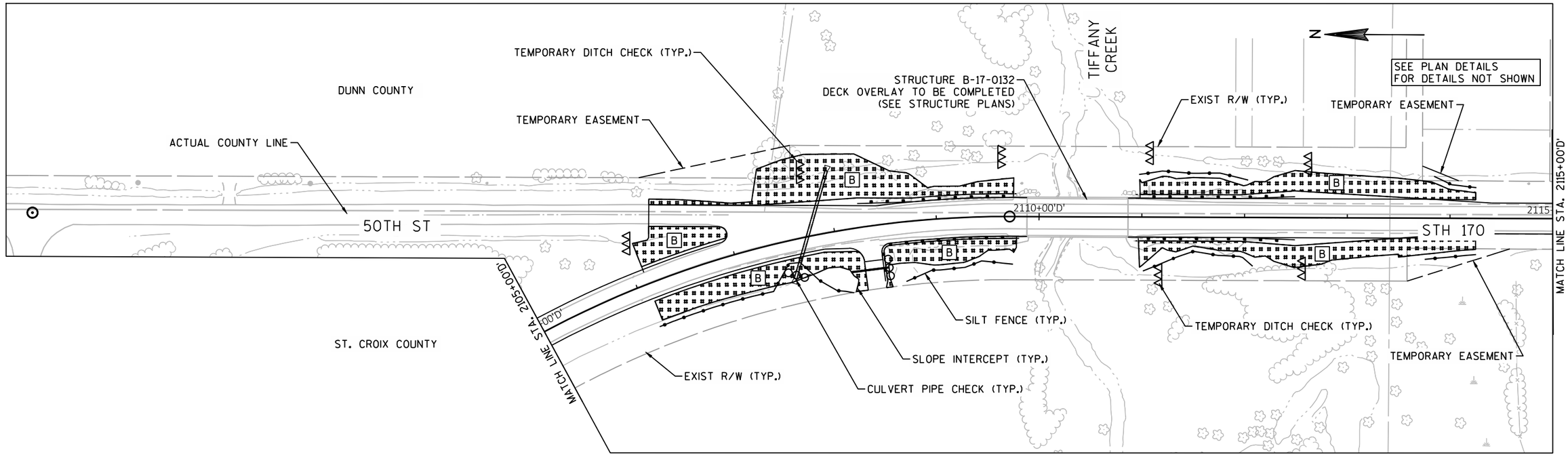
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	EROSION CONTROL: ST. CROIX COUNTY	SHEET 93	E

2



LEGEND

- [A] SOD LAWN, FERTILIZER TYPE B, AND SOD WATER
- [B] SALVAGED TOPSOIL, SEED MIXTURE #40, FERTILIZER TYPE B, EROSION MAT URBAN CLASS I TYPE A, AND SEED WATER
- [C] INLET PROTECTION TYPE C



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	EROSION CONTROL: DUNN COUNTY	SHEET 94	E

2

N

LEGEND

A SOD LAWN, FERTILIZER TYPE B, AND SOD WATER

B SALVAGED TOPSOIL, SEED MIXTURE #40, FERTILIZER TYPE B, EROSION MAT URBAN CLASS I TYPE A, AND SEED WATER

C INLET PROTECTION TYPE C

MATCH LINE STA. 2130+00'D'

2130

FLAG

SEE PLAN DETAILS FOR DETAILS NOT SHOWN

STH 170/MAIN ST

EXIST R/W (TYP.)

MATCH LINE STA. 2115+00'D'

00'D'

2120+00'D'

2125+00'D'

1ST ST

STH 170

EXIST R/W (TYP.)

CTH G

SEE CURB RAMP DETAILS FOR DETAILS NOT SHOWN

SEE PLAN DETAILS FOR DETAILS NOT SHOWN

FOREST ST

WILSON ST

CHESTNUT ST

TEMPORARY EASEMENT

PERMANENT R/W AND TEMPORARY EASEMENT

TEMPORARY EASEMENT

MATCH LINE STA. 2130+00'D'

+00'D'

2135+00'D'

2140+00'D'

2145

MATCH LINE STA. 2145+00'D'

SUMMIT ST

STH 170/MAIN ST

TEMPORARY EASEMENT

FOREST ST

TEMPORARY EASEMENT

WILSON ST

PROPOSED R/W

PINE ST

EXIST R/W (TYP.)

CHESTNUT ST

PERMANENT R/W AND TEMPORARY EASEMENT

PROPOSED R/W

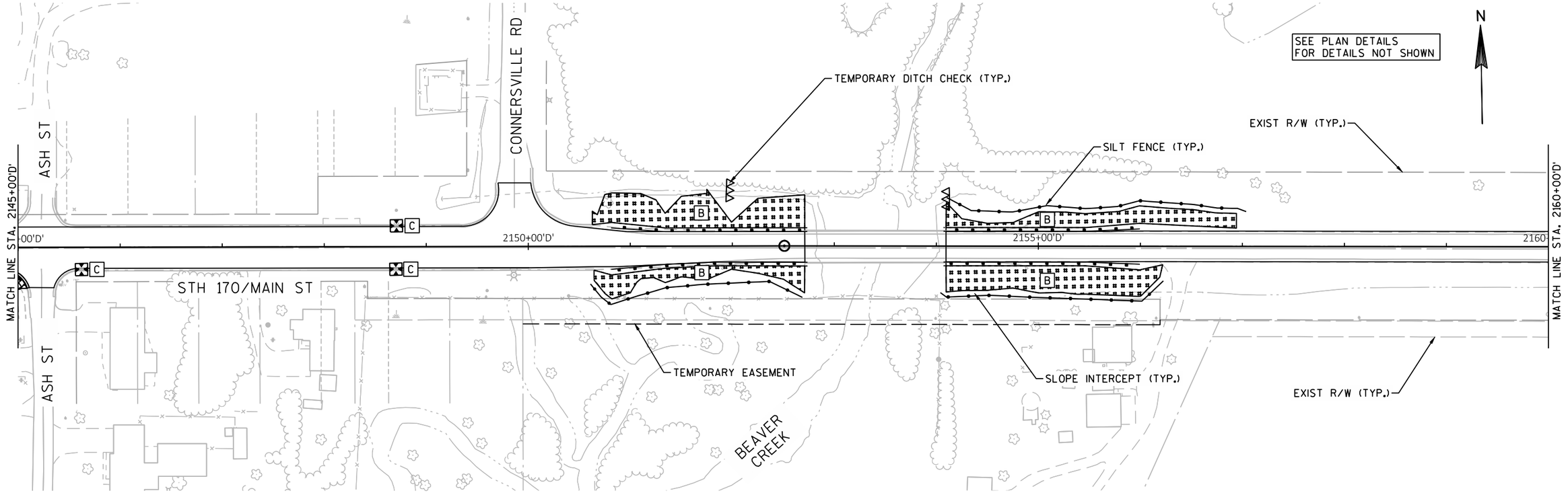
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	EROSION CONTROL: DUNN COUNTY	SHEET 95	E

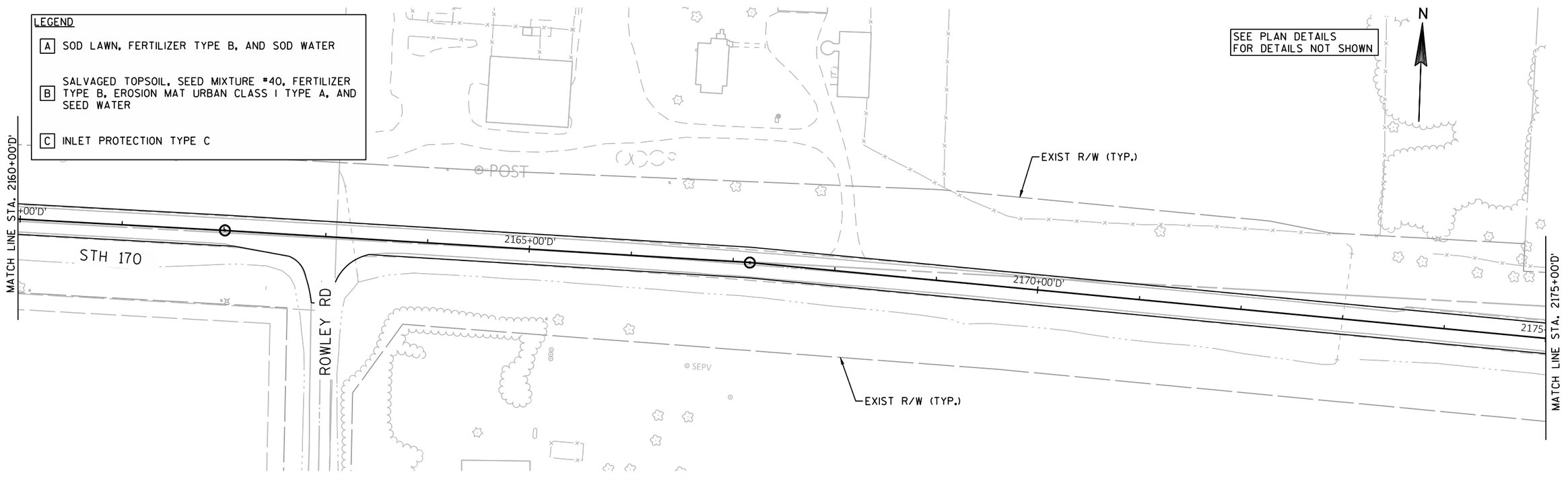
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\022001-EC_DUNN.DWG
LAYOUT NAME - STA 2115+00 - STA 2145+00

PLOT DATE : 7/5/2020 1:37 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2





PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	EROSION CONTROL: DUNN COUNTY	SHEET 96	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\022001-EC_DUNN.DWG
LAYOUT NAME - STA 2145+00 - STA 2175+00
PLOT DATE : 7/5/2020 1:38 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

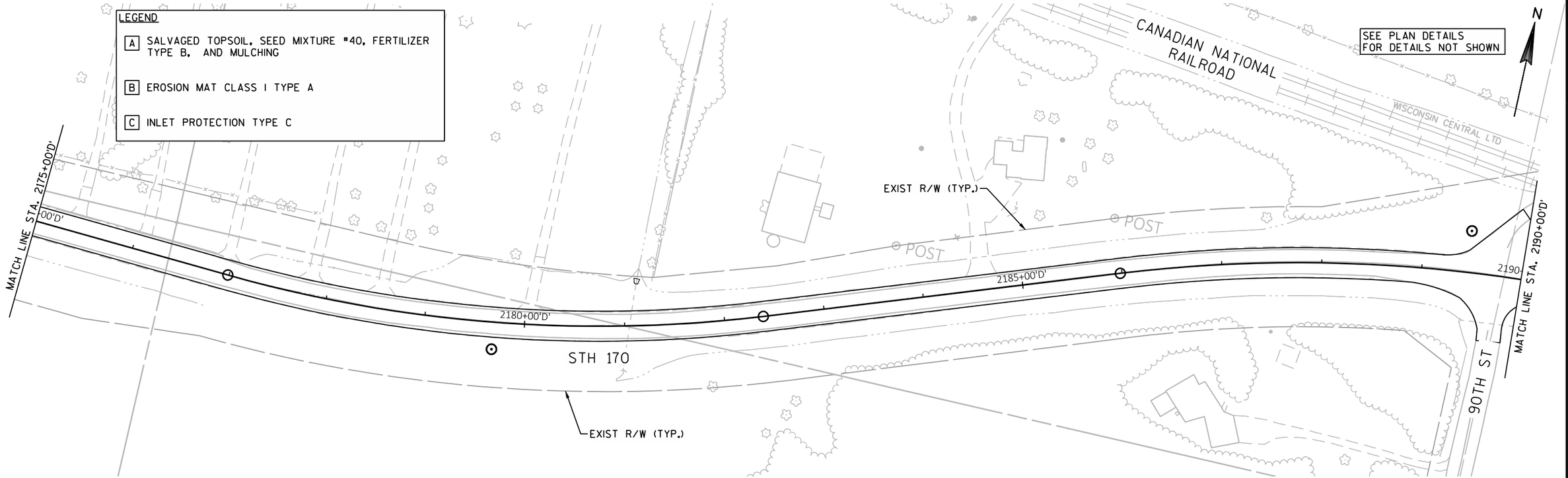
2

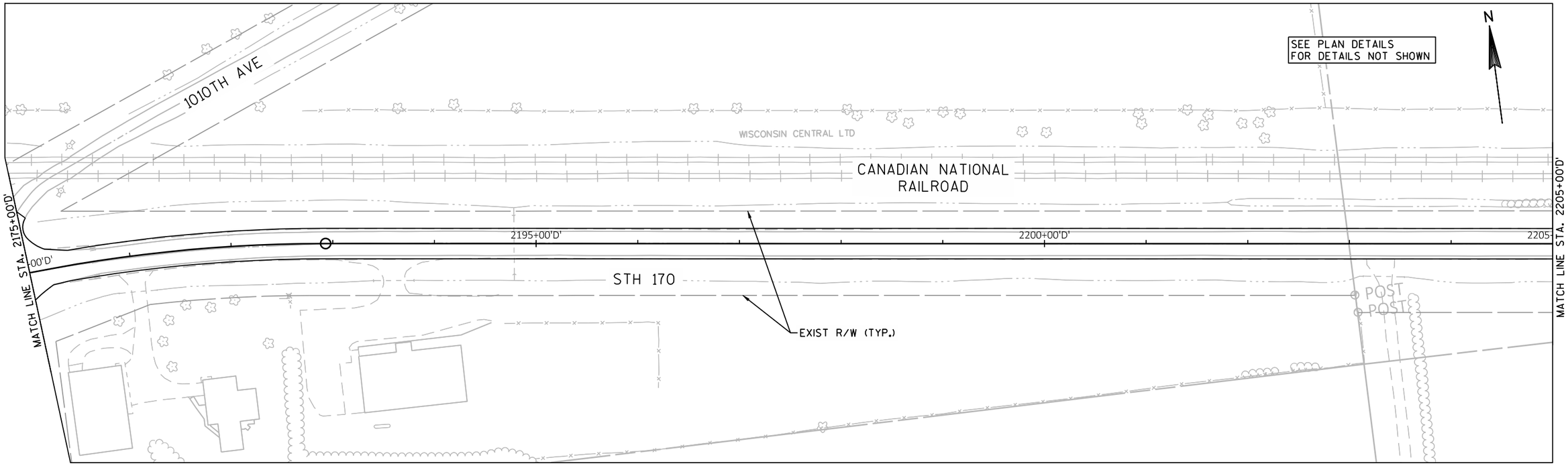
LEGEND

A SALVAGED TOPSOIL, SEED MIXTURE #40, FERTILIZER TYPE B, AND MULCHING

B EROSION MAT CLASS I TYPE A

C INLET PROTECTION TYPE C





PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	EROSION CONTROL: DUNN COUNTY	SHEET 97	E

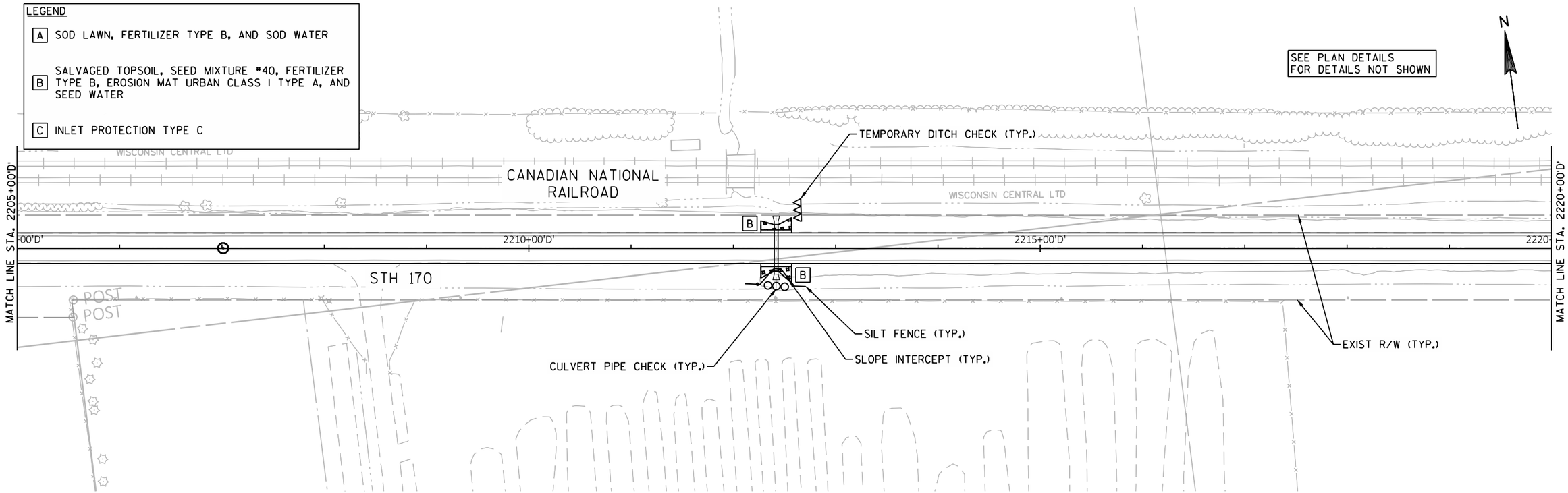
2

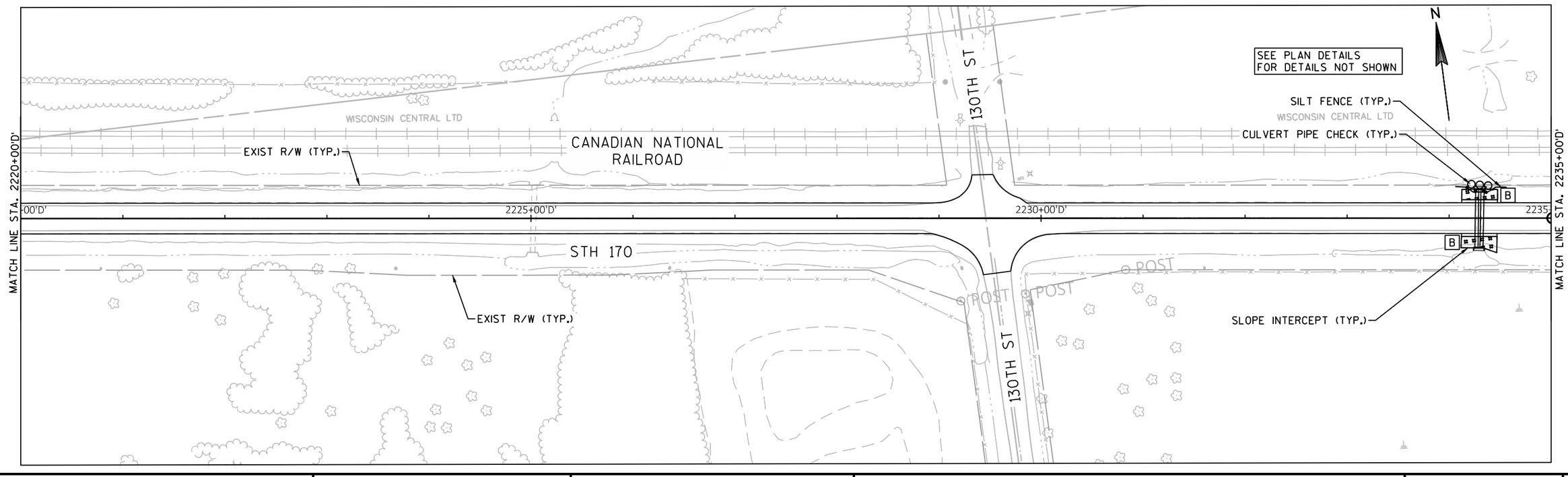
LEGEND

A SOD LAWN, FERTILIZER TYPE B, AND SOD WATER

B SALVAGED TOPSOIL, SEED MIXTURE #40, FERTILIZER TYPE B, EROSION MAT URBAN CLASS I TYPE A, AND SEED WATER

C INLET PROTECTION TYPE C





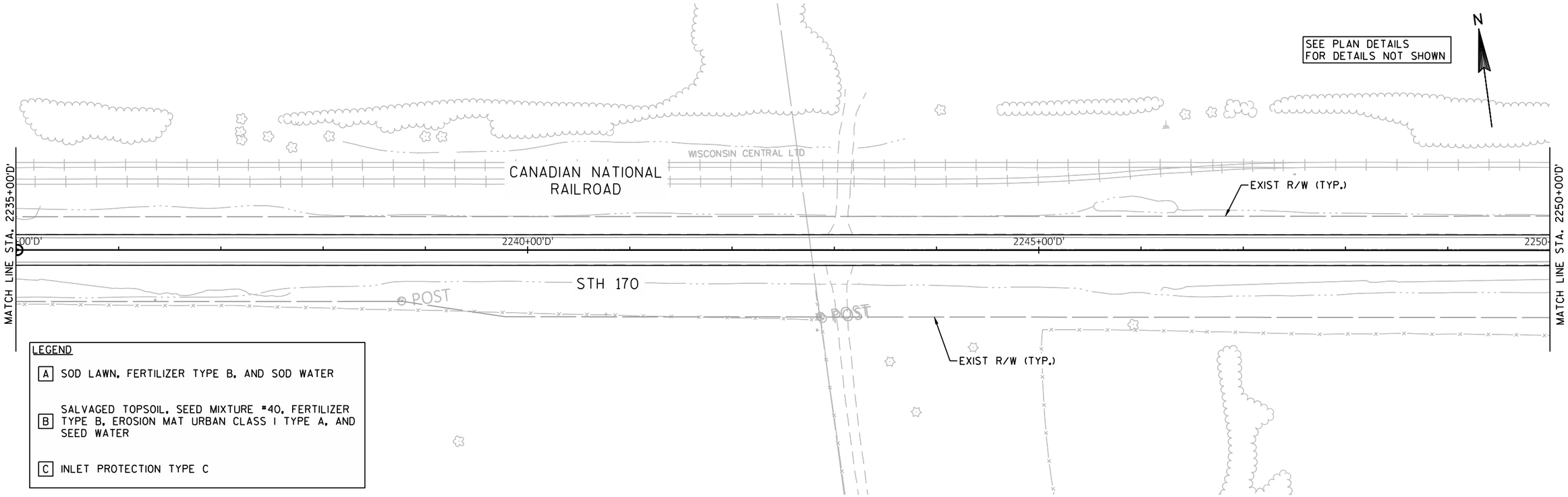
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	EROSION CONTROL: DUNN COUNTY	SHEET 98	E

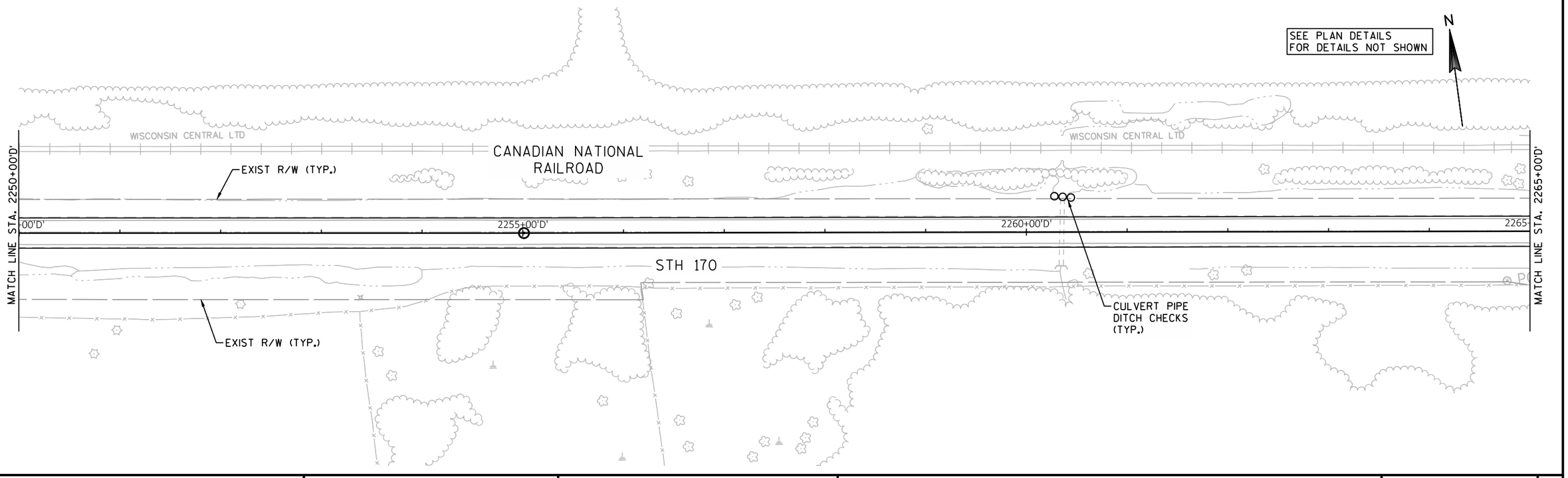
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\022001-EC_DUNN.DWG
LAYOUT NAME - STA 2205+00 - STA 2235+00

PLOT DATE : 7/5/2020 1:39 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2



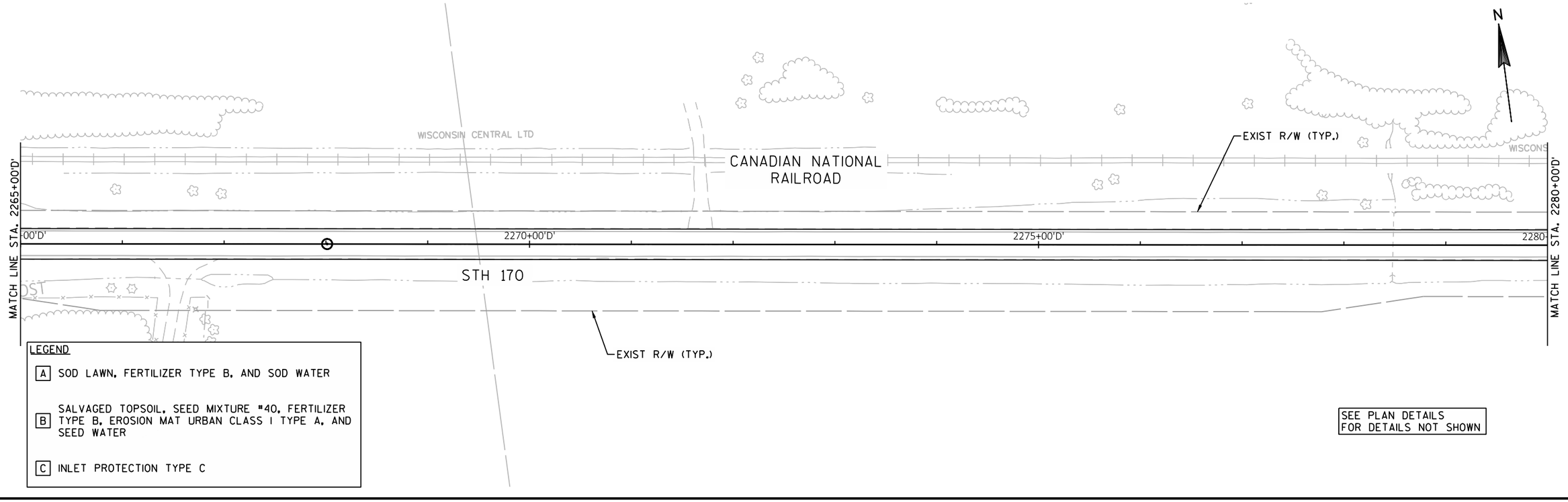


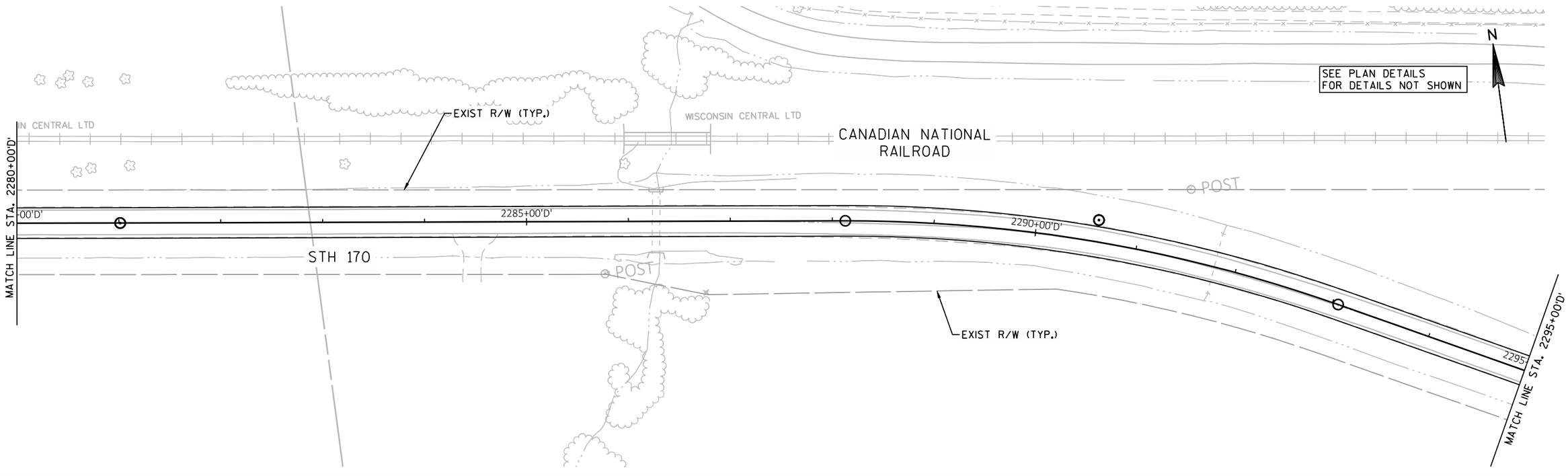
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	EROSION CONTROL: DUNN COUNTY	SHEET 99	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\022001-EC_DUNN.DWG
LAYOUT NAME - STA 2235+00 - STA 2265+00

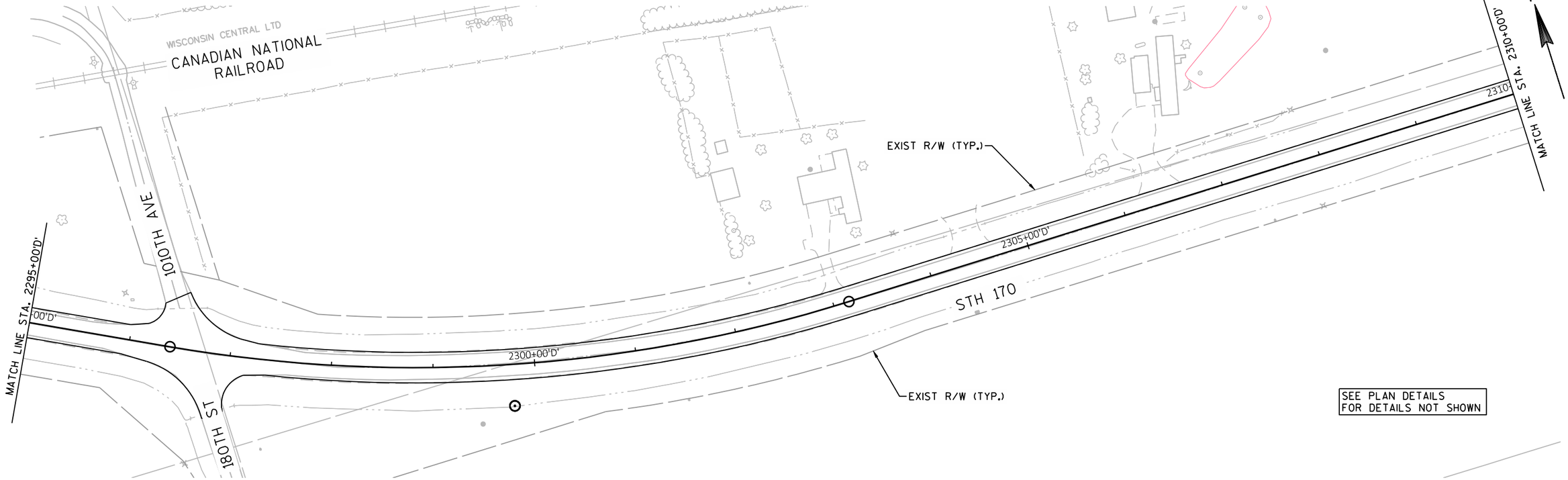
PLOT DATE : 7/5/2020 1:40 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

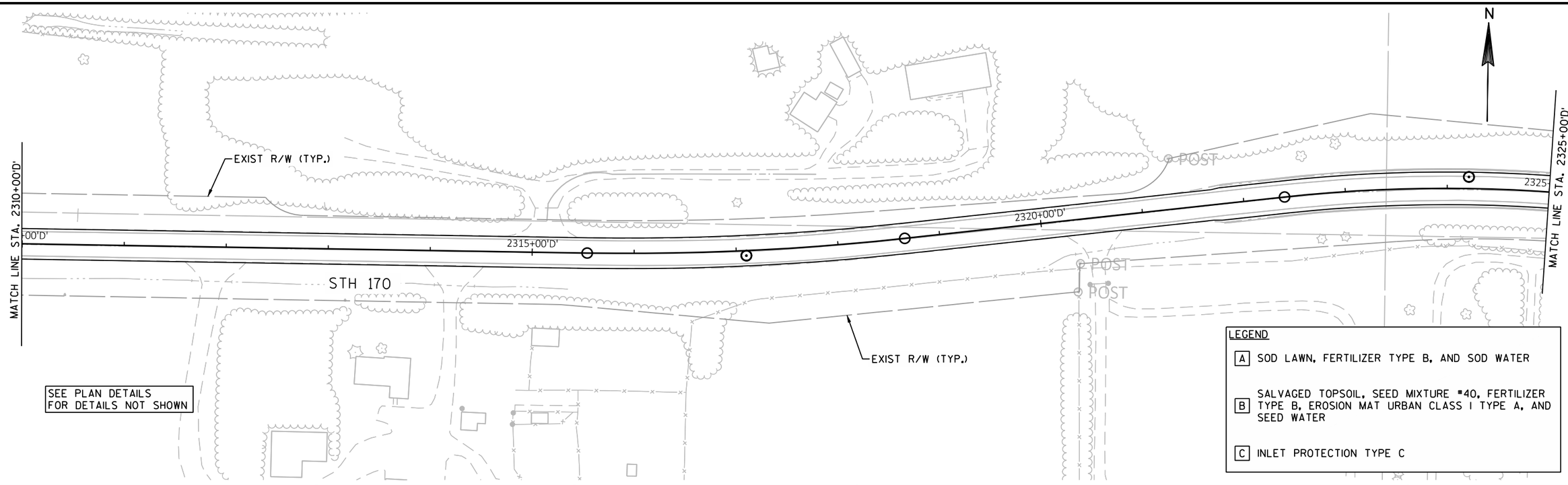
2





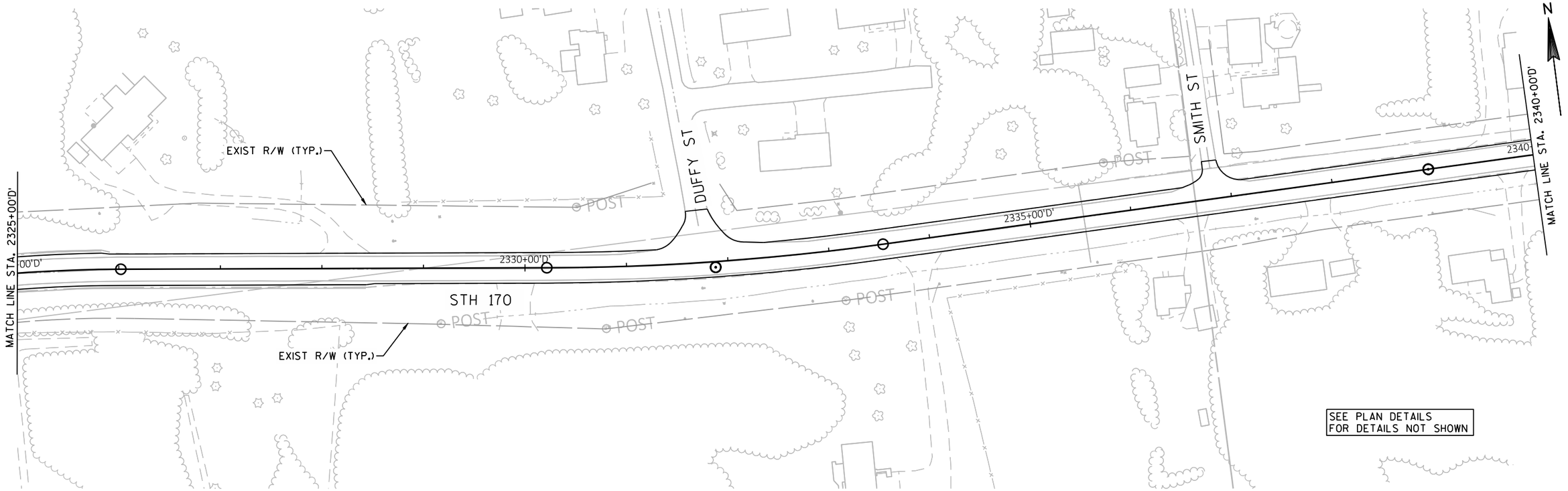
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	EROSION CONTROL: DUNN COUNTY	SHEET 100	E

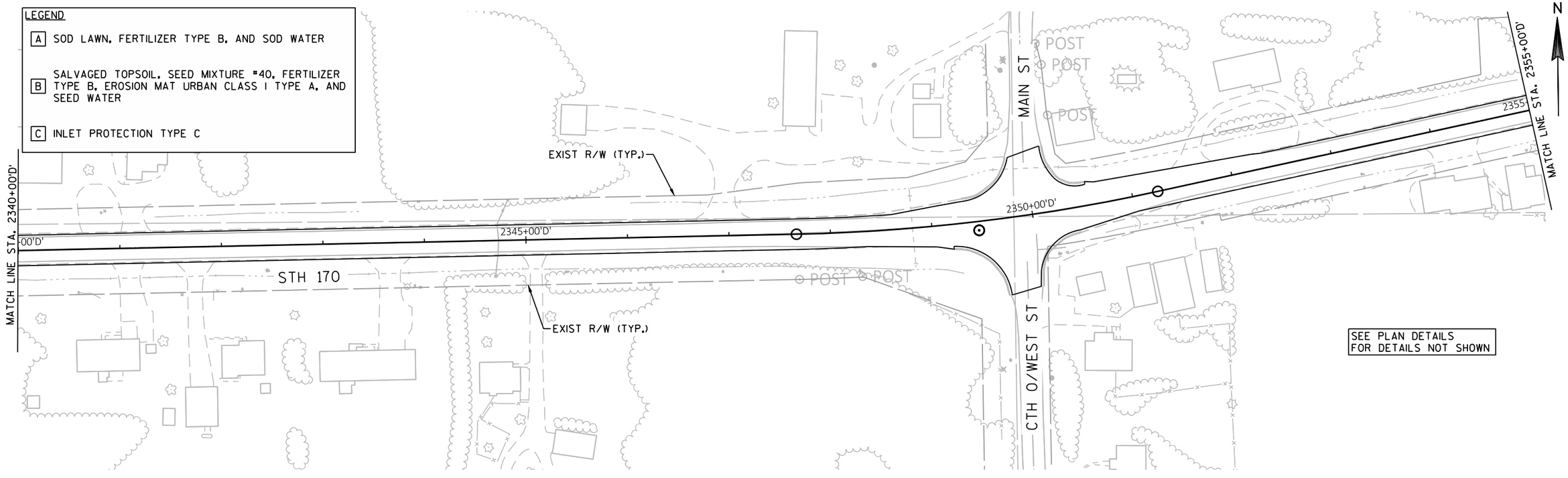




PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	EROSION CONTROL: DUNN COUNTY	SHEET 101	E

2





PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	EROSION CONTROL: DUNN COUNTY	SHEET 102	E

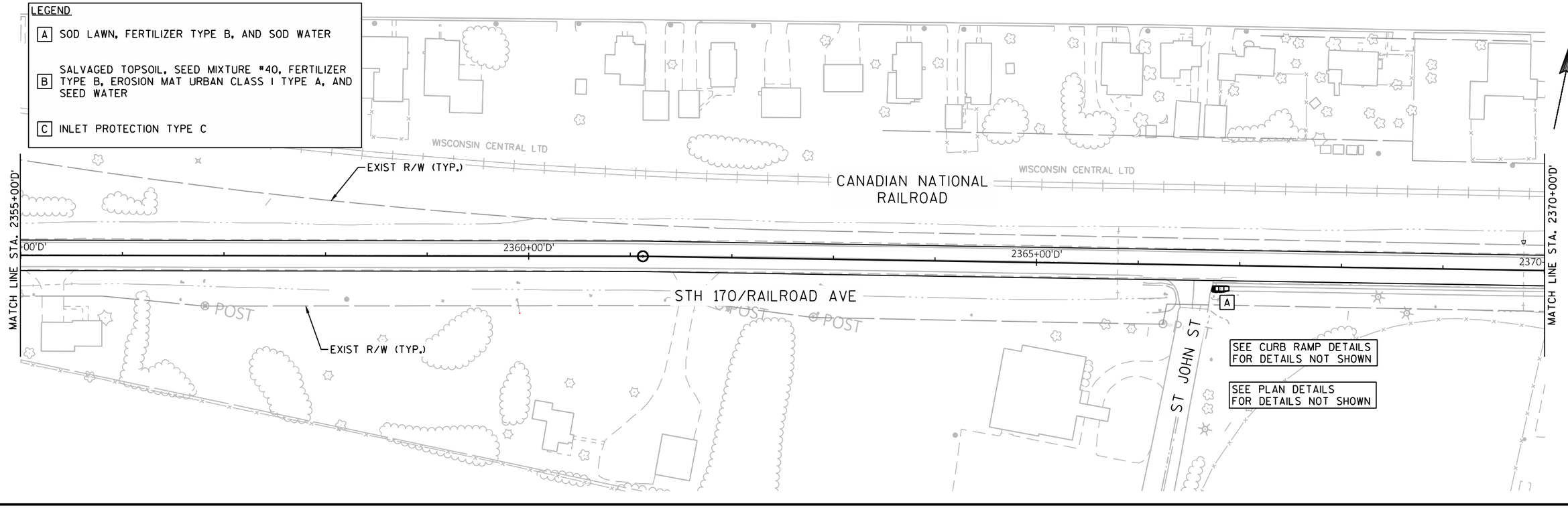
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\022001-EC_DUNN.DWG
LAYOUT NAME - STA 2325+00 - STA 2355+00
PLOT DATE : 7/5/2020 1:42 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

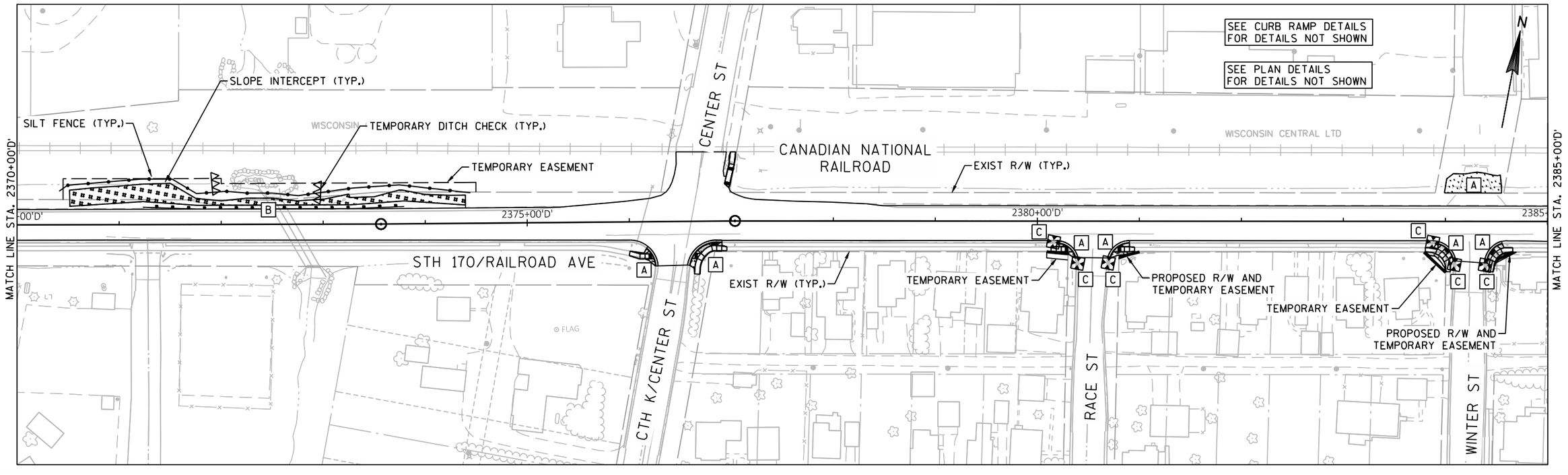
LEGEND

A SOD LAWN, FERTILIZER TYPE B, AND SOD WATER

B SALVAGED TOPSOIL, SEED MIXTURE #40, FERTILIZER TYPE B, EROSION MAT URBAN CLASS I TYPE A, AND SEED WATER

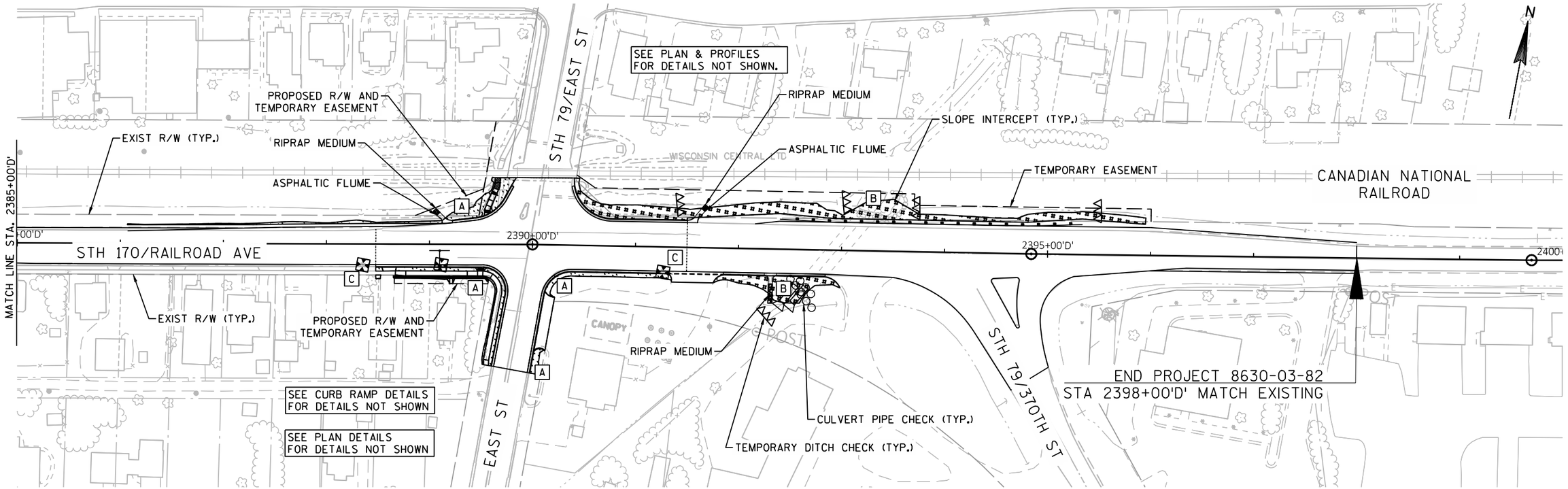
C INLET PROTECTION TYPE C





PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	EROSION CONTROL: DUNN COUNTY	SHEET 103	E

2



LEGEND

- A SOD LAWN, FERTILIZER TYPE B, AND SOD WATER
- B SALVAGED TOPSOIL, SEED MIXTURE *40, FERTILIZER TYPE B, EROSION MAT URBAN CLASS I TYPE A, AND SEED WATER
- C INLET PROTECTION TYPE C

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	EROSION CONTROL: DUNN COUNTY	SHEET 104	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\022001-EC_DUNN.DWG
LAYOUT NAME - STA 2385+00 - EOP
PLOT DATE : 7/5/2020 1:43 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUNS INSPECTED 3 DAYS PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM.
2. THE LOCATIONS OF UTILITY FACILITIES SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH UTILITY FACILITIES.
4. THE FINAL LOCATION AND ORIENTATION OF PEDESTRIAN BUTTONS MUST ADHERE TO THE LATEST STANDARDS OF THE MUTCD AND THE AMERICANS WITH DISABILITIES ACT.
5. TRAFFIC SIGNAL HEAD 9 IS NOT TO BLOCK VIEW OF THE RAILROAD SIGNAL. FIELD VERIFICATION PRIOR TO PLACING SIGNAL BASE 7 SHALL BE PERFORMED.
6. COORDINATE WITH THE RAILROAD FOR PULLING CABLE TO THE RAILROAD BUNGALOW. THE RAILROAD SHALL COMPLETE ALL CONNECTIONS INSIDE THE BUNGALOW.REFER TO SPECIAL PROVISIONS FOR CONDUIT AND WIRE INSTALLATION AND RAILROAD COORDINATION REQUIREMENTS.
7. FOR FUTURE MAINTENANCE ACCESSIBILITY, NO TRAFFIC SIGNAL EQUIPMENT IS TO BE INSTALLED WITHIN 25 FT OF THE RAILROAD TRACKS, EXCEPT INDUCTIVE LOOPS 41 AND 42, OR AS DIRECTED BY THE ENGINEER IN THE FIELD.
8. SEE MISCELLANEOUS QUANTITIES FOR INFORMATION ON INDUCTIVE LOOP INSTALLATIONS.
9. A TOTAL OF SIX 3-INCH, TWO 2-INCH, AND ONE 1 1/4-INCH CONDUITS ARE REQUIRED TO EXIT THE CABINET BASE SHOWN ON THE PLANS. THE EXTRA ONE 2-INCH CONDUIT IS TO BE CONSIDERED INCIDENTAL TO THE CONCRETE CONTROL CABINET BASE BID ITEM.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- MONOTUBE BASE, POLE, 15'-30' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE, LED C, UNLESS OTHERWISE NOTED
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- CONDUIT SPECIAL 2-3"
- PEDESTRIAN COUNTDOWN TIMER 16-INCH
- NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING
- PULL BOX NON-CONDUCTIVE, 24" X 36"
- PULL BOX NON-CONDUCTIVE, 24" X 42"
- PULL BOX NON-CONDUCTIVE, 24" X 48"
- TRAFFIC SIGNAL HEAD
- TRAFFIC SIGNAL BLANKOUT
- LANE DESIGNATION FOR INFO ONLY

PEDESTRIAN/BICYCLIST CROSSING SIGN SUMMARY		
BASE	SIGN CODE	SIGN TO FACE
SB3	R10-3ER	EAST
SB5	R10-3EL	EAST

SIGNAL BASE	MONOTUBE NO.
SB7	S-17-1375-01

TRAFFIC CONTROL SIGNAL
STH 170 & STH 79 (NORTH)
VILLAGE OF BOYCEVILLE
DUNN COUNTY

SIGNAL NO. S17-1375
CABINET TYPE: TS2
CONTROLLER TYPE: COBALT

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE DATE — TRAFFIC ENGINEER, REGION TRAFFIC ENGINEER

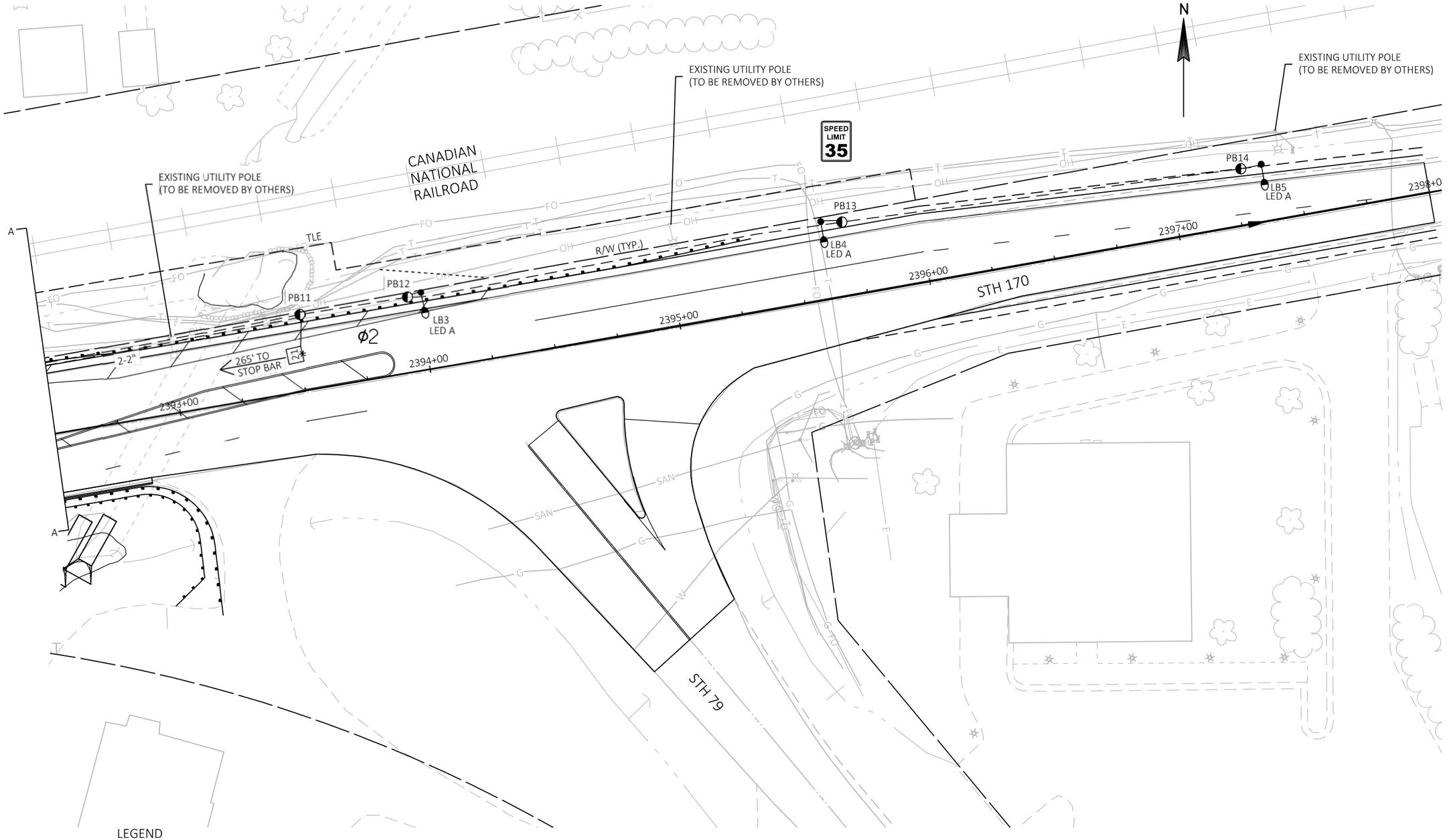
APPROVED
DATE DATE — STATE ENGINEER, STATE TRAFFIC ENGINEER

REGION CONTACT: DAVID FENSKE
DESIGNED BY: KL ENGINEERING
REVISED BY: -

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	TRAFFIC SIGNAL PLAN	SHEET 105	E

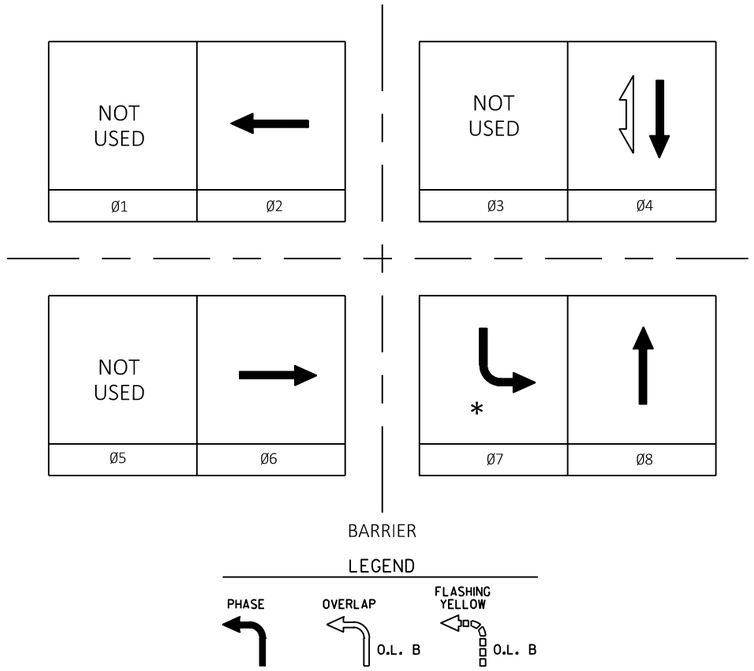
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\SIGNALS\PROP_SIG.DWG
PLOT DATE : 7/21/2020 11:20 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
WISDOT/CADDS SHEET 42

2


N
EXISTING UTILITY POLE
(TO BE REMOVED BY OTHERS)
EXISTING UTILITY POLE
(TO BE REMOVED BY OTHERS)
EXISTING UTILITY POLE
(TO BE REMOVED BY OTHERS)
CANADIAN
NATIONAL
RAILROAD
SPEED
LIMIT
35
TLE
R/W (TYP.)
PB11
PB12
PB13
PB14
LB3
LED A
LB4
LED A
LB5
LED A
ϕ2
2-2"
265' TO
STOP BAR
2393+00
2394+00
2395+00
2396+00
2397+00
2398+0
STH 170
STH 79
A
A
SAN
SAN
G
G
W
G
G
E
E
E
E
G
G
G

	HEAD NUMBERS	FLASH
ϕ1		
ϕ2	4-6	R
ϕ3		
ϕ4	10-12	R
ϕ5		
ϕ6	1-3	R
ϕ7	11,12	-
ϕ8	7-9	R
ϕ2 PED		
ϕ4 PED	4A,4B	
ϕ6 PED		
ϕ8 PED		

O.L. ASSIGNMENTS
O.L.A
O.L.B
O.L.C
O.L.D
O.L.E
O.L.F
O.L.G
O.L.H



*ACTIVE ONLY DURING RAILROAD PREEMPTION TRACK CLEAR PHASE

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR(S)	11	21	42	52	81			
CALLED PHASE	1	2	4	5	8			
CALL OPTION	X	X	X	X	X			
DELAY TIME			5"					
EXTENSION OPTION	X	X	X	X	X			
EXTEND TIME								
USE ADDED INTIAL	X	X	X	X	X			
CROSS SWITCH PHASE	6			2				

DETECTOR INPUT	19	17	23	21	27	25	31	29
PLAN LOOP DETECTOR(S)								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENSION OPTION								
EXTEND TIME								
USE ADDED INTIAL								
CROSS SWITCH PHASE								

DETECTOR INPUT	4	2	7	6	12	10	16	14
PLAN LOOP DETECTOR(S)	12	41	51	61	82			
CALLED PHASE	1	4	5	6	8			
CALL OPTION	X	X	X	X	X			
DELAY TIME								
EXTENSION OPTION	X	X	X	X	X			
EXTEND TIME								
USE ADDED INTIAL	X	X	X	X	X			
CROSS SWITCH PHASE	6		2					

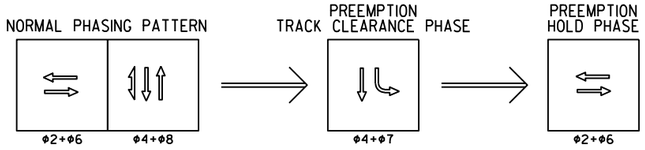
DETECTOR INPUT	20	18	24	22	28	26	32	30
PLAN LOOP DETECTOR(S)								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENSION OPTION								
EXTEND TIME								
USE ADDED INTIAL								
CROSS SWITCH PHASE								

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W/Ø	PHASE RECALL	PHASE ACTIVE
1				
2	X	6	MIN	X
3				
4				X
5				
6	X	2	MIN	X
7				X*
8				X

PREEMPTION ASSIGNMENTS			
PREEMPTION DESIGNATION	PREEMPTION TYPE	EVP CHANNEL	PHASE(S) CALLED
1	RAILROAD	-	SEE CHART
2	RAILROAD	-	SEE CHART
3	NOT USED		
4	NOT USED		
5	NOT USED		
6	NOT USED		
7	NOT USED		
8	NOT USED		

RAILROAD PREEMPTION PHASING
SEE NOTES BELOW



RAILROAD PREEMPT NOTES:

1. IN THE EVENT OF A RAILROAD PREEMPTION CALL, TERMINATE ACTIVE PHASES. FOLLOWING TERMINATION OF THE ACTIVE PHASES, THE PHASES 4 AND 7 SHALL RECEIVE A GREEN INDICATION TO CLEAR THE NORTH APPROACH. FOLLOWING THE NORTH APPROACH CLEARANCE PHASING, THE CONTROLLER SHALL HOLD PHASES 2 AND 6. AT THE END OF PREEMPTION, THE CONTROLLER SHALL RETURN TO PHASE 4 AND 8 GREEN.
2. IN THE EVENT THAT PHASES 4 AND 8 ARE ACTIVE AT THE TIME OF THE PRE-EMPTION CALL, PHASES 4 AND 8 SHALL BE TERMINATED BEFORE ACTIVATION OF THE PHASE 4 AND 7 TRACK CLEARANCE PHASE TO PREVENT YELLOW TRAP.
3. IN THE EVENT OF A RAILROAD PRE-EMPTION CALL, BEGINNING WITH THE TRACK CLEARANCE PHASE UNTIL THE END OF THE PREEMPTION HOLD PHASE, THE "NO RIGHT TURN" AND "NO LEFT TURN" BLANK OUT SIGNS SHALL BE ILLUMINATED.

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	X
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

CENTRAL SYSTEM
LOCATION OF MASTER:
CONTROLLER NO. :
SIGNAL SYSTEM NO. : SS-

TYPE OF REMOTE COMMUNICATION	
NONE	
FIBER	
CELL MODEM	X
PHONE	

TRAFFIC CONTROL SIGNAL
STH 170 & STH 79 (NORTH)
VILLAGE OF BOYCEVILLE
DUNN COUNTY

SIGNAL NO. S17-1375

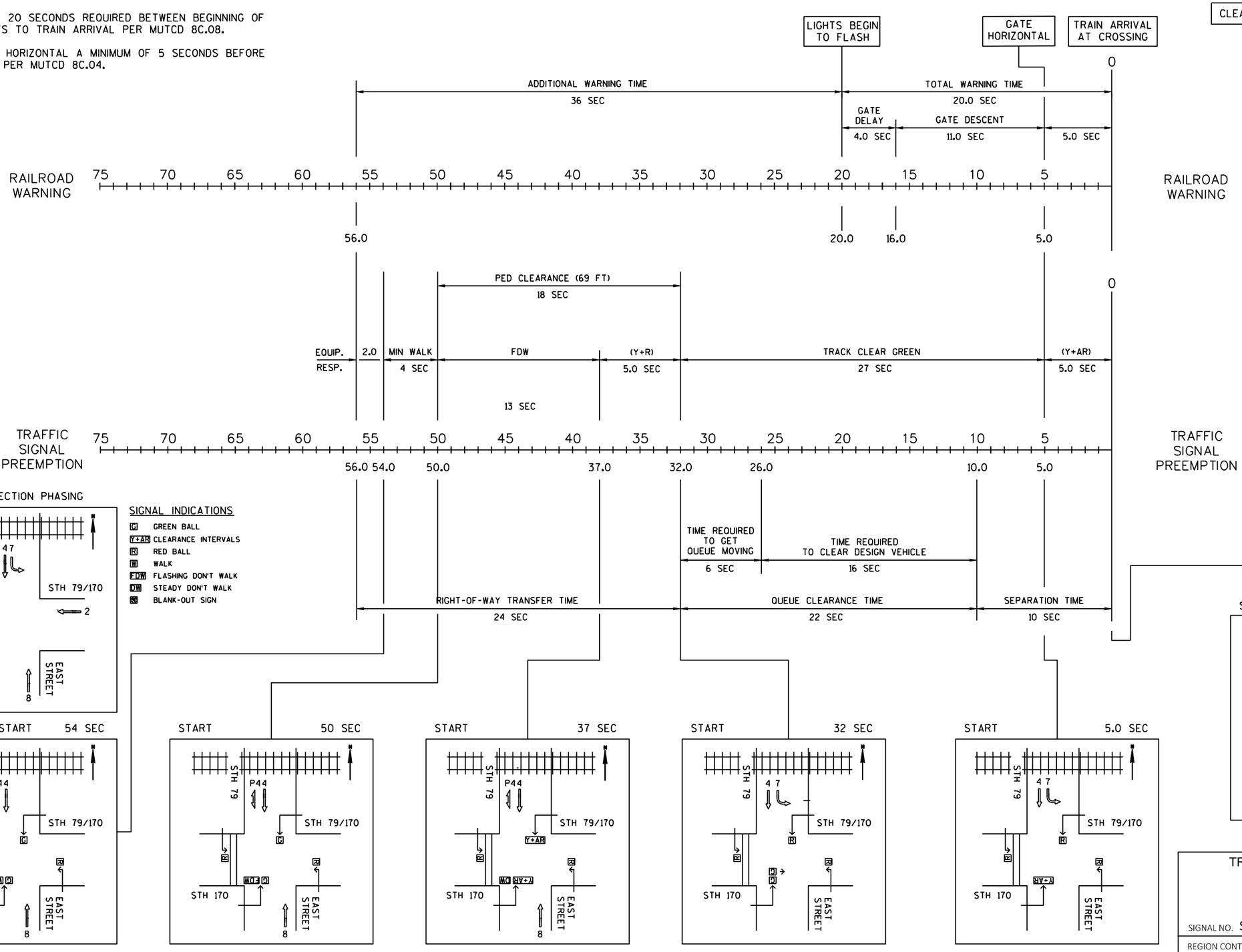
REGION CONTACT: DAVID FENSKE
DESIGNED BY: KL ENGINEERING
REVISED BY: -

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	SEQUENCE OF OPERATIONS (SIGNAL NO. S17-1375)	SHEET 107	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\SIGNALS\PROP_SIG.DWG PLOT DATE : 7/21/2020 11:20 AM PLOT BY : KL ENGINEERING PLOT NAME :
WISDOT/CADDS SHEET 42

NOTES:
1. MINIMUM TIME - 20 SECONDS REQUIRED BETWEEN BEGINNING OF FLASHING LIGHTS TO TRAIN ARRIVAL PER MUTCD 8C.08.
2. GATE MUST BE HORIZONTAL A MINIMUM OF 5 SECONDS BEFORE TRAIN ARRIVAL PER MUTCD 8C.04.

CLEARANCE TIME (CT) = X



TRAFFIC CONTROL SIGNAL
STH 170 & STH 79 (NORTH)
VILLAGE OF BOYCEVILLE
DUNN COUNTY

SIGNAL NO. S17-1375

REGION CONTACT: DAVID FENSKE
DESIGNED BY: KL ENGINEERING
REVISED BY: -

PAGE 4 OF 5

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	RAILROAD PREEMPTION SEQUENCE	SHEET 108	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\SIGNALS\PROP_SIG.DWG PLOT DATE : 7/21/2020 11:20 AM PLOT BY : KL ENGINEERING PLOT NAME :

WISDOT/CADDS SHEET 42

STH 170 & STH 79 (NORTH) NO. 14 CABLE					
CABLE RUN	CABLE	HEAD NUMBER	MOVEMENT	LENS	CONDUCTOR COLOR
CABINET TO SB-1	12/C	7	NB	R	RED
				Y	ORG
				G	GRN
		11	SB	R	RED/BLK
				Y	ORG/BLK
				G	GRN/BLK
				◄ Y	BLK
				◄ G	BLU
CABINET TO SB-2	7/C	12	SB	R	RED
				Y	ORG
				G	GRN
				◄ Y	BLK
				◄ G	BLU
CABINET TO SB-3	12/C	1	EB	R	RED
				Y	ORG
				G	GRN
		5	WB	R	RED/BLK
				Y	ORG/BLK
				G	GRN/BLK
		4B	PHASE 4 PED	W	BLU
				DW	BLK
CABINET TO SB-4	7/C	6	WB	R	RED
				Y	ORG
				G	GRN
CABINET TO SB-5	5/C	4A	PHASE 4 PED	W	GRN
				DW	RED
CABINET TO SB-6	12/C	8	NB	R	RED
				Y	ORG
				G	GRN
		10	SB	R	RED/BLK
				Y	ORG/BLK
				G	GRN/BLK
		15	PREEMPT	-	BLU
CABINET TO SB-7	12/C	2	EB	R	RED
				Y	ORG
				G	GRN
		9	NB	R	RED/BLK
				Y	ORG/BLK
				G	GRN/BLK
		13	PREEMPT	-	BLU
CABINET TO SB-8	7/C	4	WB	R	RED
				Y	ORG
				G	GRN
		14	PREEMPT	-	BLU
CABINET TO SB-9	7/C	3	EB	R	RED
				Y	ORG
				G	GRN

STH 170 & STH 79 (NORTH) EQUIPMENT GROUNDING CONDUCTOR TRAFFIC SIGNALS 10 AWG	
START	END
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	CB1

STH 170 & STH 79 (NORTH) LIGHTING CABLING CHART TYPE UF 2-12 AWG GROUNDED		
CABLE	CABLE RUN	LUMINAIRE LOCATION
2/C WITH GROUND	CABINET TO SB1	SOUTHEAST QUADRANT
	SB1 TO SB6	NORTHWEST QUADRANT
	SB6 TO LB1	WEST OF INTERSECTION
	CABINET TO SB9	NORTHEAST QUADRANT
	SB9 TO SB7	SOUTHEAST QUADRANT
	SB7 TO LB2	EAST OF INTERSECTION
	LB2 TO LB3	EAST OF INTERSECTION
	LB3 TO LB4	EAST OF INTERSECTION
	LB4 TO LB5	EAST OF INTERSECTION

NOTE

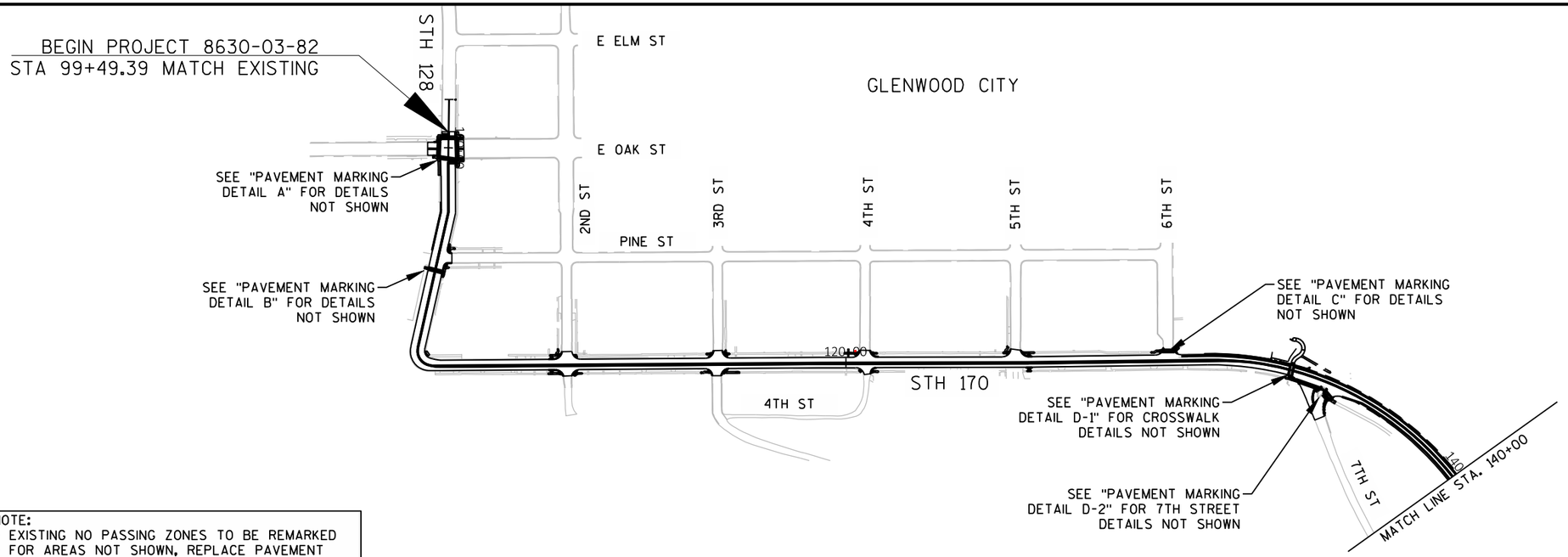
PEDESTRIAN PUSH BUTTONS SHALL BE CONNECTED TO THE CABINET WITH A CONTINUOUS LOOP LEAD-IN CABLE.

TRAFFIC CONTROL SIGNAL
STH 170 & STH 79 (NORTH)
VILLAGE OF BOYCEVILLE
DUNN COUNTY

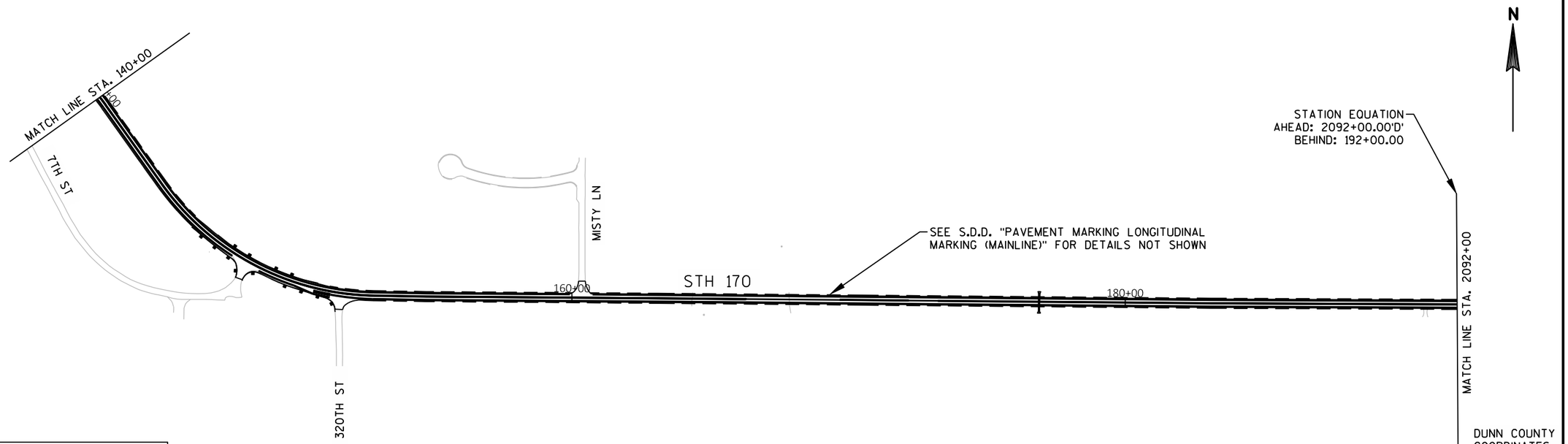
SIGNAL NO. S17-1375

REGION CONTACT: DAVID FENSKE
DESIGNED BY: KL ENGINEERING
REVISED BY: -

PAGE 5 OF 5



NOTE:
- EXISTING NO PASSING ZONES TO BE REMARKED
- FOR AREAS NOT SHOWN, REPLACE PAVEMENT MARKINGS TO MATCH EXISTING PAVEMENT MARKINGS



NOTE:
- EXISTING NO PASSING ZONES TO BE REMARKED
- FOR AREAS NOT SHOWN, REPLACE PAVEMENT MARKINGS TO MATCH EXISTING PAVEMENT MARKINGS

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PAVEMENT MARKING OVERVIEW - ST. CROIX COUNTY	SHEET 110	E

PAVEMENT MARKING LEGEND

1. MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW - DOUBLE)
2. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
3. MARKING STOP LINE EPOXY 12-INCH

DETAIL A

STH 128

99+66.26, 20.65' RT
99+62.26, 0.00'
99+65.88, -19.84' LT
99+72.27, 21.43' RT
99+71.87, -20.93' LT
99+72.92, -21.97' LT
99+74.07, -28.03' LT
99+79.82, 26.45' RT
99+83.11, 32.54' RT
REFERENCE LINE
99+75
100+00
100+03.71, 64.68' RT
100+03.65, 33.11' RT
100+02.23, -47.76' LT
100+03.06, -29.37' LT
E OAK ST
6'
100+24.69, 33.69' RT
100+26.54, 27.73' RT
100+27.67, 26.74' RT
100+25
100+31.72, -30.70' LT
100+33.60, -24.78' LT
100+33.99, -24.52' LT
100+33.84, 25.69' RT
100+39.87, -23.20' LT
100+43.77, 0.00'
100+43.77, -22.17' LT
STH 170
100+50
VLV

N

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PAVEMENT MARKING DETAILS - DETAIL A	SHEET 111	E

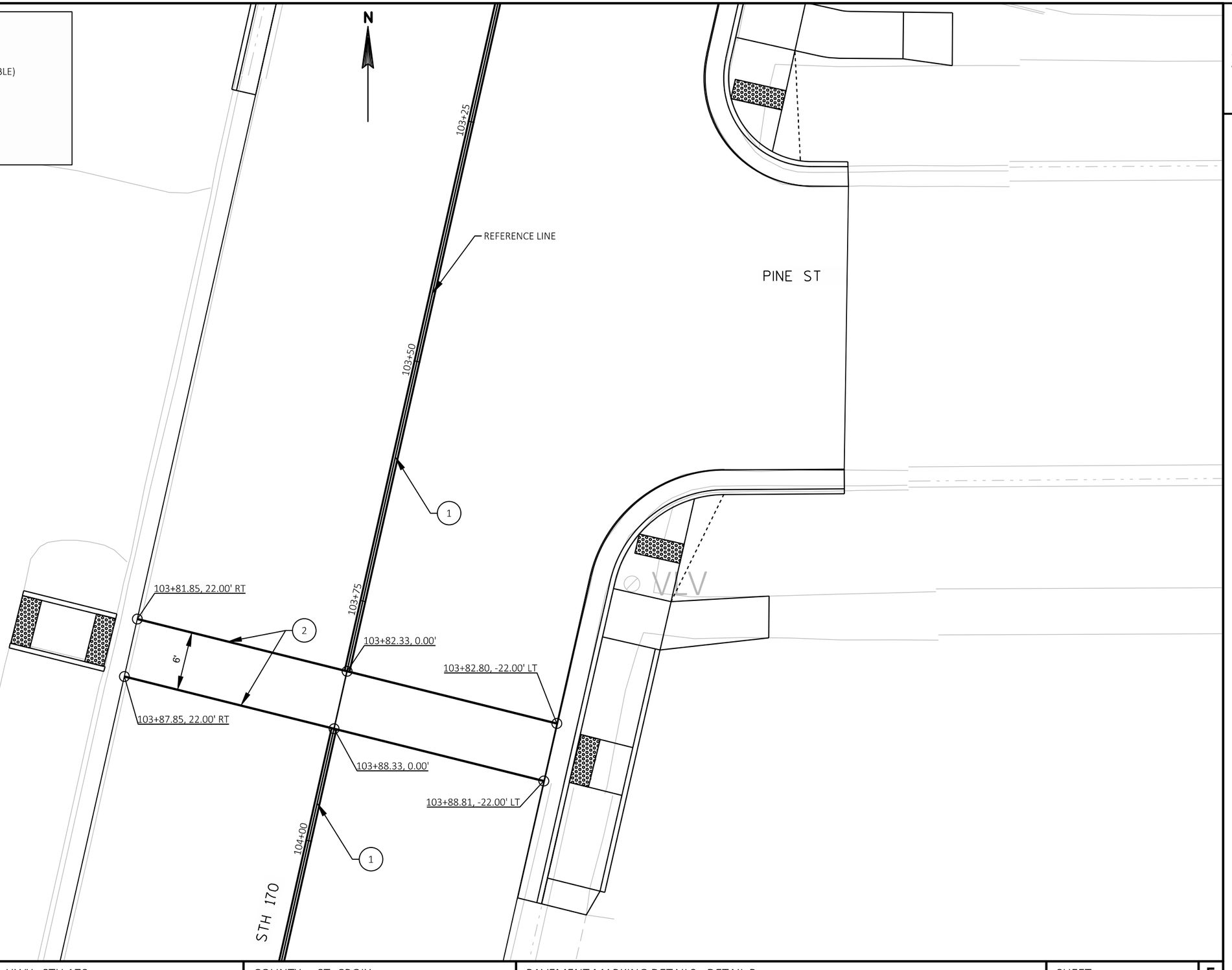
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - DETAIL A
PLOT DATE : 7/7/2020 10:47 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

2

PAVEMENT MARKING LEGEND

1. MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW - DOUBLE)
2. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

DETAIL B



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PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PAVEMENT MARKING DETAILS - DETAIL B	SHEET 112	E

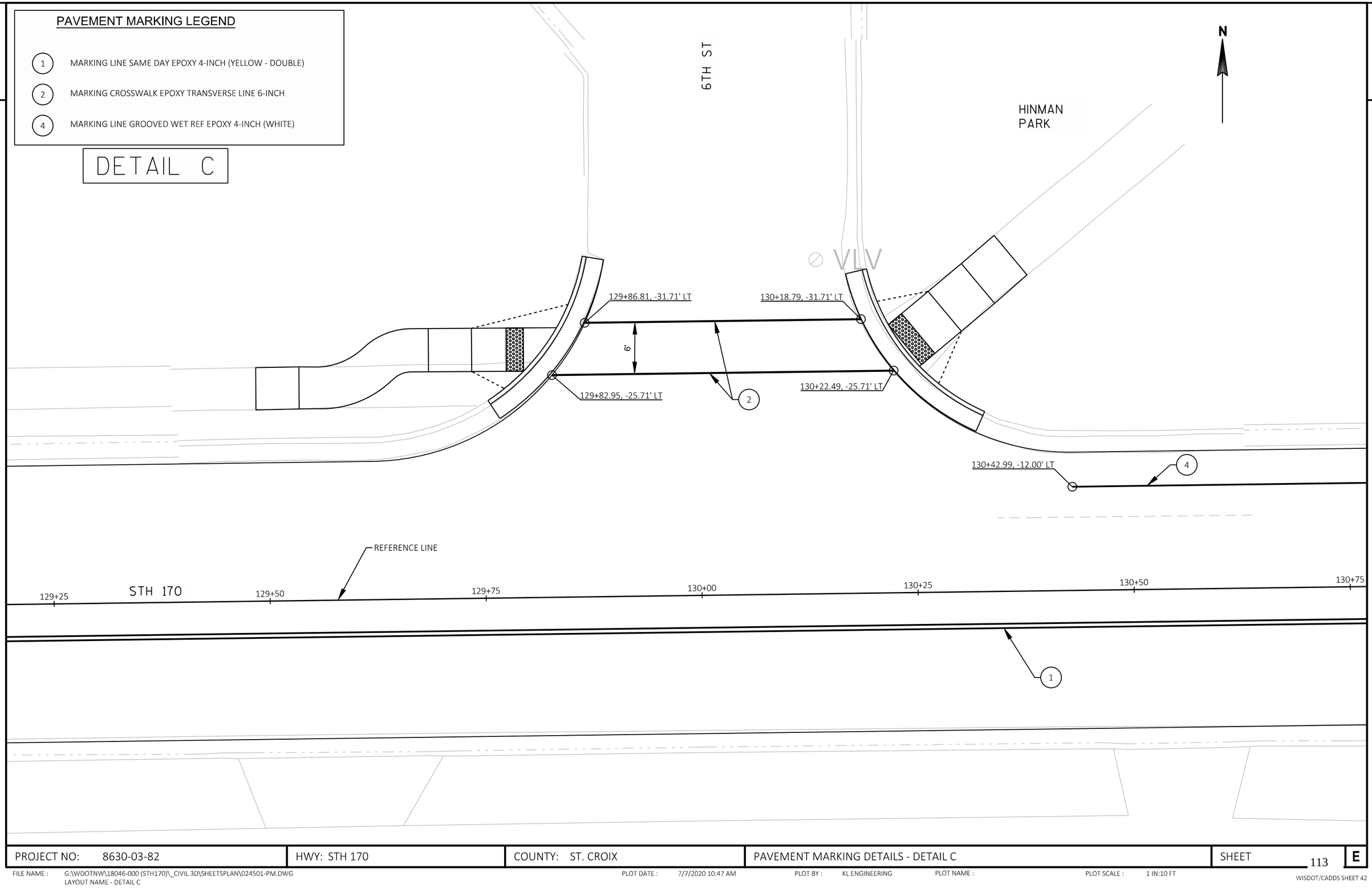
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - DETAIL B

PLOT DATE : 7/7/2020 10:47 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

PAVEMENT MARKING LEGEND

1. MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW - DOUBLE)
2. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
4. MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)

DETAIL C

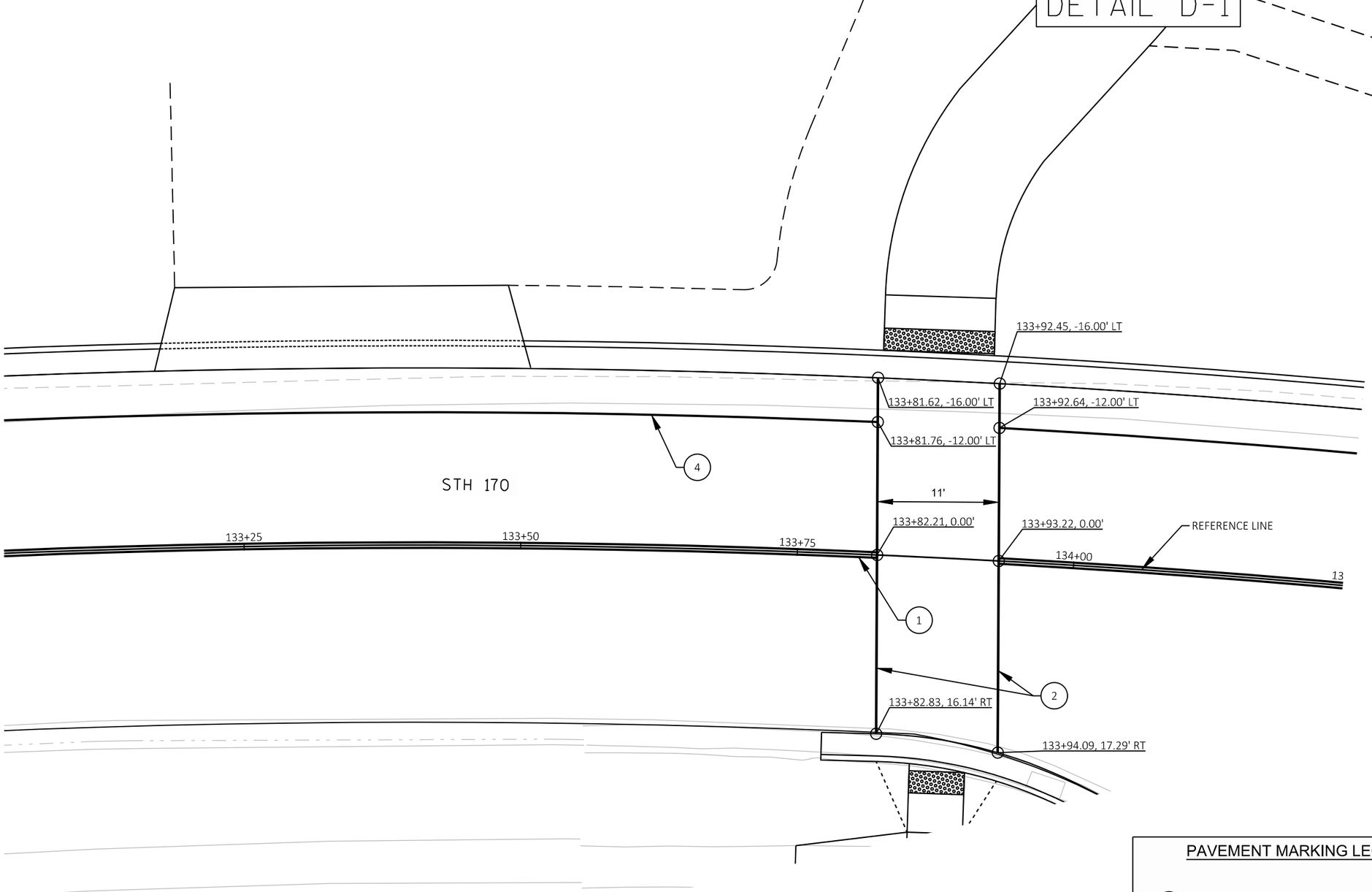


PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PAVEMENT MARKING DETAILS - DETAIL C	SHEET 113	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - DETAIL C
PLOT DATE : 7/7/2020 10:47 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

DETAIL D-1



PAVEMENT MARKING LEGEND

1	MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW - DOUBLE)
2	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
4	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PAVEMENT MARKING DETAILS - DETAIL D-1	SHEET 114	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - DETAIL D-1
PLOT DATE : 7/7/2020 10:47 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

STH 170

134+10.00, 23.60' RT

134+19.58, 29.98' RT

6'

2

134+88.44, 23.98' RT

7

7

135+13.55, 26.38' RT

134+76.56, 30.33' RT

134+88.58, 29.98' RT

134+76.66, 34.32' RT

4'

3

135+07.74, 38.12' RT

135+09.74, 34.62' RT

2

135+37.25, 38.47' RT

9'

4'

134+76.94, 45.58' RT

134+89.17, 33.96' RT

135+32.30, 46.15' RT

3

135+22.45, 45.75' RT

1

R50'

13

15

R70'

134+91.13, 77.96' RT

7TH ST

135+42.11, 99.51' RT

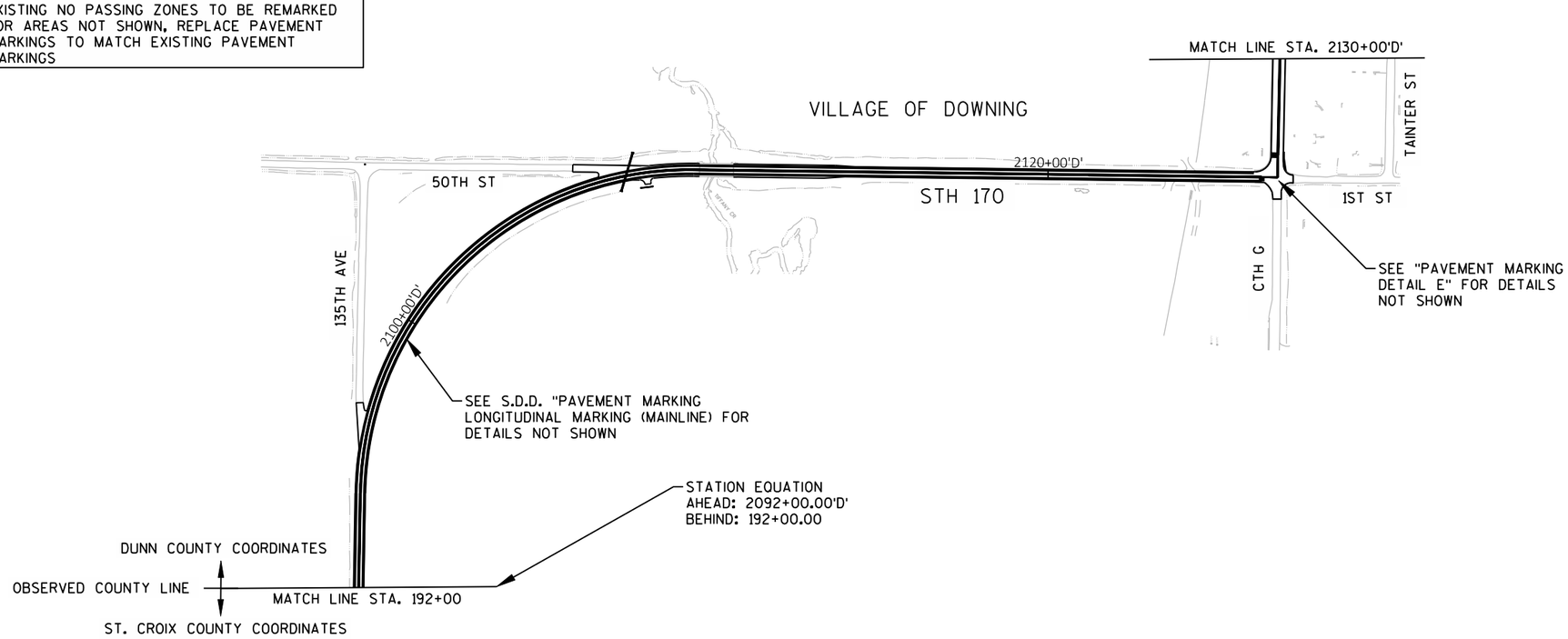
DETAIL D-2

PAVEMENT MARKING LEGEND

1	MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW - DOUBLE)
2	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
3	MARKING STOP LINE EPOXY 12-INCH
7	MARKING ISLAND NOSE EPOXY YELLOW
13	MARKING DIAGONAL EPOXY 6-INCH WHITE
15	MARKING LINE EPOXY 4-INCH WHITE

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PAVEMENT MARKING DETAILS - DETAIL D-2	SHEET 115	E

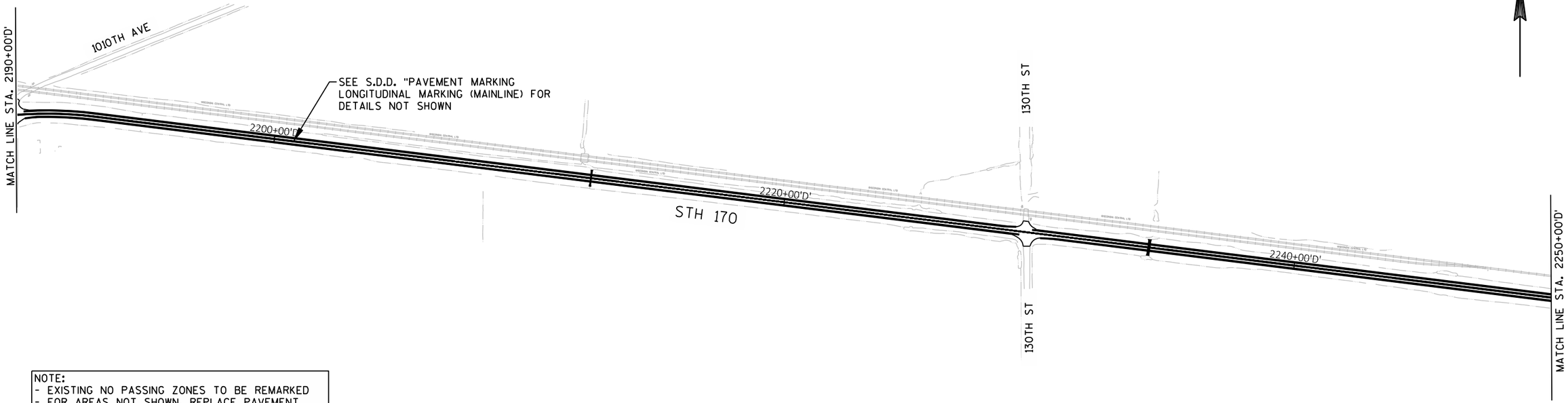
NOTE:
- EXISTING NO PASSING ZONES TO BE REMARKED
- FOR AREAS NOT SHOWN, REPLACE PAVEMENT MARKINGS TO MATCH EXISTING PAVEMENT MARKINGS



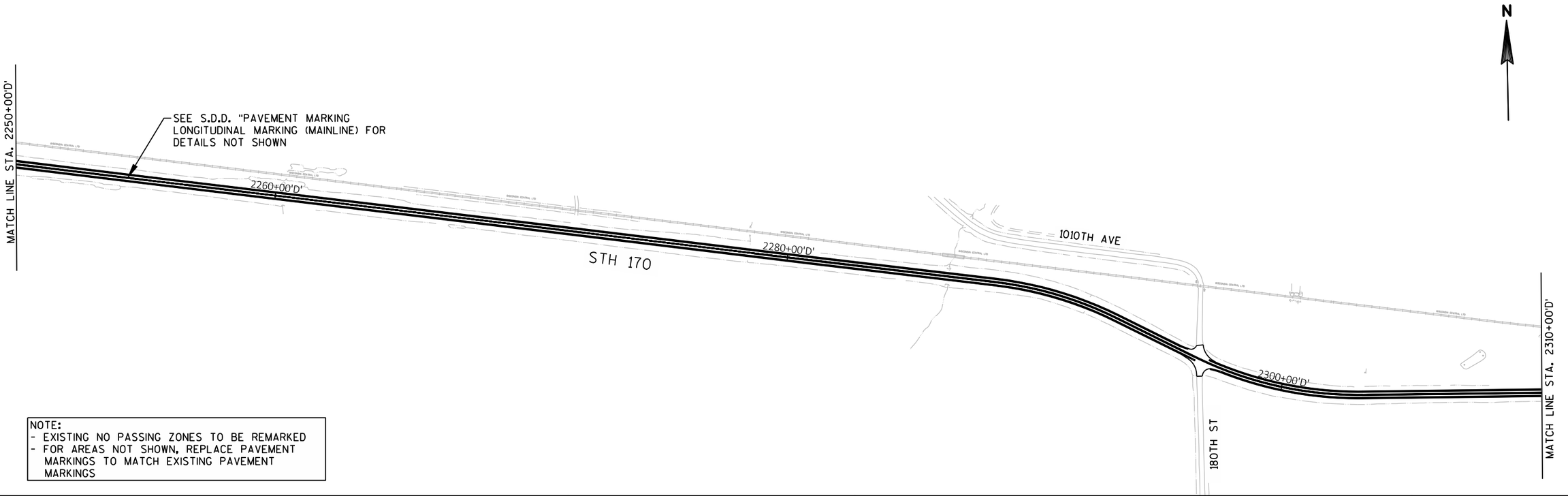
NOTE:
- EXISTING NO PASSING ZONES TO BE REMARKED
- FOR AREAS NOT SHOWN, REPLACE PAVEMENT MARKINGS TO MATCH EXISTING PAVEMENT MARKINGS

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PAVEMENT MARKING - DUNN COUNTY	SHEET 116	E

2



NOTE:
- EXISTING NO PASSING ZONES TO BE REMARKED
- FOR AREAS NOT SHOWN, REPLACE PAVEMENT MARKINGS TO MATCH EXISTING PAVEMENT MARKINGS



NOTE:
- EXISTING NO PASSING ZONES TO BE REMARKED
- FOR AREAS NOT SHOWN, REPLACE PAVEMENT MARKINGS TO MATCH EXISTING PAVEMENT MARKINGS

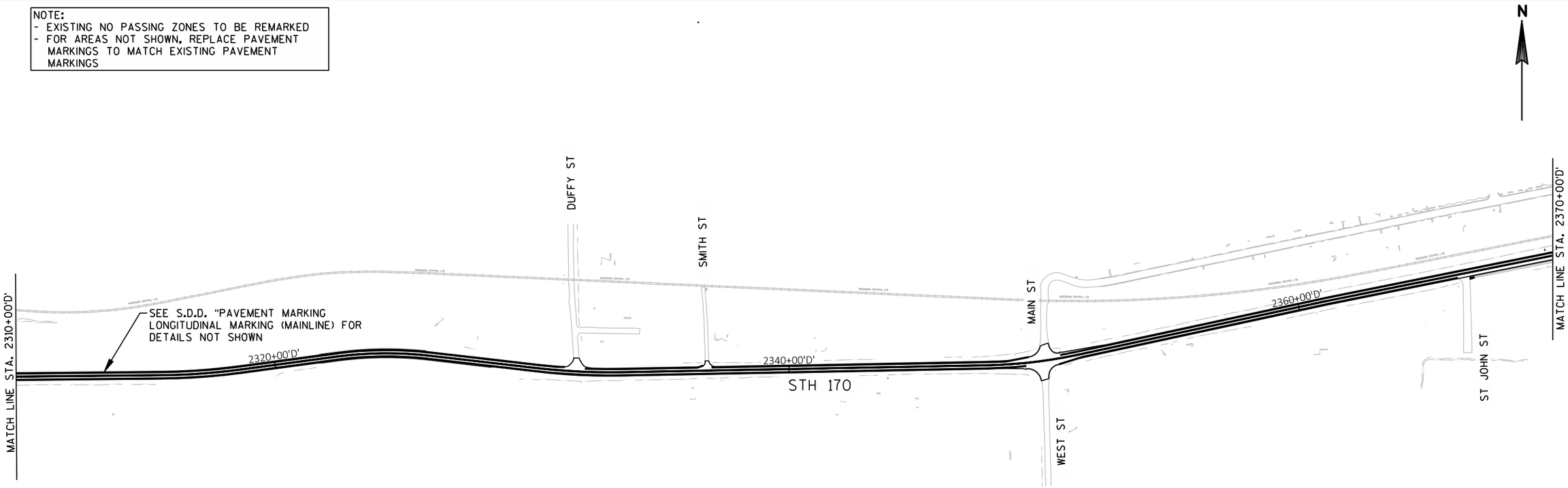
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PAVEMENT MARKING - DUNN COUNTY	SHEET 117	E

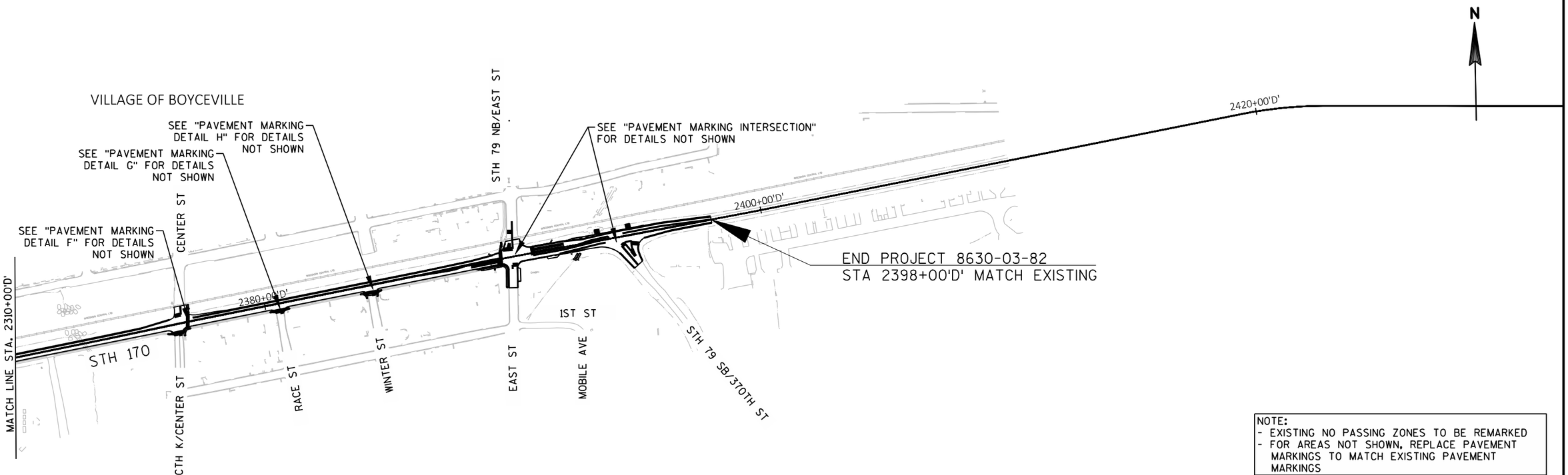
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - DUNN COUNTY - 2

PLOT DATE : 7/7/2020 10:47 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

NOTE:
- EXISTING NO PASSING ZONES TO BE REMARKED
- FOR AREAS NOT SHOWN, REPLACE PAVEMENT MARKINGS TO MATCH EXISTING PAVEMENT MARKINGS





NOTE:
- EXISTING NO PASSING ZONES TO BE REMARKED
- FOR AREAS NOT SHOWN, REPLACE PAVEMENT MARKINGS TO MATCH EXISTING PAVEMENT MARKINGS

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PAVEMENT MARKING - DUNN COUNTY	SHEET 118	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - DUNN COUNTY - 3
PLOT DATE : 7/7/2020 10:47 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:400 FT

2

2

PAVEMENT MARKING LEGEND

1	MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW - DOUBLE)
3	MARKING STOP LINE EPOXY 12-INCH
4	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
5	MARKING LINE EPOXY 4-INCH (YELLOW)
6	MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW - 12.5-FT LINE, 37.5-FT SKIP)

N

DETAIL E

STH 170

CTH G

1ST ST

2126+19.88'D', 0.00'

2126+19.86'D', 12.00' RT

2126+25'D'

2126+50'D'

2126+75'D'

2127+00'D'

2127+25'D'

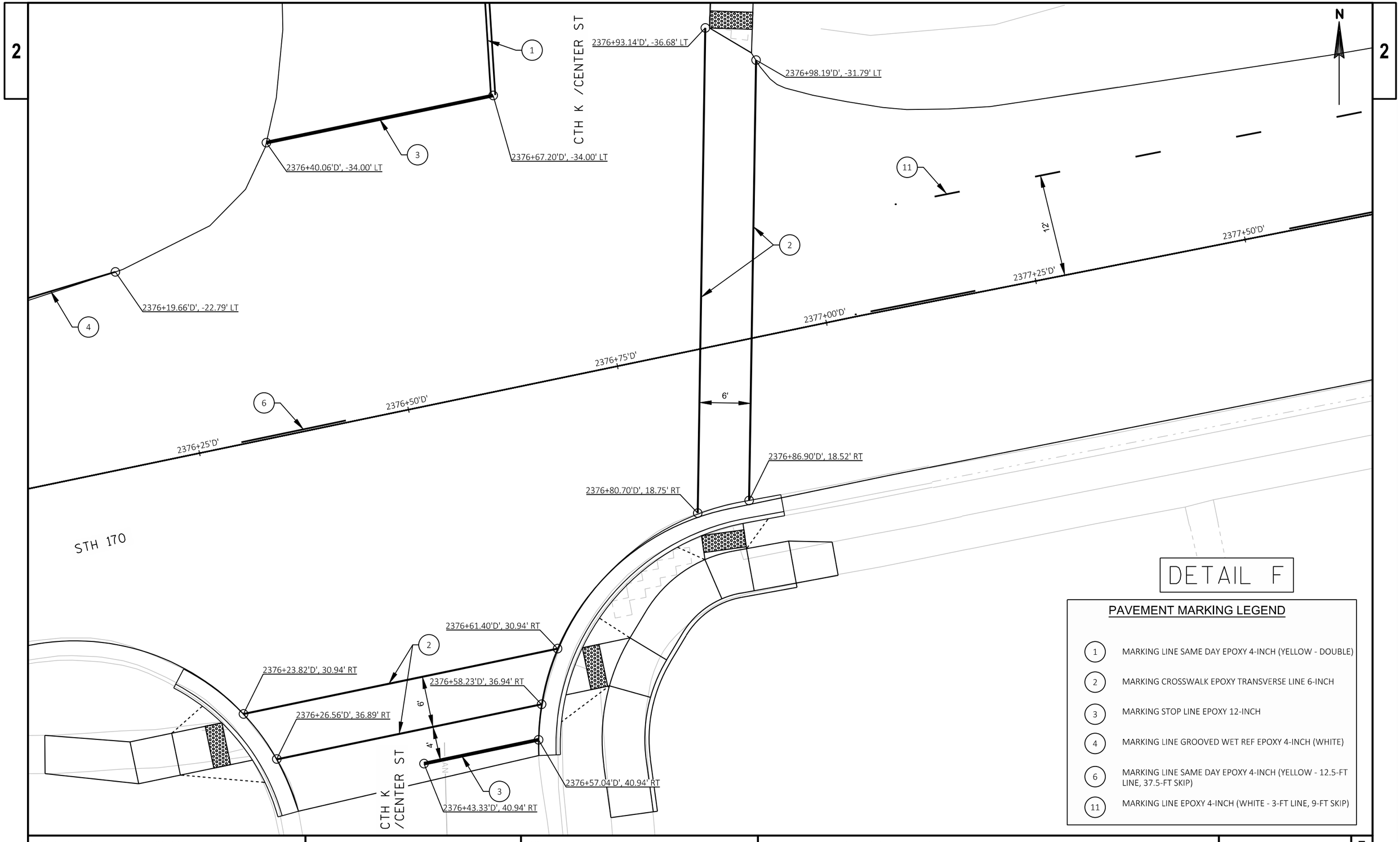
2127+30.03'D', -20.00' LT

2127+30.05'D', 0.00'

2127+50'D'

2127

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PAVEMENT MARKING DETAILS - DETAIL F	SHEET 119	E



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PAVEMENT MARKING DETAILS - DETAIL F	SHEET 120	E

2

PAVEMENT MARKING LEGEND

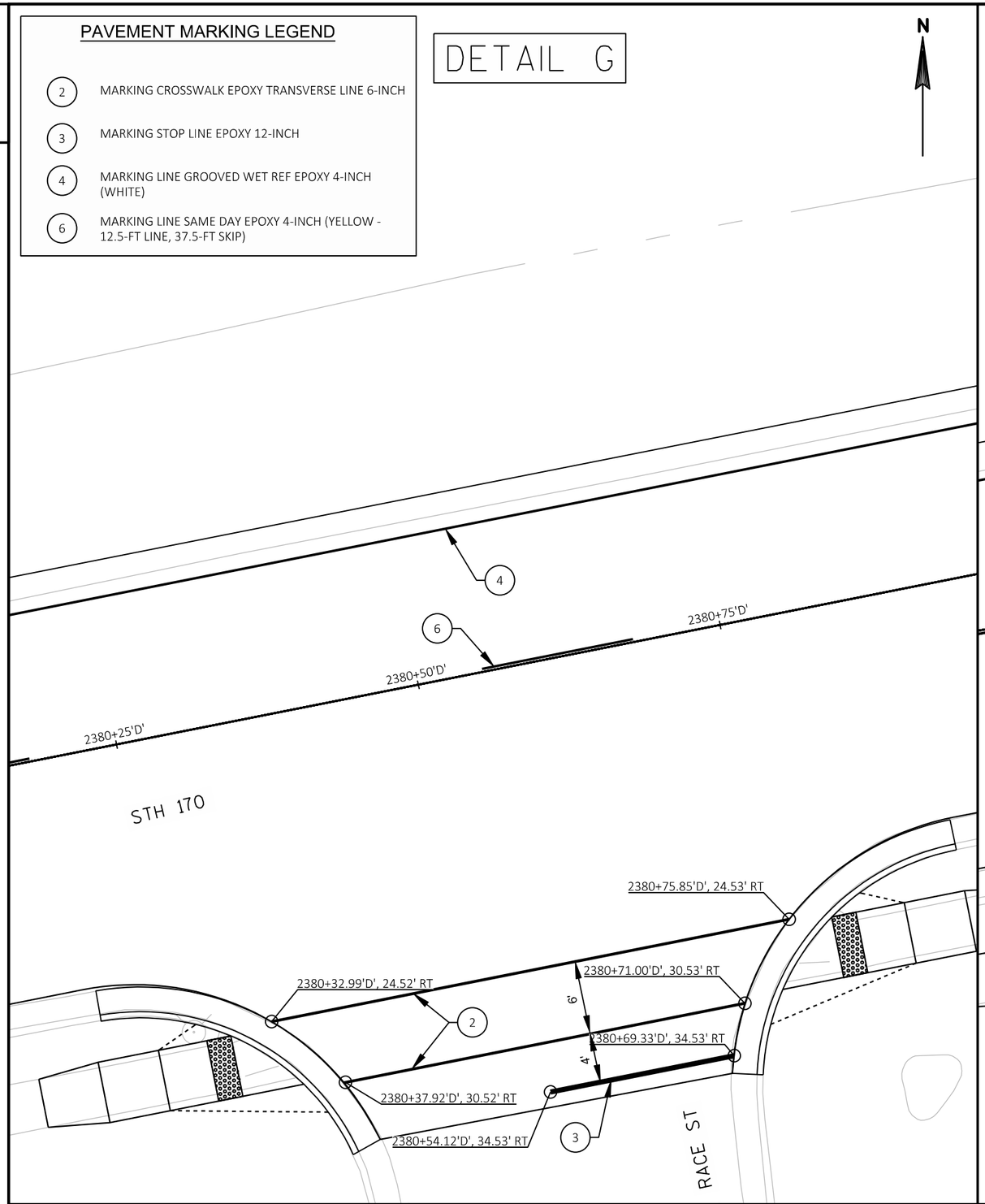
(2) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

(3) MARKING STOP LINE EPOXY 12-INCH

(4) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)

(6) MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW - 12.5-FT LINE, 37.5-FT SKIP)

DETAIL G



PAVEMENT MARKING LEGEND

(2) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

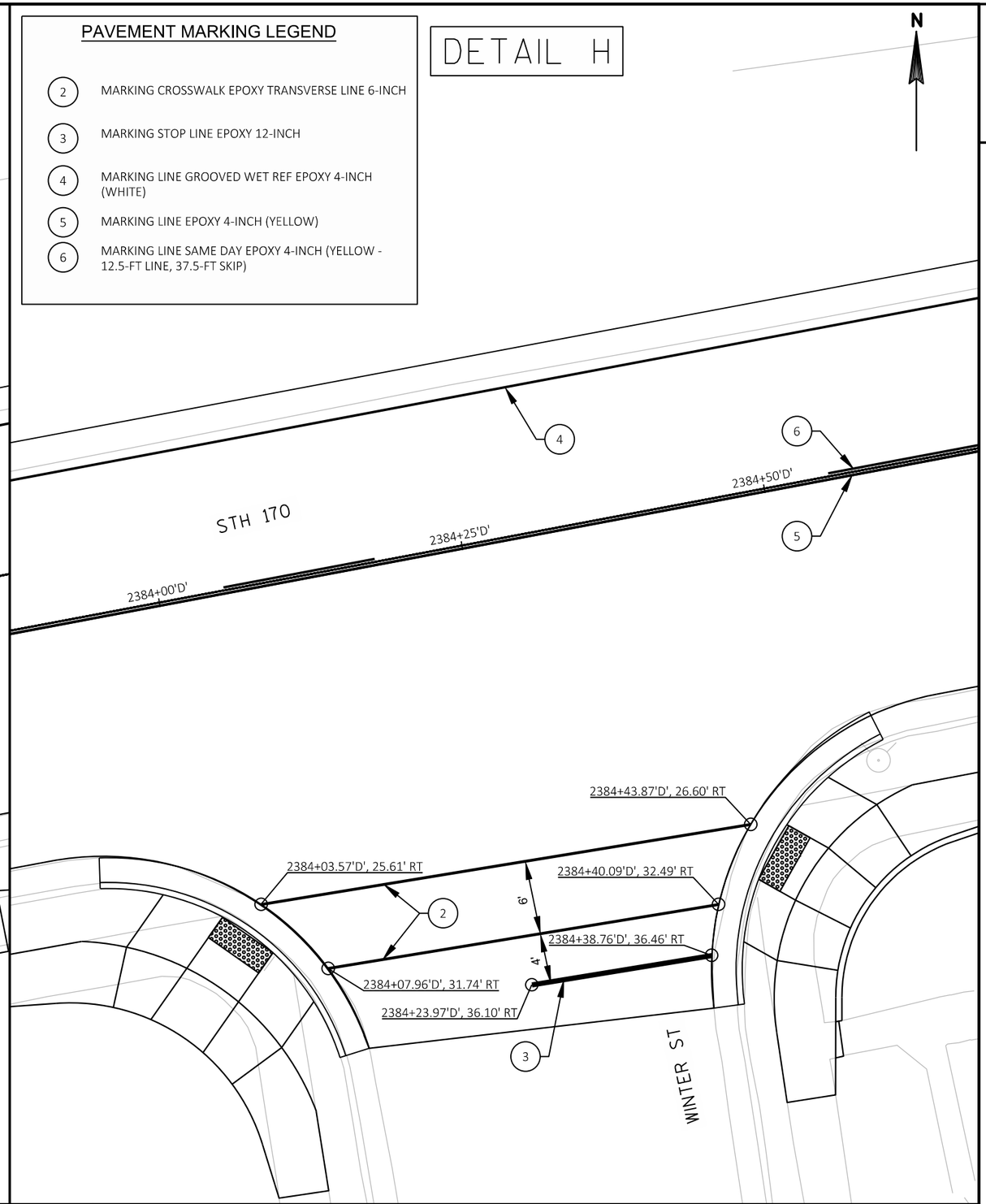
(3) MARKING STOP LINE EPOXY 12-INCH

(4) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)

(5) MARKING LINE EPOXY 4-INCH (YELLOW)

(6) MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW - 12.5-FT LINE, 37.5-FT SKIP)

DETAIL H



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PAVEMENT MARKING DETAILS - DETAIL F	SHEET 121	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - DETAILS G AND H

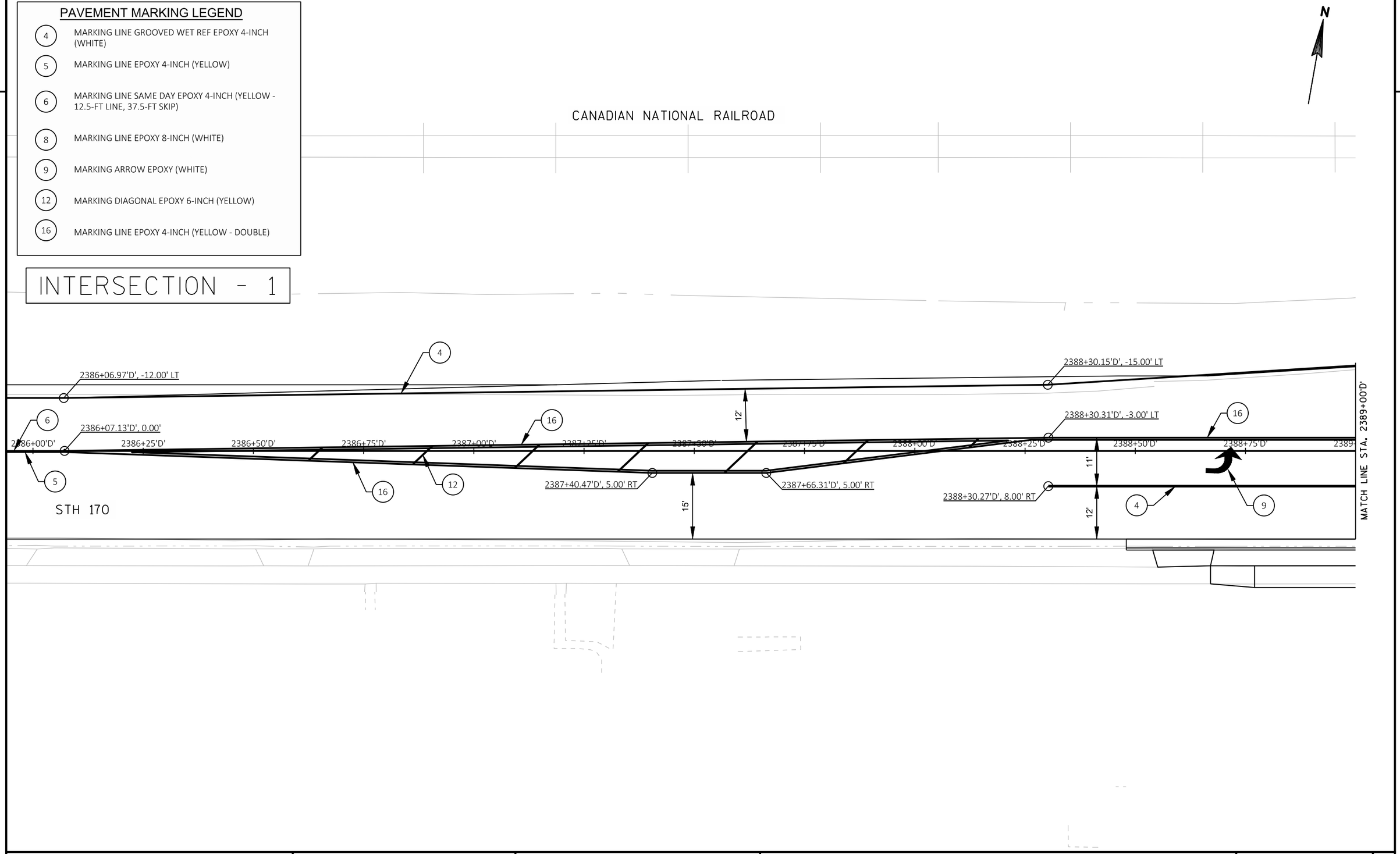
PLOT DATE : 7/7/2020 10:48 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

PAVEMENT MARKING LEGEND

4	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
5	MARKING LINE EPOXY 4-INCH (YELLOW)
6	MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW - 12.5-FT LINE, 37.5-FT SKIP)
8	MARKING LINE EPOXY 8-INCH (WHITE)
9	MARKING ARROW EPOXY (WHITE)
12	MARKING DIAGONAL EPOXY 6-INCH (YELLOW)
16	MARKING LINE EPOXY 4-INCH (YELLOW - DOUBLE)

INTERSECTION - 1



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PAVEMENT MARKING DETAILS - INTERSECTION	SHEET 122 E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - INTERSECTION-1

PLOT DATE : 7/7/2020 10:48 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

INTERSECTION - 2

PAVEMENT MARKING LEGEND

2	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
3	MARKING STOP LINE EPOXY 12-INCH
4	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
8	MARKING LINE EPOXY 8-INCH (WHITE)
9	MARKING ARROW EPOXY (WHITE)
10	MARKING LINE EPOXY 8-INCH (WHITE - 3-FT LINE, 9-FT SKIP)
11	MARKING LINE EPOXY 4-INCH (WHITE - 3-FT LINE, 9-FT SKIP)
13	MARKING DIAGONAL EPOXY 6-INCH (WHITE)
16	MARKING LINE EPOXY 4-INCH (YELLOW - DOUBLE)

N

CANADIAN NATIONAL RAILROAD

STH 79 NB/EAST ST

STH 170

EAST ST

TYPE A2 INTERSECTION.
SEE INTERSECTION DETAIL.

2389+97.19'D', -100.98' LT
2390+15.46'D', -97.59' LT
2389+98.00'D', -54.50' LT
2390+05.97'D', -29.73' LT
2389+68.18'D', -34.67' LT
2389+94.57'D', -31.20' LT
2389+58.74'D', -27.70' LT
2389+85.86'D', -32.34' LT
2389+52.38'D', -24.99' LT
2389+45.79'D', -3.00' LT
2389+49.82'D', -3.00' LT
2389+44.51'D', 8.00' RT
2389+47.14'D', 20.00' RT
2389+53.17'D', 20.08' RT
2389+43.11'D', 20.00' RT
2389+93.73'D', 32.54' RT
2390+15.53'D', 35.14' RT
2389+90.86'D', 48.67' RT
2390+81.61'D', -24.00' LT
2390+81.61'D', -13.00' LT
2390+81.62'D', -1.00' LT
2390+81.62'D', 9.00' RT
2391+42.71'D', -1.00' LT
2391+85.79'D', 22.50' RT

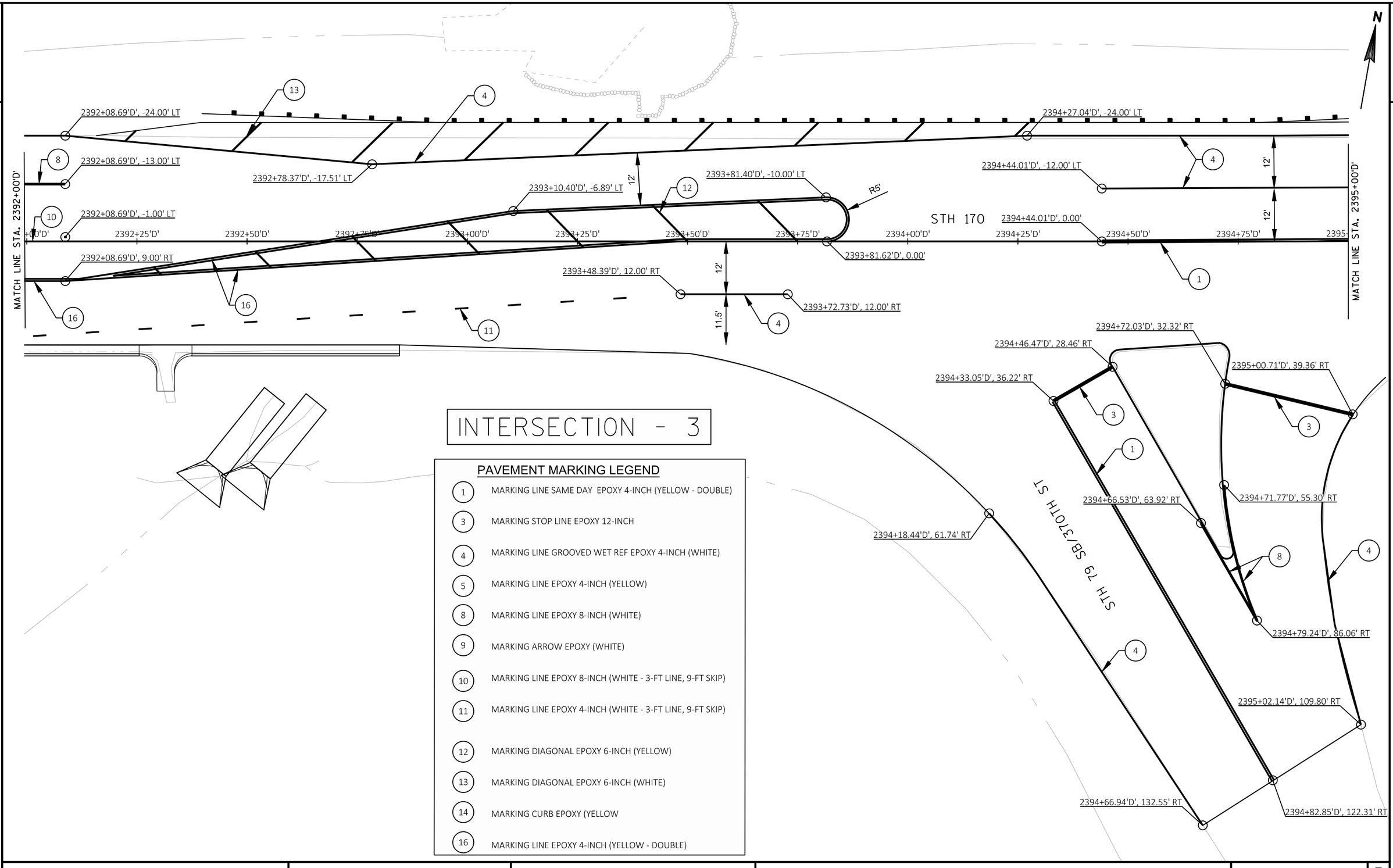
15'
12'
6'
11'
12'
14.5'
18'
11'
12'
10'
14.5'

2389+00'D'
2389+25'D'
2389+50'D'
2389+75'D'
2390+00'D'
2390+25'D'
2390+50'D'
2390+75'D'
2391+00'D'
2391+25'D'
2391+50'D'
2391+75'D'
2392+00'D'

MATCH LINE STA. 2389+00'D'

MATCH LINE STA. 2392+00'D'

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PAVEMENT MARKING DETAILS - INTERSECTION	SHEET 123	E



INTERSECTION - 3

PAVEMENT MARKING LEGEND

1	MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW - DOUBLE)
3	MARKING STOP LINE EPOXY 12-INCH
4	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
5	MARKING LINE EPOXY 4-INCH (YELLOW)
8	MARKING LINE EPOXY 8-INCH (WHITE)
9	MARKING ARROW EPOXY (WHITE)
10	MARKING LINE EPOXY 8-INCH (WHITE - 3-FT LINE, 9-FT SKIP)
11	MARKING LINE EPOXY 4-INCH (WHITE - 3-FT LINE, 9-FT SKIP)
12	MARKING DIAGONAL EPOXY 6-INCH (YELLOW)
13	MARKING DIAGONAL EPOXY 6-INCH (WHITE)
14	MARKING CURB EPOXY (YELLOW
16	MARKING LINE EPOXY 4-INCH (YELLOW - DOUBLE)

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PAVEMENT MARKING DETAILS - INTERSECTION	SHEET 124	E

2

PAVEMENT MARKING LEGEND

1 MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW - DOUBLE)

4 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)

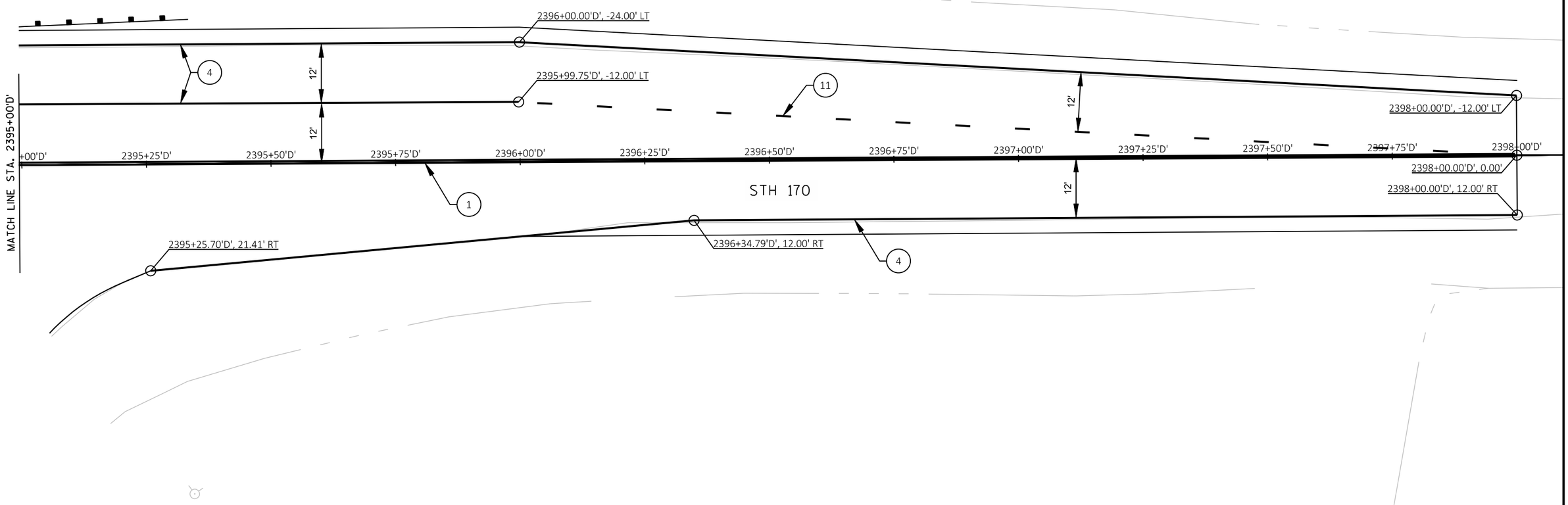
11 MARKING LINE EPOXY 4-INCH (WHITE - 3-FT LINE, 9-FT SKIP)

INTERSECTION - 4

N

2

CANADIAN NATIONAL RAILROAD



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PAVEMENT MARKING DETAILS - INTERSECTION	SHEET 125	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - INTERSECTION-4

PLOT DATE : 7/7/2020 10:48 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

MAINTENANCE OF TRAFFIC:

STH 170

- STH 170 SHALL REMAIN OPEN TO ALL EXISTING LANES AT ALL TIMES EXCEPT FOR FLAGGING OPERATIONS, SHOULDER CLOSURES, AND BRIDGE DECK OVERLAY AS NOTED IN THE CONTRACT SPECIAL PROVISIONS
- THE STH 170 AND STH 79 NB INTERSECTION WILL BE CLOSED DURING CONSTRUCTION OPERATIONS INVOLVING THE INTERSECTION AS NOTED IN THE CONTRACT SPECIAL PROVISIONS. SEE DETOUR PLANS.
- CULVERT REPLACEMENTS SHALL USE FLAGGING OPERATIONS

STH 79 NORTHBOUND

- STH 79 SHALL REMAIN OPEN TO ALL EXISTING LANES AT ALL TIMES EXCEPT FOR FLAGGING OPERATIONS AND SHOULDER CLOSURES AS NOTED IN THE CONTRACT SPECIAL PROVISIONS
- THE STH 170 AND STH 79 NB INTERSECTION WILL BE CLOSED DURING CONSTRUCTION OPERATIONS INVOLVING THE INTERSECTION AS NOTED IN THE CONTRACT SPECIAL PROVISIONS. SEE DETOUR PLANS.

LOCAL ROADS AND DRIVEWAYS

- MAINTAIN LOCAL ACCESS AT ALL TIMES

CONSTRUCTION TO BE COMPLETED:

STH 170

- MILL & OVERLAY
- REPLACE BEAM GUARD
- ADD/REPLACE/EXTEND CULVERTS AT STA. 176+89, STA. 2107+57'D', STA. 2127+00'D', STA. 2112+42'D', STA. 2234+30'D', AND STA. 2392+50'D'
- CURB RAMP AND CURB & GUTTER IMPROVEMENTS
- CURB & GUTTER EXTENSION
- RECONSTRUCT AND SIGNALIZE INTERSECTION WITH STH 79
- BRIDGE DECK OVERLAY

STH 79 NORTHBOUND

- MILL & OVERLAY
- RECONSTRUCT AND SIGNALIZE INTERSECTION WITH STH 170

NOTES:

REFER TO THE FOLLOWING TRAFFIC CONTROL DETAILS, AS WELL AS STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DEVICES AS NECESSARY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER:

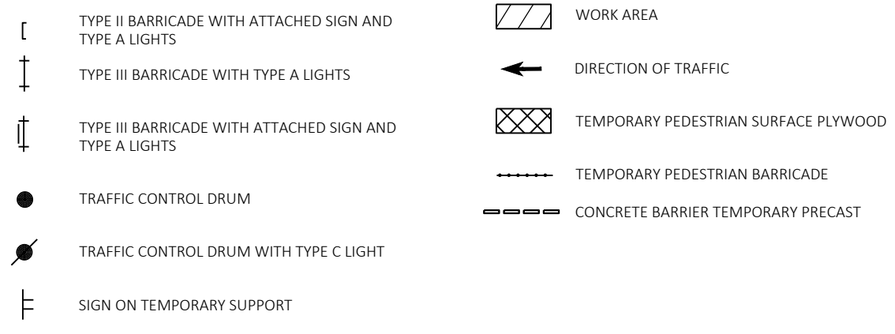
- SEE S.D.D. "TRAFFIC CONTROL, ADVANCED WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- SEE S.D.D. "TRAFFIC CONTROL, ADVANCED WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- SEE S.D.D. "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"
- SEE S.D.D. "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY"
- SEE S.D.D. "TRAFFIC CONTROL, ONE LANE ROAD STOP CONDITION"
- SEE S.D.D. "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"
- SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"
- SEE S.D.D. "TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES"
- SEE. S.D.D. "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATIONS"
- SEE S.D.D. "ONE LANE ROAD WITH TEMPORARY SIGNALS"
- SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH"
- SEE S.D.D. "DETOUR SIGNING FOR MAINLINE CLOSURES"
- SEE S.D.D. "CONCRETE BARRIER TEMPORARY PRECAST"
- SEE S.D.D. "ADVANCED WIDTH RESTRICTION SIGNING"
- SEE S.D.D. "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION"

TRAFFIC CONTROL GENERAL NOTES:

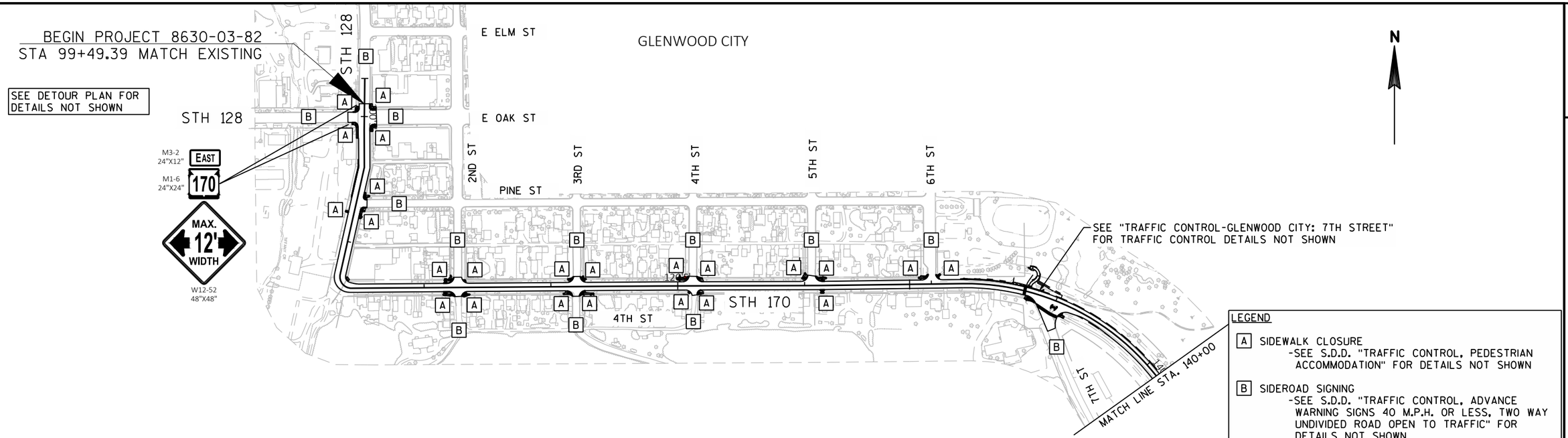
- ANY SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. REMOVING/REPLACING OR COVERING/UNCOVERING SIGNS WILL BE INCIDENTAL TO OTHER TRAFFIC CONTROL ITEMS.
- "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
- CONSIDER GEOMETRICS WHEN LOCATING SIGNS, ARROW BOARDS, AND SIGN MESSAGE BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE SIGNS, ARROW BOARDS, AND SIGN MESSAGE BOARDS.
- IF SIGNS ARE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS WITH A MINIMUM 5' MOUNTING HEIGHT.
- ALL TRAFFIC CONTROL SIGNING SHALL CONFORM TO: PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE WISCONSIN SUPPLEMENT TO THE MUTCD, TRAFFIC ENGINEERING, OPERATIONS AND SAFETY MANUAL, AND OTHER CONTRACT DOCUMENTS.
- THE TURNING OF TRAFFIC CONTROL DEVICES WHEN NOT IN USE TO OBSCURE THE MESSAGE WILL NOT BE ALLOWED.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED

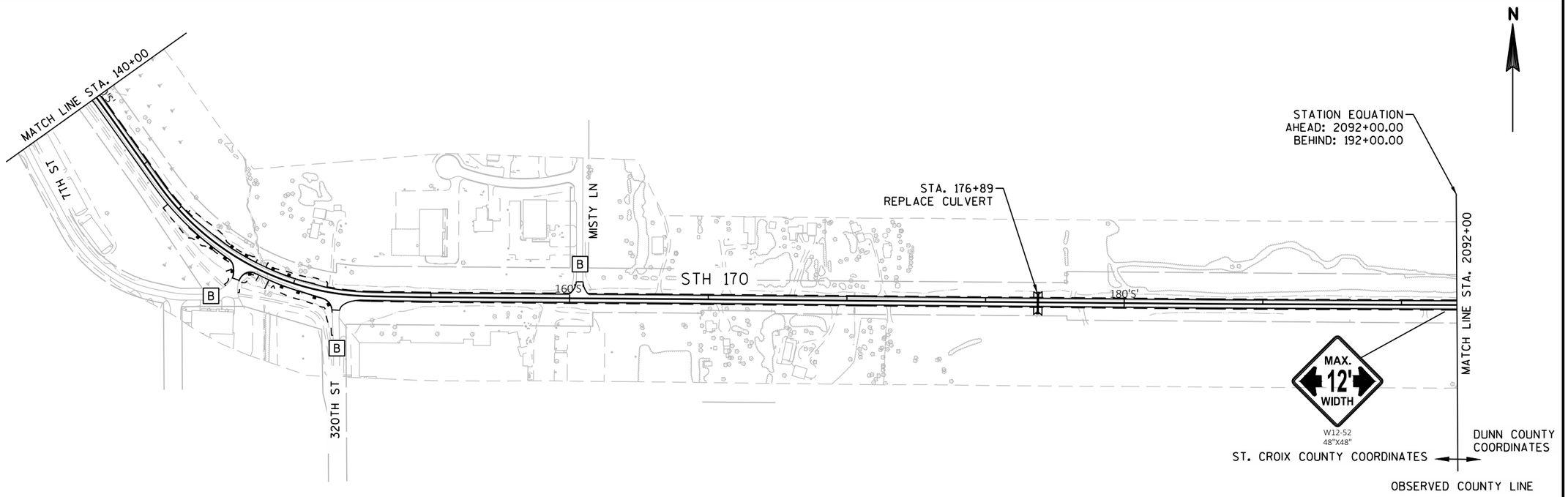
2

TRAFFIC CONTROL LEGEND



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	TRAFFIC CONTROL - OVERVIEW	SHEET 126	E





PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	TRAFFIC CONTROL - ST. CROIX COUNTY	SHEET 127	E

2

2

GLENWOOD CITY

PLAYGROUND

N

STH 170

131+00'S'

132+00'S'

133+00'S'

134+00'S'

135+00'S'

136+00'S'

12'

12'

25'
(TYP.)

TEMPORARY MARKING LINE
EPOXY 4-INCH WHITE

TEMPORARY CURB RAMP REQUIRED

SIDEWALK CLOSED
R9-9
24"X12"

TEMPORARY MARKING LINE
EPOXY 4-INCH WHITE

TEMPORARY CURB RAMP REQUIRED

SIDEWALK CLOSED
CROSS HERE
R9-11A
48"X24"

350'

SHOULDER
WORK
W21-5
48"X48"

7TH ST

EXISTING R/W (TYP.)

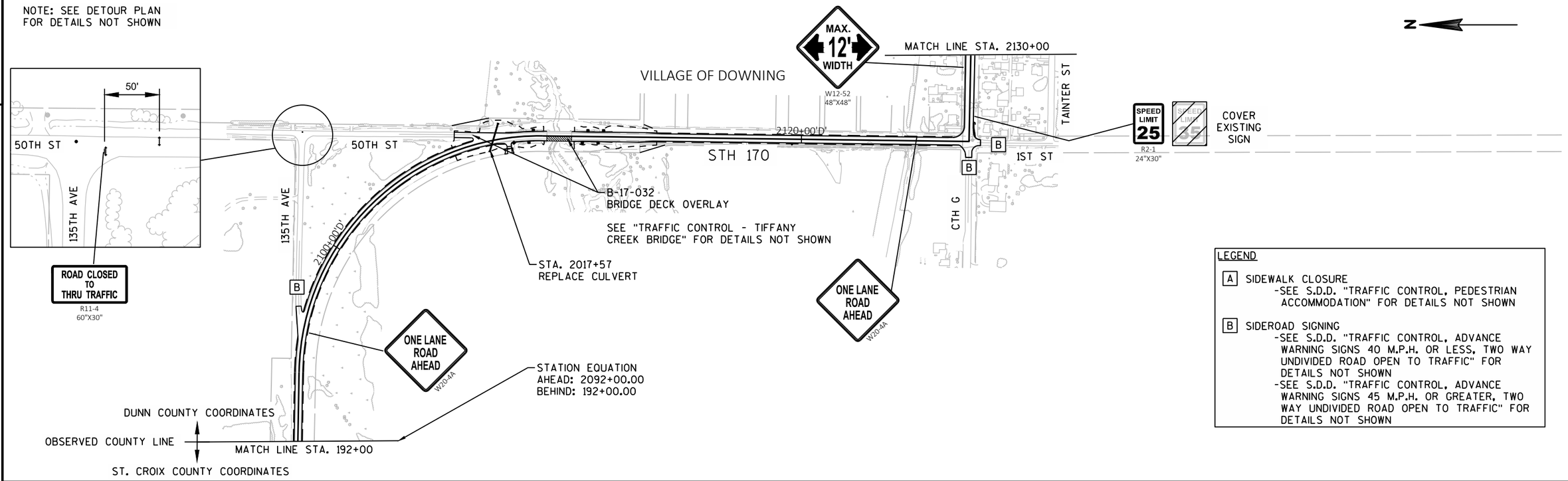
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	TRAFFIC CONTROL - GLENWOOD CITY: 7TH STREET	SHEET 128	E

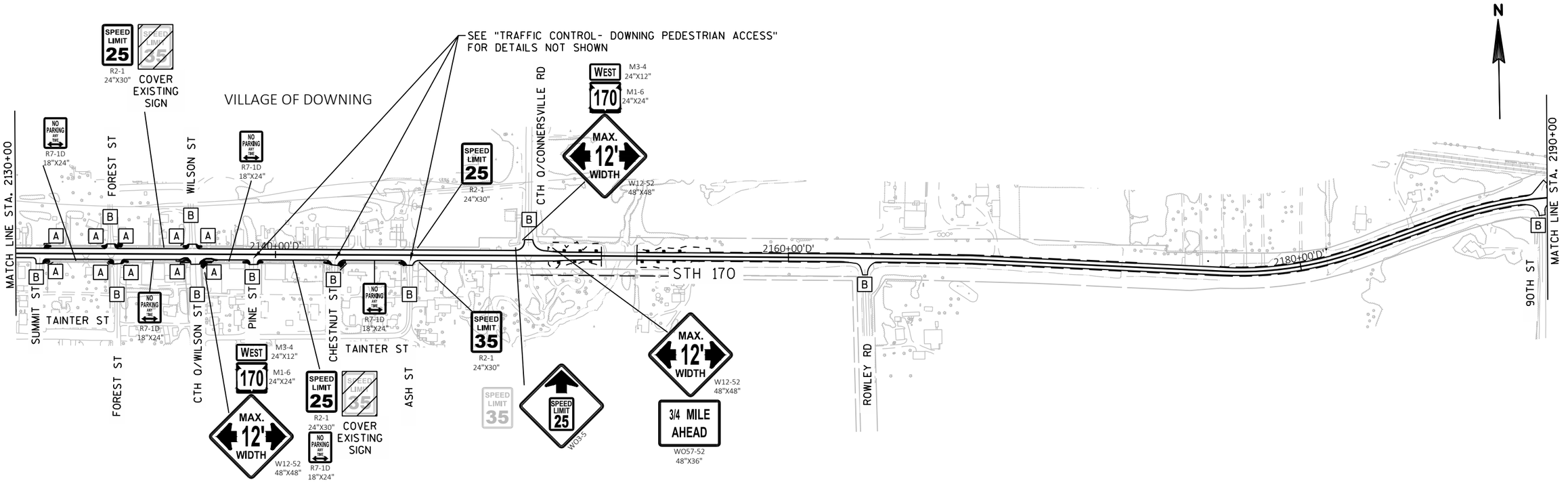
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - GLENWOOD CITY - 7TH STREET

PLOT DATE : 7/6/2020 5:11 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

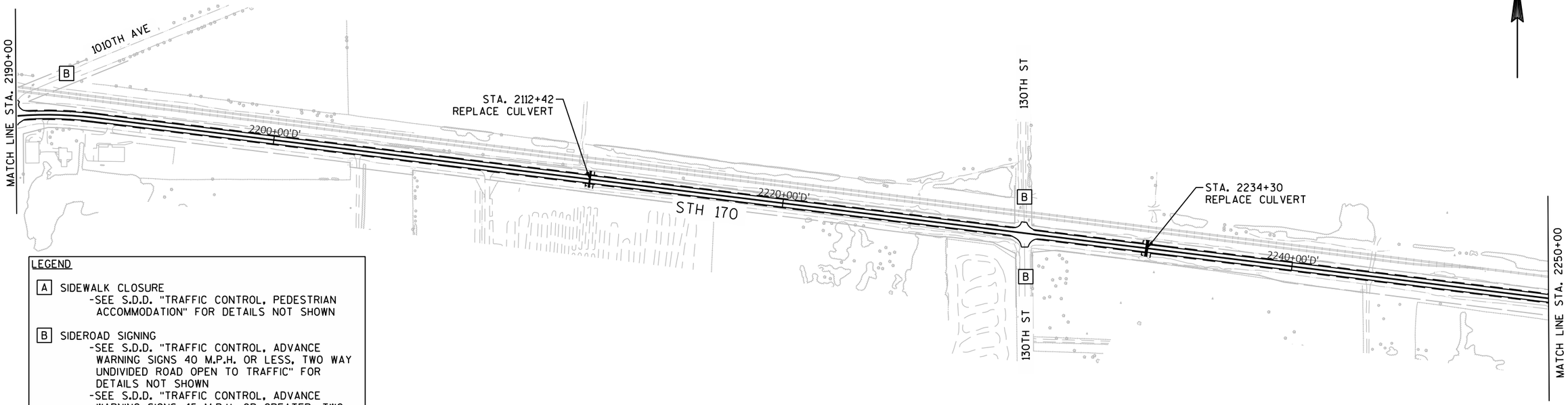
NOTE: SEE DETOUR PLAN
FOR DETAILS NOT SHOWN





PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	TRAFFIC CONTROL - DUNN COUNTY	SHEET 129	E

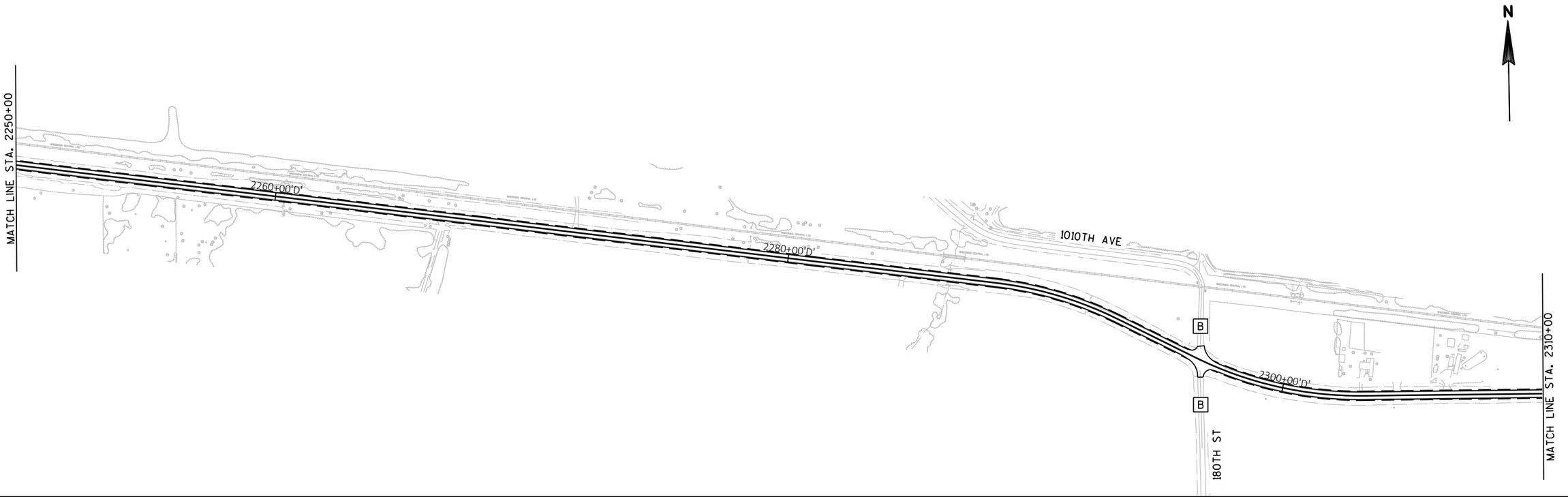
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - DUNN COUNTY - 1
PLOT DATE : 7/6/2020 5:12 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:400 FT



LEGEND

A SIDEWALK CLOSURE
-SEE S.D.D. "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR DETAILS NOT SHOWN

B SIDEROAD SIGNING
-SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR DETAILS NOT SHOWN
-SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR DETAILS NOT SHOWN



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	TRAFFIC CONTROL - DUNN COUNTY	SHEET 130 E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - DUNN COUNTY - 2
PLOT DATE : 7/6/2020 5:12 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:400 FT

2

2

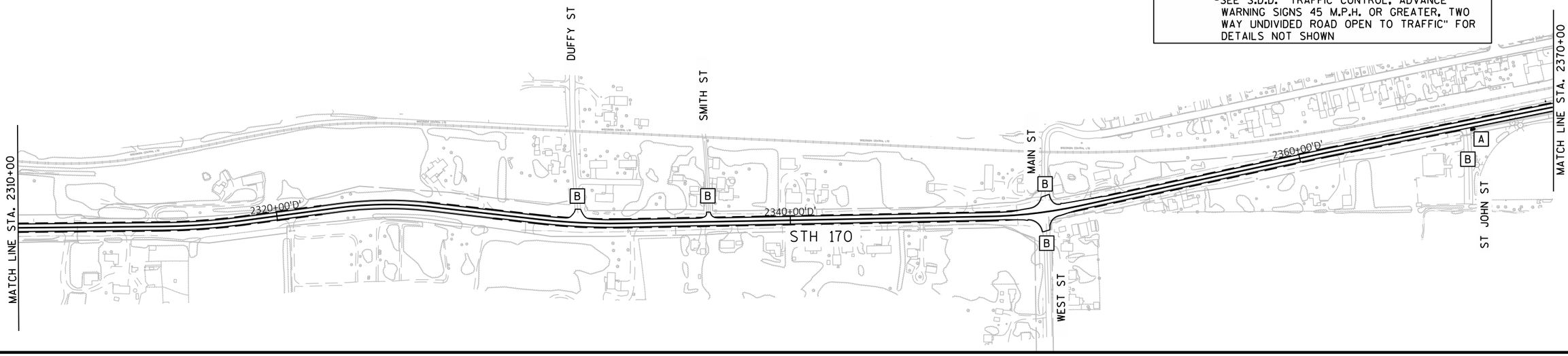
LEGEND

[A] SIDEWALK CLOSURE
-SEE S.D.D. "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR DETAILS NOT SHOWN

[B] SIDEROAD SIGNING
-SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR DETAILS NOT SHOWN
-SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR DETAILS NOT SHOWN

N

VILLAGE OF BOYCEVILLE



PLACE SIGN ON SOUTHBOUND SHOULDER AT INTERSECTION OF STH 79 AND TIFFANY ST

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH" FOR DETAILS NOT SHOWN

N

VILLAGE OF BOYCEVILLE

SEE "TRAFFIC CONTROL - BOYCEVILLE PEDESTRIAN ACCESS" FOR TRAFFIC CONTROL DETAILS NOT SHOWN

SPEED LIMIT 25
R2-1
24"X30"
COVER EXISTING SIGN

SPEED LIMIT 35

STH 79 NB/EAST ST

SEE "STH 79 NB CLOSURE" FOR TRAFFIC CONTROL DETAILS NOT SHOWN

2420+00'D'

ROAD CLOSED 3.8 MILES AHEAD LOCAL TRAFFIC ONLY
R11-3
60"X30"

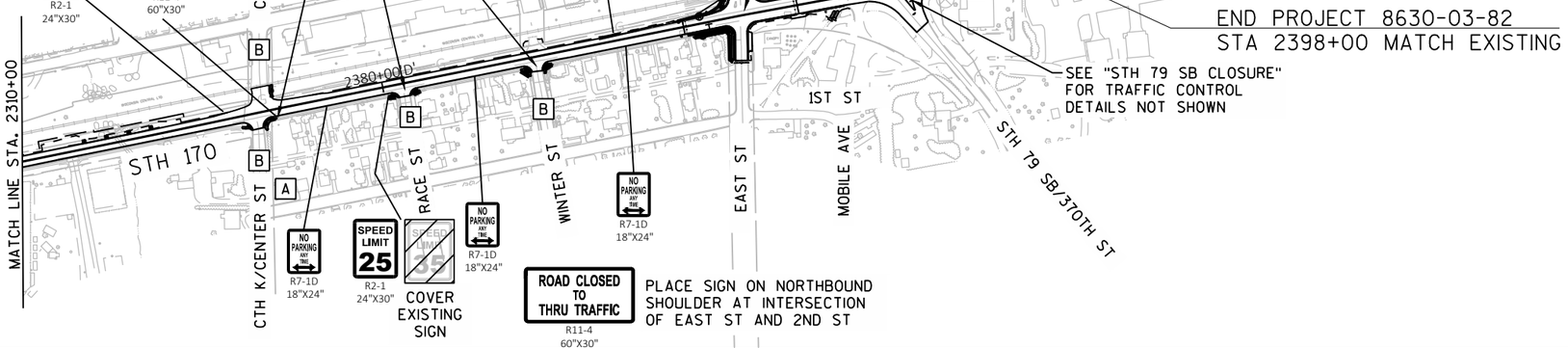
PLACE SIGN ON WESTBOUND SHOULDER AT INTERSECTION OF STH 170 AND CTH F

SPEED LIMIT 35
R2-1
24"X30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

CENTER ST

2380+00'D'



NO PARKING ANY TIME
R7-1D
18"X24"

SPEED LIMIT 25
R2-1
24"X30"
COVER EXISTING SIGN

SPEED LIMIT 35

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

PLACE SIGN ON NORTHBOUND SHOULDER AT INTERSECTION OF EAST ST AND 2ND ST

END PROJECT 8630-03-82
STA 2398+00 MATCH EXISTING

SEE "STH 79 SB CLOSURE" FOR TRAFFIC CONTROL DETAILS NOT SHOWN

SEE DETOUR PLAN FOR DETAILS NOT SHOWN

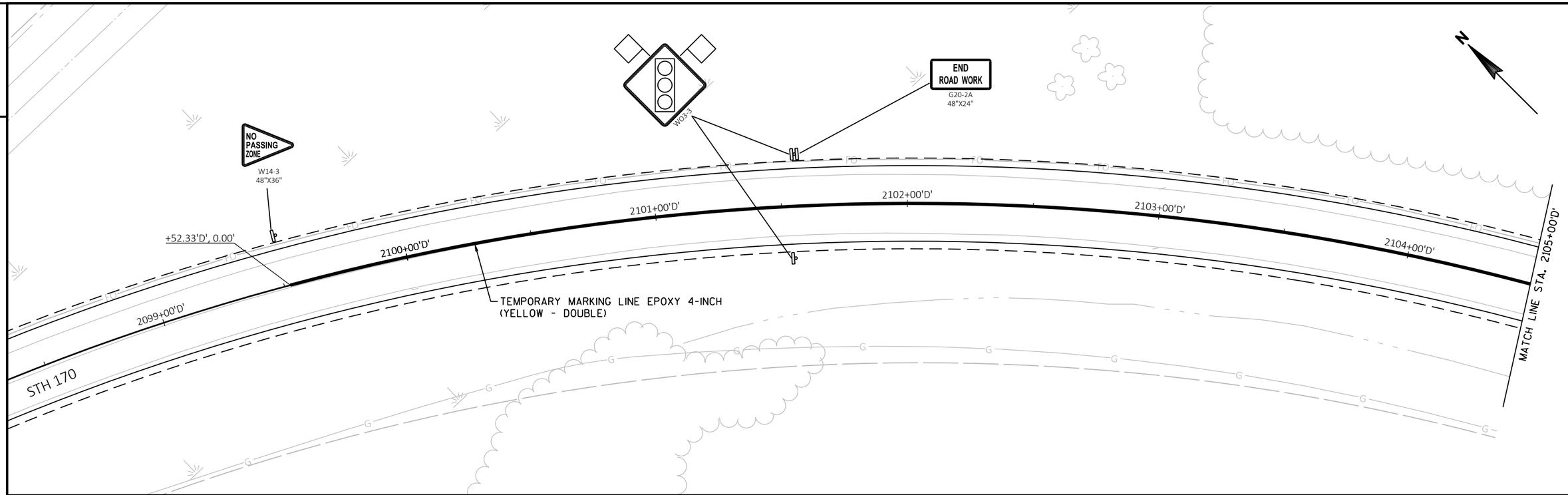
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	TRAFFIC CONTROL - DUNN COUNTY	SHEET 131	E

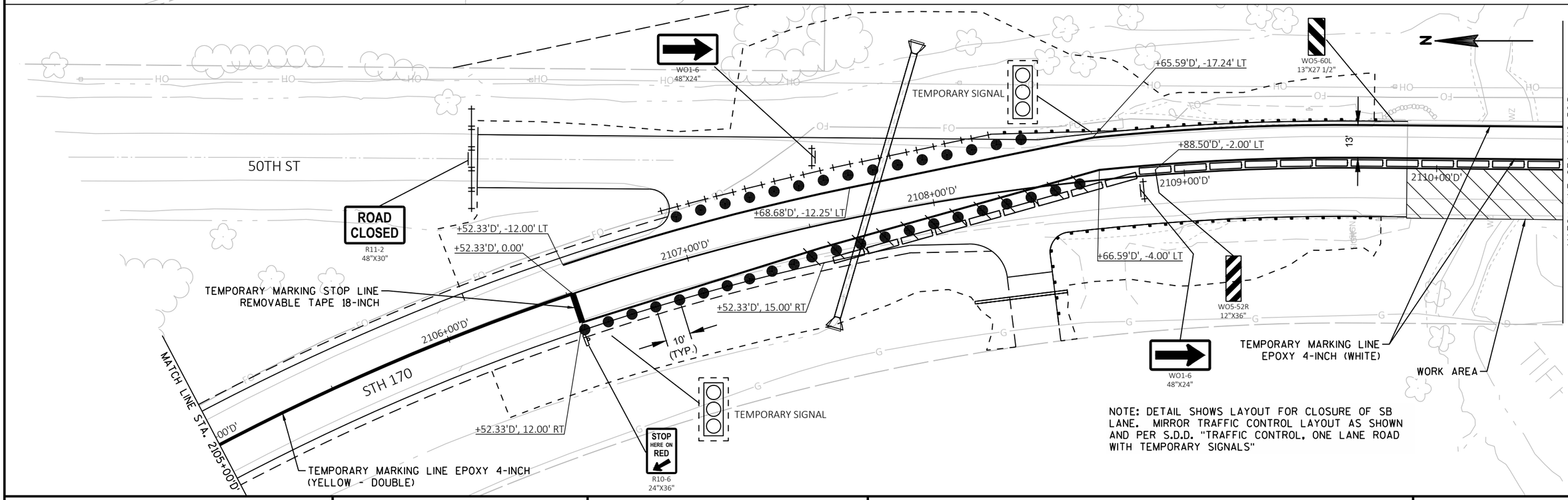
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - DUNN COUNTY - 3

PLOT DATE : 7/6/2020 5:13 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:400 FT

WISDOT/CADDS SHEET 42

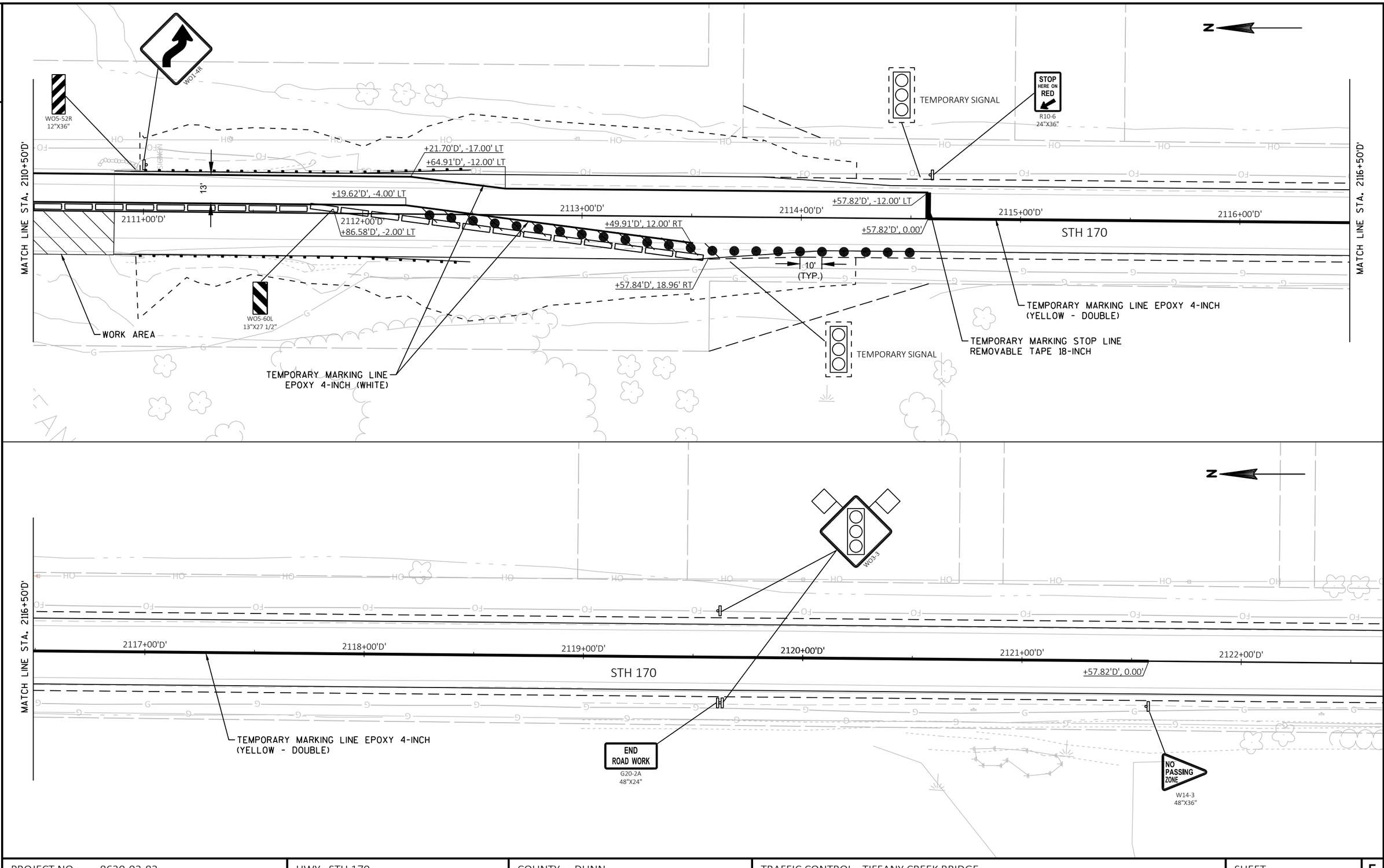
2





NOTE: DETAIL SHOWS LAYOUT FOR CLOSURE OF SB LANE. MIRROR TRAFFIC CONTROL LAYOUT AS SHOWN AND PER S.D.D. "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS"

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	TRAFFIC CONTROL - TIFFANY CREEK BRIDGE	SHEET 132	E

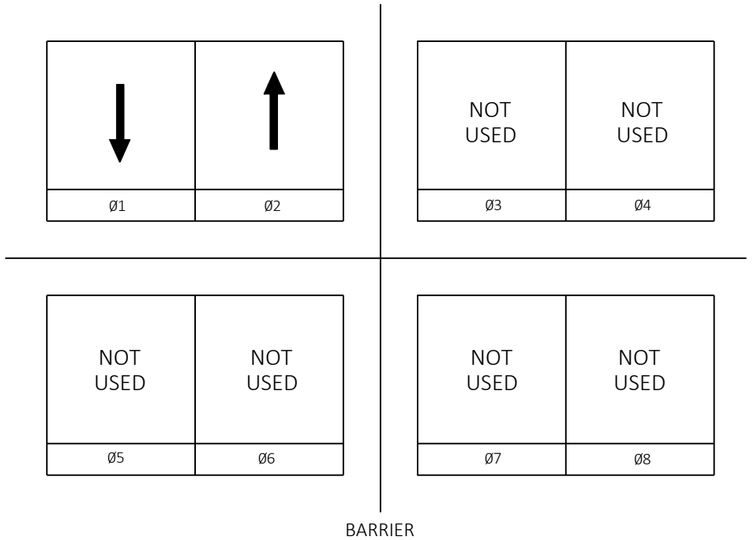


2

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	TRAFFIC CONTROL - TIFFANY CREEK BRIDGE	SHEET 133	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - TIFFANY CREEK BRIDGE - 2
PLOT DATE : 7/6/2020 5:13 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	1	
Ø2	2	
Ø3		
Ø4		
Ø5		
Ø6		
Ø7		
Ø8		

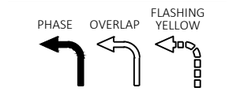


CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY w /Ø	PHASE RECALL	PHASE ACTIVE
1			MAX	X
2	X		MAX	X
3				
4				
5				
6				
7				
8				

N

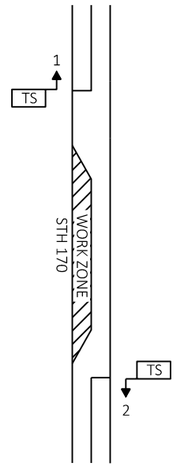
LEGEND



TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

SIGNAL TRAILER CONFIGURATION



LEGEND

X
TS
TRAILER OR POLE MOUNTED TEMPORARY BRIDGE SIGNAL WITH HEAD(S) X

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF LIGHTING	
BY OTHER AGENCY	X
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE DOT LIGHTING CABINET	

TRAFFIC SIGNAL TIMING PLAN				
PHASE	DURATION (SEC)			
	GREEN	Y	R	RECALL
1	15.0	5.0	25.0	MAX*
2	15.0	5.0	25.0	

* INTERSECTION TO OPERATE IN FIX TIME MODE.

TRAFFIC CONTROL SIGNAL
STH 170
TIFFANY CREEK BRIDGE
VILLAGE OF DOWNING
DUNN COUNTY

SIGNAL NO. TEMP

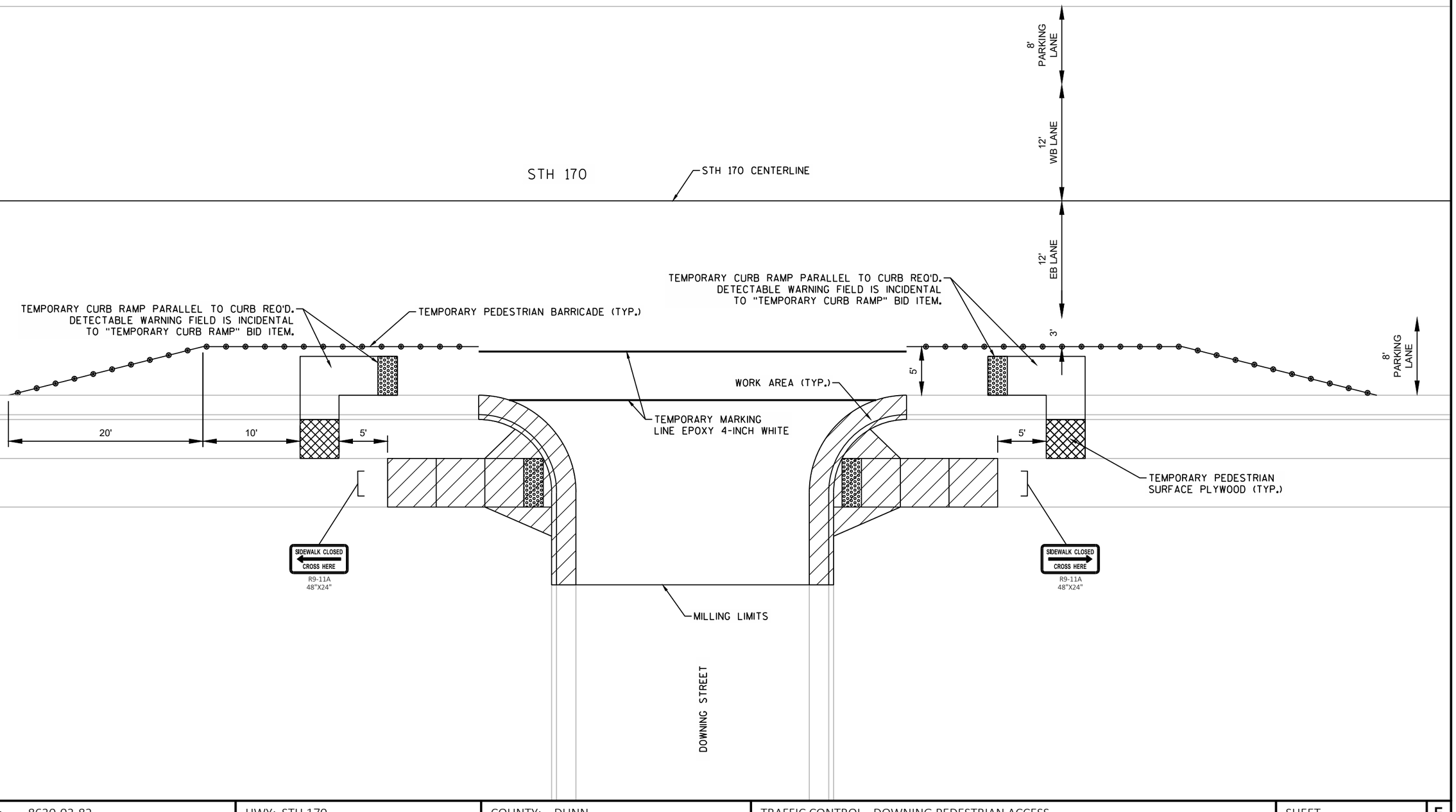
REGION CONTACT: DAVID FENSKE
DESIGNED BY: KL ENGINEERING, INC
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	TIFFANY CREEK BRIDGE TEMPORARY TRAFFIC SIGNAL PLAN	SHEET 134	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\024101-ST.DWG
LAYOUT NAME - SOO
PLOT DATE : 7/8/2020 10:26 AM
PLOT BY : JAMIE DALHEIM
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	TRAFFIC CONTROL - DOWNING PEDESTRIAN ACCESS	SHEET 135	E

2

[X] MILLING LIMITS

[X] SIDEWALK CLOSED CROSS HERE
R9-11A
48"X24"

TEMPORARY PEDESTRIAN SURFACE PLYWOOD [X]

SIDE STREET

[X] WORK AREA

3' PAVED SHLD

5' UNPAVED SHLD

[X] TEMPORARY PEDESTRIAN BARRICADE

12' WB LANE

STH 170

STH 170 CENTERLINE

[X] TEMPORARY MARKING LINE EPOXY 4-INCH WHITE

12' EB LANE

[X Y Z] TEMPORARY CURB RAMP PARALLEL TO CURB REQ'D. DETECTABLE WARNING FIELD IS INCIDENTAL TO "TEMPORARY CURB RAMP" BID ITEM.

[X Y Z] TEMPORARY PEDESTRIAN BARRICADE

[X Y Z] TEMPORARY MARKING LINE EPOXY 4-INCH WHITE

[X Y Z] WORK AREA

[X Y Z] WORK AREA

[X Y Z] TEMPORARY PEDESTRIAN BARRICADE

3'

8' PARKING LANE

5'

20'

10'

5'

5'

[X Y Z] TEMPORARY CURB RAMP PARALLEL TO CURB REQ'D. DETECTABLE WARNING FIELD IS INCIDENTAL TO "TEMPORARY CURB RAMP" BID ITEM.

[X Y Z] TEMPORARY PEDESTRIAN SURFACE PLYWOOD

[X Y Z] TEMPORARY PEDESTRIAN SURFACE PLYWOOD

[X Y] MILLING LIMITS

SIDEWALK CLOSED CROSS HERE [X Y Z]
R9-11A
48"X24"

SIDEWALK CLOSED CROSS HERE [Z]
R9-11A
48"X24"

[Z] TEMPORARY CURB RAMP REQUIRED

[Z] TEMPORARY PEDESTRIAN SURFACE PLYWOOD

[Z] TEMPORARY CURB RAMP REQUIRED

[Z] SIDEWALK CLOSED CROSS HERE
R9-11A
48"X24"

OR

[X] SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED CROSS HERE [X Y Z]
R9-11A
48"X24"

[Z] TEMPORARY PEDESTRIAN SURFACE PLYWOOD

[X] NOTE: REQUIRED AT CTH K INTERSECTION

[Y] NOTE: REQUIRED AT RACE ST INTERSECTION

[Z] NOTE: REQUIRED AT WINTER ST INTERSECTION

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	TRAFFIC CONTROL - BOYCEVILLE PEDESTRIAN ACCESS	SHEET 136	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - BOYCEVILLE PEDESTRIAN ACCESS
PLOT DATE : 7/6/2020 5:13 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

N

STH 79 NB/EAST ST

504+00'S'

503+00'S'

ROAD CLOSED
R11-2
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

PROPOSED EASEMENT

WISCONSIN CENTRAL LTD
CANADIAN NATIONAL RAILROAD

TEMPORARY EASEMENT

2392+00'D'

2391+00'D'

2390+00'D'

2389+00'D'

2388+00'D'

2387+00'D'

TEMPORARY EASEMENT

TEMPORARY CURB RAMP REQUIRED

ROAD CLOSED
R11-2
48"X30"

STH 170

SIDEWALK CLOSED
R9-9
24"X12"

TEMPORARY CURB RAMP REQUIRED

PROPOSED R/W

TEMPORARY EASEMENT

WORK AREA

ROAD CLOSED
R11-2
48"X30"

EXISTING R/W (TYP.)

CANOPY

POST

501+00'S'

SIDEWALK CLOSED
R9-9
24"X12"

ROAD CLOSED
R11-2
48"X30"

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	TRAFFIC CONTROL - STH 79 NB CLOSURE	SHEET 137	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - STH 79 NB CLOSURE

PLOT DATE : 7/6/2020 5:13 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

SEE DETOUR PLAN FOR DETAILS NOT SHOWN

CANADIAN NATIONAL RAILROAD

TEMPORARY EASEMENT

WO1-6 48"X24"

WO1-6 48"X24"

WORK AREA

STH 170

2393+00'D'

2394+00'D'

2395+00'D'

2396+00'D'

2397+00'D'

2398+00'D'

25' (TYP.)

750'

350'

350'

ROAD WORK AHEAD W20-1A 48"X48"

SHOULDER WORK W21-5 48"X48"

END ROAD WORK G20-2A 48"X24"

DETOUR M4-9R 30"X24"

LANE CLOSED R11-2L 48"X30"

ROAD CLOSED R11-2 48"X30"

25' (TYP.)

10' (TYP.)

350'

ROAD WORK AHEAD W20-1A 48"X48"

350'

END ROAD WORK G20-2A 48"X24"

STH 79 SB

EXISTING R/W (TYP.)

N

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH" FOR DETAILS NOT SHOWN

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	TRAFFIC CONTROL - STH 79 SB CLOSURE	SHEET 138	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - STH 79 SB CLOSURE

PLOT DATE : 7/6/2020 5:14 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

DETOUR PLAN LEGEND

- STH 170 DETOUR ROUTE
- STH 79 DETOUR ROUTE

N

TEMPORARY TRAFFIC SIGNAL FOR BRIDGE (B-17-132). SEE TRAFFIC CONTROL PLANS FOR MORE DETAILS

TEMPORARY CLOSURE (STH 170/STH 79 NB)

BEGIN PROJECT

END PROJECT

Emerald

Glenwood City

Downing

Boyceville

Wheele

Knapp

Wilson

Henry

odville

STANTON

SPRINGFIELD

HAY RIVER

SHERM

GLEN-

WOOD

STH 128

SYME RD

CLARKE ST

2ND ST

E WALNUT ST

E ELM ST

BEGIN PROJECT

E OAK ST

PINE ST

55.2

55.1

FAIRGROUND RD

STH 170

3RD ST

4TH ST

GLENWOOD CITY

GLEN MEADOWS LN

CTH G

130TH AVE

NORDVELEN DR

GRANBAKKEN WAY

HEDLUND ST

EVENSON RD

STH 79

TIFFANY ST

MAIN ST

END PROJECT

STH 170

AIRPORT PARK RD

CHARLOTTE ST

EAST ST

BLY ST

NELSON DR

ANDERSON HILL LN

BOYCEVILLE

STH 79

UP

CN

94

128

12

79

45 00'

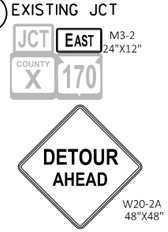
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	DETOUR PLAN: STH 170/STH 79 N INTERSECTION CLOSURE (STH 170 EASTBOUND DETOUR)	SHEET 139 E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - STH 170 EB-number

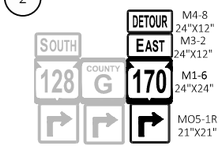
PLOT DATE : 7/5/2020 2:16 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:2 MILES

WISDOT/CADDS SHEET 44

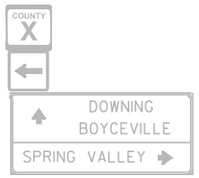
1
PLACE SIGN OVER EXISTING JCT



2

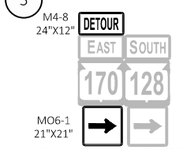


3



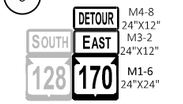
4

5

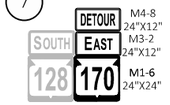


PLACE SIGN OVER EXISTING ARROW

6

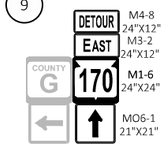


7

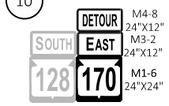


8

9



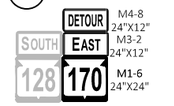
10



11

12

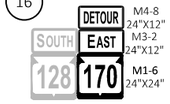
13



14

15

16



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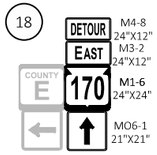

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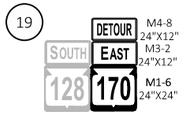

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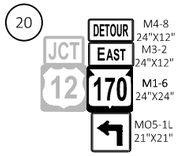

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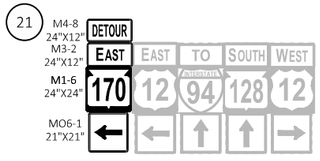

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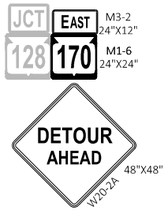

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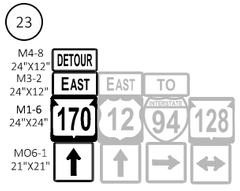

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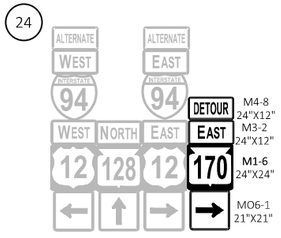

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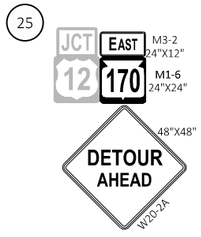

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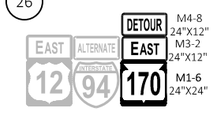

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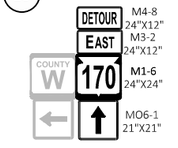

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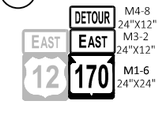

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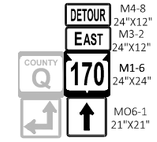

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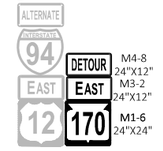


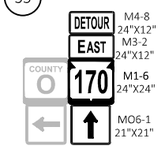
COVER EXISTING SIGNS

**SIGN APPEARS IN BOTH STH 170 AND STH 79 DETOUR PLANS

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	DETOUR PLAN: STH 170/STH 79 N INTERSECTION CLOSURE (STH 170 EASTBOUND DETOUR)	SHEET 140	E

34

35



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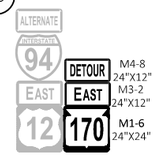

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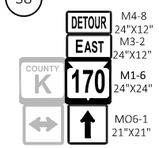

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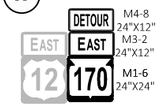

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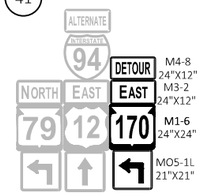

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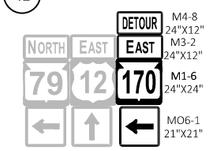

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44

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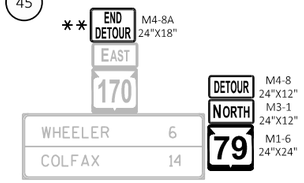

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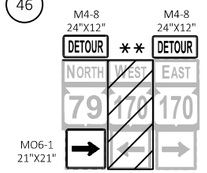
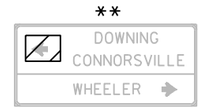


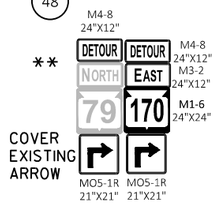
COVER EXISTING ARROW

47



COVER EXISTING ARROW WITH "RIGHT ARROW" TYPE A WITH ORANGE BACKGROUND.

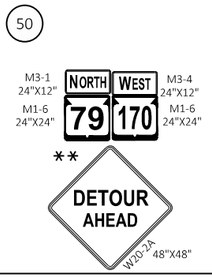
48



COVER EXISTING ARROW

** 49

50



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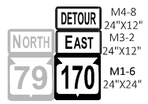


52

53

54

55

55.1

PLACE SIGN ON TRAFFIC CONTROL BARRICADE TYPE III WITH TRAFFIC CONTROL WARNING LIGHTS TYPE A

55.2

PLACE SIGN ON TRAFFIC CONTROL BARRICADE TYPE III WITH TRAFFIC CONTROL WARNING LIGHTS TYPE A

COVER EXISTING SIGNS

** SIGN APPEARS IN BOTH STH 170 AND STH 79 DETOUR PLANS

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	DETOUR PLAN: STH 170/STH 79 N INTERSECTION CLOSURE (STH 170 EASTBOUND DETOUR)	SHEET 141	E

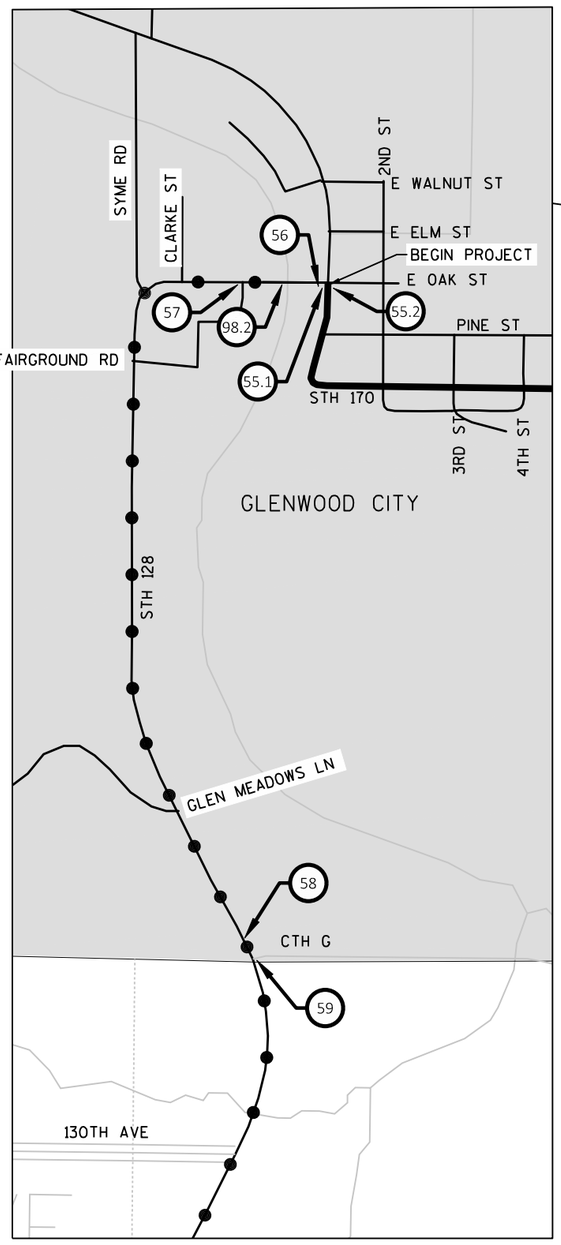
2

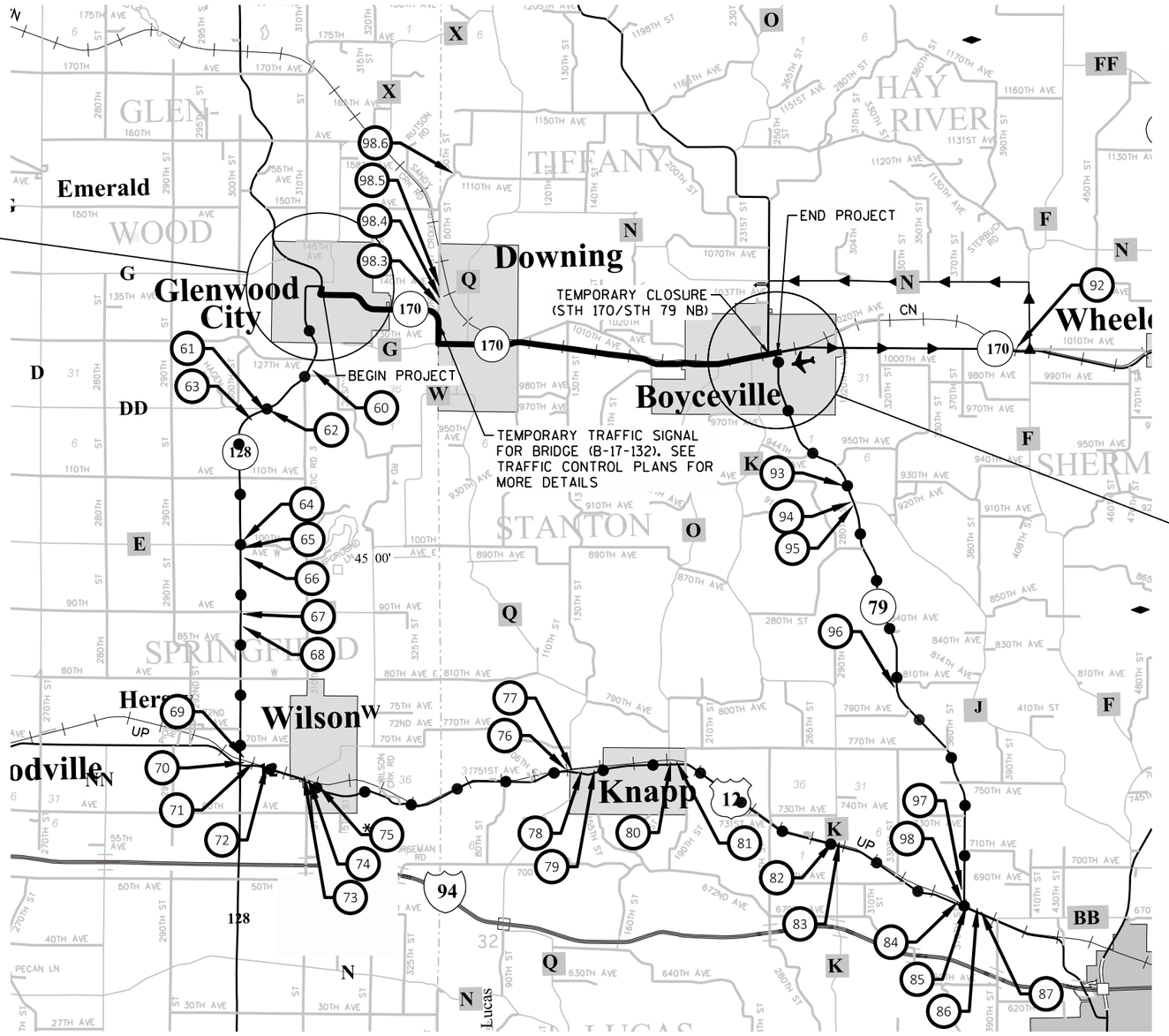
DETOUR PLAN LEGEND

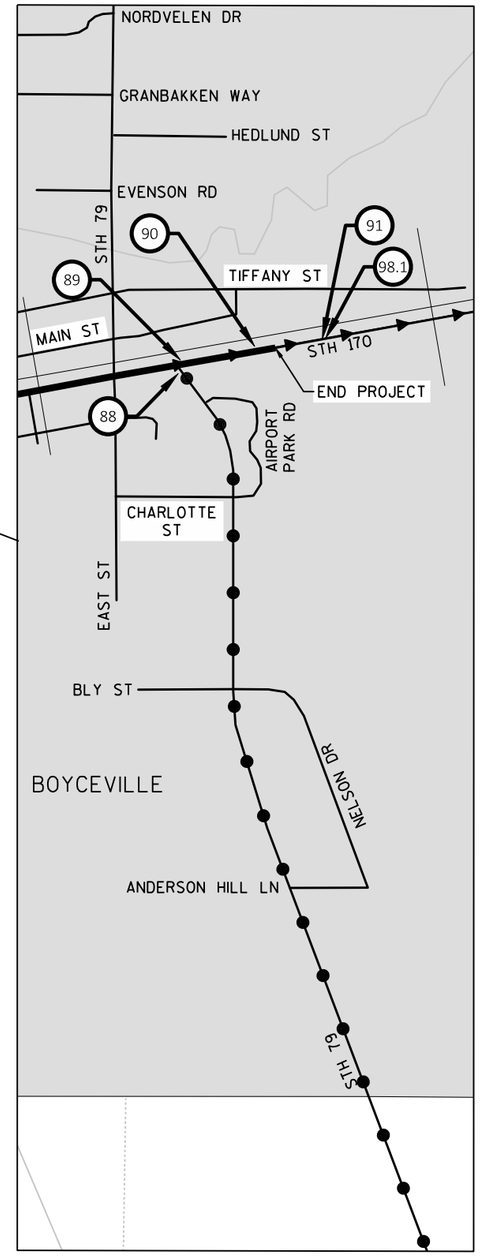
- STH 170 DETOUR ROUTE
- STH 79 DETOUR ROUTE

N

2







PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	DETOUR PLAN: STH 170/STH 79 N INTERSECTION CLOSURE (STH 170 WESTBOUND DETOUR)	SHEET 142	E

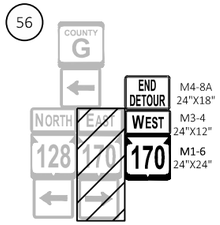
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - STH 170 WB - numbers

PLOT DATE : 7/5/2020 2:16 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:2 MILES

WISDOT/CADDS SHEET 44

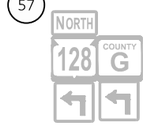
2

56



M4-8A
24"X18"
M3-4
24"X12"
M1-6
24"X24"

57



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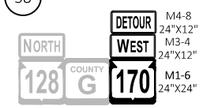
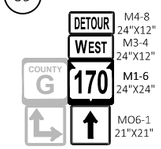


M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"

59

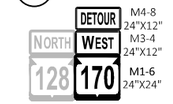


M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"
MO6-1
21"X21"

60

61

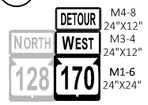
62



M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"

63

64

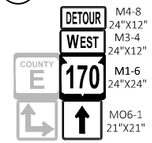


M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"

65

66

67



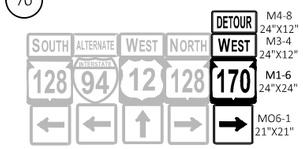
M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"
MO6-1
21"X21"

68

69

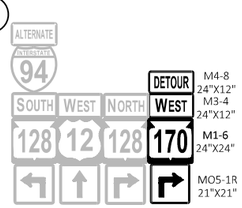
M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"

70



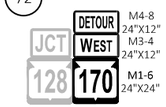
M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"
MO6-1
21"X21"

71



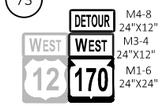
M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"
MO5-1R
21"X21"

72



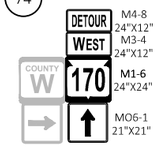
M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"

73



M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"

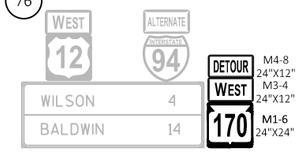
74



M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"
MO6-1
21"X21"

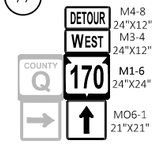
75

76



M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"

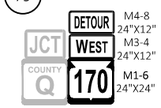
77



M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"
MO6-1
21"X21"

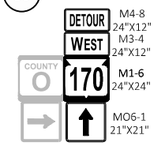
78

79



M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"

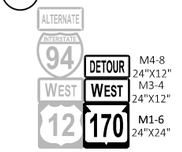
80



M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"
MO6-1
21"X21"

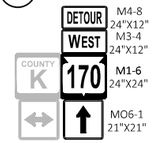
81

82



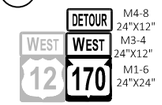
M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"

83



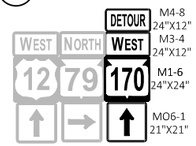
M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"
MO6-1
21"X21"

84



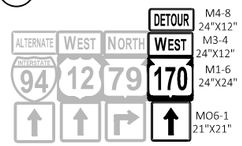
M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"

85



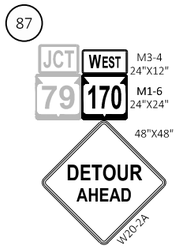
M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"
MO6-1
21"X21"

86



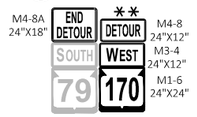
M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"
MO6-1
21"X21"

87



M3-4
24"X12"
M1-6
24"X24"
48"X48"

88



M4-8A
24"X18"
M4-8
24"X12"
M3-4
24"X12"
M1-6
24"X24"

COVER EXISTING SIGNS

** SIGN APPEARS IN BOTH STH 170 AND STH 79 DETOUR PLANS

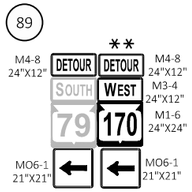
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	DETOUR PLAN: STH 170/STH 79 N INTERSECTION CLOSURE (STH 170 WESTBOUND DETOUR)	SHEET 143	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - STH 170 WB - legend 1

PLOT DATE : 7/5/2020 2:16 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:2 MILES

WISDOT/CADDS SHEET 44

89

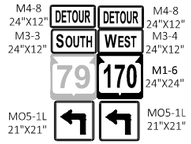


90

COVER EXISTING ARROW WITH "LEFT ARROW" TYPE A WITH ORANGE BACKGROUND.

91

COVER EXISTING JCT



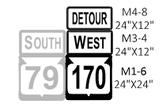
92

R11-3
60"X30"

93

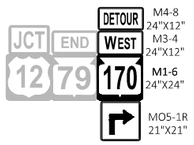
94

95



96

97



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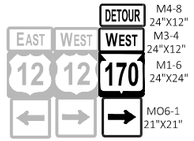

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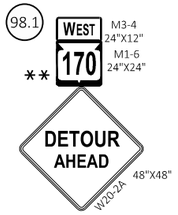


98.2

98.3

98.4

98.5

98.6

R11-3
60"X30"

PLACE ON TYPE III BARRICADE AT THE INTERSECTION OF 50TH ST AND 111OTH AVE

COVER EXISTING SIGNS

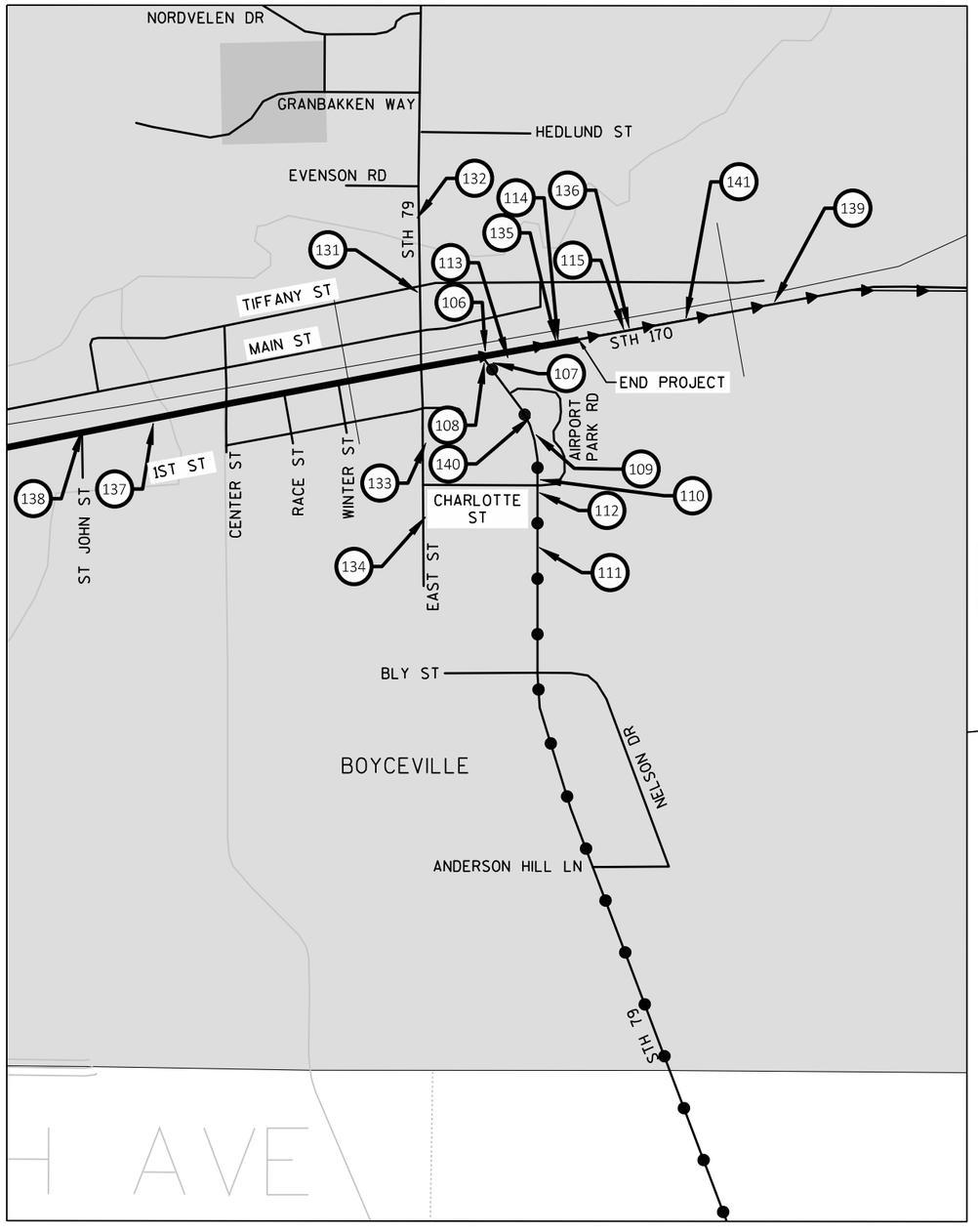
** SIGN APPEARS IN BOTH STH 170 AND STH 79 DETOUR PLANS

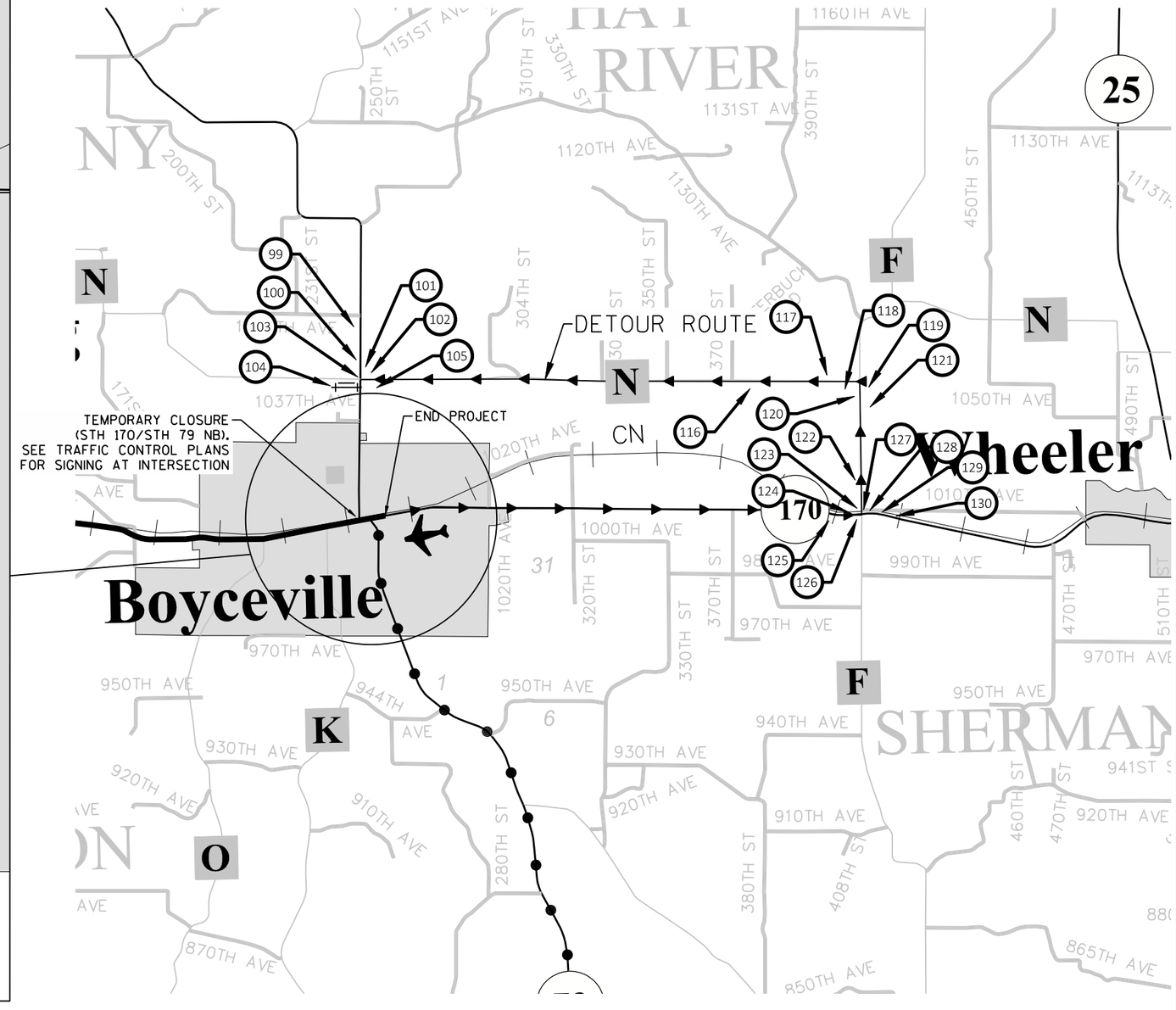
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	DETOUR PLAN: STH 170/STH 79 N INTERSECTION CLOSURE (STH 170 WESTBOUND DETOUR)	SHEET 144	E

2

DETOUR PLAN LEGEND

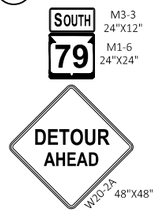
- STH 170 DETOUR ROUTE
- STH 79 DETOUR ROUTE





PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	DETOUR PLAN: STH 170/STH 79 N INTERSECTION CLOSURE (STH 79)	SHEET 145	E

99



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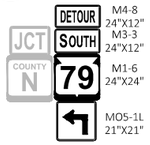
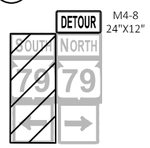


101

102



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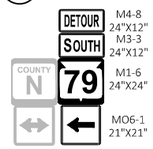
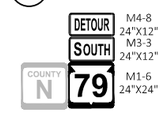


104

105



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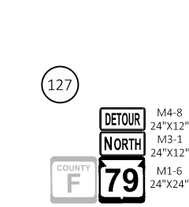
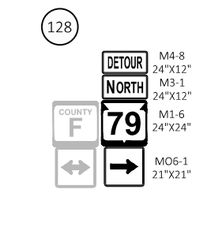
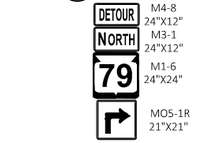


107

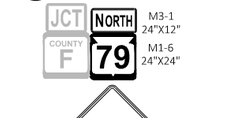


COVER
EXISTING
ARROW

108

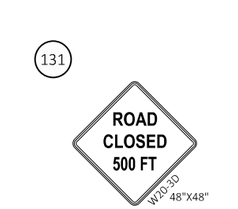


109



COVER EXISTING ARROW WITH
"RIGHT ARROW" TYPE A WITH
ORANGE BACKGROUND.

110



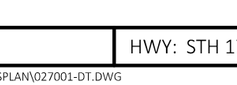
PLACE SIGN OVER
EXISTING ARROW

**111

112

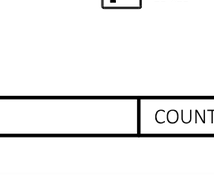
113

114



COVER EXISTING ARROW WITH
"LEFT ARROW" TYPE A WITH
ORANGE BACKGROUND.

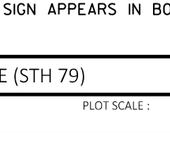
115



116

117

118



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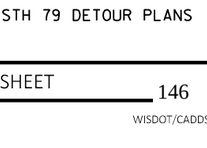

120

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131

COVER EXISTING SIGNS

** SIGN APPEARS IN BOTH STH 170 AND STH 79 DETOUR PLANS

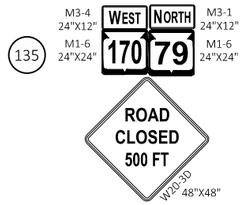
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	DETOUR PLAN: STH 170/STH 79 N INTERSECTION CLOSURE (STH 79)	SHEET 146	E

132

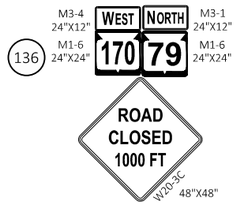
133

134

135



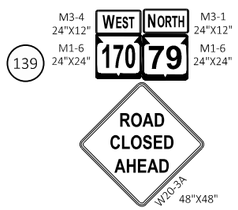
136



137

138

139



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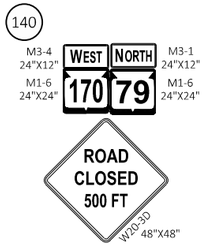
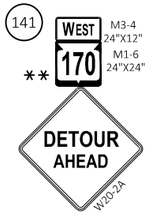


141



COVER EXISTING SIGNS

** SIGN APPEARS IN BOTH STH 170 AND STH 79 DETOUR PLANS

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX & DUNN	DETOUR PLAN: STH 170/STH 79 N INTERSECTION CLOSURE (STH 79)	SHEET 147	E

8630-03-82

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	7.000	7.000
0004	201.0205	Grubbing	STA	7.000	7.000
0006	203.0100	Removing Small Pipe Culverts	EACH	10.000	10.000
0008	204.0100	Removing Concrete Pavement	SY	6.000	6.000
0012	204.0110	Removing Asphaltic Surface	SY	120.000	120.000
0014	204.0115	Removing Asphaltic Surface Butt Joints	SY	940.000	940.000
0016	204.0120	Removing Asphaltic Surface Milling	SY	128,300.000	128,300.000
0018	204.0150	Removing Curb & Gutter	LF	2,120.000	2,120.000
0020	204.0155	Removing Concrete Sidewalk	SY	990.000	990.000
0022	204.0165	Removing Guardrail	LF	2,010.000	2,010.000
0024	204.0170	Removing Fence	LF	28.000	28.000
0030	205.0100	Excavation Common	CY	4,280.000	4,280.000
0032	208.0100	Borrow	CY	1,640.000	1,640.000
0036	211.0100	Prepare Foundation for Asphaltic Paving (project) 001. 8630-03-82	LS	1.000	1.000
0046	213.0100	Finishing Roadway (project) 001. 8630-03-82	EACH	1.000	1.000
0052	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,280.000	1,280.000
0054	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	5,740.000	5,740.000
0056	305.0500	Shaping Shoulders	STA	578.000	578.000
0060	416.0160	Concrete Driveway 6-Inch	SY	33.000	33.000
0062	455.0605	Tack Coat	GAL	20,050.000	20,050.000
0066	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0068	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	3.000	3.000
0070	460.2000	Incentive Density HMA Pavement	DOL	9,890.000	9,890.000
0072	460.2005	Incentive Density PWL HMA Pavement	DOL	11,310.000	11,310.000
0074	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	79,700.000	79,700.000
0076	460.2010	Incentive Air Voids HMA Pavement	DOL	15,320.000	15,320.000
0078	460.6644	HMA Pavement 4 MT 58-34 V	TON	15,320.000	15,320.000
0080	460.6645	HMA Pavement 5 MT 58-34 V	TON	11,440.000	11,440.000
0082	465.0105	Asphaltic Surface	TON	540.000	540.000
0084	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	40.000	40.000
0086	465.0310	Asphaltic Curb	LF	61.000	61.000
0088	465.0315	Asphaltic Flumes	SY	30.000	30.000
0090	502.3200	Protective Surface Treatment	SY	394.000	394.000
0092	504.0900	Concrete Masonry Endwalls	CY	10.000	10.000
0094	509.0301	Preparation Decks Type 1	SY	1.000	1.000
0096	509.0302	Preparation Decks Type 2	SY	1.000	1.000
0098	509.0500	Cleaning Decks	SY	394.000	394.000
0100	509.1500	Concrete Surface Repair	SF	15.000	15.000
0102	509.2000	Full-Depth Deck Repair	SY	1.000	1.000

8630-03-82

Line	Item	Item Description	Unit	Total	Qty
0104	509.2500	Concrete Masonry Overlay Decks	CY	22.000	22.000
0130	520.8000	Concrete Collars for Pipe	EACH	4.000	4.000
0134	520.9700.S	Culvert Pipe Liners (size) 01. 30-INCH	LF	134.000	134.000
0136	520.9750.S	Cleaning Culvert Pipes for Liner Verification	EACH	2.000	2.000
0138	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	1.000	1.000
0140	521.1030	Apron Endwalls for Culvert Pipe Steel 30-Inch	EACH	3.000	3.000
0142	521.1048	Apron Endwalls for Culvert Pipe Steel 48-Inch	EACH	2.000	2.000
0144	521.1271	Apron Endwalls for Pipe Arch Steel 71x47-Inch	EACH	2.000	2.000
0146	521.3112	Culvert Pipe Corrugated Steel 12-Inch	LF	38.000	38.000
0150	521.3130	Culvert Pipe Corrugated Steel 30-Inch	LF	110.000	110.000
0152	521.3148	Culvert Pipe Corrugated Steel 48-Inch	LF	64.000	64.000
0154	521.3771	Pipe Arch Corrugated Steel 71x47-Inch	LF	44.000	44.000
0158	522.0530	Culvert Pipe Reinforced Concrete Class V 30-Inch	LF	116.000	116.000
0160	522.0536	Culvert Pipe Reinforced Concrete Class V 36-Inch	LF	46.000	46.000
0166	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	2.000	2.000
0168	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	2,720.000	2,720.000
0170	601.0600	Concrete Curb Pedestrian	LF	180.000	180.000
0174	602.0410	Concrete Sidewalk 5-Inch	SF	9,760.000	9,760.000
0176	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	680.000	680.000
0178	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	20.000	20.000
0180	603.8000	Concrete Barrier Temporary Precast Delivered	LF	900.000	900.000
0182	603.8125	Concrete Barrier Temporary Precast Installed	LF	1,200.000	1,200.000
0184	603.8500	Anchoring Concrete Barrier Temporary Precast	LF	1,000.000	1,000.000
0186	603.8505	Anchoring Concrete Barrier Temporary Precast on Bridge Decks	LF	200.000	200.000
0188	606.0200	Riprap Medium	CY	9.000	9.000
0190	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	16.000	16.000
0192	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	20.000	20.000
0194	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	48.000	48.000
0198	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0200	611.0639	Inlet Covers Type H-S	EACH	2.000	2.000
0202	611.2006	Manholes 6-FT Diameter	EACH	1.000	1.000
0204	611.3230	Inlets 2x3-FT	EACH	2.000	2.000
0206	611.8115	Adjusting Inlet Covers	EACH	18.000	18.000
0208	614.2300	MGS Guardrail 3	LF	1,493.750	1,493.750
0210	614.2350	MGS Guardrail Short Radius	LF	118.750	118.750
0212	614.2500	MGS Thrie Beam Transition	LF	472.800	472.800

8630-03-82

Line	Item	Item Description	Unit	Total	Qty
0214	614.2610	MGS Guardrail Terminal EAT	EACH	14.000	14.000
0216	614.2630	MGS Guardrail Short Radius Terminal	EACH	4.000	4.000
0222	619.1000	Mobilization	EACH	0.500	0.500
0224	621.0100	Landmark Reference Monuments	EACH	3.000	3.000
0226	624.0100	Water	MGAL	110.000	110.000
0228	625.0500	Salvaged Topsoil	SY	11,000.000	11,000.000
0232	628.1104	Erosion Bales	EACH	650.000	650.000
0234	628.1504	Silt Fence	LF	3,700.000	3,700.000
0236	628.1520	Silt Fence Maintenance	LF	7,400.000	7,400.000
0240	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0242	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0246	628.2006	Erosion Mat Urban Class I Type A	SY	11,000.000	11,000.000
0250	628.7015	Inlet Protection Type C	EACH	63.000	63.000
0252	628.7504	Temporary Ditch Checks	LF	350.000	350.000
0254	628.7555	Culvert Pipe Checks	EACH	32.000	32.000
0256	629.0210	Fertilizer Type B	CWT	7.000	7.000
0260	630.0140	Seeding Mixture No. 40	LB	200.000	200.000
0264	630.0500	Seed Water	MGAL	590.000	590.000
0266	631.0300	Sod Water	MGAL	70.000	70.000
0268	631.1000	Sod Lawn	SY	1,370.000	1,370.000
0270	633.5200	Markers Culvert End	EACH	19.000	19.000
0272	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	5.000	5.000
0274	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	9.000	9.000
0276	637.2210	Signs Type II Reflective H	SF	49.250	49.250
0278	637.2230	Signs Type II Reflective F	SF	116.750	116.750
0282	638.2602	Removing Signs Type II	EACH	3.000	3.000
0286	642.5001	Field Office Type B	EACH	0.500	0.500
0288	643.0300	Traffic Control Drums	DAY	3,000.000	3,000.000
0290	643.0410	Traffic Control Barricades Type II	DAY	600.000	600.000
0292	643.0420	Traffic Control Barricades Type III	DAY	3,500.000	3,500.000
0294	643.0705	Traffic Control Warning Lights Type A	DAY	5,600.000	5,600.000
0296	643.0715	Traffic Control Warning Lights Type C	DAY	1,000.000	1,000.000
0298	643.0900	Traffic Control Signs	DAY	64,300.000	64,300.000
0300	643.0910	Traffic Control Covering Signs Type I	EACH	3.000	3.000
0302	643.0920	Traffic Control Covering Signs Type II	EACH	13.000	13.000
0304	643.5000	Traffic Control	EACH	0.500	0.500
0306	644.1420	Temporary Pedestrian Surface Plywood	SF	2,200.000	2,200.000
0310	644.1601	Temporary Pedestrian Curb Ramp	DAY	210.000	210.000
0312	644.1810	Temporary Pedestrian Barricade	LF	1,000.000	1,000.000
0314	645.0120	Geotextile Type HR	SY	40.000	40.000

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Line	Item	Item Description	Unit	Total	Qty
0316	646.1020	Marking Line Epoxy 4-Inch	LF	2,840.000	2,840.000
0318	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	62,600.000	62,600.000
0320	646.3020	Marking Line Epoxy 8-Inch	LF	490.000	490.000
0322	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	48,900.000	48,900.000
0324	646.5020	Marking Arrow Epoxy	EACH	3.000	3.000
0328	646.6020	Marking Stop Line Epoxy 12-Inch	LF	360.000	360.000
0330	646.7020	Marking Diagonal Epoxy 6-Inch	LF	250.000	250.000
0332	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	1,240.000	1,240.000
0334	646.8120	Marking Curb Epoxy	LF	130.000	130.000
0336	646.8220	Marking Island Nose Epoxy	EACH	2.000	2.000
0342	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	7,100.000	7,100.000
0344	649.0850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	24.000	24.000
0346	650.4000	Construction Staking Storm Sewer	EACH	4.000	4.000
0348	650.5000	Construction Staking Base	LF	3,800.000	3,800.000
0350	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	2,700.000	2,700.000
0352	650.6000	Construction Staking Pipe Culverts	EACH	11.000	11.000
0354	650.8000	Construction Staking Resurfacing Reference	LF	39,850.000	39,850.000
0356	650.8500	Construction Staking Electrical Installations (project) 01. 8630-03-82	LS	1.000	1.000
0358	650.9000	Construction Staking Curb Ramps	EACH	64.000	64.000
0360	650.9910	Construction Staking Supplemental Control (project) 001. 8630-03-82	LS	1.000	1.000
0366	650.9920	Construction Staking Slope Stakes	LF	3,800.000	3,800.000
0368	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,536.000	1,536.000
0370	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	966.000	966.000
0372	652.0615	Conduit Special 3-Inch	LF	400.000	400.000
0374	652.0700.S	Install Conduit into Existing Item	EACH	1.000	1.000
0376	652.0800	Conduit Loop Detector	LF	930.000	930.000
0378	652.0900	Loop Detector Slots	LF	88.000	88.000
0380	653.0154	Pull Boxes Non-Conductive 24x36-Inch	EACH	7.000	7.000
0382	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	8.000	8.000
0384	654.0101	Concrete Bases Type 1	EACH	2.000	2.000
0386	654.0102	Concrete Bases Type 2	EACH	6.000	6.000
0388	654.0105	Concrete Bases Type 5	EACH	5.000	5.000
0390	654.0113	Concrete Bases Type 13	EACH	1.000	1.000
0392	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000	1.000
0394	655.0230	Cable Traffic Signal 5-14 AWG	LF	612.000	612.000
0396	655.0240	Cable Traffic Signal 7-14 AWG	LF	587.000	587.000
0398	655.0260	Cable Traffic Signal 12-14 AWG	LF	692.000	692.000
0400	655.0305	Cable Type UF 2-12 AWG Grounded	LF	1,384.000	1,384.000

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Line	Item	Item Description	Unit	Total	Qty
0402	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	775.000	775.000
0404	655.0610	Electrical Wire Lighting 12 AWG	LF	936.000	936.000
0406	655.0700	Loop Detector Lead In Cable	LF	1,970.000	1,970.000
0408	655.0800	Loop Detector Wire	LF	3,037.000	3,037.000
0410	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. STH 170 & STH 79	LS	1.000	1.000
0412	657.0100	Pedestal Bases	EACH	2.000	2.000
0414	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	11.000	11.000
0416	657.0305	Poles Type 2	EACH	3.000	3.000
0418	657.0310	Poles Type 3	EACH	3.000	3.000
0420	657.0322	Poles Type 5-Aluminum	EACH	5.000	5.000
0422	657.0360	Poles Type 13	EACH	1.000	1.000
0424	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	1.000	1.000
0426	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	1.000	1.000
0428	657.0545	Monotube Arms 45-FT	EACH	1.000	1.000
0430	657.0585	Trombone Arms 15-FT	EACH	2.000	2.000
0432	657.0590	Trombone Arms 20-FT	EACH	1.000	1.000
0434	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	2.000	2.000
0436	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	1.000	1.000
0438	657.0614	Luminaire Arms Single Member 4-Inch Clamp 8-FT	EACH	1.000	1.000
0440	657.0615	Luminaire Arms Single Member 4 1/2-Inch Clamp 8-FT	EACH	4.000	4.000
0442	657.0815	Luminaire Arms Steel 15-FT	EACH	1.000	1.000
0444	658.0173	Traffic Signal Face 3S 12-Inch	EACH	10.000	10.000
0446	658.0175	Traffic Signal Face 5S 12-Inch	EACH	2.000	2.000
0448	658.0416	Pedestrian Signal Face 16-Inch	EACH	2.000	2.000
0450	658.0500	Pedestrian Push Buttons	EACH	2.000	2.000
0452	658.5069	Signal Mounting Hardware (location) 01. STH 170 & STH 79	LS	1.000	1.000
0454	659.1115	Luminaires Utility LED A	EACH	6.000	6.000
0456	659.1125	Luminaires Utility LED C	EACH	4.000	4.000
0458	661.0100	Temporary Traffic Signals for Bridges (structure) 001. B-17-132	LS	1.000	1.000
0460	690.0150	Sawing Asphalt	LF	860.000	860.000
0462	690.0250	Sawing Concrete	LF	790.000	790.000
0466	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,000.000	1,000.000
0468	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	630.000	630.000
0470	SPV.0060	Special 001. Pull Boxes Non-Conductive 24X48-Inch	EACH	2.000	2.000
0472	SPV.0060	Special 002. LED Blank Out Sign	EACH	3.000	3.000
0474	SPV.0060	Special 003. Abandoning Cattle Pass	EACH	1.000	1.000
0480	SPV.0090	Special 001. Concrete Curb And Gutter Repair	LF	750.000	750.000

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0482	SPV.0105	Special 001. Material Transfer Vehicle Project 8630-03-82	LS	1.000	1.000

CLEARING & GRUBBING

	LOCATION	STATION - STATION	OFFSET	201.0105 CLEARING (STA)	201.0205 GRUBBING (STA)
8630-03-82 CATEGORY 0010					
ST CROIX COUNTY					
	STH 170	186+00 - 190+00	LT	4	4
	ST CROIX COUNTY SUBTOTAL			4	4
DUNN COUNTY					
	STH 170	2285+00'D' - 2288+00'D'	RT	3	3
	DUNN COUNTY SUBTOTAL			3	3
	PROJECT 8630-03-82 TOTAL			**7**	**7**

REMOVING FENCE

	LOCATION	STATION - STATION	OFFSET	204.0170 REMOVING FENCE (LF)
8630-03-82 CATEGORY 0100				
DUNN COUNTY				
	STH 170	2384+16'D' - 2384+43'D'	LT	28
	DUNN COUNTY SUBTOTAL			28
	PROJECT 8630-03-82 TOTAL			**28**

REMOVING PAVEMENT

	LOCATION	STATION	OFFSET	204.0100 REMOVING PAVEMENT (SY)	REMARKS
8630-03-82 CATEGORY 0010					
DUNN COUNTY					
	STH 170	2388+61'D'	22.5' RT	6	REMOVE EXISTING CONCRETE DRIVEWAY
	DUNN COUNTY SUBTOTAL			6	
	PROJECT 8630-03-82 TOTAL			**6**	

REMOVING GUARDRAIL

	LOCATION	STATION - STATION	OFFSET	204.0165 REMOVING GUARDRAIL (LF)
8630-03-82 CATEGORY 0100				
ST CROIX COUNTY				
	STH 170	147+56 - 150+14	LT	258
	STH 170	146+50 - 147+96	RT	179
	STH 170	148+22 - 151+53	RT	401
	ST CROIX COUNTY SUBTOTAL			838
DUNN COUNTY				
	STH 170	2108+96'D '- 2109+78'D'	LT	84
	STH 170	2108+95'D' - 2109+81'D'	RT	85
	STH 170	2110+94'D' - 2111+78'D'	LT	86
	STH 170	2110+94'D' - 2111+78'D'	RT	86
	STH 170	2151+90'D' - 2152+74'D'	LT	85
	STH 170	2151+90'D' - 2152+74'D'	RT	85
	STH 170	2154+07'D' - 2154+90'D'	LT	84
	STH 170	2154+08'D' - 2154+90'D'	RT	82
	STH 170	2371+69'D' - 2373+22'D'	LT	153
	STH 170	2391+98'D' - 2393+04'D'	RT	140
	STH 170	2392+38'D' - 2394+39'D'	LT	202
	DUNN COUNTY SUBTOTAL			1,172
	PROJECT 8630-03-82 TOTAL			**2,010**

REMOVING SMALL PIPE CULVERTS

	ROADWAY	STATION	OFFSET	203.0100 REMOVING SMALL PIPE CULVERTS (EACH)	LENGTH (LF)	SIZE (INCH)	PIPE MATERIAL	REMARKS
8630-03-82 CATEGORY 0010								
ST CROIX COUNTY								
	STH 170	170+26	-	2	-	-	CONCRETE	REMOVE ENDWALLS AT EXISTING CATTLE PASS
	STH 170	176+89	-	1	58	48	CORRUGATED STEEL	-
	ST CROIX COUNTY SUBTOTAL			3				
DUNN COUNTY								
	STH 170	2107+73'D'	-	1	89	30	CORRUGATED STEEL	-
	STH 170	2181+12'D'	LT	1	-	30	CORRUGATED STEEL	REMOVE ENDWALL ONLY
	STH 170	2212+42'D'	-	1	63	36	CORRUGATED STEEL	-
	STH 170	2234+30'D'	-	2	60	30	CORRUGATED STEEL	-
	STH 170	2369+79'D'	-	1	-	24	CORRUGATED STEEL	REMOVE ENDWALL ONLY
	STH 170	2384+31'D'	LT	1	47	15	CORRUGATED STEEL	-
	DUNN COUNTY SUBTOTAL			7				
	PROJECT 8630-03-82 TOTAL			**10**				

REMOVING CONCRETE SIDEWALK

	LOCATION	STATION - STATION	OFFSET	204.0155 REMOVING CONCRETE SIDEWALK (SY)
8630-03-82 CATEGORY 0100				
ST CROIX COUNTY				
	OAK ST - NE QUADRANT	-	-	39
	OAK ST - NW QUADRANT	-	-	26
	OAK ST - SE QUADRANT	-	-	41
	OAK ST - SW QUADRANT	-	-	41
	PINE ST - NE QUADRANT			23
	PINE ST - SE QUADRANT	-	-	23
	STH 170	106+44 - 106+83	26.2' LT	9
	2ND ST - NE QUADRANT	-	-	6
	2ND ST - NW QUADRANT	-	-	25
	2ND ST - SE QUADRANT	-	-	14
	2ND ST - SW QUADRANT	-	-	21
	3RD ST - NE QUADRANT	-	-	19
	3RD ST - NW QUADRANT	-	-	13
	3RD ST - SE QUADRANT	-	-	27
	3RD ST - SW QUADRANT	-	-	20
	4TH ST - NE QUADRANT	-	-	11
	4TH ST - NW QUADRANT	-	-	31
	4TH ST - SE QUADRANT	-	-	14
	4TH ST - SW QUADRANT	-	-	5
	5TH ST - NE QUADRANT	-	-	24
	5TH ST - NW QUADRANT	-	-	22
	5TH ST - SE QUADRANT	-	-	6
	6TH ST - NE QUADRANT	-	-	12
	6TH ST - NW QUADRANT	-	-	16
	7TH ST - SE QUADRANT	-	-	19
	7TH ST - ISLAND	-	-	30
	7TH ST - SW QUADRANT	-	-	15
	ST CROIX COUNTY SUBTOTAL			552
DUNN COUNTY				
	SUMMIT ST - NE QUADRANT	-	-	5
	SUMMIT ST - SE QUADRANT	-	-	9
	FOREST ST - NE QUADRANT	-	-	14
	FOREST ST - NW QUADRANT	-	-	12
	FOREST ST - SE QUADRANT	-	-	15
	FOREST ST - SW QUADRANT	-	-	10
	WILSON ST - NE QUADRANT	-	-	12
	WILSON ST - NW QUADRANT	-	-	9
	WILSON ST - SE QUADRANT	-	-	34
	WILSON ST - SW QUADRANT	-	-	37
	PINE ST - SE QUADRANT	-	-	12
	PINE ST - SW QUADRANT	-	-	15
	CHESTNUT ST - SE QUADRANT	-	-	10
	CHESTNUT ST - SW QUADRANT	-	-	10
	ASH ST - SW QUADRANT	-	-	9
	ST JOHNS ST - SE QUADRANT	-	-	8
	CENTER ST - NE QUADRANT	-	-	19
	CENTER ST - SE QUADRANT	-	-	34
	CENTER ST - SW QUADRANT	-	-	11
	RACE ST - SE QUADRANT	-	-	8
	RACE ST - SW QUADRANT	-	-	8
	WINTER ST - SE QUADRANT	-	-	19
	WINTER ST - SW QUADRANT	-	-	20
	EAST ST - SW QUADRANT	-	-	78
	STH 79 NB - NW QUADRANT	-	-	19
	DUNN COUNTY SUBTOTAL			438
	PROJECT 8630-03-82 TOTAL			**990**

REMOVING CURB AND GUTTER

	LOCATION	STATION - STATION	OFFSET	204.0150 REMOVING CURB & GUTTER (LF)
8630-03-82 CATEGORY 0100				
ST CROIX COUNTY				
	OAK ST - NE QUADRANT	-	-	44
	OAK ST - NW QUADRANT	-	-	39
	OAK ST - SE QUADRANT	-	-	46
	OAK ST - SW QUADRANT	-	-	76
	STH 170	101+68 - 103+27	24.5' RT	153
	PINE ST - NE QUADRANT	-	-	38
	PINE ST - SE QUADRANT	-	-	69
	STH 170	106+44 - 106+83	26.1' LT	17
	2ND ST - NW QUADRANT	-	-	52
	2ND ST - SW QUADRANT	-	-	26
	2ND ST - SE QUADRANT	-	-	53
	3RD ST - NE QUADRANT	-	-	28
	3RD ST - NW QUADRANT	-	-	28
	3RD ST - SE QUADRANT	-	-	33
	3RD ST - SW QUADRANT	-	-	24
	4TH ST - NE QUADRANT	-	-	36
	4TH ST - NW QUADRANT	-	-	22
	4TH ST - SE QUADRANT	-	-	26
	5TH ST - NE QUADRANT	-	-	44
	5TH ST - NW QUADRANT	-	-	24
	5TH ST - SE QUADRANT	-	-	19
	6TH ST - NE QUADRANT	-	-	23
	6TH ST - NW QUADRANT	-	-	21
	STH 170	131+14 - 131+25	18.3' LT	11
	7TH ST - SW QUADRANT	-	-	50
	7TH ST - ISLAND	-	-	37
	7TH ST - SE QUADRANT	-	-	23
	ST CROIX COUNTY SUBTOTAL			1,062
DUNN COUNTY				
	1ST ST - SE QUADRANT	-	-	7
	SUMMIT ST - NE QUADRANT	-	-	19
	SUMMIT ST - SE QUADRANT	-	-	26
	FOREST ST - NE QUADRANT	-	-	16
	FOREST ST - NW QUADRANT	-	-	16
	FOREST ST - SE QUADRANT	-	-	16
	FOREST ST - SW QUADRANT	-	-	17
	WILSON ST - NE QUADRANT	-	-	16
	WILSON ST - NW QUADRANT	-	-	16
	WILSON ST - SE QUADRANT	-	-	72
	WILSON ST - SW QUADRANT	-	-	48
	PINE ST - SE QUADRANT	-	-	16
	PINE ST - SW QUADRANT	-	-	17
	CHESTNUT ST - SE QUADRANT	-	-	37
	CHESTNUT ST - SW QUADRANT	-	-	22
	ASH ST - SW QUADRANT	-	-	26
	CENTER ST - SE QUADRANT	-	-	43
	CENTER ST - SW QUADRANT	-	-	20
	RACE ST - SE QUADRANT	-	-	27
	RACE ST - SW QUADRANT	-	-	26
	WINTER ST - SE QUADRANT	-	-	27
	WINTER ST - SW QUADRANT	-	-	26
	EAST ST - SE QUADRANT	-	-	210
	EAST ST - SW QUADRANT	-	-	213
	STH 79 NB - ISLAND	-	-	36
	STH 170	2391+86 - 2392+28 'D'	25.2' RT	43
	DUNN COUNTY SUBTOTAL			1,058
	PROJECT 8630-03-82 TOTAL			**2,120**

REMOVING ASPHALTIC SURFACE

	LOCATION	STATION - STATION	204.0110 REMOVING ASPHALTIC SURFACE (SY)	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS (SY)	204.0120 REMOVING ASPHALTIC SURFACE MILLING (SY)
8630-03-82					
CATEGORY 0010					
ST CROIX COUNTY					
	STH 170	99+50 - 123+00	-	-	8,098
	STH 170	123+00 - 145+00	-	67	7,503
	STH 170	145+00 - 168+00	-	167	7,711
	STH 170	168+00 - 192+00	-	-	6,099
	BIKE PATH	--	-	-	-
	ST CROIX COUNTY SUBTOTAL		0	233	29,411
DUNN COUNTY					
	STH 170	2092+00'D' - 2172+00'D'	-	306	24,323
	STH 170	2172+00'D' - 2252+00'D'	-	133	22,556
	STH 170	2252+00'D' - 2332+00'D'	-	133	22,685
	STH 170	2332+00'D' - 2410+00'D'	120	133	21,615
	DUNN COUNTY SUBTOTAL		120	706	91,179
	CATEGORY 0010 SUBTOTAL		120	940	120,590

REMOVING ASPHALTIC SURFACE

	LOCATION	STATION - STATION	204.0110 REMOVING ASPHALTIC SURFACE (SY)	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS (SY)	204.0120 REMOVING ASPHALTIC SURFACE MILLING (SY)
8630-03-82					
CATEGORY 0040					
GLENWOOD CITY					
	STH 170	99+50 - 123+00	-	-	2,260
	STH 170	123+00 - 145+00	-	-	1,141
	STH 170	145+00 - 168+00	-	-	-
	STH 170	168+00 - 192+00	-	-	-
	BIKE PATH	--	-	-	-
	GLENWOOD CITY SUBTOTAL		0	0	3,400
	CATEGORY 0040 SUBTOTAL		0	0	3,400

REMOVING ASPHALTIC SURFACE

	LOCATION	STATION - STATION	204.0110 REMOVING ASPHALTIC SURFACE (SY)	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS (SY)	204.0120 REMOVING ASPHALTIC SURFACE MILLING (SY)
8630-03-82					
CATEGORY 0050					
DOWNING					
	STH 170	2092+00'D' - 2172+00'D'	-	-	3,360
	STH 170	2172+00'D' - 2252+00'D'	-	-	-
	STH 170	2252+00'D' - 2332+00'D'	-	-	-
	STH 170	2332+00'D' - 2410+00'D'	-	-	-
	DOWNING SUBTOTAL		-	-	3,360
	CATEGORY 0050		0	0	3,360

REMOVING ASPHALTIC SURFACE CONTINUED

	LOCATION	STATION - STATION	204.0110 REMOVING ASPHALTIC SURFACE (SY)	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS (SY)	204.0120 REMOVING ASPHALTIC SURFACE MILLING (SY)
8630-03-82					
CATEGORY 0060					
BOYCEVILLE					
	STH 170	2092+00'D' - 2172+00'D'	-	-	-
	STH 170	2172+00'D' - 2252+00'D'	-	-	-
	STH 170	2252+00'D' - 2332+00'D'	-	-	-
	STH 170	2332+00'D' - 2410+00'D'	-	-	950
	BOYCEVILLE SUBTOTAL		-	-	950
	CATEGORY 0060 SUBTOTAL		0	0	950
	PROJECT 8630-03-82 TOTAL		**120**	**940**	**128,300**

SHAPING SHOULDERS

	LOCATION	STATION - STATION	305.0500 SHAPING SHOULDERS (STA.)
8630-03-82			
CATEGORY 0010			
ST CROIX COUNTY			
	STH 170	99+50 - 123+00	-
	STH 170	123+00 - 145+00	13
	STH 170	145+00 - 168+00	33
	STH 170	168+00 - 192+00	48
	ST CROIX COUNTY SUBTOTAL		94
DUNN COUNTY			
	STH 170	2092+00'D' - 2172+00'D'	87
	STH 170	2172+00'D' - 2252+00'D'	157
	STH 170	2252+00'D' - 2332+00'D'	150
	STH 170	2332+00'D' - 2410+00'D'	90
	DUNN COUNTY SUBTOTAL		484
	PROJECT 8630-03-82 TOTAL		**578**

CONCRETE DRIVEWAY

	LOCATION	STATION	OFFSET	416.0160 CONCRETE DRIVEWAY 6-INCH (SY)
8630-03-82				
CATEGORY 0010				
ST CROIX COUNTY				
	STH 170	133+34	LT	27
	ST CROIX COUNTY SUBTOTAL			27
DUNN COUNTY				
	STH 170	2388+61'D'	RT	6
	DUNN COUNTY SUBTOTAL			6
	PROJECT 8630-03-82 TOTAL			**33**

EXCAVATION SUMMARY

8630-03-82 CATEGORY 0010	FROM / TO STATION	DIVISION	LOCATION	205.0100 EXCAVATION COMMON (CY)	SALVAGED/ UNUSABLE PAVEMENT MATERIAL (CY)	AVAILABLE MATERIAL (2)	UNEXPANDED FILL (6)	EXPANDED FILL (3) FACTOR 1.30	MASS ORDINATE +/- (4)	WASTE (5)	208.0100 BORROW (7) (CY)	COMMENT
	ST CROIX COUNTY CURB RAMPS	1-1	STH 170	24	18	6	16	21	-15	0	15	
	131+14 - 135+14	1-2	STH 170	302	98	204	3	4	200	200	0	EXCESS MATERIAL AVAILABLE
	144+62 - 151+21	1-3	STH 170	514	200	314	748	973	-659	0	659	
	STA 176+89 (CULVERT)	1-4	STH 170	146	30	116	71	92	24	24	0	EXCESS MATERIAL AVAILABLE
	DUNN COUNTY CURB RAMPS	1-5	STH 170	10	8	2	5	7	-5	0	5	
	2106+11'D' - 2114+25'D'	1-6	STH 170	743	186	556	927	1,205	-648	0	648	
	2126+94'D' - 2127+40'D'	1-7	STH 170	35	10	25	0	0	25	25	0	EXCESS MATERIAL AVAILABLE
DIV. 1	2150+63'D' - 2234+32'D'	1-8	STH 170	430	150	281	457	594	-314	0	314	
	2212+42'D' (CULVERT)	1-9	STH 170	115	30	85	5	7	79	79	0	EXCESS MATERIAL AVAILABLE
	2234+27'D' (2 CULVERTS)	1-10	STH 170	171	30	141	0	0	141	141	0	EXCESS MATERIAL AVAILABLE
	2370+51'D' - 2374+40'D'	1-11	STH 170	276	121	155	34	44	111	111	0	EXCESS MATERIAL AVAILABLE
	2384+00'D' - 2384+55'D'	1-12	STH 170	70	17	52	0	0	52	52	0	EXCESS MATERIAL AVAILABLE
	2388+48'D' - 2395+95'D'	1-13	STH 170	1,294	550	744	189	245	498	498	0	EXCESS MATERIAL AVAILABLE
	500+67'S' - 501+25'S'	1-14	STH 170	151	49	101	0	0	101	101	0	EXCESS MATERIAL AVAILABLE
			DIV 1 SUBTOTAL	4,280	1,497	2,783	2,455	3,192	-409	1,231	1,640	
			UNDISTRIBUTED									
	8603-03-82 PROJECT TOTALS			**4,280**							**1,640**	

Note 1) Salvaged/Unusable Pavement Material is included in Cut.
Note 2) Available Material = Cut - Salvaged/Unusable Pavement Material
Note 3) Expanded Fill Factor = 1.30
Note 4) The Mass Ordinate + or - Qty calculated for the Division.
Positive quantity indicates an excess of material within the Division.
Negative indicates a shortage of material within the Division.
Mass Ordinate = Available Material - Expanded Fill
Note 5) Waste = Positive Division Mass Ordinate
Note 6) Unexpanded Fill = Unexpanded Fill from individual Earthwork tables
Note 7) It was assumed that any excess material used as Fill between Divisions would be counted as Borrow.

EROSION CONTROL

	LOCATION	STATION - STATION	606.0200 RIPRAP MEDIUM (CY)	624.0100 WATER (MGAL)	628.1104 EROSION BALES (EACH)	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	628.2006 EROSION MAT URBAN CLASS I TYPE A (SY)	628.7015 INLET PROTECTION TYPE C (EACH)	628.7504 TEMPORARY DITCH CHECKS (LF)	628.7555 CULVERT PIPE CHECKS (EACH)	645.0120 GEOTEXTILE TYPE HR (SY)
8630-03-82 CATEGORY 0010												
ST CROIX COUNTY												
	STH 170	99+50 - 123+00	3	2	-	-	-	-	33	-	-	10
	STH 170	123+00 - 145+00	-	4	-	319	638	321	8	15	-	-
	STH 170	145+00 - 168+00	-	14	-	626	1,252	2,206	-	75	1	-
	STH 170	168+00 - 192+00	-	5	-	74	148	122	-	-	6	-
	ST CROIX COUNTY SUBTOTAL		3	25	0	1,019	2,038	2,649	41	90	7	10
DUNN COUNTY												
	STH 170	2092+00'D' - 2172+00'D'	-	35	-	1,391	2,782	4,771	13	140	2	-
	STH 170	2172+00'D' - 2252+00'D'	-	7	-	127	254	140	-	15	7	-
	STH 170	2252+00'D' - 2332+00'D'	-	2	-	-	-	-	-	-	4	-
	STH 170	2332+00'D' - 2410+00'D'	6	41	-	410	820	1,194	9	105	12	30
	DUNN COUNTY SUBTOTAL		6	85	0	1,928	3,856	6,105	22	260	25	30
	UNDISTRIBUTED		-	-	650	753	1,506	2,246	-	-	-	-
	PROJECT 8630-03-82 TOTAL		**9**	**110**	**650**	**3,700**	**7,400**	**11,000**	**63**	**350**	**32**	**40**

BASE AGGREGATE

	LOCATION	STATION - STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)
8630-03-82 CATEGORY 0010				
ST CROIX COUNTY				
	STH 170	99+50 - 123+00	108	-
	STH 170	123+00 - 145+00	48	246
	STH 170	145+00 - 168+00	175	734
	STH 170	168+00 - 192+00	65	263
	ST CROIX COUNTY SUBTOTAL		396	1,243
DUNN COUNTY				
	STH 170	2092+00'D' - 2172+00'D'	331	1,652
	STH 170	2172+00'D' - 2252+00'D'	177	304
	STH 170	2252+00'D' - 2332+00'D'	142	-
	STH 170	2332+00'D' - 2410+00'D'	232	2,501
	DUNN COUNTY SUBTOTAL		882	4,457
	CATEGORY 0010 SUBTOTAL		1,278	5,700

BASE AGGREGATE

	LOCATION	STATION - STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)
8630-03-82 CATEGORY 0040				
GLENWOOD CITY				
	BIKE PATH	-	2	40
	GLENWOOD CITY SUBTOTAL		2	40
	CATEGORY 0040 SUBTOTAL		2	40
	PROJECT 8630-03-82 TOTAL		**1,280**	**5,740**

HMA PAVEMENT ITEMS

	LOCATION	STATION - STATION	455.0605 TACK COAT (GAL)	460.6644 HMA PAVEMENT 4MT 58-34V (TON)	460.6645 HMA PAVEMENT 5MT 58-34V (TON)	465.0105 ASPHALTIC SURFACE (TON)	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES (TON)
8630-03-82 CATEGORY 0010							
ST CROIX COUNTY							
	STH 170	99+50 - 123+00	1,023	805	536	-	-
	STH 170	123+00 - 145+00	1,018	794	576	-	-
	STH 170	145+00 - 168+00	1,246	872	748	-	-
	STH 170	168+00 - 192+00	1,113	805	664	-	-
	ST CROIX COUNTY SUBTOTAL		4,400	3,276	2,524	0	0
DUNN COUNTY							
	STH 170	2092+00'D' - 2172+00'D'	3,851	2,780	2,277	6	-
	STH 170	2172+00'D' - 2252+00'D'	3,846	2,774	2,294	-	-
	STH 170	2252+00'D' - 2332+00'D'	3,836	2,684	2,302	-	-
	STH 170	2332+00'D' - 2410+00'D'	3,562	3,037	2,043	2	40
	DUNN COUNTY SUBTOTAL		15,095	11,275	8,916	8	40
	WEDGING - UNDISTRIBUTED		0	0	0	511	0
	CATEGORY 0010 SUBTOTAL		19,495	14,551	11,440	519	40

HMA PAVEMENT ITEMS

	LOCATION	STATION - STATION	455.0605 TACK COAT (GAL)	460.6644 HMA PAVEMENT 4MT 58-34V (TON)	460.6645 HMA PAVEMENT 5MT 58-34V (TON)	465.0105 ASPHALTIC SURFACE (TON)	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES (TON)
8630-03-82 CATEGORY 0040							
GLENWOOD CITY							
	STH 170	99+50 - 123+00	240	222	-	-	-
	STH 170	123+00 - 145+00	-	112	-	-	-
	STH 170	145+00 - 168+00	-	-	-	-	-
	STH 170	168+00 - 192+00	-	-	-	-	-
	BIKE PATH	---	-	-	-	21	-
	GLENWOOD CITY SUBTOTAL		240	334	0	21	0
	CATEGORY 0040 SUBTOTAL		240	334	0	21	0

HMA PAVEMENT ITEMS CONTINUED

	LOCATION	STATION - STATION	455.0605 TACK COAT (GAL)	460.6644 HMA PAVEMENT 4MT 58-34V (TON)	460.6645 HMA PAVEMENT 5MT 58-34V (TON)	465.0105 ASPHALTIC SURFACE (TON)	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES (TON)
8630-03-82 CATEGORY 0050							
DOWNING							
	STH 170	2092+00'D' - 2172+00'D'	245	340	-	-	-
	STH 170	2172+00'D' - 2252+00'D'	-	-	-	-	-
	STH 170	2252+00'D' - 2332+00'D'	-	-	-	-	-
	STH 170	2332+00'D' - 2410+00'D'	-	-	-	-	-
	DOWNING SUBTOTAL		245	340	0	0	0
	CATEGORY 0050 SUBTOTAL		245	340	0	0	0

HMA PAVEMENT ITEMS

	LOCATION	STATION - STATION	455.0605 TACK COAT (GAL)	460.6644 HMA PAVEMENT 4MT 58-34V (TON)	460.6645 HMA PAVEMENT 5MT 58-34V (TON)	465.0105 ASPHALTIC SURFACE (TON)	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES (TON)
8630-03-82 CATEGORY 0060							
BOYCEVILLE							
	STH 170	2092+00'D' - 2172+00'D'	-	-	-	-	-
	STH 170	2172+00'D' - 2252+00'D'	-	-	-	-	-
	STH 170	2252+00'D' - 2332+00'D'	-	-	-	-	-
	STH 170	2332+00'D' - 2410+00'D'	70	95	-	-	-
	BOYCEVILLE SUBTOTAL		70	95	0	0	0
	CATEGORY 0060 SUBTOTAL		70	95	0	0	0
	PROJECT 8630-03-82 TOTAL		**20,050**	**15,320**	**11,440**	**540**	**40**

PWL MIXTURE USE TABLE

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANES, LT AND RT	99+50 - 192+00	UPPER LAYER	LOWER LAYER OF HMA PAVEMENT 5 MT 58-34V	HMA PAVEMENT 4 MT 58-34V	2418	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES, LT AND RT	99+50 - 192+00	LOWER LAYER	EXISTING MILLED ASPHALT SURFACE	HMA PAVEMENT 5 MT 58-34V	2072	1.5"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
10 FOOT PARKING LANE, RT AND LT	99+50 - 107+40	UPPER LAYER	EXISTING MILLED ASPHALT SURFACE	HMA PAVEMENT 4 MT 58-34V	213	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY HMA PAVEMENT 460.2000
8 FOOT PARKING LANE, LT	107+40- 135+86	UPPER LAYER	EXISTING MILLED ASPHALT SURFACE	HMA PAVEMENT 4 MT 58-34V	284	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY HMA PAVEMENT 460.2000
VARIES 3'-6' SHOULDER PLUS TURN LANES, RT AND LT	135+86 - 192+00	UPPER LAYER	LOWER LAYER OF HMA PAVEMENT 5 MT 58-34V	HMA PAVEMENT 4 MT 58-34V	602	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY HMA PAVEMENT 460.2000
VARIES 3'-6' SHOULDER PLUS TURN LANES, RT AND LT	135+86 - 192+00	LOWER LAYER	EXISTING MILLED ASPHALT SURFACE	HMA PAVEMENT 5 MT 58-34V	452	1.5"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
GLENWOOD CITY CURB EXTENSION AND PARKING LANE	131+14 - 134+28	UPPER LAYER LOWER LAYER	BASE AGGREGATE	HMA PAVEMENT 4 MT 58-34V	63	5.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY HMA PAVEMENT 460.2000
ST. CROIX COUNTY CULVERT REPLACEMENT	176+89	UPPER LAYER LOWER LAYER	BASE AGGREGATE	HMA PAVEMENT 4 MT 58-34V	30	5.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES, LT AND RT	2092+00'D' - 2386+07'D'	UPPER LAYER	LOWER LAYER OF HMA PAVEMENT 5 MT 58-34V	HMA PAVEMENT 4 MT 58-34V	7686	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES, LT AND RT	2092+00'D' - 2386+07'D'	LOWER LAYER	EXISTING MILLED ASPHALT SURFACE	HMA PAVEMENT 5 MT 58-34V	6663	1.5"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
12 FOOT DRIVING LANES LT, 20' DRIVING LANES RT	2386+07'D' - 2388+48'D'	UPPER LAYER	LOWER LAYER OF HMA PAVEMENT 5 MT 58-34V	HMA PAVEMENT 4 MT 58-34V	84	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES LT, 20' DRIVING LANES RT	2386+07'D' - 2388+48'D'	LOWER LAYER	EXISTING MILLED ASPHALT SURFACE	HMA PAVEMENT 5 MT 58-34V	72	1.5"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
STH 79 INTERSECTION RECONSTRUCT	2088+48'D' - 2391+50'D'	UPPER LAYER LOWER LAYER	BASE AGGREGATE	HMA PAVEMENT 4 MT 58-34V	653	5.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
24 FOOT DRIVING LANES, LT AND RT	2391+50'D' - 2394+50'D'	UPPER LAYER	LOWER LAYER OF HMA PAVEMENT 5 MT 58-34V	HMA PAVEMENT 4 MT 58-34V	157	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
24 FOOT DRIVING LANES, LT AND RT	2391+50'D' - 2394+50'D'	LOWER LAYER	EXISTING MILLED ASPHALT SURFACE	HMA PAVEMENT 5 MT 58-34V	135	1.5"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
24 FOOT DRIVING LANES LT, 12' DRIVING LANES RT	2394+50'D' - 2396+00'D'	UPPER LAYER	LOWER LAYER OF HMA PAVEMENT 5 MT 58-34V	HMA PAVEMENT 4 MT 58-34V	59	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
24 FOOT DRIVING LANES LT, 12' DRIVING LANES RT	2394+50'D' - 2396+00'D'	LOWER LAYER	EXISTING MILLED ASPHALT SURFACE	HMA PAVEMENT 5 MT 58-34V	51	1.5"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
VARIES 12-24 FOOT DRIVING LANES LT, 12' DRIVING LANES RT	2396+00'D' - 2398+00'D'	UPPER LAYER	LOWER LAYER OF HMA PAVEMENT 5 MT 58-34V	HMA PAVEMENT 4 MT 58-34V	49	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
VARIES 12-24 FOOT DRIVING LANES LT, 12' DRIVING LANES RT	2396+00'D' - 2398+00'D'	LOWER LAYER	EXISTING MILLED ASPHALT SURFACE	HMA PAVEMENT 5 MT 58-34V	42	1.5"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
VARIES 3'-6' SHOULDER PLUS TURN LANES, RT AND LT	2092+00'D' - 2126+00'D'	UPPER LAYER	LOWER LAYER OF HMA PAVEMENT 5 MT 58-34V	HMA PAVEMENT 4 MT 58-34V	277	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY HMA PAVEMENT 460.2000
VARIES 3'-6' SHOULDER PLUS TURN LANES, RT AND LT	2092+00'D' - 2126+00'D'	LOWER LAYER	EXISTING MILLED ASPHALT SURFACE	HMA PAVEMENT 5 MT 58-34V	237	1.5"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
VARIES 3'-6' SHOULDER PLUS TURN LANES, RT AND LT	2150+64'D' - 2386+07'D'	UPPER LAYER	LOWER LAYER OF HMA PAVEMENT 5 MT 58-34V	HMA PAVEMENT 4 MT 58-34V	2118	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY HMA PAVEMENT 460.2000
VARIES 3'-6' SHOULDER PLUS TURN LANES, RT AND LT	2150+64'D' - 2386+07'D'	LOWER LAYER	EXISTING MILLED ASPHALT SURFACE	HMA PAVEMENT 5 MT 58-34V	1613	1.5"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
VARIES 3'-6' SHOULDER PLUS TURN LANES, RT AND LT	2394+50'D' - 2398+00'D'	UPPER LAYER	LOWER LAYER OF HMA PAVEMENT 5 MT 58-34V	HMA PAVEMENT 4 MT 58-34V	120	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY HMA PAVEMENT 460.2000
VARIES 3'-6' SHOULDER PLUS TURN LANES, RT AND LT	2394+50'D' - 2398+00'D'	LOWER LAYER	EXISTING MILLED ASPHALT SURFACE	HMA PAVEMENT 5 MT 58-34V	103	1.5"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
DUNN COUNTY CULVERT REPLACEMENTS	VARIOUS	UPPER LAYER LOWER LAYER	BASE AGGREGATE	HMA PAVEMENT 4 MT 58-34V	173	5.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005

ASPHALTIC FLUME

	LOCATION	STATION	OFFSET	465.0310 ASPHALTIC CURB (LF)	465.0315 ASPHALTIC FLUME (SY)
8630-03-82 **CATEGORY 0100**					
ST CROIX COUNTY					
	GLENWOOD CITY	134+33	15.6' LT	17	7
	ST CROIX COUNTY SUBTOTAL			17	7
DUNN COUNTY					
	BOYCEVILLE	2389+18'D'	20.3' LT	15	7
	BOYCEVILLE	2391+55'D'	24.0' LT	15	9
	BOYCEVILLE	2392+32	23.5' RT	14	7
	DUNN COUNTY SUBTOTAL			44	23
	PROJECT 8630-03-82 TOTAL			**61**	**30**

CULVERT PIPES

ROADWAY	INLET STATION	INLET OFFSET	INLET ELEVATION	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	SKEW	SLOPE %	PIPE THICKNESS STEEL (IN)	504.0900 CONCRETE MASONRY ENDWALLS (CY)	520.8000* CONCRETE COLLARS FOR PIPE (EACH)	520.9700.S.01 CULVERT PIPE LINERS 01. 30-INCH (LF)	520.9750.S CLEANING CULVERT PIPES FOR LINER VERIFICATION (EACH)	521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH (EACH)	521.1030 30-INCH (EACH)	521.1048 48-INCH (EACH)	521.1271 APRON ENDWALLS FOR PIPE ARCH STEEL 71X47-INCH (EACH)	521.3112 CULVERT PIPE CORRUGATED STEEL 12-INCH (LF)	521.3130 30-INCH (LF)	521.3148 48-INCH (LF)	521.3771 PIPE ARCH CORRUGATED STEEL 71X47-INCH (LF)	522.0530 CULVERT PIPE REINFORCED CONCRETE CLASS V 30-INCH (LF)	522.0536 36-INCH (LF)	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH (EACH)	633.5200 MARKERS CULVERT END (EACH)
8630-03-82 CATEGORY 0010																									
ST CROIX COUNTY																									
STH 170	176+89	29.6' LT	991.80	176+89	34.3' RT	990.43	0°32'56" LHF	2.31	0.109	-	-	-	-	-	-	2	-	-	-	64	-	-	-	-	-
ST CROIX COUNTY SUBTOTAL										0	0	0	0	0	0	2	0	0	0	64	0	0	0	0	0
DUNN COUNTY																									
STH 170	2107+53'D'	37.2' RT	980.52	2108+02'D'	59.6' LT	980.09	27°32'50" LHF	0.40	0.079	-	-	-	-	-	2	-	-	-	110	-	-	-	-	-	2
STH 170	2108+48'D'	42.5' RT	983.52	2108+10'D'	41.8' RT	982.34	-	3.09	0.064	-	-	-	-	-	-	-	-	38	-	-	-	-	-	-	-
STH 170	2163+33'D'	35.4' RT	-	2163+16'D'	50.4' LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
STH 170	2172+99'D'	39.9' RT	-	2173+03'D'	64.0' LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
STH 170	-	-	-	2181+12'D'	42.0' LT	972.78	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
STH 170	2212+42'D'	22.5' RT	965.54	2212+42'D'	23.2' LT	965.37	0°04'12" RHF	0.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46	2	2
STH 170	2234+28'D'	28.6' LT	963.63	2234+27'D'	29.1' RT	963.46	0°49'01" RHF	0.30	-	10	-	-	-	-	-	-	-	-	-	-	-	-	58	-	-	2
STH 170	2234+33'D'	28.5' LT	963.63	2234+32'D'	29.2' RT	963.46	1°05'35" RHF	0.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	58	-	-	-
STH 170	2260+32'D'	33.2' RT	959.69	2260+34'D'	33.3' LT	959.25	-	-	-	-	-	67	1	-	-	-	-	-	-	-	-	-	-	-	-	1
STH 170	2260+37'D'	33.22' RT	959.67	2260+38'D'	33.4' LT	959.22	-	-	-	-	-	67	1	-	-	-	-	-	-	-	-	-	-	-	-	-
STH 170	2348+81'D'	34.6' RT	-	2348+81'D'	31.2' LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
STH 170	-	-	-	2369+79'D'	26.0' LT	945.33	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2
STH 170	2372+90'D'	42.8' RT	-	2372+51'D'	26.9' LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
STH 170	2392+56'D'	35.0' RT	939.56	2392+43'D'	51.5' RT	939.31	51°06'48" LHF	-	0.109	-	1	-	-	-	-	-	1	-	-	-	22	-	-	-	-	2
STH 170	2372+90'D'	36.4' RT	939.43	2372+51'D'	52.0' RT	939.12	50°56'54" LHF	1.54	0.109	-	1	-	-	-	-	-	1	-	-	-	22	-	-	-	-	-
DUNN COUNTY SUBTOTAL										10	2	134	2	1	3	0	2	38	110	0	44	116	46	2	19
PROJECT 8630-03-82 TOTAL										**10**	**2**	**134**	**2**	**1**	**3**	**2**	**2**	**38**	**110**	**64**	**44**	**116**	**46**	**2**	**19**

*ADDITIONAL QUANTITY FOUND IN "STORM SEWER PIPES AND STRUCTURES" TABLE

STORM SEWER PIPES AND STRUCTURES

ROADWAY	STRUCTURE NUMBER	STRUCTURE STATION	STRUCTURE OFFSET	RIM ELEVATION	BOTTOM OF STRUCTURE ELEVATION	STRUTURE DEPTH	520.8000* CONCRETE COLLARS FOR PIPE (EACH)	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH (LF)	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH (LF)	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH (LF)	611.0530 MANHOLE COVERS TYPE J (EACH)	611.0639 INLET COVERS TYPE H-S (EACH)	611.2006 MANHOLES 6-FT DIAMETER (EACH)	611.3230 INLETS 2X3-FT (EACH)	REMARKS
8630-03-82 CATEGORY 0010															
DUNN COUNTY															
STH 170	1.1	2127+30'D'	17.0' RT	993.27'	990.84'	2.43'	-	-	-	48	-	1	-	1	CONNECT PIPE TO EXISTING INLET AT STA. 2126+84'D', 24.6' RT
STH 170	2.1	2389+10'D'	6.4' RT	945.77'	940.96'	4.81'	-	-	-	-	1	-	1	-	
STH 170	2.2	2389+20'D'	6.4' RT	-	-	-	1	-	10	-	-	-	-	-	CONNECT PIPE TO STRUCTURE 2.1
STH 170	2.3	2389+00'D'	6.4' RT	-	-	-	1	-	10	-	-	-	-	-	CONNECT PIPE TO STRUCTURE 2.1
STH 170	2.4	2389+10'D'	21.1' RT	945.25'	942.57'	2.68'	-	16	-	-	-	1	-	1	CONNECT PIPE TO STRUCTURE 2.1
DUNN COUNTY SUBTOTAL							2	16	20	48	1	2	1	2	
PROJECT 8630-03-82 TOTAL							**2**	**16**	**20**	**48**	**1**	**2**	**1**	**2**	

*ADDITIONAL QUANTITY FOUND IN "CULVERT PIPES" TABLE

CONCRETE CURB AND GUTTER

	LOCATION	STATION - STATION	OFFSET	601.0411 CONCRETE CURB AND GUTTER 30-INCH TYPE D (LF)	601.0600 CONCRETE CURB PEDESTRIAN (LF)	SPV.0090.001 CONCRETE CURB AND GUTTER REPAIR (LF)
8630-03-82 CATEGORY 0100						
ST CROIX COUNTY						
	OAK ST - NE QUADRANT	-	-	39	-	-
	OAK ST - NW QUADRANT	-	-	44	-	-
	OAK ST - SE QUADRANT	-	-	45	-	-
	OAK ST - SW QUADRANT	-	-	76	24	-
	STH 170	101+69 - 103+27	24.0' RT	153	-	-
	PINE ST - NE QUADRANT	-	-	37	-	-
	PINE ST - SE QUADRANT	-	-	62	25	-
	PINE ST - SW QUADRANT	-	-	-	20	-
	STH 170	106+44 - 106+83	25.5' LT	17	-	-
	STH 170	107+40 - 110+86	15.8' RT	-	-	346
	2ND ST - NW QUADRANT	-	-	52	-	-
	2ND ST - SE QUADRANT	-	-	26	-	-
	2ND ST - SW QUADRANT	-	-	53	-	-
	STH 170	111+66 - 115+70	15.8' RT	-	-	404
	3RD ST - NE QUADRANT	-	-	28	-	-
	3RD ST - NW QUADRANT	-	-	27	-	-
	3RD ST - SE QUADRANT	-	-	32	41	-
	3RD ST - SW QUADRANT	-	-	24	-	-
	4TH ST - NE QUADRANT	-	-	36	-	-
	4TH ST - NW QUADRANT	-	-	22	-	-
	4TH ST - SE QUADRANT	-	-	26	-	-
	5TH ST - NE QUADRANT	-	-	44	-	-
	5TH ST - NW QUADRANT	-	-	24	-	-
	5TH ST - SE QUADRANT	-	-	19	-	-
	6TH ST - NE QUADRANT	-	-	23	-	-
	6TH ST - NW QUADRANT	-	-	21	-	-
	STH 170	131+14 - 134+28	18.0' LT	319	-	-
	7TH ST - SE QUADRANT	-	-	23	-	-
	7TH ST - ISLAND	-	-	37	-	-
	7TH ST - SW QUADRANT	-	-	50	-	-
	ST CROIX COUNTY SUBTOTAL			1,359	110	750
DUNN COUNTY						
	1ST ST - SE QUADRANT	-	-	46	-	-
	SUMMIT ST - NE QUADRANT	-	-	19	-	-
	SUMMIT ST - SE QUADRANT	-	-	32	-	-
	FOREST ST - NE QUADRANT	-	-	22	-	-
	FOREST ST - NW QUADRANT	-	-	22	-	-
	FOREST ST - SE QUADRANT	-	-	21	-	-
	FOREST ST - SW QUADRANT	-	-	22	-	-
	WILSON ST - NE QUADRANT	-	-	22	-	-
	WILSON ST - NW QUADRANT	-	-	22	-	-
	WILSON ST - SE QUADRANT	-	-	78	-	-
	WILSON ST - SW QUADRANT	-	-	53	-	-
	PINE ST - SE QUADRANT	-	-	22	-	-
	PINE ST - SW QUADRANT	-	-	23	-	-
	CHESTNUT ST - SE QUADRANT	-	-	36	-	-
	CHESTNUT ST - SW QUADRANT	-	-	22	-	-
	ASH ST - SW QUADRANT	-	-	26	-	-
	CENTER ST - SE QUADRANT	-	-	39	40	-
	CENTER ST - SW QUADRANT	-	-	20	-	-
	RACE ST - SE QUADRANT	-	-	26	-	-
	RACE ST - SW QUADRANT	-	-	26	-	-
	WINTER ST - SE QUADRANT	-	-	26	30	-
	WINTER ST - SW QUADRANT	-	-	26	-	-
	EAST ST - SE QUADRANT	-	-	210	-	-
	EAST ST - SW QUADRANT	-	-	214	-	-
	STH 79 NB - NE QUADRANT	-	-	126	-	-
	STH 79 NB - NW QUADRANT	-	-	73	-	-
	STH 170	2391+86'D' - 2392+26'D'	25.5' RT	40	-	-
	STH 170	2392+38'D' - 2392+85'D'	25.5' RT	47	-	-
	DUNN COUNTY SUBTOTAL			1,361	70	0
	PROJECT 8630-03-82 TOTAL			**2,720**	**180**	**750**

LANDMARK REFERENCE MONUMENTS

	ROADWAY	STATION	OFFSET	621.0100 LANDMARK REFERENCE MONUMENTS (EACH)	REMARKS
8630-03-82 CATEGORY 0010					
ST CROIX COUNTY					
	STH 170	151+61	10.9' RT	1	EAST 1/4 CORNER SECTION 25, T30N, R15W
	ST CROIX COUNTY SUBTOTAL			1	
DUNN COUNTY					
	STH 170	2126+70'D'	0.5' RT	1	SOUTHWEST CORNER SECTION 30, T30N, R14W
	STH 170	2149+85'D'	0.9' RT	1	SOUTH 1/4 CORNER SECTION 30, T30N, R14W
	DUNN COUNTY SUBTOTAL			2	
	UNDISTRIBUTED			0	
	PROJECT 8630-03-82 TOTAL			**3**	

LANDSCAPING

	LOCATION	STATION - STATION	625.0500 SALVAGED TOPSOIL (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0140 SEEDING MIXTURE NO. 40 (LB)	630.0500 SEED WATER (MGAL)	631.0300 SOD WATER (MGAL)	631.1000 SOD LAWN (SY)
8630-03-82 CATEGORY 0010								
ST CROIX COUNTY								
	STH 170	99+50 - 123+00	0	0.4	0	0	17	252
	STH 170	123+00 - 145+00	321	0.5	6	22	13	165
	STH 170	145+00 - 168+00	2,206	1.4	40	149	0	0
	STH 170	168+00 - 192+00	122	0.1	2	8	0	0
	ST CROIX COUNTY SUBTOTAL		2,649	2.3	48	179	30	416
DUNN COUNTY								
	STH 170	2092+00'D' - 2172+00'D'	4,771	3.3	86	321	28	173
	STH 170	2172+00'D' - 2252+00'D'	140	0.1	3	9	0	0
	STH 170	2252+00'D' - 2332+00'D'	0	0.0	0	0	0	0
	STH 170	2332+00'D' - 2410+00'D'	1,194	1.3	21	80	12	499
	DUNN COUNTY SUBTOTAL		6,105	4.7	110	411	40	672
	UNDISTRIBUTED		2,246	-	42	-	-	281
	PROJECT 8630-03-82 TOTAL		**11,000**	**7**	**200**	**590**	**70**	**1,370**

ADJUSTING INLET COVERS

	LOCATION	STATION - STATION	611.8115 ADJUSTING INLET COVERS (EACH)
8630-03-82 CATEGORY 0010			
ST CROIX COUNTY			
	STH 170	99+50 - 123+00	14
	STH 170	123+00 - 145+00	2
	ST CROIX COUNTY SUBTOTAL		16
DUNN COUNTY			
	STH 170	2092+00'D' - 2172+00'D'	1
	STH 170	2332+00'D' - 2410+00'D'	1
	DUNN COUNTY SUBTOTAL		2
	PROJECT 8630-03-82 TOTAL		**18**

CONCRETE SIDEWALK

	LOCATION	STATION - STATION	OFFSET	602.0410 CONCRETE SIDEWALK 5-INCH (SF)	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW (SF)	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW (SF)
8630-03-82						
CATEGORY 0100						
ST CROIX COUNTY						
	OAK ST - NE QUADRANT	-	-	338	10	-
	OAK ST - NW QUADRANT	-	-	214	20	-
	OAK ST - SE QUADRANT	-	-	342	10	-
	OAK ST - SW QUADRANT	-	-	376	10	-
	PINE ST - NE QUADRANT	-	-	204	11	-
	PINE ST - SE QUADRANT	-	-	278	19	-
	PINE ST - SW QUADRANT	-	-	49	20	-
	STH 170	106+44 - 106+83	26.2' LT	84	-	-
	2ND ST - NE QUADRANT	-	-	57	20	-
	2ND ST - NW QUADRANT	-	-	287	20	-
	2ND ST - SE QUADRANT	-	-	210	10	-
	2ND ST - SW QUADRANT	-	-	240	20	-
	3RD ST - NE QUADRANT	-	-	190	10	-
	3RD ST - NW QUADRANT	-	-	89	10	-
	3RD ST - SE QUADRANT	-	-	278	20	-
	3RD ST - SW QUADRANT	-	-	153	10	-
	4TH ST - NE QUADRANT	-	-	89	10	-
	4TH ST - NW QUADRANT	-	-	243	10	-
	4TH ST - SE QUADRANT	-	-	110	10	-
	4TH ST - SW QUADRANT	-	-	47	10	-
	5TH ST - NE QUADRANT	-	-	227	20	-
	5TH ST - NW QUADRANT	-	-	192	10	-
	5TH ST - SE QUADRANT	-	-	103	10	-
	6TH ST - NE QUADRANT	-	-	98	10	-
	6TH ST - NW QUADRANT	-	-	170	10	-
	7TH ST - SE QUADRANT	-	-	148	20	-
	7TH ST - ISLAND	-	-	272	20	-
	7TH ST - SW QUADRANT	-	-	190	10	20
	ST CROIX COUNTY SUBTOTAL			5,278	370	20
DUNN COUNTY						
	SUMMIT ST - NE QUADRANT	-	-	115	10	-
	SUMMIT ST - SE QUADRANT	-	-	136	20	-
	FOREST ST - NE QUADRANT	-	-	107	10	-
	FOREST ST - NW QUADRANT	-	-	86	10	-
	FOREST ST - SE QUADRANT	-	-	113	10	-
	FOREST ST - SW QUADRANT	-	-	106	10	-
	WILSON ST - NE QUADRANT	-	-	86	10	-
	WILSON ST - NW QUADRANT	-	-	86	10	-
	WILSON ST - SE QUADRANT	-	-	329	10	-
	WILSON ST - SW QUADRANT	-	-	207	10	-
	PINE ST - SE QUADRANT	-	-	87	10	-
	PINE ST - SW QUADRANT	-	-	111	10	-
	CHESTNUT ST - SE QUADRANT	-	-	188	10	-
	CHESTNUT ST - SW QUADRANT	-	-	113	10	-
	ASH ST - SW QUADRANT	-	-	180	10	-
	ST JOHNS ST - SE QUADRANT	-	-	81	10	-
	CENTER ST - NE QUADRANT	-	-	169	20	-
	CENTER ST - SE QUADRANT	-	-	269	20	-
	CENTER ST - SW QUADRANT	-	-	111	10	-
	RACE ST - SE QUADRANT	-	-	91	10	-
	RACE ST - SW QUADRANT	-	-	92	10	-
	WINTER ST - SE QUADRANT	-	-	236	10	-
	WINTER ST - SW QUADRANT	-	-	246	10	-
	EAST ST - SW QUADRANT	-	-	950	10	-
	STH 79 NB - NW QUADRANT	-	-	132	20	-
	DUNN COUNTY SUBTOTAL			4427	290	0
	CATEGORY 0010 SUBTOTAL			9,705	660	20

CONCRETE SIDEWALK CONTINUED

	LOCATION	STATION - STATION	OFFSET	602.0410 CONCRETE SIDEWALK 5-INCH (SF)	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW (SF)	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW (SF)
8630-03-82						
CATEGORY 0040						
GLENWOOD CITY						
	PATH TO HINMAN PARK	133+87	18.5' LT	55	20	-
	GLENWOOD CITY SUBTOTAL			55	20	0
	CATEGORY 0040 SUBTOTAL			55	20	0
	PROJECT 8630-03-82 TOTAL			**9,760**	**680**	**20**

MGS GUARDRAIL

	LOCATION	STATION - STATION	OFFSET	614.2300 MGS GUARDRAIL 3 (LF)	614.2350 MGS GUARDRAIL SHORT RADIUS (LF)	614.2500 MGS THRIE BEAM TRANSITION (LF)	614.2610 MGS GUARDRAIL TERMINAL EAT (EACH)	614.2630 MGS GUARDRAIL SHORT RADIUS TERMINAL (EACH)
8630-03-82								
CATEGORY 0010								
ST CROIX COUNTY								
	STH 170	146+62 - 148+45	LT	87.50	-	39.40	1	-
	STH 170	145+71 - 147+97	RT	131.25	50.00	-	1	1
	STH 170	148+22 - 148+71	RT	-	18.75	39.40	-	1
	STH 170	148+86 - 150+76	LT	93.75	-	39.40	1	-
	STH 170	149+10 - 151+54	RT	168.75	37.50	39.40	-	1
	ST CROIX COUNTY SUBTOTAL			481.25	106.25	157.60	3	3
DUNN COUNTY								
	STH 170	2108+26'D' - 2109+78'D'	LT	62.50	-	39.40	1	-
	STH 170	2108+43'D' - 2109+80'D'	RT	87.50	12.50	39.40	-	1
	STH 170	2110+94'D' - 2112+49'D'	LT	62.50	-	39.40	1	-
	STH 170	2110+94'D' - 2112+49'D'	RT	62.50	-	39.40	1	-
	STH 170	2150+81'D' - 2152+74'D'	LT	100.00	-	39.40	1	-
	STH 170	2150+81'D' - 2152+74'D'	RT	100.00	-	39.40	1	-
	STH 170	2154+07'D' - 2155+99'D'	LT	100.00	-	39.40	1	-
	STH 170	2154+07'D' - 2155+99'D'	RT	100.00	-	39.40	1	-
	STH 170	2371+23'D' - 2373+79'D'	LT	150.00	-	-	2	-
	STH 170	2392+40'D' - 2395+34'D'	LT	187.50	-	-	2	-
	DUNN COUNTY SUBTOTAL			1,012.50	12.50	315.20	11	1
	PROJECT 8630-03-82 TOTAL			**1,493.75**	**118.75**	**472.80**	**14.00**	**4.00**

PERMANENT SIGNING TYPE II

SIGN #	SIGN CODE	SIGN SIZE W X H IN	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0614 POSTS WOOD 4X6-INCH 14 FT EACH	634.0616 POSTS WOOD 4X6-INCH 16 FT EACH	SIGN MOUNTED ON SAME POST AS	638.2602 REMOVING SIGNS TYPE II EACH	REMARKS
PROJECT 8630-03-82									
CATEGORY 0010									
1-01	W11-2	30 X 30	--	6.25	--	1	--	--	PEDESTRIAN CROSSING SYMBOL
1-02	W16-7L	24 X 12	--	2.00	--	--	1-01	--	LEFT DIAGONAL DOWNWARD POINTING ARROW (YELLOW)
1-03	W11-2	30 X 30	--	6.25	--	1	--	--	PEDESTRIAN CROSSING SYMBOL
1-04	W16-7L	24 X 12	--	2.00	--	--	1-03	--	LEFT DIAGONAL DOWNWARD POINTING ARROW (YELLOW)
2-01	W11-2	30 X 30	--	6.25	--	1	--	--	PEDESTRIAN CROSSING SYMBOL
2-02	W16-7L	24 X 12	--	2.00	--	--	2-01	--	LEFT DIAGONAL DOWNWARD POINTING ARROW (YELLOW)
2-03	W11-2	30 X 30	--	6.25	--	1	--	--	PEDESTRIAN CROSSING SYMBOL
2-04	W16-7L	24 X 12	--	2.00	--	--	2-03	--	LEFT DIAGONAL DOWNWARD POINTING ARROW (YELLOW)
2-05	R7-51L	18 X 24	3.00	--	1	--	--	--	NO PARKING HERE TO CORNER (LEFT ARROW)
2-06	W11-2	30 X 30	--	6.25	--	1	--	--	PEDESTRIAN CROSSING SYMBOL
2-07	W16-7L	24 X 12	--	2.00	--	--	2-06	--	LEFT DIAGONAL DOWNWARD POINTING ARROW (YELLOW)
2-08	W5-59R	18 X 18	--	2.25	--	--	--	--	BEAM GUARD REFLECTIVE END MARKER (RIGHT)
2-09	W5-59L	18 X 18	--	2.25	--	--	--	--	BEAM GUARD REFLECTIVE END MARKER (LEFT)
2-10	W5-59R	18 X 18	--	2.25	--	--	--	--	BEAM GUARD REFLECTIVE END MARKER (RIGHT)
5-01	W5-59L	18 X 18	--	2.25	--	--	--	--	BEAM GUARD REFLECTIVE END MARKER (LEFT)
5-02	W5-59L	18 X 18	--	2.25	--	--	--	--	BEAM GUARD REFLECTIVE END MARKER (LEFT)
5-03	W5-59R	18 X 18	--	2.25	--	--	--	--	BEAM GUARD REFLECTIVE END MARKER (RIGHT)
7-01	W5-59R	18 X 18	--	2.25	--	--	--	--	BEAM GUARD REFLECTIVE END MARKER (RIGHT)
7-02	W5-59L	18 X 18	--	2.25	--	--	--	--	BEAM GUARD REFLECTIVE END MARKER (LEFT)
7-03	W5-59R	18 X 18	--	2.25	--	--	--	--	BEAM GUARD REFLECTIVE END MARKER (RIGHT)
7-04	W5-59L	18 X 18	--	2.25	--	--	--	--	BEAM GUARD REFLECTIVE END MARKER (LEFT)
8-01	R1-1	30 X 30	6.25	--	--	--	--	1	STOP SIGN. REPLACE EXISTING YIELD SIGN
8-02	R1-1	30 X 30	6.25	--	--	--	--	1	STOP SIGN. REPLACE EXISTING YIELD SIGN
14-01	-	- -	--	--	--	--	--	1	REMOVE EXISTING SIGN
14-02	W5-59L	18 X 18	--	2.25	--	--	--	--	BEAM GUARD REFLECTIVE END MARKER (LEFT)
14-03	W5-59R	18 X 18	--	2.25	--	--	--	--	BEAM GUARD REFLECTIVE END MARKER (RIGHT)
15-01	W3-3	36 X 36	--	9.00	--	1	--	--	SIGNAL AHEAD
15-02	R3-8LF	36 X 30	7.50	--	1	--	--	--	LEFT ONLY / AHEAD, RIGHT
15-03	W3-3	36 X 36	--	9.00	--	1	--	--	SIGNAL AHEAD
15-04	W3-3	36 X 36	--	9.00	--	1	--	--	SIGNAL AHEAD
15-05	R3-8AR	36 X 30	7.50	--	1	--	--	--	AHEAD ONLY / RIGHT ONLY
15-06	R3-8LAR	54 X 30	11.25	--	1	--	--	--	LEFT ONLY / AHEAD ONLY / RIGHT ONLY
15-07	W3-3	36 X 36	--	9.00	--	1	--	--	SIGNAL AHEAD
15-08	R3-8ER	36 X 30	7.50	--	1	--	--	--	LEFT, AHEAD / RIGHT ONLY
15-09	W5-59L	18 X 18	--	2.25	--	--	--	--	BEAM GUARD REFLECTIVE END MARKER (LEFT)
15-10	W5-59R	18 X 18	--	2.25	--	--	--	--	BEAM GUARD REFLECTIVE END MARKER (RIGHT)
15-11	W16-15P	24 X 12	--	2.00	--	--	15-01	--	NEW
15-12	W16-15P	24 X 12	--	2.00	--	--	15-03	--	NEW
15-13	W16-15P	24 X 12	--	2.00	--	--	15-04	--	NEW
15-14	W16-15P	24 X 12	--	2.00	--	--	15-07	--	NEW
PROJECT 8630-03-82 TOTALS			**49.25**	**116.75**	**5**	**9**		**3**	

TEMPORARY PAVEMENT MARKING

	LOCATION	STATION - STATION	649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE) (LF)	649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) (LF)	649.0850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE) (LF)
8630-03-82					
CATEGORY 0010					
ST CROIX COUNTY					
	STH 170	123+00 - 145+00	252	-	-
	ST CROIX COUNTY SUBTOTAL		252	0	0
DUNN COUNTY					
	STH 170	2092+00'D' - 2172+00'D'	3,438	2,800	24
	STH 170	2332+00'D' - 2410+00'D'	610	-	-
	DUNN COUNTY SUBTOTAL		4,048	2,800	24
	PROJECT 8630-03-82 TOTAL		**7,100**		**24**

COVERING SIGNS

8630-03-82 CATEGORY 0010 LOCATION	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE 1 EACH	NUMBER OF CYCLES	NUMBER OF SIGNS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	NUMBER OF CYCLES	NUMBER OF SIGNS
STH 170 - ST, CROIX COUNTY	0	1	0	0	1	0
STH 170 - DUNN COUNTY	0	1	0	5	1	5
STH 170 - DETOUR	3	1	3	7	1	7
STH 79 - DETOUR	0	1	0	1	1	1
PROJECT 8630-03-82 TOTAL	3			13		

TRAFFIC CONTROL DEVICES

	LOCATION	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED (LF)	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED (LF)	603.8500 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST (LF)	603.8505 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST ON BRIDGE DECKS (LF)	643.0300 TRAFFIC CONTROL DRUMS (DAYS)	643.0410 TRAFFIC CONTROL BARRICADES TYPE II (DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (DAYS)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A (DAYS)	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C (DAYS)	643.0900 TRAFFIC CONTROL SIGNS (DAYS)	644.1420 TEMPORARY PEDESTRIAN SURFACE PLYWOOD (SF)	644.1601 TEMPORARY PEDESTRIAN CURB RAMP (DAY)	644.1810 TEMPORARY PEDESTRIAN BARRICADE (LF)
8630-03-82														
CATEGORY 0010														
STH 170														
	ST. CROIX COUNTY	0	0	0	0	182	247	487	734	0	4,869	403	21	49
	DUNN COUNTY	900	1,200	1,000	200	2,818	353	2,005	2,850	1,000	4,495	1,797	189	951
	STH 170 SUBTOTAL	900	1,200	1,000	200	3,000	600	2,492	3,584	1,000	9,364	2,200	210	1,000
DETOURS														
	STH 170 DETOUR	0	0	0	0	0	0	672	1,344	0	40,824	0	0	0
	STH 79 DETOUR	0	0	0	0	0	0	336	672	0	14,112	0	0	0
	DETOURS SUBTOTAL	0	0	0	0	0	0	1,008	2,016	0	54,936	0	0	0
	PROJECT 8630-03-82 TOTAL	**900**	**1,200**	**1,000**	**200**	**3,000**	**600**	**3,500**	**5,600**	**1,000**	**64,300**	**2,200**	**210**	**1,000**

PAVEMENT MARKING

LOCATION	STATION - STATION	646.1020 MARKING LINE EPOXY 4-INCH (WHITE) (LF)	646.1020 MARKING LINE EPOXY 4-INCH (YELLOW) (LF)	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (LF)	646.3020 MARKING LINE EPOXY 8-INCH (WHITE) (LF)	646.4520 MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW) (LF)	646.5020 MARKING ARROW EPOXY (WHITE) (EACH)	646.6020 MARKING STOP LINE EPOXY 12-INCH (WHITE) (LF)	646.7020 MARKING DIAGONAL EPOXY 6-INCH (WHITE) (LF)	646.7020 MARKING DIAGONAL EPOXY 6-INCH (YELLOW) (LF)	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) (LF)	646.8120 MARKING CURB EPOXY (YELLOW) (LF)	646.8220 MARKING ISLAND NOSE EPOXY (YELLOW) (EACH)
8630-03-82													
CATEGORY 0010													
ST CROIX COUNTY													
STH 170	99+50 - 123+00	-	-	-	-	4,627	-	43	-	-	488	-	-
STH 170	123+00 - 145+00	96	-	2,386	65	4,480	-	28	38	-	332	-	2
STH 170	145+00 - 168+00	-	-	4,260	-	3,648	-	-	-	-	-	-	-
STH 170	168+00 - 192+00	-	-	4,800	-	2,749	-	-	-	-	-	-	-
ST CROIX COUNTY SUBTOTAL		96	0	11,446	65	15,504	0	71	38	0	820	0	2
DUNN COUNTY													
STH 170	2092+00'D' - 2172+00'D'	122	-	10,496	-	11,543	-	32	-	-	-	-	-
STH 170	2172+00'D' - 2252+00'D'	45	-	15,499	-	7,909	-	-	-	-	-	-	-
STH 170	2252+00'D' - 2332+00'D'	35	-	15,671	-	10,347	-	-	-	-	-	-	-
STH 170	2332+00'D' - 2410+00'D'	248	2,295	9,488	425	3,598	3	257	102	110	420	130	-
DUNN COUNTY SUBTOTAL		449	2,295	51,154	425	33,396	3	289	102	110	420	130	0
PROJECT 8630-03-82 TOTAL		**2,840**		**62,600**	**490**	**48,900**	**3**	**360**	**250**		**1,240**	**130**	**2**

SAWING

LOCATION	STATION - STATION	690.0150 SAWING ASPHALT (LF)	690.0250 SAWING CONCRETE (LF)
8630-03-82			
CATEGORY 0010			
ST CROIX COUNTY			
STH 170	99+50 - 123+00	-	401
STH 170	123+00 - 145+00	415	121
STH 170	145+00 - 168+00	-	-
STH 170	168+00 - 192+00	60	-
ST CROIX COUNTY SUBTOTAL		475	521
DUNN COUNTY			
STH 170	2092+00'D' - 2172+00'D'	95	174
STH 170	2172+00'D' - 2252+00'D'	120	-
STH 170	2252+00'D' - 2332+00'D'	-	-
STH 170	2332+00'D' - 2410+00'D'	170	95
DUNN COUNTY SUBTOTAL		385	269
PROJECT 8630-03-82 TOTAL		**860**	**790**

ABANDONING CATTLE PASS

LOCATION	STATION	SPV.0060.003 ABANDONING CATTLE PASS (EACH)
8630-03-82		
CATEGORY 0010		
STH 170	170+28	1
PROJECT 8630-03-82 TOTAL		**1**

3

CONSTRUCTION STAKING

	LOCATION	STATION - STATION	650.4000 CONSTRUCTION STAKING STORM SEWER (EACH)	650.5000 CONSTRUCTION STAKING BASE (LF)	650.5500 CONSTUCTION STAKING CURB GUTTER AND CURB & GUTTER (LF)	650.6000 CONSTRUCTION STAKING PIPE CULVERTS (EACH)	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE (LF)	650.9000 CONSTRUCTION STAKING CURB RAMPS (EACH)	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (8630-03-82) (LS)	650.9920 CONSTRUCTION STAKING SLOPE STAKES (LF)
8630-03-82										
CATEGORY 0010										
ST CROIX COUNTY										
	STH 170	99+50 - 123+00	-	-	799	-	2,350	25	-	-
	STH 170	123+00 - 145+00	-	400	540	-	2,200	12	-	400
	STH 170	145+00 - 168+00	-	706	-	-	2,300	-	-	706
	STH 170	168+00 - 192+00	-	32	-	1	2,400	-	-	32
	ST CROIX COUNTY SUBTOTAL		0	1,138	1,339	1	9,250	37	0	1,138
DUNN COUNTY										
	STH 170	2092+00'D' - 2172+00'D'	2	1,209	489	2	8,000	16	-	1,209
	STH 170	2172+00'D' - 2252+00'D'	-	66	-	3	8,000	-	-	66
	STH 170	2252+00'D' - 2332+00'D'	-	-	-	2	8,000	-	-	-
	STH 170	2332+00'D' - 2410+00'D'	2	1,387	872	3	6,600	11	-	1,387
	DUNN COUNTY SUBTOTAL		4	2,662	1,361	10	30,600	27	0	2,662
	UNDISTRIBUTED		0	0	0	0	0	0	1	0
	PROJECT 8630-03-82 TOTAL		**4**	**3,800**	**2,700**	**11**	**39,850**	**64**	**1**	**3,800**

TRAFFIC SIGNAL PULL BOXES

LOCATION / PULL BOX NUMBER	STATION	OFFSET	L/R	653.0154 PULL BOXES NON-CONDUCTIVE 24X36-INCH EACH	653.0164 PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH	SPV.0060.001 PULL BOXES NON-CONDUCTIVE 24X48-INCH EACH
CATEGORY 0030 INTERSECTION						
PB1	2390+22	45.7'	R	--	1	--
PB2	2389+70	37.2'	R	--	1	--
PB3	2389+32	25.0'	R	--	1	--
PB4	2387+86	25.0'	R	1	--	--
PB5	2386+79	25.0'	R	1	--	--
PB6	2389+30	25.9'	L	--	1	--
PB7	2389+65	40.4'	L	--	1	--
PB8	2390+52	39.1'	L	--	1	--
PB9	2390+89	28.8'	L	--	1	--
PB10	2392+28	28.4'	L	1	--	--
PB11	2393+53	30.1'	L	1	--	--
PB12	2393+96	29.7'	L	1	--	--
PB13	2395+70	29.2'	L	1	--	--
PB14	2397+28	22.3'	L	1	--	--
PB15	2390+73	28.8'	R	--	1	--
PB16	2391+84	34.5'	R	--	--	1
PB17	2390+45	109.0'	L	--	--	1
PROJECT TOTAL				**7**	**8**	**2**

TRAFFIC SIGNAL CONDUIT

LOCATION	FROM	-	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615 CONDUIT SPECIAL 3-INCH LF	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH
CATEGORY 0030 INTERSECTION							
	CB1	-	PB1	--	60	--	--
	PB1	-	SB1	10	--	--	--
	PB1	-	PB2	--	106	--	--
	PB2	-	SB2	14	--	--	--
	PB2	-	PB3	--	84	--	--
	PB3	-	SB3	13	--	--	--
	PB3	-	PB4	292	--	--	--
	PB4	-	LP1	5	--	--	--
	PB4	-	PB5	108	--	--	--
	PB3	-	PB6	--	102	--	--
	PB6	-	SB4	5	--	--	--
	PB6	-	PB7	--	80	--	--
	PB7	-	SB5	14	--	--	--
	PB7	-	SB6	5	--	--	--
	PB7	-	PB8	--	176	--	--
	PB8	-	SB7	--	14	--	--
	PB8	-	PB9	--	78	--	--
	PB9	-	SB8	13	--	--	--
	PB9	-	PB10	280	--	--	--
	PB10	-	LB2	5	--	--	--
	PB10	-	PB11	244	--	--	--
	PB11	-	PB12	35	--	--	--
	PB12	-	PB3	5	--	--	--
	PB12	-	PB13	166	--	--	--
	PB13	-	LB4	8	--	--	--
	PB13	-	PB14	158	--	--	--
	PB14	-	LP5	8	--	--	--
	PB9	-	PB15	--	122	--	--
	PB15	-	SB9	5	--	--	--
	PB15	-	CB1	--	102	--	--
	CB1	-	PB15	143	--	--	--
	PB15	-	PB16	--	--	400	--
	PB16	-	BUNGALOW	--	42	--	1
PROJECT TOTAL				**1,536**	**966**	**400**	**1**

PEDESTRIAN PUSH BUTTONS

LOCATION / BASE NUMBER	658.0500 PEDESTRIAN PUSH BUTTON EACH
CATEGORY 0030 INTERSECTION	
SB3	1
SB5	1
PROJECT TOTAL	**2**

TRAFFIC SIGNAL STRUCTURES

LOCATION / BASE NUMBER	STATION	OFFSET	L/R	654.0113 CONCRETE BASES TYPE 13 EACH	657.0360 POLES TYPE 13 EACH	657.0545 MONOTUBE ARMS ARMS 45-FT EACH	657.0815 LUMINAIRE ARMS STEEL 15-FT EACH	659.1125 * LUMINAIRES UTILITY LED C EACH
CATEGORY 0030 INTERSECTION								
SB7	2390+63	38.5'	L	1	1	1	1	1
PROJECT TOTAL				**1**	**1**	**1**	**1**	**1**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

TRAFFIC SIGNAL STRUCTURES

LOCATION / BASE NUMBER	STATION	OFFSET	L/R	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0105 CONCRETE BASES TYPE 5 EACH	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0305 POLES TYPE 2 EACH	657.0310 POLES TYPE 3 EACH	657.0322 POLES TYPE 5-ALUMINUM EACH	657.0430 RAFFIC SIGNAL STANDARD: ALUMINUM 10-FT EACH	657.0425 ALUMINUM 15-FT EACH	657.0585 TROMBONE ARMS 15-FT EACH	657.0590 TROMBONE ARMS 20-FT EACH	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT EACH	657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT EACH	657.0615 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 8-FT EACH	657.0614 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 8-FT EACH	659.1115 LUMINAIRES UTILITY LED A EACH	659.1125 * LUMINAIRES UTILITY LED C EACH
CATEGORY 0030 INTERSECTION																					
SB1	2390+23	37.1'	R	--	1	--	--	1	--	1	--	--	--	--	--	--	--	--	1	--	1
SB2	2389+62	39.1'	R	--	1	--	--	1	1	--	--	--	--	--	1	--	--	--	--	--	--
SB3	2389+45	24.8'	R	1	--	--	1	--	--	--	--	--	1	--	--	--	--	--	--	--	--
SB4	2389+25	26.5'	L	--	1	--	--	1	1	--	--	--	--	1	--	--	--	--	--	--	--
SB5	2389+53	34.1'	L	1	--	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--
SB6	2389+62	37.4'	L	--	1	--	--	1	--	1	--	--	--	--	--	--	1	--	--	--	1
SB8	2390+82	31.5'	L	--	1	--	--	1	1	--	--	--	--	--	--	--	--	--	--	--	--
SB9	2390+67	28.5'	R	--	1	--	--	1	--	1	--	--	--	1	--	--	1	--	--	--	1
LB1	2387+76	29.6'	R	--	--	1	--	1	--	--	1	--	--	--	--	1	--	--	--	1	--
LB2	2392+35	28.8'	L	--	--	1	--	1	--	--	1	--	--	--	--	--	--	1	--	1	--
LB3	2394+02	30.6'	L	--	--	1	--	1	--	--	1	--	--	--	--	--	--	1	--	1	--
LB4	2395+62	30.8'	L	--	--	1	--	1	--	--	1	--	--	--	--	--	--	1	--	1	--
LB5	2397+37	22.5'	L	--	--	1	--	1	--	--	1	--	--	--	--	--	--	1	--	1	--
EXISTING UTILITY POLE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
PROJECT TOTAL				**2**	**6**	**5**	**2**	**11**	**3**	**3**	**5**	**1**	**1**	**2**	**1**	**1**	**2**	**4**	**1**	**6**	**3**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

TRAFFIC SIGNAL LOOP DETECTORS

LOCATION / LOOP NO.	STATION **	OFFSET	L/R	SIZE FT X FT	NO. OF TURNS	INSTALLATION METHOD	652.0900 LOOP DETECTOR SLOTS LF	652.0800 CONDUIT LOOP DETECTOR LF	655.0800 LOOP DETECTOR WIRE LF	655.0700 * LOOP DETECTOR LEAD IN CABLE LF
CATEGORY 0030 INTERSECTION										
11	2389+20	2.5'	R	6 X 20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	--	100	312	115
12	2389+48	2.5'	R	6 X 20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	--	92	288	115
21	2393+51	14.7'	L	6 X 6	5	LOOP DETECTOR INSTALLED IN EXISTING ASPHALTIC PAVEMENT	42	39	207	380
41	2390+00	27.4'	L	6 X 25	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	--	140	432	205
42	2389+76	30.5'	L	6 X 20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	--	76	240	205
51	2391+07	4.0'	R	6 X 20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	--	122	378	95
52	2390+79	4.0'	R	6 X 20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	--	116	360	95
61	2386+79	11.3'	R	6 X 15	4	LOOP DETECTOR INSTALLED IN EXISTING ASPHALTIC PAVEMENT	46	49	208	370
81	2389+98	58.6'	L	6 X 20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	--	104	324	20
82	2390+03	30.9'	L	6 X 20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	--	92	288	20
PROJECT TOTAL							**88**	**930**	**3,037**	**1,620**

NOTE - INSTALL LOOPS 21 AND 61 PRIOR TO FINAL OVERLAY OF THE ASPHALT SURFACE
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

TRAFFIC SIGNAL HEADS

LOCATION	SIGNAL BASE NO.	HEAD NO.	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0175 TRAFFIC SIGNAL FACE 5S 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	SPV.0060.002 LED BLANK OUT SIGN EACH
CATEGORY 0300 INTERSECTION						
	SB1	7	1	--	--	--
		11	--	1	--	--
	SB2	12	--	1	--	--
	SB3	1	1	--	--	--
		5	1	--	--	--
		4B	--	--	1	--
	SB4	6	1	--	--	--
	SB5	4A	--	--	1	--
	SB6	8	1	--	--	--
		10	1	--	--	--
		15	--	--	--	1
	SB7	2	1	--	--	--
		9	1	--	--	--
		13	--	--	--	1
	SB8	4	1	--	--	--
		14	--	--	--	1
	SB9	3	1	--	--	--
PROJECT TOTAL			**10**	**2**	**2**	**3**

TRAFFIC SIGNAL CABLE AND WIRE - BELOW GROUND

LOCATION	FROM	-	TO	655.0230 * CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG LF	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF	655.0305 CABLE TYPE UF 2-12 AWG GROUNDED LF	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
CATEGORY 0030 INTERSECTION								
	CB1	-	SB1	--	--	57	45	57
	CB1	-	SB2	--	130	--	--	--
	CB1	-	SB3	--	--	187	--	--
	CB1	-	SB4	--	245	--	--	--
	CB1	-	SB5	309	--	--	--	--
	CB1	-	SB6	--	--	299	--	--
	CB1	-	SB7	--	--	149	128	--
	CB1	-	SB8	--	145	--	--	--
	CB1	-	SB9	--	67	--	--	67
	SB1	-	SB2	--	--	--	--	98
	SB2	-	SB3	--	--	--	--	73
	SB3	-	SB4	--	--	--	--	92
	SB4	-	SB5	--	--	--	--	82
	SB5	-	SB6	--	--	--	--	35
	SB6	-	SB7	--	--	--	--	144
	SB7	-	SB8	--	--	--	--	32
	SB8	-	SB9	--	--	--	--	95
	SB1	-	SB4	--	--	--	196	--
	SB4	-	LB1	--	--	--	234	--
	SB3	-	LB1	--	--	--	--	--
	SB7	-	LB2	--	--	--	181	--
	LB2	-	LB3	--	--	--	198	--
	LB3	-	LB4	--	--	--	203	--
	LB4	-	LB5	--	--	--	199	--
PROJECT TOTAL				**309**	**587**	**692**	**1,384**	**775**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

TRAFFIC SIGNAL CABLE AND WIRE - ABOVE GROUND

LOCATION	FROM SIGNAL BASE	-	TO SIGNAL HEAD	655.0230 * CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF	655.0700 * LOOP DETECTOR LEAD IN CABLE LF
CATEGORY 0030 INTERSECTION						
	SB1	-	7	19	--	--
		-	11	19	--	--
		-	LUMINAIRE	--	117	--
	SB2	-	12	19	--	--
	SB3	-	1	19	--	--
		-	5	19	--	--
		-	4B	15	--	--
	CB1	-	BUTTON	--	--	130
	SB4	-	6	19	--	--
		-	LUMINAIRE	--	117	--
	SB5	-	4A	15	--	--
	CB1	-	BUTTON	--	--	220
	SB6	-	8	19	--	--
		-	10	19	--	--
			15	15	--	--
	SB7	-	2	19	--	--
		-	9	19	--	--
		-	13	15	--	--
		-	14	15	--	--
		-	LUMINAIRE	--	117	--
	SB8	-	4	19	--	--
	SB9	-	3	19	--	--
	LB1	-	--	--	117	--
	LB2	-	--	--	117	--
	LB3	-	--	--	117	--
	LB4	-	--	--	117	--
	LB5	-	--	--	117	--
PROJECT TOTAL				**303**	**936**	**350**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

CONSTRUCTION STAKING

LOCATION	650.8500.01 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (STH 170 & STH 79) LS
CATEGORY 0030	
STH 170 & STH 79 (NORTH)	1
PROJECT TOTAL	**1**

TRAFFIC SIGNAL CONTROL

LOCATION	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL (STH 170 & STH 79) LS
CATEGORY 0030		
STH 170 & STH 79 (NORTH)	1	1
PROJECT TOTAL	**1**	**1**

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.01 SIGNAL MOUNTING HARDWARE (STH 170 & STH 79) LS
CATEGORY 0030	
STH 170 & STH 79 (NORTH)	1
PROJECT TOTAL	**1**

TEMPORARY TRAFFIC SIGNAL FOR BRIDGES

LOCATION	661.0100 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) 001 . B-17-0132 LS
CATEGORY 0030	
TIFFANY CREEK	1
PROJECT TOTAL	**1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
8630-03-22
GLENWOOD CITY TO COLFAX
(STH 128 - STH 79)
STH 170
ST. CROIX & DUNN COUNTY

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING — TO BE REMOVED
BRIDGE

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (3/4-INCH UNLESS NOTED)

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER (25)
UTILITY NUMBER (40)
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

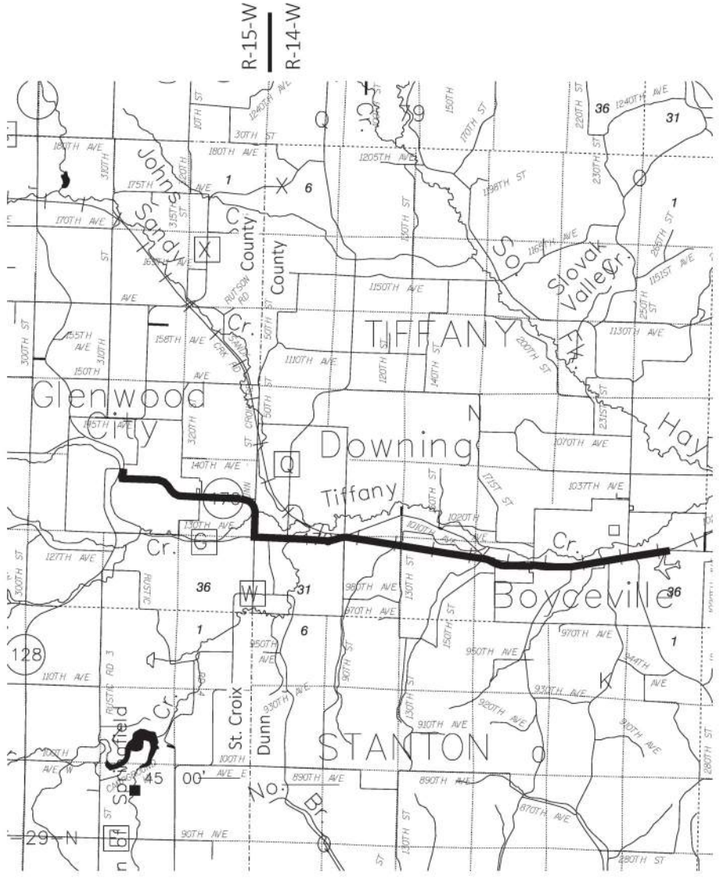
ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTICTIVE DEVELOPMENT EASEMENT	RDE
CENTERLINE	C/L	RIGHT	RT
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE	CONC	SECTION	SEC
COUNTY	CO	SEPTIC VENT	SEPV
COUNTY TRUNK HIGHWAY	CTH	SQUARE FEET	SF
DISTANCE	DIST	STATE TRUNK HIGHWAY	STH
CORNER	COR	STATION	STA
DOCUMENT NUMBER	DOC	TELEPHONE PEDESTAL	TP
EASEMENT	EASE	TEMPORARY LIMITED EASEMENT	TLE
EXISTING	EX	TRANSPORTATION PROJECT PLAT	TPP
GAS VALVE	GV	UNITED STATES HIGHWAY	USH
GRID NORTH	GN	VOLUME	V
HIGHWAY EASEMENT	HE		
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		
POINT OF COMPOUND CURVE	PCC		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

W — WATER
G — GAS
T — TELEPHONE
OH — OVERHEAD TRANSMISSION LINES
E — ELECTRIC
TV — CABLE TELEVISION
FO — FIBER OPTIC
SAN — SANITARY SEWER
SS — STORM SEWER



THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 8630-03-22.

NOTES:

FOR ST. CROIX COUNTY (SHEETS 4.01 TO 4.04):
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST. CROIX COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR DUNN COUNTY (SHEETS 4.04 TO 4.10):
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, 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 DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, 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 DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NW REGION.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

FOR ST CROIX COUNTY (SHEETS 4.01 THROUGH 4.04):
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 ESTABLISHED FROM R/W PLAT 8630-06-21, ORIGINAL PLAT OF GLENWOOD, FIRST ADDITION TO GLENWOOD, CSM 3015, CSM 6319, POS D, POS F, POS H, POS K.
EXISTING HIGHWAY RIGHT-OF-WAY FOR OAK ST. ESTABLISHED FROM ORIGINAL PLAT OF GLENWOOD, CSM 3015.
EXISTING HIGHWAY RIGHT-OF-WAY FOR PINE ST. ESTABLISHED FROM ORIGINAL PLAT OF GLENWOOD.
EXISTING HIGHWAY RIGHT-OF-WAY FOR SECOND ST. ESTABLISHED FROM ORIGINAL PLAT OF GLENWOOD.
EXISTING HIGHWAY RIGHT-OF-WAY FOR THIRD ST. ESTABLISHED FROM ORIGINAL PLAT OF GLENWOOD, FIRST ADDITION TO GLENWOOD, POS H.
EXISTING HIGHWAY RIGHT-OF-WAY FOR FOURTH ST. ESTABLISHED FROM ORIGINAL PLAT OF GLENWOOD, FIRST ADDITION TO GLENWOOD, POS H.
EXISTING HIGHWAY RIGHT-OF-WAY FOR FIFTH ST. ESTABLISHED FROM FIRST ADDITION TO GLENWOOD.
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIXTH ST. ESTABLISHED FROM FIRST ADDITION TO GLENWOOD, POS D, POS K.

FOR FOR DUNN COUNTY (SHEETS 4.04 THROUGH 4.10):
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 ESTABLISHED FROM R/W PLATS 6379, 6410, 8631-01-21 & 8926-00-01-4.01, COOLCROFT ADDITION TO THE VILLAGE OF DOWNING, R. A. WEED'S ADDITON TO THE VILLAGE OF DOWNING, STODDARD'S ADDITION TO THE VILLAGE OF DOWNING, CSM 4204, PLAT OF SURVEYS S229, S230, S231, S370, S1501, M890.
EXISTING HIGHWAY RIGHT-OF-WAY FOR COOLIDGE AVE. ESTABLISHED FROM COOLCROFT ADDITION TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR FIRST ST. ESTABLISHED FROM STODDARD'S ADDITION TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR OAK ST. ESTABLISHED FROM R. A. WEED'S ADDITON TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR SUMMIT ST. ESTABLISHED FROM STODDARD'S ADDITION TO THE VILLAGE OF DOWNING, PLAT OF SURVEY S370.
EXISTING HIGHWAY RIGHT-OF-WAY FOR FOREST ST. ESTABLISHED FROM WEED'S ADDITION TO THE VILLAGE OF DOWNING, STODDARD'S ADDITION TO THE VILLAGE OF DOWNING, PLAT OF SURVEY S370.
EXISTING HIGHWAY RIGHT-OF-WAY FOR ELM ST. ESTABLISHED FROM R. A. WEED'S ADDITON TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR WILSON ST. ESTABLISHED FROM R. A. WEED'S ADDITION TO THE VILLAGE OF DOWNING, STODDARD'S ADDITION TO THE VILLAGE OF DOWNING, ORIGINAL PLAT TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR PINE ST. ESTABLISHED FROM ORIGINAL PLAT TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CHETNUT ST. ESTABLISHED FROM ORIGINAL PLAT TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR ASH ST. ESTABLISHED FROM ORIGINAL PLAT TO THE VILLAGE OF DOWNING, PLAT OF SURVEY S231, S368.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CENTRAL ST. ESTABLISHED FROM R. A. WEED'S ADDITION TO THE VILLAGE OF DOWNING, PLAT OF SURVEY S229.
EXISTING HIGHWAY RIGHT-OF-WAY FOR TIFFANY ST. ESTABLISHED FROM R. A. WEED'S ADDITON TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR LOCUST ST. ESTABLISHED FROM ORIGINAL PLAT TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CTH Q ESTABLISHED FROM R/W PLAT 8631-01-21, CSM 1072.
EXISTING HIGHWAY RIGHT-OF-WAY FOR ROWLEY RD. ESTABLISHED FROM R/W PLAT 8631-01-21, PLAT OF SURVEY M890.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CENTER ST. ESTABLISHED FROM R/W PLATS 8630-01-21 & 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE, CSM 4429.
EXISTING HIGHWAY RIGHT-OF-WAY FOR RACE ST. ESTABLISHED FROM R/W PLATS 8630-01-21 & 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE, CSM 4429.
EXISTING HIGHWAY RIGHT-OF-WAY FOR WINTER ST. ESTABLISHED FROM R/W PLAT 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE, CSM 2744.
EXISTING HIGHWAY RIGHT-OF-WAY FOR EAST ST ESTABLISHED FROM R/W PLATS 8630-01-21 & 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE.

PROJECT NUMBER	8630-03-22 -4..04
SHEET	2 OF 2
AMENDMENT NO:	

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\RW\TITLE SHEET.DWG
LAYOUT NAME: TPP Title 34x22
PLOT DATE : 9/16/2015 3:04 PM
PLOT BY : SCOTT DEMEUSE
PLOT NAME : _____
APPRAISAL PLAT DATE : 08/06/2019
_____4.___

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.01

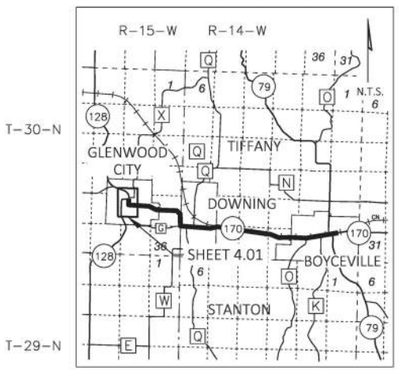
THAT PART OF LOT 1, BLOCK 2, LOT 25, BLOCK 3 AND LOT 24, BLOCK 4, ORIGINAL PLAT OF GLENWOOD, PART OF OUTLOT 78, ASSESSOR'S PLAT GLENWOOD CITY, LOCATED IN PART OF THE NW 1/4 OF THE NW 1/4 OF SECTION 26; AND PART OF LOT 24, BLOCK 4, ORIGINAL PLAT OF GLENWOOD, LOCATED IN THE NE 1/4 OF THE NW 1/4 OF SECTION 26; ALL IN T 30 N, R 15 W, CITY OF GLENWOOD CITY, ST. CROIX COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LOCATION SKETCH



1088885
BETH PABST
REGISTER OF DEEDS
ST. CROIX CO., WI
RECEIVED FOR RECORD
09/20/2019 09:06 AM
EXEMPT #
PLAT FEE 25.00
VOLUME: TPP1
PAGES: 160
PAGES: 1
**The above recording information verifies that this document has been electronically recorded & returned to the submitter

171

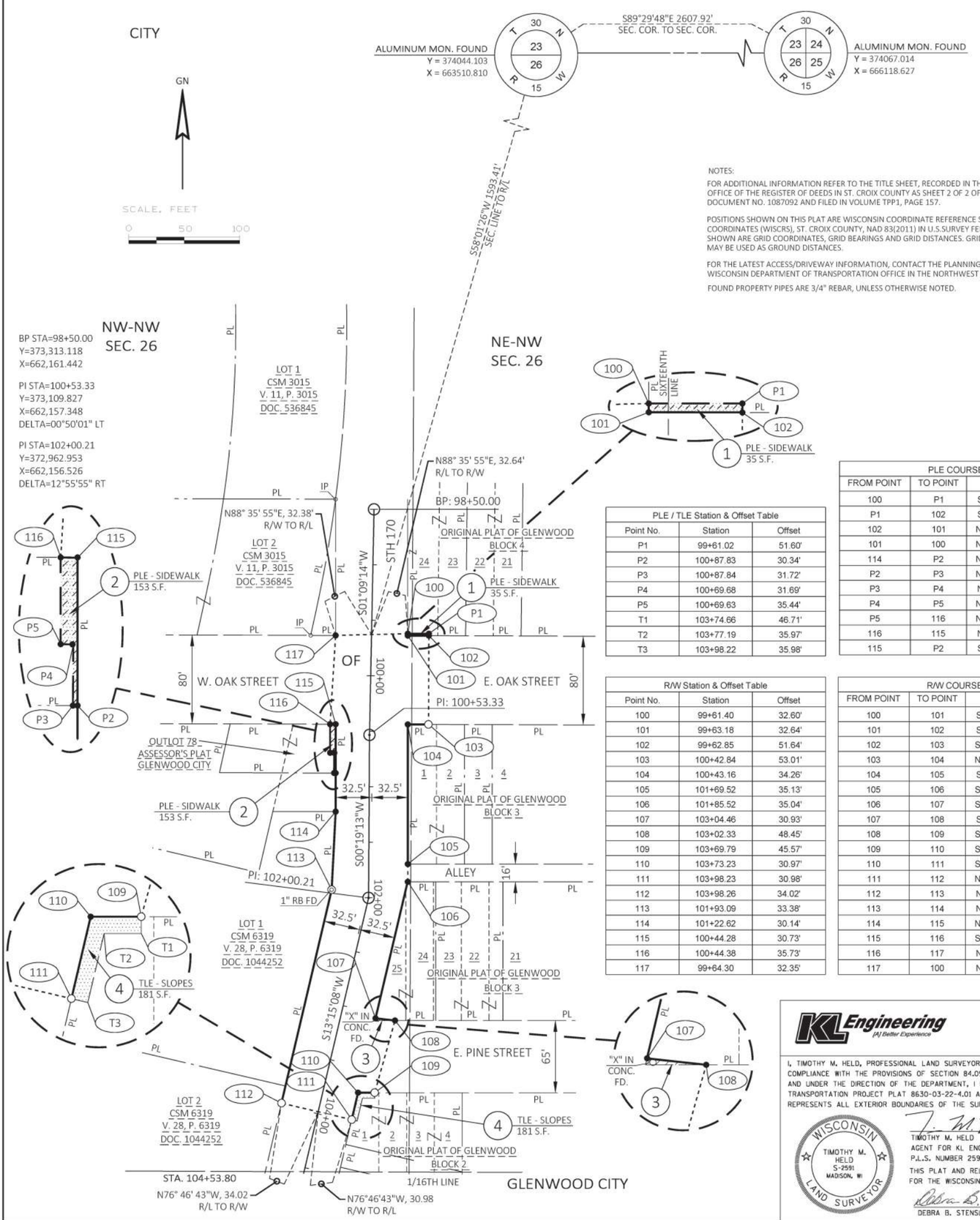
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.01
AMENDMENT NO.___

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO THE STATE OF WISCONSIN
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE SF	PLE SF
1	ASHLESON PROPERIES, LLC, A WISCONSIN LIMITED LIABILITY COMPANY	PLE	----	----	----	----	35
2	BONNIE PELKAN AND ANTON O. PELKIN	PLE	----	----	----	----	153
3	EMMANUEL PROPERTIES WI #2 LLC, A WISCONSIN LIMITED LIABILITY COMPANY	FEE	18	----	18	----	----
4	SHEM RASCHKE	TLE	----	----	----	181	----

HIGHWAY	BASIS
STH 170:	ORIGINAL PLAT OF GLENWOOD, CSM 3015, CSM 6319, POS F.
OAK ST:	ORIGINAL PLAT OF GLENWOOD, CSM 3015.
PINE ST:	ORIGINAL PLAT OF GLENWOOD



NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN ST. CROIX COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 1087092 AND FILED IN VOLUME TPP1, PAGE 157.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST. CROIX COUNTY, NAD 83(2011) IN U.S.SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

FOUND PROPERTY PIPES ARE 3/4" REBAR, UNLESS OTHERWISE NOTED.

PLE / TLE Station & Offset Table		
Point No.	Station	Offset
P1	99+61.02	51.60'
P2	100+87.83	30.34'
P3	100+87.84	31.72'
P4	100+69.68	31.69'
P5	100+69.63	35.44'
T1	103+74.66	46.71'
T2	103+77.19	35.97'
T3	103+98.22	35.98'

PLE COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
100	P1	S89° 59' 03"E	19.00'
P1	102	S00° 00' 25"E	1.83'
102	101	N89° 50' 00"W	19.00'
101	100	N00° 00' 35"W	1.78'
114	P2	N00° 00' 35"W	34.79'
P2	P3	N89° 50' 00"W	1.38'
P3	P4	N00° 24' 04"E	18.16'
P4	P5	N88° 57' 06"W	3.75'
P5	116	N00° 00' 35"W	25.77'
116	115	N89° 59' 25"E	5.00'
115	P2	S00° 00' 35"E	44.00'

R/W Station & Offset Table		
Point No.	Station	Offset
100	99+61.40	32.60'
101	99+63.18	32.64'
102	99+62.85	51.64'
103	100+42.84	53.01'
104	100+43.16	34.26'
105	101+69.52	35.13'
106	101+85.52	35.04'
107	103+04.46	30.93'
108	103+02.33	48.45'
109	103+69.79	45.57'
110	103+73.23	30.97'
111	103+98.23	30.98'
112	103+98.26	34.02'
113	101+93.09	33.38'
114	101+22.62	30.14'
115	100+44.28	30.73'
116	100+44.38	35.73'
117	99+64.30	32.35'

R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
100	101	S00° 00' 35"E	1.78'
101	102	S89° 50' 00"E	19.00'
102	103	S00° 10' 00"W	80.00'
103	104	N89° 50' 00"W	18.75'
104	105	S00° 00' 35"E	125.87'
105	106	S00° 39' 34"W	16.00'
106	107	S13° 13' 17"W	126.40'
107	108	S83° 40' 01"E	17.65'
108	109	S15° 42' 02"W	67.52'
109	110	S90° 00' 00"W	15.00'
110	111	S13° 13' 17"W	25.00'
111	112	N76° 46' 43"W	65.00'
112	113	N13° 13' 17"E	197.52'
113	114	N02° 57' 09"E	70.54'
114	115	N00° 00' 35"W	78.79'
115	116	S89° 59' 25"W	5.00'
116	117	N03° 33' 59"E	80.16'
117	100	N88° 35' 55"E	65.02'

KL Engineering
A Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN TIMOTHY M. HELD S-2591 MADISON, WI LAND SURVEYOR

9-13-2019
TIMOTHY M. HELD DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

9-18-2019
DEBRA B. STENSLAND DATE

FILE NAME : G:\WDOT\NW\18046-000 (STH170)_CIVIL 3D\SHEETS\PLAN\RW\ST. CROIX CO\040101-RP.DWG
APPRAISAL PLAT DATE : 09/13/2019
PLOT DATE : 9/18/2019 1:21 PM
PLOT BY : Timothy Held
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
8630-03-22 - 4.01

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.02

THAT PART OF LOTS 16 AND 17, BLOCK 1, LOT 15, BLOCK 2, LOT 1, BLOCK 12, LOT 1, BLOCK 13 AND LOTS 9 AND 16, BLOCK 14, ORIGINAL PLAT OF GLENWOOD, LOCATED IN THE SE 1/4 OF THE NW 1/4 OF SECTION 26, T 30 N, R 15 W, CITY OF GLENWOOD CITY, ST. CROIX COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

R/W Station & Offset Table		
Point No.	Station	Offset
200	121+18.73	32.20'
201	121+18.95	32.80'
202	120+78.53	32.84'
203	120+31.53	32.89'
204	117+29.73	32.40'
205	116+31.38	32.41'
206	116+31.38	49.47'
207	115+66.38	32.41'
208	111+66.38	32.43'
209	111+66.38	40.43'
210	111+01.38	39.43'
211	111+01.38	32.43'
212	110+66.38	32.43'
213	110+66.38	32.57'
214	110+95.76	32.57'
215	111+01.26	42.57'
216	111+01.26	52.57'
217	111+66.26	32.57'
218	115+66.27	32.59'
219	116+31.26	38.67'
220	116+31.27	32.59'
221	117+29.84	32.60'
222	120+31.13	32.11'
223	120+31.12	38.57'
224	120+96.13	32.18'

R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
200	201	S00° 09' 07"W	65.00'
201	202	N89° 42' 35"W	40.42'
202	203	N89° 42' 35"W	47.00'
203	204	N89° 42' 35"W	301.65'
204	205	N89° 54' 00"W	98.35'
205	206	S00° 06' 00"W	17.07'
206	207	N75° 11' 16"W	67.20'
207	208	N89° 54' 00"W	400.00'
208	209	S00° 06' 00"W	8.00'
209	210	N89° 01' 07"W	65.01'
210	211	N00° 06' 00"E	7.00'
211	212	N89° 54' 00"W	35.00'
212	213	N00° 06' 00"E	65.00'
213	214	S89° 54' 00"E	29.39'
214	215	N28° 54' 38"E	11.41'
215	216	N00° 06' 00"E	10.00'
216	217	S72° 47' 51"E	68.01'
217	218	S89° 54' 00"E	400.00'
218	219	N84° 45' 38"E	65.28'
219	220	S00° 06' 00"W	6.07'
220	221	S89° 54' 00"E	98.57'
221	222	S89° 42' 35"E	301.43'
222	223	N00° 17' 25"E	6.46'
223	224	S84° 01' 48"E	65.32'
224	200	S89° 42' 35"E	22.60'

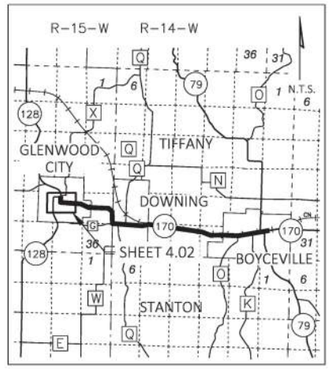
TLE Station & Offset Table		
Point No.	Station	Offset
T4	116+81.38	32.40'
T5	116+81.38	40.30'
T6	111+86.38	32.43'
T7	111+86.38	40.43'
T8	110+66.38	39.43'
T9	110+79.26	32.57'
T10	110+79.26	40.57'
T11	110+94.5	40.57'
T12	116+43.41	32.59'
T13	119+94.13	32.07'
T14	119+94.12	37.07'
T15	120+01.62	37.08'
T16	120+01.62	42.08'
T17	120+14.59	42.09'
T18	120+14.6	38.56'
T52	116+59.37	40.34'
T53	116+59.38	49.47'

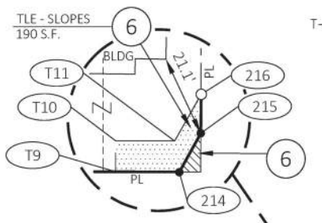
1088770
BETH PABST
REGISTER OF DEEDS
ST. CROIX CO., WI
RECEIVED FOR RECORD
09/18/2019 01:43 PM
EXEMPT #
PLAT FEE 25.00

VOLUME: TPP1
PAGES: 158
PAGES: 1
**The above recording information verifies that this document has been electronically recorded & returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.02
AMENDMENT NO:___

LOCATION SKETCH





SE-NW
SEC. 26

PI STA=119+16.76
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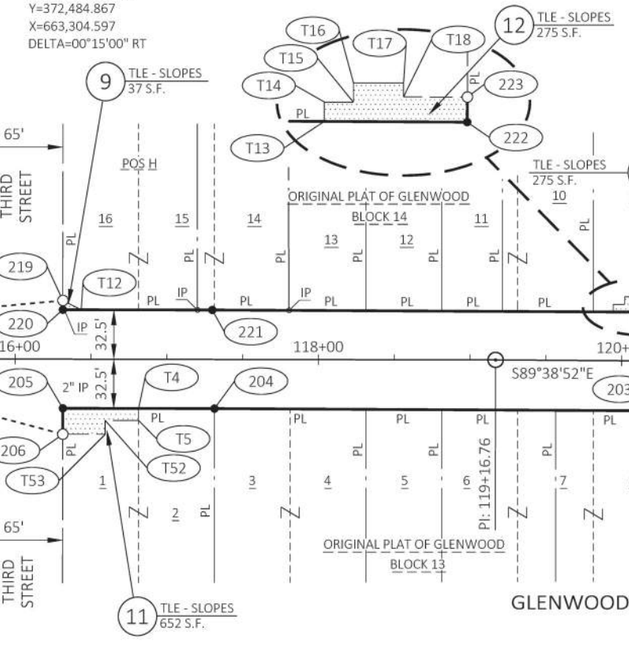
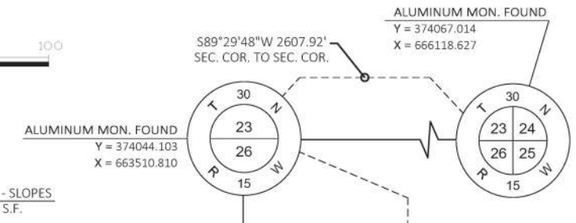


GN

SCALE, FEET
0 50 100



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO THE STATE OF WISCONSIN
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE SF
6	CRAIG W. ANDERSON AND JULIE A. ANDERSON	FEE/TLE	28	----	28	190
7	ANNETTA M. WALDON, VENDOR AND LAURIE L. STEWART, PURCHASER UNDER LAND CONTRACT RECORDED 9/16/2015 AS DOCUMENT NO. 1018619	TLE	----	----	----	245
8	BENJAMIN T. HELLER AND LISA A. HELLER	TLE	----	----	----	160
9	THOMAS J. SCHUG	TLE	----	----	----	37
11	CARLTON DEWITT AND PAULA DEWITT	TLE	----	----	----	652
12	RONNIE L. GILBERTSON	TLE	----	----	----	275

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN ST. CROIX COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 1087092 AND FILED IN VOLUME TPP1, PAGE 157.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE COORDINATES (WISCRS), ST. CROIX COUNTY, NAD 83(2011) IN U.S.SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

FOUND PROPERTY PIPES ARE 3/4" REBAR, UNLESS OTHERWISE NOTED.

HIGHWAY	BASIS
STH 170:	R/W PLAT 8630-06-21, ORIGINAL PLAT OF GLENWOOD, FIRST ADDITION TO GLENWOOD, POS H.
SECOND ST:	ORIGINAL PLAT OF GLENWOOD.
THIRD ST:	ORIGINAL PLAT OF GLENWOOD, POS H.
FOURTH ST:	ORIGINAL PLAT OF GLENWOOD, FIRST ADDITION TO GLENWOOD, POS H.

KL Engineering
[A] Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN TIMOTHY M. HELD S-2591 MADISON, WI LAND SURVEYOR

9-13-2019
TIMOTHY M. HELD — DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

9-16-2019
DEBRA B. STENSLAND — DATE

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\RW\ST. CROIX CO\040101-RP.DWG
PLOT DATE : 9/13/2019 10:39 AM
PLOT BY : SCOTT DEMEUSE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
APPRAISAL PLAT DATE : 09/05/2019

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.03

THAT PART OF LOT 9, BLOCK 23, LOTS 9 AND 16, BLOCK 26 AND LOT 14, BLOCK 31, FIRST ADDITION TO GLENWOOD, LOCATED IN THE SW 1/4 OF THE NE 1/4 OF SECTION 26, T 30 N, R 15 W, CITY OF GLENWOOD CITY, ST. CROIX COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN ST. CROIX COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 1087092 AND FILED IN VOLUME TPP1, PAGE 157.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST. CROIX COUNTY, NAD 83(2011) IN U.S.SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

FOUND PROPERTY PIPES ARE 3/4" REBAR, UNLESS OTHERWISE NOTED.

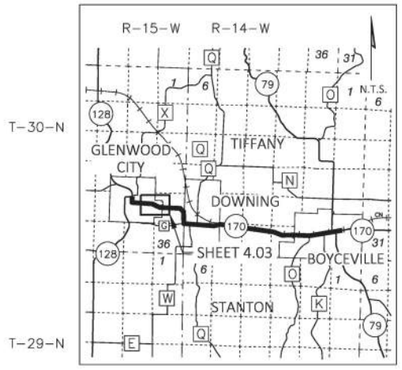
UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	CENTURYLINK	RELEASE OF RIGHTS
201	XCEL ENERGY	RELEASE OF RIGHTS

(200) CENTURYLINK
V. 1335, P. 322, DOC. 581888 (10' WIDE EASEMENT) - PARCEL 17

(201) XCEL ENERGY
V. 308, P. 386, DOC. 236009 (BLANKET EASEMENT) - PARCEL 16

LOCATION SKETCH



1088771
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ST. CROIX CO., WI
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09/18/2019 01:45 PM
EXEMPT #
PLAT FEE 25.00
VOLUME: TPP1
PAGES: 159
PAGES: 1
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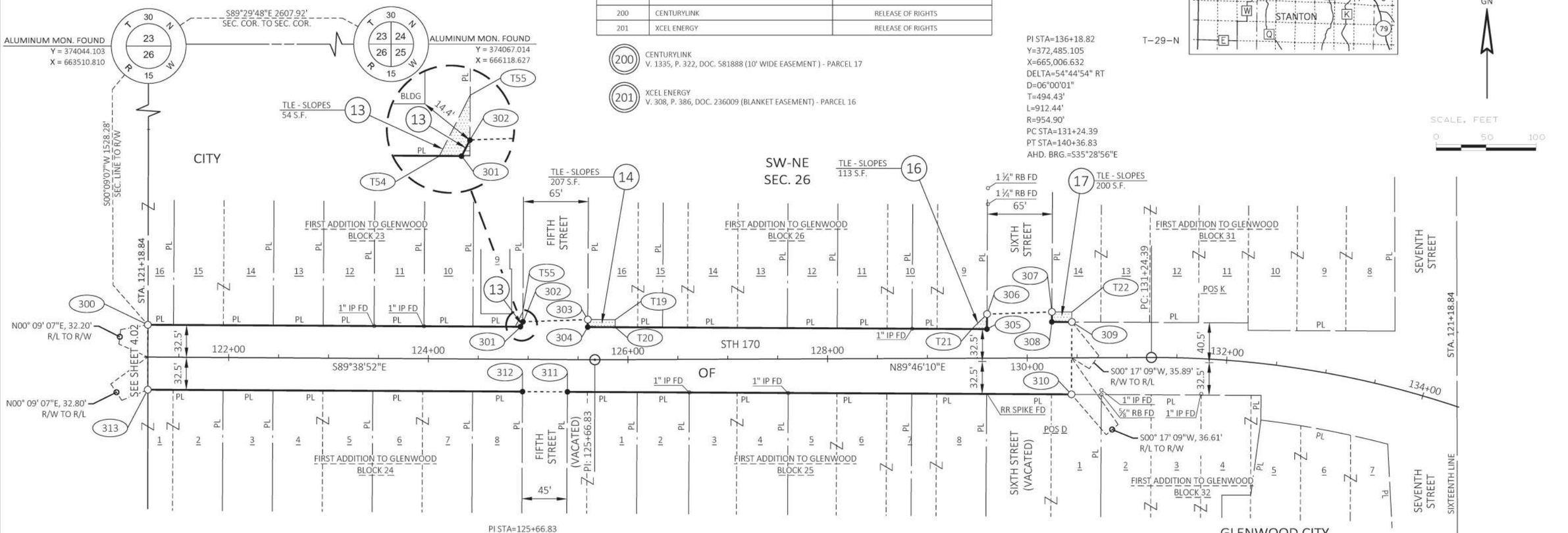
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.03
AMENDMENT NO:___

GN

SCALE, FEET
0 50 100

PI STA=136+18.82
Y=372,485.105
X=665,006.632
DELTA=54°44'54" RT
D=06°00'01"
T=494.43'
L=912.44'
R=954.90'
PC STA=131+24.39
PT STA=140+36.83
AHD. BRG.=S35°28'56"E



PI STA=125+66.83
Y=372,480.870
X=663,954.656
DELTA=00°34'58" LT

HIGHWAY	BASIS
STH 170:	R/W PLAT 8630-06-21, FIRST ADDITION TO GLENWOOD, POS D, POS K.
FIFTH ST:	FIRST ADDITION TO GLENWOOD.
SIXTH ST:	FIRST ADDITION TO GLENWOOD, POS D, POS K.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO THE STATE OF WISCONSIN
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE SF
13	WILLIAM J. MITCH AND VICKIE SCHMIDT	FEE/TLE	4	----	4	54
14	MICHAEL D. LARSON AND AMANDA R. LARSON	TLE	----	----	----	207
			----	----	----	----
16	MICHAEL F. KORTUEM AND LINDA L. KORTUEM	TLE	----	----	----	113
17	CITY OF GLENWOOD, A MUNICIPAL CORPORATION	TLE	----	----	----	200

TLE Station & Offset Table		
Point No.	Station	Offset
T19	125+87.38	40.01'
T20	125+87.31	32.51'
T21	129+44.79	29.29'
T22	130+44.95	45.88'
T54	124+86.89	32.60'
T55	124+94.47	47.79'

R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
300	301	S89° 42' 35"E	373.75'
301	302	N26° 52' 38"E	4.47'
302	303	N87° 12' 22"E	65.10'
303	304	S00° 19' 04"W	7.50'
304	305	S89° 42' 51"E	400.00'
305	306	N00° 15' 22"E	15.00'
306	307	N88° 05' 01"E	65.05'
307	308	S00° 15' 22"W	10.00'
308	309	S89° 42' 51"E	20.00'
309	310	S00° 17' 09"W	72.50'
310	311	N89° 42' 51"W	505.04'
311	312	N89° 42' 38"W	45.00'
312	313	N89° 42' 35"W	375.56'

R/W Station & Offset Table		
Point No.	Station	Offset
300	121+18.73	32.20'
301	124+92.48	32.61'
302	124+94.47	36.61'
303	125+59.47	40.18'
304	125+59.48	32.68'
305	129+59.79	29.15'
306	129+59.92	44.15'
307	130+24.95	46.07'
308	130+24.86	36.07'
309	130+44.86	35.89'
310	130+44.21	36.61'
311	125+39.52	32.34'
312	124+94.52	32.39'
313	121+18.95	32.80'

KL Engineering
[A] Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN TIMOTHY M. HELD S-2591 MADISON, WI LAND SURVEYOR

9-13-2019
TIMOTHY M. HELD — DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

9-16-2019
DEBRA B. STENSLAND — DATE

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\RW\ST. CROIX CO\040101-RP.DWG
APPRAISAL PLAT DATE : 09/13/2019
PLOT DATE : 9/13/2019 10:39 AM
PLOT BY : SCOTT DEMEUSE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

8630-03-22 - 4.03

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.04

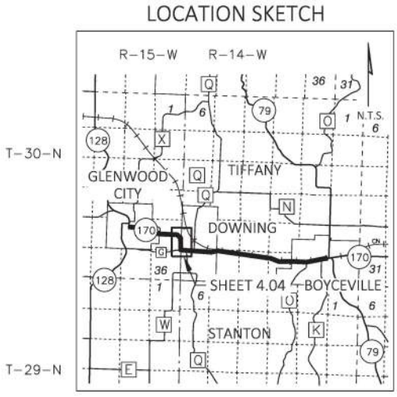
THAT PART OF LOT 9, BLOCK B OF COOLCROFT ADDITION TO THE VILLAGE OF DOWNING LOCATED IN THE FRACTIONAL SW 1/4 OF THE SW 1/4 OF SECTION 30; ALSO THAT PART OF THE FRACTIONAL NW 1/4 OF THE SW 1/4 OF SECTION 30, ALL IN T 30 N, R 14 W, VILLAGE OF DOWNING, DUNN COUNTY, WISCONSIN. ALSO THAT PART OF THE SE 1/4 OF THE SE 1/4 OF SECTION 25, T 30 N, R 15 W, TOWN OF GLENWOOD, ST. CROIX COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LOCATION SKETCH



1087092
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EXEMPT #
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VOLUME: TPP1
PAGES: 157
PAGES: 2
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.04
SHEET 1 OF 2
AMENDMENT NO:___

GN

SCALE, FEET
0 50 100

SURVEY NAIL MON. FOUND
Y = 235360.775
X = 107439.873

S89° 29' 54"E, 33.00'
SEC. LINE TO R/W

S00°30'06"W 593.24'
SEC. COR. TO TRAV. PT.

2106+00

COUNTY

COUNTY

400

18 TLE - SLOPES
1,814 S.F.

PL

19 TLE - SLOPES
538 S.F.

401

402

PI STA = 2104+25.88
Y = 235357.583
X = 107436.701
DELTA = 89°44'36" RT
D = 5°59'47"
T = 951.23'
L = 1496.62'
R = 955.50'
PC STA = 2094+74.65
BK. BRG. S89°13'08"E

2108+00

N00°30'06"E
361.21

TOWN

VILLAGE

S89° 28' 33"E, 3.36'
R/L LINE TO SEC. LINE

S89° 28' 33"E, 61.64'
R/W TO R/L

412

PT: 2109+71.27

2110+00

65'

65'

PL

NE-SE
SEC. 25

FRACTIONAL
NW-SW
SEC. 30

S00°30'06"W 2649.51'
SEC. COR. TO SEC. COR.

STH 170

TOWN OF GLENWOOD

VILLAGE OF DOWNING

2112+00

S00°31'27"W

S00°30'06"W 487.23'
TRAV. PT. TO TRAV. PT.

OF

OF

OF

BLOCK C

403

411

409

406

404

410

405

STA. 2113+41.56 1/16 LINE

ALLEY 16' (UNIMPROVED)

COOLCROFT ADDITION
TO THE VILLAGE
OF DOWNING

T23

T24

TLE - SLOPES
1,599 S.F.

21

19 TLE - SLOPES
250 S.F.

ST. CROIX

DUNN

2114+00

SE-SE
SEC. 25

408

407

BLOCK B

FRACTIONAL
SW-SW
SEC. 30

N89° 18' 51"W, 29.63'
R/L TO R/W

N89° 18' 51"W, 32.66'
R/W TO SEC. LINE

50'

COOLIDGE AVE.
(UNIMPROVED)

N89° 18' 51"W, 3.71'
SEC. LINE TO R/L

33'

33'

2116+00

BLOCK D

GLENWOOD

DOWNING

N00°30'06"E 1207.83'
SEC. COR. TO TRAV. PT.

SURVEY NAIL MON. FOUND
Y = 232711.362
X = 107416.675

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO STATE OF WISCONSIN
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
18	ESTATE OF HELMER HURTGEN	TLE	----	----	----	1814
19	ROBERT LUDTKE & JOAN M. LUDTKE	TLE	----	----	----	788
21	DAVID W. & THERESA M. HOFFMAN	TLE	----	----	----	1599

HIGHWAY	BASIS
STH 170:	R/W PLATS 6379, 6410, COOLCROFT ADDITION TO THE VILLAGE OF DOWNING

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN ST. CROIX AND DUNN COUNTIES AS SHEET 2 OF 2 OF THIS DOCUMENT.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD 83(2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
400	401	S00° 30' 06"W	147.01'
401	402	S89° 29' 54"E	32.00'
402	403	S00° 30' 06"W	585.15'
403	404	S00° 30' 06"W	14.85'
404	405	S00° 30' 06"W	16.00'
405	406	N89° 29' 54"W	32.06'
406	407	S00° 41' 09"W	85.55'
407	408	N89° 18' 51"W	66.00'
408	409	N00° 41' 09"E	100.00'
409	410	N89° 29' 54"W	31.98'
410	411	N00° 30' 06"E	17.11'
411	412	N00° 30' 06"E	370.05'

R/W Station & Offset Table		
Point No.	Station	Offset
400	2106+37.55	100.11'
401	2107+68.04	59.30'
402	2107+74.20	90.61'
403	2113+42.19	68.67'
404	2113+57.04	68.67'
405	2113+73.04	68.68'
406	2113+73.05	36.62'
407	2114+58.39	36.38'
408	2114+58.41	29.63'
409	2113+58.41	29.34'
410	2113+58.43	61.33'
411	2113+41.31	61.33'
412	2109+71.27	61.48'

TLE Station & Offset Table		
Point No.	Station	Offset
T23	2113+73.04	50.75'
T24	2114+08.39	36.52'

KL Engineering
A Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.04 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN
TIMOTHY M. HELD
S-2591
MADISON, WI
LAND SURVEYOR

08-16-2019
TIMOTHY M. HELD DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

08-16-2019
DEBRA B. STENSLAND DATE

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\RW\DUNN CO\040101-RP.DWG
APPRAISAL PLAT DATE : 08/15/2019
PLOT DATE : 8/16/2019 3:05 PM
PLOT BY : Timothy Held
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
8630-03-22 - 4.04

636946
DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN
RECORDED ON
08/20/2019 1 PM
REC FEE: 2
PAGES: 1
The above recording information verifies that this document has been electronically recorded and returned to the submitter.

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.04

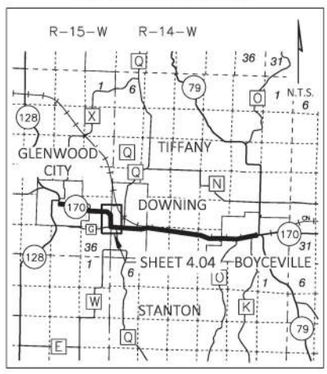
THAT PART OF LOT 9, BLOCK B OF COOLCROFT ADDITION TO THE VILLAGE OF DOWNING LOCATED IN THE FRACTIONAL SW 1/4 OF THE SW 1/4 OF SECTION 30; ALSO THAT PART OF THE FRACTIONAL NW 1/4 OF THE SW 1/4 OF SECTION 30, ALL IN T 30 N, R 14 W, VILLAGE OF DOWNING, DUNN COUNTY, WISCONSIN. ALSO THAT PART OF THE SE 1/4 OF THE SE 1/4 OF SECTION 25, T 30 N, R 15 W, TOWN OF GLENWOOD, ST. CROIX COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

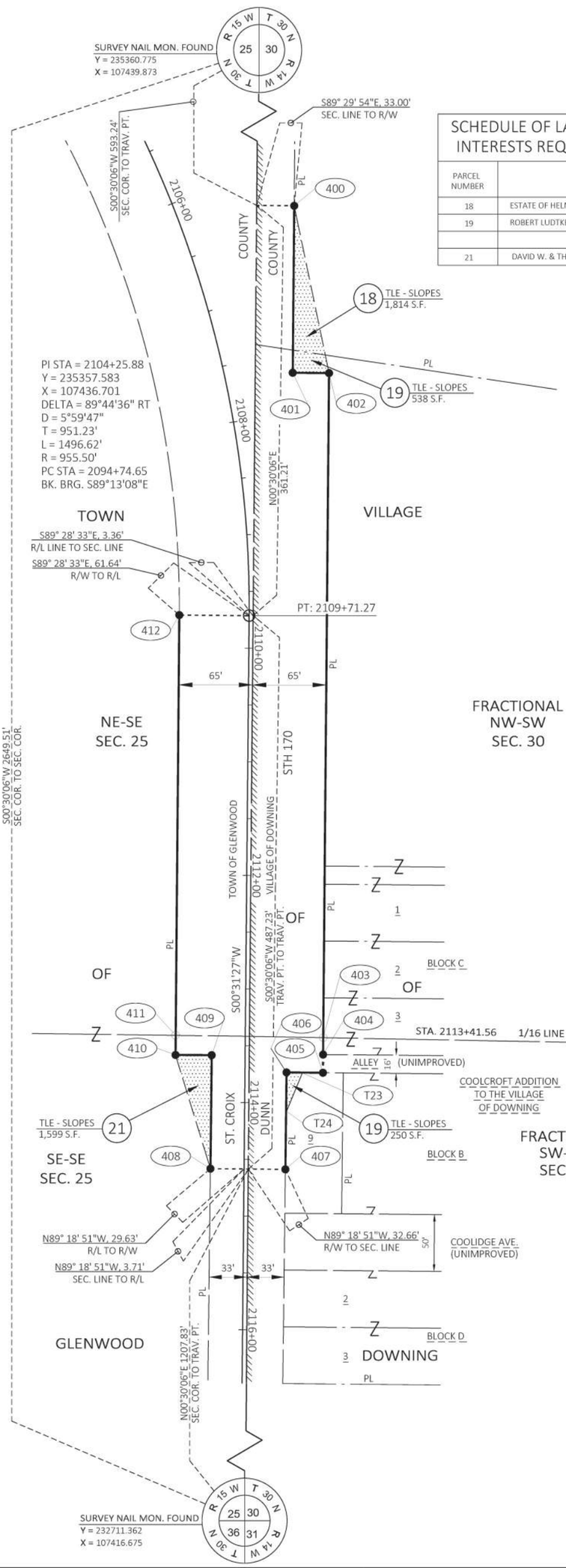
LOCATION SKETCH



RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.04
SHEET 1 OF 2
AMENDMENT NO:___

GN

SCALE: FEET
0 50 100



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO STATE OF WISCONSIN
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
18	ESTATE OF HELMER HURTGEN	TLE	----	----	----	1814
19	ROBERT LUDTKE & JOAN M. LUDTKE	TLE	----	----	----	788
21	DAVID W. & THERESA M. HOFFMAN	TLE	----	----	----	1599

HIGHWAY	BASIS
STH 170:	R/W PLATS 6379, 6410, COOLCROFT ADDITION TO THE VILLAGE OF DOWNING

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN ST. CROIX AND DUNN COUNTIES AS SHEET 2 OF 2 OF THIS DOCUMENT.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD 83(2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
400	401	S00° 30' 06"W	147.01'
401	402	S89° 29' 54"E	32.00'
402	403	S00° 30' 06"W	585.15'
403	404	S00° 30' 06"W	14.85'
404	405	S00° 30' 06"W	16.00'
405	406	N89° 29' 54"W	32.06'
406	407	S00° 41' 09"W	85.55'
407	408	N89° 18' 51"W	66.00'
408	409	N00° 41' 09"E	100.00'
409	410	N89° 29' 54"W	31.98'
410	411	N00° 30' 06"E	17.11'
411	412	N00° 30' 06"E	370.05'

R/W Station & Offset Table		
Point No.	Station	Offset
400	2106+37.55	100.11'
401	2107+68.04	59.30'
402	2107+74.20	90.61'
403	2113+42.19	68.67'
404	2113+57.04	68.67'
405	2113+73.04	68.68'
406	2113+73.05	36.62'
407	2114+58.39	36.38'
408	2114+58.41	29.63'
409	2113+58.41	29.34'
410	2113+58.43	61.33'
411	2113+41.31	61.33'
412	2109+71.27	61.48'

TLE Station & Offset Table		
Point No.	Station	Offset
T23	2113+73.04	50.75'
T24	2114+08.39	36.52'

KL Engineering
A Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.04 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN TIMOTHY M. HELD S-2591 MADISON, WI LAND SURVEYOR

08-16-2019
TIMOTHY M. HELD DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

08-16-2019
DEBRA B. STENSLAND DATE

8630-03-22 - 4.04
1 IN:100 FT
PLOT SCALE :
PLOT NAME :
Timothy Held
PLOT BY :
8/16/2019 3:05 PM
PLOT DATE :
PLOT DATE :
G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\RW\DUNN CO\040101-RP.DWG
FILE NAME :
APPRAISAL PLAT DATE : 08/15/2019

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
TO BE REMOVED
BRIDGE

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN

R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (3/4-INCH UNLESS NOTED)

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)

PARCEL NUMBER (25)
UTILITY NUMBER (40)
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTICTIVE DEVELOPMENT EASEMENT	RDE
CENTERLINE	C/L	RIGHT	RT
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE	CONC	SECTION	SEC
COUNTY	CO	SEPTIC VENT	SEPV
COUNTY TRUNK HIGHWAY	CTH	SQUARE FEET	SF
DISTANCE	DIST	STATE TRUNK HIGHWAY	STH
CORNER	COR	STATION	STA
DOCUMENT NUMBER	DOC	TELEPHONE PEDESTAL	TP
EASEMENT	EASE	TEMPORARY LIMITED EASEMENT	TLE
EXISTING	EX	TRANSPORTATION PROJECT PLAT	TPP
GAS VALVE	GV	UNITED STATES HIGHWAY	USH
GRID NORTH	GN	VOLUME	V
HIGHWAY EASEMENT	HE		
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		
POINT OF COMPOUND CURVE	PCC		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

W — WATER
G — GAS
T — TELEPHONE
OH — OVERHEAD TRANSMISSION LINES
E — ELECTRIC
TV — CABLE TELEVISION
FO — FIBER OPTIC
SAN — SANITARY SEWER
SS — STORM SEWER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
8630-03-22
GLENWOOD CITY TO COLFAX
(STH 128 - STH 79)
STH 170
ST. CROIX & DUNN COUNTY

R-15-W | R-14-W

GN

LAYOUT
SCALE 0 0.5 MI.

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 8630-03-22.

NOTES:

FOR ST. CROIX COUNTY (SHEETS 4.01 TO 4.04):
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST. CROIX COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR DUNN COUNTY (SHEETS 4.04 TO 4.10):
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, 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 DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, 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 DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NW REGION.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

FOR ST CROIX COUNTY (SHEETS 4.01 THROUGH 4.04):
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 ESTABLISHED FROM R/W PLAT 8630-06-21, ORIGINAL PLAT OF GLENWOOD, FIRST ADDITION TO GLENWOOD, CSM 3015, CSM 6319, POS D, POS F, POS H, POS K.
EXISTING HIGHWAY RIGHT-OF-WAY FOR OAK ST. ESTABLISHED FROM ORIGINAL PLAT OF GLENWOOD, CSM 3015.
EXISTING HIGHWAY RIGHT-OF-WAY FOR PINE ST. ESTABLISHED FROM ORIGINAL PLAT OF GLENWOOD.
EXISTING HIGHWAY RIGHT-OF-WAY FOR SECOND ST. ESTABLISHED FROM ORIGINAL PLAT OF GLENWOOD.
EXISTING HIGHWAY RIGHT-OF-WAY FOR THIRD ST. ESTABLISHED FROM ORIGINAL PLAT OF GLENWOOD, FIRST ADDITION TO GLENWOOD, POS H.
EXISTING HIGHWAY RIGHT-OF-WAY FOR FOURTH ST. ESTABLISHED FROM ORIGINAL PLAT OF GLENWOOD, FIRST ADDITION TO GLENWOOD, POS H.
EXISTING HIGHWAY RIGHT-OF-WAY FOR FIFTH ST. ESTABLISHED FROM FIRST ADDITION TO GLENWOOD.
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIXTH ST. ESTABLISHED FROM FIRST ADDITION TO GLENWOOD, POS D, POS K.

FOR FOR DUNN COUNTY (SHEETS 4.04 THROUGH 4.10):
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 ESTABLISHED FROM R/W PLATS 6379, 6410, 8631-01-21 & 8926-00-01-4.01, COOLCROFT ADDITION TO THE VILLAGE OF DOWNING, R. A. WEED'S ADDITON TO THE VILLAGE OF DOWNING, STODDARD'S ADDITION TO THE VILLAGE OF DOWNING, CSM 4204, PLAT OF SURVEYS S229, S230, S231, S370, S1501, M890.
EXISTING HIGHWAY RIGHT-OF-WAY FOR COOLIDGE AVE. ESTABLISHED FROM COOLCROFT ADDITION TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR FIRST ST. ESTABLISHED FROM STODDARD'S ADDITION TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR OAK ST. ESTABLISHED FROM R. A. WEED'S ADDITON TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR SUMMIT ST. ESTABLISHED FROM STODDARD'S ADDITION TO THE VILLAGE OF DOWNING, PLAT OF SURVEY S370.
EXISTING HIGHWAY RIGHT-OF-WAY FOR FOREST ST. ESTABLISHED FROM WEED'S ADDITION TO THE VILLAGE OF DOWNING, STODDARD'S ADDITION TO THE VILLAGE OF DOWNING, PLAT OF SURVEY S370.
EXISTING HIGHWAY RIGHT-OF-WAY FOR ELM ST. ESTABLISHED FROM R. A. WEED'S ADDITON TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR WILSON ST. ESTABLISHED FROM R. A. WEED'S ADDITION TO THE VILLAGE OF DOWNING, STODDARD'S ADDITION TO THE VILLAGE OF DOWNING, ORIGINAL PLAT TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR PINE ST. ESTABLISHED FROM ORIGINAL PLAT TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CHETNUT ST. ESTABLISHED FROM ORIGINAL PLAT TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR ASH ST. ESTABLISHED FROM ORIGINAL PLAT TO THE VILLAGE OF DOWNING, PLAT OF SURVEY S231, S368.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CENTRAL ST. ESTABLISHED FROM R. A. WEED'S ADDITION TO THE VILLAGE OF DOWNING, PLAT OF SURVEY S229.
EXISTING HIGHWAY RIGHT-OF-WAY FOR TIFFANY ST. ESTABLISHED FROM R. A. WEED'S ADDITON TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR LOCUST ST. ESTABLISHED FROM ORIGINAL PLAT TO THE VILLAGE OF DOWNING.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CTH Q ESTABLISHED FROM R/W PLAT 8631-01-21, CSM 1072.
EXISTING HIGHWAY RIGHT-OF-WAY FOR ROWLEY RD. ESTABLISHED FROM R/W PLAT 8631-01-21, PLAT OF SURVEY M890.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CENTER ST. ESTABLISHED FROM R/W PLATS 8630-01-21 & 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE, CSM 4429.
EXISTING HIGHWAY RIGHT-OF-WAY FOR RACE ST. ESTABLISHED FROM R/W PLATS 8630-01-21 & 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE, CSM 4429.
EXISTING HIGHWAY RIGHT-OF-WAY FOR WINTER ST. ESTABLISHED FROM R/W PLAT 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE, CSM 2744.
EXISTING HIGHWAY RIGHT-OF-WAY FOR EAST ST ESTABLISHED FROM R/W PLATS 8630-01-21 & 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE.

PROJECT NUMBER	8630-03-22 -4..04
SHEET	2 OF 2
AMENDMENT NO:	

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\RW\TITLE SHEET.DWG
LAYOUT NAME: TPP Title 34x22
PLOT DATE : 9/16/2015 3:04 PM
PLOT BY : SCOTT DEMEUSE
PLOT NAME : _____
APPRAISAL PLAT DATE : 08/06/2019

4

637610

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
09/18/2019 10:05 AM

REC FEE: 25.00
PAGES: 1
The above recording information verifies that this document has been electronically recorded and returned to the submitter.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.05
AMENDMENT NO:___

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.05

THAT PART OF LOT 4, BLOCK 5 AND LOTS 1 & 4, BLOCK 6 OF R.A. WEED'S ADDITION TO THE VILLAGE OF DOWNING LOCATED IN THE FRACTIONAL SW 1/4 OF THE SW 1/4 OF SECTION 30; ALSO THAT PART OF LOTS 1 & 4, BLOCK 2 OF STODDARD'S ADDITION TO THE VILLAGE OF DOWNING LOCATED IN AND ALSO INCLUDING PART OF THE FRACTIONAL NW 1/4 OF THE NW 1/4 OF SECTION 31, ALL IN T 30 N, R 14 W, VILLAGE OF DOWNING, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

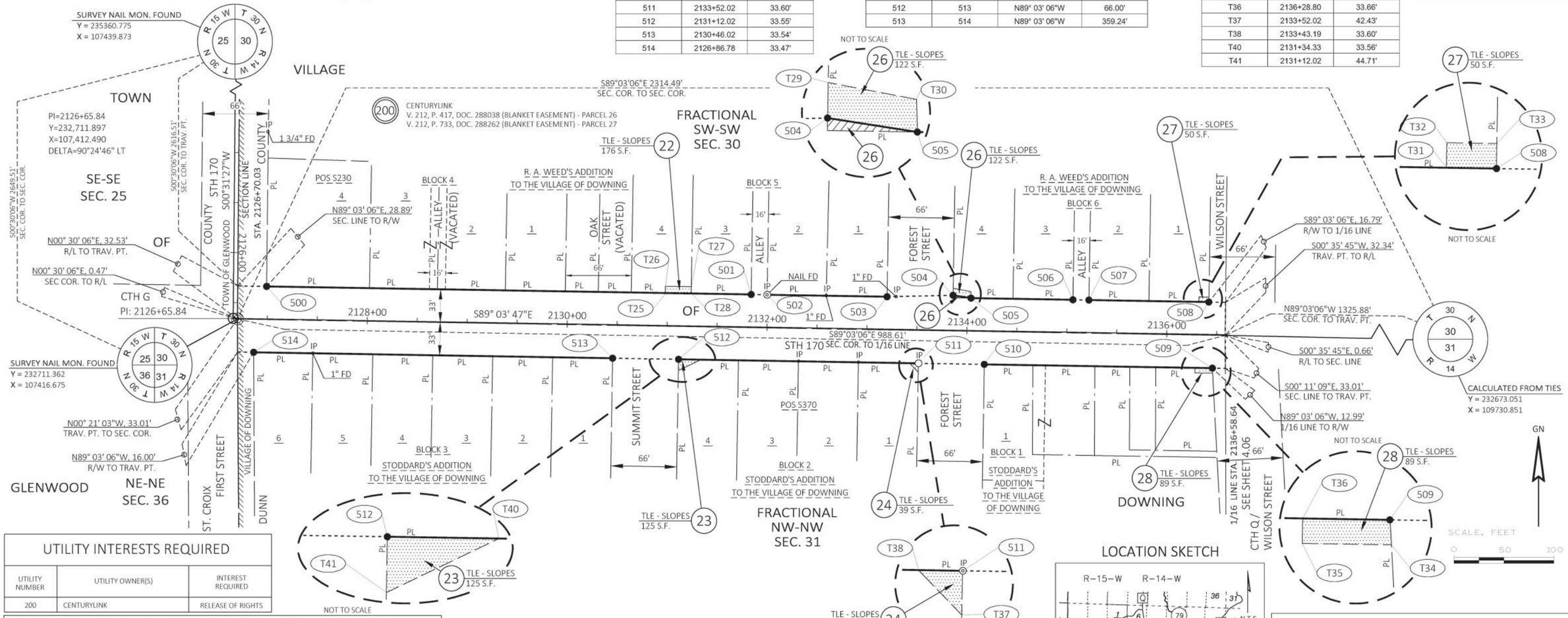
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

R/W Station & Offset Table		
Point No.	Station	Offset
500	2126+98.67	32.53'
501	2131+83.65	32.43'
502	2131+99.65	32.43'
503	2133+19.65	32.40'
504	2133+85.65	34.89'
505	2134+03.65	32.39'
506	2135+05.65	32.37'
507	2135+21.65	32.36'
508	2136+41.65	32.34'
509	2136+46.30	33.66'
510	2134+18.02	33.62'
511	2133+52.02	33.60'
512	2131+12.02	33.55'
513	2130+46.02	33.54'
514	2126+86.78	33.47'

R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
500	501	S89° 03' 06"E	484.99'
501	502	S89° 03' 06"E	16.00'
502	503	S89° 03' 06"E	120.00'
503	504	N88° 46' 45"E	66.05'
504	505	S81° 08' 44"E	18.18'
505	506	S89° 03' 06"E	102.00'
506	507	S89° 03' 06"E	16.00'
507	508	S89° 03' 06"E	120.00'
509	510	N89° 03' 06"W	228.28'
510	511	N89° 03' 06"W	66.00'
511	512	N89° 03' 06"W	240.00'
512	513	N89° 03' 06"W	66.00'
513	514	N89° 03' 06"W	359.24'

TLE Station & Offset Table		
Point No.	Station	Offset
T25	2130+97.65	32.45'
T26	2130+97.65	39.20'
T27	2131+23.65	39.19'
T28	2131+23.65	32.44'
T29	2133+85.65	41.98'
T30	2134+03.38	38.90'
T31	2136+31.65	32.34'
T32	2136+31.65	37.34'
T33	2136+41.65	37.34'
T34	2136+46.64	38.66'
T35	2136+28.80	38.66'
T36	2136+28.80	33.66'
T37	2133+52.02	42.43'
T38	2133+43.19	33.60'
T40	2131+34.33	33.56'
T41	2131+12.02	44.71'



UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	CENTURYLINK	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO STATE OF WISCONSIN
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
22	JAKE C. LUEPKE	TLE	----	----	----	176
23	TIMOTHY J. FENSTRA	TLE	----	----	----	125
24	MARJORIE A. MATHISON & DEBORAH M. LEITHAUSER	TLE	----	----	----	39
26	QUASSIM DHARSI	FEE/TLE	23	----	23	122
27	PETER BARTLETTE	TLE	----	----	----	50
28	JOHN W. BLASER	TLE	----	----	----	89

NOTES:
FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 636946.

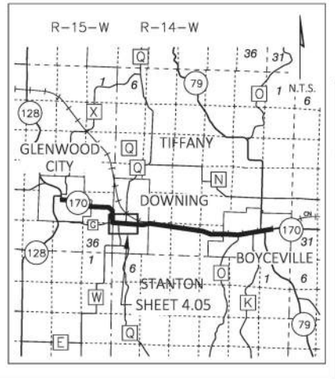
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD 83(2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

FOUND PROPERTY PIPES ARE 3/4" REBAR, UNLESS OTHERWISE NOTED.

HIGHWAY:	BASIS:
STH 170	R. A. WEED'S ADDITON TO THE VILLAGE OF DOWNING, STODDARD'S ADDITION TO THE VILLAGE OF DOWNING, PLAT OF SURVEY S230, S370.
FIRST ST.	STODDARD'S ADDITION TO THE VILLAGE OF DOWNING.
OAK ST.	R. A. WEED'S ADDITON TO THE VILLAGE OF DOWNING.
SUMMIT ST.	STODDARD'S ADDITION TO THE VILLAGE OF DOWNING, PLAT OF SURVEY S370.
FOREST ST. TO	R.A. WEED'S ADDITION TO THE VILLAGE OF DOWNING, STODDARD'S ADDITION THE VILLAGE OF DOWNING, PLAT OF SURVEY S370

LOCATION SKETCH



KL Engineering
[A] Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.05 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

09-13-2019
DATE
TIMOTHY M. HELD
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591

WISCONSIN TIMOTHY M. HELD S-2591 MADISON, WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

9-16-2019
DEBRA B. STENSLAND

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.05, AMENDMENT NO. 1

AMENDS UTILITY PARCEL 200 OF TRANSPORTATION PROJECT PLAT 8630-03-22 - 4.05, RECORDED AS DOCUMENT 637610 IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY, WISCONSIN.

THAT PART OF LOT 4, BLOCK 5 AND LOTS 1 & 4, BLOCK 6 OF R.A. WEED'S ADDITION TO THE VILLAGE OF DOWNING LOCATED IN THE FRACTIONAL SW 1/4 OF THE SW 1/4 OF SECTION 30; ALSO THAT PART OF LOTS 1 & 4, BLOCK 2 OF STODDARD'S ADDITION TO THE VILLAGE OF DOWNING LOCATED IN AND ALSO INCLUDING PART OF THE FRACTIONAL NW 1/4 OF THE NW 1/4 OF SECTION 31, ALL IN T 30 N, R 14 W, VILLAGE OF DOWNING, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 636946.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD 83(2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

FOUND PROPERTY PIPES ARE 3/4" REBAR, UNLESS OTHERWISE NOTED.

R/W Station & Offset Table		
Point No.	Station	Offset
500	2126+98.67	32.53'
501	2131+83.65	32.43'
502	2131+99.65	32.43'
503	2133+19.65	32.40'
504	2133+85.65	34.89'
505	2134+03.65	32.39'
506	2135+05.65	32.37'
507	2135+21.65	32.36'
508	2136+41.65	32.34'
509	2136+46.30	33.66'
510	2134+18.02	33.62'
511	2133+52.02	33.60'
512	2131+12.02	33.55'
513	2130+46.02	33.54'
514	2126+86.78	33.47'

TLE Station & Offset Table		
Point No.	Station	Offset
T25	2130+97.65	32.45'
T26	2130+97.65	39.20'
T27	2131+23.65	39.19'
T28	2131+23.65	32.44'
T29	2133+85.65	41.98'
T30	2134+03.38	38.90'
T31	2136+31.65	32.34'
T32	2136+31.65	37.34'
T33	2136+41.65	37.34'
T34	2136+46.64	38.66'
T35	2136+28.80	38.66'
T36	2136+28.80	33.66'
T37	2133+52.02	42.43'
T38	2133+43.19	33.60'
T40	2131+34.33	33.56'
T41	2131+12.02	44.71'

643431

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
06/30/2020 12:45 PM

REC FEE: 25.00
PAGES: 1
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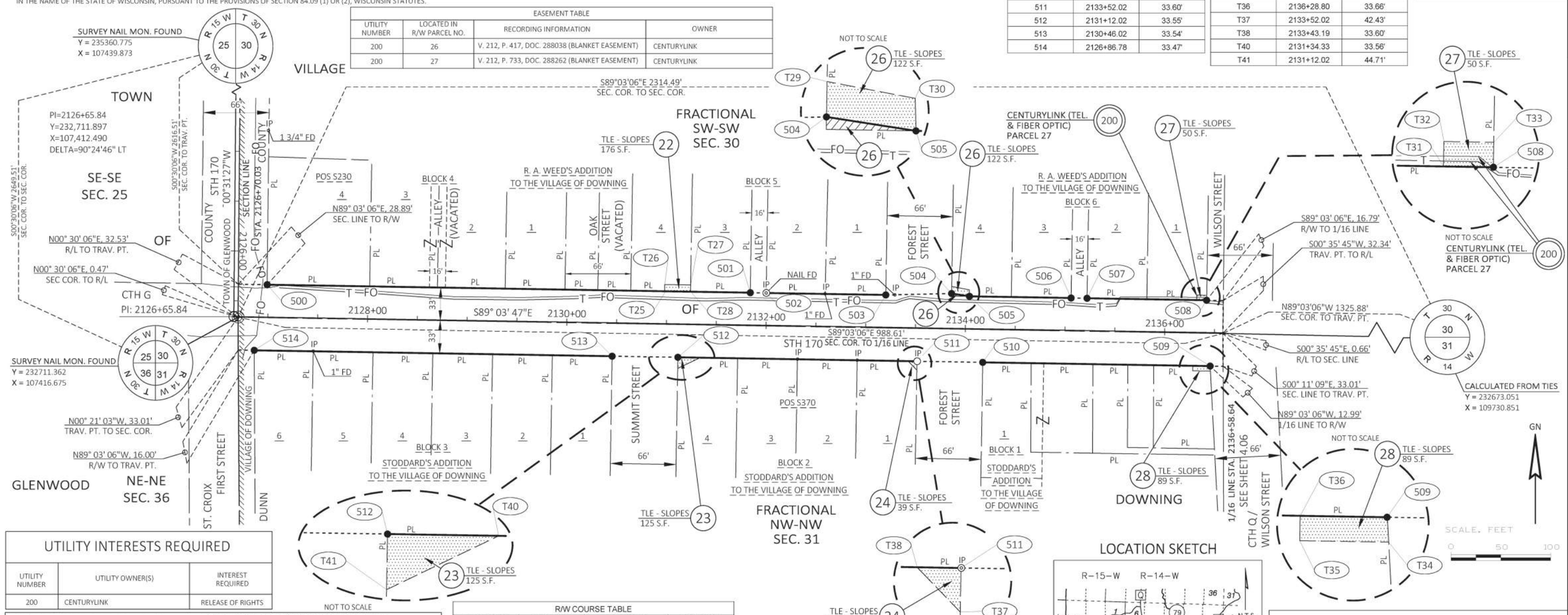
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.05
AMENDMENT NO: 1

EASEMENT TABLE			
UTILITY NUMBER	LOCATED IN R/W PARCEL NO.	RECORDING INFORMATION	OWNER
200	26	V. 212, P. 417, DOC. 288038 (BLANKET EASEMENT)	CENTURYLINK
200	27	V. 212, P. 733, DOC. 288262 (BLANKET EASEMENT)	CENTURYLINK



UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	CENTURYLINK	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO STATE OF WISCONSIN
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
22	JAKE C. LUEPKE	TLE	----	----	----	176
23	TIMOTHY J. FENSTRA	TLE	----	----	----	125
24	MARJORIE A. MATHISON & DEBORAH M. LEITHAUSER	TLE	----	----	----	39
26	QUASSIM DHARSI	FEE/TLE	23	----	23	122
27	PETER BARTLETTE	TLE	----	----	----	50
28	JOHN W. BLASER	TLE	----	----	----	89

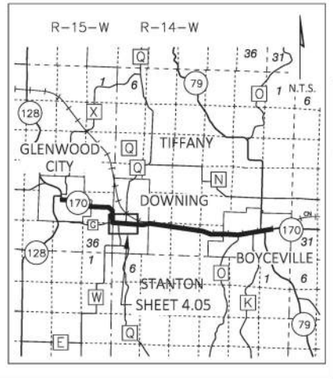
R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
500	501	S89° 03' 06"E	484.99'
501	502	S89° 03' 06"E	16.00'
502	503	S89° 03' 06"E	120.00'
503	504	N88° 46' 45"E	66.05'
504	505	S81° 08' 44"E	18.18'
505	506	S89° 03' 06"E	102.00'
506	507	S89° 03' 06"E	16.00'
507	508	S89° 03' 06"E	120.00'
509	510	N89° 03' 06"W	228.28'
510	511	N89° 03' 06"W	66.00'
511	512	N89° 03' 06"W	240.00'
512	513	N89° 03' 06"W	66.00'
513	514	N89° 03' 06"W	359.24'

HIGHWAY:	BASIS:
STH 170	R. A. WEED'S ADDITON TO THE VILLAGE OF DOWNING, STODDARD'S ADDITION TO THE VILLAGE OF DOWNING, PLAT OF SURVEY S230, S370.
FIRST ST.	STODDARD'S ADDITION TO THE VILLAGE OF DOWNING.
OAK ST.	R. A. WEED'S ADDITON TO THE VILLAGE OF DOWNING.
SUMMIT ST.	STODDARD'S ADDITION TO THE VILLAGE OF DOWNING, PLAT OF SURVEY S370.
FOREST ST. TO	R.A. WEED'S ADDITION TO THE VILLAGE OF DOWNING, STODDARD'S ADDITION THE VILLAGE OF DOWNING, PLAT OF SURVEY S370

T-30-N

T-29-N

LOCATION SKETCH



KL Engineering
[A] Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.05, AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN TIMOTHY M. HELD S-2591 MADISON, WI LAND SURVEYOR

06-30-2020
TIMOTHY M. HELD — DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

06/30/2020
DEBRA B. STENSLAND — DATE

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\RW\DUNN CO\040101-RP AMENDMENTS.DWG
PLOT DATE : 6/30/2020 10:10 AM PLOT BY : TIMOTHY HELD PLOT NAME : PLOT SCALE : 1 IN:100 FT
APPRAISAL PLAT DATE : 06-30-2020

637611

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
09/18/2019 10:13 AM

REC FEE: 25.00
PAGES: 1

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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.06
AMENDMENT NO:___

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.06

THAT PART OF LOTS 1 & 4, BLOCK 3, AND LOT 3, BLOCK 5 OF THE ORIGINAL PLAT VILLAGE OF DOWNING, LOCATED IN THE NE 1/4 OF THE NW 1/4 OF SECTION 31, T 30 N, R 14 W, VILLAGE OF DOWNING, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
600	601	N89° 03' 06"W	143.00'
601	602	N00° 56' 54"E	17.00'
602	603	N89° 03' 06"W	285.55'
603	604	S86° 36' 58"W	66.19'
604	605	N44° 03' 11"W	7.07'
605	606	N89° 03' 06"W	220.76'
606	607	S45° 56' 49"W	18.38'
607	608	N77° 54' 32"W	67.27'
608	609	N89° 03' 06"W	240.00'
609	610	N89° 03' 06"W	66.00'
610	611	N89° 03' 06"W	147.60'
611	612	S43° 58' 50"W	27.30'
613	614	S89° 03' 06"E	120.00'
614	615	S89° 03' 06"E	16.00'
615	616	S89° 03' 06"E	306.00'
616	617	S89° 03' 06"E	16.00'
617	618	S89° 03' 06"E	120.00'
618	619	S89° 03' 06"E	66.00'
619	620	S89° 03' 06"E	120.00'
620	621	S89° 03' 06"E	16.00'
621	622	S89° 03' 06"E	306.29'
622	623	N00° 56' 54"E	37.00'
623	624	S89° 03' 06"E	145.78'

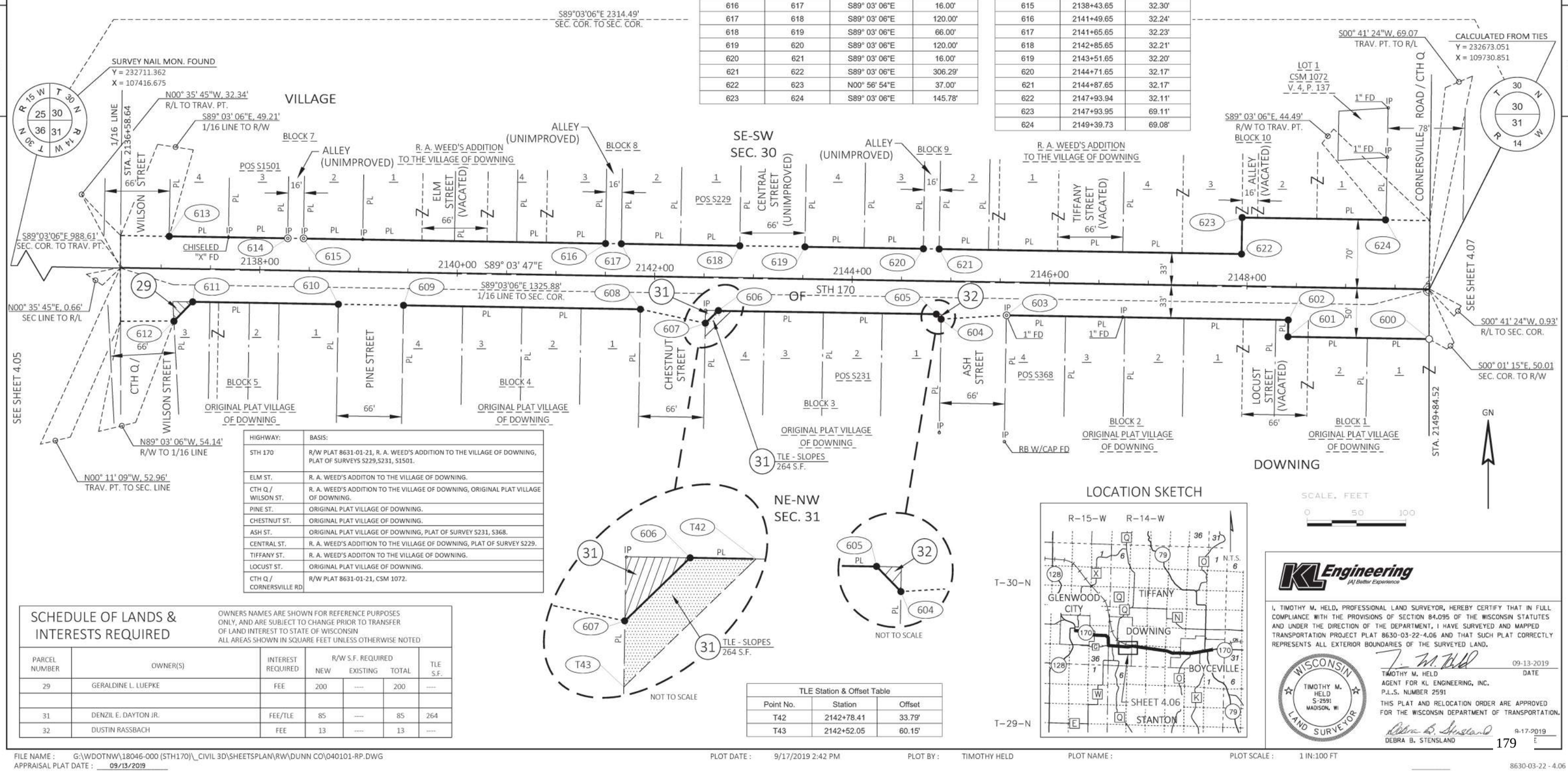
R/W Station & Offset Table		
Point No.	Station	Offset
600	2149+85.36	50.93'
601	2148+42.36	50.90'
602	2148+42.36	33.90'
603	2145+56.81	33.84'
604	2144+90.81	38.83'
605	2144+85.81	33.83'
606	2142+65.05	33.79'
607	2142+52.05	46.78'
608	2141+86.05	33.77'
609	2139+46.05	33.72'
610	2138+80.05	33.71'
611	2137+32.45	33.68'
612	2137+13.82	53.63'
613	2137+07.65	32.33'
614	2138+27.65	32.30'
615	2138+43.65	32.30'
616	2141+49.65	32.24'
617	2141+65.65	32.23'
618	2142+85.65	32.21'
619	2143+51.65	32.20'
620	2144+71.65	32.17'
621	2144+87.65	32.17'
622	2147+93.94	32.11'
623	2147+93.95	69.11'
624	2149+39.73	69.08'

NOTES:
FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 636946.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS) COORDINATES, DUNN COUNTY, NAD 83(2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

FOUND PROPERTY PIPES ARE 3/4" REBAR, UNLESS OTHERWISE NOTED.



HIGHWAY:	BASIS:
STH 170	R/W PLAT 8631-01-21, R. A. WEED'S ADDITION TO THE VILLAGE OF DOWNING, PLAT OF SURVEYS S229,S231, S1501.
ELM ST.	R. A. WEED'S ADDITON TO THE VILLAGE OF DOWNING.
CTH Q / WILSON ST.	R. A. WEED'S ADDITION TO THE VILLAGE OF DOWNING, ORIGINAL PLAT VILLAGE OF DOWNING.
PINE ST.	ORIGINAL PLAT VILLAGE OF DOWNING.
CHESTNUT ST.	ORIGINAL PLAT VILLAGE OF DOWNING.
ASH ST.	ORIGINAL PLAT VILLAGE OF DOWNING, PLAT OF SURVEY S231, S368.
CENTRAL ST.	R. A. WEED'S ADDITION TO THE VILLAGE OF DOWNING, PLAT OF SURVEY S229.
TIFFANY ST.	R. A. WEED'S ADDITON TO THE VILLAGE OF DOWNING.
LOCUST ST.	ORIGINAL PLAT VILLAGE OF DOWNING.
CTH Q / CORNERSVILLE RD	R/W PLAT 8631-01-21, CSM 1072.

TLE Station & Offset Table		
Point No.	Station	Offset
T42	2142+78.41	33.79'
T43	2142+52.05	60.15'

LOCATION SKETCH

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO STATE OF WISCONSIN
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
29	GERALDINE L. LUEPKE	FEE	200	----	200	----
31	DENZIL E. DAYTON JR.	FEE/TLE	85	----	85	264
32	DUSTIN RASSBACH	FEE	13	----	13	----

KL Engineering
[A] Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.06 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN TIMOTHY M. HELD S-2591 MADISON, WI LAND SURVEYOR

09-13-2019
DATE

TIMOTHY M. HELD
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

9-17-2019
DEBRA B. STENSLAND

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\RW\DUNN CO\040101-RP.DWG
APPRAISAL PLAT DATE : 09/13/2019
PLOT DATE : 9/17/2019 2:42 PM
PLOT BY : TIMOTHY HELD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

637612

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
09/18/2019 10:23 AM

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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.07
AMENDMENT NO:___

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.07

THAT PART OF LOT 2, CERTIFIED SURVEY MAP NUMBER 4204 RECORDED IN VOLUME 20 OF CERTIFIED SURVEYS MAPS, PAGE 144 AS DOCUMENT NUMBER 611167 LOCATED IN THE NW 1/4 OF THE NE 1/4 OF SECTION 31, T 30 N, R 14 W, VILLAGE OF DOWNING, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
700	701	S88° 52' 06"E	1291.98'
702	703	N88° 52' 06"W	646.78'
703	704	N01° 07' 54"E	20.00'
704	705	N88° 52' 06"W	633.89'

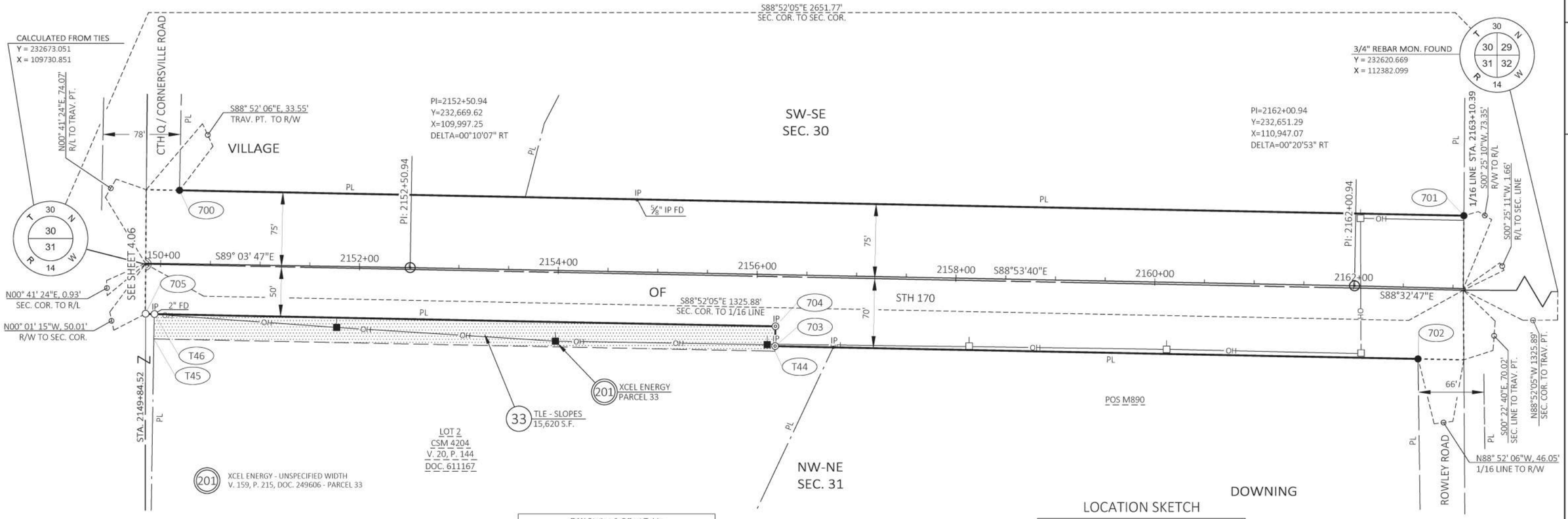
NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 636946.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD 83(2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

FOUND PROPERTY PIPES ARE 3/4" REBAR, UNLESS OTHERWISE NOTED.



HIGHWAY:	BASIS:
STH 170	R/W PLAT 8631-01-21, CSM 4204, PLAT OF SURVEY M890.
ROWLEY RD.	R/W PLAT 8631-01-21, CSM 4204, PLAT OF SURVEY M890.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO STATE OF WISCONSIN
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
33	DARIN DEANSWENBY	TLE	----	----	----	15620

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
201	XCEL ENERGY	RELEASE OF RIGHTS

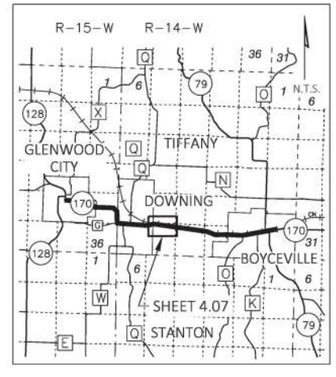
R/W Station & Offset Table		
Point No.	Station	Offset
700	2150+17.75	73.96'
701	2163+09.07	73.34'
702	2162+66.61	71.90'
703	2156+19.39	72.00'
704	2156+19.40	52.00'
705	2149+85.36	50.93'

TLE Station & Offset Table		
Point No.	Station	Offset
T44	2156+19.38	77.00'
T45	2149+94.41	75.96'
T46	2149+94.39	50.96'

GN

SCALE, FEET
0 50 100

LOCATION SKETCH



KL Engineering
[A] Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.07 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

09-13-2019
DATE

TIMOTHY M. HELD
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

9-16-2019
DEBRA B. STENSLAND

WISCONSIN TIMOTHY M. HELD S-2591 MADISON, WI LAND SURVEYOR

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\RW\DUNN CO\040101-RP.DWG
APPRAISAL PLAT DATE : 09/13/2019
PLOT DATE : 9/13/2019 10:50 AM
PLOT BY : SCOTT DEMEUSE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.08

THAT PART OF THE NW 1/4 OF THE NE 1/4 OF SECTION 35, T 30 N, R 14 W, VILLAGE OF BOYCEVILLE, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

NOTES:

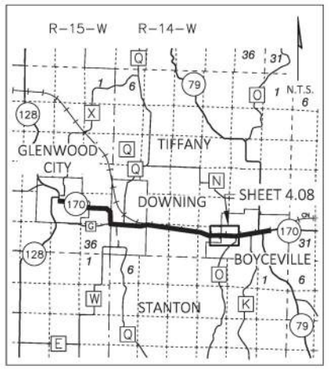
FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 636946.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD 83(2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

FOUND PROPERTY PIPES ARE 3/4" REBAR, UNLESS OTHERWISE NOTED.

LOCATION SKETCH



SCHEDULE OF LANDS & INTERESTS REQUIRED	OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO STATE OF WISCONSIN ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED					
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
38	WISCONSIN CENTRAL LTD.	TLE	----	----	----	6246

HIGHWAY:	BASIS:
STH 170	R/W PLAT 8631-01-21
CENTER ST.	R/W PLATS 8630-01-21 & 8926-00-01-4.01, CSM 4429.

639033

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
11/22/2019 02:13 PM

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PAGES: 1
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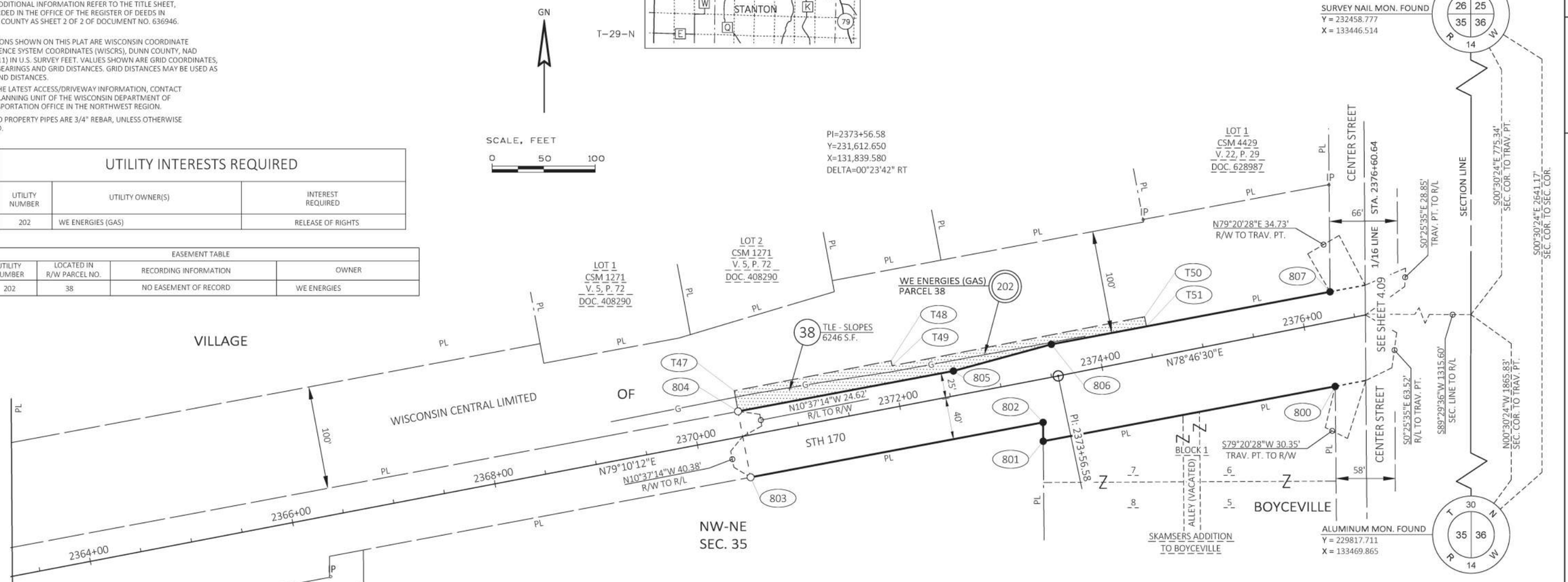
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.08
AMENDMENT NO:___

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
202	WE ENERGIES (GAS)	RELEASE OF RIGHTS

EASEMENT TABLE			
UTILITY NUMBER	LOCATED IN R/W PARCEL NO.	RECORDING INFORMATION	OWNER
202	38	NO EASEMENT OF RECORD	WE ENERGIES



R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
800	801	S79° 20' 28"W	288.42'
801	802	N00° 26' 51"W	18.29'
802	803	S79° 22' 46"W	288.93'
803	804	N10° 37' 14"W	65.00'
804	805	N79° 22' 46"E	212.60'
805	806	N74° 46' 00"E	98.48'
806	807	N79° 20' 28"E	275.32'

R/W Station & Offset Table		
Point No.	Station	Offset
800	2376+18.39	62.10'
801	2373+30.40	59.43'
802	2373+33.69	41.44'
803	2370+44.76	40.38'
804	2370+45.00	24.62'
805	2372+57.60	23.84'
806	2373+55.79	31.40'
807	2376+31.31	28.68'

TLE Station & Offset Table		
Point No.	Station	Offset
T47	2370+45.00	45.00'
T48	2372+00.00	45.00'
T49	2372+00.00	40.00'
T50	2374+50.00	40.00'
T51	2374+50.00	30.47'

KL Engineering
[A] Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.08 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN TIMOTHY M. HELD S-2591 MADISON, WI LAND SURVEYOR

T. M. Held 11/22/2019
TIMOTHY M. HELD DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Debra B. Stensland 11/22/2019
DEBRA B. STENSLAND

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\RW\DUNN CO\040101-RP.DWG
APPRAISAL PLAT DATE : 11/22/2019
PLOT DATE : 11/22/2019 8:48 AM PLOT BY : TIMOTHY HELD PLOT NAME : PLOT SCALE : 1 IN:100 FT

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.08, AMENDMENT NO. 1

AMENDS UTILITY PARCEL 202 OF TRANSPORTATION PROJECT PLAT NO. 8630-03-22 - 4.08, RECORDED AS DOCUMENT 639033 IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY, WISCONSIN.

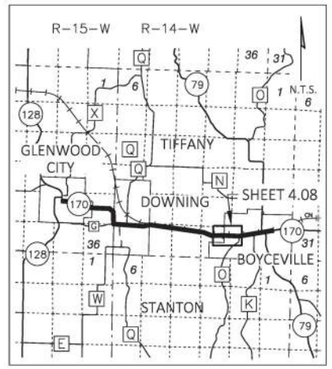
THAT PART OF THE NW 1/4 OF THE NE 1/4 OF SECTION 35, T 30 N, R 14 W, VILLAGE OF BOYCEVILLE, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LOCATION SKETCH



GN

SCALE, FEET
0 50 100

SCHEDULE OF LANDS & INTERESTS REQUIRED	OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO STATE OF WISCONSIN. ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED					
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
38	WISCONSIN CENTRAL LTD.	TLE	----	----	----	6246

HIGHWAY:	BASIS:
STH 170	R/W PLAT 8631-01-21
CENTER ST.	R/W PLATS 8630-01-21 & 8926-00-01-4.01, CSM 4429.

643406
DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN
RECORDED ON
06/29/2020 01:09 PM
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PAGES: 1
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.08
AMENDMENT NO: 1

NOTES:
FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 636946.

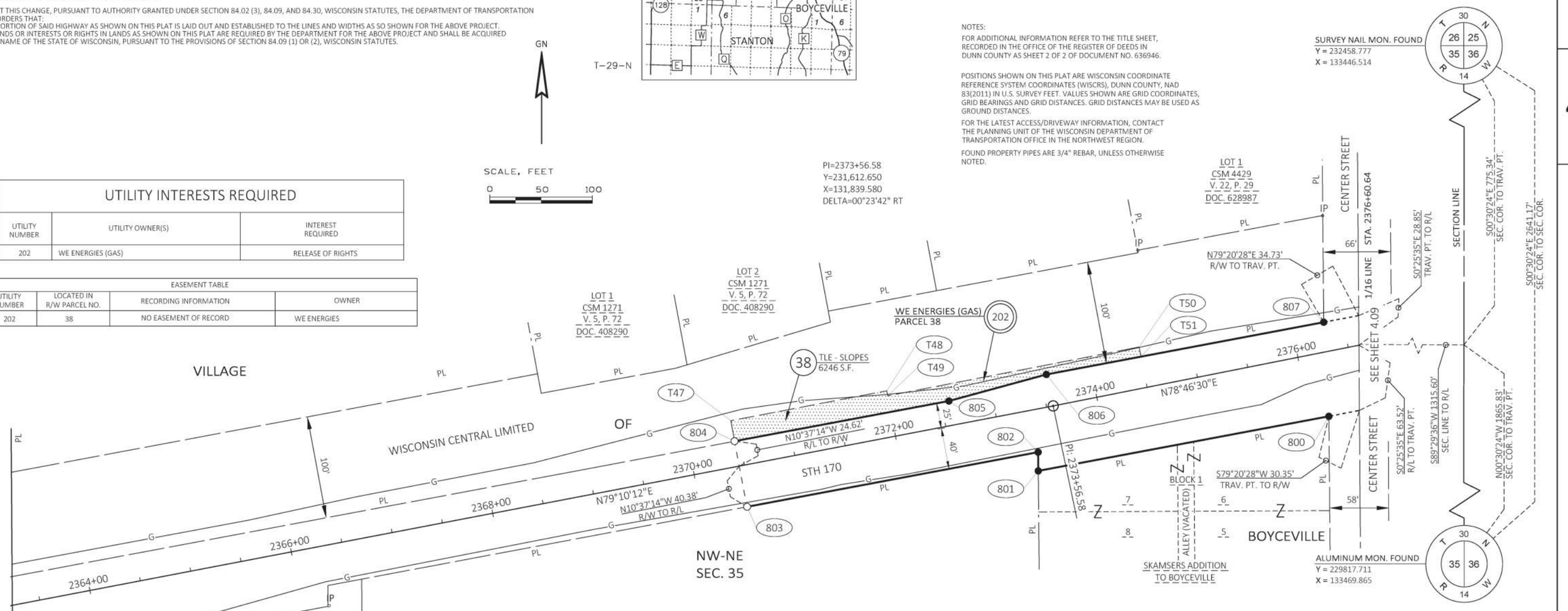
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD 83(2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

FOUND PROPERTY PIPES ARE 3/4" REBAR, UNLESS OTHERWISE NOTED.

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
202	WE ENERGIES (GAS)	RELEASE OF RIGHTS

EASEMENT TABLE			
UTILITY NUMBER	LOCATED IN R/W PARCEL NO.	RECORDING INFORMATION	OWNER
202	38	NO EASEMENT OF RECORD	WE ENERGIES



R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
800	801	S79° 20' 28"W	288.42'
801	802	N00° 26' 51"W	18.29'
802	803	S79° 22' 46"W	288.93'
803	804	N10° 37' 14"W	65.00'
804	805	N79° 22' 46"E	212.60'
805	806	N74° 46' 00"E	98.48'
806	807	N79° 20' 28"E	275.32'

R/W Station & Offset Table		
Point No.	Station	Offset
800	2376+18.39	62.10'
801	2373+30.40	59.43'
802	2373+33.69	41.44'
803	2370+44.76	40.38'
804	2370+45.00	24.62'
805	2372+57.60	23.84'
806	2373+55.79	31.40'
807	2376+31.31	28.68'

TLE Station & Offset Table		
Point No.	Station	Offset
T47	2370+45.00	45.00'
T48	2372+00.00	45.00'
T49	2372+00.00	40.00'
T50	2374+50.00	40.00'
T51	2374+50.00	30.47'

KL Engineering
[A] Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.08, AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN TIMOTHY M. HELD S-2591 MADISON, WI LAND SURVEYOR

06-25-2020
TIMOTHY M. HELD — DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

DEBRA B. STENSLAND — 06/29/2020 — DATE

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\RW\DUNN CO\040101-RP AMENDMENTS.DWG
PLOT DATE : 6/25/2020 3:34 PM PLOT BY : TIMOTHY HELD PLOT NAME : PLOT SCALE : 1 IN:100 FT
APPRAISAL PLAT DATE : 06-25-2020

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.09

THAT PART OF LOT 7, BLOCK 1, LOTS 1 AND 6, BLOCK 2 AND LOTS 1, 9 AND 10, BLOCK 3 OF PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE LOCATED IN AND INCLUDING THE NE 1/4 OF THE NE 1/4 OF SECTION 35, T 30 N, R 14 W, VILLAGE OF BOYCEVILLE, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO STATE OF WISCONSIN
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
34	TOM L. HARRIS & JOAN R. BISSON-HARRIS	FEE/TLE	20	----	20	125
36	WILLARD TRONRUD & ADELINE M. TRONRUD	FEE/TLE	50	----	50	20
37	JEREMY M. WAHL AND ASHLEY I. WAHL	FEE	219	----	219	---
38	WISCONSIN CENTRAL LTD.	TLE	---	----	---	809
39	LARRY G. RINECK JR. &ANDREA B. RINECK	FEE/TLE	58	----	58	35
41	MAURICE EVENSON AND SHARON EVENSON	FEE/TLE	20	----	20	60
42	HARRY A. JOLES, JR.	FEE/TLE	171	----	171	483

GN

R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
900	901	N00° 30' 24"W	2.30'
901	902	N48° 12' 09"W	4.71'
902	903	S79° 20' 28"W	88.43'
903	904	N10° 39' 32"W	2.00'
904	905	S79° 20' 28"W	398.81'
905	906	S56° 12' 44"W	17.94'
906	907	S64° 54' 48"W	51.98'
907	908	N57° 31' 46"W	29.25'
908	909	S79° 20' 28"W	278.82'
909	910	S65° 22' 47"W	20.72'
910	911	S82° 46' 40"W	50.04'
911	912	S84° 47' 29"W	21.05'
912	913	S79° 20' 28"W	325.36'
914	915	N79° 20' 28"E	691.90'
915	916	N79° 20' 28"E	67.05'
916	917	N79° 20' 28"E	490.92'
917	918	N17° 43' 40"E	41.69'
918	919	N82° 34' 23"E	7.45'

EASEMENT TABLE			
UTILITY NUMBER	LOCATED IN R/W PARCEL NO.	RECORDING INFORMATION	OWNER
200	38	NO EASEMENT OF RECORD	CENTURYLINK
202	38	NO EASEMENT OF RECORD	WE ENERGIES

HIGHWAY:	BASIS:
STH 170	R/W PLATS 8630-01-21 & 8926-00-01-4.01.
CENTER ST.	R/W PLATS 8630-01-21 & 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE, CSM 4429.
RACE ST.	R/W PLATS 8630-01-21 & 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE.
WINTER ST.	R/W PLAT 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE, CSM 2744.
EAST ST. / STH 79	R/W PLATS 8630-01-21 & 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE.

NOTES:
FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 636946.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD 83(2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

FOUND PROPERTY PIPES ARE 3/4" REBAR, UNLESS OTHERWISE NOTED.

639034
DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN
RECORDED ON
11/22/2019 02:18 PM
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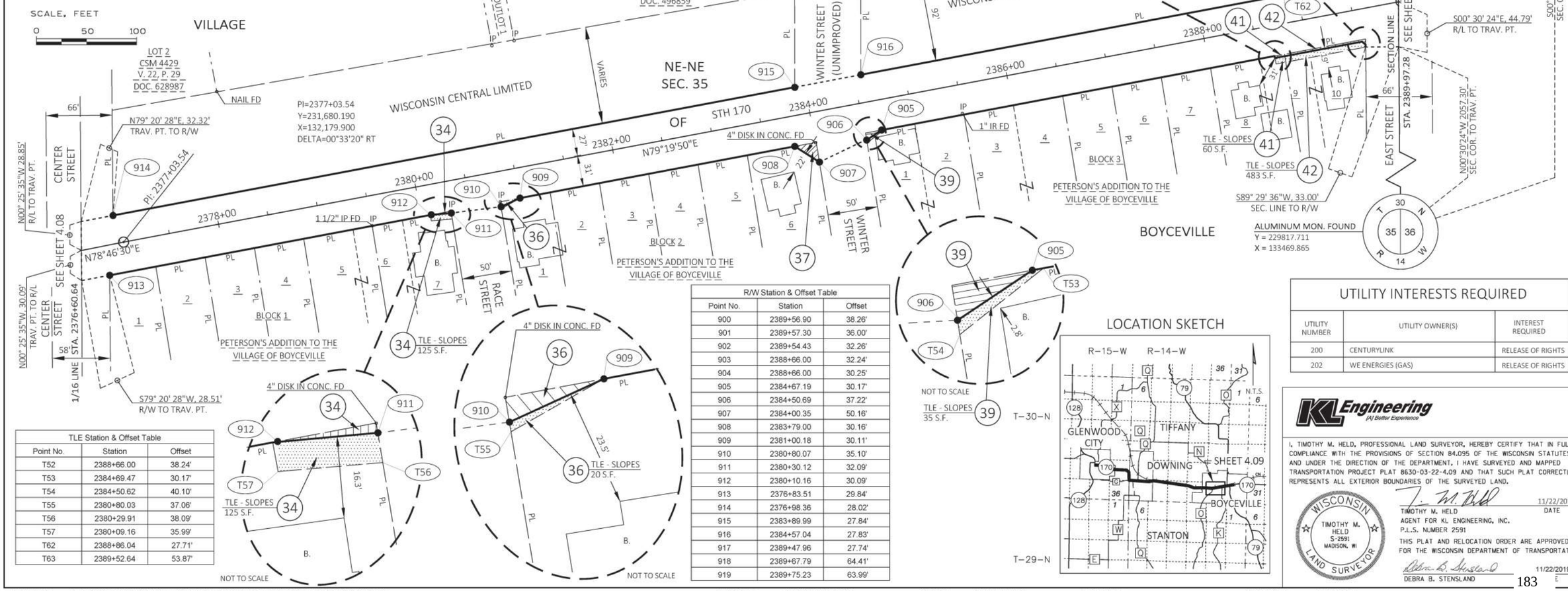
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.09
AMENDMENT NO:___

SCALE, FEET
0 50 100



TLE Station & Offset Table		
Point No.	Station	Offset
T52	2388+66.00	38.24'
T53	2384+69.47	30.17'
T54	2384+50.62	40.10'
T55	2380+80.03	37.06'
T56	2380+29.91	38.09'
T57	2380+09.16	35.99'
T62	2388+86.04	27.71'
T63	2389+52.64	53.87'

R/W Station & Offset Table		
Point No.	Station	Offset
900	2389+56.90	38.26'
901	2389+57.30	36.00'
902	2389+54.43	32.26'
903	2388+66.00	32.24'
904	2388+66.00	30.25'
905	2384+67.19	30.17'
906	2384+50.69	37.22'
907	2384+00.35	50.16'
908	2383+79.00	30.16'
909	2381+00.18	30.11'
910	2380+80.07	35.10'
911	2380+30.12	32.09'
912	2380+10.16	30.09'
913	2376+83.51	29.84'
914	2376+98.36	28.02'
915	2383+89.99	27.84'
916	2384+57.04	27.83'
917	2389+47.96	27.74'
918	2389+67.79	64.41'
919	2389+75.23	63.99'

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	CENTURYLINK	RELEASE OF RIGHTS
202	WE ENERGIES (GAS)	RELEASE OF RIGHTS

LOCATION SKETCH

KL Engineering
Al Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.09 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN TIMOTHY M. HELD S-2591 MADISON, WI LAND SURVEYOR

11/22/2019
TIMOTHY M. HELD DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

11/22/2019
DEBRA B. STENSLAND DATE

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\RW\DUNN CO\040101-RP.DWG
PLOT DATE : 11/22/2019 8:49 AM
PLOT BY : TIMOTHY HELD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
APPRAISAL PLAT DATE : 11/22/2019

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.09, AMENDMENT NO. 1

AMENDS UTILITY PARCEL 200 OF TRANSPORTATION PROJECT PLAT NO. 8630-03-22 - 4.09, RECORDED AS DOCUMENT 639034 IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY, WISCONSIN.

THAT PART OF LOT 7, BLOCK 1, LOTS 1 AND 6, BLOCK 2 AND LOTS 1, 9 AND 10, BLOCK 3 OF PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE LOCATED IN AND INCLUDING THE NE 1/4 OF THE NE 1/4 OF SECTION 35, T 30 N, R 14 W, VILLAGE OF BOYCEVILLE, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO STATE OF WISCONSIN
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
34	TOM L. HARRIS & JOAN R. BISSON-HARRIS	FEE/TLE	20	----	20	125
36	WILLARD TRONRUD & ADELINE M. TRONRUD	FEE/TLE	50	----	50	20
37	JEREMY M. WAHL AND ASHLEY I. WAHL	FEE	219	----	219	---
38	WISCONSIN CENTRAL LTD.	TLE	---	----	---	809
39	LARRY G. RINECK JR. &ANDREA B. RINECK	FEE/TLE	58	----	58	35
41	MAURICE EVENSON AND SHARON EVENSON	FEE/TLE	20	----	20	60
42	HARRY A. JOLES, JR.	FEE/TLE	171	----	171	483

EASEMENT TABLE			
UTILITY NUMBER	LOCATED IN R/W PARCEL NO.	RECORDING INFORMATION	OWNER
200	38	NO EASEMENT OF RECORD	CENTURYLINK
202	38	NO EASEMENT OF RECORD	WE ENERGIES

R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
900	901	N00° 30' 24"W	2.30'
901	902	N48° 12' 09"W	4.71'
902	903	S79° 20' 28"W	88.43'
903	904	N10° 39' 32"W	2.00'
904	905	S79° 20' 28"W	398.81'
905	906	S56° 12' 44"W	17.94'
906	907	S64° 54' 48"W	51.98'
907	908	N57° 31' 46"W	29.25'
908	909	S79° 20' 28"W	278.82'
909	910	S65° 22' 47"W	20.72'
910	911	S82° 46' 40"W	50.04'
911	912	S84° 47' 29"W	21.05'
912	913	S79° 20' 28"W	325.36'
914	915	N79° 20' 28"E	691.90'
915	916	N79° 20' 28"E	67.05'
916	917	N79° 20' 28"E	490.92'
917	918	N17° 43' 40"E	41.69'
918	919	N82° 34' 23"E	7.45'

HIGHWAY:	BASIS:
STH 170	R/W PLATS 8630-01-21 & 8926-00-01-4.01.
CENTER ST.	R/W PLATS 8630-01-21 & 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE, CSM 4429.
RACE ST.	R/W PLATS 8630-01-21 & 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE.
WINTER ST.	R/W PLAT 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE, CSM 2744.
EAST ST. / STH 79	R/W PLATS 8630-01-21 & 8926-00-01-4.01, PETERSON'S ADDITION TO THE VILLAGE OF BOYCEVILLE.

NOTES:
FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 636946.

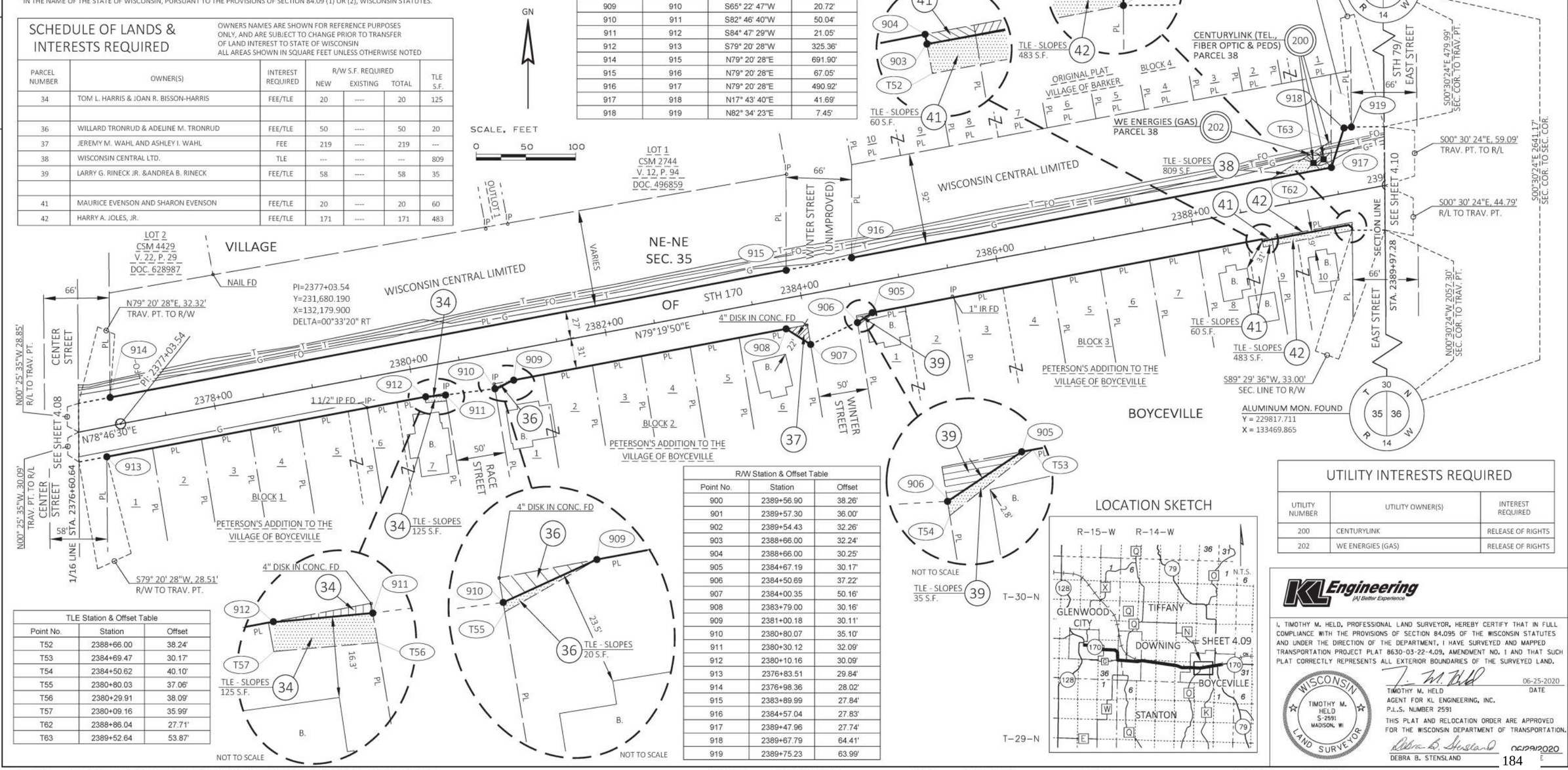
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD 83(2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

FOUND PROPERTY PIPES ARE 3/4" REBAR, UNLESS OTHERWISE NOTED.

643407
DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN
RECORDED ON
06/29/2020 01:15 PM
REC FEE: 25.00
PAGES: 1
The above recording information verifies that this document has been electronically recorded and returned to the submitter.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.09
AMENDMENT NO: 1



TLE Station & Offset Table		
Point No.	Station	Offset
T52	2388+66.00	38.24'
T53	2384+69.47	30.17'
T54	2384+50.62	40.10'
T55	2380+80.03	37.06'
T56	2380+29.91	38.09'
T57	2380+09.16	35.99'
T62	2388+86.04	27.71'
T63	2389+52.64	53.87'

R/W Station & Offset Table		
Point No.	Station	Offset
900	2389+56.90	38.26'
901	2389+57.30	36.00'
902	2389+54.43	32.26'
903	2388+66.00	32.24'
904	2388+66.00	30.25'
905	2384+67.19	30.17'
906	2384+50.69	37.22'
907	2384+00.35	50.16'
908	2383+79.00	30.16'
909	2381+00.18	30.11'
910	2380+80.07	35.10'
911	2380+30.12	32.09'
912	2380+10.16	30.09'
913	2376+83.51	29.84'
914	2376+98.36	28.02'
915	2383+89.99	27.84'
916	2384+57.04	27.83'
917	2389+47.96	27.74'
918	2389+67.79	64.41'
919	2389+75.23	63.99'

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	CENTURYLINK	RELEASE OF RIGHTS
202	WE ENERGIES (GAS)	RELEASE OF RIGHTS

LOCATION SKETCH

KL Engineering
[A] Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.09, AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN TIMOTHY M. HELD S-2591 MADISON, WI LAND SURVEYOR

06-25-2020
TIMOTHY M. HELD — DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

06/29/2020
DEBRA B. STENSLAND — DATE

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.10

THAT PART OF THE NW 1/4 OF THE NW 1/4 OF SECTION 36, T 30 N, R 14 W, VILLAGE OF BOYCEVILLE, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 636946.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD 83(2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO STATE OF WISCONSIN
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED			TLE S.F.
			NEW	EXISTING	TOTAL	
38	WISCONSIN CENTRAL LTD.	TLE	---	----	---	11,129

639035

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
11/22/2019 02:24 PM

REC FEE: 25.00
PAGES: 1
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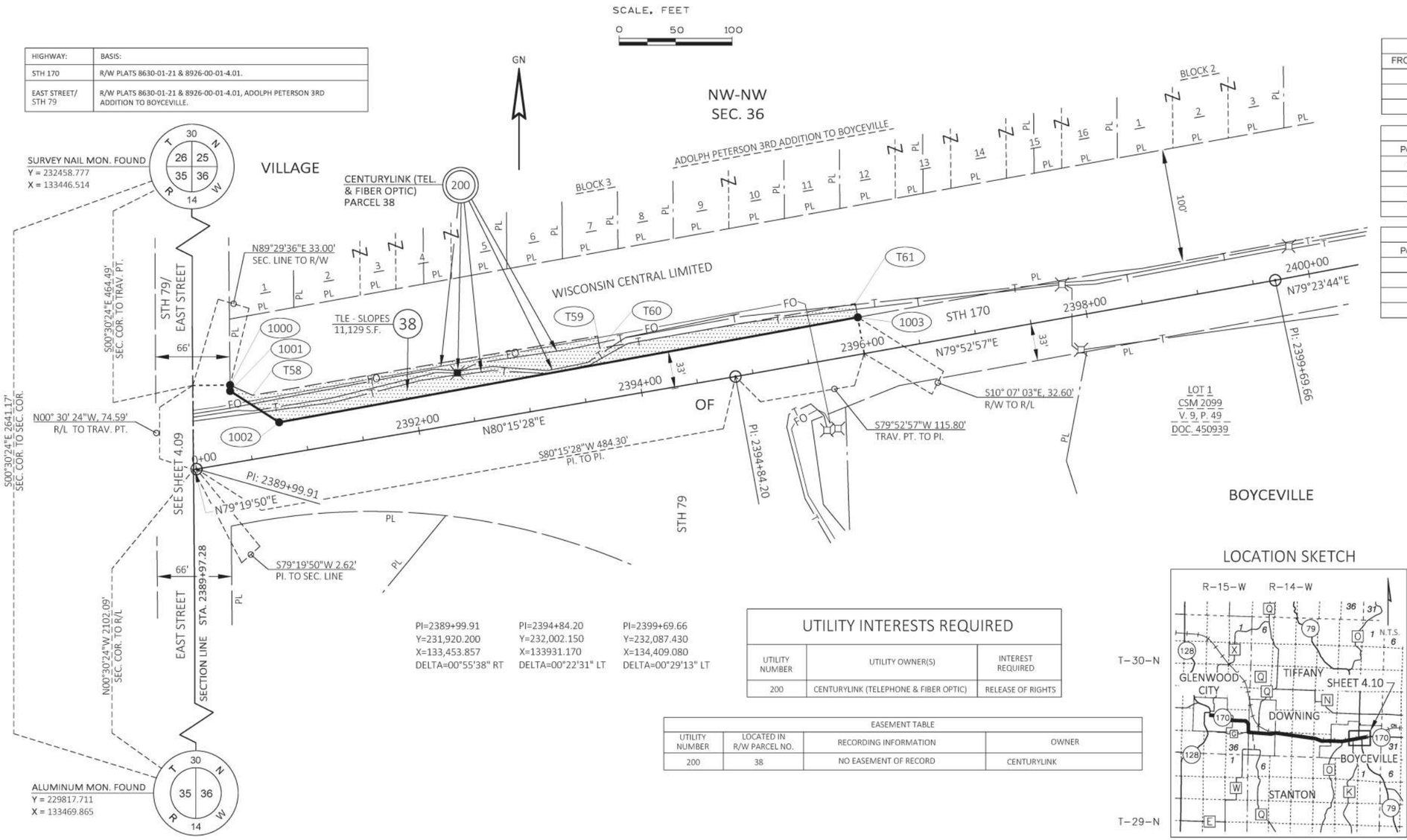
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.10
AMENDMENT NO:___

4



R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
1000	1001	S00° 30' 24"E	5.23'
1001	1002	S57° 26' 08"E	51.48'
1002	1003	N79° 43' 13"E	520.75'

R/W Station & Offset Table		
Point No.	Station	Offset
1000	2390+41.83	68.29'
1001	2390+40.99	63.12'
1002	2390+79.06	28.47'
1003	2396+00.00	32.60'

TLE Station & Offset Table		
Point No.	Station	Offset
T58	2390+60.00	56.00'
T59	2393+70.00	56.00'
T60	2393+70.00	45.00'
T61	2396+00.00	45.00'

HIGHWAY:	BASIS:
STH 170	R/W PLATS 8630-01-21 & 8926-00-01-4.01.
EAST STREET/ STH 79	R/W PLATS 8630-01-21 & 8926-00-01-4.01, ADOLPH PETERSON 3RD ADDITION TO BOYCEVILLE.

PI=2389+99.91
Y=231,920.200
X=133,453.857
DELTA=00°55'38" RT

PI=2394+84.20
Y=232,002.150
X=133931.170
DELTA=00°22'31" LT

PI=2399+69.66
Y=232,087.430
X=134,409.080
DELTA=00°29'13" LT

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	CENTURYLINK (TELEPHONE & FIBER OPTIC)	RELEASE OF RIGHTS

EASEMENT TABLE			
UTILITY NUMBER	LOCATED IN R/W PARCEL NO.	RECORDING INFORMATION	OWNER
200	38	NO EASEMENT OF RECORD	CENTURYLINK

LOCATION SKETCH

KL Engineering
[A] Better Experience

I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.10 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN TIMOTHY M. HELD S-2591 MADISON, WI LAND SURVEYOR

11/22/2019
TIMOTHY M. HELD DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

11/22/2019
DEBRA B. STENSLAND DATE

TRANSPORTATION PROJECT PLAT NO: 8630-03-22 - 4.10, AMENDMENT NO. 1

AMENDS UTILITY PARCEL 200 AND ADDS UTILITY PARCEL 201 TO TRANSPORTATION PROJECT PLAT NO. 8630-03-22 - 4.10, RECORDED AS DOCUMENT 639035 IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY, WISCONSIN.

THAT PART OF THE NW 1/4 OF THE NW 1/4 OF SECTION 36, T 30 N, R 14 W, VILLAGE OF BOYCEVILLE, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER STH 170 GLENWOOD CITY TO COLFAX (STH 128 - STH 79)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

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ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
38	WISCONSIN CENTRAL LTD.	TLE	---	----	---	11,129

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 636946.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD 83(2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

643502
DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN
RECORDED ON
07/02/2020 12:16 PM
REC FEE: 25.00
PAGES: 1
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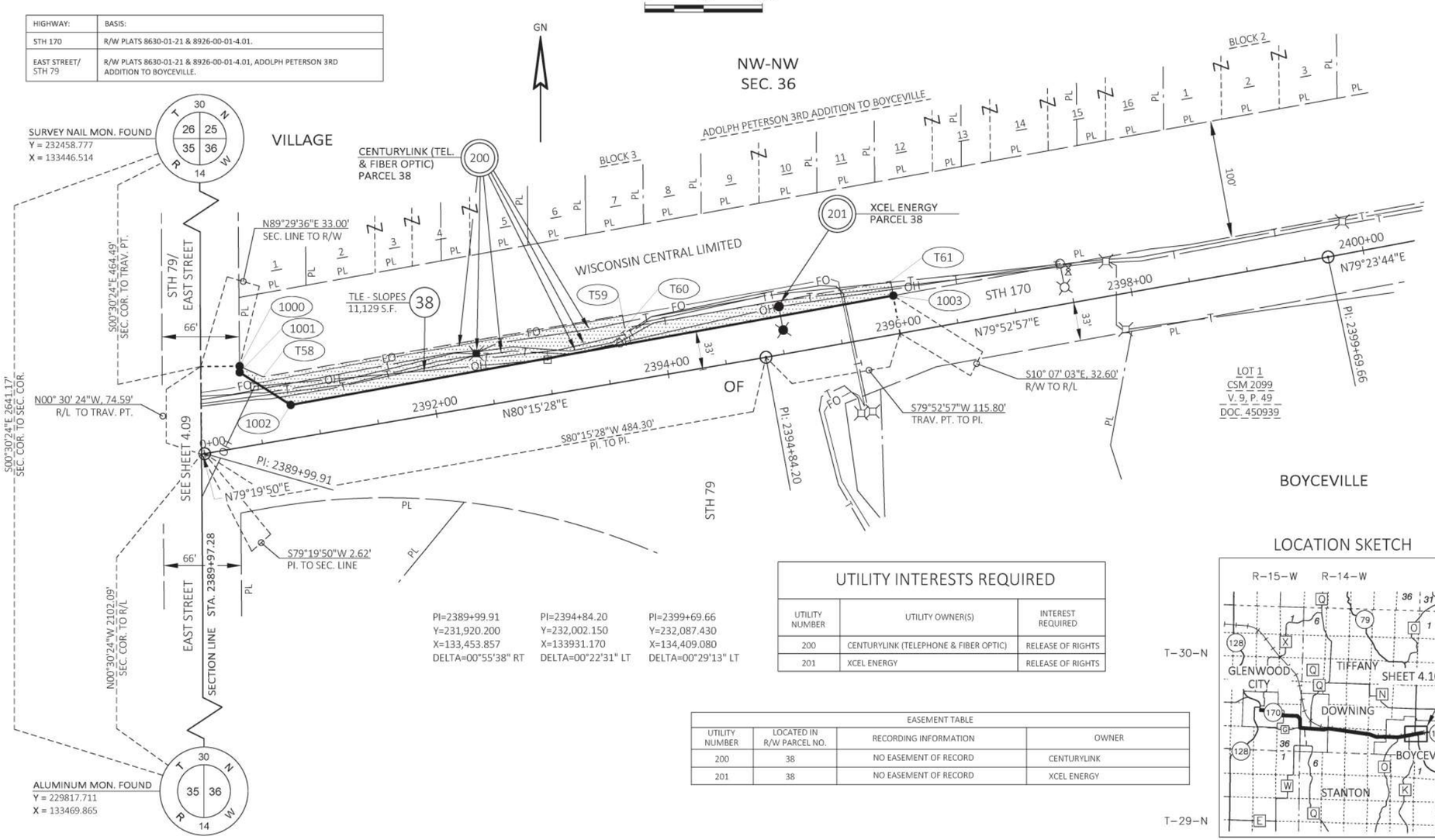
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-03-22 - 4.10
AMENDMENT NO: 1

HIGHWAY:	BASIS:
STH 170	R/W PLATS 8630-01-21 & 8926-00-01-4.01.
EAST STREET/ STH 79	R/W PLATS 8630-01-21 & 8926-00-01-4.01, ADOLPH PETERSON 3RD ADDITION TO BOYCEVILLE.

SCALE, FEET
0 50 100



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Y=231,920.200
X=133,453.857
DELTA=00°55'38" RT

PI=2394+84.20
Y=232,002.150
X=133931.170
DELTA=00°22'31" LT

PI=2399+69.66
Y=232,087.430
X=134,409.080
DELTA=00°29'13" LT

R/W COURSE TABLE			
FROM POINT	TO POINT	BEARING	DISTANCE
1000	1001	S00° 30' 24"E	5.23'
1001	1002	S57° 26' 08"E	51.48'
1002	1003	N79° 43' 13"E	520.75'

R/W Station & Offset Table		
Point No.	Station	Offset
1000	2390+41.83	68.29'
1001	2390+40.99	63.12'
1002	2390+79.06	28.47'
1003	2396+00.00	32.60'

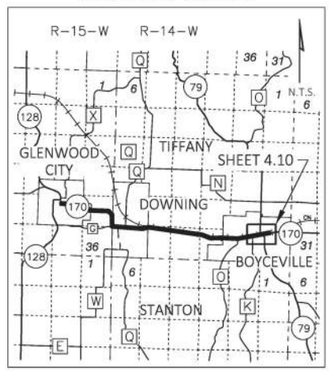
TLE Station & Offset Table		
Point No.	Station	Offset
T58	2390+60.00	56.00'
T59	2393+70.00	56.00'
T60	2393+70.00	45.00'
T61	2396+00.00	45.00'

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	CENTURYLINK (TELEPHONE & FIBER OPTIC)	RELEASE OF RIGHTS
201	XCEL ENERGY	RELEASE OF RIGHTS

EASEMENT TABLE			
UTILITY NUMBER	LOCATED IN R/W PARCEL NO.	RECORDING INFORMATION	OWNER
200	38	NO EASEMENT OF RECORD	CENTURYLINK
201	38	NO EASEMENT OF RECORD	XCEL ENERGY

LOCATION SKETCH



KL Engineering
[A] Better Experience

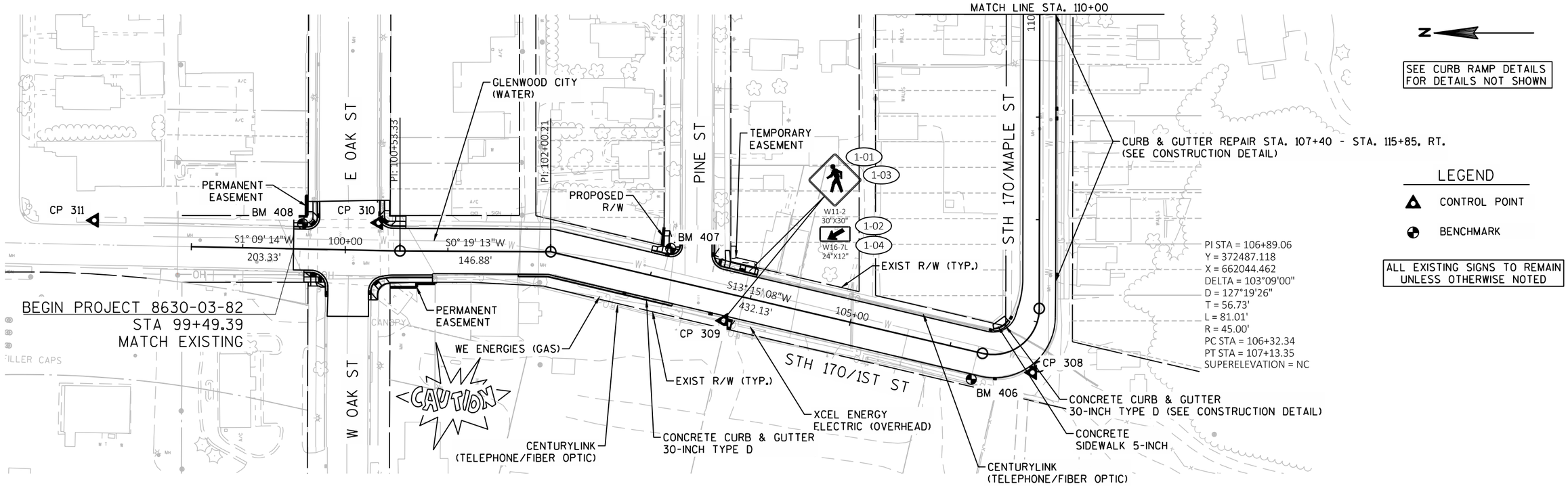
I, TIMOTHY M. HELD, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 8630-03-22-4.10, AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

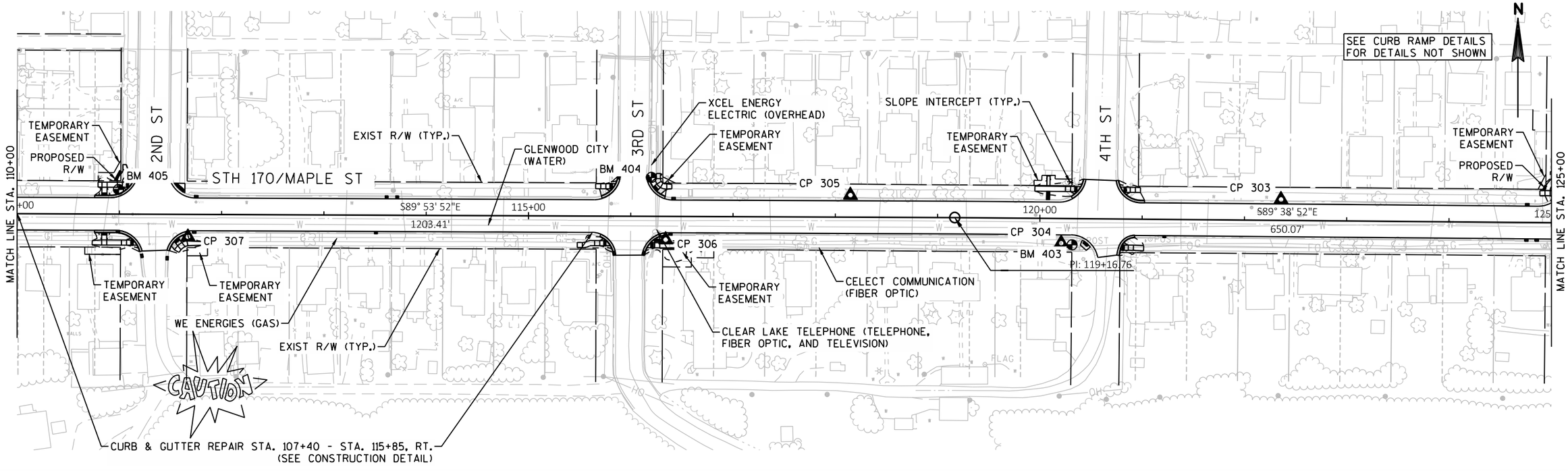
07-01-2020
TIMOTHY M. HELD — DATE
AGENT FOR KL ENGINEERING, INC.
P.L.S. NUMBER 2591
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

WISCONSIN TIMOTHY M. HELD S-2591 MADISON, WI LAND SURVEYOR

07/02/2020
DEBRA B. STENSLAND

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\RW\DUNN CO\040101-RP AMENDMENTS.DWG
PLOT DATE : 7/2/2020 9:00 AM
PLOT BY : TIMOTHY HELD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
APPRAISAL PLAT DATE : 07-01-2020

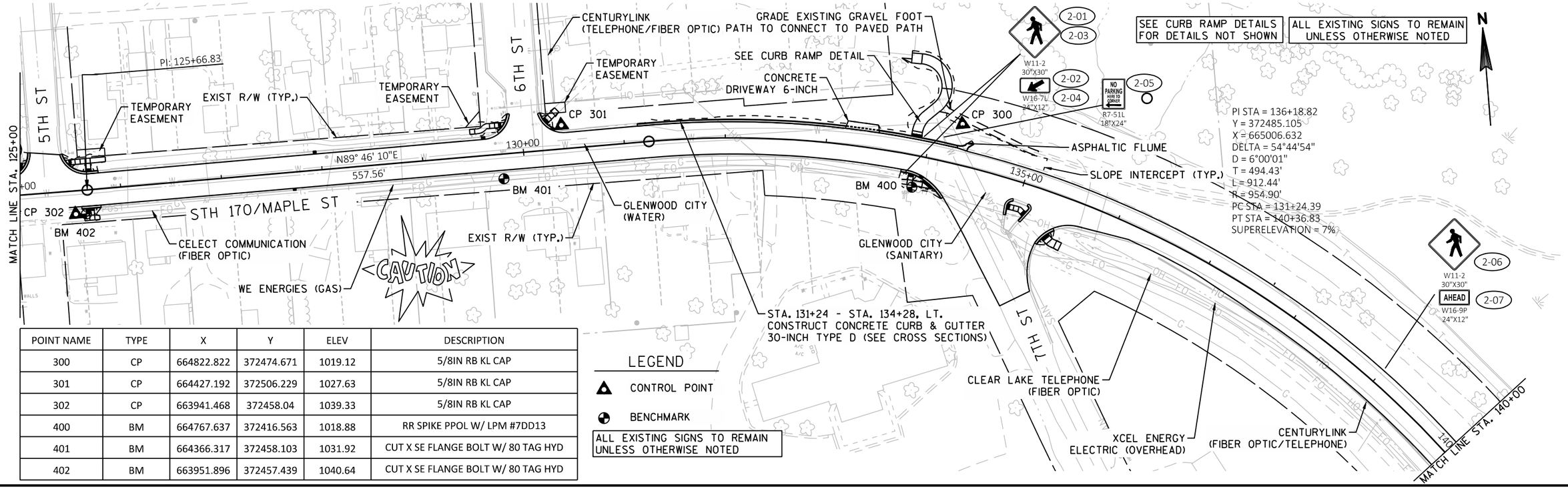




PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: ST. CROIX COUNTY	SHEET 187	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\ST. CROIX\021201-PD_ST. CROIX.DWG
LAYOUT NAME - SOP - STA 125+00
PLOT DATE : 7/2/2020 11:00 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1IN:100FT

POINT NAME	TYPE	X	Y	ELEV	DESCRIPTION
303	CP	663623.45	372503.331	1057.5	5/8IN RB KL CAP
304	CP	663408.738	372459.973	1076.15	5/8IN RB KL CAP
305	CP	663202.491	372506.522	1074.74	5/8IN RB KL CAP
306	CP	663022.041	372462.458	1068.01	5/8IN RB KL CAP
307	CP	662555.041	372464.168	1048.13	5/8IN RB KL CAP
308	CP	662038.779	372493.599	1030.864	MAG NAIL
309	CP	662089.406	372794.504	1033.285	5/8IN RB KL CAP
310	CP	662184.77	373130.656	1037.006	MAG NAIL
311	CP	662187.151	373407.703	1039.34	CUT X IN CONC S/W
403	BM	663419.319	372458.515	1077.08	CUT X SE FLANGE BOLT W/ 80 TAG HYD
404	BM	663007.88	372523.444	1066.59	RR SPIKE LPM #6BB15
405	BM	662487.022	372510.433	1047.59	CUT X NW FLANGE BOLT W/ 80 TAG HYD
406	BM	662032.227	372553.325	1032.96	CUT X SW FLANGE BOLT W/ 76 TAG HYD
407	BM	662159.819	372846.09	1037.96	CUT X E FLANGE BOLT W/ 70 TAG HYD
408	BM	662183.778	373204.731	1039.58	CUT X NE FLANGE BOLT W/ 80 TAG HYD

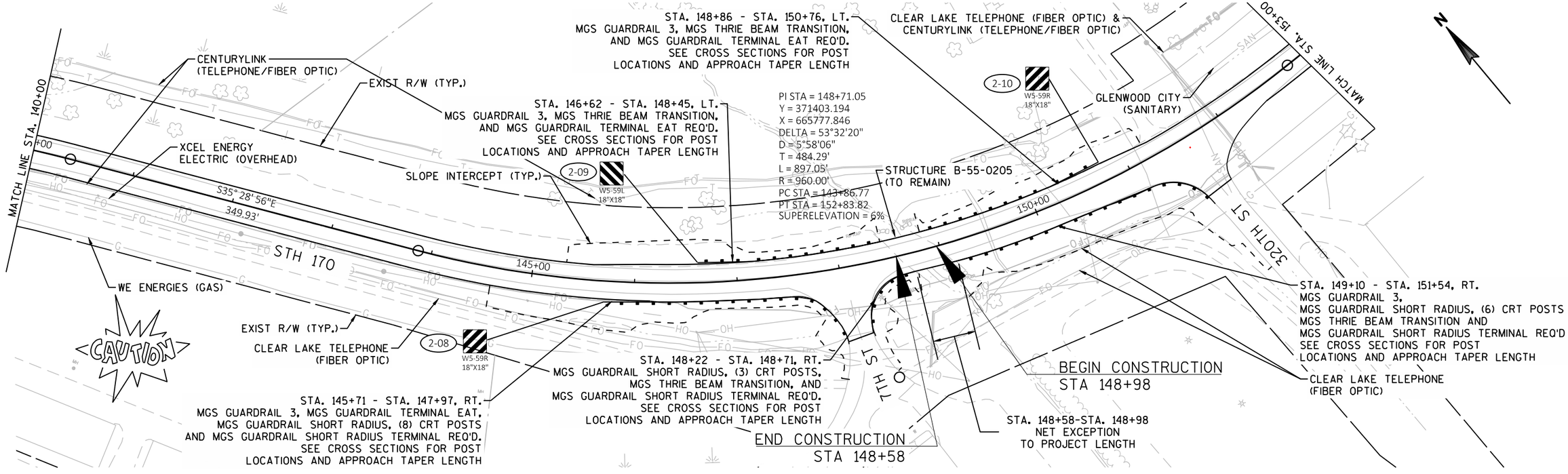


POINT NAME	TYPE	X	Y	ELEV	DESCRIPTION
300	CP	664822.822	372474.671	1019.12	5/8IN RB KL CAP
301	CP	664427.192	372506.229	1027.63	5/8IN RB KL CAP
302	CP	663941.468	372458.04	1039.33	5/8IN RB KL CAP
400	BM	664767.637	372416.563	1018.88	RR SPIKE PPOL W/ LPM #7DD13
401	BM	664366.317	372458.103	1031.92	CUT X SE FLANGE BOLT W/ 80 TAG HYD
402	BM	663951.896	372457.439	1040.64	CUT X SE FLANGE BOLT W/ 80 TAG HYD

LEGEND

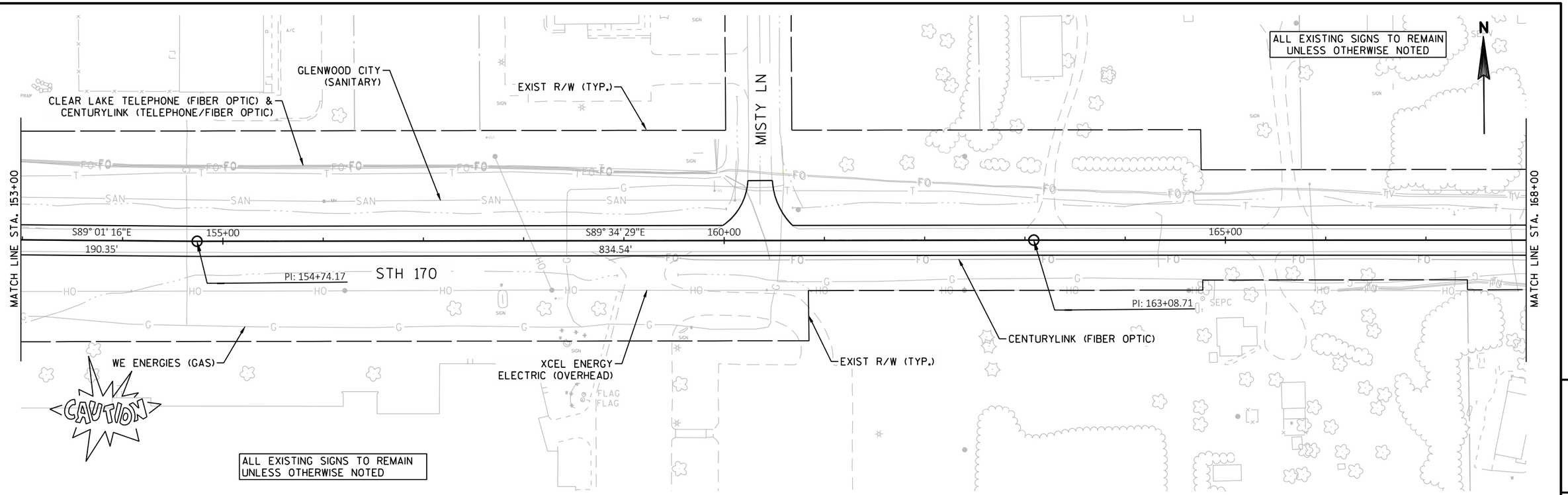
- CONTROL POINT
- BENCHMARK

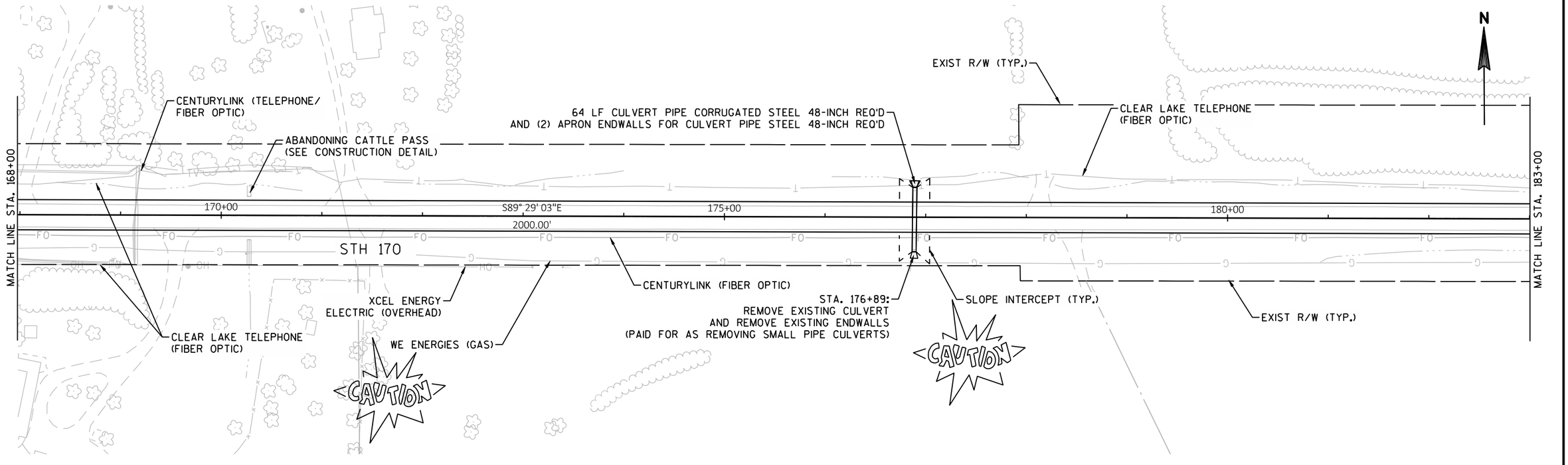
ALL EXISTING SIGNS TO REMAIN UNLESS OTHERWISE NOTED



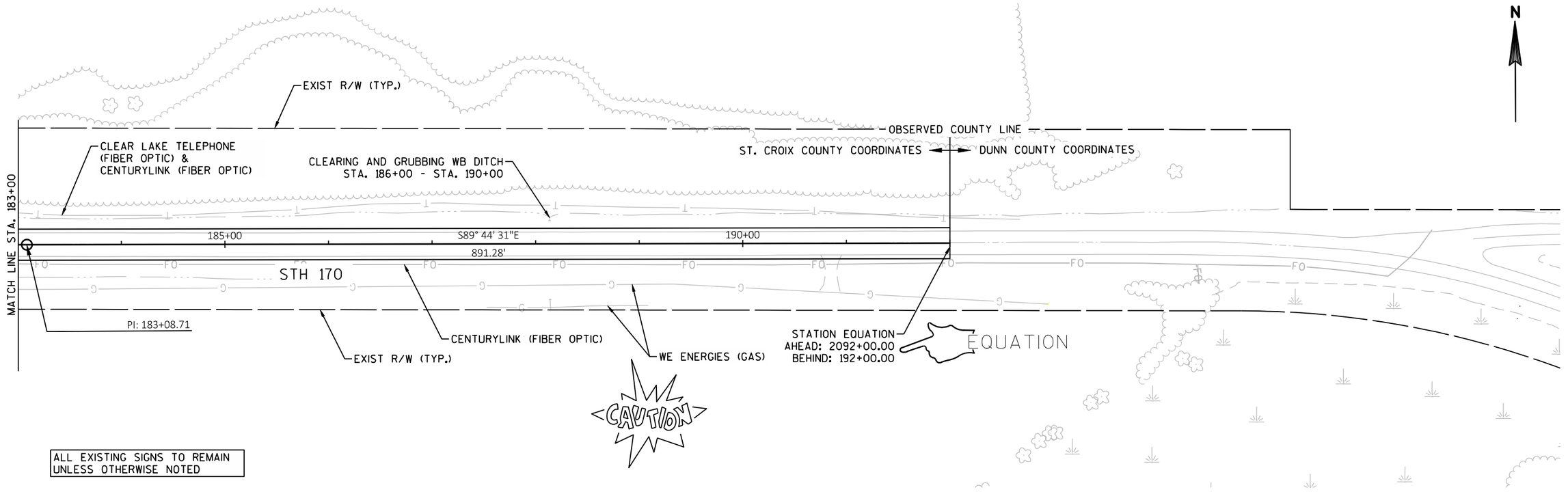
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: ST. CROIX COUNTY	SHEET 189	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\ST. CROIX\021201-PD_ST. CROIX.DWG
LAYOUT NAME - STA 125+00 - STA 153+00
PLOT DATE : 7/2/2020 11:01 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1IN:100FT



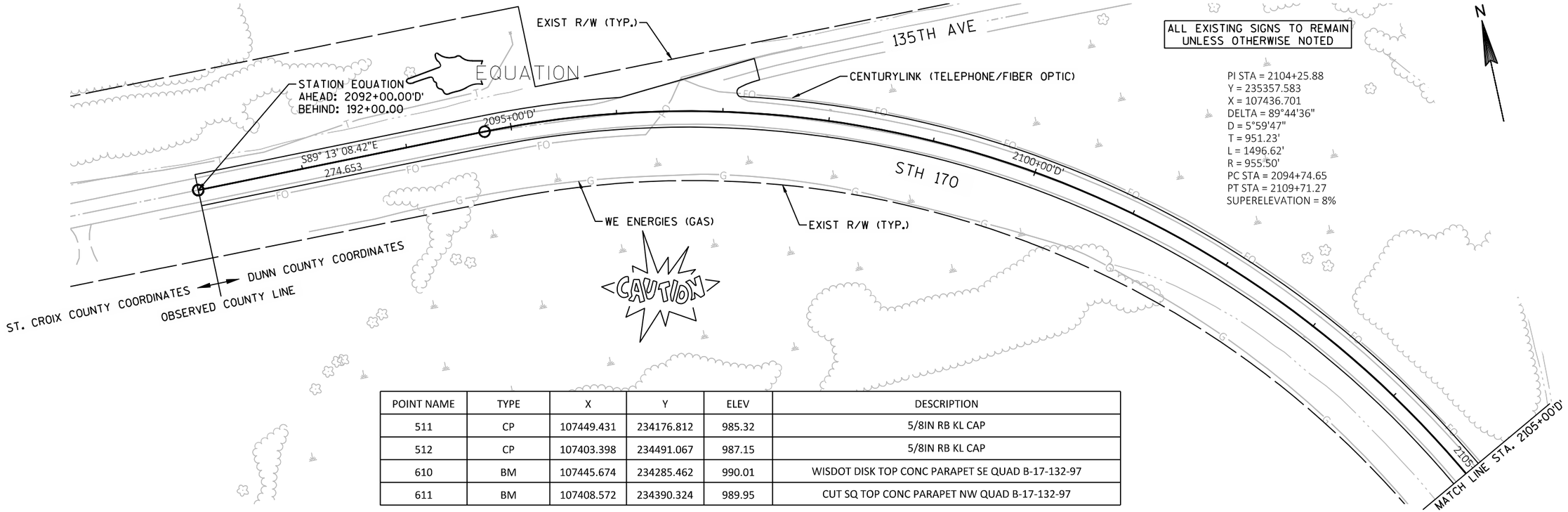


PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: ST. CROIX COUNTY	SHEET 190	E

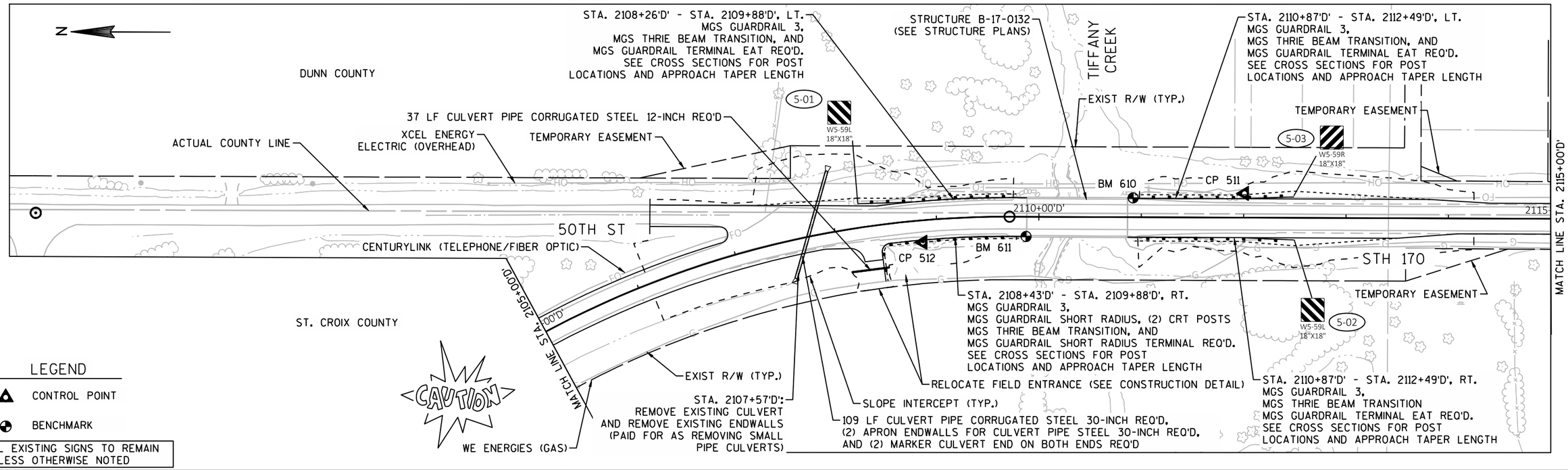


PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	PLAN DETAILS: ST. CROIX COUNTY	SHEET 191	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\ST. CROIX\021201-PD_ST. CROIX.DWG
LAYOUT NAME - STA 183+00 - STA 192+00
PLOT DATE : 7/2/2020 11:01 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

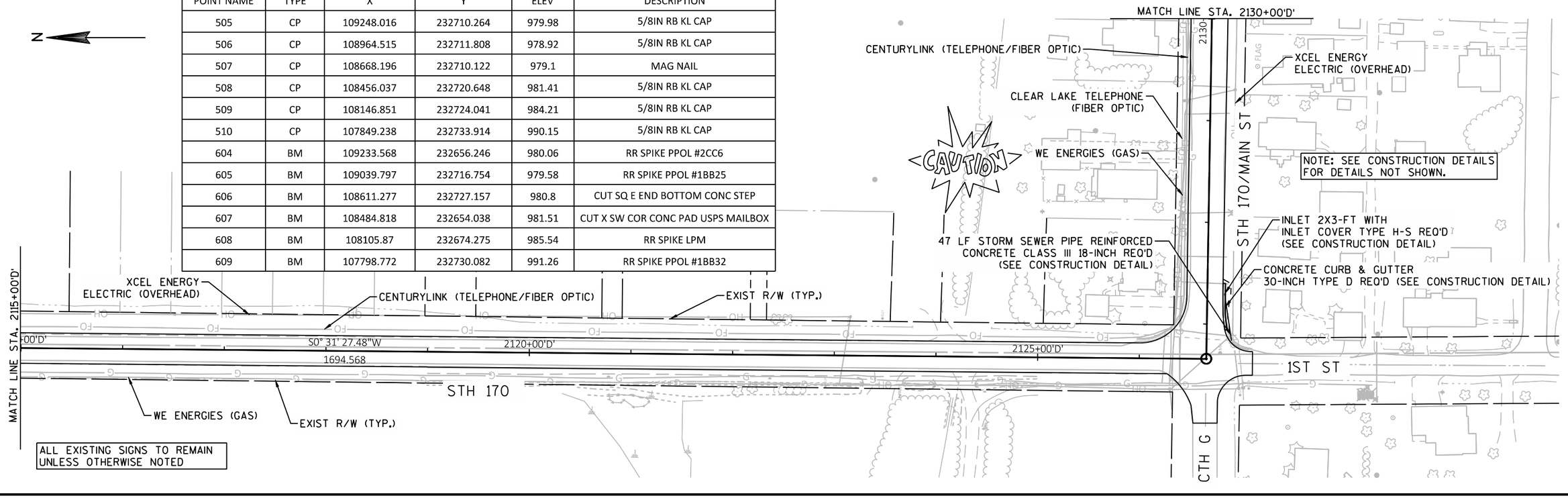


POINT NAME	TYPE	X	Y	ELEV	DESCRIPTION
511	CP	107449.431	234176.812	985.32	5/8IN RB KL CAP
512	CP	107403.398	234491.067	987.15	5/8IN RB KL CAP
610	BM	107445.674	234285.462	990.01	WISDOT DISK TOP CONC PARAPET SE QUAD B-17-132-97
611	BM	107408.572	234390.324	989.95	CUT SQ TOP CONC PARAPET NW QUAD B-17-132-97



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: DUNN COUNTY	SHEET 192	E

POINT NAME	TYPE	X	Y	ELEV	DESCRIPTION
505	CP	109248.016	232710.264	979.98	5/8IN RB KL CAP
506	CP	108964.515	232711.808	978.92	5/8IN RB KL CAP
507	CP	108668.196	232710.122	979.1	MAG NAIL
508	CP	108456.037	232720.648	981.41	5/8IN RB KL CAP
509	CP	108146.851	232724.041	984.21	5/8IN RB KL CAP
510	CP	107849.238	232733.914	990.15	5/8IN RB KL CAP
604	BM	109233.568	232656.246	980.06	RR SPIKE PPOL #2CC6
605	BM	109039.797	232716.754	979.58	RR SPIKE PPOL #1BB25
606	BM	108611.277	232727.157	980.8	CUT SQ E END BOTTOM CONC STEP
607	BM	108484.818	232654.038	981.51	CUT X SW COR CONC PAD USPS MAILBOX
608	BM	108105.87	232674.275	985.54	RR SPIKE LPM
609	BM	107798.772	232730.082	991.26	RR SPIKE PPOL #1BB32



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: DUNN COUNTY	SHEET 193	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021201-PD_DUNN.DWG
LAYOUT NAME - STA 2115+00 - STA 2145+00
PLOT DATE : 7/2/2020 10:47 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL EXISTING SIGNS TO REMAIN UNLESS OTHERWISE NOTED

CAUTION

CENTURYLINK (TELEPHONE/FIBER OPTIC)

WE ENERGIES (GAS)

CLEAR LAKE TELEPHONE (FIBER OPTIC)

ASH ST

CONNERSVILLE RD

EXISTING RAIL ON BRIDGE (TO REMAIN)

STRUCTURE B-17-0017 (TO REMAIN)

STA. 2150+81'D' - STA. 2152+74'D', LT.
MGS GUARDRAIL 3,
MGS THRIE BEAM TRANSITION, AND
MGS GUARDRAIL TERMINAL EAT REQ'D.
SEE CROSS SECTIONS FOR POST
LOCATIONS AND APPROACH TAPER LENGTH

BEGIN CONSTRUCTION
STA 2154+08'D'

SLOPE INTERCEPT (TYP.)

STA. 2154+07'D' - STA. 2156+00'D', LT.
MGS GUARDRAIL 3,
MGS THRIE BEAM TRANSITION, AND
MGS GUARDRAIL TERMINAL EAT REQ'D.
SEE CROSS SECTIONS FOR POST
LOCATIONS AND APPROACH TAPER LENGTH

EXIST R/W (TYP.)

N

7-02 W5-59L 18"X18"

PI: 2152+50.94

7-03 W5-59R 18"X18"

MATCH LINE STA. 2145+00'D'

00'D'

2150+00'D'

2155+00'D'

S88° 53' 39.82"E

950.000

2160

MATCH LINE STA. 2160+00'D'

STH 170/MAIN ST

7-01 W5-59R 18"X18"

7-04 W5-59L 18"X18"

XCEL ENERGY
ELECTRIC (OVERHEAD)

WE ENERGIES (GAS)

CAUTION

STA. 2150+81'D' - STA. 2152+74'D', RT.
MGS GUARDRAIL 3,
MGS THRIE BEAM TRANSITION, AND
MGS GUARDRAIL TERMINAL EAT REQ'D.
SEE CROSS SECTIONS FOR POST
LOCATIONS AND APPROACH TAPER LENGTH

TEMPORARY EASEMENT

CENTURYLINK
(TELEPHONE/FIBER OPTIC)

STA. 2154+07'D' - STA. 2156+00'D', RT.
MGS GUARDRAIL 3,
MGS THRIE BEAM TRANSITION, AND
MGS GUARDRAIL TERMINAL EAT REQ'D.
SEE CROSS SECTIONS FOR POST
LOCATIONS AND APPROACH TAPER LENGTH

EXIST R/W (TYP.)

END CONSTRUCTION
STA 2152+72'D'

BEAVER CREEK

STA. 2152+70'D'-STA. 2154+08'D'
NET EXCEPTION
TO PROJECT LENGTH

ALL EXISTING SIGNS TO REMAIN UNLESS OTHERWISE NOTED

5

5

N

XCEL ENERGY
ELECTRIC (OVERHEAD)

PI: 2162+00.94

WE ENERGIES (GAS)

EXIST R/W (TYP.)

CENTURYLINK (TELEPHONE/FIBER OPTIC)

MATCH LINE STA. 2160+00'D'

+00'D'

PI: 2167+16.49

S88° 32' 46.61"E

515.544

2165+00'D'

STH 170

2170+00'D'

S86° 36' 45.18"E

982.279

2175+

MATCH LINE STA. 2175+00'D'

ROWLEY RD

INSTALL MARKERS CULVERT
END ON BOTH ENDS

EXIST R/W (TYP.)

INSTALL MARKERS CULVERT
END ON BOTH ENDS

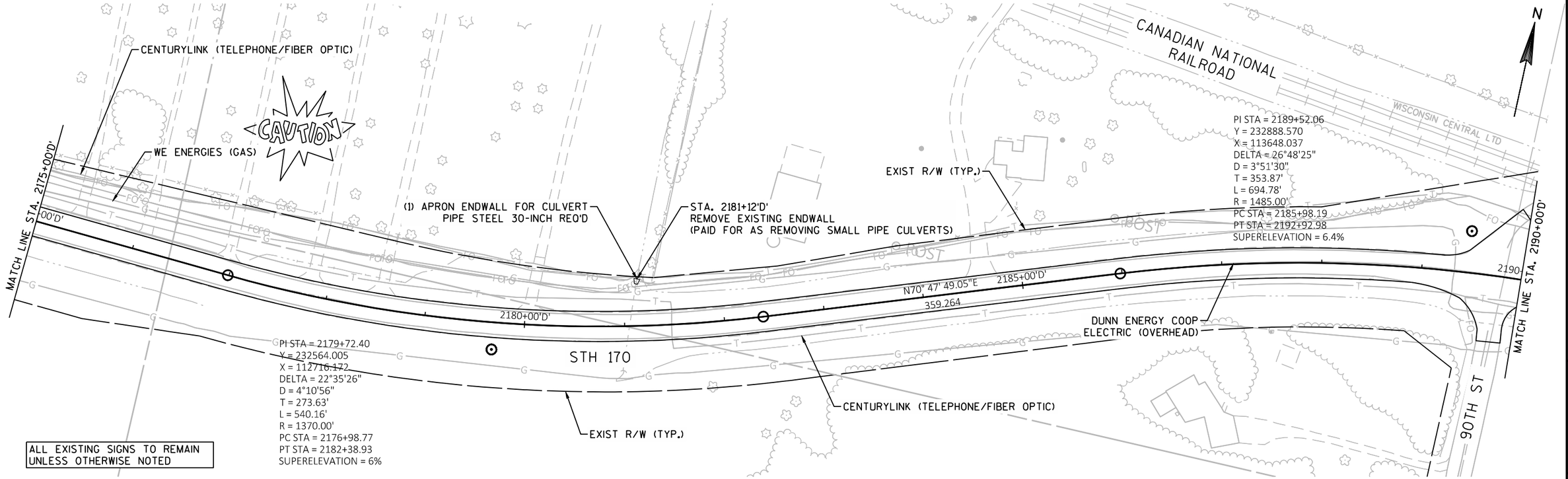
CENTURYLINK (TELEPHONE/FIBER OPTIC)

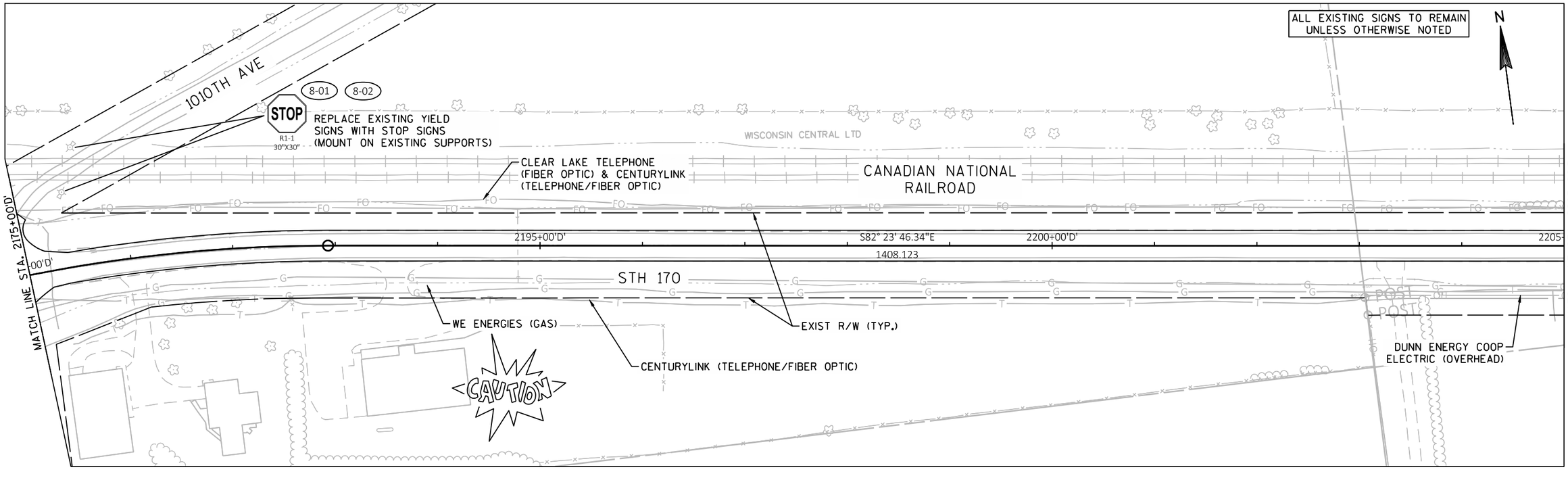
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: DUNN COUNTY	SHEET 194	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021201-PD_DUNN.DWG
LAYOUT NAME - STA 2145+00 - STA 2175+00

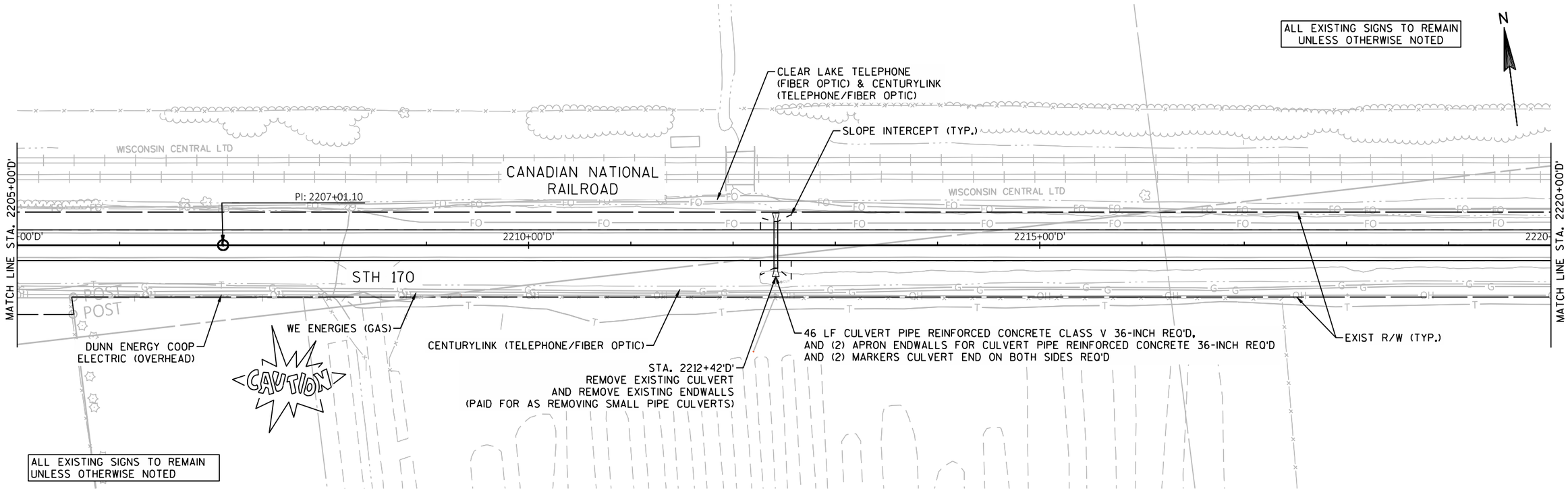
PLOT DATE : 7/2/2020 10:47 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

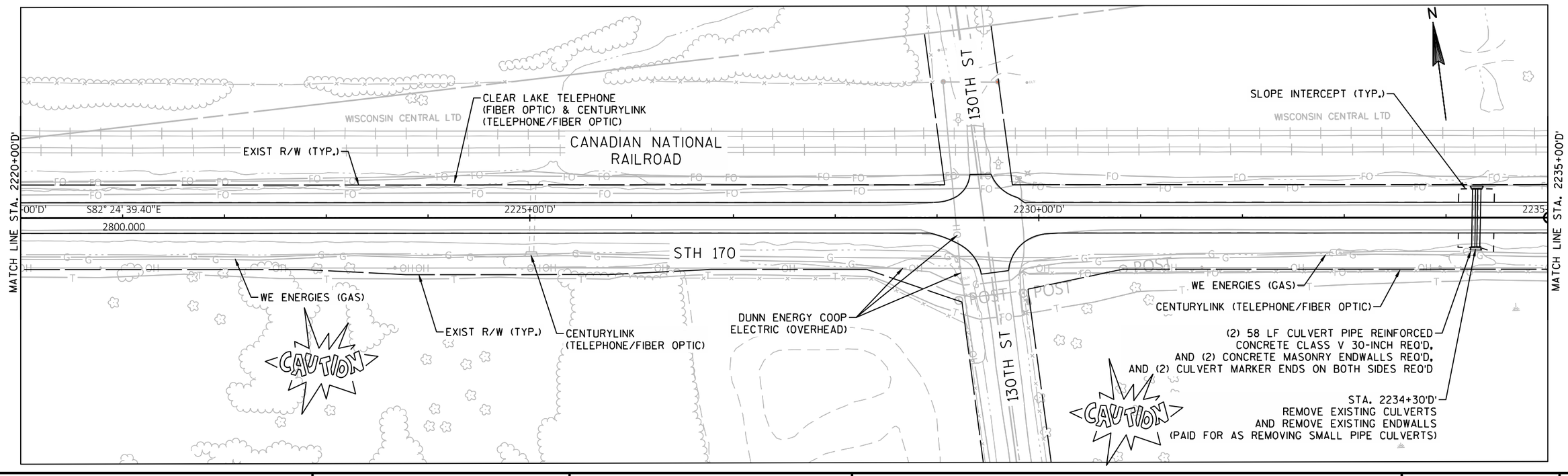
WISDOT/CADDS SHEET 44



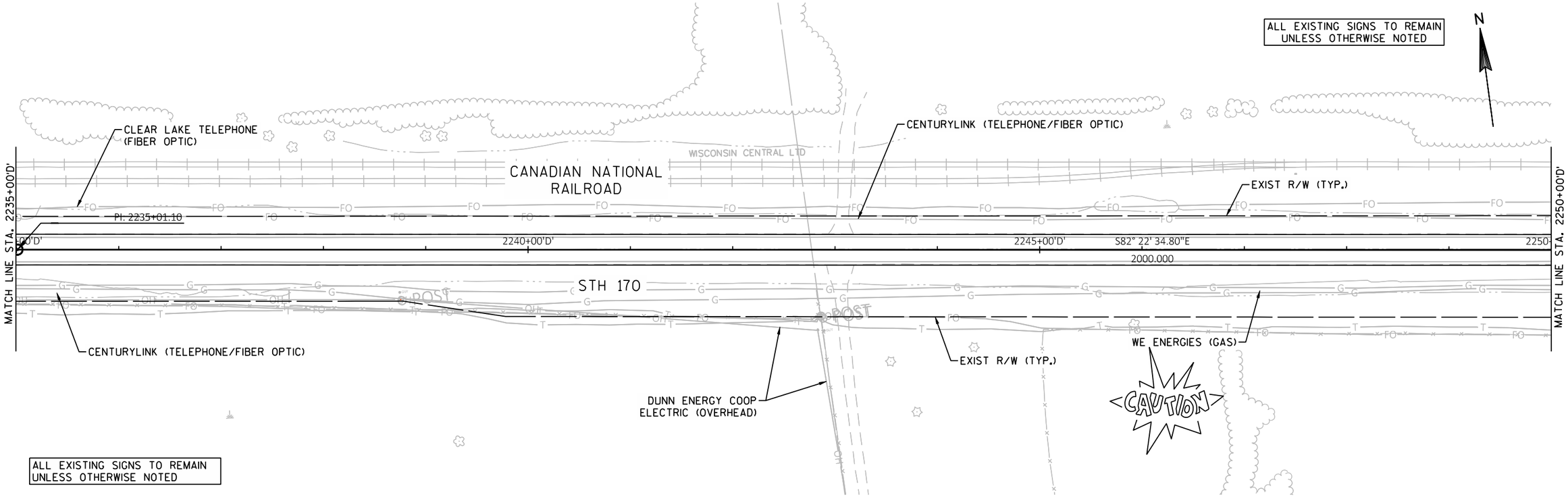


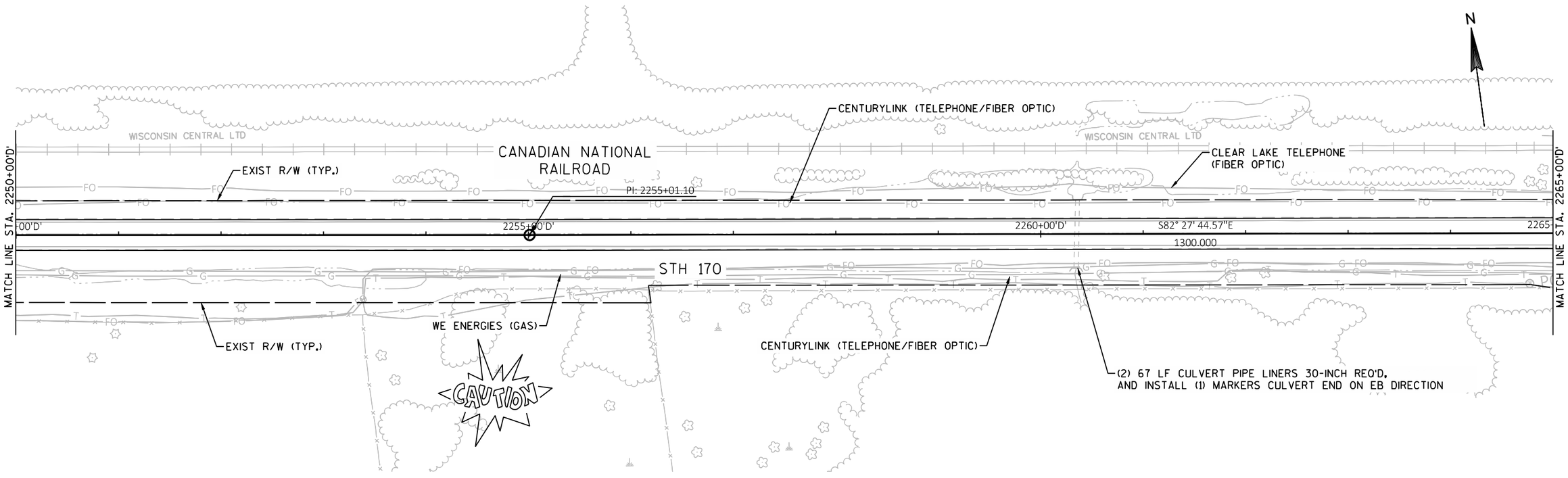
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: DUNN COUNTY	SHEET 195	E



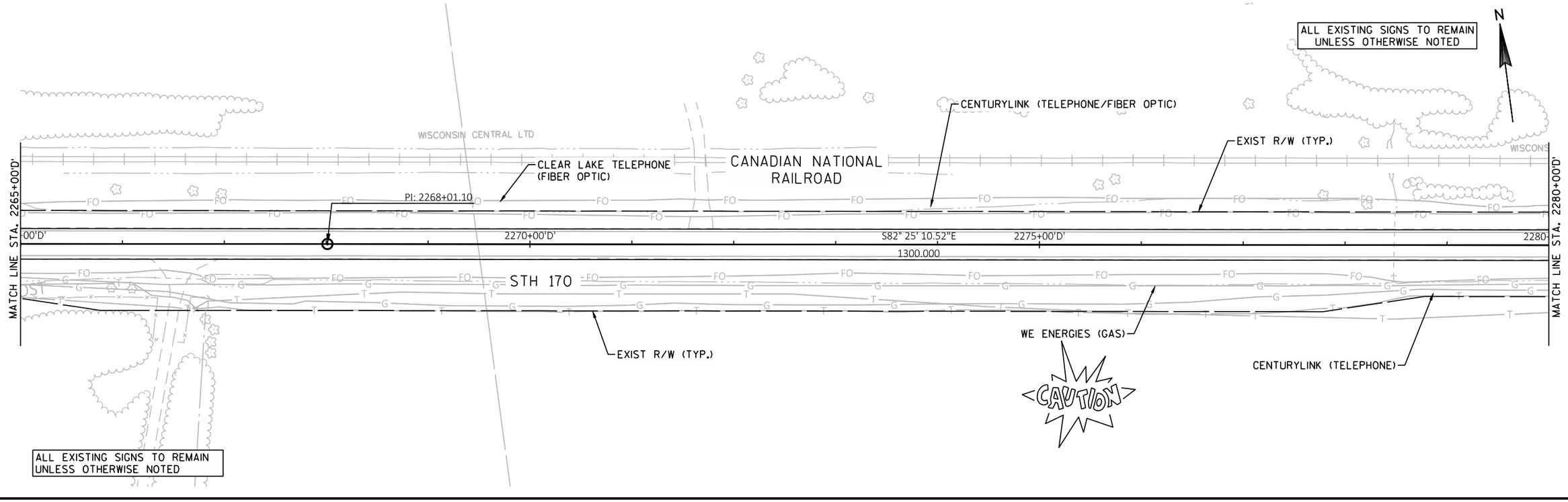


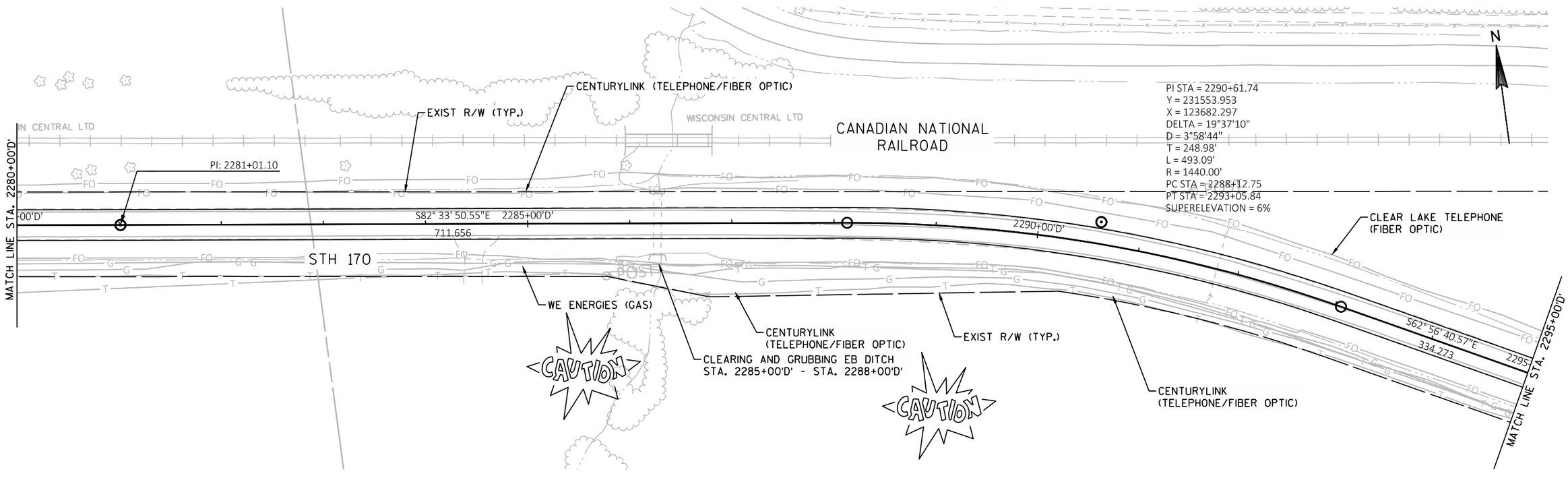
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: DUNN COUNTY	SHEET 196	E



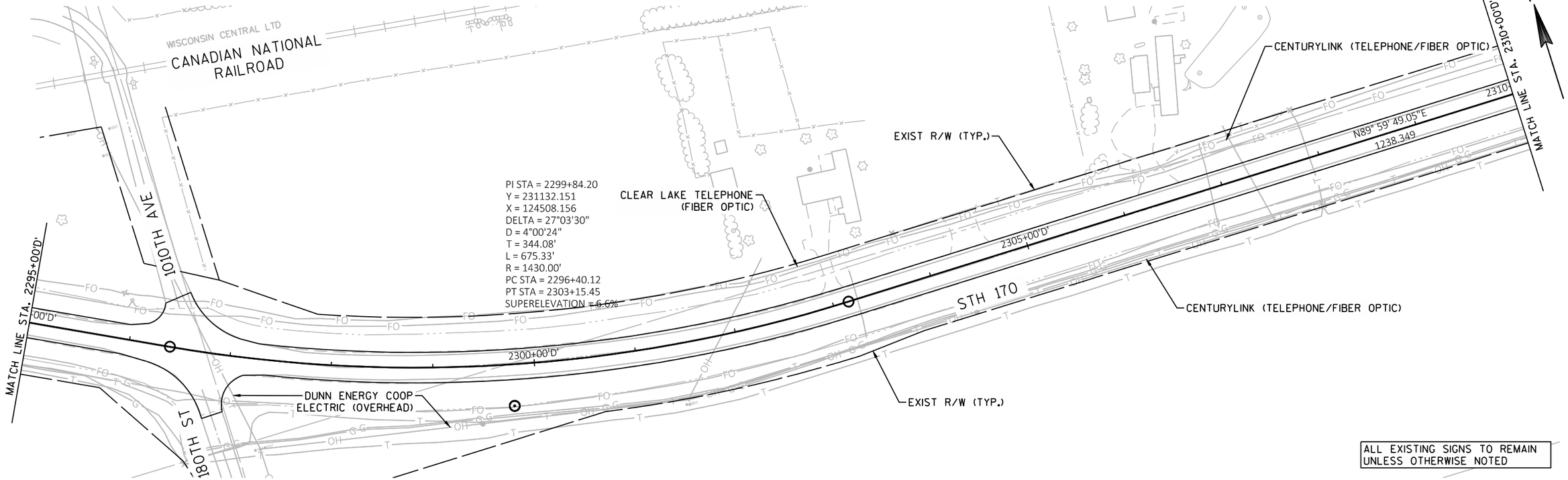


PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: DUNN COUNTY	SHEET 197	E





PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: DUNN COUNTY	SHEET 198	E

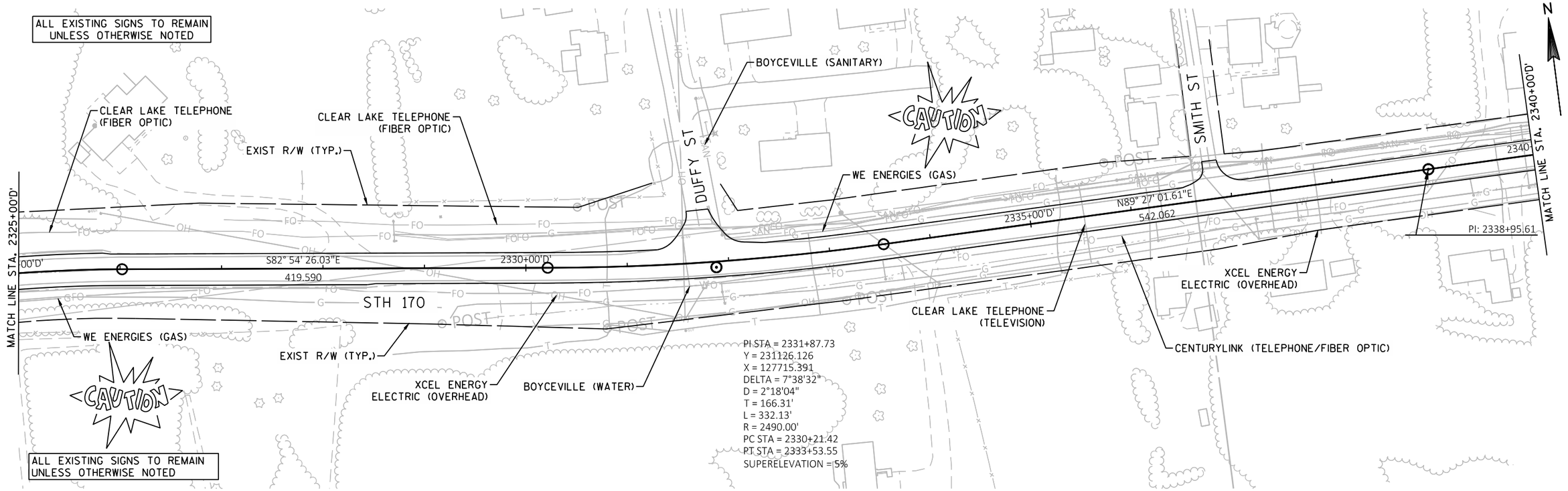


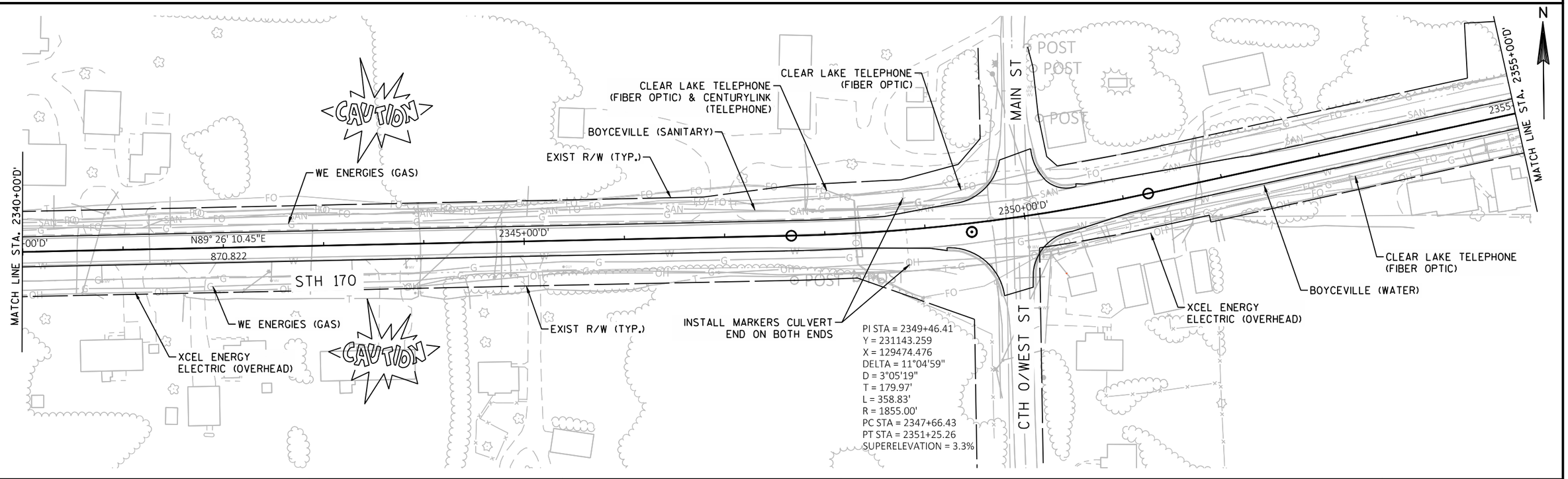
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: DUNN COUNTY	SHEET 199	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021201-PD_DUNN.DWG
LAYOUT NAME - STA 2295+00 - STA 2325+00

PLOT DATE : 7/2/2020 10:50 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

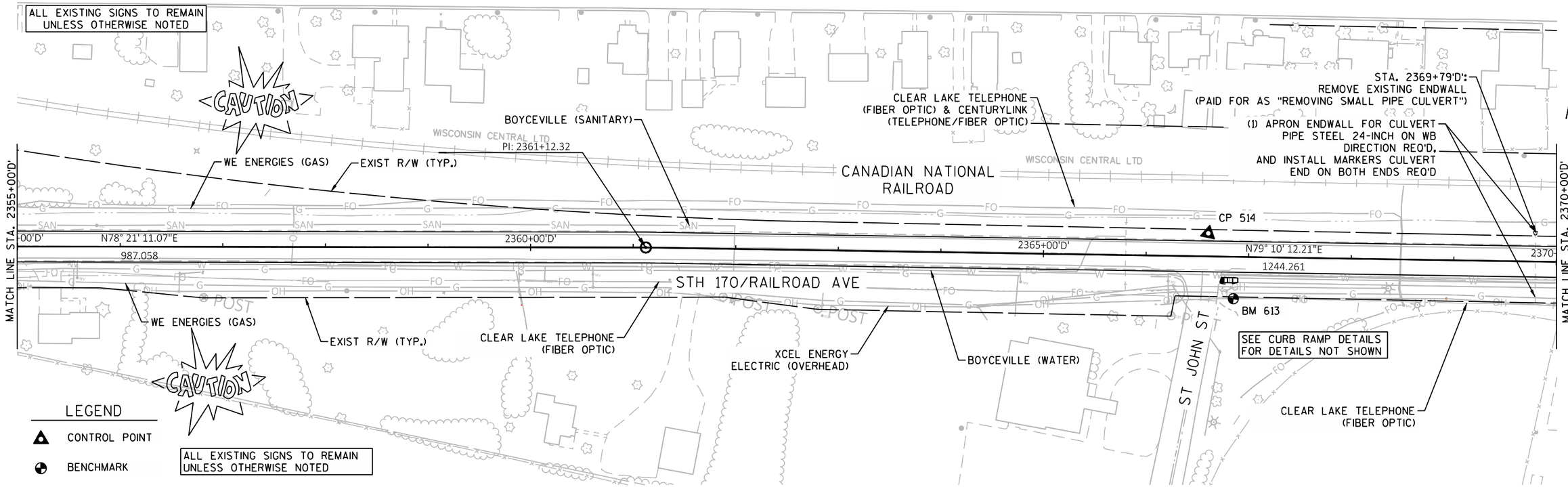
WISDOT/CADDS SHEET 44

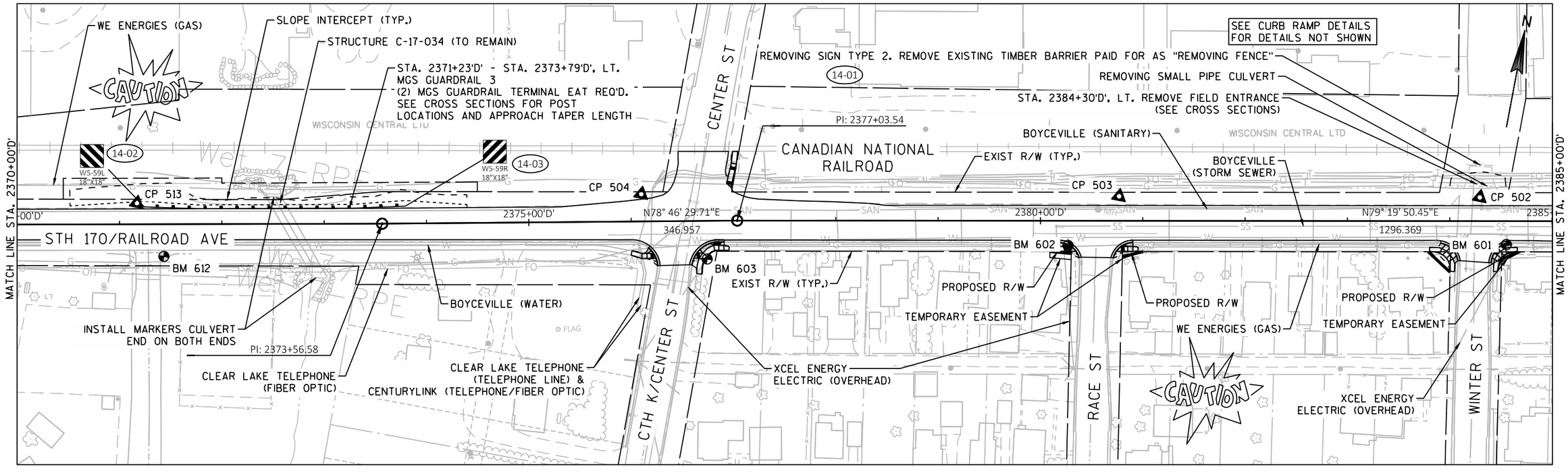




PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: DUNN COUNTY	SHEET 200	E

ALL EXISTING SIGNS TO REMAIN UNLESS OTHERWISE NOTED

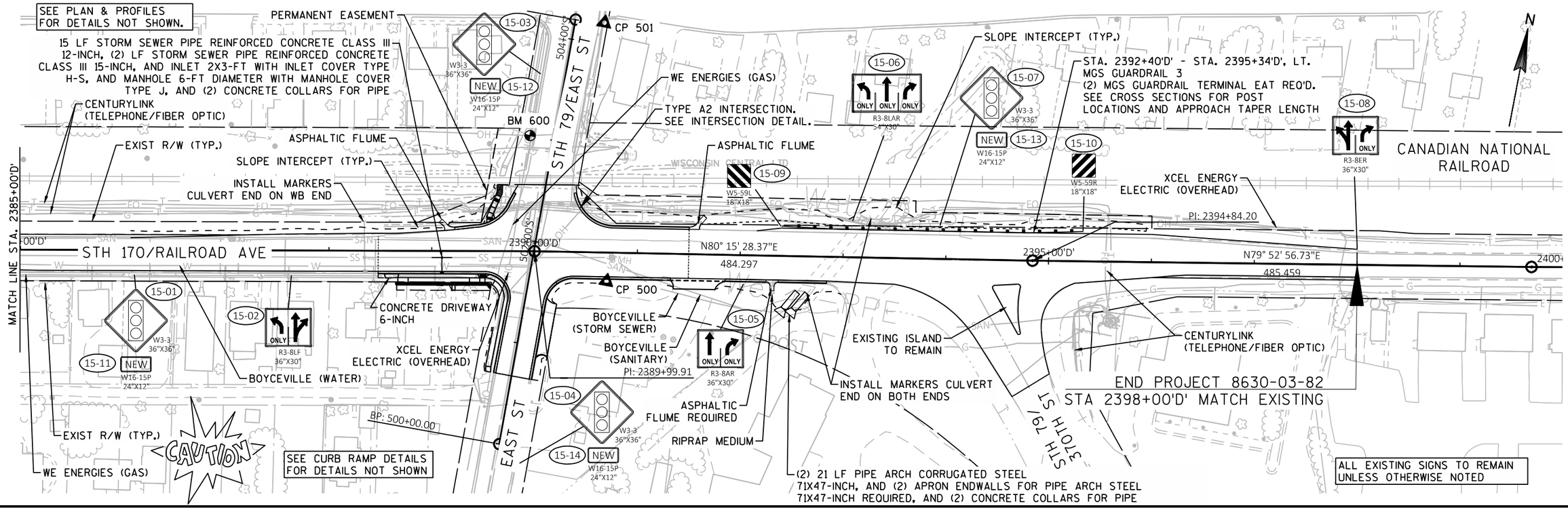




PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN DETAILS: DUNN COUNTY	SHEET 201	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\021201-PD_DUNN.DWG
LAYOUT NAME - STA 2355+00 - STA 2385+00
PLOT DATE : 7/2/2020 10:52 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

POINT NAME	TYPE	X	Y	ELEV	DESCRIPTION
502	CP	132888.786	231837.27	946.11	MAG NAIL
503	CP	132542.189	231772.793	946.36	5/8IN RB KL CAP
504	CP	132082.988	231688.24	947.58	5/8IN RB KL CAP
513	CP	131600.254	231587.866	948.31	5/8IN RB KL CAP
514	CP	131151.382	231503.898	948.2	5/8IN RB KL CAP
601	BM	132922.839	231796.77	948.92	CUT X NW FLANGE BOLT HYD
602	BM	132502.095	231716.322	949.74	CUT X N FLANGE BOLT HYD
603	BM	132158.018	231637.776	948.93	RR SPIKE LPM #5AA1
612	BM	131635.874	231541.574	950.95	CUT X S FLANGE BOLT HYD
613	BM	131188.311	231446.519	948.48	RR SPIKE PPOL #40



LEGEND

- CONTROL POINT
- BENCHMARK

POINT NAME	TYPE	X	Y	ELEV	DESCRIPTION
500	CP	133528.124	231904.554	946.77	5/8IN RB KL CAP
501	CP	133478.899	232151.226	944.84	5/8IN RB KL CAP
600	BM	133428.445	232029.774	947.54	RR SPIKE PPOL #04

SEE CURB RAMP DETAILS FOR DETAILS NOT SHOWN

SEE PLAN DETAILS FOR DETAILS NOT SHOWN

SEE INTERSECTION DETAILS FOR DETAILS NOT SHOWN

CANADIAN NATIONAL RAILROAD

CENTURYLINK (TELEPHONE/FIBER OPTIC)

WE ENERGIES (GAS)

TEMPORARY EASEMENT

STH 79 NB /EAST ST

CAUTION

STA. 2389+99.25'D' = STA. 501+90.54'S'

WISCONSIN CENTRAL LTD

CENTURYLINK (TELEPHONE/FIBER OPTIC)

XCEL ENERGY (ELECTRIC OVERHEAD)

TEMPORARY EASEMENT

EXIST R/W

WISCONSIN CENTRAL LTD

XCEL ENERGY (ELECTRIC OVERHEAD)

EXIST R/W

BOYCEVILLE (WATER)

BOYCEVILLE (SANITARY)

2386+00'D'

2387+00'D'

2388+00'D'

2389+00'D'

2389+00'S'

2390+00'D'

2391+00'D'

2392+00'D'

2393+00'D'

STH 170/RAILROAD AVE

CP 500

BOYCEVILLE (STORM SEWER)

TYPE A2 INTERSECTION. SEE INTERSECTION DETAIL.

SLOPE INTERCEPT (TYP.)

STA. 2392+31'D', RT. ASPHALTIC FLUME REQ'D (SEE CONSTRUCTION DETAIL)

EXIST R/W

WE ENERGIES (GAS)

EXIST R/W

CAUTION

HARRY A. JOLES JR

TEMPORARY EASEMENT

MAURICE EVENSON

PROPOSED R/W

501+00'S'

EAST ST

CEDAR COUNTRY COOPERATIVE

STA. 2391+59'D', RT. CONSTRUCT C.E. (53' WIDE)

STA. 2388+61'D', RT. CONSTRUCT P.E. (14' WIDE)

STA. 501+19'S', RT. CONSTRUCT C.E. (58' WIDE)

SAWING ASPHALT (TYP.)

LEGEND

CONTROL POINT

BENCHMARK

5

5

POINT NAME	TYPE	X	Y	ELEV	DESCRIPTION
500	CP	133528.124	231904.554	946.77	5/8IN RB KL CAP

960

950

940

BEGIN RECONSTRUCTION
STA 2388+48'D'
SAWCUT REQUIRED

END RECONSTRUCTION
STA 2391+50'D'
SAWCUT REQUIRED

STA 2388+48.00'D' EL 946.18

STA 2389+10.00'D' EL 945.99

STA 2389+99.25'D' EL 946.69

STA 2390+80.00'D' EL 946.99

STA 2391+50.00'D' EL 946.78

FINISHED PROFILE

-0.30%

0.78%

0.38%

-0.30%

EXISTING GROUND

Existing Ground
Station=2388+48.00'D'
Elev. = 946.177

Existing Ground
Station=2391+50.00'D'
Elev. = 946.782

EXISTING PROFILE ELEV.

PROPOSED PROFILE ELEV.

946.68	946.57	946.42	946.13	946.00	946.17	946.07	946.02	946.18	946.30	946.36	946.69	946.53	946.88	946.71	946.93	946.78	946.78	947.15	946.91	947.07

2387+00'D' 2388+00'D' 2389+00'D' 2390+00'D' 2391+00'D' 2392+00'D' 2393+00'D'

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN AND PROFILE - STH 170	SHEET 204	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\050101_PP_STH 79 INTERSECTION.DWG
LAYOUT NAME - Sheet 1

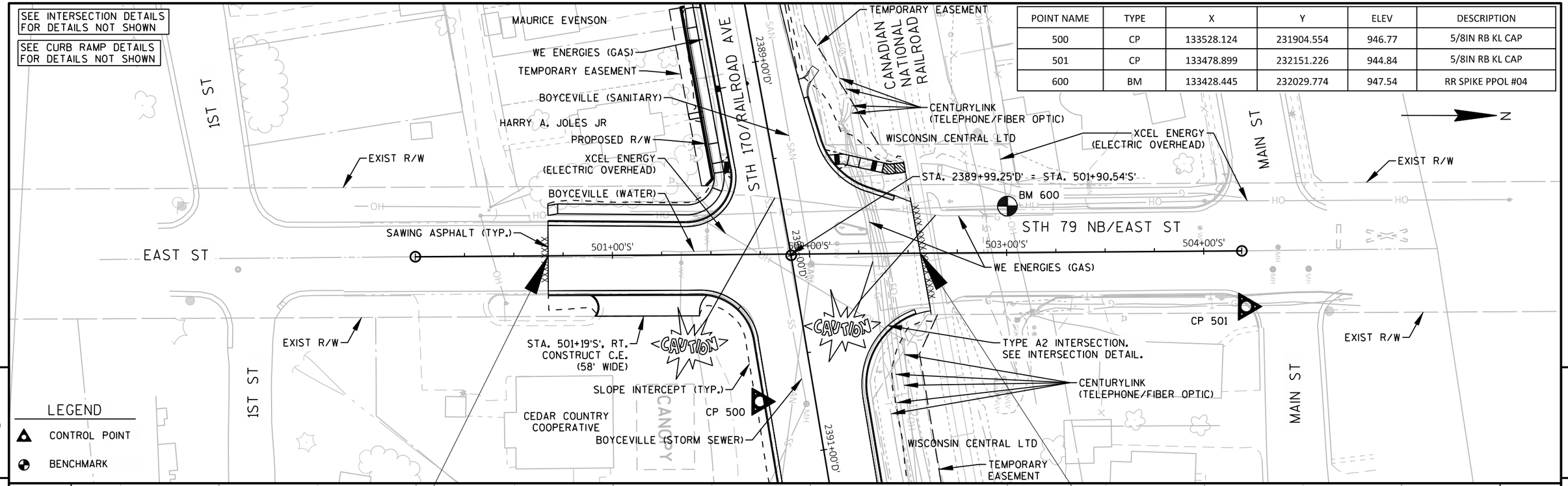
PLOT DATE : 7/5/2020 2:13 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:50 FT

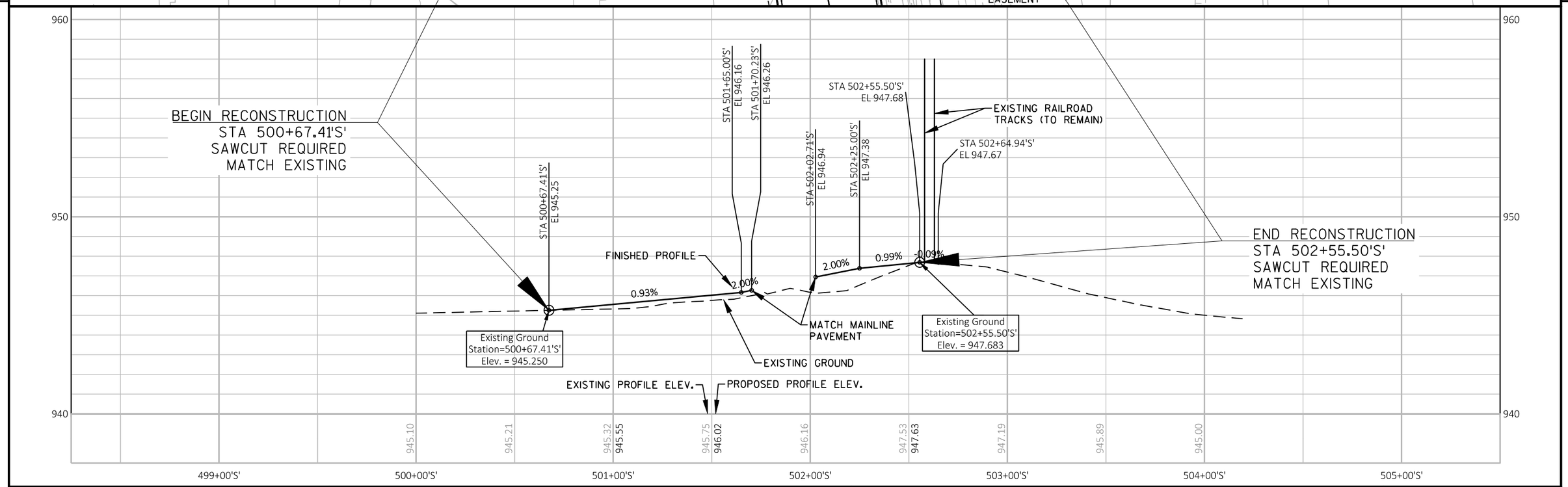
WISDOT/CADDS SHEET 44

SEE INTERSECTION DETAILS FOR DETAILS NOT SHOWN

SEE CURB RAMP DETAILS FOR DETAILS NOT SHOWN

POINT NAME	TYPE	X	Y	ELEV	DESCRIPTION
500	CP	133528.124	231904.554	946.77	5/8IN RB KL CAP
501	CP	133478.899	232151.226	944.84	5/8IN RB KL CAP
600	BM	133428.445	232029.774	947.54	RR SPIKE PPOL #04





PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	PLAN AND PROFILE - STH 79	SHEET 205	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\050101_PP_STH 79 INTERSECTION.DWG
LAYOUT NAME - Sheet 2

PLOT DATE : 7/5/2020 2:13 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

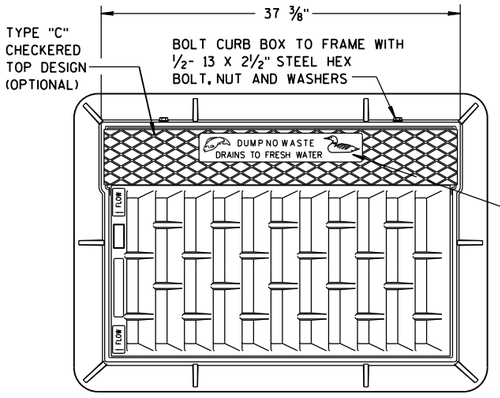
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-21A	CONCRETE CURB & GUTTER
08D01-21B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D16-11	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08D19-02	DRIVEWAY AND SIDEWALK RAMPS TYPE Z
08D20-01	DRIVEWAYS WITH CURB & GUTTER RETURNS
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
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
08F03-03	DETAILS FOR PIPE CATTLE PASS, CONCRETE ENDWALLS AND STEPS
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F10-01	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
09B02-10	CONDUIT
09B16-01	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-10	CONCRETE BASE TYPE 10
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E01-15A	POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
09E01-15B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-15C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E08-08B	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-08E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09F13-04	LOOP DETECTOR INSTALLED IN EXISTING ASPHALTIC PAVEMENT
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
09G02-05A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09H11-01	IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS
13B01-10	PAVEMENT DETAILS FOR RAILROAD APPROACH
13C19-02	HMA LONGITUDINAL JOINTS
14B07-15A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B42-06A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

6

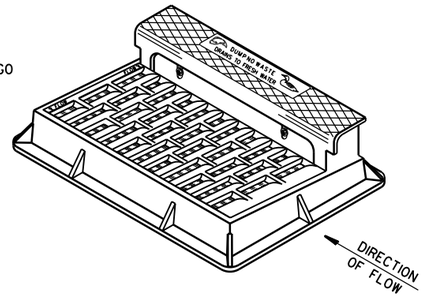
Standard Detail Drawing List

14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B53-01A	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01B	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01C	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01D	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01E	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01F	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01G	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01H	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01I	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C07-15C	PAVEMENT MARKING ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C09-11A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-04	MEDIAN ISLAND MARKING
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-06A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-06B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-06C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D32-05	TRAFFIC CONTROL, ONE LANE ROAD STOP CONDITION
15D33-06	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

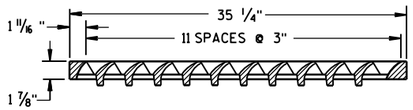
6

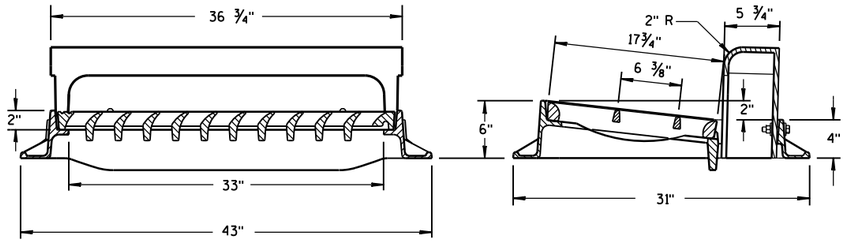


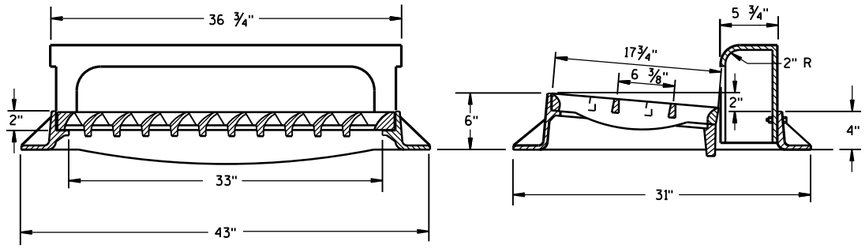
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

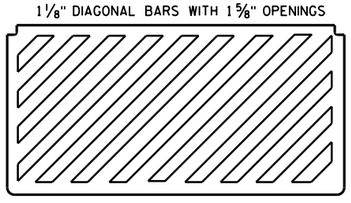






TYPE "H"

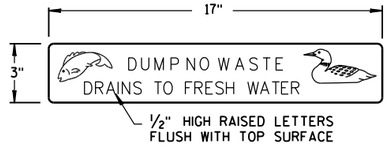
NOTE: EITHER CASTING IS ACCEPTABLE



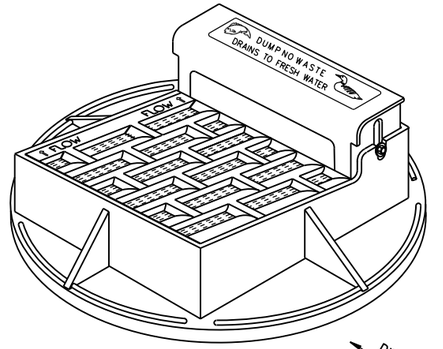
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

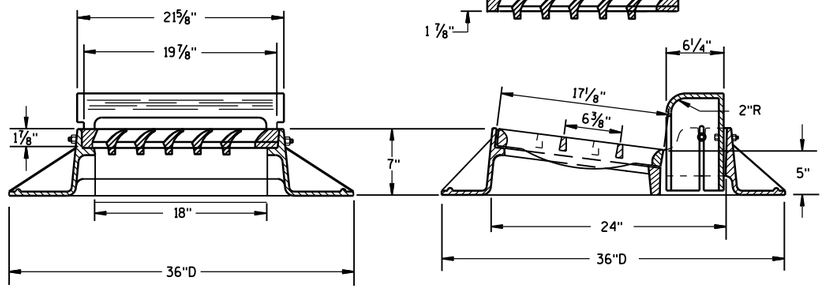


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



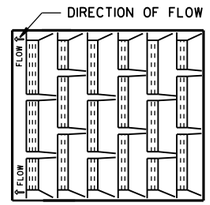
TYPE "A"

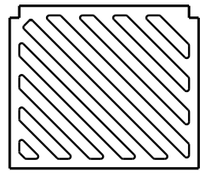
GENERAL NOTES

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.

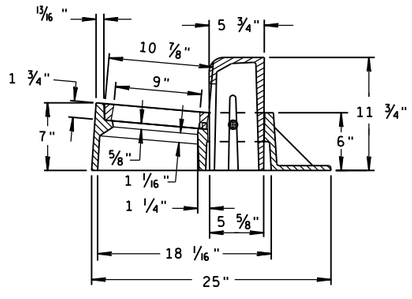


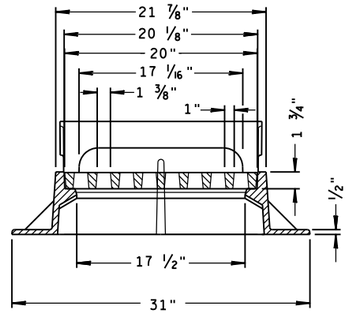


SPECIAL GRATE FOR TYPE "A" COVER

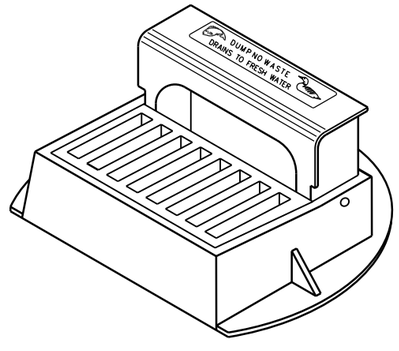
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"

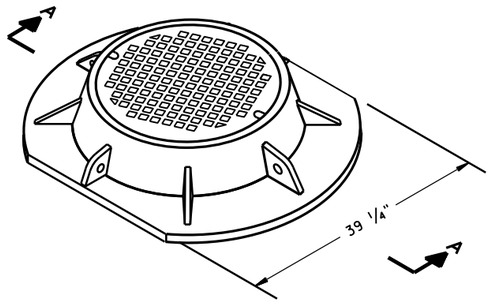


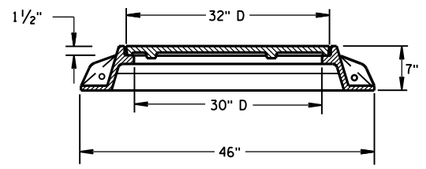
INLET COVERS TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

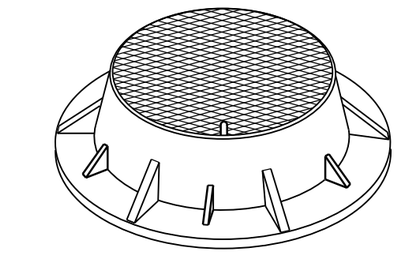
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

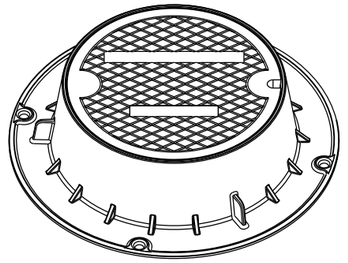
S.D.D. 8 A 5-19a

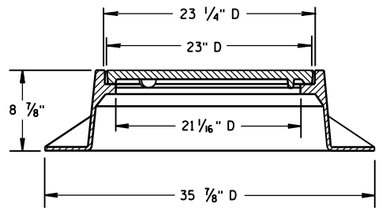


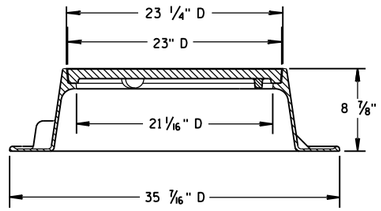


SECTION A-A
TYPE "K"









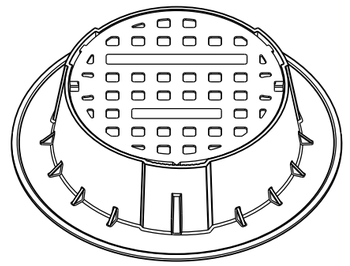
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

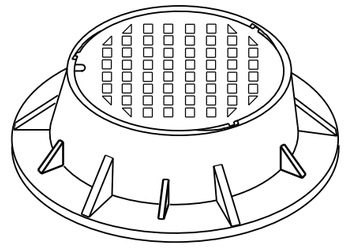
GENERAL NOTES

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.

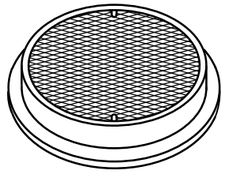
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

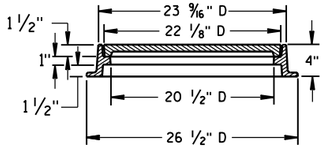
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



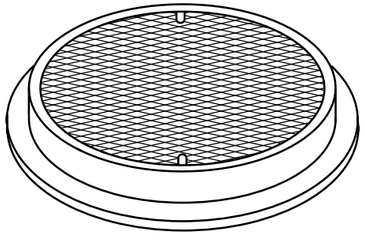


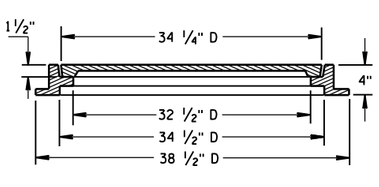
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



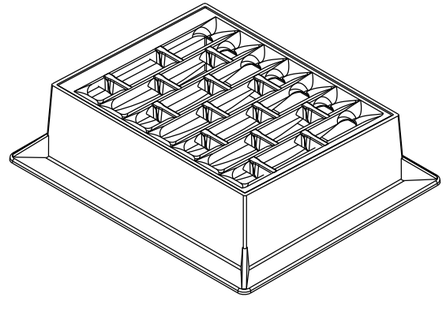


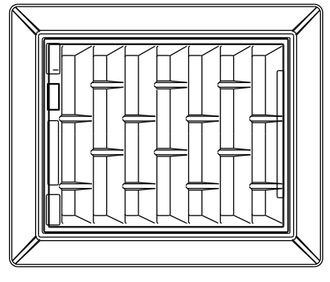
TYPE "L"

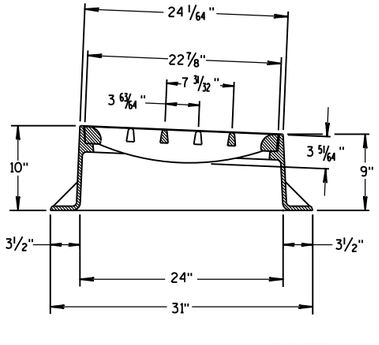


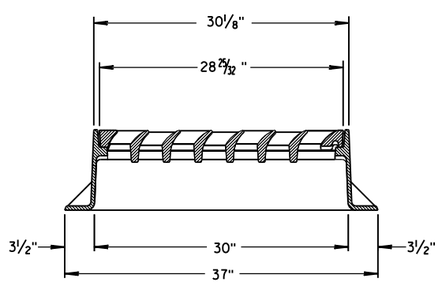


TYPE "M"









INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

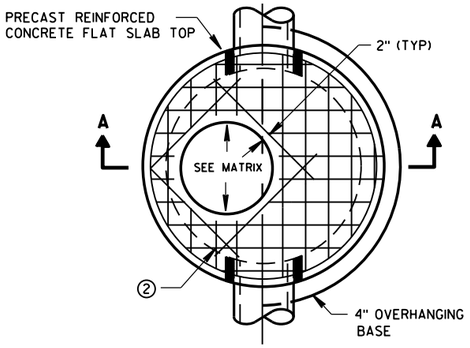
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

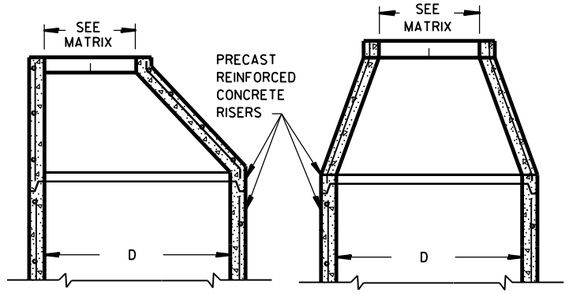
S.D.D. 8 A 5-19d

6

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

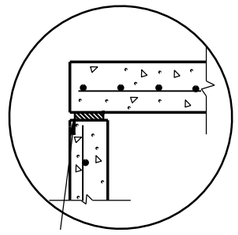


PLAN VIEW CIRCULAR OPENING

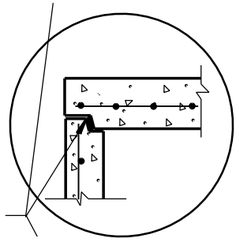


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

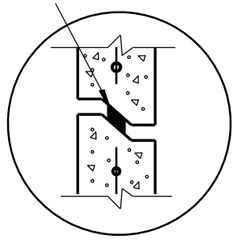


TOP WITH PLAIN END JOINT



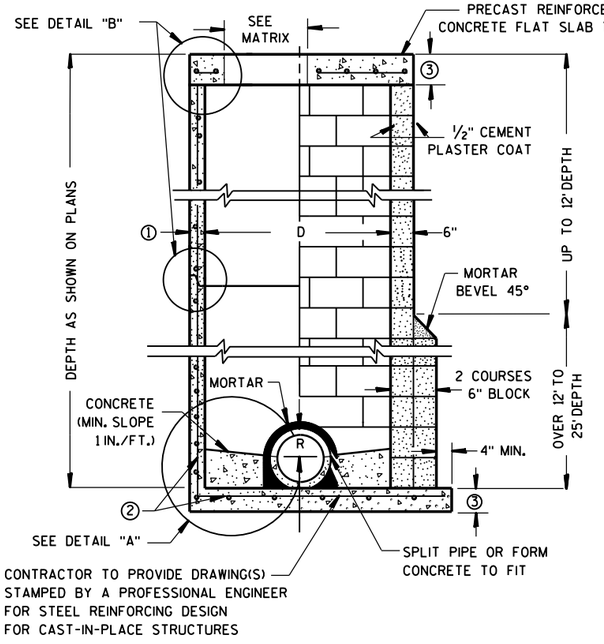
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



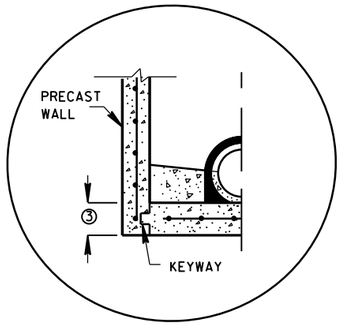
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

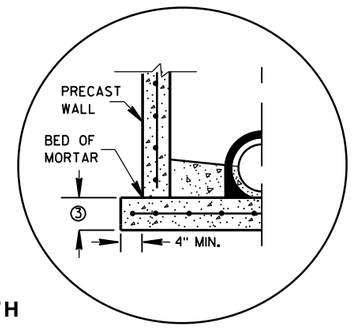


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

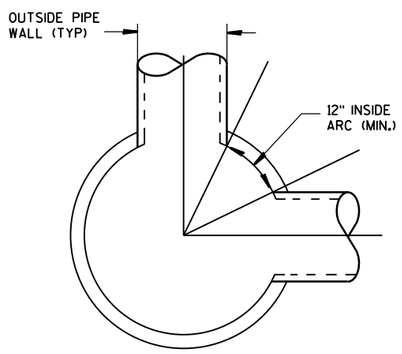


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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 MANHOLE 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 CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED 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" 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.

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

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

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, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES 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".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE 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	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

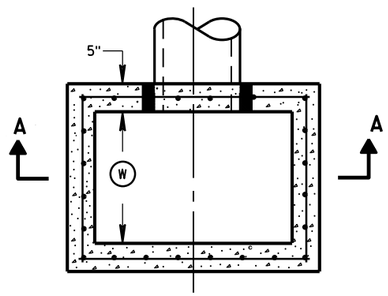
APPROVED

Sept., 2016
DATE

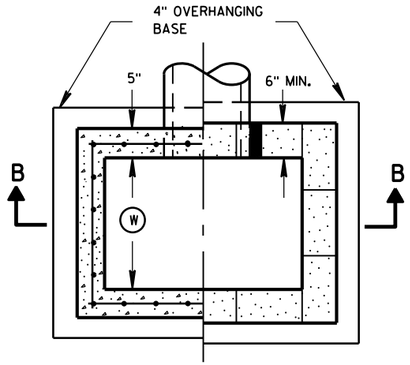
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

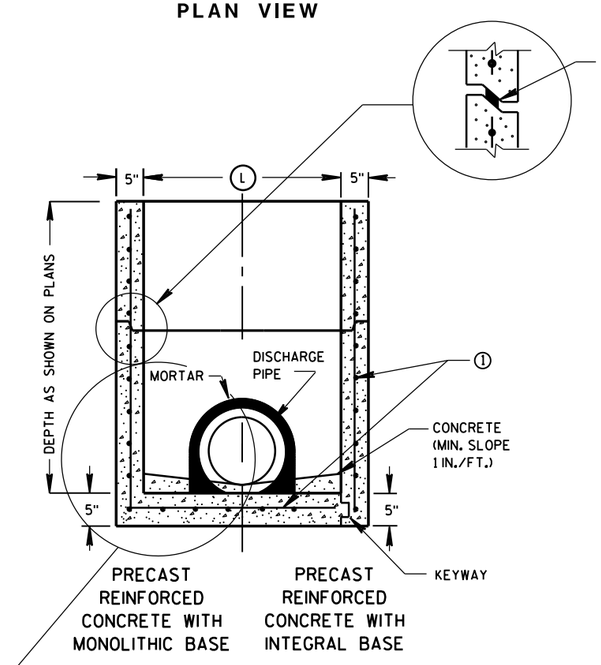
6
S.D.D. 8 B 9-2



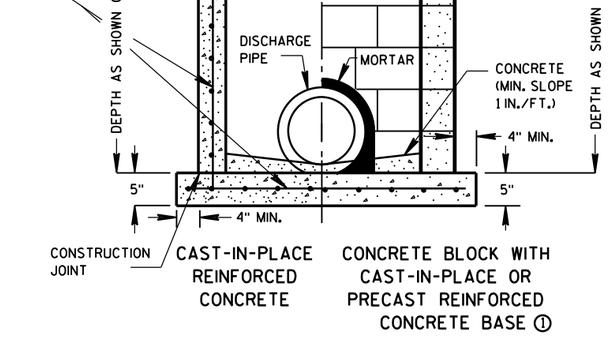
PLAN VIEW



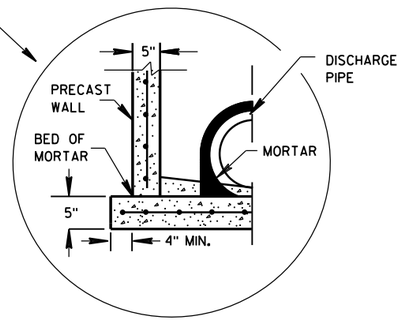
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

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 INLET 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 PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES 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.

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

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

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND 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.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

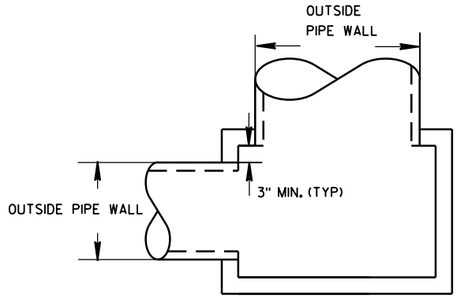
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

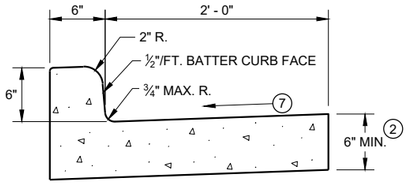
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

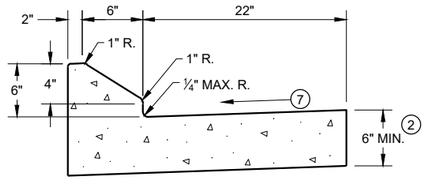
APPROVED
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT
UNIT SUPERVIS
FHWA

6

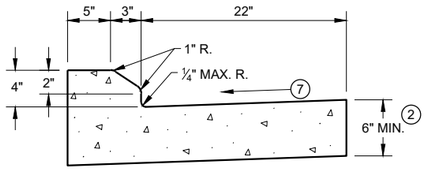
S.D.D. 8 C 7-2



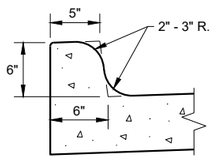
TYPES A[1] & D



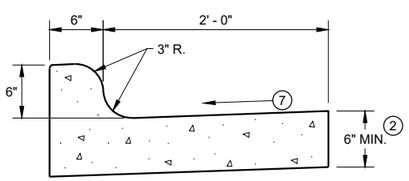
6" SLOPED CURB TYPES G[1] & J



4" SLOPED CURB TYPES G[1] & J

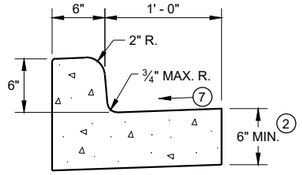


TYPES K[1] & L
(OPTIONAL CURB SHAPE)



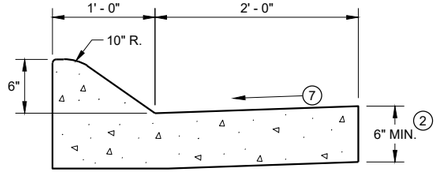
TYPES K[1] & L

CONCRETE CURB AND GUTTER 30"

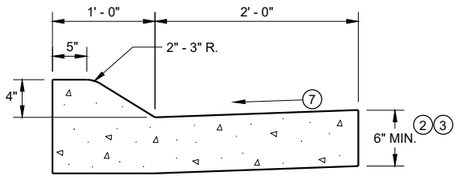


TYPES A[1] & D

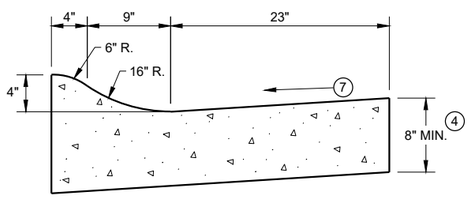
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A[1] & D



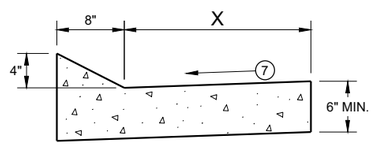
4" SLOPED CURB TYPES A[1] & D



4" SLOPED CURB TYPES R[1] & T[5]

CONCRETE CURB AND GUTTER 36"

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

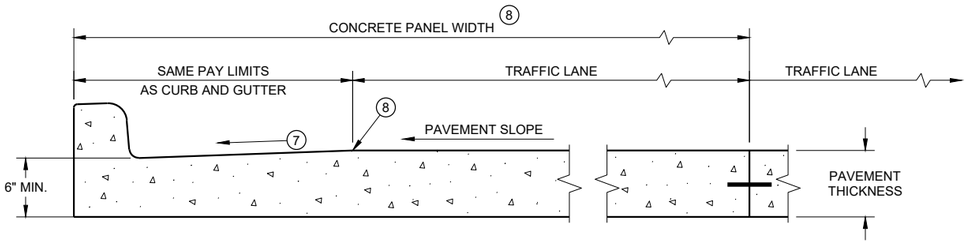


TYPES TBT & TBTT[1]

CONCRETE CURB AND GUTTER

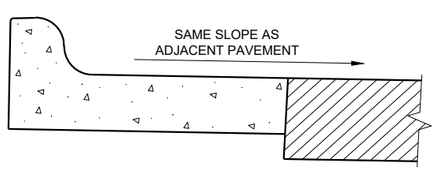
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

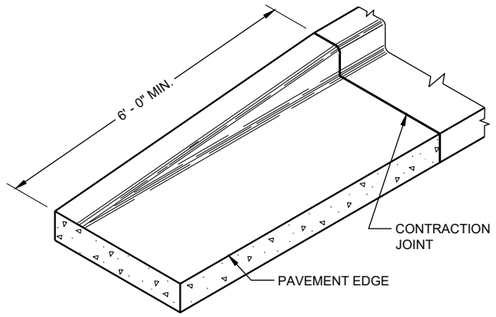
1. TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
3. USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH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

CONCRETE CURB AND GUTTER

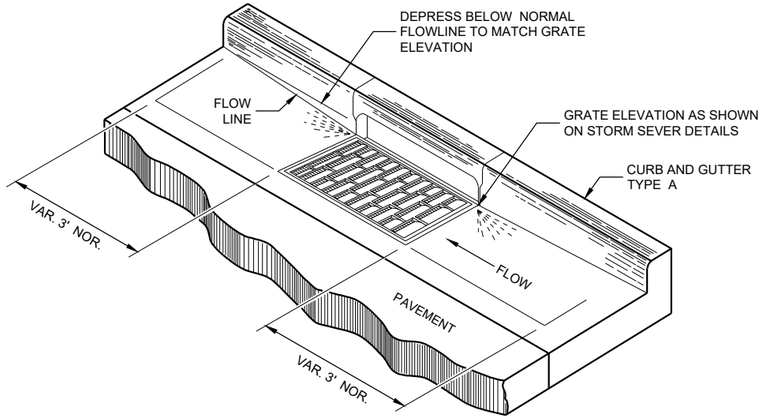
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D01 - 21a
SDD 08D01 - 21a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

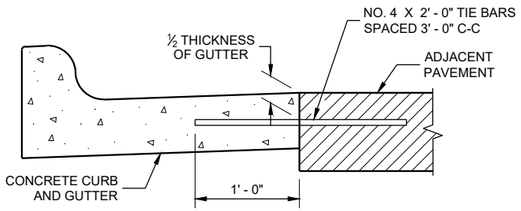
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

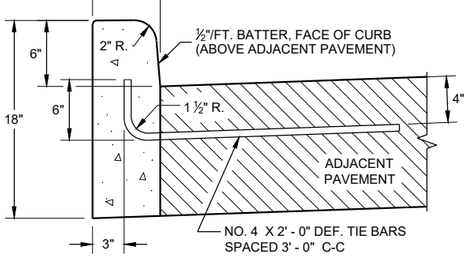
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

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

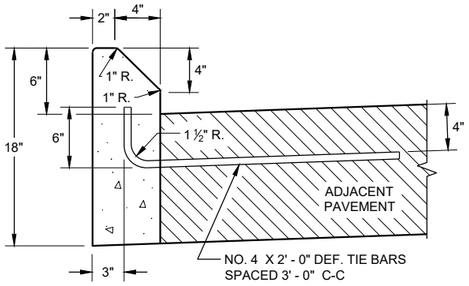
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

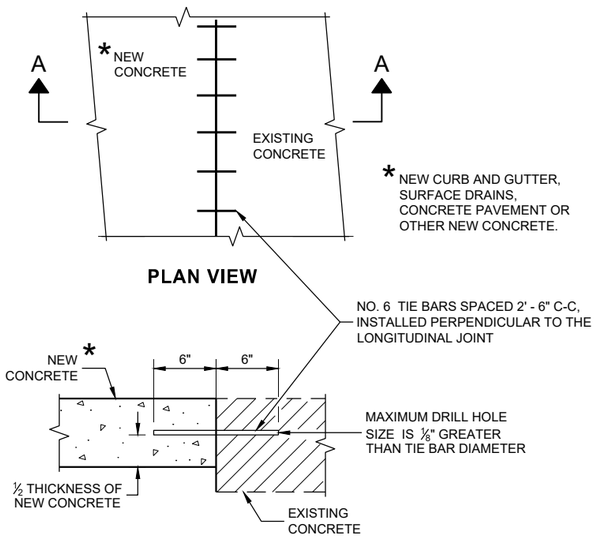


TYPES A (1) & D

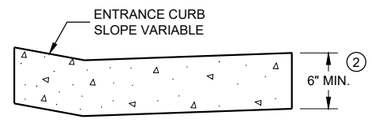


TYPES G (1) & J

CONCRETE CURB



TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

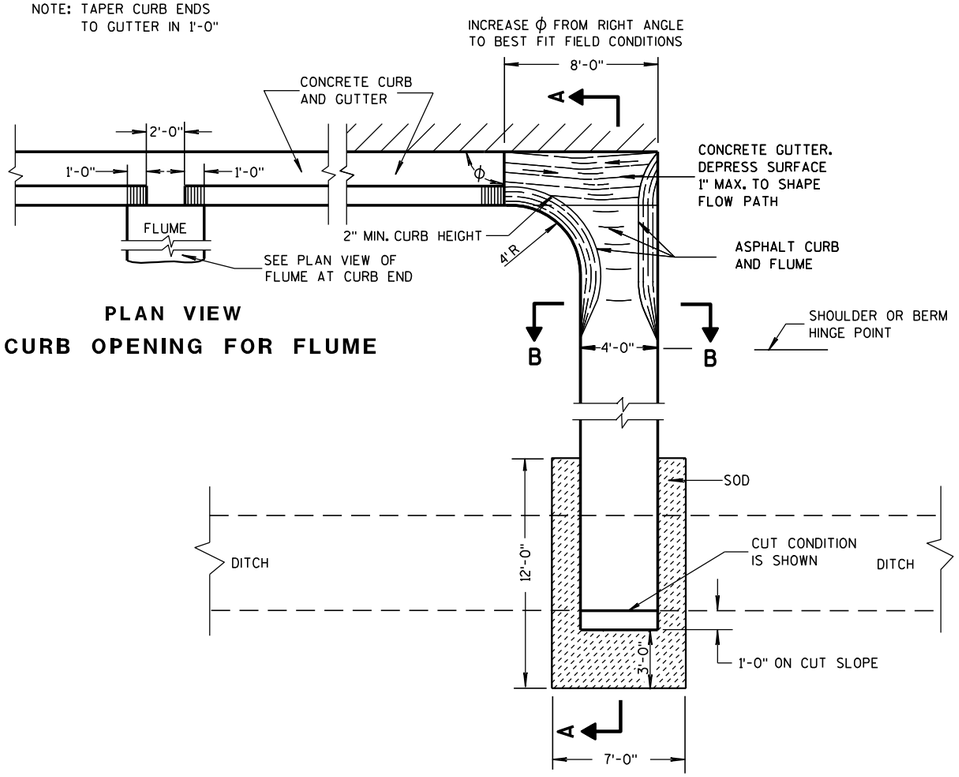
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

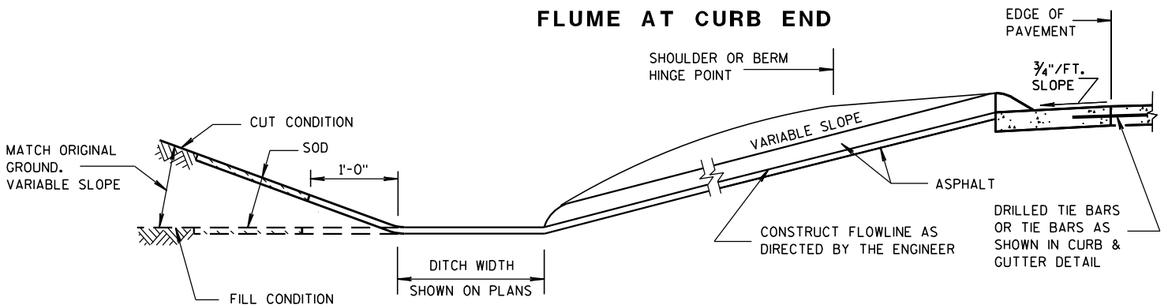
SDD08D01 - 21b

ASPHALTIC FLUME

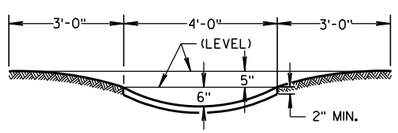


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

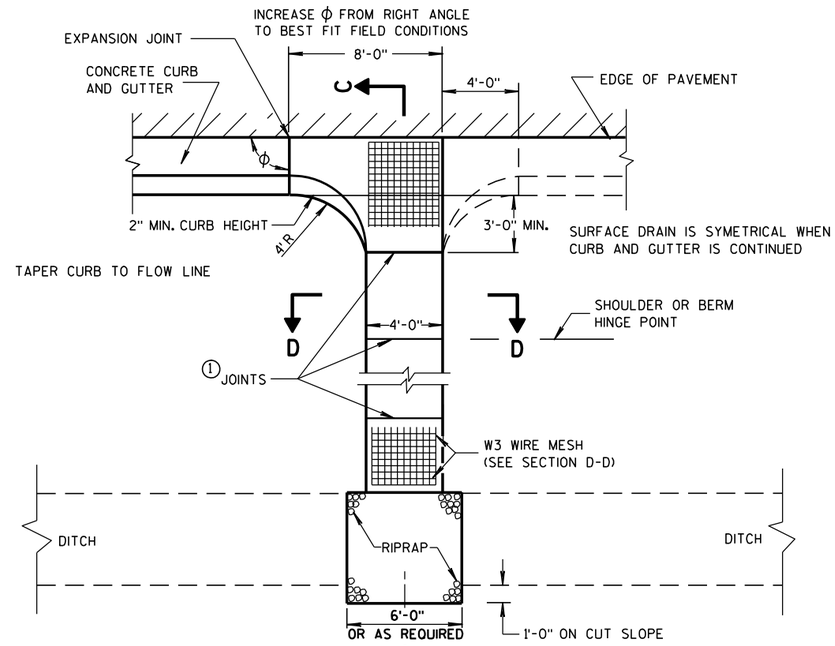
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

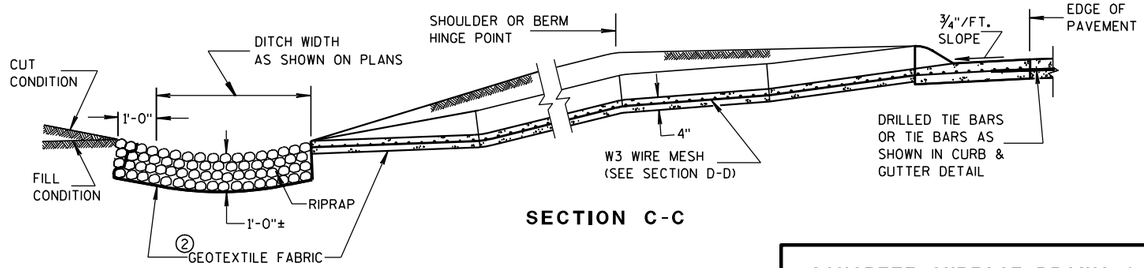
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

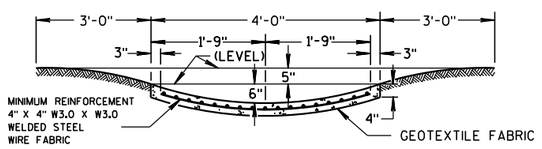
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 8 D 4-5

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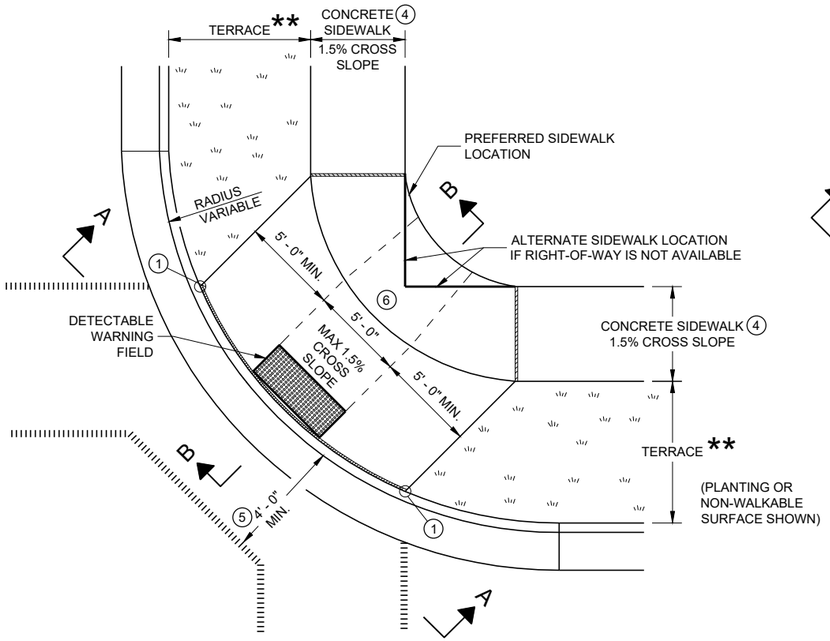
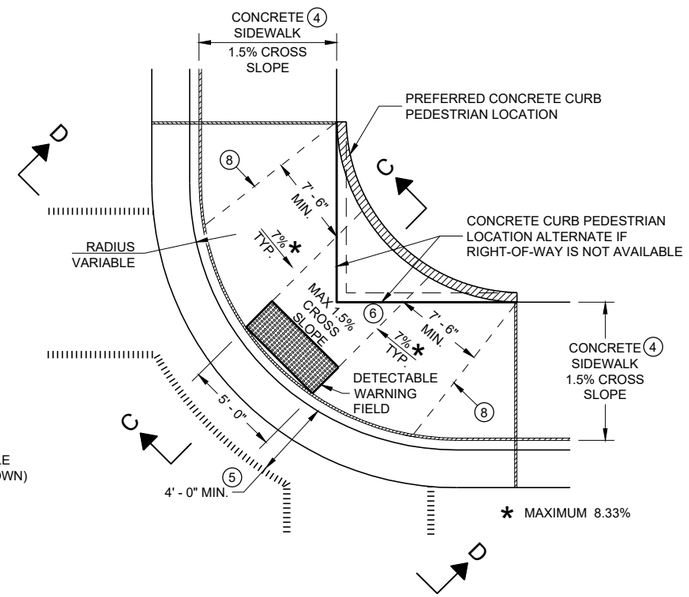
S.D.D. 8 D 4-5



PLAN VIEW

CURB RAMP TYPE 1

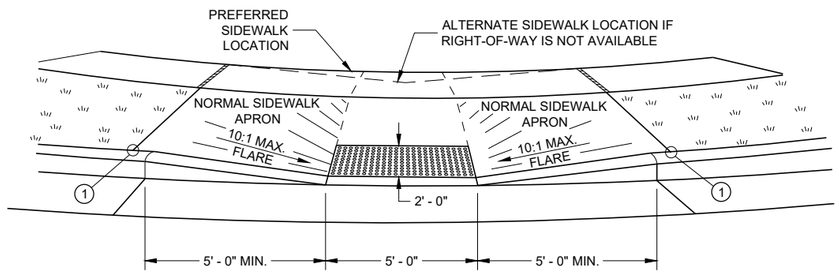
(CENTER OF CORNER RADIUS)



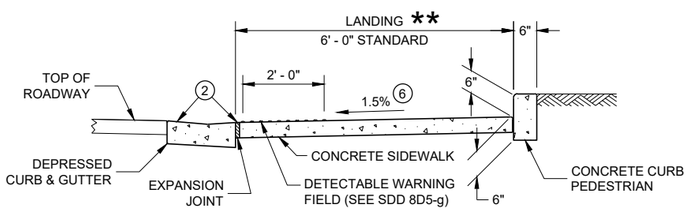
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

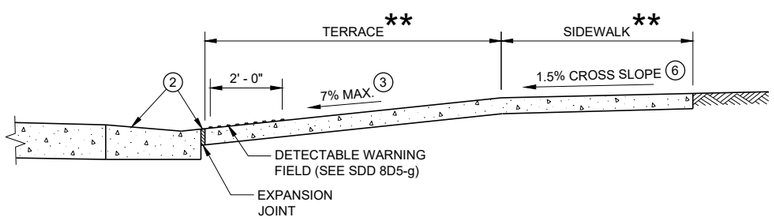


VIEW A - A FOR TYPE 1

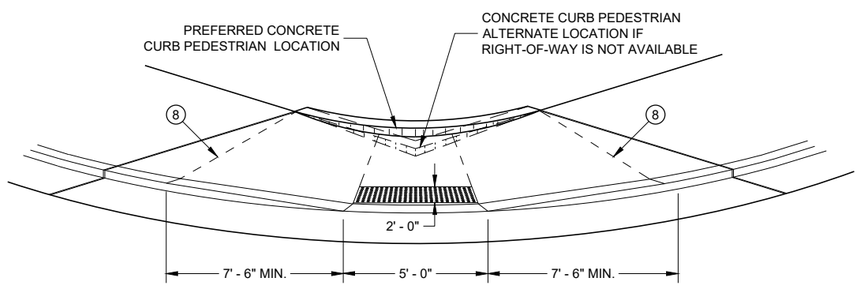


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

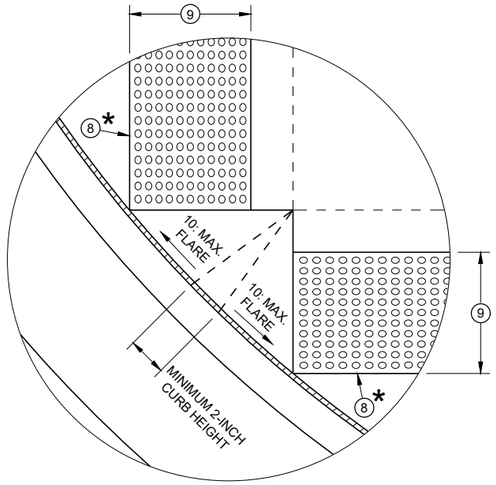
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

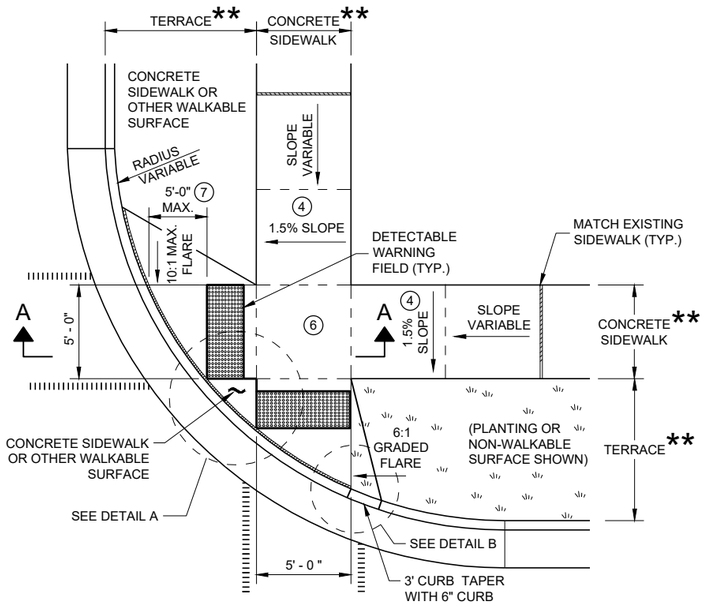
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

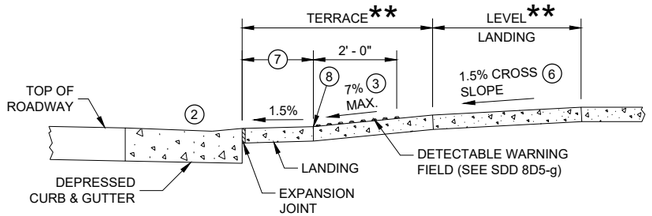
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

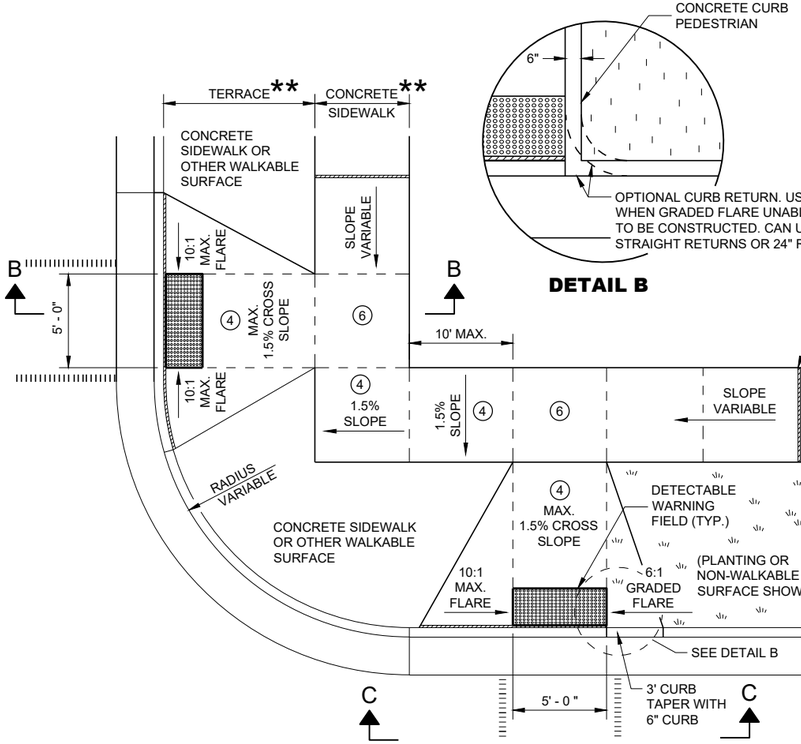
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

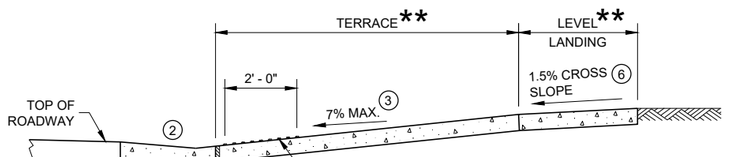
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

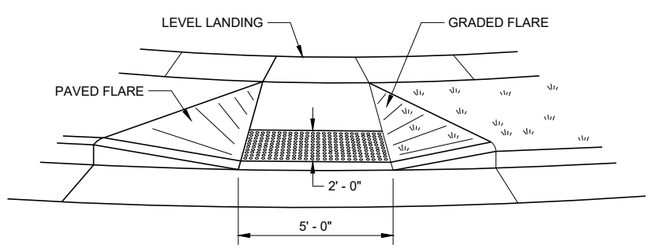


DETAIL B

PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 2 AND 3

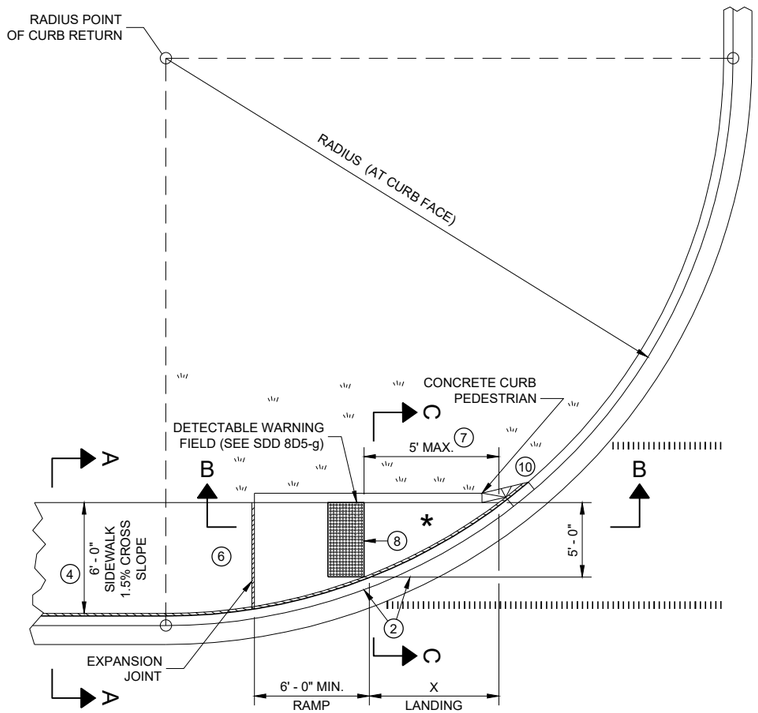
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

6

SDD 08D05 - 20b

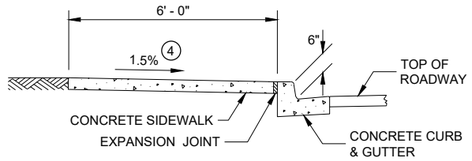


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

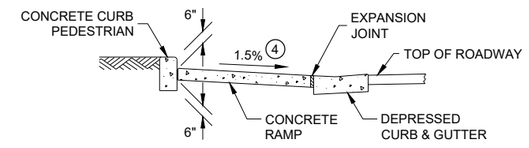
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

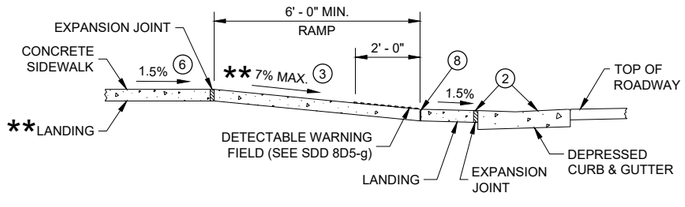
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



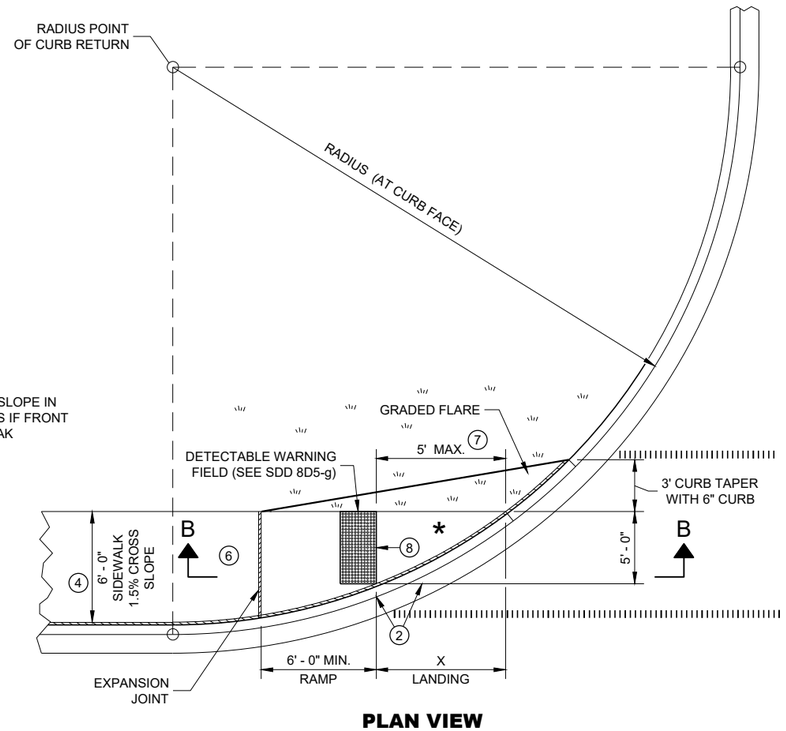
SECTION C - C FOR TYPE 4A



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

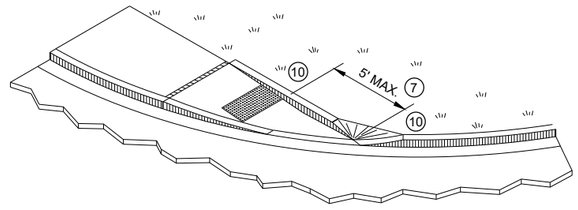
SECTION B - B FOR TYPE 4A AND TYPE 4A1

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

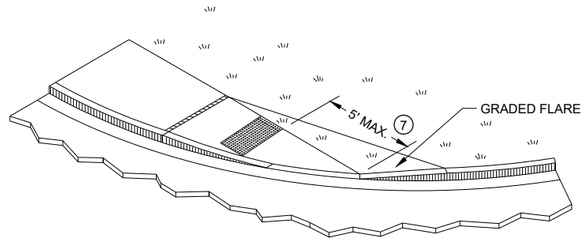


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



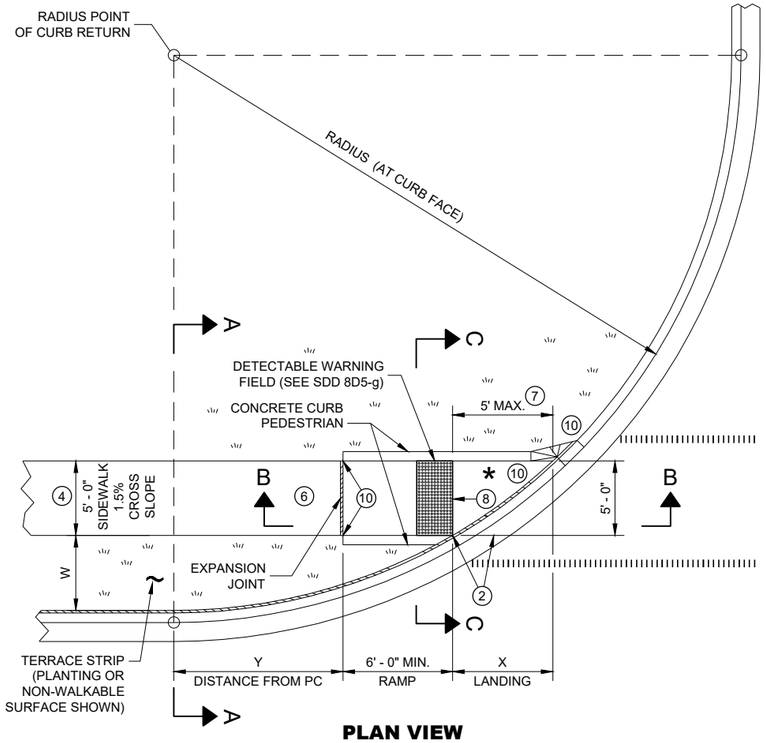
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20c



PLAN VIEW

CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET	5' - 9 ¾"	3' - 6 ½"	4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

SECTION C - C FOR TYPE 4B

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

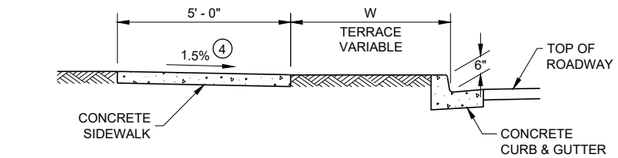
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

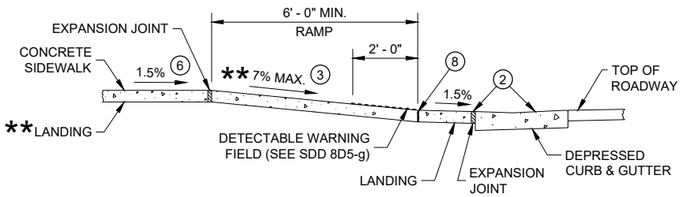
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



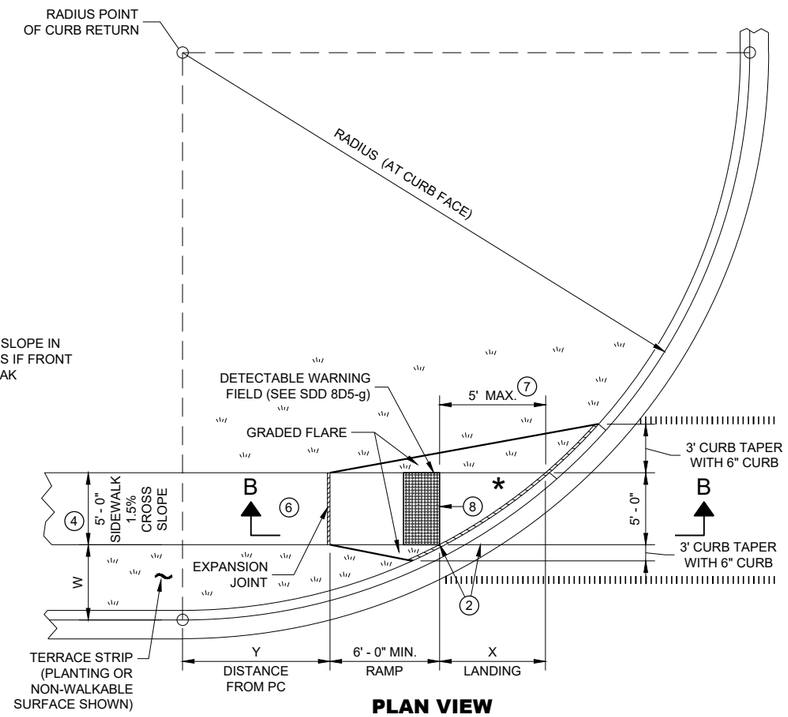
SECTION A - A FOR TYPE 4B



SECTION B - B FOR TYPE 4B AND TYPE 4B1

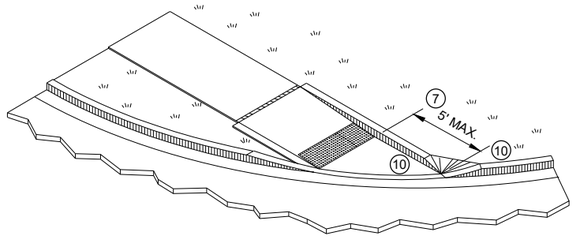
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

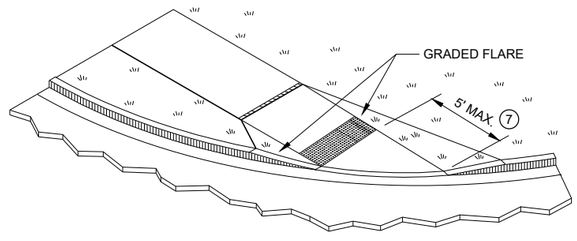


PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B

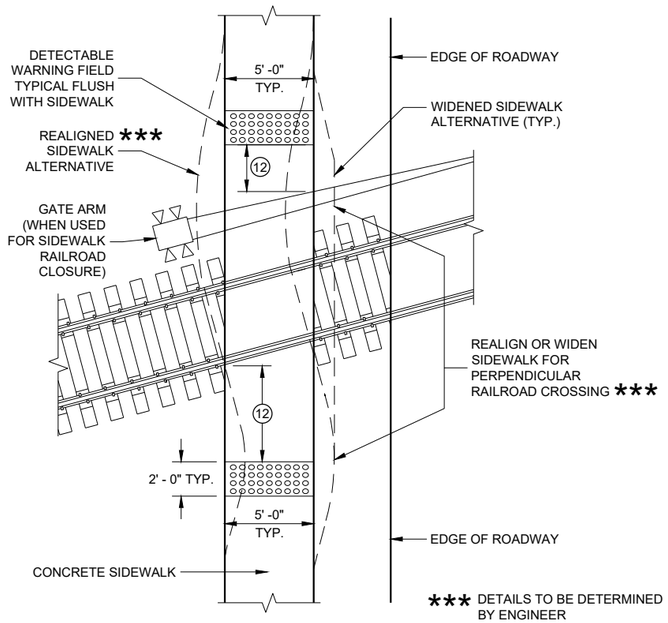


ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

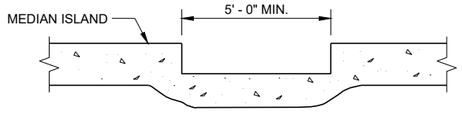
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D05 - 20d

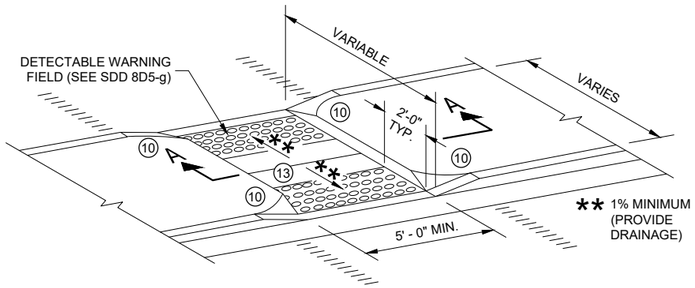


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

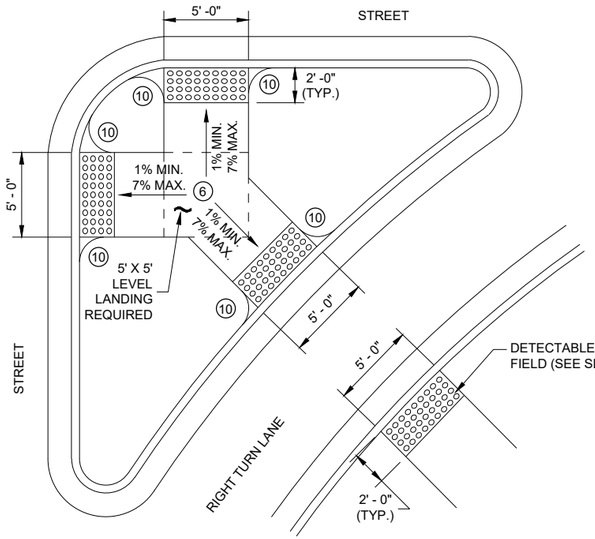
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

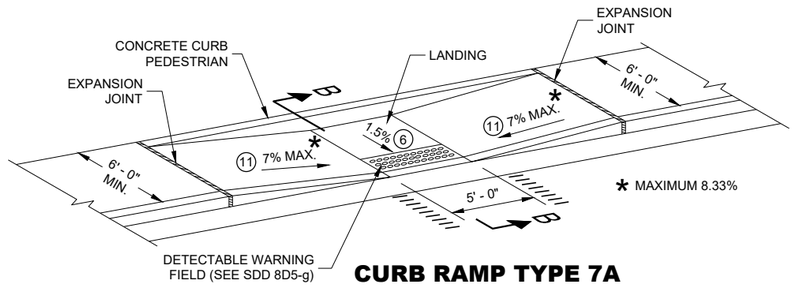
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

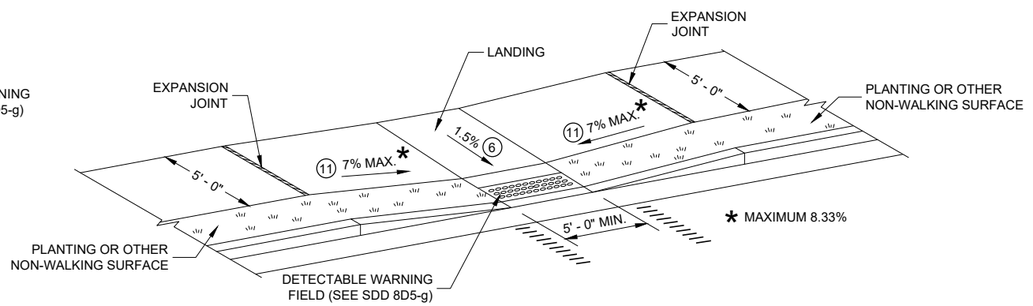
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 7A

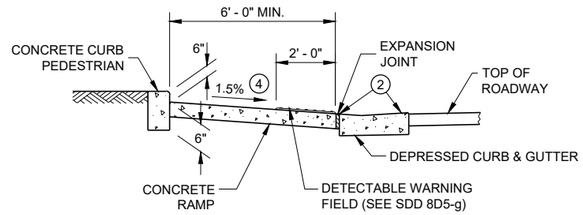
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.



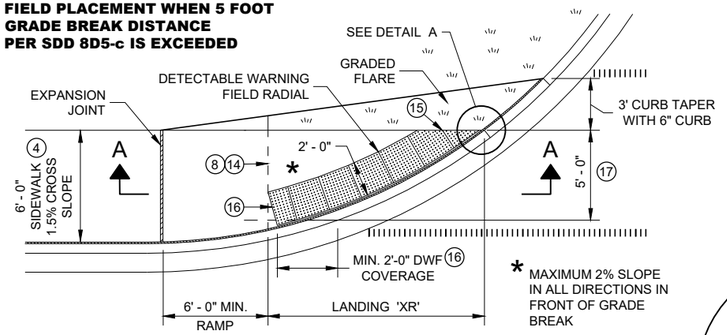
SECTION B - B FOR TYPE 7A

CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D05 - 20e

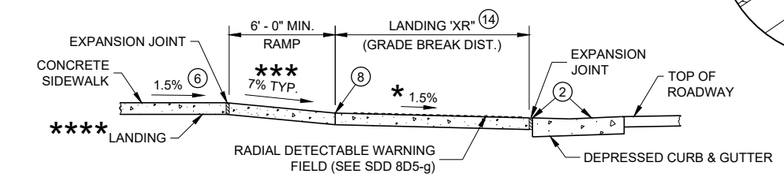
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



PLAN VIEW

CURB RAMP TYPE 4A1

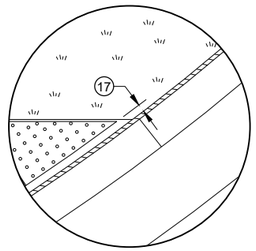
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1



DETAIL A

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

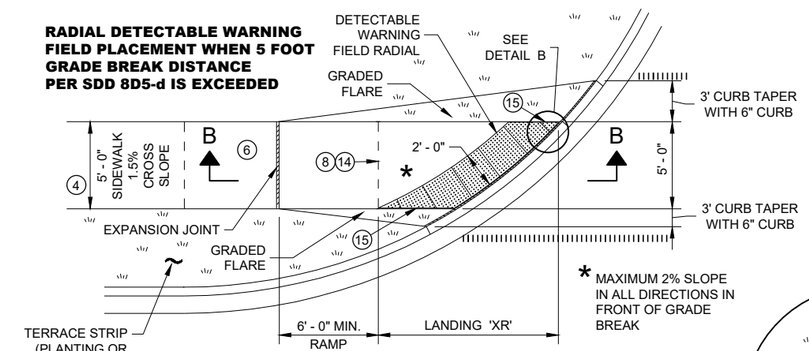
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

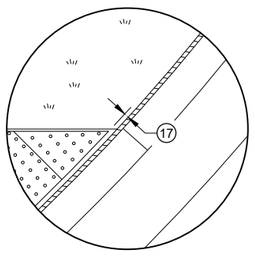
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



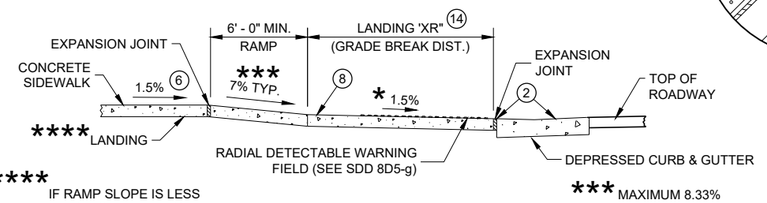
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

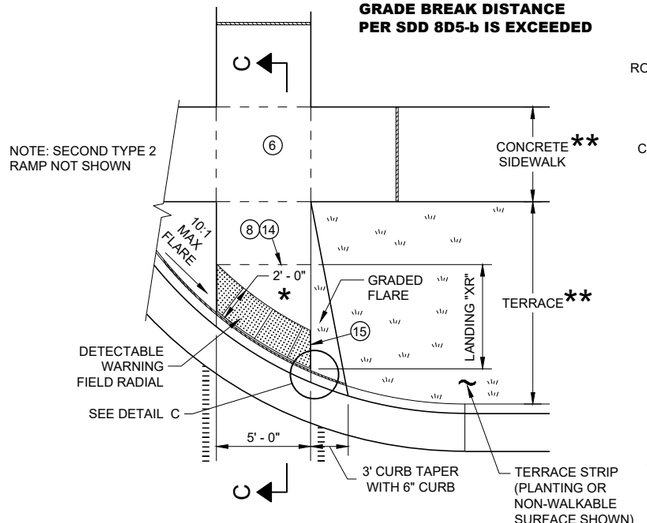


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

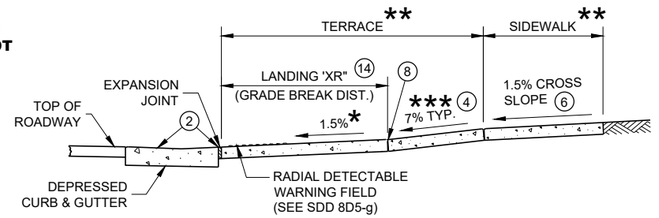


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

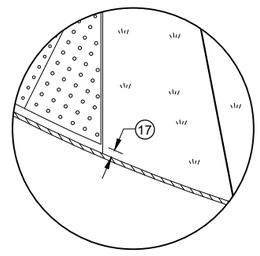


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

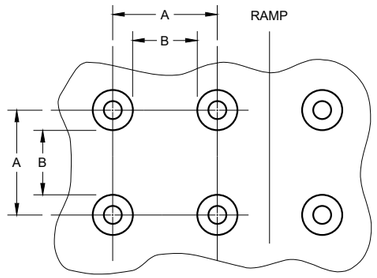
CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

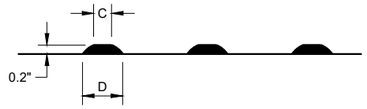
SDD 08D05 - 20f

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

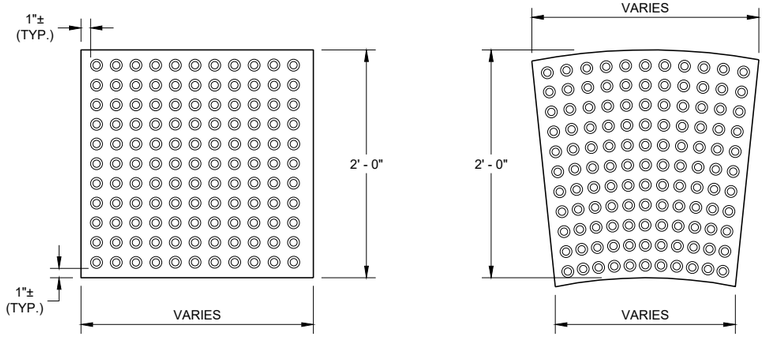


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

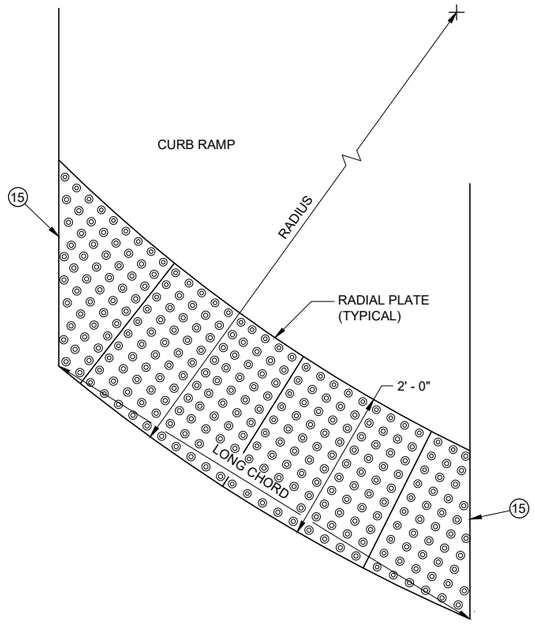
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

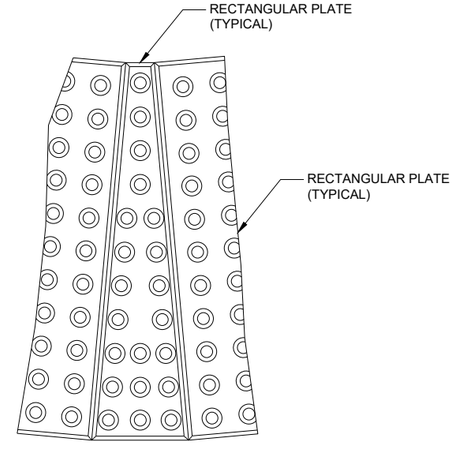
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

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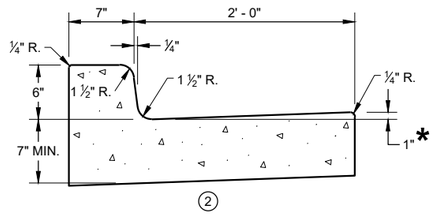
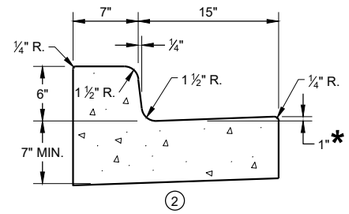
SDD 08D05 - 20g

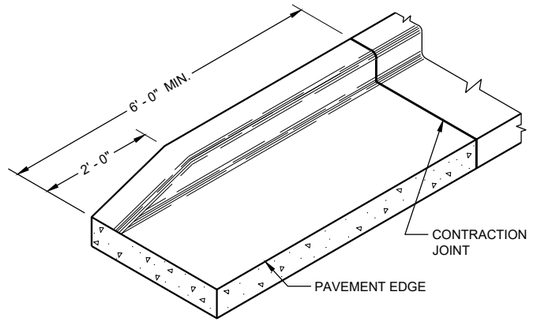


CONCRETE CURB AND GUTTER 31" ①

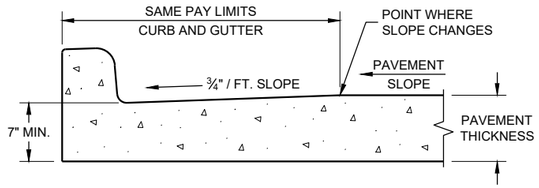
*TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



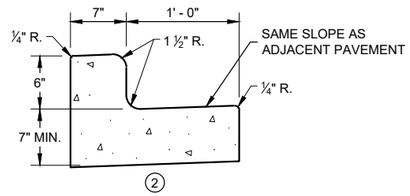
CONCRETE CURB AND GUTTER 22" ①



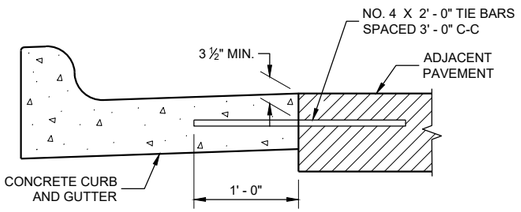
END SECTIONCURB AND GUTTER



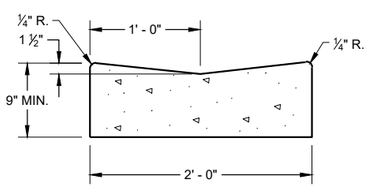
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER



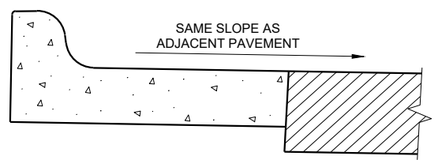
CONCRETE CURB AND GUTTER 19" ①



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.

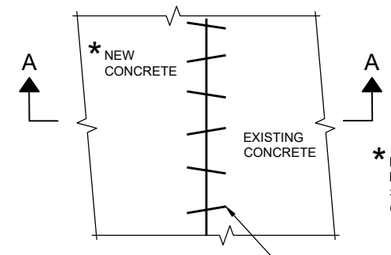
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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".

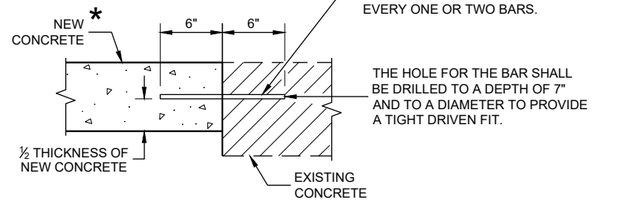
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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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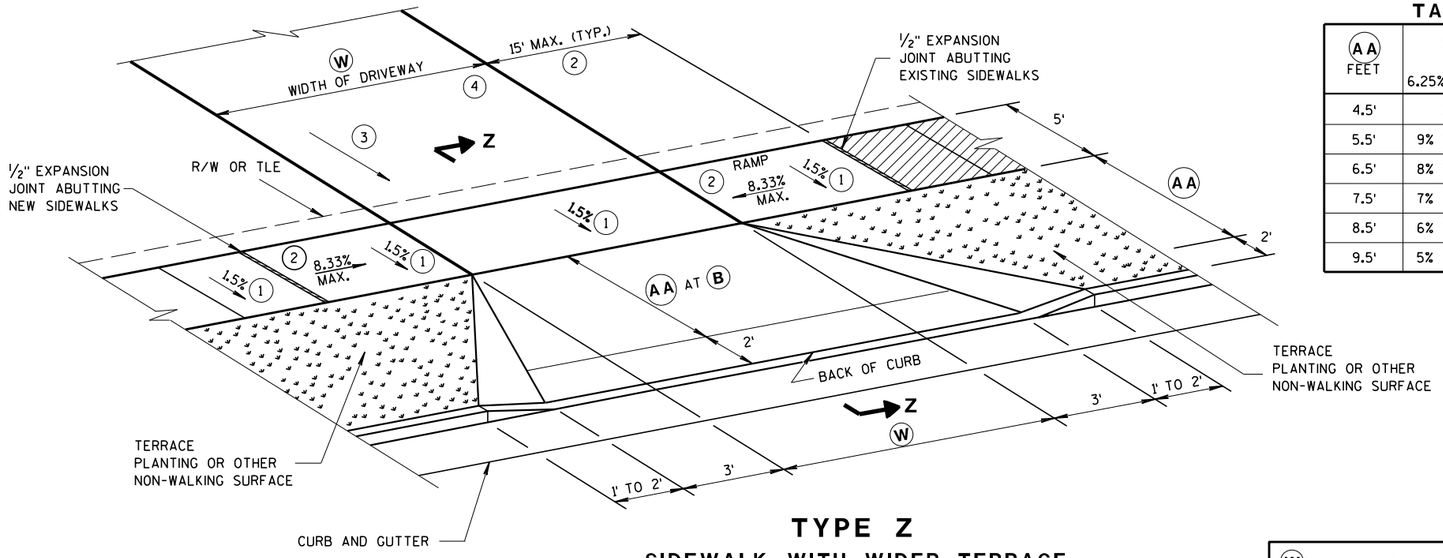
SDD 08D16 - 11



TYPE Z

SIDEWALK WITH WIDER TERRACE

TERRACE VARIES 7 TO 12 FEET

TABLE Z

(AA) FEET	(B) % 6.25% GUTTER	(B) % 4% GUTTER
4.5'	11.5%	9% TO 11.5%
5.5'	9% TO 11.5%	8% TO 11.5%
6.5'	8% TO 11.5%	6% TO 11.5%
7.5'	7% TO 11.5%	6% TO 11.5%
8.5'	6% TO 11.5%	5% TO 11.5%
9.5'	5% TO 11.5%	4% TO 11.5%

(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.

(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM

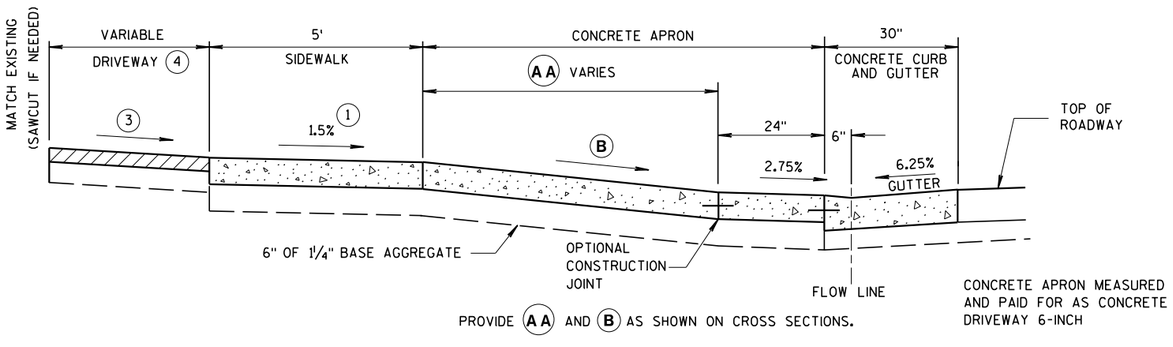
10.5% UP AWAY FROM SIDEWALK (SAG)

8.5% DOWN AWAY FROM SIDEWALK (CREST)

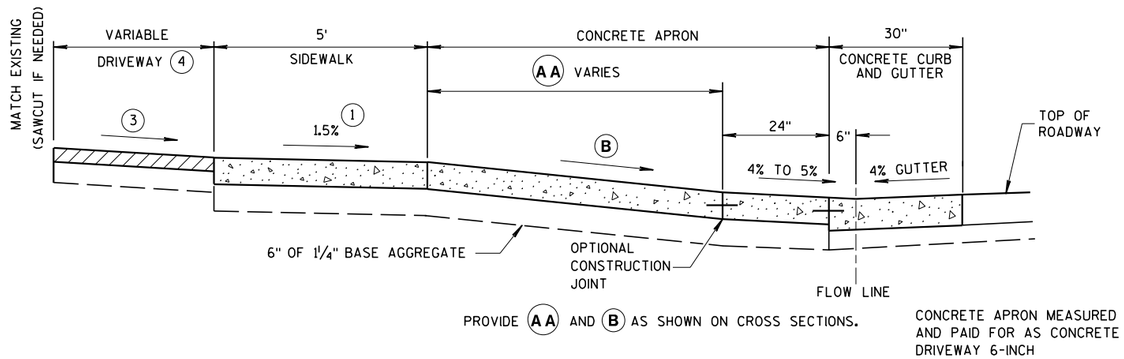
ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

(4) DRIVEWAY TYPES

- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)



6.25% GUTTER SLOPE



4% GUTTER SLOPE

NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS FOR **B** VALUES NOT SHOWN IN TABLE Z.

SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY 6-INCH.

SEPARATE PAYMENT FOR BASE AGGREGATE WILL BE MADE.

SECTION Z-Z

DRIVEWAY DETAIL WITH CONCRETE CURB & GUTTER

(URBAN AND SUBURBAN)

NOT TO SCALE

DRIVEWAY AND SIDEWALK RAMPS TYPE Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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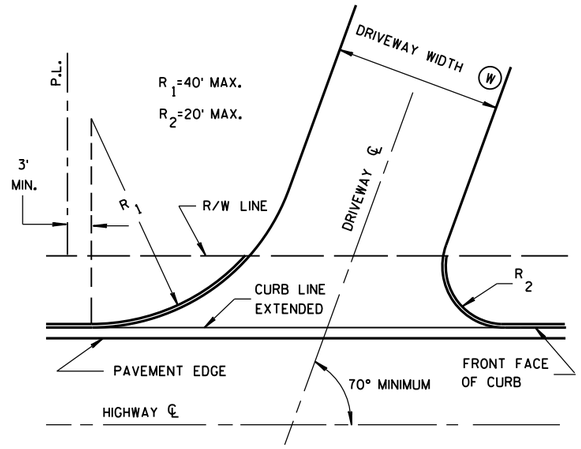
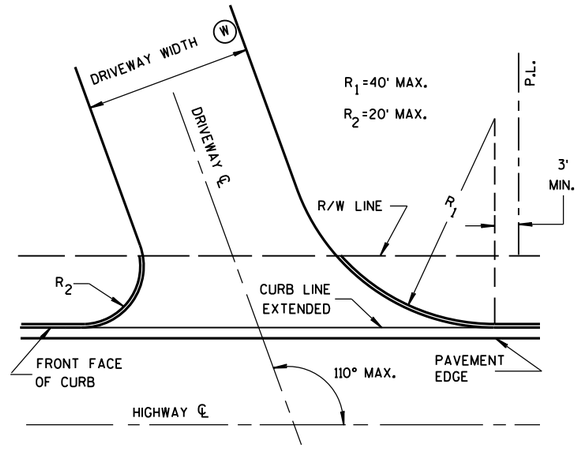
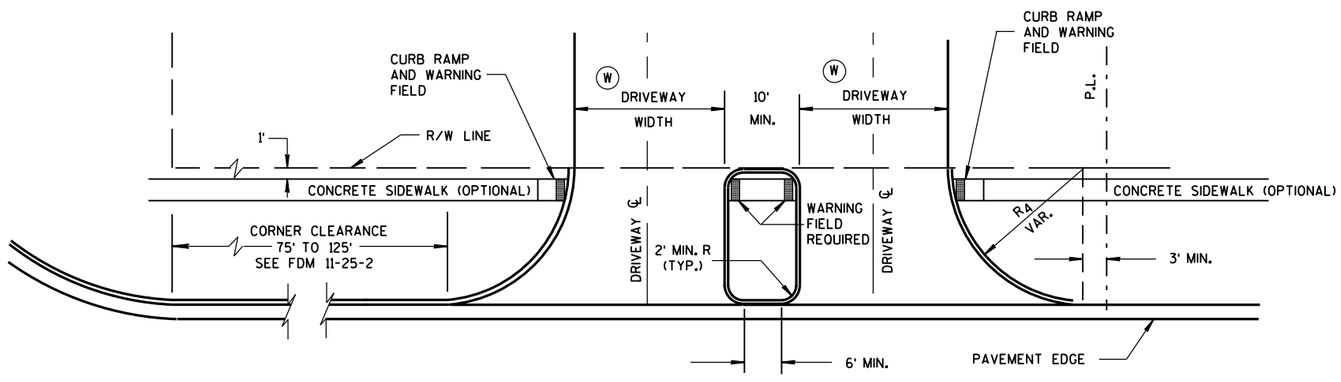




SKEWED DRIVEWAY DETAILS
(COMMERCIAL AND NON-COMMERCIAL)

SIDEWALK NOT SHOWN



DRIVEWAY LOCATION AND SPACING DETAILS

SIDEWALK SHOWN

NOTES

A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS.

THE MINIMUM ANGLE OF INTERSECTION BETWEEN THE DRIVEWAY AND HIGHWAY CENTERLINES SHALL BE 70°.

ALL CURVILINEAR PRIVATE ENTRANCE OUTLINES SHALL BE CONTAINED WITHIN THE HIGHWAY R/W.

NO DRIVEWAY SHALL BE BUILT WITHIN 3 FEET OF THE PROPERTY LINE EXCEPT FOR EXISTING JOINT DRIVEWAY SHARED BY TWO OWNERS.

Ⓦ DRIVEWAY WIDTHS:

COMMERCIAL - 35' MAX., 16' MIN.

RESIDENTIAL AND NON-COMMERCIAL - 24' MAX., 12' MIN.

DRIVEWAYS WITH CURB & GUTTER RETURNS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

December, 2016 — DATE

/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERV

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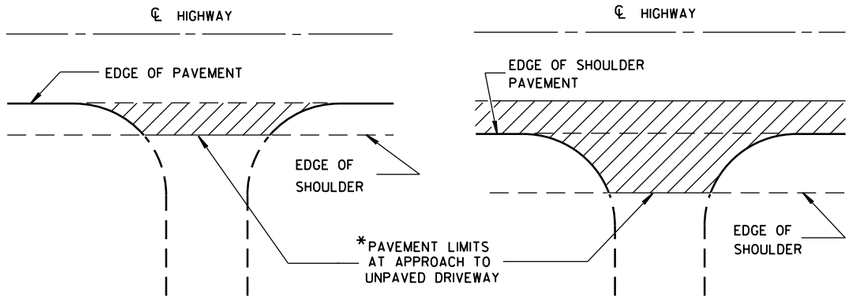
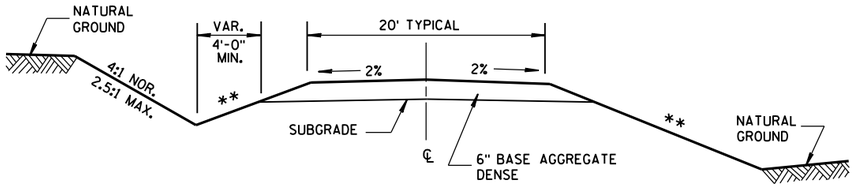


*WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

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

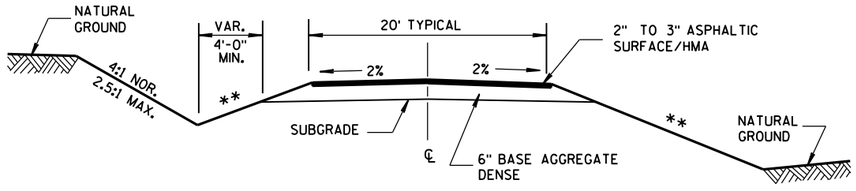


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

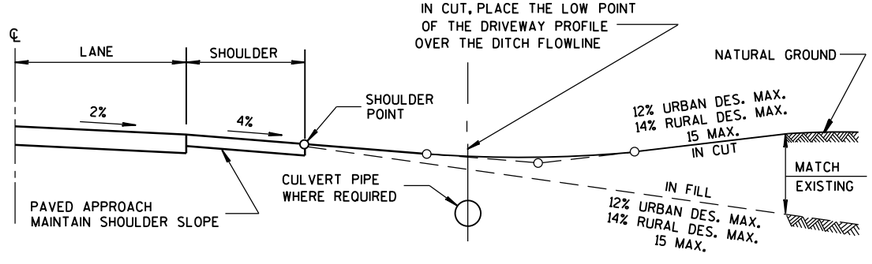
** SLOPE CAN VARY WITH SPEED. SEE 11-45-2.6.2.

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



TYPICAL DRIVEWAY PROFILES

DRIVEWAYS WITHOUT CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS UNIT SUPERV
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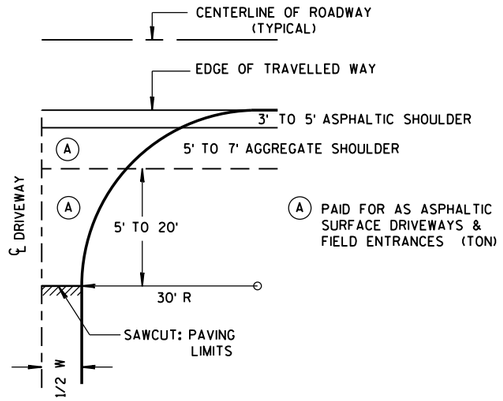
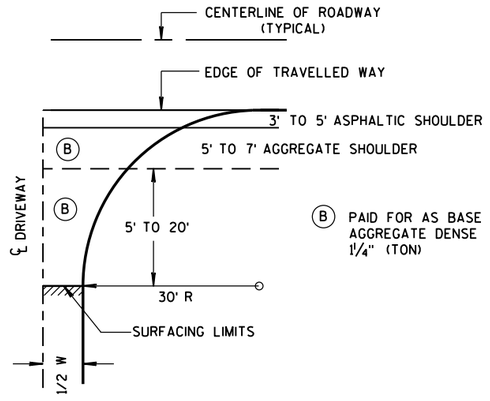


PLAN VIEW
HALF SECTION

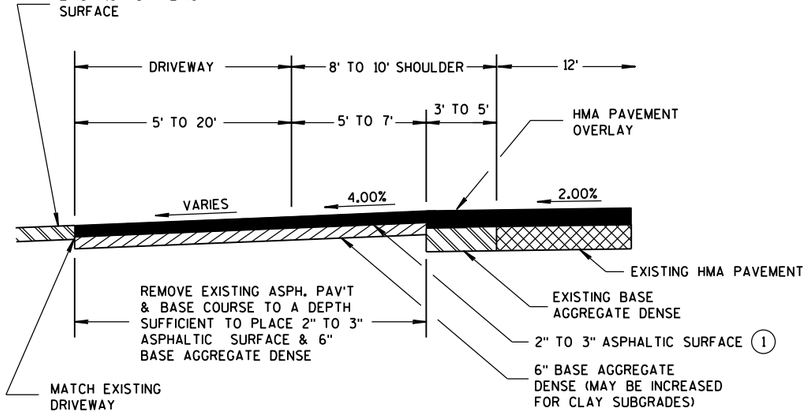
W MIN. = 16'
W MAX. = 24'



PLAN VIEW
HALF SECTION

GENERAL NOTES

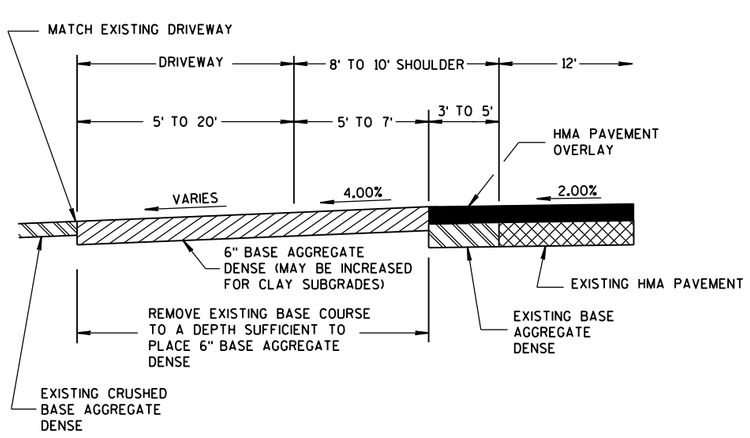
(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PROFILE VIEW

RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 — /S/ Rodney Taylor
DATE — ROADWAY STANDARDS UNIT SUPERV — ENT
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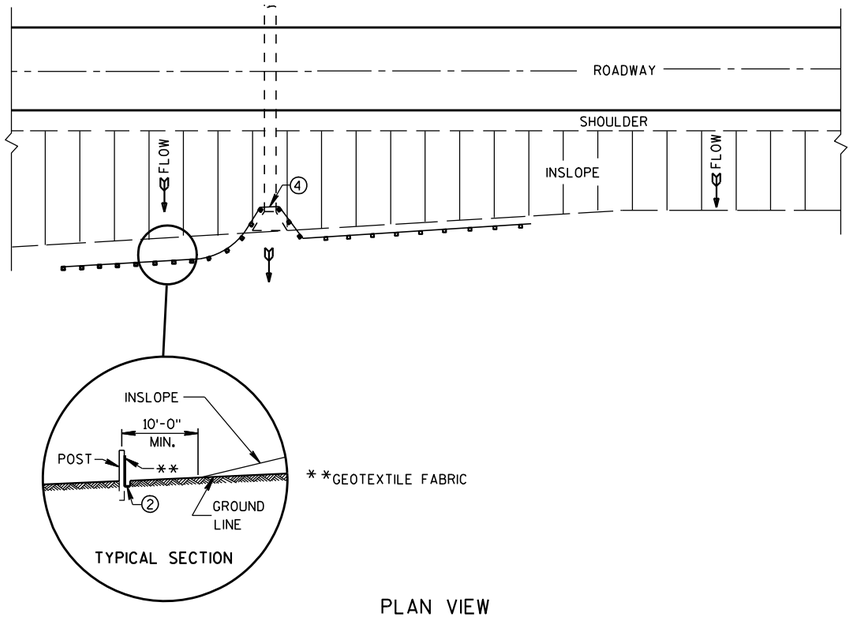
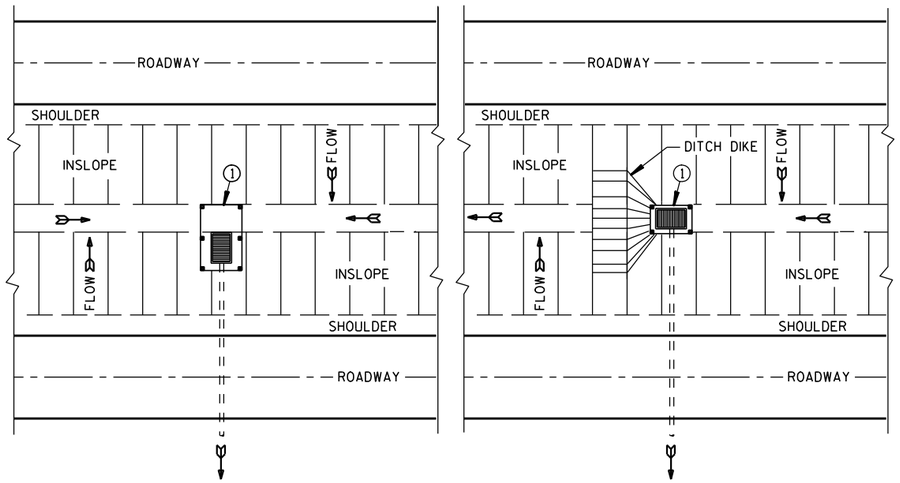


PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



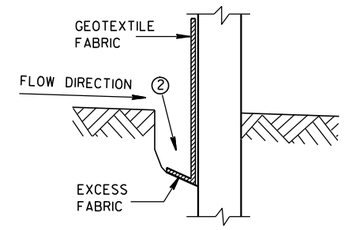
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

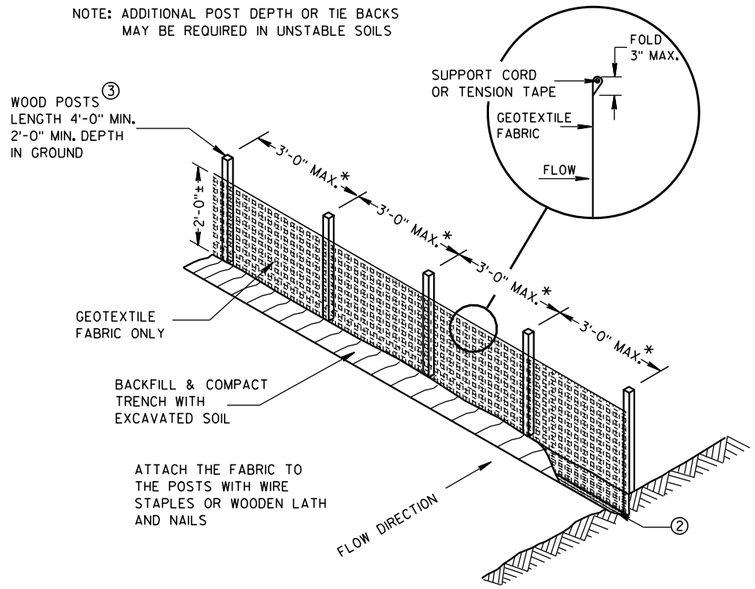
GENERAL NOTES

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.

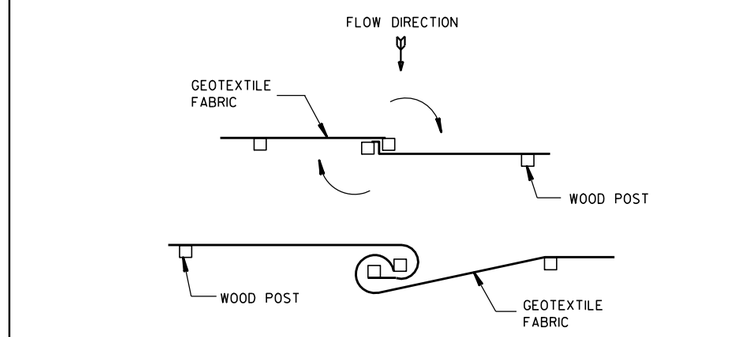


TRENCH DETAIL

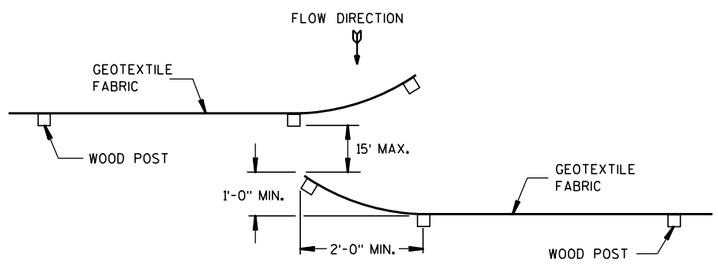


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

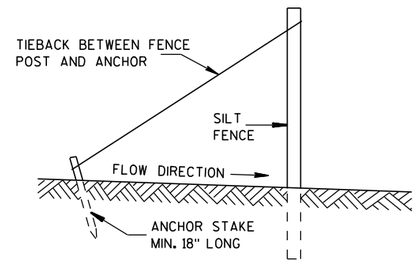


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

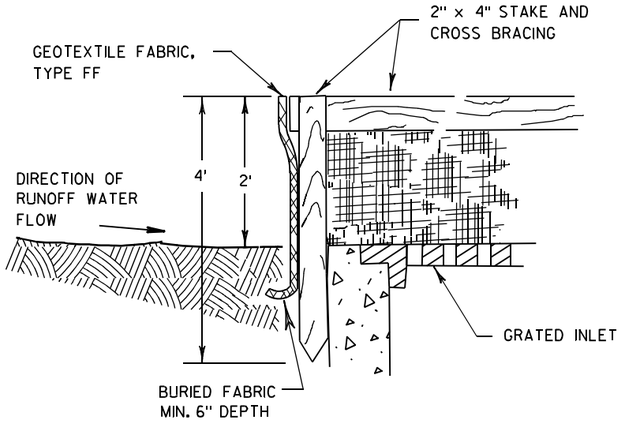
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

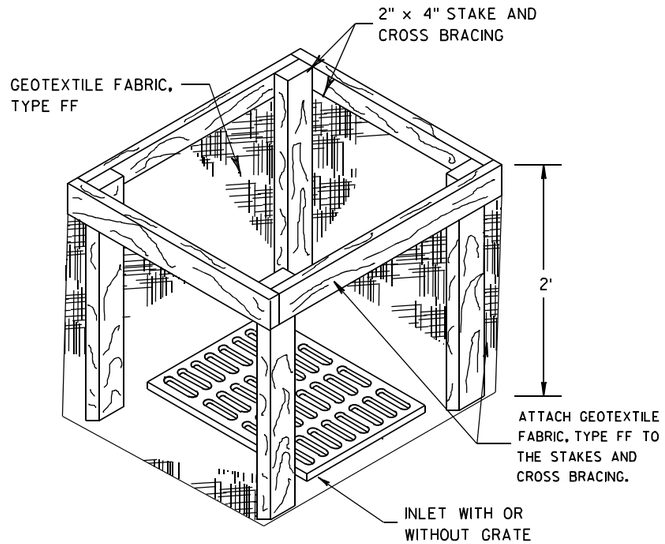
6

S.D.D. 8 E 9-6

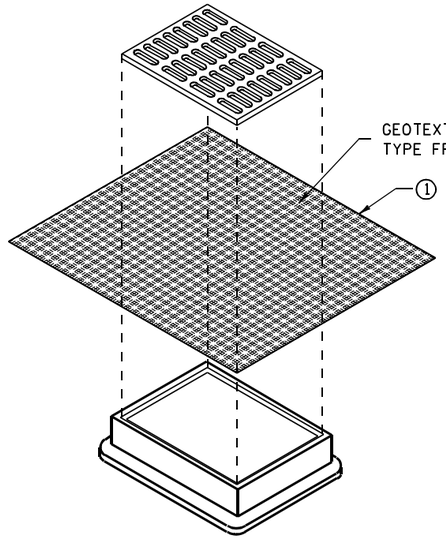
6

S.D.D. 8 E 9-6



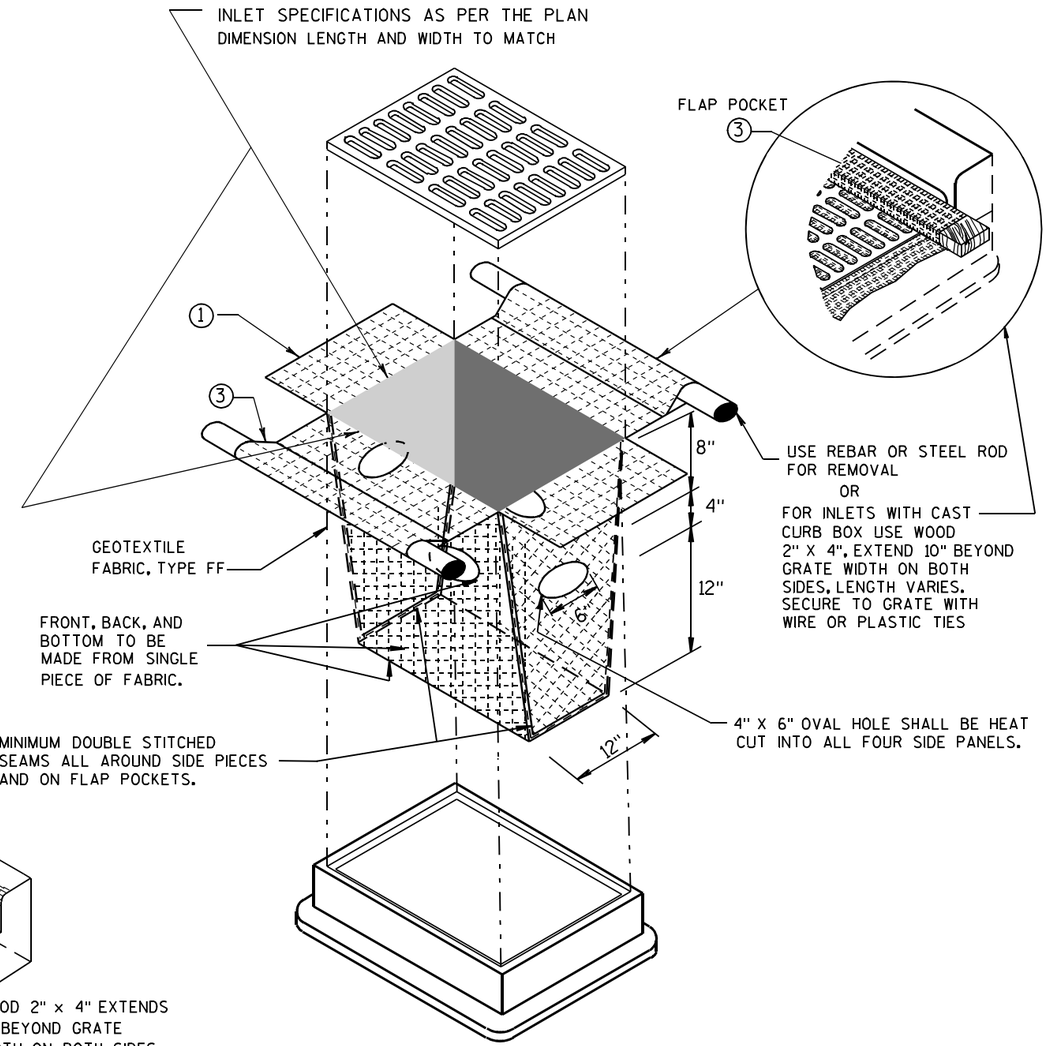


INLET PROTECTION, TYPE A



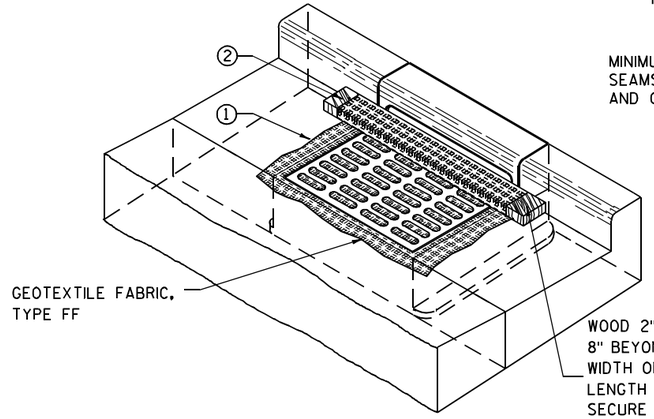
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

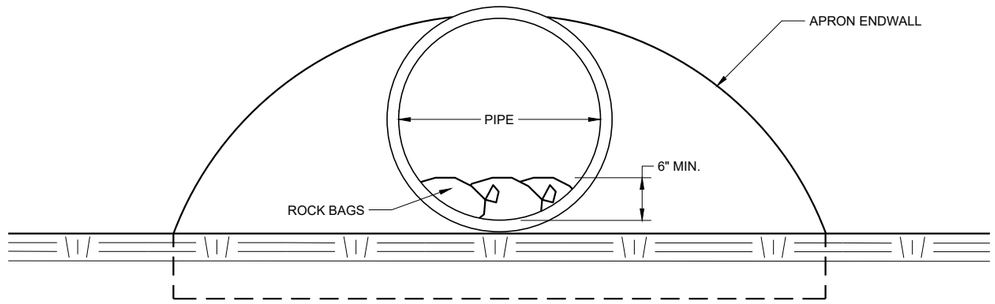
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

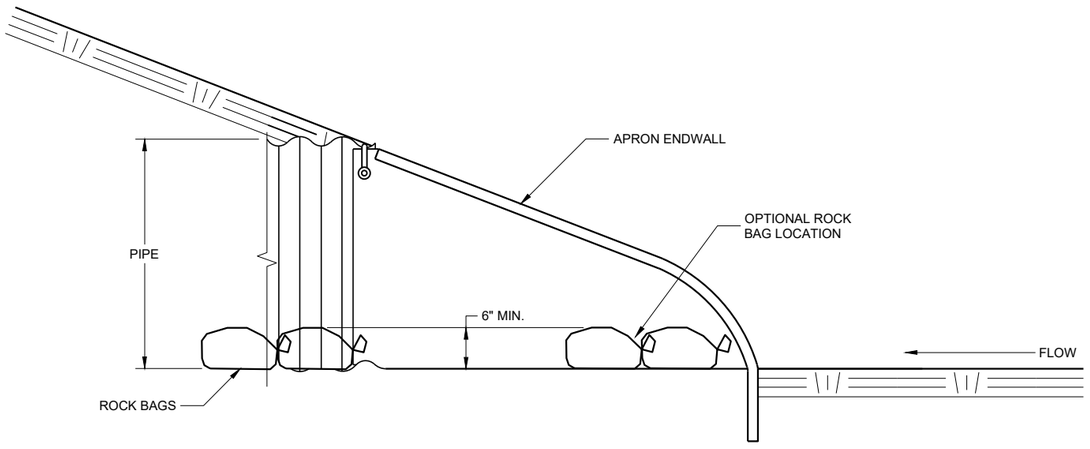
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

SDD 08E15 - 01

6

SDD 08E15 - 01

METAL APRON ENDWALLS

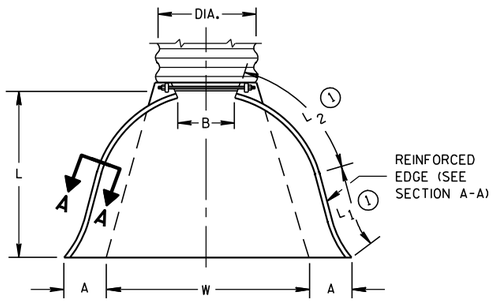
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

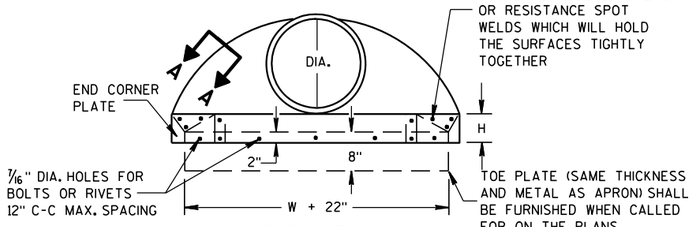
REINFORCED CONCRETE APRON ENDWALLS

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

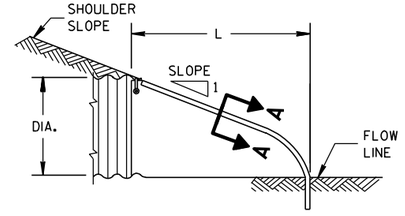
*MINIMUM
**MAXIMUM



PLAN VIEW

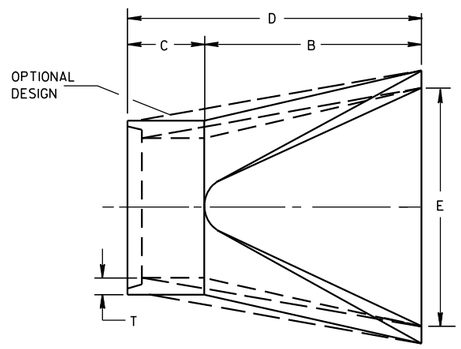


END VIEW

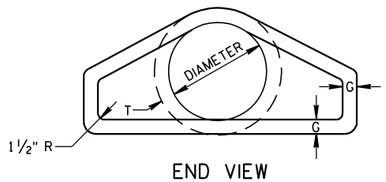


SIDE ELEVATION

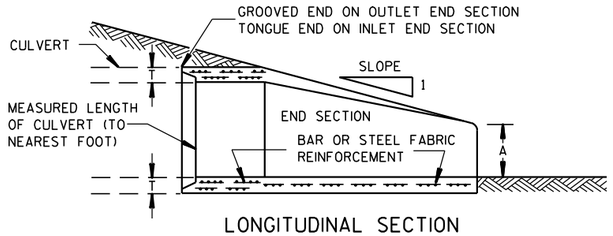
METAL ENDWALLS



PLAN

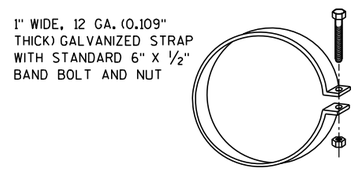


END VIEW



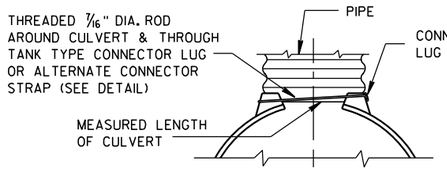
LONGITUDINAL SECTION

CONCRETE ENDWALLS

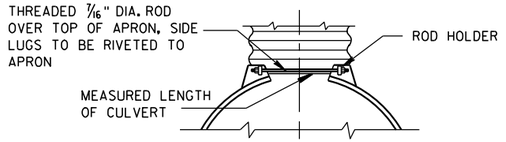


ALTERNATE FOR TYPE 1 CONNECTION

END SECTION CONNECTOR STRAP

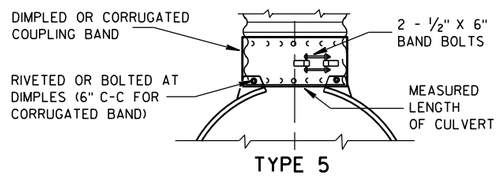


TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE

TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

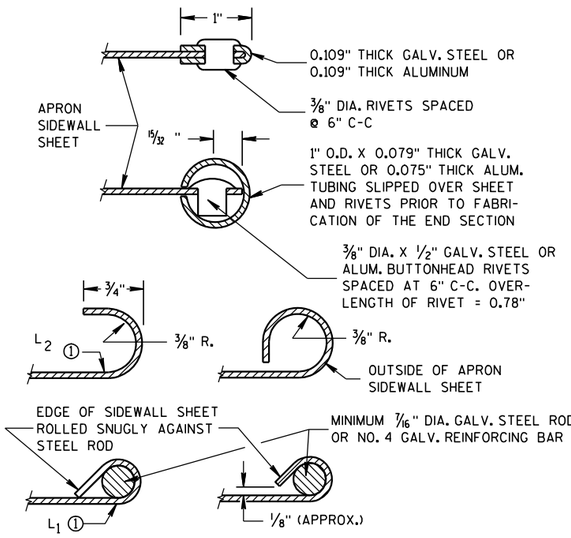
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

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

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

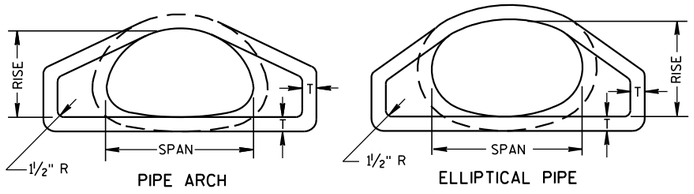
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOP 230 NEER
FHWA

6

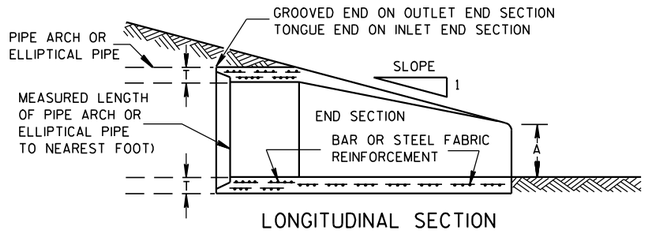
S.D.D. 8 F 1-11

6

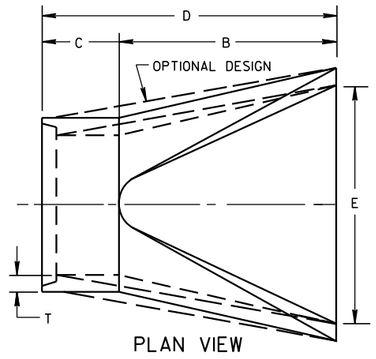
S.D.D. 8 F 1-11



END VIEW

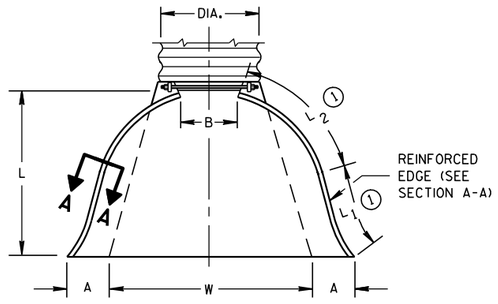


LONGITUDINAL SECTION

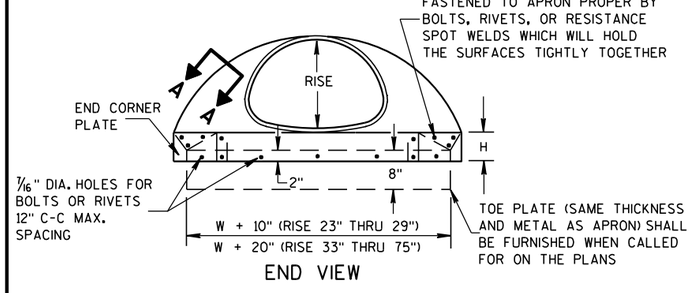


PLAN VIEW

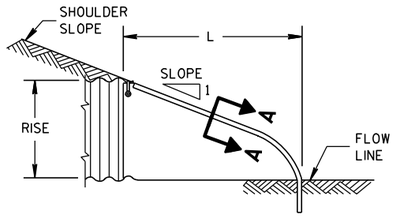
CONCRETE ENDWALLS



PLAN VIEW

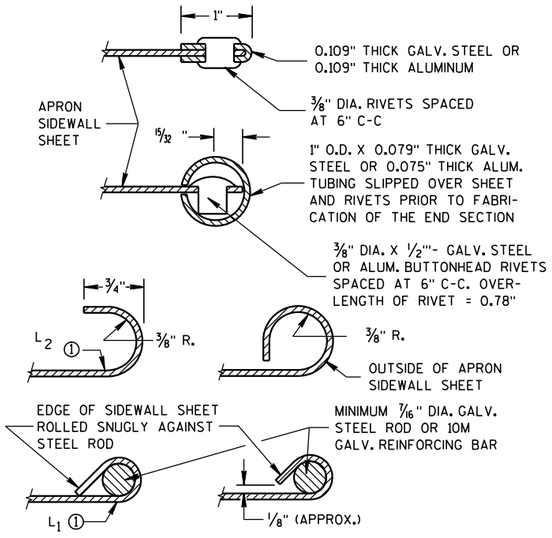


END VIEW



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

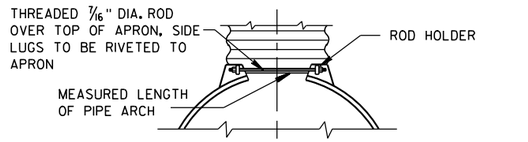
REINFORCED CONCRETE PIPE ARCH

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

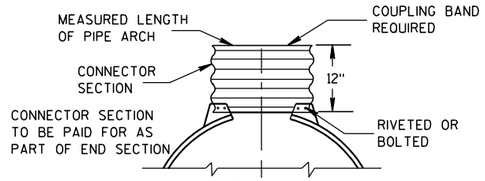
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48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

**NOMINAL SIZE



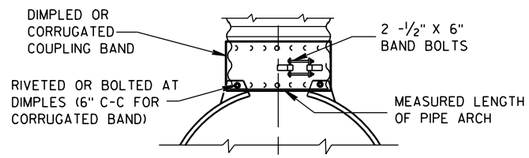
TYPE 2

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

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S.D.D. 8 F 2-1

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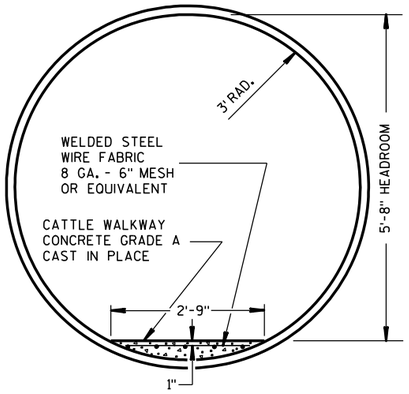
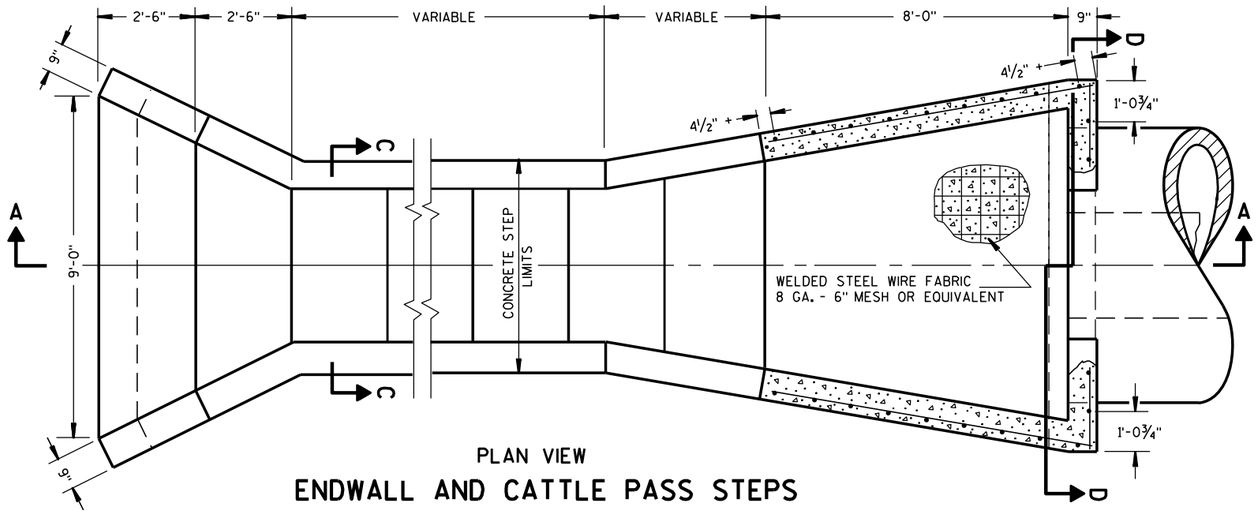
S.D.D. 8 F 2-1



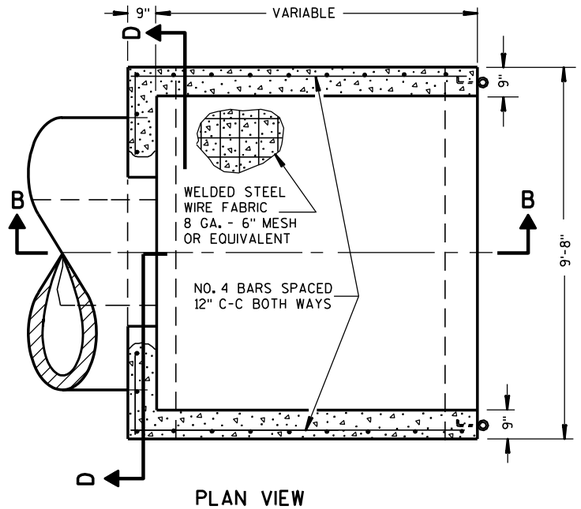
CROSS SECTION

CORRUGATED METAL PIPE CATTLE PASS



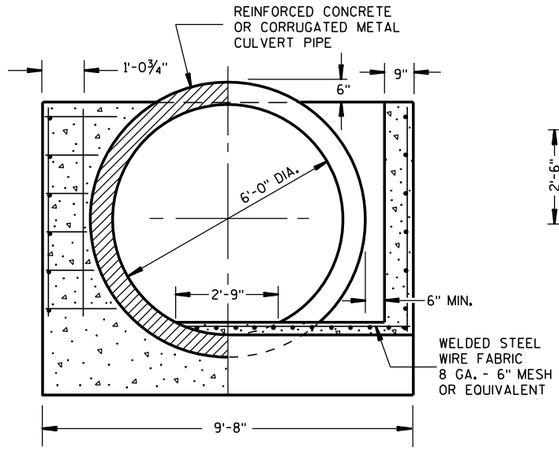
PLAN VIEW

ENDWALL AND CATTLE PASS STEPS

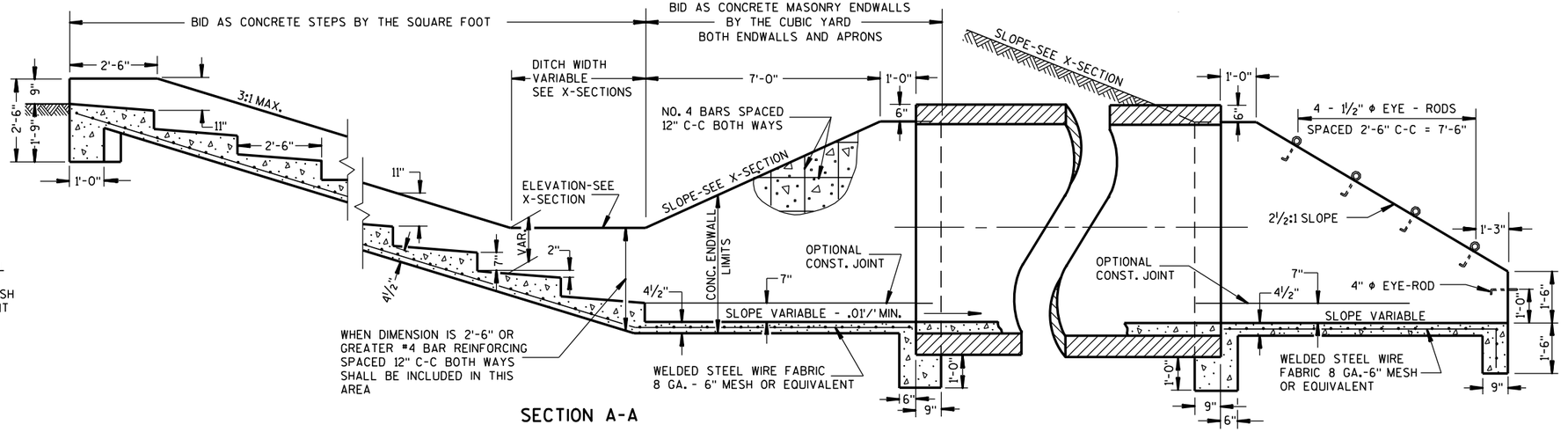


PLAN VIEW

ENDWALL FOR CATTLE PASS

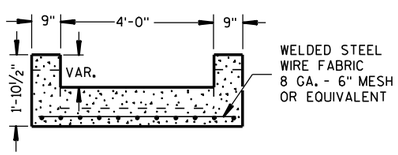


SECTION D-D

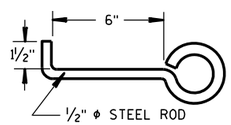


SECTION A-A

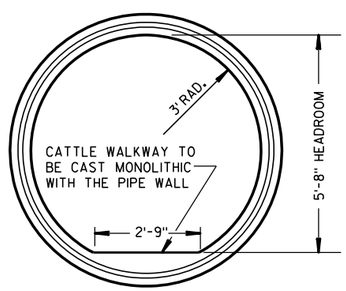
SECTION B-B



SECTION C-C



EYE-ROD ANCHOR



END VIEW

REINFORCED CONCRETE PIPE CATTLE PASS

GENERAL NOTES

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

ALL STEEL REINFORCEMENT IN ENDWALLS AND CATTLE PASS STEPS SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

ALL STEEL REINFORCEMENT OR FABRIC USED AS SHOWN ABOVE SHALL BE INCIDENTAL TO THE BID ITEM OF WHICH IT IS AN INTEGRAL PART.

EYE-RODS FOR FENCE CONNECTIONS SHALL BE PROVIDED BY THE CONTRACTOR AS AN INCIDENTAL TO THE BID ITEM OF CONCRETE MASONRY, ENDWALLS AND SHALL BE GALVANIZED.

CONCRETE USED FOR THE CATTLE WALKWAY WITHIN THE PIPE SHALL BE INCIDENTAL TO THE BID ITEM OF PIPE CATTLE PASS.

DETAILS FOR PIPE CATTLE PASS, CONCRETE ENDWALL AND STEPS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/6/75 — DATE

/S/ Harold Fiedler — STATE DESIGN ENGINE 232 — HWYS

FHWA

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S.D.D. 8 F 3-3

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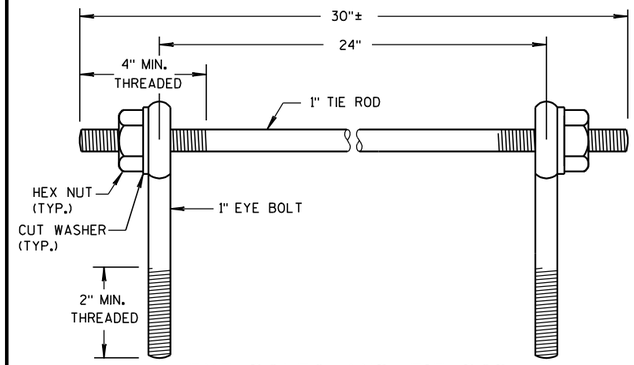
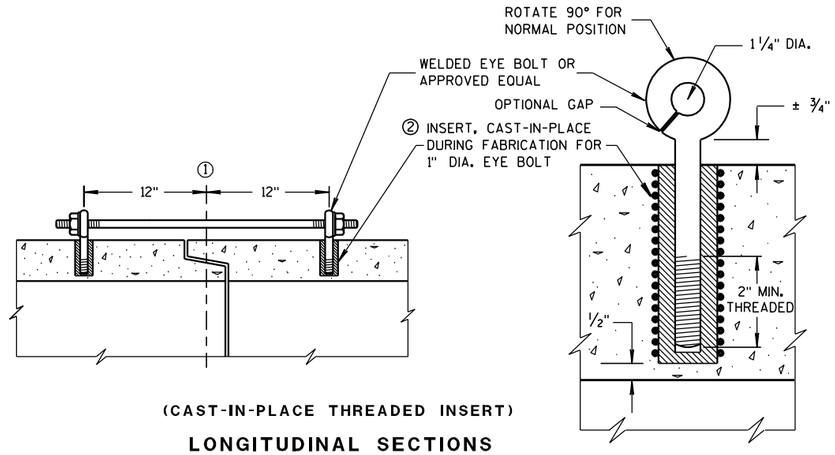
S.D.D. 8 F 3-3



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

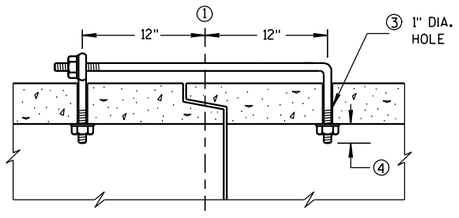
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

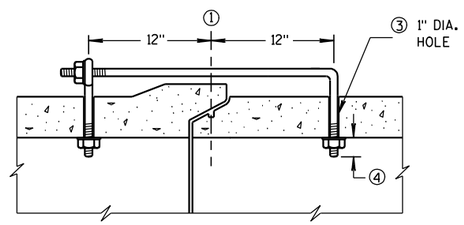
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

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



(TONGUE & GROOVE PIPE)

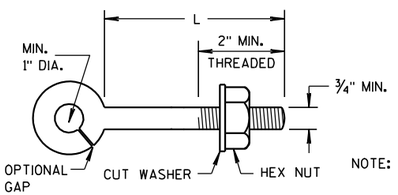


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

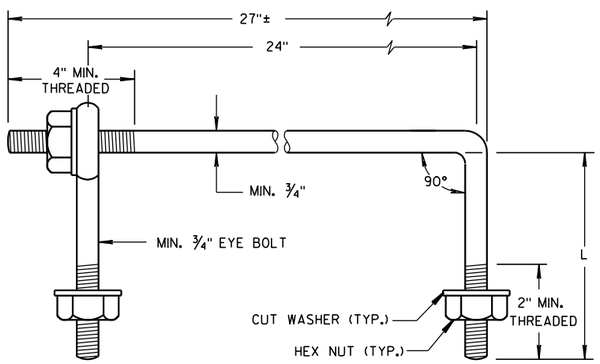
EYE BOLT DIMENSION TABLE

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



EYE BOLT

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



EYE BOLT AND TIE ROD

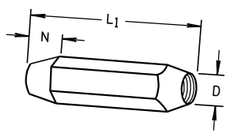
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

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

DIMENSIONS SHOWN ARE IN INCHES



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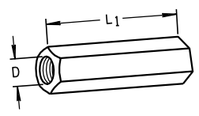
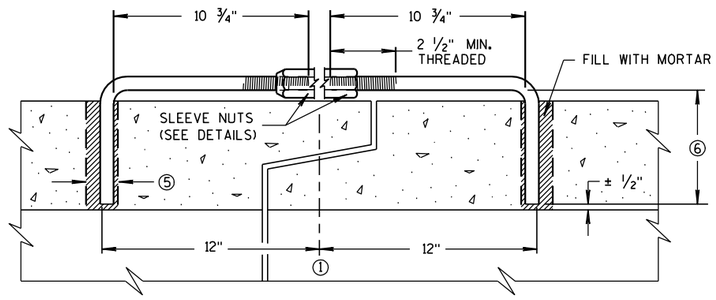


PLAIN

RIGHT AND LEFT THREADS

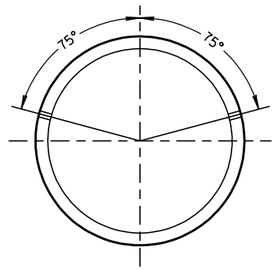
SLEEVE NUTS



LONGITUDINAL SECTION

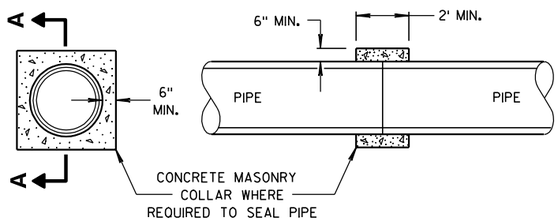
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
233
FHWA

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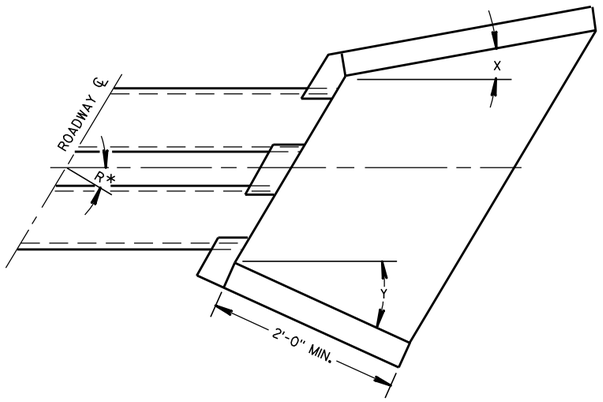
S.D.D. 8 F 4-7



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

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.

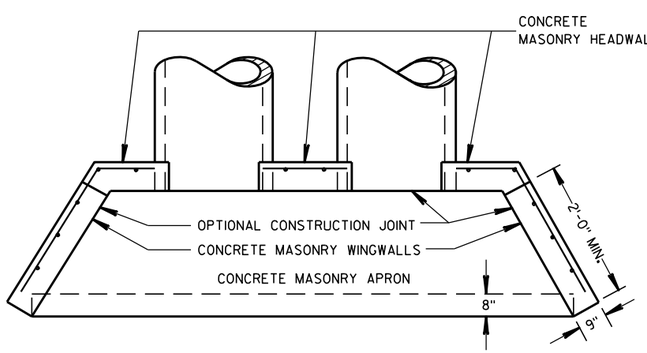
FILL SLOPES FLATTER THAN 2 ½:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

(1) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

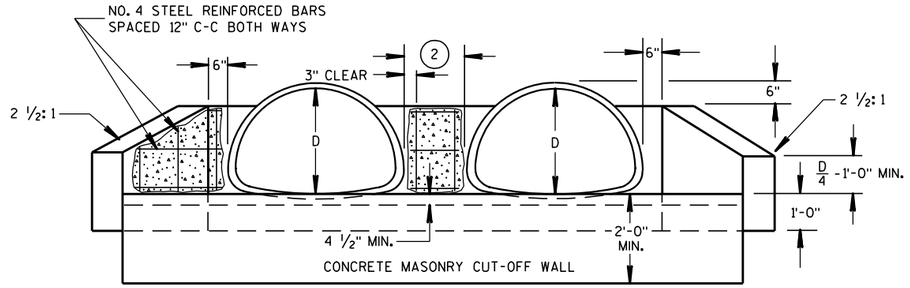
(2) THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	½ DIA. OR SPAN
OVER 72"	3'-0"



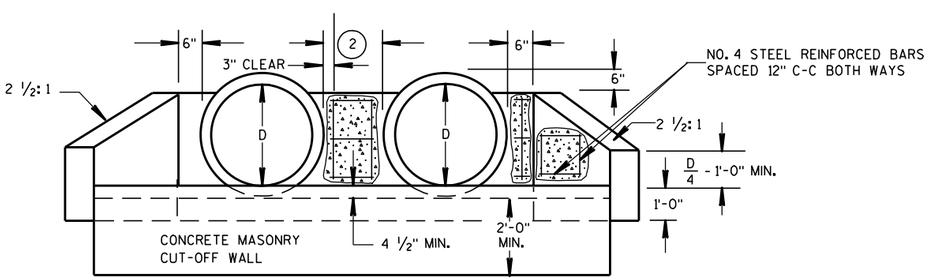
PLAN VIEW

CULVERT PIPE AND PIPE ARCH



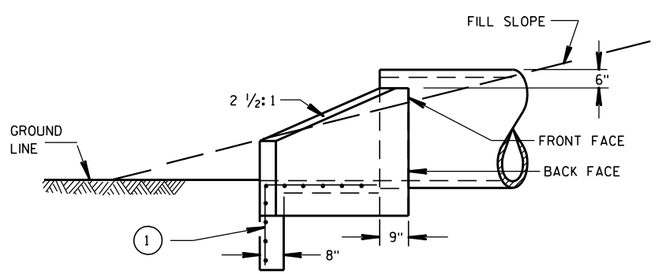
END ELEVATION

PIPE ARCH



END ELEVATION

CULVERT PIPE



SIDE ELEVATION

CULVERT PIPE AND PIPE ARCH

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/14/98 DATE
/S/ Rory L. Rhinehart
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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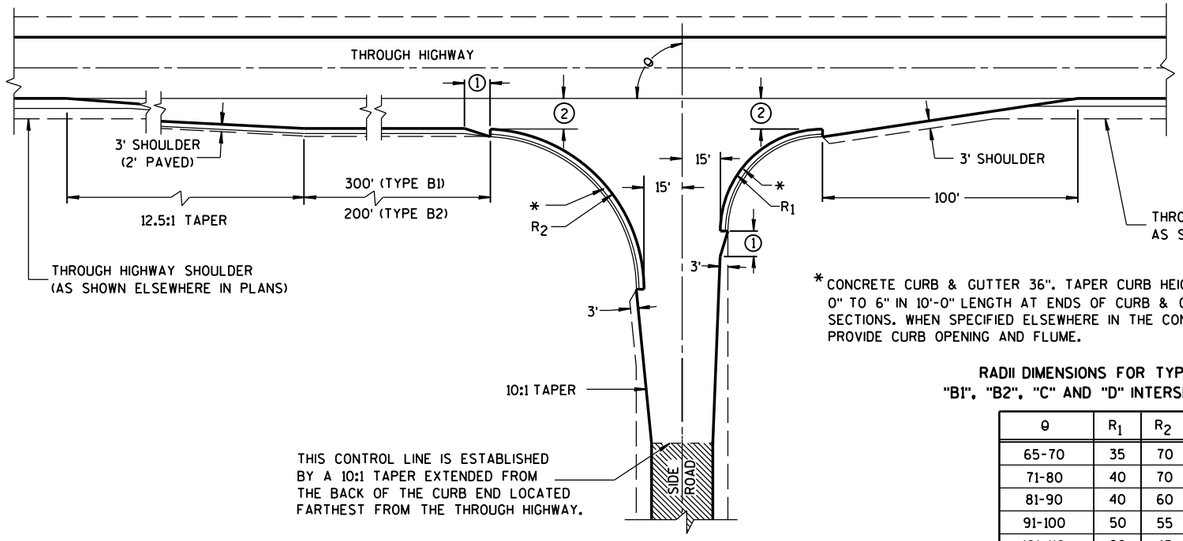
S.D.D. 8 F 10-1

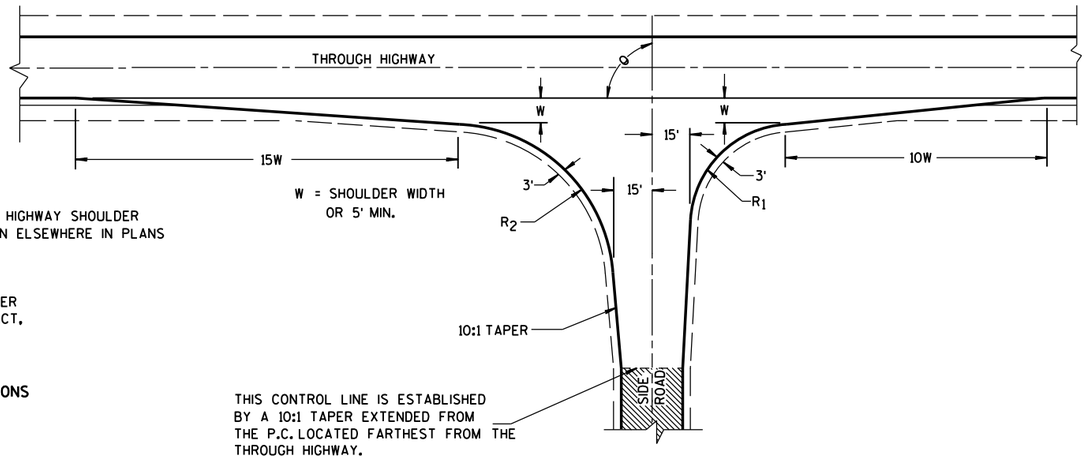


TYPE "B1" AND "B2"

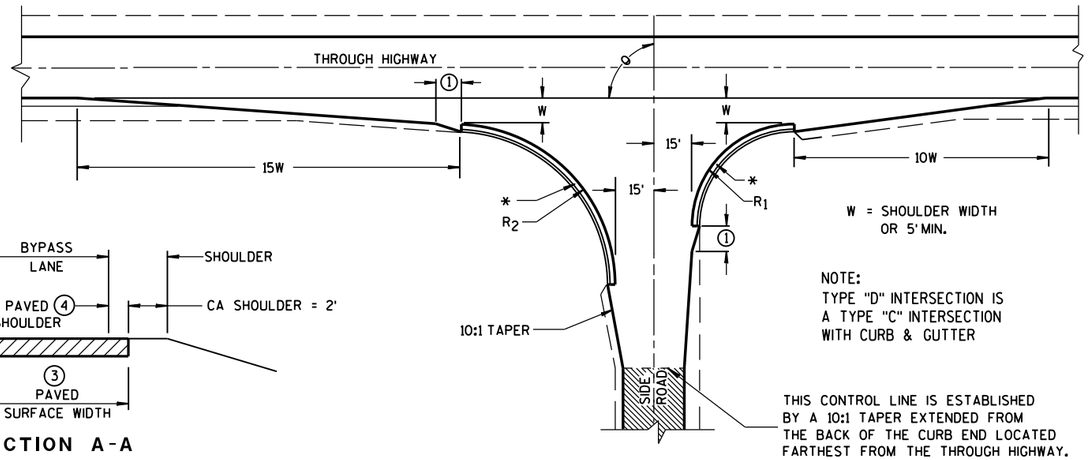
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

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

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



TYPE "C"



TYPE "D"

GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

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

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

EXISTING PAVED SURFACE

BYPASS LANE

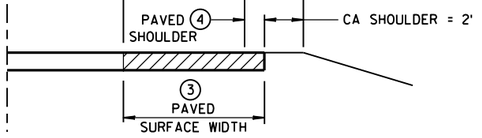
(1) 10-FT TYPICAL.

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

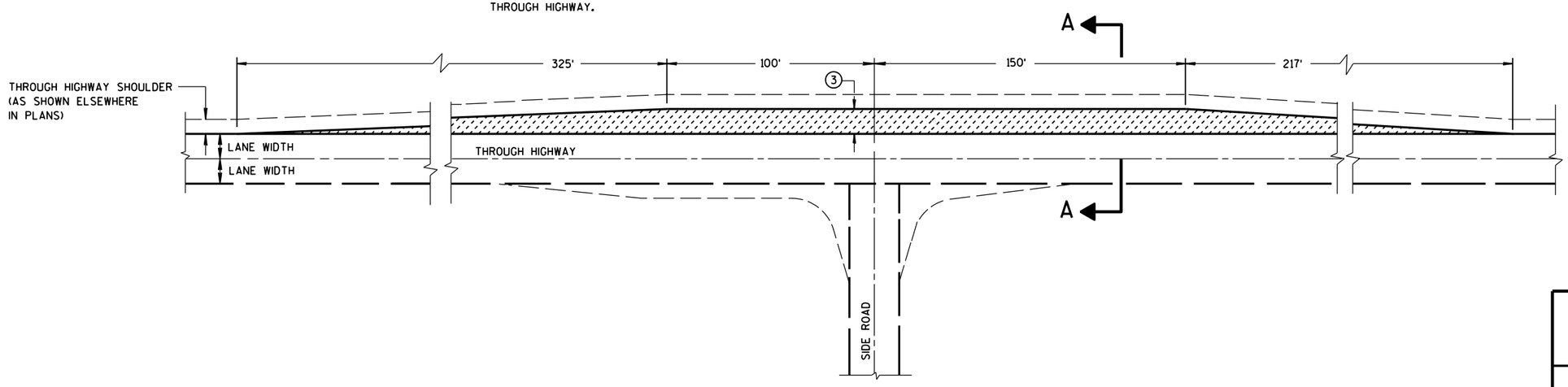
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

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

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



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



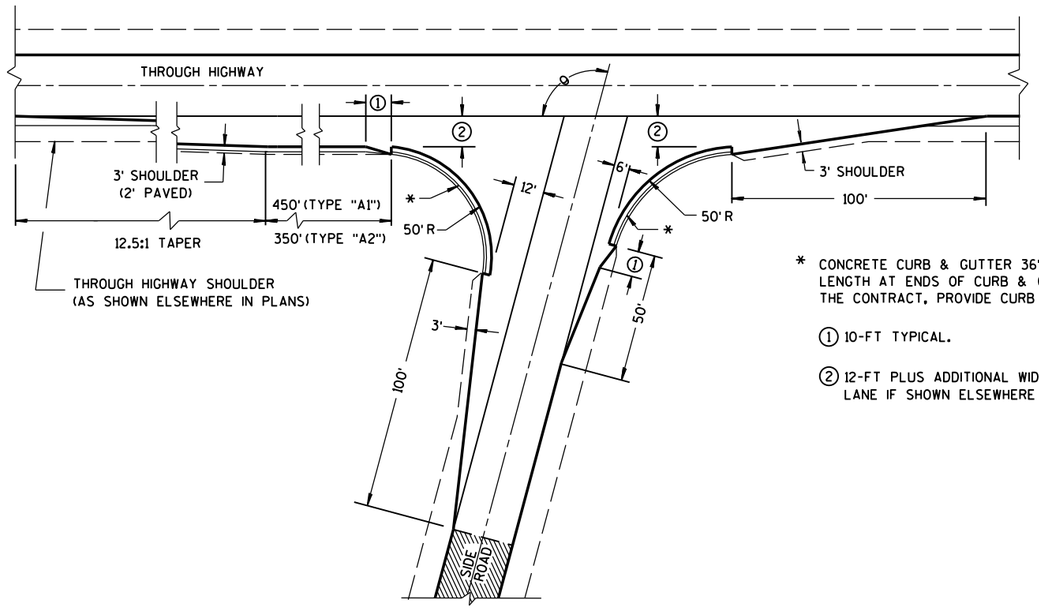
TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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

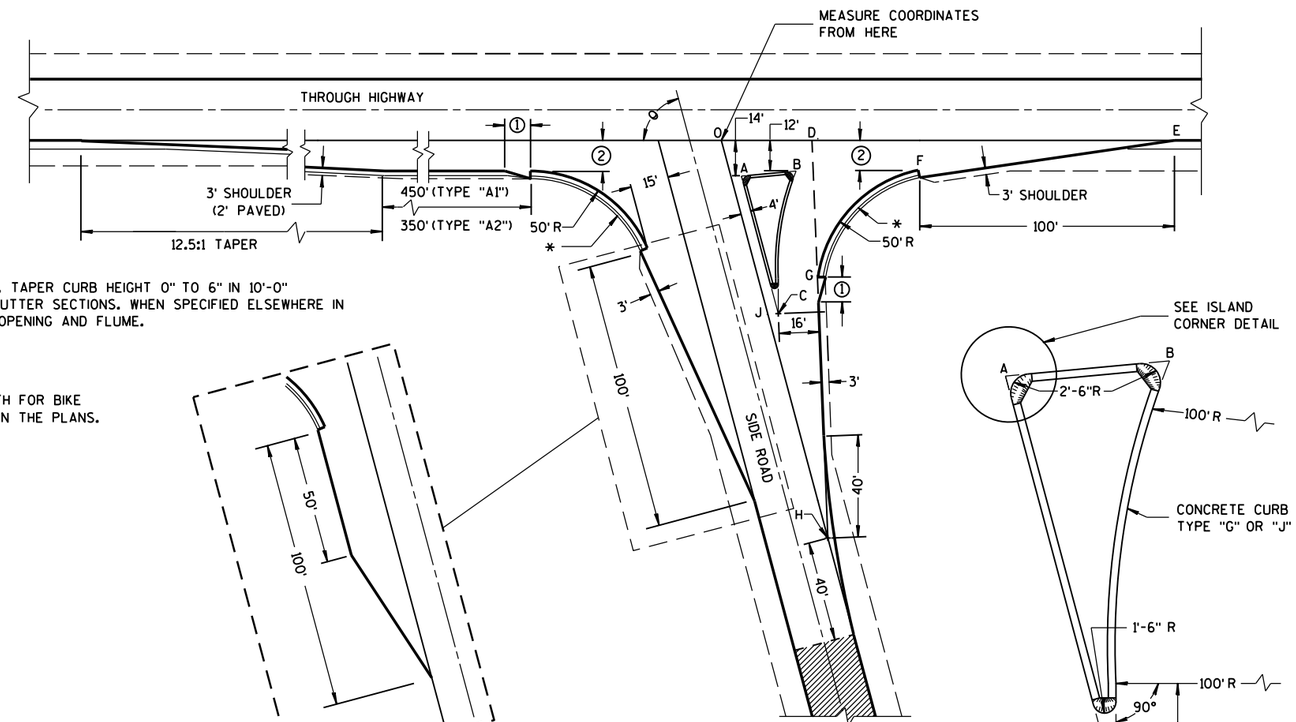


θ = MORE THAN 80°

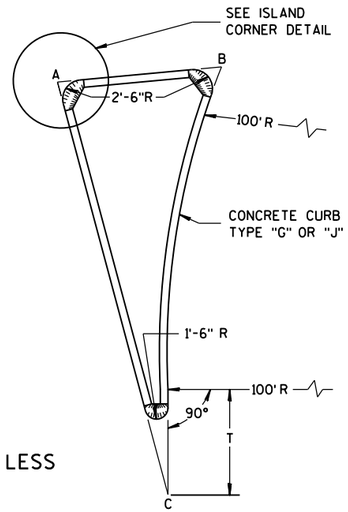
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

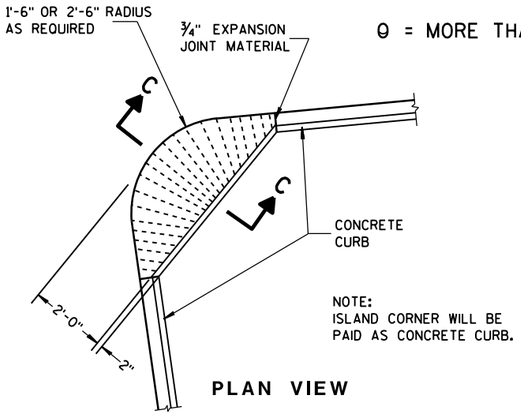
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.



θ = ACUTE ANGLES 80° OR LESS

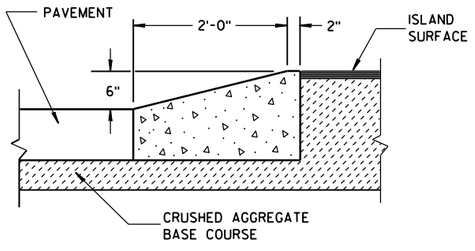


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS



NOTE:
ISLAND CORNER WILL BE PAID AS CONCRETE CURB.

PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

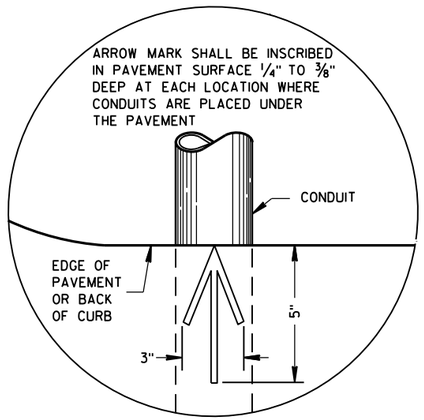
AT-GRADE SIDE ROAD
INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/18/12 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

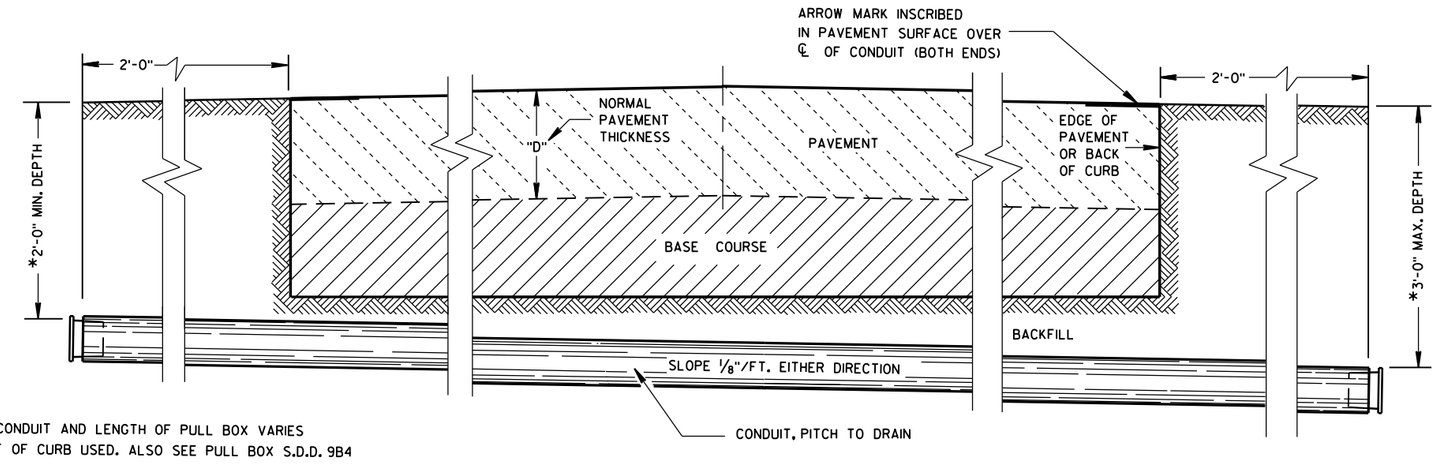
S.D.D. 9 A 1-13b

6



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 237
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 1/2	22 1/2
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

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 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN 1/4".

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 1/4".

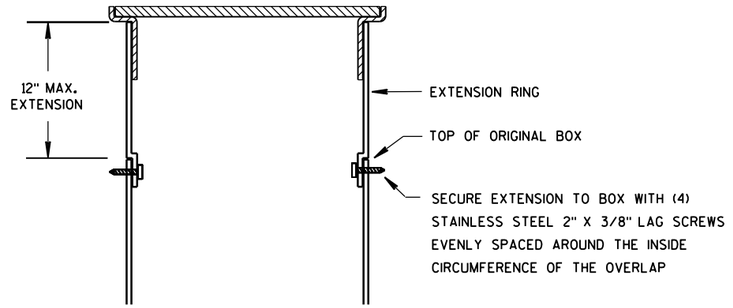
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

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

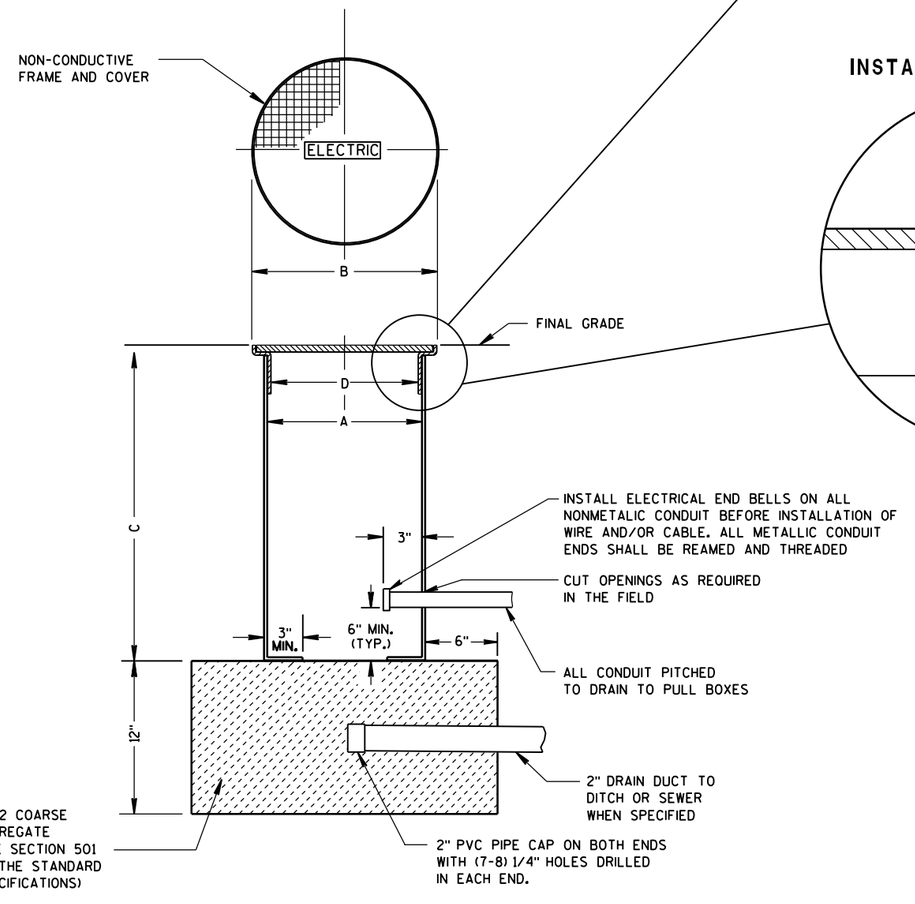
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

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.

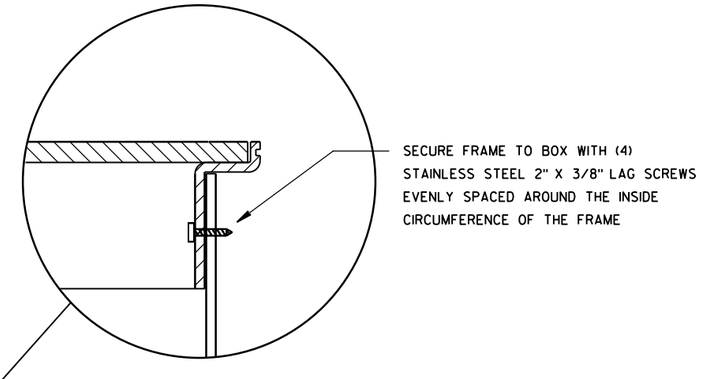


BOX EXTENSION

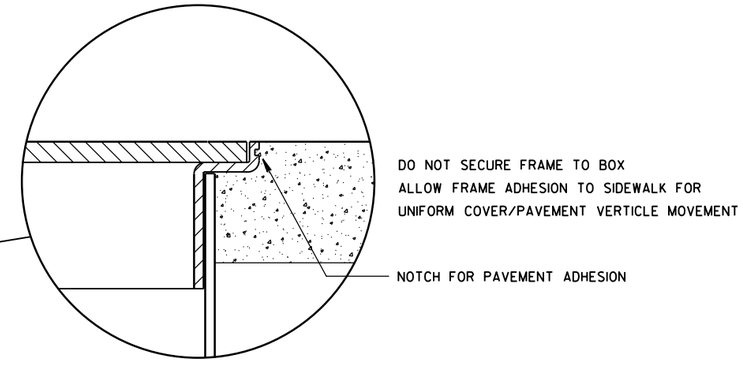


NON-CONDUCTIVE PULL BOX

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



PULL BOX NON-CONDUCTIVE

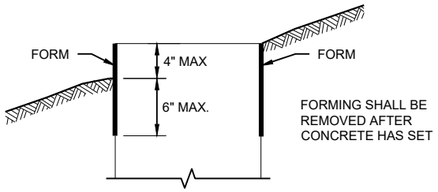
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 16-1

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.

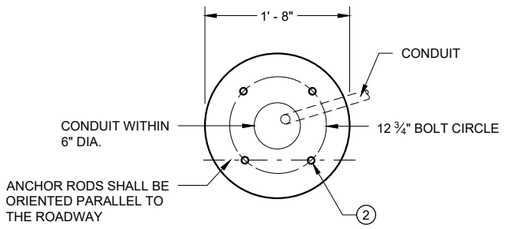
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

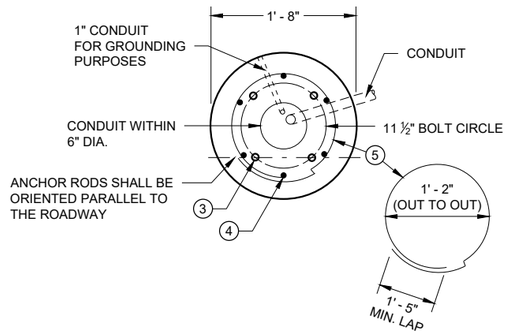
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

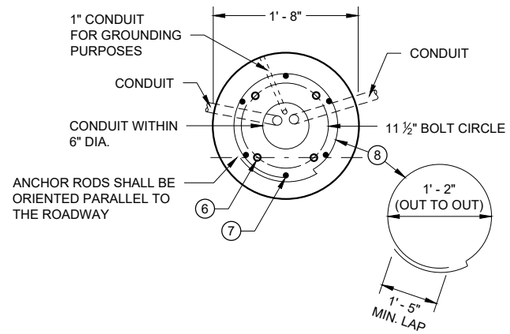
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

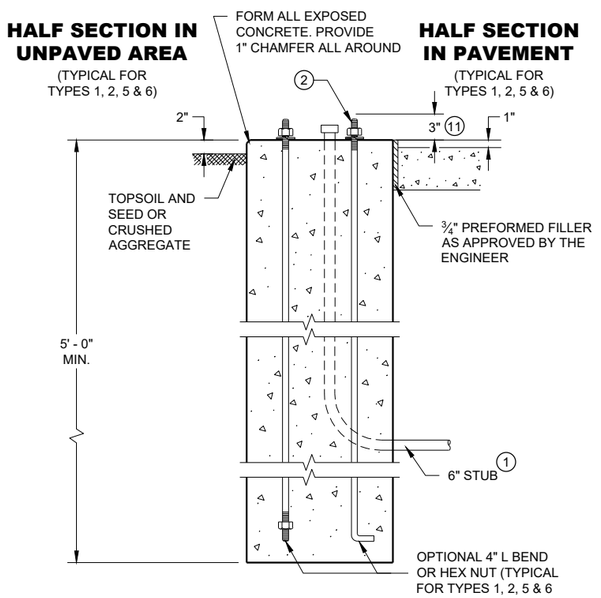
WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

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

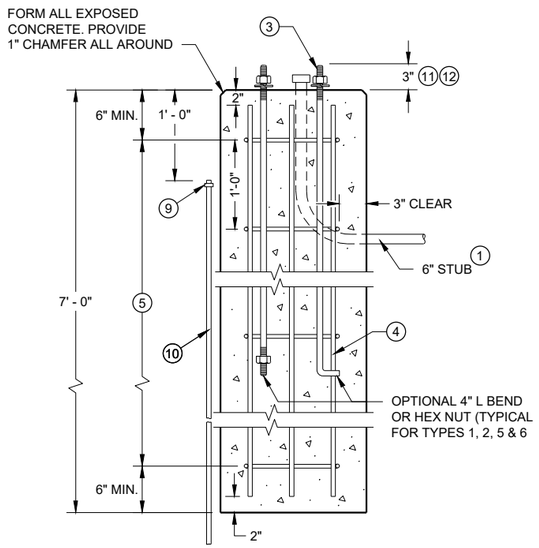




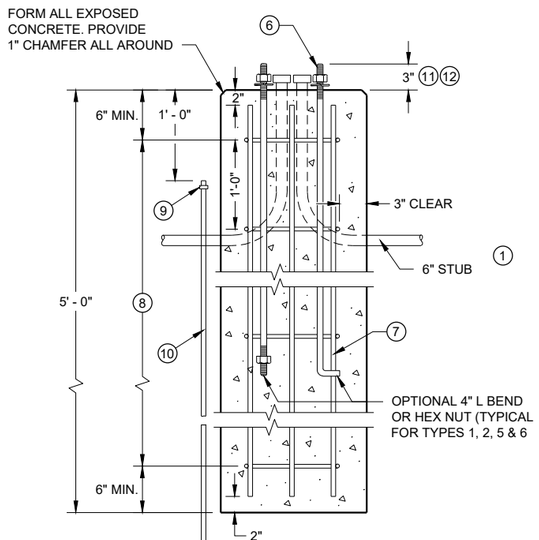




TYPE 1



TYPE 2



TYPE 5 & 6

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.

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 641.2.2 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.

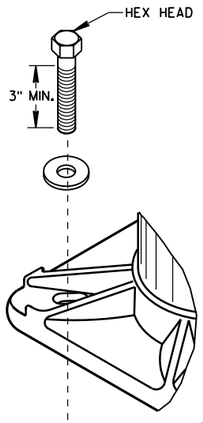
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

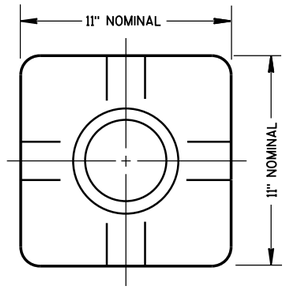
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

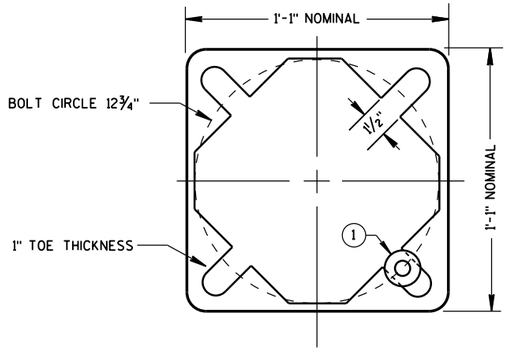
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

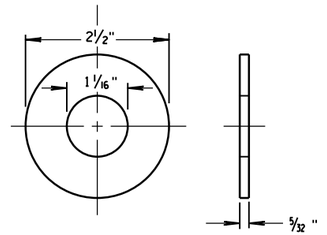




TOP VIEW
(PEDESTAL BASE)

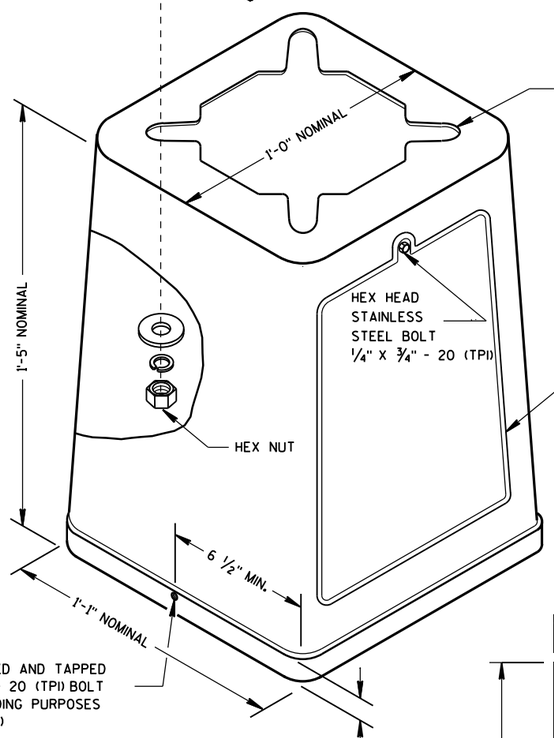


BOTTOM VIEW
(PEDESTAL BASE)

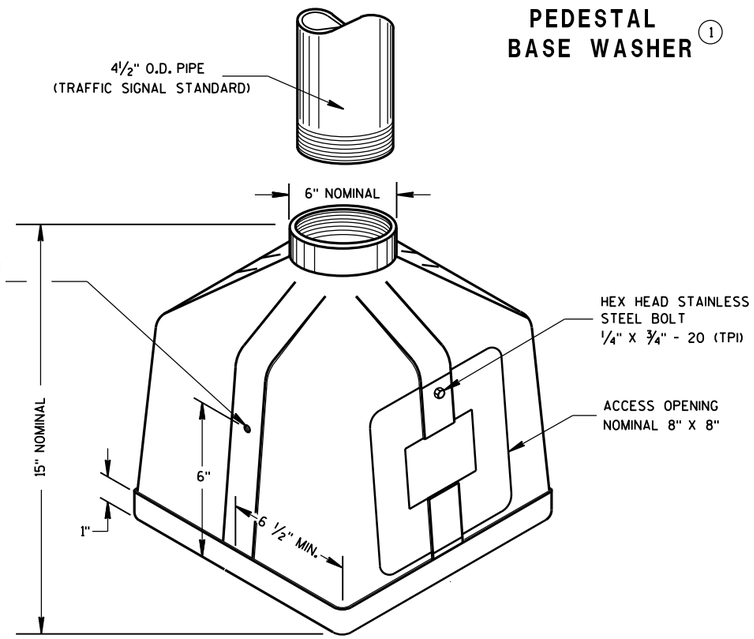


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

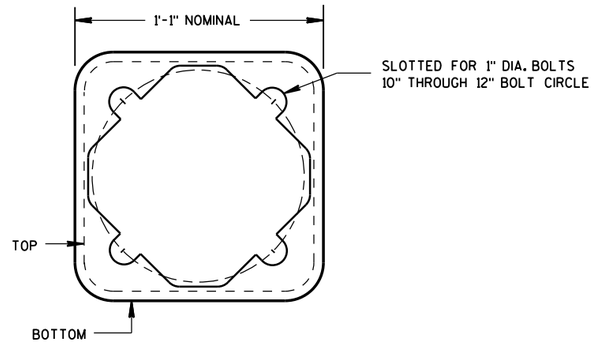


ISOMETRIC VIEW

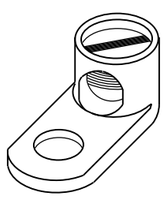


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

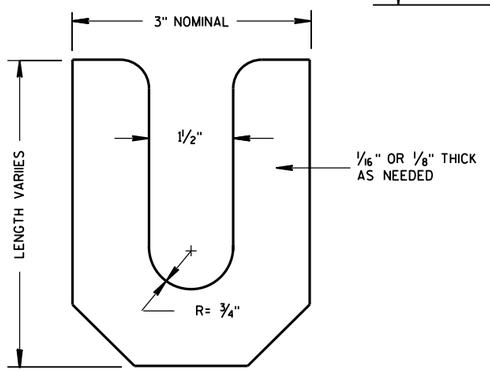


TYPICAL MECHANICAL CONNECTOR LUG

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
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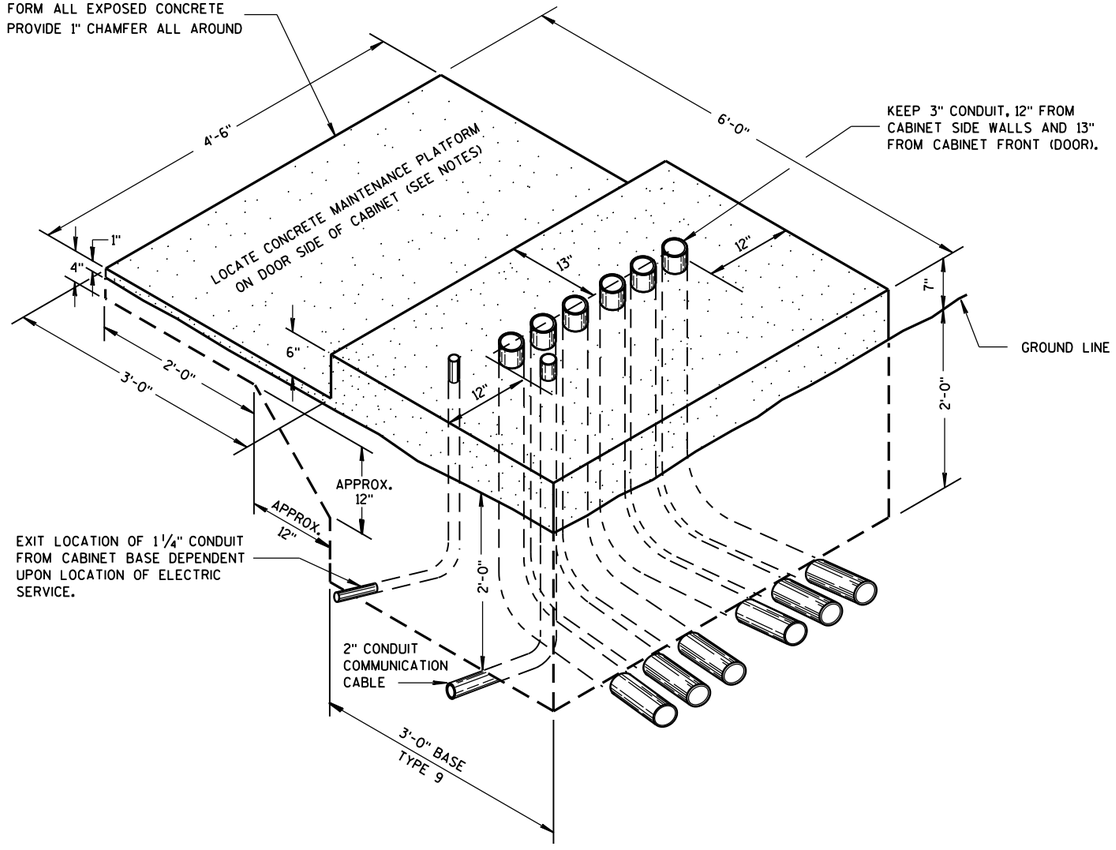
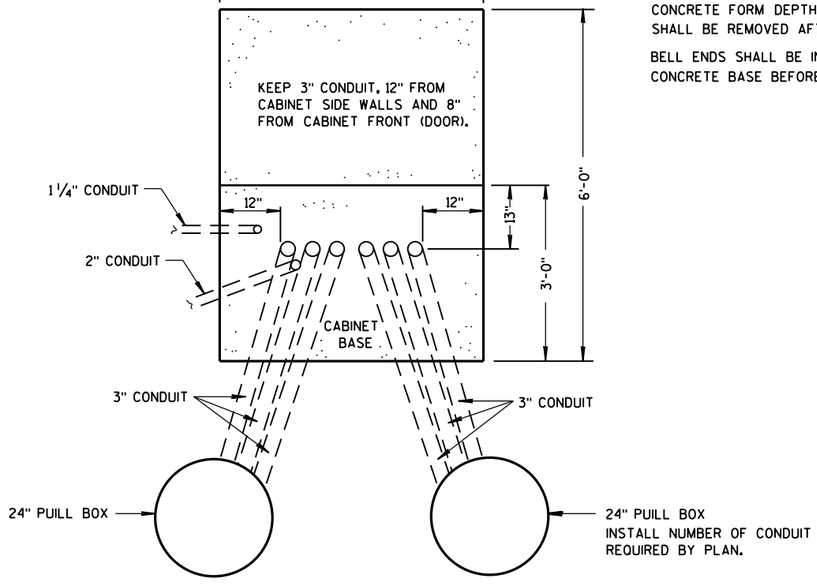


ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC 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.

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

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

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

MINIMUM BENDING RADIUS OF CONDUIT = 6 X 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 NONMETALLIC 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 NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" 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 9, SPECIAL

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GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL 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 AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS 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 AT THE ENTRANCE OF THE BASE.

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUIT 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 OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC 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).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE 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.

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

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

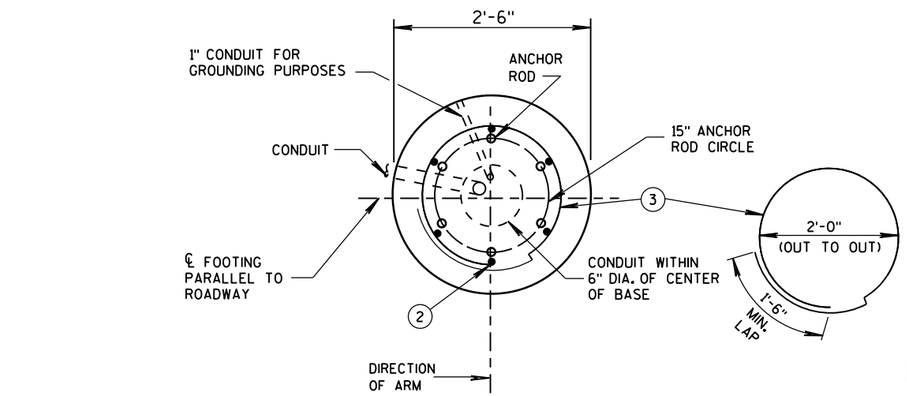
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

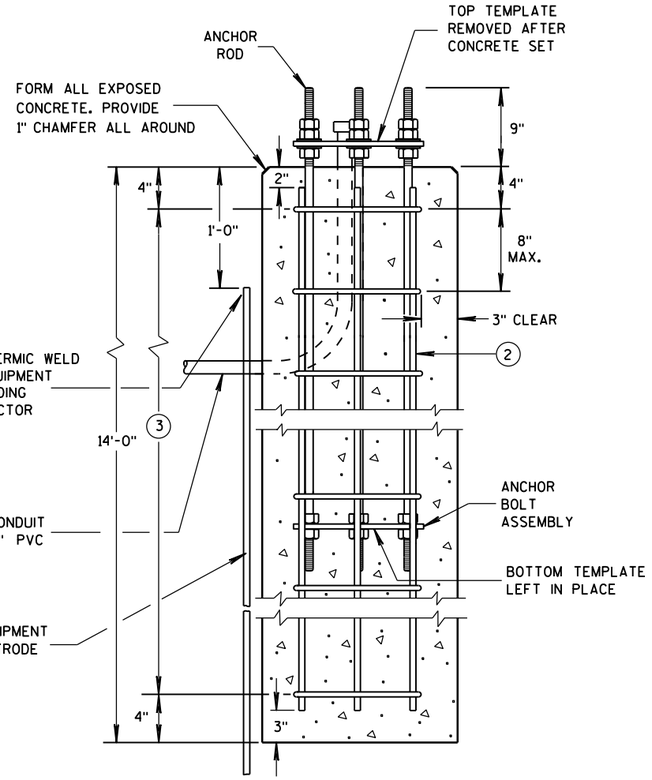
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATION)	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.

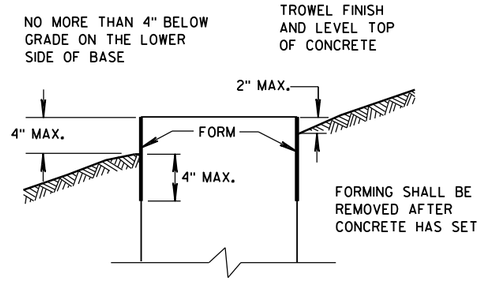




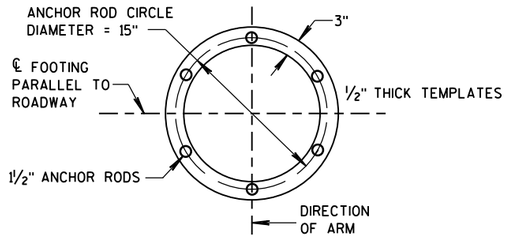
CONCRETE BASE TYPE 10

(FOR TYPE 9 & 10 & OVER HEIGHT (OH) POLES)

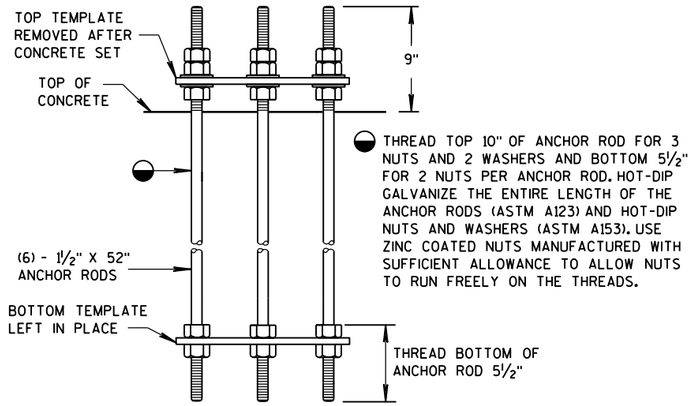
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
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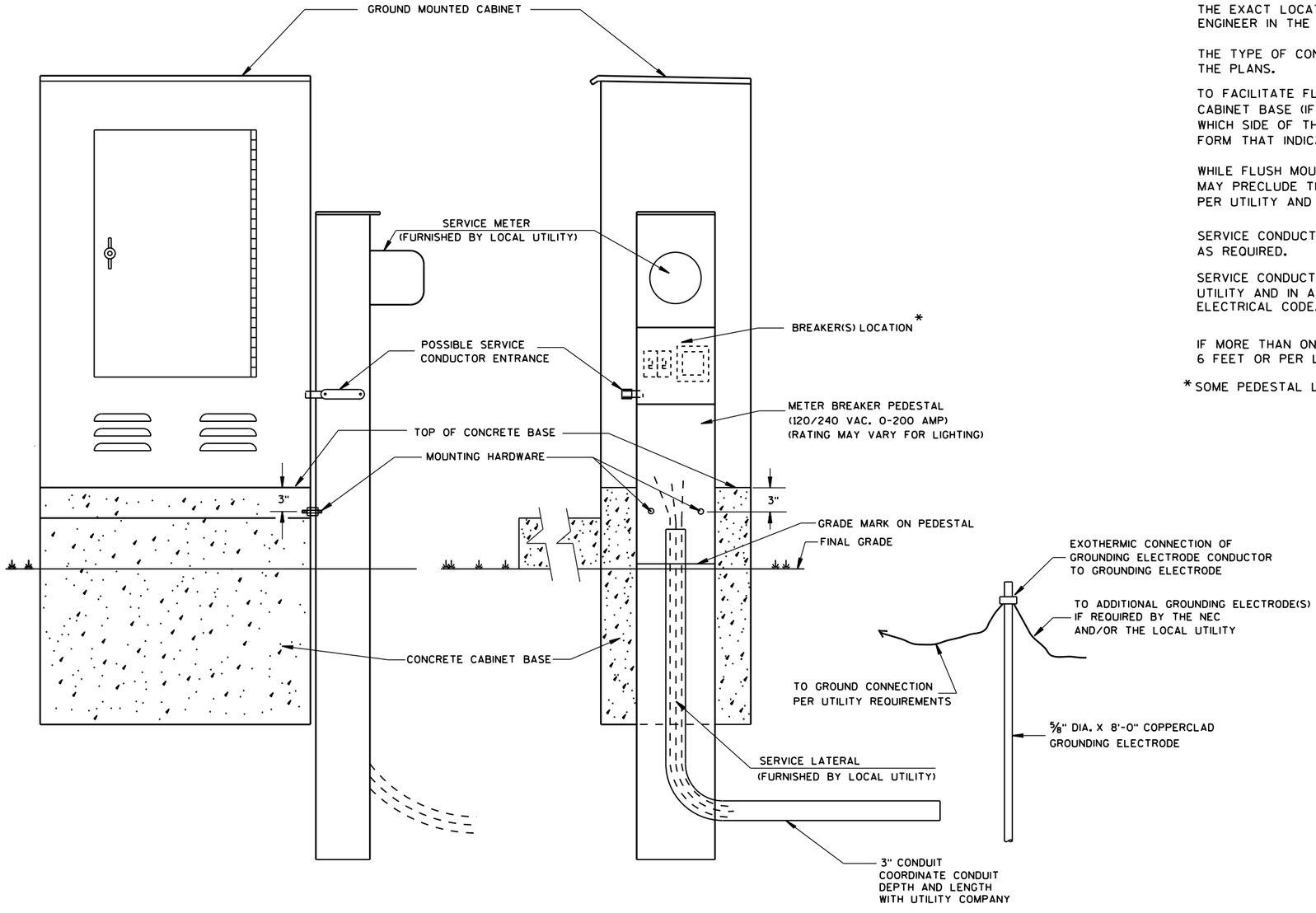

TYPICAL CABINET SERVICE INSTALLATION

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.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
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APPROVED
Sept. 2014 — DATE
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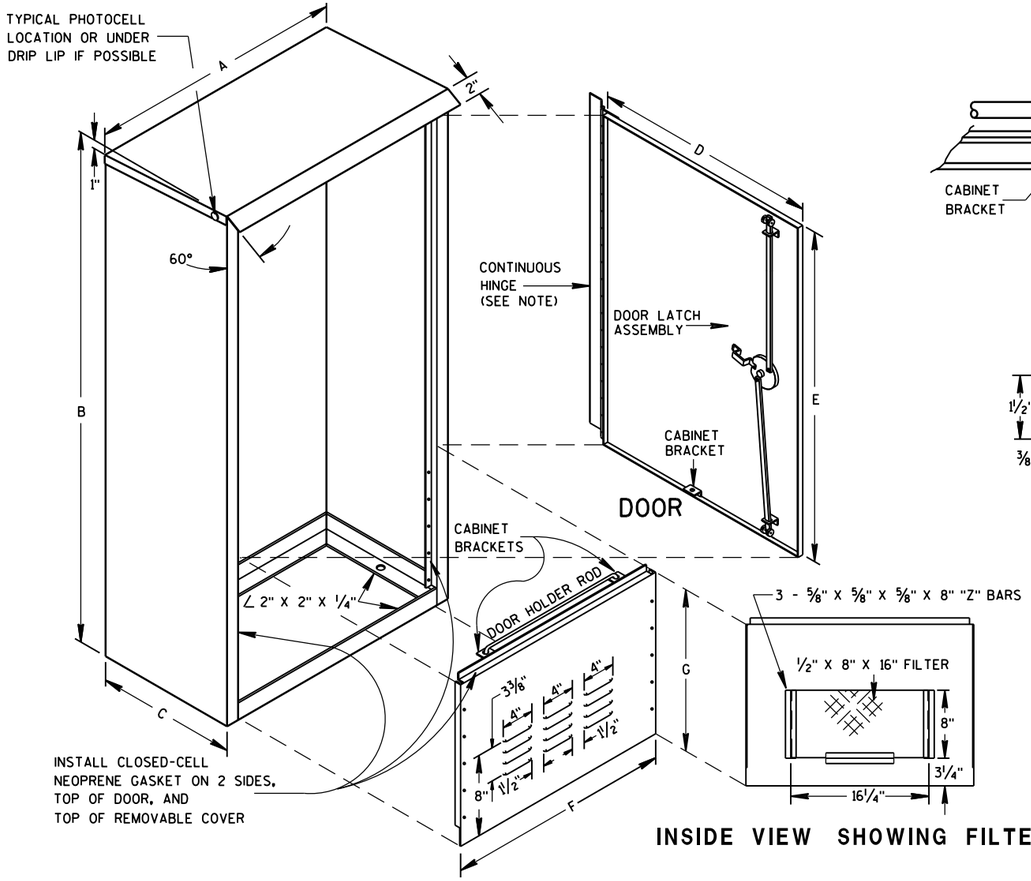
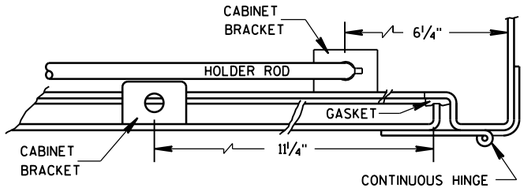
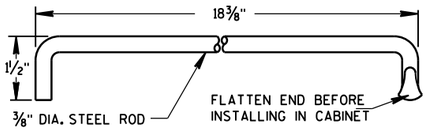


REMOVABLE COVER

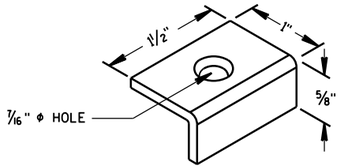
INSIDE VIEW SHOWING FILTER



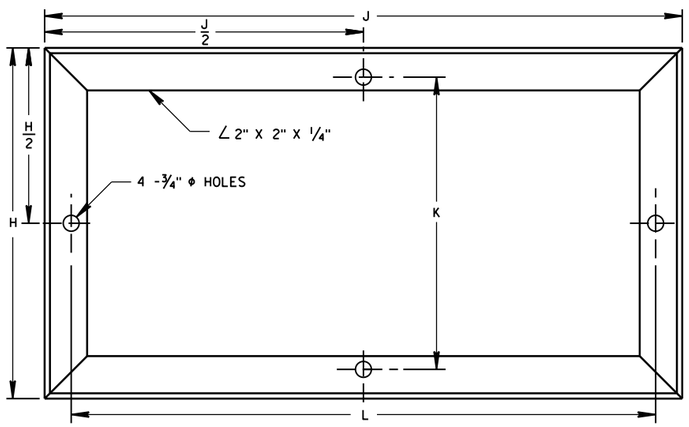
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

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.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

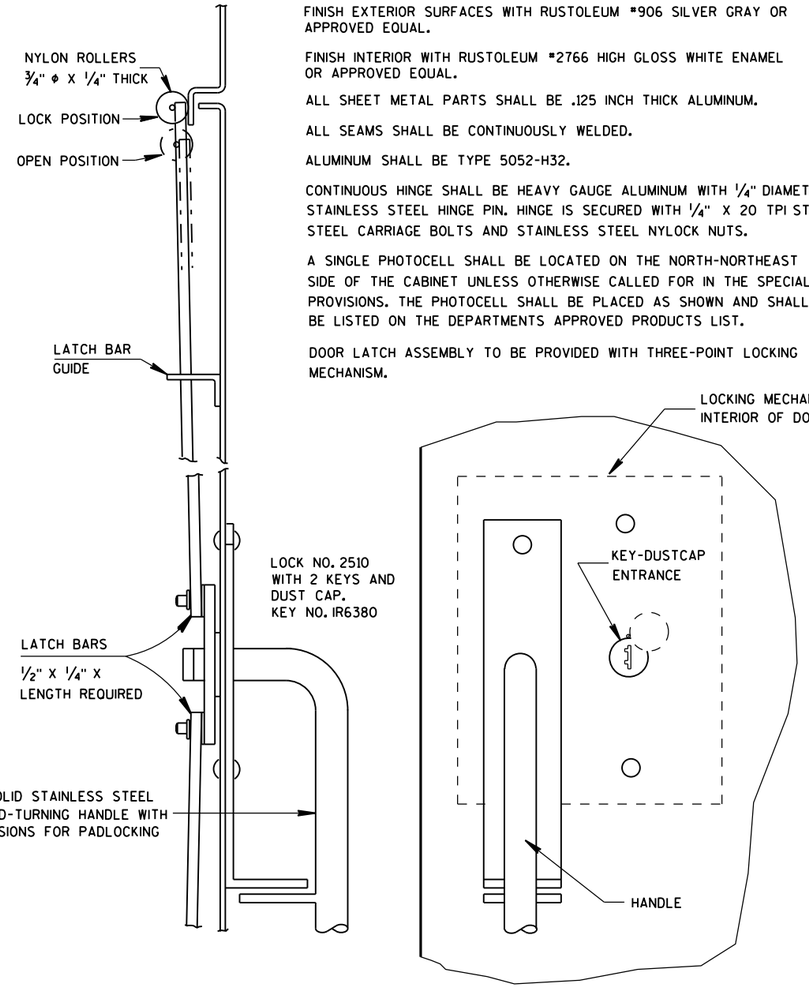
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

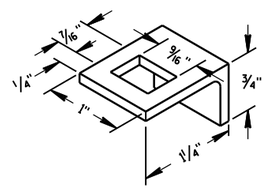
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
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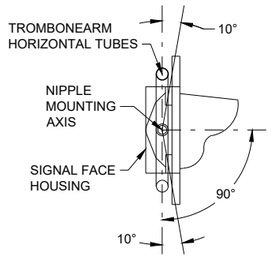
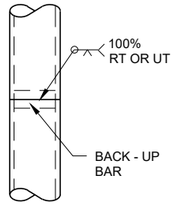


SECTION A-A

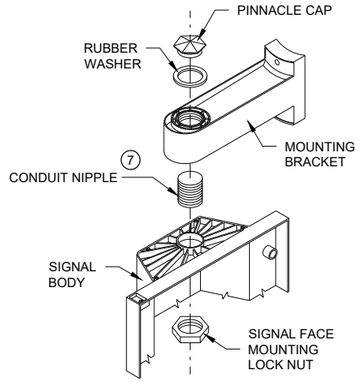
(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)

FOR MANUFACTURERS USE ONLY

WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN / BRIDGE FOR VERIFICATION AND APPROVAL.



POLE SPLICE DETAIL



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

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

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

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

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

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) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

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

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING,PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) ASREQUIRED, TO PLUMB THE SIGNAL FACES.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

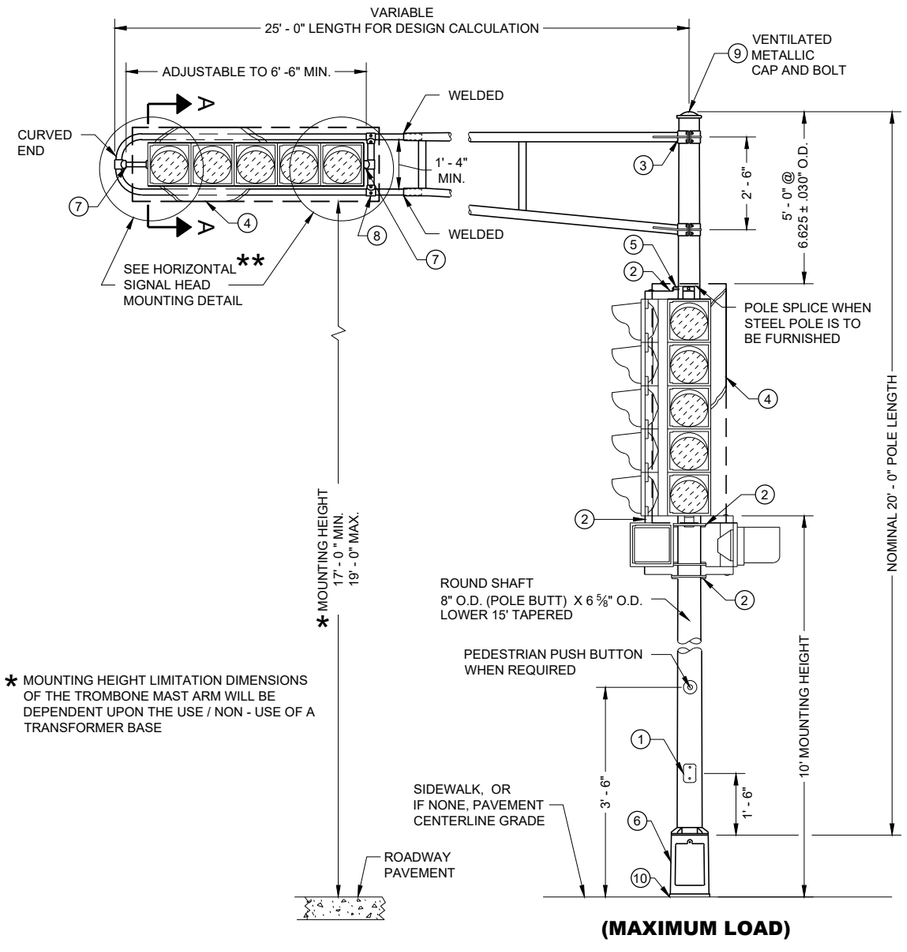
(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOTINTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUTIS THE SLIDING TYPE.

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

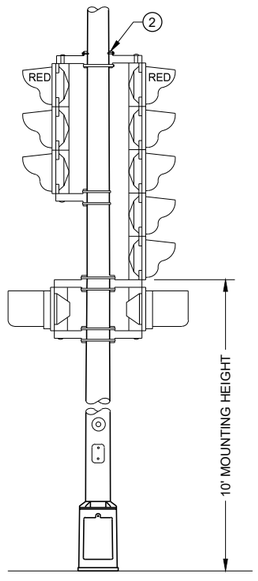
(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

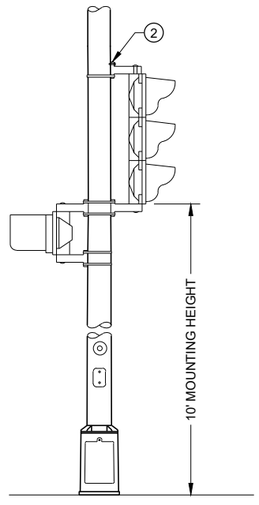


* MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE / NON - USE OF A TRANSFORMER BASE

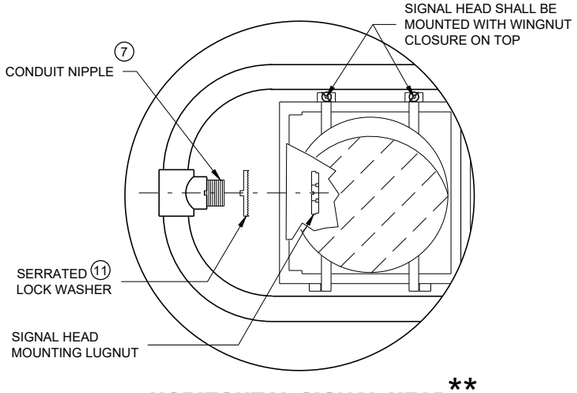
(MAXIMUM LOAD)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



HORIZONTAL SIGNAL HEAD MOUNTING DETAIL **

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

TYPE 2 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

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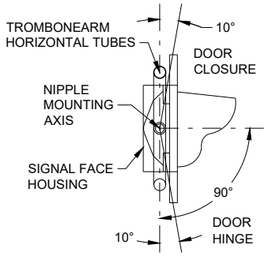
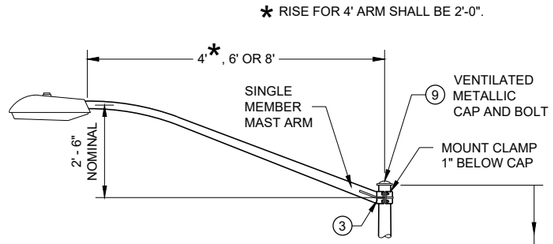
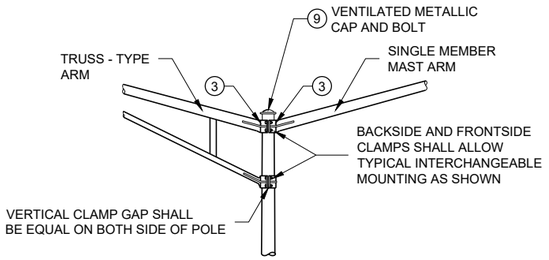
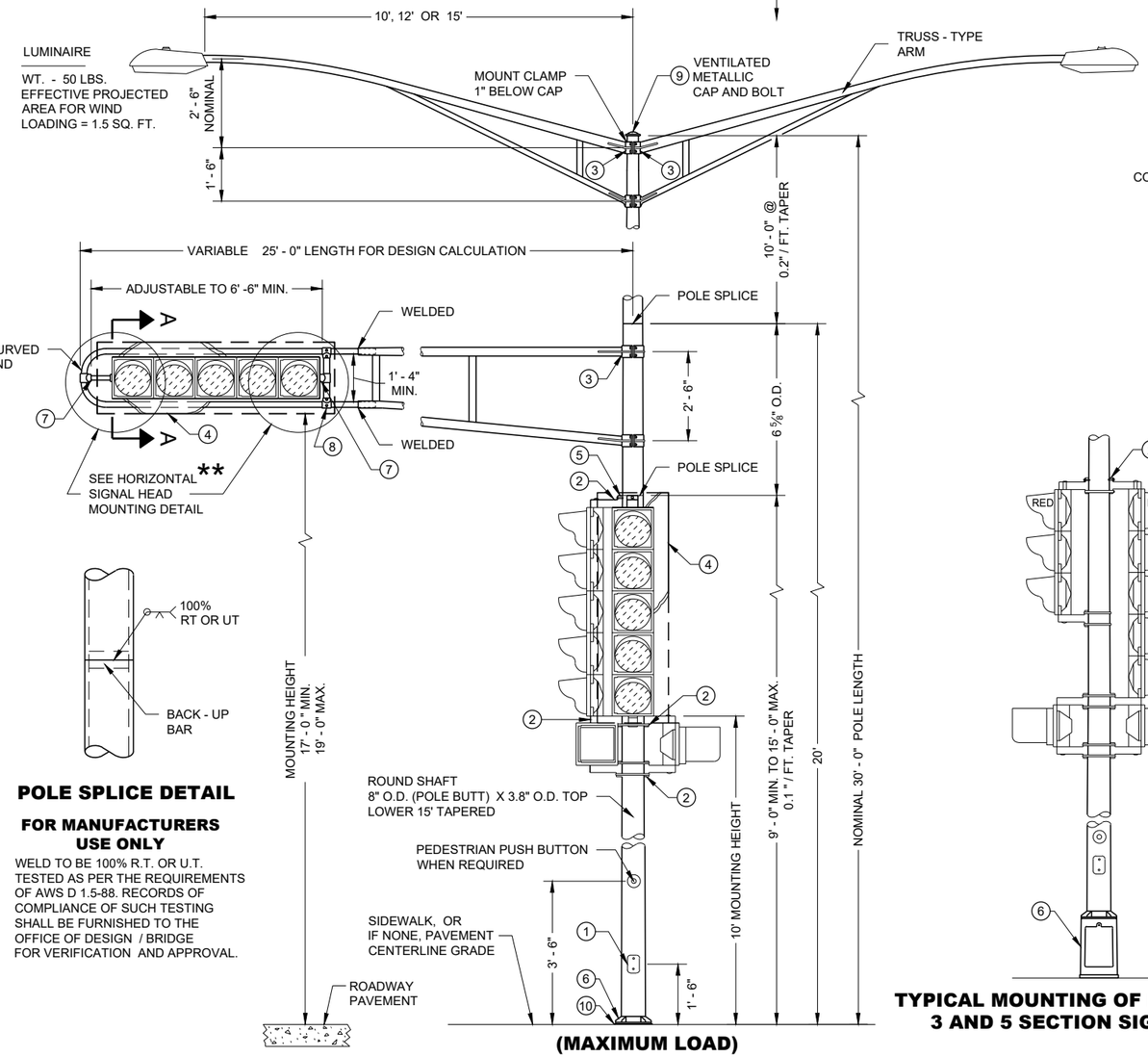


SECTION A-A





INTERCHANGEABLE MOUNTING DETAIL

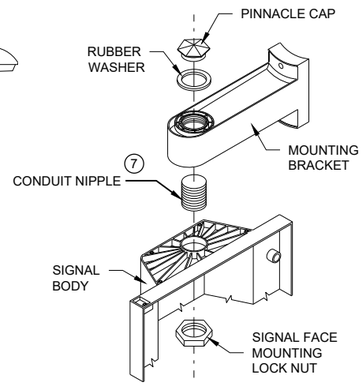


(MAXIMUM LOAD)

POLE SPLICE DETAIL

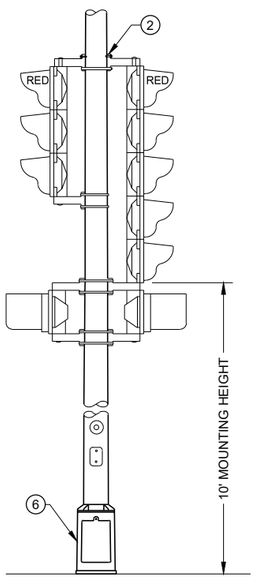
FOR MANUFACTURERS USE ONLY

WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN / BRIDGE FOR VERIFICATION AND APPROVAL.

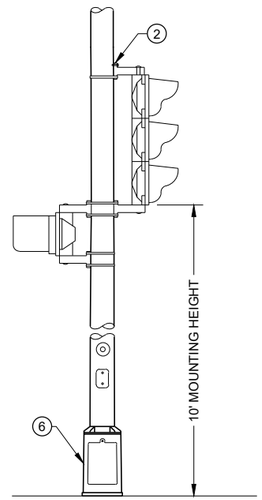


SIGNAL FACE MOUNTING DETAIL

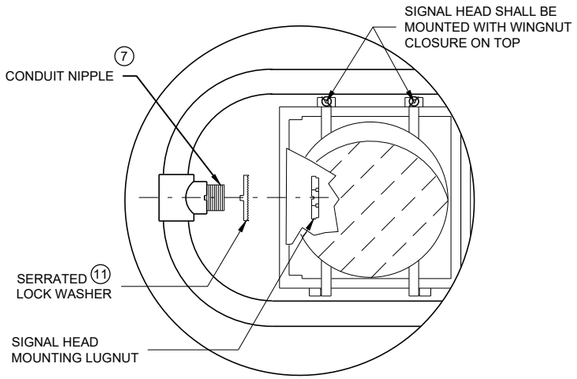
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



HORIZONTAL SIGNAL HEAD ** MOUNTING DETAIL

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

GENERAL NOTES

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

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

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

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8 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) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED. UNDER MAX LOADING, TYPE 3 POLE SHALL BE MOUNTED DIRECTLY TO ITS CONCRETE BASE.

(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

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

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

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

TYPE 3 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 3 (HEAVY DUTY)

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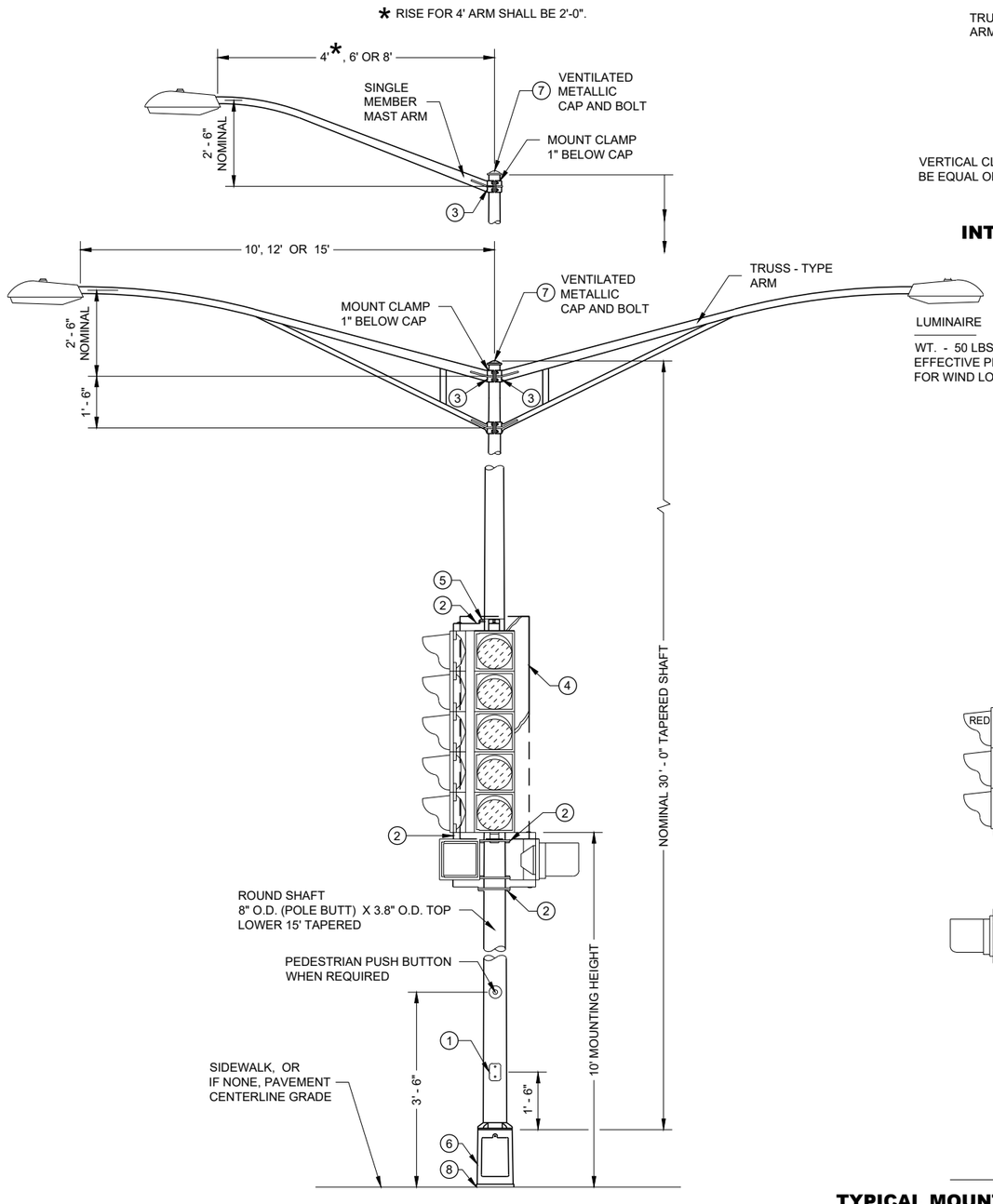
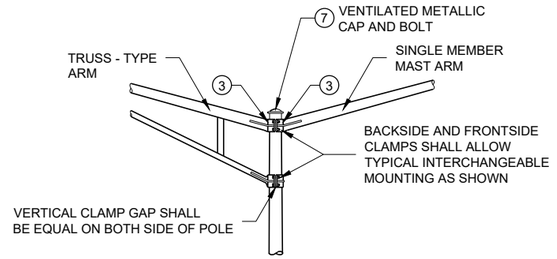


(MAXIMUM LOAD)



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

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

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

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) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

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

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

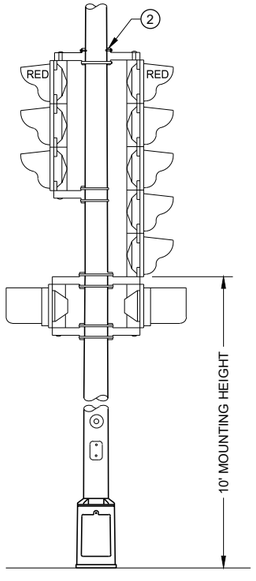
(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

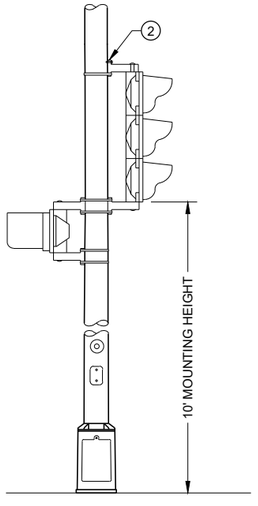
(7) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

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

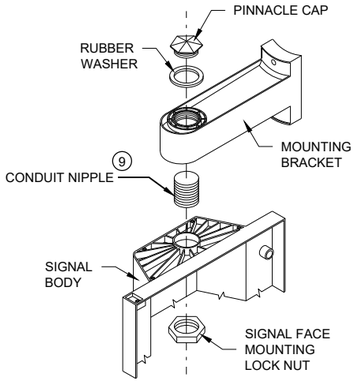
(9) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



SIGNAL FACE MOUNTING DETAIL
(BANDED)

TYPE 4 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

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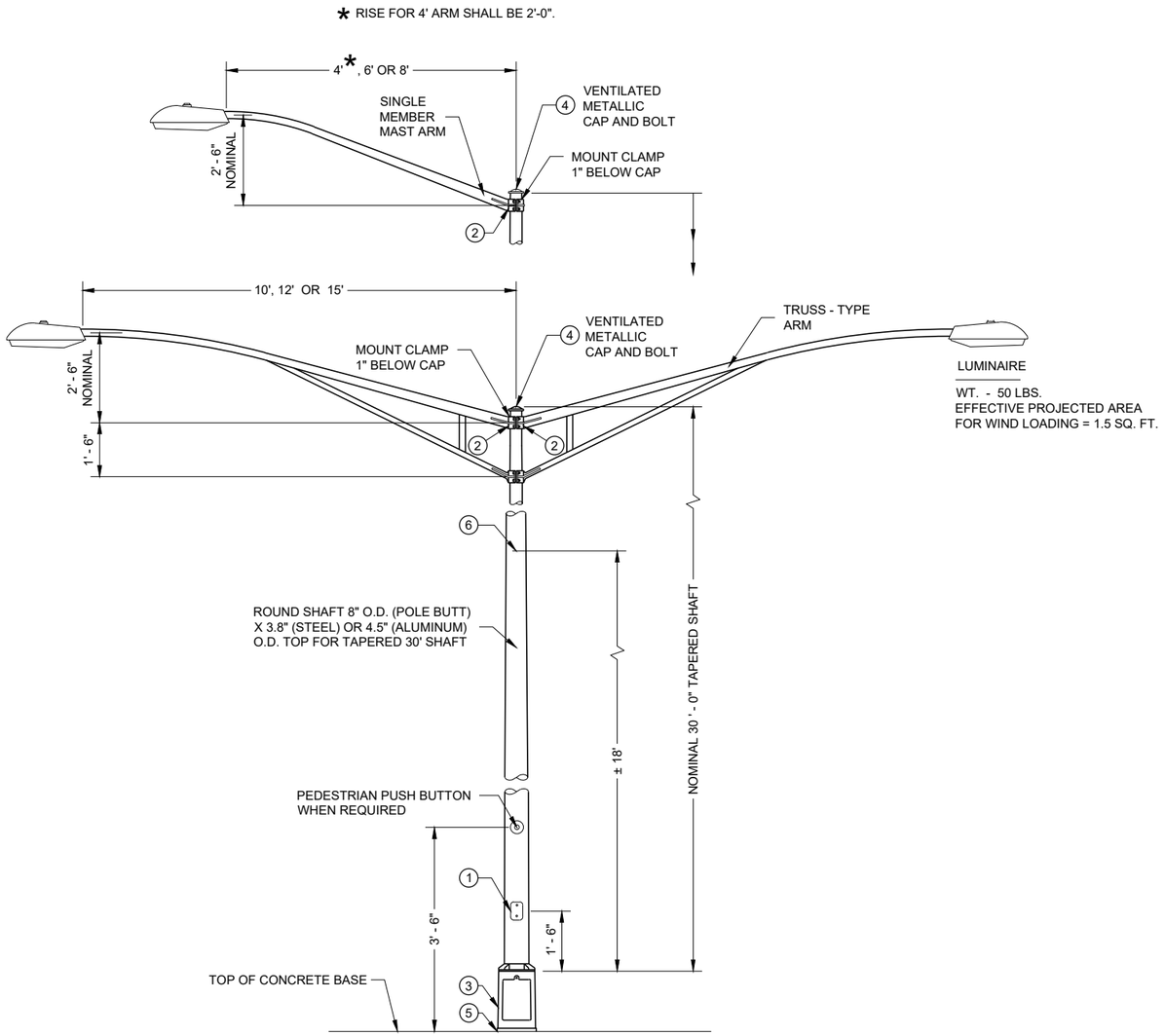


TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

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.

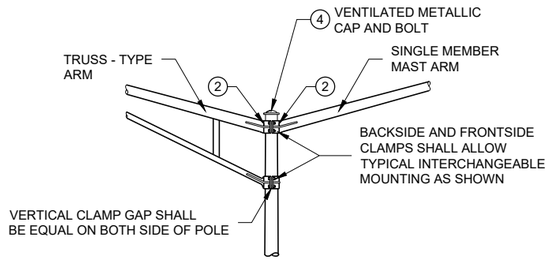
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(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.

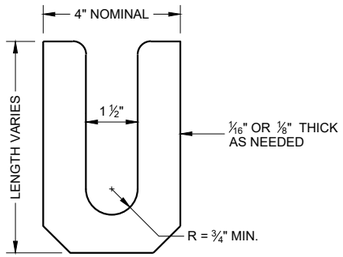
(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.

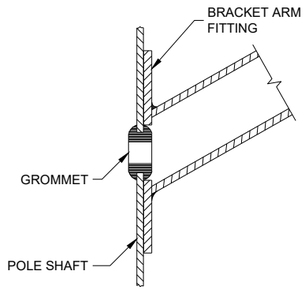


INTERCHANGEABLE MOUNTING DETAIL

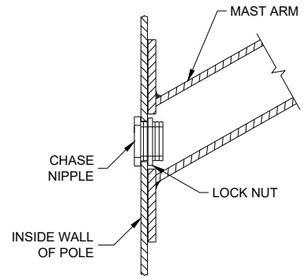
POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)



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.

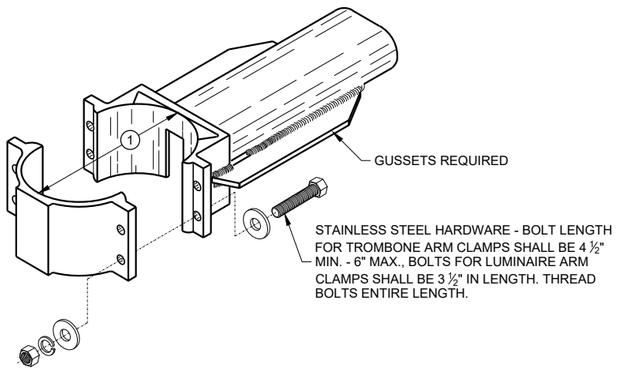
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

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

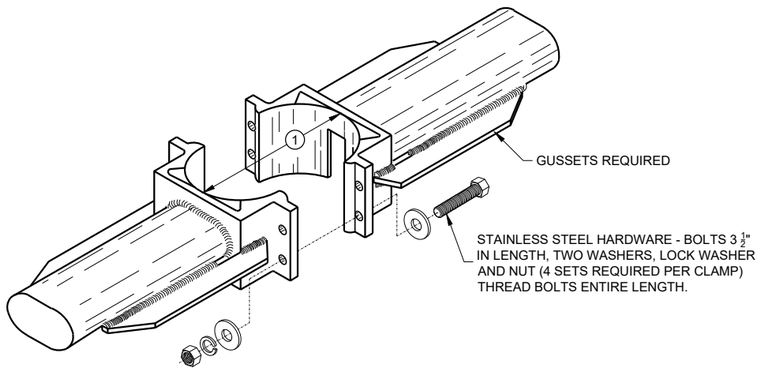
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

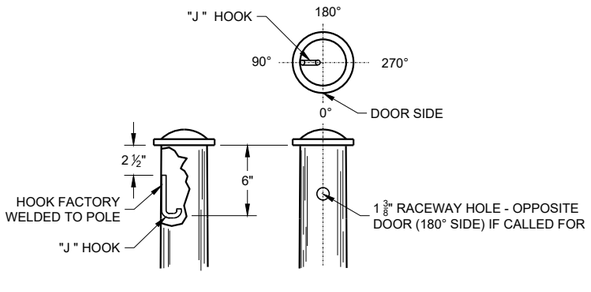
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



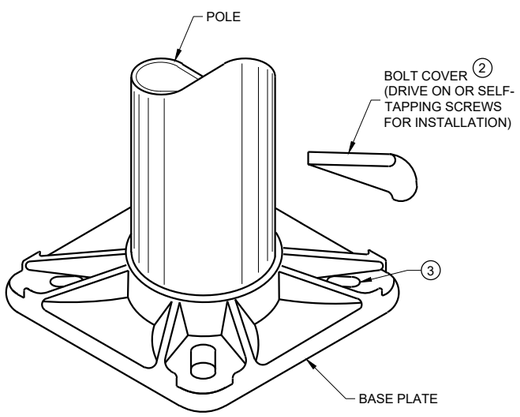
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



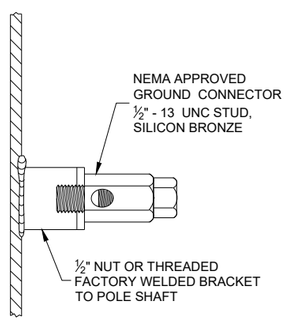
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

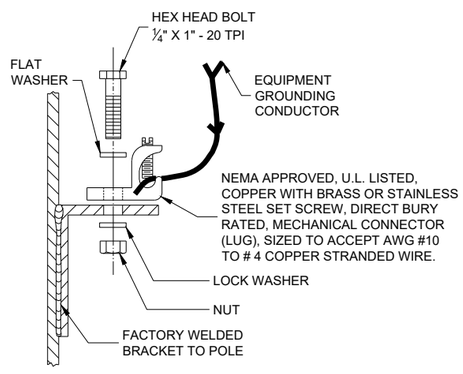


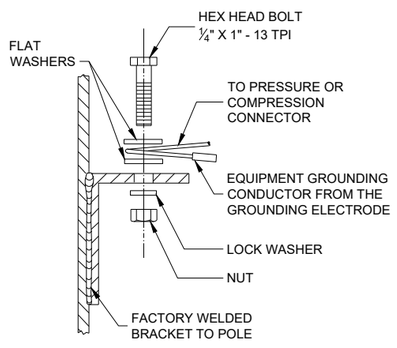
TYPICAL "J" HOOK LOCATION



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 249

FHWA

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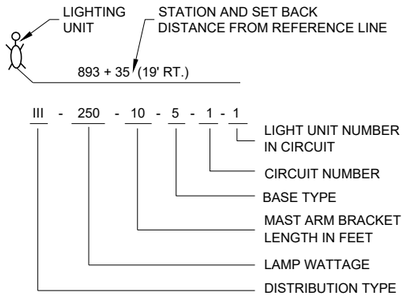
SDD 09A01 - 15g

GENERAL NOTES

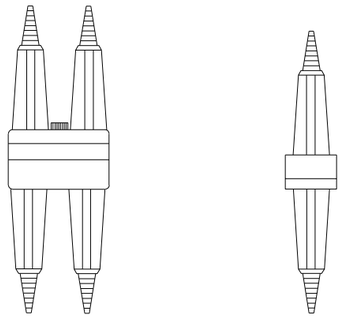
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

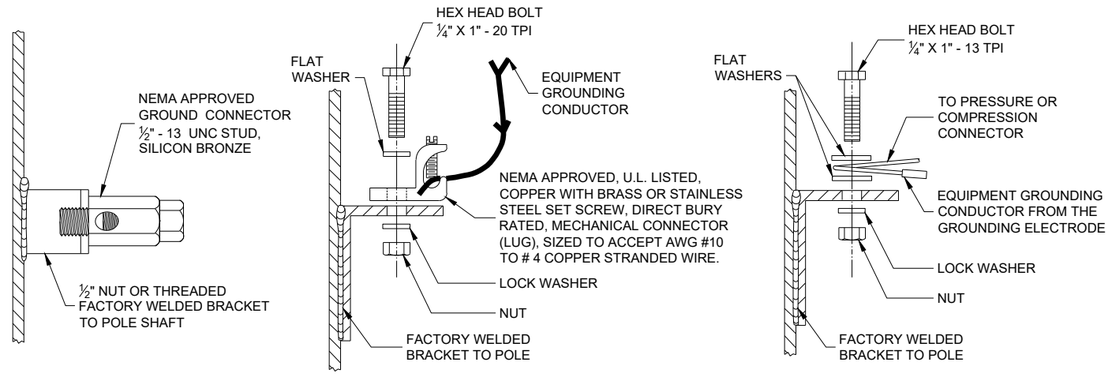


LIGHTING UNIT CODE
(TYPICAL)

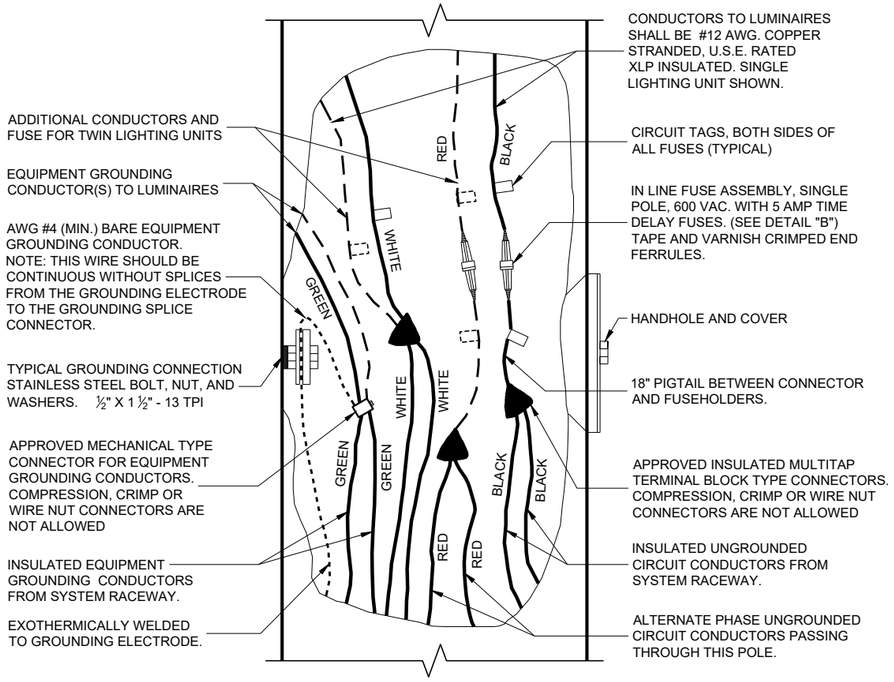


DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT

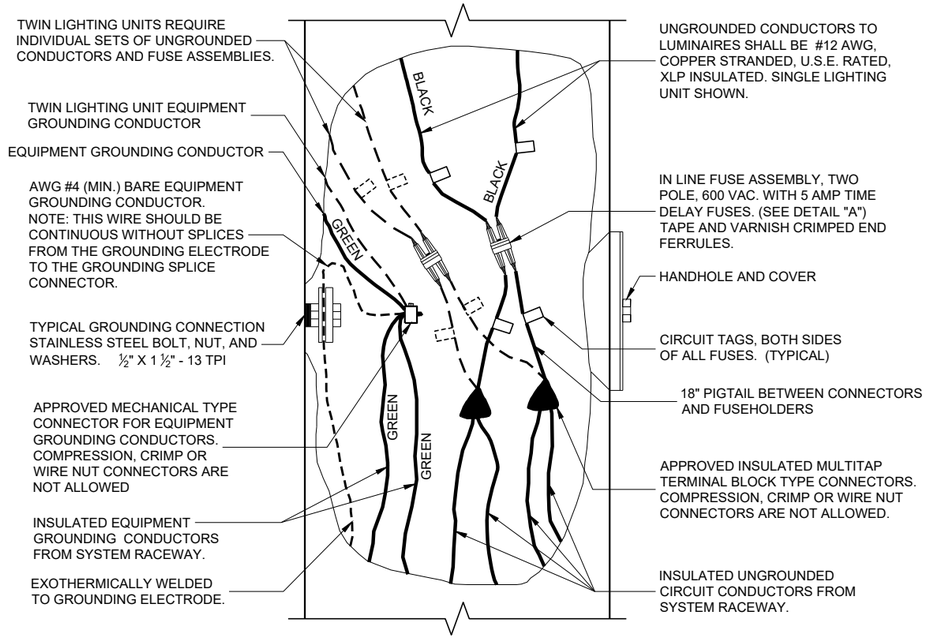
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



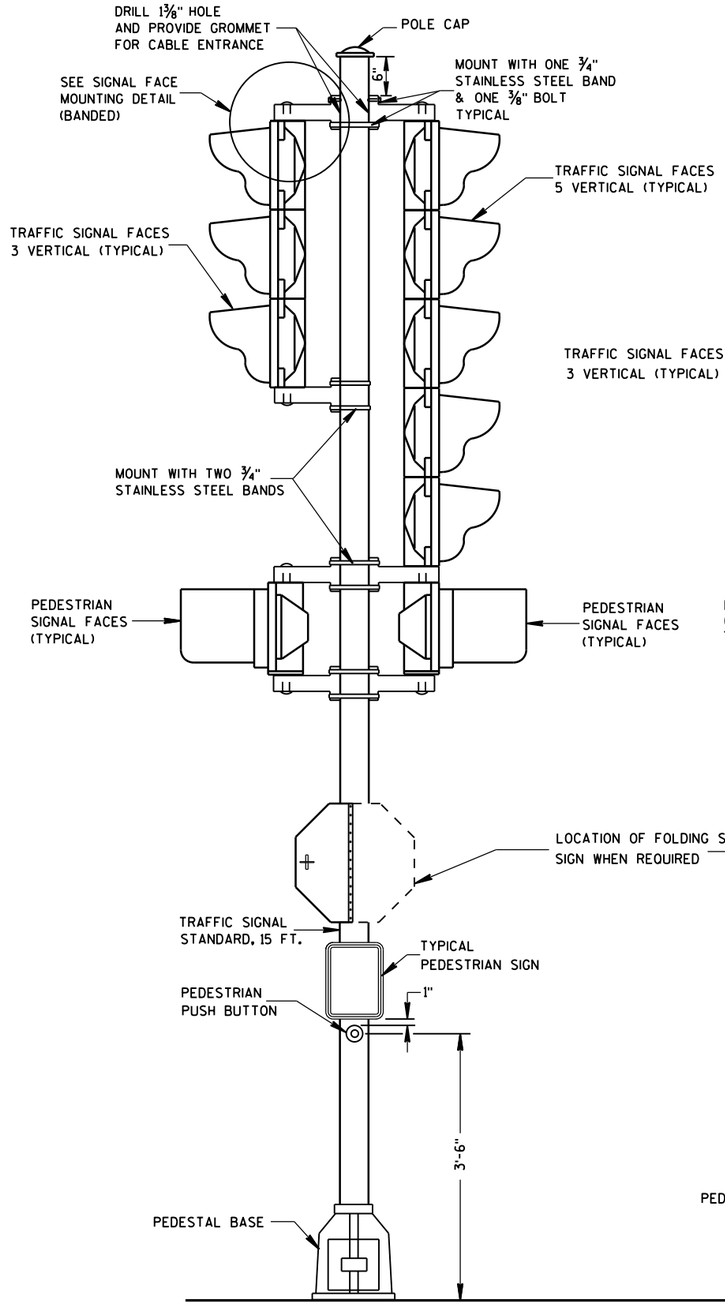
2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT POLE WIRING

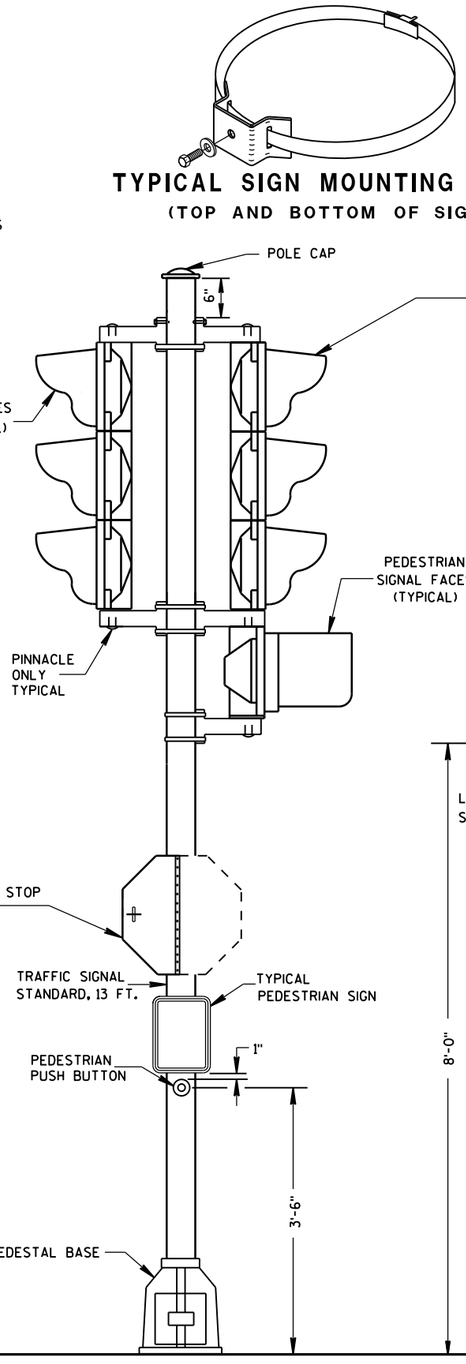
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 250

FHWA

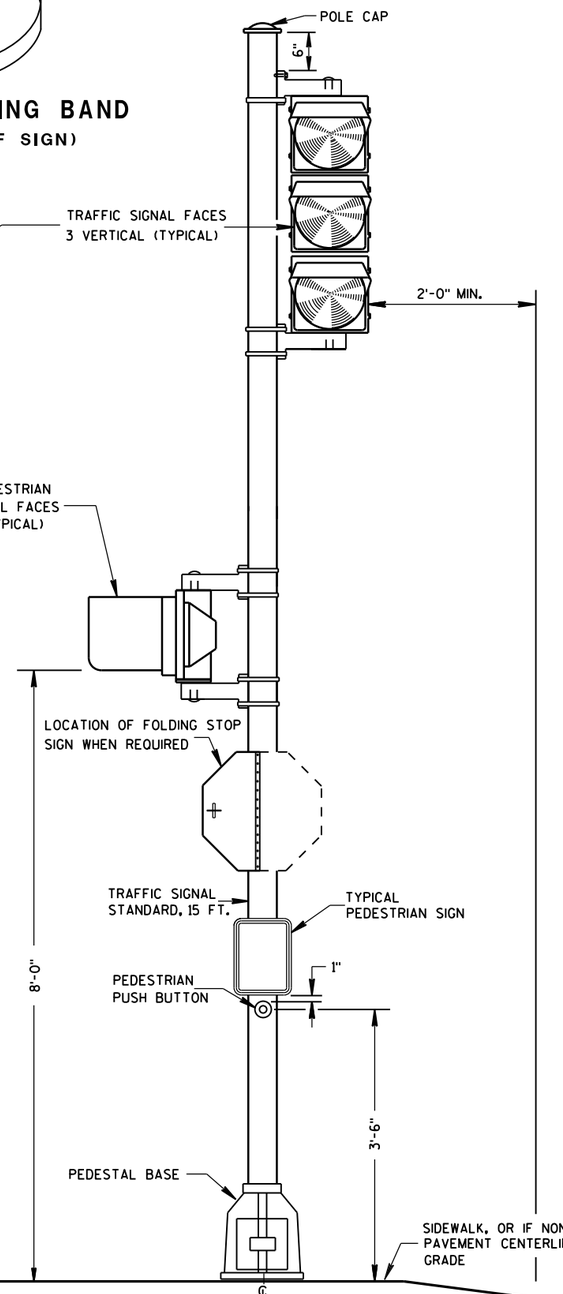


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

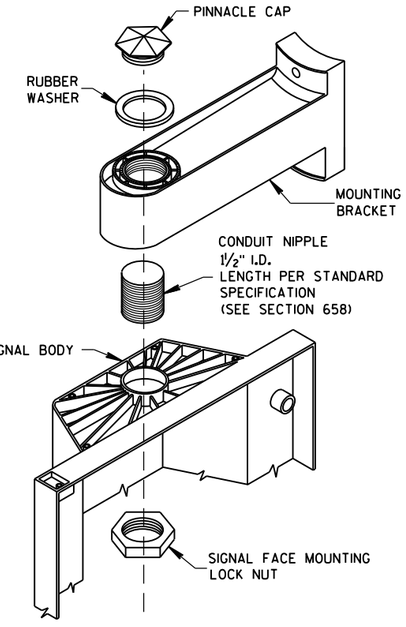
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

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



SIGNAL FACE MOUNTING DETAIL
(BANDED)

TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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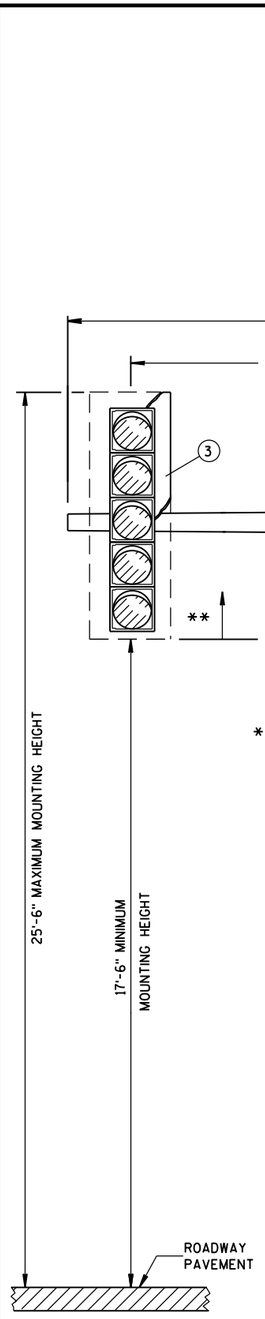
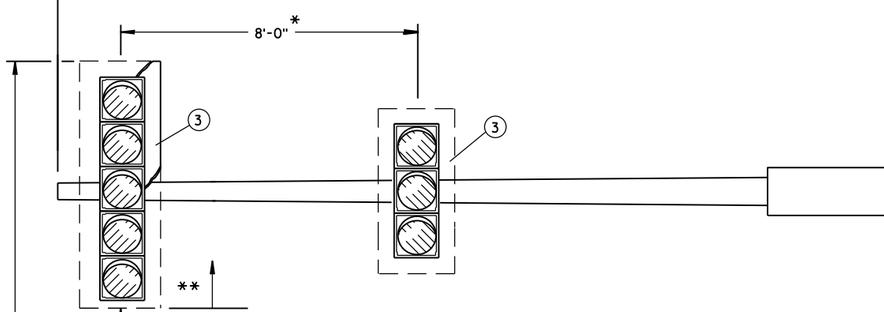
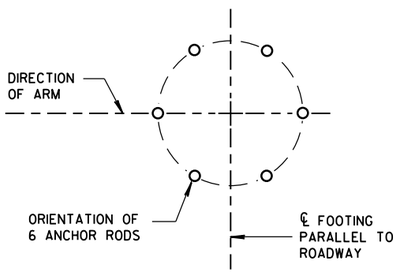


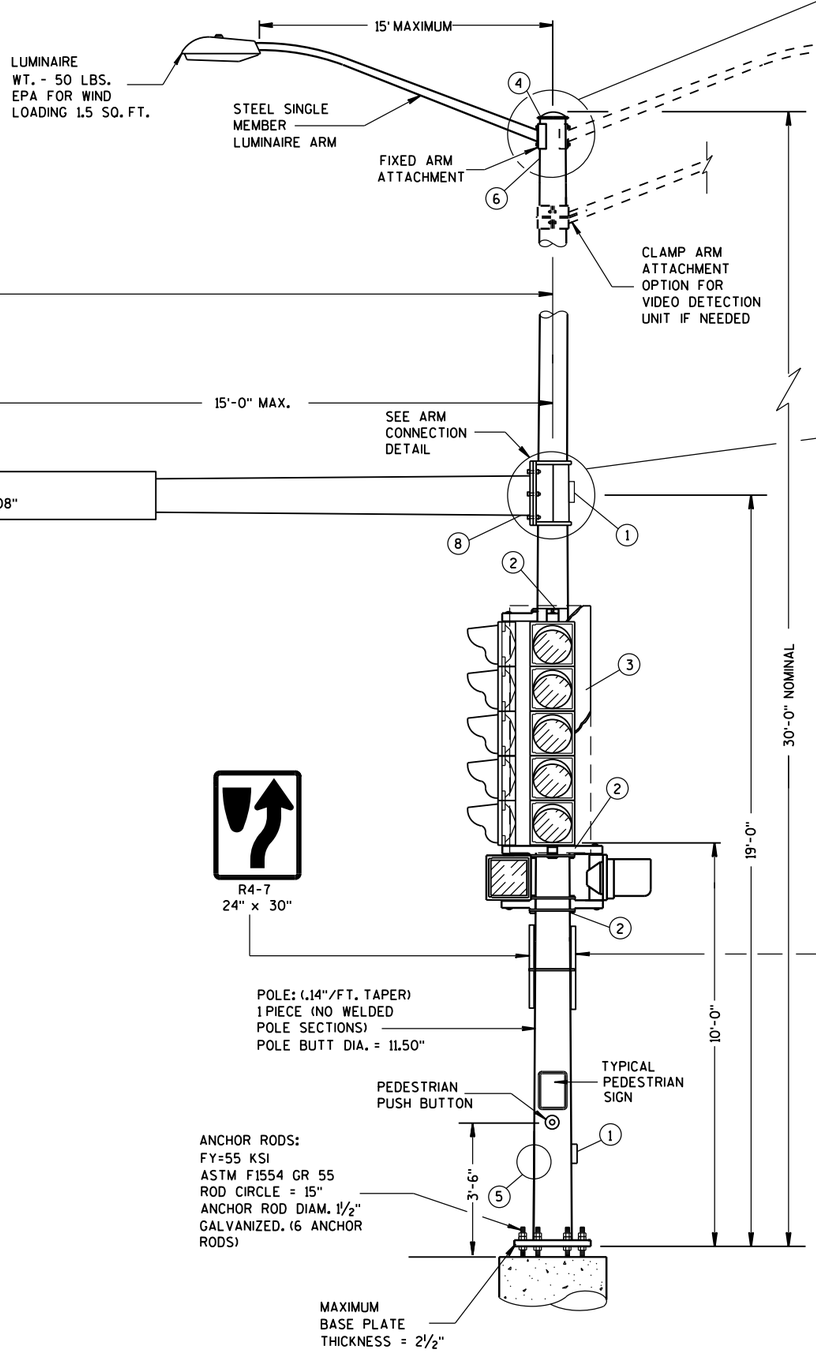


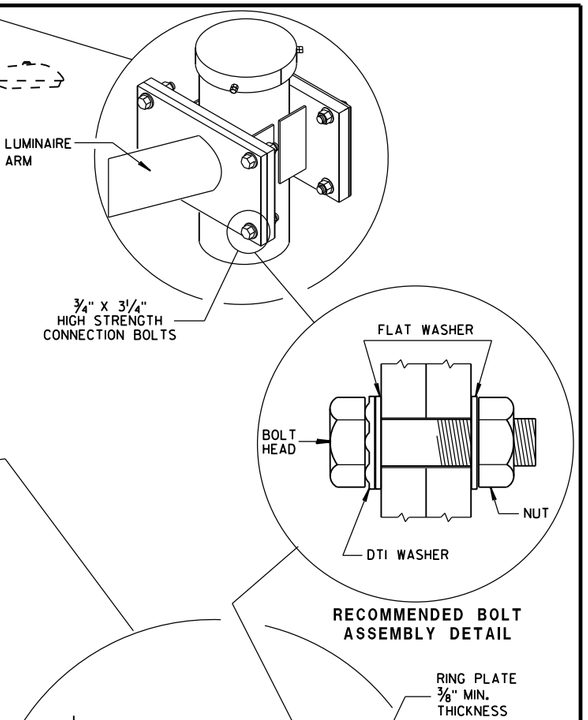
* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

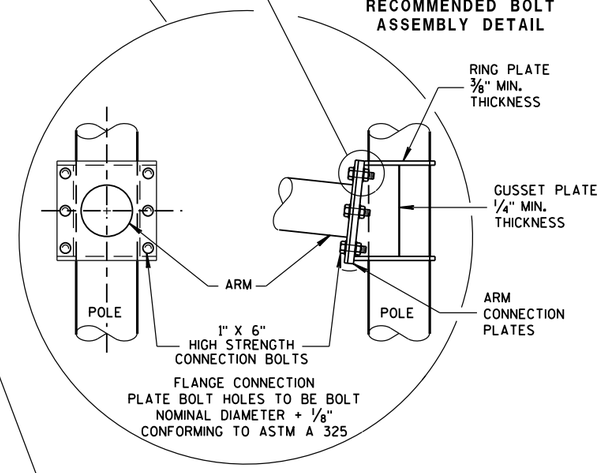


ANCHOR ROD LOCATION





RECOMMENDED BOLT ASSEMBLY DETAIL



6 BOLT ARM CONNECTION DETAIL

(MAXIMUM LOAD)

TYPE 10 POLE
15'- 30' MONOTUBE ARM

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 252
FHWA

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S.D.D. 9 E 8-8b

GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

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

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO 2013 6TH EDITION AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

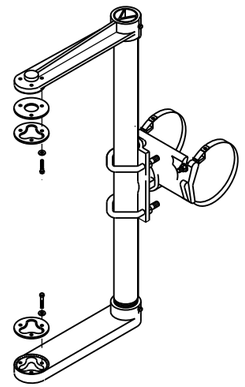
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

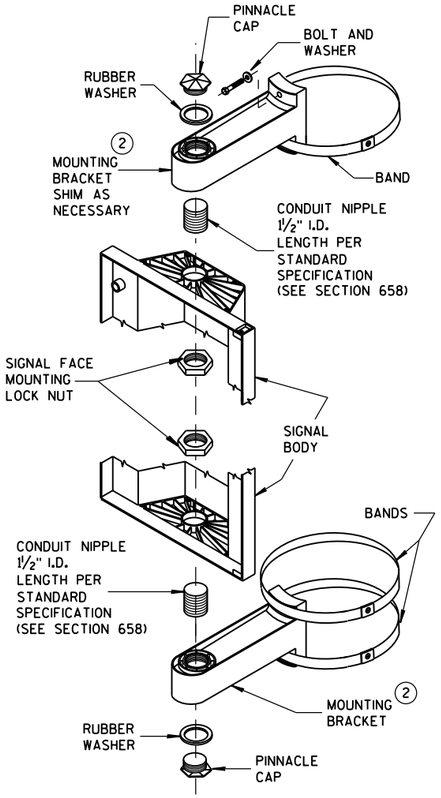
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

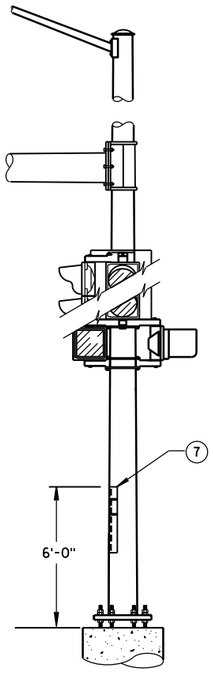


SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

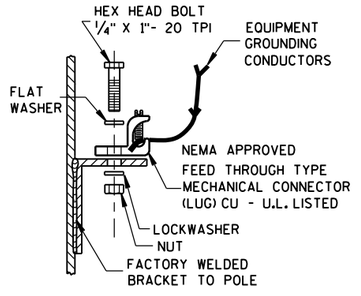
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE VERTICAL MOUNTING DETAIL

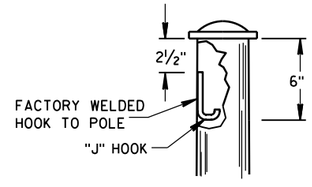


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 253
FHWA

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S.D.D. 9 E 8-8e

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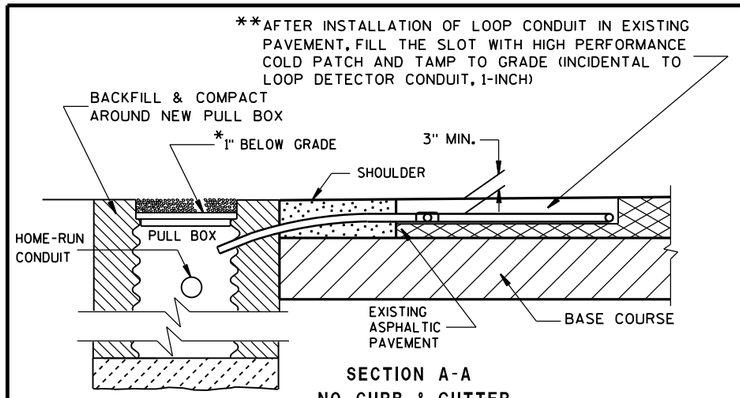
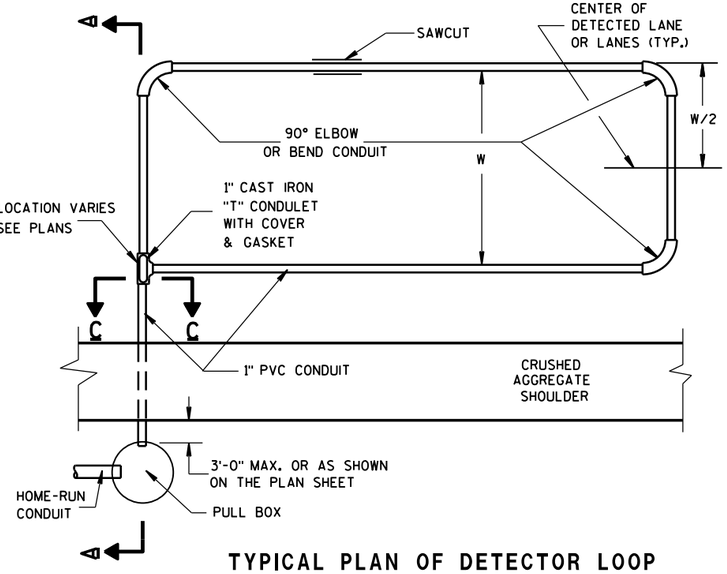
S.D.D. 9 E 8-8e



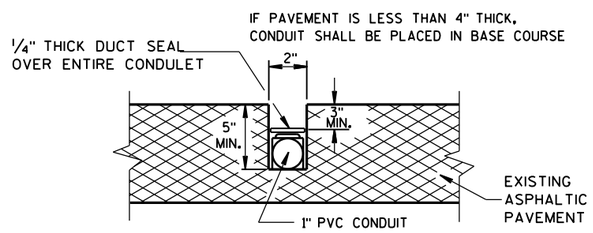
SECTION A-A
NO CURB & GUTTER

TYPICAL PLAN OF LOOP DETECTOR

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF DETECTOR LOOP



SIDE VIEW
SECTION C-C

LOOP DETECTOR SLOT DETAIL

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISITANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

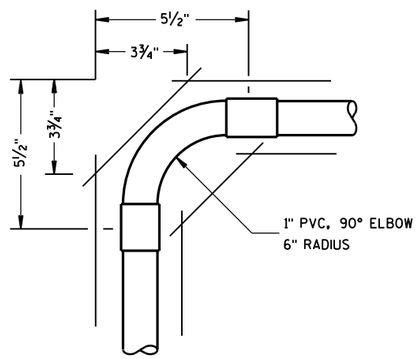
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

IN THE EVENT THAT THE EXISTING PAVEMENT IS MORE THAN 5 INCHES THICK, AND THEREFORE , THE 1 INCH CONDUIT DOES NOT REQUIRE INSTALLATION BELOW THE PAVEMENT INTO THE BASE COURSE, PLACE SOME OF THE TAR OR EPOXY SEALANT IN THE SLOT TO A DEPTH OF APPROXIMATELY 1/2 INCH BEFORE INSTALLATION OF THE CONDUIT. IF THE CONDUIT MUST BE PLACED IN THE BASE COURSE, DO NOT PLACE THE TAR OR EPOXY SEALANT IN THE SLOT.

ONCE THE 2" LOOP SLOT HAS BEEN CHIPPED OUT, THE LOOP INSTALLATION SHALL BE COMPLETED PRIOR TO OPENING THE LANE(S) TO TRAFFIC.

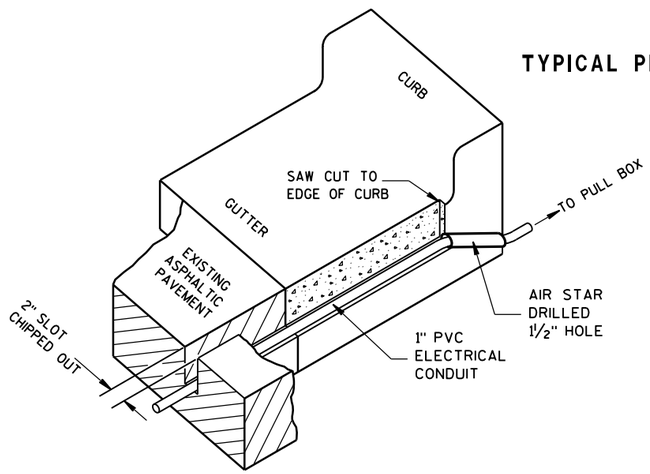
** AFTER THE HIGH PERFORMANCE COLD PATCH HAS BEEN TAMPED, SEAL THE SLOT/HIGH PERFORMANCE COLD PATCH/ PAVEMENT OPENING WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

IN THE EVENT HIGH PERFORMANCE COLD PATCH IS NOT AVAILABLE, AND FLEXIBLE TYPE EPOXY IS USED AS A LOOP SLOT FILLER, THE 2 INCH SLOT SHALL BE TOTALLY CLEAN AND DRY BEFORE ITS INSTALLATION. EPOXY USE SHALL BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER AND THE FURNISHED EPOXY SHALL BE INSTALLED AFTER WRITTEN APPROVAL BY THE PROJECT ENGINEER.



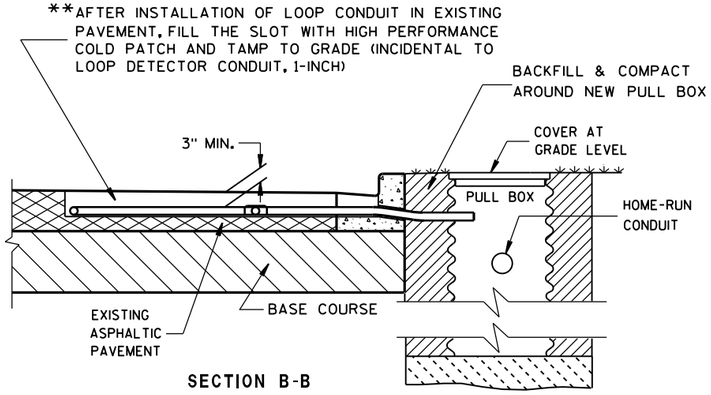
TOP VIEW

CORNER SAW SLOT DETAIL



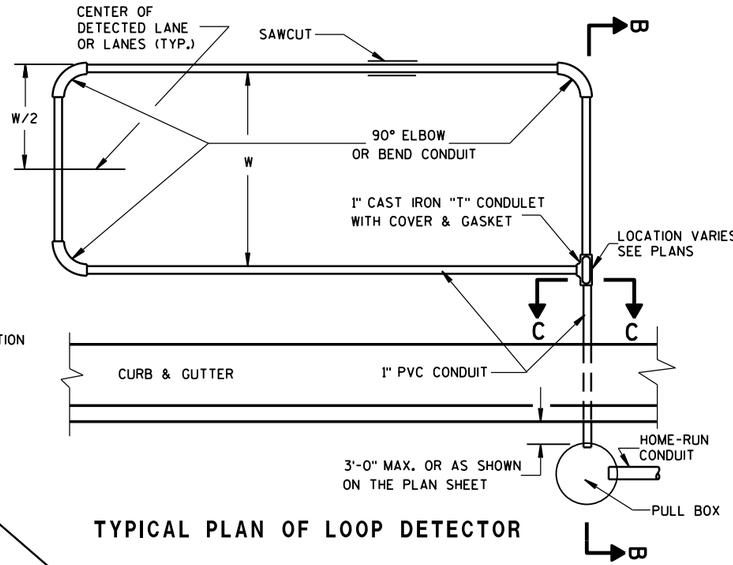
ISOMETRIC VIEW

TYPICAL SAW CUT DETAIL FOR LEAD-IN CONDUIT



SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR

LOOP DETECTOR INSTALLED IN EXISTING ASPHALTIC PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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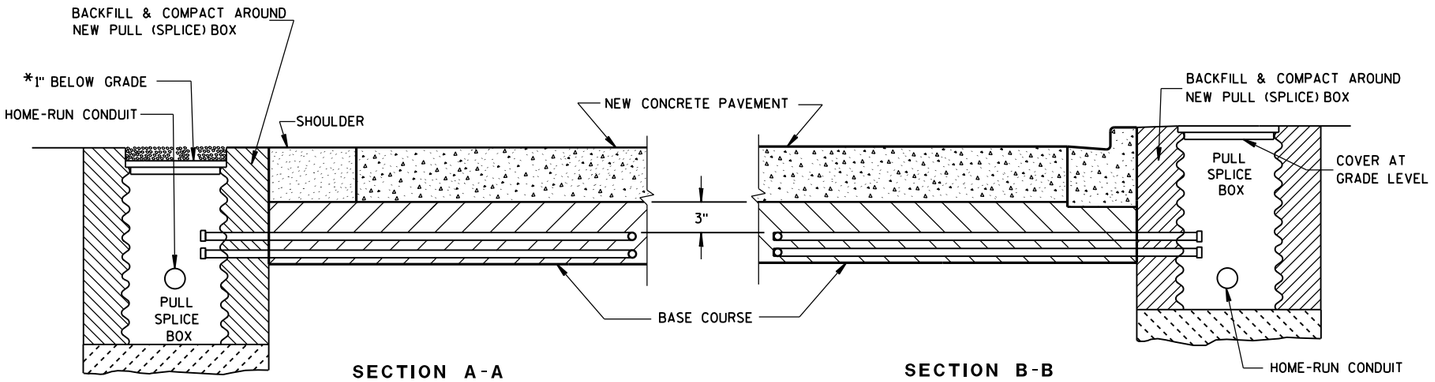
S.D.D. 9 F 13-4



SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

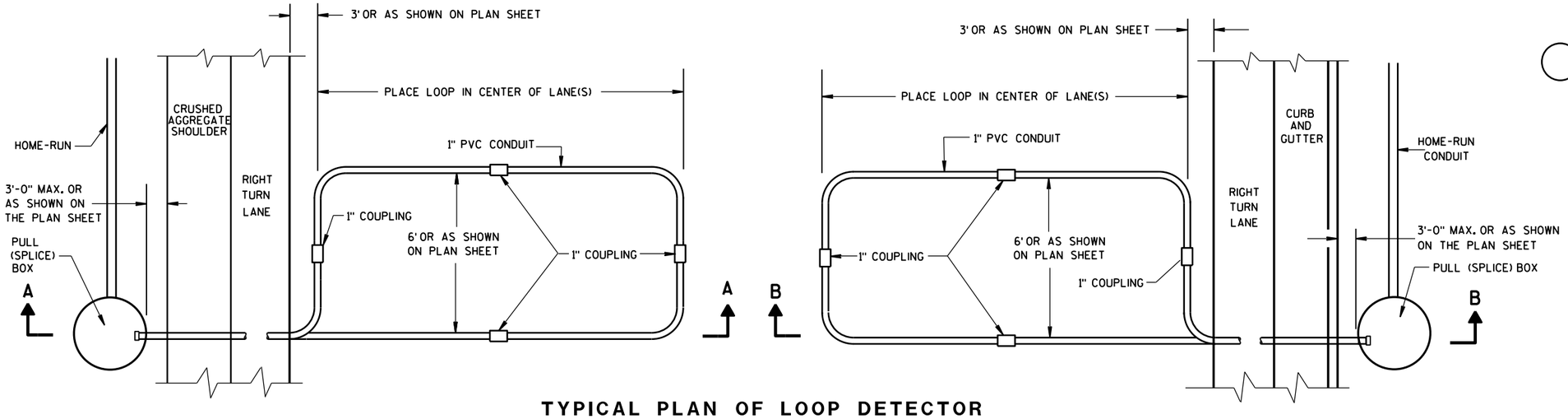
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

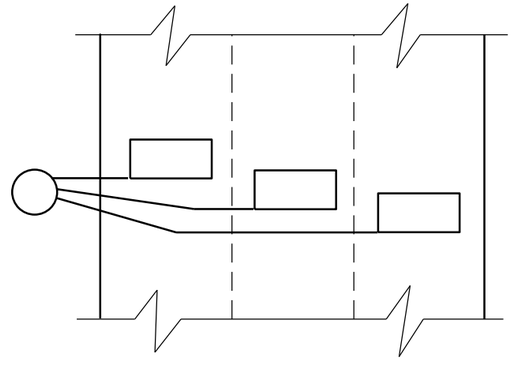
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE CONDUITS IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN OF LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



MULTI-LANE INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED Sept. 2014 — DATE /S/ Ahmet Demirbilek — STATE ELECTRICAL 255 FHWA

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S.D.D. 9 F 15-4b

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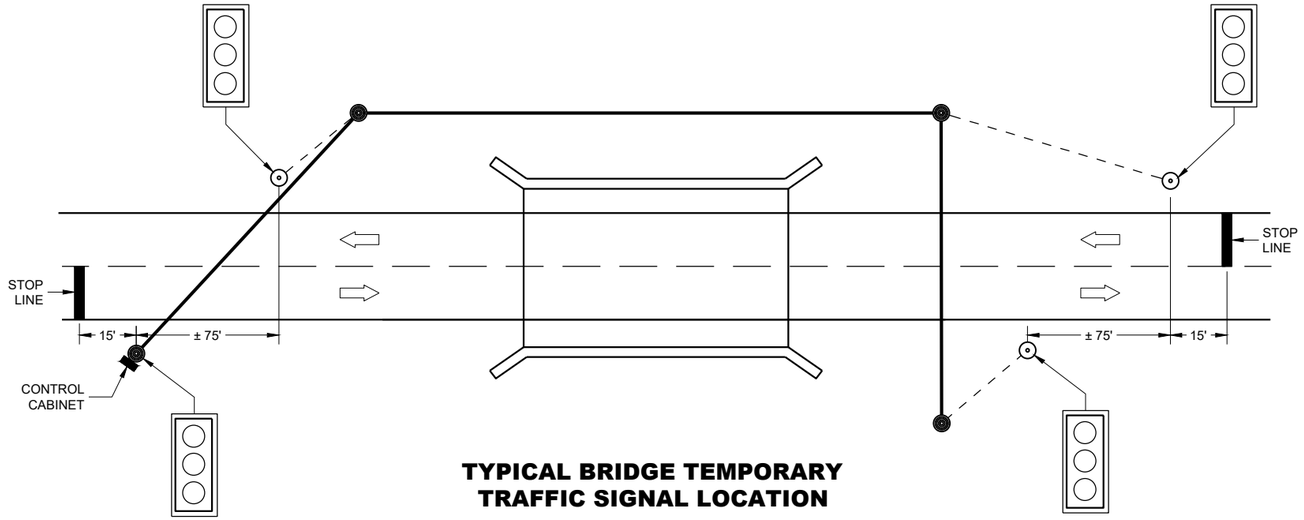
S.D.D. 9 F 15-4b



TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION

LEGEND

- WOOD POLE (NON-BREAKAWAY)
- WOOD POST (BREADAWAY)
- SIGNAL CABLE
- SIGNAL CABLE W/MESSENGER
- DIRECTION OF TRAFFIC
- LED TRAFFIC SIGNAL WITH BACKPLATE (3-12")

GENERAL NOTES

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

POLE MOUNTED TRAFFIC SIGNAL CONTROL CABINET MAY BE MOUNTED ON THE SERVICE POLE IF THE ELECTRICAL UTILITY ALLOWS THE INSTALLATION.

WHEN UTILITY POLES ARE USED TO SPAN THE TEMPORARY OVERHEAD CABLE, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER OF THE POLES AND GIVEN TO THE PROJECT MANAGER. ALL PERTINENT UTILITY AND CODE CLEARANCES SHALL BE MAINTAINED.

WOOD POLES (NON-BREAKAWAY) SHALL BE NO CLOSER TO EDGE OF PAVEMENT THAN OFFSET DISTANCE CHART ALLOWS OR 4 FEET BEHIND PROTECTIVE BARRIER (BEAM GUARD, ETC.).

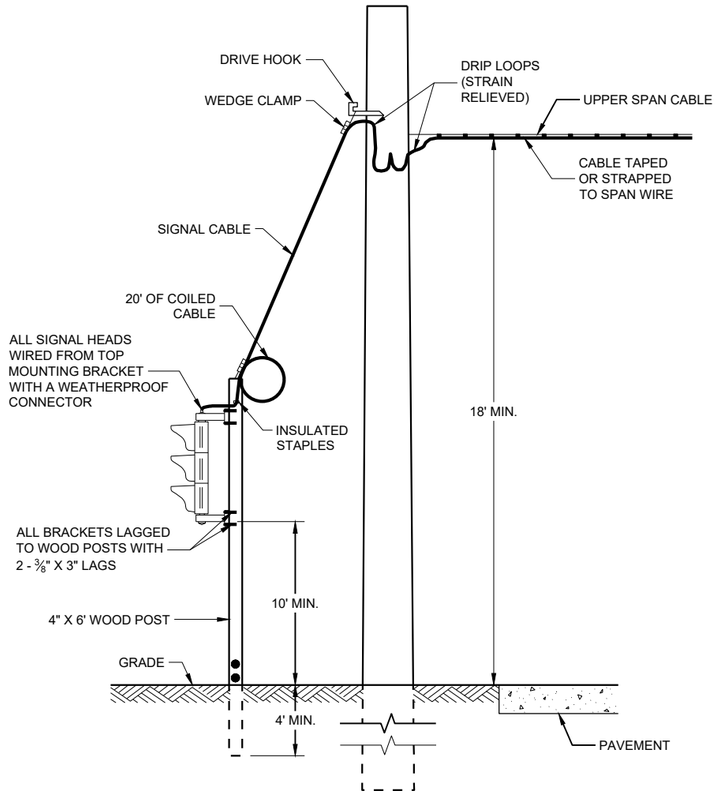
WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

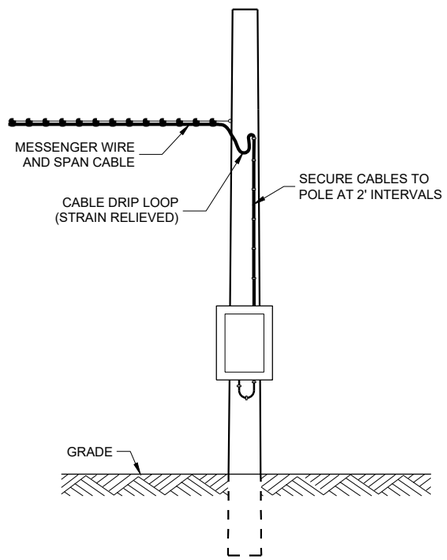
TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

EACH TRAFFIC SIGNAL SHALL HAVE A BACKPLATE.

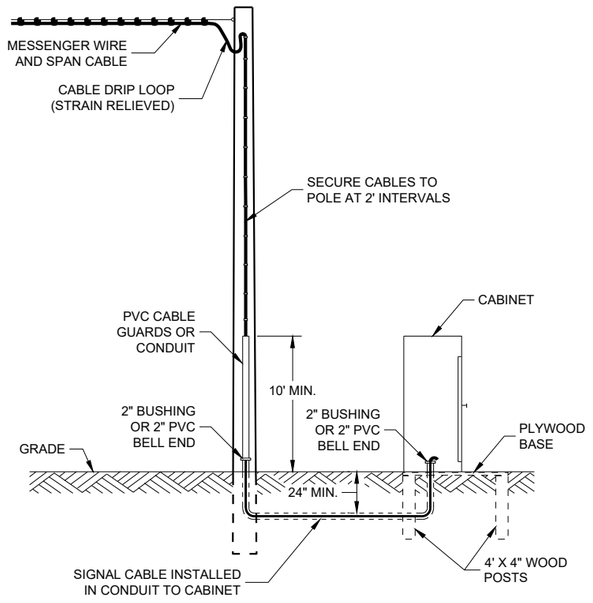
SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



TYPICAL DROP TO TRAFFIC SIGNAL FACE



POLE MOUNT CABINET INSTALLATION



GROUND MOUNT CABINET INSTALLATION

MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

OFFSET DISTANCES FOR TEMPORARY NON-BREAKAWAY POLES	
SPEED LIMIT	OFFSET DISTANCE*
GREATER THAN 45 MPH	18 FT
45 MPH OR LESS	12 FT
45 MPH OR LESS W/CURBS	2 FT

* NOTE: OFFSET MEASURED FROM OUTER EDGE OF OUTSIDE THRU LANE.

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Ahmet Demirbilek — ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD09G02 - 05a

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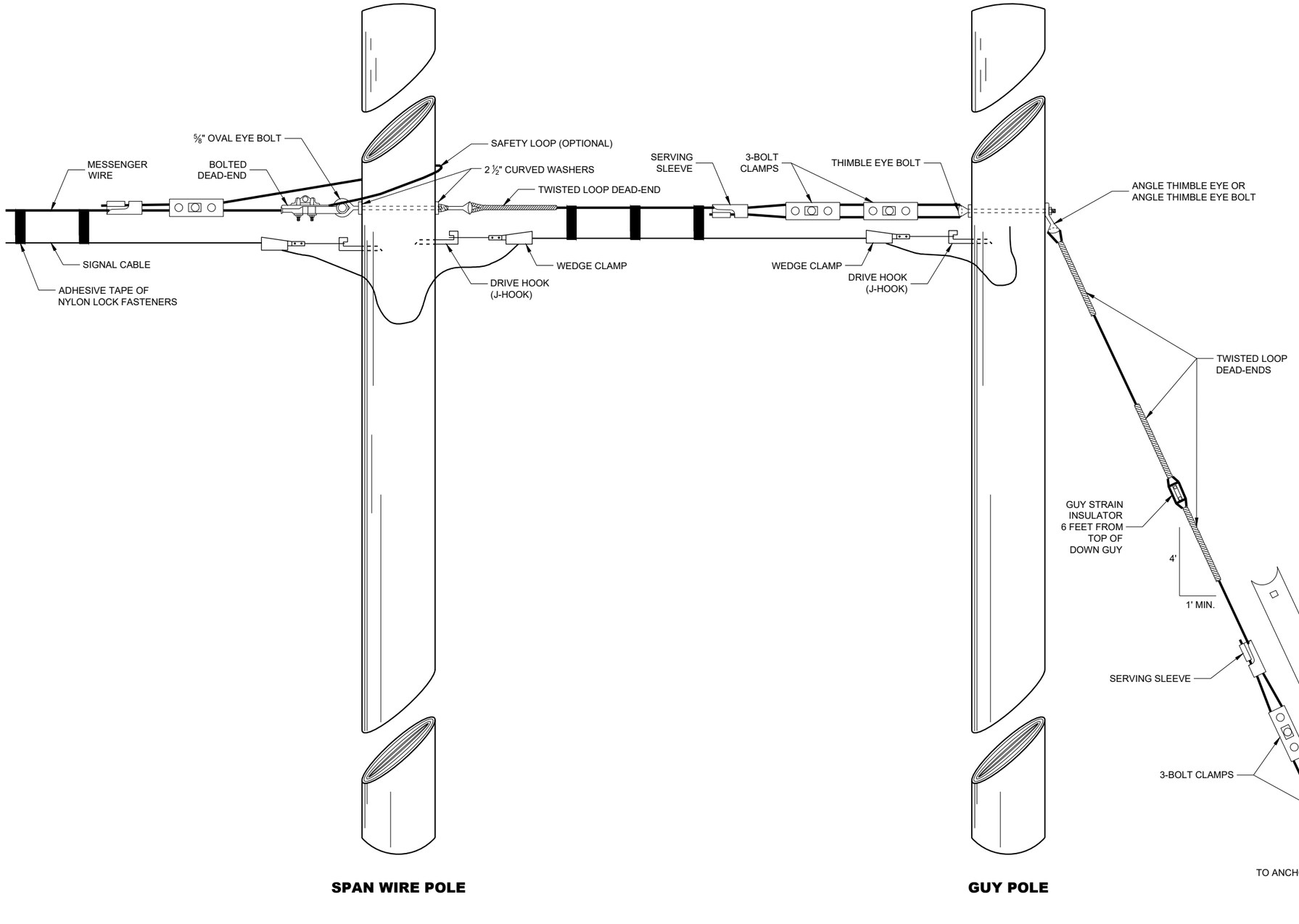
SDD09G02 - 05a

GENERAL NOTES

USE ¾" DRILL IN WOOD POLE TO PROVIDE FOR ⅝" BOLTS.



SPAN WIRE POLE

GUY POLE

TYPICAL DEAD-ENDINGS OR GUYING

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015 — DATE
/S/ Ahmet Demerbilek — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD09G02 - 05b

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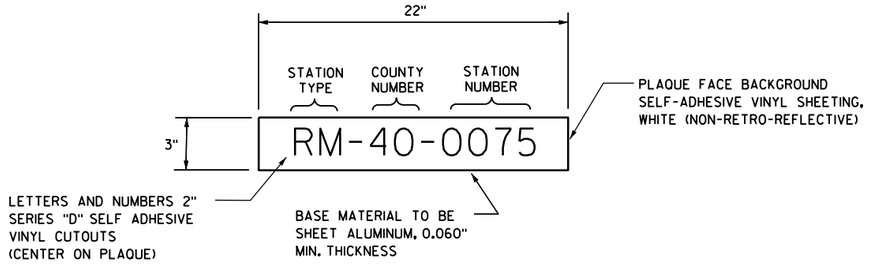
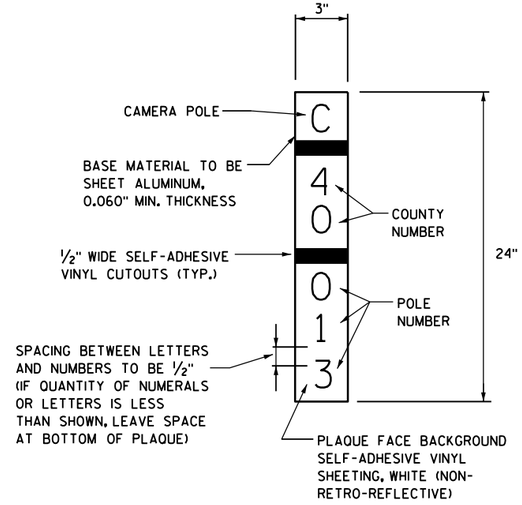
SDD09G02 - 05b



CONTROL CABINET IDENTIFICATION PLAQUE DETAIL



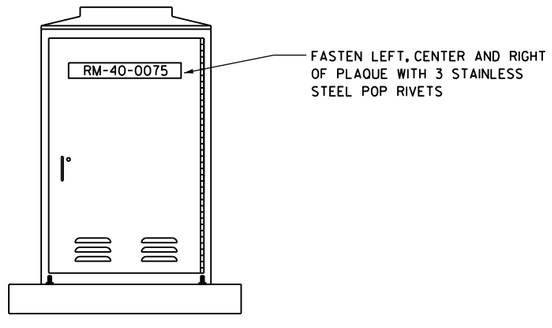
POLE IDENTIFICATION PLAQUE DETAIL

GENERAL NOTES

1. TWO PLAQUES PER CABINET REQUIRED ON CONTROL CABINET.
2. FASTEN ONE PLAQUE ON FRONT DOOR, UPPER HALF.
3. FASTEN ONE PLAQUE ON SIDE FACING LOCAL STREET. IF NO LOCAL STREET NEARBY, OR IF SUCH LOCATION COINCIDES WITH LOCATION OF PLAQUE IN NOTE (2), FASTEN PLAQUE ON REAR OF CABINET, UPPER HALF.
4. COUNTY NUMBER NOT REQUIRED ON RAMP METER CABINETS.

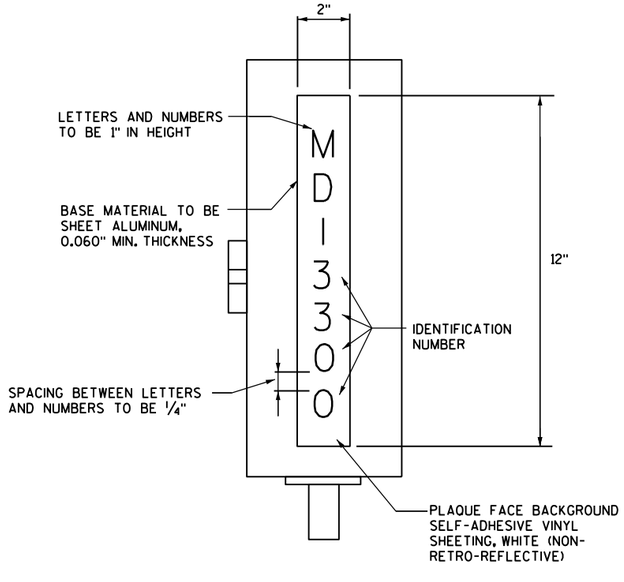
LEGEND STATION TYPE

RM - RAMP METER
CCTV - CLOSED CIRCUIT TELEVISION
ATR - AUTOMATIC TRAFFIC RECORDER
SDS - SYSTEM DETECTOR STATION
MD - MICROWAVE DETECTOR



CONTROL CABINET IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

(TYPICAL ALL CONTROL CABINETS)



MICROWAVE DETECTOR FIELD CABINET IDENTIFICATION PLAQUE DETAIL

IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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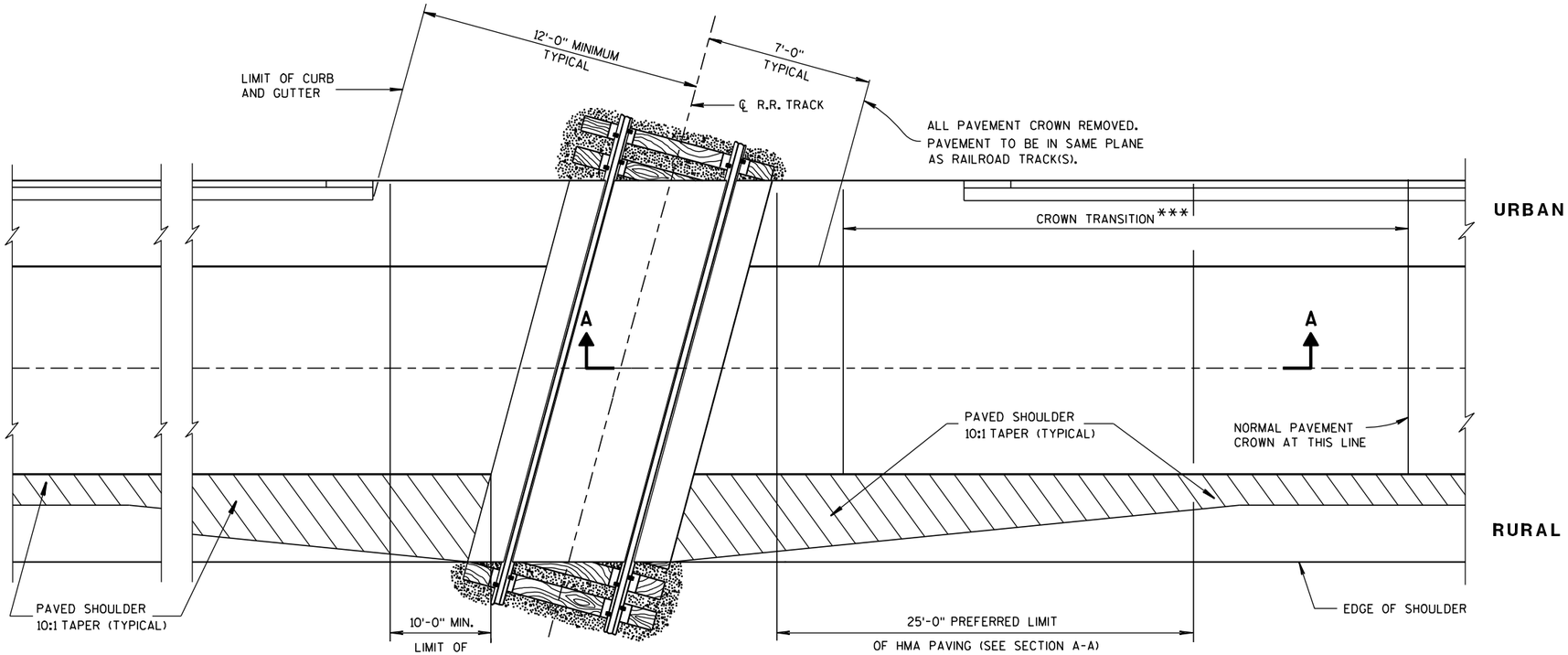
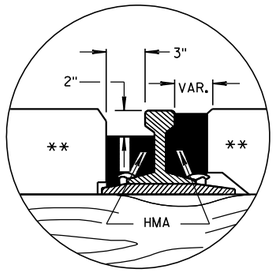




DETAIL B

HMA FLANGEWAY AND FIELD FILLERS

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.

TIMBER, CONCRETE OR RUBBER CROSSING SURFACE MATERIAL, RAILS, TIES, BALLAST, GEOTEXTILE FABRIC AND CROSSING DRAINAGE SYSTEM BY OTHERS UNLESS OTHERWISE PROVIDED.

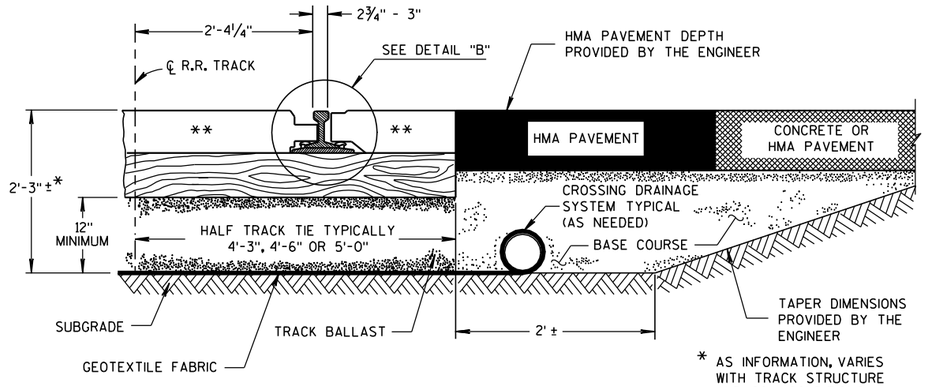
HMA PAVEMENT APPROACHES AND HMA PAVEMET CROSSING SURFACES TO BE PLACED BY CONTRACTOR UNLESS OTHERWISE PROVIDED.

HMA FLANGEWAY AND FIELD FILLERS TO BE PLACED AND THOROUGHLY HAND COMPACTED BY THE CONTRACTOR WHEN NOT PROVIDED BY OTHERS. SEE DETAIL B. HMA FILLERS NOT REQUIRED WHEN RUBBER FILLERS ARE PROVIDED.

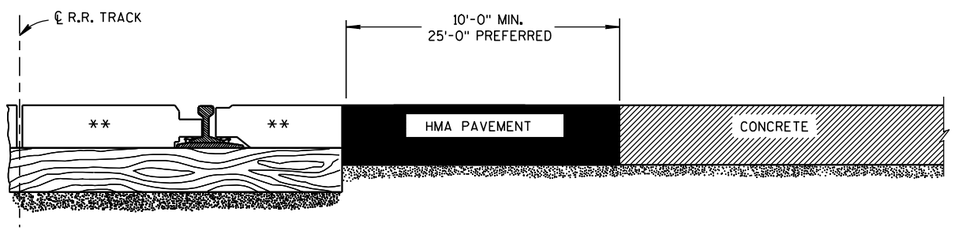
HMA PAVEMENT SHALL BE ROLLED PARALLEL TO THE TRACK.

** CROSSING SURFACE MAY BE TIMBER, RUBBER, CONCRETE, HMA PAVEMENT OR A COMBINATION OF SUCH MATERIALS.

*** CROWN TRANSITION LENGTH SHOWN ELSEWHERE IN THE PLAN.



TYPICAL HALF SECTION



SECTION A-A

CONCRETE PAVEMENT APPROACH

SECTION A-A

HMA PAVEMENT APPROACH

EXAMPLES OF PAVEMENT APPROACHES

PAVEMENT DETAILS FOR RAILROAD APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-28-09 DATE
/S/ Ronald E. Adams
CHIEF, RAILROADS & HAI CTION
FHWA

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S.D.D. 13 B 1-10

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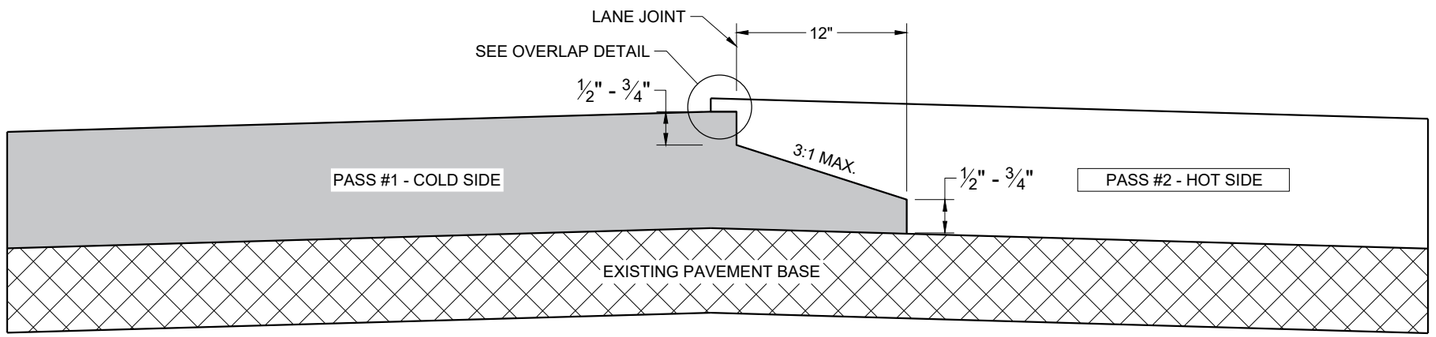
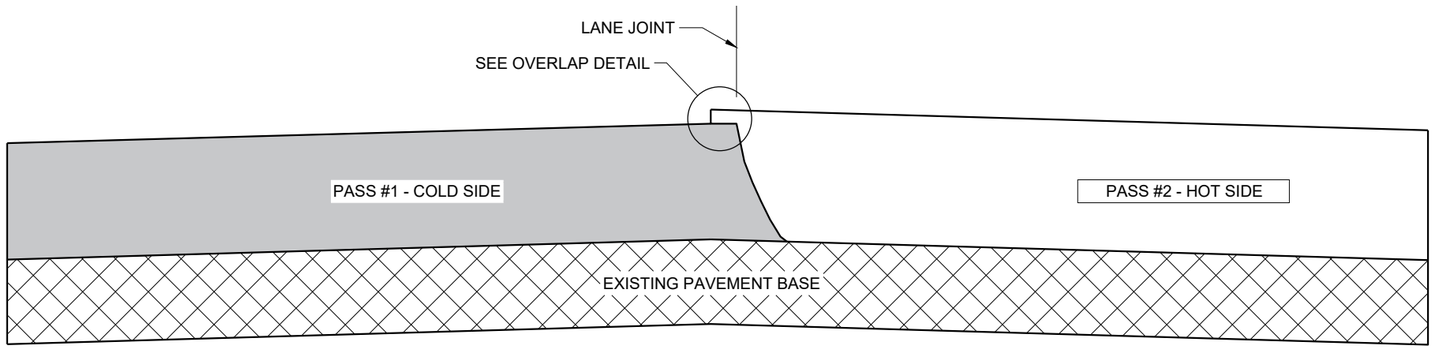
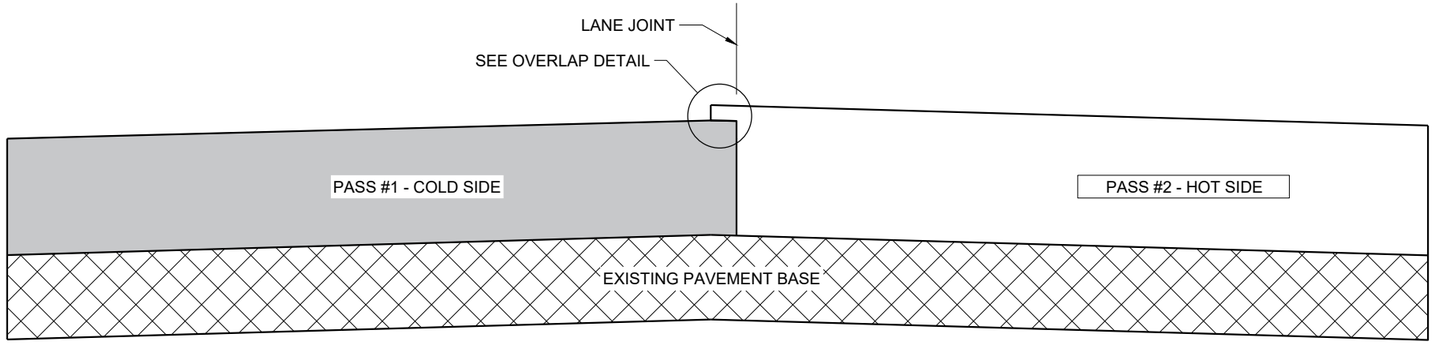
S.D.D. 13 B 1-10



TYPICAL PAVEMENT CROSS SECTION
OF NOTCHED WEDGE LONGITUDINAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL LONGITUDINAL JOINT



TYPICAL PAVEMENT CROSS SECTION
OF MILLED LONGITUDINAL JOINT

GENERAL NOTES

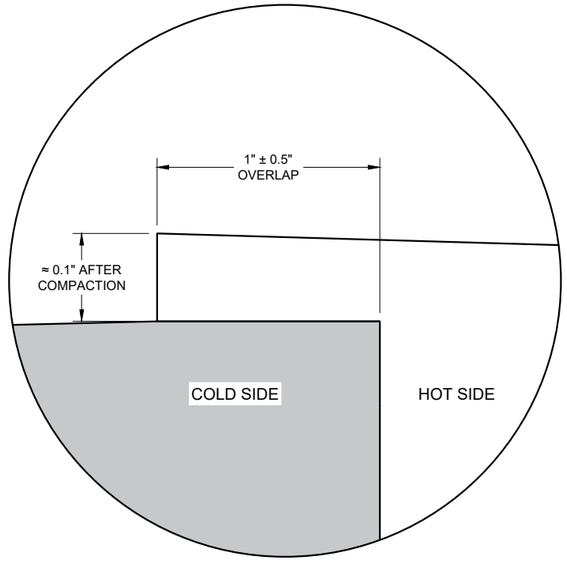
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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.

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 - 02

SDD 13C19 - 02

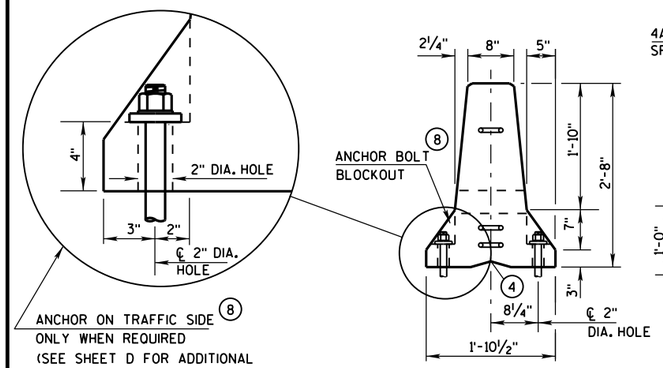
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

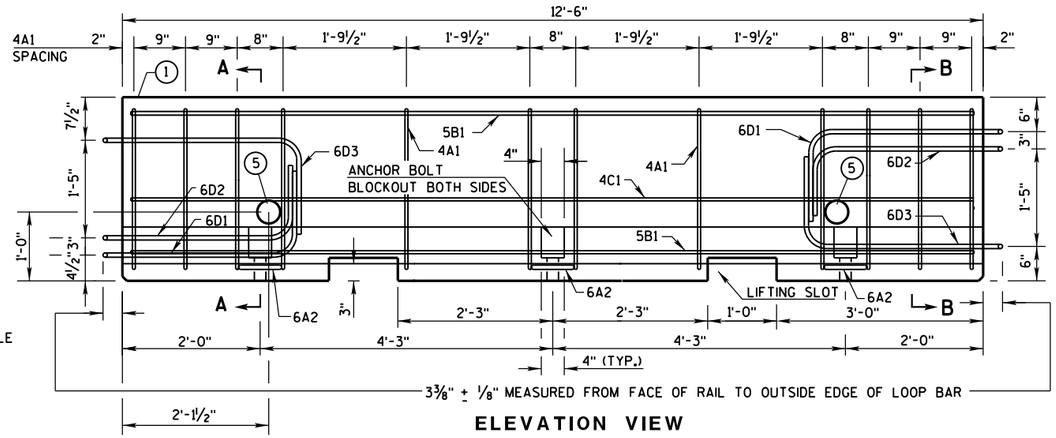
APPROVED
February 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

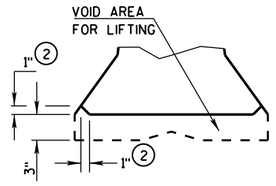
FHWA



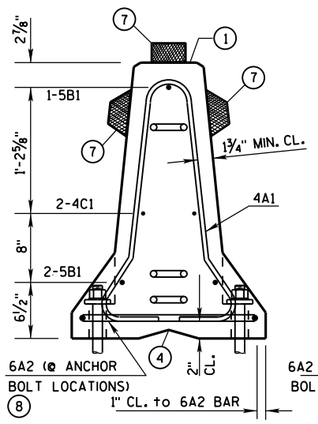
END VIEW



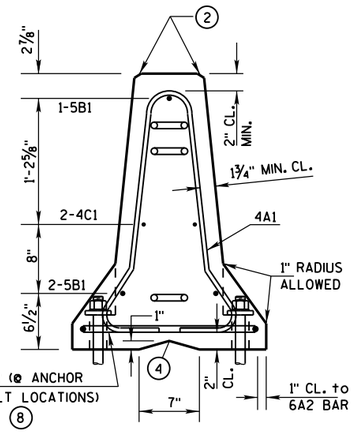
ELEVATION VIEW



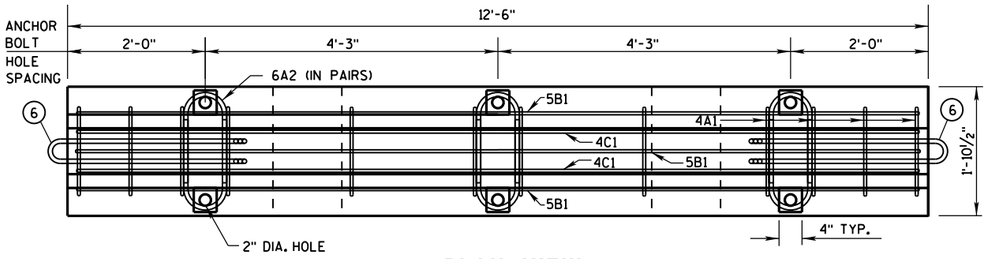
DETAIL "B"
LIFTING SLOT DETAIL



SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)



PLAN VIEW

DETAILS OF BARRIER SECTION

GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-15(a) THRU 14B7-15(i).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

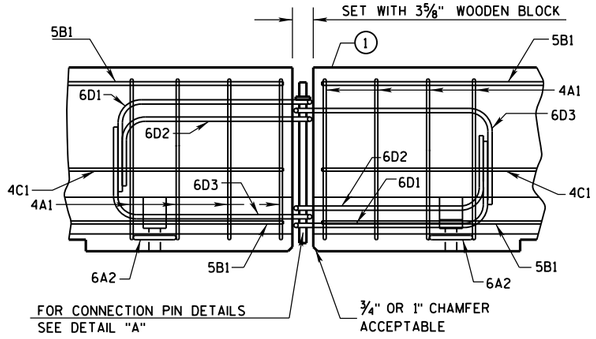
(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

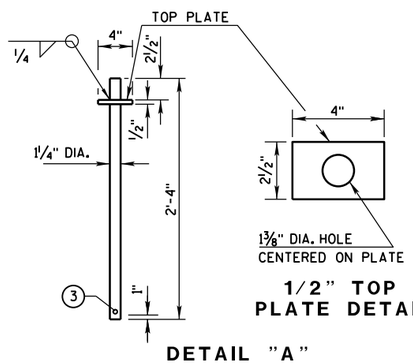
(8) SEE SHEET D FOR HOW TO ANCHOR BARRIER. SEE SHEET E FOR WHEN TO ANCHOR BARRIER.

(9) 1" CHAMFER OPTIONAL.

f'c = 4,000 psi

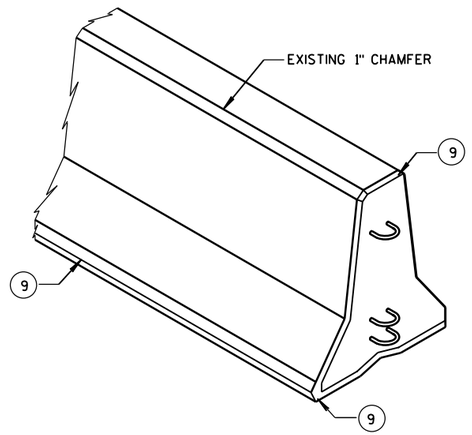


DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

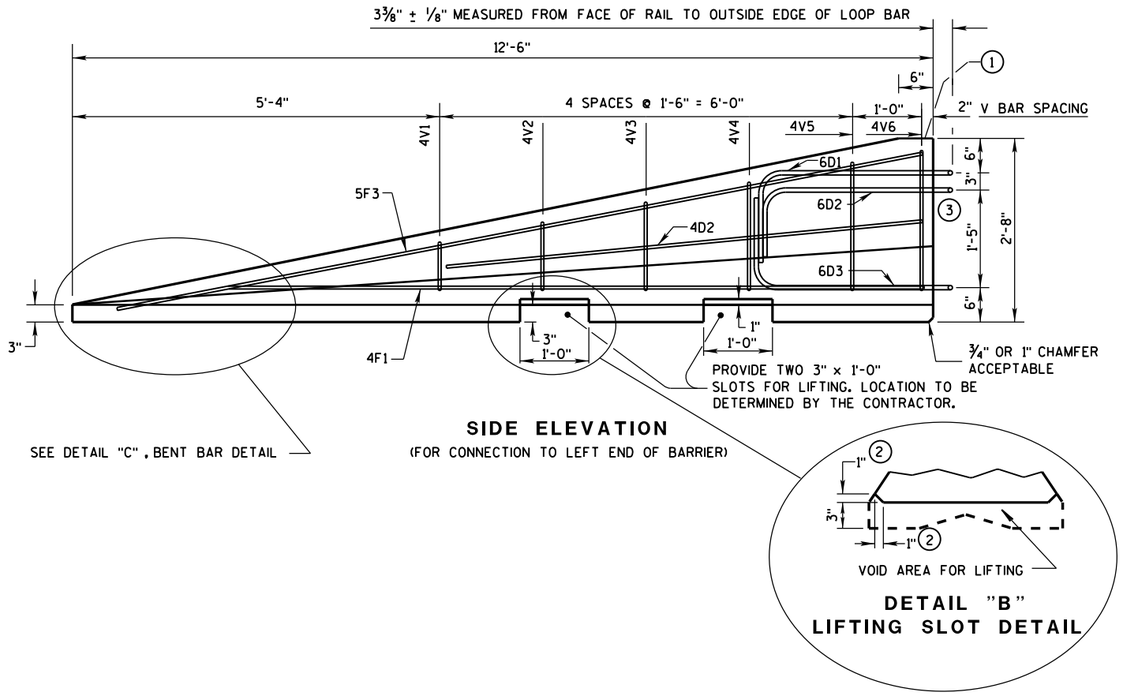
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 261

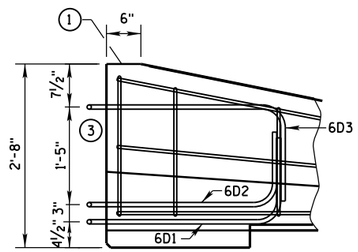
6

S.D.D. 14 B 7-15a

6

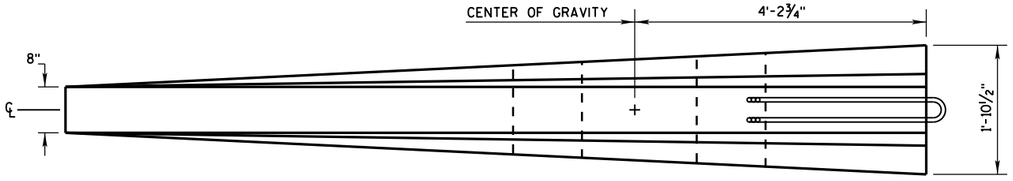
S.D.D. 14 B 7-15a

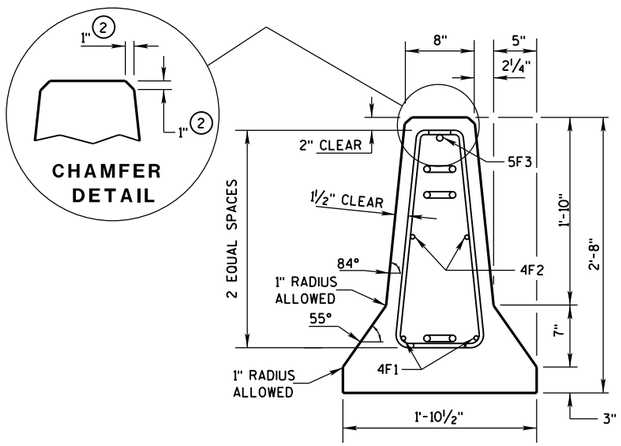


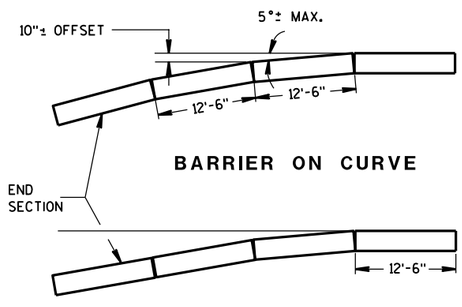


GENERAL NOTES

1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.







POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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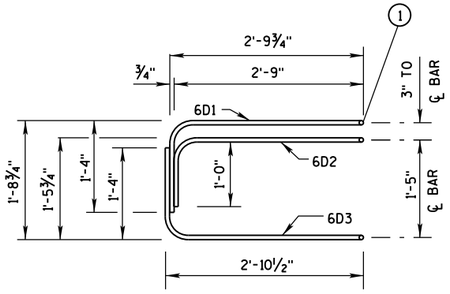
S.D.D. 14 B 7-15b

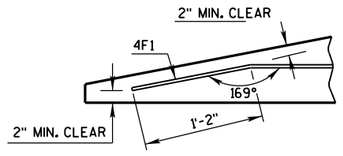
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

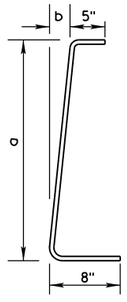
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

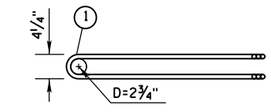
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

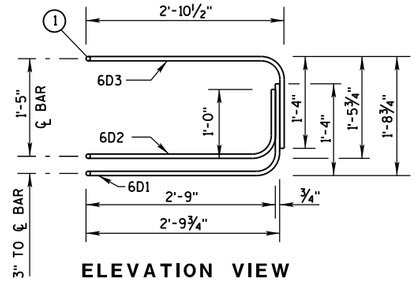
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

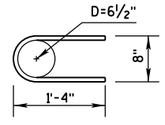
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



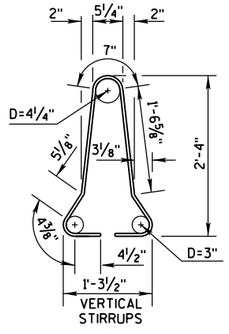
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2



4A1

BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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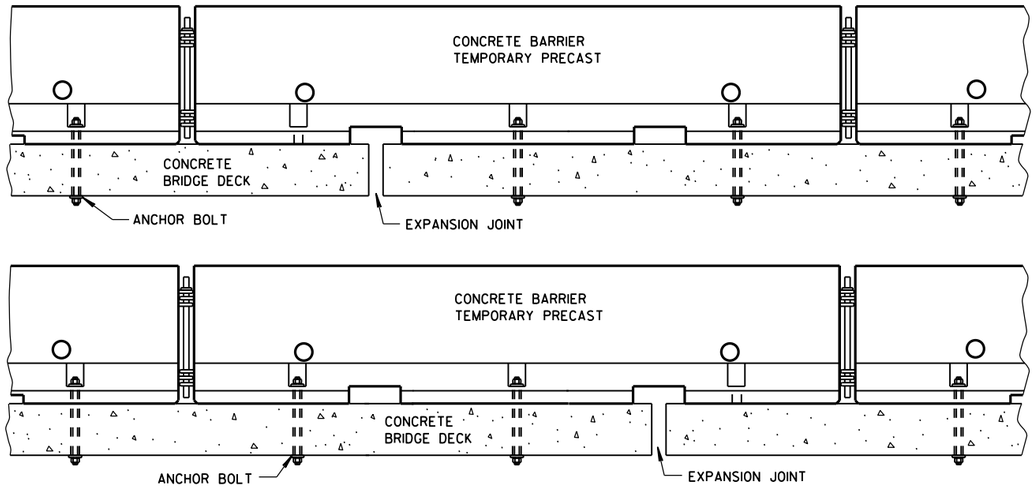
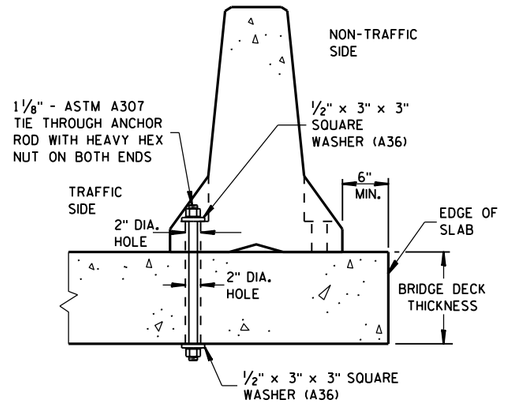
S.D.D. 14 B 7-15c



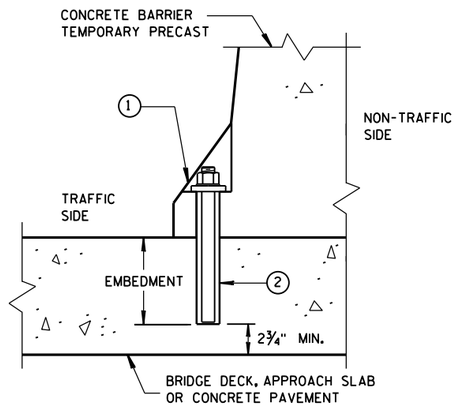
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

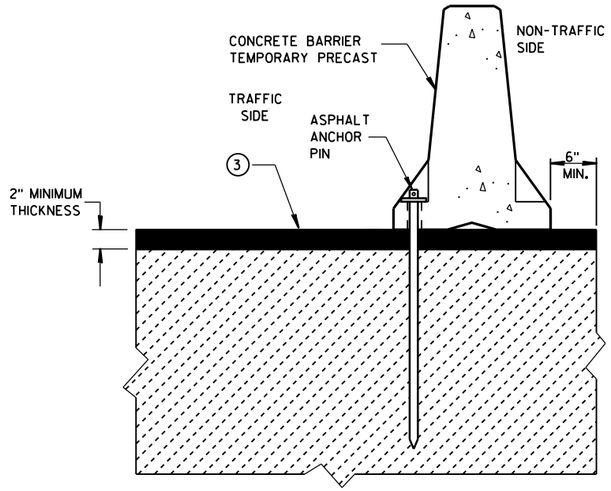
(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

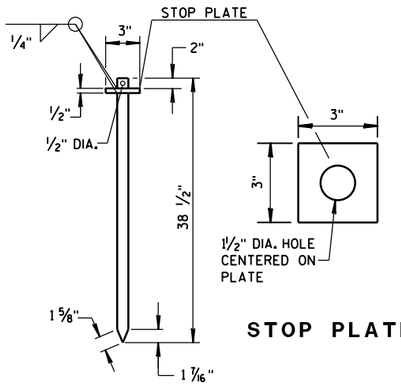
SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERICAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

1. 1⅛" DIAMENTER A307 THREADED ROD. ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL. ASTM A563A HEAVY HEX NUT.
2. ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.
3. ASPHALT SURFACE SHOWN. CONTRACTOR MAY DRILL THROUGH CONCRETE PAVEMENT AND THAN DRIVE ASPHALT ANCHOR PIN.



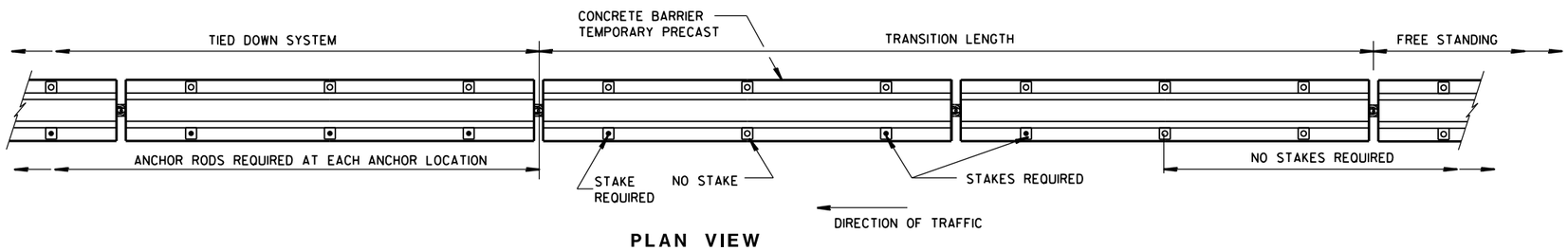
STAKE DOWN INSTALLATION FOR ASPHALTIC SURFACE



STOP PLATE

ASPHALT ANCHOR PIN

(ASTM A36 STEEL)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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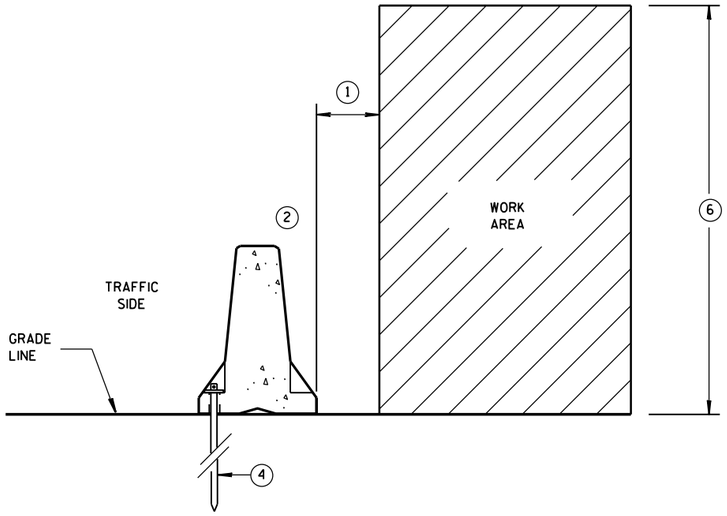
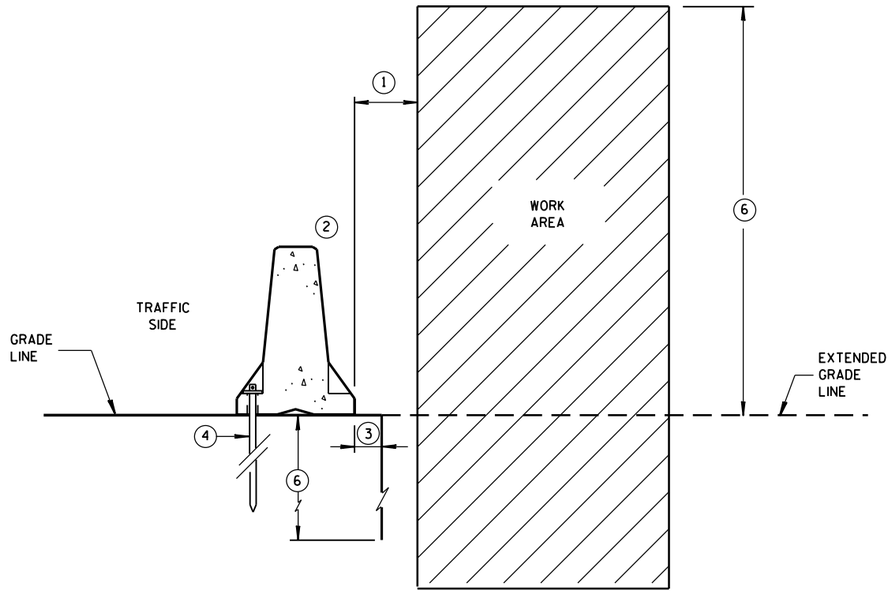
S.D.D. 14 B 7-15d



ANCHORED BARRIER SPACE REQUIREMENTS FOR HAZARDS EXTENDED ABOVE THE GRADE LINE

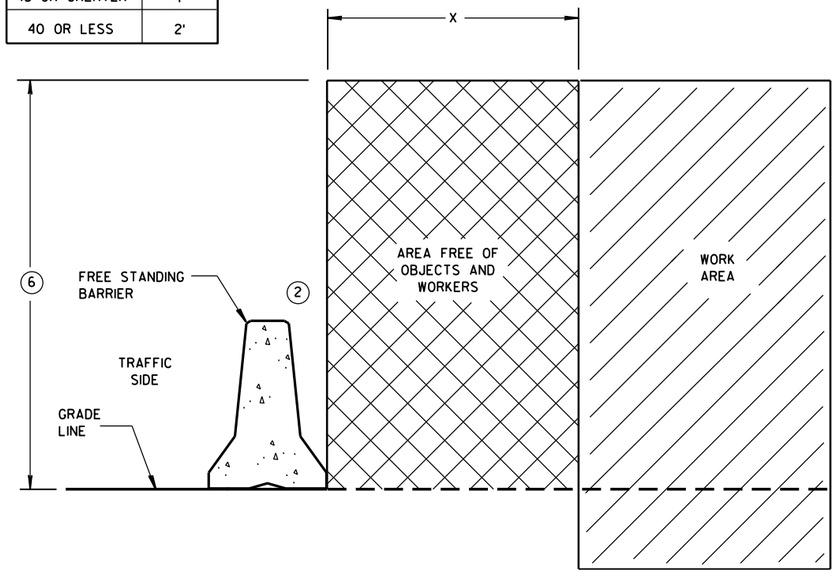


ANCHORED BARRIER SPACE REQUIREMENTS ON VERTICAL DROP OFFS

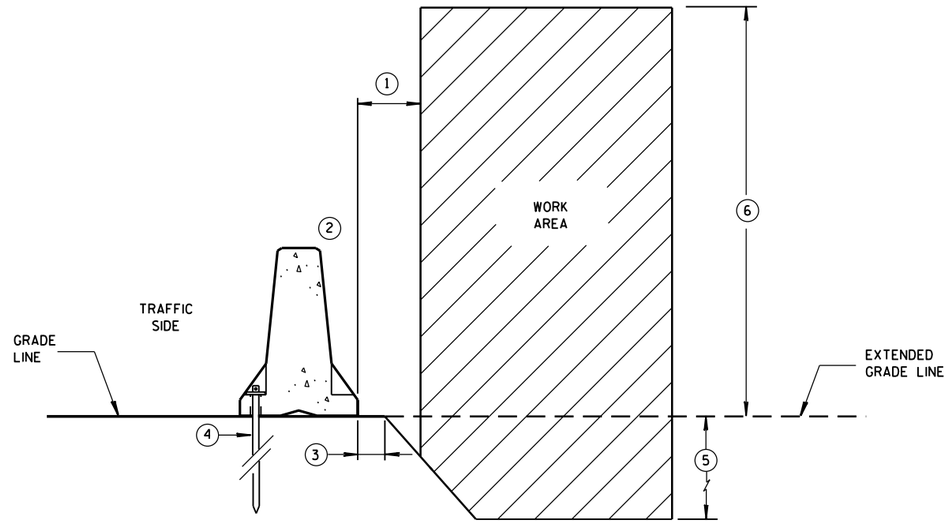
GENERAL NOTES

1. WHEN OBJECTS EXTEND ABOVE THE GRADE, A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT. SEE OTHER DETAILS FOR FOR THE MINIMUM OFFSET FROM BACK OF BARRIER TO SLOPES OR VERTICAL DROPS.
2. OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR LEANED AGAINST THE BARRIER WITHOUT PERMISSION OF THE PROJECT ENGINEER.
3. SEE OTHER DETAIL ON SHEET "D" FOR SPACE REQUIREMENTS.
4. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR A STAKE DOWN FOR ASPHALTIC SURFACE TREATMENT DETAILS. ASPHALTIC ANCHOR SHOWN.
5. DEPTH OF 3 FEET OR MORE.
6. Y = 6'-6".

POSTED SPEED MPH	X
45 OR GREATER	4'
40 OR LESS	2'



FREE STANDING BARRIER SPACE REQUIREMENTS



ANCHORED BARRIER SPACE REQUIREMENTS ON SLOPES

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 7-15e

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

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

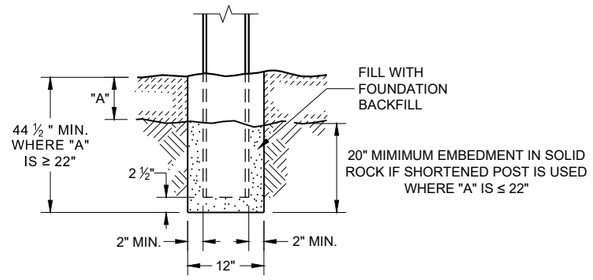
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

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

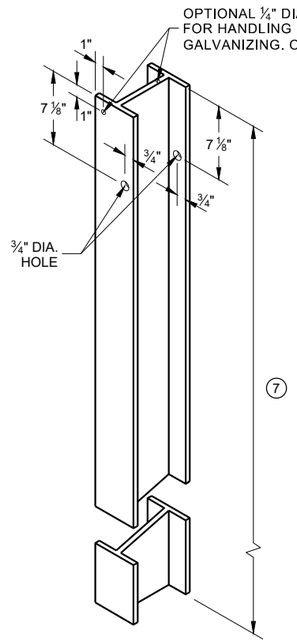
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS +1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

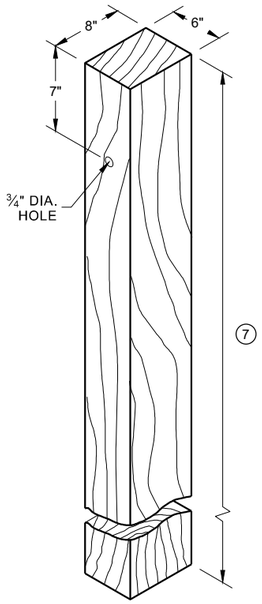
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



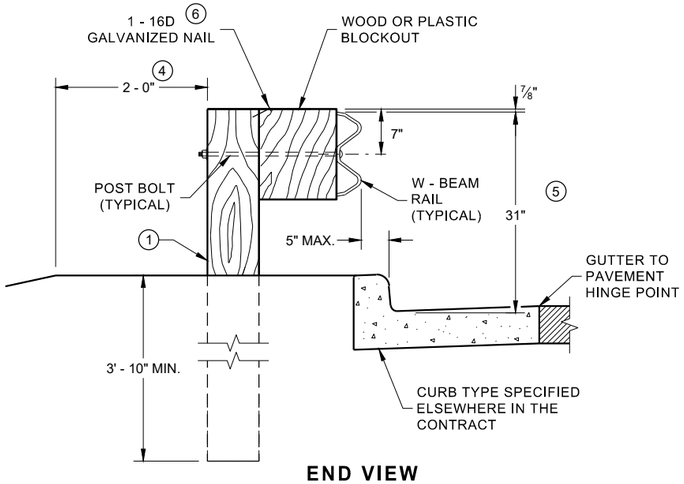
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



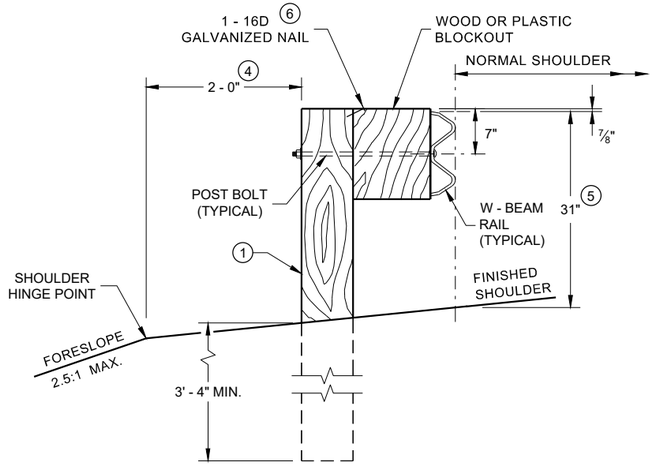
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



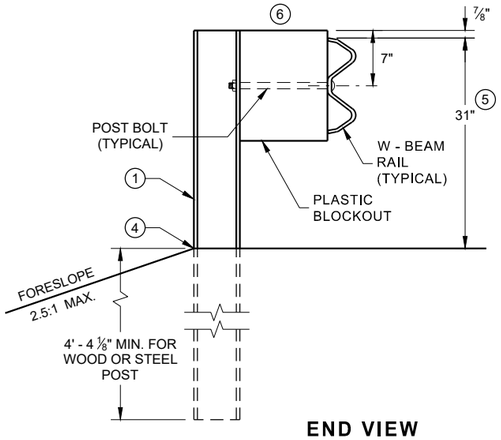
WOOD POST (6" X 8") NOMINAL (1)



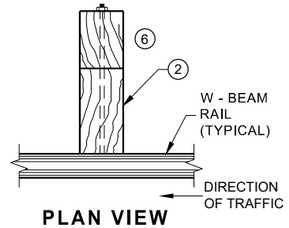
END VIEW
LOCATED ALONG A CURBED ROADWAY



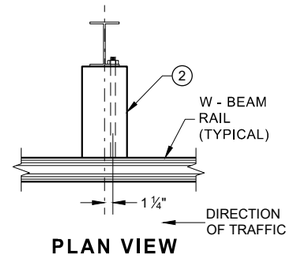
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



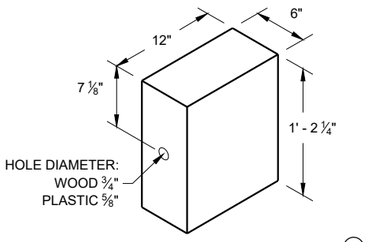
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

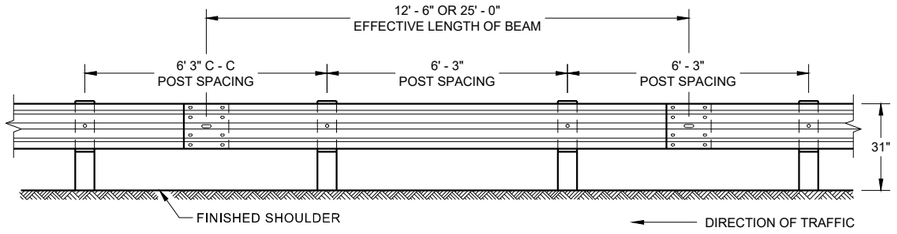
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

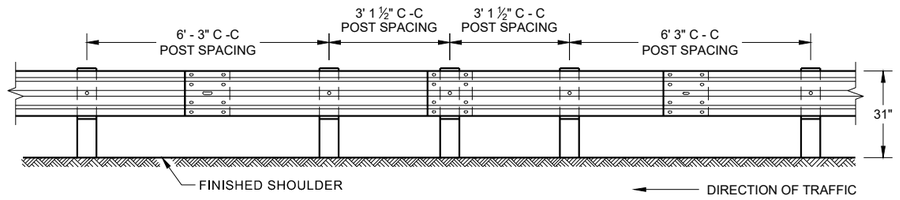
SDD 14B42 - 06a

6

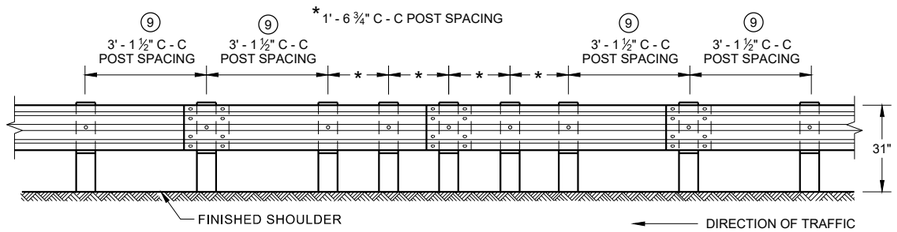
SDD 14B42 - 06a



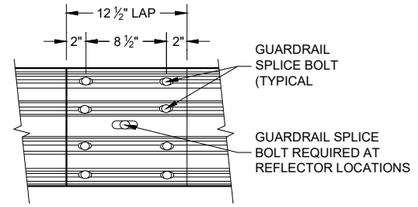
FRONT VIEW
POST SPACING STANDARD INSTALLATION



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



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

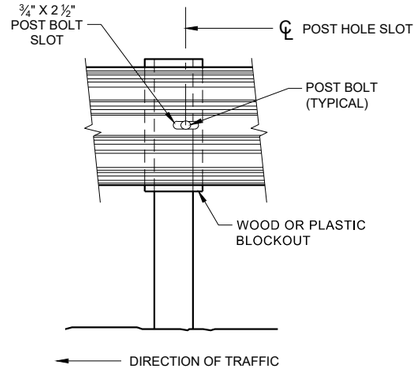
GENERAL NOTES

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

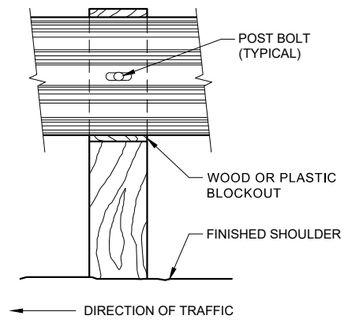
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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

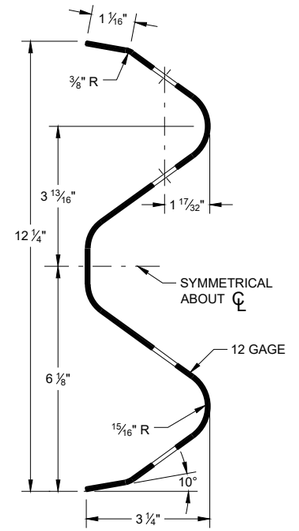
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



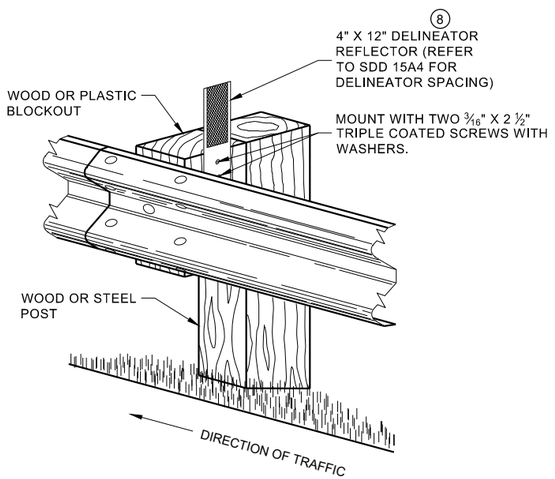
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



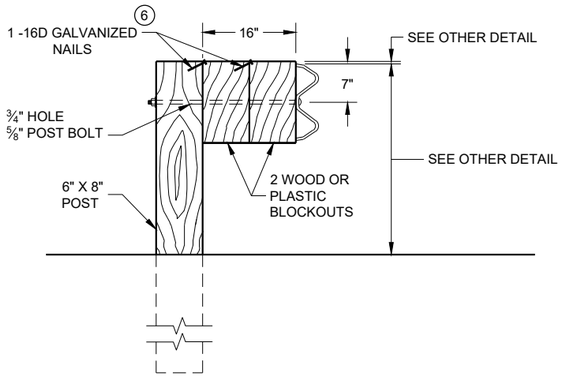
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 06b

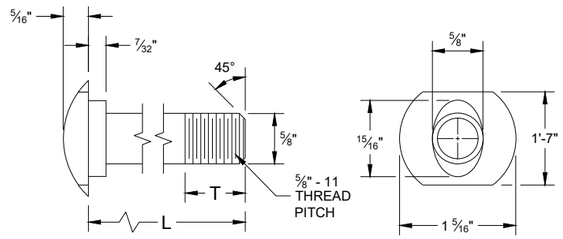


DETAIL FOR 16" BLOCKOUT DEPTH

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

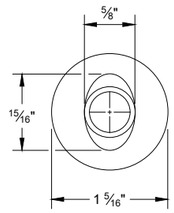
NOTE:

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

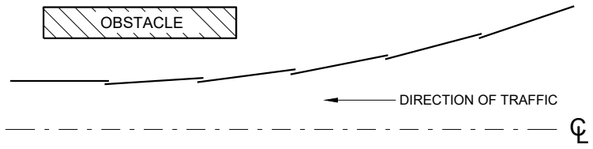


POST BOLT TABLE

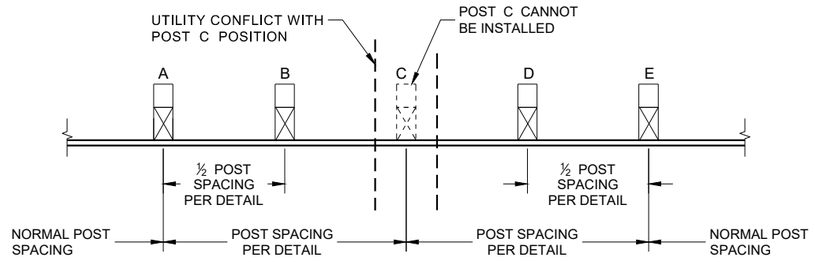
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



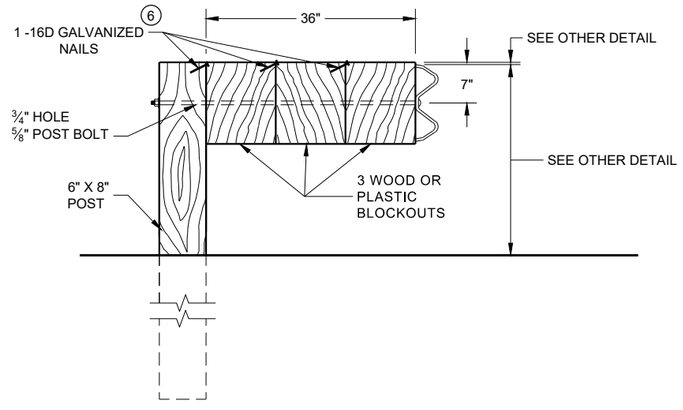
ALTERNATE BOLT HEAD



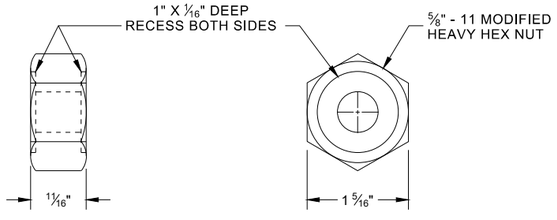
PLAN VIEW
BEAM LAPPING DETAIL



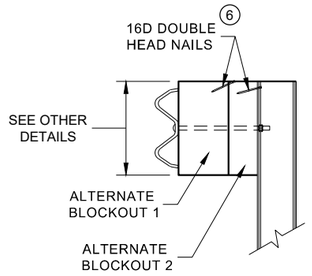
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



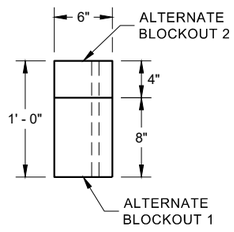
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

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

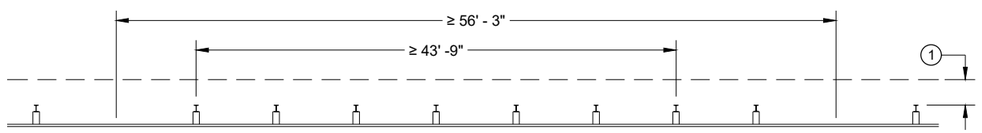
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

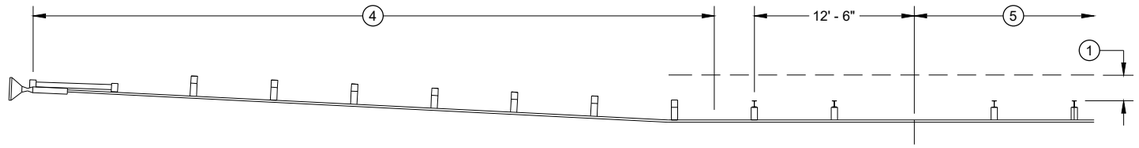
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

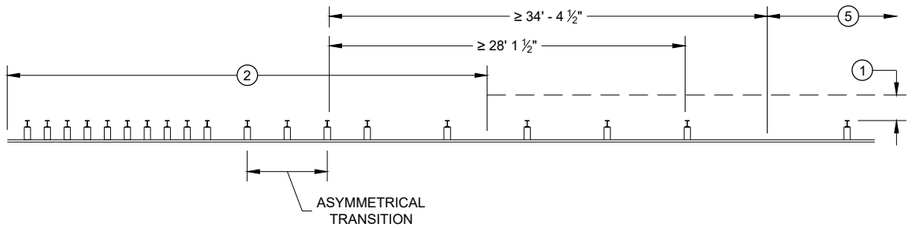
SDD 14B42 - 06c



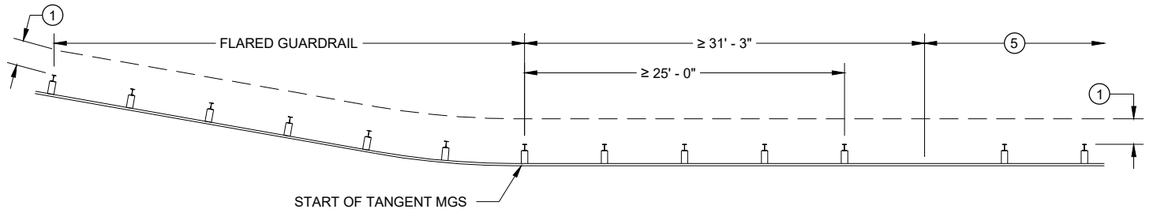
MISSING POST IN NORMAL BEAM GUARD RUN



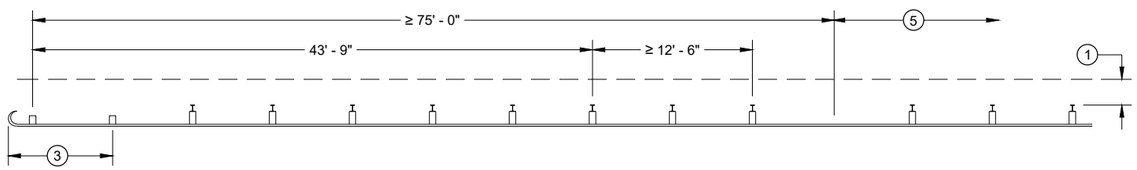
MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



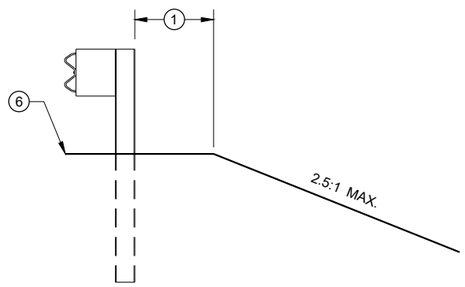
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



MISSING POST IN NORMAL BEAM GUARD RUN NEAR FLARED BEAM GUARD



MISSING POST IN NORMAL BEAM GUARD RUN NEAR TYPE 2 TERMINAL



CROSS SECTION VIEW

1. MINIMUM OF 2 FEET OF GRADING BEHIND POST.
2. SEE SDD 14B45 FOR MORE DETAILS.
3. SEE SDD 14B47 FOR MORE DETAILS.
4. SEE SDD 14B44 FOR MORE DETAILS.
5. SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.
6. SEE PLAN FOR SHOULDER DESIGN.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B42 - 06d

GENERAL NOTES

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

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

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

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

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

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

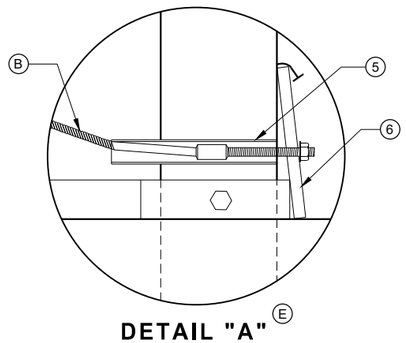
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

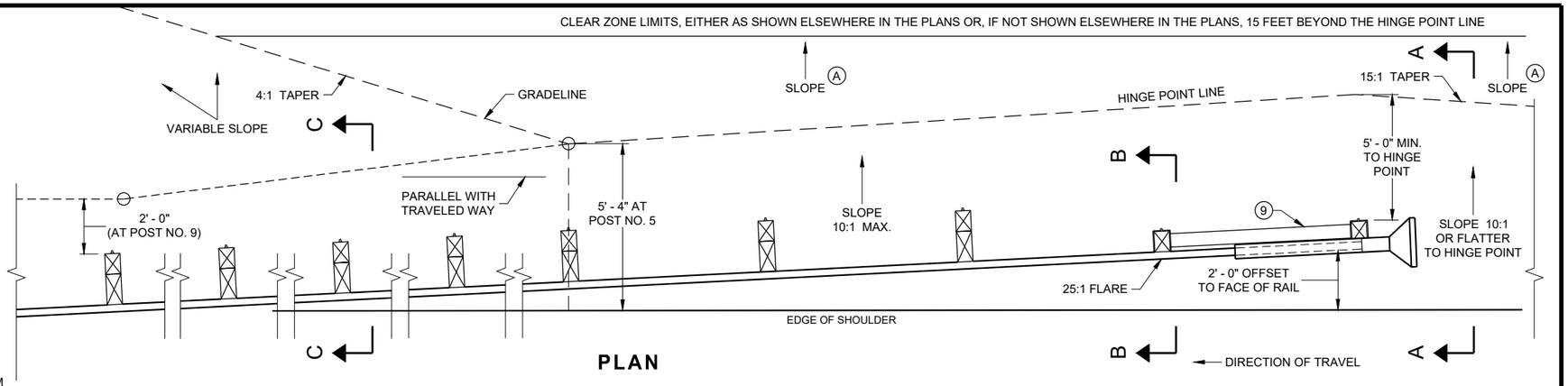
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

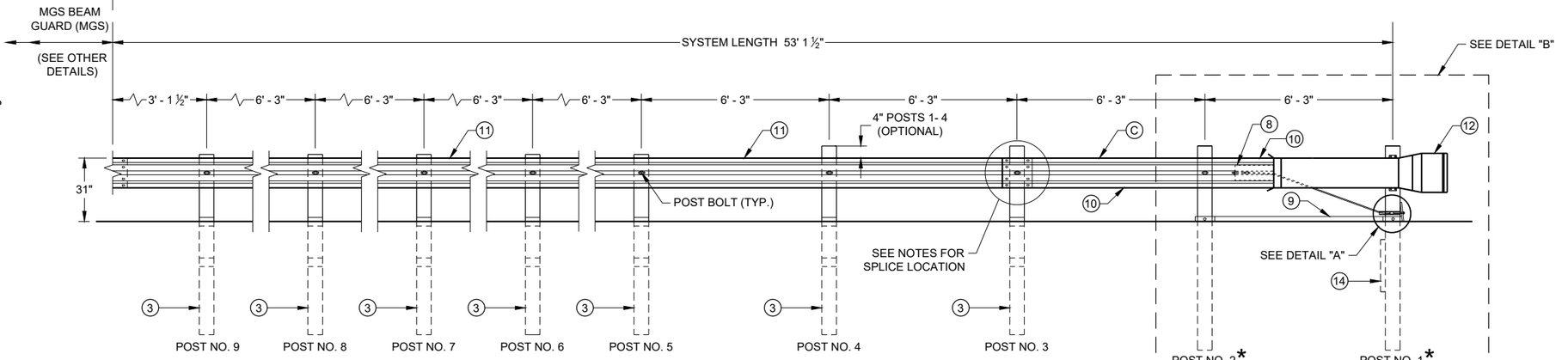
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



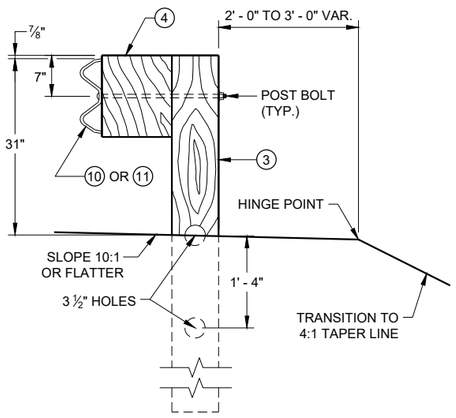
DETAIL "A" (E)



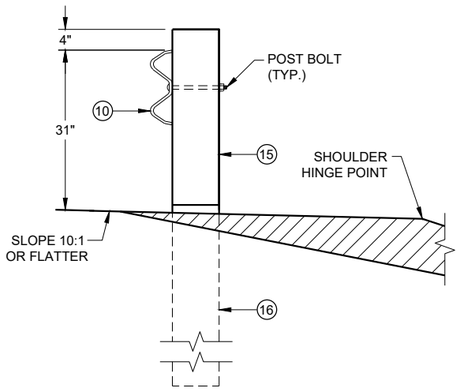
PLAN



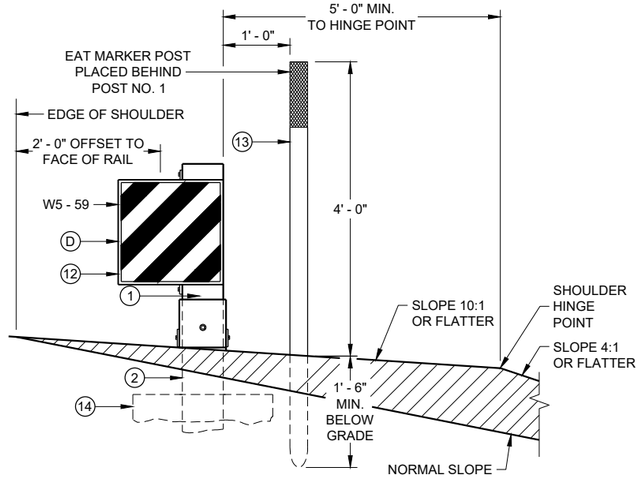
ELEVATION



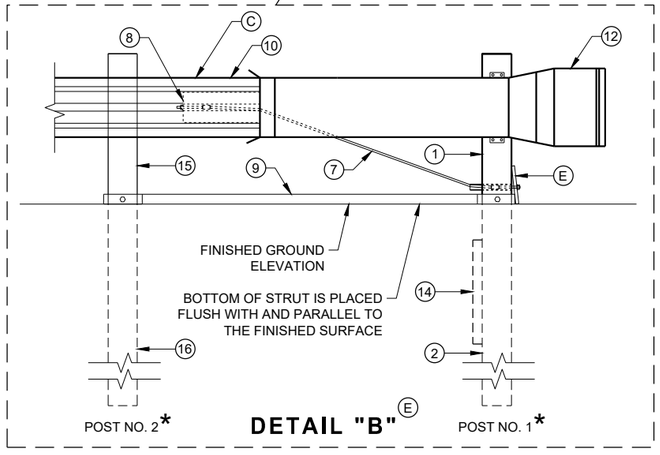
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



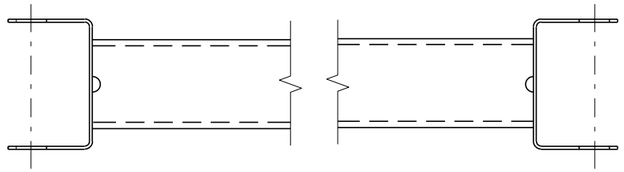
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

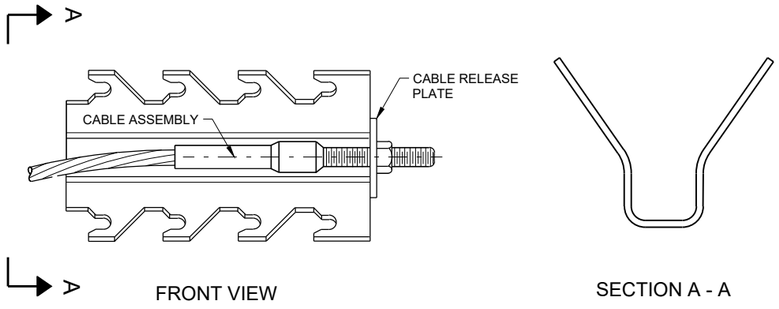
SDD 14B44 - 04a



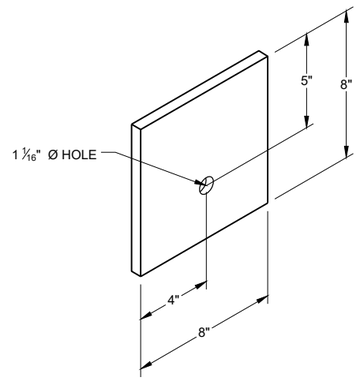
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

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



GENERIC ANCHOR CABLE BOX ⑨ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

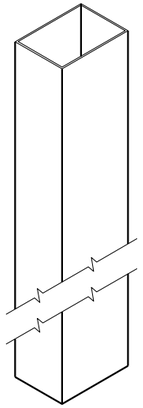
6

SDD 14B44 - 04b

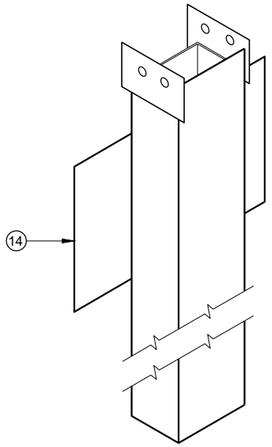
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

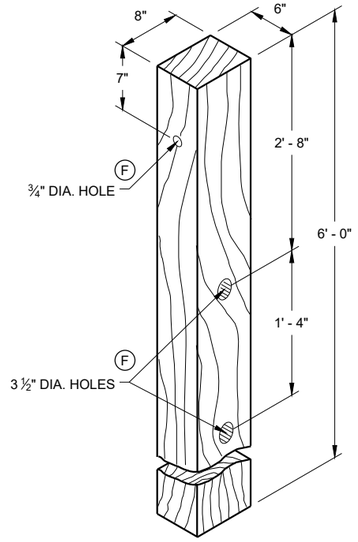
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



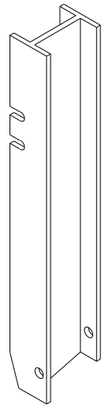
UPPER POST NO. 1 (1) (E)



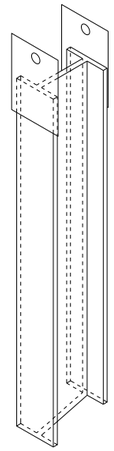
LOWER POST NO. 1 (2) (E)



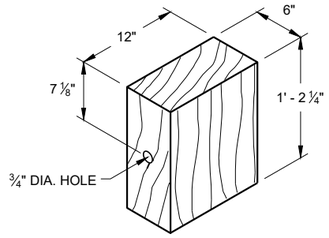
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



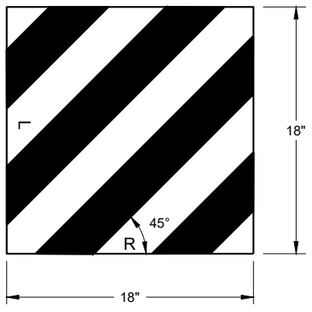
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

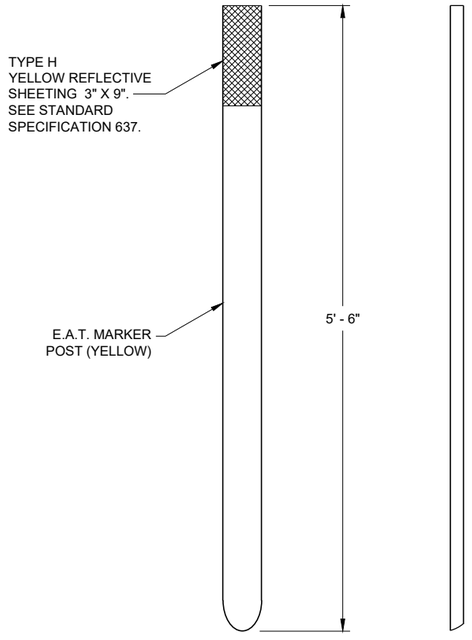


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



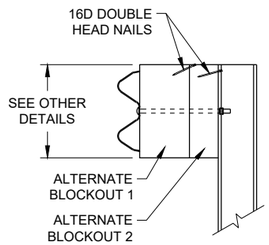
W5 - 59

REFLECTIVE SHEETING DETAIL (E)

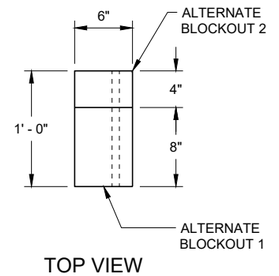


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

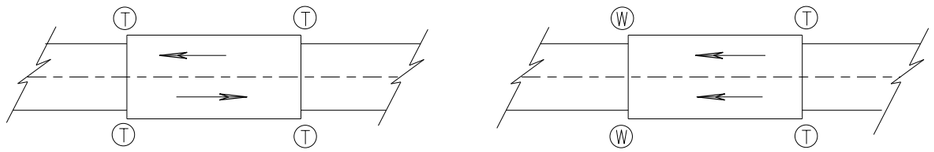
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

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

TRANSITION USES STEEL POSTS ONLY.

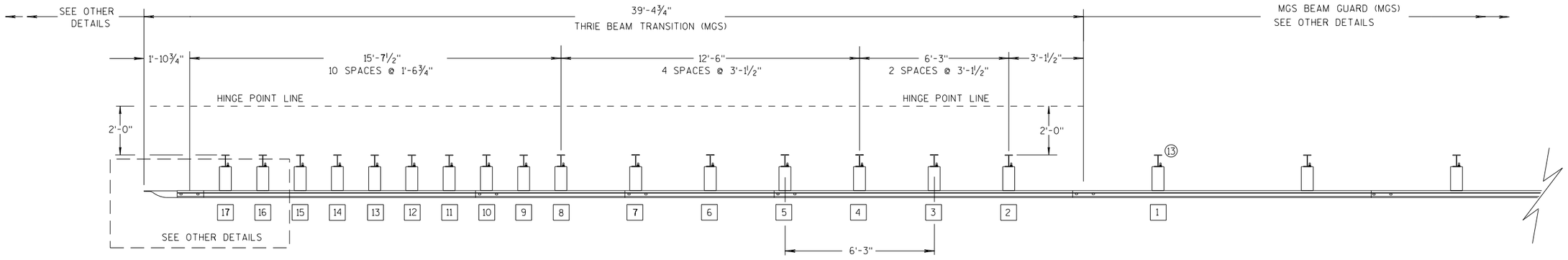
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

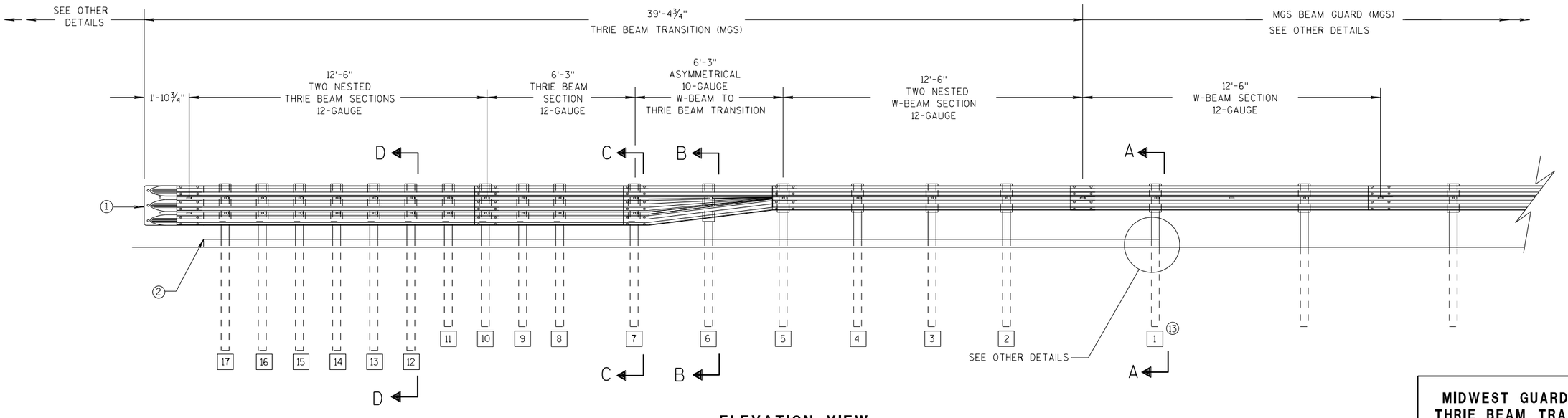
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

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

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 273

6

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

6

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

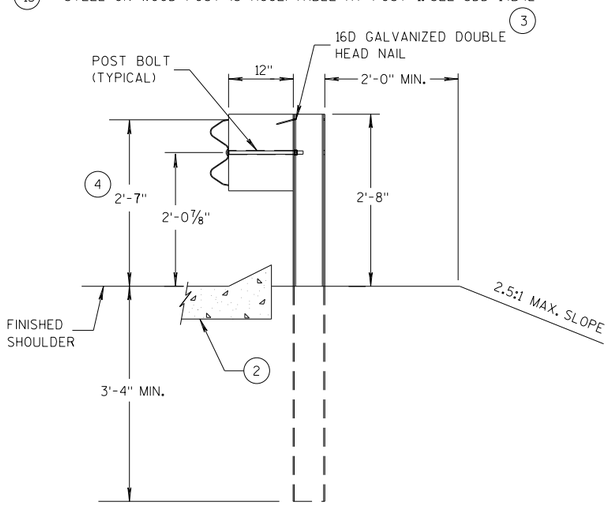
GENERAL NOTES

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

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

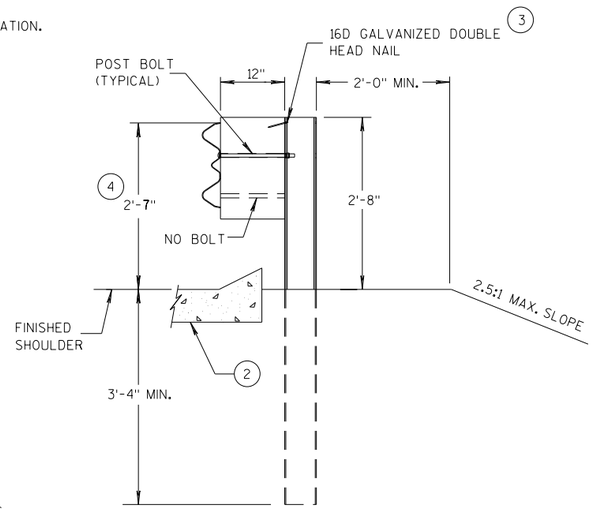
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



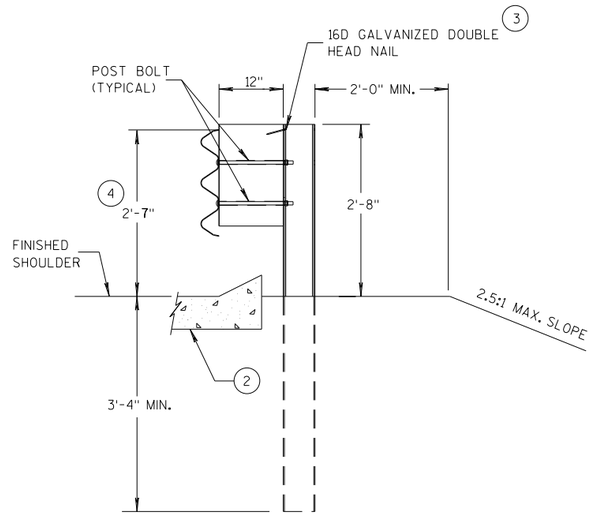
SECTION A-A (13)

POSTS 1-5



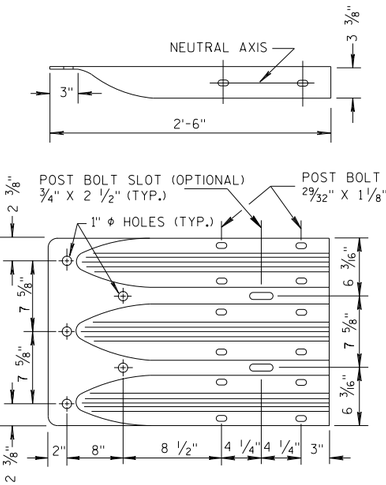
SECTION B-B

POST 6

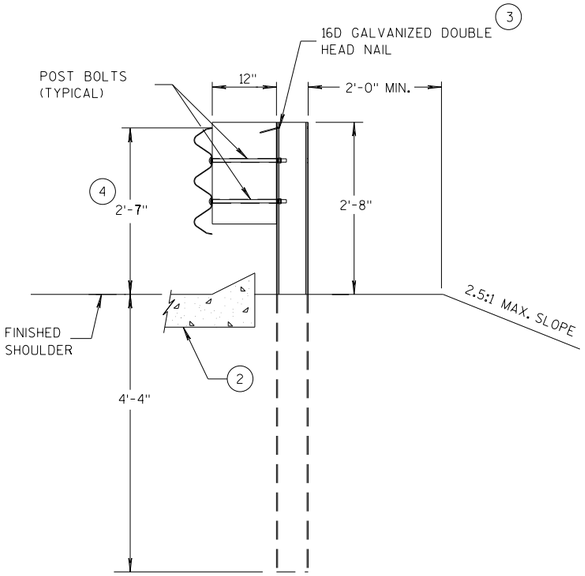


SECTION C-C

POSTS 7-11

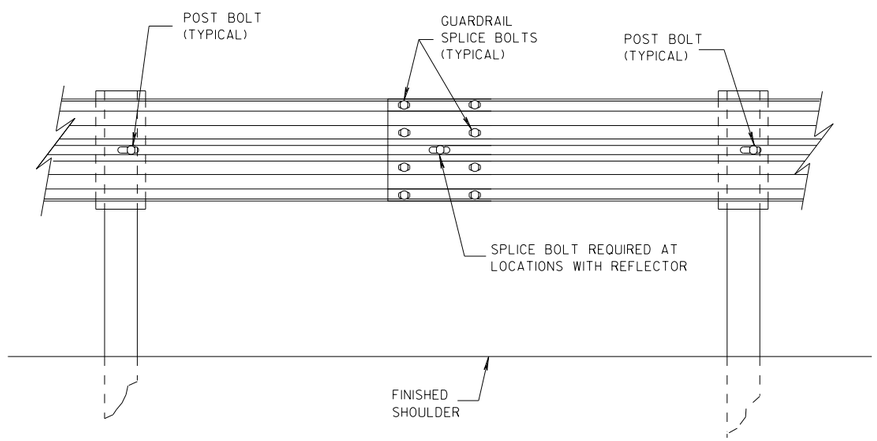


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

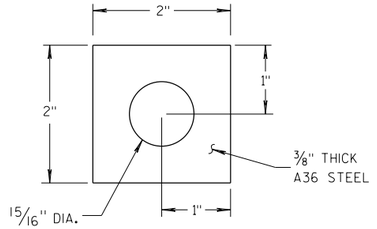
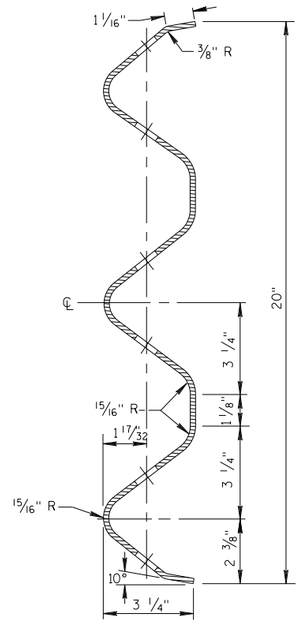


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

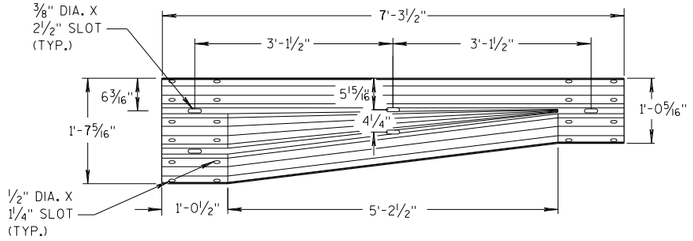
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 274

6

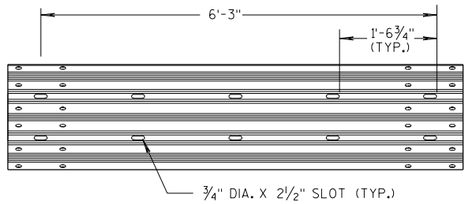
S.D.D. 14 B 45-5b

6

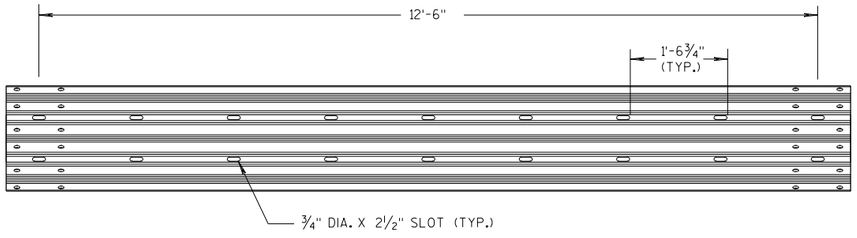
S.D.D. 14 B 45-5b



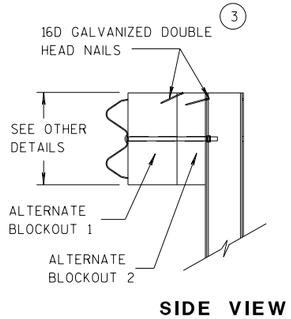
W-BEAM TO THRIE BEAM TRANSITION SECTION



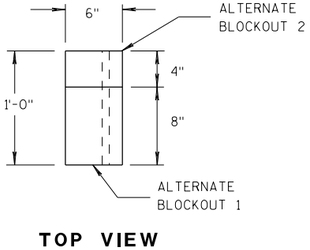
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

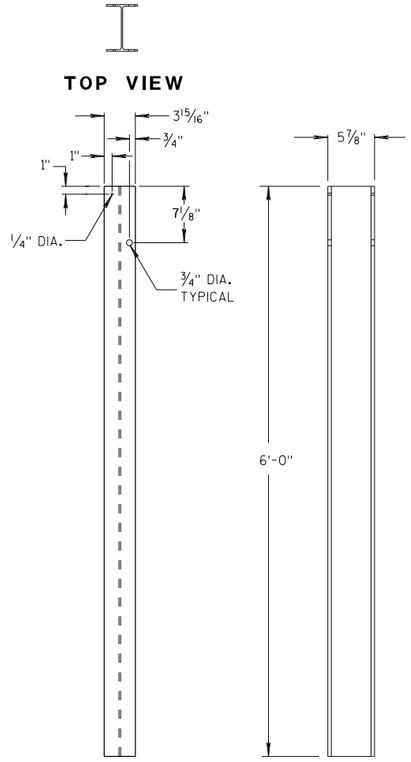


SIDE VIEW



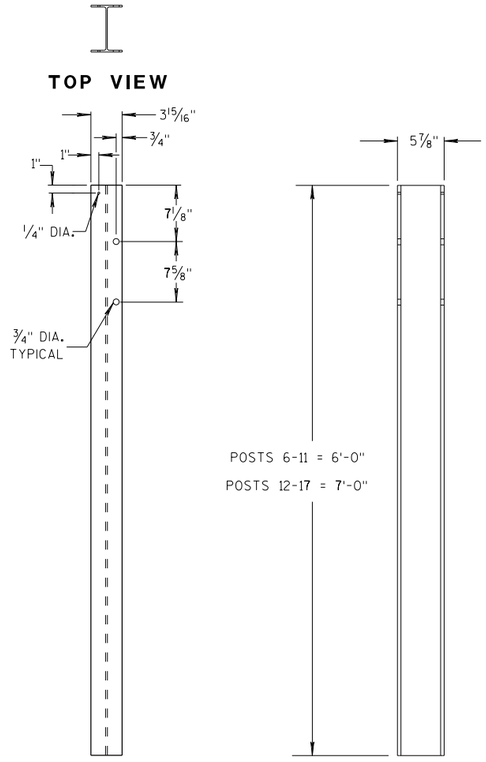
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



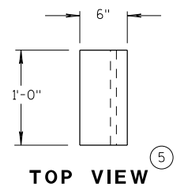
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

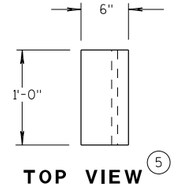


FRONT VIEW SIDE VIEW

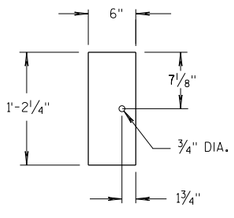
STEEL POSTS 6-17



TOP VIEW (5)

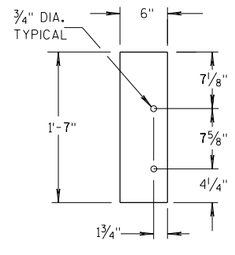


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

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

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

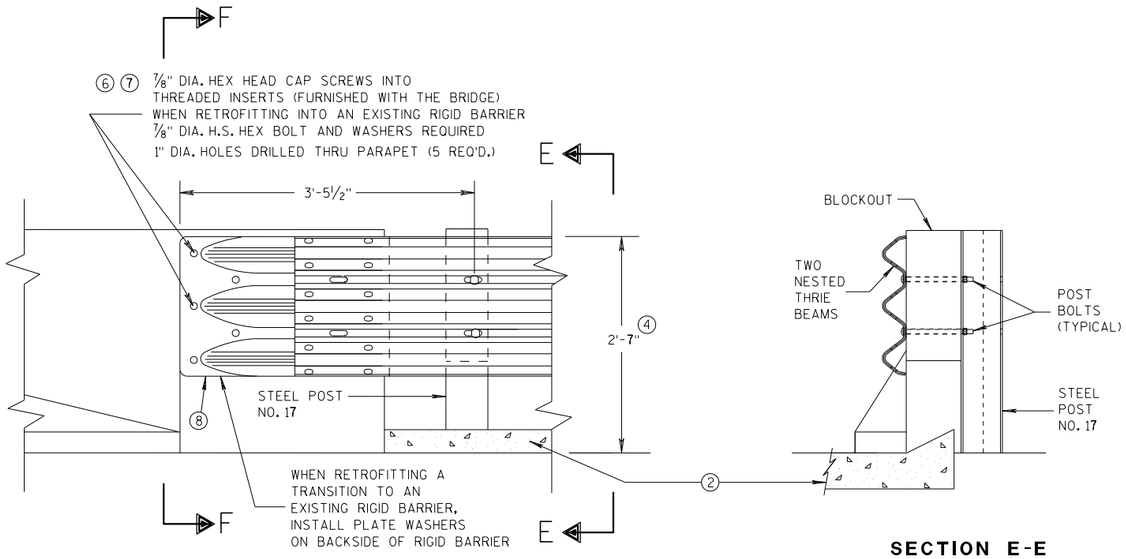
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 275

6
S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

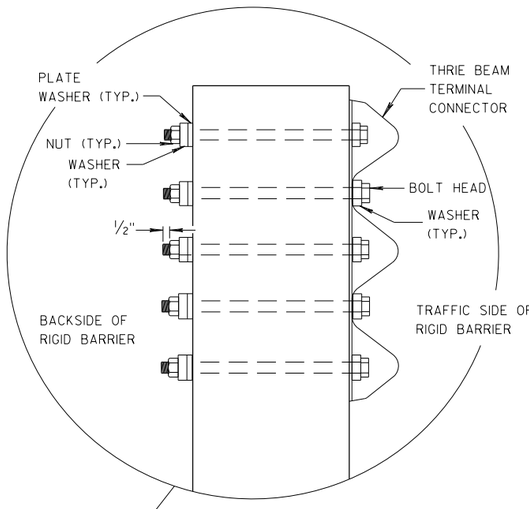
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

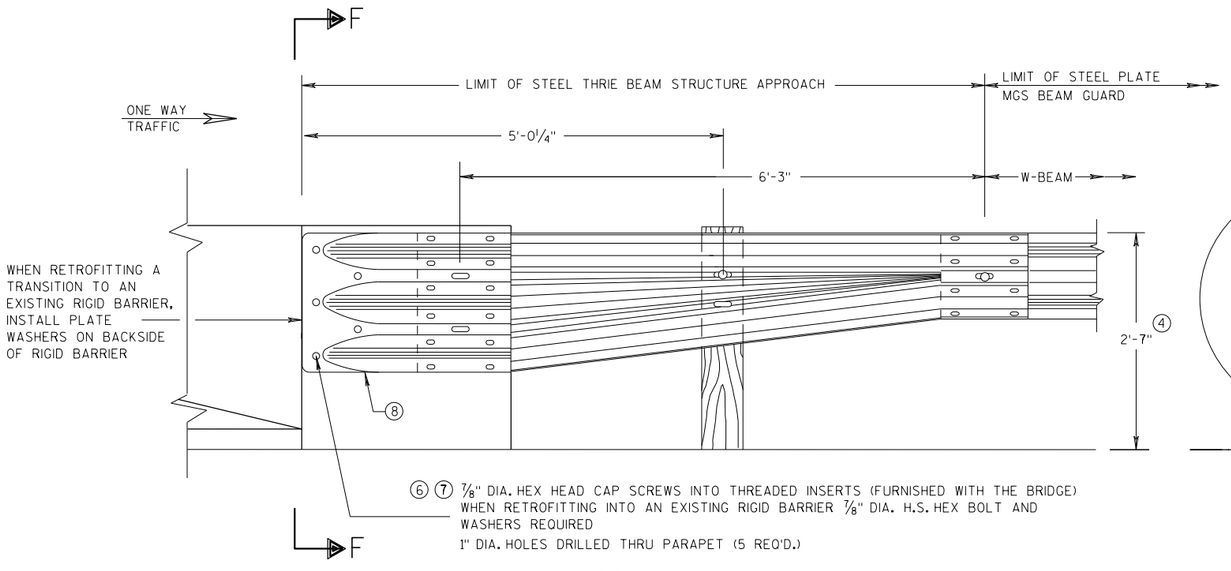
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

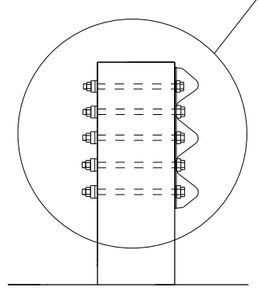
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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

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

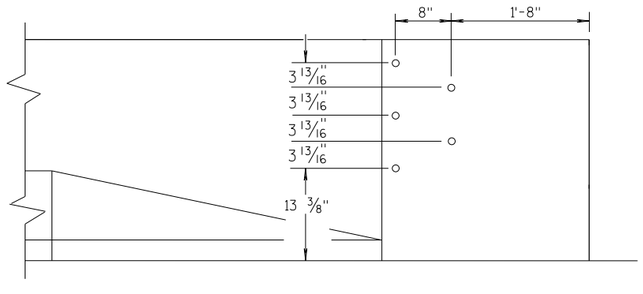




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D[illegible] UNIT SUPERVI[illegible]NT
FHWA

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

6

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

GENERAL NOTES

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

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

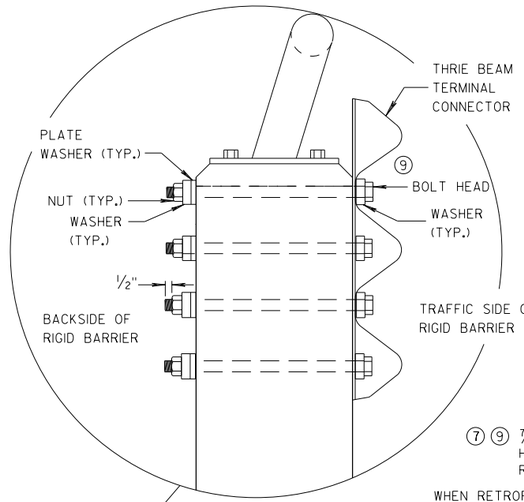
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

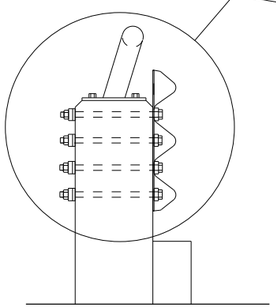
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

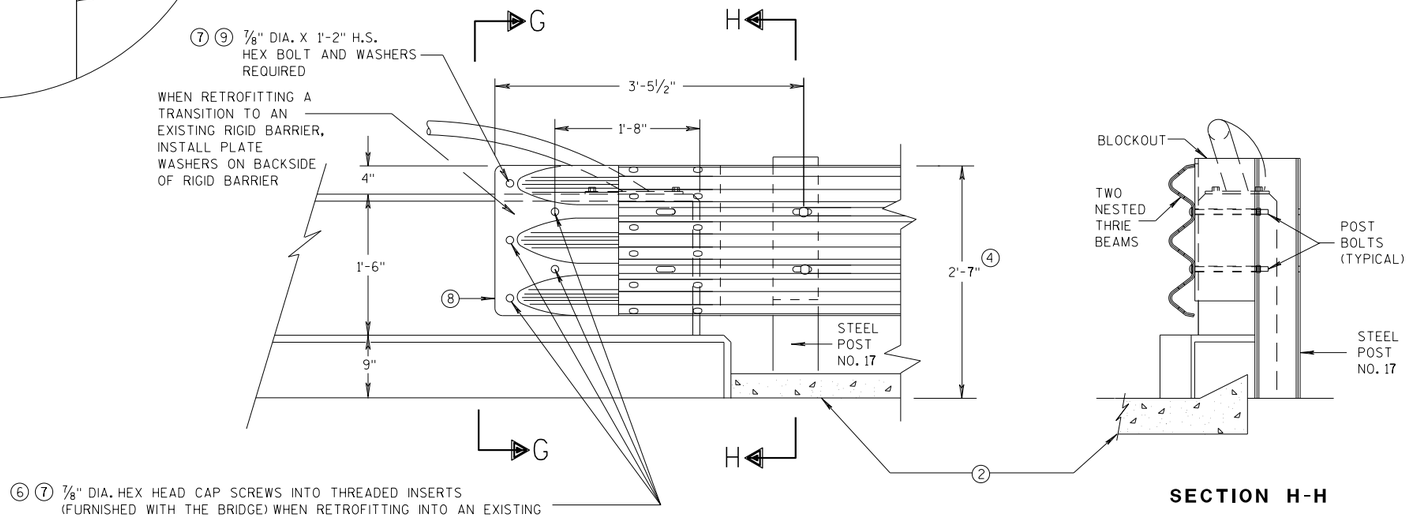
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





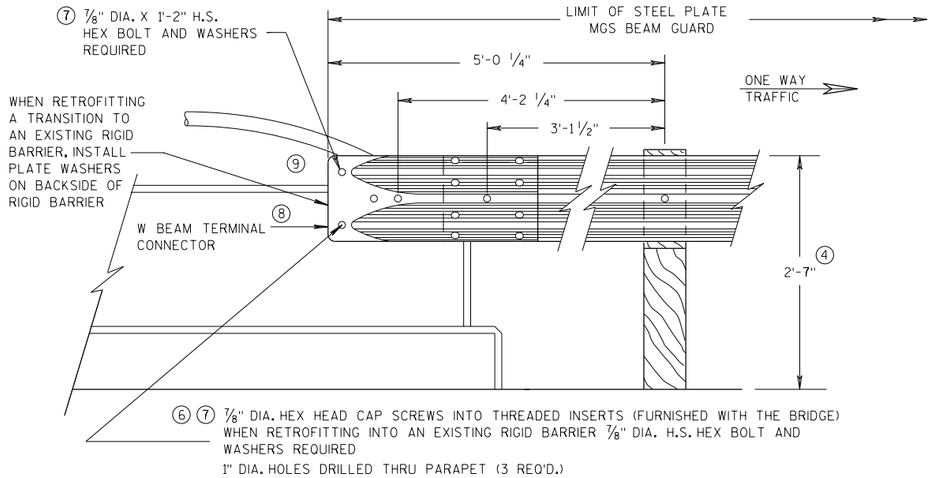
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVI

277

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6

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

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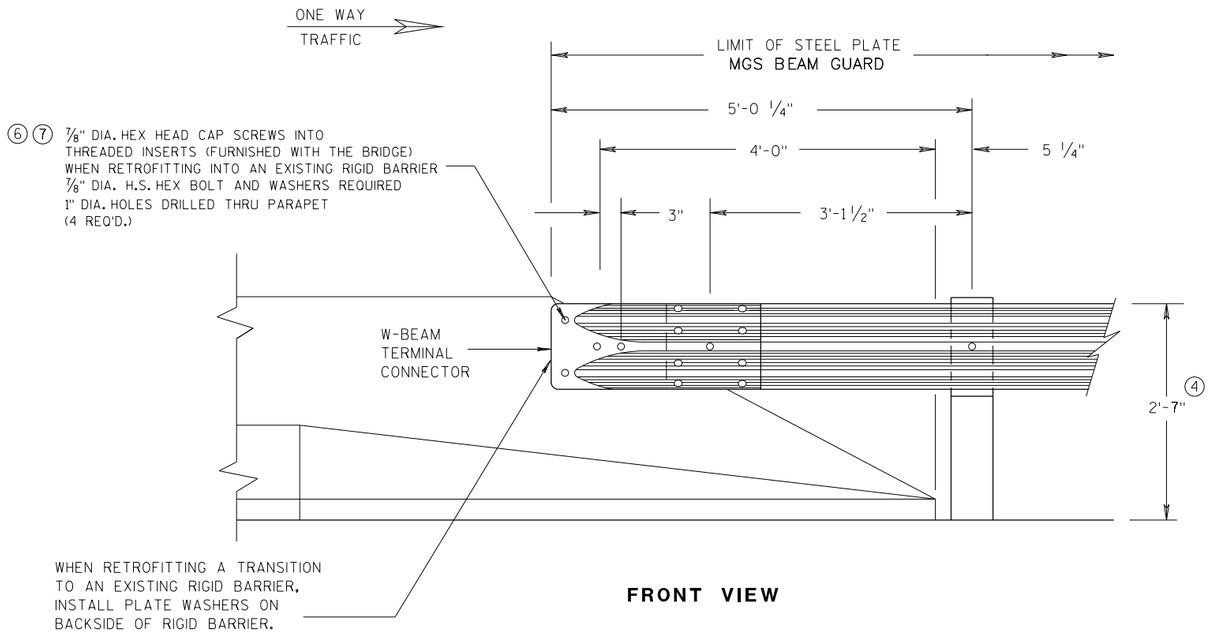
S.D.D. 14 B 45-5e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

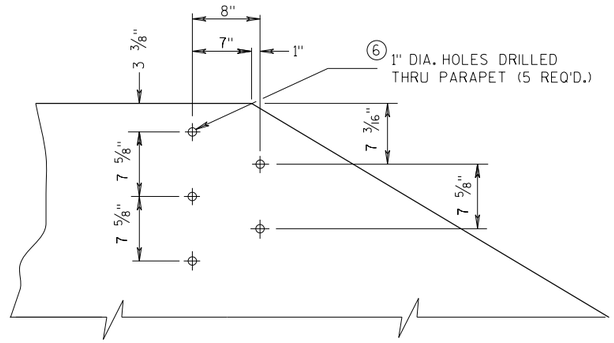
GENERAL NOTES

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

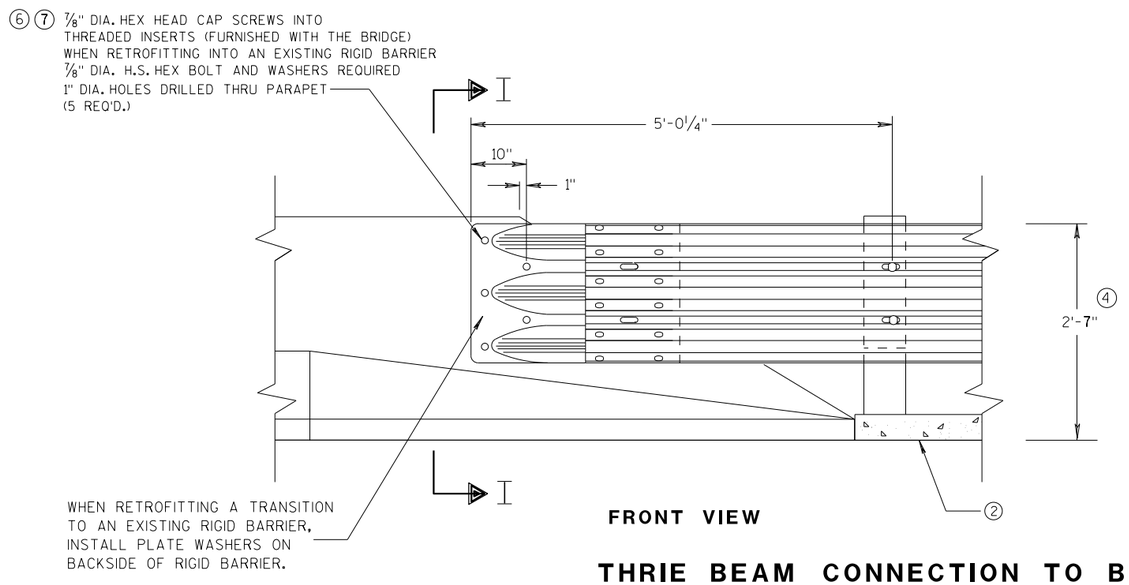
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

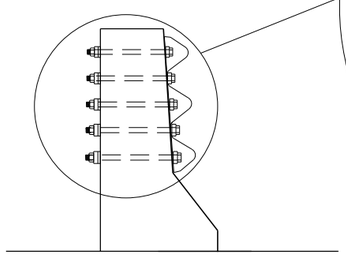
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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



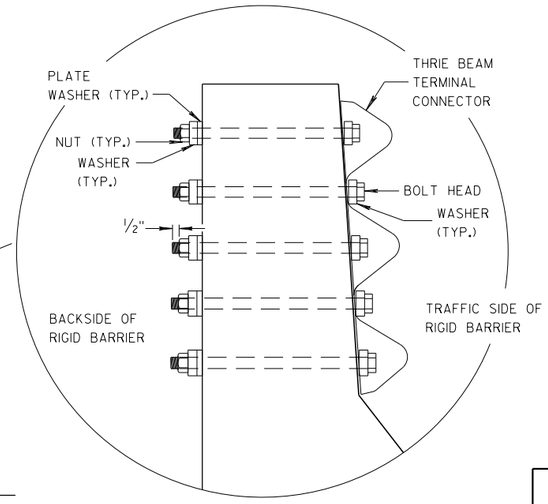
DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS [illegible] UNIT SUPERVI[illegible]ENT
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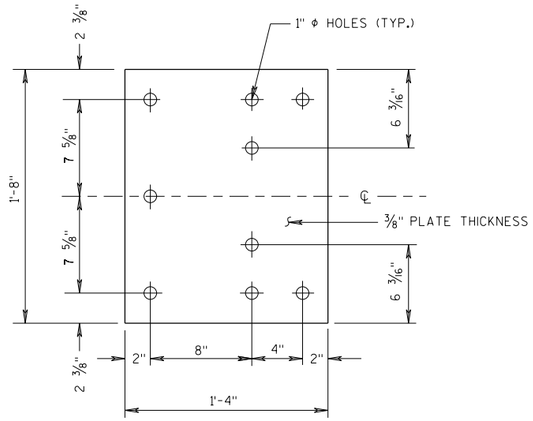
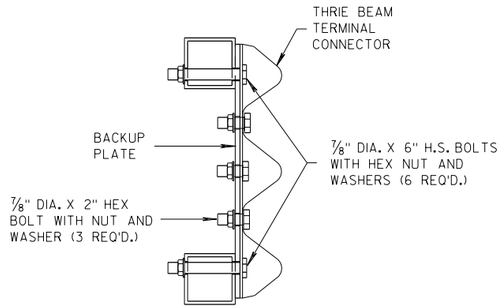
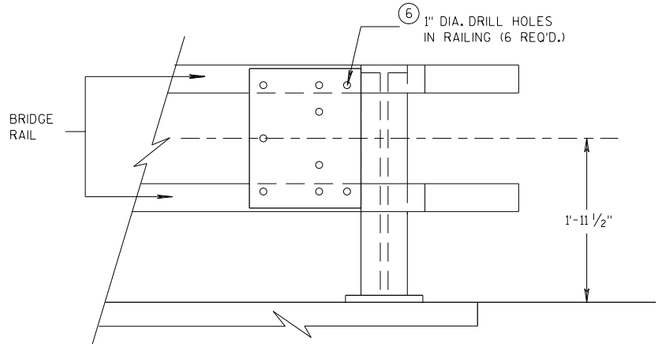


BACK-UP PLATE DETAIL



SECTION J-J

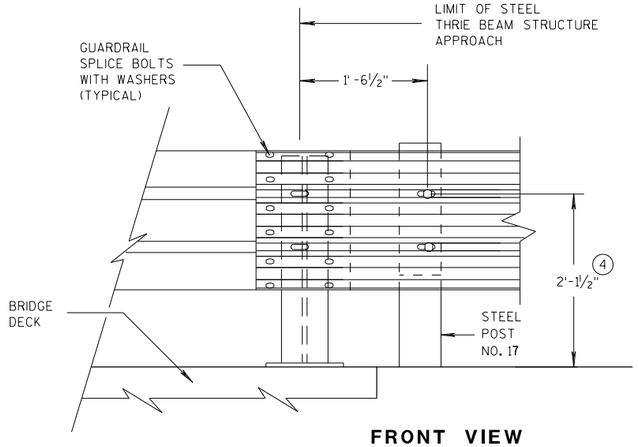


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

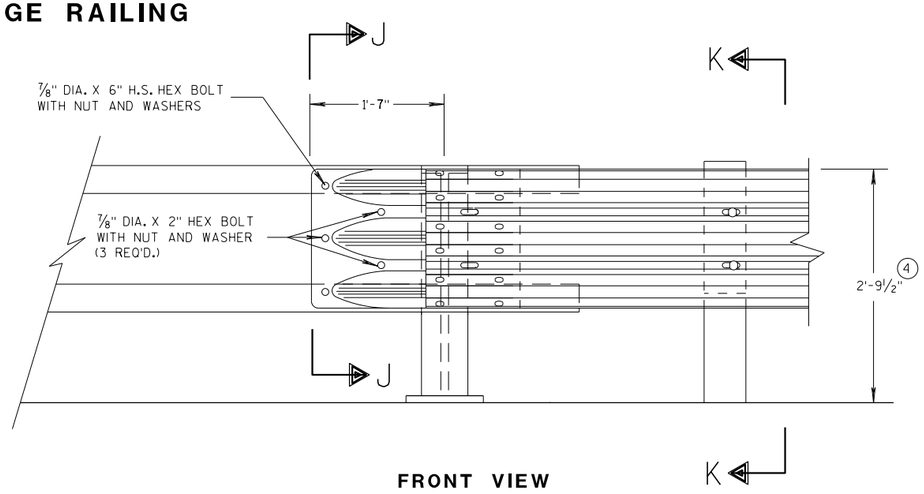
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

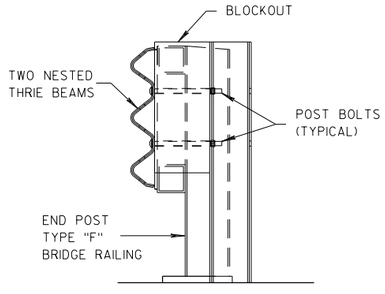


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE
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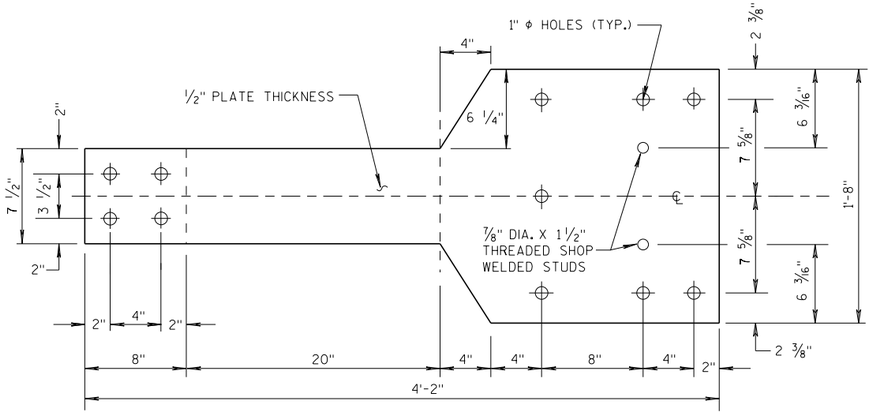
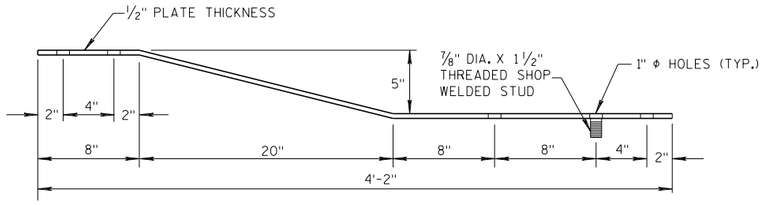
GENERAL NOTES

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

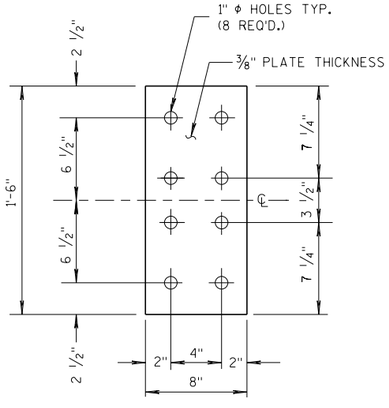


FRONT VIEW

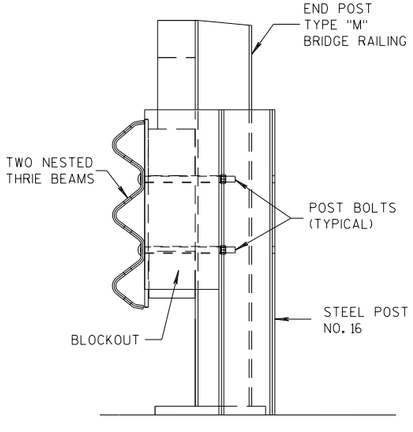


PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

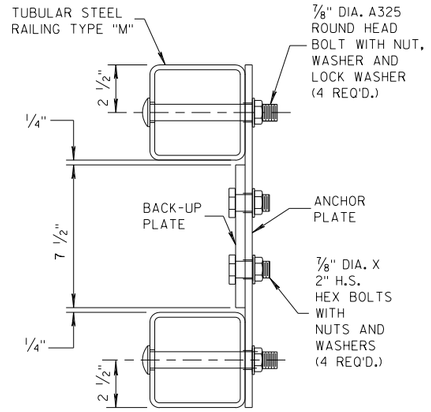


FRONT VIEW

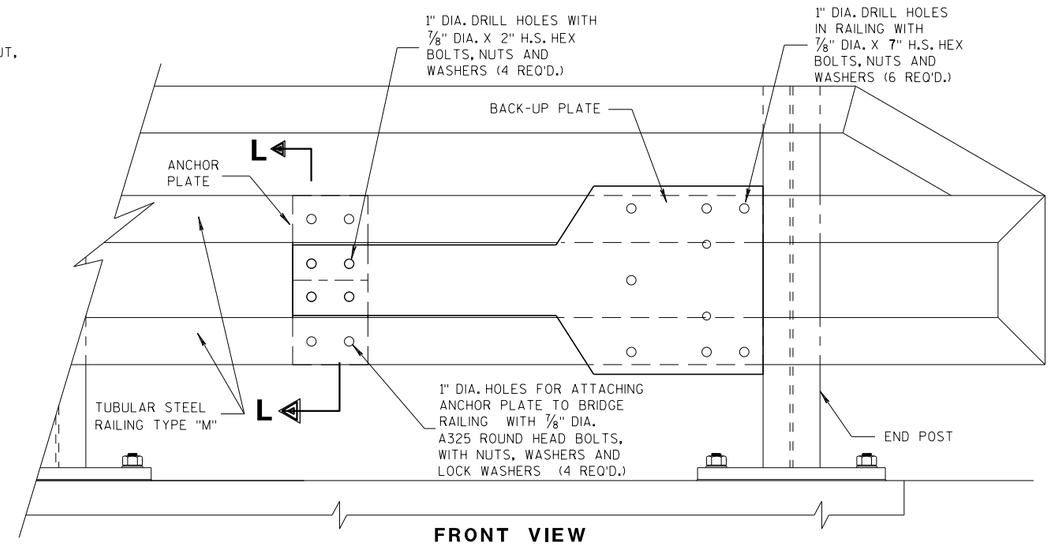


SECTION M-M

ANCHOR PLATE DETAIL, TYPE "M"

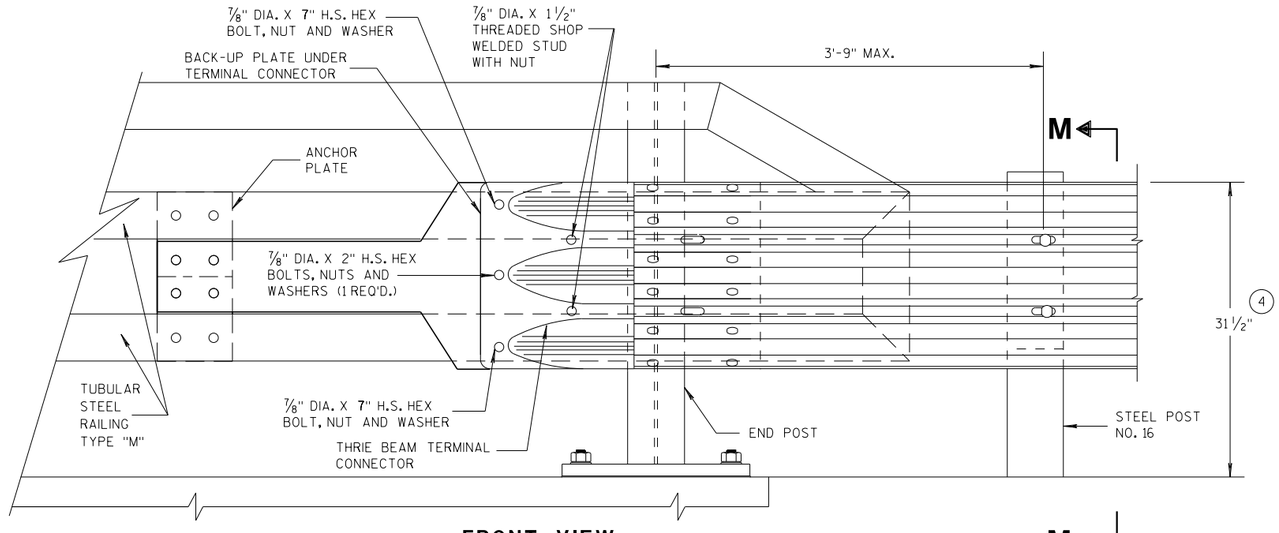


SECTION L-L

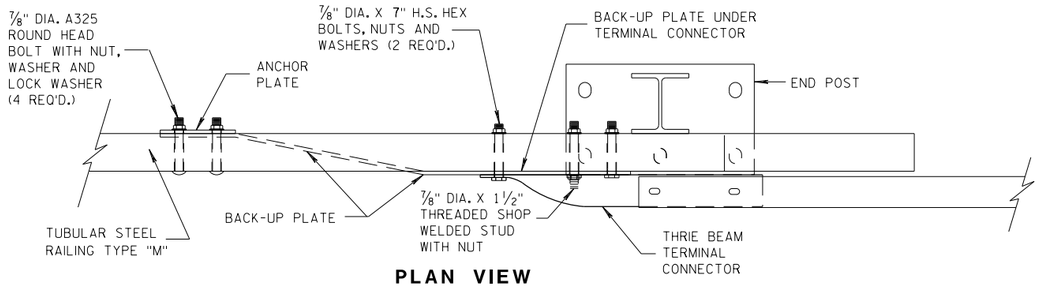


FRONT VIEW

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



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
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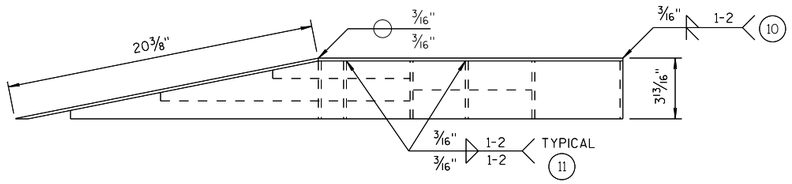

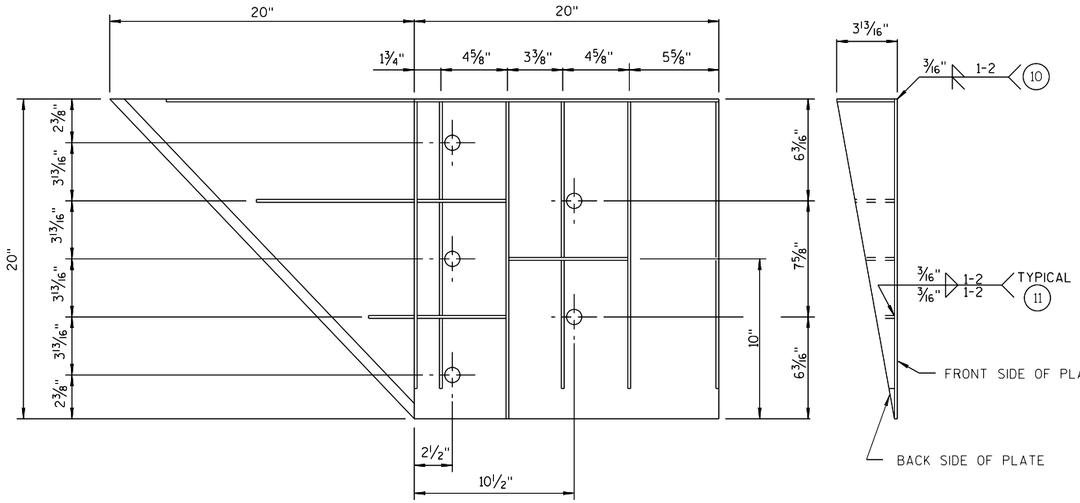

WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

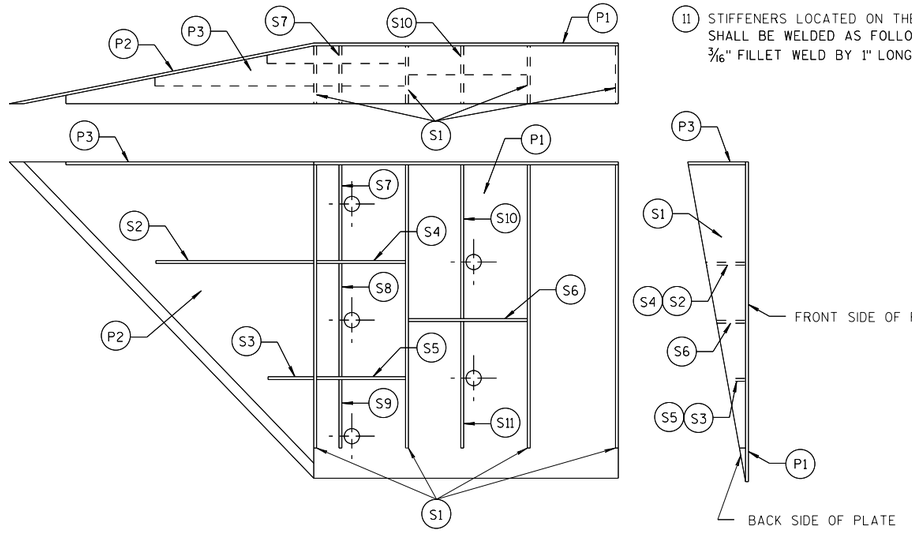

PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

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

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

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

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

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

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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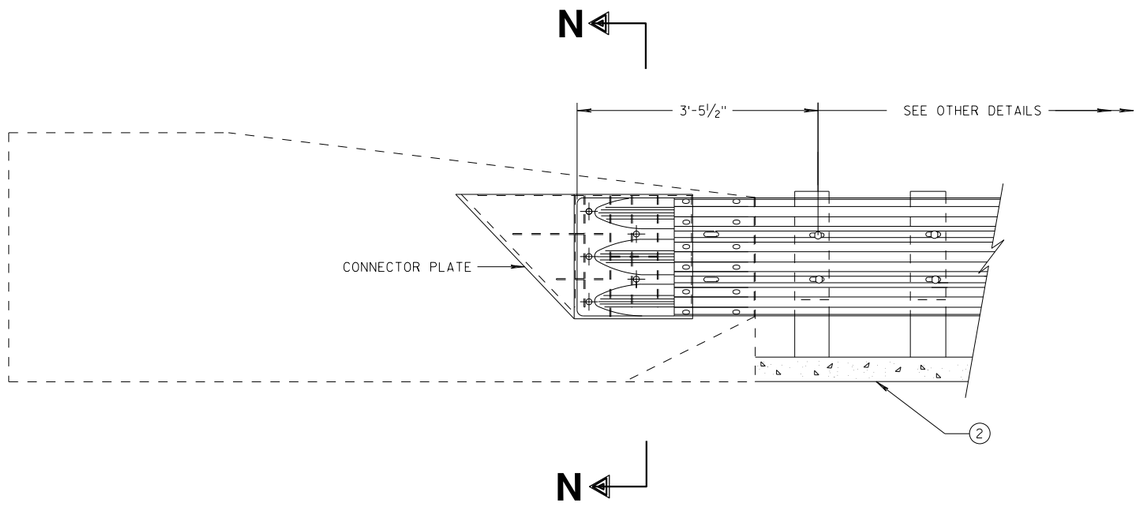
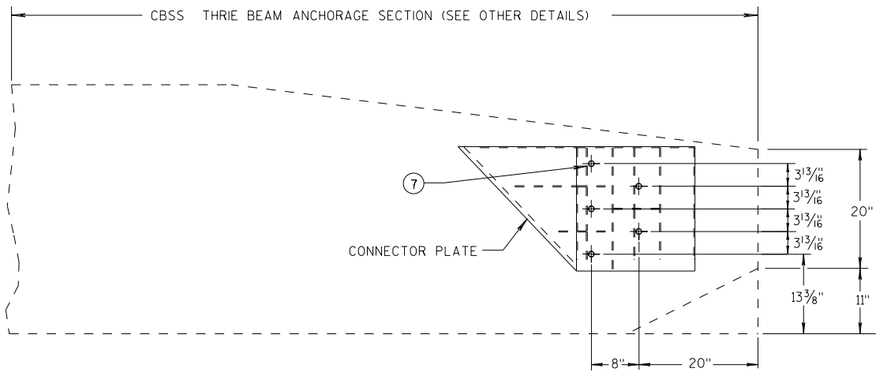


THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



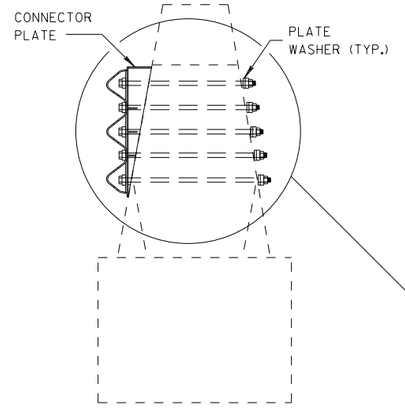
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

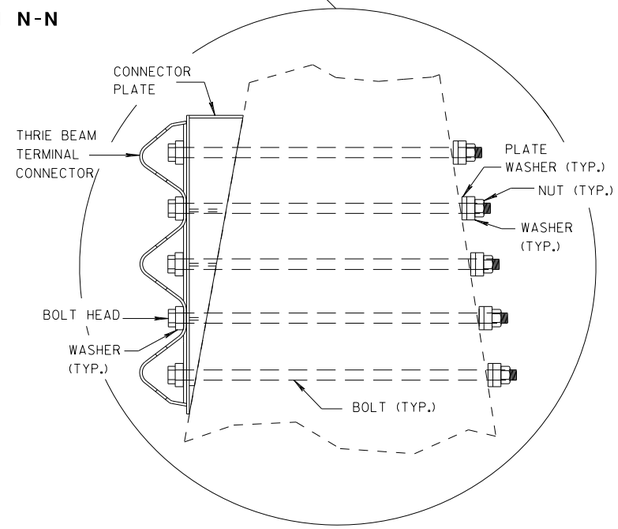
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

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



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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7/2018
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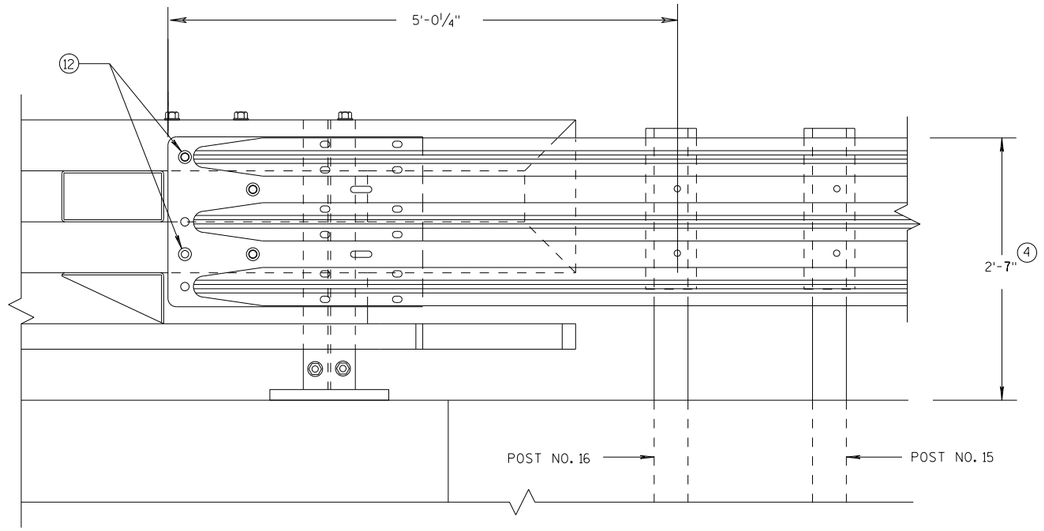
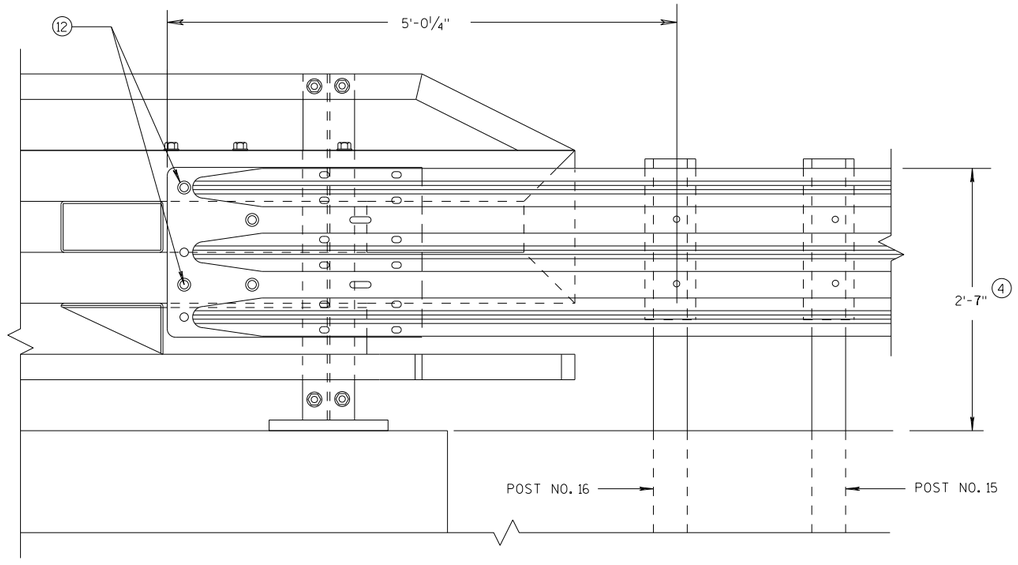


ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

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

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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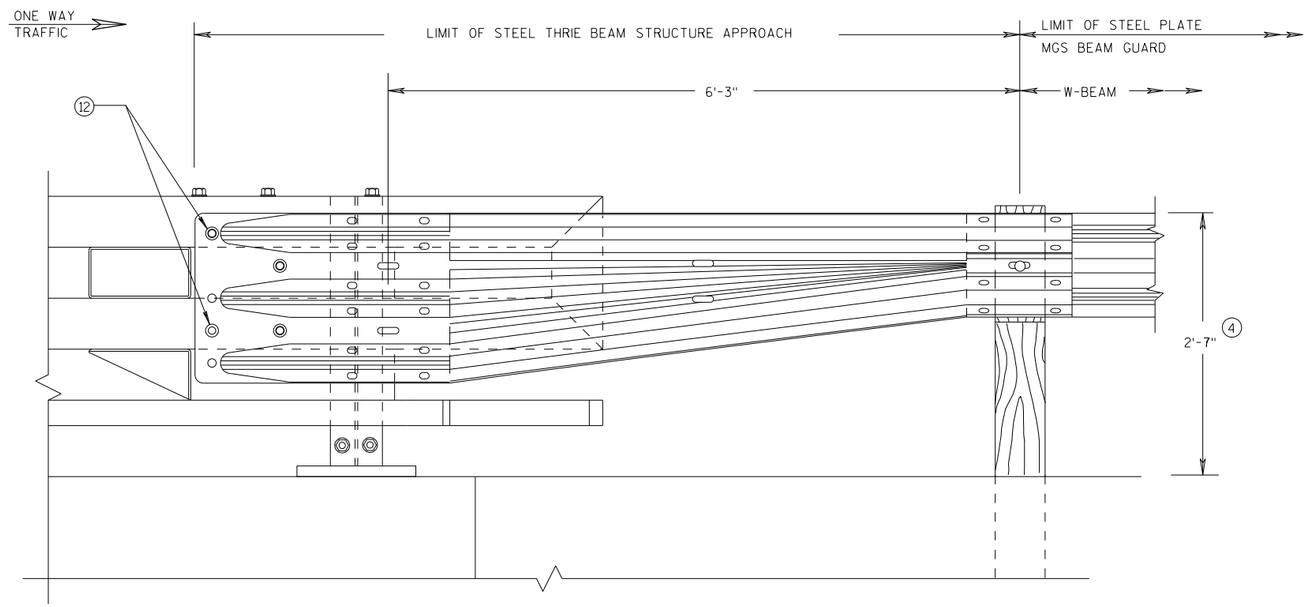


FRONT VIEW

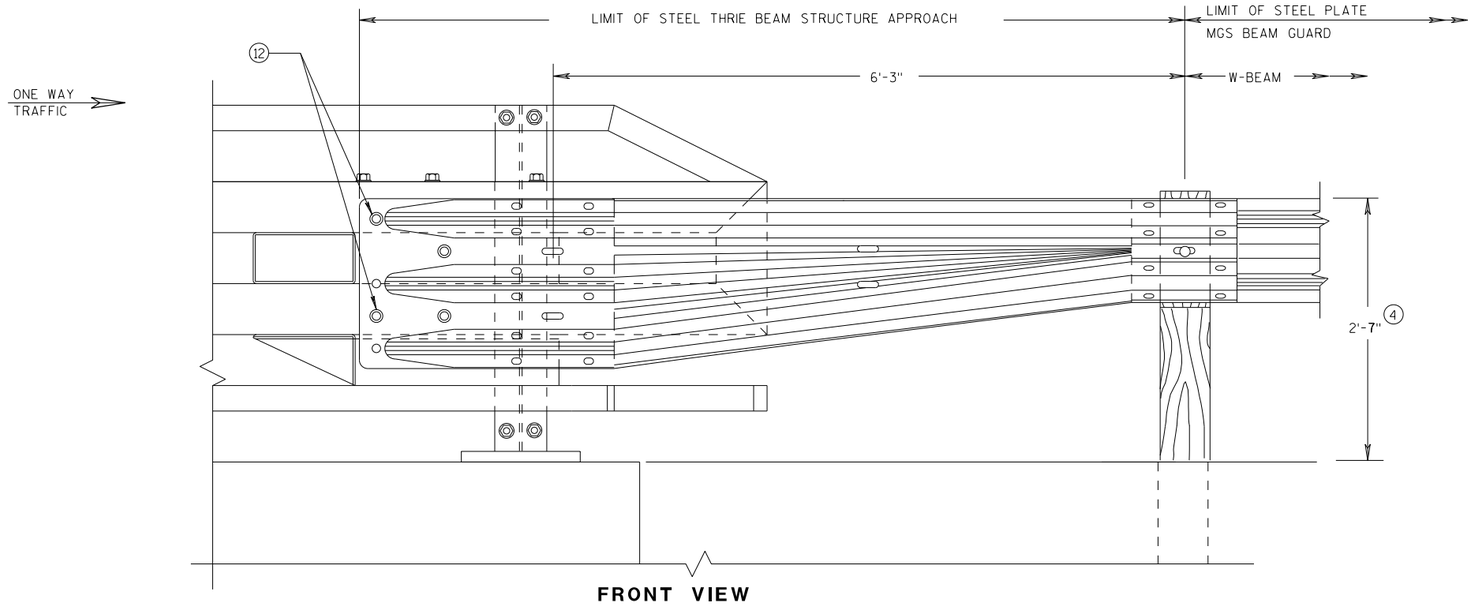
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

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

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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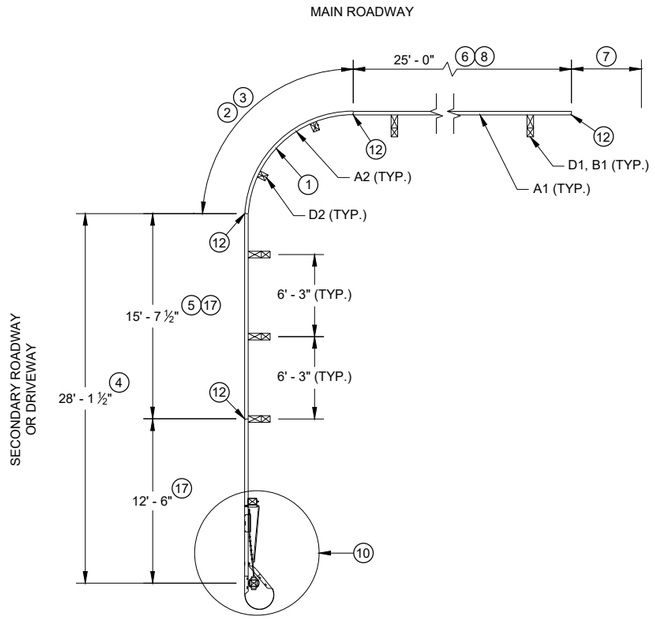
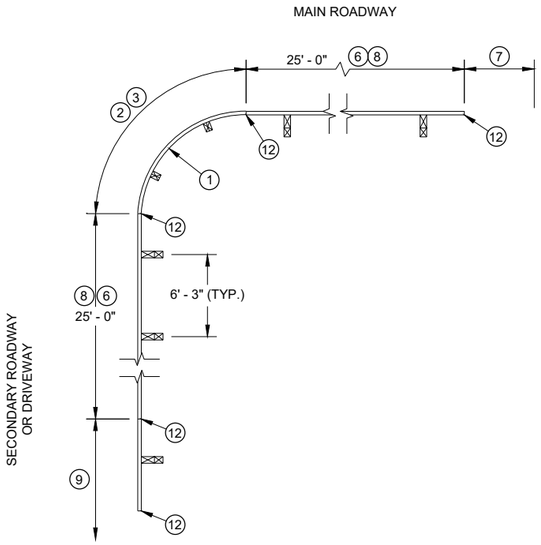


PLAN VIEW

SHORT RADIUS BEAM GUARD WITH SHORT RADIUS TERMINAL ON SECONDARY ROAD OR DRIVEWAY

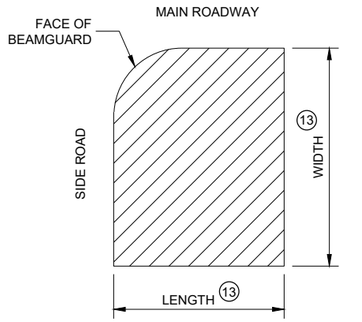


PLAN VIEW

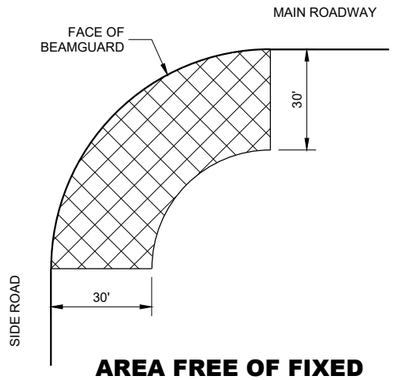
SHORT RADIUS BEAM GUARD WITH EAT, ADDITIONAL BEAM GUARD OR TRANSITION TO RIGID BARRIER ON SECONDARY ROAD OR DRIVEWAY

TABLE FOR RADIUS OF 32' AND LESS

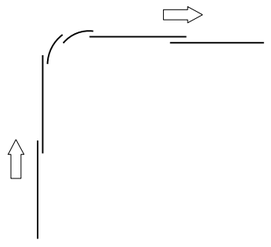
RADIUS (FT)	LENGTH (FT)	WIDTH (FT)
8	25	15
16	30	15
24	40	20
32	50	30



AREA FREE OF FIXED OBJECTS FOR RADIUS 32' AND LESS (16)



AREA FREE OF FIXED OBJECTS FOR RADIUS GREATER THAN 32'



LAP SPLICE DETAIL

GENERAL NOTES

SEE PLANS FOR OTHER BARRIER SYSTEM AND LOCATION SPECIFICS.

SEE SDD 14B42 FOR MORE INFORMATION ON BEAM GUARD INSTALLATION, PARTS, MATERIALS, AND INSTALLATION INFORMATION.

GALVANIZE PARTS AFTER FABRICATION.

WELDING TO FOLLOW CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI / AWS D1.1.

UNLESS NOTED OTHERWISE, ALL PLATES ARE FLAT AND FREE OF WARP.

UNLESS NOTED OTHERWISE, ALL EDGES ARE SMOOTH, STRAIGHT AND VERTICAL.

ALL CUTS AND HOLES, EXCEPT IN BEAM GUARD RAIL ARE TO BE MACHINED OR MACHINE FLAME CUT.

UNLESS NOTED OTHERWISE, CUT OR PROVIDE BOLTS THAT ARE ¼" TO ½" BEYOND THE NUT.

DRAWINGS ARE NOT TO SCALE.

(1) RADIUS MEASURE FROM INSIDE OF RAIL. LENGTH OF BEAM GUARD SHORT RADIUS GUARD MEASURED ALONG TRAFFIC SIDE OF RAIL. RADIUS BETWEEN 8 FEET TO 150 FEET. SEE PLAN FOR REQUIRED RADIUS. BEAM GUARD RAIL IN RADIUS IS SHOP BENT. ODD RAIL LENGTH OR FIELD CUTS MAY BE REQUIRED.

(2) CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE USED IN THE RADIUS. CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE SPACED 6' - 3". SEE PLAN FOR NUMBER OF CONTROLLED RELEASE (CRT) POSTS.

(3) WITHIN RADIUS BEAM GUARD RAILS ARE NOT BOLTED TO POSTS. BEAM GUARD RAIL IS RESTED ON TOP OF LAG SCREW.

(4) MINIMUM LENGTH OF BEAM GUARD ALONG SIDE ROAD OR DRIVEWAY TO INSTALL SHORT RADIUS TERMINAL. BEAM GUARD IS PAID WITH BEAM GUARD ITEM.

(5) ODD LENGTH OF BEAM GUARD REQUIRED TO INSTALL SHORT RADIUS TERMINAL.

(6) MINIMUM AMOUNT OF BEAM GUARD TO BE INSTALLED PRIOR TO TRANSITION TO RIGID BARRIER. ADDITIONAL BEAM GUARD, OR EAT. BEAM GUARD PAID FOR WITH BEAM GUARD ITEM. SEE PLANS FOR MORE DETAIL.

(7) BEAM GUARD, EAT, OR TRANSITION TO RIGID BARRIER. SEE PLAN.

(8) TOP OF BEAM GUARD BY THE RADIUS IS 27". HEIGHT OF BEAM GUARD IS 31" BY TRANSITION TO RIGID BARRIER, ADDITIONAL BEAM GUARD OR EAT.

(9) ADDITIONAL BEAM GUARD, EAT OR TRANSITION TO RIGID BARRIER. BEAM GUARD SHOWN. SEE PLAN FOR DETAILS.

(10) SHORT RADIUS TERMINAL (SEE OTHER DETAILS).

(11) HEIGHT VARIES. SEE NOTE (8) AND (8).

(12) BEAM GUARD RAIL SPLICE LOCATION. SPLICE LOCATION REQUIRES PART F1 AND F2. SEE SDD 14B42 FOR DETAILS.

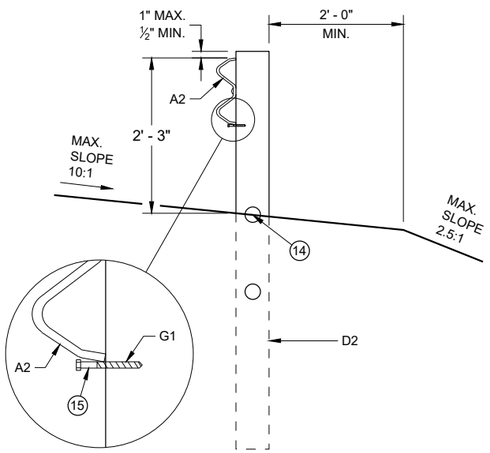
(13) SEE TABLE FOR VALUES.

(14) MAXIMUM HEIGHT FOR CENTER OF HOLE IS ¾" ABOVE FINISHED GROUND ±1".

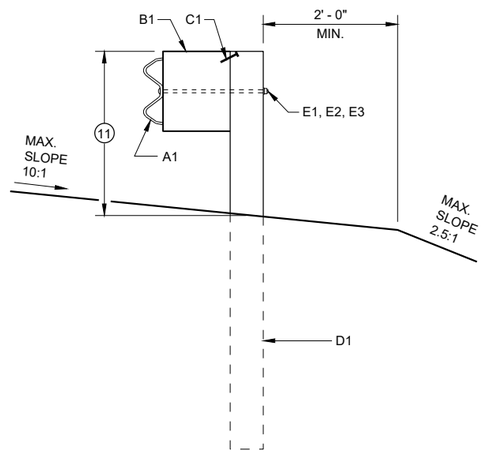
(15) DRILL POST $^{15}/_{64}$" DIA. PILOT HOLE. DO NOT HAMMER LAG SCREW INTO POST.

(16) SMALL SIGNS ON BREAKAWAY HARDWARE ARE ACCEPTABLE.

(17) TOP OF RAIL HEIGHT IS 27" WHEN USING A SHORT RADIUS TERMINAL (CRT).



CONTROLLED RELEASE TERMINAL POST (CRT) IN RADIUS



BEAM GUARD POSTS IN HEIGHT TRANSITION

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B53 - 01a

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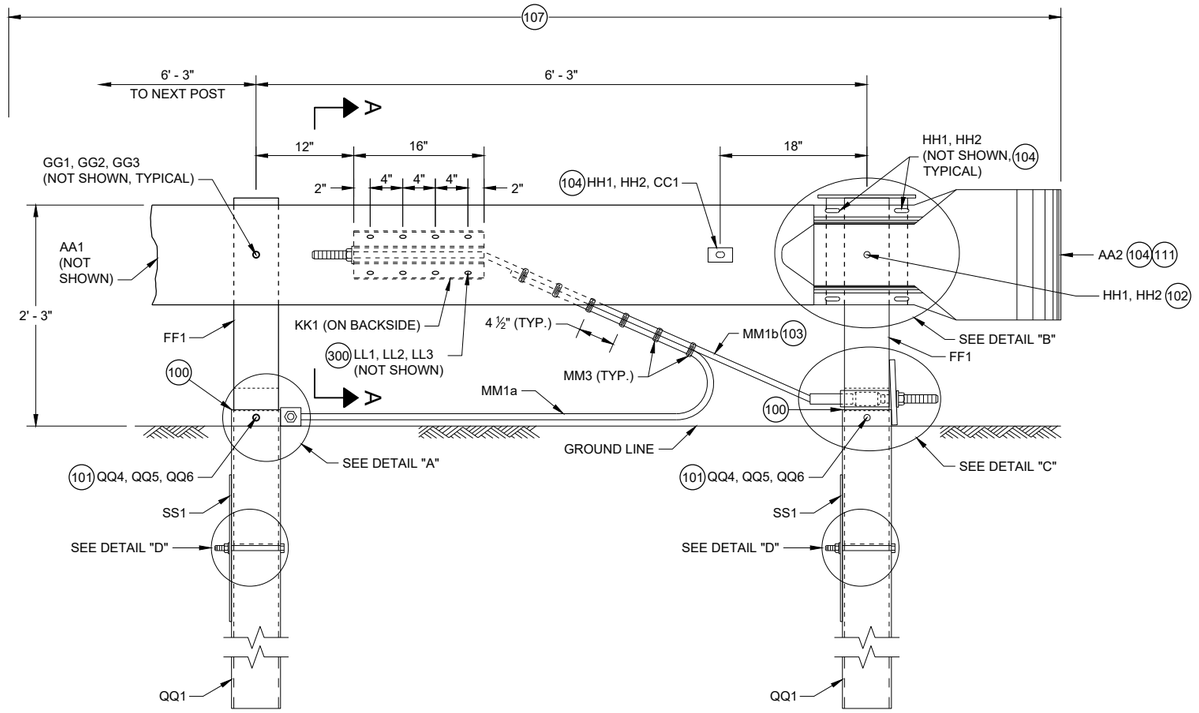
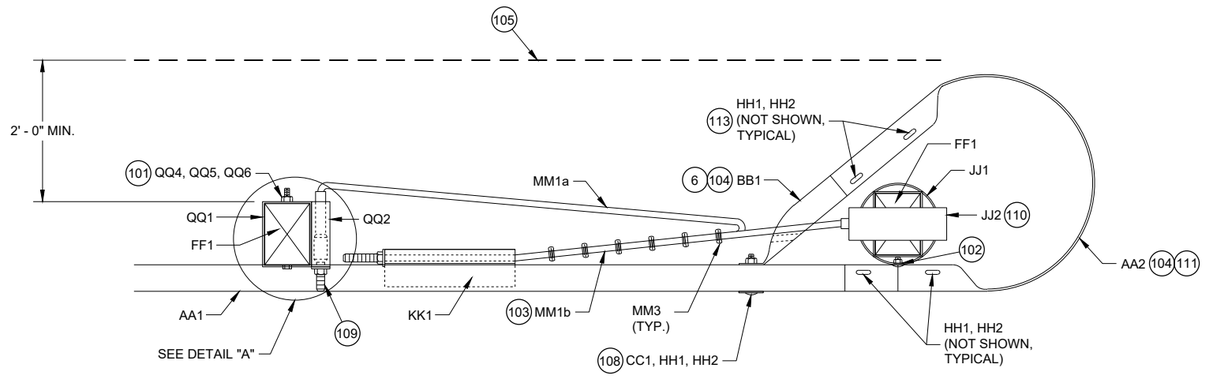
SDD 14B53 - 01a



PROFILE VIEW

SHORT RADIUS TERMINAL



TOP VIEW

SHORT RADIUS TERMINAL

GENERAL NOTES

100 TOP OF FOUNDATION TUBE 2 INCHES MAXIMUM ABOVE FINISHED GROUND.

101 WASHERS REQUIRED BETWEEN BOLT HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

102 SPLICE BOLT AND NUT CONNECTS BEAM GUARD RAIL, W-BEAM SECTION BUFFER, AND STEEL PIPE ASSEMBLY. NO WASHER REQUIRED. SEE DETAIL "B".

103 CABLE IS TAUT.

104 ADJUST AA2 AND BB1 TO FIT.

105 BREAK POINT OF SHOULDER.

106 TACK WELD CABLE CONNECTOR TUBE PLATE TO CABLE CONNECTION TUBE. SEE DETAIL "A" PROFILE VIEW.

107 PAY LIMIT FOR BEAM GUARD.

108 SQUARE WASHER BETWEEN HEAD OF BOLT AND TRAFFIC FACE OF BEAM GUARD. ROUND WASHER REQUIRED BETWEEN NUT AND BB1.

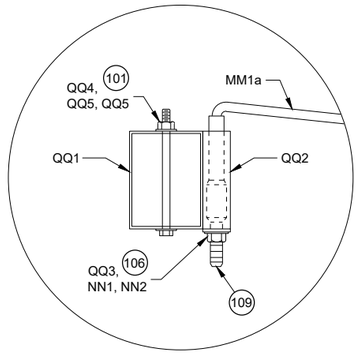
109 CUT OR PROVIDE THREADED STUD THAT IS FLUSH WITH FACE OF BEAM GUARD RAIL KK1 (PLUS OR MINUS ½" TOLERANCE). DEBURR AFTER CUTTING.

110 SEE STEEL PIPE ASSEMBLY DETAILS.

111 ATTACH UU2 WITH UU3. SHOP APPLY UU1 TO UU2.

112 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA1 TO AA2.

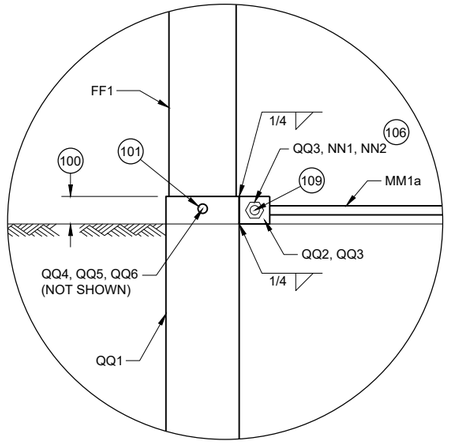
113 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA2 TO BB1.



TOP VIEW

DETAIL "A"

(WOOD BREAKAWAY AND BEAM GUARD RAIL POSTS NOT SHOWN)



PROFILE VIEW

DETAIL "A"

6

SDD 14B53 - 01b

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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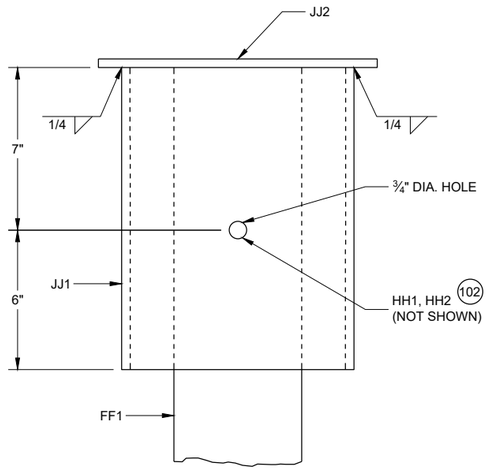
SDD 14B53 - 01b

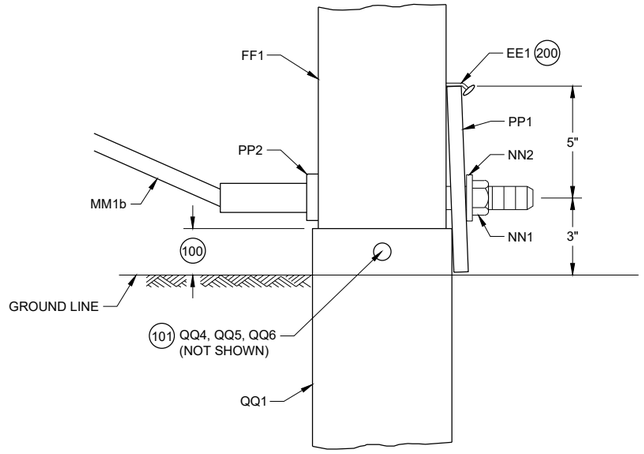
GENERAL NOTES

(200) TWO (2) NAILS SPACED 4 INCHES CENTER TO CENTER.



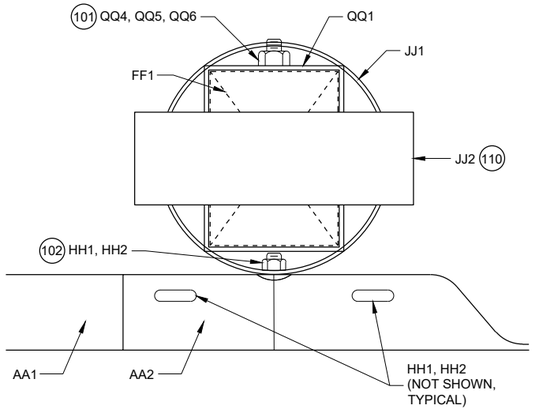
PROFILE VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY
(BEAM GUARD AND W BEAM END SECTION NOT SHOWN)



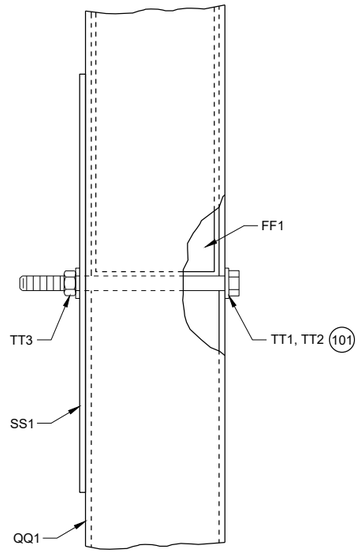
PROFILE VIEW

DETAIL "C"



PLAN VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY



PROFILE VIEW

DETAIL "D"

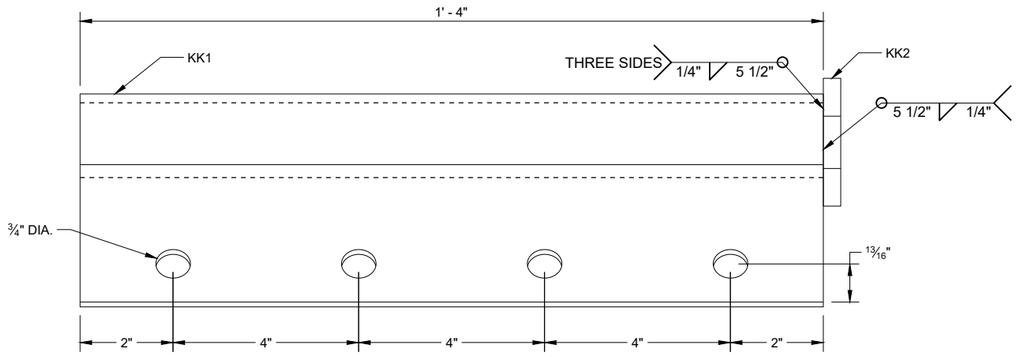
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

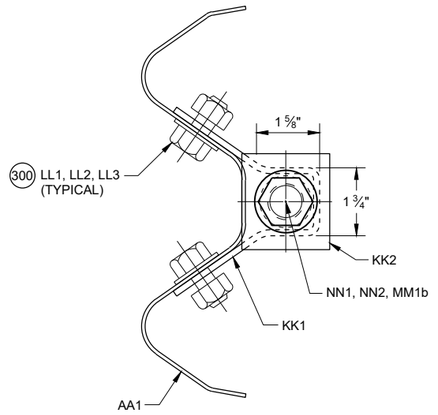
6

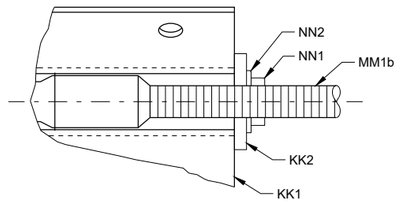
SDD 14B53 - 01c

GENERAL NOTES

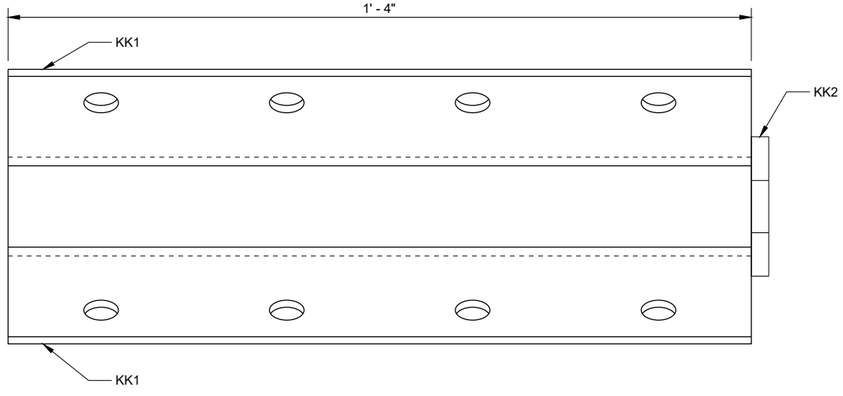
(300) WASHERS REQUIRED BETWEEN BOLT HEAD AND BEAM GUARD RAIL AND BETWEEN NUT AND ANCHOR BRACKET. EIGHT (8) LL1 AND LL3 REQUIRED. SIXTEEN (16) LL2 REQUIRED.

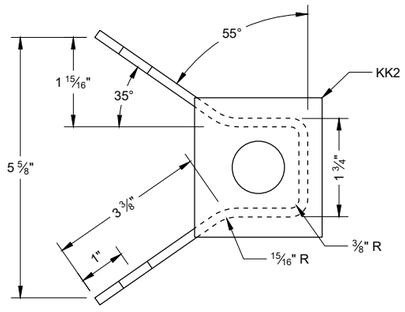




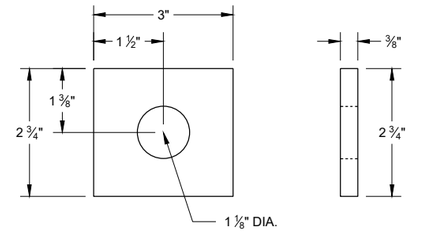


SECTION A - A





ANCHOR BRACKET (KK1, KK2)



ANCHOR BRACKET BEARING PLATE (KK2)

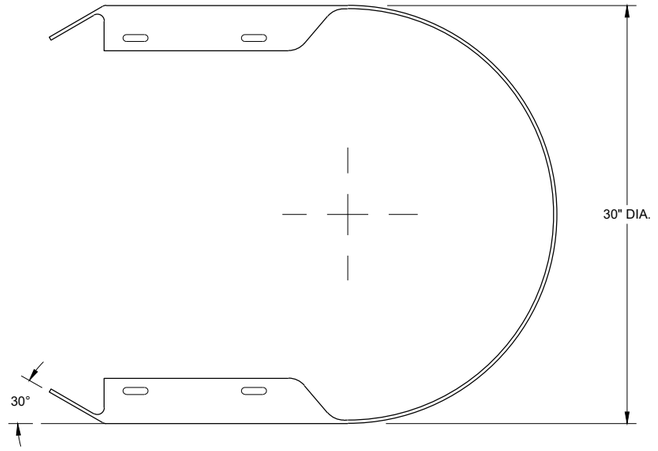
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

6
SDD 14B53 - 01d

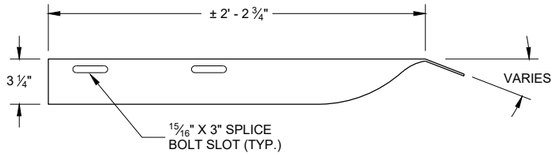
GENERAL NOTES

(400) CROSS SECTION OF PART IS TO FIT OVER AA1 .

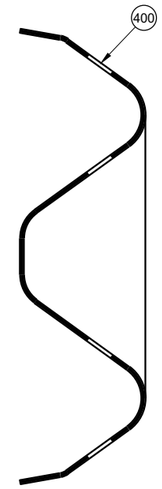
(401) CROSS SECTION OF PART IS TO FIT OVER OR UNDER AA1 .



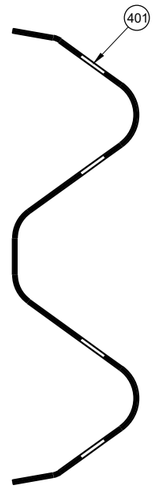
TOP VIEW



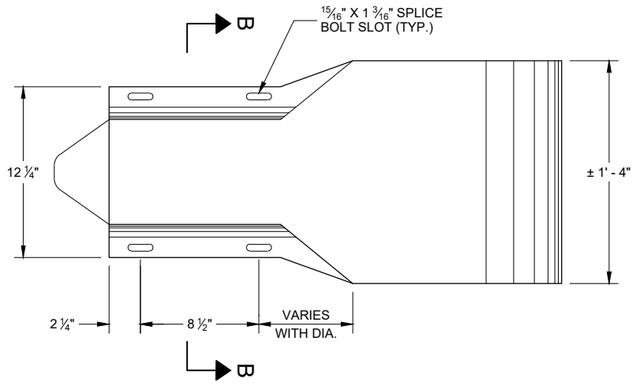
TOP VIEW



SECTION B -B

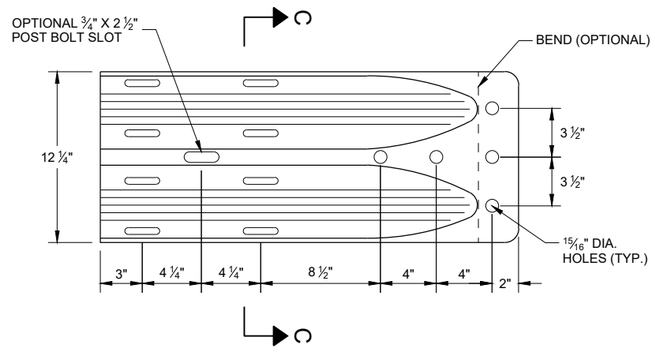


SECTION C -C



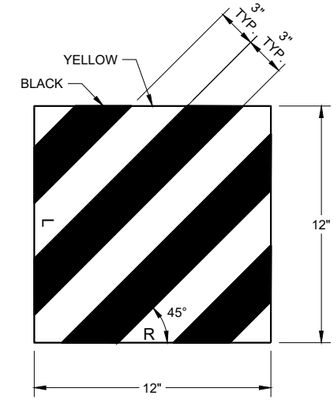
PROFILE VIEW

W BEAM
END SECTION BUFFER (AA2)



PROFILE VIEW

W BEAM
TERMINAL CONNECTOR (BB1)



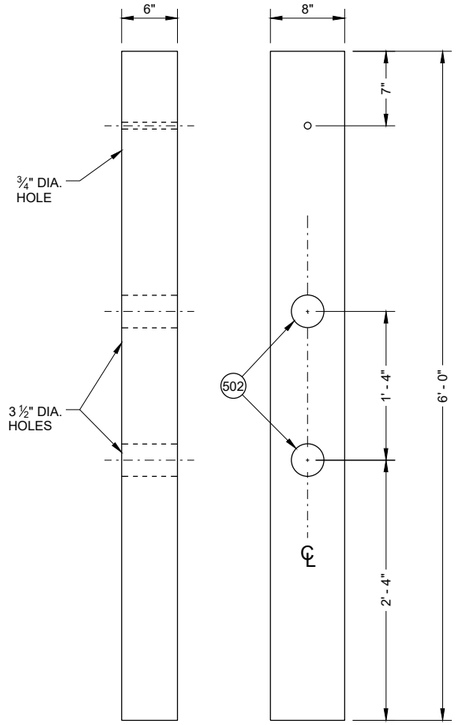
REFLECTIVE SHEETING (UU1, UU2)

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

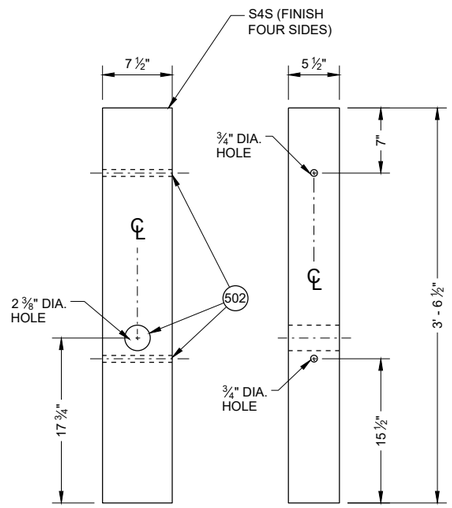
6

SDD 14B53 - 01e



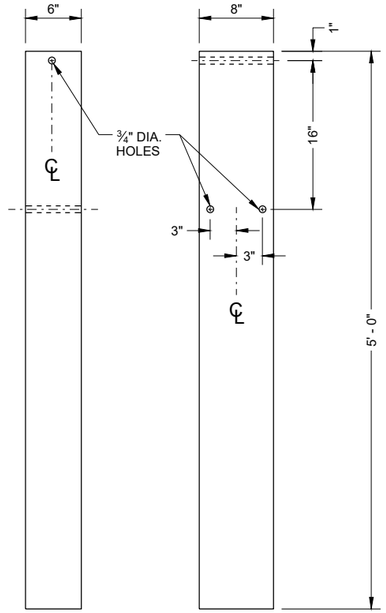
FRONT VIEW SIDE VIEW

CONTROLLED RELEASE POST (CRT) (DD2)



FRONT VIEW SIDE VIEW

WOOD BREAKAWAY POST (FF1)



FRONT VIEW SIDE VIEW

FOUNDATION TUBE (QQ1) 500

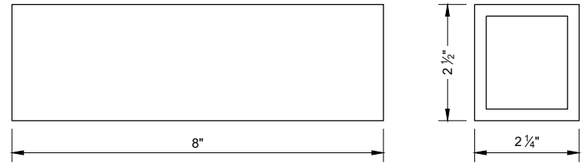
GENERAL NOTES

500 SEE DETAIL "D" FOR LOCATION AND ATTACHMENT OF SS1.

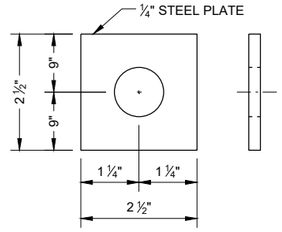
501 FOR MM1a THREADED STUD ONLY REQUIRED ON ONE END. SWAGED FITTING REQUIRED.

502 LOCATE HOLES ON THE CENTERLINE OF THE SIDE OF THE POST.

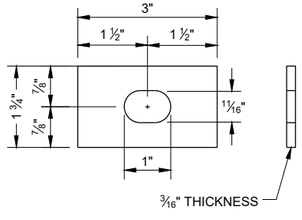
503 MM1a MAY HAVE ONE THREADED STUD 4 INCHES LONG. SEE NOTE 109.



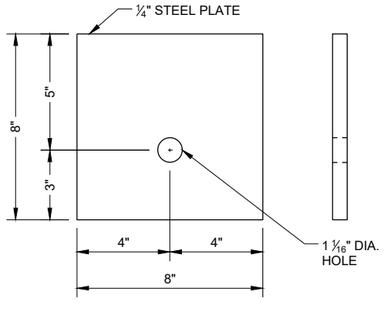
FOUNDATION TUBE - ANCHOR CABLE TUBE (QQ2)



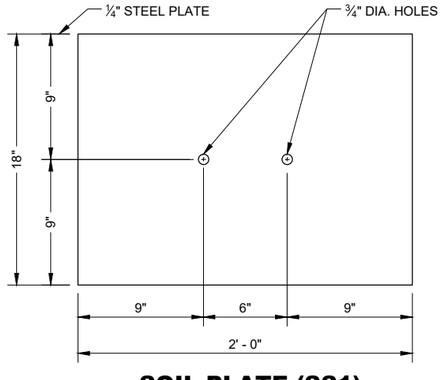
ANCHOR CABLE TUBE END PLATE (QQ3)



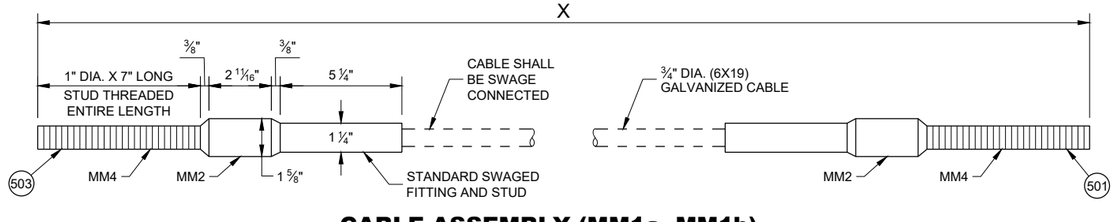
RECTANGULAR PLATE WASHER (CC1)



BEARING PLATE (PP1)



SOIL PLATE (SS1)



CABLE ASSEMBLY (MM1a, MM1b)

"X" LENGTH

MM1b	9' - 0"
MM1b	6' - 8"

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B53 - 01f

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	BEAM GUARD RAIL	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
A2	BEAM GUARD RAIL - SHOP BENT	INDICATE ON BACK OF RAIL THE RADIUS THAT RAIL WAS BENT TO. SHOP BEND RADIUS IS TO THE NEAREST FOOT. FOLLOW AASHTO M180 ON HOW TO MARK RADIUS INFORMATION.	
		AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
B1	BLOCK - WOOD	WISDOT SPEC. 614	SEE SDD 14B42
C1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEAD)	
D1	POST-STRONG POST-WOOD	WISDOT SPEC. 614	SEE SDD 14B42
D2	POST-CRT-WOOD	WISDOT SPEC. 614	
E1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
E2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	5/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
E3	POST BOLT - NUT	AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
F1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
F2	SPLICE BOLT - NUT	ASTM A563 GRADE A	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
G1	LAG SCREW	ASTM A308 GRADE A ASTM A153 CLASS D	1/2" DIA. 6" LONG
H1	DELINEATOR - BEAM GUARD		SEE SDD 14B42 FOR MORE INFORMATION
H2	DELINEATION - SHEETING	YELLOW OR WHITE	
		WISDOT SPEC 637 TYPE SH	
		APPROVED PRODUCT LIST	
J1	FOUNDATION BACKFILL	STANDARD SPEC. 614	
AA1	BEAM GUARD RAIL - PUNCHED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
AA2	BEAM GUARD RAIL - END SECTION BUFFER	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
BB1	BEAM GUARD RAIL - TERMINAL CONNECTOR MODIFIED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
CC1	SHORT RADIUS - SQUARE WASHER	AASHTO M180	
		GALV. AASHTO M111 / ASTM A123	
EE1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)	
FF1	POST - BCT - WOOD	S4S FINISH ON 4 SIDES	
		WISDOT SPEC. 614	
GG1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	3/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
GG2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	3/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B53 - 01g

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
GG3	POST BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE 14B42 FOR GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
HH1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180 HEAD GEOMETRY	
HH2	SPLICE BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
JJ1	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	10" O.D.
JJ2	TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS ⅜" X 4" X 1' - 0"
		GALV. AASHTO M111 / ASTM A123	
KK1	ANCHOR BRACKET	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
KK2	ANCHOR BRACKET - BEARING PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
LL1	ANCHOR BRACKET - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
LL2	ANCHOR BRACKET - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	⅝" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
LL3	ANCHOR BRACKET - NUT	ASTM A563 GRADE A	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
MM1a	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM1b	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM2	ANCHOR CABLE - SWAGE FITTING	ASTM A576 GRADE 1035	
		SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. WITH A BREAKING STRENGTH 40,000 LBS.	
		GALV. AASHTO M111 / ASTM A123	
		ASME B30.26 FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING INTO CONNECTION: NAME OF MANUFACTURER OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE.	
MM3	WIRE ROPE CABLE CLAMPS	FF-C-450D TYPE 1 CLASS 1	¾"
		ASTM A153 HOT DIP CLASS D	
MM4	ANCHOR CABLE - SWAGE FITTING - STUD	ASTM F3125 GRADE A325 TYPE 1 OR SAE GRADE 5 OR ASTM A449 TYPE 1 HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
NN1	ANCHOR CABLE - NUT	ASTM A563 GRADE A	1" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
NN2	ANCHOR CABLE - NUT - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	1" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

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SDD 14B53 - 01h

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
PP1	BEARING PLATE AT POST	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
PP2	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	2" DIA. x 6" LONG
QQ1	FOUNDATION TUBE	ASTM A500 GRADE B	8" X 6" X 3/16"
		GALV. AASHTO M111 / ASTM A123	
QQ2	SHORT RADIUS - FOUNDATION TUBE - ANCHOR CABLE - TUBE	ASTM A500 GRADE B	DIMENSIONS 2 1/2" X 2 1/4" X 1/4" X 8"
		GALV. AASHTO M111 / ASTM A123	
QQ3	SHORT RADIUS - SOIL TUBE - ANCHOR CABLE - TUBE - END PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS 2 1/2" X 2 1/2" X 1/4"
		GALV. AASHTO M111 / ASTM A123	
QQ4	GROUND STRUT AND YOKE - BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
		ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	
		UNC	
QQ5	GROUND PLATE AND YOKE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
QQ6	GROUND STRUT AND YOKE - NUT	HEAVY HEX	5/8 DIA.
		UNC	
		ASTM A563 GRADE A	
		OVER TAPPED NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
SS1	SOIL PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / A123	
TT1	SOIL PLATE - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	5/8 DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
TT2	SOIL PLATE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
TT3	SOIL PLATE - NUT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
UU1	OBJECT MARKER - SHEETING	MUTCD / WISDOT OBJECT MARKER TYPE 3	PATTERN AND COLOR FOR SHEETING. SHEETING TYPE FOR MARKER.
		WISDOT SPEC 637 TYPE F	
		APPROVED PRODUCT LIST	
UU2	OBJECT MARKER - ALUMINUM PLATE	WISDOT SPEC 637 ALUMINUM PLATE	MATERIAL AND THICKNESS OF MATERIALS
UU3	OBJECT MARKER - SCREWS	STAINLESS SELF-TAPPING SCREWS	
VV1	FOUNDATION BACKFILL	WISDOT SPEC 614	

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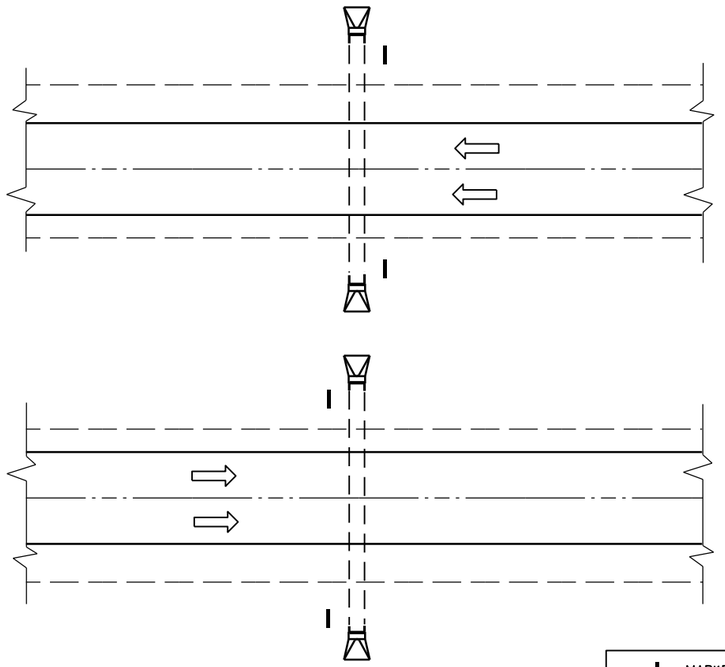
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

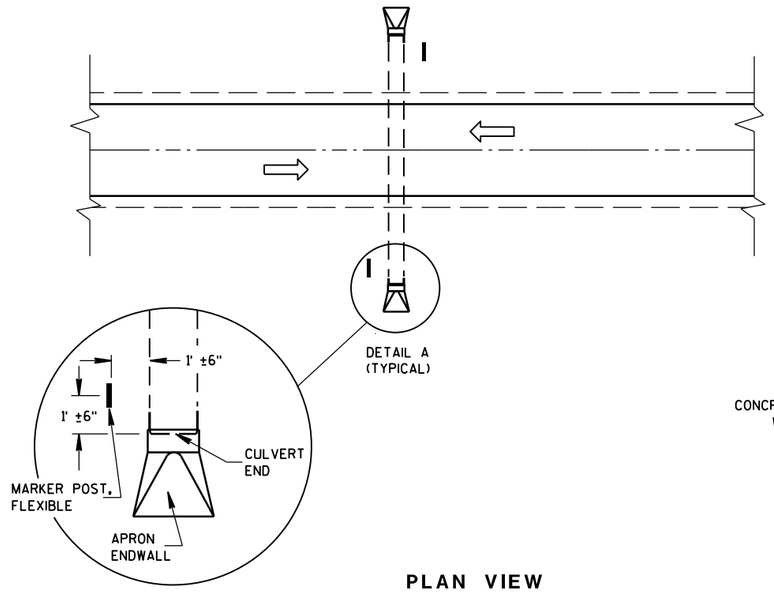
FHWA

SDD 14B53 - 01i



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

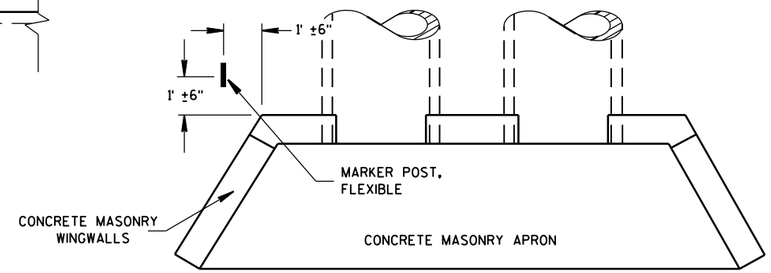
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

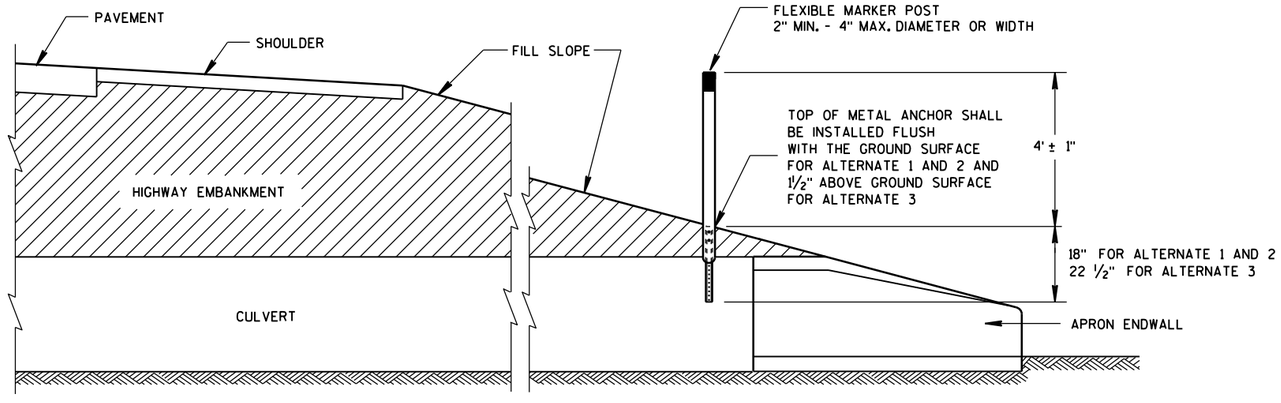
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

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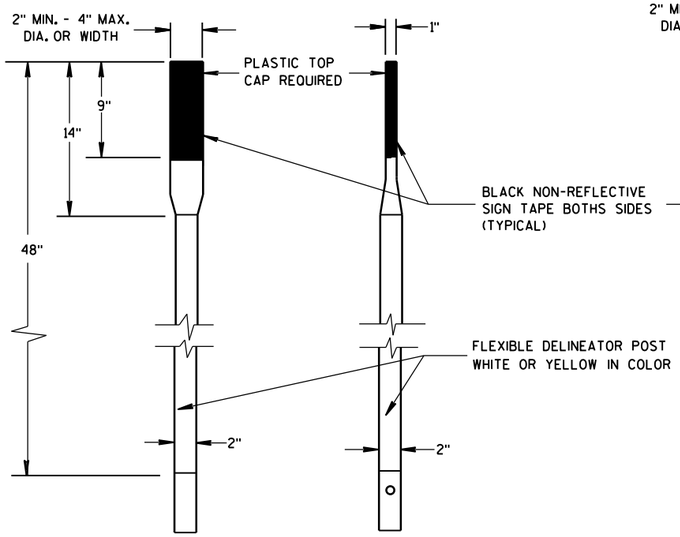
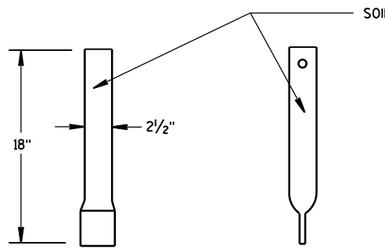
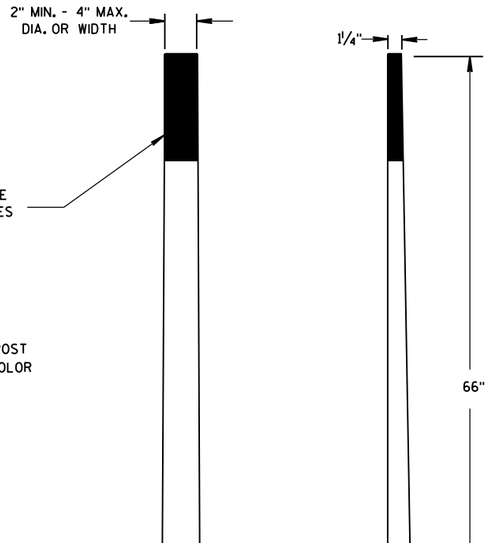
S.D.D. 15 A 3-2a





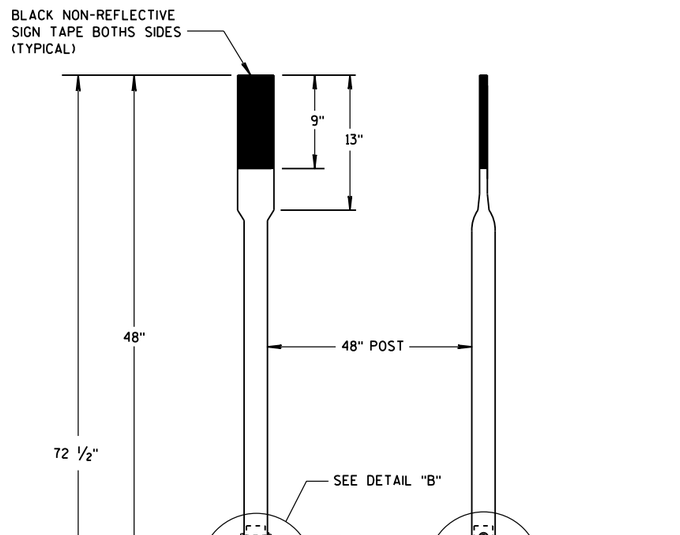
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

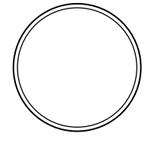
ALTERNATE 2



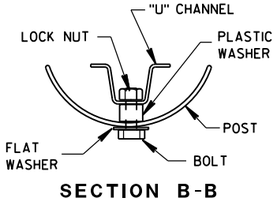
FRONT VIEW SIDE VIEW

ALTERNATE 3

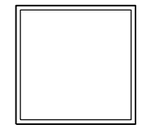
FLEXIBLE MARKER POSTS



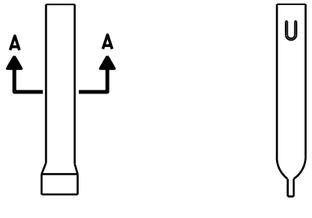
SECTION A-A



SECTION B-B

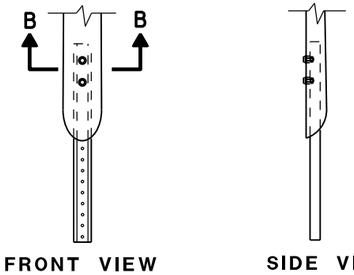


SECTION C-C



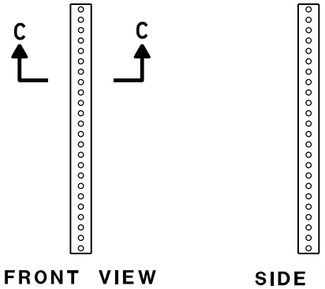
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

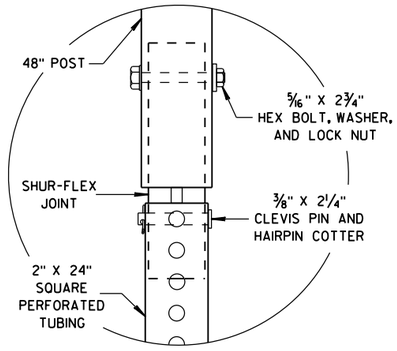
ALTERNATE 2



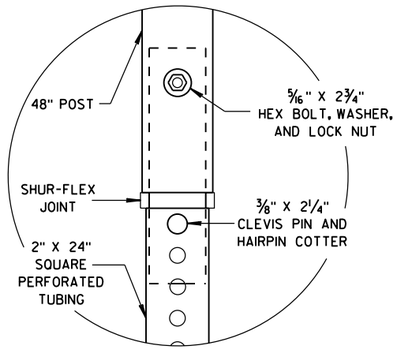
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

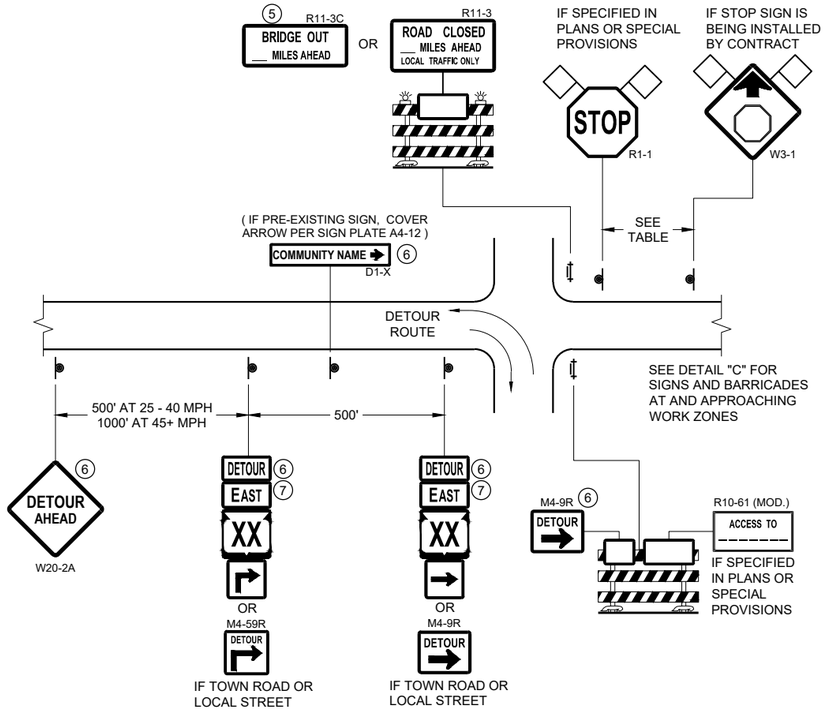
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

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

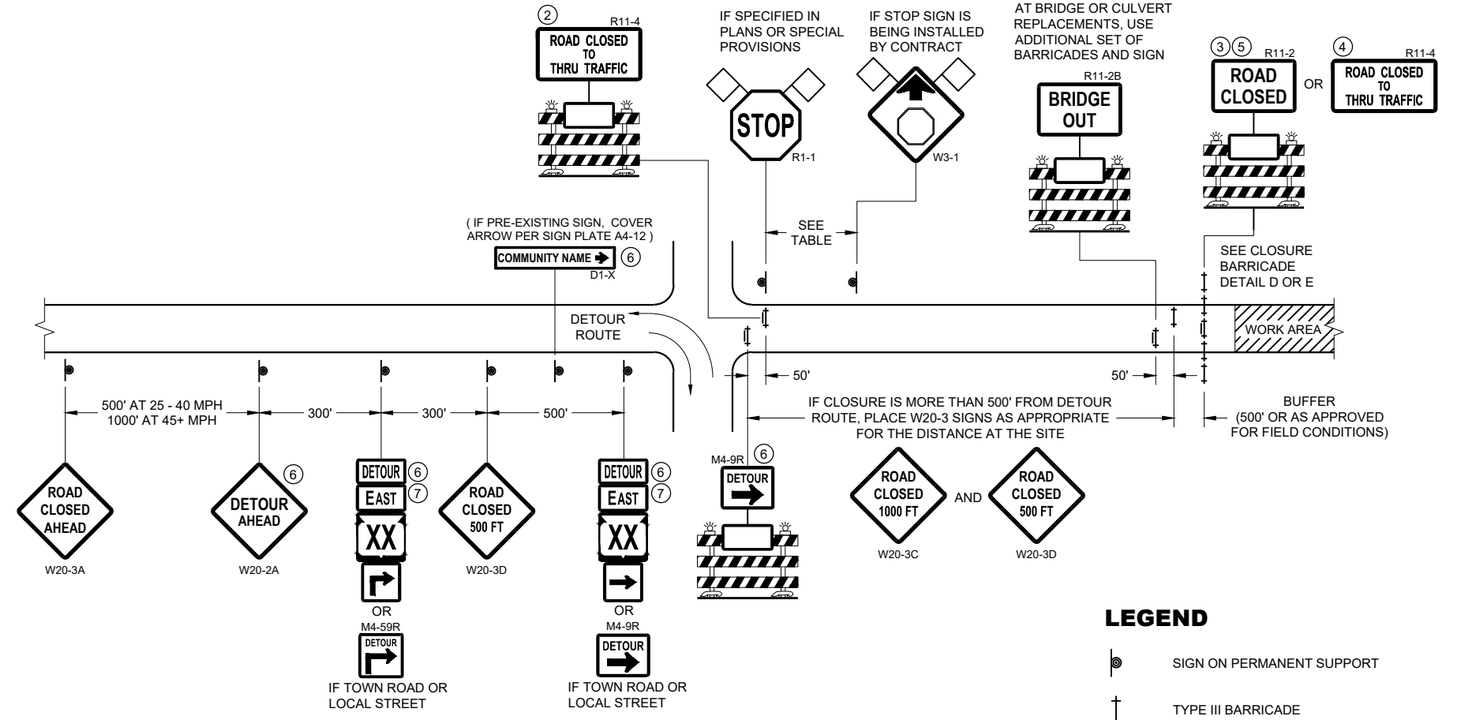
6

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)



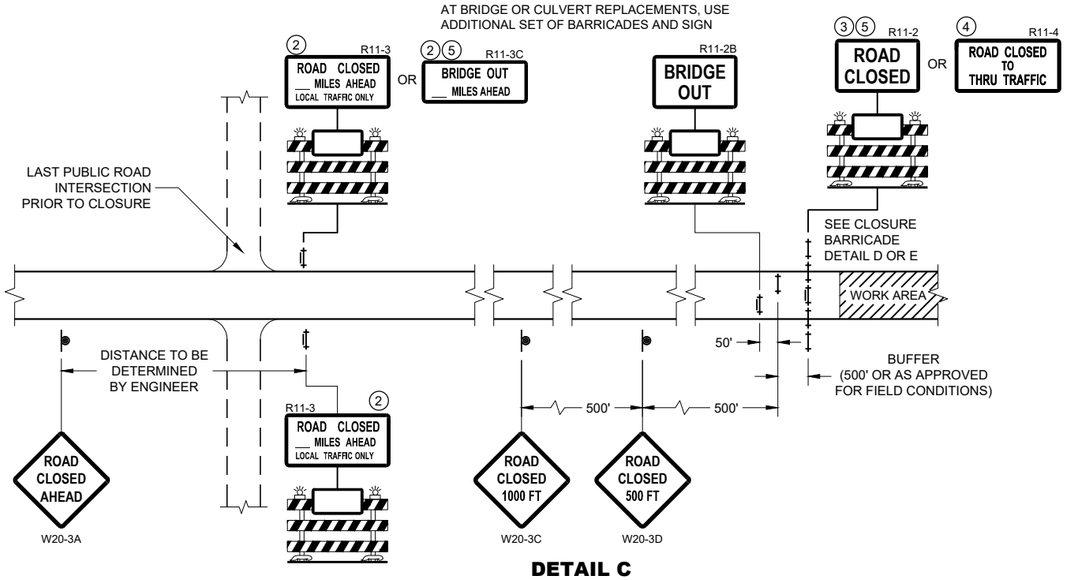
DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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

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



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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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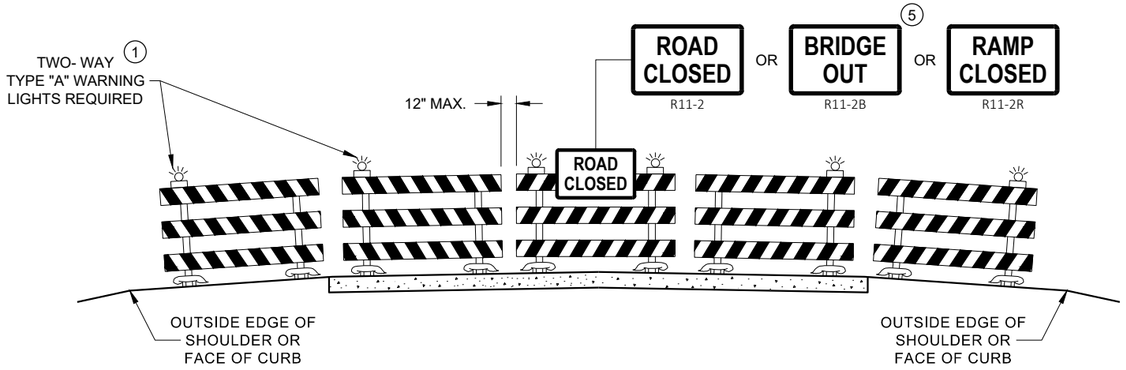
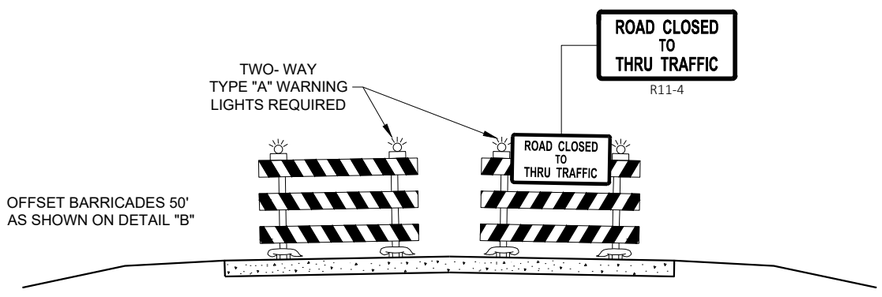
SDD 15C02 - 08a

SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

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

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 08b

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

LEGEND

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

GENERAL NOTES

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

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

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

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

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

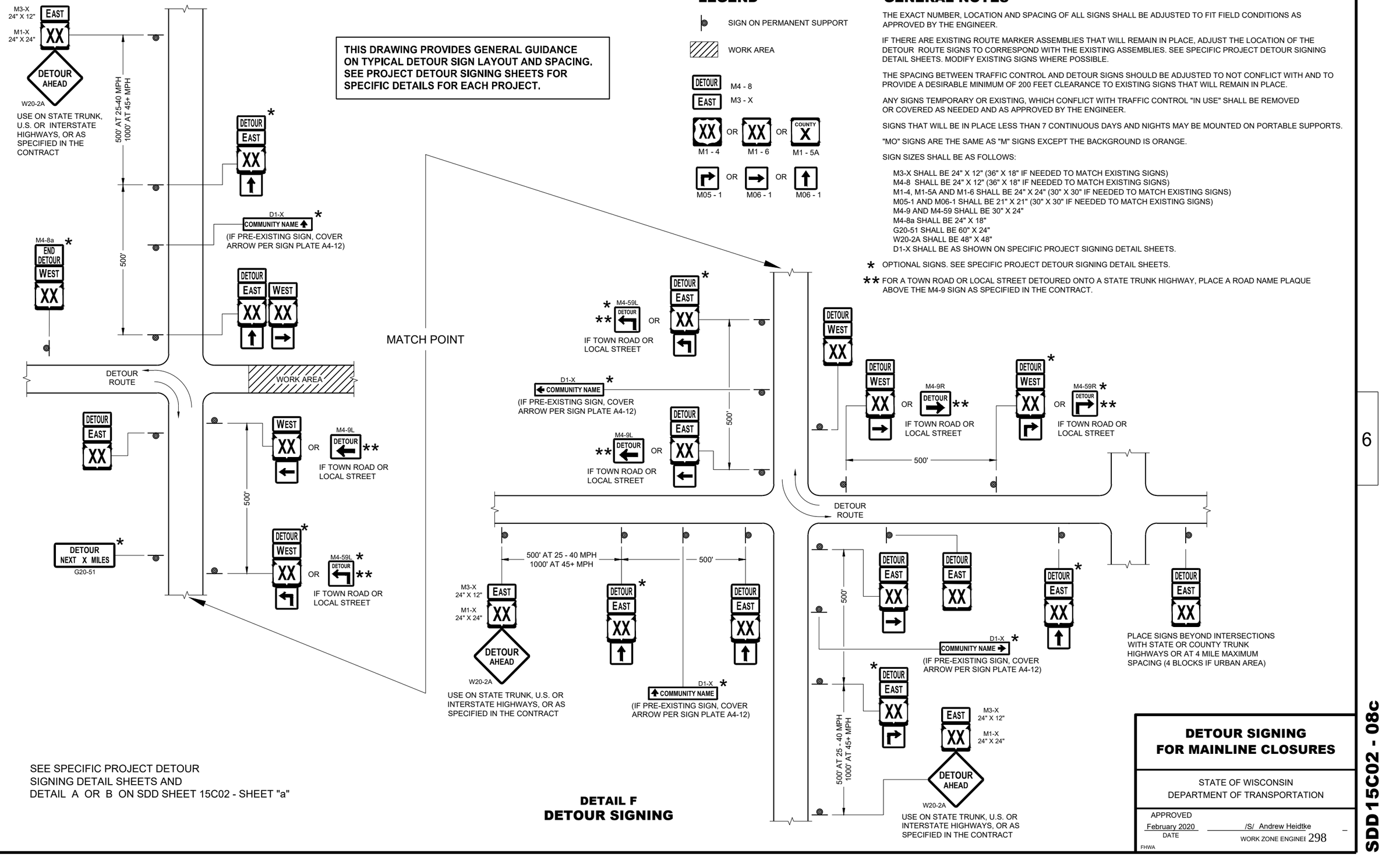
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (30" X 30" 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
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 08c

SDD 15C02 - 08c

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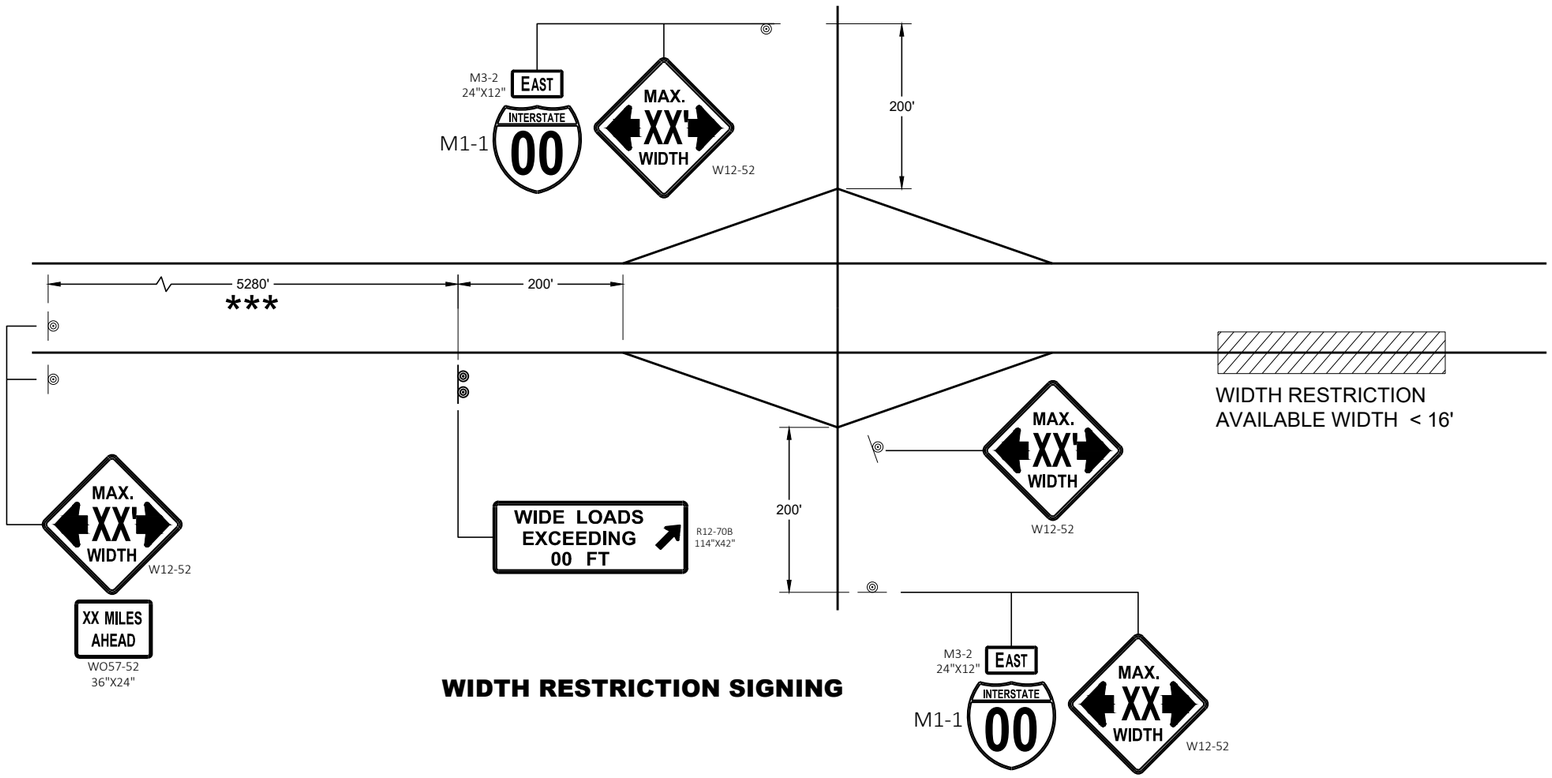


WIDTH RESTRICTION SIGNING

LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

THE SPACING BETWEEN 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.

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

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

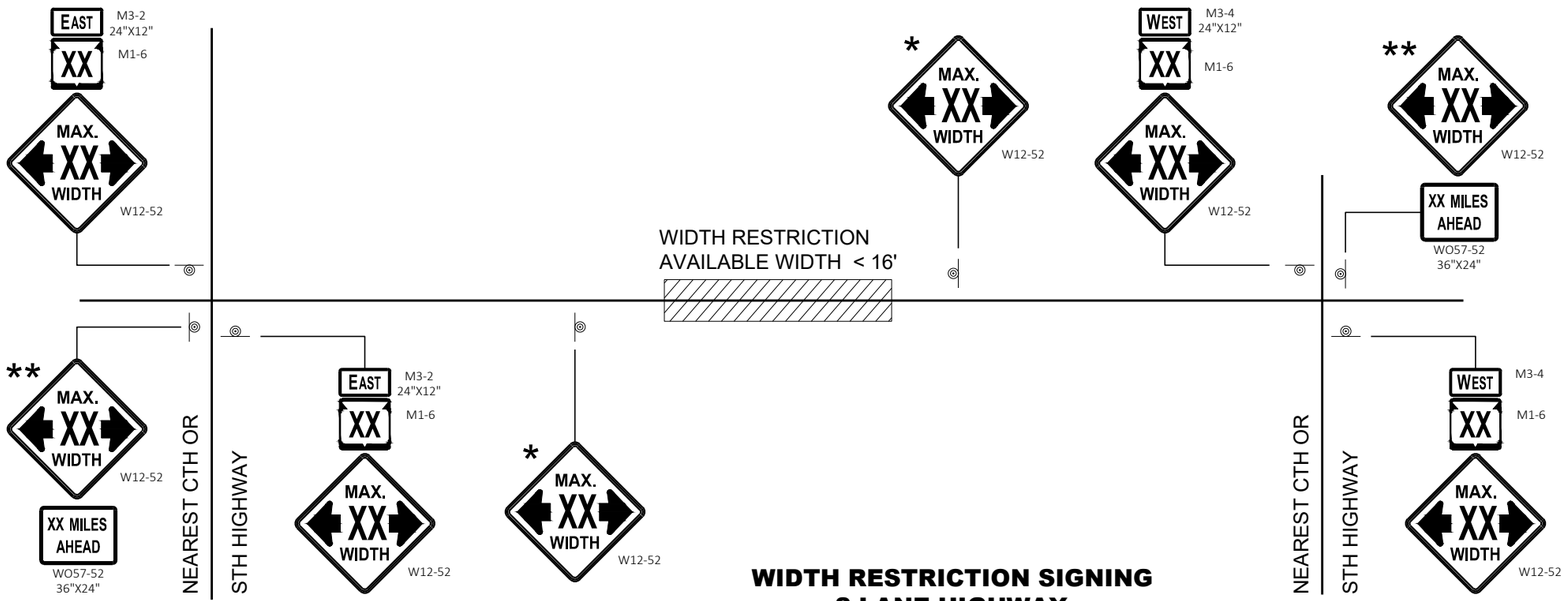
WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

* PLACE 500 FEET BEFORE THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.

WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

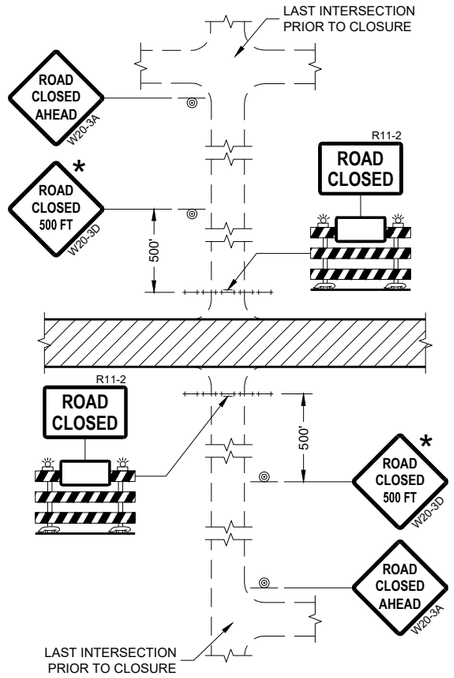
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

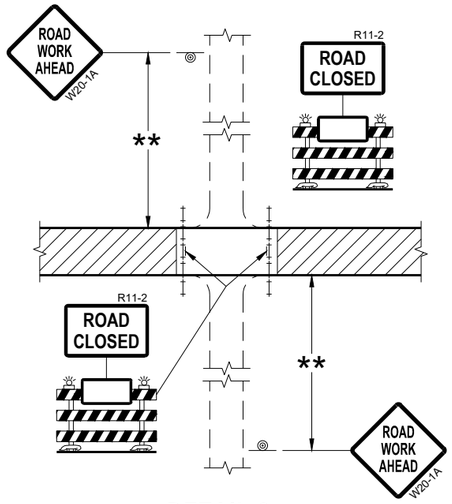
FHWA

6

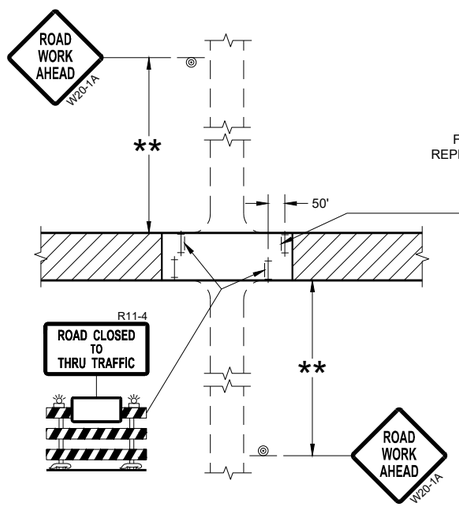
SDD 15C02 - 08f



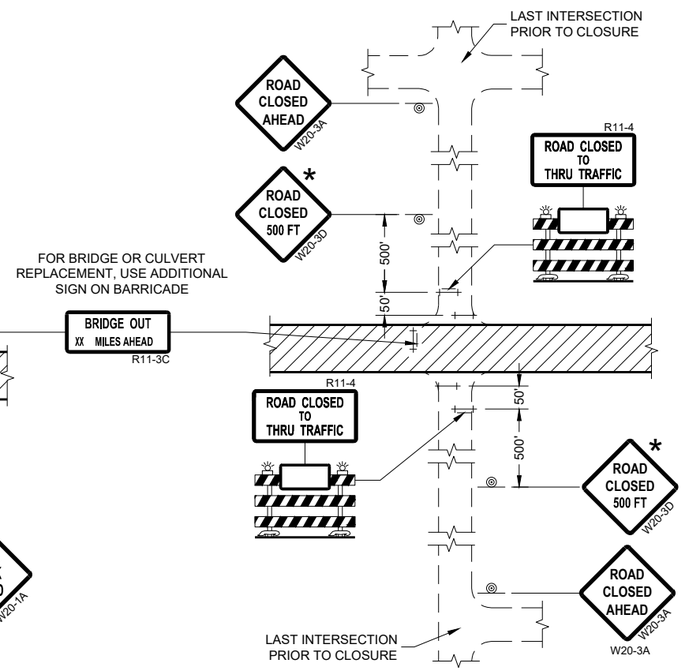
DETAIL 1
(NO ACCESS TO PROJECT)



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15C03 - 05

GENERAL NOTES

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

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

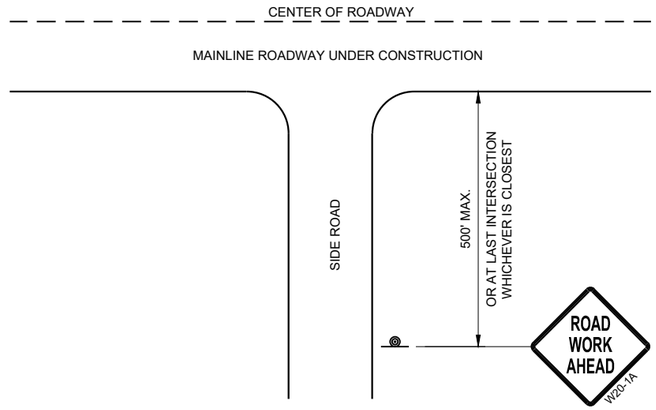
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



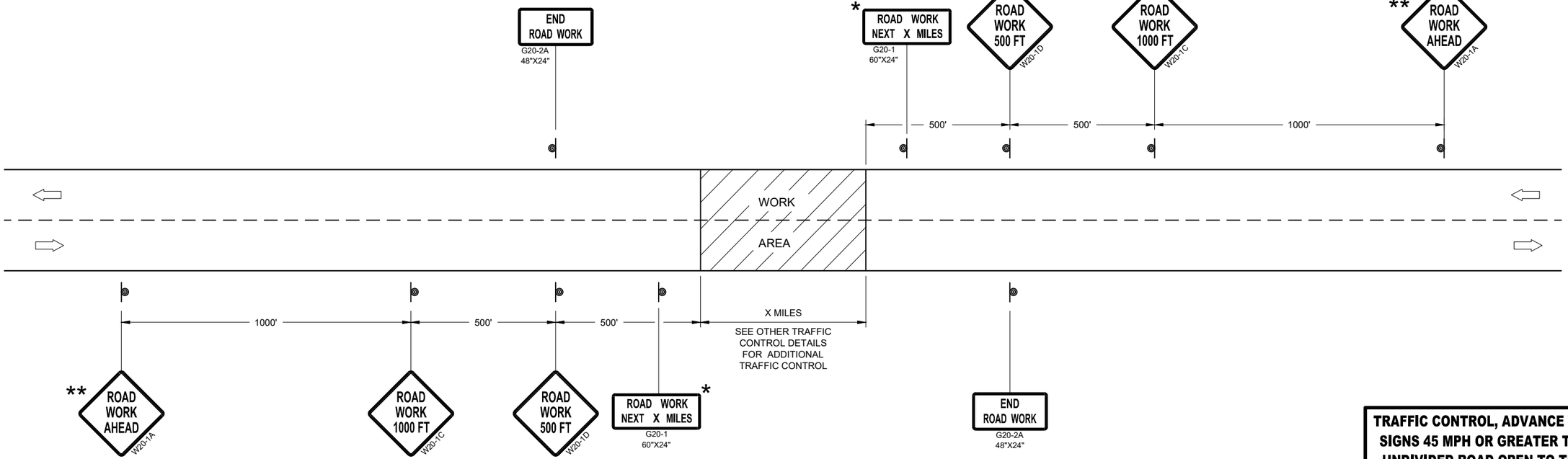
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C04 - 05

GENERAL NOTES

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

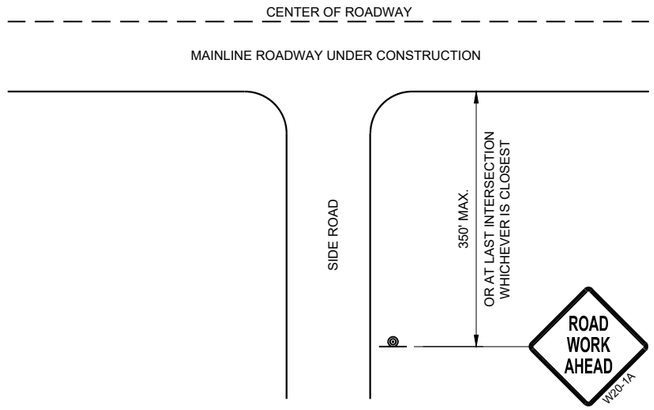
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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



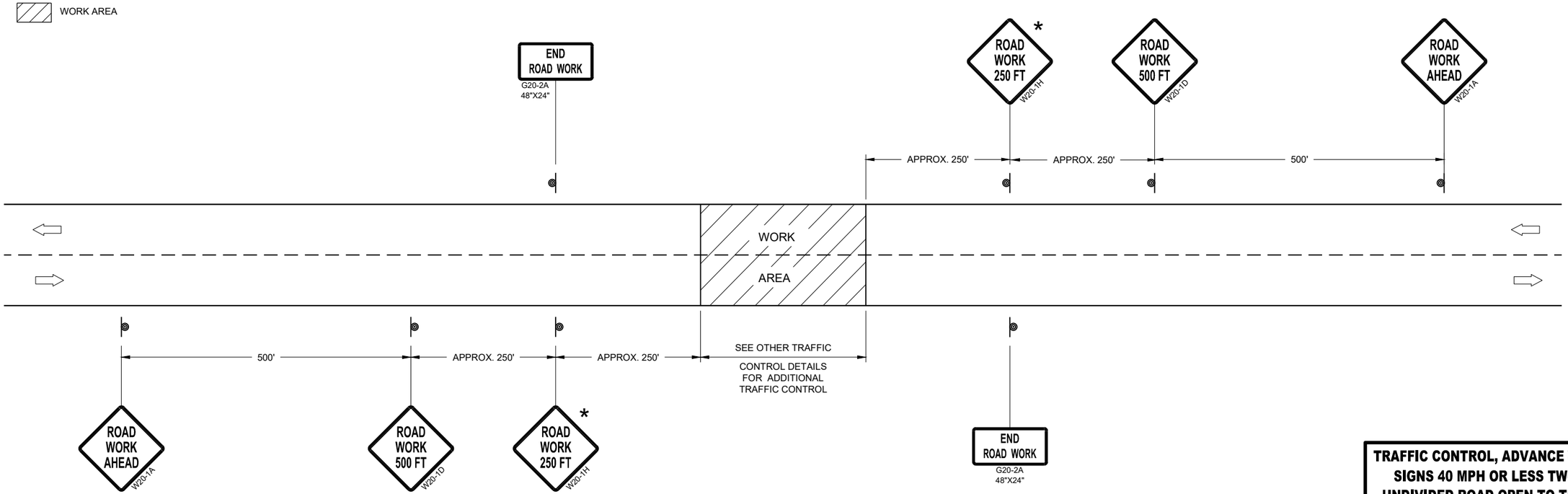
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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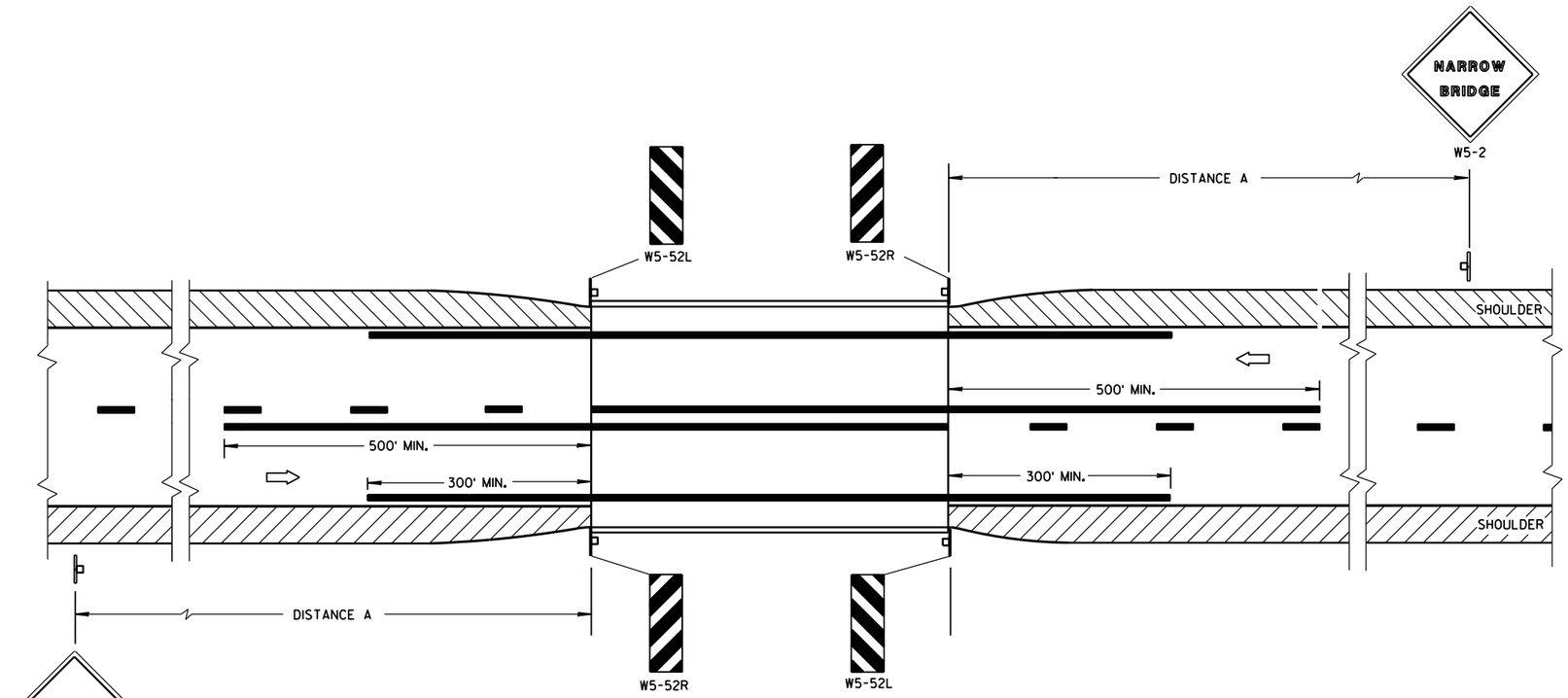
SDD 15C05 - 05



SITUATION 1

WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	750'

GENERAL NOTES

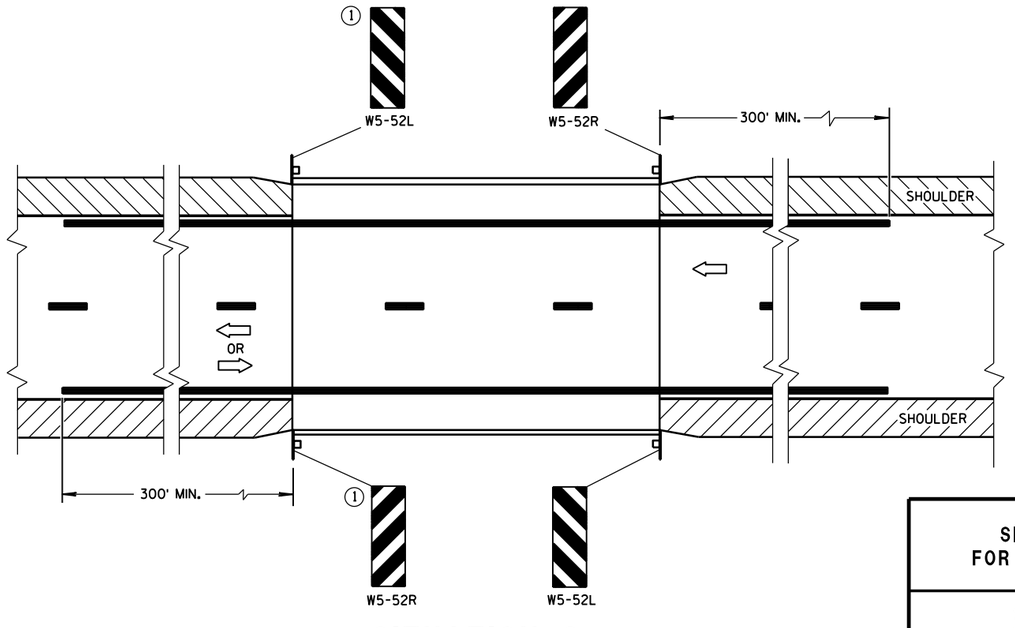
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

(1) OMIT ON ONE-WAY TRAVELLED WAYS.

⇨ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET.

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]EER
FHWA

6

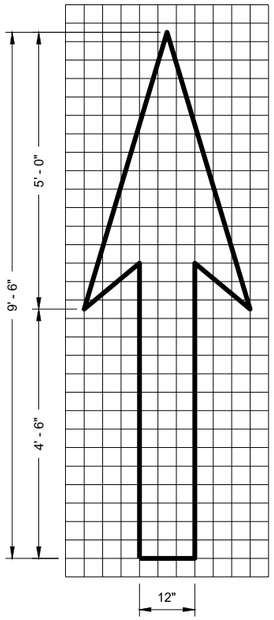
S.D.D. 15 C 6-9

6

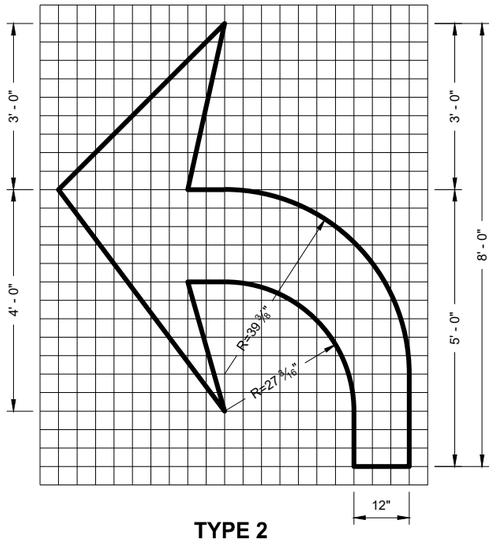
S.D.D. 15 C 6-9

GENERAL NOTES

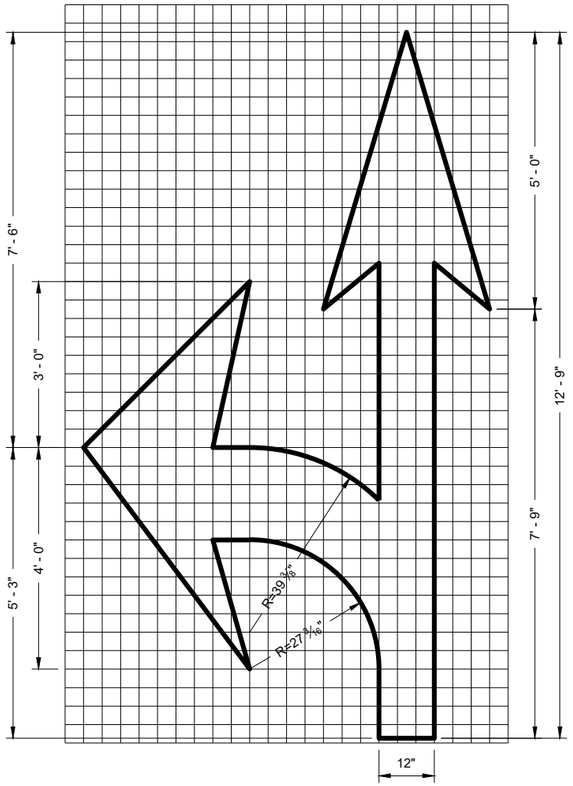
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



TYPE 1



TYPE 2



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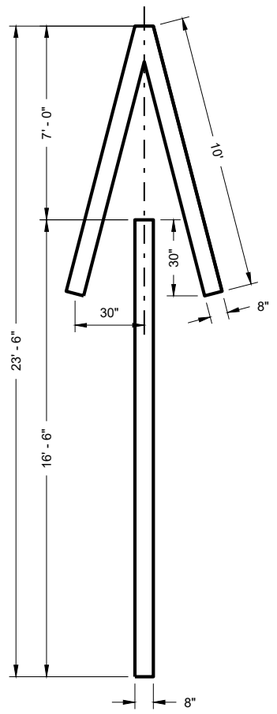

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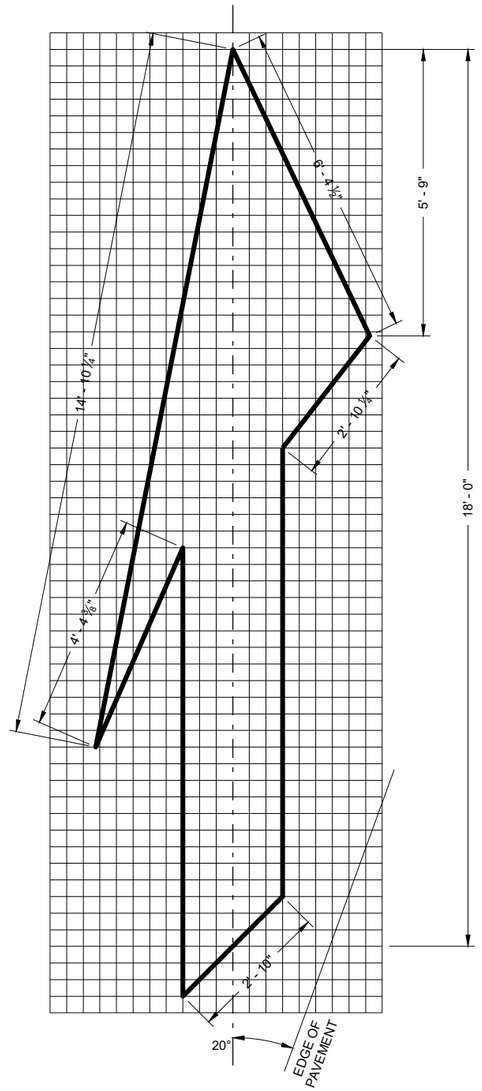
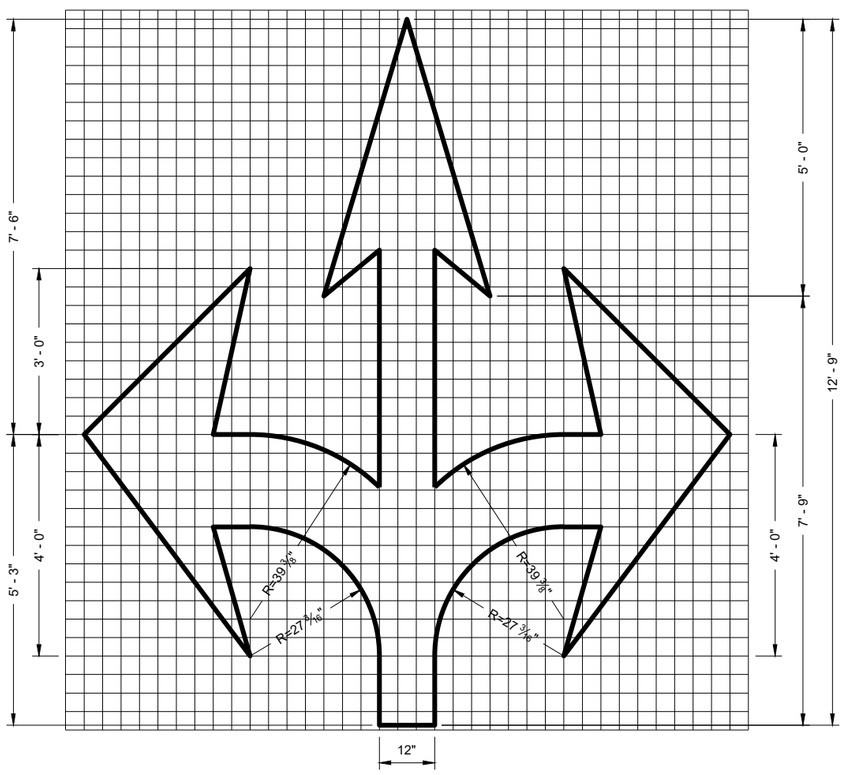
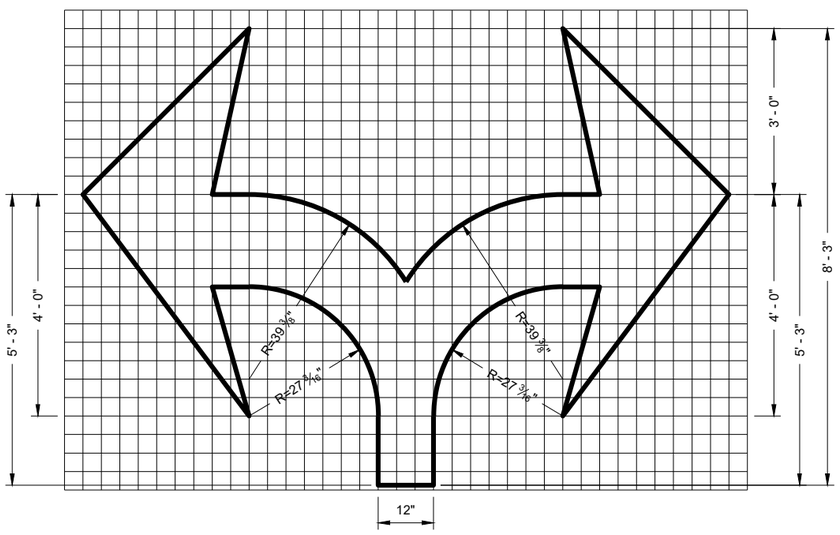


TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

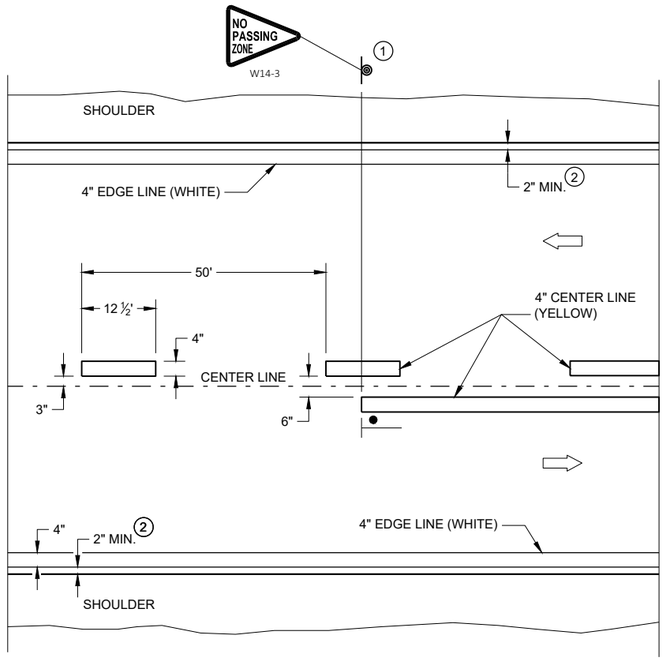
FHWA

6

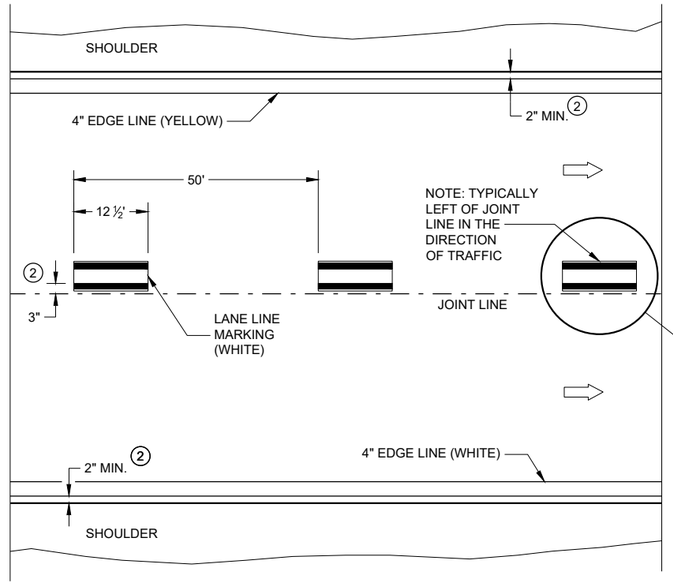
SDD 15C07 - 15c

6

SDD 15C07 - 15c

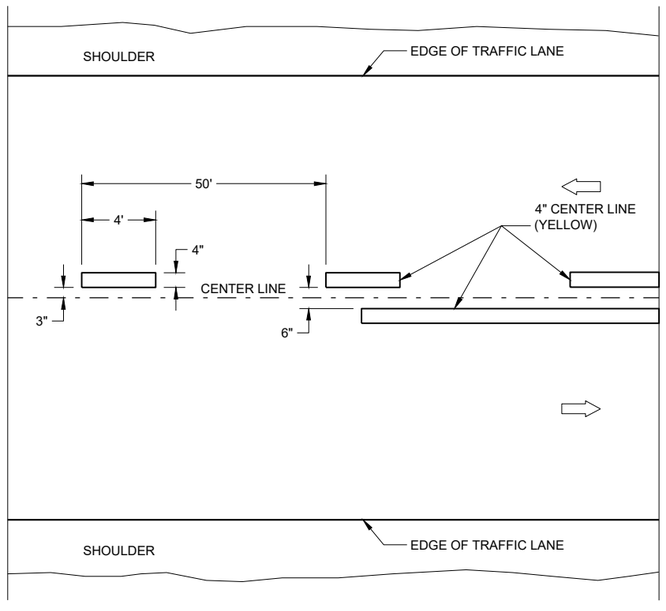


TWO WAY TRAFFIC

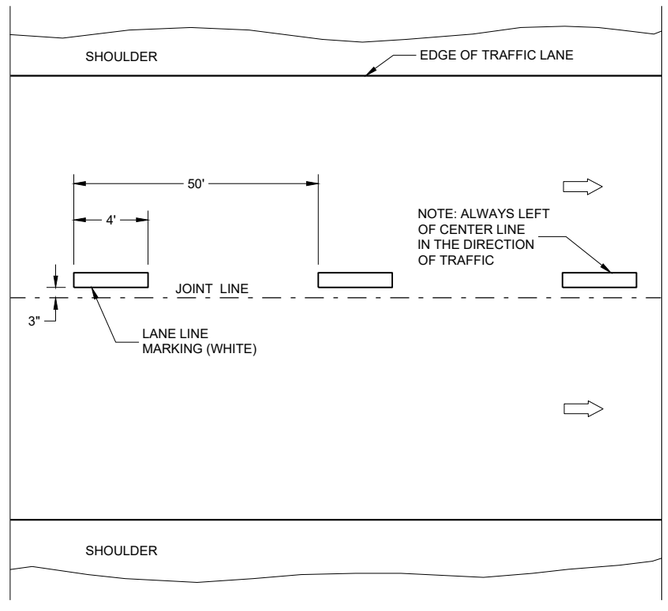


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

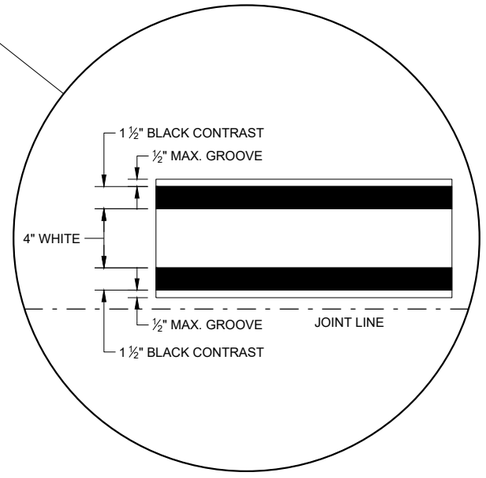
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITH 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

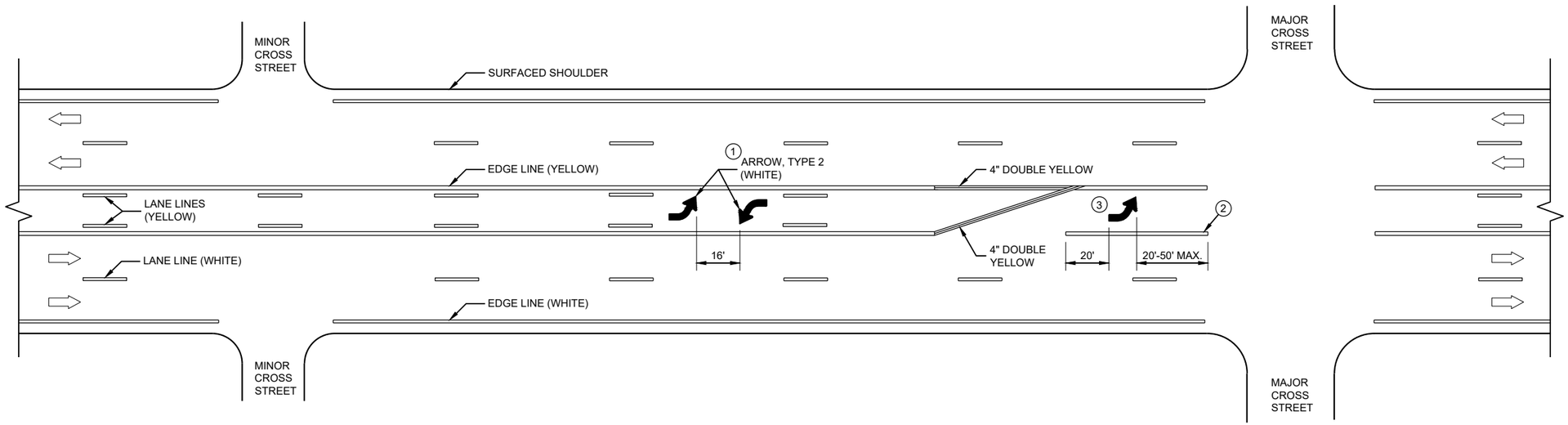
SDD 15C08 - 20a

SDD 15C08 - 20a

GENERAL NOTES

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

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

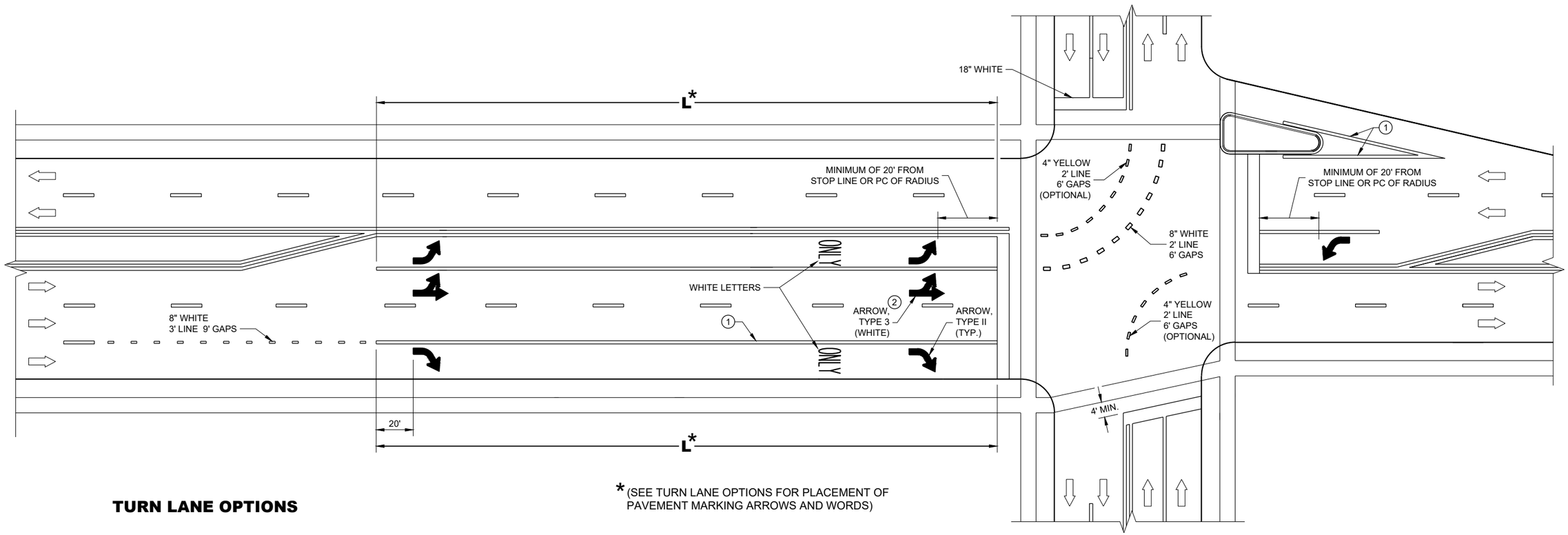
SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

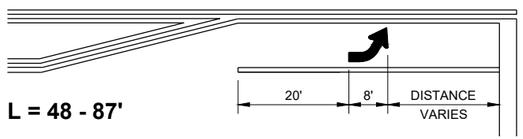
SDD 15C08 - 20b



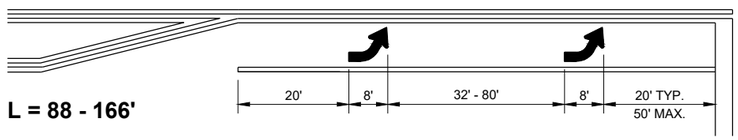
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

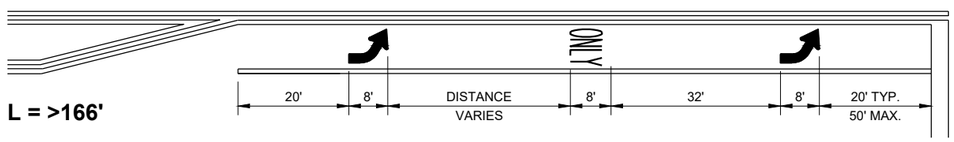
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

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

DIRECTION OF TRAFFIC

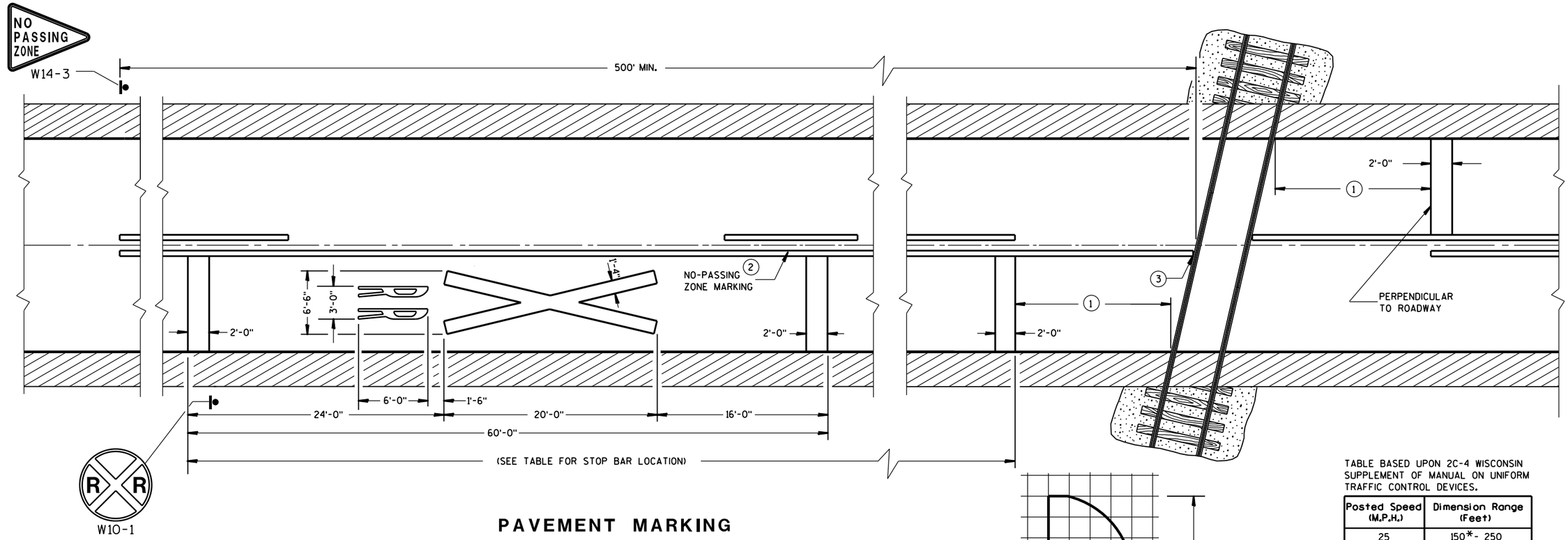
L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08 - 20c



PAVEMENT MARKING

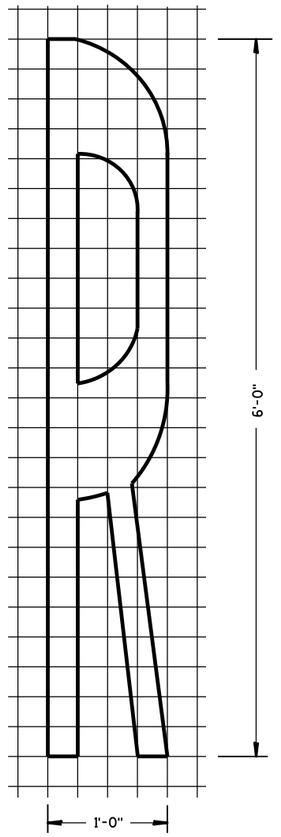


TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

Posted Speed (M.P.H.)	Dimension Range (Feet)
25	150*- 250
30	200*- 300
35	250*- 450
40	300*- 500
45	400*- 650
50	550*- 800
55	750*- 1000
60	1000*- 1250
65	1000*- 1250

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSE PROXIMITY OF DRIVEWAYS, BRIDGES, SIDEROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.

GENERAL NOTES

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

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

RETRACE EXISTING SYMBOL WHERE EXISTING SYMBOLS ARE PLACED.

(1) MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNALS, GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.

(2) 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.

(3) FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAI[illegible]GINEER

FHWA

6

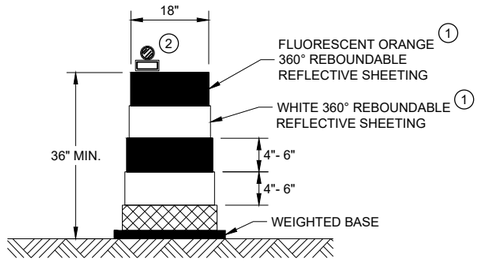
S.D.D. 15 C 9-11a

6

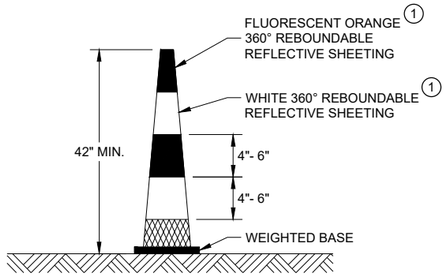
S.D.D. 15 C 9-11a

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

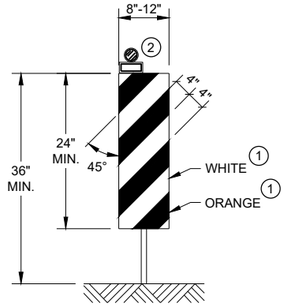


DRUM



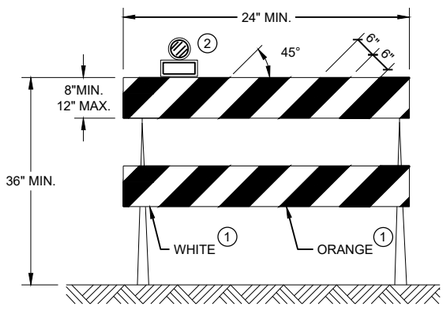
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



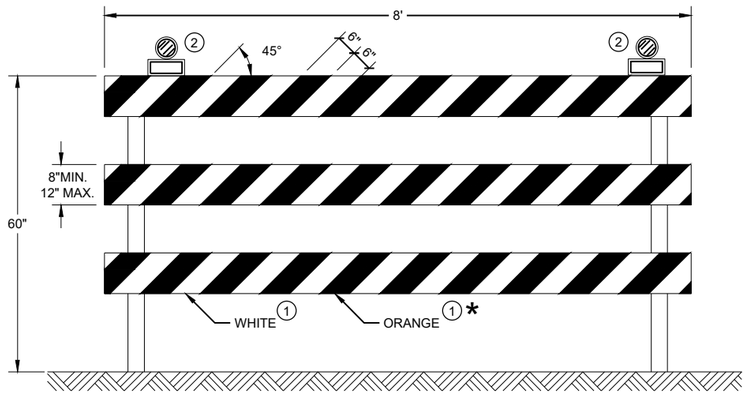
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15C11 - 07b

6

SDD 15C11 - 07b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

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

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

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

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

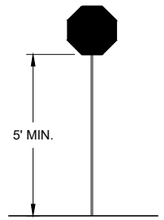
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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



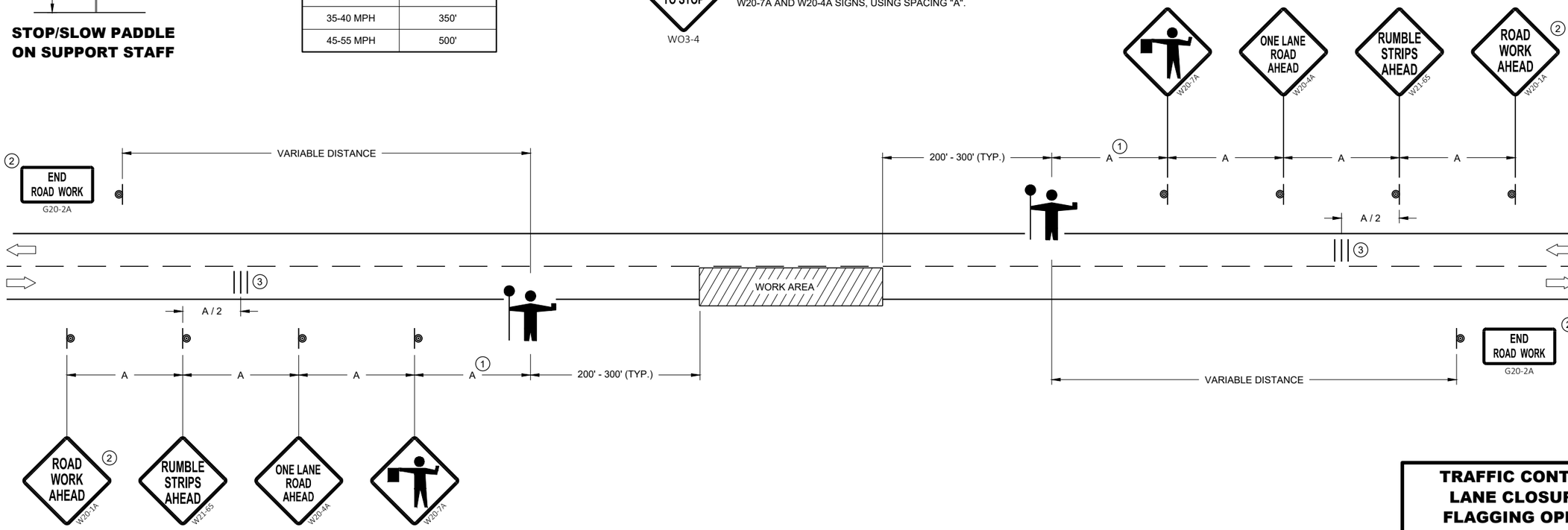
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

WO3-4

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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEE 310
FHWA	

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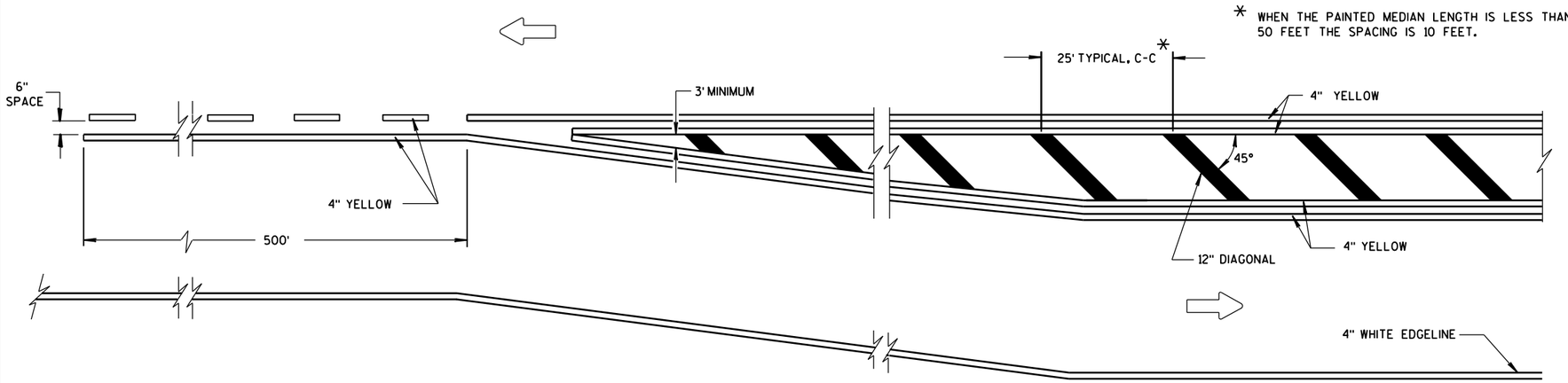
SDD 15C12 - 07

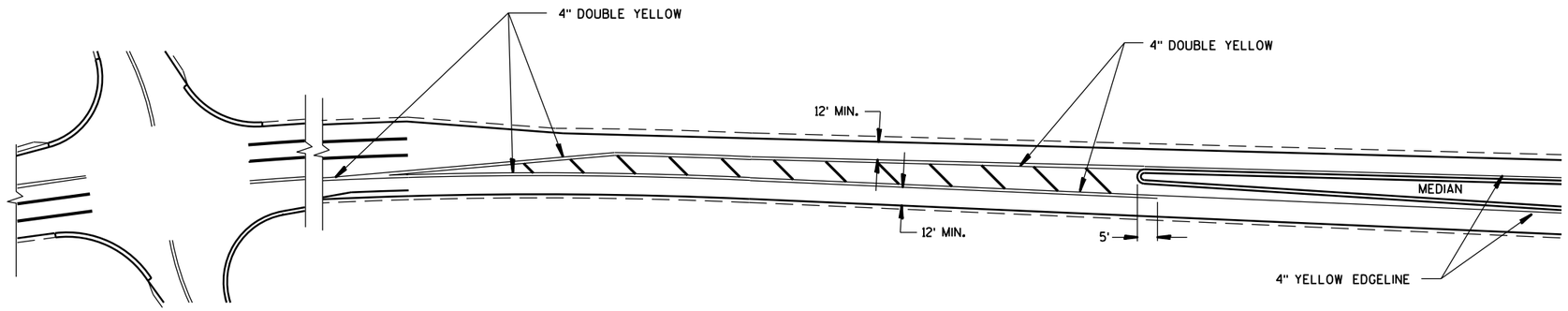


MEDIAN ISLAND DETAIL

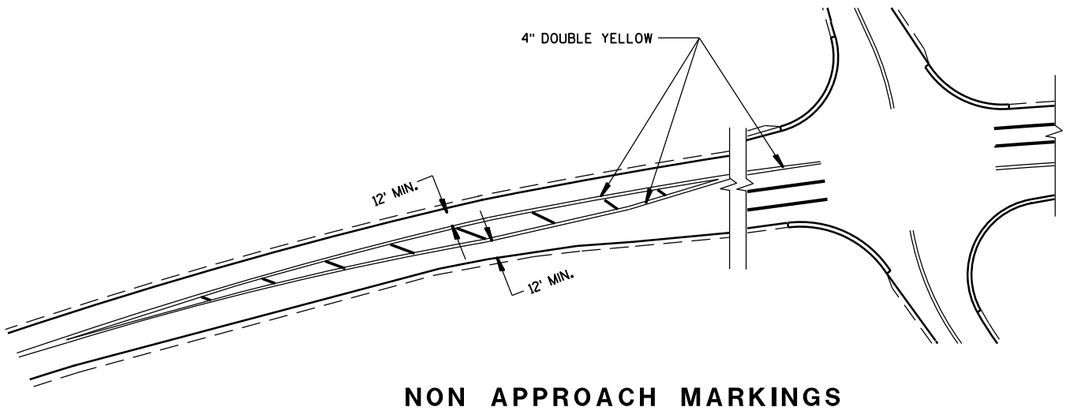
GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE FHWA	/S/ Matthew Rauch STATE SIGNING AND MARK ER

6

S.D.D. 15 C 18-4

6

S.D.D. 15 C 18-4

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

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

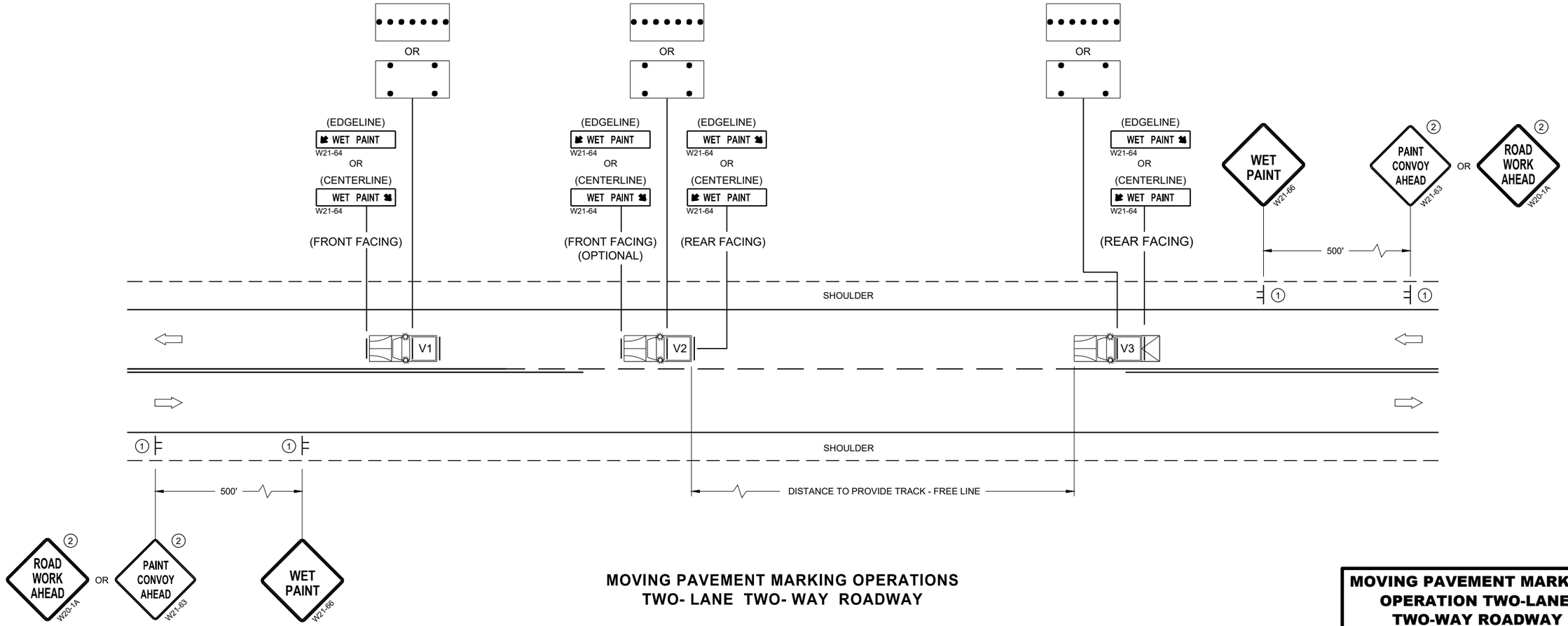
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

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

CONES SHALL BE A MINIMUM OF 18" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

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



MOVING PAVEMENT MARKING OPERATIONS TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

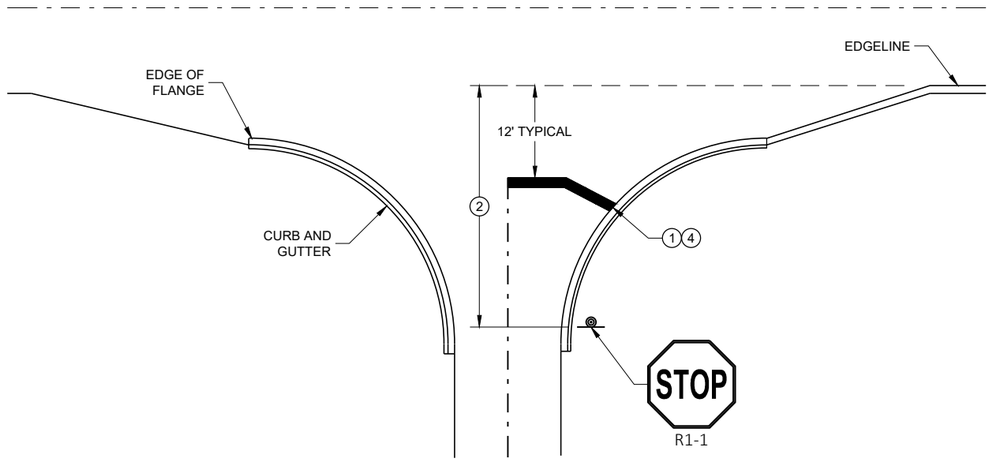
FHWA

6 SDD 15C19 - 06a

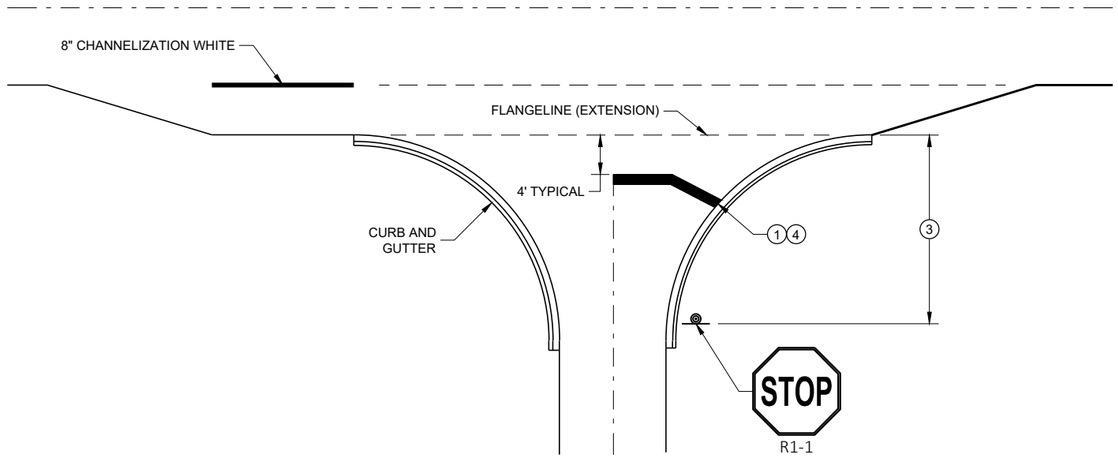
GENERAL NOTES

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

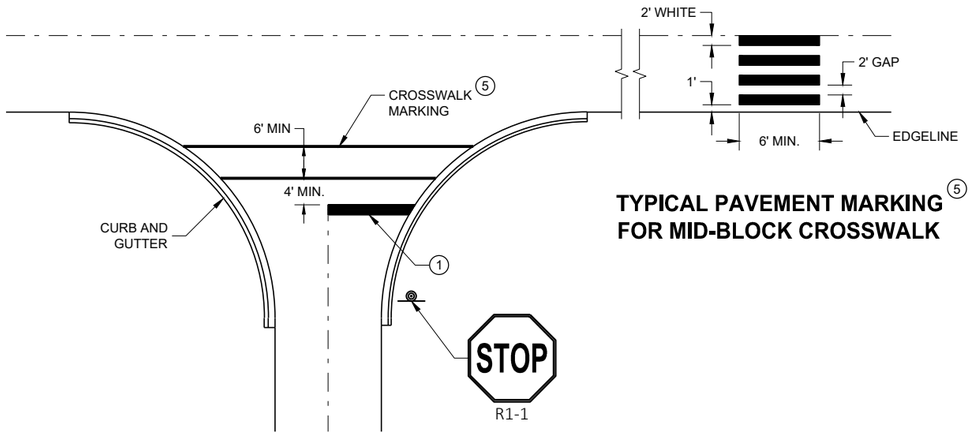
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

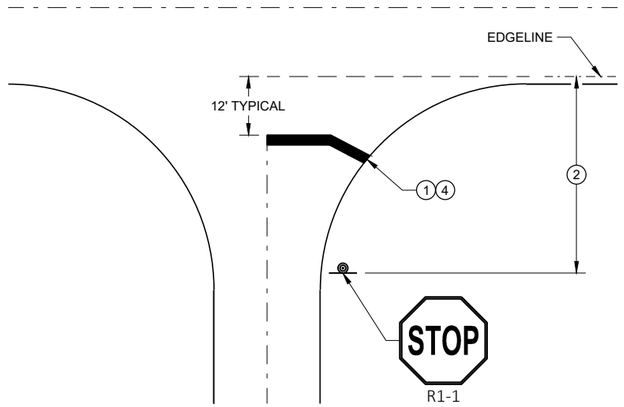


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

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SDD 15C33 - 04

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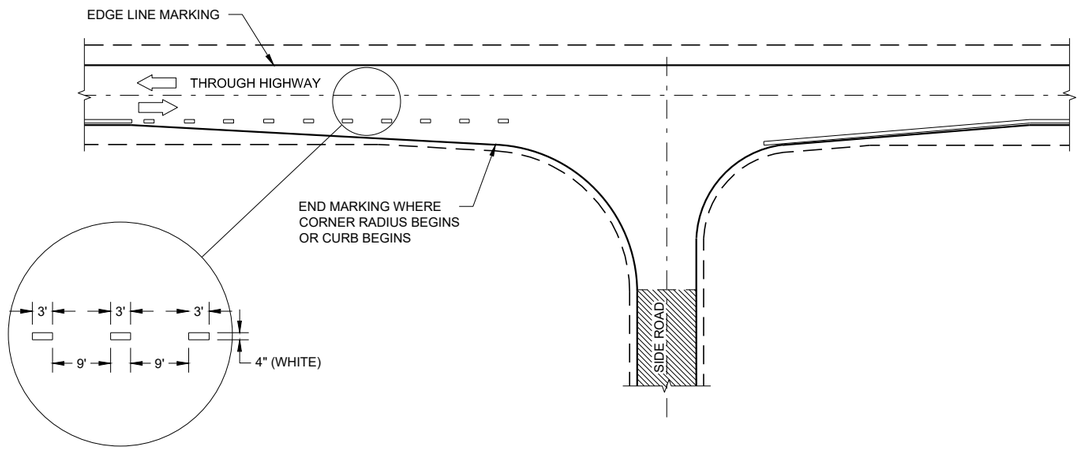
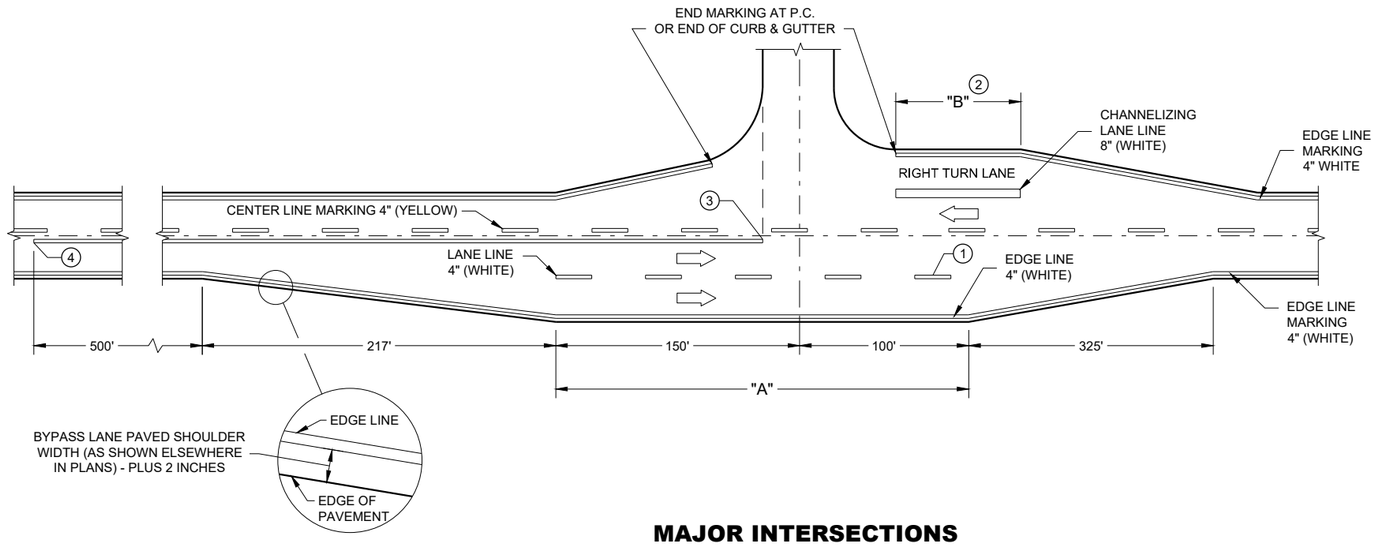
SDD 15C33 - 04



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

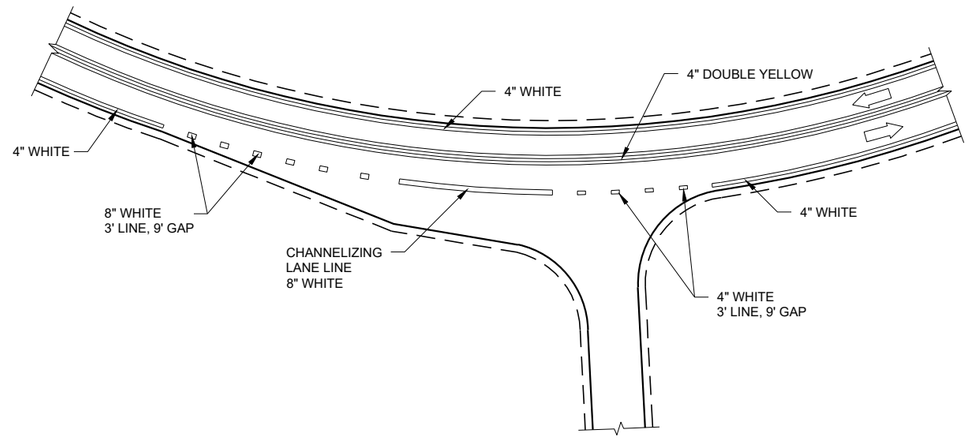
GENERAL NOTES

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

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

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15C35 - 04a

SDD 15C35 - 04a

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

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

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

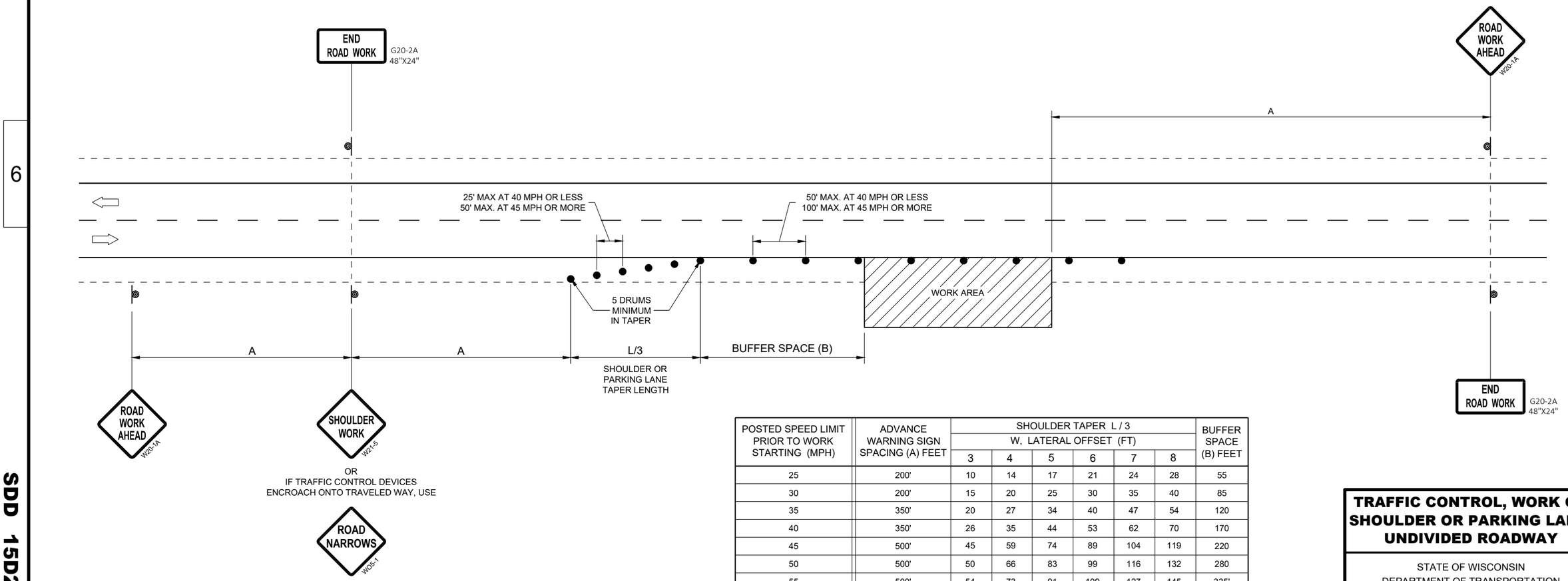
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

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



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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

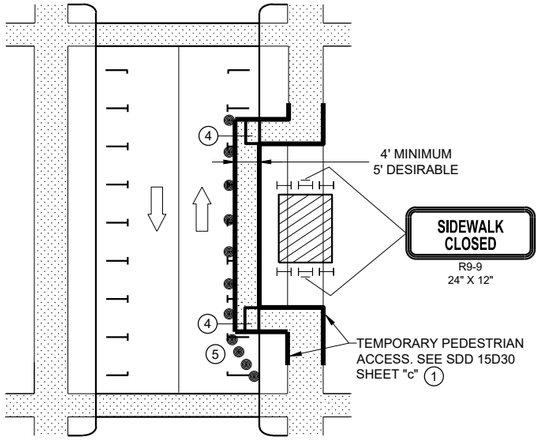
/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

6

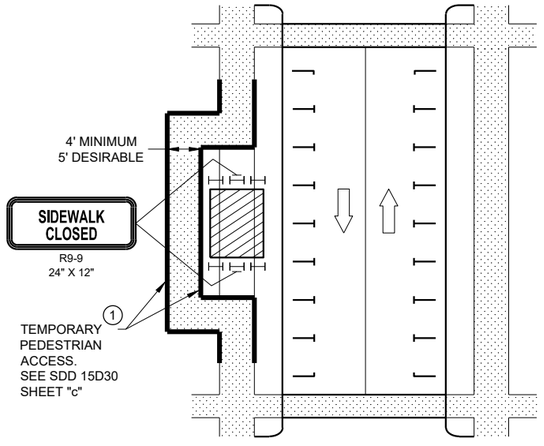
SDD 15D28 - 04

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

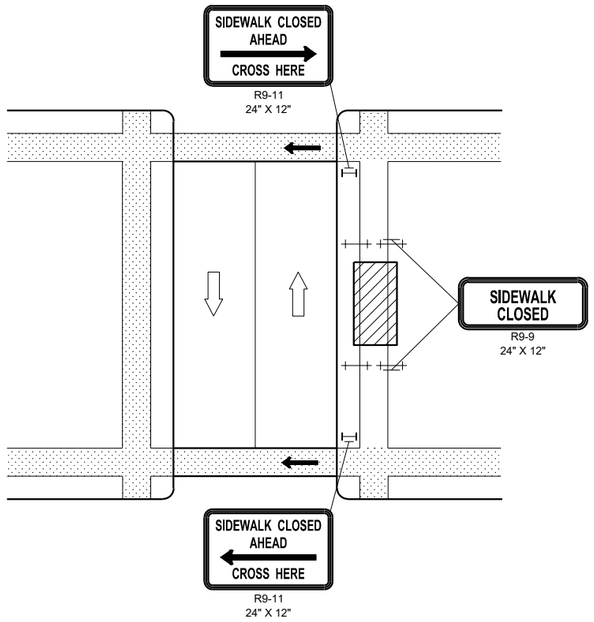


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

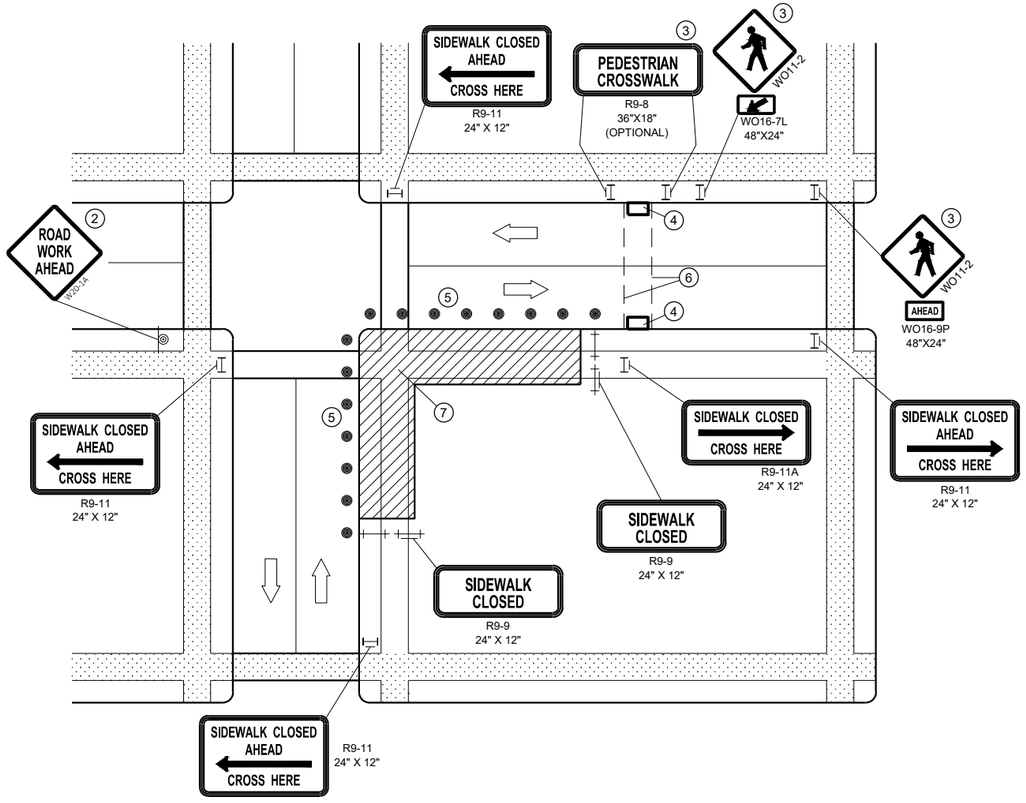
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

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

FOR NIGHTIME CLOSURE, USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEK LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

1. IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE
2. "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
3. IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND WO11-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
4. TEMPORARY CURB RAMPS. SEE SDD 15D30 SHEET "b'.
5. DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
6. TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
7. LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

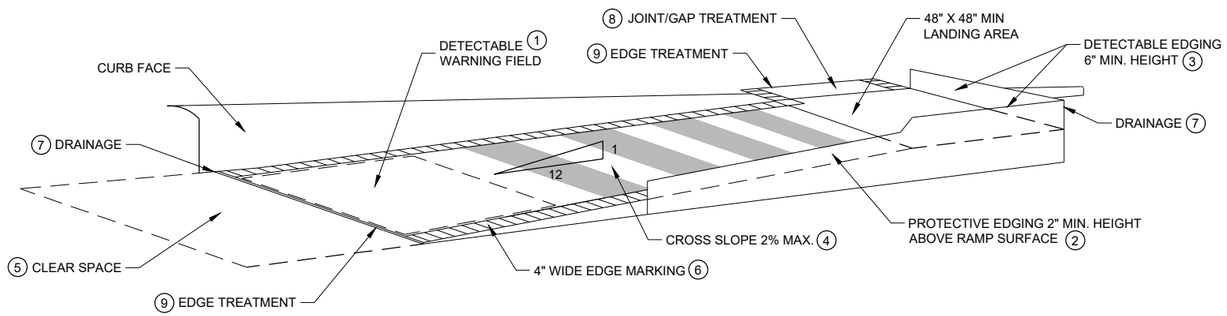
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

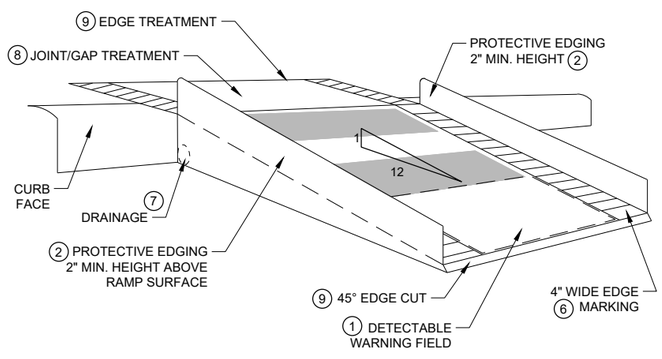
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

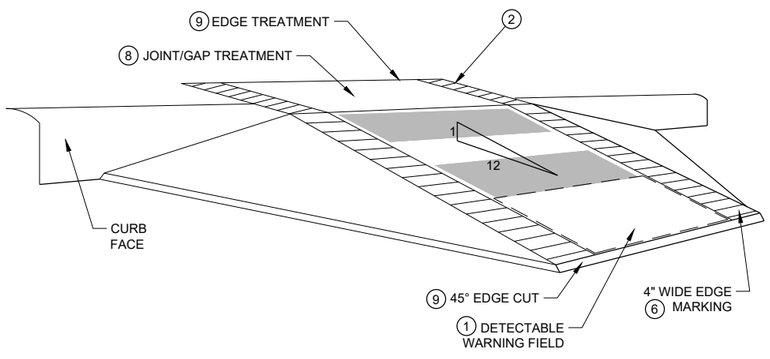
SDD 15D30 - 06a



TEMPORARY CURB RAMP PARALLEL TO CURB



WITH PROTECTIVE EDGE



WITH SIDE APRON

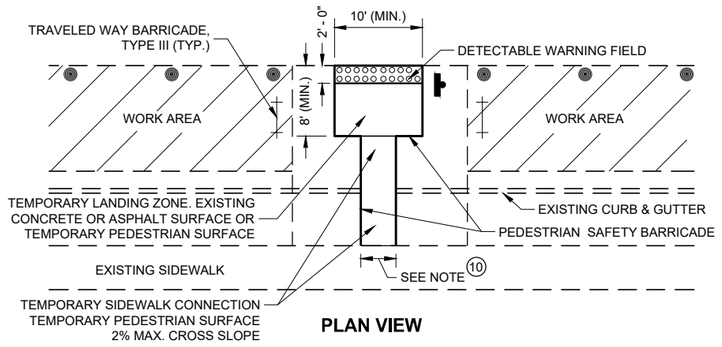
TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

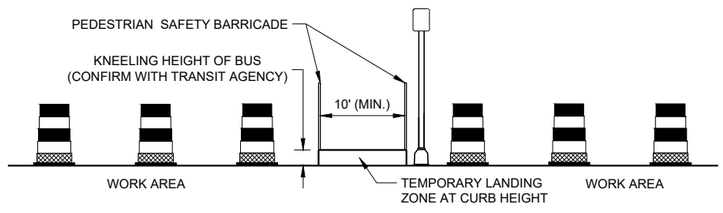
NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

1. CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 08D05, SHEET "e".
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
5. CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
6. THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
7. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.
9. CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES SHALL BE VERTICAL UP TO ¼" HIGH AND BEVELED AT 1:2 BETWEEN ¼" AND ½".
10. 5" WIDE MIN. WITH PEDESTRIAN SAFETY BARRICADE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY BARRICADE.



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

LEGEND

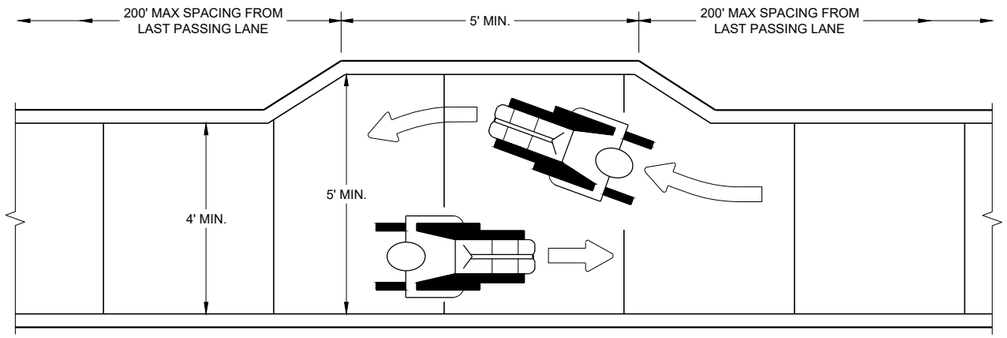
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- WORK AREA

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

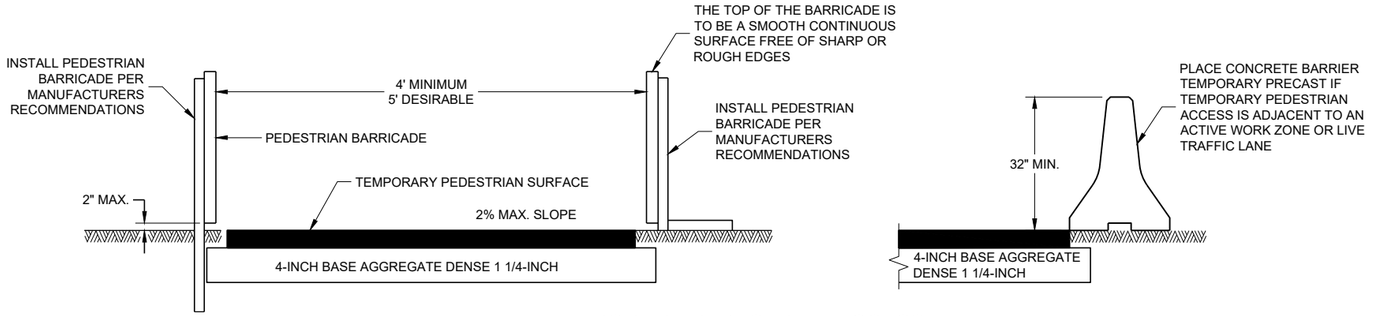
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

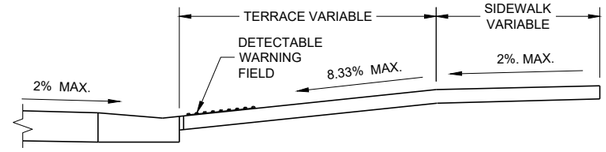
SDD 15D30 - 06b



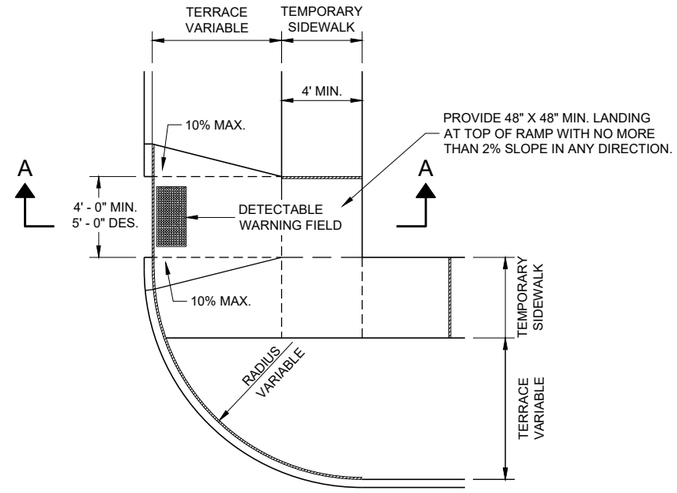
NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN ACCESS



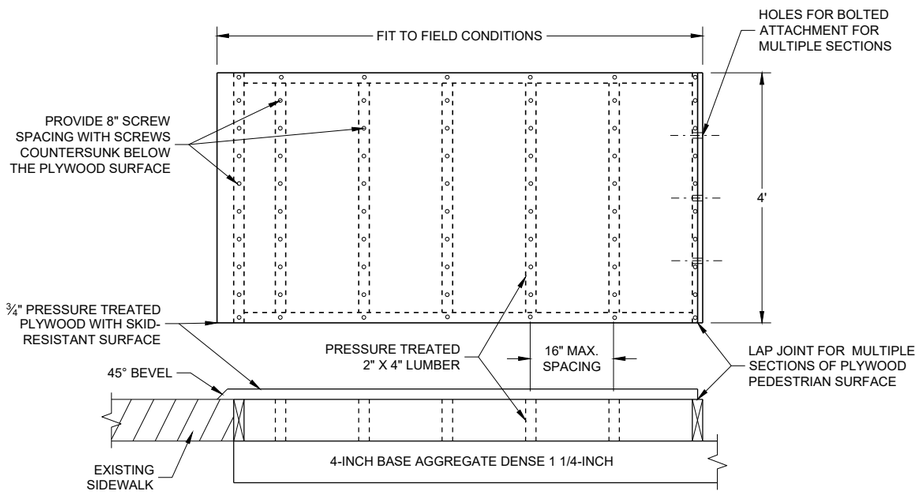
SECTION A - A



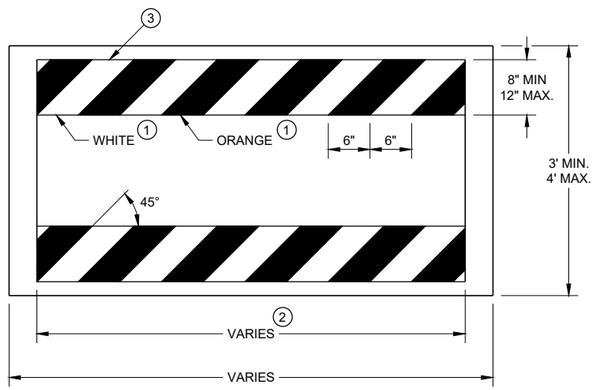
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



TEMPORARY PEDESTRIAN BARRICADE *

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

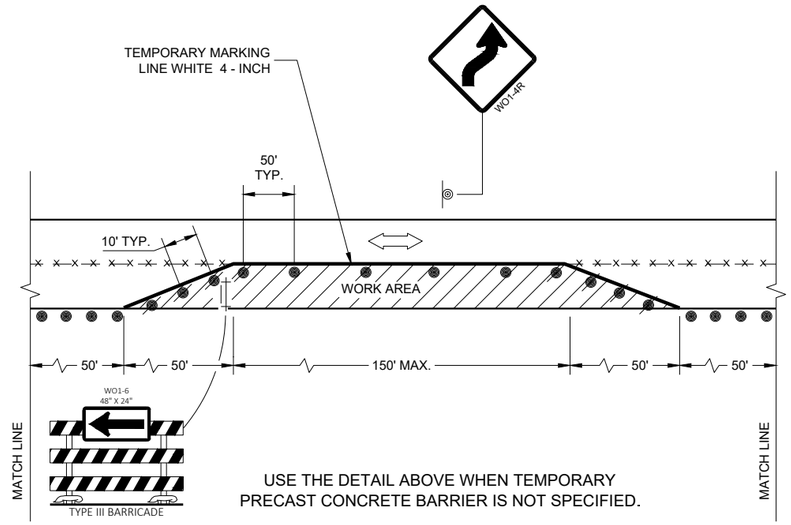
SDD 15D30 - 06c

6

SDD 15D30 - 06c

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLAGS, 16" X 16" MIN. (ORANGE)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- ASPHALTIC PAVEMENT WIDENING
- CONCRETE BARRIER TEMPORARY PRECAST



USE THE DETAIL ABOVE WHEN TEMPORARY PRECAST CONCRETE BARRIER IS NOT SPECIFIED.

GENERAL NOTES

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

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

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

PLACE TEMPORARY PAVEMENT MARKING EDGELINE AND CENTERLINE AND REMOVE EXISTING PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.

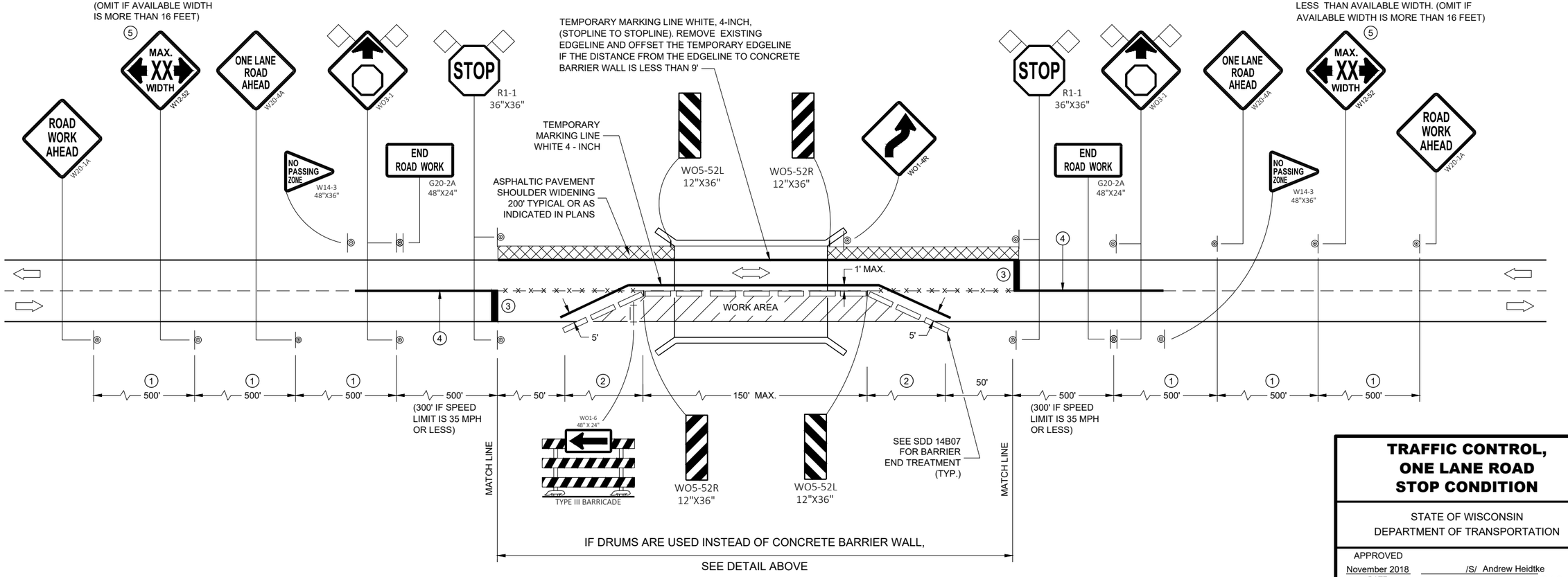
(1) 500 FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35 - 40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25 - 30 MPH, USE 200 FOOT TYPICAL SPACING.

(2) DIMENSION DETERMINED BY CBTP TAPER FROM EDGE LINE TO TANGENT SECTION OF THE ROAD.

(3) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18 - INCH.

(4) 700 FOOT TEMPORARY MARKING LINE, DOUBLE YELLOW 4 - INCH . WHEN THE DISTANCE FOR THE PRECEDING NO - PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.

(5) SEE SDD 15C02 - SHEET "F" FOR ADVANCED WIDTH RESTRICTION SIGNING.



TRAFFIC CONTROL, ONE LANE ROAD STOP CONDITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

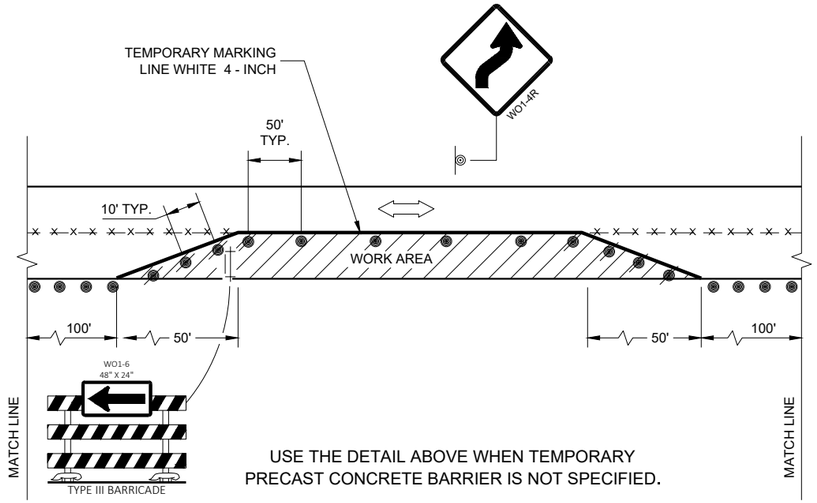
FHWA

SDD 15D32 - 05

SDD 15D32 - 05

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLAGS, 16" X 16" MIN. (ORANGE)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- ASPHALTIC PAVEMENT WIDENING
- CONCRETE BARRIER TEMPORARY PRECAST
- TEMPORARY SIGNAL. SEE SDD 09G02 FOR EXACT PLACEMENT



USE THE DETAIL ABOVE WHEN TEMPORARY PRECAST CONCRETE BARRIER IS NOT SPECIFIED.

GENERAL NOTES

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

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

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

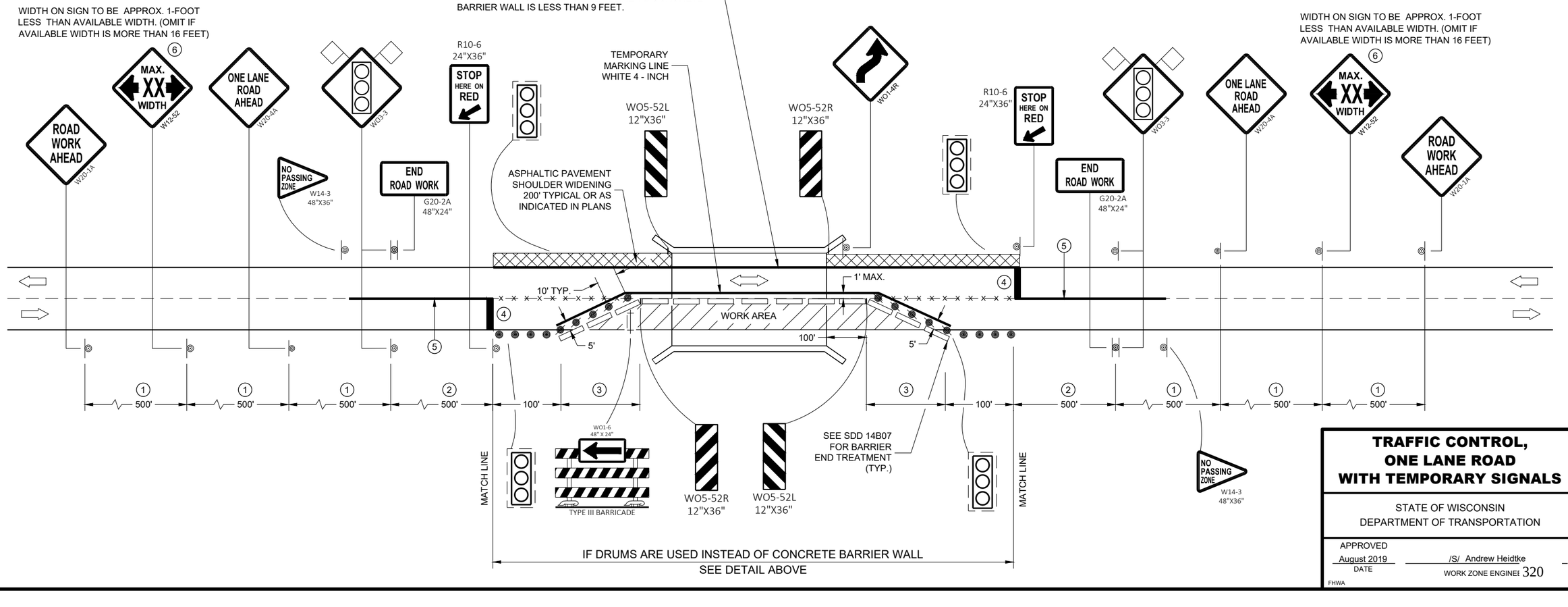
ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

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

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

PLACE TEMPORARY PAVEMENT MARKING EDGELINE AND CENTERLINE AND REMOVE EXISTING PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.

1. 500 FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35 - 40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25 - 30 MPH, USE 200 FOOT TYPICAL SPACING.
2. USE 300 FOOT SPACING IF THE PRE - CONSTRUCTION REGULATORY SPEED IS 35 MPH OR LESS.
3. DIMENSION DETERMINED BY CBTP TAPER FROM EDGE LINE TO TANGENT SECTION OF THE ROAD.
4. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18 - INCH.
5. 700 FOOT TEMPORARY MARKING LINE, DOUBLE YELLOW 4 - INCH . WHEN THE DISTANCE FOR THE PRECEDING NO - PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.
6. SEE SDD 15C02 - SHEET "F" FOR ADVANCED WIDTH RESTRICTION SIGNING.



TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

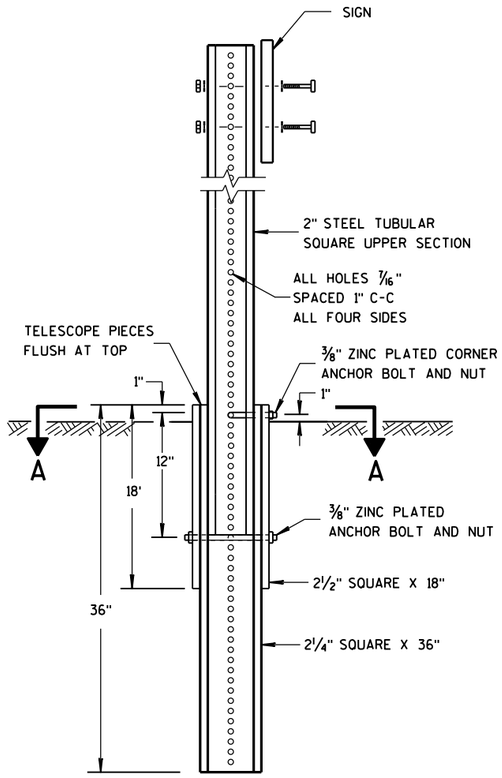
APPROVED
August 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

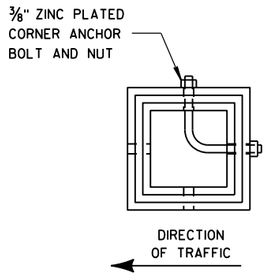
FHWA

6

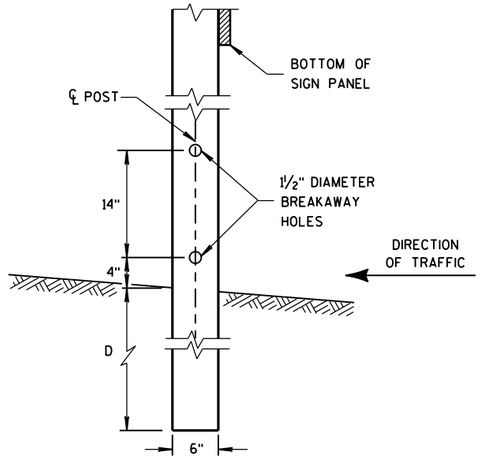
SDD 15D33 - 06



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



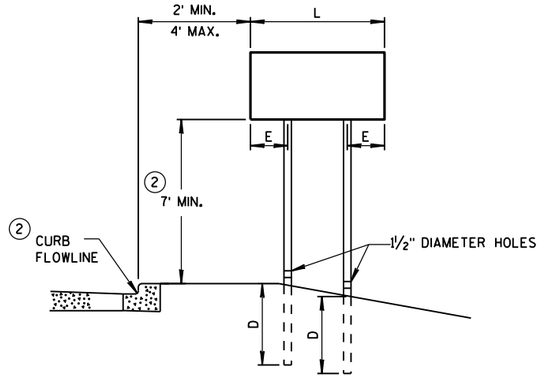
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

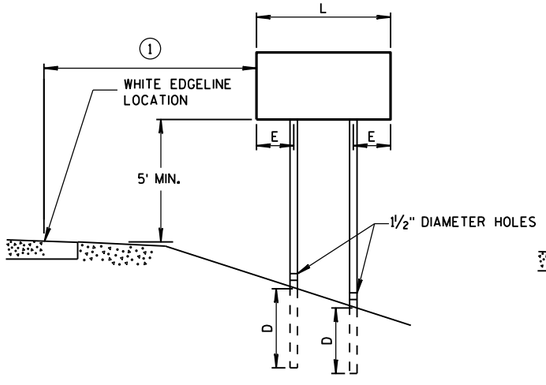
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

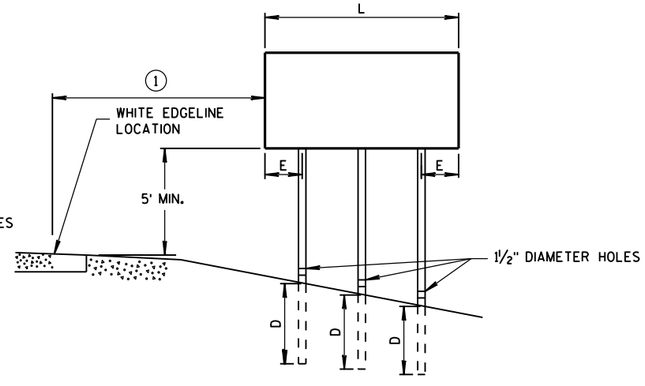
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL 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).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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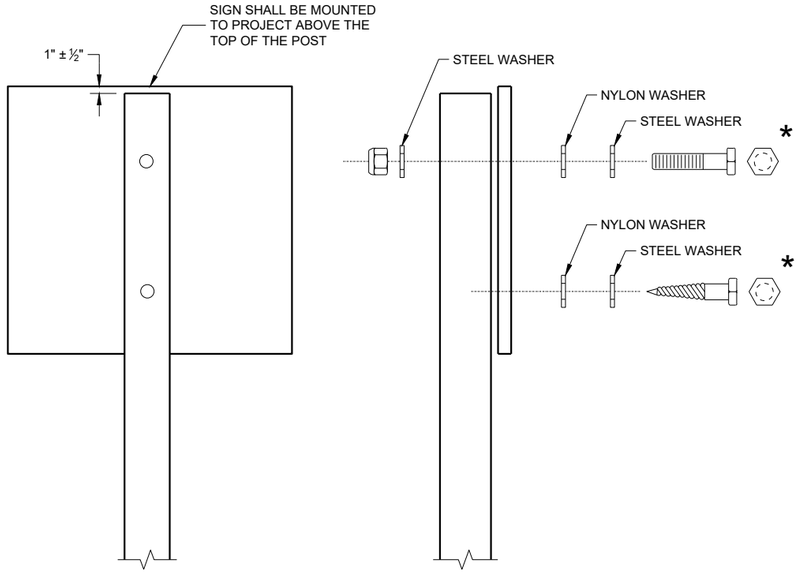
S.D.D. 15 D 38-2a

6

S.D.D. 15 D 38-2a



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.

WOOD POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

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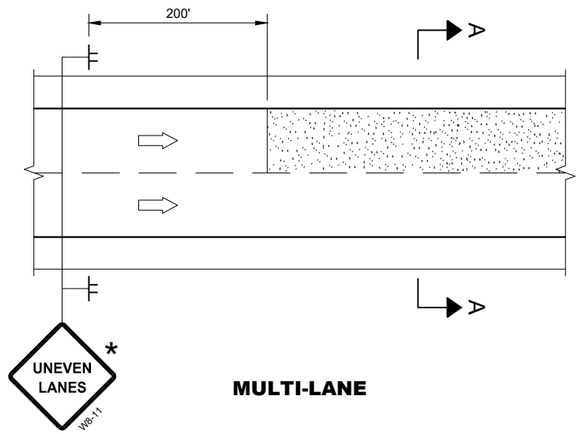
SDD 15D38 - 02b

SDD15D38 - 02b

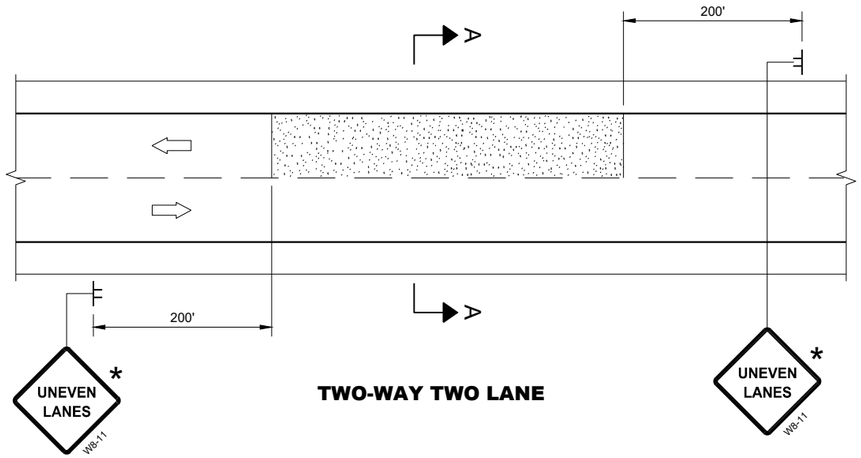
ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

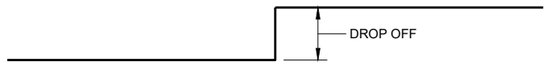
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

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

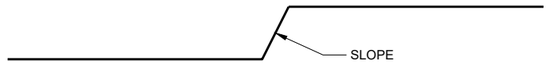
LEGEND

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

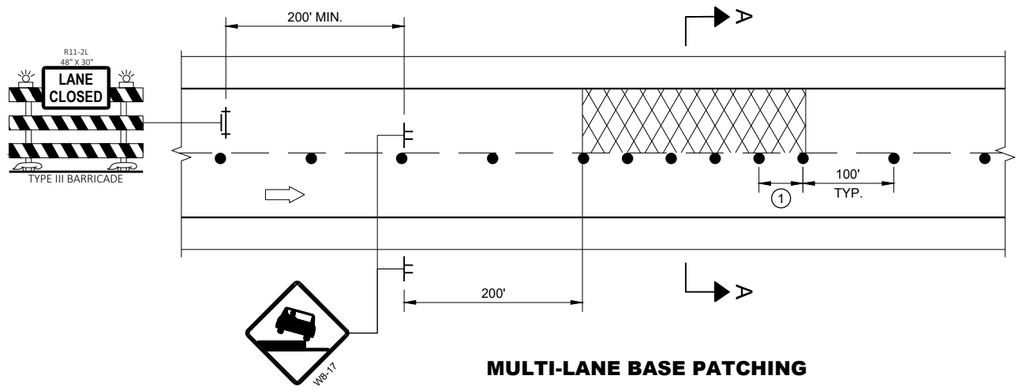


SECTION A - A

OR

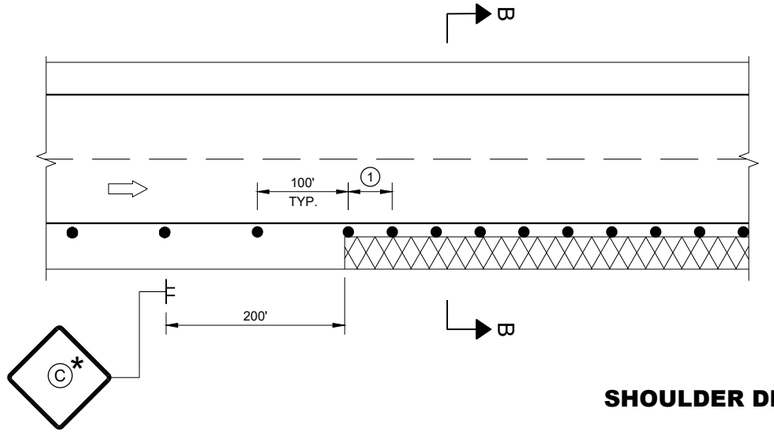


SECTION A - A

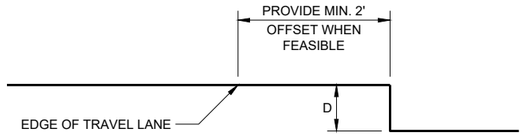


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

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

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15D39 - 02

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SDD 15D39 - 02

GENERAL NOTES

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

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

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

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

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

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

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

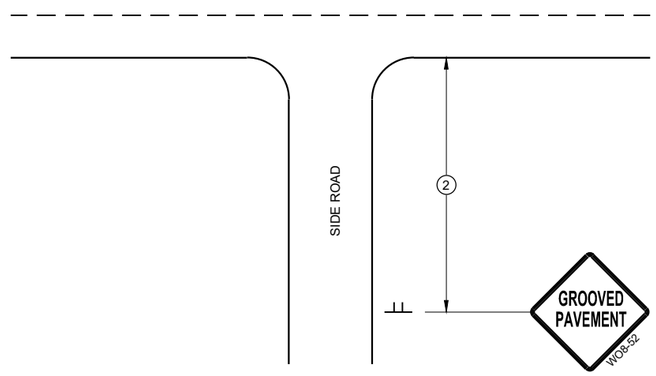
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

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

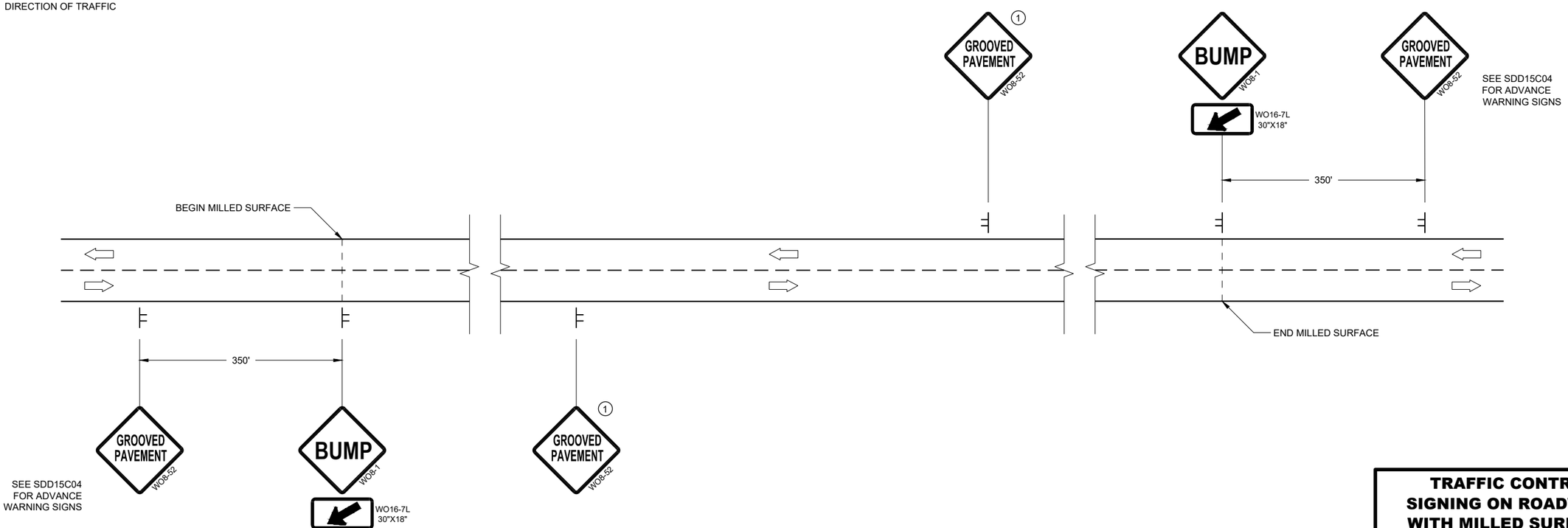
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

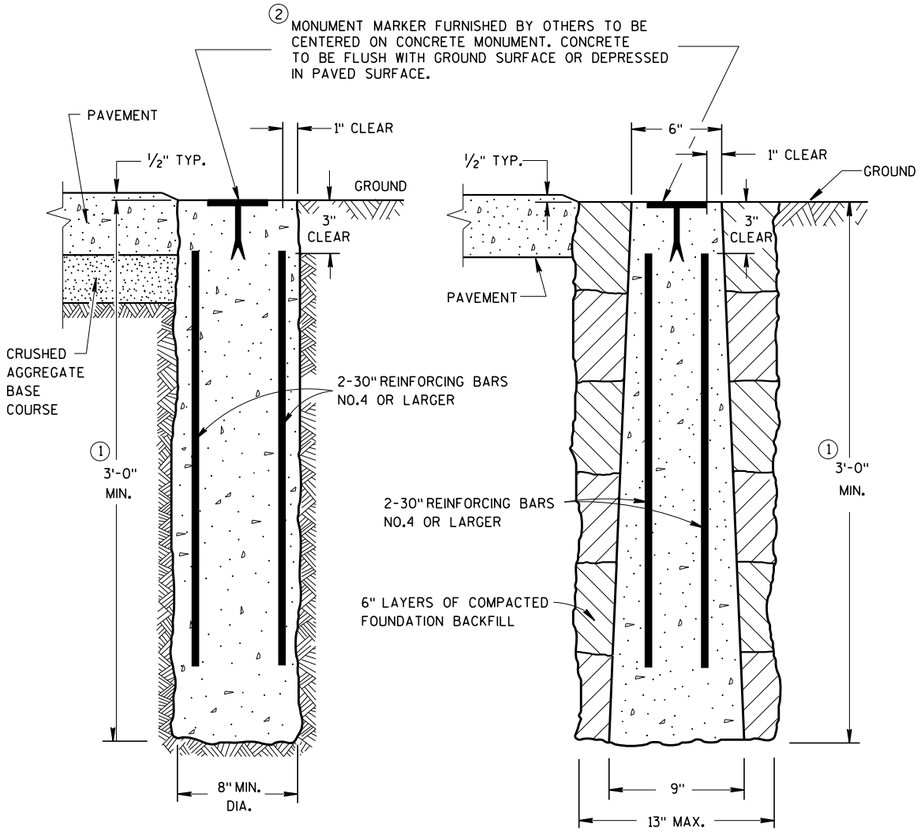
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15D44 - 02

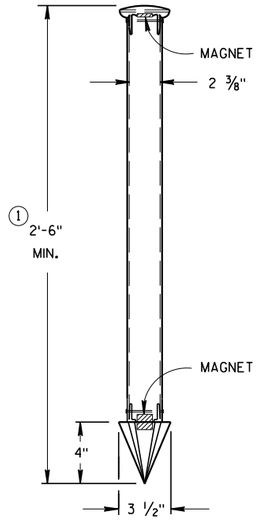


CAST-IN-PLACE

PRECAST

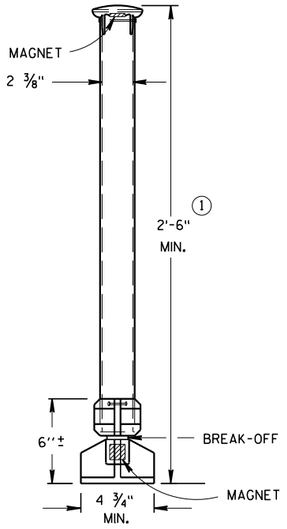
CONCRETE MONUMENTS

TYPE A



TYPE C

DRIVE-IN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

GENERAL NOTES

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

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

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

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

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

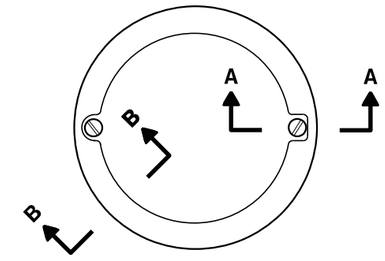
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

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

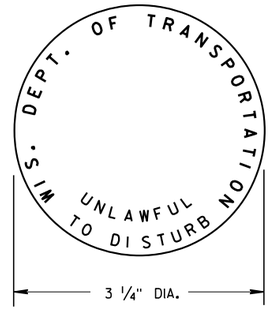
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER

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

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

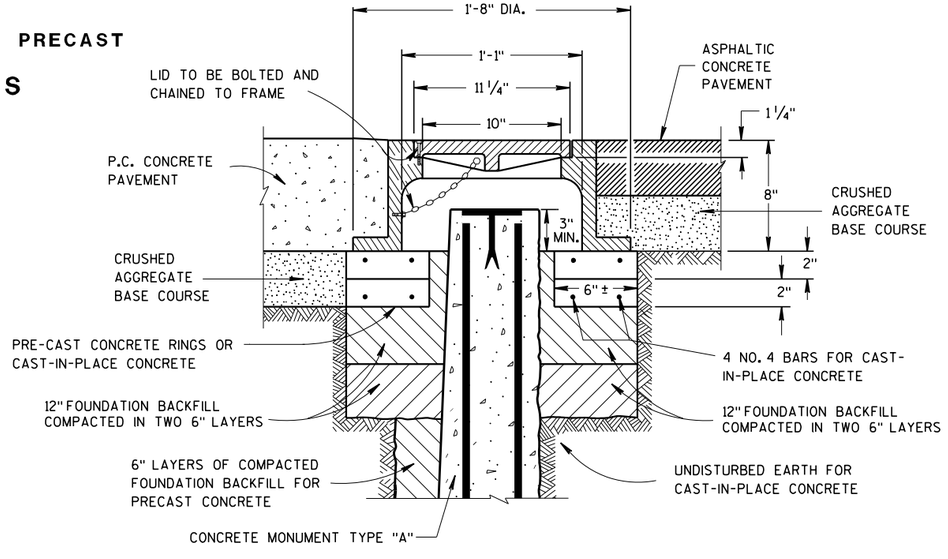


TOP VIEW



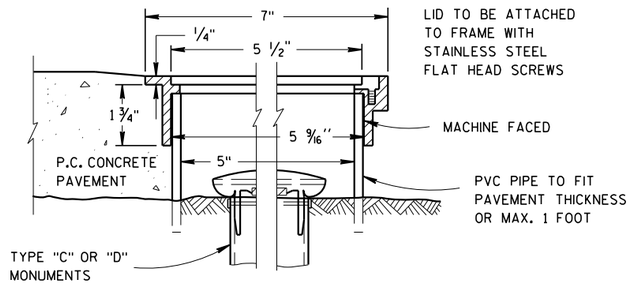
② WIS DOT MONUMENT MARKER LOGO

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



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT 95 LBS)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

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

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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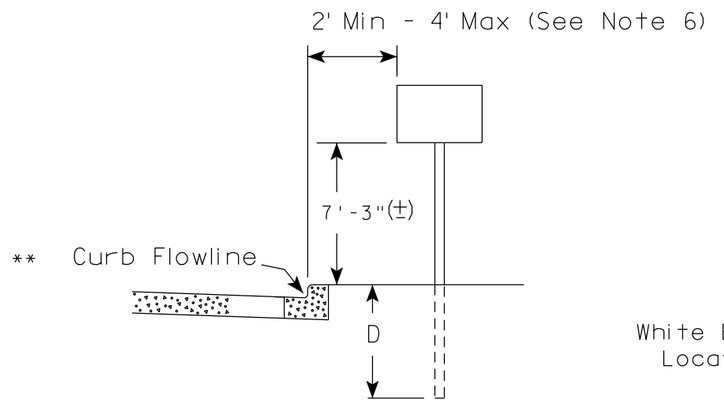
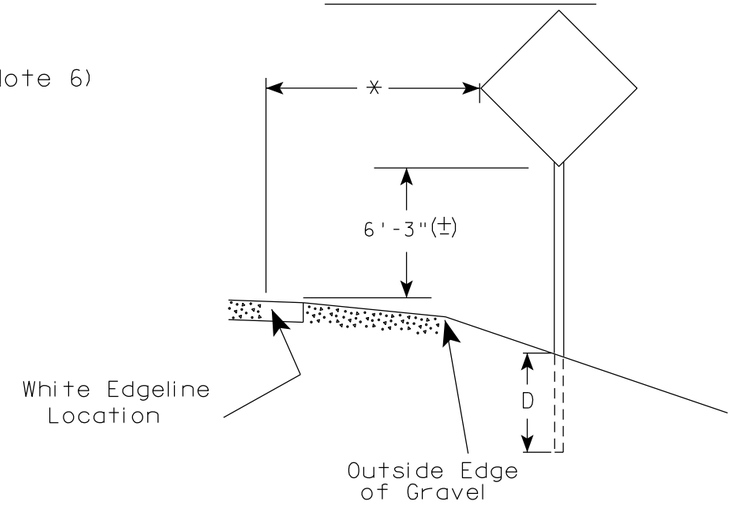
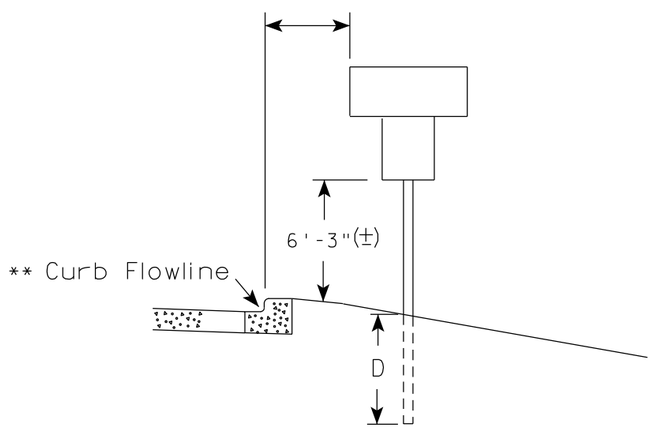
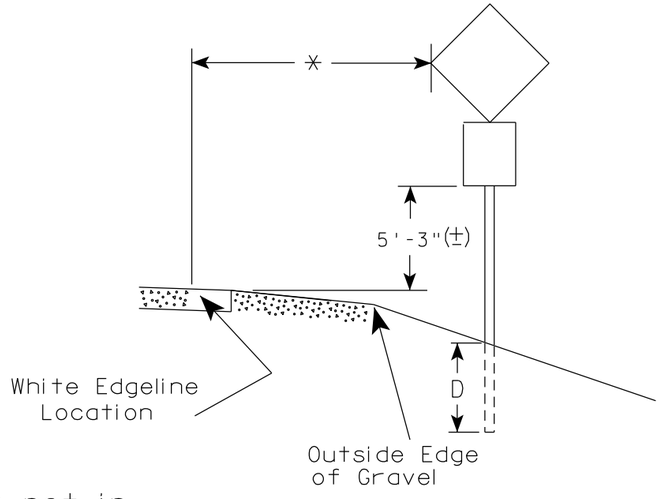
URBAN AREA



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.

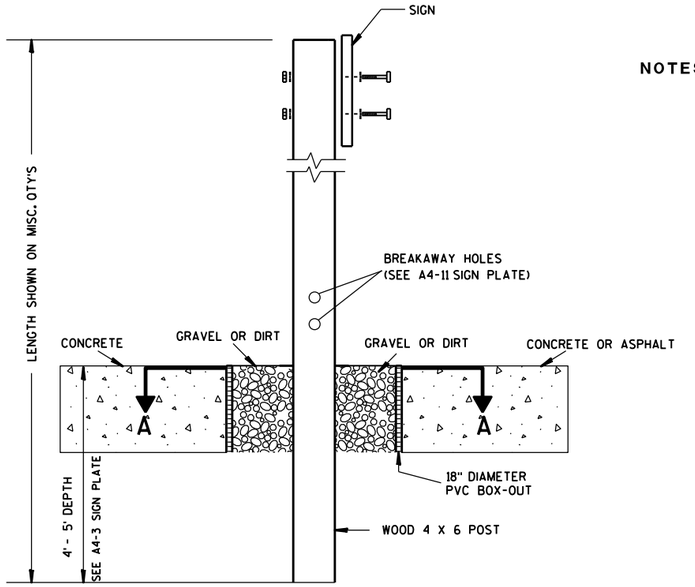
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

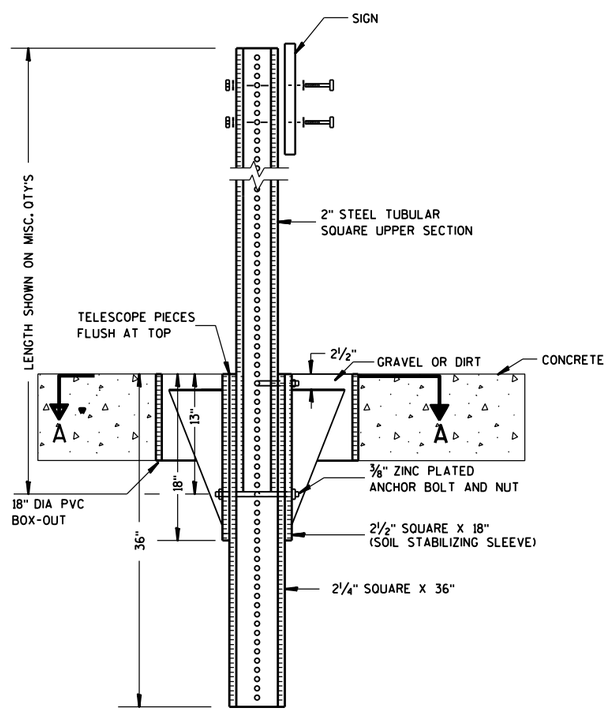
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 326	E



ELEVATION VIEW

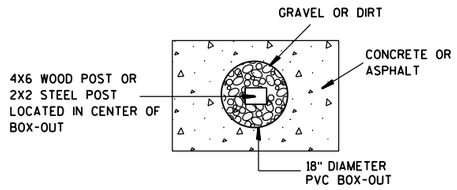
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

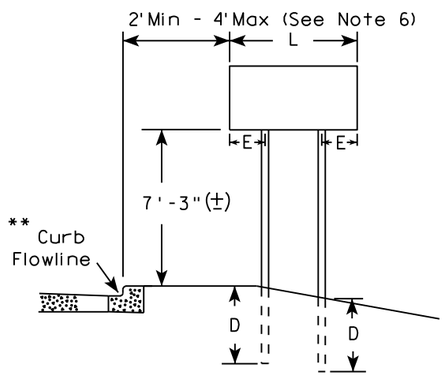
APPROVED Matthew R Rauch
for State Traffic Engineer

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

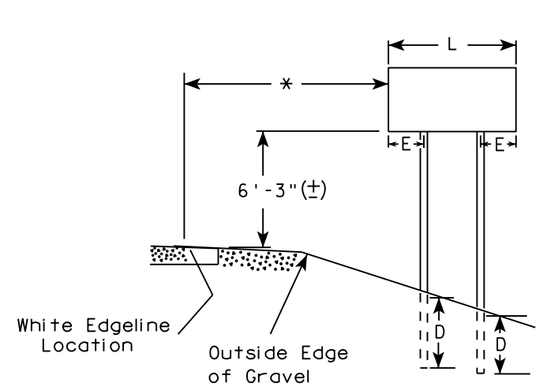
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

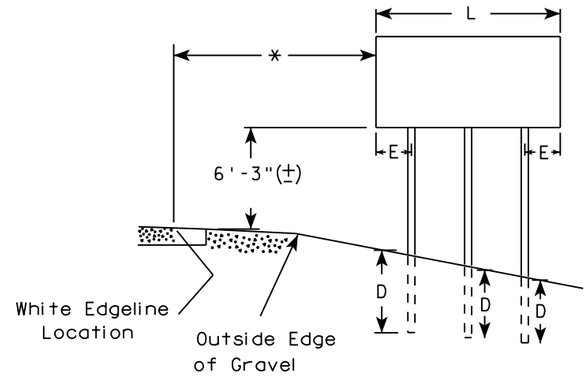
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

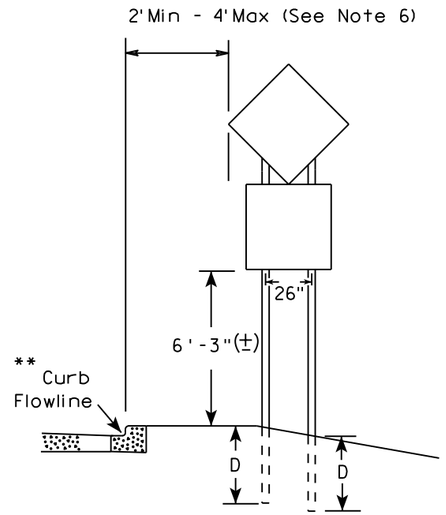
URBAN AREA



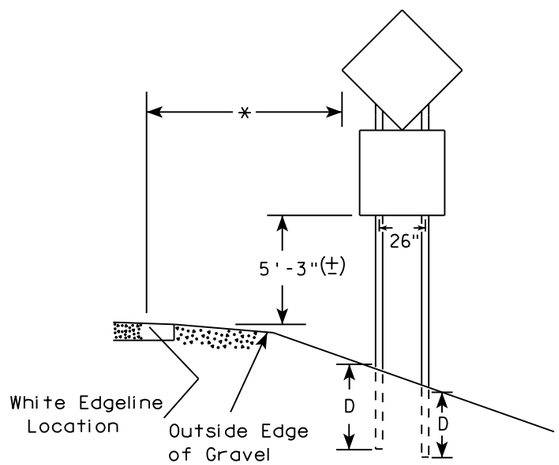
RURAL AREA (See Note 3)







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'

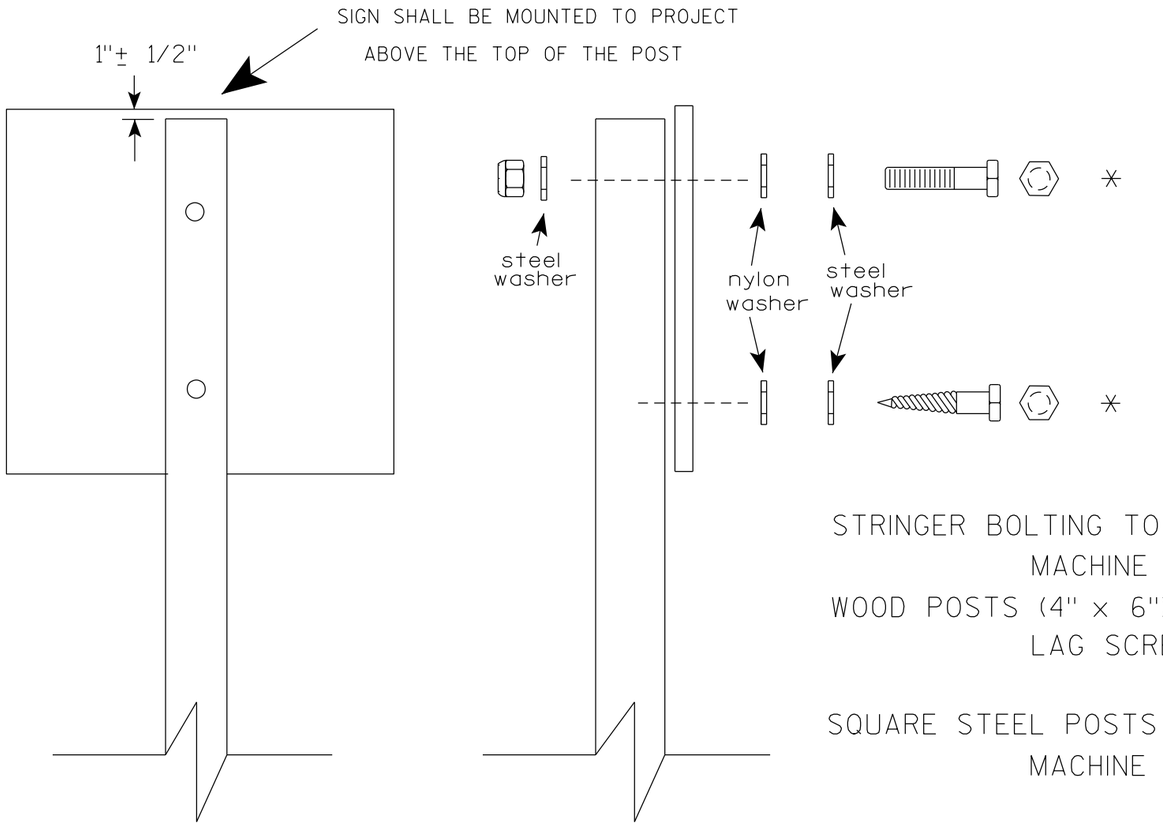
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 328	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

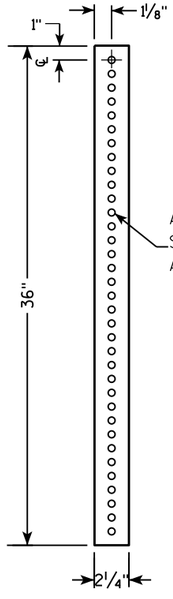
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

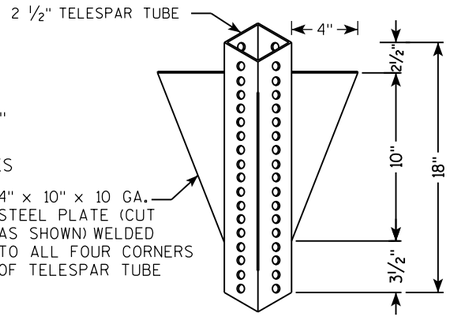
SHEET NO: 329 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

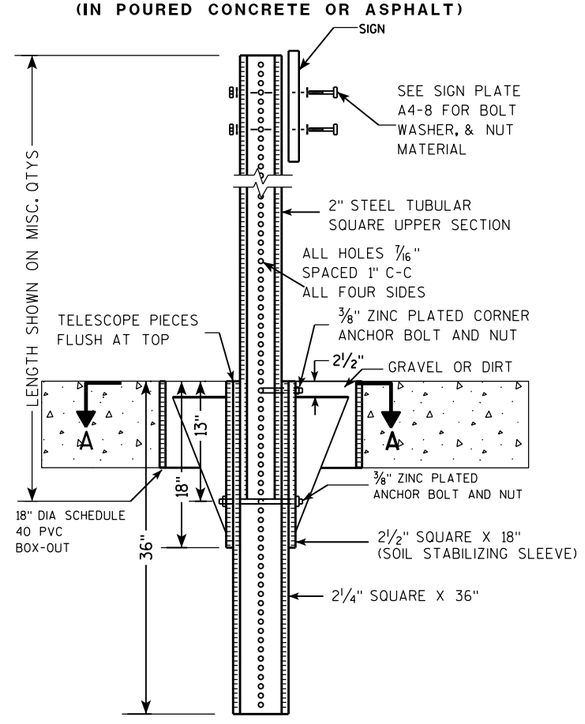
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



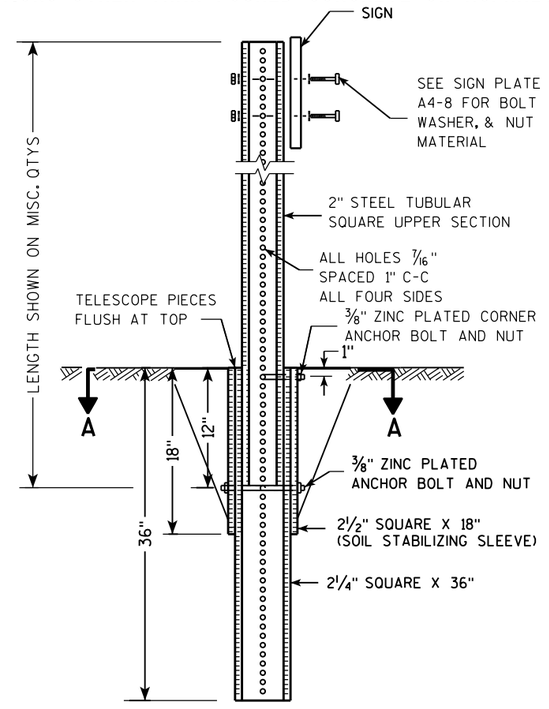
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

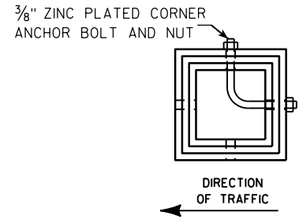


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

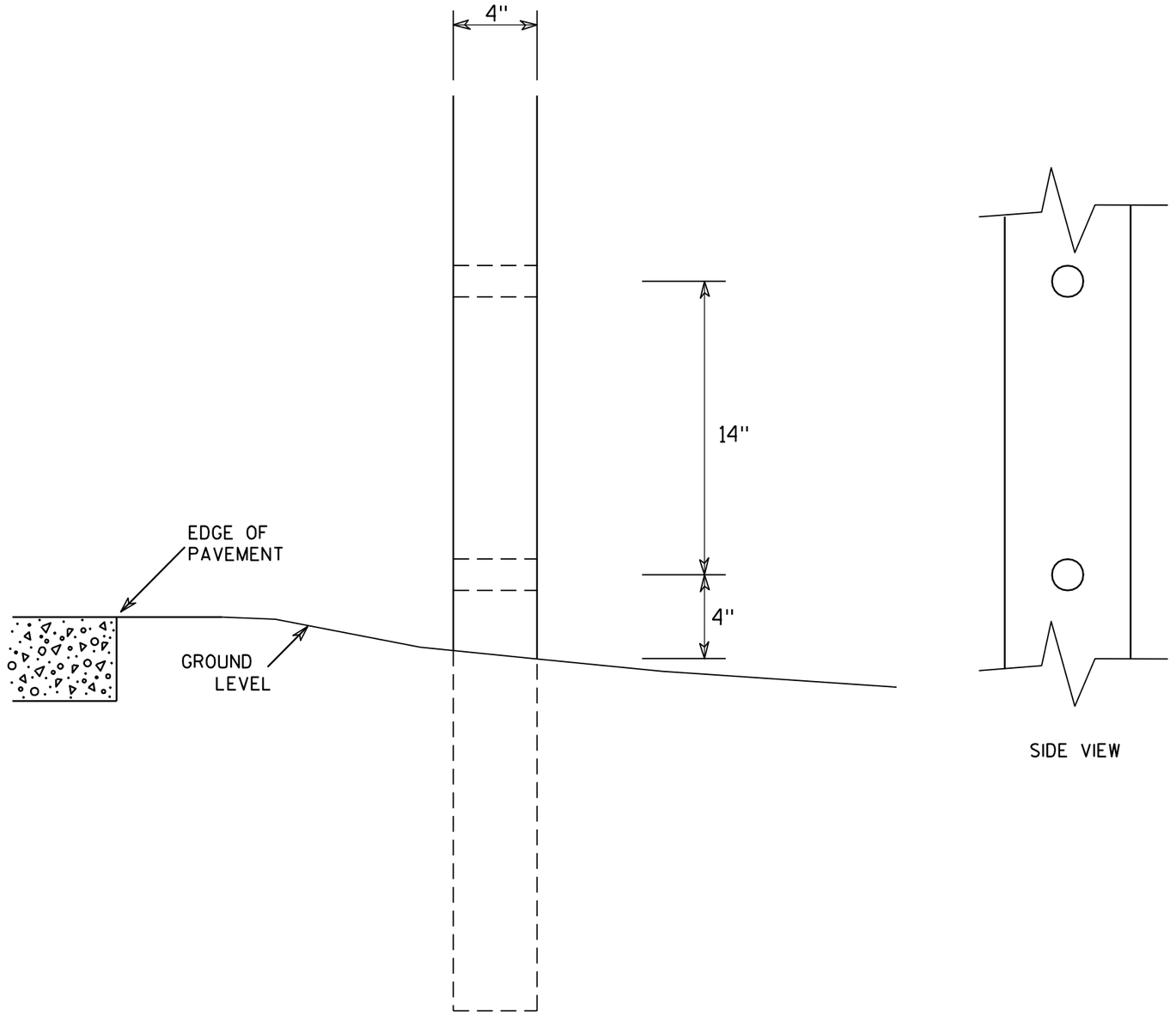
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 330 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

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

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

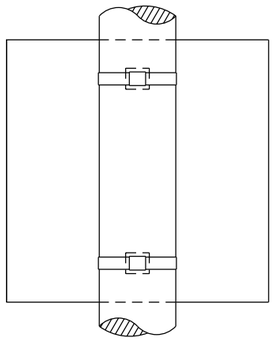
APPROVED Chester J Spang
for State Traffic Engineer

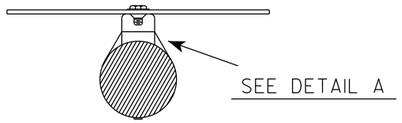
DATE 3/27/97 PLATE NO. A4-11.2

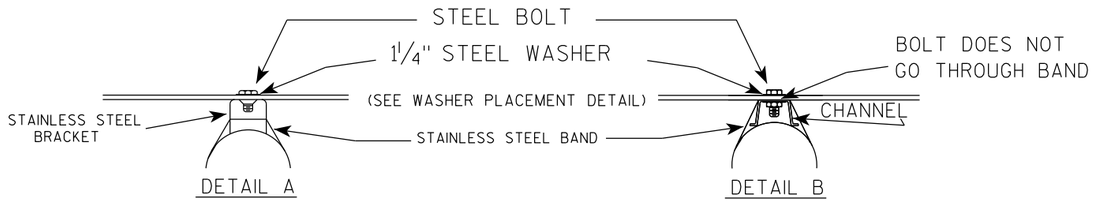
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 331	E

BANDING

SINGLE SIGN



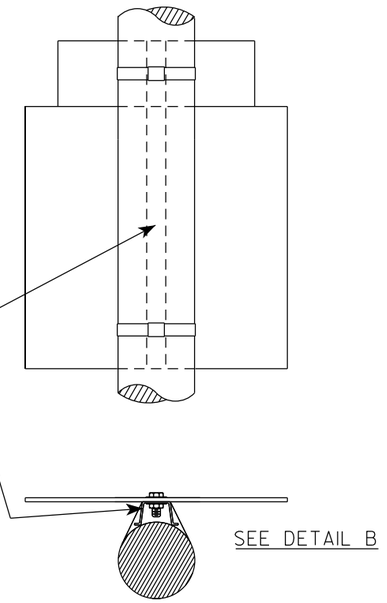




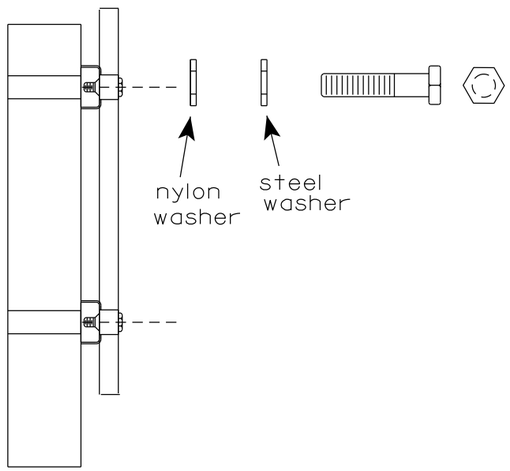
GENERAL NOTES

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

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

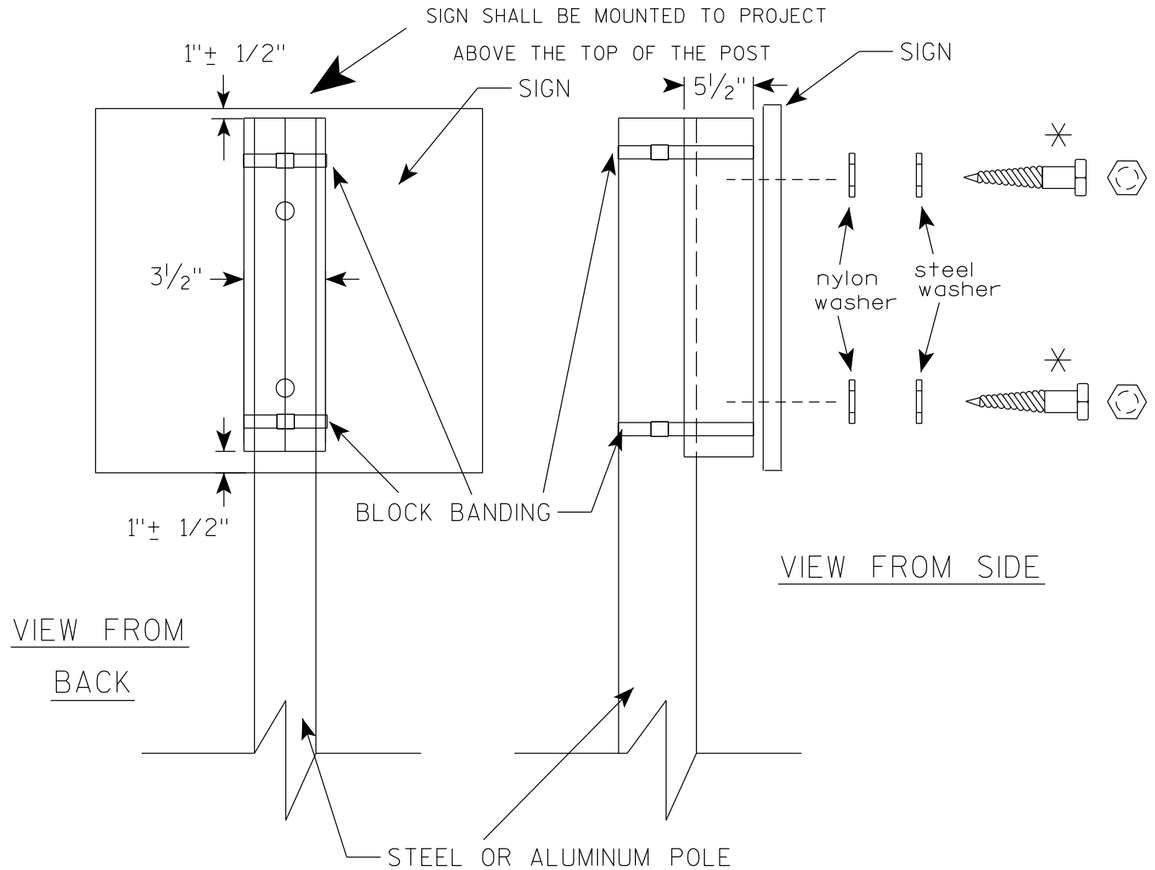
DATE 6/10/19 PLATE NO. A5-9.4

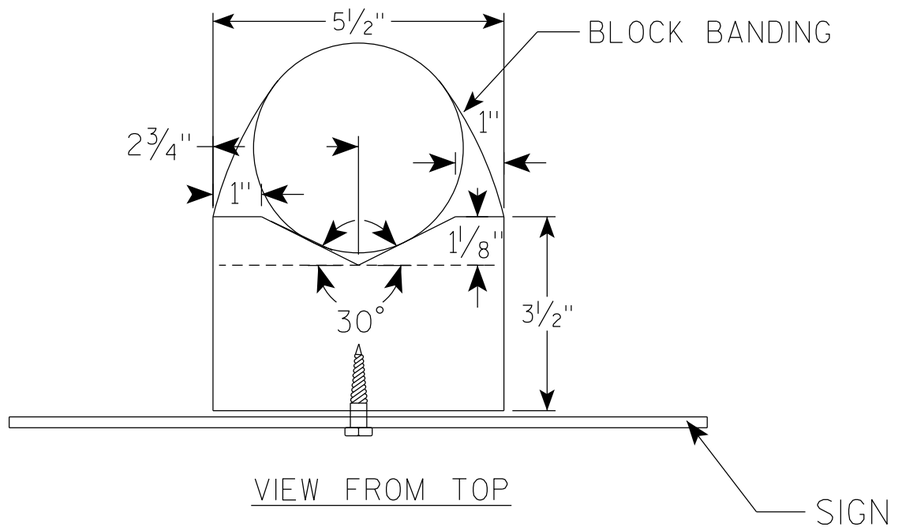
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 332	E

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"

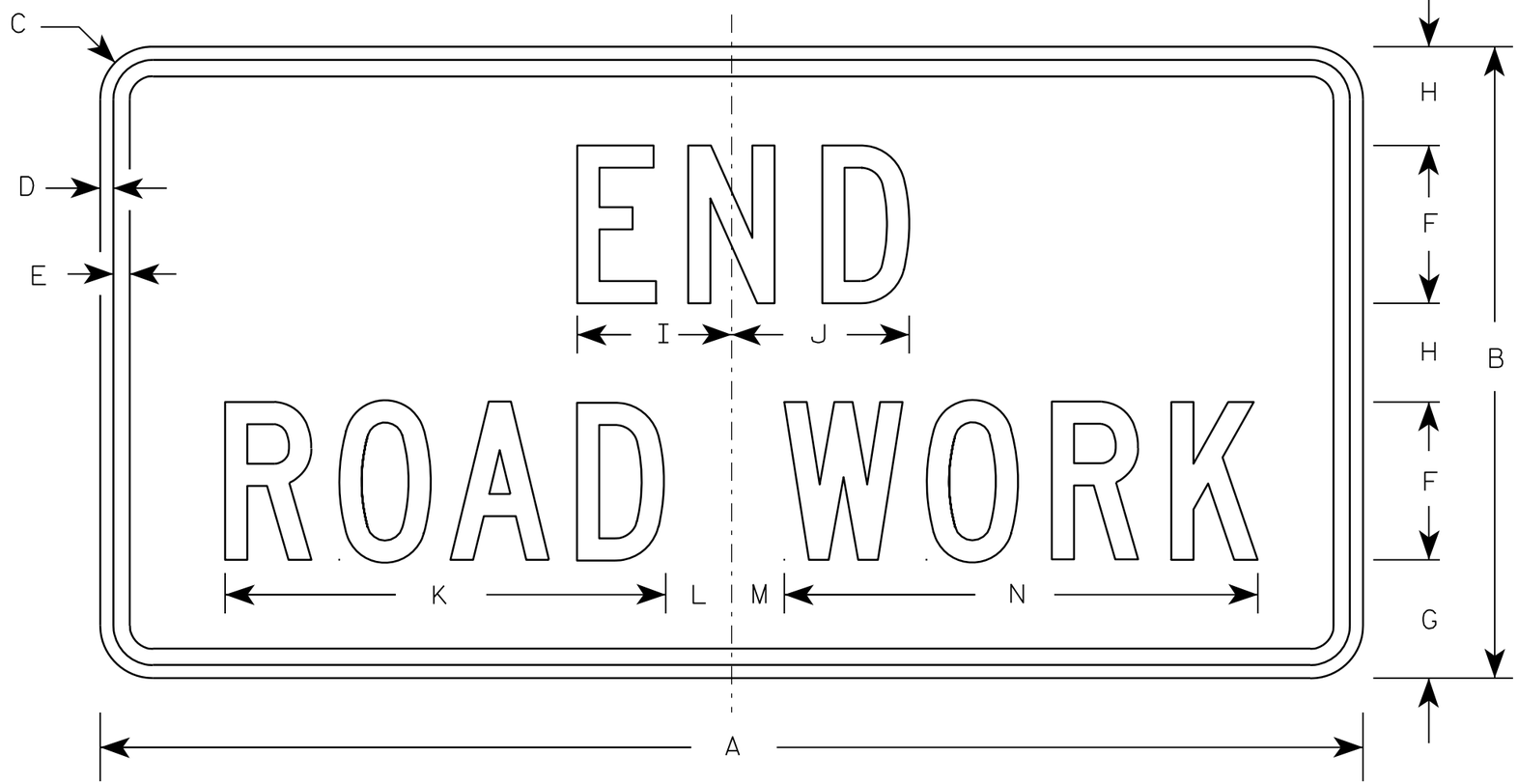
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:				SHEET NO: 333	E



G20-2A

NOTES

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

Metric equivalent for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

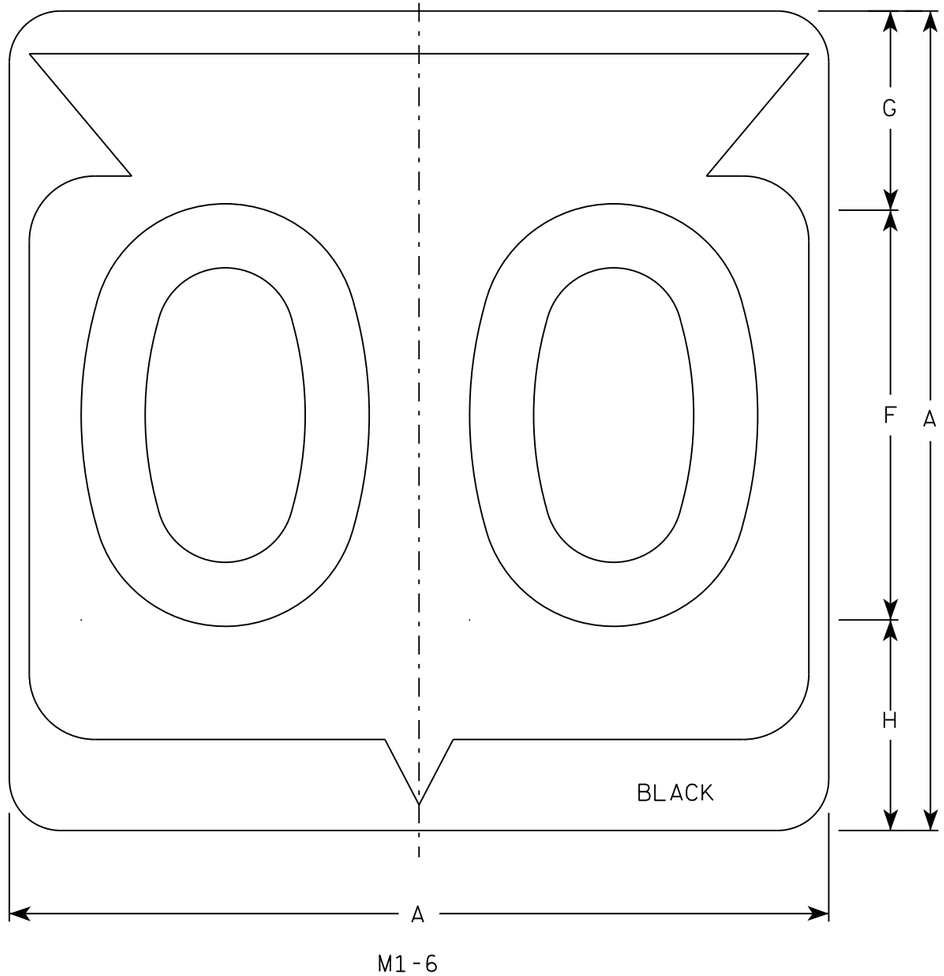
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

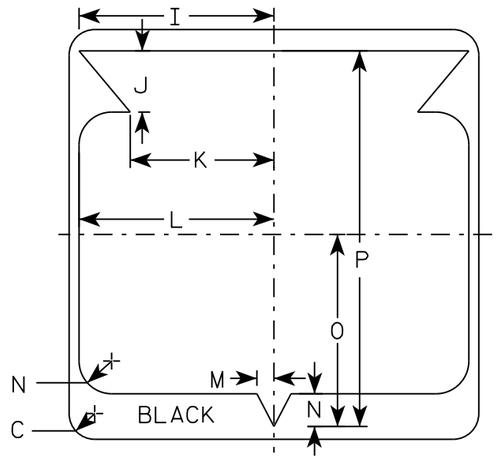
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 334	E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
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		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

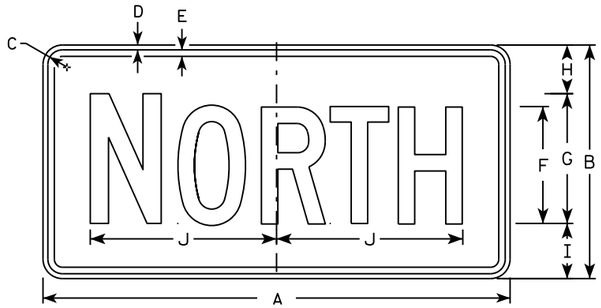
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

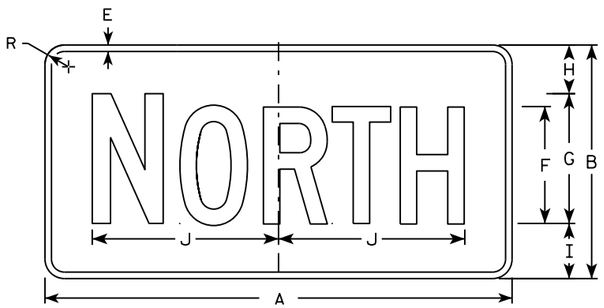
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 335 | E



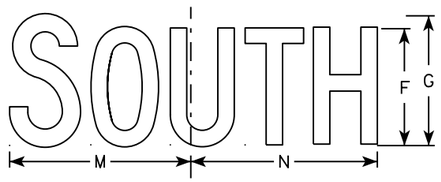
M3-1
MM3-1
MP3-1



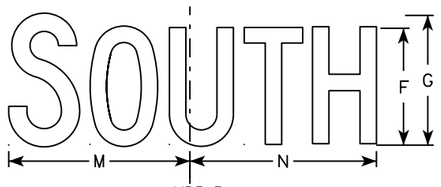
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

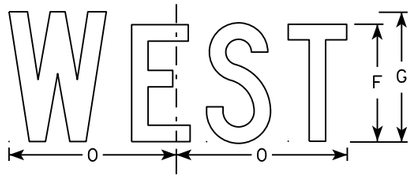
MB3-2
MK3-2
MN3-2



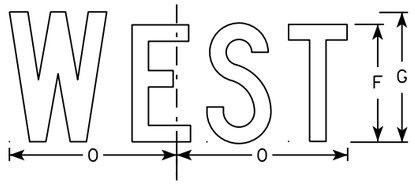
M3-3
MM3-3
MP3-3



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

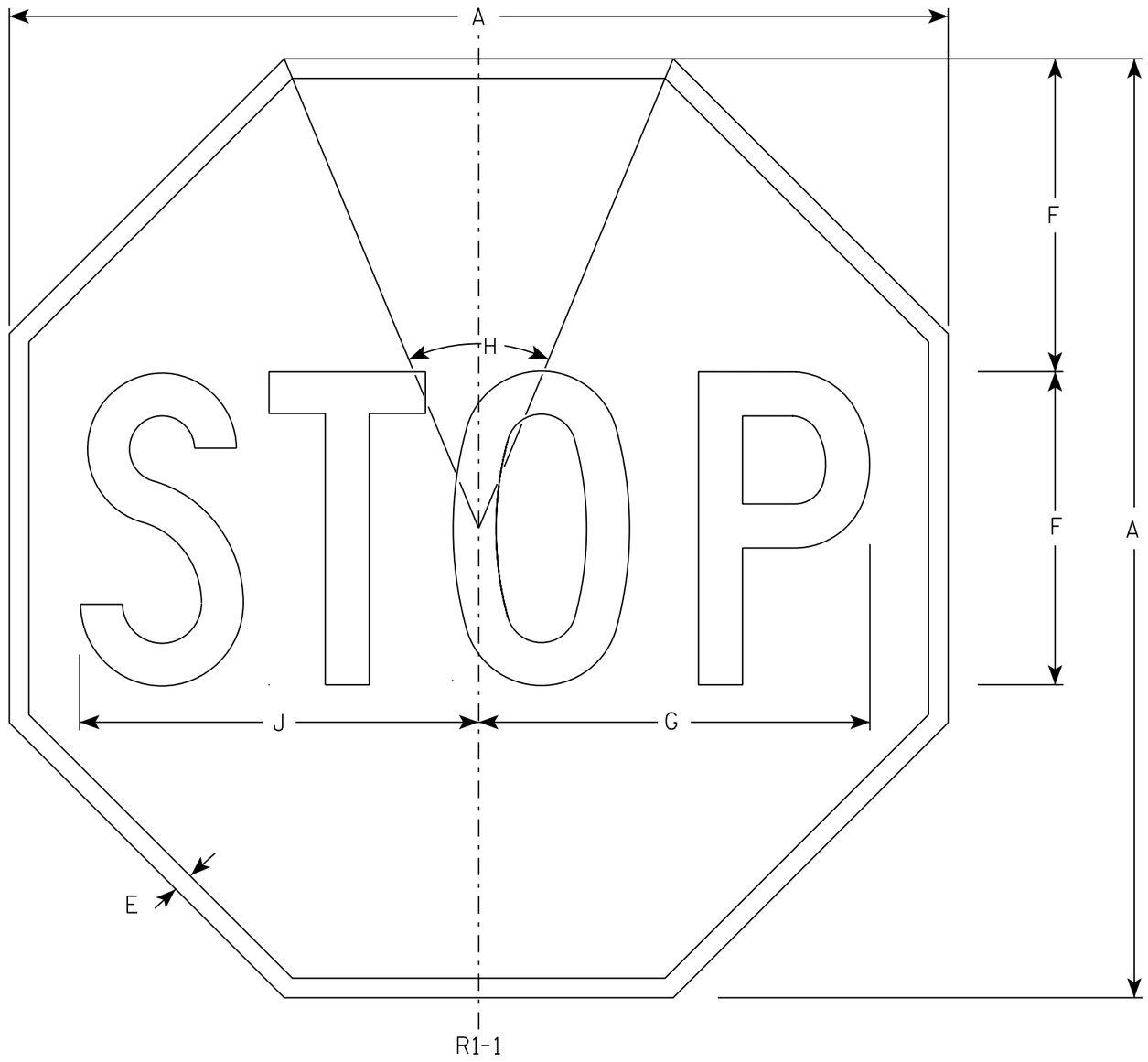
WISCONSIN DEPT OF TRANSPORTATION

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



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

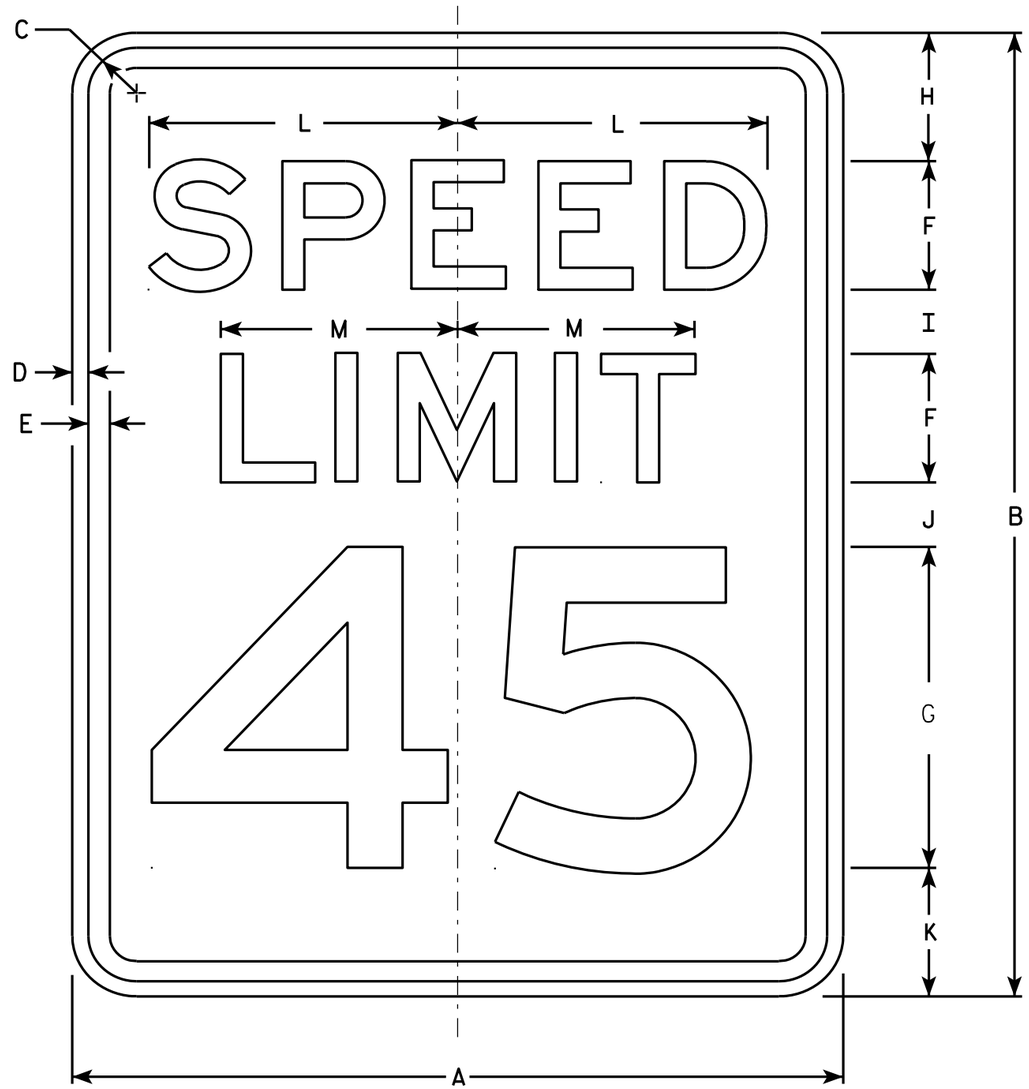
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 337	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
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 adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

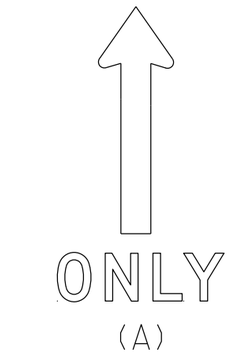
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 338 | E

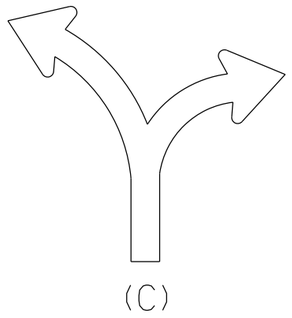
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000

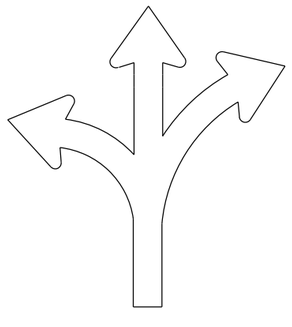
WISDOT/CADDS SHEET 42

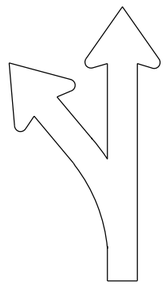


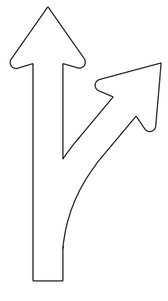
(A)

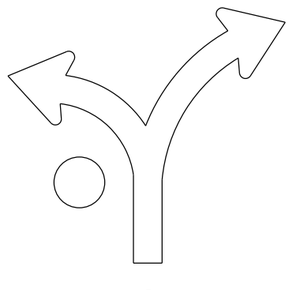
(B)

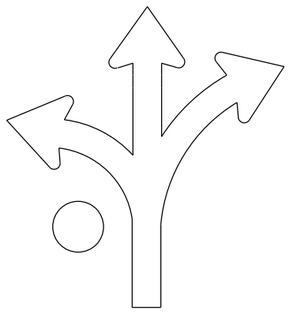

(C)

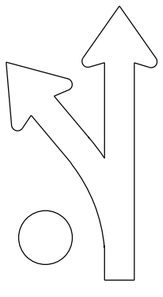

(D)


(E)

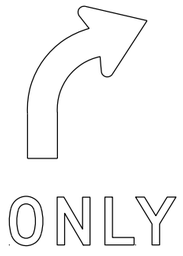

(F)


(G)

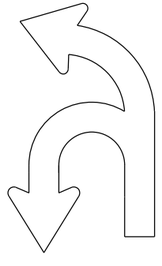

(H)


(I)

(L)



(R)


(U)

NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

1 Letter =	3.75 sq ft	for Size 2
	6.0 sq ft	for Size 3
	10.0 sq ft	for Size 4 or 5
2 Letters =	7.5 sq ft	for Size 2
	12.0 sq ft	for Size 3
	20.0 sq ft	for Size 4 or 5
3 Letters =	11.25 sq ft	for Size 2
	18.0 sq ft	for Size 3
	30.0 sq ft	for Size 4 or 5
4 Letters =	15.0 sq ft	for Size 2
	24.0 sq ft	for Size 3
	40.0 sq ft	for Size 4 or 5
5 Letters =	18.75 sq ft	for Size 2
	30.0 sq ft	for Size 3
	50.0 sq ft	for Size 4 or 5
6 Letters =	22.5 sq ft	for Size 2
	36.0 sq ft	for Size 3
	60.0 sq ft	for Size 4 or 5

6. When letters C,D,G,H are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

7

7

PROJECT NO:

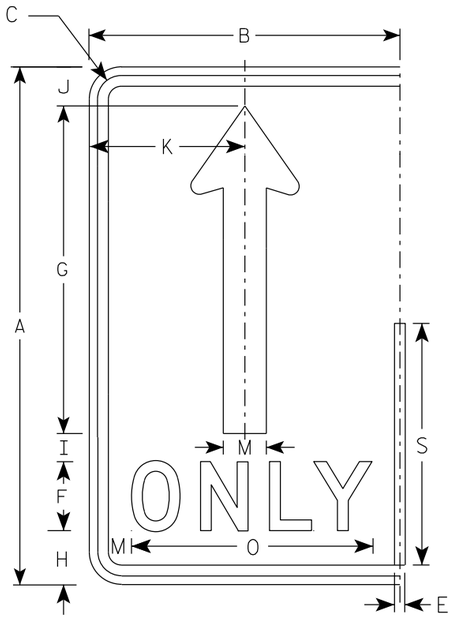
SHEET NO: 339 E

FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 21-MAY 2019 4:37 PLOT BY : mscj9h PLOT NAME :

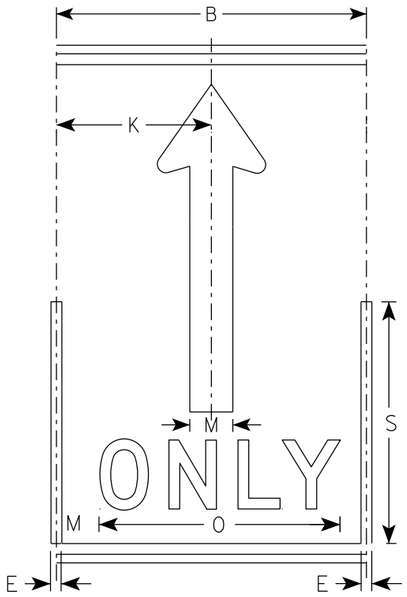
WISDOT/CADDS SHEET 42

NOTES

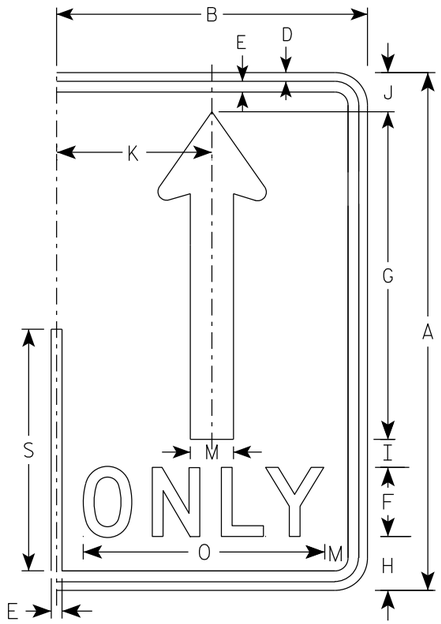
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



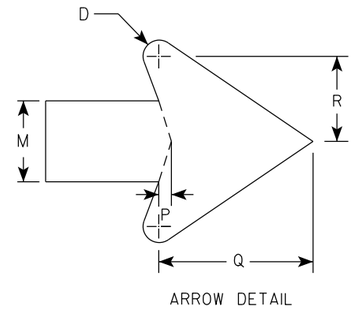
(A)



(A)



(A)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3/8	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8	5	22 3/4	3 3/4	1 3/4	2 3/4	12		3		17 5/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

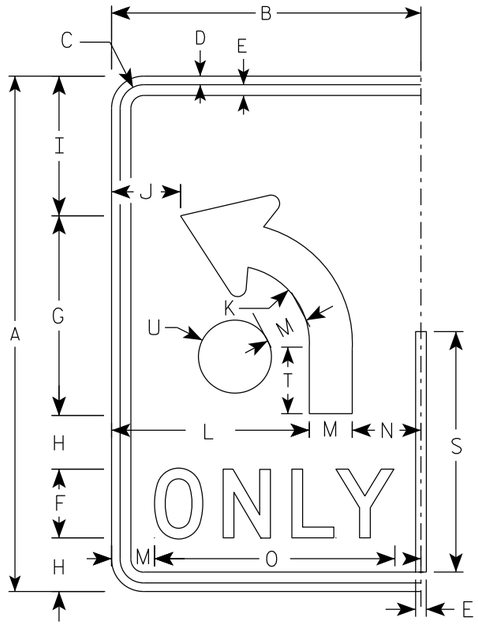
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

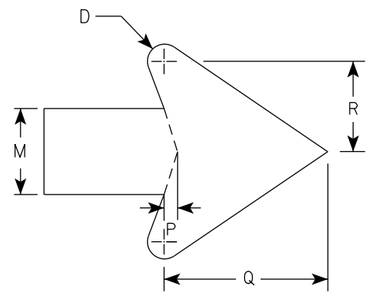
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 340	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
   Message Series - D



(B)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8	2 1/2						6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0

STANDARD SIGN

R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

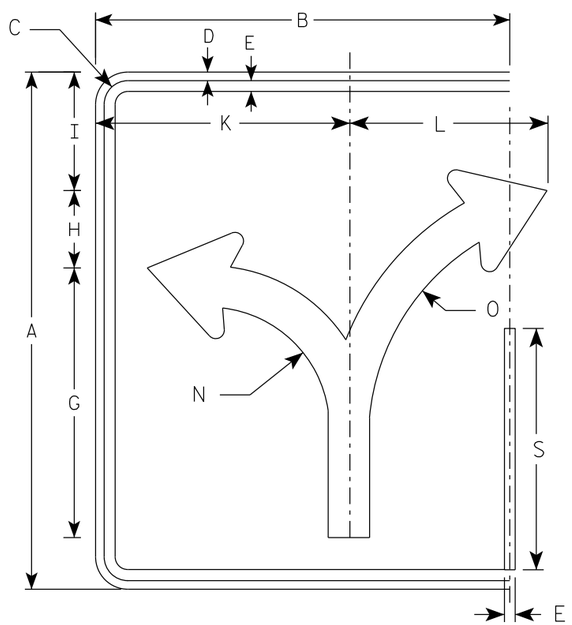
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

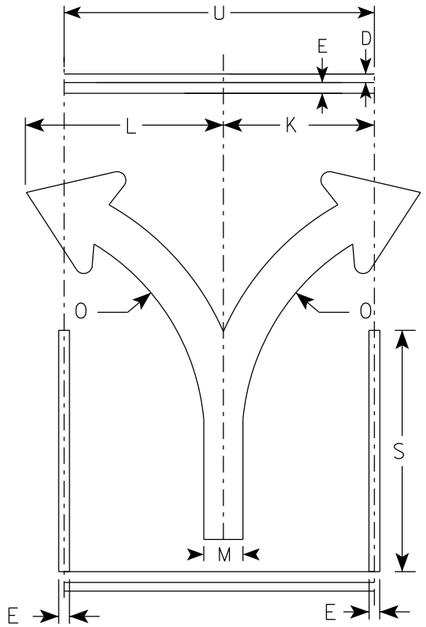
SHEET NO: 341 E

NOTES

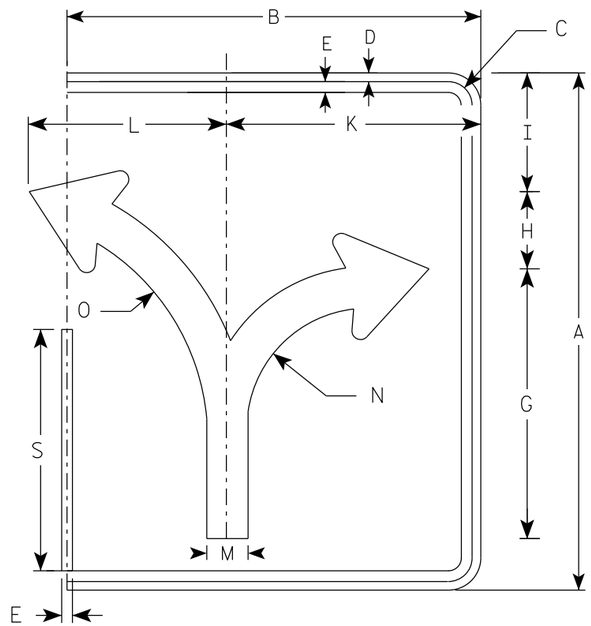
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



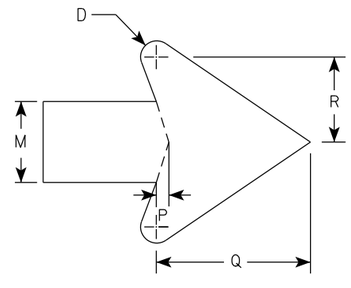
(C)



(C)



(C)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

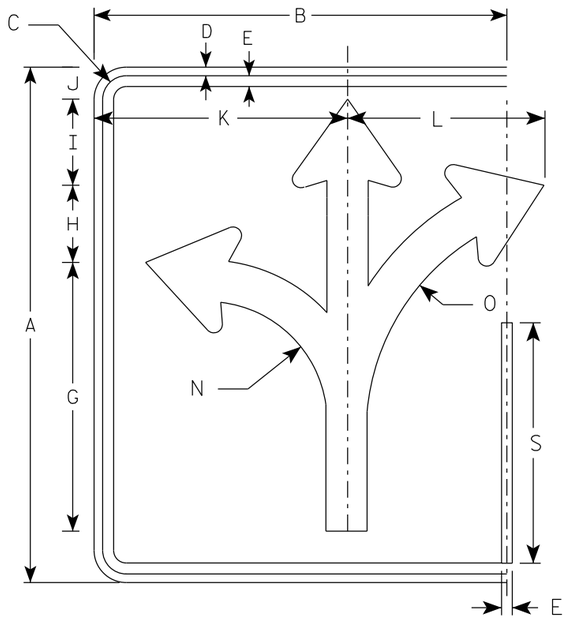
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

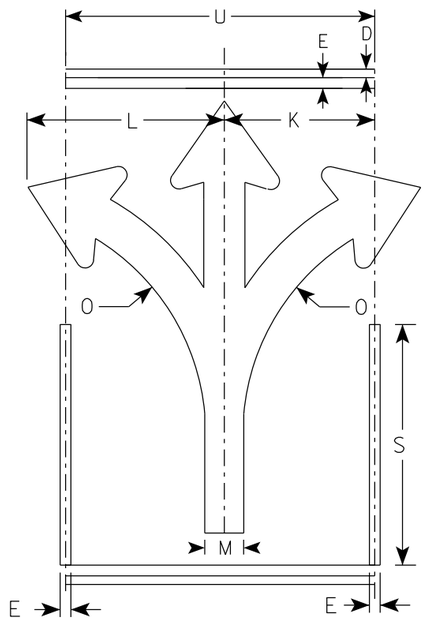
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 342 | E

NOTES

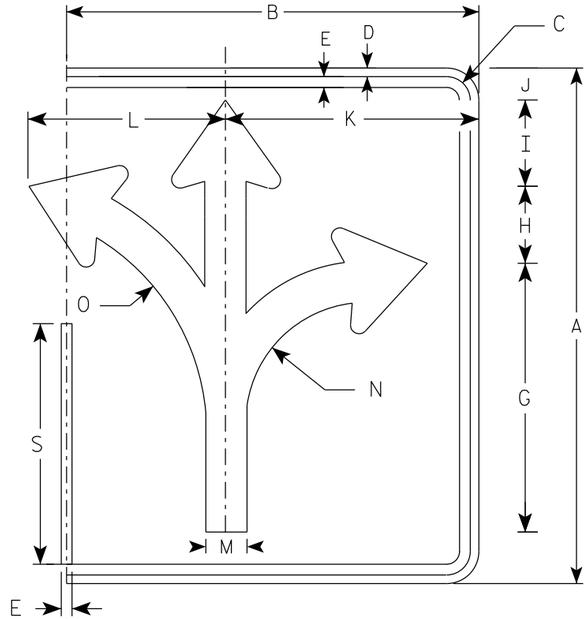
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



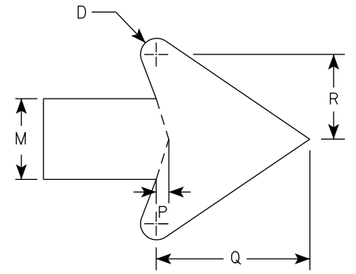
(D)



(D)



(D)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	6	2 1/4	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

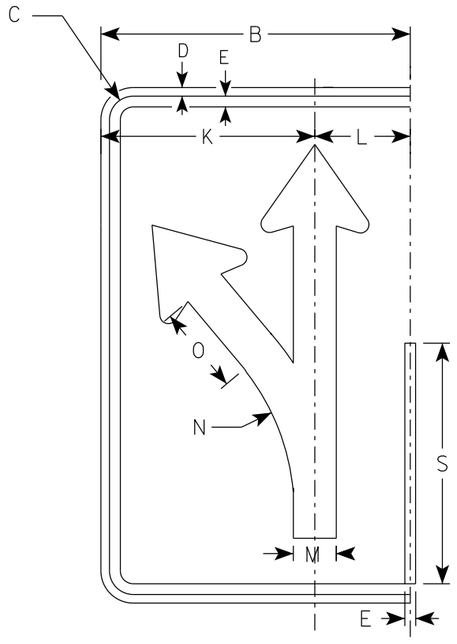
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

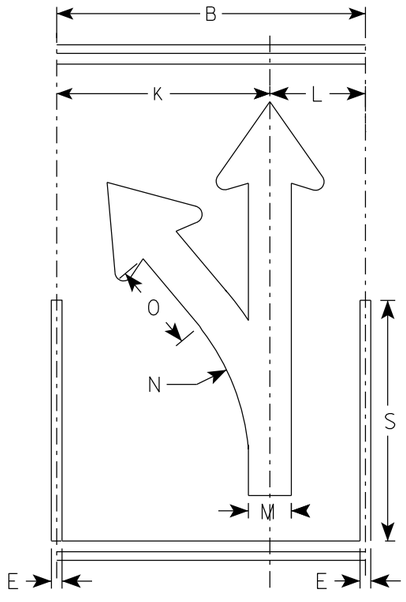
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 343 | E

NOTES

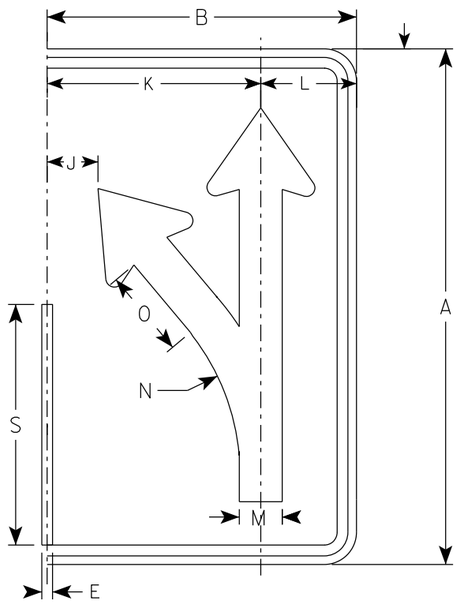
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



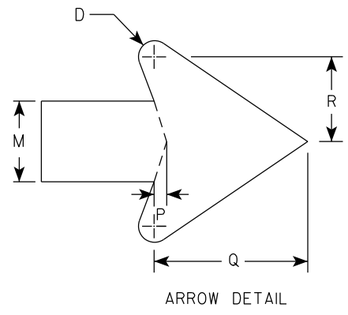
(E)



(E)



(E)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

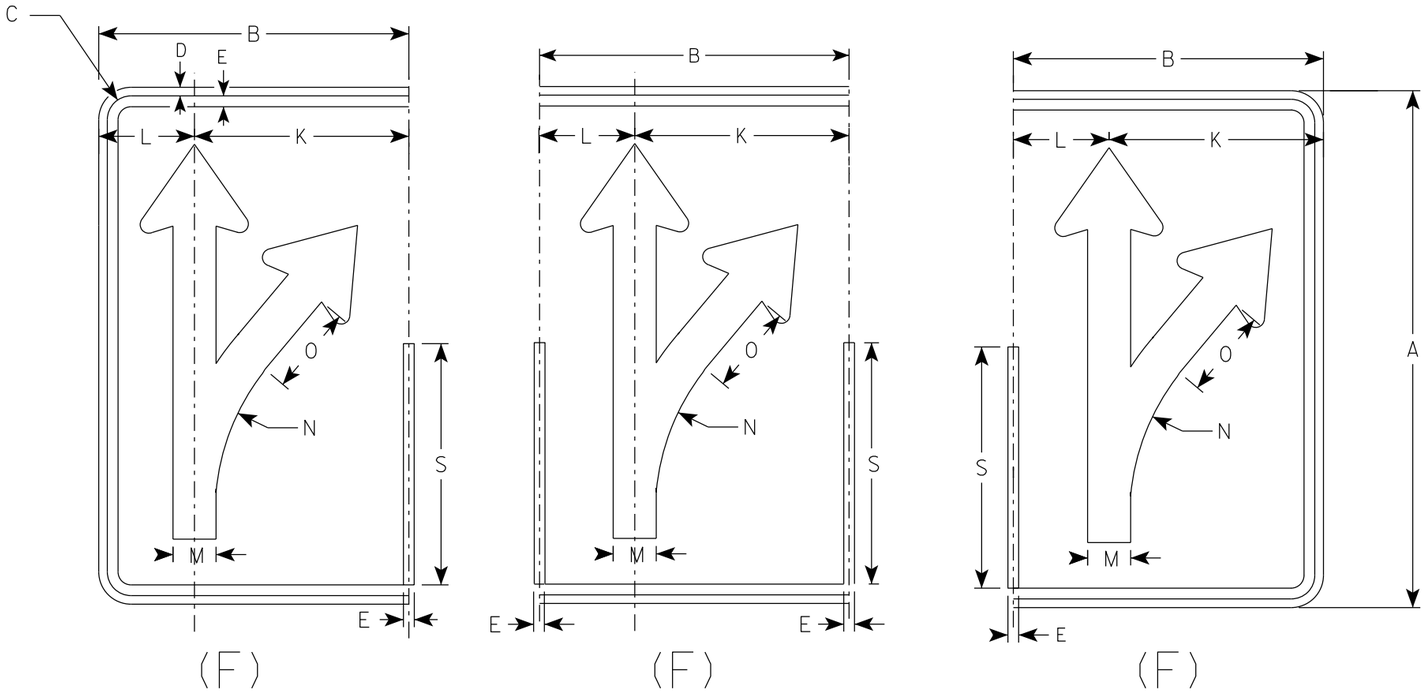
APPROVED Matthew R Rauch
For State Traffic Engineer

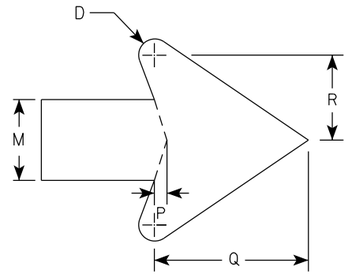
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 344 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None





ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (F) Arrow

WISCONSIN DEPT OF TRANSPORTATION

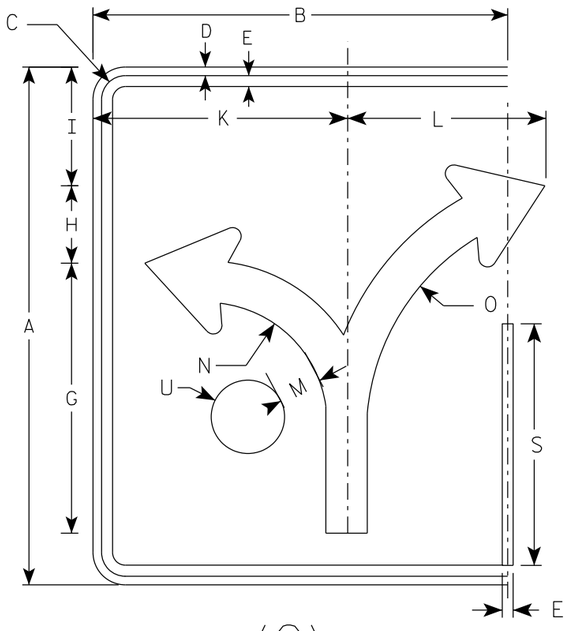
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

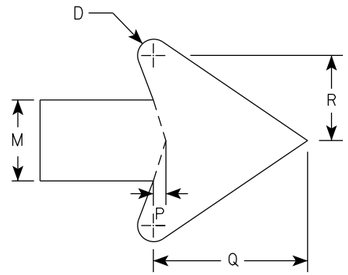
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 345 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(G)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

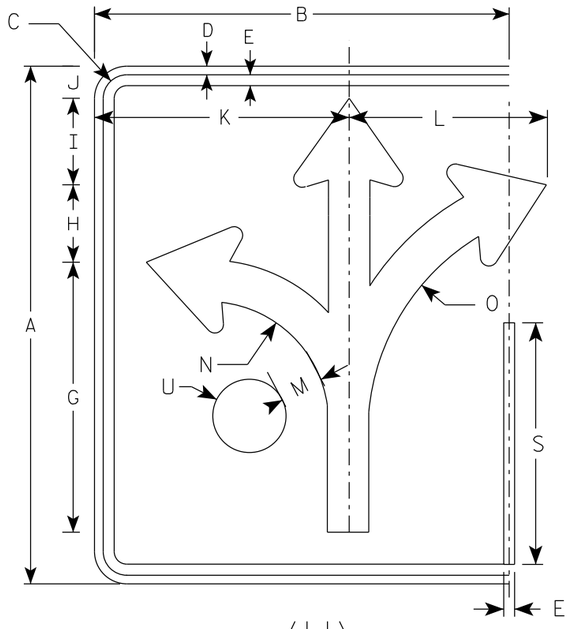
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

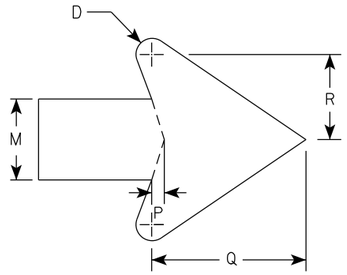
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 346 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(H)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	6	3 1/8	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

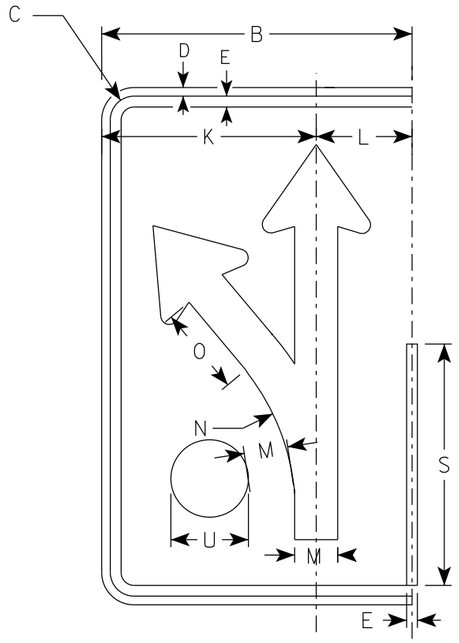
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

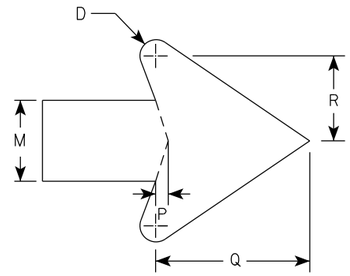
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 347	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(I)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4		2 1/2						6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0

STANDARD SIGN
R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

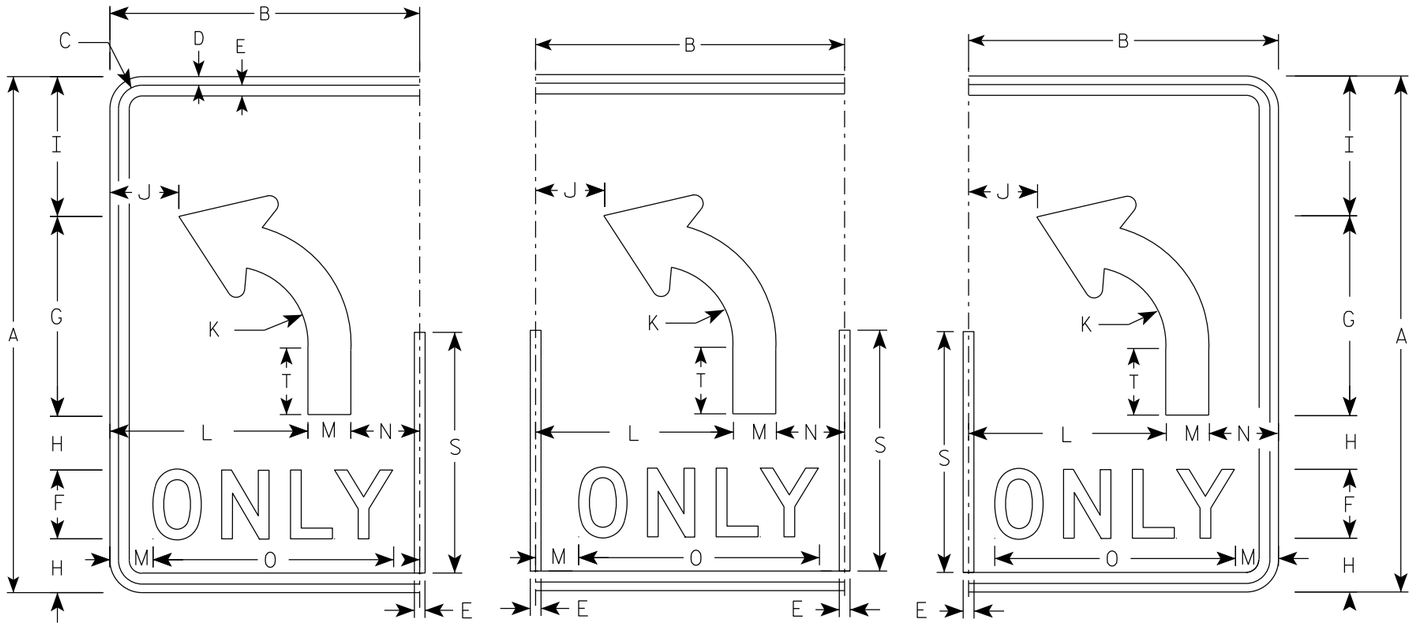
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

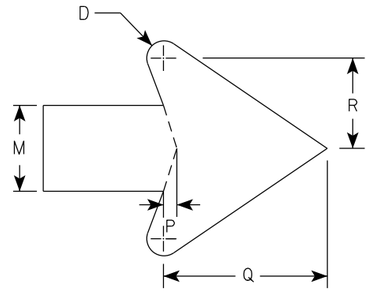
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 348 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



(L) (L) (L)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4		5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

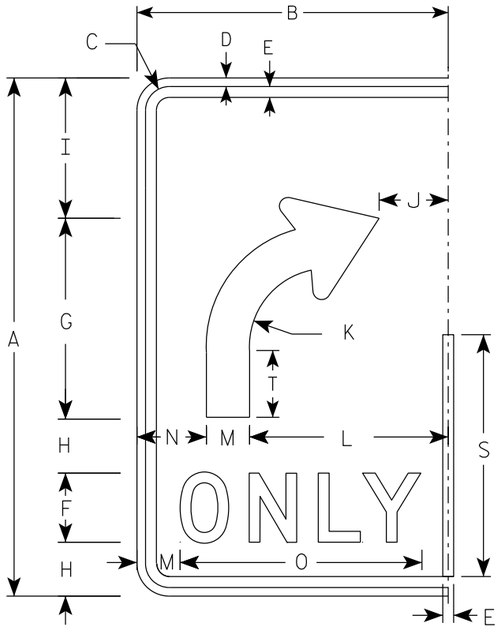
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

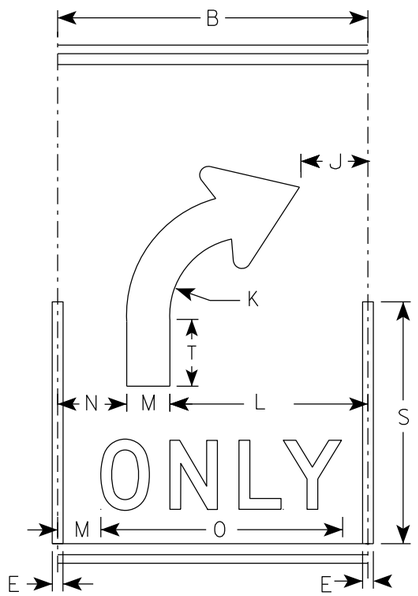
SHEET NO: 349 E

NOTES

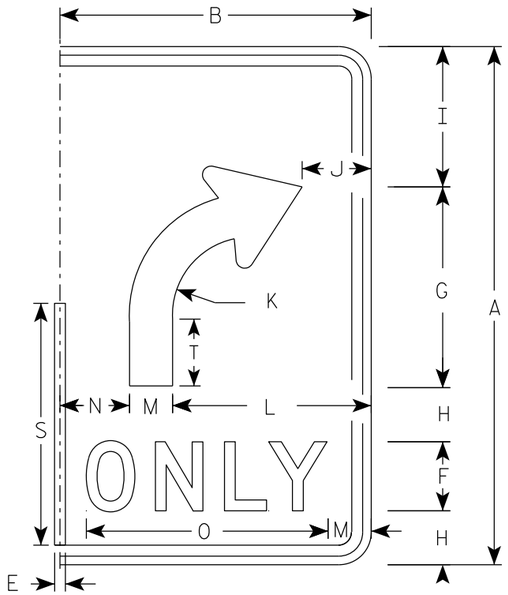
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



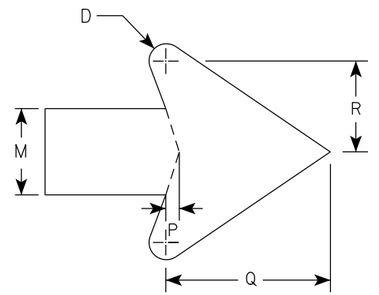
(R)



(R)



(R)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN
R3-8 (R) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

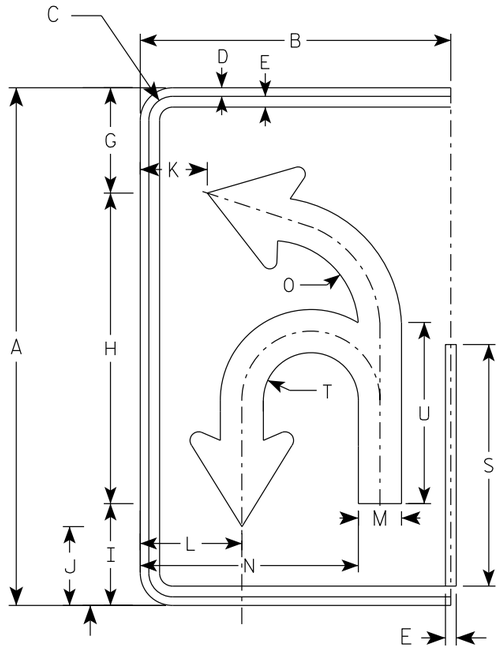
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

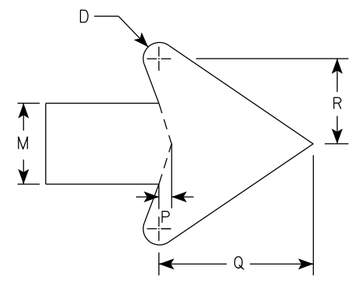
SHEET NO: 350 E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(U)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3/8	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
2M	30	18	1 3/8	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	21 5/8	7 1/8	5 1/2	5 7/8	8 1/4	3	16 3/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4	3 1/4	12 5/8						6.0
4	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0
5	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0

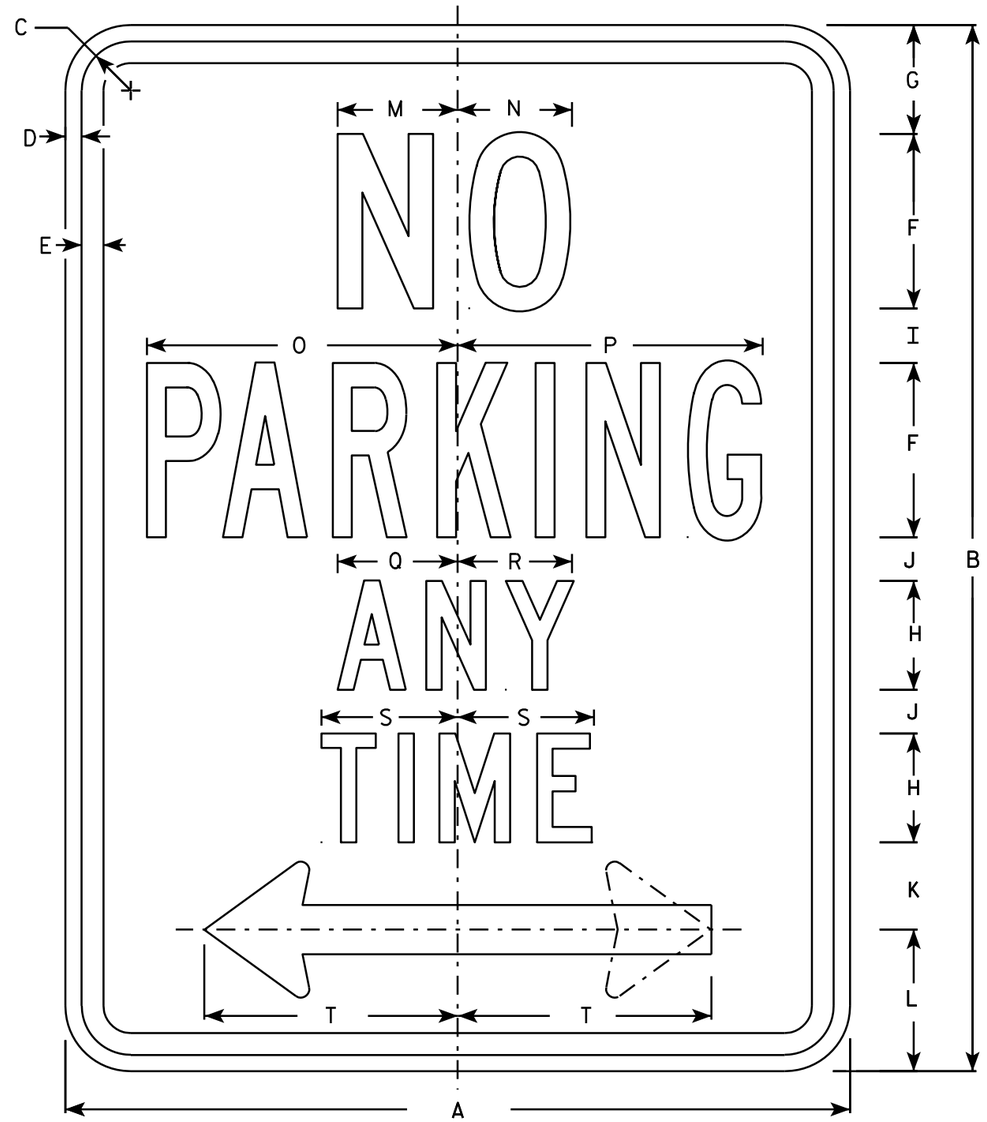
STANDARD SIGN
R3-8 (U) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

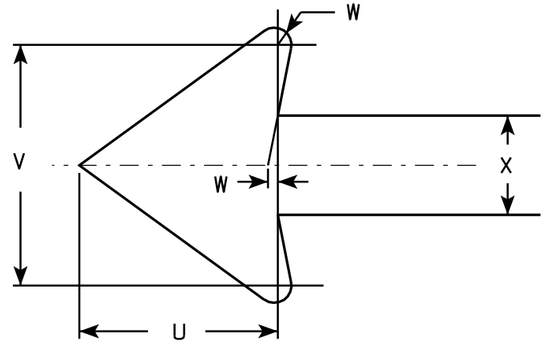
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 351 | E



R7-1

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 - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



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	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 352	E

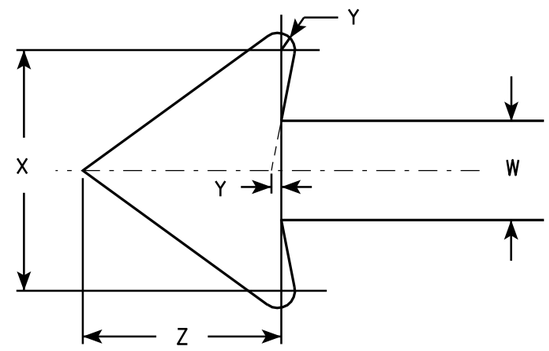
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R71.DGN PLOT DATE : 31-MAR-2011 09:20 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.476110:1.000000

WISDOT/CADDS SHEET 42

R7-51

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 - Red
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. R7-51D (double arrow)
   R7-51R (right arrow)
   R7-51L (left arrow)
6. Lines 1, 3 and 4 are Series C.
   Line 2 is Series B.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	4 7/8	5/8	1 3/4	2 1/2	4 3/8	3 7/8	3/4	1 3/4	1/8	1 1/2	1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	5 3/4	1 1/8	1 1/2	3 1/8	5 1/2	5 7/8	1 1/8	2 5/8	1/4	2 1/4	3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
4																											
5																											

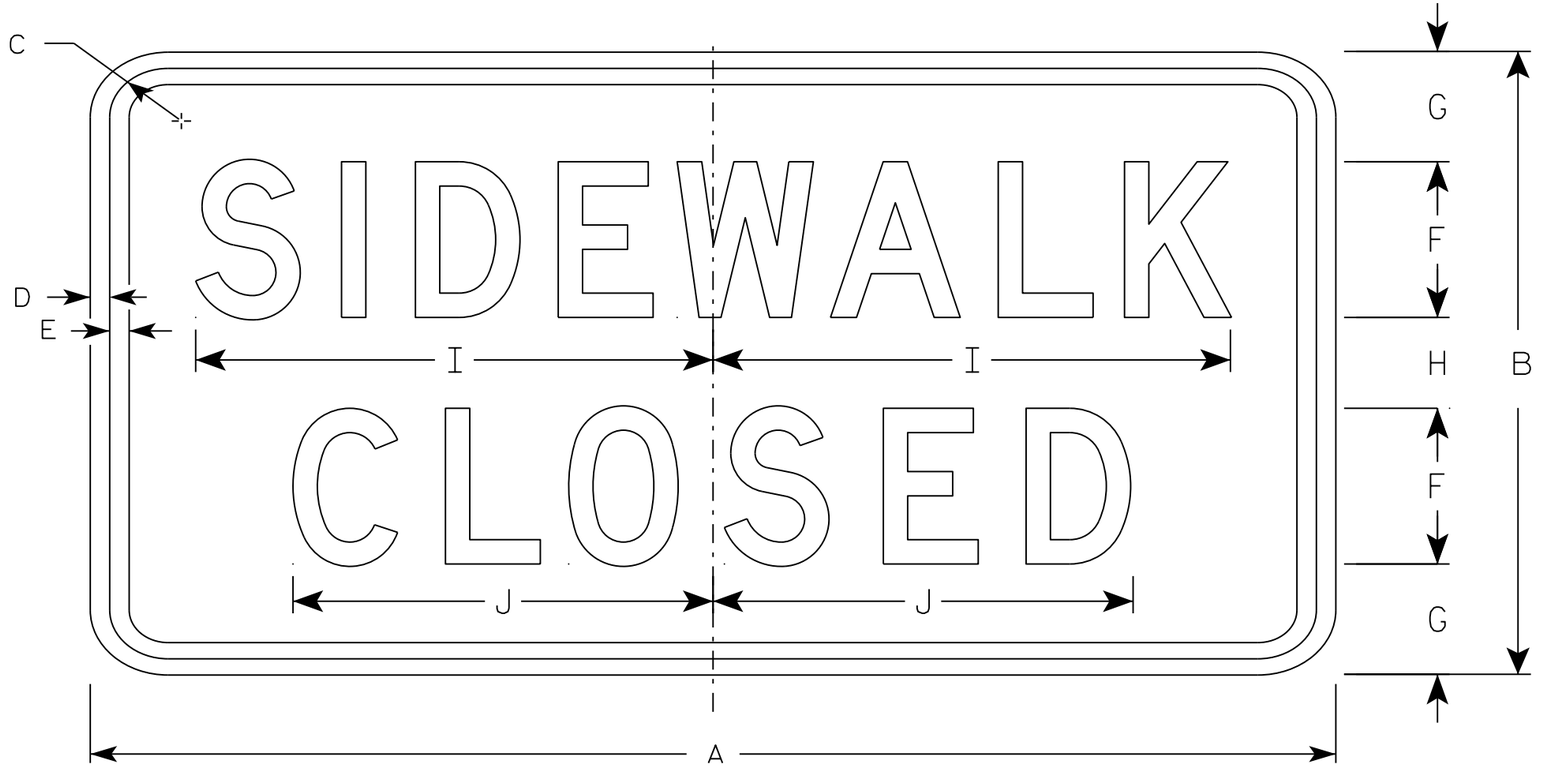
STANDARD SIGN
R7-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-51.6

PROJECT NO:	HWY:	COUNTY:			SHEET NO: 353	E



R9-9

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

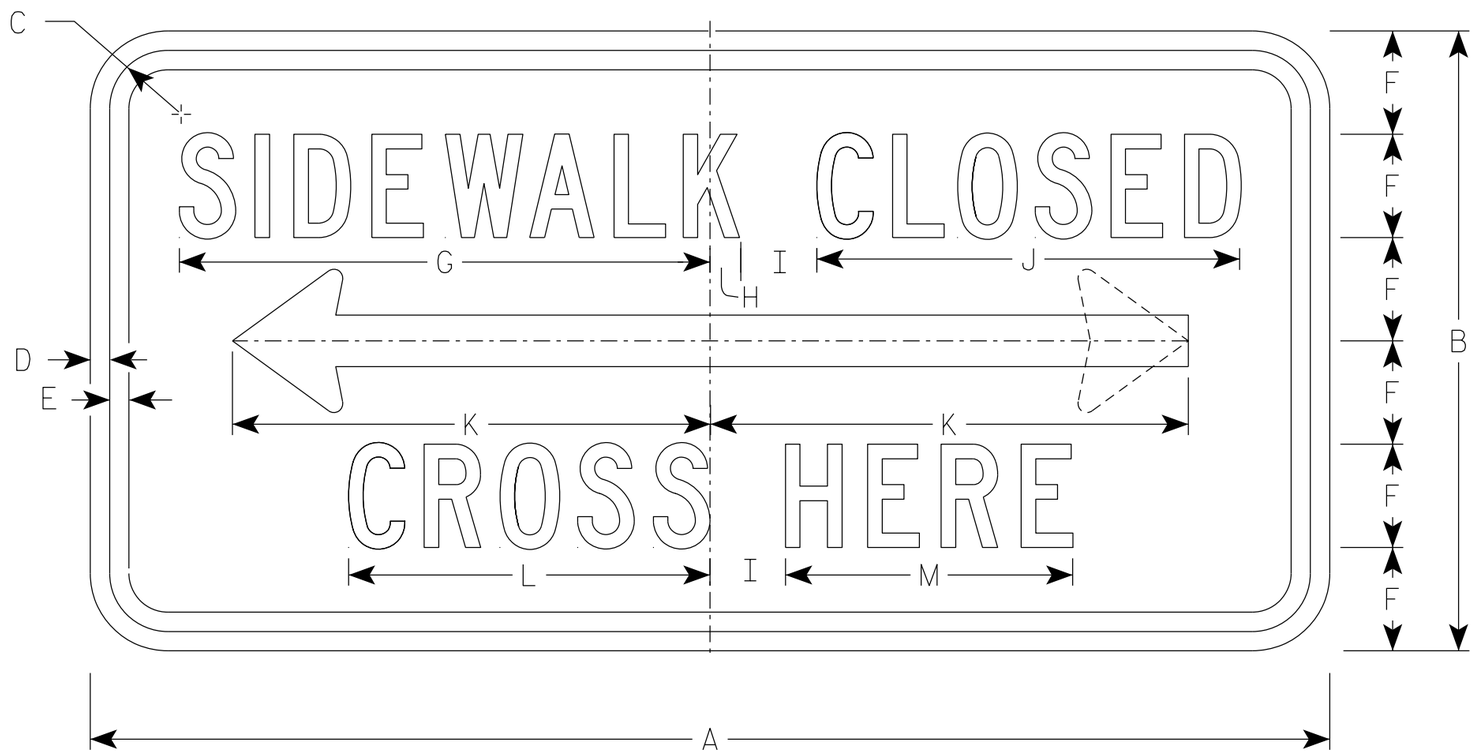
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 354 R9-9.6

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

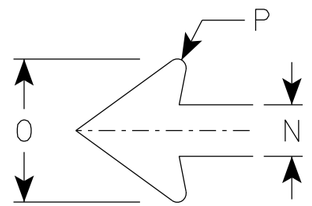
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R9-11A

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. Use Size 2 for Sidewalks. Use Size 3 for paths and Trails.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	2	10 1/4	5/8	1 1/2	8 1/4	9 1/4	7	5 5/8	1	2 3/4	1/8											2.0
2M	24	12	1 1/8	3/8	3/8	2	10 1/4	5/8	1 1/2	8 1/4	9 1/4	7	5 5/8	1	2 3/4	1/8											2.0
3	30	15	1 1/8	3/8	1/2	2 1/2	12 3/4	1/2	2	10 1/4	12 3/8	8 5/8	6 3/4	1 1/4	3 5/8	1/4											3.125
4																											
5																											

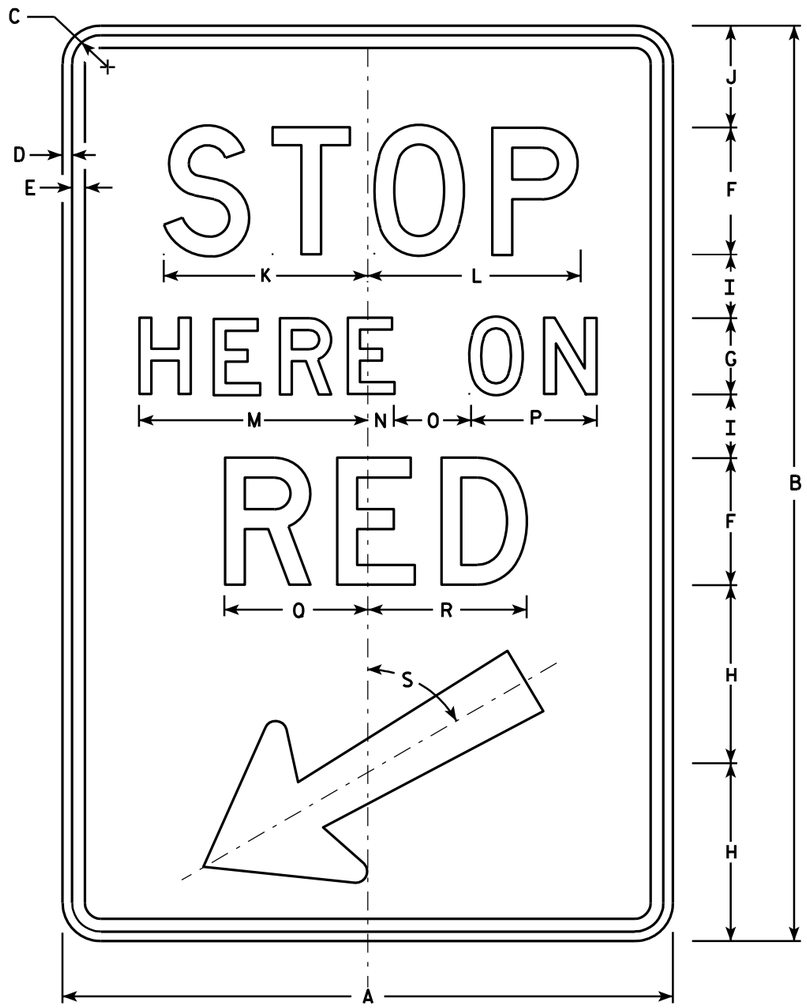
STANDARD SIGN
R9-11A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/7/2020 PLATE NO. R9-11A.4

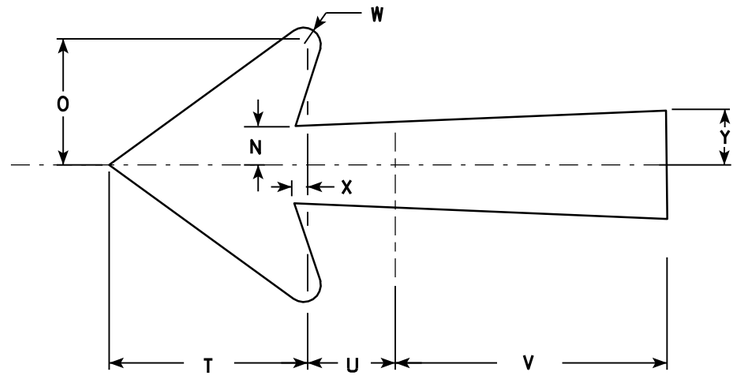
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 355 | E



R10-6

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - 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.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
2M	24	36	1 1/8	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
3																											
4																											
5																											

STANDARD SIGN
R10-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/5/11 PLATE NO. R10-6.6

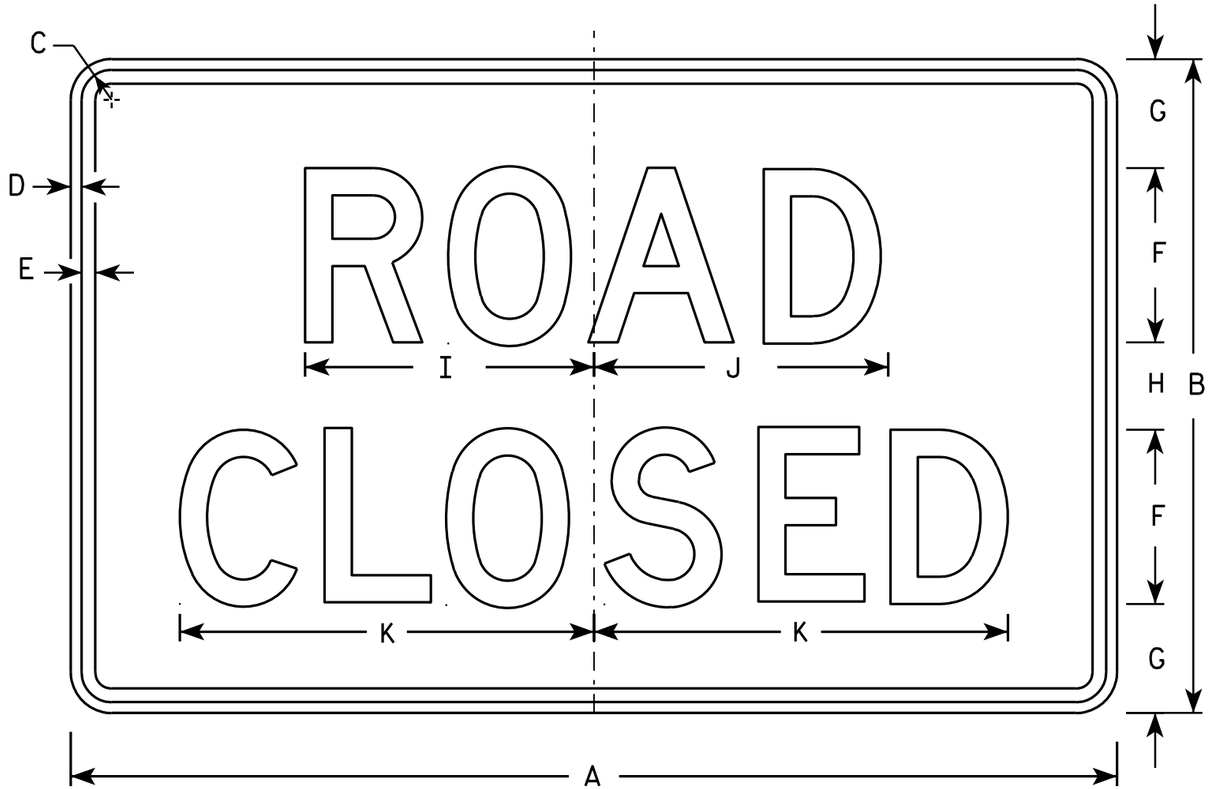
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 356	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R106.DGN PLOT DATE : 05-APR-2011 09:50 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

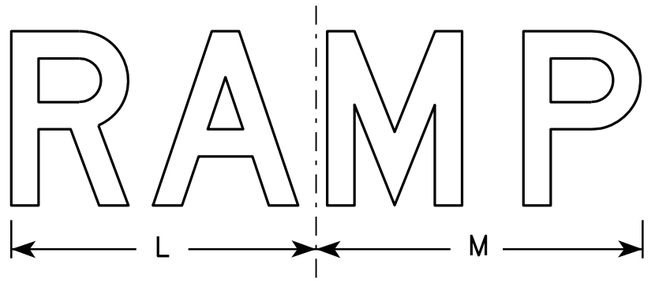
7



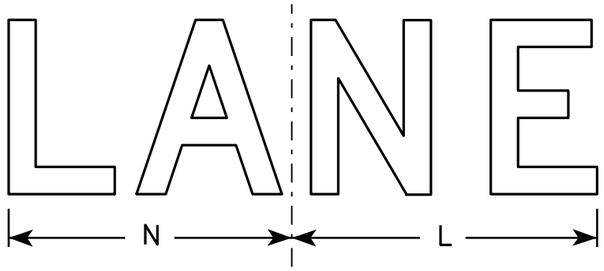
R11-2

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 - 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. Modify the message as required.



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

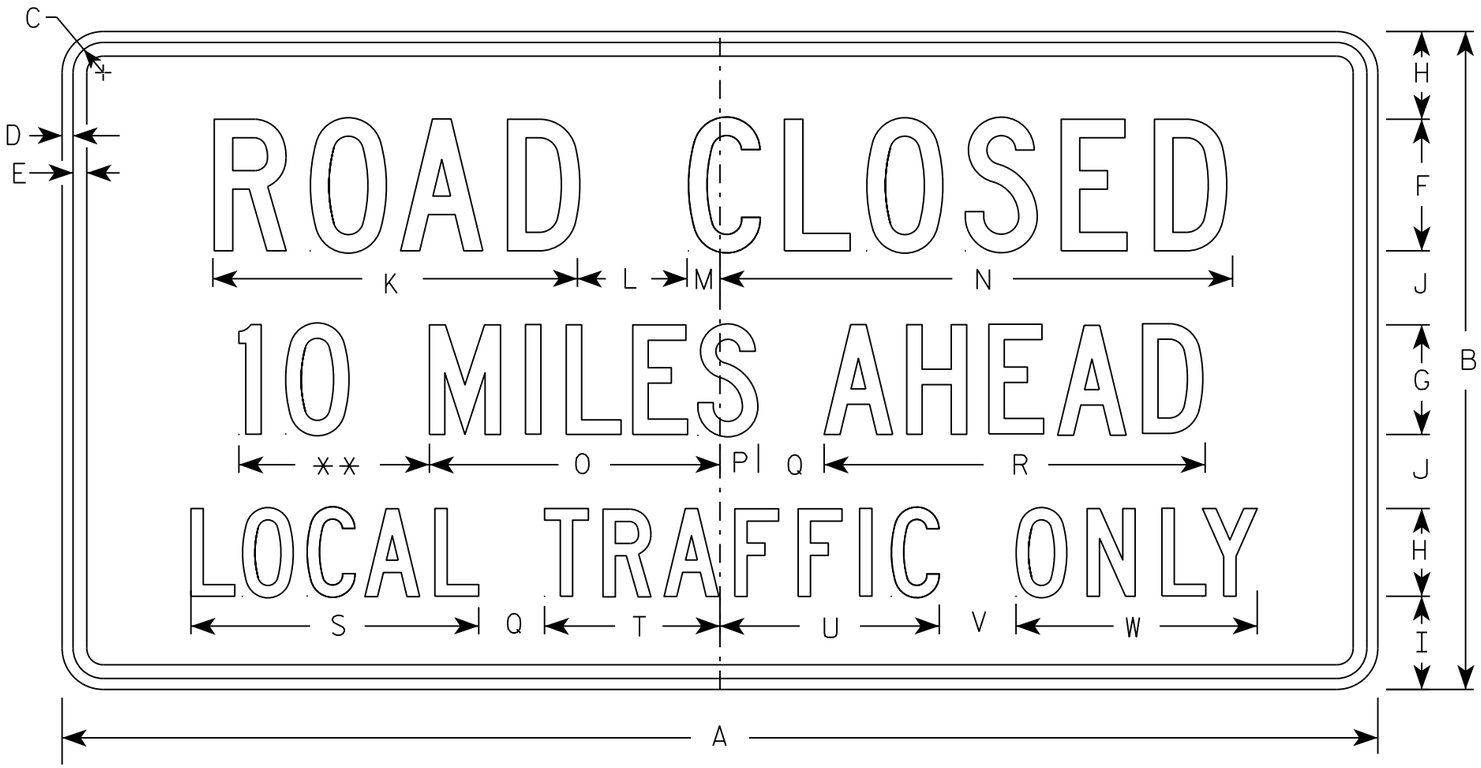
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 357 | E

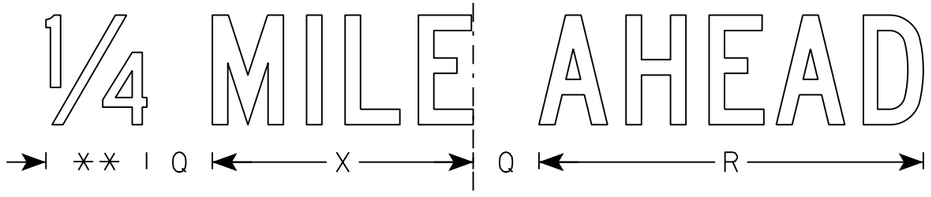
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4	7 1/8			4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
3																											
4																											
5																											

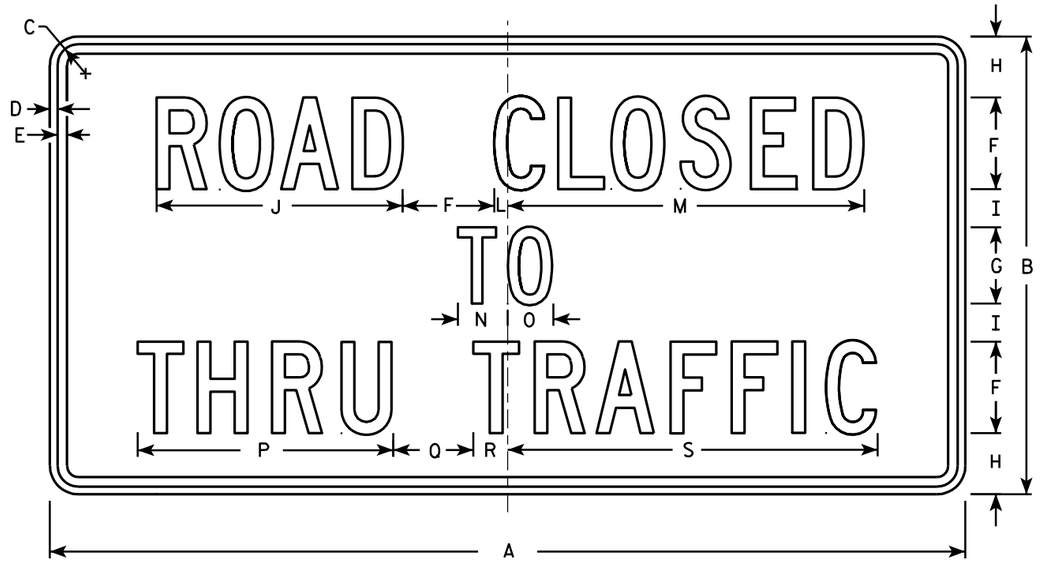
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/17 PLATE NO. R11-3.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 358 | E



R11-4

NOTES

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

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

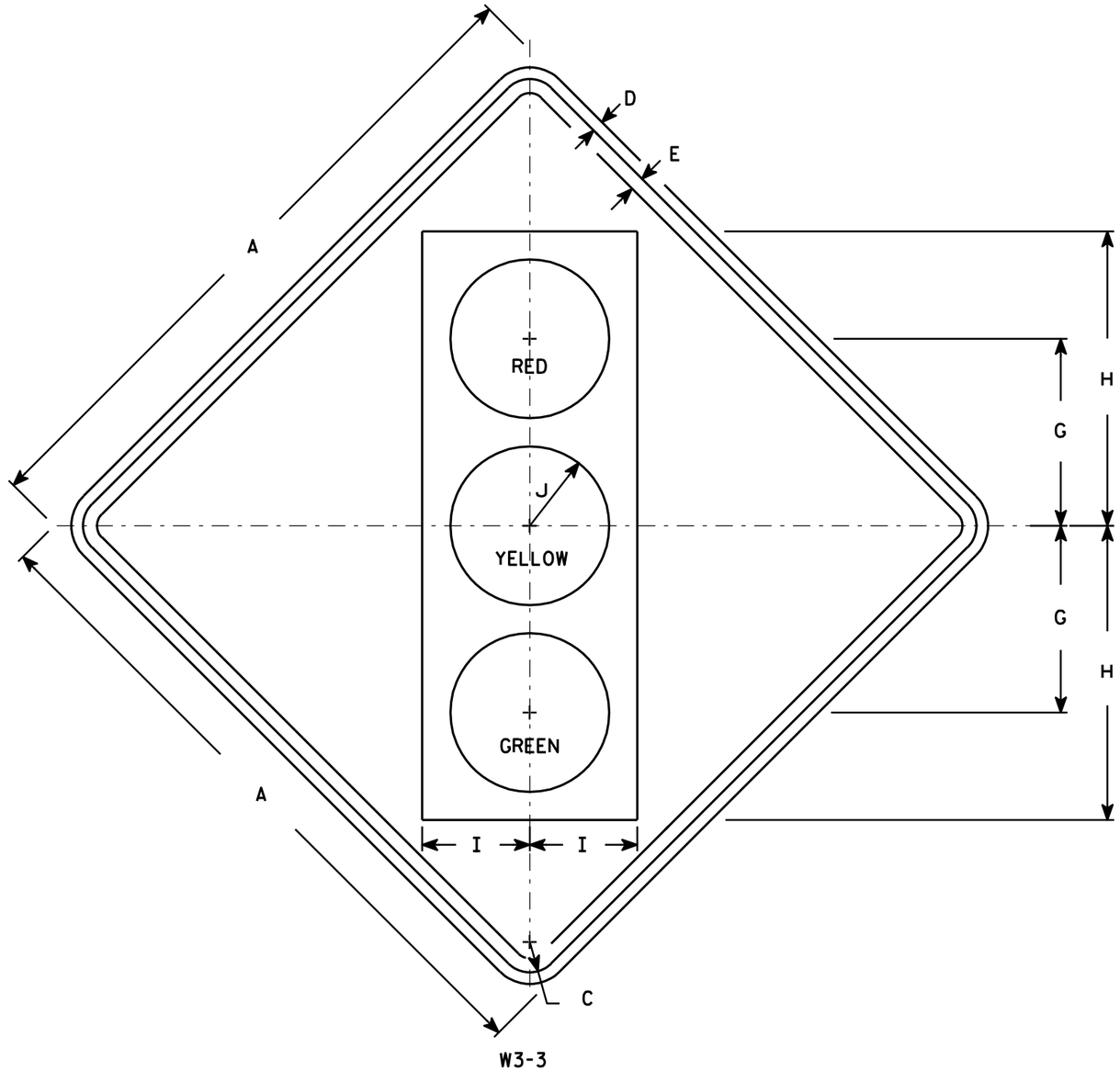
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 359 | E



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 - 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. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

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		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

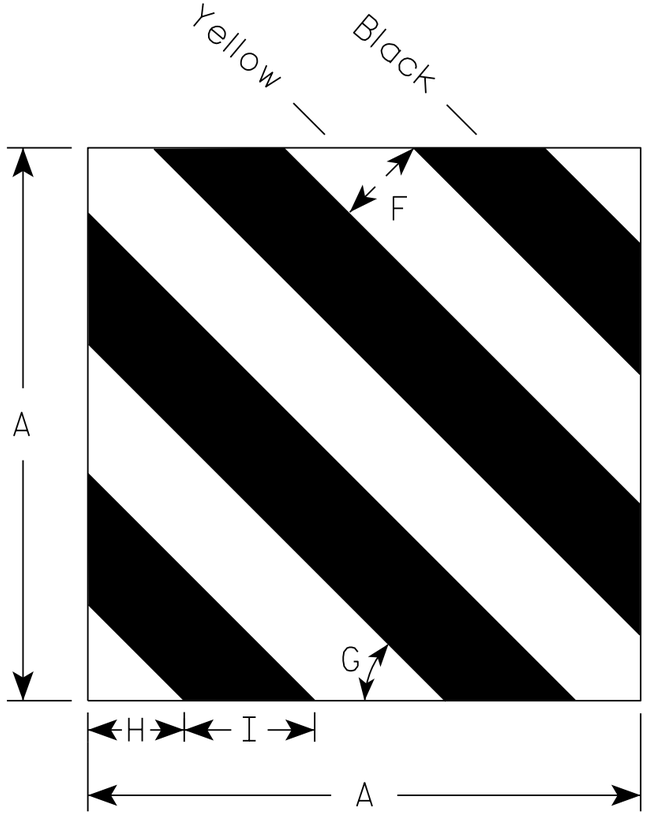
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

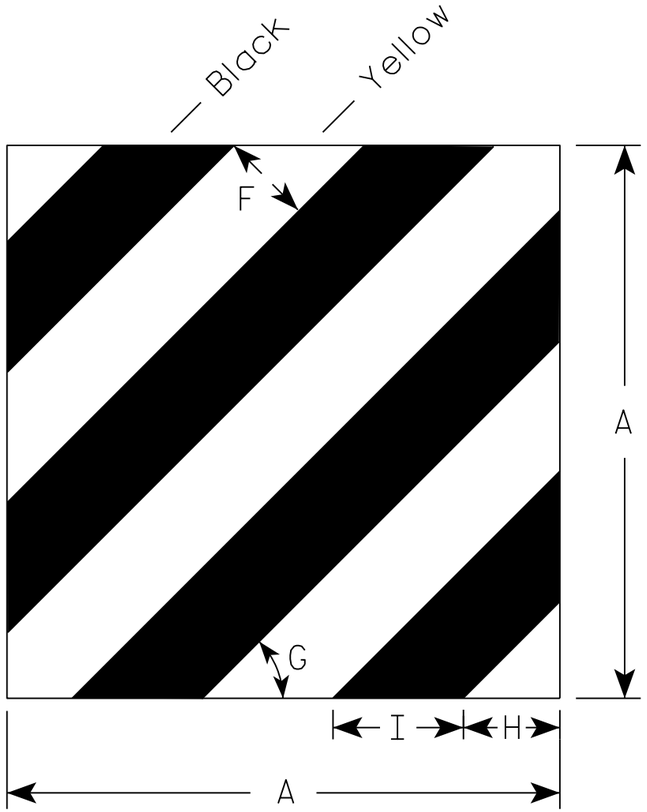
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 360 | E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Base material is to be .040 sheet aluminum.



W5-59L



W5-59R

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					2	45°	2 7/8	2 1/8																		1.00
2S	18					3	45°	3 1/8	4 1/4																		2.25
2M	18					3	45°	3 1/8	4 1/4																		2.25
3																											
4																											
5																											

STANDARD SIGN
W5-59L & W5-59R

WISCONSIN DEPT OF TRANSPORTATION

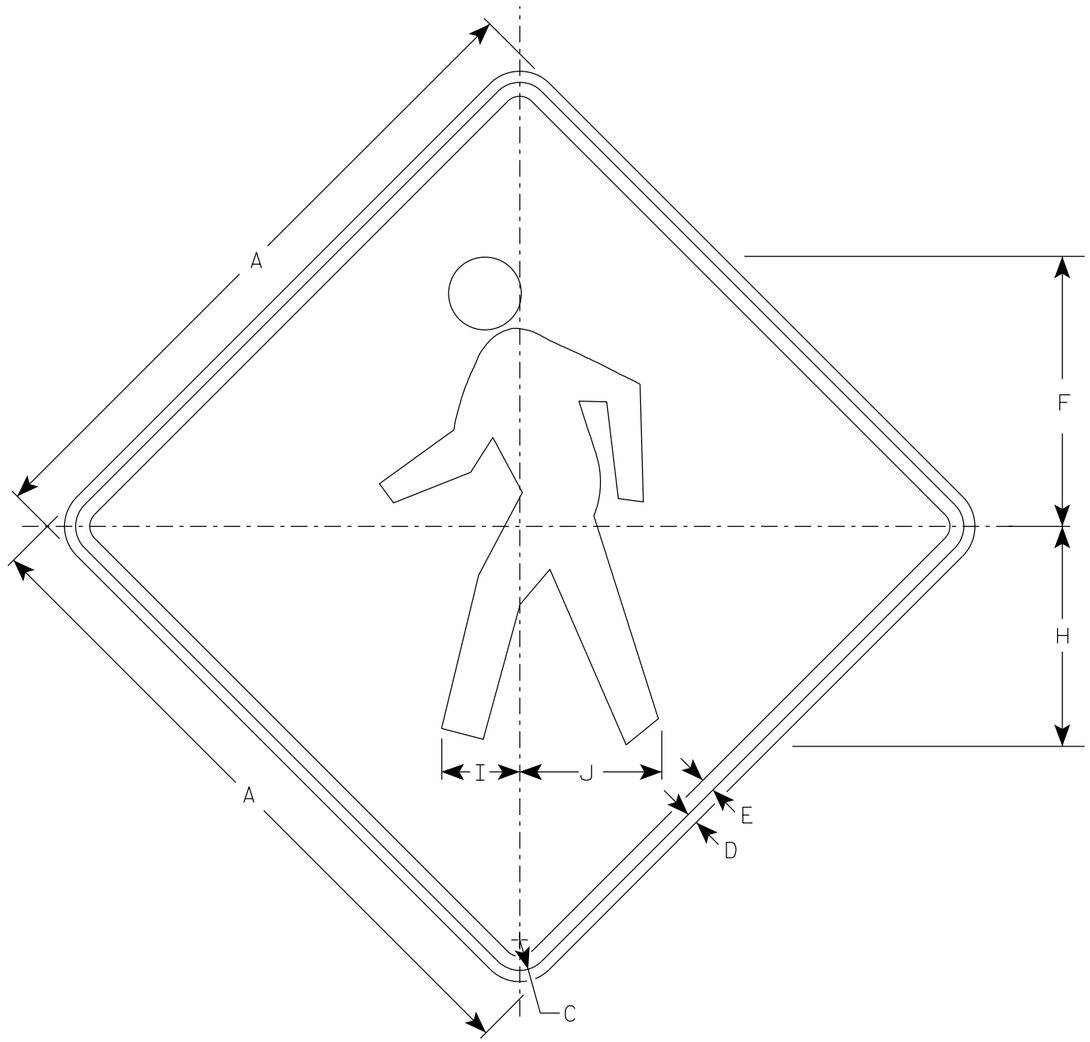
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. W5-59.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 361 | E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black



W11-2

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	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

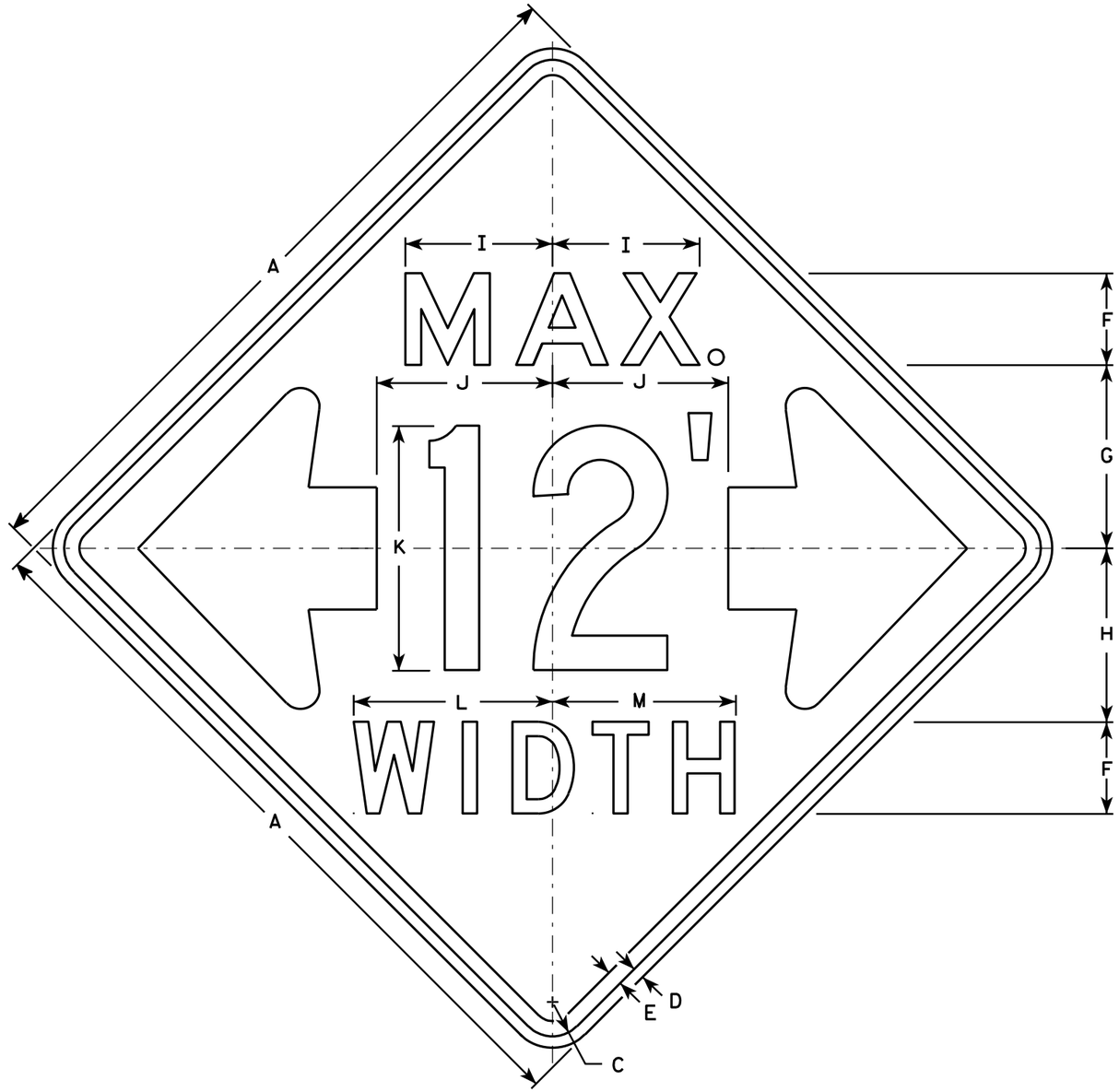
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/8/2020 PLATE NO. W11-2.8

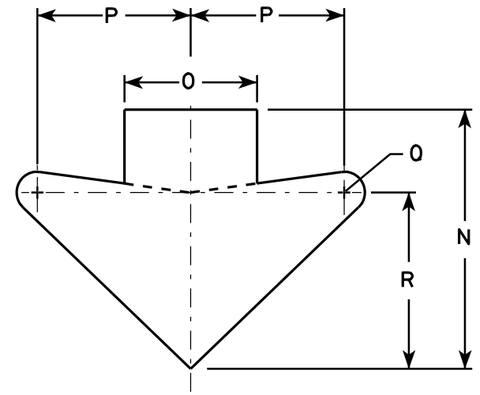
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 362 E



W12-52

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. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

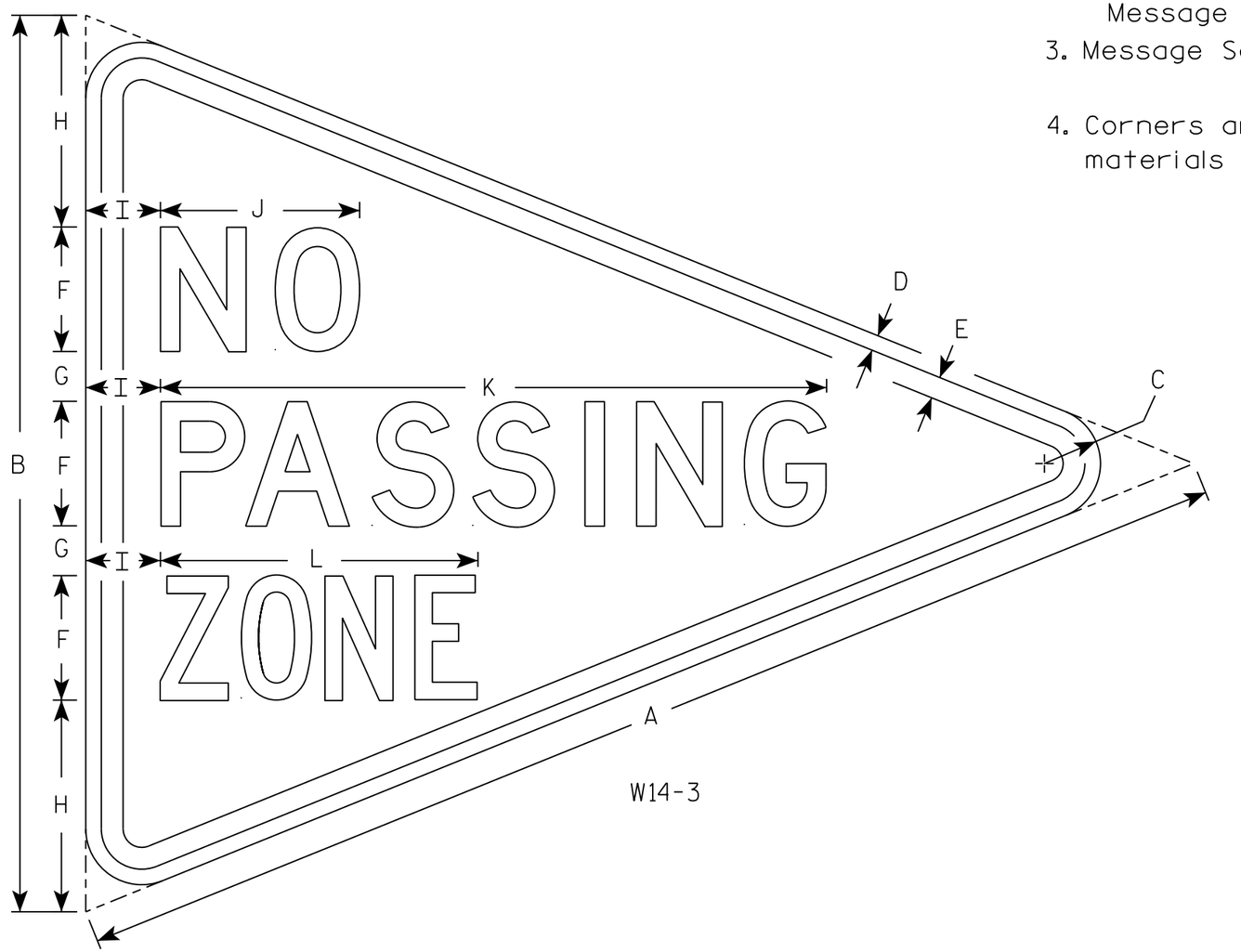
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 363	E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

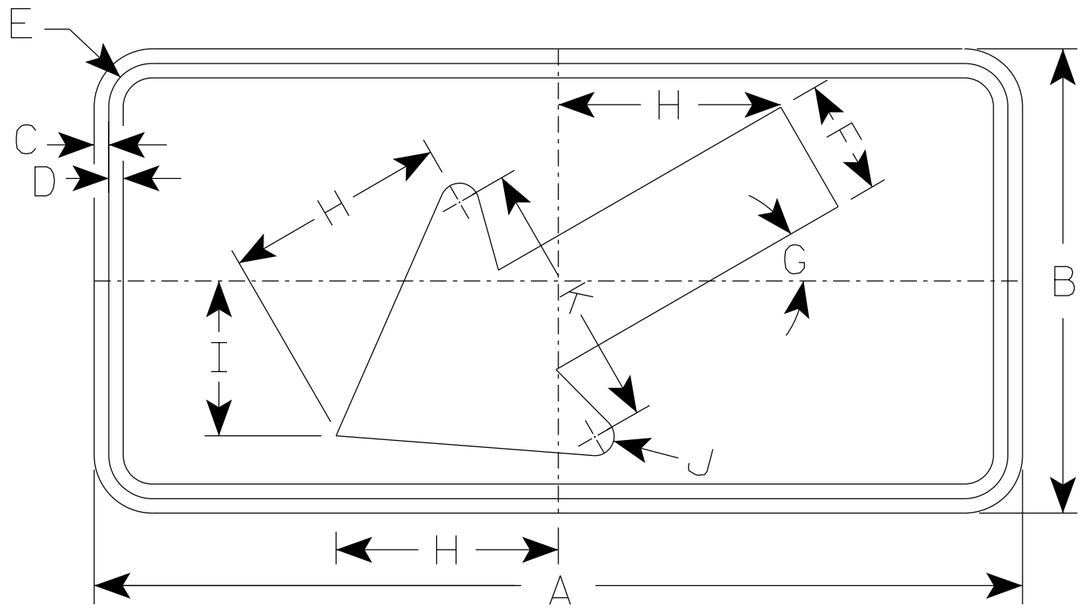
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 364 | E



W16-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W16-7R is the same as W16-7L except the arrow is reversed along the vertical centerline.

* For 36" x 36" Warning Signs, use 30" x 18" W16-7L signs.
* For 48" x 48" Warning Signs, use 48" x 24" W16-7L signs.

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1																											
	2S	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
*	2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
*	3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
*	4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
	5																											

STANDARD SIGN
W16-7

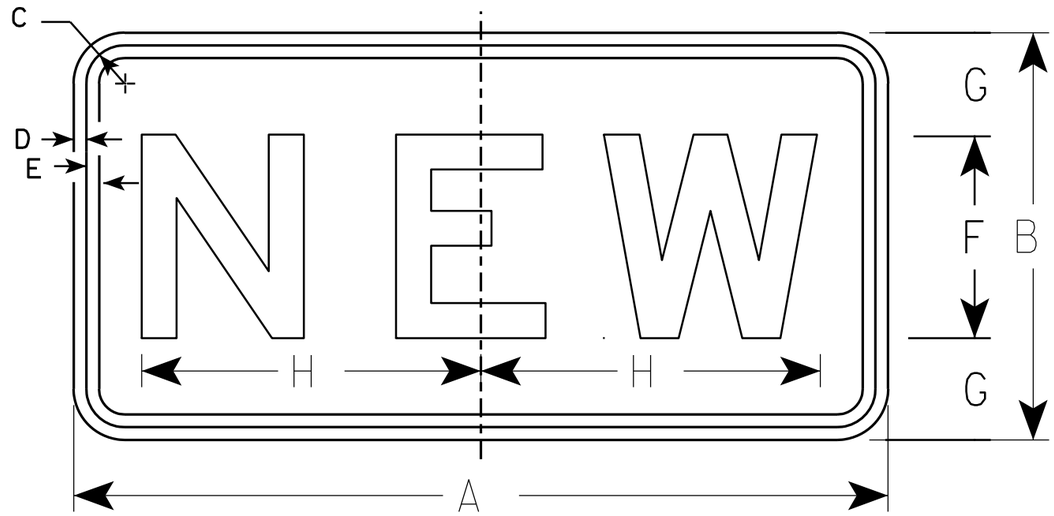
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/25/2020 PLATE NO. W16-7.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 365 | E

7



W16-15P

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

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

STANDARD SIGN
W16-15P

WISCONSIN DEPT OF TRANSPORTATION

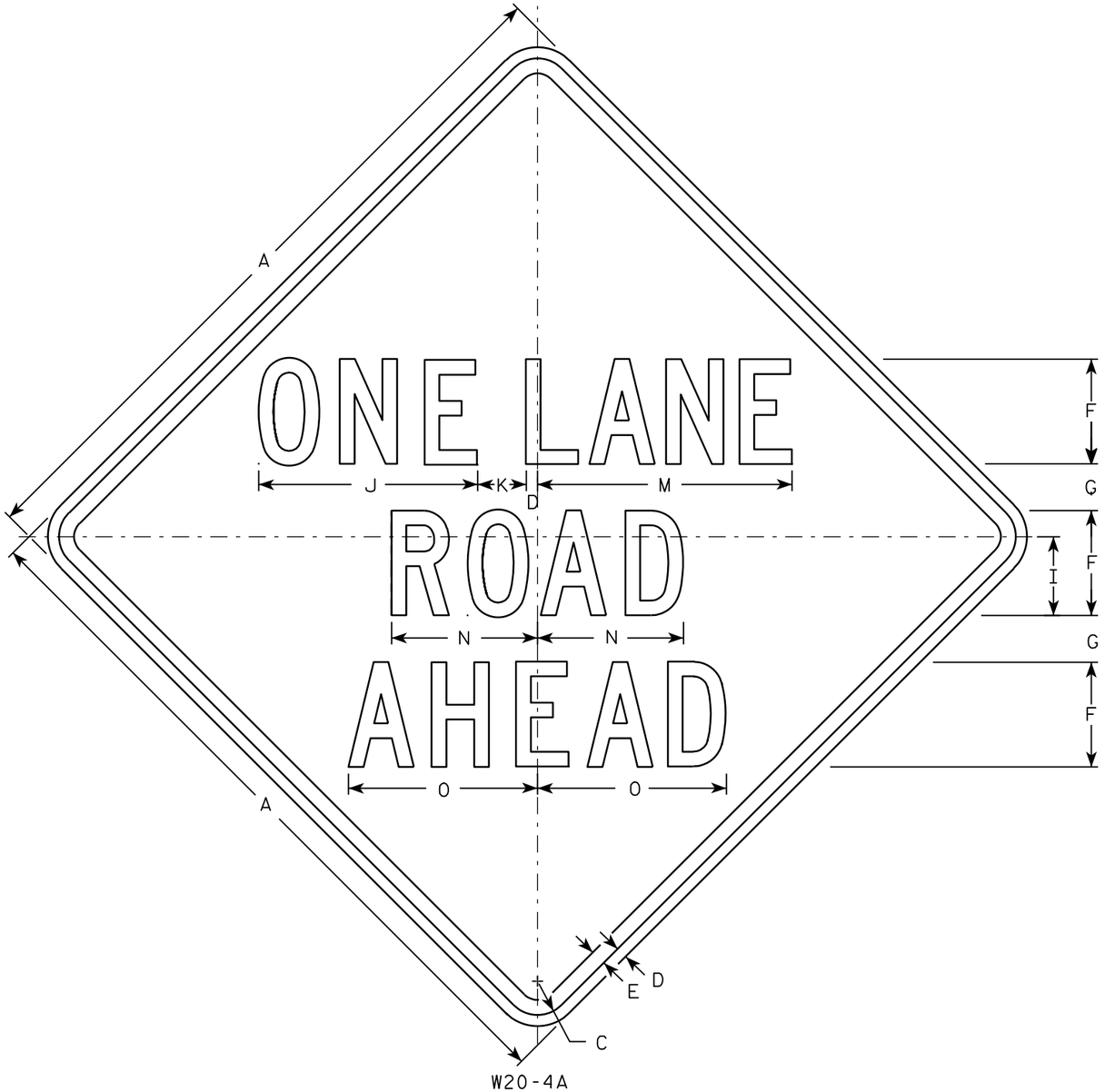
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W16-15P.2

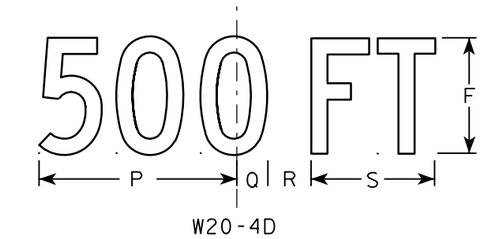
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 366 | E

7

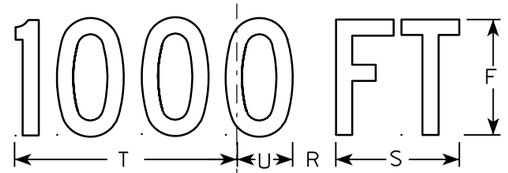
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W1615P.DGN PLOT DATE : 13-MAR-2013 13:32 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 4.465706:1.000000
WISDOT/CADDS SHEET 42



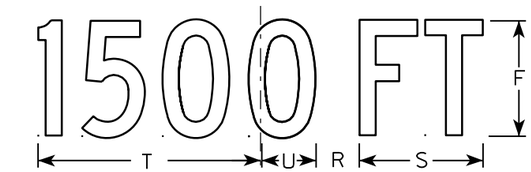
W20-4A



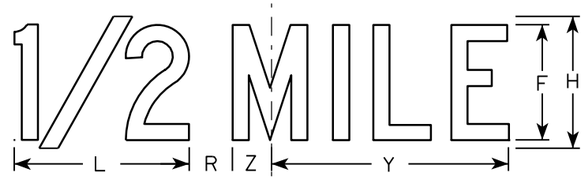
W20-4D



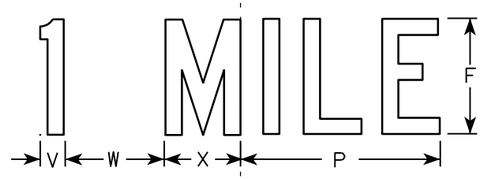
W20-4C



W20-4B



W20-4G



W20-4F

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 3/8	6	3 3/4	10 3/8	2 3/8	8	13 1/2	7	8 7/8	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	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-4A, B, C, D, F & G

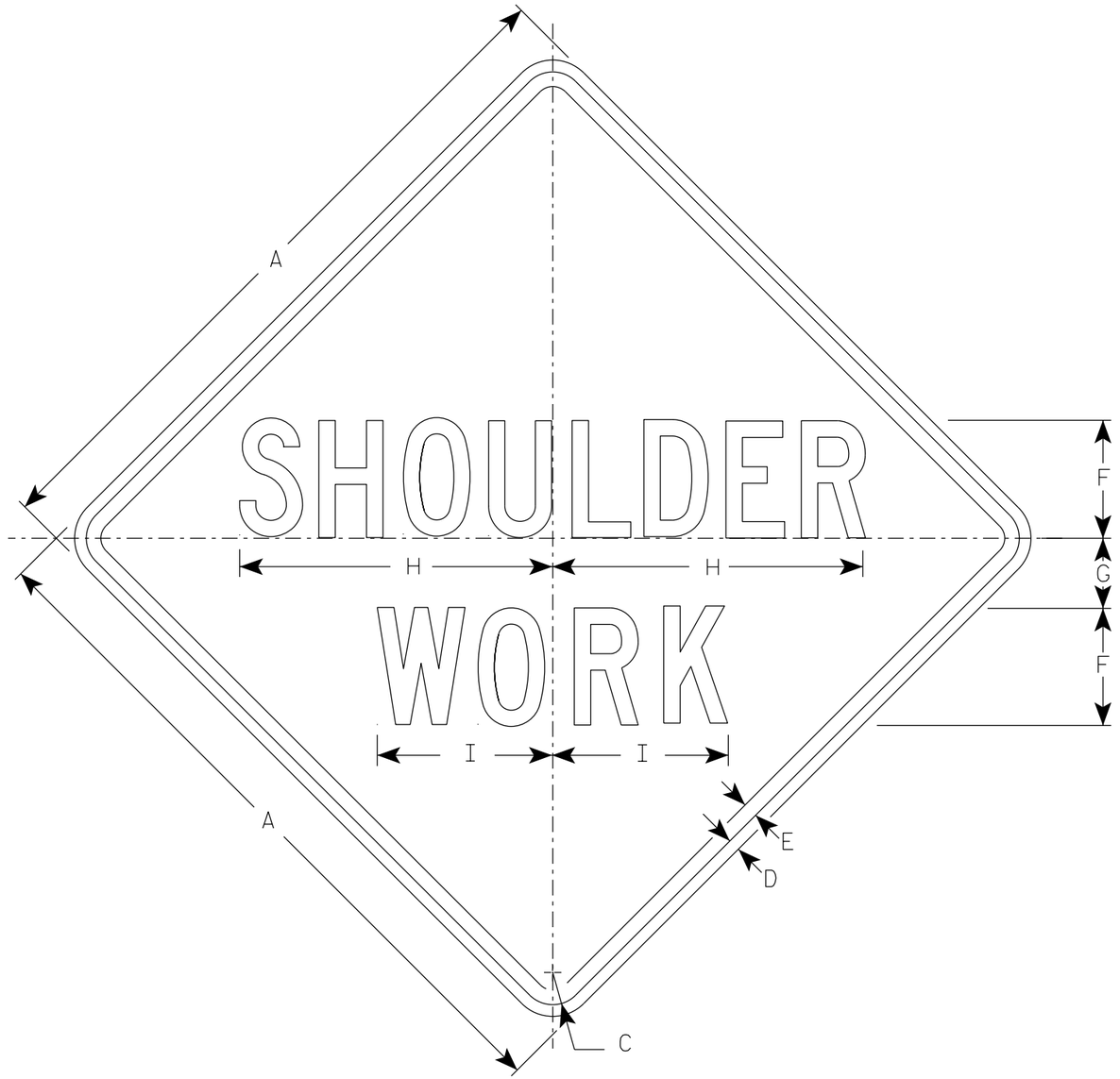
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-4.9

PROJECT NO:

SHEET NO: 367 E



W21-5

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	3 1/2	16	9																		9.0
2S	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
2M	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
3	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
4	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0

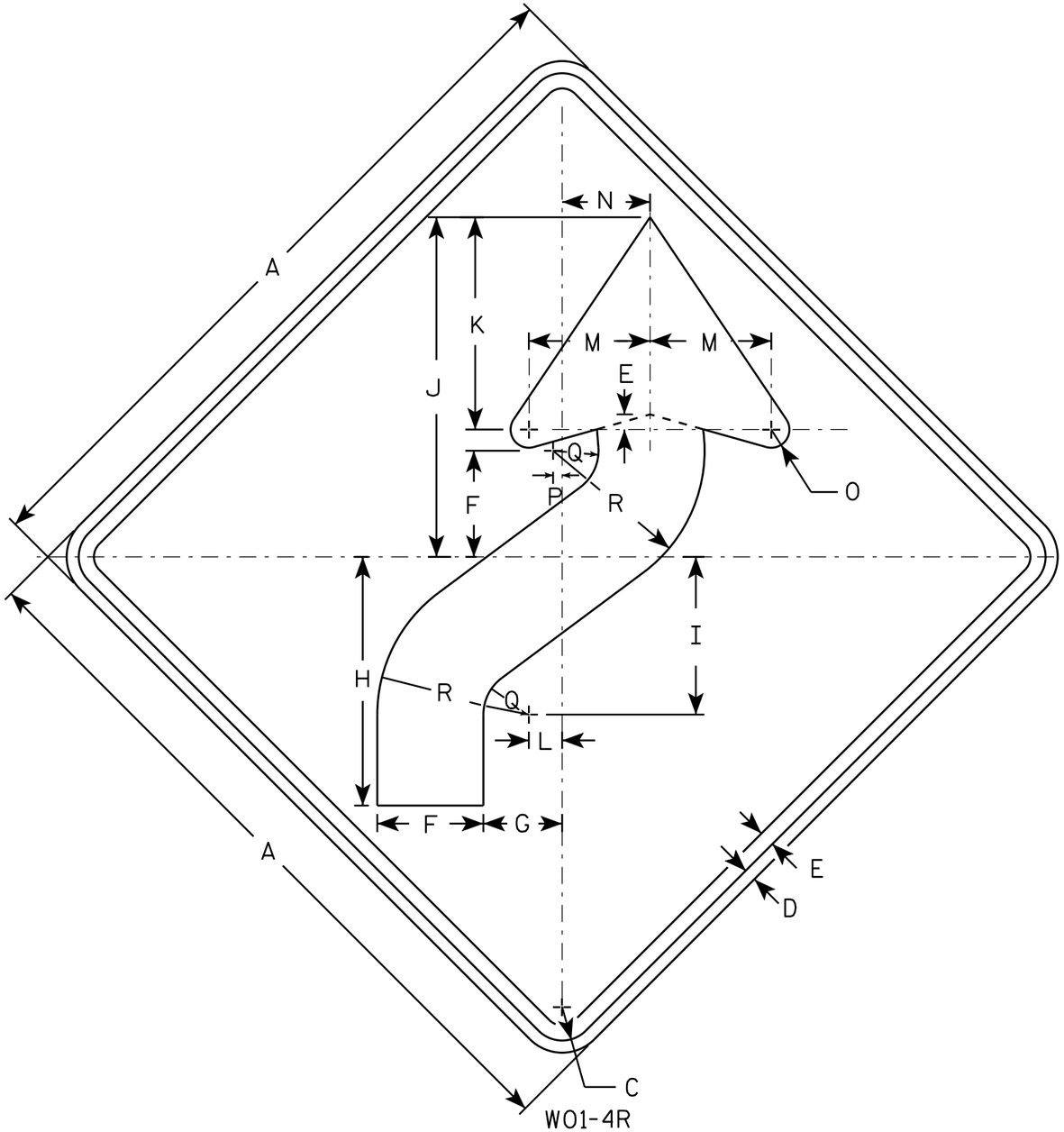
STANDARD SIGN
W21-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/30/2020 PLATE NO. W21-5.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 368 E



W01-4R

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. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

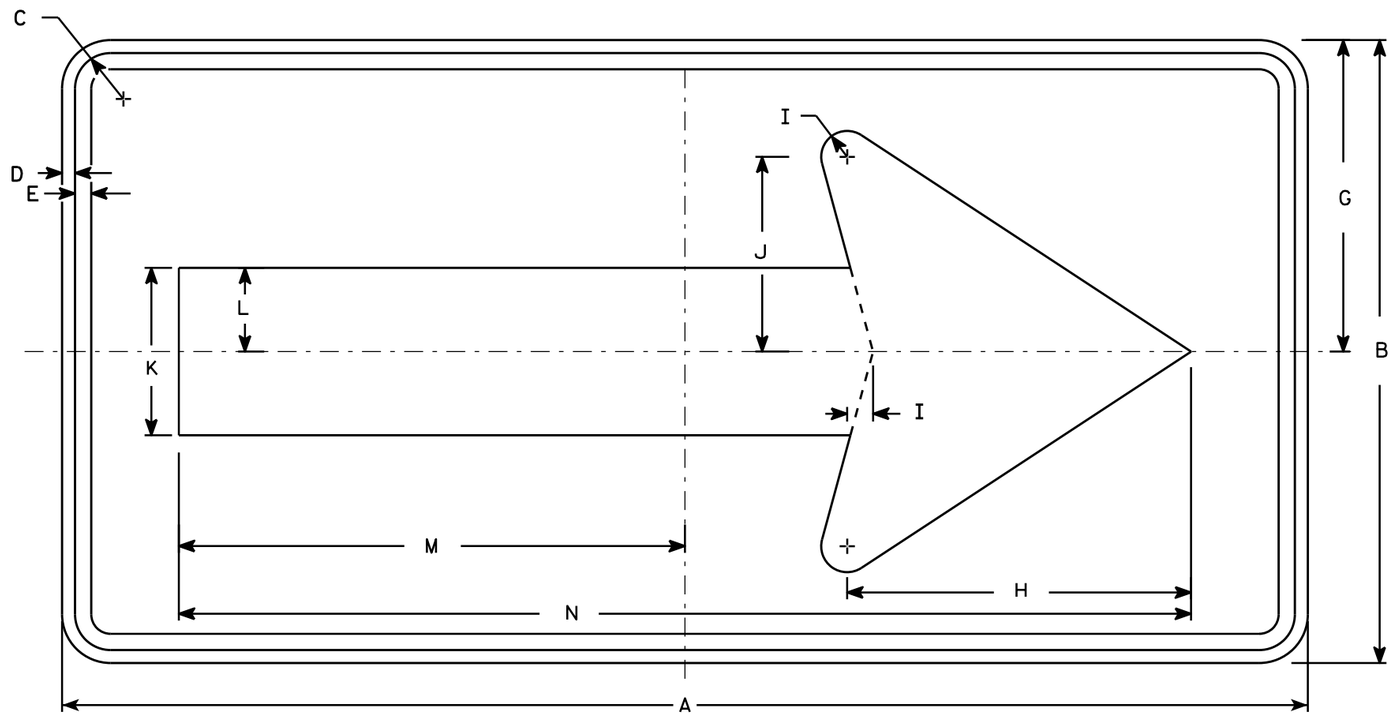
STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

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



W01-6

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

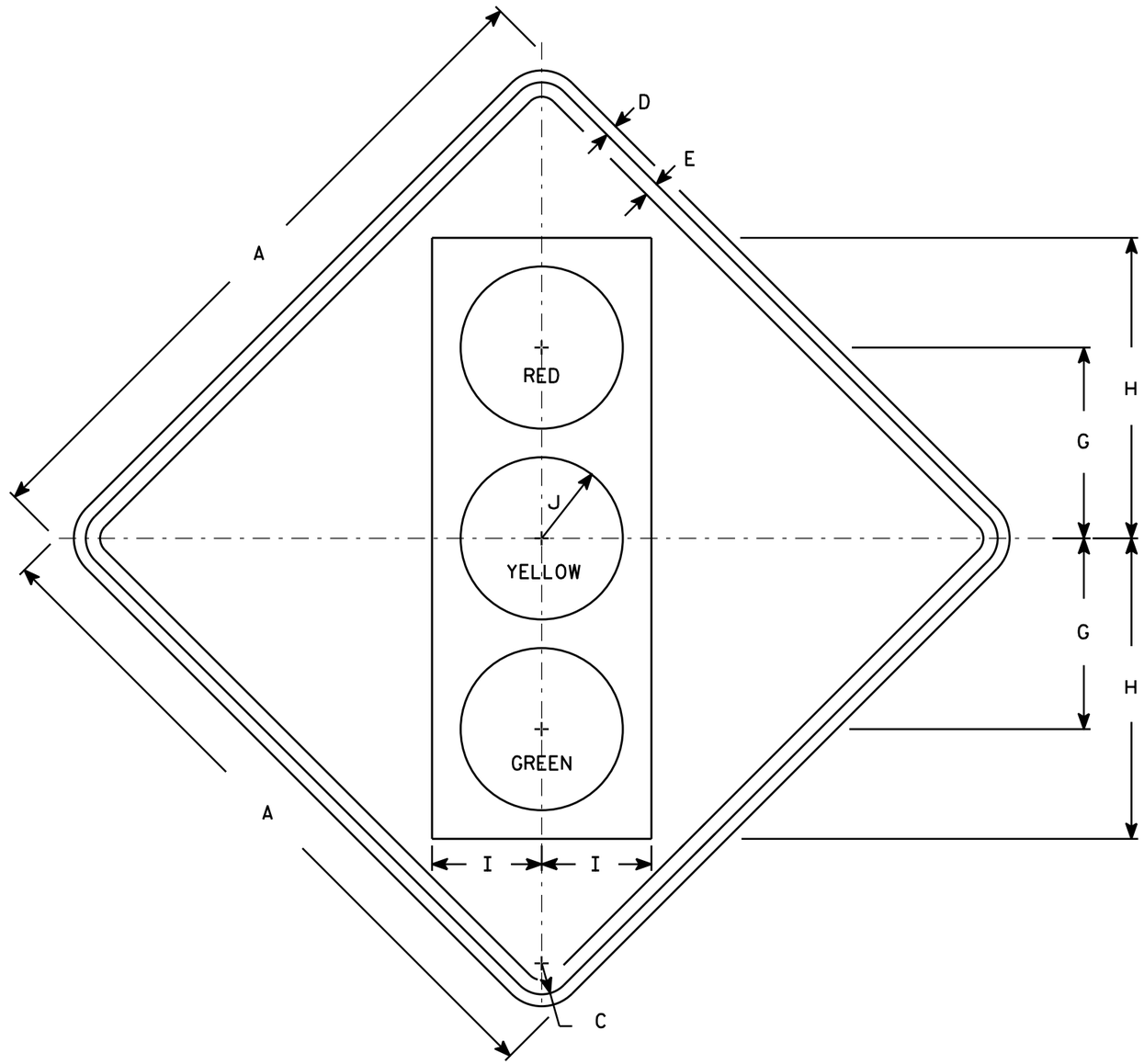
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE W01-6.1

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



W03-3

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 - 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. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

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		10	15 3/4	5 3/4	4 1/4																	9.0
2S	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
2M	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
3	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W03-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLAT 371 W03-3.1

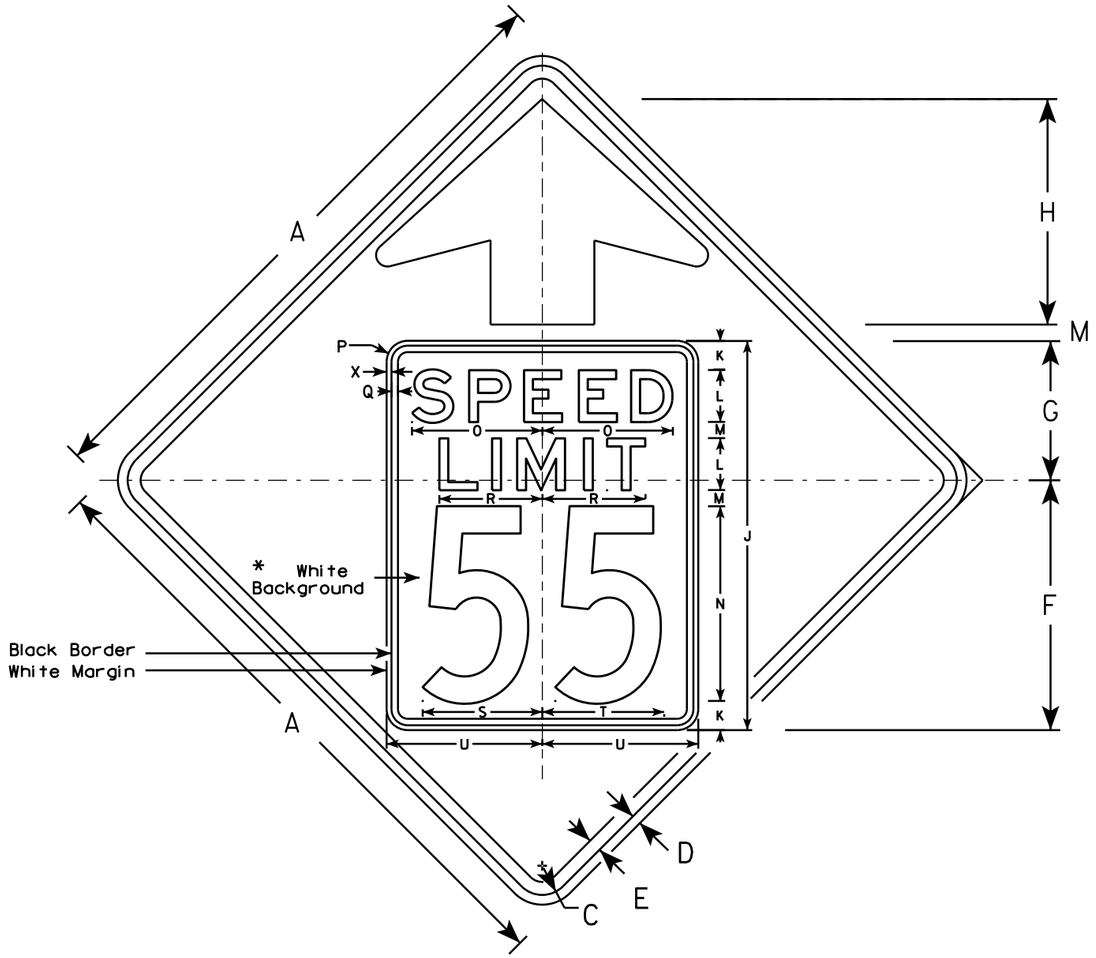
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W033.DGN PLOT DATE : 20-NOV-2013 11:26 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 7.296908:1.000000

WISDOT/CADDS SHEET 42

7

7

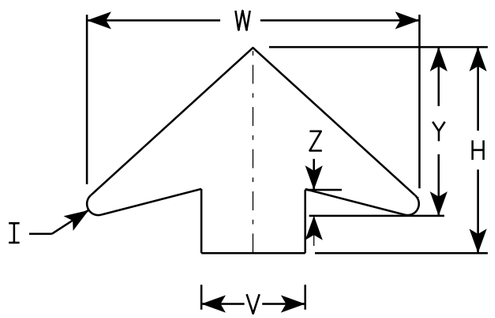


W03-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - ORANGE*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2S	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
2M	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
3	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W03-5

WISCONSIN DEPT OF TRANSPORTATION

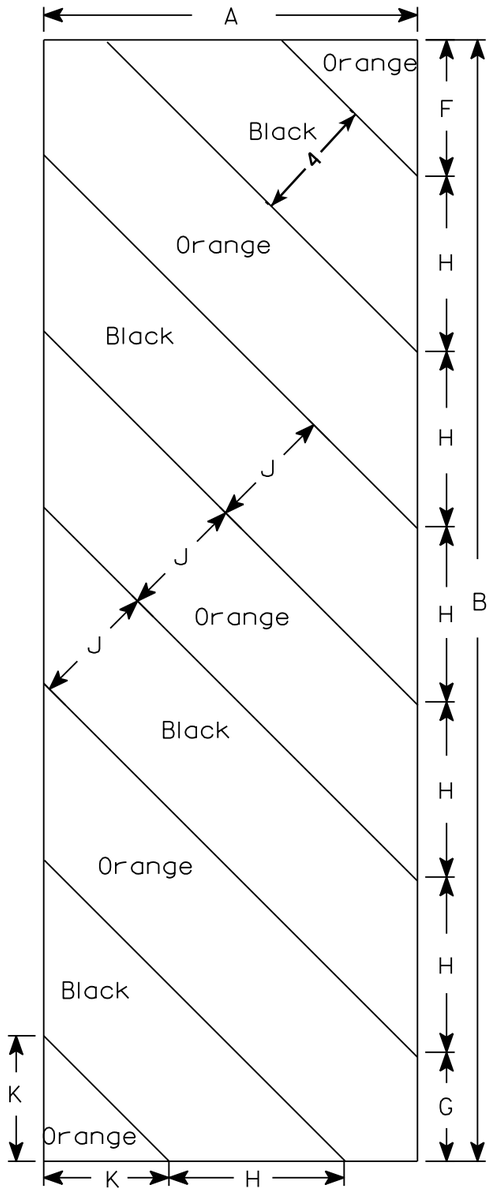
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W03-5.1

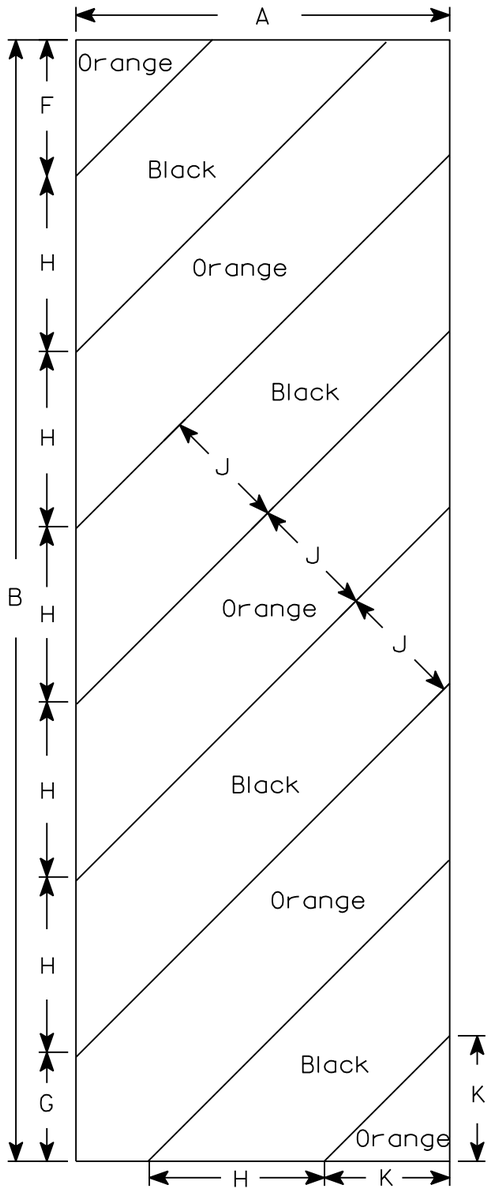
PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W035.DGN PLOT DATE : 20-NOV-2013 11:32 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



W05-52L



W05-52R

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. 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. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

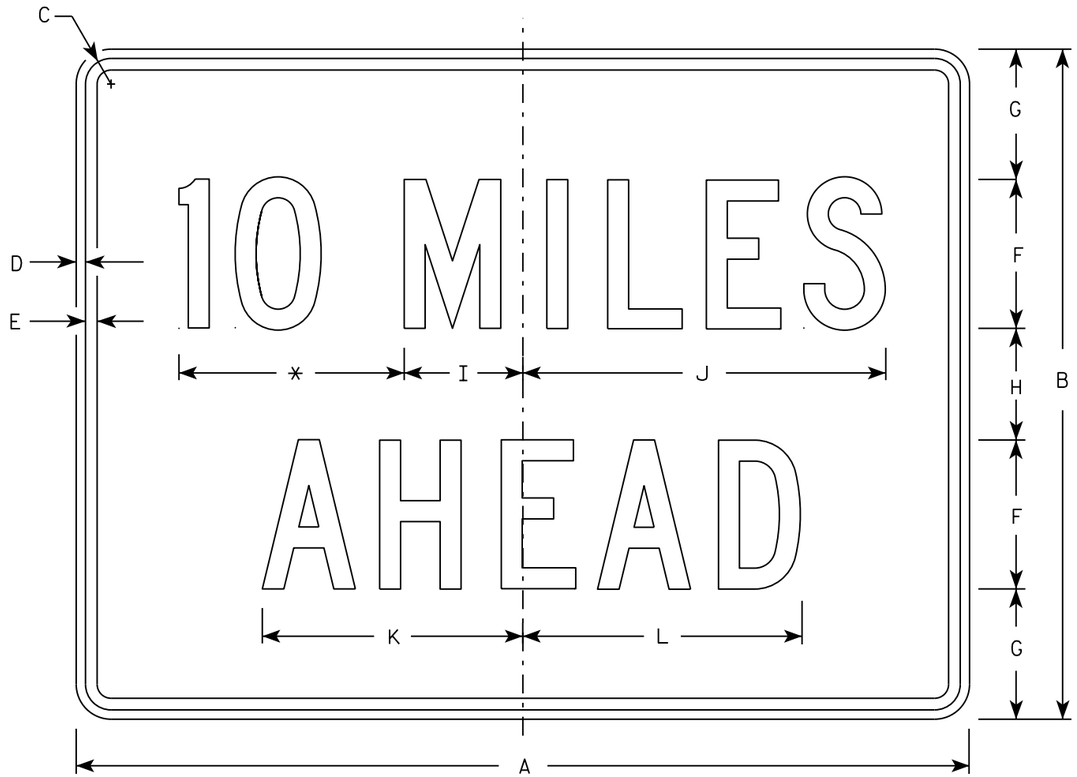
W05-52L & W05-52R

WISCONSIN DEPT OF TRANSPORTATION

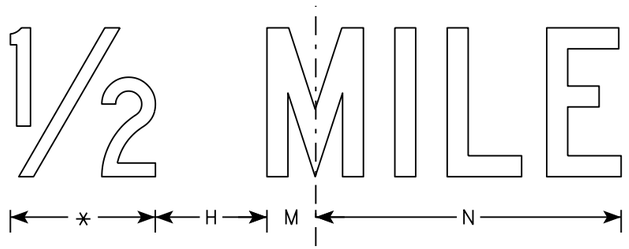
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE No. W05-52.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W057-52



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

* 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	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

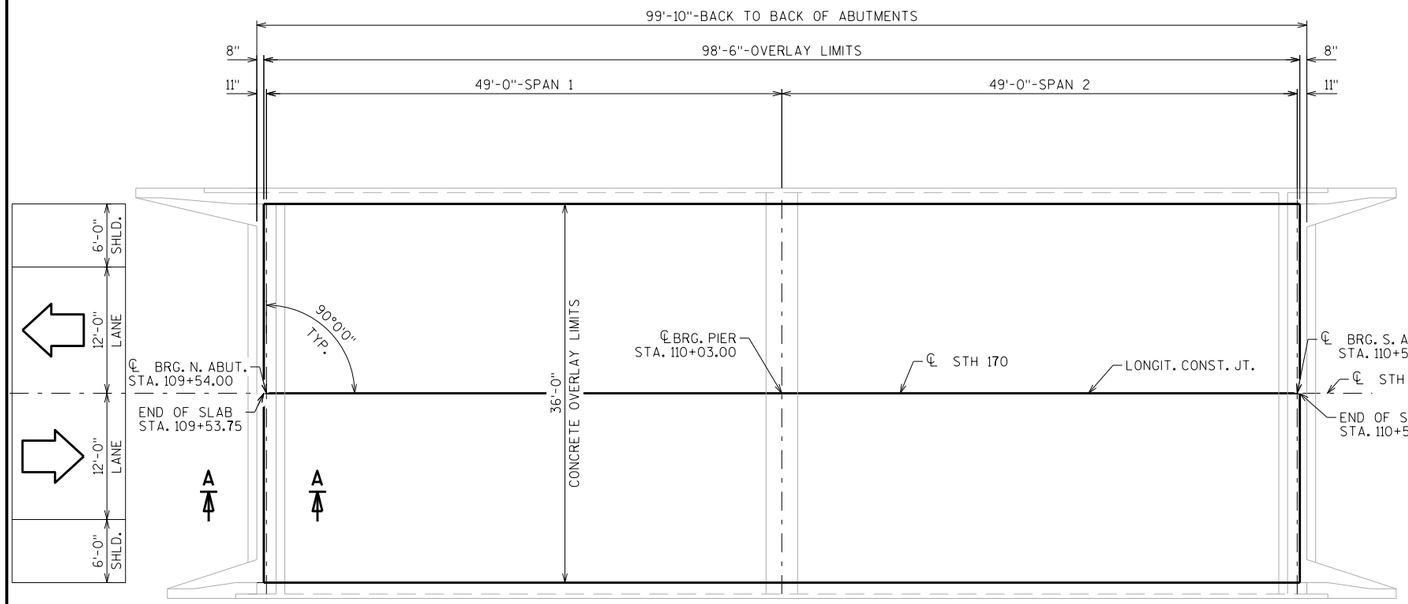
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W057-52.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 374	E

STATE PROJECT NUMBER

8630-03-82



PLAN

2 SPAN HAUNCHED CONCRETE SLAB

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS-20
INVENTORY RATING: HS-21
OPERATING RATING: HS-35
MAXIMUM STANDARD PERMIT VEHICLE LOAD: 210 KIPS

MATERIAL PROPERTIES:

CONCRETE MASONRY OVERLAY DECKS ——— f`c = 4,000 P.S.I.

TRAFFIC VOLUME

STH 170
ADT = 1,900 (2041)
R.D.S. = 60 M.P.H.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

A MINIMUM OF 1-INCH OF CONCRETE SHALL BE REMOVED FROM THE ENTIRE BRIDGE DECK UNDER THE BID ITEM "CLEANING DECKS".

"PREPARATION DECKS TYPE 1" AND "PREPARATION DECKS TYPE 2" ARE AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".

ANY EXCAVATION REQUIRED TO COMPLETE THE OVERLAY TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 1½" PLACED ABOVE THE DECK SURFACE AFTER SURFACE PREPARATION. EXPECTED AVERAGE OVERLAY IS 2". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURES DESIGN SECTION.

CONCRETE SURFACE REPAIR LOCATIONS AND EXTENTS ON BOTH ABUTMENTS SHALL BE DETERMINED BY THE FIELD ENGINEER.

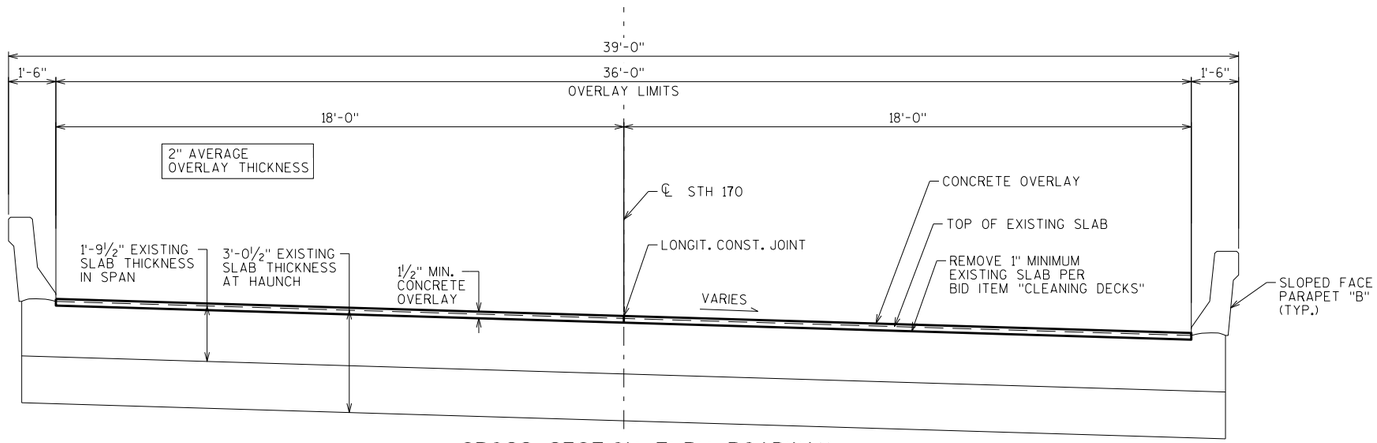
PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF SURFACE OF THE NEW CONCRETE OVERLAY.

SEAL OVERLAY CONSTRUCTION JOINTS ACCORDING TO SECTION 502.3.13.1 OF THE STANDARD SPECIFICATION COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY OVERLAY DECKS."

THE AVERAGE OVERLAY THICKNESS IS BASED ON THE MINIMUM OVERLAY THICKNESS PLUS ½-INCH TO ACCOUNT FOR VARIATIONS IN THE DECK SURFACE.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
502.3200	PROTECTIVE SURFACE TREATMENT	SY	394
509.0301	PREPARATION DECKS TYPE 1	SY	1
509.0302	PREPARATION DECKS TYPE 2	SY	1
509.0500	CLEANING DECKS	SY	394
509.1500	CONCRETE SURFACE REPAIR	SF	15
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	22

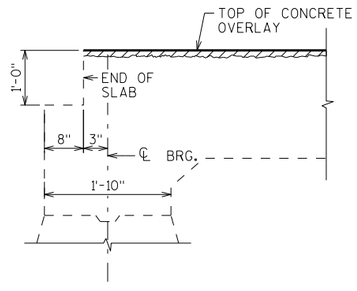


CROSS SECTION THRU ROADWAY

LOOKING SOUTH

LIST OF DRAWINGS

1. CONCRETE OVERLAY
2. STAGING



SECTION A-A

STRUCTURE DESIGN CONTACTS:

JOEL MAAS (608) 267-0273
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

WISCONSIN DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURES

ACCEPTED LLS 10/5/20
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-17-132

STH 170 OVER TIFFANY CREEK

COUNTY	TOWN
DUNN	DOWNING

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
JDM	PJR	JDM	PJR

CONCRETE OVERLAY

SHEET 1 OF 2

375

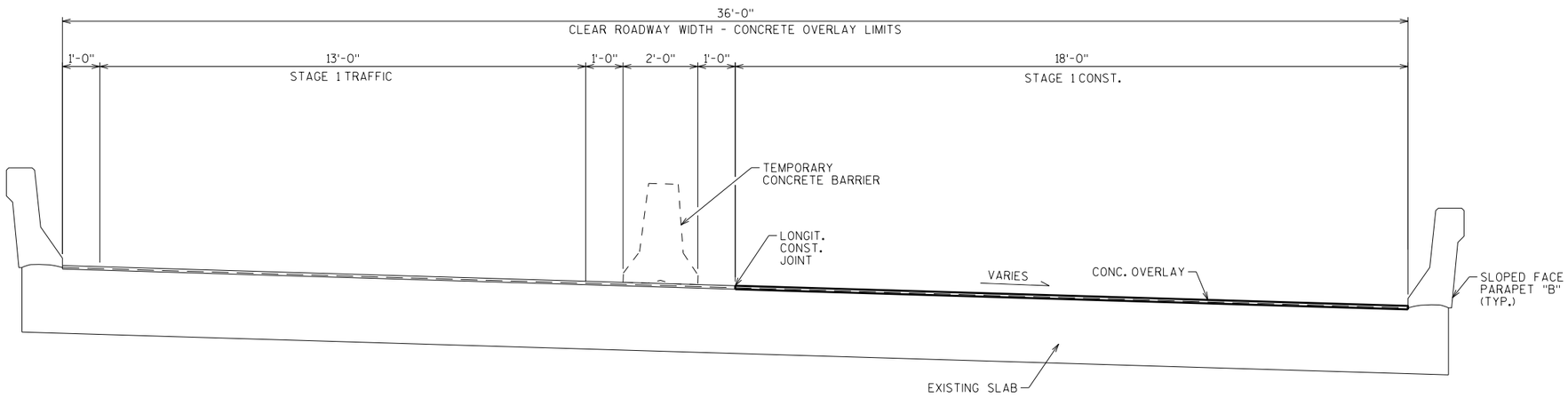
I.D. 8630-03-32A DATE: OCT. 2020

SCALE = 7.00

8

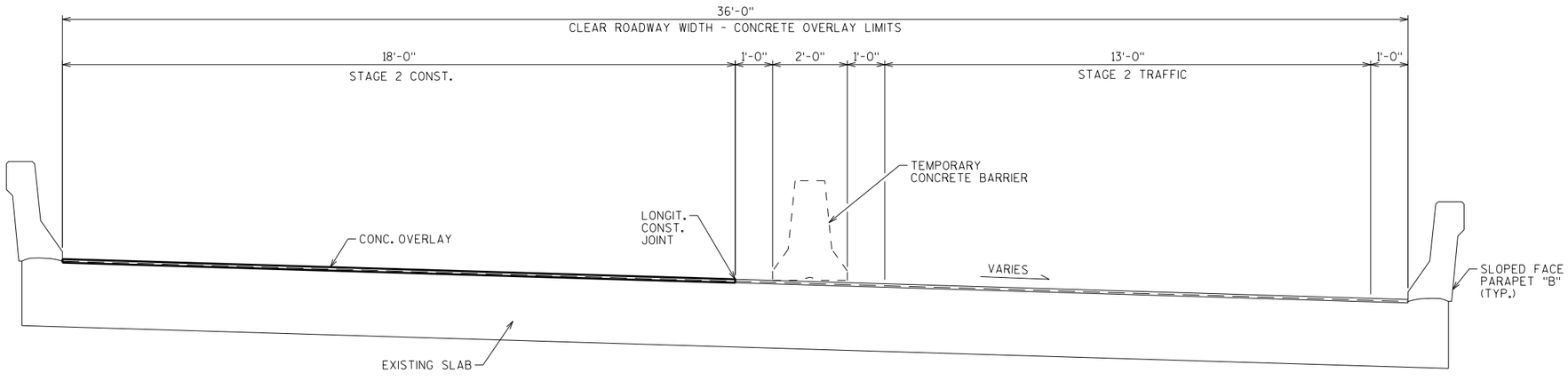
8

STATE PROJECT NUMBER
8630-03-82



CROSS SECTION THRU ROADWAY

LOOKING SOUTH



CROSS SECTION THRU ROADWAY

LOOKING SOUTH

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-132

DRAWN BY JDM | PLANS CK'D. PJR

STAGING

SHEET 2

376

SCALE = 1.75

DIVISION 1-1/CAT. 0010: ST. CROIX COUNTY CURB RAMPS

STATION	Distance	Area: Cut (SF)	Area: SALVAGED/UNUSEABLE PAVEMENT MATERIAL (SF)	Area: Fill (SF)	Incremental Volume (Unadjusted): Cut Note 1 (CY)	Incremental Volume (Unadjusted): Salvaged/Unuseable Pavement Material (CY)	Incremental Volume (Unadjusted): Fill Note 2 (CY)	Cumulative Vol (CY): Cut 1.00 Note 3	Cumulative Vol (CY): Fill 1.00 Note 4	Cumulative Vol (CY): Expanded Fill 1.3	Mass Ordinate Note 5
-	-	-	-	-	24	18	16	6	16	21	-15
				Column totals	24	18	16				

Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

DIVISION 1-2/CAT. 0010 (STA 131+14 - STA 135+14): STH 170

STATION	Distance	Area: Cut (SF)	Area: SALVAGED/UNUSEABLE PAVEMENT MATERIAL (SF)	Area: Fill (SF)	Incremental Volume (Unadjusted): Cut Note 1 (CY)	Incremental Volume (Unadjusted): Salvaged/Unuseable Pavement Material (CY)	Incremental Volume (Unadjusted): Fill Note 2 (CY)	Cumulative Vol (CY): Cut 1.00 Note 3	Cumulative Vol (CY): Fill 1.00 Note 4	Cumulative Vol (CY): Expanded Fill 1.3	Mass Ordinate Note 5
131+14		20.0	6.7	0.0							
131+25	11	19.8	6.7	0.0	7.8	2.6	0.0	7.8	0.0	0.0	7.8
131+50	25	19.4	6.7	0.0	18.2	6.2	0.0	26.0	0.0	0.0	25.9
131+75	25	19.2	6.7	0.0	17.9	6.2	0.0	43.8	0.0	0.0	43.8
132+00	25	18.1	6.7	0.3	17.3	6.2	0.1	61.1	0.2	0.2	60.9
132+20	20	16.8	6.7	0.5	13.0	4.9	0.3	74.1	0.5	0.6	73.5
132+25	5	16.6	6.7	0.6	3.1	1.2	0.1	77.2	0.6	0.7	76.4
132+50	25	15.6	6.7	0.6	14.9	6.2	0.6	92.1	1.1	1.5	90.6
132+75	25	15.0	6.7	0.5	14.2	6.2	0.5	106.2	1.7	2.2	104.1
133+00	25	14.4	6.7	0.2	13.6	6.2	0.3	119.8	2.0	2.6	117.2
133+25	25	16.6	6.7	0.0	14.4	6.2	0.1	134.2	2.1	2.7	131.5
133+50	25	14.5	6.7	0.0	14.4	6.2	0.0	148.6	2.1	2.7	145.9
133+75	25	12.8	6.7	0.3	12.6	6.2	0.1	161.2	2.2	2.9	158.3
134+00	25	40.9	6.7	0.5	24.9	6.2	0.4	186.1	2.6	3.3	182.7
134+25	25	25.8	6.7	0.3	30.8	6.2	0.4	216.9	2.9	3.8	213.1
134+28	3	26.9	6.7	0.3	2.7	0.7	0.0	219.6	3.0	3.9	215.7
134+50	22	31.9	6.3	0.0	24.2	5.3	0.1	243.8	3.1	4.0	239.8
134+75	25	24.4	6.3	0.0	26.1	5.8	0.0	269.9	3.1	4.0	265.9
135+00	25	21.1	6.3	0.0	21.1	5.8	0.0	291.0	3.1	4.1	286.9
135+14	14	20.2	6.3	0.2	10.7	3.2	0.1	301.7	3.2	4.1	297.5
				Column totals	302	98	3				

Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

DIVISION 1-3/CAT. 0010 (STA 144+62 - STA 151+21): STH 170

STATION	Distance	Area: Cut (SF)	Area: SALVAGED/UNUSEABLE PAVEMENT MATERIAL (SF)	Area: Fill (SF)	Incremental Volume (Unadjusted): Cut Note 1 (CY)	Incremental Volume (Unadjusted): Salvaged/Unuseable Pavement Material (CY)	Incremental Volume (Unadjusted): Fill Note 2 (CY)	Cumulative Vol (CY): Cut 1.00 Note 3	Cumulative Vol (CY): Fill 1.00 Note 4	Cumulative Vol (CY): Expanded Fill 1.3	Mass Ordinate Note 5
144+62		6.7	4.9	18.4							
144+75	13	7.9	4.9	18.1	3.6	2.4	9.0	3.6	9.0	11.7	-8.1
145+00	25	9.0	4.9	19.7	7.8	4.5	17.5	11.4	26.5	34.4	-23.1
145+25	25	10.2	4.9	23.1	8.9	4.5	19.9	20.3	46.4	60.3	-40.0
145+33	8	22.4	9.2	29.0	4.6	2.0	7.4	24.9	53.7	69.8	-44.9
145+50	17	21.4	9.2	46.1	14.1	5.9	24.2	39.0	77.9	101.2	-62.3
145+71	21	20.8	9.2	69.4	16.8	7.3	53.0	55.8	130.8	170.1	-114.3
145+75	4	20.9	9.2	69.5	2.7	1.2	9.1	58.5	139.9	181.9	-123.4
145+97	22	22.1	9.2	64.7	17.9	7.7	55.8	76.4	195.7	254.5	-178.1
146+00	3	19.7	9.2	53.7	2.0	0.9	5.5	78.3	201.3	261.7	-183.3
146+24	24	24.6	9.2	33.2	19.3	8.0	37.9	97.7	239.1	310.9	-213.2
146+25	1	24.8	9.2	33.3	1.4	0.5	1.8	99.0	241.0	313.3	-214.2
146+50	25	26.7	9.2	26.2	23.8	8.5	27.5	122.9	268.5	349.0	-226.2
146+62	12	27.5	9.2	22.5	12.1	4.1	10.8	134.9	279.3	363.1	-228.2
146+75	13	29.0	9.2	18.1	13.6	4.4	9.8	148.5	289.1	375.8	-227.3
146+89	14	29.5	9.2	12.5	15.2	4.8	8.0	163.7	297.0	386.2	-222.4
147+00	11	28.9	9.2	3.8	11.8	3.7	3.3	175.6	300.3	390.4	-214.9
147+16	16	30.0	9.2	0.2	17.6	5.5	1.2	193.1	301.5	392.0	-198.9
147+25	9	31.8	9.2	0.2	10.2	3.0	0.1	203.3	301.6	392.1	-188.8
147+50	25	35.8	4.1	0.0	31.3	6.1	0.1	234.6	301.7	392.2	-157.6
147+75	25	13.5	4.1	0.0	22.8	3.8	0.0	257.5	301.7	392.2	-134.7
148+00	25	12.7	4.1	0.6	12.1	3.8	0.3	269.6	302.0	392.6	-123.0
148+25	25	11.2	4.1	3.8	11.1	3.8	2.0	280.7	304.0	395.2	-114.5
148+44	19	10.5	4.1	62.7	7.7	2.9	23.4	288.4	327.4	425.7	-137.3
149+00		14.9	9.2	0.0							
149+25	25	27.9	9.2	15.9	19.8	8.5	7.4	19.8	7.4	9.6	10.2
149+50	25	29.6	9.2	6.5	26.6	8.5	10.4	46.4	17.7	23.1	23.3
149+75	25	27.5	9.2	17.9	26.4	8.5	11.3	72.8	29.0	37.7	35.1
150+00	25	24.5	9.2	31.7	24.1	8.5	22.9	96.9	52.0	67.5	29.4
150+22	22	19.8	9.2	43.0	17.8	7.4	30.1	114.7	82.0	106.6	8.1
150+25	3	19.3	9.2	44.1	2.4	1.1	5.3	117.1	87.3	113.5	3.6
150+49	24	17.6	9.2	49.9	16.2	8.1	41.3	133.3	128.7	167.3	-34.0
150+50	75	17.4	9.2	50.3	48.6	25.6	139.1	181.9	267.8	348.1	-166.2
150+75	25	17.2	9.2	72.8	16.0	8.5	57.0	197.9	324.8	422.2	-224.3
150+76	1	17.2	9.2	73.3	0.6	0.3	2.4	198.5	327.1	425.3	-226.8
151+00	24	15.1	9.2	73.4	14.4	8.2	65.5	212.9	392.7	510.5	-297.6
151+21	21	17.9	9.2	0.0	12.8	7.1	28.3	225.7	421.0	547.3	-321.6
				Column totals	514	200	748				

Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

DIVISION 1-4/CAT. 0010 (STA 176+89): STH 170 CULVERT

STATION	Distance	Area: Cut (SF)	Area: SALVAGED/UNUSEABLE PAVEMENT MATERIAL (SF)	Area: Fill (SF)	Incremental Volume (Unadjusted): Cut Note 1 (CY)	Incremental Volume (Unadjusted): Salvaged/Unuseable Pavement Material (CY)	Incremental Volume (Unadjusted): Fill Note 2 (CY)	Cumulative Vol (CY): Cut 1.00 Note 3	Cumulative Vol (CY): Fill 1.00 Note 4	Cumulative Vol (CY): Expanded Fill 1.3	Mass Ordinate Note 5
176+89		0.0	10.0	0.0	146	30	71	146.0	71.0	92.3	54
				Column totals	146	30	71				

Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

DIVISION 1-5/CAT. 0010: DUNN COUNTY CURB RAMPS

STATION	Distance	Area: Cut (SF)	Area: SALVAGED/UNUSEABLE PAVEMENT MATERIAL (SF)	Area: Fill (SF)	Incremental Volume (Unadjusted): Cut Note 1 (CY)	Incremental Volume (Unadjusted): Salvaged/Unuseable Pavement Material (CY)	Incremental Volume (Unadjusted): Fill Note 2 (CY)	Cumulative Vol (CY): Cut 1.00 Note 3	Cumulative Vol (CY): Fill 1.00 Note 4	Cumulative Vol (CY): Expanded Fill 1.3	Mass Ordinate Note 5
-	-	-	-	-	10	8	5	2	5	7	-5
				Column totals	10	8	5				

Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

DIVISION 1-6/CAT. 0010 (STA 2106+11'D' - STA 2114+25'D'): STH 170

STATION	Distance	Area: Cut (SF)	Area: SALVAGED/UNUSEABLE PAVEMENT MATERIAL (SF)	Area: Fill (SF)	Incremental Volume (Unadjusted): Cut Note 1 (CY)	Incremental Volume (Unadjusted): Salvaged/Unuseable Pavement Material (CY)	Incremental Volume (Unadjusted): Fill Note 2 (CY)	Cumulative Vol (CY): Cut 1.00 Note 3	Cumulative Vol (CY): Fill 1.00 Note 4	Cumulative Vol (CY): Expanded Fill 1.3	Mass Ordinate Note 5
2106+11		14.0	7.3	58.2							
2106+25	14	13.6	7.3	52.1	7.0	3.7	27.7	7.0	27.7	36.0	-29.1
2106+50	25	15.5	7.3	52.8	13.5	6.8	48.6	20.4	76.3	99.1	-78.7
2106+75	25	14.0	7.3	31.8	13.6	6.8	39.2	34.1	115.4	150.1	-116.0
2107+00	25	13.7	7.3	17.1	12.8	6.8	22.6	46.9	138.1	179.5	-132.6
2107+25	25	19.4	7.3	53.5	15.3	6.8	32.7	62.2	170.8	222.0	-159.8
2107+32	7	27.2	7.3	79.0	6.4	2.0	18.2	68.6	189.0	245.6	-177.0
2107+50	18	66.0	7.3	96.8	30.4	4.8	57.3	99.0	246.2	320.1	-221.1
2107+75	25	85.9	7.3	100.1	70.3	6.8	91.2	169.3	337.4	438.6	-269.3
2108+00	25	51.4	7.3	89.6	63.6	6.8	87.8	232.8	425.2	552.8	-320.0
2108+25	25	34.1	7.3	101.8	39.6	6.8	88.6	272.4	513.9	668.0	-395.6
2108+26	1	34.0	7.3	100.9	1.1	0.2	3.4	273.5	517.3	672.4	-398.9
2108+50	24	24.5	7.3	54.1	26.1	6.5	69.2	299.6	586.4	762.3	-462.7
2108+75	25	35.6	7.3	11.5	27.8	6.8	30.4	327.4	616.8	801.8	-474.4
2108+78	3	35.5	7.3	6.8	3.5	0.7	0.9	331.0	617.7	803.0	-472.0
2109+00	22	38.3	7.3	3.8	30.5	6.0	4.4	361.5	622.1	808.7	-447.2
2109+25	25	27.2	7.3	9.1	30.4	6.8	6.0	391.8	628.1	816.5	-424.7
2109+50	25	27.2	7.3	8.9	25.2	6.8	8.3	417.0	636.4	827.3	-410.3
2109+75	25	22.8	7.3	18.7	23.1	6.8	12.8	440.2	649.2	843.9	-403.8
2111+00		21.3	7.3	41.3							
2111+25	25	38.8	7.3	0.0	27.8	6.8	19.1	27.8	19.1	24.8	3.0
2111+50	25	34.5	7.3	0.0	33.9	6.8	0.0	61.7	19.1	24.8	36.9
2111+75	25	42.1	7.3	0.0	35.5	6.8	0.0	97.2	19.1	24.8	72.4
2111+96	21	30.4	7.3	0.9	28.4	5.7	0.3	125.6	19.5	25.3	100.3
2112+00	4	28.9	7.3	2.9	4.2	1.0	0.3	129.8	19.7	25.6	104.2
2112+24	24	22.9	7.3	17.1	23.2	6.6	9.0	153.1	28.7	37.3	115.7
2112+25	1	22.7	7.3	17.8	0.6	0.2	0.5	153.7	29.2	38.0	115.8
2112+49	24	20.2	7.3	54.2	19.2	6.6	32.3	172.9	61.5	79.9	93.0
2112+50	1	20.2	7.3	54.6	0.6	0.2	1.6	173.5	63.1	82.0	91.5
2112+75	25	20.2	7.3	43.8	18.7	6.8	45.6	192.2	108.6	141.2	51.0
2113+00	25	20.0	7.3	41.7	18.6	6.8	39.6	210.8	148.2	192.7	18.1
2113+25	25	18.6	7.3	43.8	17.9	6.8	39.6	228.7	187.8	244.2	-15.5
2113+50	25	18.7	7.3	43.4	17.3	6.8	40.4	246.0	228.2	296.7	-50.7
2113+75	25	19.5	7.3	24.8	17.7	6.8	31.5	263.6	259.7	337.6	-74.0
2113+82	7	19.6	7.3	18.8	5.2	2.0	5.8	268.9	265.6	345.2	-76.4
2114+00	18	21.8	7.3	6.2	13.6	4.8	8.2	282.5	273.8	355.9	-73.4
2114+25	25	21.6	7.3	1.6	20.1	6.8	3.6	302.6	277.4	360.6	-58.0
				Column totals	743	186	927				

Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

DIVISION 1-7/CAT. 0010 (STA 2126+94'D' - STA 2127+40'D'): STH 170

STATION	Distance	Area: Cut (SF)	Area: SALVAGED/UNUSEABLE PAVEMENT MATERIAL (SF)	Area: Fill (SF)	Incremental Volume (Unadjusted): Cut Note 1 (CY)	Incremental Volume (Unadjusted): Salvaged/Unuseable Pavement Material (CY)	Incremental Volume (Unadjusted): Fill Note 2 (CY)	Cumulative Vol (CY): Cut 1.00 Note 3	Cumulative Vol (CY): Fill 1.00 Note 4	Cumulative Vol (CY): Expanded Fill 1.3	Mass Ordinate Note 5
2126+94		26.4	6.0	0.0							
2127+00	6	23.3	6.0	0.1	5.5	1.3	0.0	5.5	0.0	0.0	5.5
2127+25	25	18.1	6.0	0.0	19.2	5.6	0.0	24.7	0.0	0.1	24.6
2127+40	15	18.8	6.0	0.0	10.3	3.3	0.0	35.0	0.0	0.1	34.9
				Column totals	35	10	0				

Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

DIVISION 1-8/CAT. 0010 (STA 2150+63'D' - STA 2234+32'D'): STH 170

STATION	Distance	Area: Cut (SF)	Area: SALVAGED/UNUSEABLE PAVEMENT MATERIAL (SF)	Area: Fill (SF)	Incremental Volume (Unadjusted): Cut Note 1 (CY)	Incremental Volume (Unadjusted): Salvaged/Unuseable Pavement Material (CY)	Incremental Volume (Unadjusted): Fill Note 2 (CY)	Cumulative Vol (CY): Cut 1.00 Note 3	Cumulative Vol (CY): Fill 1.00 Note 4	Cumulative Vol (CY): Expanded Fill 1.3	Mass Ordinate Note 5
2150+63		60.7	11.1	0.0							
2150+75	12	33.2	9.8	23.5	21.2	4.7	5.3	21.2	5.3	6.9	14.3
2150+81	6	30.4	8.7	41.5	7.2	2.1	7.4	28.5	12.7	16.5	11.9
2151+00	19	29.3	8.1	37.6	20.8	5.9	27.6	49.3	40.4	52.5	-3.1
2151+06	6	28.1	8.1	35.0	6.5	1.8	8.2	55.8	48.5	63.1	-7.3
2151+25	19	26.5	8.1	8.3	19.1	5.7	15.2	74.9	63.7	82.8	-7.9
2151+34	9	27.7	8.1	5.3	9.2	2.7	2.3	84.1	66.0	85.8	-1.8
2151+50	16	29.4	8.1	8.2	16.8	4.8	4.0	100.9	70.0	91.0	9.9
2151+75	25	28.5	8.1	21.4	26.8	7.5	13.7	127.7	83.7	108.8	18.9
2152+00	25	27.1	8.1	15.3	25.7	7.5	16.9	153.4	100.7	130.9	22.6
2152+25	25	24.5	8.1	8.6	23.9	7.5	11.1	177.3	111.7	145.2	32.1
2152+50	25	22.1	8.1	20.9	21.6	7.5	13.7	198.9	125.4	163.0	35.9
2152+71	21	14.1	8.1	135.4	14.0	6.3	60.4	212.9	185.8	241.5	-28.6
2154+10		14.4	8.1	122.8							
2154+25	15	23.9	8.1	23.6	10.9	4.6	41.6	10.9	41.6	54.1	-43.2
2154+50	25	26.4	8.1	19.5	23.3	7.5	19.9	34.2	61.5	80.0	-45.8
2154+75	25	23.1	8.1	9.9	22.9	7.5	13.6	57.1	75.2	97.7	-40.6
2155+00	25	26.2	8.1	22.7	22.8	7.5	15.1	79.9	90.3	117.3	-37.4
2155+25	25	21.6	8.1	26.8	22.1	7.5	22.9	102.0	113.2	147.1	-45.1
2155+46	21	25.8	8.1	40.6	18.6	6.4	26.5	120.7	139.7	181.6	-61.0
2155+50	4	25.1	8.1	42.6	3.5	1.1	5.7	124.2	145.5	189.1	-64.9
2155+74	24	21.4	8.1	51.3	21.0	7.3	42.4	145.2	187.8	244.2	-99.0
2155+75	1	21.5	8.1	51.6	0.5	0.2	1.2	145.7	189.0	245.7	-100.0
2155+99	24	24.2	8.1	58.3	20.7	7.4	49.7	166.3	238.7	310.4	-144.0
2156+00	1	24.2	8.1	57.4	0.5	0.2	1.2	166.8	239.9	311.9	-145.1
2156+19	19	24.3	8.1	5.1	17.1	5.7	22.0	183.9	261.9	340.5	-156.6
2156+25	6	11.9	8.1	5.0	4.0	1.8	1.1	187.9	263.1	342.0	-154.0
2156+50	25	10.4	8.1	4.5	10.3	7.5	4.4	198.3	267.5	347.7	-149.5
2156+75	25	12.4	8.1	1.6	10.6	7.5	2.8	208.8	270.3	351.4	-142.6
2156+94	19	11.6	8.1	1.4	8.5	5.7	1.0	217.3	271.3	352.8	-135.4
				Column totals	430	150	457				

Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

DIVISION 1-9/CAT. 0010 (STA 2212+42'D'): STH 170 CULVERT											
		Area			Incremental Volume (Unadjusted)			Cumulative Vol (CY)			
STATION	Distance	Cut (SF)	SALVAGED/UNUSEABLE PAVEMENT MATERIAL (SF)	Fill (SF)	Cut Note 1 (CY)	Salvaged/Unuseable Pavement Material (CY)	Fill Note 2 (CY)	Cut 1.00 Note 3	Fill 1.00 Note 4	Expanded Fill 1.3	Mass Ordinate Note 5
2212+42		0.0	10.0	0.0	115	30	5	115.0	5.0	6.5	109
				Column totals	115	30	5				

Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

DIVISION 1-10/CAT. 0010 (STA 2234+27'D'): STH 170 CULVERT											
		Area			Incremental Volume (Unadjusted)			Cumulative Vol (CY)			
STATION	Distance	Cut (SF)	SALVAGED/UNUSEABLE PAVEMENT MATERIAL (SF)	Fill (SF)	Cut Note 1 (CY)	Salvaged/Unuseable Pavement Material (CY)	Fill Note 2 (CY)	Cut 1.00 Note 3	Fill 1.00 Note 4	Expanded Fill 1.3	Mass Ordinate Note 5
2212+42		0.0	10.0	0.0	171	30	0.25	171.0	0.3	0.3	171
				Column totals	171	30	0				

Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

DIVISION 1-11/CAT. 0010 (STA 2370+51'D' - STA 2374+40'D'): STH 170											
		Area			Incremental Volume (Unadjusted)			Cumulative Vol (CY)			
STATION	Distance	Cut (SF)	SALVAGED/UNUSEABLE PAVEMENT MATERIAL (SF)	Fill (SF)	Cut Note 1 (CY)	Salvaged/Unuseable Pavement Material (CY)	Fill Note 2 (CY)	Cut 1.00 Note 3	Fill 1.00 Note 4	Expanded Fill 1.3	Mass Ordinate Note 5
2370+51		22.3	8.4	0.0							
2370+75	24	20.1	8.4	1.6	18.6	7.3	0.7	18.6	0.7	0.9	17.7
2371+00	25	21.3	8.4	6.1	19.2	7.8	3.6	37.7	4.2	5.5	32.2
2371+23	23	17.0	8.4	15.3	16.4	7.2	9.2	54.1	13.4	17.4	36.7
2371+25	2	17.0	8.4	15.2	1.2	0.6	1.0	55.3	14.4	18.8	36.5
2371+50	25	17.9	8.4	10.1	15.9	7.7	11.5	71.2	26.0	33.8	37.4
2371+75	25	17.9	8.4	0.0	16.8	7.9	4.7	88.0	30.7	39.9	48.1
2371+76	1	18.1	8.4	0.0	0.8	0.4	0.0	88.8	30.7	39.9	48.9
2372+00	24	17.5	8.4	0.0	15.7	7.4	0.0	104.5	30.7	39.9	64.6
2372+25	25	18.3	8.4	0.4	16.6	7.8	0.2	121.1	30.9	40.2	80.9
2372+50	25	19.0	8.4	0.2	17.3	7.8	0.3	138.4	31.2	40.6	97.8
2372+75	25	19.0	8.4	0.0	17.6	7.8	0.1	155.9	31.3	40.7	115.2
2373+00	25	20.0	8.4	0.0	18.0	7.8	0.0	174.0	31.3	40.7	133.3
2373+25	25	22.6	8.4	0.0	19.7	7.8	0.0	193.7	31.3	40.7	153.0
2373+26	1	21.6	8.4	0.0	1.0	0.4	0.0	194.7	31.3	40.7	154.0
2373+50	24	19.3	8.4	0.0	18.0	7.4	0.0	212.7	31.3	40.7	172.0
2373+53	3	19.0	8.4	0.1	2.0	0.9	0.0	214.7	31.3	40.7	174.0
2373+75	22	18.3	8.4	2.8	15.3	6.9	1.2	230.0	32.5	42.2	187.8
2373+79	4	18.4	8.4	2.2	3.0	1.4	0.4	233.1	32.9	42.8	190.3
2374+00	21	18.8	8.4	0.1	14.2	6.4	0.9	247.2	33.8	43.9	203.3
2374+25	25	19.6	8.4	0.0	17.8	7.8	0.1	265.0	33.9	44.0	221.0
2374+40	15	21.0	8.4	0.0	11.0	4.5	0.0	276.0	33.9	44.0	232.0
				Column totals	276	121	34				

Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

DIVISION 1-12/CAT. 0010 (STA 2370+51'D' - STA 2374+40'D'): STH 170											
		Area			Incremental Volume (Unadjusted)			Cumulative Vol (CY)			
STATION	Distance	Cut (SF)	SALVAGED/UNUSEABLE PAVEMENT MATERIAL (SF)	Fill (SF)	Cut Note 1 (CY)	Salvaged/Unuseable Pavement Material (CY)	Fill Note 2 (CY)	Cut 1.00 Note 3	Fill 1.00 Note 4	Expanded Fill 1.3	Mass Ordinate Note 5
2384+00		12.4	8.4	0.0							
2384+25	25	45.0	8.4	0.0	26.6	7.8	0.0	26.6	0.0	0.0	26.6
2384+50	25	36.8	8.4	0.0	37.8	7.8	0.0	64.4	0.0	0.0	64.4
2384+55	5	18.7	8.4	0.0	5.1	1.6	0.0	69.6	0.0	0.0	69.6
				Column totals	70	17	0				

Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

DIVISION 1-13/CAT. 0010 (2388+48'D' - 2395+95'D'): STH 170

STATION	Distance	Area			Incremental Volume (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut (SF)	SALVAGED/UNUSEABLE PAVEMENT MATERIAL (SF)	Fill (SF)	Cut Note 1 (CY)	Salvaged/Unuseable Pavement Material (CY)	Fill Note 2 (CY)	Cut 1.00 Note 3	Fill 1.00 Note 4	Expanded Fill 1.3	Note 5
2386+07		1.3	0.0	0.3							
2386+25	18	1.8	0.0	0.1	1.0	0.0	0.1	1.0	0.1	0.2	0.8
2386+50	25	2.5	0.0	0.3	2.0	0.0	0.2	3.0	0.3	0.4	2.6
2386+75	25	3.1	0.0	0.7	2.6	0.0	0.5	5.5	0.8	1.0	4.5
2387+00	25	3.8	0.0	0.8	3.2	0.0	0.7	8.7	1.5	1.9	6.8
2387+25	25	4.6	0.0	0.7	3.9	0.0	0.7	12.7	2.2	2.8	9.8
2387+50	25	5.4	0.0	1.1	4.7	0.0	0.9	17.3	3.0	3.9	13.4
2387+75	25	6.1	0.0	1.1	5.3	0.0	1.0	22.7	4.1	5.3	17.4
2388+00	25	6.6	0.0	0.6	5.9	0.0	0.8	28.6	4.9	6.3	22.2
2388+25	25	6.6	0.0	2.1	6.1	0.0	1.2	34.7	6.1	7.9	26.7
2388+48	23	7.1	16.0	0.8	5.8	6.8	1.2	40.5	7.3	9.5	30.9
2388+50	2	56.1	16.0	0.8	2.4	1.2	0.1	42.8	7.4	9.6	33.2
2388+75	25	62.9	22.5	1.2	55.1	17.8	0.9	97.9	8.3	10.8	87.2
2388+78	3	64.6	25.0	1.2	7.7	2.9	0.1	105.6	8.4	10.9	94.7
2389+00	22	71.9	25.0	1.2	55.0	20.1	1.0	160.6	9.4	12.2	148.4
2389+21	21	70.3	27.5	3.2	55.9	20.6	1.7	216.5	11.1	14.4	202.1
2389+25	4	67.7	27.5	4.0	9.7	3.8	0.5	226.2	11.6	15.1	211.1
2389+50	25	54.4	30.0	17.6	56.5	26.6	10.0	282.7	21.6	28.1	254.6
2389+51	1	53.9	40.0	19.0	2.4	1.6	0.8	285.1	22.4	29.1	256.0
2389+75	24	133.4	58.0	0.3	82.5	43.2	8.5	367.6	30.9	40.2	327.4
2390+00	25	163.5	75.0	0.0	137.4	61.6	0.1	505.1	31.1	40.4	464.7
2390+25	25	100.6	50.0	0.1	122.3	57.9	0.1	627.3	31.1	40.4	586.9
2390+50	25	52.4	37.5	7.2	70.8	40.5	3.4	698.1	34.5	44.9	653.3
2390+75	25	51.7	25.0	9.5	48.2	28.9	7.8	746.3	42.3	55.0	691.4
2390+77	2	51.7	25.0	9.8	3.5	1.7	0.7	749.9	42.9	55.8	694.0
2391+00	23	60.8	24.0	11.2	48.2	21.0	9.0	798.1	51.9	67.5	730.6
2391+25	25	74.7	24.0	6.9	62.7	22.2	8.4	860.8	60.3	78.5	782.3
2391+50	25	72.7	24.0	2.9	68.2	22.2	4.6	929.0	64.9	84.4	844.6
2392+00	50	9.8	13.0	1.8	76.4	34.3	4.4	1005.4	69.3	90.1	915.4
2392+25	25	28.8	13.0	8.9	17.9	12.0	4.9	1023.3	74.2	96.5	926.8
2392+40	15	32.3	13.0	27.6	16.6	7.1	9.9	1039.9	84.1	109.4	930.6
2392+50	10	32.6	13.0	50.2	12.4	5.0	14.8	1052.3	98.9	128.6	923.7
2392+65	15	34.8	13.0	37.1	18.3	7.1	23.7	1070.6	122.7	159.5	911.2
2392+75	10	33.1	13.0	9.1	13.0	5.0	8.8	1083.6	131.5	170.9	912.7
2392+93	18	18.5	6.5	0.4	17.0	6.4	3.1	1100.6	134.6	175.0	925.6
2393+00	7	19.2	6.5	0.2	5.0	1.7	0.1	1105.6	134.7	175.1	930.5
2393+25	25	15.7	6.5	25.1	16.1	6.0	11.7	1121.8	146.4	190.3	931.5
2393+50	25	12.5	6.5	30.2	13.1	6.0	25.6	1134.8	172.0	223.6	911.3
2393+75	25	11.7	6.5	0.5	11.2	6.0	14.2	1146.1	186.2	242.0	904.1
2394+00	25	15.4	6.5	1.0	12.5	6.0	0.7	1158.6	186.9	242.9	915.7
2394+25	25	16.0	6.5	0.1	14.5	6.0	0.5	1173.1	187.4	243.6	929.5
2394+50	25	16.7	6.5	0.0	15.1	6.0	0.0	1188.3	187.4	243.6	944.6
2394+75	25	17.0	6.5	0.0	15.6	6.0	0.0	1203.9	187.4	243.6	960.2
2394+80	5	17.1	6.5	0.1	3.3	1.3	0.0	1207.2	187.4	243.7	963.6
2395+00	20	17.8	6.5	0.7	12.7	4.7	0.3	1219.9	187.7	244.0	975.9
2395+09	9	19.3	6.5	0.7	5.9	2.1	0.2	1225.8	187.9	244.3	981.5
2395+25	16	22.7	6.5	0.0	12.8	4.0	0.2	1238.6	188.1	244.6	994.0
2395+34	9	22.0	6.5	0.1	7.1	2.1	0.0	1245.7	188.1	244.6	1001.1
2395+50	16	19.0	6.5	0.2	12.5	4.0	0.1	1258.2	188.3	244.7	1013.4
2395+75	25	18.2	6.5	0.2	17.2	6.0	0.2	1275.4	188.4	245.0	1030.4
2395+95	20	15.3	6.5	0.0	18.4	4.8	0.1	1293.8	188.5	245.1	1048.7
				Column totals	1,294	550	189				

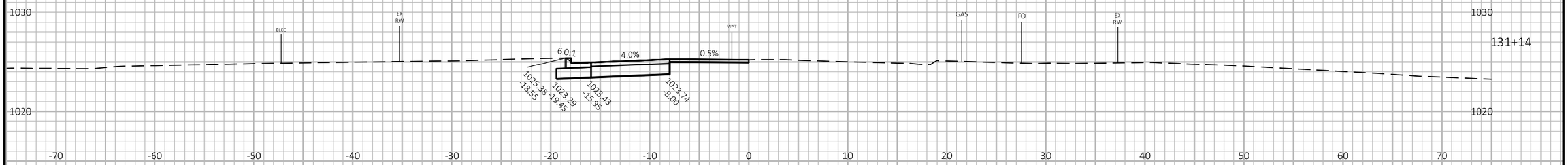
Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

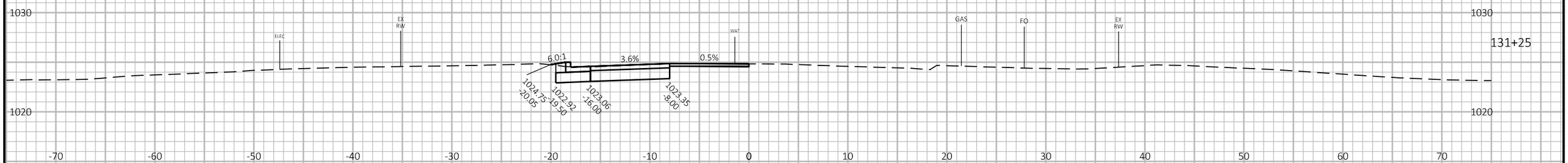
DIVISION 1-14/CAT. 0010 (STA 2370+51'D' - STA 2374+40'D'): STH 170

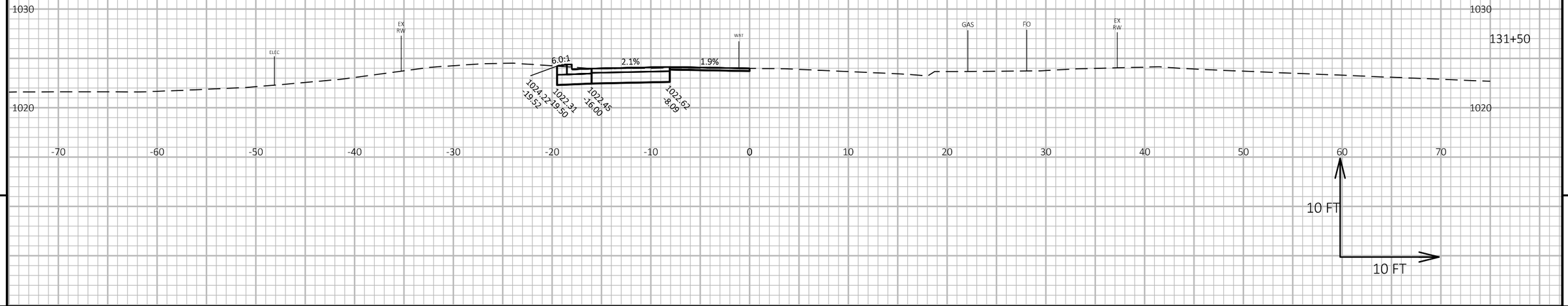
STATION	Distance	Area			Incremental Volume (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut (SF)	SALVAGED/UNUSEABLE PAVEMENT MATERIAL (SF)	Fill (SF)	Cut Note 1 (CY)	Salvaged/Unuseable Pavement Material (CY)	Fill Note 2 (CY)	Cut 1.00 Note 3	Fill 1.00 Note 4	Expanded Fill 1.3	Note 5
500+67		75.6	23.0	0.0							
500+75	8	74.4	23.0	0.2	22.2	6.8	0.0	22.2	0.0	0.0	22.2
501+00	25	69.9	23.0	0.0	66.8	21.3	0.1	89.0	0.1	0.1	88.9
501+25	25	63.6	23.0	0.0	61.8	21.3	0.0	150.8	0.1	0.1	150.7
				Column totals	151	49	0				

Notes:
1 - Cut: Cut includes Salvaged/Unusable Pavement Material
2 - Fill: Does not include Unusable Pavement Excavation volume
3 - Cut: Cut includes Salvaged/Unusable Pavement Material
4 - Fill: Does not include Unusable Pavement Excavation volume
5 - Mass Ordinate: [Cut - Expanded Fill] (Fill Factor Adjusted)

BEGIN PARTIAL RECONSTRUCTION







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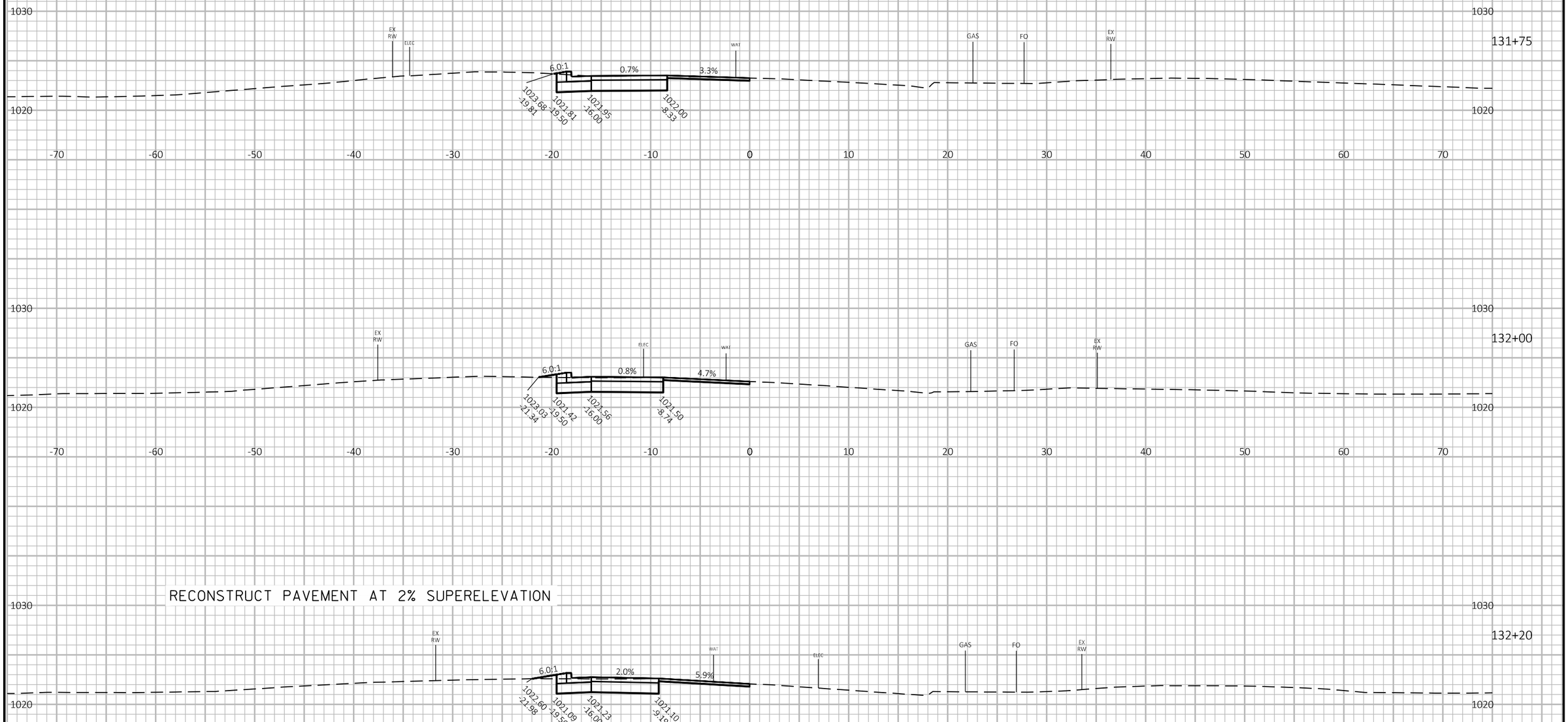
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 381	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (1)

PLOT DATE : 7/1/2020 6:28 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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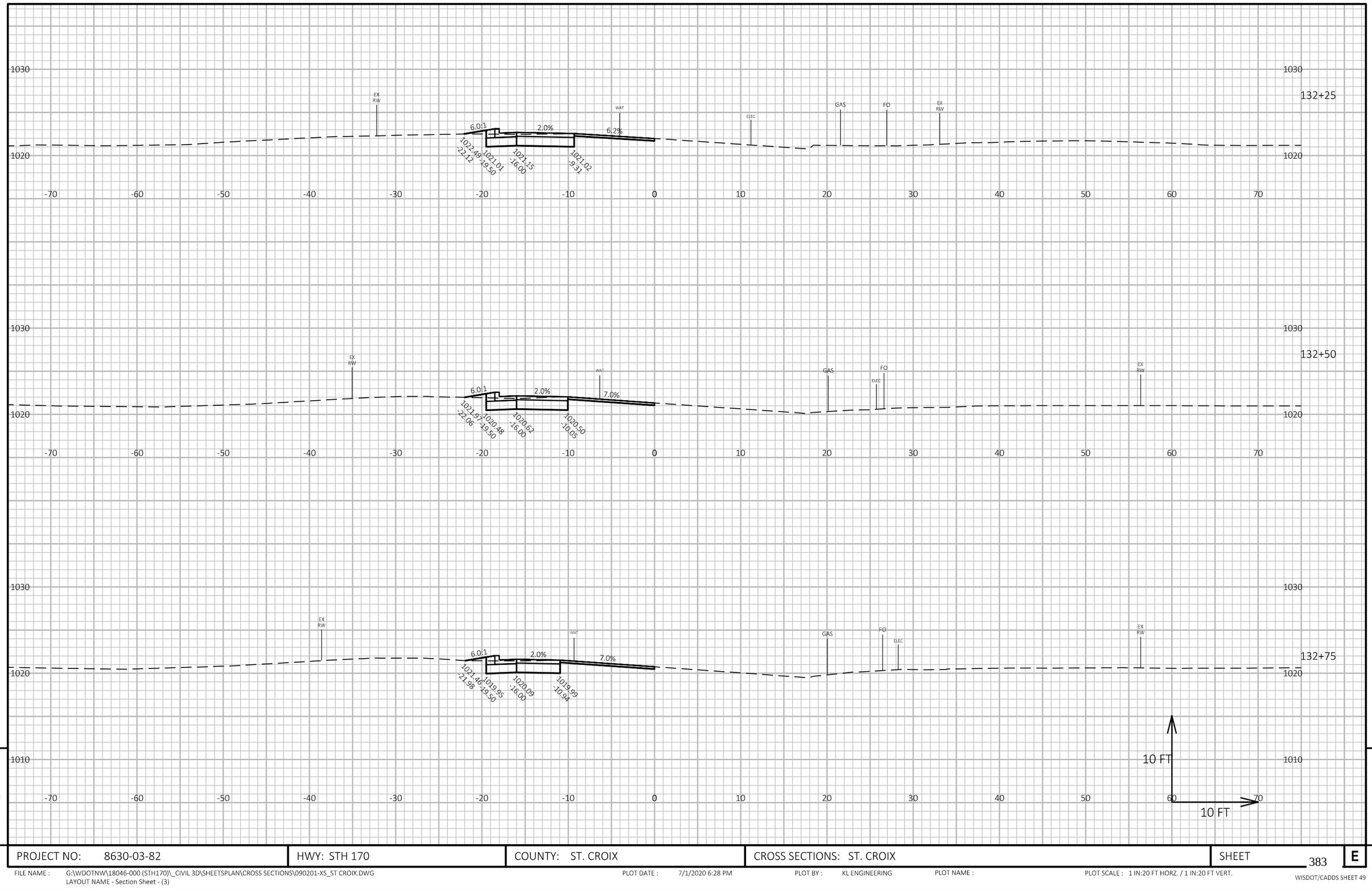
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 382	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (2)

PLOT DATE : 7/1/2020 6:28 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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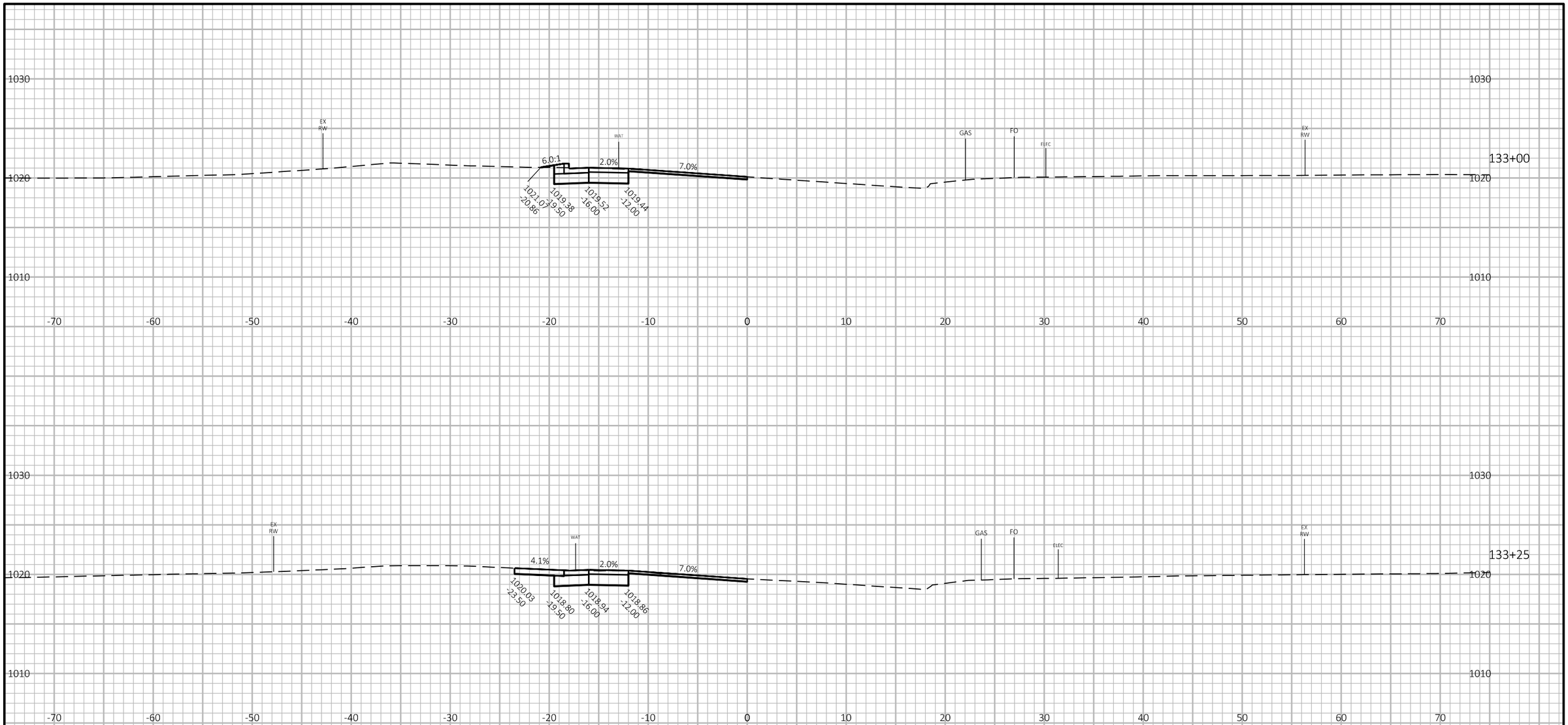
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 383	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (3)

PLOT DATE : 7/1/2020 6:28 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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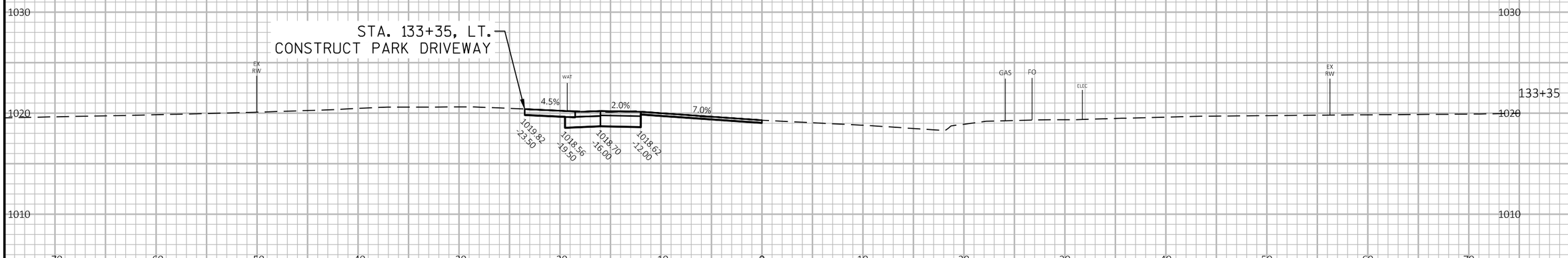
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 384	E

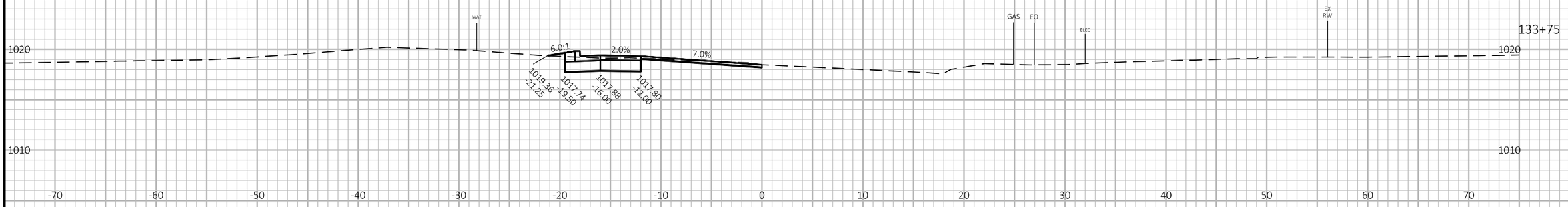
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (4)

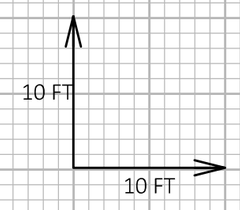
PLOT DATE : 7/1/2020 6:28 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

STA. 133+35, LT.
CONSTRUCT PARK DRIVEWAY







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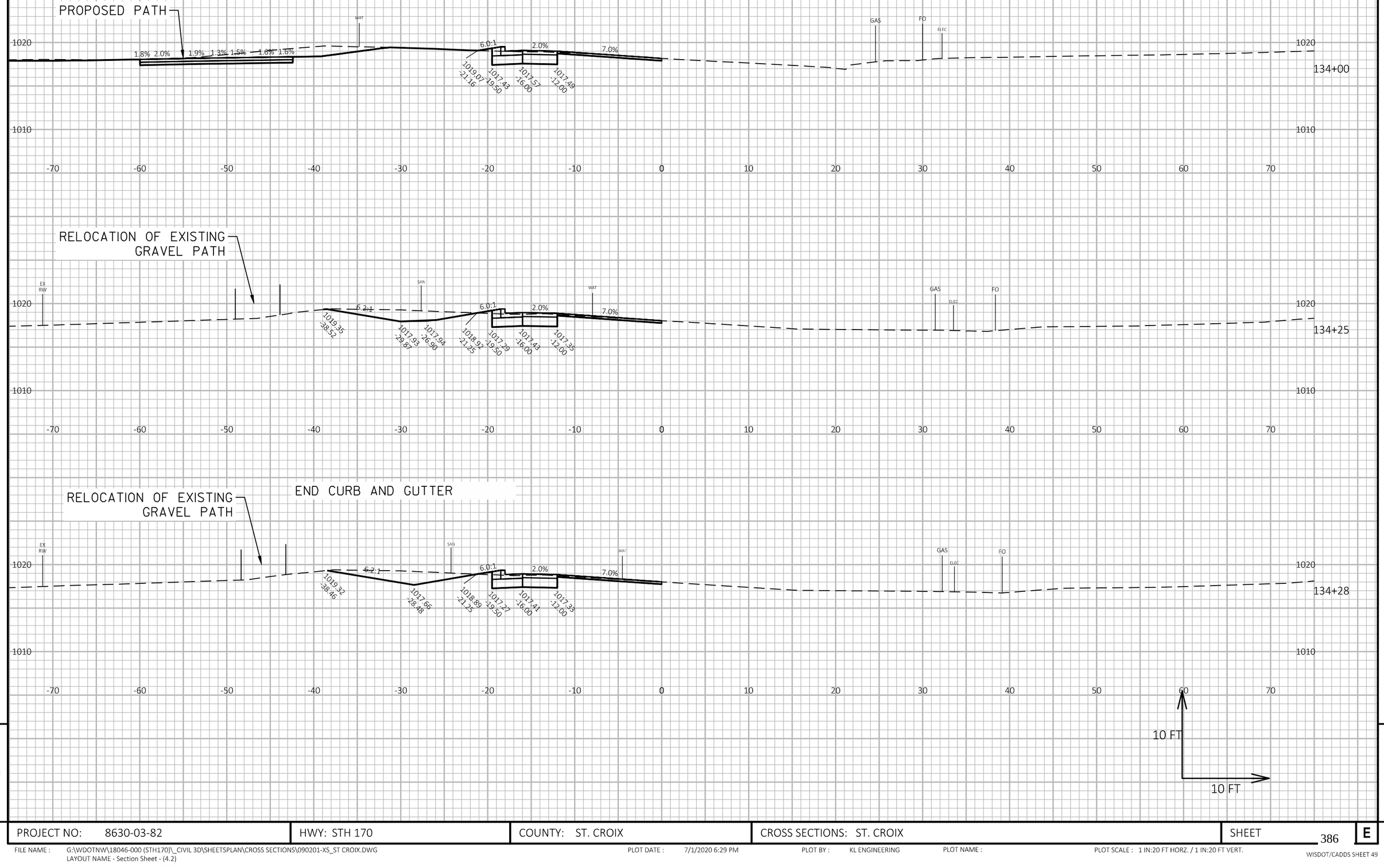
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 385	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (4.1)

PLOT DATE : 7/1/2020 6:28 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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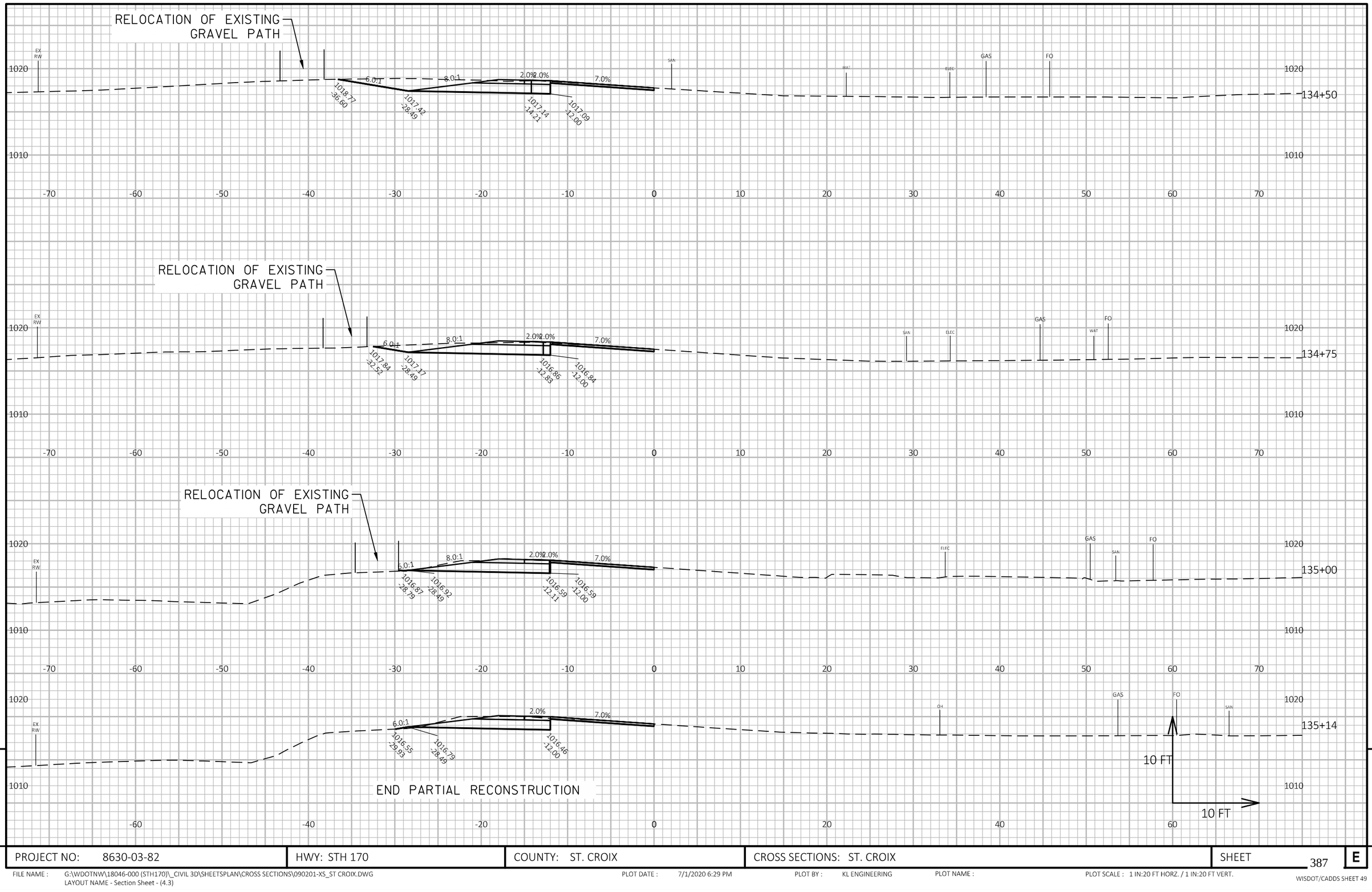
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 386	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (4.2)

PLOT DATE : 7/1/2020 6:29 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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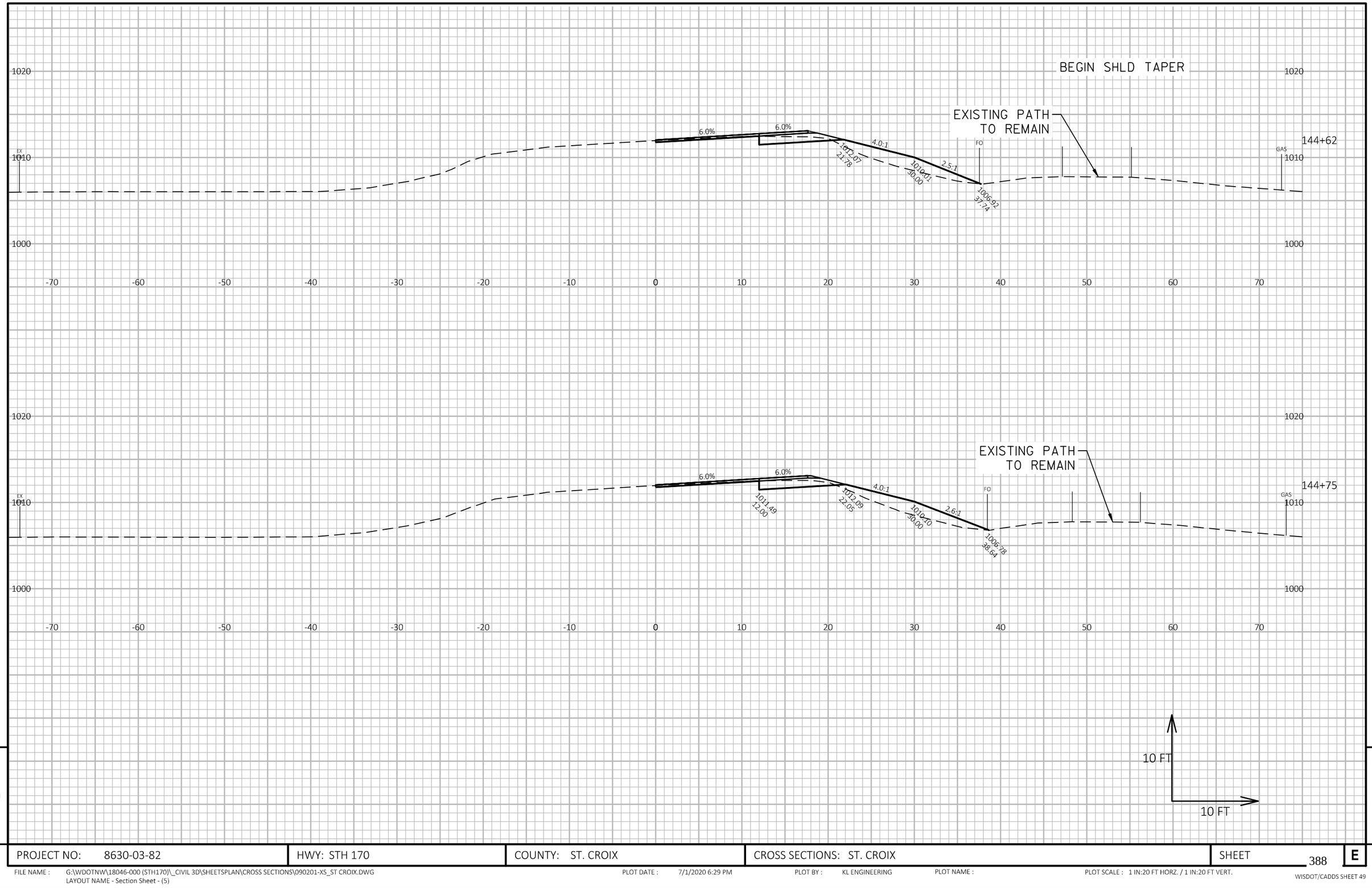
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 387	E

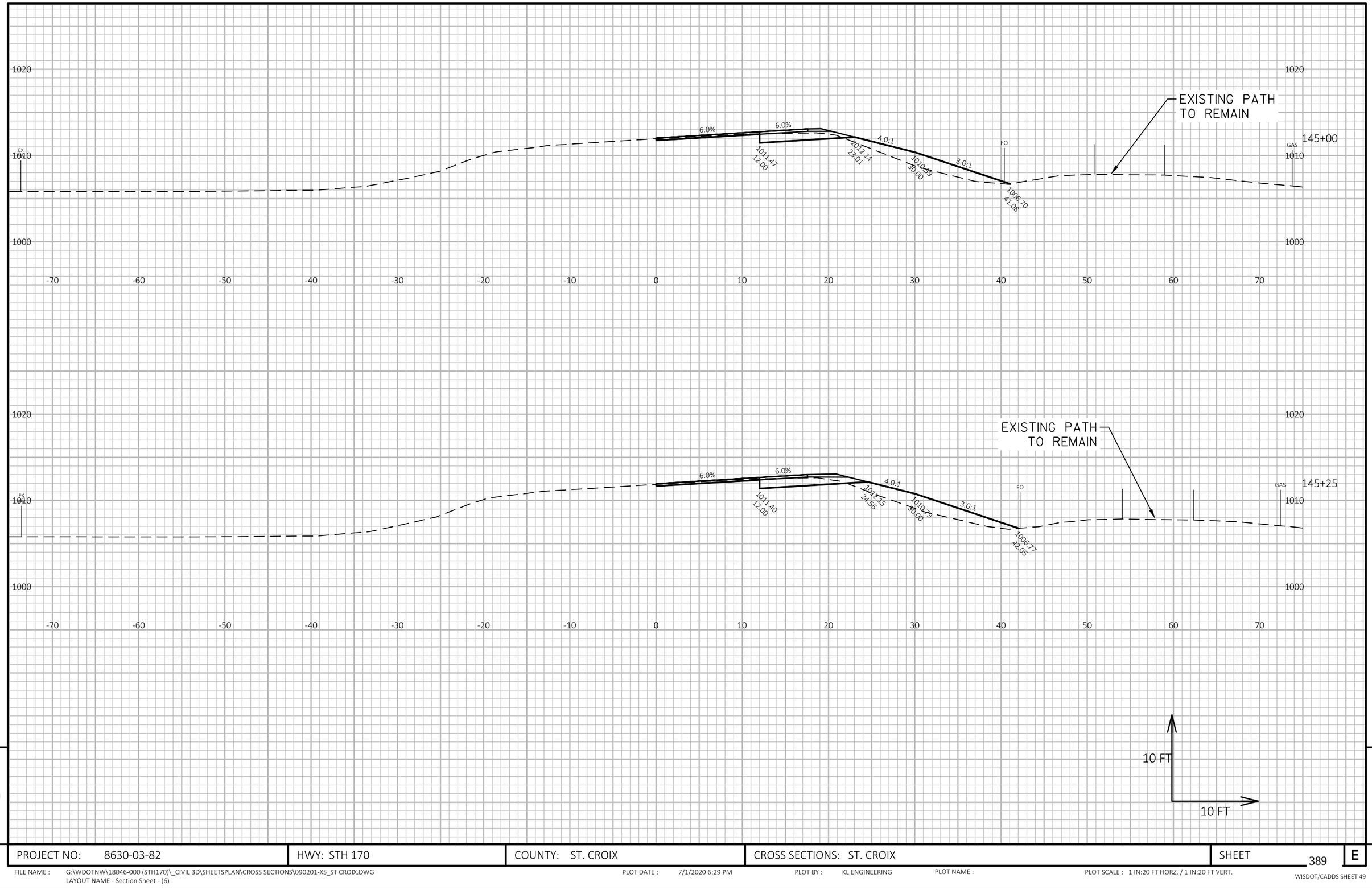
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (4.3)

PLOT DATE : 7/1/2020 6:29 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 388	E

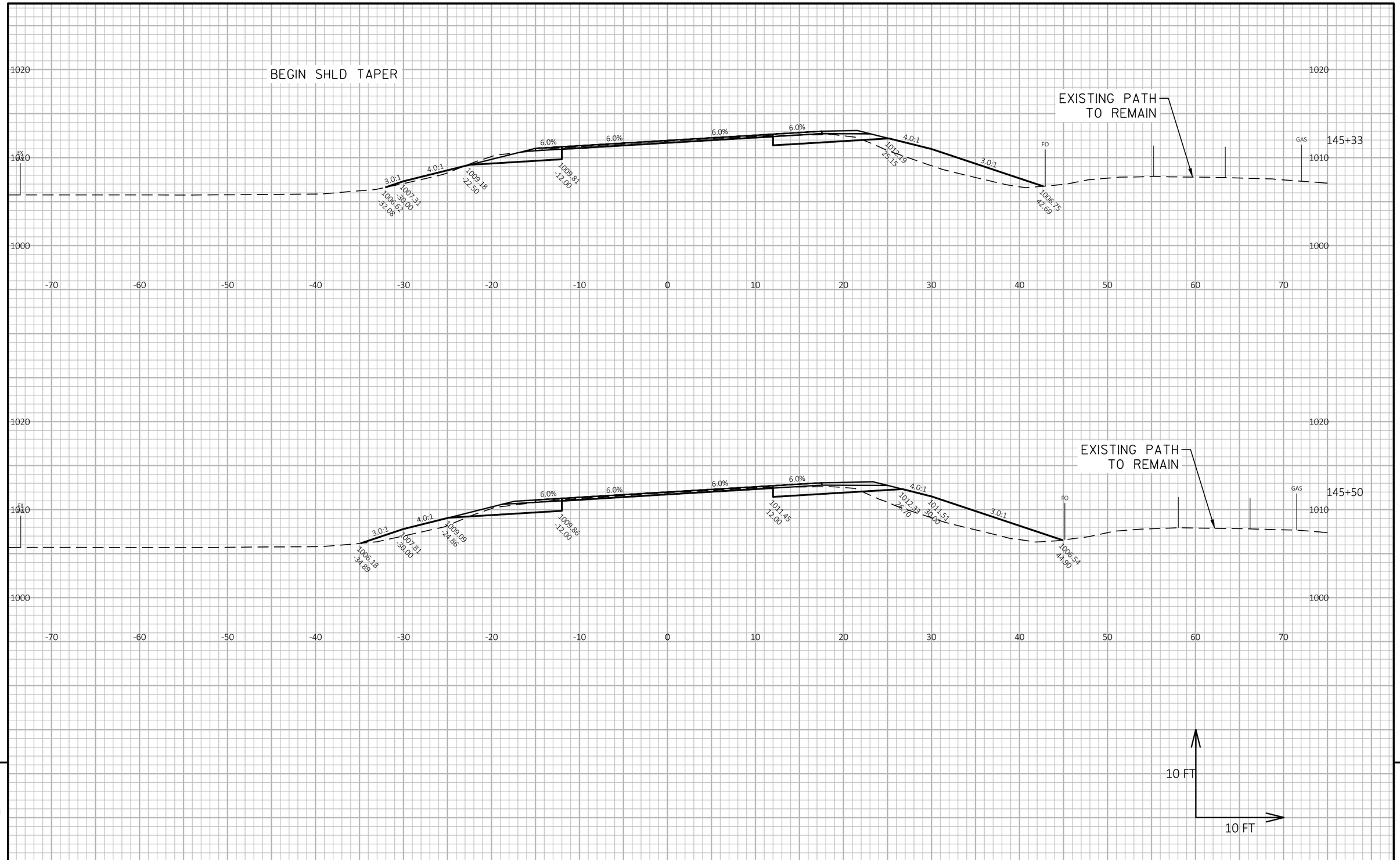


PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 389	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (6)

PLOT DATE : 7/1/2020 6:29 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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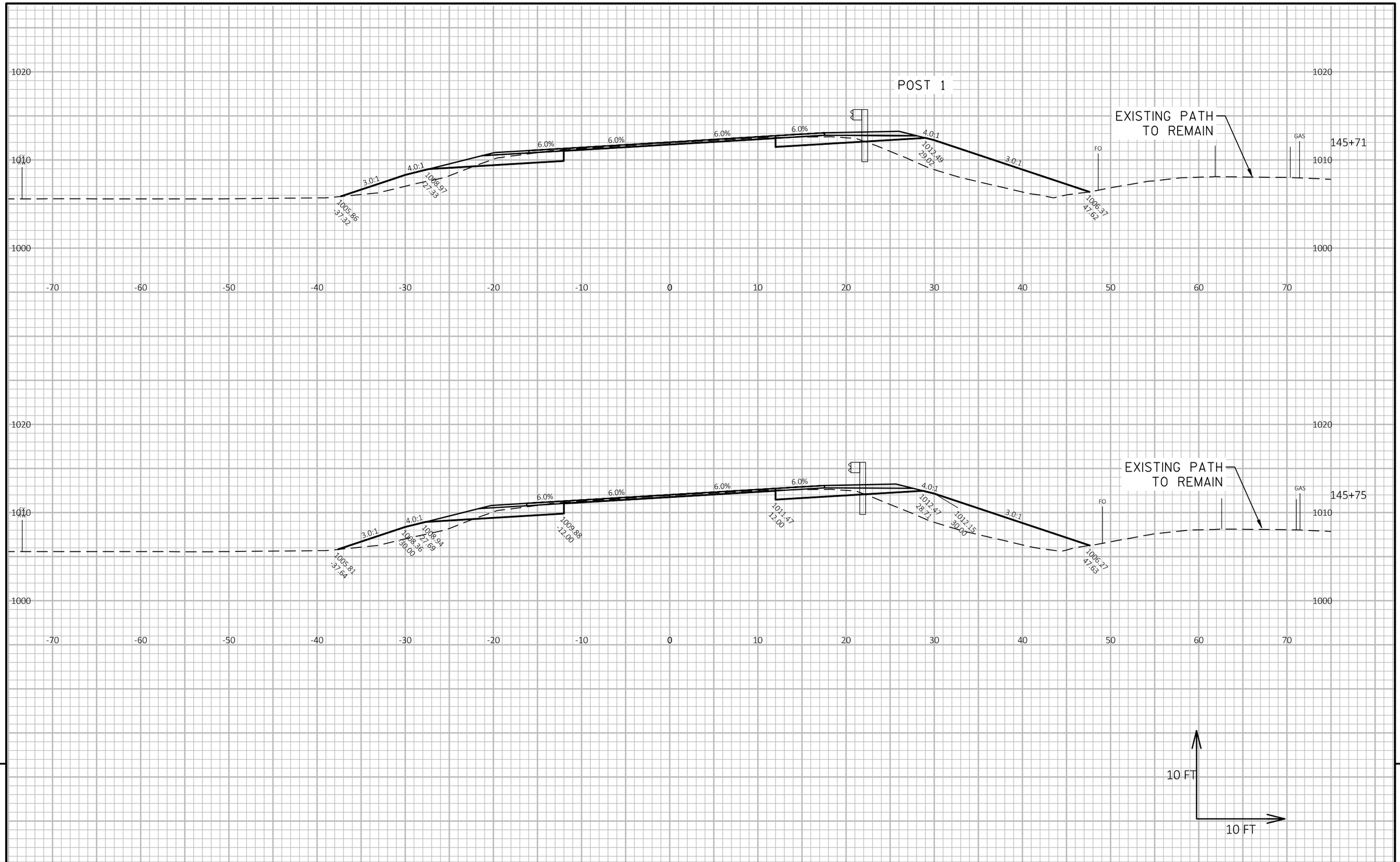
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 390	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (7)

PLOT DATE : 7/1/2020 6:30 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

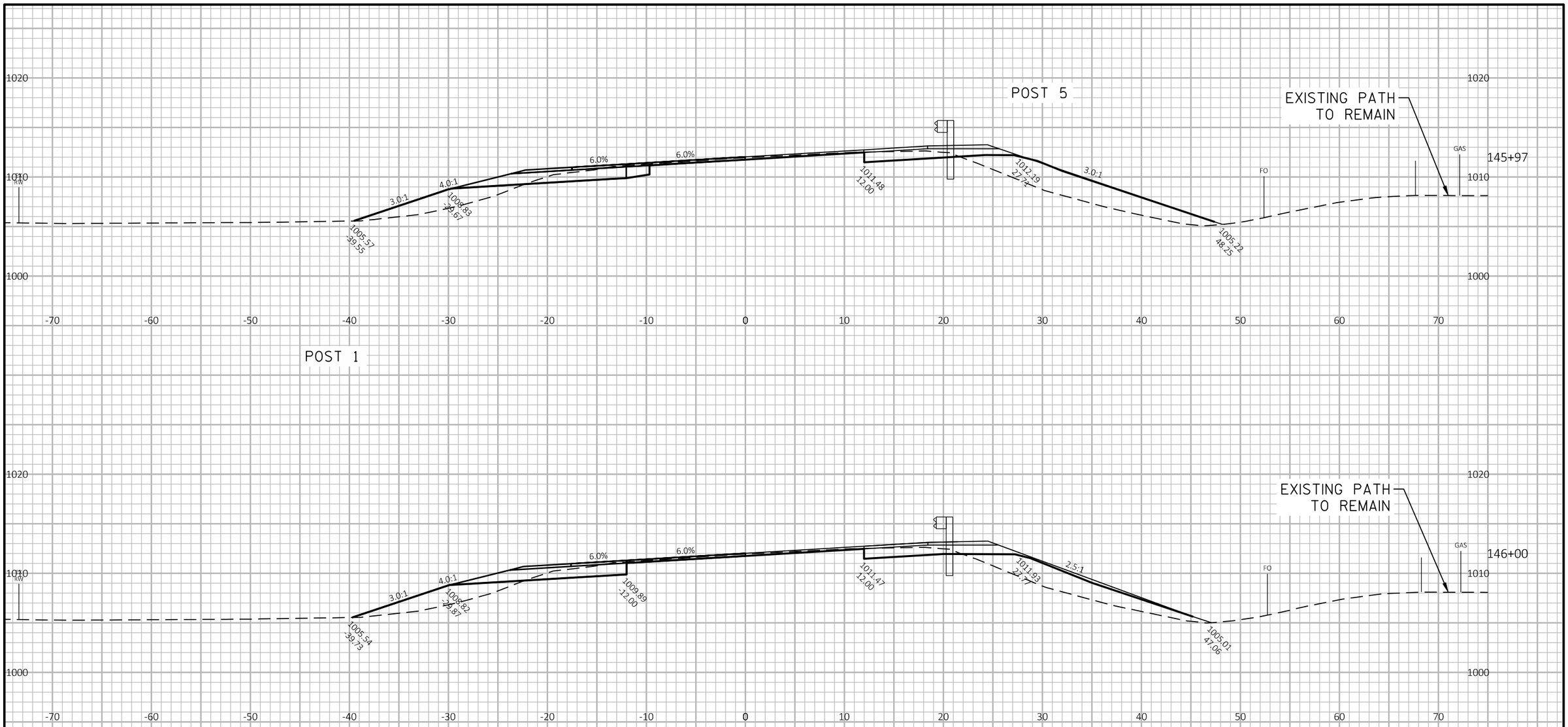


PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 391	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (8)

PLOT DATE : 7/1/2020 6:30 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 392	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (9)

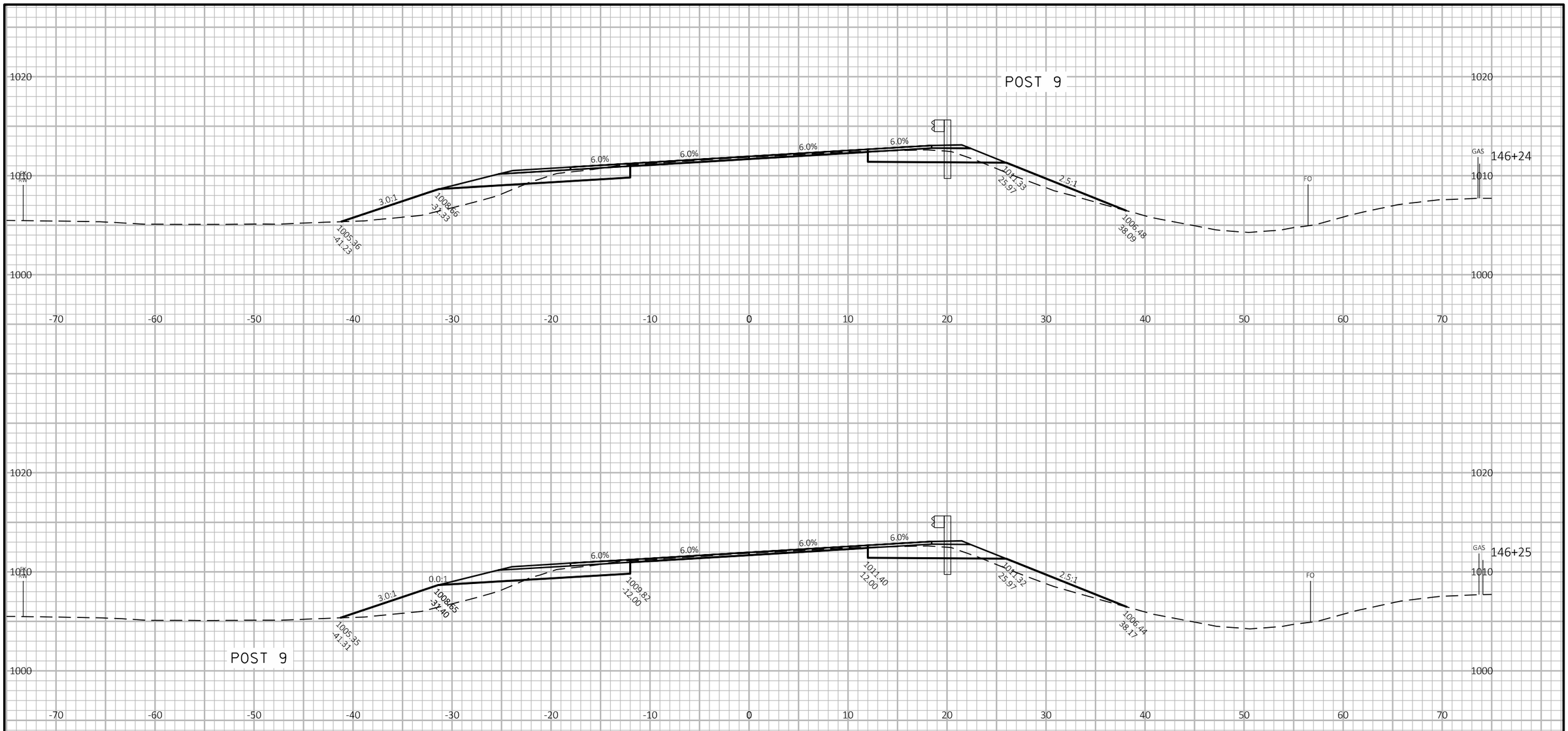
PLOT DATE : 7/1/2020 6:30 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

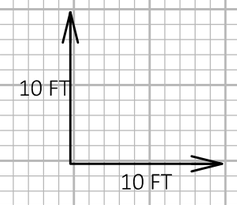
9

9

POST 9



POST 9



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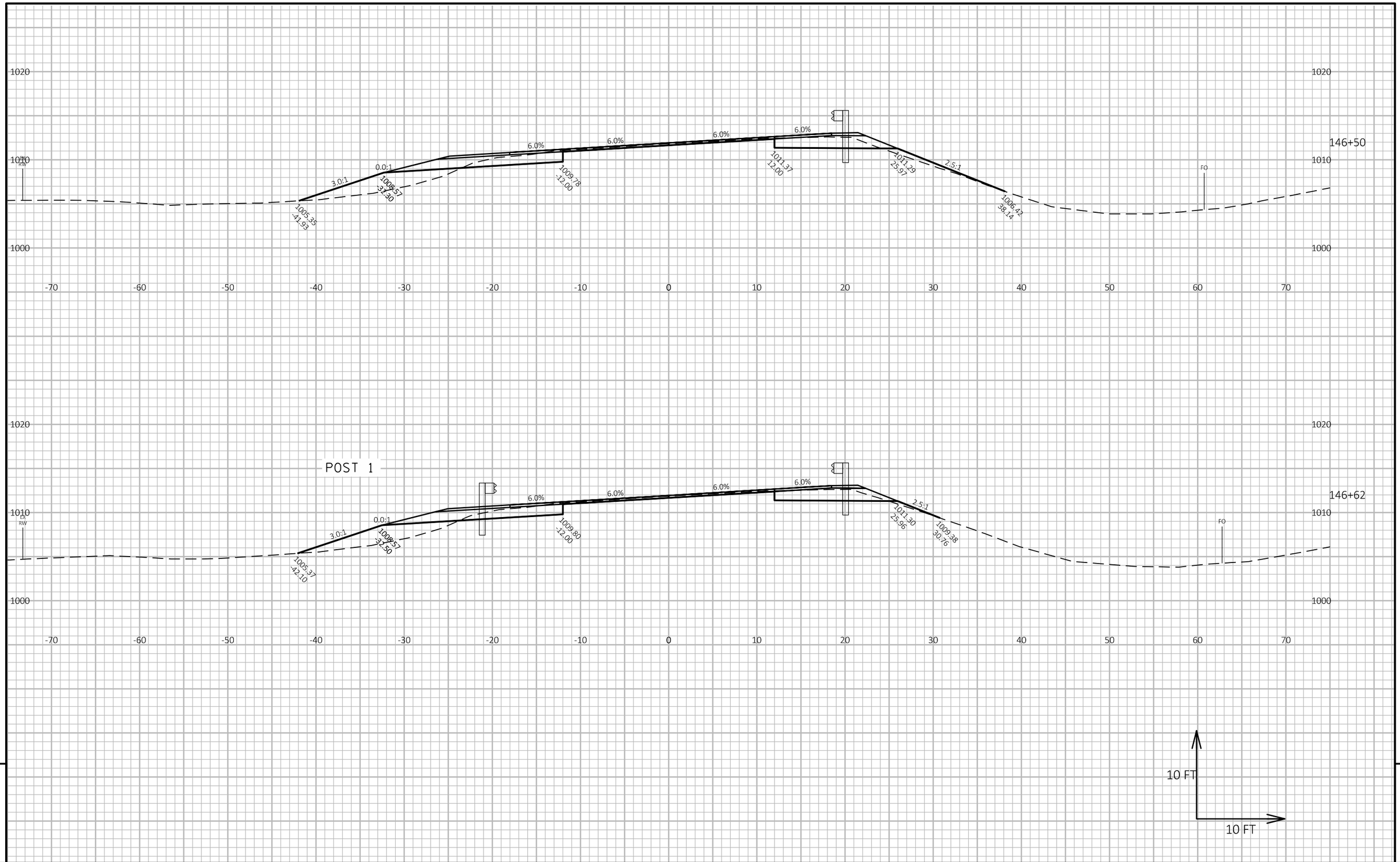
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 393	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (10)

PLOT DATE : 7/1/2020 6:30 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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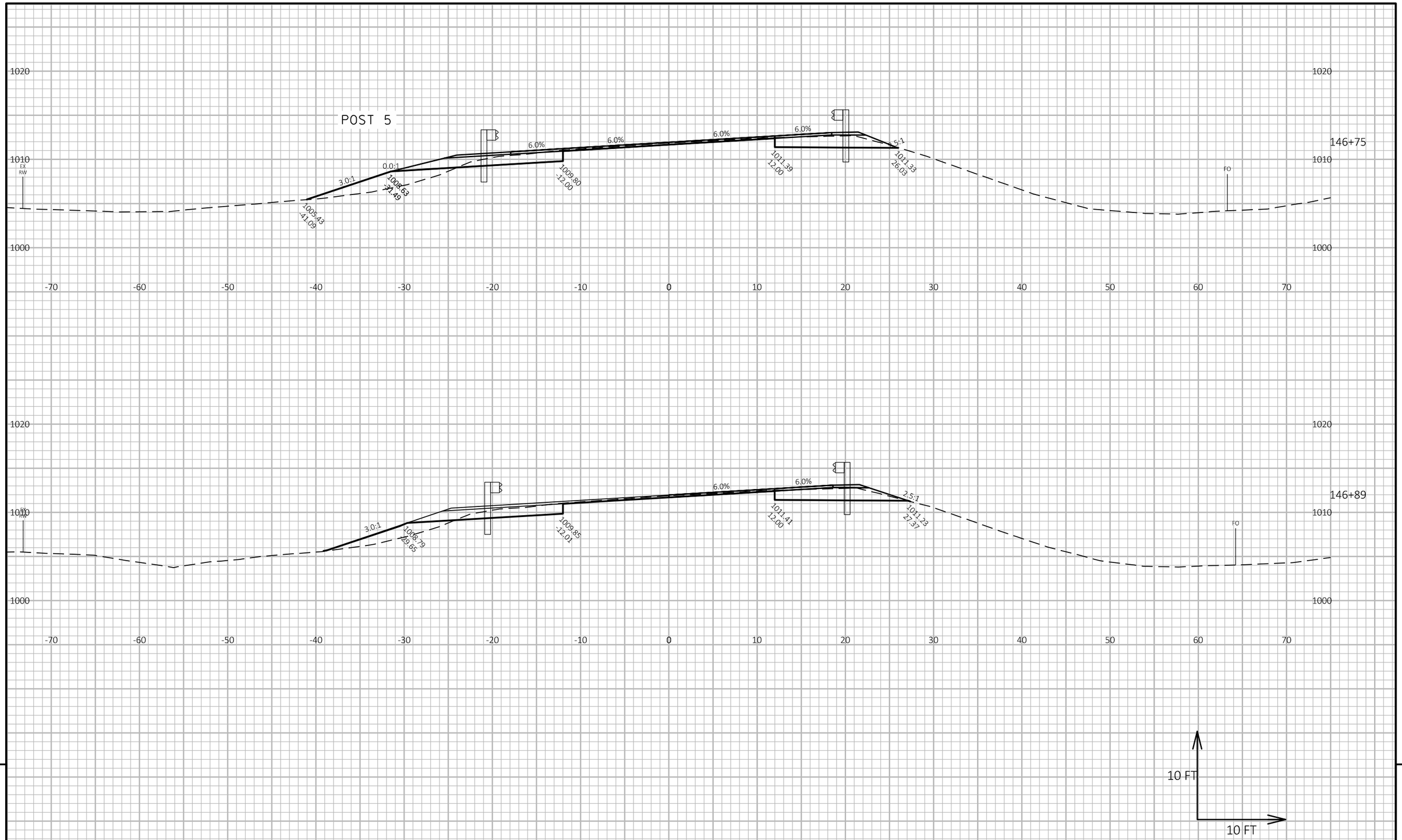
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 394	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (11)

PLOT DATE : 7/1/2020 6:31 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

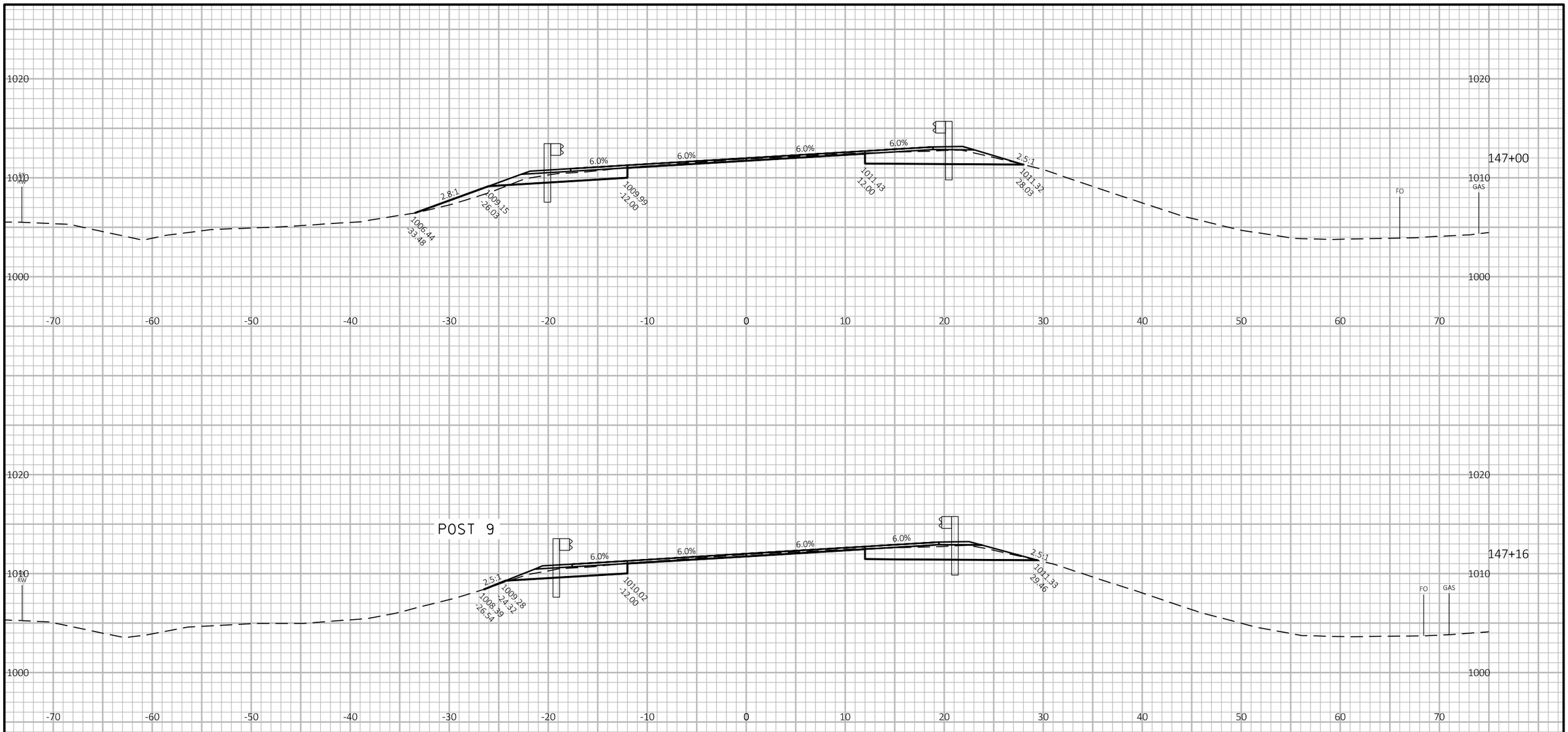


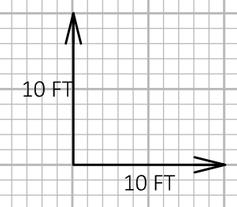
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 395	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (12)

PLOT DATE : 7/1/2020 6:31 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





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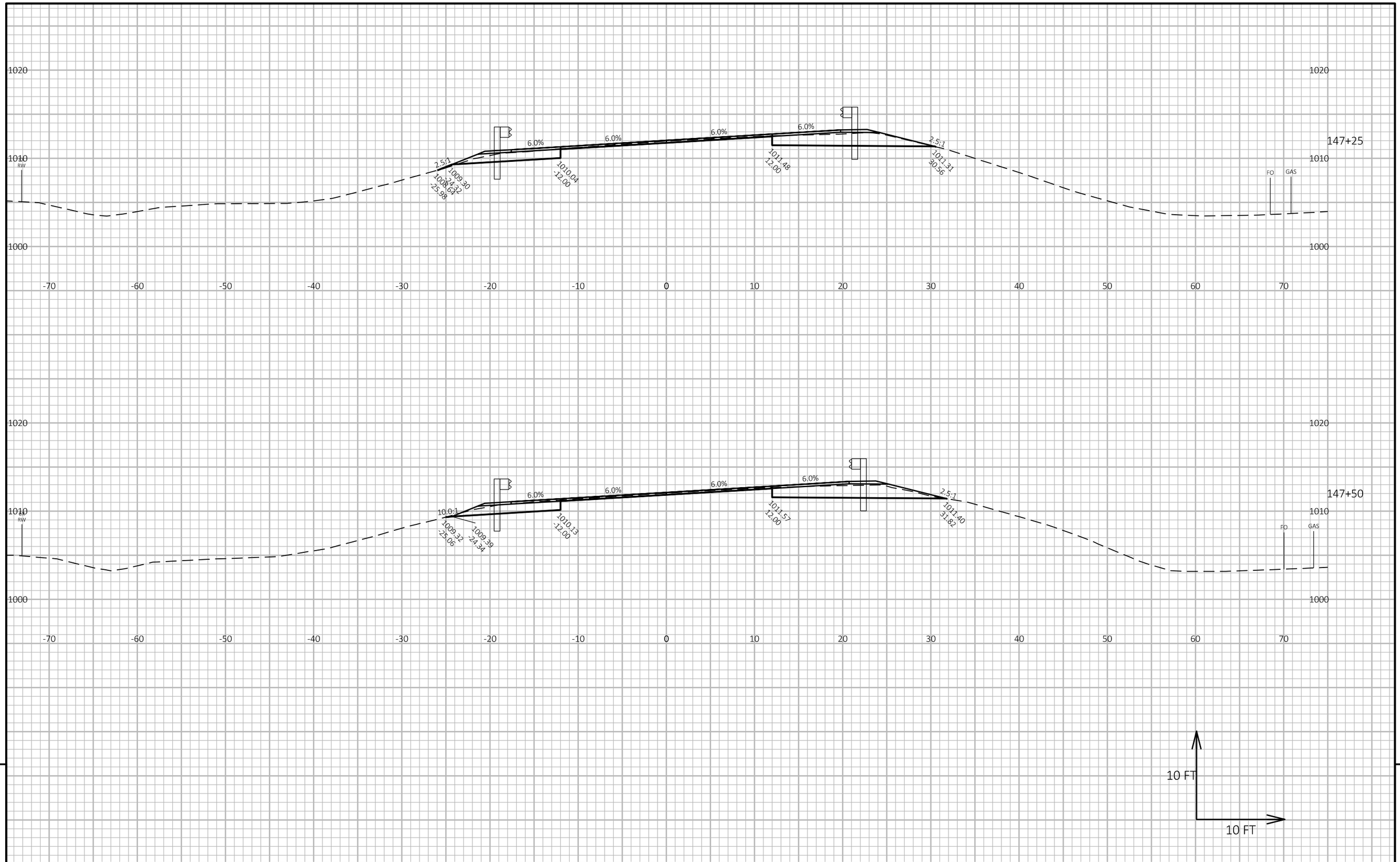
9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 396	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (13)

PLOT DATE : 7/1/2020 6:31 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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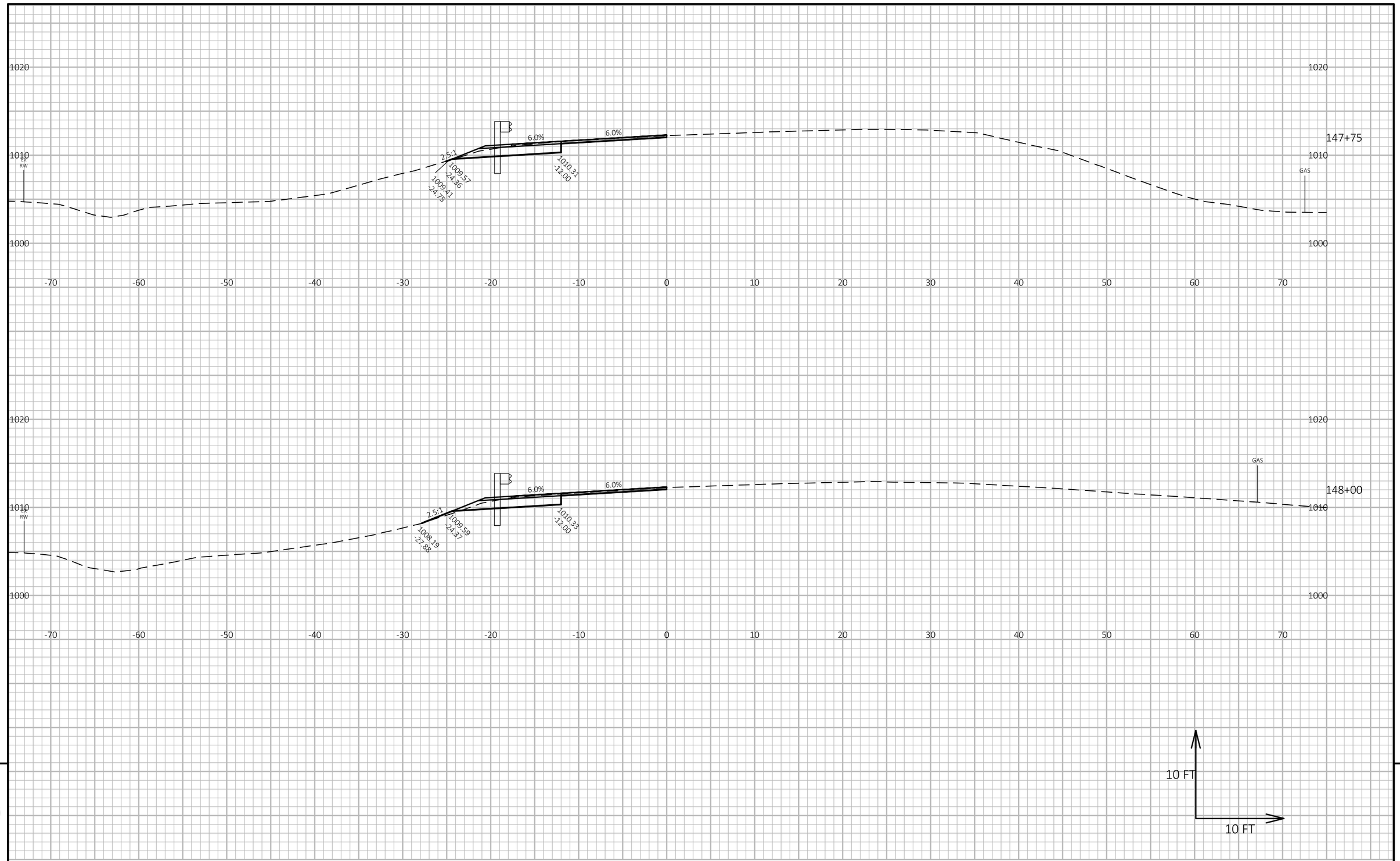
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 397	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (14)

PLOT DATE : 7/1/2020 6:31 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

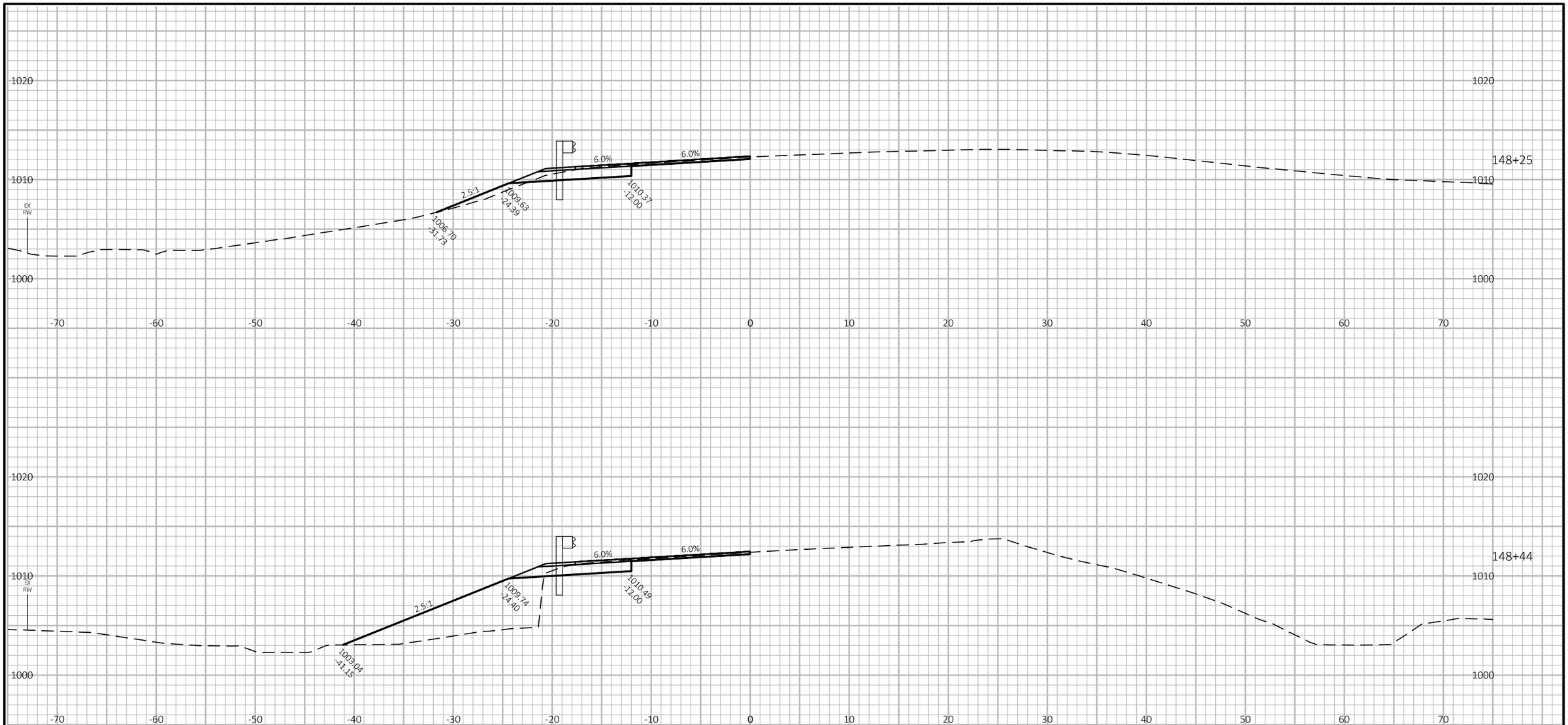


PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 398	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (15)

PLOT DATE : 7/1/2020 6:32 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

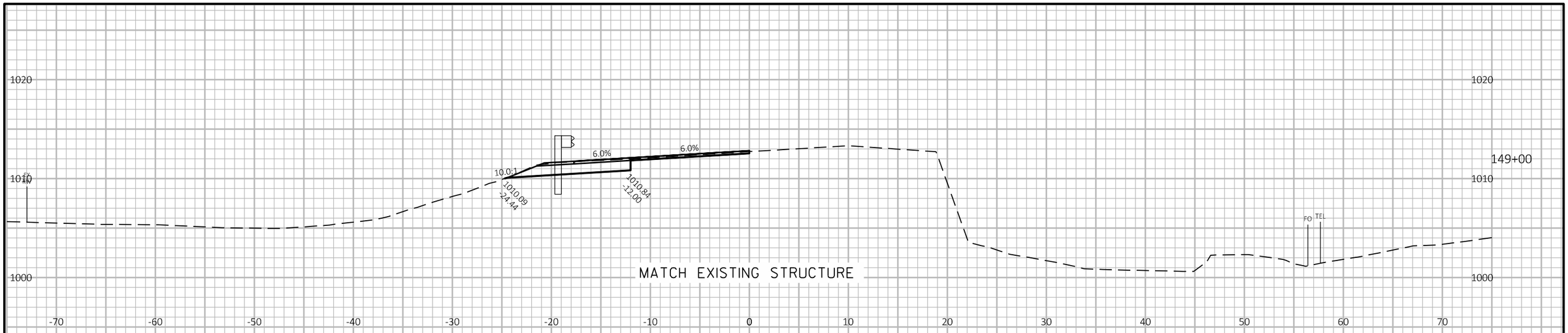
9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 399	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (16)

PLOT DATE : 7/1/2020 6:32 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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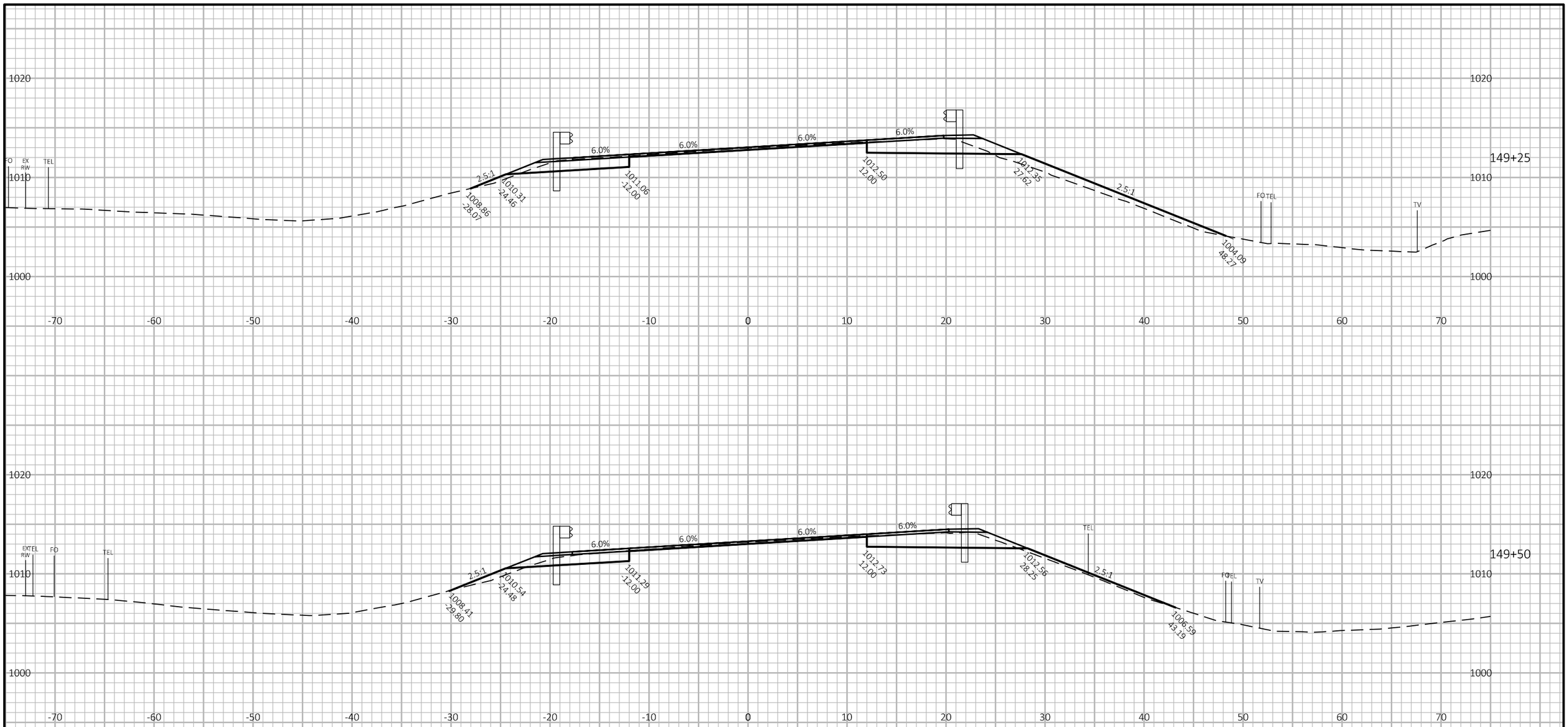
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 400	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (17)

PLOT DATE : 7/1/2020 6:32 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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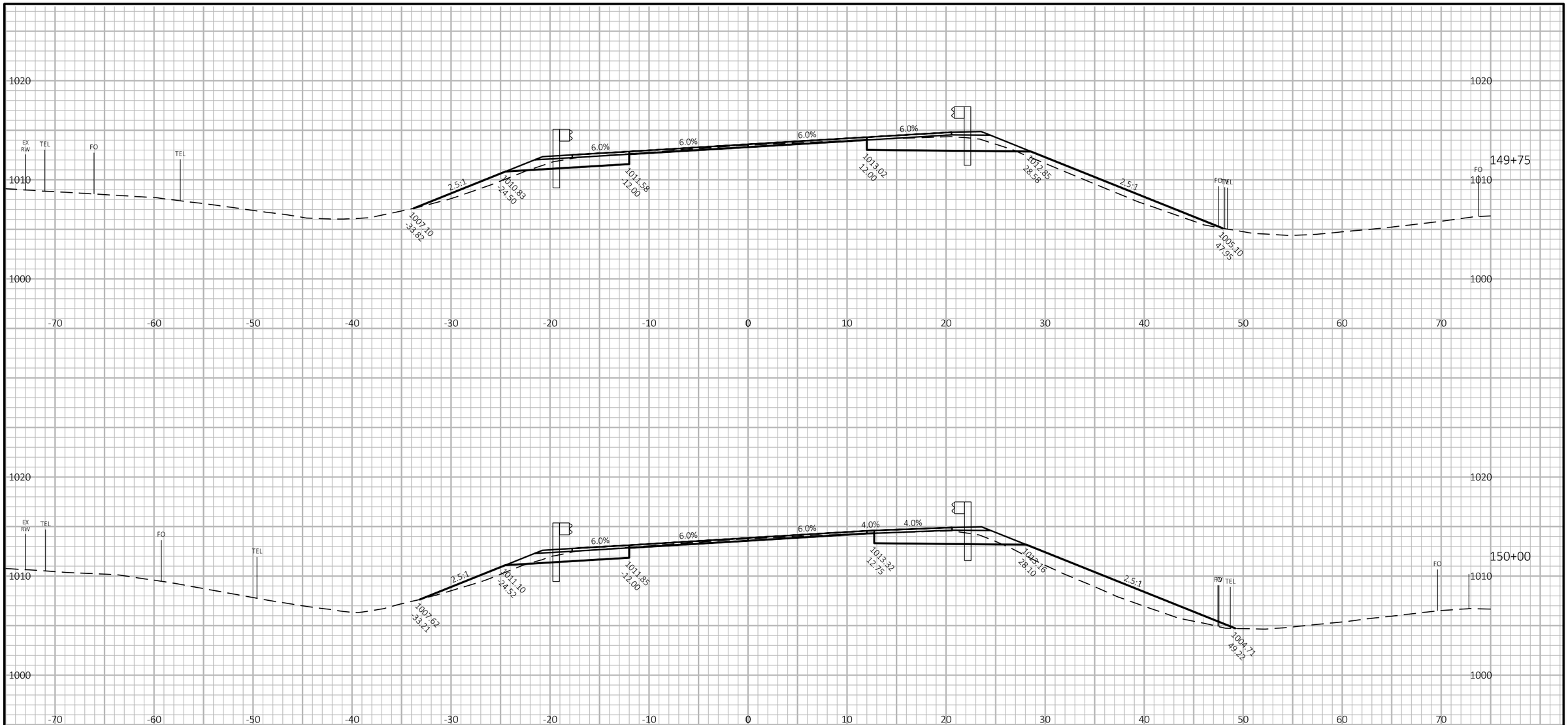
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 401	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (18)

PLOT DATE : 7/1/2020 6:32 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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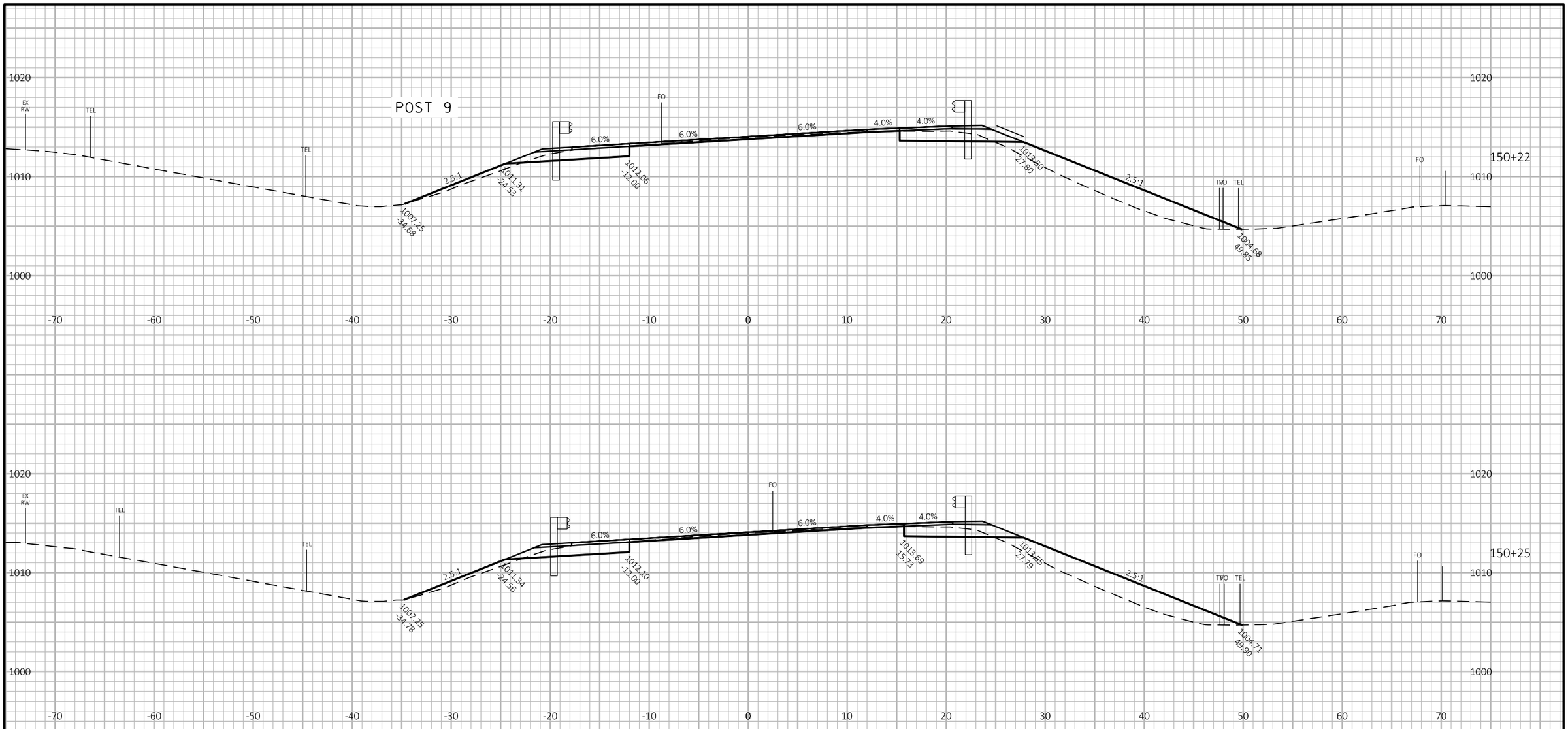
9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 402	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (19)

PLOT DATE : 7/1/2020 6:32 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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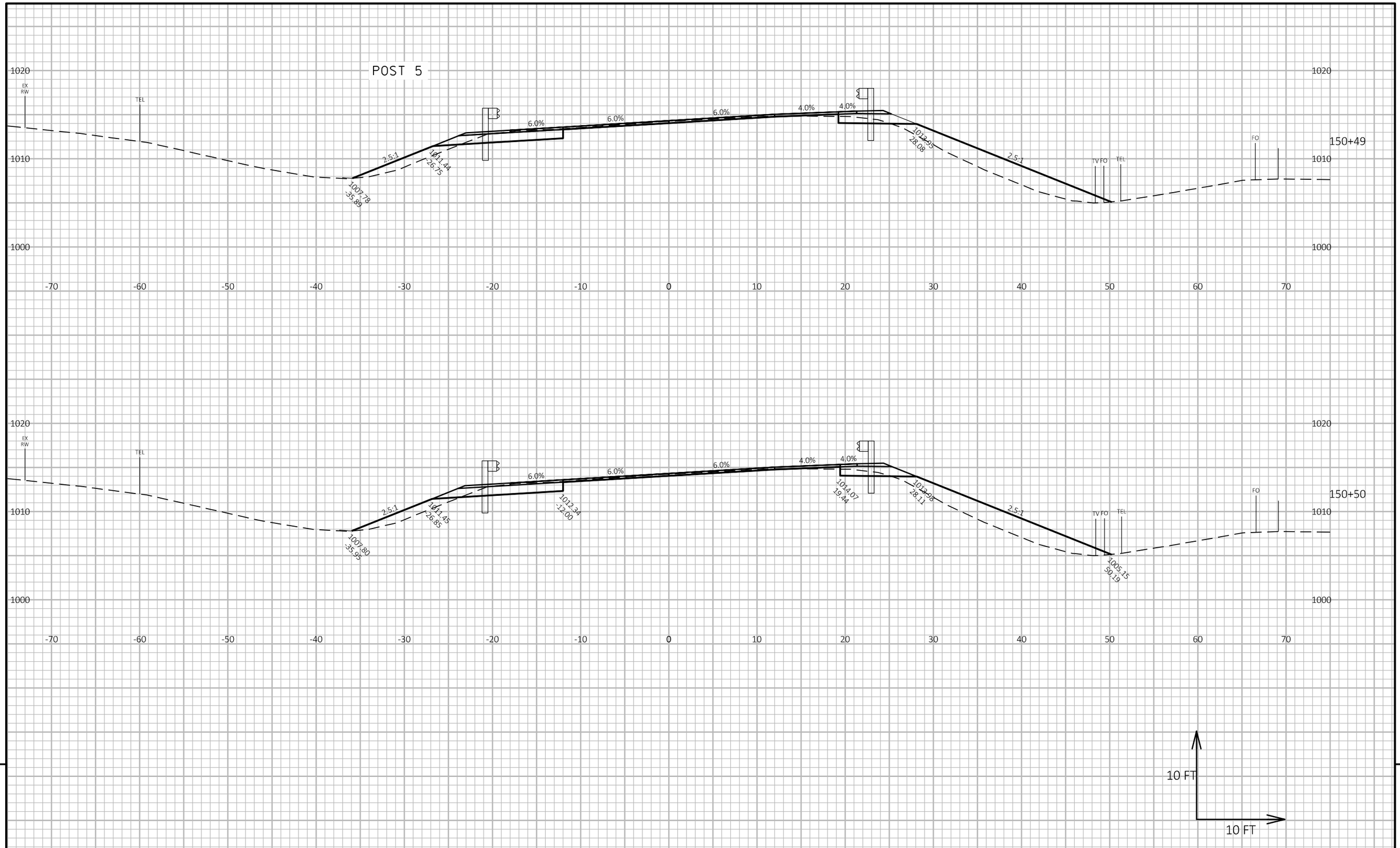
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 403	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (20)

PLOT DATE : 7/1/2020 6:33 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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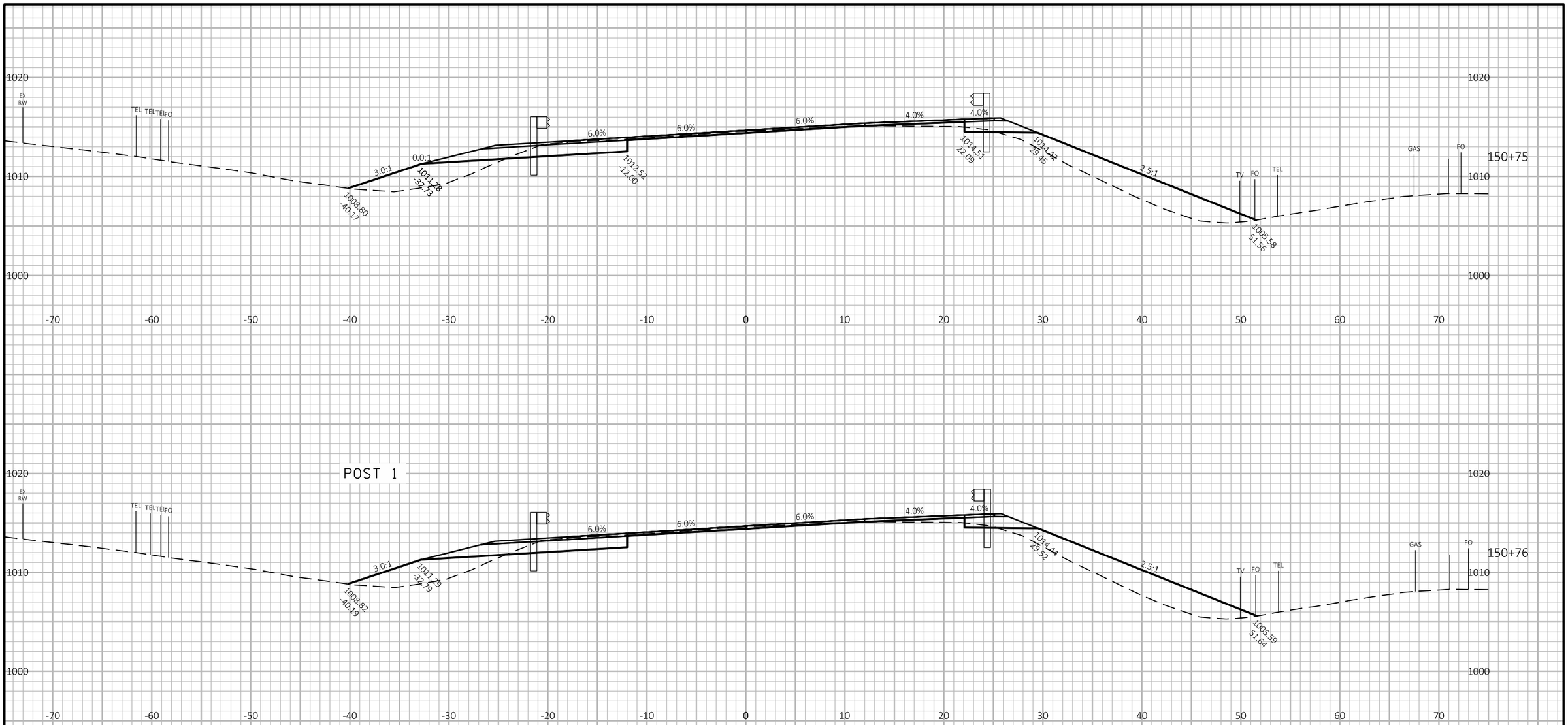
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 404	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (21)

PLOT DATE : 7/1/2020 6:33 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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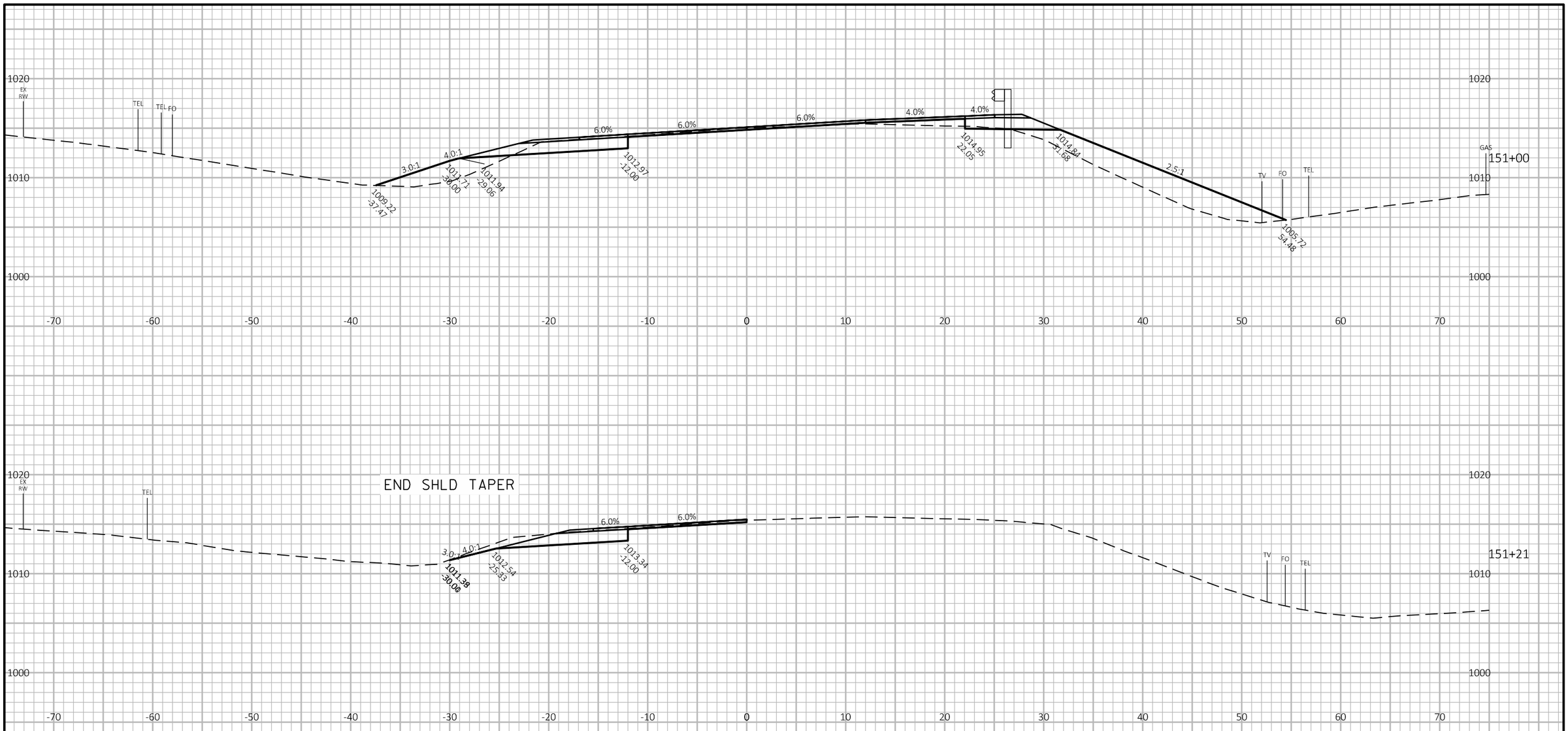
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 405	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (22)

PLOT DATE : 7/1/2020 6:33 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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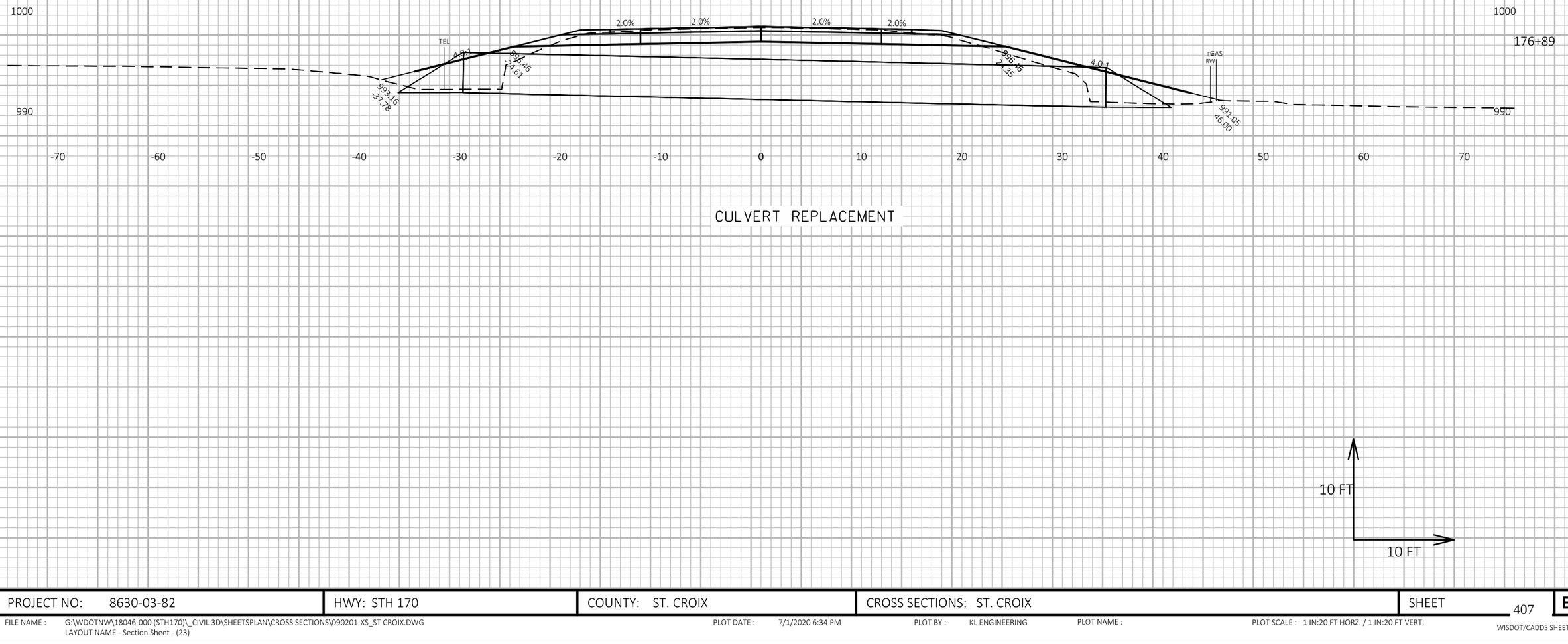
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 406	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (22.1)

PLOT DATE : 7/1/2020 6:33 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



CULVERT REPLACEMENT

9

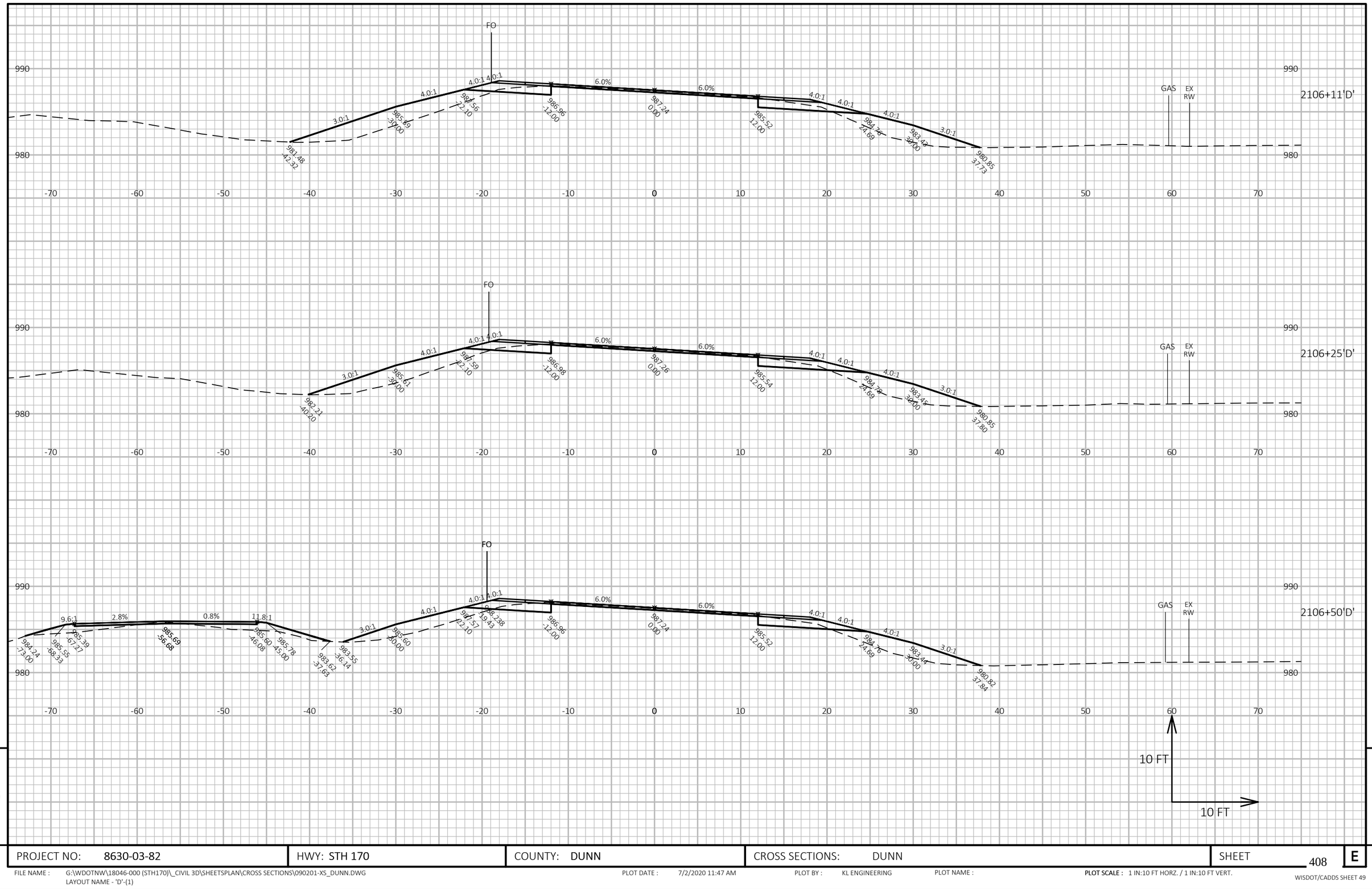
9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: ST. CROIX	CROSS SECTIONS: ST. CROIX	SHEET 407	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_ST CROIX.DWG
LAYOUT NAME - Section Sheet - (23)

PLOT DATE : 7/1/2020 6:34 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 408	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(1)

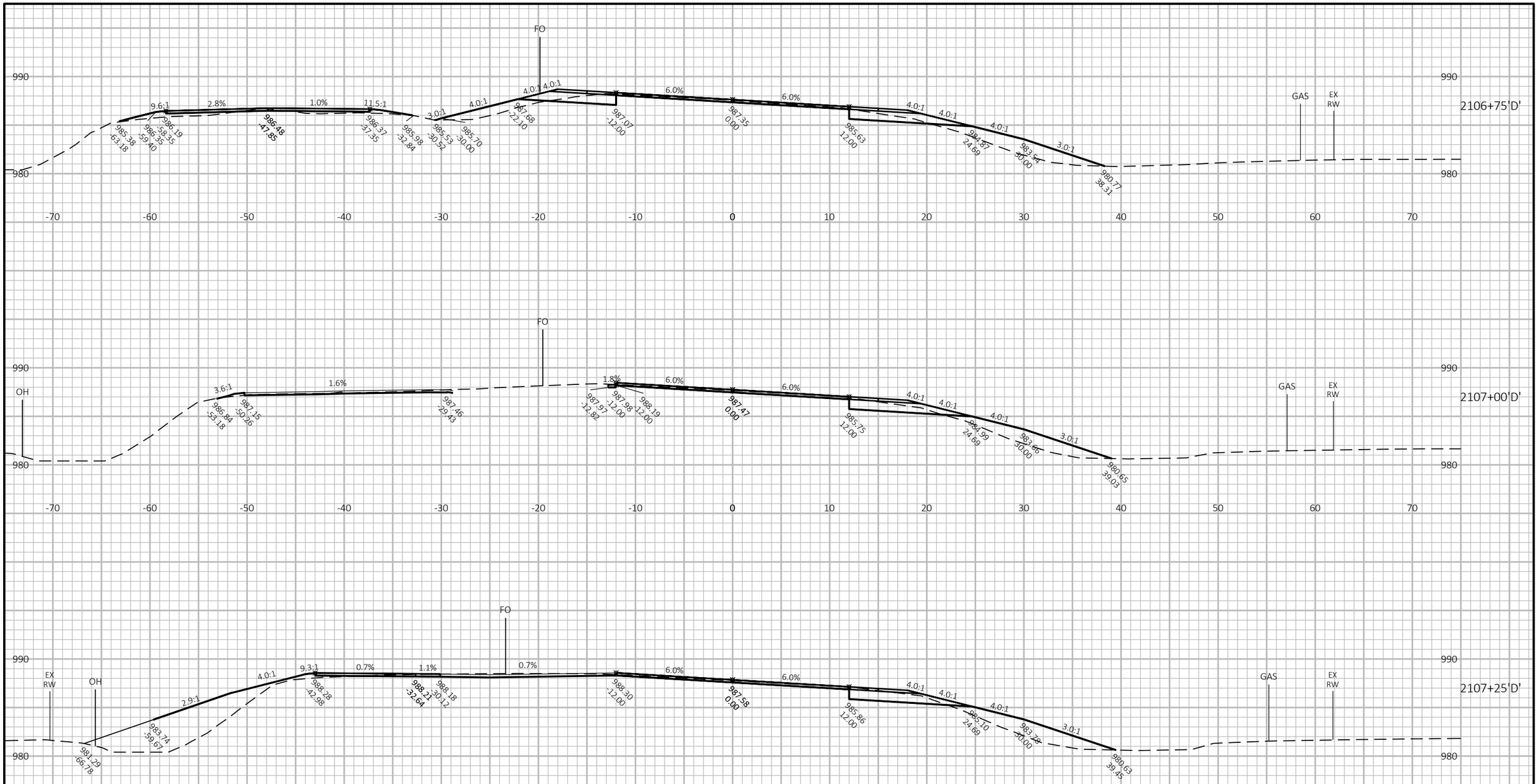
PLOT DATE : 7/2/2020 11:47 AM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 409 E

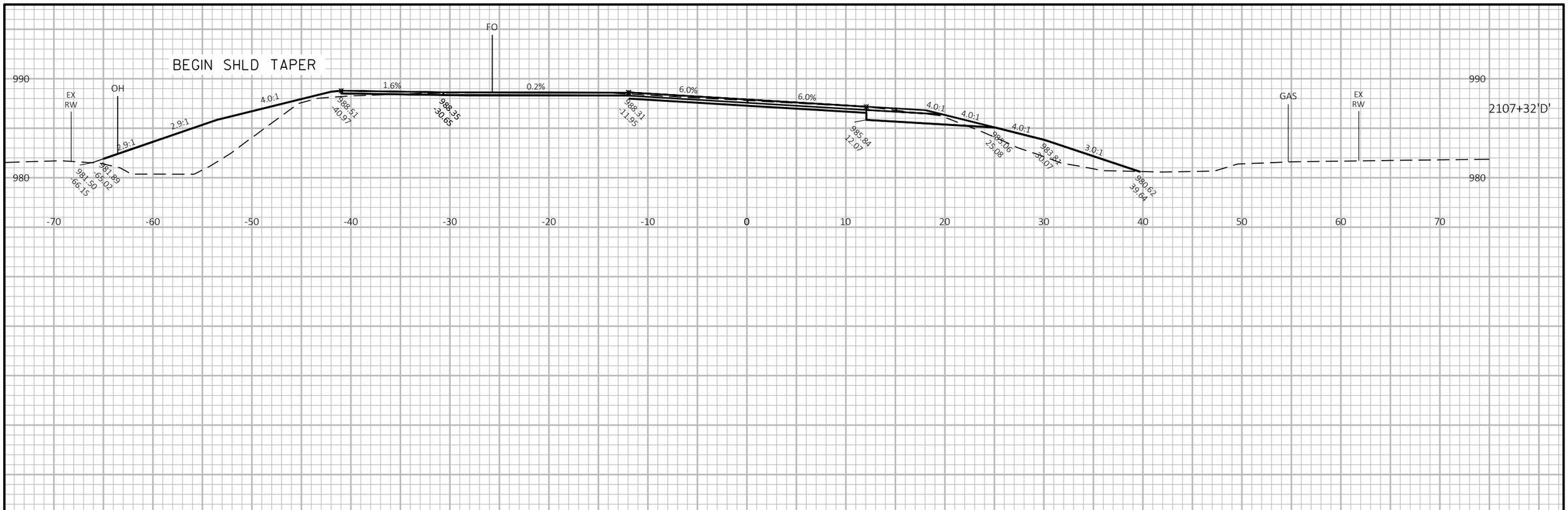
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(2)

PLOT DATE : 7/2/2020 11:48 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49

9 9



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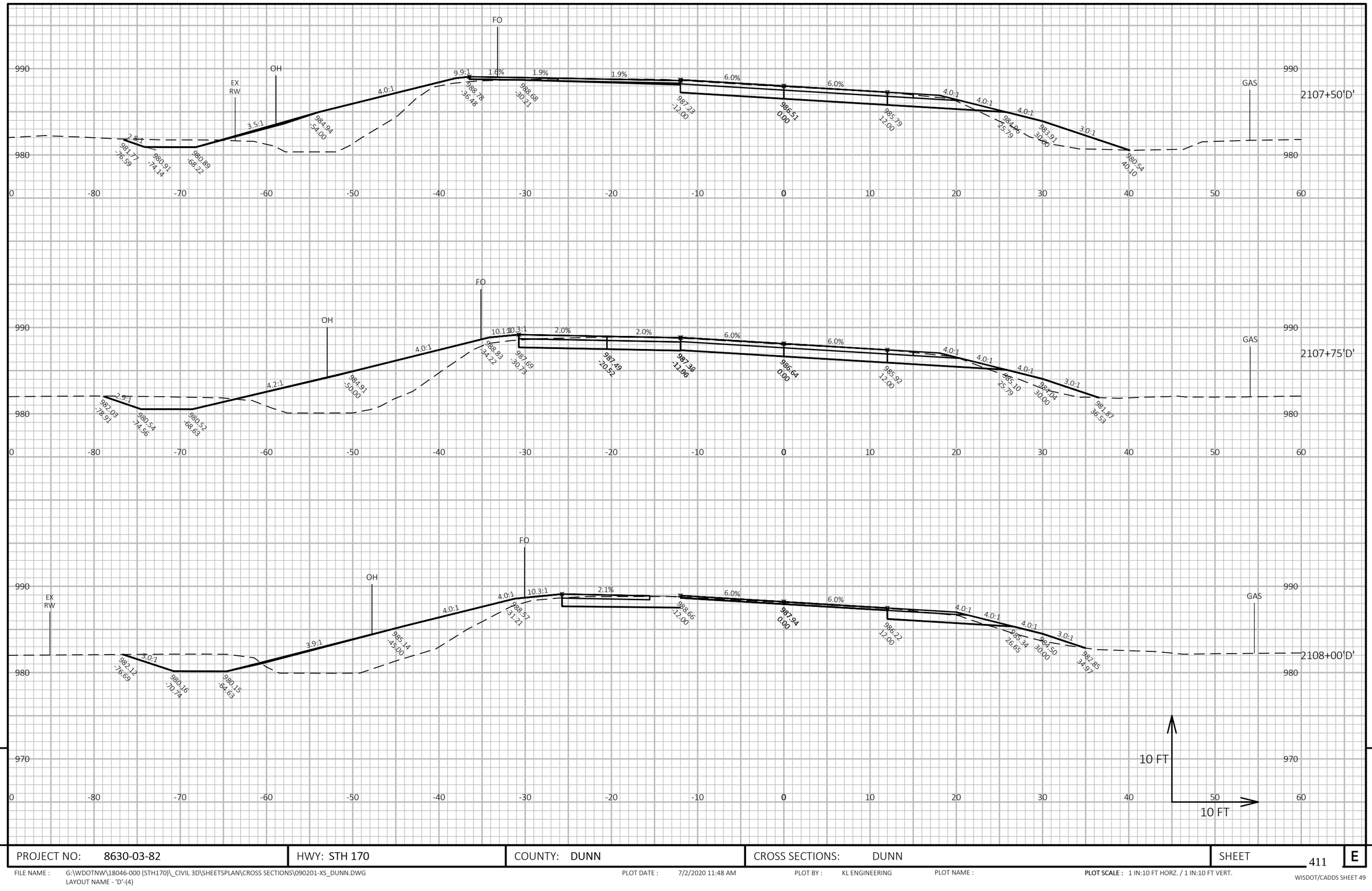
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 410	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(3)

PLOT DATE : 7/2/2020 11:48 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 411	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(4)

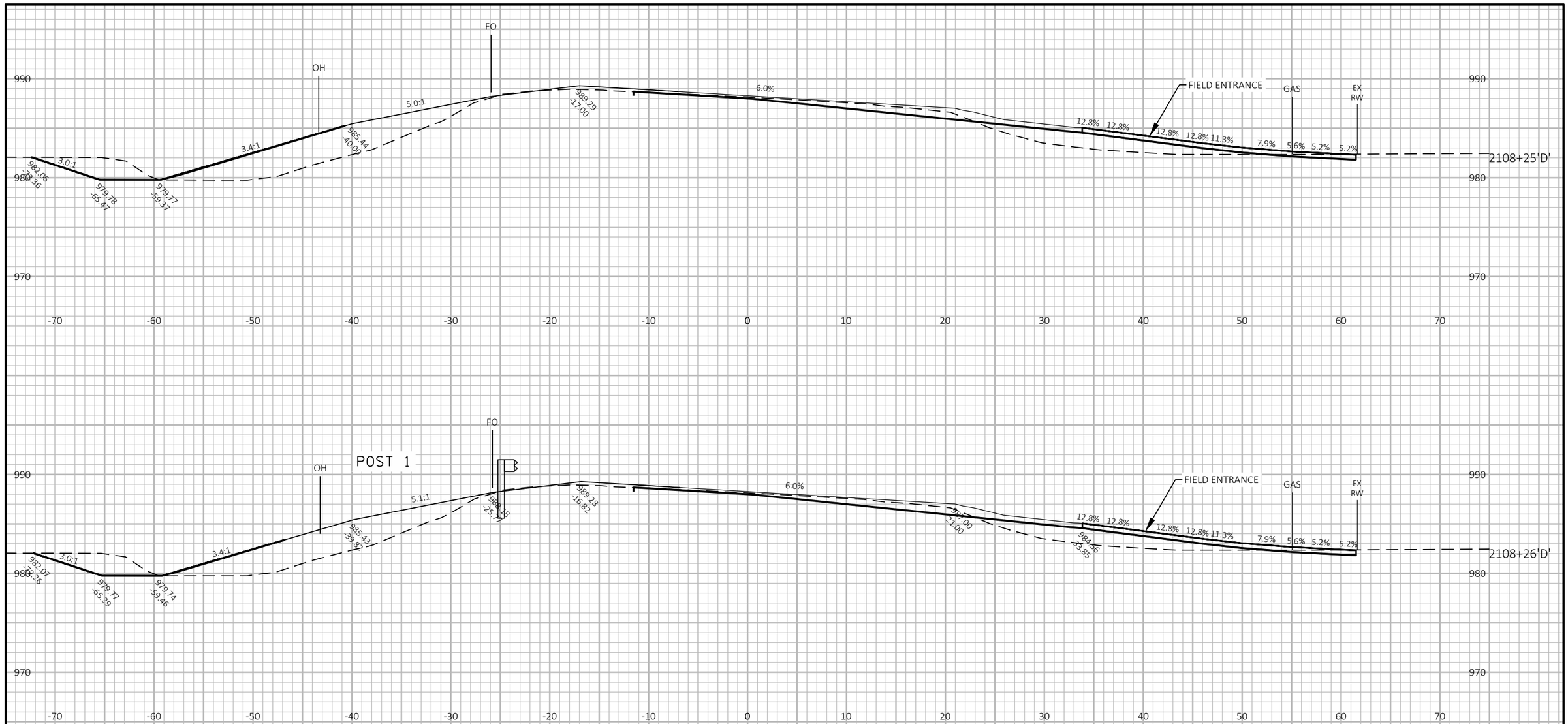
PLOT DATE : 7/2/2020 11:48 AM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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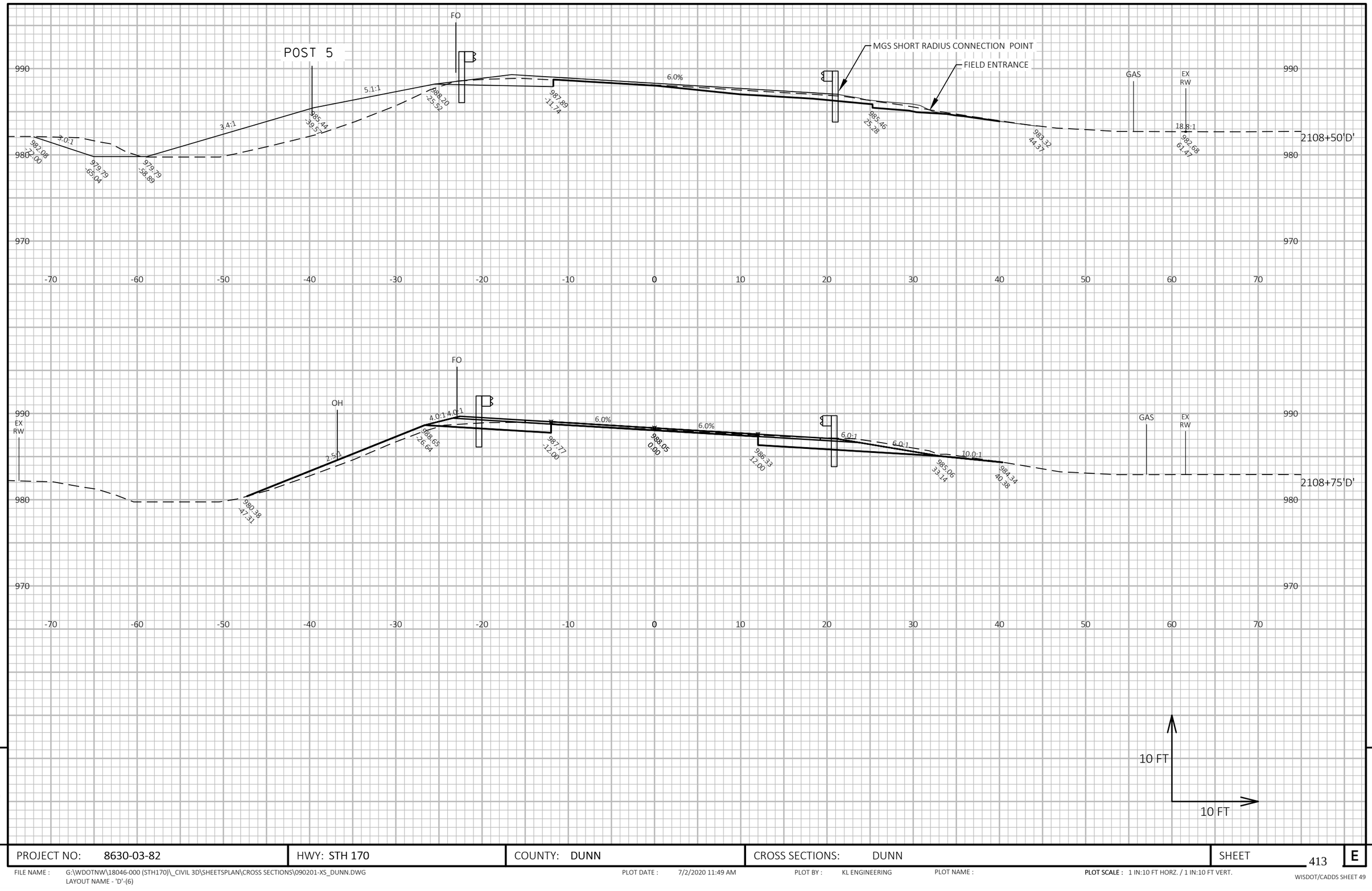
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 412	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(5)

PLOT DATE : 7/2/2020 11:48 AM PLOT BY : KL ENGINEERING PLOT NAME :

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



9

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PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 413	E

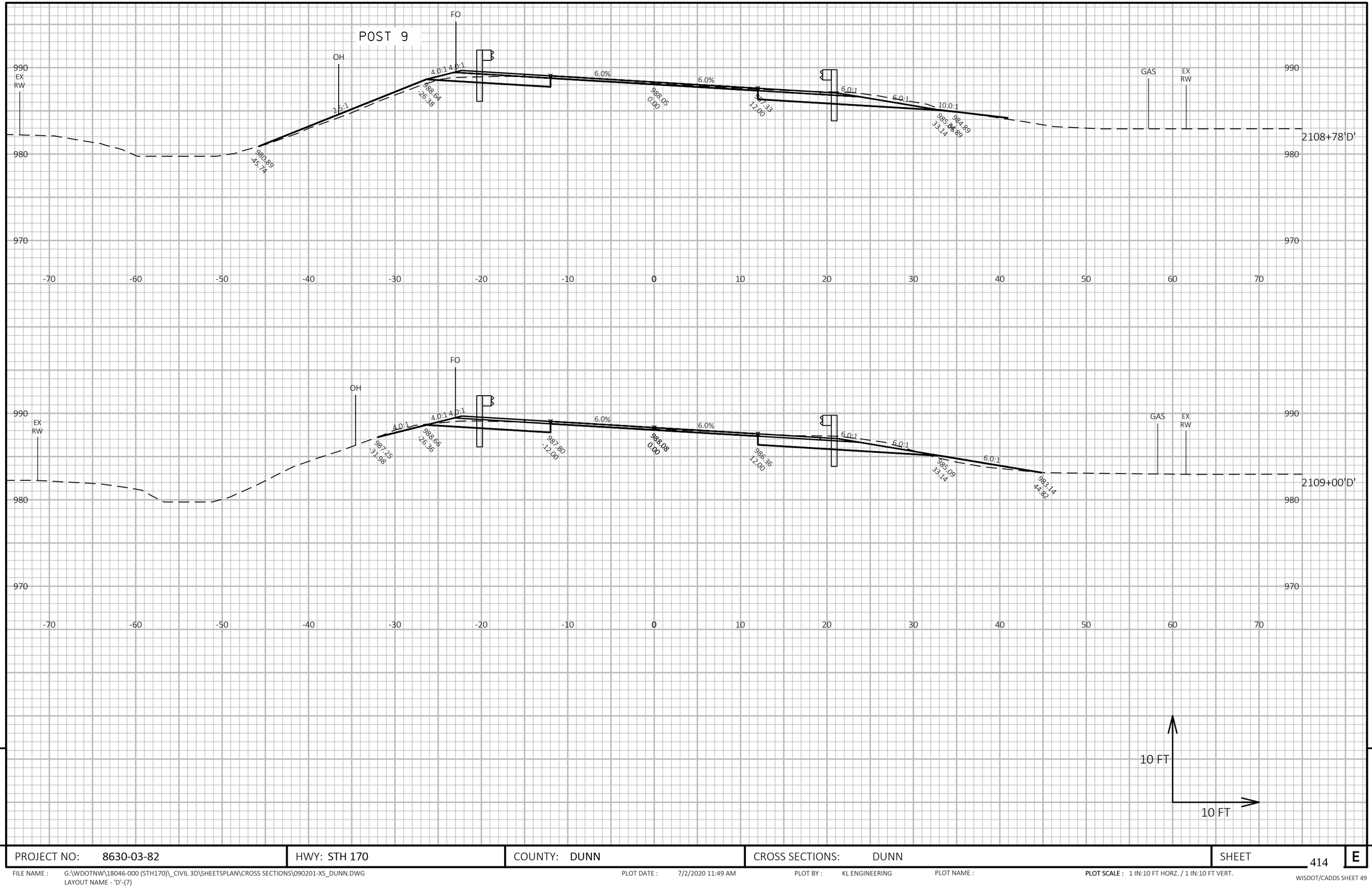
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(6)

PLOT DATE : 7/2/2020 11:49 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49

POST 9



9

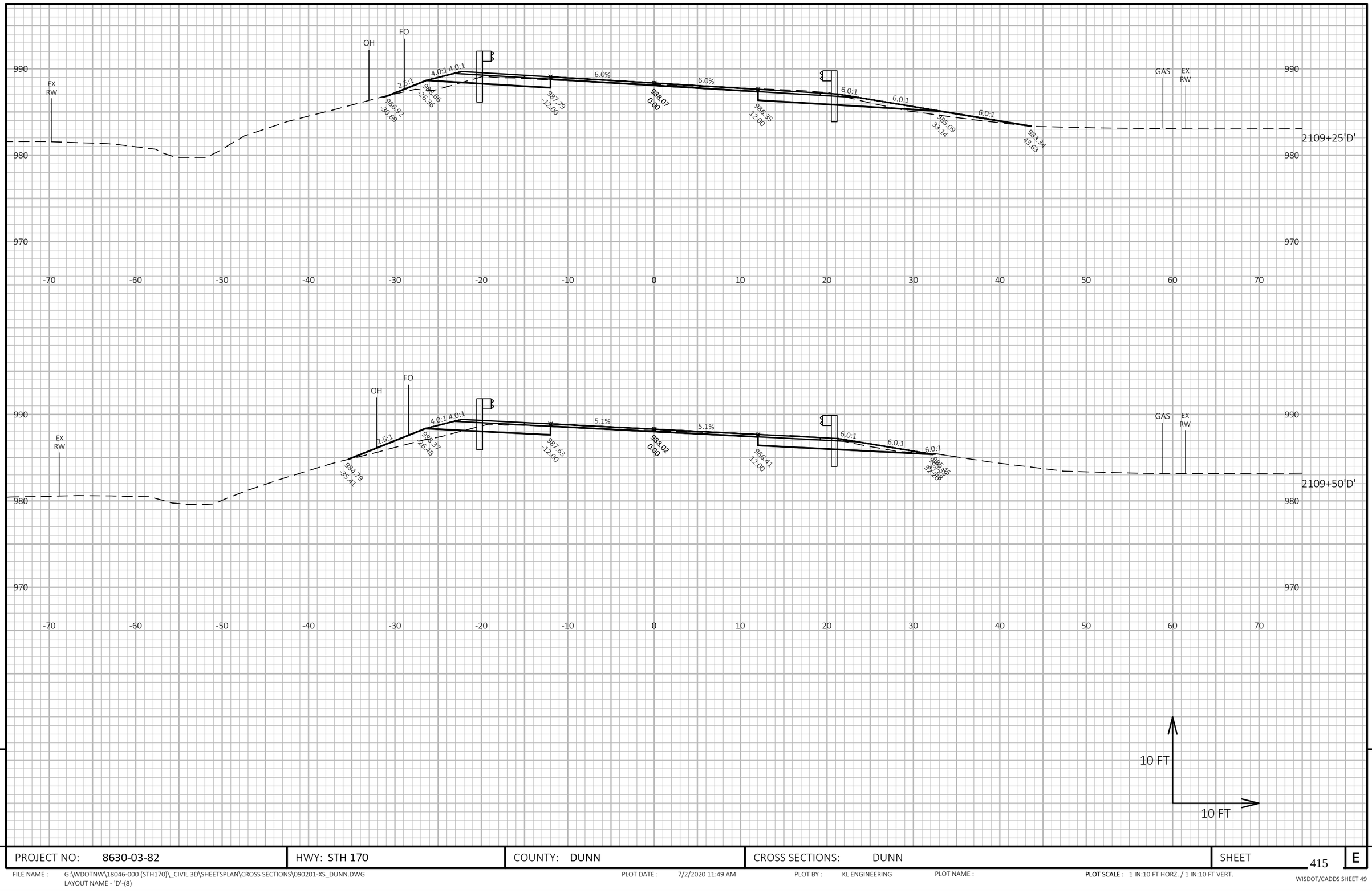
9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 414	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(7)

PLOT DATE : 7/2/2020 11:49 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

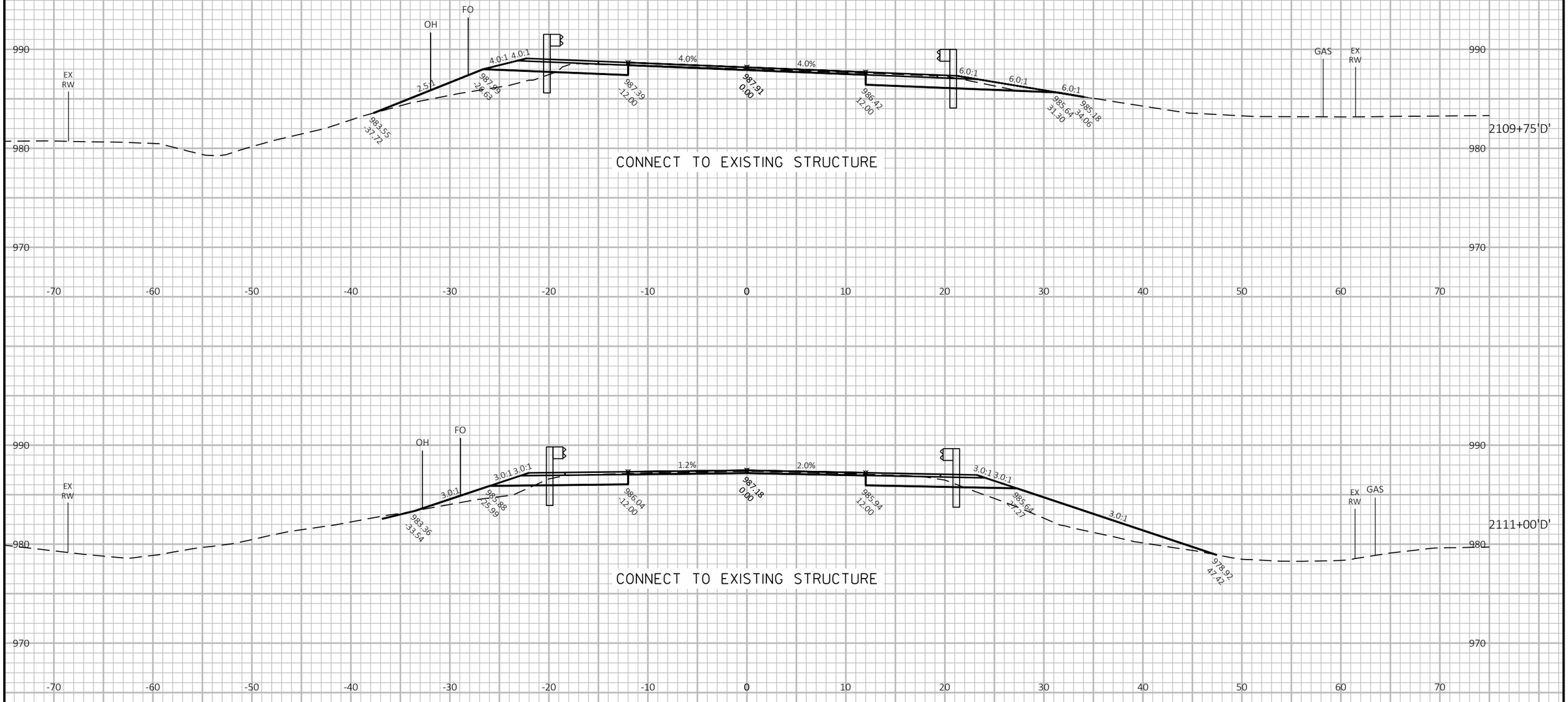
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 415	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(8)

PLOT DATE : 7/2/2020 11:49 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



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9

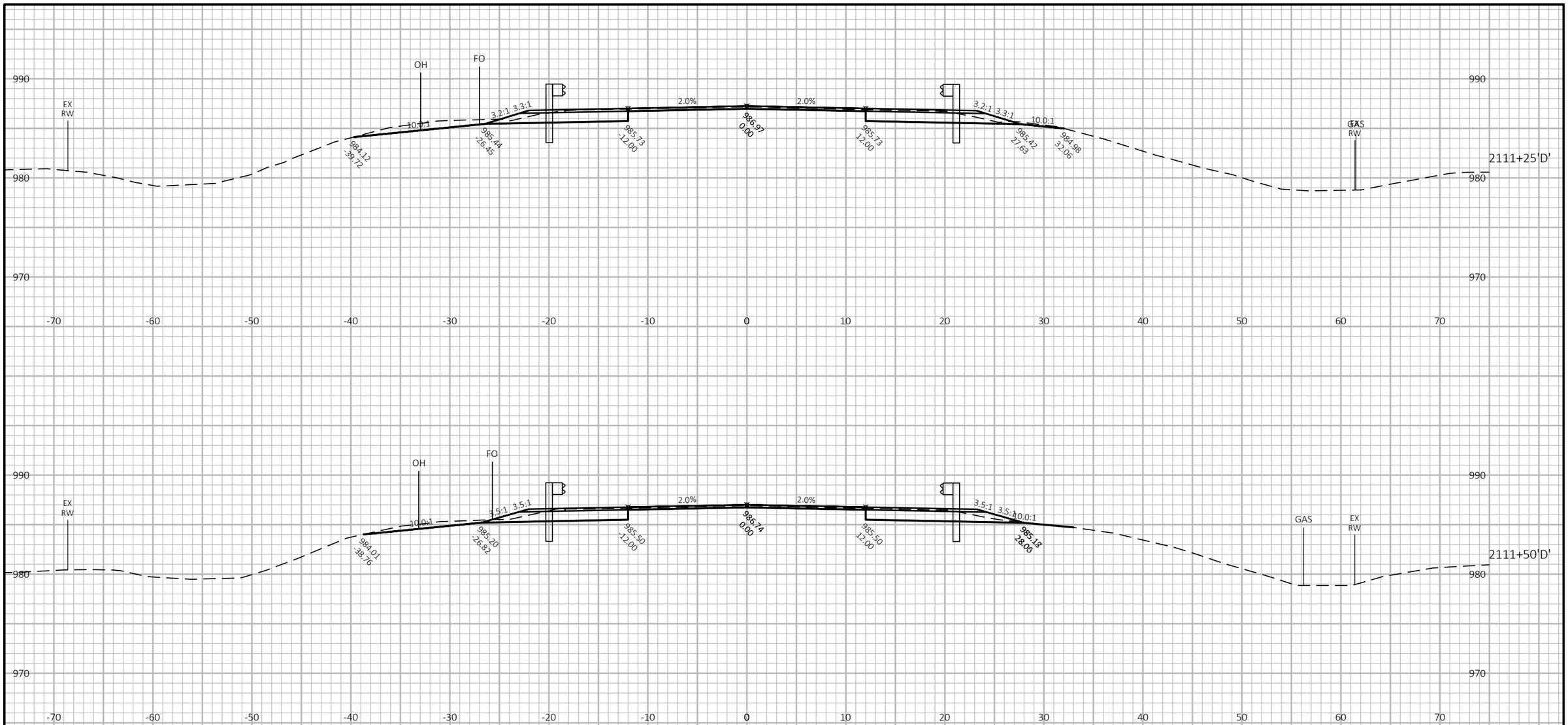
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 416	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(9)

PLOT DATE : 7/2/2020 11:49 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



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9

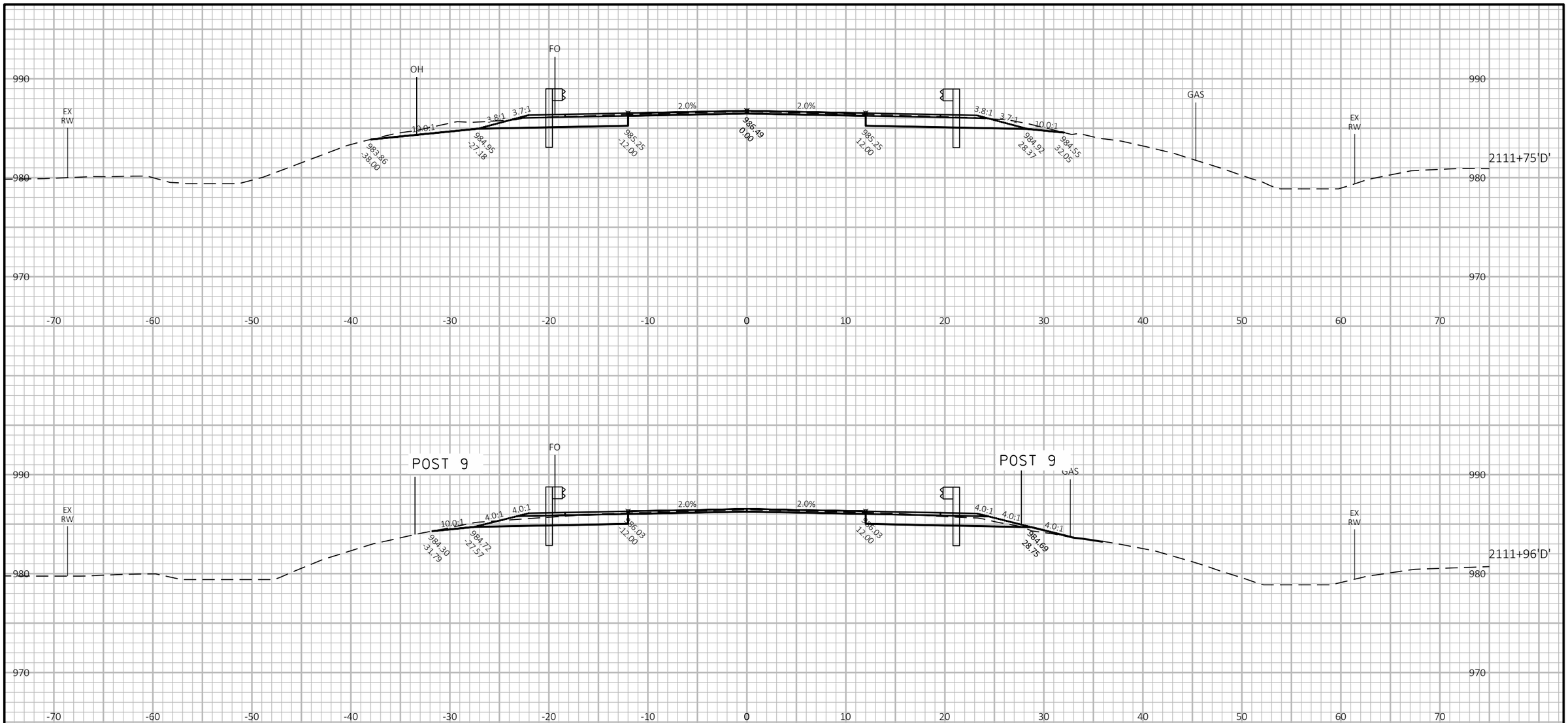
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 417	E

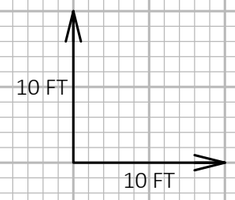
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(10)

PLOT DATE : 7/2/2020 11:50 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49





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PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 418	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(11)

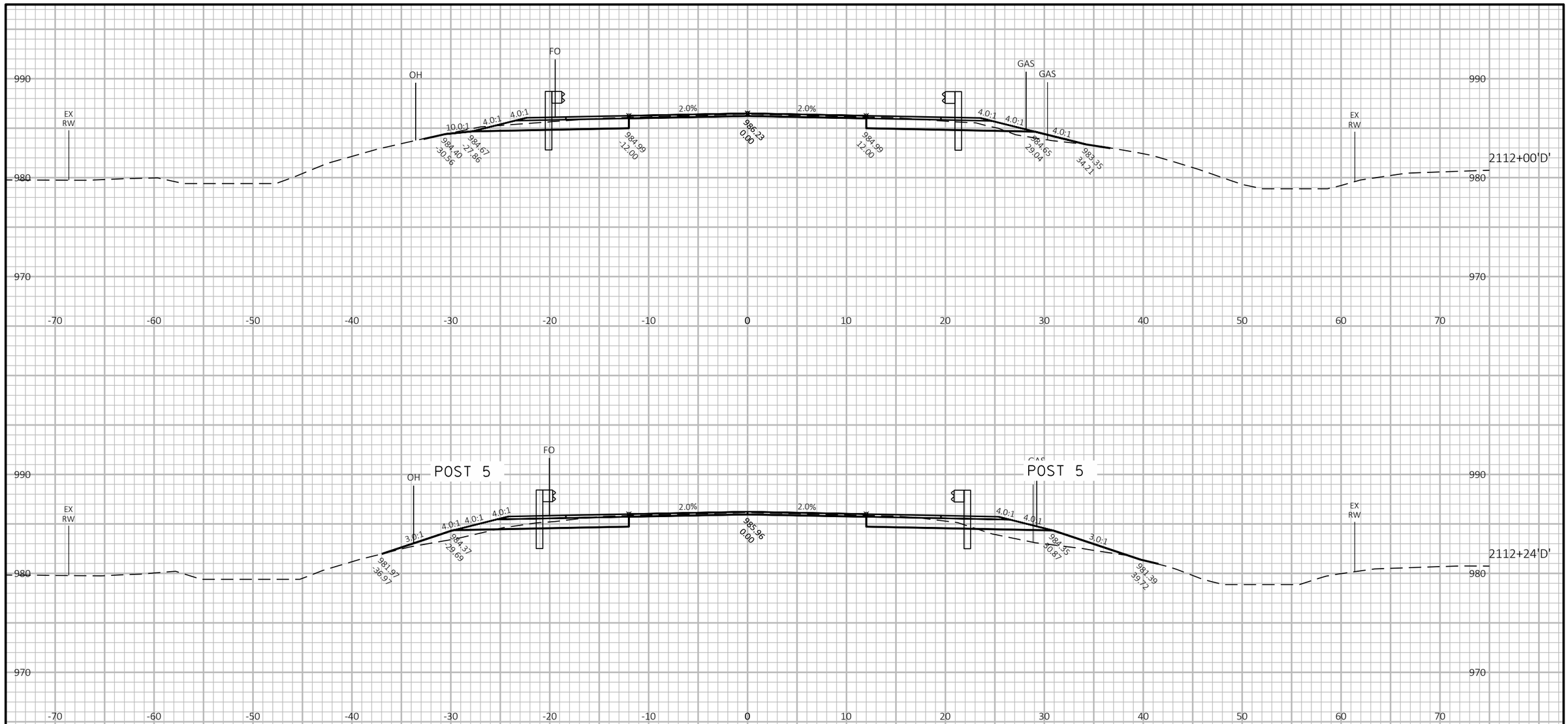
PLOT DATE : 7/2/2020 11:50 AM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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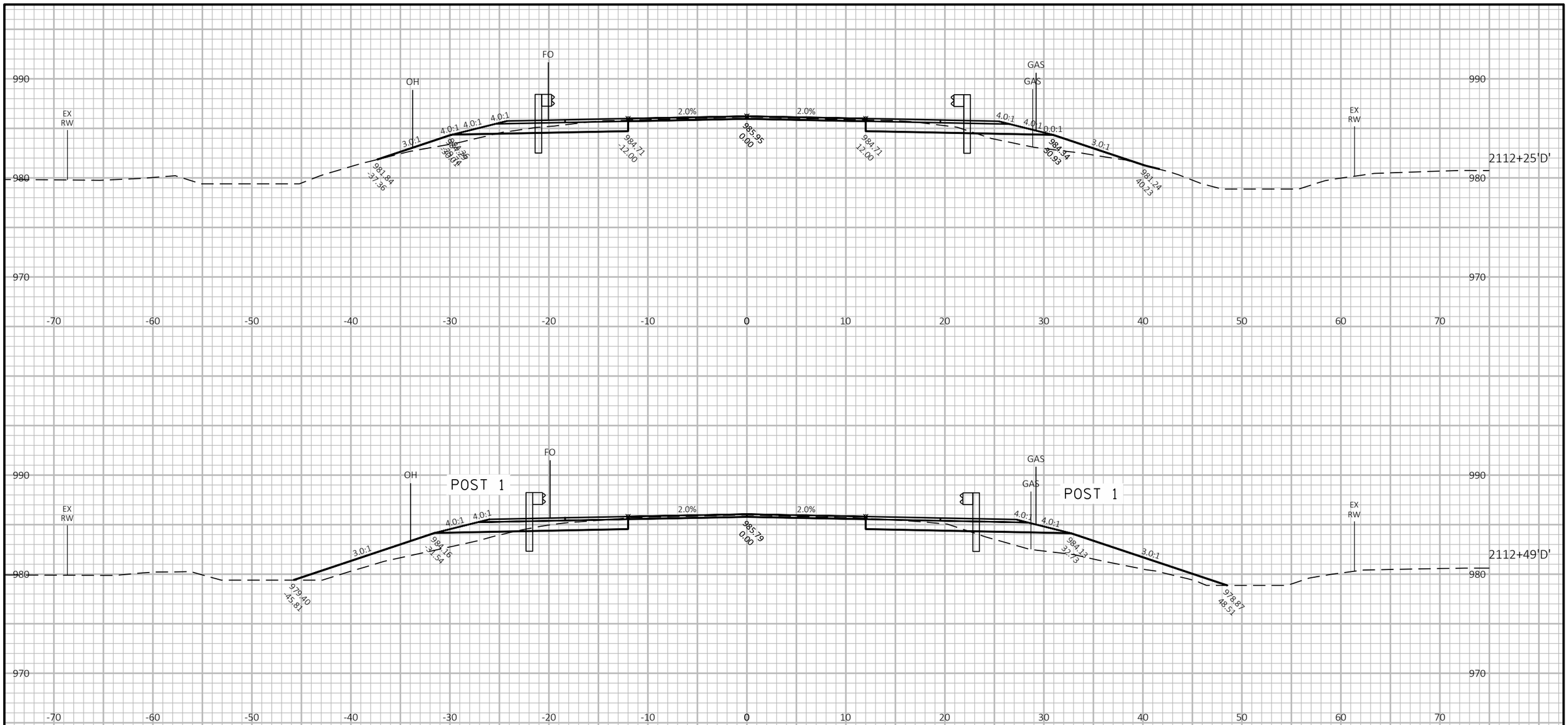
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 419	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(12)

PLOT DATE : 7/2/2020 11:50 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

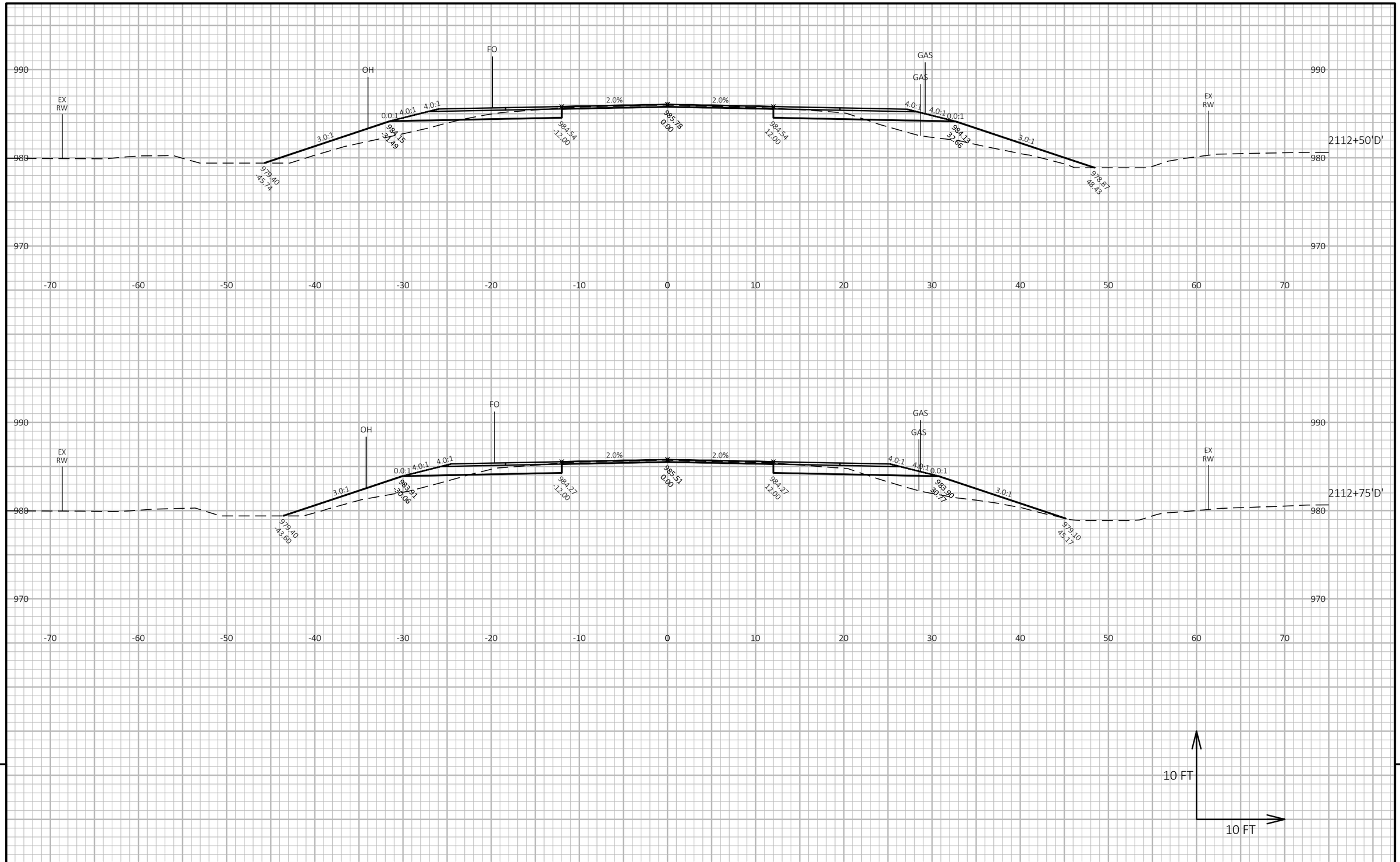


PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 420 E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(13)

PLOT DATE : 7/2/2020 11:50 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 421	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(14)

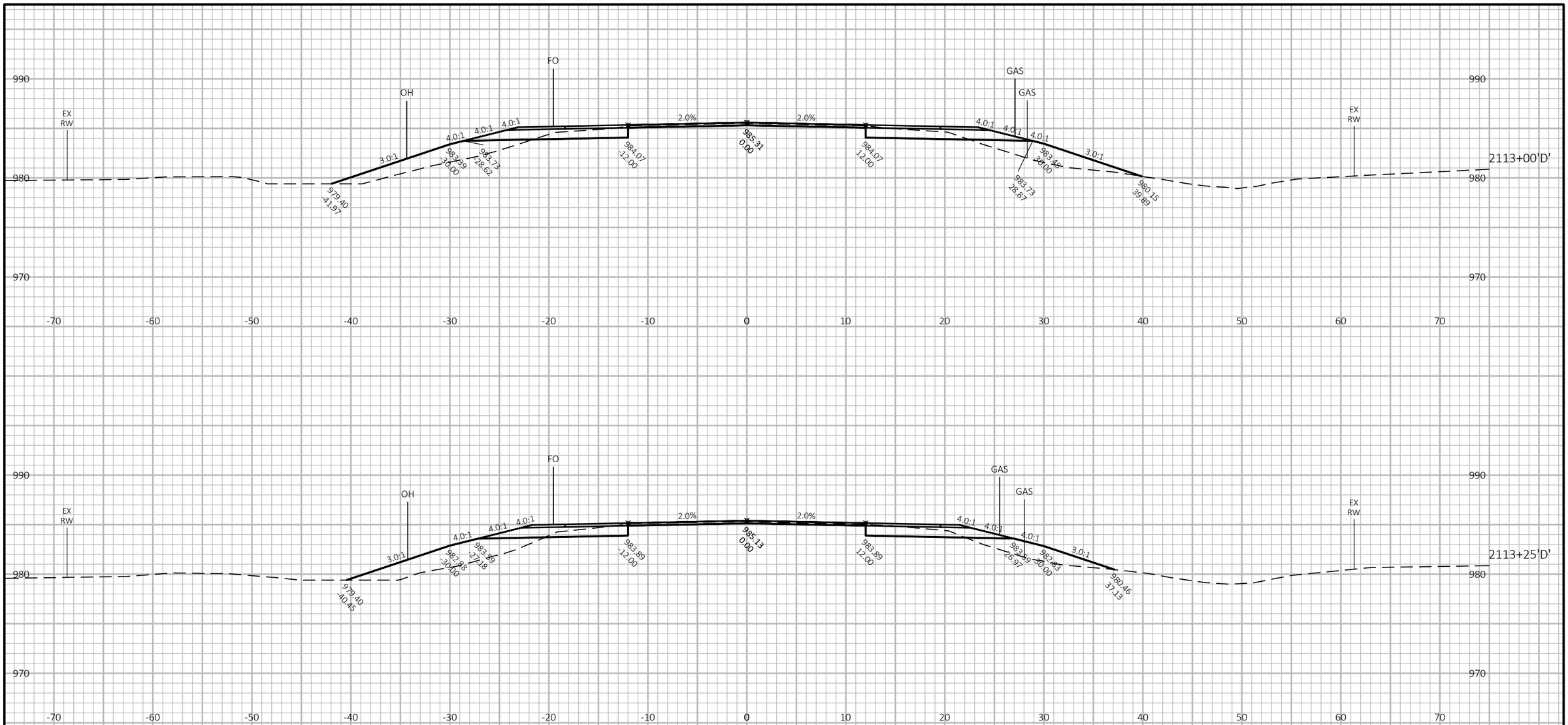
PLOT DATE : 7/2/2020 11:51 AM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



10 FT

10 FT

9

9

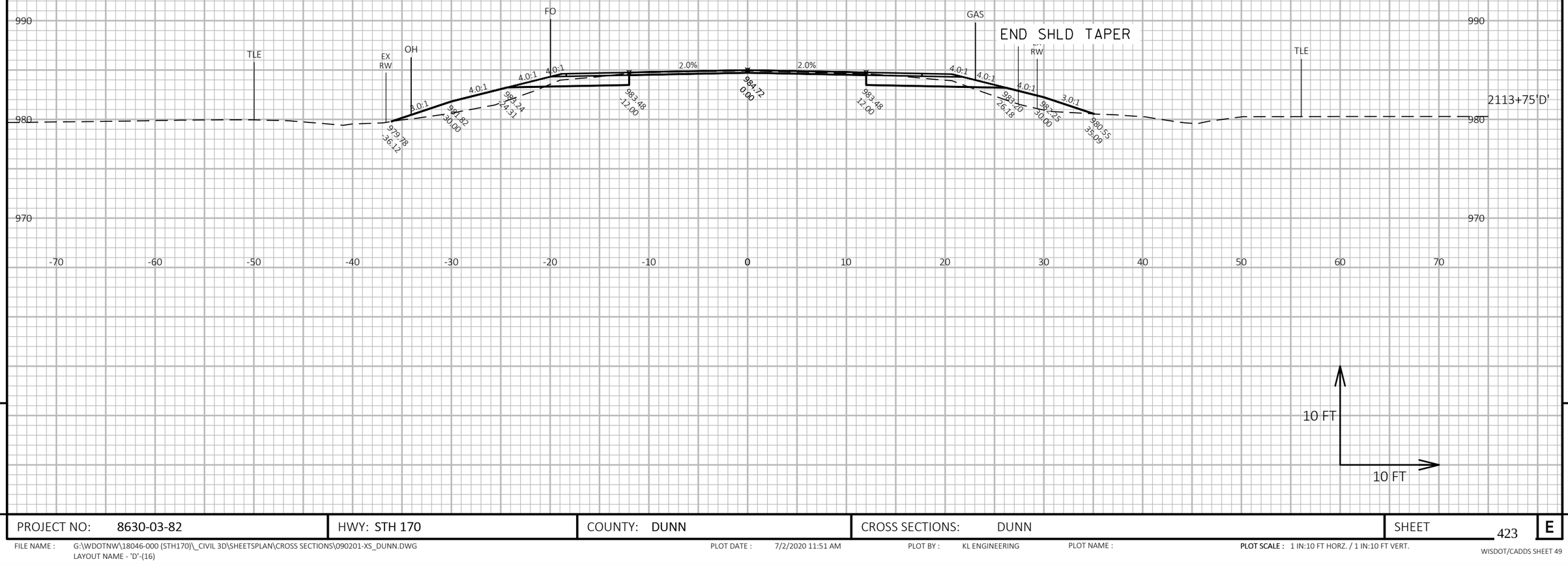
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 422	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(15)

PLOT DATE : 7/2/2020 11:51 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 423	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(16)

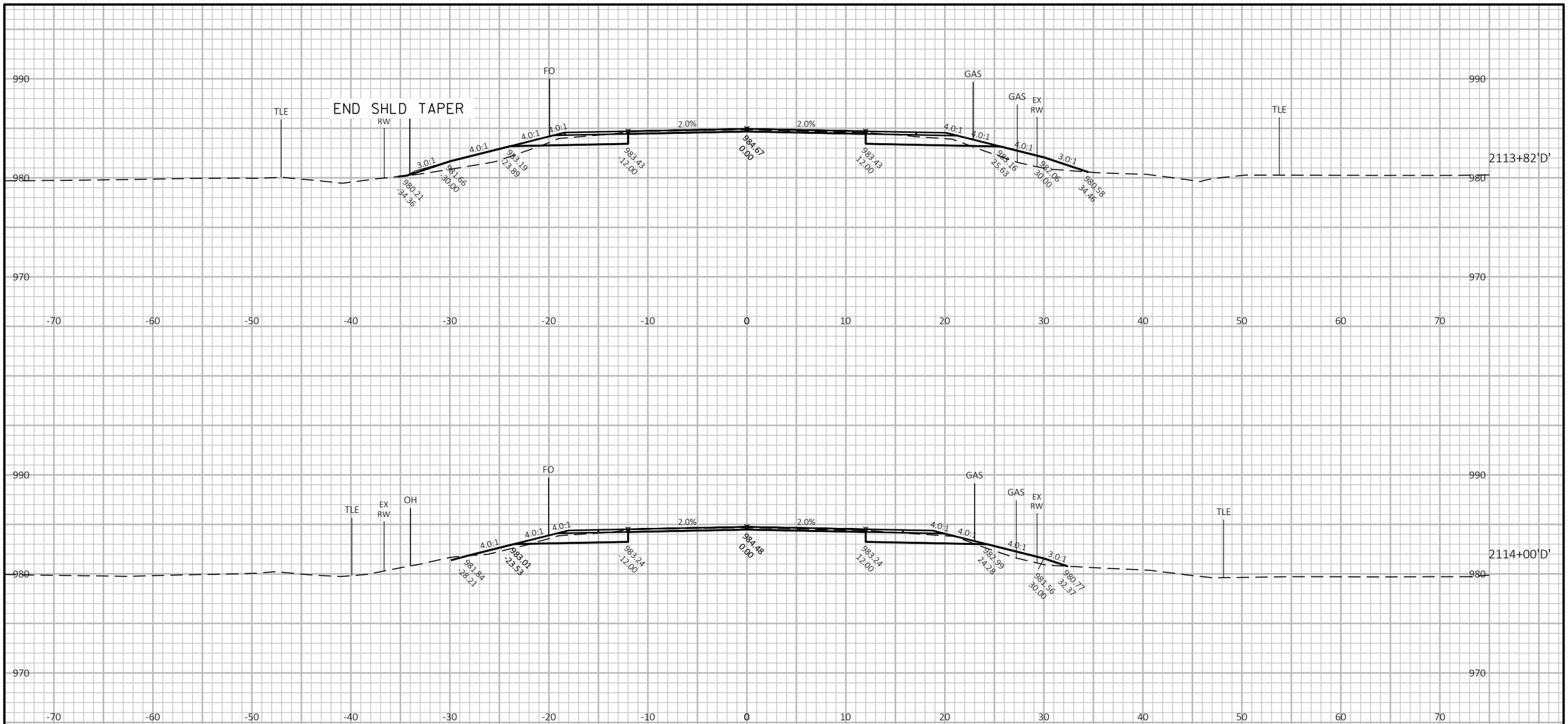
PLOT DATE : 7/2/2020 11:51 AM

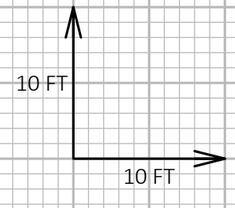
PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49





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9

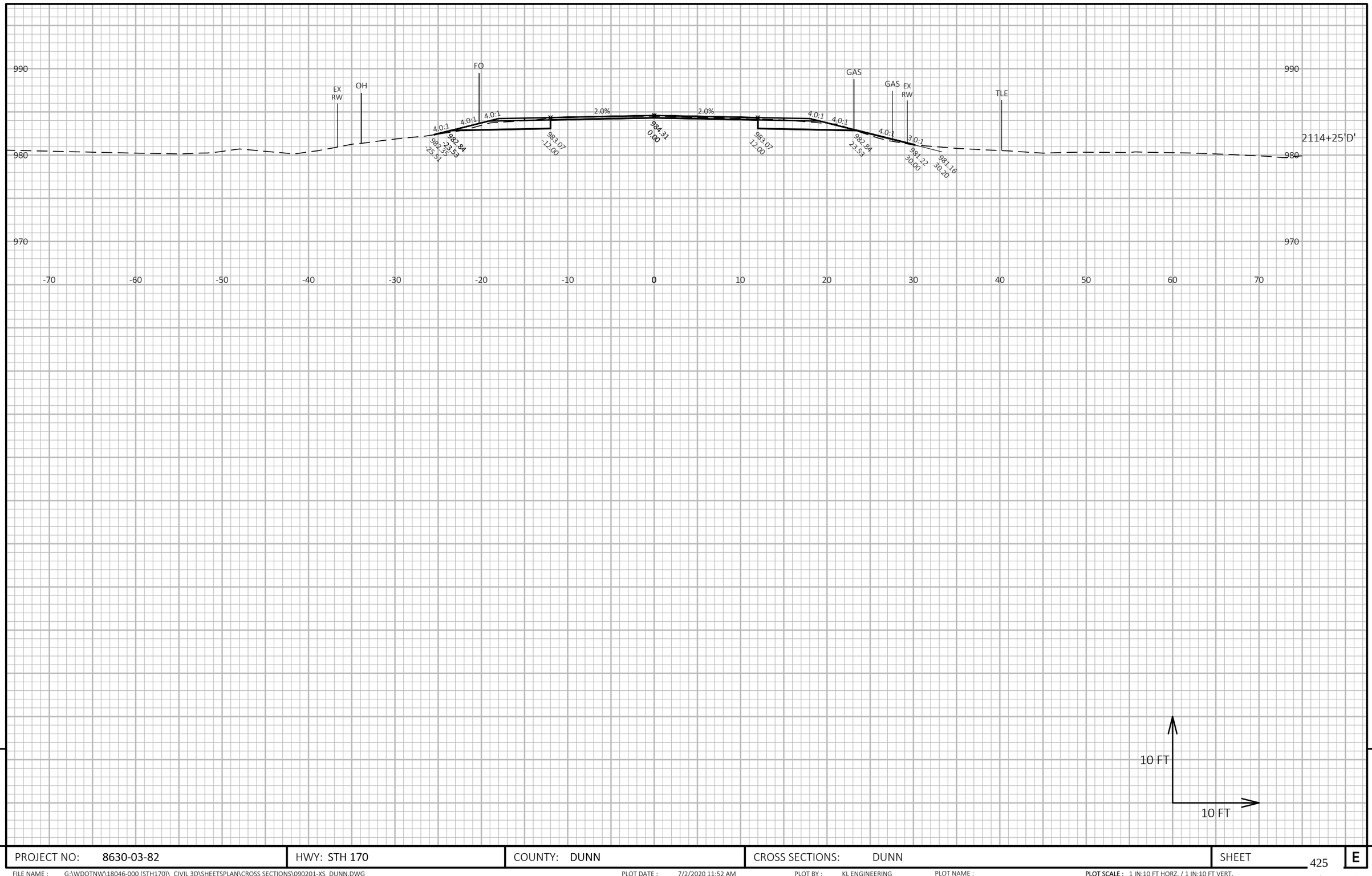
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 424	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D-(17)

PLOT DATE : 7/2/2020 11:51 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

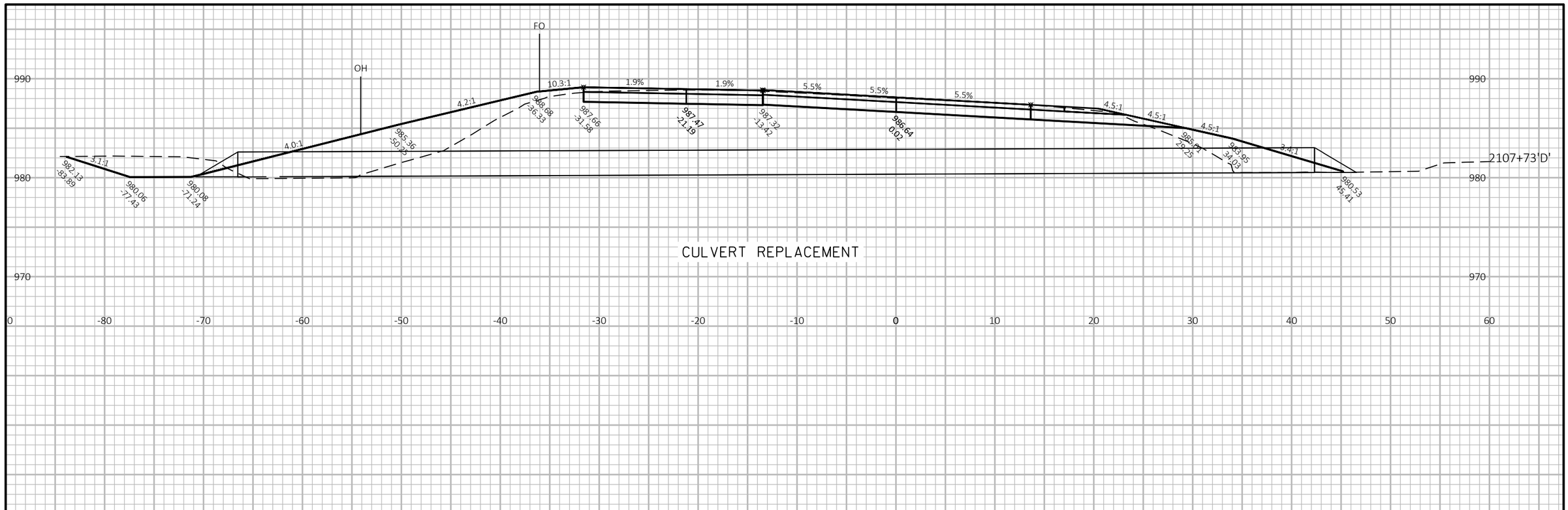
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 425	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(18)

PLOT DATE : 7/2/2020 11:52 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 426	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(19)

PLOT DATE : 7/2/2020 11:52 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49

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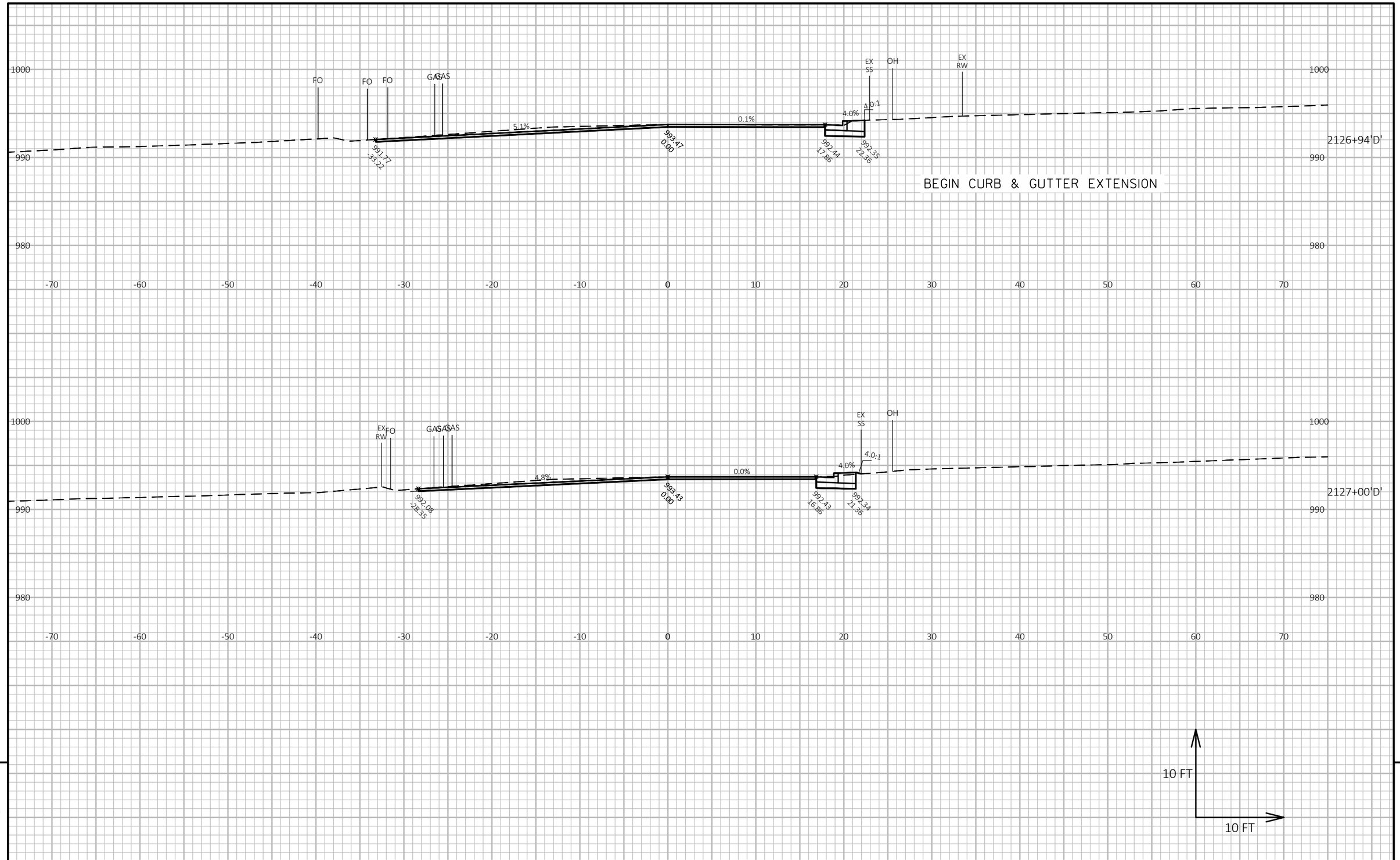

9

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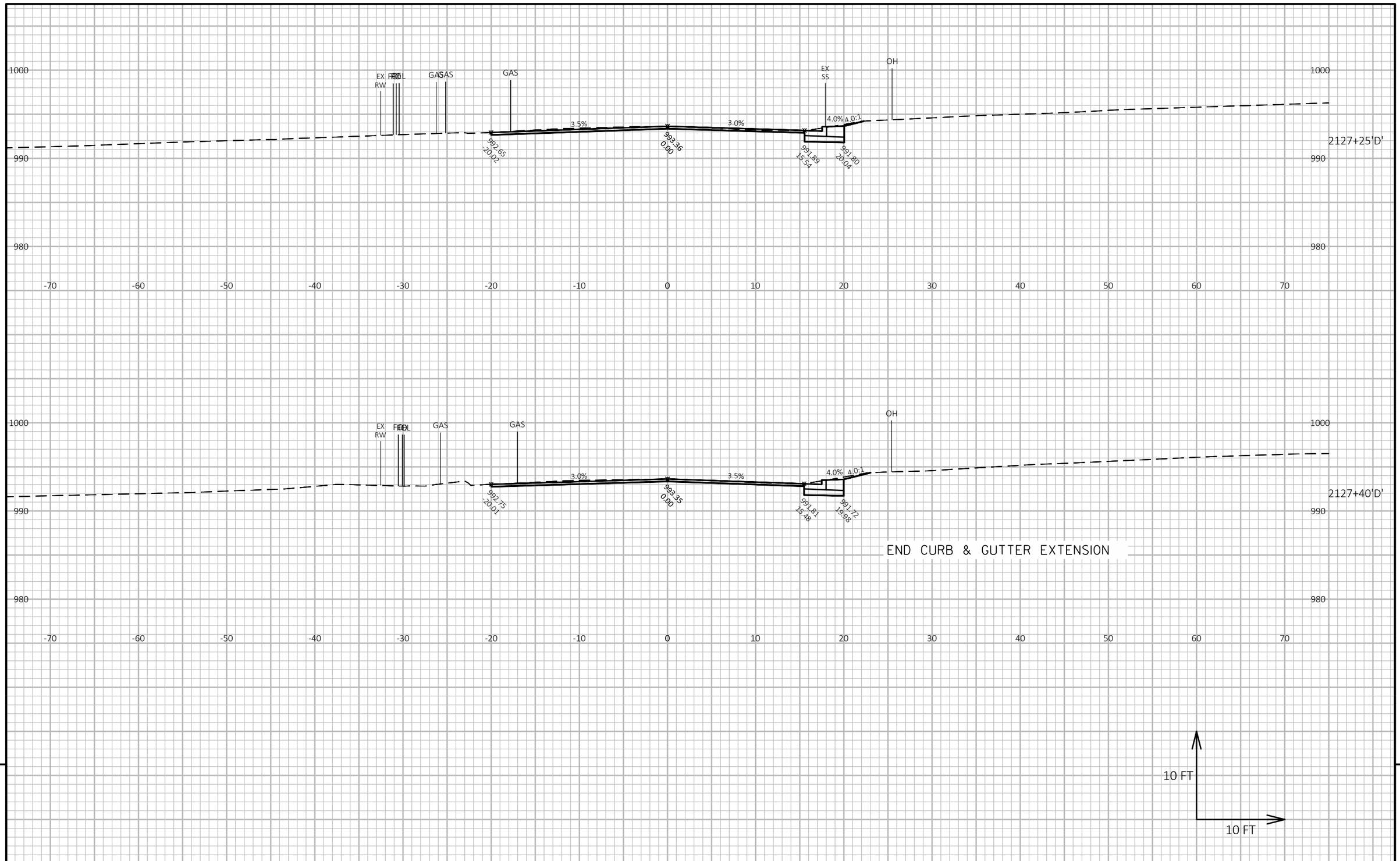
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 427	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(20)

PLOT DATE : 7/2/2020 11:52 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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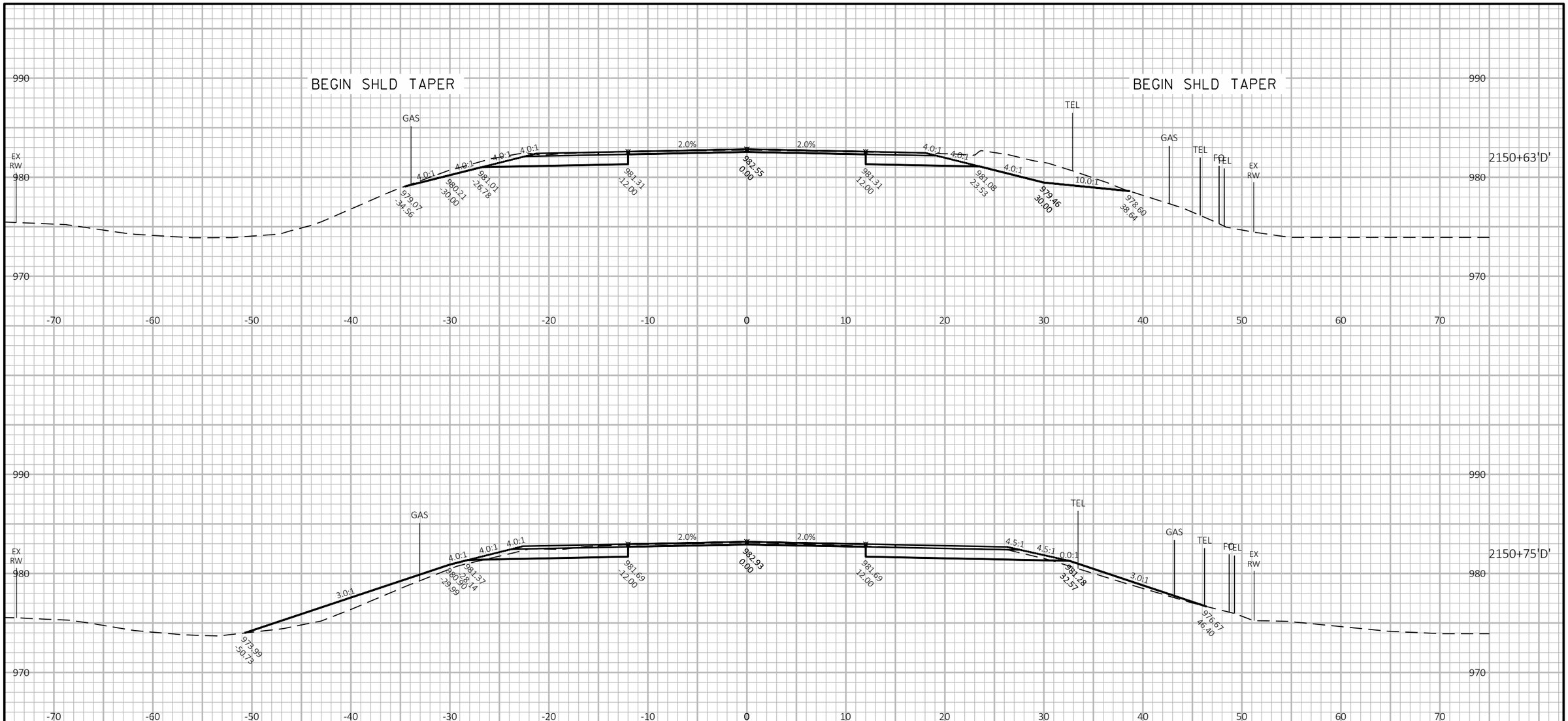
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 428	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(21)

PLOT DATE : 7/2/2020 11:52 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 429	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(22)

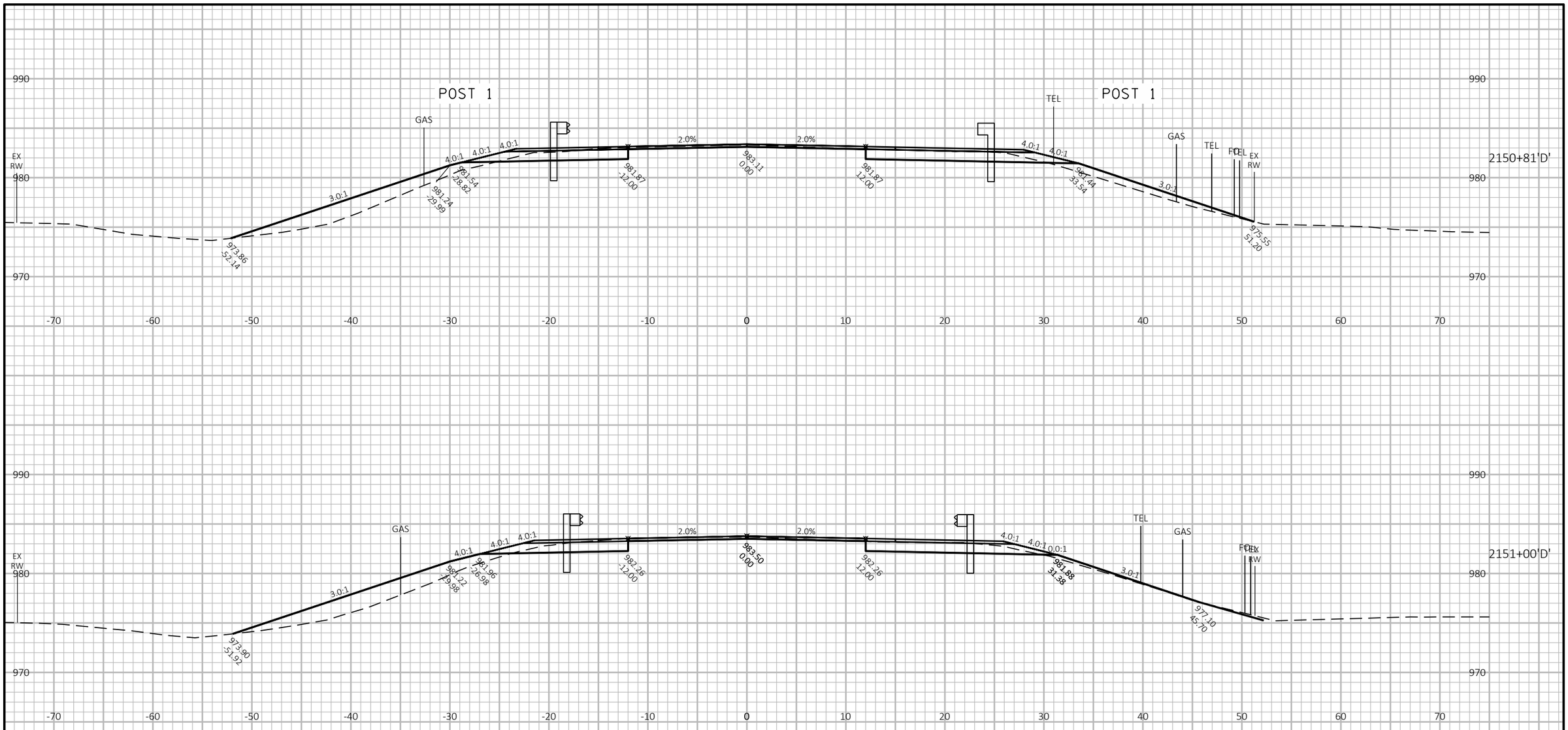
PLOT DATE : 7/2/2020 11:53 AM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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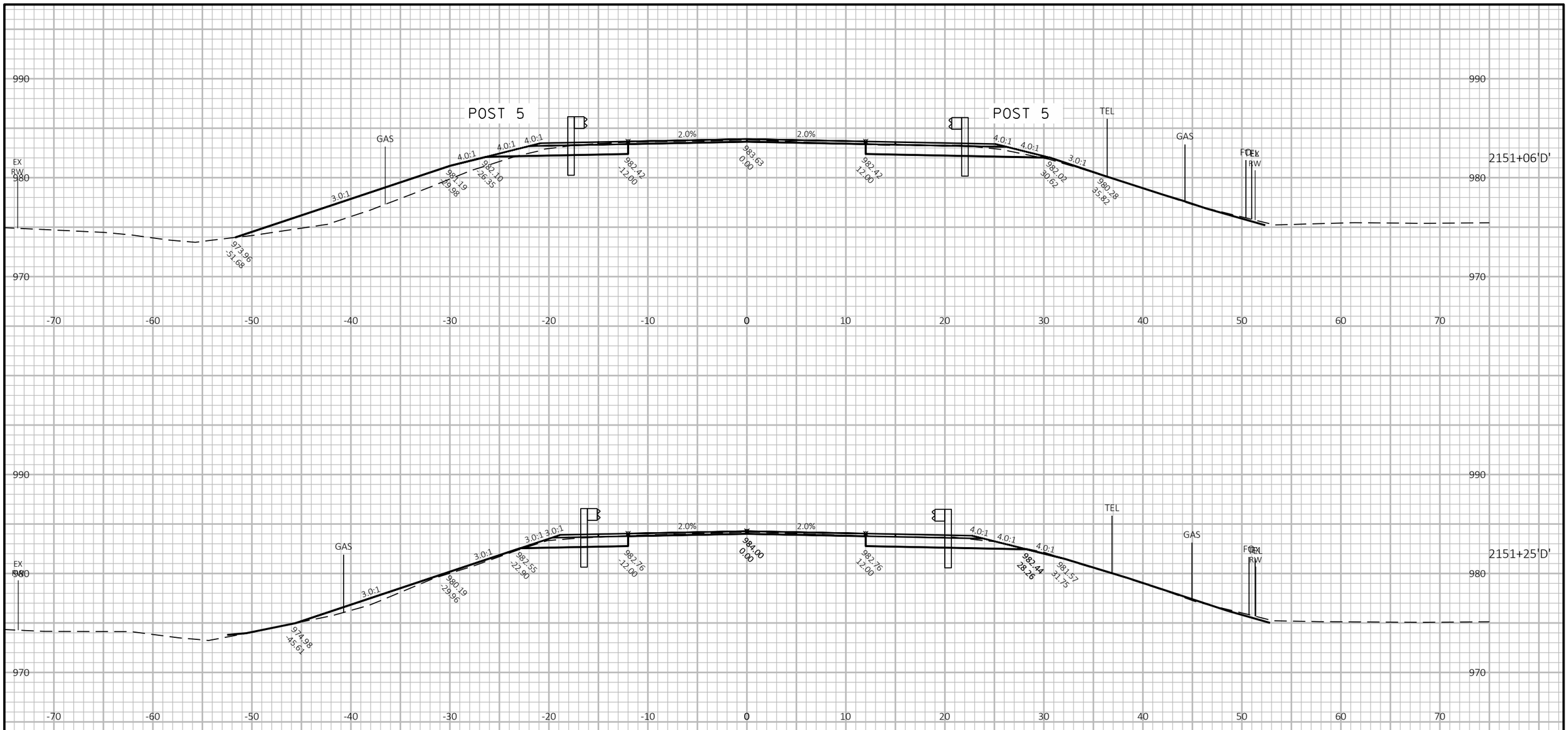
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 430	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(23)

PLOT DATE : 7/2/2020 11:53 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

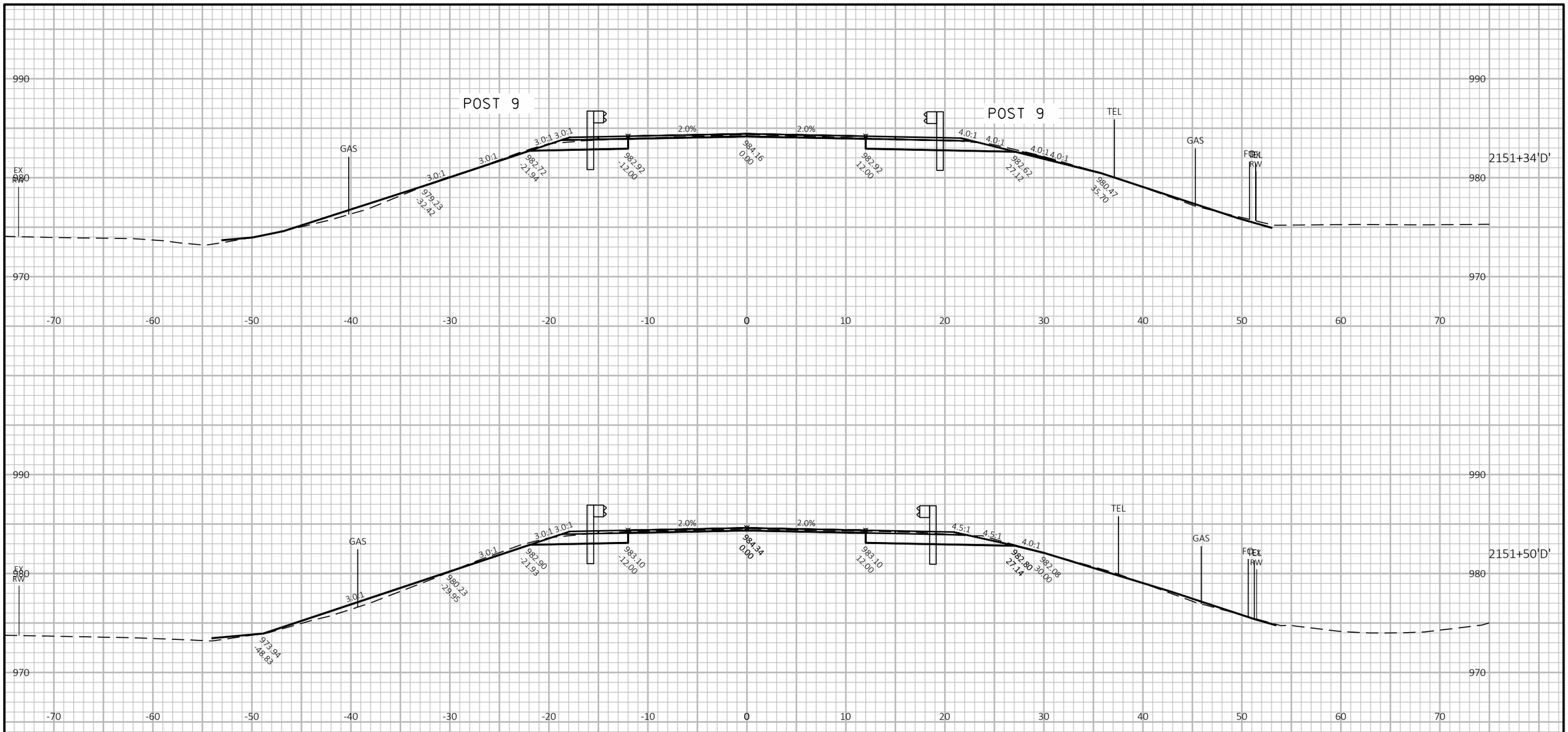


PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 431	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(24)

PLOT DATE : 7/2/2020 11:53 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 432	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(25)

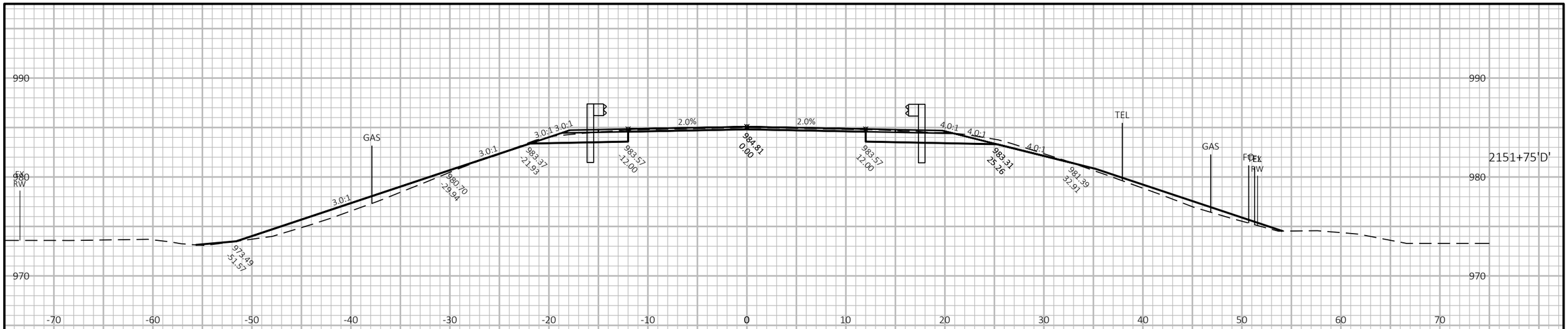
PLOT DATE : 7/2/2020 11:53 AM

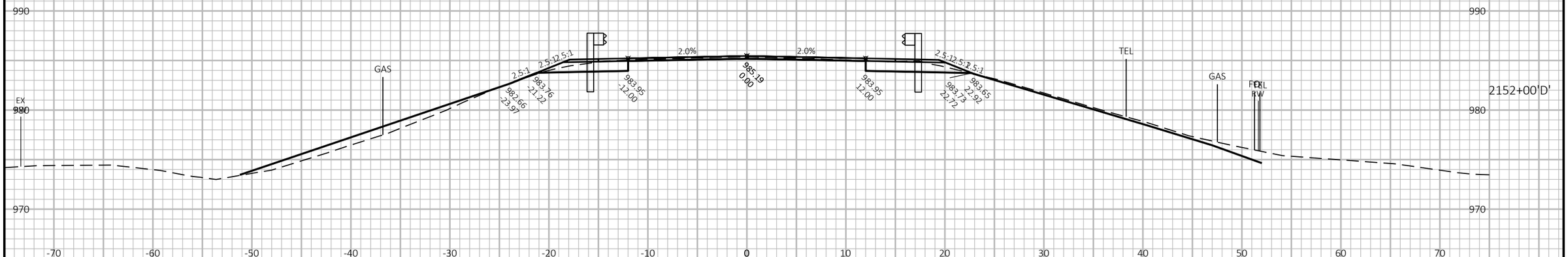
PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49





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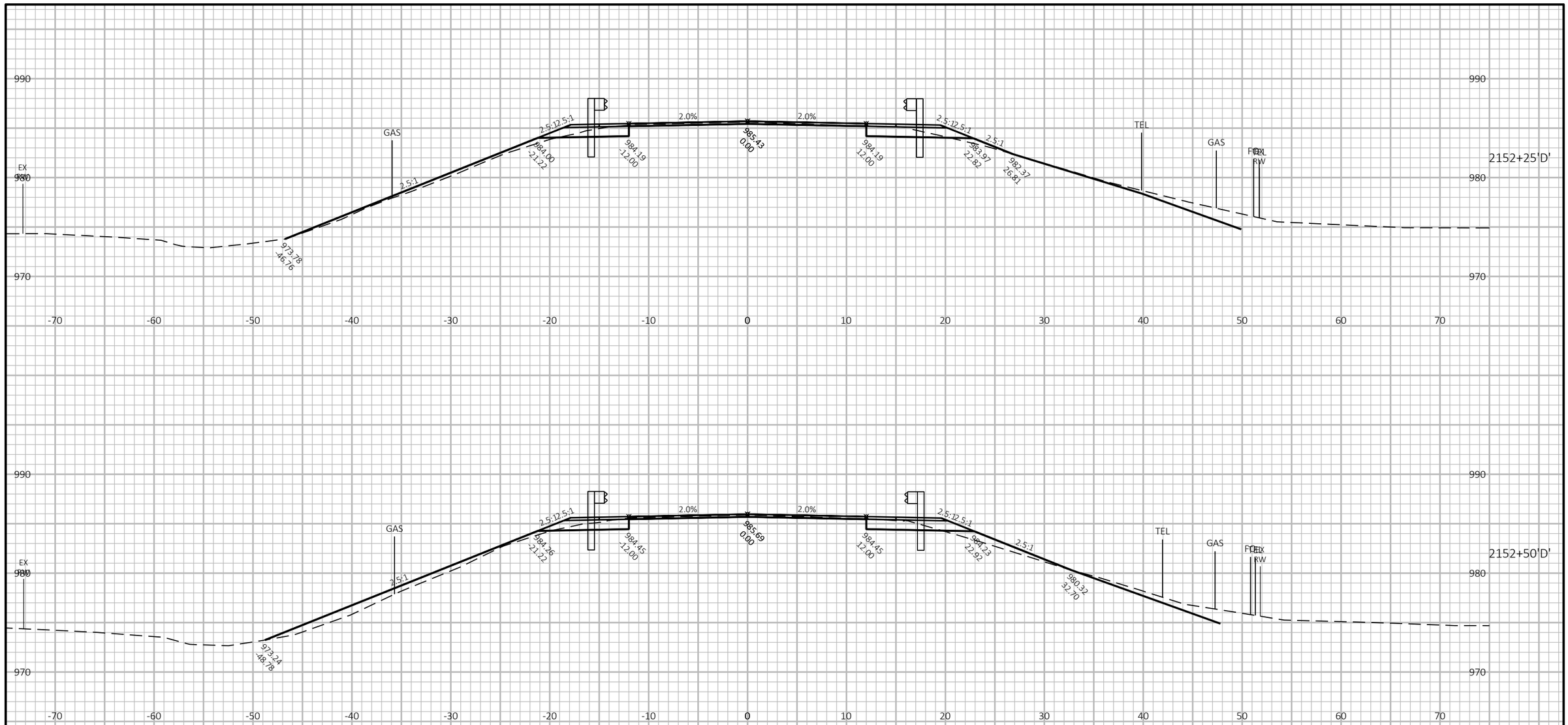
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 433	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(26)

PLOT DATE : 7/2/2020 11:54 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

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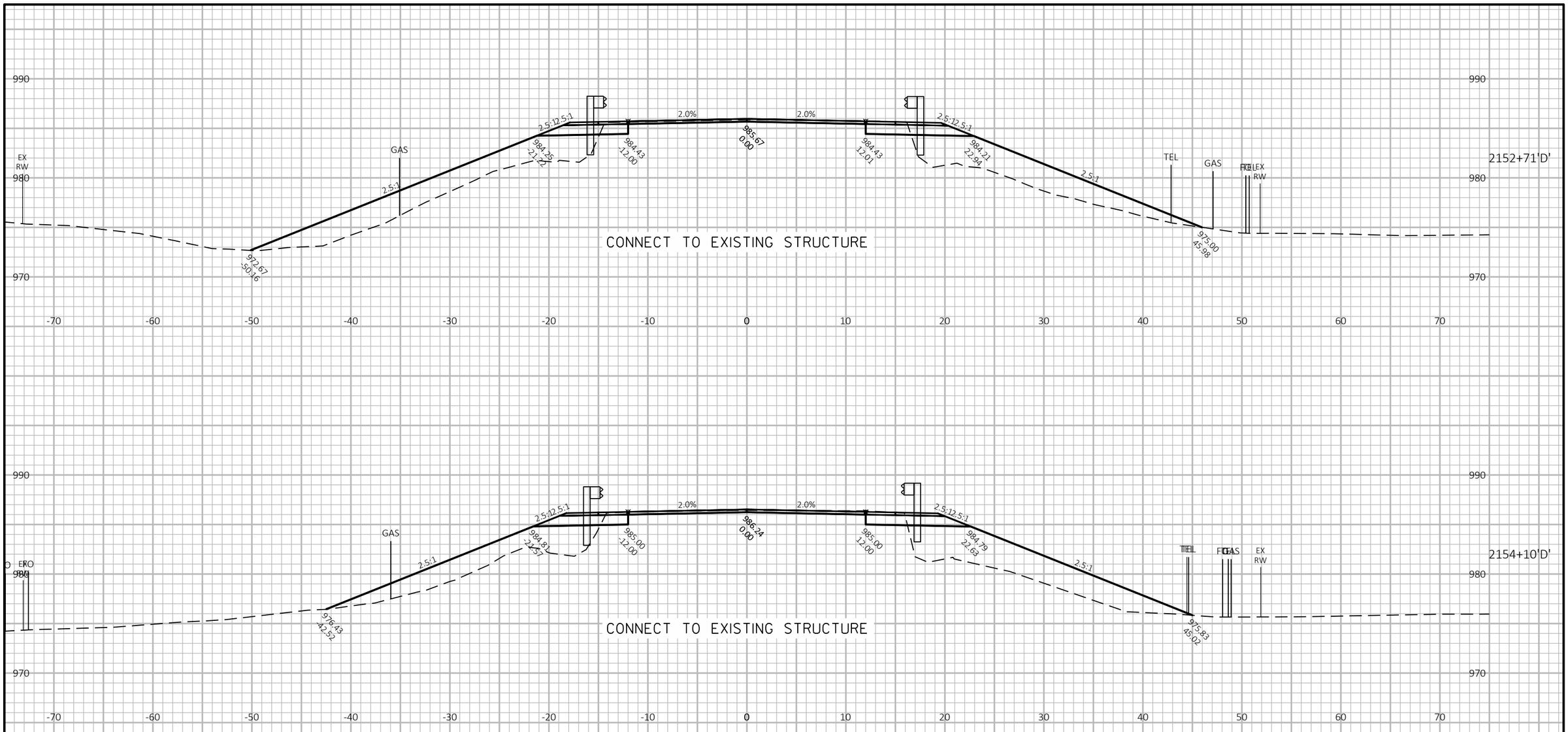
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 434	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(27)

PLOT DATE : 7/2/2020 11:54 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

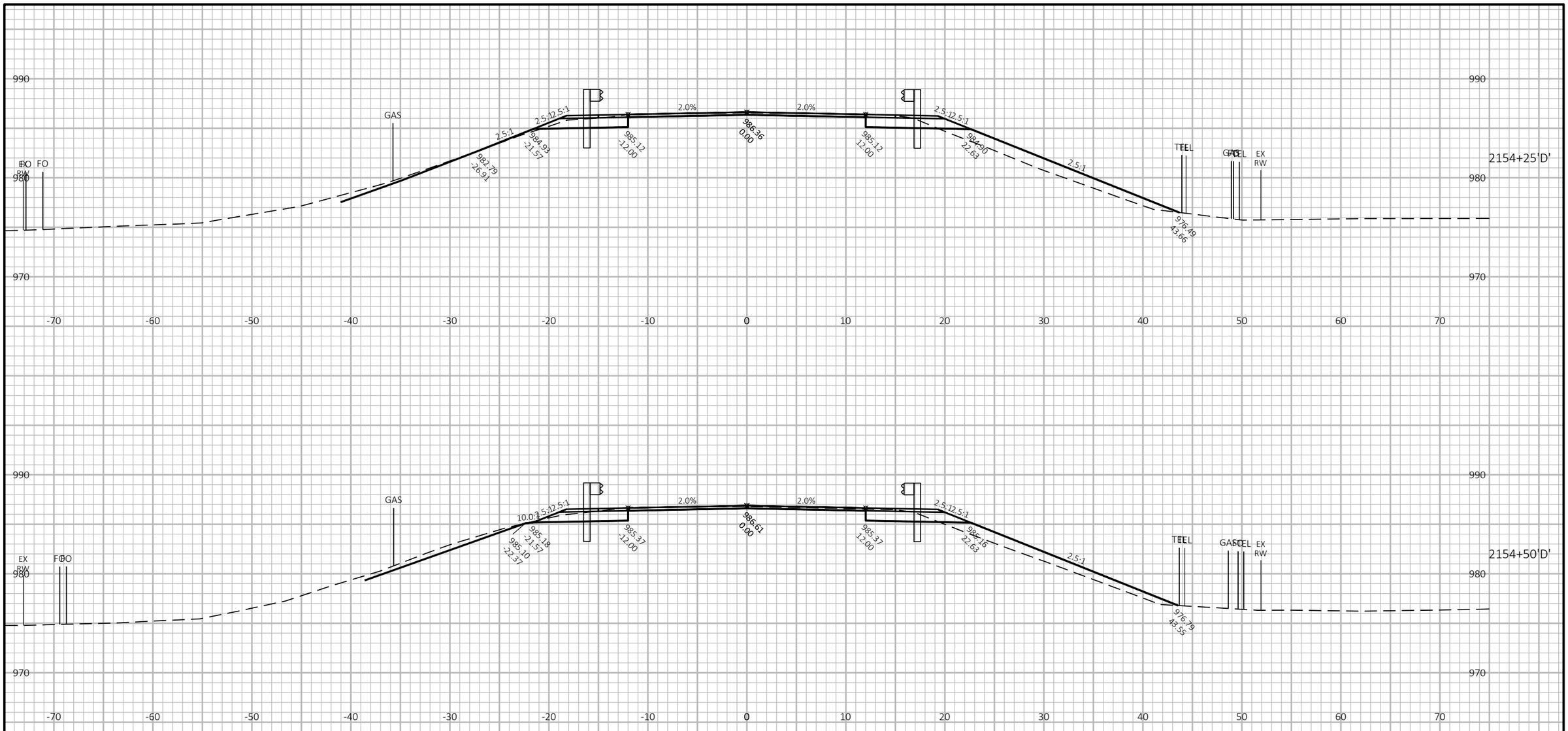


PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 435	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(28)

PLOT DATE : 7/2/2020 11:54 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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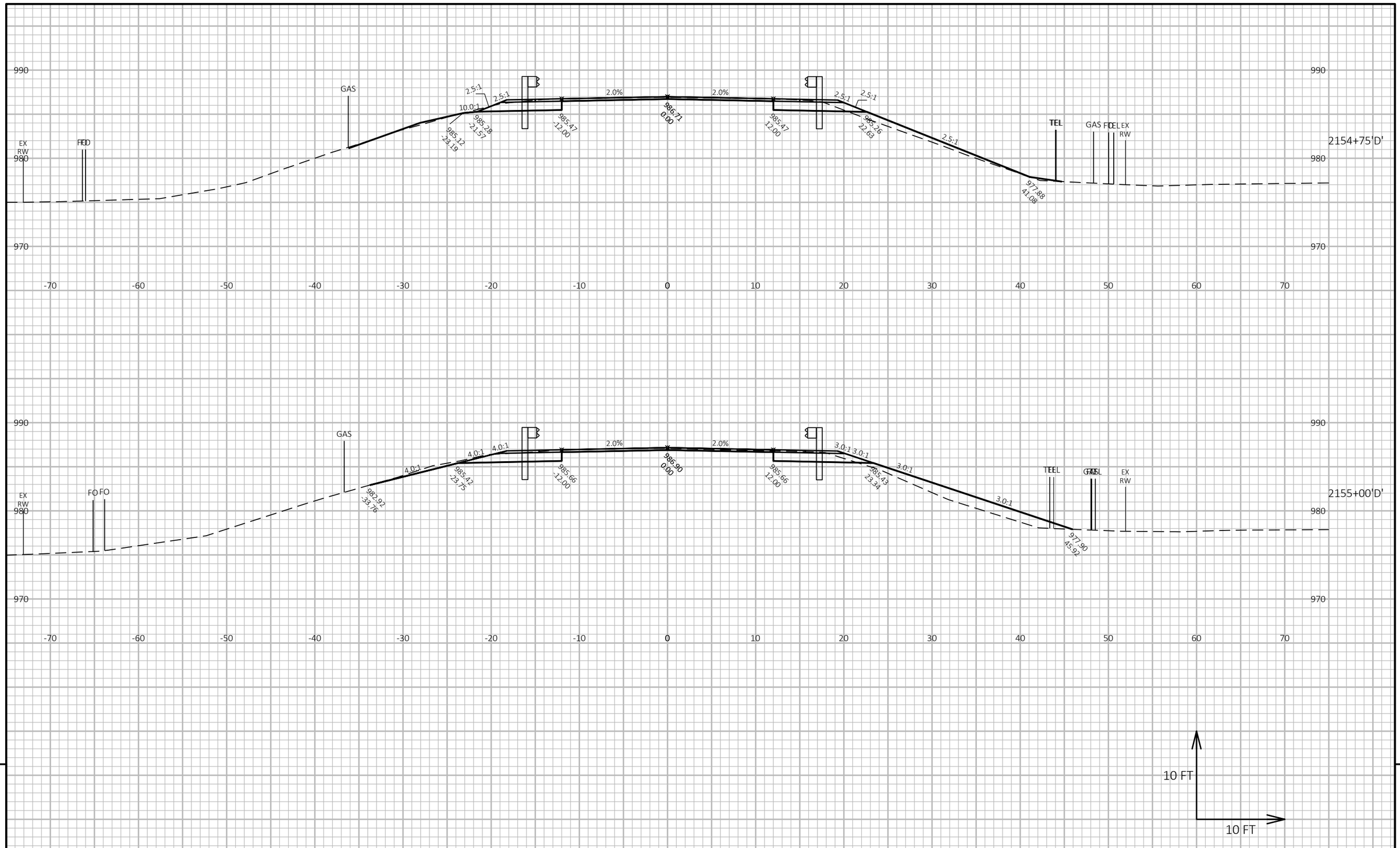
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 436	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(29)

PLOT DATE : 7/2/2020 11:55 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



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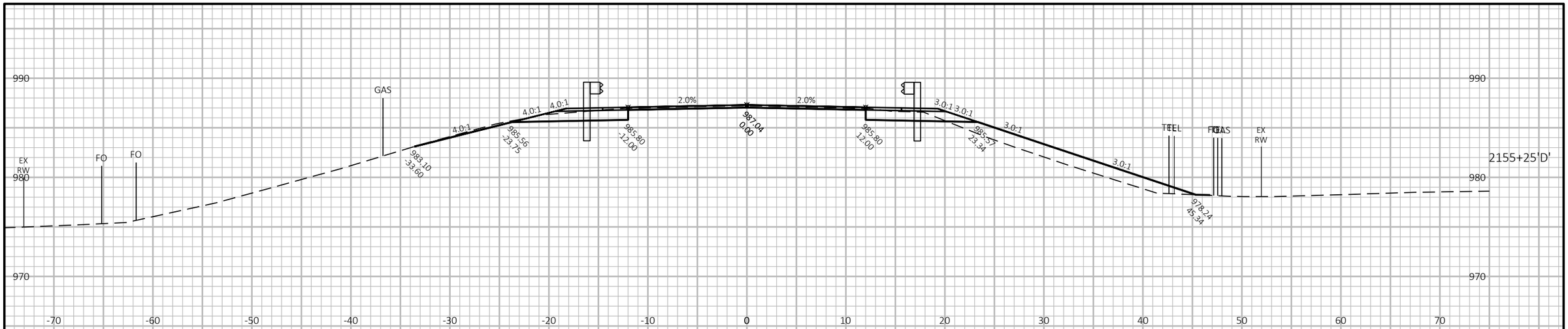
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 437	E

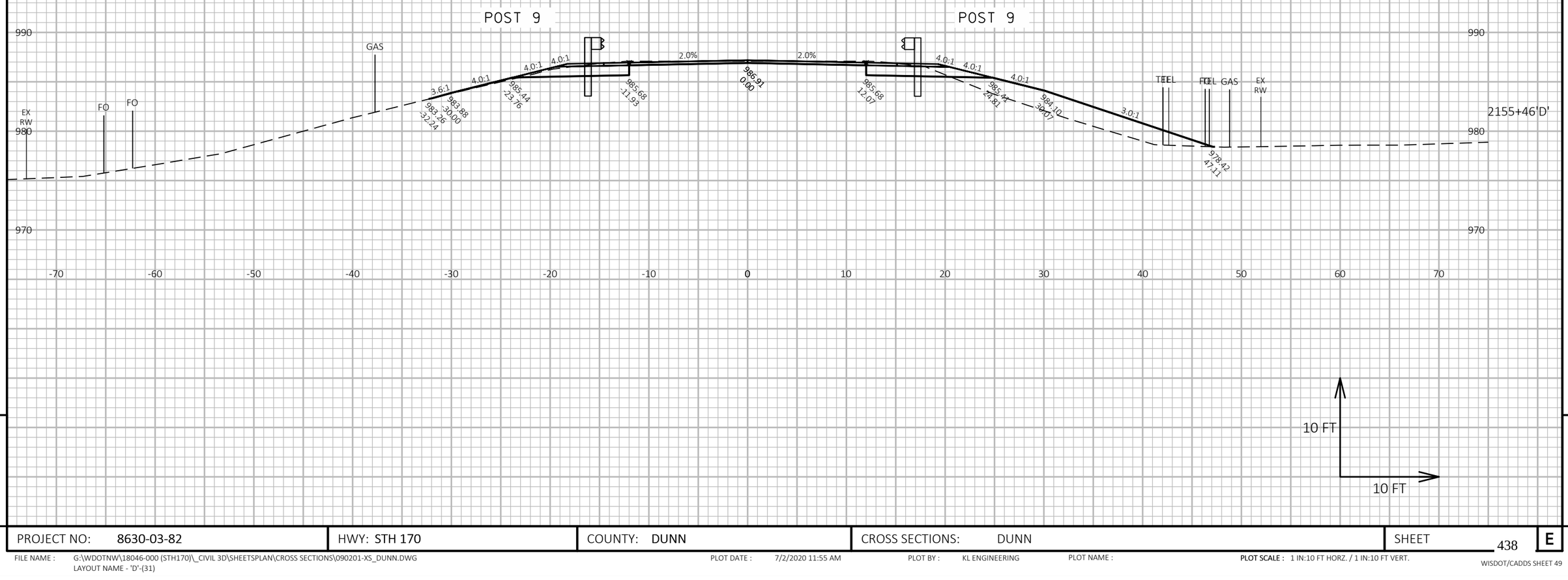
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(30)

PLOT DATE : 7/2/2020 11:55 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49





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9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 438	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(31)

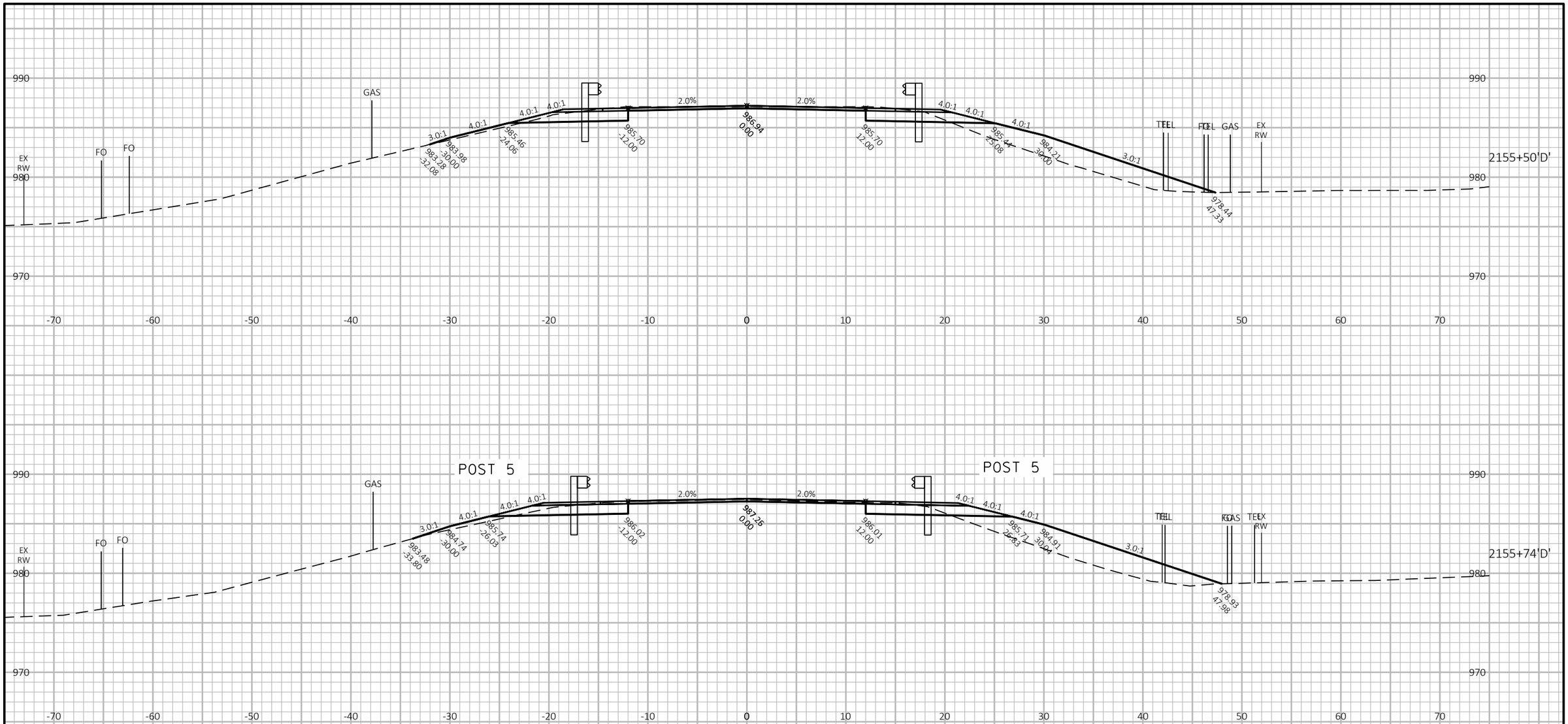
PLOT DATE : 7/2/2020 11:55 AM

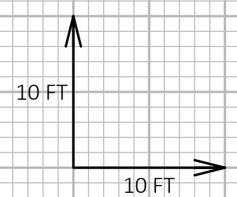
PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49





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PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 439	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(32)

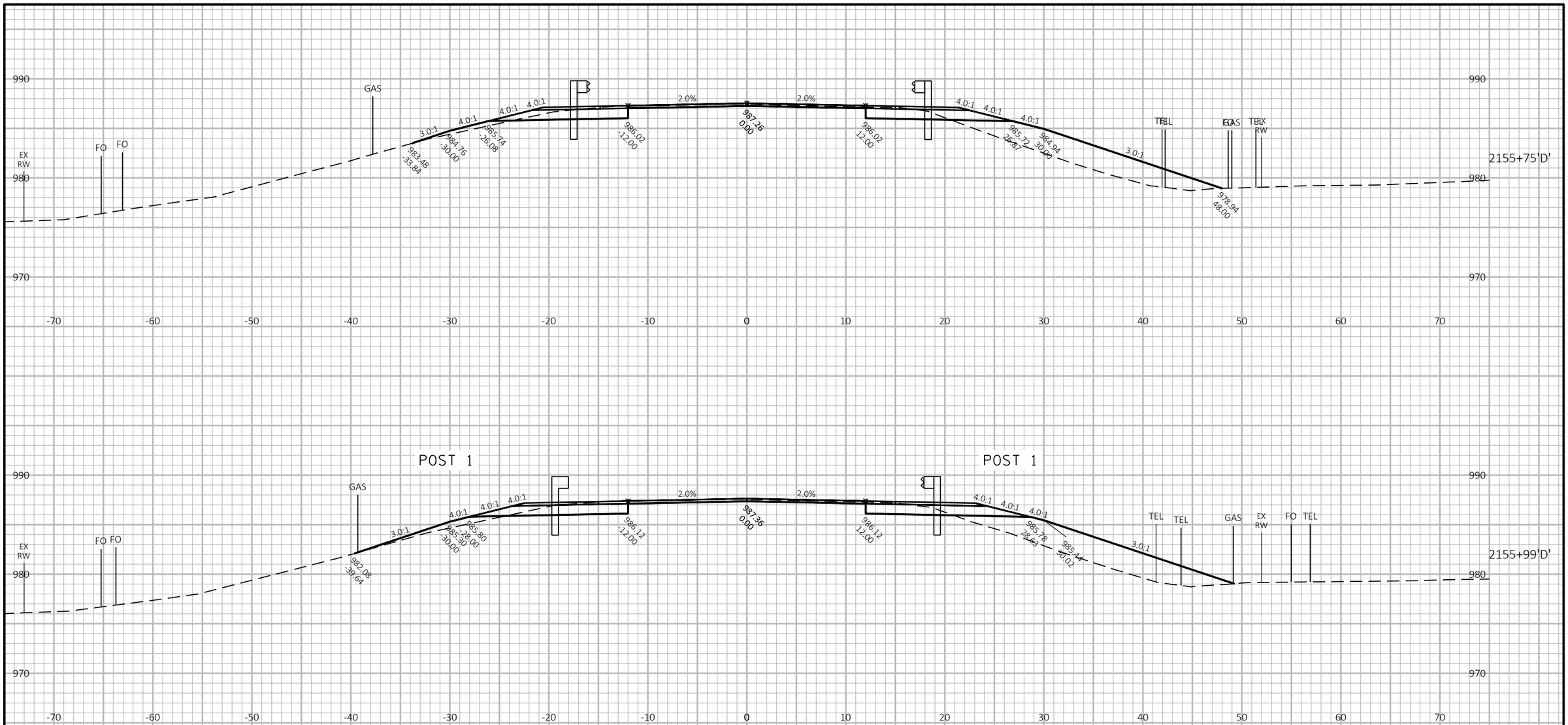
PLOT DATE : 7/2/2020 11:56 AM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



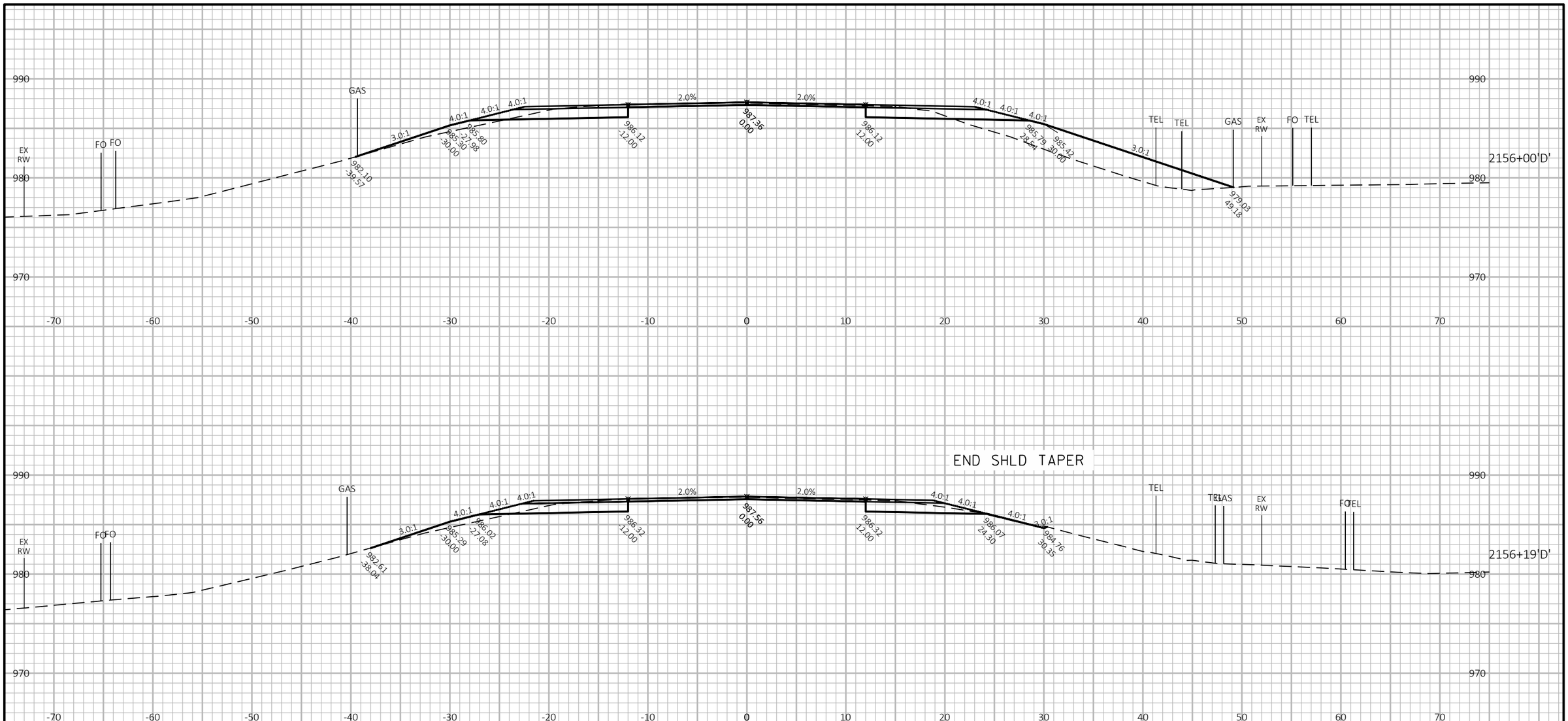
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 440	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(33)

PLOT DATE : 7/2/2020 11:56 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 441	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(34)

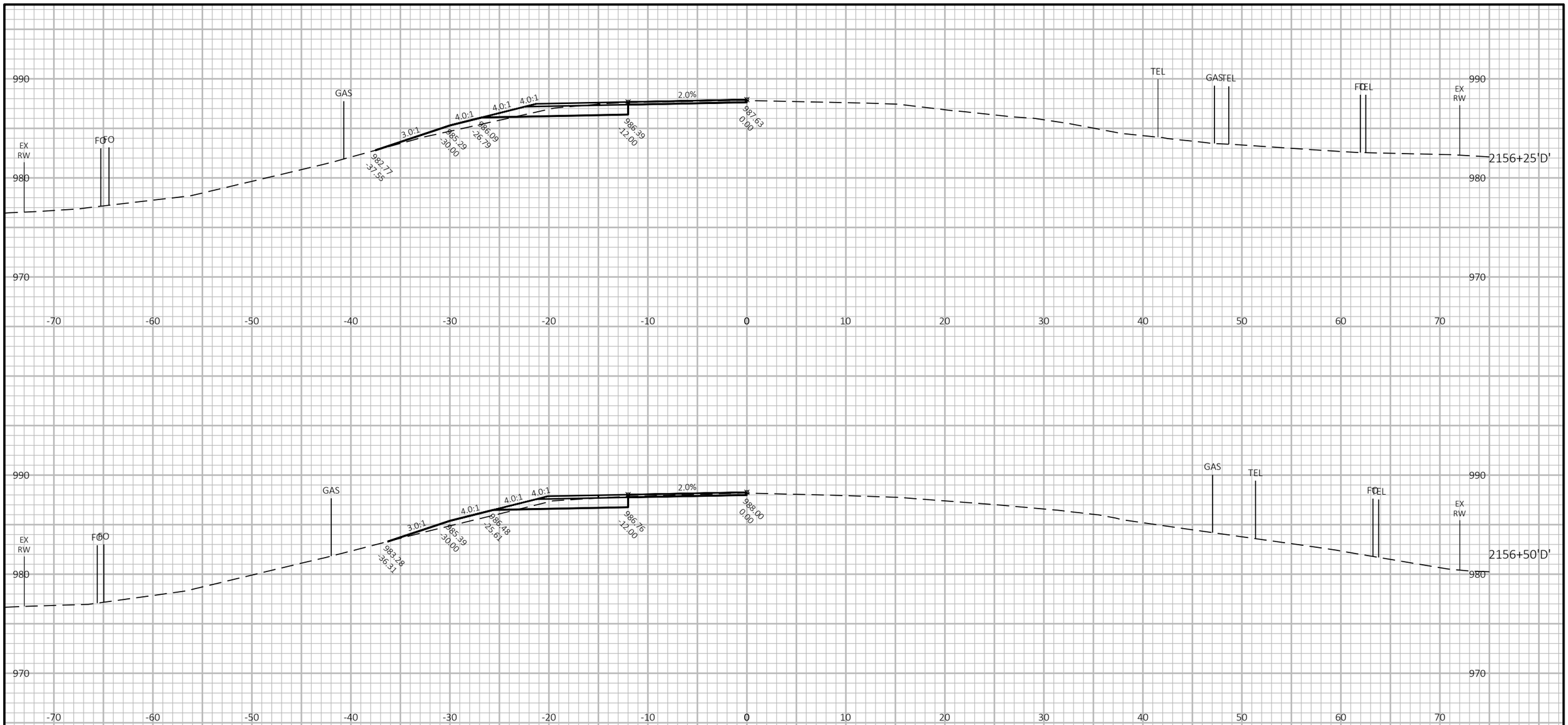
PLOT DATE : 7/2/2020 11:56 AM

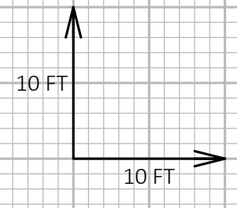
PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49





9

9

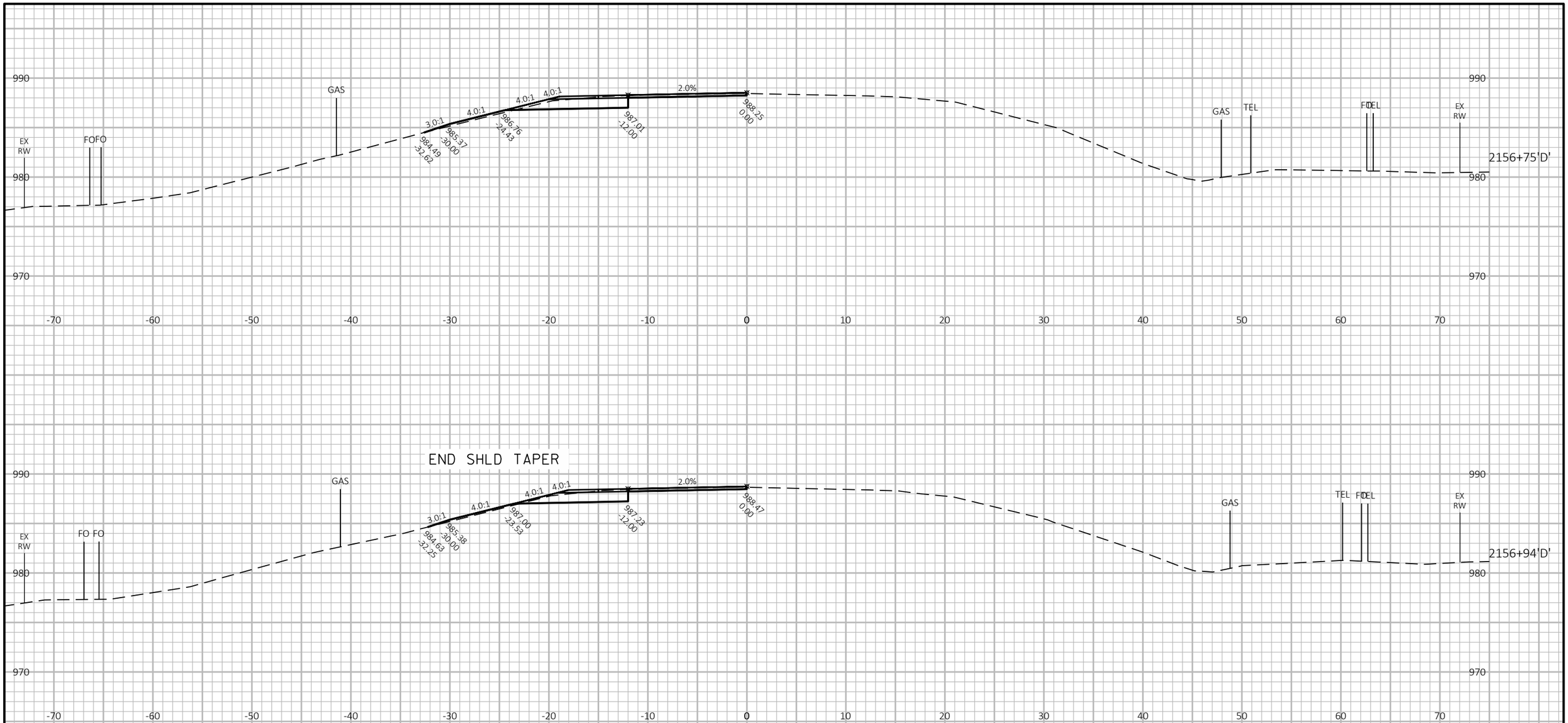
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 442	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(35)

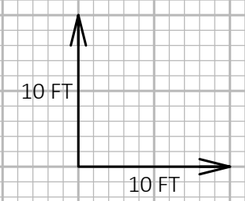
PLOT DATE : 7/2/2020 11:57 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



END SHLD TAPER



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 443	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(36)

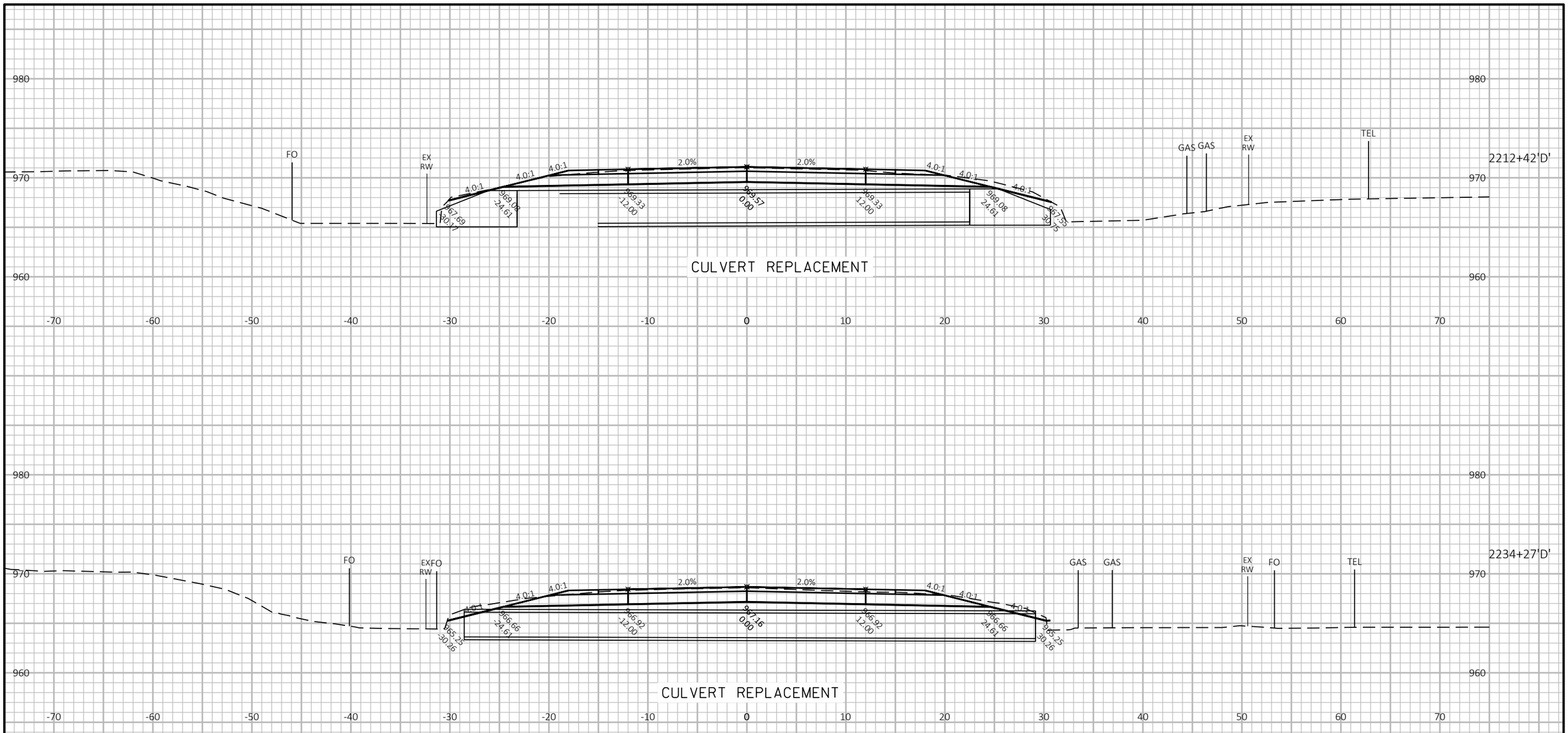
PLOT DATE : 7/2/2020 11:57 AM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 444	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(37)

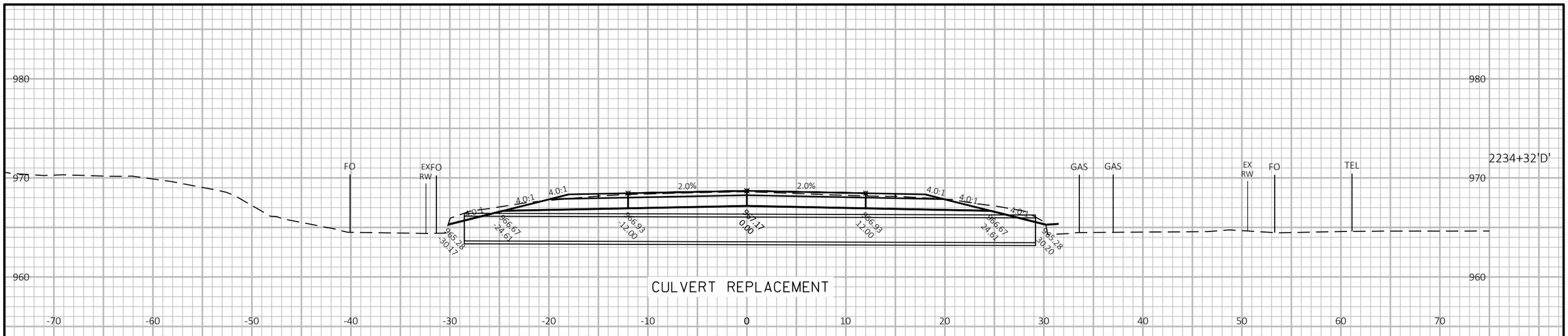
PLOT DATE : 7/2/2020 11:58 AM

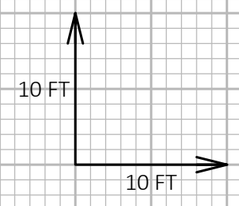
PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49





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9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 445	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(38)

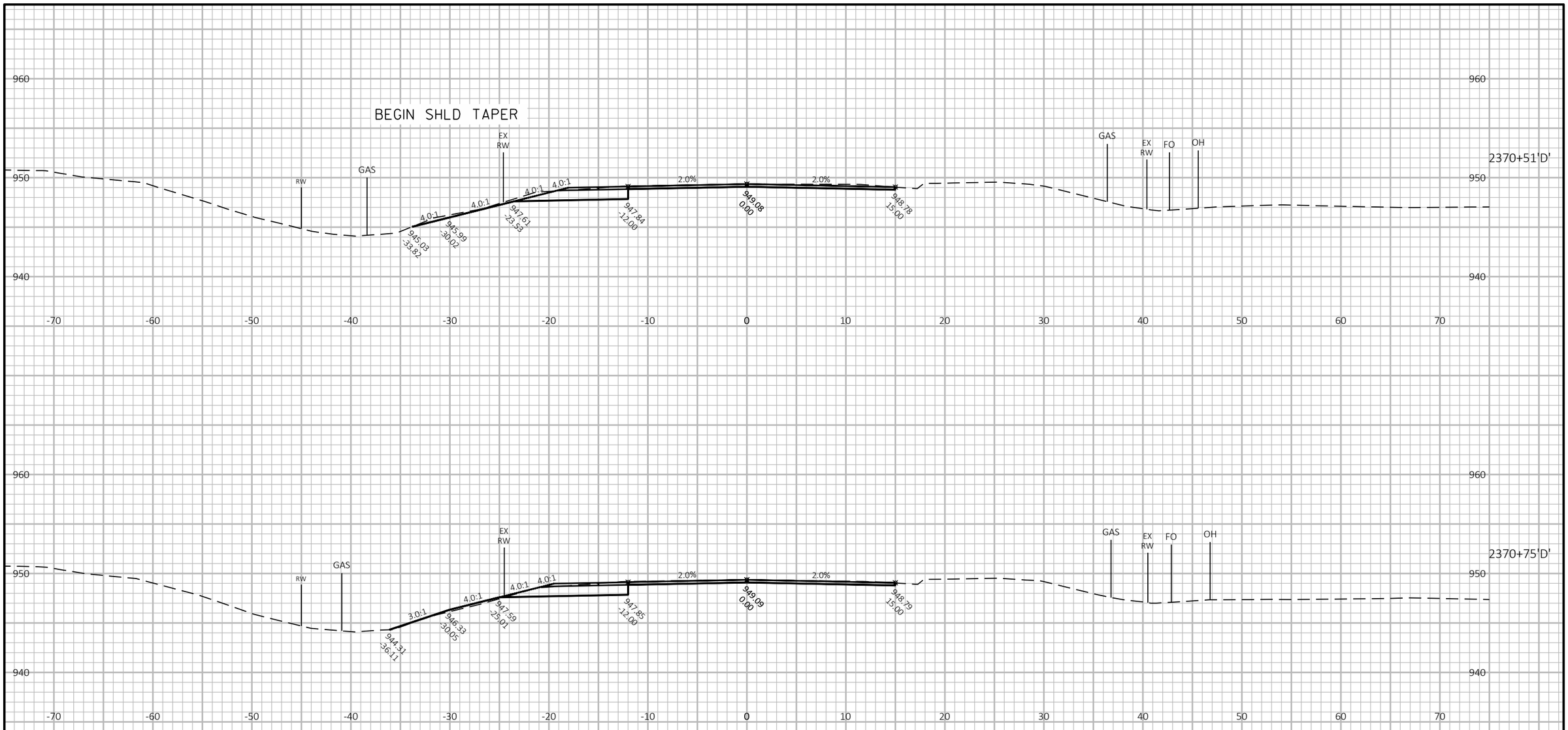
PLOT DATE : 7/2/2020 11:58 AM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



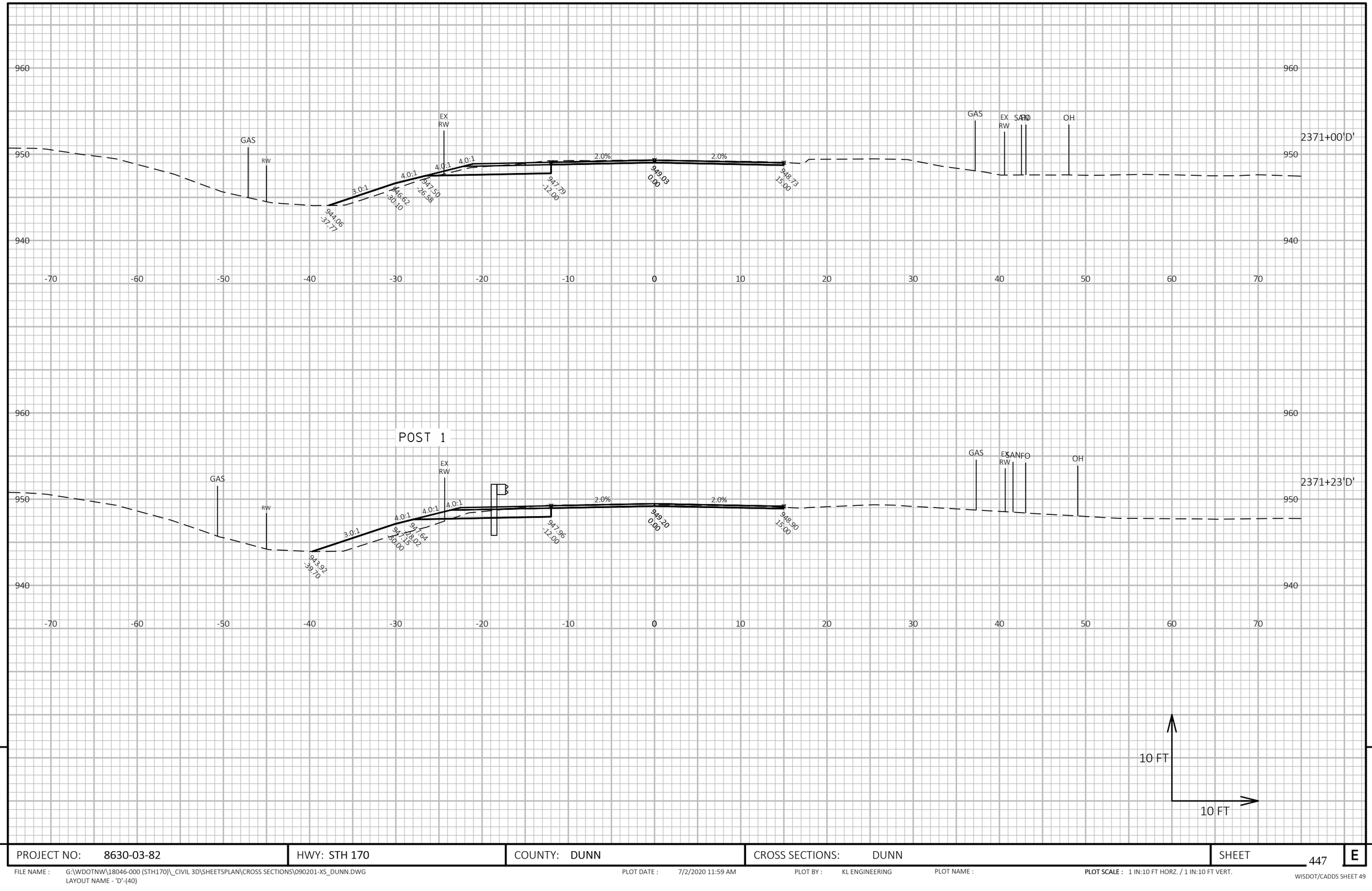
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 446	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(39)

PLOT DATE : 7/2/2020 11:58 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 447	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(40)

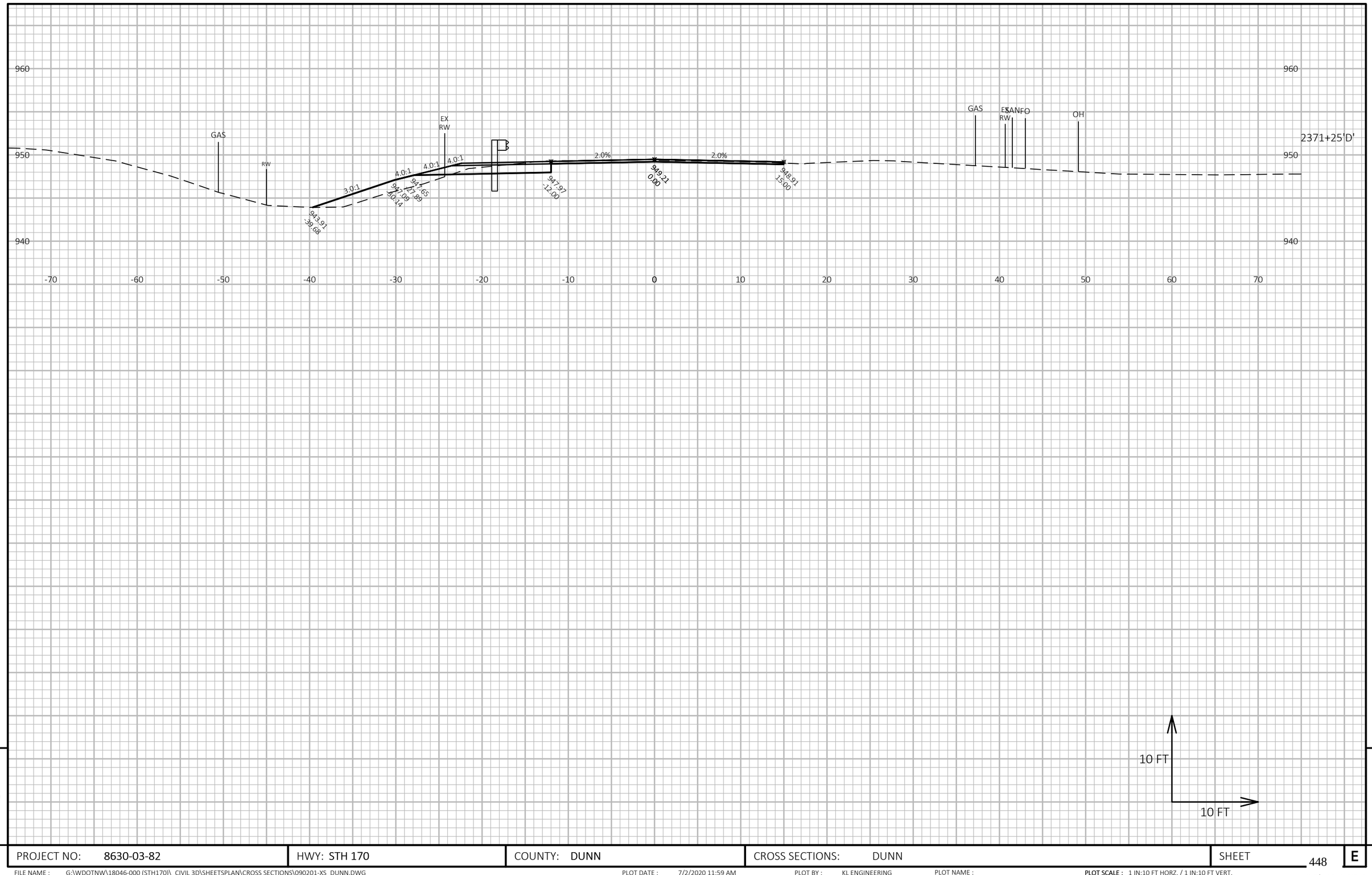
PLOT DATE : 7/2/2020 11:59 AM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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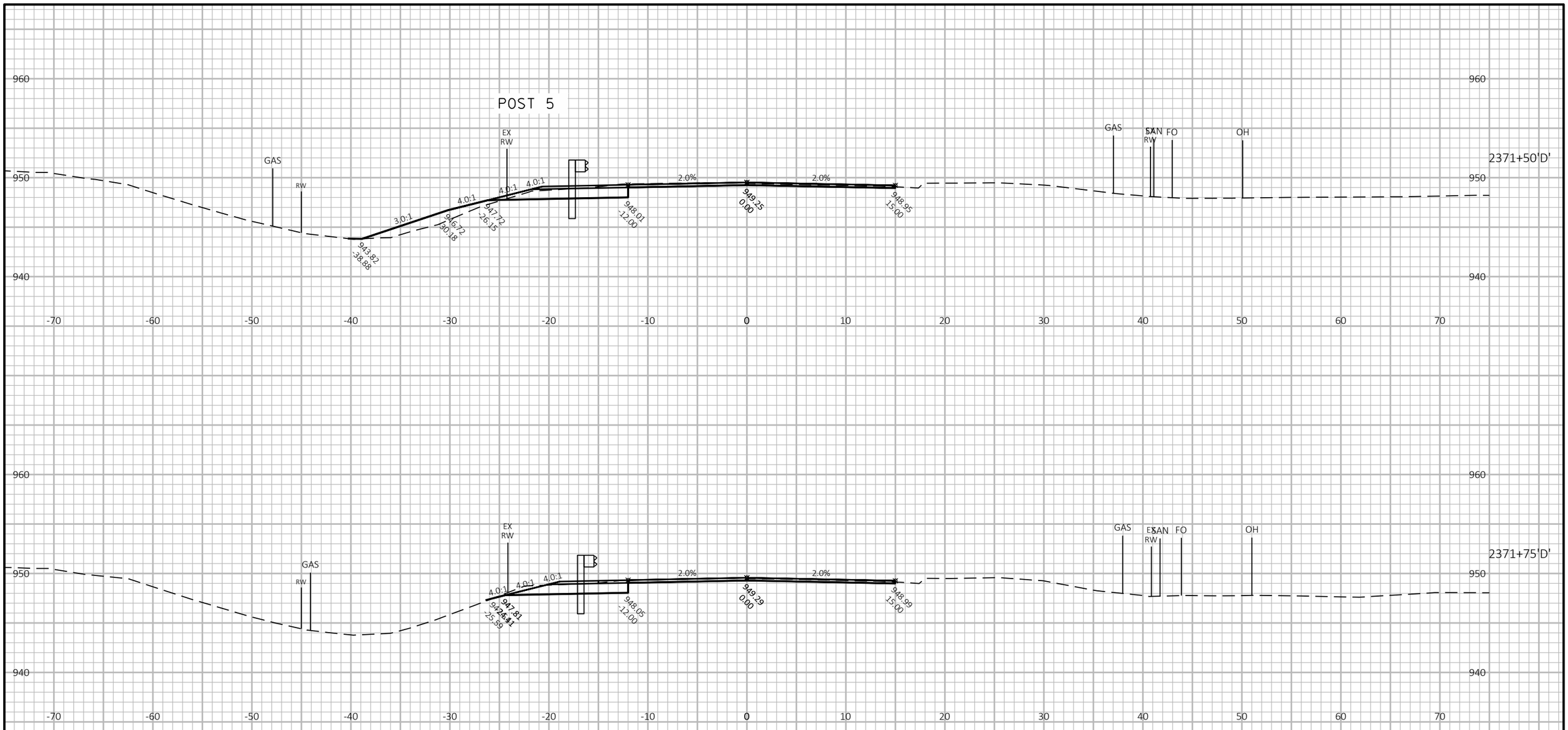
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 448	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(41)

PLOT DATE : 7/2/2020 11:59 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 449	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(42)

PLOT DATE : 7/2/2020 11:59 AM

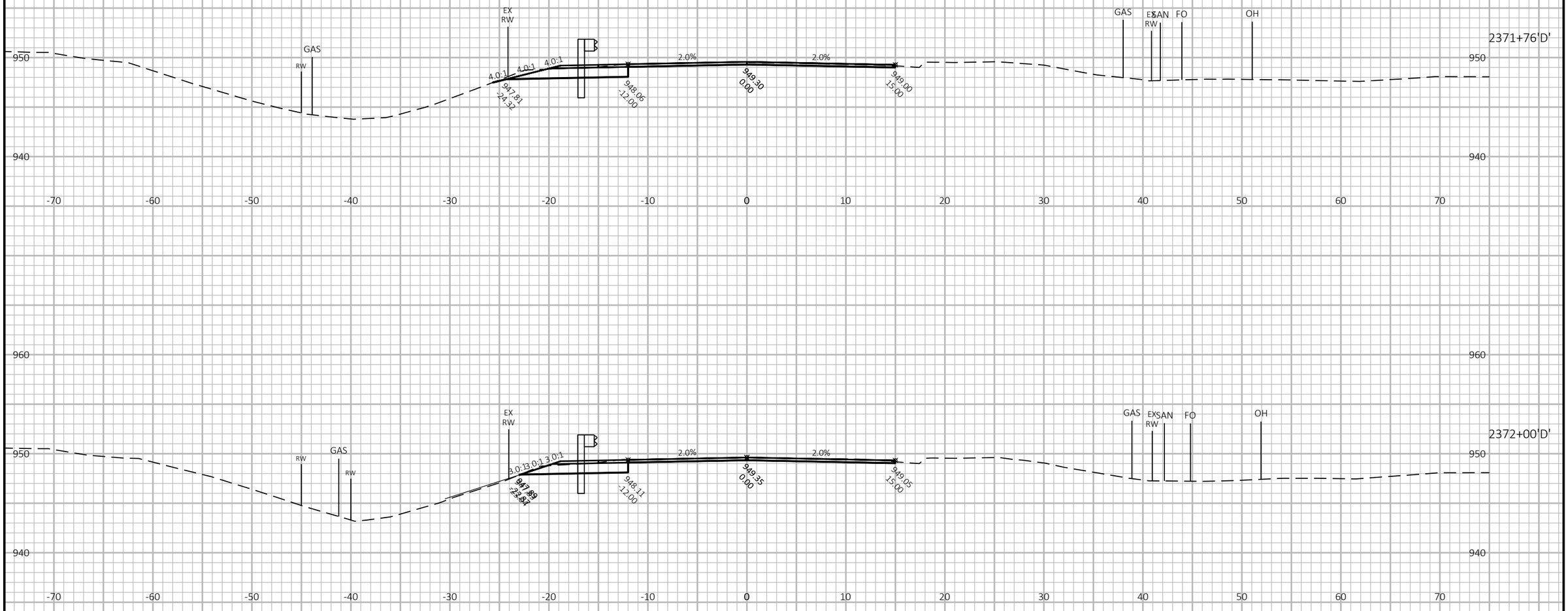
PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49

POST 9



2371+76'D'

2372+00'D'

10 FT

10 FT

9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 450	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(43)

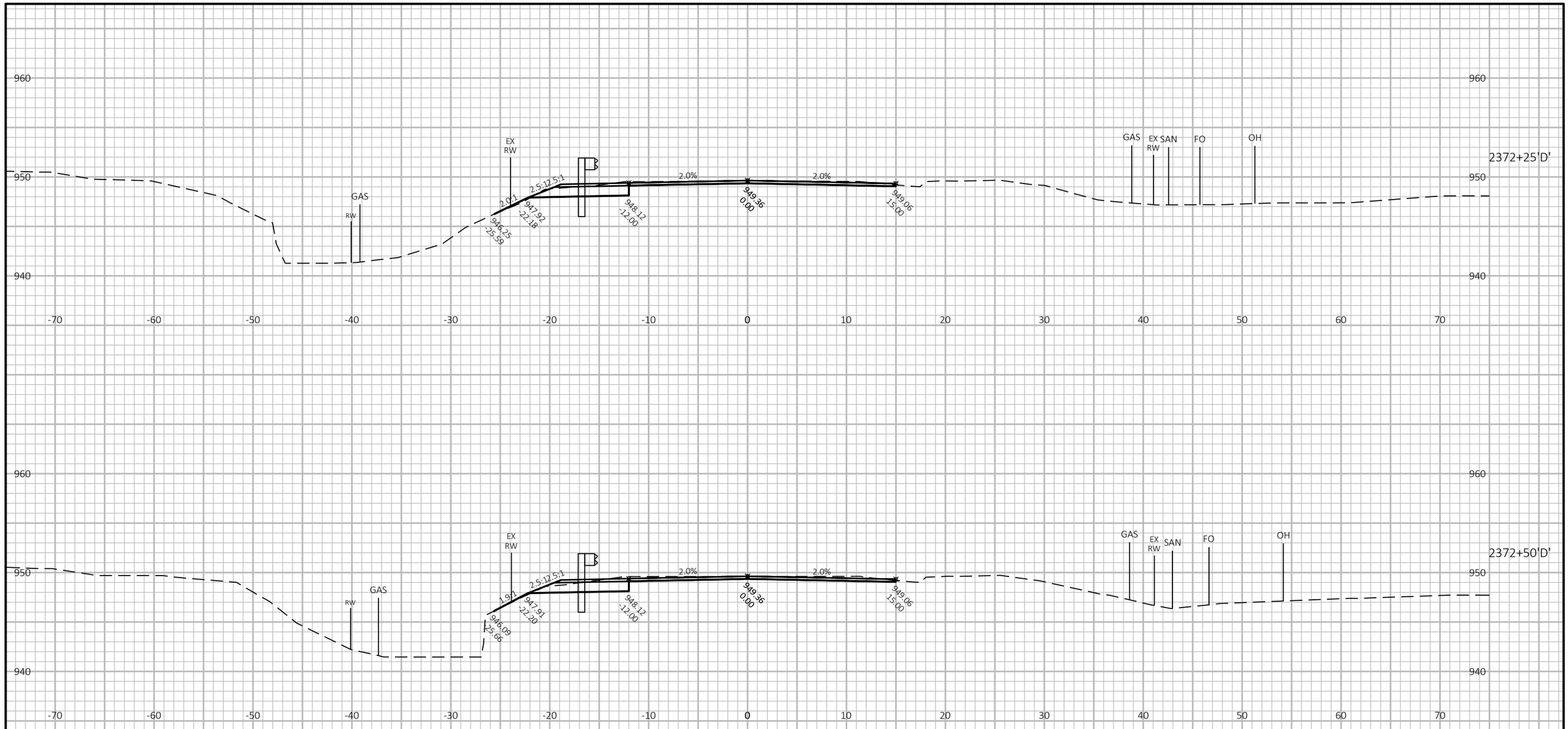
PLOT DATE : 7/2/2020 12:00 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 451	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(44)

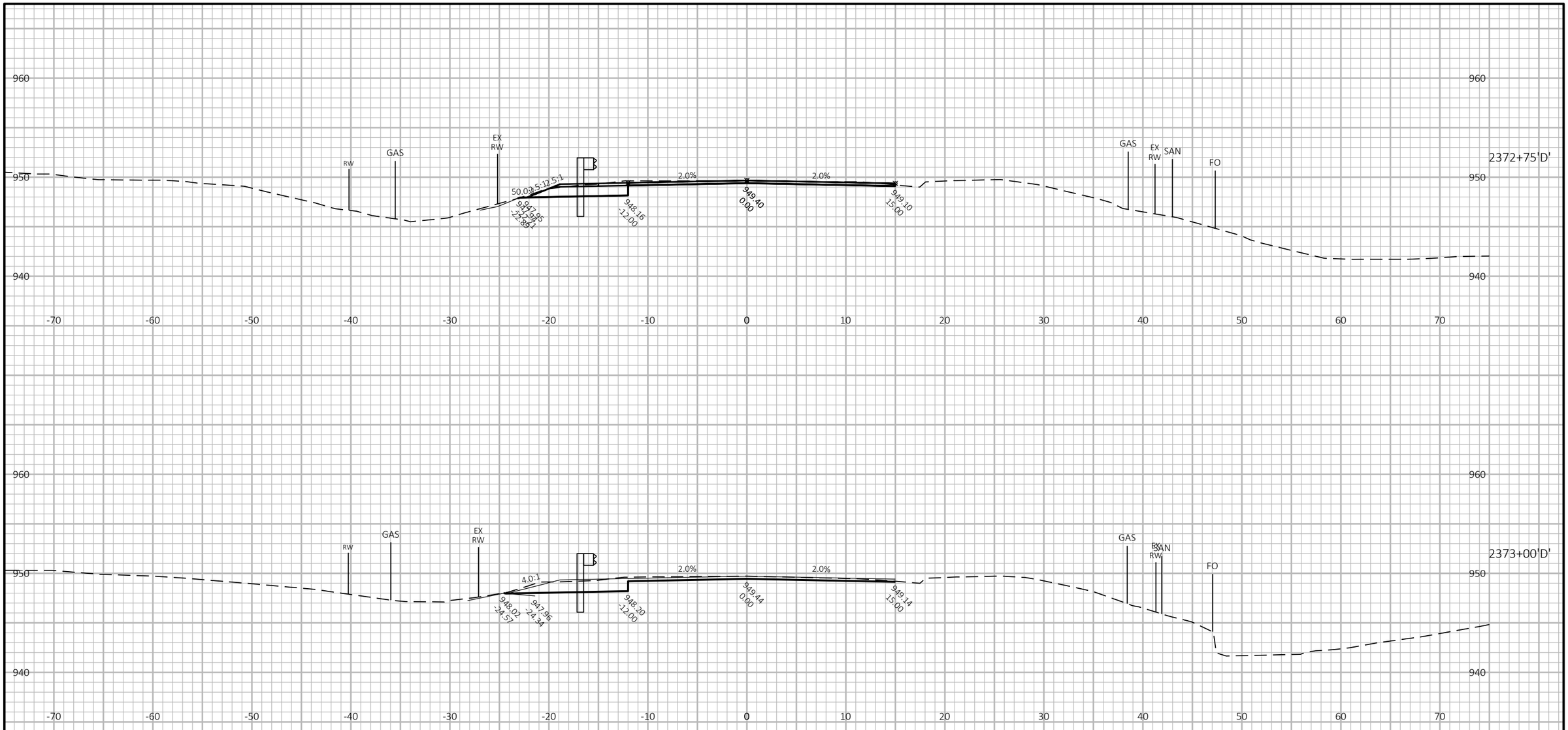
PLOT DATE : 7/2/2020 12:00 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 452	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(45)

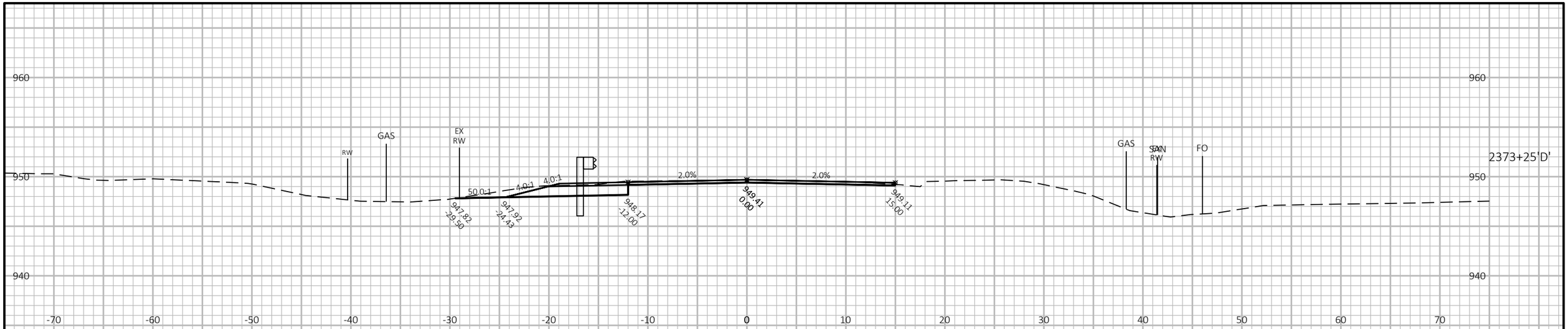
PLOT DATE : 7/2/2020 12:00 PM

PLOT BY : KL ENGINEERING

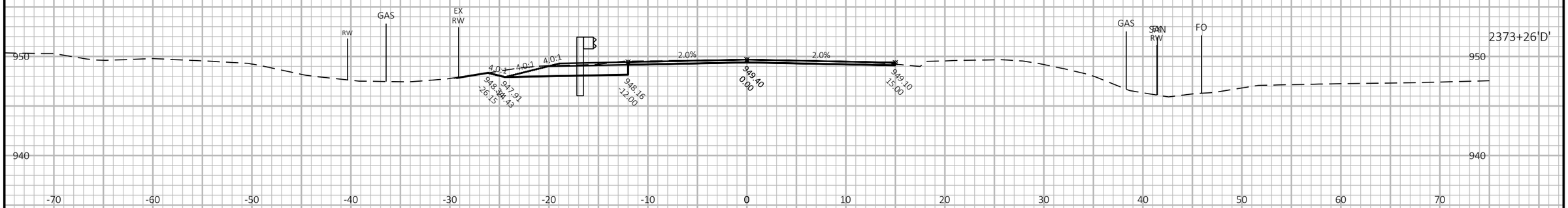
PLOT NAME :

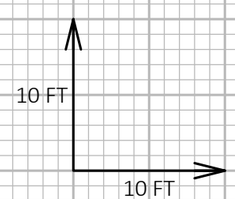
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



POST 9





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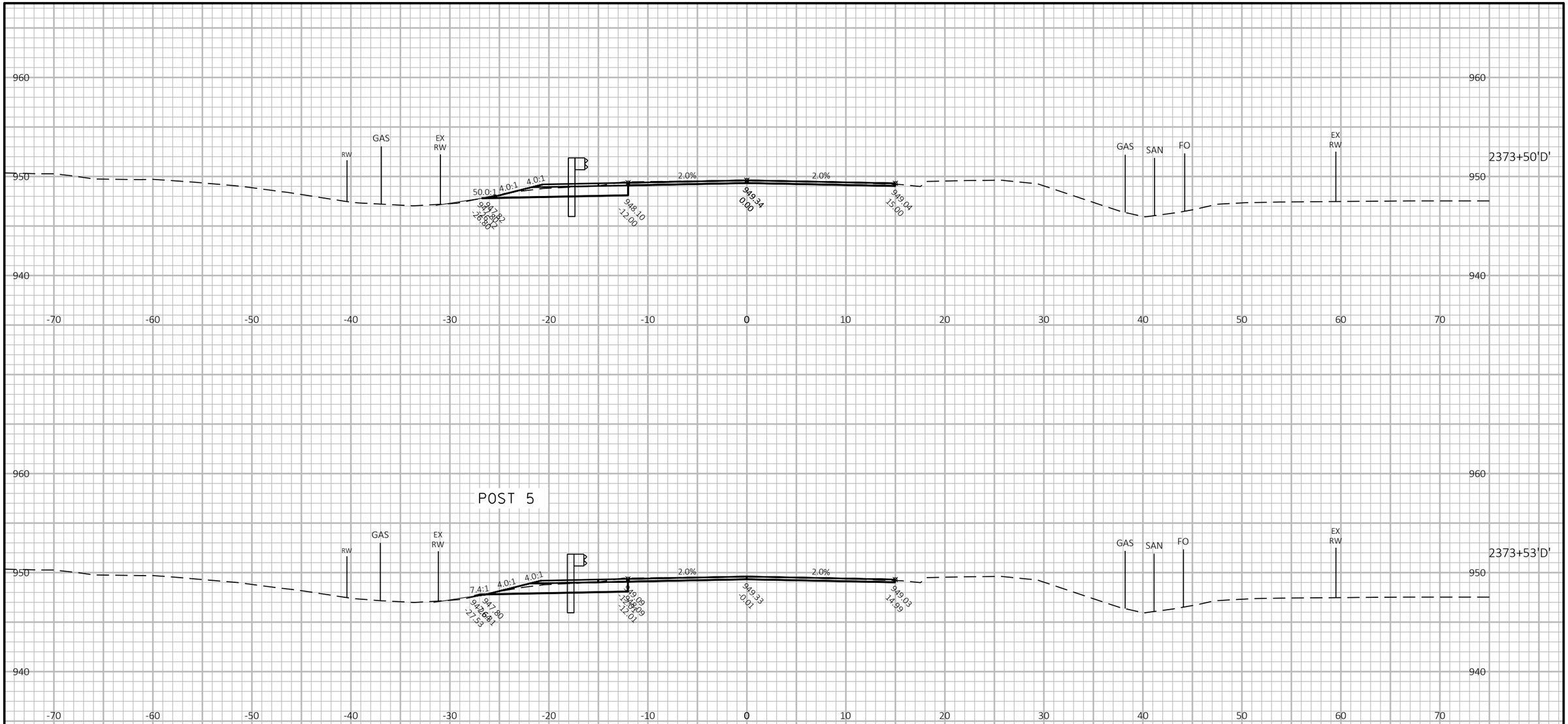
9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 453	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(46)

PLOT DATE : 7/2/2020 12:01 PM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



POST 5

10 FT

10 FT

9

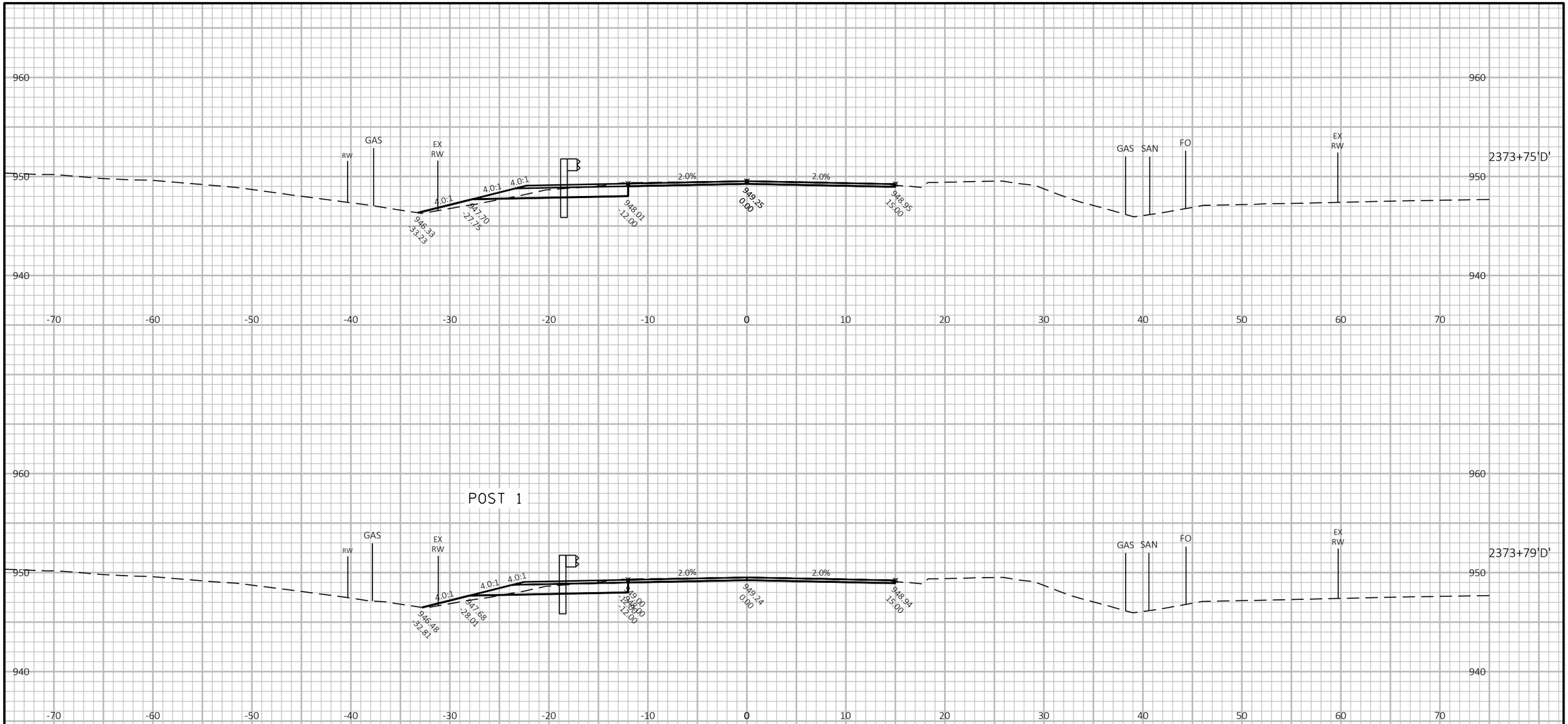
9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 454	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(47)

PLOT DATE : 7/2/2020 12:01 PM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

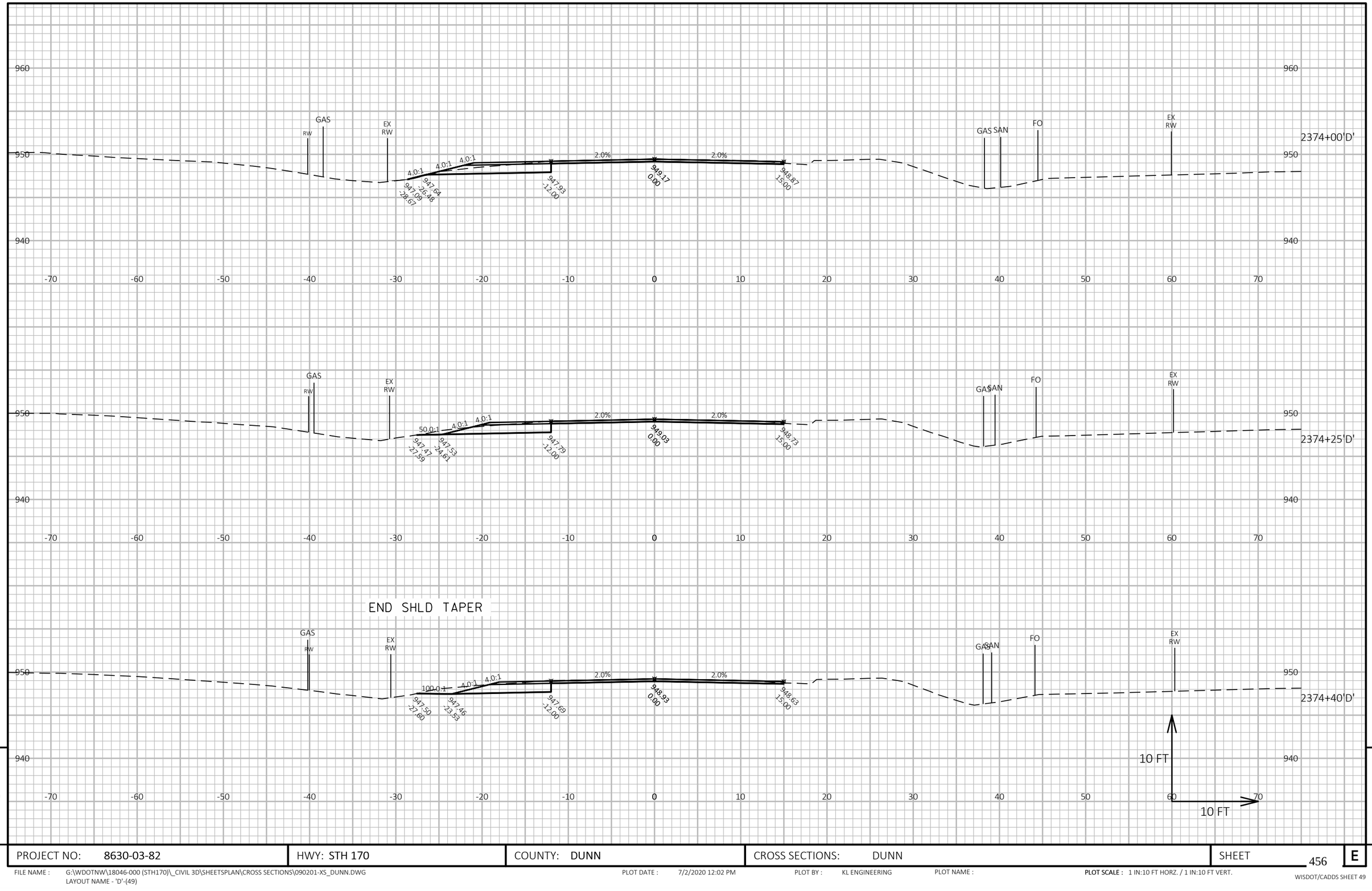
9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 455	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(48)

PLOT DATE : 7/2/2020 12:01 PM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

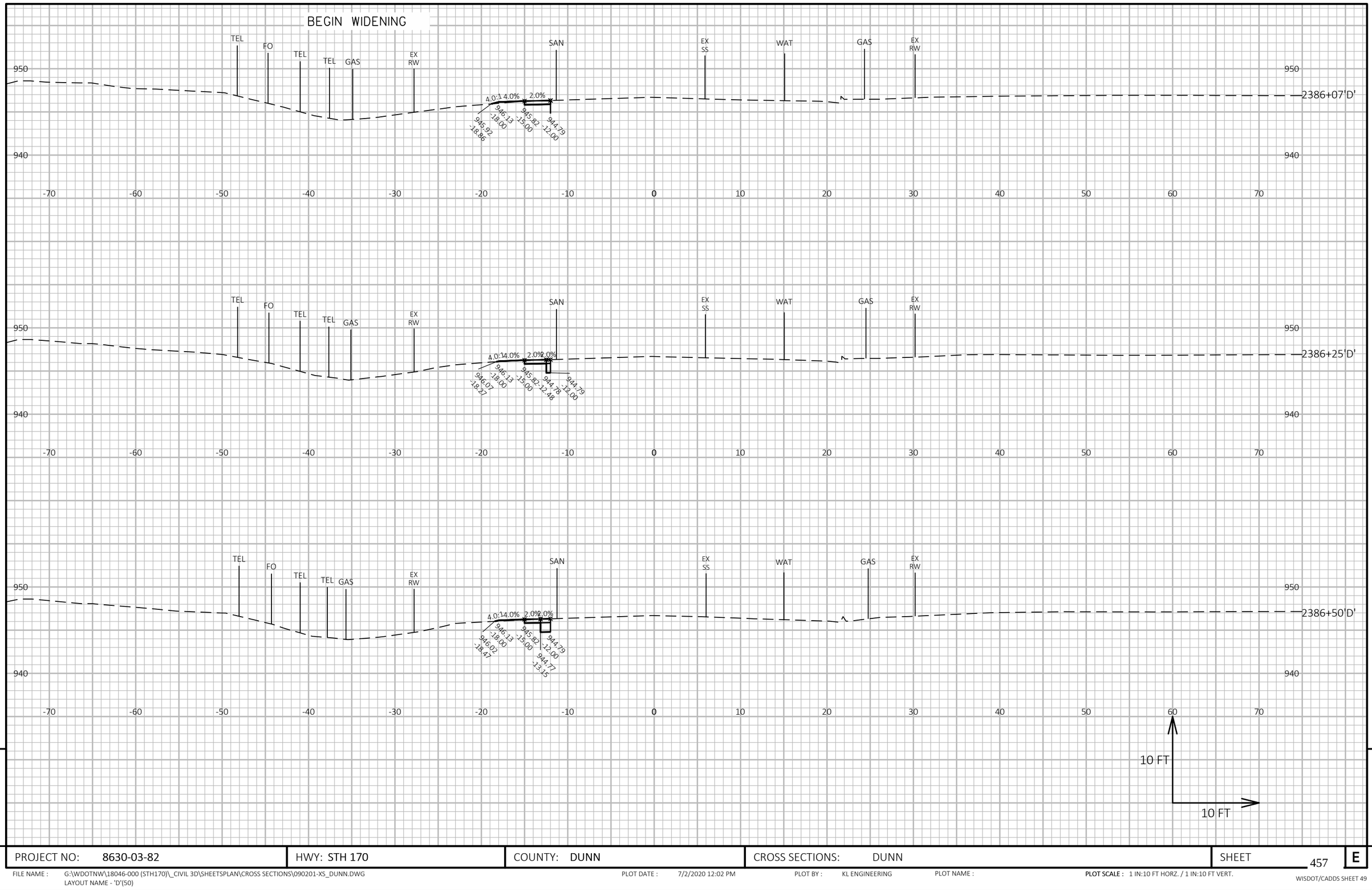


PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 456	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(49)

PLOT DATE : 7/2/2020 12:02 PM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 457	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(50)

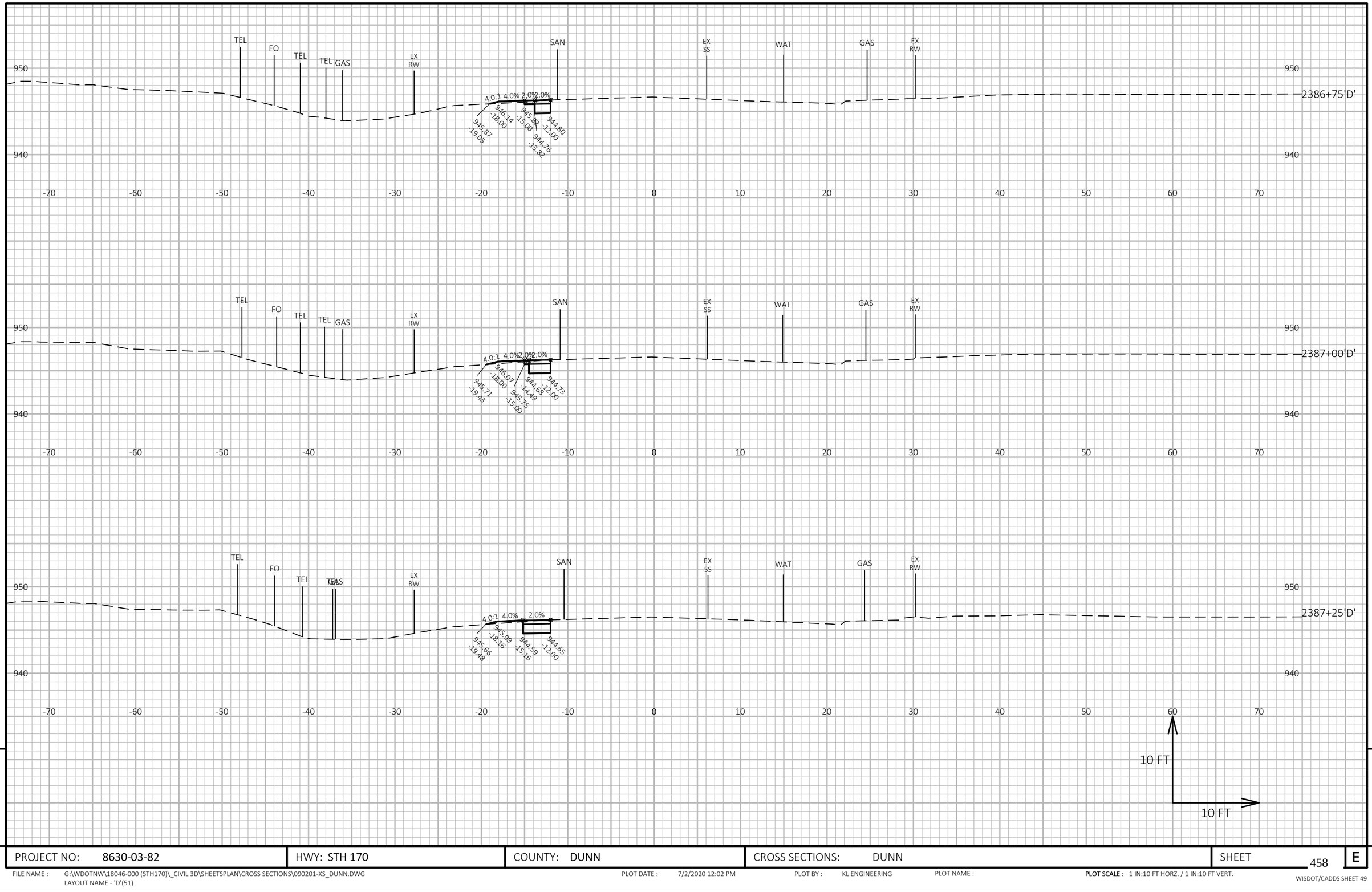
PLOT DATE : 7/2/2020 12:02 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 458	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(51)

PLOT DATE : 7/2/2020 12:02 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49

9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 459	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(52)

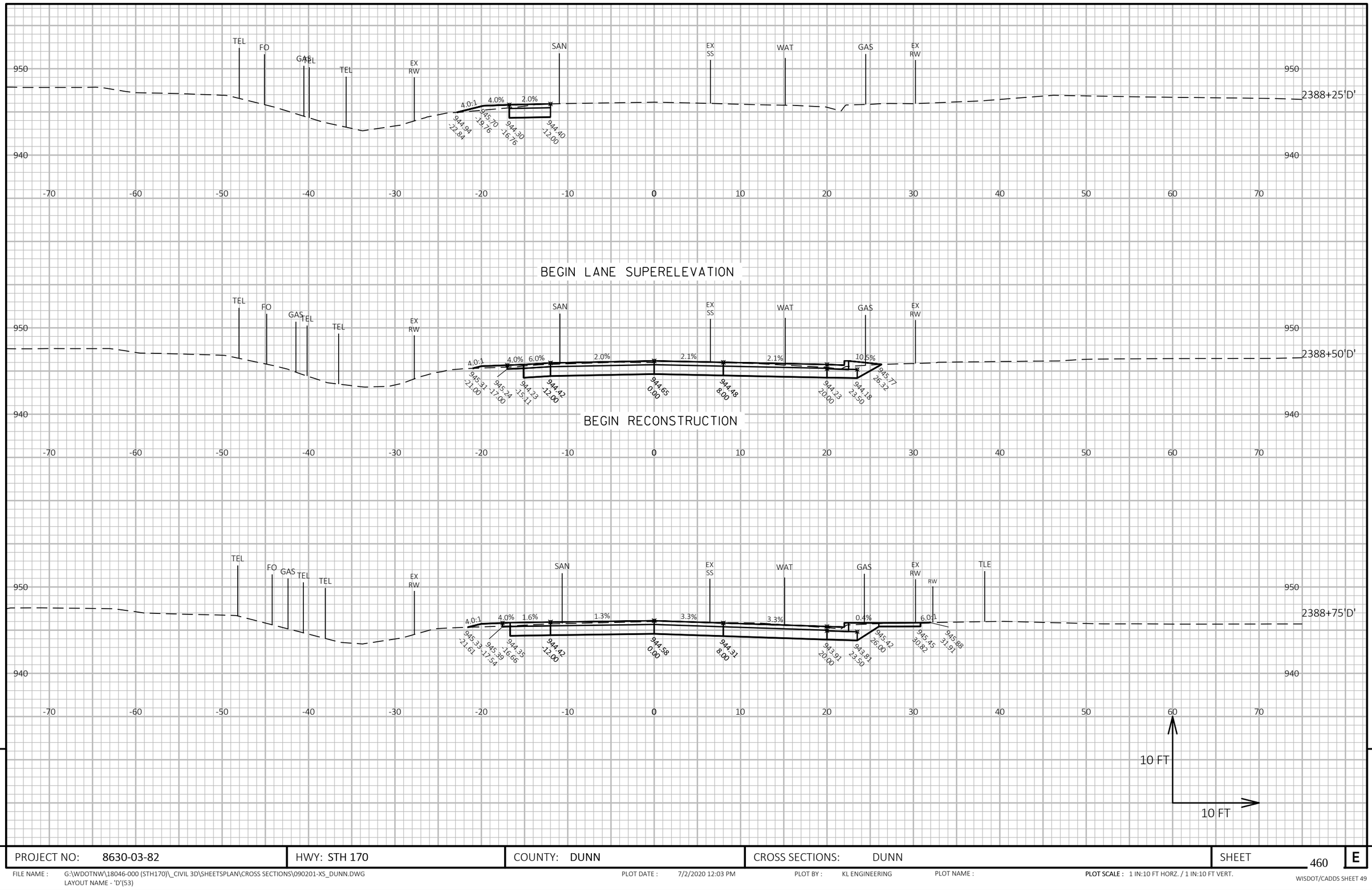
PLOT DATE : 7/2/2020 12:03 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 460	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(53)

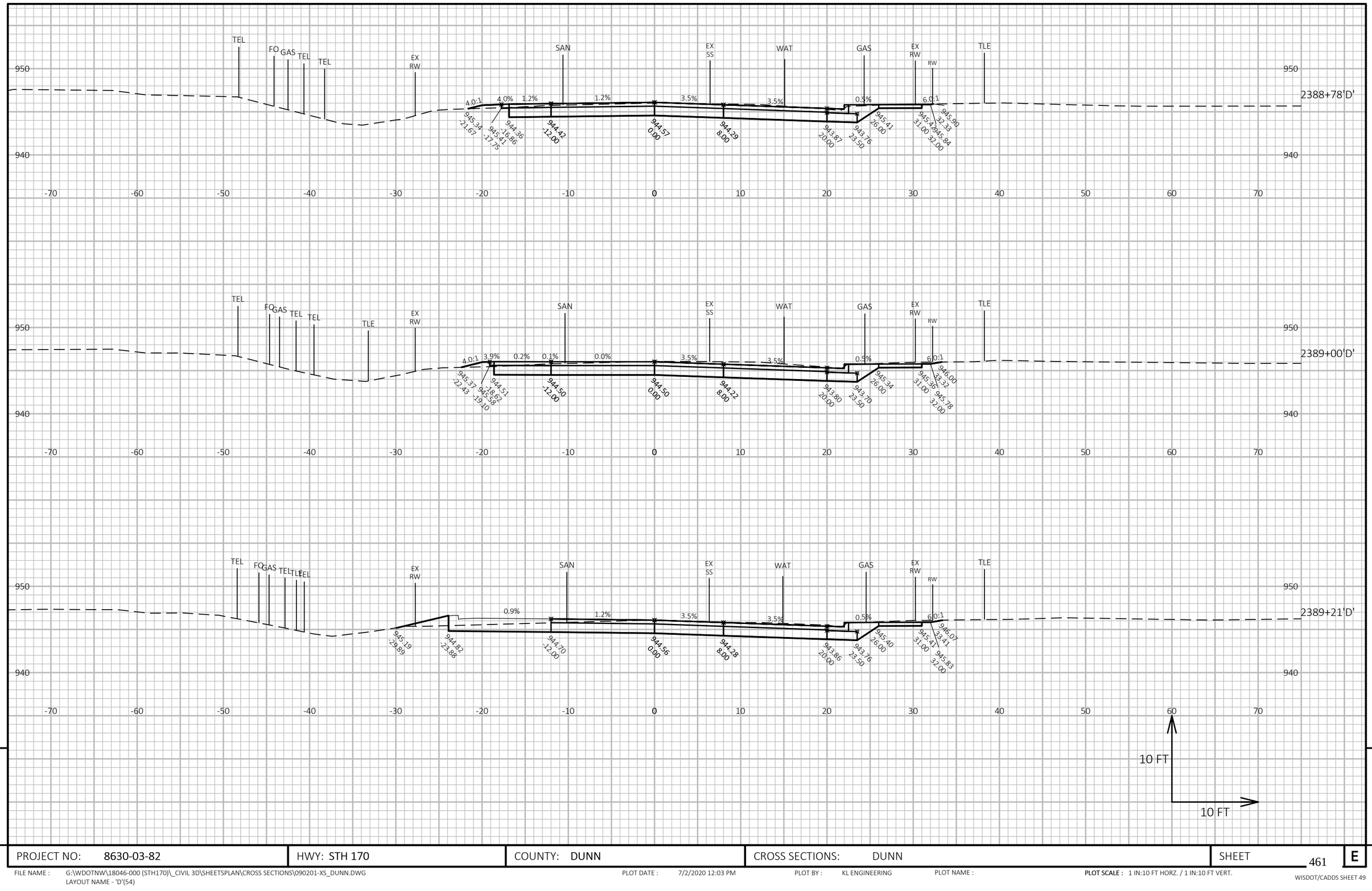
PLOT DATE : 7/2/2020 12:03 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 461	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(54)

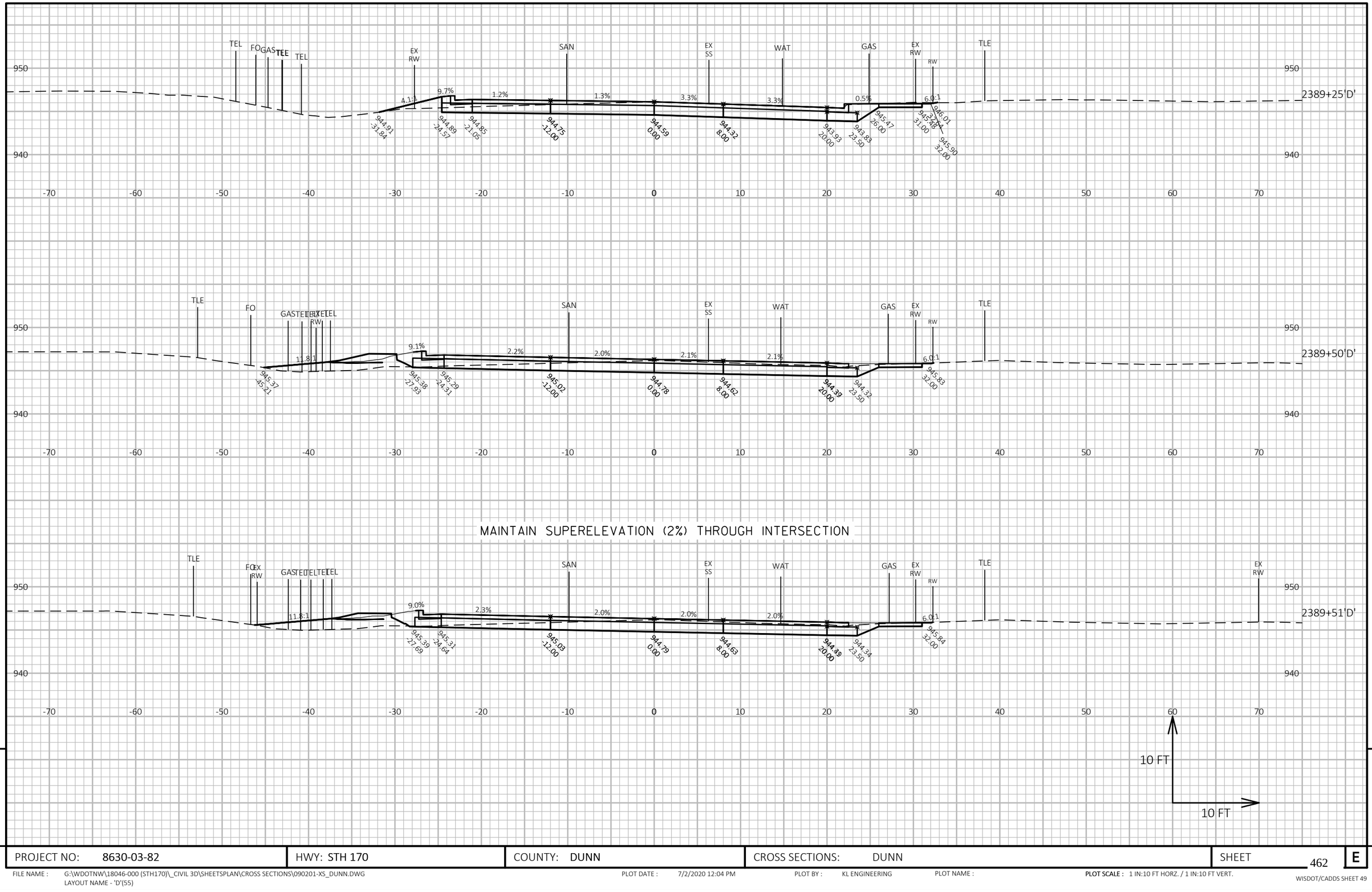
PLOT DATE : 7/2/2020 12:03 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 462	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(55)

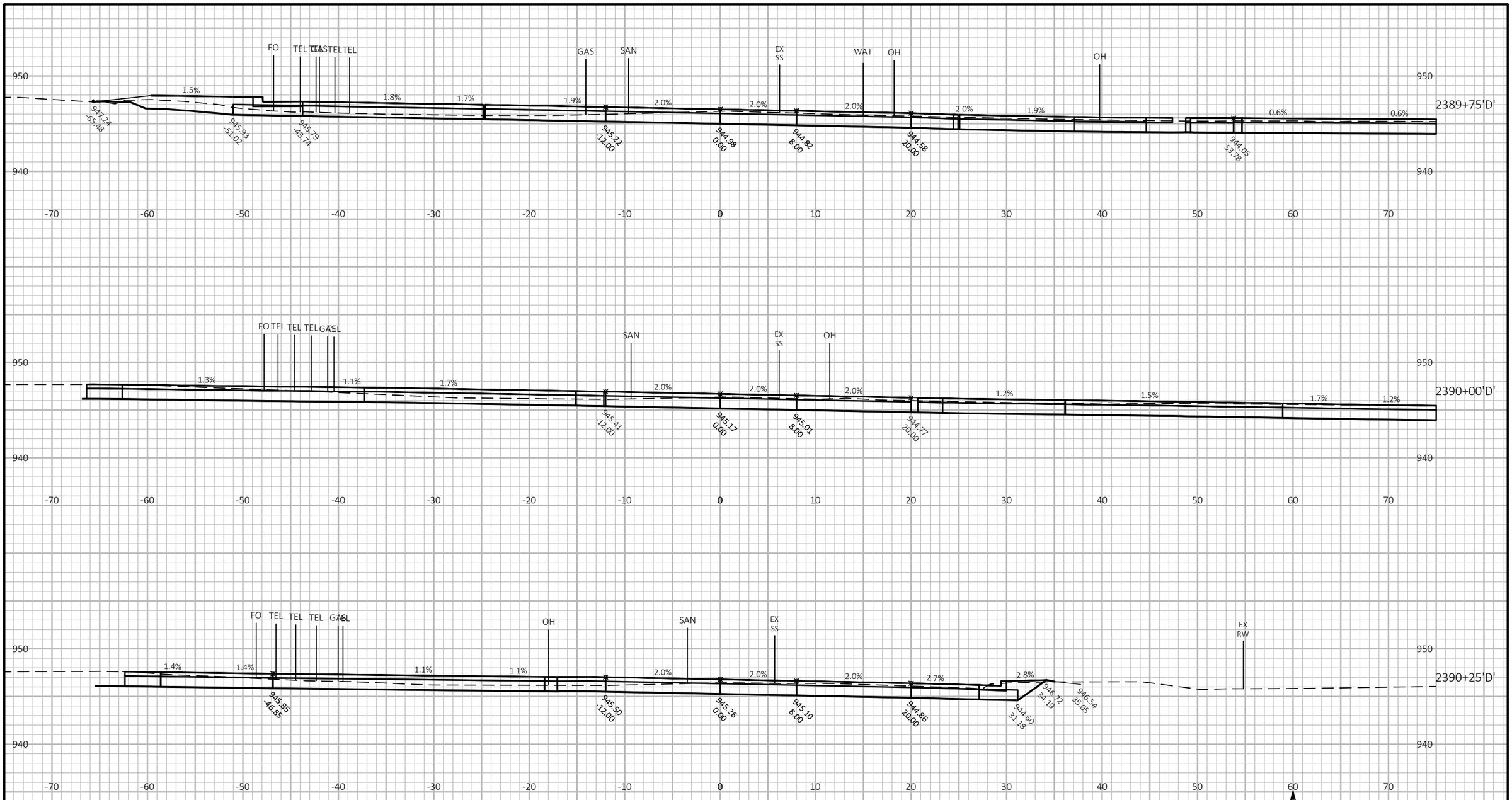
PLOT DATE : 7/2/2020 12:04 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 463	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(56)

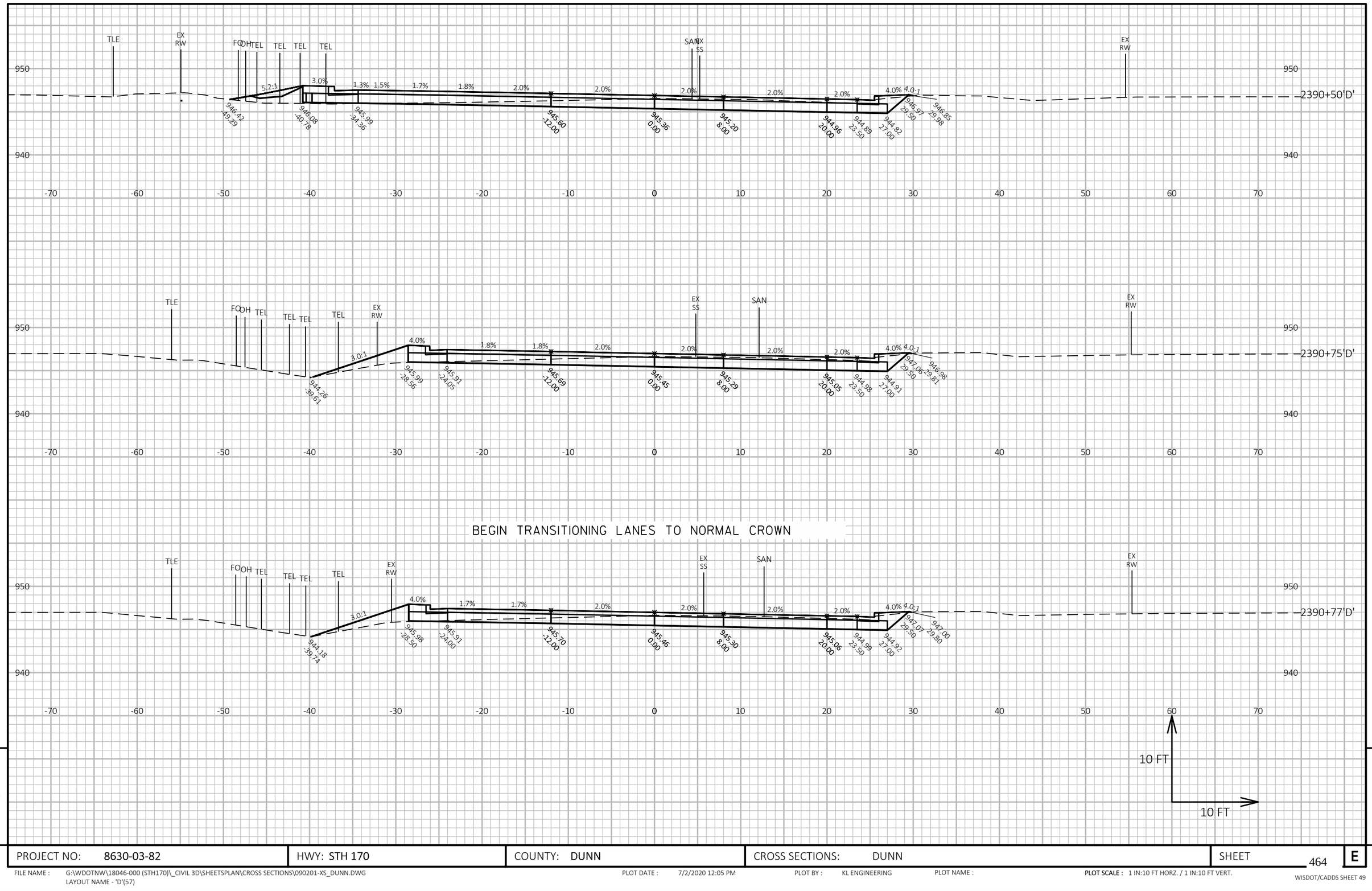
PLOT DATE : 7/2/2020 12:04 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 464	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(57)

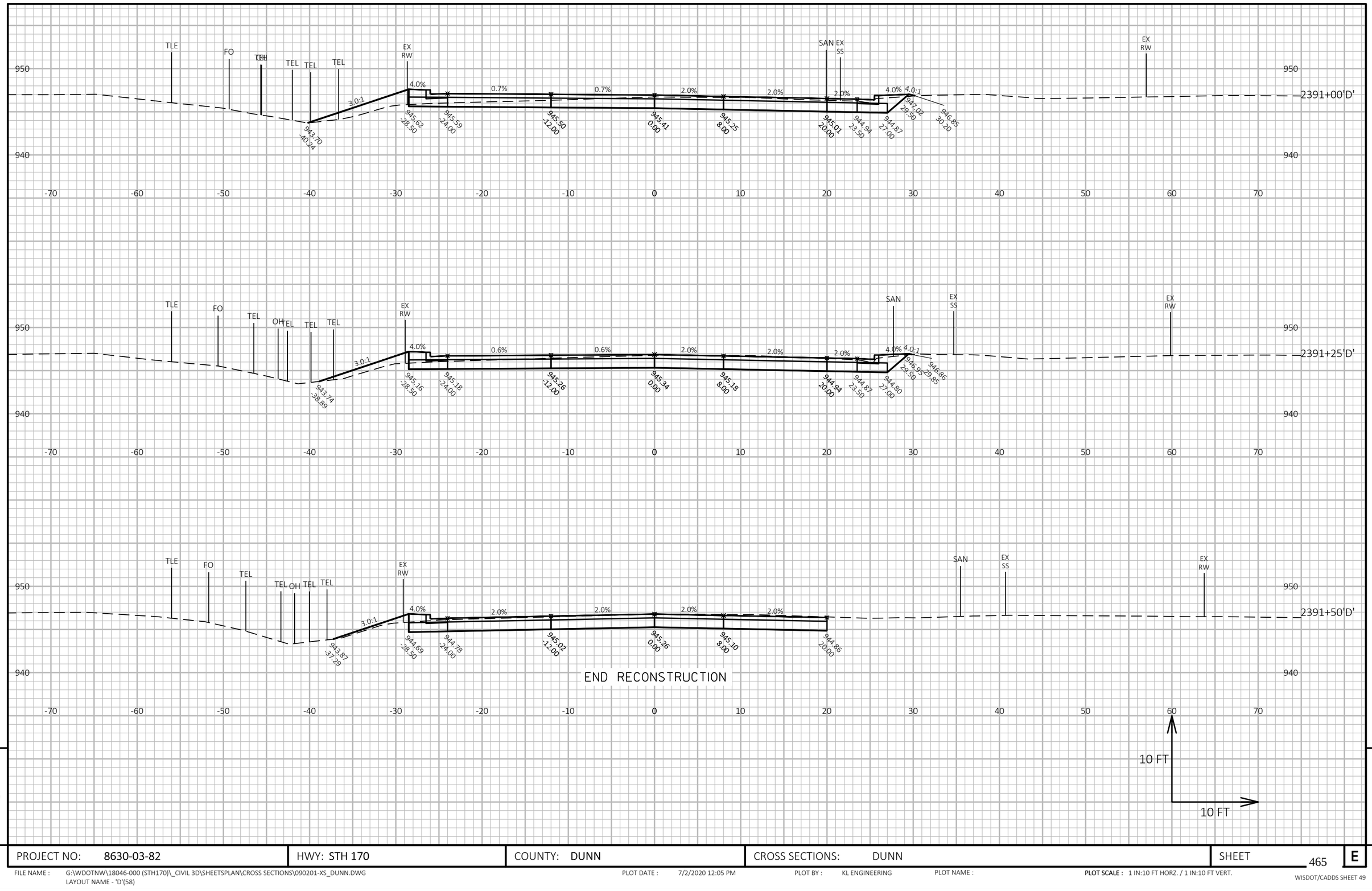
PLOT DATE : 7/2/2020 12:05 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 465	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(58)

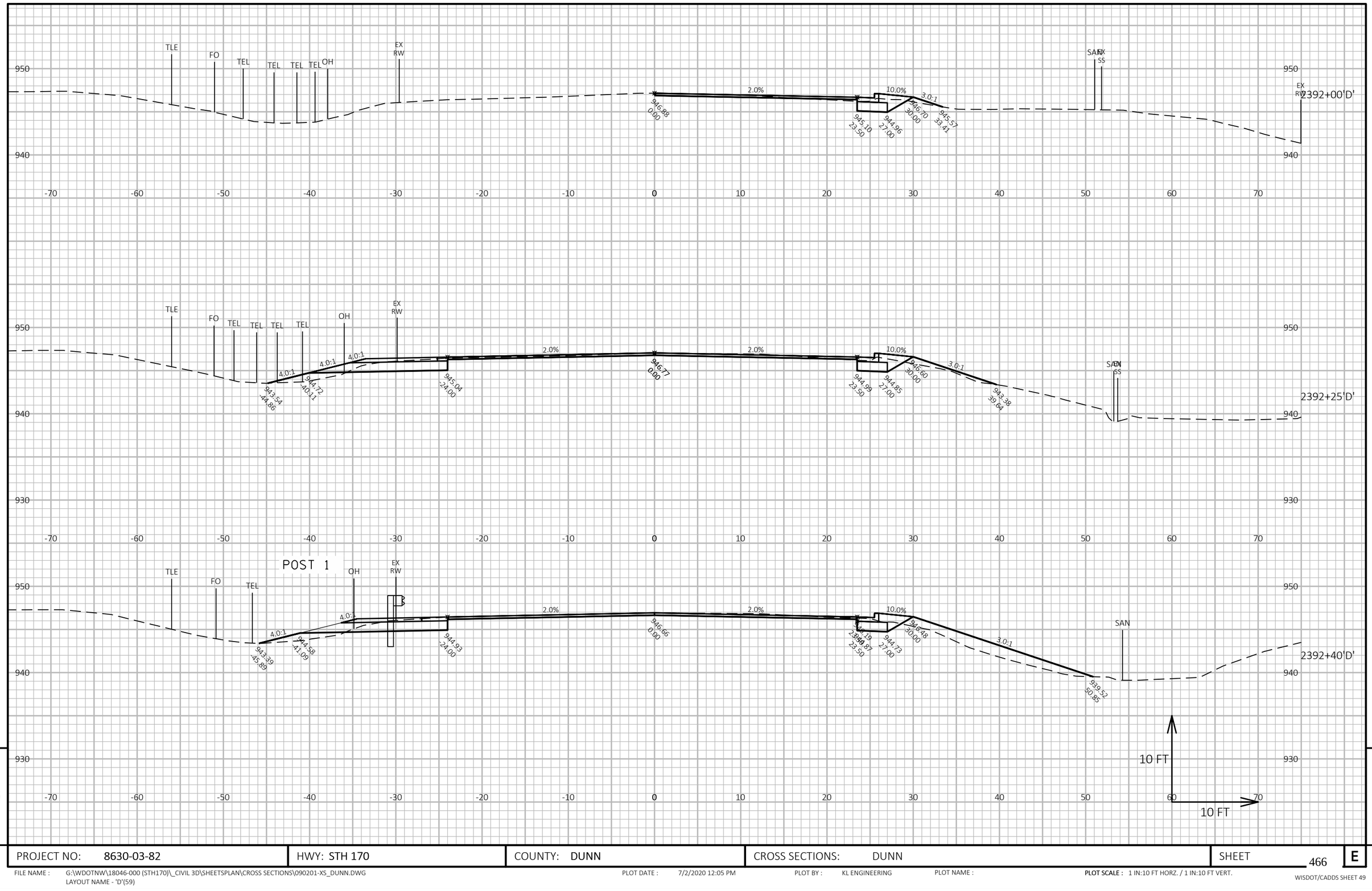
PLOT DATE : 7/2/2020 12:05 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49

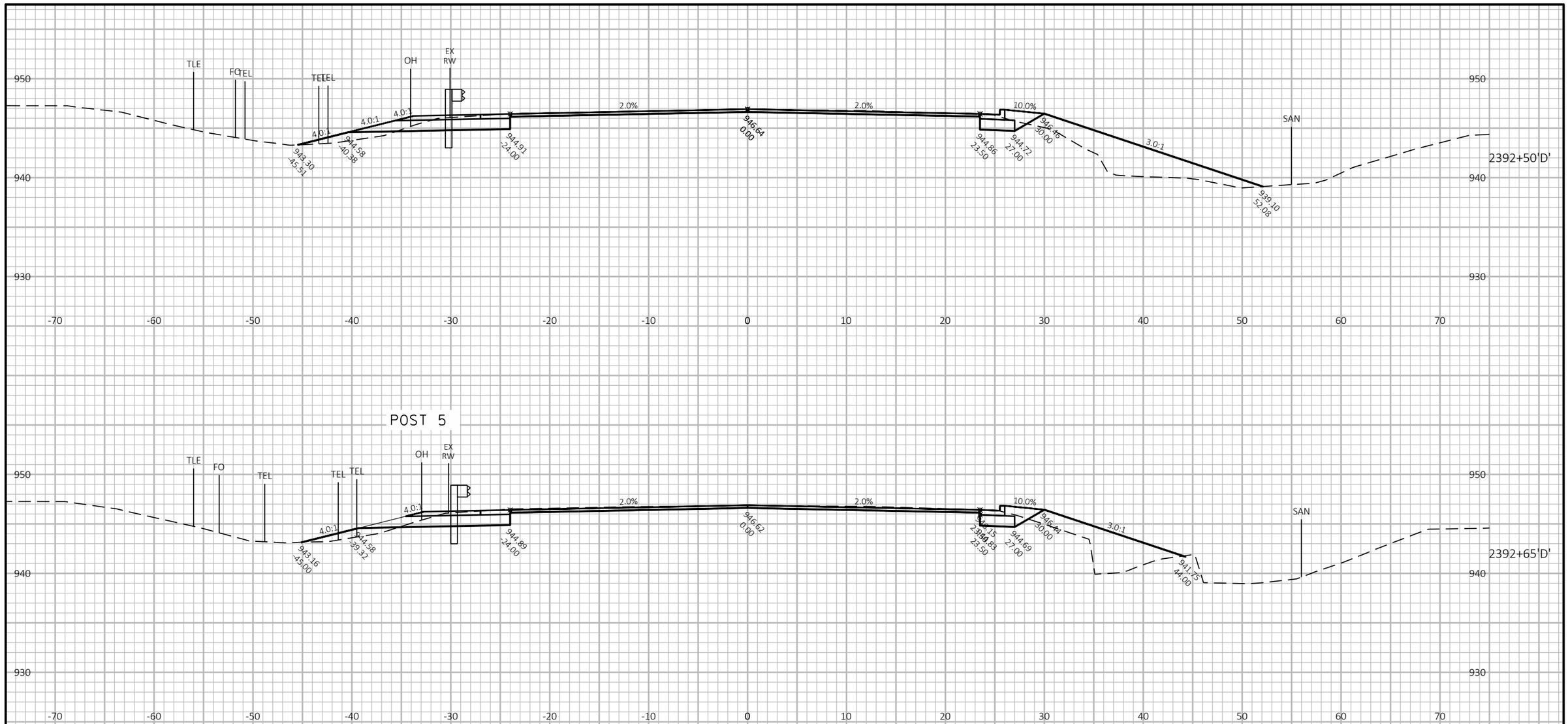


PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 466	E

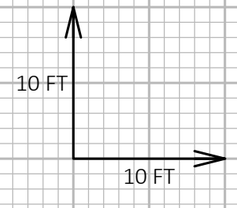
FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(59)

PLOT DATE : 7/2/2020 12:05 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



POST 5



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9

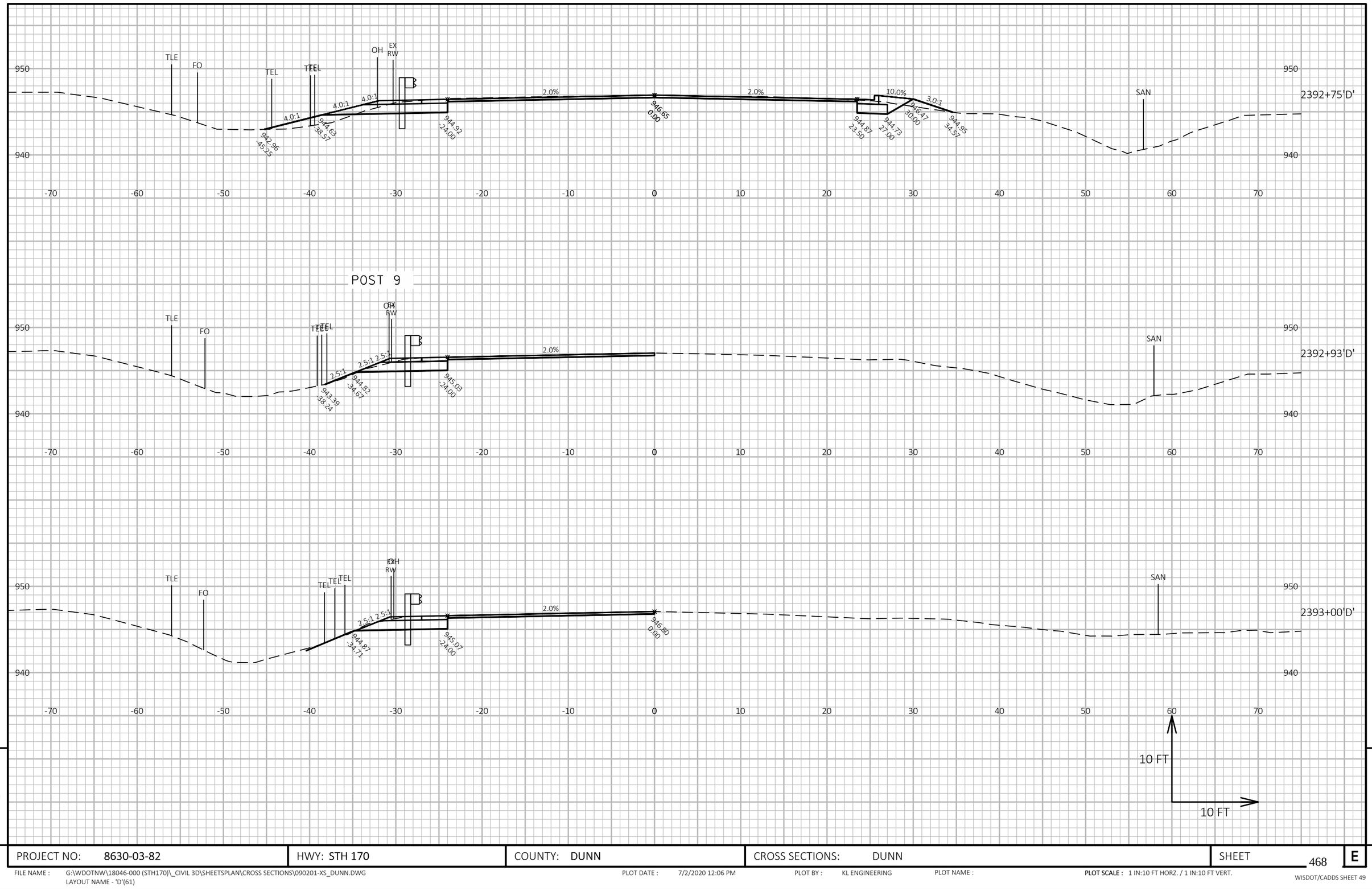
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 467	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(60)

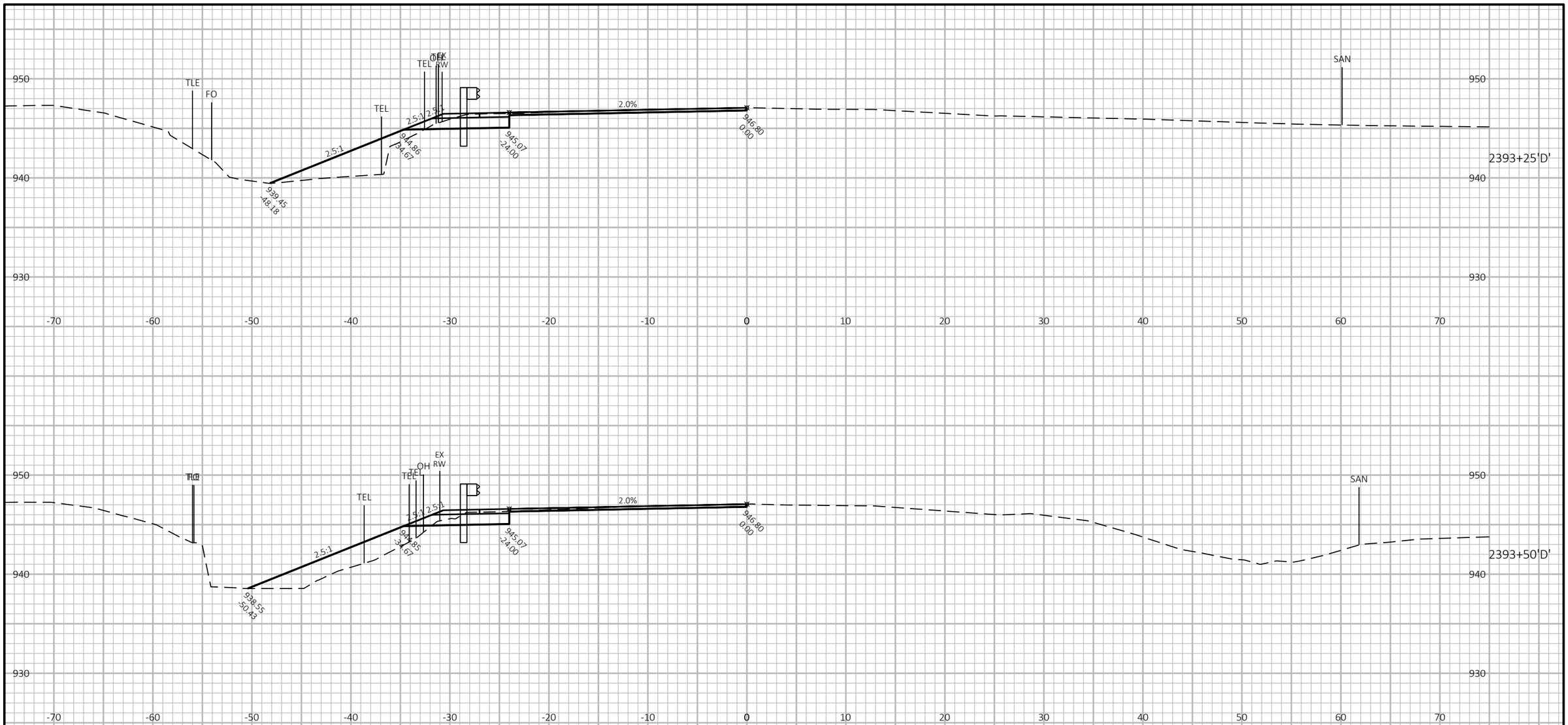
PLOT DATE : 7/2/2020 12:06 PM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



9	PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 468 E



9

9

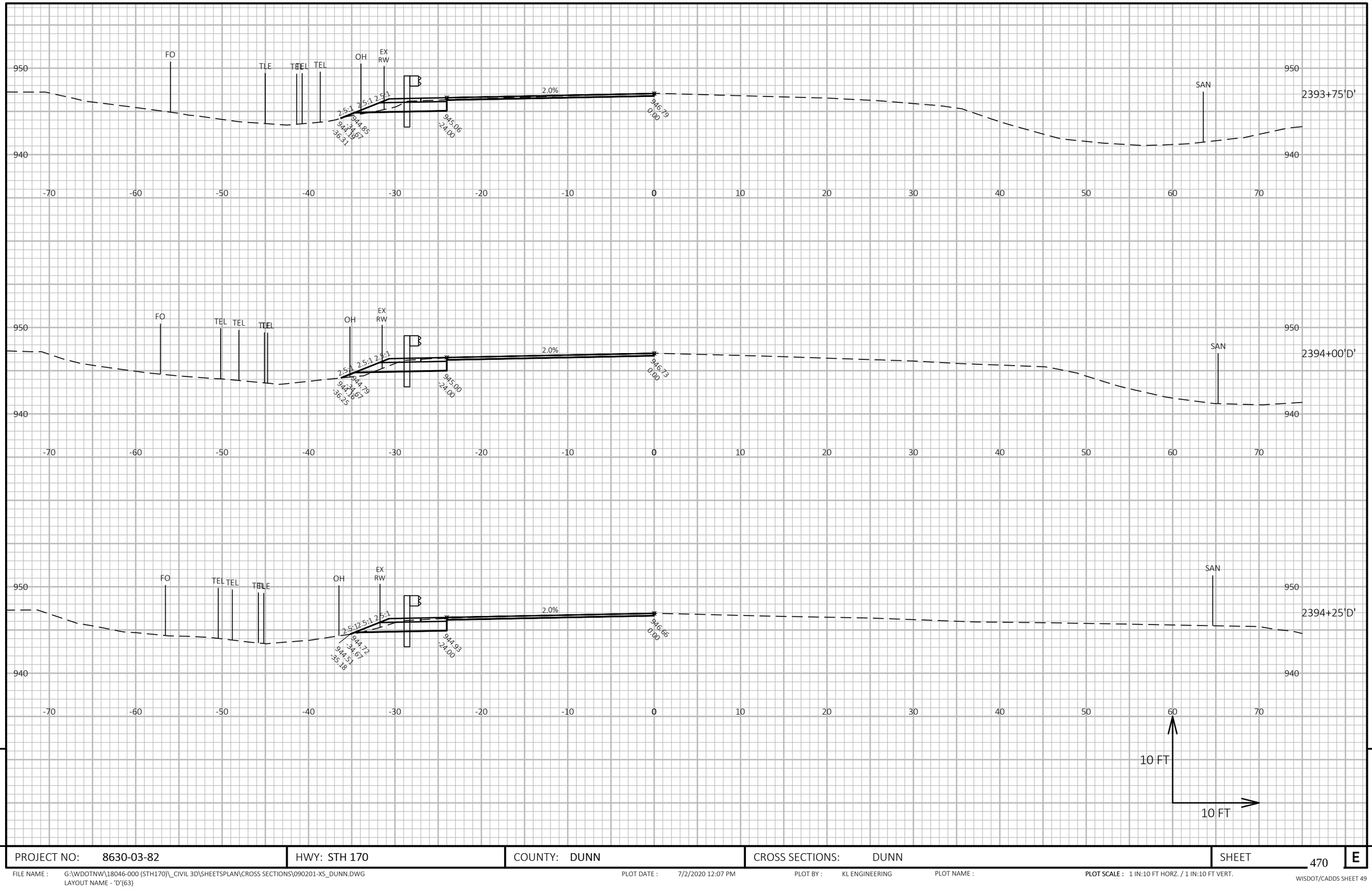
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 469	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(62)

PLOT DATE : 7/2/2020 12:07 PM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 470	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(63)

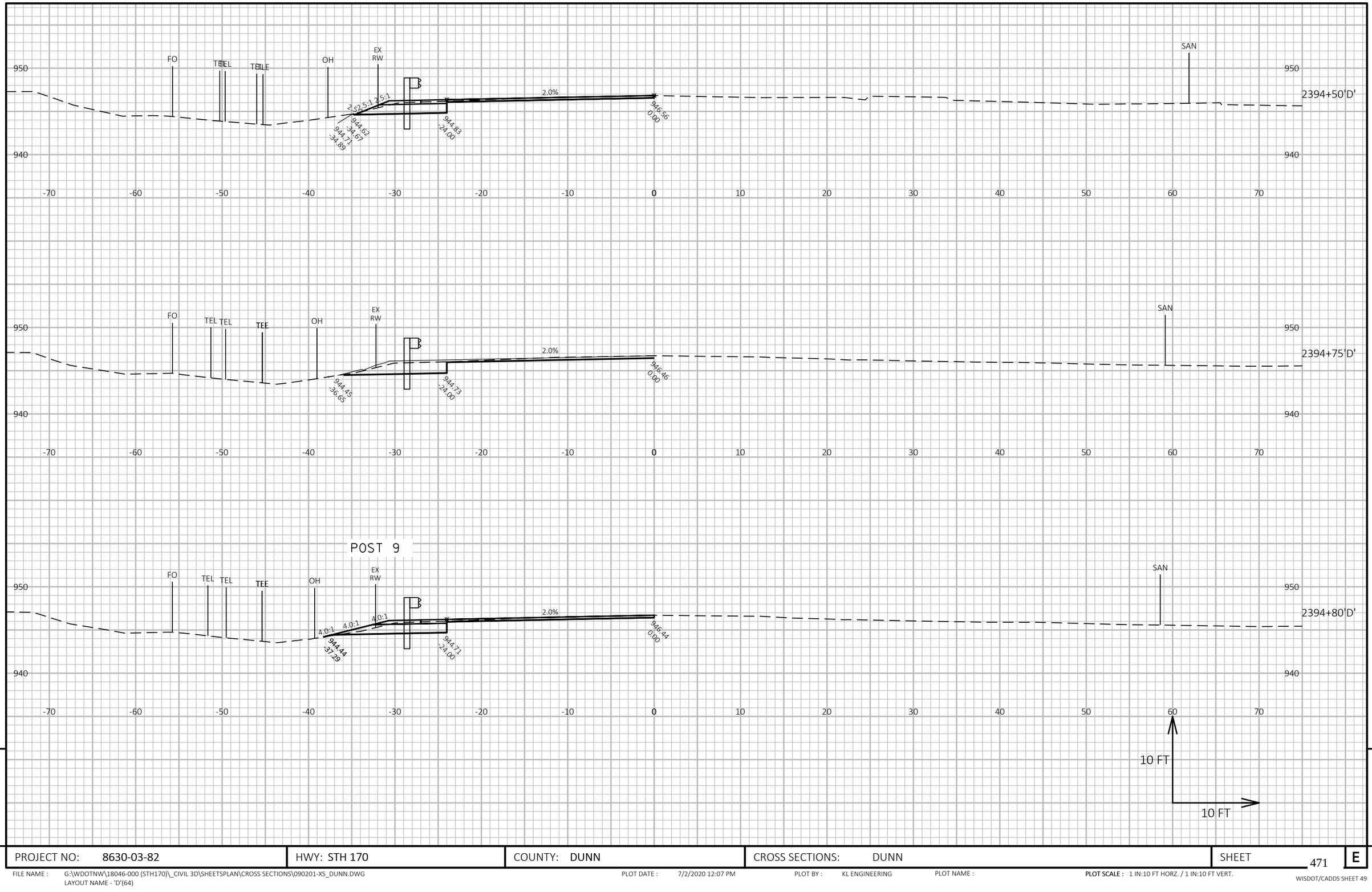
PLOT DATE : 7/2/2020 12:07 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 471	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(64)

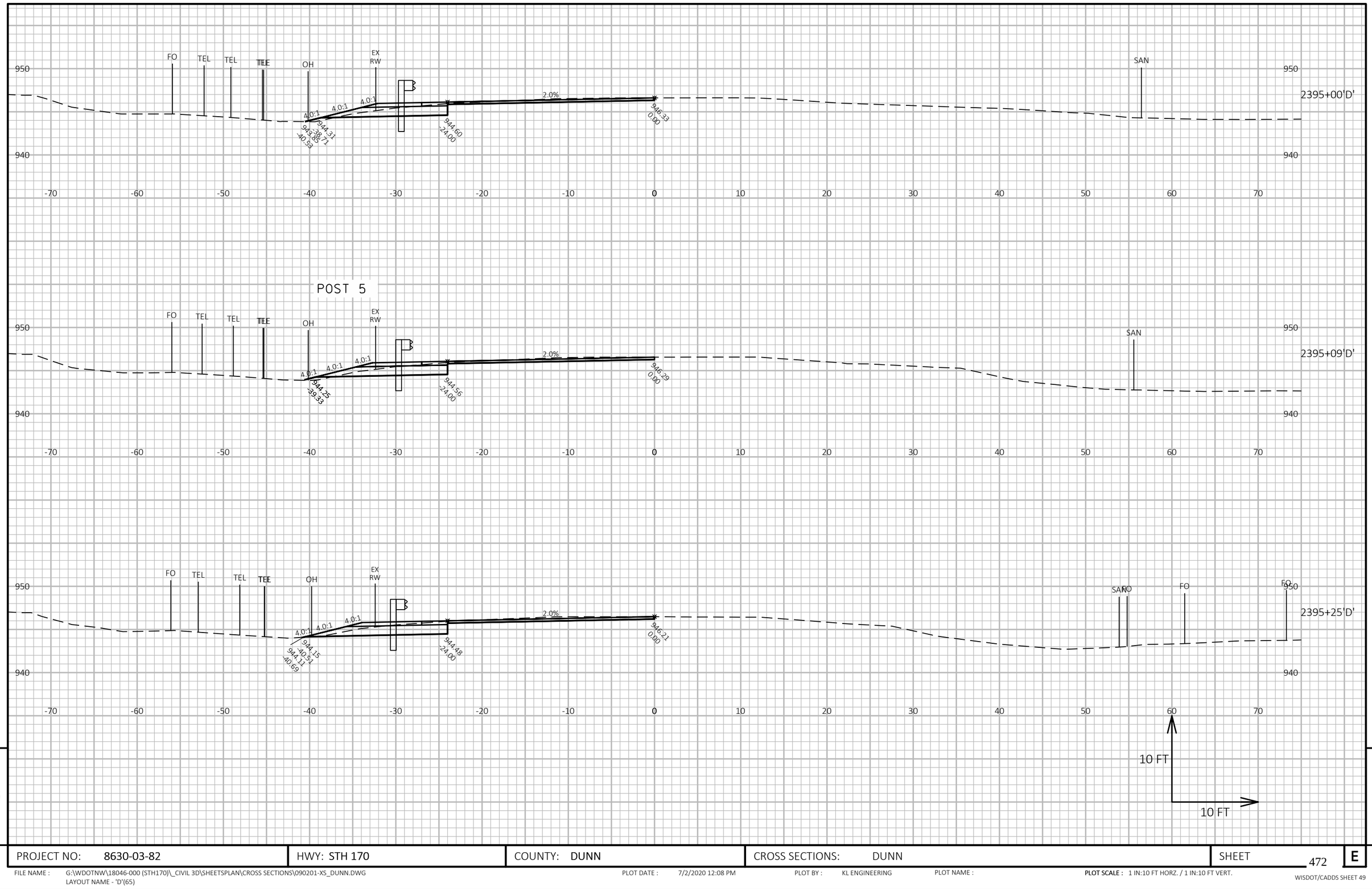
PLOT DATE : 7/2/2020 12:07 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 472	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(65)

PLOT DATE : 7/2/2020 12:08 PM

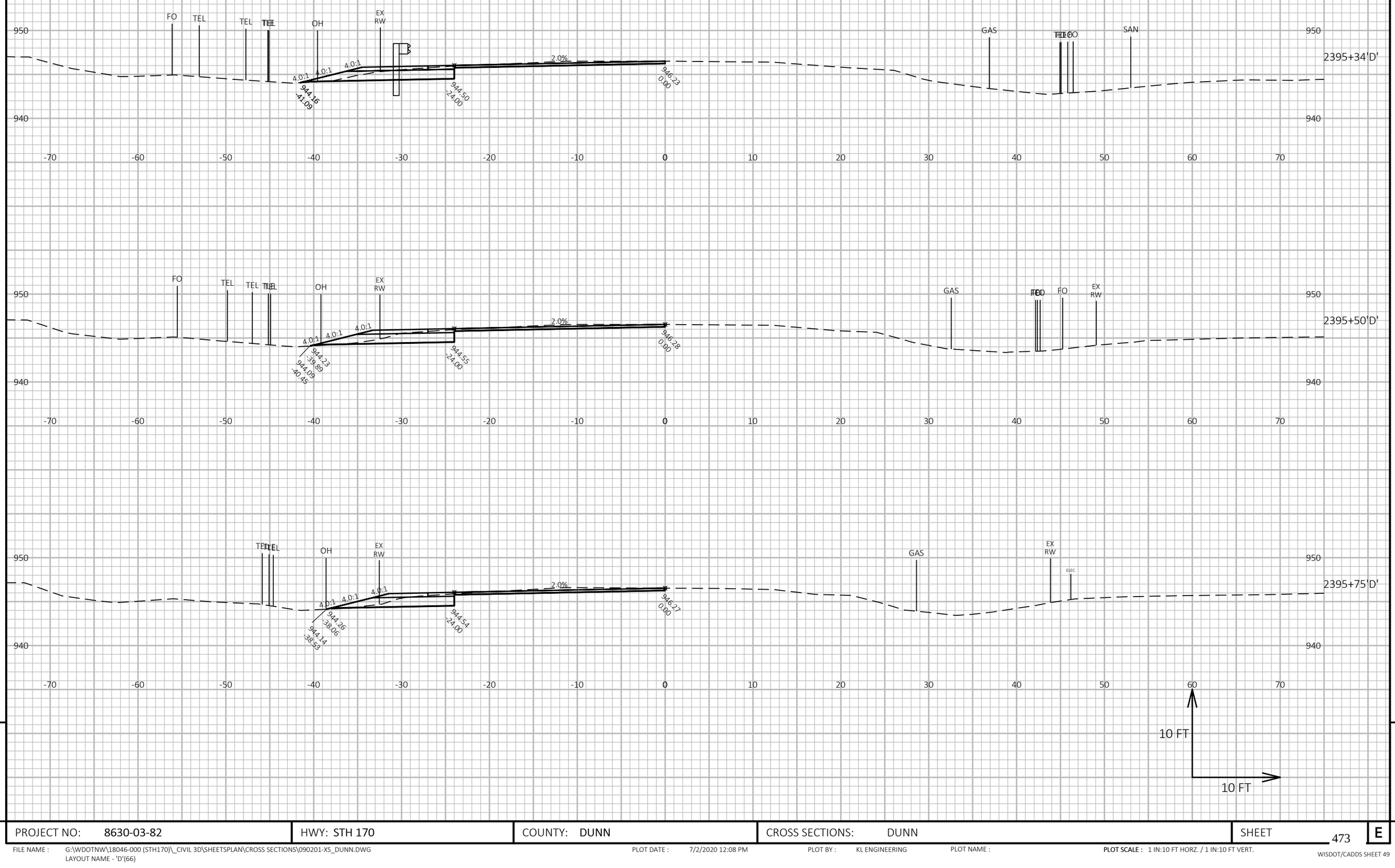
PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49

POST 1



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PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 473	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(66)

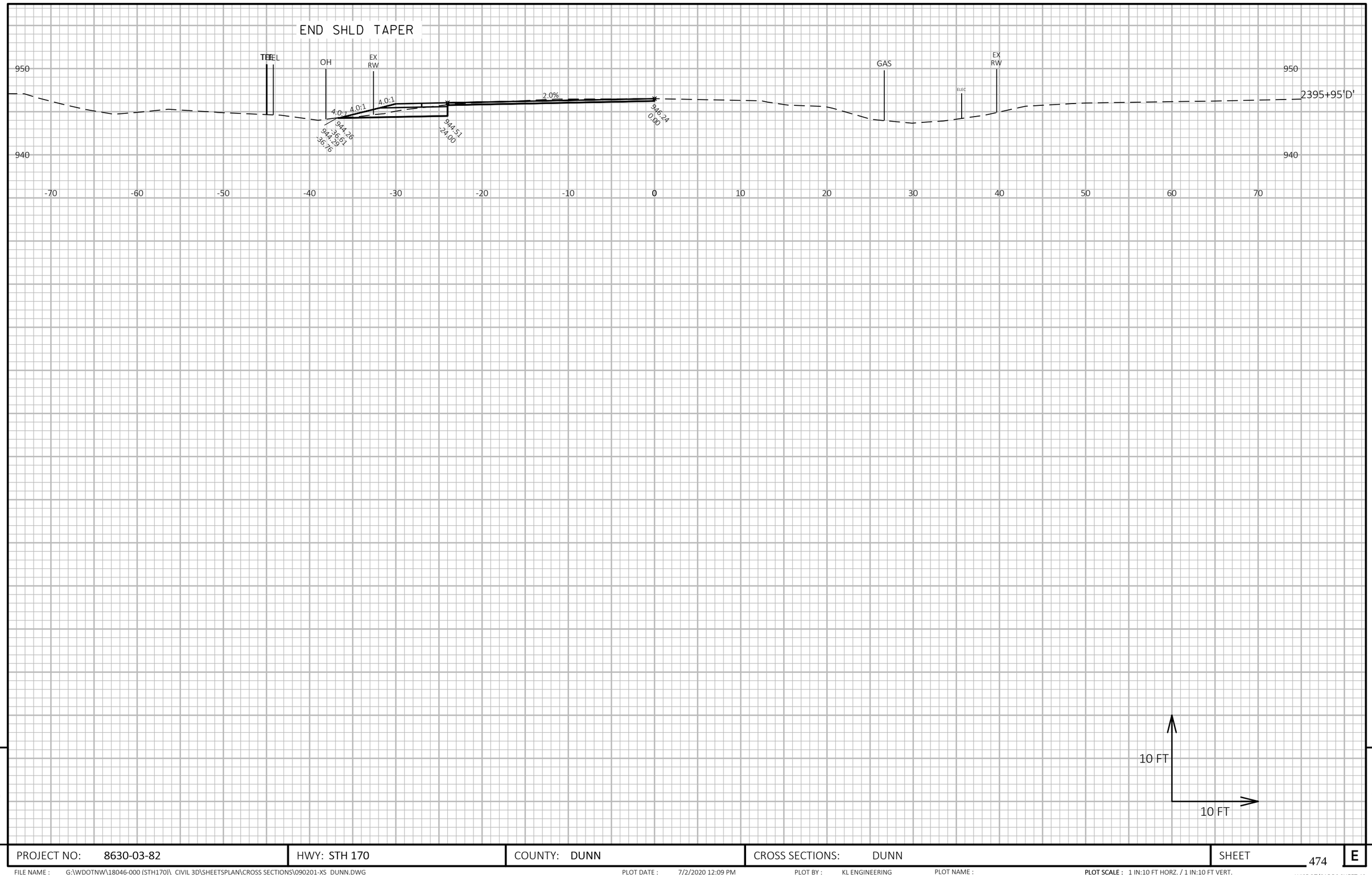
PLOT DATE : 7/2/2020 12:08 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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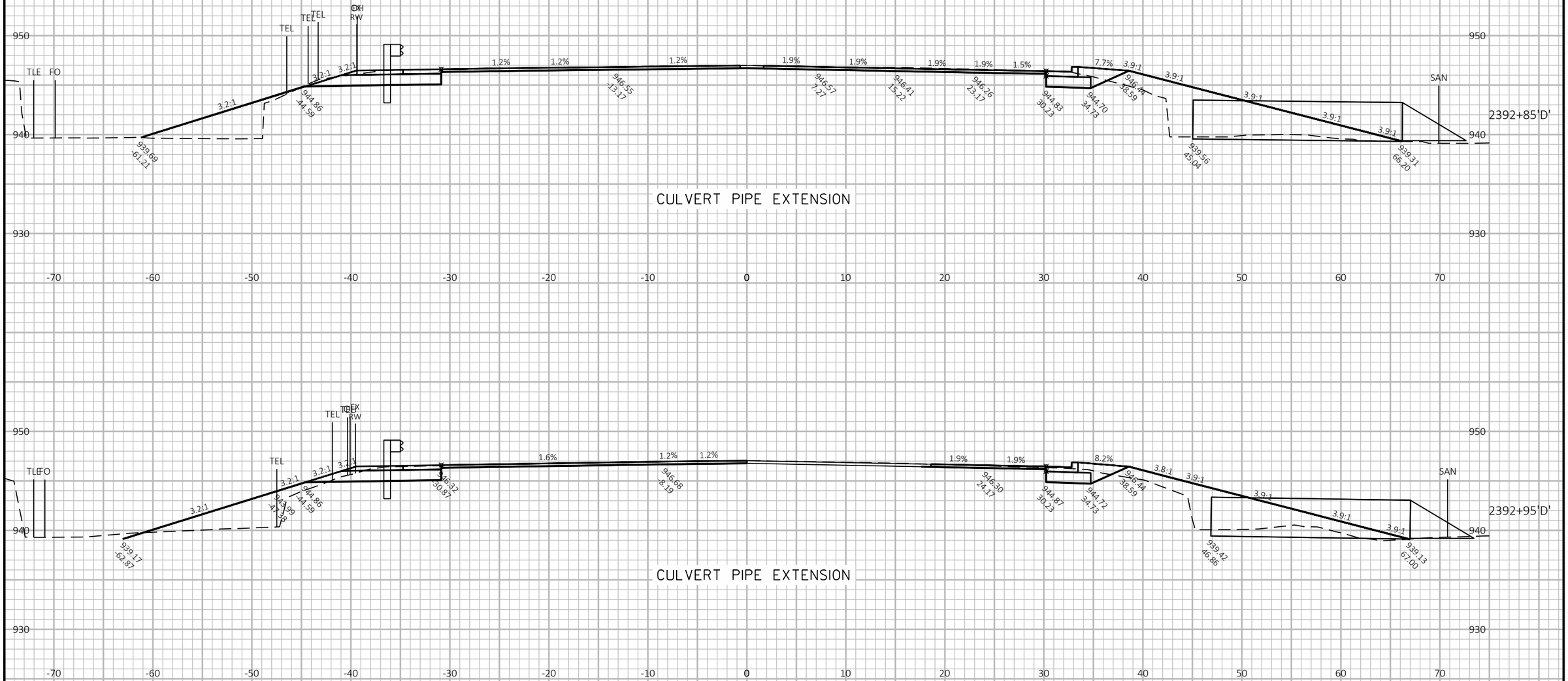
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 474	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'(67)

PLOT DATE : 7/2/2020 12:09 PM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



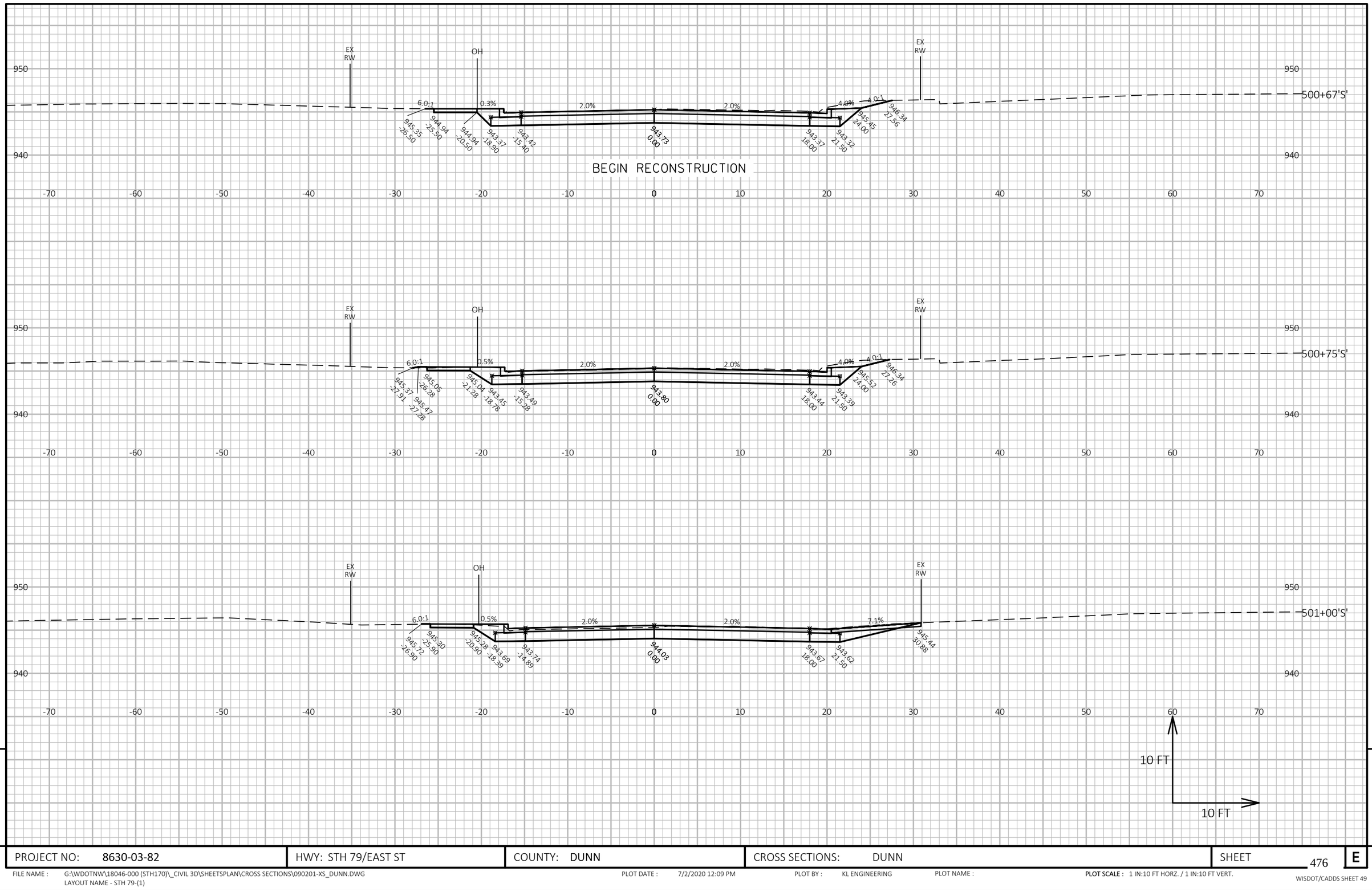
PROJECT NO: 8630-03-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 475	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - 'D'-(68)

PLOT DATE : 7/2/2020 12:09 PM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 8630-03-82	HWY: STH 79/EAST ST	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 476	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - STH 79-(1)

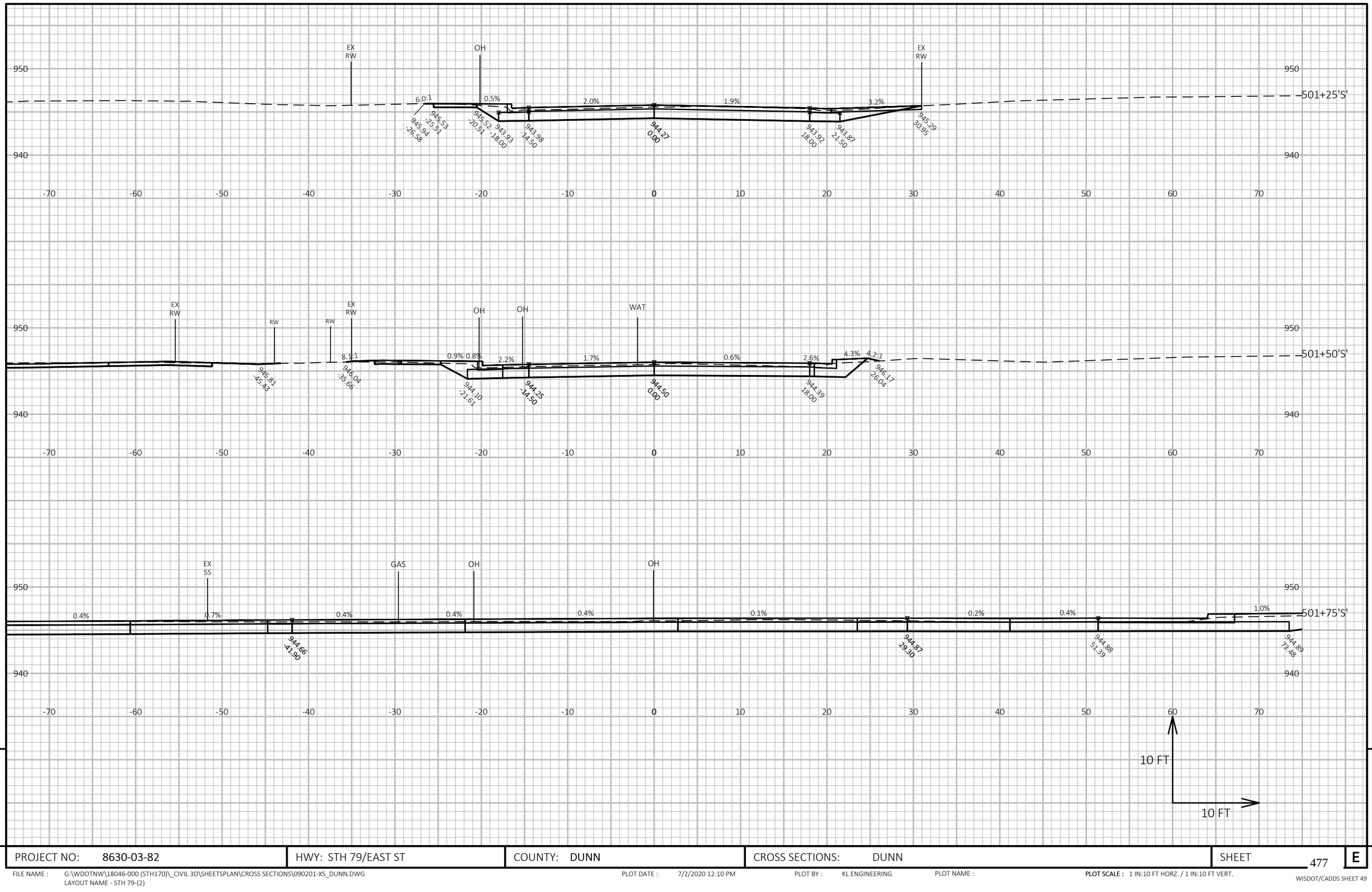
PLOT DATE : 7/2/2020 12:09 PM

PLOT BY : KL ENGINEERING

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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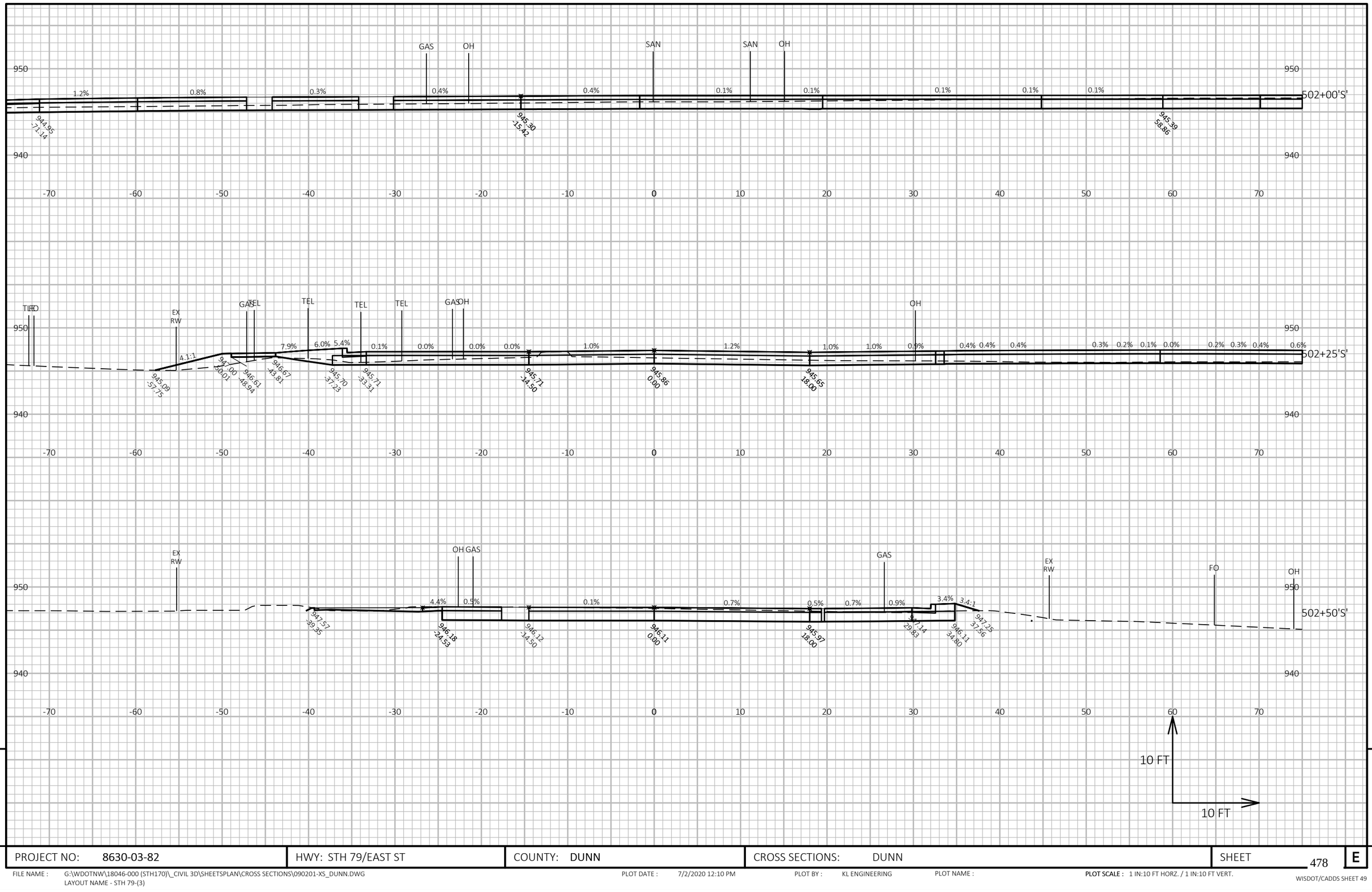
PROJECT NO: 8630-03-82	HWY: STH 79/EAST ST	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 477	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - STH 79-(2)

PLOT DATE : 7/2/2020 12:10 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



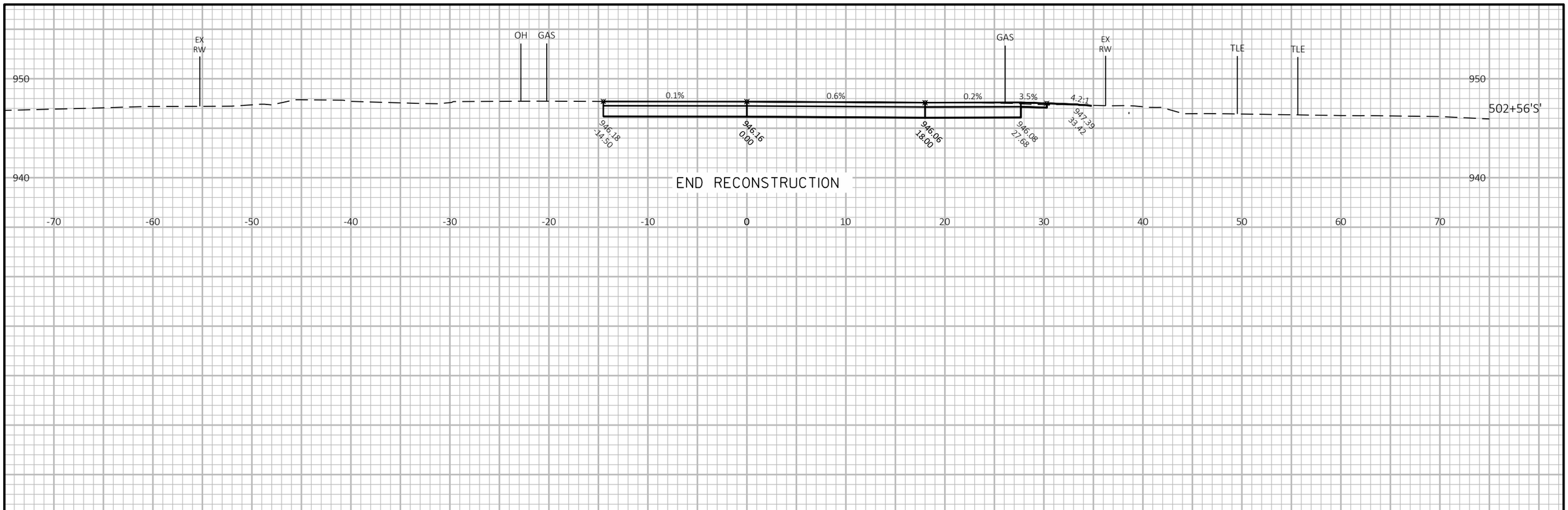
PROJECT NO: 8630-03-82	HWY: STH 79/EAST ST	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 478	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - STH 79-(3)

PLOT DATE : 7/2/2020 12:10 PM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 8630-03-82	HWY: STH 79/EAST ST	COUNTY: DUNN	CROSS SECTIONS: DUNN	SHEET 479	E

FILE NAME : G:\WDOTNW\18046-000 (STH170)_CIVIL 3D\SHEETSPLAN\CROSS SECTIONS\090201-XS_DUNN.DWG
LAYOUT NAME - STH 79-(4)

PLOT DATE : 7/2/2020 12:10 PM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

EAU DECEMBER 2020

PROJECT ID: 8630-05-82/83

WITH: 8630-03-82

COUNTY: DUNN

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
~~Section No.~~	~~5~~	~~Plan and Profile~~
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
~~Section No.~~	~~8~~	~~Structure Plans~~
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 152

27

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

GLENWOOD CITY - COLFAX

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8630-05-82	WISC 2021053	1
8630-05-83	WISC 2021050	1

STH 25 TO CTH D

STH 170
DUNN COUNTY

STATE PROJECT NUMBER: 8630-05-82

STH 79 TO STH 25

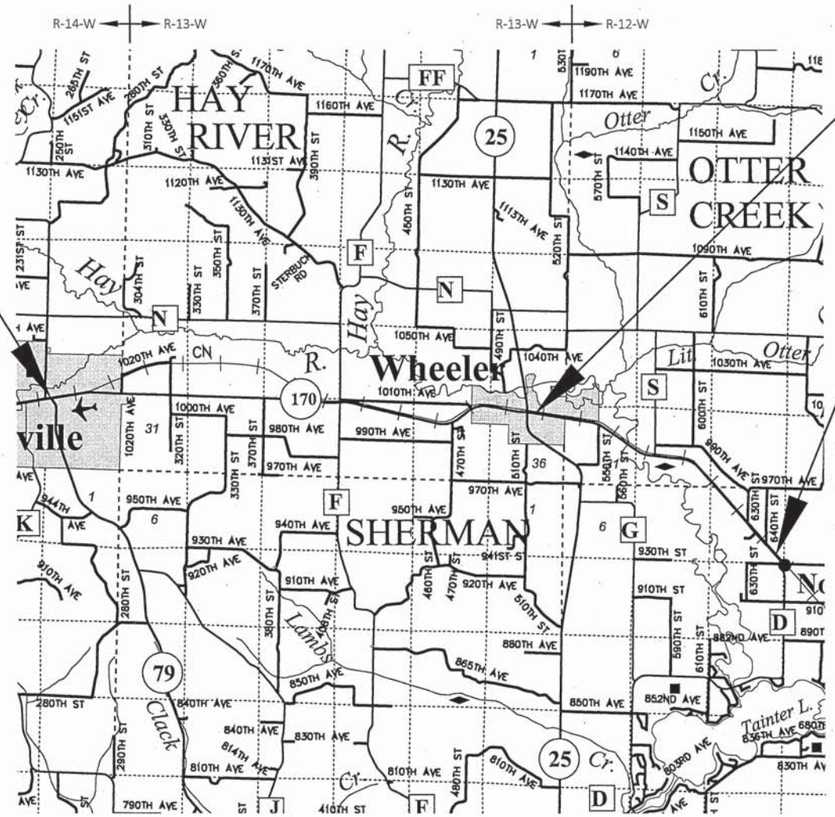
STH 170
DUNN COUNTY

STATE PROJECT NUMBER: 8630-05-83

BEGIN PROJECT 8630-05-83
STA 397+93.04
Y = 232056.57
X = 134236.16

BEGIN PROJECT 8630-05-82
END PROJECT 8630-05-83
STA 737+90.00
Y = 231783.24
X = 167619.03

END PROJECT 8630-05-82
STA 948+94.80



LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 3.997 MI (82)
TOTAL NET LENGTH OF CENTERLINE = 6.439 MI (83)

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), DUNN COUNTY, NAD83 (HYEAR), 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 (YEAR). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

DESIGN DESIGNATION		8630-05-82	DESIGN DESIGNATION		8630-05-83
A.A.D.T.	(2017)	= 700	A.A.D.T.	(2017)	= 1300
A.A.D.T.	(2037)	= 900	A.A.D.T.	(2037)	= 1600
D.H.V.		= ---	D.H.V.		= ---
D.D.		= 50/50	D.D.		= 50/50
T.		= 6.9%	T.		= 6.9%
DESIGN SPEED		= 35/55 MPH	DESIGN SPEED		= 35/55 MPH
ESALS		= 700,000	ESALS		= 700,000

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 (SOETE)
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

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

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

ORIGINAL PLANS PREPARED BY
AYRES

WISCONSIN
MARK R. PETERSEN
E-36785
EAU CLAIRE WI
PROFESSIONAL ENGINEER

7/16/20 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WDOT
Designer	AYRES ASSOCIATES INC
Project Manager	TYLER RONGSTAD, PE
Regional Examiner	TOU YANG
Regional Supervisor	JAMES KOENIG

APPROVED FOR THE DEPARTMENT
DATE: Tyler Rongstad (Signature)

E

FILE NAME : I:\41\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\010101-TI.DWG PLOT DATE : 7/16/2020 3:34 PM PLOT BY : RESHESKE, CARRIE PLOT NAME :

GENERAL NOTES

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 DIGGERS HOTLINE AND OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA.

ALL RADII ARE MEASURED TO EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.

PRIOR TO THE PLACEMENT OF MGS GUARDRAIL, THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED UNLESS SHOWN OTHERWISE.

UTILITY CONTACTS

BOYCEVILLE WASTEWATER TREATMENT
FACILITY - WATER & SEWER
1233 CHARLOTTE STREET
PO BOX 368
BOYCEVILLE, WI 54725-0368
ATTN: DON ROSE
715-643-2678
waterworks54725@hotmail.com

WHEELER VILLAGE OF MUNICIPAL WATER
UTILITY - WATER & SEWER
VILLAGE OF WHEELER
PO BOX 16
WHEELER, WI 54772-0016
ATTN:KENNETH KOEHLER, PWD
715-632-2449
office@wheeler-wi.com

WE ENERGIES - GAS/PETROLEUM
104 WEST SOUTH STREET
RICE LAKE, WI 54868
ATTN: STEVEN CHAVERS
715-234-9605
steven.chavers@we-energies.com
24-HOUR EMERGENCY (GAS)
800-261-5325

VIKING GAS TRANSMISSION COMPANY - GAS/PETROLEUM
13506 COUNTY HWY OO
CHIPPEWA FALLS, WI 54729
ATTN: NATHAN DACHEL
715-726-2282
nathan.dachel@oneok.com
24-HOUR EMERGENCY CONTACT (GAS)
888-417-6275

DAIRYLAND POWER COOPERATIVE - ELECTRIC
3200 EAST AVENUE SOUTH
PO BOX 817
LA CROSSE, WI 54602-0817
ATTN: ROB MALY
608-518-2633
rob.maly@dairylandpower.com

DUNN ENERGY COOPERATIVE - ELECTRIC
N5725 600TH STREET
PO BOX 220
MENOMONIE, WI 54751-0220
ATTN: MIKE ANDRASCHKO
715-232-6240
mandra@dunnenergy.com

XCEL ENERGY - ELECTRIC
320 HELLER ROAD
MENOMONIE, WI 54751
ATTN: TRAVIS WERLEIN
715-232-7415
travis.a.werlein@xcelenergy.com

XCEL ENERGY - TRANSMISSION
415 5TH STREET
MINNEAPOLIS, MN 55401
ATTN: MITCH DIENGER
612-321-3109
mitchell.a.dienger@xcelenergy.com

CENTURYLINK - COMMUNICATION LINE
20 SOUTH WILSON AVENUE
RICE LAKE, WI 54868
ATTN: KYLE SCHLAMPP
715-234-5573
kyle.schlampp@centurylink.com

CINC (a/k/a CCI SYSTEMS) - COMMUNICATION LINE
105 GARFIELD AVENUE
EAU CLAIRE, WI 54701
ATTN: DAREN BAUER
715-836-5286
bauerdp@uwec.edu

CHARTER COMMUNICATIONS - COMMUNICATION LINE
1201 MCCANN DRIVE
ALTOONA, WI 54720
ATTN: SHANE YODER
715-831-8940 EXT. 51113
shane.yoder@charter.com

WINDSTREAM KDL, LLC - COMMUNICATION LINE
314 NORTH DANZ AVENUE
GREEN BAY, WI 54302-3526
ATTN: ERIC BECKER
920-461-9825
eric.becker@windstream.com

* DENOTES NOT A DIGGERS HOTLINE MEMBER

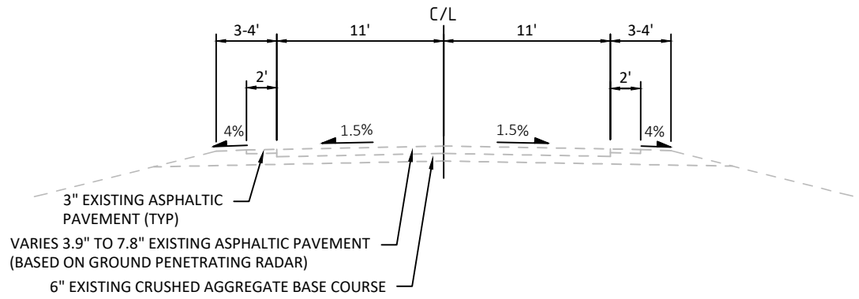
DNR CONTACT

DNR WEST CENTRAL REGION HQ
1300 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
ATTN: AMY LESIK
715-836-6571
amyl.lesik@wisconsin.gov

DESIGN CONTACT

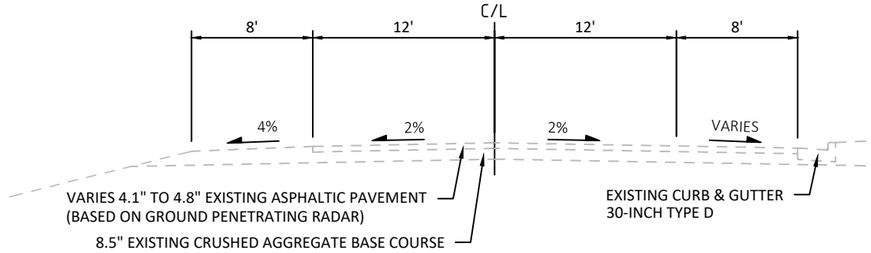
AYRES ASSOCIATES INC
3433 OAKWOOD HILLS PARKWAY
EAU CLAIRE, WI 54701
ATTN: MARK PETERSEN, PE
715-834-3161
petersenm@ayresassociates.com

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



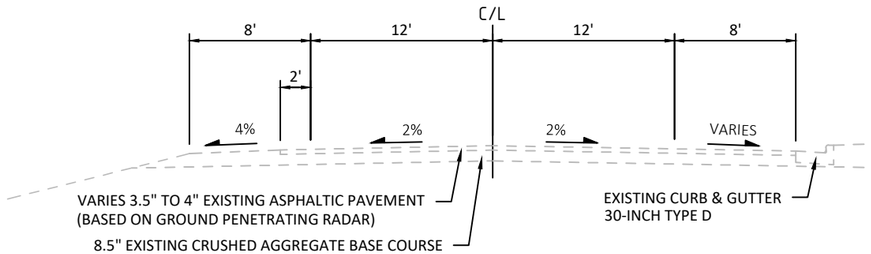
EXISTING TYPICAL SECTION

STA 397+93.00 - STA 712+65.82



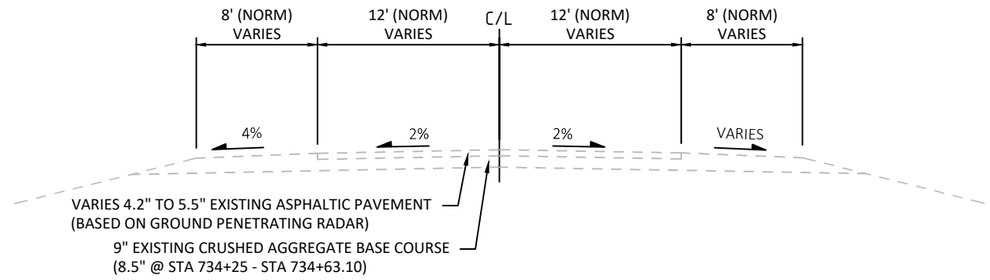
EXISTING TYPICAL SECTION

STA 728+60.00 - STA 734+25.00



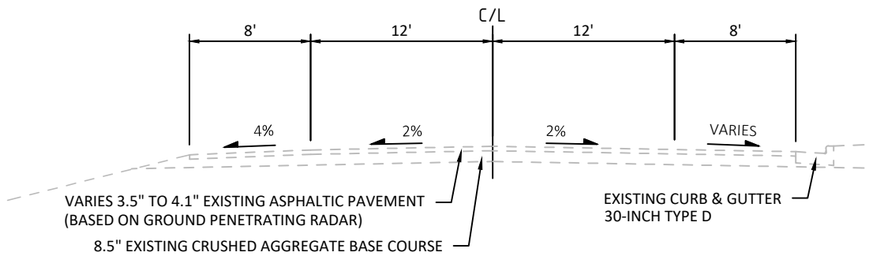
EXISTING TYPICAL SECTION

STA 712+65.82 - STA 718+80.00



EXISTING TYPICAL SECTION

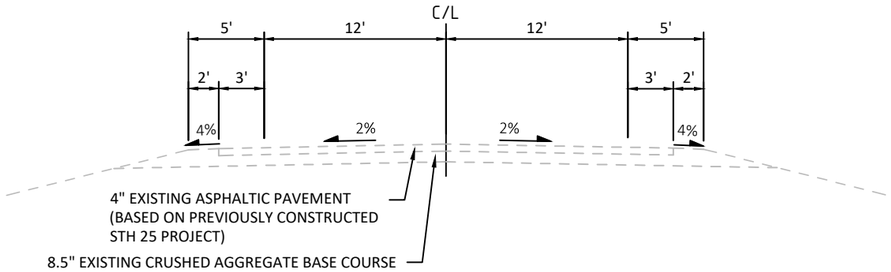
STA 734+25.00 - STA 737+90.00



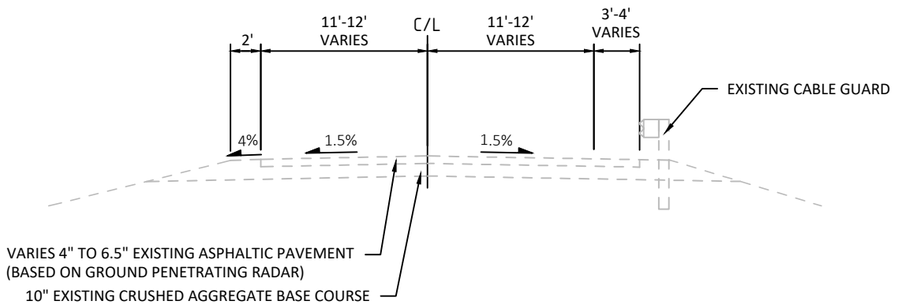
EXISTING TYPICAL SECTION

STA 718+80.00 - STA 728+60.00

PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	EXISTING TYPICAL SECTIONS	SHEET 3	E

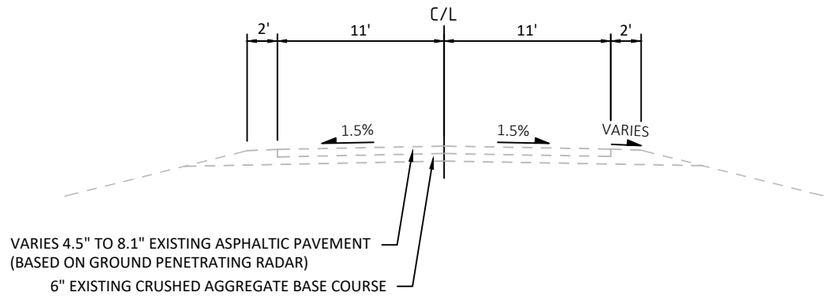


EXISTING TYPICAL SECTION - STH 25



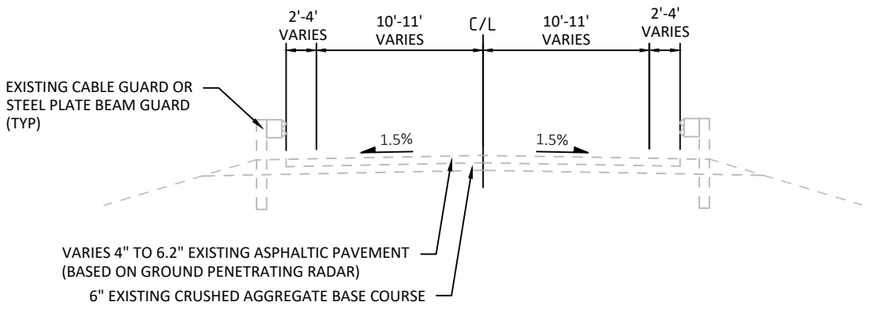
EXISTING TYPICAL SECTION

STA 802+64.00 - STA 807+65.00
STA 845+87.00 - STA 848+91.00



EXISTING TYPICAL SECTION

STA 737+90.00 - STA 798+44.00
STA 820+32.00 - STA 845+87.00
STA 848+91.00 - STA 948+94.80

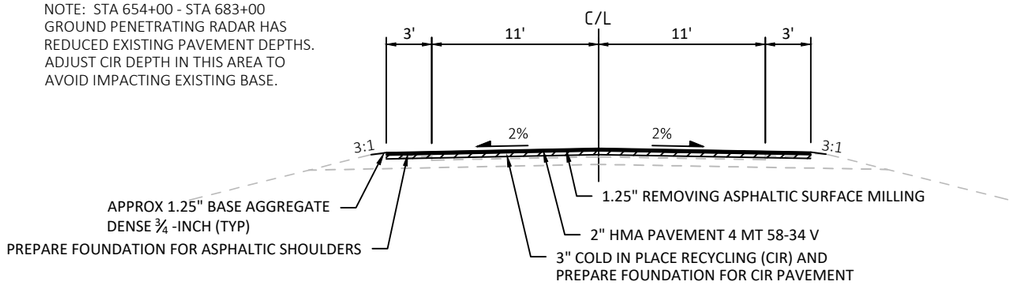


EXISTING TYPICAL SECTION

STA 798+44.00 - STA 802+64.00
STA 807+65.00 - STA 820+32.00

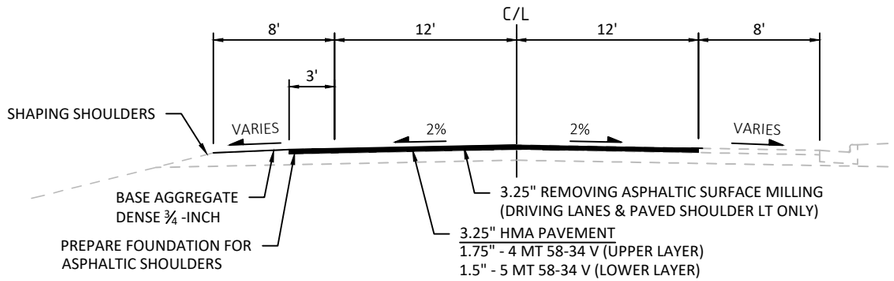
PROJECT NO: 8630-05-83/82	HWY: STH 170	COUNTY: DUNN	EXISTING TYPICAL SECTIONS	SHEET 4	E

NOTE: STA 654+00 - STA 683+00
GROUND PENETRATING RADAR HAS
REDUCED EXISTING PAVEMENT DEPTHS.
ADJUST CIR DEPTH IN THIS AREA TO
AVOID IMPACTING EXISTING BASE.



FINISHED TYPICAL SECTION

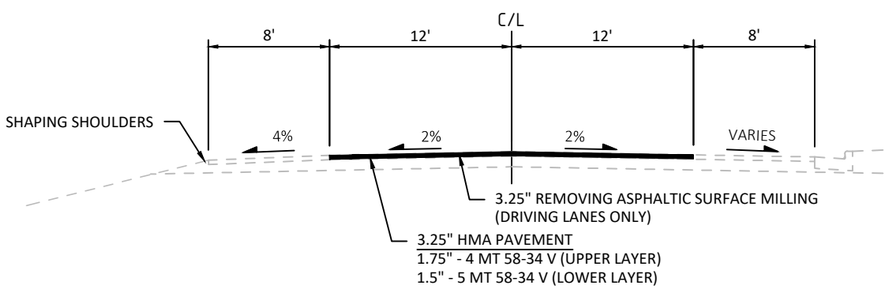
STA 397+93.00 - STA 712+65.82



FINISHED TYPICAL SECTION

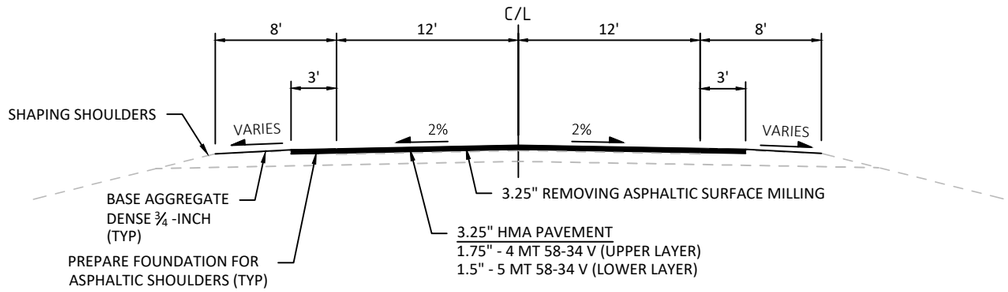
STA 712+65.82 - STA 718+80.00

STA 728+60.00 - STA 734+25.00



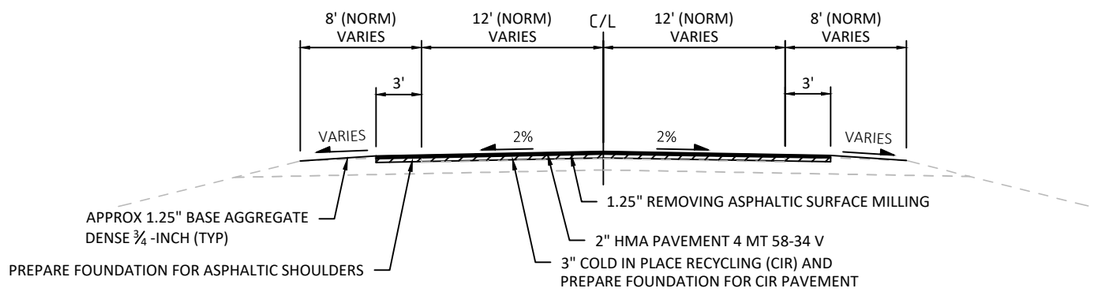
FINISHED TYPICAL SECTION

STA 718+80.00 - STA 728+60.00



FINISHED TYPICAL SECTION

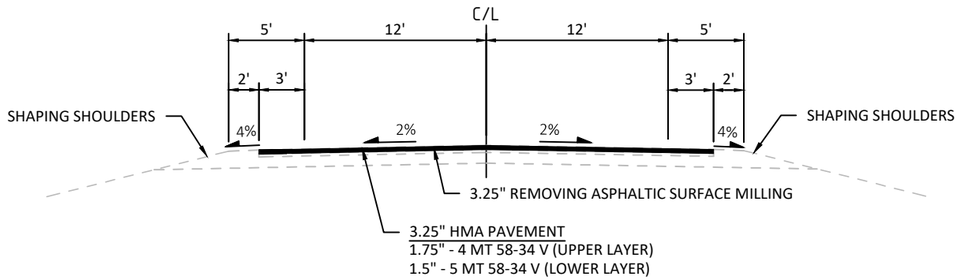
STA 734+25.00 - STA 734+63.10



FINISHED TYPICAL SECTION

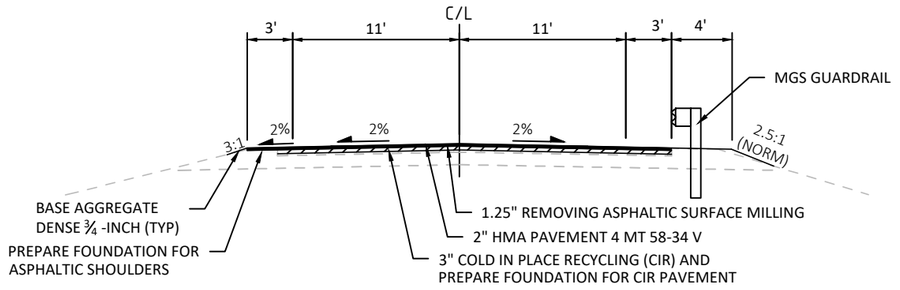
STA 734+63.10 - STA 737+90.00

PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	FINISHED TYPICAL SECTIONS	SHEET 5	E



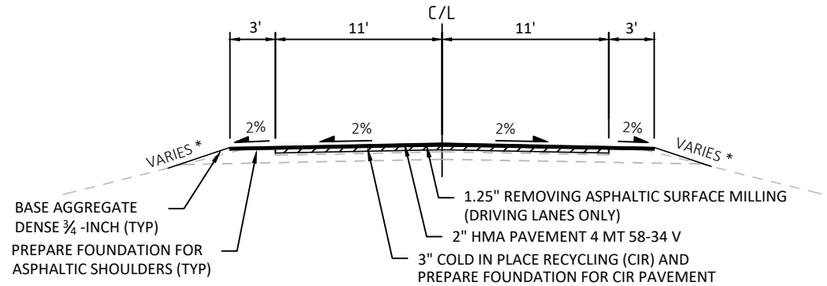
FINISHED TYPICAL SECTION - STH 25

STA 9+19.10 - STA 11+68.47



FINISHED TYPICAL SECTION

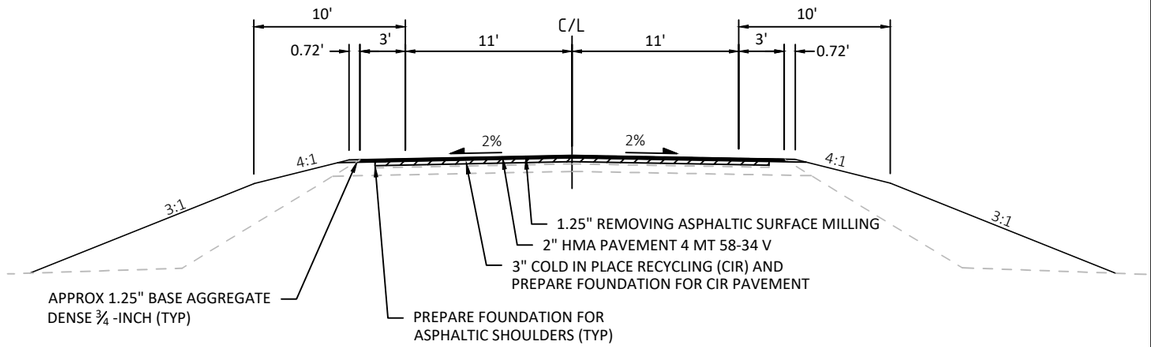
STA 843+45.40 - STA 849+26.60



* MATCH EXISTING
SUBGRADE SHOULDER POINT

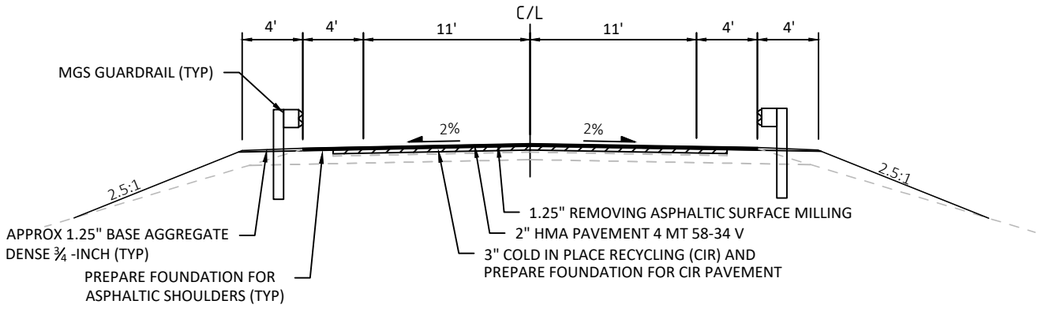
FINISHED TYPICAL SECTION

STA 737+90.00 - STA 798+00.00
STA 821+00.00 - STA 843+45.40
STA 849+26.60 - STA 948+94.80



FINISHED TYPICAL SECTION REMOVING EXISTING CABLE GUARD

STA 798+00.00 - STA 803+08.20
STA 815+32.60 - STA 821+00.00



FINISHED TYPICAL SECTION

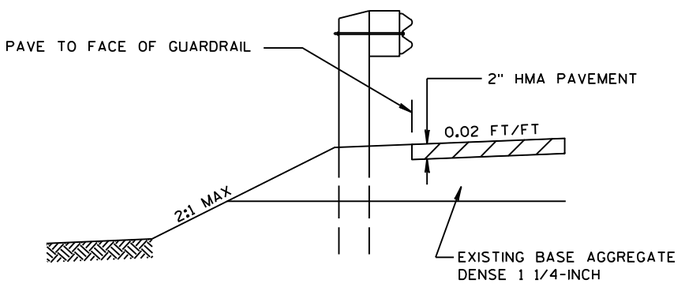
STA 803+08.20 - STA 808+58.20
STA 810+82.60 - STA 815+32.60

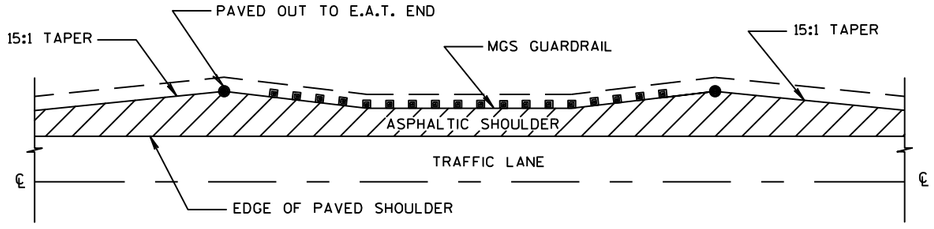
PROJECT NO: 8630-05-83/82	HWY: STH 170	COUNTY: DUNN	FINISHED TYPICAL SECTIONS	SHEET 6	E

RUNOFF COEFFICIENT TABLE

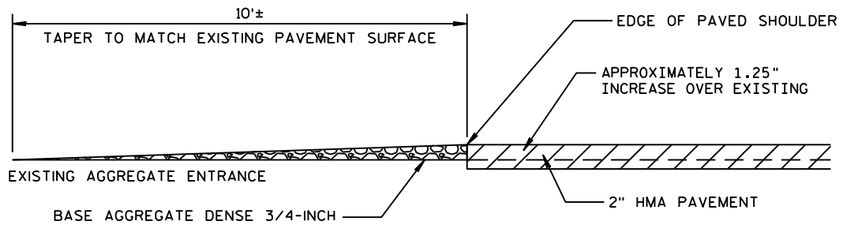
A	HYDROLOGIC SOIL GROUP											
	B C								D			
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37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

TOTAL PROJECT AREA = 125 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 25 ACRES

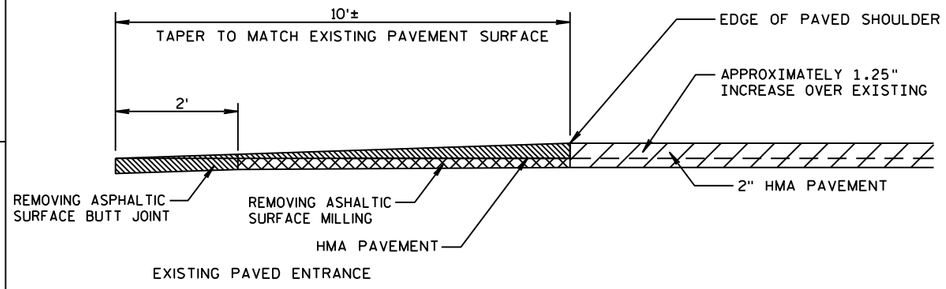




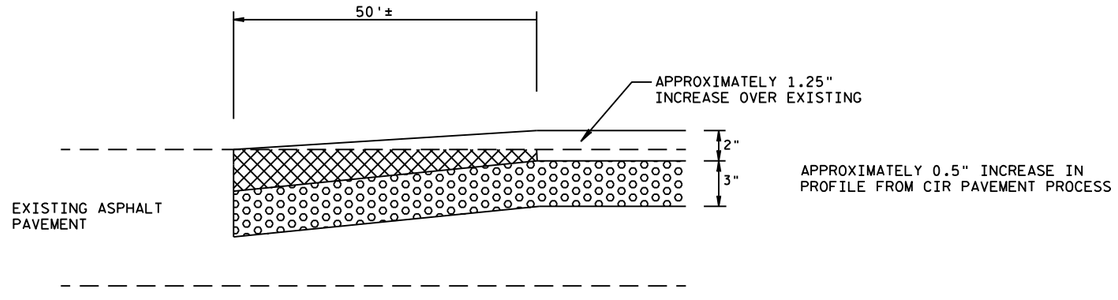
ASPHALTIC PAVING ALONG BEAMGUARD



BASE AGGREGATE PRIVATE ENTRANCE DETAIL PROFILE VIEW



PAVED PRIVATE ENTRANCE DETAIL PROFILE VIEW



BUTT JOINT DETAIL

2

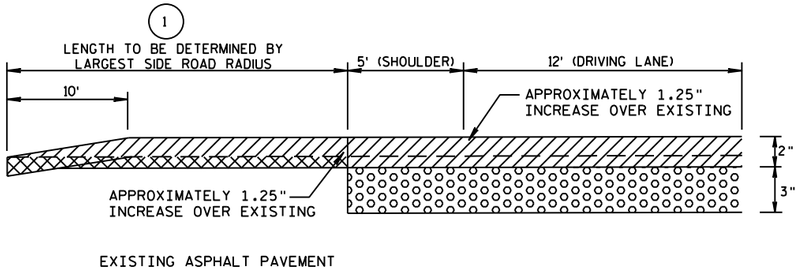
REMOVING ASPHALTIC SURFACE MILLING/BUTT JOINT (DEPTH VARIES FROM 0" TO 2")

2" HMA PAVEMENT OVERLAY

3" COLD IN-PLACE RECYCLE ASPHALTIC BASE LAYER W/2" HMA PAVEMENT OVERLAY

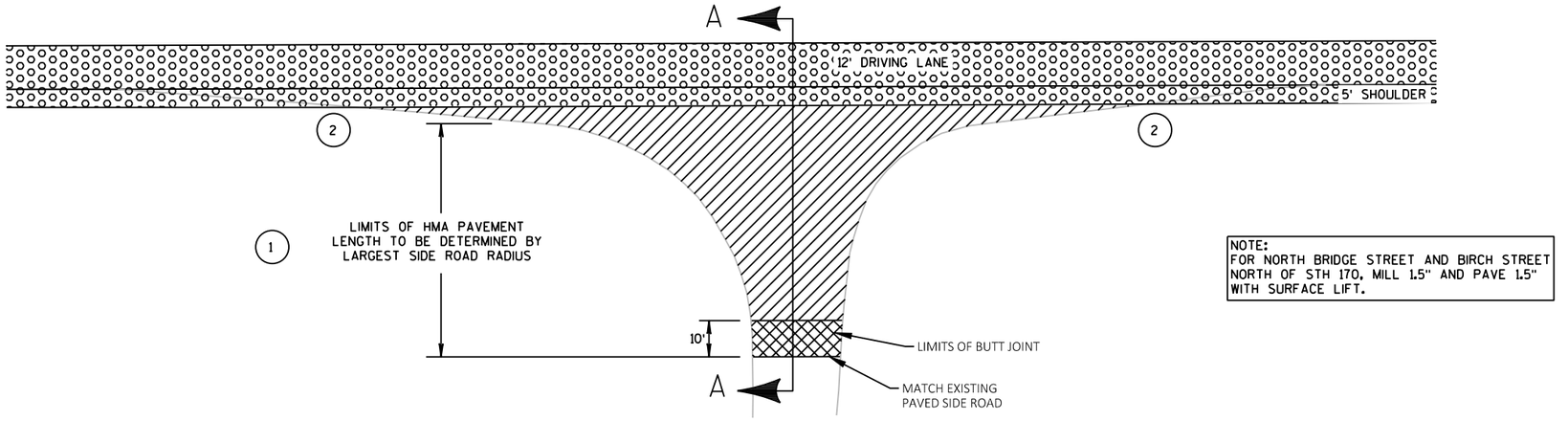
(1) LIMITS AS DIRECTED BY THE ENGINEER.

(2) MATCH EXISTING TAPER RATES.



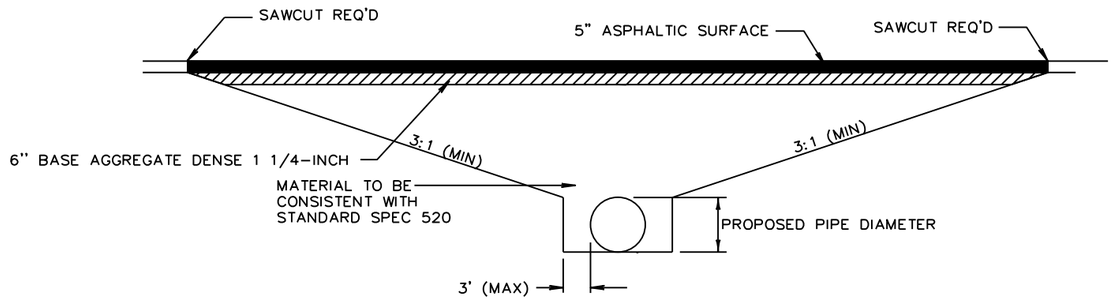
APPROXIMATELY 0.5" INCREASE IN PROFILE FROM CIR PAVEMENT PROCESS

SECTION A-A



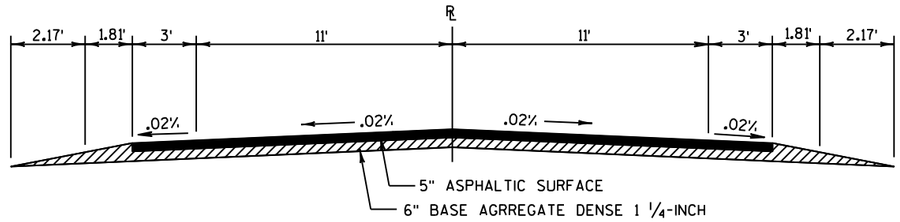
NOTE:
FOR NORTH BRIDGE STREET AND BIRCH STREET NORTH OF STH 170, MILL 1.5" AND PAVE 1.5" WITH SURFACE LIFT.

DETAIL FOR RURAL PAVED SIDE ROAD



DETAIL FOR STH 170 CULVERT PIPE REMOVAL, REPLACEMENT AND BASE PATCHING INSTALLATION

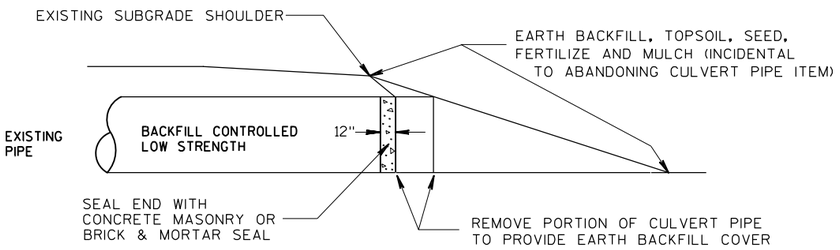
NOTE: EXCAVATION IS INCIDENTAL TO REMOVING CULVERT PIPE/STORM SEWER PIPE



FINISHED TYPICAL SECTION FOR STH 170 PIPE INSTALLATION AREAS

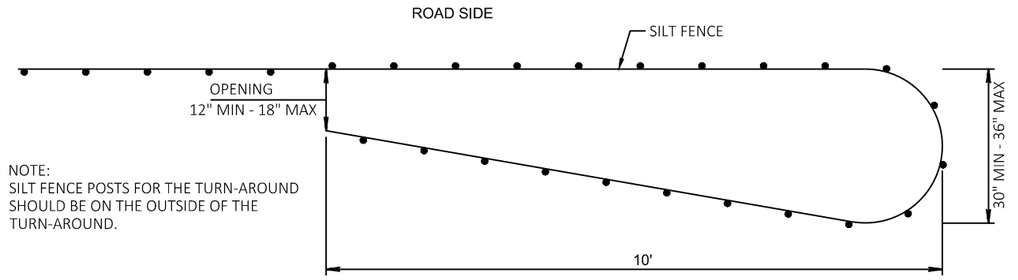
STA 460+07	STA 636+44
STA 466+97	STA 678+22
STA 478+54	STA 710+03
STA 514+47	STA 728+87
STA 571+17	STA 745+10
STA 597+79	STA 787+37

NOTE: SEE CULVERT PIPE DETAILS FOR ADDITIONAL INFORMATION

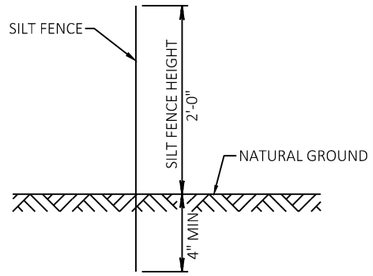


ABANDONING CULVERT PIPE DETAIL

STA 514+42

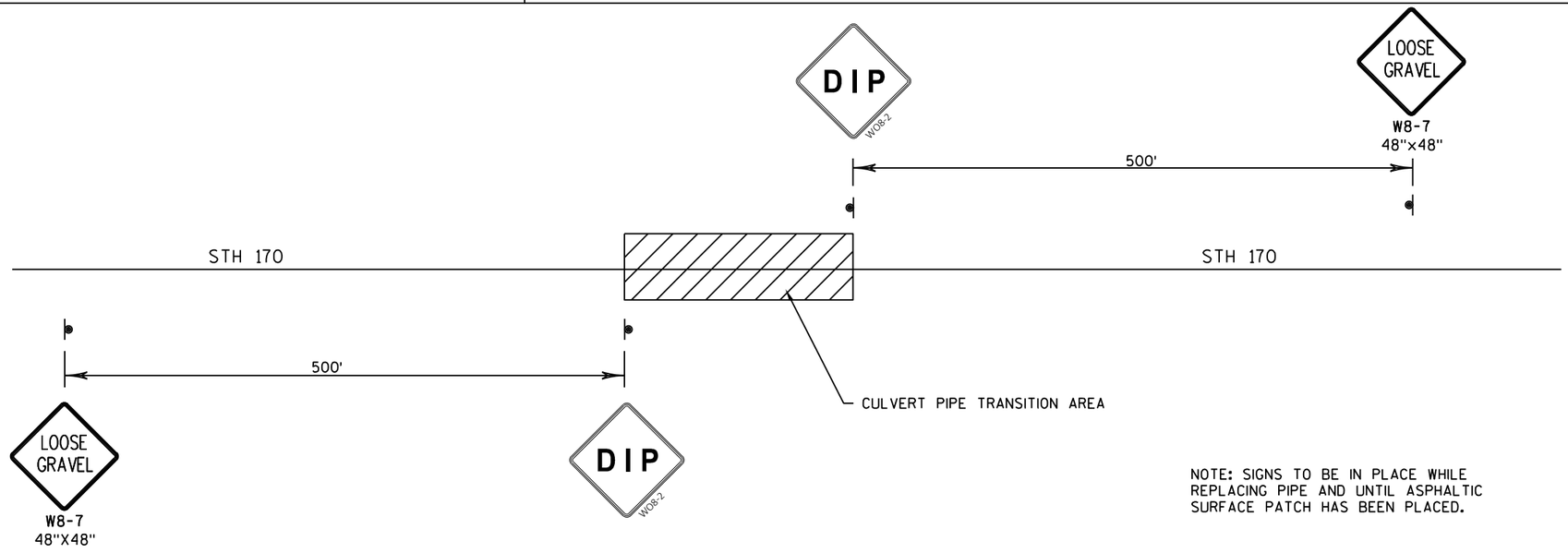


PLAN VIEW

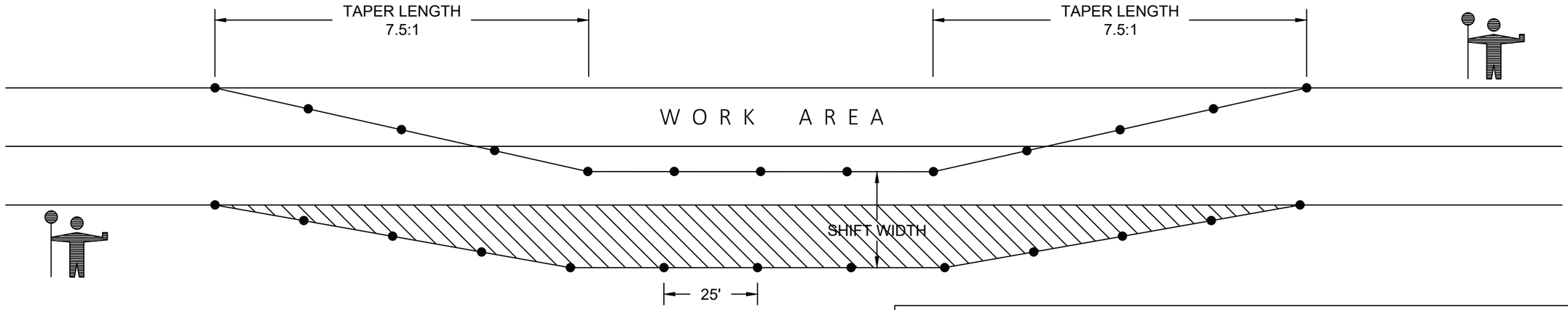


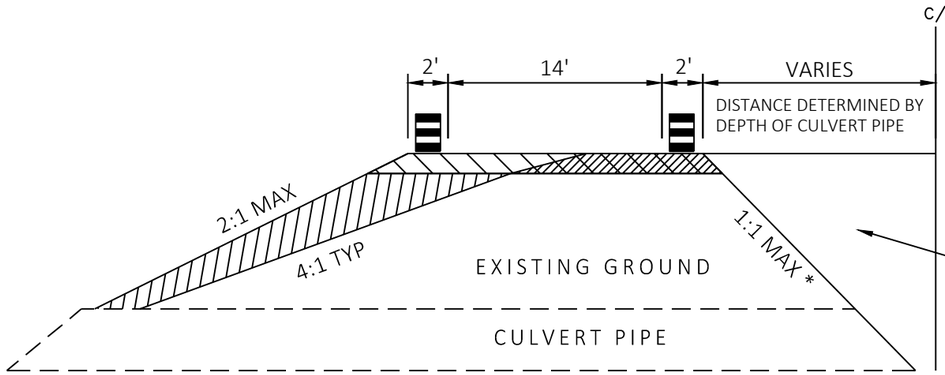
SIDE VIEW

SILT FENCE TURN-AROUND DETAIL



TEMPORARY SIGNING AT CULVERT PIPE REPLACEMENT





FOR AREAS THAT DON'T ALLOW FOR ENOUGH WIDENING, USE TEMPORARY SHORING TO LIMIT IMPACTS. TEMPORARY SHORING PAID SEPARATELY FROM LANE SHIFT.

NOTES

1. EXTEND TAPERS ACROSS THE SHOULDER UNLESS DOING SO WOULD GREATLY CONFLICT WITH THE WORK OPERATION

2. WHEN WORK IS NOT IN PROGRESS:
   - REMOVE OR COVER ALL LANE CLOSURE SIGNS
   - MOVE ALL DEVICES A SAFE DISTANCE OUTSIDE THE SHOULDER
   - RESTORE LANES TO A SAFE OPERATING CONDITION

3. USE WITH SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"

* USE 1:1 FOR COHESIVE CLAYS AND SILTS, LOAMS, SANDY CLAYS, & ANGULAR GRAVEL SOILS

KEY

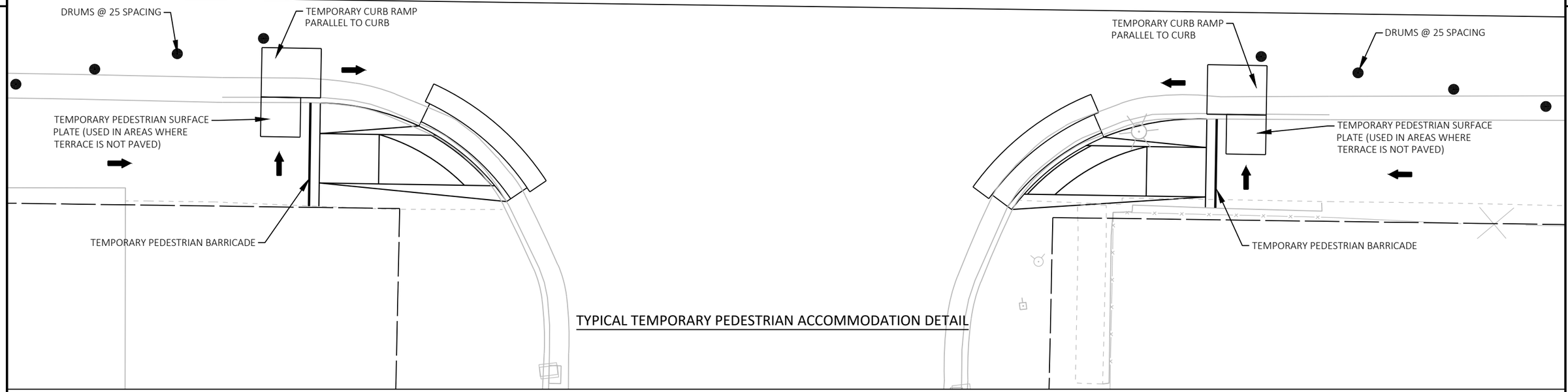
- TRAFFIC CONTROL DRUM
- EXISTING PAVED SURFACE -OR- 6" BASE AGGREGATE DENSE 1 1/4 INCH - INCIDENTAL TO LANE SHIFT SYSTEM
- 6" BASE AGGREGATE DENSE 1 1/4 INCH - INCIDENTAL TO LANE SHIFT SYSTEM
- FILL - INCIDENTAL TO LANE SHIFT SYSTEM

LANE SHIFT DETAIL STH 170

STA 460+07
STA 466+97
STA 514+50
STA 517+71
STA 636+44
STA 745+10
STA 787+37

STH 170

NOTE:
SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL INFORMATION.



TYPICAL TEMPORARY PEDESTRIAN ACCOMMODATION DETAIL

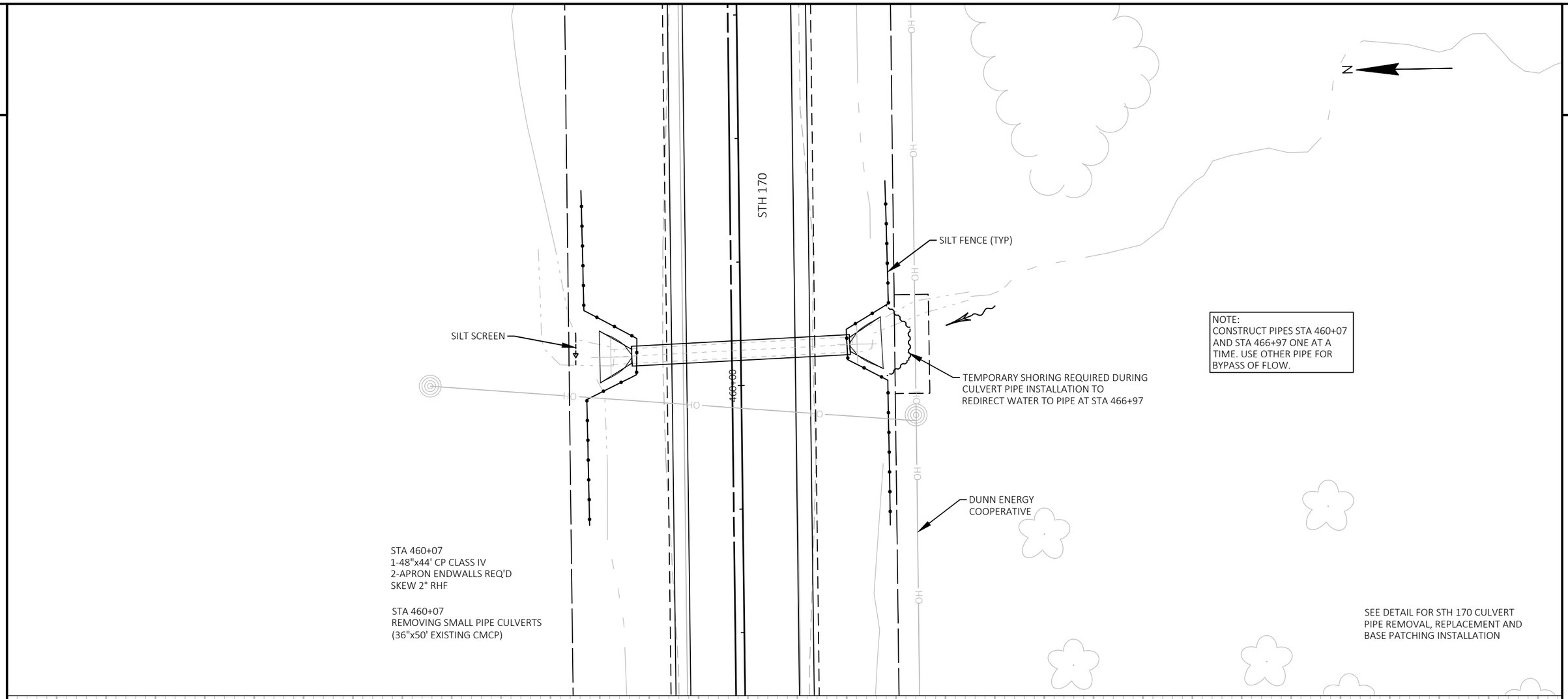
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CONTRUCTION DETAIL	SHEET 11	E

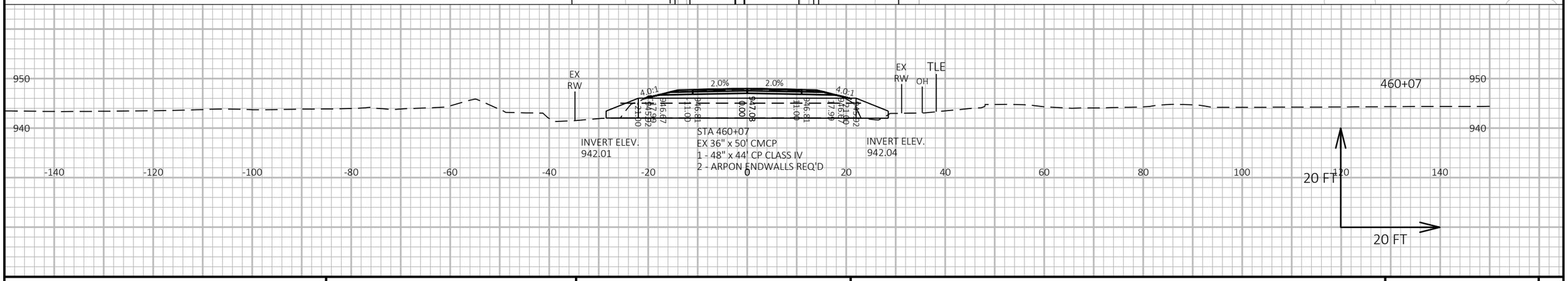
FILE NAME : I:\41\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 021006-cd

PLOT DATE : 7/22/2020 5:19 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2





PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	CULVERT PIPE DETAIL STA 460+07	SHEET 12	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\021002_CD.DWG
LAYOUT NAME - 021002_cd 460+07
PLOT DATE : 7/14/2020 2:27 PM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 42

2

2

N

STH 170

SILT FENCE (TYP)

SILT SCREEN

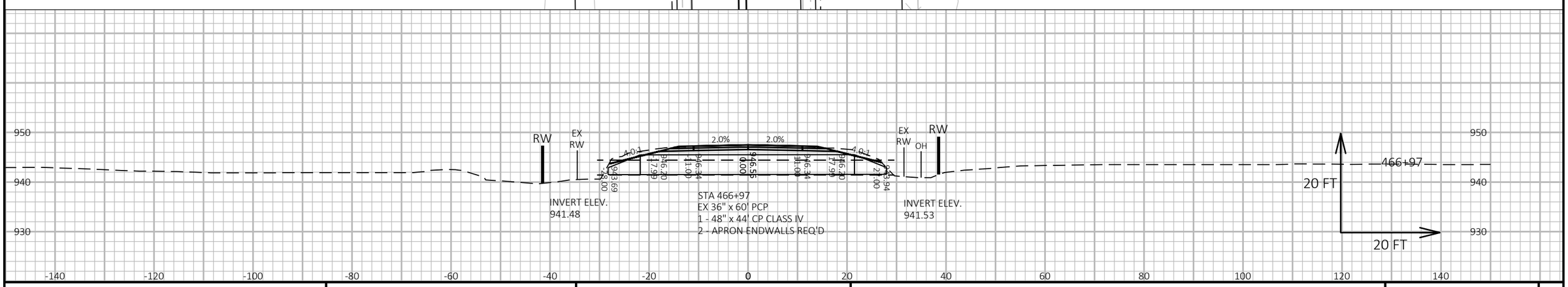
TEMPORARY SHORING REQUIRED DURING
CULVERT PIPE INSTALLATION TO
REDIRECT WATER TO PIPE AT STA 460+07

DUNN ENERGY
COOPERATIVE

STA 466+97
1-48"x44' CP CLASS IV
2-APRON ENDWALLS REQ'D

STA 466+97
REMOVING SMALL PIPE CULVERTS
(36"x60' EXISTING PCP)

SEE DETAIL FOR STH 170 CULVERT
PIPE REMOVAL, REPLACEMENT AND
BASE PATCHING INSTALLATION



PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	CULVERT PIPE DETAIL STA 466+97	SHEET 13	E

2

N

STH 170

479+00

478+00

DUNN ENERGY COOPERATIVE

SILT FENCE (TYP)

TEMPORARY DITCH CHECK

CULVERT PIPE CHECK

320TH ST

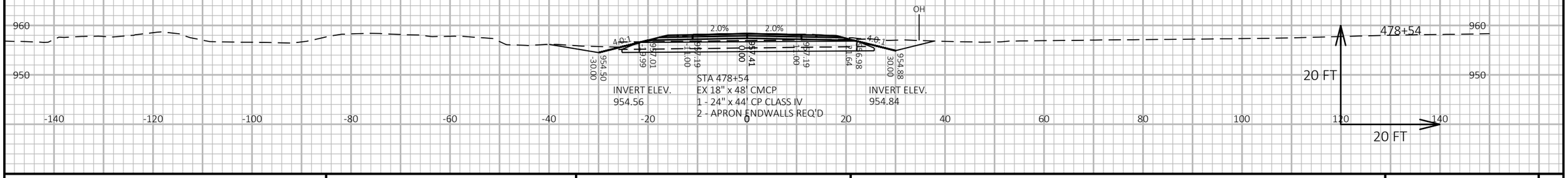
320TH ST

PI: 478+27.72

STA 478+54
1-24"x44' CP CLASS IV
2-APRON ENDWALLS REQ'D

STA 478+54
REMOVING SMALL PIPE CULVERTS
(18"x48' EXISTING CMCP)

SEE DETAIL FOR STH 170 CULVERT PIPE REMOVAL, REPLACEMENT AND BASE PATCHING INSTALLATION



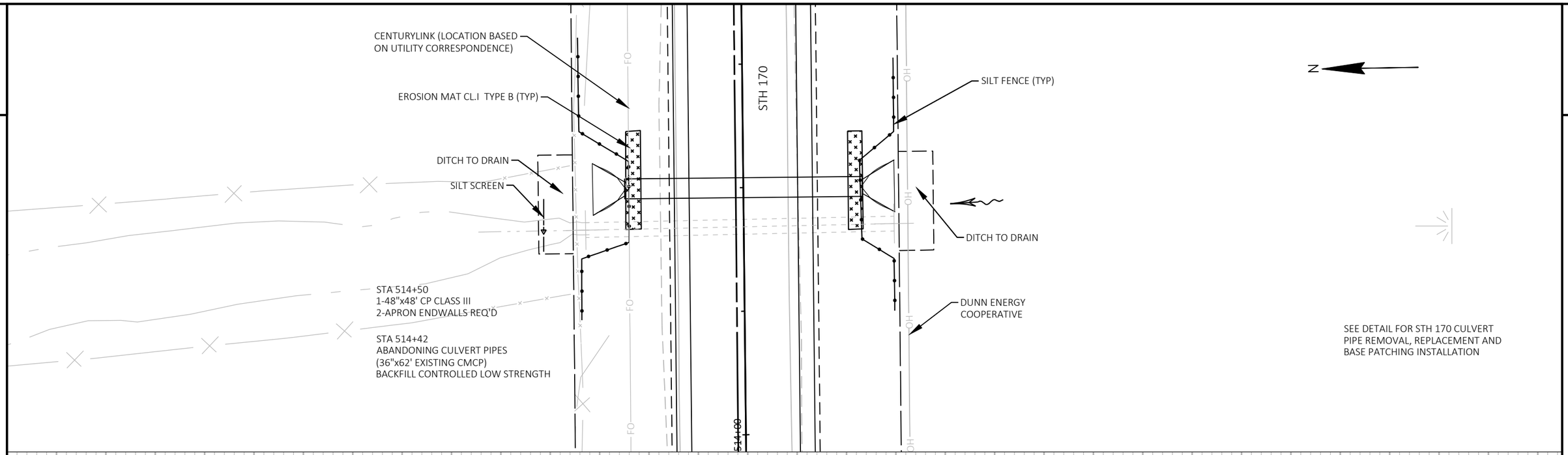
PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	CULVERT PIPE DETAIL STA 478+54	SHEET 14	E

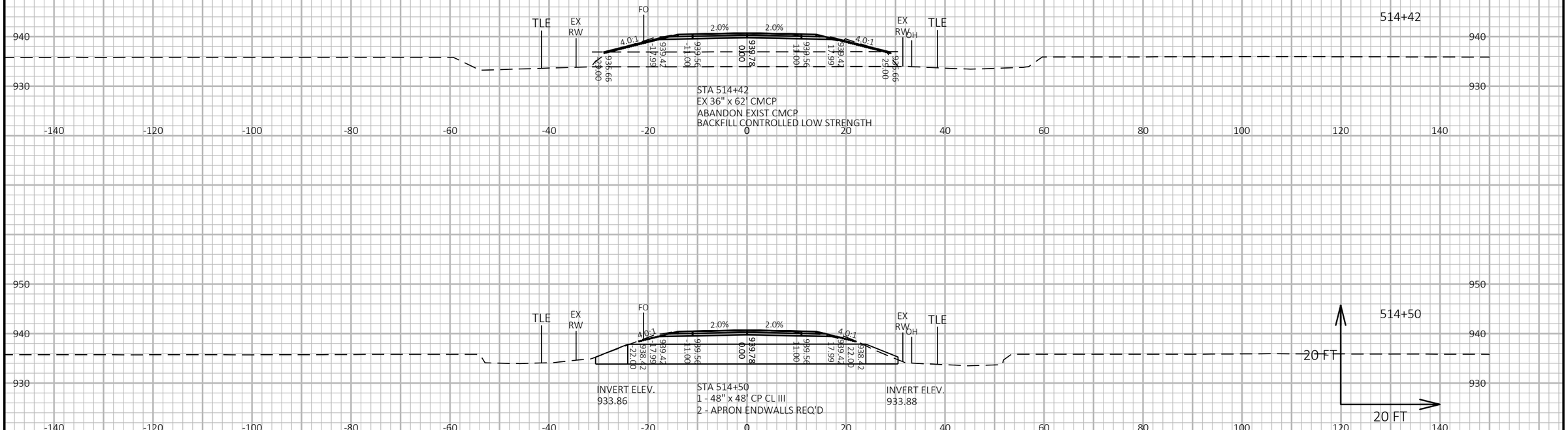
FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\021002_CD.DWG
LAYOUT NAME - 021002_cd 478+54

PLOT DATE : 7/14/2020 2:29 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 42

2



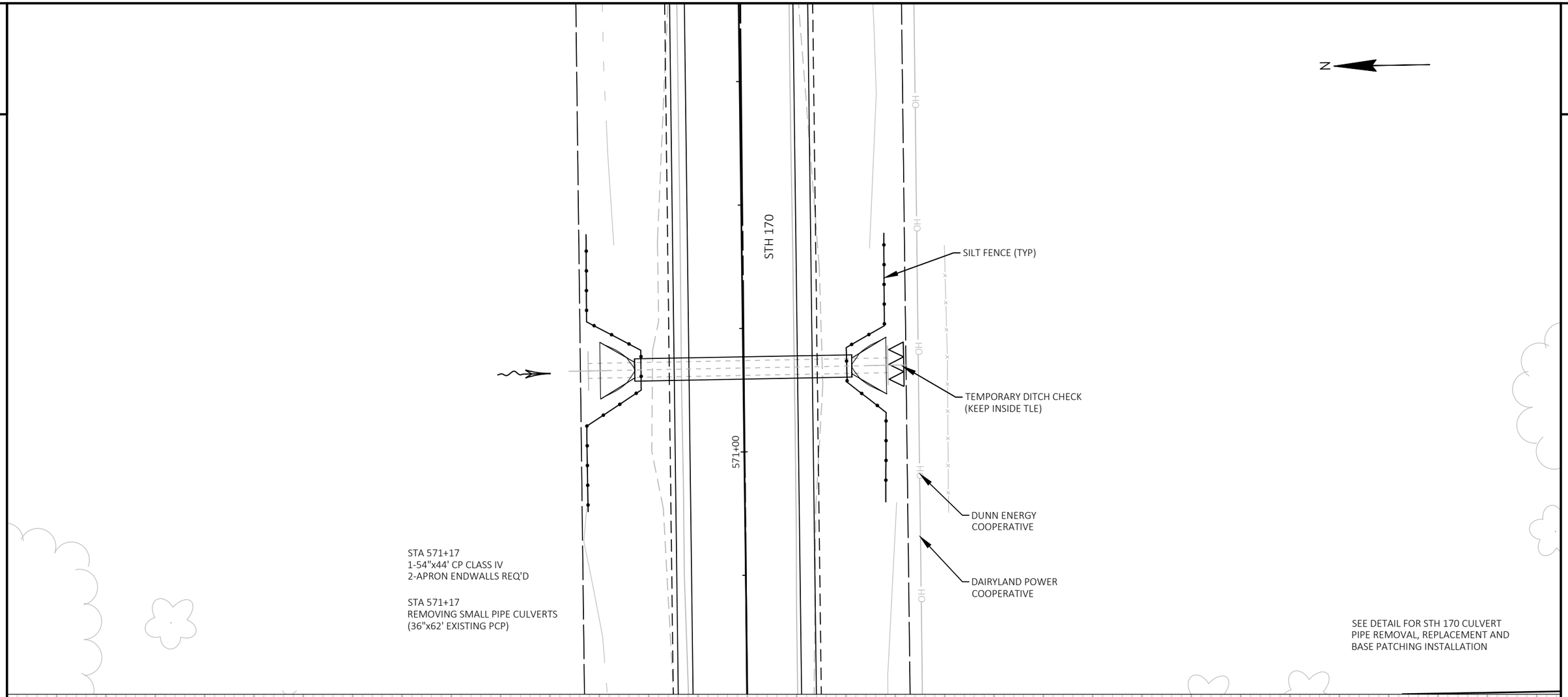


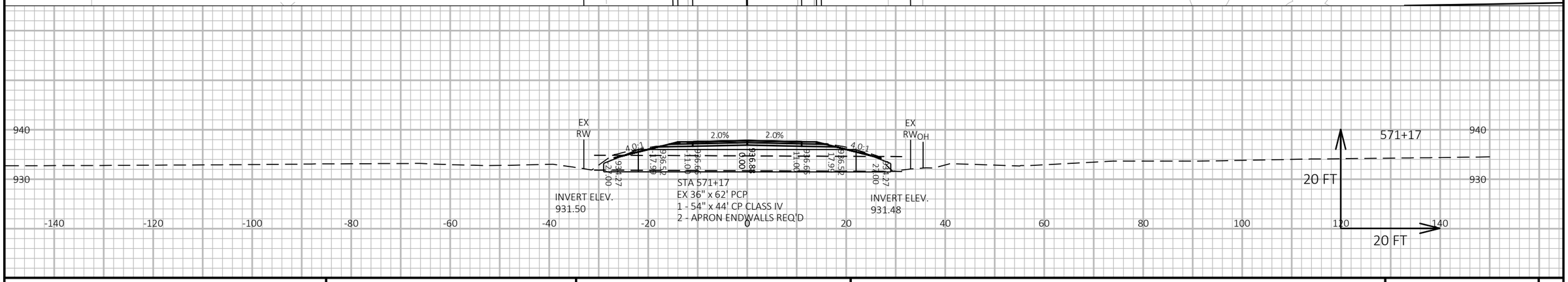
PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	CULVERT PIPE DETAIL STA 514+47	SHEET 15	E

FILE NAME : I:\41\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\021002_CD.DWG
LAYOUT NAME - 021002_cd 514+42

PLOT DATE : 7/22/2020 8:45 AM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 42





PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	CULVERT PIPE DETAIL STA 571+17	SHEET 16	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\021003_CD.DWG
LAYOUT NAME - 021003_cd 571+17
PLOT DATE : 7/14/2020 2:33 PM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 42

2

2

N

CENTURYLINK

STH 170

598+00

CULVERT PIPE CHECK

SILT FENCE (TYP)

DAIRYLAND POWER COOPERATIVE

DITCH TO DRAIN

TEMPORARY DITCH CHECK

DUNN ENERGY COOPERATIVE

STA 597+79
1-30"x44' CPRC CLASS IV
2-APRON ENDWALLS REQ'D
SKEW 3° LHF

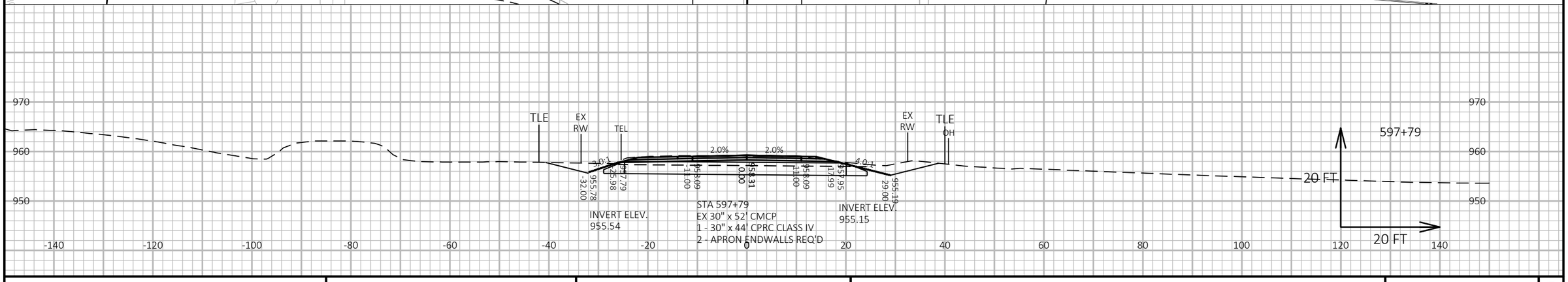
STA 597+79
REMOVING SMALL PIPE CULVERTS
(30"x52' EXISTING CMCP)

CTH F

PI: 597+24.45

CTH F

SEE DETAIL FOR STH 170 CULVERT PIPE REMOVAL, REPLACEMENT AND BASE PATCHING INSTALLATION



PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	CULVERT PIPE DETAIL STA 597+79	SHEET 17	E

FILE NAME : I:\41\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\021003_CD.DWG
LAYOUT NAME - 021003_cd 597+79
PLOT DATE : 7/22/2020 8:42 AM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 42

2

2

637+00

636+00

STH 170

OH

N

TEMPORARY DITCH CHECK

SILT FENCE (TYP)

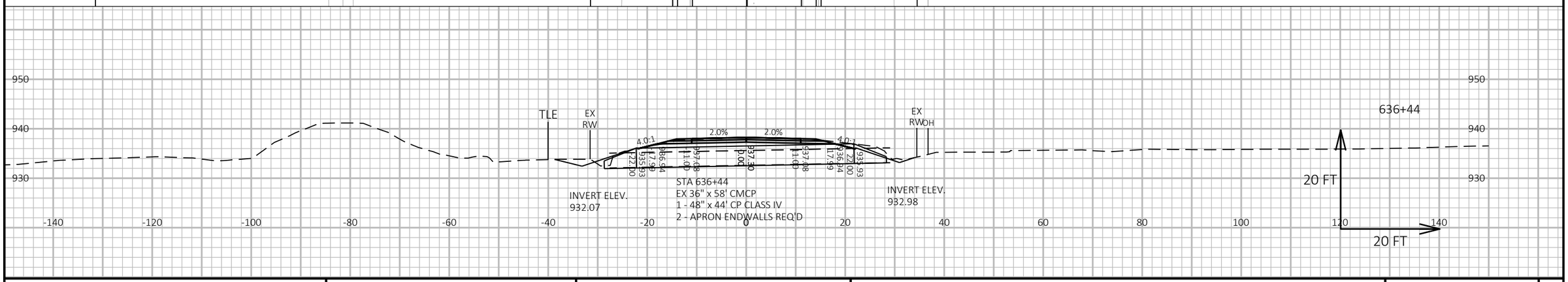
CULVERT PIPE CHECK

DAIRYLAND POWER
COOPERATIVE

STA 636+44
1-48"x44' CP CLASS IV
2-APRON ENDWALLS REQ'D
SKEW 3° RHF

STA 636+44
REMOVING SMALL PIPE CULVERTS
(36"x58' EXISTING CMCP)

SEE DETAIL FOR STH 170 CULVERT
PIPE REMOVAL, REPLACEMENT AND
BASE PATCHING INSTALLATION



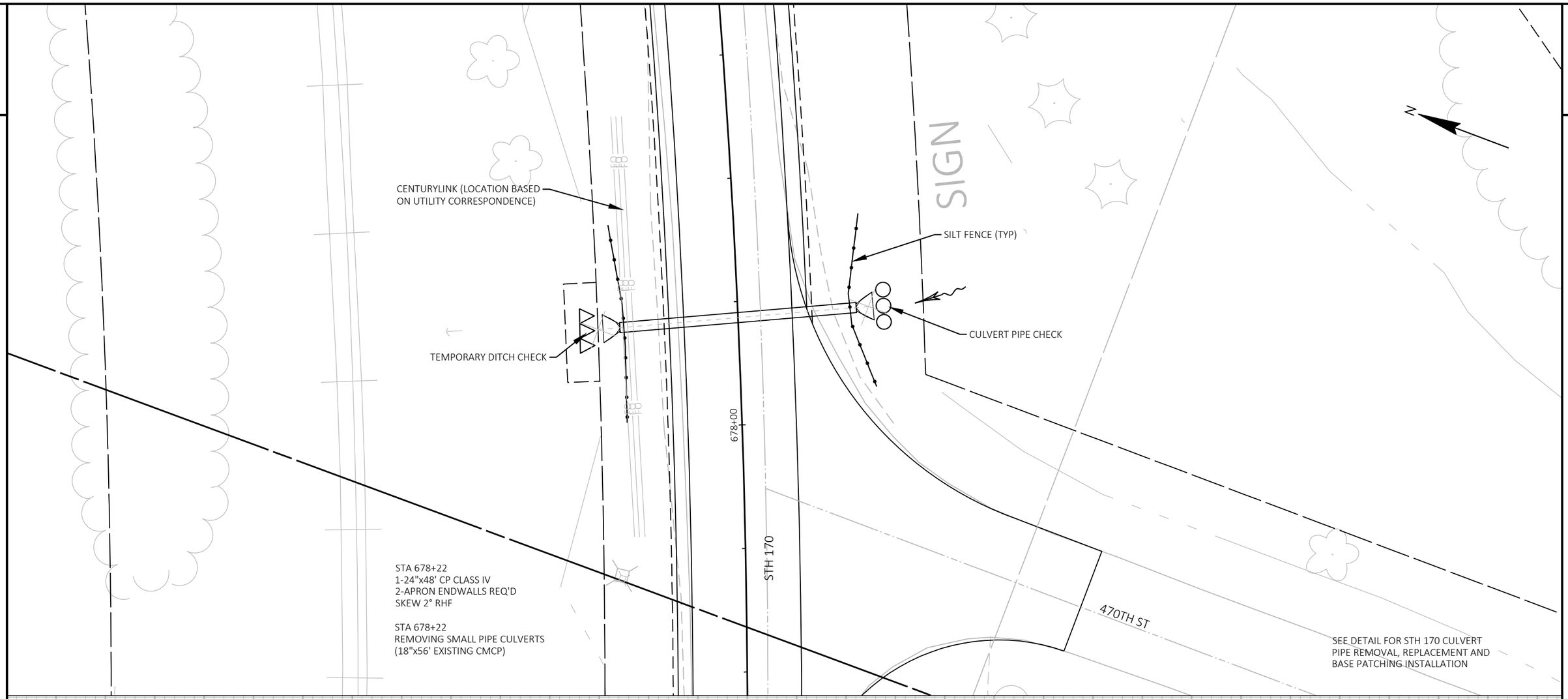
PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	CULVERT PIPE DETAIL STA 636+44	SHEET 18	E

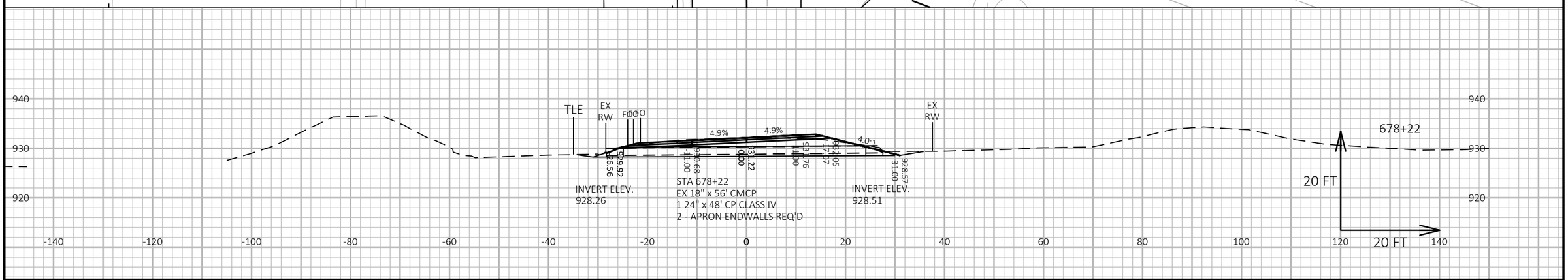
FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\021003_CD.DWG
LAYOUT NAME - 021003_cd 636+44

PLOT DATE : 7/23/2020 2:36 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 42

2





PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	CULVERT PIPE DETAIL STA 678+22	SHEET 19	E

2

2

N

STH 170

CENTURYLINK

WHEELER VILLAGE OF MUNICIPAL WATER UTILITY - SEWER

XCEL ENERGY

SILT FENCE (TYP)

WE ENERGIES

TEMPORARY DITCH CHECK

CULVERT PIPE CHECK

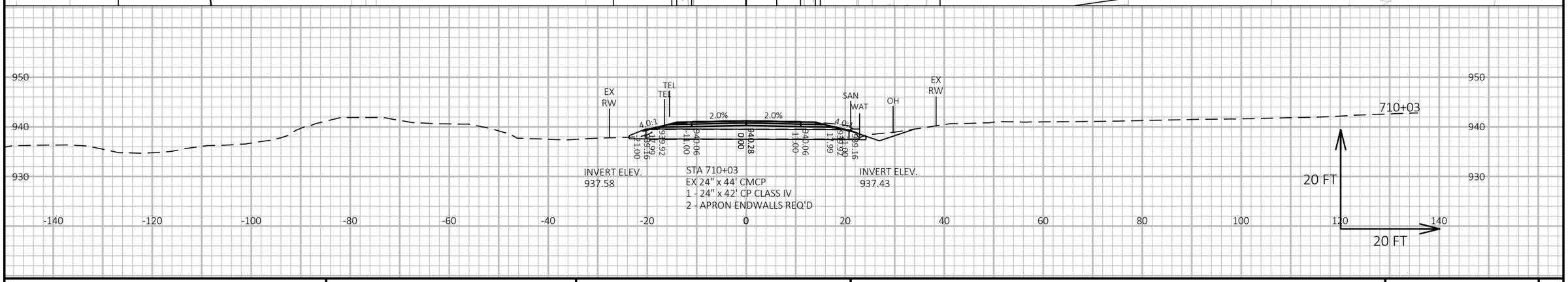
710+00

CAUTION

STA 710+03
1-24"x42' CP CLASS IV
2-APRON ENDWALLS REQ'D
SKEW 3° RHF

STA 710+03
REMOVING SMALL PIPE CULVERTS
(24"x44' EXISTING CMCP)

SEE DETAIL FOR STH 170 CULVERT PIPE REMOVAL, REPLACEMENT AND BASE PATCHING INSTALLATION



PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	CULVERT PIPE DETAIL STA 710+03	SHEET 20	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\021003_CD.DWG
LAYOUT NAME - 021003_cd 710+03

PLOT DATE : 7/23/2020 2:36 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 42

2

CENTURYLINK

SILT FENCE

TEMPORARY DITCH CHECK
(KEEP INSIDE R/W)

WHEELER VILLAGE OF MUNICIPAL
WATER UTILITY - WATER

WHEELER VILLAGE OF MUNICIPAL
WATER UTILITY - SEWER

XCEL ENERGY

INLET PROTECTION TYPE C

STH 170

729+00

PI: 728+58.55

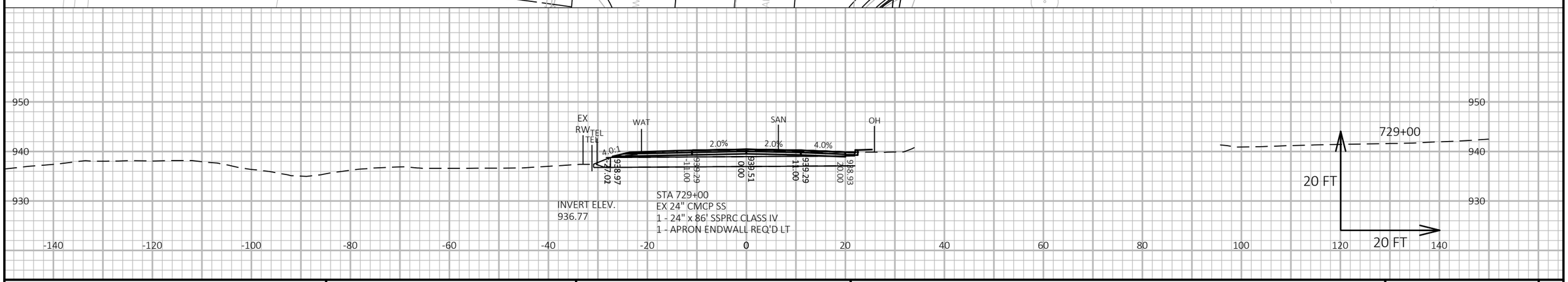
N BIRCH ST

S BIRCH ST

STA 728+87
ADJUSTING INLET COVER
1-24"x86' SSPRC CLASS IV
1-APRON ENDWALL LT REQ'D

STA 728+87
REMOVING STORM SEWER
(24"x58' EXISTING CMCP SS)

SEE DETAIL FOR STH 170 CULVERT
PIPE REMOVAL, REPLACEMENT AND
BASE PATCHING INSTALLATION



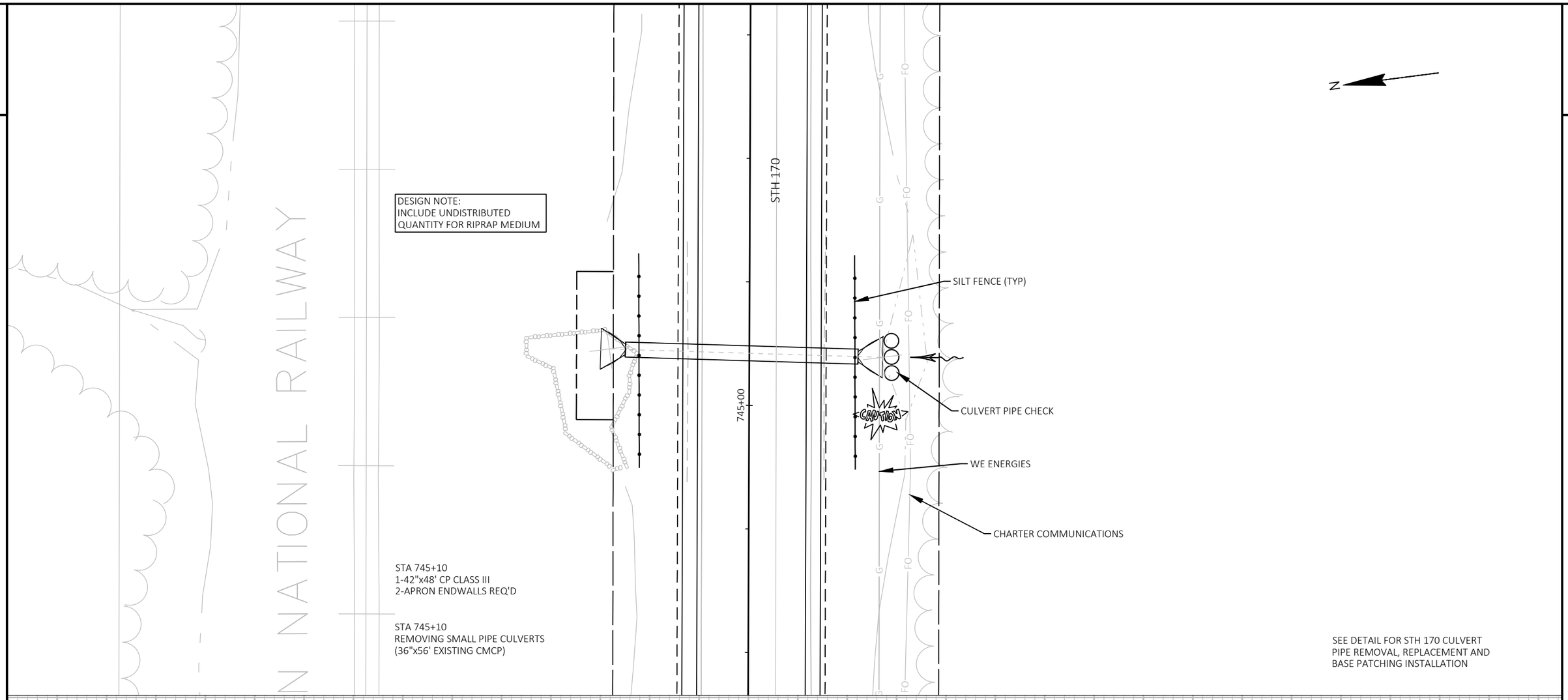
PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	CULVERT PIPE DETAIL STA 728+87	SHEET 21	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\021003_CD.DWG
LAYOUT NAME - 021003_cd 729+00

PLOT DATE : 7/23/2020 2:37 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

2

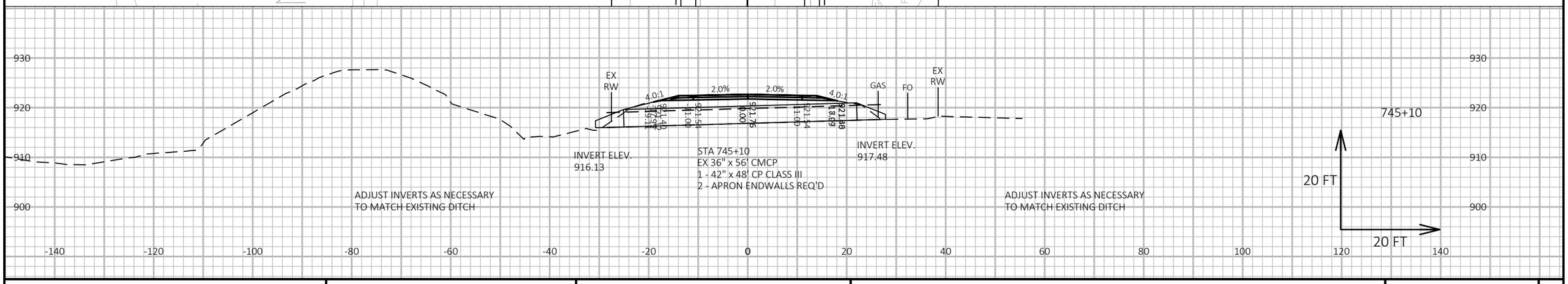
DESIGN NOTE:
INCLUDE UNDISTRIBUTED
QUANTITY FOR RIPRAP MEDIUM



STA 745+10
1-42"x48' CP CLASS III
2-APRON ENDWALLS REQ'D

STA 745+10
REMOVING SMALL PIPE CULVERTS
(36"x56' EXISTING CMCP)

SEE DETAIL FOR STH 170 CULVERT
PIPE REMOVAL, REPLACEMENT AND
BASE PATCHING INSTALLATION



PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CULVERT PIPE DETAIL STA 745+10	SHEET 22	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\021004_CD.DWG
LAYOUT NAME - 021004_cd 745+10

PLOT DATE : 7/23/2020 2:23 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

2

2

788+00

787+00

STH 170

CENTURYLINK

SILT FENCE (TYP)

EROSION MAT CL.I TYPE B

CULVERT PIPE CHECK

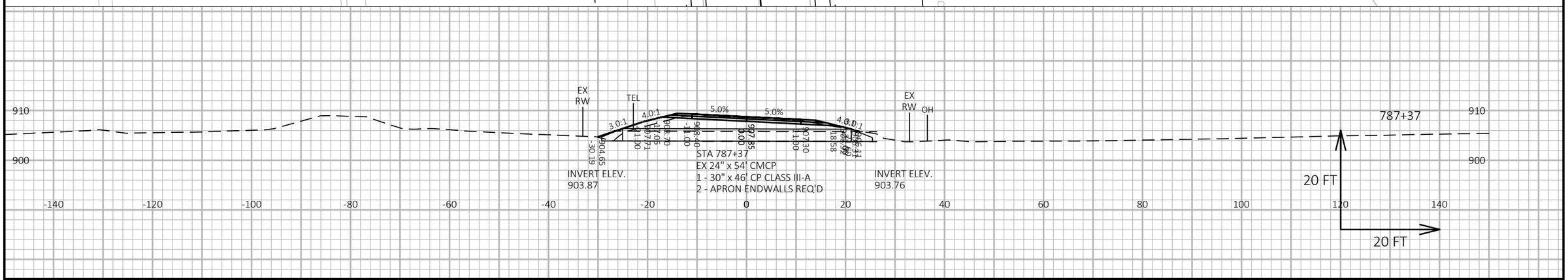
TEMPORARY DITCH CHECK

XCEL ENERGY

STA 787+37
1-30"x46' CP CLASS III-A
2-APRON ENDWALLS REQ'D

STA 787+37
REMOVING SMALL PIPE CULVERTS
(24"x54' EXISTING CMCP)

SEE DETAIL FOR STH 170 CULVERT
PIPE REMOVAL, REPLACEMENT AND
BASE PATCHING INSTALLATION



INVERT ELEV.
903.87

STA 787+37
EX 24" x 54' CMCP
1 - 30" x 46' CP CLASS III-A
2 - APRON ENDWALLS REQ'D

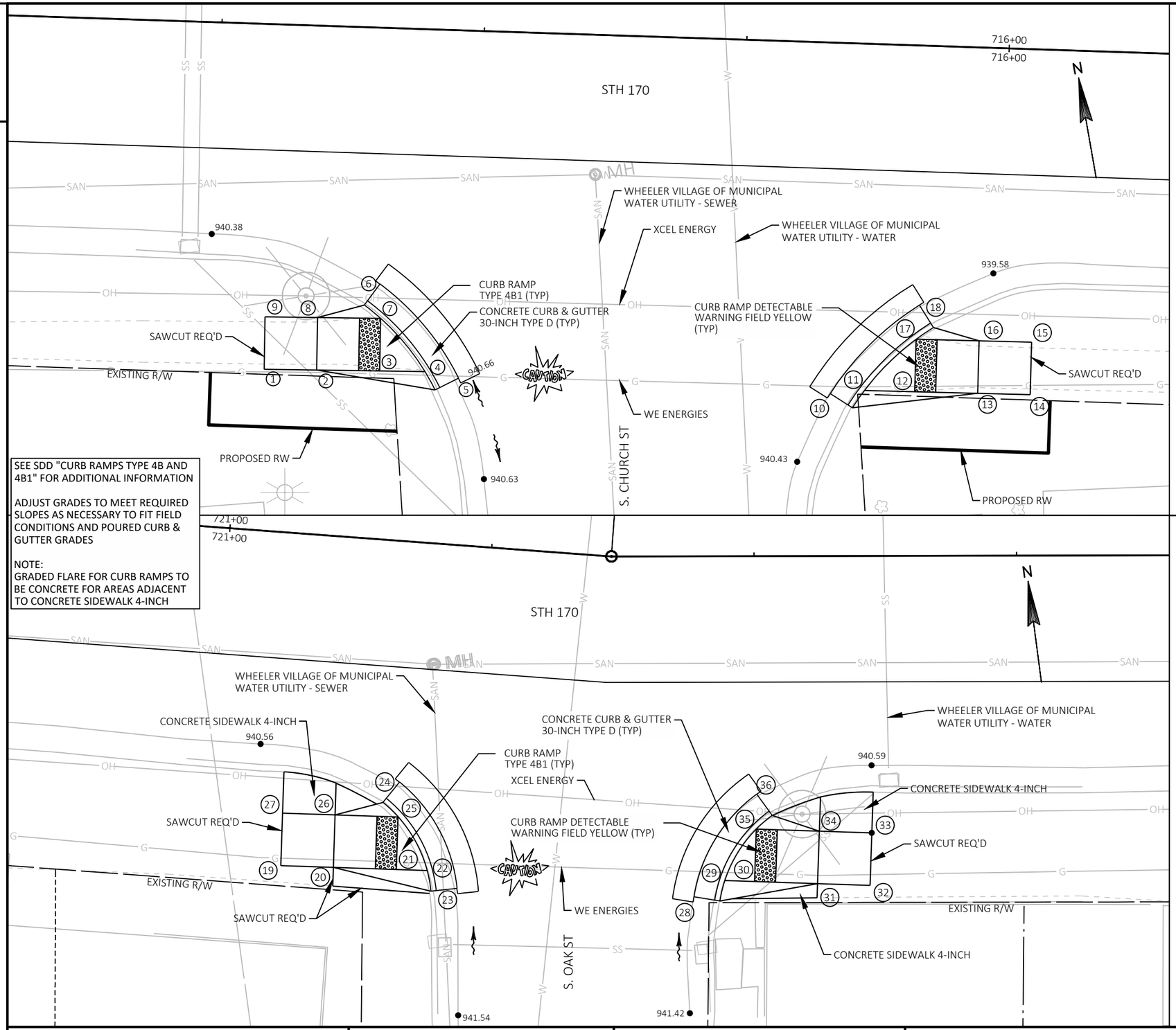
INVERT ELEV.
903.76

PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CULVERT PIPE DETAIL STA 787+37	SHEET 23	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\021004_CD.DWG
LAYOUT NAME - 021004_cd 787+37

PLOT DATE : 7/23/2020 2:24 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 42



SEE SDD "CURB RAMPS TYPE 4B AND 4B1" FOR ADDITIONAL INFORMATION

ADJUST GRADES TO MEET REQUIRED SLOPES AS NECESSARY TO FIT FIELD CONDITIONS AND POURED CURB & GUTTER GRADES

NOTE:
GRADED FLARE FOR CURB RAMPS TO BE CONCRETE FOR AREAS ADJACENT TO CONCRETE SIDEWALK 4-INCH

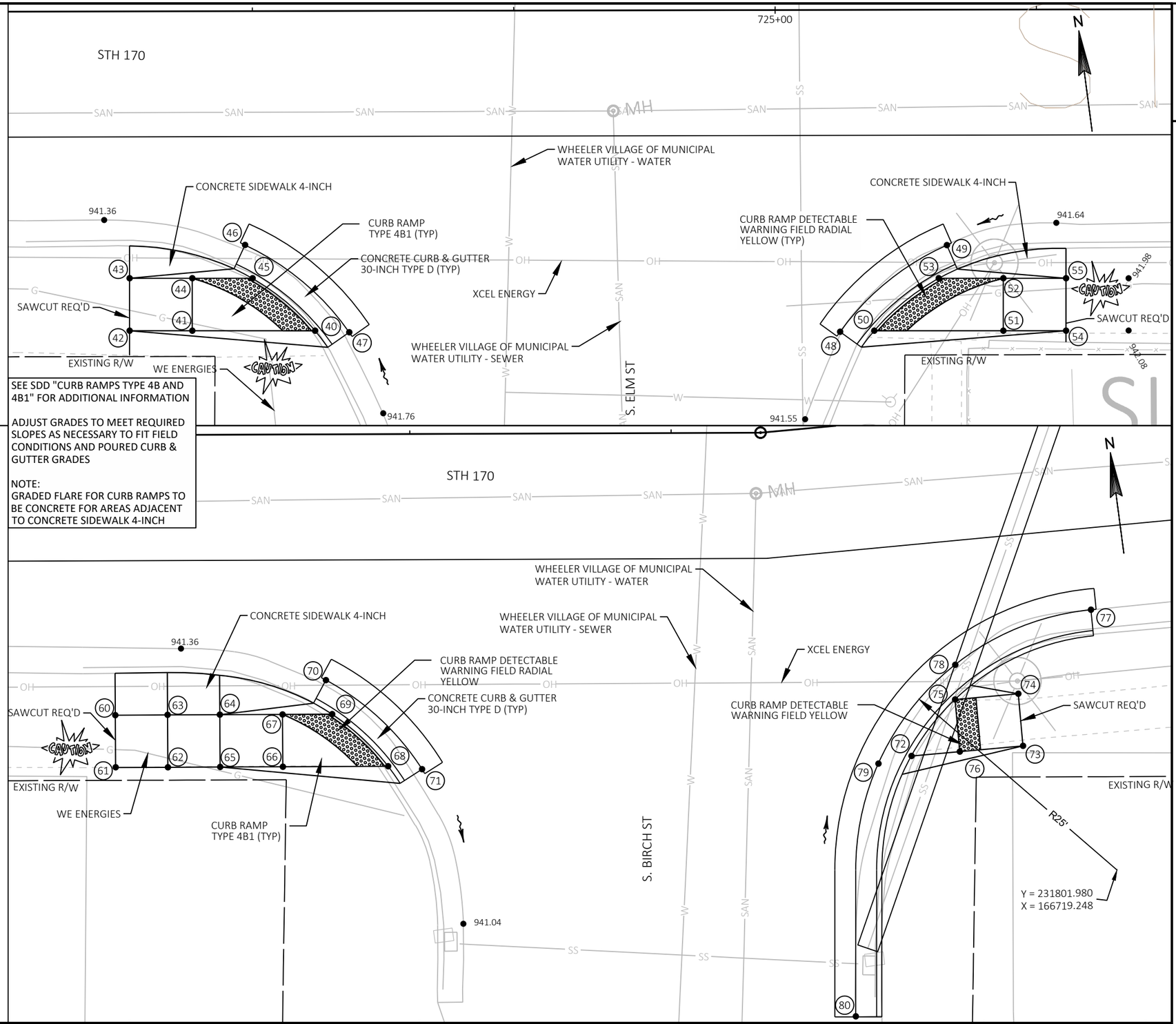
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
1	715+30.11	32.88 RT	232032.49	165374.59	941.14
2	715+35.11	32.78 RT	232031.56	165379.50	940.83
3	715+41.11	32.67 RT	232030.45	165385.40	940.54
4	715+45.40	32.59 RT	232029.65	165389.61	940.53
5	715+48.62	33.13 RT	232028.47	165392.66	940.66
6	715+40.85	24.41 RT	232038.59	165386.83	940.51
7	715+41.01	27.67 RT	232035.36	165386.32	940.47
8	715+35.01	27.78 RT	232036.48	165380.43	940.75
9	715+30.01	27.88 RT	232037.40	165375.52	940.98
10	715+84.05	33.42 RT	232020.96	165427.29	940.27
11	715+87.29	33.01 RT	232020.69	165430.54	940.15
12	715+92.09	32.97 RT	232019.75	165435.24	940.17
13	715+98.09	32.93 RT	232018.58	165441.13	940.20
14	716+03.09	32.89 RT	232017.60	165446.03	940.25
15	716+03.05	27.89 RT	232022.50	165447.01	940.10
16	715+98.05	27.93 RT	232023.48	165442.11	940.05
17	715+92.05	27.97 RT	232024.66	165436.22	939.99
18	715+92.26	24.72 RT	232027.80	165437.10	939.87

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
19	721+07.21	31.69 RT	231915.94	165939.80	941.36
20	721+12.20	31.48 RT	231915.12	165944.73	941.28
21	721+18.20	31.24 RT	231914.13	165950.65	941.15
22	721+21.12	31.12 RT	231913.65	165953.54	941.12
23	721+24.09	32.62 RT	231911.58	165956.14	941.21
24	721+17.88	22.93 RT	231922.34	165952.03	940.98
25	721+18.00	26.25 RT	231919.06	165951.47	940.95
26	721+12.00	26.49 RT	231920.05	165945.55	941.08
27	721+07.01	26.69 RT	231920.87	165940.62	941.15
28	721+44.21	32.43 RT	231907.84	165978.41	941.21
29	721+47.15	30.88 RT	231908.99	165981.52	940.93
30	721+49.99	30.98 RT	231908.53	165984.32	940.97
31	721+55.98	31.20 RT	231907.54	165990.24	941.27
32	721+60.98	31.38 RT	231906.72	165995.17	941.35
33	721+61.16	26.38 RT	231911.65	165995.99	941.07
34	721+56.16	26.20 RT	231912.47	165991.06	941.21
35	721+50.16	25.99 RT	231913.46	165985.14	940.91
36	721+50.22	22.67 RT	231916.75	165985.62	940.81

PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CURB RAMP DETAILS	SHEET 24	E

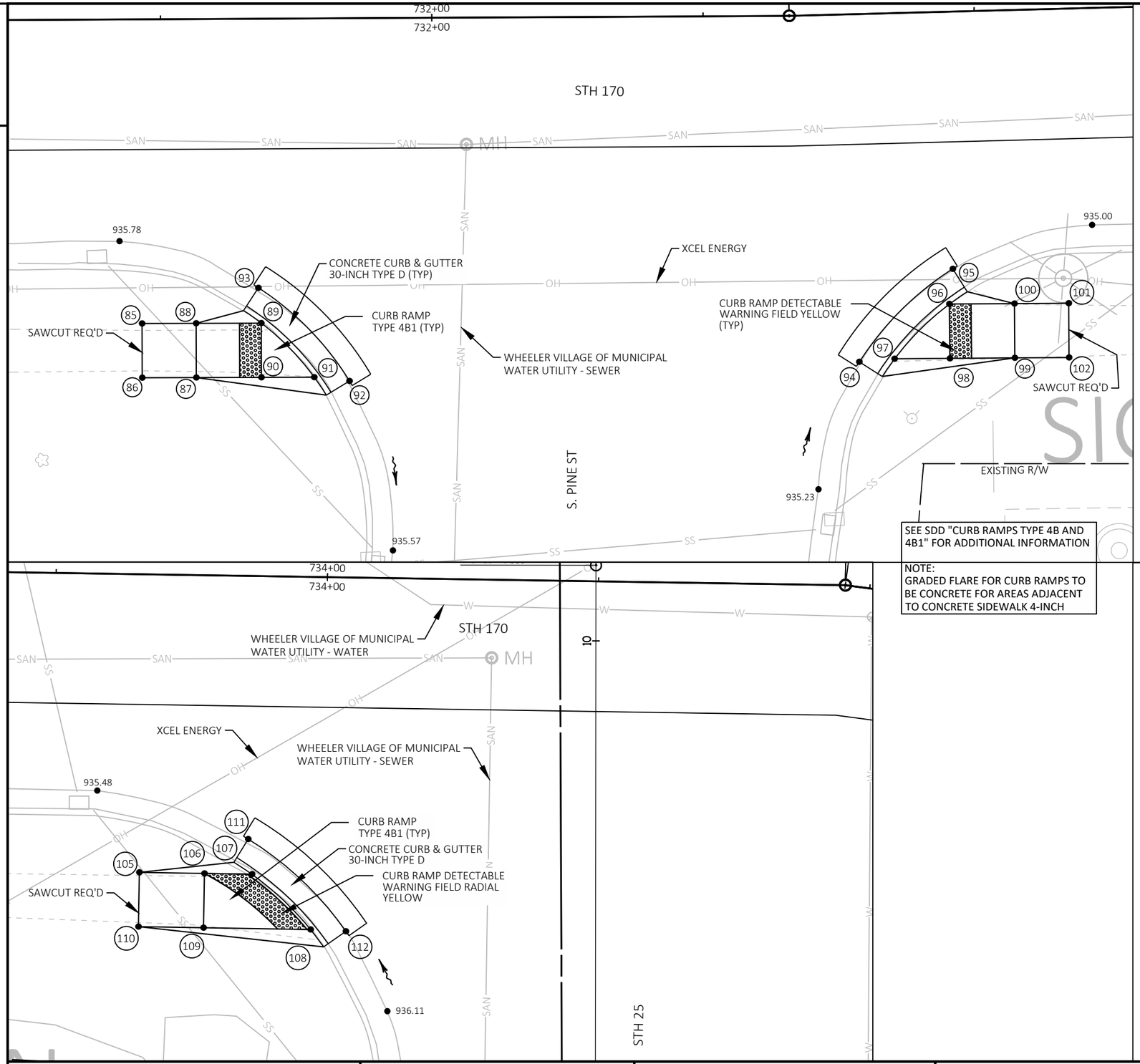
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
40	724+55.93	30.56 RT	231869.52	166287.77	941.61
41	724+44.19	30.54 RT	231871.05	166276.12	941.89
42	724+38.19	30.53 RT	231871.84	166270.17	941.91
43	724+38.20	25.53 RT	231876.80	166270.83	941.75
44	724+44.20	25.54 RT	231876.01	166276.78	941.82
45	724+49.96	25.55 RT	231875.26	166282.49	941.75
46	724+49.24	22.36 RT	231878.51	166282.19	941.51
47	724+59.20	30.72 RT	231868.94	166290.99	941.67
48	725+06.16	30.78 RT	231862.83	166337.55	941.54
49	725+16.39	22.51 RT	231869.71	166348.76	941.57
50	725+09.43	30.67 RT	231862.51	166340.80	941.73
51	725+21.77	30.70 RT	231860.90	166353.04	941.98
52	725+21.78	25.70 RT	231865.86	166353.69	941.82
53	725+15.60	25.68 RT	231866.66	166347.57	941.83
54	725+27.77	30.71 RT	231860.11	166358.99	942.04
55	725+27.78	25.71 RT	231865.07	166359.64	941.96

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
60	727+96.73	26.77 RT	231829.36	166626.21	941.89
61	727+96.73	31.76 RT	231824.41	166625.57	942.06
62	728+01.73	31.77 RT	231823.76	166630.53	941.66
63	728+01.73	26.77 RT	231828.72	166631.17	941.73
64	728+06.73	26.76 RT	231828.07	166636.13	941.66
65	728+06.73	31.76 RT	231823.12	166635.48	941.59
66	728+12.73	31.76 RT	231822.35	166641.43	941.17
67	728+12.73	26.76 RT	231827.31	166642.08	941.24
68	728+22.80	31.75 RT	231821.06	166651.42	941.02
69	728+17.46	26.76 RT	231826.70	166646.77	941.29
70	728+16.89	23.49 RT	231830.01	166646.63	941.30
71	728+26.05	32.05 RT	231820.34	166654.61	941.15
72	728+70.03	32.11 RT	231815.40	166701.19	940.23
73	728+80.75	32.16 RT	231814.94	166711.90	940.53
74	728+80.77	27.16 RT	231819.93	166712.12	940.24
75	728+74.69	27.13 RT	231820.20	166706.04	940.22
76	728+74.67	32.13 RT	231815.20	166705.83	940.29
77	728+88.44	19.82 RT	231826.97	166720.06	939.63
78	728+75.01	23.83 RT	231823.48	166706.49	939.94
79	728+66.81	32.55 RT	231815.09	166697.96	940.33
80	728+62.39	56.41 RT	231791.42	166692.61	941.07



PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CURB RAMP DETAILS	SHEET 25	E

FILE NAME : I:\41\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021302-cr
PLOT DATE : 7/16/2020 3:30 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



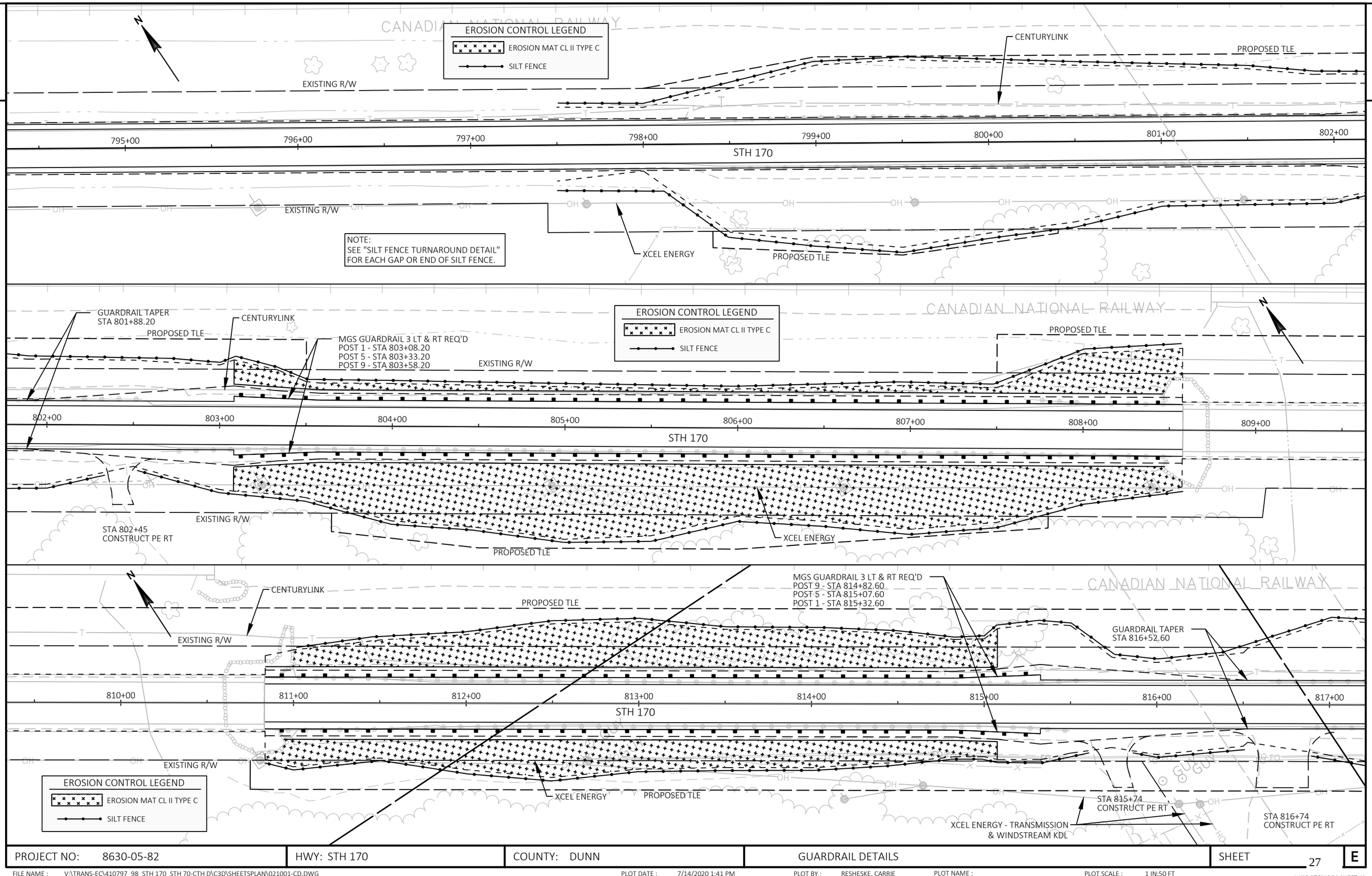
SEE SDD "CURB RAMPS TYPE 4B AND 4B1" FOR ADDITIONAL INFORMATION

NOTE:
GRADED FLARE FOR CURB RAMPS TO BE CONCRETE FOR AREAS ADJACENT TO CONCRETE SIDEWALK 4-INCH

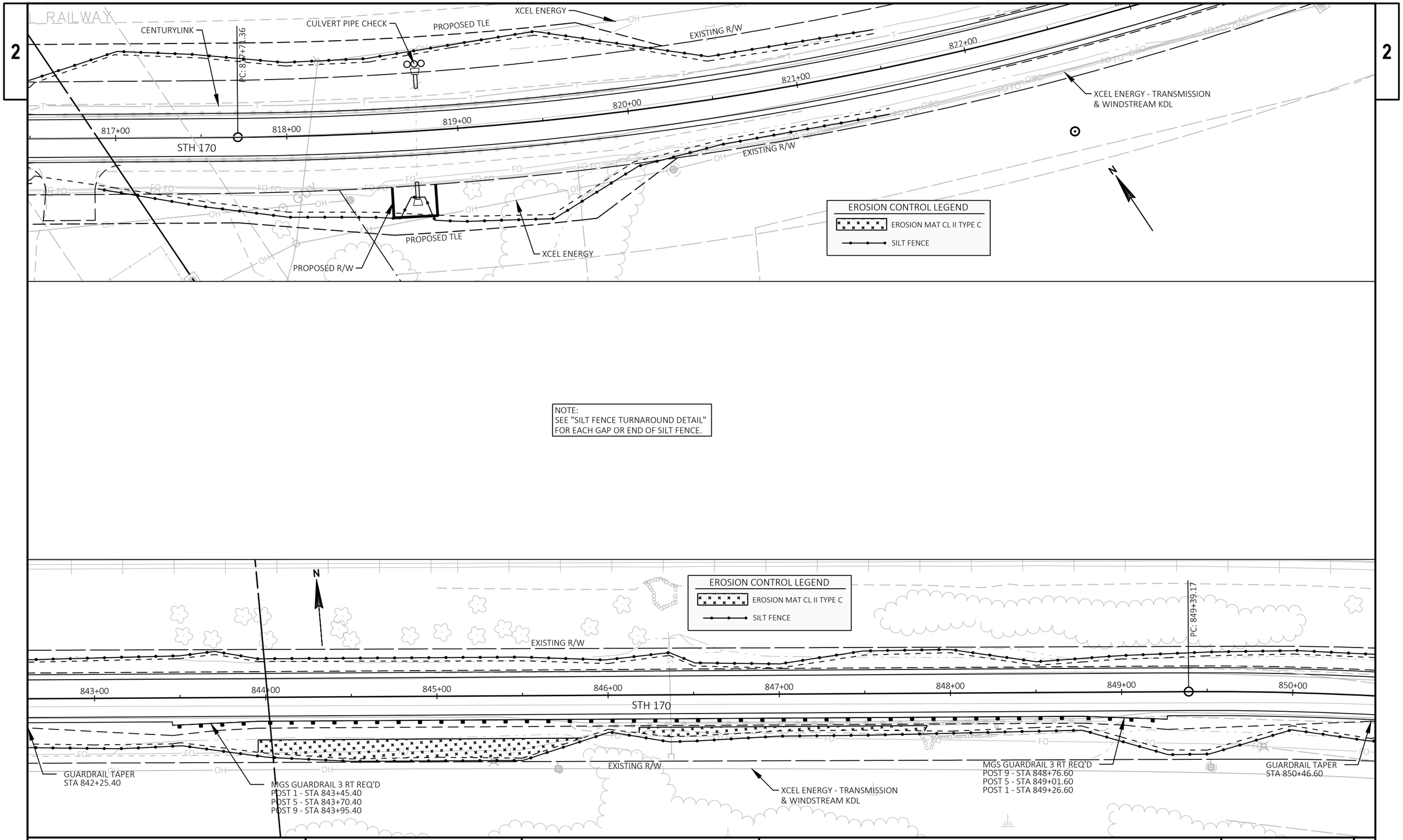
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
85	731+73.14	28.03 RT	231807.73	167004.23	936.09
86	731+73.12	33.03 RT	231802.74	167004.02	936.17
87	731+78.12	33.04 RT	231802.53	167009.02	936.06
88	731+78.14	28.04 RT	231807.53	167009.22	936.06
89	731+84.14	28.05 RT	231807.28	167015.22	935.65
90	731+84.12	33.05 RT	231802.29	167015.02	935.64
91	731+88.98	33.06 RT	231802.09	167019.87	935.65
92	731+92.23	33.43 RT	231801.60	167023.10	935.66
93	731+83.88	24.80 RT	231810.54	167015.09	935.75
94	732+38.58	32.05 RT	231801.27	167070.13	935.13
95	732+47.40	23.70 RT	231809.46	167079.11	935.03
96	732+47.01	26.94 RT	231806.23	167078.66	934.93
97	732+41.83	31.84 RT	231801.42	167073.39	935.03
98	732+46.92	31.94 RT	231801.23	167078.47	935.10
99	732+52.92	32.05 RT	231801.01	167084.47	935.47
100	732+53.01	27.06 RT	231806.01	167084.66	935.39
101	732+58.01	27.15 RT	231805.82	167089.65	935.40
102	732+57.92	32.15 RT	231800.82	167089.47	935.50

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
105	733+83.09	27.48 RT	231803.24	167214.70	936.02
106	733+89.09	27.48 RT	231803.13	167220.70	935.93
107	733+93.47	27.48 RT	231803.04	167225.09	935.87
108	733+98.94	32.49 RT	231797.94	167230.47	935.92
109	733+89.09	32.48 RT	231798.13	167220.61	936.00
110	733+83.09	32.48 RT	231798.24	167214.61	936.09
111	733+93.07	24.25 RT	231806.28	167224.74	935.93
112	734+02.20	32.60 RT	231797.77	167233.72	936.02

2



PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	GUARDRAIL DETAILS	SHEET 27	E



PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	GUARDRAIL DETAILS	SHEET 28	E

2

W8-11
48"X48"

PLACE EVERY 1 MILE IN MILL AND OVERLAY ZONES

W8-52
48"X48"

PLACE PRIOR TO EVERY MILLED SURFACE SECTIONS AND ON SIDE ROAD APPROACH.

PLACE SIGNS 350' IN ADVANCE OF PAVING OPERATIONS. ADD BUMP SIGN AT PROFILE CHANGE EXCEEDING ONE INCH.

W8-11
48"X48"

WO13-1
36"X36"

WO16-7L
48"X24"

W8-11
48"X48"

WO13-1
36"X36"

350'

BEGIN PROJECT

STH 170

END PROJECT

350'

W8-11
48"X48"

WO13-1
36"X36"

WO16-7L
48"X24"

W8-11
48"X48"

WO13-1
36"X36"

PLACE SIGNS 350' IN ADVANCE OF PAVING OPERATIONS. ADD BUMP SIGN AT PROFILE CHANGE EXCEEDING ONE INCH.

NOTES:

USE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADVANCE WARNING SIGNS.

DRAWING NOT TO SCALE. ALL SIGNS & POSTS ON THIS SHEET SHALL BE PAID FOR WITH "TRAFFIC CONTROL SIGNS" BID ITEM.

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

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE. ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

DETAIL FOR SIGNING ON CIR PAVEMENT AND MILLED SURFACES

PI STA = 399+68.69
Y = 232087.43
X = 134409.08

PI STA = 421+04.84
Y = 232480.54
X = 136508.74
DELTA = 11°22'15"
D = 3°30'00"
T = 162.98'
L = 324.88'
R = 1637.02'
PC STA = 419+41.86
PT STA = 422+66.74
DESIGN SPEED = 60 MPH
SE = 6%

BP: 397+93.04
PI: 399+68.69
PC: 419+41.86
PT: 422+66.74

CANADIAN NATIONAL RAILWAY

EXISTING R/W (TYP)

STH 170

N79° 52'57" E

N79° 23'44" E

S89° 14'04" E

S89° 45'47" E

BOYCEVILLE WASTEWATER TREATMENT

XCEL ENERGY

DUNN ENERGY COOPERATIVE

STH 79

BEGIN PROJECT 8630-05-83
STA 397+93.04
Y = 232056.57
X = 134236.16
MATCH EXISTING SAWCUT REQ'D

PI STA = 448+23.55
Y = 232444.15
X = 139228.28

PI: 448+23.55

PRAIRIE RD

SIGNS TO REMAIN

STA 425+80
24" x 47' EXISTING
CULVERT TO REMAIN
CLEANING CULVERT PIPE

STA 431+51
18" x 47' EXISTING
CULVERT TO REMAIN
CLEANING CULVERT PIPE

STA 444+88
24" x 30" x 44' EXISTING
CULVERT TO REMAIN
CLEANING CULVERT PIPE

PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	PLAN	SHEET 30	E

2

2

N

PI STA = 478+27.72
Y = 232431.72
X = 142232.43

PI 478+27.72

STA 478+54
18" x 43' EXIST CULVERT
REPLACE AND ADD ENDWALLS
SEE DETAIL

EXISTING R/W (TYP)

STH 170

455 460 465 470 475 480 485

S89°45'47"E

S89°39'18"E

DUNN ENERGY
COOPERATIVE

STA 460+07
36" x 50' EXIST CULVERT
REPLACE AND ADD ENDWALLS
SEE DETAIL

STA 466+97
36" x 52' EXIST CULVERT
REPLACE AND ADD ENDWALLS
SEE DETAIL

320TH ST

N

EXISTING R/W (TYP)

STH 170

485 490 495 500 505 510 515

S89°39'18"E

DUNN ENERGY
COOPERATIVE

STA 505+11
24" x 46' EXISTING
CULVERT TO REMAIN
CLEANING CULVERT
PIPE

STA 514+42
ABANDON CULVERT PIPE
36" x 62' EXIST CULVERT
REPLACE AND ADD ENDWALLS
SEE DETAIL

PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	PLAN	SHEET 31	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050102-pp

PLOT DATE : 7/14/2020 2:45 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

PI STA = 523+23.10
Y = 232404.66
X = 146727.73

PI: 523+23.10

EXISTING R/W (TYP)

STH 170

515 520 525 530 535 540 545

S89° 39' 18" E

S89° 14' 46" E

DUNN ENERGY
COOPERATIVE

N

DAIRYLAND POWER
COOPERATIVE

STA 544+63
EXISTING CULVERT
TO REMAIN

370TH ST

2

PI STA = 549+62.93
Y = 232369.93
X = 149367.32

PI: 549+62.93

EXISTING R/W (TYP)

STH 170

545 550 555 560 565 570 575

S89° 14' 46" E

S89° 36' 58" E

S89° 44' 53" E

PI STA = 562+62.90
Y = 232361.22
X = 150667.26

PI: 562+62.90

N

370TH ST

STA 559+87 & STA 560+03
42" x 56' EXISTING
CULVERTS TO REMAIN
INSTALL RIPRAP MEDIUM LT

STA 562+08
30" x 56' EXISTING CULVERT
TO REMAIN (PLASTIC)

DUNN ENERGY
COOPERATIVE &
DAIRYLAND POWER
COOPERATIVE

STA 571+11
30" x 55' EXIST CULVERT
REPLACE AND ADD ENDWALLS
SEE DETAIL

PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	PLAN	SHEET 32	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050103-pp

PLOT DATE : 7/14/2020 2:45 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

PI STA = 575+28.17
Y = 232355.66
X = 151932.52

PI: 575+28.17
PC: 577+41.14
PT: 580+15.25
PC: 581+97.79
PT: 592+23.31
PI: 599+10.07

S88°30'12"E
S74°26'45"E
N83°02'38"E

EXISTING R/W (TYP)

STH 170

CANADIAN NATIONAL RAILWAY

CTH F

MOVING SIGNS TYPE II

J13-1

DUNN ENERGY COOPERATIVE

DAIRYLAND POWER COOPERATIVE

R1-1

J13-2

MOVING SIGNS TYPE II

MOVING SIGNS TYPE II

PI STA = 578+78.92
Y = 232348.54
X = 152283.21
DELTA = 14°23'27"
D = 5°15'00"
T = 137.78'
L = 274.11'
R = 1091.35'
PC STA = 577+41.14
PT STA = 580+15.25
DESIGN SPEED = 55 MPH
SE = 6%

DUNN ENERGY COOPERATIVE & DAIRYLAND POWER COOPERATIVE

PI STA = 587+16.10
Y = 232123.66
X = 153091.12
DELTA = 20°30'37"
D = 2°00'00"
T = 518.31'
L = 1025.52'
R = 2864.79'
PC STA = 581+97.79
PT STA = 592+23.31
DESIGN SPEED = 55 MPH
SE = 4.5%

STA 597+79
30" x 49' EXIST CULVERT
REPLACE AND ADD ENDWALLS
SEE DETAIL

PI STA = 602+33.99
Y = 232255.75
X = 154614.39
DELTA = 16°05'23"
D = 2°30'00"
T = 323.92'
L = 643.58'
R = 2291.83'
PC STA = 599+10.07
PT STA = 605+53.65
DESIGN SPEED = 55 MPH
SE = 5.1%

PI STA = 608+99.82
Y = 232126.36
X = 155271.87

PI STA = 618+50.69
Y = 231921.45
X = 156200.40

PT: 605+53.65
PI: 608+99.82
PI: 618+50.69

S78°52'00"E
S77°33'19"E
S77°49'15"E

DUNN ENERGY COOPERATIVE

EXISTING R/W (TYP)

STH 170

DAIRYLAND POWER COOPERATIVE

PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	PLAN	SHEET 33	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050104-pp

PLOT DATE : 7/14/2020 2:46 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

2

2

N

PI STA = 653+55.36
Y = 231182.08
X = 159626.19

PI: 653+55.36

CANADIAN NATIONAL RAILWAY

625 630 635 640 645 650 655 660 665

STH 170

S77°49'15"E

S77°28'53"E

STA 636+45
36" x 50' EXIST CULVERT
REPLACE AND ADD ENDWALLS
SEE DETAIL

STA 642+02
30" x 58' EXISTING
CULVERT TO REMAIN
CLEANING CULVERT PIPE

DAIRYLAND POWER
COOPERATIVE

EXISTING R/W (TYP)

N

PC: 665+80.00

S77°28'53"E

665 670 675 680 685 690 695

PT: 684+63.16

PC: 690+24.39

10TH AVE

N46°29'09"E

STA 689+42
18" x 58' EXISTING
CULVERT TO REMAIN
CLEANING CULVERT
PIPE

STA 671+03
60" x 57' EXISTING
CULVERT TO REMAIN

PI STA = 675+98.20
Y = 230695.72
X = 161815.66
DELTA = 54°02'18"
D = 2°52'10"
T = 1018.20'
L = 1883.15'
R = 1996.67'
PC STA = 665+80.00
PT STA = 684+63.16
DESIGN SPEED = 60 MPH
SE = 5.6%

470TH ST

EXISTING R/W (TYP)

STA 678+22
18" x 50' EXIST CULVERT
REPLACE AND ADD ENDWALLS
SEE DETAIL

PROJECT NO: 8630-05-83	HWY: STH 170	COUNTY: DUNN	PLAN	SHEET 34	E

PI STA = 697+85.55
Y = 232247.08
X = 163568.27
DELTA = 45°01'36"
D = 3°07'12"
T = 761.16'
L = 1443.16'
R = 1836.40'
PC STA = 690+24.39
PT STA = 704+67.55
DESIGN SPEED = 60 MPH
SE = 5.6%

PT: 704+67.55
PC: 705+30.96
PT: 708+35.07
PI: 714+73.77
PI: 721+36.42

PI STA = 714+73.77
Y = 232076.17
X = 165326.14

PI STA = 721+36.42
Y = 231941.00
X = 165974.85

WHEELER VILLAGE OF MUNICIPAL WATER UTILITY - WATER

STA 718+23
EXIST STORM SEWER CLEANING CULVERT PIPES

STA 721+62
EXIST STORM SEWER CLEANING CULVERT PIPES

CENTURYLINK

STH 170

N BRIDGE ST

CANADIAN NATIONAL RAILWAY

700 705 710 715 720 725

S86°29'16"E

S81°55'34"E

S78°13'48"E

EXISTING R/W (TYP)

WE ENERGIES

STA 710+03
24" x 47' EXIST CULVERT
REPLACE AND ADD ENDWALLS
SEE DETAIL

XCEL ENERGY

CHURCH ST

WE ENERGIES

WHEELER VILLAGE OF MUNICIPAL WATER UTILITY - SEWER

S OAK ST

SIGN ATTACHED TO LIGHT POLE

SIGN ATTACHED TO LIGHT POLE

S ELM ST

PI STA = 706+83.10
Y = 232187.24
X = 164543.15
DELTA = 4°33'42"
D = 1°30'00"
T = 152.14'
L = 304.12'
R = 3819.72'
PC STA = 705+30.96
PT STA = 708+35.07
DESIGN SPEED = 60 MPH
SE = 3.7%

EP: 14+09.26

PI STA = 732+32.93
Y = 231833.42
X = 167065.07

PI STA = 728+58.55
Y = 231847.94
X = 166690.97

PI STA = 734+47.74
Y = 231829.54
X = 167279.84

WHEELER VILLAGE OF MUNICIPAL WATER UTILITY - WATER

STA 726+82
EXIST STORM SEWER CLEANING CULVERT PIPES

STA 725+02
EXIST STORM SEWER CLEANING CULVERT PIPES

PI: 728+58.55
PI: 732+32.93
PI: 734+47.74
PI: 738+00.00

CHARTER COMMUNICATIONS

CENTURYLINK

STH 25

STH 170

725 730 735 740 745 750 755

PI: 736+06.97

XCEL ENERGY

WE ENERGIES

CHARTER COMMUNICATIONS

EXISTING R/W (TYP)

STA 745+10
36" x 47' EXIST CULVERT
REPLACE AND ADD ENDWALLS
SEE DETAIL

WHEELER VILLAGE OF MUNICIPAL WATER UTILITY - SEWER

STA 728+87
24" x 58' EXIST STORM SEWER (METAL)
REPLACE AND ADD ENDWALL
SEE DETAIL

STOP
R1-1

MOVING SIGNS TYPE II

STA 732+73
EXIST STORM SEWER CLEANING CULVERT PIPES

STA 733+72
EXIST STORM SEWER CLEANING CULVERT PIPES

S ELM ST
S BIRCH ST
S PINE ST

BP: 6+00.00

BEGIN PROJECT 8630-05-82
END PROJECT 8630-05-83
STA 737+90.00
Y = 231783.24
X = 167619.03

PROJECT NO: 8630-05-83/8630-05-82	HWY: STH 170	COUNTY: DUNN	PLAN	SHEET 35	E

2

2

PI STA = 773+08.09
Y = 231323.04
X = 171106.81

PI STA = 784+56.73
Y = 231176.90
X = 172246.11
DELTA = 25°59'19"
D = 3°00'00"
T = 440.72'
L = 866.28'
R = 1909.86'
PC STA = 780+16.00
PT STA = 788+82.28
DESIGN SPEED = 60 MPH
SE = 5.5%

N

PI: 773+08.09

PC: 780+16.00

HAY R

CANADIAN NATIONAL RAILWAY

STH 170

S82°41'26"E

STA 762+68
24" x 47' EXISTING
CULVERT TO REMAIN
CLEANING CULVERT
PIPE

XCEL ENERGY

XCEL ENERGY

STA 781+66
24" x 48' EXISTING
CULVERT TO REMAIN
CLEANING CULVERT
PIPE

550TH ST

STA 803+08.20 - STA 808+58.20
MGS GUARDRAIL 3 LT & RT REQ'D
SEE DETAIL

STA 810+82.60 - STA 815+32.60
MGS GUARDRAIL 3 LT & RT REQ'D
SEE DETAIL

N

MOVING SIGNS TYPE II

MOVING SIGNS TYPE II

MOVING SIGNS TYPE II

NO PASSING ZONE
W14-3

W5-52L

W5-52R

PT: 788+82.28

S56°42'07"E

STA 787+37
24" x 47' EXIST CULVERT
REPLACE AND ADD ENDWALLS
SEE DETAIL

XCEL ENERGY

550TH ST

STA 798+44 - STA 802+55, LT
STA 798+45 - STA 801+93, RT
REMOVING CABLE GUARD

STA 807+66 - STA 808+58, LT
STA 802+66 - STA 808+58, RT
REMOVING GUARDRAIL

NO PASSING ZONE
W14-3
MOVING SIGNS TYPE II

W5-52R
MOVING SIGNS TYPE II

HAY RIVER

W5-52L
MOVING SIGNS TYPE II

STA 810+83 - STA 815+62, LT
STA 810+83 - STA 815+50, RT
REMOVING GUARDRAIL

PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	PLAN	SHEET 36	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050107-pp

PLOT DATE : 7/14/2020 2:47 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

2

STA 816+65 - STA 820+03, LT
STA 816+84 - STA 819+95, RT
REMOVING CABLE GUARD

PC: 817+71.36

REMOVING SIGNS TYPE II

STOP
R1-1
30"X30"

PT: 827+29.01

CTH S

VIKING GAS TRANSMISSION

STH 170

S85° 25' 53"E

XCEL ENERGY

EXISTING R/W (TYP)

WINDSTREAM & XCEL ENERGY

STA 818+75
24" x 60' EXIST CULVERT
ADD EXTENSIONS AND ENDWALLS
SEE CROSS SECTIONS

PI STA = 822+60.47
Y = 229080.34
X = 175438.06
DELTA = 28°43'46"
D = 3°00'00"
T = 489.11'
L = 957.65'
R = 1909.86'
PC STA = 817+71.36
PT STA = 827+29.01
DESIGN SPEED = 60 MPH
SE = 5.5%

N

MOVING SIGNS TYPE II

PC: 849+39.17

STH 170

PT: 863+59.25

S42° 49' 44"E

STA 843+45.40 - STA 849+26.60
MGS GUARDRAIL 3 RT REQ'D
SEE DETAIL

PI STA = 856+83.84
Y = 228806.02
X = 178871.07
DELTA = 42°36'09"
D = 3°00'00"
T = 744.67'
L = 1420.08'
R = 1909.86'
PC STA = 849+39.17
PT STA = 863+59.25
DESIGN SPEED = 60 MPH
SE = 5.5%

WINDSTREAM & XCEL ENERGY

EXISTING R/W (TYP)

STA 845+87 - STA 848+91
REMOVE GUARDRAIL RT

W1-2R
MOVING SIGNS TYPE II

STA 846+36
36" x 65' EXISTING
CULVERT TO REMAIN
CLEANING CULVERT
PIPE

N

PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	PLAN	SHEET 37	E

2

2

N

CANADIAN NATIONAL RAILWAY

STH 170

875 880 885 890 895 900 905

S42° 49' 44" E

WINDSTREAM &
XCEL ENERGY

EXISTING R/W (TYP)

DUNN ENERGY
COOPERATIVE

N

630TH ST

PC: 909+69.20

PT: 912+00.69

PC: 914+48.20

PT: 916+71.96

CINC

EXISTING R/W (TYP)

640TH ST

PC: 930+54.04

PT: 933+44.65

PC: 934+43.10

905 910 915 920 925 930 935

S42° 49' 44" E

S38° 11' 57" E

S42° 40' 28" E

S48° 29' 12" E

PI STA = 910+85.01
Y = 224794.09
X = 182589.93
DELTA = 4°37'47"
D = 2°00'00"
T = 115.81'
L = 231.48'
R = 2864.79'
PC STA = 909+69.20
PT STA = 912+00.69
DESIGN SPEED = 62 MPH
SE = 4.5%

PI STA = 915+60.14
Y = 224420.60
X = 182883.83
DELTA = 4°28'30"
D = 2°00'00"
T = 111.93'
L = 223.75'
R = 2864.79'
PC STA = 914+48.20
PT STA = 916+71.96
DESIGN SPEED = 60 MPH
SE = 4.5%

DUNN ENERGY
COOPERATIVE

STA 919+14
36" METAL & 3' x 3' CONCRETE
BOX TO REMAIN
CLEANING CULVERT PIPE

634TH ST

STA 933+13 - STA 934+75
REMOVING EXISTING PAVED
SHOULDER GREATER THAN
3' WIDE. SAWCUT REQ'D.

PI STA = 931+99.47
Y = 223215.25
X = 183995.09
DELTA = 5°48'44"
D = 2°00'00"
T = 145.43'
L = 290.61'
R = 2864.79'
PC STA = 930+54.04
PT STA = 933+44.65
DESIGN SPEED = 60 MPH
SE = 4.5%

PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	PLAN	SHEET 38	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050109-pp

PLOT DATE : 7/14/2020 2:48 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

PI STA = 935+85.01
Y = 222959.55
X = 184283.97
DELTA = 5°40'18"
D = 2°00'00"
T = 141.91'
L = 283.58'
R = 2864.79'
PC STA = 934+43.10
PT STA = 937+26.68
DESIGN SPEED = 60 MPH
SE = 4.5%

PI STA = 951+99.11
Y = 221775.35
X = 185381.12

PC: 934+43.10

PT: 937+26.68

EP: 951+99.11

CANADIAN NATIONAL RAILWAY

CINC

STH 170

935

940

945

950

S42°48'53"E

DUNN ENERGY COOPERATIVE

EXISTING R/W (TYP)

CTH D

STH 170

END PROJECT 8630-05-82
STA 948+94.80
MATCH EXISTING
SAWCUT REQ'D

PI STA = 6+00.00
Y = 231424.46
X = 167255.39

PI STA = 10+06.97
Y = 231831.43
X = 167256.86

PI STA = 14+09.26
Y = 232233.72
X = 167257.93

PI 732+32.93

BP: 6+00.00

PI: 10+06.97

EP: 14+09.26

STA 9+19.10, STH 25
CONSTRUCTION LIMITS
MATCH EXISTING

STH 25

PI: 734+47.74

LHE FOR DRAINAGE
PROJECT 8630-02-21

STA 10+48
EXIST 30" CMCP
CLEANING CULVERT
PIPES

STA 11+68.47 STH 25
CONSTRUCTION LIMITS
MATCH EXISTING

STH 170

PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	PLAN	SHEET 39	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050110-pp

PLOT DATE : 7/14/2020 2:49 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:200 FT

					8630-05-82	8630-05-83
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0002	201.0105	Clearing	STA	10.000	10.000	
0004	201.0205	Grubbing	STA	10.000	10.000	
0006	203.0100	Removing Small Pipe Culverts	EACH	11.000	2.000	9.000
0010	204.0105	Removing Pavement Butt Joints	SY	849.000	273.000	576.000
0012	204.0110	Removing Asphaltic Surface	SY	983.000	269.000	714.000
0016	204.0120	Removing Asphaltic Surface Milling	SY	140,792.000	52,391.000	88,401.000
0018	204.0150	Removing Curb & Gutter	LF	168.000		168.000
0020	204.0155	Removing Concrete Sidewalk	SY	114.000		114.000
0022	204.0165	Removing Guardrail	LF	1,934.000	1,934.000	
0026	204.0270	Abandoning Culvert Pipes	EACH	1.000		1.000
0028	204.9090.S	Removing (item description) 001. Removing Cable Guard	LF	1,408.000	1,408.000	
0030	205.0100	Excavation Common	CY	638.000	618.000	20.000
0032	208.0100	Borrow	CY	7,493.000	7,473.000	20.000
0034	209.0200.S	Backfill Controlled Low Strength	CY	16.200		16.200
0038	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	1,069.000	417.000	652.000
0040	211.0700.S	Prepare Foundation for CIR Base Layer (project) 002. 8630-05-82	EACH	1.000	1.000	
0042	211.0700.S	Prepare Foundation for CIR Base Layer (project) 003. 8630-05-83	EACH	1.000		1.000
0044	211.0800.S	Base Repair for CIR Layer	CY	400.000	200.000	200.000
0048	213.0100	Finishing Roadway (project) 002. 8630-05-82	EACH	1.000	1.000	
0050	213.0100	Finishing Roadway (project) 003. 8630-05-83	EACH	1.000		1.000
0052	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,800.000	900.000	900.000
0054	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	606.000	98.000	508.000
0056	305.0500	Shaping Shoulders	STA	26.000		26.000
0058	327.1000.S	CIR Asphaltic Base Layer	SY	144,185.000	52,391.000	91,794.000
0062	455.0605	Tack Coat	GAL	12,707.000	4,617.000	8,090.000
0064	455.0770.S	Asphalt Stabilizing Agent	TON	504.000	183.000	321.000
0066	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	0.600	0.200	0.400
0068	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.100	0.400	0.700
0072	460.2005	Incentive Density PWL HMA Pavement	DOL	14,440.000	5,820.000	8,620.000
0074	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	23,000.000	8,500.000	14,500.000
0076	460.2010	Incentive Air Voids HMA Pavement	DOL	19,570.000	7,390.000	12,180.000
0078	460.6644	HMA Pavement 4 MT 58-34 V	TON	19,555.000	7,380.000	12,175.000
0080	460.6645	HMA Pavement 5 MT 58-34 V	TON	640.000		640.000
0082	465.0105	Asphaltic Surface	TON	232.000	37.000	195.000
0084	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	25.000	5.000	20.000
0106	511.1100	Temporary Shoring	SF	372.000		372.000
0108	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	6.000		6.000

					8630-05-82	8630-05-83
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0110	520.1030	Apron Endwalls for Culvert Pipe 30-Inch	EACH	2.000	2.000	
0112	520.1042	Apron Endwalls for Culvert Pipe 42-Inch	EACH	2.000	2.000	
0114	520.1048	Apron Endwalls for Culvert Pipe 48-Inch	EACH	8.000		8.000
0116	520.1054	Apron Endwalls for Culvert Pipe 54-Inch	EACH	2.000		2.000
0118	520.3142	Culvert Pipe Class III 42-Inch	LF	48.000	48.000	
0120	520.3148	Culvert Pipe Class III 48-Inch	LF	48.000		48.000
0122	520.3330	Culvert Pipe Class III-A 30-Inch	LF	46.000	46.000	
0124	520.4124	Culvert Pipe Class IV 24-Inch	LF	134.000		134.000
0126	520.4148	Culvert Pipe Class IV 48-Inch	LF	132.000		132.000
0128	520.4154	Culvert Pipe Class IV 54-Inch	LF	44.000		44.000
0132	520.8700	Cleaning Culvert Pipes	EACH	17.000	4.000	13.000
0138	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	2.000	2.000	
0148	521.3124	Culvert Pipe Corrugated Steel 24-Inch	LF	18.000	18.000	
0156	522.0430	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	44.000		44.000
0162	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	1.000		1.000
0164	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000		2.000
0168	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	168.000		168.000
0172	602.0405	Concrete Sidewalk 4-Inch	SF	1,115.000		1,115.000
0176	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	70.000		70.000
0178	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	68.000		68.000
0188	606.0200	Riprap Medium	CY	10.000	5.000	5.000
0196	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	86.000		86.000
0206	611.8115	Adjusting Inlet Covers	EACH	1.000		1.000
0208	614.2300	MGS Guardrail 3	LF	2,151.000	2,151.000	
0212	614.2500	MGS Thrie Beam Transition	LF	150.000	150.000	
0214	614.2610	MGS Guardrail Terminal EAT	EACH	6.000	6.000	
0218	618.0100	Maintenance And Repair of Haul Roads (project) 002. 8630-05-82	EACH	1.000	1.000	
0220	618.0100	Maintenance And Repair of Haul Roads (project) 003. 8630-05-83	EACH	1.000		1.000
0222	619.1000	Mobilization	EACH	0.500	0.200	0.300
0226	624.0100	Water	MGAL	105.000	50.000	55.000
0228	625.0500	Salvaged Topsoil	SY	14,010.000	11,730.000	2,280.000
0230	627.0200	Mulching	SY	17,513.000	14,663.000	2,850.000
0234	628.1504	Silt Fence	LF	9,215.000	7,925.000	1,290.000
0236	628.1520	Silt Fence Maintenance	LF	9,215.000	7,925.000	1,290.000
0238	628.1550	Silt Screen	LF	55.000		55.000
0240	628.1905	Mobilizations Erosion Control	EACH	8.000	4.000	4.000

					8630-05-82	8630-05-83
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0242	628.1910	Mobilizations Emergency Erosion Control	EACH	8.000	4.000	4.000
0244	628.2004	Erosion Mat Class I Type B	SY	35.000	15.000	20.000
0248	628.2027	Erosion Mat Class II Type C	SY	5,230.000	5,230.000	
0250	628.7015	Inlet Protection Type C	EACH	1.000		1.000
0252	628.7504	Temporary Ditch Checks	LF	141.000	18.000	123.000
0254	628.7555	Culvert Pipe Checks	EACH	66.000	23.000	43.000
0256	629.0210	Fertilizer Type B	CWT	11.200	9.300	1.900
0258	630.0120	Seeding Mixture No. 20	LB	472.000	396.000	76.000
0260	630.0140	Seeding Mixture No. 40	LB	2.000		2.000
0262	630.0200	Seeding Temporary	LB	237.000	198.000	39.000
0264	630.0500	Seed Water	MGAL	395.000	330.000	65.000
0270	633.5200	Markers Culvert End	EACH	50.000	12.000	38.000
0276	637.2210	Signs Type II Reflective H	SF	5.180	5.180	
0280	638.2102	Moving Signs Type II	EACH	12.000	8.000	4.000
0282	638.2602	Removing Signs Type II	EACH	1.000	1.000	
0284	638.4000	Moving Small Sign Supports	EACH	12.000	8.000	4.000
0286	642.5001	Field Office Type B	EACH	0.500	0.200	0.300
0288	643.0300	Traffic Control Drums	DAY	100.000	50.000	50.000
0298	643.0900	Traffic Control Signs	DAY	6,387.000	1,922.000	4,465.000
0304	643.5000	Traffic Control	EACH	0.500	0.200	0.300
0308	644.1430	Temporary Pedestrian Surface Plate	SF	150.000		150.000
0310	644.1601	Temporary Pedestrian Curb Ramp	DAY	55.000		55.000
0312	644.1810	Temporary Pedestrian Barricade	LF	100.000		100.000
0314	645.0120	Geotextile Type HR	SY	36.000	18.000	18.000
0318	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	110,604.000	42,210.000	68,394.000
0322	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	70,250.000	27,000.000	43,250.000
0326	646.5320	Marking Railroad Crossings Epoxy	EACH	2.000	2.000	
0338	648.0100	Locating No-Passing Zones	MI	10.440	4.000	6.440
0340	649.0105	Temporary Marking Line Paint 4-Inch	LF	120,500.000	46,000.000	74,500.000
0350	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	168.000		168.000
0352	650.6000	Construction Staking Pipe Culverts	EACH	12.000	2.000	10.000
0354	650.8000	Construction Staking Resurfacing Reference	LF	54,879.000	20,882.000	33,997.000
0358	650.9000	Construction Staking Curb Ramps	EACH	11.000		11.000
0362	650.9910	Construction Staking Supplemental Control (project) 002. 8630-05-82	LS	1.000	1.000	
0364	650.9910	Construction Staking Supplemental Control (project) 003. 8630-05-83	LS	1.000		1.000
0366	650.9920	Construction Staking Slope Stakes	LF	2,076.000	2,076.000	
0460	690.0150	Sawing Asphalt	LF	1,033.000	250.000	783.000
0462	690.0250	Sawing Concrete	LF	124.000		124.000

					8630-05-82	8630-05-83
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0464	740.0440	Incentive IRI Ride	DOL	20,873.000	7,995.000	12,878.000
0476	SPV.0060	Special 004. Connection to Existing Inlets or Manholes	EACH	1.000		1.000
0478	SPV.0060	Special 005. Lane Shift	EACH	7.000	2.000	5.000
0484	SPV.0105	Special 002. Material Transfer Vehicle project 8630-05-82	LS	1.000	1.000	
0486	SPV.0105	Special 003. Material Transfer Vehicle Project 8630-05-83	LS	1.000		1.000

CLEARING & GRUBBING

STATION TO STATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
798+00 - 801+00	3	3
804+00 - 806+00	2	2
812+00 - 816+00	4	4
819+00 - 820+00	1	1
PROJECT ID 8630-05-82 SUMMARY	**10**	**10**
PROJECT TOTAL	**10**	**10**

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	SIZE	MATERIAL	203.0100 EACH
460+07	STH 170	36"x50'	CMCP	1
466+97	STH 170	36"x60'	PCP	1
478+54	STH 170	18"x48'	CMCP	1
571+11	STH 170	30"x62'	PCP	1
597+79	STH 170	30"x52'	CMCP	1
636+45	STH 170	36"x58'	CMCP	1
678+22	STH 170	18"x56'	CMCP	1
710+03	STH 170	24"x44'	CMCP	1
728+87	STH 170	24"x58'	CMCP	1
PROJECT ID 8630-05-83 SUMMARY				**9**
745+10	STH 170	36"x56'	CMCP	1
787+37	STH 170	24"x54'	CMCP	1
PROJECT ID 8630-05-82 SUMMARY				**2**
PROJECT TOTAL				**11**

REMOVING ASPHALTIC SURFACE MILLING

STATION TO STATION	LOCATION	204.0120 SY
9+19 - 11+68	STH 25	681
397+93.04-737+90	STH 170	88401
PROJECT ID 8630-05-83 SUMMARY		**88401**
737+90-808+57.69	STH 170	17723
810+83.05-948+94.80	STH 170	34668
PROJECT ID 8630-05-82 SUMMARY		**52391**
PROJECT TOTAL		**140792**

REMOVING ASPHALTIC SURFACE

STATION	LOCATION	204.0110 SY
460+07	PIPE REPLACEMENT	53
466+97	PIPE REPLACEMENT	56
478+54	PIPE REPLACEMENT	69
514+47	PIPE REPLACEMENT	70
571+17	PIPE REPLACEMENT	57
597+79	PIPE REPLACEMENT	66
636+44	PIPE REPLACEMENT	55
678+22	PIPE REPLACEMENT	82
710+03	PIPE REPLACEMENT	50
715+42	SW QUAD OF S CHURCH ST	3
715+92	SE QUAD OF S CHURCH ST	3
721+17	SW QUAD OF S OAK ST	3
721+51	SE QUAD OF S OAK ST	3
724+49	SW QUAD OF S ELM ST	3
725+16	SE QUAD OF S ELM ST	3
728+19	SW QUAD OF S BIRCH ST	3
728+87	PIPE REPLACEMENT	126
731+86	SW QUAD OF S PINE ST	3
732+46	SE QUAD OF S PINE ST	3
733+94	SW QUAD OF STH 25	3
PROJECT ID 8630-05-83 SUMMARY		**714**
745+10	PIPE REPLACEMENT	69
787+37	PIPE REPLACEMENT	58
933+12-934+75	STH 170 WIDE SHOULDER	142
PROJECT ID 8630-05-82 SUMMARY		**269**
PROJECT TOTAL		**983**

REMOVING CURB & GUTTER

LOCATION	204.0150 LF
SW QUAD OF S CHURCH ST	12
SE QUAD OF S CHURCH ST	12
SW QUAD OF S OAK ST	11
SE QUAD OF S OAK ST	11
SW QUAD OF S ELM ST	13
SE QUAD OF S ELM ST	13
SW QUAD OF S BIRCH ST	12
SE QUAD OF S BIRCH ST	48
SW QUAD OF S PINE ST	12
SE QUAD OF S PINE ST	12
SW QUAD OF STH 25	12
PROJECT ID 8630-05-83 SUMMARY	**168**
PROJECT TOTAL	**168**

REMOVING CONCRETE SIDEWALK

LOCATION	204.0155 SY
SW QUAD OF S CHURCH ST	7
SE QUAD OF S CHURCH ST	7
SW QUAD OF S OAK ST	12
SE QUAD OF S OAK ST	12
SW QUAD OF S ELM ST	16
SE QUAD OF S ELM ST	13
SW QUAD OF S BIRCH ST	22
SE QUAD OF S BIRCH ST	4
SW QUAD OF S PINE ST	6
SE QUAD OF S PINE ST	8
SW QUAD OF STH 25	7
PROJECT ID 8630-05-83 SUMMARY	**114**
PROJECT TOTAL	**114**

REMOVING PAVEMENT BUTT JOINTS

STATION	LOCATION	204.0105 SY
397+93	STH 170	142
443+97	PRAIRIE ROAD	27
478+28	320TH ST	46
544+05	370TH ST	77
597+26	CTH F	52
677+75	470TH ST	25
693+95	1010TH AVE	25
717+80	N BRIDGE ST	29
728+54	BIRCH ST	25
734+21	STH 25	68
DRIVEWAYS	ENTIRE PROJECT	60
PROJECT ID 8630-05-83 SUMMARY		**576**
785+55	550ST ST	21
830+85	CTH S	25
913+70	630TH ST	26
923+50	634TH ST	23
934+00	634TH ST	21
948+94	STH 170	142
DRIVEWAYS	ENTIRE PROJECT	15
PROJECT ID 8630-05-82 SUMMARY		**273**
PROJECT TOTAL		**849**

REMOVING GUARDRAIL

STATION TO STATION	LOCATION	204.0165 LF
807+66 - 808+58	LT	92
802+66 - 808+58	RT	592
810+83 - 815+62	LT	479
810+83 - 815+50	RT	467
845+87 - 848+91	RT	304
PROJECT ID 8630-05-82 SUMMARY		**1934**
PROJECT TOTAL		**1934**

ABANDONING CULVERT PIPES

STATION	LOCATION	SIZE	MATERIAL	204.0270 EACH
514+42	STH 170	36"x62'	CMCP	1
PROJECT ID 8630-05-83 SUMMARY				**1**
PROJECT TOTAL				**1**

EARTHWORK SUMMARY

STATION TO STATION	LOCATION	205.0100 EXCAVATION COMMON CY	UNEXPANDED FILL CY	(2) (4) EXPANDED FILL CY	(5) MASS ORDINATE +/- CY	(1) WASTE CY	(3) 208.0100 BORROW CY
UNDISTRIBUTED (PIPES)	STH 170	20	---	----	---	---	20
PROJECT ID 8630-05-83 SUMMARY		**20**					**20**
798+00 - 808+57.50	STH 170	120	2899	3769	3649	---	3649
810+83.5 - 821+00	STH 170	65	3129	4068	4003	---	4003
842+25.40 - 850+46.60	STH 170	433	188	244	-189	---	-189
UNDISTRIBUTED (PIPES)		0	---	----	---	---	10
PROJECT ID 8630-05-82 SUMMARY		**618**					**7473**
PROJECT TOTAL		**638**					**7493**

(1) WASTE = EXPANDED FILL - EXCAVATION COMMON (FOR INFORMATION ONLY - NOT A BID ITEM)
(2) EXPANSION FACTOR = 1.30
(3) BORROW = EXPANDED FILL - EXCAVATION COMMON
(4) EXPANDED FILL = UNEXPANDED FILL * EXPANSION FACTOR
(5) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. MINUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. PLUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(6) NO EXCAVATION COMMON FOR PIPE EXCAVATION. UNDISTIRUBED EXCAVATION COMMON IS BASED ON DITCHING TO DRAIN

REMOVING CABLE GUARD

STATION TO STATION	LOCATION	204.9090.S LF
798+44 - 802+55	LT	411
798+45 - 801+93	RT	348
816+65 - 820+03	LT	338
816+84 - 819+95	RT	311
PROJECT ID 8630-05-82 SUMMARY		**1408**
PROJECT TOTAL		**1408**

BACKFILL CONTROLLED LOW STRENGTH

STATION	LOCATION	209.0200.S CY
514+42	STH 170	16.2
PROJECT ID 8630-05-83 SUMMARY		**16.2**
PROJECT TOTAL		**16.2**

PREPARING FOUNDATION FOR ASPHALT SHOULDER

STATION TO STATION	LOCATION	211.0400 STA
397+93 - 718+80	LT	322
397+93 - 712+66	RT	316
728+60 - 737+90	LT	10
734+25 - 737+90	RT	4
PROJECT ID 8630-05-83 SUMMARY		**652**
737+90 - 808+58	LT	72
737+90 - 808+58	RT	72
810+83 - 948+95	LT	139
810+83 - 843+45	RT	34
849+27 - 948+95	RT	100
PROJECT ID 8630-05-82 SUMMARY		**417**
PROJECT TOTAL		**1069**

PREPARE FOUNDATION FOR CIR BASE LAYER

LOCATION	211.0700.S EACH
.003 8630-05-83	**1**
.002 8630-05-82	**1**

FINISHING ROADWAY

PROJECT	213.0100 EACH
.003 8630-05-8	**1**
.002 8630-05-8	**1**

BASE REPAIR FOR CIR PAVEMENT

LOCATION	211.0800.S CY
UNDISTRIBUTED	200
PROJECT ID 8630-05-83 SUMMARY	**200**
UNDISTRIBUTED	200
PROJECT ID 8630-05-82 SUMMARY	**200**
PROJECT TOTAL	**400**

SHAPING SHOULDERS

STATION TO STATION	DESCRIPTION	305.0500 STA
712+66 - 734+66	STH 170 LT	22
10+42 - 11+68	STH 25	4
PROJECT ID 8630-05-83 SUMMARY		**26**
PROJECT TOTAL		**26**

BASE AGGREGATE DENSE

STATION TO STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON
397+93-737+90	STH 170	250	---
397+93-737+90	DRIVEWAYS	40	---
460+07	PIPE REPLACEMENT	10	40
466+97	PIPE REPLACEMENT	10	42
478+54	PIPE REPLACEMENT	10	43
514+47	PIPE REPLACEMENT	13	53
571+17	PIPE REPLACEMENT	11	47
597+79	PIPE REPLACEMENT	10	42
636+44	PIPE REPLACEMENT	10	42
678+22	PIPE REPLACEMENT	12	43
710+03	PIPE REPLACEMENT	9	38
715+42	SW QUAD OF S CHURCH ST	---	5
715+92	SE QUAD OF S CHURCH ST	---	6
721+17	SW QUAD OF S OAK ST	---	5
721+51	SE QUAD OF S OAK ST	---	5
724+49	SW QUAD OF S ELM ST	---	7
725+16	SE QUAD OF S ELM ST	---	7
728+19	SW QUAD OF S BIRCH ST	---	7
728+73	SE QUAD OF S BIRCH ST	---	11
728+87	PIPE REPLACEMENT	5	49
731+86	SW QUAD OF S PINE ST	---	5
732+46	SE QUAD OF S PINE ST	---	5
733+94	SW QUAD OF STH 25	---	6
UNDISTRIBUTED		510	---
PROJECT ID 8630-05-83 SUMMARY		**900**	**508**
737+90-798+00	STH 170	50	---
737+90-948+94.80	DRIVEWAYS	50	---
745+10	PIPE REPLACEMENT	13	53
787+37	PIPE REPLACEMENT	11	45
798+00-802+00	STH 170	12	---
802+00-808+58.20	STH 170	79	---
810+82.60-816+52.00	STH 170	68	---
816+52.00-821+00	STH 170	15	---
821+00-843+45.40	STH 170	20	---
843+45.40-849+26.60	STH 170	60	---
849+26.60-948+94.80	STH 170	97	---
UNDISTRIBUTED		425	---
PROJECT ID 8630-05-82 SUMMARY		**900**	**98**
PROJECT TOTALS		**1800**	**606**

(1) UNDISTRIBUTED INCLUDED TO ACCOUNT FOR EXISITNG SLOUGHED OFF SHOULDERS

COLD-IN-PLACE RECYCLING (CIR) PARTIAL DPETH ITEMS

STATION TO STATION	327.1000.S COLD-IN-PLACE RECYCLING (CIR) ASPHALT PAVEMENT SY	455.0770.S ASPHALT STABILIZING AGENT TON
397+93 - 712+66	90922	318
734+63 - 737+90	872	3
PROJECT ID 8630-05-83 SUMMARY	**91794**	**321**
737+90 - 808+58	17723	62
810+82 - 948+95	34668	121
PROJECT ID 8630-05-82 SUMMARY	52391	183
PROJECT TOTALS	**235979**	**825**

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HMA PAVEMENT ITEMS

STATION TO STATION	LOCATION	460.6644 4 MT 58-34 V TON	460.6645 5 MT 58-34 V TON	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS TON	455.0605 TACK COAT GAL	460.0105.S HMA PAVEMENT PWL TEST STRIP VOLUMETRICS EACH	460.0110.S HMA PAVEMENT PWL TEST STRIP DENSITY EACH
397+93-737+90	STH 170 (1)	12175	640	---	---	8051	---	---
397+93-737+90	DRIVEWAYS	---	---	---	20	---	---	---
460+07	PIPE REPLACEMENT	---	---	15	---	3	---	---
466+97	PIPE REPLACEMENT	---	---	16	---	3	---	---
478+54	PIPE REPLACEMENT	---	---	20	---	4	---	---
514+47	PIPE REPLACEMENT	---	---	20	---	4	---	---
571+17	PIPE REPLACEMENT	---	---	16	---	3	---	---
597+79	PIPE REPLACEMENT	---	---	19	---	4	---	---
636+44	PIPE REPLACEMENT	---	---	16	---	3	---	---
678+22	PIPE REPLACEMENT	---	---	23	---	5	---	---
710+03	PIPE REPLACEMENT	---	---	14	---	3	---	---
728+87	PIPE REPLACEMENT	---	---	36	---	7	---	---
PROJECT ID 8630-05-83 SUMMARY		**12175**	**640**	**195**	**20**	**8090**	**0.4**	**0.7**
737+90-808+58.20	STH 170	2495	---	---	---	1559	---	---
737+90-948+94.80	DRIVEWAYS	---	---	---	5	---	---	---
745+10	PIPE REPLACEMENT	---	---	20	---	3	---	---
787+37	PIPE REPLACEMENT	---	---	17	---	3	---	---
810+82.60-948+94.80	STH 170	4885	---	---	---	3052	---	---
PROJECT ID 8630-05-82 SUMMARY		**7380**	**0**	**37**	**5**	**4617**	**0.2**	**0.4**
PROJECT TOTALS		**19555**	**640**	**232**	**25**	**12707**	**0.6**	**1.1**

(1) INCLUDES STH 25 PAVEMENT

Location	Station	Mixture Use	Underlying Surface	Bid Item	Tons	Thickness	Quality Management Program to be used for:	
							Mixture Acceptance	Density Acceptance
11 foot Driving Lane	397+93 - 737+90	Surface Layer	CIR PAVEMENT	4MT 58-34 V	9,308	2"	PWL Incentative Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
12 foot Driving Lane	712+65.82 - 734+63.10	Surface Layer	5 MT 58-34 V	4MT 58-34 V	575	1.75"	PWL Incentative Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
12 foot Driving Lane	712+65.82 - 734+63.10	Binder Layer	MILLED EXISTING HMA SURFACE	5 MT 58-34 V	493	1.5"	PWL Incentative Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
11 foot Driving Lane	734+63.10 - 737+90	Surface Layer	CIR PAVEMENT	4MT 58-34 V	90	2"	PWL Incentative Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2004
11 foot Driving Lane	737+90 - 808+58.20	Surface Layer	CIR PAVEMENT	4MT 58-34 V	1,936	2''	PWL Incentative Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
11 foot Driving Lane	810+82.60 - 948+94.80	Surface Layer	CIR PAVEMENT	4MT 58-34 V	3,782	2''	PWL Incentative Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
Various		Culvert Patches	Base Aggregate	Asphaltic Surface	232	5" Total	QMP as per SS 465	Acceptance by ordinatry compaction
3 foot shoulder	397+93 - 737+90	Surface Layer	CIR PAVEMENT	4MT 58-34 V	1,997	2"	PWL Incentative Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentative
3 foot shoulder	712+65.82 - 734+63.10	Surface Layer	5 MT 58-34 V	4MT 58-34 V	175	1.75"	PWL Incentative Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentative
3 foot shoulder	712+65.82 - 734+63.10	Binder Layer	MILLED EXISTING HMA SURFACE	5 MT 58-34 V	147	1.5"	PWL Incentative Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentative
3 foot shoulder	737+90 - 808+58.20	Surface Layer	CIR PAVEMENT	4MT 58-34 V	30	2"	PWL Incentative Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentative
3 foot shoulder	737+90 - 808+58.20	Surface Layer	CIR PAVEMENT	4MT 58-34 V	559	2''	PWL Incentative Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentative
3 foot shoulder	810+82.60 - 948+94.80	Surface Layer	CIR PAVEMENT	4MT 58-34 V	1,103	2"	PWL Incentative Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentative

TEMPORARY SHORING

STATION	LOCATION	511.1100 SF
460+07	RT	54
460+07	LT	54
466+97	LT	66
466+97	RT	66
571+17	LT	66
571+17	RT	66
PROJECT ID 8630-05-83 SUMMARY		**372**
PROJECT TOTAL		**372**

CLEANING CULVERT PIPES

STATION	LOCATION	520.8700 EACH
425+80	STH 170	1
431+51	STH 170	1
444+88	STH 170	1
505+11	STH 170	1
642+02	STH 170	1
689+42	STH 170	1
718+23	STH 170	1
721+62	STH 170	1
725+02	STH 170	1
726+82	STH 170	1
732+73	STH 170	1
733+72	STH 170	1
10+48	STH 25	1
PROJECT ID 8630-05-83 SUMMARY		**13**
762+68	STH 170	1
781+66	STH 170	1
846+36	STH 170	1
919+14	STH 170	1
PROJECT ID 8630-05-82 SUMMARY		**4**
PROJECT TOTAL		**17**

CULVERT PIPE & APRON ENDWALLS FOR CULVERT PIPE

STATION	LOCATION	THICKNESS STEEL INCHES	THICKNESS ALUM INCHES	520.3330 CULVERT PIPE CLASS III-A 30-INCH LF	520.3142 CULVERT PIPE 42-INCH LF	520.3148 CLASS III 48-INCH LF	520.4124 CULVERT PIPE CLASS IV 24-INCH LF	520.4148 48-INCH LF	520.4154 54-INCH LF	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH	520.1030 30-INCH EACH	520.1042 42-INCH EACH	520.1048 48-INCH EACH	520.1054 54-INCH EACH	INVERT EL	DISCH EL	% SLOPE
460+07	STH 170	.109	.105	---	---	---	---	44	---	---	---	---	2	---	942.04	942.01	0.07%
466+97	STH 170	.109	.105	---	---	---	---	44	---	---	---	---	2	---	941.53	941.48	0.11%
478+54	STH 170	.064	.075	---	---	---	44	---	---	2	---	---	---	---	954.84	954.56	0.64%
514+47	STH 170	.109	.105	---	---	48	---	---	---	---	---	---	2	---	933.88	933.86	0.04%
571+17	STH 170	.109	.105	---	---	---	---	---	44	---	---	---	---	2	931.50	931.48	0.05%
636+44	STH 170	.109	.105	---	---	---	---	44	---	---	---	---	2	---	932.98	932.07	2.07%
678+22	STH 170	.064	.075	---	---	---	48	---	---	2	---	---	---	---	928.51	928.26	0.52%
710+03	STH 170	.064	.075	---	---	---	42	---	---	2	---	---	---	---	937.58	937.43	0.36%
PROJECT ID 8630-05-83 SUMMARY				**---**	**---**	**48**	**134**	**132**	**44**	**6**	**---**	**---**	**8**	**2**			
745+10	STH 170	.109	.105	---	48	---	---	---	---	---	---	2	---	---	917.48	916.13	2.81%
787+37	STH 170	.079	.075	46	---	---	---	---	---	---	2	---	---	---	903.87	903.76	0.24%
PROJECT ID 8630-05-82 SUMMARY				**46**	**48**	**---**	**---**	**---**	**---**	**---**	**2**	**2**	**---**	**---**			
PROJECT TOTALS				**46**	**48**	**48**	**134**	**132**	**44**	**6**	**2**	**2**	**8**	**2**			

CULVERT PIPE CORRUGATED STEEL 24-INCH & APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH

STATION	LOCATION	521.3124 PIPE LF	THICKNESS STEEL INCHES	521.1024 ENDWALL EACH
818+75	STH 170, LT	8	0.064	1
818+75	STH 170, RT	10	0.064	1
PROJECT ID 8630-05-82 SUMMARY		**18**		**2**
PROJECT TOTALS		**18**		**2**

CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH & APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH

STATION	LOCATION	522.0430 PIPE LF	522.1030 ENDWALL EACH	INVERT EL	DISCH EL	% SLOPE
597+79	STH 170	44	2	955.54	955.15	0.89%
PROJECT ID 8630-05-83 SUMMARY		**44**	**2**			
PROJECT TOTALS		**44**	**2**			

RIPRAP MEDIUM & GEOTEXTILE TYPE HR

STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
559+87	LT	2	7
560+03	LT	2	7
UNDISTRIBUTED		1	4
PROJECT ID 8630-05-83 SUMMARY		**5**	**18**
745+10	LT	4	14
UNDISTRIBUTED		1	4
PROJECT ID 8630-05-82 SUMMARY		**5**	**18**
PROJECT TOTALS		**10**	**36**

STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH & APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH

STATION	LOCATION	608.0424 PIPE LF	522.1024 ENDWALL EACH	SPV.0060.004 CONNECTION TO EXISTING INLETS OR MANHOLES EACH	INVERT EL	DISCH EL
729+00	STH 170	86	1	1	937.10	936.77
PROJECT ID 8630-05-83 SUMMARY		**86**	**1**	**1**		

CONCRETE CURB AND GUTTER

LOCATION	601.0411 30-INCH TYPE D LF
SW QUAD OF S CHURCH ST	12
SE QUAD OF S CHURCH ST	12
SW QUAD OF S OAK ST	11
SE QUAD OF S OAK ST	11
SW QUAD OF S ELM ST	13
SE QUAD OF S ELM ST	13
SW QUAD OF S BIRCH ST	12
SE QUAD OF S BIRCH ST	48
SW QUAD OF S PINE ST	12
SE QUAD OF S PINE ST	12
SW QUAD OF STH 25	12
PROJECT ID 8630-05-83 SUMMARY	**168**
PROJECT TOTALS	**168**

CONCRETE SIDEWALK 4-INCH

LOCATION	602.0405 SF
SW QUAD OF S CHURCH ST	80
SE QUAD OF S CHURCH ST	81
SW QUAD OF S OAK ST	110
SE QUAD OF S OAK ST	110
SW QUAD OF S ELM ST	115
SE QUAD OF S ELM ST	115
SW QUAD OF S BIRCH ST	200
SE QUAD OF S BIRCH ST	56
SW QUAD OF S PINE ST	81
SE QUAD OF S PINE ST	82
SW QUAD OF STH 25	85
PROJECT ID 8630-05-83 SUMMARY	**1115**
PROJECT TOTAL	**1115**

CURB RAMP DETECTABLE WARNING FIELD YELLOW

LOCATION	602.0505 SF	602.0605 RADIAL SF	BACK OF CURB RADIUS LF	LANDING LENGTH XR' LF	RADIAL LONG CORD LF
SW QUAD OF S CHURCH ST	10	---	---	---	---
SE QUAD OF S CHURCH ST	10	---	---	---	---
SW QUAD OF S OAK ST	10	---	---	---	---
SE QUAD OF S OAK ST	10	---	---	---	---
SW QUAD OF S ELM ST	---	18	22.5	11.75	7.94
SE QUAD OF S ELM ST	---	18	22.5	12.34	8.09
SW QUAD OF S BIRCH ST	---	16	22.5	16.07	7.41
SE QUAD OF S BIRCH ST	10	---	---	---	---
SW QUAD OF S PINE ST	10	---	---	---	---
SE QUAD OF S PINE ST	10	---	---	---	---
SW QUAD OF STH 25	---	16	28.0	9.86	7.50
PROJECT ID 8630-05-83 SUMMARY	**70**	**68**			
PROJECT TOTALS	**70**	**68**			

NOTE: ADJUST BACK OF CURB RADIUS TO MACTH EXISTING CURB RADIUS AS NECESSARY

ADJUSTING INLET COVERS

STATION	LOCATION	611.8115 EACH
728+64	RT	1
PROJECT ID 8630-05-83 SUMMARY		**1**
PROJECT TOTAL		**1**

3

MGS GUARDRAIL

STATION TO STATION	LOCATION	614.2300 GUARDRAIL 3 LF	614.2500 THRIE BEAM TRANSITION LF	614.2610 TERMINAL EAT EACH
803+08.20 - 808+58.20	LT	475	37.5	1
803+08.20 - 808+58.20	RT	475	37.5	1
810+82.60 - 815+32.60	LT	363	37.5	1
810+82.60 - 815+32.60	RT	363	37.5	1
843+45.40 - 849+26.60	RT	475	---	2
PROJECT ID 8630-05-82 SUMMARY		**2151**	**150**	**6**
PROJECT TOTALS		**2151**	**150**	**6**

MAINTENANCE AND REPAIR OF HAUL ROADS

PROJECT	618.0100 EACH
03. 8630-05-83	**1**
02. 8630-05-82	**1**

MOBILIZATION

PROJECT	619.1000 EACH
8630-05-83	**0.3**
8630-05-82	**0.2**
PROJECT TOTAL	**0.5**

SALVAGED TOPSOIL, MULCHING, FERTILIZER, & SEEDING

STATION TO STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
PIPE REPLACEMENTS	STH 170	2250	2250	1.4	61	---	30	51
CURB RAMP REPLACMENTS	STH 170	30	30	0.1	---	1	1	1
UNDISTRIBUTED		---	570	0.4	15	1	8	13
PROJECT ID 8630-05-83 SUMMARY		**2280**	**2850**	**1.9**	**76**	**2**	**39**	**65**
798+00 - 808+58	STH 170	5450	5450	3.4	147	---	74	123
810+82 - 821+00	STH 170	4630	4630	2.9	125	---	63	104
842+25 - 850+47	STH 170	1200	1200	0.8	32	---	16	27
PIPE REPLACEMENTS	STH 170	450	450	0.3	12	---	6	10
UNDISTRIBUTED		---	2933	1.9	79	---	40	66
PROJECT ID 8630-05-82 SUMMARY		**11730**	**14663**	**9.3**	**396**	**0**	**198**	**330**
PROJECT TOTAL		**14010**	**17513**	**11.2**	**471**	**2**	**238**	**395**

WATER

LOCATION	624.0100 MGAL
BASE COMPACTION	50
DUST CONTROL	5
PROJECT ID 8630-05-83 SUMMARY	55
BASE COMPACTION	40
DUST CONTROL	10
PROJECT ID 8630-05-82 SUMMARY	50
PROJECT TOTAL	**105**

SILT SCREEN

STATION	LOCATION	628.1550 LF
460+07	LT	15
466+97	LT	15
514+42	LT	15
UNDISTRIBUTED		10
PROJECT ID 8630-05-83 SUMMARY		**55**
PROJECT TOTAL		**55**

SILT FENCE

STATION TO STATION	LOCATION	628.1504 LF	628.1520 MAINTENANCE LF
460+07	LT/RT	160	160
466+97	LT/RT	130	130
478+54	LT/RT	80	80
514+47	LT/RT	130	130
571+17	LT/RT	130	130
597+79	LT/RT	100	100
636+44	LT/RT	100	100
678+22	LT/RT	80	80
710+03	LT/RT	80	80
728+87	LT	40	40
UNDISTRIBUTED		260	260
PROJECT ID 8630-05-83 SUMMARY		**1290**	**1290**
745+10	LT/RT	90	90
787+37	LT/RT	100	100
797+50 - 808+58	RT/LT	2230	2230
810+83 - 821+50	RT/LT	2100	2100
842+00 - 851+00	RT/LT	1815	1815
UNDISTRIBUTED		1590	1590
PROJECT ID 8630-05-82 SUMMARY		**7925**	**7925**
PROJECT TOTALS		**9215**	**9215**

MOBILIZATIONS EROSION CONTROL AND EMERGENCY EROSION CONTROL

PROJECT	628.1905 EACH	628.1910 EMERGENCY EACH
8630-05-83	4	4
8630-05-82	4	4
PROJECT TOTALS	**8**	**8**

EROSION MAT

STATION TO STATION	LOCATION	628.2004 CLASS I TYPE B SY	628.2027 CLASS II TYPE C SY
514+47	LT/RT	15	---
UNDISTIBUTED		5	---
PROJECT ID 8630-05-83 SUMMARY		**20**	**---**
787+37	LT	10	---
803+00 - 808+58	LT	---	400
803+00 - 808+58	RT	---	1890
811+00 - 815+08	LT	---	920
810+83 - 815+08	RT	---	710
843+95 - 845+85	RT	---	200
846+18 - 847+86	RT	---	60
UNDISTIBUTED		5	1050
PROJECT ID 8630-05-82 SUMMARY		**15**	**5230**
PROJECT TOTAL		**35**	**5230**

INLET PROTECTION TYPE C

STATION	LOCATION	628.7015 EACH
728+64	RT	1
PROJECT ID 8630-05-83 SUMMARY		**1**
PROJECT TOTAL		**1**

TEMPORARY DITCH CHECKS

STATION	LOCATION	628.7504 LF
478+54	LT	14
571+17	RT	14
597+79	RT	14
636+44	LT	14
678+22	LT	14
710+03	RT	14
729+00	LT	14
UNDISTIBUTED		25
PROJECT ID 8630-05-83 SUMMARY		**123**
787+37	RT	14
UNDISTIBUTED		4
PROJECT ID 8630-05-82 SUMMARY		**18**
PROJECT TOTAL		**141**

CULVERT PIPE CHECKS

STATION	LOCATION	628.7555 EACH
478+54	RT	3
571+17	LT	8
597+79	LT	5
636+44	RT	12
678+22	RT	3
710+03	LT	3
UNDISTIBUTED		9
PROJECT ID 8630-05-83 SUMMARY		**43**
745+10	RT	10
787+37	LT	5
818+75	LT	3
UNDISTIBUTED		5
PROJECT ID 8630-05-82 SUMMARY		**23**
PROJECT TOTAL		**66**

MARKERS CULVERT END

STATION	LOCATION	633.5200 EACH
425+80	LT/RT	2
431+51	LT/RT	2
444+88	RT	1
460+07	LT/RT	2
466+97	LT/RT	2
478+54	LT/RT	2
514+47	LT/RT	2
544+63	LT/RT	2
571+11	LT/RT	2
597+79	LT/RT	2
636+45	LT/RT	2
642+02	LT	1
671+03	LT/RT	2
678+22	LT/RT	2
710+03	LT/RT	2
715+23	LT	1
718+23	LT	1
721+62	LT	1
725+02	LT	1
726+82	LT	1
728+87	LT	1
732+73	LT	1
733+72	LT	1
10+48	STH 25, LT/RT	2
PROJECT ID 8630-05-83 SUMMARY		**38**
745+10	LT/RT	2
762+68	LT/RT	2
787+37	LT/RT	2
818+75	LT/RT	2
846+36	LT/RT	2
919+14	LT/RT	2
PROJECT ID 8630-05-82 SUMMARY		**12**
PROJECT TOTAL		**50**

PERMANENT SIGNING

APPROX STATION LOCATION	SIGN CODE	SIGN SIZE WxH (INCHES)	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2602 REMOVING SIGNS TYPE II EACH	COMMENT
830+67, LT	R2-1		---	1	YEILD SIGN
830+67, LT	R1-1	30 X 30	5.18	---	CTH S (SHARES POST W/RAILROAD CROSSI
PROJECT ID 8630-05-82 SUMMARY			**5.18**	**1**	
PROJECT TOTALS			**5.18**	**1**	

FIELD OFFICE TYPE B

LOCATION	642.5001 EACH
8630-05-83	**0.3**
8630-05-82	**0.2**
PROJECT TOTAL	**0.5**

MOVING SIGNS TYPE II AND SMALL SIGN SUPPORTS

APPROX STATION LOCATION	SIGN CODE	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	COMMENT
597+50, RT	R1-1	1	1	STOP (CTH F)
597+54, RT	J13-2	1	1	170, DOUBLE ARROW;F, UP ARROW
597+98, LT	J13-1	1	1	F, DOUBLE ARROW
728+75, RT	R1-1	1	1	STOP (S BIRCH ST)
PROJECT ID 8630-05-83 SUMMARY		**4**	**4**	
804+98, RT	W14-3	1	1	NO PASSING ZONE
807+92, LT	W14-3	1	1	NO PASSING ZONE
808+59, LT	W5-52L	1	1	CLEARANCE MARKER
808+59, RT	W5-52R	1	1	CLEARANCE MARKER
810+84, LT	W5-52R	1	1	CLEARANCE MARKER
810+84, RT	W5-52L	1	1	CLEARANCE MARKER
846+14, RT	W1-2R	1	1	CURVE RIGHT
850+33, LT	I55-56	1	1	ADOPT-A-HIGHWAY
PROJECT ID 8630-05-82 SUMMARY		**8**	**8**	
PROJECT TOTALS		**12**	**12**	

TRAFFIC CONTROL ITEMS

PROJECT	643.0300 DRUMS EACH	DAY	643.0900 SIGNS EACH	DAY
ENTIRE PROJECT	---	---	5	625
20 SIDE ROADS	---	---	20	2500
PIPE REPLACEMENTS	---	---	40	560
CIR/MILLED SURFACE	---	---	31	620
UNDISTIBUTED	---	50	---	160
PROJECT ID 8630-05-83 SUMMARY		**50**		**4465**
ENTIRE PROJECT	---	---	5	625
5 SIDE ROADS	---	---	5	625
PIPE REPLACEMENTS	---	---	8	112
CIR/MILLED SURFACE	---	---	20	400
UNDISTIBUTED	---	50	---	160
PROJECT ID 8630-05-82 SUMMARY		**50**		**1922**
PROJECT TOTAL		**100**		**6387**

TRAFFIC CONTROL

PROJECT	643.5000 EACH
8630-05-83	**0.3**
8630-05-82	**0.2**

TEMPORARY PEDESTRIAN

LOCATION	644.1430 SURFACE PLATE SF	644.1601 CURB RAMP EACH	DAYS	644.1810 BARRICADE LF
VILLAGE OF WHEELER	150	11	55	100
PROJECT 8630-05-83 SUMMARY	**150**		**55**	**100**

MARKING LINE SAME DAY EPOXY 4-INCH

STATION TO STATION	DESCRIPTION	646.4520 (YELLOW) LF
9+19 - 11+68	STH 25 C/L	250
397+93 - 737+90	C/L	43000
PROJECT ID 8630-05-83 SUMMARY		**43250**
737+90 - 948+95	C/L	27000
PROJECT ID 8630-05-82 SUMMARY		**27000**
PROJECT TOTAL		**70250**

MARKING RAILROAD CROSSING EPOXY

LOCATION	646.5320 EACH
STH 25 SOUTH OF CROSSING (1)	1
STH 25 NORTH OF CROSSING	1
PROJECT ID 8630-05-82 SUMMARY	**2**
PROJECT TOTALS	**2**

(1) ONLY PLACE STOP BAR BETWEEN RAILROAD TRACK AND STH 170

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH

STATION TO STATION	DESCRIPTION	646.1040 (WHITE) LF
397+93 - 737+90	LT	33997
397+93 - 737+90	RT	33997
9+19 - 11+68	STH 25 LT	200
9+19 - 11+68	STH 25 RT	200
PROJECT ID 8630-05-83 SUMMARY		**68394**
737+90 - 948+95	LT	21105
737+90 - 948+95	RT	21105
PROJECT ID 8630-05-82 SUMMARY		**42210**
PROJECT TOTAL		**110604**

LOCATING NO-PASSING ZONES

LOCATION	648.0100 MI
PROJECT LIMITS	6.44
PROJECT ID 8630-05-83 SUMMARY	**6.44**
PROJECT LIMITS	4
PROJECT ID 8630-05-82 SUMMARY	**4**
PROJECT TOTALS	**10.44**

TEMPORARY MARKING LINE PAINT 4-INCH

STATION TO STATION	DESCRIPTION	649.0105 LF
397+93 - 737+90	MILLED SURFACE C/L	37000
397+93 - 712+65	CIR SURFACE C/L	34700
712+65 - 734+63	1ST LIFT C/L	2000
9+19 - 11+68	MILLED SURFACE C/L	250
9+19 - 11+68	1ST LIFT C/L	250
734+63 - 737+90	CIR SURFACE C/L	300
PROJECT ID 8630-05-83 SUMMARY		**74500**
737+90 - 948+95	MILLED SURFACE C/L	23000
737+90 - 948+95	CIR SURFACE C/L	23000
PROJECT ID 8630-05-82 SUMMARY		**46000**
PROJECT TOTAL		**120500**

CONSTRUCTION STAKING

STATION TO STATION	650.9920 SLOPE STAKES LF
798+00 - 808+58	1058
810+83 - 821+00	570
842+25 - 855+47	448
PROJECT ID 8630-05-82 SUMMARY	**2076**
PROJECT TOTALS	**2076**

CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER

STATION	LOCATION	650.5500 LF
715+44	SW QUAD OF S CHURCH ST	12
715+89	SE QUAD OF S CHURCH ST	12
721+20	SW QUAD OF S OAK ST	11
721+48	SE QUAD OF S OAK ST	11
724+54	SW QUAD OF S ELM ST	13
725+11	SE QUAD OF S ELM ST	13
728+21	SW QUAD OF S BIRCH ST	12
728+71	SE QUAD OF S BIRCH ST	48
731+87	SW QUAD OF S PINE ST	12
732+44	SE QUAD OF S PINE ST	12
733+97	SW QUAD OF STH 25	12
PROJECT ID 8630-05-83 SUMMARY		**168**
PROJECT TOTAL		**168**

CONSTRUCTION STAKING PIPE CULVERTS

STATION	LOCATION	650.6000 EACH
460+07	STH 170	1
466+97	STH 170	1
478+54	STH 170	1
514+47	STH 170	1
571+17	STH 170	1
597+79	STH 170	1
636+44	STH 170	1
678+22	STH 170	1
710+03	STH 170	1
729+00	STH 170	1
PROJECT ID 8630-05-83 SUMMARY		**10**
745+10	STH 170	1
787+37	STH 170	1
PROJECT ID 8630-05-82 SUMMARY		**2**
PROJECT TOTAL		**12**

CONSTRUCTION STAKING RESURFACING REFERENCE

STATION TO STATION	650.8000 LF
397+93-737+90	33997
PROJECT ID 8630-05-83 SUMMARY	**33997**
737+90-808+58.20	7069
810+82.60-948+94.80	13813
PROJECT ID 8630-05-82 SUMMARY	**20882**
PROJECT TOTAL	**54879**

CONSTRUCTION STAKING CURB RAMPS

LOCATION	650.9000 EACH
SW QUAD OF S CHURCH ST	1
SE QUAD OF S CHURCH ST	1
SW QUAD OF S OAK ST	1
SE QUAD OF S OAK ST	1
SW QUAD OF S ELM ST	1
SE QUAD OF S ELM ST	1
SW QUAD OF S BIRCH ST	1
SE QUAD OF S BIRCH ST	1
SW QUAD OF S PINE ST	1
SE QUAD OF S PINE ST	1
SW QUAD OF STH 25	1
PROJECT ID 8630-05-83 SUMMARY	**11**
PROJECT TOTAL	**11**

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL

PROJECT	650.9910 LS
003. 8630-05-83	**1**
002. 8630-05-82	**1**

MATERIAL TRANSFER VEHICLE

PROJECT	SPV.0105.002 LS	SPV.0105.003 LS
8630-05-83	---	1
8630-05-82	1	---

SAWING

STATION	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF
460+07	PIPE REPLACEMENT	46	---
466+97	PIPE REPLACEMENT	46	---
478+54	PIPE REPLACEMENT	72	---
514+47	PIPE REPLACEMENT	46	---
571+17	PIPE REPLACEMENT	46	---
597+79	PIPE REPLACEMENT	60	---
636+44	PIPE REPLACEMENT	46	---
678+22	PIPE REPLACEMENT	56	---
710+03	PIPE REPLACEMENT	44	---
715+42	SW QUAD OF S CHURCH ST	18	9
715+92	SE QUAD OF S CHURCH ST	18	9
721+17	SW QUAD OF S OAK ST	18	15
721+51	SE QUAD OF S OAK ST	18	15
724+49	SW QUAD OF S ELM ST	19	16
725+16	SE QUAD OF S ELM ST	19	14
728+19	SW QUAD OF S BIRCH ST	19	14
728+73	SE QUAD OF S BIRCH ST	---	4
729+00	PIPE REPLACEMENT	138	---
731+86	SW QUAD OF S PINE ST	18	9
732+46	SE QUAD OF S PINE ST	18	10
733+94	SW QUAD OF STH 25	18	9
PROJECT ID 8630-05-83 SUMMARY		**783**	**124**
745+10	PIPE REPLACEMENT	44	---
787+37	PIPE REPLACEMENT	44	---
933+13-934+75	STH 170 RT SHOULDER	162	---
PROJECT ID 8630-05-82 SUMMARY		**250**	**0**
PROJECT TOTAL		**1033**	**124**

LANE SHIFT

STATION	LOCATION	SPV.0060.005 EACH
460+07	STH 170	1
466+97	STH 170	1
514+47	STH 170	1
571+17	STH 170	1
636+44	STH 170	1
PROJECT ID 8630-05-83 SUMMARY		**5**
745+10	STH 170	1
787+37	STH 170	1
PROJECT ID 8630-05-82 SUMMARY		**2**
PROJECT TOTALS		**7**

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 8630-05-23

GLENWOOD CITY - COLFAX

STH 79 - STH 25 AND STH 25 - CTH D

STH 170

DUNN COUNTY

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) (TYPE)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
SIXTEENTH CORNER MONUMENT

NOTATION FOR COMBUSTABLE FLUIDS
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
R/W MONUMENT
NON-MONUMENTED R/W POINT
FOUND IRON PIN
VALVE (GAS, WATER, ETC.) (TYPE)
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

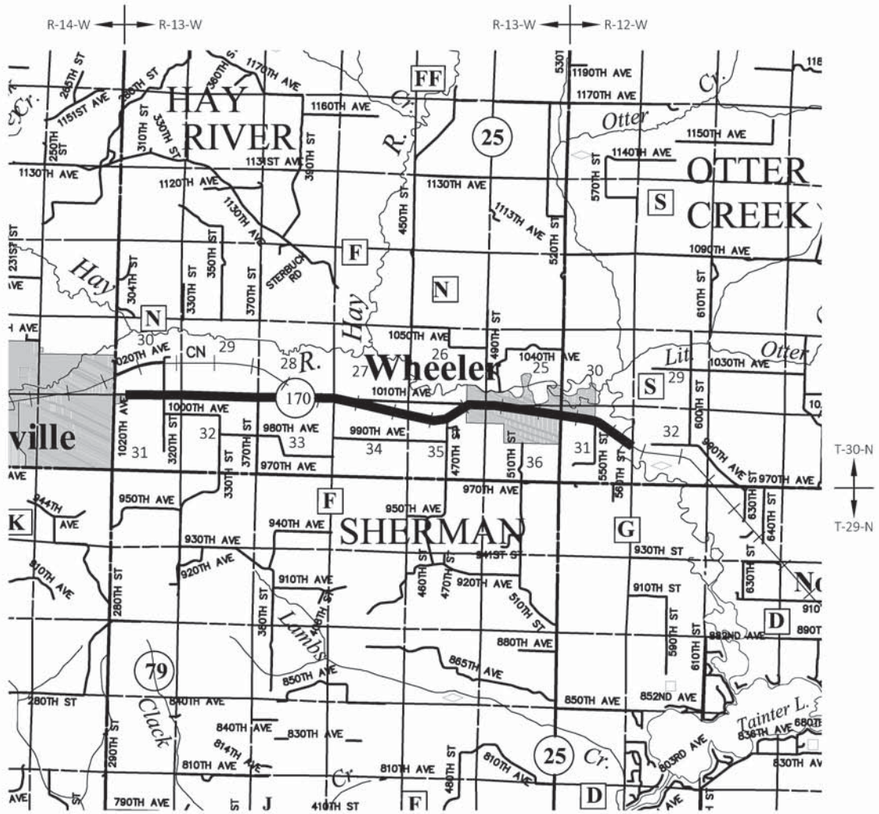
ACCESS CONTROLLED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NEW ACCESS (NEW HIGHWAY)
BRIDGE
PARCEL NUMBER 25
UTILITY NUMBER 40

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	POINT OF BEGINNING	POB
ALUMINUM	ALUM	POINT OF CURVATURE	PC
AND OTHERS	ET AL	PROPERTY LINE	PL
BACK	BK	RECORDED AS	(100')
BLOCK	BLK	REFERENCE LINE	R/L
BUILDING	BLDG	REMAINING	REM
CENTERLINE	C/L	RIGHT	RT
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE	CONC	SECTION	SEC
COUNTY	CO	SEPTIC VENT	SEPV
COUNTY TRUNK HIGHWAY	CTH	SQUARE FEET	SF
DISTANCE	DIST	STATE TRUNK HIGHWAY	STH
CORNER	COR	STATION	STA
DOCUMENT NUMBER	DOC	SUBDIVISION	SUBD
EASEMENT	EASE	TANGENT	TAN
EXISTING	EX	TELEPHONE PEDESTAL	TP
GAS VALVE	GV	TEMPORARY LIMITED EASEMENT	TLE
GRID NORTH	GN	TRANSPORTATION PROJECT PLAT	TPP
HIGHWAY EASEMENT	HE	UNITED STATES HIGHWAY	USH
HOUSE	HSE	VOLUME	V
IDENTIFICATION	D		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		

CURVE DATA

LONG CHORD	LC
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	Δ
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB



CONVENTIONAL UTILITY SYMBOLS

WATER (W)
GAS (G)
TELEPHONE (T)
OVERHEAD (OH)
TRANSMISSION LINES
ELECTRIC (E)
CABLE TELEVISION (TV)
FIBER OPTIC (FO)
SANITARY SEWER (SAN)
STORM SEWER (SS)

LAYOUT
SCALE 0 1.0 MI
GN

THE NOTES, CONVENTIONAL SIGNS AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 8630-05-23.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" CAPPED IRON REBAR), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

EXISTING ACCESS CONTROL ALONG STH 170 HAS BEEN ESTABLISHED FROM CERTIFIED SURVEY MAP NO. 4339, VOLUME 21, PAGE 109, DOC. NO 622920.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, 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 DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) FOR THE RIGHT TO CONSTRUCT AND MAINTAIN A DRAINAGE FACILITY, INCLUDING FOR SUCH PURPOSE THE RIGHT TO OPERATE THE 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 TO DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES WITHIN THE RIGHT OF WAY.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-05-23 - 4.01
SHEET 2 OF 2

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\RW\040101-TI.DWG
APPRAISAL DATE: OCTOBER 8, 2019
PLOT DATE : 10/11/2019 9:57 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : PLOT SCALE : 1"=100'
8630-05-23 - 4.01

638153

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
10/11/2019 03:28 PM

REC FEE: 25.00
PAGES: 2

The above recording information verifies that this document has been electronically recorded and returned to the submitter.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-05-23 - 4.01
SHEET 1 OF 2

TRANSPORTATION PROJECT PLAT NO: 8630-05-23 - 4.01

THAT PART OF THE NORTH 1/2 OF THE FRACTIONAL NORTHWEST 1/4 OF SECTION 31, T30N, R13W, TOWN OF HAY RIVER, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER - STH 170 GLENWOOD CITY - COLFAX (STH 79 - STH 25 AND STH 25 - CTH D)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	EXISTING R/W SF	TOTAL R/W SF	TLE SF
1	DANIEL D. & VICKI LAUERSDORF	TLE	-------	-------	-------	139

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

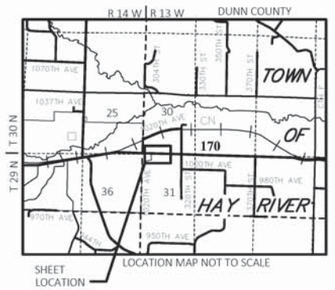
NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

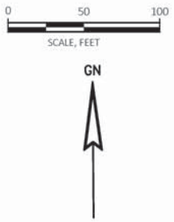
FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

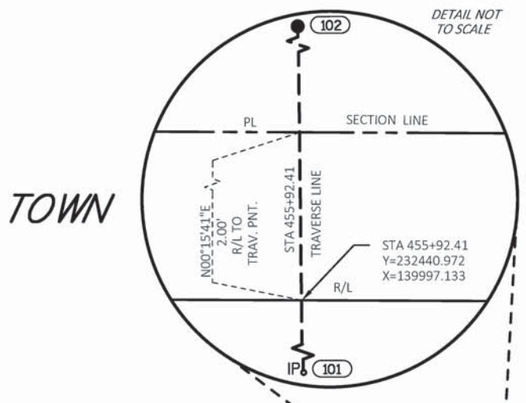
EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

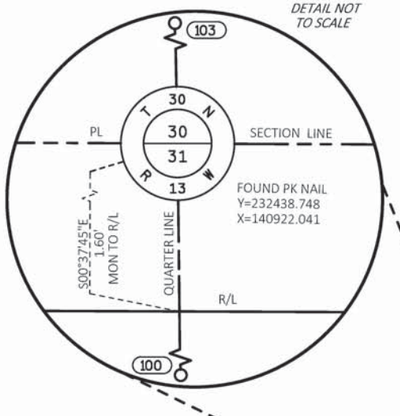
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 SHOWN HEREIN BASED ON COUNTY TRUNK HIGHWAY G IMPROVEMENT PROJECT CIRCA 1931, PREVIOUS DIVISION JOB NO. 6332, PREVIOUS PROJECT 8630-02-21 AND FROM CERTIFIED SURVEY MAP NO. 2167, VOLUME 9, PAGE 117, DOCUMENT NUMBER 454728.

EXISTING HIGHWAY RIGHT-OF-WAY FOR LAUERSDORF ROAD SHOWN HEREIN BASED ON CERTIFIED SURVEY MAP NO. 2167, VOLUME 9, PAGE 117, DOCUMENT NUMBER 454728.



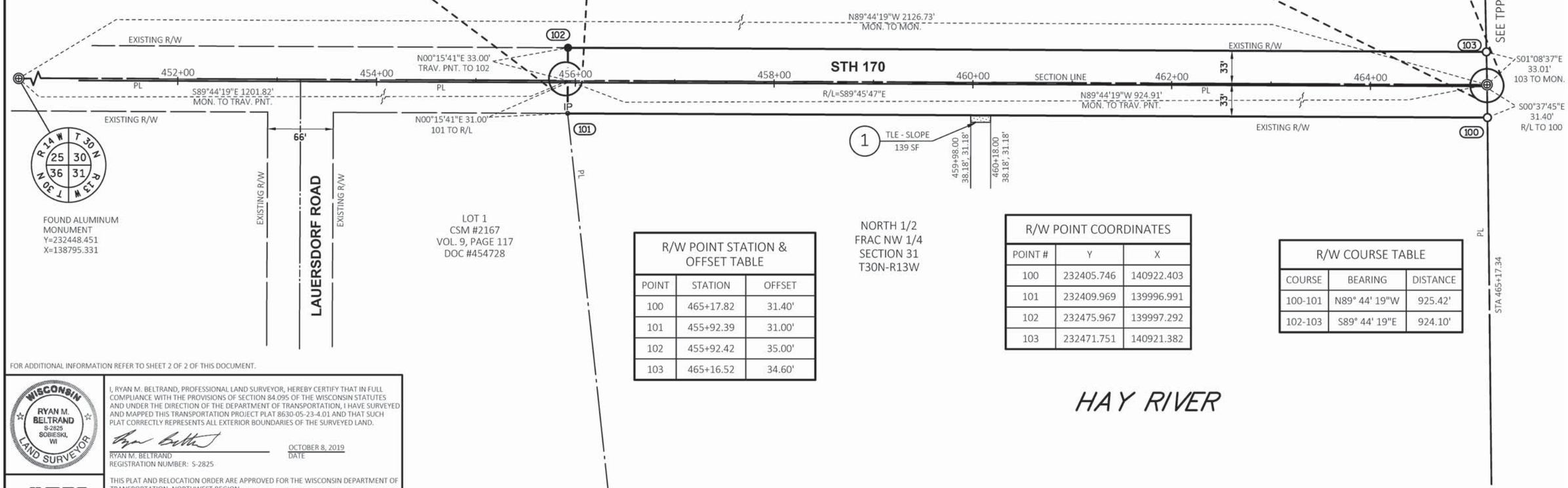






SOUTH 1/2
FRAC SW 1/4
SECTION 30
T30N-R13W

OF



FOUND ALUMINUM MONUMENT
Y=232448.451
X=138795.331

R/W POINT STATION & OFFSET TABLE		
POINT	STATION	OFFSET
100	465+17.82	31.40'
101	455+92.39	31.00'
102	455+92.42	35.00'
103	465+16.52	34.60'

R/W POINT COORDINATES		
POINT #	Y	X
100	232405.746	140922.403
101	232409.969	139996.991
102	232475.967	139997.292
103	232471.751	140921.382

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
100-101	N89° 44' 19"W	925.42'
102-103	S89° 44' 19"E	924.10'

FOR ADDITIONAL INFORMATION REFER TO SHEET 2 OF 2 OF THIS DOCUMENT.

WISCONSIN
RYAN M. BELTRAND
S-2825
SOBIESKI, WI
LAND SURVEYOR

I, RYAN M. BELTRAND, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT 8630-05-23-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

RYAN M. BELTRAND — OCTOBER 8, 2019
REGISTRATION NUMBER: S-2825

AYRES ASSOCIATES

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHWEST REGION.

DEBRA B. STENSLAND — OCTOBER 11, 2019

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\RW\0797_040101-RW.DWG
PLOT DATE : 10/10/2019 4:18 PM
PLOT BY: AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE : 1"=100'
APPRAISAL DATE: OCTOBER 8, 2019

TRANSPORTATION PROJECT PLAT NO: 8630-05-23 - 4.02

THAT PART OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 30, AND THAT PART OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 31, T30N, R13W, TOWN OF HAY RIVER, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER - STH 170 GLENWOOD CITY - COLFAX (STH 79 - STH 25 AND STH 25 - CTH D)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

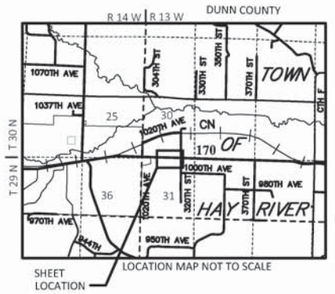
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	EXISTING R/W SF	TOTAL R/W SF	TLE SF
2	RANDALL & PEGGY SCHUTZ REVOCABLE LIVING TRUST DATED NOVEMBER 12, 2018	FEE	140	43,212	43,352	------
3	WALDEMAR S. & NANCY L. PUSTOL	FEE	140	43,168	43,308	------

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.



638905

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
11/18/2019 10:16 AM

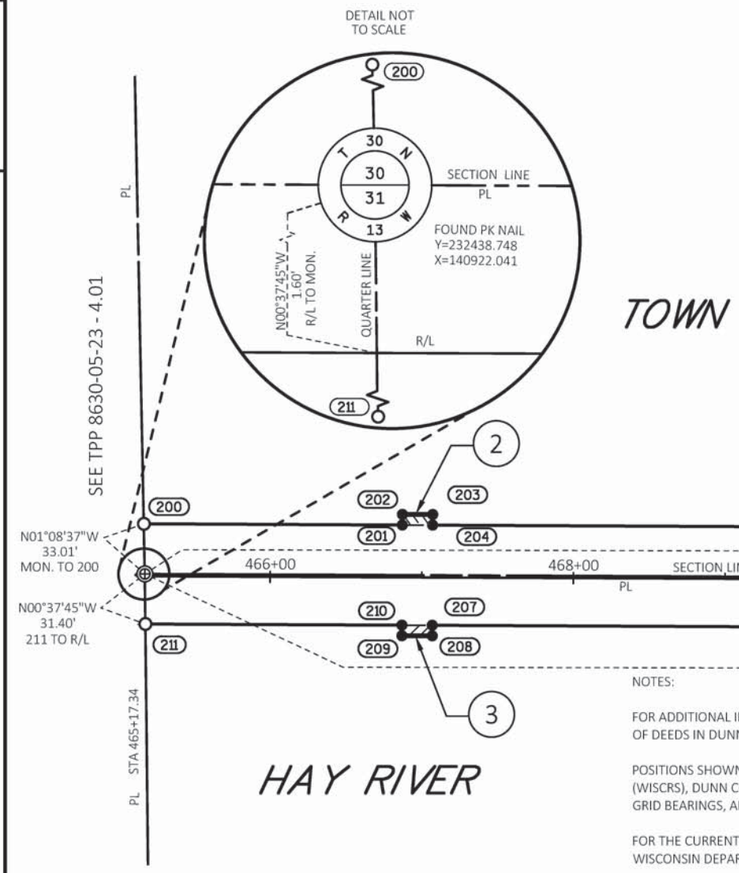
REC FEE: 25.00
PAGES: 1

The above recording information verifies that this document has been electronically recorded and returned to the submitter.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-05-23 - 4.02

0 50 100
SCALE, FEET

4



R/W COURSE TABLE

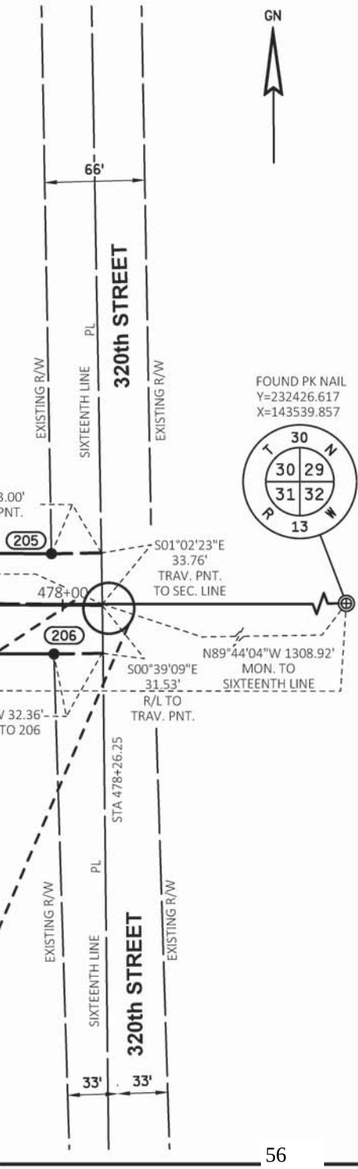
COURSE	BEARING	DISTANCE
200-201	S89° 44' 04"E	170.49'
201-202	N00° 14' 13"E	6.98'
202-203	S89° 45' 47"E	20.00'
203-204	S00° 14' 13"W	6.99'
204-205	S89° 44' 04"E	1085.48'
206-207	N89° 44' 04"W	1087.37'
207-208	S00° 14' 13"W	7.01'
208-209	N89° 45' 47"W	20.00'
209-210	N00° 14' 13"E	7.02'
210-211	N89° 44' 04"W	169.20'

R/W POINT STATION & OFFSET TABLE

POINT	STATION	OFFSET
200	465+16.52	34.60'
201	466+87.00	34.52'
202	466+87.00	41.50'
203	467+07.00	41.50'
204	467+07.00	34.51'
205	477+92.49	33.97'
206	477+94.39	32.03'
207	467+07.00	31.49'
208	467+07.00	38.50'
209	466+87.00	38.50'
210	466+87.00	31.48'
211	465+17.82	31.40'

R/W POINT COORDINATES

POINT #	Y	X
200	232471.751	140921.382
201	232470.961	141091.870
202	232477.942	141091.898
203	232477.860	141111.898
204	232470.869	141111.869
205	232465.839	142197.342
206	232399.830	142198.961
207	232404.869	141111.599
208	232397.860	141111.570
209	232397.943	141091.570
210	232404.962	141091.600
211	232405.746	140922.403



4

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 638153.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" I.D. X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 SHOWN HEREIN BASED ON COUNTY TRUNK HIGHWAY G IMPROVEMENT PROJECT CIRCA 1931.

EXISTING HIGHWAY RIGHT-OF-WAY FOR 320TH STREET SHOWN HEREIN IS PRESUMED TO BE 4 RODS IN WIDTH AND CENTERED ON THE CENTERLINE OF THE TRAVELED WAY PER STATE STATUTE 82.31(2).

UTILITIES INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
51	CENTURYLINK	RELEASE OF RIGHTS

51 CENTURYLINK
VOL. 243, PAGE 217,
DOC. NO. 304910
- PARCEL 3

WISCONSIN
RYAN M. BELTRAND
S-2825
SOBIESKI, WI
LAND SURVEYOR

I, RYAN M. BELTRAND, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT 8630-05-23-4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

RYAN M. BELTRAND — NOVEMBER 4, 2019 DATE
REGISTRATION NUMBER: S-2825

AYRES ASSOCIATES

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHWEST REGION.

DEBRA B. STENSLAND — NOVEMBER 14, 2019 DATE

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\RW\0797_040102-RW.DWG
PLOT DATE : 11/4/2019 11:59 AM
PLOT BY: AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE : 1"=100'
APPRAISAL DATE: NOVEMBER 4, 2019

8630-05-23 - 4.02

TRANSPORTATION PROJECT PLAT NO: 8630-05-23 - 4.03

THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 29, AND THAT PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4, OF SECTION 32, T30N, R13W, TOWN OF HAY RIVER, DUNN COUNTY, WISCONSIN.

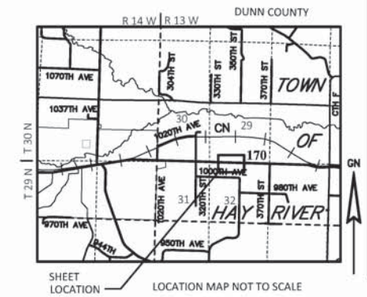
RELOCATION ORDER - STH 170 GLENWOOD CITY - COLFAX (STH 79 - STH 25 AND STH 25 - CTH D)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	EXISTING R/W SF	TOTAL R/W SF	TLE SF
4	GORDON KOLKIND	TLE	-------	-------	-------	140
5	WAYNE LORENZ	TLE	-------	-------	-------	140

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.



638906

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
11/18/2019 10:22 AM

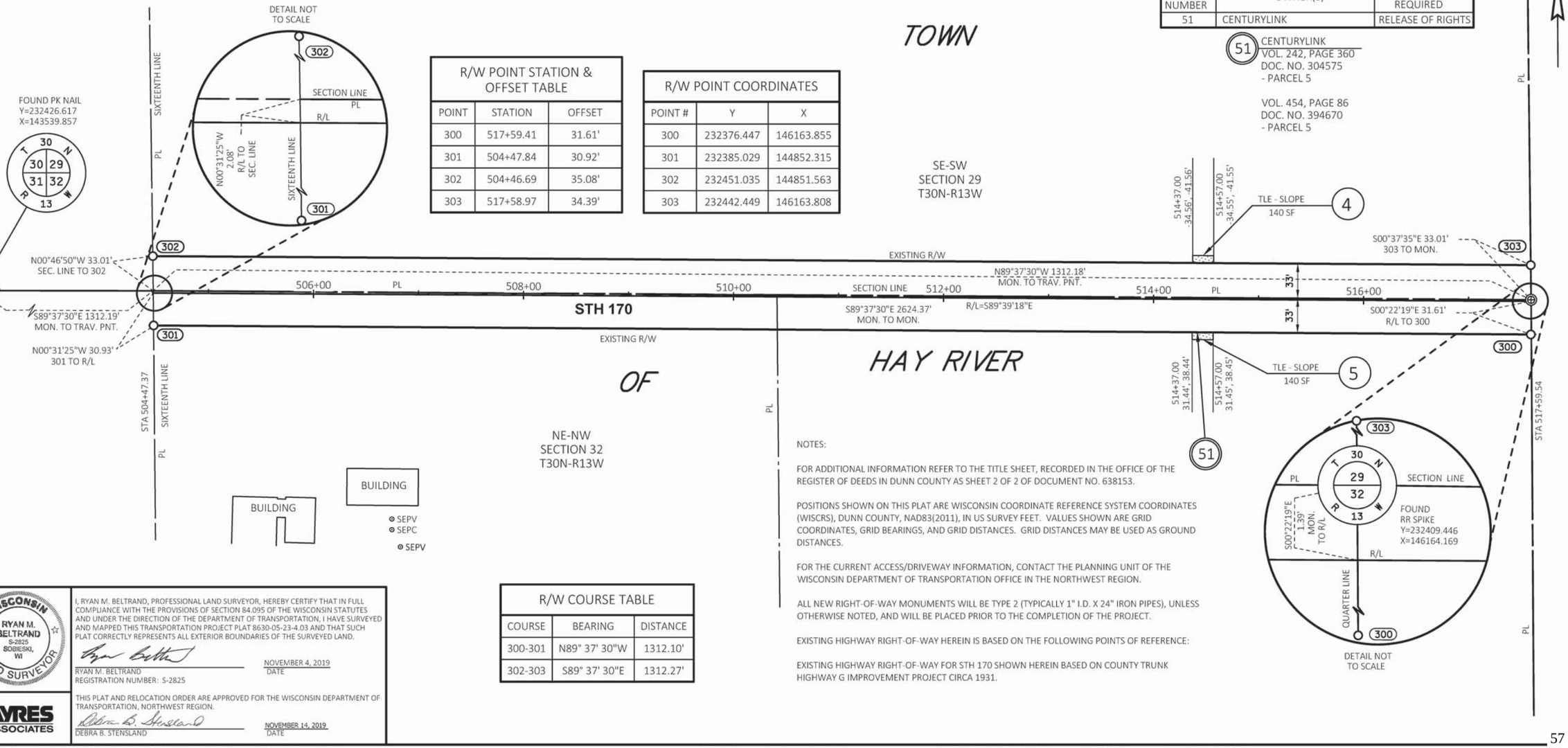
REC FEE: 25.00
PAGES: 1

The above recording information verifies that this document has been electronically recorded and returned to the submitter.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-05-23 - 4.03

0 50 100
SCALE, FEET

4



R/W POINT STATION & OFFSET TABLE		
POINT	STATION	OFFSET
300	517+59.41	31.61'
301	504+47.84	30.92'
302	504+46.69	35.08'
303	517+58.97	34.39'

R/W POINT COORDINATES		
POINT #	Y	X
300	232376.447	146163.855
301	232385.029	144852.315
302	232451.035	144851.563
303	232442.449	146163.808

UTILITIES INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
51	CENTURYLINK	RELEASE OF RIGHTS

51 CENTURYLINK
VOL. 242, PAGE 360
DOC. NO. 304575
- PARCEL 5

VOL. 454, PAGE 86
DOC. NO. 394670
- PARCEL 5

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
300-301	N89° 37' 30"W	1312.10'
302-303	S89° 37' 30"E	1312.27'

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 638153.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" I.D. X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 SHOWN HEREIN BASED ON COUNTY TRUNK HIGHWAY G IMPROVEMENT PROJECT CIRCA 1931.

WISCONSIN RYAN M. BELTRAND S-2825 SOBIESKI, WI LAND SURVEYOR

I, RYAN M. BELTRAND, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT 8630-05-23-4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

RYAN M. BELTRAND — NOVEMBER 4, 2019
REGISTRATION NUMBER: S-2825

AYRES ASSOCIATES

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHWEST REGION.

DEBRA B. STENSLAND — NOVEMBER 14, 2019

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\RW\0797_040103-RW.DWG
PLOT DATE : 11/4/2019 12:06 PM
PLOT BY: AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE : 1"=100'
APPRAISAL DATE: NOVEMBER 4, 2019

8630-05-23 - 4.03

TRANSPORTATION PROJECT PLAT NO: 8630-05-23 - 4.04

THAT PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 34, T30N, R13W, TOWN OF HAY RIVER, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER - STH 170 GLENWOOD CITY - COLFAX (STH 79 - STH 25 AND STH 25 - CTH D)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

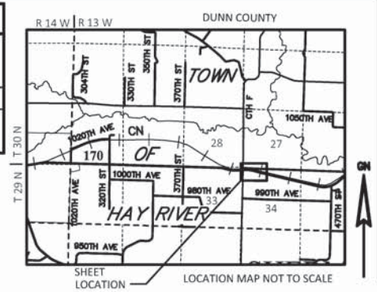
SCALE, FEET: 0 — 50 — 100

GN

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	EXISTING R/W SF	TOTAL R/W SF	TLE SF
6	WISCONSIN CENTRAL LTD.	TLE	-------	-------	-------	349
7	VENDOR: LOREN R. & MARY LOUR E. SLIND VENDEE: JEFFREY R. & KELLEY J. LAKE	TLE	-------	-------	-------	353

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.



638907

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
11/18/2019 10:28 AM

REC FEE: 25.00
PAGES: 1

The above recording information verifies that this document has been electronically recorded and returned to the submitter.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-05-23 - 4.04

R/W COURSE TABLE

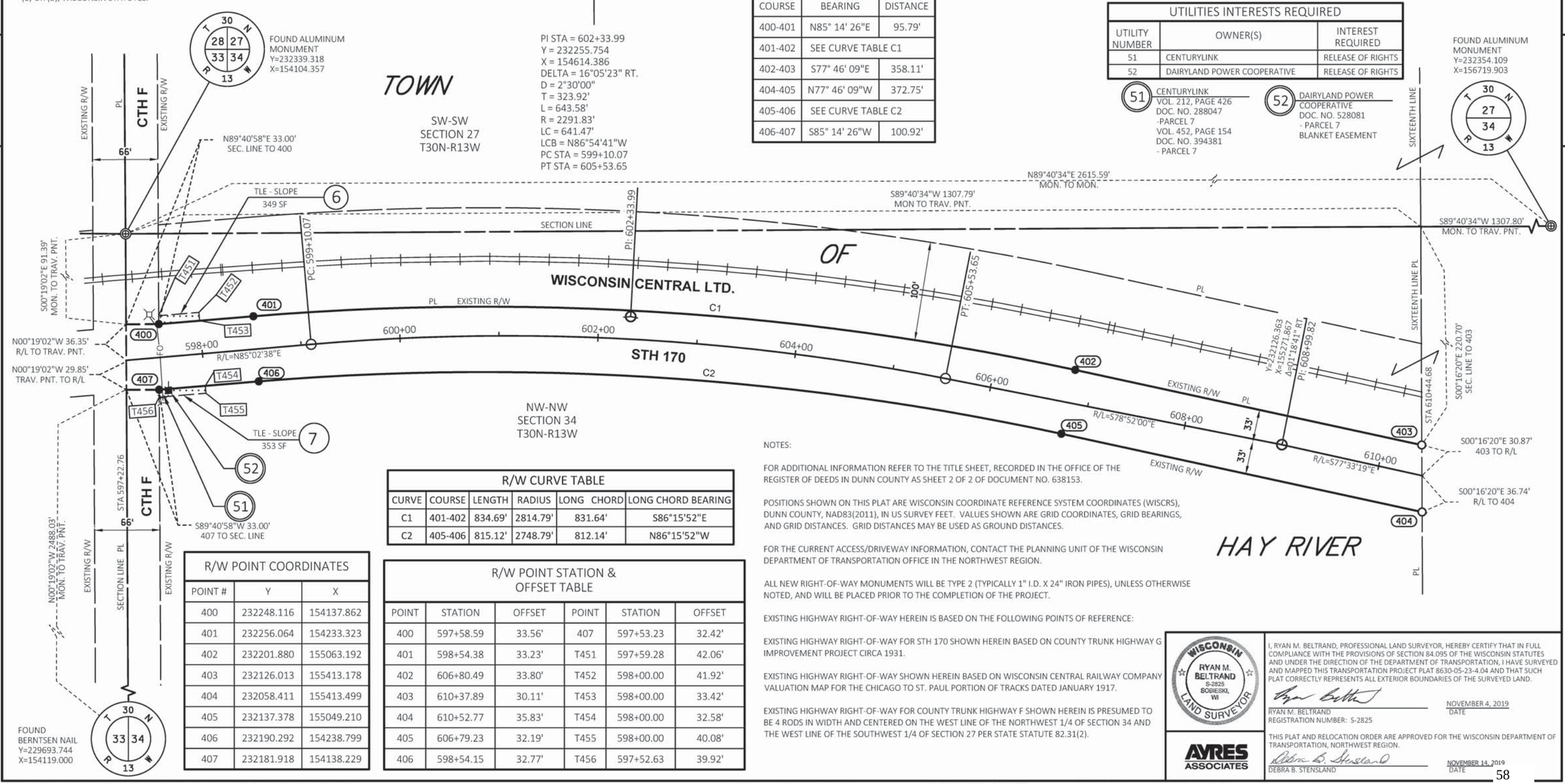
COURSE	BEARING	DISTANCE
400-401	N85° 14' 26"E	95.79'
401-402	SEE CURVE TABLE C1	
402-403	S77° 46' 09"E	358.11'
404-405	N77° 46' 09"W	372.75'
405-406	SEE CURVE TABLE C2	
406-407	S85° 14' 26"W	100.92'

UTILITIES INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
51	CENTURYLINK	RELEASE OF RIGHTS
52	DAIRYLAND POWER COOPERATIVE	RELEASE OF RIGHTS

51 CENTURYLINK
VOL. 212, PAGE 426
DOC. NO. 288047
-PARCEL 7
VOL. 452, PAGE 154
DOC. NO. 394381
- PARCEL 7

52 DAIRYLAND POWER COOPERATIVE
DOC. NO. 528081
- PARCEL 7
BLANKET EASEMENT



R/W POINT COORDINATES

POINT #	Y	X
400	232248.116	154137.862
401	232256.064	154233.323
402	232201.880	155063.192
403	232126.013	155413.178
404	232058.411	155413.499
405	232137.378	155049.210
406	232190.292	154238.799
407	232181.918	154138.229

R/W CURVE TABLE

CURVE	COURSE	LENGTH	RADIUS	LONG CHORD	LONG CHORD BEARING
C1	401-402	834.69'	2814.79'	831.64'	S86°15'52"E
C2	405-406	815.12'	2748.79'	812.14'	N86°15'52"W

R/W POINT STATION & OFFSET TABLE

POINT	STATION	OFFSET	POINT	STATION	OFFSET
400	597+58.59	33.56'	407	597+53.23	32.42'
401	598+54.38	33.23'	T451	597+59.28	42.06'
402	606+80.49	33.80'	T452	598+00.00	41.92'
403	610+37.89	30.11'	T453	598+00.00	33.42'
404	610+52.77	35.83'	T454	598+00.00	32.58'
405	606+79.23	32.19'	T455	598+00.00	40.08'
406	598+54.15	32.77'	T456	597+52.63	39.92'

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 638153.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" I.D. X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 SHOWN HEREIN BASED ON COUNTY TRUNK HIGHWAY G IMPROVEMENT PROJECT CIRCA 1931.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN BASED ON WISCONSIN CENTRAL RAILWAY COMPANY VALUATION MAP FOR THE CHICAGO TO ST. PAUL PORTION OF TRACKS DATED JANUARY 1917.

EXISTING HIGHWAY RIGHT-OF-WAY FOR COUNTY TRUNK HIGHWAY F SHOWN HEREIN IS PRESUMED TO BE 4 RODS IN WIDTH AND CENTERED ON THE WEST LINE OF THE NORTHWEST 1/4 OF SECTION 34 AND THE WEST LINE OF THE SOUTHWEST 1/4 OF SECTION 27 PER STATE STATUTE 82.31(2).

WISCONSIN
RYAN M. BELTRAND
S-2825
SOBIESKI, WI
LAND SURVEYOR

I, RYAN M. BELTRAND, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT 8630-05-23-4.04 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

RYAN M. BELTRAND — NOVEMBER 4, 2019
REGISTRATION NUMBER: S-2825 — DATE

AYRES ASSOCIATES

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHWEST REGION.

DEBRA B. STENSLAND — NOVEMBER 14, 2019
DATE

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\RW\0797_040104-RW.DWG
PLOT DATE : 11/4/2019 11:55 AM
PLOT BY: AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE : 1"=100'
APPRAISAL DATE: NOVEMBER 4, 2019

8630-05-23 - 4.04

TRANSPORTATION PROJECT PLAT NO: 8630-05-23 - 4.05

THAT PART OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 34, T30N, R13W, TOWN OF HAY RIVER, DUNN COUNTY, WISCONSIN.

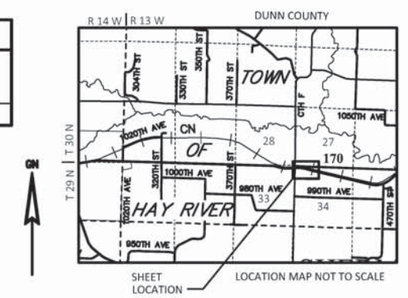
RELOCATION ORDER - STH 170 GLENWOOD CITY - COLFAX (STH 79 - STH 25 AND STH 25 - CTH D)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	EXISTING R/W SF	TOTAL R/W SF	TLE SF
6	WISCONSIN CENTRAL LTD.	TLE	------	------	------	169

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.



638908

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
11/18/2019 10:34 AM

REC FEE: 25.00
PAGES: 1
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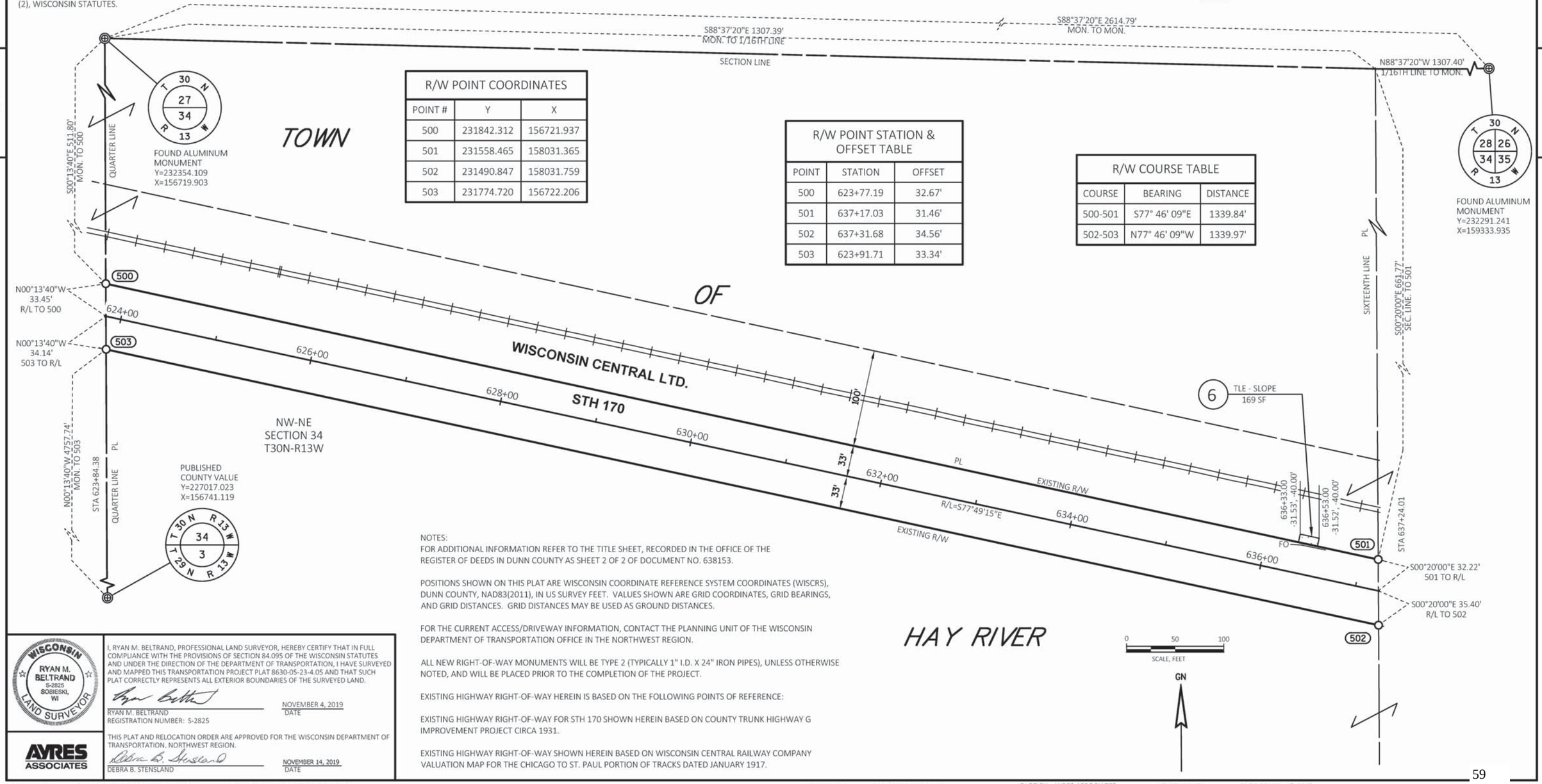
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-05-23 - 4.05

4



4

R/W POINT COORDINATES		
POINT #	Y	X
500	231842.312	156721.937
501	231558.465	158031.365
502	231490.847	158031.759
503	231774.720	156722.206

R/W POINT STATION & OFFSET TABLE		
POINT	STATION	OFFSET
500	623+77.19	32.67'
501	637+17.03	31.46'
502	637+31.68	34.56'
503	623+91.71	33.34'

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
500-501	S77° 46' 09"E	1339.84'
502-503	N77° 46' 09"W	1339.97'

NOTES:
FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 638153.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" I.D. X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 SHOWN HEREIN BASED ON COUNTY TRUNK HIGHWAY G IMPROVEMENT PROJECT CIRCA 1931.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN BASED ON WISCONSIN CENTRAL RAILWAY COMPANY VALUATION MAP FOR THE CHICAGO TO ST. PAUL PORTION OF TRACKS DATED JANUARY 1917.

WISCONSIN
RYAN M. BELTRAND
S-2825
SOBIESKI, WI
LAND SURVEYOR

I, RYAN M. BELTRAND, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT 8630-05-23-4.05 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

RYAN M. BELTRAND — NOVEMBER 4, 2019
REGISTRATION NUMBER: S-2825

AYRES ASSOCIATES

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION. NORTHWEST REGION.

DEBRA B. STENSLAND — NOVEMBER 14, 2019

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\RW\0797_040105-RW.DWG
APPRAISAL DATE: NOVEMBER 4, 2019
PLOT DATE : 11/4/2019 11:32 AM
PLOT BY: AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE: 1"=100'

TRANSPORTATION PROJECT PLAT NO: 8630-05-23 - 4.06

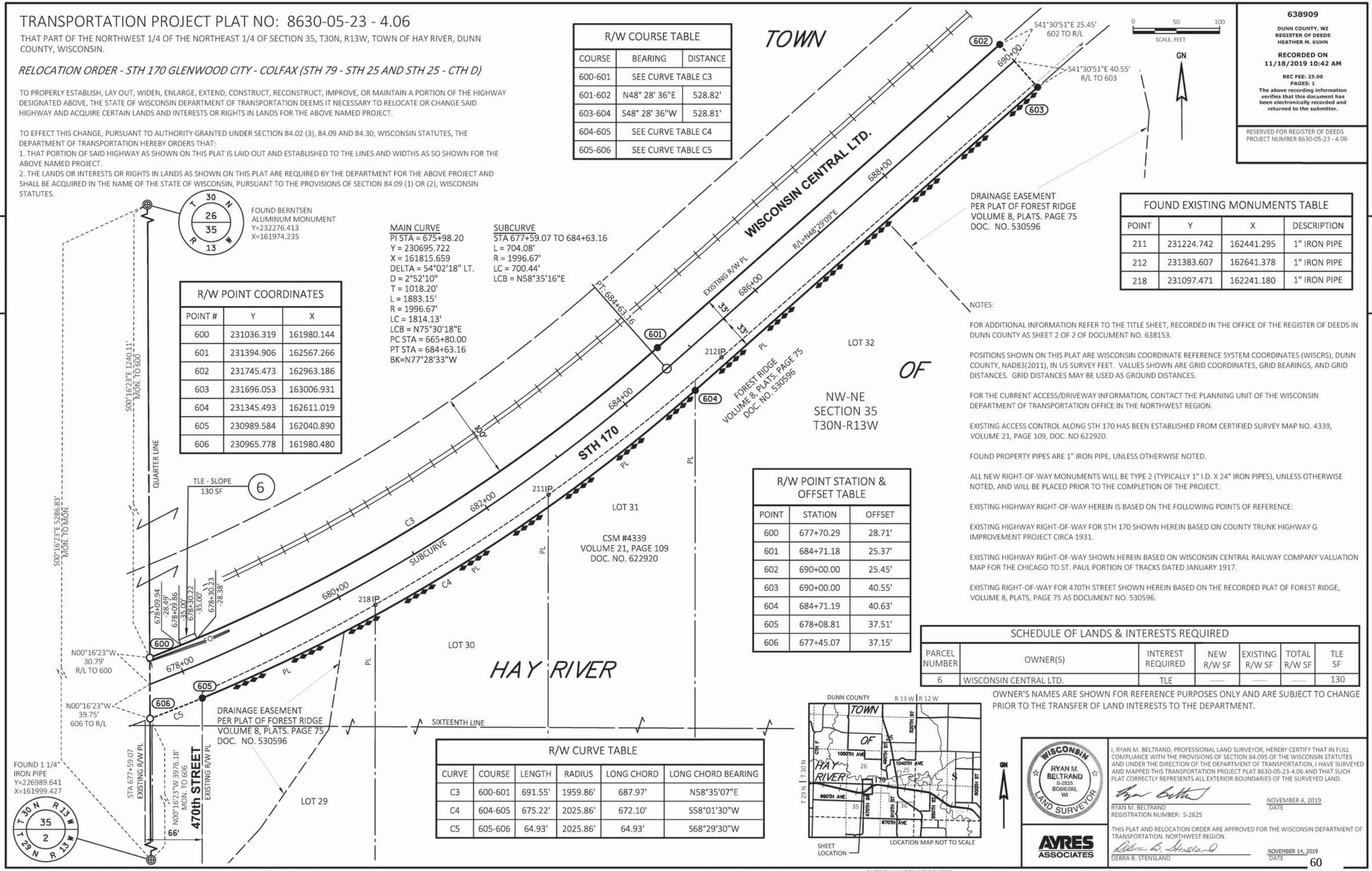
THAT PART OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 35, T30N, R13W, TOWN OF HAY RIVER, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER - STH 170 GLENWOOD CITY - COLFAX (STH 79 - STH 25 AND STH 25 - CTH D)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
600-601	SEE CURVE TABLE C3	
601-602	N48° 28' 36"E	528.82'
603-604	S48° 28' 36"W	528.81'
604-605	SEE CURVE TABLE C4	
605-606	SEE CURVE TABLE C5	



R/W POINT COORDINATES		
POINT #	Y	X
600	231036.319	161980.144
601	231394.906	162567.266
602	231745.473	162963.186
603	231696.053	163006.931
604	231345.493	162611.019
605	230989.584	162040.890
606	230965.778	161980.480

MAIN CURVE
PI STA = 675+98.20
Y = 230695.722
X = 161815.659
DELTA = 54°02'18" LT.
D = 2°52'10"
T = 1018.20'
L = 1883.15'
R = 1996.67'
LC = 1814.13'
LCB = N75°30'18"E
PC STA = 665+80.00
PT STA = 684+63.16
BK=N77°28'33"W

SUBCURVE
STA 677+59.07 TO 684+63.16
L = 704.08'
R = 1996.67'
LC = 700.44'
LCB = N58°35'16"E

R/W POINT STATION & OFFSET TABLE		
POINT	STATION	OFFSET
600	677+70.29	28.71'
601	684+71.18	25.37'
602	690+00.00	25.45'
603	690+00.00	40.55'
604	684+71.19	40.63'
605	678+08.81	37.51'
606	677+45.07	37.15'

R/W CURVE TABLE					
CURVE	COURSE	LENGTH	RADIUS	LONG CHORD	LONG CHORD BEARING
C3	600-601	691.55'	1959.86'	687.97'	N58°35'07"E
C4	604-605	675.22'	2025.86'	672.10'	S58°01'30"W
C5	605-606	64.93'	2025.86'	64.93'	S68°29'30"W

FOUND EXISTING MONUMENTS TABLE			
POINT	Y	X	DESCRIPTION
211	231224.742	162441.295	1" IRON PIPE
212	231383.607	162641.378	1" IRON PIPE
218	231097.471	162241.180	1" IRON PIPE

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 638153.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

EXISTING ACCESS CONTROL ALONG STH 170 HAS BEEN ESTABLISHED FROM CERTIFIED SURVEY MAP NO. 4339, VOLUME 21, PAGE 109, DOC. NO 622920.

FOUND PROPERTY PIPES ARE 1" IRON PIPE, UNLESS OTHERWISE NOTED.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" I.D. X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 SHOWN HEREIN BASED ON COUNTY TRUNK HIGHWAY G IMPROVEMENT PROJECT CIRCA 1931.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN BASED ON WISCONSIN CENTRAL RAILWAY COMPANY VALUATION MAP FOR THE CHICAGO TO ST. PAUL PORTION OF TRACKS DATED JANUARY 1917.

EXISTING RIGHT-OF-WAY FOR 470TH STREET SHOWN HEREIN BASED ON THE RECORDED PLAT OF FOREST RIDGE, VOLUME 8, PLATS, PAGE 75 AS DOCUMENT NO. 530596.

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	EXISTING R/W SF	TOTAL R/W SF	TLE SF
6	WISCONSIN CENTRAL LTD.	TLE	------	------	------	130

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

I, RYAN M. BELTRAND, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT 8630-05-23-4.06 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

RYAN M. BELTRAND
REGISTRATION NUMBER: S-2825
NOVEMBER 4, 2019
DATE

WISCONSIN RYAN M. BELTRAND S-2825 SOBIESKI, WI LAND SURVEYOR

AYRES ASSOCIATES

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION. NORTHWEST REGION.

DEBRA B. STENSLAND
NOVEMBER 14, 2019
DATE

638909
DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN
RECORDED ON
11/18/2019 10:42 AM
REC FEE: 25.00
PAGES: 1
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-05-23 - 4.06

TRANSPORTATION PROJECT PLAT NO: 8630-05-23 - 4.07

THAT PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 36, T30N, R13W, VILLAGE OF WHEELER, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER - STH 170 GLENWOOD CITY - COLFAX (STH 79 - STH 25 AND STH 25 - CTH D)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	EXISTING R/W SF	TOTAL R/W SF	TLE SF
8	CAIN R. HUGHES	FEE	88	-------	88	------
9	THE VOR FREISER NORWEGIAN LUTHERAN CHURCH AKA OUR SAVIOR'S NORWEIGIAN LUTHERAN CHURCH	FEE	91	------	91	------

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

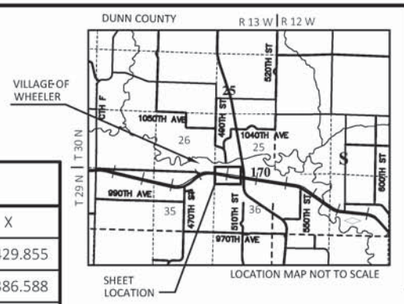
R/W COURSE TABLE

COURSE	BEARING	DISTANCE	COURSE	BEARING	DISTANCE
700-701	S82° 34' 20"E	1007.41'	708-709	N78° 13' 48"W	17.86'
702-703	S82° 34' 20"E	45.80'	709-710	N06°20'45"E	5.03'
703-704	S07° 25' 40"W	29.34'	711-712	S06°20'45"W	5.01'
704-705	S78° 12' 15"E	234.24'	712-713	N78° 13' 48"W	17.94'
706-707	N78° 12' 15"W	497.60'	713-714	N11° 46' 12"E	5.00'
707-708	S11° 46' 12"W	5.00'	714-715	N78° 12'15"W	53.41'
			715-716	N82° 34' 20"W	708.03'

R/W POINT COORDINATES

POINT #	Y	X	POINT #	Y	X
700	232202.127	164614.718	710	232020.459	165429.855
701	232071.891	165613.677	711	232029.495	165386.588
702	232065.366	165663.724	708	232011.816	165446.781
703	232059.446	165709.135	709	232015.459	165429.298
704	232030.351	165705.342	712	232024.511	165386.034
705	231982.466	165934.637	713	232028.170	165368.470
706	231914.989	165934.888	714	232033.065	165369.490
707	232016.711	165447.801	715	232043.984	165317.206
			716	232135.517	164615.116

GN



639074

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
11/26/2019 11:30 AM

REC FEE: 25.00
PAGES: 1

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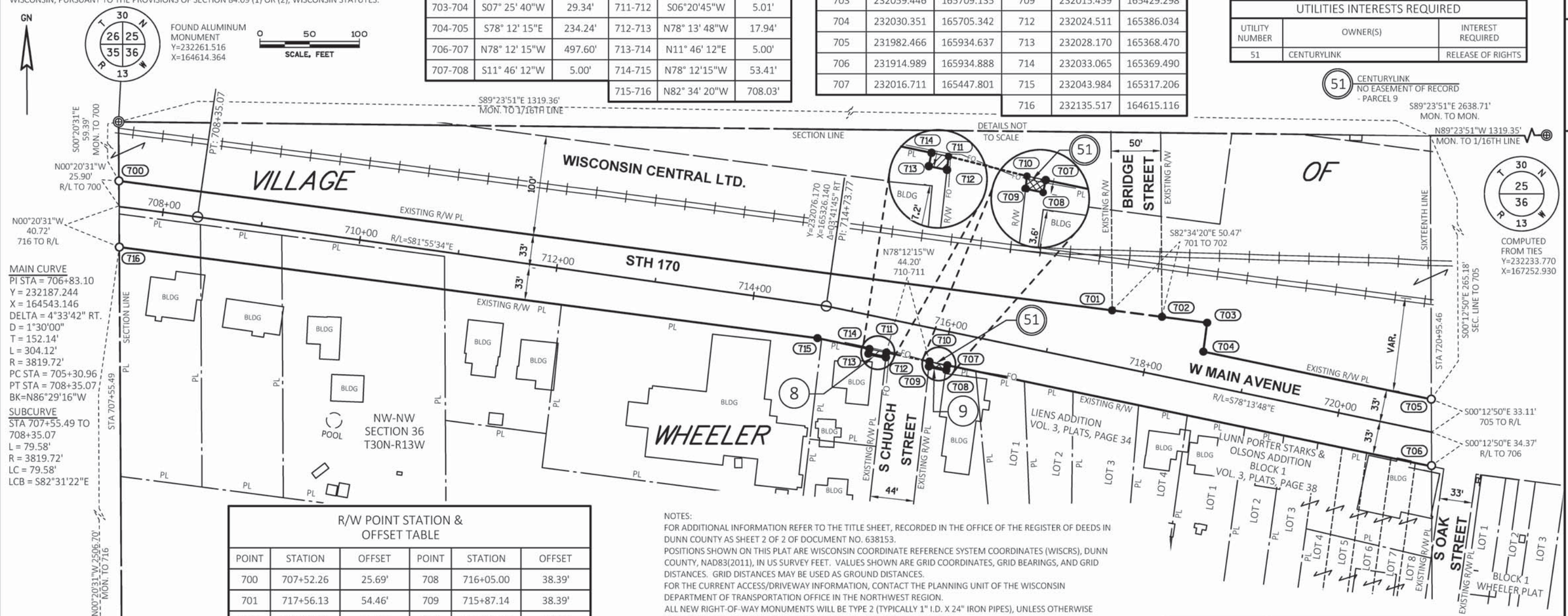
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-05-23 - 4.07

UTILITIES INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
51	CENTURYLINK	RELEASE OF RIGHTS

51 CENTURYLINK
NO EASEMENT OF RECORD
- PARCEL 9



R/W POINT STATION & OFFSET TABLE

POINT	STATION	OFFSET	POINT	STATION	OFFSET
700	707+52.26	25.69'	708	716+05.00	38.39'
701	717+56.13	54.46'	709	715+87.14	38.39'
702	718+06.46	58.28'	710	715+86.67	33.38'
703	718+52.12	61.75'	711	715+42.47	38.36'
704	718+54.34	32.50'	712	715+42.94	38.36'
705	720+88.59	32.39'	713	715+25.00	38.36'
706	721+02.46	33.00'	714	715+25.00	33.36'
707	716+05.00	33.39'	715	714+69.44	33.12'
			716	707+60.67	40.39'

NOTES:
FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 638153.
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.
FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.
ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" I.D. X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.
EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 SHOWN HEREIN BASED ON PREVIOUS PROJECT 8630-02-21.
EXISTING HIGHWAY RIGHT-OF-WAY FOR S. CHURCH STREET SHOWN HEREIN BASED ON PATRICK NOONEYS 2ND ADDITION TO WHEELER AND IS CENTERED ON THE TRAVELED WAY.
EXISTING HIGHWAY RIGHT-OF-WAY FOR S. OAK STREET SHOWN HEREIN IS BASED ON PLAT OF THE VILLAGE OF WELTON (WHEELER).
EXISTING HIGHWAY RIGHT-OF-WAY FOR BRIDGE STREET SHOWN HEREIN BASED ON PREVIOUS PROJECT 8630-02-21.
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN BASED ON WISCONSIN CENTRAL RAILWAY COMPANY VALUATION MAP FOR THE CHICAGO TO ST. PAUL PORTION OF TRACKS DATED JANUARY 1917.

WISCONSIN
RYAN M. BELTRAND
S-2825
SOBIESKI, WI
LAND SURVEYOR

I, RYAN M. BELTRAND, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT 8630-05-23-4.07 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

RYAN M. BELTRAND — NOVEMBER 18, 2019
REGISTRATION NUMBER: S-2825 — DATE

AYRES ASSOCIATES

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHWEST REGION.

DEBRA B. STENSLAND — NOVEMBER 25, 2019
DATE

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\RW\0797_040107-RW.DWG
PLOT DATE : 11/18/2019 4:14 PM
PLOT BY: AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE: 1"=100'
APPRAISAL DATE: NOVEMBER 18, 2019

TRANSPORTATION PROJECT PLAT NO: 8630-05-23 - 4.08

THAT PART OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 31, T30N, R12W, TOWN OF OTTER CREEK, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER - STH 170 GLENWOOD CITY - COLFAX (STH 79 - STH 25 AND STH 25 - CTH D)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

639140
DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN
RECORDED ON
12/02/2019 01:12 PM
REC FEE: 25.00
PAGES: 1
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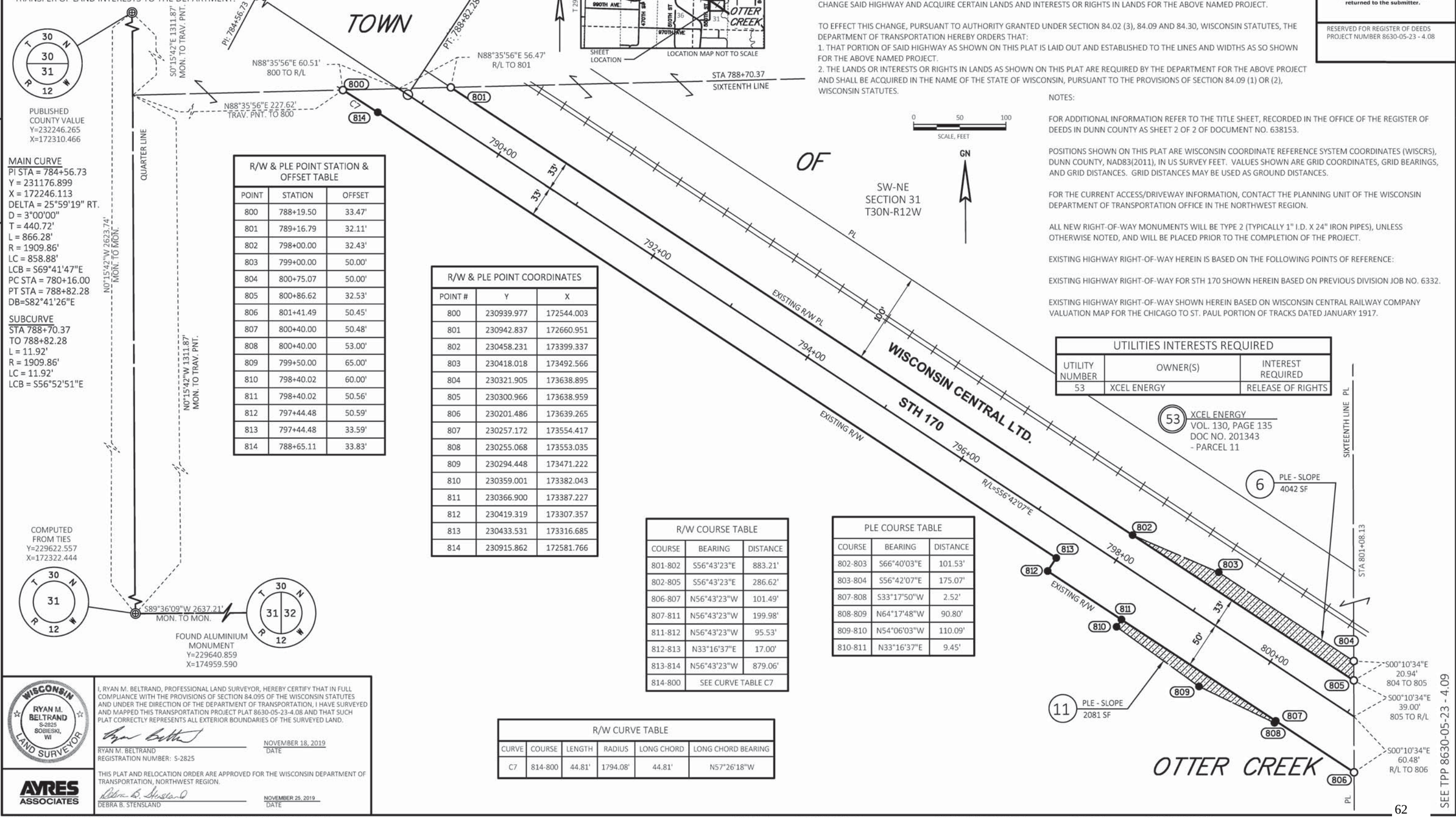
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-05-23 - 4.08

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	EXISTING R/W SF	TOTAL R/W SF	PLE SF	TLE SF
6	WISCONSIN CENTRAL LTD.	PLE	------	------	------	4042	------
11	SAMUEL E. OWEN	PLE	------	------	------	2081	------

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.



R/W & PLE POINT STATION & OFFSET TABLE

POINT	STATION	OFFSET
800	788+19.50	33.47'
801	789+16.79	32.11'
802	798+00.00	32.43'
803	799+00.00	50.00'
804	800+75.07	50.00'
805	800+86.62	32.53'
806	801+41.49	50.45'
807	800+40.00	50.48'
808	800+40.00	53.00'
809	799+50.00	65.00'
810	798+40.02	60.00'
811	798+40.02	50.56'
812	797+44.48	50.59'
813	797+44.48	33.59'
814	788+65.11	33.83'

R/W & PLE POINT COORDINATES

POINT #	Y	X
800	230939.977	172544.003
801	230942.837	172660.951
802	230458.231	173399.337
803	230418.018	173492.566
804	230321.905	173638.895
805	230300.966	173638.959
806	230201.486	173639.265
807	230257.172	173554.417
808	230255.068	173553.035
809	230294.448	173471.222
810	230359.001	173382.043
811	230366.900	173387.227
812	230419.319	173307.357
813	230433.531	173316.685
814	230915.862	172581.766

R/W COURSE TABLE

COURSE	BEARING	DISTANCE
801-802	S56°43'23"E	883.21'
802-805	S56°43'23"E	286.62'
806-807	N56°43'23"W	101.49'
807-811	N56°43'23"W	199.98'
811-812	N56°43'23"W	95.53'
812-813	N33°16'37"E	17.00'
813-814	N56°43'23"W	879.06'
814-800	SEE CURVE TABLE C7	

PLE COURSE TABLE

COURSE	BEARING	DISTANCE
802-803	S66°40'03"E	101.53'
803-804	S56°42'07"E	175.07'
807-808	S33°17'50"W	2.52'
808-809	N64°17'48"W	90.80'
809-810	N54°06'03"W	110.09'
810-811	N33°16'37"E	9.45'

R/W CURVE TABLE

CURVE	COURSE	LENGTH	RADIUS	LONG CHORD	LONG CHORD BEARING
C7	814-800	44.81'	1794.08'	44.81'	N57°26'18"W

UTILITIES INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
53	XCEL ENERGY	RELEASE OF RIGHTS

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 638153.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" I.D. X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 SHOWN HEREIN BASED ON PREVIOUS DIVISION JOB NO. 6332.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN BASED ON WISCONSIN CENTRAL RAILWAY COMPANY VALUATION MAP FOR THE CHICAGO TO ST. PAUL PORTION OF TRACKS DATED JANUARY 1917.

WISCONSIN
RYAN M. BELTRAND
S-2825
SOBIESKI, WI
LAND SURVEYOR

I, RYAN M. BELTRAND, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT 8630-05-23-4.08 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

RYAN M. BELTRAND — NOVEMBER 18, 2019 DATE
REGISTRATION NUMBER: S-2825

AYRES ASSOCIATES

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHWEST REGION.

DEBRA B. STENSLAND — NOVEMBER 25, 2019 DATE

SEE TPP 8630-05-23 - 4.09

TRANSPORTATION PROJECT PLAT NO: 8630-05-23 - 4.09

THAT PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 31, T30N, R12W, TOWN OF OTTER CREEK, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER - STH 170 GLENWOOD CITY - COLFAX (STH 79 - STH 25 AND STH 25 - CTH D)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

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1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED							
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	EXISTING R/W SF	TOTAL R/W SF	PLE SF	TLE SF
6	WISCONSIN CENTRAL LTD.	PLE	------	------	------	17,079	------
12	WILLIAM EDWARDS JR.	PLE	------	------	------	8430	------

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

UTILITIES INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
51	CENTURYLINK	RELEASE OF RIGHTS
53	XCEL ENERGY	RELEASE OF RIGHTS

53 XCEL ENERGY
VOL. 130, PAGE 122
DOC. NO. 201324
- PARCEL 12
VOL. 130, PAGE 116
DOC. NO. 201316
- PARCEL 12

51 CENTURY LINK
NO EASEMENT OF RECORD
- PARCEL 6

SE-NE
SECTION 31
T30N-R12W

R/W & PLE POINT COORDINATES		
POINT #	Y	X
900	229638.972	174687.747
901	229638.697	174648.047
902	229637.871	174529.019
903	229637.659	174498.488
904	229689.368	174419.763
905	229703.482	174429.048
906	229796.184	174287.799
907	229783.038	174276.847
908	229851.124	174173.106
909	229845.527	174169.435
910	229933.423	174011.765

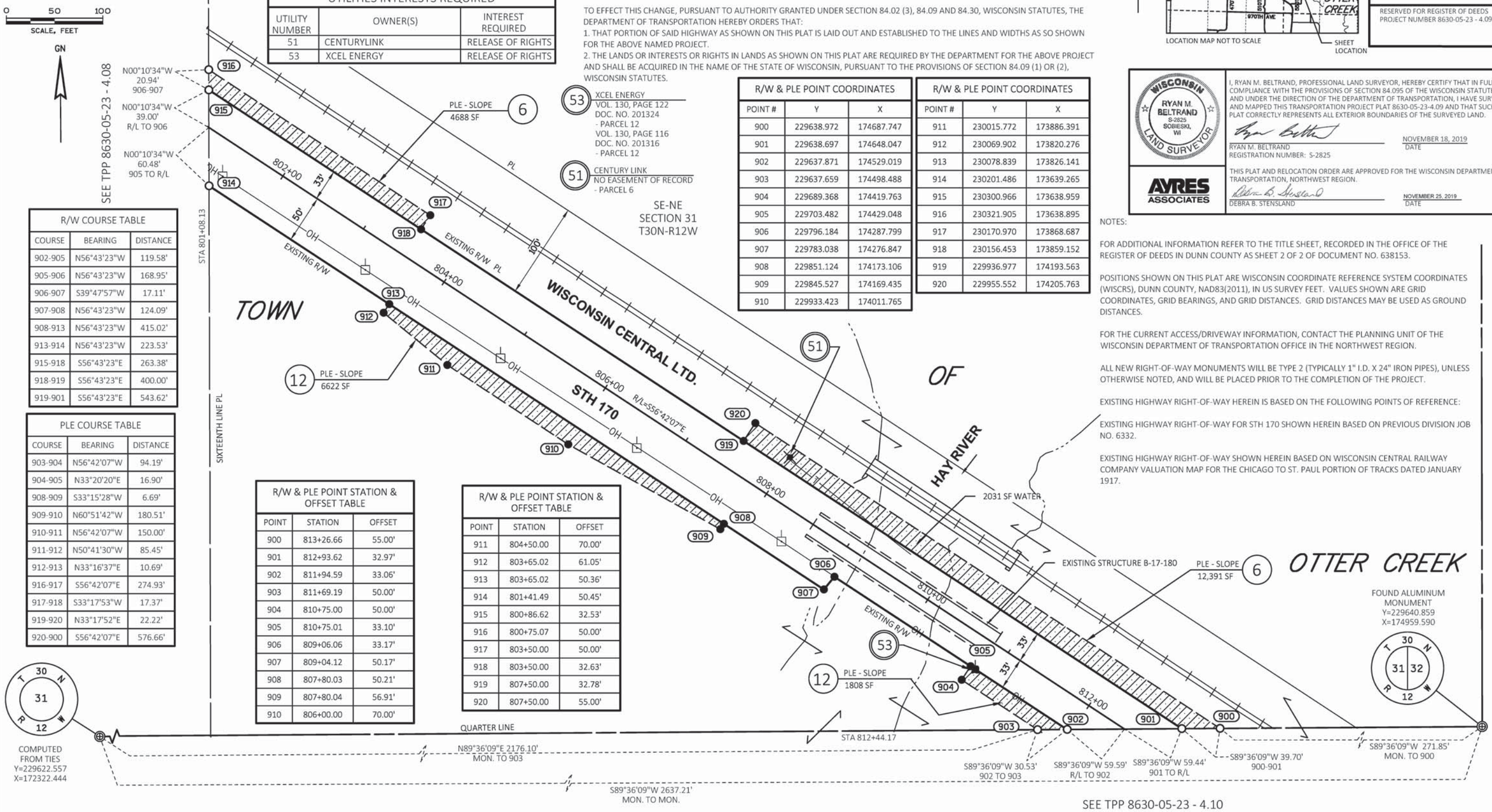
R/W & PLE POINT COORDINATES		
POINT #	Y	X
911	230015.772	173886.391
912	230069.902	173820.276
913	230078.839	173826.141
914	230201.486	173639.265
915	230300.966	173638.959
916	230321.905	173638.895
917	230170.970	173868.687
918	230156.453	173859.152
919	229936.977	174193.563
920	229955.552	174205.763

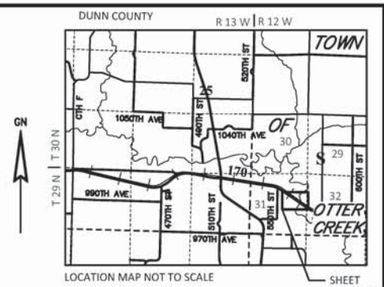
R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
902-905	N56°43'23"W	119.58'
905-906	N56°43'23"W	168.95'
906-907	S39°47'57"W	17.11'
907-908	N56°43'23"W	124.09'
908-913	N56°43'23"W	415.02'
913-914	N56°43'23"W	223.53'
915-918	S56°43'23"E	263.38'
918-919	S56°43'23"E	400.00'
919-901	S56°43'23"E	543.62'

PLE COURSE TABLE		
COURSE	BEARING	DISTANCE
903-904	N56°42'07"W	94.19'
904-905	N33°20'20"E	16.90'
908-909	S33°15'28"W	6.69'
909-910	N60°51'42"W	180.51'
910-911	N56°42'07"W	150.00'
911-912	N50°41'30"W	85.45'
912-913	N33°16'37"E	10.69'
916-917	S56°42'07"E	274.93'
917-918	S33°17'53"W	17.37'
919-920	N33°17'52"E	22.22'
920-900	S56°42'07"E	576.66'

R/W & PLE POINT STATION & OFFSET TABLE		
POINT	STATION	OFFSET
900	813+26.66	55.00'
901	812+93.62	32.97'
902	811+94.59	33.06'
903	811+69.19	50.00'
904	810+75.00	50.00'
905	810+75.01	33.10'
906	809+06.06	33.17'
907	809+04.12	50.17'
908	807+80.03	50.21'
909	807+80.04	56.91'
910	806+00.00	70.00'

R/W & PLE POINT STATION & OFFSET TABLE		
POINT	STATION	OFFSET
911	804+50.00	70.00'
912	803+65.02	61.05'
913	803+65.02	50.36'
914	801+41.49	50.45'
915	800+86.62	32.53'
916	800+75.07	50.00'
917	803+50.00	50.00'
918	803+50.00	32.63'
919	807+50.00	32.78'
920	807+50.00	55.00'





639075

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
11/26/2019 11:46 AM

REC FEE: 25.00
PAGES: 1

The above recording information verifies that this document has been electronically recorded and returned to the submitter.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-05-23 - 4.09

WISCONSIN
RYAN M. BELTRAND
S-2825
SOBIESKI, WI
LAND SURVEYOR

I, RYAN M. BELTRAND, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT 8630-05-23-4.09 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

RYAN M. BELTRAND
REGISTRATION NUMBER: S-2825

NOVEMBER 18, 2019
DATE

AYRES ASSOCIATES

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHWEST REGION.

DEBRA B. STENSLAND

NOVEMBER 25, 2019
DATE

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 638153.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" I.D. X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 SHOWN HEREIN BASED ON PREVIOUS DIVISION JOB NO. 6332.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN BASED ON WISCONSIN CENTRAL RAILWAY COMPANY VALUATION MAP FOR THE CHICAGO TO ST. PAUL PORTION OF TRACKS DATED JANUARY 1917.

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\RW\0798_040109-RW.DWG
APPRAISAL DATE: NOVEMBER 18, 2019
PLOT DATE : 11/18/2019 4:37 PM
PLOT BY: AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE: 1"=100'
8630-05-23 - 4.09

TRANSPORTATION PROJECT PLAT NO: 8630-05-23 - 4.10

PART OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 31, T30N, R12W, TOWN OF OTTER CREEK, DUNN COUNTY, WISCONSIN.

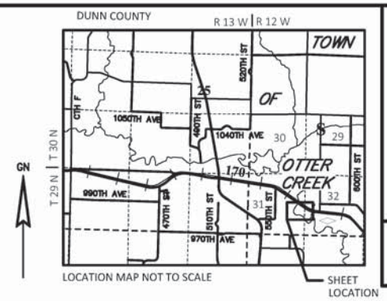
RELOCATION ORDER - STH 170 GLENWOOD CITY - COLFAX (STH 79 - STH 25 AND STH 25 - CTH D)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED							
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	EXISTING R/W SF	TOTAL R/W SF	PLE SF	TLE SF
6	WISCONSIN CENTRAL LTD.	PLE	------	------	------	7687	------
12	WILLIAM EDWARDS JR.	PLE	------	------	------	7062	------
13	NORTHERN STATES POWER COMPANY	PLE	------	------	------	2054	------

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.



639076
DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN
RECORDED ON
11/26/2019 11:51 AM
REC FEE: 25.00
PAGES: 1
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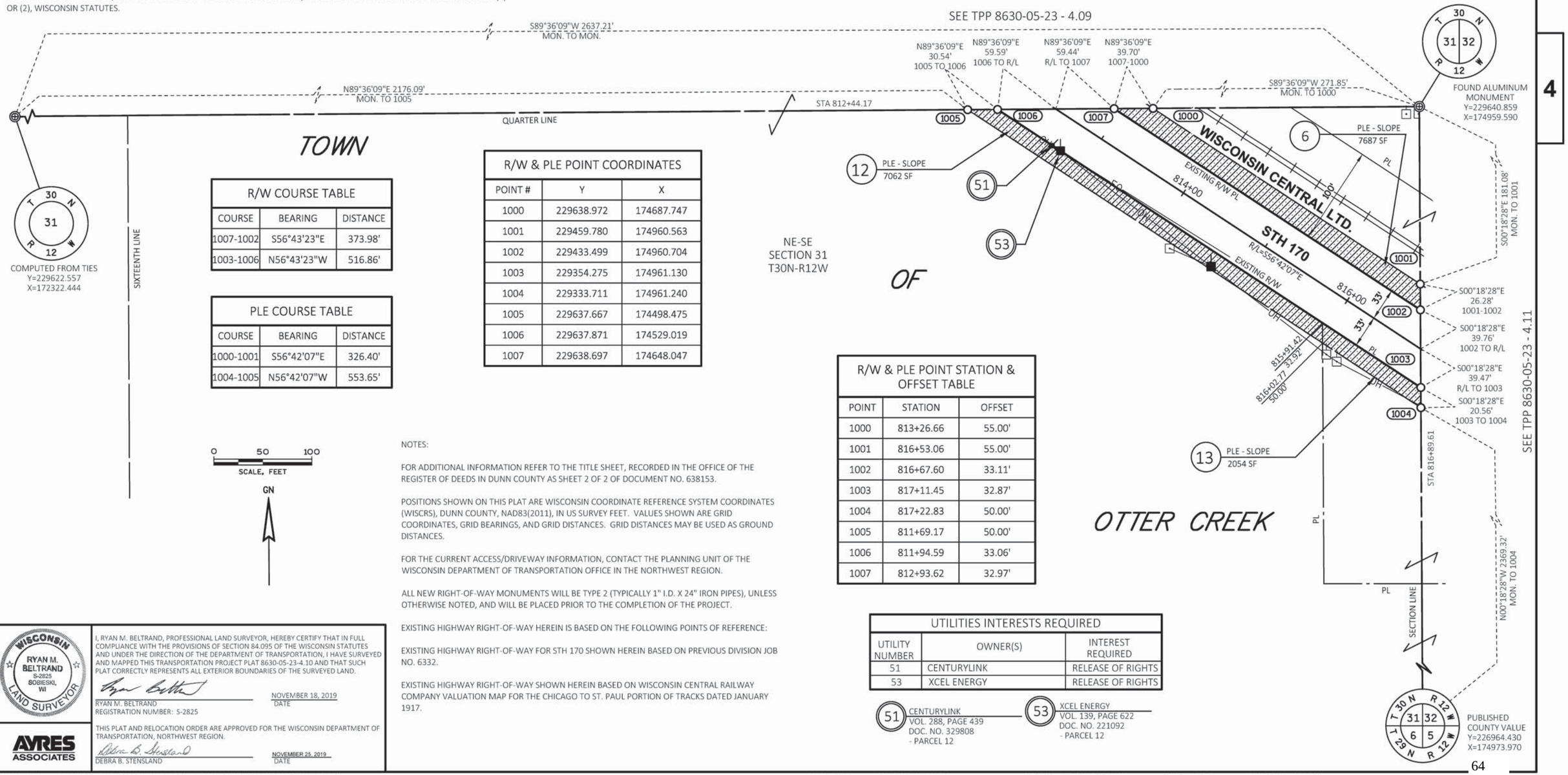
PROJECT NUMBER 8630-05-23 - 4.10



R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
1007-1002	S56°43'23"E	373.98'
1003-1006	N56°43'23"W	516.86'

PLE COURSE TABLE		
COURSE	BEARING	DISTANCE
1000-1001	S56°42'07"E	326.40'
1004-1005	N56°42'07"W	553.65'

R/W & PLE POINT COORDINATES		
POINT #	Y	X
1000	229638.972	174687.747
1001	229459.780	174960.563
1002	229433.499	174960.704
1003	229354.275	174961.130
1004	229333.711	174961.240
1005	229637.667	174498.475
1006	229637.871	174529.019
1007	229638.697	174648.047

R/W & PLE POINT STATION & OFFSET TABLE		
POINT	STATION	OFFSET
1000	813+26.66	55.00'
1001	816+53.06	55.00'
1002	816+67.60	33.11'
1003	817+11.45	32.87'
1004	817+22.83	50.00'
1005	811+69.17	50.00'
1006	811+94.59	33.06'
1007	812+93.62	32.97'

0 50 100
SCALE, FEET

GN

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 638153.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" I.D. X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 SHOWN HEREIN BASED ON PREVIOUS DIVISION JOB NO. 6332.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN BASED ON WISCONSIN CENTRAL RAILWAY COMPANY VALUATION MAP FOR THE CHICAGO TO ST. PAUL PORTION OF TRACKS DATED JANUARY 1917.

WISCONSIN
RYAN M. BELTRAND
S-2825
SOBIESKI, WI
LAND SURVEYOR

I, RYAN M. BELTRAND, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT 8630-05-23-4.10 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

RYAN M. BELTRAND
REGISTRATION NUMBER: S-2825
NOVEMBER 18, 2019
DATE

AYRES ASSOCIATES

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHWEST REGION.

DEBRA B. STENSLAND
NOVEMBER 25, 2019
DATE

UTILITIES INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
51	CENTURYLINK	RELEASE OF RIGHTS
53	XCEL ENERGY	RELEASE OF RIGHTS

51 CENTURYLINK
VOL. 288, PAGE 439
DOC. NO. 329808
- PARCEL 12

53 XCEL ENERGY
VOL. 139, PAGE 622
DOC. NO. 221092
- PARCEL 12

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\RW\0798_040110-RW.DWG
APPRAISAL DATE: NOVEMBER 18, 2019
PLOT DATE : 11/18/2019 4:45 PM
PLOT BY: AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE: 1"=100'

TRANSPORTATION PROJECT PLAT NO: 8630-05-23 - 4.11

PART OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 32, T30N, R12W, TOWN OF OTTER CREEK, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER - STH 170 GLENWOOD CITY - COLFAX (STH 79 - STH 25 AND STH 25 - CTH D)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

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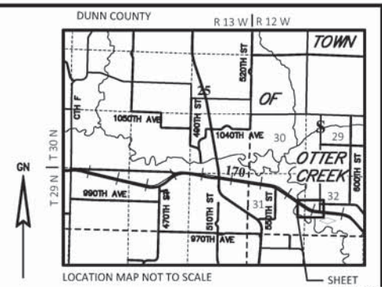
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	EXISTING R/W SF	TOTAL R/W SF	PLE SF	TLE ACRES
6	WISCONSIN CENTRAL LTD.	PLE	------	------	------	7083	------
12	WILLIAM EDWARDS JR.	FEE & PLE	461	91,872	92,333	4217	------
13	NORTHERN STATES POWER COMPANY	PLE	------	------	------	2353	------

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.



639077
DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN
RECORDED ON
11/26/2019 11:56 AM
REC FEE: 25.00
PAGES: 1
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8630-05-23 - 4.11

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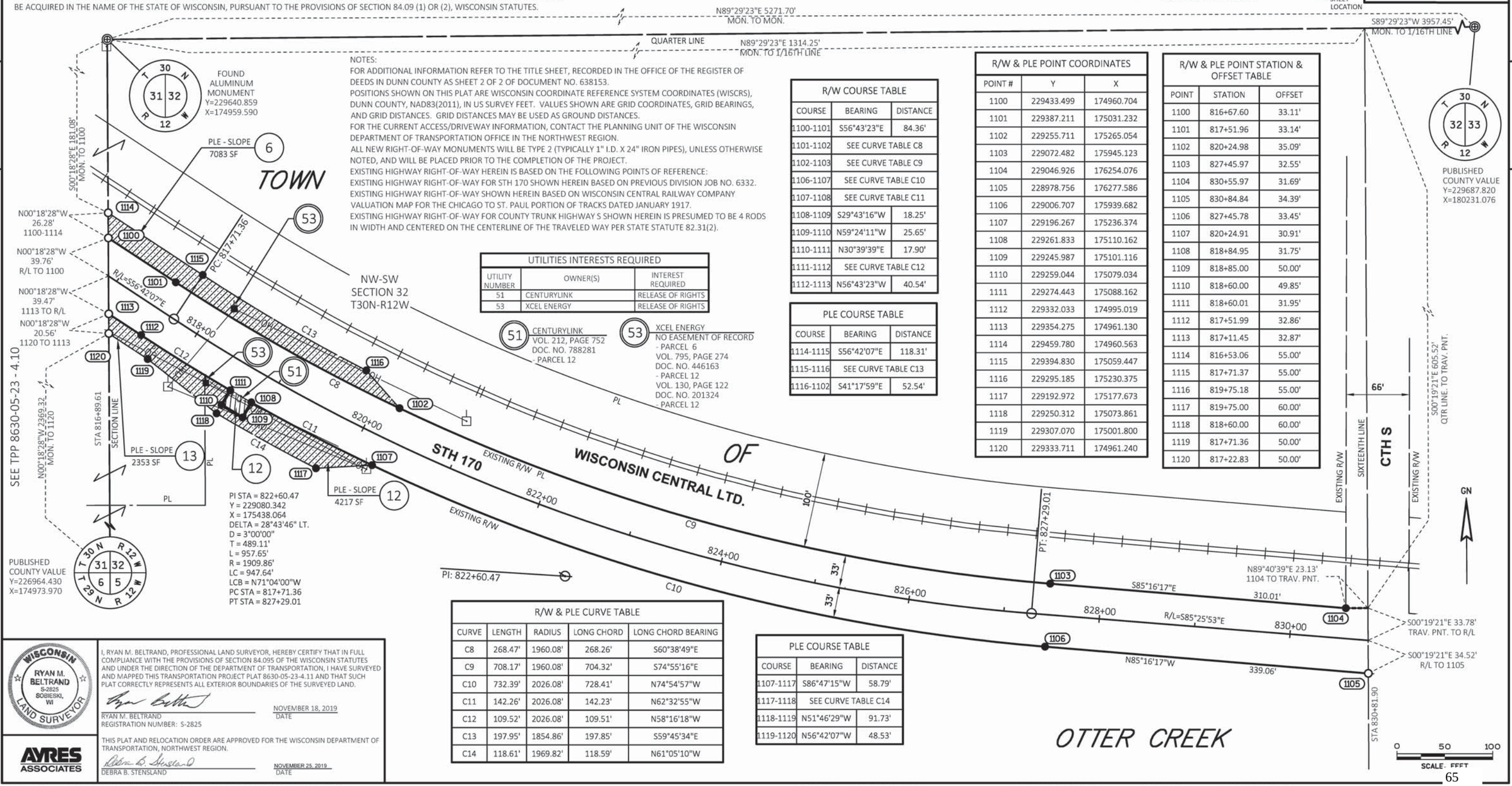

NOTES:
FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 638153.
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.
FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTHWEST REGION.
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EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 SHOWN HEREIN BASED ON PREVIOUS DIVISION JOB NO. 6332.
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN BASED ON WISCONSIN CENTRAL RAILWAY COMPANY VALUATION MAP FOR THE CHICAGO TO ST. PAUL PORTION OF TRACKS DATED JANUARY 1917.
EXISTING HIGHWAY RIGHT-OF-WAY FOR COUNTY TRUNK HIGHWAY S SHOWN HEREIN IS PRESUMED TO BE 4 RODS IN WIDTH AND CENTERED ON THE CENTERLINE OF THE TRAVELED WAY PER STATE STATUTE 82.31(2).

UTILITIES INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
51	CENTURYLINK	RELEASE OF RIGHTS
53	XCEL ENERGY	RELEASE OF RIGHTS

R/W COURSE TABLE

COURSE	BEARING	DISTANCE
1100-1101	S56°43'23"E	84.36'
1101-1102	SEE CURVE TABLE C8	
1102-1103	SEE CURVE TABLE C9	
1106-1107	SEE CURVE TABLE C10	
1107-1108	SEE CURVE TABLE C11	
1108-1109	S29°43'16"W	18.25'
1109-1110	N59°24'11"W	25.65'
1110-1111	N30°39'39"E	17.90'
1111-1112	SEE CURVE TABLE C12	
1112-1113	N56°43'23"W	40.54'

PLE COURSE TABLE

COURSE	BEARING	DISTANCE
1114-1115	S56°42'07"E	118.31'
1115-1116	SEE CURVE TABLE C13	
1116-1102	S41°17'59"E	52.54'

R/W & PLE POINT COORDINATES

POINT #	Y	X
1100	229433.499	174960.704
1101	229387.211	175031.232
1102	229255.711	175265.054
1103	229072.482	175945.123
1104	229046.926	176254.076
1105	228978.756	176277.586
1106	229006.707	175939.682
1107	229196.267	175236.374
1108	229261.833	175110.162
1109	229245.987	175101.116
1110	229259.044	175079.034
1111	229274.443	175088.162
1112	229332.033	174995.019
1113	229354.275	174961.130
1114	229459.780	174960.563
1115	229394.830	175059.447
1116	229295.185	175230.375
1117	229192.972	175177.673
1118	229250.312	175073.861
1119	229307.070	175001.800
1120	229333.711	174961.240

R/W & PLE POINT STATION & OFFSET TABLE

POINT	STATION	OFFSET
1100	816+67.60	33.11'
1101	817+51.96	33.14'
1102	820+24.98	35.09'
1103	827+45.97	32.55'
1104	830+55.97	31.69'
1105	830+84.84	34.39'
1106	827+45.78	33.45'
1107	820+24.91	30.91'
1108	818+84.95	31.75'
1109	818+85.00	50.00'
1110	818+60.00	49.85'
1111	818+60.01	31.95'
1112	817+51.99	32.86'
1113	817+11.45	32.87'
1114	816+53.06	55.00'
1115	817+71.37	55.00'
1116	819+75.18	55.00'
1117	819+75.00	60.00'
1118	818+60.00	60.00'
1119	817+71.36	50.00'
1120	817+22.83	50.00'

R/W & PLE CURVE TABLE

CURVE	LENGTH	RADIUS	LONG CHORD	LONG CHORD BEARING
C8	268.47'	1960.08'	268.26'	S60°38'49"E
C9	708.17'	1960.08'	704.32'	S74°55'16"E
C10	732.39'	2026.08'	728.41'	N74°54'57"W
C11	142.26'	2026.08'	142.23'	N62°32'55"W
C12	109.52'	2026.08'	109.51'	N58°16'18"W
C13	197.95'	1854.86'	197.85'	S59°45'34"E
C14	118.61'	1969.82'	118.59'	N61°05'10"W

PLE COURSE TABLE

COURSE	BEARING	DISTANCE
1107-1117	S86°47'15"W	58.79'
1117-1118	SEE CURVE TABLE C14	
1118-1119	N51°46'29"W	91.73'
1119-1120	N56°42'07"W	48.53'

WISCONSIN
RYAN M. BELTRAND
S-2825
SOBIESKI, WI
LAND SURVEYOR

I, RYAN M. BELTRAND, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT 8630-05-23-4.11 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

RYAN M. BELTRAND — NOVEMBER 18, 2019
REGISTRATION NUMBER: S-2825 — DATE

AYRES ASSOCIATES

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHWEST REGION.

DEBRA B. STENSLAND — NOVEMBER 25, 2019
DATE

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\RW\0798_040111-RW.DWG
APPRAISAL DATE: NOVEMBER 18, 2019
PLOT DATE : 11/18/2019 5:08 PM
PLOT BY: AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE: 1"=100'

TRANSPORTATION PROJECT PLAT NO: 8630-05-23 - 4.12

THAT PART OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 36, T30N, R13W, VILLAGE OF WHEELER, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER - STH 170 GLENWOOD CITY - COLFAX (STH 79 - STH 25 AND STH 25 - CTH D)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.

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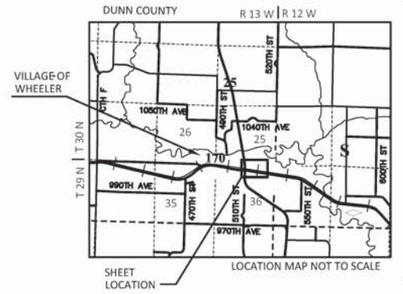
SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	EXISTING R/W SF	TOTAL R/W SF	PLE SF
6	WISCONSIN CENTRAL LTD.	PLE	------	------	------	223

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

0 50 100
SCALE, FEET

GN



639142

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
12/02/2019 01:21 PM

REC FEE: 25.00
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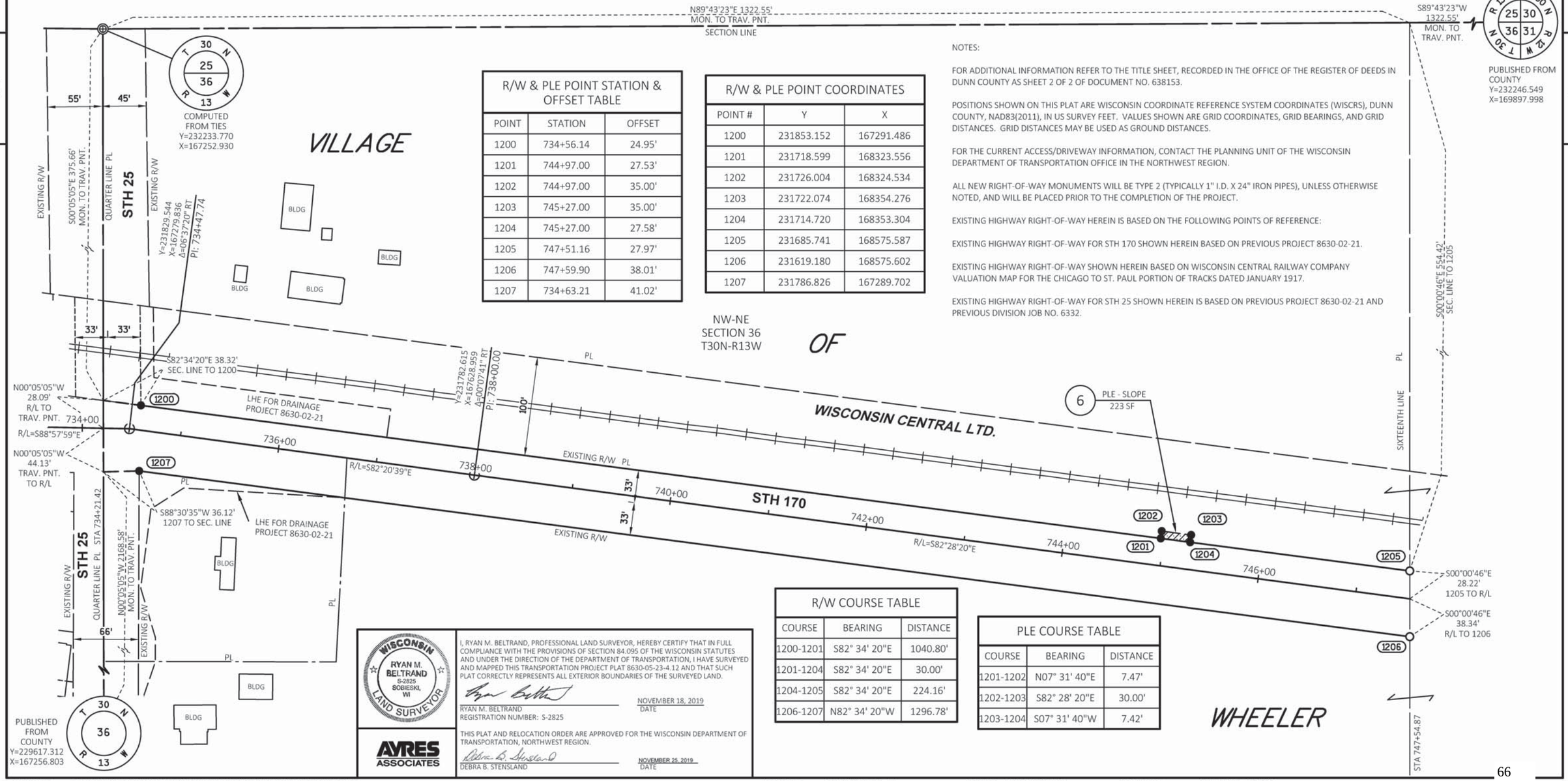
PROJECT NUMBER 8630-05-23 - 4.12



R/W & PLE POINT STATION & OFFSET TABLE		
POINT	STATION	OFFSET
1200	734+56.14	24.95'
1201	744+97.00	27.53'
1202	744+97.00	35.00'
1203	745+27.00	35.00'
1204	745+27.00	27.58'
1205	747+51.16	27.97'
1206	747+59.90	38.01'
1207	734+63.21	41.02'

R/W & PLE POINT COORDINATES		
POINT #	Y	X
1200	231853.152	167291.486
1201	231718.599	168323.556
1202	231726.004	168324.534
1203	231722.074	168354.276
1204	231714.720	168353.304
1205	231685.741	168575.587
1206	231619.180	168575.602
1207	231786.826	167289.702

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN DUNN COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 638153.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 170 SHOWN HEREIN BASED ON PREVIOUS PROJECT 8630-02-21.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN BASED ON WISCONSIN CENTRAL RAILWAY COMPANY VALUATION MAP FOR THE CHICAGO TO ST. PAUL PORTION OF TRACKS DATED JANUARY 1917.

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 25 SHOWN HEREIN IS BASED ON PREVIOUS PROJECT 8630-02-21 AND PREVIOUS DIVISION JOB NO. 6332.

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
1200-1201	S82° 34' 20"E	1040.80'
1201-1204	S82° 34' 20"E	30.00'
1204-1205	S82° 34' 20"E	224.16'
1206-1207	N82° 34' 20"W	1296.78'

PLE COURSE TABLE		
COURSE	BEARING	DISTANCE
1201-1202	N07° 31' 40"E	7.47'
1202-1203	S82° 28' 20"E	30.00'
1203-1204	S07° 31' 40"W	7.42'

WISCONSIN
RYAN M. BELTRAND
S-2825
SOBIESKI, WI
LAND SURVEYOR

I, RYAN M. BELTRAND, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT 8630-05-23-4.12 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

RYAN M. BELTRAND — NOVEMBER 18, 2019
REGISTRATION NUMBER: S-2825 — DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHWEST REGION.

DEBRA B. STENSLAND — NOVEMBER 25, 2019
DATE

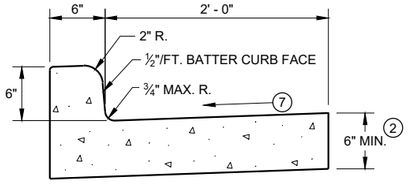
AYRES ASSOCIATES

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\RW\0798_040112-RW.DWG
APPRAISAL DATE: NOVEMBER 18, 2019

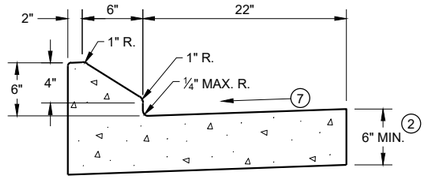
PLOT DATE : 11/19/2019 7:41 AM
PLOT BY: AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE: 1"=100'

Standard Detail Drawing List

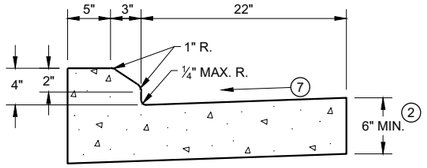
08D01-21A	CONCRETE CURB & GUTTER
08D01-21B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E12-01	SILT SCREEN
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13C19-02	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
14B42-06A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C09-11B	TRUCK STOPPING LANE PAVEMENT MARKINGS
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



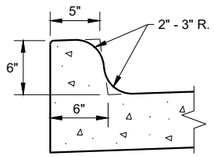
TYPES A (1) & D



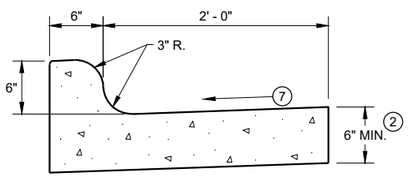
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

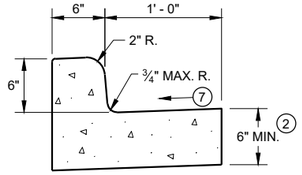


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



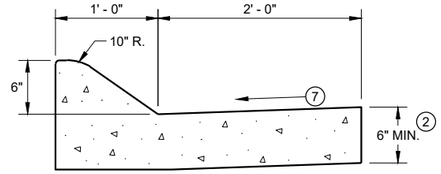
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

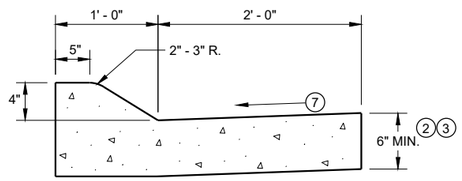


TYPES A (1) & D

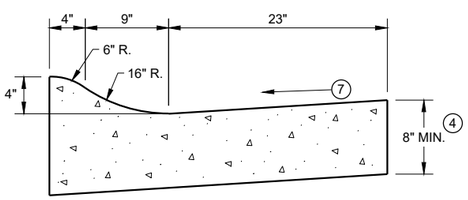
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A (1) & D



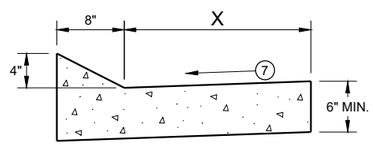
4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

CONCRETE CURB AND GUTTER 36"

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

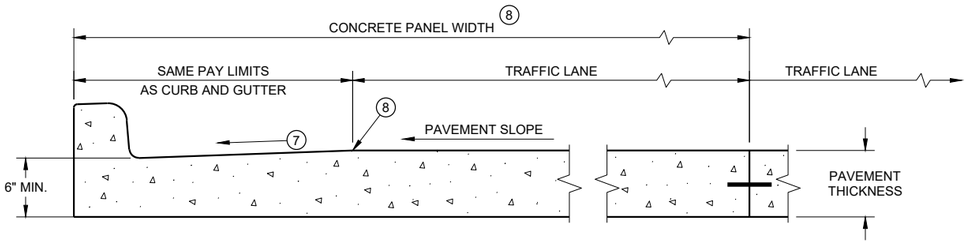


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

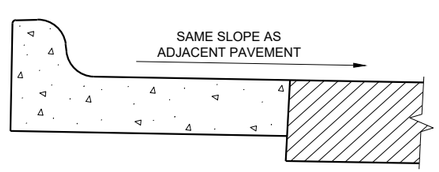
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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) 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.

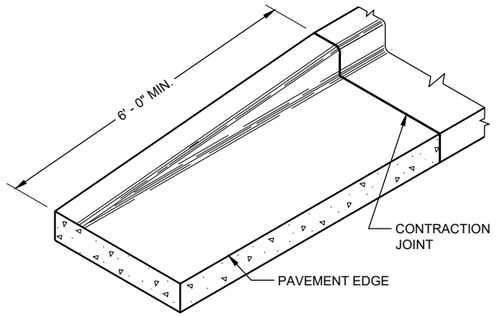
(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(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.

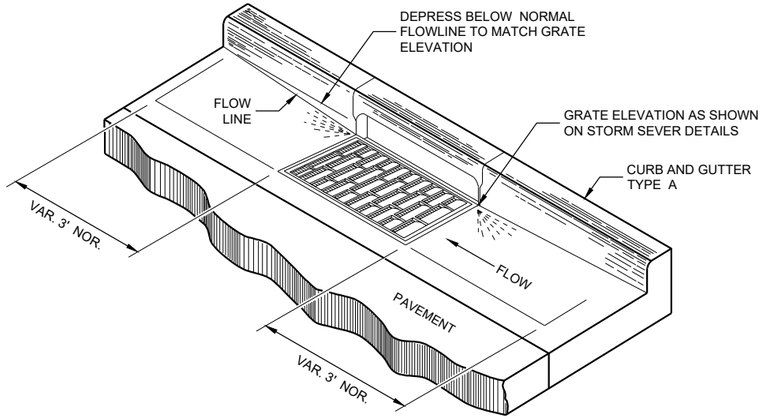
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D01 - 21a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

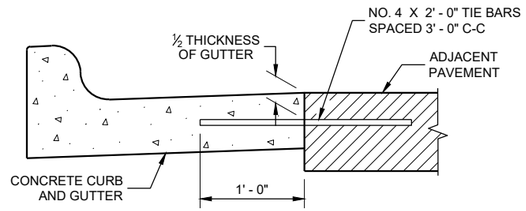
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

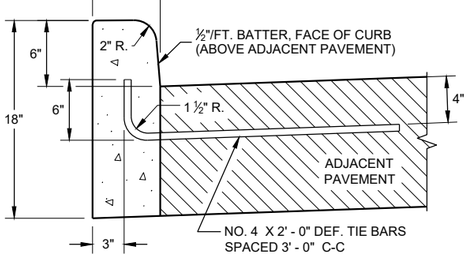
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

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

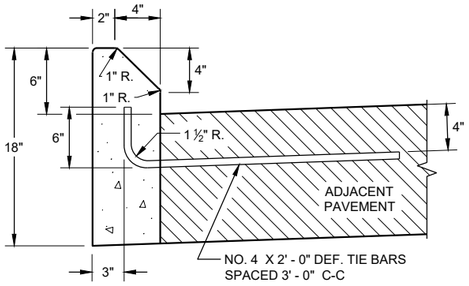
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

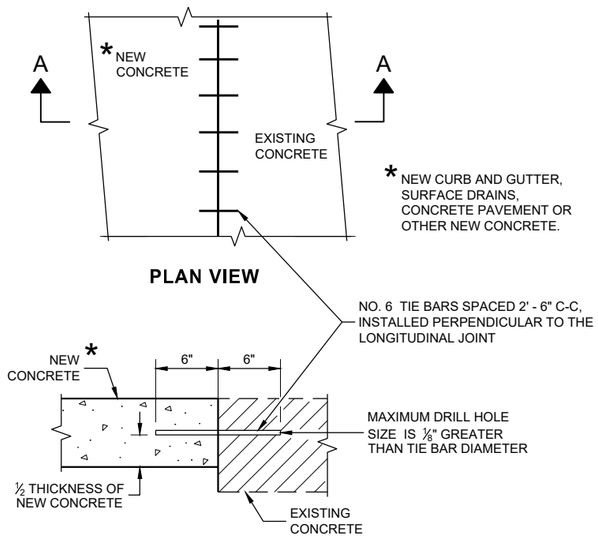


TYPES A (1) & D

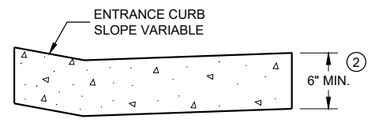


TYPES G (1) & J

CONCRETE CURB



TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

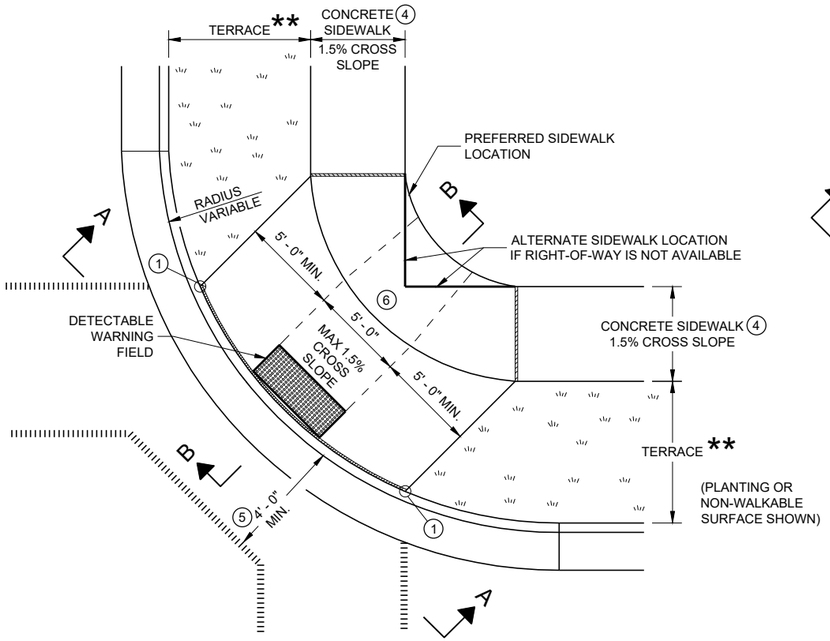
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

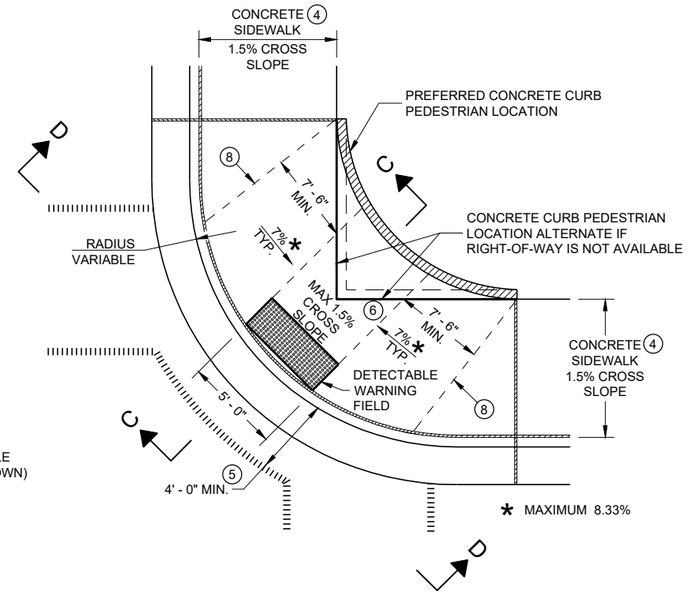
SDD08D01 - 21b



PLAN VIEW

CURB RAMP TYPE 1

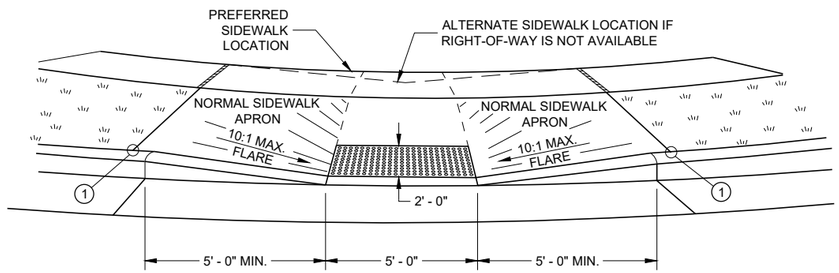
(CENTER OF CORNER RADIUS)



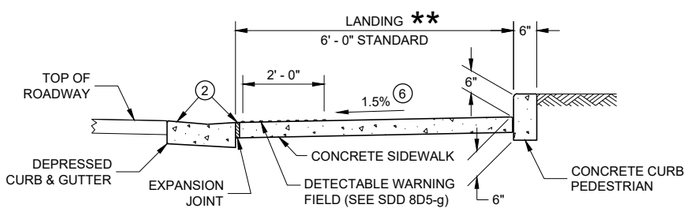
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

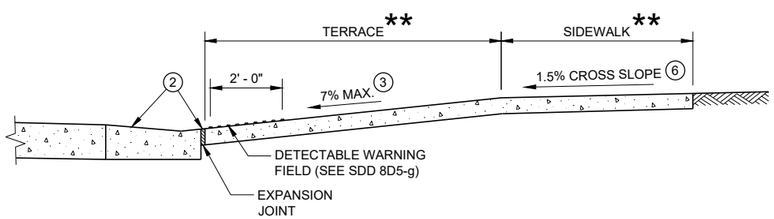


VIEW A - A FOR TYPE 1

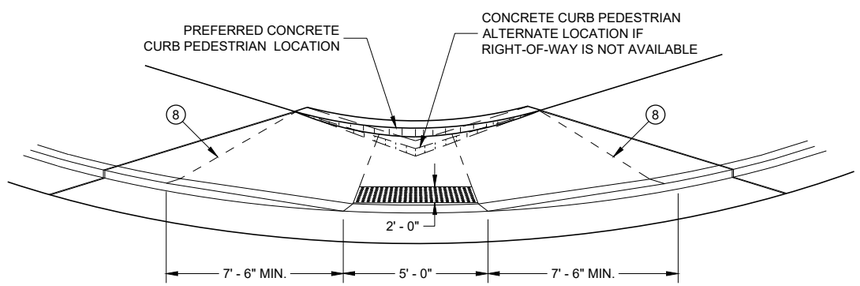


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

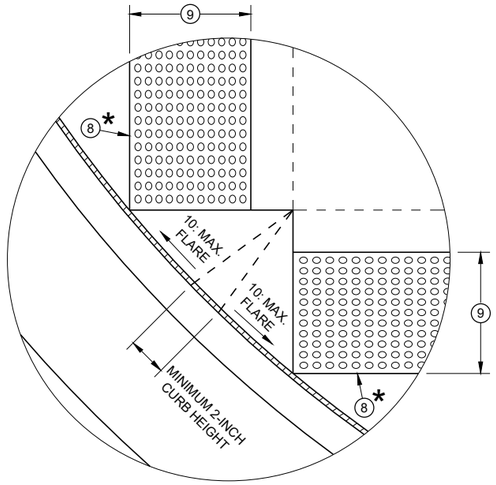
LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

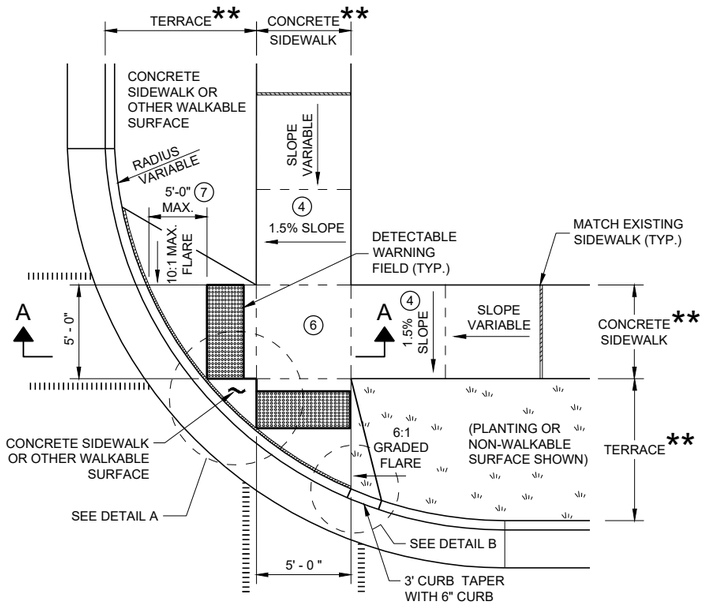
CURB RAMPS
TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D05 - 20a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

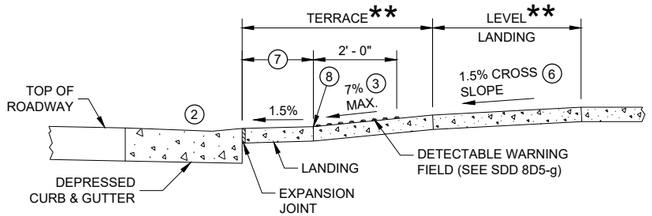
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

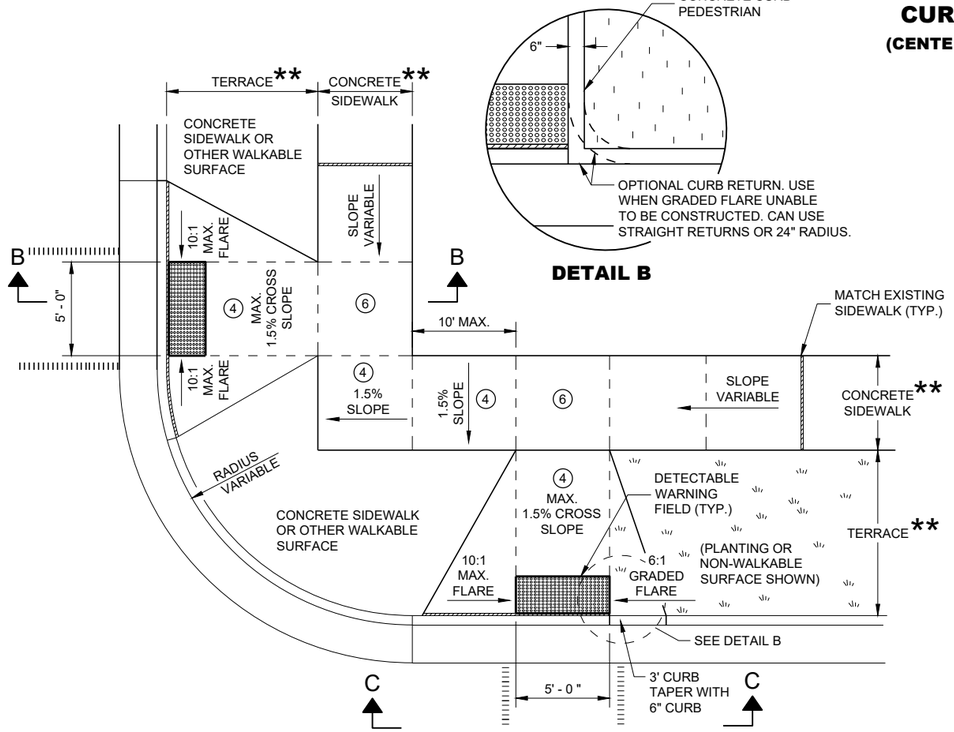
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

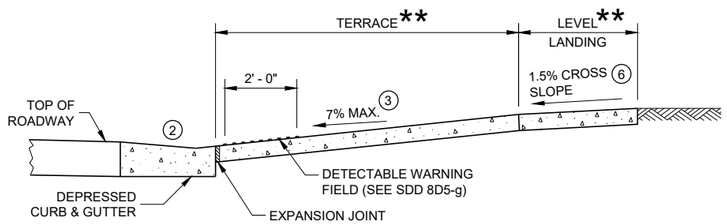
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

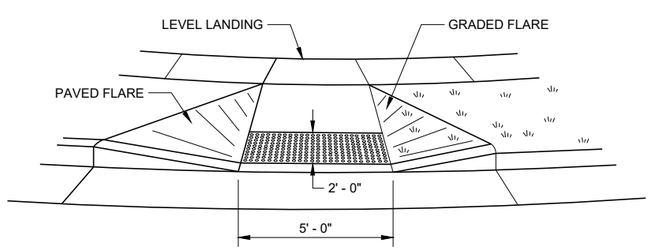


DETAIL B

PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 2 AND 3

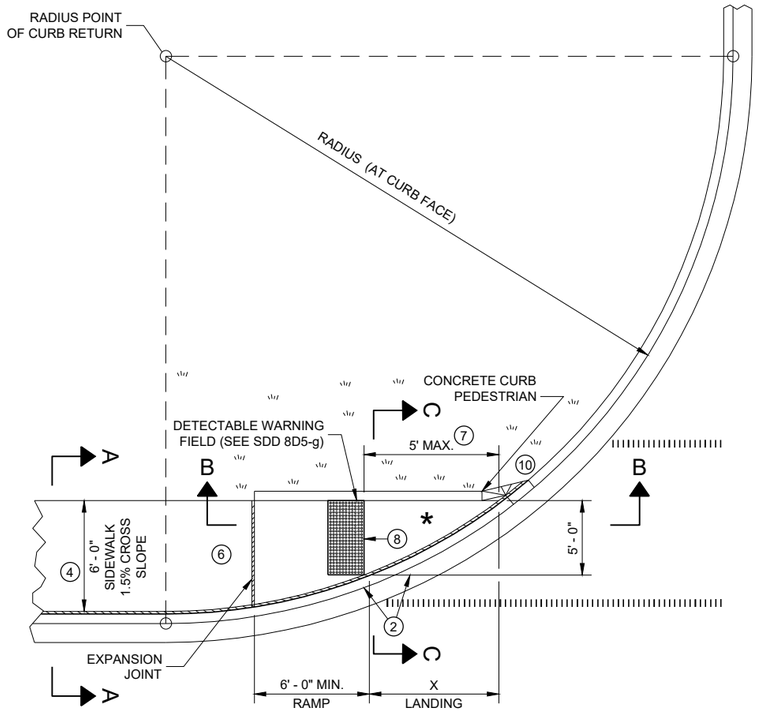
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

6

SDD 08D05 - 20b

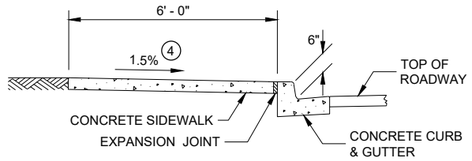


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

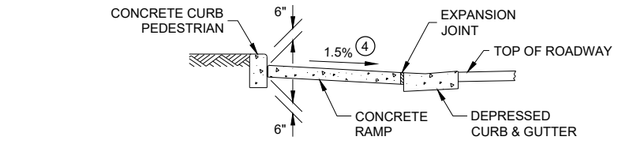
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

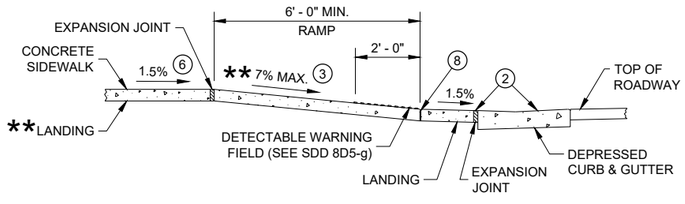
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



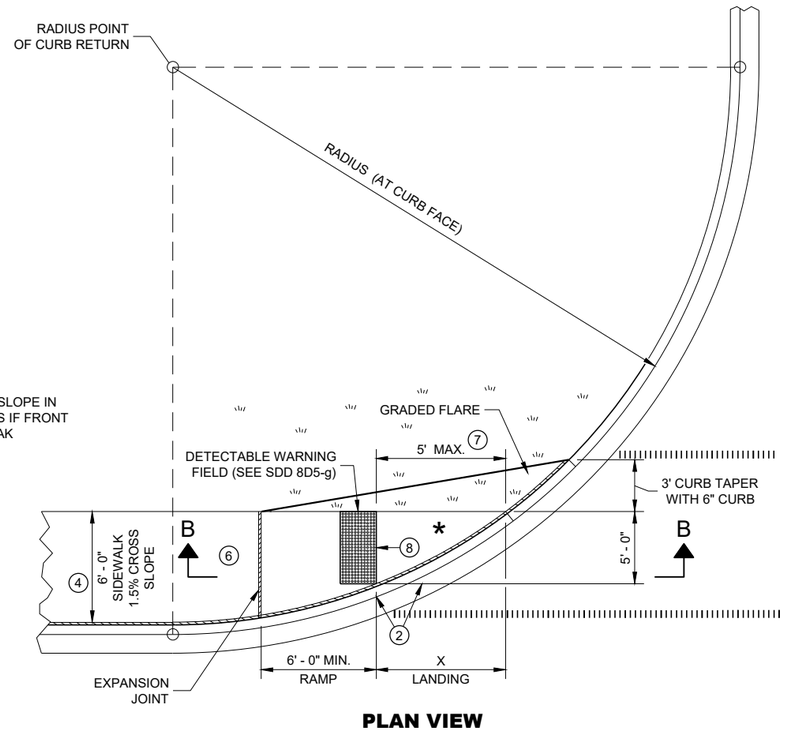
SECTION C - C FOR TYPE 4A



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

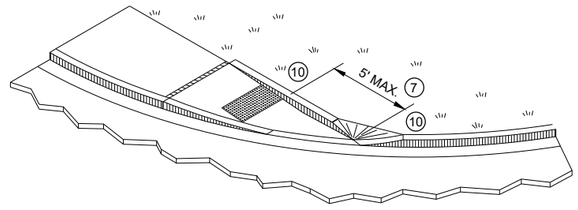
SECTION B - B FOR TYPE 4A AND TYPE 4A1

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

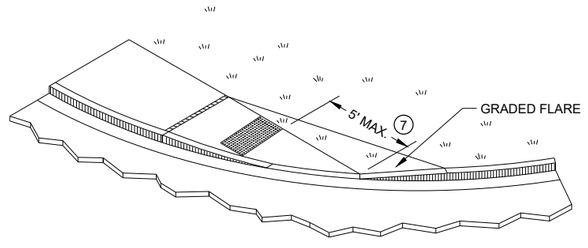


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



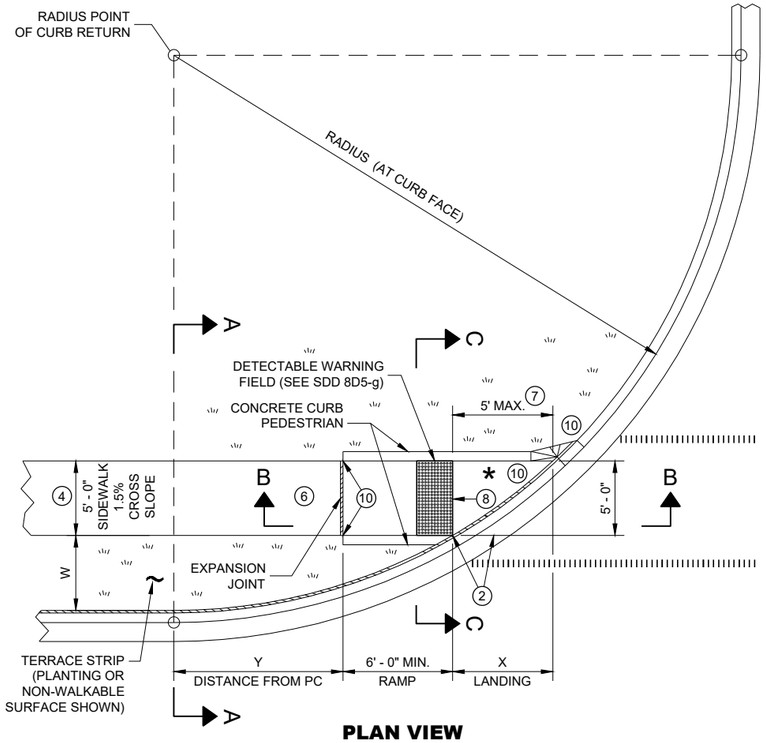
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20c

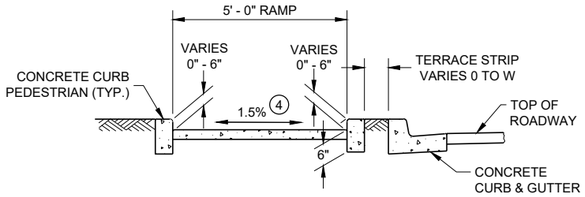


PLAN VIEW

CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET	5' - 9 ¾"	3' - 6 ½"	4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C - C FOR TYPE 4B

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

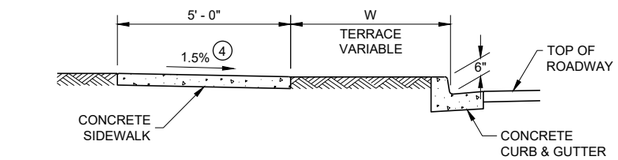
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

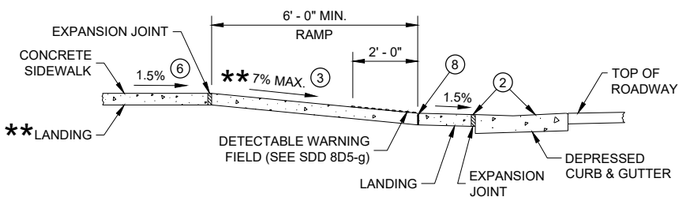
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



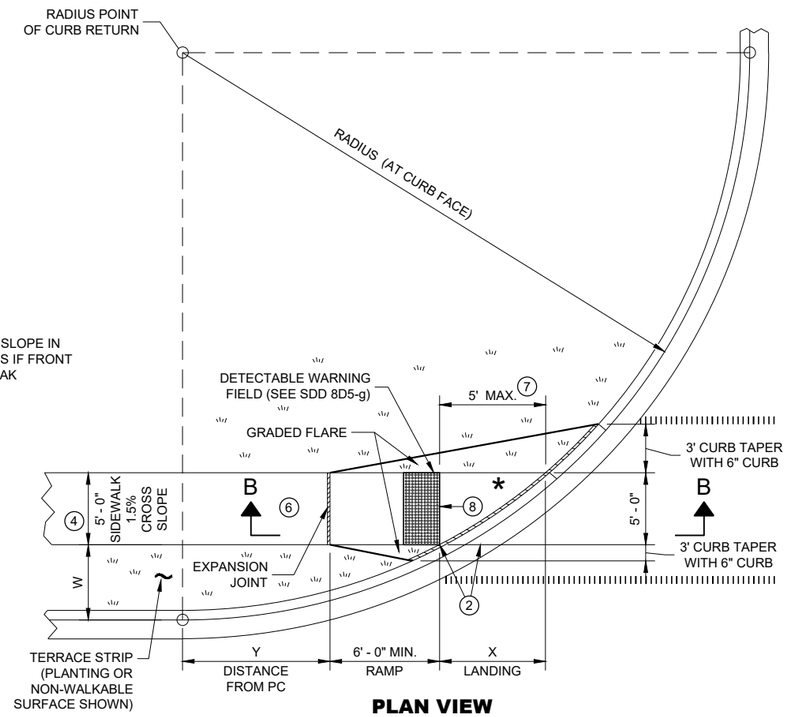
SECTION A - A FOR TYPE 4B



SECTION B - B FOR TYPE 4B AND TYPE 4B1

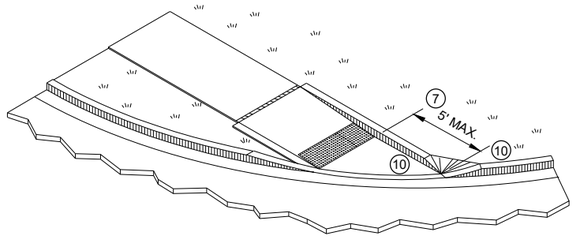
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

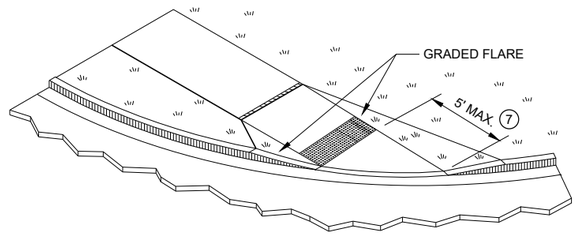


PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



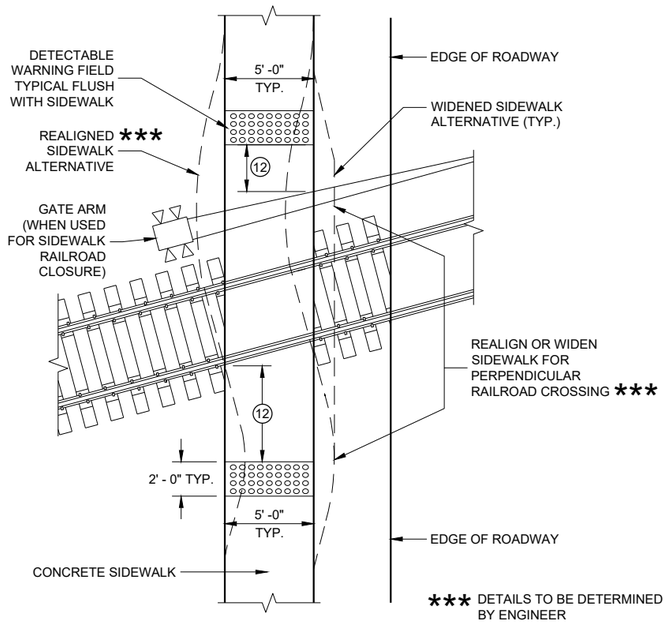
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

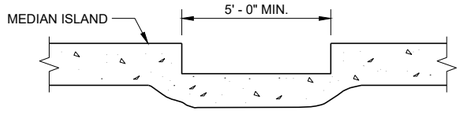
6

SDD 08D05 - 20d

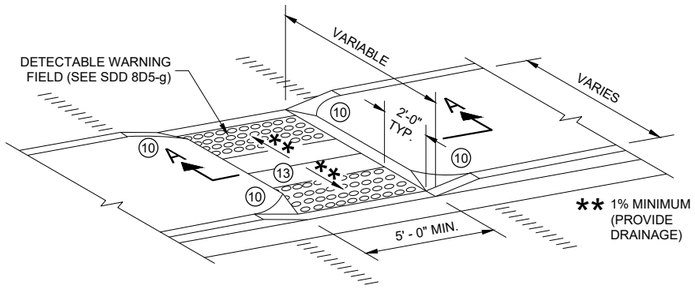


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

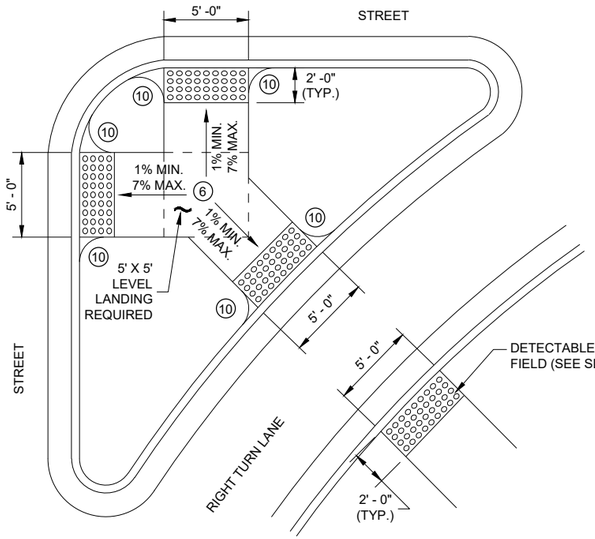
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

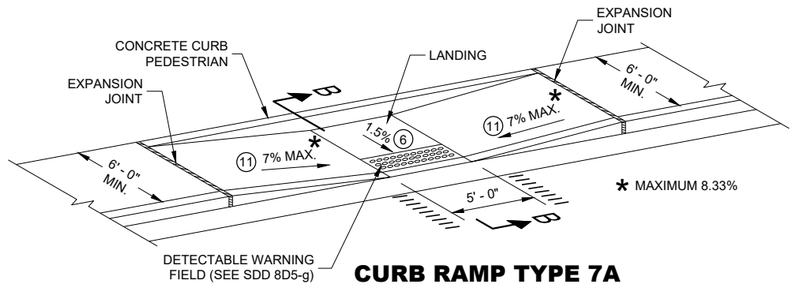
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

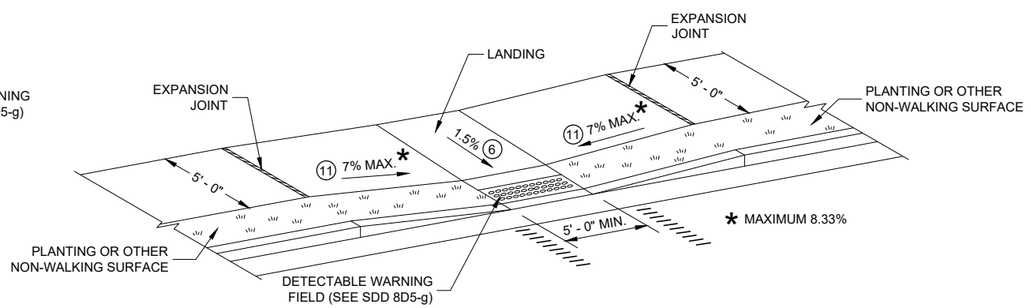
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 7A

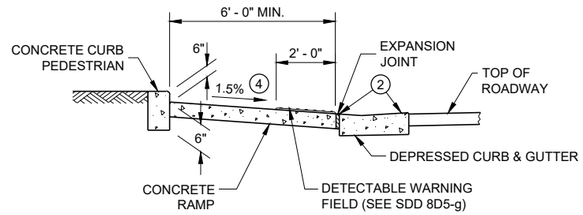
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.



SECTION B - B FOR TYPE 7A

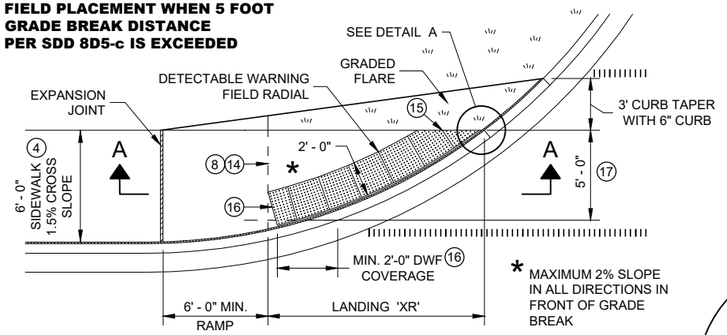
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20e

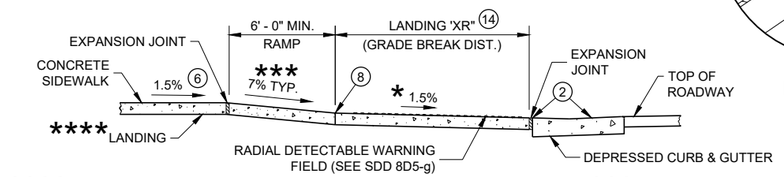
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



PLAN VIEW

CURB RAMP TYPE 4A1

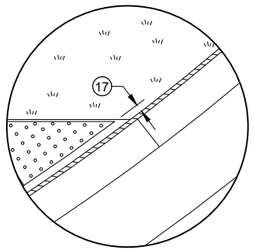
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1



DETAIL A

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

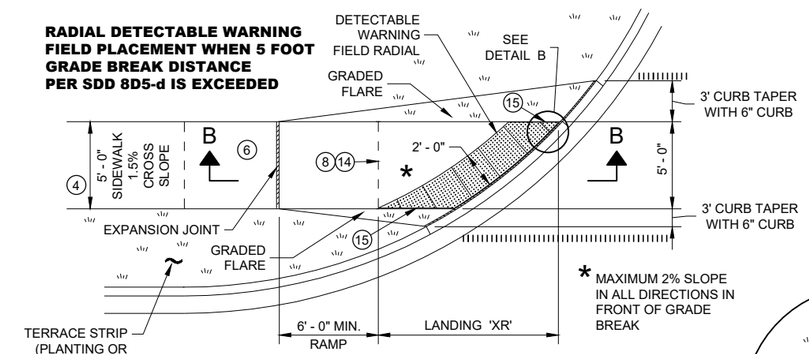
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

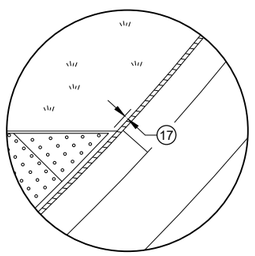
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



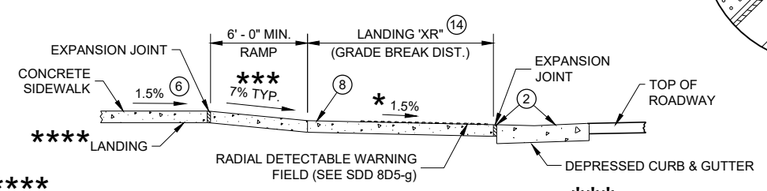
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

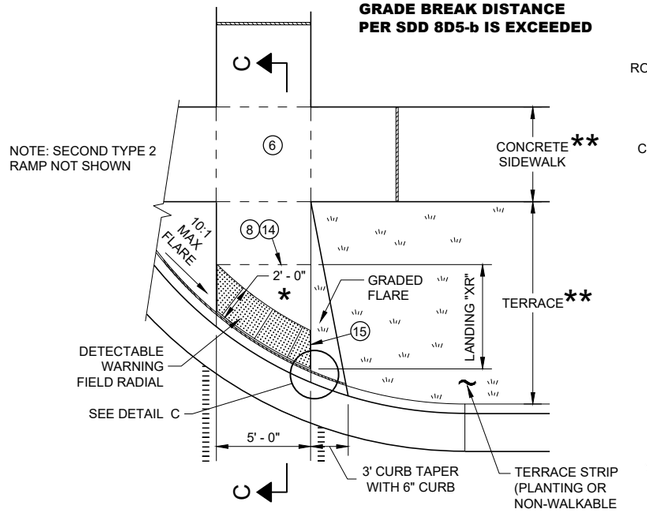


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

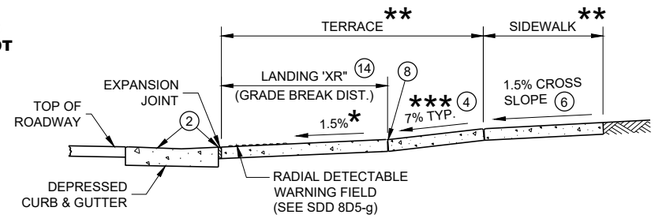


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

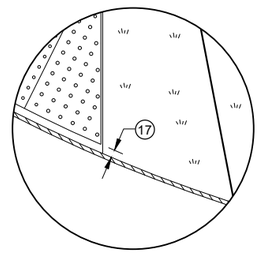


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

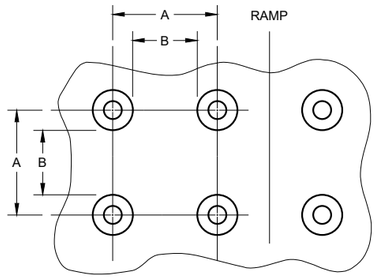
CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

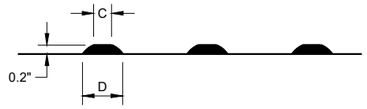
SDD 08D05 - 20f

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

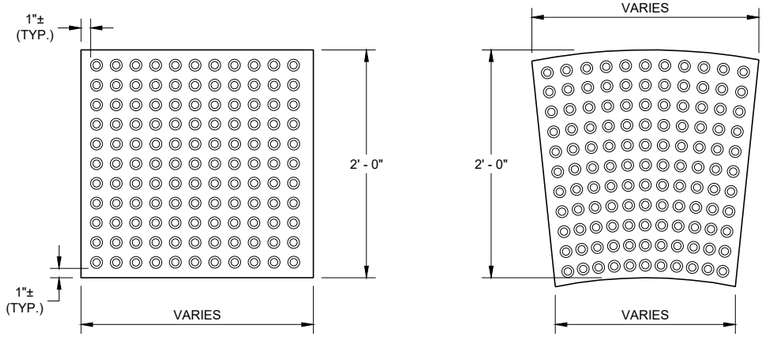


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

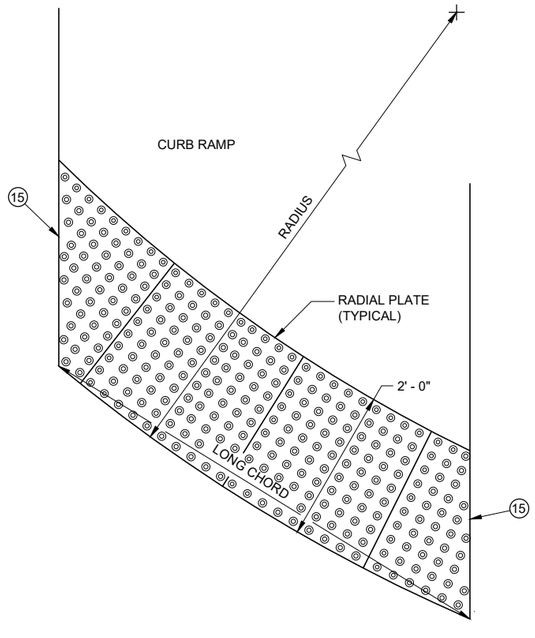
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

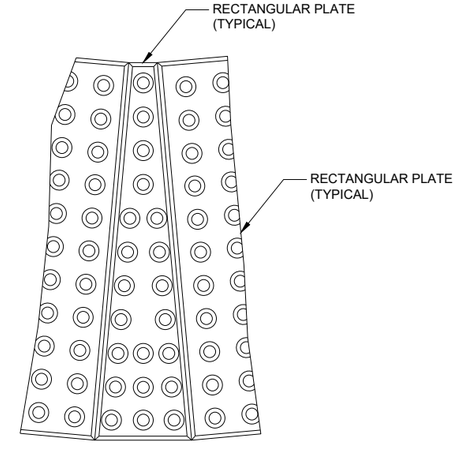
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

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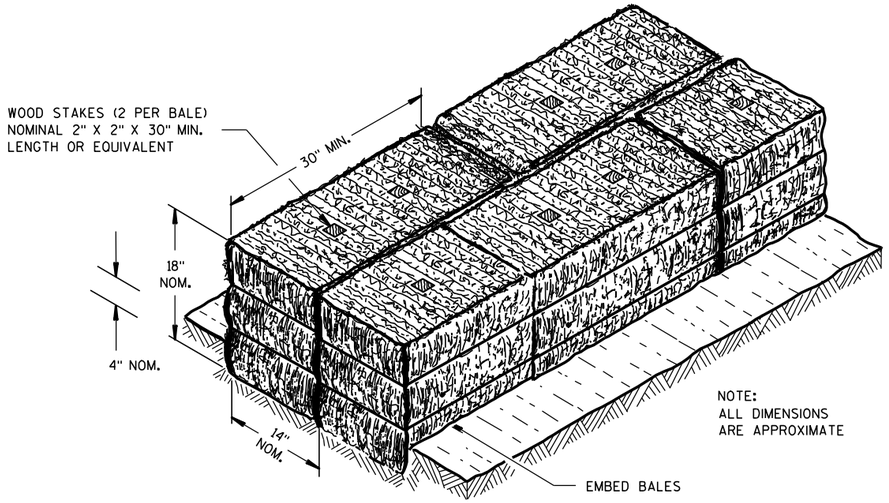
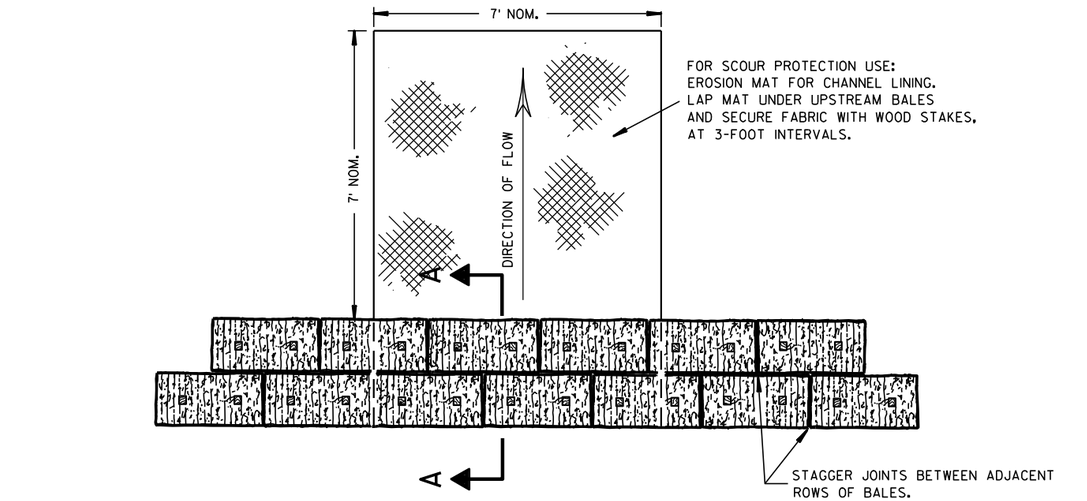
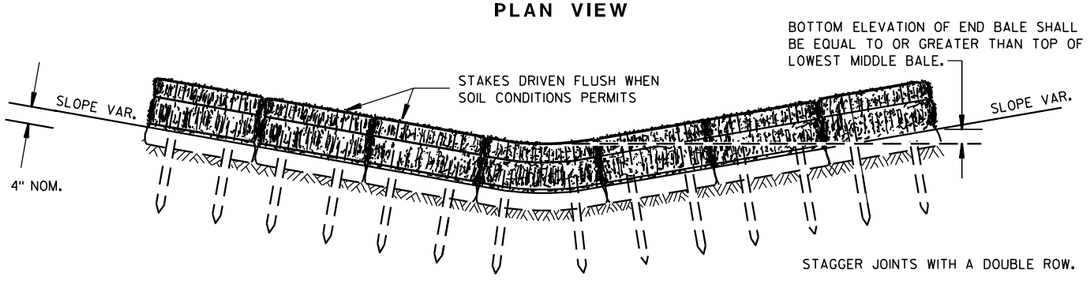
SDD 08D05 - 20g



SECTION A-A



PLAN VIEW



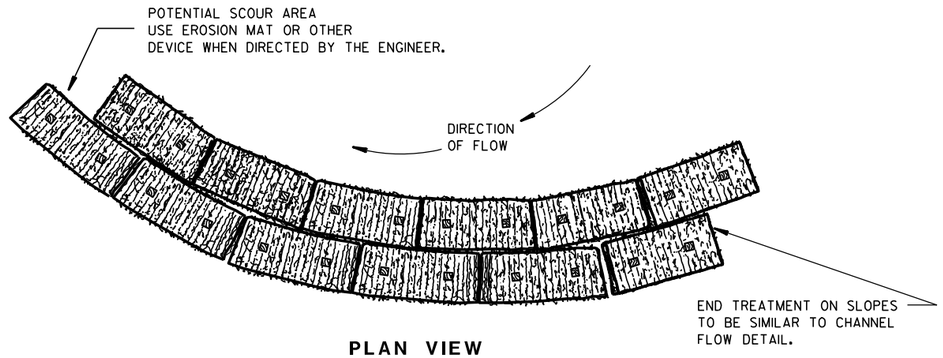
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

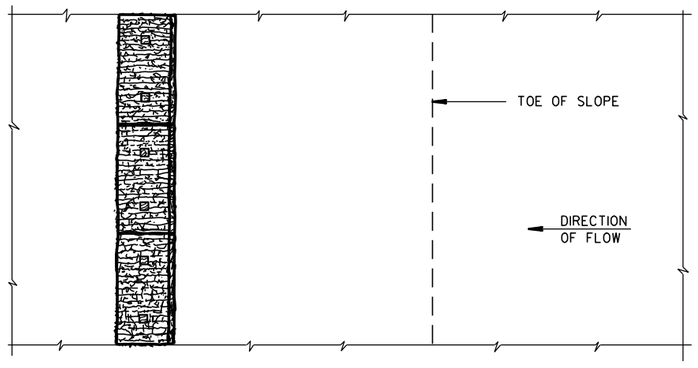
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

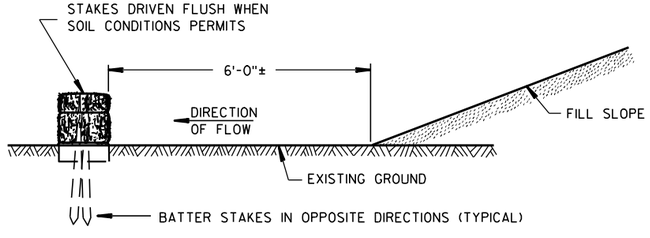


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

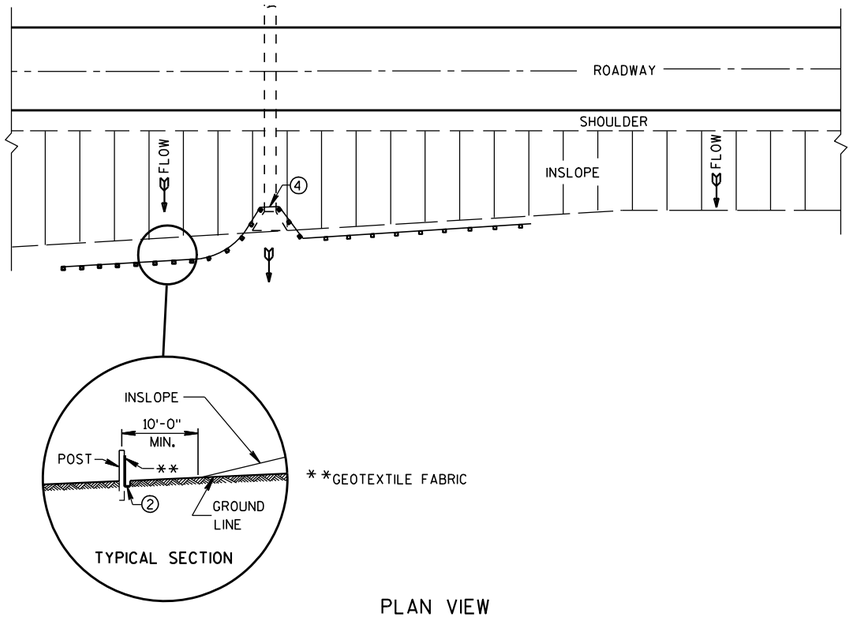
6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

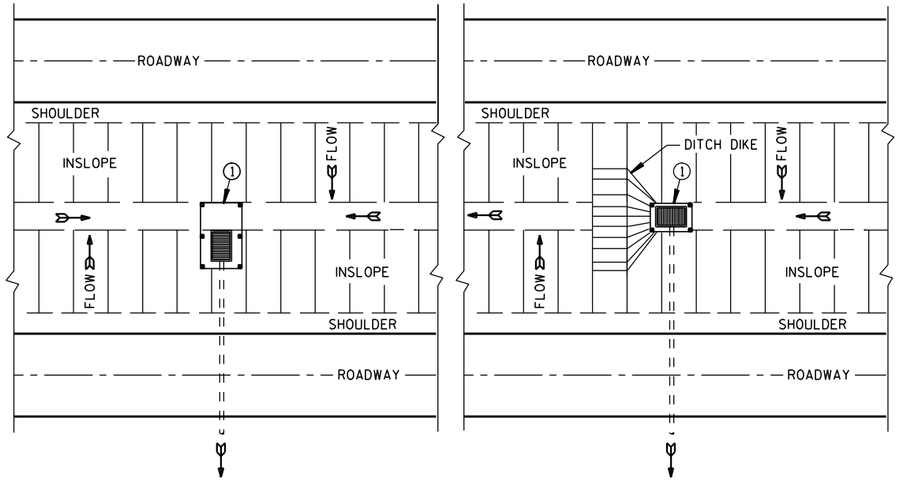
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



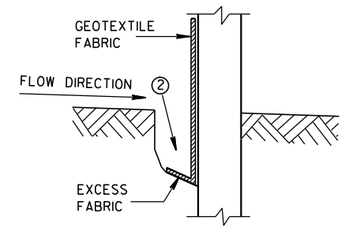
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

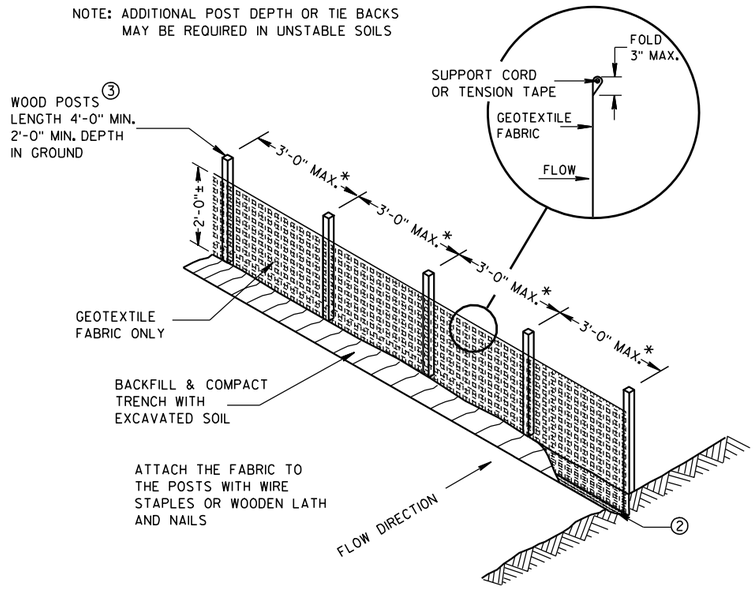
GENERAL NOTES

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

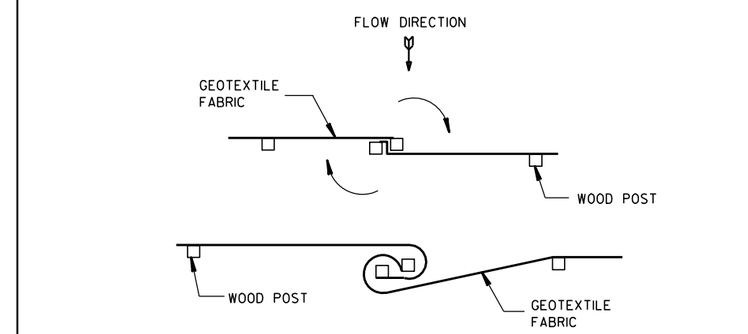
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



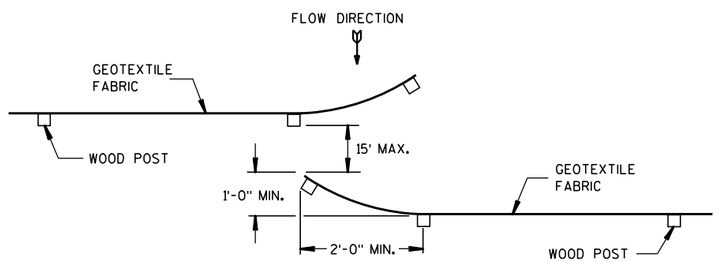
TRENCH DETAIL



SILT FENCE

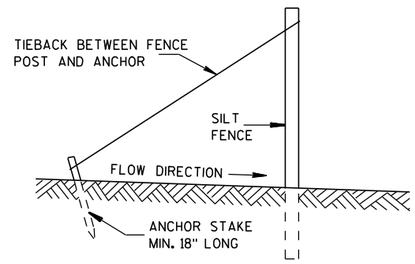


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

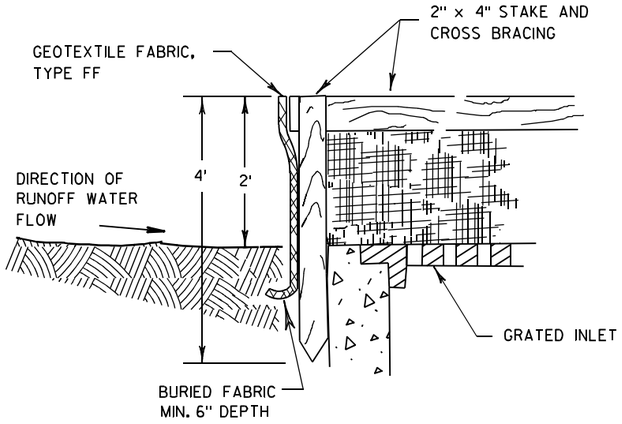
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

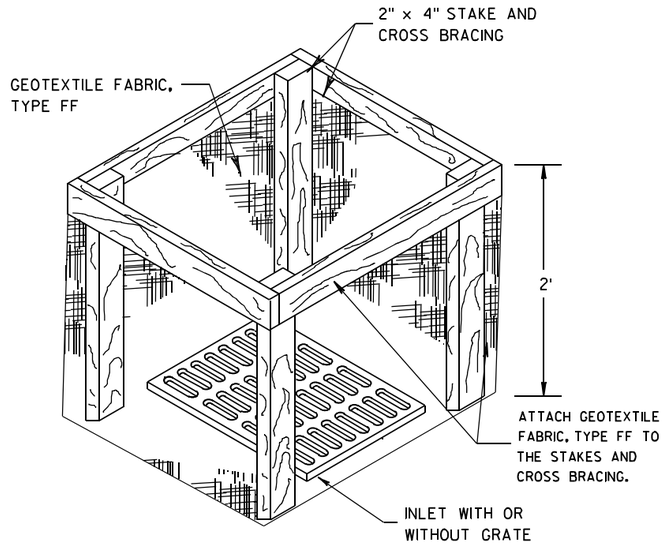
6

S.D.D. 8 E 9-6

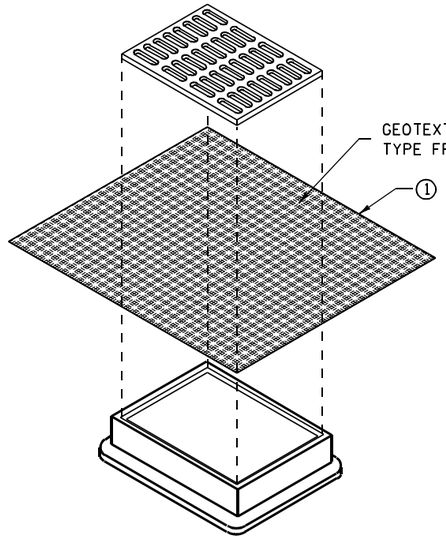
6

S.D.D. 8 E 9-6



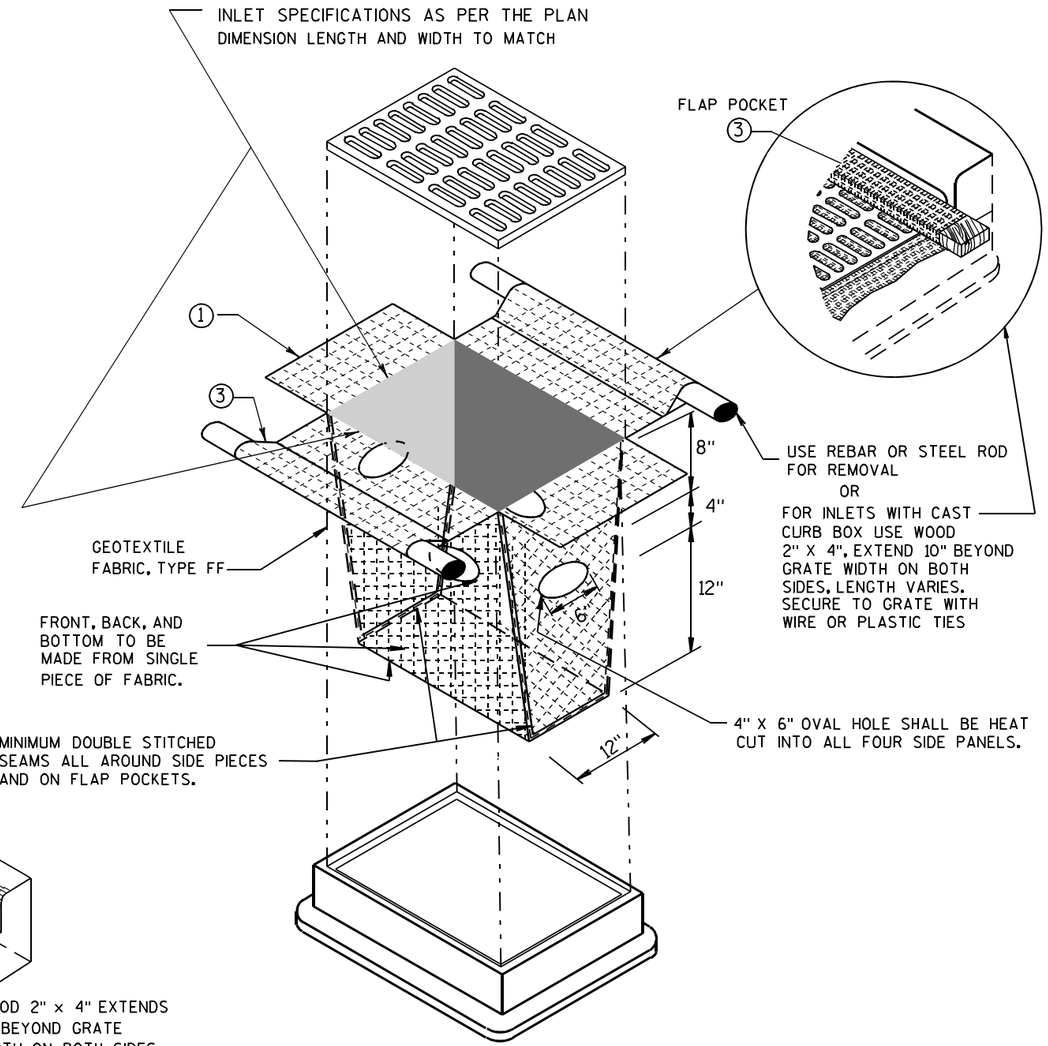


INLET PROTECTION, TYPE A



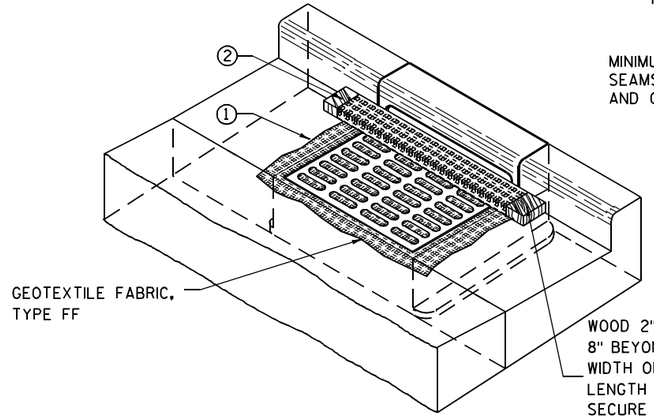
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

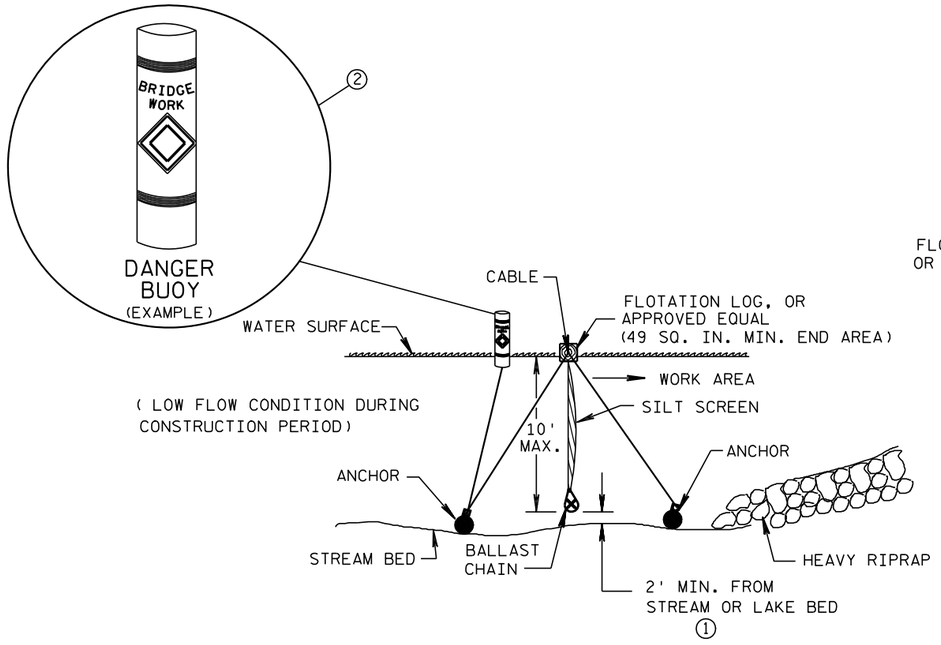
6
S.D.D. 8 E 10-2

GENERAL NOTES

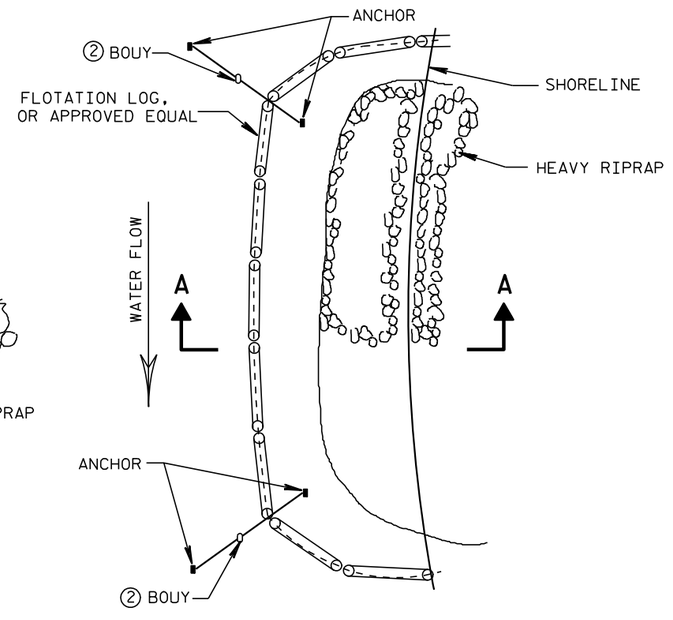
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① 2' MINIMUM SHALL BE MAINTAINED DURING CONSTRUCTION PERIOD.

② USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



SECTION A-A



PLAN VIEW

SILT SCREEN PLACEMENT DETAIL

SILT SCREEN
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 6/04/02 DATE — /S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER FHWA

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S.D.D. 8 E 12-1

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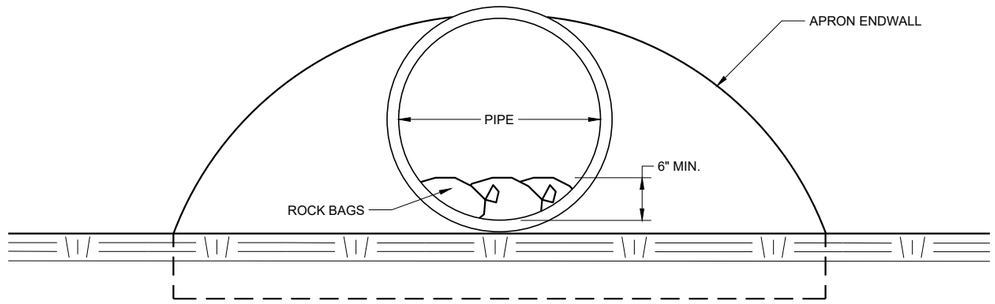
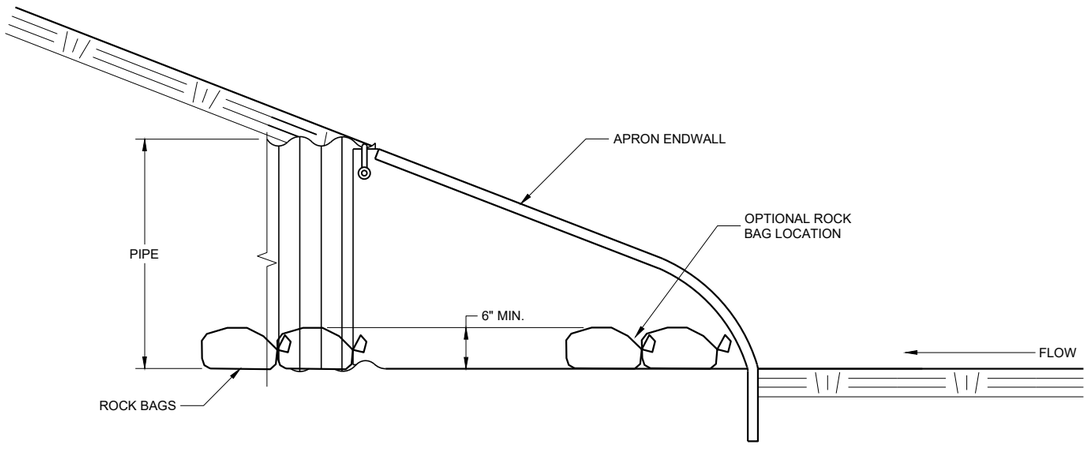
S.D.D. 8 E 12-1



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

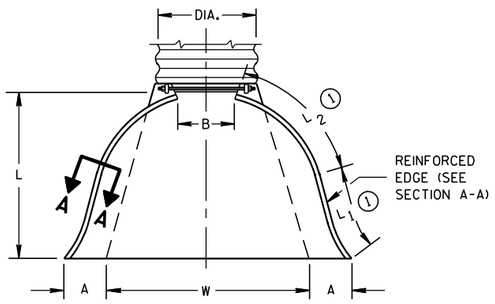
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

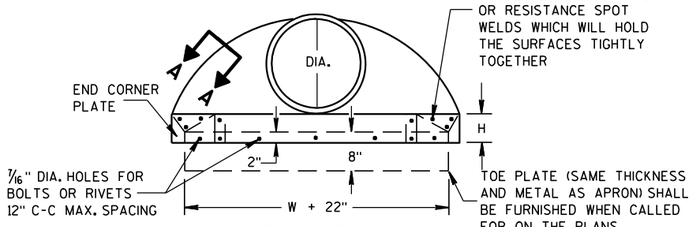
REINFORCED CONCRETE APRON ENDWALLS

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

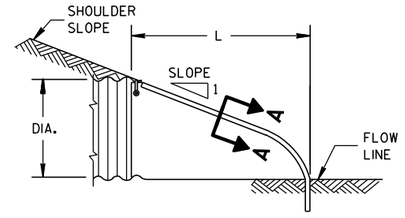
*MINIMUM
**MAXIMUM



PLAN VIEW

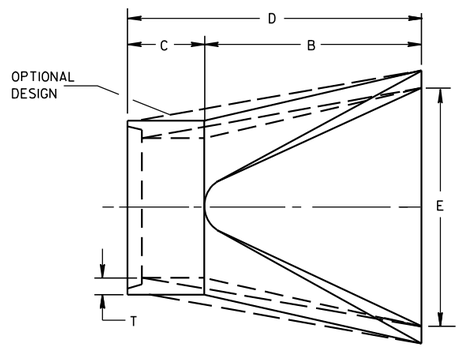


END VIEW

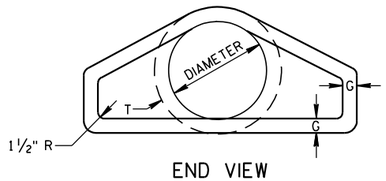


SIDE ELEVATION

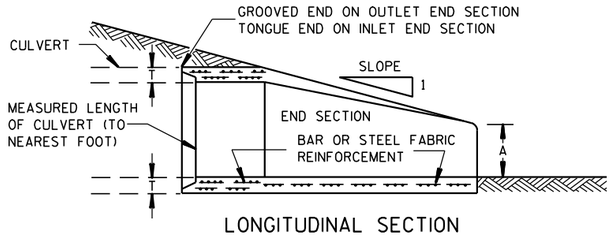
METAL ENDWALLS



PLAN

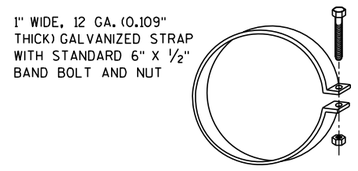


END VIEW



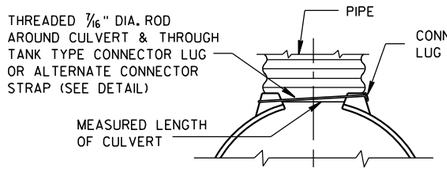
LONGITUDINAL SECTION

CONCRETE ENDWALLS

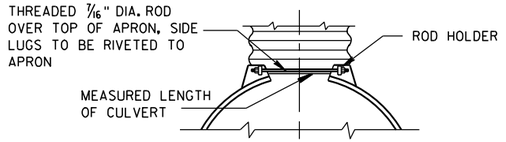


ALTERNATE FOR TYPE 1 CONNECTION

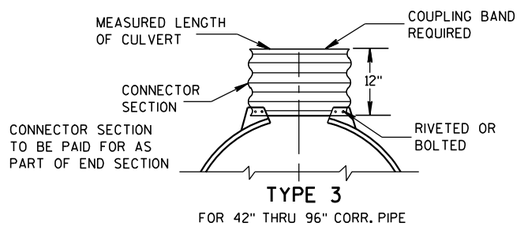
END SECTION CONNECTOR STRAP



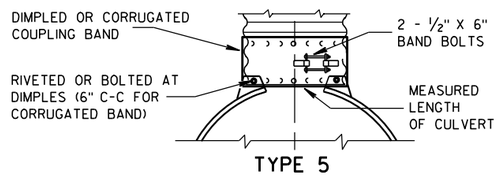
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

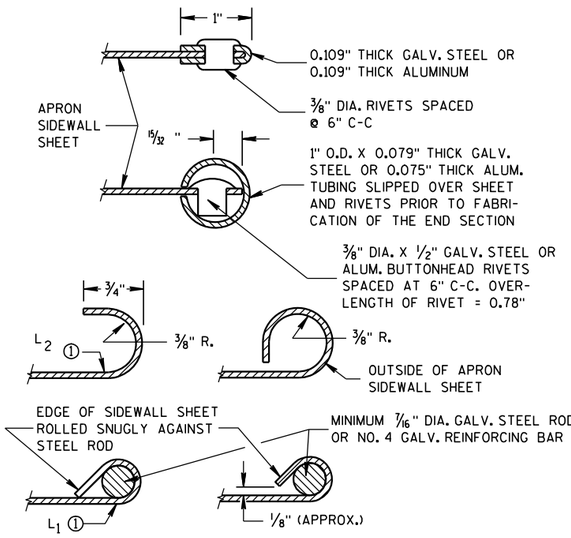
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

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

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 8 F 1-11

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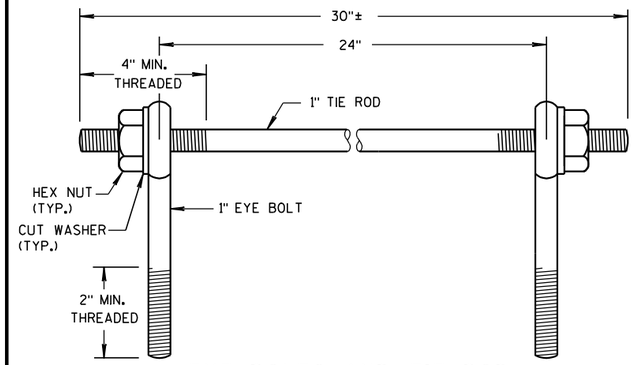
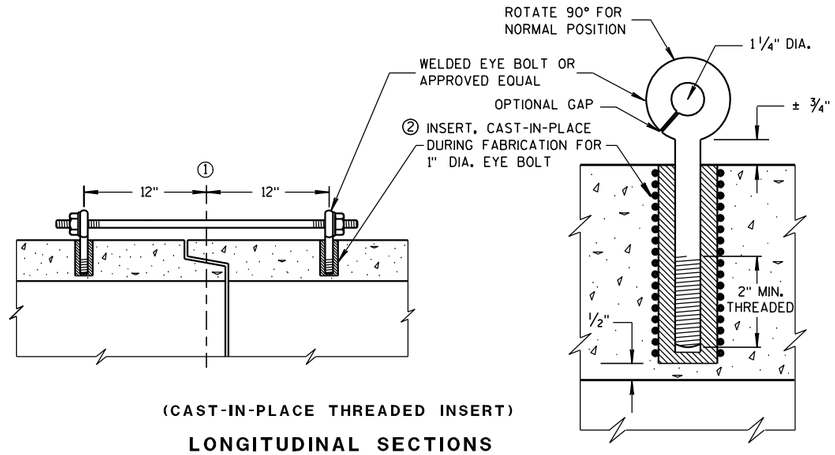
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

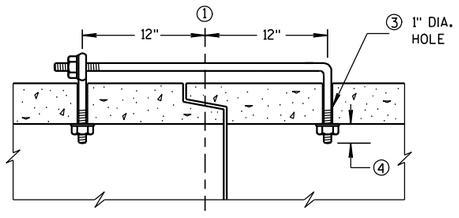
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

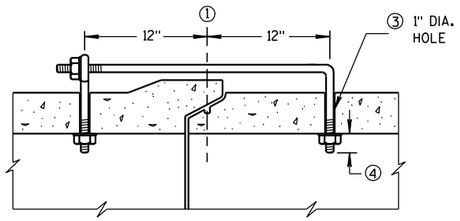
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

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



(TONGUE & GROOVE PIPE)

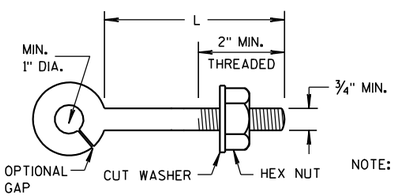


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

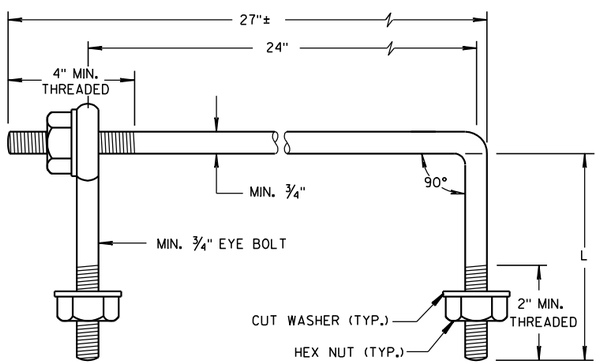
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

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



EYE BOLT AND TIE ROD

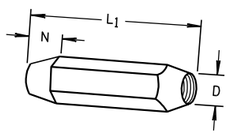
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

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

DIMENSIONS SHOWN ARE IN INCHES



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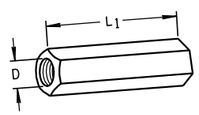
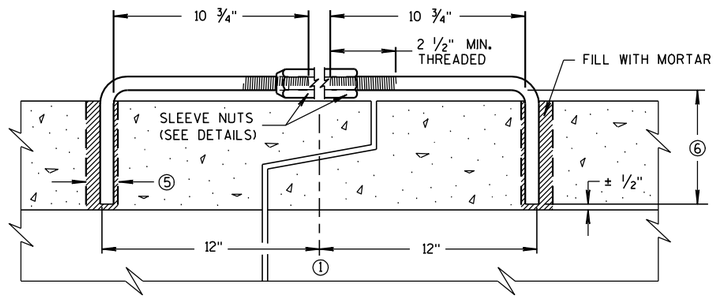


PLAIN

RIGHT AND LEFT THREADS

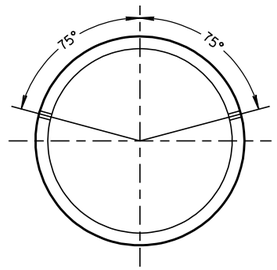
SLEEVE NUTS



LONGITUDINAL SECTION

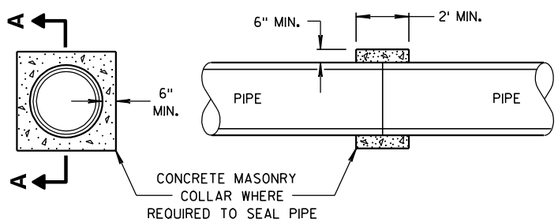
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 8 F 4-7

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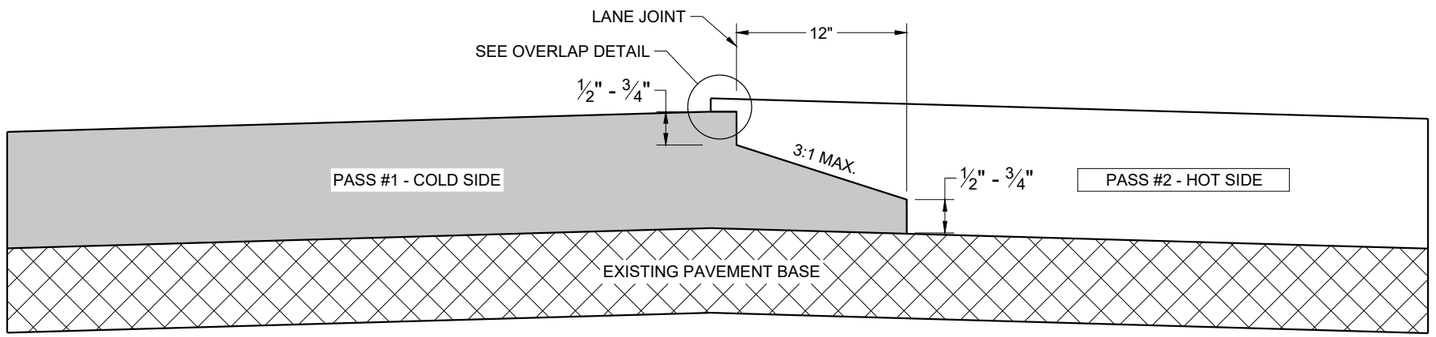
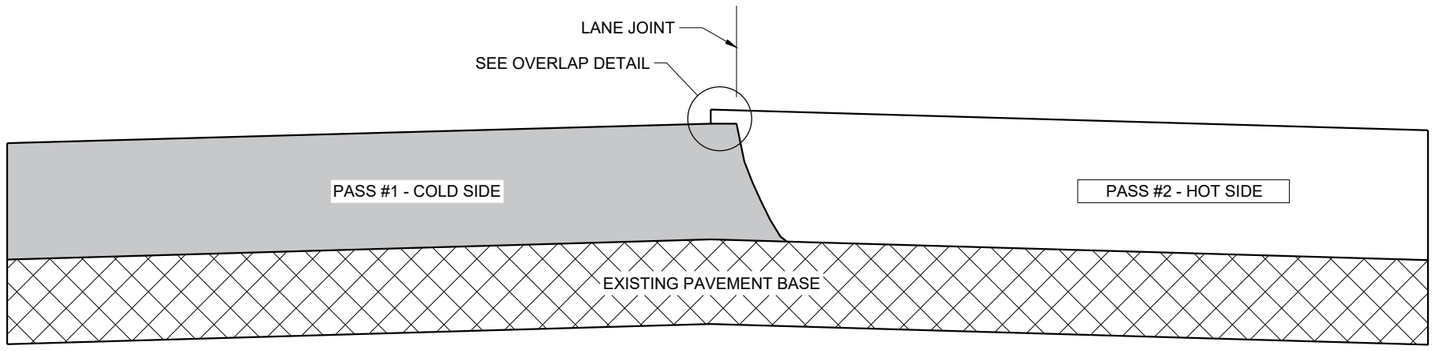
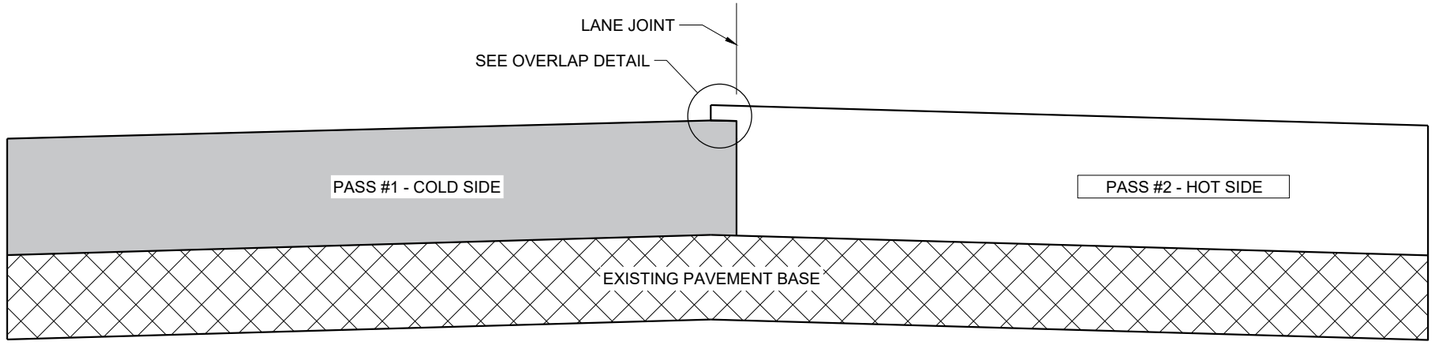
S.D.D. 8 F 4-7



TYPICAL PAVEMENT CROSS SECTION
OF NOTCHED WEDGE LONGITUDINAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL LONGITUDINAL JOINT



TYPICAL PAVEMENT CROSS SECTION
OF MILLED LONGITUDINAL JOINT

GENERAL NOTES

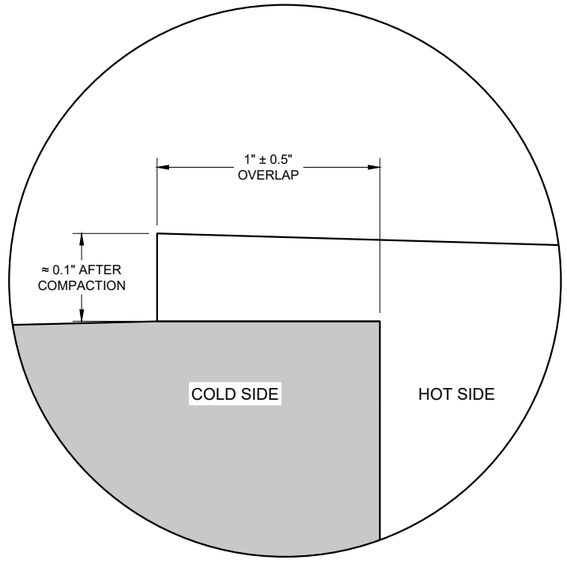
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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.

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

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

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



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 02

SDD 13C19 - 02

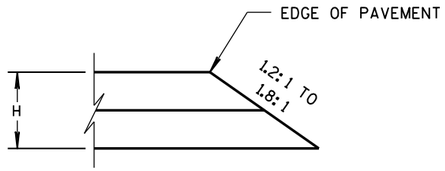
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

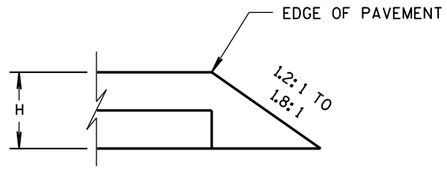
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



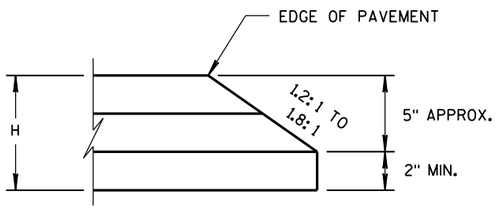
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



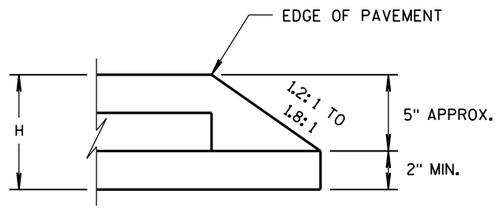
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

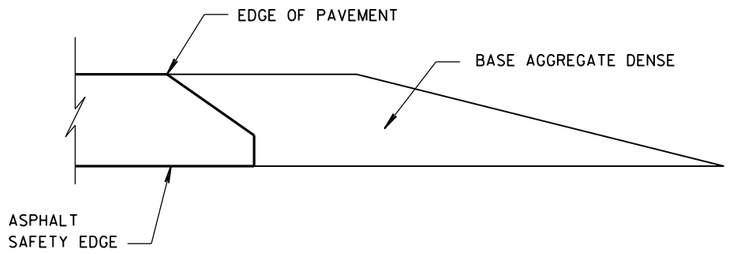
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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

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

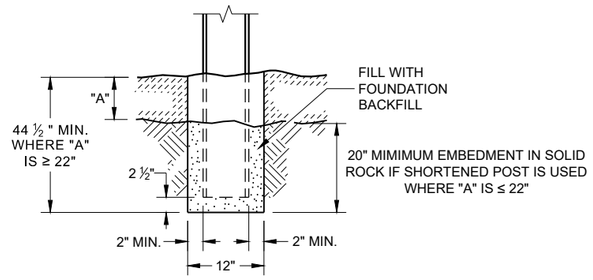
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

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

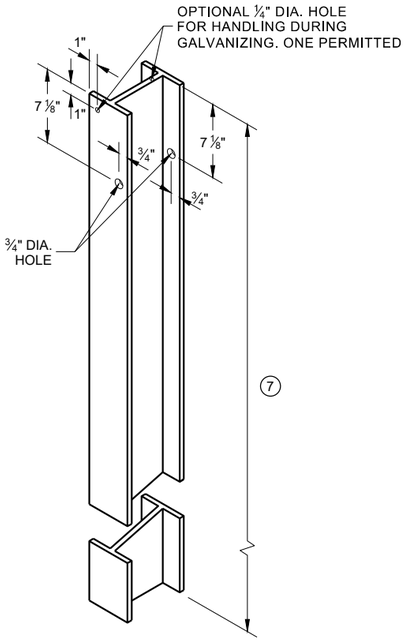
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS +1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

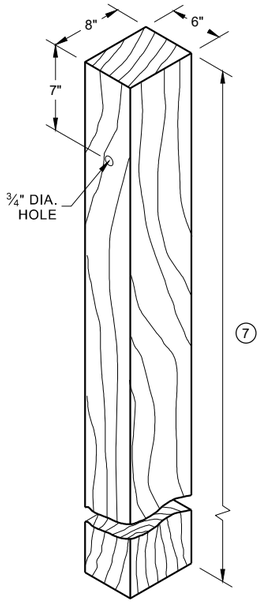
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



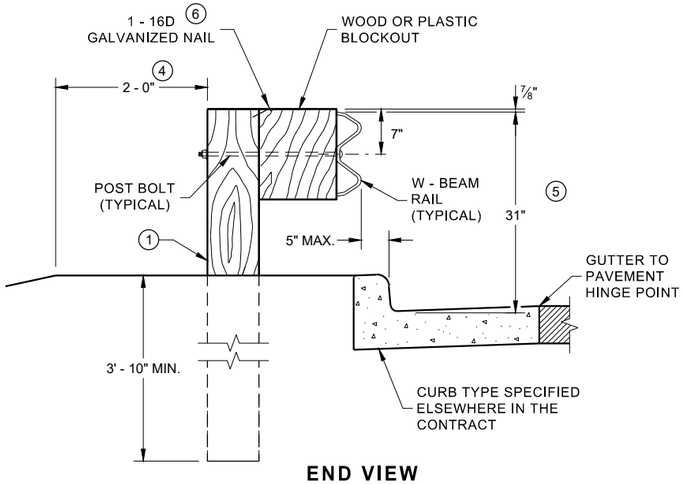
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



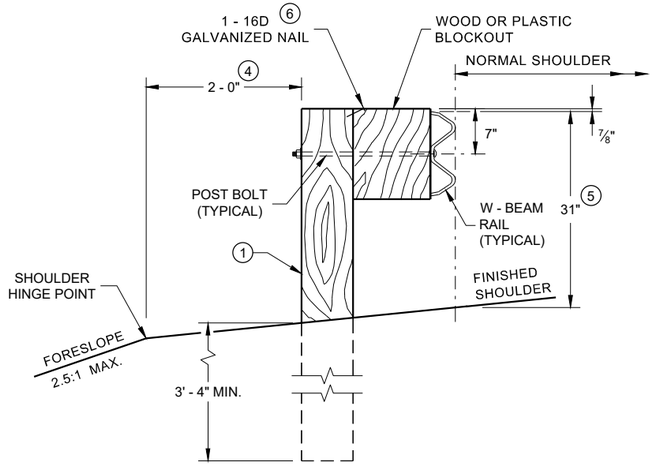
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



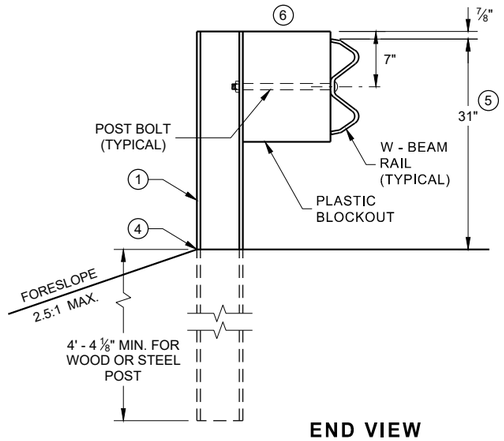
WOOD POST (6" X 8") NOMINAL (1)



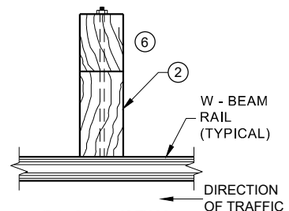
END VIEW
LOCATED ALONG A CURBED ROADWAY



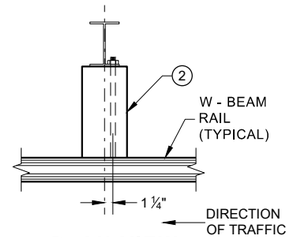
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



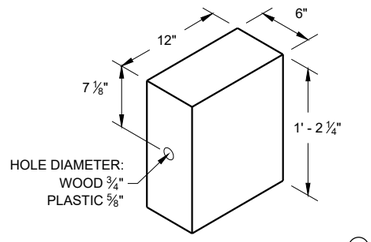
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

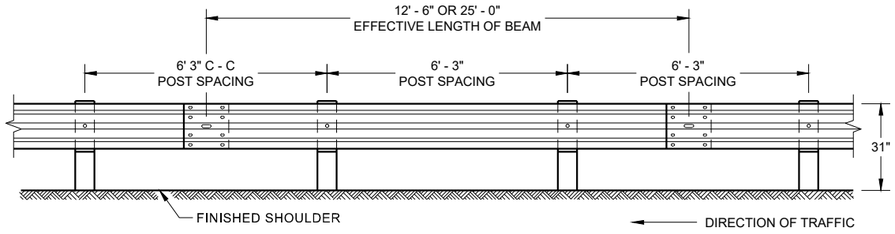
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

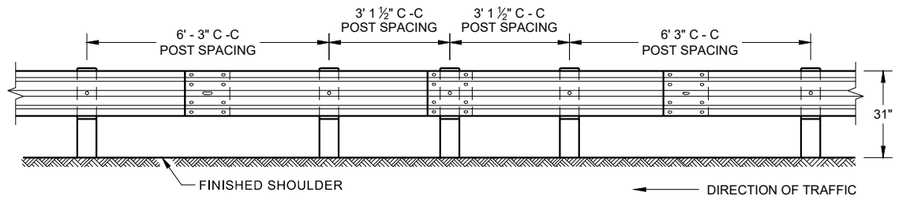
SDD 14B42 - 06a

6

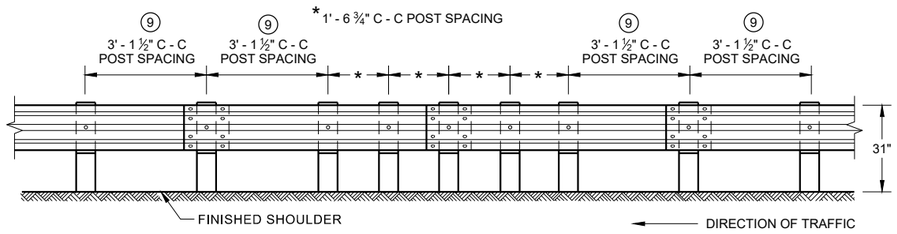
SDD 14B42 - 06a



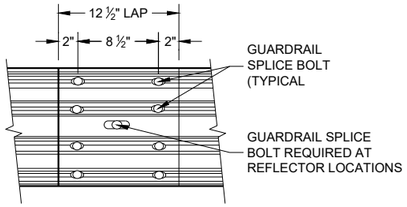
FRONT VIEW
POST SPACING STANDARD INSTALLATION



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



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

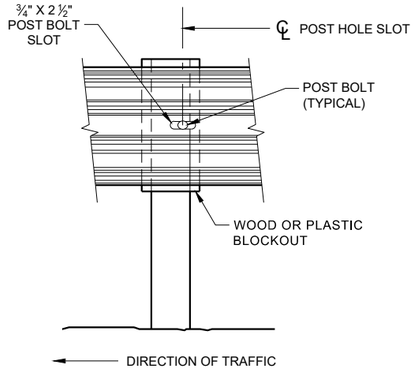
GENERAL NOTES

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

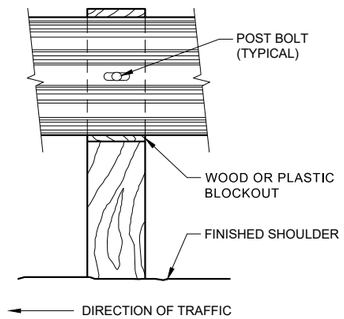
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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

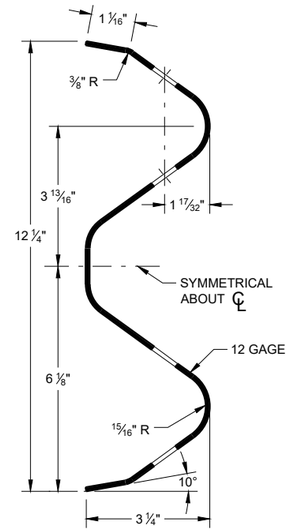
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



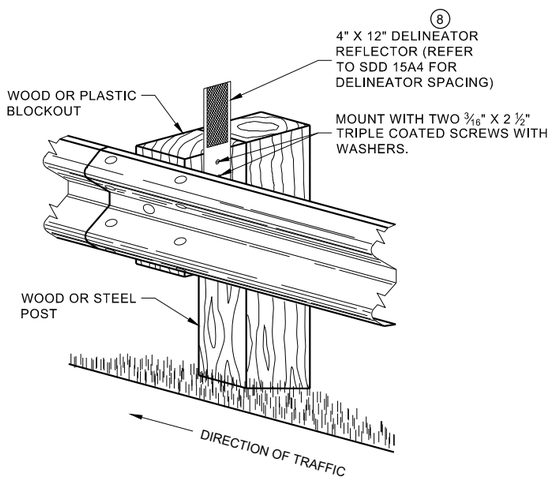
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL

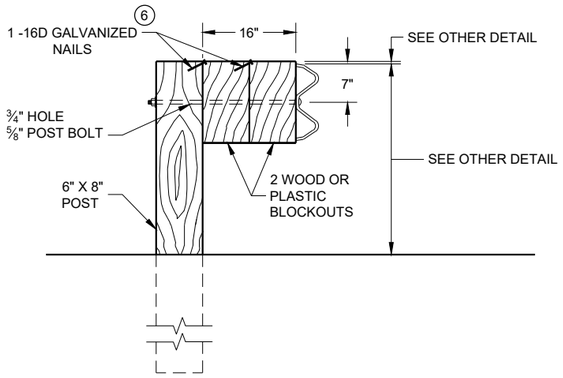


ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B42 - 06b

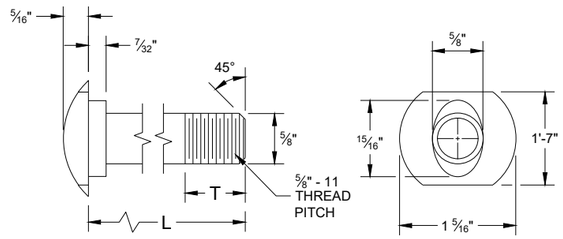


DETAIL FOR 16" BLOCKOUT DEPTH

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

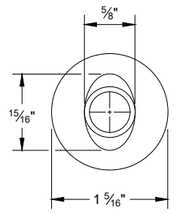
NOTE:

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

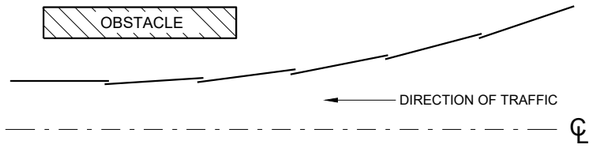


POST BOLT TABLE

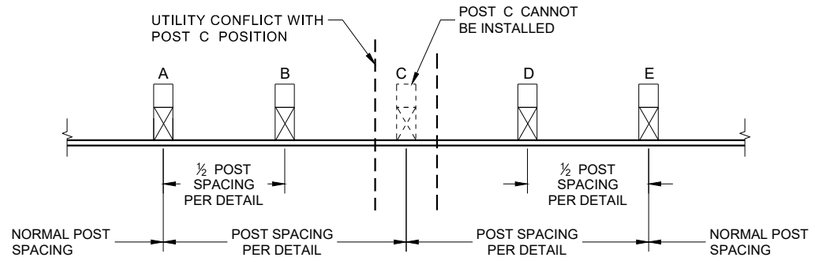
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



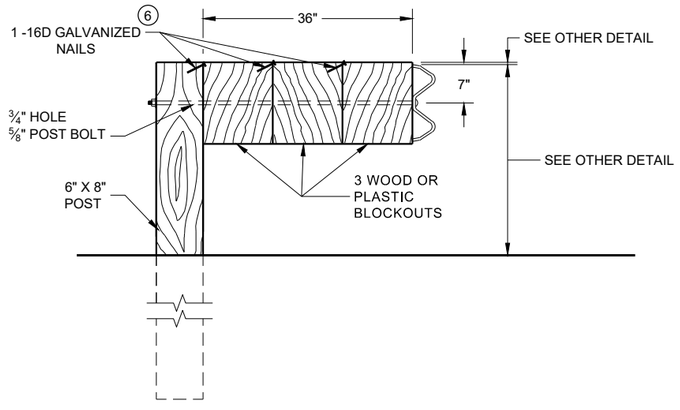
ALTERNATE BOLT HEAD



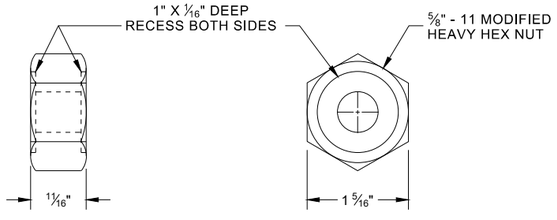
PLAN VIEW
BEAM LAPPING DETAIL



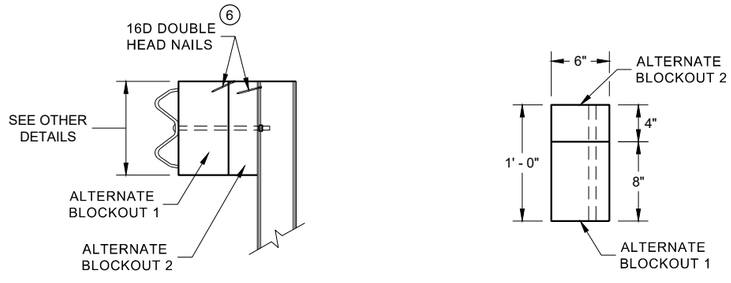
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW

PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

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

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

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

6

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 06c

GENERAL NOTES

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

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

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

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

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

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

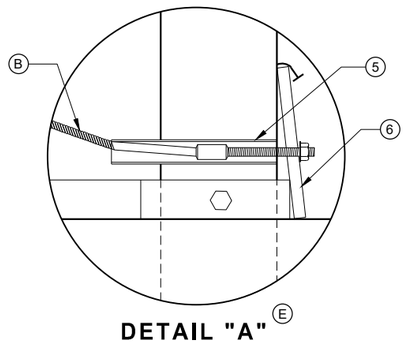
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

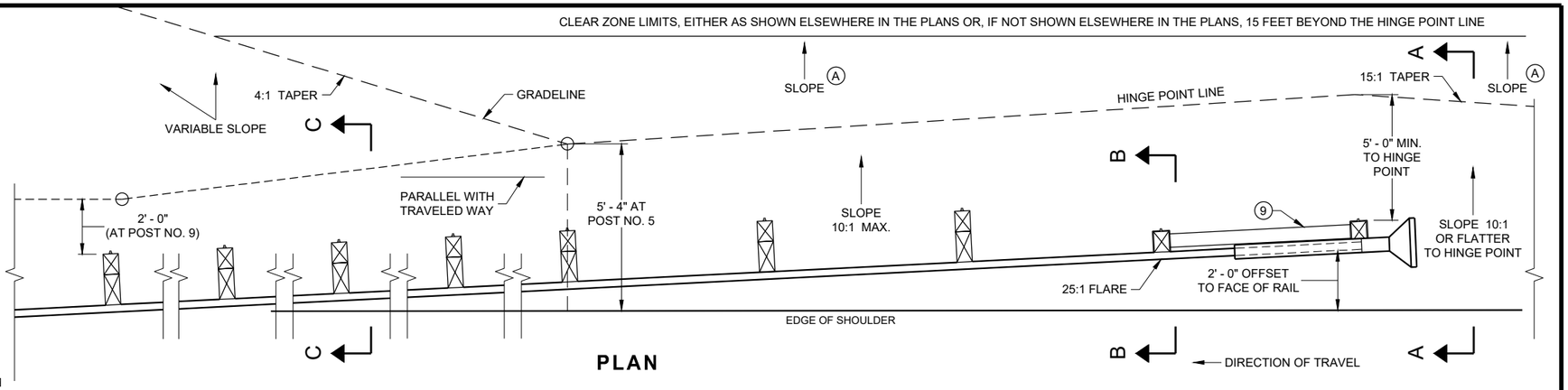
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

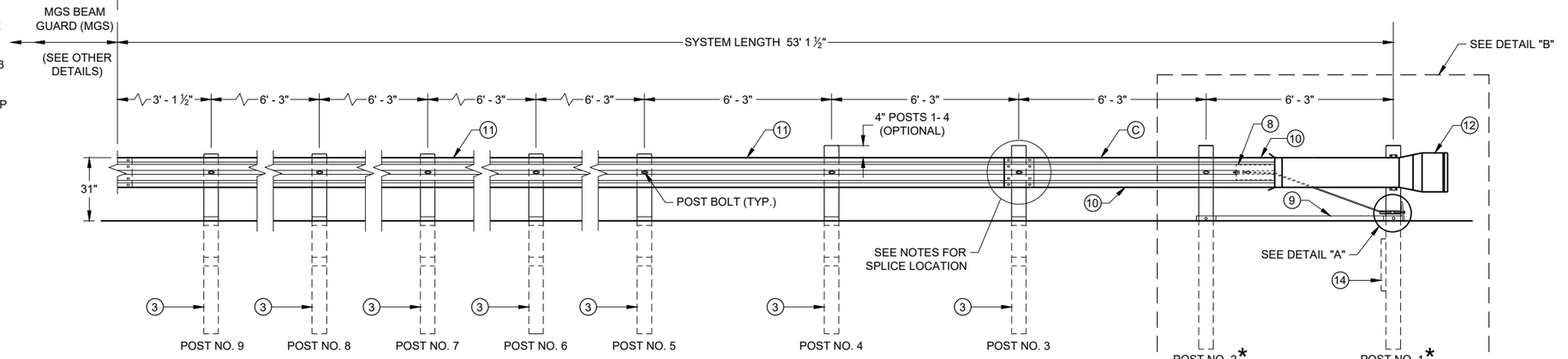
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



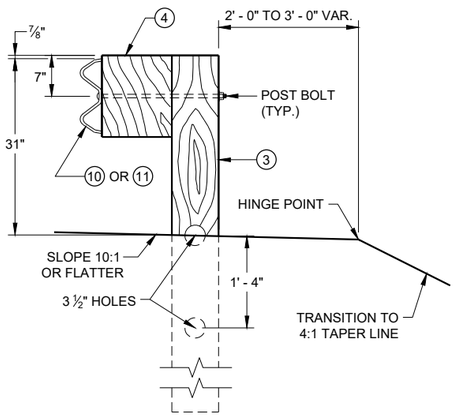
DETAIL "A" (E)



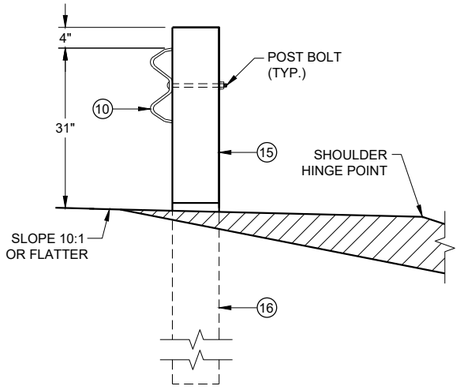
PLAN



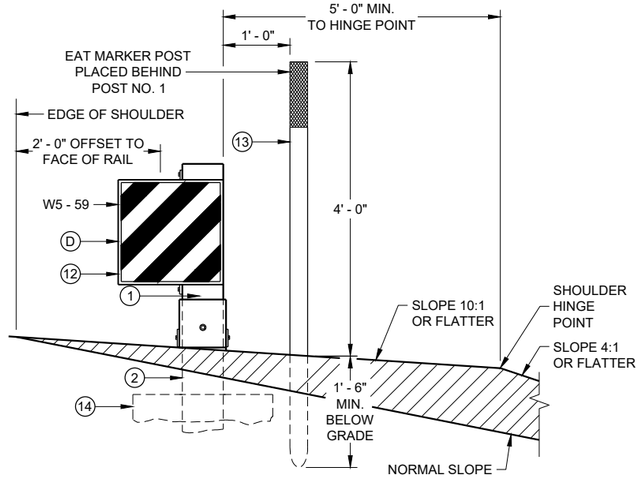
ELEVATION



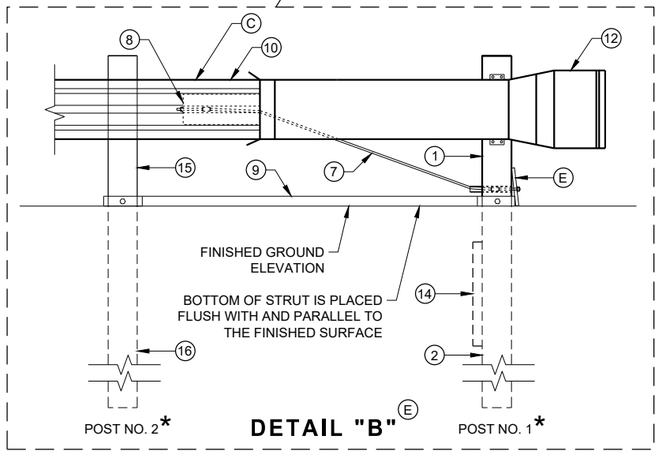
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



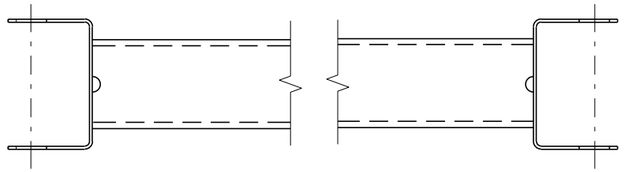
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

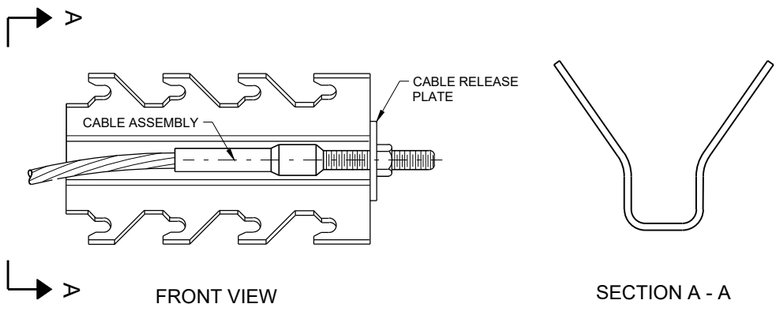
SDD 14B44 - 04a



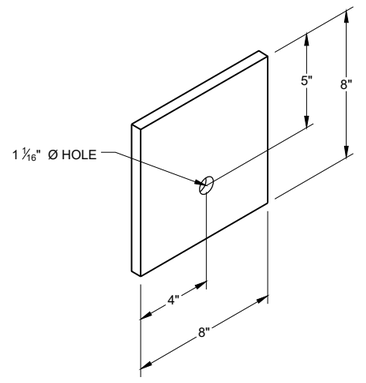
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

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



GENERIC ANCHOR CABLE BOX ⑨ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

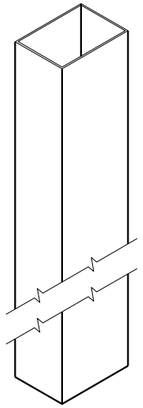
6

SDD 14B44 - 04b

SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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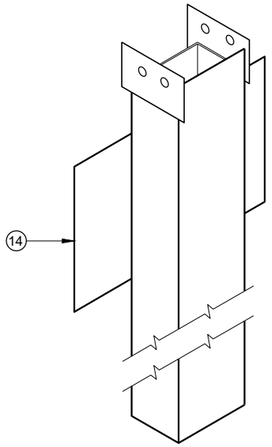

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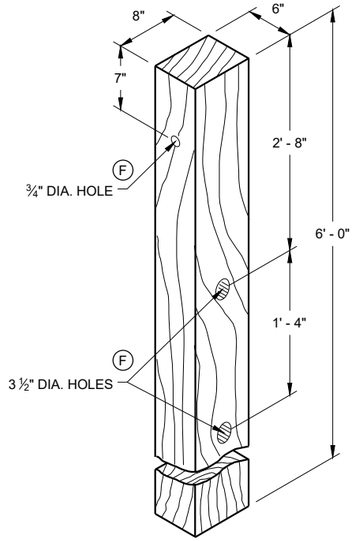
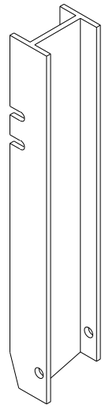


WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



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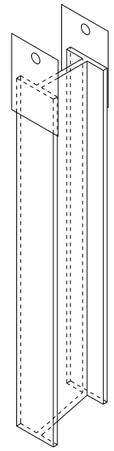

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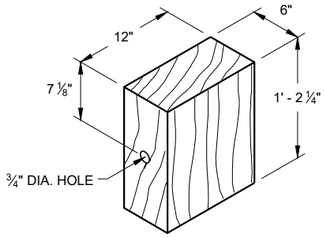
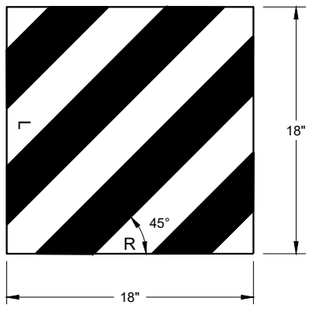
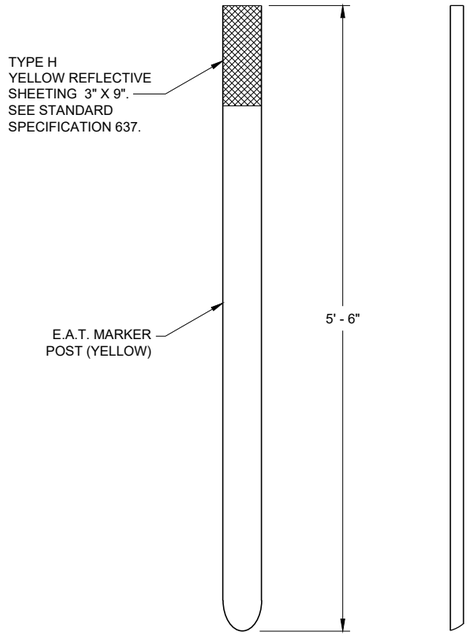


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



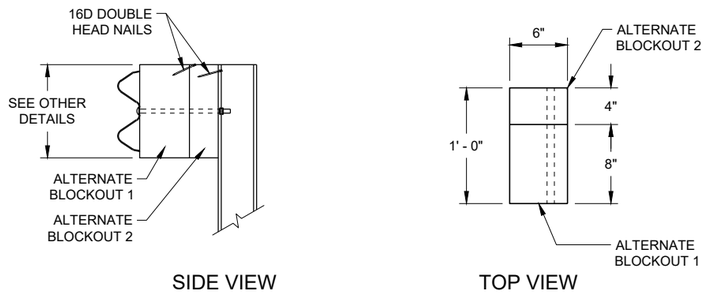
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

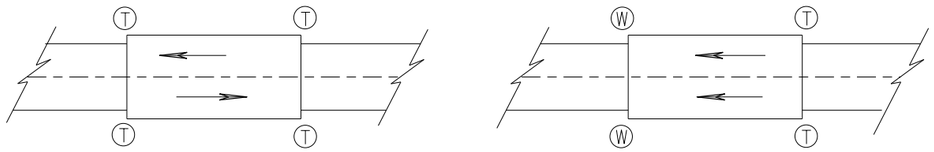
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

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

TRANSITION USES STEEL POSTS ONLY.

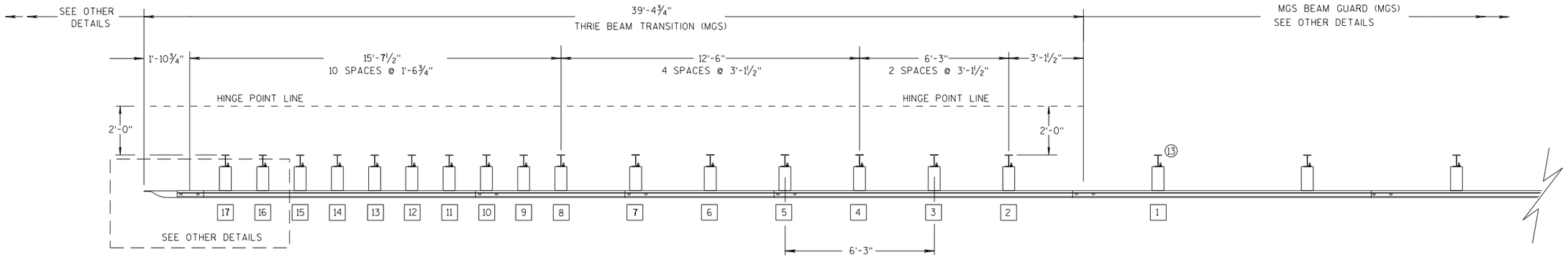
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

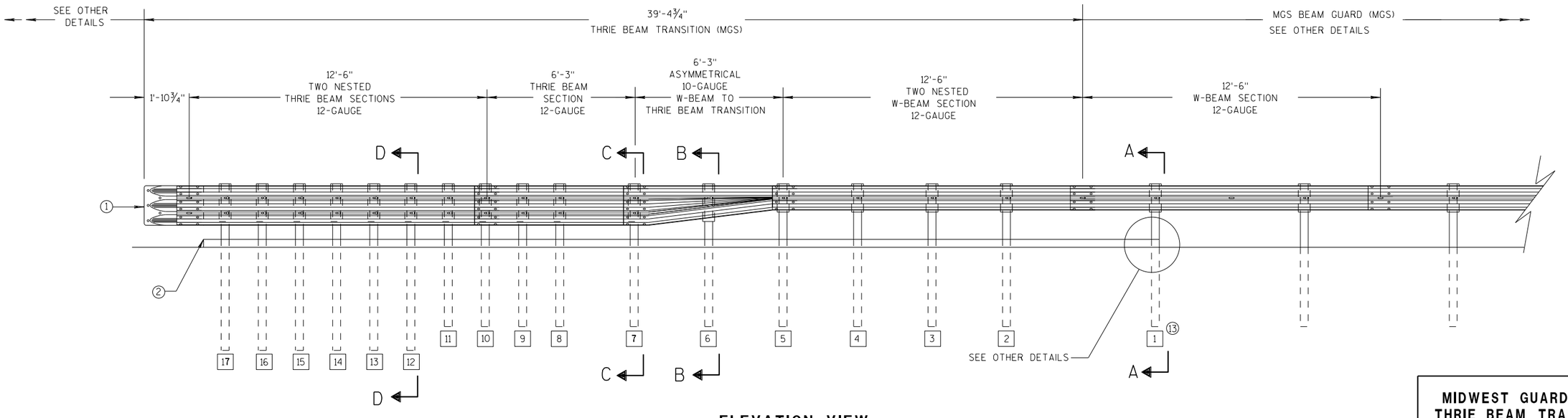
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

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

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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

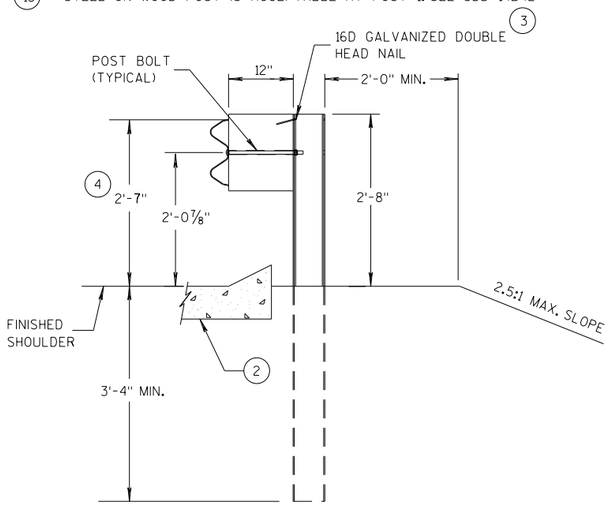
GENERAL NOTES

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

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

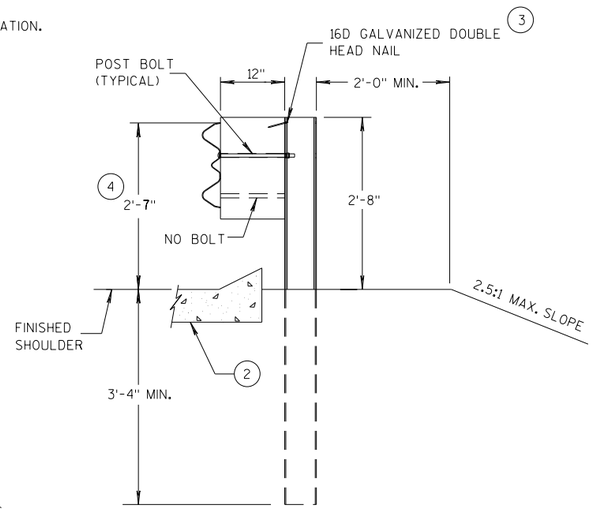
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



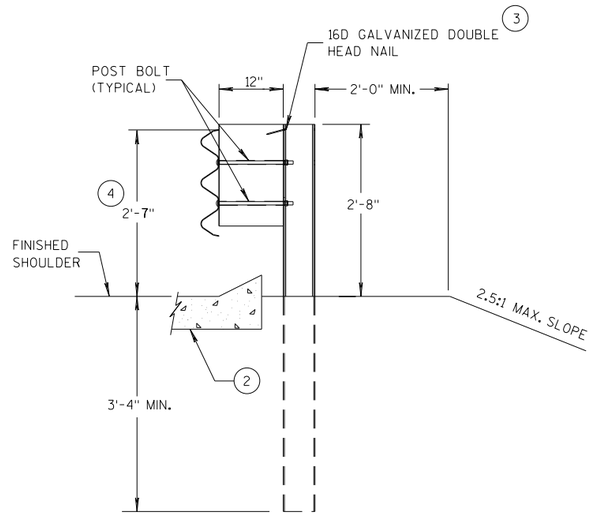
SECTION A-A (13)

POSTS 1-5



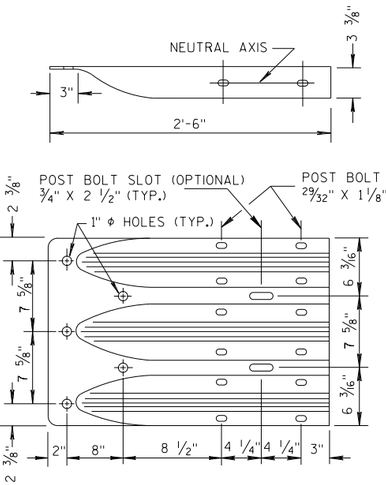
SECTION B-B

POST 6

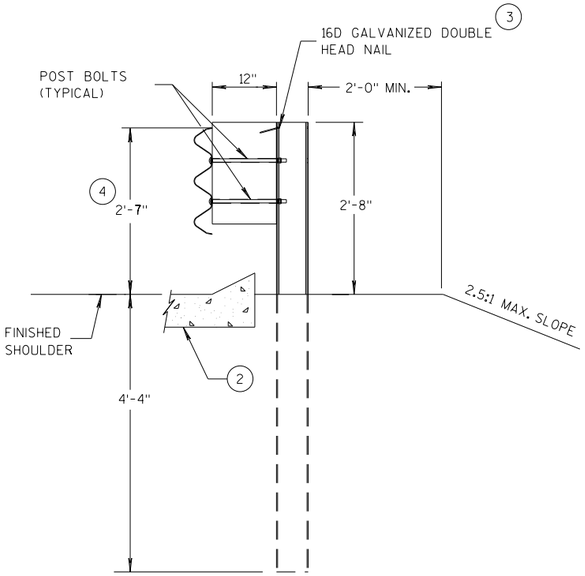


SECTION C-C

POSTS 7-11

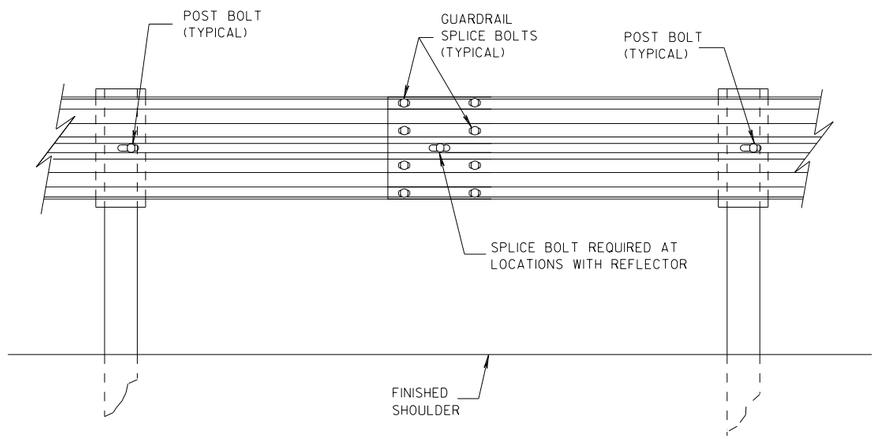


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

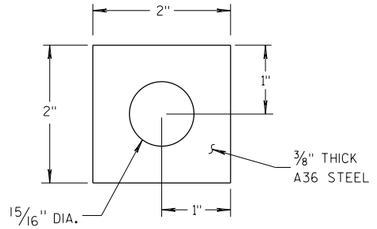
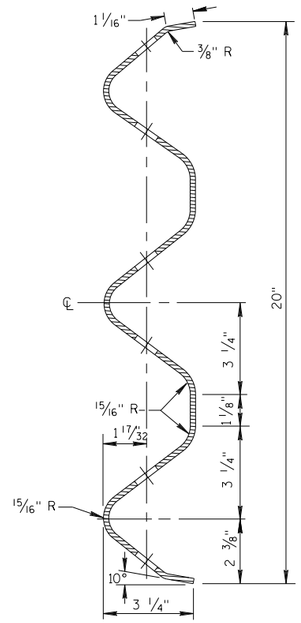


PLATE WASHER DETAIL



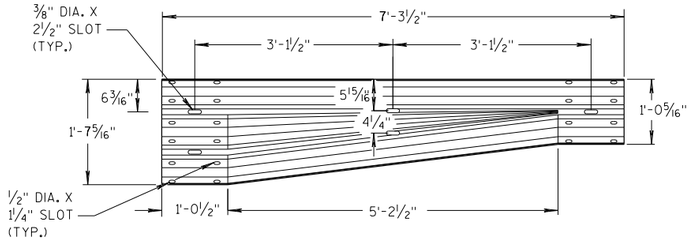
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

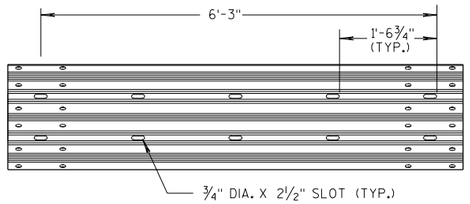
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

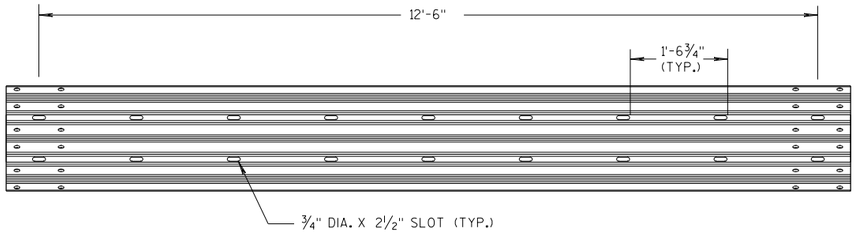
S.D.D. 14 B 45-5b



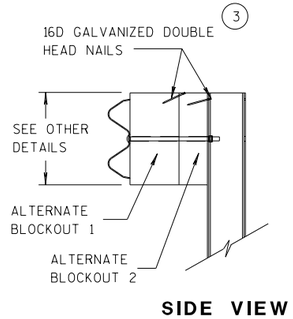
W-BEAM TO THRIE BEAM TRANSITION SECTION



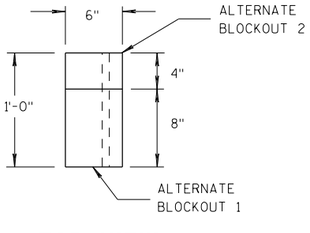
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

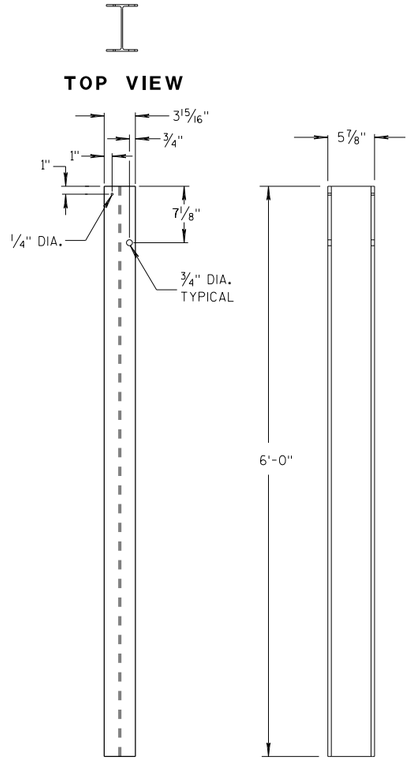


SIDE VIEW



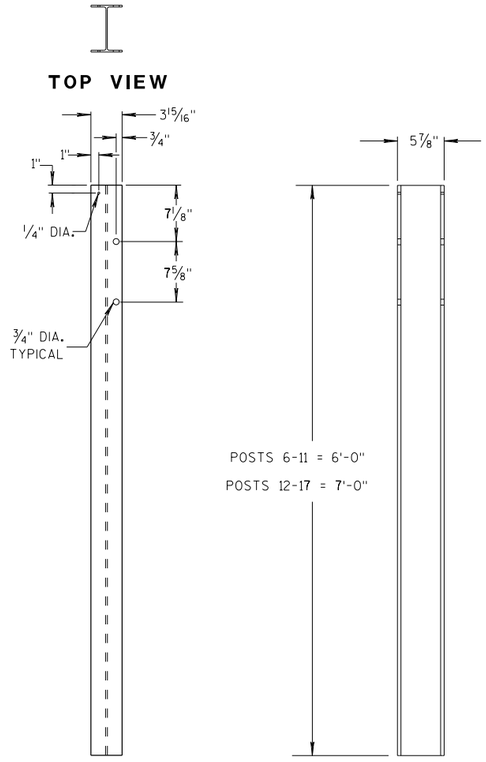
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



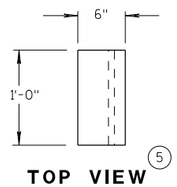
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

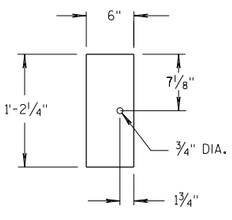


FRONT VIEW SIDE VIEW

STEEL POSTS 6-17

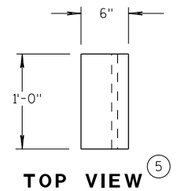


TOP VIEW (5)

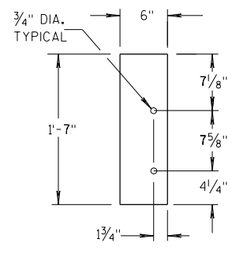


FRONT VIEW

BLOCKOUT POSTS 1-5



TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

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

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

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

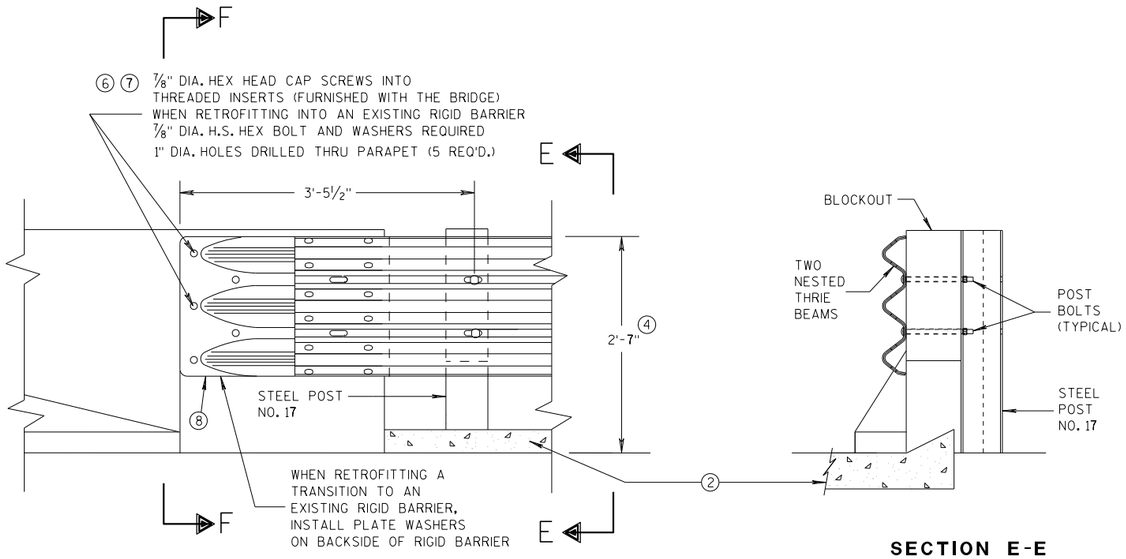
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

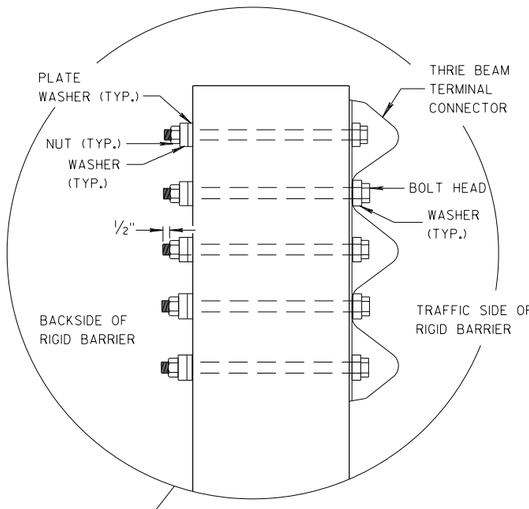
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

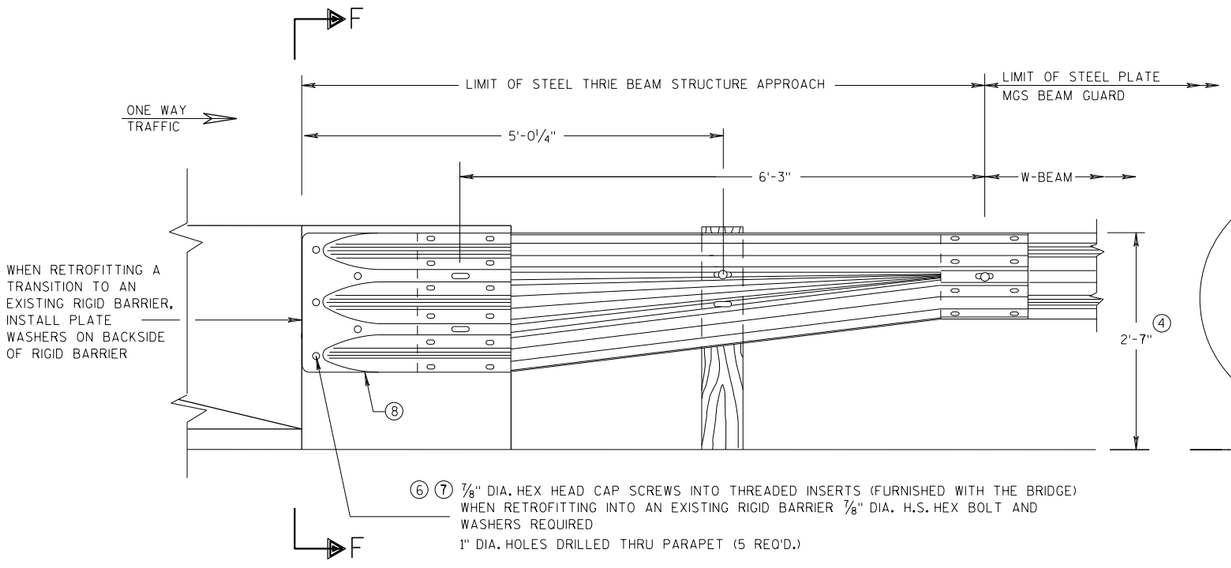
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

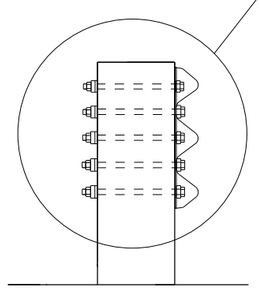
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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

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

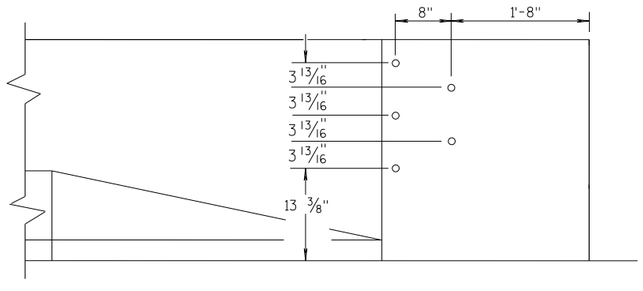




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D UNIT SUPERVI
NT
FHWA

6

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

6

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

GENERAL NOTES

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

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

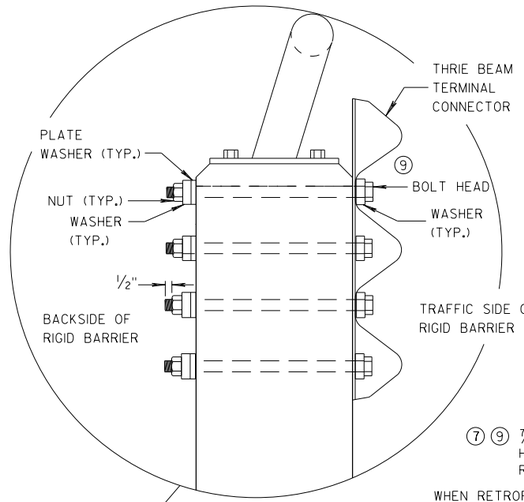
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

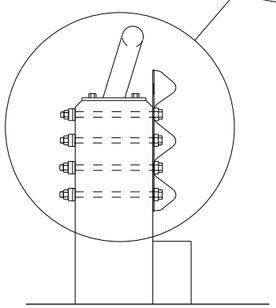
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

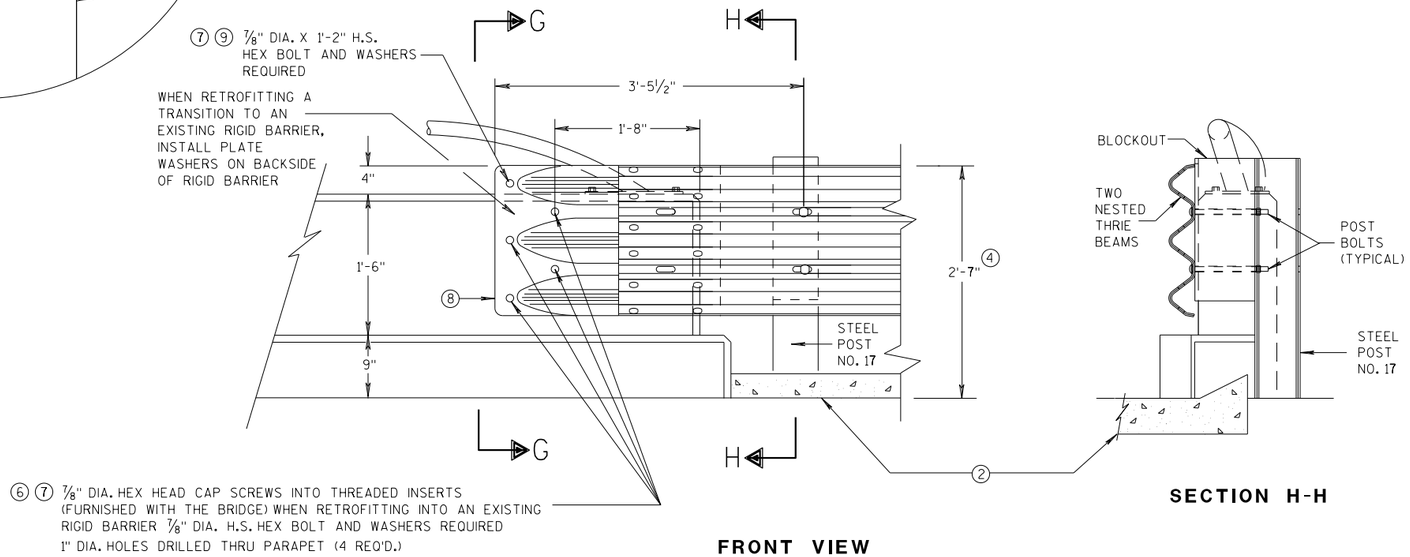
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





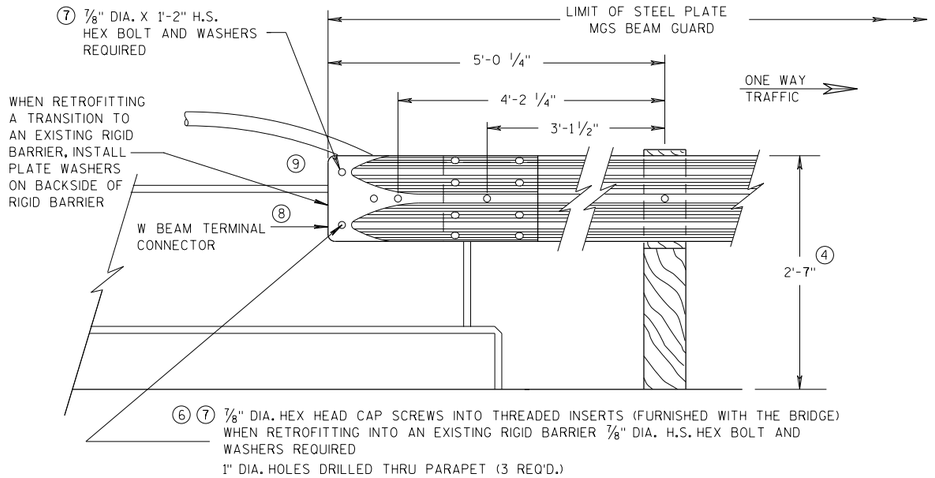
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVI
FHWA

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

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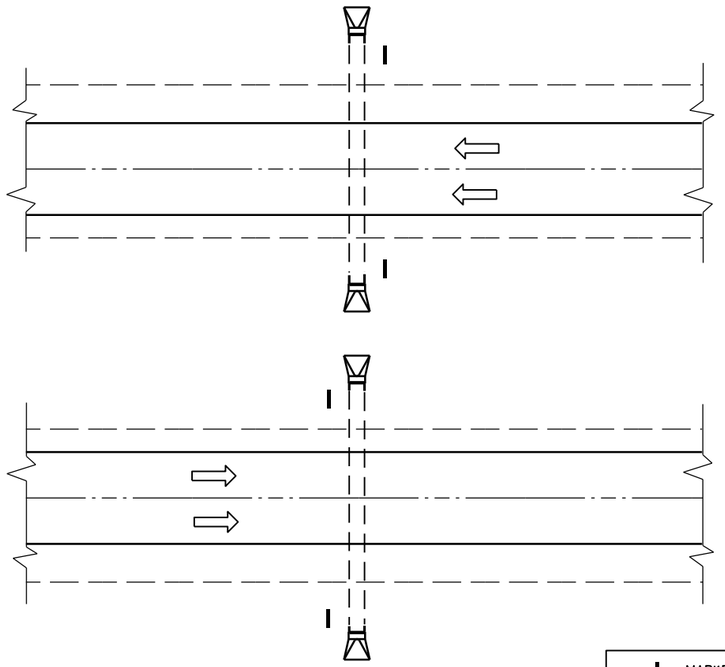
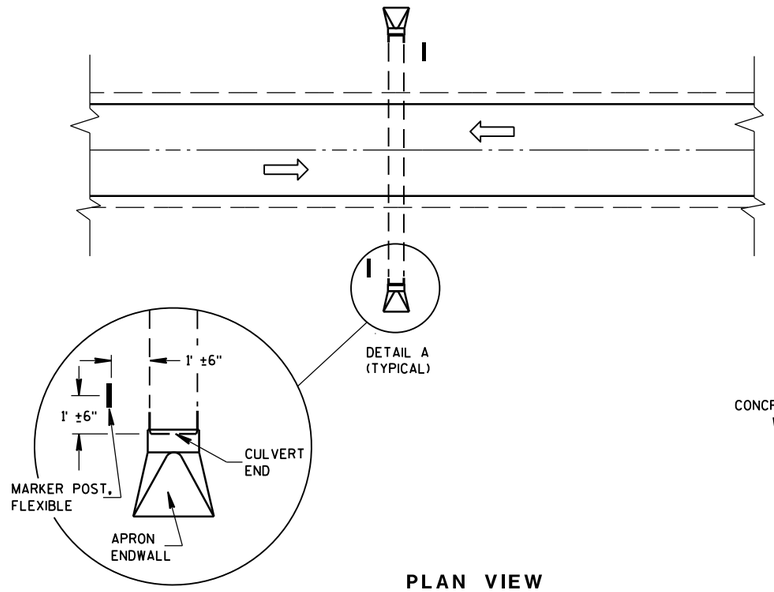
S.D.D. 14 B 45-5e



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

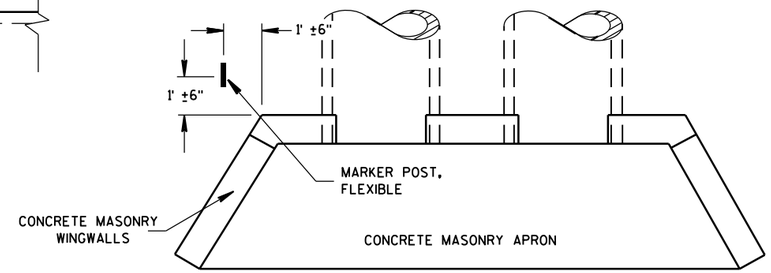
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

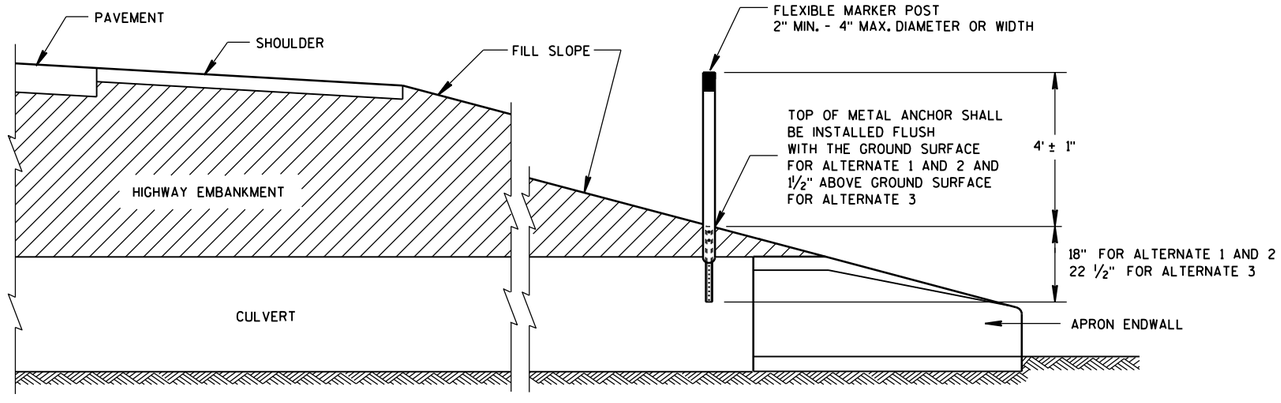
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

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

GENERAL NOTES

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

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

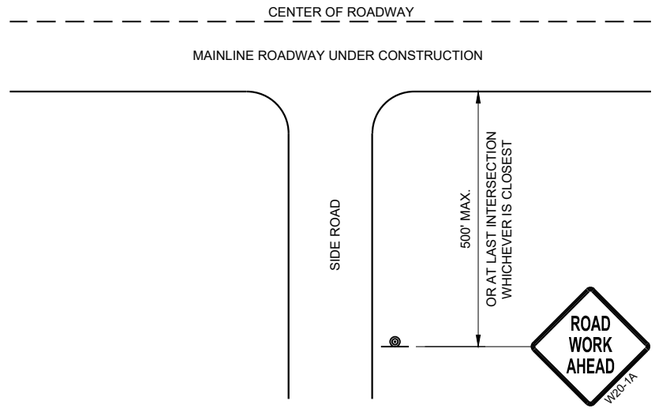
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



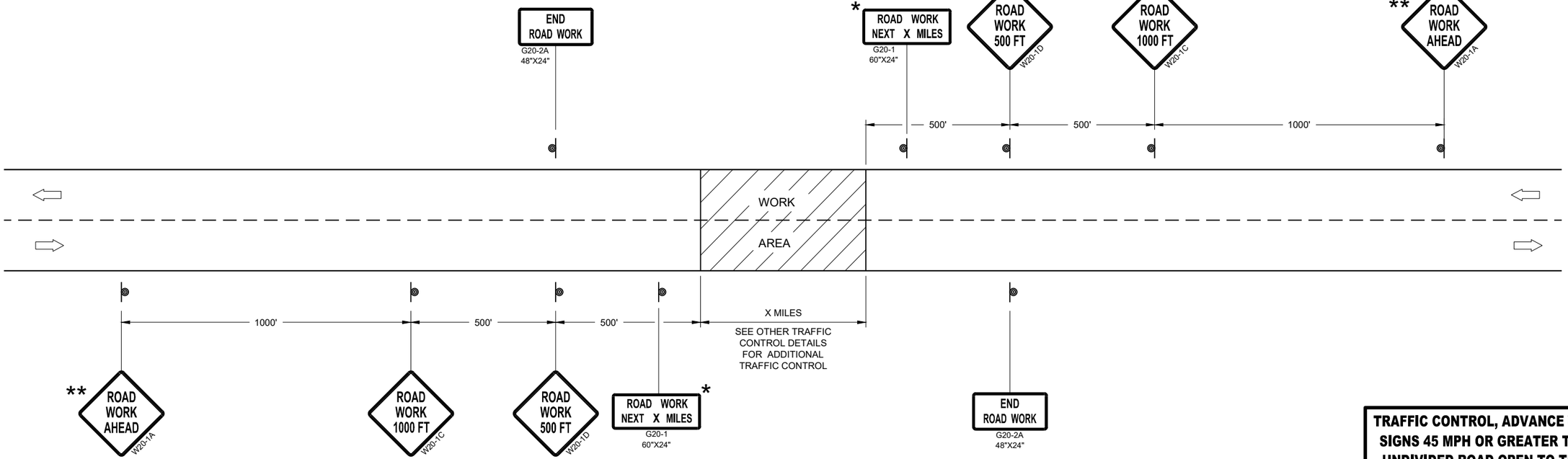
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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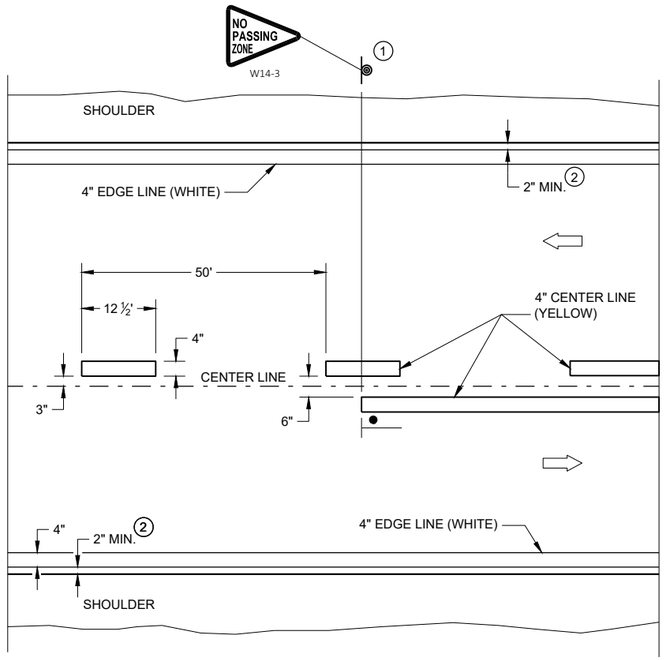
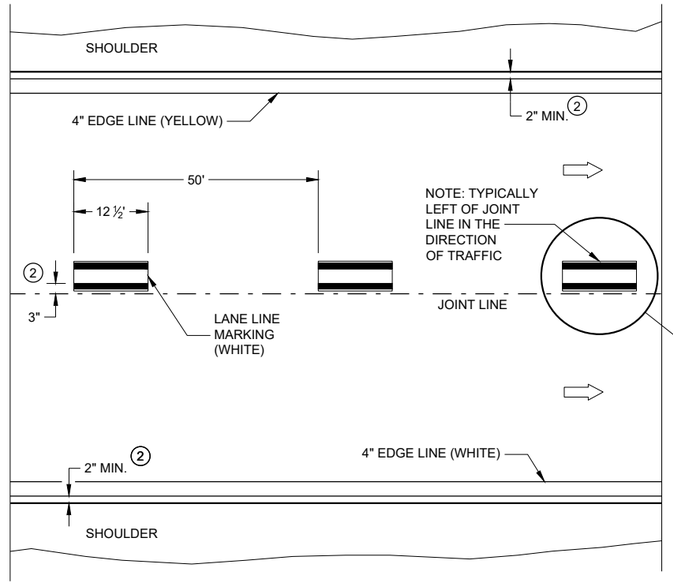
SDD 15C04 - 05

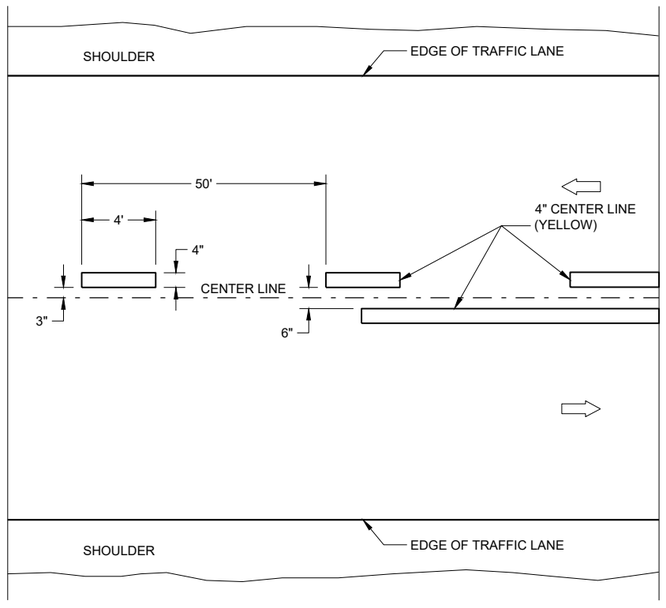


TWO WAY TRAFFIC

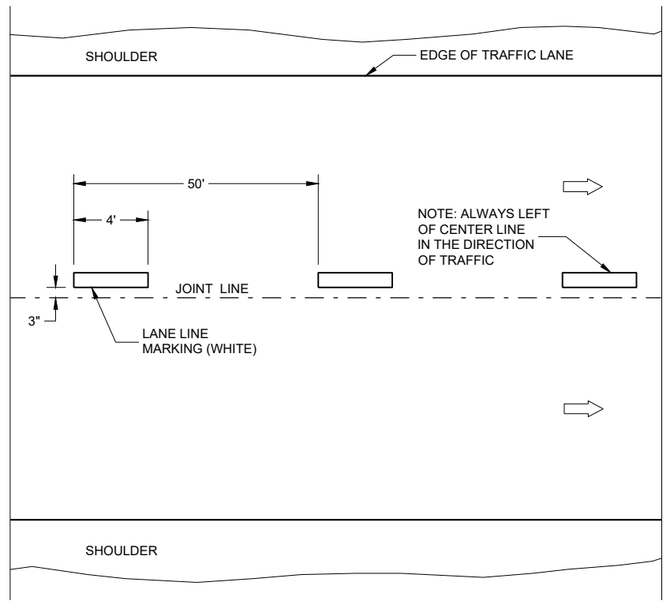


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

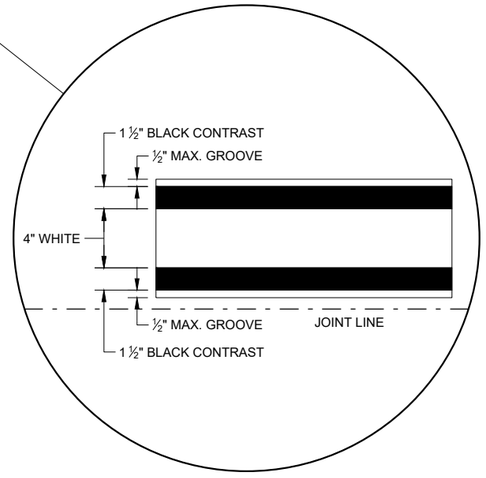
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITH 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

SDD 15C08 - 20a

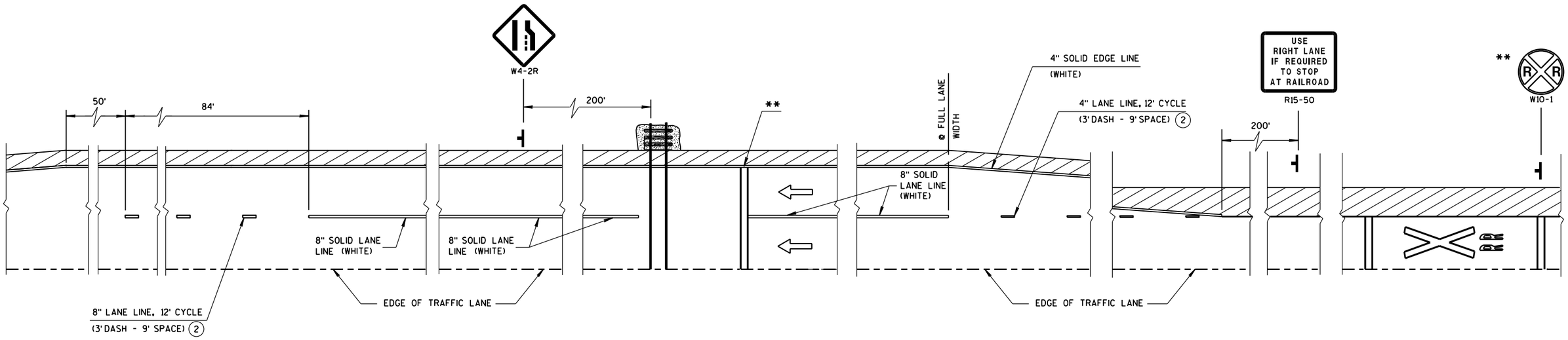
SDD 15C08 - 20a

GENERAL NOTES

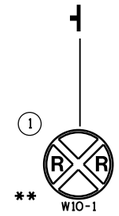
SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

(1) INSTALLED FOR EXPRESSWAYS.

(2) 3' LINE 9' GAP. EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.



DETAIL FOR TRUCK STOPPING LANE PAVEMENT MARKINGS



LEGEND

⇦ DIRECTION OF TRAFFIC FLOW

** SEE "SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD - HIGHWAY GRADE CROSSING" FOR LOCATION OF ADVANCE MARKINGS.

POST MOUNTED SIGN

TRUCK STOPPING LANE PAVEMENT MARKINGS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept., 2017 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MARKING ENGINEER
FHWA	

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S.D.D. 15 C 9-11b

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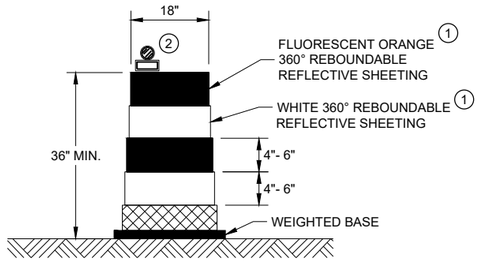
S.D.D. 15 C 9-11b

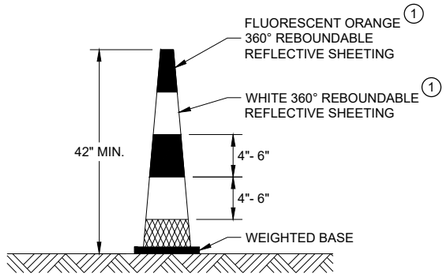
GENERAL NOTES

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

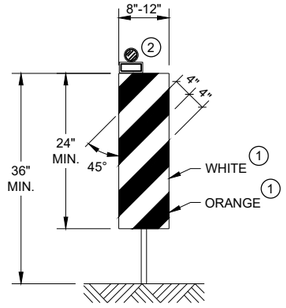


DRUM



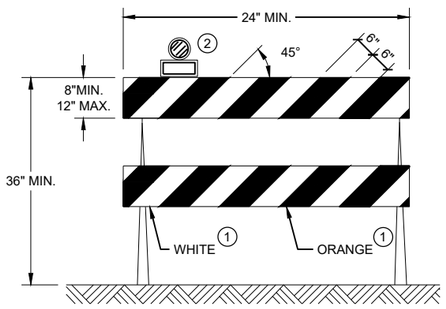
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



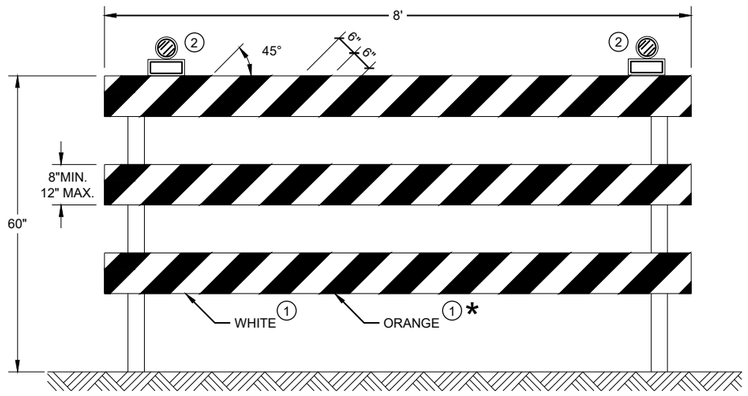
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C11 - 07b

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SDD 15C11 - 07b

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

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

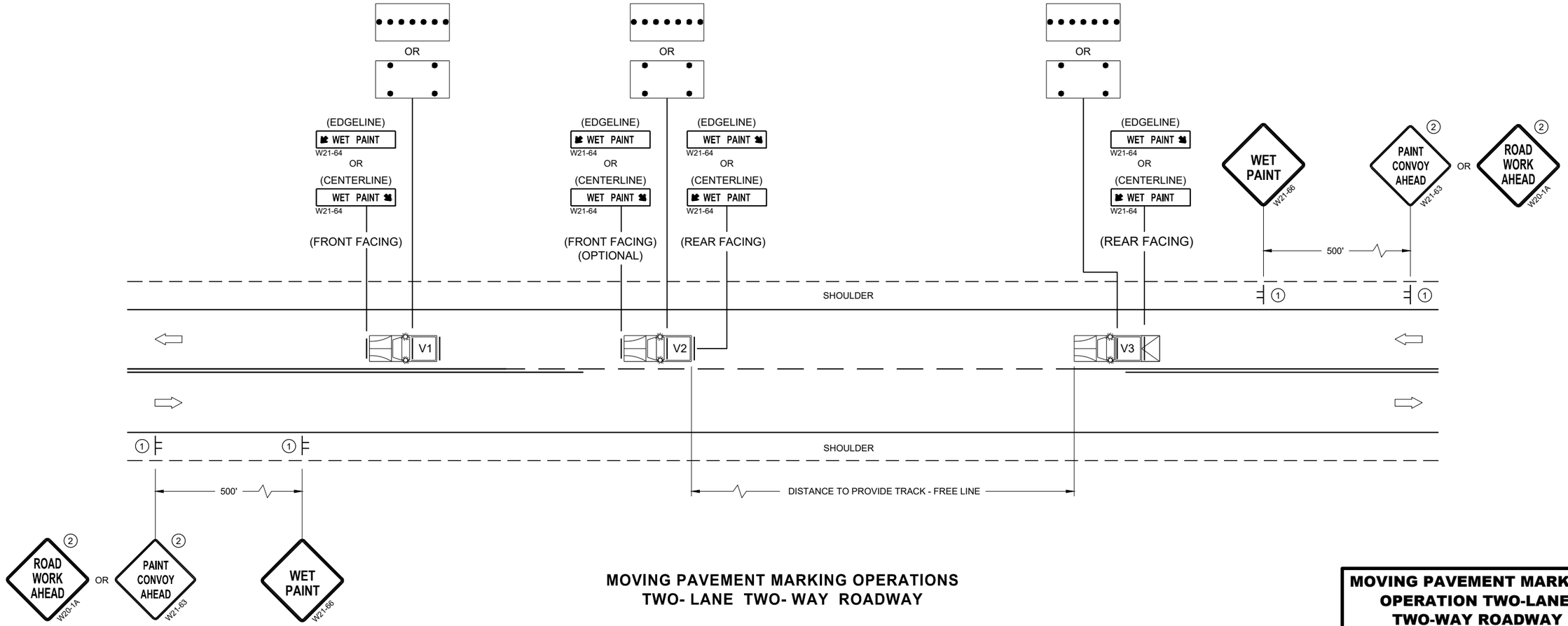
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

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

CONES SHALL BE A MINIMUM OF 18" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

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



MOVING PAVEMENT MARKING OPERATIONS TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

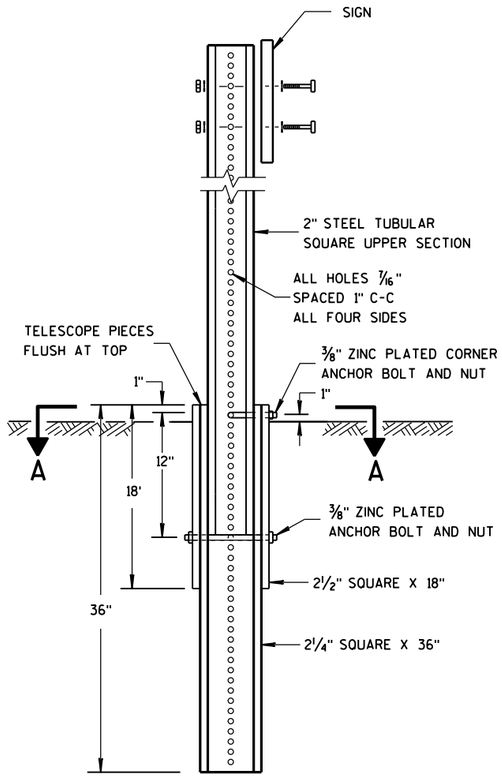
APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

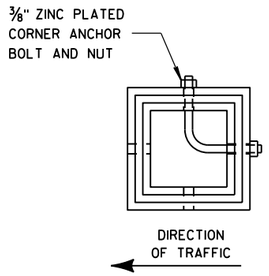
FHWA

SDD 15C19 - 06a

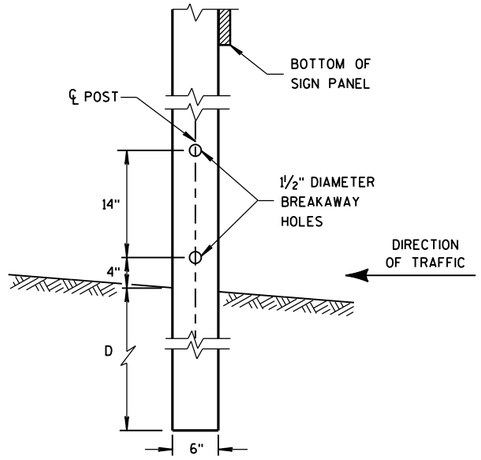
SDD 15C19 - 06a



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



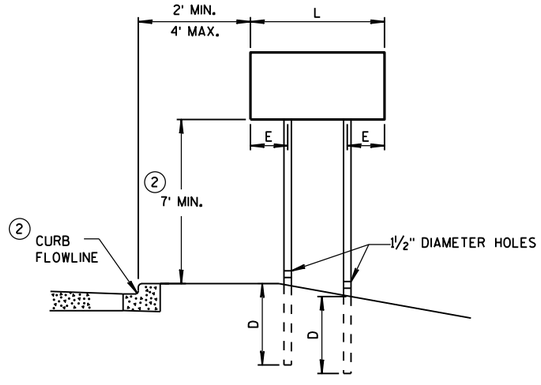
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

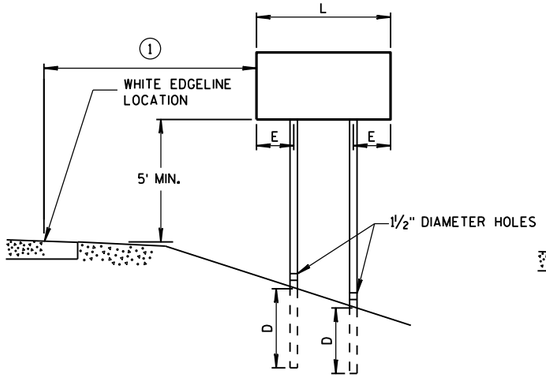
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

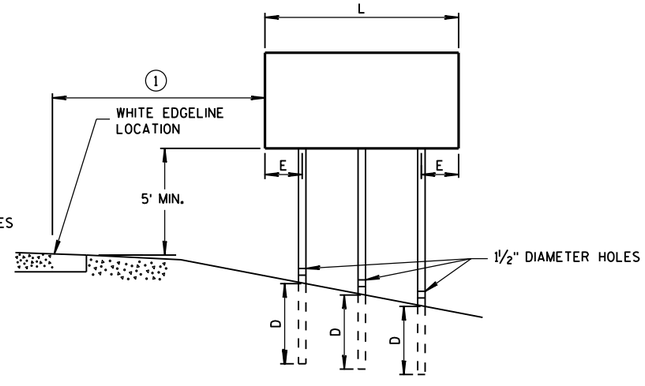
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL 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).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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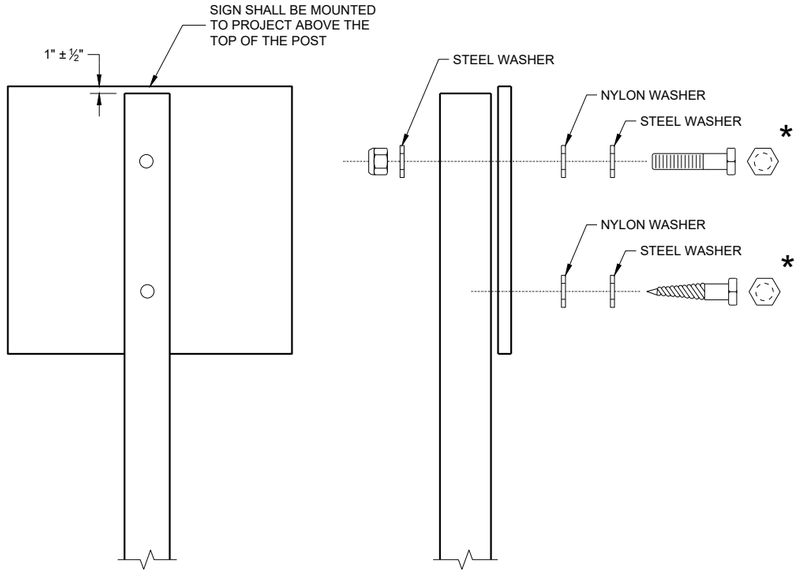
S.D.D. 15 D 38-2a



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.

WOOD POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

SDD 15D38 - 02b

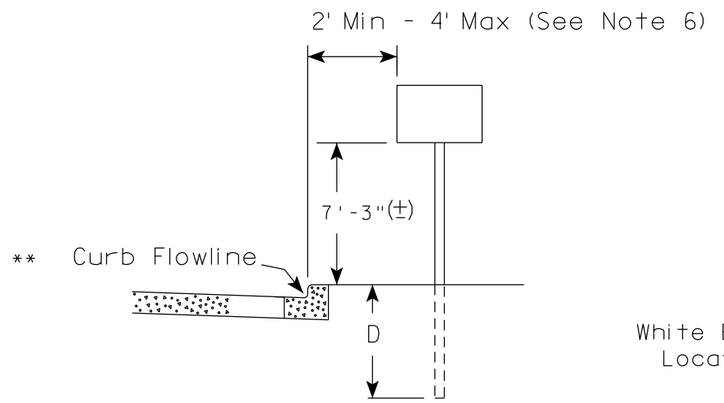
SDD15D38 - 02b

ATTACHMENT OF SIGNS TO POSTS

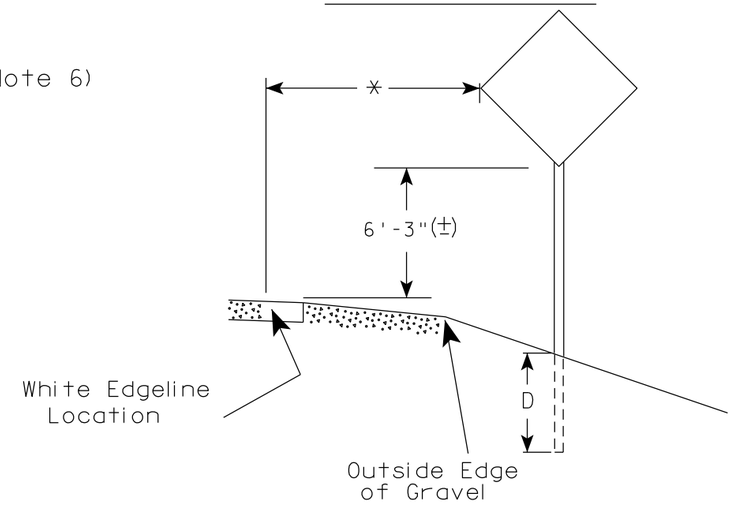
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

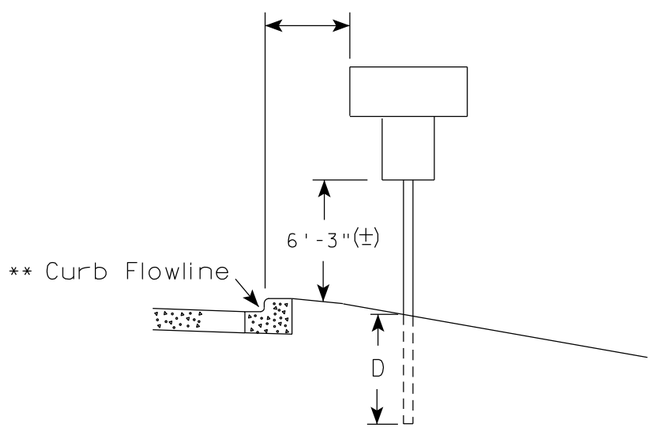
APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

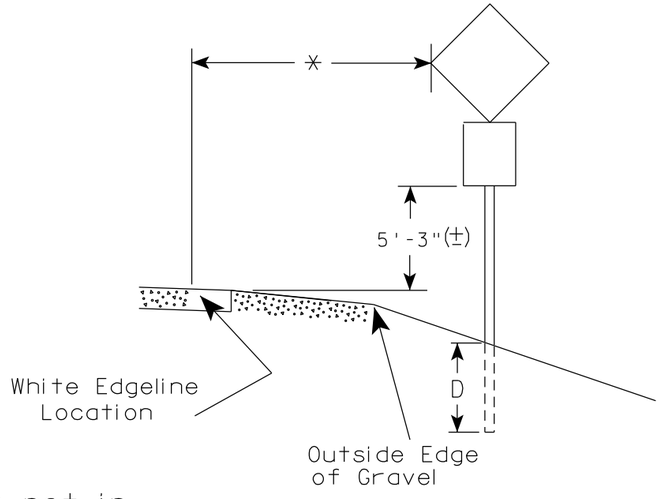
URBAN AREA



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.

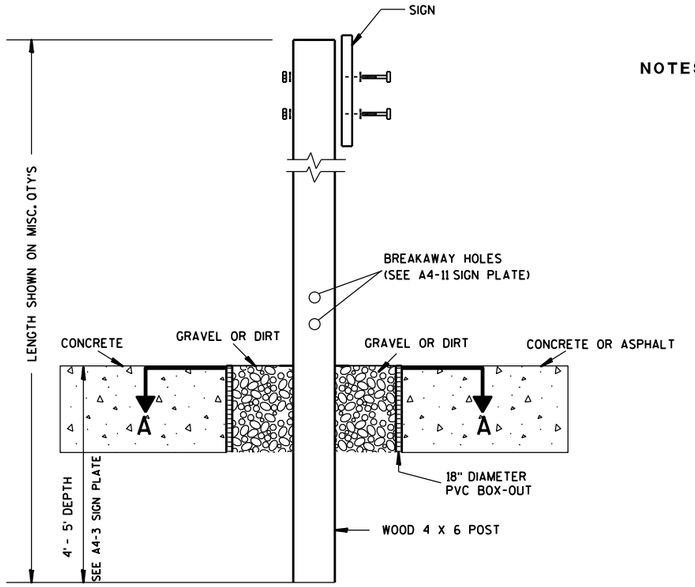
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

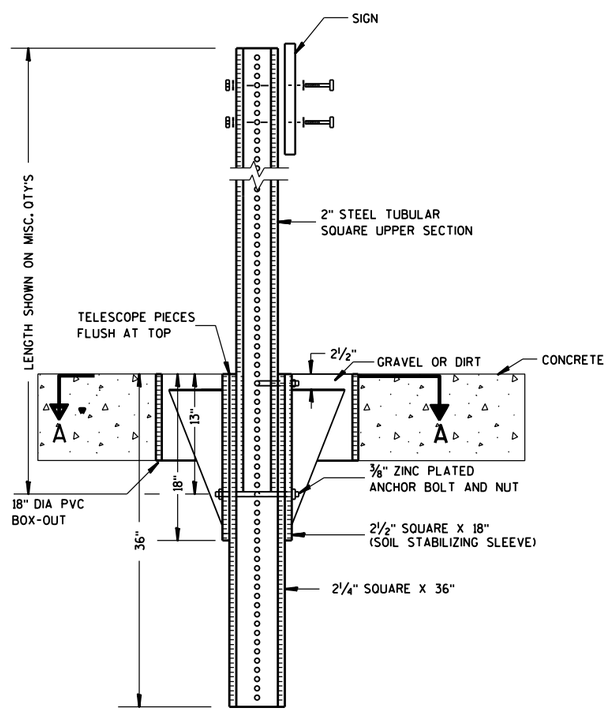
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 105	E



ELEVATION VIEW

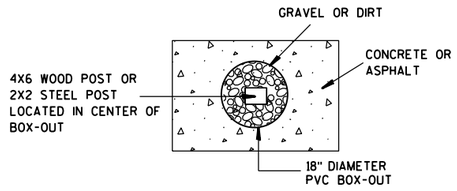
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

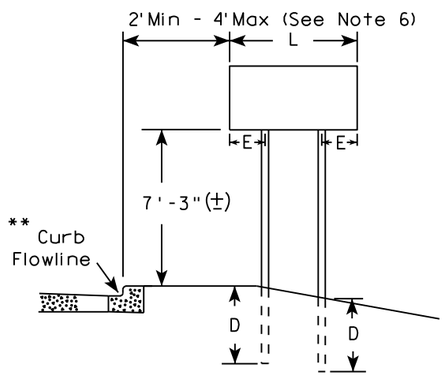
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

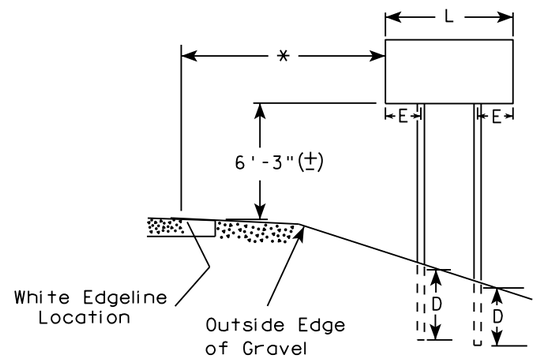
DATE 1/27/14 PLATE NO. A4-3B.1

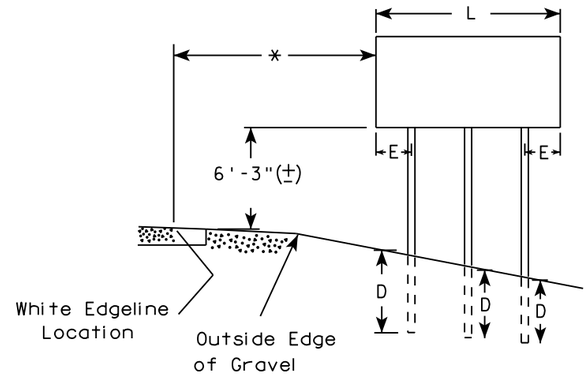
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

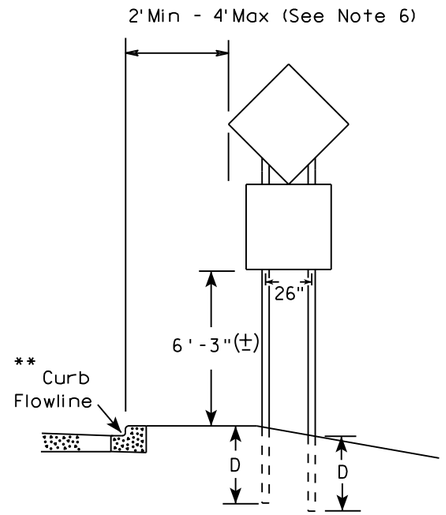
URBAN AREA



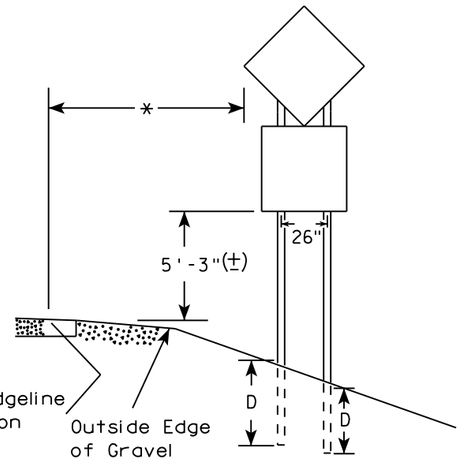
RURAL AREA (See Note 3)







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'

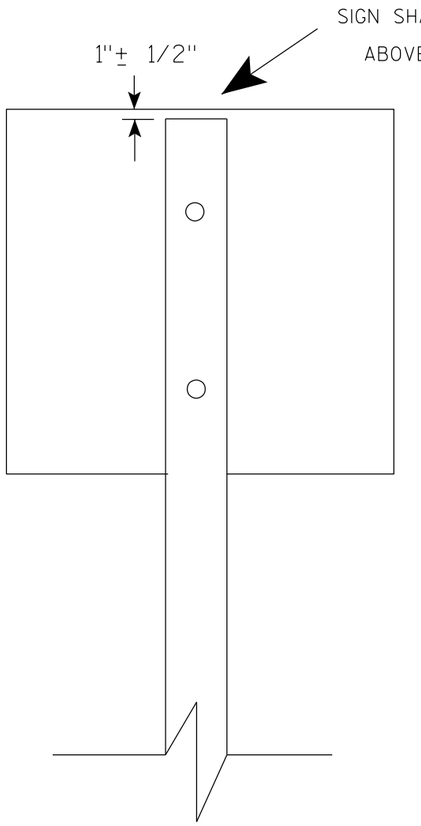
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

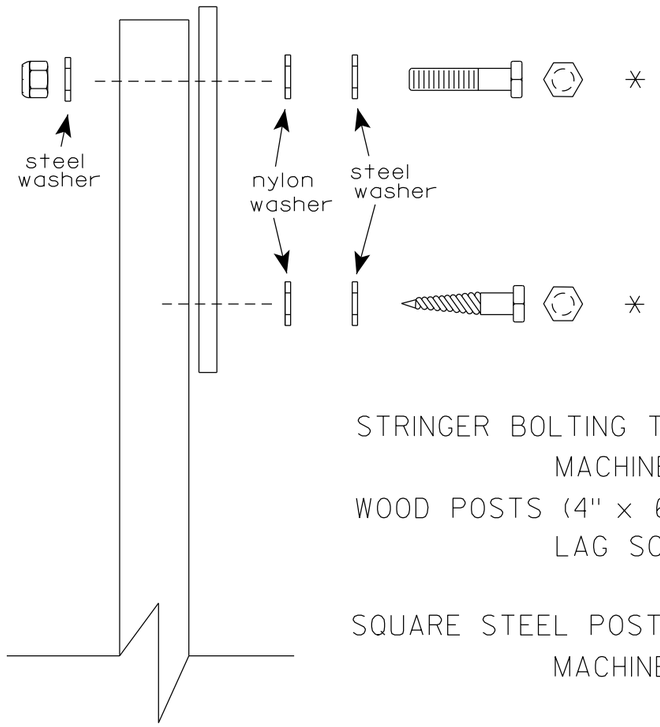
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 107	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: 108 E

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

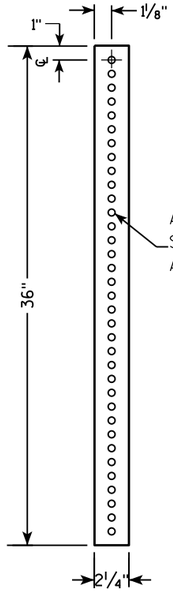
WISDOT/CADDS SHEET 42

7

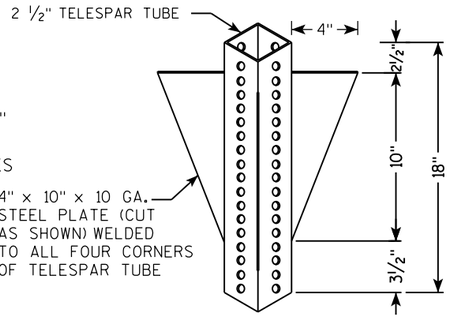
7

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

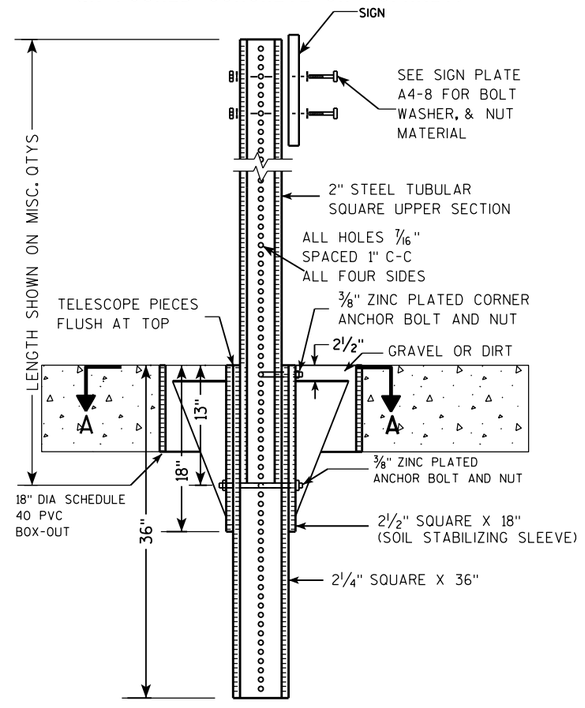
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



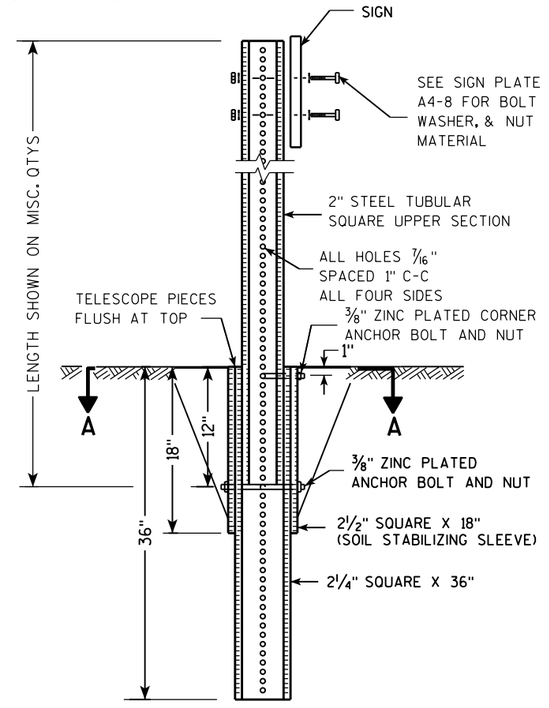
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

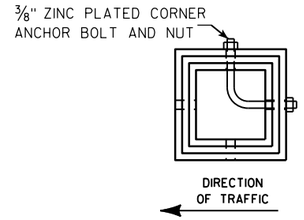


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

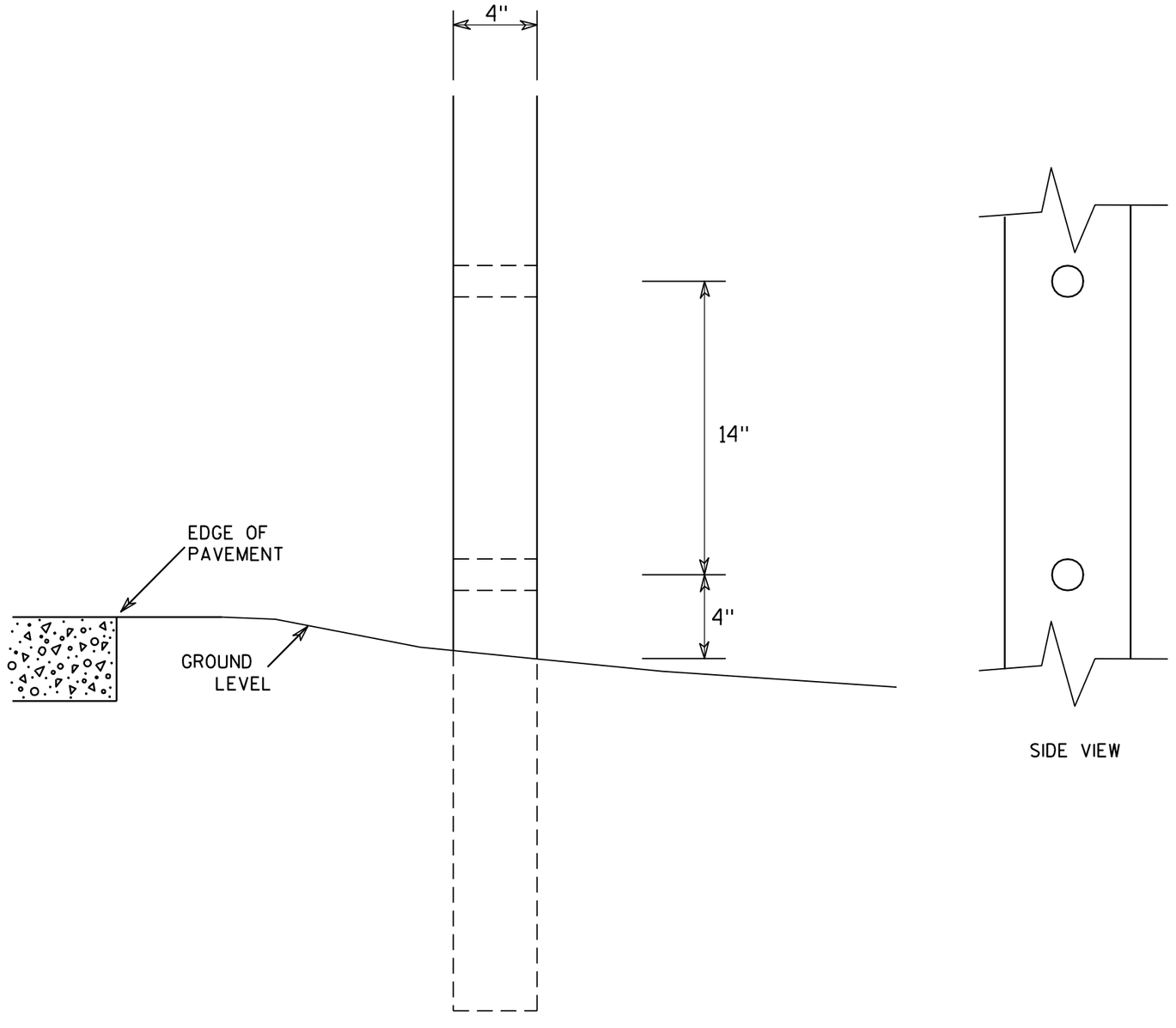
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

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



SIDE VIEW

GENERAL NOTES

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

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

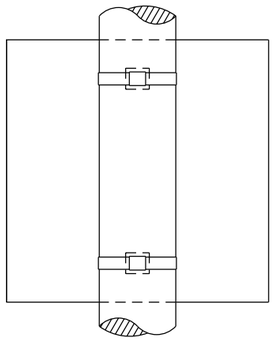
APPROVED Chester J Spang for State Traffic Engineer

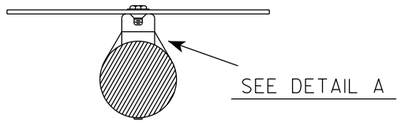
DATE 3/27/97 PLATE NO. A4-11.2

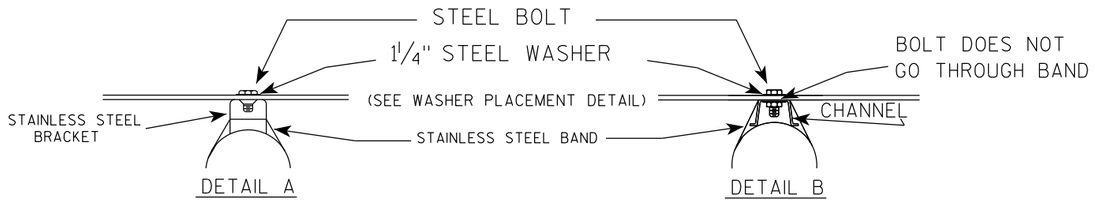
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 110	E

BANDING

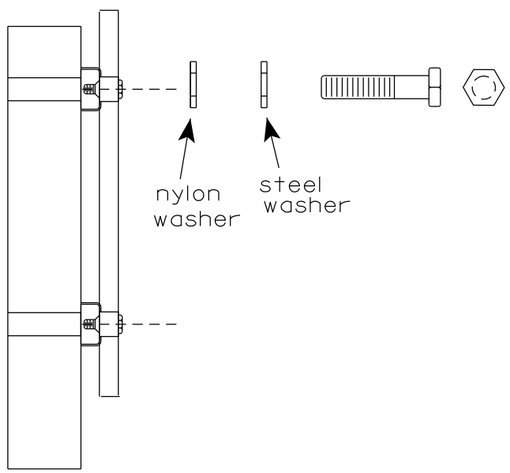
SINGLE SIGN







WASHER PLACEMENT

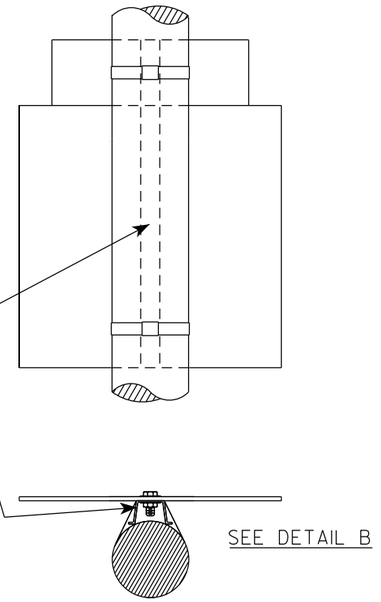


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

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

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

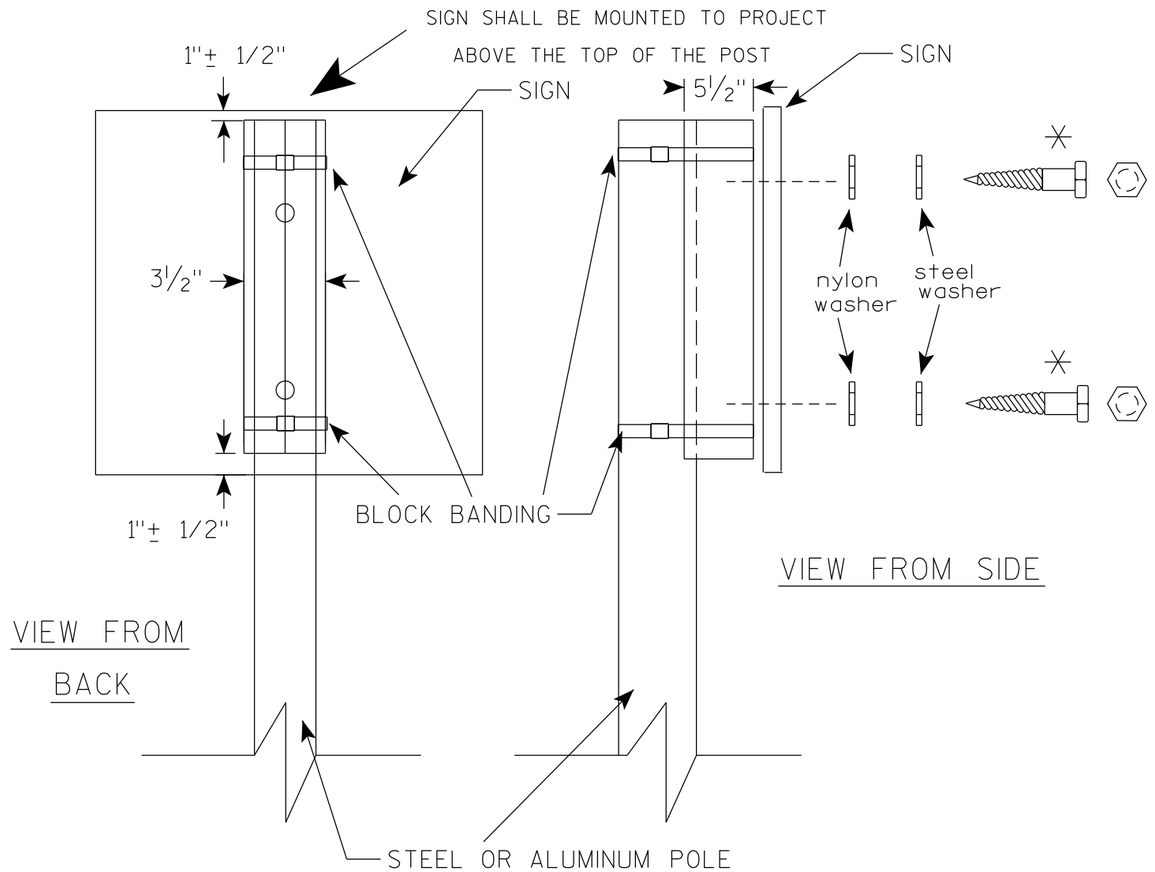
DATE 6/10/19 PLATE NO. A5-9.4

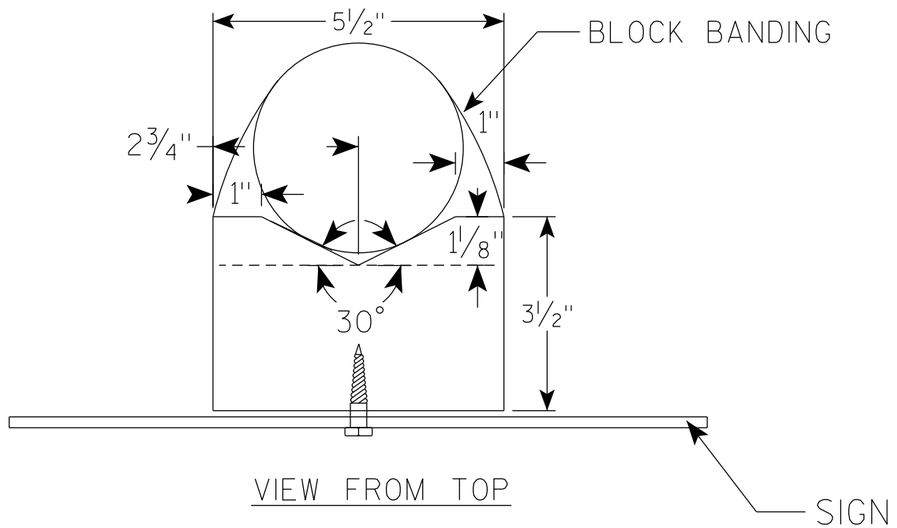
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 111	E

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"

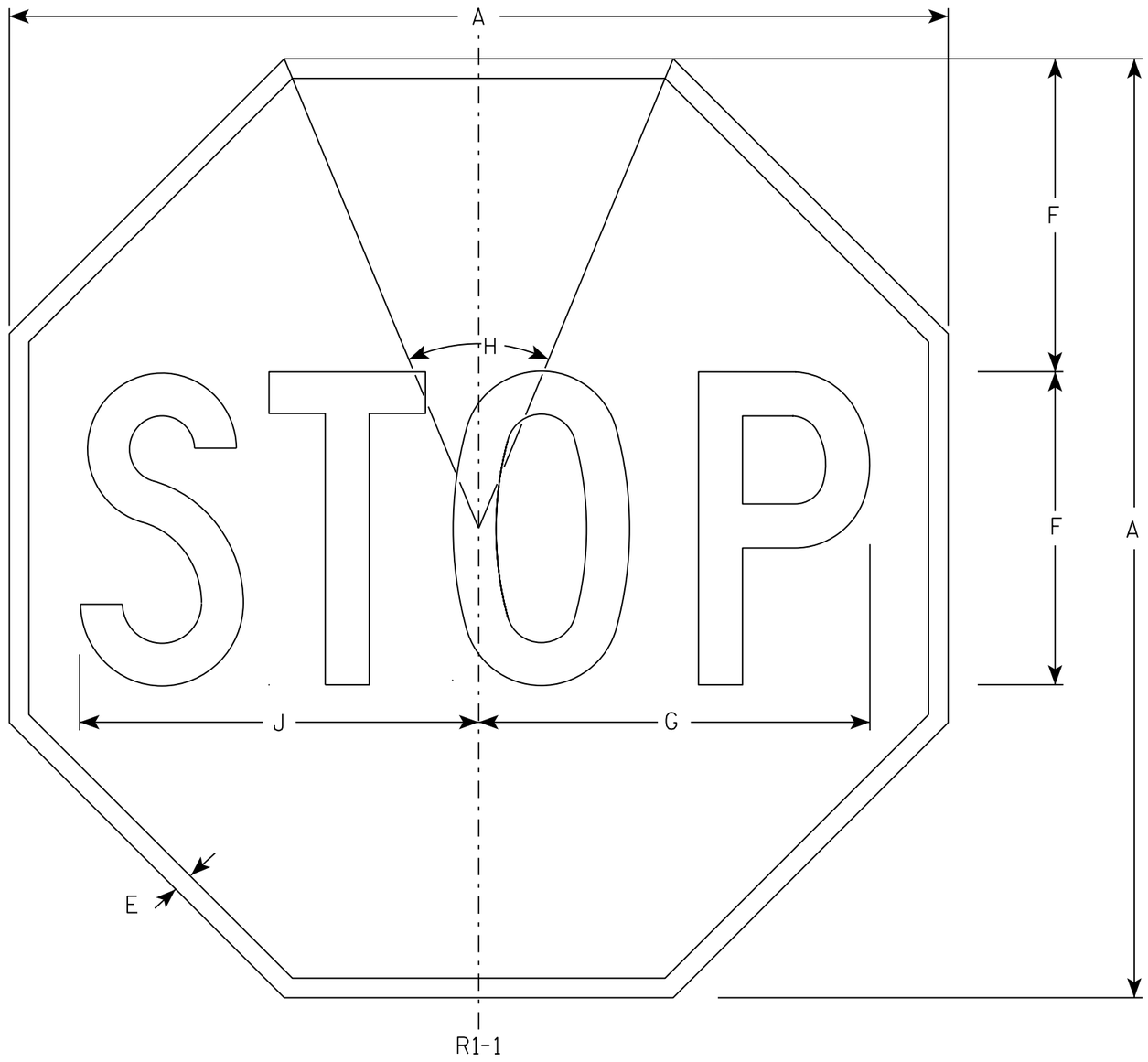
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO: | SHEET NO: 112 | E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

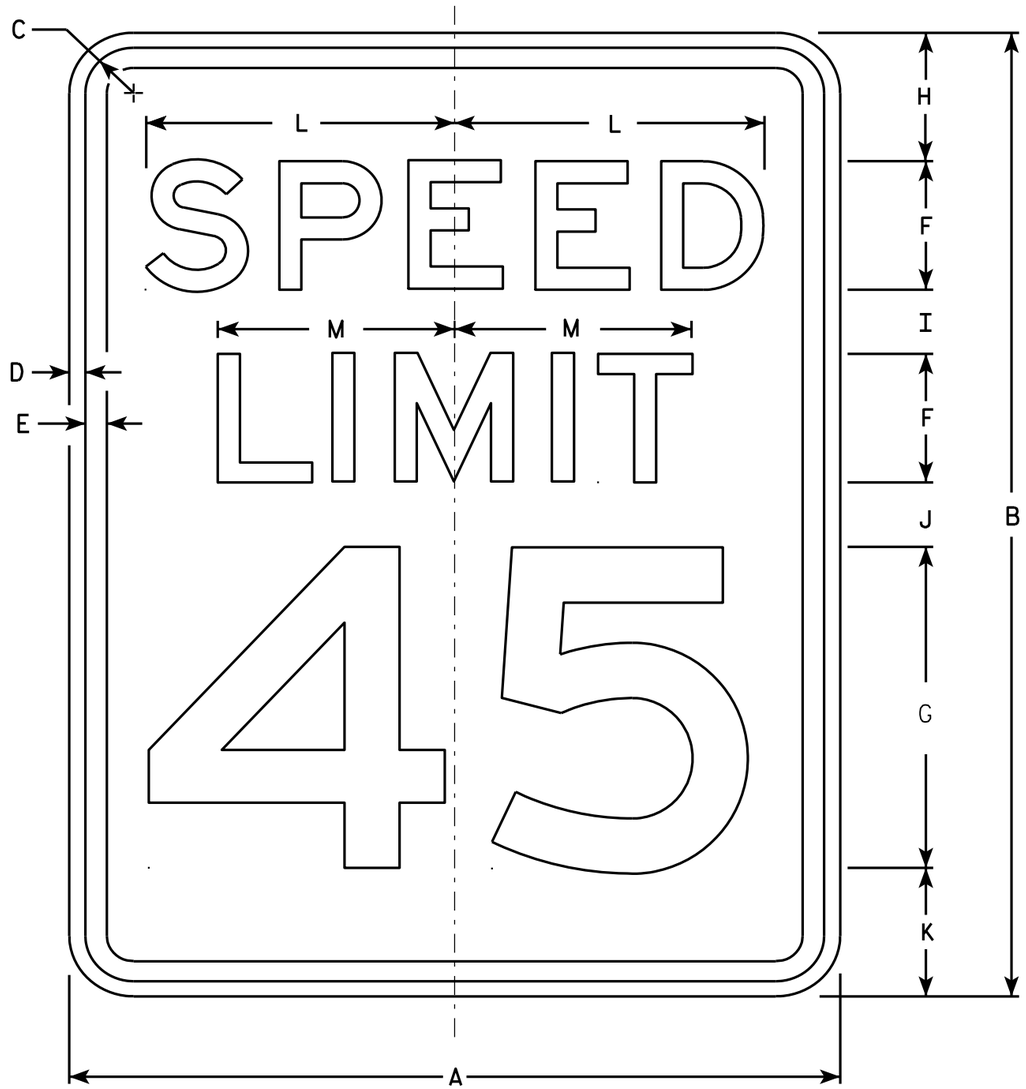
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 113	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
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 adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

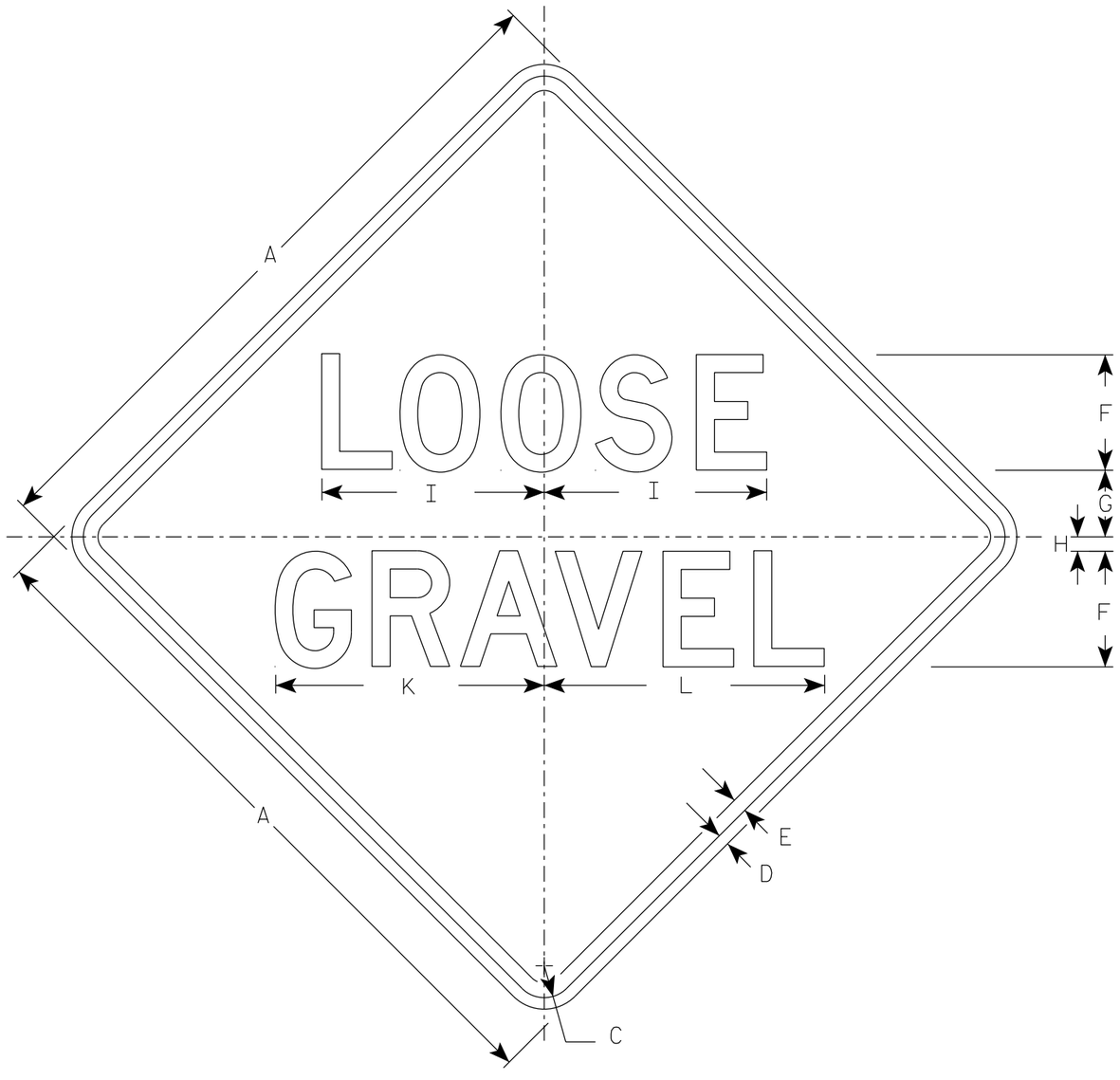
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 114 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000

WISDOT/CADDS SHEET 42



W8-7

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4	2 3/4	1/2	7 3/4		9 1/4	9 3/4															4.0
2S	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
2M	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
3	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
4	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
5	48		2 1/4	3/4	1	8	5 1/2	1	15 1/2		18 5/8	19 3/8															16.0

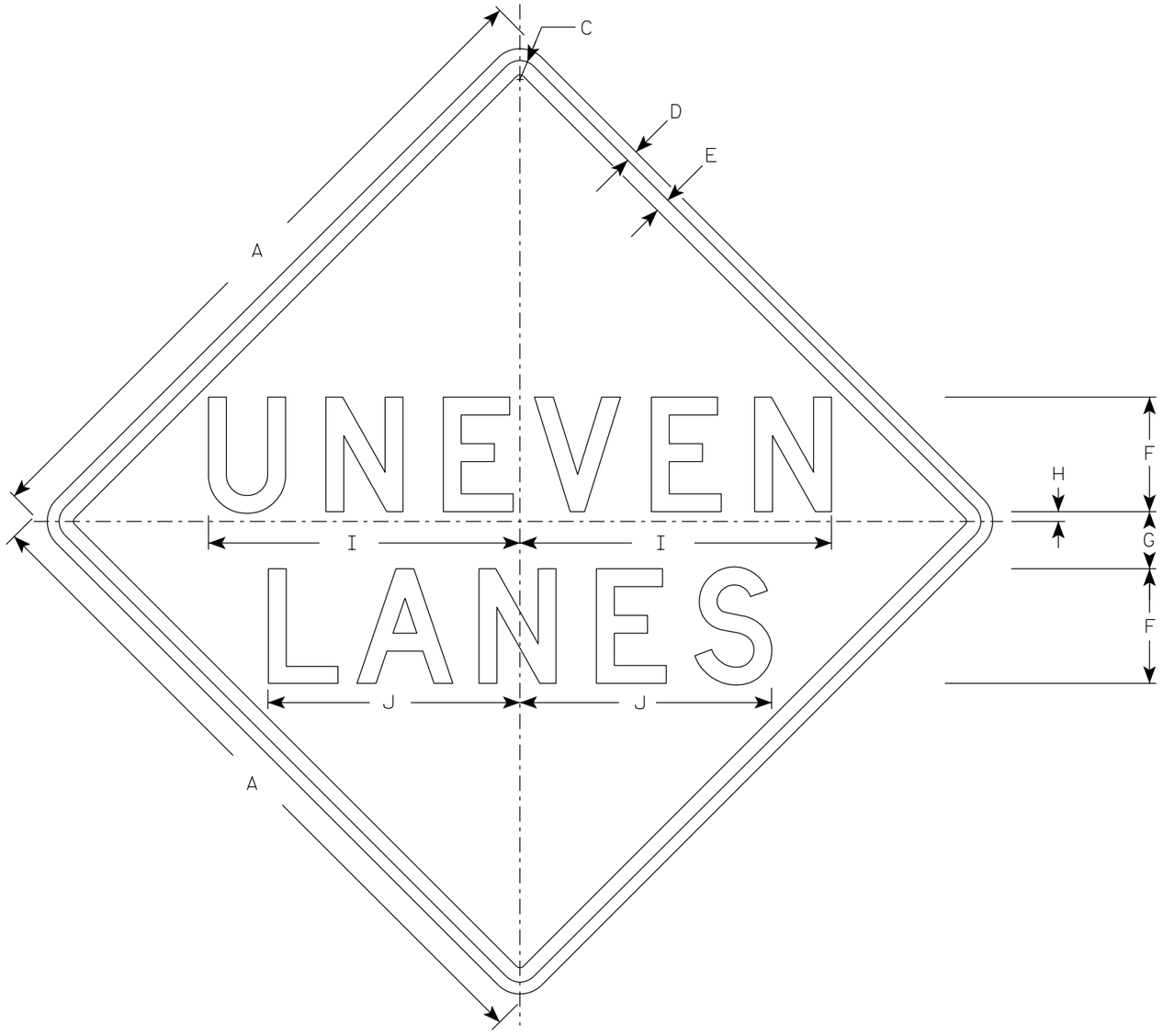
STANDARD SIGN
W8-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/16/2020 PLATE NO. W8-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W8-11

NOTES

1. Sign is Type II - Type F Reflective
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.

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	3	1/2	16 3/8	13 1/4																	9.0
2S	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0
2M	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0
3	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0
4	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0
5	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0

STANDARD SIGN
W8-11

WISCONSIN DEPT OF TRANSPORTATION

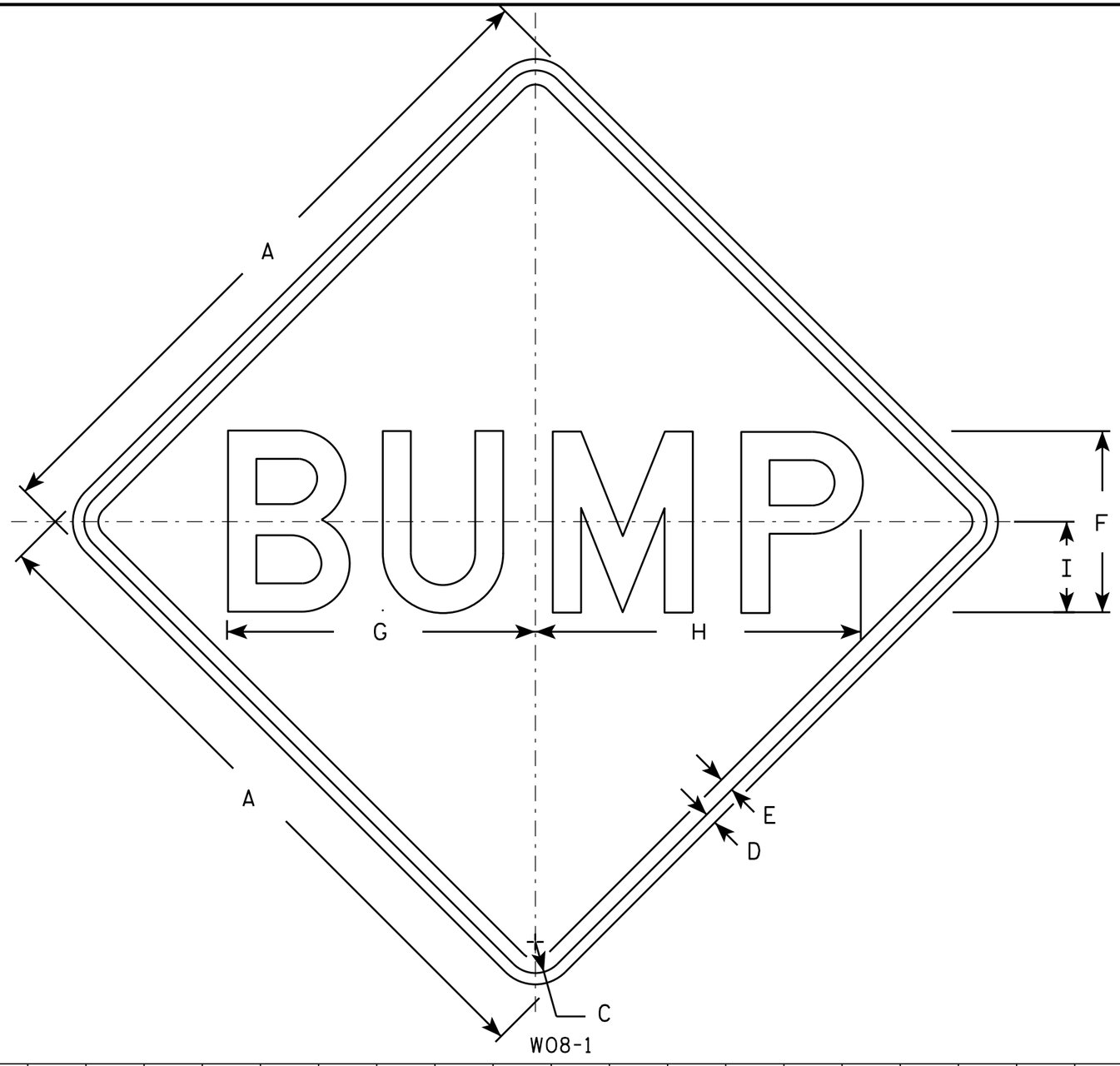
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/20/2020 PLATE NO. W8-11.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W811.dgn PLOT DATE : 20-APRIL 2020 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7



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.

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	10	16 7/8	17 7/8	5																		9.0
2S	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
2M	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
3	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
4	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
5	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0

STANDARD SIGN
W08-1

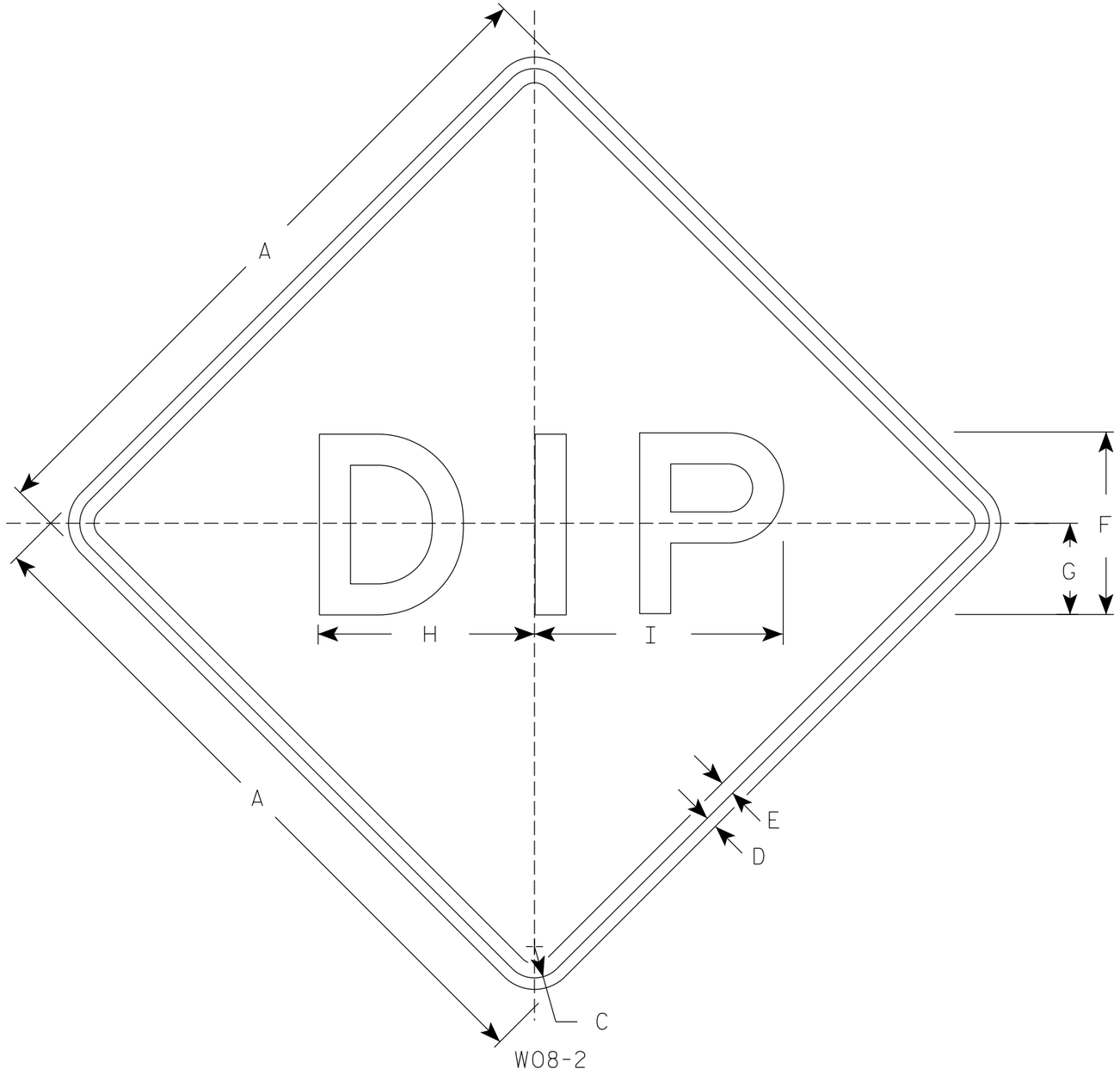
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 117 W08-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W081.DGN PLOT DATE : 20-NOV-2013 12:24 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.688833:1.000000 WISDOT/CADDS SHEET 42



W08-2

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	10	5	11 7/8	13 1/2																		9.0
2S	48		2 1/4	3/4	1	12	6	14 1/4	16 1/4																		16.0
2M	48		2 1/4	3/4	1	12	6	14 1/4	16 1/4																		16.0
3	48		2 1/4	3/4	1	12	6	14 1/4	16 1/4																		16.0
4	48		2 1/4	3/4	1	12	6	14 1/4	16 1/4																		16.0
5	48		2 1/4	3/4	1	12	6	14 1/4	16 1/4																		16.0

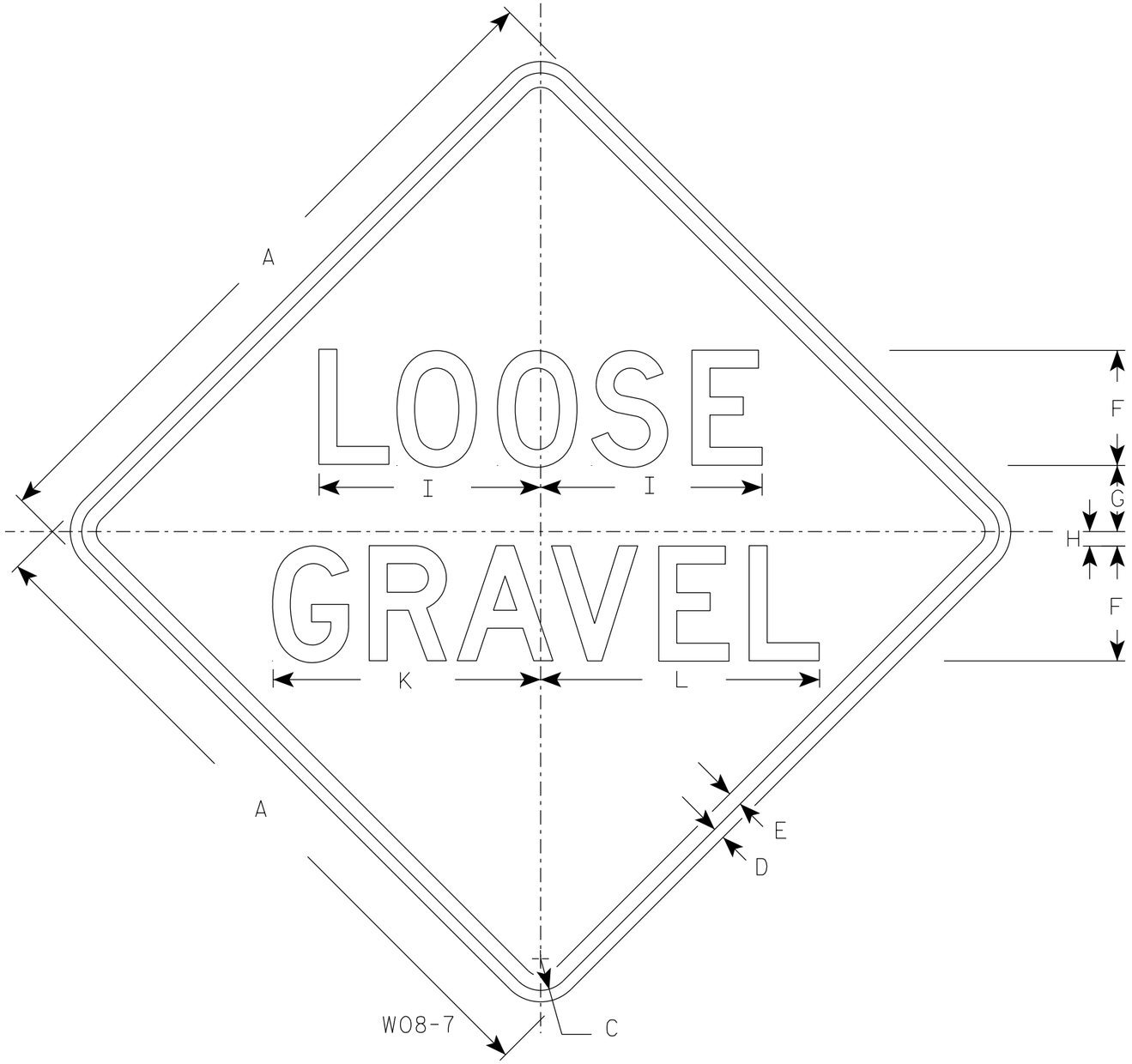
STANDARD SIGN
W08-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/7/19 PLATE NO. W08-2.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 118 | E



NOTES

1. Sign is Type II - Type F Reflective
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.

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	4 1/8	3/4	11 5/8		14	14 1/2															9.0
2S	48		2 1/4	3/4	1	8	5 1/2	1	15 1/2		18 5/8	19 3/8															16.0
2M	48		2 1/4	3/4	1	8	5 1/2	1	15 1/2		18 5/8	19 3/8															16.0
3	48		2 1/4	3/4	1	8	5 1/2	1	15 1/2		18 5/8	19 3/8															16.0
4	48		2 1/4	3/4	1	8	5 1/2	1	15 1/2		18 5/8	19 3/8															16.0
5	48		2 1/4	3/4	1	8	5 1/2	1	15 1/2		18 5/8	19 3/8															16.0

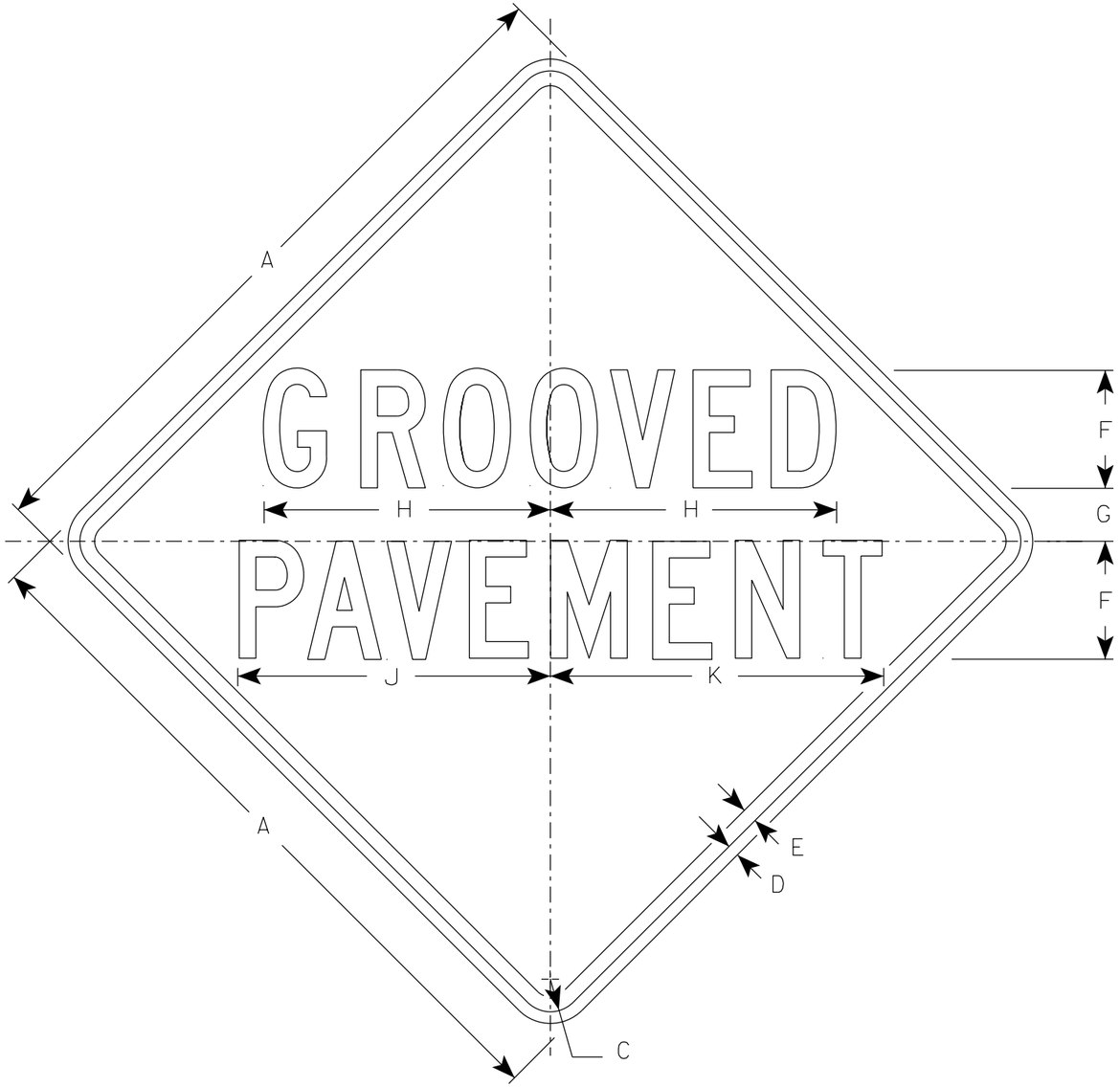
STANDARD SIGN
W08-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/16/2020 PLATE NO. W08-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E



W08-15

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	2 5/8	14 1/2		15 7/8	17																9.0
2S	48		2 1/4	3/4	1	8	3 1/2	19 3/8		21 1/4	22 5/8																16.0
2M	48		2 1/4	3/4	1	8	3 1/2	19 3/8		21 1/4	22 5/8																16.0
3	48		2 1/4	3/4	1	8	3 1/2	19 3/8		21 1/4	22 5/8																16.0
4	48		2 1/4	3/4	1	8	3 1/2	19 3/8		21 1/4	22 5/8																16.0
5	48		2 1/4	3/4	1	8	3 1/2	19 3/8		21 1/4	22 5/8																16.0

STANDARD SIGN
W08-15

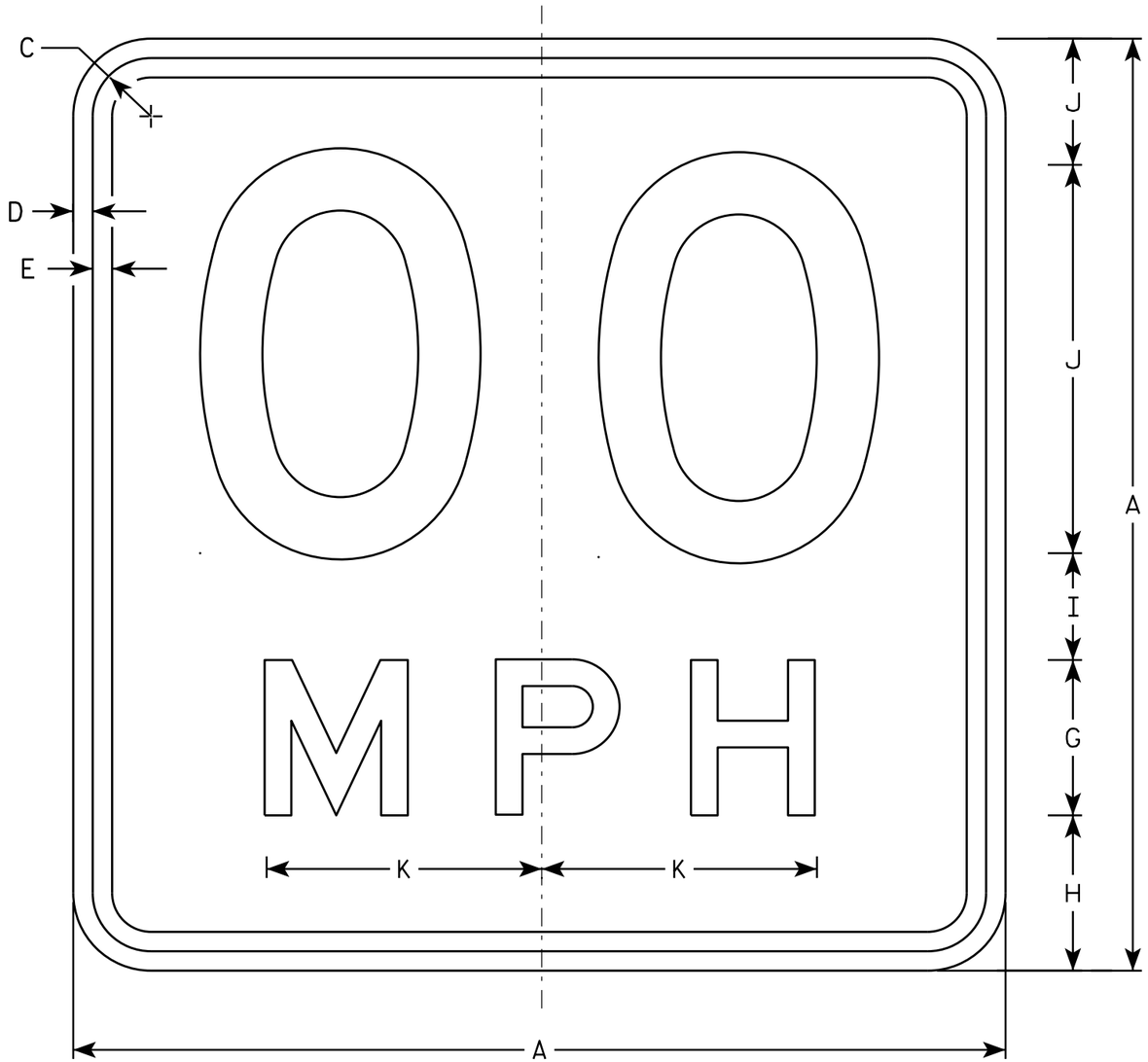
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/16/2020 PLATE NO. W08-15.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 120 | E

7



W013-1

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 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	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
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

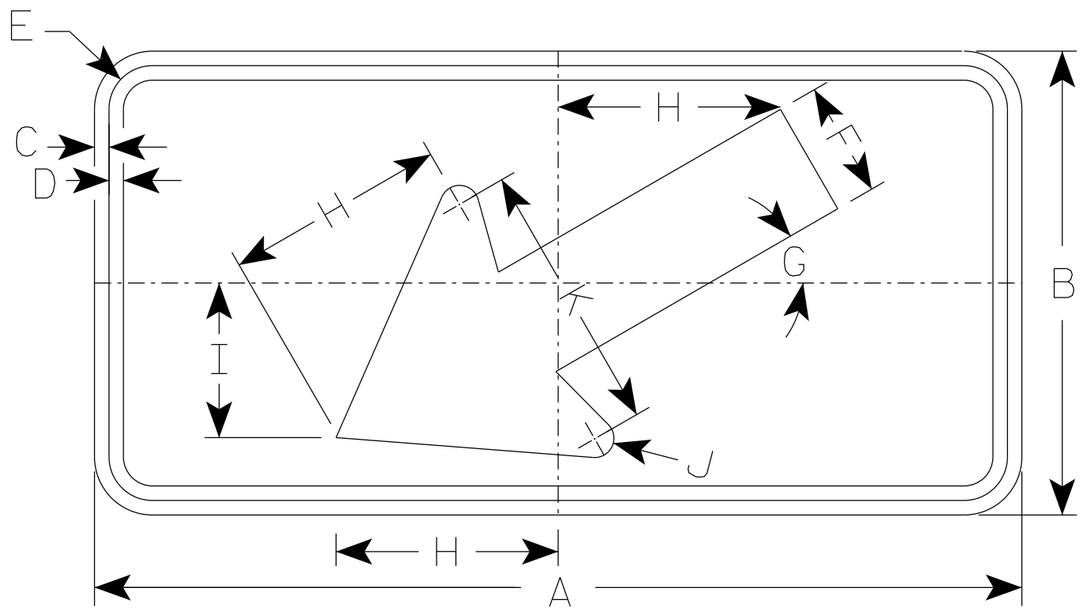
STANDARD SIGN
W013-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/13 PLATE 121 W013-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W016-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded but corners shall be rounded when base material is metal.
4. W016-7R is the same as W016-L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2S	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
2M	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
3	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0

STANDARD SIGN
W016-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

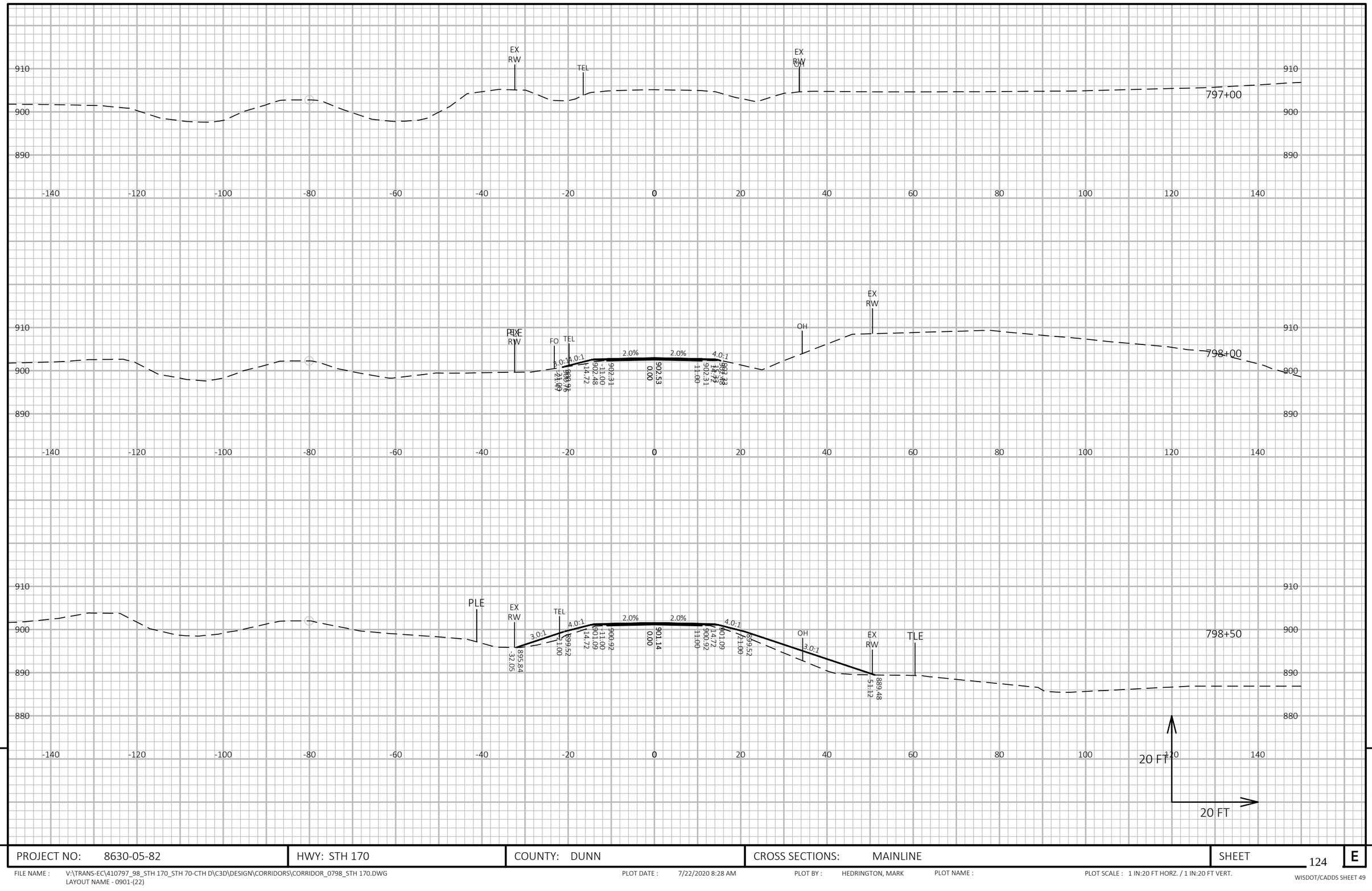
DATE 7/11/18 PLATE NO. W016-7.1

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W0167.dgn PLOT DATE : 11-JUL-2018 3:11 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

STATION	AREA (SF)		INCR. VOL (CY)		CUMULATIVE VOL (CY		MASS ORDINATE
	CUT	FILL	CUT	FILL	CUT 1.00	EXP. FILL 1.30	
798+00	1.47	4.44	0.00	0.00	0.00	0.00	0.00
798+50	0.89	79.41	2.19	77.64	2.19	100.93	-98.75
799+00	2.47	122.24	3.11	186.71	5.30	343.66	-338.36
799+50	1.33	157.14	3.52	258.69	8.81	679.95	-671.13
800+00	2.91	103.76	3.93	241.57	12.74	993.99	-981.25
800+50	2.67	86.28	5.17	175.96	17.91	1222.75	-1204.84
801+00	3.76	80.91	5.95	154.81	23.86	1423.99	-1400.13
801+50	4.05	69.01	7.23	138.81	31.09	1604.45	-1573.36
801+88.2	3.06	61.90	5.03	92.61	36.12	1724.84	-1688.72
802+00	3.44	63.26	1.42	27.35	37.54	1760.40	-1722.85
802+50	5.17	21.11	7.97	78.12	45.51	1861.95	-1816.44
803+00	3.24	39.39	7.79	56.02	53.30	1934.78	-1881.47
803+08.2	3.49	46.85	1.02	13.10	54.32	1951.80	-1897.48
803+33.2	4.15	36.42	3.54	38.55	57.86	2001.92	-1944.06
803+58.2	3.51	19.62	3.55	25.94	61.41	2035.65	-1974.24
804+00	1.44	41.73	3.83	47.49	65.24	2097.38	-2032.14
804+50	1.42	105.10	2.65	135.95	67.89	2274.12	-2206.23
805+00	6.20	167.40	7.06	252.31	74.94	2602.13	-2527.19
805+50	8.02	99.52	13.17	247.15	88.11	2923.42	-2835.31
806+00	7.09	33.53	13.99	123.19	102.10	3083.58	-2981.48
806+50	0.90	34.83	7.40	63.30	109.50	3165.86	-3056.36
807+00	1.46	71.40	2.19	98.36	111.68	3293.73	-3182.05
807+50	1.77	64.42	2.99	125.76	114.67	3457.22	-3342.54
808+00	1.68	24.40	3.19	82.24	117.87	3564.13	-3446.26
808+50	0.57	131.94	2.08	144.76	119.95	3752.32	-3632.37
808+57.5	0.00	0.00	0.08	18.33	120.03	3776.14	-3656.11
STRUCTURE							
810+83.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
811+00	2.55	28.46	0.78	8.70	0.78	11.30	-10.53
811+50	2.94	25.58	5.08	50.04	5.86	76.35	-70.49
812+00	5.03	54.29	7.38	73.95	13.24	172.49	-159.25
812+50	1.75	119.93	6.28	161.31	19.52	382.20	-362.68
813+00	1.96	124.52	3.44	226.34	22.96	676.45	-653.49
813+50	0.68	106.85	2.44	214.23	25.40	954.95	-929.55
814+00	1.79	87.46	2.29	179.92	27.69	1188.84	-1161.15
814+50	1.52	67.70	3.06	143.67	30.75	1375.61	-1344.86
814+82.6	1.49	50.15	1.82	71.15	32.57	1468.10	-1435.53
815+07.6	1.25	60.51	1.27	51.23	33.84	1534.70	-1500.86
815+32.6	0.66	48.66	0.88	50.54	34.72	1600.40	-1565.68
815+50	0.21	33.15	0.28	26.36	35.00	1634.67	-1599.67
815+74	0.02	16.00	0.10	21.85	35.10	1663.07	-1627.97
816+00	0.38	18.22	0.19	16.47	35.30	1684.49	-1649.19
816+52.6	0.26	18.45	0.62	35.72	35.92	1730.93	-1695.01
816+74	2.82	51.77	1.22	27.83	37.14	1767.10	-1729.96
817+00	0.01	100.60	1.36	73.36	38.50	1862.47	-1823.97

STATION	AREA (SF)		INCR. VOL (CY)		CUMULATIVE VOL (CY		MASS ORDINATE
	CUT	FILL	CUT	FILL	CUT 1.00	EXP. FILL 1.30	
817+50	0.00	122.78	0.01	206.83	38.51	2131.36	-2092.84
818+00	0.20	121.32	0.19	226.02	38.70	2425.18	-2386.48
818+50	0.02	124.25	0.20	227.38	38.90	2720.77	-2681.87
818+75	0.39	148.64	0.19	126.34	39.09	2885.01	-2845.92
819+00	0.87	179.30	0.58	151.82	39.67	3082.39	-3042.71
819+50	0.92	218.76	1.66	368.57	41.33	3561.53	-3520.20
820+00	2.44	67.55	3.11	265.10	44.44	3906.16	-3861.72
820+50	2.97	23.03	5.01	83.87	49.45	4015.20	-3965.74
821+00	3.56	15.91	6.05	36.06	55.50	4062.07	-4006.57
821+50	5.38	13.60	8.28	27.32	63.78	4097.59	-4033.81
822+00	3.86	21.13	8.56	32.16	72.33	4139.39	-4067.06
823+00	3.07	12.11	12.83	61.56	85.17	4219.42	-4134.25
842+00	10.32	0.00	0.00	0.00	0.00	0.00	0.00
842+25.4	15.17	0.00	11.99	0.00	11.99	0.00	11.99
842+50	11.72	0.00	12.25	0.00	24.24	0.00	24.24
843+00	7.88	5.72	18.15	5.30	42.39	6.89	35.50
843+45.4	15.03	4.78	19.26	8.83	61.65	18.36	43.29
843+70.4	12.84	0.49	12.90	2.44	74.55	21.53	53.02
843+95.4	16.25	0.26	13.47	0.35	88.02	21.98	66.04
844+00	16.79	0.27	2.81	0.05	90.83	22.04	68.79
844+50	29.39	0.53	42.76	0.74	133.59	23.01	110.59
845+00	25.28	1.56	50.62	1.94	184.21	25.52	158.69
845+50	28.62	1.78	49.91	3.09	234.12	29.54	204.58
846+00	7.00	1.79	32.98	3.31	267.10	33.84	233.26
846+36	2.28	7.21	6.19	6.00	273.29	41.64	231.65
846+50	2.45	3.76	1.23	2.84	274.52	45.34	229.18
847+00	5.42	2.85	7.29	6.12	281.80	53.29	228.51
847+50	11.64	2.46	15.80	4.92	297.60	59.68	237.91
848+00	8.89	4.77	19.01	6.69	316.61	68.39	248.22
848+50	5.22	1.50	13.06	5.81	329.67	75.93	253.74
848+76.6	4.06	1.84	4.57	1.65	334.24	78.07	256.17
849+01.6	2.48	10.87	3.03	5.88	337.27	85.72	251.55
849+26.6	13.98	9.12	7.62	9.25	344.89	97.75	247.14
849+50	10.74	14.64	10.71	10.30	355.60	111.14	244.47
850+00	3.66	10.68	13.33	23.44	368.94	141.62	227.32
850+46.6	7.42	9.45	9.56	17.37	378.50	164.20	214.30



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PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 124	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(22)

PLOT DATE : 7/22/2020 8:28 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

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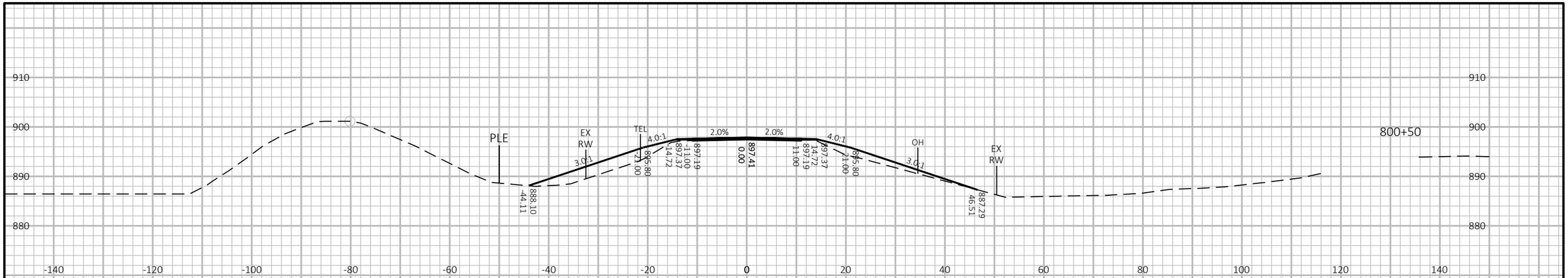
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 125	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(23)

PLOT DATE : 7/22/2020 8:29 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

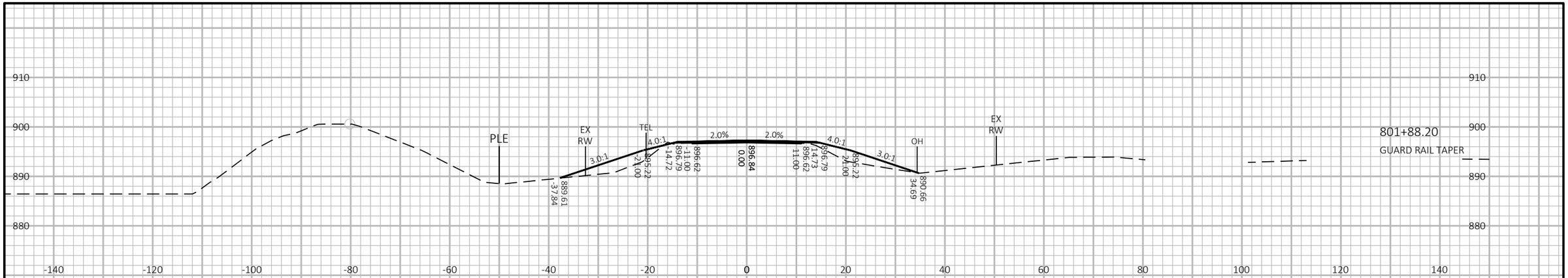


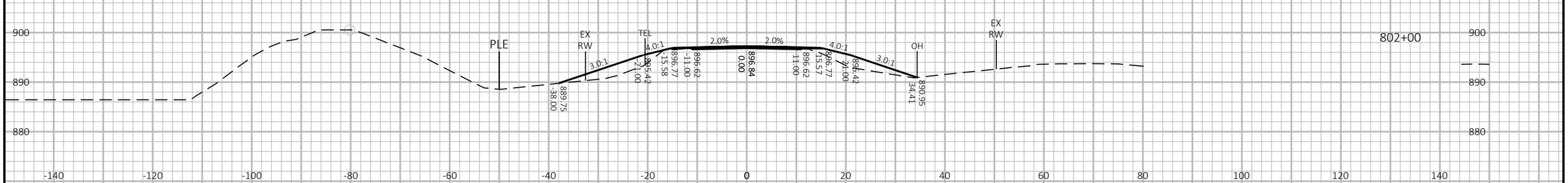
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 126	E

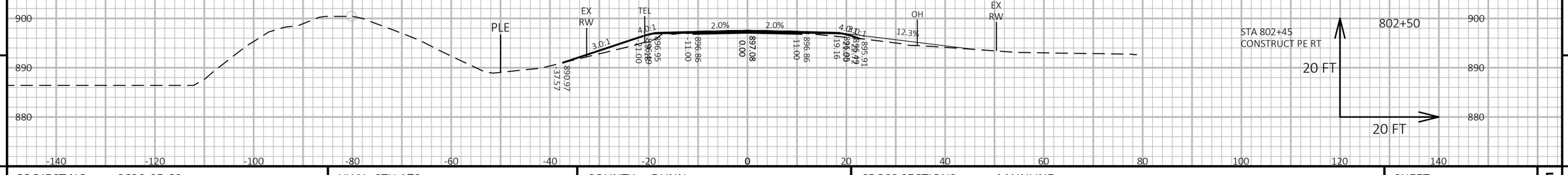
FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(24)

PLOT DATE : 7/22/2020 8:29 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49







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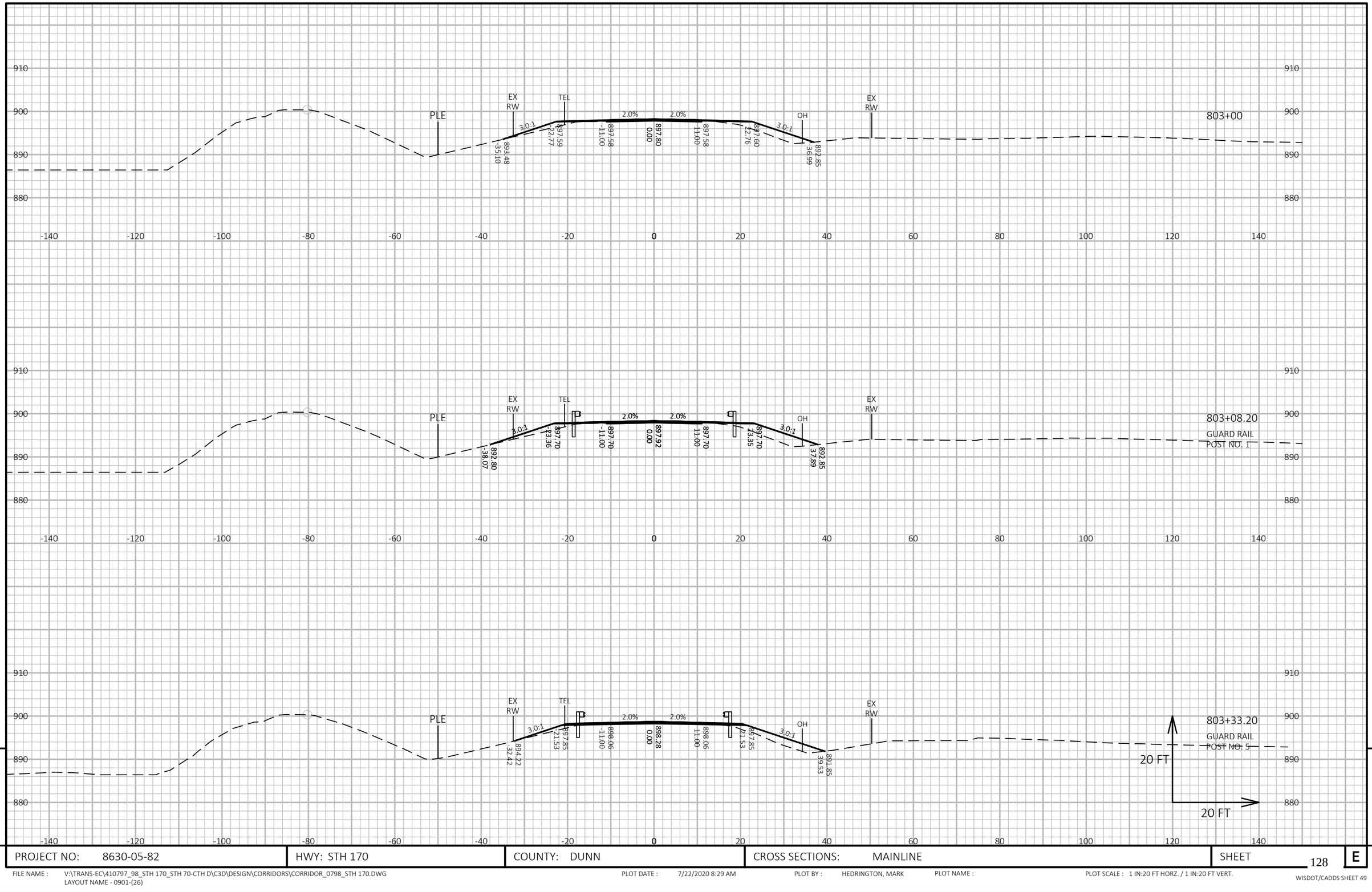
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 127	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(25)

PLOT DATE : 7/22/2020 8:29 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

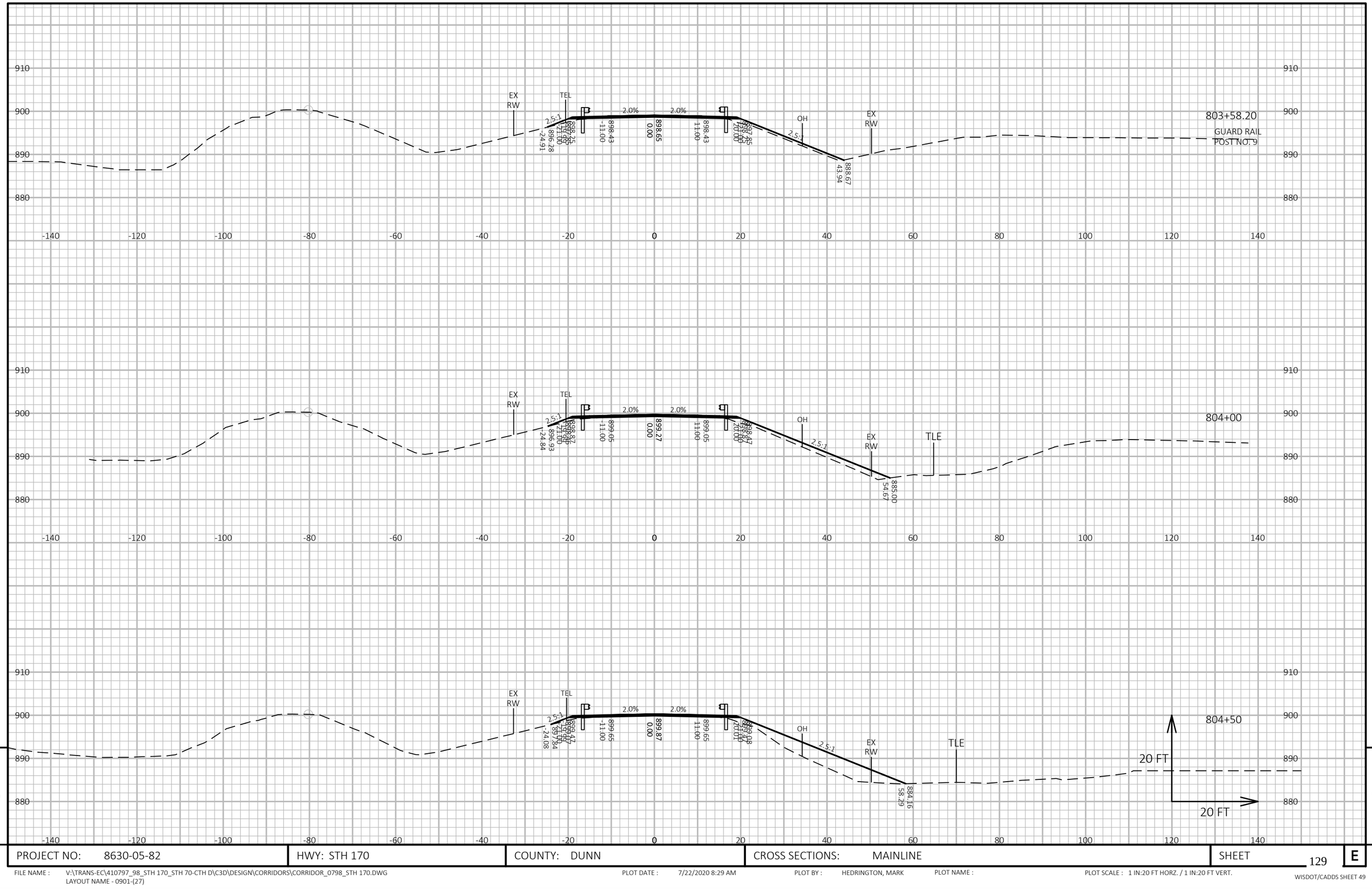


PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 128 E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(26)

PLOT DATE : 7/22/2020 8:29 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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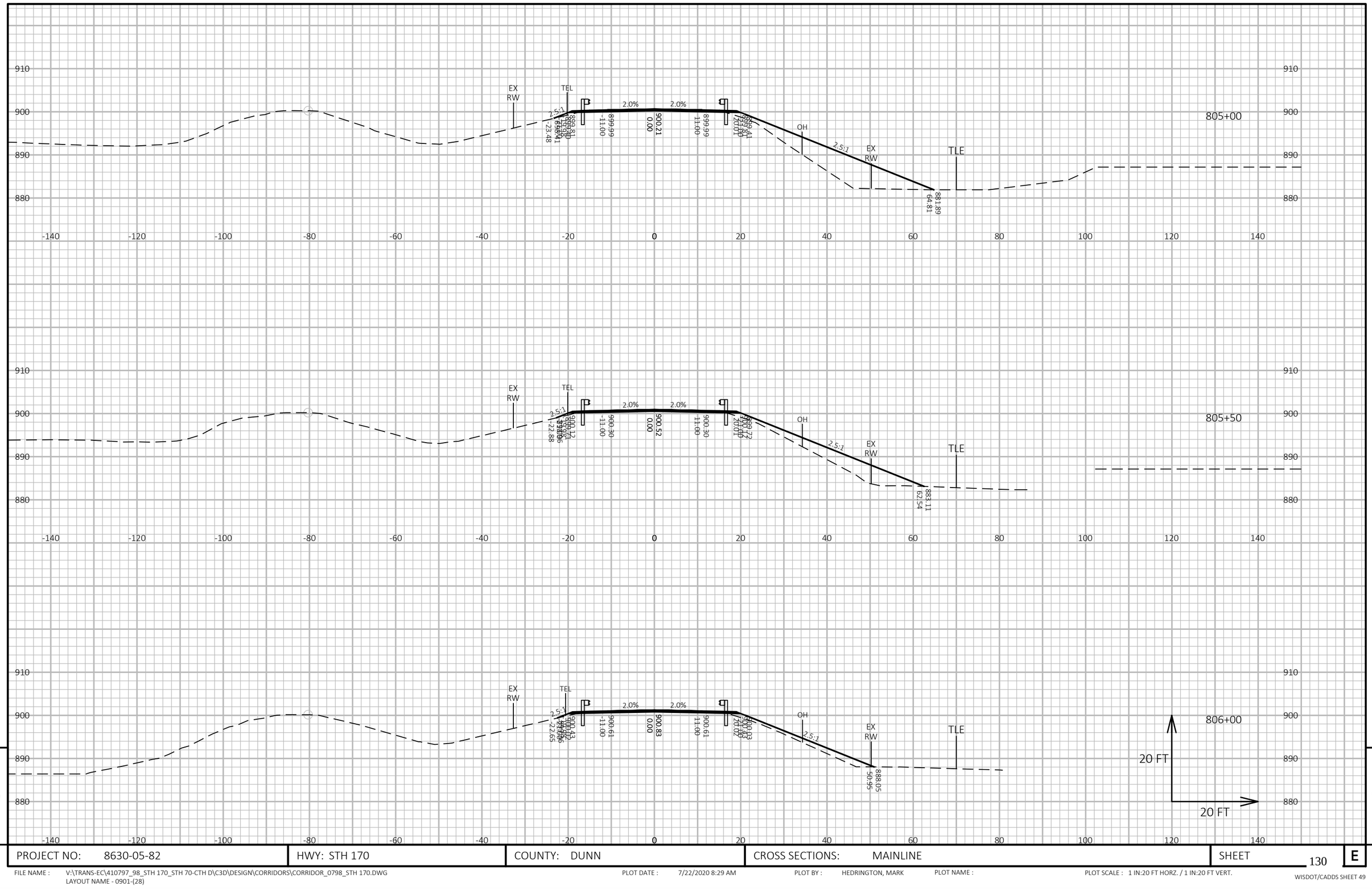
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 129	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(27)

PLOT DATE : 7/22/2020 8:29 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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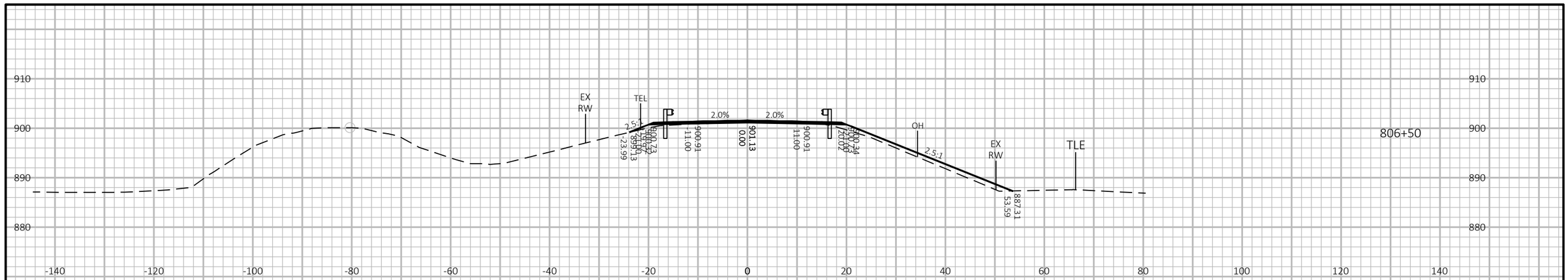
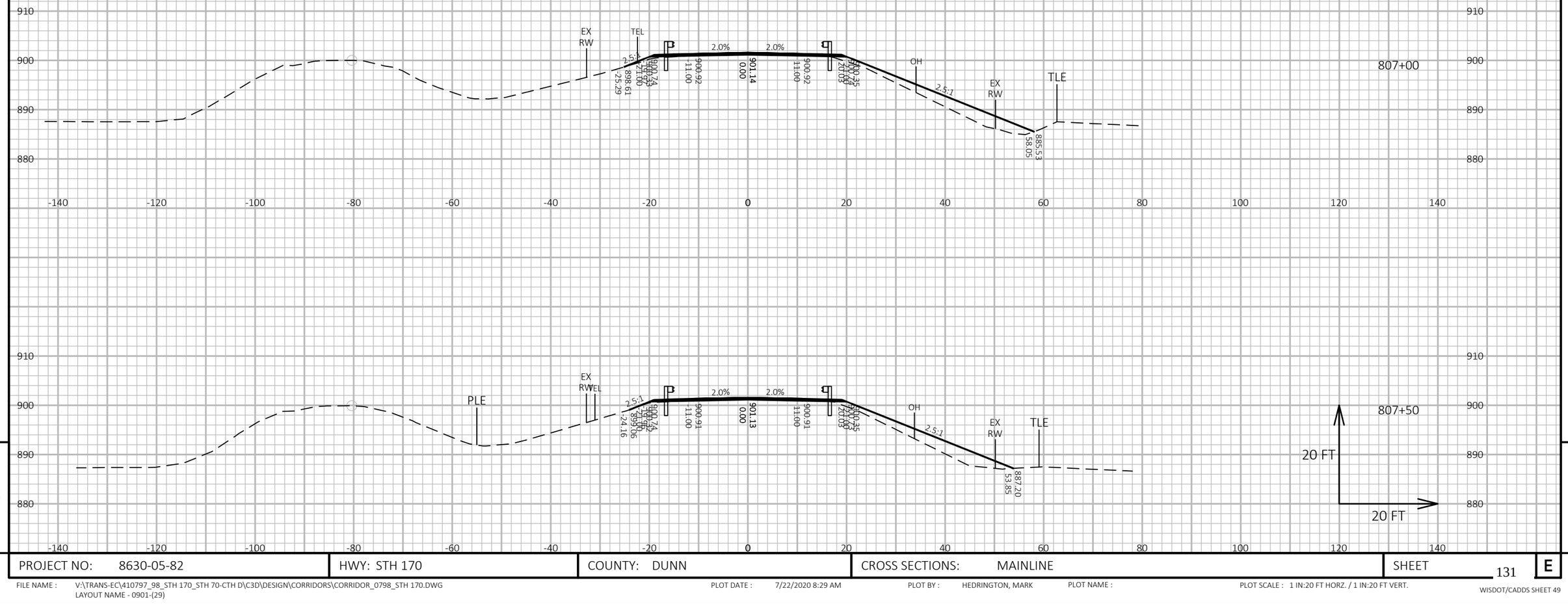
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 130	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(28)

PLOT DATE : 7/22/2020 8:29 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.





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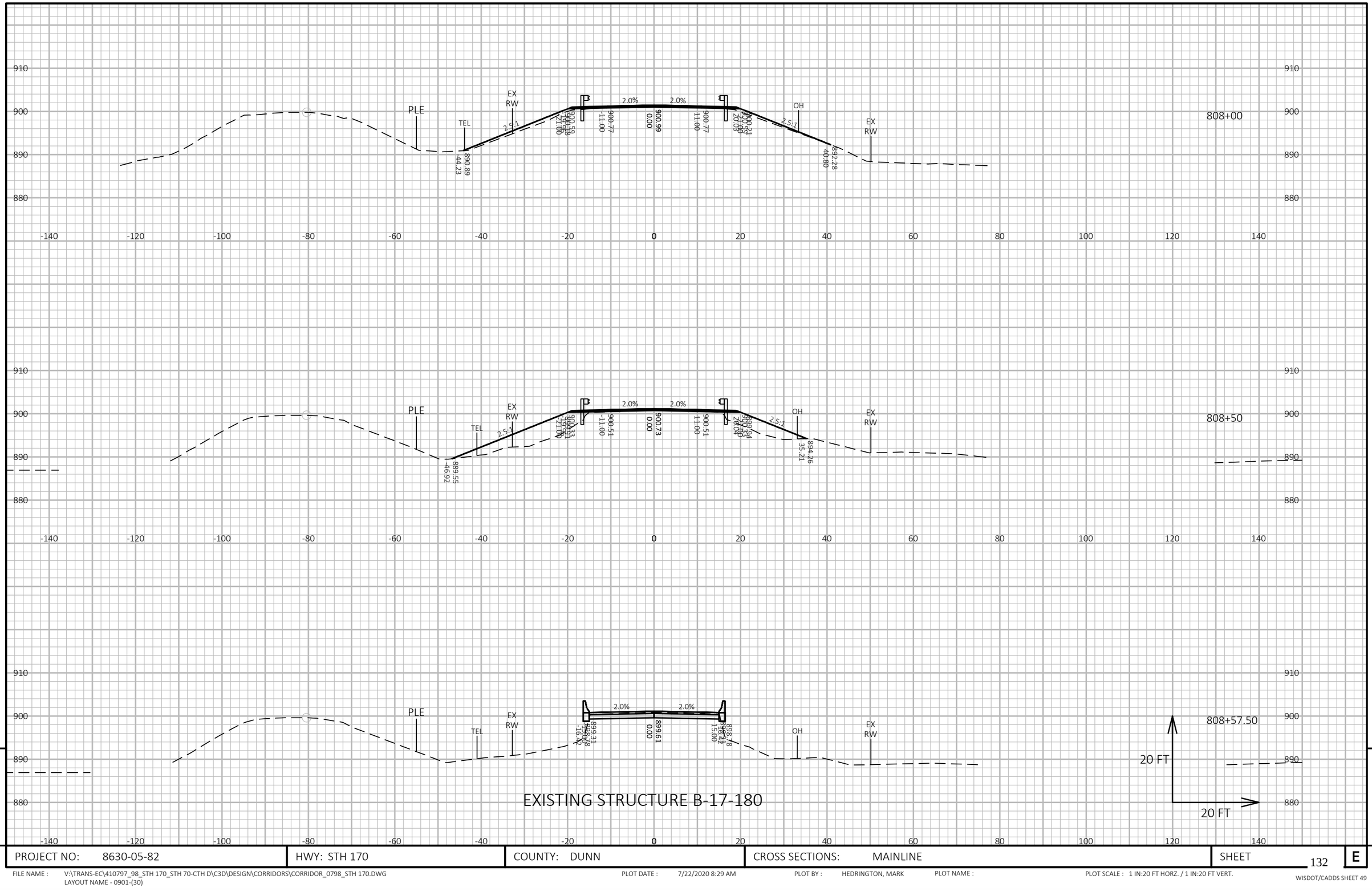
9

PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 131	E



EXISTING STRUCTURE B-17-180

9 9

PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 132	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(30)

PLOT DATE : 7/22/2020 8:29 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

9

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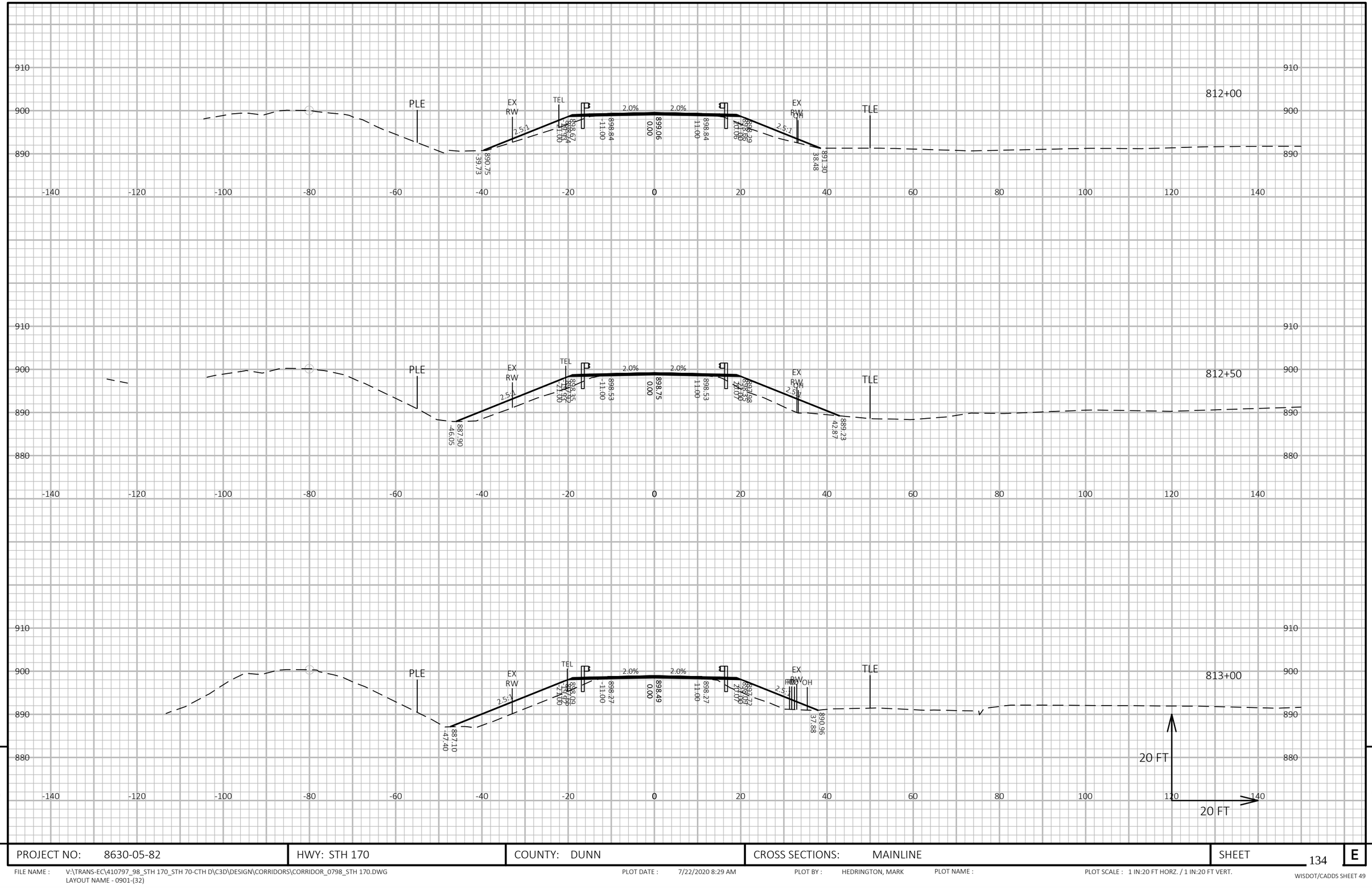
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 133	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(31)

PLOT DATE : 7/22/2020 8:29 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

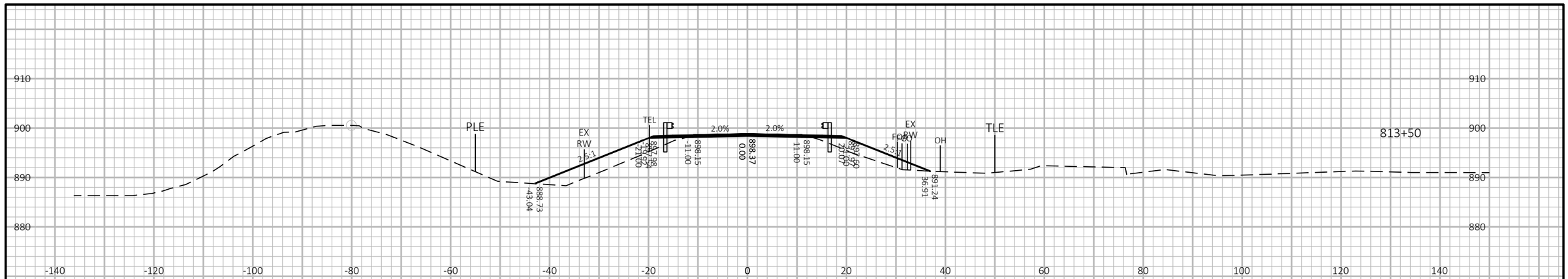


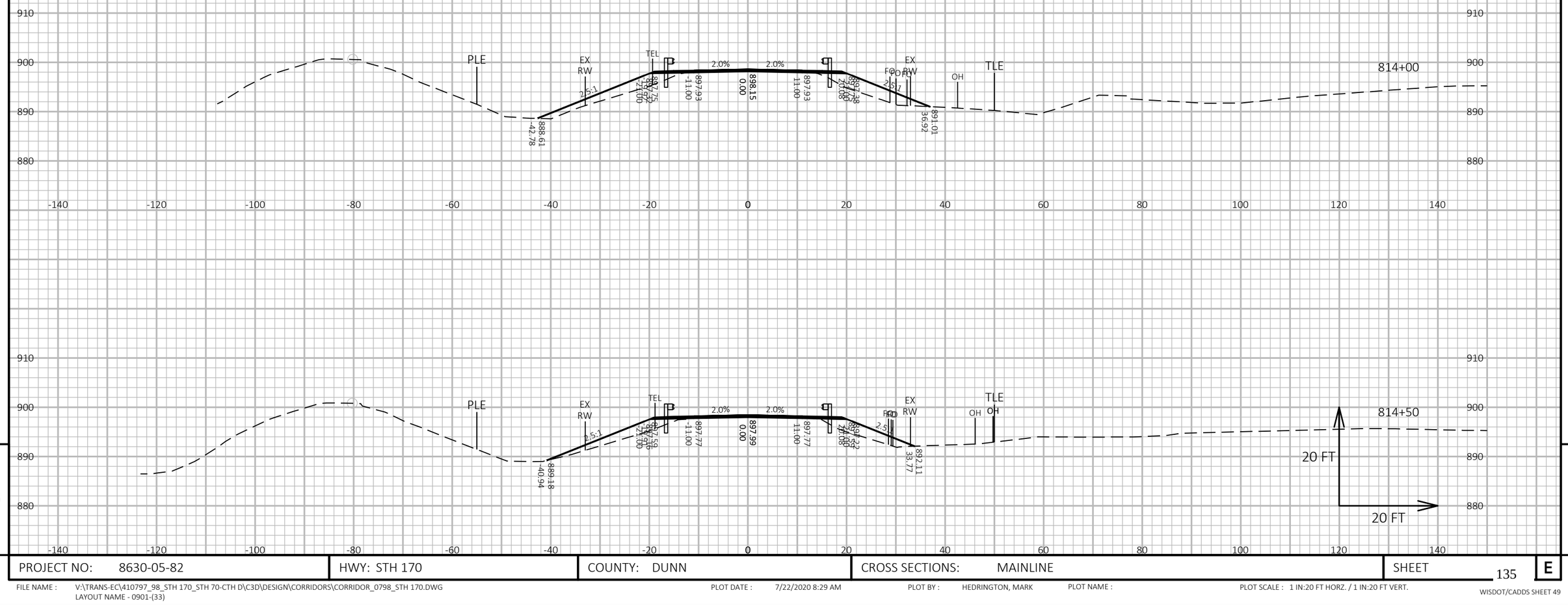
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 134	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(32)

PLOT DATE : 7/22/2020 8:29 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





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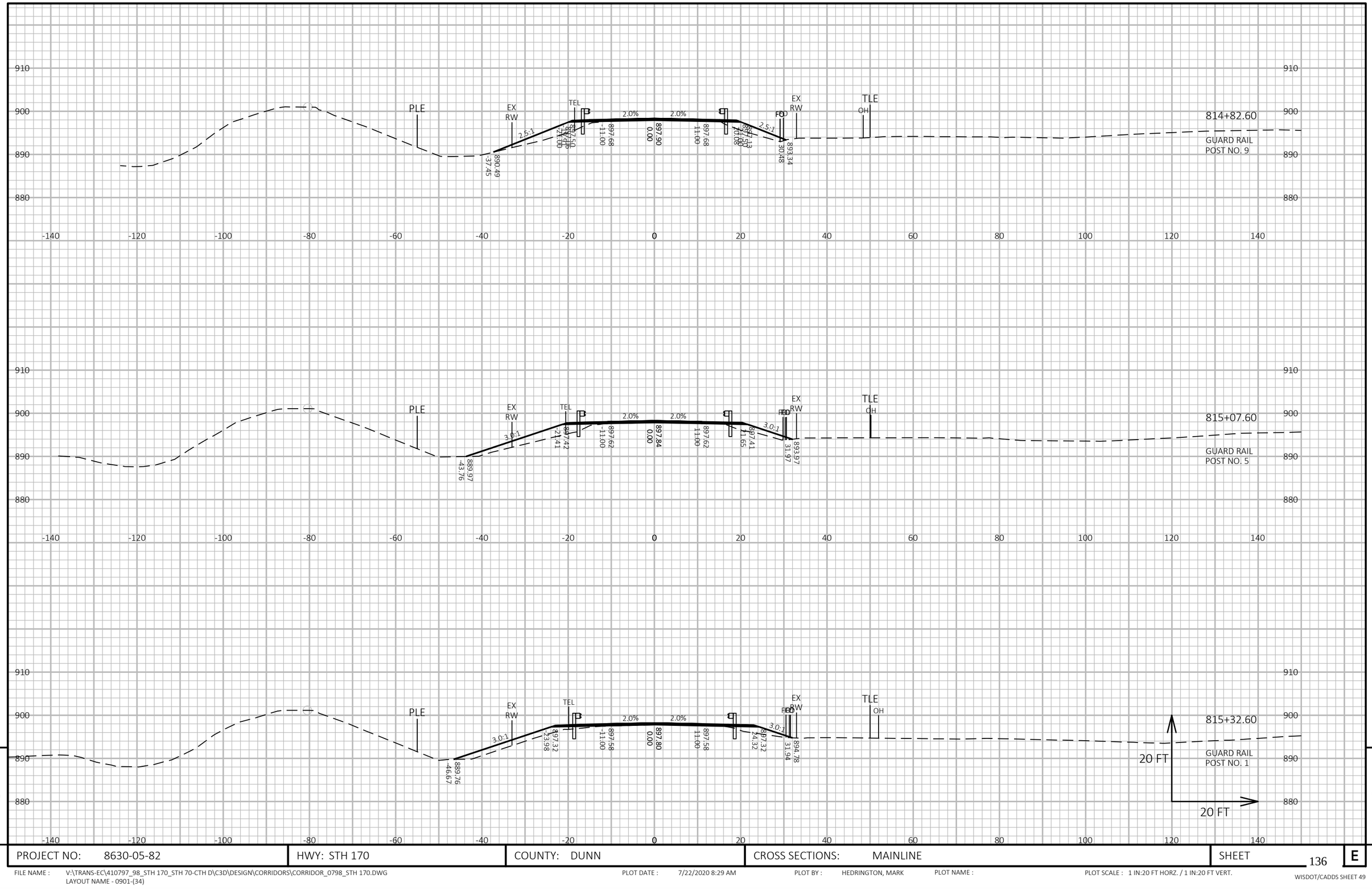
9

PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 135	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(33)

PLOT DATE : 7/22/2020 8:29 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

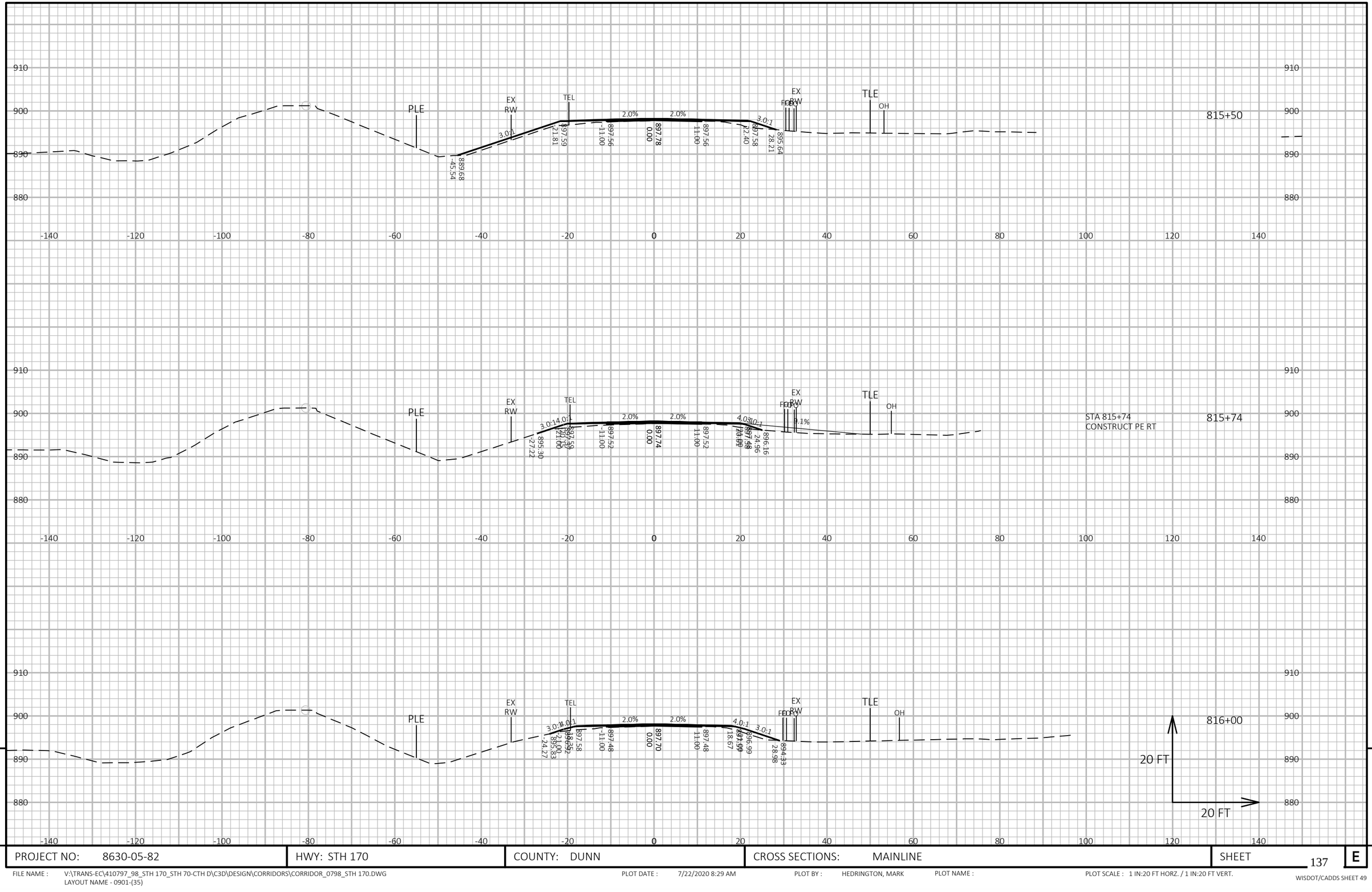


9 9

PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 136	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(34)

PLOT DATE : 7/22/2020 8:29 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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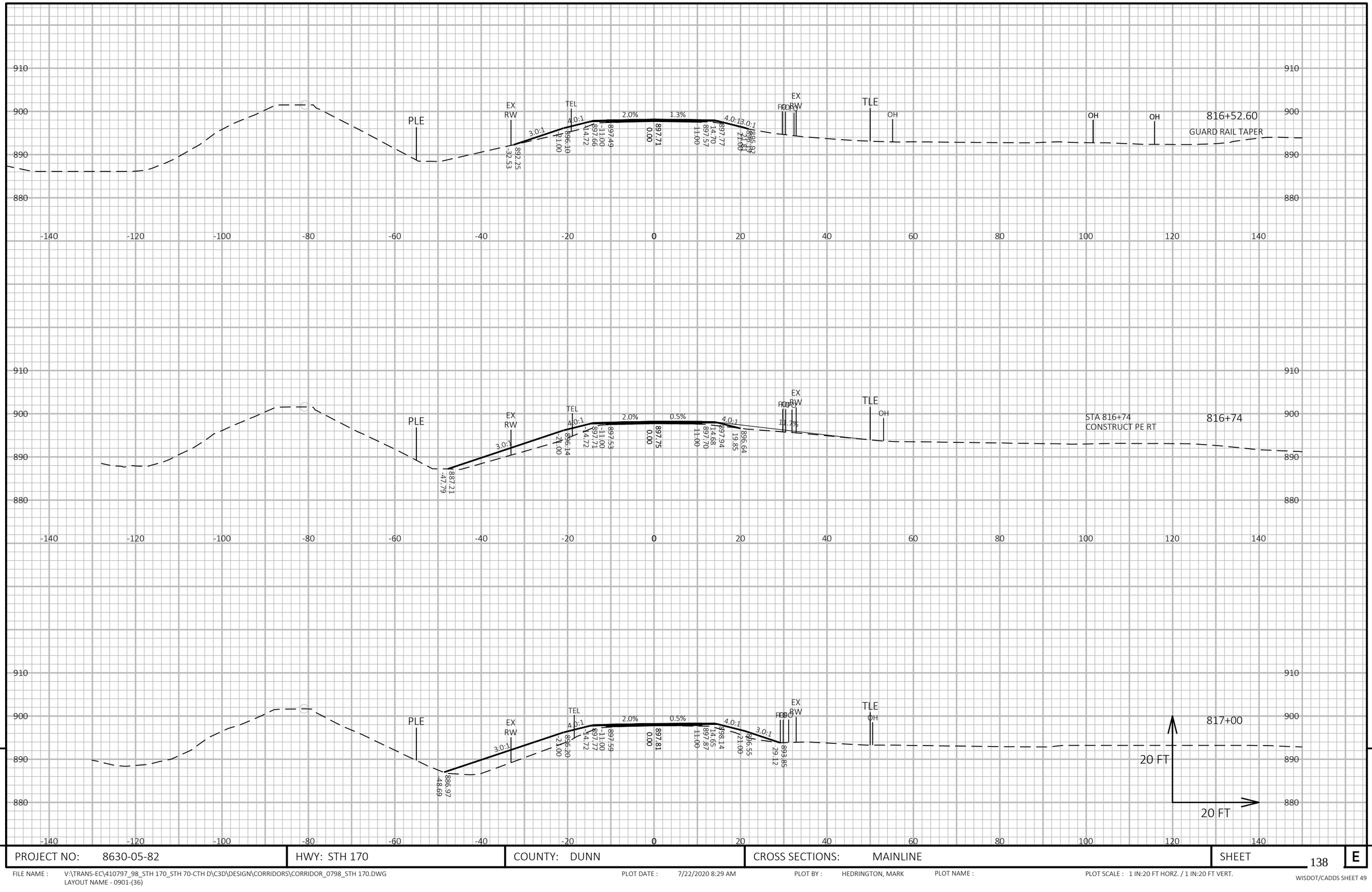
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 137	E



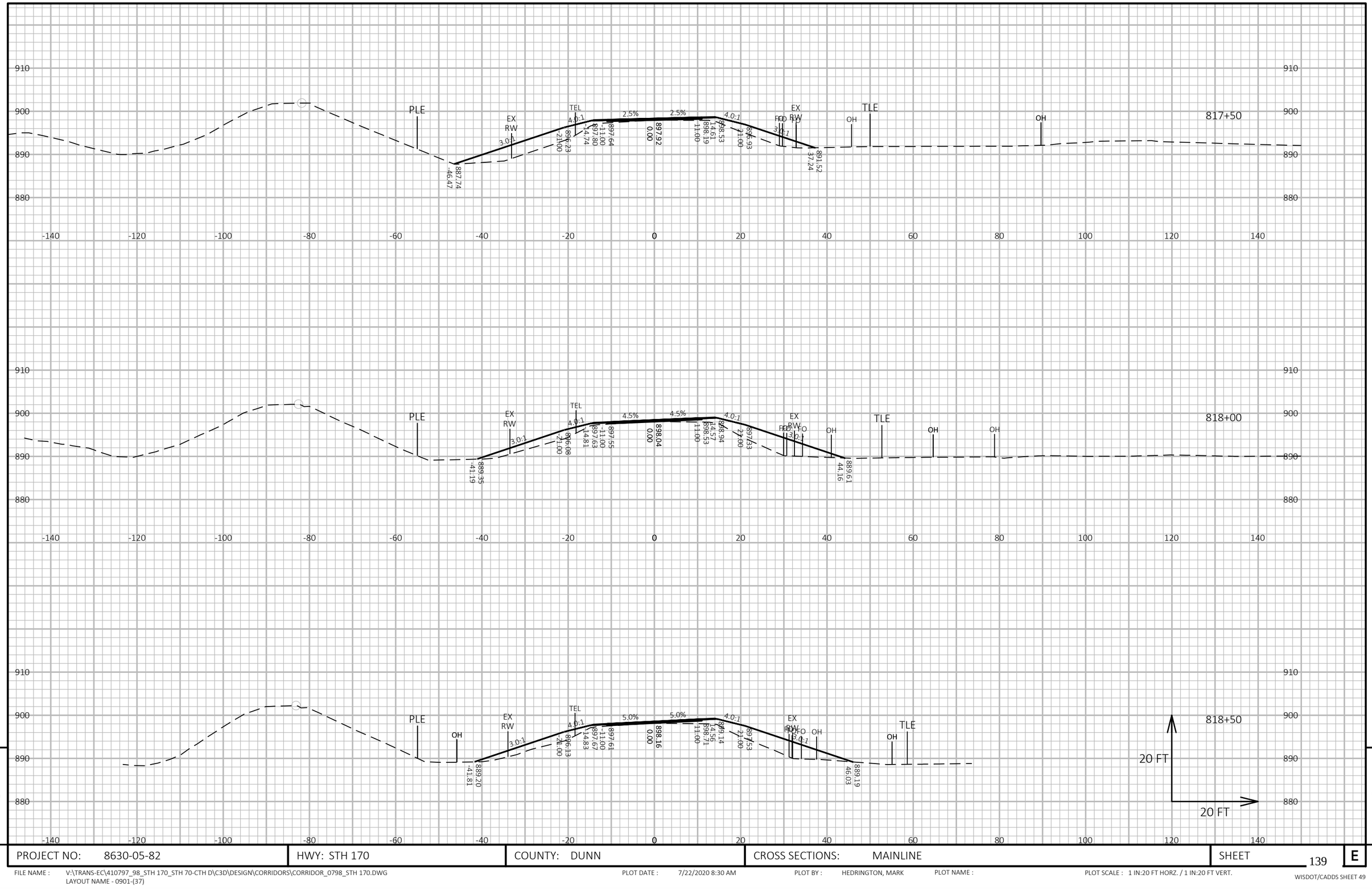
9

9

PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 138	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(36)

PLOT DATE : 7/22/2020 8:29 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

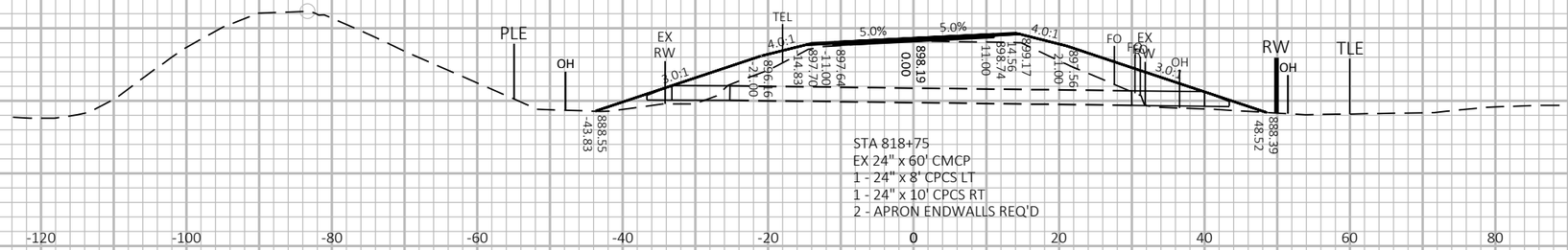


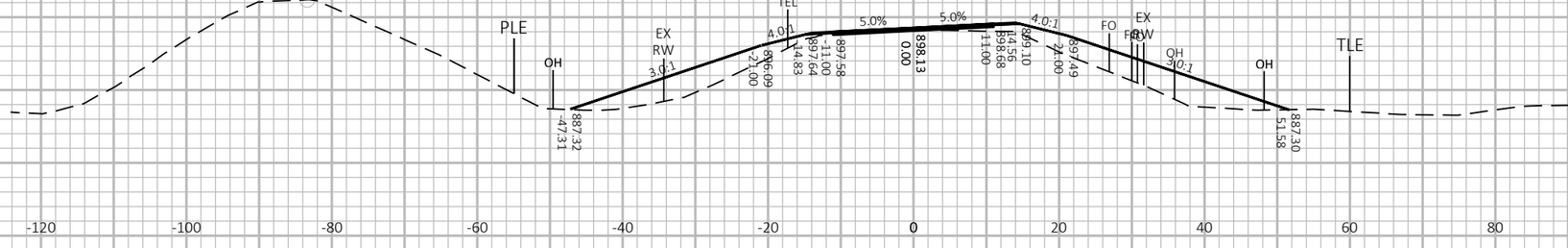
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 139 E

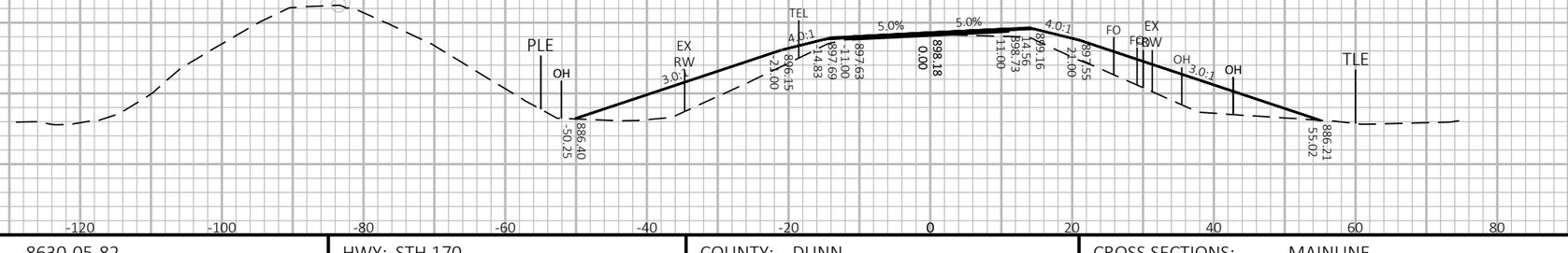
FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(37)

PLOT DATE : 7/22/2020 8:30 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





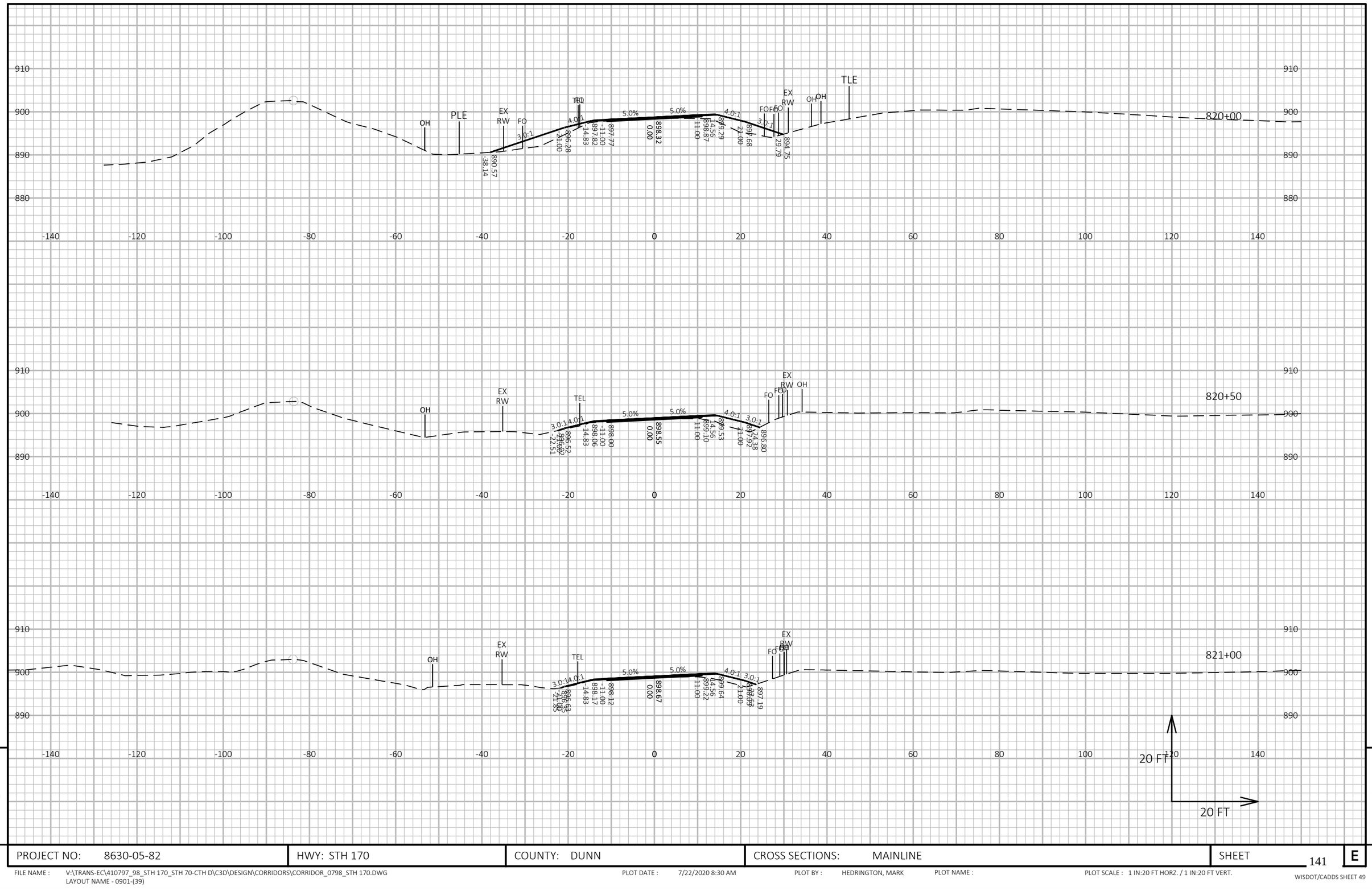


PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 140 E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(38)

PLOT DATE : 7/22/2020 8:30 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

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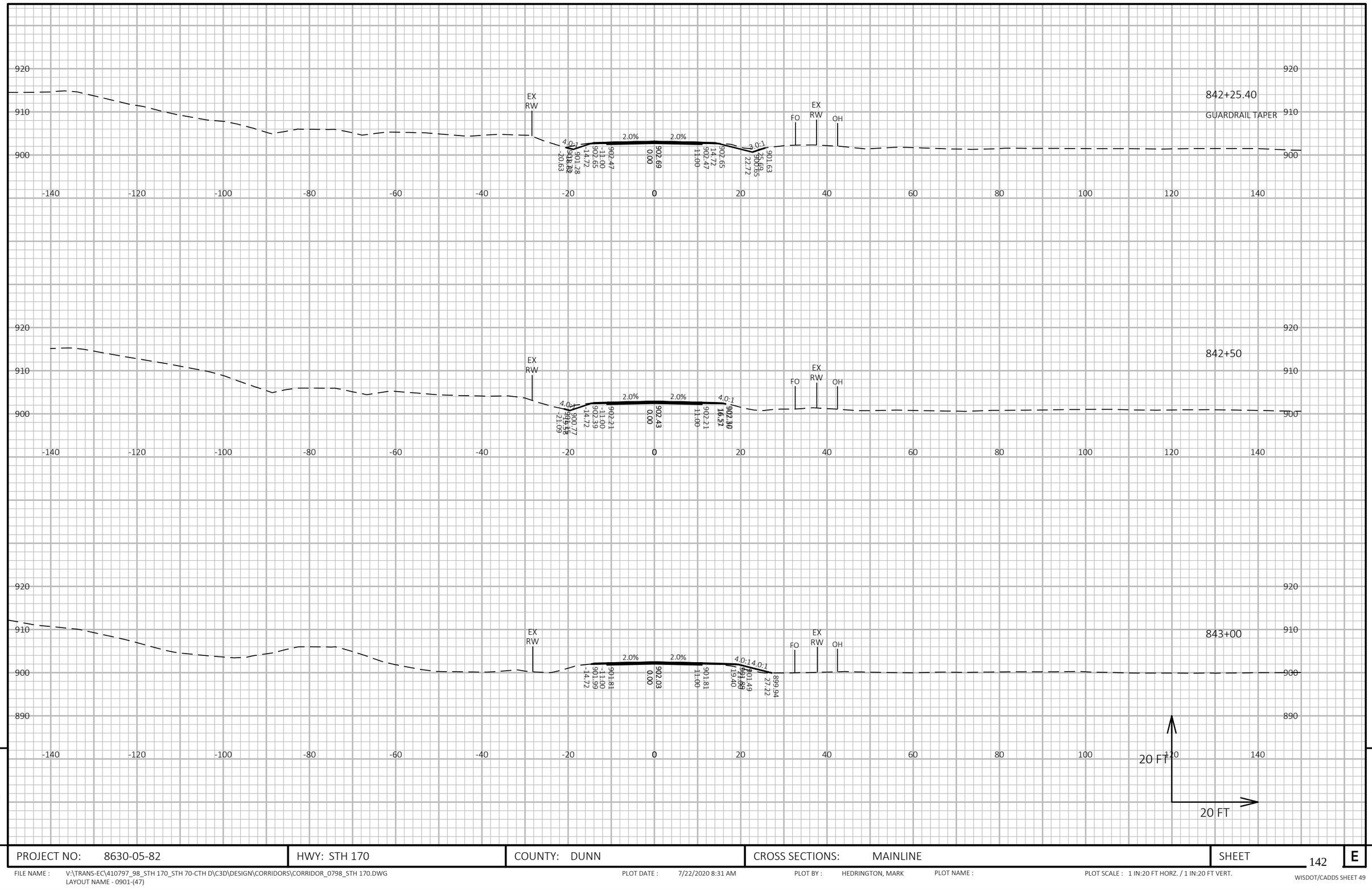
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 141	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(39)

PLOT DATE : 7/22/2020 8:30 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

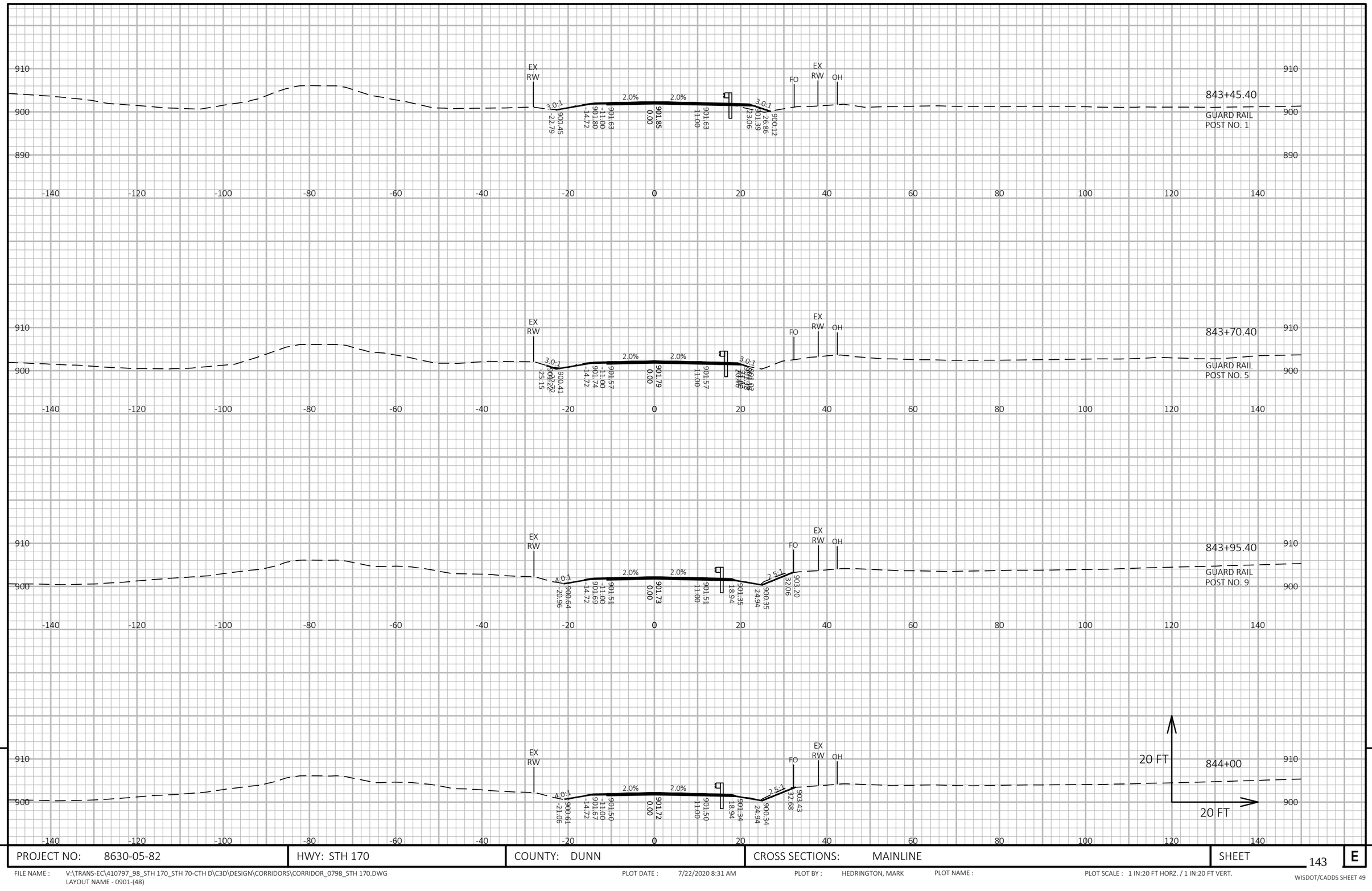


PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 142	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(47)

PLOT DATE : 7/22/2020 8:31 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 143	E

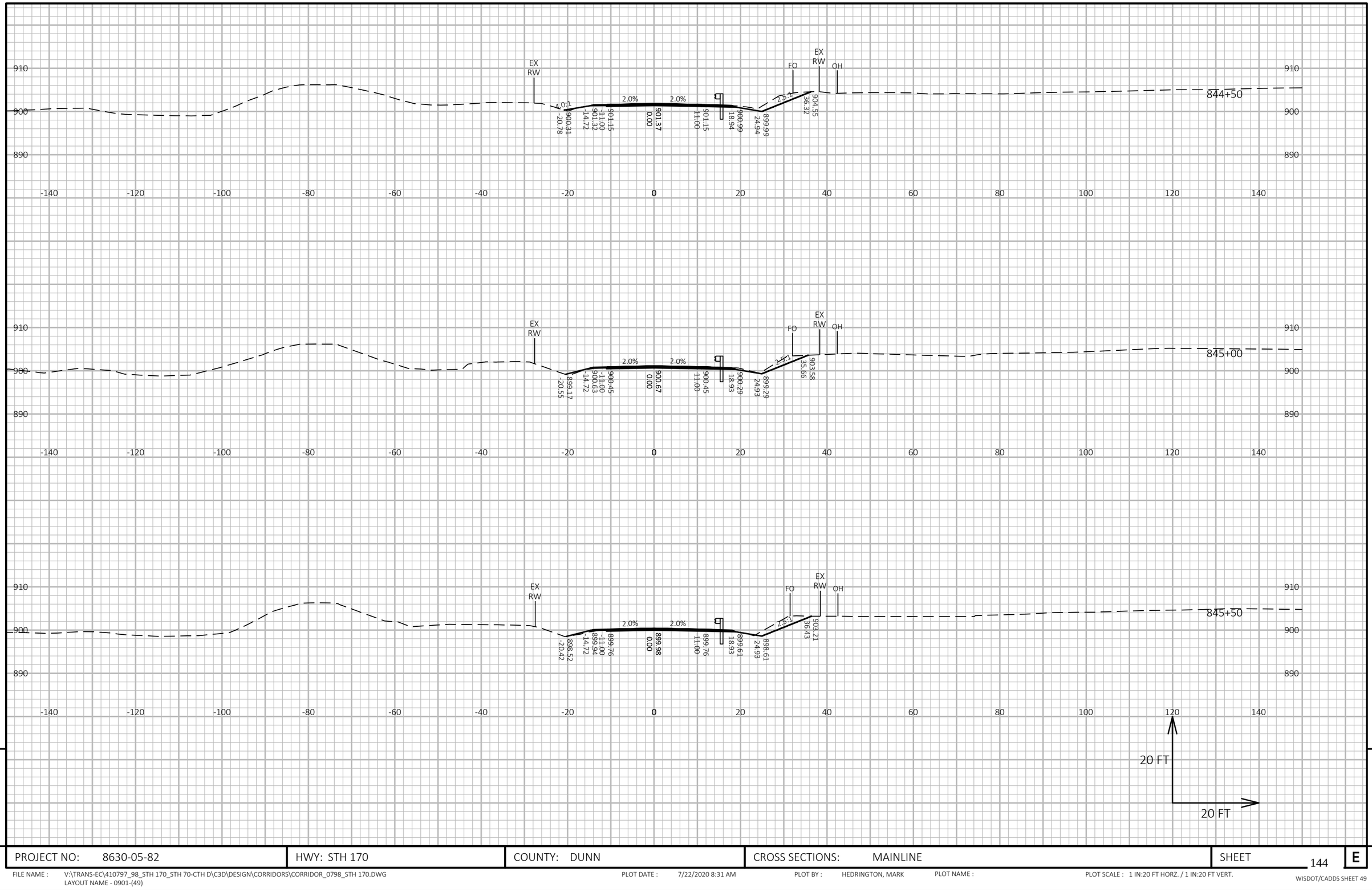
FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(48)

PLOT DATE : 7/22/2020 8:31 AM

PLOT BY : HEDRINGTON, MARK

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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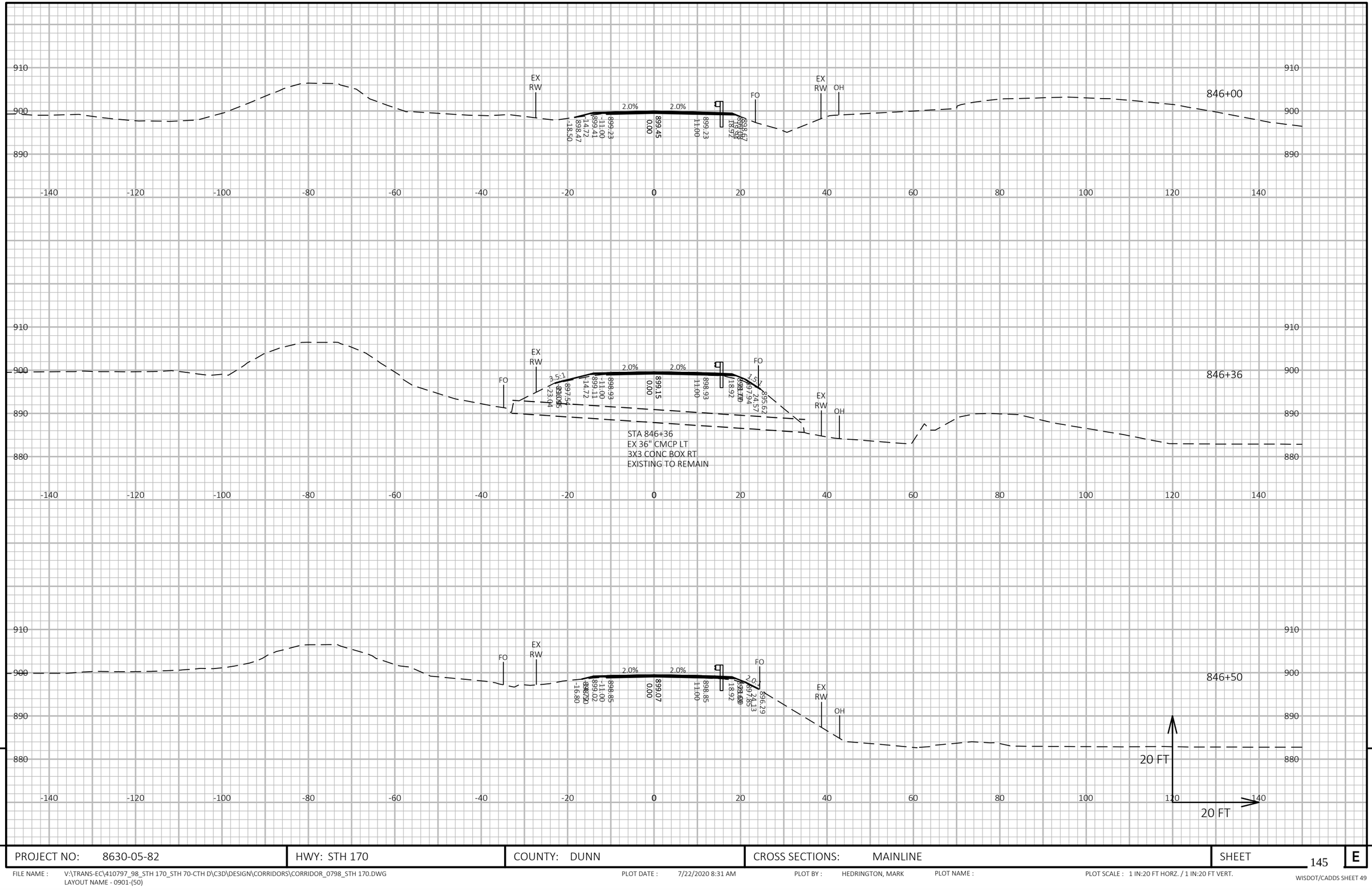
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 144	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(49)

PLOT DATE : 7/22/2020 8:31 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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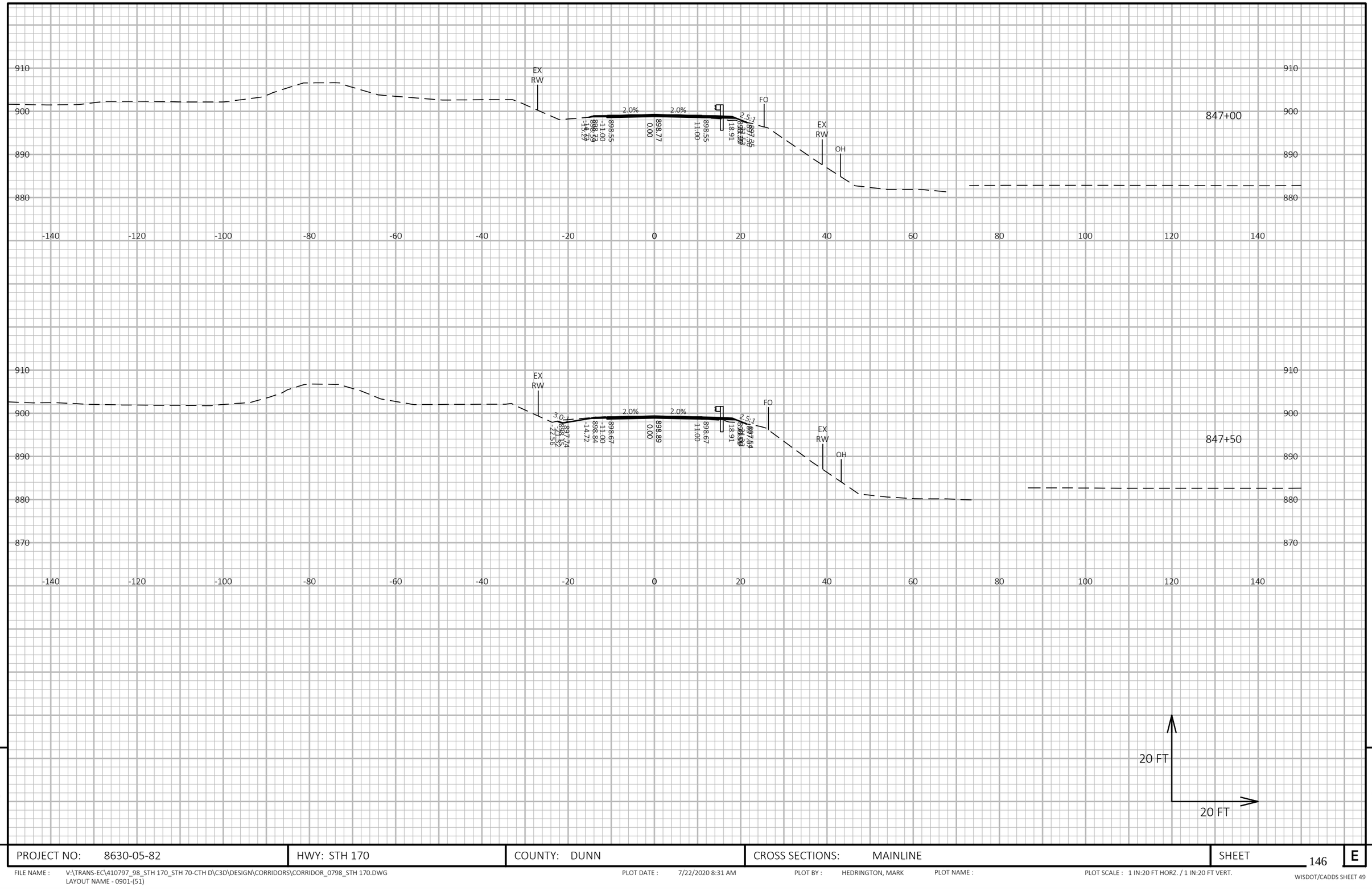
9

PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 145	E



9

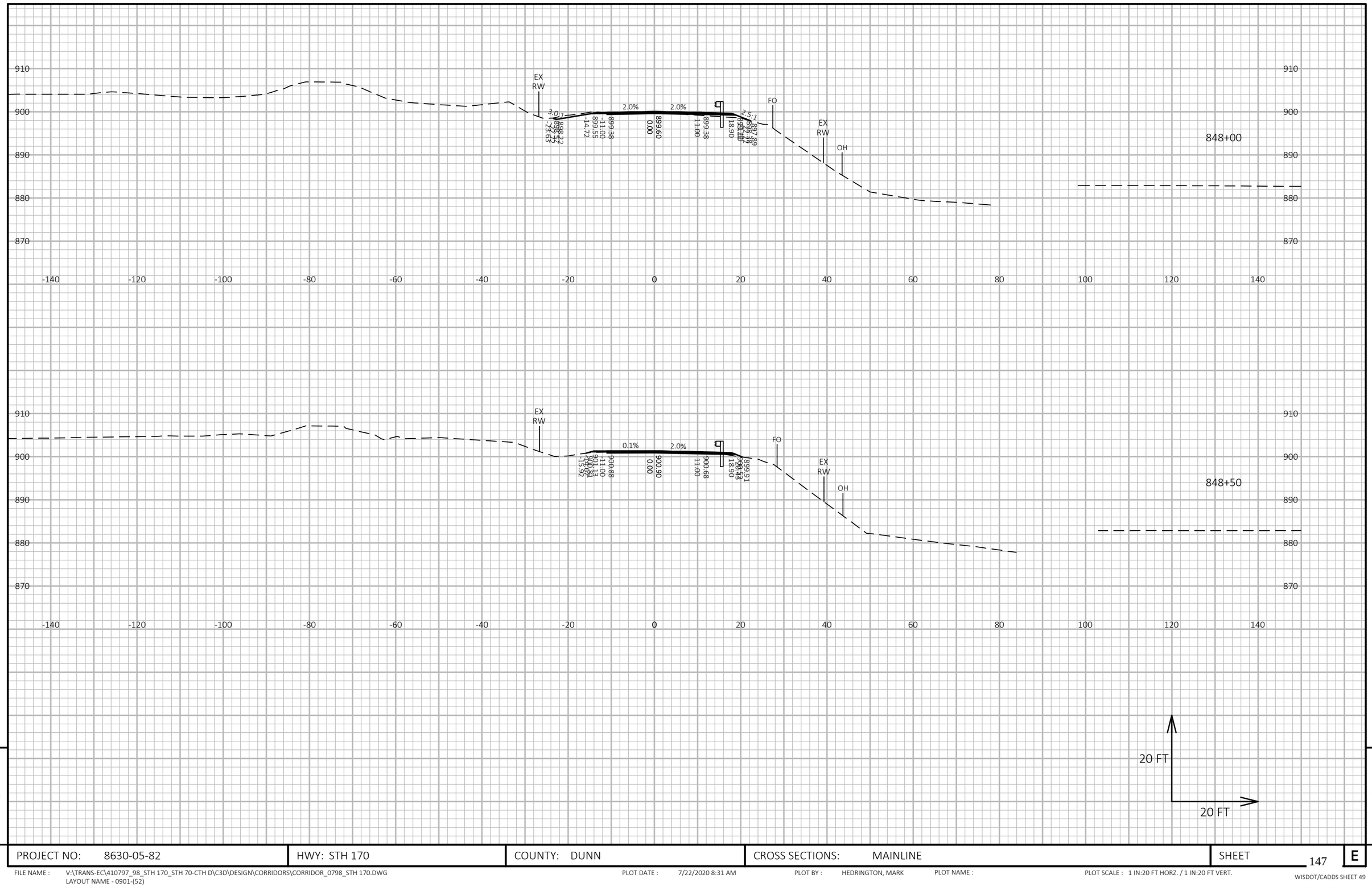
9

PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 146	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(51)

PLOT DATE : 7/22/2020 8:31 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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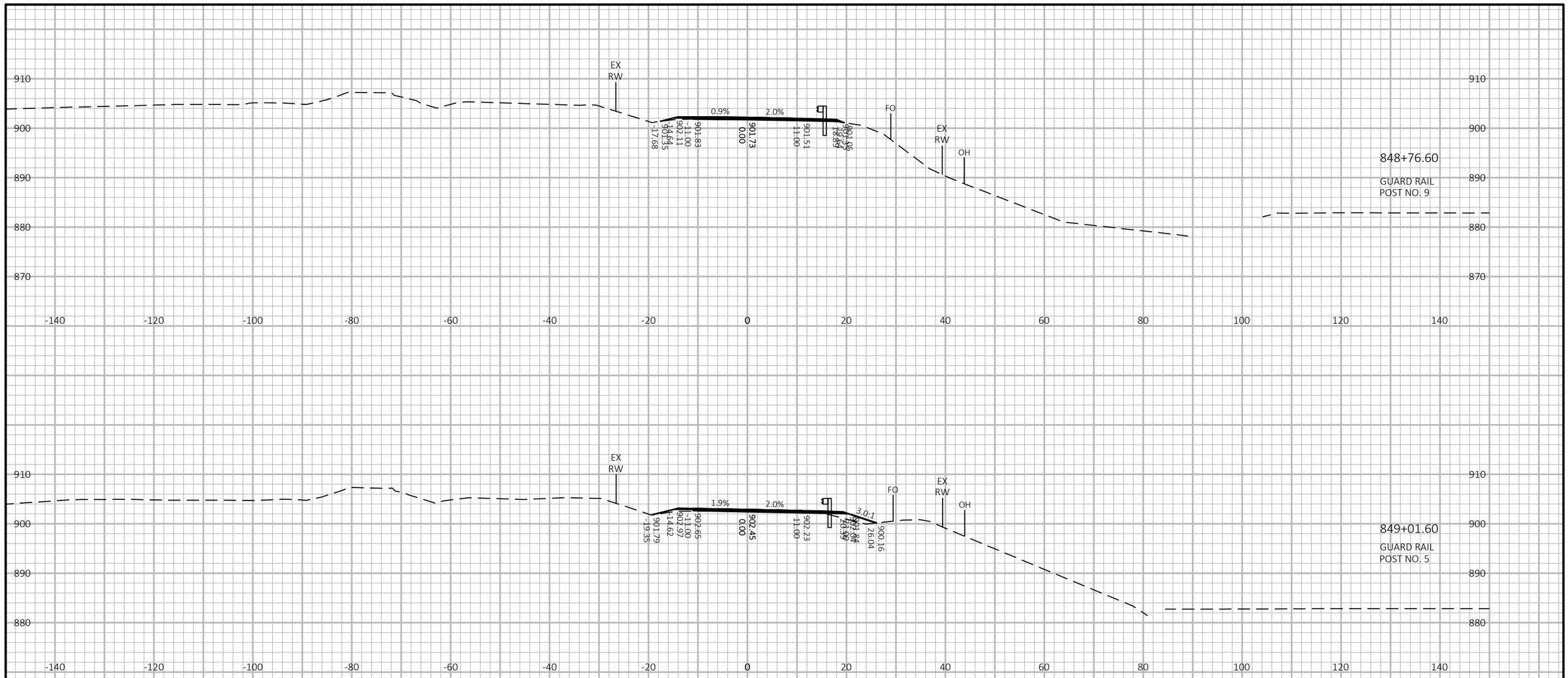
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 147	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(52)

PLOT DATE : 7/22/2020 8:31 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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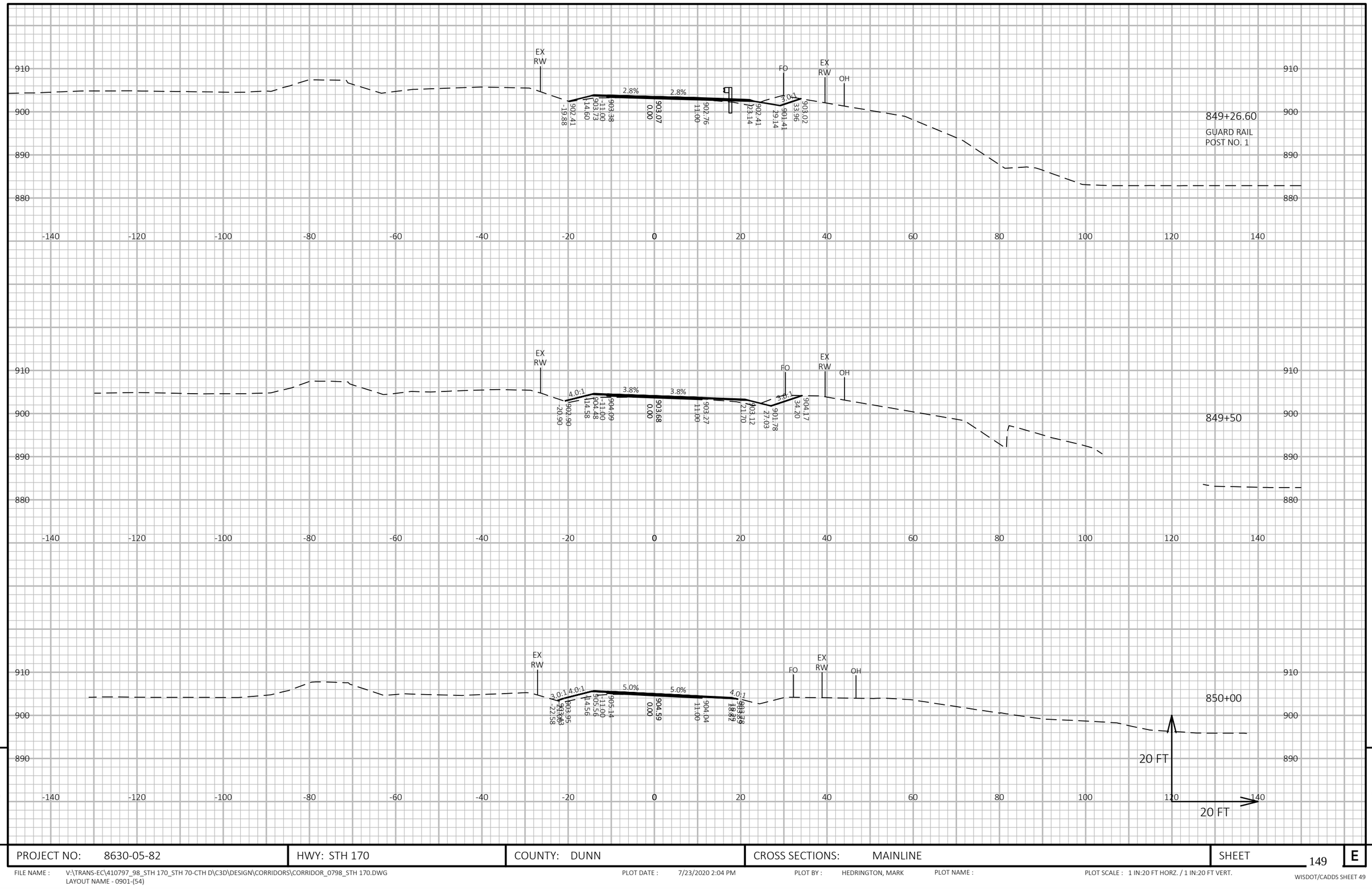
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 148	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(53)

PLOT DATE : 7/23/2020 2:04 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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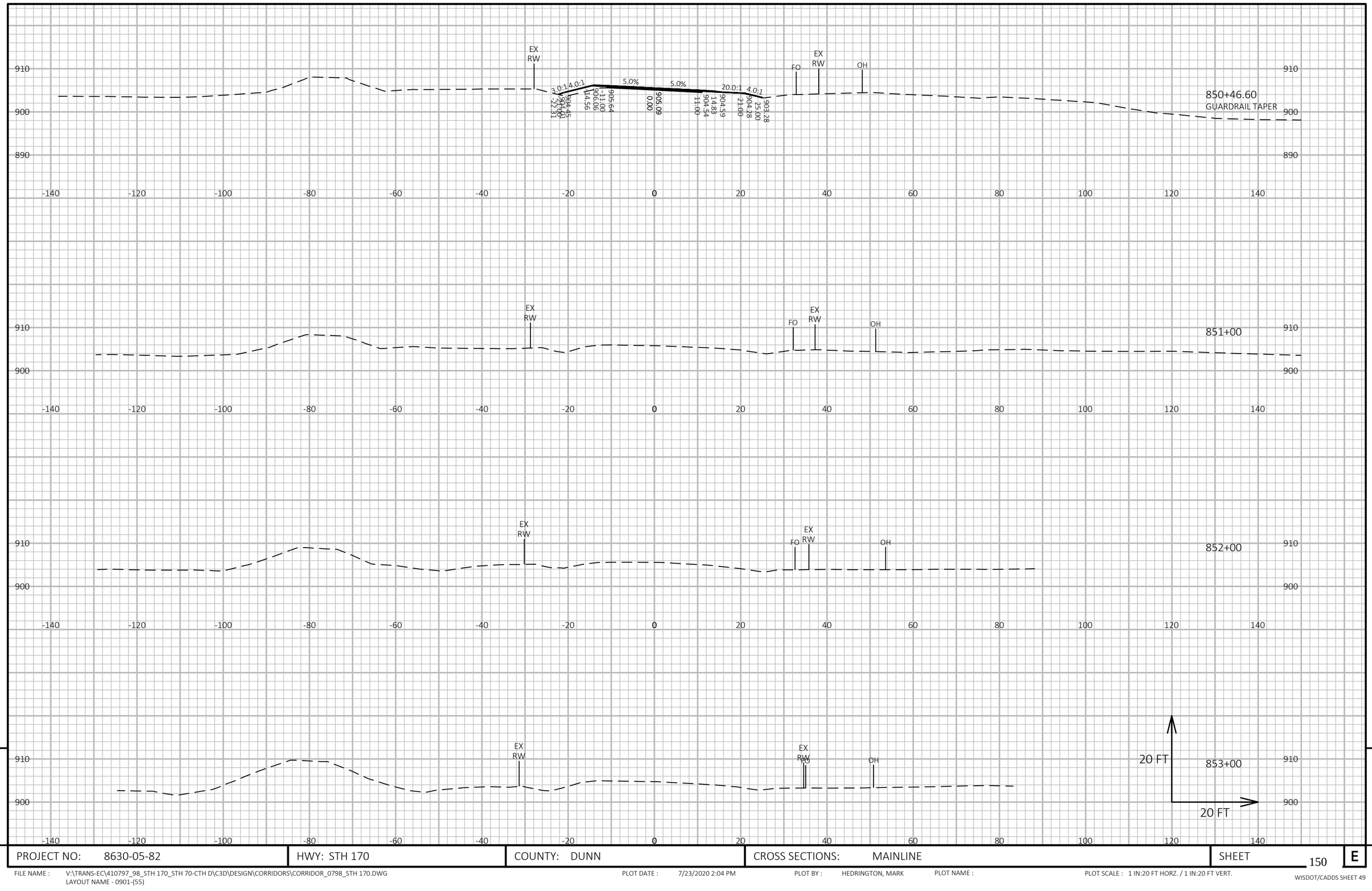
PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 149	E



PROJECT NO: 8630-05-82	HWY: STH 170	COUNTY: DUNN	CROSS SECTIONS: MAINLINE	SHEET 150	E

FILE NAME : V:\TRANS-EC\410797_98_STH 170_STH 70-CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR_0798_STH 170.DWG
LAYOUT NAME - 0901-(55)

PLOT DATE : 7/23/2020 2:04 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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Notes

Wisconsin Department of Transportation

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