LAX | DECEMBER 2024

PROJECT ID: 5040-03-70

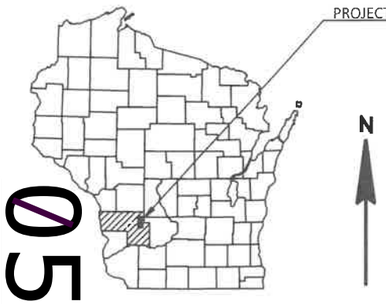
WITH: N/A

COUNTY: RICHLAND/VERNON

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 = 380



05

DESIGN DESIGNATION 5040-03-00

A.A.D.T.	(2024)	=	1850
A.A.D.T.	(2044)	=	1960
D.H.V.		=	255
D.D.		=	60/40
T.		=	17.3%
DESIGN SPEED		=	60 MPH
ESALS		=	600,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

RICHLAND CENTER - HILLSBORO

CTH C TO S FORK BARABOO R STRUCTURE

STH 80

RICHLAND AND VERNON COUNTIES

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5040-03-70	WISC 2025094	1

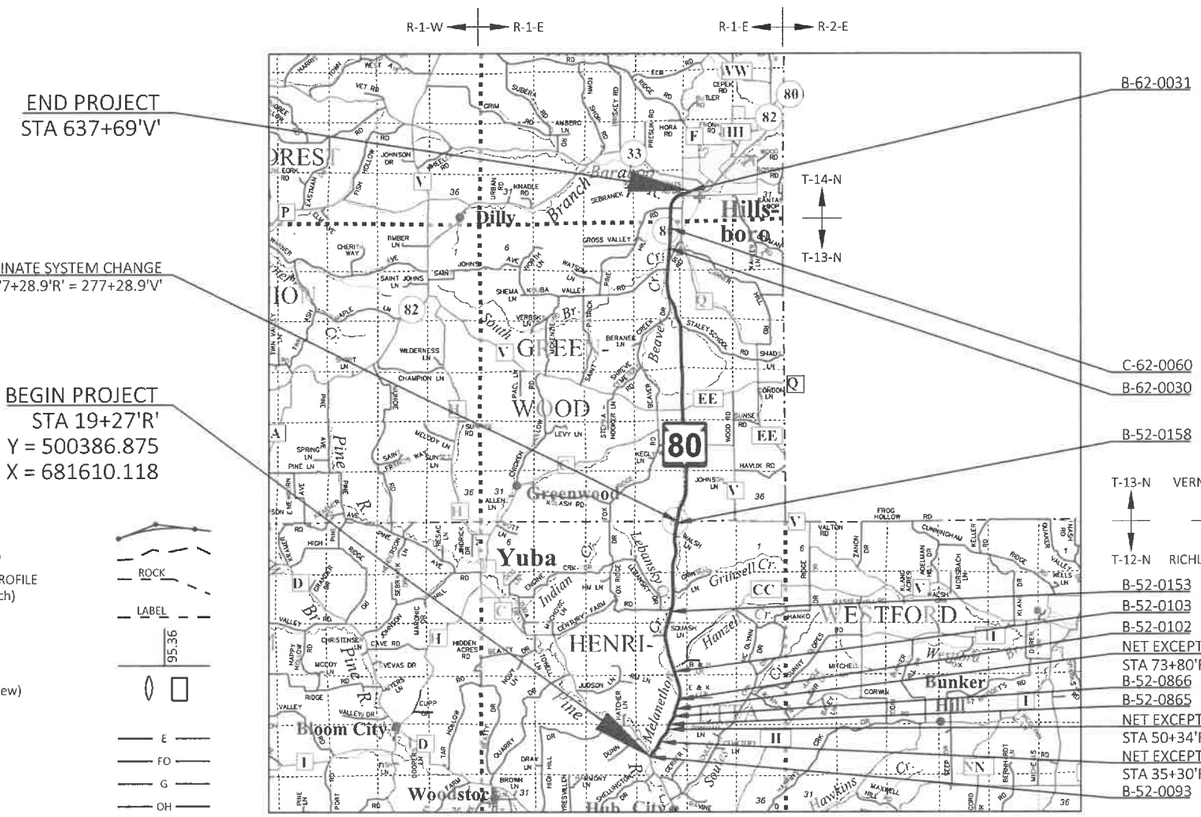
STATE PROJECT NUMBER

5040-03-70

END PROJECT
STA 637+69'V'

COORDINATE SYSTEM CHANGE
STA 277+28.9'R' = 277+28.9'V'

BEGIN PROJECT
STA 19+27'R'
Y = 500386.875
X = 681610.118



B-62-0031
C-62-0060
B-62-0030
B-52-0158
B-52-0153
B-52-0103
B-52-0102
NET EXCEPTION TO CL LENGTH
STA 73+80'R' TO 74+27'R' (B-52-0101)
B-52-0866
B-52-0865
NET EXCEPTION TO CL LENGTH
STA 50+34'R' TO 51+27'R'
NET EXCEPTION TO CL LENGTH
STA 35+30'R' TO 36+28'R'
B-52-0093

LAYOUT

SCALE 0 3 MI

TOTAL NET LENGTH OF CENTERLINE = 11.666 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), RICHLAND COUNTY AND VERNON COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

ORIGINAL PLANS PREPARED BY

CORRE, INC.

CORRE ENGINEERING

1802 WARDEN STREET
EAU CLAIRE, WI 54703
(608)828-1011
www.correinc.com

WISCONSIN
CAMERON J SHIFFER
E-46587
EAU CLAIRE
WI
PROFESSIONAL ENGINEER

DATE: 7/29/24 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT/CORRE INC
Designer	CORRE INC
Project Manager	BRIAN MEYER, PE
Regional Examiner	SW REGION
Regional Supervisor	JOHN BAINTER, PE

APPROVED FOR THE DEPARTME
DATE: 07/29/2024

E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\010101-TI.DWG PLOT DATE : 7/29/2024 5:36 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME :

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
STORM SEWER
TRAFFIC CONTROL

UTILITY CONTACTS

ALLIANT ENERGY
ELECTRICITY
TYLER DONOVAN
338 E STATE ST
MAUSTON, WI 53948
(608) 963-9585
TYLERDONOVAN@ALLIANTENERGY.COM

ALLIANT ENERGY
GAS
TYLER DONOVAN
338 E STATE ST
MAUSTON, WI 53948
(608) 963-9585
TYLERDONOVAN@ALLIANTENERGY.COM

DAIRYLAND POWER COOPERATIVE
ELECTRICITY - TRANSMISSION
MIKE LYDON
3200 EAST AVE S
PO BOX 817
LA CROSSE, WI 54602
(608) 787-1381
MICHAEL.LYDON@DAIRYLANDPOWER.COM

FRONTIER COMMUNICATIONS
COMMUNICATION LINE
COLE ZIMMERMAN
BLUFFS, IL, 62621
(217) 836-5351
CZIMMERMAN@MSCON.COM

HILLSBORO TELEPHONE COMPANY
COMMUNICATION LINE
CHAD SCHMIDT
121 MILL ST
PO BOX 427
HILLSBORO, WI 54634
(608) 489-4415
CSCHMIDT@HILLSBOROTEL.COM

LA VALLE TELEPHONE COOPERATIVE
COMMUNICATION LINE
JOHN BARTZ
108 W MAIN ST
LA VALLE, WI 53941
(608) 985-7201
JBARTZ@MWT.NET

RICHLAND ELECTRIC COOPERATIVE
ELECTRICITY
CURT BROCKWAY
30 E ROBB RD
RICHLAND CENTER, WI 53581
(608) 475-2444
CBROCKWAY@REC.COOP

VERNON ELECTRIC COOPERATIVE
ELECTRICITY
COLE CARY
110 SAUGSTAD RD
WESTBY, WI 54667
(608) 634-3121
CCARY@VERNONELECTRIC.ORG

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

GENERAL NOTES

-THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE.

-THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS.

-PRIOR TO THE PLACEMENT OF MGS GUARDRAIL, THE SHOULDERS SHALL BE IN PLACE, SHAPED, AND COMPACTED UNLESS SHOWN OTHERWISE.

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

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

-APPLY TACK COAT AT A RATE OF 0.07 GAL/SY TO MILLED SURFACES AND 0.05 GAL/SY BETWEEN LAYERS OF NEW HMA PAVEMENT.

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

-DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE TOPSOILED (SALVAGED), FERTILIZED, SEEDED, AND COVERED WITH MULCH UNLESS SPECIFIED ELSEWHERE IN THE PLANS.

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 142 ACRES

TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 4.4 ACRES

WISDOT CONTACT

WISDOT SW REGION
BRIAN MEYER, PE
3550 MORMON COULEE RD
LA CROSSE, WI 54601
(608) 789-5676
BRIAN.MEYER@DOT.WI.GOV

DNR CONTACT

DNR SERVICE CENTER
KAREN KALVELAGE
3550 MORMON COULEE RD
LA CROSSE, WI 54601
(608) 406-7880
KAREN.KALVELAGE@WISCONSIN.GOV

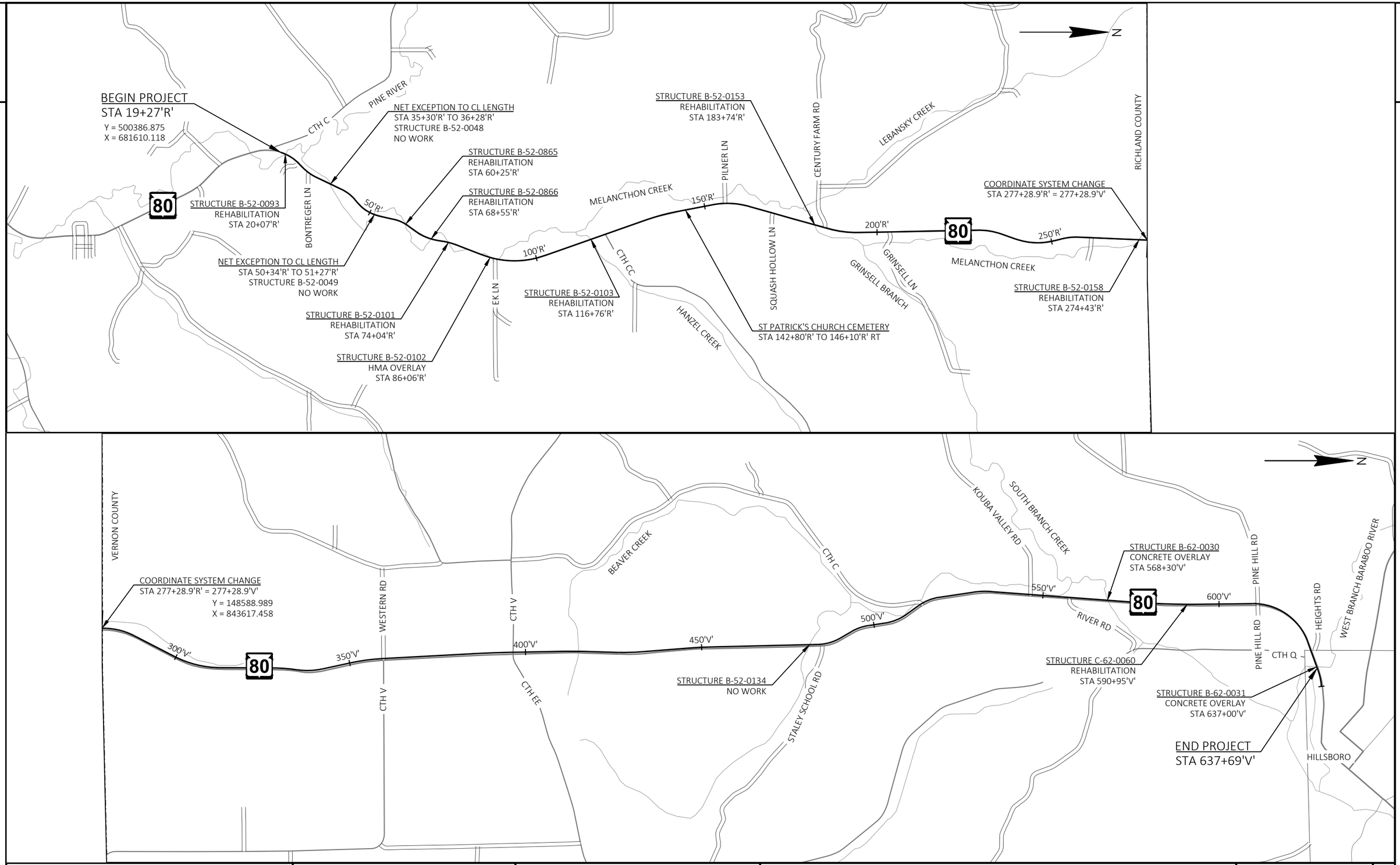
CONSULTANT CONTACT

CORRE, INC.
KEVIN MEYER, PE
1802 WARDEN ST
EAU CLAIRE, WI 54703
(715) 299-1894
KMEYER@CORREINC.COM

BORING LOG

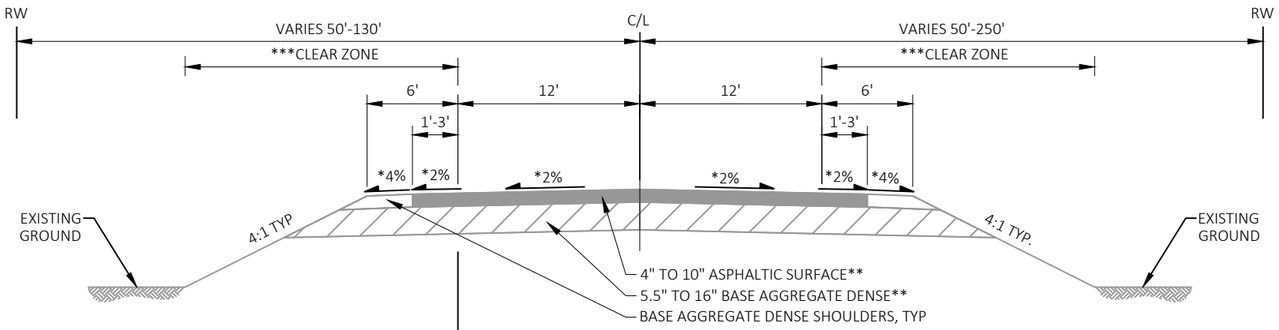
BORING NO.	LOG MILE	STATION	ASPHALTIC DEPTH (IN)	BASE DEPTH (IN)
B-1	0.11	22+85'R'	5.0	15.0
B-2	0.32	33+94'R'	5.0	11.0
B-3	0.56	46+61'R'	4.0	12.0
B-4	0.78	58+22'R'	4.0	10.0
B-5	1.06	73+01'R'	4.0	8.0
B-6	1.28	84+62'R'	4.0	12.0
B-7	1.54	98+35'R'	4.0	-
B-8	1.77	110+50'R'	4.5	12.5
B-9	2.02	123+89'R'	6.0	11.0
B-10	2.23	134+98'R'	9.0	10.0
B-11	2.46	147+12'R'	8.0	10.0
B-12	2.73	161+38'R'	4.5	9.5
B-13	2.94	172+28'R'	5.5	13.5
B-14	3.14	182+84'R'	4.0	14.0
B-15	3.38	195+58'R'	6.0	13.0
B-16	3.61	207+72'R'	5.0	13.0
B-17	3.83	219+34'R'	5.0	11.0
B-18	4.05	230+96'R'	6.0	13.0
B-19	4.29	243+63'R'	4.0	14.0
B-20	4.51	255+24'R'	4.0	14.0
B-21	4.76	268+22'R'	4.0	14.0
B-22	4.98	280+35'V'	4.0	12.0
B-23	5.21	292+50'V'	5.0	11.0
B-24	5.45	305+17'V'	7.0	12.0
B-25	5.74	320+48'V'	6.0	12.0
B-26	5.98	333+15'V'	6.0	15.0
B-27	6.23	346+35'V'	4.0	15.0
B-28	6.45	357+97'V'	5.0	13.0
B-29	6.68	370+03'V'	4.0	15.0
B-30	6.90	381+65'V'	9.0	9.0
B-31	7.11	392+73'V'	5.0	14.0
B-32	7.34	404+76'V'	4.0	14.0
B-33	7.56	416+37'V'	5.0	16.0
B-34	7.80	429+05'V'	7.0	15.0
B-35	7.94	436+44'V'	4.0	13.0
B-36	8.20	450+17'V'	5.0	15.0
B-37	8.40	460+73'V'	5.0	14.0
B-38	8.67	474+98'V'	9.0	11.0
B-39	8.92	488+58'V'	7.0	7.0
B-40	9.15	500+73'V'	8.0	11.0
B-41	9.39	513+40'V'	8.0	13.0
B-42	9.60	524+04'V'	9.0	12.0
B-43	9.82	535+65'V'	9.5	8.0
B-44	10.05	548+22'V'	7.0 (3.0 RAP)	13.0
B-45	10.29	560+82'V'	10.0	8.0
B-46	10.56	575+07'V'	9.5	5.5
B-47	10.82	588+80'V'	9.0	9.0
B-48	11.11	604+11'V'	8.0	7.0
B-49	11.41	620+11'V'	9.0	9.0
B-50	11.61	630+67'V'	7.0	12.0

2



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 01
PLOT DATE : 7/29/2024 5:53 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:2500 FT
WISDOT/CADDS SHEET 44



EXISTING TYPICAL SECTION

STA 20+83'R' - 35+30'R'
STA 36+28'R' - 50+34'R'
STA 51+27'R' - 73+80'R'
STA 74+27'R' - 85+75'R'
STA 86+40'R' - 116+59'R'
STA 116+93'R' - 124+17'R'
STA 125+99'R' - 277+29'R'
STA 277+29'V' - 567+71'V'
STA 568+87'V' - 573+94'V'
STA 587+12'V' - 636+42'V'

NOTES

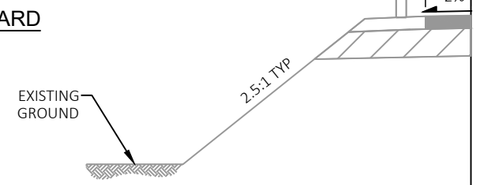
*SUPERELEVATION IS TYPICAL

** SEE BORING LOG FOR ASPHALT AND BASE DEPTHS

***CLEAR ZONE
STA 19+27'R' TO 121+00'R' - 18'
STA 121+00'R' TO 515+00'V' - 26' IN FILL, 20' IN CUT
STA 515+00'V' TO 637+69'V' - 20'

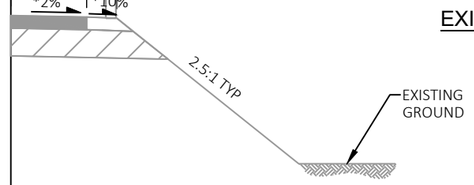
EXISTING TYPICAL SECTION - BEAMGUARD

SEE PLAN SHEETS FOR LOCATIONS
RIGHT SIDE SIMILAR



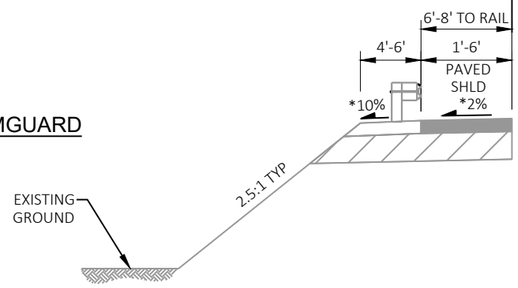
EXISTING TYPICAL SECTION - BEAMGUARD

SEE PLAN SHEETS FOR LOCATIONS
LEFT SIDE SIMILAR



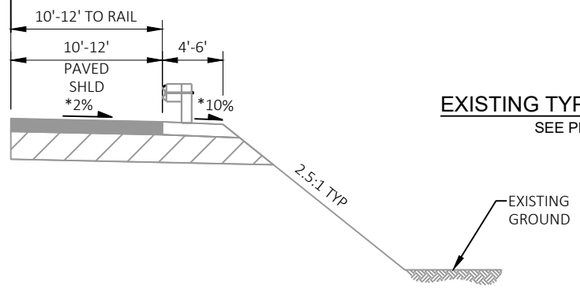
EXISTING TYPICAL SECTION - BEAMGUARD

SEE PLAN SHEETS FOR LOCATIONS
RIGHT SIDE SIMILAR

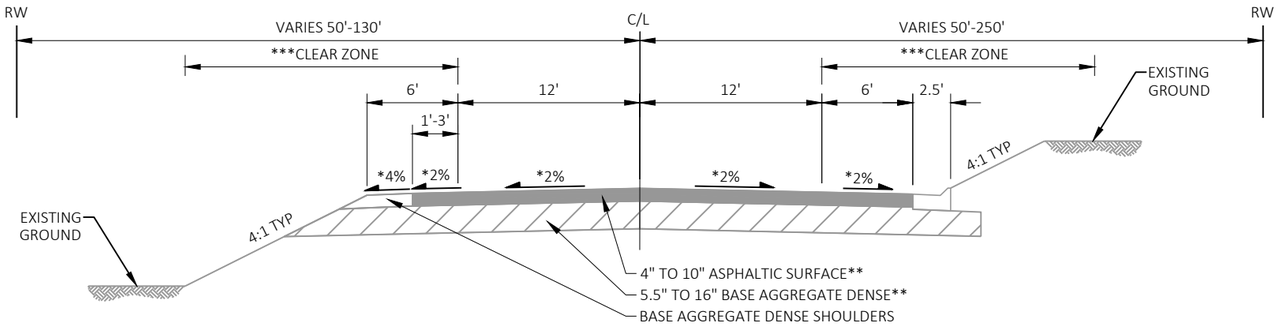


EXISTING TYPICAL SECTION - BEAMGUARD

SEE PLAN SHEETS FOR LOCATIONS
LEFT SIDE SIMILAR



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TYPICAL SECTIONS	SHEET 4	E



EXISTING TYPICAL SECTION - CURB & GUTTER RT

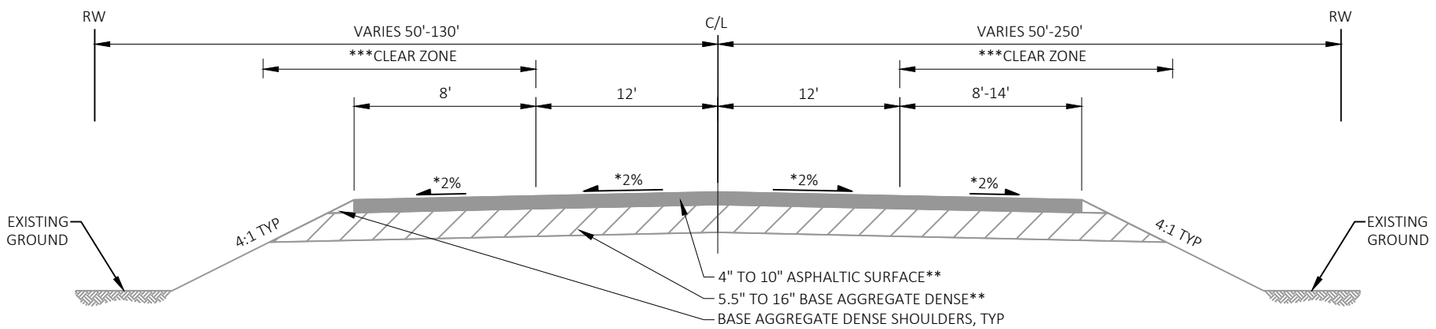
STA 124+17'R' - 125+99'R'

NOTES

*SUPERELEVATION IS TYPICAL

** SEE BORING LOG FOR ASPHALT AND BASE DEPTHS

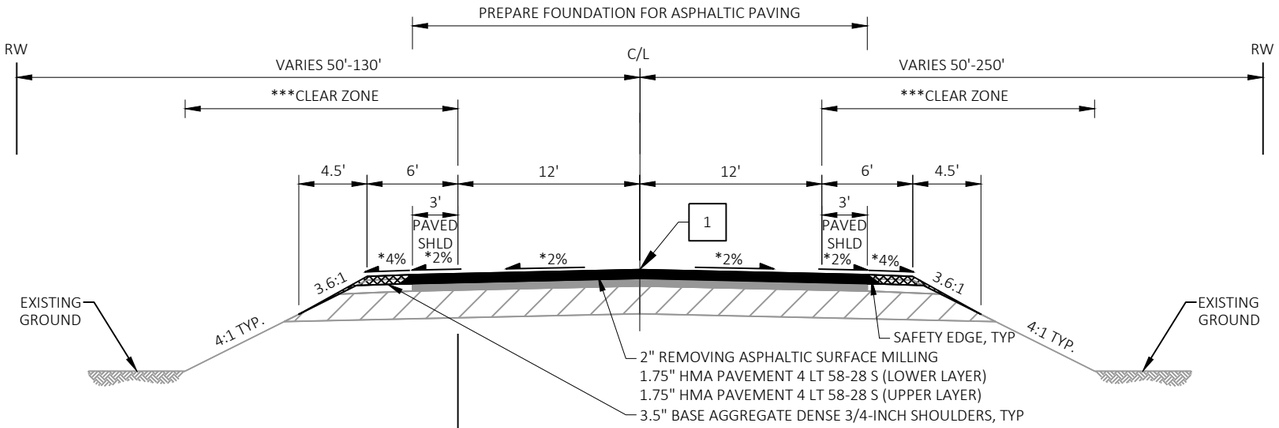
***CLEAR ZONE
STA 19+27'R' TO 121+00'R' - 18'
STA 121+00'R' TO 515+00'V' - 26' IN FILL, 20' IN CUT
STA 515+00'V' TO 637+69'V' - 20'



EXISTING TYPICAL SECTION - OVERFLOW

STA 573+94'V' - 587+12'V'

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TYPICAL SECTIONS	SHEET 5	E



FINISHED TYPICAL SECTION

STA 20+83'R' - 35+30'R'
STA 36+28'R' - 50+34'R'
STA 51+27'R' - 73+80'R'
STA 74+27'R' - 85+75'R'
STA 86+40'R' - 116+59'R'
STA 116+93'R' - 124+17'R'
STA 125+99'R' - 277+29'R'
STA 277+29'V' - 567+71'V'
STA 568+87'V' - 573+59'V'
STA 586+70'V' - 636+42'V'

1 ASPHALTIC RUMBLE STRIPS, CENTERLINE

IN ANY DISTURBED AREAS

(A) SEEDING MIXTURE NO. 20, FERTILIZER TYPE B.

(B) SALVAGED TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, MULCH OR EROSION MAT AS SPECIFIED ELSEWHERE.

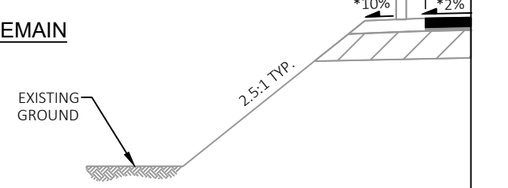
NOTES

*SUPERELEVATION IS TYPICAL. MATCH EXISTING SUPERELEVATION. HIGH SIDE SUPERELEVATED UNPAVED SHOULDER MAX ROLLOVER OF 8%. SEE CROSS SECTIONS FOR MORE INFORMATION.

***CLEAR ZONE
STA 19+27'R' TO 121+00'R' - 18'
STA 121+00'R' TO 515+00'V' - 26' IN FILL, 20' IN CUT
STA 515+00'V' TO 637+69'V' - 20'

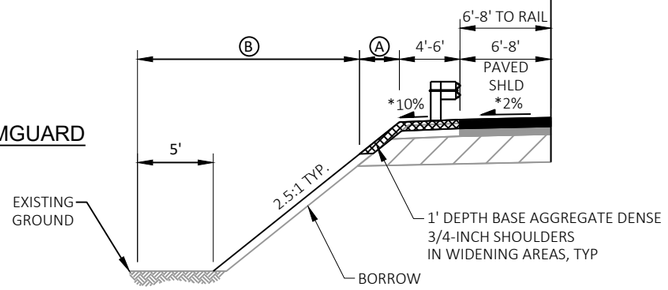
PROPOSED TYPICAL SECTION - BEAMGUARD TO REMAIN

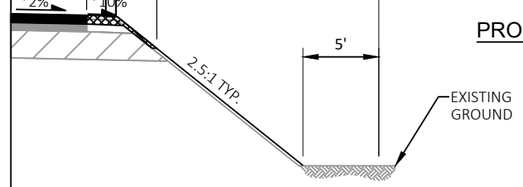
SEE PLAN SHEETS FOR LOCATIONS
RIGHT SIDE SIMILAR
PROFILE TRANSITION TO MATCH EXISTING



PROPOSED TYPICAL SECTION - BEAMGUARD

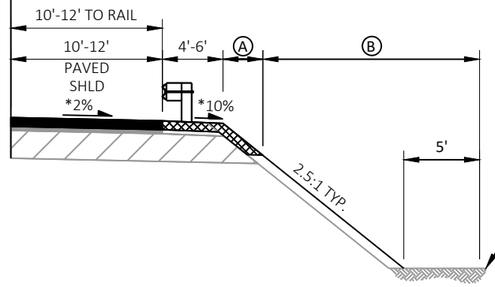
SEE PLAN SHEETS FOR LOCATIONS
RIGHT SIDE SIMILAR





PROPOSED TYPICAL SECTION - BEAMGUARD

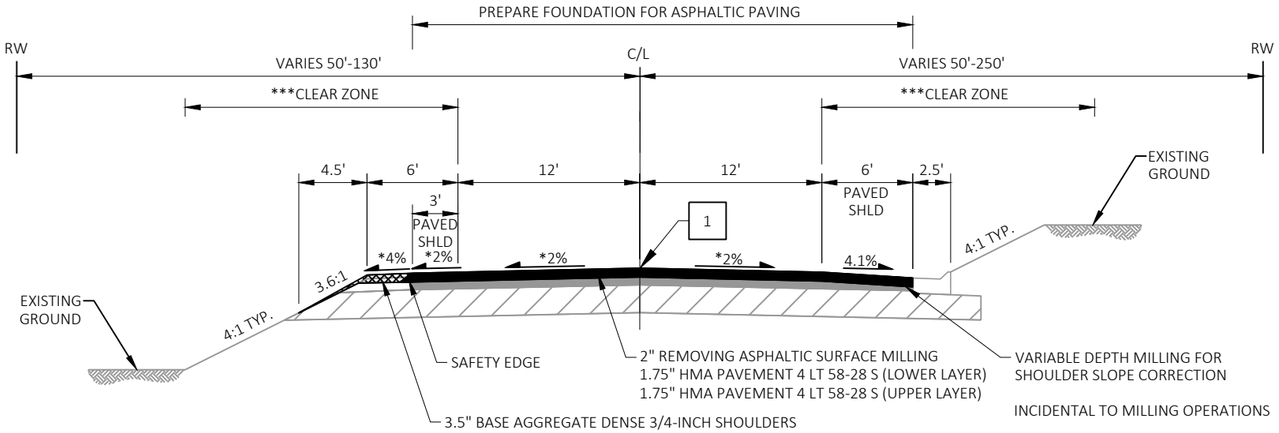
SEE PLAN SHEETS FOR LOCATIONS
LEFT SIDE SIMILAR



PROPOSED TYPICAL SECTION - BEAMGUARD

SEE PLAN SHEETS FOR LOCATIONS
LEFT SIDE SIMILAR

2



FINSHED TYPICAL SECTION - CURB & GUTTER RT

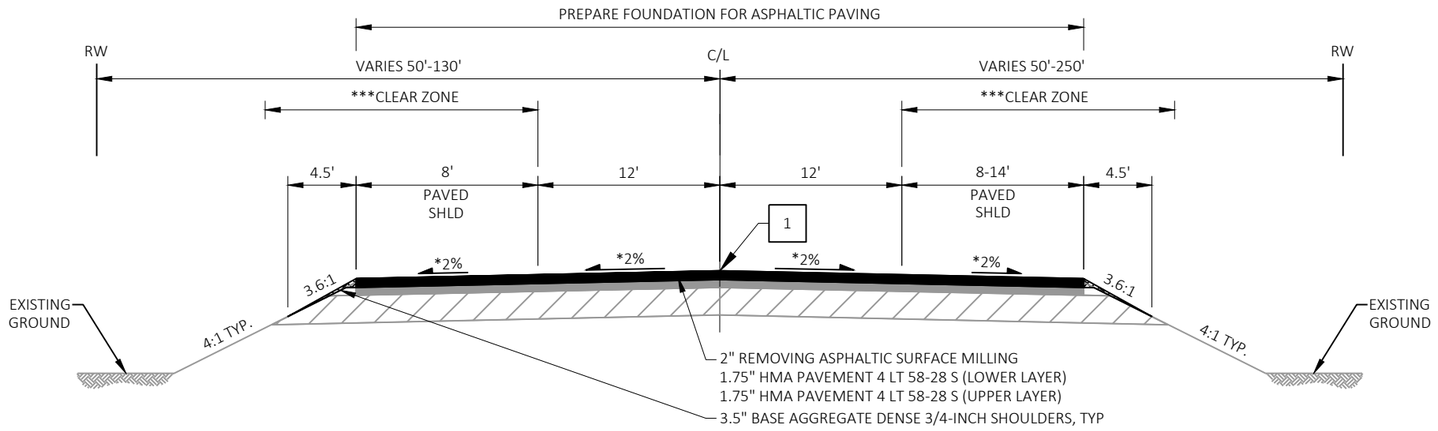
STA 124+17'R' - 125+99'R'

1 ASPHALTIC RUMBLE STRIPS, CENTERLINE

NOTES

*SUPERELEVATION IS TYPICAL. MATCH EXISTING SUPERELEVATION. HIGH SIDE SUPERELEVATED UNPAVED SHOULDER MAX ROLLOVER OF 8%. SEE CROSS SECTIONS FOR MORE INFORMATION.

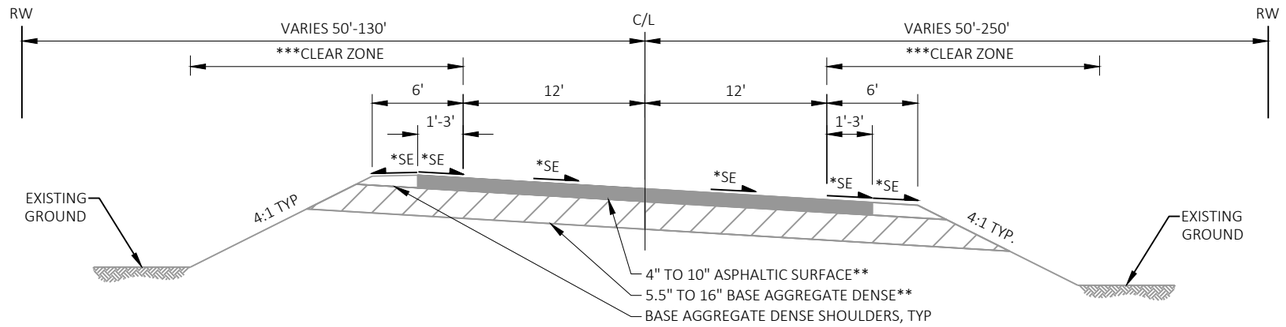
***CLEAR ZONE
STA 19+27'R' TO 121+00'R' - 18'
STA 121+00'R' TO 515+00'V' - 26' IN FILL, 20' IN CUT
STA 515+00'V' TO 637+69'V' - 20'



FINISHED TYPICAL SECTION - OVERFLOW

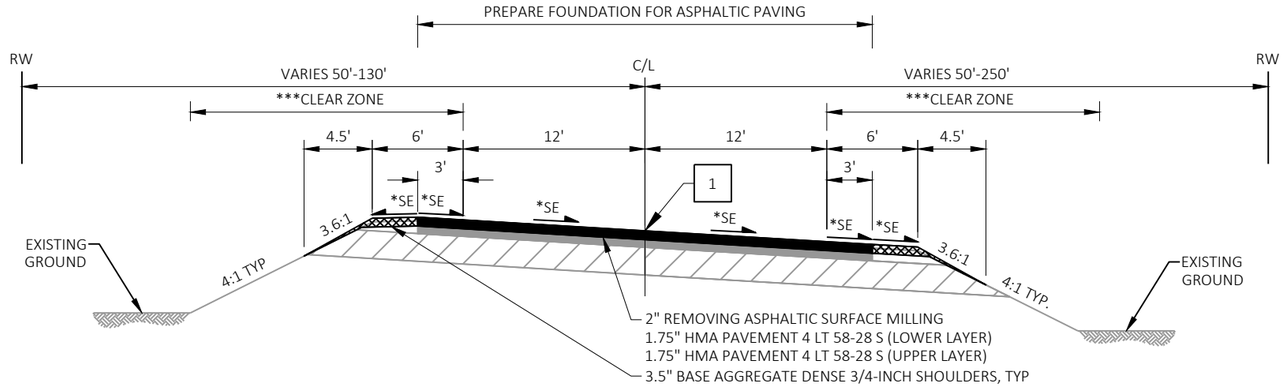
STA 573+59'V' - 586+70'V'

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TYPICAL SECTIONS	SHEET 7	E



EXISTING TYPICAL SUPERELEVATED SECTION

SEE PLAN SHEETS FOR LOCATIONS



FINISHED TYPICAL SUPERELEVATED SECTION

SEE PLAN SHEETS FOR LOCATIONS

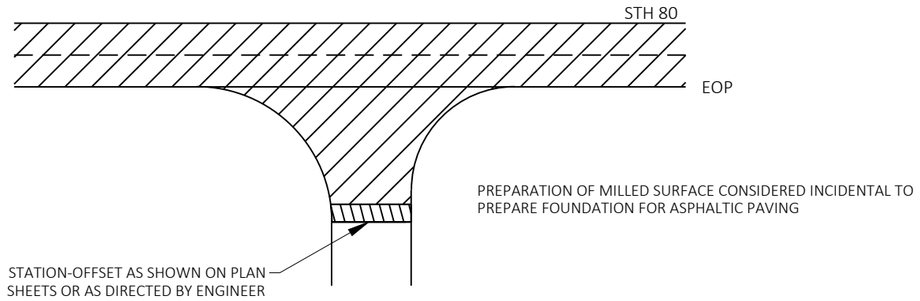
1 ASPHALTIC RUMBLE STRIPS, CENTERLINE

NOTES

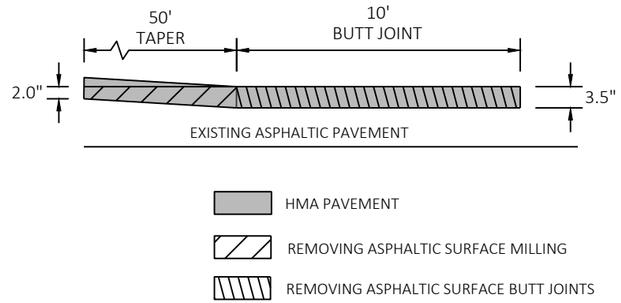
*SUPERELEVATION IS TYPICAL. MATCH EXISTING SUPERELEVATION. HIGH SIDE SUPERELEVATED UNPAVED SHOULDER MAX ROLLOVER OF 8%. SEE CROSS SECTIONS FOR MORE INFORMATION.

**SEE BORING LOG FOR ASPHALT AND BASE DEPTHS

***CLEAR ZONE
STA 19+27'R' TO 121+00'R' - 18'
STA 121+00'R' TO 515+00'V' - 26' IN FILL, 20' IN CUT
STA 515+00'V' TO 637+69'V' - 20'



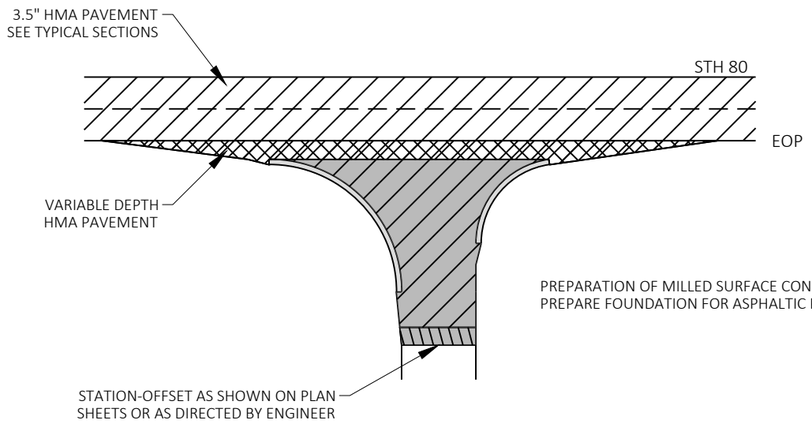
SIDEROADS
WITHOUT CURB AND GUTTER



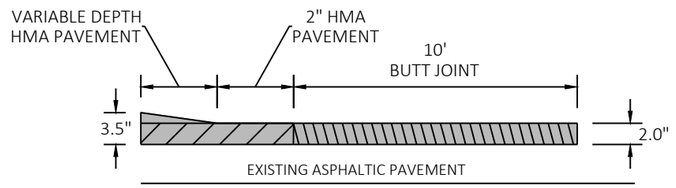
AGGREGATE SIDE ROADS OR DRIVEWAYS DO NOT REQUIRE BUTT JOINTS.

TRANSITION CONSIDERED INCIDENTAL TO REMOVING ASPHALTIC SURFACE MILLING.

BUTT JOINTS
MAINLINE AND SIDE ROADS WITHOUT CURB AND GUTTER



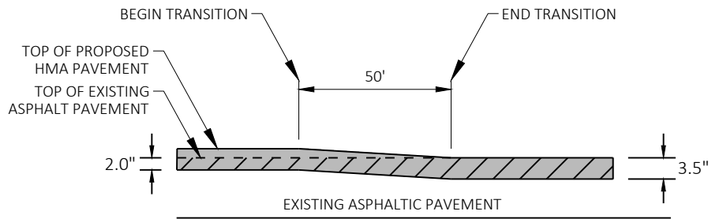
SIDEROADS
WITH CURB AND GUTTER



AGGREGATE SIDE ROADS OR DRIVEWAYS DO NOT REQUIRE BUTT JOINTS.

BUTT JOINTS
SIDE ROADS WITH CURB AND GUTTER

2



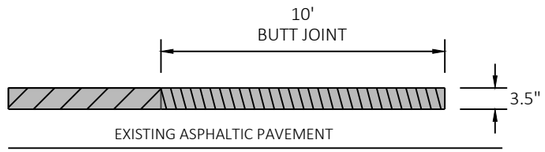
HMA PAVEMENT

REMOVING ASPHALTIC SURFACE MILLING

TRANSITION CONSIDERED INCIDENTAL TO REMOVING ASPHALTIC SURFACE MILLING.

PROFILE TRANSITION

STA 33+65'R' - 34+15'R'
STA 37+68'R' - 38+18'R'
STA 48+61'R' - 49+11'R'
STA 52+83'R' - 53+33'R'



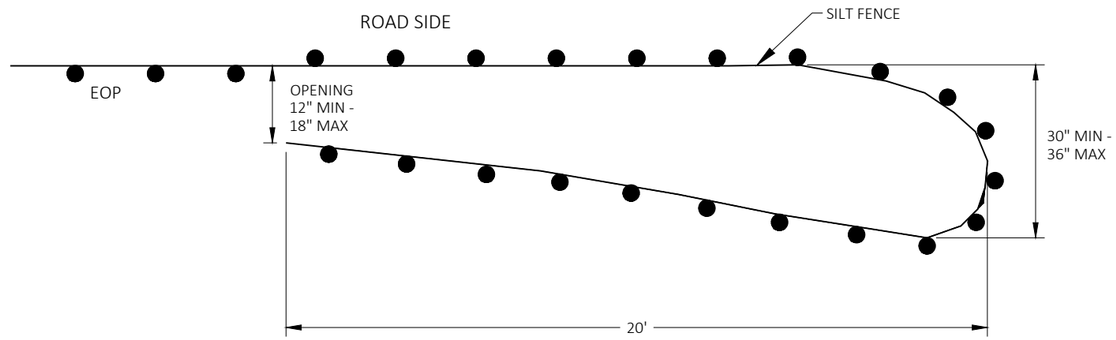
HMA PAVEMENT

REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS

BUTT JOINTS

STA 35+20'R' - 35+30'R'
STA 36+28'R' - 36+38'R'
STA 50+24'R' - 50+34'R'
STA 51+27'R' - 51+37'R'

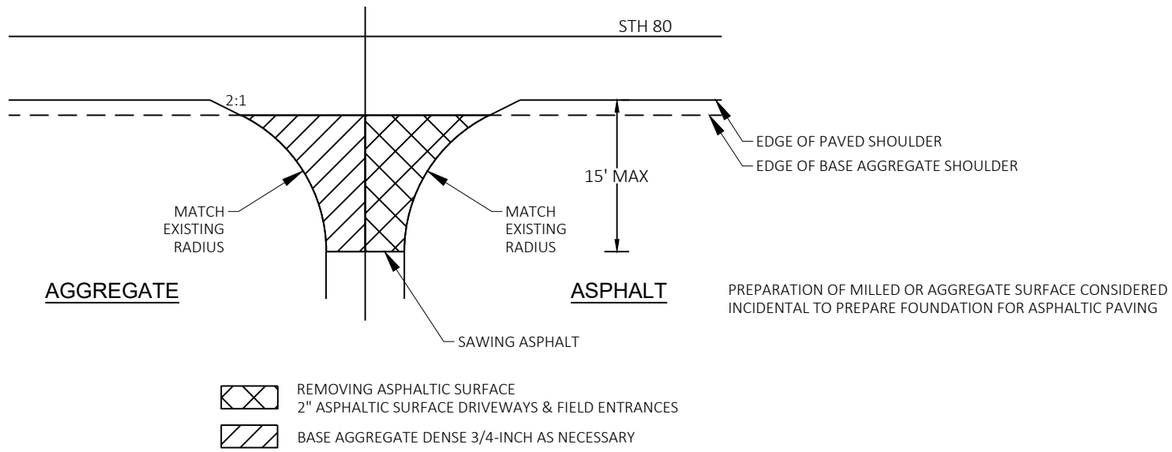


PLAN VIEW

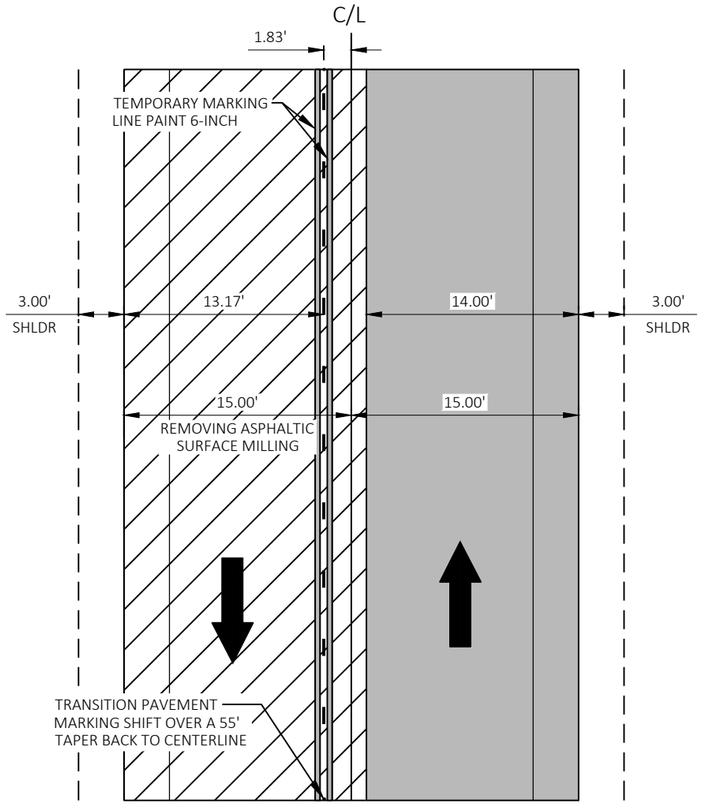
TEMPORARY SMALL ANIMAL TURN AROUND

GENERAL NOTES:
SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND. AND TRENCHED IN ACCORDING TO SILT FENCE REQUIREMENTS.

PLACE WHEN SILT FENCE TERMINATES WITHIN 200 LF OF WATERWAY OR AS DIRECTED BY THE ENGINEER.



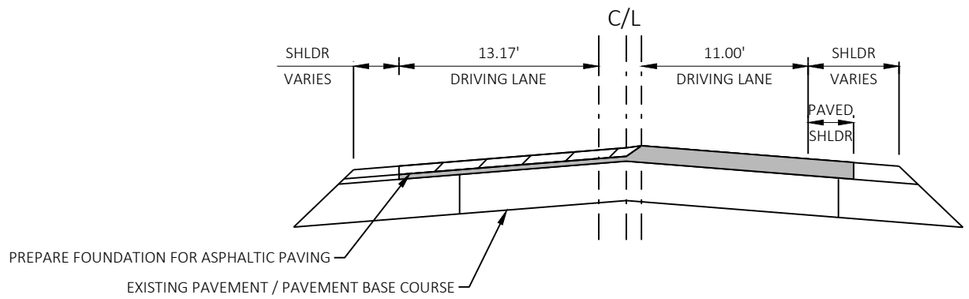
DRIVEWAYS



PLAN VIEW

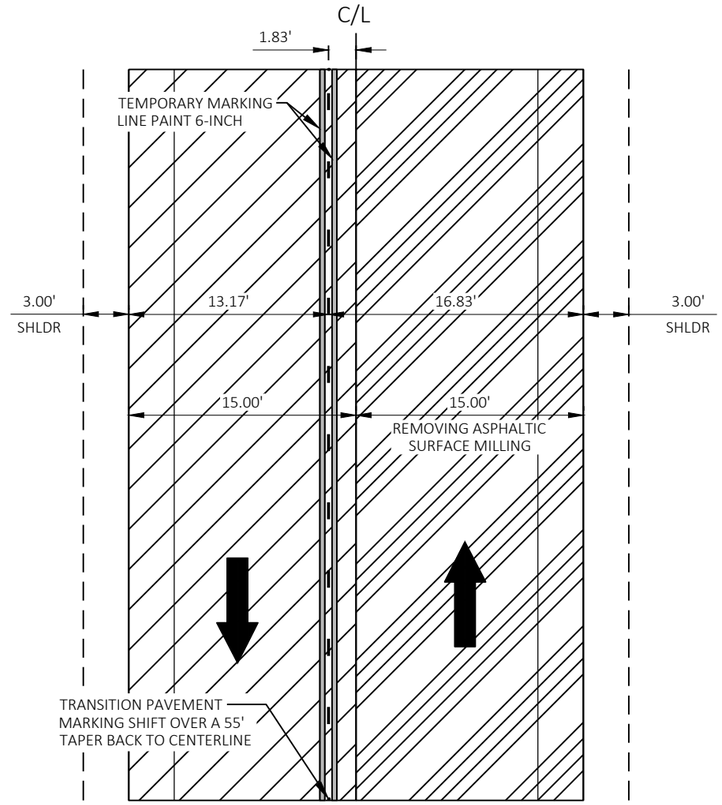
EXISTING ASPHALTIC SURFACE

FIRST PASS 1 3/4" HMA PAVEMENT 4 LT 58-28 S PAVING LIMITS (LOWER LAYER)



CROSS SECTION VIEW

FIRST PASS DETAIL

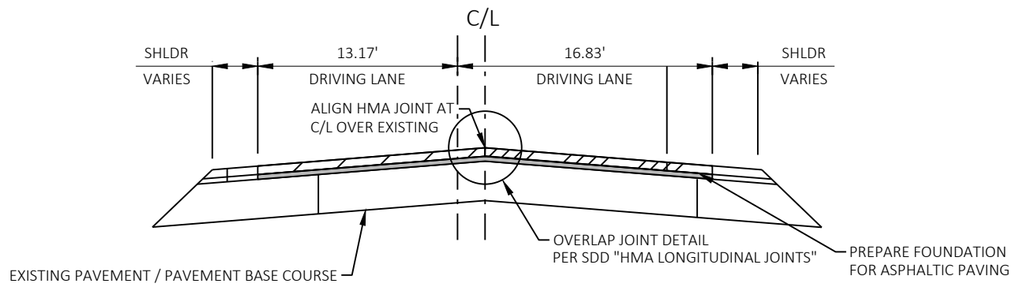


PLAN VIEW

EXISTING ASPHALTIC SURFACE

FIRST PASS 1 3/4" HMA PAVEMENT 4 LT 58-28 S PAVING LIMITS (LOWER LAYER)

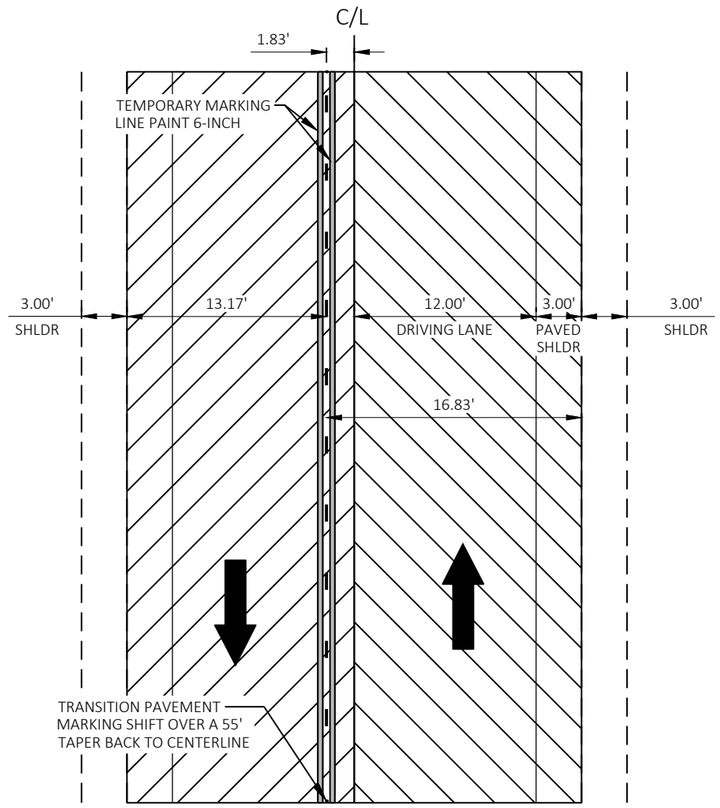
SECOND PASS 1 3/4" HMA PAVEMENT 4 LT 58-28 S PAVING LIMITS (LOWER LAYER)



CROSS SECTION VIEW

SECOND PASS DETAIL

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CONSTRUCTION DETAILS	SHEET 12	E

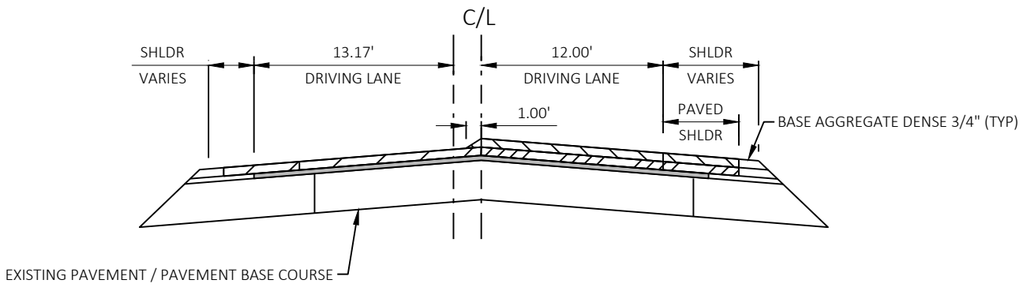


PLAN VIEW

FIRST PASS 1 3/4" HMA PAVEMENT 4 LT 58-28 S PAVING LIMITS (LOWER LAYER)

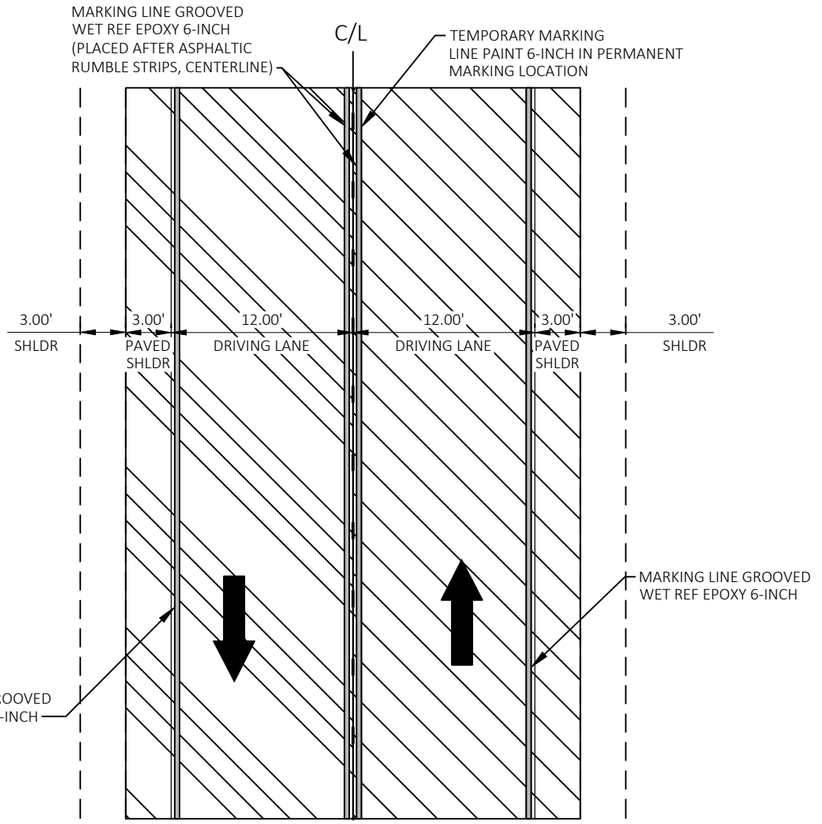
SECOND PASS 1 3/4" HMA PAVEMENT 4 LT 58-28 S PAVING LIMITS (LOWER LAYER)

THIRD PASS 1 3/4" HMA PAVEMENT 4 LT 58-28 S PAVING LIMITS (UPPER LAYER)



CROSS SECTION VIEW

THIRD PASS DETAIL

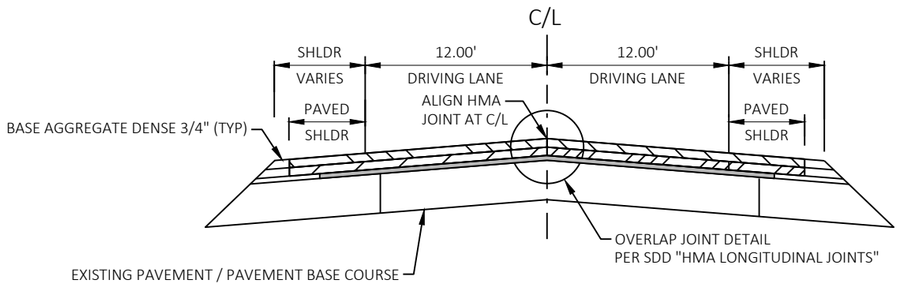


PLAN VIEW

SECOND PASS 1 3/4" HMA PAVEMENT 4 LT 58-28 S PAVING LIMITS (LOWER LAYER)

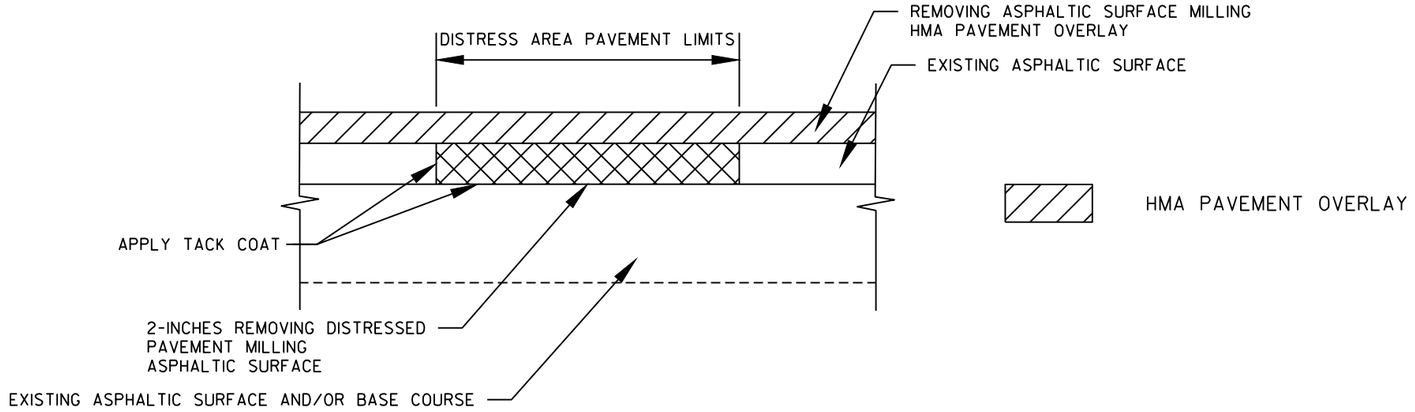
THIRD PASS 1 3/4" HMA PAVEMENT 4 LT 58-28 S PAVING LIMITS (UPPER LAYER)

FOURTH PASS 1 3/4" HMA PAVEMENT 4 LT 58-28 S PAVING LIMITS (UPPER LAYER)

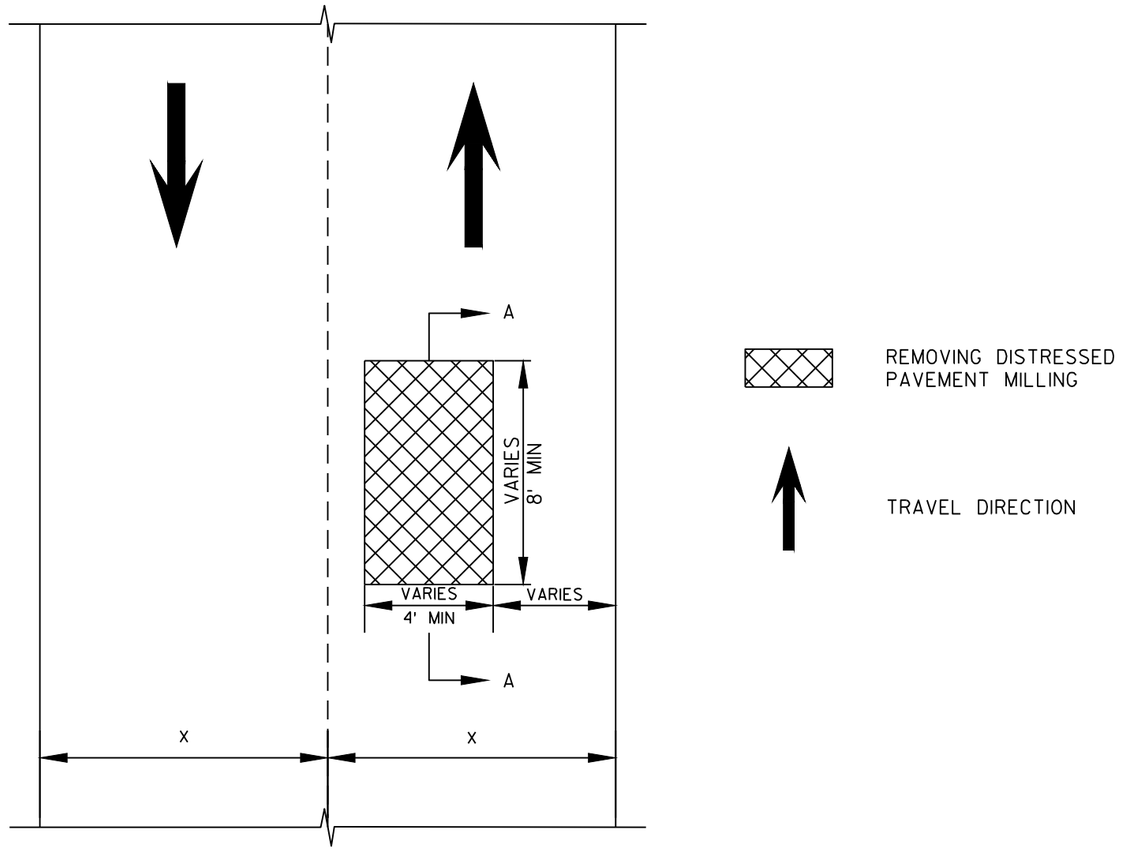


CROSS SECTION VIEW

FOURTH PASS DETAIL

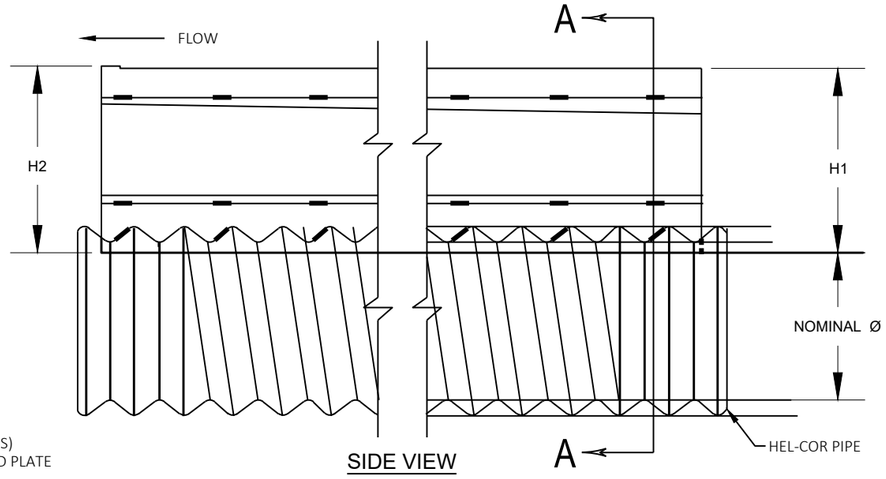


REMOVING DISTRESS PAVEMENT MILLING
SECTION A-A



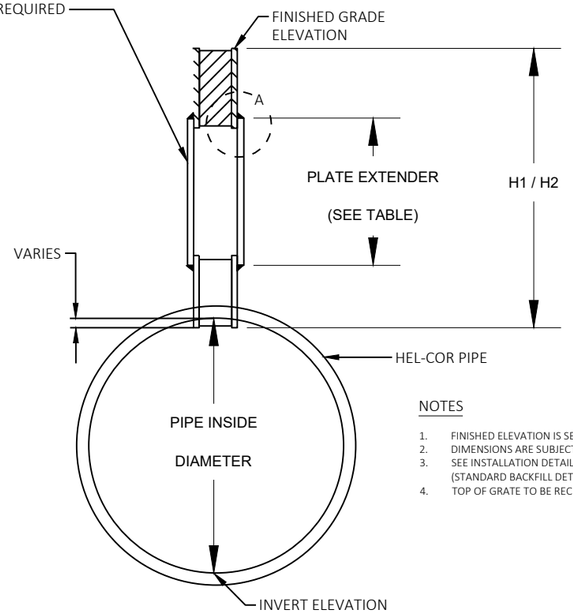
PLAN VIEW

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



SIDE VIEW

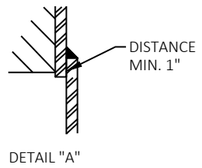
(PLATE EXTENDERS)
7 GA. GALVANIZED PLATE
PER ASTM A 761
SLOPE AS REQUIRED



SECTION A-A

LOADING CONDITION	MAX PLATE EXTENDER HEIGHT
H20 / H25* 750 PSI CONCRETE	21"

* 125 PSI TIRE PRESURE



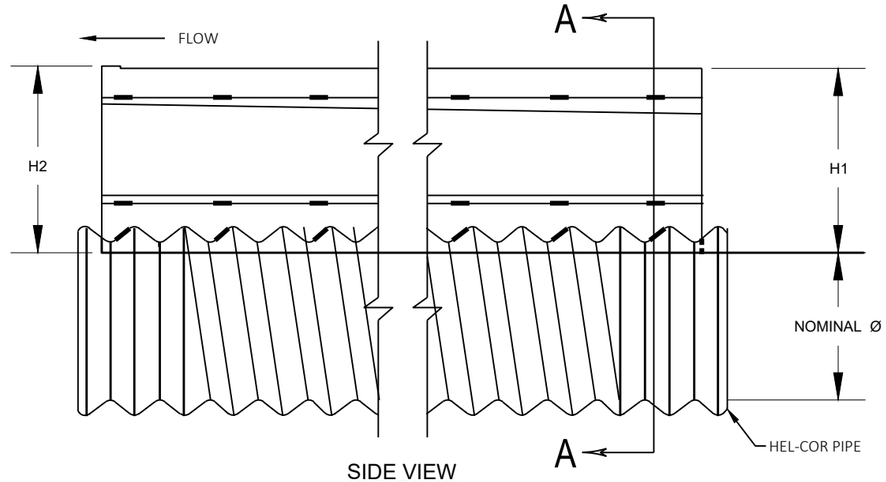
DETAIL "A"

NOTES

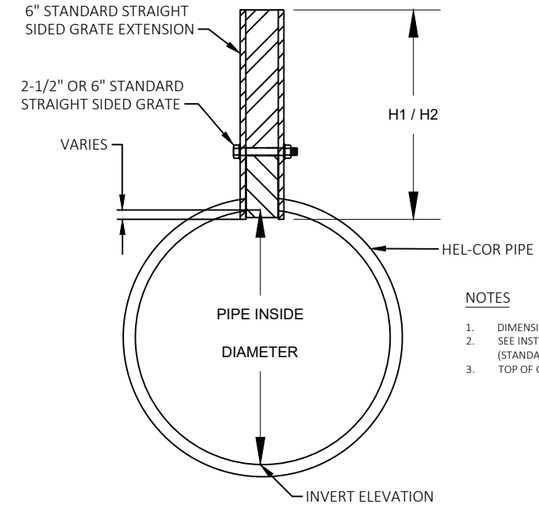
1. FINISHED ELEVATION IS SET FROM TOP OF GRATE, NOT FROM INVERT OF PIPE.
2. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
3. SEE INSTALLATION DETAILS FOR PROPER INSTALLATION OF SLOTTED DRAIN SYSTEM. (STANDARD BACKFILL DETAIL)
4. TOP OF GRATE TO BE RECESSED 1/4" FROM FINISHED GRADE.

SURFACE DRAIN PIPE CORRUGATED METAL SLOTTED (12-INCH)

SEE STORM SEWER PLAN FOR DIMENSIONS



SIDE VIEW



SECTION A-A

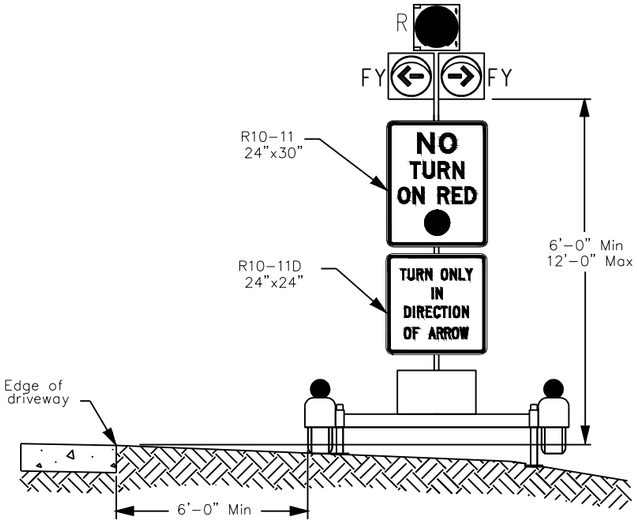
NOTES

1. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
2. SEE INSTALLATION DETAILS FOR PROPER INSTALLATION OF SLOTTED DRAIN SYSTEM. (STANDARD BACKFILL DETAIL)
3. TOP OF GRATE TO BE RECESSED 1/4" FROM FINISHED GRADE.

SURFACE DRAIN PIPE CORRUGATED METAL SLOTTED (12-INCH)

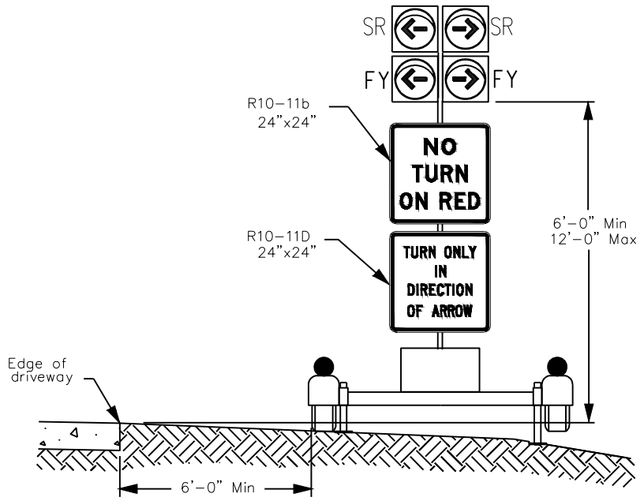
SEE STORM SEWER PLAN FOR DIMENSIONS

2



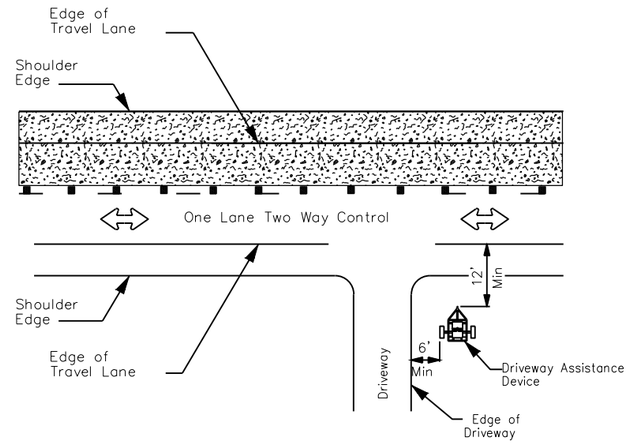
ELEVATION VIEW

DAD 3 HEAD DEVICE



ELEVATION VIEW

DAD 4 HEAD DEVICE



PLAN VIEW

TYPICAL DAD INSTALLATION

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CONSTRUCTION DETAILS	SHEET 16	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 08
PLOT DATE : 10/21/2024 9:29 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	REMARKS
A	68+21.0 'R'	-18.0 LT	504563.000	684011.829	812.70'	CONC BARRIER
B	68+71.7 'R'	-18.0 LT	504610.121	684028.543	812.51'	CONC BARRIER
C	69+22.3 'R'	-18.0 LT	504657.803	684043.583	812.53'	CONC BARRIER
D	69+22.3 'R'	-16.0 LT	504657.275	684045.512	812.65'	FLAG
E	69+45.2 'R'	-16.0 LT	504678.969	684051.746	812.66'	FLAG
F	69+68.0 'R'	-16.0 LT	504700.799	684057.645	812.65'	FLAG

REMOVING GUARDRAIL
STA 67+43'R' TO 69+44'R' RT
STA 67+75'R' TO 69+82'R' LT

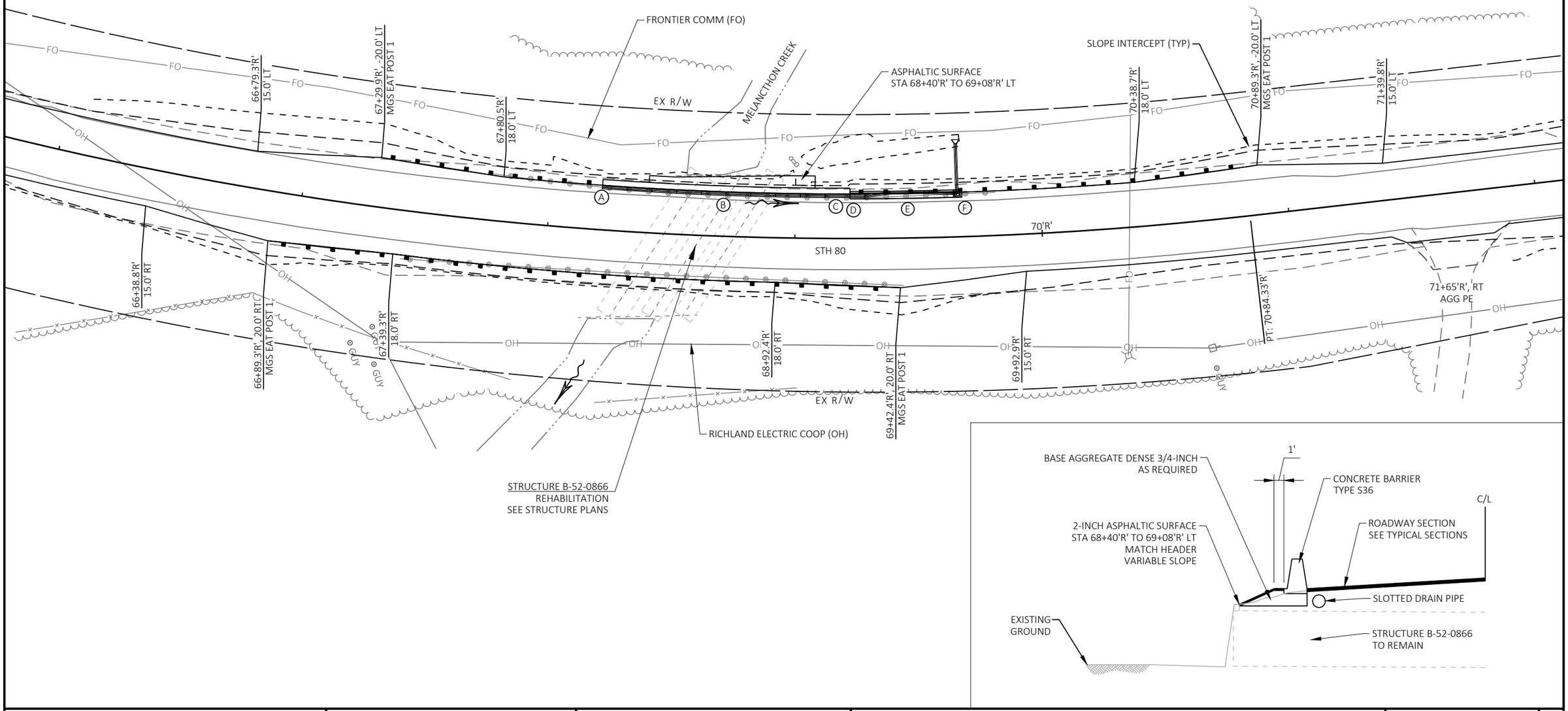
MGS GUARDRAIL 3, MGS GUARDRAIL TERMINAL EAT
STA 66+89'R' TO 69+42'R' RT
MGS THRIE BEAM TRANSITION, MGS GUARDRAIL 3,
MGS GUARDRAIL TERMINAL EAT
STA 67+30'R' TO 68+22'R' LT
STA 69+22'R' TO 70+89'R' LT

CONCRETE BARRIER TYPE S 36
STA 68+21'R' TO 69+22'R' LT
THRIE BEAM ANCHORS REQUIRED

CONC C&G 4-INCH SLOPED 36-INCH TYPE TBT
STA 69+22'R' TO 69+68'R' LT

SURFACE DRAIN PIPE CORRUGATED METAL
SLOTTED 12-INCH
STA 68+21'R' TO 69+66'R' LT
SEE CONSTRUCTION DETAIL
SEE STORM SEWER PLAN

FINAL PLACEMENT OF THE INLET MUST MAINTAIN
THE MINIMUM POST SEPARATION DISTANCES IN THE
STANDARD DETAIL DRAWING.



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN DETAILS	SHEET 17	E

2

STATION & OFFSET TABLE			
POINT	STATION	OFFSET	H (FT)
38	183+64.3 'R'	19.5 LT	5.08
39	183+67.4 'R'	19.5 LT	5.09
40	183+70.5 'R'	19.5 LT	5.10
41	183+73.6 'R'	19.5 LT	5.11
42	183+76.8 'R'	19.5 LT	5.12
43	183+79.9 'R'	19.5 LT	5.13
44	183+83.0 'R'	19.5 LT	5.15

POINT STA-OFF TO CENTER OF W6X9 POST

N

2

38 39 40 41 42 43 44

9 POSTS AT HALF POST SPACING

183+58.1'R'
12.0' LT

FACE OF RAIL AT 18' OFFSET

SAWING ASPHALT

183+89.3'R'
12.0' LT

7 POSTS AT HALF POST SPACING

EXCAVATION COMMON
4-INCH ASPHALTIC SURFACE PRIOR TO MILLING
BASE AGGREGATE DENSE 1 1/4-INCH TO TOP OF BOX OR 12-INCH MIN

STRUCTURE B-52-0153
REHABILITATION
SEE STRUCTURE PLANS

N15° 41' 24"E
STH 80

9 POSTS AT HALF POST SPACING

183+58.1'R'
12.0' RT

SAWING ASPHALT

183+89.4'R'
12.0' RT

31 32 33 34 35 36 37

ANCHOR POST ASSEMBLY TOP MOUNT (TYP)
BOLT THROUGH DETAIL REQUIRED

7 POSTS AT HALF POST SPACING

MGS GUARDRAIL ENERGY
ABSORBING TERMINAL

184+11.5'R'
18.0' RT

STATION & OFFSET TABLE			
POINT	STATION	OFFSET	H (FT)
31	183+64.4 'R'	19.5 RT	4.70
32	183+67.5 'R'	19.5 RT	4.71
33	183+70.7 'R'	19.5 RT	4.72
34	183+73.8 'R'	19.5 RT	4.73
35	183+76.9 'R'	19.5 RT	4.74
36	183+80.0 'R'	19.5 RT	4.75
37	183+83.2 'R'	19.5 RT	4.77

POINT STA-OFF TO CENTER OF W6X9 POST

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN DETAILS	SHEET 18	E

2

STATION & OFFSET TABLE			
POINT	STATION	OFFSET	H (FT)
22	274+54.0 'R'	-19.5 LT	4.36
23	274+57.1 'R'	-19.5 LT	4.41
24	274+60.3 'R'	-19.5 LT	4.46
25	274+63.4 'R'	-19.5 LT	4.51
26	274+66.5 'R'	-19.5 LT	4.57
27	274+69.6 'R'	-19.5 LT	4.64
28	274+72.8 'R'	-19.5 LT	4.69
29	274+75.9 'R'	-19.5 LT	4.75
30	274+79.0 'R'	-19.5 LT	4.81

POINT STA-OFF TO CENTER OF W6X9 POST

N

ANCHOR POST ASSEMBLY TOP MOUNT (TYP)
BOLT THROUGH DETAIL REQUIRED

22 23 24 25 26 27 28 29 30

FACE OF RAIL AT 18' OFFSET

14 POSTS AT HALF POST SPACING

17 POSTS AT HALF POST SPACING

274+47.8'R'
12.0' LT

SAWING ASPHALT

275+07.2'R'
12.0' LT

STRUCTURE B-52-0158
REHABILITATION
SEE STRUCTURE PLANS

EXCAVATION COMMON
4-INCH ASPHALTIC SURFACE PRIOR TO MILLING
BASE AGGREGATE DENSE 1 1/4-INCH TO TOP OF
BOX OR 12-INCH MIN

N2° 22' 57"E
STH 80

275'R'

273+83.5'R'
12.0' RT

SAWING ASPHALT

274+38.8'R'
12.0' RT

12 POSTS AT HALF POST SPACING

10 POSTS AT HALF POST SPACING

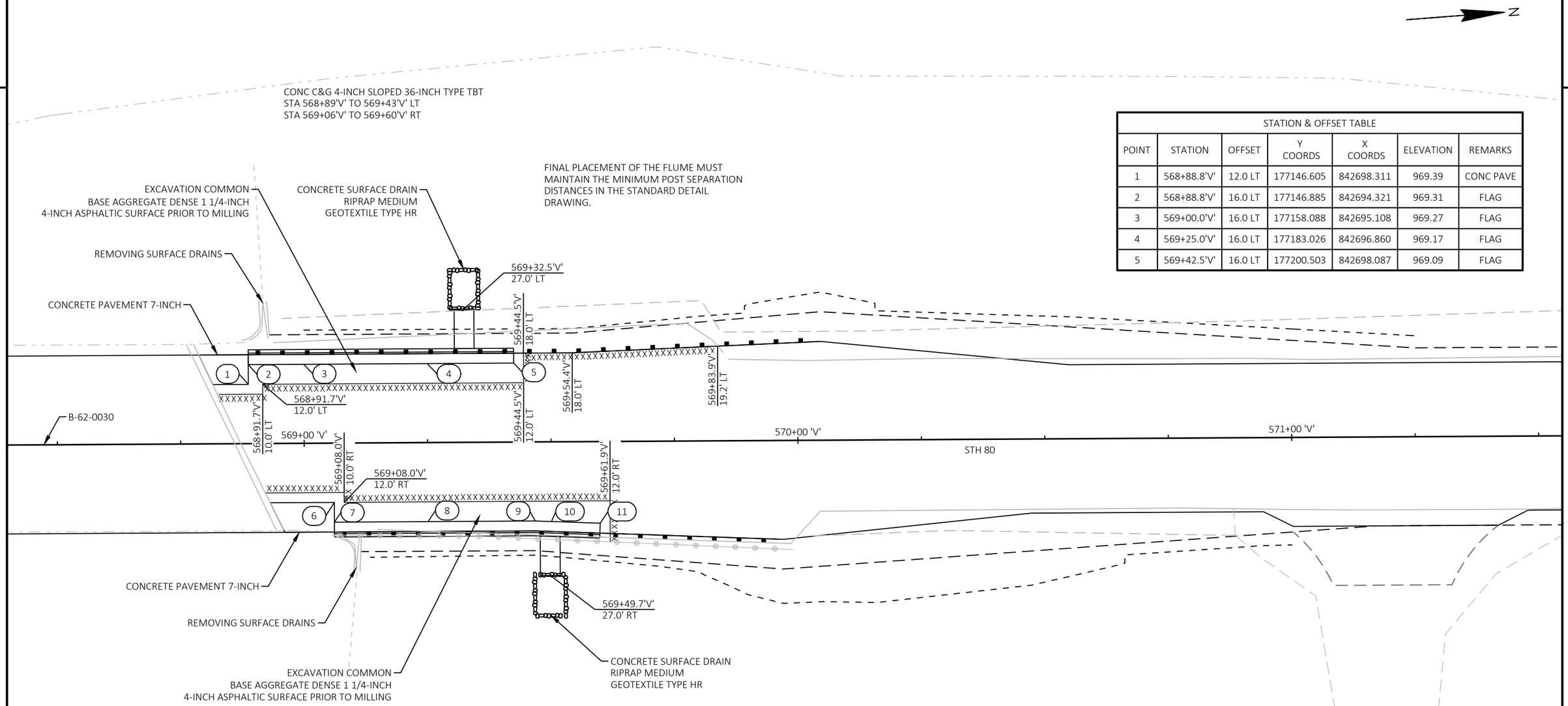
13 14 15 16 17 18 19 20 21

STATION & OFFSET TABLE			
POINT	STATION	OFFSET	H (FT)
13	274+07.3 'R'	19.5 RT	4.81
14	274+10.4 'R'	19.5 RT	4.86
15	274+13.5 'R'	19.5 RT	4.91
16	274+16.6 'R'	19.5 RT	4.95
17	274+19.8 'R'	19.5 RT	5.00
18	274+22.9 'R'	19.5 RT	5.04
19	274+26.0 'R'	19.5 RT	5.09
20	274+29.1 'R'	19.5 RT	5.13
21	274+32.3 'R'	19.5 RT	5.17

POINT STA-OFF TO CENTER OF W6X9 POST

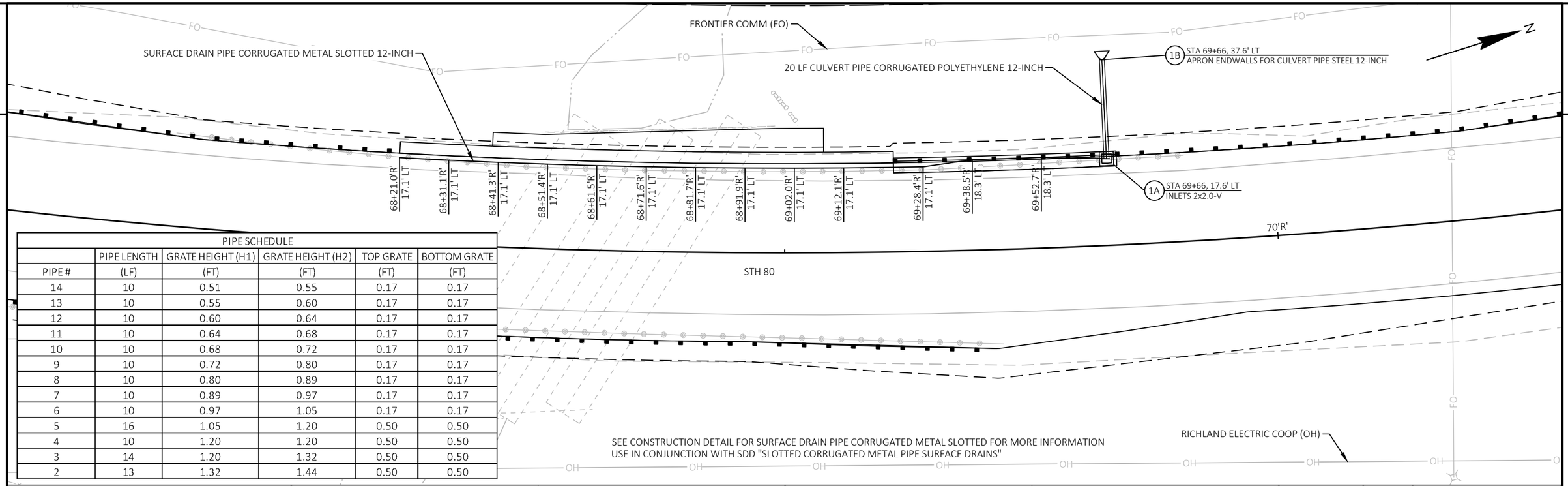
2

2

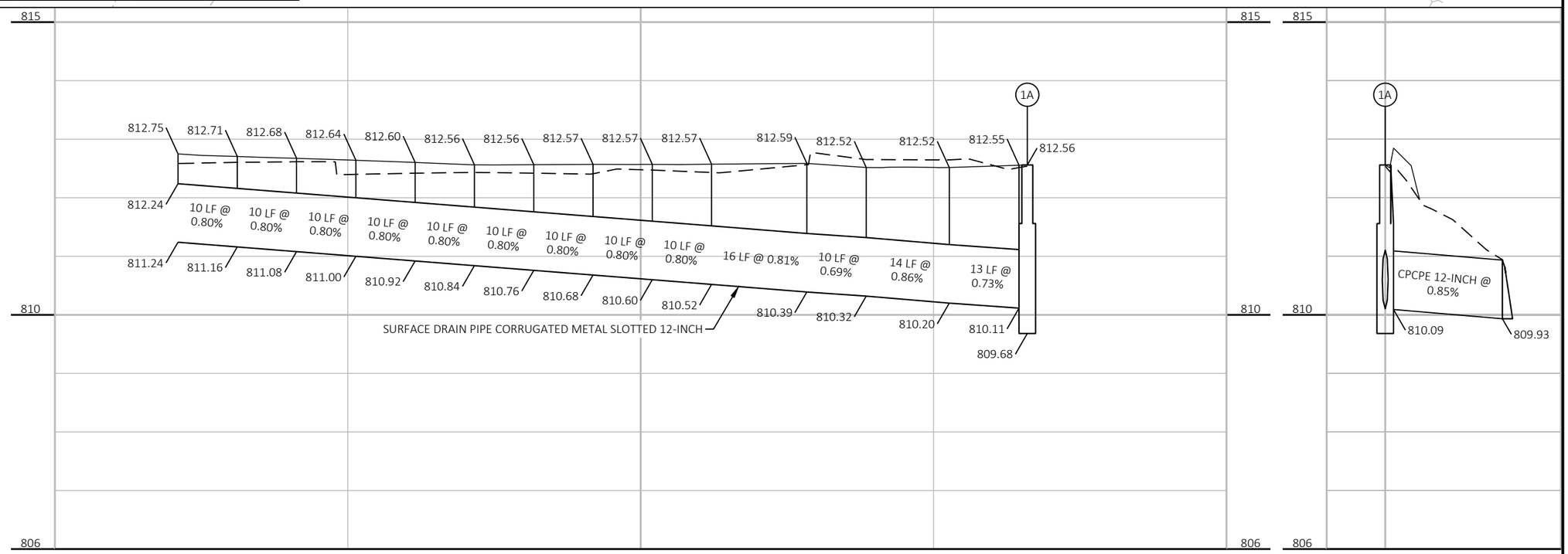


STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	REMARKS
1	568+88.8'V'	12.0 LT	177146.605	842698.311	969.39	CONC PAVE
2	568+88.8'V'	16.0 LT	177146.885	842694.321	969.31	FLAG
3	569+00.0'V'	16.0 LT	177158.088	842695.108	969.27	FLAG
4	569+25.0'V'	16.0 LT	177183.026	842696.860	969.17	FLAG
5	569+42.5'V'	16.0 LT	177200.503	842698.087	969.09	FLAG

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	REMARKS
6	569+06.0'V'	12.0 RT	177162.151	842723.462	969.33	CONC PAVE
7	569+06.0'V'	16.0 RT	177161.871	842727.452	969.25	FLAG
8	569+25.0'V'	16.0 RT	177180.784	842728.780	969.17	FLAG
9	569+46.7'V'	16.0 RT	177202.436	842730.302	969.07	FLAG
10	569+50.0'V'	16.1 RT	177205.714	842730.664	969.05	FLAG
11	569+59.9'V'	16.5 RT	177215.531	842731.749	969.00	FLAG



PIPE SCHEDULE					
	PIPE LENGTH	GRATE HEIGHT (H1)	GRATE HEIGHT (H2)	TOP GRATE	BOTTOM GRATE
PIPE #	(LF)	(FT)	(FT)	(FT)	(FT)
14	10	0.51	0.55	0.17	0.17
13	10	0.55	0.60	0.17	0.17
12	10	0.60	0.64	0.17	0.17
11	10	0.64	0.68	0.17	0.17
10	10	0.68	0.72	0.17	0.17
9	10	0.72	0.80	0.17	0.17
8	10	0.80	0.89	0.17	0.17
7	10	0.89	0.97	0.17	0.17
6	10	0.97	1.05	0.17	0.17
5	16	1.05	1.20	0.50	0.50
4	10	1.20	1.20	0.50	0.50
3	14	1.20	1.32	0.50	0.50
2	13	1.32	1.44	0.50	0.50



BEGIN PROJECT
STA 19+27'R'

CTH C

PINE RIVER

NET EXCEPTION TO CL LENGTH
STA 35+30'R' TO 36+28'R'
STRUCTURE B-52-0048
NO WORK

STRUCTURE B-52-0865
REHABILITATION
STA 60+25'R'

STRUCTURE B-52-0866
REHABILITATION
STA 68+55'R'

BONTREGER LN

50'R'

MELANCTHON CREEK

150'R'

PILNER LN

CENTURY FARM RD

LEBANSKY CREEK

RICHLAND COUNTY

COORDINATE SYSTEM CHANGE
STA 277+28.9'R' = 277+28.9'V'

200'R'

250'R'

MELANCTHON CREEK

STRUCTURE B-52-0158
REHABILITATION
STA 274+43'R'

STRUCTURE B-52-0093
REHABILITATION
STA 20+07'R'

NET EXCEPTION TO CL LENGTH
STA 50+34'R' TO 51+27'R'
STRUCTURE B-52-0049
NO WORK

STRUCTURE B-52-0101
REHABILITATION
STA 74+04'R'

100'R'

EK LN

CTH CC

HANZEL CREEK

SQUASH HOLLOW LN

GRINSELL BRANCH

GRINSELL LN

STRUCTURE B-52-0153
REHABILITATION
STA 183+74'R'

STRUCTURE B-52-0102
HMA OVERLAY
STA 86+06'R'

STRUCTURE B-52-0103
REHABILITATION
STA 116+76'R'

MB

N

1 ROAD WORK AHEAD W20-1A

2 ROAD WORK 1000 FT W20-1C

3 ROAD WORK 500 FT W20-1D

4 ROAD WORK NEXT X MILES G20-1 60"X24"

5 END ROAD WORK G20-2A 48"X24"

6 MB — FRAME 1: ROAD WORK BEGINS; FRAME 2: XXXXDAY XX/XX

7 MAX. 13' WIDTH W12-52 48"X48"

XX MILES AHEAD WO57-52 48"X36"

PLACE AT USH 14, STH 56, 1 MILE SOUTH OF PROJECT, STH 82

ALL SIGNS ARE 48" X 48" UNLESS NOTED.

NOT ALL TRAFFIC CONTROL SHOWN. SEE STAGING DETAILS. FOLLOW APPLICABLE SDD'S FOR ADDITIONAL DETAILS.

2

VERNON COUNTY

COORDINATE SYSTEM CHANGE
STA 277+28.9'R' = 277+28.9'V'

300'V'

350'V'

WESTERN RD

CTH V

400'V'

CTH EE

BEAVER CREEK

CTH C

450'V'

STRUCTURE B-52-0134
NO WORK

STALEY SCHOOL RD

500'V'

KOUBA VALLEY RD

SOUTH BRANCH CREEK

550'V'

STRUCTURE B-62-0030
CONCRETE OVERLAY
STA 568+30'V'

RIVER RD

600'V'

STRUCTURE C-62-0060
REHABILITATION
STA 590+70'V'

PINE HILL RD

HEIGHTS RD

WEST BRANCH BARABOO RIVER

CTH Q

STRUCTURE B-62-0031
CONCRETE OVERLAY
STA 637+00'V'

END PROJECT
STA 637+69'V'

HILLSBORO

N

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TRAFFIC CONTROL - OVERVIEW	SHEET 22	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\025101-TC-OVERVIEW.DWG
LAYOUT NAME - 01
PLOT DATE : 7/29/2024 6:53 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:2500 FT
WISDOT/CADDS SHEET 44

2

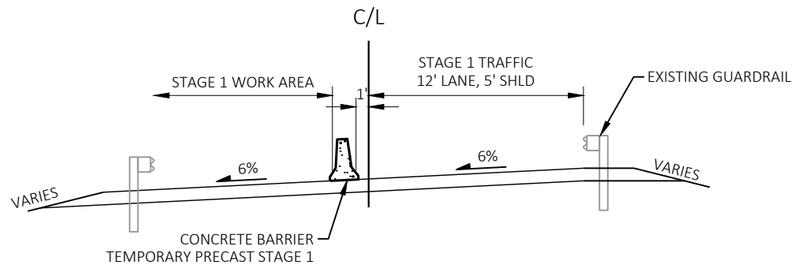
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- ASPHALTIC SURFACE
  ADDITIONAL QUANTITY SHOWN IN STAGE 2
- DIRECTION OF TRAFFIC

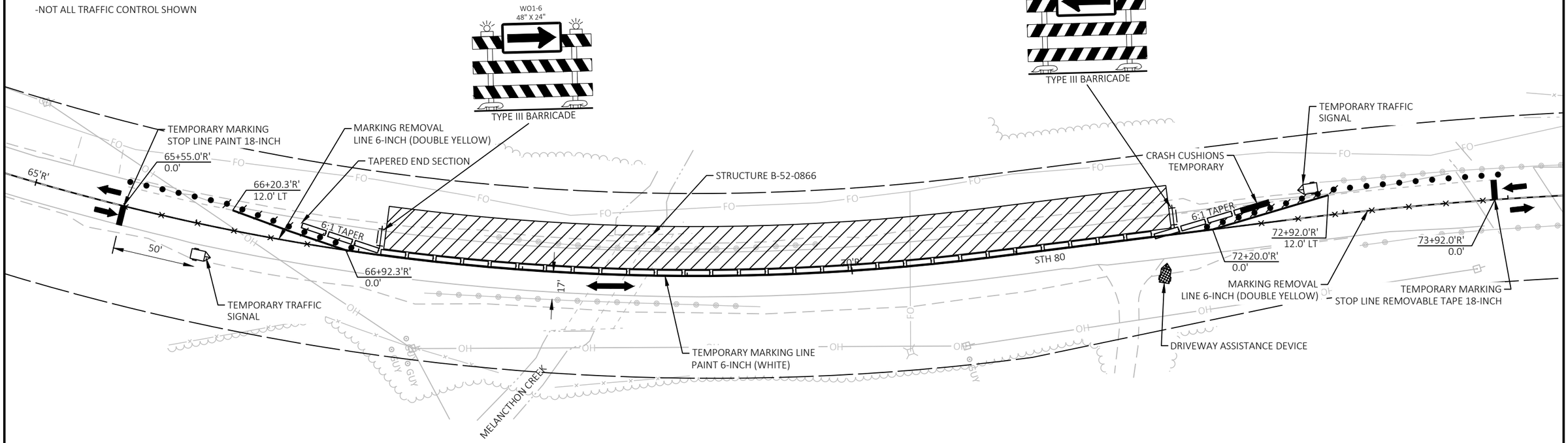
NOTES

-USE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION," AND "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS," AS MODIFIED ON THIS PLAN SHEET.

-NOT ALL TRAFFIC CONTROL SHOWN



STAGE 1 TRAFFIC CONTROL - B-52-0866



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TRAFFIC CONTROL - B-52-0866 - STAGE 1	SHEET 23	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\025101-TC-RICHLAND-STAGE1.DWG
LAYOUT NAME - 01
PLOT DATE : 7/29/2024 9:44 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:60 FT
WISDOT/CADDS SHEET 42

2

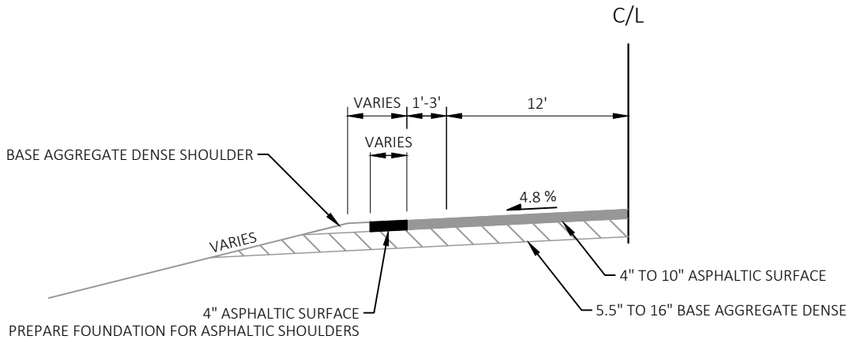
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- ASPHALTIC SURFACE
  ADDITIONAL QUANTITY SHOWN IN STAGE 2
- DIRECTION OF TRAFFIC

NOTES

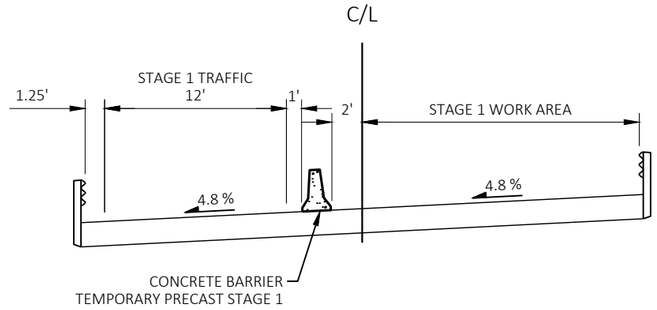
-USE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION," AND "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS," AS MODIFIED ON THIS PLAN SHEET.

-NOT ALL TRAFFIC CONTROL SHOWN

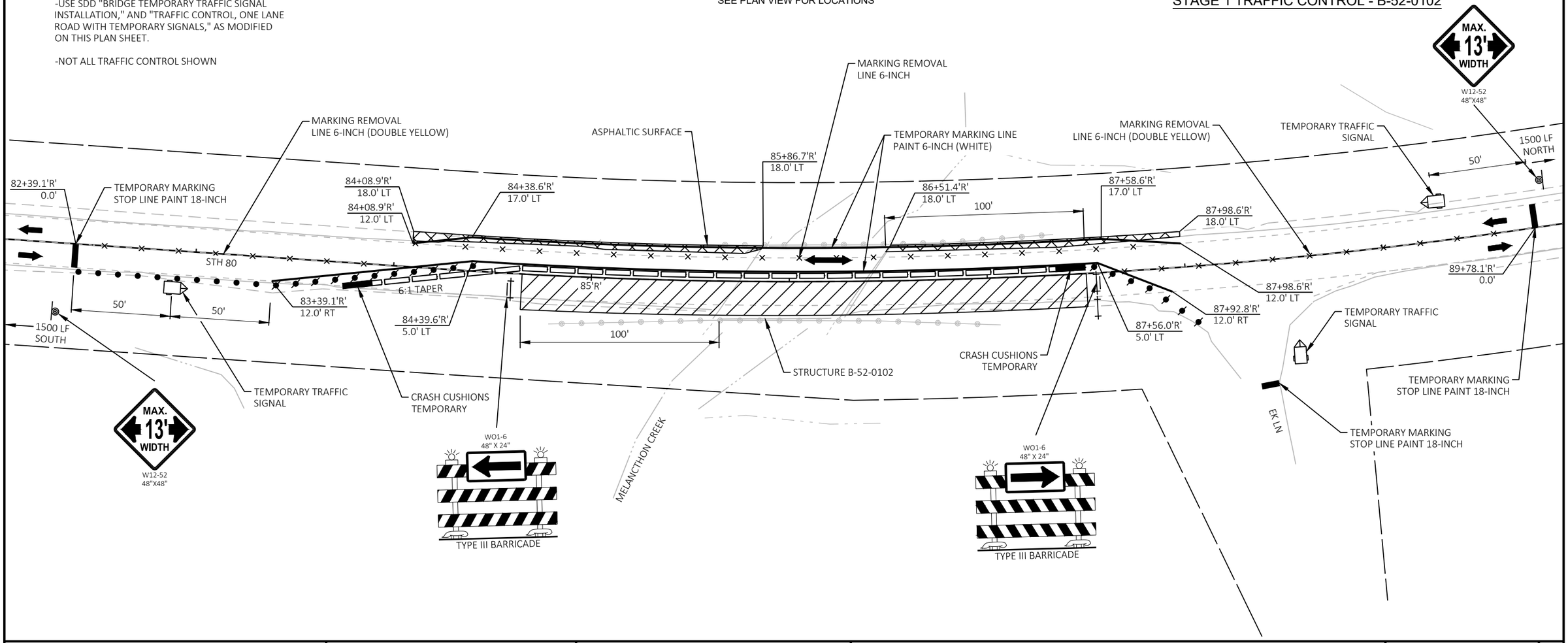


TYPICAL TEMPORARY WIDENING SECTION STH 80

STA 84+09'R' - 85+87'R'
STA 86+51'R' - 87+99'R'
SEE PLAN VIEW FOR LOCATIONS

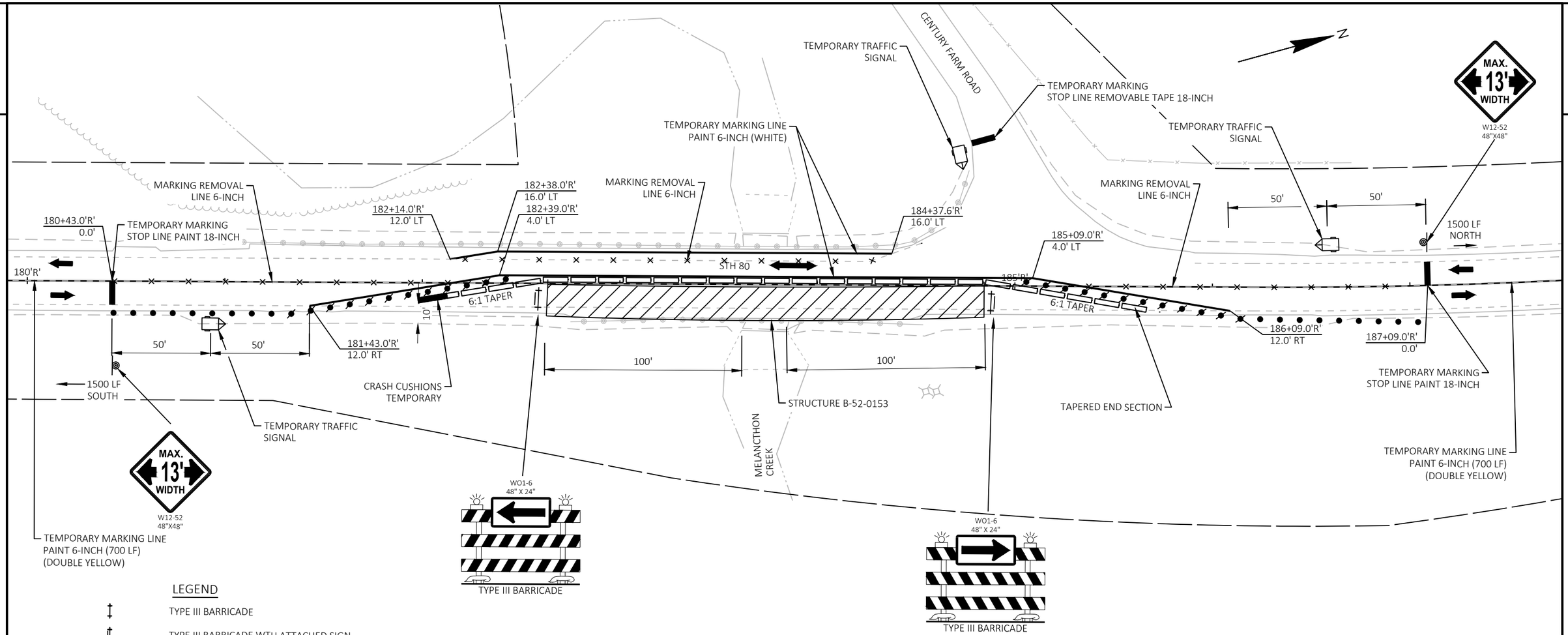


STAGE 1 TRAFFIC CONTROL - B-52-0102



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TRAFFIC CONTROL - B-52-0102 - STAGE 1	SHEET 24	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\025101-TC-RICHLAND-STAGE1.DWG
LAYOUT NAME - 02
PLOT DATE : 7/29/2024 9:44 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42



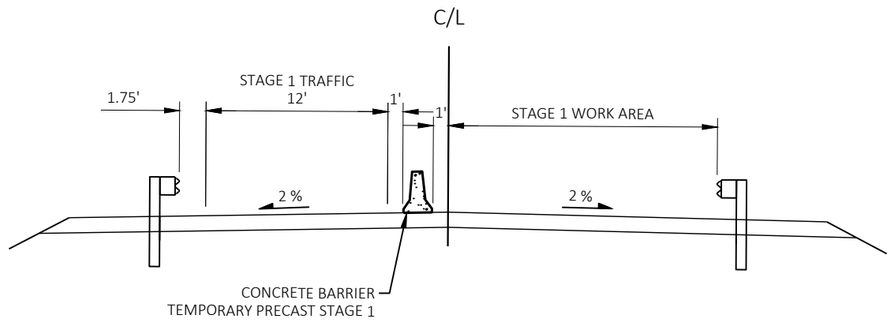
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- ASPHALTIC SURFACE ADDITIONAL QUANTITY SHOWN IN STAGE 2
- DIRECTION OF TRAFFIC

NOTES

-USE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION," AND "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS," AS MODIFIED ON THIS PLAN SHEET.

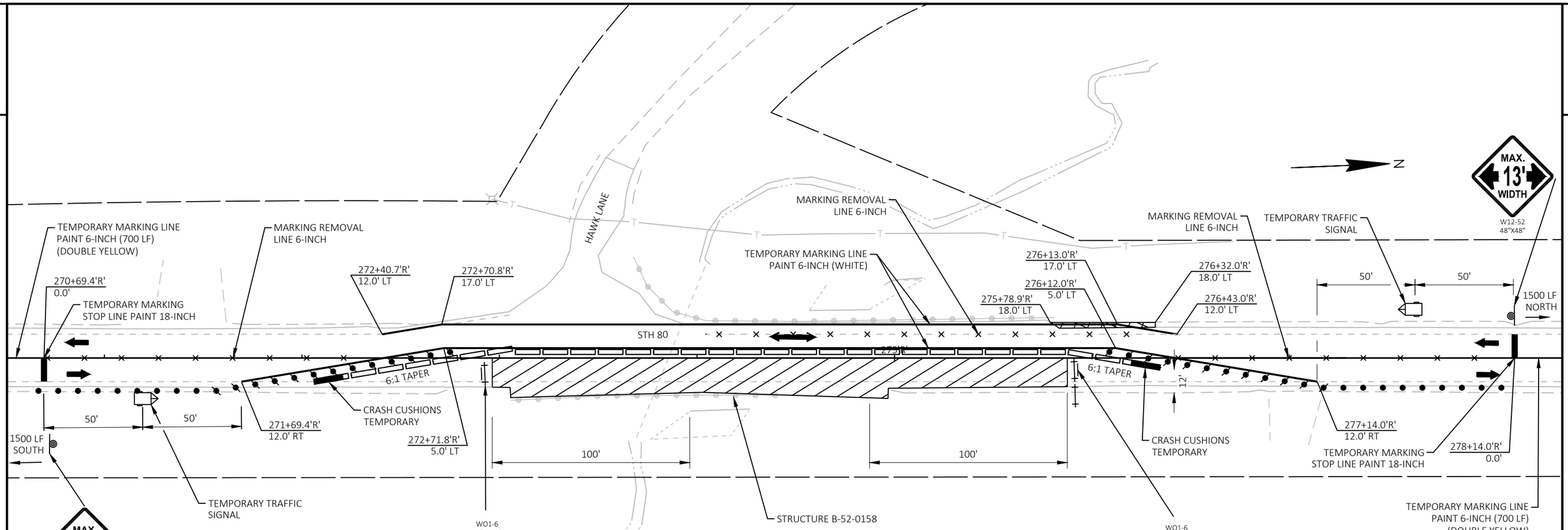
-NOT ALL TRAFFIC CONTROL SHOWN



STAGE 1 TRAFFIC CONTROL - B-52-0153

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TRAFFIC CONTROL - B-52-0153 - STAGE 1	SHEET 25	E

2



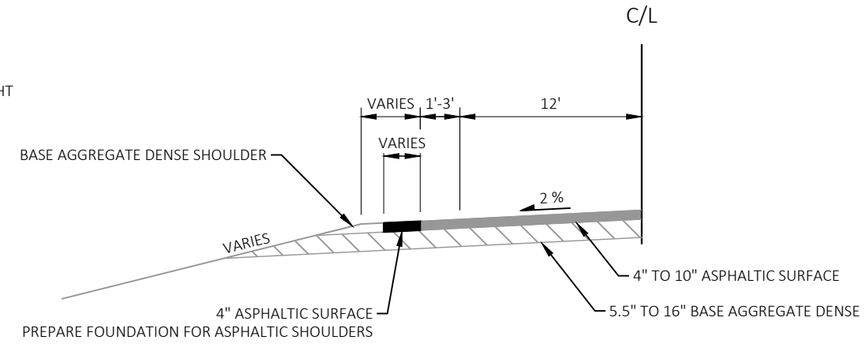
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- ASPHALTIC SURFACE
  ADDITIONAL QUANTITY SHOWN IN STAGE 2
- DIRECTION OF TRAFFIC

NOTES

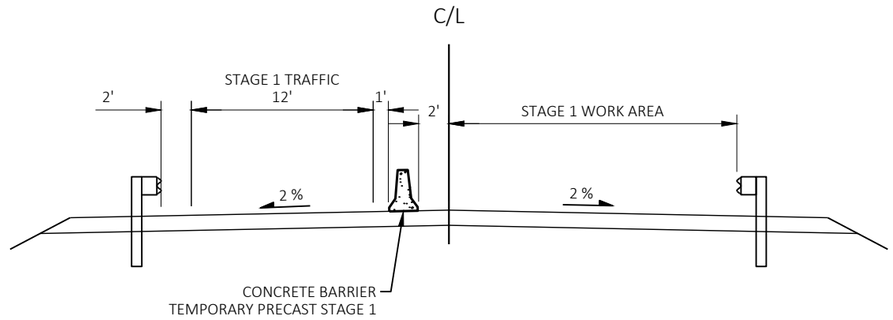
-USE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION," AND "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS," AS MODIFIED ON THIS PLAN SHEET.

-NOT ALL TRAFFIC CONTROL SHOWN



TYPICAL TEMPORARY WIDENING SECTION STH 80

STA 275+79'R' - 276+32'R'
SEE PLAN VIEW FOR LOCATIONS

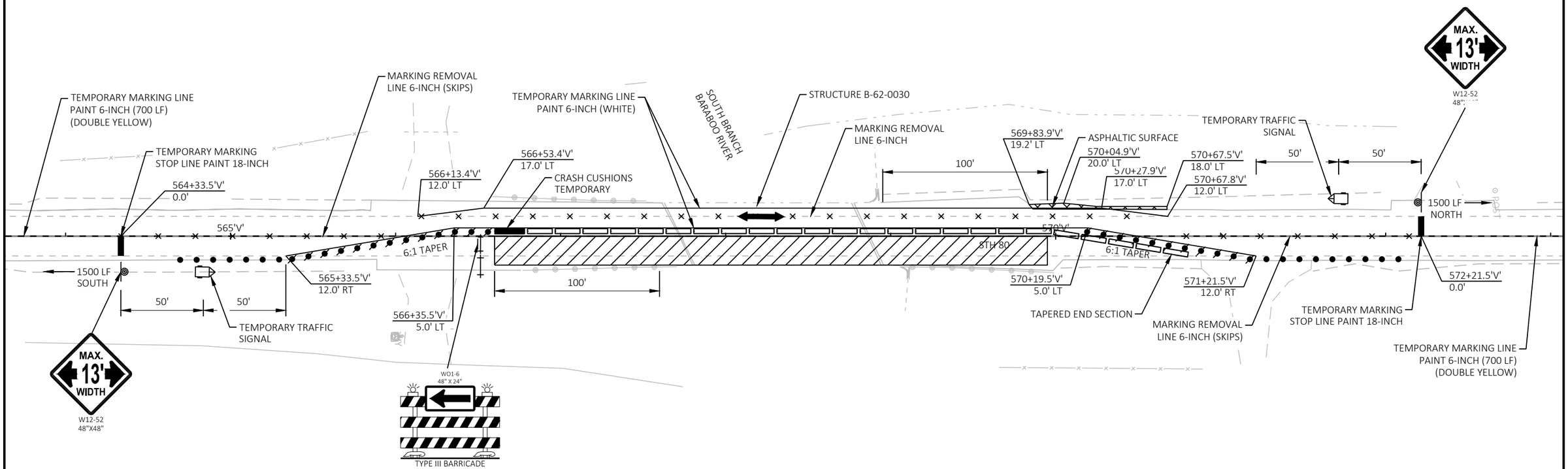


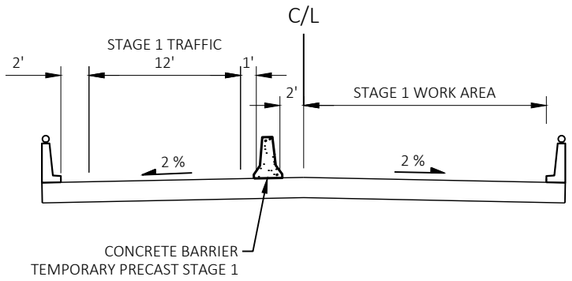
STAGE 1 TRAFFIC CONTROL - B-52-0158

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TRAFFIC CONTROL - B-52-0158 - STAGE 1	SHEET 26	E

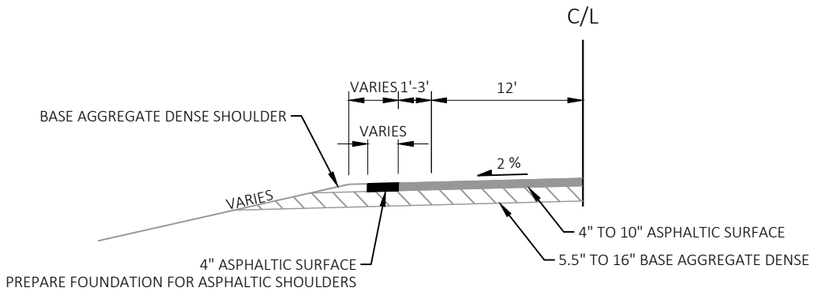
FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\025101-TC-RICHLAND-STAGE1.DWG
LAYOUT NAME - 04
PLOT DATE : 7/29/2024 9:44 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2





STAGE 1 TRAFFIC CONTROL - B-62-0030



TYPICAL TEMPORARY WIDENING SECTION STH 80

STA 569+84'V' - 570+68'V' LT
SEE PLAN VIEW FOR LOCATIONS

NOTES

-USE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION," AND "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS," AS MODIFIED ON THIS PLAN SHEET.

-NOT ALL TRAFFIC CONTROL SHOWN

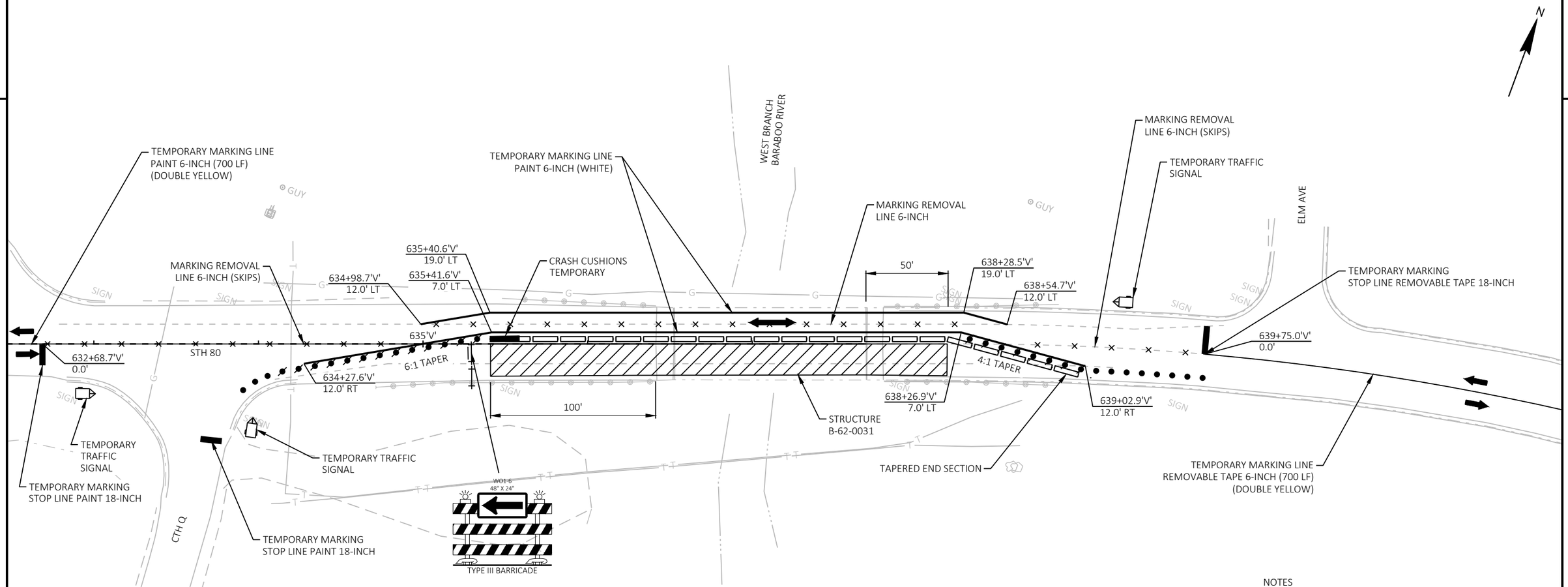
LEGEND

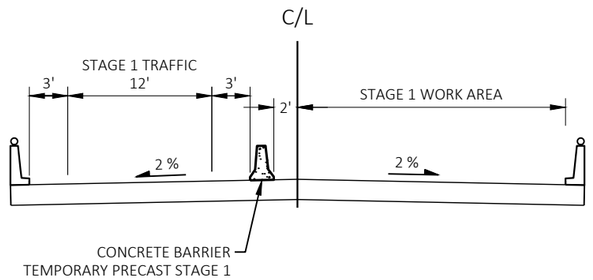
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- ASPHALTIC SURFACE ADDITIONAL QUANTITY SHOWN IN STAGE 2
- DIRECTION OF TRAFFIC

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TRAFFIC CONTROL - B-62-0030 - STAGE 1	SHEET 27	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\025101-TC-VERNON-STAGE1.DWG
LAYOUT NAME - 01
PLOT DATE : 7/29/2024 9:48 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:60 FT
WISDOT/CADDS SHEET 42

2





STAGE 1 TRAFFIC CONTROL - B-62-0031

NOTES

-USE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION," AND "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS," AS MODIFIED ON THIS PLAN SHEET.

-NOT ALL TRAFFIC CONTROL SHOWN

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- ASPHALTIC SURFACE
  ADDITIONAL QUANTITY SHOWN IN STAGE 2
- DIRECTION OF TRAFFIC

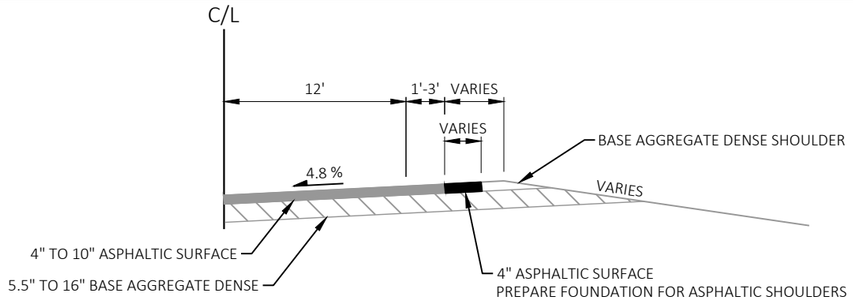
PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TRAFFIC CONTROL - B-62-0031 - STAGE 1	SHEET 28	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\025101-TC-VERNON-STAGE1.DWG
LAYOUT NAME - 02
PLOT DATE : 7/29/2024 9:48 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:60 FT
WISDOT/CADDS SHEET 42

2

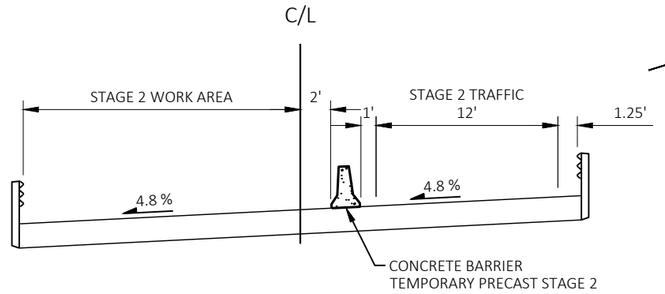
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- ASPHALTIC SURFACE
  ADDITIONAL QUANTITY FROM STAGE 1 SHOWN
- DIRECTION OF TRAFFIC



TYPICAL TEMPORARY WIDENING SECTION STH 80

STA 84+01'R' - 85+65'R' RT
STA 86+28'R' - 87+82'R' RT
SEE PLAN VIEW FOR LOCATIONS

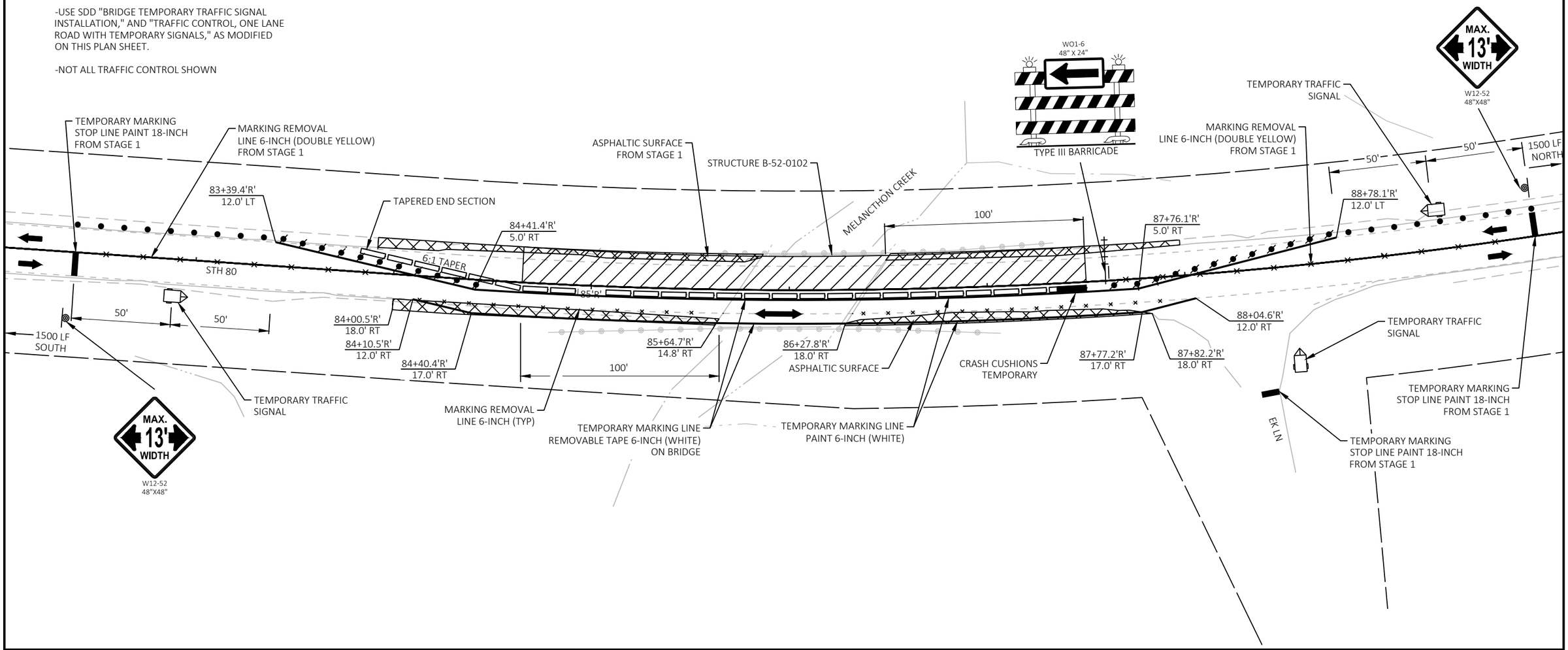


STAGE 2 TRAFFIC CONTROL - B-52-0102

NOTES

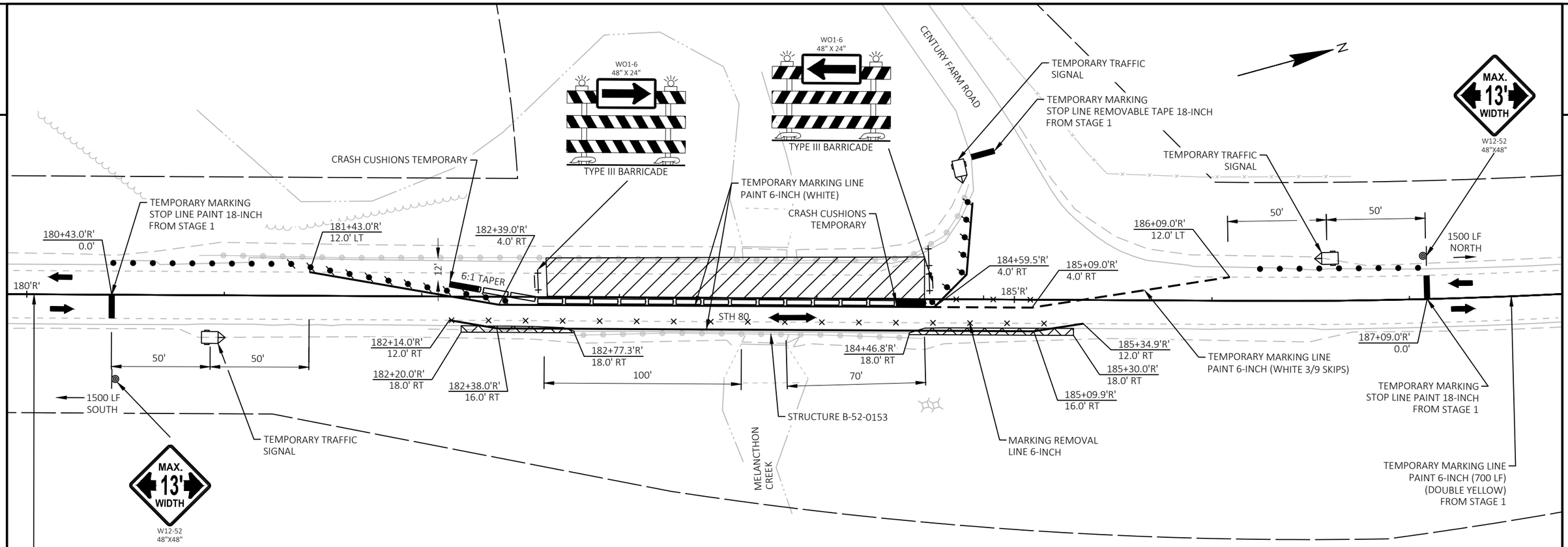
-USE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION," AND "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS," AS MODIFIED ON THIS PLAN SHEET.

-NOT ALL TRAFFIC CONTROL SHOWN



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TRAFFIC CONTROL - B-52-0102 - STAGE 2	SHEET 29	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\025102-TC-RICHLAND-STAGE2.DWG
LAYOUT NAME - 01
PLOT DATE : 7/29/2024 9:45 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

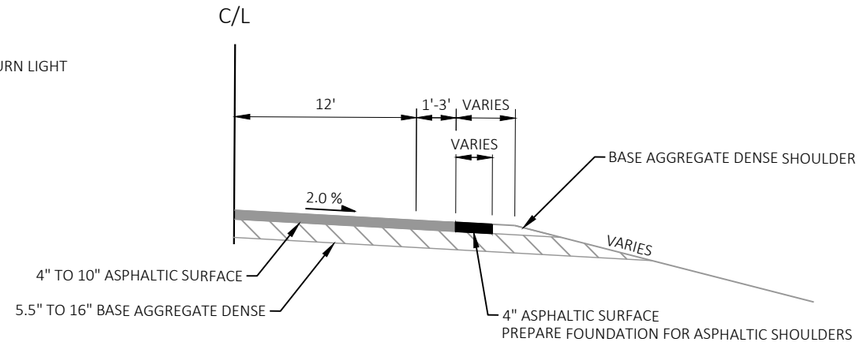


LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- ASPHALTIC SURFACE
  ADDITIONAL QUANTITY FROM STAGE 1 SHOWN
- DIRECTION OF TRAFFIC

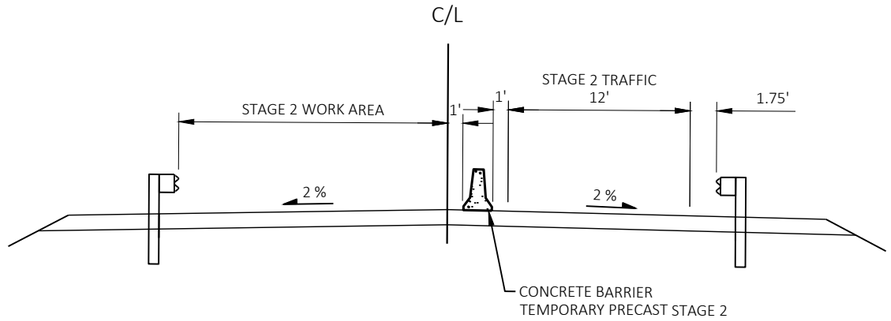
NOTES

-USE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION," AND "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS," AS MODIFIED ON THIS PLAN SHEET.



TYPICAL TEMPORARY WIDENING SECTION STH 80

STA 182+20'R' - 182+77'R'
STA 184+47'R' - 185+30'R'
SEE PLAN VIEW FOR LOCATIONS

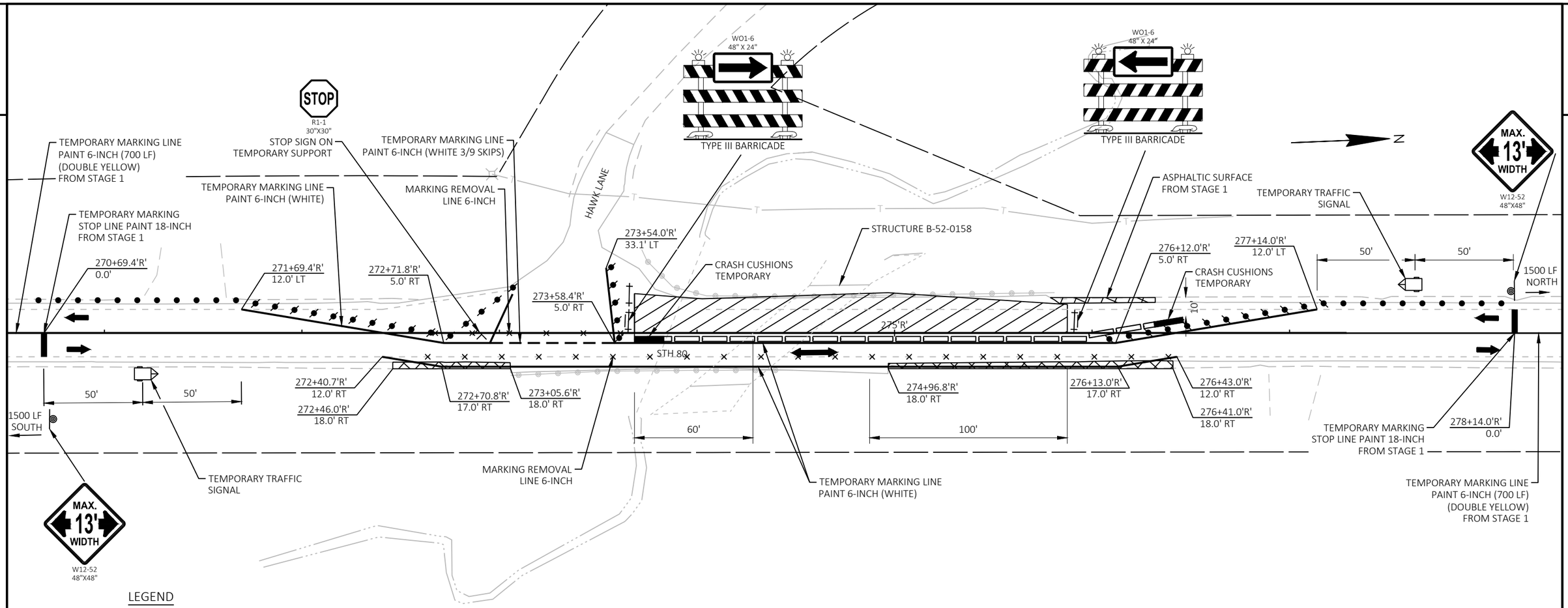


STAGE 2 TRAFFIC CONTROL - B-52-0153

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TRAFFIC CONTROL - B-52-0153 - STAGE 2	SHEET 30	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\025102-TC-RICHLAND-STAGE2.DWG
LAYOUT NAME - 02
PLOT DATE : 7/29/2024 9:46 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



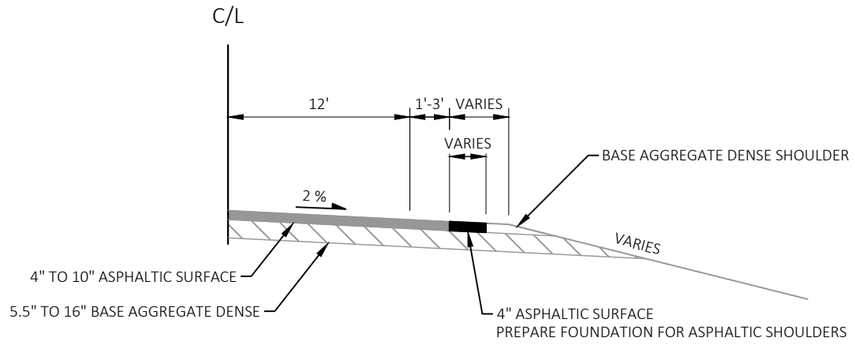
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- ASPHALTIC SURFACE TEMPORARY
  ADDITIONAL QUANTITY FROM STAGE 1 SHOWN
- DIRECTION OF TRAFFIC

NOTES

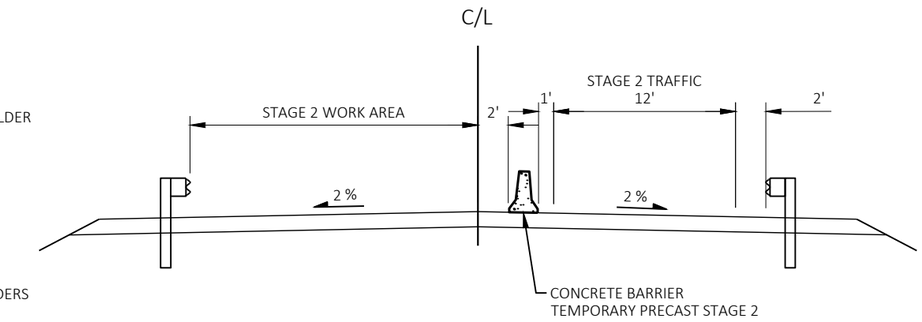
-USE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION," AND "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS," AS MODIFIED ON THIS PLAN SHEET.

-NOT ALL TRAFFIC CONTROL SHOWN



TYPICAL TEMPORARY WIDENING SECTION STH 80

STA 275+79'R' - 276+32'R'
SEE PLAN VIEW FOR LOCATIONS



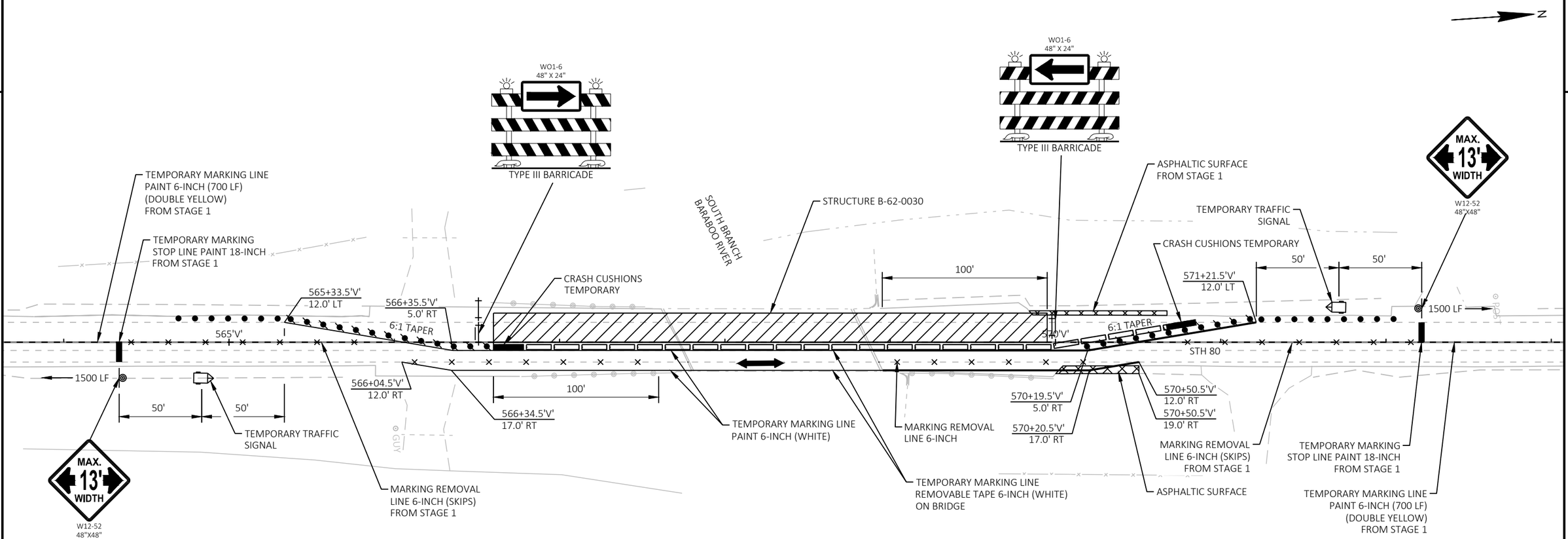
STAGE 2 TRAFFIC CONTROL - B-52-0158

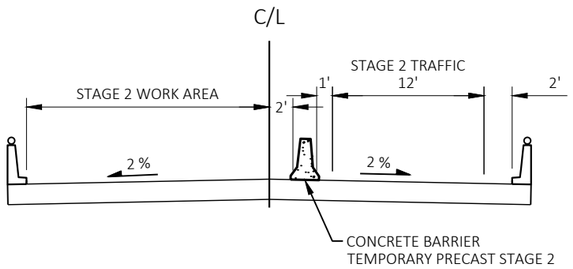
PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TRAFFIC CONTROL - B-52-0158 - STAGE 2	SHEET 31	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\025102-TC-RICHLAND-STAGE2.DWG
LAYOUT NAME - 03
PLOT DATE : 7/29/2024 9:46 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

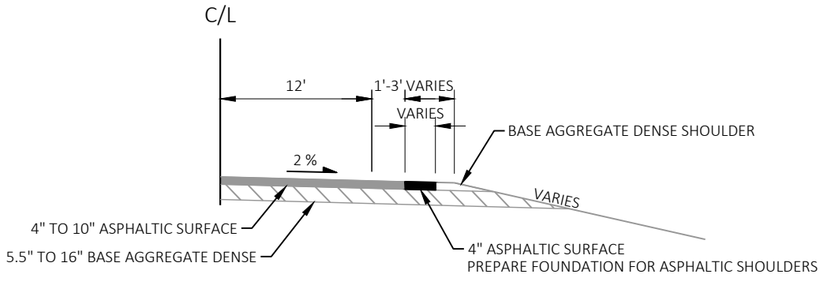
2

N





STAGE 2 TRAFFIC CONTROL - B-62-0030



TYPICAL TEMPORARY WIDENING SECTION STH 80

STA 570+00'V' - 570+51'V' RT
SEE PLAN VIEW FOR LOCATIONS

NOTES

-USE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION," AND "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS," AS MODIFIED ON THIS PLAN SHEET.

-NOT ALL TRAFFIC CONTROL SHOWN

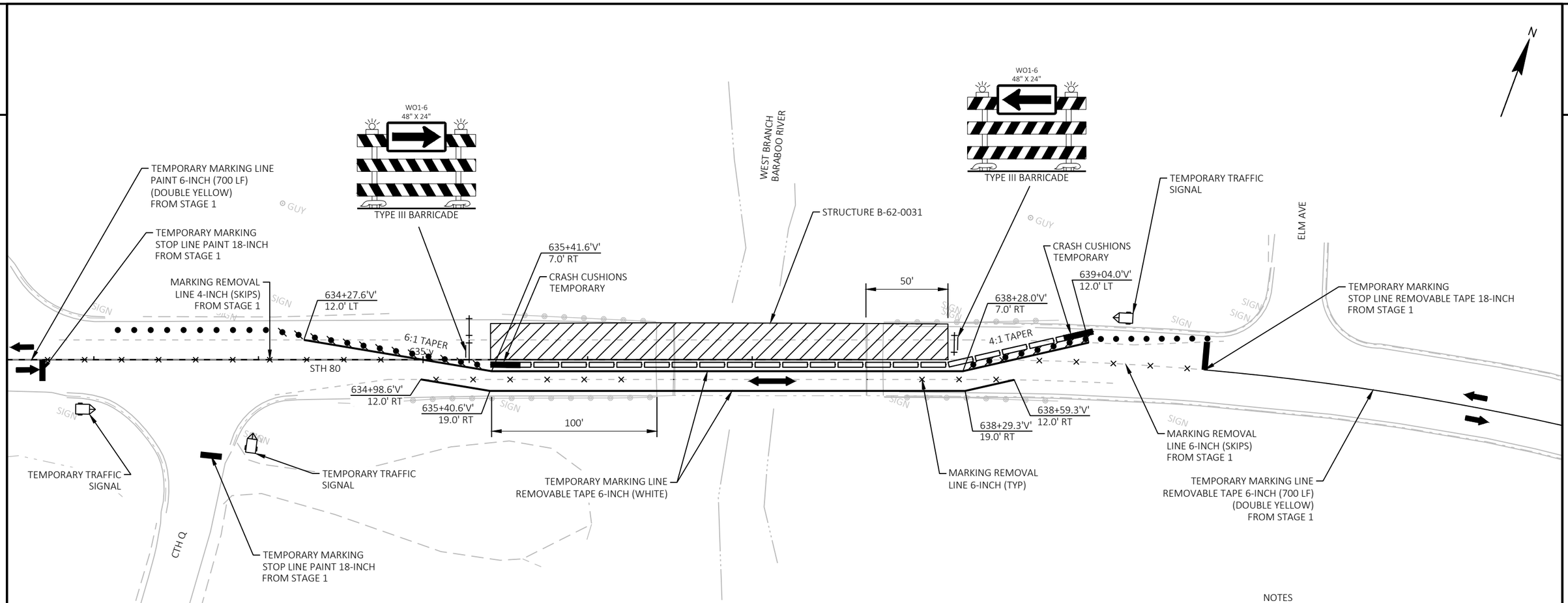
LEGEND

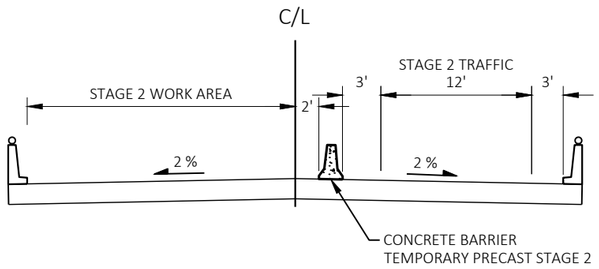
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- ASPHALTIC SURFACE
  ADDITIONAL QUANTITY FROM STAGE 1 SHOWN
- DIRECTION OF TRAFFIC

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TRAFFIC CONTROL - B-62-0030 - STAGE 2	SHEET 32	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\025102-TC-VERNON-STAGE2.DWG
LAYOUT NAME - 01
PLOT DATE : 7/29/2024 9:49 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:60 FT
WISDOT/CADDS SHEET 42

2





STAGE 2 TRAFFIC CONTROL - B-62-0031

NOTES

-USE SDD "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION," AND "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS," AS MODIFIED ON THIS PLAN SHEET.

-NOT ALL TRAFFIC CONTROL SHOWN

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- ASPHALTIC SURFACE
  ADDITIONAL QUANTITY FROM STAGE 1 SHOWN
- DIRECTION OF TRAFFIC

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	TRAFFIC CONTROL - B-62-0031 - STAGE 2	SHEET 33	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\025102-TC-VERNON-STAGE2.DWG
LAYOUT NAME - 02
PLOT DATE : 7/29/2024 9:49 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:60 FT
WISDOT/CADDS SHEET 42

Estimate Of Quantities

5040-03-70

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	2.000	2.000
0008	203.0211.S	Abatement of Asbestos Containing Material (structure) 01. B-52-93	EACH	1.000	1.000
0010	203.0211.S	Abatement of Asbestos Containing Material (structure) 02. B-62-31	EACH	1.000	1.000
0012	203.0250	Removing Structure Over Waterway Remove Debris (structure) 01. B-62-30	EACH	1.000	1.000
0014	203.0250	Removing Structure Over Waterway Remove Debris (structure) 02. B-62-31	EACH	1.000	1.000
0016	203.0270	Removing Structure Over Waterway Debris Capture (structure) 01. B-52-153	EACH	1.000	1.000
0018	203.0270	Removing Structure Over Waterway Debris Capture (structure) 02. B-52-158	EACH	1.000	1.000
0020	203.0270	Removing Structure Over Waterway Debris Capture (structure) 03. C-62-60	EACH	1.000	1.000
0022	203.0335	Debris Containment Over Waterway (structure) 01. B-52-93	EACH	1.000	1.000
0024	203.0335	Debris Containment Over Waterway (structure) 02. B-52-101	EACH	1.000	1.000
0026	203.0335	Debris Containment Over Waterway (structure) 03. B-52-102	EACH	1.000	1.000
0028	203.0335	Debris Containment Over Waterway (structure) 04. B-52-103	EACH	1.000	1.000
0030	203.0335	Debris Containment Over Waterway (structure) 05. B-52-153	EACH	1.000	1.000
0032	203.0335	Debris Containment Over Waterway (structure) 06. B-52-158	EACH	1.000	1.000
0034	203.0335	Debris Containment Over Waterway (structure) 07. B-62-30	EACH	1.000	1.000
0036	203.0335	Debris Containment Over Waterway (structure) 08. B-62-31	EACH	1.000	1.000
0038	204.0110	Removing Asphaltic Surface	SY	435.000	435.000
0040	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,135.000	1,135.000
0042	204.0120	Removing Asphaltic Surface Milling	SY	214,420.000	214,420.000
0044	204.0165	Removing Guardrail	LF	12,120.000	12,120.000
0046	204.0190	Removing Surface Drains	EACH	2.000	2.000
0048	205.0100	Excavation Common	CY	394.000	394.000
0050	206.2001	Excavation for Structures Culverts (structure) 01. B-52-153	EACH	1.000	1.000
0052	206.2001	Excavation for Structures Culverts (structure) 02. B-52-158	EACH	1.000	1.000
0054	206.2001	Excavation for Structures Culverts (structure) 03. B-52-865	EACH	1.000	1.000
0056	206.2001	Excavation for Structures Culverts (structure) 04. B-52-866	EACH	1.000	1.000
0058	206.5001	Cofferdams (structure) 01. B-52-153	EACH	1.000	1.000
0060	206.5001	Cofferdams (structure) 02. B-52-158	EACH	1.000	1.000
0062	208.0100	Borrow	CY	2,906.000	2,906.000
0064	209.0200.S	Backfill Controlled Low Strength	CY	30.000	30.000
0066	210.1500	Backfill Structure Type A	TON	15.000	15.000
0068	210.2500	Backfill Structure Type B	TON	490.000	490.000
0070	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 5040-03-70	EACH	1.000	1.000
0072	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	19.000	19.000
0074	213.0100	Finishing Roadway (project) 01. 5040-03-70	EACH	1.000	1.000
0076	305.0110	Base Aggregate Dense 3/4-Inch	TON	13,600.000	13,600.000
0078	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	155.000	155.000
0080	311.0110	Breaker Run	TON	191.000	191.000
0082	415.0070	Concrete Pavement 7-Inch	SY	16.000	16.000
0084	455.0605	Tack Coat	GAL	26,502.000	26,502.000
0086	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0088	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0090	460.2005	Incentive Density PWL HMA Pavement	DOL	31,940.000	31,940.000
0092	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	24,450.000	24,450.000
0094	460.2010	Incentive Air Voids HMA Pavement	DOL	43,910.000	43,910.000
0096	460.5224	HMA Pavement 4 LT 58-28 S	TON	43,949.000	43,949.000
0098	465.0105	Asphaltic Surface	TON	270.000	270.000

5040-03-70

Line	Item	Item Description	Unit	Total	Qty
0100	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	60.000	60.000
0102	465.0560	Asphaltic Rumble Strips, Centerline	LF	55,725.000	55,725.000
0104	502.0100	Concrete Masonry Bridges	CY	59.000	59.000
0106	502.3200	Protective Surface Treatment	SY	1,070.000	1,070.000
0108	502.3210	Pigmented Surface Sealer	SY	300.000	300.000
0110	502.4205	Adhesive Anchors No. 5 Bar	EACH	871.000	871.000
0112	504.0100	Concrete Masonry Culverts	CY	103.000	103.000
0114	505.0400	Bar Steel Reinforcement HS Structures	LB	630.000	630.000
0116	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	21,260.000	21,260.000
0118	509.0301	Preparation Decks Type 1	SY	40.000	40.000
0120	509.0302	Preparation Decks Type 2	SY	14.000	14.000
0122	509.0310.S	Sawing Pavement Deck Preparation Areas	LF	50.000	50.000
0124	509.0505.S	Cleaning Decks to Reapply Concrete Masonry Overlay	SY	1,030.000	1,030.000
0126	509.1500	Concrete Surface Repair	SF	1,325.000	1,325.000
0128	509.2000	Full-Depth Deck Repair	SY	22.000	22.000
0130	509.2100.S	Concrete Masonry Deck Repair	CY	1.000	1.000
0132	509.2500	Concrete Masonry Overlay Decks	CY	97.000	97.000
0134	509.9005.S	Removing Concrete Masonry Deck Overlay (structure) 01. B-62-30	SY	480.000	480.000
0136	509.9005.S	Removing Concrete Masonry Deck Overlay (structure) 02. B-62-31	SY	570.000	570.000
0138	509.9020.S	Epoxy Crack Sealing	LF	200.000	200.000
0140	511.1200	Temporary Shoring (structure) 01. B-52-153	SF	860.000	860.000
0142	511.1200	Temporary Shoring (structure) 02. B-52-158	SF	630.000	630.000
0144	513.2001	Railing Pipe	LF	30.000	30.000
0146	516.0500	Rubberized Membrane Waterproofing	SY	43.000	43.000
0148	516.0600.S	Sheet Membrane Waterproofing for Asphalt Overlays	SY	280.000	280.000
0150	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	1.000	1.000
0152	520.9700.S	Culvert Pipe Liners (size) 01. 42-Inch	LF	391.000	391.000
0154	520.9750.S	Cleaning Culvert Pipes for Liner Verification	EACH	2.000	2.000
0156	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	4.000	4.000
0158	521.2005.S	Surface Drain Pipe Corrugated Metal Slotted (inch) 01. 12-Inch	LF	143.000	143.000
0160	521.3112	Culvert Pipe Corrugated Steel 12-Inch	LF	112.000	112.000
0162	530.0112	Culvert Pipe Corrugated Polyethylene 12-Inch	LF	20.000	20.000
0164	601.0588	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	LF	153.000	153.000
0166	602.3010	Concrete Surface Drains	CY	2.000	2.000
0168	603.1136	Concrete Barrier Type S36	LF	100.000	100.000
0170	603.8000	Concrete Barrier Temporary Precast Delivered	LF	2,400.000	2,400.000
0172	603.8125	Concrete Barrier Temporary Precast Installed	LF	3,850.000	3,850.000
0174	606.0200	Riprap Medium	CY	6.000	6.000
0176	606.0300	Riprap Heavy	CY	260.000	260.000
0178	611.0654	Inlet Covers Type V	EACH	1.000	1.000
0180	611.3220	Inlets 2x2-FT	EACH	1.000	1.000
0182	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	8.000	8.000
0184	614.0230	Steel Thrie Beam	LF	18.800	18.800
0186	614.0305	Steel Plate Beam Guard Class A	LF	275.000	275.000
0188	614.0345	Steel Plate Beam Guard Short Radius	LF	75.000	75.000
0190	614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EACH	1.000	1.000
0192	614.0905	Crash Cushions Temporary	EACH	17.000	17.000
0194	614.2300	MGS Guardrail 3	LF	8,312.500	8,312.500
0196	614.2330	MGS Guardrail 3 K	LF	850.000	850.000

5040-03-70

Line	Item	Item Description	Unit	Total	Qty
0198	614.2350	MGS Guardrail Short Radius	LF	275.000	275.000
0200	614.2500	MGS Thrie Beam Transition	LF	840.000	840.000
0202	614.2610	MGS Guardrail Terminal EAT	EACH	56.000	56.000
0204	614.2630	MGS Guardrail Short Radius Terminal	EACH	1.000	1.000
0206	614.8010	Anchor Post Assembly Top Mount	EACH	32.000	32.000
0208	618.0100	Maintenance and Repair of Haul Roads (project) 01. 5040-03-70	EACH	1.000	1.000
0210	619.1000	Mobilization	EACH	1.000	1.000
0212	624.0100	Water	MGAL	70.000	70.000
0214	625.0500	Salvaged Topsoil	SY	18,050.000	18,050.000
0216	627.0200	Mulching	SY	125.000	125.000
0218	628.1504	Silt Fence	LF	23,030.000	23,030.000
0220	628.1520	Silt Fence Maintenance	LF	23,030.000	23,030.000
0222	628.1905	Mobilizations Erosion Control	EACH	12.000	12.000
0224	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	6.000
0226	628.2004	Erosion Mat Class I Type B	SY	17,925.000	17,925.000
0228	629.0210	Fertilizer Type B	CWT	13.100	13.100
0230	630.0120	Seeding Mixture No. 20	LB	501.000	501.000
0232	630.0500	Seed Water	MGAL	422.000	422.000
0234	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	9.000	9.000
0236	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	2.000	2.000
0238	638.2102	Moving Signs Type II	EACH	11.000	11.000
0240	638.3000	Removing Small Sign Supports	EACH	11.000	11.000
0242	642.5001	Field Office Type B	EACH	1.000	1.000
0244	643.0300	Traffic Control Drums	DAY	12,061.000	12,061.000
0246	643.0420	Traffic Control Barricades Type III	DAY	392.000	392.000
0248	643.0705	Traffic Control Warning Lights Type A	DAY	784.000	784.000
0250	643.0715	Traffic Control Warning Lights Type C	DAY	3,486.000	3,486.000
0252	643.0900	Traffic Control Signs	DAY	8,238.000	8,238.000
0254	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0256	643.3165	Temporary Marking Line Paint 6-Inch	LF	276,025.000	276,025.000
0258	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	610.000	610.000
0260	643.3805	Temporary Marking Stop Line Paint 18-Inch	LF	144.000	144.000
0262	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	41.000	41.000
0264	643.5000	Traffic Control	EACH	1.000	1.000
0266	645.0105	Geotextile Type C	SY	170.000	170.000
0268	645.0120	Geotextile Type HR	SY	809.000	809.000
0270	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	212,600.000	212,600.000
0272	646.9002	Marking Removal Line 6-Inch	LF	6,150.000	6,150.000
0274	650.4000	Construction Staking Storm Sewer	EACH	1.000	1.000
0276	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	153.000	153.000
0278	650.7000	Construction Staking Concrete Pavement	LF	25.000	25.000
0280	650.7500	Construction Staking Concrete Barrier	LF	100.000	100.000
0282	650.8000	Construction Staking Resurfacing Reference	LF	61,842.000	61,842.000
0284	650.9911	Construction Staking Supplemental Control (project) 01. 5040-03-70	EACH	1.000	1.000
0286	650.9920	Construction Staking Slope Stakes	LF	14,092.000	14,092.000
0288	661.0101	Temporary Traffic Signals for Bridges (structure) 01. B-52-0866	EACH	1.000	1.000
0290	661.0101	Temporary Traffic Signals for Bridges (structure) 02. B-52-0102	EACH	1.000	1.000
0292	661.0101	Temporary Traffic Signals for Bridges (structure) 03. B-52-0153	EACH	1.000	1.000
0294	661.0101	Temporary Traffic Signals for Bridges (structure) 04. B-62-0158	EACH	1.000	1.000

5040-03-70

Line	Item	Item Description	Unit	Total	Qty
0296	661.0101	Temporary Traffic Signals for Bridges (structure) 05. B-62-0030	EACH	1.000	1.000
0298	661.0101	Temporary Traffic Signals for Bridges (structure) 06. B-62-0031	EACH	1.000	1.000
0300	690.0150	Sawing Asphalt	LF	585.000	585.000
0302	715.0502	Incentive Strength Concrete Structures	DOL	990.000	990.000
0304	715.0603	Incentive Strength Concrete Barrier	DOL	50.000	50.000
0306	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	500.000
0308	740.0440	Incentive IRI Ride	DOL	40,000.000	40,000.000
0310	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 20+07	EACH	1.000	1.000
0312	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 02. 60+25	EACH	1.000	1.000
0314	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 03. 68+55	EACH	1.000	1.000
0316	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 04. 74+04	EACH	1.000	1.000
0318	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 05. 86+06	EACH	1.000	1.000
0320	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 06. 116+76	EACH	1.000	1.000
0322	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 07. 183+74	EACH	1.000	1.000
0324	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 08. 274+43	EACH	1.000	1.000
0326	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 09. 568+30	EACH	1.000	1.000
0328	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 10. 590+95	EACH	1.000	1.000
0330	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 11. 637+00	EACH	1.000	1.000
0332	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	400.000	400.000
0334	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	250.000	250.000
0336	SPV.0035	Special 01. Partially Grouted Riprap	CY	60.000	60.000
0338	SPV.0045	Special 01. Driveway Assistance Device System	DAY	14.000	14.000
0340	SPV.0060	Special 01. Embedded Galvanic Anodes	EACH	170.000	170.000
0342	SPV.0060	Special 02. Precast Inspection Platform Slab B-52-865	EACH	16.000	16.000
0344	SPV.0060	Special 03. Precast Inspection Platform Slab B-52-866	EACH	14.000	14.000
0346	SPV.0060	Special 04. Temporary Stream Diversion B-52-865	EACH	1.000	1.000
0348	SPV.0060	Special 05. Temporary Stream Diversion B-52-866	EACH	1.000	1.000
0350	SPV.0090	Special 01. Flashing Stainless Steel	LF	107.000	107.000
0352	SPV.0090	Special 02. Cleaning Parapets Special	LF	546.000	546.000
0354	SPV.0165	Special 01. Concrete Surface Repair Full-Depth	SF	55.000	55.000
0356	SPV.0165	Special 02. Fiber Wrap Reinforcing Non-Structural	SF	570.000	570.000
0358	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	550.000	550.000

CATEGORY	STATION		TO	STATION		LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA	REMARKS
0010	118+00	'R'	-	119+00	'R'	LT	1	1	BG SLOPES
0010	180+00	'R'	-	182+00	'R'	LT	2	2	FE
0010	223+00	'R'	-	225+00	'R'	RT	2	2	BG SLOPES
0010	483+00	'V'	-	484+00	'V'	RT	1	1	BG SLOPES
0010	484+00	'V'	-	485+00	'V'	LT	1	1	BG SLOPES
						TOTAL 0010	7	7	

CATEGORY	STATION		LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	REMARKS
0010	115+74	'R'	RT	1	FE, 50 LF CPCS 12-INCH
0010	117+70	'R'	LT	1	FE, 42 LF CPCS 12-INCH
			TOTAL 0010	2	

CATEGORY	STATION		LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY	REMARKS
0010	44+86	'R'	LT	35	PE
0010	53+57	'R'	RT	32	PE
0010	65+33	'R'	LT	47	PE
0010	408+82	'V'	RT	49	PE
0010	423+82	'V'	LT	52	PE
0010	451+51	'V'	RT	33	PE
0010	509+08	'V'	RT	40	PE
0010	594+30	'V'	RT	147	CE
			TOTAL 0010	435	

CATEGORY	STATION		TO	STATION		LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	REMARKS
0010	20+83	'R'	-	20+93	'R'	ML	45	STH 80
0010	35+20	'R'	-	35+30	'R'	ML	35	STH 80
0010	36+28	'R'	-	36+38	'R'	ML	35	STH 80
0010	50+24	'R'	-	50+34	'R'	ML	35	STH 80
0010	51+27	'R'	-	51+37	'R'	ML	35	STH 80
0010	73+70	'R'	-	73+80	'R'	ML	40	STH 80
0010	74+27	'R'	-	74+37	'R'	ML	40	STH 80
0010	85+65	'R'	-	85+75	'R'	ML	40	STH 80
0010	86+40	'R'	-	86+50	'R'	ML	40	STH 80
0010	88+34	'R'				RT	25	EK LN
0010	116+49	'R'	-	116+59	'R'	ML	40	STH 80
0010	116+93	'R'	-	117+03	'R'	ML	40	STH 80
0010	120+86	'R'				RT	30	CTH CC
0010	155+80	'R'				LT	25	PLINER LN
0010	184+99	'R'				LT	55	CENTURY FARM RD
0010	203+50	'R'				RT	30	GRINSELL LN
0010	273+44	'R'				LT	85	HAWK LN
0010	359+47	'V'				RT	30	CTH V
0010	359+60	'V'				LT	30	WESTERN RD
0010	396+31	'V'				LT	30	CTH V
0010	396+31	'V'				RT	30	CTH EE
0010	483+85	'V'				RT	30	STALEY SCHOOL RD
0010	514+93	'V'				LT	30	BEAVER CREEK DR
0010	546+11	'V'				LT	35	KOUBA VALLEY RD
0010	567+61	'V'	-	567+71	'V'	ML	40	STH 80
0010	568+87	'V'	-	568+97	'V'	ML	30	STH 80
0010	610+52	'V'				LT	30	PINE HILL RD
0010	610+71	'V'				RT	30	PINE HILL RD
0010	632+07	'V'				LT	30	HEIGHTS RD
0010	633+49	'V'				RT	35	CTH Q
0010	636+32	'V'	-	636+42	'V'	ML	50	STH 80
						TOTAL 0010	1,135	

3

CATEGORY	STATION		TO	STATION		LOCATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	REMARKS
0010	20+93	'R'	-	35+20	'R'	ML	4,760	STH 80
0010	36+38	'R'	-	50+24	'R'	ML	4,330	STH 80
0010	51+37	'R'	-	73+70	'R'	ML	6,910	STH 80
0010	74+37	'R'	-	85+65	'R'	ML	3,330	STH 80
0010	86+50	'R'	-	116+49	'R'	ML	8,960	STH 80
0010	88+34	'R'				RT	200	EK LN
0010	117+03	'R'	-	277+29	'R'	ML	54,770	STH 80
0010	120+86	'R'				RT	330	CTH CC
0010	155+80	'R'				LT	240	PLINER LN
0010	184+99	'R'				LT	220	CENTURY FARM RD
0010	203+50	'R'				RT	150	GRINSELL LN
0010	273+44	'R'				LT	30	HAWKS LN
0010	277+29	'V'	-	396+00	'V'	ML	40,430	STH 80
0010	359+47	'V'				RT	390	CTH V
0010	359+60	'V'				LT	300	WESTERN RD
0010	396+00	'V'	-	567+61	'V'	ML	59,560	STH 80
0010	396+31	'V'				LT	380	CTH V
0010	396+31	'V'				RT	340	CTH EE
0010	483+85	'V'				RT	190	STALEY SCHOOL RD
0010	514+93	'V'				LT	300	BEAVER CREEK DR
0010	546+11	'V'				LT	390	KOUBA VALLEY RD
0010	557+20	'V'				RT	260	RIVER RD
0010	568+97	'V'	-	636+32	'V'	ML	26,200	STH 80
0010	610+52	'V'				LT	460	PINE HILL RD
0010	610+71	'V'				RT	170	PINE HILL RD
0010	632+07	'V'				LT	320	HEIGHTS RD
0010	633+49	'V'				RT	500	CTH Q
						TOTAL 0010	214,420	

CATEGORY	STATION		LOCATION	204.0190 REMOVING SURFACE DRAINS EACH
0010	568+92	'V'	LT	1
0010	569+10	'V'	RT	1
			TOTAL 0010	2

CATEGORY	STATION		TO	STATION		LOCATION	204.0165 REMOVING GUARDRAIL LF
0010	20+84	'R'	-	21+54	'R'	RT	70
0010	21+02	'R'	-	21+72	'R'	LT	70
0010	25+42	'R'	-	27+97	'R'	RT	254
0010	58+00	'R'	-	63+98	'R'	LT	604
0010	58+30	'R'	-	62+27	'R'	RT	392
0010	67+43	'R'	-	69+44	'R'	RT	204
0010	67+75	'R'	-	69+82	'R'	LT	204
0010	72+88	'R'	-	73+69	'R'	LT	82
0010	73+08	'R'	-	73+90	'R'	RT	82
0010	74+14	'R'	-	76+57	'R'	LT	268
0010	74+36	'R'	-	75+27	'R'	RT	91
0010	76+78	'R'	-	77+85	'R'	LT	129
0010	84+79	'R'	-	85+61	'R'	RT	82
0010	85+04	'R'	-	85+88	'R'	LT	82
0010	86+25	'R'	-	87+06	'R'	RT	82
0010	86+52	'R'	-	87+34	'R'	LT	82
0010	115+84	'R'	-	116+51	'R'	LT	68
0010	116+05	'R'	-	116+74	'R'	RT	68
0010	116+80	'R'	-	117+45	'R'	LT	68
0010	117+00	'R'	-	117+66	'R'	RT	68
0010	144+43	'R'	-	152+96	'R'	LT	854
0010	180+87	'R'	-	184+77	'R'	LT	410
0010	182+75	'R'	-	184+54	'R'	RT	179
0010	191+49	'R'	-	193+01	'R'	RT	154
0010	209+07	'R'	-	223+57	'R'	RT	1,450
0010	273+06	'R'	-	274+97	'R'	RT	191
0010	273+68	'R'	-	275+81	'R'	LT	228
0010	285+46	'V'	-	289+45	'V'	LT	400
0010	294+89	'V'	-	303+07	'V'	LT	816
0010	321+76	'V'	-	325+85	'V'	LT	412
0010	326+21	'V'	-	335+43	'V'	LT	925
0010	436+01	'V'	-	449+98	'V'	RT	1,397
0010	478+90	'V'	-	483+67	'V'	RT	490
0010	478+92	'V'	-	483+96	'V'	LT	504
0010	566+58	'V'	-	567+52	'V'	LT	94
0010	566+77	'V'	-	567+71	'V'	RT	94
0010	568+88	'V'	-	569+78	'V'	LT	90
0010	569+05	'V'	-	569+99	'V'	RT	94
0010	634+48	'V'	-	636+41	'V'	RT	194
0010	635+48	'V'	-	636+42	'V'	LT	94
						TOTAL 0010	12,120

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DIVISION	FROM/TO STATION	LOCATION	COMMON EXCAVATION (1) CUT (2)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW	COMMENT
DIVISION 1 (ALL INDIVIDUAL)											
2084-2387-LT	20+84.04/23+87.00	LT	0	0	0	64	80	-80	0	80	
2084-2276-RT	20+84.04/22+76.00	RT	0	0	0	49	61	-61	0	61	
2430-2994-LT	24+30.00/29+94.00	LT	3	0	3	48	60	-57	0	57	
5679-6427-LT	56+79.64/64+27.00	LT	0	0	0	23	29	-29	0	29	
6000-6400-RT	60+00.00/64+00.00	RT	0	0	0	43	54	-54	0	54	
B-52-0866/CONC WALL & C&G	68+21.00/69+68.00	LT	20	0	20	0	0	20	0	0	
6900-6967-LT	69+00.00/69+67.38	LT	13	0	13	0	0	13	13	0	
7700-7953-LT	77+00.00/79+53.00	LT	2	0	2	18	23	-21	0	21	
8375-8449-RT	83+75.00/84+49.00	RT	0	0	0	3	4	-4	0	4	
8400-8496-LT	84+00.00/84+96.28	LT	0	0	0	6	8	-8	0	8	
8795-8950-LT	87+95.00/89+50.00	LT	0	0	0	34	43	-43	0	43	
11457-11587-LT	114+57.00/115+87.00	LT	0	0	0	1	1	-1	0	1	
11499-11586-RT	114+99.00/115+85.68	RT	0	0	0	49	61	-61	0	61	
11741-11908-LT	117+40.66/119+08.11	LT	49	0	49	59	74	-25	0	25	
11766-11901-RT	117+65.66/119+01.00	RT	0	0	0	10	13	-13	0	13	
14349-15401-LT	143+49.00/154+01.00	LT	0	0	0	171	214	-214	0	214	
18000-18133-LT	180+00.00/181+32.55	LT	0	0	0	22	28	-28	0	28	
18132-18231-RT	181+32.00/182+31.00	RT	0	0	0	13	16	-16	0	16	
100007-100067-RT	1000+06.66/1000+66.53	RT	0	0	0	4	5	-5	0	5	
B-52-153/ANCHOR POST	183+58.00/183+89.00	RT	25	0	25	0	0	25	0	0	
B-52-153/ANCHOR POST	183+58.00/183+89.00	LT	25	0	25	0	0	25	0	0	
18872-19468-RT	188+71.86/194+68.00	RT	0	0	0	89	111	-111	0	111	
20999-22478-RT	209+99.00/224+78.00	RT	0	0	0	411	514	-514	0	514	
27199-27569-RT	271+99.00/275+69.00	RT	0	0	0	8	10	-10	0	10	
B-52-158/ANCHOR POST	273+83.50/274+38.80	RT	35	0	35	0	0	35	0	0	
B-52-158/ANCHOR POST	274+47.80/275+07.20	LT	40	0	40	0	0	40	0	0	
27500-27729-RT	275+00.00/277+28.85	RT	0	0	0	12	15	-15	0	15	
28467-29040-LT	284+67.38/290+39.77	LT	0	0	0	111	139	-139	0	139	
29386-30334-LT	293+85.74/303+33.73	LT	0	0	0	144	180	-180	0	180	
32149-32573-LT	321+49.27/325+73.22	LT	0	0	0	52	65	-65	0	65	
32613-33660-LT	326+13.28/336+60.34	LT	0	0	0	64	80	-80	0	80	
44948-45119-RT	449+48.04/451+18.62	RT	0	0	0	311	389	-389	0	389	
47750-48348-RT	477+49.99/483+47.59	RT	0	0	0	119	149	-149	0	149	
47785-48450-LT	477+84.62/484+50.00	LT	0	0	0	394	493	-493	0	493	
300063-300158-RT	3000+62.99/3001+58.07	RT	0	0	0	30	38	-38	0	38	
B-62-0030/SURFACE DRAIN	568+78.00/569+44.20	LT	20	0	20	0	0	20	0	0	
B-62-0030/SURFACE DRAIN	568+92.00/569+61.90	RT	20	0	20	0	0	20	0	0	
56979-57066-RT	569+79.39/570+66.07	RT	0	0	0	1	1	-1	0	1	
59050-59175-LT	590+50.00/591+75.00	LT	142	0	142	8	10	132	132	0	
63500-63566-LT	635+00.00/635+65.75	LT	0	0	0	5	6	-6	0	6	
DIVISION 1 SUBTOTAL			394	0	394	2,376	2,970	-2,576	145	2,906	
GRAND TOTAL			394	0	394	2,376	2,970	-2,576	145	2,906	
TOTAL COMMON EXC			394								

NOTES:

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

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

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

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

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

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

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

CATEGORY	STATION		TO	STATION		LOCATION	211.0101.01 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) (01. 5040-03-70) EACH
0010	20+83	'R'	-	636+42	'V'	ML	1
						TOTAL 0010	1

CATEGORY	STATION		TO	STATION		LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	REMARKS
0010	84+00	'R'	-	88+00	'R'	LT	4	B-52-0102 - STAGE 1
0010	84+00	'R'	-	88+00	'R'	RT	4	B-52-0102 - STAGE 2
0010	182+00	'R'	-	186+00	'R'	RT	3	B-52-0153 - STAGE 2
0010	275+00	'R'	-	277+00	'R'	LT	2	B-52-0158 - STAGE 1
0010	272+00	'R'	-	277+00	'R'	RT	5	B-52-0158 - STAGE 2
0010	570+00	'V'	-	571+00	'V'	RT	1	B-62-0030 - STAGE 2
						TOTAL 0010	19	

CATEGORY	STATION		TO	STATION		LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	REMARKS
0010	20+84	'R'	-	35+30	'R'	LT & RT	650	BOP TO B-52-0048
0010	36+28	'R'	-	50+34	'R'	LT & RT	240	B-52-0048 TO B-52-0049
0010	51+27	'R'	-	73+80	'R'	LT & RT	910	B-52-0049 TO B-52-0101
0010	74+27	'R'	-	85+75	'R'	LT & RT	440	B-52-0101 TO B-52-0102
0010	86+40	'R'	-	116+59	'R'	LT & RT	720	B-52-0102 TO B-52-0103
0010	116+93	'R'	-	277+29	'R'	LT & RT	3,690	B-52-0103 TO COUNTY LINE
0010	277+29	'V'	-	359+60	'V'	LT & RT	1,920	COUNTY LINE TO CTH V
0010	359+60	'V'	-	396+31	'V'	LT & RT	660	CTH V TO CTH EE
0010	396+31	'V'	-	567+71	'V'	LT & RT	3,300	CTH EE TO B-62-0030
0010	568+87	'V'	-	610+71	'V'	LT & RT	600	B-62-0030 TO PINE HILL RD
0010	610+71	'V'	-	636+42	'V'	LT & RT	470	PINE HILL RD TO B-62-0031
						TOTAL 0010	13,600	

CATEGORY	STATION		TO	STATION		LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	REMARKS
0010	183+58	'R'	-	183+89	'R'	RT	25	B-52-0153
0010	183+58	'R'	-	183+89	'R'	LT	25	B-52-0153
0010	273+84	'R'	-	274+39	'R'	RT	35	B-52-0158
0010	274+48	'R'	-	275+07	'R'	LT	40	B-52-0158
0010	568+78	'V'	-	569+45	'V'	LT	15	SURFACE DRAIN
0010	568+92	'V'	-	569+62	'V'	RT	15	SURFACE DRAIN
						TOTAL 0010	155	

CATEGORY	STATION		TO	STATION		LOCATION	415.0070 CONCRETE PAVEMENT 7-INCH SY
0010	568+78	'V'	-	568+89	'V'	LT	7
0010	568+92	'V'	-	569+06	'V'	RT	9
						TOTAL 0010	16

CATEGORY	STATION		TO	STATION		LOCATION	* 455.0605 TACK COAT GAL	* 460.5224 HMA PAVEMENT 4 LT 58-28 S TON	REMARKS
0010	20+83	'R'	-	35+30	'R'	ML	615	1,020	BOP TO B-52-0048
0010	36+28	'R'	-	50+34	'R'	ML	570	950	B-52-0048 TO B-52-0049
0010	51+27	'R'	-	73+80	'R'	ML	1,010	1,670	B-52-0049 TO B-52-0101
0010	74+27	'R'	-	85+75	'R'	ML	500	830	B-52-0101 TO B-52-0102
0010	86+40	'R'	-	116+59	'R'	ML	1,250	2,070	B-52-0102 TO B-52-0103
0010	88+34	'R'				RT	30	50	EK LANE
0010	116+93	'R'	-	277+29	'R'	ML	6,690	11,080	B-52-0103 TO COUNTY LINE
0010	120+86	'R'				RT	50	80	CTH CC
0010	155+80	'R'				LT	35	50	PLINER LN
0010	184+29	'R'				LT	35	50	CENTURY FARM RD
0010	203+50	'R'				RT	20	40	GRINSELL LN
0010	273+65	'R'				LT	15	30	HAWKS LN
0010	277+29	'V'	-	396+00	'V'	ML	4,925	8,160	COUNTY LINE TO 396+00'V'
0010	359+47	'V'				RT	50	90	CTH V
0010	359+60	'V'				LT	40	70	WESTERN RD
0010	396+00	'V'	-	567+71	'V'	ML	7,120	11,800	396+00 TO B-62-0030
0010	396+31	'V'				LT	50	80	CTH V
0010	396+31	'V'				RT	45	80	CTH EE
0010	483+85	'V'				RT	30	50	STALEY SCHOOL RD
0010	514+93	'V'				LT	45	70	BEAVER CREEK DR
0010	546+11	'V'				LT	55	90	KOUBA VALLEY RD
0010	557+20	'V'				RT	30	50	RIVER RD
0010	568+87	'V'	-	636+42	'V'	ML	3,085	5,110	B-62-0030 TO B-62-0031
0010	610+52	'V'				LT	60	100	PINE HILL RD
0010	610+71	'V'				RT	35	60	PINE HILL RD
0010	632+07	'V'				LT	45	70	HEIGHTS RD
0010	633+49	'V'				RT	65	110	CTH Q
						TOTAL 0010	26,500	43,910	

*ADDITIONAL QUANTITY SHOWN ELSEWHERE IN PLAN

CATEGORY	LOCATION	460.0105.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	460.0110.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH
0010	PROJECT	1	2
	TOTAL 0010	1	2

CATEGORY	STATION		LOCATION	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
0010	44+86	'R'	LT	4
0010	53+57	'R'	RT	4
0010	65+33	'R'	LT	6
0010	76+68	'R'	LT	8
0010	408+82	'V'	RT	6
0010	423+82	'V'	LT	6
0010	451+51	'V'	RT	4
0010	509+08	'V'	RT	5
0010	594+30	'V'	RT	17
			TOTAL 0010	60

CATEGORY	STATION		TO	STATION		LOCATION	465.0560 ASPHALTIC RUMBLE STRIPS, CENTERLINE LF
0010	21+08	'R'	-	35+05	'R'	CL	1,397
0010	36+53	'R'	-	50+09	'R'	CL	1,356
0010	51+52	'R'	-	73+55	'R'	CL	2,203
0010	74+52	'R'	-	85+50	'R'	CL	1,098
0010	90+24	'R'	-	116+34	'R'	CL	2,610
0010	111+78	'R'	-	118+70	'R'	CL	692
0010	122+70	'R'	-	153+81	'R'	CL	3,111
0010	157+81	'R'	-	183+00	'R'	CL	2,519
0010	187+00	'R'	-	201+50	'R'	CL	1,450
0010	205+50	'R'	-	357+47	'V'	CL	15,197
0010	361+60	'V'	-	394+31	'V'	CL	3,271
0010	398+31	'V'	-	481+82	'V'	CL	8,351
0010	485+82	'V'	-	513+05	'V'	CL	2,723
0010	517+05	'V'	-	544+11	'V'	CL	2,706
0010	548+11	'V'	-	555+10	'V'	CL	699
0010	559+10	'V'	-	567+46	'V'	CL	836
0010	569+12	'V'	-	593+30	'V'	CL	2,418
0010	595+30	'V'	-	608+52	'V'	CL	1,322
0010	612+71	'V'	-	630+37	'V'	CL	1,766
						TOTAL 0010	55,725

PWL MIXTURE USE TABLE								
THE FOLLOWING ACCEPTANCE CRITERIA ARE APPLICABLE TO THIS PROJECT:								
LOCATION	STATION	MIXTURE USE:	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANE	20+83'R' TO 636+42'V'	LOWER LAYER	MILLED SURFACE	4 LT 58-28 S	15970	1.75-INCHES	INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANE	20+83'R' TO 636+42'V'	UPPER LAYER	4 LT 58-28 S	4 LT 58-28 S	15970	1.75-INCHES		
PAVED SHOULDERS	20+83'R' TO 636+42'V'	LOWER LAYER	MILLED SURFACE	4 LT 58-28 S	5375	1.75-INCHES		ACCEPTANCE TESTING BY DEPARTMENT, NOT ELLIGIBLE FOR INCENTIVE.
PAVED SHOULDERS	20+83'R' TO 636+42'V'	UPPER LAYER	4 LT 58-28 S	4 LT 58-28 S	5375	1.75-INCHES		
SIDE ROADS	VARIOUS	LOWER LAYER	MILLED SURFACE	4 LT 58-28 S	610	1.75-INCHES		
SIDE ROADS	VARIOUS	UPPER LAYER	4 LT 58-28 S	4 LT 58-28 S	610	1.75-INCHES		

CATEGORY	STATION		TO	STATION		LOCATION	465.0105 ASPHALTIC SURFACE TON	SPV.0180.01 SPECIAL (01. REMOVING DISTRESSED PAVEMENT MILLING) SY	REMARKS
0010	84+09	'R'	-	87+99	'R'	LT	30	-	B-52-0102 - STAGE 1
0010	84+01	'R'	-	87+82	'R'	RT	40	-	B-52-0102 - STAGE 2
0010	182+20	'R'	-	185+30	'R'	RT	15	-	B-52-0153 - STAGE 2
0010	275+79	'R'	-	276+32	'R'	LT	5	-	B-52-0158 - STAGE 1
0010	272+46	'R'	-	276+41	'R'	RT	20	-	B-52-0158 - STAGE 2
0010	570+00	'V'	-	570+51	'V'	RT	10	-	B-62-0030 - STAGE 2
0010	19+27	'R'	-	637+69	'V'	PROJECT	95	550	MISC REPAIRS
0010	68+40	'R'	-	69+08	'R'	LT	5	-	2-IN, BARRIER WALL SLOPE
0010	183+58	'R'	-	183+89	'R'	LT	5	-	4-IN, B-52-153 - ANCHOR POST
0010	183+58	'R'	-	183+89	'R'	RT	5	-	4-IN, B-52-153 - ANCHOR POST
0010	273+84	'R'	-	274+39	'R'	RT	10	-	4 IN, B-52-158 - ANCHOR POST
0010	274+48	'R'	-	275+07	'R'	LT	10	-	4 IN, B-52-158 - ANCHOR POST
0010	568+78	'V'	-	469+45	'V'	LT	10	-	4 IN, SURFACE DRAIN MATCH
0010	568+92	'V'	-	569+62	'V'	RT	10	-	4 IN, SURFACE DRAIN MATCH
						TOTAL 0010	270	550	

CATEGORY	STATION		LOCATION	520.9700.S.01 CULVERT PIPE LINERS (SIZE) (01. 42-INCH) LF	520.9750.S CLEANING CULVERT PIPES FOR LINER VERIFICATION EACH	REMARKS
0010	414+77	'V'	ML	225	1	225 LF X 42-IN CPCS, S = 1.3%
0010	420+05	'V'	ML	166	1	166 LF X 42-IN CPCS, S = 3.3%
			TOTAL 0010	391	2	

CATEGORY	STATION		TO	STATION		LOCATION	601.0588 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT LF
0010	69+22	'R'	-	69+68	'R'	LT	45
0010	568+89	'V'	-	569+43	'V'	LT	54
0010	569+06	'V'	-	569+60	'V'	RT	54
						TOTAL 0010	153

CATEGORY	STATION		TO	STATION		LOCATION	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH EACH	521.2005.S.01 SURFACE DRAIN PIPE CORRUGATED METAL SLOTTED (INCH) (01. 12-INCH) LF	530.0112 CULVERT PIPE CORRUGATED POLYETHYLENE 12-INCH LF	611.0654 INLET COVERS TYPE V EACH	611.3220 INLETS 2X2-FT EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH
0010	68+21	'R'	-	69+66	'R'	LT	1	143	20	1	1	1
						TOTAL 0010	1	143	20	1	1	1

CATEGORY	STATION		LOCATION	602.3010 CONCRETE SURFACE DRAINS CY
0010	569+33	'V'	LT	1
0010	569+50	'V'	RT	1
			TOTAL 0010	2

CATEGORY	STATION		TO	STATION		LOCATION	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH EACH	521.3112 CULVERT PIPE CORRUGATED STEEL 12-INCH LF	REMARKS
0010	115+42	'R'	-	116+03	'R'	RT	2	62	THICK = 0.064"
0010	118+56	'R'	-	119+06	'R'	LT	2	50	THICK = 0.064"
						TOTAL 0010	4	112	

CATEGORY	STATION		TO	STATION		LOCATION	603.1136 CONCRETE BARRIER TYPE S36 LF	REMARKS
0010	68+21	'R'	-	69+22	'R'	LT	100	B-52-0866
						TOTAL 0010	100	

CATEGORY	STATION		TO	STATION		LOCATION	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	REMARKS
0010	66+55	'R'		72+56	'R'	ML	575.0	575.0	B-52-0866 - STAGE 1
0010	83+75	'R'	-	87+50	'R'	ML	325.0	325.0	B-52-0102 - STAGE 1
0010	83+75	'R'	-	87+50	'R'	ML	25.0	350.0	B-52-0102 - STAGE 2
0010	181+98	'R'	-	185+73	'R'	ML	350.0	350.0	B-52-0153 - STAGE 1
0010	181+80	'R'	-	184+55	'R'	ML	-	200.0	B-52-0153 - STAGE 2
0010	272+06	'R'	-	276+35	'R'	ML	375.0	375.0	B-52-0158 - STAGE 1
0010	273+68	'R'	-	276+46	'R'	ML	-	225.0	B-52-0158 - STAGE 2
0010	566+60	'V'	-	570+85	'V'	ML	400.0	400.0	B-62-0030 - STAGE 1
0010	566+60	'V'	-	570+85	'V'	ML	-	375.0	B-62-0030 - STAGE 2
0010	635+41	'V'	-	638+80	'V'	ML	350.0	350.0	B-62-0031 - STAGE 1
0010	635+41	'V'	-	639+82	'V'	ML	-	325.0	B-62-0031 - STAGE 2
						TOTAL 0010	2,400.0	3,850.0	

CATEGORY	STATION		LOCATION	614.0905 CRASH CUSHIONS TEMPORARY EACH	BACK WIDTH	OBJECT MARKING PATTERN	CRASH TEST LEVEL	TRAFFIC DIRECTION	TRAFFIC LOCATION	CRASH CUSHION SHIELDS	REMARKS
0010	72+56	'R'	ML	1	4	OM-3R (WO5-58R)	TL-3	BIDIRECTIONAL	LT	CBTP	B-52-0866 - STAGE 1
0010	83+75	'R'	ML	1	2	OM-3R (WO5-58R)	TL-3	BIDIRECTIONAL	LT	CBTP	B-52-0102 - STAGE 1
0010	87+50	'R'	ML	1	2	OM-3L (WO5-58L)	TL-3	BIDIRECTIONAL	RT	CBTP	B-52-0102 - STAGE 1
0010	87+50	'R'	ML	1	2	OM-3R (WO5-58R)	TL-3	BIDIRECTIONAL	LT	CBTP	B-52-0102 - STAGE 2
0010	181+98	'R'	ML	1	1	OM-3R (WO5-58R)	TL-3	BIDIRECTIONAL	LT	CBTP	B-52-0153 - STAGE 1
0010	182+14	'R'	ML	1	1	OM-3L (WO5-58L)	TL-3	BIDIRECTIONAL	RT	CBTP	B-52-0153 - STAGE 2
0010	184+55	'R'	ML	1	1	OM-3R (WO5-58R)	TL-3	BIDIRECTIONAL	LT	CBTP	B-52-0153 - STAGE 2
0010	272+06	'R'	ML	1	2	OM-3R (WO5-58R)	TL-3	BIDIRECTIONAL	LT	CBTP	B-52-0158 - STAGE 1
0010	273+68	'R'	ML	1	2	OM-3L (WO5-58L)	TL-3	BIDIRECTIONAL	RT	CBTP	B-52-0158 - STAGE 2
0010	276+35	'R'	ML	1	2	OM-3L (WO5-58L)	TL-3	BIDIRECTIONAL	RT	CBTP	B-52-0158 - STAGE 1
0010	276+46	'R'	ML	1	2	OM-3R (WO5-58R)	TL-3	BIDIRECTIONAL	LT	CBTP	B-52-0158 - STAGE 2
0010	566+60	'V'	ML	1	2	OM-3R (WO5-58R)	TL-3	BIDIRECTIONAL	LT	CBTP	B-62-0030 - STAGE 1
0010	566+60	'V'	ML	1	2	OM-3L (WO5-58L)	TL-3	BIDIRECTIONAL	RT	CBTP	B-62-0030 - STAGE 2
0010	570+85	'V'	ML	1	2	OM-3R (WO5-58R)	TL-3	BIDIRECTIONAL	LT	CBTP	B-62-0030 - STAGE 2
0010	635+41	'V'	ML	1	2	OM-3R (WO5-58R)	TL-3	BIDIRECTIONAL	LT	CBTP	B-62-0031 - STAGE 1
0010	635+41	'V'	ML	1	2	OM-3L (WO5-58L)	TL-3	BIDIRECTIONAL	RT	CBTP	B-62-0031 - STAGE 2
0010	639+06	'V'	ML	1	2	OM-3R (WO5-58R)	TL-3	BIDIRECTIONAL	LT	CBTP	B-62-0031 - STAGE 2
			TOTAL 0010	17							

CATEGORY	STATION		TO	STATION		LOCATION	606.0200 RIPRAP MEDIUM CY	* 606.0300 RIPRAP HEAVY CY	* 645.0120 GEOTEXTILE TYPE HR SY	REMARKS
0010	569+33	'V'				LT	3	-	11	SURFACE DRAIN
0010	569+50	'V'				RT	3	-	11	SURFACE DRAIN
0010	590+87	'V'	-	591+36	'V'	LT	-	80	155	C-62-0060
						TOTAL 0010	6	80	177	

CATEGORY	STATION		TO	STATION		LOCATION	614.0230 STEEL THRIE BEAM LF	614.0305 STEEL PLATE BEAM GUARD CLASS A LF	614.0345 STEEL PLATE BEAM GUARD SHORT RADIUS LF	614.0370 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL EACH	614.2300 MGS GUARDRAIL 3 LF	614.2330 MGS GUARDRAIL 3 K 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	614.8010 ANCHOR POST ASSEMBLY TOP MOUNT EACH	REMARKS
0010	20+84	'R'	-	21+76	'R'	RT	-	-	-	-	-	-	-	40	1	-	-	B-52-0093
0010	21+02	'R'	-	22+65	'R'	LT	-	-	-	-	75.0	-	-	40	1	-	-	B-52-0093
0010	25+50	'R'	-	28+70	'R'	LT	-	-	-	-	-	212.5	-	-	2	-	-	-
0010	58+00	'R'	-	64+01	'R'	LT	-	-	-	-	350.0	150.0	-	-	2	-	-	B-52-0865
0010	58+30	'R'	-	62+29	'R'	RT	-	-	-	-	162.5	125.0	-	-	2	-	-	B-52-0865
0010	66+89	'R'	-	69+42	'R'	RT	-	-	-	-	150.0	-	-	-	2	-	-	B-52-0866
0010	67+30	'R'	-	68+22	'R'	LT	-	-	-	-	-	-	-	40	1	-	-	B-52-0866
0010	69+22	'R'	-	70+89	'R'	LT	-	-	-	-	75.0	-	-	40	1	-	-	B-52-0866
0010	72+62	'R'	-	73+92	'R'	RT	-	-	-	-	37.5	-	-	40	1	-	-	B-52-0101
0010	72+80	'R'	-	73+70	'R'	LT	-	-	-	-	-	-	-	40	1	-	-	B-52-0101
0010	74+14	'R'	-	76+57	'R'	LT	18.8	200.0	37.5	-	-	-	-	-	-	-	-	B-52-0101
0010	74+36	'R'	-	75+27	'R'	RT	-	-	-	-	-	-	-	40	1	-	-	B-52-0101
0010	76+78	'R'	-	78+29	'R'	LT	-	75.0	37.5	1	-	-	-	-	-	-	-	B-52-0101
0010	84+11	'R'	-	85+63	'R'	RT	-	-	-	-	62.5	-	-	40	1	-	-	B-52-0102
0010	84+96	'R'	-	85+88	'R'	LT	-	-	-	-	-	-	-	40	1	-	-	B-52-0102
0010	86+24	'R'	-	87+14	'R'	RT	-	-	-	-	-	-	-	40	1	-	-	B-52-0102
0010	86+51	'R'	-	88+30	'R'	LT	-	-	-	-	87.5	-	-	40	1	-	-	B-52-0102
0010	115+61	'R'	-	116+51	'R'	LT	-	-	-	-	-	-	-	40	1	-	-	B-52-0103
0010	115+79	'R'	-	116+70	'R'	RT	-	-	-	-	-	-	-	40	1	-	-	B-52-0103
0010	116+80	'R'	-	118+20	'R'	LT	-	-	-	-	50.0	-	-	40	1	-	-	B-52-0103
0010	117+00	'R'	-	117+91	'R'	RT	-	-	-	-	-	-	-	40	1	-	-	B-52-0103
0010	144+40	'R'	-	152+95	'R'	LT	-	-	-	-	750.0	-	-	-	2	-	-	-
0010	180+83	'R'	-	184+24	'R'	LT	-	-	-	-	250.0	75.0	100.0	-	2	-	7	B-52-0153
0010	182+05	'R'	-	184+62	'R'	RT	-	-	-	-	75.0	75.0	-	-	2	-	7	B-52-0153
0010	189+92	'R'	-	193+47	'R'	RT	-	-	-	-	250.0	-	-	-	2	-	-	-
0010	209+00	'R'	-	223+57	'R'	RT	-	-	-	-	1,350.0	-	-	-	2	-	-	-
0010	272+23	'R'	-	275+17	'R'	RT	-	-	-	-	100.0	87.5	-	-	2	-	9	B-52-0158
0010	273+78	'R'	-	276+63	'R'	LT	-	-	-	-	75.0	125.0	87.5	-	1	1	9	B-52-0158
0010	285+47	'V'	-	289+52	'V'	LT	-	-	-	-	300.0	-	-	-	2	-	-	-
0010	294+87	'V'	-	303+08	'V'	LT	-	-	-	-	712.5	-	-	-	2	-	-	-
0010	321+77	'V'	-	325+71	'V'	LT	-	-	-	-	287.5	-	-	-	2	-	-	-
0010	326+27	'V'	-	335+44	'V'	LT	-	-	-	-	812.5	-	-	-	2	-	-	-
0010	435+91	'V'	-	449+98	'V'	RT	-	-	-	-	1,300.0	-	-	-	2	-	-	-
0010	478+35	'V'	-	483+59	'V'	RT	-	-	-	-	462.5	-	87.5	-	2	-	-	B-62-0134
0010	478+90	'V'	-	483+98	'V'	LT	-	-	-	-	400.0	-	-	-	2	-	-	B-62-0134
0010	566+54	'V'	-	567+69	'V'	RT	-	-	-	-	25.0	-	-	40	1	-	-	B-62-0030
0010	566+61	'V'	-	567+51	'V'	LT	-	-	-	-	-	-	-	40	1	-	-	B-62-0030
0010	568+89	'V'	-	570+04	'V'	LT	-	-	-	-	25.0	-	-	40	1	-	-	B-62-0030
0010	569+06	'V'	-	569+97	'V'	RT	-	-	-	-	-	-	-	40	1	-	-	B-62-0030
0010	634+53	'V'	-	636+31	'V'	RT	-	-	-	-	87.5	-	-	40	1	-	-	B-62-0031
0010	635+41	'V'	-	636+31	'V'	LT	-	-	-	-	-	-	-	40	1	-	-	B-62-0031
						TOTAL 0010	18.8	275.0	75.0	1	8,312.5	850.0	275.0	840	56	1	32	

CATEGORY	LOCATION	624.0100 WATER MGAL
0010	PROJECT	70
	TOTAL 0010	70

CATEGORY	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	PROJECT	12	6
	TOTAL 0010	12	6

CATEGORY	STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2004 EROSION MAT CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0500 SEED WATER MGAL
0010	20+83 'R'	-	22+75 'R'	RT	235	-	240	240	235	0.2	7	6
0010	20+83 'R'	-	22+75 'R'	LT	135	-	220	220	135	0.1	4	4
0010	23+00 'R'	-	29+93 'R'	LT	360	-	730	730	360	0.3	10	9
0010	56+80 'R'	-	63+49 'R'	RT	290	-	620	620	290	0.2	8	7
0010	56+80 'R'	-	65+14 'R'	LT	365	-	910	910	365	0.3	10	9
0010	65+69 'R'	-	69+93 'R'	RT	25	25	490	490	-	0.1	1	1
0010	66+64 'R'	-	79+52 'R'	LT	345	-	1330	1330	345	0.3	10	8
0010	71+82 'R'	-	76+44 'R'	RT	25	25	430	430	-	0.1	1	1
0010	82+90 'R'	-	87+78 'R'	RT	45	-	520	520	45	0.1	2	2
0010	82+90 'R'	-	89+51 'R'	LT	350	-	630	630	350	0.3	10	8
0010	114+40 'R'	-	119+41 'R'	RT	275	-	530	530	275	0.2	8	7
0010	114+40 'R'	-	119+41 'R'	LT	405	-	350	350	405	0.3	11	10
0010	143+19 'R'	-	154+16 'R'	LT	1055	-	1170	1170	1055	0.7	29	24
0010	179+62 'R'	-	184+24 'R'	LT	285	-	750	750	285	0.2	8	7
0010	180+84 'R'	-	185+93 'R'	RT	200	-	590	590	200	0.2	6	5
0010	188+72 'R'	-	194+67 'R'	RT	485	-	690	690	485	0.4	14	11
0010	207+80 'R'	-	224+77 'R'	RT	2140	-	1740	1740	2140	1.4	58	49
0010	271+03 'R'	-	276+00 'R'	RT	185	-	640	640	185	0.2	5	5
0010	273+78 'R'	-	277+29 'R'	LT	210	-	530	530	210	0.2	6	5
0010	284+26 'V'	-	290+72 'V'	LT	755	-	700	700	755	0.5	21	17
0010	293+67 'V'	-	304+29 'V'	LT	925	-	1100	1100	925	0.6	25	21
0010	320+56 'V'	-	336+64 'V'	LT	1105	-	1480	1480	1105	0.7	30	25
0010	434+71 'V'	-	451+19 'V'	RT	860	-	1730	1730	860	0.6	24	20
0010	477+15 'V'	-	483+59 'V'	RT	1190	-	750	750	1190	0.8	33	27
0010	477+69 'V'	-	485+18 'V'	LT	1645	-	750	750	1645	1.1	45	37
0010	565+35 'V'	-	571+00 'V'	RT	45	-	350	350	45	0.1	2	2
0010	565+35 'V'	-	571+25 'V'	LT	25	25	380	380	-	0.1	1	1
0010	590+50 'V'	-	591+75 'V'	LT	400	-	150	150	400	0.3	11	9
0010	634+53 'V'	-	636+42 'V'	RT	25	25	210	210	-	0.1	1	1
0010	634+53 'V'	-	636+42 'V'	LT	50	-	220	220	50	0.1	2	2
0010	UNDISTRIBUTED				3610	25	2100	2100	3585	2.3	98	82
				TOTAL 0010	18,050	125	23,030	23,030	17,925	13.1	501	422

CATEGORY	STATION		LOCATION	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	20+80	'R'	LT	1	-	1	1	BRIDGE
0010	21+04	'R'	LT	1	-	1	1	BRIDGE
0010	21+09	'R'	RT	1	-	1	1	YUBA
0010	28+35	'R'	LT	-	1	1	1	JCT COUNTY C
0010	64+10	'R'	LT	1	-	1	1	CURVE LEFT
0010	184+70	'R'	LT	1	-	1	1	STOP
0010	221+10	'R'	RT	1	-	1	1	NO PASSING PENNANT
0010	288+43	'V'	LT	1	-	1	1	CURVE LEFT
0010	321+85	'V'	LT	1	-	1	1	NO PASSING PENNANT
0010	443+00	'V'	RT	1	-	1	1	NO PASSING PENNANT
0010	635+50	'V'	RT	-	1	1	1	NORTH 80
			TOTAL 0010	9	2	11	11	

CATEGORY	LOCATION	643.0300 TRAFFIC CONTROL DRUMS DAYS	DEVICES	DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS	DEVICES	DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	DEVICES	DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAYS	DEVICES	DAY	643.0900 TRAFFIC CONTROL SIGNS DAYS	DEVICES	DAY	643.1050 TRAFFIC CONTROL SIGNS PCMS DAYS	DEVICES	DAY	643.5000 TRAFFIC CONTROL EACH	SPV.0045.01 SPECIAL (01. DRIVEWAY ASSISTANCE DEVICE SYSTEM) DAY	REMARKS
0010	PROJECT	7	10	70	-	-	-	-	-	-	-	-	-	115	38	4,066	7	2	14	1	-	PROJECT
0010	PROJECT	-	-	-	-	-	-	-	-	-	-	-	-	35	44	1,540	-	-	-	-	-	MILLING
0010	B-52-0093	7	40	280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STRUC WORK
0010	B-52-0093	7	40	280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STRUC WORK
0010	B-52-0102	14	35	490	14	3	42	14	6	84	14	18	252	14	17	238	-	-	-	-	-	STAGE 1
0010	B-52-0102	14	45	630	14	2	28	14	4	56	14	23	322	14	16	224	-	-	-	-	-	STAGE 2
0010	B-52-0103	7	40	280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STRUC WORK
0010	B-52-0103	7	40	280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STRUC WORK
0010	B-62-0030	14	40	560	14	2	28	14	4	56	14	24	336	14	16	224	-	-	-	-	-	STAGE 1
0010	B-62-0030	14	40	560	14	2	28	14	4	56	14	24	336	14	16	224	-	-	-	-	-	STAGE 2
0010	B-62-0031	14	35	490	14	2	28	14	4	56	14	21	294	14	16	224	-	-	-	-	-	STAGE 1
0010	B-62-0031	14	40	560	14	3	42	14	6	84	14	21	294	14	17	238	-	-	-	-	-	STAGE 2
0010	B-52-0101	14	30	420	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STRUC WORK
0010	B-52-0153	14	42	588	14	2	28	14	4	56	14	24	336	14	18	252	-	-	-	-	-	STAGE 1
0010	B-52-0153	14	37	518	14	3	42	14	6	84	14	19	266	14	18	252	-	-	-	-	-	STAGE 2
0010	B-52-0158	14	43	602	14	3	42	14	6	84	14	25	350	14	18	252	-	-	-	-	-	STAGE 1
0010	B-52-0158	14	52	728	14	3	42	14	6	84	14	32	448	14	18	252	-	-	-	-	-	STAGE 2
0010	B-52-0865	14	35	490	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STRUC WORK
0010	B-52-0866	14	35	490	14	3	42	14	6	84	14	18	252	14	18	252	-	-	-	-	14	STRUC WORK
0010	C-62-0060	7	35	245	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STRUC WORK
0010	ADDITIONAL BG	25	140	3,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PROJECT
	TOTAL 0010			12,061			392			784			3,486			8,238			14	1	14	

CATEGORY	STATION		TO	STATION		LOCATION	643.3805 TEMPORARY MARKING STOP LINE PAINT 18-INCH LF	646.9002 MARKING REMOVAL LINE 6-INCH LF	643.3850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH LF	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH LF	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH LF	REMARKS
0010	65+55	'R'	-	73+92	'R'	B-52-0866	12	620	12	-	-	675	STAGE 1
0010	82+39	'R'	-	89+78	'R'	B-52-0102	36	1,350	-	-	-	850	STAGE 1
0010	82+39	'R'	-	89+78	'R'	B-52-0102	-	335	-	-	135	810	STAGE 2
0010	180+43	'R'	-	187+09	'R'	B-52-0153	24	710	12	-	-	3,500	STAGE 1
0010	180+43	'R'	-	187+09	'R'	B-52-0153	-	320	-	-	-	740	STAGE 2
0010	270+69	'R'	-	278+14	'R'	B-52-0158	24	710	-	-	-	3,760	STAGE 1
0010	270+69	'R'	-	278+14	'R'	B-52-0158	-	525	-	-	-	970	STAGE 2
0010	564+34	'V'	-	572+22	'V'	B-62-0030	24	550	-	-	-	3,850	STAGE 1
0010	564+34	'V'	-	572+22	'V'	B-62-0030	-	330	-	-	235	820	STAGE 2
0010	632+69	'V'	-	639+75	'V'	B-62-0031	24	450	17	-	-	3,640	STAGE 1
0010	632+69	'V'	-	639+75	'V'	B-62-0031	-	250	-	-	240	610	STAGE 2
0010	19+27	'R'	-	637+69	'V'	CL	-	-	-	-	-	82,600	MILLED LAYER - CL
0010	19+27	'R'	-	637+69	'V'	CL	-	-	-	-	-	82,600	LOWER LAYER - CL
0010	19+27	'R'	-	637+69	'V'	CL	-	-	-	-	-	90,600	UPPER LAYER - CL PRE RUMBLES
0010	19+27	'R'	-	637+69	'V'	CL	-	-	-	90,600	-	-	UPPER LAYER - CL POST RUMBLES
0010	19+27	'R'	-	637+69	'V'	LT	-	-	-	60,900	-	-	WHITE EDGE LINE
0010	19+27	'R'	-	637+69	'V'	RT	-	-	-	61,100	-	-	WHITE EDGE LINE
						TOTAL 0010	144	6,150	41	212,600	610	276,025	

CATEGORY	STATION		TO	STATION		LOCATION	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.7500 CONSTRUCTION STAKING CONCRETE BARRIER LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 5040-03-70) EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
0010	19+27	'R'	-	637+69	'V'	ML	-	-	-	61,842	1	-
0010	21+25	'R'	-	23+00	'R'	RT & LT	-	-	-	-	-	175
0010	25+00	'R'	-	29+00	'R'	RT & LT	-	-	-	-	-	400
0010	57+00	'R'	-	79+00	'R'	RT & LT	-	-	-	-	-	2,200
0010	68+21	'R'	-	69+22	'R'	LT	-	-	100	-	-	-
0010	69+22	'R'	-	69+68	'R'	LT	45	-	-	-	-	-
0010	83+00	'R'	-	89+00	'R'	RT & LT	-	-	-	-	-	600
0010	115+00	'R'	-	119+00	'R'	RT & LT	-	-	-	-	-	400
0010	144+00	'R'	-	154+00	'R'	RT & LT	-	-	-	-	-	1,000
0010	180+00	'R'	-	185+00	'R'	RT & LT	-	-	-	-	-	500
0010	189+00	'R'	-	194+00	'R'	RT & LT	-	-	-	-	-	500
0010	208+00	'R'	-	224+00	'R'	RT & LT	-	-	-	-	-	1,600
0010	272+00	'R'	-	277+00	'R'	RT & LT	-	-	-	-	-	500
0010	1000+17	'C'	-	1000+67	'C'	RT	-	-	-	-	-	50
0010	285+00	'V'	-	290+00	'V'	RT & LT	-	-	-	-	-	500
0010	294+00	'V'	-	304+00	'V'	RT & LT	-	-	-	-	-	1,000
0010	321+00	'V'	-	336+00	'V'	RT & LT	-	-	-	-	-	1,500
0010	435+00	'V'	-	451+00	'V'	RT & LT	-	-	-	-	-	1,600
0010	478+00	'V'	-	485+00	'V'	RT & LT	-	-	-	-	-	700
0010	566+00	'V'	-	571+00	'V'	RT & LT	-	-	-	-	-	500
0010	568+78	'V'	-	568+89	'V'	LT	-	11	-	-	-	-
0010	568+89	'V'	-	569+43	'V'	LT	54	-	-	-	-	-
0010	568+92	'V'	-	569+06	'V'	RT	-	14	-	-	-	-
0010	569+06	'V'	-	569+60	'V'	RT	54	-	-	-	-	-
0010	590+50	'V'	-	591+75	'V'	LT	-	-	-	-	-	125
0010	634+53	'V'	-	636+00	'V'	RT & LT	-	-	-	-	-	147
0010	3000+63	'SS'	-	3001+58	'V	RT	-	-	-	-	-	95
						TOTAL 0010	153	25	100	61,842	1	14,092

CATEGORY	LOCATION	661.0101.01 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) (01. B-52-0866) EACH	661.0101.02 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) (02. B-52-0102) EACH	661.0101.03 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) (03. B-52-0153) EACH	661.0101.04 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) (04. B-62-0158) EACH	661.0101.05 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) (05. B-62-0030) EACH	661.0101.06 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) (06. B-62-0031) EACH
0010	STRUCTURES	1	1	1	1	1	1
	TOTAL 0010	1	1	1	1	1	1

CATEGORY	STATION		LOCATION	690.0150 SAWING ASPHALT LF	REMARKS
0010	44+86	'R'	LT	18	PE
0010	53+57	'R'	RT	16	PE
0010	65+33	'R'	LT	26	PE
0010	183+58	'R'	RT	44	B-52-0153
0010	183+58	'R'	LT	44	B-52-0153
0010	273+84	'R'	RT	68	B-52-0158
0010	274+48	'R'	LT	72	B-52-0158
0010	408+82	'V'	RT	29	PE
0010	423+82	'V'	LT	31	PE
0010	451+51	'V'	RT	17	PE
0010	568+83	'V'	LT	110	SURFACE DRAIN/EAT
0010	568+92	'V'	RT	80	SURFACE DRAIN
0010	594+30	'V'	RT	30	CE
			TOTAL 0010	585	

CATEGORY	LOCATION	999.2000.S.01 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (01. 20+07) EACH	999.2000.S.02 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (02. 60+25) EACH	999.2000.S.03 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (03. 68+55) EACH	999.2000.S.04 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (04. 74+04) EACH	999.2000.S.05 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (05. 86+06) EACH	999.2000.S.06 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (06. 116+76) EACH	999.2000.S.07 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (07. 183+74) EACH	999.2000.S.08 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (08. 274+43) EACH	999.2000.S.09 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (09. 568+30) EACH	999.2000.S.10 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (10. 590+95) EACH	999.2000.S.11 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (11. 637+00) EACH
0010	STRUCTURES	1	1	1	1	1	1	1	1	1	1	1
	TOTAL 0010	1	1	1	1	1	1	1	1	1	1	1

CATEGORY	LOCATION	SPV.0060.04 SPECIAL (04. TEMPORARY STREAM DIVERSION B-52-865) EACH	SPV.0060.05 SPECIAL (05. TEMPORARY STREAM DIVERSION B-52-866) EACH
0010	B-52-865	1	-
0010	B-52-866	-	1
	TOTAL 0010	1	1

STRUCTURE B-52-0093
REHABILITATION
SEE STRUCTURE PLANS

SLOPE INTERCEPT (TYP)

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 20+83.2'R'

BEGIN PROJECT
STA 19+27'R'
Y = 500386.875
X = 681610.118

CTH C

20'R'

22+16.2'R
18.0' LT

22+65.4'R', -20.0' LT
MGS EAT POST 1

23+15.9'R
15.0' LT

RICHLAND ELECTRIC COOP (OH)

SILT FENCE (TYP)

22+88'R', LT
BAD PE

25+10.2'R
15.0' LT

25+50.2'R', -19.0' LT
MGS EAT POST 1

26+01.2'R
17.0' LT

REMOVING GUARDRAIL
STA 25+42'R' TO 27+97'R' LT

MGS GUARDRAIL 3K, MGS GUARDRAIL TERMINAL EAT
STA 25+50'R' TO 28+70'R' LT

PI STA = 29+40.18'R'
Y = 501183.493
X = 682214.191
DELTA = 20°03'54"
D = 4°30'00"
T = 225.25'
L = 445.89'
R = 1273.24'
PC STA = 27+14.92'R'
Y = 501025.976
X = 682053.174
PT STA = 31+60.81'R'
Y = 501386.693
X = 682311.393

N

25+23'R', LT
BAD PE

R/W

PC: 27+14.92'R'

28+20.0'R
17.0' LT

28+70.0'R', -19.0' LT
MGS EAT POST 1

29+11.0'R
15.0' LT

PT: 31+60.81'R'

STA 32+00'R'

36'

25'R'

15'

23+01'R', RT
BAD PE

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

N45° 37' 46"E, 169.69'

STH 80

MELANCHTON CREEK

30'R'

21+25.2'R
18.0' RT

21+76.0'R', 20.0' RT
MGS EAT POST 1

22+26.5'R
15.0' RT

EROSION MAT
CLASS I TYPE B (TYP)

24+98'R', RT
BAD PE

PT: 25+45.24'R'

R/W

29+25'R', RT
BAD PE

MATCHLINE

PINE RIVER

FRONTIER COMM (FO)

LAVALLE (FO)

FO

PI STA = 19+46.76'R'
Y = 500392.905
X = 681406.040
DELTA = 60°02'03"
D = 4°30'00"
T = 735.61'
L = 1334.09'
R = 1273.24'
PC STA = 12+11.15'R'
Y = 499680.420
X = 681589.037
PT STA = 25+45.24'R'
Y = 500907.315
X = 681931.877

REMOVING GUARDRAIL
STA 20+84'R' TO 21+54'R' RT
STA 21+02'R' TO 21+72'R' LT

STA 26+75'R'
EXISTING 24-INCH CPCS
TO REMAIN

BONTREGER LN

BEGIN ASPHALT CENTERLINE
RUMBLE STRIPS 2-LANE RURAL
STA 21+08'R'

MGS THRIE BEAM TRANSITION, MGS GUARDRAIL 3
MGS GUARDRAIL TERMINAL EAT
STA 20+84'R' TO 21+76'R' RT
STA 21+02'R' TO 22+65'R' LT

5

5

STRUCTURE B-52-0048
NO WORK

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 35+29.6'R'

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 36+28.1'R'

PROFILE TRANSITION
SEE CONSTRUCTION DETAIL
STA 37+68'R' TO 38+18'R'

SAWING ASPHALT
STA 44+86'R' LT

PC: 39+61.75'R'

37+18.0'R
15.0' LT

37+68.0'R
17.0' LT

37+88.5'R
15.0' LT

R/W

PROFILE TRANSITION
SEE CONSTRUCTION DETAIL
STA 33+65'R' TO 34+15'R'

34+18.9'R
15.0' LT

34+39.4'R
17.0' LT

34+89.4'R
15.0' LT

REMOVING ASPHALTIC SURFACE
ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

44+86'R', LT
ASPH PE

N25° 33' 52"E, 800.94'

40'R'

36'

STH 80

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

45'R'

35'R'

STA 32+00'R'

MATCHLINE

36+68.4'R'
15.0' RT

37+18.4'R'
17.0' RT

37+38.9'R'
15.0' RT

R/W

MELANCHTON CREEK

44+84'R', RT
BAD PE

STA 47+00'R'

MATCHLINE

33+95'R', RT
BAD PE

33+94.4'R'
15.0' RT

34+14.9'R'
17.0' RT

34+64.9'R'
15.0' RT

PI STA = 41+99.64'R'
Y = 502323.817
X = 682759.671
DELTA = 23°27'20"
D = 5°00'00"
T = 237.89'
L = 469.11'
R = 1145.92'
PC STA = 39+61.75'R'
Y = 502109.218
X = 682657.016
PT STA = 44+30.86'R'
Y = 502479.823
X = 682939.262

PT: 44+30.86'R'

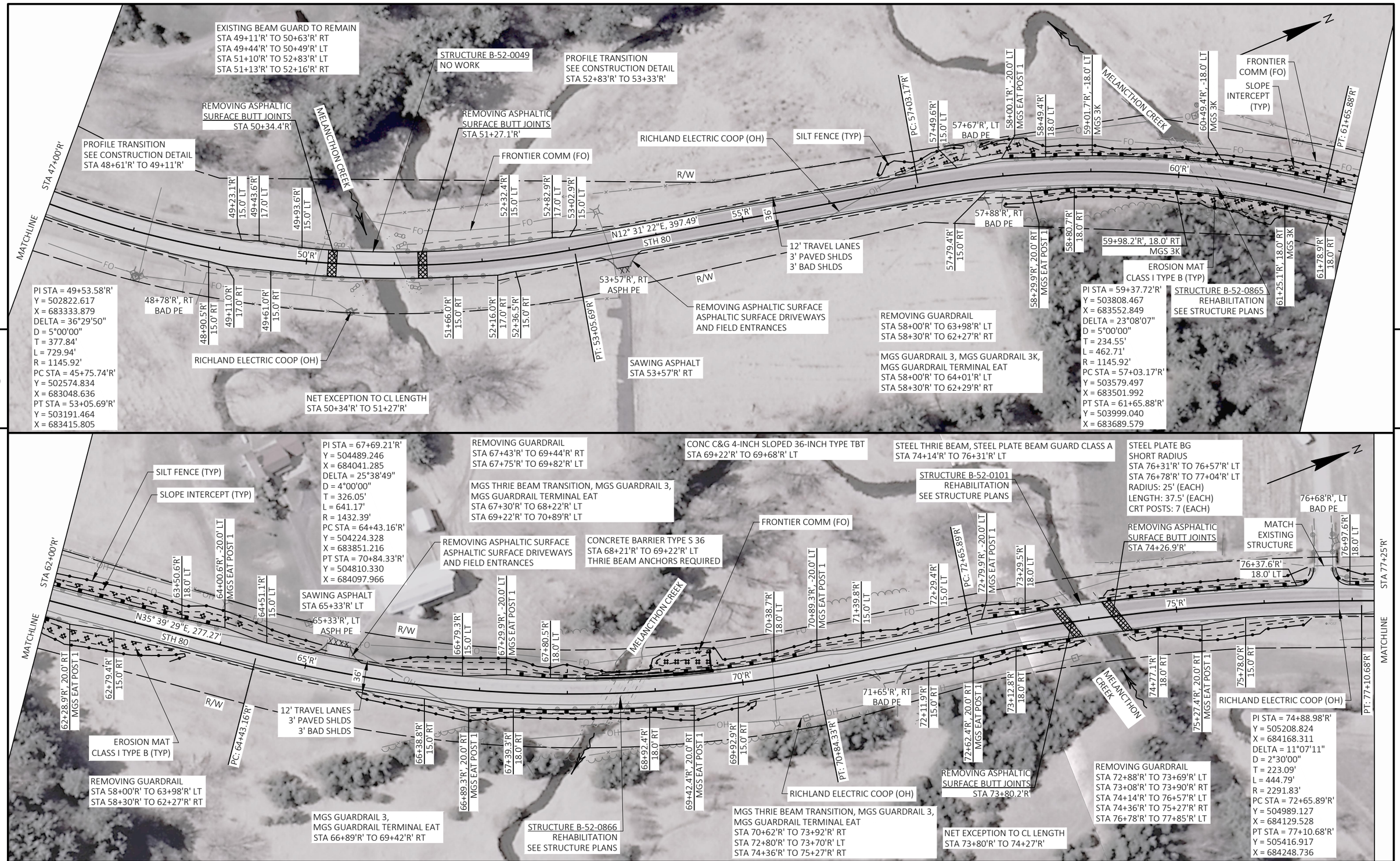
PC: 45+75.74'R'

EXISTING BEAM GUARD TO REMAIN
STA 34+15'R' TO 35+44'R' RT
STA 34+39'R' TO 35+57'R' LT
STA 36+01'R' TO 37+68'R' LT
STA 36+14'R' TO 37+18'R' RT

NET EXCEPTION TO CL LENGTH
STA 35+30'R' TO 36+28'R'

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - RICHLAND	SHEET 51	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\050201-PN-WCCS RICHLAND.DWG
LAYOUT NAME - 01
PLOT DATE : 7/29/2024 10:20 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - RICHLAND	SHEET 52	E

STEEL PLATE BEAM GUARD CLASS A, STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
STA 77+04'R' TO 78+29'R' LT

MGS THRIE BEAM TRANSITION, MGS GUARDRAIL 3, MGS GUARDRAIL TERMINAL EAT
STA 84+11'R' TO 85+63'R' RT
STA 84+96'R' TO 85+88'R' LT
STA 86+24'R' TO 87+14'R' RT
STA 86+51'R' TO 88+30'R' LT

REMOVING GUARDRAIL
STA 84+79'R' TO 85+61'R' RT
STA 85+04'R' TO 85+88'R' LT
STA 86+25'R' TO 87+06'R' RT
STA 86+52'R' TO 87+34'R' LT

PI STA = 93+69.56'R'
Y = 506964.260
X = 684846.763
DELTA = 40°29'25"
D = 2°15'00"
T = 939.20'
L = 1799.57'
R = 2546.48'
PC STA = 84+30.36'R'
Y = 506088.210
X = 684508.182
PT STA = 102+29.93'R'
Y = 507850.357
X = 684535.423

N

STA 77+25'R'

77+78.7'R' 18.0' LT

78+28.7'R', -20.0' LT SPBG EAT POST 1

78+79.2'R' 15.0' LT

EROSION MAT CLASS I TYPE B (TYP)

SLOPE INTERCEPT (TYP)

SILT FENCE (TYP)

PC: 84+30.36'R'

84+45.8'R' 15.0' LT

84+96.3'R', -20.0' LT MGS EAT POST 1

85+46.6'R' 18.0' LT

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 85+74.5'R'

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 86+39.7'R'

87+79.8'R' 18.0' LT

88+30.2'R', -20.0' LT MGS EAT POST 1

88+80.7'R' 15.0' LT

STA 92+00'R'

MATCHLINE

R/W

80'R'

N21° 07' 51"E, 719.68'

STH 80

36'

79+50'R', RT BAD PE

85'R'

90'R'

90+58'R', RT BAD PE

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

R/W

83+60.0'R' 15.0' RT

84+10.5'R', 20.0' RT MGS EAT POST 1

84+60.3'R' 18.0' RT

MELANCTHON CREEK

28

STRUCTURE B-52-0102
HMA OVERLAY
SEE STRUCTURE PLANS

86+64.4'R' 18.0' RT

87+14.0'R', 20.0' RT MGS EAT POST 1

87+44.5'R' 17.0' RT

87+63.7'R' 17.0' RT

87+78.7'R' 18.0' RT

EK LN

88+75.2'R' 18.0' RT

89+05.2'R' 15.0' RT

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 88+34.2'R'

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
28	85+61.52 'R'	21.15 RT	506205.117	684572.390	825.93'	BM CP28 / WISDOT ALUMINIUM CAP

PI STA = 93+69.56'R'
Y = 506964.260
X = 684846.763
DELTA = 40°29'25"
D = 2°15'00"
T = 939.20'
L = 1799.57'
R = 2546.48'
PC STA = 84+30.36'R'
Y = 506088.210
X = 684508.182
PT STA = 102+29.93'R'
Y = 507850.357
X = 684535.423

N

STA 92+00'R'

MATCHLINE

93+97'R', LT BAD PE

95'R'

95+18'R', RT BAD PE

36'

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

PT: 102+29.93'R'

R/W

100'R'

N19° 21' 34"W, 3103.46'

STH 80

105'R'

103+76'R', RT BAD PE

R/W

STA 107+00'R'

MATCHLINE

RICHLAND ELECTRIC COOP (OH)

STA 100+11'R'
EXISTING 48-INCH CPCS TO REMAIN

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - RICHLAND	SHEET 53	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\050201-PN-WCCS RICHLAND.DWG
LAYOUT NAME - 03

PLOT DATE : 7/29/2024 10:20 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

MGS THRIE BEAM TRANSITION, MGS GUARDRAIL 3,
MGS GUARDRAIL TERMINAL EAT
STA 115+61'R' TO 116+51'R' LT
STA 115+79'R' TO 116+70'R' RT
STA 116+80'R' TO 118+20'R' LT
STA 117+00'R' TO 117+91'R' RT

STRUCTURE B-52-0103
REHABILITATION
SEE STRUCTURE PLANS

REMOVING GUARDRAIL
STA 115+84'R' TO 116+51'R' LT
STA 116+05'R' TO 116+74'R' RT
STA 116+80'R' TO 117+45'R' LT
STA 117+00'R' TO 117+66'R' RT

EXISTING CP
STA 117+70'R' LT
1 REMOVING SMALL PIPE CULVERTS
42 LF CPCS 12-INCH
PROPOSED CP: 11856
CPCS 12-INCH
INVERT 1: 118+5
INVERT 2: 119+0
LENGTH: 50 LF
SLOPE: -0.80%
2 AEW CPCS 12-INCH

CLEARING & GRUBBING
STA 118+00'R' TO 119+00'R' LT

SILT FENCE (TYP)
SLOPE INTERCEPT (TYP)

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 116+92.6'R'

115+10.2'R' 15.0' LT
115+60.7'R', -20.0' LT MGS EAT POST 1
116+10.7'R' 18.0' LT
117+70.3'R' 18.0' LT
118+20.3'R', -20.0' LT MGS EAT POST 1
118+70.8'R' 15.0' LT
118+83'R', LT BAD PE

STA 107+00'R'
MATCHLINE
108+83'R', LT BAD PE
R/W
110'R'
36'
N19° 21' 34"W, 3103.46'
115'R'
STH 80
120'R'
STA 122+00'R'
MATCHLINE
RICHLAND ELECTRIC COOP (OH)
12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS
R/W
115+28.7'R' 15.0' RT
115+74'R', RT BAD PE
116+29.2'R' 18.0' RT
115+79.2'R', 20.0' RT MGS EAT POST 1
27
HANZEL CREEK
117+40.7'R' 18.0' RT
117+90.7'R', 20.0' RT MGS EAT POST 1
118+41.2'R' 15.0' RT
119+64.7'R' 15.0' RT
120+09.7'R' 18.0' RT
121+26.2'R' 18.0' RT
121+56.2'R' 15.0' RT
CTH CC

EXISTING CP
STA 115+74'R' RT
1 REMOVING SMALL PIPE CULVERTS
50 LF CPCS 12-INCH

PROPOSED CP: 11542
CPCS 12-INCH
INVERT 1: 115+42.0'R', 36.3' RT, 836.20'
INVERT 2: 116+03.4'R', 44.7' RT, 835.90'
LENGTH: 62 LF
SLOPE: 0.48%
2 AEW CPCS 12-INCH

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 116+58.9'R'

FRONTIER COMM (FO)

EROSION MAT
CLASS I TYPE B (TYP)

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 120+85.9'R', 100.0' RT

N

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
27	116+72.34 'R'	20.11 RT	509217.869	684076.244	839.47'	BM CP27 / WISDOT ALUMINIUM CAP

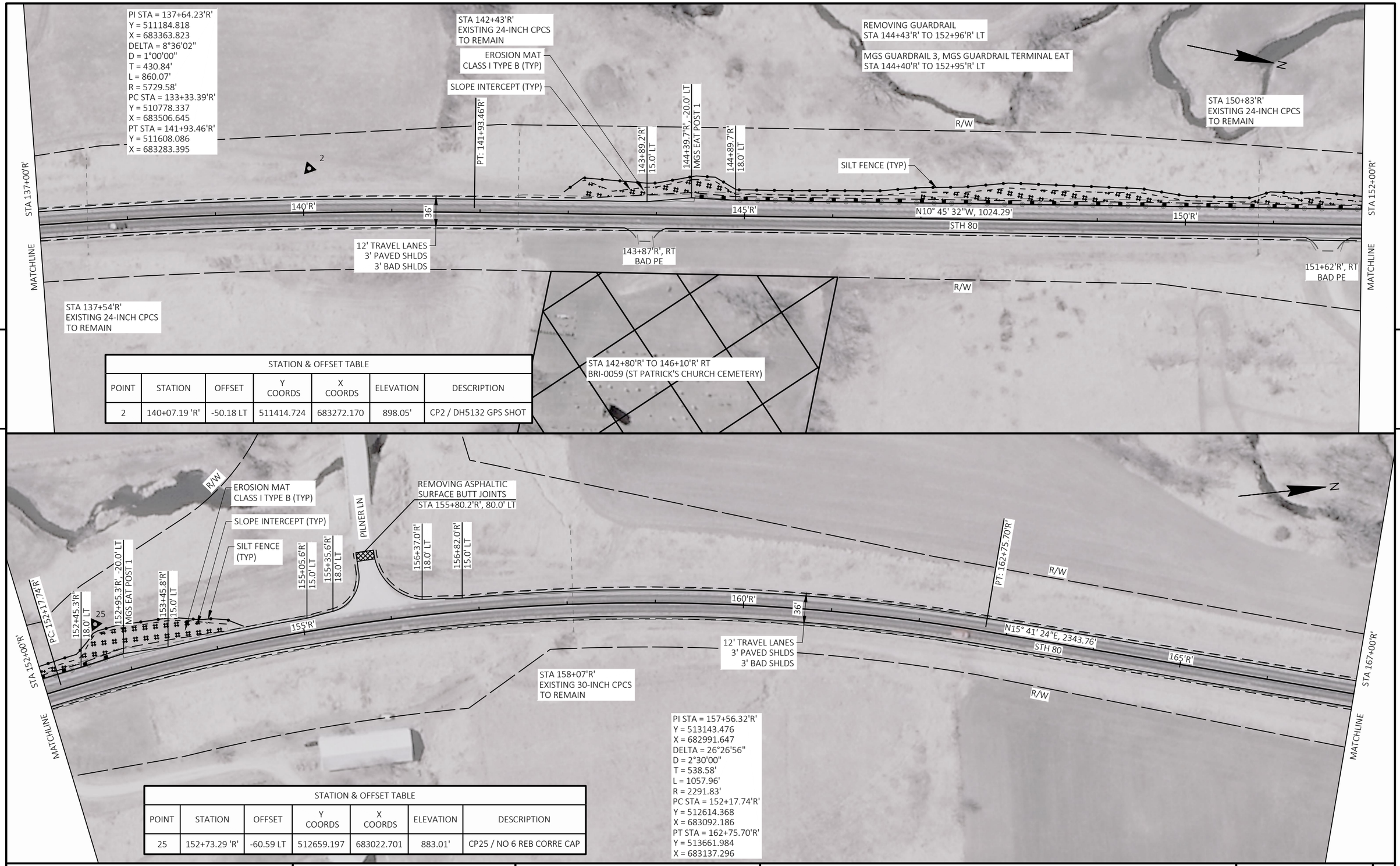
STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
26	123+13.03 'R'	-35.56 LT	509803.884	683811.336	844.11'	CP26 / NO 6 REB CORRE CAP

R/W
PC: 133+33.39'R'
136+00'R', LT BAD PE
STA 122+00'R'
MATCHLINE
26
OH
RICHLAND ELECTRIC COOP (OH)
125'R'
N19° 21' 34"W, 3103.46'
130'R'
36'
STH 80
135'R'
STA 137+00'R'
MATCHLINE
123+56.3'R' 15.0' RT
126+22'R', RT BAD PE
126+59.3'R' 15.0' RT
12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS
136+43'R', RT BAD PE
R/W
EXISTING CURB & GUTTER TO REMAIN

PI STA = 137+64.23'R'
Y = 511184.818
X = 683363.823
DELTA = 8°36'02"
D = 1°00'00"
T = 430.84'
L = 860.07'
R = 5729.58'
PC STA = 133+33.39'R'
Y = 510778.337
X = 683506.645
PT STA = 141+93.46'R'
Y = 511608.086
X = 683283.395

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - RICHLAND	SHEET 54 E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\050201-PN-WCCS RICHLAND.DWG
LAYOUT NAME - 04
PLOT DATE : 7/29/2024 10:20 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
2	140+07.19 'R'	-50.18 LT	511414.724	683272.170	898.05'	CP2 / DH5132 GPS SHOT

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
25	152+73.29 'R'	-60.59 LT	512659.197	683022.701	883.01'	CP25 / NO 6 REB CORRE CAP

PI STA = 157+56.32'R'
Y = 513143.476
X = 682991.647
DELTA = 26°26'56"
D = 2°30'00"
T = 538.58'
L = 1057.96'
R = 2291.83'
PC STA = 152+17.74'R'
Y = 512614.368
X = 683092.186
PT STA = 162+75.70'R'
Y = 513661.984
X = 683137.296

STA 168+94'R'
EXISTING 60-INCH CPCS
TO REMAIN

CLEARING & GRUBBING
STA 180+00'R' TO 182+00'R' LT

SILT FENCE (TYP)

SLOPE INTERCEPT (TYP)

180+32.0'R'
15.0' LT

180+82.5'R', -20.0' LT
MGS EAT POST 1

181+32.5'R'
18.0' LT

STA 167+00'R

168+14'R', LT
BAD PE

169+70'R', LT
BAD PE

R/W

170'R'

N15° 41' 24"E, 2343.76'

175'R'

180'R'

STH 80

36'

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

MATCHLINE

R/W

181+54.5'R'
15.0' RT

SQUASH HOLLOW LN

CENTURY FARM RD

N70° 23' 29"E, 88.26'

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 184+98.6'R'

PI STA = 1001+28.03'C'
Y = 515822.517
X = 683671.716
DELTA = 35°17'55"
D = 45°50'12"
T = 39.77'
L = 77.01'
R = 125.00'
PC STA = 1000+88.26'C'
Y = 515809.170
X = 683634.252
PT STA = 1001+65.27'C'
Y = 515811.761
X = 683710.005

MGS GUARDRAIL
SHORT RADIUS
STA 184+36'R' TO 184+72'R' LT
RADIUS: 45'
LENGTH: 100'
CRT POSTS: 17

MGS GUARDRAIL 3, MGS GUARDRAIL TERMINAL EAT
STA 180+83'R' TO 183+33'R' LT
STA 184+08'R' TO 184+36'R' LT
STA 184+72'R' TO 184+24'R' LT
STA 182+05'R' TO 183+33'R' RT
STA 184+08'R' TO 184+62'R' RT

MGS GUARDRAIL 3K
STA 183+33'R' TO 184+08'R' LT
STA 183+33'R' TO 184+08'R' RT
ANCHOR POST ASSEMBLY TOP MOUNT
REQUIRED OVER B-52-0153

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
24	183+62.01 'R'	23.19 RT	515664.288	683723.826	892.03'	CP24 / WISDOT ALUMINIUM CAP

184+24.1'R', -152.4' LT
MGS EAT POST 1

184+54.4'R'
112.7' LT

184+71.5'R'
90.3' LT

184+35.7'R'
18.0' LT

184+08.0'R', -18.0' LT
MGS 3K

183+33.0'R', -18.0' LT
MGS 3K

185+77.6'R'
18.0' LT

186+22.6'R'
15.0' LT

STA 182+00'R

N15° 41' 24"E, 2343.76'

STH 80

24

185'R'

PT: 1001+65.27'C'

MATCHLINE

182+05.0'R', 20.0' RT
MGS EAT POST 1

182+55.0'R'
18.0' RT

183+33.2'R', 18.0' RT
MGS 3K

MELANCTHON CREEK

184+11.5'R'
18.0' RT

184+61.5'R', 20.0' RT
MGS EAT POST 1

185+12.0'R'
15.0' RT

PC: 186+19.46'R'

STRUCTURE B-52-0153
REHABILITATION
SEE STRUCTURE PLANS

LAVALLE TEL (TEL)

R/W

REMOVING GUARDRAIL
STA 180+87'R' TO 184+77'R' LT
STA 182+75'R' TO 184+54'R' RT

36'

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

SLOPE INTERCEPT (TYP)

EROSION MAT
CLASS I TYPE B (TYP)

189+41.9'R'
15.0' RT

189+92.4'R', 20.0' RT
MGS EAT POST 1

190+42.0'R'
18.0' RT

RICHLAND ELECTRIC COOP (OH)

190+27'R', LT
BAD PE

190'R'

SILT FENCE (TYP)

192+96.9'R'
18.0' RT

193+46.6'R', 20.0' RT
MGS EAT POST 1

193+97.1'R'
15.0' RT

REMOVING GUARDRAIL
STA 191+49'R' TO 193+01'R' RT

MGS GUARDRAIL 3, MGS GUARDRAIL TERMINAL EAT
STA 189+92'R' TO 193+47'R' RT

PT: 194+58.96'R'

195'R'

STA 197+00'R

MATCHLINE

PI STA = 190+42.24'R'
Y = 516325.442
X = 683885.461
DELTA = 16°47'24"
D = 2°00'00"
T = 422.78'
L = 839.50'
R = 2864.79'
PC STA = 186+19.46'R'
Y = 515918.414
X = 683771.127
PT STA = 194+58.96'R'
Y = 516748.145
X = 683877.345

STA 197+00'R'

MATCHLINE

R/W

200'R'

N1° 06' 00"W, 3395.70'

STH 80

205'R'

36'

210'R'

STA 212+00'R'

MATCHLINE

199+69'R', RT
BAD PE

23

R/W

202+63.7'R'
15.0' RT

203+08.7'R'
18.0' RT

GRINSELL LN

203+91.8'R'
18.0' RT

204+21.8'R'
15.0' RT

R/W

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

208+49.6'R'
15.0' RT

209+00.1'R', 20.0' RT
MGS EAT POST 1

209+50.1'R'
18.0' RT

SLOPE INTERCEPT (TYP)

SILT FENCE (TYP)

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 203+49.8'R', 55.0' RT

REMOVING GUARDRAIL
STA 209+07'R' TO 223+57'R' RT

MGS GUARDRAIL 3, MGS GUARDRAIL TERMINAL EAT
STA 209+00'R' TO 223+57'R' RT

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
23	202+46.84 'R'	54.62 RT	517536.926	683916.830	921.37'	CP23 / NO 6 REB CORRE CAP

STA 212+00'R'

MATCHLINE

STA 217+97'R'
EXISTING 36-INCH CPCS
TO REMAIN

R/W

215'R'

N1° 06' 00"W, 3395.70'

STH 80

220'R'

221+85'R', LT
BAD PE

225'R'

225+66'R', LT
BAD PE

36'

STA 227+00'R'

MATCHLINE

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

223+06.6'R'
18.0' RT

223+56.5'R', 20.0' RT
MGS EAT POST 1

224+07.0'R'
15.0' RT

R/W

EROSION MAT
CLASS I TYPE B (TYP)

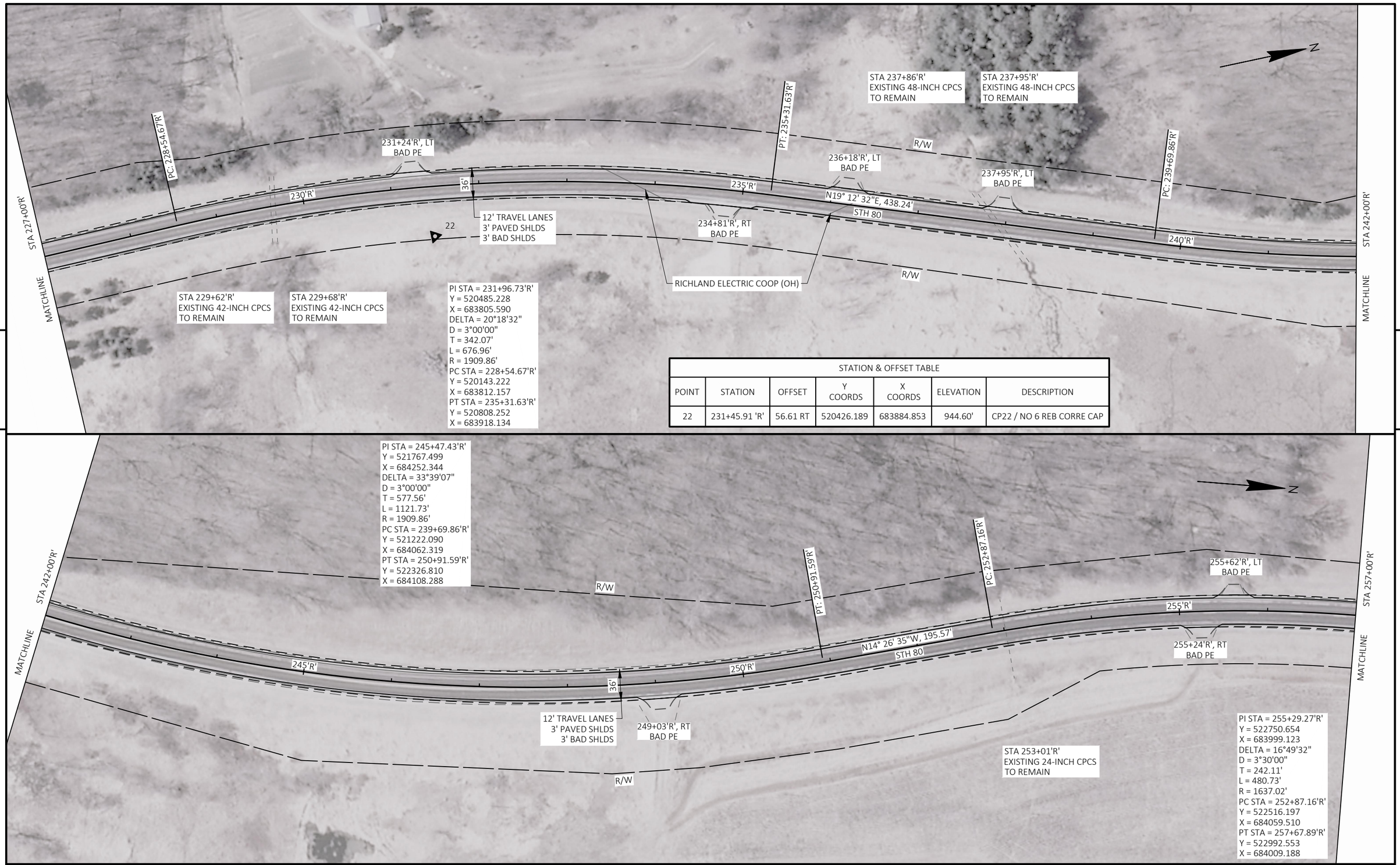
SILT FENCE (TYP)

SLOPE INTERCEPT (TYP)

REMOVING GUARDRAIL
STA 209+07'R' TO 223+57'R' RT

MGS GUARDRAIL 3, MGS GUARDRAIL TERMINAL EAT
STA 209+00'R' TO 223+57'R' RT

CLEARING & GRUBBING
STA 223+00'R' TO 225+00'R' RT



STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
22	231+45.91 'R'	56.61 RT	520426.189	683884.853	944.60'	CP22 / NO 6 REB CORRE CAP

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - RICHLAND	SHEET 58	E

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
21	263+84.01 'R'	-50.67 LT	523610.246	683984.174	975.31'	CP21 / NO 6 REB CORRE CAP

N

STA 257+00'R'

PT: 257+67.89'R'

SHIELDS LN

R/W

21

RICHLAND ELECTRIC COOP (OH)

271+43'R', LT
BAD PE

STA 272+00'R'

260'R'

N2° 22' 57"E, 2077.91'

265'R'

36'

270'R'

STH 80

MATCHLINE

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

MATCHLINE

R/W

SLOPE INTERCEPT (TYP)

SILT FENCE (TYP)

271+72.6'R'
15.0' RT

STA 260+34'R'
EXISTING 30-INCH CPCS
TO REMAIN

WALSH LN

STA 262+65'R'
EXISTING 60-INCH CPCS
TO REMAIN

STA 262+73'R'
EXISTING 60-INCH CPCS
TO REMAIN

WISCONSIN DNR

PROPERTY LINE

5

5

N

PC: 2000+31.09'H'

HAWK LN

MGS GUARDRAIL
SHORT RADIUS
STA 273+68'R' TO 274+10'R'
RADIUS: 45'
LENGTH: 87.5'
CRT POSTS: 15
1 MGS GUARDRAIL SHORT RADIUS TERMINAL

PI STA = 2000+51.32'H'
Y = 524586.174
X = 683976.477
DELTA = 30°11'17"
D = 76°23'40"
T = 20.23'
L = 39.52'
R = 75.00'
PC STA = 2000+31.09'H'
Y = 524600.388
X = 683962.085
PT STA = 2000+70.61'H'
Y = 524581.124
X = 683996.065

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 273+44.0'R', 30.0' LT

PT: 2000+70.61'H'

31.09

S45° 21' 19"E

EXISTING
PLE

273+78.4'R'
105.6' LT

273+68.1'R'
79.5' LT

HILLSBORO
TEL (TEL)

EROSION MAT
CLASS I TYPE B (TYP)

END WCCS RICHLAND COUNTY
STA 277+28.9'R'

272+58.6'R'
15.0' LT

272+88.6'R'
18.0' LT

80.94

S75° 32' 36"E

274+10.0'R', -18.0' LT
MGS 3K

275+31.9'R', -18.0' LT
MGS 3K

276+13.1'R'
18.0' LT

276+63.1'R', -20.0' LT
MGS EAT POST 1

277+13.6'R'
15.0' LT

STA 272+00'R'

R/W

275'R'

N2° 22' 57"E, 2077.91'

STH 80

MATCHLINE

277+02'R', RT
BAD PE

272+23.1'R', 20.0' RT
MGS EAT POST 1

272+73.1'R'
18.0' RT

273+76.3'R', 18.0' RT
MGS 3K

274+67.1'R'
18.0' RT

275+17.1'R', 20.0' RT
MGS EAT POST 1

275+67.6'R'
15.0' RT

SLOPE INTERCEPT (TYP)

SILT FENCE (TYP)

BEGIN WCCS VERNON COUNTY
STA 277+28.9'V'

R/W

STRUCTURE B-52-0158
REHABILITATION
SEE STRUCTURE PLANS

EXISTING
PLE

STA 273+86'R'
EXISTING 60-INCH CPCS
TO REMAIN

MGS GUARDRAIL 3K
STA 273+83'R' TO 274+58'R' RT
STA 274+19'R' TO 275+32'R' LT
ANCHOR POST ASSEMBLY TOP MOUNT
REQUIRED OVER B-52-0158

REMOVING GUARDRAIL
STA 273+06'R' TO 274+97'R' RT
STA 273+68'R' TO 275+81'R' LT

MGS GUARDRAIL 3, MGS GUARDRAIL TERMINAL EAT
STA 272+23'R' TO 273+83'R' RT
STA 274+58'R' TO 275+17'R' RT
STA 275+32'R' TO 276+63'R' LT

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - RICHLAND	SHEET 59	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\050201-PN-WCCS RICHLAND.DWG
LAYOUT NAME - 09
PLOT DATE : 7/29/2024 10:21 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

END WCCS RICHLAND COUNTY
STA 277+28.9'R'

BEGIN WCCS VERNON COUNTY
STA 277+28.9'V'
Y = 148588.989
X = 843617.458

PC: 278+45.74'V'
N2° 08' 21"E, 2077.90'
STH 80
280'V'
36'
12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS
R/W
STH 80
285'V'
SILT FENCE (TYP)
SLOPE INTERCEPT (TYP)
284+96.3'V'
15.0' LT
285+46.8'V', -20.0' LT
MGS EAT POST 1
285+96.3'V'
18.0' LT
PT: 286+75.26'V'
REMOVING GUARDRAIL
STA 285+46'V' TO 289+45'V' LT
MGS GUARDRAIL 3, MGS GUARDRAIL TERMINAL EAT
STA 285+47'V' TO 289+42'V' LT
EROSION MAT
CLASS I TYPE B (TYP)
289+01.8'V'
18.0' LT
289+51.8'V', -20.0' LT
MGS EAT POST 1
290+02.3'V'
15.0' LT
HILLSBORO TEL (TEL)
N27° 01' 28"E, 1279.92'
STH 80
290'V'
N
STA 291+50'V'
MATCHLINE

PI STA = 282+67.15'V'
Y = 149127.122
X = 843637.559
DELTA = 24°53'07"
D = 3°00'00"
T = 421.40'
L = 829.51'
R = 1909.86'
PC STA = 278+45.74'V'
Y = 148706.015
X = 843621.830
PT STA = 286+75.26'V'
Y = 149502.512
X = 843829.031

STA 287+31'V'
EXISTING 30-INCH CPCS
TO REMAIN

5

5

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP 20	294+69.68 'V'	-48.39 LT	150232.184	844146.884	1035.15'	CP20 / NO 6 REB CORRE CAP

REMOVING GUARDRAIL
STA 294+89'V' TO 303+07'V' LT
MGS GUARDRAIL 3, MGS GUARDRAIL TERMINAL EAT
STA 294+87'V' TO 303+08'V' LT
HILLSBORO TEL (TEL)
SLOPE INTERCEPT (TYP)
SILT FENCE (TYP)
EROSION MAT
CLASS I TYPE B (TYP)
VERNON ELECTRIC (OH)
294+36.7'V'
15.0' LT
294+87.2'V', -20.0' LT
MGS EAT POST 1
295+37.2'V'
18.0' LT
PC: 299+55.18'V'
302+57.9'V'
18.0' LT
303+08.2'V', -20.0' LT
MGS EAT POST 1
303+58.7'V'
15.0' LT
N
T 13 N
R 01 E
34 35
SECTION CORNER - 1/4 CORNER
3/4-INCH REBAR
NORTHING: 151223.775
EASTING: 844618.218
STA 291+50'V'
291+72'V', LT
BAD PE
R/W
20
N27° 01' 28"E, 1279.92'
STH 80
295'V'
296+10'V', RT
BAD PE
298+50'V', RT
BAD PE
300'V'
305+71'V', LT
BAD PE
305'V'
36'
12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS
STA 306+50'V'
MATCHLINE
R/W

PI STA = 306+43.58'V'
Y = 151255.922
X = 844723.380
DELTA = 27°01'25"
D = 2°00'00"
T = 688.40'
L = 1351.19'
R = 2864.79'
PC STA = 299+55.18'V'
Y = 150642.684
X = 844410.590
PT STA = 313+06.37'V'
Y = 151944.325
X = 844723.388

STA 297+84'V'
EXISTING 60-INCH CPCS
TO REMAIN

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - VERNON	SHEET 60	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\050201-PN-WCCS VERNON.DWG
LAYOUT NAME - 01-Vern
PLOT DATE : 7/29/2024 11:31 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

5

5

STA 306+50'V'

MATCHLINE

310'V'

315'V'

320'V'

312+92'V', RT
BAD PE

319+62'V', RT
BAD PE

321+28'V', LT
BAD PE

321+26.4'V'
15.0' LT

SLOPE INTERCEPT (TYP)

R/W

N0° 00' 02"E, 1462.08'

STH 80

36'

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

STA 312+48'V'
EXISTING 60-INCH CPCS
TO REMAIN

STA 314+80'V'
EXISTING 30-INCH CPCS
TO REMAIN

STA 321+49'V'
EXISTING 72-INCH CPCS
TO REMAIN

MGS GUARDRAIL 3, MGS GUARDRAIL TERMINAL EAT
STA 321+77'V' TO 325+71'V' LT
STA 326+27'V' TO 335+44'V' LT

REMOVING GUARDRAIL
STA 321+76'V' TO 325+85'V' LT
STA 326+21'V' TO 335+43'V' LT

STA 321+50'V'

MATCHLINE

321+76.9'V', -20.0' LT
MGS EAT POST 1

322+26.9'V'
18.0' LT

325+20.7'V'
18.0' LT

326+70.7'V', -20.0' LT
MGS EAT POST 1

326+00'V', LT
BAD PE

326+27.1'V', -20.0' LT
MGS EAT POST 1

326+77.1'V'
18.0' LT

PC: 327+68.45'V'

SILT FENCE (TYP)

EROSION MAT
CLASS I TYPE B (TYP)

334+93.2'V'
18.0' LT

PC: 334+97.56'V'

335+43.6'V', -20.0' LT
MGS EAT POST 1

335+94.1'V'
15.0' LT

SLOPE INTERCEPT (TYP)

18

330'V'

325'V'

335'V'

STH 80

N0° 00' 02"E, 1462.08'

STH 80

321+97'V', RT
BAD PE

HILLSBORO TEL (FO)

VERNON ELECTRIC COOP (ELEC)

R/W

PT: 334+94.34'V'

STA 336+50'V'

MATCHLINE

PI STA = 331+32.04'V'
Y = 153769.999
X = 844723.410
DELTA = 8°22'36"
D = 1°09'14"
T = 363.59'
L = 725.89'
R = 4965.00'
PC STA = 327+68.45'V'
Y = 153406.406
X = 844723.406
PT STA = 334+94.34'V'
Y = 154129.712
X = 844776.383

STA 333+57'V'
EXISTING 60-INCH CPCS
TO REMAIN

STATION & OFFSET TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP 18	330+33.73 'V'	-36.78 LT	153673.524	844693.764	1117.31'	CP18 / NO 6 REB CORRE CAP

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - VERNON	SHEET 61	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\050201-PN-WCCS VERNON.DWG
LAYOUT NAME - 02-Vern
PLOT DATE : 7/29/2024 11:31 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:100 FT

PI STA = 338+49.34'V'
Y = 154480.928
X = 844828.105
DELTA = 20°52'23"
D = 3°00'00"
T = 351.78'
L = 695.77'
R = 1909.86'
PC STA = 334+97.56'V'
Y = 154132.897
X = 844776.852
PT STA = 341+93.33'V'
Y = 154824.380
X = 844751.990

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP 17	348+06.63 'V'	-41.36 LT	155414.211	844578.916	1221.53'	CP17 / NO 6 REB CORRE CAP

N

STA 336+50'V'

MATCHLINE

PT: 341+93.33'V'

R/W

17

348+94'V', LT
BAD PE

PC: 350+28.77'V'

STA 351+50'V'

350'V'

340'V'

345'V'

N12° 29' 45"W, 835.44'

STH 80

36'

339+92'V', RT
BAD PE

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

345+19'V', RT
BAD PE

R/W

MATCHLINE

STA 348+93'V'
EXISTING 48-INCH CPCS
TO REMAIN

5

5

WESTERN RD

N

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 359+59.8'V', 80.0' LT

R/W

358+66.2'V'
15.0' LT

358+96.2'V'
18.0' LT

PT: 359+49.74'V'

360+27.6'V'
18.0' LT

360+77.6'V'
15.0' LT

STA 351+50'V'

352+28'V', LT
BAD PE

355'V'

360'V'

N3° 17' 10"W, 2757.41'

STH 80

36'

365'V'

STA 366+50'V'

358+18.8'V'
15.0' RT

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

360+61.6'V'
15.0' RT

MATCHLINE

PI STA = 354+90.25'V'
Y = 156090.582
X = 844471.380
DELTA = 9°12'35"
D = 1°00'00"
T = 461.48'
L = 920.97'
R = 5729.58'
PC STA = 350+28.77'V'
Y = 155640.033
X = 844571.229
PT STA = 359+49.74'V'
Y = 156551.304
X = 844444.928

VERNON ELECTRIC (ELEC)

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 359+46.9'V', 115.0' RT

CTH V

R/W

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - VERNON	SHEET 62	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\050201-PN-WCCS VERNON.DWG
LAYOUT NAME - 03-Vern
PLOT DATE : 7/29/2024 11:32 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:100 FT

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP 16	379+34.60 'V'	-39.18 LT	158530.652	844292.040	1265.36'	CP16 / NO 6 REB CORRE CAP

N

STA 366+50'V'

MATCHLINE

R/W

372+10'V', LT
BAD PE

16
POST

370'V'

36'

375'V'

N3° 17' 10"W, 2757.41'

380'V'

STH 80

372+15'V', RT
BAD PE

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

376+54'V', RT
BAD PE

R/W

STA 381+50'V'

MATCHLINE

5

5

SECTION CORNER
3/4-INCH REBAR
NORTHING: 159291.400
EASTING: 844288.200

N

CTH V

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 396+31.0'V', 115.0' LT

R/W

PC: 387+07.15'V'

PT: 395+03.13'V'

395+17.6'V'
15.0' LT

STA 381+50'V'

383+19'V', LT
BAD PE

388+74'V', LT
BAD PE

N3° 17' 10"W, 2757.41'

385'V'

36'

390'V'

395'V'

STH 80

STH 80

STA 396+50'V'

MATCHLINE

POST

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

386+77'V', RT
BAD PE

387+35'V', RT
BAD PE

395+04.9'V'
15.0' RT

VERNON ELECTRIC (ELEC)

PI STA = 391+05.18'V'
Y = 159701.549
X = 844264.059
DELTA = 1°59'24"
D = 0°15'00"
T = 398.03'
L = 795.98'
R = 22918.31'
PC STA = 387+07.15'V'
Y = 159304.175
X = 844286.874
PT STA = 395+03.13'V'
Y = 160099.476
X = 844255.057

R/W

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 396+31.3'V', 105.0' RT

CTH EE

STA 382+23'V'
EXISTING 42-INCH CPCS
TO REMAIN

STA 382+28'V'
EXISTING 42-INCH CPCS
TO REMAIN

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - VERNON	SHEET 63	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\050201-PN-WCCS VERNON.DWG
LAYOUT NAME - 04-Vern

PLOT DATE : 7/29/2024 11:32 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:100 FT

STA 396+50'V'

MATCHLINE

397+58.3'V'
15.0' LT

397+43.4'V'
15.0' RT

R/W

402+87'V', LT
BAD PE

402+87'V', RT
BAD PE

400'V'

N1° 17' 46"W, 1623.93'

405'V'

STH 80

36'

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

410'V'

PC: 411+27.05'V'

411+36'V', RT
BAD PE

XXXX
408+82'V', RT
ASPH PE

REMOVING ASPHALTIC SURFACE
ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

SAWING ASPHALT
STA 408+82'V' RT

N

STA 411+50'V'

MATCHLINE

5

5

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP 15	414+05.09 'V'	-36.78 LT	162001.063	844178.626	1251.00'	CP15 / NO 6 REB CORRE CAP

STA 411+50'V'

MATCHLINE

EXISTING
PLE

PT: 416+76.64'V'

417+27'V', LT
BAD PE

15

415'V'

36'

420'V'

N1° 27' 07"E, 963.45'

STH 80

425'V'

EXISTING
PLE

SAWING ASPHALT
STA 423+82'V' LT

R/W

PC: 426+40.10'V'

423+82'V', LT
ASPH PE
XXXX

REMOVING ASPHALTIC SURFACE
ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

422+71'V', RT
BAD PE

424+05'V', RT
BAD PE

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

R/W

N

STA 426+50'V'

MATCHLINE

PI STA = 414+01.90'V'
Y = 161997.766
X = 844212.110
DELTA = 2°44'53"
D = 0°30'00"
T = 274.85'
L = 549.59'
R = 11459.16'
PC STA = 411+27.05'V'
Y = 161722.988
X = 844218.326
PT STA = 416+76.64'V'
Y = 162272.525
X = 844219.074

EXISTING
PLE

STA 414+77'V'
EXISTING 42-INCH CPCS
225 LF CULVERT PIPE LINERS 42-INCH
1 CLEANING CULVERT PIPES FOR LINER VERIFICATION

STA 420+05'V'
EXISTING 42-INCH CPCS
166 LF CULVERT PIPE LINERS 42-INCH
1 CLEANING CULVERT PIPES FOR LINER VERIFICATION

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - VERNON	SHEET 64	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\050201-PN-WCCS VERNON.DWG
LAYOUT NAME - 05-Vern
PLOT DATE : 7/29/2024 11:32 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

PI STA = 429+50.37'V'
Y = 163545.842
X = 844251.347
DELTA = 6°11'58"
D = 1°00'00"
T = 310.27'
L = 619.94'
R = 5729.58'
PC STA = 426+40.10'V'
Y = 163235.669
X = 844243.486
PT STA = 432+60.04'V'
Y = 163855.051
X = 844225.668

N

R/W

STA 426+50'V'

MATCHLINE

PT: 432+60.04'V'

430'V'

36'

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

435'V'

N4° 44' 51"W, 1380.96'

440'V'

STH 80

STA 441+50'V'

MATCHLINE

SLOPE INTERCEPT (TYP)

435+40.8'V'
15.0' RT

435+91.3'V', 20.0' RT
MGS EAT POST 1

436+41.3'V'
18.0' RT

SILT FENCE (TYP)

R/W

REMOVING GUARDRAIL
STA 436+01'V' TO 449+98'V' RT

MGS GUARDRAIL 3, MGS GUARDRAIL TERMINAL EAT
STA 435+91'V' TO 449+98'V' LT

T 13 N
R 01 E
15 22 14 23

SECTION CORNER
3/4-INCH REBAR
NORTHING: 164698.710
EASTING: 844170.750

5

5

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP 14	444+49.10 'V'	-71.77 LT	165034.092	844055.728	1155.77'	CP14 / NO 6 REB CORRE CAP

PI STA = 449+56.94'V'
Y = 165546.129
X = 844085.225
DELTA = 3°09'31"
D = 0°30'00"
T = 315.94'
L = 631.73'
R = 11459.16'
PC STA = 446+40.99'V'
Y = 165231.269
X = 844111.374
PT STA = 452+72.72'V'
Y = 165861.950
X = 844076.464

N

R/W

PC: 446+40.99'V'

14

444+36'V', LT
BAD PE

PT: 452+72.72'V'

HILLSBORO TEL (TEL)

453+57'V', LT
BAD PE

STA 441+50'V'

N4° 44' 51"W, 1380.96'

445'V'

STH 80

450'V'

36'

455'V'

N1° 35' 20"W, 3018.05'

STH 80

STA 456+50'V'

MATCHLINE

SLOPE INTERCEPT (TYP)

SILT FENCE (TYP)

449+48.1'V'
18.0' RT

449+98.1'V', 20.0' RT
MGS EAT POST 1

450+48.6'V'
15.0' RT

451+51'V', RT
ASPH PE

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

EROSION MAT
CLASS I TYPE B (TYP)

REMOVING ASPHALTIC SURFACE
ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

VERNON ELECTRIC COOP (ELEC)

SAWING ASPHALT
STA 451+51'V' RT

R/W

STA 450+16'V'
EXISTING 48-INCH CPCS
TO REMAIN

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - VERNON	SHEET 65	E

STA 456+50'V'

MATCHLINE

STA 471+50'V'

MATCHLINE

STA 467+10'V'
EXISTING 48-INCH CPCS
TO REMAIN

N

R/W

466+76'V', LT
BAD PE

460'V'

465'V'

N1° 35' 20"W, 3018.05'

470'V'

STH 80

36'

461+51'V', RT
BAD PE

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

467+29'V', RT
BAD PE

R/W

STA 459+39'V'
EXISTING 30-INCH CPCS
TO REMAIN

SECTION CORNER - 1/4 CORNER
1 1/4-INCH IRON ROD
NORTHING: 167298.448
EASTING: 844072.375

5

5

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP 13	478+44.81 'V'	-42.81 LT	168431.862	843962.356	1036.97'	CP13 / NO 6 REB CORRE CAP

REMOVING GUARDRAIL
STA 478+90'V' TO 483+67'V' RT
STA 478+92'V' TO 483+96'V' LT

CLEARING AND GRUBBING
STA 483+00'V' TO 484+00'V' RT
STA 484+00'V' TO 485+00'V' LT

N

STA 471+50'V'

MATCHLINE

HILLSBORO TEL (TEL)

473+45'V', LT
BAD PE

R/W

478+39.4'V'
15.0' LT

478+89.9'V', -20.0' LT
MGS EAT POST 1

479+39.9'V'
18.0' LT

EROSION MAT
CLASS I TYPE B (TYP)

SILT FENCE (TYP)

SLOPE INTERCEPT (TYP)

PC: 482+90.77'V'

483+46.9'V'
18.0' LT

483+97.6'V', -20.0' LT
MGS EAT POST 1

484+48.1'V'
15.0' LT

484+66'V', LT
BAD PE

STA 486+50'V'

MATCHLINE

475'V'

36'

N1° 35' 20"W, 3018.05'

STH 80

480'V'

485'V'

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

478+09'V', RT
BAD PE

477+84.6'V'
15.0' RT

478+35.1'V', 20.0' RT
MGS EAT POST 1

478+85.1'V'
18.0' RT

R/W

BEAVER CREEK

STRUCTURE B-62-0134
NO WORK

483+25.3'V'
18.0' RT

62.99

N84° 26' 49"E

484+35.1'V'
18.0' RT

484+65.1'V'
15.0' RT

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 483+84.9'V', 60.0' RT

483+72.7'V'
77.1' RT

PC: 3000+62.99'SS'

PT: 3001+02.53'SS'

PI STA = 3000+82.83'SS'
Y = 168982.146
X = 844069.203
DELTA = 11°55'27"
D = 30°09'20"
T = 19.84'
L = 39.54'
R = 190.00'
PC STA = 3000+62.99'SS'
Y = 168980.226
X = 844049.453
PT STA = 3001+02.53'SS'
Y = 168979.944
X = 844088.923

MGS GUARDRAIL 3, MGS GUARDRAIL TERMINAL EAT
STA 478+35'V' TO 483+25'V' RT
STA 483+73'V' TO 483+59'V' RT
STA 478+90'V' TO 483+98'V' LT

MGS GUARDRAIL
SHORT RADIUS
STA 483+25'V' TO 483+73'V'
RADIUS: 50'
LENGTH: 87.5'
CRT POSTS: 15

483+58.8'V', 153.7' RT
MGS EAT POST 1

58.97

S83° 37' 44"E

STALEY SCHOOL RD

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - VERNON	SHEET 66	E

PI STA = 486+36.32'V'
Y = 169224.252
X = 843983.201
DELTA = 28°45'07"
D = 4°15'00"
T = 345.54'
L = 676.52'
R = 1348.14'
PC STA = 482+90.77'V'
Y = 168878.844
X = 843992.782
PT STA = 489+67.29'V'
Y = 169522.467
X = 843808.654

PT: 489+67.29'V'
PC: 493+35.11'V'
PT: 498+39.40'V'
R/W
493+73'V', LT
BAD PE
495+72'V', LT
BAD PE
495'V'
36'
499+93'V', LT
BAD PE
500'V'
N8° 54' 31"W, 480.25'
STH 80
N30° 20' 27"W, 367.82'
490'V'
493+25'V', RT
BAD PE
12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS
489+52'V', RT
BAD PE
501+45'V', RT
BAD PE
STA 486+50'V'
STA 501+50'V'
MATCHLINE
MATCHLINE
N

STA 492+40'V'
EXISTING 30-INCH CPCS
TO REMAIN

PI STA = 495+90.24'V'
Y = 170060.090
X = 843493.978
DELTA = 21°25'56"
D = 4°15'00"
T = 255.13'
L = 504.29'
R = 1348.14'
PC STA = 493+35.11'V'
Y = 169839.908
X = 843622.853
PT STA = 498+39.40'V'
Y = 170312.137
X = 843454.469

PI STA = 506+57.47'V'
Y = 171120.339
X = 843327.783
DELTA = 27°02'20"
D = 4°04'41"
T = 337.82'
L = 663.05'
R = 1405.00'
PC STA = 503+19.65'V'
Y = 170786.598
X = 843380.097
PT STA = 509+82.70'V'
Y = 171393.820
X = 843129.469

STATION & OFFSET TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP 12	511+17.86 'V'	-49.56 LT	171474.145	843010.002	1003.21'	CP12 / NO 6 REB CORRE CAP

BEAVER CREEK DR
REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 514+93.1'V', 85.0' LT
514+01.7'V'
15.0' LT
514+46.7'V'
18.0' LT
515+70.2'V'
21.0' LT
516+00.2'V'
15.0' LT
PT: 503+19.65'V'
PC: 509+82.70'V'
R/W
12
515'V'
VERNON ELECTRIC COOP (OH)
505'V'
510'V'
N35° 56' 52"W, 417.13'
STH 80
513+27'V', RT
BAD PE
PC: 513+99.83'V'
36'
12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS
509+08'V', RT
ASPH PE
R/W
STA 501+50'V'
STA 516+50'V'
MATCHLINE
MATCHLINE

STA 502+36'V'
EXISTING 48-INCH CPCS
TO REMAIN

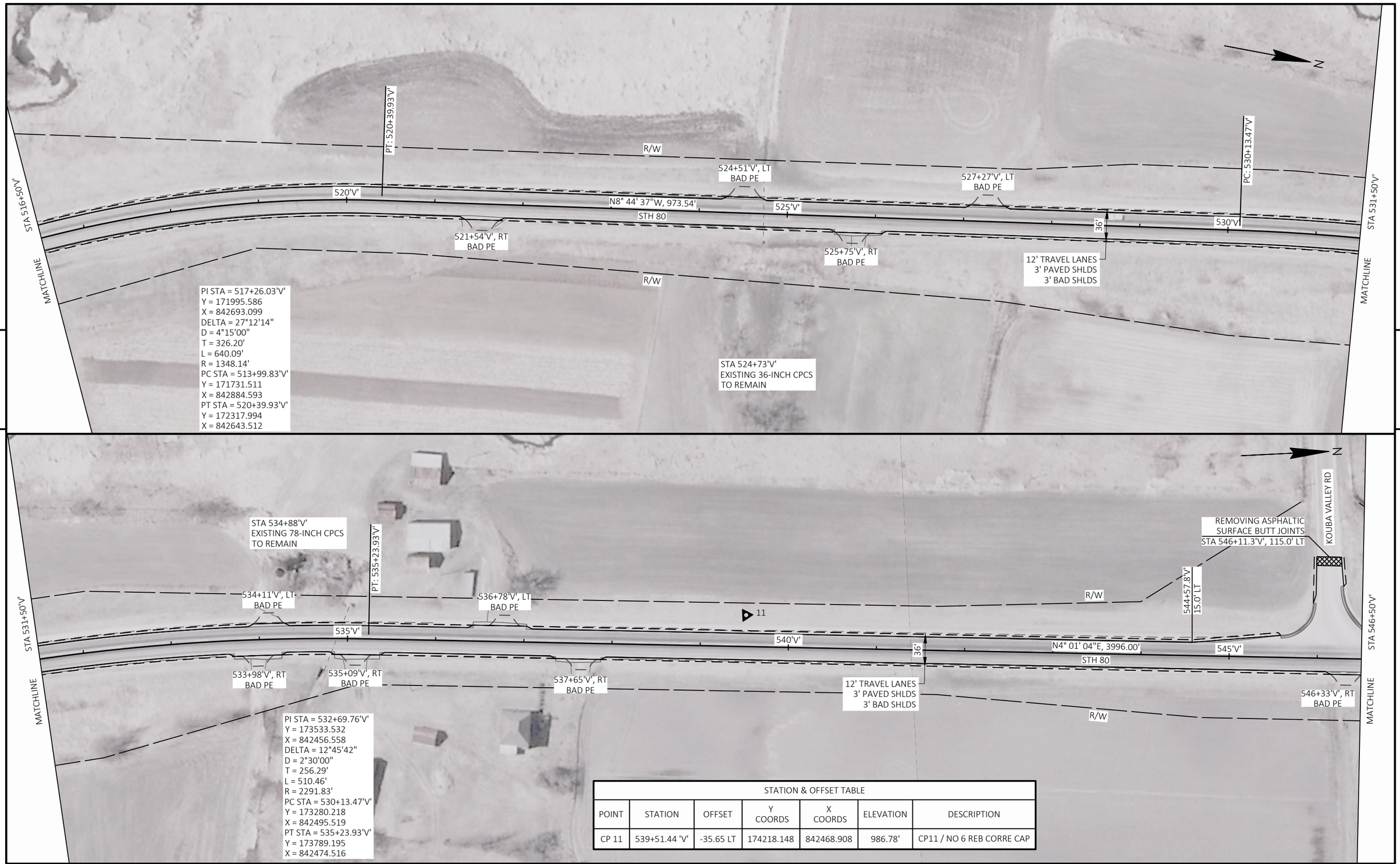
STA 508+14'V'
EXISTING 24-INCH CPCS
TO REMAIN

STA 512+47'V'
EXISTING 36-INCH CPCS
TO REMAIN

STA 515+89'V'
EXISTING 24-INCH CPCS
TO REMAIN

5
5

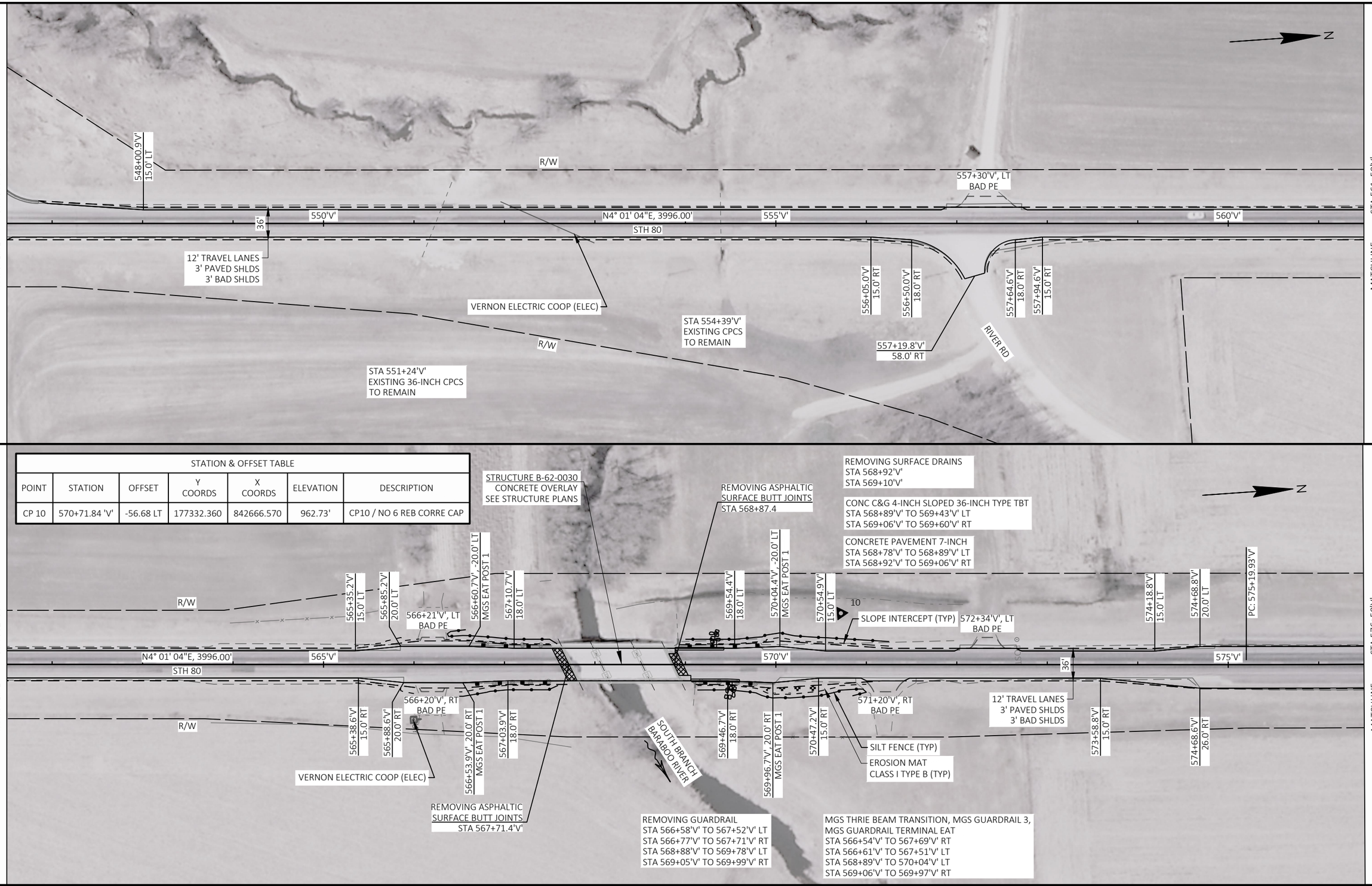
PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - VERNON	SHEET 67	E



5

5

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP 11	539+51.44 'V'	-35.65 LT	174218.148	842468.908	986.78'	CP11 / NO 6 REB CORRE CAP



STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP 10	570+71.84 'V'	-56.68 LT	177332.360	842666.570	962.73'	CP10 / NO 6 REB CORRE CAP

PI STA = 585+10.86'V'
Y = 178763.867
X = 842823.937
DELTA = 4°57'06"
D = 0°15'00"
T = 990.93'
L = 1980.62'
R = 22918.31'
PC STA = 575+19.93'V'
Y = 177775.374
X = 842754.506
PT STA = 595+00.55'V'
Y = 179754.664
X = 842807.790

N

STRUCTURE C-62-0060
REHABILITATION
SEE STRUCTURE PLANS

RIPRAP HEAVY
GEOTEXTILE FABRIC TYPE HR

SLOPE INTERCEPT (TYP)

SILT FENCE (TYP)

EROSION MAT
CLASS I TYPE B (TYP)

R/W

585+67.0'V'
20.0' LT

586+17.0'V'
15.0' LT

585+37'V', LT
BAD PE

STA 576+50'V'

MATCHLINE

580'V'

585'V'

590'V'

STH 80

36'

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

STA 591+50'V'

MATCHLINE

585+99'V', RT
BAD PE

582+50.0'V'
26.0' RT

582+70.0'V'
24.0' RT

584+50.0'V'
24.0' RT

584+70.0'V'
22.0' RT

586+20.0'V'
22.0' RT

586+70.0'V'
15.0' RT

R/W

STA 582+06'V'
EXISTING 30-INCH CPCS
TO REMAIN

5

5

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP 1	601+28.20 'V'	-90.98 LT	180380.746	842706.596	1027.30'	CP1 / DH5081 GPS SHOT

N

R/W

1

SLOPE INTERCEPT (TYP)

SILT FENCE (TYP)

EROSION MAT
CLASS I TYPE B (TYP)

PT: 595+00.55'V'

597+18'V', LT
BAD PE

STA 591+50'V'

595'V'

600'V'

N0° 56' 01"W, 1451.11'

STH 80

605'V'

36'

12' TRAVEL LANES
3' PAVED SHLDS
3' BAD SHLDS

STA 606+50'V'

MATCHLINE

MATCHLINE

602+50'V', RT
BAD PE

REMOVING ASPHALTIC SURFACE
ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

XXXX
594+30'V', RT
ASPH PE

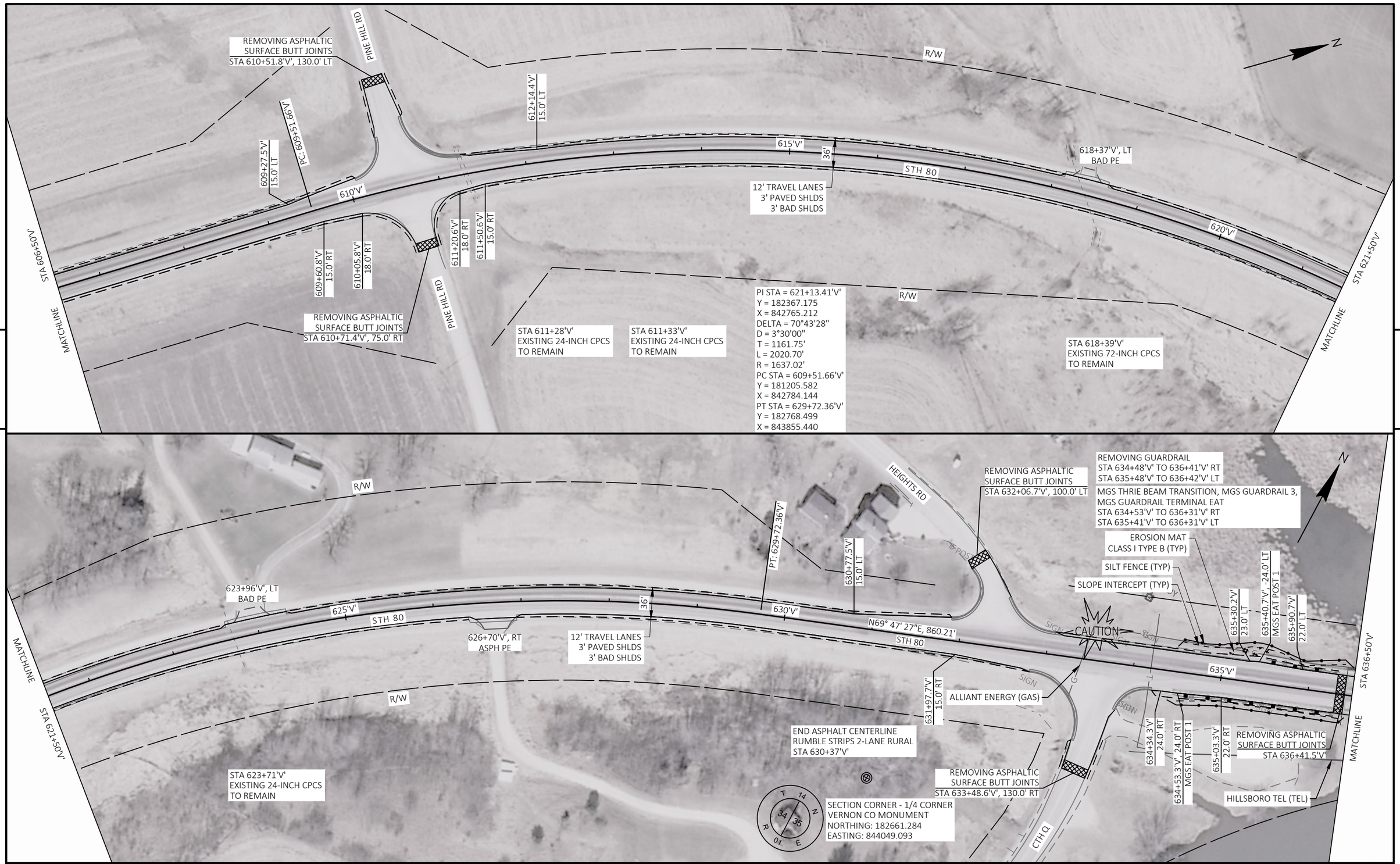
R/W

SAWING ASPHALT
STA 594+30'V' RT

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - VERNON	SHEET 70	E

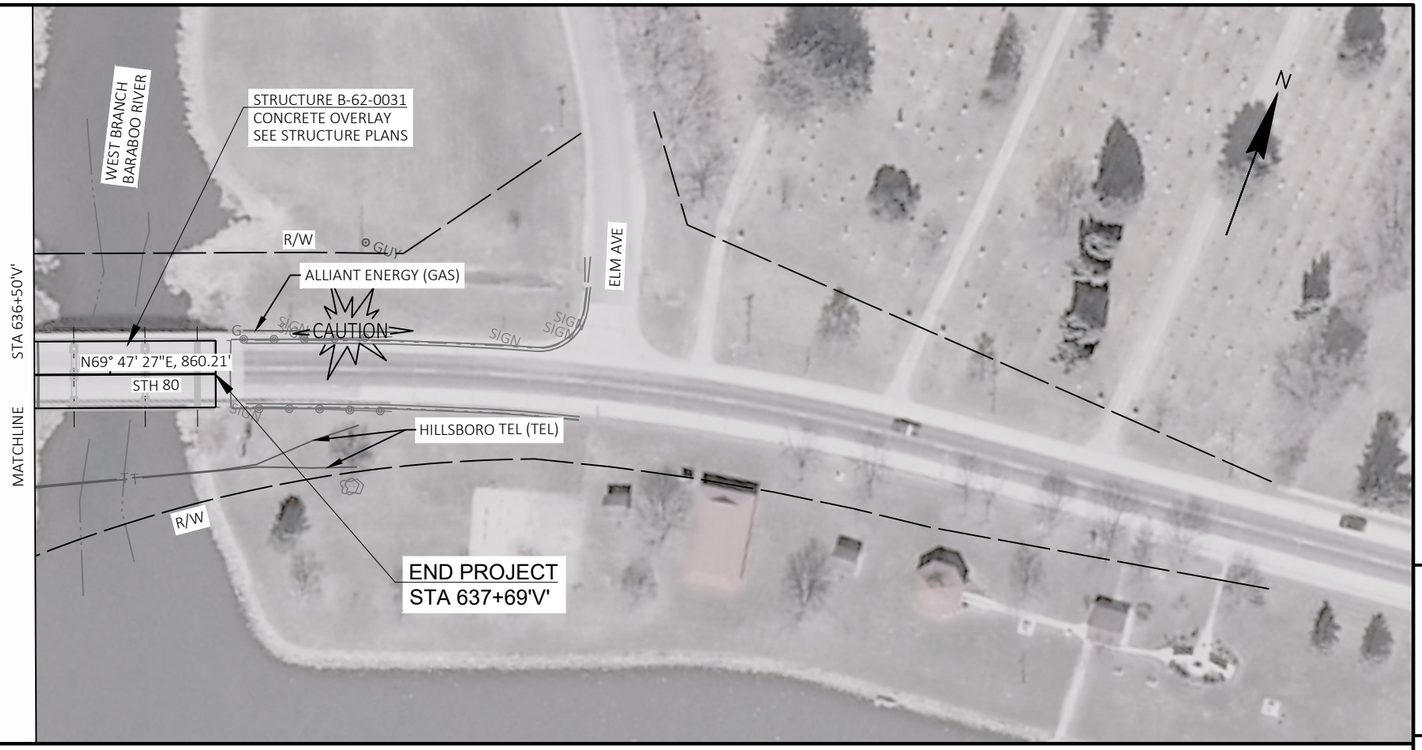
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LAYOUT NAME - 11-Vern

PLOT DATE : 7/29/2024 11:33 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - VERNON	SHEET 71	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\050201-PN-WCCS VERNON.DWG
LAYOUT NAME - 12-Vern
PLOT DATE : 7/29/2024 11:33 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



5

5

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	PLAN SHEETS - VERNON	SHEET 72	E

Standard Detail Drawing List

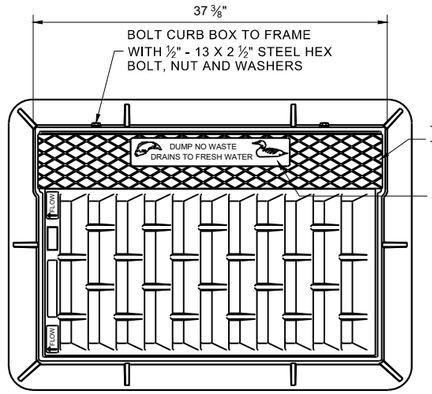
08A05-21A	INLET COVERS TYPE A, H, A-S, H-S & Z
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-08A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D03-09A	CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES
08D03-09B	CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES
08D13-02	SLOTTED CORRUGATED METAL PIPE SURFACE DRAINS
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
09G02-05A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13C19-03	HMA LONGITUDINAL JOINTS
14B07-16A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16J	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16K	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16L	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16M	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16N	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B15-11A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B18-06A	STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)
14B18-06B	STEEL PLATE BEAM GUARD, CLASS "A" AT MEDIAN APPROACH TO BRIDGES
14B20-12A	STEEL THRIE BEAM STRUCTURE APPROACH
14B20-12B	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END PARAPETS
14B20-12C	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO VERTICAL FACED PARAPETS
14B20-12D	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SLOPED END PARAPETS
14B20-12E	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPES "F" AND "W"
14B20-12F	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPE "M"
14B20-12G	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTOR PLATE DETAIL
14B20-12H	STEEL THRIE BEAM STRUCTURE APPROACH, SINGLE SLOPE ATTACHMENT
14B27-01A	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01B	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01C	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B29-01	SAFETY EDGE
14B32-10A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-10B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-10C	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-10D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-10E	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-10F	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-10G	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-10H	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B33-02A	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B33-02B	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B33-02C	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B33-02D	CONCRETE BARRIER SINGLE SLOPE 36" THRIE BEAM ANCHOR
14B33-02E	CONCRETE BARRIER SINGLE SLOPE 36" THRIE BEAM ANCHOR

6

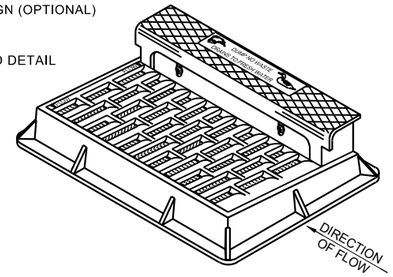
Standard Detail Drawing List

14B33-02F	CONCRETE BARRIER SINGLE SLOPE 36" THRIE BEAM ANCHOR
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B51-03A	ANCHOR POST ASSEMBLY TOP-MOUNTED
14B51-03B	ANCHOR POST ASSEMBLY TOP-MOUNTED
14B51-03C	ANCHOR POST ASSEMBLY TOP-MOUNTED
14B53-02A	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02B	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02C	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02D	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02E	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02F	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02G	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02H	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02I	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
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
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C11-10A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C12-09B	TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE
15C19-08A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D33-09	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

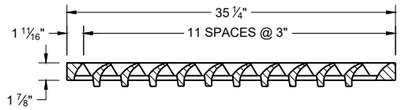
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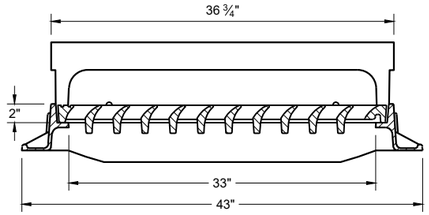


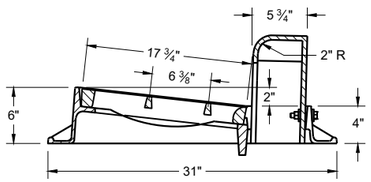
NOTE: EITHER CASTING IS ACCEPTABLE

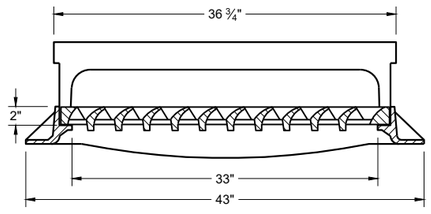


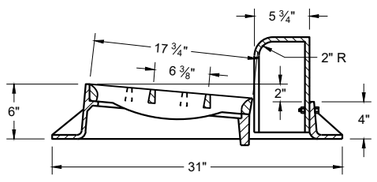
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







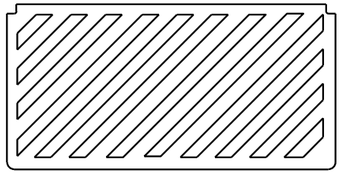




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

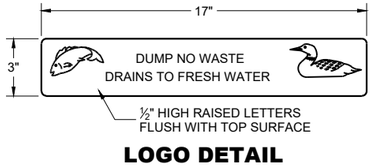
1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS



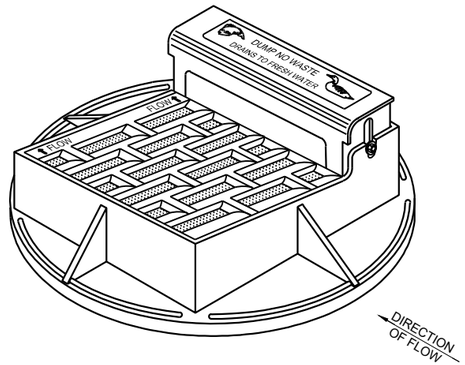
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

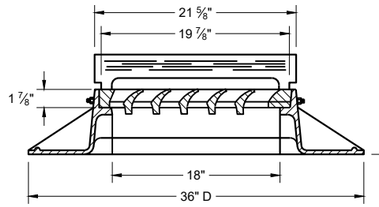


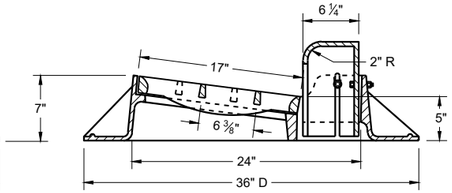
LOGO DETAIL



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE





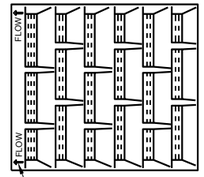
TYPE "A"

GENERAL NOTES

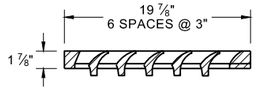
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

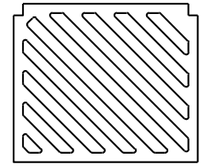
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



DIRECTION OF FLOW ARROWS



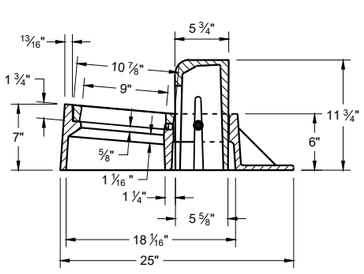
1" DIAGONAL BARS WITH 1 1/2" OPENINGS



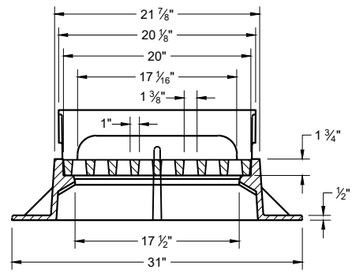
SPECIAL GRATE FOR TYPE "A" COVER

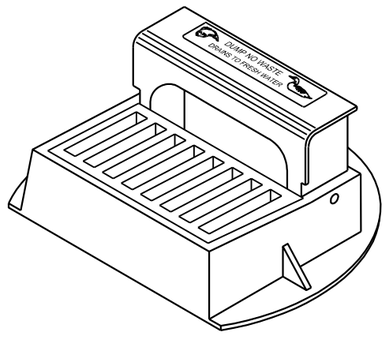
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "Z"





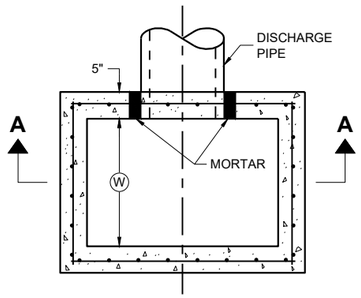
INLET COVERS
TYPES A, H, A-S, H-S AND Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

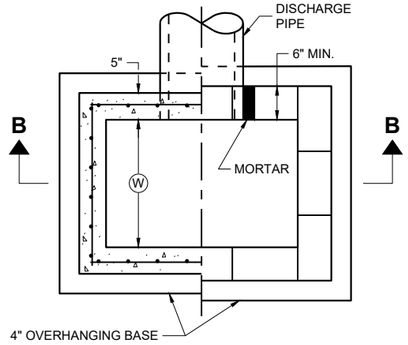
APPROVED
December 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

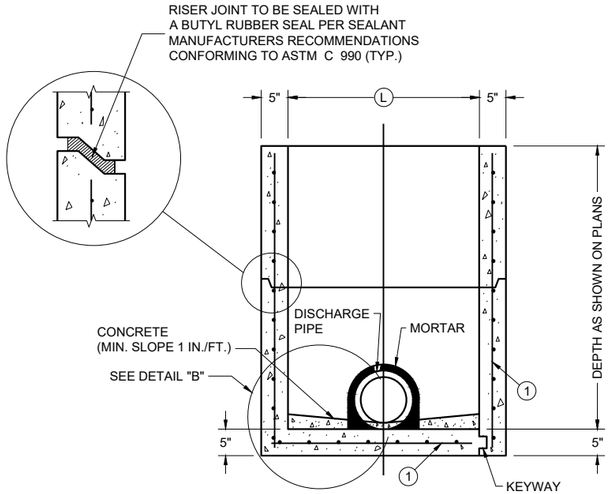
FHWA



PLAN VIEW



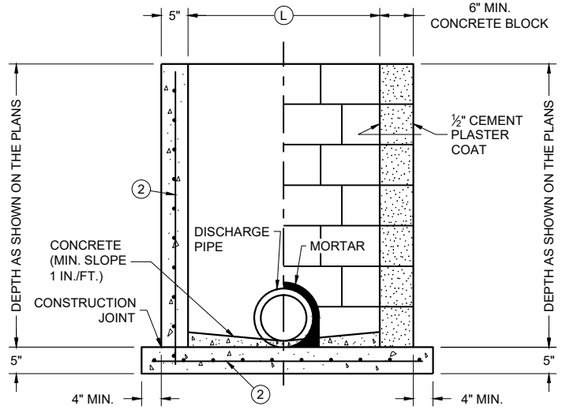
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

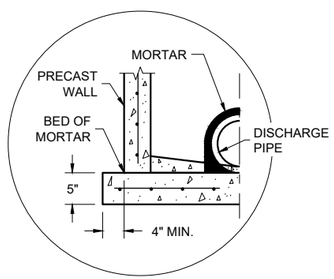
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

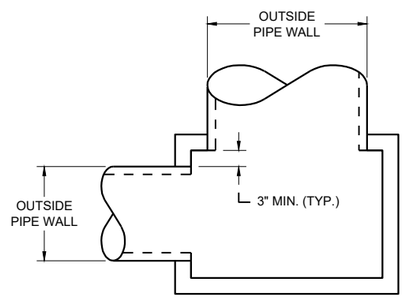
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T 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" 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 AND REINFORCED CONCRETE BASES 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.

CATCH BASIN COVER MATRIX

INLET SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE									
			ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM	V V-B
2 X 2-FT	2	2	X	X				X				
2 X 2.5-FT	2	2.5			X			X	X	X	X	
2 X 3-FT	2	3					X					
2.5 X 3-FT	2.5	3				X						
2 X 3.5-FT	2	3.5										X

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2 X 2-FT	12	12
2 X 2.5-FT	12	18
2 X 3-FT	12	24
2.5 X 3-FT	18	24
2 X 3.5-FT	12	30

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT

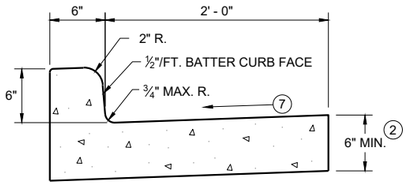
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

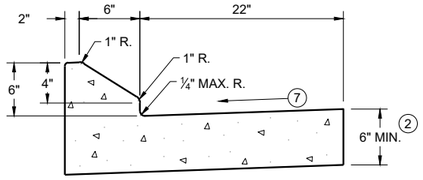
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

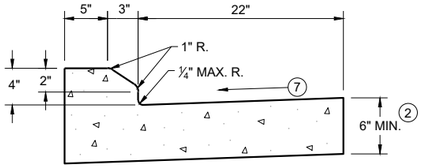
6
SDD 08C07-03



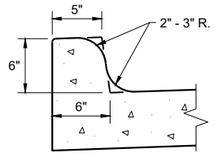
TYPES A (1) & D



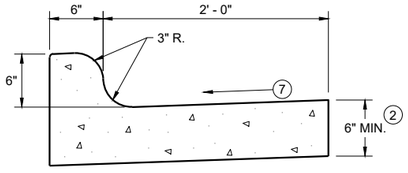
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

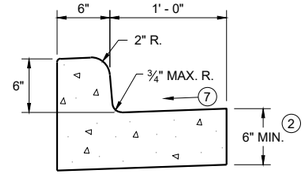


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



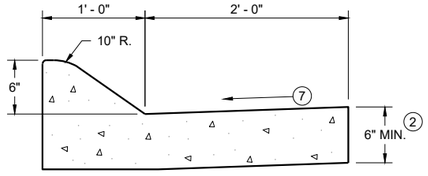
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

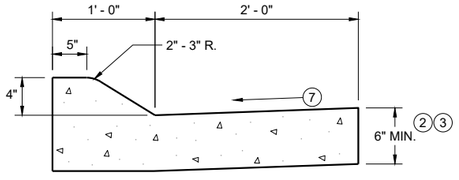


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

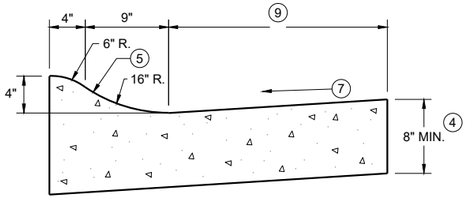


6" SLOPED CURB TYPES A (1) & D



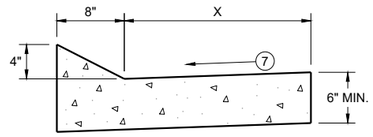
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

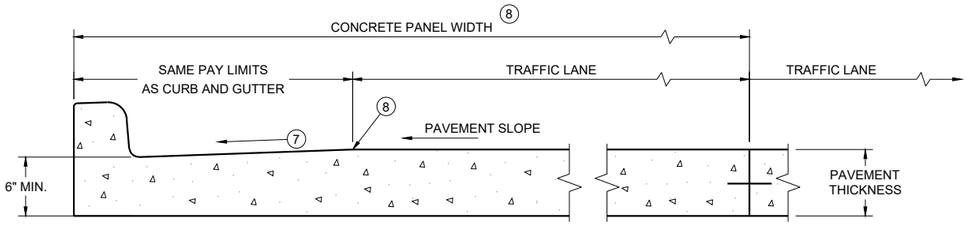


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

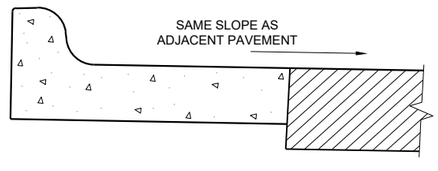
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

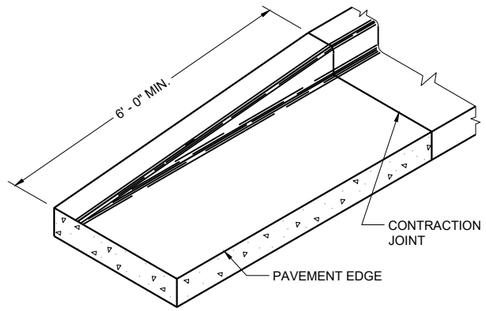
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

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

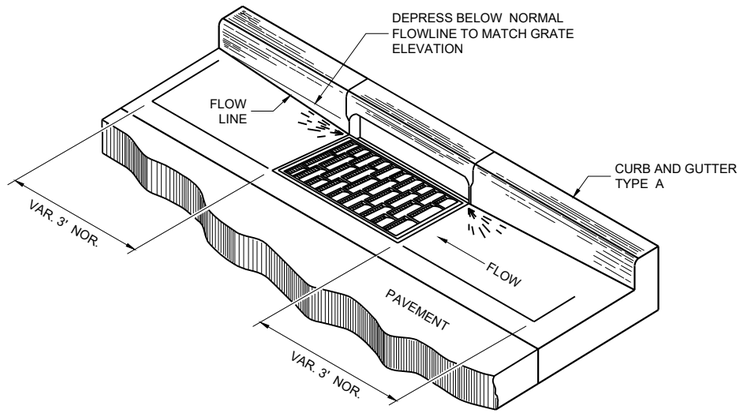
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

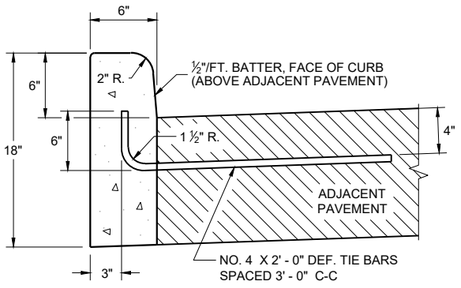
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

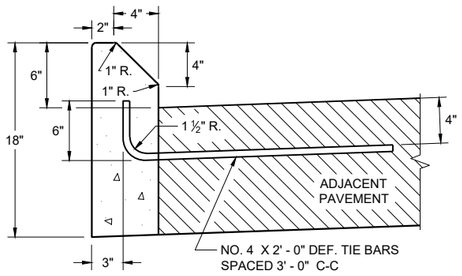
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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

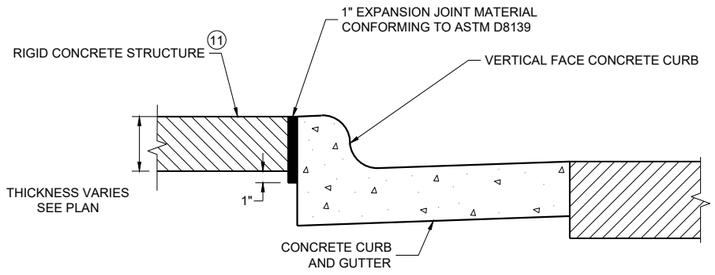


TYPES A (1) & D

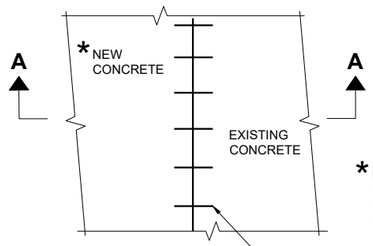


TYPES G (1) & J

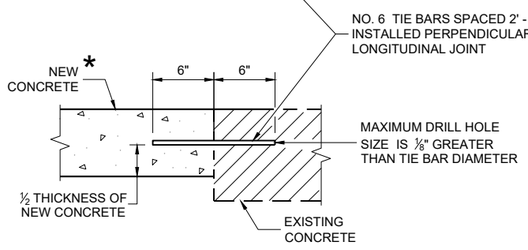
CONCRETE CURB



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

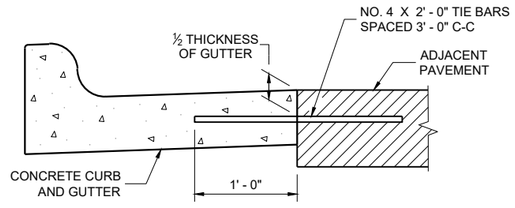


PLAN VIEW

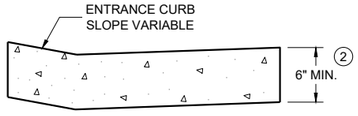


SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6
SDD 08D01-23b

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.

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

(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

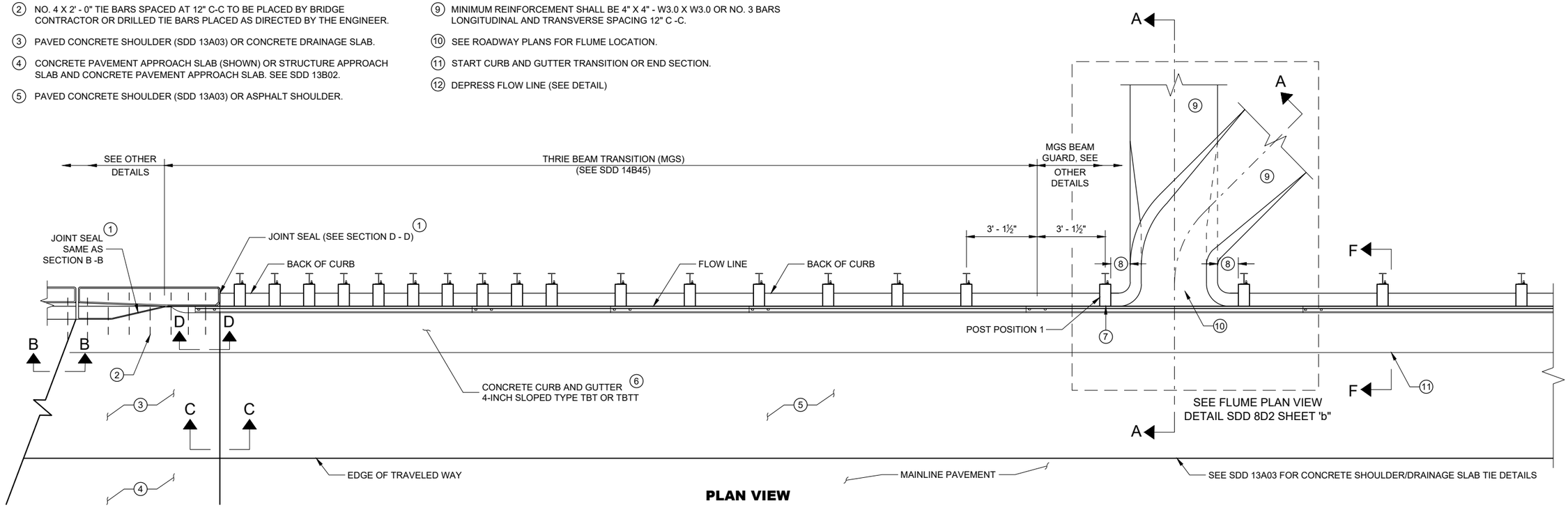
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

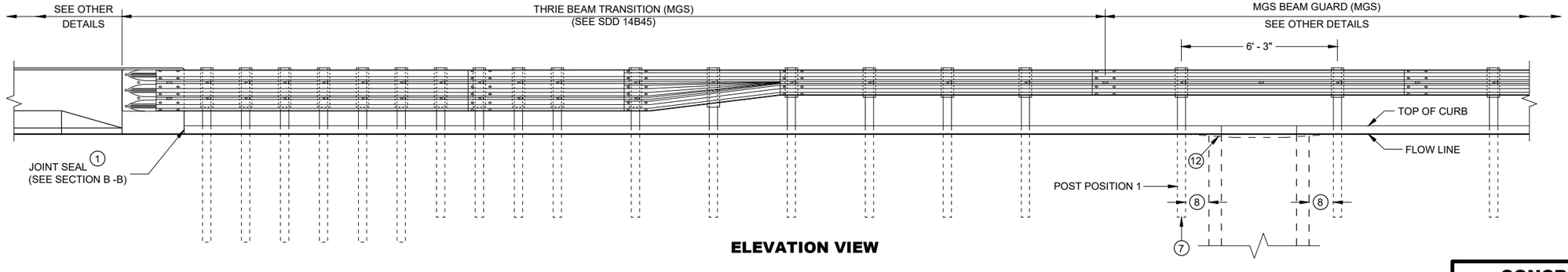
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



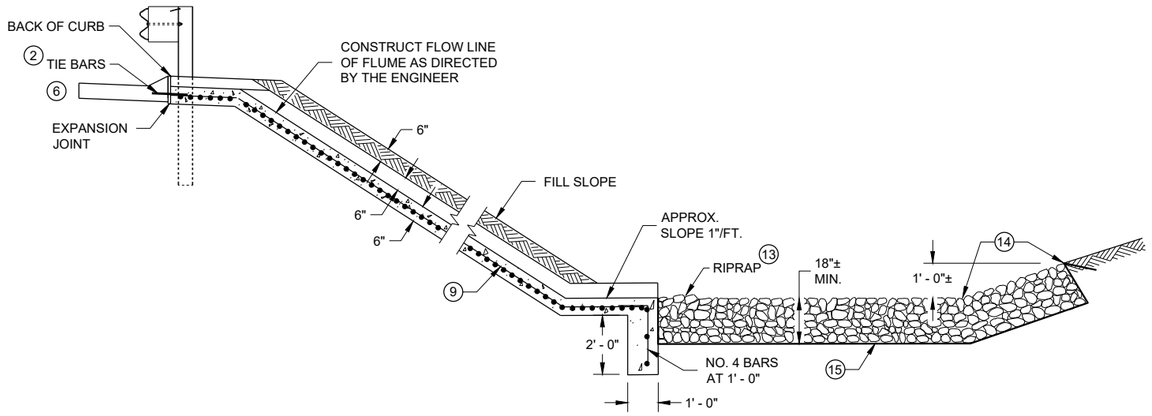
ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

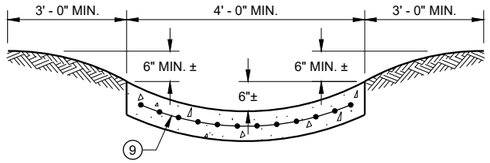
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

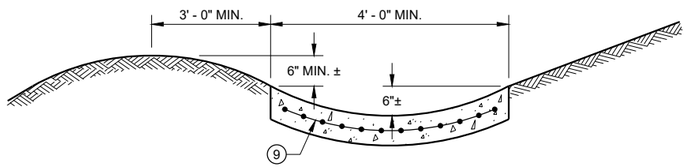
SDD 08D02 - 08a



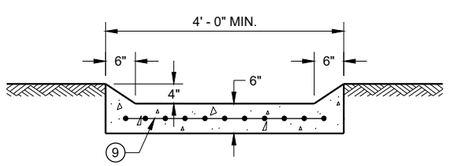
SECTION A - A



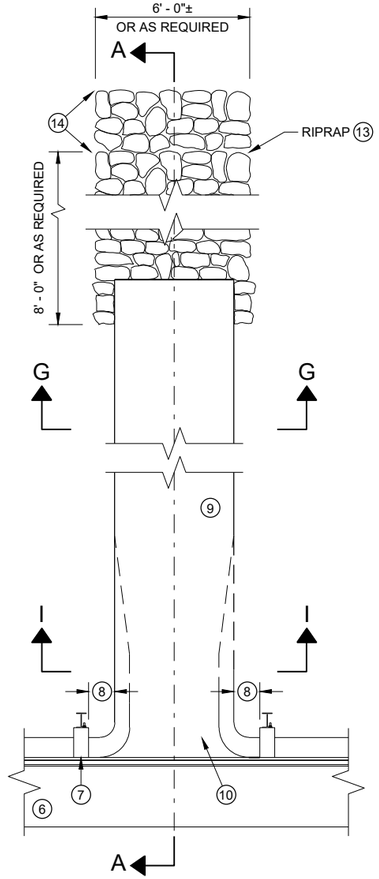
SECTION G - G



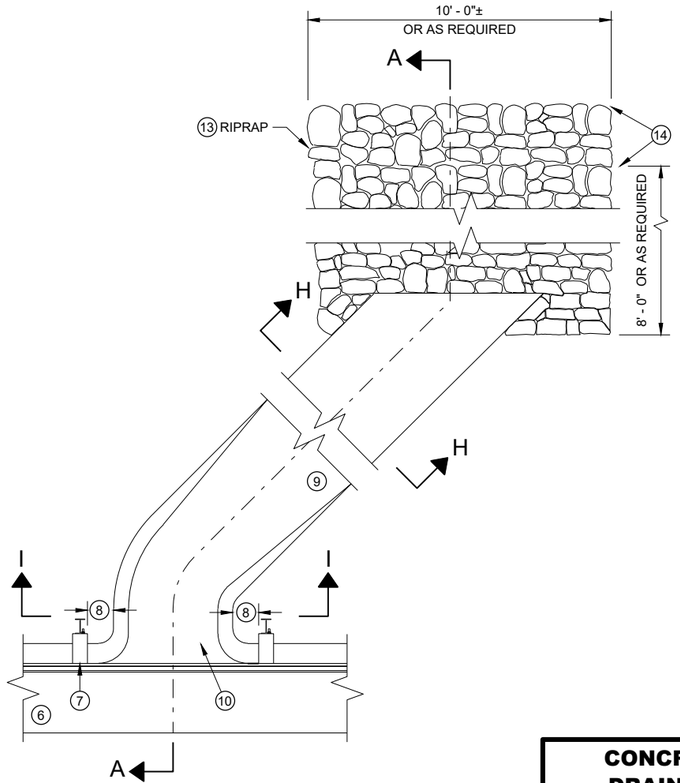
SECTION H - H



SECTION I - I



PLAN VIEW PERPENDICULAR FLUME



PLAN VIEW SKEWED FLUME

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.

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

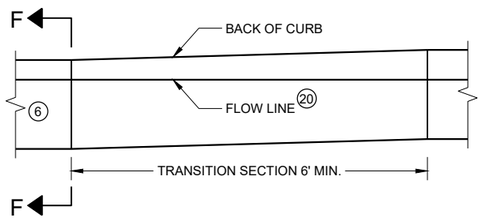
1. USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
2. NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
3. PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.
4. CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.
5. PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.
6. CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.
7. PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)
8. CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.
9. MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.
10. SEE ROADWAY PLANS FOR FLUME LOCATION.
11. START CURB AND GUTTER TRANSITION OR END SECTION.
12. DEPRESS FLOW LINE (SEE DETAIL)
13. MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.
14. LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH AS REQUIRED.
15. GEOTEXTILE TYPE HR.

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

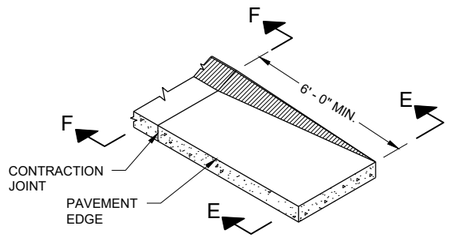
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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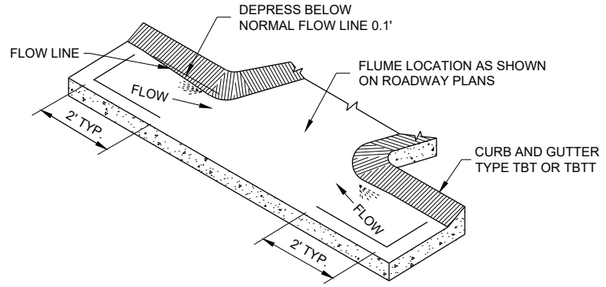
SDD 08D02 - 08b



**CURB AND GUTTER TRANSITION SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT**



**CURB AND GUTTER END SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT**



**CURB AND GUTTER FLOW LINE DEPRESSION
AT FLUMES CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE TBT OR TBTT**

GENERAL NOTES

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(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

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(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)

(13) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(14) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(15) GEOTEXTILE TYPE HR.

(16) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C - C.

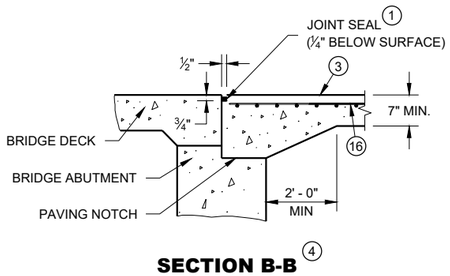
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(18) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

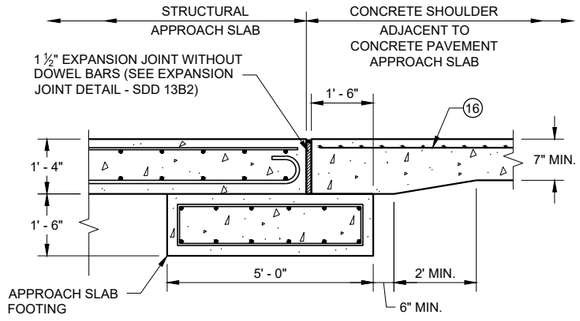
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

(20) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

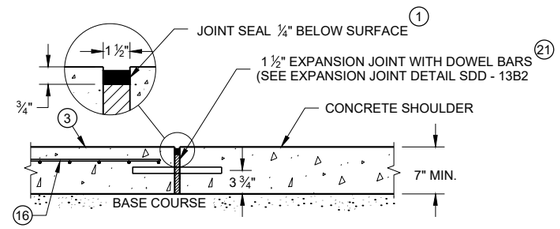
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



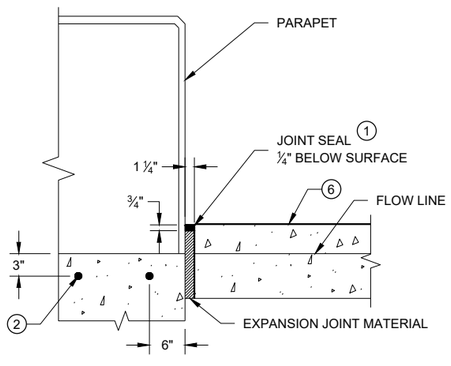
SECTION B-B



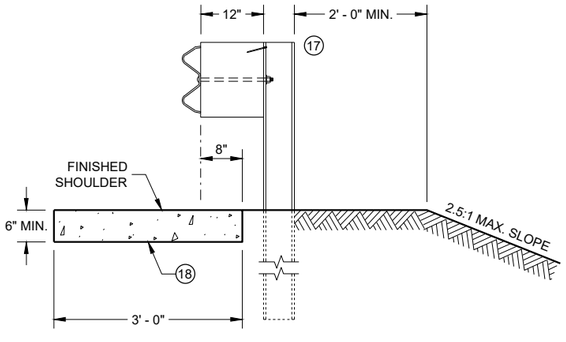
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



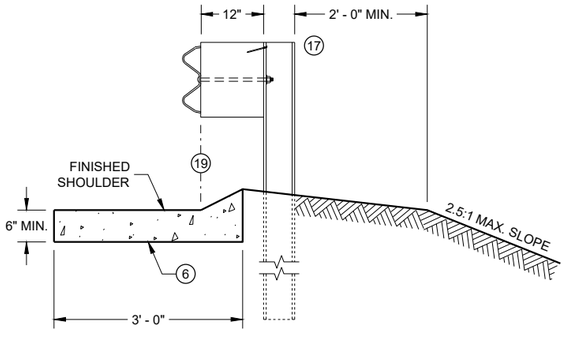
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

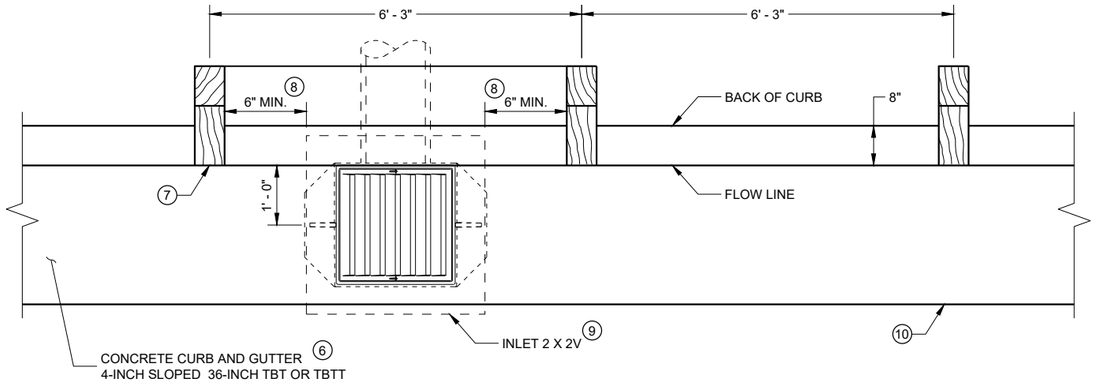
CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

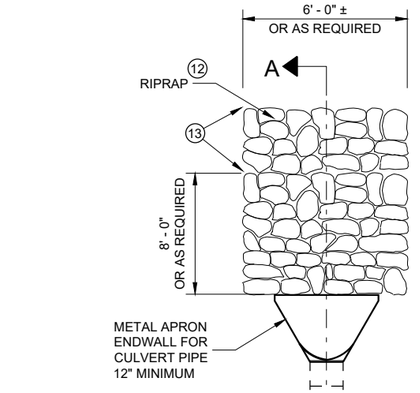
FHWA

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SDD 08D02 - 08c



INLET PLAN VIEW

(NOTE: RAIL NOT SHOWN FOR CLARITY)



GENERAL NOTES

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(7) PLACE DRAINAGE STRUCTURE BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER DRAINAGE STRUCTURE BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE WALL OF DRAINAGE STRUCTURE TO POSTS.

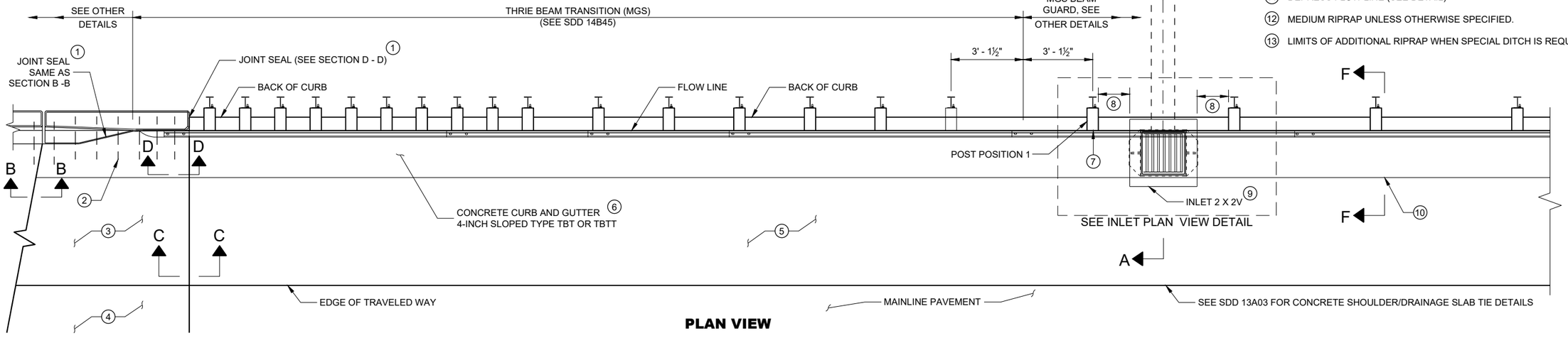
(9) SEE SDD 08A05 AND 08C07 FOR DETAILS. SEE ROADWAY PLANS FOR LOCATION.

(10) START CURB AND GUTTER TRANSITION OR END SECTION.

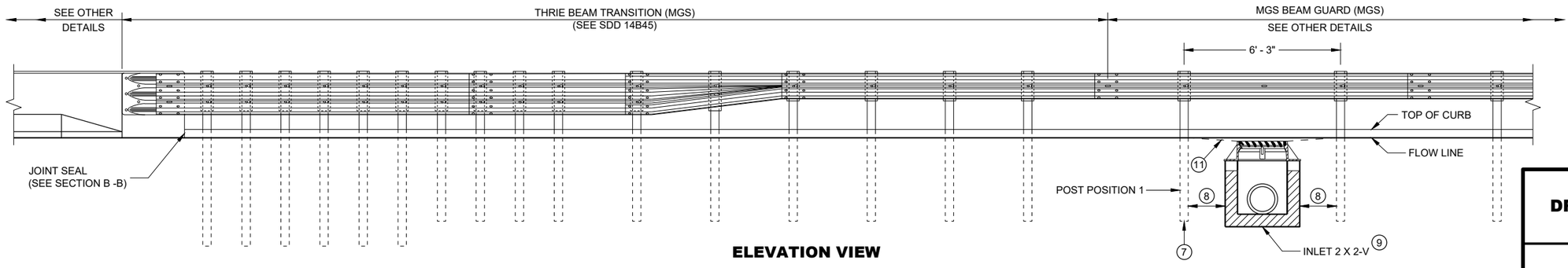
(11) DEPRESS FLOW LINE (SEE DETAIL)

(12) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(13) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.



PLAN VIEW



ELEVATION VIEW

CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

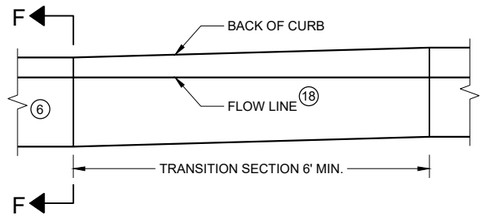
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

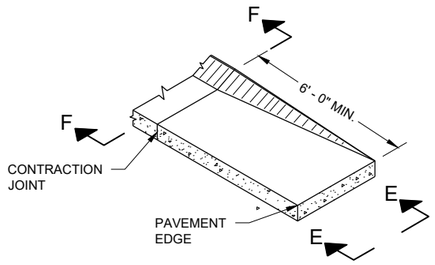
SDD 08D03 - 09a

6

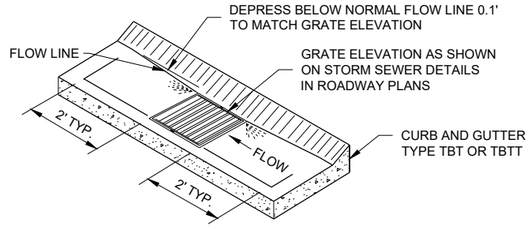
SDD 08D03 - 09a



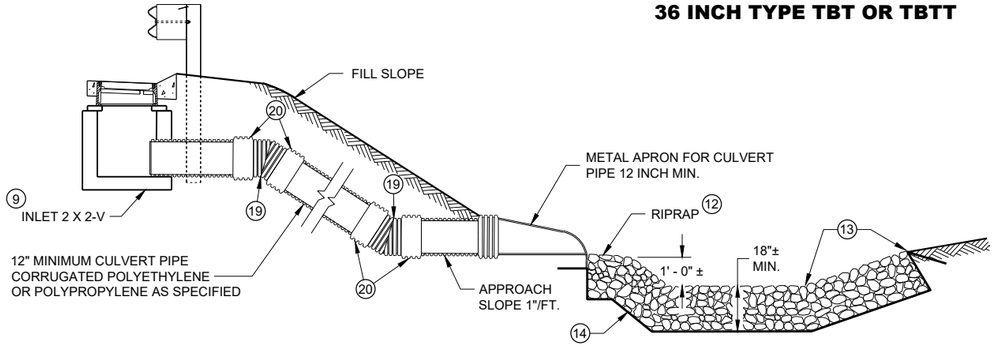
CURB AND GUTTER TRANSITION SECTION CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT



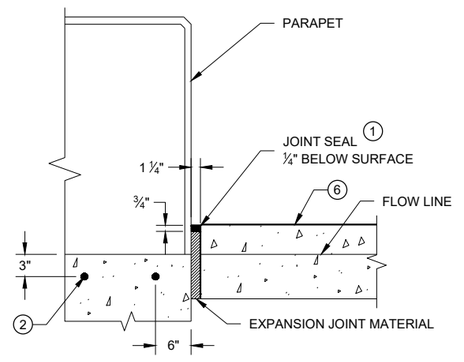
CURB AND GUTTER END SECTION CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT



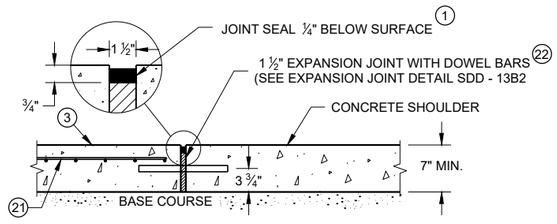
CURB AND GUTTER FLOW LINE DEPRESSION AT INLETS CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT



SECTION A - A

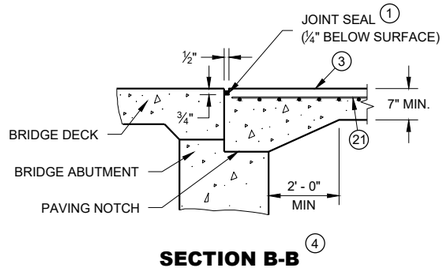


SECTION D - D

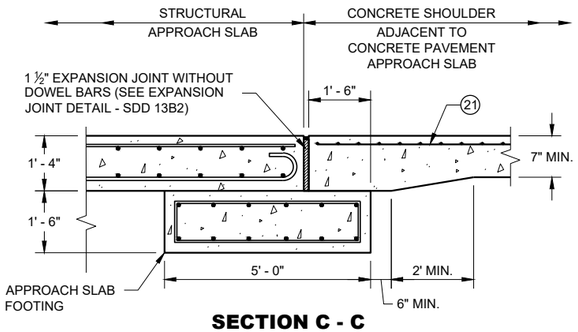


SECTION C - C

JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS

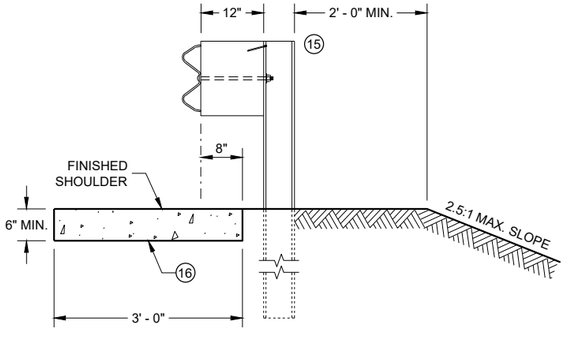


SECTION B-B 4

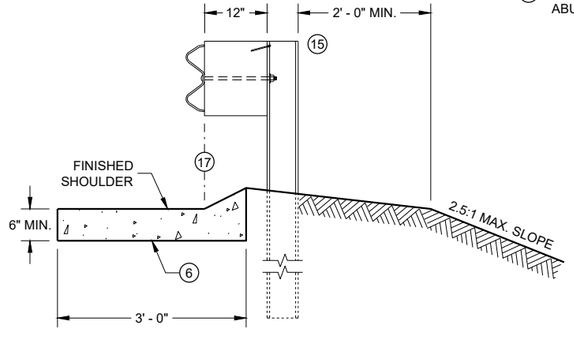


SECTION C - C

JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



SECTION E - E



SECTION F - F

GENERAL NOTES

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(7) PLACE DRAINAGE STRUCTURE BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER DRAINAGE STRUCTURE BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE WALL OF DRAINAGE STRUCTURE TO POSTS.

(9) SEE SDD 08A05 AND 08C07 FOR DETAILS. SEE ROADWAY PLANS FOR LOCATION.

(10) START CURB AND GUTTER TRANSITION OR END SECTION.

(11) DEPRESS FLOW LINE (SEE DETAIL)

(12) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(13) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(14) GEOTEXTILE TYPE HR.

(15) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(16) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

(17) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

(18) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

(19) MANUFACTURER SUPPLIED BEND.

(20) MANUFACTURER SUPPLIED EXTERNAL MECHANICAL COUPLING OR A MANUFACTURER RECOMMENDED COUPLING WITH A MASTIC IMPREGNATED GEOTEXTILE WRAP AND MECHANICAL FASTENING BANDS.

(21) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C - C.

(22) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.

CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

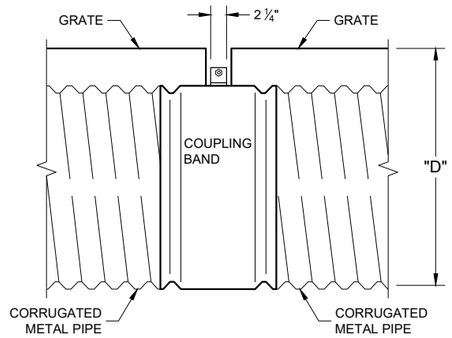
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

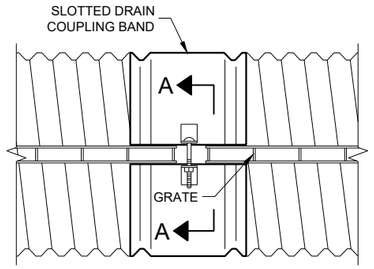
FHWA

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SDD 08D03 - 09b



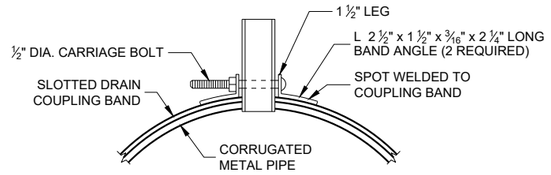
SIDE VIEW



PLAN VIEW

TYPICAL COUPLING BAND FOR SLOTTED DRAIN

(ALTERNATES PERMITTED AS APPROVED BY THE ENGINEER)



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.

THE PIPE FOR THE SLOTTED DRAIN SHALL MEET AASHTO DESIGNATION M-36, AND THE GRATE ASSEMBLIES SHALL BE MADE FROM STRUCTURAL STEEL SUITABLY WELDED TO FORM THE OPEN SLOT AND HOT-DIP GALVANIZED TO MEET THE PROVISIONS OF AASHTO DESIGNATION M-111.

NORMAL PIPE SIZES ARE 12-INCH THROUGH 24-INCH DIAMETER IN 0.064 INCH THICKNESS, AND 30-INCH DIAMETER PIPE IN 0.079 INCH THICKNESS.

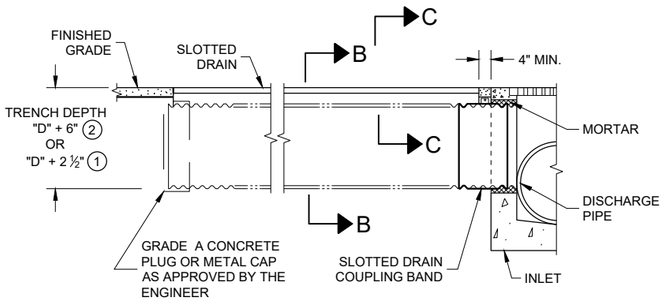
(1) 2 ½" NORMAL GRATE DEPTH

(2) 6" SPECIAL GRATE DEPTH, WHEN SPECIFIED ON THE PLANS.

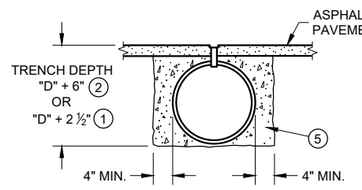
(3) FOR SCREEDING DIRECTLY OVER THE SLOTTED DRAIN WITH ASPHALT PAVER. FOR CONCRETE SURFACE USE 3" WIDE TAPE OVER THE SLOT TO KEEP MATERIAL OUT OF THE PIPE.

(4) WHEN THE SURFACE IS CONCRETE PAVEMENT THE GRADE AS SHOWN ON THE PLANS WILL BE FLUSH WITH THE TOP OF THE SLOTTED DRAIN.

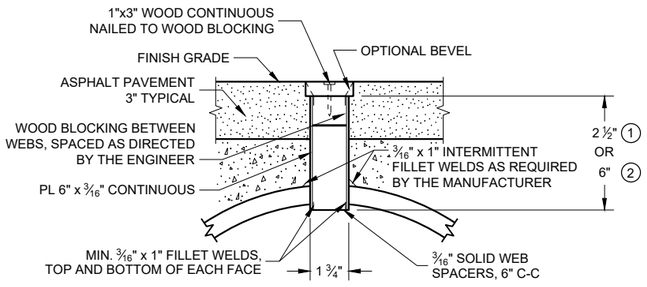
(5) ENCASE CORRUGATED METAL PIPE SURFACE DRAIN IN GRADE "A" CONCRETE CONFORMING TO STANDARD SPECIFICATION 501 AS MODIFIED IN STANDARD SPECIFICATION 716. PROVIDE QMP FOR CLASS III ANCILLARY CONCRETE PER STANDARD SPECIFICATION 716. UTILIZING HIGH EARLY STRENGTH (HES) CONCRETE CONFORMING TO STANDARD SPECIFICATION 710.4(5) IS ALLOWED AND MAY BE REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER.



SLOTTED DRAIN INSTALLATION TYPE "A"

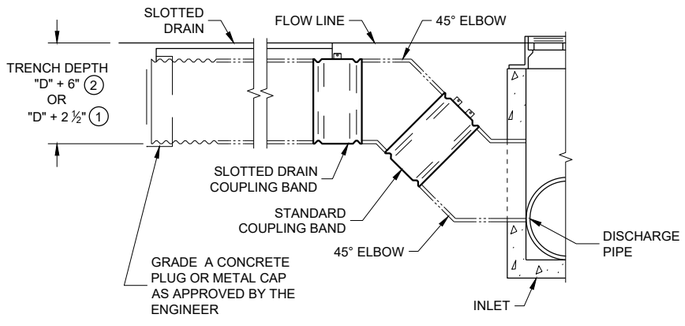


SECTION B - B

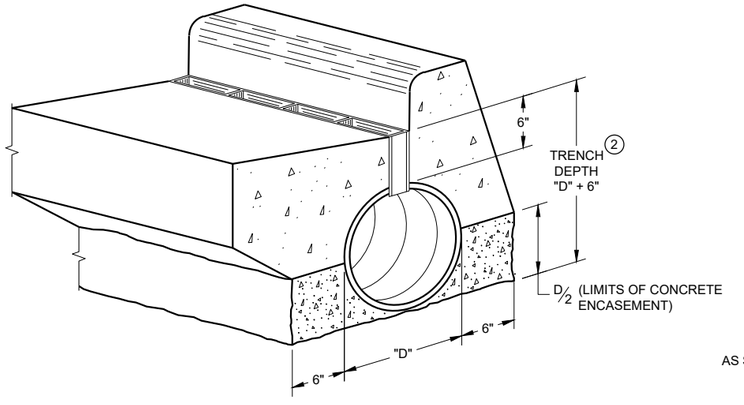


SECTION C - C
GRATE SLOT DETAIL

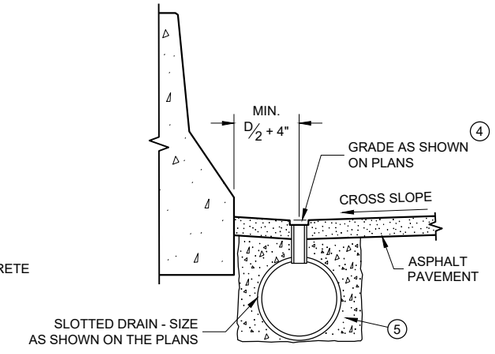
NOTE:
TO PREVENT "FLOATING" OF THE SLOTTED DRAIN DURING BACKFILL OPERATIONS, PROVIDE ADEQUATE WEDGES OR POUR THE LEAN GROUT ON TOP OF THE PLUGGED SLOT ALLOWING IT TO SLOUGH TO THE SIDES OF THE PIPE. THIS WILL PROVIDE ENOUGH WEIGHT ON TOP TO KEEP THE PIPE FROM FLOATING



SLOTTED DRAIN INSTALLATION TYPE "B"



SLOTTED DRAIN INSTALLATION IN FLOW LINE OF CURB AND GUTTER TYPE "C"



SLOTTED DRAIN INSTALLATION AT MEDIAN BARRIER TYPE "D"

SLOTTED CORRUGATED METAL PIPE SURFACE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

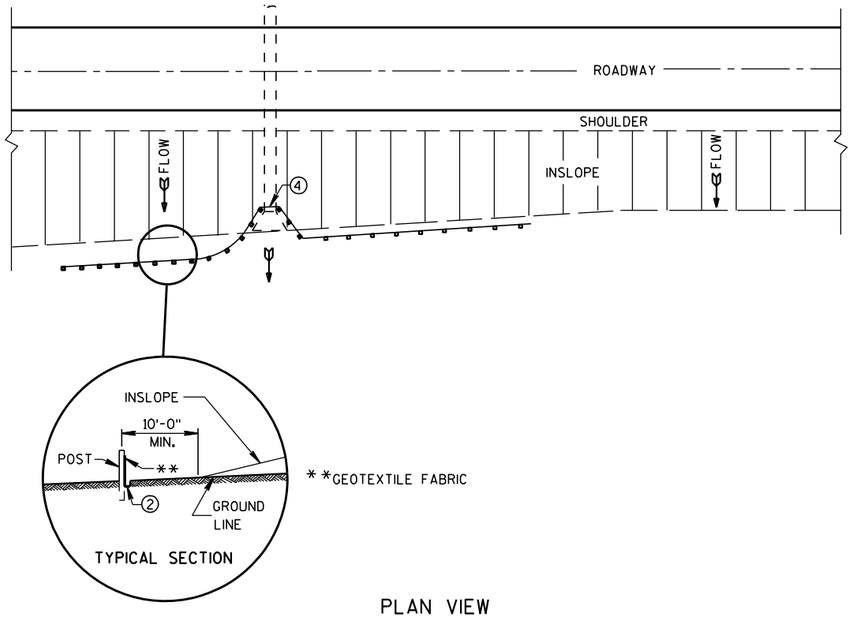
APPROVED
May 2022
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

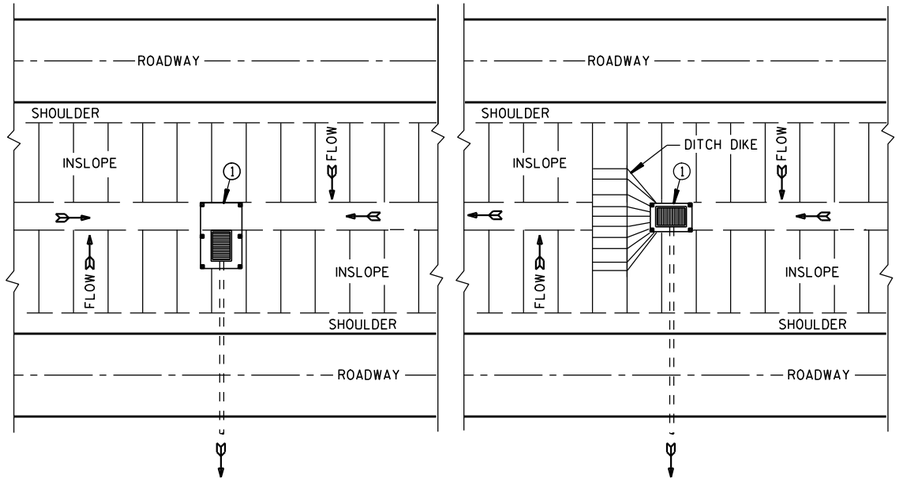
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SDD 08D13 - 02



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



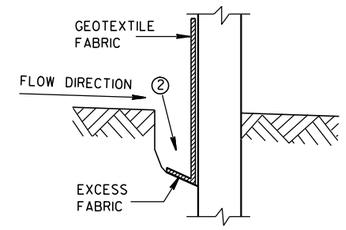
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

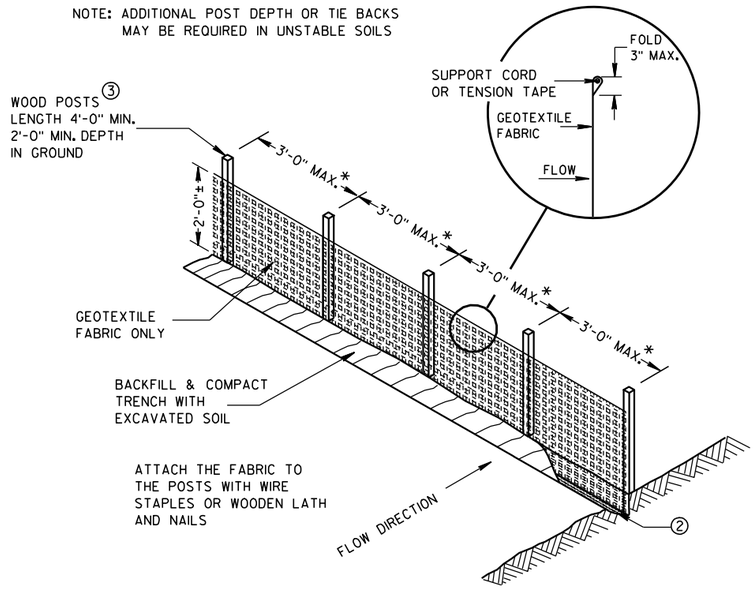
GENERAL NOTES

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

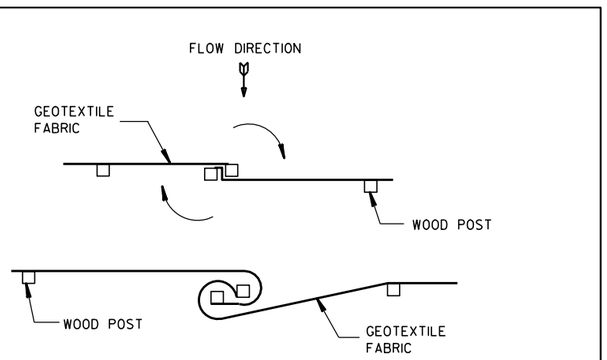
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



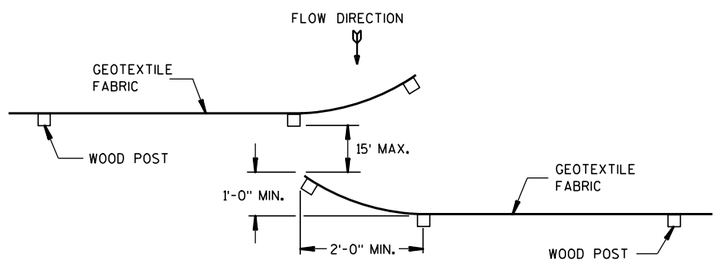
TRENCH DETAIL



SILT FENCE

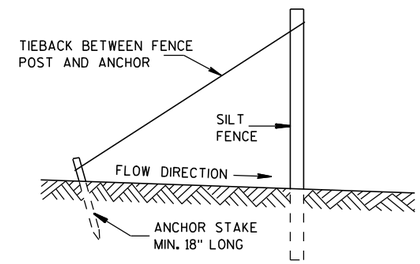


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 8 E 9-6

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S.D.D. 8 E 9-6

METAL APRON ENDWALLS

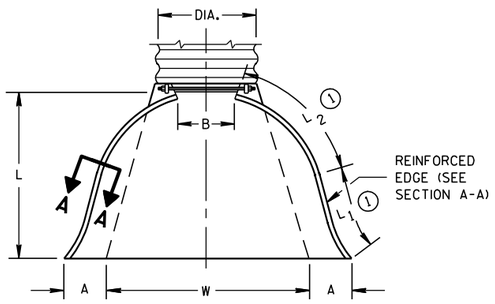
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

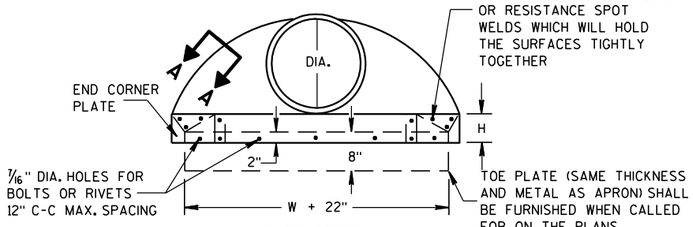
REINFORCED CONCRETE APRON ENDWALLS

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

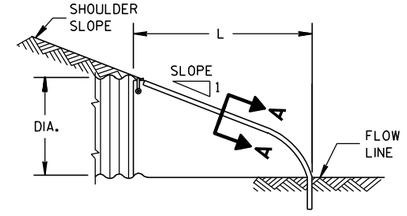
*MINIMUM
**MAXIMUM



PLAN VIEW

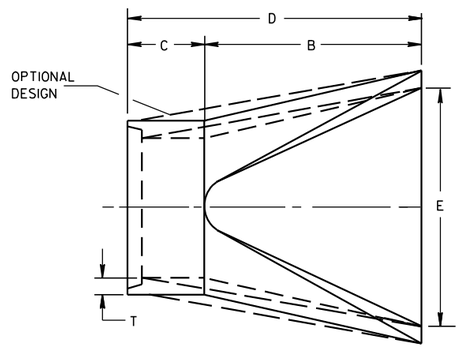


END VIEW

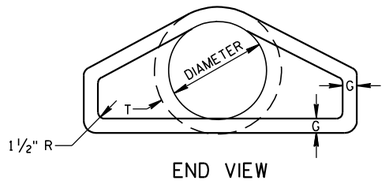


SIDE ELEVATION

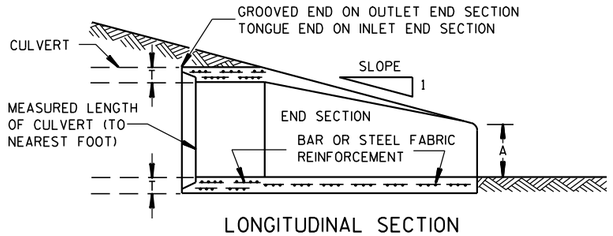
METAL ENDWALLS



PLAN

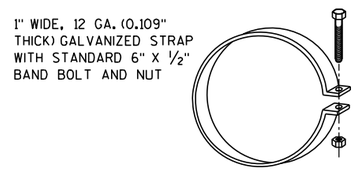


END VIEW



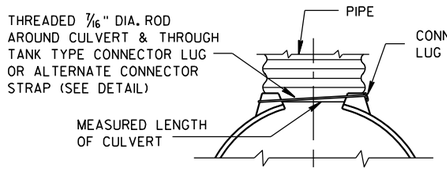
LONGITUDINAL SECTION

CONCRETE ENDWALLS

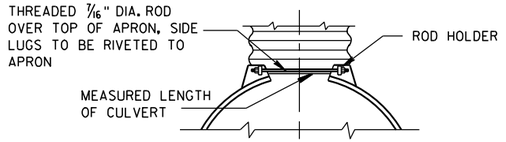


ALTERNATE FOR TYPE 1 CONNECTION

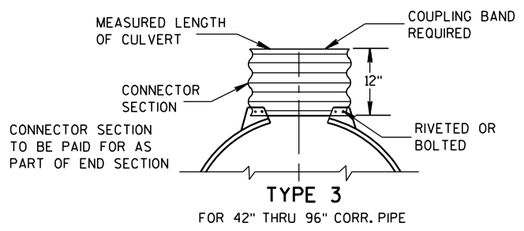
END SECTION CONNECTOR STRAP



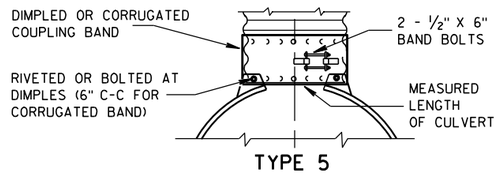
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

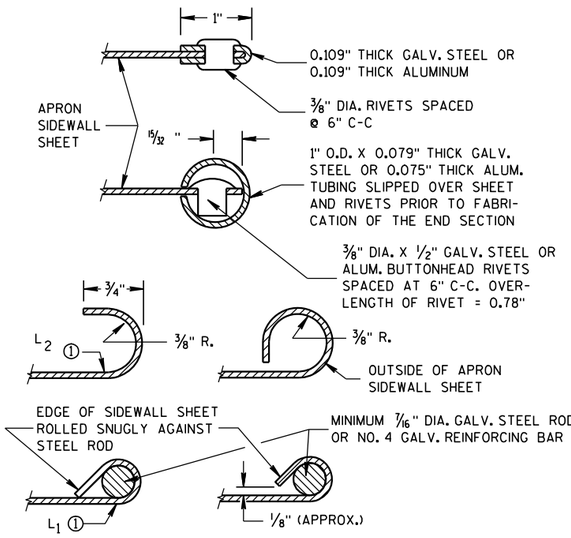
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

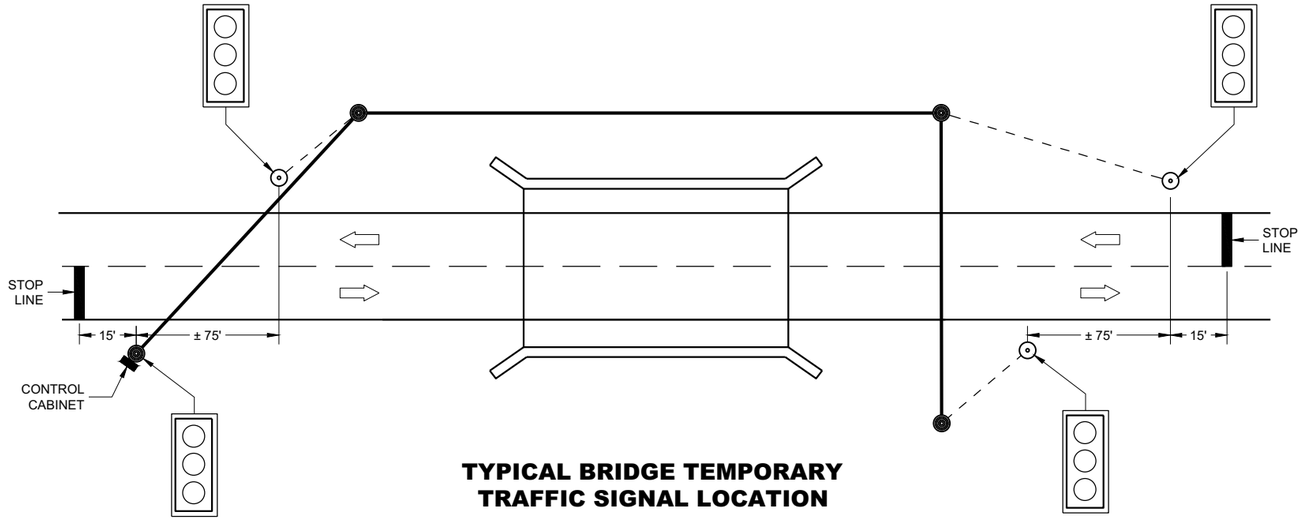
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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



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.).

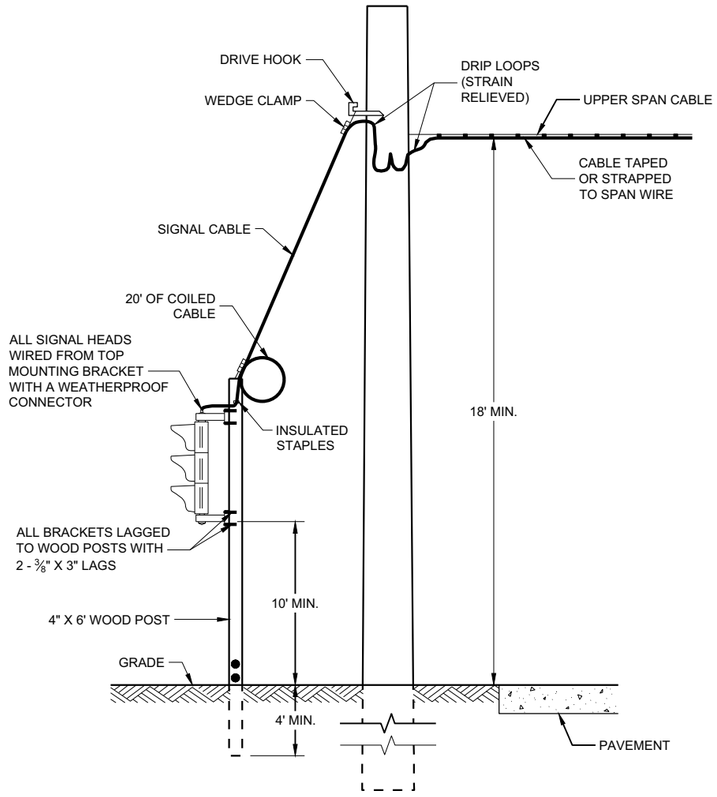
WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

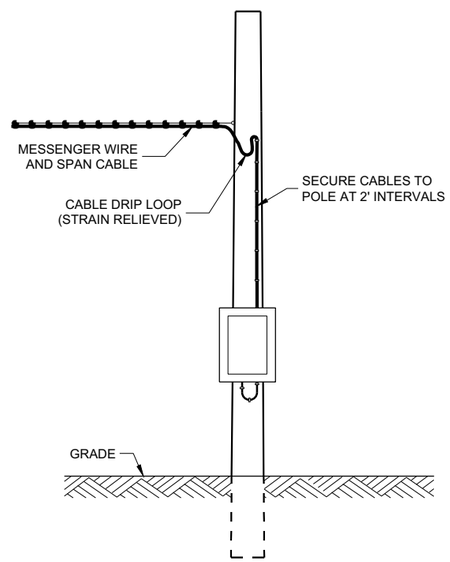
TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

EACH TRAFFIC SIGNAL SHALL HAVE A BACKPLATE.

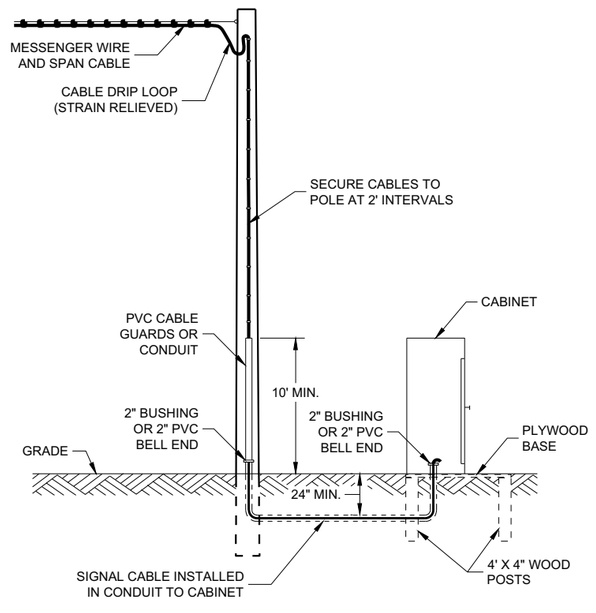
SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



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

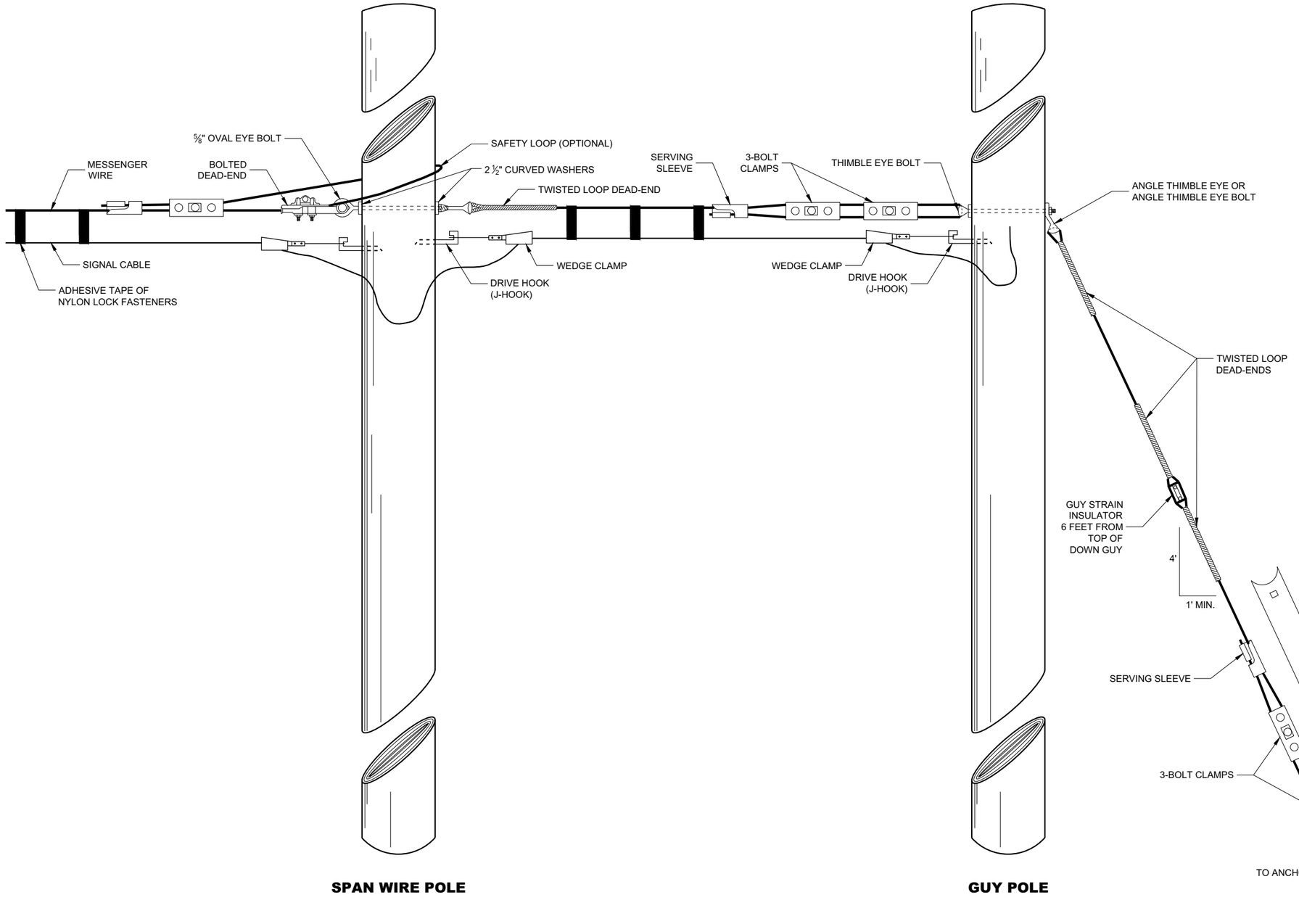
FHWA

6

SDD09G02 - 05a
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

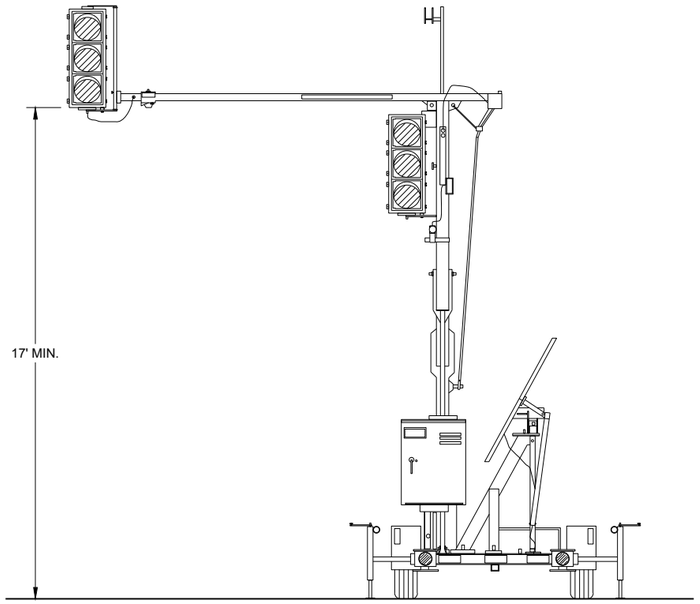
FHWA

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SDD09G02 - 05b

6

SDD09G02 - 05b

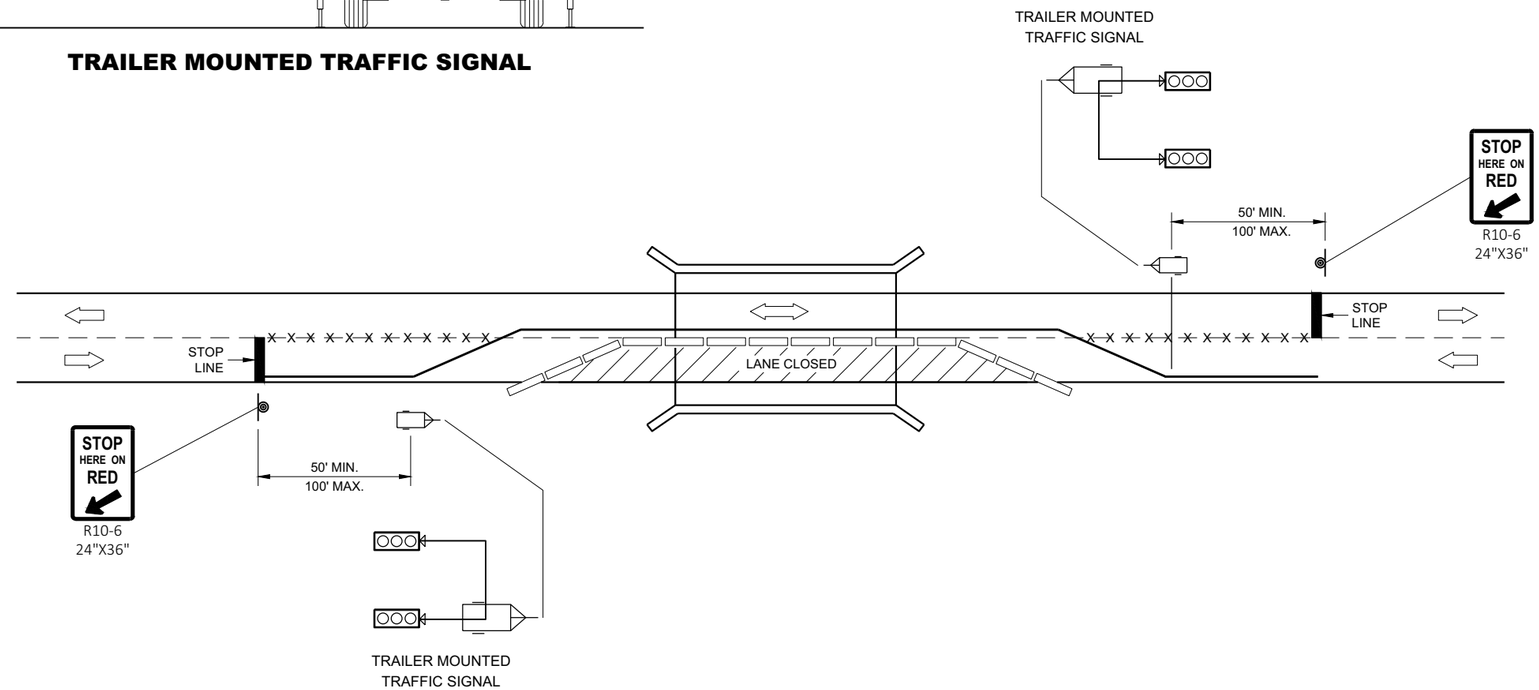


TRAILER MOUNTED TRAFFIC SIGNAL

GENERAL NOTES

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

SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

LEGEND

- POST MOUNTED SIGN
- TEMPORARY PRECAST CONCRETE BARRIER
- TRAILER MOUNTED TRAFFIC SIGNAL
- REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

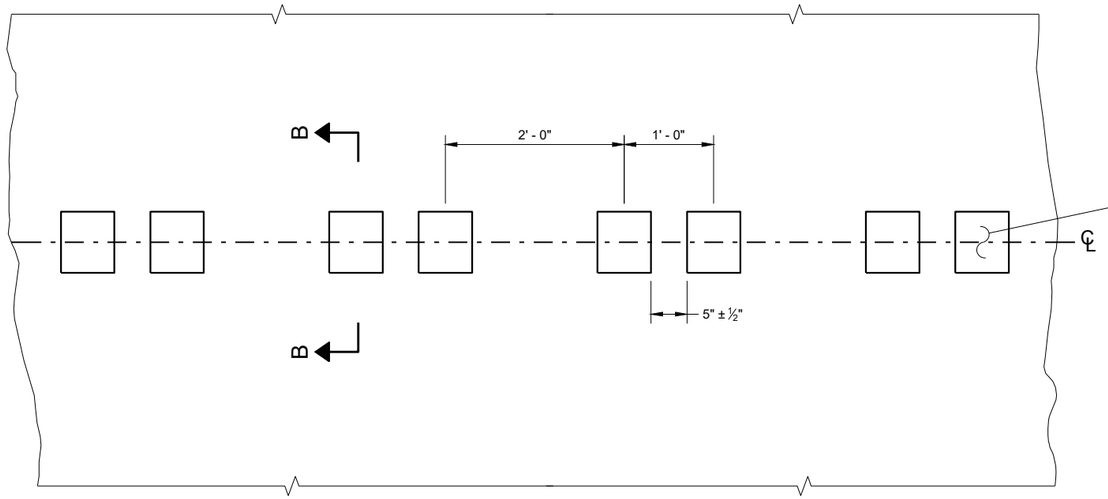
SDD09G02 - 05c

SDD09G02 - 05c

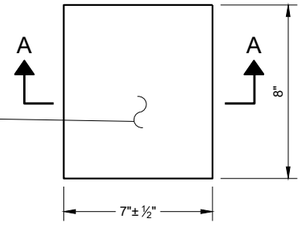
GENERAL NOTES

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

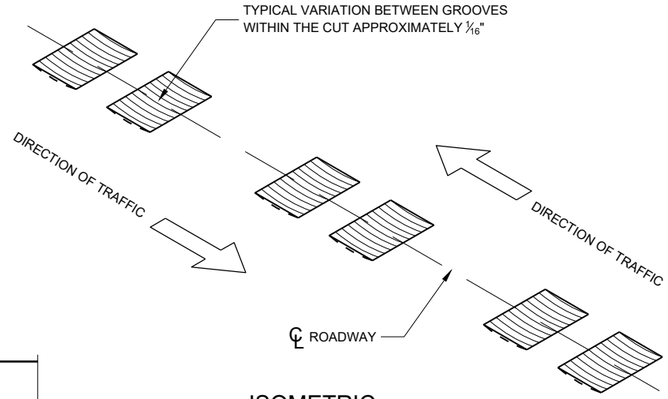
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



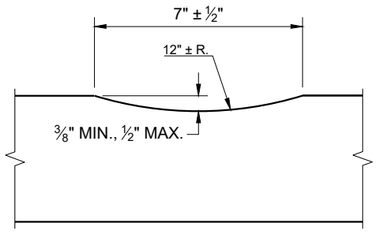
PLAN DETAIL VIEW



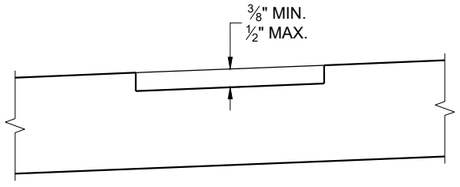
PLAN VIEW
(SINGLE GROOVE)



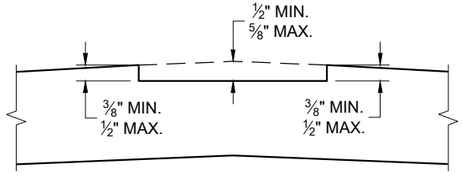
ISOMETRIC



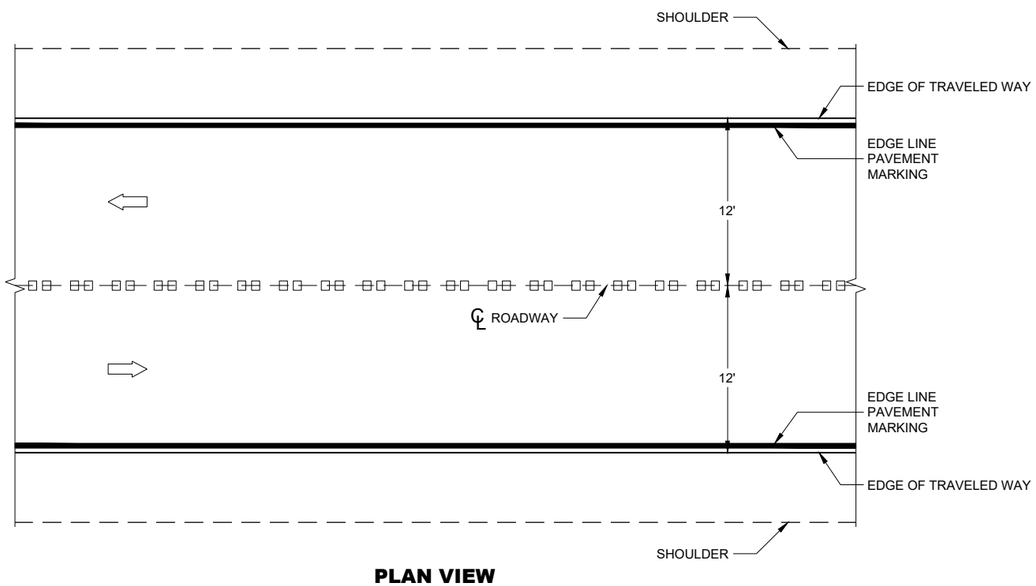
SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



PLAN VIEW

CENTERLINE RUMBLE STRIPS - ASPHALT

6

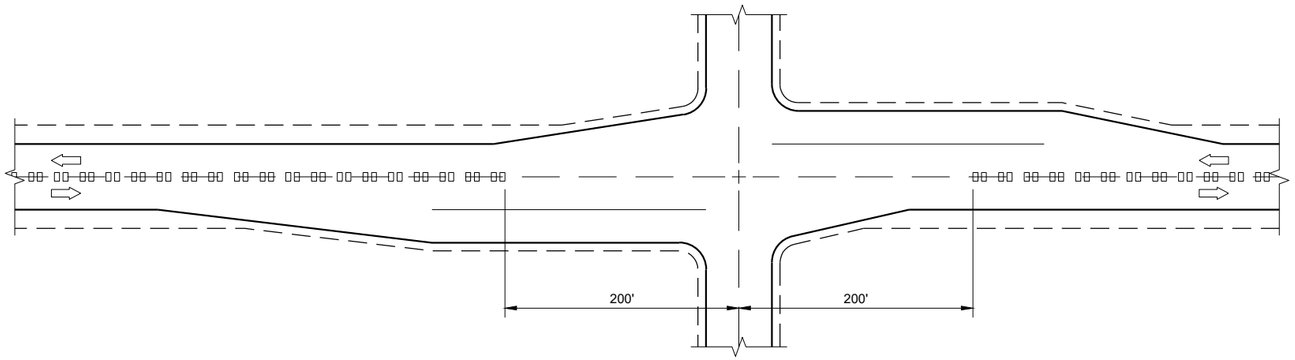
SDD 13A11 - 04a

CENTERLINE RUMBLE STRIPS - ASPHALT

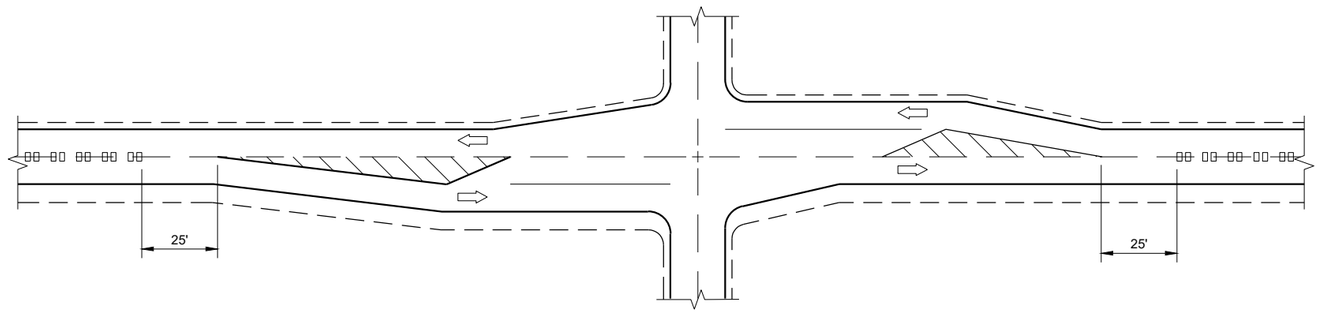
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

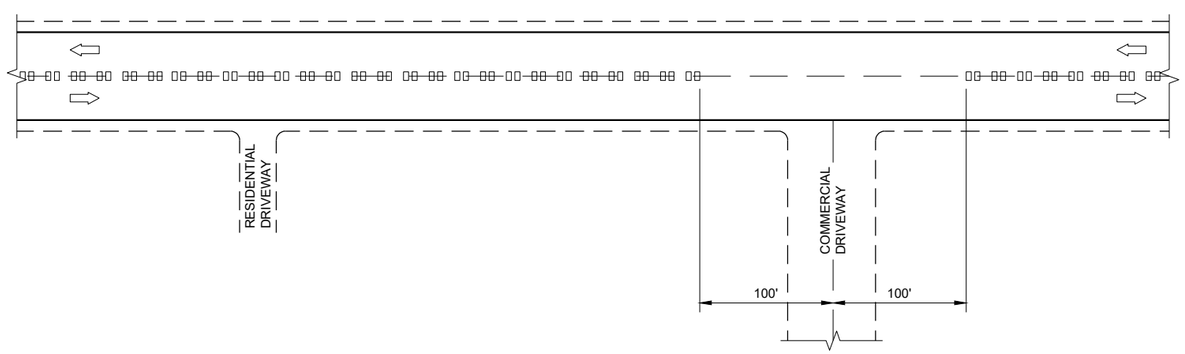
SDD 13A11 - 04a



CENTERLINE GROOVES AT INTERSECTIONS



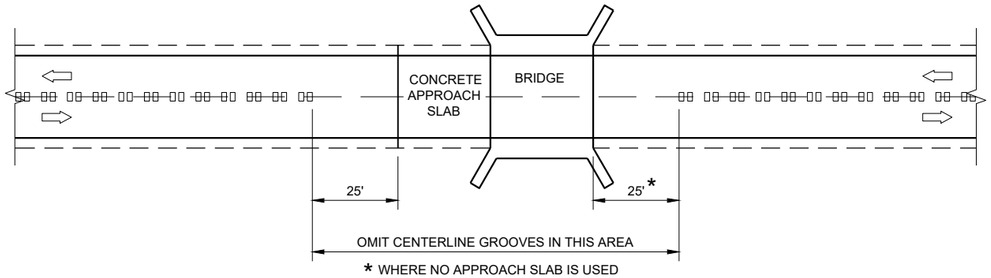
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



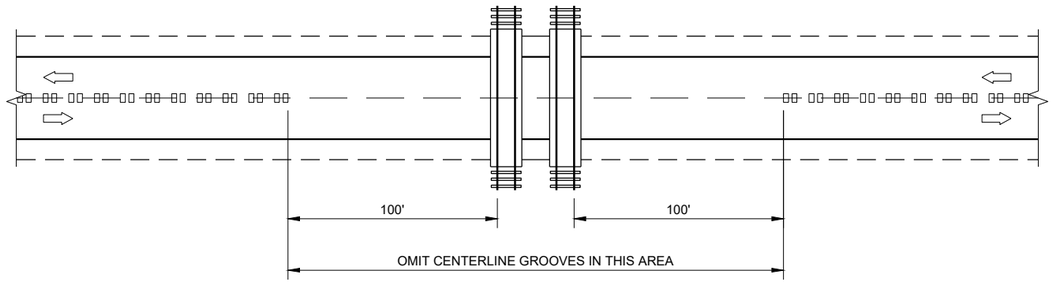
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

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

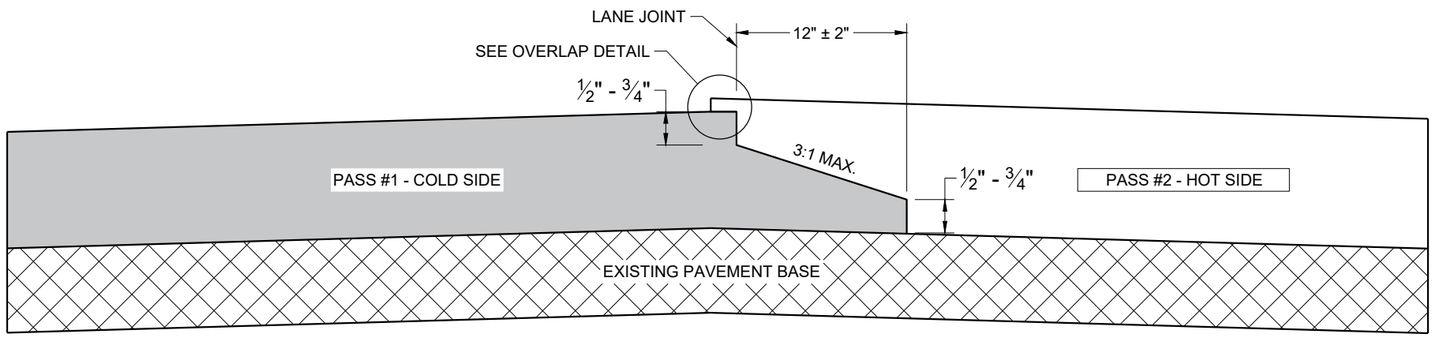
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

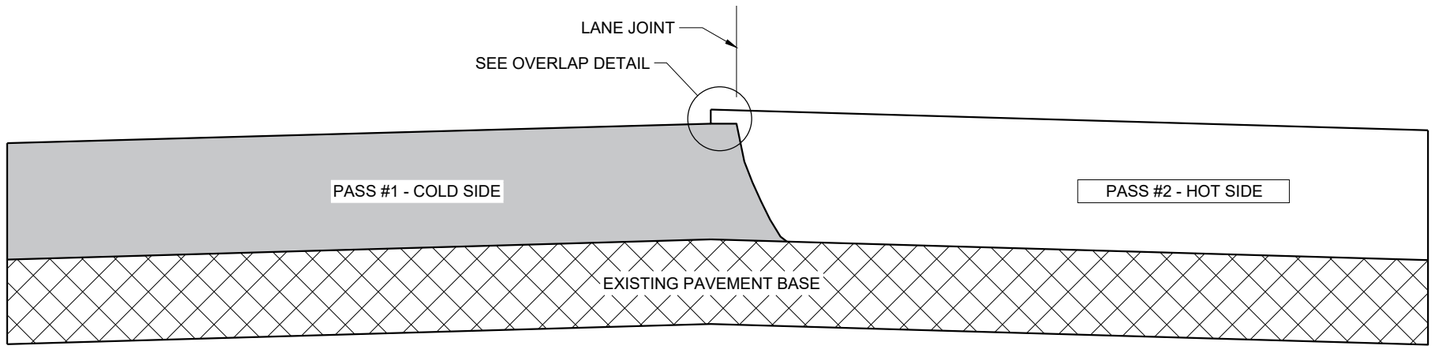
FHWA

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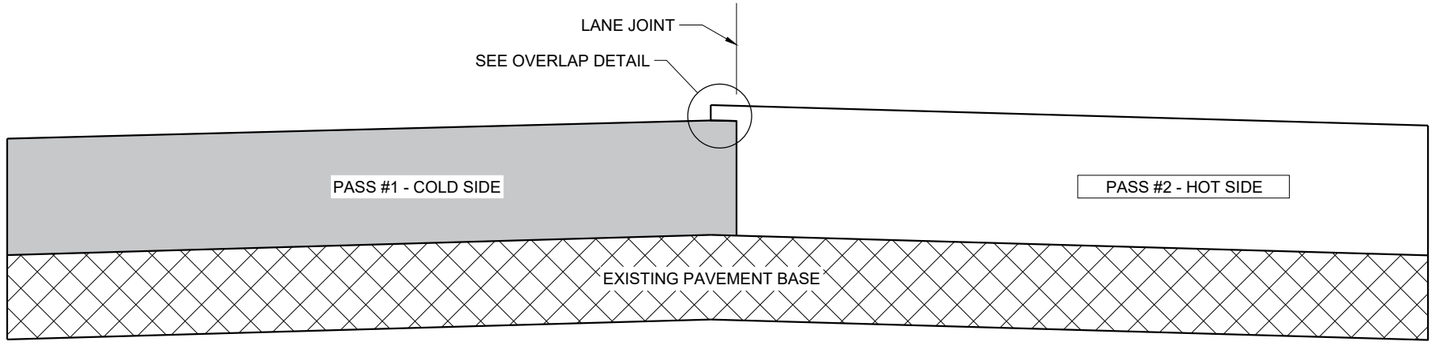
SDD 13A11 - 04d



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

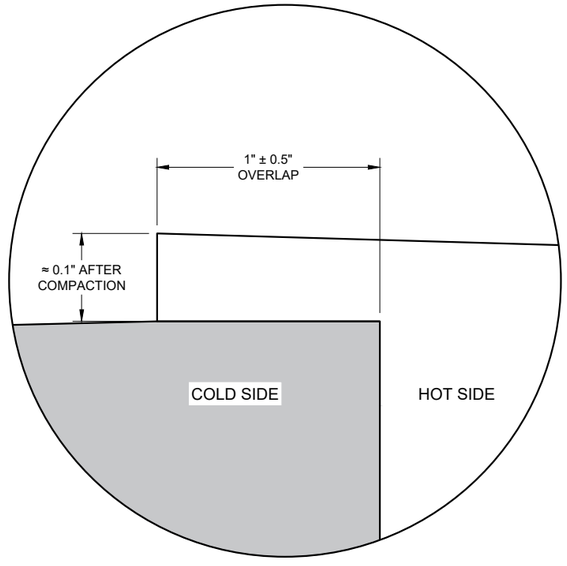
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



OVERLAP DETAIL (TYPICAL)

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

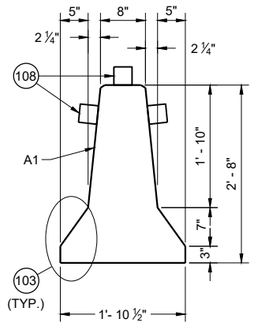
APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

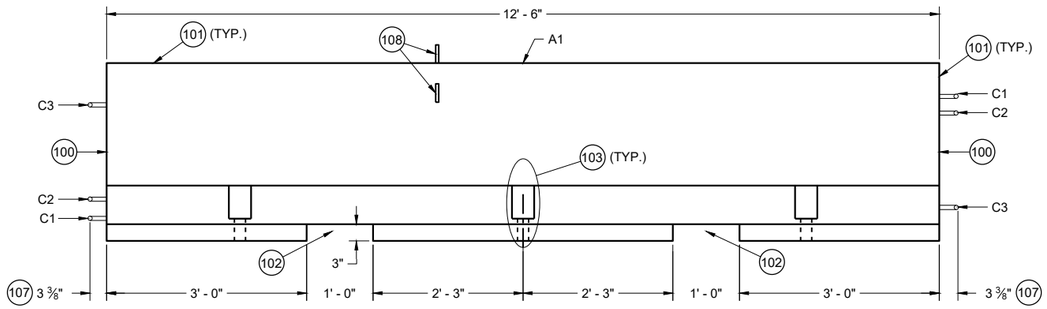
FHWA

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SDD 13C19 - 03



CROSS SECTION



PROFILE VIEW

GENERAL NOTES

PLACE BARRIER ON PAVED SURFACE. BEFORE PLACEMENT OF TEMPORARY BARRIER, REMOVE ALL LOOSE MATERIAL FROM PAVED SURFACE.

LOOP BARS C1, C2 AND C3 ARE NOT FOR PLACEMENT OR MOVEMENT OF BARRIER.

(100) PERMANENTLY FORM INTO ONE END OF BARRIER THE FOLLOWING INFORMATION:
- A. TYPE OF BARRIER: WI-CBTP
- B. MANUFACTURER
- C. DATE OF MANUFACTURE (MONTH AND YEAR)

(101) 1" OPTIONAL CHAMFER

(102) SEE LIFTING SLOT DETAIL

(103) SEE ANCHOR BLOCK DETAIL

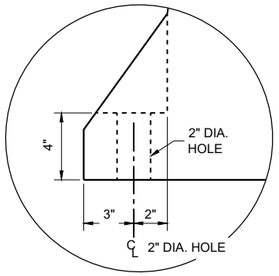
(104) 1 ¾" MIN. CLEAR COVER

(105) 2" MIN. CLEAR COVER

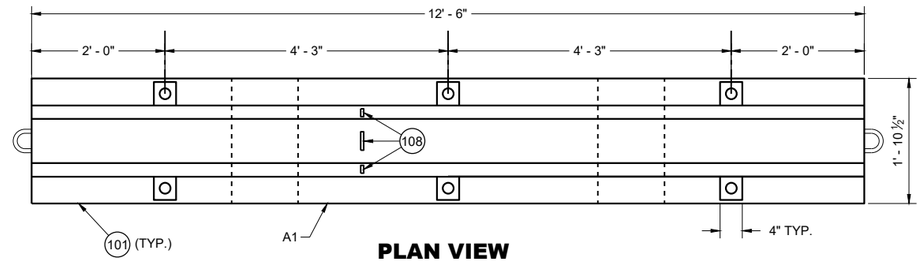
(106) 1" MIN. CLEAR COVER

(107) ± ⅛" MEASURED FROM FACE OF CONCRETE BARRIER TO OUTSIDE OF LOOP BAR (TYP.)

(108) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURERS INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED LEFT OF TRAFFIC AND WHITE WHEN BARRIER IS LOCATED RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART, PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO SIDE MOUNTED DELINEATORS ON BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAT 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

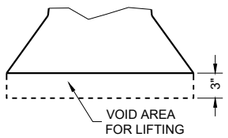


ANCHOR BLOCK DETAIL

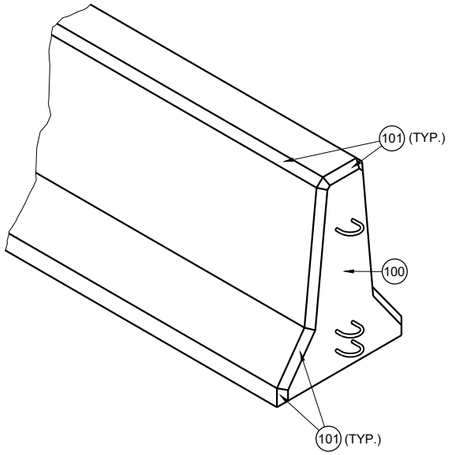


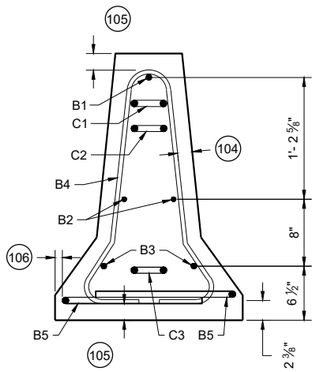
PLAN VIEW

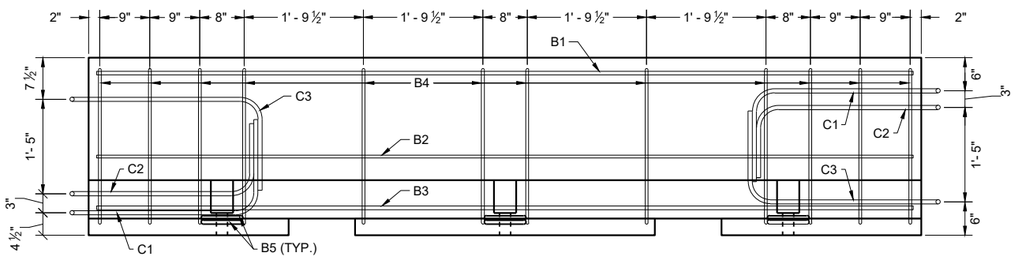
TEMPORARY BARRIER



LIFTING SLOT DETAIL (TYP.)





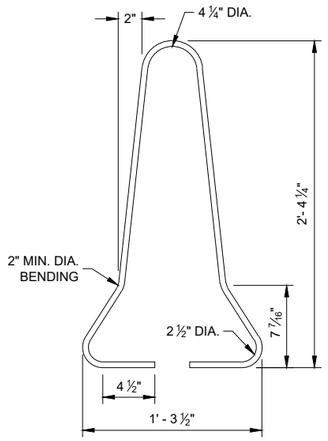


PROFILE VIEW

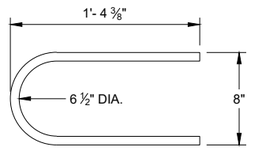
TEMPORARY BARRIER REINFORCEMENT

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

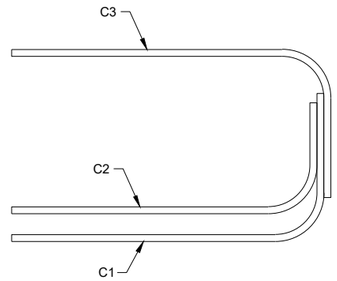
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



B4 BAR DETAIL

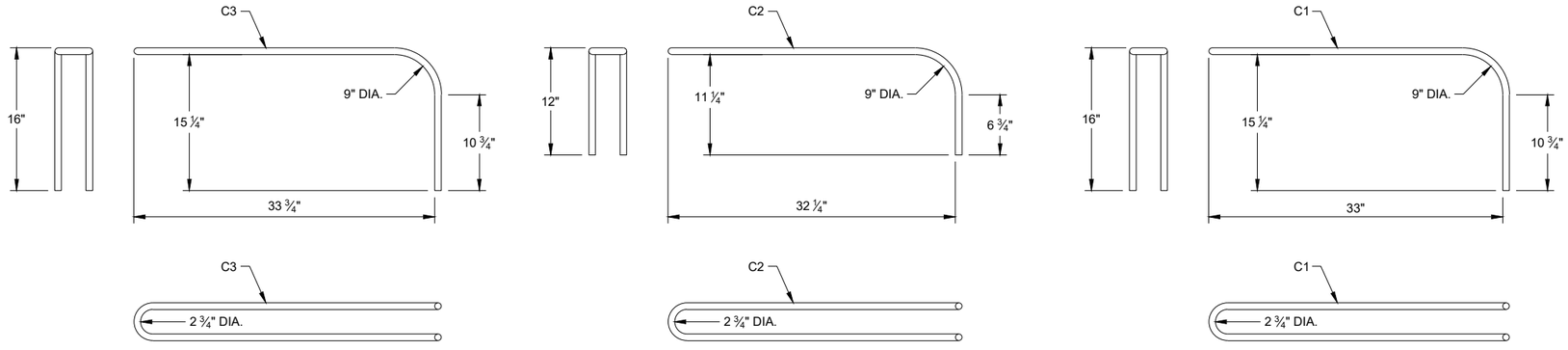


B5 BAR DETAIL



PROFILE VIEW

LOOP BAR ASSEMBLY

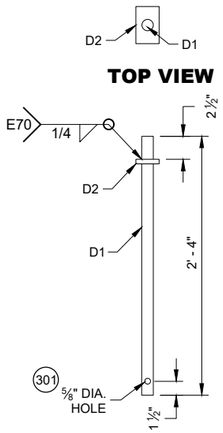


C BAR DETAILS

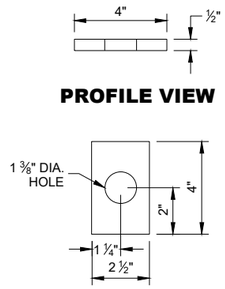
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B07-16b

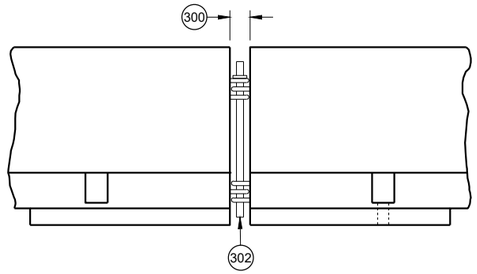


PROFILE VIEW



TOP VIEW
D2

CONNECTOR PIN ASSEMBLY



CONNECTING TEMPORARY BARRIER SECTIONS

GENERAL NOTES

300 SET WITH 3 ⅝" WOOD BLOCK.

301 HOLE IS OPTIONAL.

302 CONNECTOR PIN ASSEMBLY.

303 CONCRETE PAVEMENT, APPROACH SLAB, OR DECK.

304 CONCRETE DECK.

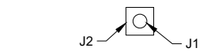
305 DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY OR CONCRETE PAVEMENT WITH ASPHALT OVERLAY.

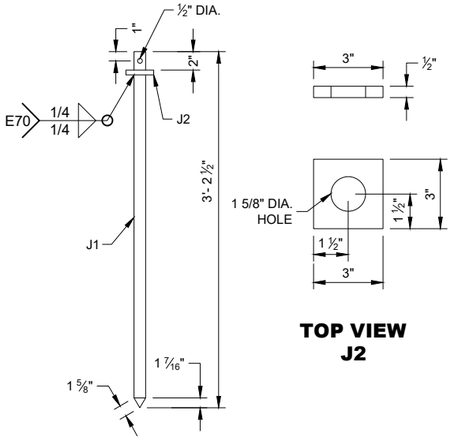
306 MINIMUM OF 2" OF ASPHALT.

307 ASPHALT ANCHOR PIN ASSEMBLY

308 IF DRILLING A PILOT HOLE, THE MAX, DIA. OF THE HOLE IS 3/4"

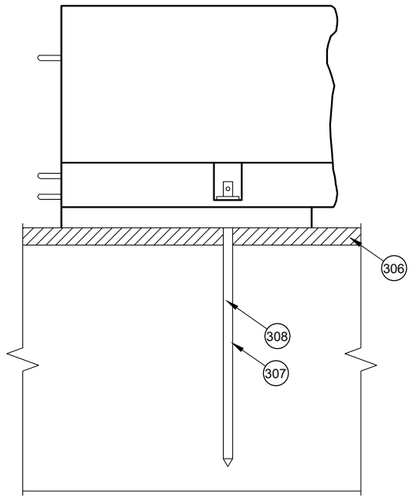
309 WHEN THERE IS ASPHALT OVERLAYING CONCRETE PAVEMENT, A 1 5/8" DIA. PILOT HOLE CAN BE DRILLED INTO THE OVERLAY AND CONCRETE. IF NEEDED DRILL A 3/4" PILOT HOLE IN BASE COURSE.





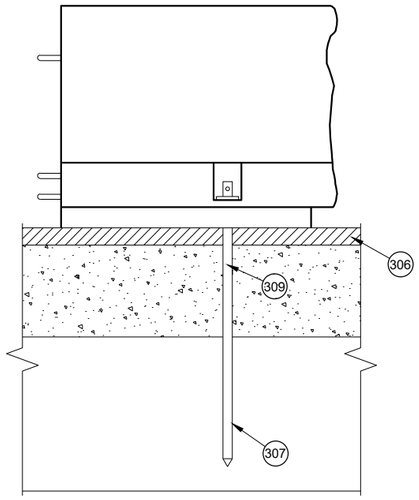
PROFILE VIEW

ASPHALT ANCHOR PIN ASSEMBLY



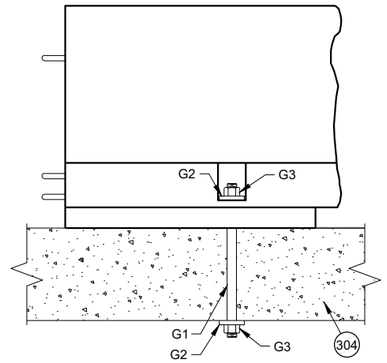
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT PAVEMENT



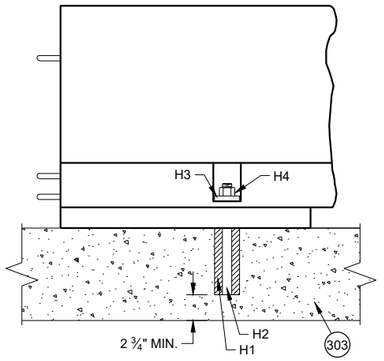
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT OVERLAY ON TOP OF CONCRETE PAVEMENT



SIDE VIEW

THROUGH BOLT ANCHOR INSTALLATION (305)



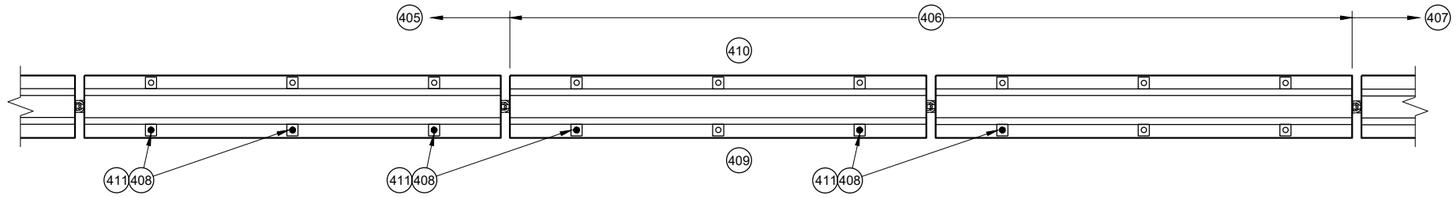
SIDE VIEW

ADHESIVE ANCHOR INSTALLATION (305)

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

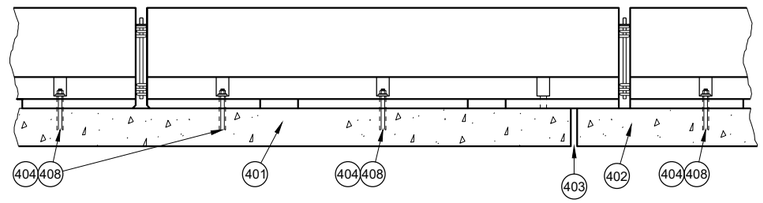
6

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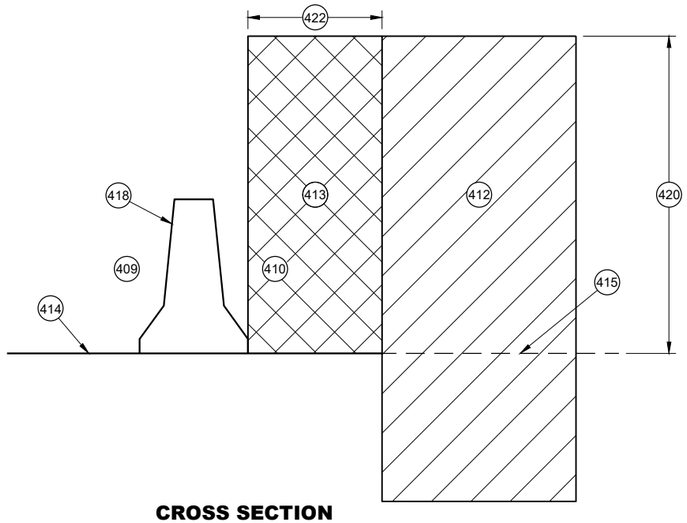
PLAN VIEW

TRANSITION FROM FREE STANDING TO ANCHORED BARRIER



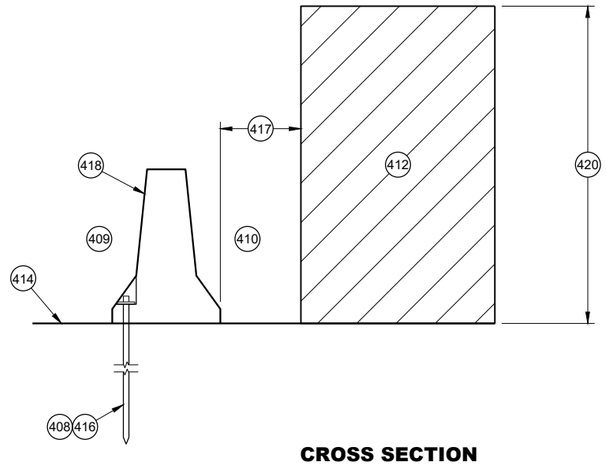
PROFILE VIEW

ANCHORED BARRIER NEAR EXPANSION JOINT (400)



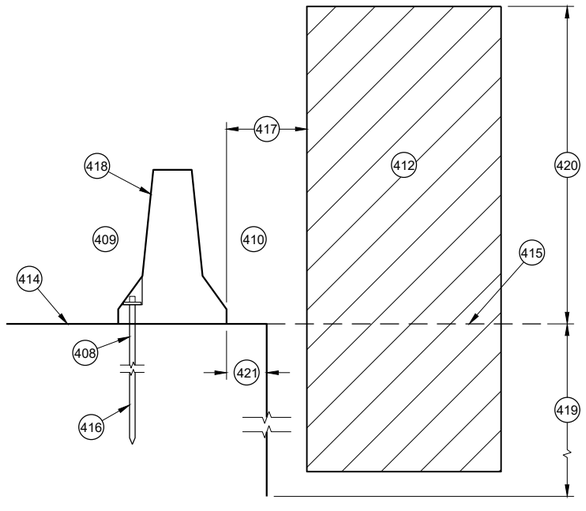
CROSS SECTION

FREE STANDING BARRIER



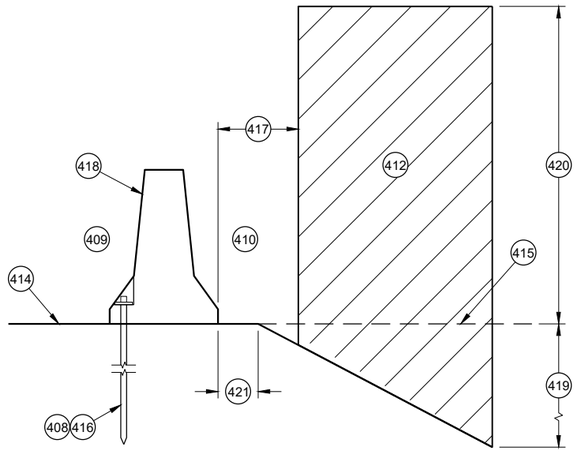
CROSS SECTION

ANCHORED BARRIER FOR OBJECTS ABOVE THE GRADE LINE AND NEAR THE BARRIER



CROSS SECTION

ANCHORED BARRIER NEAR VERTICAL DROP OFF



CROSS SECTION

ANCHORED BARRIER NEAR A SLOPE

GENERAL NOTES

(400) 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.

(401) CONCRETE DECK

(402) CONCRETE DECK OR APPROACH SLAB.

(403) EXPANSION JOINT

(404) ADHESIVE ANCHOR SHOWN. SEE ANCHOR DETAILS.

(405) ANCHORED TEMPORARY BARRIER

(406) TRANSITION FROM ANCHORED TEMPORARY BARRIER TO FREE STANDING

(407) FREE STANDING BARRIER

(408) REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERCIAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

(409) TRAFFIC SIDE

(410) NON-TRAFFIC SIDE

(411) ANCHOR LOCATION. SEE ANCHORING DETAILS.

(412) WORK AREA

(413) AREA FREE OF OBJECTS AND WORKERS

(414) GRADE LINE

(415) EXTENDED GRADE LINE

(416) ANCHORED TEMPORARY BARRIER. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR AN ASPHALT ANCHOR ROD DETAILS FOR MORE INFORMATION. ASPHALT ANCHOR ROD SHOWN.

(417) WHEN OBJECTS EXTEND ABOVE THE GRADE. A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT.

(418) OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR ALLOWED TO LEAN AGAINST THE BARRIER WITHOUT WRITTEN PERMISSION OF THE PROJECT ENGINEER.

(419) DEPTHS OF 3 FEET OR MORE.

(420) Y = 6.5'

(421) OFFSET FROM BACK OF BARRIER EDGE:

CONCRETE PAVEMENT	0.5'
ASPHALT	0.5'

(422) POSTED SPEED (MPH):

45 OR GREATER	4.0'
40 OR LOWER	2.0'

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
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GENERAL NOTES

500 EXISTING RIGID BARRIERS (VARIES)

501 TEMPORARY BARRIER

502 SEE OTHER DETAIL ON HOW TO ANCHOR TEMPORARY BARRIER (BARRIER ASPHALT ANCHOR SHOWN).

503 ANCHORS ARE REQUIRED ON BOTH SIDE OF THE TEMPORARY BARRIER.

504 NESTED RAILS ARE REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

505 TRAFFIC TRAVELS FROM PERMANENT BARRIER TO TEMPORARY BARRIER.

506 TRAFFIC TRAVELS FROM TEMPORARY BARRIER TO PERMANENT BARRIER.

507 VERTICAL BARRIER

508 SAFETY SHAPE BARRIER

509 SINGLE SLOPE BARRIER

510 CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF RIGID BARRIER.

511 BENT THRIE BEAM TO FIT.

512 THRIE BEAM PIECES ARE OFFSET 15 ¼" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.

513 TWO (2) P1, P2 AND P3 ARE REQUIRED

514 FIVE (5) N1, N2 AND N3 ARE REQUIRED

515 TWO (2) R1, R2 AND R3 ARE REQUIRED

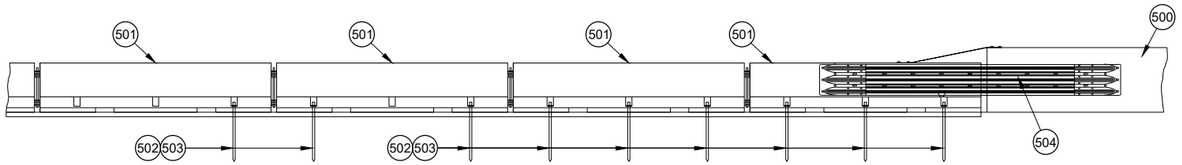
516 CUT WOOD BLOCK TO FIT.

517 SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL ASSEMBLY.

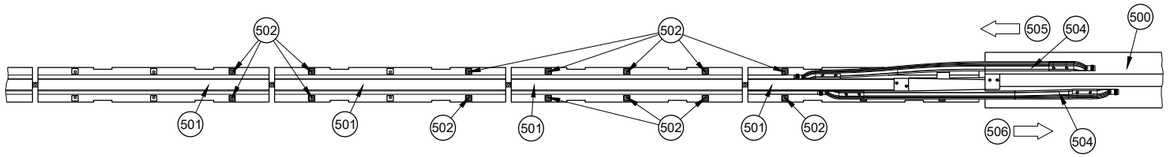
518 CAP ASSEMBLY

519 4" MAX. GAP BETWEEN TEMPORARY BARRIER AND RIGID BARRIER.

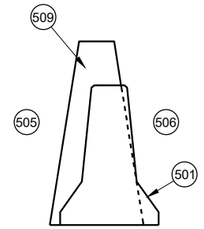
520 ALL TWELVE SPLICE HOLES REQUIRE M1 AND M2



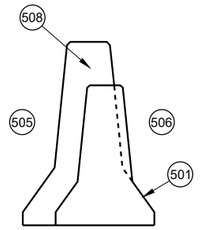
PROFILE VIEW



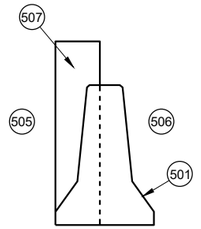
PLAN VIEW



CROSS SECTION TEMPORARY BARRIER PLACEMENT SINGLE SLOPE

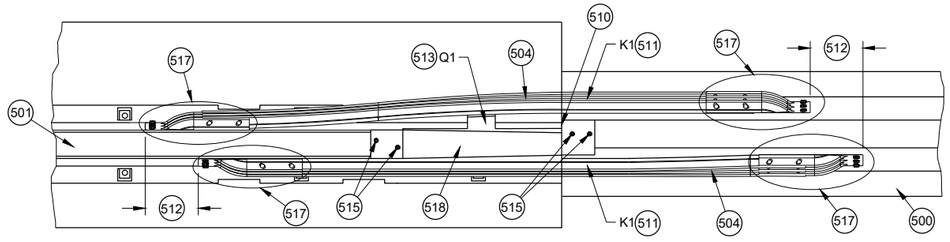


CROSS SECTION TEMPORARY BARRIER PLACEMENT SAFETY SHAPE

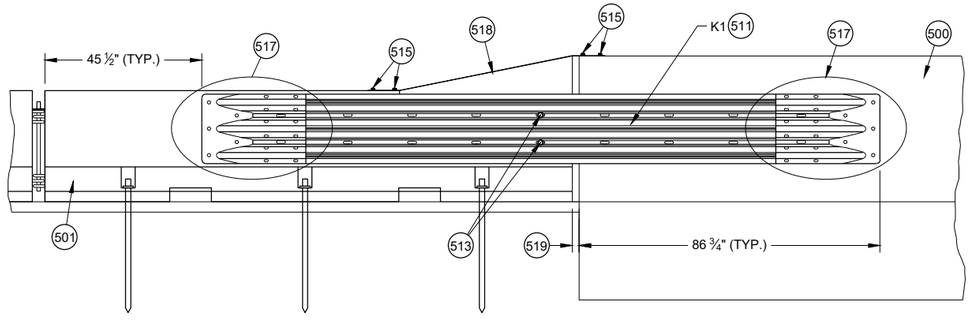


CROSS SECTION TEMPORARY BARRIER PLACEMENT VERTICAL

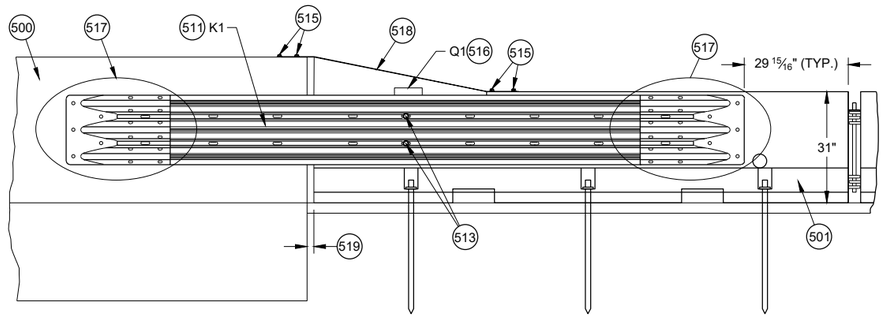
PLAN VIEW
TRANSITION TO RIGID BARRIER



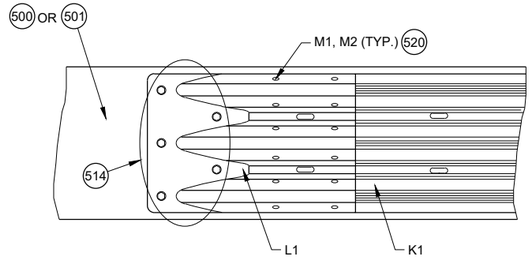
PLAN DETAIL VIEW
TRANSITION TO RIGID BARRIER



FRONT DETAIL VIEW
TRANSITION TO RIGID BARRIER



BACK DETAIL VIEW
TRANSITION TO RIGID BARRIER

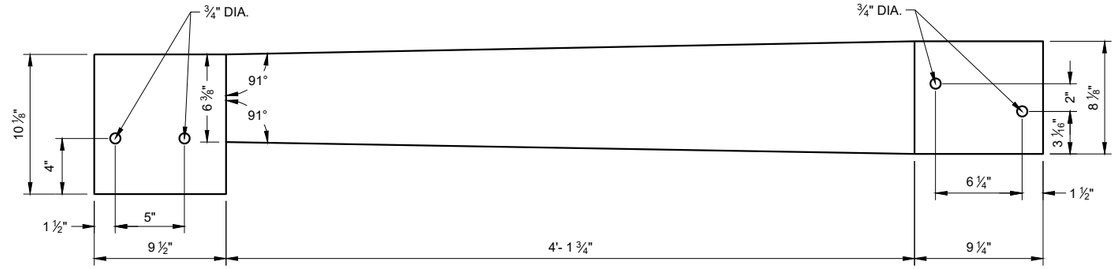


517 DETAIL PLAN VIEW
THRIE BEAM RAIL TERMINAL CONNECTOR ASSEMBLY

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

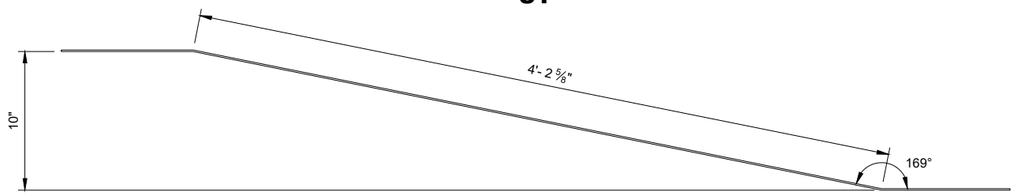
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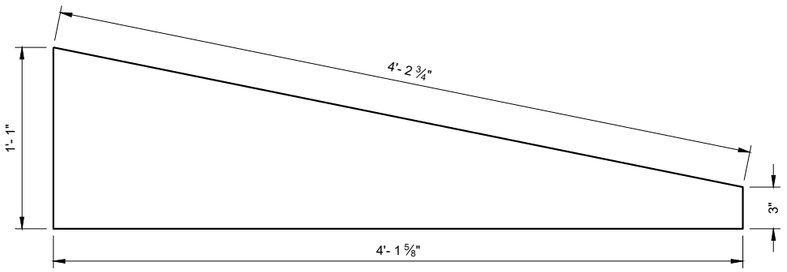
TOP VIEW

S1



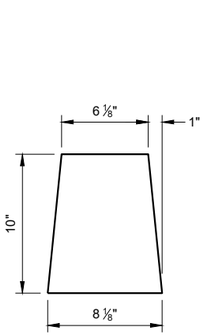
ELEVATION VIEW

S1

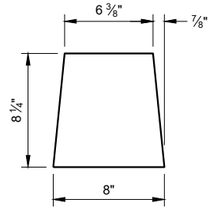


SIDE VIEW

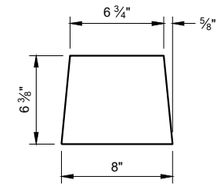
S3



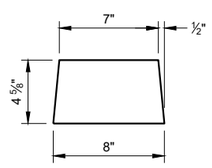
S2



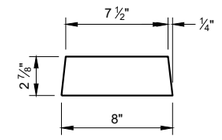
S4



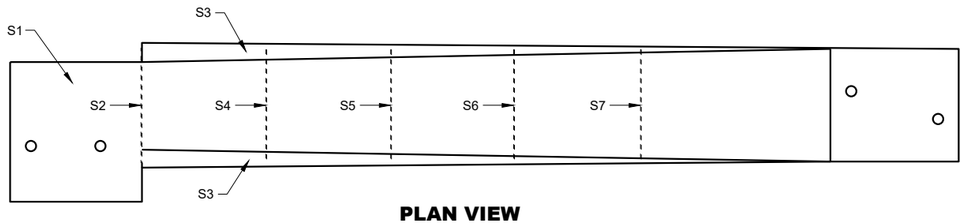
S5



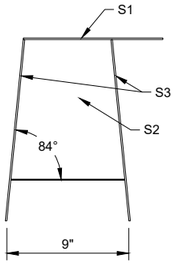
S6



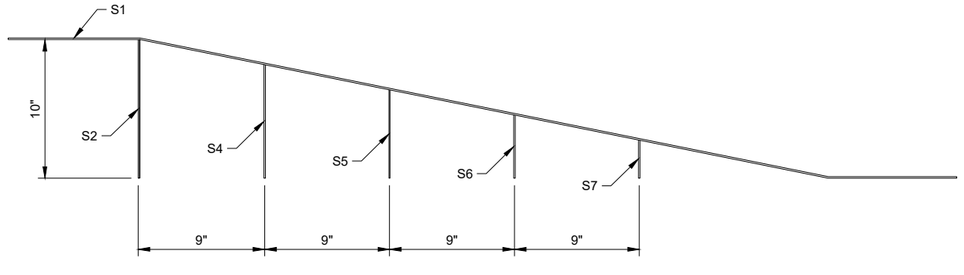
S7



PLAN VIEW



BACK VIEW



SIDE VIEW (600)

42" TOP CAP ASSEMBLY

GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THREE SIDES

STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

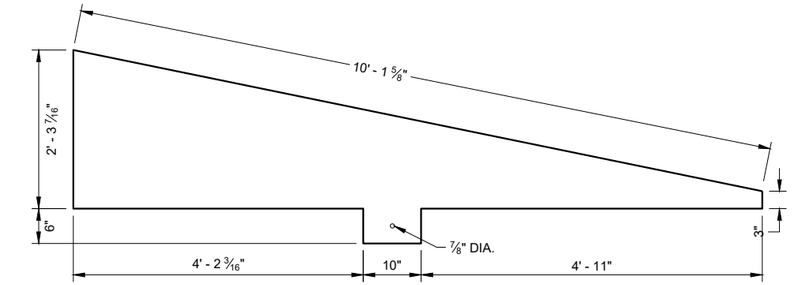
(600) SIDE PLATES (S3) NOT SHOWN FOR CLARITY.

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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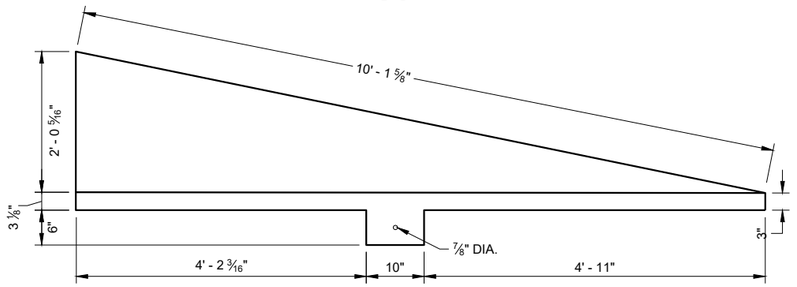
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SIDE VIEW
T4



END VIEW



SIDE VIEW
T3

END VIEW

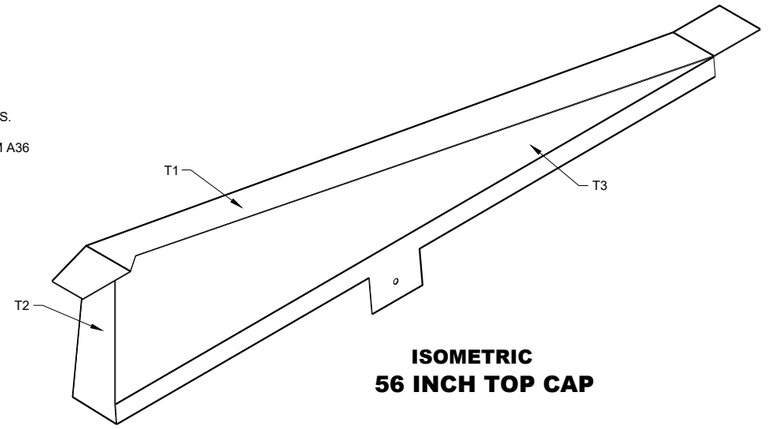
GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THRIE SIDES

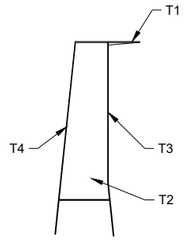
STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

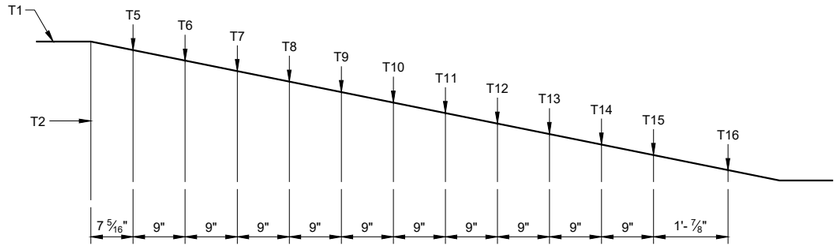
(700) SIDE PLATES (T3 AND T4) NOT SHOWN FOR CLARITY.



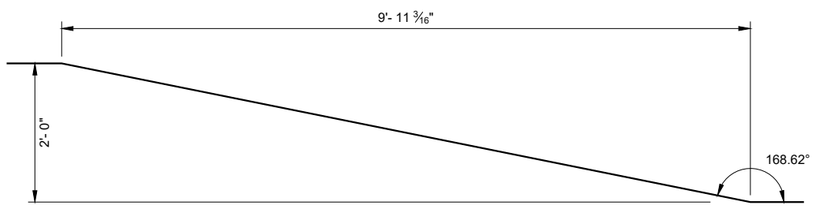
ISOMETRIC
56 INCH TOP CAP



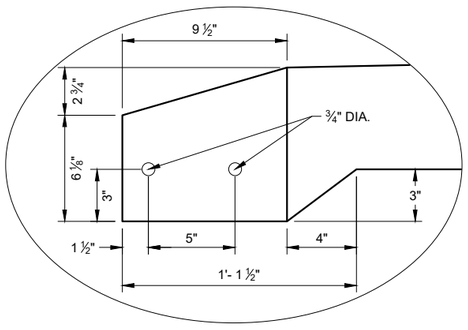
END VIEW
56 INCH TOP CAP



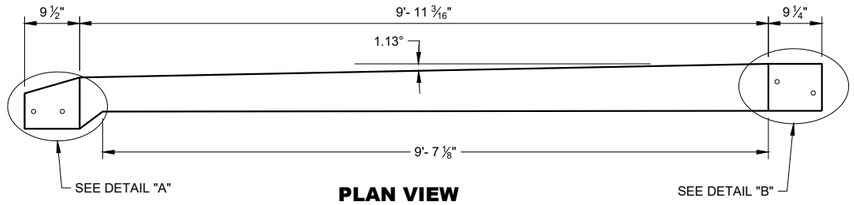
SIDE VIEW (700)
56 INCH TOP CAP



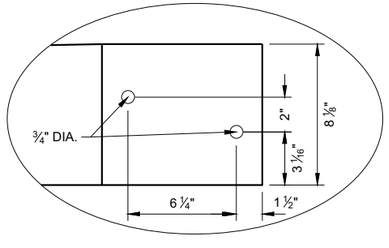
SIDE VIEW
TOP PLATE T1



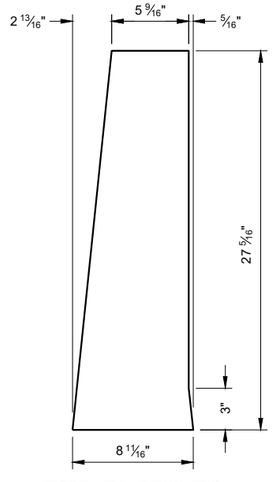
DETAIL "A"



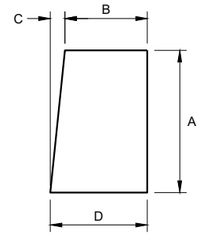
PLAN VIEW
TOP PLATE T1



DETAIL "B"



END PLATE T2

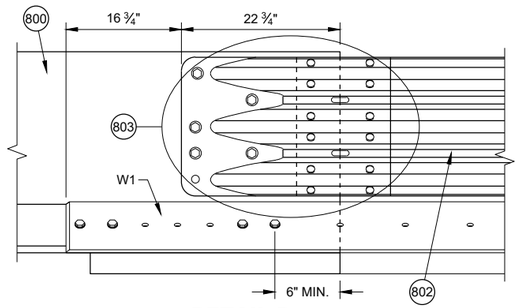


GUSSET PLATES
T5 - T16

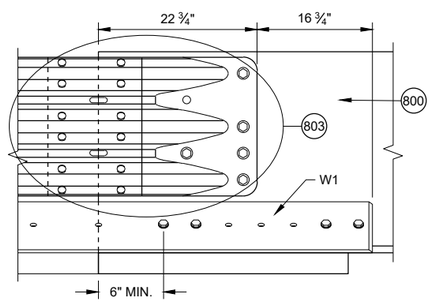
GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
T5	22 13/16"	5 1/16"	2 5/16"	8 1/16"
T6	21"	5 7/8"	2 3/16"	8 1/16"
T7	19 3/16"	6 1/16"	1 15/16"	8 1/16"
T8	17 3/8"	6 1/4"	1 13/16"	8 1/16"
T9	15 5/16"	6 7/16"	1 9/16"	8 1/16"
T10	13 3/4"	6 5/8"	1 7/16"	8 1/16"
T11	11 15/16"	6 13/16"	1 1/4"	8 1/16"
T12	10 1/8"	7"	1 1/16"	8 1/16"
T13	8 5/16"	7 3/16"	7/8"	8 1/16"
T14	6 1/2"	7 3/8"	1 1/16"	8 1/16"
T15	4 11/16"	7 9/16"	1/2"	8"
T16	2 7/8"	7 3/4"	1/4"	8"

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

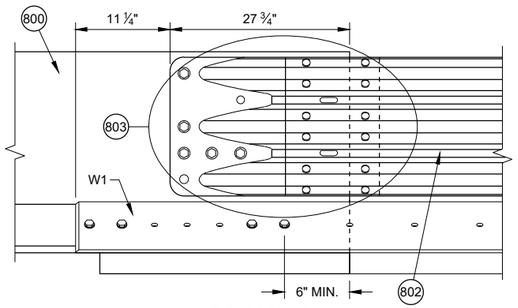
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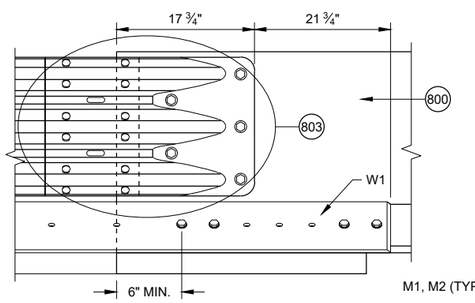
DETAIL D



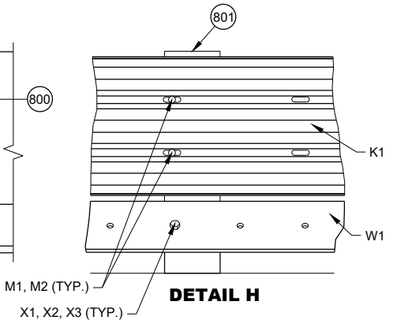
DETAIL E



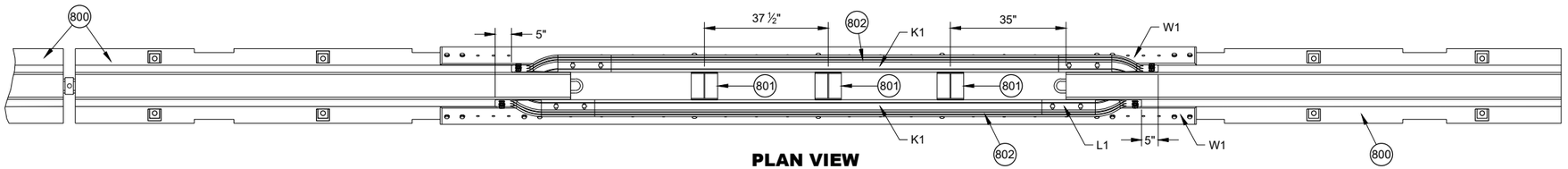
DETAIL F



DETAIL G



DETAIL H



PLAN VIEW

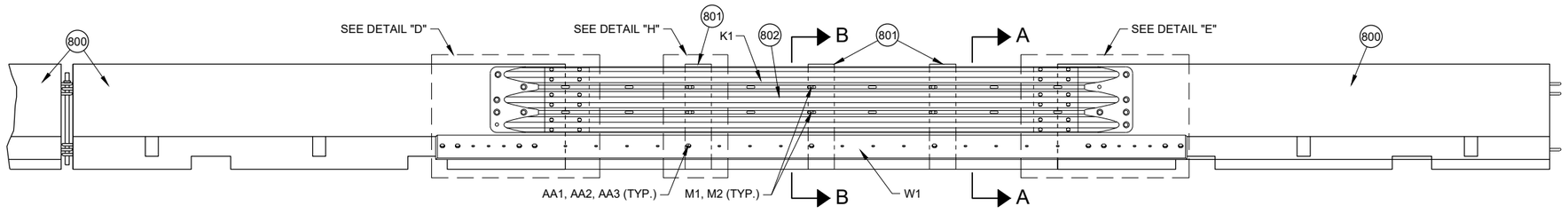
GENERAL NOTES

(800) FREE STANDING TEMPORARY BARRIER

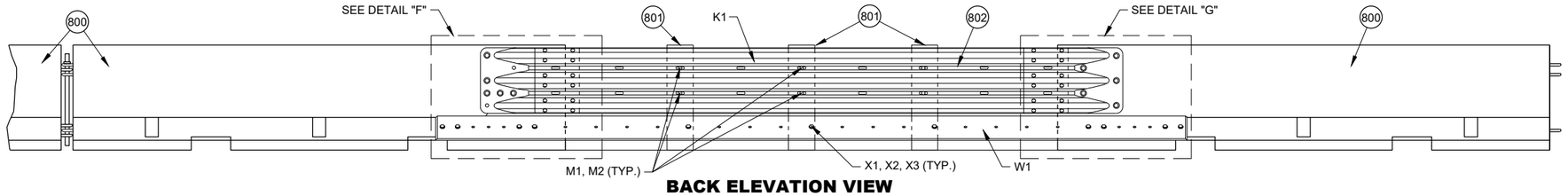
(801) GAP STIFFENER ASSEMBLY

(802) THRIE BEAMS ARE NESTED ON BOTH SIDES OF THE TEMPORARY BARRIER.

(803) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL



FRONT ELEVATION VIEW



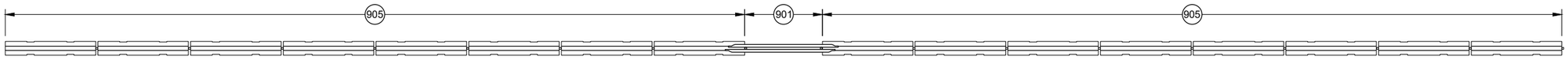
BACK ELEVATION VIEW

PORTABLE CONCRETE BARRIER GAP THRIE BEAM COVER

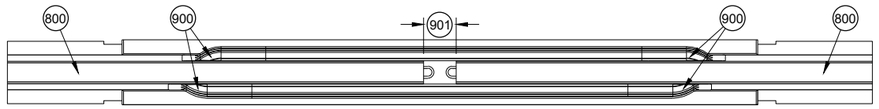
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

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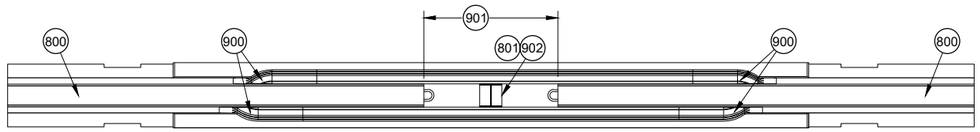
PLAN VIEW
GAP WITHIN SPACING



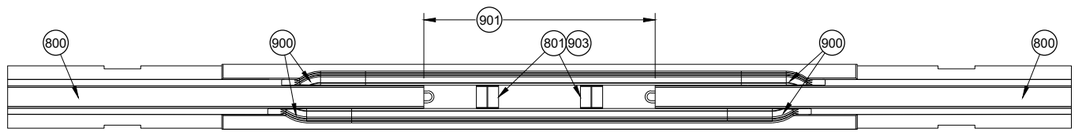
PLAN VIEW
TEMPORARY BARRIER GAP OVER 4" TO 1' MAX. (904)

GENERAL NOTES

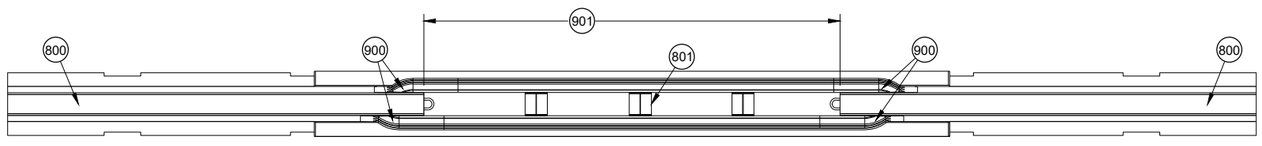
(900) SEE OTHER DETAILS FOR TEMPORARY GAP HARDWARE (TYP.)
(901) TEMPORARY BARRIER GAP
(902) GAP STIFFENER ASSEMBLY CENTERED IN THE GAP.
(903) GAP STIFFENER ASSEMBLY IS OFFSET 18 ¾" FROM CENTER
(904) MINIMUM NUMBER OF GAP STIFFENERS SHOWN FOR THE GAP RANGE SHOWN.
(905) MINIMUM OF 8 CONTINUOUS FREE STANDING TEMPORARY BARRIERS



PLAN VIEW
TEMPORARY BARRIER GAP OVER 1' TO 4' MAX. (904)



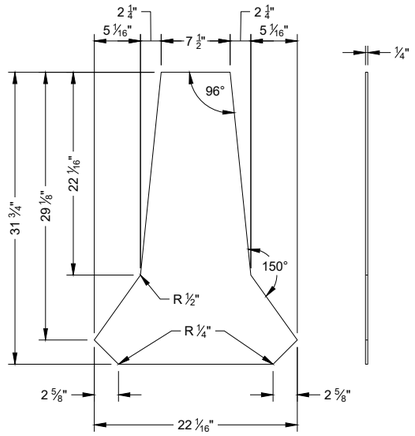
PLAN VIEW
TEMPORARY BARRIER GAP OVER 4' TO 7' MAX. (904)



PLAN VIEW
TEMPORARY BARRIER GAP OVER 7' TO 12.5' MAX. (904)

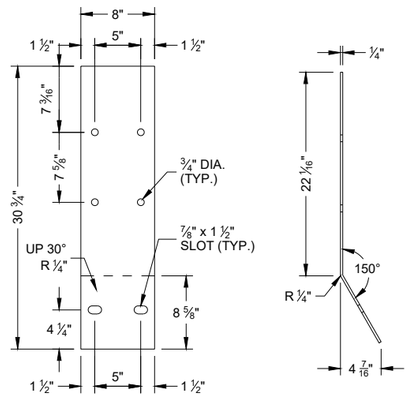
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

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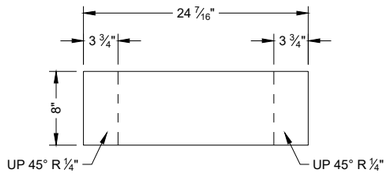
PROFILE VIEW SIDE VIEW

STIFFENER ASSEMBLY CENTER PANEL U1

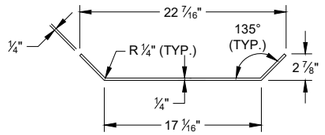


FLAT PATTERN SIDE VIEW

STIFFENER ASSEMBLY SIDE PANEL U2

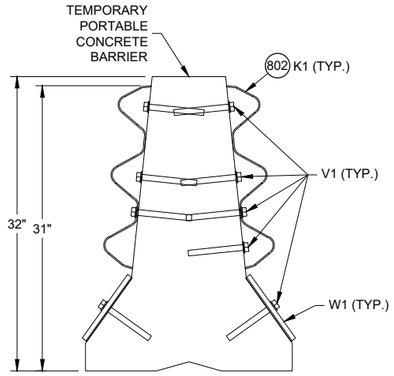


FLAT PATTERN

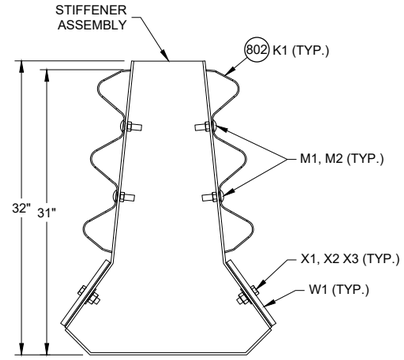


PROFILE VIEW

STIFFENER ASSEMBLY BOTTOM PANEL U3

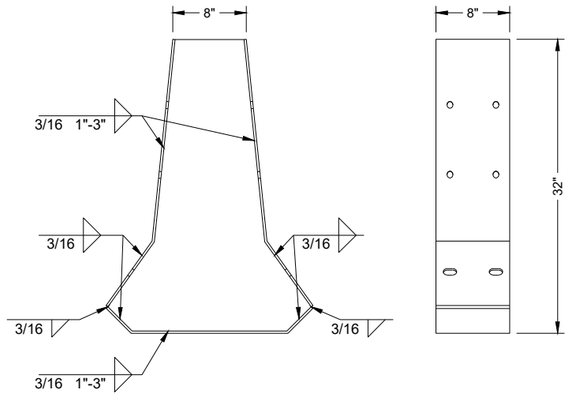


SECTION A - A



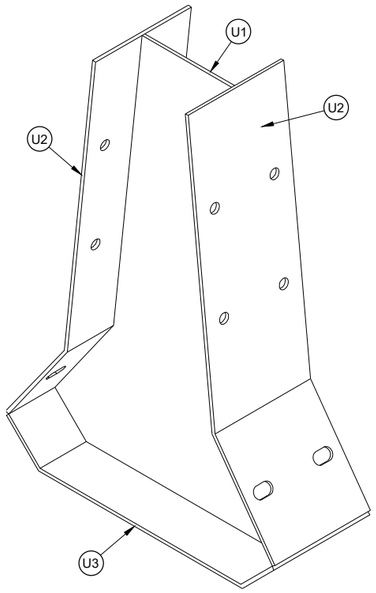
SECTION B - B

PLAN VIEW



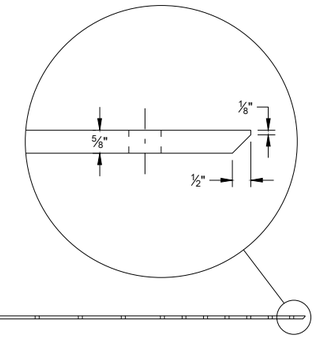
PROFILE VIEW

SIDE VIEW

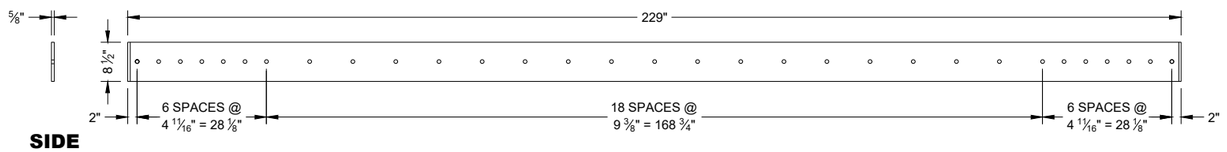


ISOMETRIC

GAP STIFFENER ASSEMBLY



PLAN VIEW



SIDE VIEW

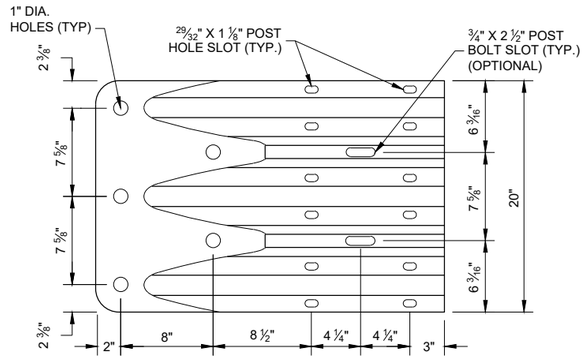
ELEVATION VIEW

W1 TOE PLATE

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

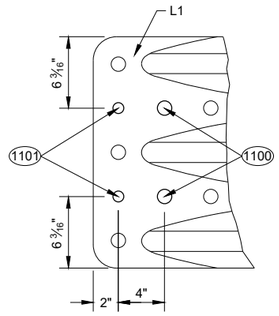
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ELEVATION VIEW

THRIE BEAM TERMINAL CONNECTOR



ELEVATION VIEW

ADDITIONAL THRIE BEAM (1102) TERMINAL CONNECTOR HOLE DETAIL

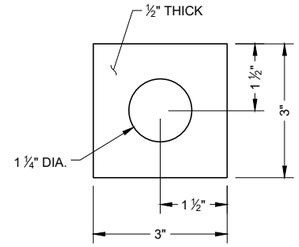


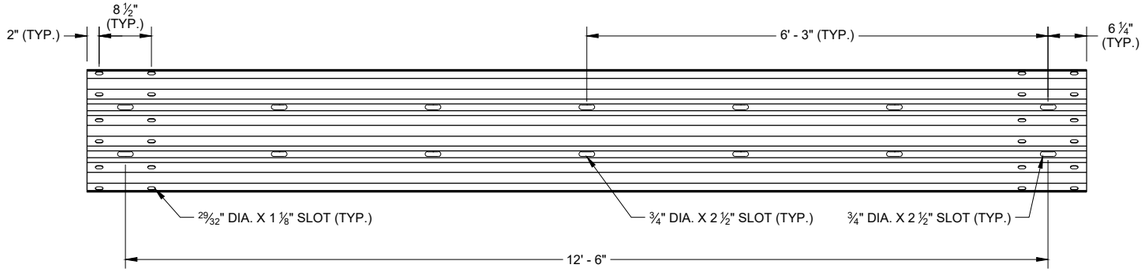
PLATE WASHER DETAIL G2, H3

GENERAL NOTES

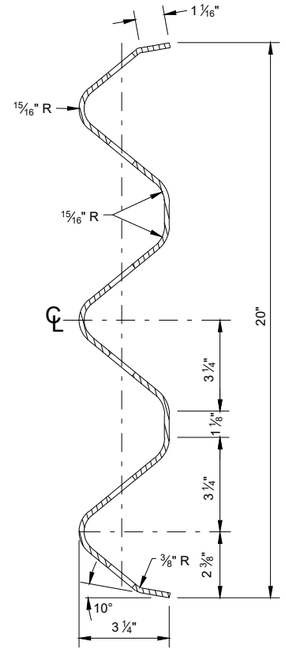
(1100) 1" DIA. HOLE

(1101) 3/4" DIA. HOLE

(1102) PROVIDE HOLES IN THRIE BEAM TERMINAL CONNECTOR TO LIMIT STEEL REINFORCEMENT OR LOOP BAR CONFLICT. CONTRACTOR MAY FIELD DRILL ADDITIONAL HOLE OR PROVIDE THRIE BEAM TERMINAL CONNECTOR WITH ADDITIONAL HOLES FROM SUPPLIER.



SLOTTED THRIE BEAM RAIL K1

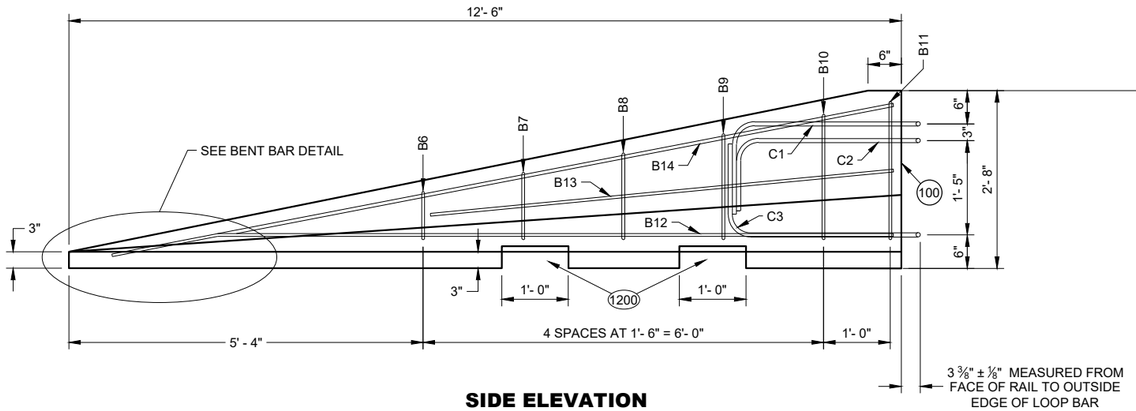


SECTION THROUGH BEAM K1

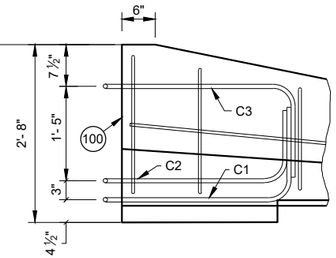
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

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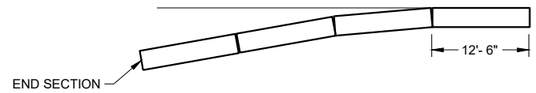
SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED FOR OPPOSITE END
(FOR CONNECTION TO RIGHT END OF BARRIER)

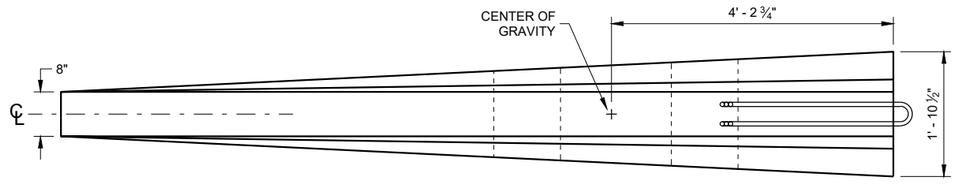
GENERAL NOTES

(1200) SEE LIFTING SLOT DETAIL. LOCATION OF LIFTING SLOTS DETERMINED BY CONTRACTOR.

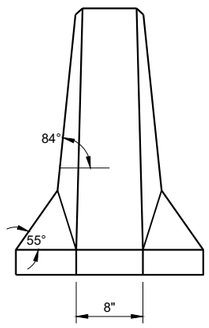


FLARE AT BARRIER END

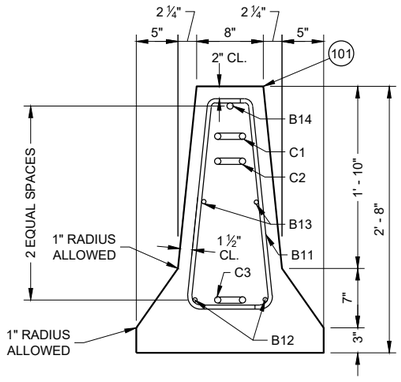
POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1



PLAN VIEW

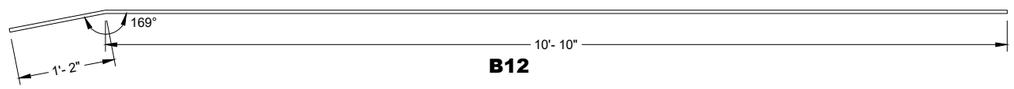


FRONT ELEVATION

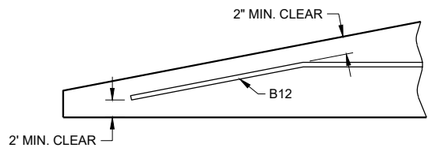


END SECTION

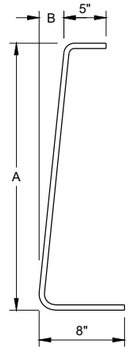
DETAILS OF BARRIER TAPER SECTION



B12



BENT BAR DETAIL



BAR	A	B
B6	10"	1"
B7	1'- 1"	1 ¼"
B8	1'- 5"	1 ⅝"
B9	1'- 8"	1 ⅞"
B10	2'- 0 ½"	2 ⅜"
B11	2'- 3"	2 ¾"

B BARS

2 OF EACH SIZE REQUIRED FOR STIRRUP ASSEMBLY

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	PRECAST TEMPORARY BARRIER - CONCRETE	MIN. = f'c 5000 PSI	
B1	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B2	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-2"
B3	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B4	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 6'-0"
B5	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#6 REBAR, LENGTH 2'-11"
B6	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 1'-11"
B7	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-2"
B8	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-6"
B9	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-9"
B10	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-2"
B11	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-4"
B12	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-0"
B13	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 7'-9"
B14	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 11'-9"
C1	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C2	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C3	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
D1	CONNECTION PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ¼" DIA.
D2	CONNECTION PIN - TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G1	BOLT THROUGH ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A OR SAE J429 GRADE 2 UNC	1 ⅛" DIA.
G2	BOLT THROUGH ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G3	BOLT THROUGH ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
H1	ADHESIVE ANCHOR - ADHESIVE	ICC-ES-AC308 5 ¼" EMBEDMENT WITH A MIN. BOND STRENGTH OF 1,650 PSI. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
H2	ADHESIVE ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A / SAE J429 GRADE 2 UNC	1 ⅛" DIA.
H3	ADHESIVE ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
H4	ADHESIVE ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
J1	ASPHALT ANCHOR PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ½" DIA.
J2	ASPHALT ANCHOR PIN - STOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
K1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE
L1	THRIE BEAM RAIL - TERMINAL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
M1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	⅝" DIA.
M2	SPLICE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
N1	THRIE BEAM RAIL TERMINAL - MECHANICAL ANCHOR	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA. LENGTH 6"
N2	THRIE BEAM RAIL TERMINAL - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
N3	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
P1	THRIE BEAM RAIL CONNECTION 1-BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA.
P2	THRIE BEAM RAIL CONNECTION 1-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
P3	THRIE BEAM RAIL CONNETION 1- MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
Q1	BLOCK WOOD	SEE STANDARD SPEC. 614	
R1	CAP - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	⅝" DIA.
R2	CAP- BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
R3	CAP - BOLT - MECHANICAL ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	12 GAUGE
S1	CAP 42-INCH TOP PLATE	AASHTO M111 / ASTM A123 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	12 GAUGE
S2	CAP 42-INCH END PLATE	AASHTO M111 / ASTM A123 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	12 GAUGE
S3	CAP 42-INCH SIDE PLATE	AASHTO M111 / ASTM A123 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	12 GAUGE
S4	CAP 42-INCH GUSSET 1	AASHTO M111 / ASTM A123 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	12 GAUGE
S5	CAP 42-INCH GUSSET 2	AASHTO M111 / ASTM A123 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	12 GAUGE
S6	CAP 42-INCH GUSSET 3	AASHTO M111 / ASTM A123 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	12 GAUGE
S7	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 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	12 GAUGE

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SDD 14B07-16m

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16m

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
T1	CAP 56-INCH TOP PLATE	AASHTO M111 / ASTM A123 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	12 GAUGE
T2	CAP 56-INCH END PLATE	AASHTO M111 / ASTM A123 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	12 GAUGE
T3	CAP 56-INCH SIDE PLATE 1	AASHTO M111 / ASTM A123 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	12 GAUGE
T4	CAP 56-INCH SIDE PLATE 2	AASHTO M111 / ASTM A123 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	12 GAUGE
T5	CAP 56-INCH GUSSET 1	AASHTO M111 / ASTM A123 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	12 GAUGE
T6	CAP 56-INCH GUSSET 2	AASHTO M111 / ASTM A123 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	12 GAUGE
T7	CAP 56-INCH GUSSET 3	AASHTO M111 / ASTM A123 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	12 GAUGE
T8	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 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	12 GAUGE
T9	CAP 42-INCH GUSSET 5	AASHTO M111 / ASTM A123 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	12 GAUGE
T10	CAP 42-INCH GUSSET 6	AASHTO M111 / ASTM A123 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	12 GAUGE
T11	CAP 42-INCH GUSSET 7	AASHTO M111 / ASTM A123 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	12 GAUGE
T12	CAP 42-INCH GUSSET 8	AASHTO M111 / ASTM A123 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	12 GAUGE
T13	CAP 42-INCH GUSSET 9	AASHTO M111 / ASTM A123 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	12 GAUGE
T14	CAP 42-INCH GUSSET 10	AASHTO M111 / ASTM A123 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	12 GAUGE
T15	CAP 42-INCH GUSSET 11	AASHTO M111 / ASTM A123 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	12 GAUGE
T16	CAP 42-INCH GUSSET 12	AASHTO M111 / ASTM A123 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	12 GAUGE
U1	GAP STIFFENER	AASHTO M111 / ASTM A123 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	
U2	GAP STIFFENER - CONNECTOR PLATE 1	AASHTO M111 / ASTM A123 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	
U3	GAP STIFFENER - CONNECTOR PLATE 2	AASHTO M111 / ASTM A123 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	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
V1	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 24.0 KIPS AND ULTIMATE SHEAR LOAD 21.5 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	¾" DIA.
V2	GAP STIFFENER - BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C O R MECHANICAL GALVANIZE TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
W1	TOE PLATE	AASHTO M111/ASTM A123 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	
X1	TOE PLATE - CONNECTION BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC HEAVY HEX HEAD OR AASTHO M180 HEAD, ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED. PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT.	¾" DIA.
X2	TOE PLATE - CONNECTION BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1 (HARDEN WASHER ONLY)	
X3	TOE PLATE - CONNECTION BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	

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SDD 14B07-16n

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

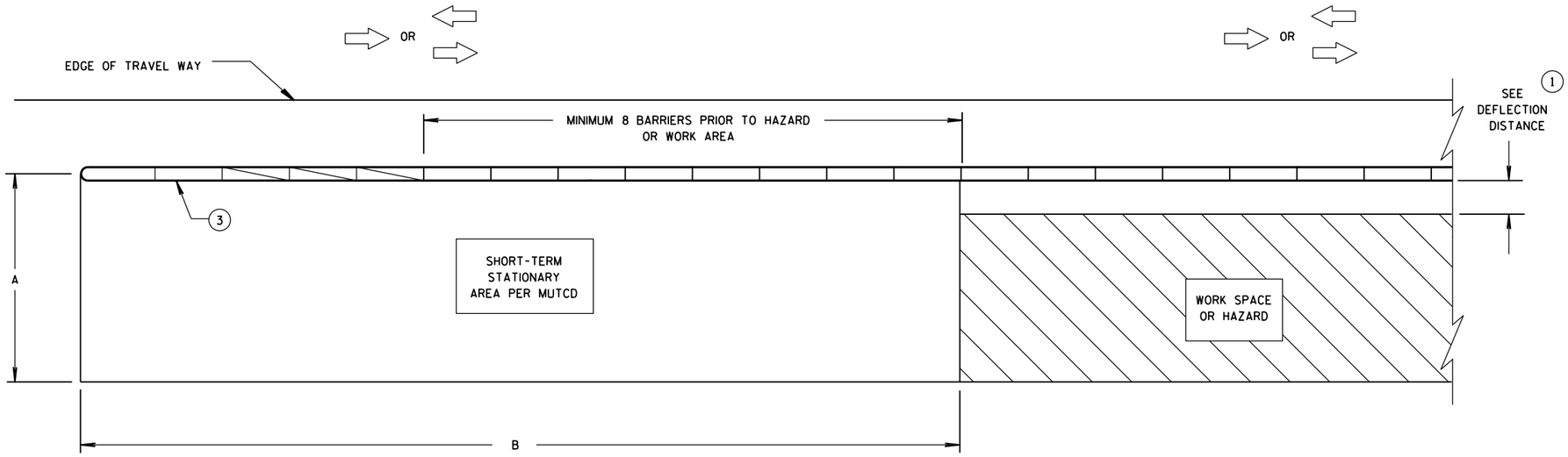
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD 14B07-16n



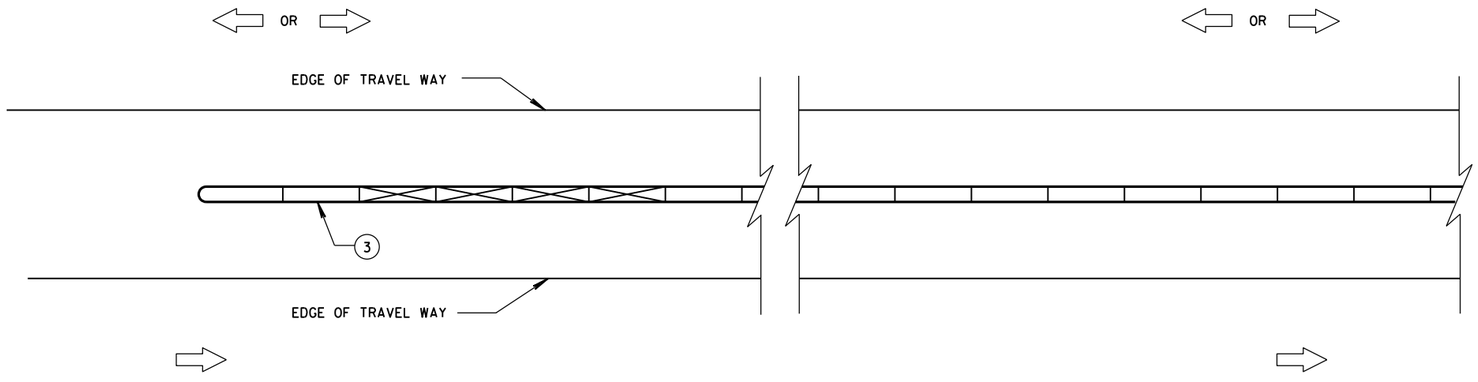
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

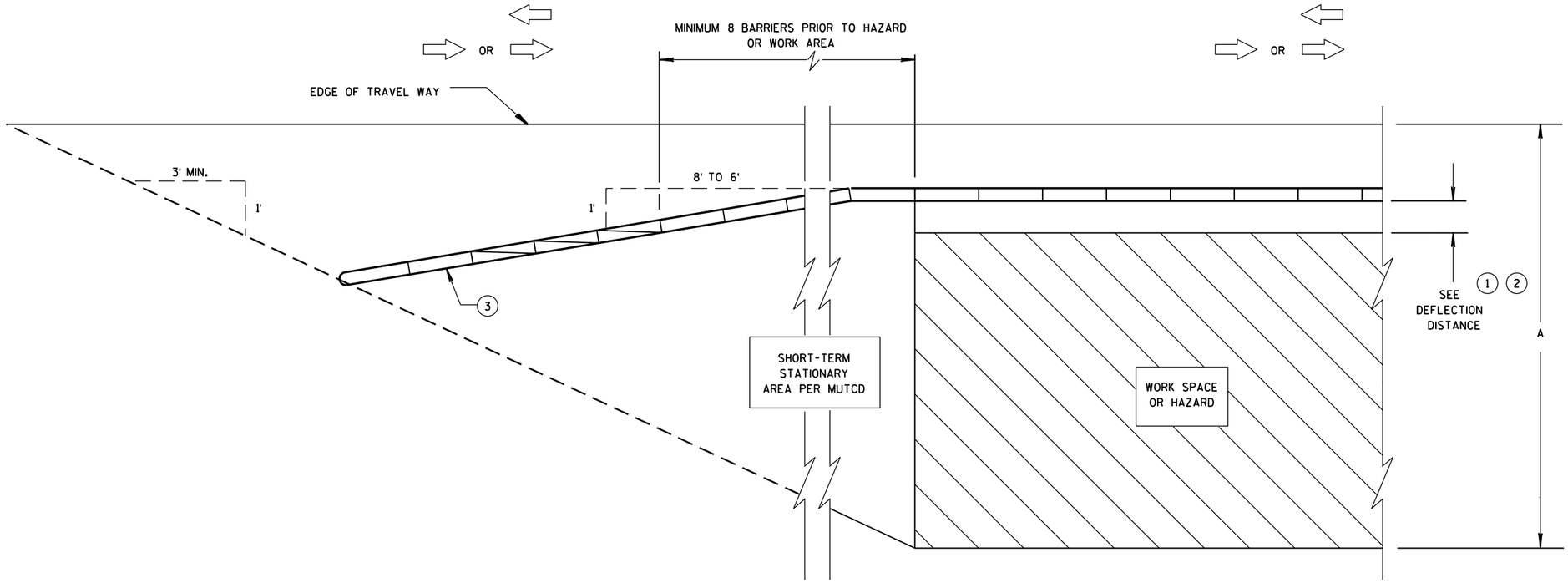
(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

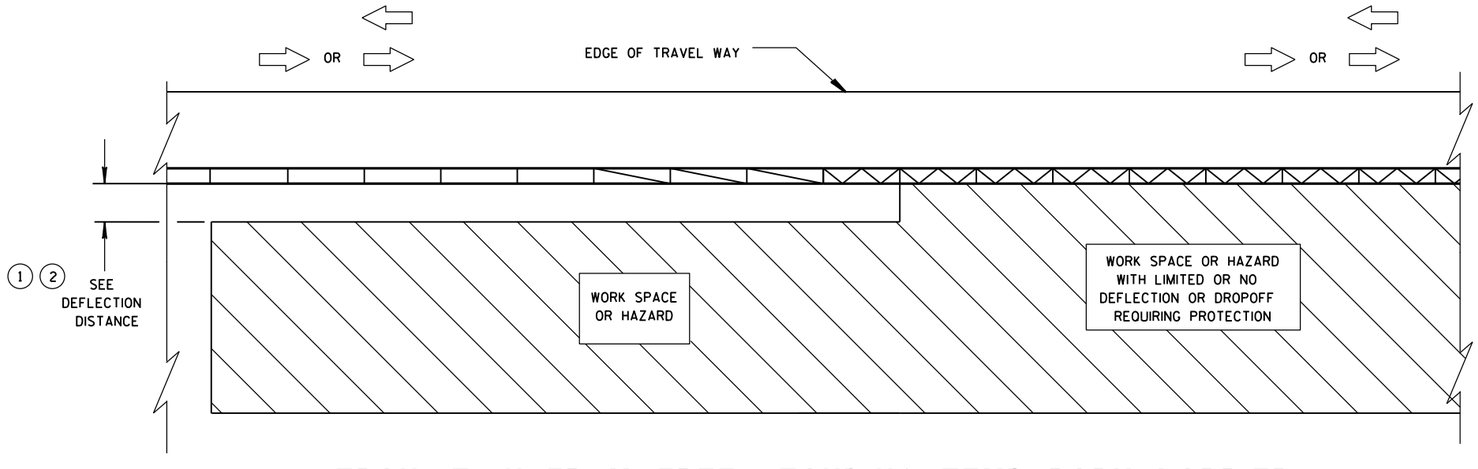
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 8-2a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

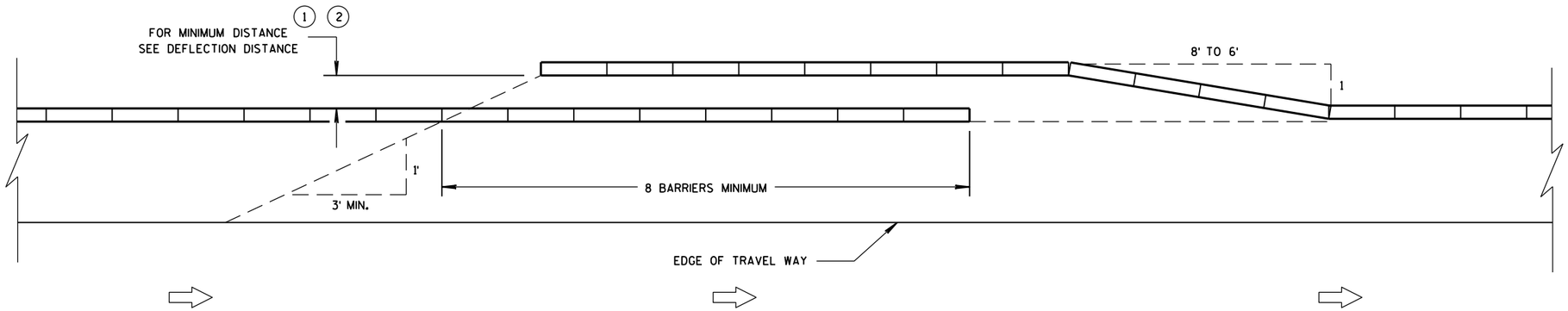
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

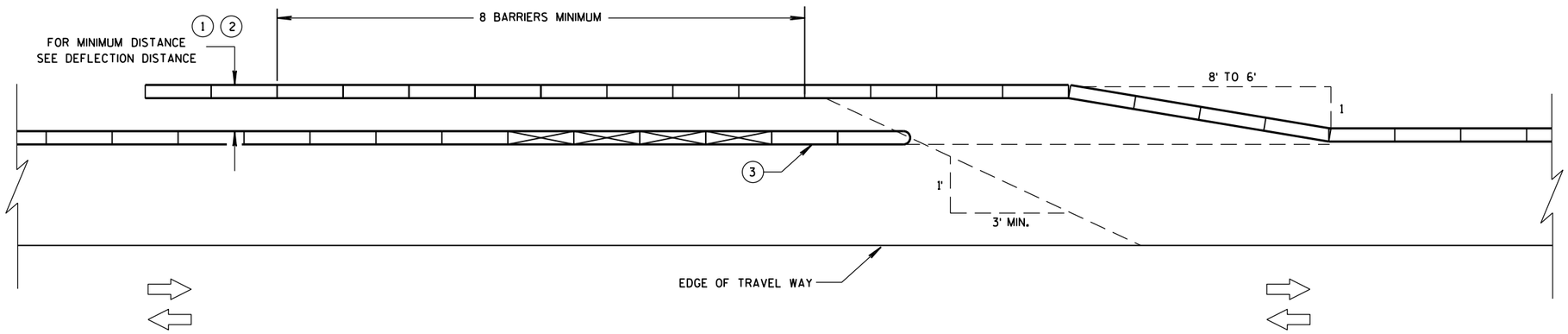
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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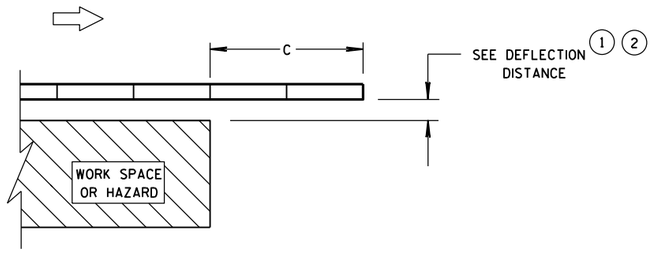
S.D.D. 14 B 8-2b



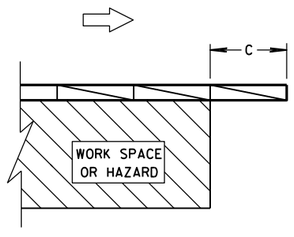
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

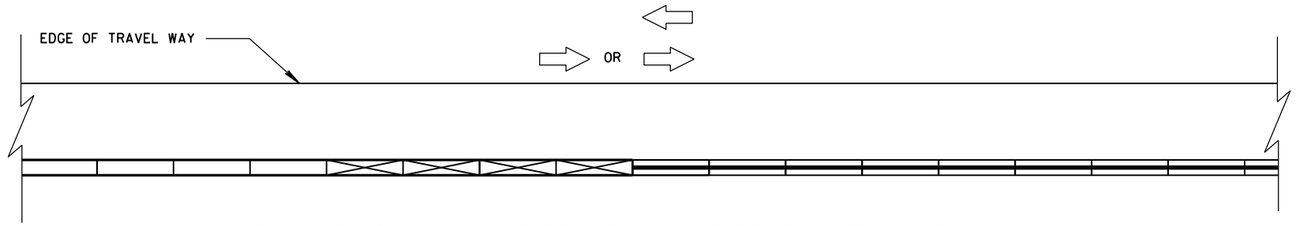
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

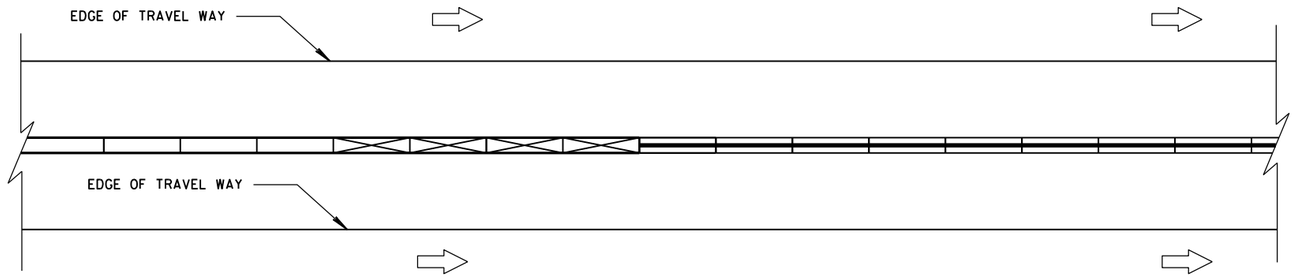
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 14 B 8-2c



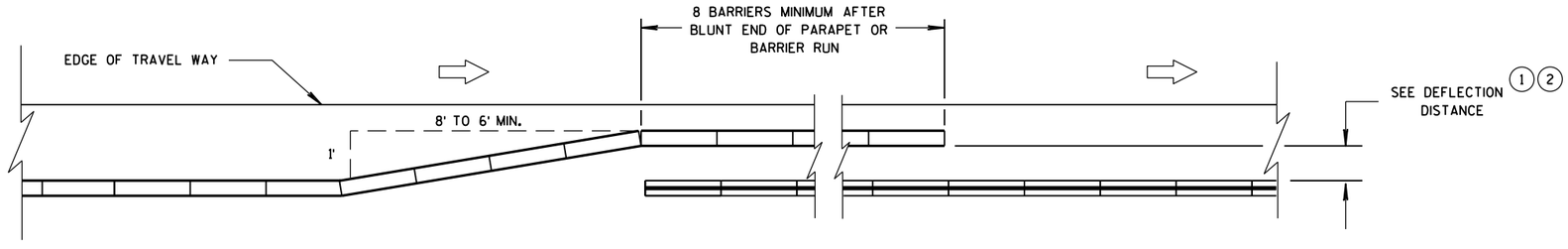
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



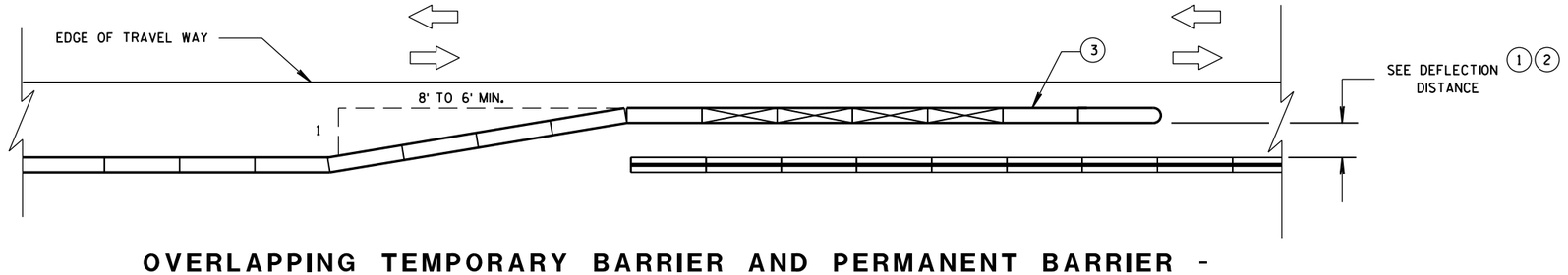
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 8-2d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

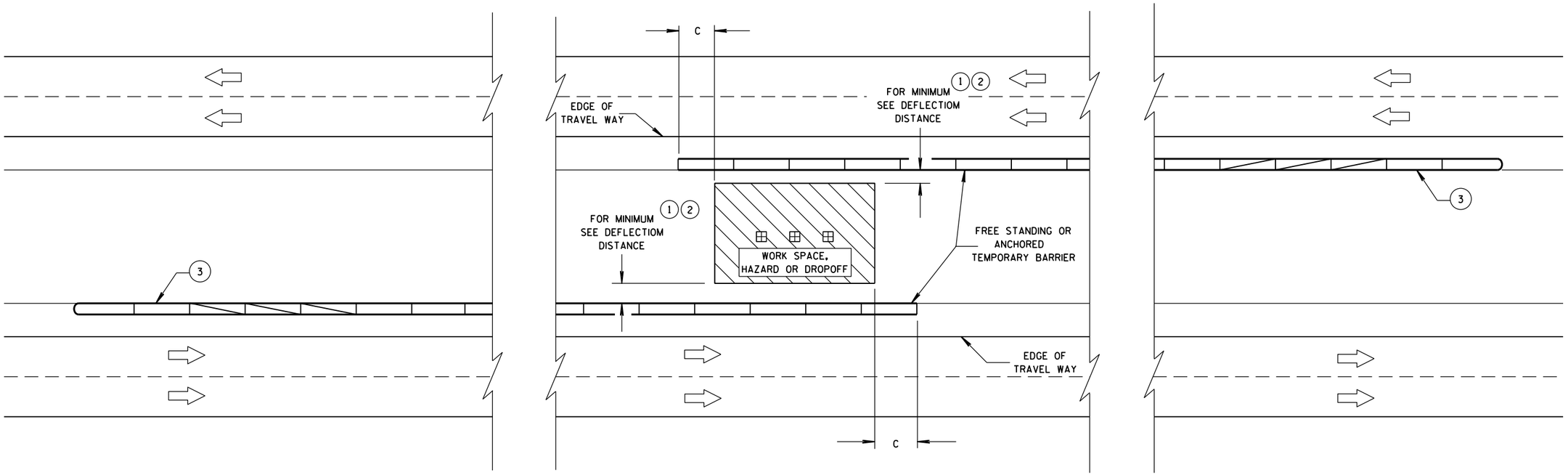
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER
FHWA

6

S.D.D. 14 B 8-2e

GENERAL NOTES

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

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

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

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

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

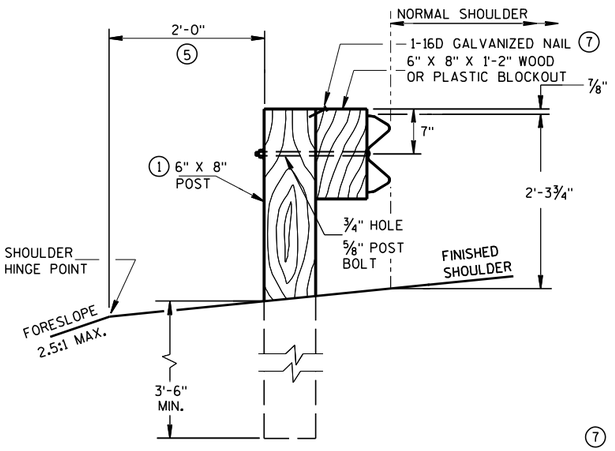
(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

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

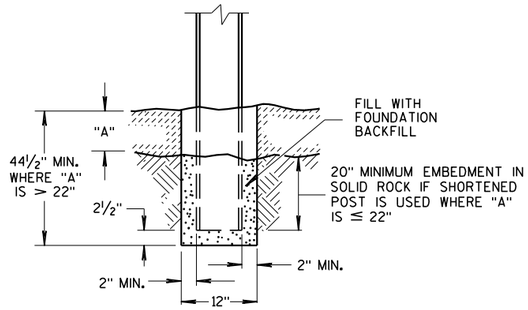
(7) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

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

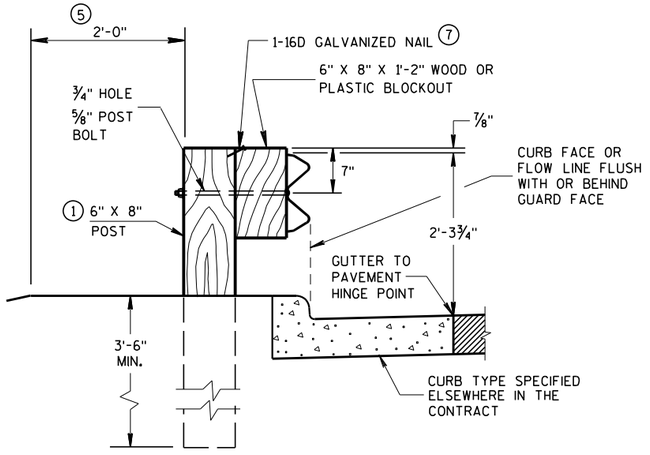
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



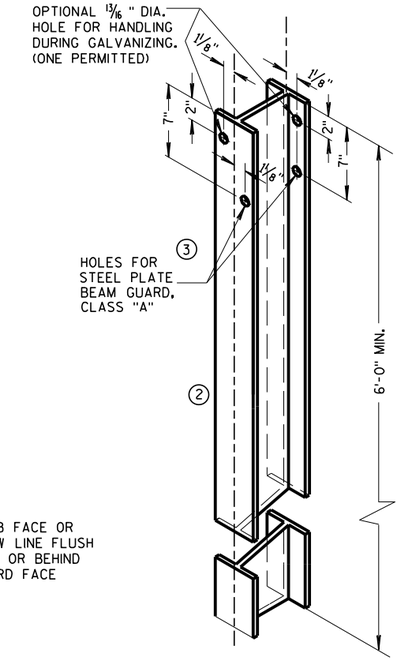
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



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

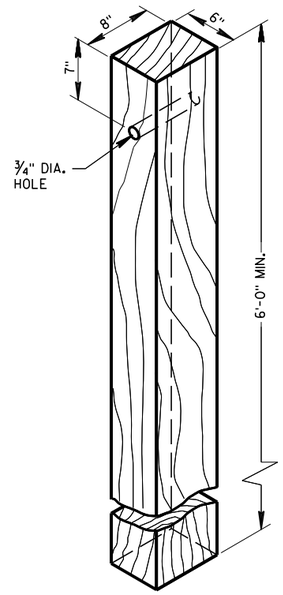


END VIEW
LOCATED ALONG A CURBED ROADWAY

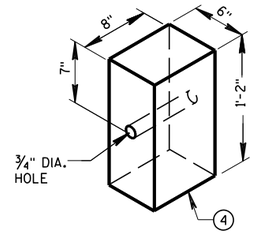


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

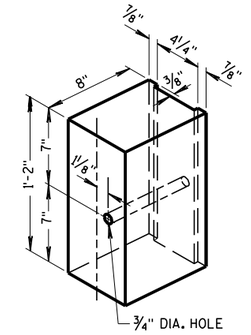
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



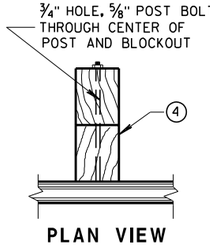
WOOD POST
(6"X8") NOMINAL



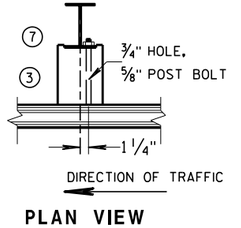
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



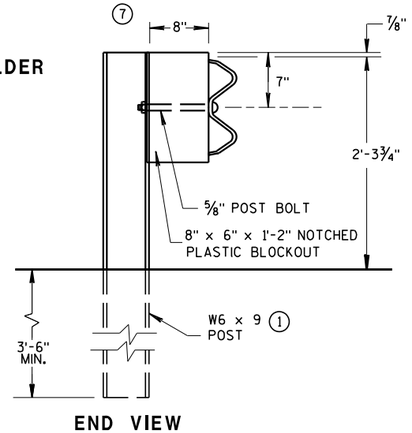
TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS (1)



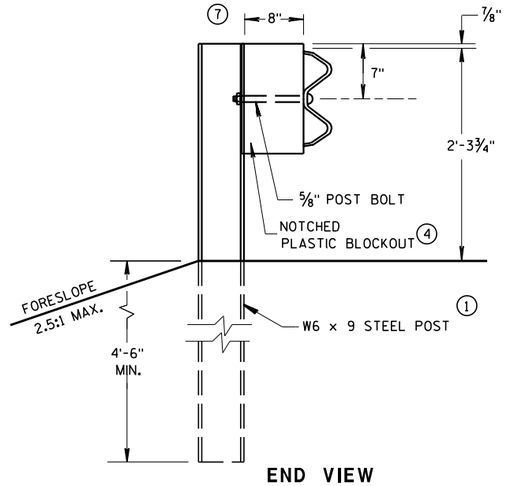
PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



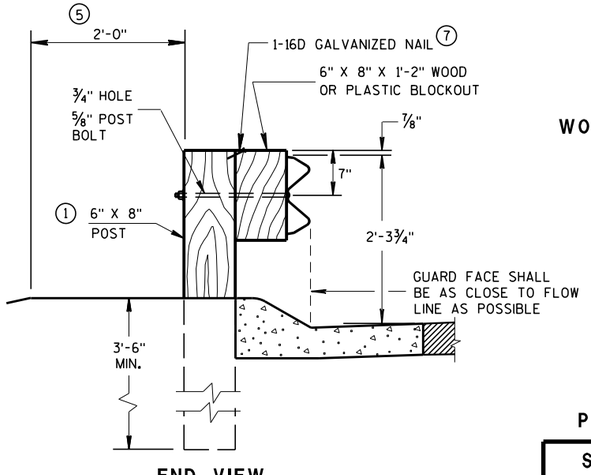
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



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



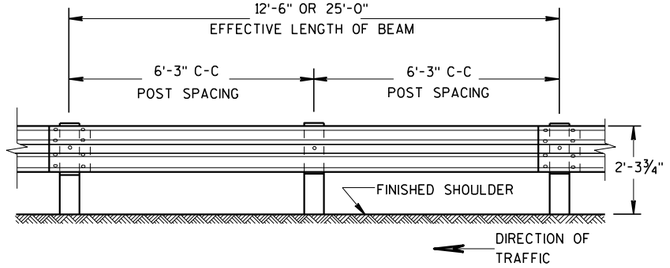
END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

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

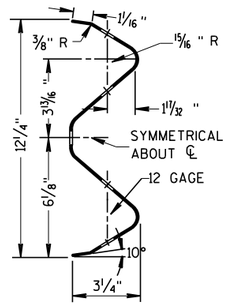
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

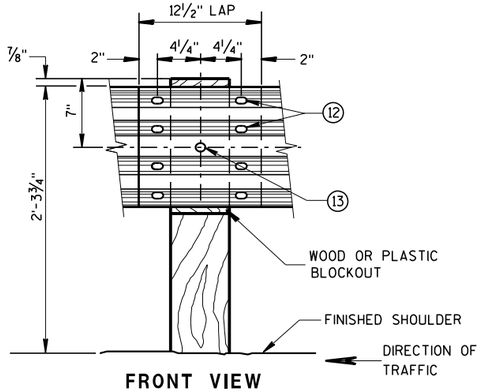


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

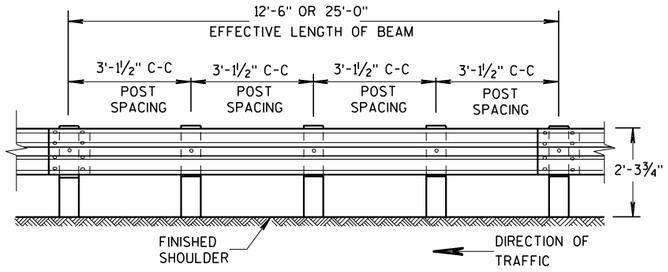
GENERAL NOTES

FURNISH GUARDRAIL DEFLECTORS FROM APPROVED PRODUCTS LIST.

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

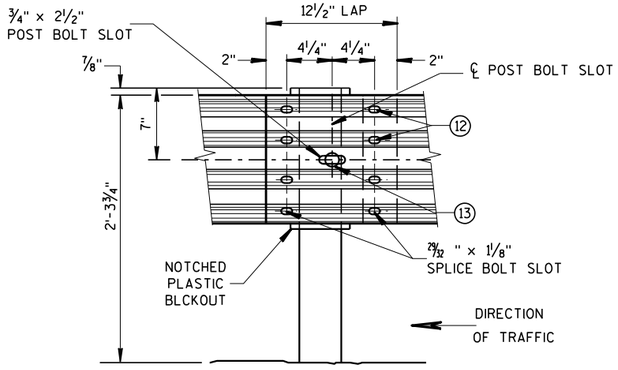
(12) 8 -⅝" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

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



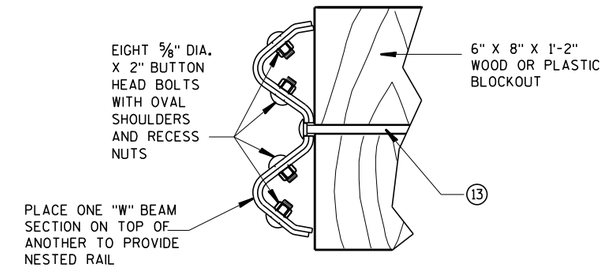
FRONT VIEW

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



FRONT VIEW

BEAM SPLICE AT STEEL POST

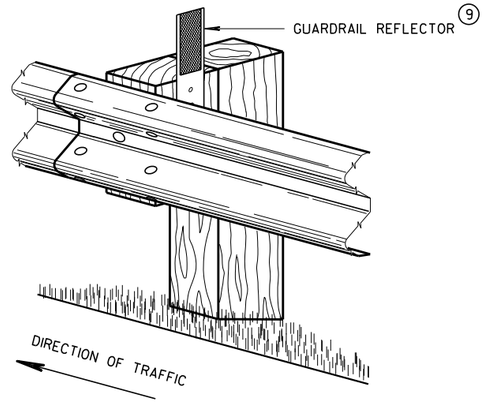


NESTED W BEAM (NW)

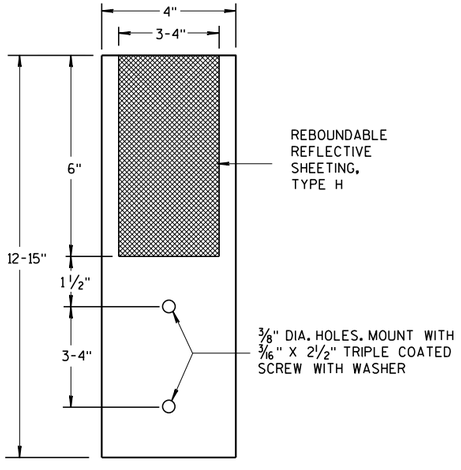
USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

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



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



4"x 12" GUARDRAIL REFLECTOR

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

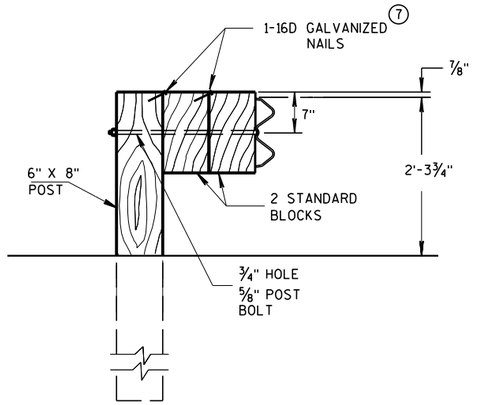
STATE OF WISCO 113
DEPARTMENT OF TRANSPORTATION

6

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

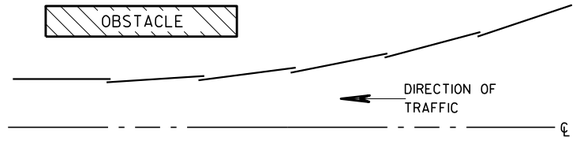
6

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

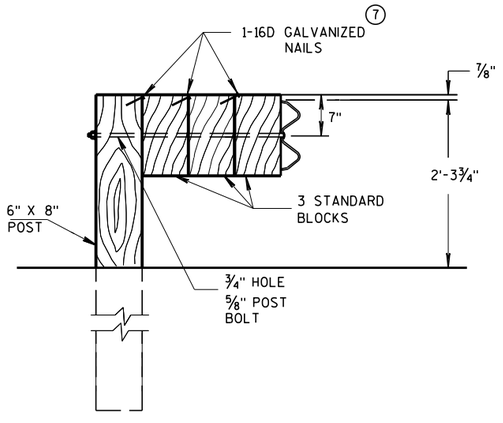


DETAIL FOR DOUBLE BLOCKS

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

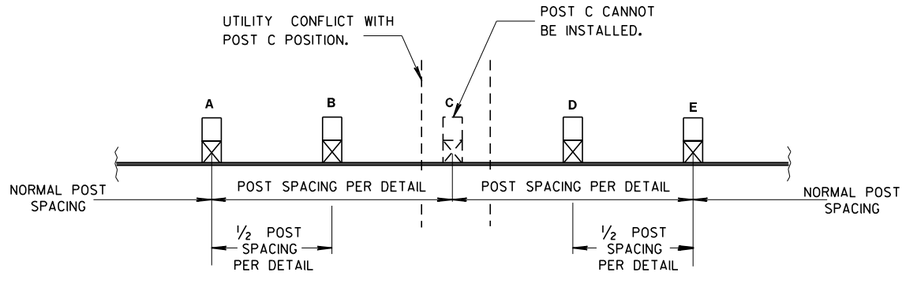


PLAN VIEW
BEAM LAPPING DETAIL



DETAIL FOR TRIPLE BLOCKS

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



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

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

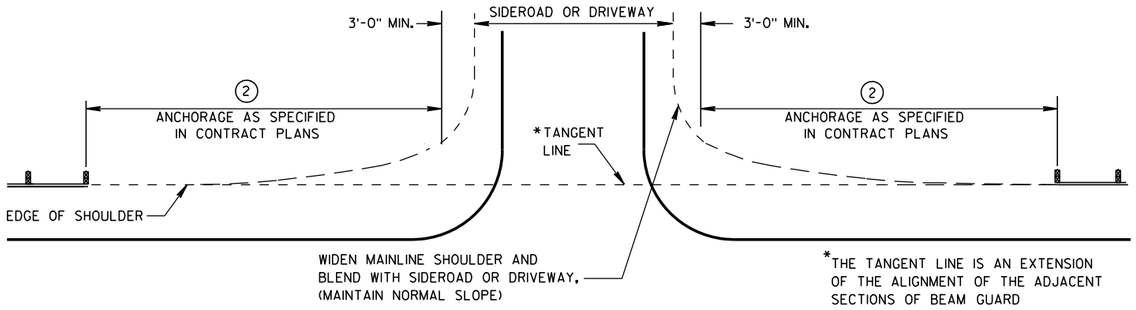
DO NOT USE EXTRA BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

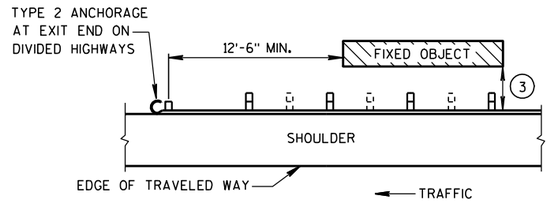
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



BEAM GUARD AT SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PERTINENT STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

W6 X 9 OR W6 X 8.5 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

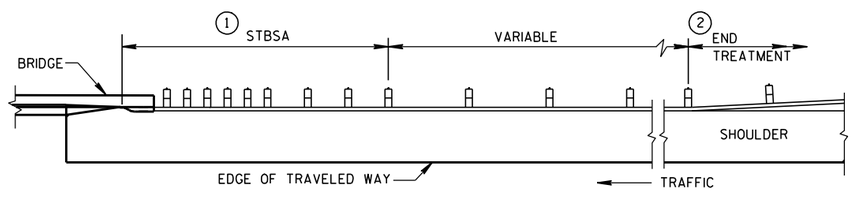
THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

(1) STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA) - SEE CURRENT SDD 14B20.

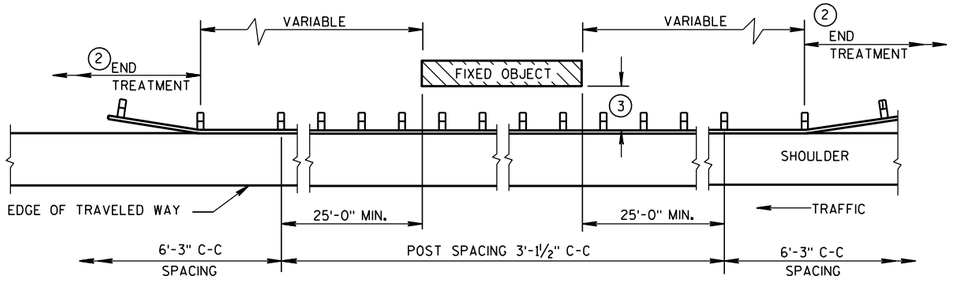
(2) USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

(3)

MINIMUM LATERAL DISTANCE FROM FACE OF BEAM GUARD TO FIXED OBJECT	POST SPACING
3'-6"	3' - 1½"
4'-6"	6' - 3"

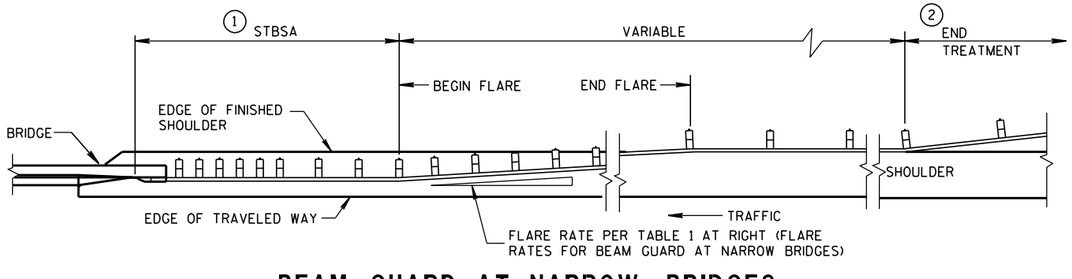


BEAM GUARD AT FULL WIDTH BRIDGES



BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC

(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")



BEAM GUARD AT NARROW BRIDGES
(FLARED TO SHOULDER EDGE, THEN PARALLEL TO ROADWAY)

TABLE 1
FLARE RATES FOR BEAM GUARD AT NARROW BRIDGES

POSTED SPEED (MPH)	FLARE RATE
25	13:1
30	15:1
35	16:1
40	18:1
45	21:1
50	24:1
55	26:1
65	30:1

STEEL PLATE BEAM GUARD CLASS "A" AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS

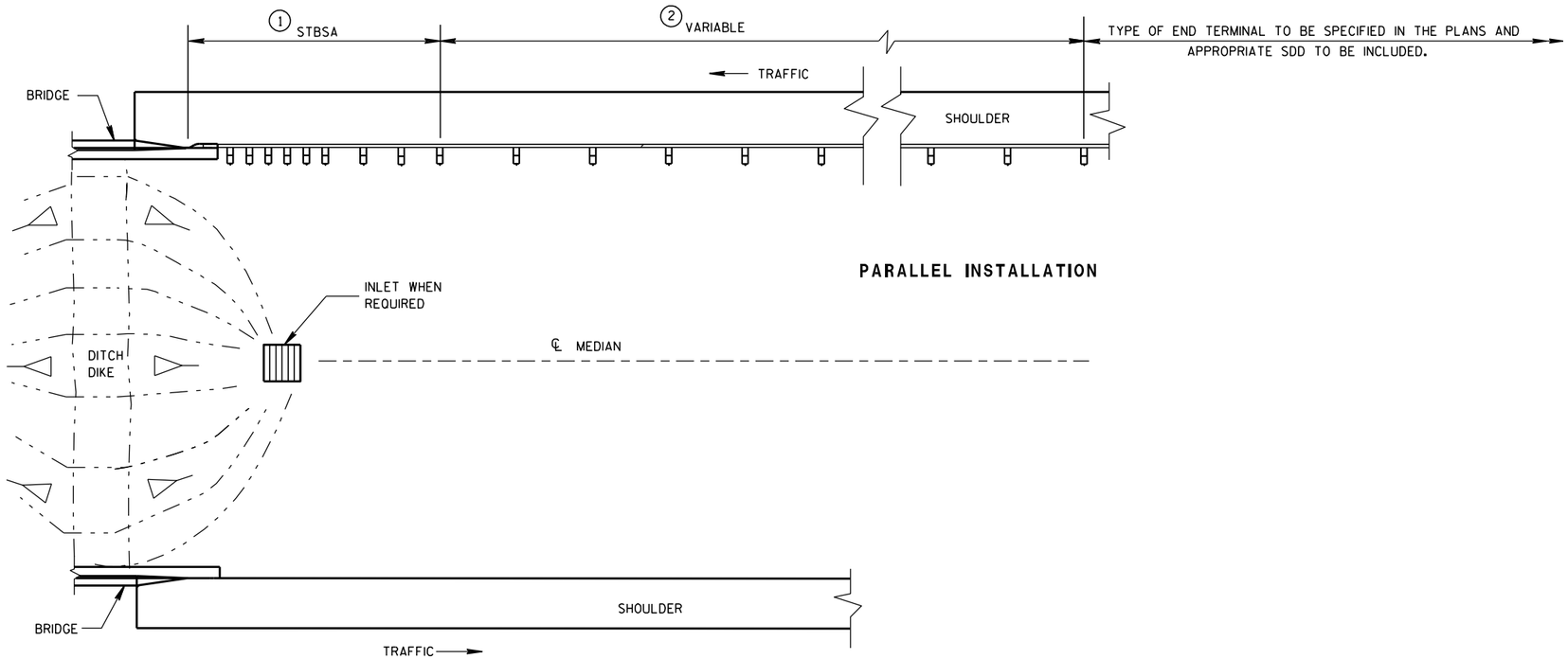
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-21-07 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 14 B 18-6a

GENERAL NOTES

1. STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA) - SEE CURRENT SDD 14B20.
2. LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.



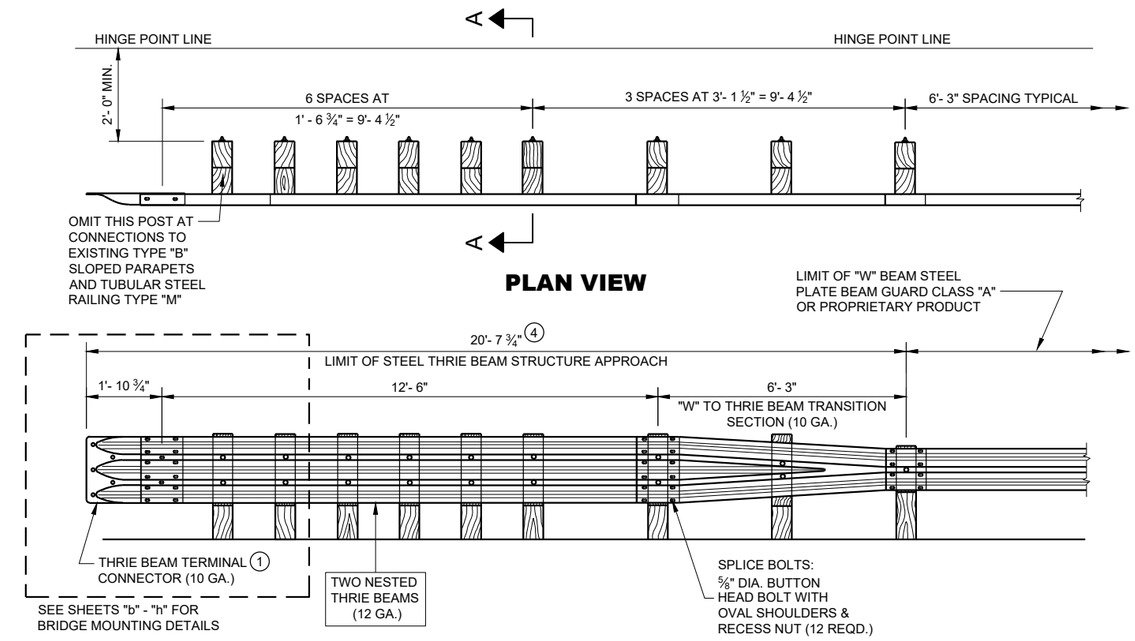
PARALLEL INSTALLATION

BEAM GUARD AT MEDIAN APPROACH TO BRIDGES

STEEL PLATE BEAM GUARD CLASS "A" AT MEDIAN APPROACH TO BRIDGES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
8-21-07 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

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S.D.D. 14 B 18-6b



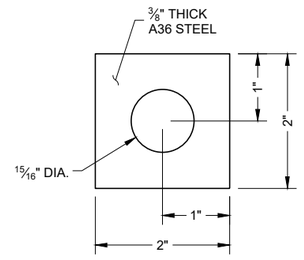


PLATE WASHER DETAIL

GENERAL NOTES

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

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

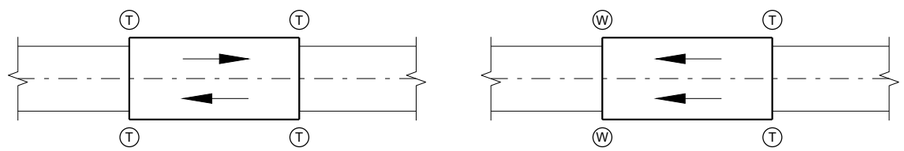
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 ½" , AND 12" DIAMETER AROUND POST. SEE 14B15 FOR MORE DETAILS.

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

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

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

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



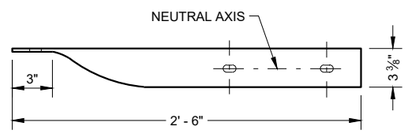
TWO WAY TRAFFIC

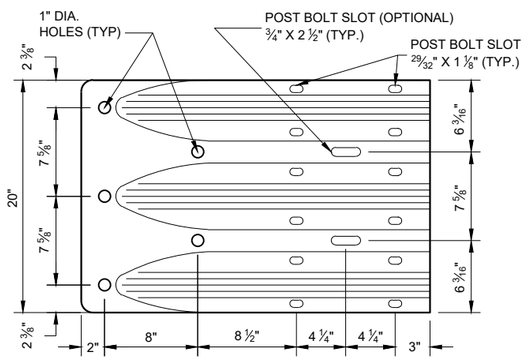
ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

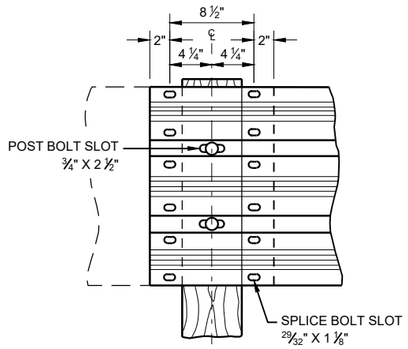
(W) W-BEAM CONNECTION WHEN REQUIRED

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

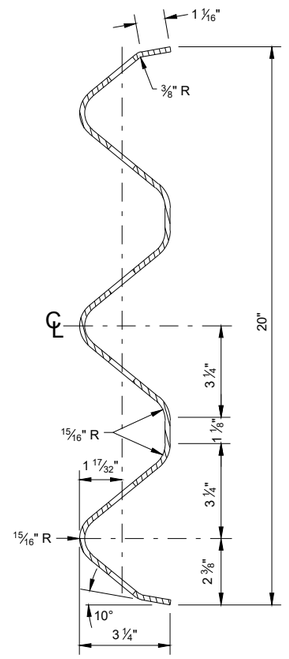




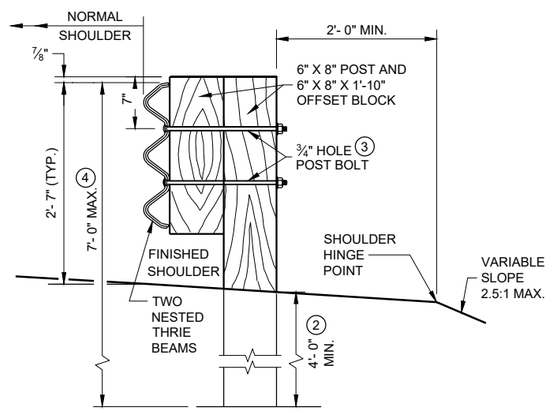
THRIE BEAM TERMINAL CONNECTOR



THRIE BEAM SPLICE



SECTION THRU BEAM RAIL ELEMENT



SECTION A-A

STEEL THRIE BEAM STRUCTURE APPROACH

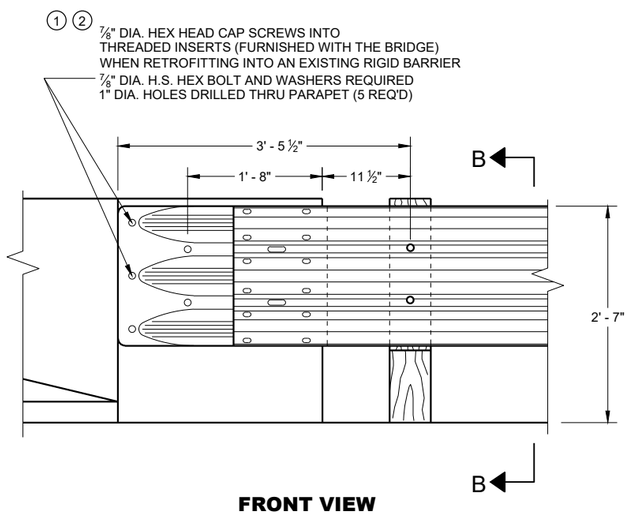
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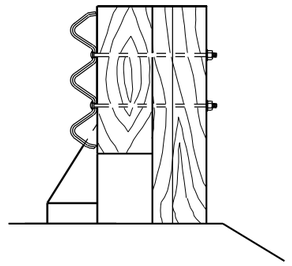
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FRONT VIEW



SECTION B - B

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

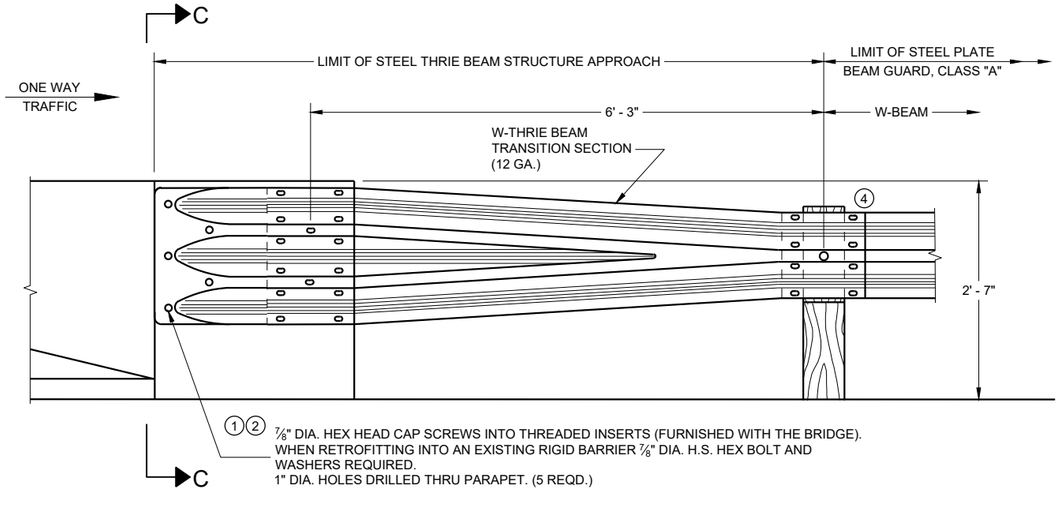
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

③ 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".

④ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

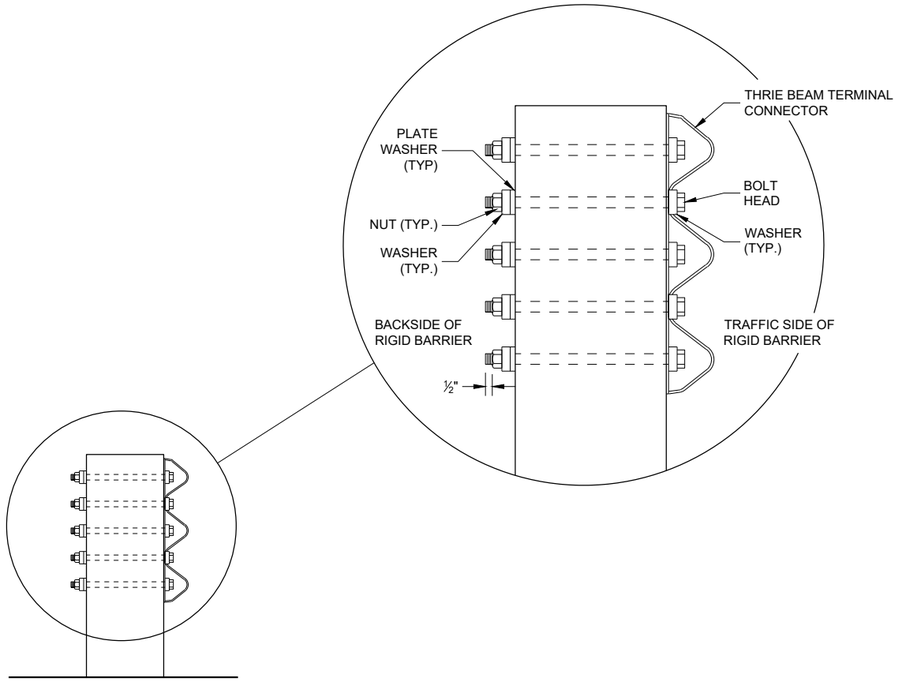
DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGE)



SECTION C - C

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END PARAPETS

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GENERAL NOTES

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

BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

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

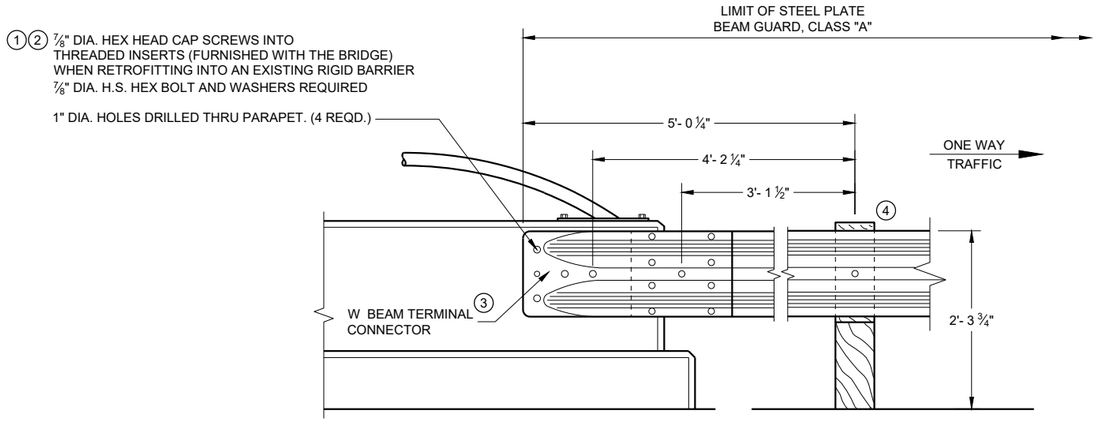
(2) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

(3) 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".

(4) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

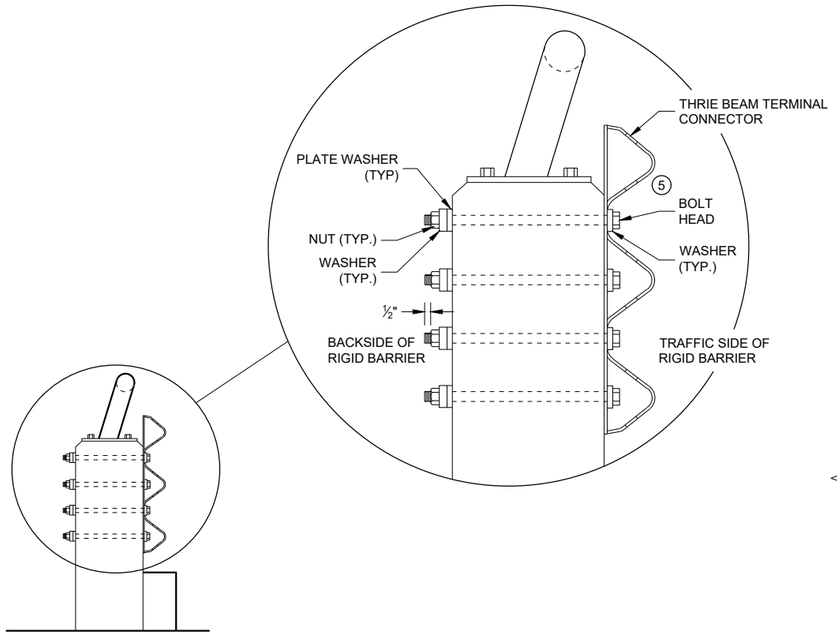
(5) BOLT, NUT AND WASHERS NO REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PARAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE THE EDGE OF PARAPET.

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

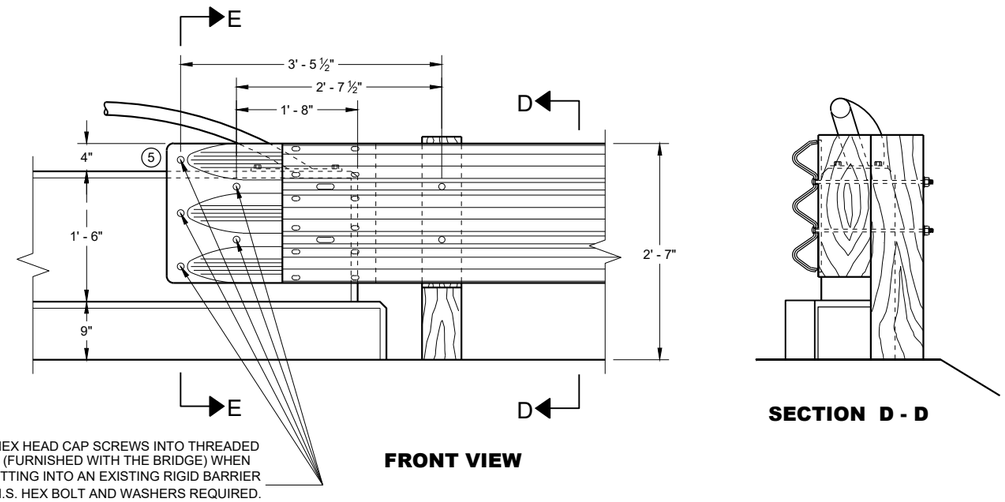


FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



SECTION E - E



FRONT VIEW

SECTION D - D

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

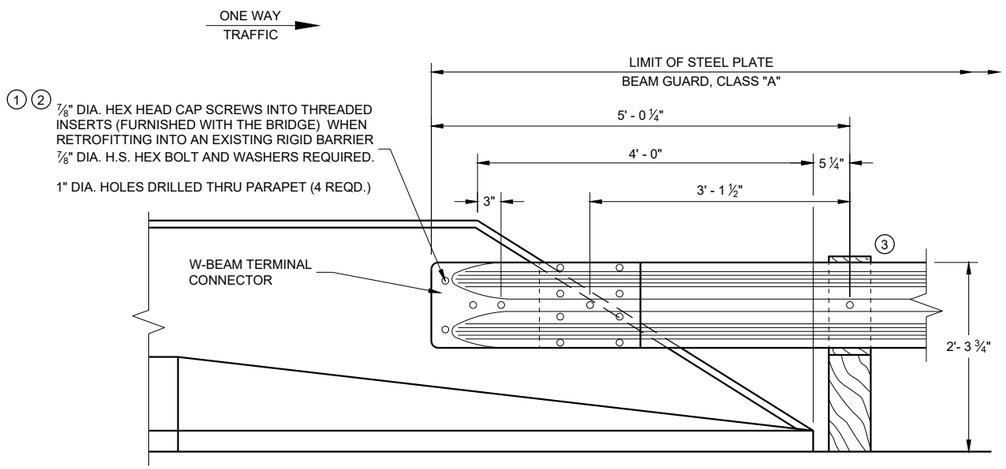
STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO VERTICAL FACED PARAPETS

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FRONT VIEW

W BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

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

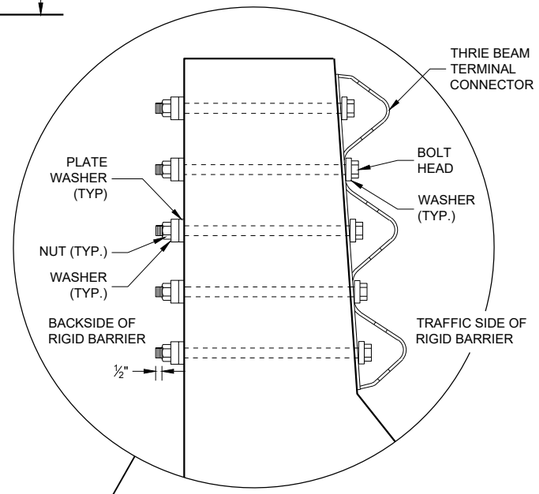
BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

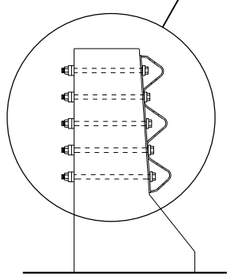
1. DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

2. BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

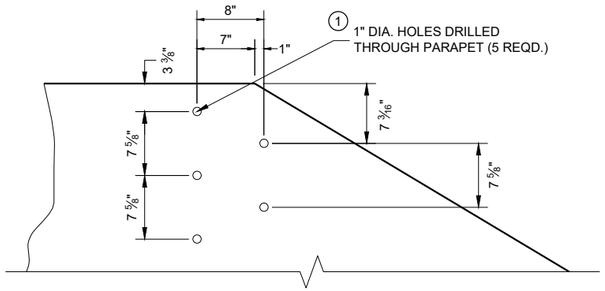
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   DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

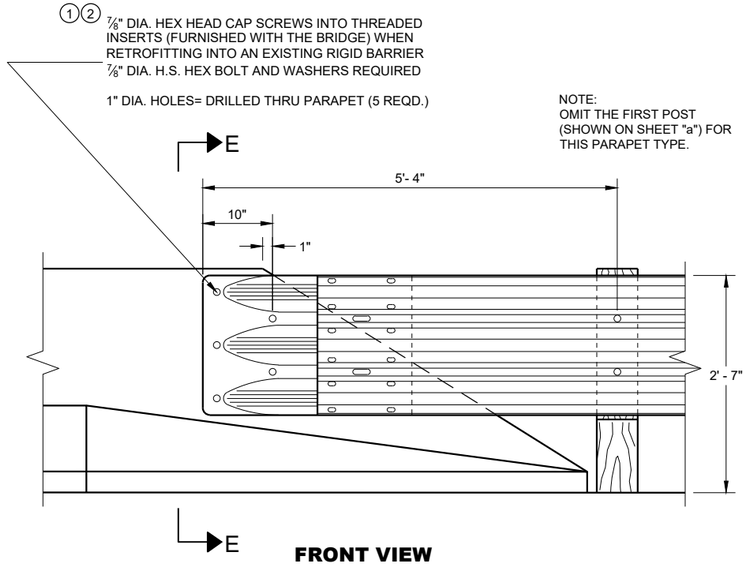




SECTION E - E



DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SLOPED END PARAPETS

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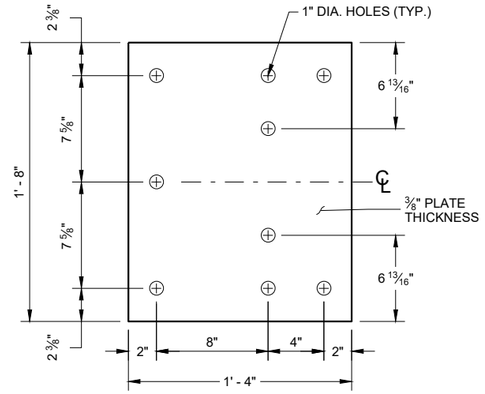
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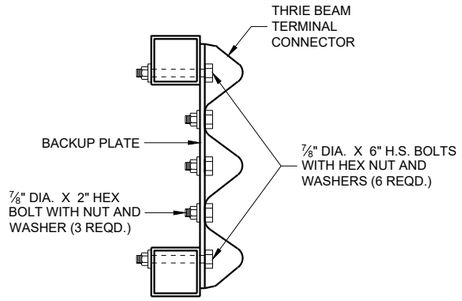
SDD 14B20 - 12d

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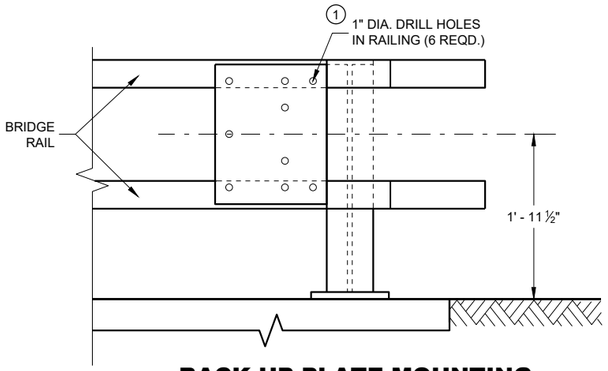
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BACK-UP PLATE DETAIL



SECTION G - G



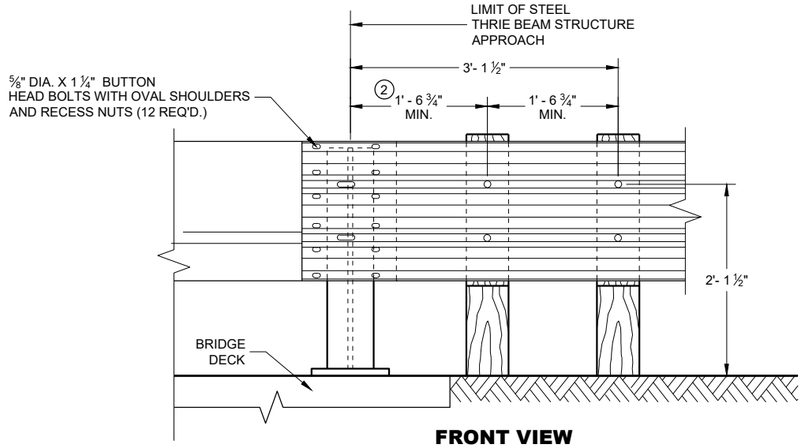
BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

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

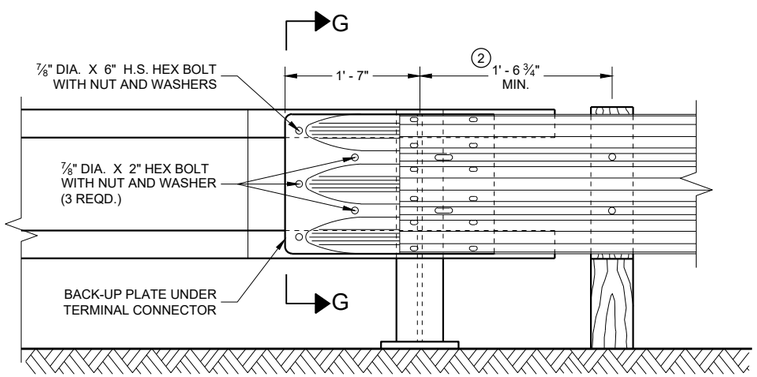
(1) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

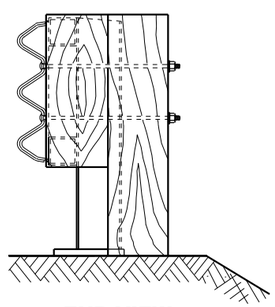


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



END VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

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

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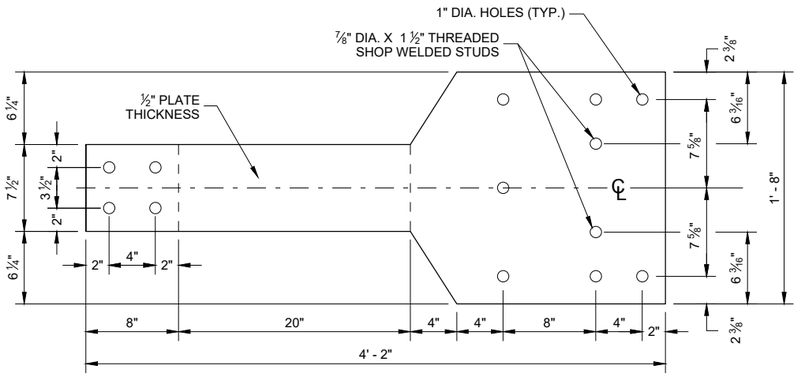
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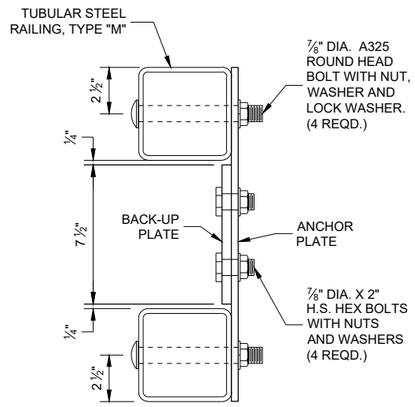
SDD 14B20 - 12e

GENERAL NOTES

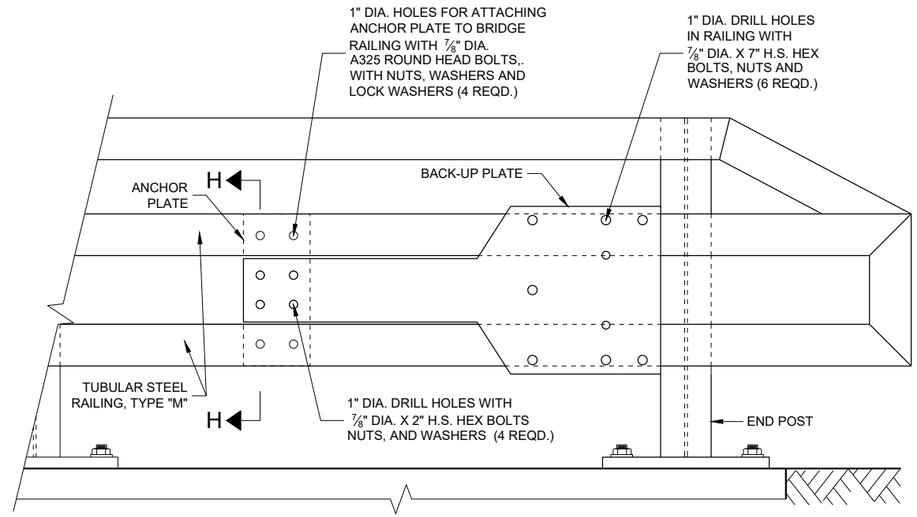
(1) VARY THIS DIMENSION DEPENDING ON ABUTMENT TYPE, WINGWALL DETAILS, AN ANGLE OF SKEW. PLACE THE FIRST WOOD POST OFF THE BRIDGE SHALL BE AS CLOSE AS FEASIBLE TO THE STEEL END POST.



FRONT VIEW

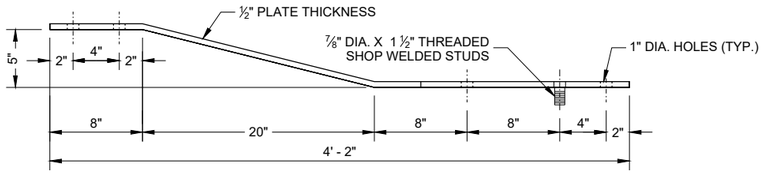


SECTION H - H



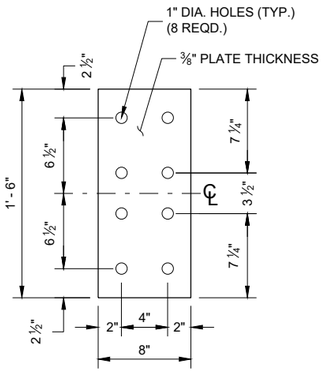
FRONT VIEW

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



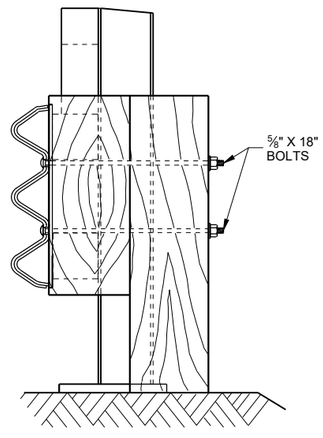
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

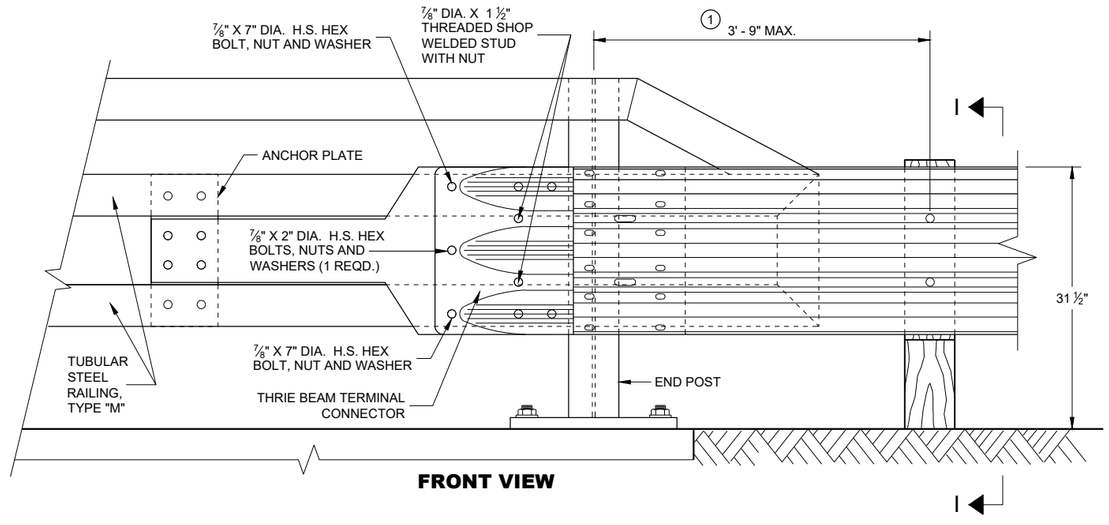


PLAN VIEW

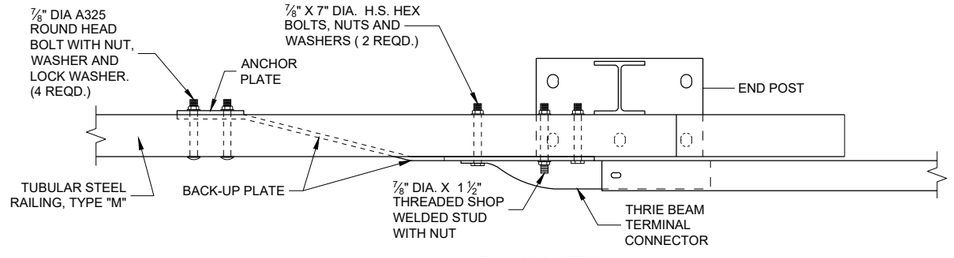
ANCHOR PLATE DETAIL, TYPE "M"



SECTION I - I



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

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

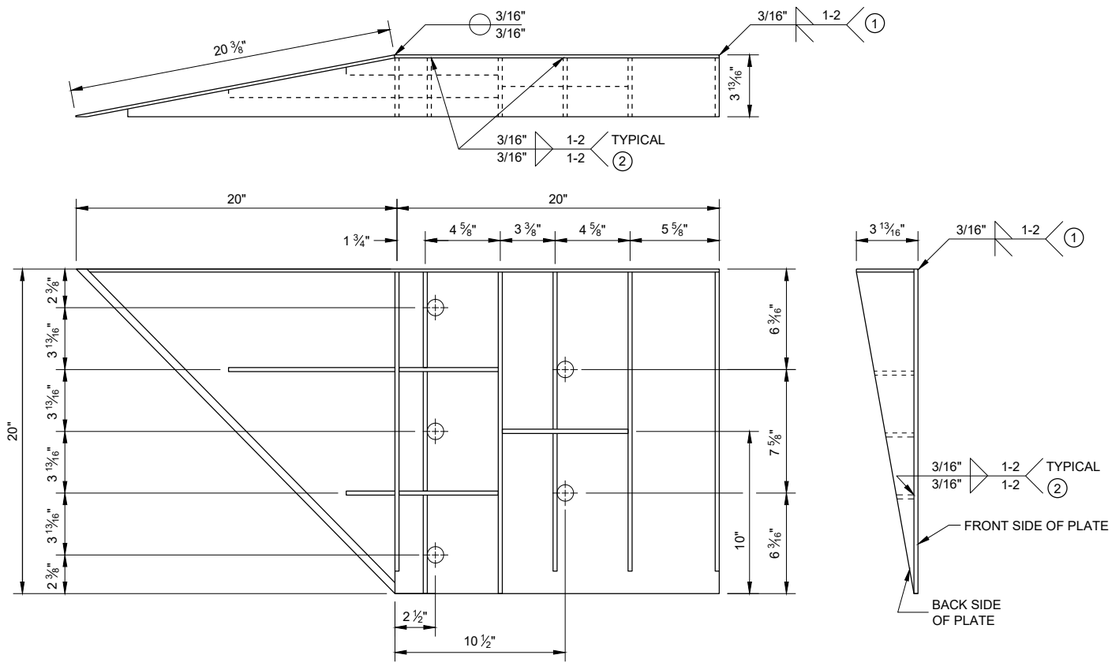
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WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

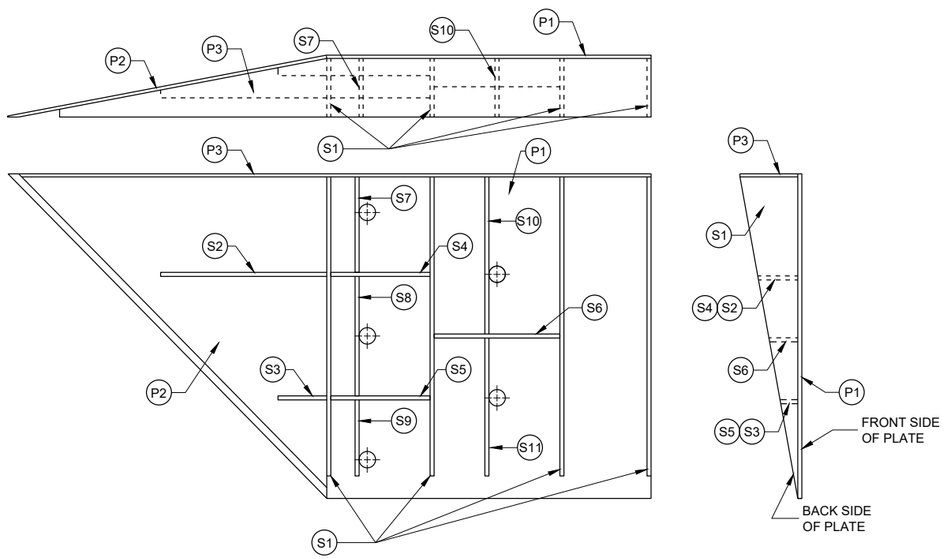


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK

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

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

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION, MIRROR DRAWINGS.

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

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

CONNECTOR PLATED DIMENSION (PER ASSEMBLY)

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

STEEL THRIE BEAM STRUCTURE APPROACH

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTOR PLATE DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

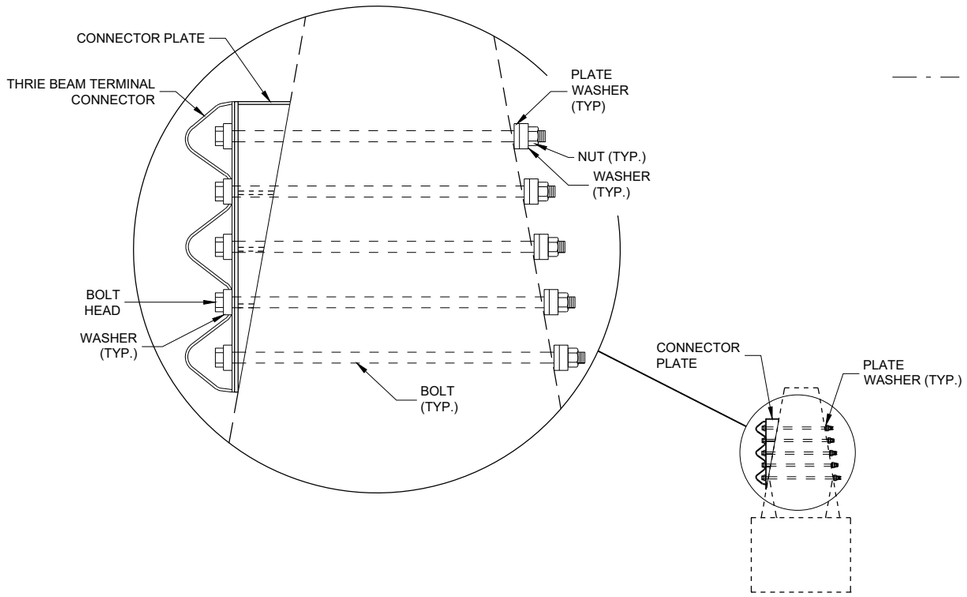
APPROVED
November 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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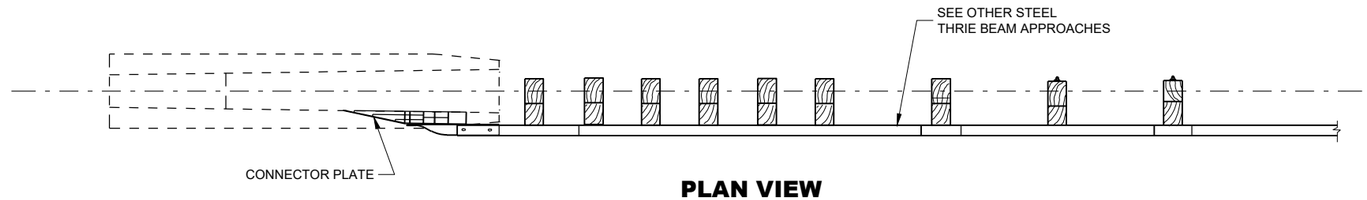
SDD 14B20 - 12g

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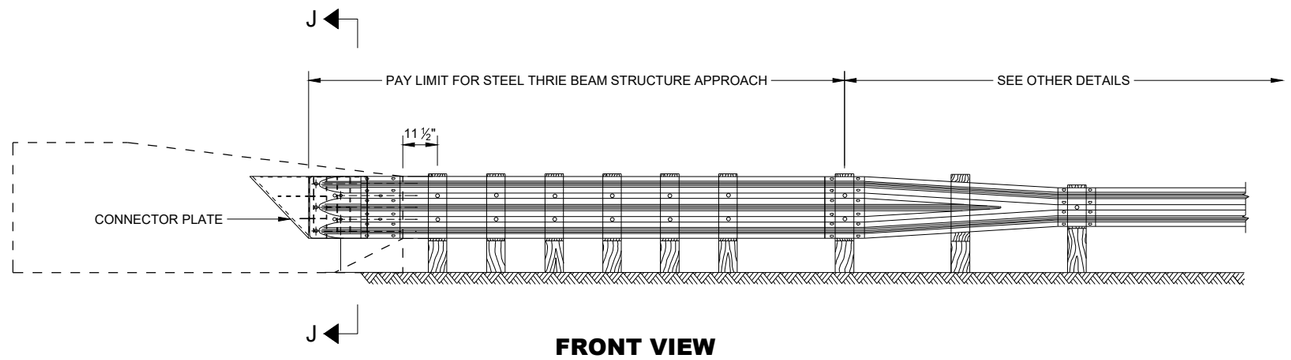
SDD 14B20 - 12g



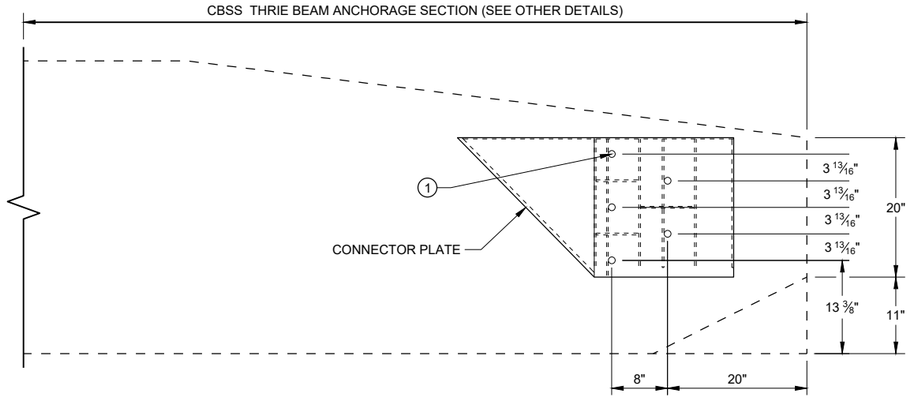
SECTION J - J



PLAN VIEW



FRONT VIEW



CONNECTOR PLATE PLACEMENT

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 614.

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

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

STEEL THRIE BEAM STRUCTURE APPROACH

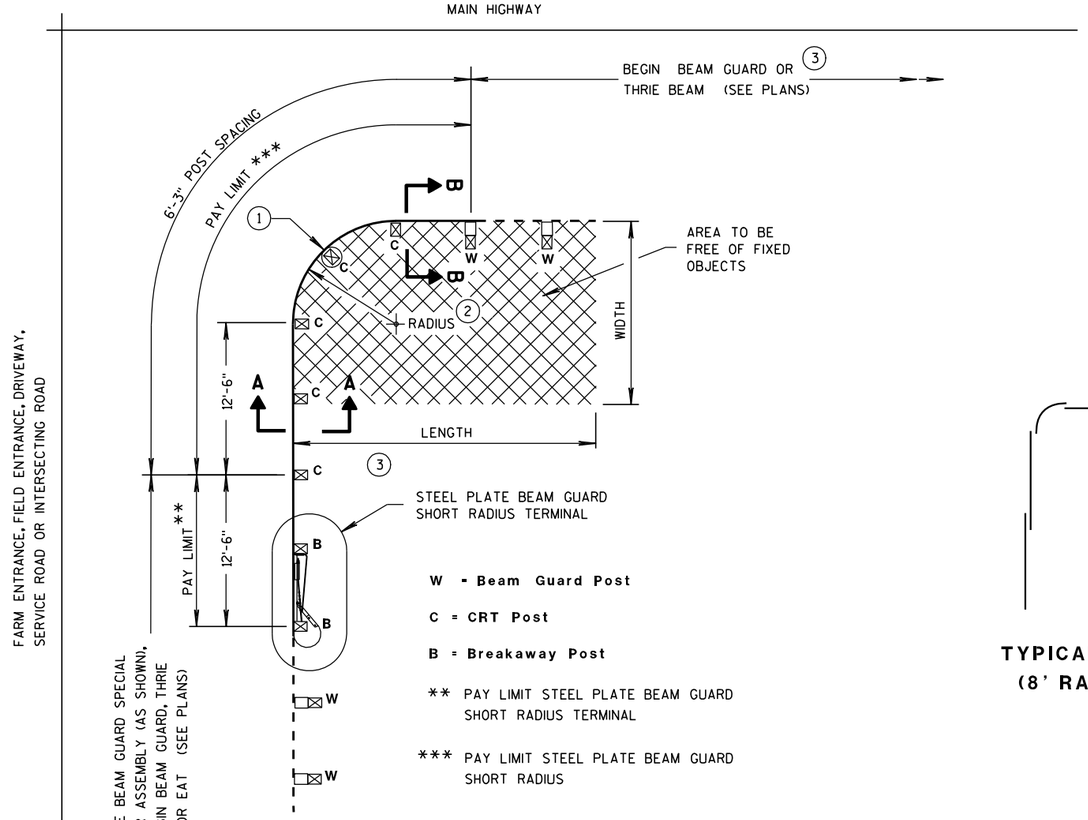
MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

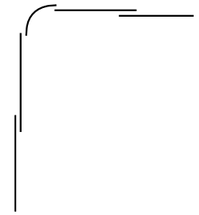
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SDD 14B20 - 12h



TYPICAL LAYOUT
(8' RADIUS SHOWN)



TYPICAL LAP SPLICES
(8' RADIUS SHOWN)

GENERAL NOTES

ALL ANGLES, CHANNELS, AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36 AND THE STRUCTURAL TUBING SHALL CONFORM TO ASTM A 500. WELDING SHALL MEET THE CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI/AWS D1.1. ALL STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 123. PUNCHING, DRILLING, CUTTING, OR WELDING WILL NOT BE PERMITTED AFTER GALVANIZING. FURNISH AND INSTALL HARDWARE PER STANDARD SPECIFICATION 614.2. UNLESS NOTED OTHERWISE.

SHOP BEND CURVED RAIL SECTIONS.

SEE STANDARD DETAIL DRAWING 14 B 15 FOR OTHER DETAIL.

(1) ON THE 8 FOOT RADIUS INSTALLATION, DO NOT INSTALL BUTTON HEAD BOLT AT CENTER CRT POST.

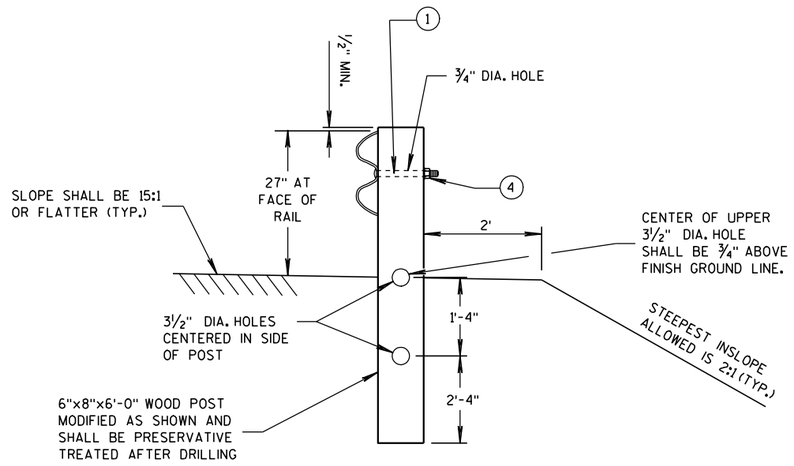
(2) RADIUS FROM 8' - 36'. SEE PLAN.

(3) HEIGHT TRANSITION MAY BE REQUIRED. SEE PLAN OR PROJECT ENGINEER.

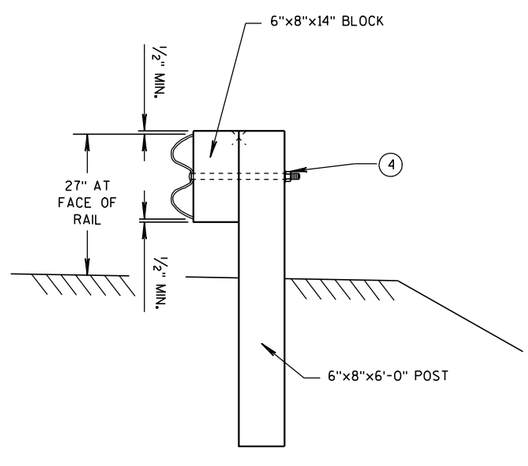
(4) 5/8" ø X 1'-6" BUTTON HEAD BOLT AND RECESS NUT WITH ROUND WASHER UNDER NUT.

RADIUS	NUMBER OF CRT POSTS	*NUMBER AND LENGTH OF CURVED RAILS	REQUIRED AREA FREE OF FIXED OBJECTS (LENGTH x WIDTH)
8'	5	1 at 12.5'	25' x 15'
16'	7	1 at 25'	30' x 15'
24'	9	1 at 25' and 1 at 12.5'	40' x 20'
32'	11	2 at 25'	50' x 20'

* THE NUMBER OF RAILS IS BASED ON A 90° INTERSECTION. SEE PLAN FOR NON 90° INSTALLATIONS.



SECTION A-A
(CRT POST)



SECTION B-B
(BEAM GUARD POST)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

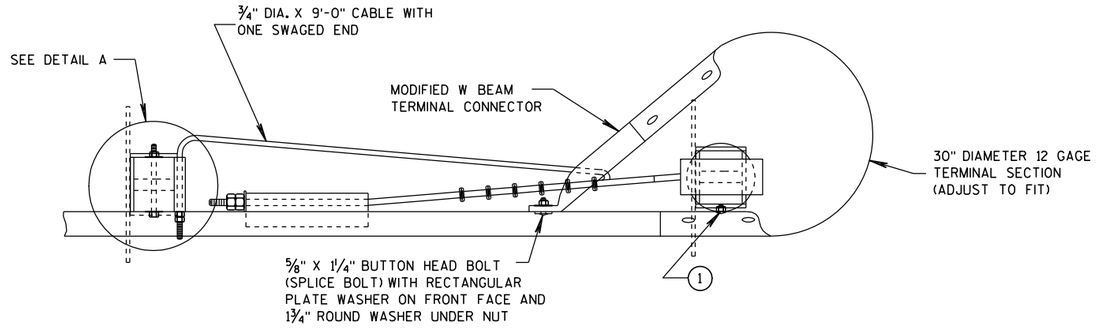
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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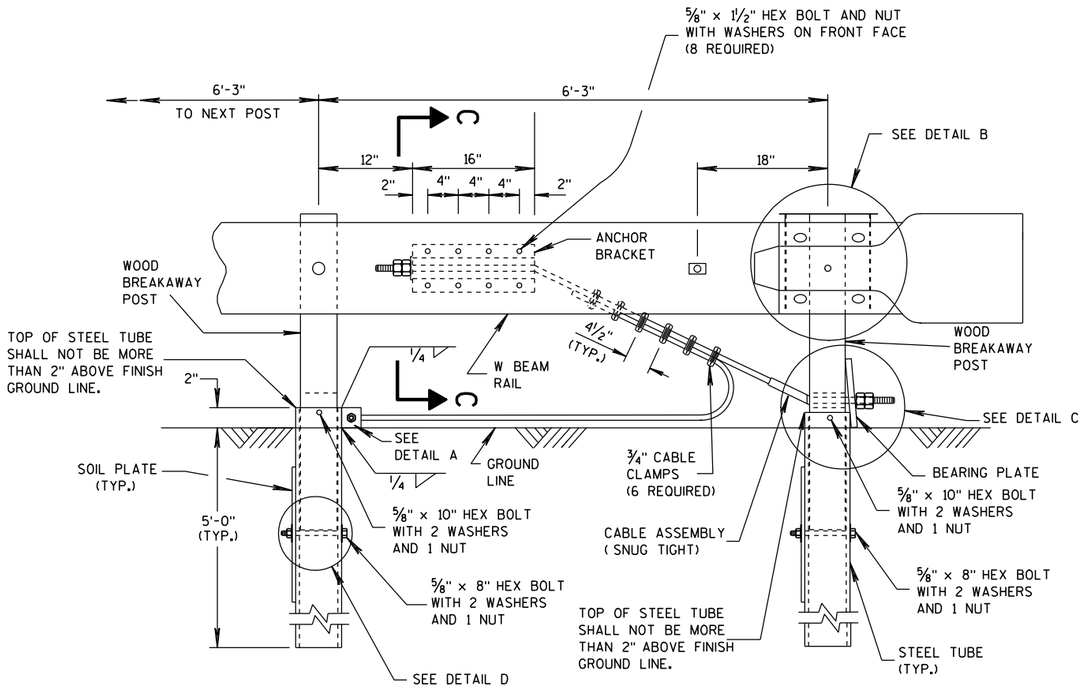
S.D.D. 14 B 27-1a

6

S.D.D. 14 B 27-1a



PLAN VIEW



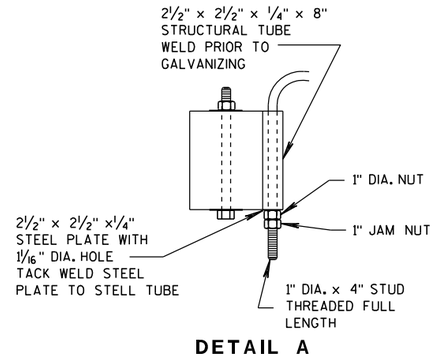
ELEVATION VIEW

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

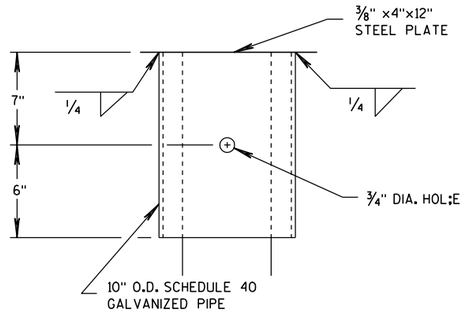
GENERAL NOTES

(1) ATTACH W BEAM RAIL TO THE STEEL PIPE WITH A ⅝" X 2" BUTTON HEAD BOLT WITH NO WASHER. CONNECTION TO THE POST IS NOT REQUIRED.

INSTALL GALVANIZED ¾" (6X19) PREFORMED WIRE OR INDEPENDENT WIRE ROPE CORE CONFORMING TO AASHTO M 30. MANUFACTURE WIRE ROPE OUT OF IMPROVED PLOW STEEL WITH A MINIMUM BREAKING STRENGTH OF 42,800 PSI.



DETAIL A



DETAIL B

(BEAM GUARD AND TERMINAL SECTION NOT SHOWN)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

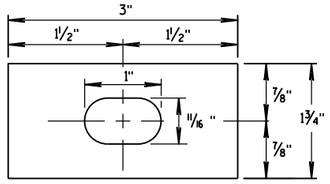
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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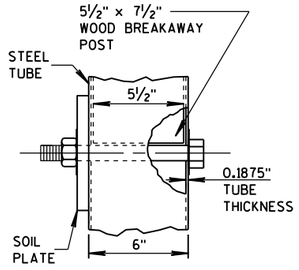
S.D.D. 14 B 27-1b

6

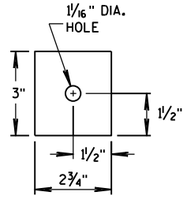
S.D.D. 14 B 27-1b



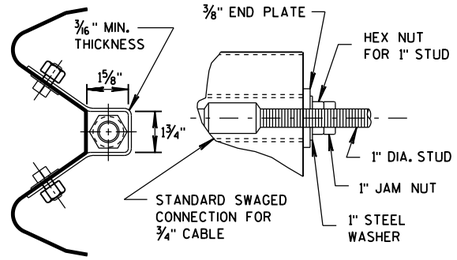
RECTANGULAR PLATE WASHER



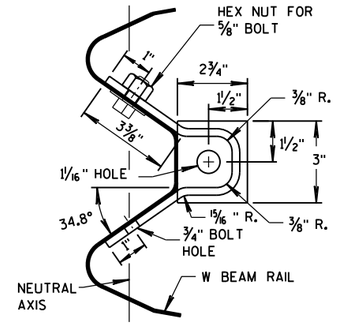
DETAIL D



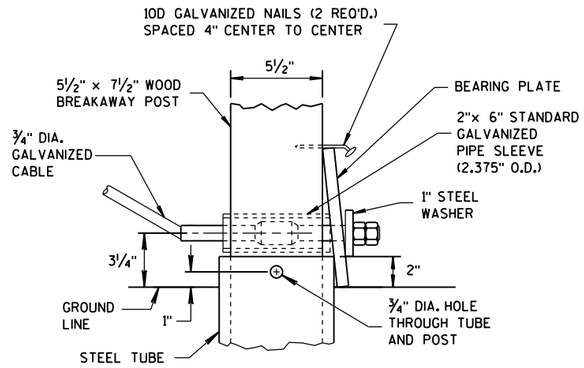
END PLATE



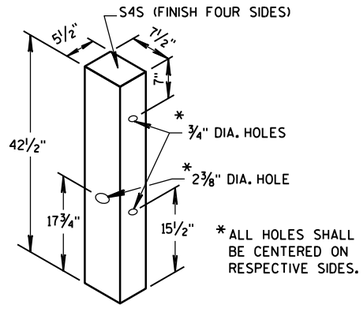
SECTION C-C
(END PLATE REMOVED)



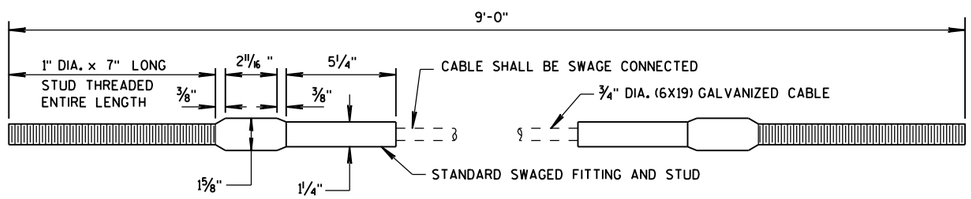
ANCHOR BRACKET



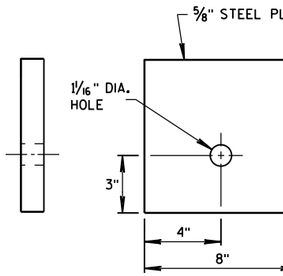
DETAIL C



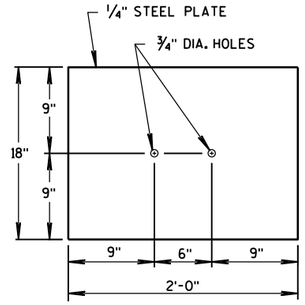
WOOD BREAKAWAY POST



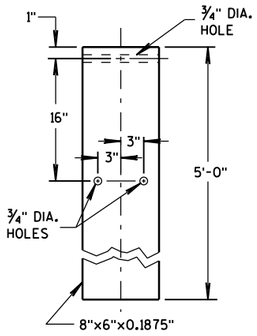
CABLE ASSEMBLY



BEARING PLATE



SOIL PLATE



STEEL TUBE

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

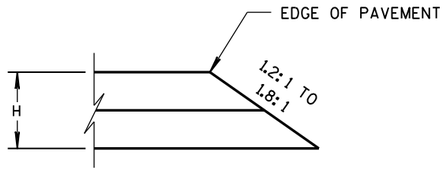
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S.D.D. 14 B 27-1c

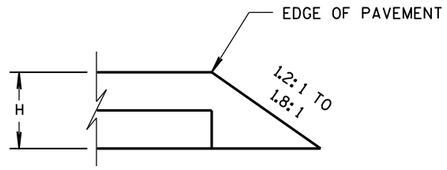
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S.D.D. 14 B 27-1c



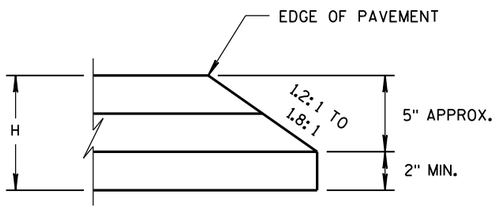
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



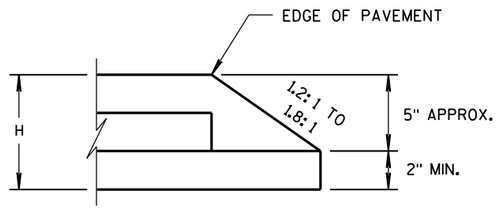
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

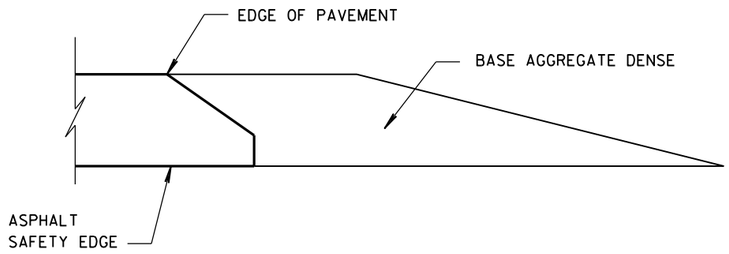
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

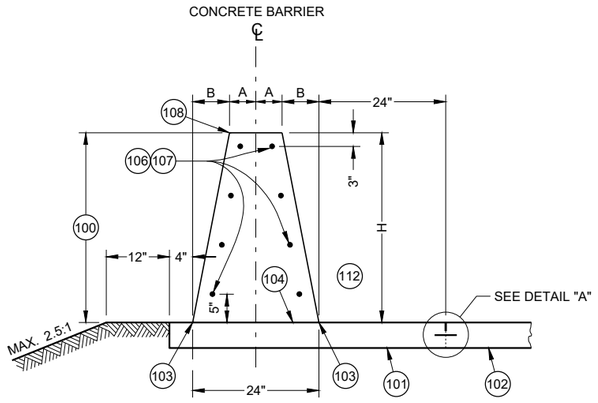
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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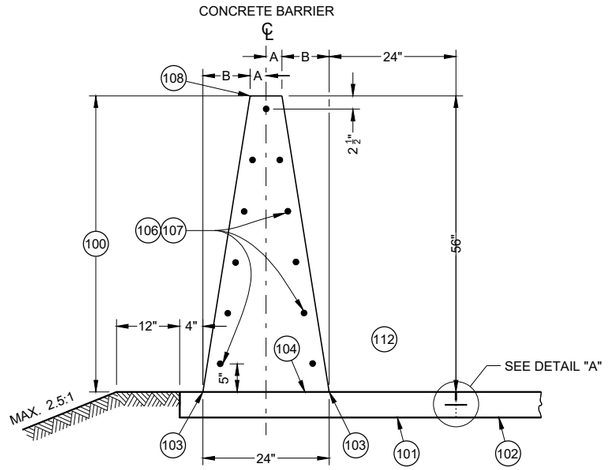
11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



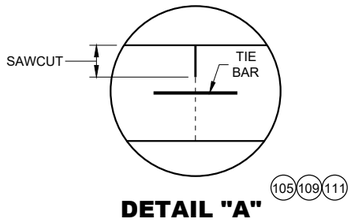
32 - INCH, 36 - INCH OR 42 - INCH SINGLE SLOPE CONCRETE BARRIER
(TYPE S32, TYPE S36, TYPE S42)



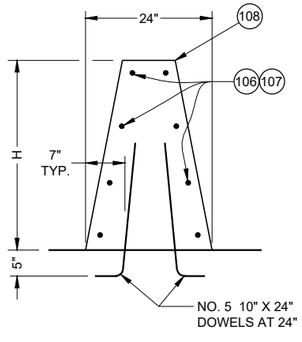
56 - INCH SINGLE SLOPE CONCRETE BARRIER
(TYPE S56)

TABLE "A"

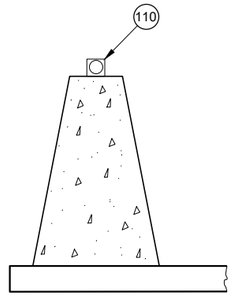
BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6 ¼	5 ¾	8
42	5 ¼	6 ¾	10
56	3	9	11



DETAIL "A"



SINGLE SLOPE CONCRETE BARRIER ON BRIDGE
(NON OUTER PARAPET APPLICATION)



DELINEATION

GENERAL NOTES

WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.

LOCATE EXPANSION JOINTS IN CONCRETE BARRIER SHALL AT ALL DECK AND PRINCIPAL WALL JOINTS. FILL EXPANSION JOINT WITH EXPANSION JOINT MATERIAL. SEAL THE EXPANSION JOINT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.

2" CLEAR COVER TYPICAL

ANCHORS ARE REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN IN THIS SDD OR DETAIL SHOWN ON SDD 14B33. ANCHORS INCIDENTAL TO CBSS.

PROVIDE A 1" DEEP CONTRACTION JOINT IN BARRIER PAD AND BARRIER. JOINT IS TO MATCH ADJACENT CONCRETE JOINTS. NO DOWEL BARS ARE REQUIRED FOR BARRIER PAD. IF ADJACENT TO ASPHALT, CONTRACTION JOINT IS REQUIRED EVERY 15'.

ALL REBAR SHALL BE EPOXY COATED M31 TYPE S. SEE STANDARD SPECIFICATION 505.

CONCRETE BARRIER, UPPER CONCRETE BARRIER, LOWER CONCRETE BARRIER, CONCRETE BARRIER PAD, AND FOOTINGS ARE TERMS USED TO DESCRIBE PARTS OF SINGLE SLOPE CONCRETE BARRIER BID ITEMS. THESE PARTS ARE INCIDENTAL TO THE SINGLE SLOPE CONCRETE BARRIER BID ITEMS.

(100) CONCRETE BARRIER

(101) CONCRETE BARRIER PAD

(102) PAVEMENT

(103) WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 1 ½", USE TYPE A SINGLE SLOPE BARRIER.

(104) OPTIONAL CONSTRUCTION JOINT.

(105) CONSTRUCTION JOINTS MAY BE ELIMINATED WHEN CONCRETE SHOULDER IS LESS THAT 10'.

(106) STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL IS 2' BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.

(107) NO. 5 CONTINUOUS BARS EVENLY SPACED (SEE TABLE "A").

(108) USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

(109) CONCRETE BARRIER PAD UNDER CBSS MAY BE PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED ⅓ DEPTH. CONCRETE BARRIER PAD AND SAWING OF CONCRETE SHOULDER IS INCIDENTAL TO CONCRETE BARRIER BID ITEM. CONCRETE BARRIER PAD MINIMUM DEPTH IS 6", OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.

(110) SEE SDD 15A04 FOR DELINEATOR DETAILS AND SPACING.

(111) SEE SDD 13C01 FOR DETAILS TYPING CONCRETE BARRIER TO ADJACENT CONCRETE

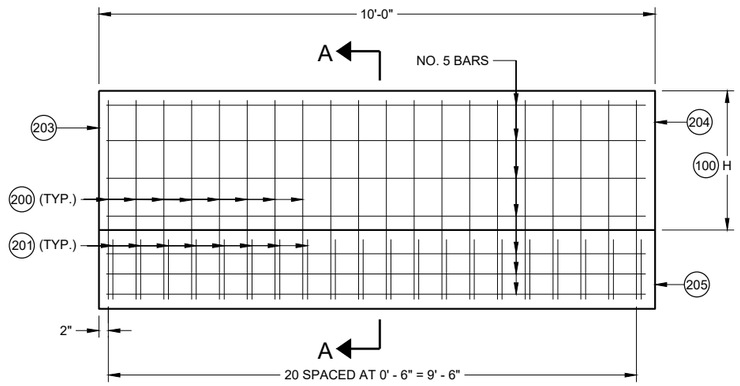
(112) TRAFFIC SIDE

CONCRETE BARRIER SINGLE SLOPE (CBSS)

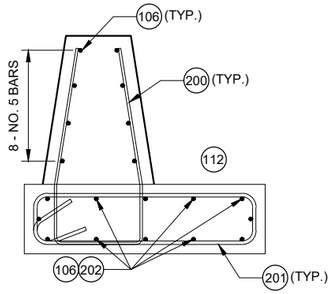
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DEPARTMENT OF TRANSPORTATION

6

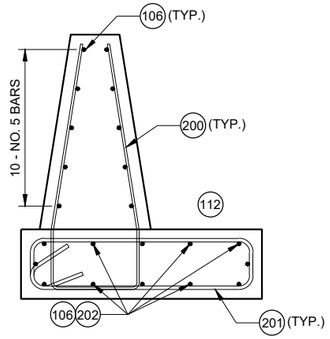
SDD 14B32 - 10a



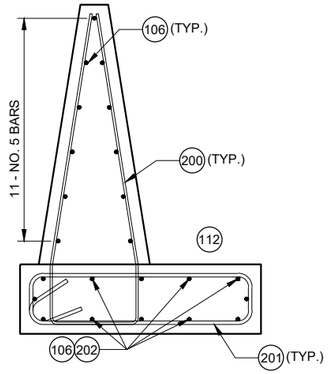
END ANCHOR SINGLE SLOPE CONCRETE BARRIER



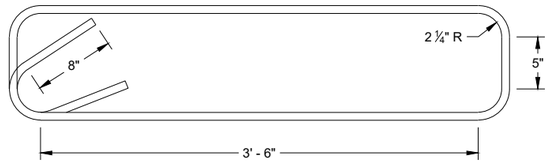
32" AND 36" CBSS



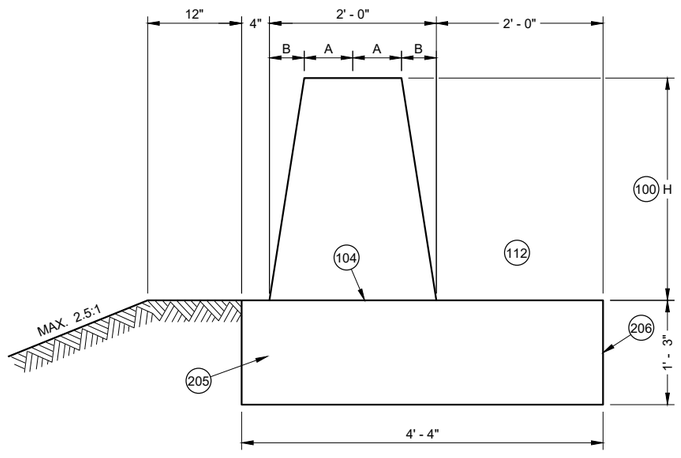
42" CBSS



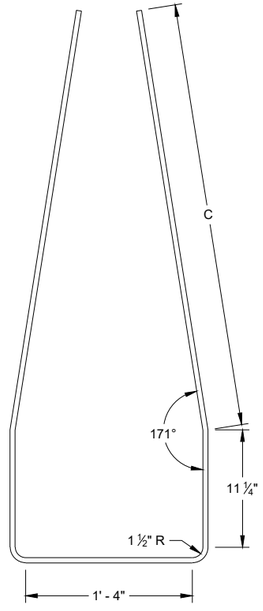
56" CBSS



STIRRUP BAR BENDING DETAIL



SECTION A - A



V1 BAR BENDING DETAIL

TABLE "B"

BARRIER HEIGHT H INCHES	C INCHES
32	2' - 6"
36	2' - 11"
42	3' - 4"
56	4' - 6 ½"

GENERAL NOTES

200 V1 BARS ARE NO. 5 BARS. (SEE BAR BENDING DETAIL)

201 STIRRUPS ARE NO. 6 BARS. (SEE BAR BENDING DETAIL)

202 TWELVE (12) NO. 5 BARS EVENLY SPACED

203 END OF INSTALLATION OR EXPANSION JOINT.

204 SEE COLD JOINT DETAIL TO CONNECT END ANCHOR SINGLE SLOPE CONCRETE BARRIER TO SINGLE SLOPE CONCRETE BARRIER.

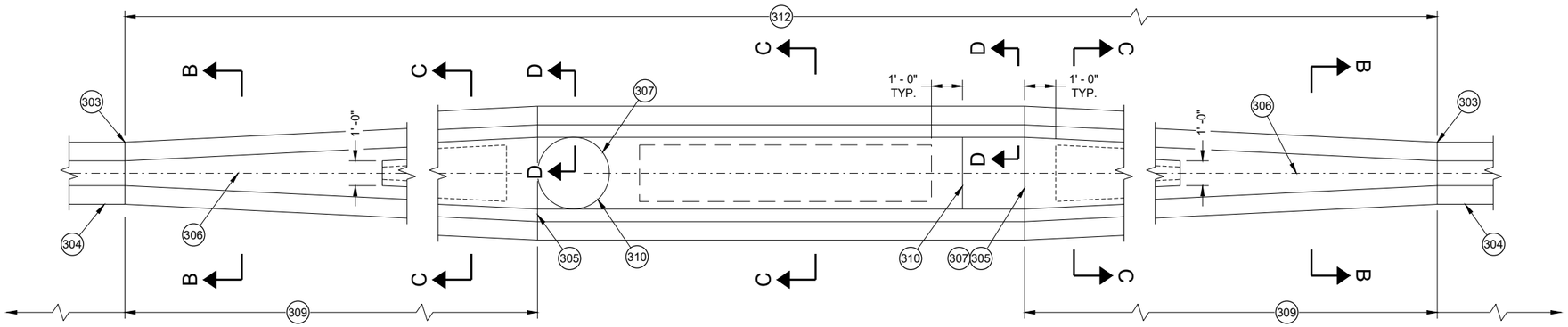
205 FOOTING

206 DO NOT TIE TO FOOTING TO ADJACENT PAVEMENT.

CONCRETE BARRIER SINGLE SLOPE (CBSS)

6

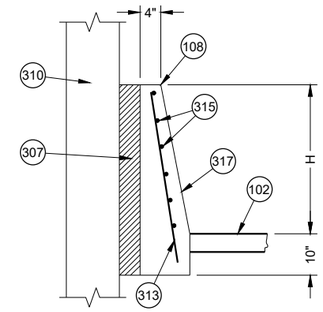
SDD 14B32 - 10b



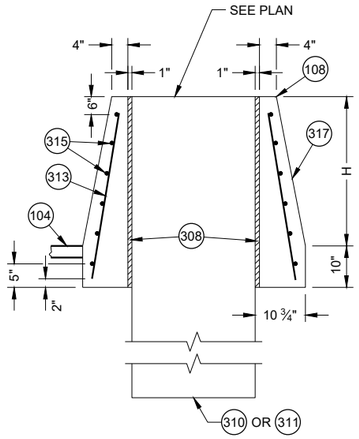
LARGE FIXED OBJECTS PROTECTION
(TYPE S32, TYPE S36, TYPE S42, TYPE S56)

TABLE "C"

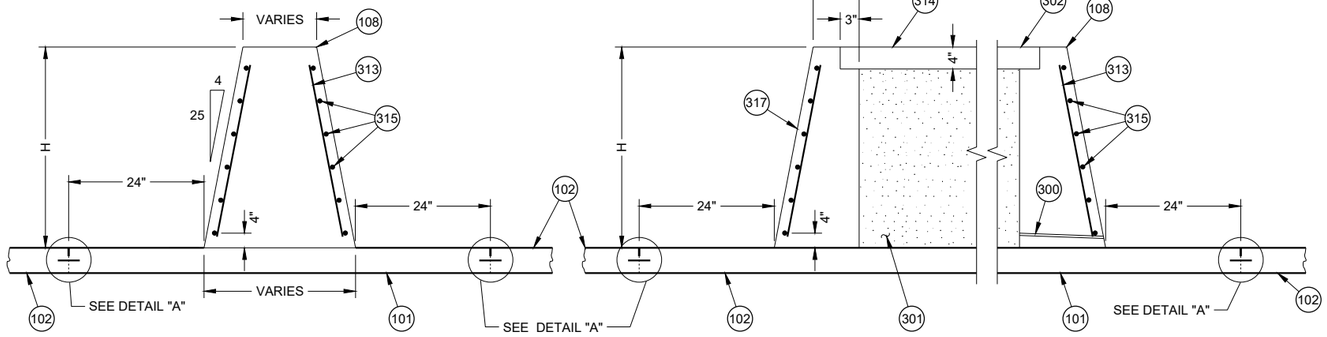
BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF BARS EACH
32	4	6
36	4	6
42	5	6
56	5	6



SECTION D - D

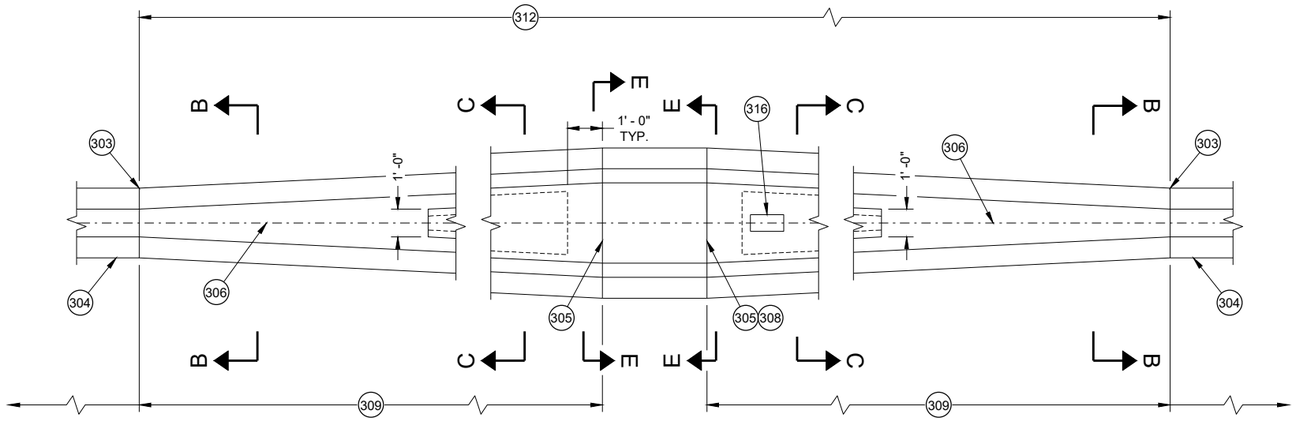


SECTION E - E



SECTION B - B

SECTION C - C



SMALL FIXED OBJECTS PROTECTION
(TYPE S32, TYPE S36, TYPE S42, TYPE S56)

GENERAL NOTES

300 INSTALL 1 INCH DIAMETER DRAIN PIPE EVERY 20 FEET OF CROSS SECTION B -B. MINIMUM ONE DRAIN CAVITY.

301 BETWEEN CONCRETE BARRIER WALLS FILL WITH FOUNDATION BACKFILL.

302 LEVEL THE TOP OF CONCRETE BARRIER CAP ACROSS TOP OF BARRIER. ADJUST HEIGHT OF CONCRETE BARRIER WALL ON LOW SIDE OF OFFSET OR SUPERELEVATED ROADWAYS TO PROVIDE LEVEL GRADE ACROSS TOP OF CONCRETE CAP.

303 USE COLD JOINTS BETWEEN FIXED OBJECT PROTECTION AND CONCRETE BARRIER ANCHOR.

304 INSTALL END ANCHOR SINGLE SLOPE CONCRETE BARRIER.

305 SEE COLD JOINT DETAIL

306 CENTERLINE OF CONCRETE BARRIER.

307 INSTALL 4" EXPANDED POLYSTYRENE BETWEEN COLUMN AND CONCRETE BARRIER.

308 INSTALL 1" EXPANDED POLYSTYRENE BETWEEN PEDESTAL AND CONCRETE BARRIER.

309 20:1 MIN. TRANSITION.

310 COLUMN

311 PEDESTAL

312 LIMITS OF PAYMENT FOR LARGE FIXED OBJECT PROTECTION (SEE PLAN)

313 NO. 4 BARS SPACED 12" CENTER TO CENTER (TYP.)

314 USE NO. 3 BAR SPACED 12 INCHES CENTER TO CENTER (PLACED IN EACH DIRECTION) OR EQUIVALENT WIRE MESH.

315 SEE TABLE "C" FOR BAR INFORMATION

316 ELECTRICAL PULL BOX FOR SIGN FLUSH WITH TOP OF CONCRETE BARRIER.

317 VARIABLE SLOPE

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B32 - 10c

GENERAL NOTES

(400) END ANCHOR SINGLE SLOPE CONCRETE BARRIER.

(401) PARAPET, SIGN BRIDGE BASE, LIGHT POLE BASE OR OTHER OBJECT SINGLE SLOPE CONCRETE BARRIER CANNOT TIE INTO.

(402) JOINT SEAL CONFORMING TO STANDARD SPECIFICATION 415.2.6

(403) EXPANSION JOINT MATERIAL.

(404) INLET (SEE PLAN)

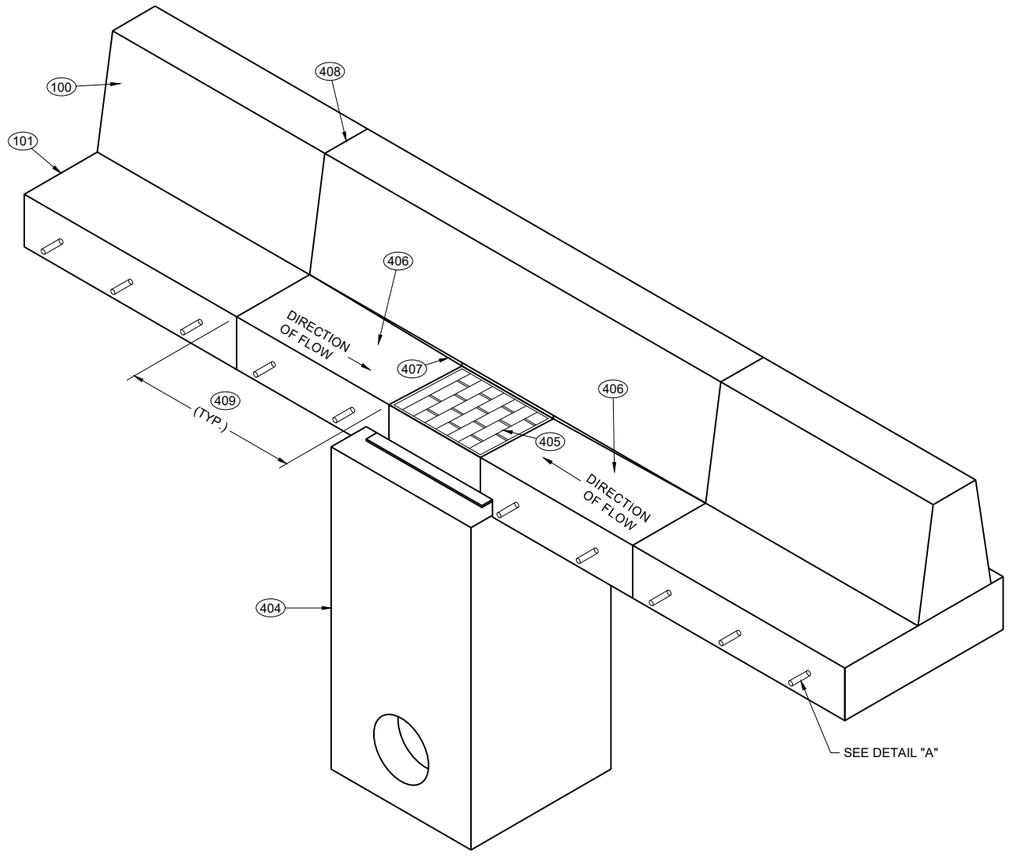
(405) INLET COVER BW (SEE PLAN)

(406) WARP PAN TO MATCH INLET COVER.

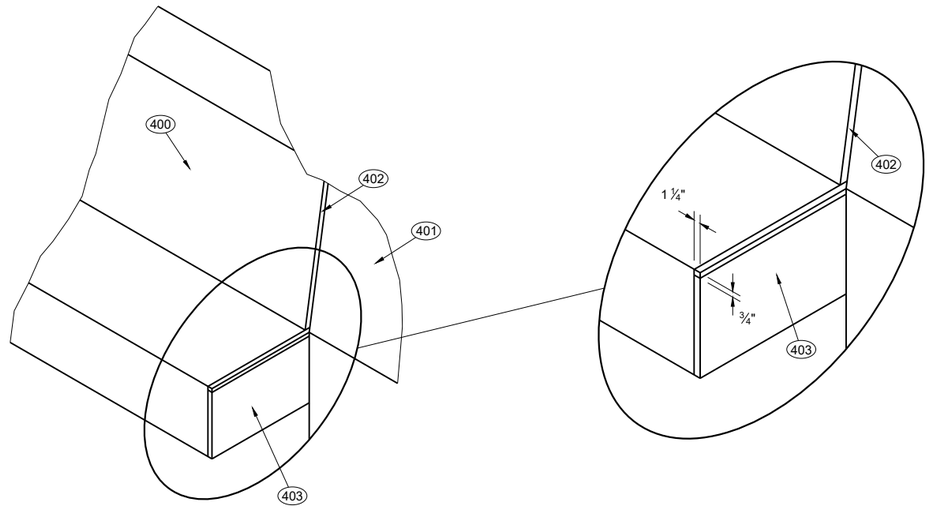
(407) EXTEND BARRIER SLOPE TO INLET. SEE PLAN FOR THE LENGTH OF EXTENSION.

(408) CONTRACTION JOINT.

(409) WHEN ADJACENT TO CONCRETE PAVEMENT OR SHOULDER, JOINT SHOULD MATCH CONCRETE JOINTS. OTHERWISE, 3' (TYP.). SEE SDD 13C18 FOR MORE INFORMATION.



DRAINAGE DETAIL



EXPANSION JOINT DETAIL

6

SDD 14B32-10d

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B32-10d

GENERAL NOTES

USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

(500) SEE TABLE "A" FOR DIMENSIONS

(501) SEE TABLE "D"

(502) MULTIPLE HEIGHT TRANSITION MAY BE USED IN SEQUENCE TO GET APPROPRIATE HEIGHT.

(503) COLD JOINT

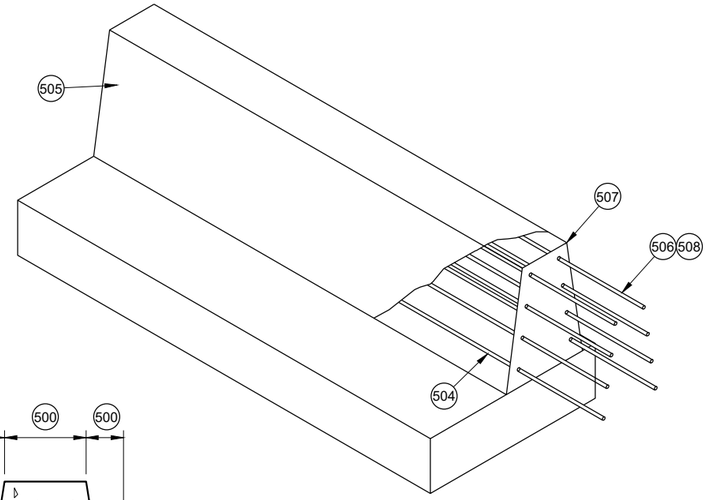
(504) BARRIER REBAR (SEE OTHER DETAILS FOR BAR SIZE, QUANTITY AND LOCATION).

(505) SINGLE SLOPE BARRIER SHOWN. SIMILAR DETAIL CAN BE USED FOR COLD JOINT IN END ANCHORS AND TRANSITIONS.

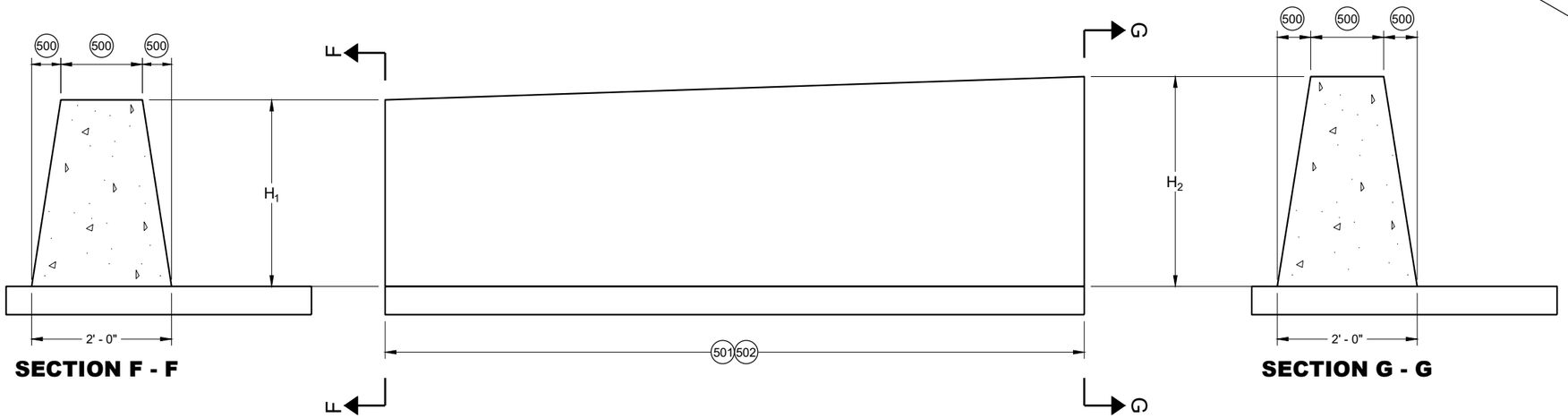
(506) NO. 5 REBAR FOR SPLICE. 3' OF SPLICE REBAR IS LAPPED AND TIED TO BARRIER REBAR. EXTEND 3' OF SPLICE REBAR BEYOND END OF POUR. ALL BARS ARE FIRMLY TIED OR CONNECTED. EVERY REBAR IN THE BARRIER SECTION REQUIRES A SPLICE BAR.

(507) END OF POUR.

(508) LAP AND TIE 3' OF NEXT POUR'S REBAR TO SPLICE REBAR.



COLD JOINT DETAIL



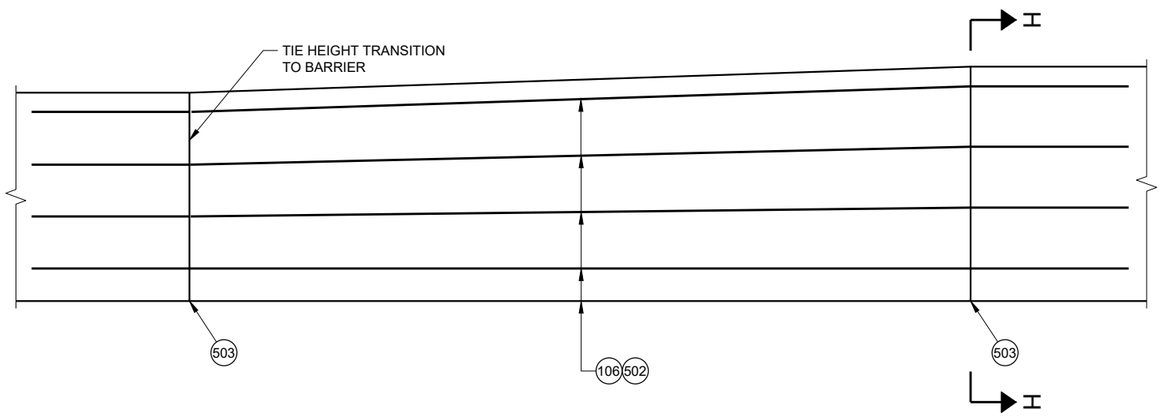
SECTION F - F

SECTION G - G

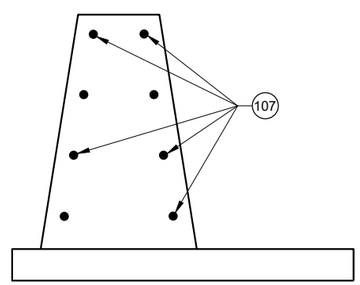
DOUBLE COLD JOINT HEIGHT TRANSITION

TABLE "D"

H_1	H_2	L	NUMBER OF NO. 5 BARS
32"	36"	10' - 0"	8
36"	42"	10' - 6"	10
42"	56"	24' - 6"	11



STEEL REINFORCEMENT DETAIL



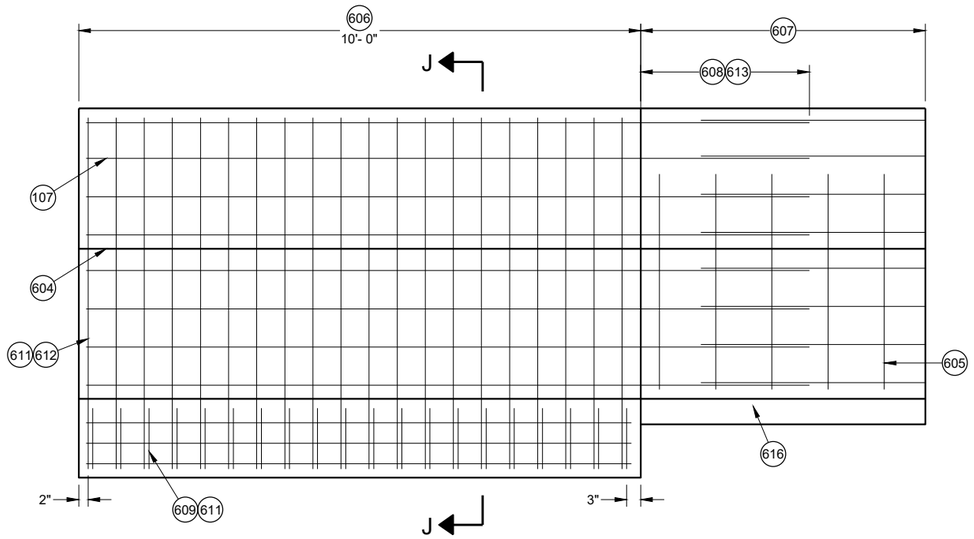
SECTION H - H

CONCRETE BARRIER SINGLE SLOPE (CBSS)

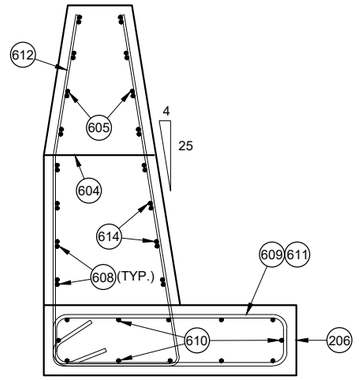
STATE OF WISCONSIN
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SDD 14B32 - 10e

SDD 14B32 - 10e



END ANCHOR MEDIAN BARRIER AND RETAINING WALL



SECTION J - J
END ANCHOR AND MEDIAN WALL END ANCHOR REINFORCEMENT DETAIL

GENERAL NOTES

600 UPPER CONCRETE BARRIER

601 LOWER CONCRETE BARRIER

602 MAX HEIGHT 36".

603 VERTICAL OFFSET FROM TOP ROADWAY SURFACES

604 OPTIONAL CONSTRUCTION JOINT WHEN HEIGHT IS GREATER THAN 1 ½".

605 NO. 4 BARRIER LOOP BARS ARE NOT REQUIRED FOR ROADWAY OFFSETS ARE LESS THAN 1'- 0", EXCEPT WHEN USED IN ANCHORS. BARRIER LOOP BARS ARE SPACED 12" CENTER TO CENTER OUTSIDE OF MEDIAN BARRIER AND RETAINING WALL END ANCHOR.

606 SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL ANCHOR

607 SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL (SEE OTHER DETAILS)

608 NO. 5 REBAR 3' OF LAP OF LONGITUDINAL STEEL.

609 NO. 6 REBAR END ANCHOR FOOTING LOOP

610 TWELVE (12) NO. 5 BARS EVENLY SPACED.

611 SS ANCHOR END LOOP AND END ANCHOR FOOTING LOOP ARE SPACED 6" CENTER TO CENTER.

612 END ANCHOR LOOP BAR IS NO. 5 REBAR.

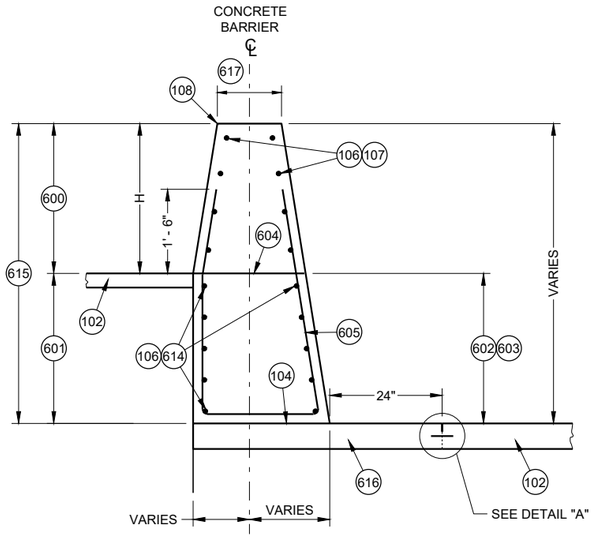
613 SEE COLD JOINT DETAIL.

614 SEE TABLE "E" FOR REQUIRED REBAR

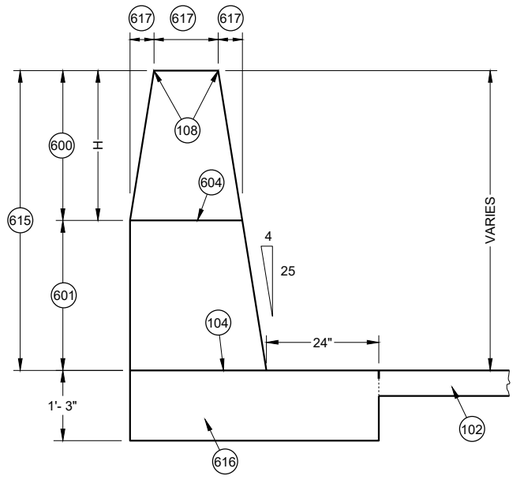
615 TOTAL BARRIER HEIGHT (SEE PLAN FOR HEIGHT)

616 FOR SOME LOCATIONS, NO PAN IS NEEDED. SEE OTHER DETAILS.

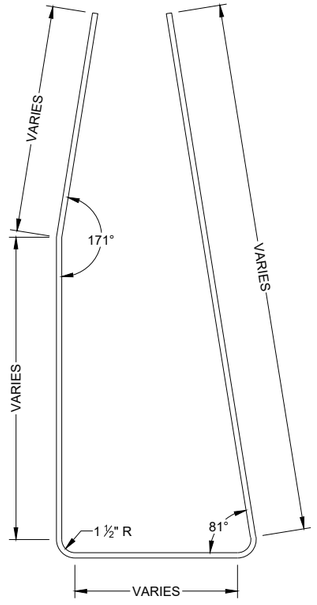
617 SEE TABLE "A" FOR DIMENSIONS



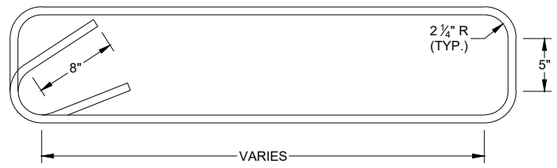
SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)
(BETWEEN ADJACENT ROADWAYS)



SECTION J - J
MEDIAN BARRIER AND RETAINING WALL END ANCHOR DIMENSIONS



LOOP BAR BENDING DETAIL



END ANCHOR STIRRUP BAR BENDING DETAIL

TABLE "E"

HEIGHT BETWEEN ROADWAY	QUANTITY OF NO. 6 BARS
0 TO 3"	0
GREATER THAN 3" TO 8"	2
GREATER THAN 8" TO 12"	4
GREATER THAN 12" TO 36"	8

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B32 - 10f

6

SDD 14B32 - 10f

GENERAL NOTES

700 END ANCHOR SINGLE SLOPE CONCRETE BARRIER

701 SEE EXPANSION JOINT DETAIL

702 END ANCHOR SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL

703 PAY LIMIT FOR SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL

704 SEE COLD JOINT DETAIL

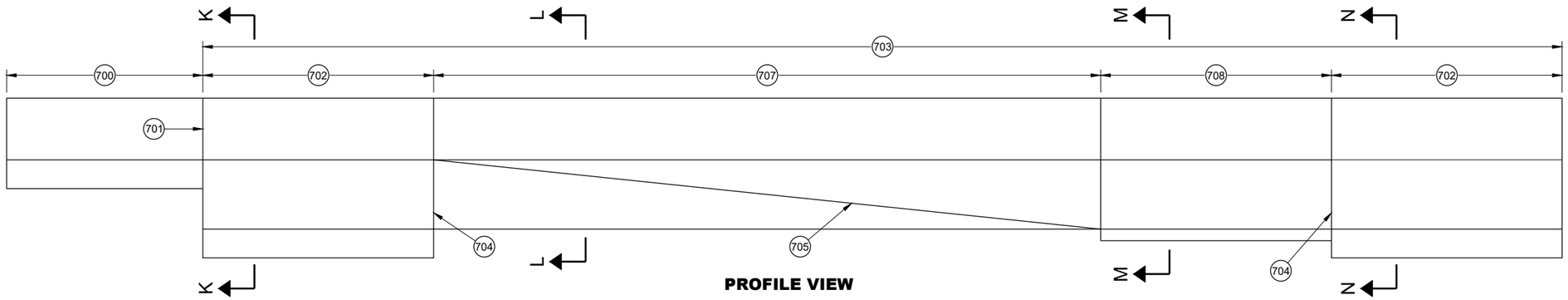
705 LOW SIDE SHOULDER

706 HIGH SIDE SHOULDER

707 SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL INSTALLED WITHOUT A PAN.

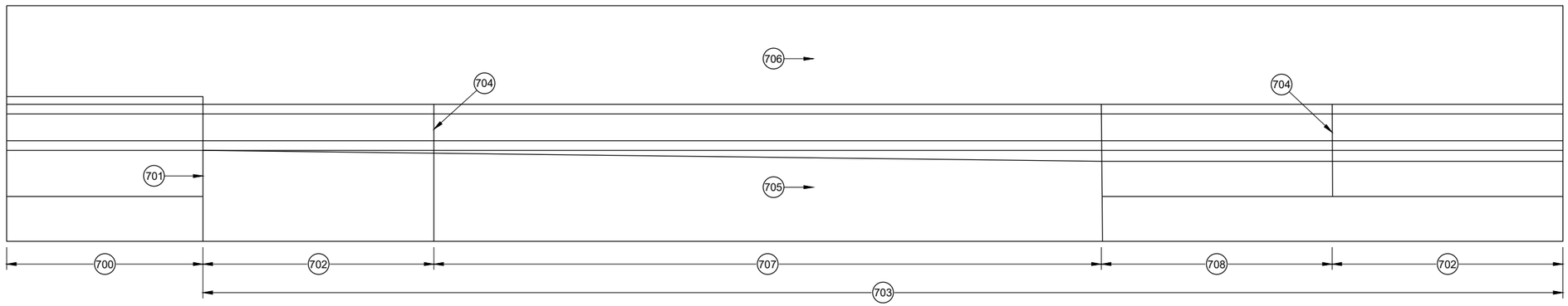
708 SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL INSTALLED WITH A PAN.

709 EXCAVATION AND COMPACTION



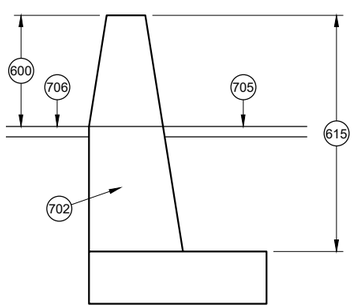
PROFILE VIEW

SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL

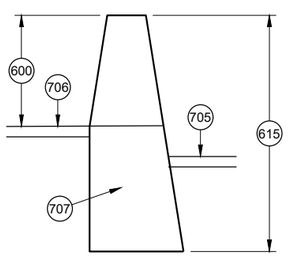


PLAN VIEW

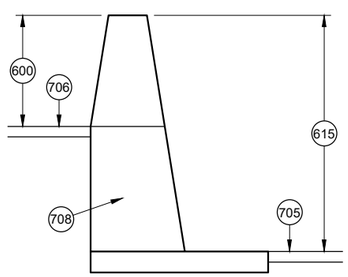
SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL



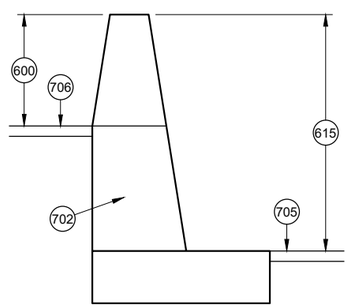
SECTION K - K



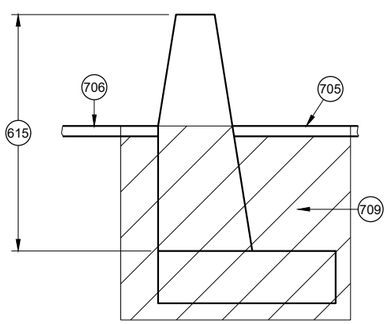
SECTION L - L



SECTION M - M



SECTION N - N

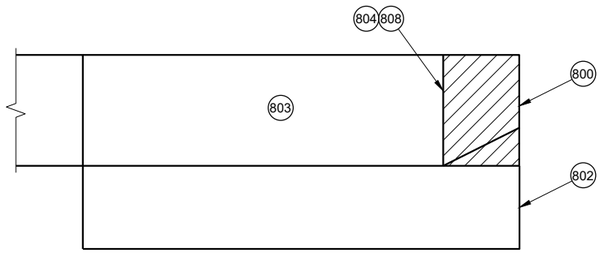


CONCRETE BARRIER
SINGLE SLOPE (CBSS)

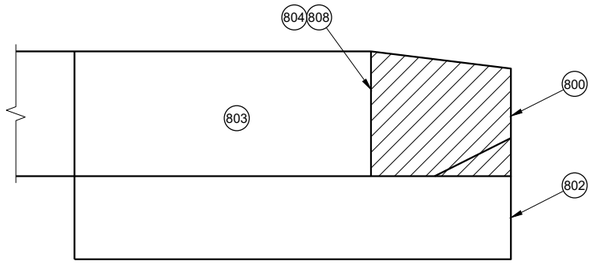
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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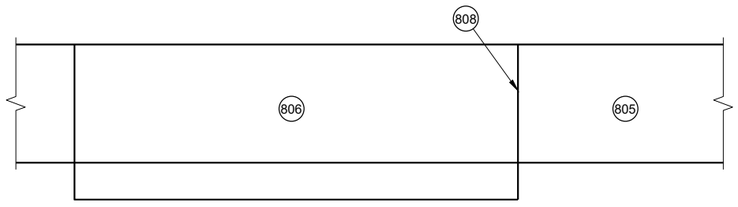
SDD 14B32 - 10g



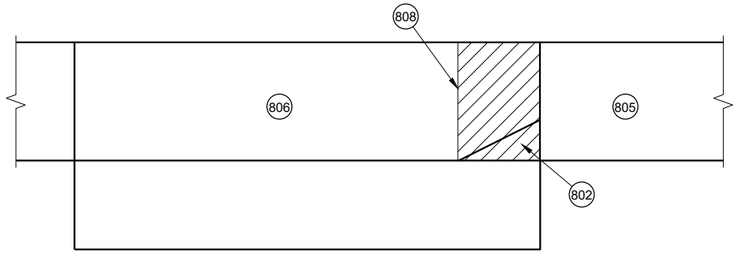
REMOVAL AREA OF
32" CONCRETE THRIE BEAM ANCHORAGE



REMOVAL AREA OF CONCRETE THRIE BEAM ANCHORAGE WITH HEIGHT GREATER THAN 32"



CONCRETE BARRIER EXTENSION NEAR END ANCHORAGE



CONCRETE BARRIER EXTENSION NEAR THRIE BEAM TERMINAL

GENERAL NOTES

END ANCHORAGE MAY OR MAY NOT BE PRESENT ON EXISTING BARRIER.

REMOVE THRIE BEAM ANCHORAGE AS SHOWN.

800 AREA OF BARRIER REMOVAL AN NEW CONCRETE AND STEEL IS INSTALLED.

801 MINIMUM LENGTH OF REMOVAL IS 15'

802 FOOTING BELOW GROUND MAY REMAIN IN PLACE.

803 CONCRETE BARRIER SINGLE SLOPE THRIE BEAM ANCHOR TO REMAIN.

804 SAW CUT

805 NEW SINGLE SLOPE CONCRETE BARRIER.

806 CONCRETE BARRIE SINGLE SLOPE TO REMAIN.

807 SINGLE SLOPE CONCRETE BARRIER OR CONCRETE BARRIER SINGLE SLOPE THRIE BEAM ANCHOR TO REMAIN.

808 SEE CONNECTION DETAIL.

809 NO. 5 CONTINUOUS BAR.

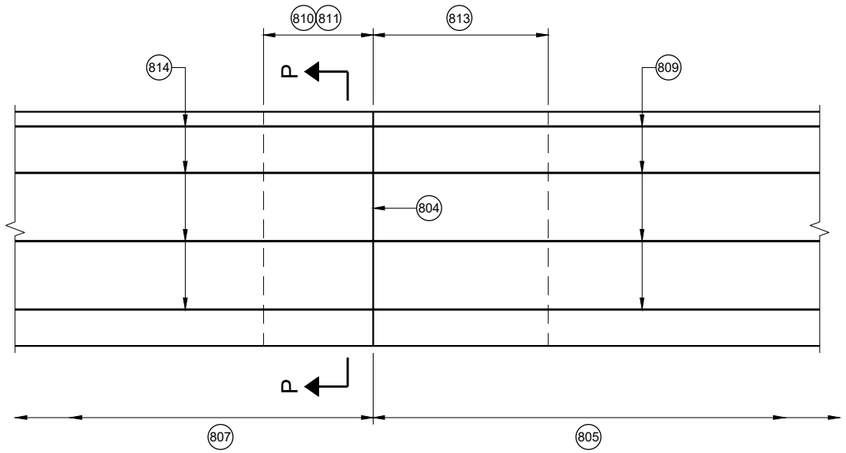
810 3' MIN. DRILL HOLES. USES NO. 5 ADHESIVE ANCHORS.

811 THE NUMBER OF DRILL HOLES IS EQUAL TO THE NUMBER OF HORIZONTAL REBAR IN BARRIER. DRILL HOLES ARE TO BE A MINIMUM OF 4" FROM EDGE OF CONCRETE.

812 EXISTING REBAR IN EXISTING BARRIER OR END ANCHOR.

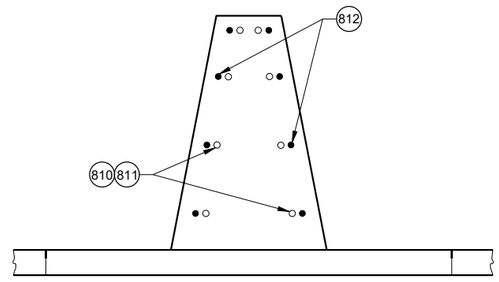
813 3' BAR OVERLAP

814 EXISTING REINFORCEMENT

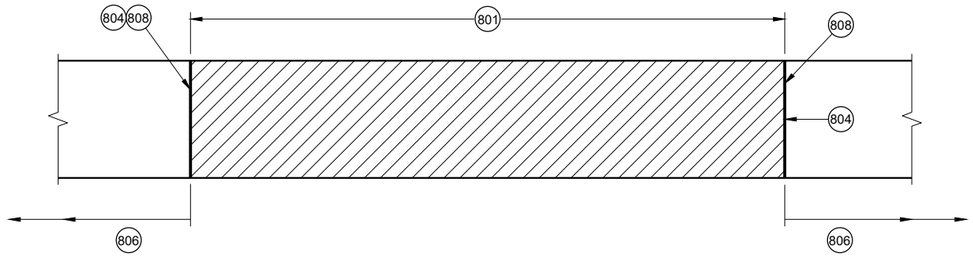


CONNECTION DETAIL

SINGLE SLOPE CONCRETE BARRIER TO NEW SINGLE SLOPE CONCRETE BARRIER



SECTION P - P



BARRIER REMOVAL AND REPLACEMENT

RETROFIT OR REPAIR SINGLE SLOPE CONCRETE BARRIER

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

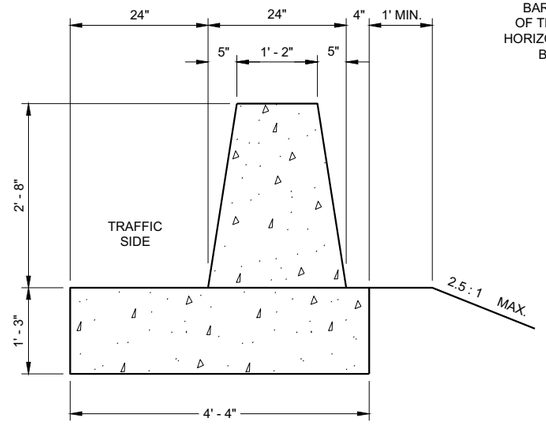
APPROVED
May 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

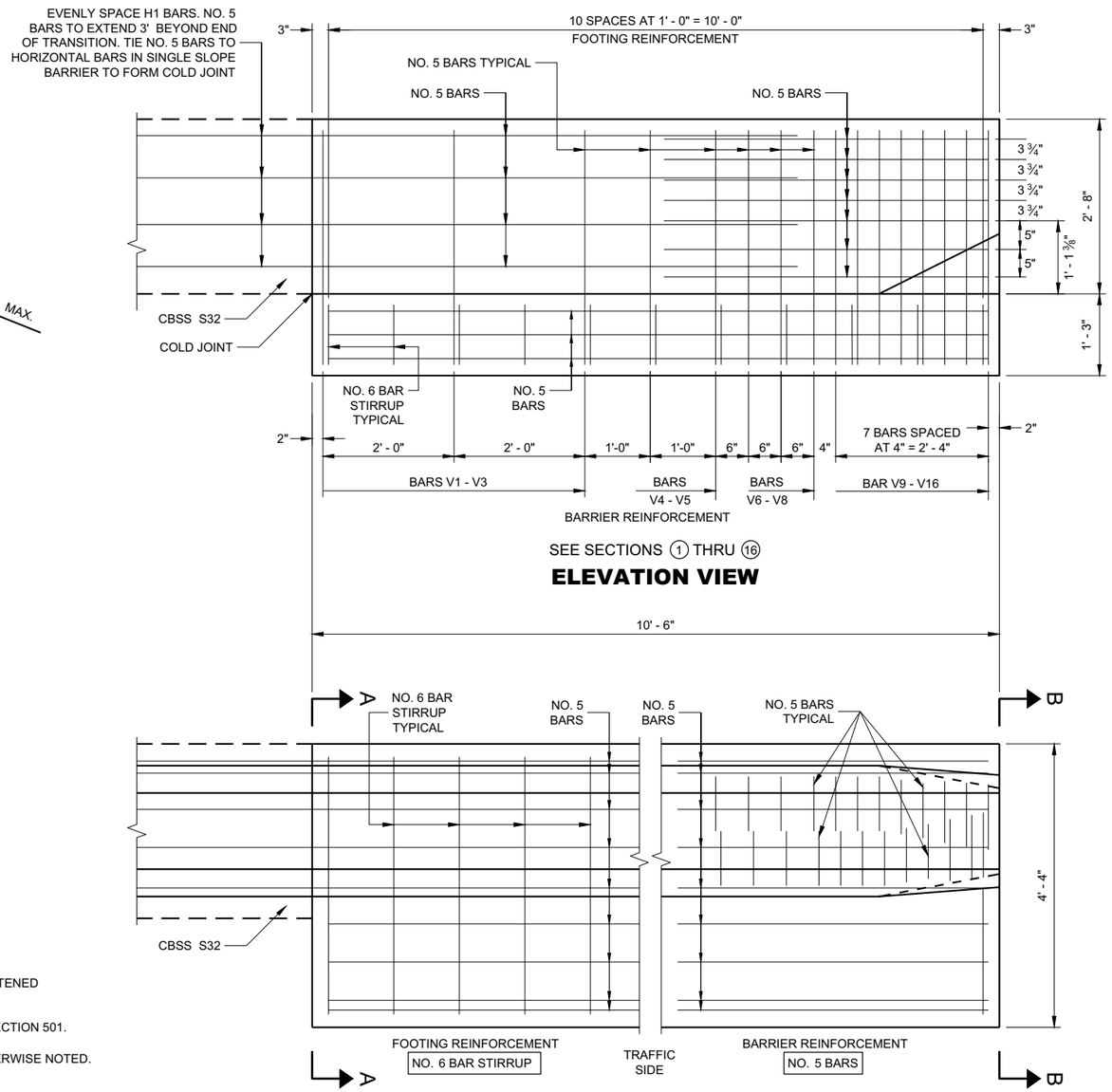
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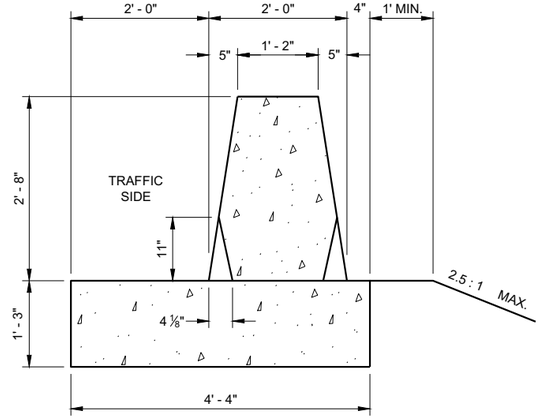
SDD 14B32 - 10h

6

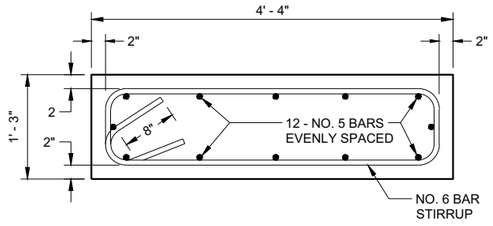
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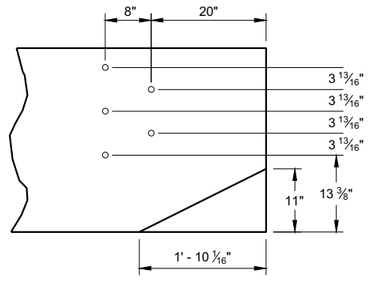




SECTION B - B



TYPICAL FOOTING



PVC PIPE LOCATIONS

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

THRIE BEAM ANCHOR INCIDENTAL TO CONCRETE BARRIER ITEM.

INSTALL SCHEDULE 40 PVC PIPE 1" DIAMETER AT LOCATIONS INDICATED.

EXTEND PVC PIPE COMPLETELY THROUGH BARRIER.

CUT ENDS OF PVC PIPE FLUSH WITH FINISHED FACE OF BARRIER.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

6

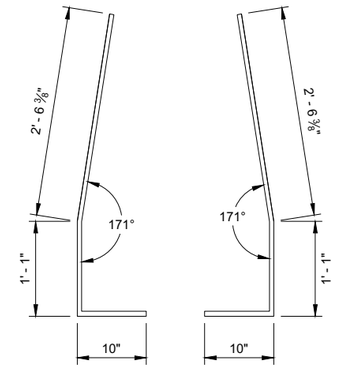
SDD 14B33 - 02a

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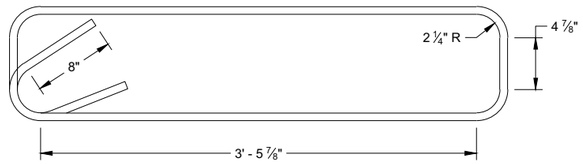
SDD 14B33 - 02a

CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR

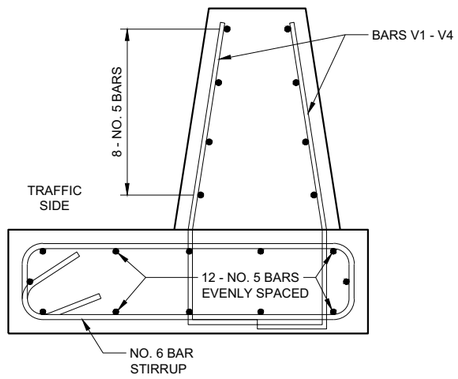
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



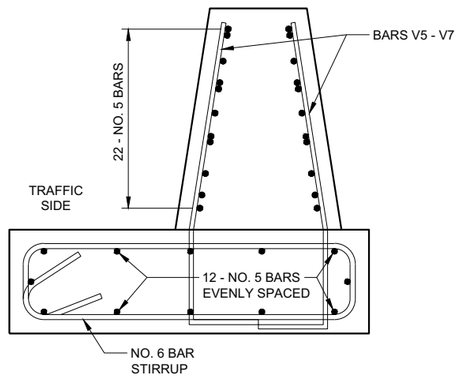
BAR BENDING DETAIL
BARS 1 - 11



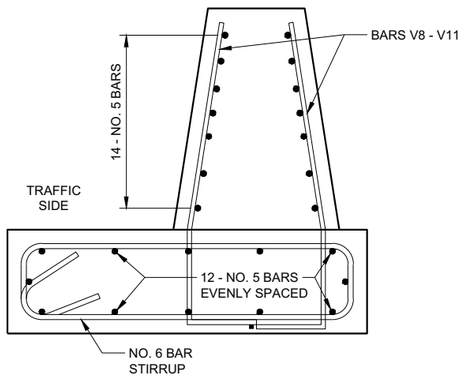
STIRRUP BAR
BENDING DETAIL



BAR DETAIL
SECTIONS 1 - 4



BAR DETAIL
SECTIONS 5 - 7



BAR DETAIL
SECTIONS 8 - 11

6

SDD 14B33 - 02b

CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

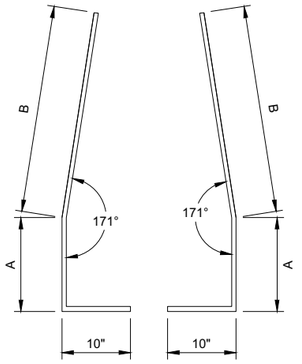
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B33 - 02b

BAR CHART
BAR POSITIONS
12 - 13

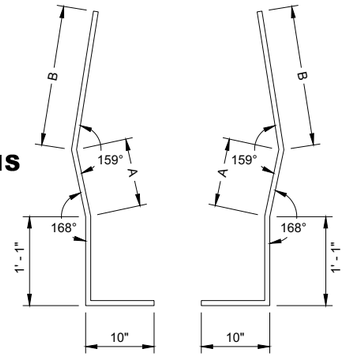
BAR	A	B
V12	1' - 3"	2' - 6"
V13	1' - 8"	2' - 1 ½"



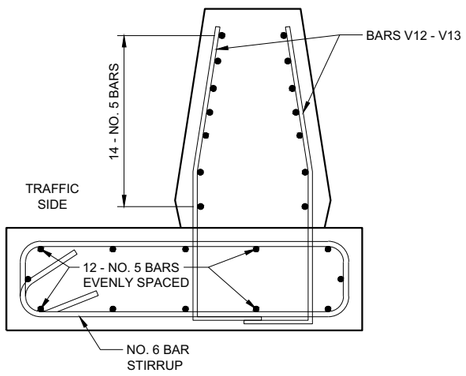
BAR BENDING DETAIL
SECTIONS V12- V13

BAR CHART
BAR POSITIONS
14 - 16

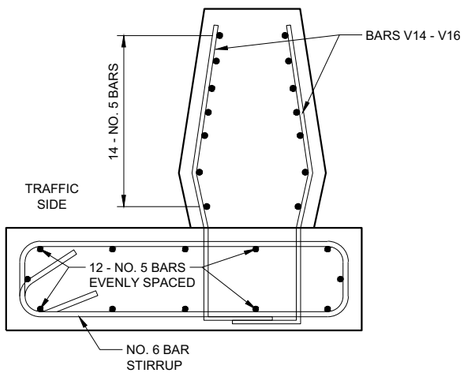
BAR	A	B
V14	6"	2' - 1"
V15	8"	1' - 11"
V16	10"	1' - 8 ½"



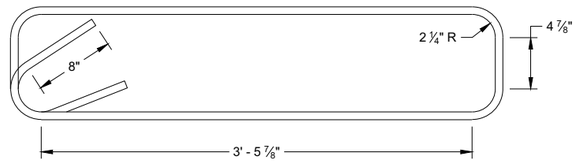
BAR BENDING DETAIL
SECTIONS V14 - V16



BAR DETAIL
SECTIONS 12 - 13



BAR DETAIL
SECTIONS 14 - 16



STIRRUP BAR
BENDING DETAIL

CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

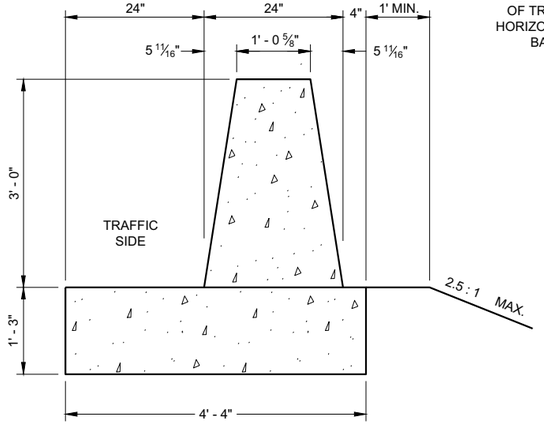
APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

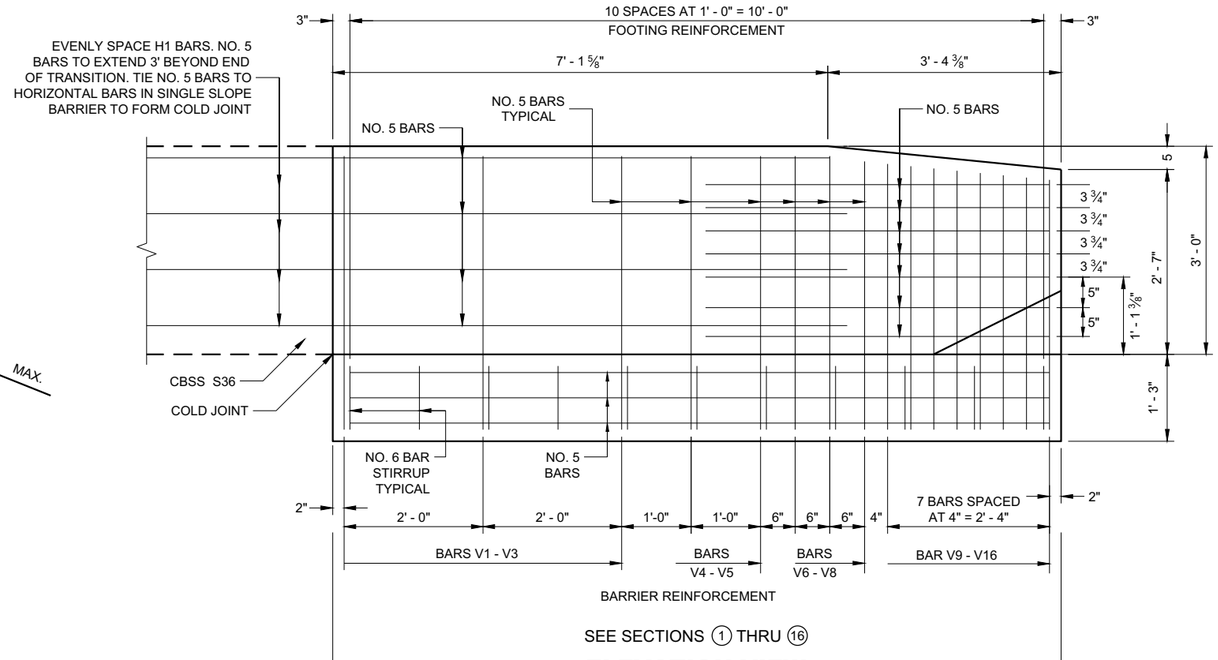
SDD 14B33 - 02c

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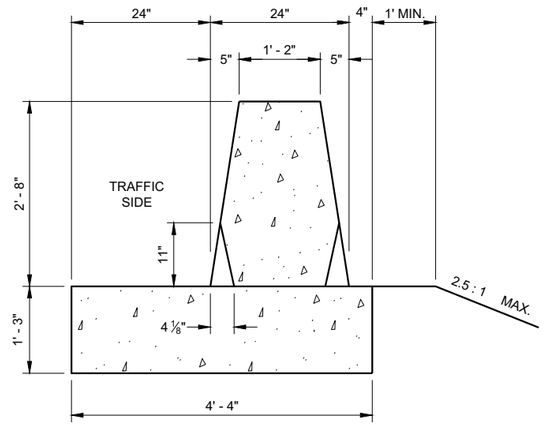
SDD 14B33 - 02c



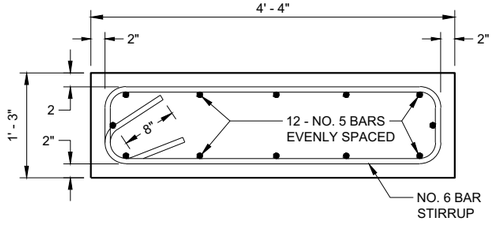
SECTION A - A



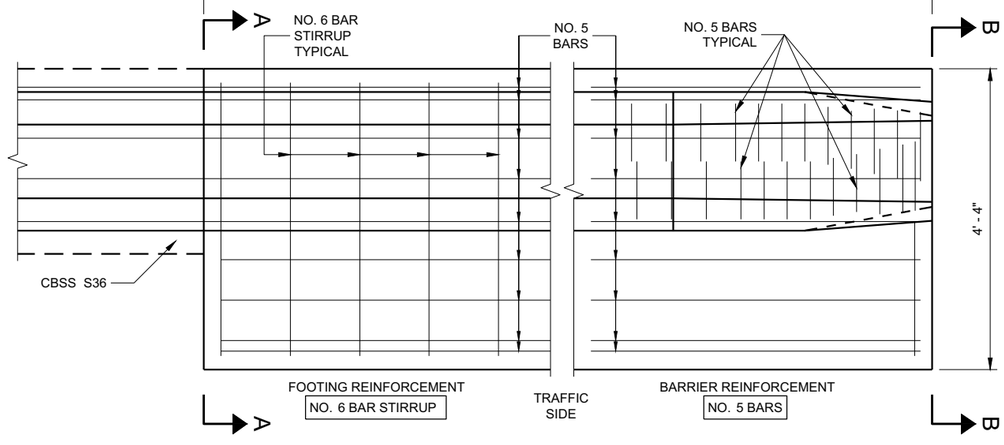
ELEVATION VIEW



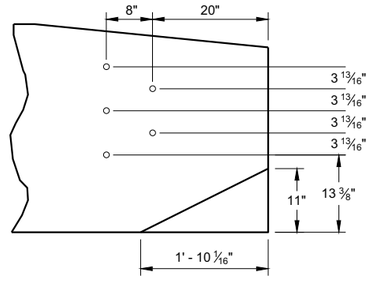
SECTION B - B



TYPICAL FOOTING



PLAN VIEW



PVC PIPE LOCATIONS

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

THRIE BEAM ANCHOR INCIDENTAL TO CONCRETE BARRIER ITEM.

INSTALL SCHEDULE 40 PVC PIPE 1" DIAMETER AT LOCATIONS INDICATED.

EXTEND PVC PIPE COMPLETELY THROUGH BARRIER.

CUT ENDS OF PVC PIPE FLUSH WITH FINISHED FACE OF BARRIER.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

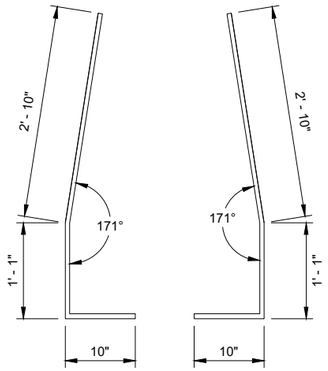
2" CLEAR COVER TYPICAL.

CONCRETE BARRIER SINGLE SLOPE 36" THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B33 - 02d

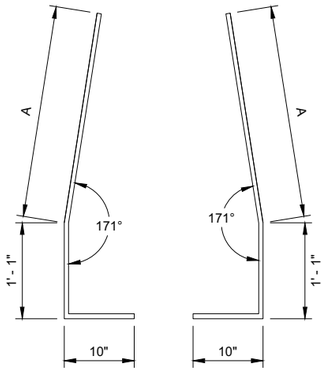
SDD 14B33 - 02d



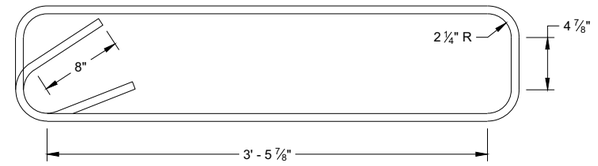
BAR BENDING DETAIL
SECTIONS V1- V6

BAR CHART
BAR POSITIONS
7 - 11

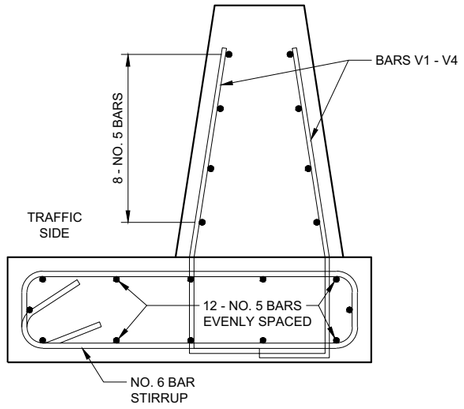
BAR	A
V7	2' - 10 ¼"
V8	2' - 9 ¾"
V9	2' - 9 ¼"
V10	2' - 9"
V11	2' - 8 ½"



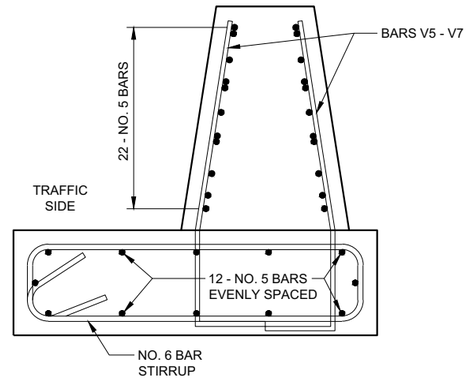
BAR BENDING DETAIL
SECTIONS V7- V11



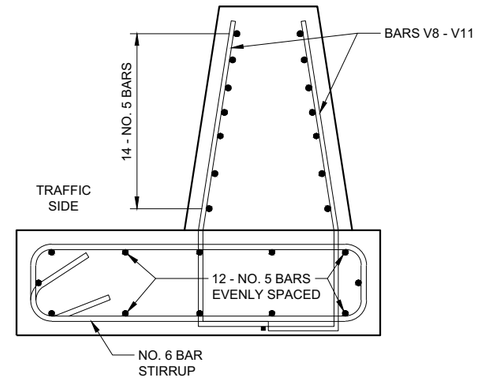
STIRRUP BAR
BENDING DETAIL



BAR DETAIL
SECTIONS 1 - 4



BAR DETAIL
SECTIONS 5 - 7



BAR DETAIL
SECTIONS 8 - 11

6

SDD 14B33 - 02e

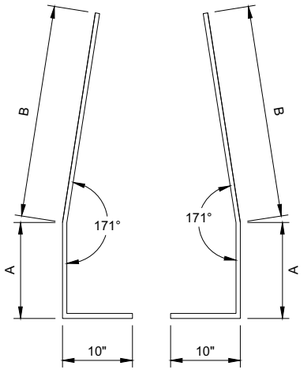
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SDD 14B33 - 02e

CONCRETE BARRIER
SINGLE SLOPE 36"
THRIE BEAM ANCHOR

BAR CHART
BAR POSITIONS
12 - 13

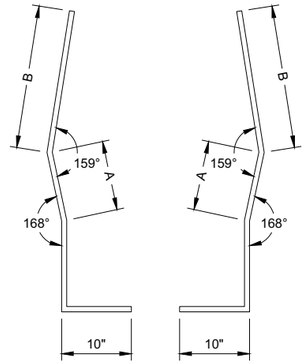
BAR	A	B
V12	1' - 3"	2' - 6"
V13	1' - 8"	2' - 1 ½"



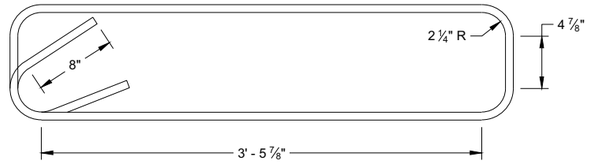
BAR BENDING DETAIL
SECTIONS V12 - V13

BAR CHART
BAR POSITIONS
14 - 16

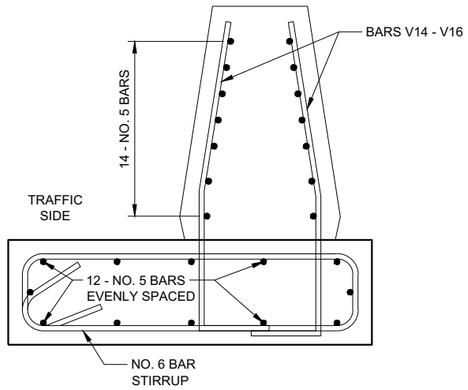
BAR	A	B
V14	6"	2' - 1"
V15	8"	1' - 11"
V16	10"	1' - 8 ½"



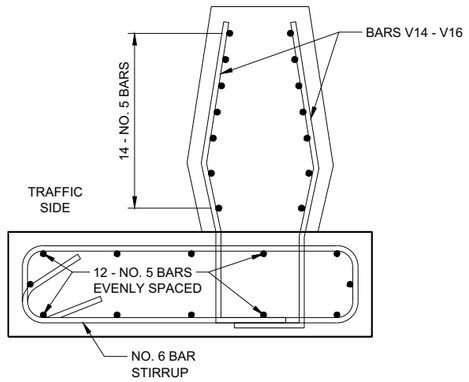
BAR BENDING DETAIL
SECTIONS V14 - V16



STIRRUP BAR
BENDING DETAIL



BAR DETAIL
SECTIONS 12 - 13



BAR DETAIL
SECTIONS 14 - 16

CONCRETE BARRIER
SINGLE SLOPE 36"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 14B33 - 02f

SDD 14B33 - 02f

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

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

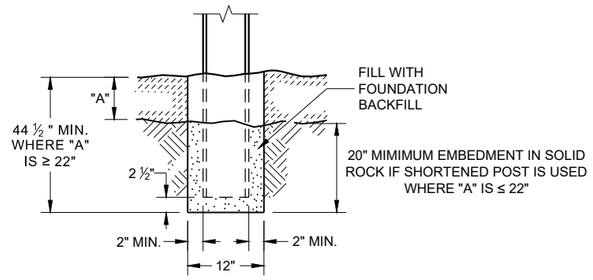
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

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

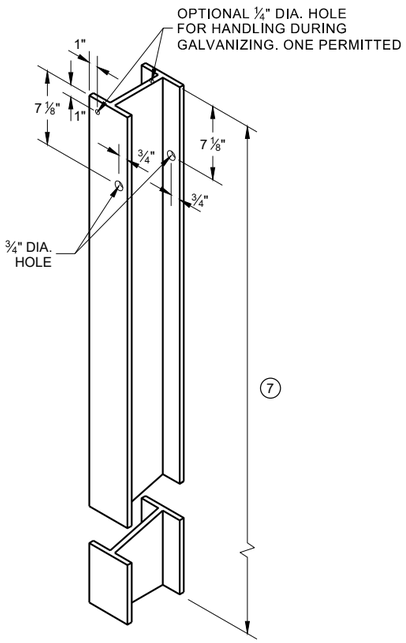
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

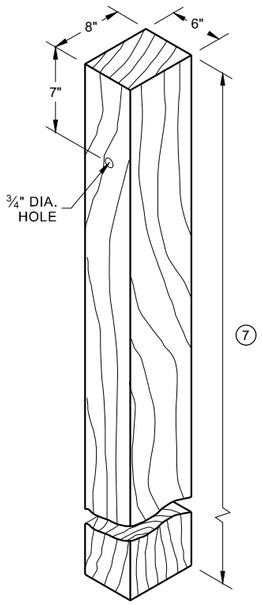
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



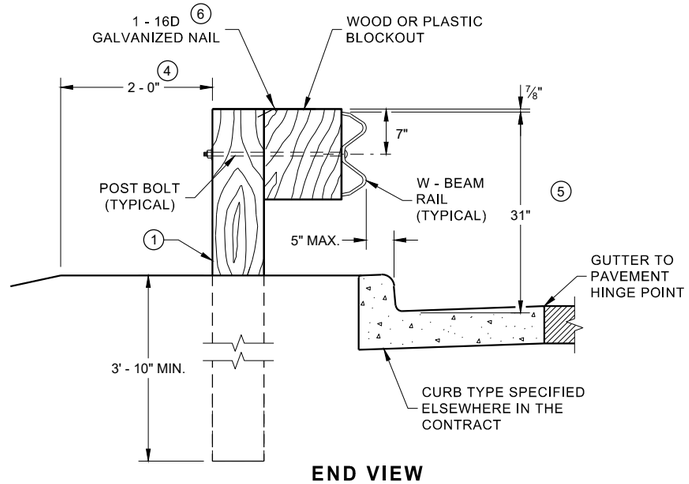
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



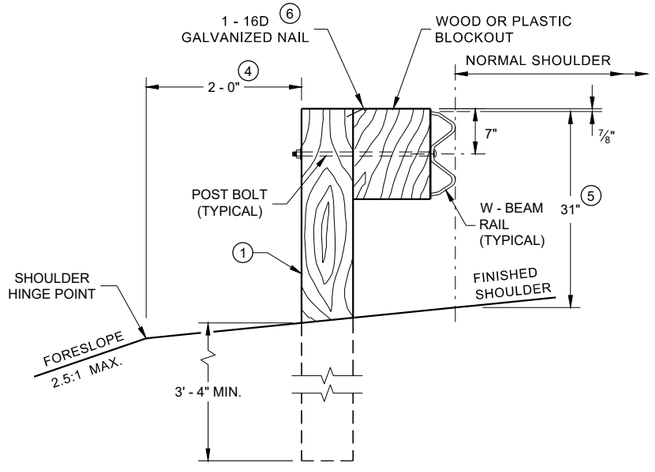
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



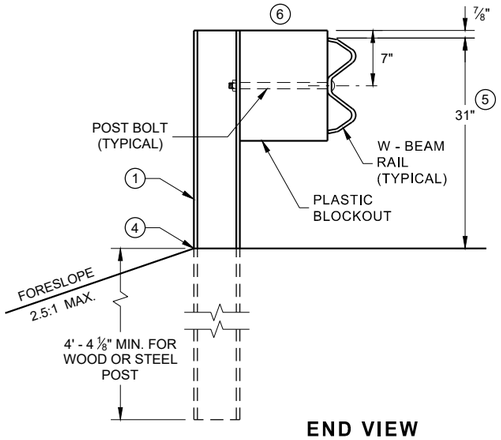
WOOD POST (6" X 8") NOMINAL (1)



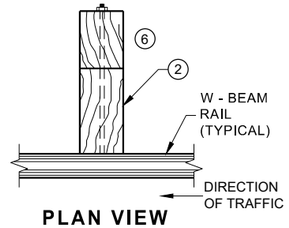
END VIEW
LOCATED ALONG A CURBED ROADWAY



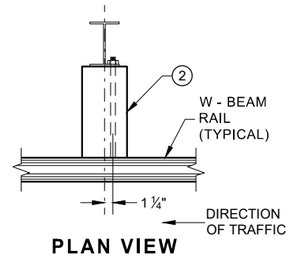
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



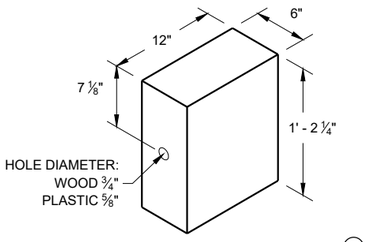
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

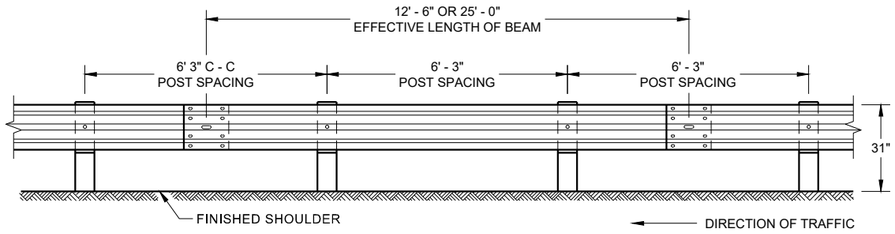
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

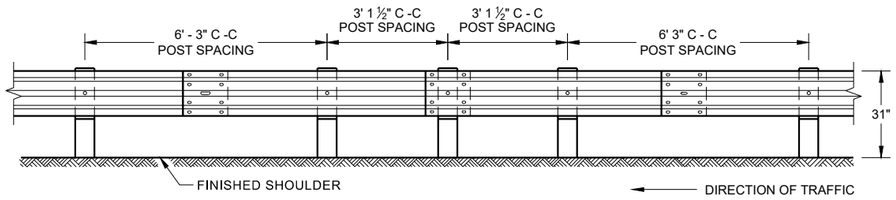
SDD 14B42 - 07a

6

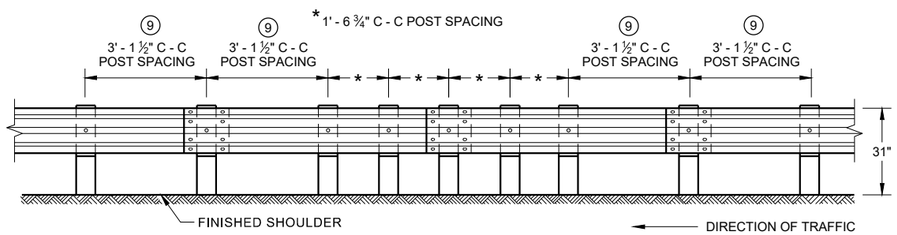
SDD 14B42 - 07a



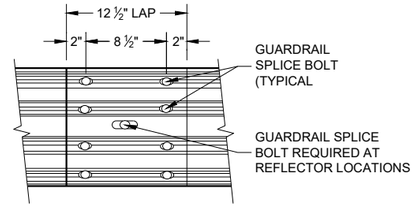
FRONT VIEW
POST SPACING STANDARD INSTALLATION



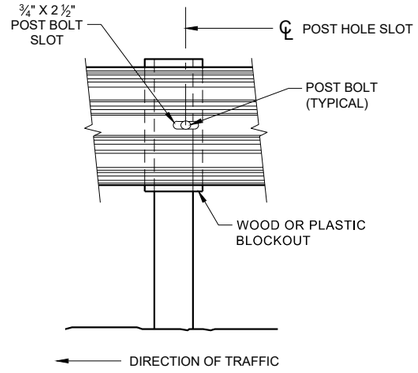
FRONT VIEW
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



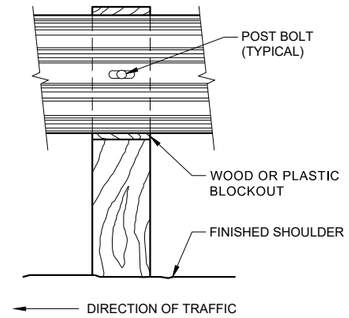
FRONT VIEW
QUARTER POST SPACING (QS)



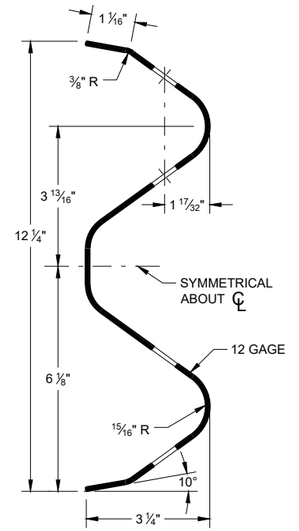
FRONT VIEW
MID-SPAN BEAM SPLICE



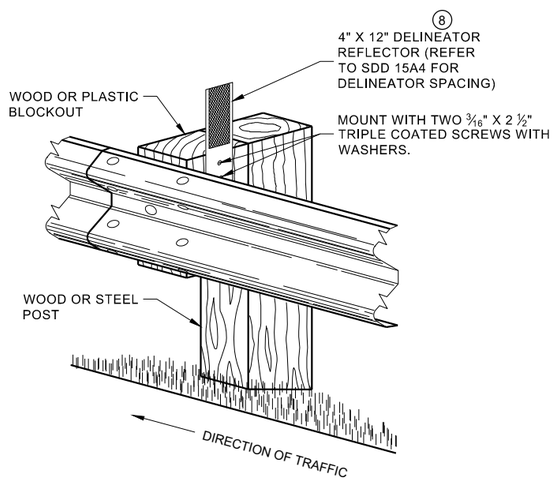
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

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

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

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

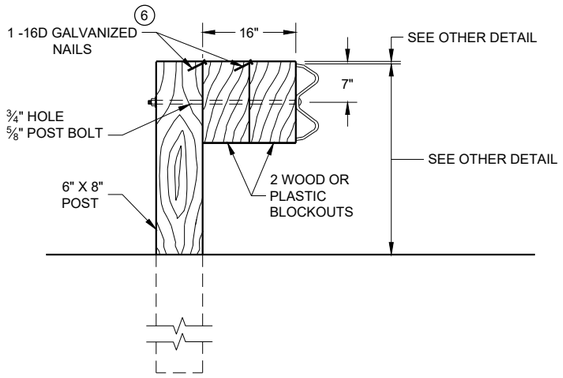
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

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

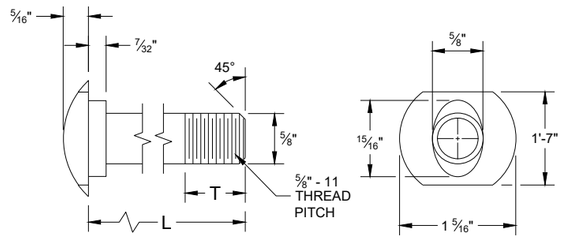


DETAIL FOR 16" BLOCKOUT DEPTH

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

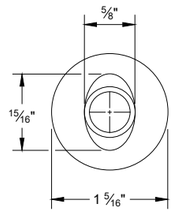
NOTE:

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.

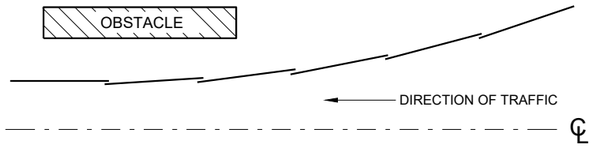


POST BOLT TABLE

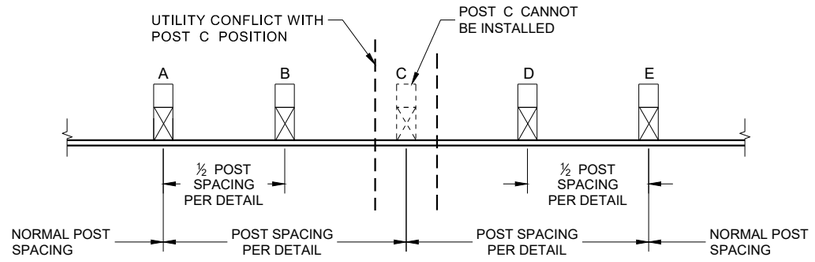
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



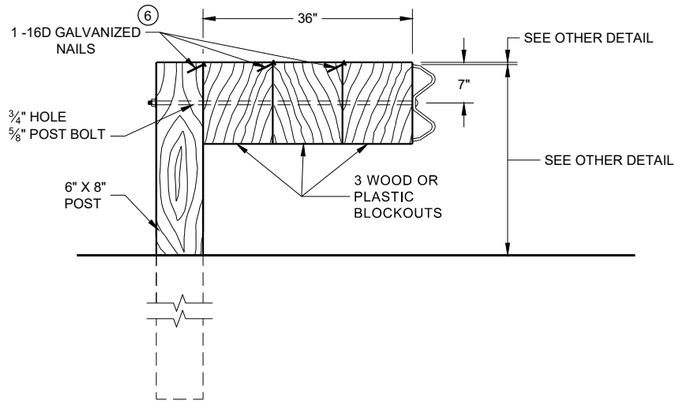
ALTERNATE BOLT HEAD



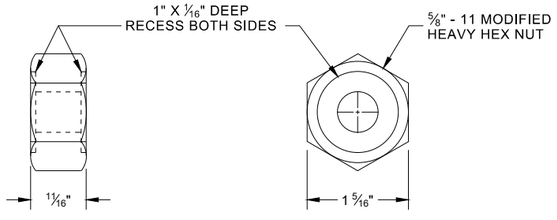
PLAN VIEW
BEAM LAPPING DETAIL



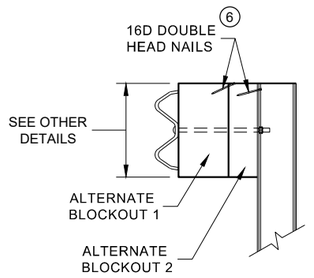
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



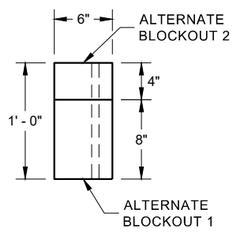
DETAIL FOR 36" BLOCKOUT DEPTH



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.

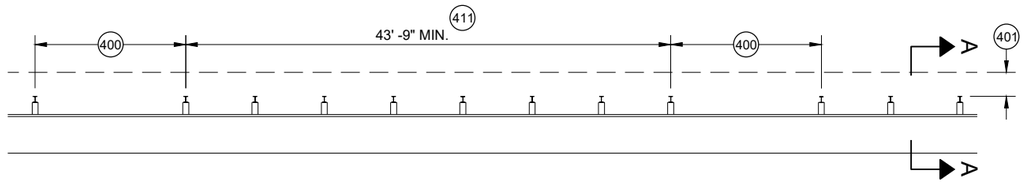
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(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.

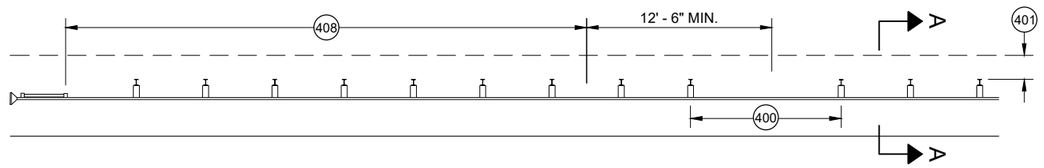
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

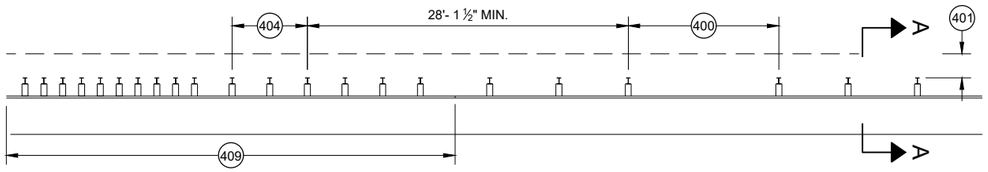
SDD 14B42 - 07c



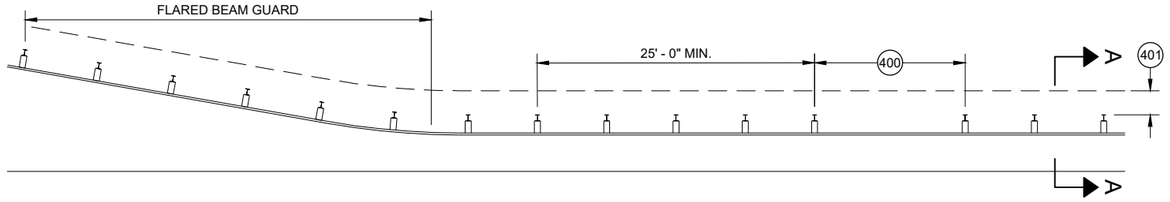
MISSING POST IN MGS GUARDRAIL



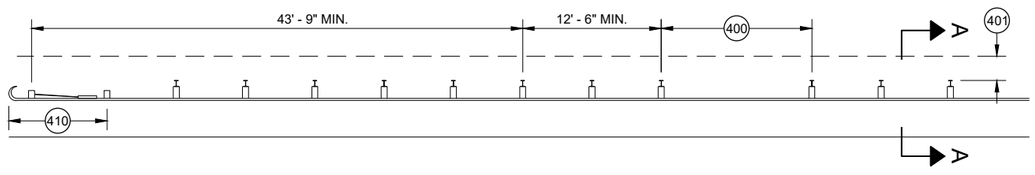
MISSING POST IN MGS GUARDRAIL NEAR EAT



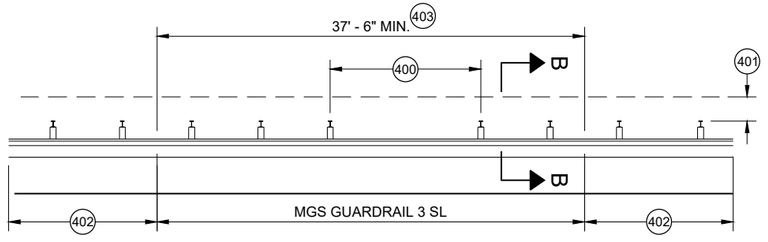
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

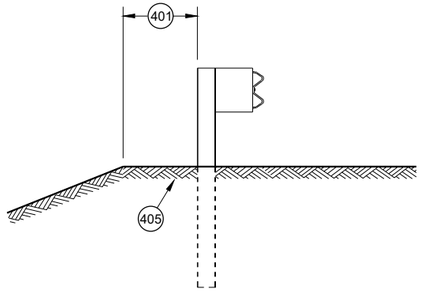


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

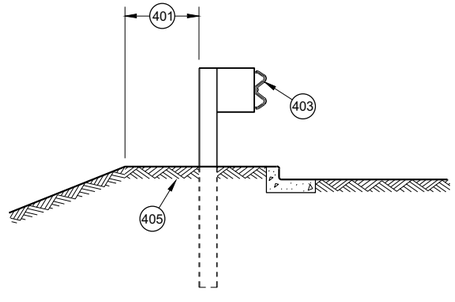


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

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



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B42 - 07d

GENERAL NOTES

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

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

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

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

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

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

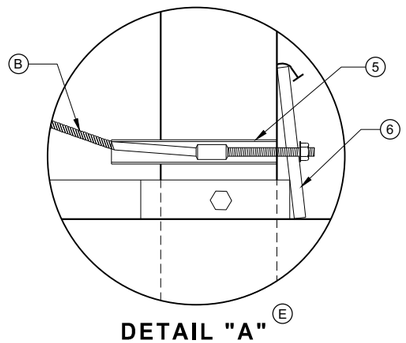
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

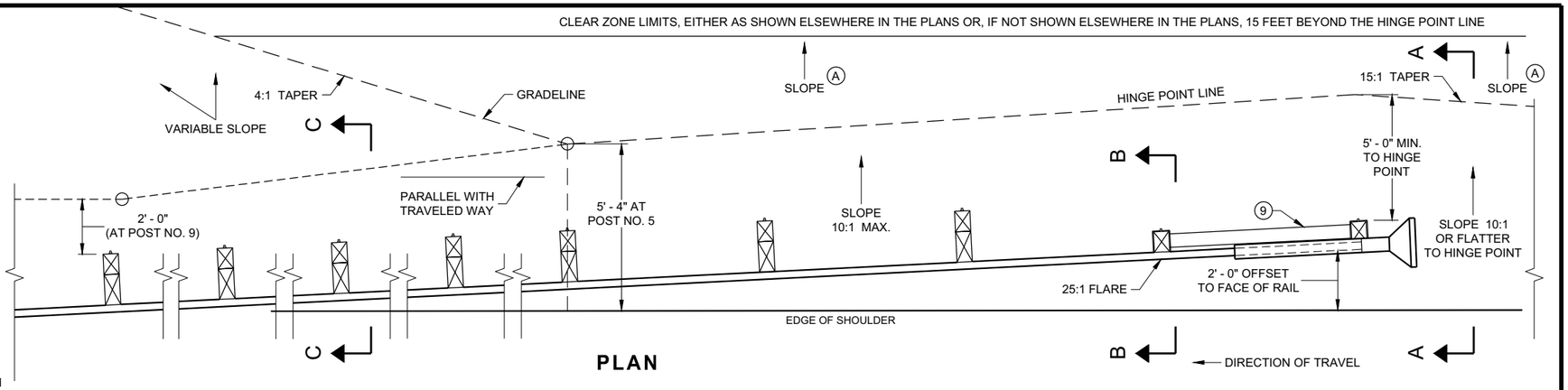
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

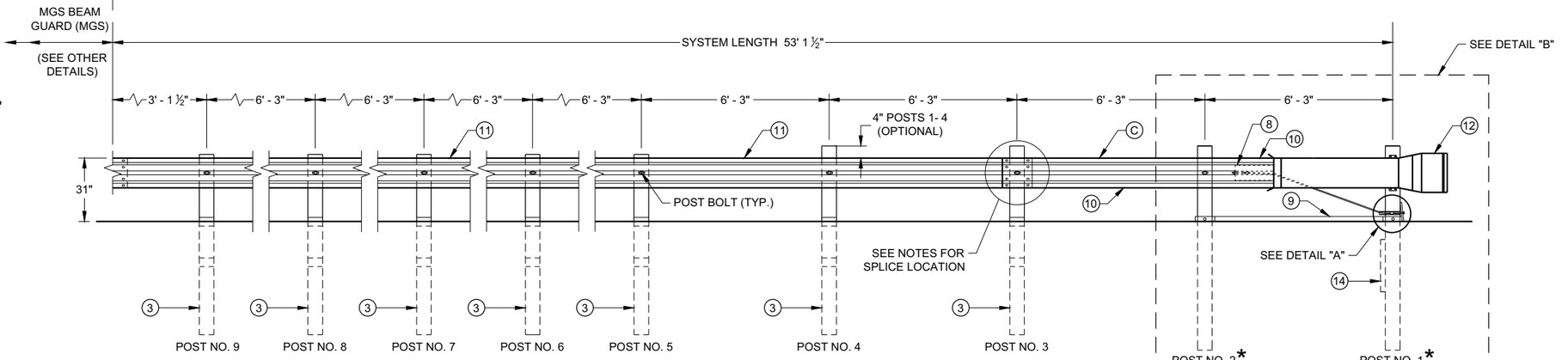
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



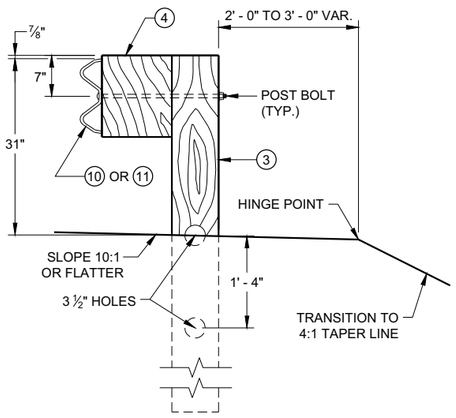
DETAIL "A" (E)



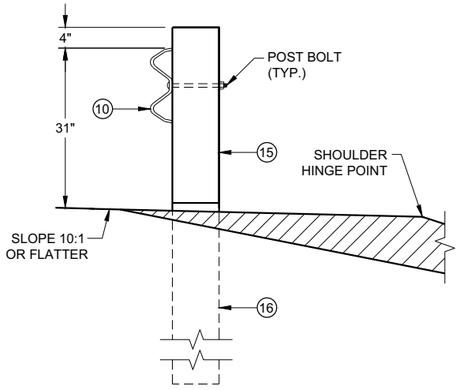
PLAN



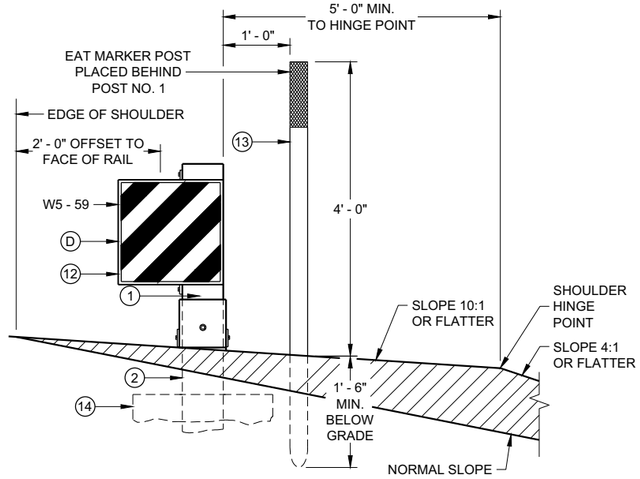
ELEVATION



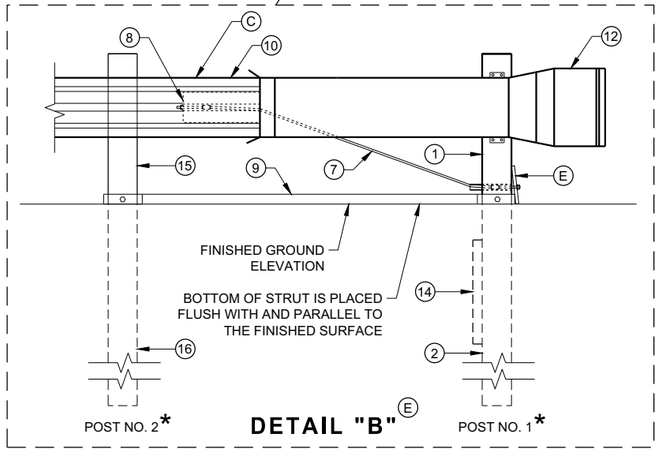
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



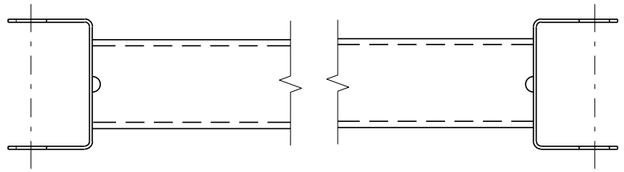
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

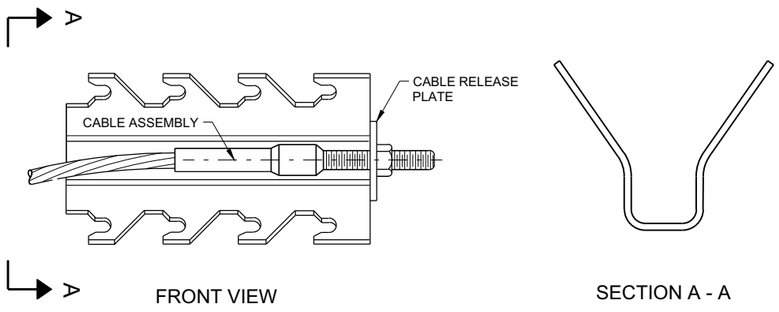
SDD 14B44 - 04a



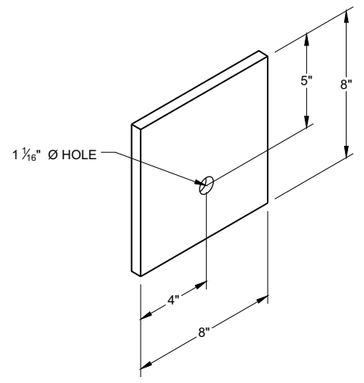
GENERIC GROUND STRUT ⑨ Ⓔ

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 ⑧ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

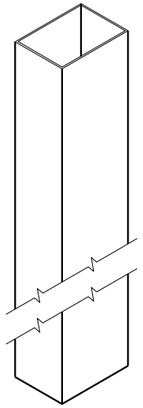
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SDD 14B44 - 04b

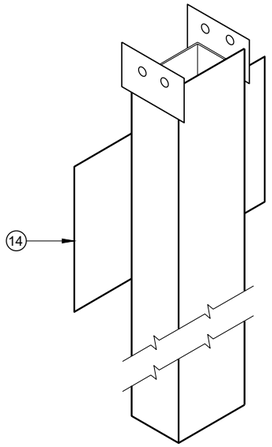
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

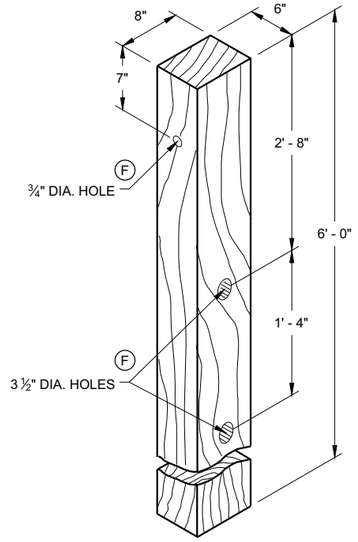
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA



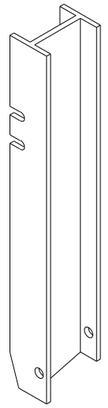
UPPER POST NO. 1 (1) (E)



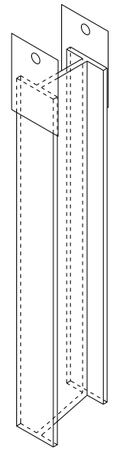
LOWER POST NO. 1 (2) (E)



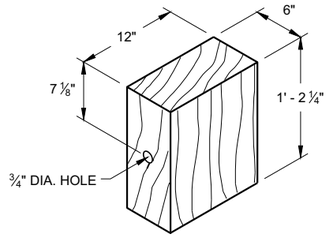
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



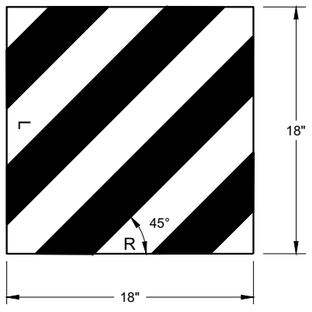
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

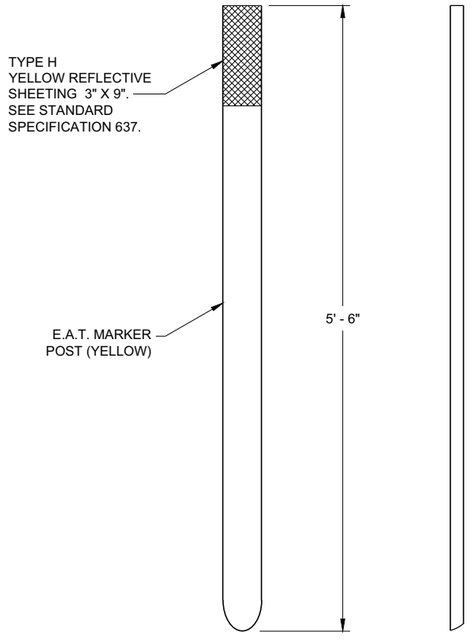


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



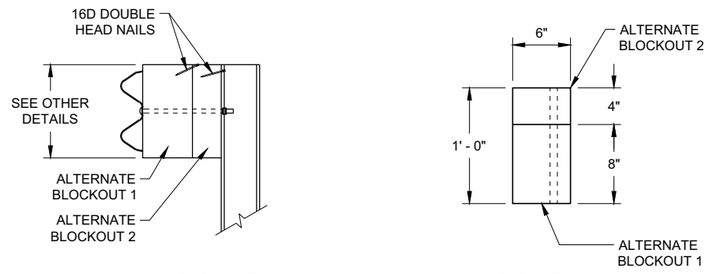
W5 - 59

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)

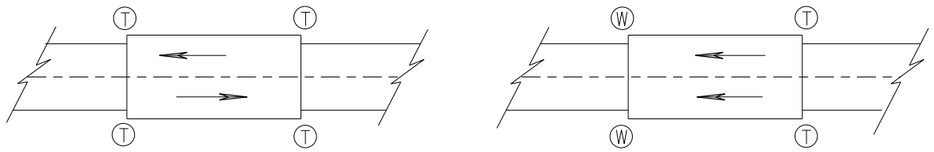
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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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.

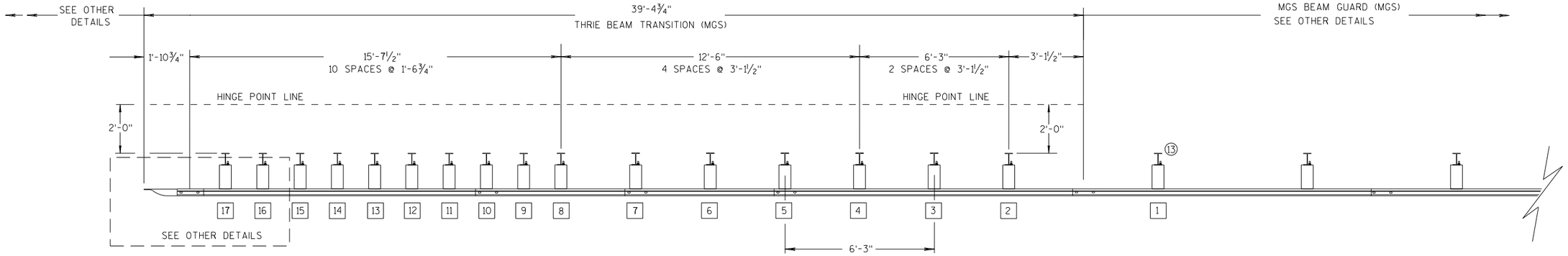
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

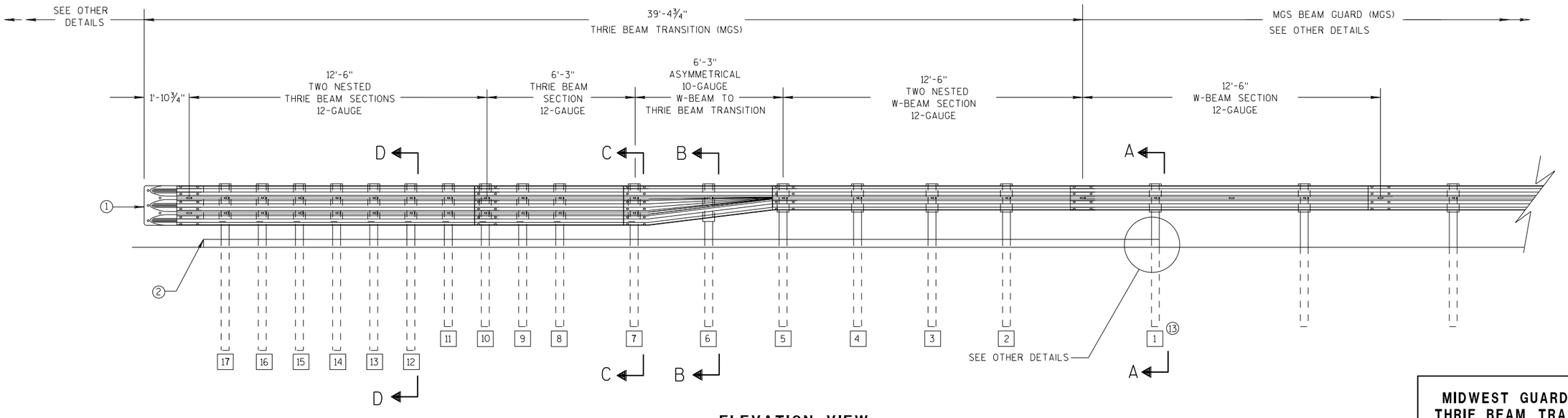
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(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

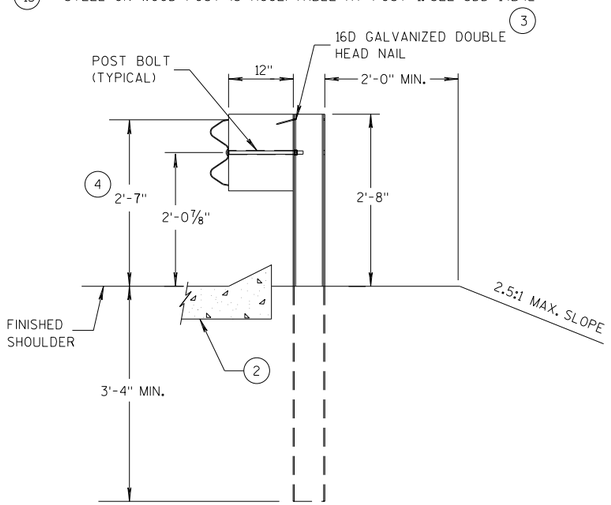
GENERAL NOTES

(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.

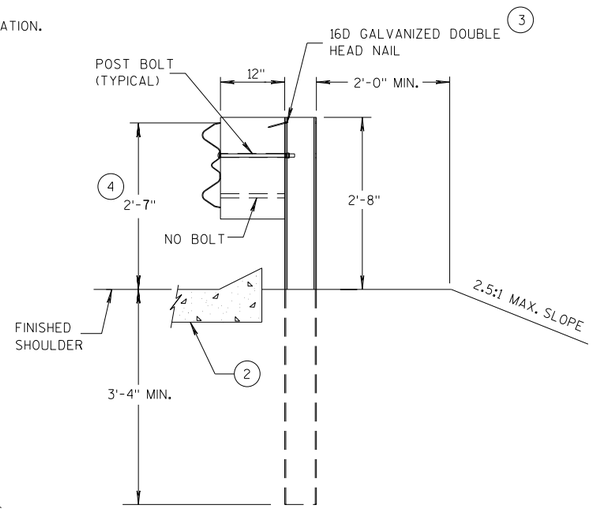
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



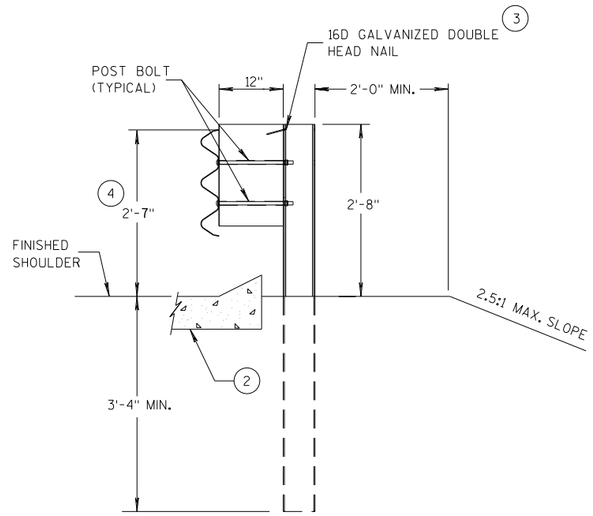
SECTION A-A (13)

POSTS 1-5



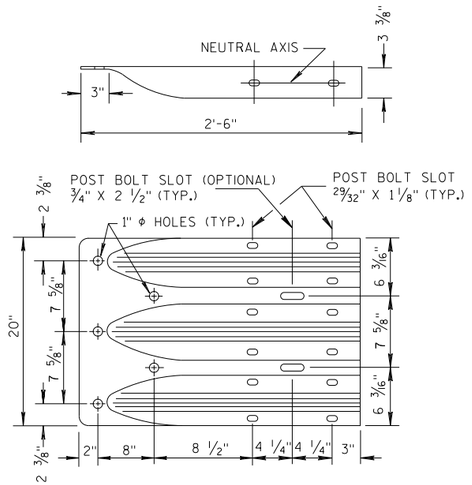
SECTION B-B

POST 6

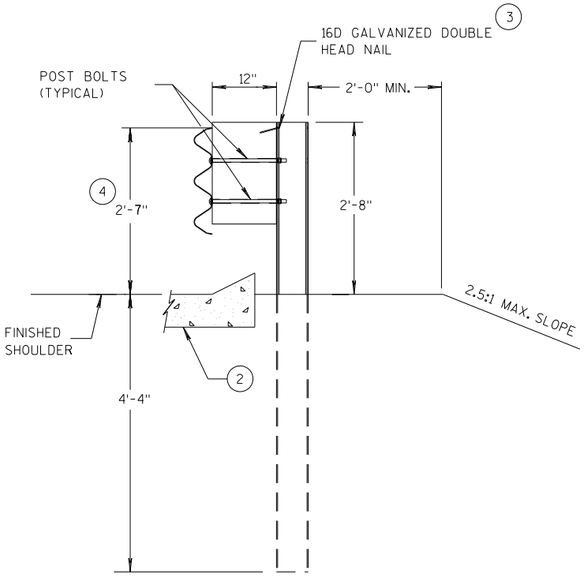


SECTION C-C

POSTS 7-11

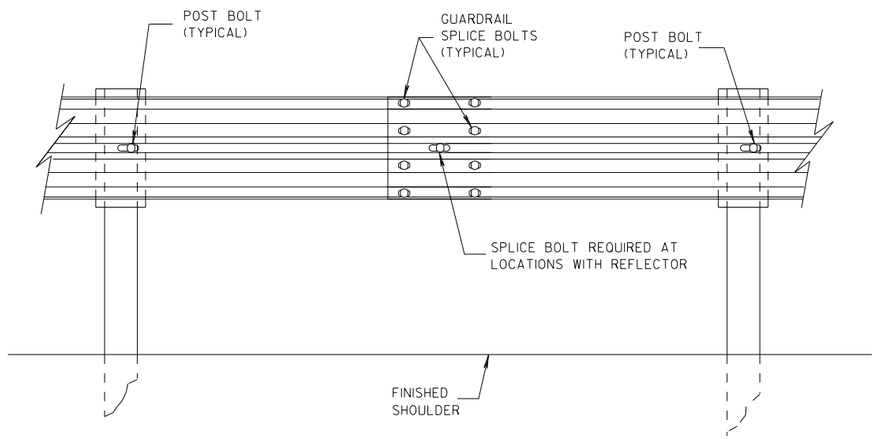


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

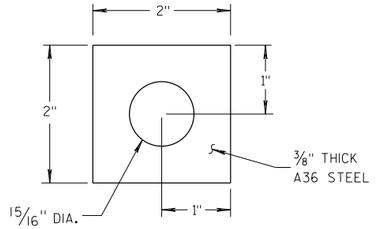
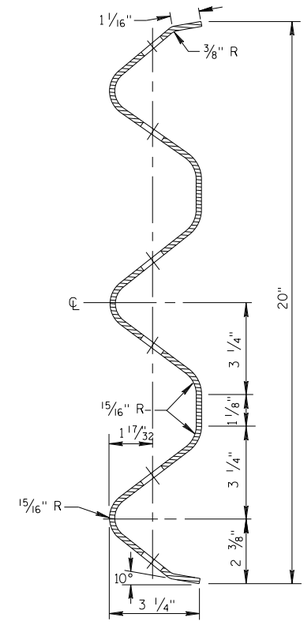


PLATE WASHER DETAIL



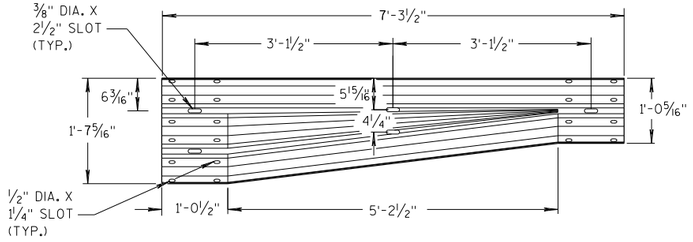
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

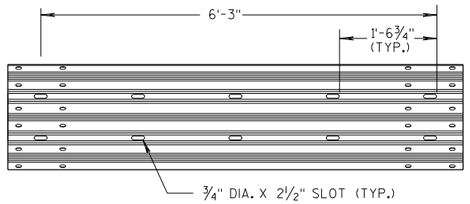
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

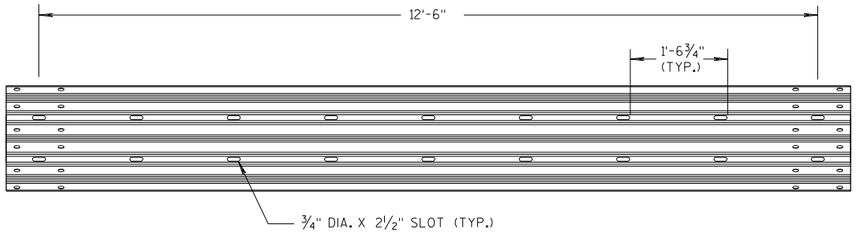
S.D.D. 14 B 45-5b



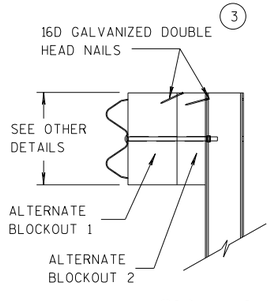
W-BEAM TO THRIE BEAM TRANSITION SECTION



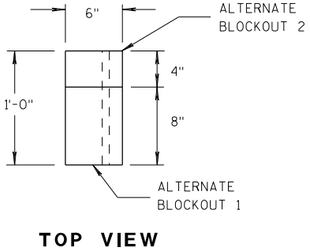
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

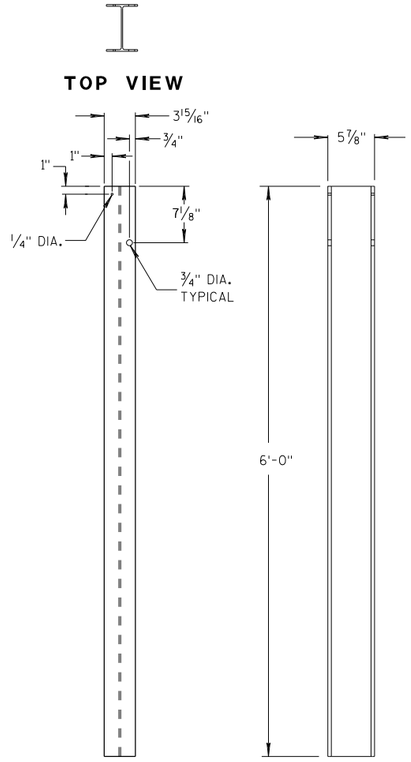


SIDE VIEW



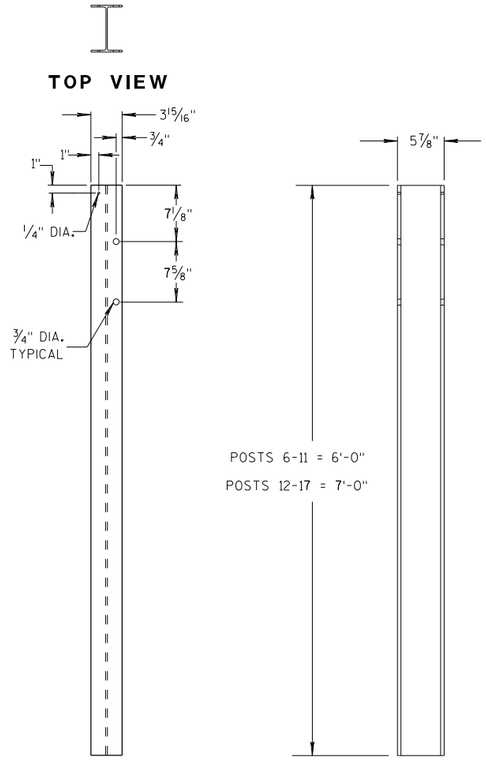
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



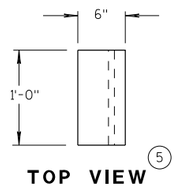
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

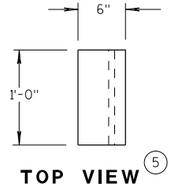


FRONT VIEW SIDE VIEW

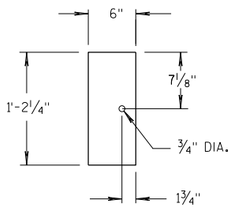
STEEL POSTS 6-17



TOP VIEW (5)

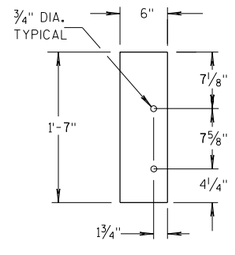


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

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

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

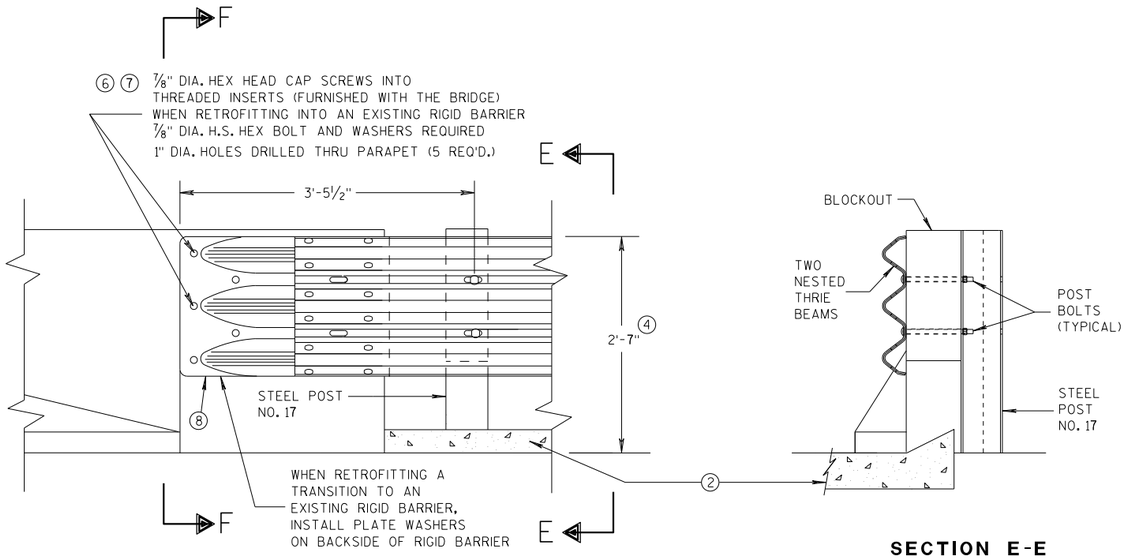
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

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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.

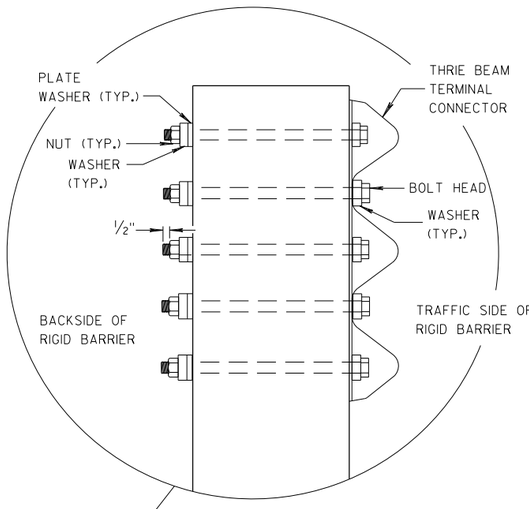
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

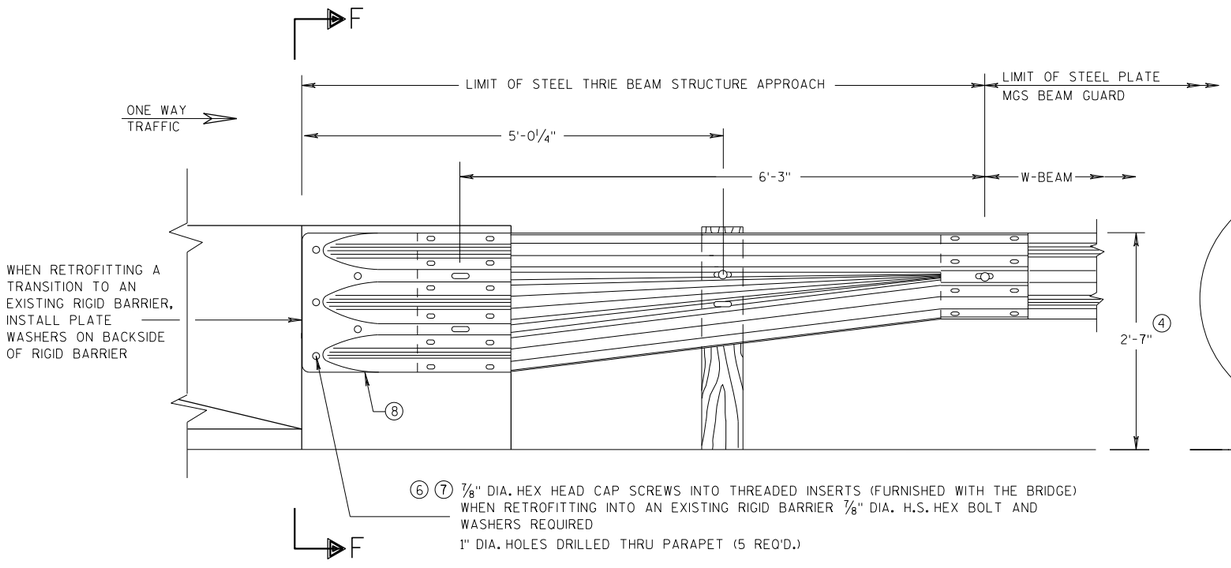
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

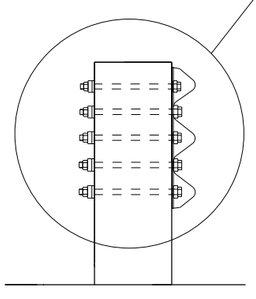
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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".

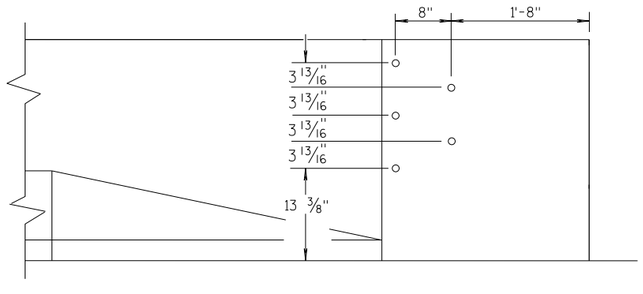




FRONT VIEW



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 SUPERVIS 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.

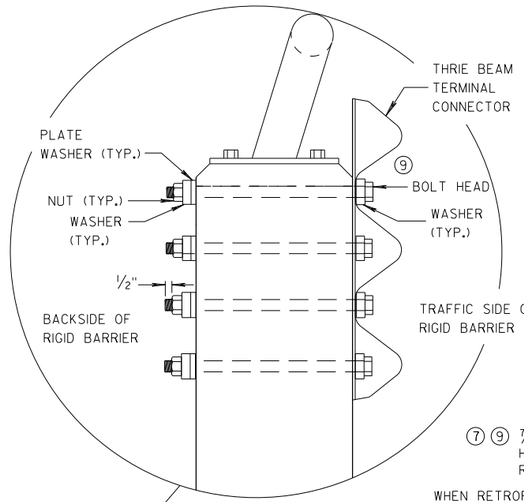
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

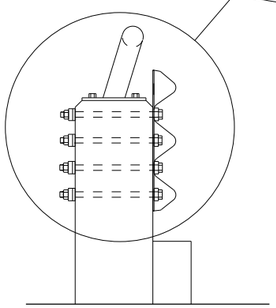
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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.

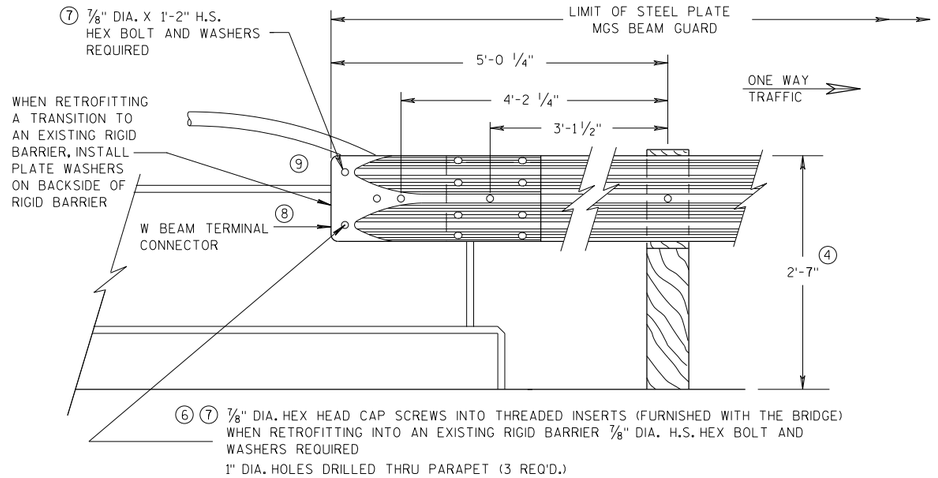
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(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.





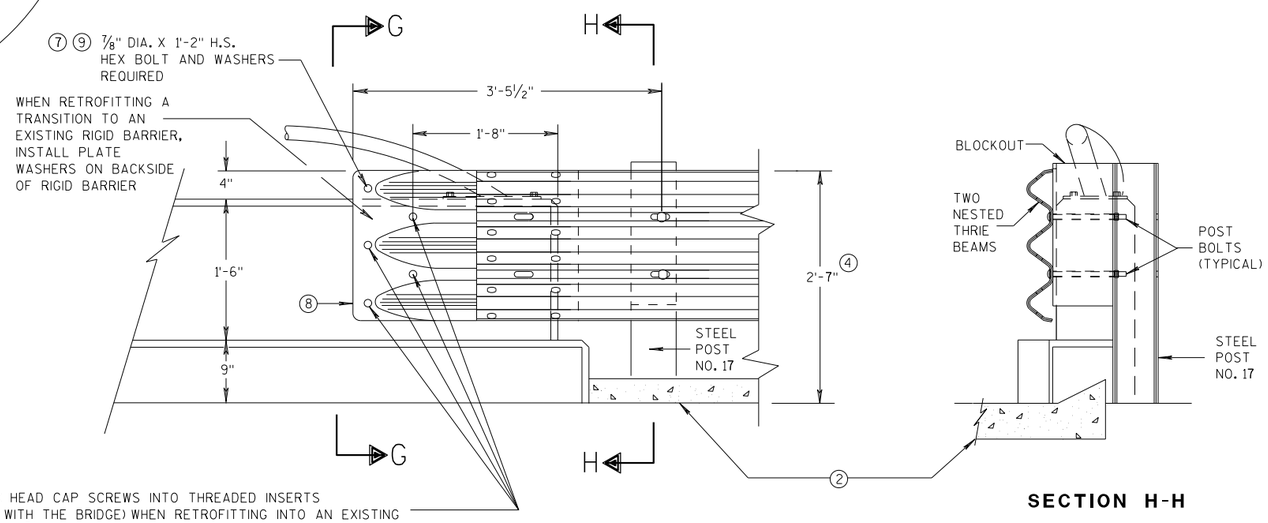
SECTION G-G



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018
DATE
FHWA

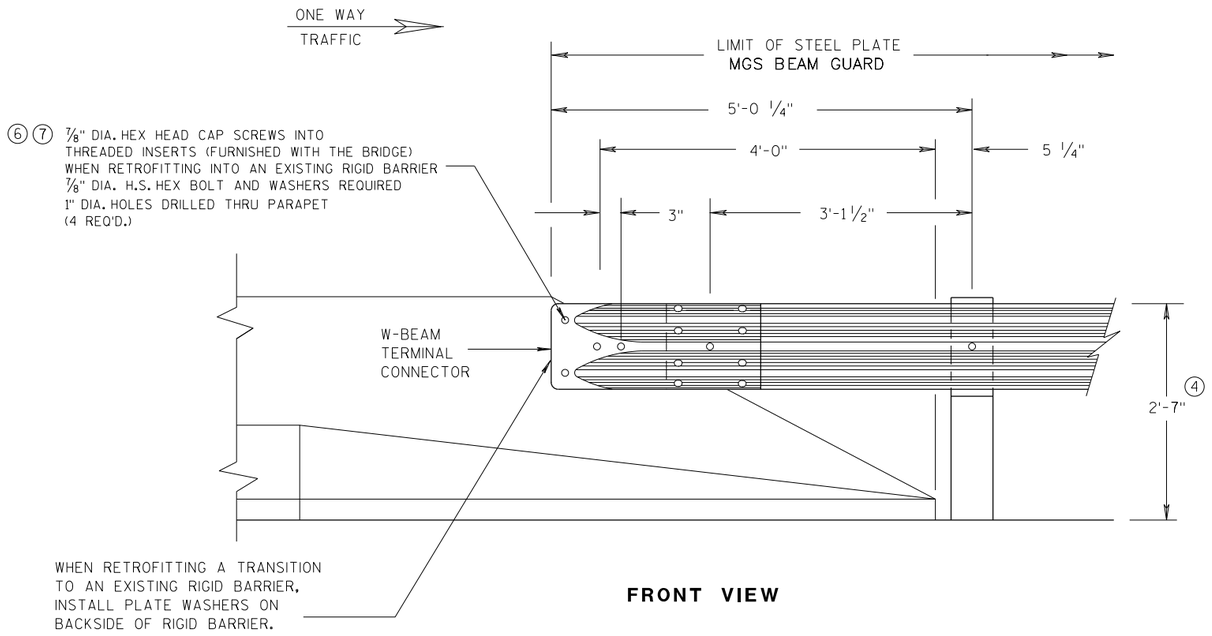
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVIS NT

6

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

6

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)

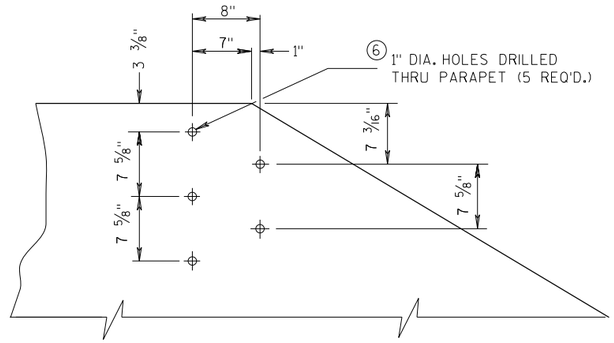
GENERAL NOTES

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

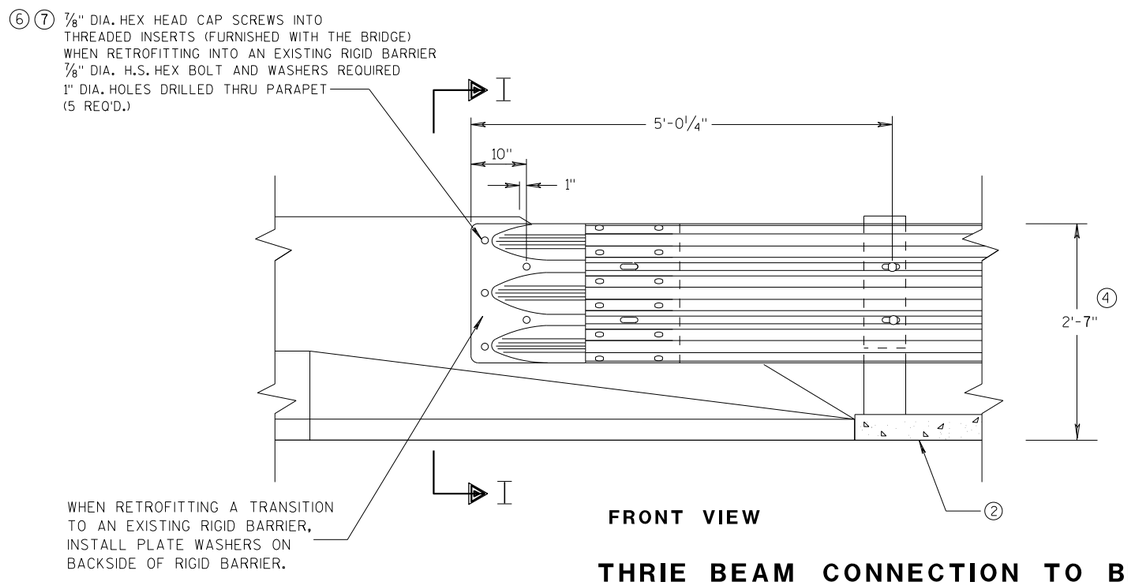
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

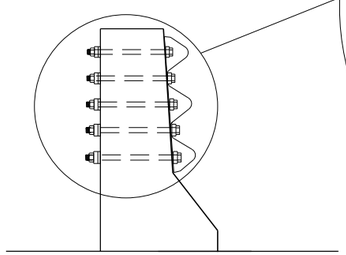
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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.



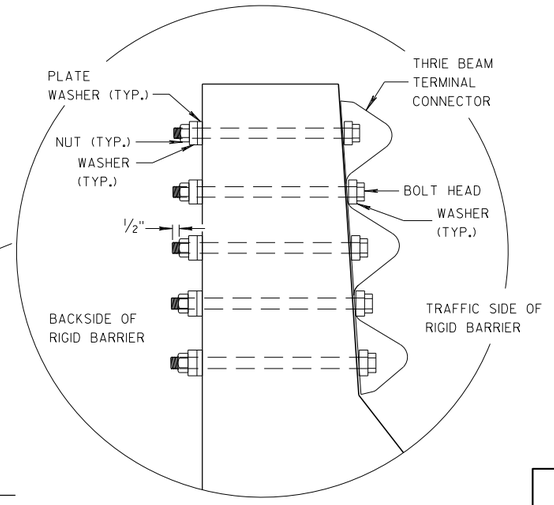
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

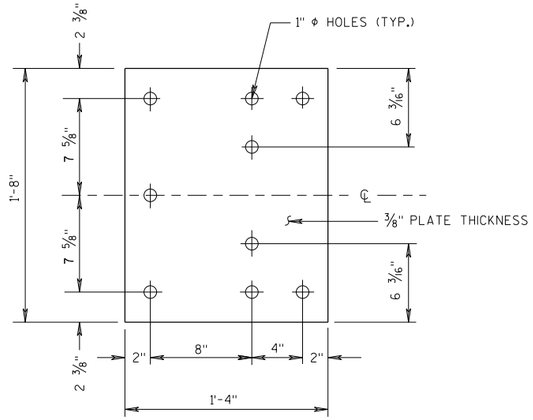
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

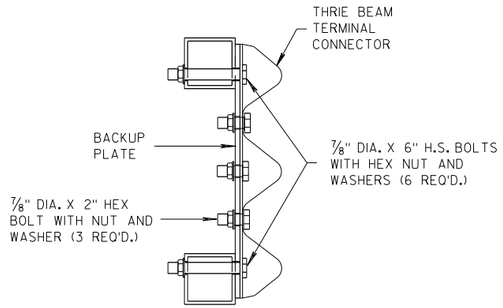
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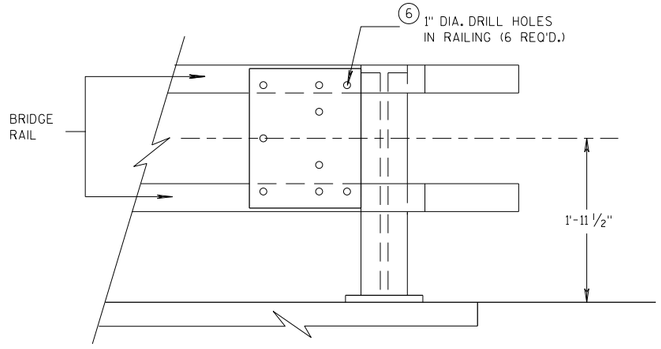
S.D.D. 14 B 45-5f



BACK-UP PLATE DETAIL



SECTION J-J

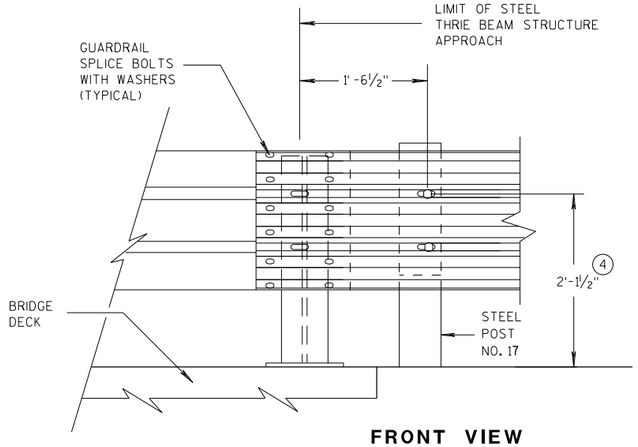


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

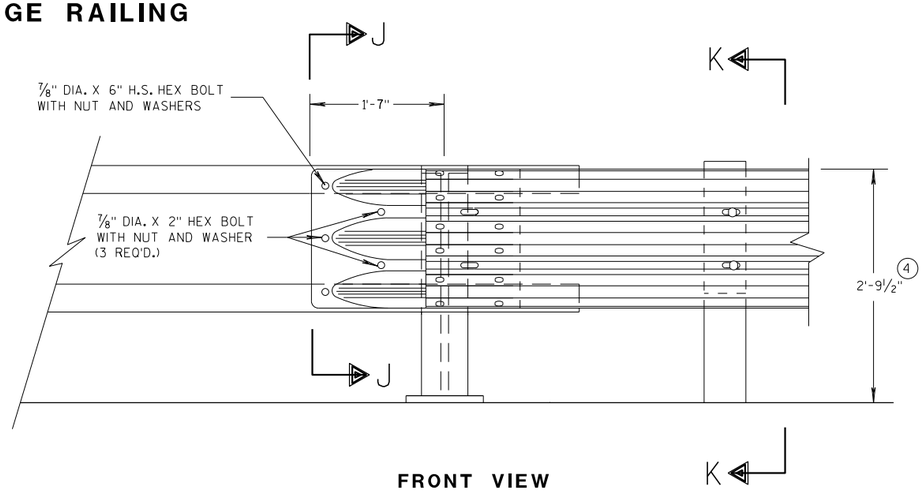
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

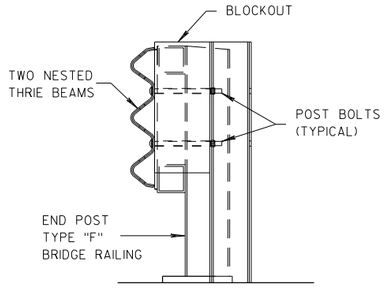


FRONT VIEW

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)

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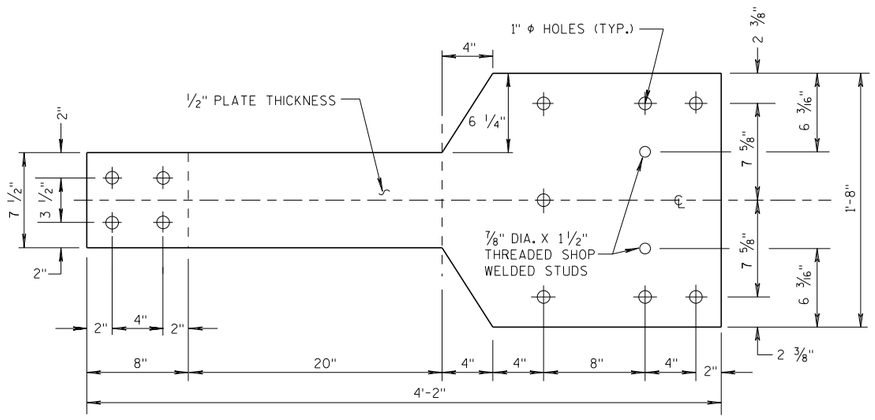
S.D.D. 14 B 45-5g

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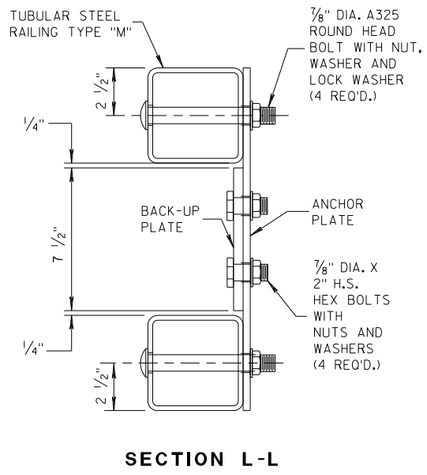
S.D.D. 14 B 45-5g

GENERAL NOTES

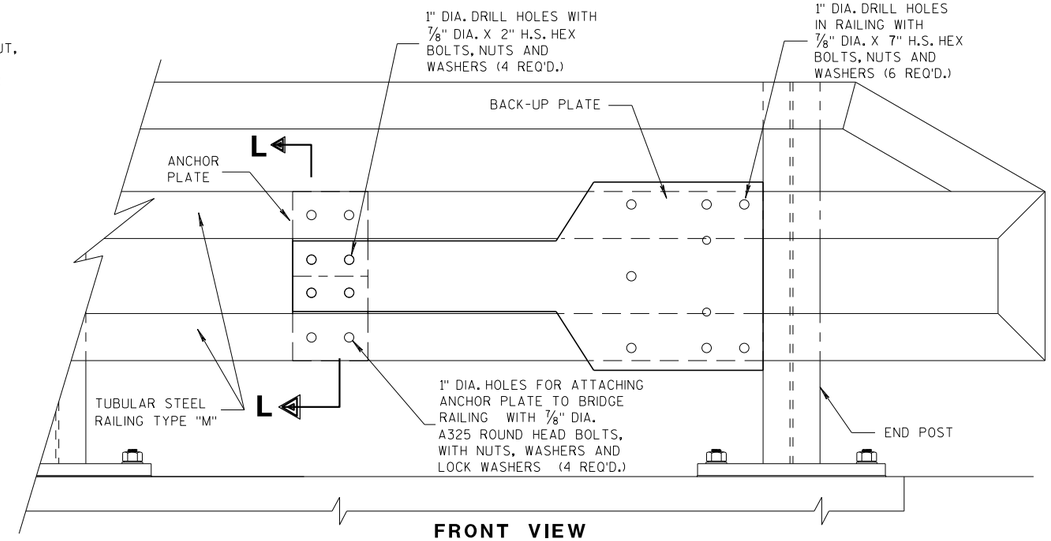
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



FRONT VIEW

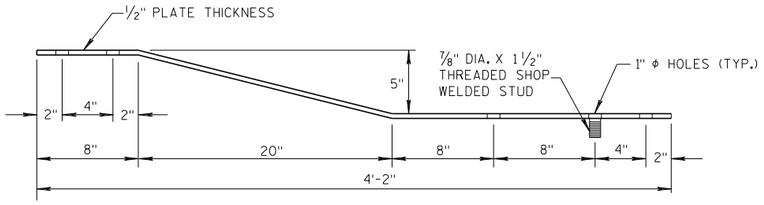


SECTION L-L



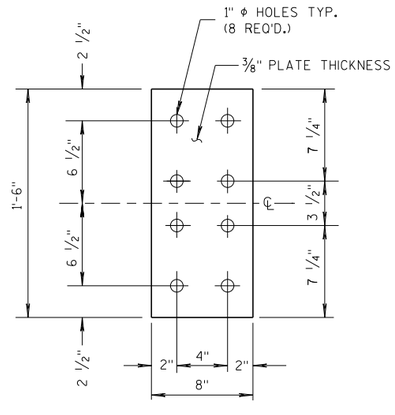
FRONT VIEW

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



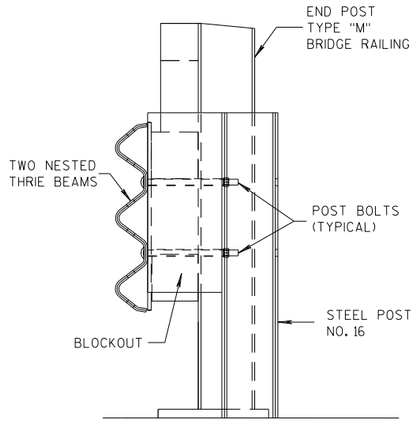
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

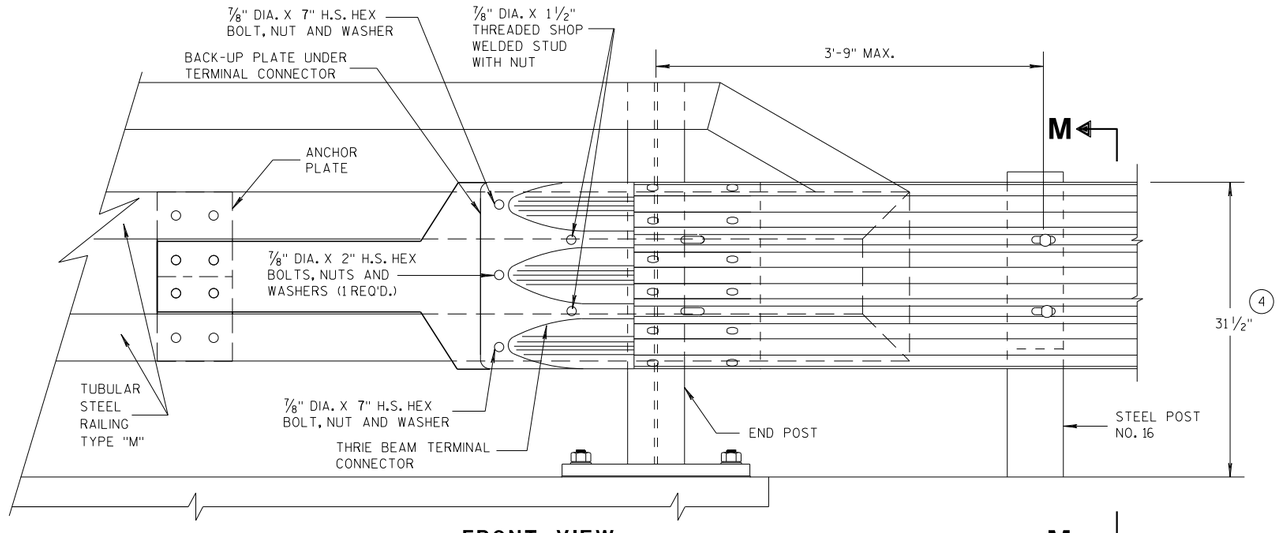


FRONT VIEW

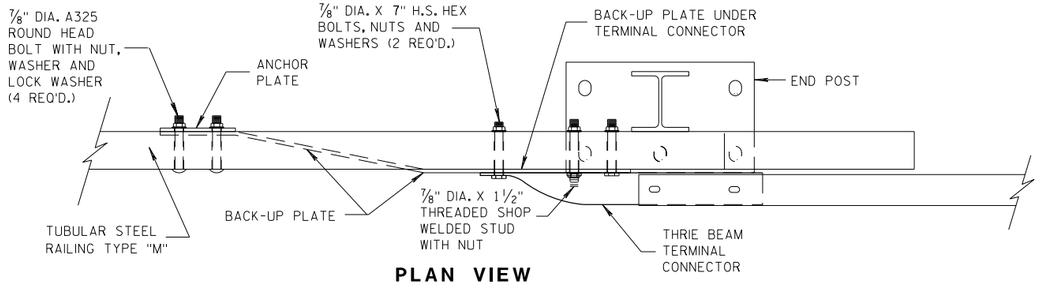
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

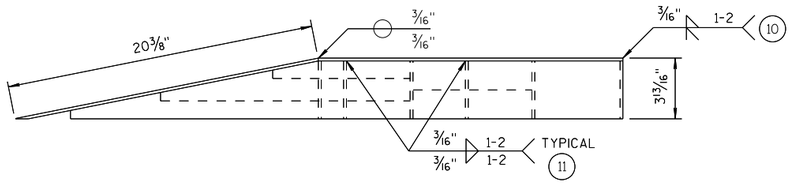
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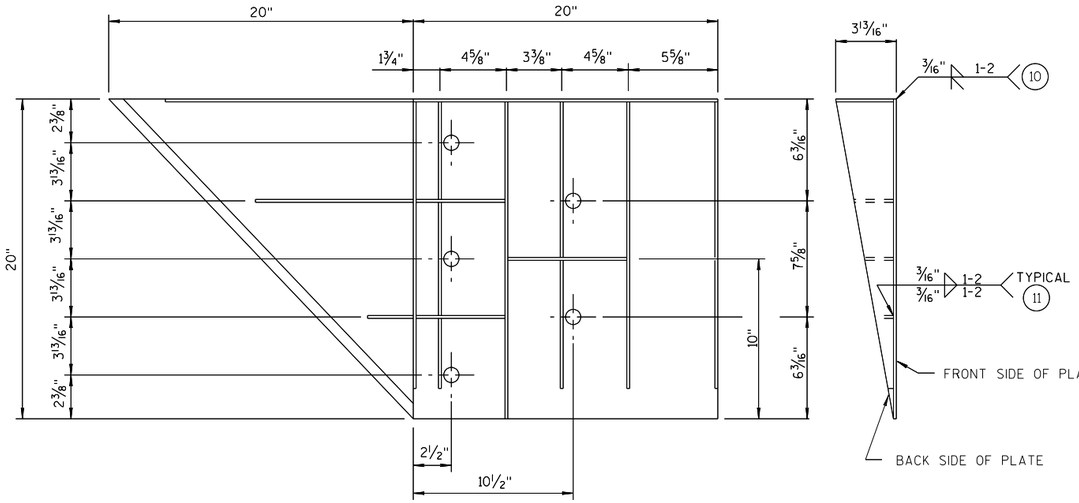
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S.D.D. 14 B 45-5h

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





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

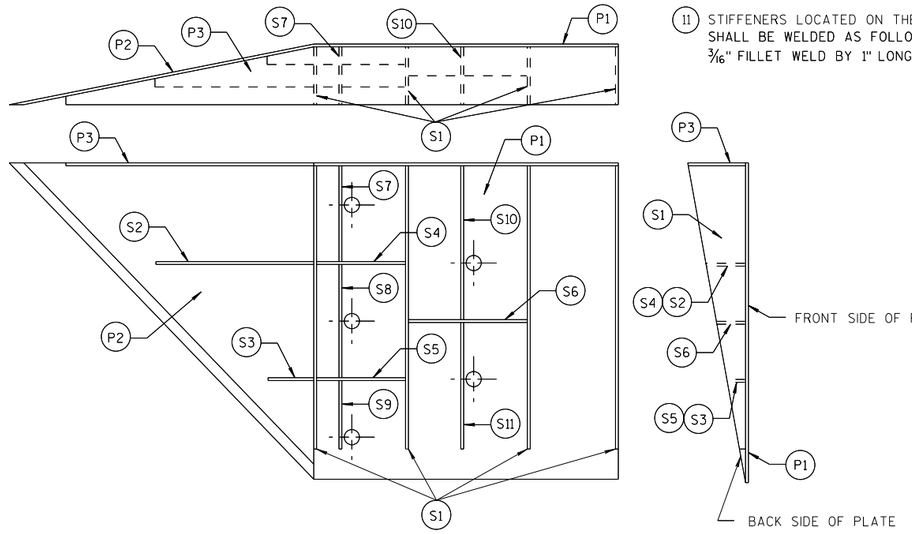


PLATE AND STIFFENER IDENTIFICATION

(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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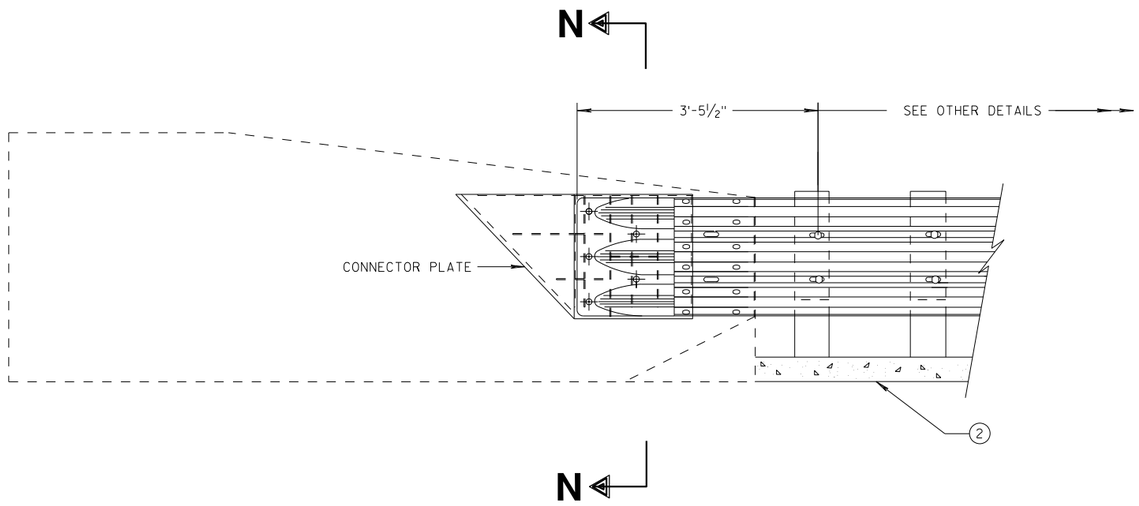
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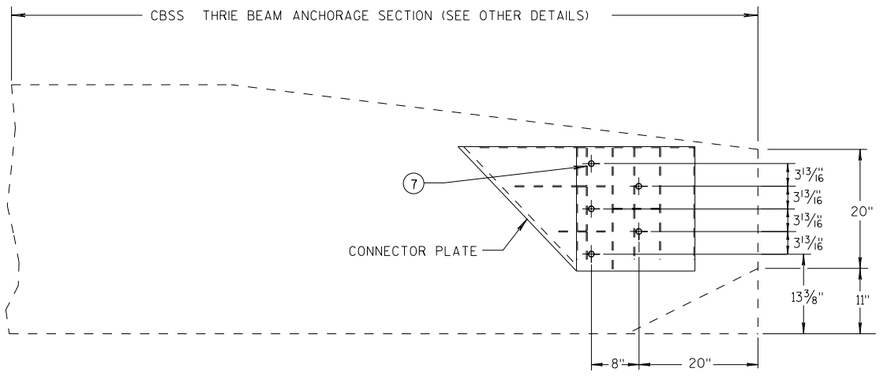
S.D.D. 14 B 45-5i

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



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



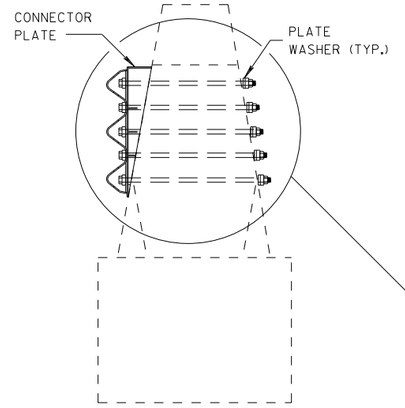
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

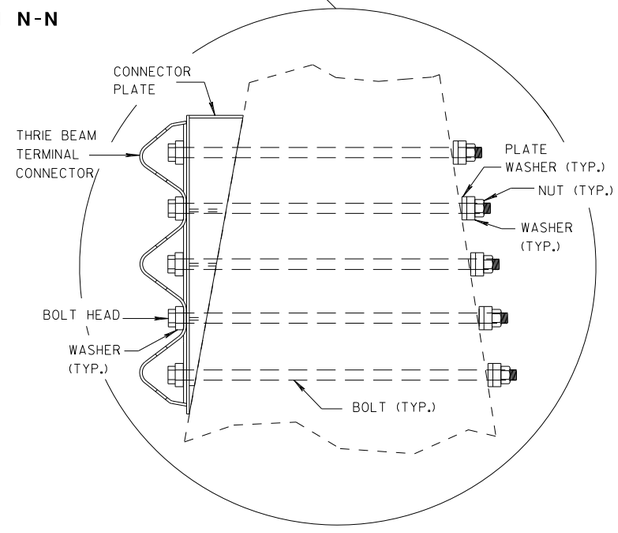
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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)

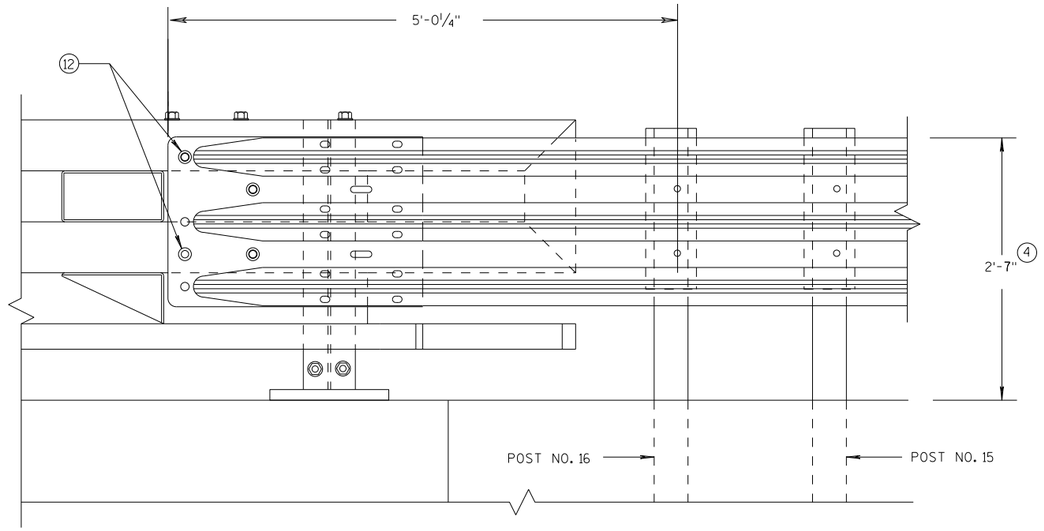
STATE OF WISCONSIN
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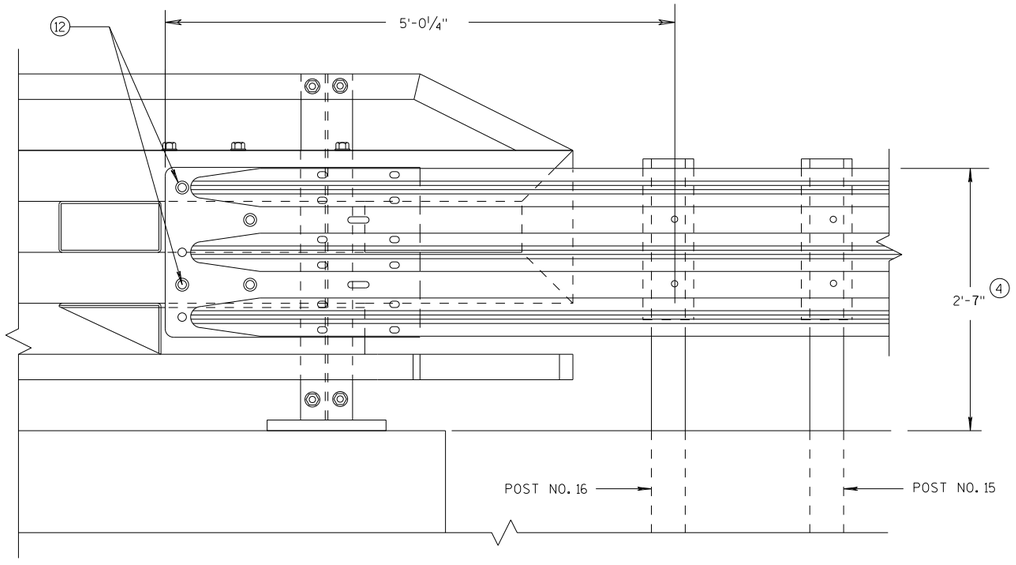
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S.D.D. 14 B 45-5j



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)

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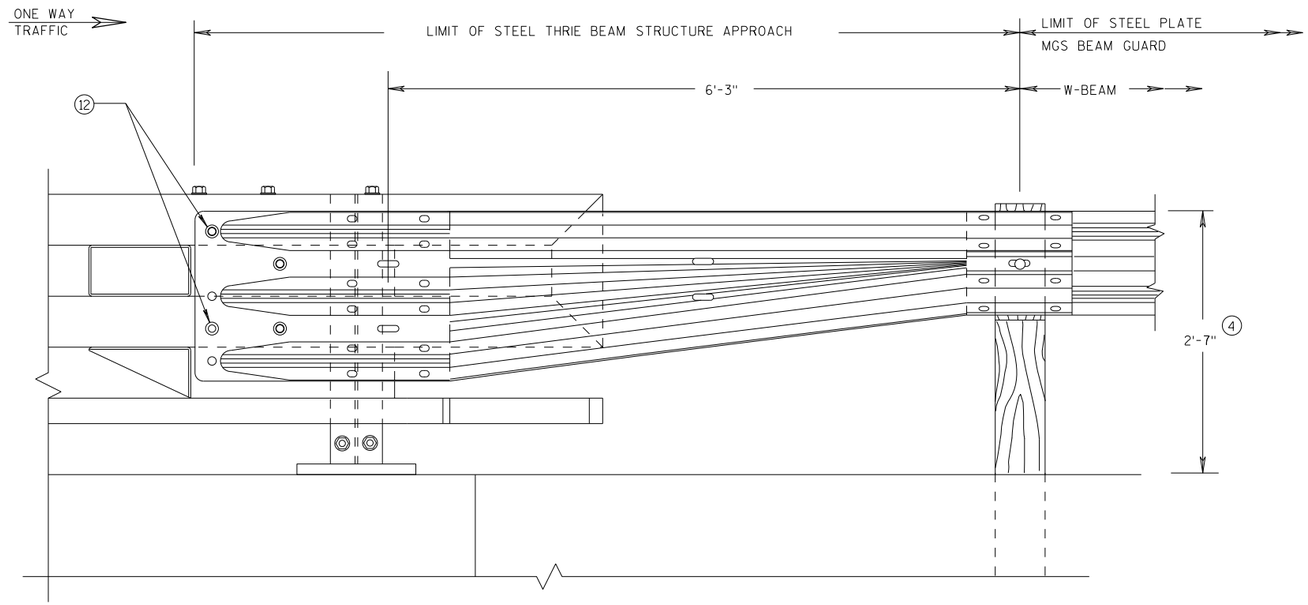
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S.D.D. 14 B 45-5k

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



FRONT VIEW

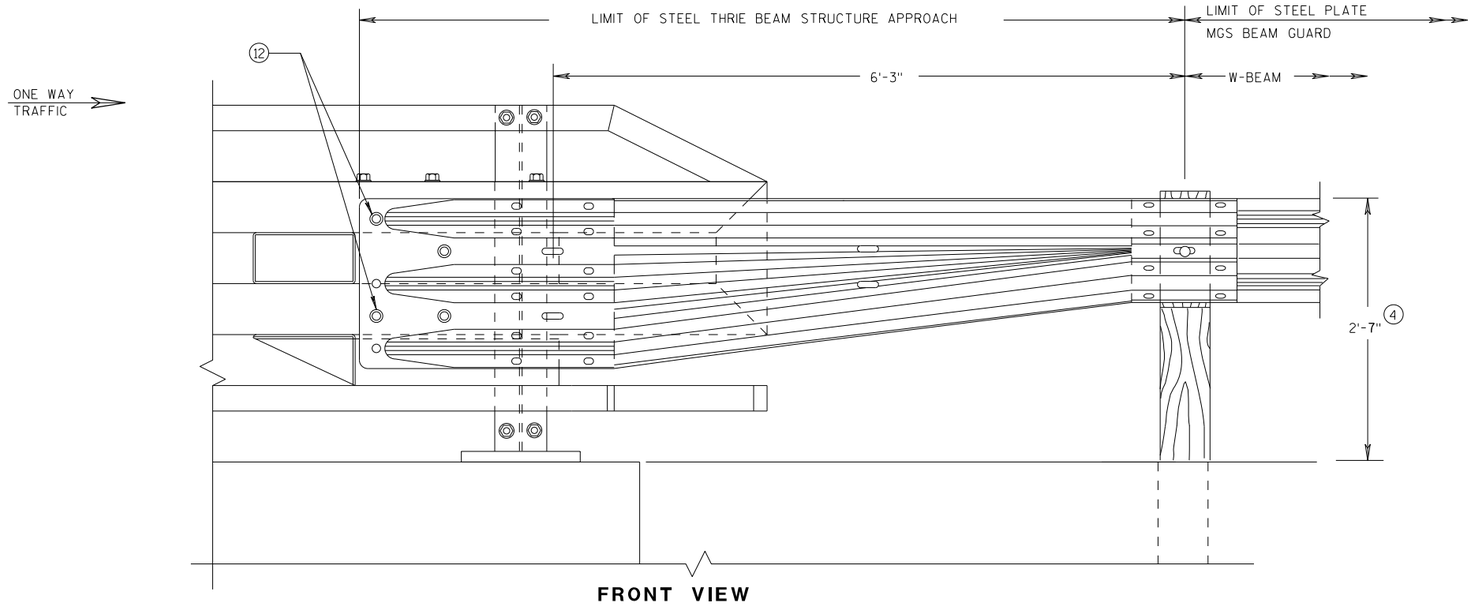
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(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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UNIT SUPERVIS

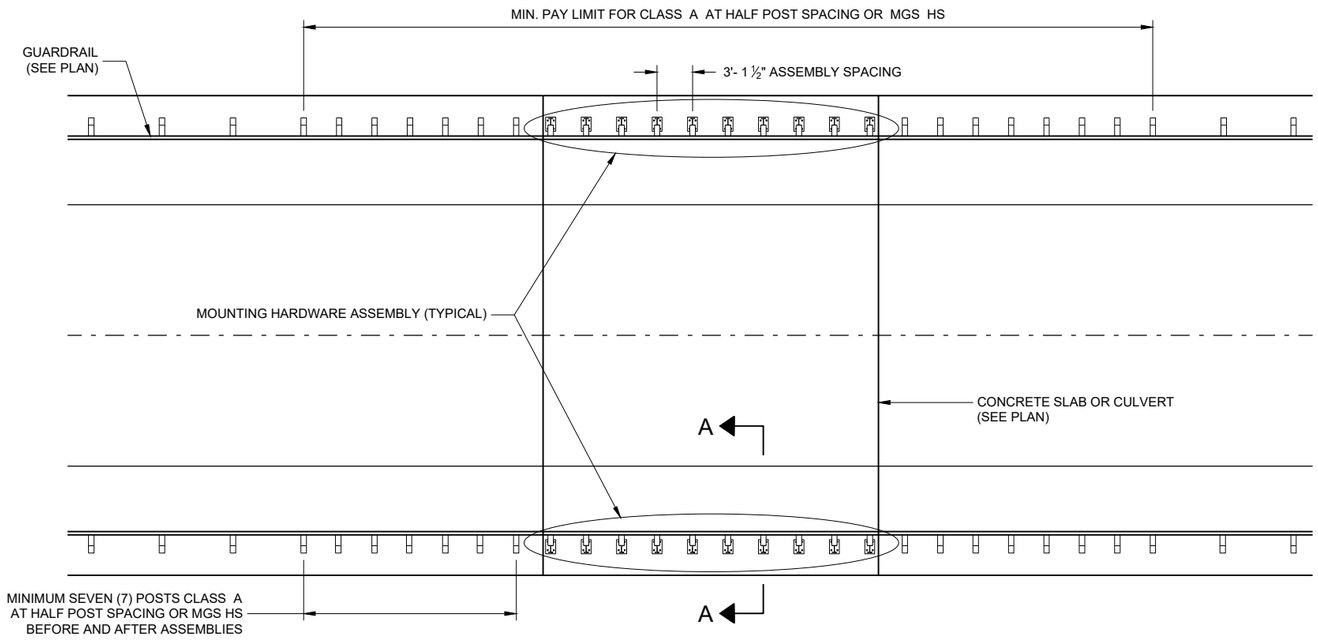
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S.D.D. 14 B 45-5L

6

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



PLAN VIEW

GENERAL NOTES

HOLES DRILLED INTO CONCRETE SLAB OR CULVERT ARE 1 ⅛" DIAMETER.

POST BASE PLATE (AND BOTTOM PLATES IF USED) SHALL BE FLAT WITH ALL SURFACES SMOOTH, AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS. CUT BOTTOM OF POST SO THAT POST WILL BE VERTICAL WHEN POST ASSEMBLY IS PLACED ON TOP OF CONCRETE. HEX BOLTS AND THREADED RODS ARE TO BE PLACED PERPENDICULAR TO THE BASE PLATE.

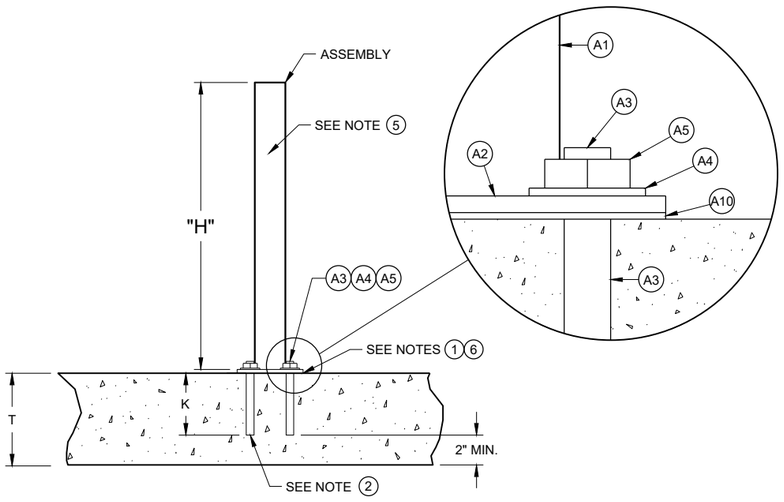
"H" DIMENSION WILL VARY. SEE PLAN FOR "H" DIMENSION. CONTRACTOR HAS OPTION OF INSTALLING POSTS THAT ARE TALLER THAN "H" DIMENSION AND CUT POSTS TO PROPER "H" DIMENSION IN THE FIELD. IF ELECTING TO FIELD CUT POSTS, DRILL HOLES AT APPROPRIATE LOCATIONS AND APPLY GALVANIZATION.

GALVANIZE STEEL COMPONENTS AFTER FABRICATION PER SECTION 614 OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

INSTALL 1 NUT AND 1 WASHER WHERE APPLICABLE. PROVIDE SUFFICIENT LENGTH OF BOLT OR THREADED ROD TO ALLOW FOR ¼" TO ½" OF THREAD TO BEYOND THE NUT.

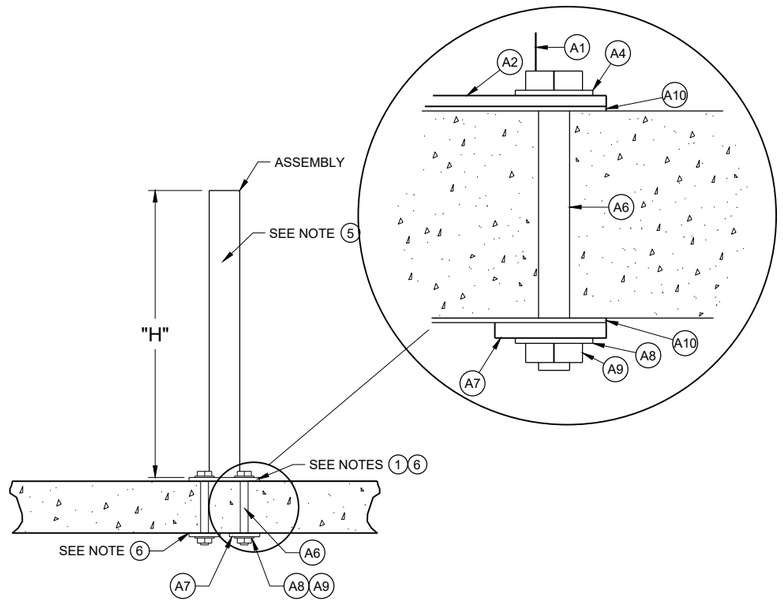
1. FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE A2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. CAULK AROUND PERIMETER OF A2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.
2. BOND STRENGTH OF ADHESIVE IS 1,305 PSI OR GREATER WITH A MINIMUM EMBEDMENT DEPTH OF 8-INCHES. IF MINIMUM EMBEDMENT CANNOT BE ACHIEVED, BOLT THROUGH STRUCTURE.
3. USE GAS-METAL ARC WELDING (GMAW) PROCESS WITH ER70S-3 WELDING WIRE AND ARGON-OXYGEN OR CO_2 COVER GAS.
4. OTHER COMPONENT OF BARRIER SYSTEM NOT SHOWN. SEE SDD 14B15 OR SDD 14B42 FOR MORE DETAILS.
5. HOLES TO MOUNT BEAM GUARD AND BLOCK NOT SHOWN ON DRAWINGS. SEE SDD 14B15 OR SDD 14B42 FOR MORE DETAILS.
6. ADD AND ADJUST SHIM PLATES AS NECESSARY TO INSTALL POST PLUMB. SEE (A10) FOR DETAIL.

Concrete Strength (f'c) PSI	"T" Inch	Min. "K" Inch
3,500	11 ≤	9
4,000	10 ≤	8



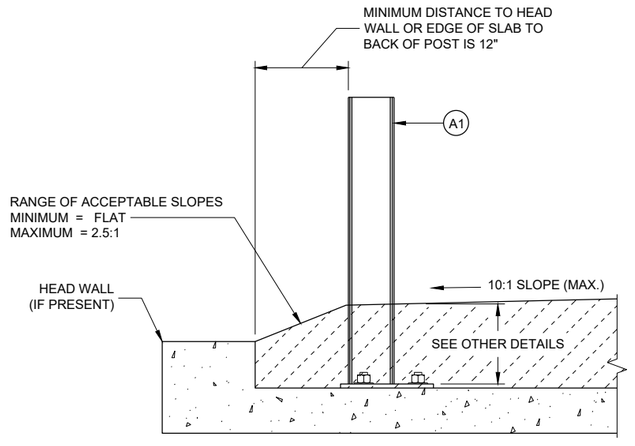
ADHESIVE ANCHOR DETAIL

SEE NOTE 4



BOLT THROUGH DETAIL

SEE NOTE 4



SECTION A - A

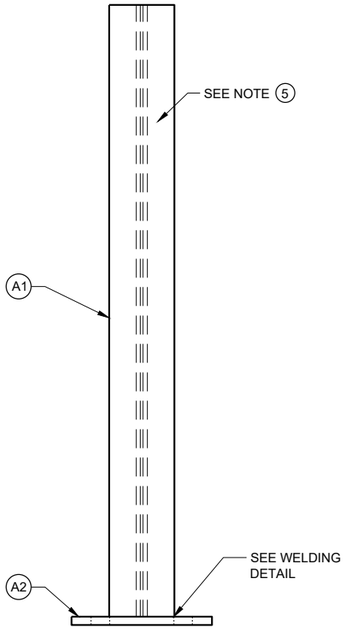
SEE NOTE 4

ANCHOR POST ASSEMBLY TOP MOUNTED

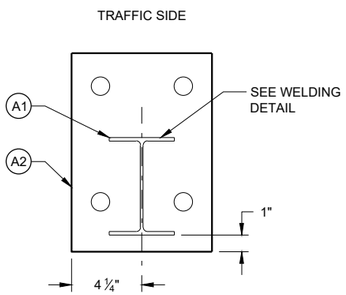
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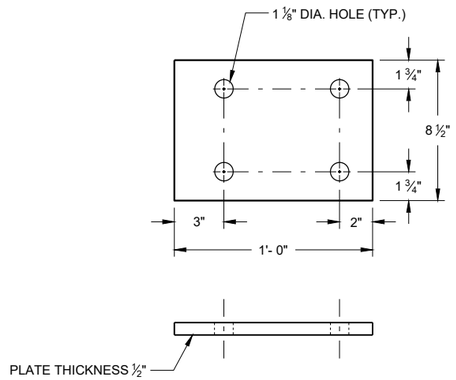
SDD 14B51 - 03a
SDD 14B51 - 03a



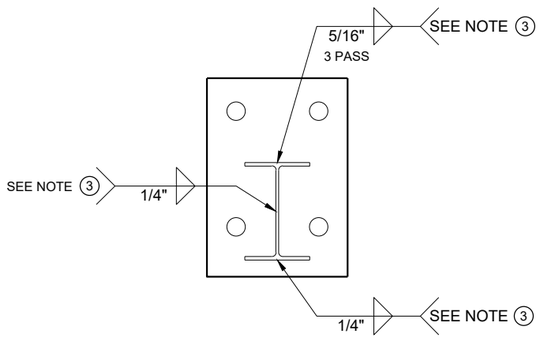
PROFILE VIEW
POST ASSEMBLY



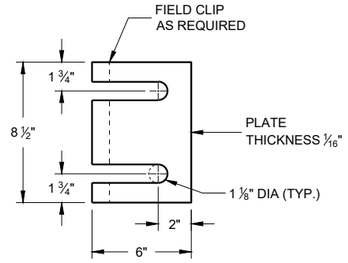
PLAN VIEW
POST ASSEMBLY



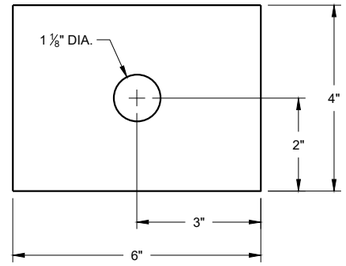
(A2) **STEEL BASE PLATE**



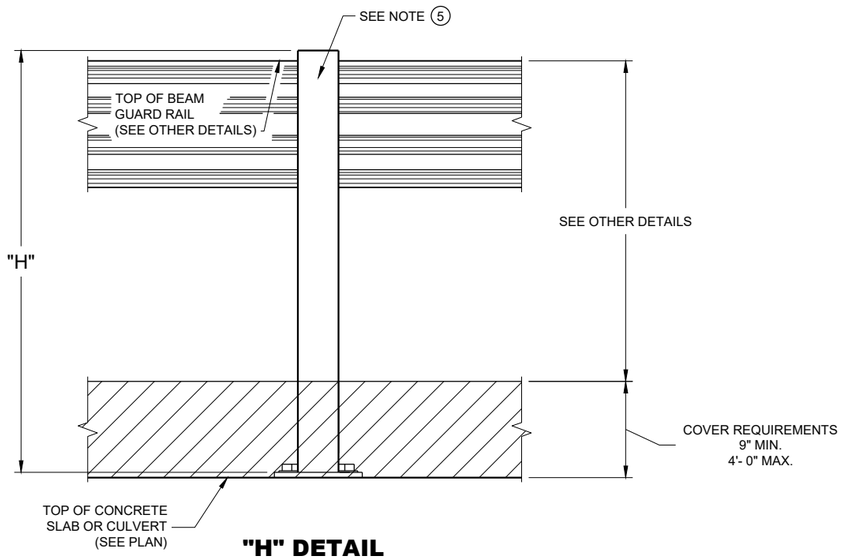
POST ASSEMBLY
WELDING DETAIL



(A10) **SHIM PLATE**



(A7) **PLATE WASHER**



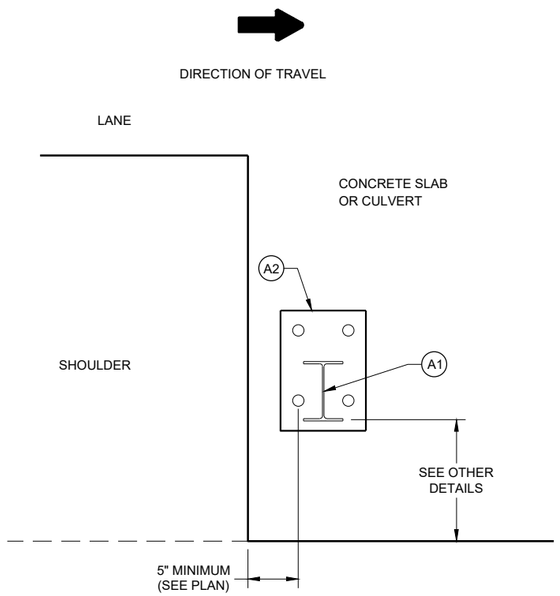
"H" DETAIL

SEE NOTE (4)

ANCHOR POST ASSEMBLY
TOP MOUNTED

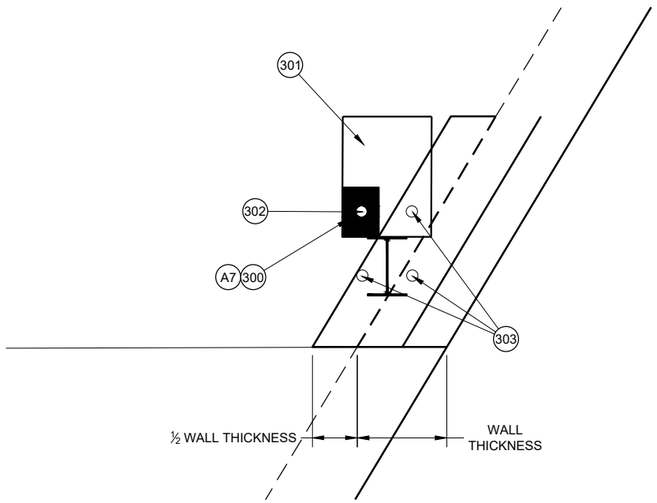
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EDGE PLACEMENT

SEE NOTE (4)



TOP MOUNT OPTION NEAR EDGE OF SLAB

BILL OF MATERIALS LIST

ITEM	DESCRIPTION	MATERIAL SPECIFICATIONS	NOTES
A1	W6x9 or W6x8.5	ASTM A992 50 KSI MIN., ASTM A709 GRADE 50, OR ASTM A36	SEE SDD 14B15 OR 14B42 LENGTH WILL VARY
A2	STEEL BASE PLATE	ASTM A992 50 KSI MIN., ASTM A529 GRADE 50, ASTM A572 GRADE 50, OR ASTM A36	
A3	1" DIA. THREADED ROD	SAE J429 GRADE 2, OR ASTM F1554 GRADE 55	LENGTH WILL VARY
A4	1" DIA. FLAT WASHER	ASTM F844	
A5	1" HEX NUT	ASTM A563A	
A6	1" DIA. HEX BOLT	ASTM A307	LENGTH WILL VARY
A7	PLATE WASHER	ASTM A992 50 KSI MIN., ASTM A529 GRADE 50, ASTM A572 GRADE 50, OR ASTM A36	¼" THICKNESS
A8	1" DIA. FLAT WASHER	ASTM F844	
A9	1" DIA. HEX NUT	ASTM A563A	
A10	SHIM PLATE	SEE (A2)	4 MAX PER POST

NOTES

300. Plate washer installed on underside of slab or culvert

301. Top plate assembly on top of slab or culvert

302. Bolt through option allowed

303. Adhesive Anchors

ANCHOR POST ASSEMBLY TOP MOUNTED

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APPROVED

May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

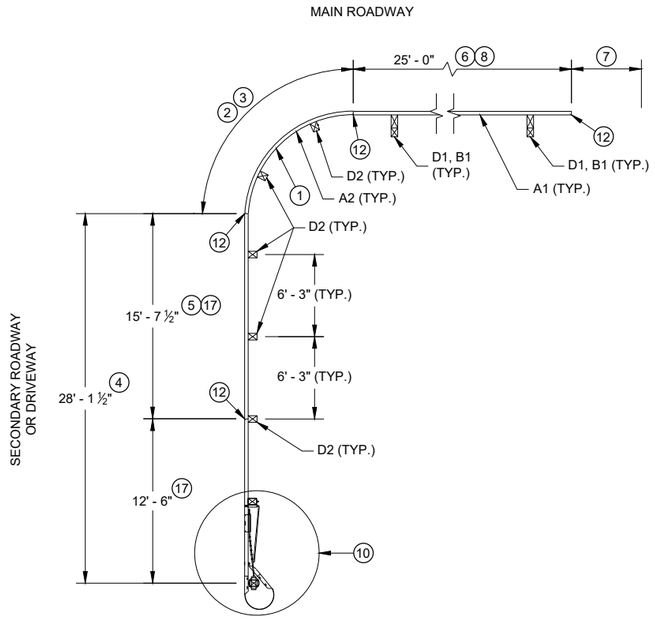
FHWA

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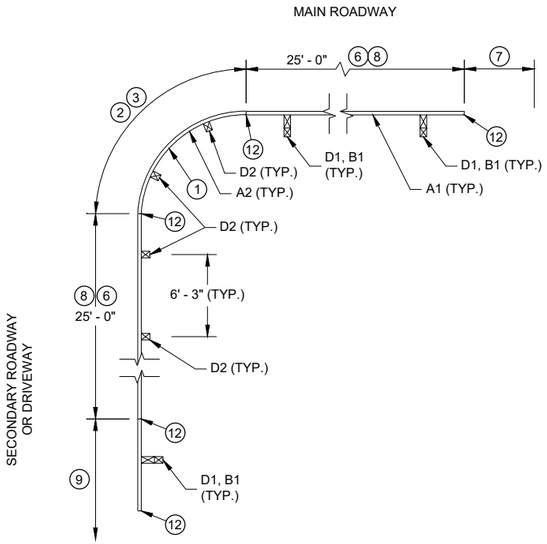
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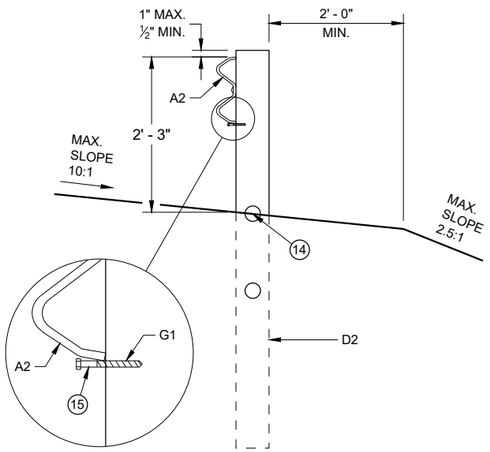
PLAN VIEW

SHORT RADIUS BEAM GUARD WITH SHORT RADIUS TERMINAL ON SECONDARY ROAD OR DRIVEWAY

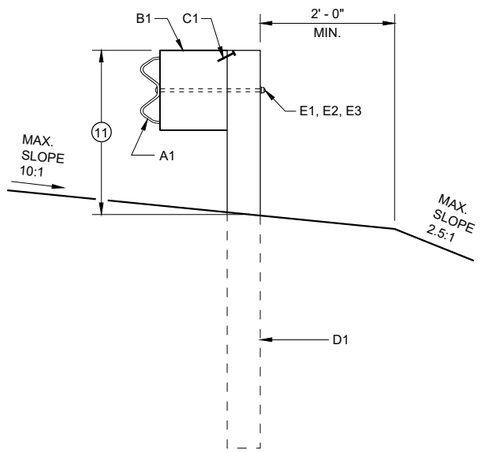


PLAN VIEW

SHORT RADIUS BEAM GUARD WITH EAT, ADDITIONAL BEAM GUARD OR TRANSITION TO RIGID BARRIER ON SECONDARY ROAD OR DRIVEWAY



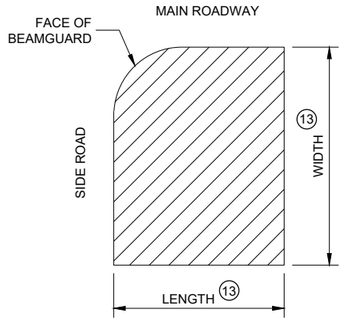
CONTROLLED RELEASE TERMINAL POST (CRT) IN RADIUS



BEAM GUARD POSTS IN HEIGHT TRANSITION

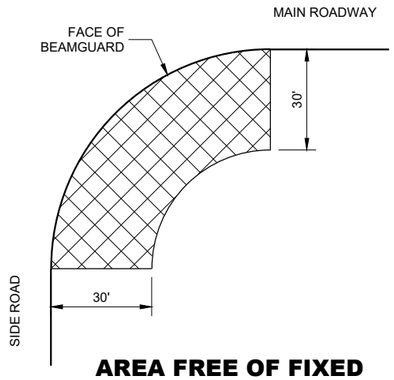
TABLE FOR RADIUS OF 32' AND LESS

RADIUS (FT)	LENGTH (FT)	WIDTH (FT)
8	25	15
16	30	15
24	40	20
32	50	30

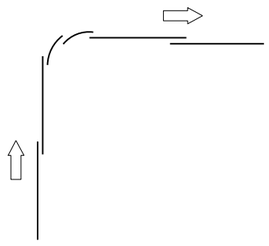


AREA FREE OF FIXED OBJECTS FOR RADIUS 32' AND LESS

16



AREA FREE OF FIXED OBJECTS FOR RADIUS GREATER THAN 32'



LAP SPLICE DETAIL

GENERAL NOTES

SEE PLANS FOR OTHER BARRIER SYSTEM AND LOCATION SPECIFICS.

SEE SDD 14B42 FOR MORE INFORMATION ON BEAM GUARD INSTALLATION, PARTS, MATERIALS, AND INSTALLATION INFORMATION.

GALVANIZE PARTS AFTER FABRICATION.

WELDING TO FOLLOW CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI / AWS D1.1.

UNLESS NOTED OTHERWISE, ALL PLATES ARE FLAT AND FREE OF WARP.

UNLESS NOTED OTHERWISE, ALL EDGES ARE SMOOTH, STRAIGHT AND VERTICAL.

ALL CUTS AND HOLES, EXCEPT IN BEAM GUARD RAIL ARE TO BE MACHINED OR MACHINE FLAME CUT.

UNLESS NOTED OTHERWISE, CUT OR PROVIDE BOLTS THAT ARE ¼" TO ½" BEYOND THE NUT.

DRAWINGS ARE NOT TO SCALE.

1. RADIUS MEASURE FROM INSIDE OF RAIL. LENGTH OF BEAM GUARD SHORT RADIUS GUARD MEASURED ALONG TRAFFIC SIDE OF RAIL. RADIUS BETWEEN 8 FEET TO 150 FEET. SEE PLAN FOR REQUIRED RADIUS. BEAM GUARD RAIL IN RADIUS IS SHOP BENT. ODD RAIL LENGTH OR FIELD CUTS MAY BE REQUIRED.
2. CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE USED IN THE RADIUS. CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE SPACED 6' - 3". SEE PLAN FOR NUMBER OF CONTROLLED RELEASE (CRT) POSTS.
3. WITHIN RADIUS BEAM GUARD RAILS ARE NOT BOLTED TO POSTS. BEAM GUARD RAIL IS RESTED ON TOP OF LAG SCREW.
4. MINIMUM LENGTH OF BEAM GUARD ALONG SIDE ROAD OR DRIVEWAY TO INSTALL SHORT RADIUS TERMINAL. BEAM GUARD IS PAID WITH BEAM GUARD ITEM.
5. ODD LENGTH OF BEAM GUARD REQUIRED TO INSTALL SHORT RADIUS TERMINAL.
6. MINIMUM AMOUNT OF BEAM GUARD TO BE INSTALLED PRIOR TO TRANSITION TO RIGID BARRIER. ADDITIONAL BEAM GUARD, OR EAT. BEAM GUARD PAID FOR WITH BEAM GUARD ITEM. SEE PLANS FOR MORE DETAIL.
7. BEAM GUARD, EAT, OR TRANSITION TO RIGID BARRIER. SEE PLAN.
8. TOP OF BEAM GUARD BY THE RADIUS IS 27". HEIGHT OF BEAM GUARD IS 31" BY TRANSITION TO RIGID BARRIER, ADDITIONAL BEAM GUARD OR EAT.
9. ADDITIONAL BEAM GUARD, EAT OR TRANSITION TO RIGID BARRIER. BEAM GUARD SHOWN. SEE PLAN FOR DETAILS.
10. SHORT RADIUS TERMINAL (SEE OTHER DETAILS).
11. HEIGHT VARIES. SEE NOTE 8 AND 8 .
12. BEAM GUARD RAIL SPLICE LOCATION. SPLICE LOCATION REQUIRES PART F1 AND F2. SEE SDD 14B42 FOR DETAILS.
13. SEE TABLE FOR VALUES.
14. MAXIMUM HEIGHT FOR CENTER OF HOLE IS ¾" ABOVE FINISHED GROUND ±1".
15. DRILL POST $^{15}/_{64}$" DIA. PILOT HOLE. DO NOT HAMMER LAG SCREW INTO POST.
16. SMALL SIGNS ON BREAKAWAY HARDWARE ARE ACCEPTABLE.
17. TOP OF RAIL HEIGHT IS 27" WHEN USING A SHORT RADIUS TERMINAL (CRT).

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

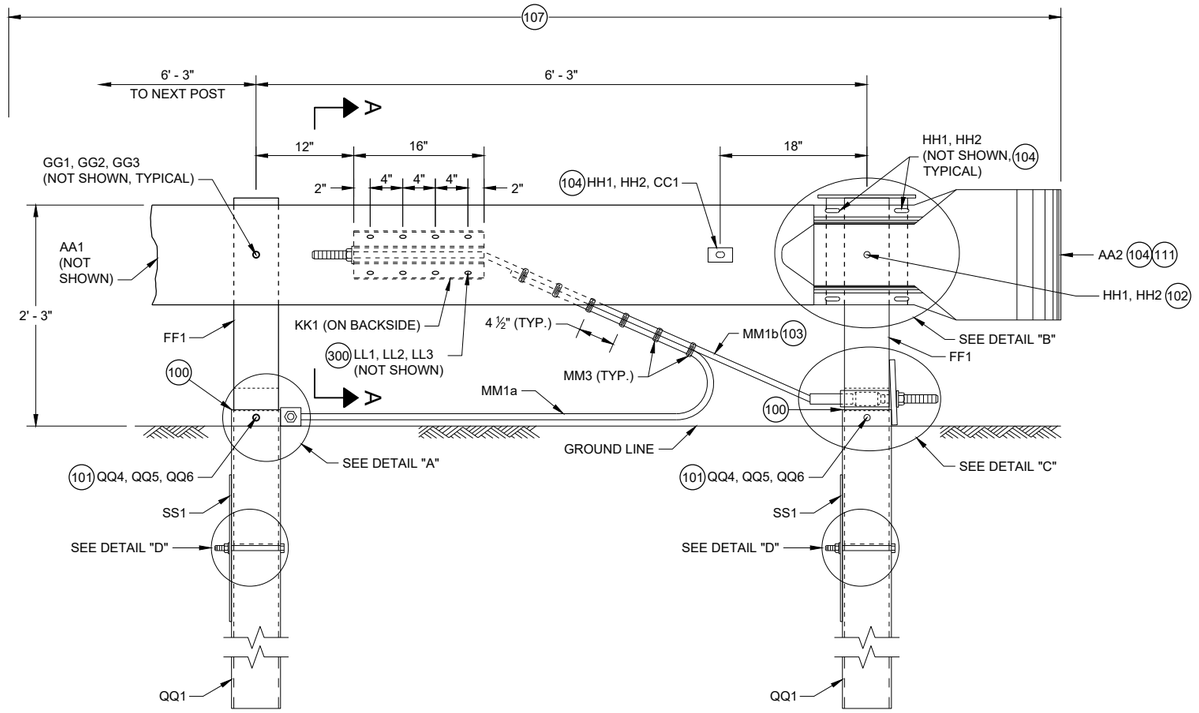
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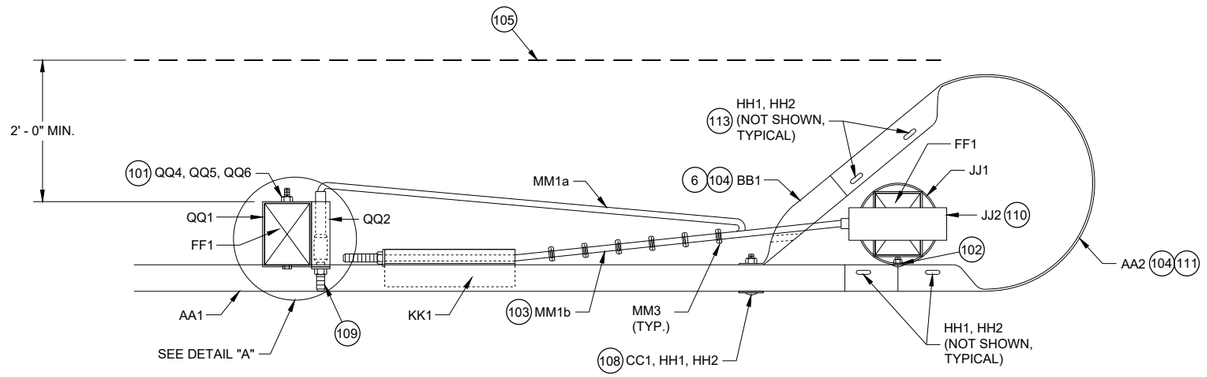
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PROFILE VIEW

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.

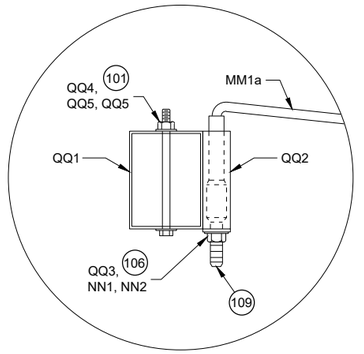
109 CUT OR PROVIDE THREADED STUD THAT IS FLUSH WITH FACE OF BEAM GUARD RAIL KK1 (PLUS OR MINUS ½" TOLERANCE). DEBURR AFTER CUTTING.

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.

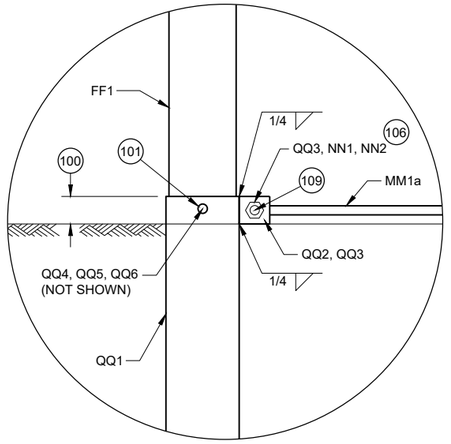
113 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA2 TO BB1.



TOP VIEW

DETAIL "A"

(WOOD BREAKAWAY AND BEAM GUARD RAIL POSTS NOT SHOWN)



PROFILE VIEW

DETAIL "A"

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
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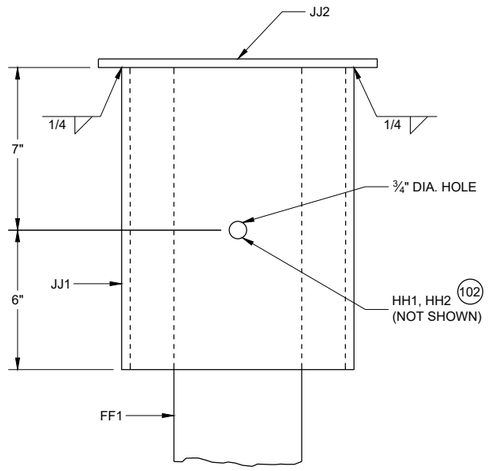
SDD 14B53 - 02b

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SDD 14B53 - 02b

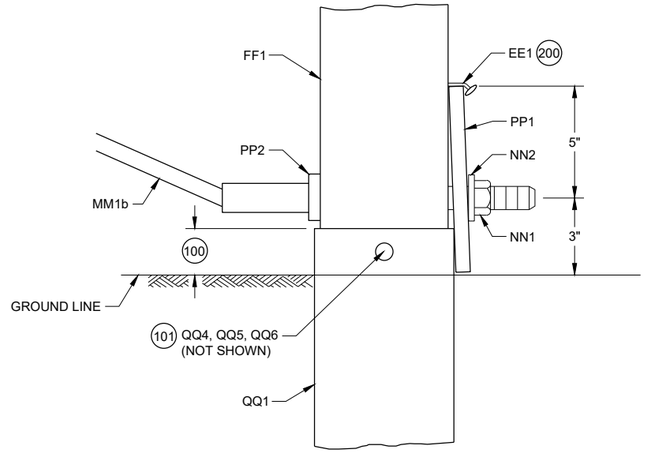
GENERAL NOTES

(200) TWO (2) NAILS SPACED 4 INCHES CENTER TO CENTER.



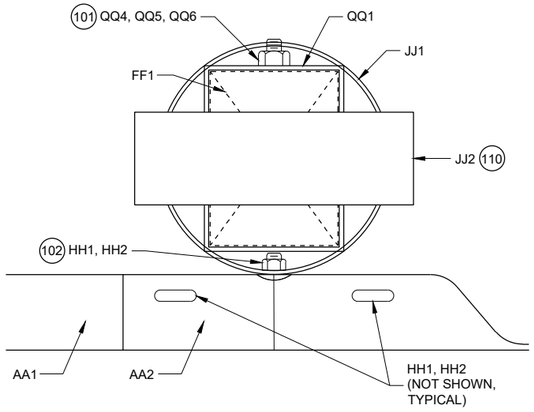
PROFILE VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY
(BEAM GUARD AND W BEAM END SECTION NOT SHOWN)



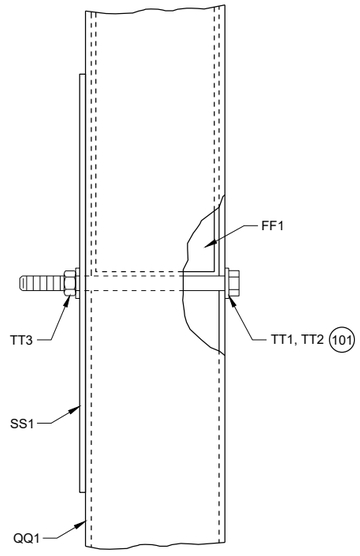
PROFILE VIEW

DETAIL "C"



PLAN VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY



PROFILE VIEW

DETAIL "D"

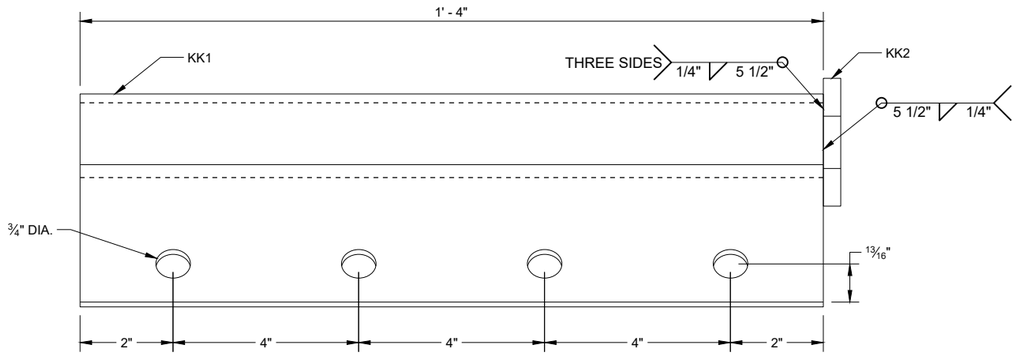
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

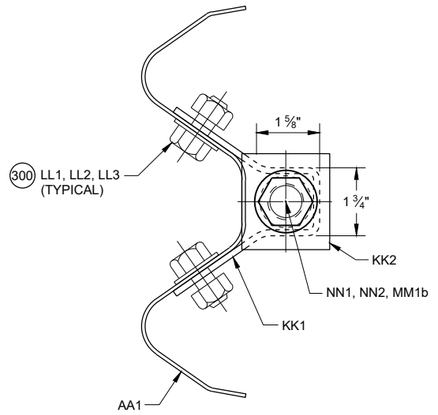
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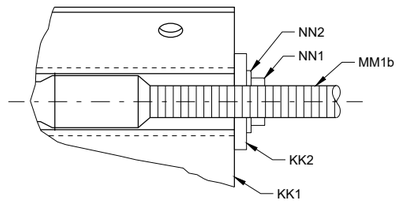
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GENERAL NOTES

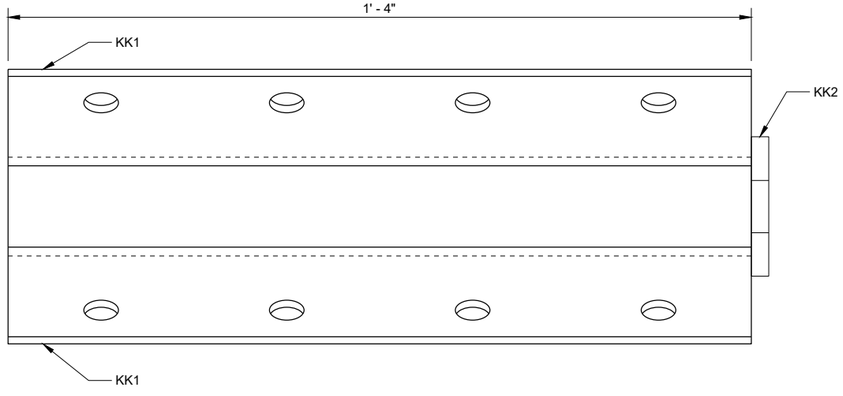
(300) WASHERS REQUIRED BETWEEN BOLT HEAD AND BEAM GUARD RAIL AND BETWEEN NUT AND ANCHOR BRACKET. EIGHT (8) LL1 AND LL3 REQUIRED. SIXTEEN (16) LL2 REQUIRED.

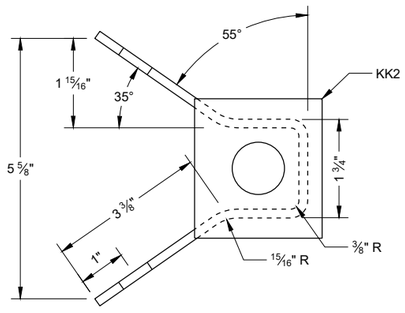




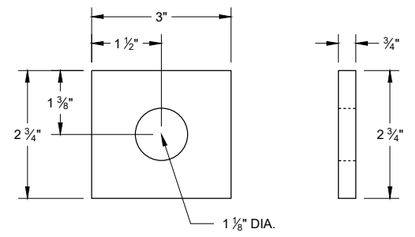


SECTION A - A





ANCHOR BRACKET (KK1, KK2)



ANCHOR BRACKET BEARING PLATE (KK2)

6

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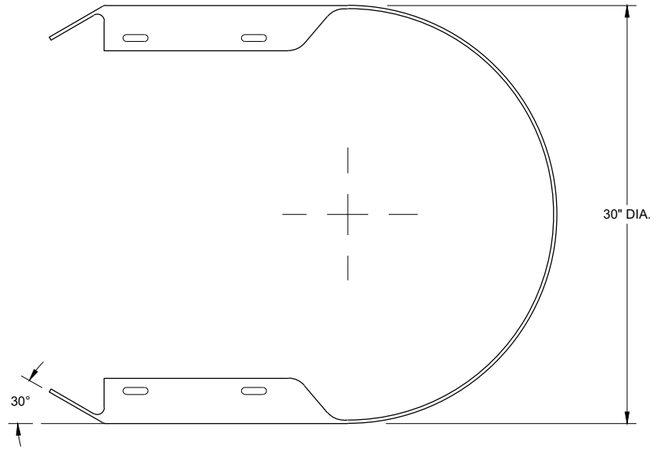
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SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

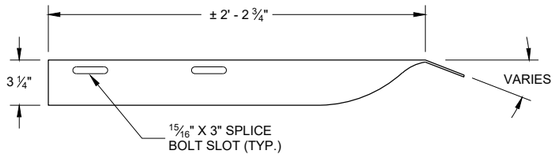
GENERAL NOTES

(400) CROSS SECTION OF PART IS TO FIT OVER AA1 .

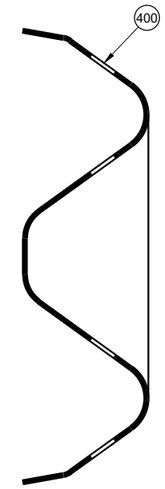
(401) CROSS SECTION OF PART IS TO FIT OVER OR UNDER AA1 .



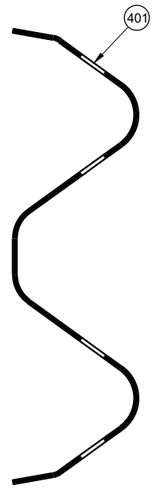
TOP VIEW



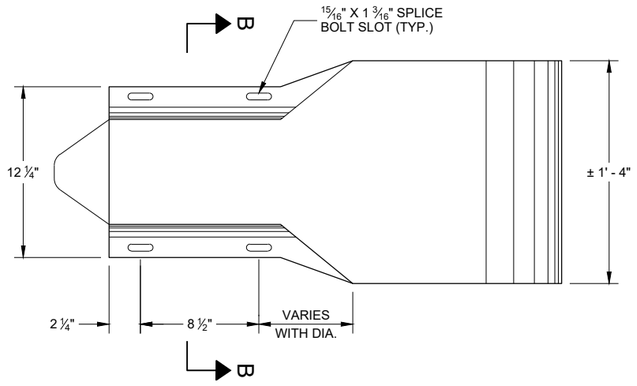
TOP VIEW



SECTION B -B

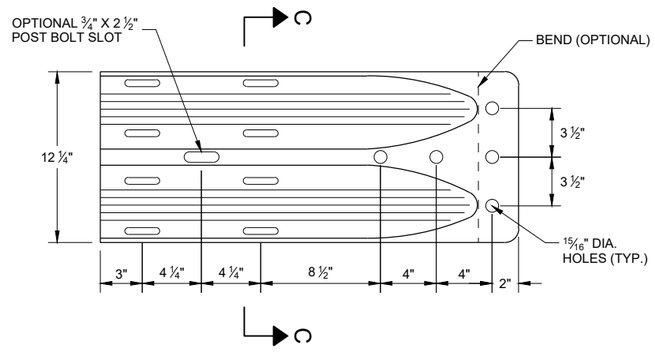


SECTION C -C



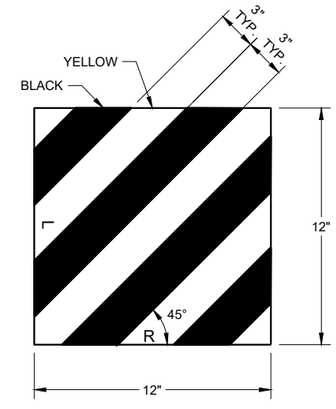
PROFILE VIEW

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)

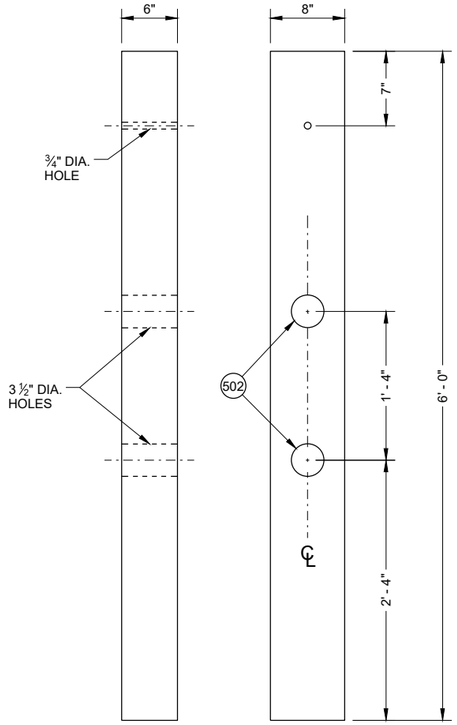
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SDD 14B53 - 02e

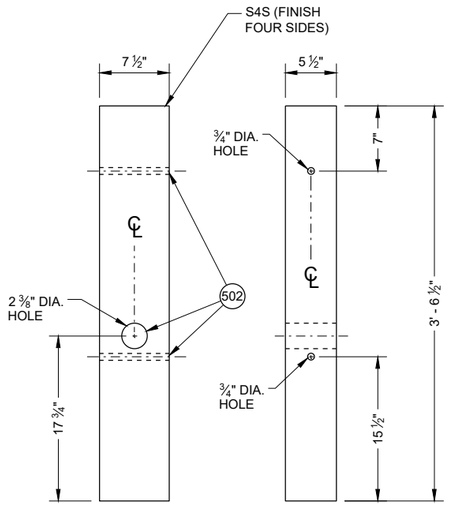
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SDD 14B53 - 02e



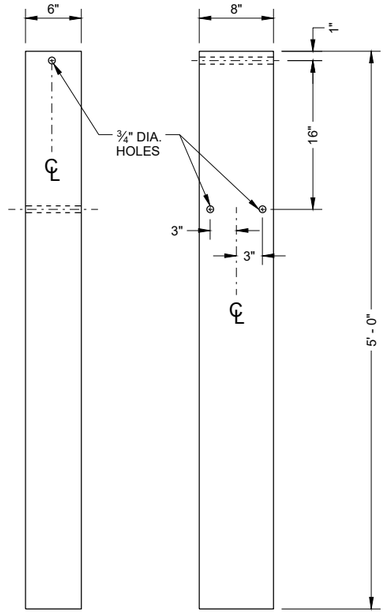
FRONT VIEW SIDE VIEW

CONTROLLED RELEASE POST (CRT) (DD2)



FRONT VIEW SIDE VIEW

WOOD BREAKAWAY POST (FF1)



FRONT VIEW SIDE VIEW

FOUNDATION TUBE (QQ1) 500

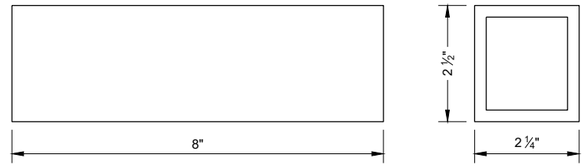
GENERAL NOTES

500 SEE DETAIL "D" FOR LOCATION AND ATTACHMENT OF SS1.

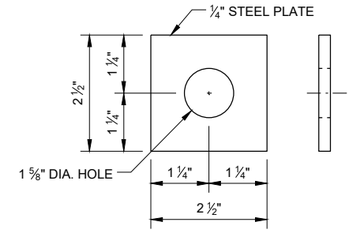
501 FOR MM1a THREADED STUD ONLY REQUIRED ON ONE END. SWAGED FITTING REQUIRED.

502 LOCATE HOLES ON THE CENTERLINE OF THE SIDE OF THE POST.

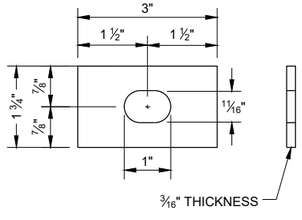
503 MM1a MAY HAVE ONE THREADED STUD 4 INCHES LONG. SEE NOTE 109.



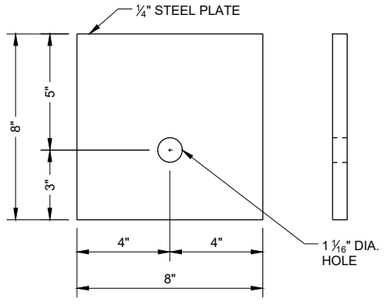
FOUNDATION TUBE - ANCHOR CABLE TUBE (QQ2)



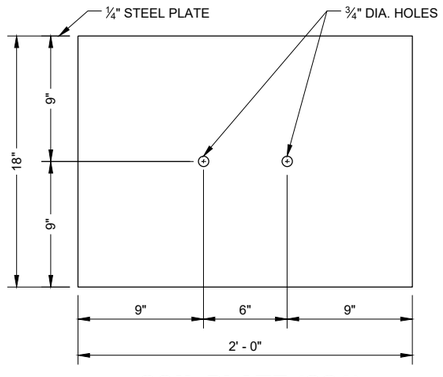
ANCHOR CABLE TUBE END PLATE (QQ3)



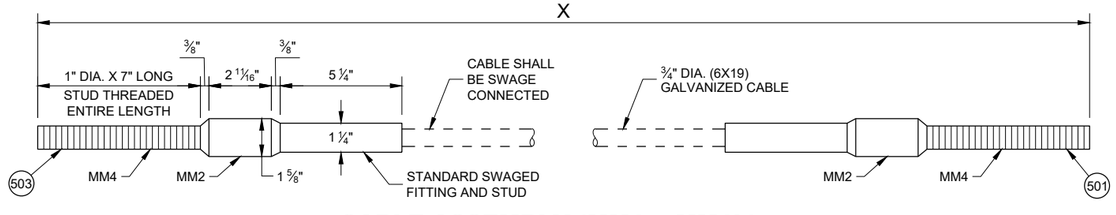
RECTANGULAR PLATE WASHER (CC1)



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 - 02f

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	BEAM GUARD RAIL	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
A2	BEAM GUARD RAIL - SHOP BENT	INDICATE ON BACK OF RAIL THE RADIUS THAT RAIL WAS BENT TO. SHOP BEND RADIUS IS TO THE NEAREST FOOT. FOLLOW AASHTO M180 ON HOW TO MARK RADIUS INFORMATION.	
		AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
B1	BLOCK - WOOD	WISDOT SPEC. 614	SEE SDD 14B42
C1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEAD)	
D1	POST-STRONG POST-WOOD	WISDOT SPEC. 614	SEE SDD 14B42
D2	POST-CRT-WOOD	WISDOT SPEC. 614	
E1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
E2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	5/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
E3	POST BOLT - NUT	AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
F1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
F2	SPLICE BOLT - NUT	ASTM A563 GRADE A	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
G1	LAG SCREW	ASTM A308 GRADE A ASTM A153 CLASS D	1/2" DIA. 6" LONG
H1	DELINEATOR - BEAM GUARD		SEE SDD 14B42 FOR MORE INFORMATION
H2	DELINEATION - SHEETING	YELLOW OR WHITE	
		WISDOT SPEC 637 TYPE SH	
		APPROVED PRODUCT LIST	
J1	FOUNDATION BACKFILL	STANDARD SPEC. 614	
AA1	BEAM GUARD RAIL - PUNCHED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
AA2	BEAM GUARD RAIL - END SECTION BUFFER	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
BB1	BEAM GUARD RAIL - TERMINAL CONNECTOR MODIFIED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
CC1	SHORT RADIUS - SQUARE WASHER	AASHTO M180	
		GALV. AASHTO M111 / ASTM A123	
EE1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)	
FF1	POST - BCT - WOOD	S4S FINISH ON 4 SIDES	
		WISDOT SPEC. 614	
GG1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	3/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
GG2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	3/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

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SDD 14B53 - 02g

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
GG3	POST BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE 14B42 FOR GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
HH1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180 HEAD GEOMETRY	
HH2	SPLICE BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
JJ1	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	10" O.D.
JJ2	TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS ⅜" X 4" X 1' - 0"
		GALV. AASHTO M111 / ASTM A123	
KK1	ANCHOR BRACKET	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
KK2	ANCHOR BRACKET - BEARING PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
LL1	ANCHOR BRACKET - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
LL2	ANCHOR BRACKET - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	⅝" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
LL3	ANCHOR BRACKET - NUT	ASTM A563 GRADE A	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
MM1a	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM1b	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM2	ANCHOR CABLE - SWAGE FITTING	ASTM A576 GRADE 1035	
		SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. WITH A BREAKING STRENGTH 40,000 LBS.	
		GALV. AASHTO M111 / ASTM A123	
		ASME B30.26 FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING INTO CONNECTION: NAME OF MANUFACTURER OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE.	
MM3	WIRE ROPE CABLE CLAMPS	FF-C-450D TYPE 1 CLASS 1	¾"
		ASTM A153 HOT DIP CLASS D	
MM4	ANCHOR CABLE - SWAGE FITTING - STUD	ASTM F3125 GRADE A325 TYPE 1 OR SAE GRADE 5 OR ASTM A449 TYPE 1 HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
NN1	ANCHOR CABLE - NUT	ASTM A563 GRADE A	1" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
NN2	ANCHOR CABLE - NUT - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	1" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

6

SDD 14B53 - 02h

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
PP1	BEARING PLATE AT POST	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
PP2	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	2" DIA. x 6" LONG
QQ1	FOUNDATION TUBE	ASTM A500 GRADE B	8" X 6" X 3/16"
		GALV. AASHTO M111 / ASTM A123	
QQ2	SHORT RADIUS - FOUNDATION TUBE - ANCHOR CABLE - TUBE	ASTM A500 GRADE B	DIMENSIONS 2 1/2" X 2 1/4" X 1/4" X 8"
		GALV. AASHTO M111 / ASTM A123	
QQ3	SHORT RADIUS - SOIL TUBE - ANCHOR CABLE - TUBE - END PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS 2 1/2" X 2 1/2" X 1/4"
		GALV. AASHTO M111 / ASTM A123	
QQ4	GROUND STRUT AND YOKE - BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
		ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	
		UNC	
QQ5	GROUND PLATE AND YOKE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
QQ6	GROUND STRUT AND YOKE - NUT	HEAVY HEX	5/8 DIA.
		UNC	
		ASTM A563 GRADE A	
		OVER TAPPED NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
SS1	SOIL PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / A123	
TT1	SOIL PLATE - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	5/8 DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
TT2	SOIL PLATE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
TT3	SOIL PLATE - NUT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
UU1	OBJECT MARKER - SHEETING	MUTCD / WISDOT OBJECT MARKER TYPE 3	PATTERN AND COLOR FOR SHEETING. SHEETING TYPE FOR MARKER.
		WISDOT SPEC 637 TYPE F	
		APPROVED PRODUCT LIST	
UU2	OBJECT MARKER - ALUMINUM PLATE	WISDOT SPEC 637 ALUMINUM PLATE	MATERIAL AND THICKNESS OF MATERIALS
UU3	OBJECT MARKER - SCREWS	STAINLESS SELF-TAPPING SCREWS	
VV1	FOUNDATION BACKFILL	WISDOT SPEC 614	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

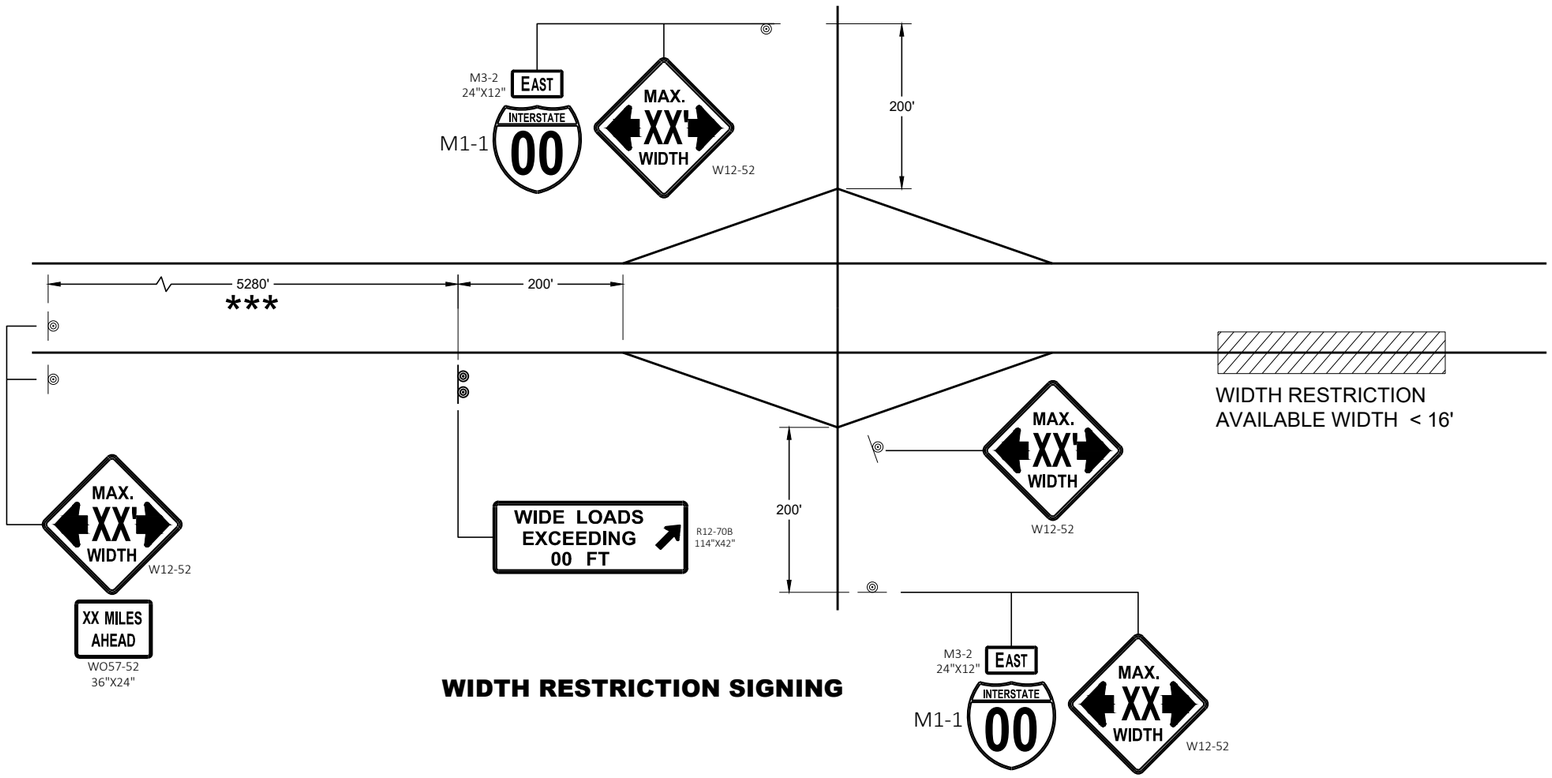
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

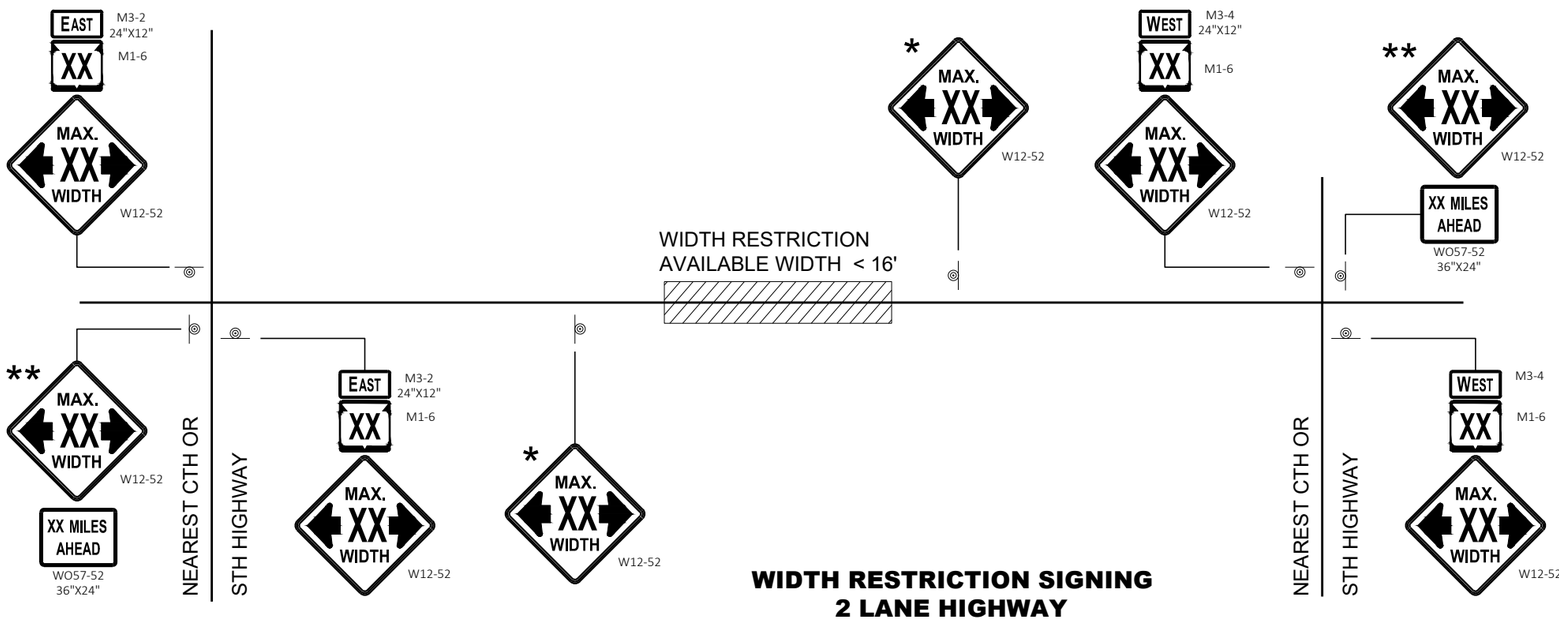
FHWA

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SDD 14B53 - 02i



WIDTH RESTRICTION SIGNING



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

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 AFTER 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

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 15C02 - 09f

6

SDD 15C02 - 09f

GENERAL NOTES

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

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

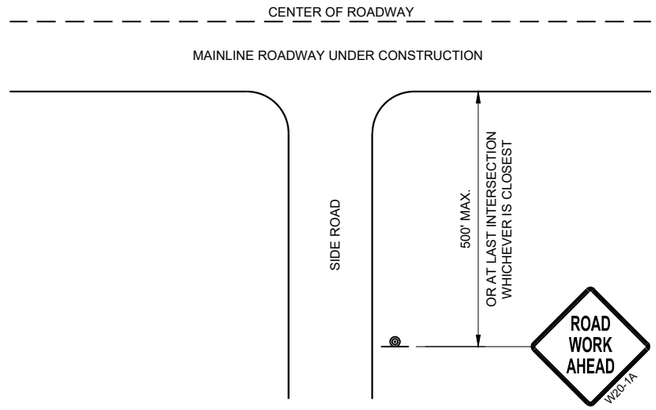
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



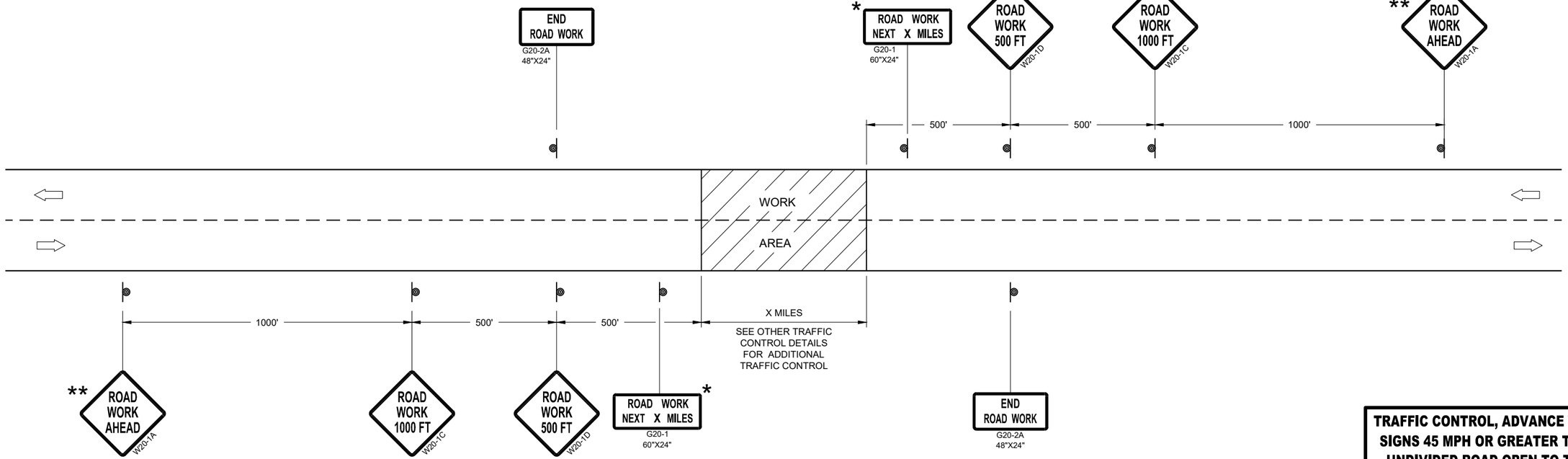
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C04 - 05

GENERAL NOTES

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

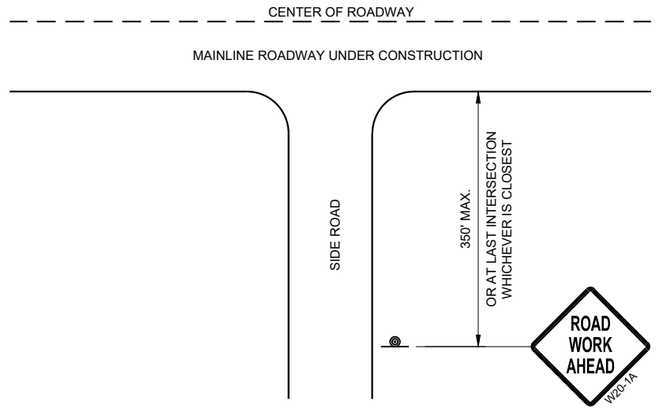
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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



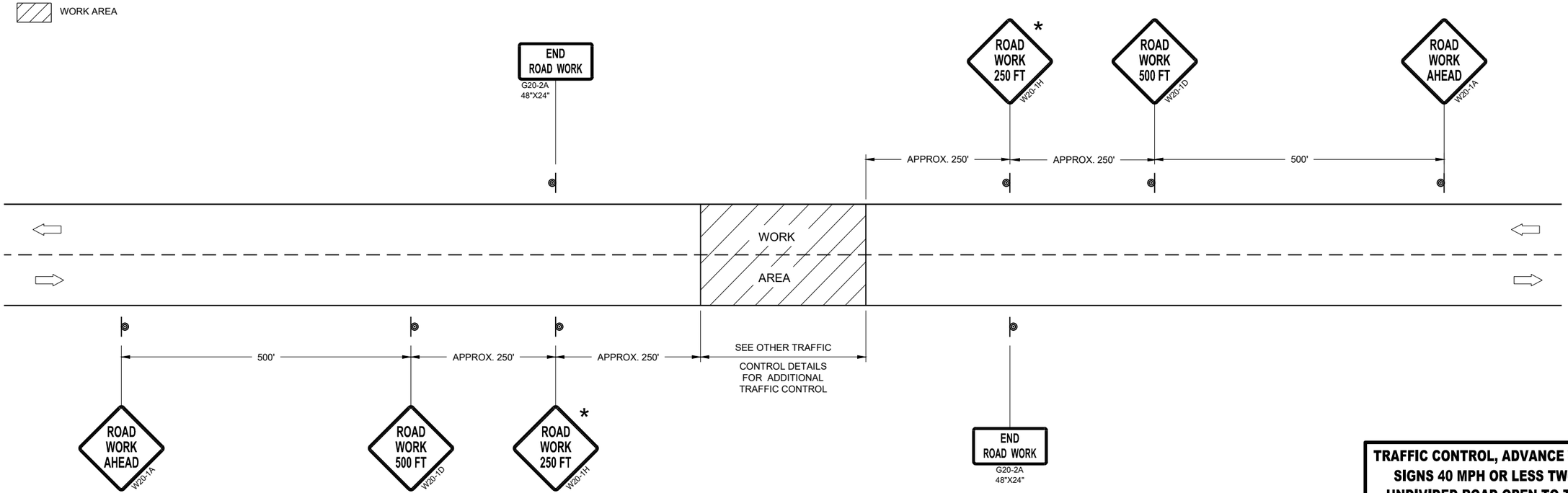
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C05 - 05

GENERAL NOTES

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

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

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

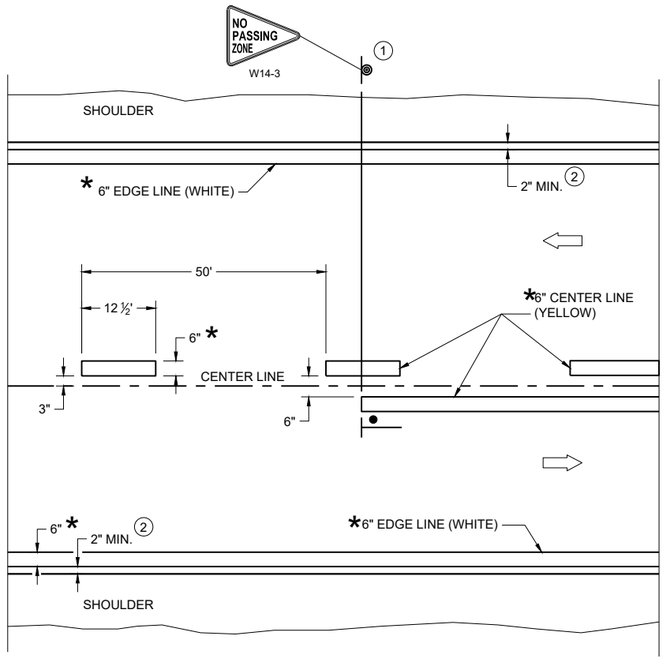
LEGEND

"T" MARKING

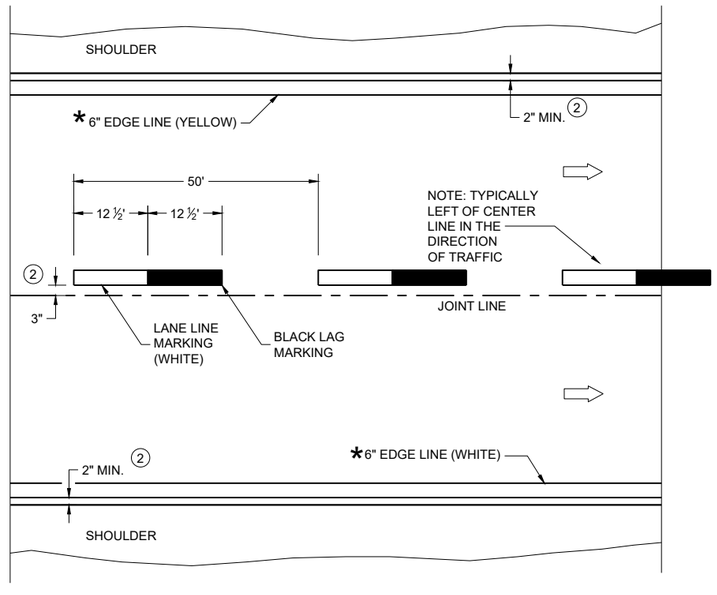
SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

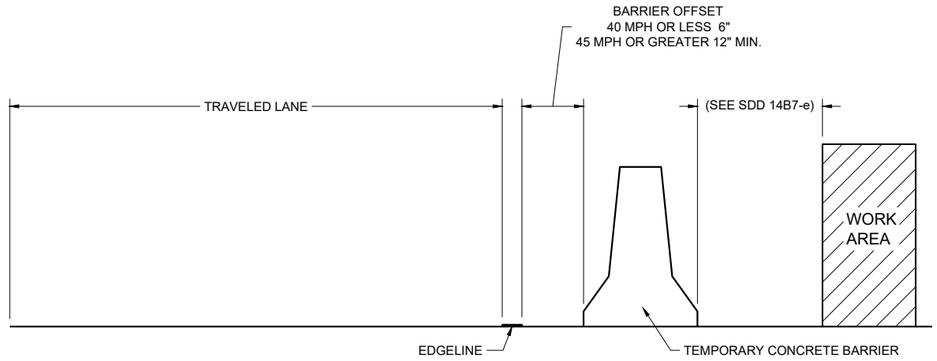
APPROVED
May 2023 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer
FHWA

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SDD 15C08-23a

6

SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

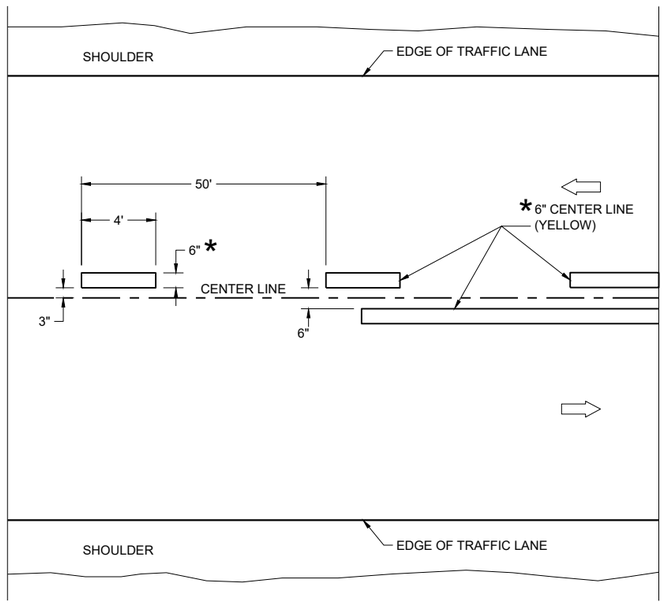
GENERAL NOTES

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

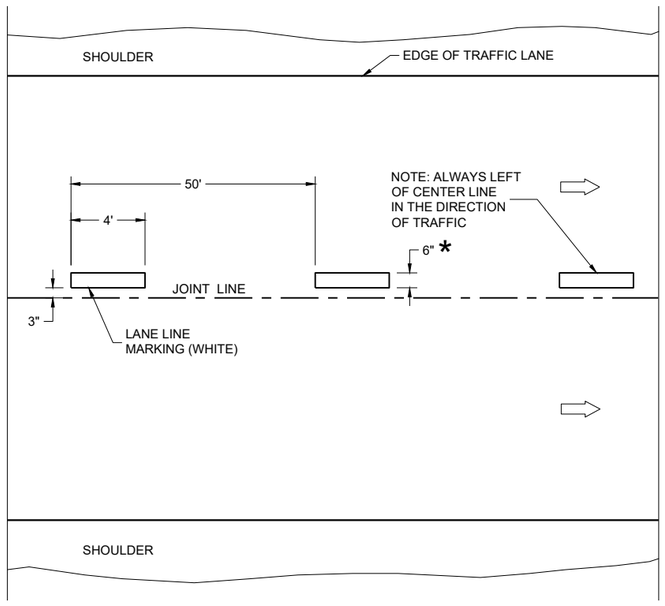
LEGEND

DIRECTION OF TRAFFIC

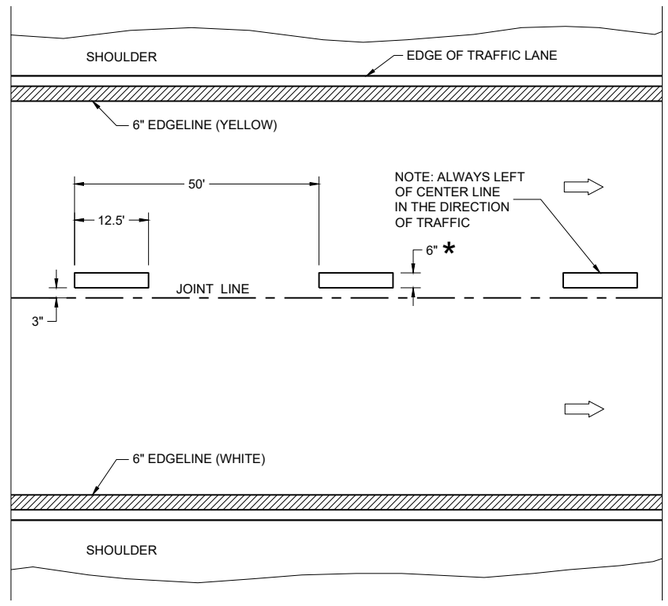
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

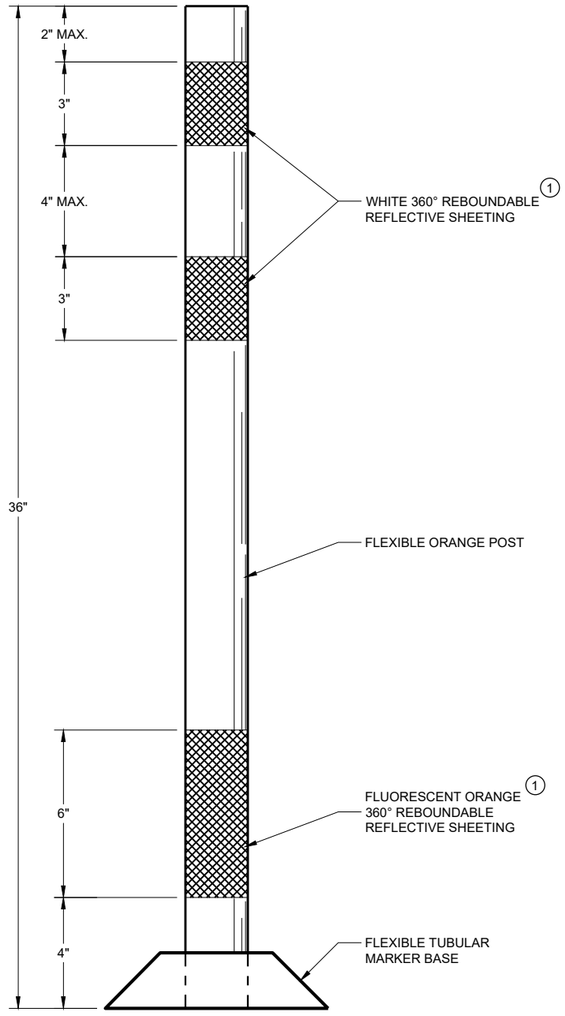
FHWA

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SDD 15C08-23b

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SDD 15C08-23b



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

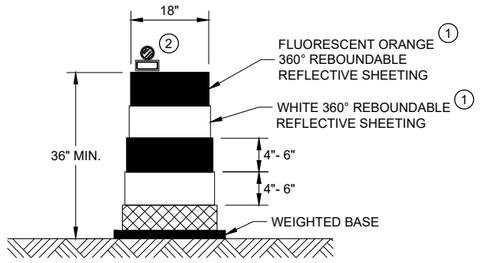
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SDD 15C11 - 10a

SDD 15C11 - 10a

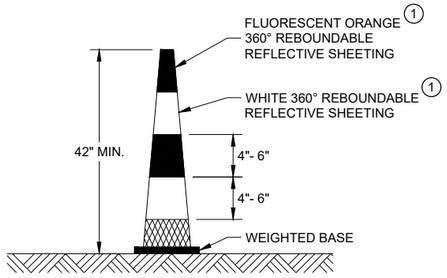
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

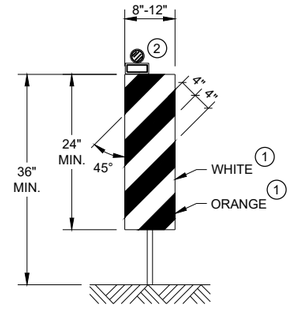
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

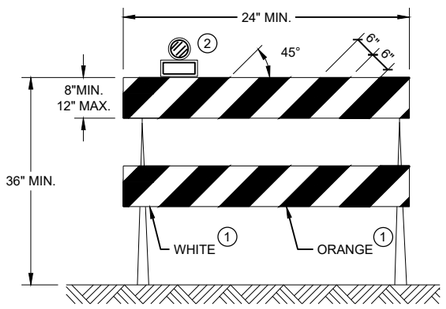
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



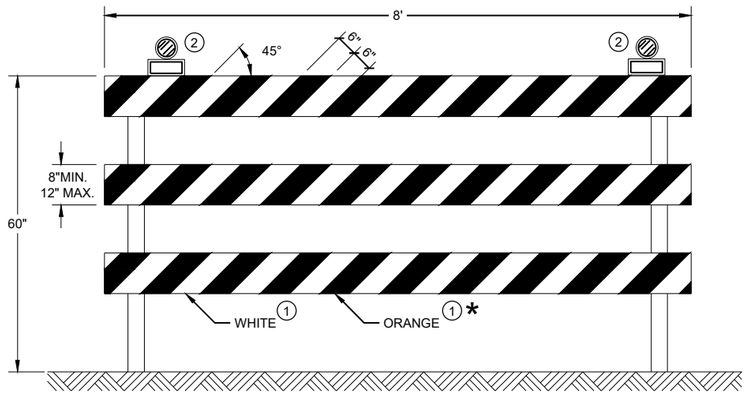
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 10b
SDD 15C11 - 10b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

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

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

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

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

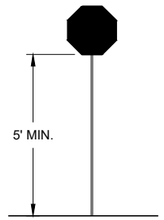
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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



STOP/SLOW PADDLE ON SUPPORT STAFF

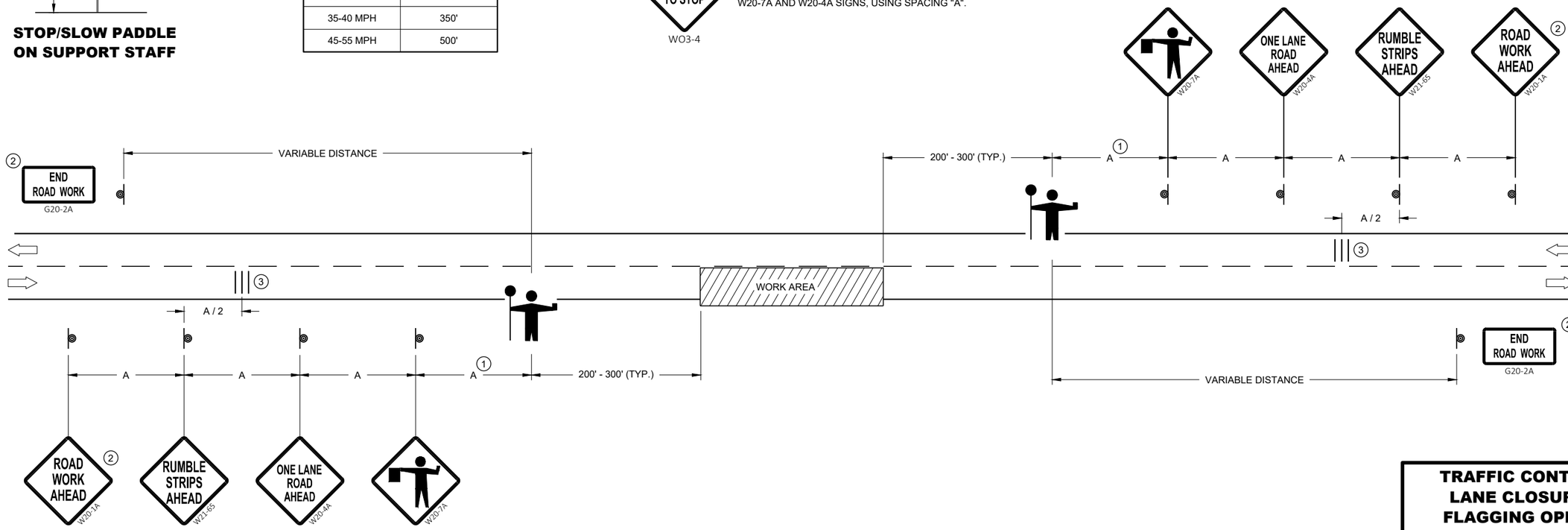
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



WO3-4

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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C12 - 09a

6

SDD 15C12 - 09a

GENERAL NOTES

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL CONE 42-INCH

TRAFFIC CONTROL DRUM

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

AFAD — AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

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

IF THE AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) STOPS WORKING, 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.

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.

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

(2) IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE WO3-4 SIGNS WITH W20-7A SIGNS.

TEMPORARY PORTABLE RUMBLE STRIPS

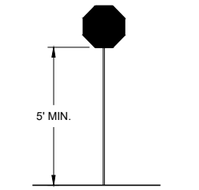
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

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

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.

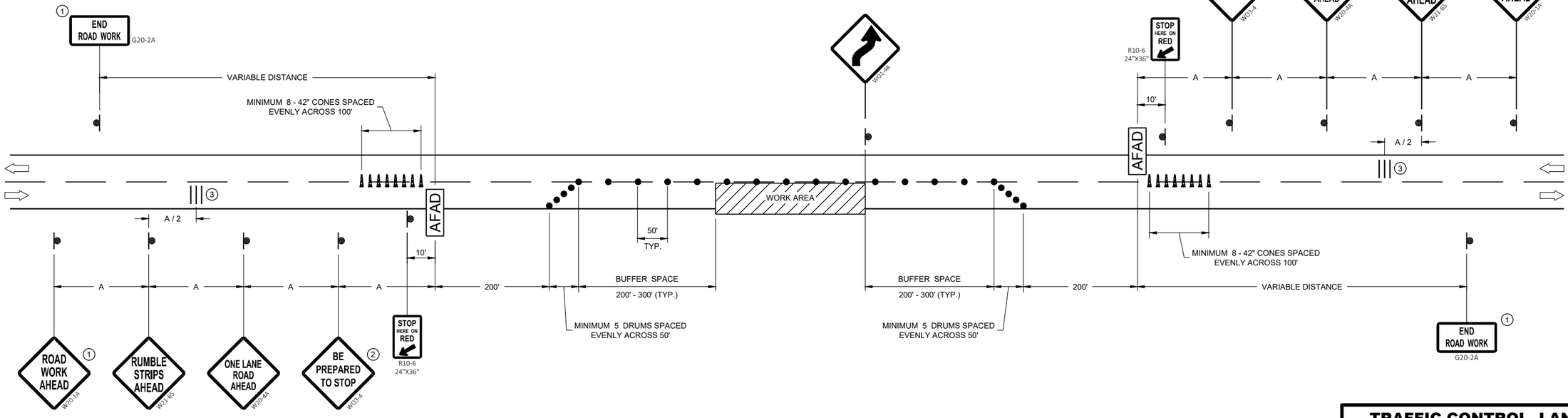
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



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'



TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

SDD 15C12 - 09b

SDD 15C12 - 09b

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

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

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

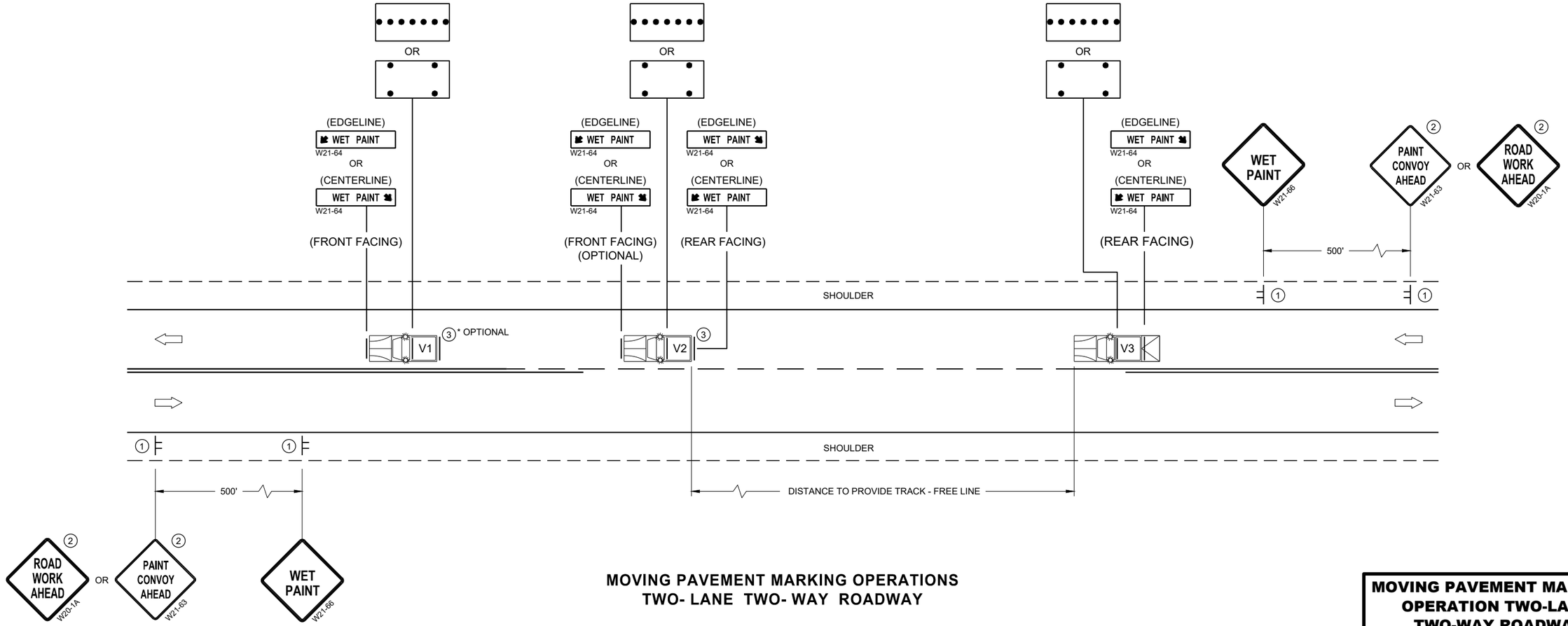
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

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

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



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Andrew I...
WORK ZONE EN

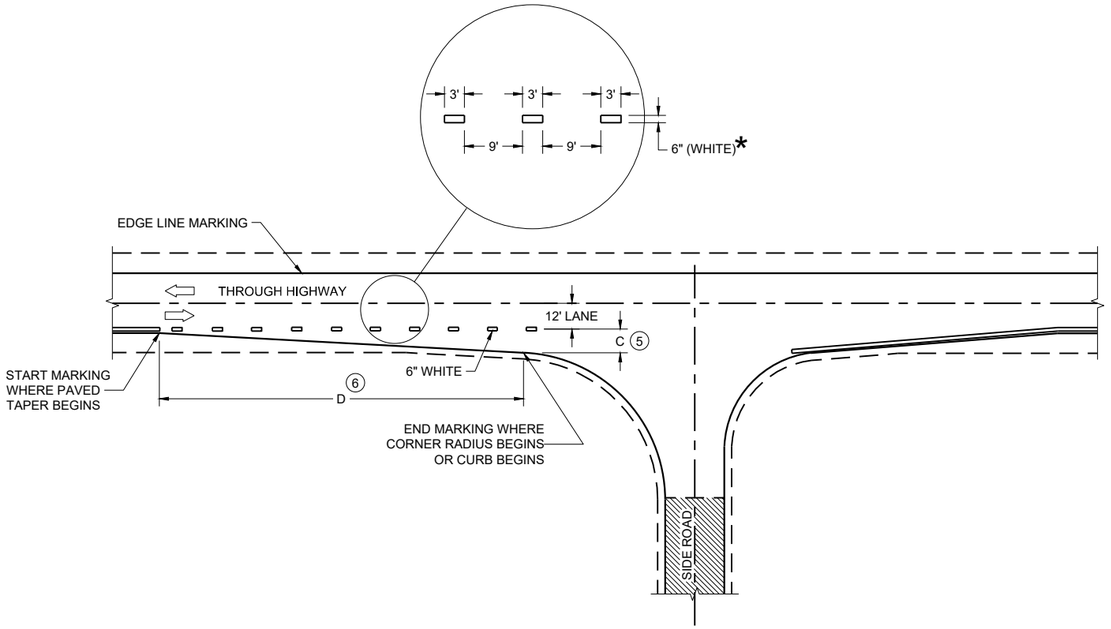
FHWA

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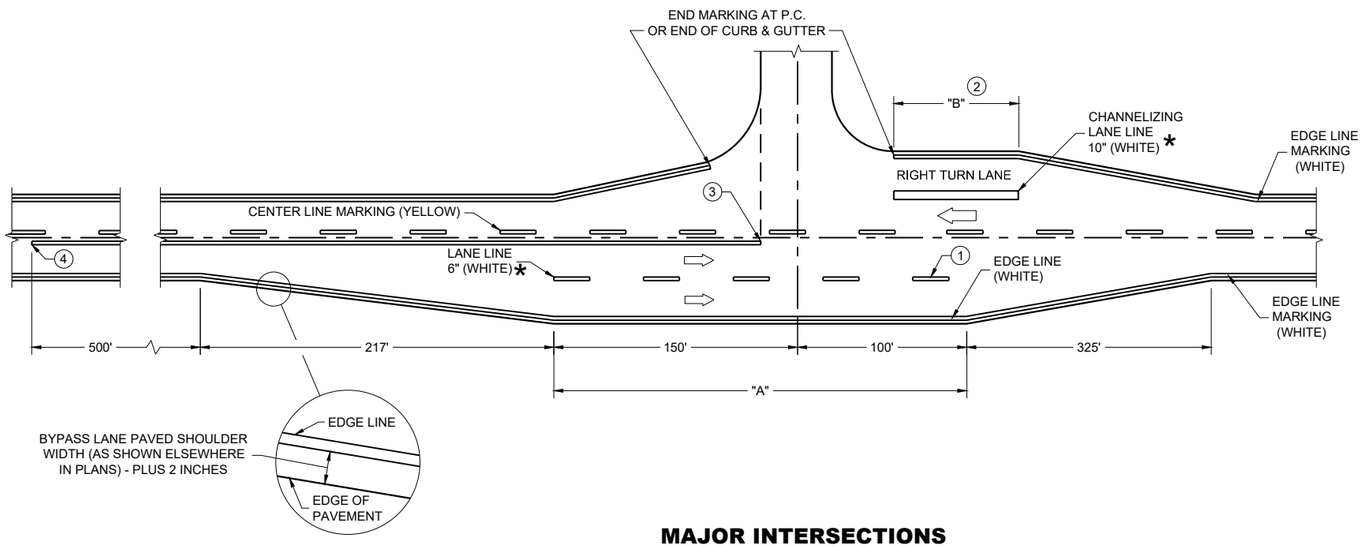
SDD 15C19-08a

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SDD 15C19-08a



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

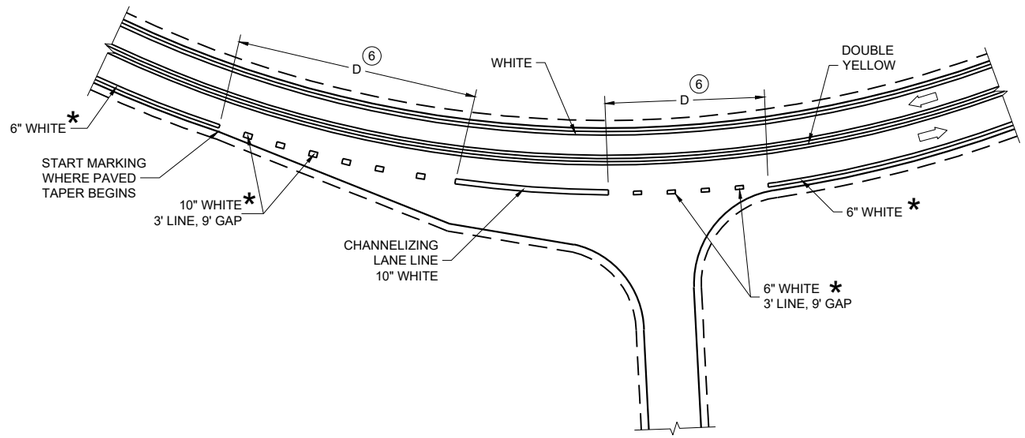
GENERAL NOTES

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

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

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

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

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

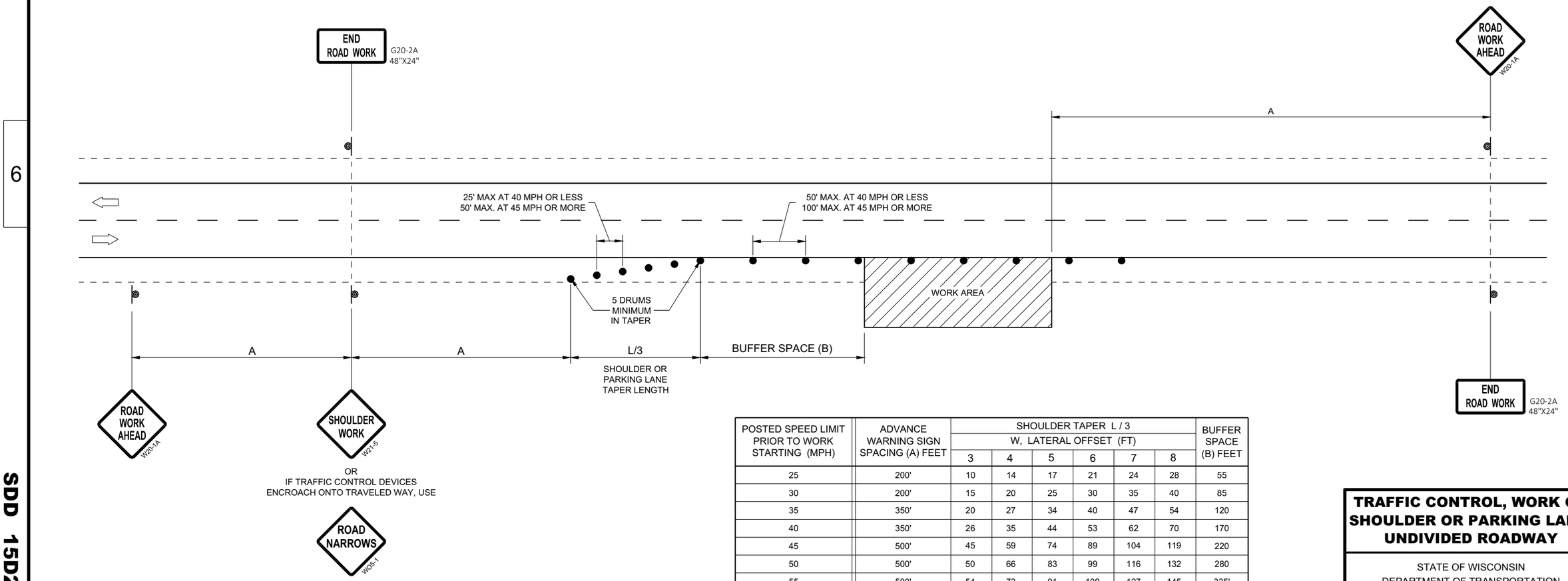
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

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



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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

SDD 15D28 - 04

SDD 15D28 - 04

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)

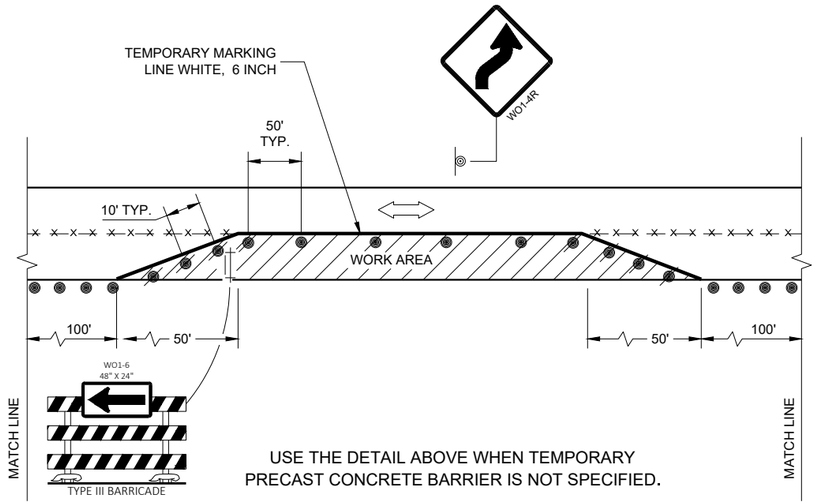
REMOVING PAVEMENT MARKING

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.

REMOVE PAVEMENT MARKING AND PLACE TEMPORARY PAVEMENT MARKING LINES IF THE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

INSTALL OVERHEAD TEMPORARY SIGNAL HEADS ABOVE THE MIDDLE OF THE TRAVEL LANE THEY ARE CONTROLLING.

(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.

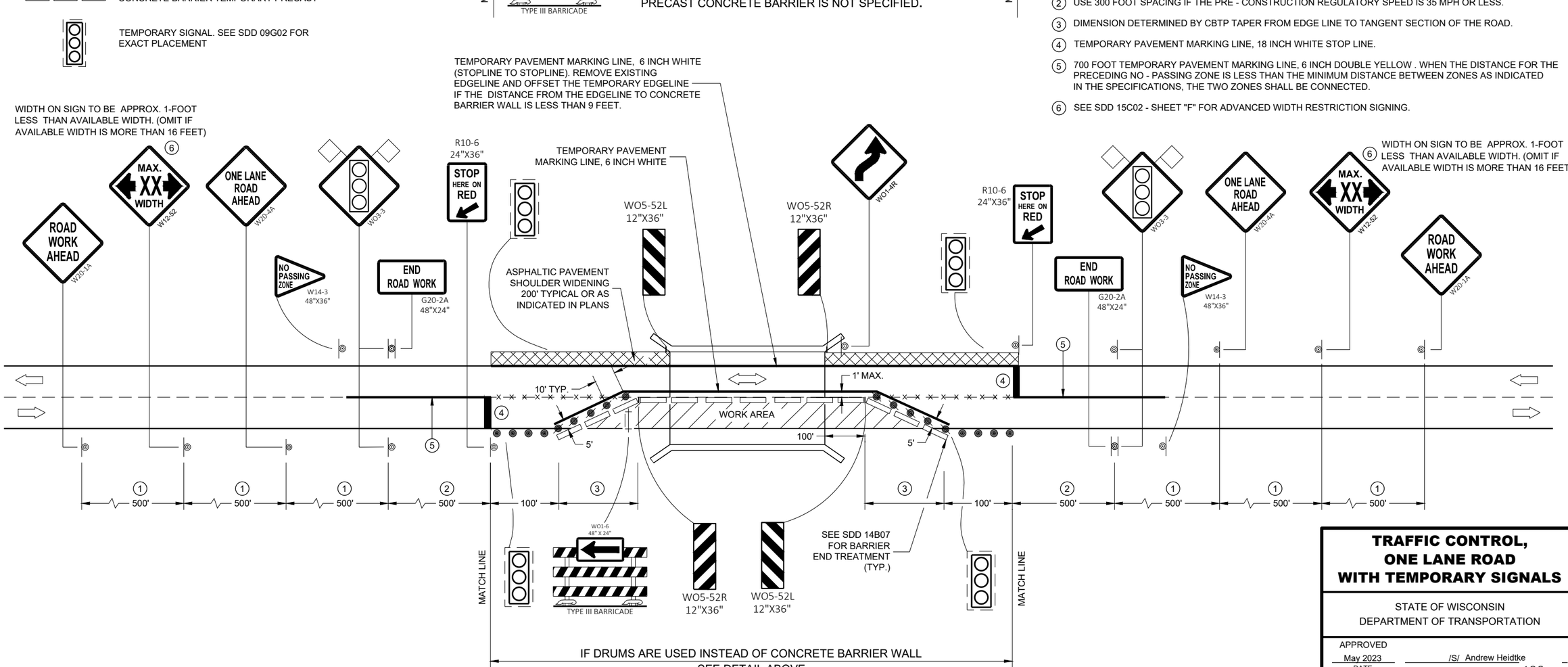
(2) USE 300 FOOT SPACING IF THE PRE - CONSTRUCTION REGULATORY SPEED IS 35 MPH OR LESS.

(3) DIMENSION DETERMINED BY CBTP TAPER FROM EDGE LINE TO TANGENT SECTION OF THE ROAD.

(4) TEMPORARY PAVEMENT MARKING LINE, 18 INCH WHITE STOP LINE.

(5) 700 FOOT TEMPORARY PAVEMENT MARKING LINE, 6 INCH DOUBLE YELLOW . 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

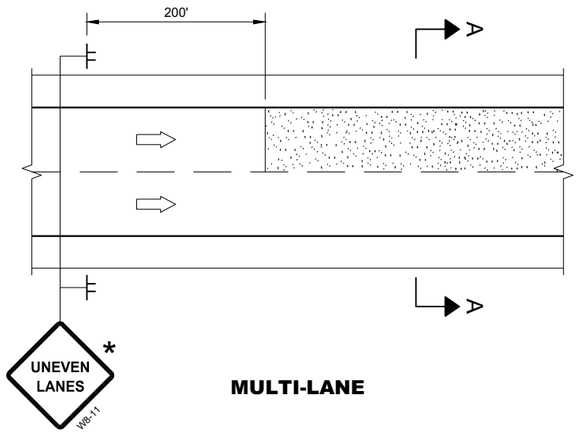
APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

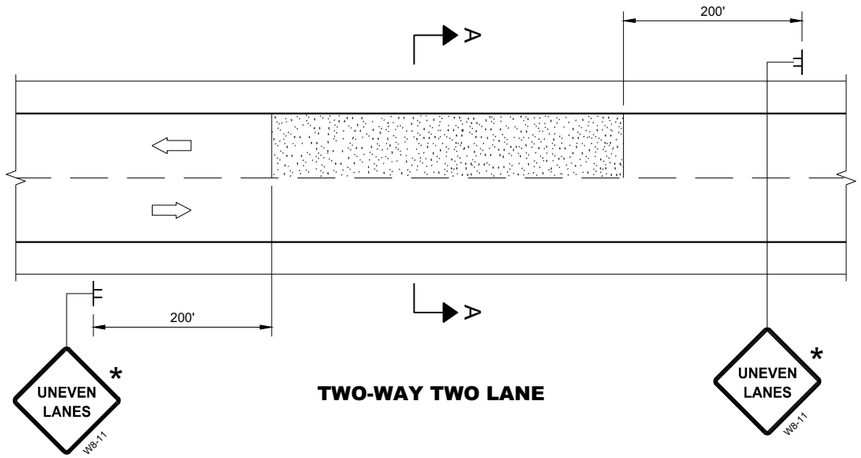
FHWA

SDD 15D33-09

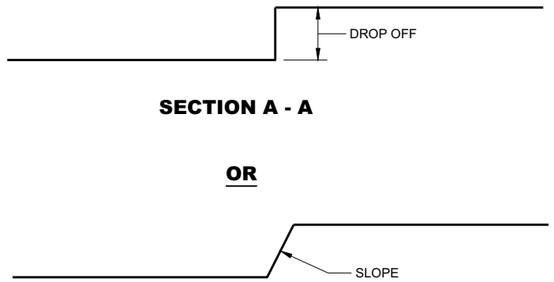
SDD 15D33-09



MULTI-LANE

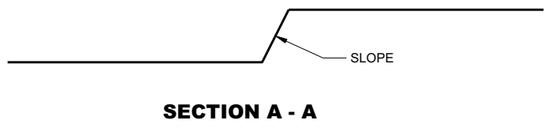


TWO-WAY TWO LANE

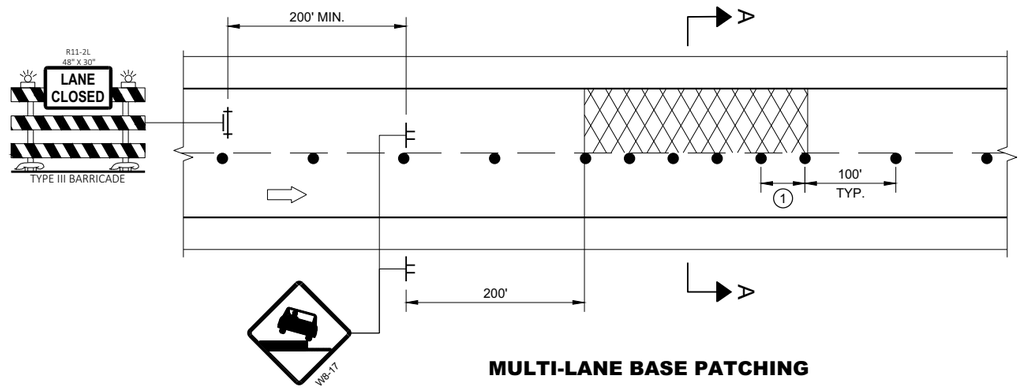


SECTION A - A

OR



SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

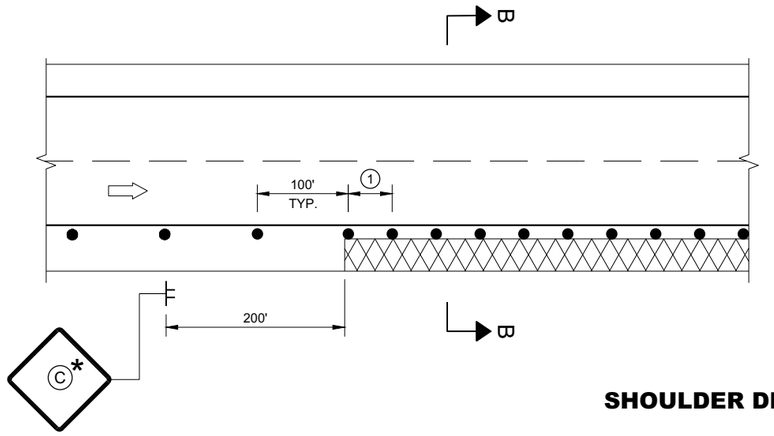
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

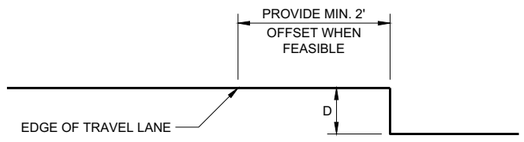
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

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



SHOULDER DROP-OFFS



SECTION B - B

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

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D39 - 02

6

SDD 15D39 - 02

GENERAL NOTES

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

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

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

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

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

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

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

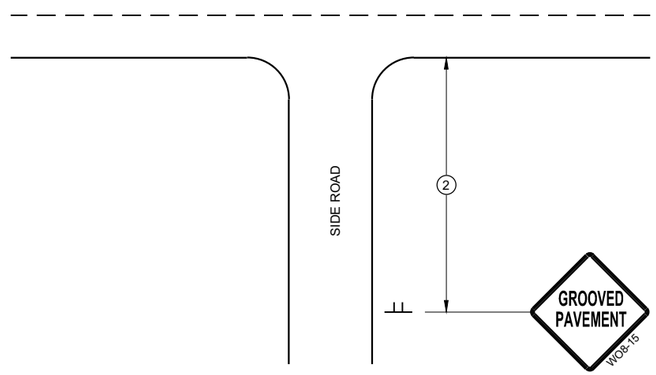
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

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

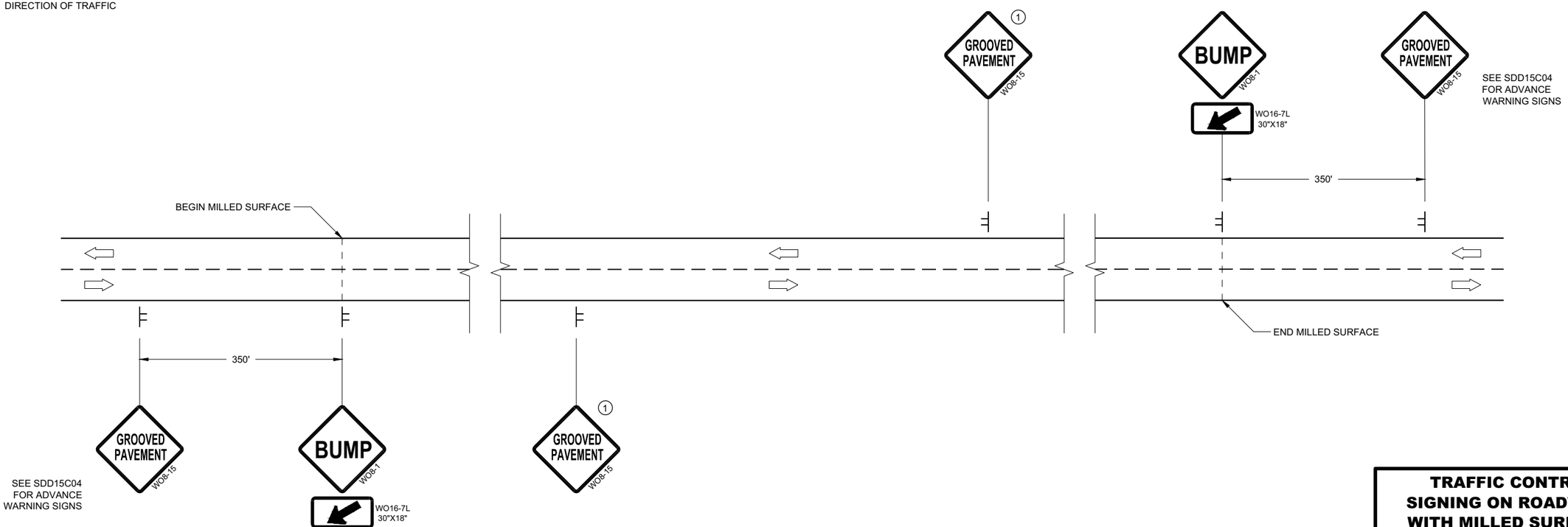
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6
SDD 15D44 - 02

GENERAL NOTES

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

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

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

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

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

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

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

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

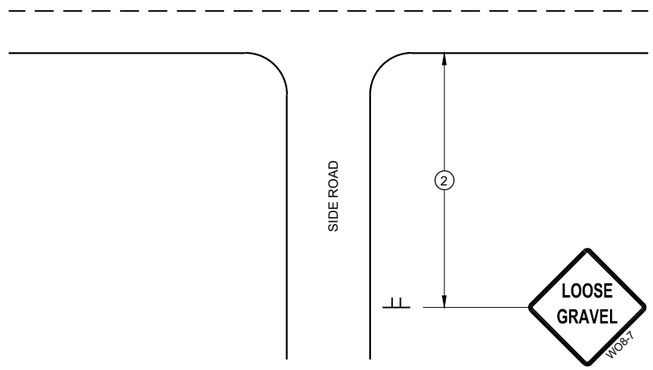
(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

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

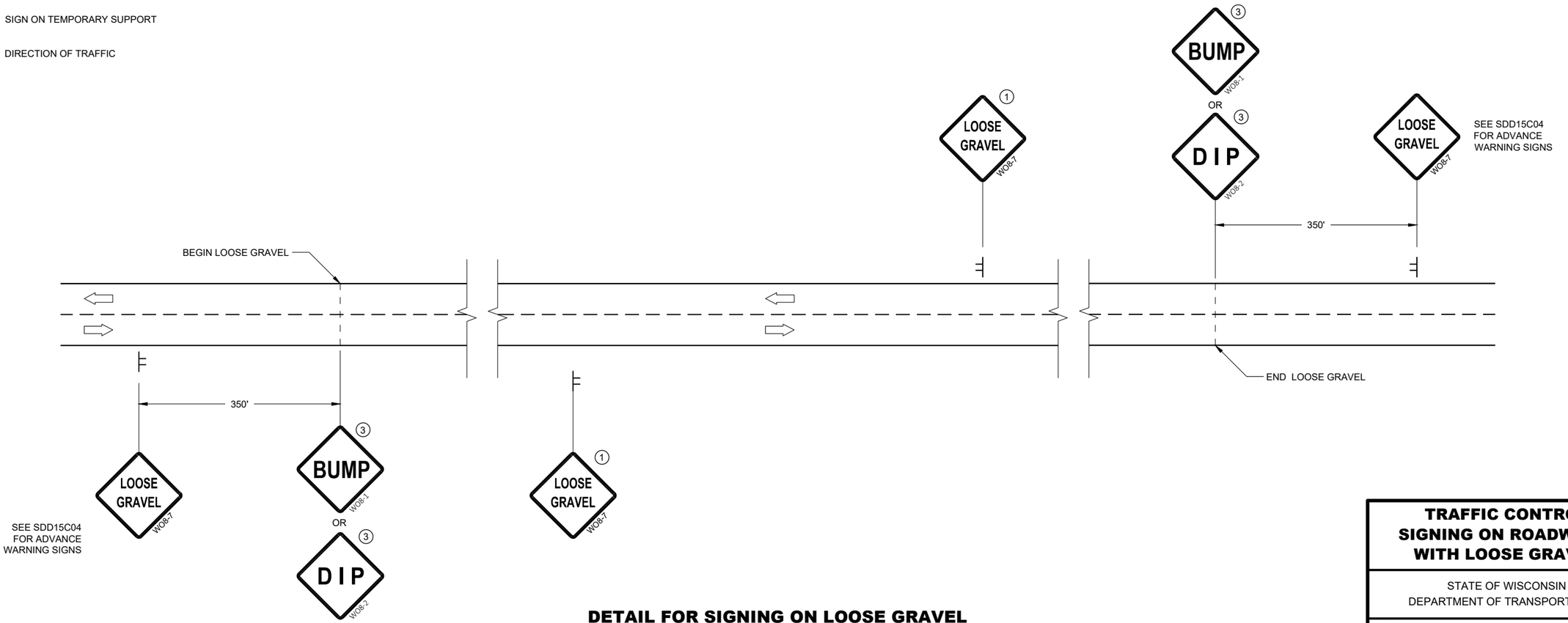
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D45 - 03

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

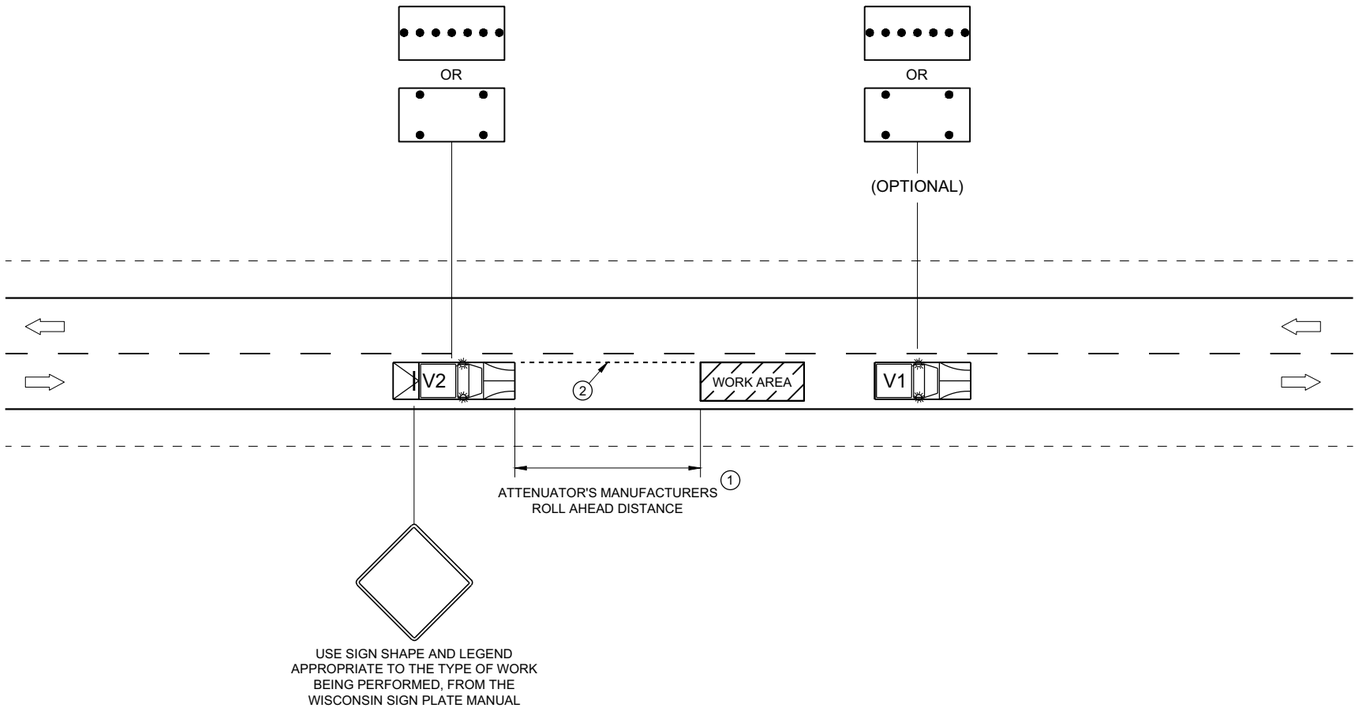
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

(1) DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

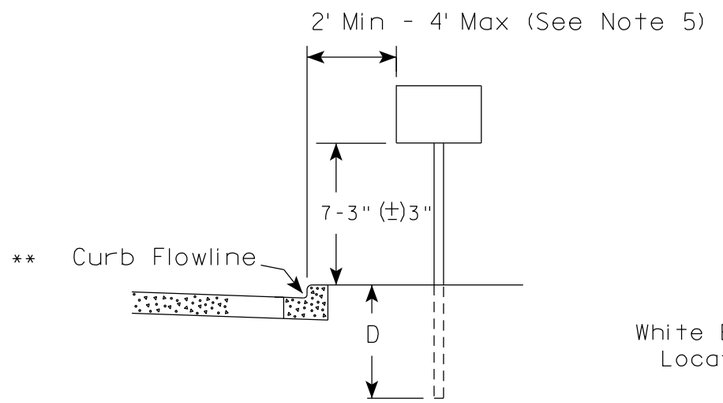
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

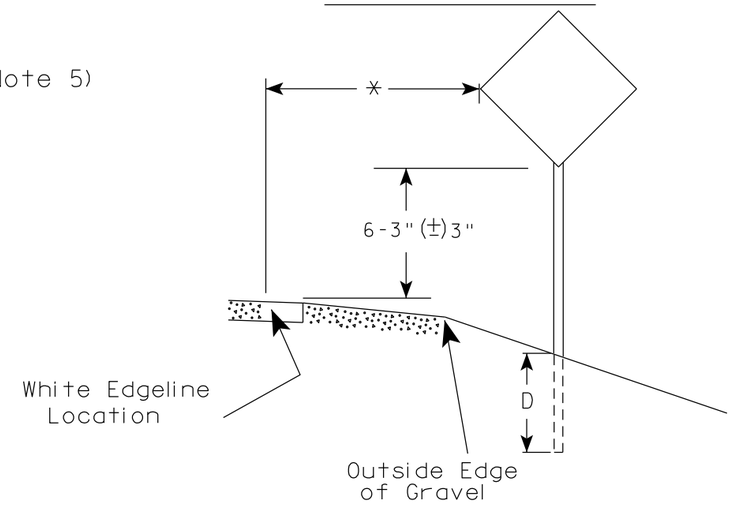
6

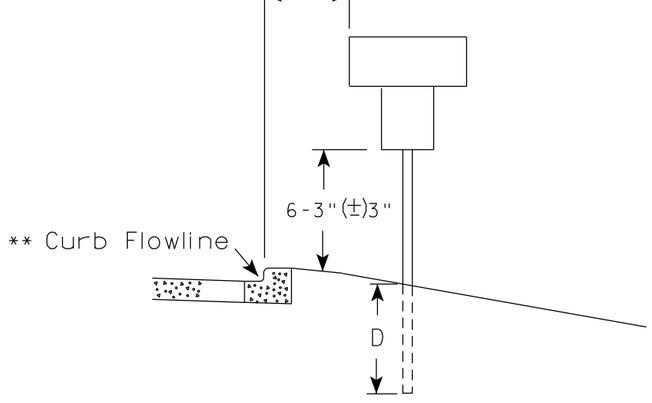
SDD 15D51 - 01

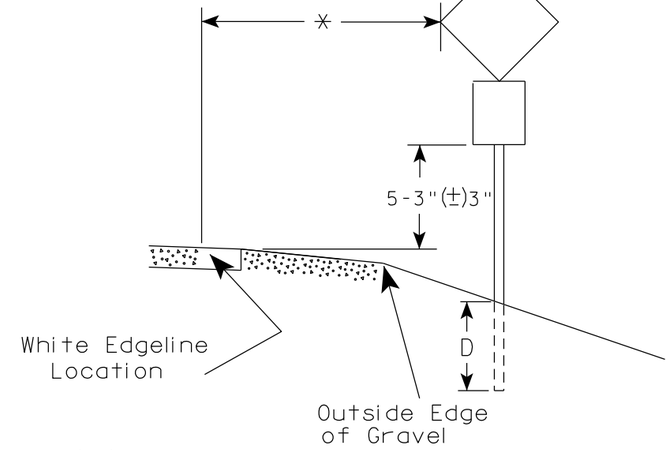
URBAN AREA



RURAL AREA (See Note 2)







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

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

GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

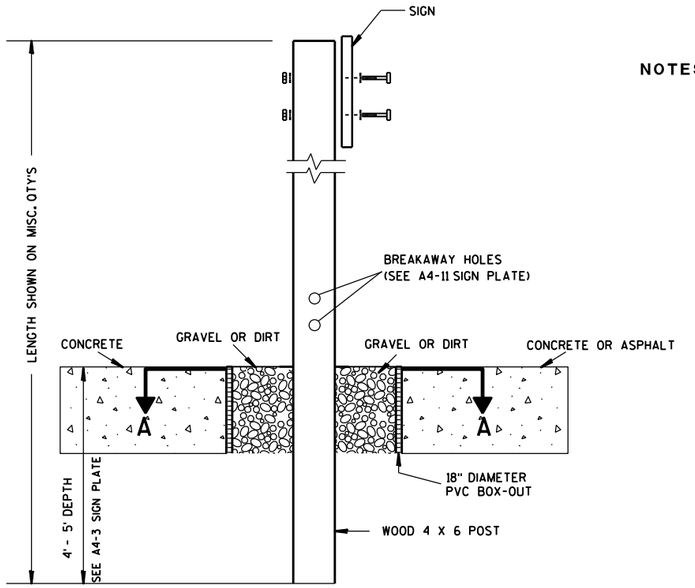
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

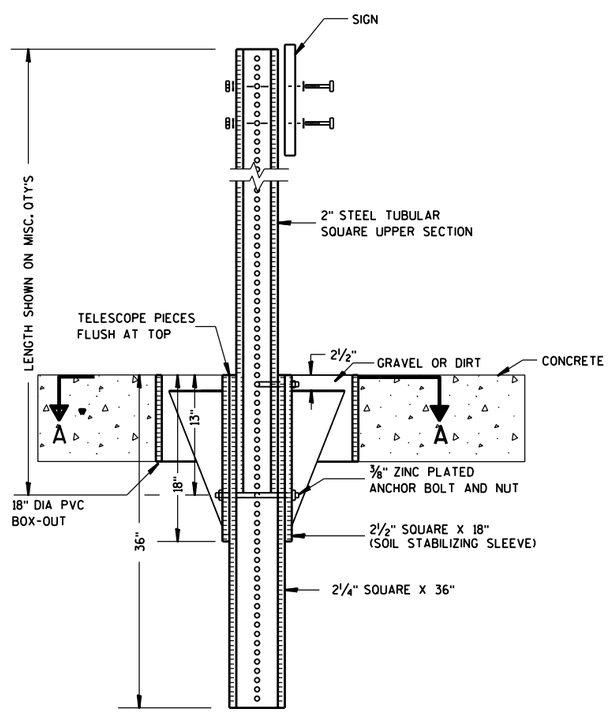
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 191	E



ELEVATION VIEW

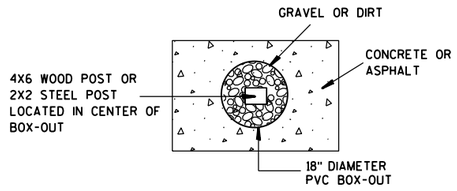
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

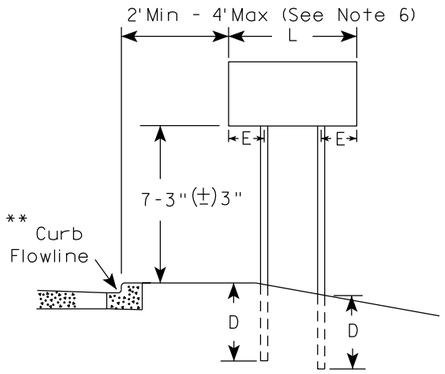
APPROVED Matthew R Rauch
for State Traffic Engineer

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

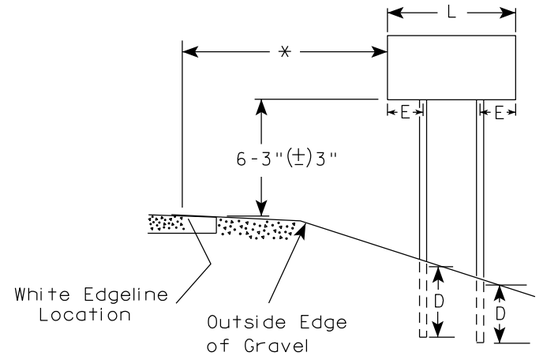
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

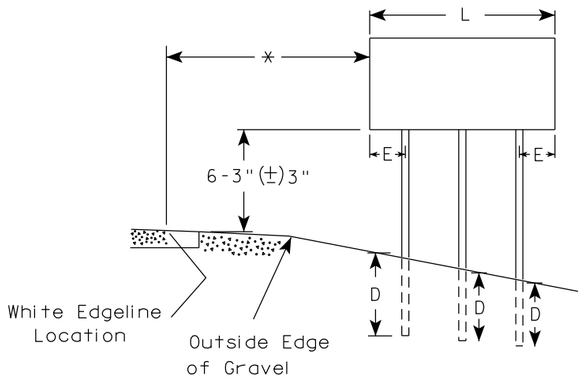
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

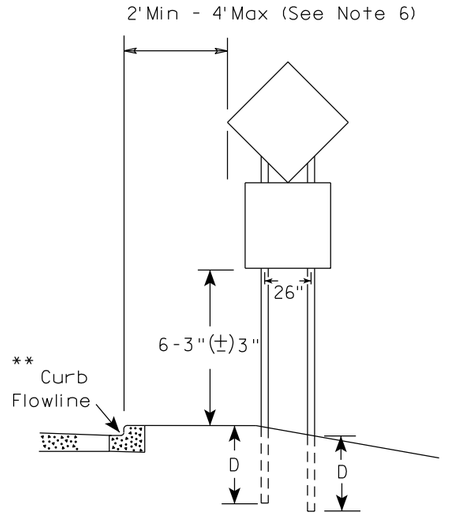
URBAN AREA



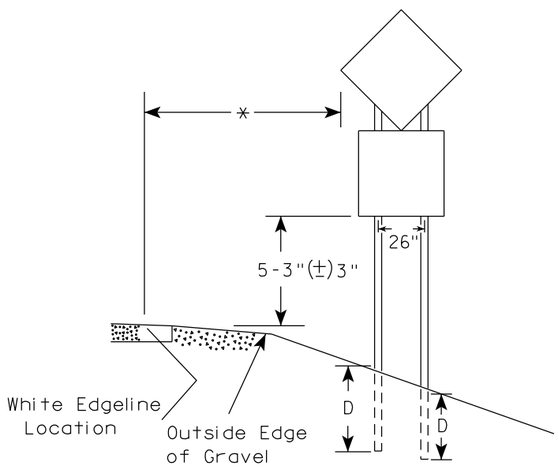
RURAL AREA (See Note 3)







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

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

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

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

POST EMBEDMENT DEPTH

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

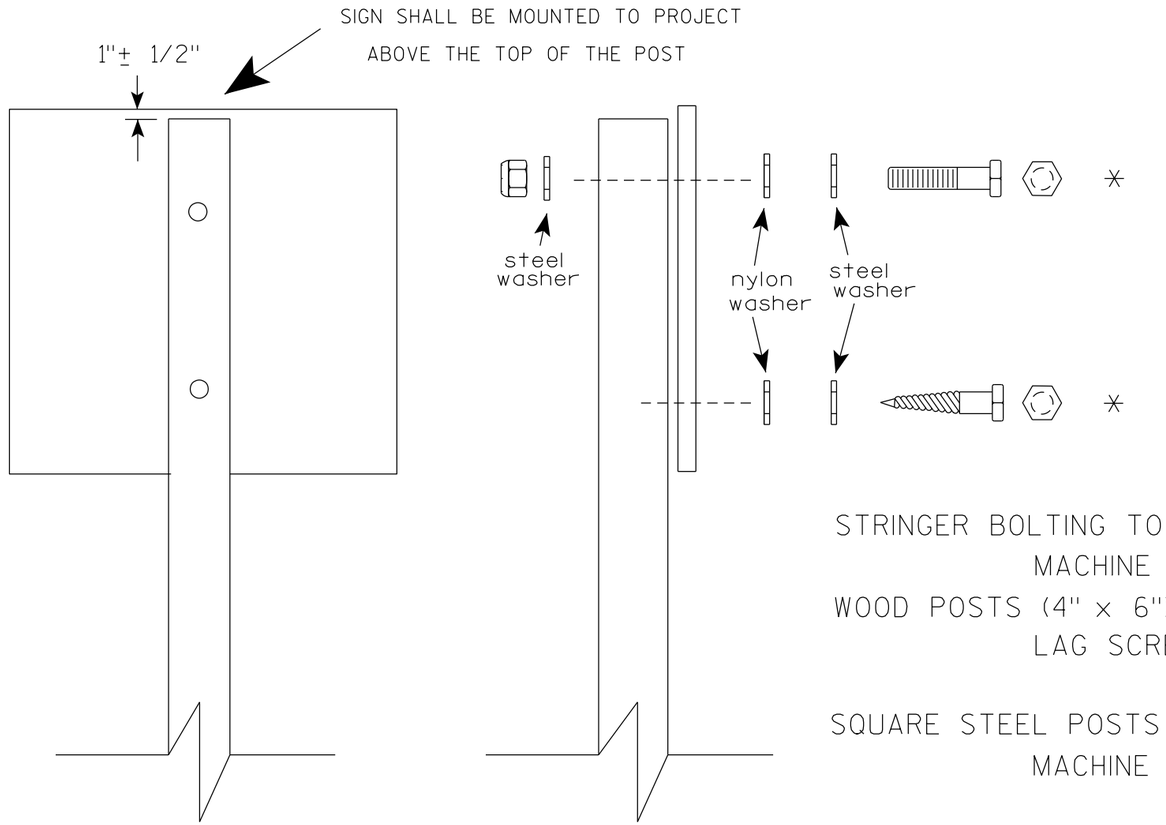
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 193	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

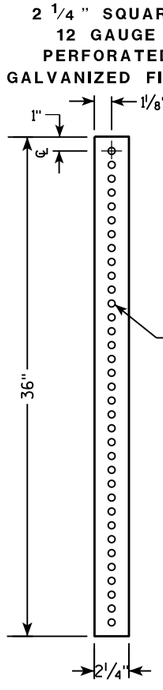
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

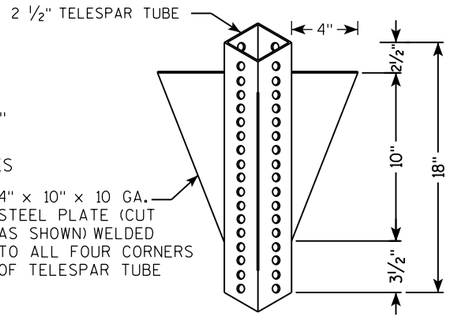
SHEET NO: 194 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

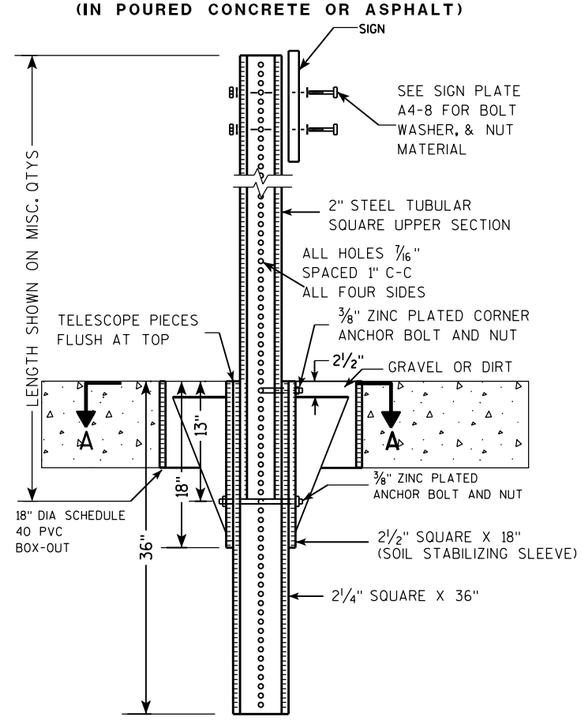
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



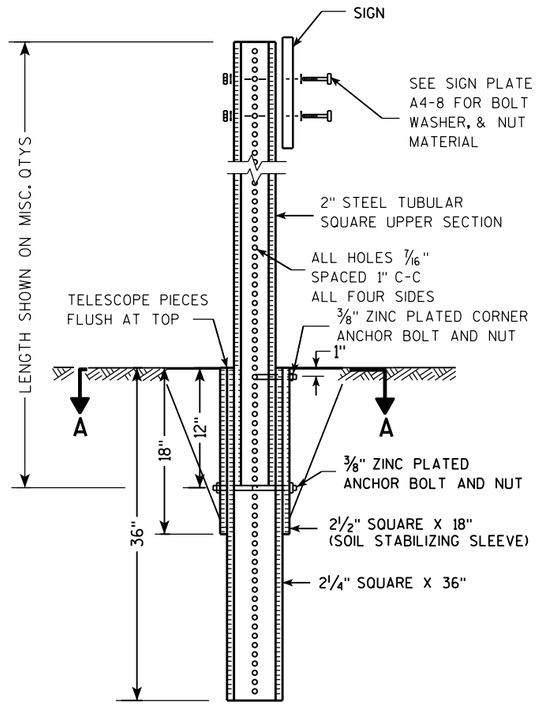
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

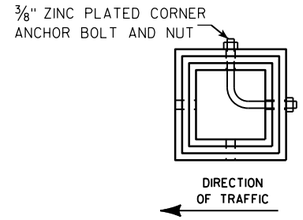


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

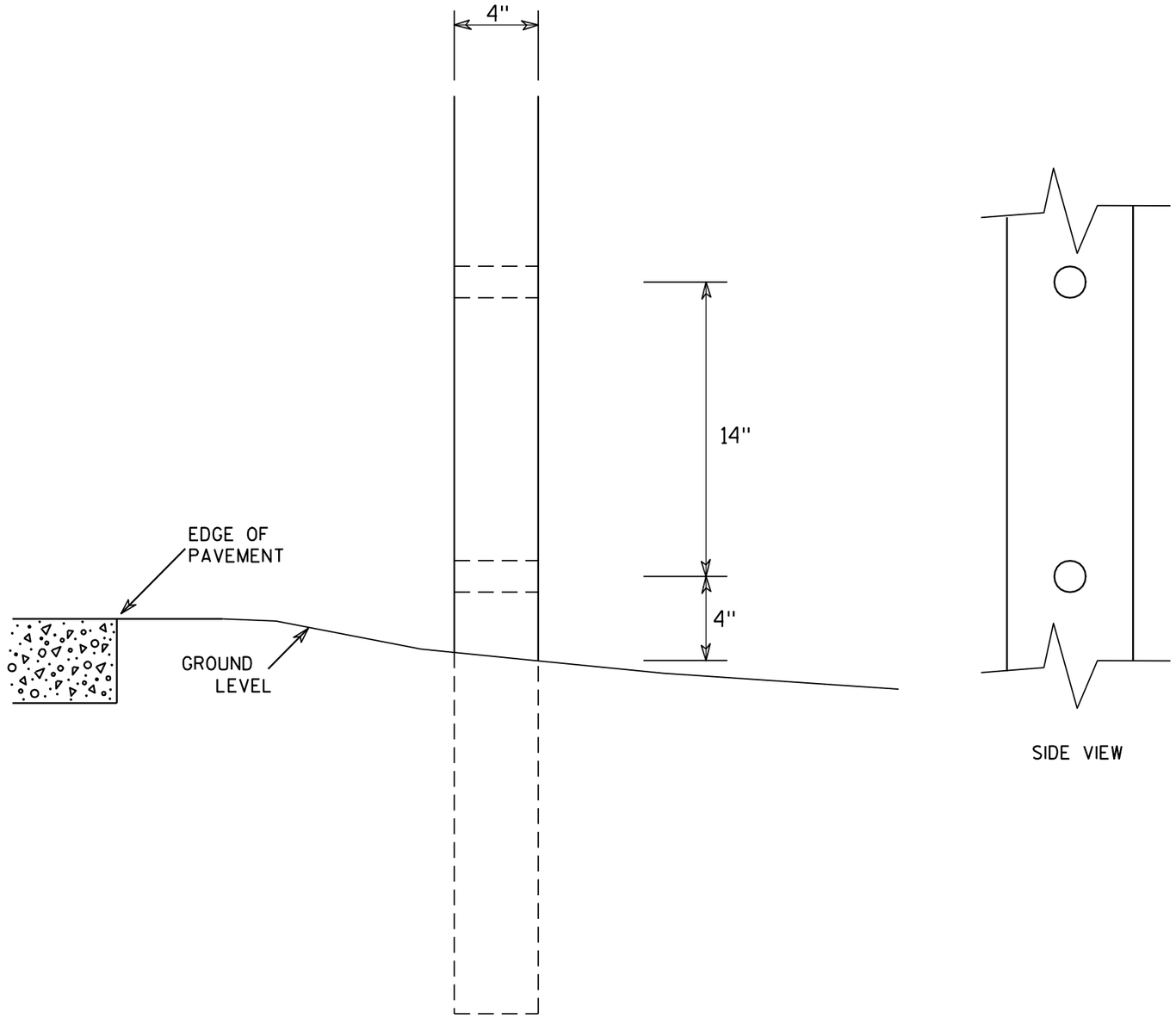
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 195 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

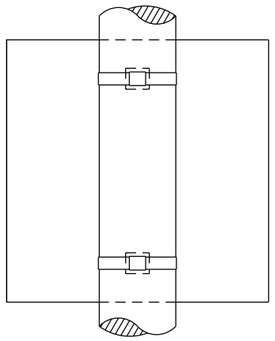
APPROVED Chester J Spang for State Traffic Engineer

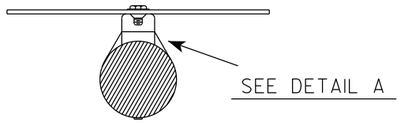
DATE 3/27/97 PLATE NO. A4-11.2

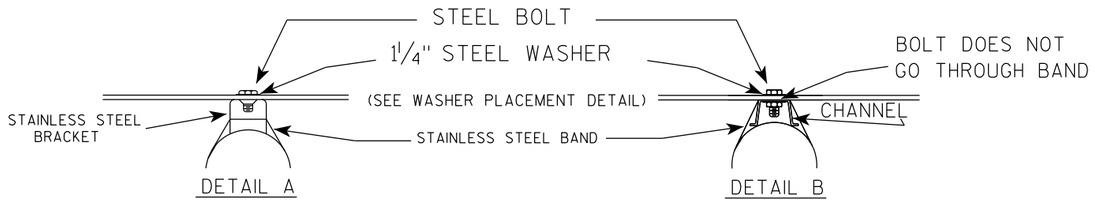
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 196	E

BANDING

SINGLE SIGN



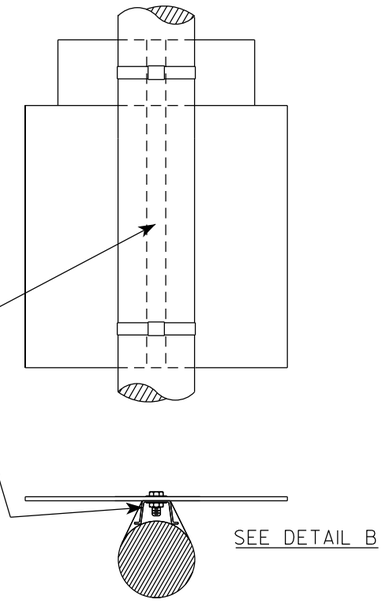




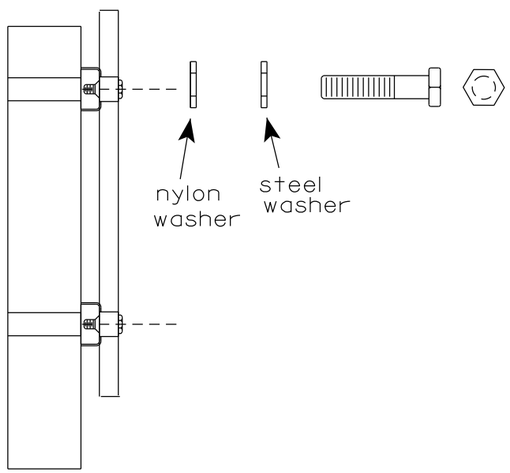
GENERAL NOTES

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

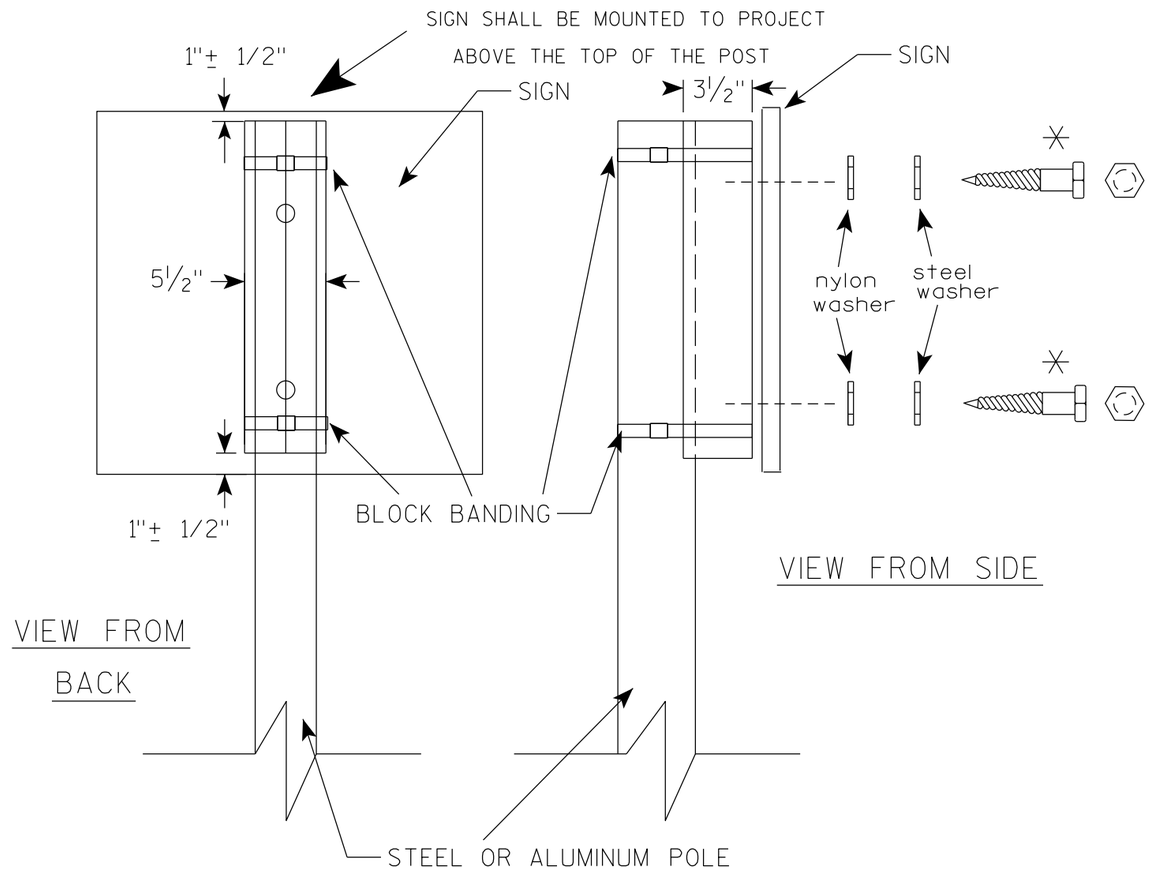
DATE 6/10/19 PLATE NO. A5-9.4

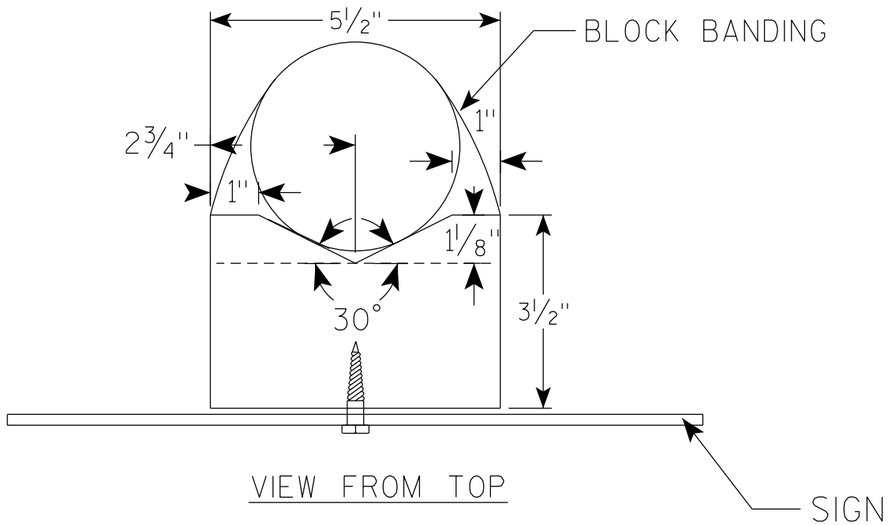
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 197	E

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

7

7





GENERAL NOTES

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

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

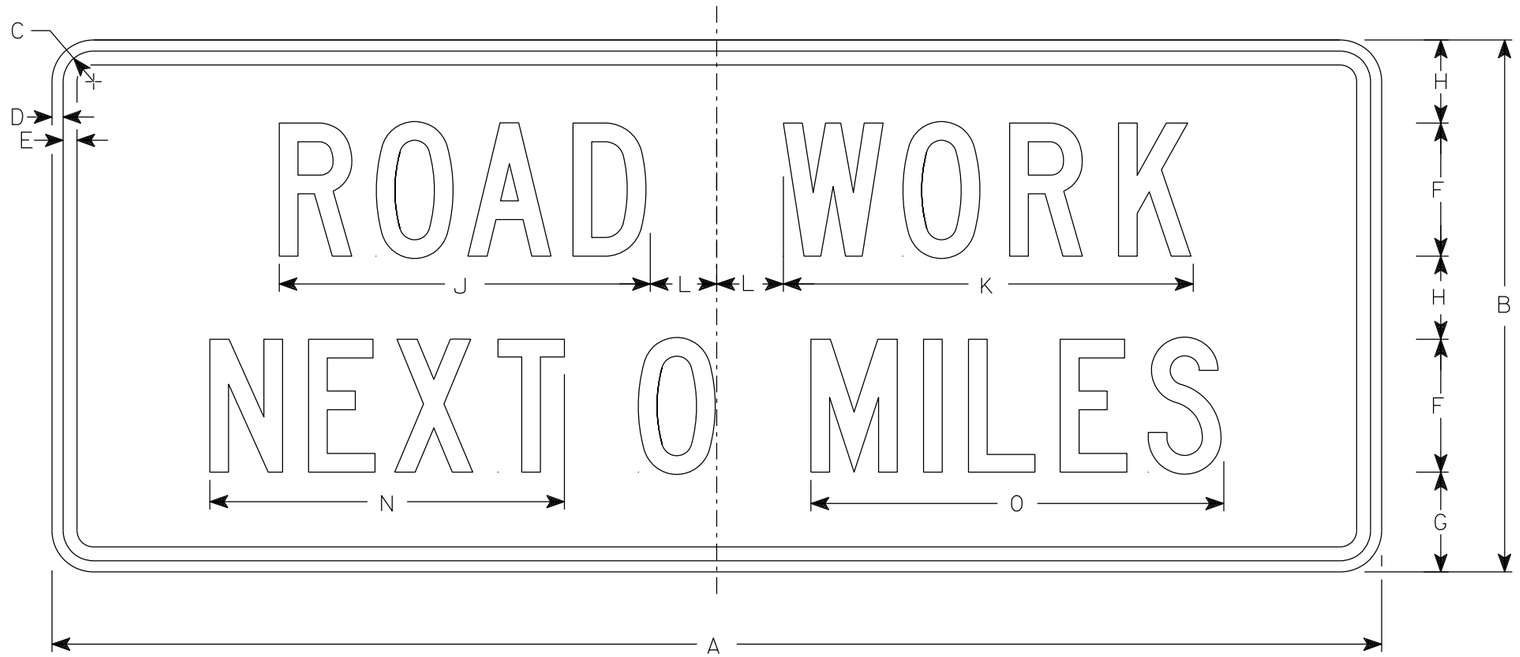
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 198 E



G20-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
2M	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
3	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
4	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
5	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0

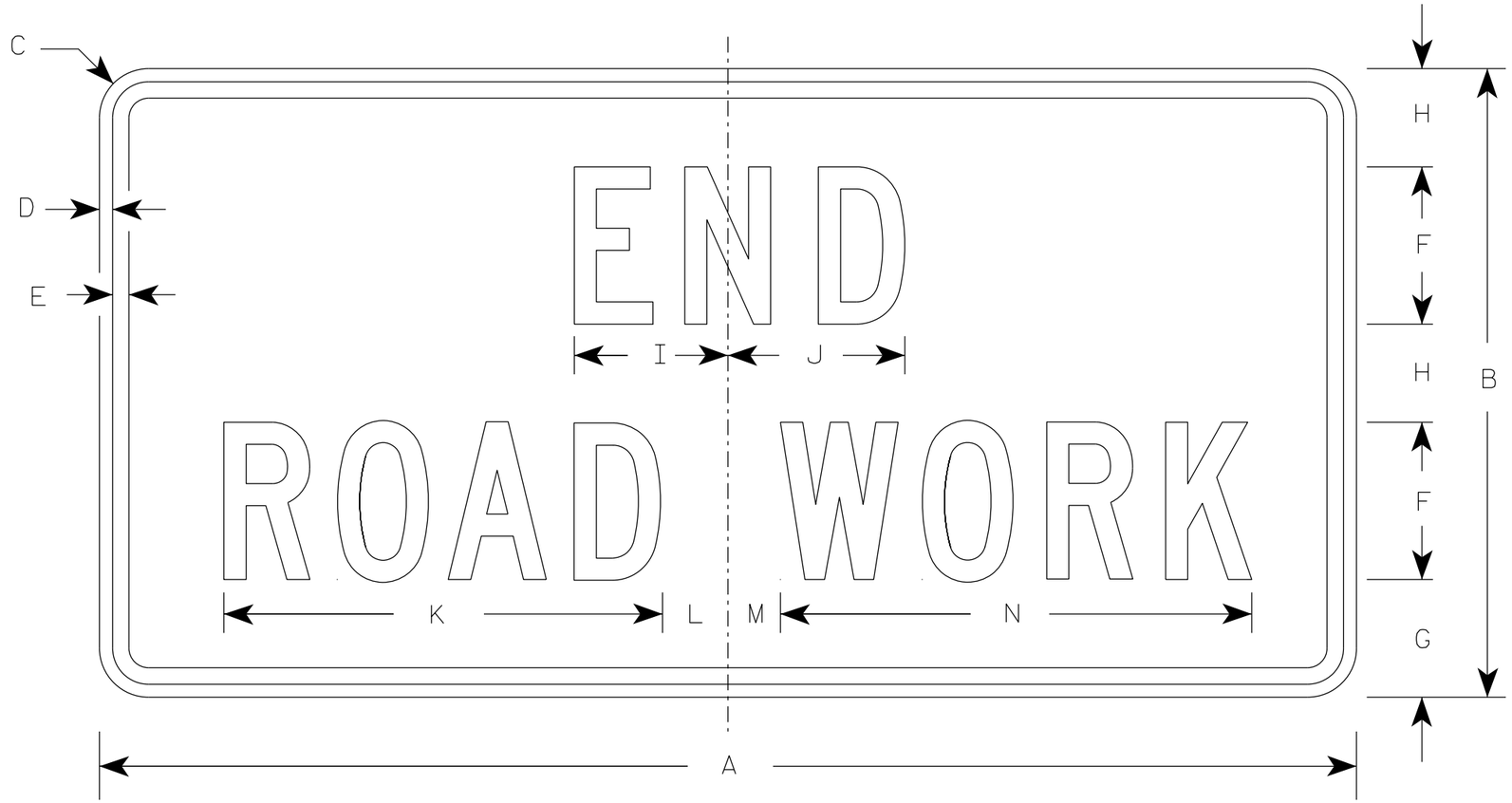
STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 199	E



G20-2A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5
2	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
2M	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
3	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
4	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
5	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0

STANDARD SIGN

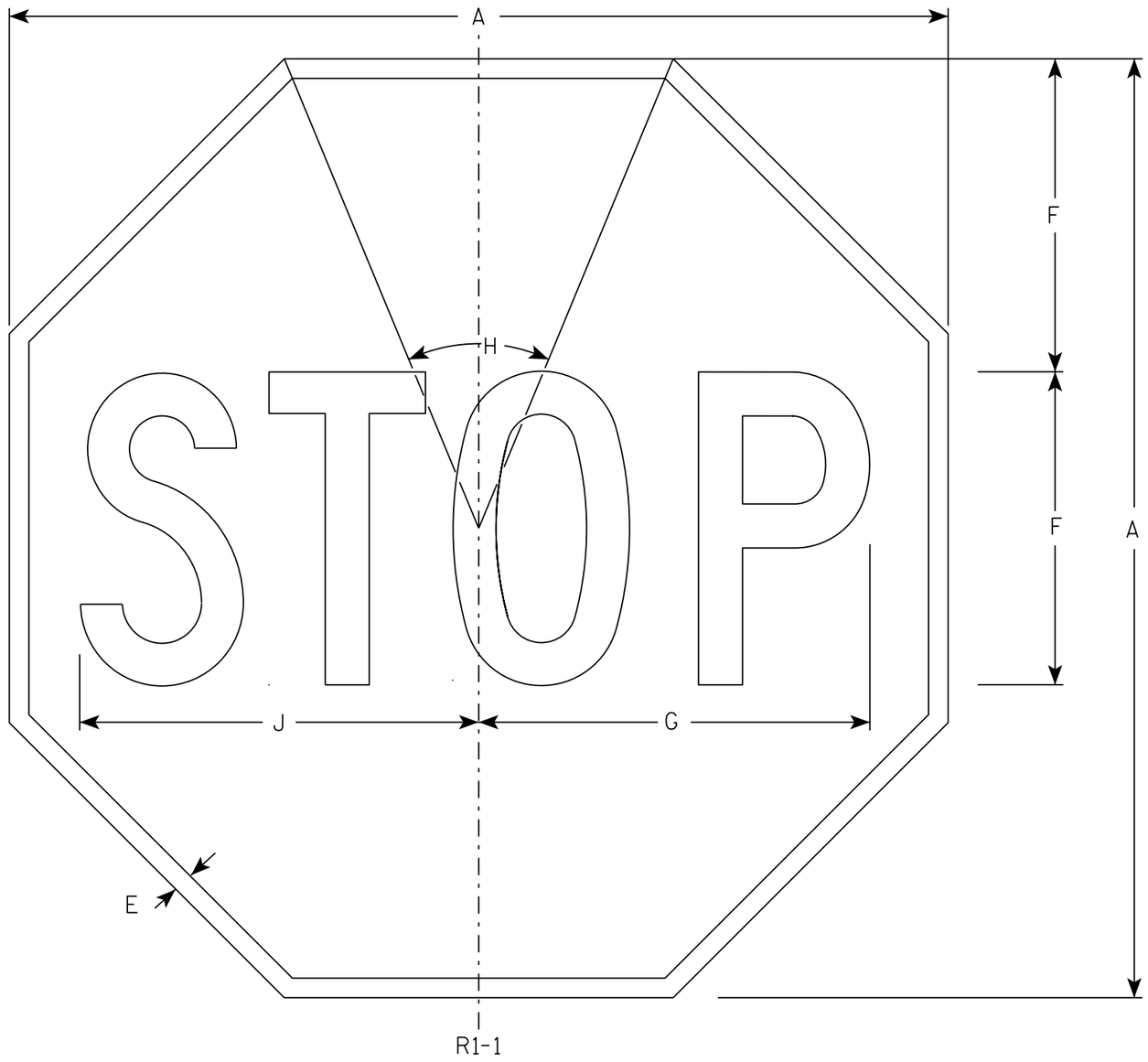
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 200 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

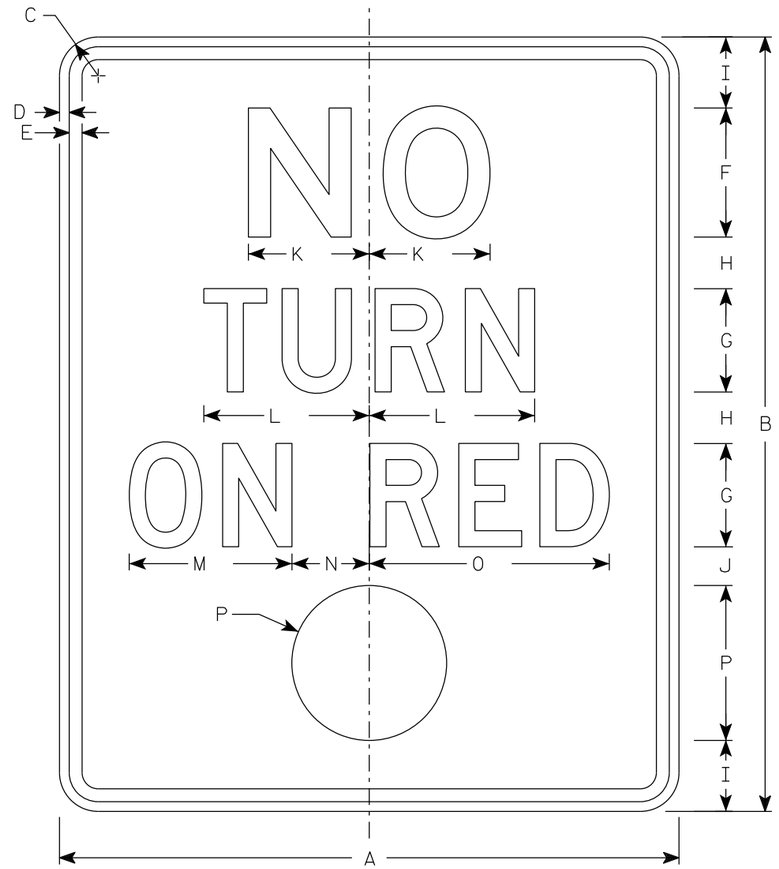
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

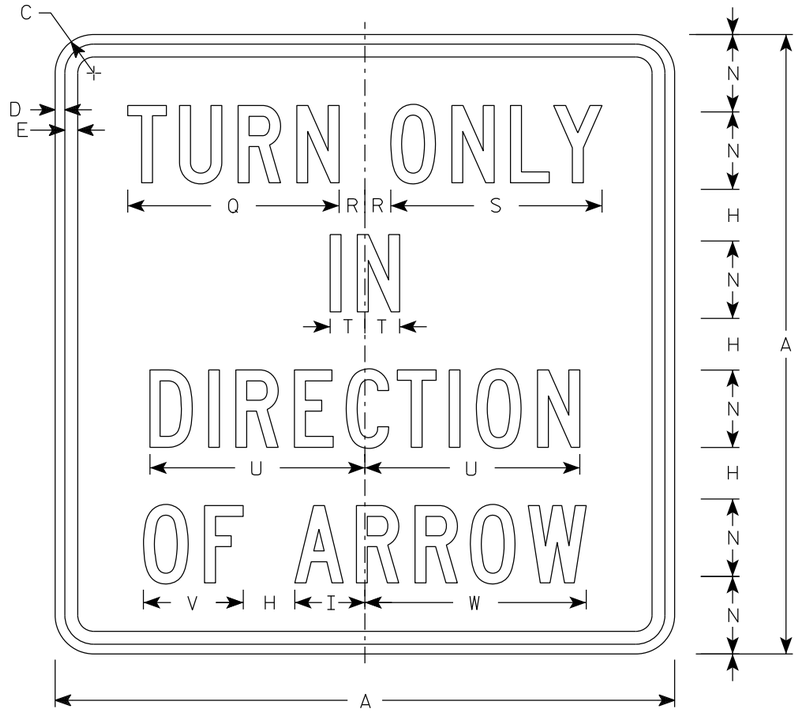
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 201	E



R10-11



R10-11D

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - R10-11 - D except line 1 is Series E
   R10-11D - Series C
4. Signs used with Driveway Assistance Device Only

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	30	1 1/2	3/8	1/2	5	4	2	2 3/4	1 1/2	4 5/8	6 3/8	6 1/4	3	9 1/4	6	8 1/4	1	8 1/4	1 3/8	8 3/8	3 7/8	8 5/8				5.0
2M	24	30	1 1/2	3/8	1/2	5	4	2	2 3/4	1 1/2	4 5/8	6 3/8	6 1/4	3	9 1/4	6	8 1/4	1	8 1/4	1 3/8	8 3/8	3 7/8	8 5/8				5.0
3																											
4																											
5																											

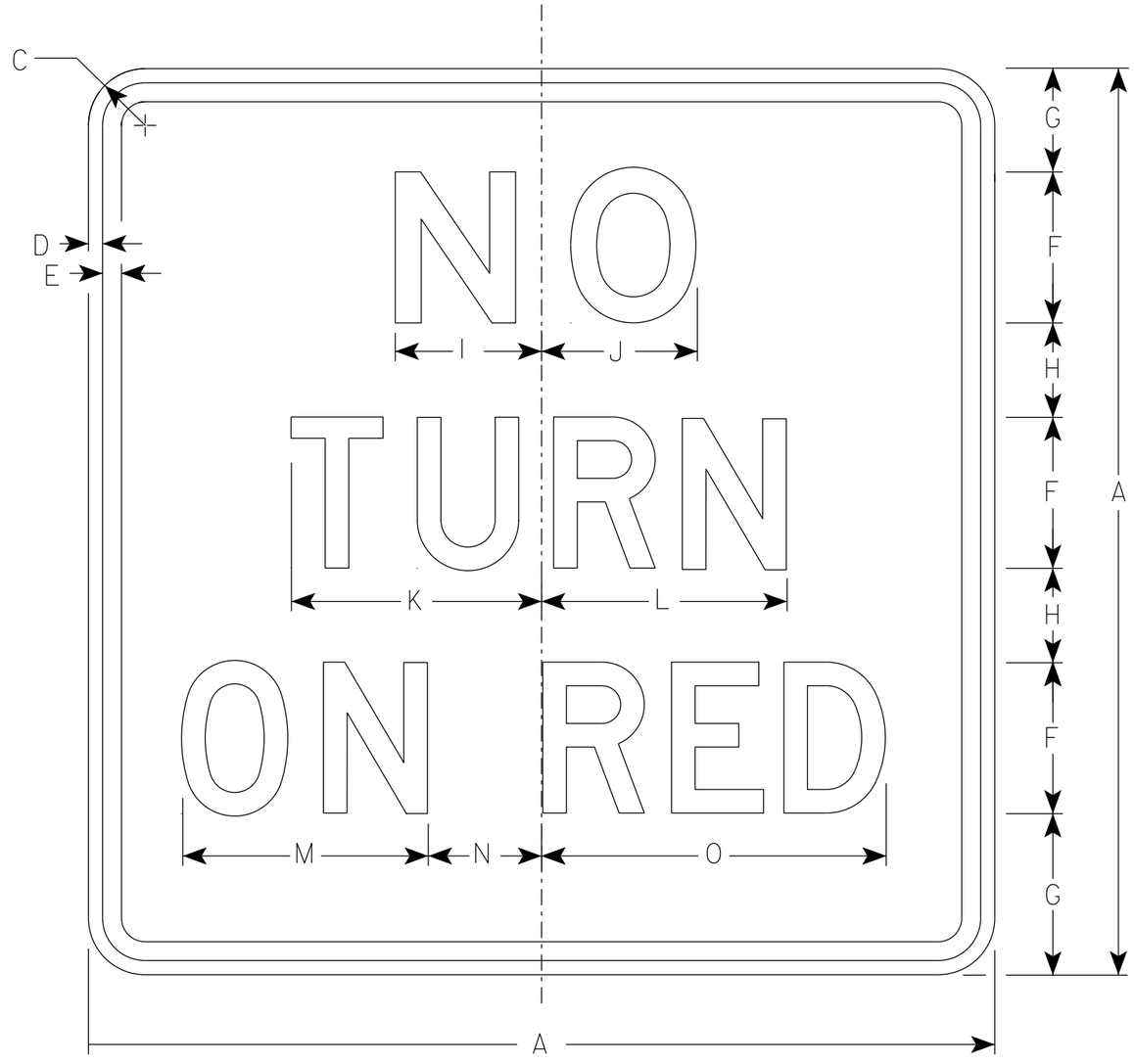
STANDARD SIGN
R10-11

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/22/23 PLATE NO. R10-11.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 202 | E



R10-11B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series E.
   Lines 2 and 3 are 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	18		1 1/2	3/8	3/8	3	2 3/4	1 3/4	3	3 1/8	5	4 7/8	5 1/4	1 7/8	7 1/8												2.25
2S	24		1 1/2	3/8	1/2	4	3 1/2	2 1/2	3 7/8	4 1/8	6 5/8	6 1/2	6 1/2	3	9 1/8												4.0
2M	24		1 1/2	3/8	1/2	4	3 1/2	2 1/2	3 7/8	4 1/8	6 5/8	6 1/2	6 1/2	3	9 1/8												4.0
3	30		1 7/8	1/2	5/8	5	4 1/2	3	4 7/8	5 1/4	8 1/4	8 1/8	7 3/4	4 1/8	11 7/8												6.25
4																											
5																											

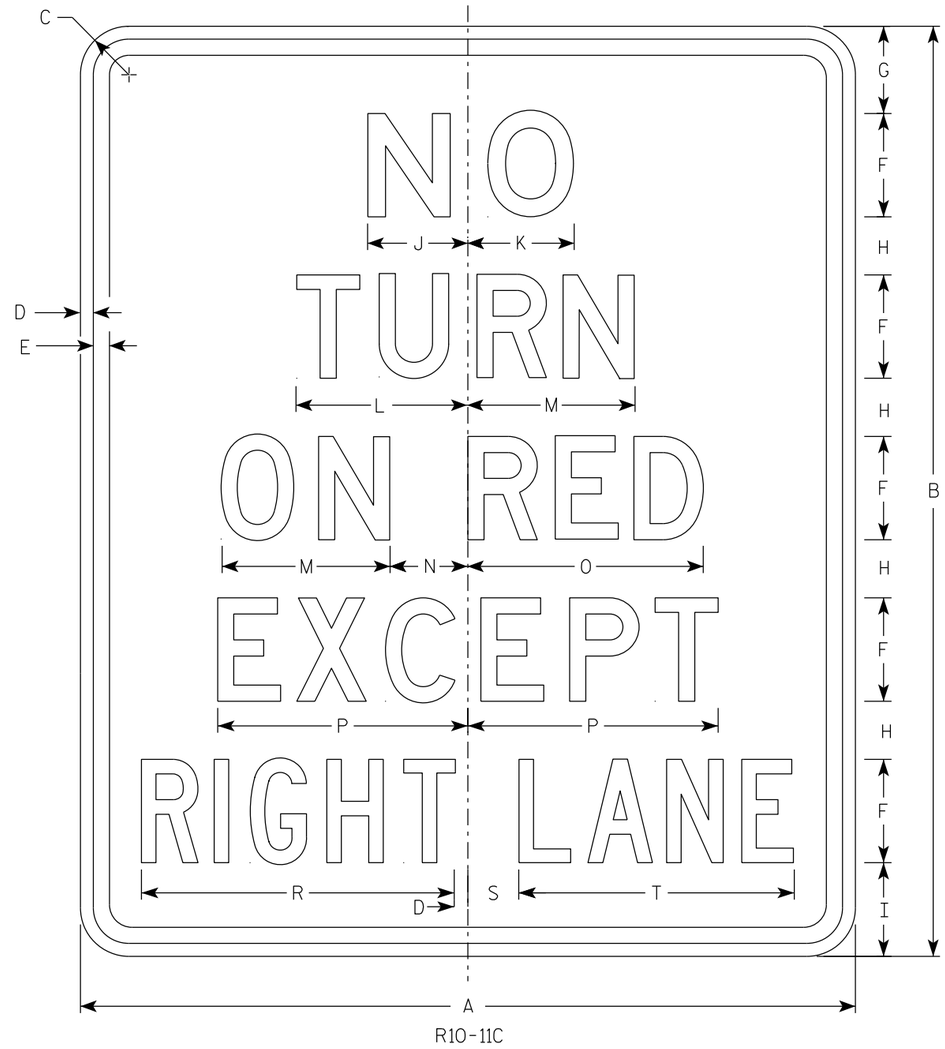
STANDARD SIGN
R10-11B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/31/24 PLATE NO. R10-11B.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 203 E



R10-11C

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series E.
   Lines 2, 3 and 4 are Series D.
   Line 5 is 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																											
2S	30	36	1 7/8	1/2	5/8	4	3 3/8	2 1/4	3 5/8	3 7/8	4 1/8	6 5/8	6 1/2	3	9 1/8	9 3/4		12 1/8	2	10 5/8							7.5
2M	30	36	1 7/8	1/2	5/8	4	3 3/8	2 1/4	3 5/8	3 7/8	4 1/8	6 5/8	6 1/2	3	9 1/8	9 3/4		12 1/8	2	10 5/8							7.5
3																											
4																											
5																											

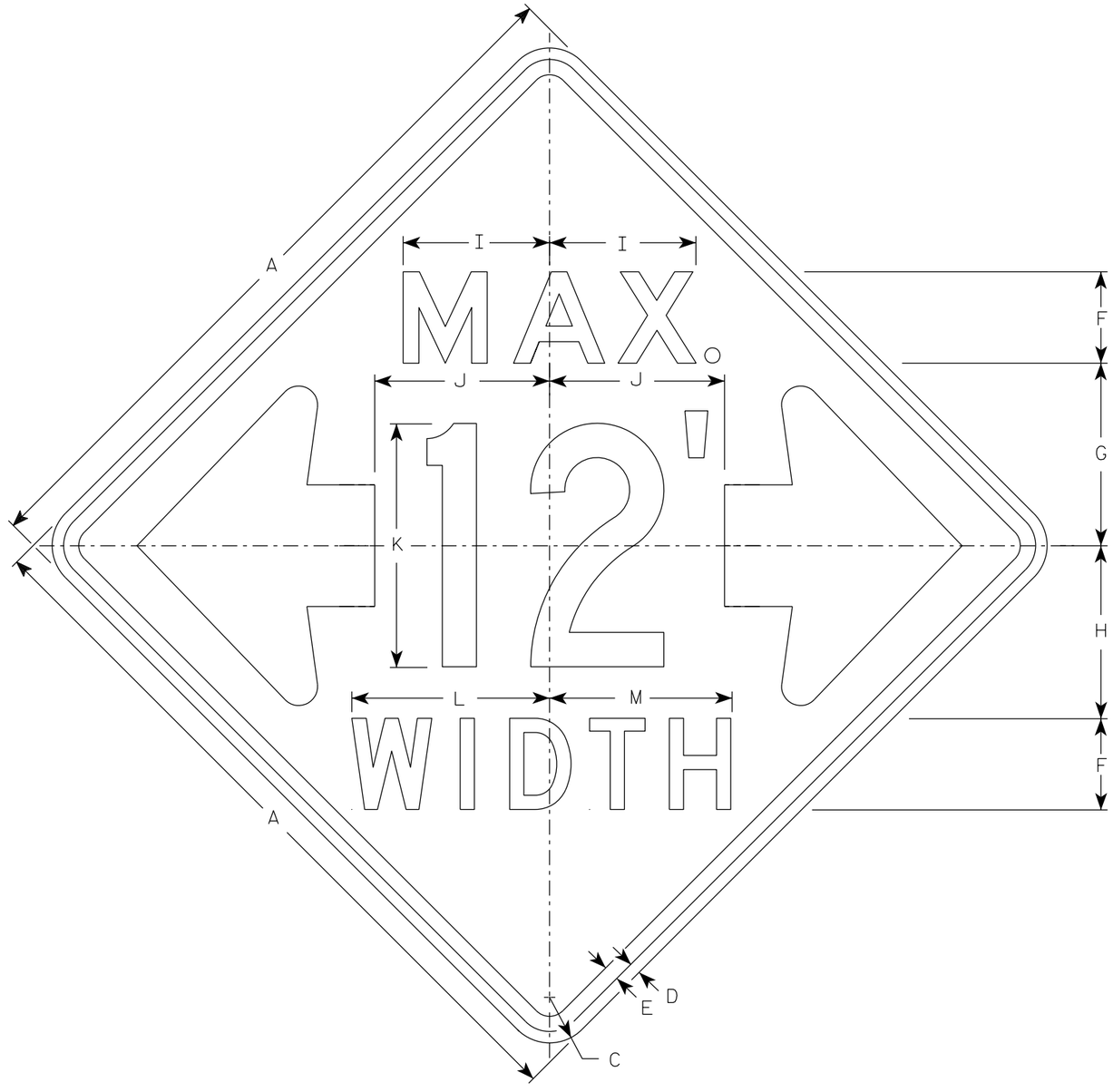
STANDARD SIGN
R10-11C

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/31/24 PLATE NO. R10-11C.2

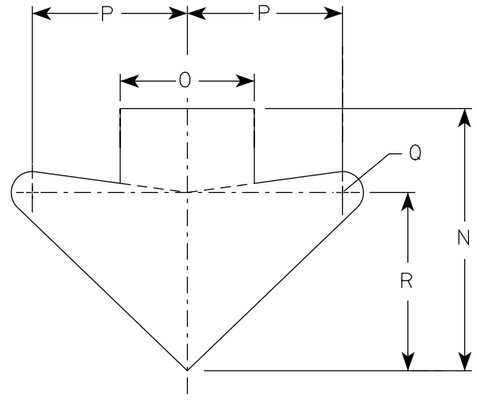
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 204 | E



W12-52

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. The top line is series E, the numerals are series C, and the bottom line is series D.
5. 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		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
2M	48		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
3																											
4																											
5																											

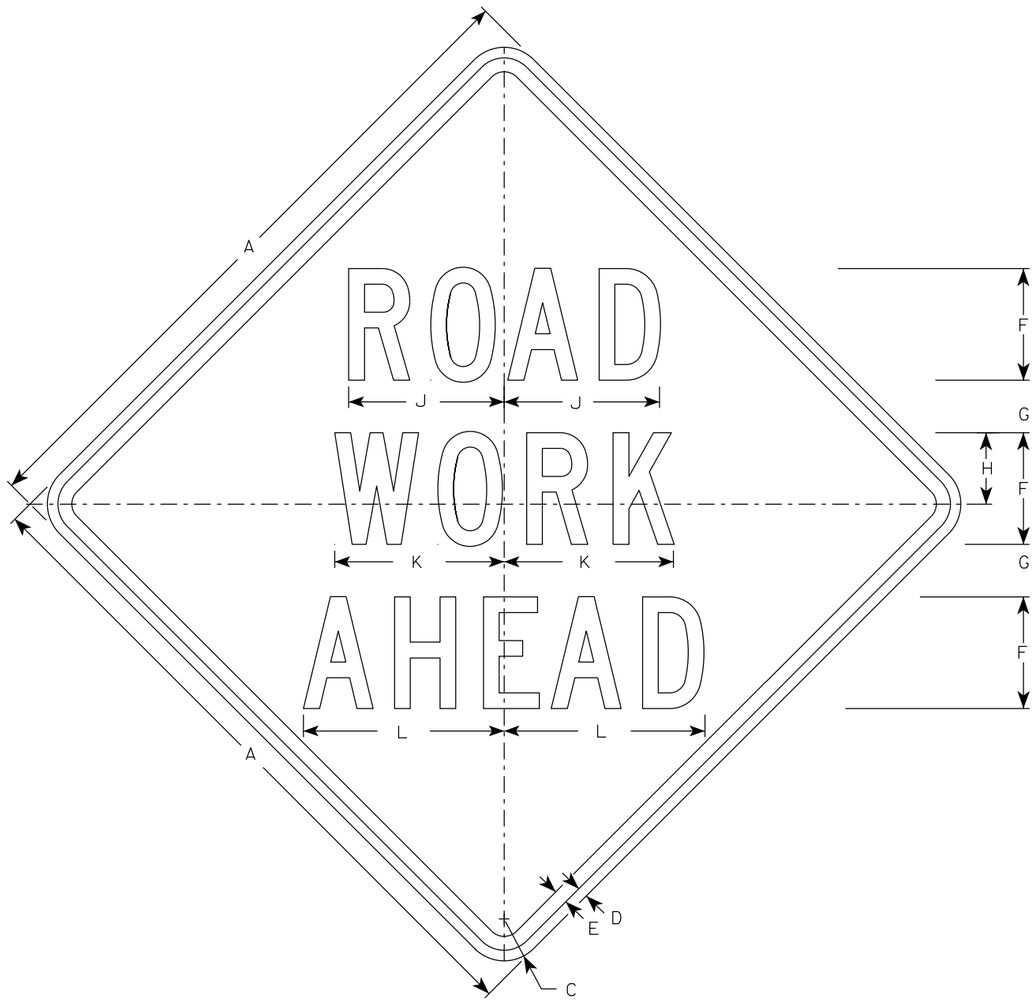
STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

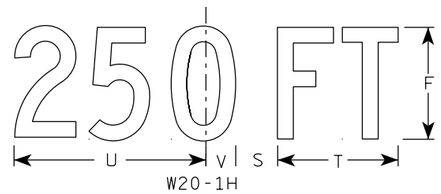
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/2024 PLATE NO. W12-52.8

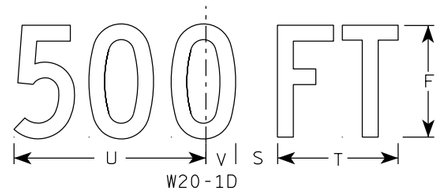
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 205 E



W20-1A



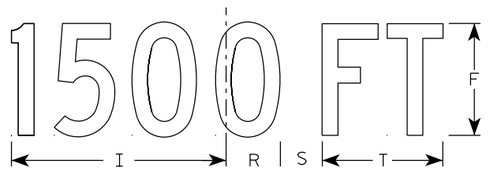
W20-1H



W20-1D



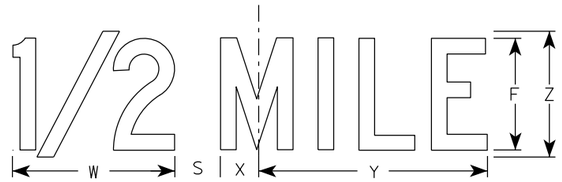
W20-1C



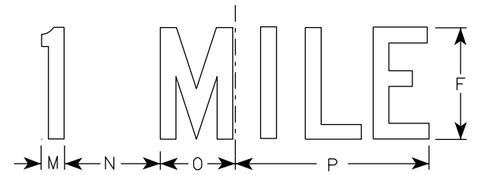
W20-1B

NOTES

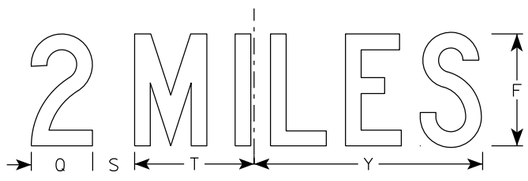
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

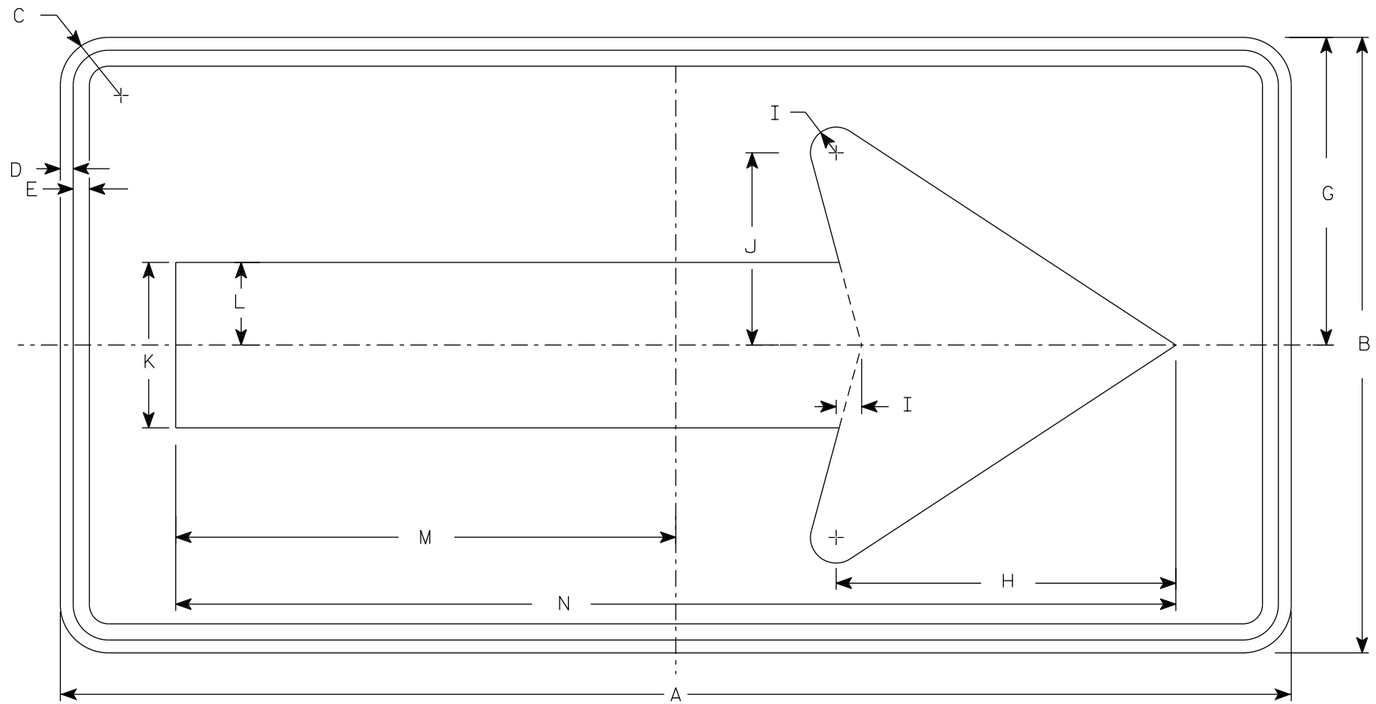
SHEET NO: 206 E

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

WISDOT/CADDS SHEET 42

7

7



WO1-6

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

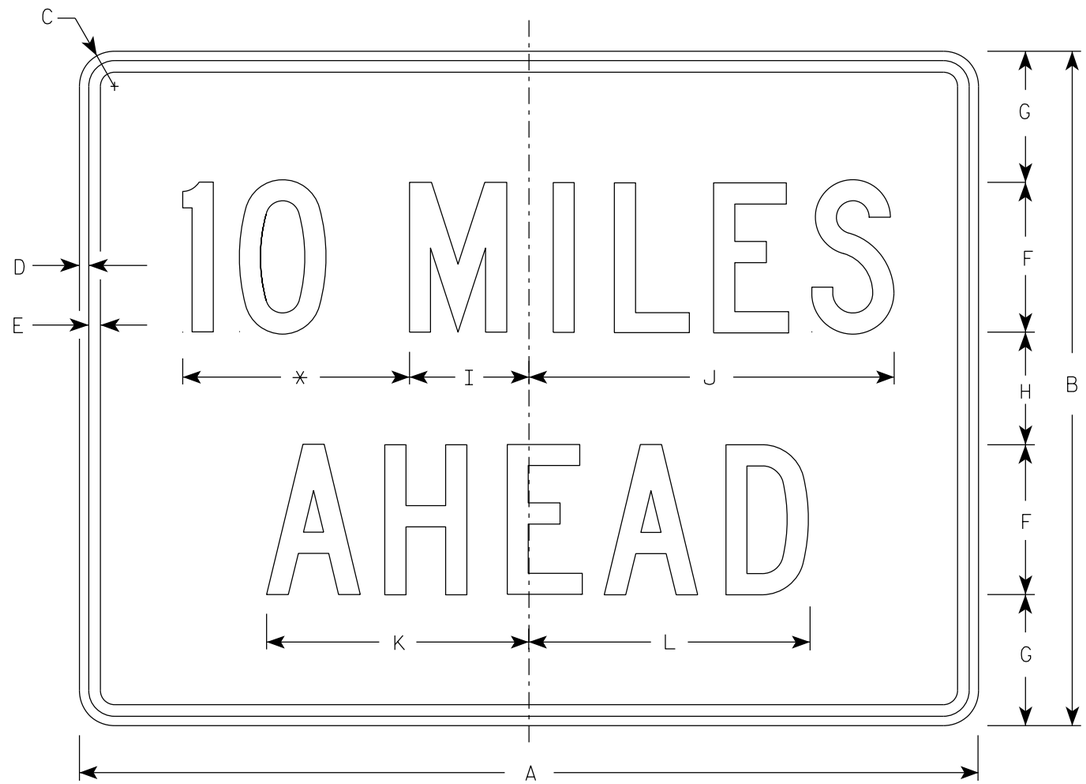
STANDARD SIGN
WO1-6

WISCONSIN DEPT OF TRANSPORTATION

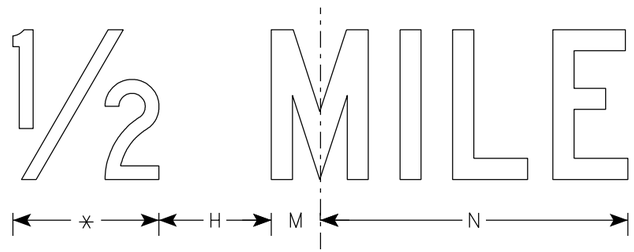
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-6.2

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



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 1/2	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	2 1/4	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	2 1/4	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	2 1/4	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	2 1/4	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	2 1/4	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

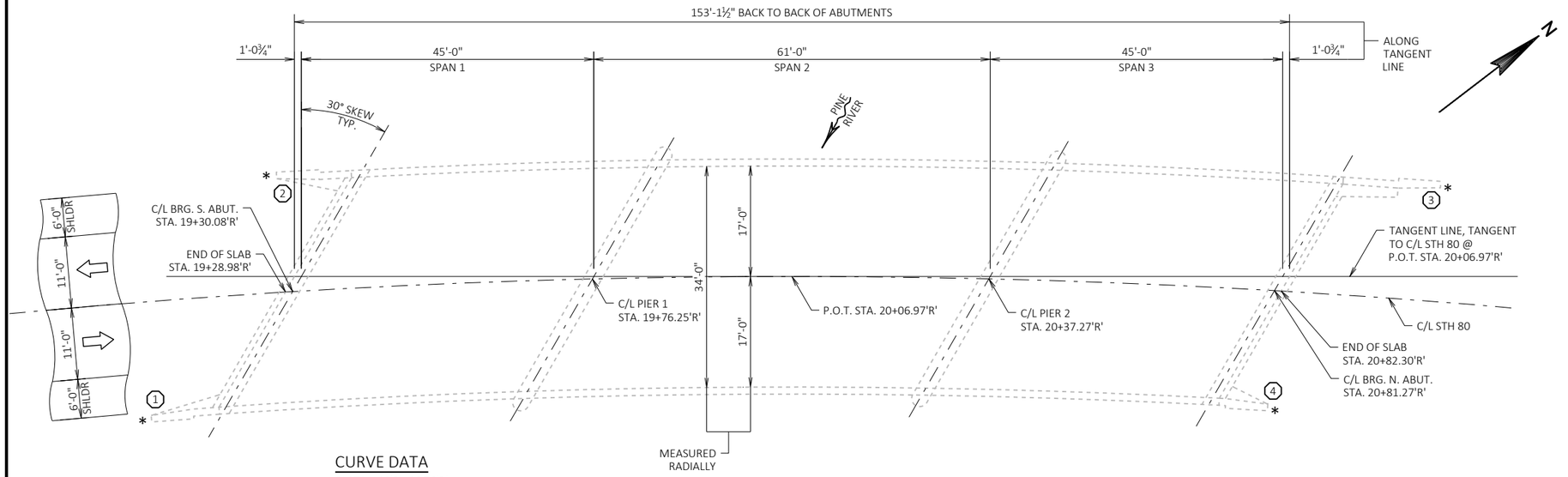
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W057-52.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 208 E

STATE PROJECT NUMBER

5040-03-70

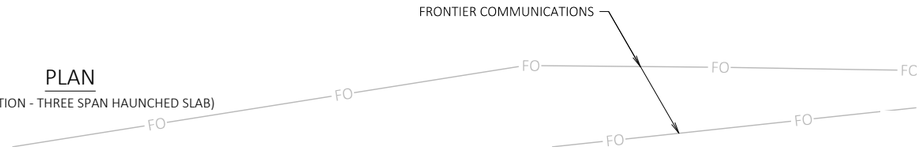


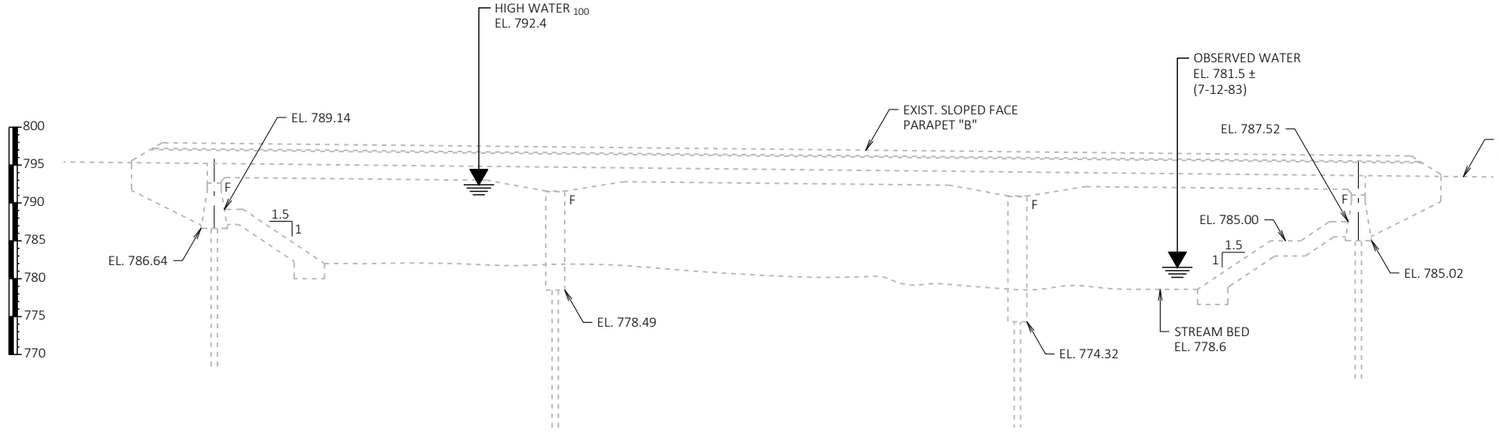
CURVE DATA

PI STA = 19'R'+46.76'R'
DELTA = 60°02'03"
D = 4°30'00"
T = 735.61'
L = 1334.09'
R = 1273.24'
PC STA = 12'R'+11.15'R'
PT STA = 25'R'+45.24'R'

PLAN

(REHABILITATION - THREE SPAN HAUNCHED SLAB)





ELEVATION

(NORMAL TO PINE RIVER)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING	HS20 (FROM HSI)
INVENTORY RATING	HS22 (FROM HSI)
OPERATIONAL RATING	HS38 (FROM HSI)
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV)	230 KIPS (FROM HSI)

MATERIAL PROPERTIES:

CONCRETE

SUPERSTRUCTURE	f'c = 4,000 PSI
OTHER	f'c = 3,500 PSI

TRAFFIC DATA

STH 80

ADT (2024) = 1850
ADT (2044) = 1960
DESIGN SPEED = 60 MPH

LEGEND

⬡ DENOTES WING NUMBER

* EXISTING THRIE BEAM CONNECTION

SCOPE OF WORK

1. CONCRETE SURFACE REPAIR AT LOCATIONS DIRECTED BY ENGINEER

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES

WISCONSIN
ERIC T. PRICE
E-39027
MADISON
WI
PROFESSIONAL ENGINEER

July 30, 2024

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
TELEPHONE: (608) 261-0261

CONSULTANT CONTACT
ERIC PRICE, P.E.
TELEPHONE: (608) 826-6145

NO.	DATE	REVISION	BY

CORRE ENGINEERING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED SDR 08/01/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-52-93

STH 80 OVER PINE RIVER

COUNTY: RICHLAND	TOWN/~~CITY/VILLAGE~~: HENRIETTA
DESIGN SPEC.: REHABILITATION N/A	

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BH	ETP	PKF	BH

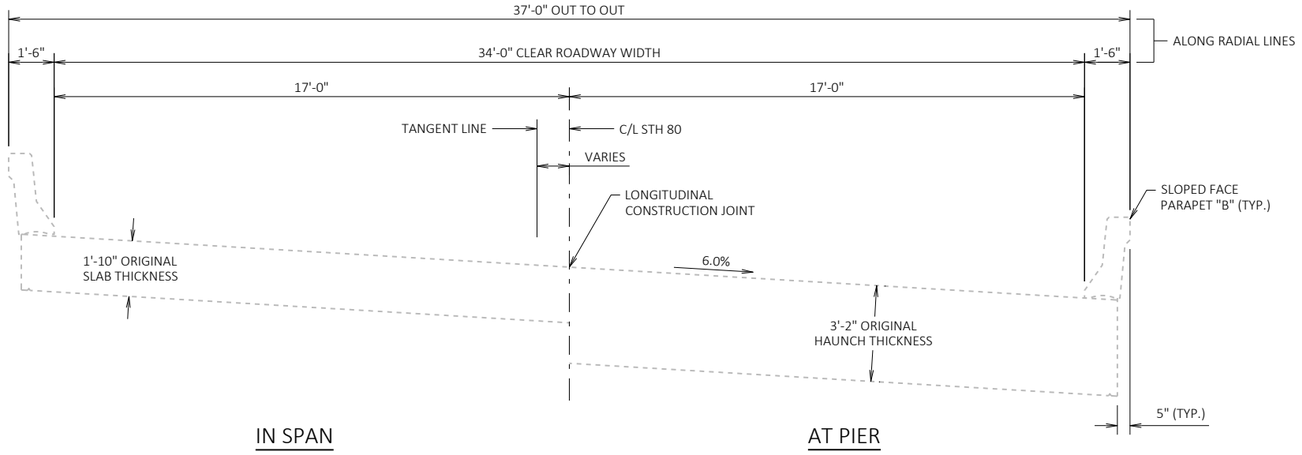
GENERAL PLAN

SHEET 1 of 2

209

8

8



CROSS SECTION

(LOOKING NORTH)

STATE PROJECT NUMBER

5040-03-70

GENERAL NOTES

1. DRAWINGS SHALL NOT BE SCALED.
2. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
3. ELEVATIONS ARE BASED ON THE INSPECTION REPORT OR EXISTING PLANS.
4. CLEAN, STRAIGHTEN, AND EXTEND EXISTING BAR STEEL REINFORCEMENT 24 BAR DIAMETERS INTO NEW CONSTRUCTION WHERE APPLICABLE.
5. ALL CONCRETE REMOVAL NOT COVERED WITH A CONCRETE OVERLAY SHALL BE DEFINED BY A ½" DEEP SAW CUT.
6. MATERIALS, EQUIPMENT, ETC. SHALL NOT BE STOCKPILED/STORED ON THE STRUCTURE WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
7. SEE ROAD PLANS FOR TRAFFIC CONTROL DETAILS.

TOTAL ESTIMATED QUANTITIES

	ITEM NUMBER	BID ITEMS	UNIT	SOUTH ABUT.	PIER 1	PIER 2	NORTH ABUT.	SUPER	TOTAL
	203.0211.S.01	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-52-93	EACH	----	----	----	----	----	1
■	203.0335.01	DEBRIS CONTAINMENT OVER WATERWAY B-52-93	EACH	----	----	----	----	----	1
	509.1500	CONCRETE SURFACE REPAIR	SF	20	10	10	20	40	100
		NON-BID ITEMS							

ALL BID ITEMS ARE CATEGORY 0110

LEGEND

■ DEBRIS CONTAINMENT IS TO BE USED ONLY FOR CONCRETE SURFACE REPAIR OVER THE WATER. USE OF DEBRIS CONTAINMENT AT OTHER LOCATIONS WILL NOT BE ALLOWED OR PAID FOR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-93

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY CORRE

CROSS SECTION & QUANTITIES

SHEET 2 OF 2

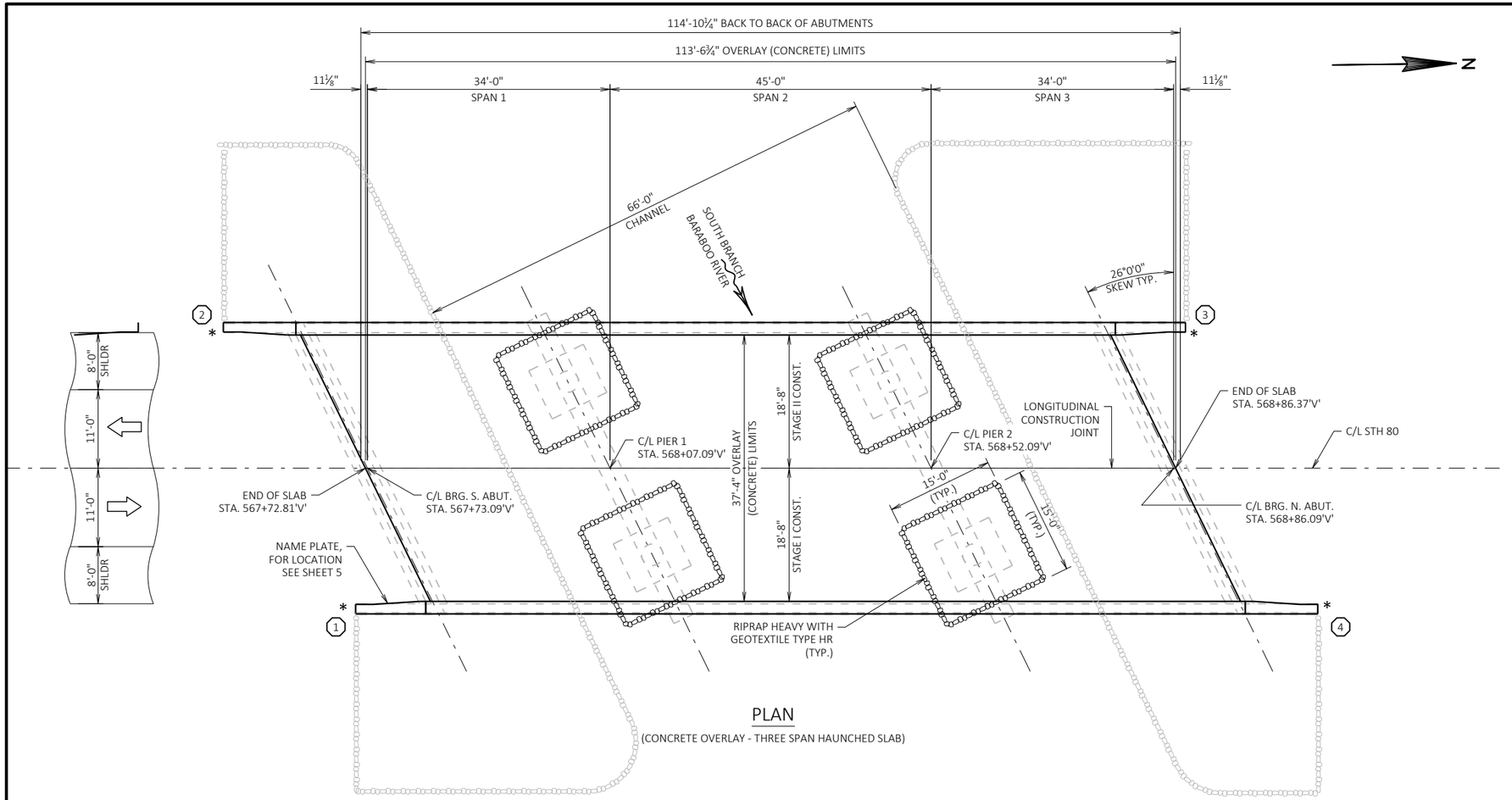
210

8

8

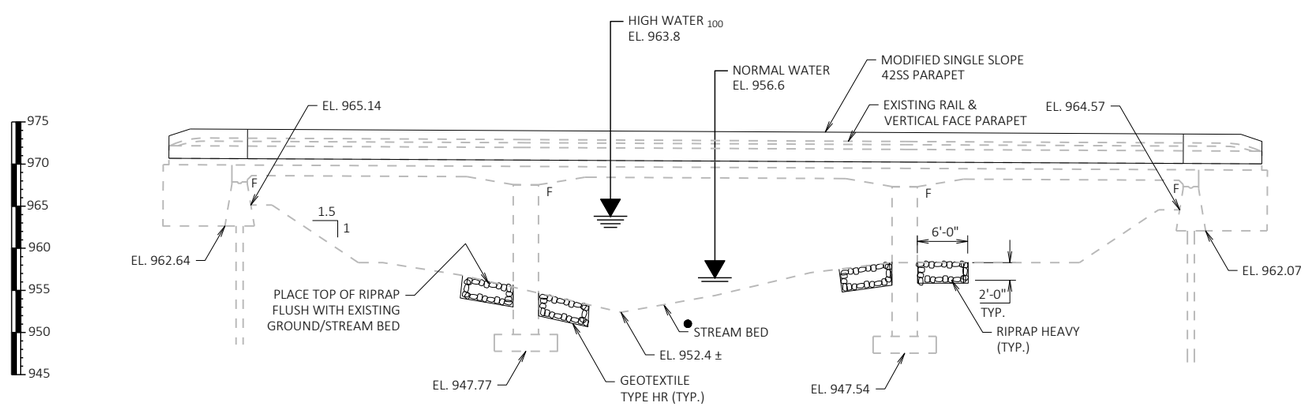
STATE PROJECT NUMBER

5040-03-70



PLAN

(CONCRETE OVERLAY - THREE SPAN HAUNCHED SLAB)



ELEVATION

(NORMAL TO SOUTH BRANCH BARABOO RIVER)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING	HS20
INVENTORY RATING	HS14
OPERATIONAL RATING	HS24
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV)	250 KIPS

MATERIAL PROPERTIES:

CONCRETE MASONRY OVERLAY DECKS	f'c = 4,000 PSI
OTHER CONCRETE	
SUPERSTRUCTURE	f'c = 4,000 PSI
SUBSTRUCTURE	f'c = 3,500 PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 PSI

TRAFFIC DATA

STH 80

ADT (2024) = 1850

ADT (2044) = 1960

DESIGN SPEED = 60 MPH

LEGEND

- ⬡ DENOTES WING NUMBER
- ✱ EXISTING THRIE BEAM CONNECTION
- ● STREAM BED PROFILE BASED ON 2016 INSPECTION AND ORIGINAL PLANS

SCOPE OF WORK

1. REMOVAL OF THE EXISTING CONCRETE OVERLAY AND PLACEMENT OF A NEW CONCRETE OVERLAY
2. RETROFIT EXISTING PARAPETS
3. SCOUR REPAIR
4. CONCRETE SURFACE REPAIR AT LOCATIONS DIRECTED BY ENGINEER

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. DECK CONDITION SURVEY
4. PARAPET DETAILS 1
5. PARAPET DETAILS 2

WISCONSIN PROFESSIONAL ENGINEER
ERIC T. PRICE
E-39027
MADISON WI

July 30, 2024

BRIDGE OFFICE CONTACT

AARON BONK, P.E.

TELEPHONE: (608) 261-0261

CONSULTANT CONTACT

ERIC PRICE, P.E.

TELEPHONE: (608) 826-6145

NO.	DATE	REVISION	BY

CORRE ENGINEERING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED SDR 08/01/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-62-30

STH 80 OVER SOUTH BRANCH BARABOO RIVER

COUNTY	TOWN/~~CITY/VILLAGE~~
VERNON	GREENWOOD

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BH	ETP	PKF	BH

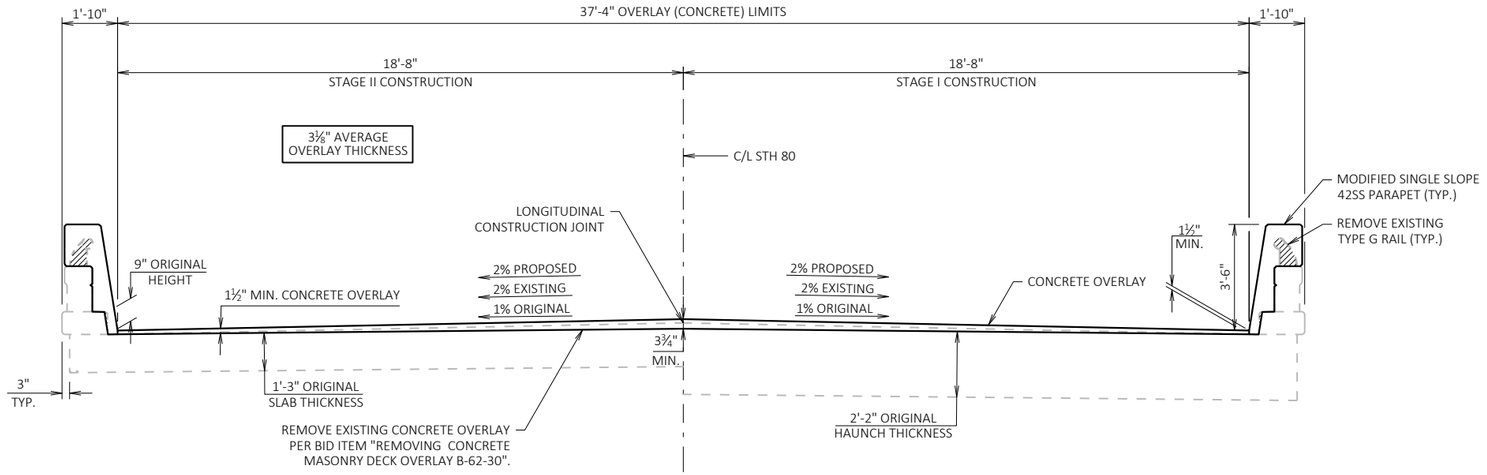
GENERAL PLAN

SHEET 1 of 5

211

8

8



CROSS SECTION

(LOOKING NORTH)

TOTAL ESTIMATED QUANTITIES

	ITEM NUMBER	BID ITEMS	UNIT	SOUTH ABUT.	PIER 1	PIER 2	NORTH ABUT.	SUPER	TOTAL
■	203.0250.01	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS B-62-30	EACH	----	----	----	----	----	1
■	203.0335.07	DEBRIS CONTAINMENT OVER WATERWAY B-62-30	EACH	----	----	----	----	----	1
	502.0100	CONCRETE MASONRY BRIDGES	CY	----	----	----	----	29	29
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	----	----	----	----	470	470
	502.3210	PIGMENTED SURFACE SEALER	SY	----	----	----	----	150	150
	502.4205	ADHESIVE ANCHORS NO. 5 BARS	EACH	----	----	----	----	426	426
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	----	----	----	----	5590	5590
	509.0301	PREPARATION DECKS TYPE 1	SY	----	----	----	----	10	10
	509.0302	PREPARATION DECKS TYPE 2	SY	----	----	----	----	4	4
	509.0505.S	CLEANING DECKS TO REAPPLY CONCRETE MASONRY OVERLAY	SY	----	----	----	----	470	470
	509.1500	CONCRETE SURFACE REPAIR	SF	10	10	10	10	60	100
	509.2000	FULL-DEPTH DECK REPAIR	SY	----	----	----	----	10	10
	509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	----	----	----	----	42	42
	509.9005.S.01	REMOVING CONCRETE MASONRY DECK OVERLAY B-62-30	SY	----	----	----	----	480	480
	606.0300	RIPRAP HEAVY	CY	----	30	30	----	----	60
●	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	----	----	----	----	4	4
	645.0120	GEOTEXTILE TYPE HR	SY	----	80	80	----	----	160
	SPV.0090.02	CLEANING PARAPETS SPECIAL	LF	----	----	----	----	270	270
		NON-BID ITEMS							
		NAME PLATE	EACH	----	----	----	----	----	1
		FILLER	SIZE						½"

ALL BID ITEMS ARE CATEGORY 0020

LEGEND

■ REMOVING OLD STRUCTURE BID ITEM APPLIES TO WORK ON THE PARAPETS. DEBRIS CONTAINMENT BID ITEM APPLIES ONLY FOR FULL-DEPTH DECK REPAIRS OR CONCRETE SURFACE REPAIRS OVER THE WATERWAY.

● AT LOCATIONS WHERE NO WORK IS PROPOSED ON THE EXISTING THRIE BEAM, THE COST OF REMOVING AND RE-ATTACHING IS INCLUDED IN THE "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD" ITEM.

STATE PROJECT NUMBER

5040-03-70

GENERAL NOTES

1. DRAWINGS SHALL NOT BE SCALED.
2. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
3. ELEVATIONS ARE BASED ON THE INSPECTION REPORT OR EXISTING PLANS.
4. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
5. THE FIRST DIGIT OF A THREE DIGIT AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFY THE BAR SIZE.
6. PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 1¼" PLACED ABOVE THE DECK AFTER SURFACE PREPARATION. EXPECTED AVERAGE OVERLAY THICKNESS IS 3⅛". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURE DESIGN SECTION.
7. THE AVERAGE OVERLAY THICKNESS IS BASED ON THE MINIMUM OVERLAY THICKNESS PLUS ½-INCH TO ACCOUNT FOR VARIATIONS IN THE DECK SURFACE.
8. A MINIMUM OF 1-INCH OF EXISTING CONCRETE COVER SHALL BE MAINTAINED OVER THE TOP MAT OF SLAB REINFORCEMENT. DO NOT EXPOSE MORE THAN ⅓ OF THE TOP BAR STEEL OVER THE PIERS DURING DECK PREPARATION WORK. IF NECESSARY, ADJACENT SPANS MUST BE SHORED.
9. ANY EXCAVATION REQUIRED TO COMPLETE THE OVERLAY AT THE ABUTMENTS IS INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS". ANY EXCAVATION REQUIRED TO PLACE THE HEAVY RIPRAP IS INCIDENTAL TO THE BID ITEM "RIPRAP HEAVY".
10. CLEAN, STRAIGHTEN, AND EXTEND EXISTING BAR STEEL REINFORCEMENT 24 BAR DIAMETERS INTO NEW CONSTRUCTION WHERE APPLICABLE.
11. ALL CONCRETE REMOVAL NOT COVERED WITH A CONCRETE OVERLAY SHALL BE DEFINED BY A 1" DEEP SAW CUT.
12. "PREPARATION DECKS TYPE 1", "PREPARATION DECKS TYPE 2", "FULL-DEPTH DECK REPAIR", AND "CONCRETE SURFACE REPAIR" QUANTITIES ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE THE FIELD IDENTIFICATION AND DETERMINATION OF ALL REPAIR LOCATIONS WITH THE ENGINEER. DECK PREPARATION AND FULL-DEPTH DECK REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".
13. ALL PREVIOUS PATCHES SHALL BE REMOVED UNDER THE BID ITEM FOR "PREPARATION DECKS TYPE 1", AND "PREPARATION DECKS TYPE 2".
14. MATERIALS, EQUIPMENT, ETC. SHALL NOT BE STOCKPILED/STORED ON THE BRIDGE DECK WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
15. PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY.
16. PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND TOP OF THE PARAPET, INCLUDING PARAPETS ON ABUTMENT WINGS.
17. SEAL OVERLAY CONSTRUCTION JOINTS ACCORDING TO SECTION 502.3.13.1 OF THE STANDARD SPECIFICATIONS. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY OVERLAY DECKS".
18. SEE ROADWAY PLANS FOR CONSTRUCTION STAGING DETAILS.
19. THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR, 1969.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-30

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY CORRE

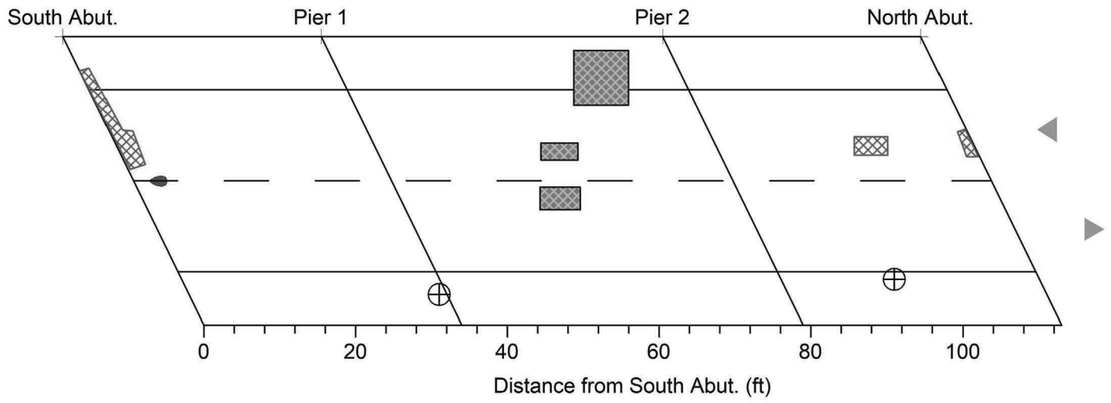
CROSS SECTION & QUANTITIES

SHEET 2 OF 5

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8

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Conditions Legend		Orientation	Quantity Summary			General Information
Rebar-level deterioration detected by GPR	Delamination detected by IR		Estimate Deck Prep Items	sq. ft.	%	Bridge ID: B-62-030 STH 80 over S Br Baraboo River
Increasing severity -->	Patching/ Spalling		Type 1	49.8	1.2	Analyzed by: SB Reviewed by: AC Completed: 10/15/19
⊕ IE (delam)	Undetectable Conditions		Type 2	2.4	0.1	
⊕ IE (no delam)	Potential Full-Depth Area	▶ Direction of traffic	Full-Depth	78.6	1.8	**Sheet 1 of 1**

NOTES:

DECK CONDITION SURVEY PERFORMED BY INFRASENSE ON 10/15/2019.

DEFECT AREAS SHOWN ON THIS SHEET ARE FOR INFORMATION ONLY. THE FIELD ENGINEER WILL SOUND THE DECK AND MARK AREAS IN THE FIELD. RELATED QUANTITIES SHOWN ON SHEET 2 WERE INCREASED TO ACCOUNT FOR GROWTH AND VARIABILITY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-30

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY CORRE

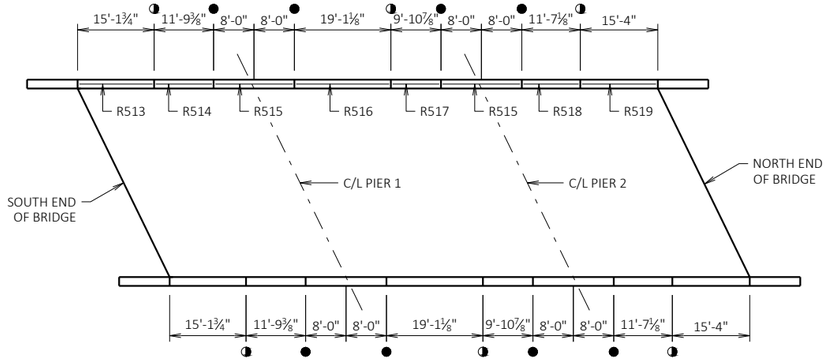
DECK CONDITION SURVEY

SHEET 3 OF 5

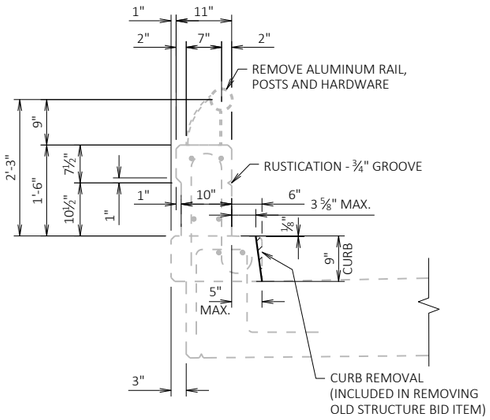
213

STATE PROJECT NUMBER

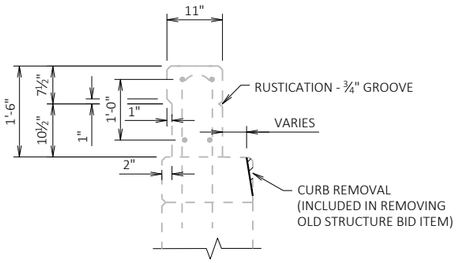
5040-03-70



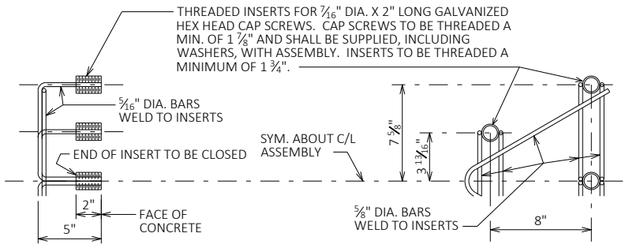
DEFLECTION JOINT SPACING



EXISTING SECTION THRU PARAPET & CURB ON BRIDGE



EXISTING SECTION THRU PARAPET & CURB ON WING



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

LEGEND

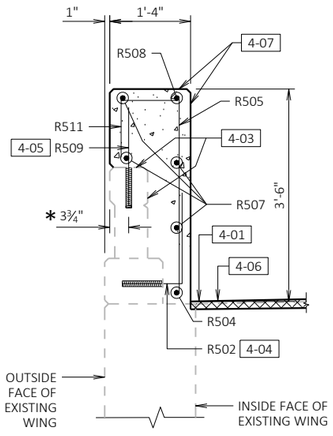
- 4-01 TOP OF OVERLAY OR APPROACH PAVEMENT.
- 4-02 REMOVAL OF EXISTING OVERLAY OR PREPARATION DECKS TYPE 1 AND 2 WHERE REQUIRED.
- 4-03 SOUND CONCRETE SURFACES TO RECEIVE "CLEANING PARAPETS SPECIAL". DETERIORATED CONCRETE SURFACES TO BE REMOVED TO SOUND CONCRETE OR TO ONE INCH BEHIND EXISTING REINFORCING STEEL, WHICHEVER DEPTH IS GREATER UNDER THE BID ITEM "REMOVING OLD STRUCTURE". SALVAGE EXISTING REINFORCING STEEL.
- 4-04 ADHESIVE ANCHORS NO. 5 BARS. EMBED 8" INTO EXISTING CONCRETE. EPOXY ANCHORED.
- 4-05 ADHESIVE ANCHORS NO. 5 BARS. EMBED 6" INTO EXISTING CONCRETE. EPOXY ANCHORED.
- 4-06 PROTECTIVE SURFACE TREATMENT APPLIED TO ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY.
- 4-07 PIGMENTED SURFACE SEALER APPLIED TO THE FRONT FACE AND TOP OF THE PARAPET.
- ● EXISTING DEFLECTION JOINT IN CURB & PARAPET
- ◑ EXISTING DEFLECTION JOINT IN PARAPET ONLY. PROPOSED JOINT AS SHOWN IN SECTION VIEW.
- ✱ AT SECTION A-A ONLY
- REMOVAL LIMITS
- ▲ SEE SHEET 5 FOR LOCATION OF SECTIONS.

NOTE:

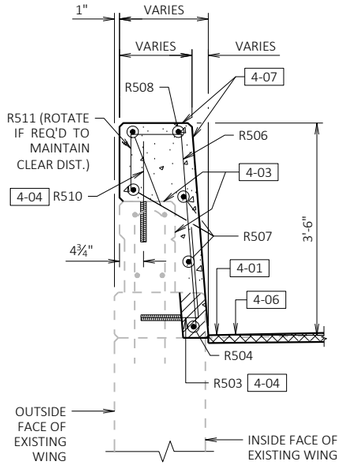
CLEAN, STRAIGHTEN AND EXTEND EXISTING BAR STEEL REINFORCEMENT A MINIMUM OF 24 BAR DIAMETERS INTO NEW CONSTRUCTION WHERE APPLICABLE. DO NOT CUT EXISTING DOWELS OR STIRRUPS THAT EXTEND INTO EXISTING WINGS OR DECK.

EXISTING DEFLECTION JOINT LOCATIONS SHALL BE MATCHED WITH THE PROPOSED WORK. DEFLECTION JOINTS SHALL CONSIST OF ⅛" ZINC OR PLASTIC PLATE CUT AS SHOWN IN SECTION AT DEFLECTION JOINT BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.

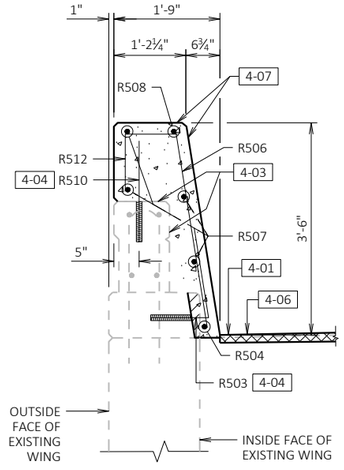
REMOVAL OF EXISTING RAILING AND PORTIONS OF EXISTING CURB OR PARAPET INCLUDED IN "REMOVING OLD STRUCTURE" ITEM.



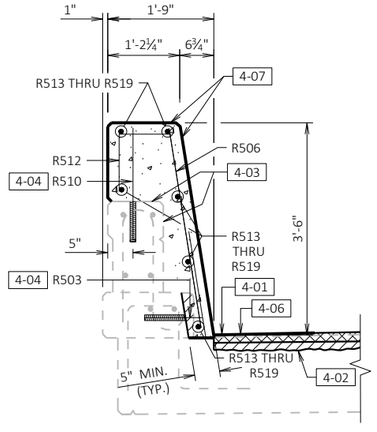
▲ SECTION A-A



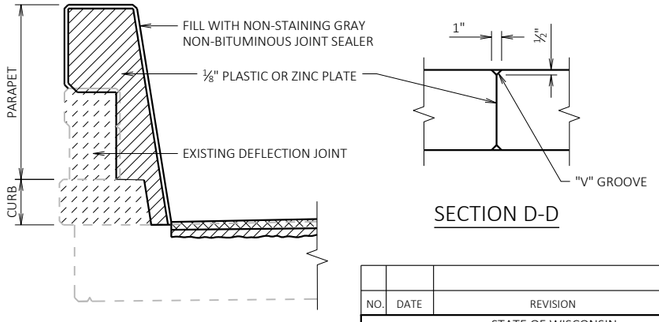
▲ SECTION B-B



▲ SECTION C-C



SECTION ON BRIDGE



SECTION D-D

SECTION AT DEFLECTION JOINT

(SHOWING DEFLECTION JOINT IN PARAPET)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-30

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY CORRE

PARAPET DETAILS 1

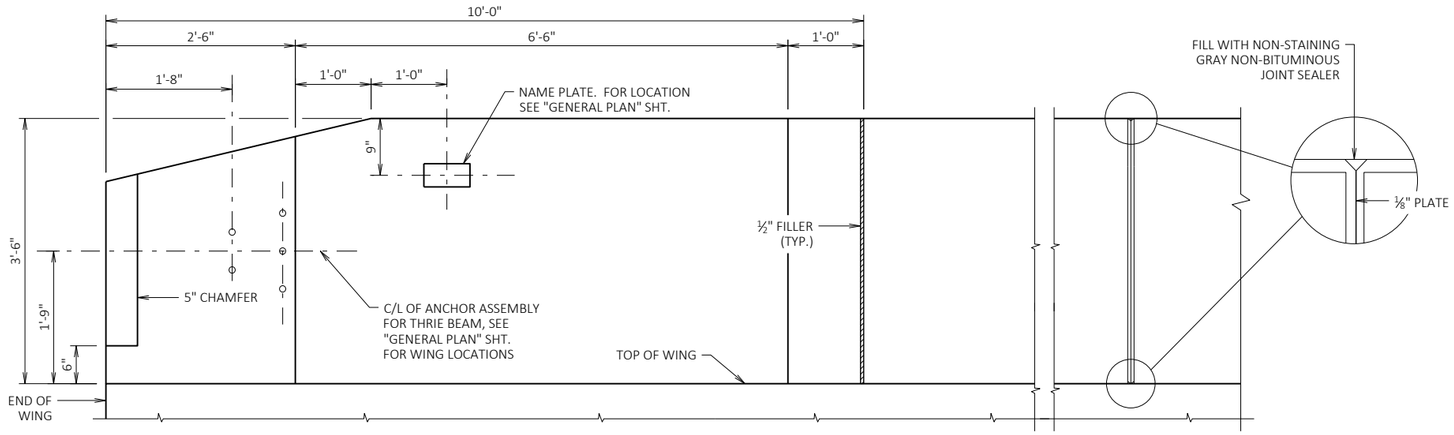
SHEET 4 OF 5

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8

8

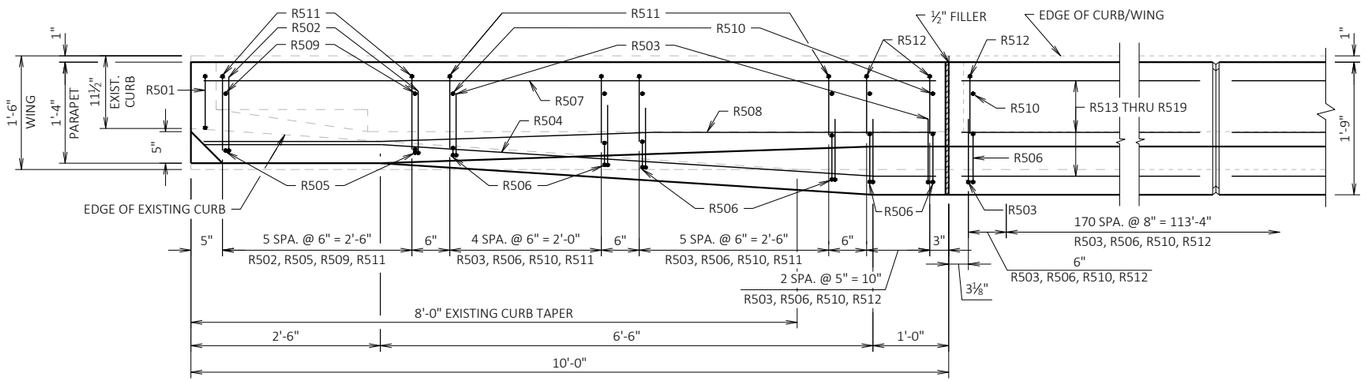
FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\503_STRUCTURES\503.3_FINAL\B-62-30\080101_GP_B-62-30.DWG PLOT DATE : 7/27/2024 12:24 PM PLOT BY : PAULETTE FENSKE



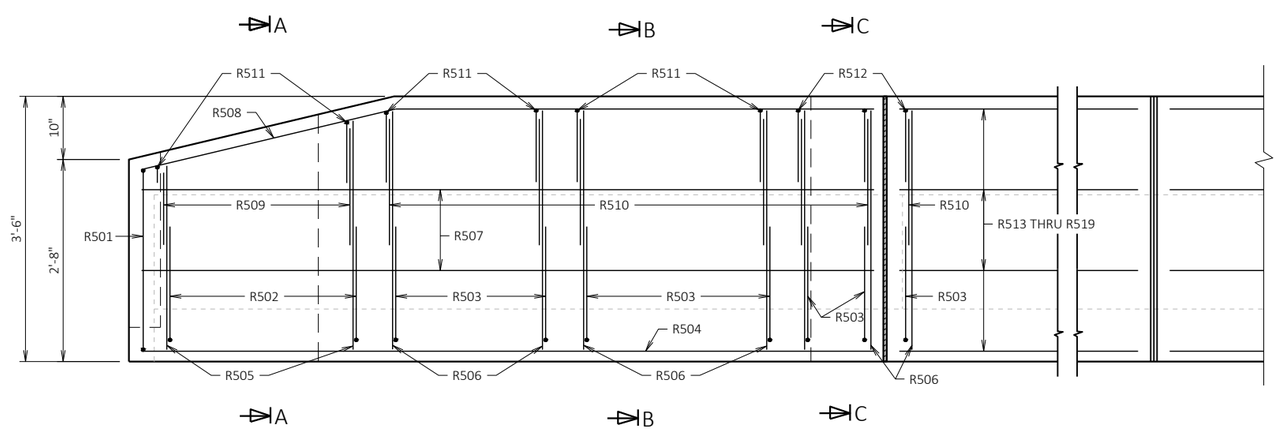
AT ABUTMENTS

AT DEFLECTION JOINT

INSIDE ELEVATION AT WINGS



PLAN



OUTSIDE ELEVATION

NOTES

FOR SECTION VIEWS SEE SHEET 4.

STATE PROJECT NUMBER

5040-03-70

BILL OF BARS - PARAPETS

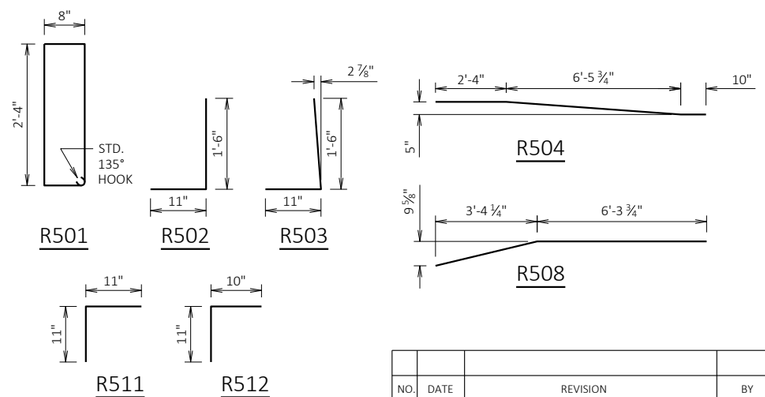
BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
COATED BARS						TOTAL WEIGHT = 5,590 LBS
R501	4	6'-8"	X		PARAPETS @ ENDS	VERT.
R502	24	2'-4"	X		PARAPETS - DOWELS IN CURB	VERT.
R503	402	2'-4"	X		PARAPETS - DOWELS IN CURB	VERT.
R504	4	9'-8"	X		PARAPETS @ TOE	HORIZ.
R505	24	2'-9"		X	PARAPETS @ FRONT	VERT.
R506	402	3'-2"			PARAPETS @ FRONT	VERT.
R507	16	9'-8"			PARAPETS	HORIZ.
R508	4	9'-9"	X		PARAPETS @ TOP	HORIZ.
R509	24	1'-3"		X	PARAPETS @ TOP OF EXISTING	VERT.
R510	402	1'-8"			PARAPETS @ TOP OF EXISTING	VERT.
R511	68	1'-9"	X		PARAPETS @ TOP	HORIZ.
R512	358	1'-8"	X		PARAPETS @ TOP	HORIZ.
R513	12	14'-9"			PARAPETS	HORIZ.
R514	12	11'-5"			PARAPETS	HORIZ.
R515	24	15'-8"			PARAPETS	HORIZ.
R516	12	18'-9"			PARAPETS	HORIZ.
R517	12	9'-6"			PARAPETS	HORIZ.
R518	12	11'-3"			PARAPETS	HORIZ.
R519	12	15'-0"			PARAPETS	HORIZ.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
R505	4 SERIES OF 6	2'-5" TO 3'-0"
R509	4 SERIES OF 6	0'-11" TO 1'-6"

BUNDLE AND TAG EACH SERIES SEPARATELY.



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-30

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY CORRE

PARAPET DETAILS 2

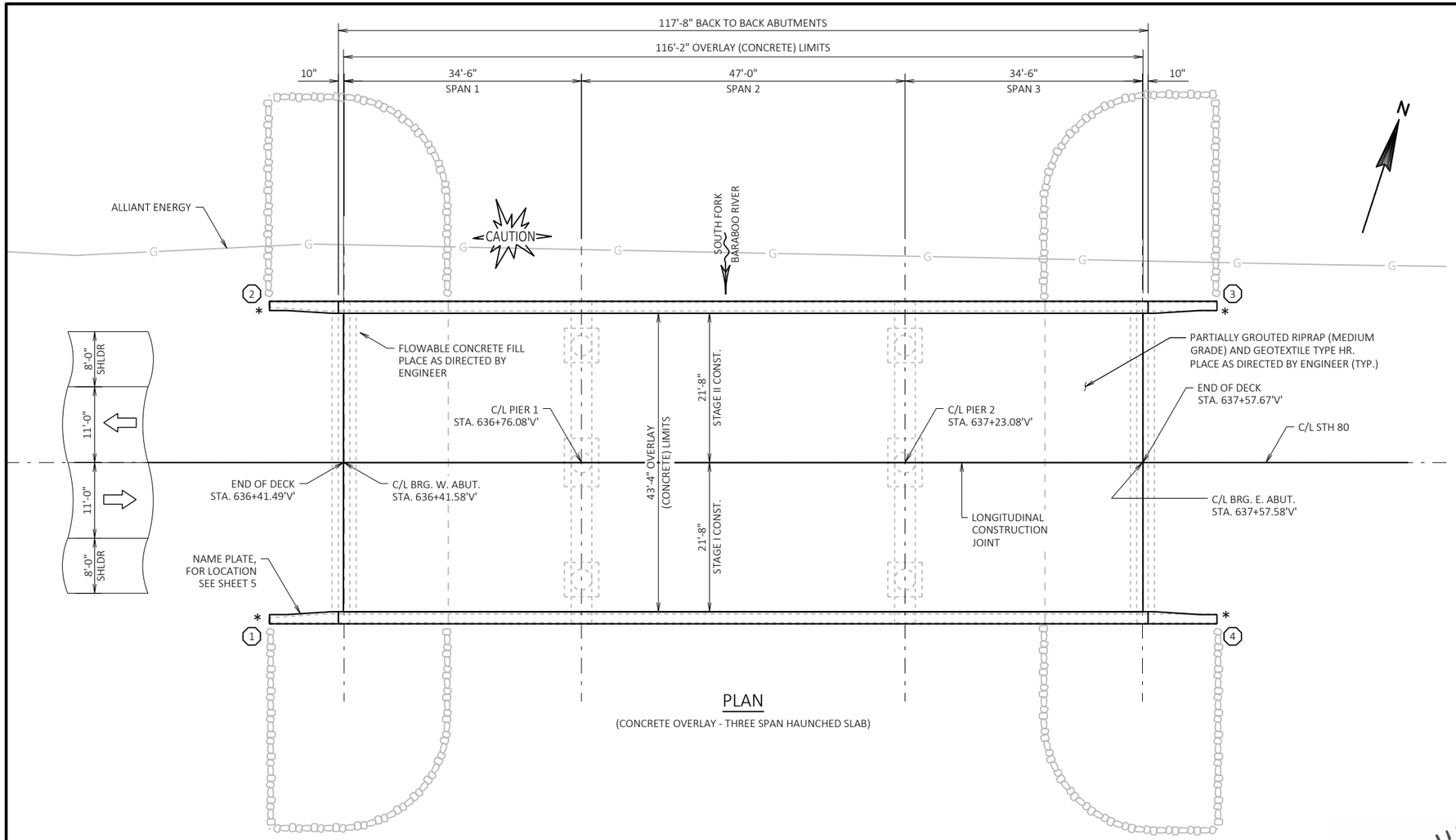
SHEET 5 OF 5

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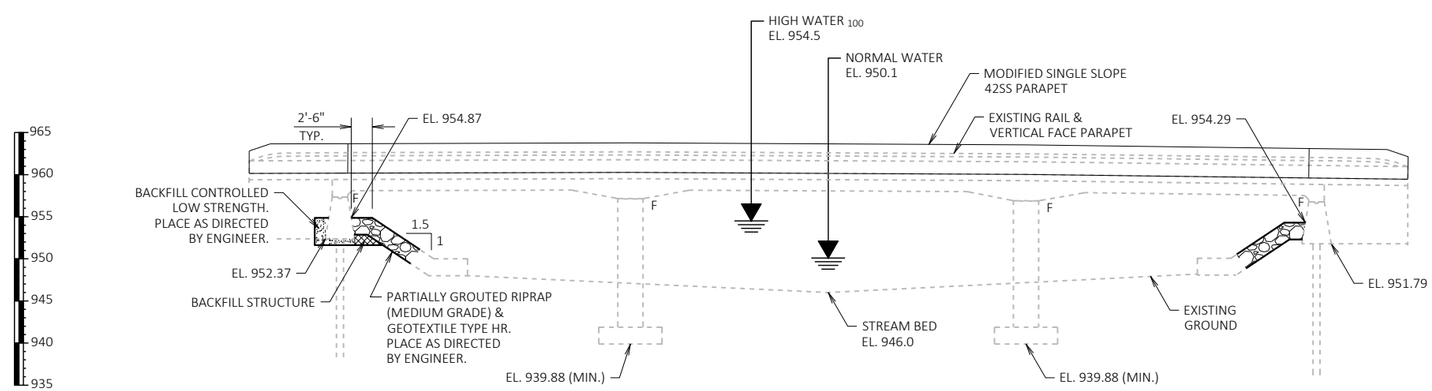
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FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\503_STRUCTURES\503.3_FINAL\B-62-30\080101_GP_B-62-30.DWG PLOT DATE : 7/27/2024 12:24 PM PLOT BY : PAULETTE FENSKE



PLAN

(CONCRETE OVERLAY - THREE SPAN HAUNCHED SLAB)



ELEVATION

(NORMAL TO SOUTH FORK BARABOO RIVER)

STATE PROJECT NUMBER

5040-03-70

DESIGN DATA

LIVE LOAD:

DESIGN LOADING	HS20
INVENTORY RATING	HS15
OPERATIONAL RATING	HS25
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV)	250 KIPS

MATERIAL PROPERTIES:

CONCRETE MASONRY OVERLAY DECKS	f'c = 4,000 PSI
OTHER CONCRETE	
SUPERSTRUCTURE	f'c = 4,000 PSI
SUBSTRUCTURE	f'c = 3,500 PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 PSI

TRAFFIC DATA

STH 80

ADT (2024) = 1850

ADT (2044) = 1960

DESIGN SPEED = 60 MPH

LEGEND

⬡ DENOTES WING NUMBER

* EXISTING THRIE BEAM CONNECTION

SCOPE OF WORK

1. REMOVAL OF THE EXISTING CONCRETE OVERLAY AND PLACEMENT OF A NEW CONCRETE OVERLAY
2. RETROFIT EXISTING PARAPETS
3. CONCRETE SURFACE REPAIR AT LOCATIONS DIRECTED BY ENGINEER
4. SLOPE REPAIR WHICH INCLUDES THE PLACEMENT OF PARTIALLY GROUTED RIPRAP AND GEOTEXTILE TYPE HR AT LOCATIONS DIRECTED BY ENGINEER
5. REPAIR OF ABUTMENT UNDERMINING AT LOCATIONS DIRECTED BY ENGINEER

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. DECK CONDITION SURVEY
4. PARAPET DETAILS 1
5. PARAPET DETAILS 2

WISCONSIN
ERIC T. PRICE
E-39027
MADISON
WI
PROFESSIONAL ENGINEER

July 30, 2024

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
TELEPHONE: (608) 261-0261

CONSULTANT CONTACT
ERIC PRICE, P.E.
TELEPHONE: (608) 826-6145

NO.	DATE	REVISION	BY

CORRE ENGINEERING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED SDR 08/01/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-62-31

STH 80 OVER SOUTH FORK BARABOO RIVER

COUNTY	VERNON	~~TOWN~~/CITY/~~VILLAGE~~	HILLSBORO
DESIGN SPEC.	REHABILITATION N/A		
DESIGNED BY	BH	DESIGN CK'D.	ETP
DRAWN BY	PKF	PLANS CK'D.	BH

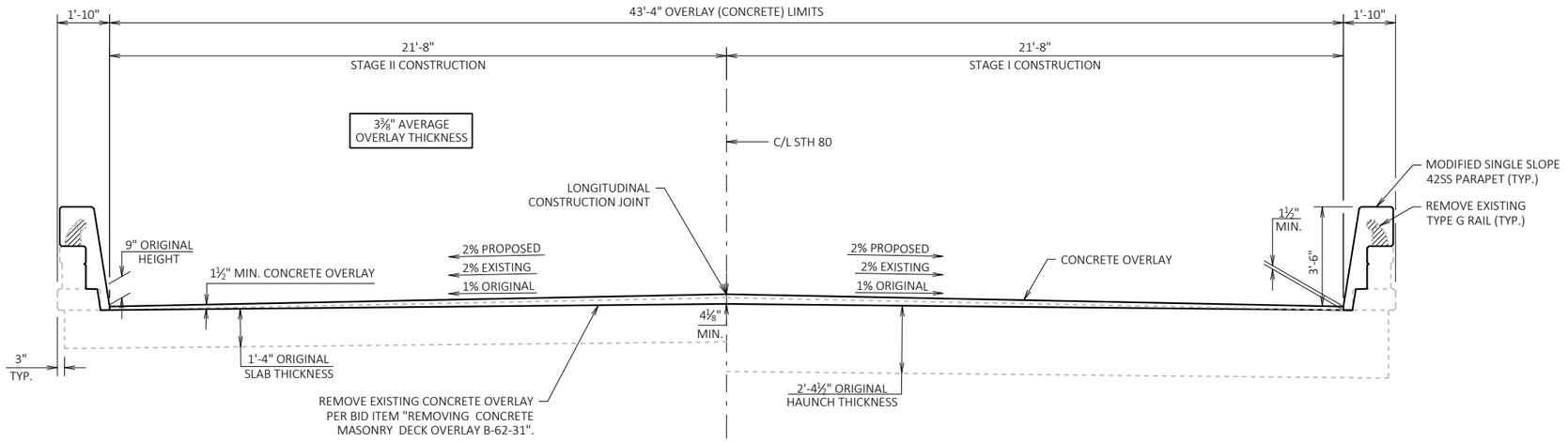
GENERAL PLAN

SHEET 1 of 5

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8



CROSS SECTION

(LOOKING EAST)

TOTAL ESTIMATED QUANTITIES

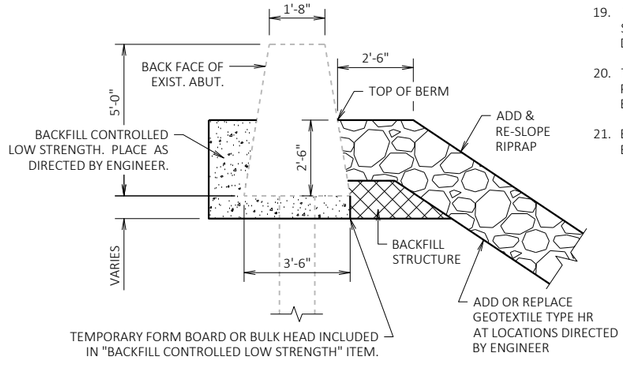
	ITEM NUMBER	BID ITEMS	UNIT	WEST ABUT.	PIER 1	PIER 2	EAST ABUT.	SUPER	TOTAL
	203.0211.S.02	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-62-31	EACH	----	----	----	----	----	1
■	203.0250.02	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS B-62-31	EACH	----	----	----	----	----	1
■	203.0335.08	DEBRIS CONTAINMENT OVER WATERWAY B-62-31	EACH	----	----	----	----	----	1
	209.0200.S	BACKFILL CONTROLLED LOW STRENGTH	CY	30	----	----	----	----	30
	210.1500	BACKFILL STRUCTURE TYPE A	TON	15	----	----	----	----	15
	502.0100	CONCRETE MASONRY BRIDGES	CY	----	----	----	----	30	30
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	----	----	----	----	560	560
	502.3210	PIGMENTED SURFACE SEALER	SY	----	----	----	----	150	150
	502.4205	ADHESIVE ANCHORS NO. 5 BARS	EACH	----	----	----	----	434	434
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	----	----	----	----	5,660	5,660
	509.0301	PREPARATION DECKS TYPE 1	SY	----	----	----	----	25	25
	509.0302	PREPARATION DECKS TYPE 2	SY	----	----	----	----	10	10
	509.0505.S	CLEANING DECKS TO REAPPLY CONCRETE MASONRY OVERLAY	SY	----	----	----	----	560	560
	509.1500	CONCRETE SURFACE REPAIR	SF	5	5	5	5	80	100
	509.2000	FULL-DEPTH DECK REPAIR	SY	----	----	----	----	12	12
	509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	----	----	----	----	55	55
	509.9005.S.02	REMOVING CONCRETE MASONRY DECK OVERLAY B-62-31	SY	----	----	----	----	570	570
●	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	----	----	----	----	4	4
	645.0120	GEOTEXTILE TYPE HR	SY	70	----	----	70	----	140
	SPV.0035.01	PARTIALLY GROUTED RIPRAP	CY	30	----	----	30	----	60
	SPV.0090.02	CLEANING PARAPETS SPECIAL	LF	----	----	----	----	276	276
		NON-BID ITEMS							
		NAME PLATE	EACH	----	----	----	----	----	1

ALL BID ITEMS ARE CATEGORY 0030

LEGEND

■ REMOVING OLD STRUCTURE BID ITEM APPLIES TO WORK ON THE PARAPETS. DEBRIS CONTAINMENT BID ITEM APPLIES ONLY FOR FULL-DEPTH DECK REPAIRS OR CONCRETE SURFACE REPAIRS OVER THE WATERWAY.

● AT LOCATIONS WHERE NO WORK IS PROPOSED ON THE EXISTING THRIE BEAM, THE COST OF REMOVING AND RE-ATTACHING IS INCLUDED IN THE "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD" ITEM.



CROSS SECTION THRU ABUTMENT UNDERMINING REPAIR

STATE PROJECT NUMBER

5040-03-70

GENERAL NOTES

1. DRAWINGS SHALL NOT BE SCALED.
2. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
3. ELEVATIONS ARE BASED ON THE INSPECTION REPORT OR EXISTING PLANS.
4. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
5. THE FIRST DIGIT OF A THREE DIGIT OR THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFY THE BAR SIZE.
6. PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 1½" PLACED ABOVE THE DECK AFTER SURFACE PREPARATION. EXPECTED AVERAGE OVERLAY THICKNESS IS 3 ⅜". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURE DESIGN SECTION.
7. THE AVERAGE OVERLAY THICKNESS IS BASED ON THE MINIMUM OVERLAY THICKNESS PLUS ½-INCH TO ACCOUNT FOR VARIATIONS IN THE DECK SURFACE.
8. A MINIMUM OF 1-INCH OF EXISTING CONCRETE COVER SHALL BE MAINTAINED OVER THE TOP MAT OF SLAB REINFORCEMENT. DO NOT EXPOSE MORE THAN ⅓ OF THE TOP BAR STEEL OVER THE PIERS DURING DECK PREPARATION WORK. IF NECESSARY, ADJACENT SPANS MUST BE SHORED.
9. ANY EXCAVATION REQUIRED TO COMPLETE THE WORK IS INCIDENTAL TO OTHER BID ITEMS.
10. CLEAN, STRAIGHTEN, AND EXTEND EXISTING BAR STEEL REINFORCEMENT 24 BAR DIAMETERS INTO NEW CONSTRUCTION WHERE APPLICABLE.
11. ALL CONCRETE REMOVAL NOT COVERED WITH A CONCRETE OVERLAY SHALL BE DEFINED BY A 1" DEEP SAW CUT.
12. "PREPARATION DECKS TYPE 1", "PREPARATION DECKS TYPE 2", "FULL-DEPTH DECK REPAIR", AND "CONCRETE SURFACE REPAIR" QUANTITIES ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE THE FIELD IDENTIFICATION AND DETERMINATION OF ALL REPAIR LOCATIONS WITH THE ENGINEER. DECK PREPARATION AND FULL-DEPTH DECK REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".
13. ALL PREVIOUS PATCHES SHALL BE REMOVED UNDER THE BID ITEM FOR "PREPARATION DECKS TYPE 1", AND "PREPARATION DECKS TYPE 2".
14. MATERIALS, EQUIPMENT, ETC. SHALL NOT BE STOCKPILED/STORED ON THE BRIDGE DECK WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
15. PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY.
16. PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND TOP OF THE PARAPET, INCLUDING PARAPETS ON ABUTMENT WINGS.
17. SEAL OVERLAY CONSTRUCTION JOINTS ACCORDING TO SECTION 502.3.13.1 OF THE STANDARD SPECIFICATIONS. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY OVERLAY DECKS".
18. SEE ROADWAY PLANS FOR CONSTRUCTION STAGING DETAILS.
19. THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR 1969.
20. THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH PARTIALLY GROUTED RIPRAP AND GEOTEXTILE TYPE 'HR', AS DIRECTED BY THE ENGINEER.
21. BACKFILL CONTROLLED LOW STRENGTH SHALL BE PLACED AS DIRECTED BY THE ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-31

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY CORRE

CROSS SECTION & QUANTITIES

SHEET 2 OF 5

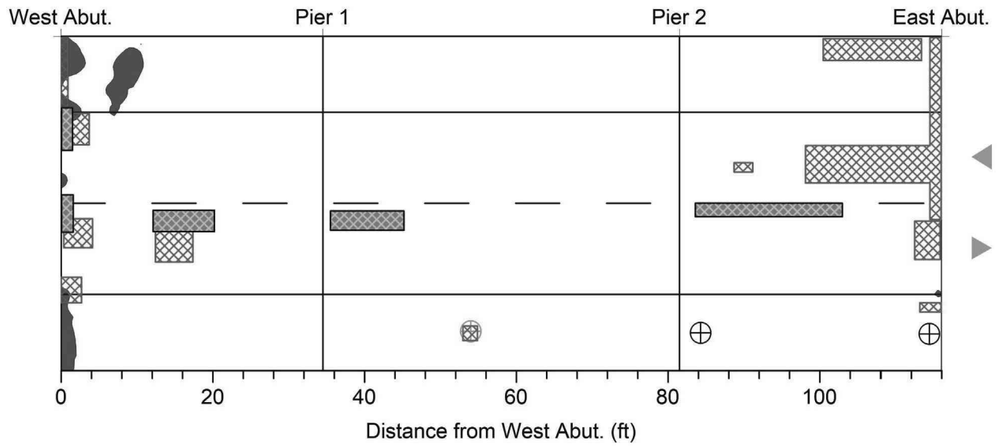
217

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STATE PROJECT NUMBER

5040-03-70



Conditions Legend		Orientation	Quantity Summary			General Information
Rebar-level deterioration detected by GPR	Delamination detected by IR		Estimate Deck Prep Items	sq. ft.	%	Bridge ID: B-62-031 STH 80 over S Fk Baraboo River
Increasing severity -->	Patching/ Spalling		Type 1	222.0	4.3	Analyzed by: SB Reviewed by: AC Completed: 10/15/19
⊕ IE (delam)	Undetectable Conditions	Direction of traffic	Type 2	57.7	1.1	**Sheet 1 of 1**
⊕ IE (no delam)	Potential Full-Depth Area		Full-Depth	97.5	1.9	

INFRASENSE

NOTES:

DECK CONDITION SURVEY PERFORMED BY INFRASENSE ON 10/15/2019.

DEFECT AREAS SHOWN ON THIS SHEET ARE FOR INFORMATION ONLY. THE FIELD ENGINEER WILL SOUND THE DECK AND MARK AREAS IN THE FIELD. RELATED QUANTITIES SHOWN ON SHEET 2 WERE INCREASED TO ACCOUNT FOR GROWTH AND VARIABILITY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-31

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY CORRE

DECK CONDITION SURVEY

SHEET 3 OF 5

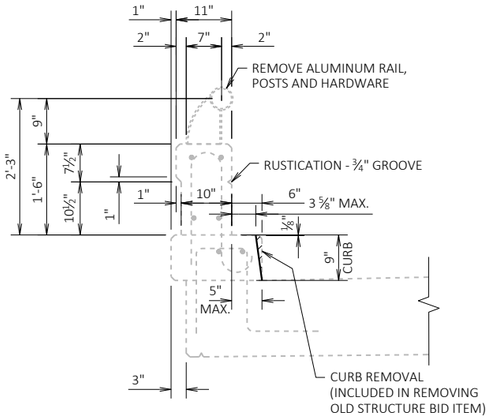
218

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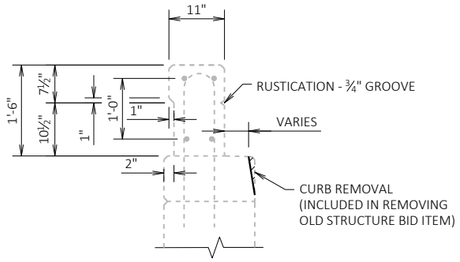
FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\503_STRUCTURES\503.3_FINAL\B-62-31\080101_GP_B-62-31.DWG PLOT DATE : 7/27/2024 12:24 PM PLOT BY : PAULETTE FENSKE

STATE PROJECT NUMBER

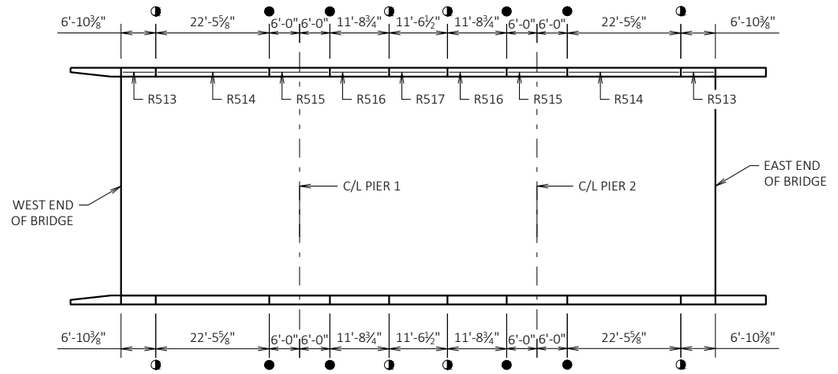
5040-03-70



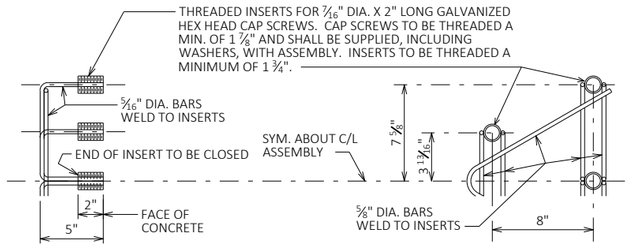
EXISTING SECTION THRU PARAPET & CURB ON BRIDGE



EXISTING SECTION THRU PARAPET & CURB ON WING



DEFLECTION JOINT SPACING



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

LEGEND

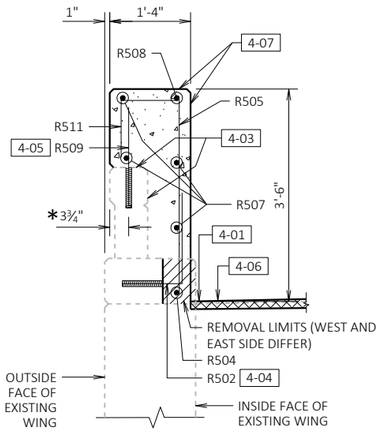
- 4-01 TOP OF OVERLAY OR APPROACH PAVEMENT.
- 4-02 REMOVAL OF EXISTING OVERLAY OR PREPARATION DECKS TYPE 1 AND 2 WHERE REQUIRED.
- 4-03 SOUND CONCRETE SURFACES TO RECEIVE "CLEANING PARAPETS SPECIAL". DETERIORATED CONCRETE SURFACES TO BE REMOVED TO SOUND CONCRETE OR TO ONE INCH BEHIND EXISTING REINFORCING STEEL, WHICHEVER DEPTH IS GREATER UNDER THE BID ITEM "REMOVING OLD STRUCTURE". SALVAGE EXISTING REINFORCING STEEL.
- 4-04 ADHESIVE ANCHORS NO. 5 BARS. EMBED 8" INTO EXISTING CONCRETE. EPOXY ANCHORED.
- 4-05 ADHESIVE ANCHORS NO. 5 BARS. EMBED 6" INTO EXISTING CONCRETE. EPOXY ANCHORED.
- 4-06 PROTECTIVE SURFACE TREATMENT APPLIED TO ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY.
- 4-07 PIGMENTED SURFACE SEALER APPLIED TO THE FRONT FACE AND TOP OF THE PARAPET.
- ● EXISTING DEFLECTION JOINT IN CURB & PARAPET
- ◑ EXISTING DEFLECTION JOINT IN PARAPET ONLY. PROPOSED JOINT AS SHOWN IN SECTION VIEW.
- * AT SECTION A-A ONLY
- REMOVAL LIMITS
- ▲ SEE SHEET 5 FOR LOCATION OF SECTIONS

NOTE:

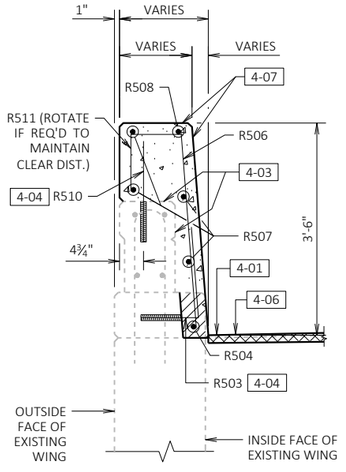
CLEAN, STRAIGHTEN AND EXTEND EXISTING BAR STEEL REINFORCEMENT A MINIMUM OF 24 BAR DIAMETERS INTO NEW CONSTRUCTION WHERE APPLICABLE. DO NOT CUT EXISTING DOWELS OR STIRRUPS THAT EXTEND INTO EXISTING WINGS OR DECK.

EXISTING DEFLECTION JOINT LOCATIONS SHALL BE MATCHED WITH THE PROPOSED WORK. DEFLECTION JOINTS SHALL CONSIST OF ⅛" ZINC OR PLASTIC PLATE CUT AS SHOWN IN SECTION C BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.

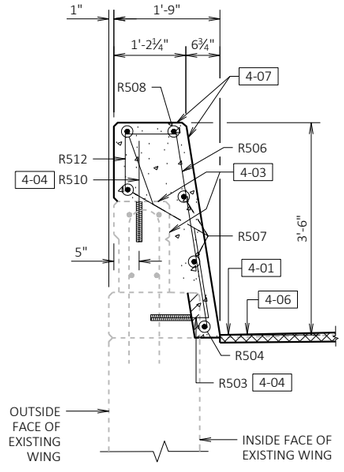
REMOVAL OF EXISTING RAILING OR PORTIONS OF EXISTING CURB OR PARAPET INCLUDED IN "REMOVING OLD STRUCTURE" ITEM.



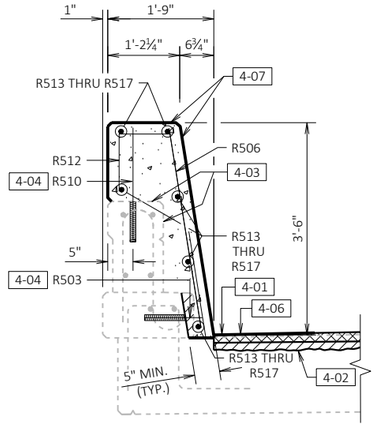
▲ SECTION A-A



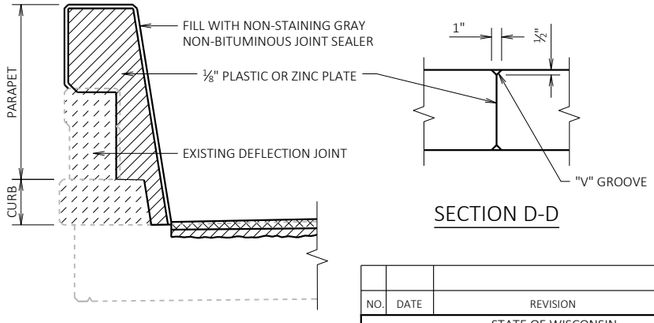
▲ SECTION B-B



▲ SECTION C-C



SECTION ON BRIDGE



SECTION AT DEFLECTION JOINT

(SHOWING DEFLECTION JOINT IN PARAPET)

SECTION D-D

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-31

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY CORRE

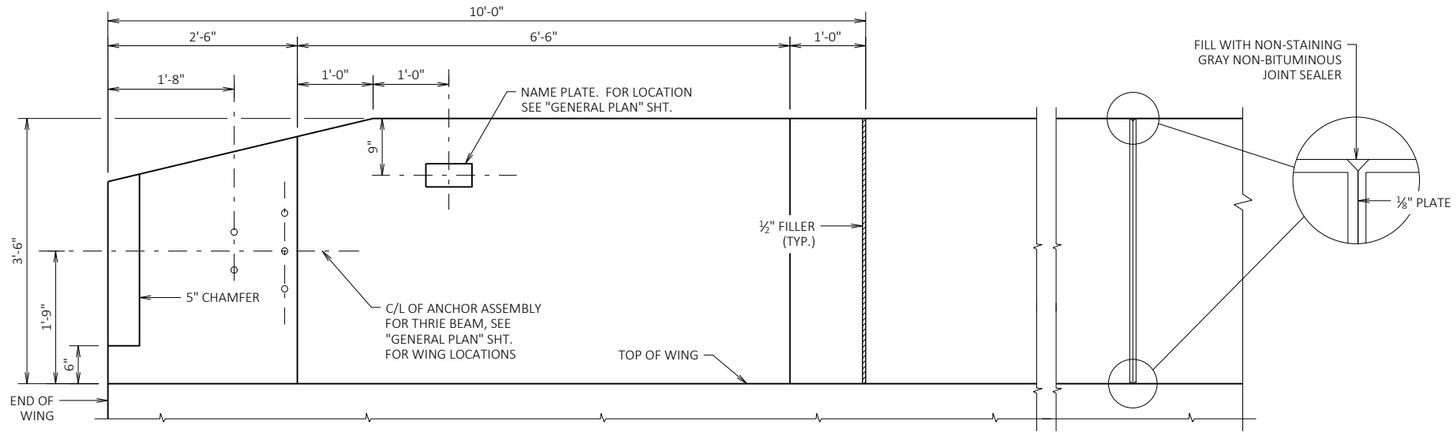
PARAPET DETAILS 1

SHEET 4 OF 5

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AT ABUTMENTS

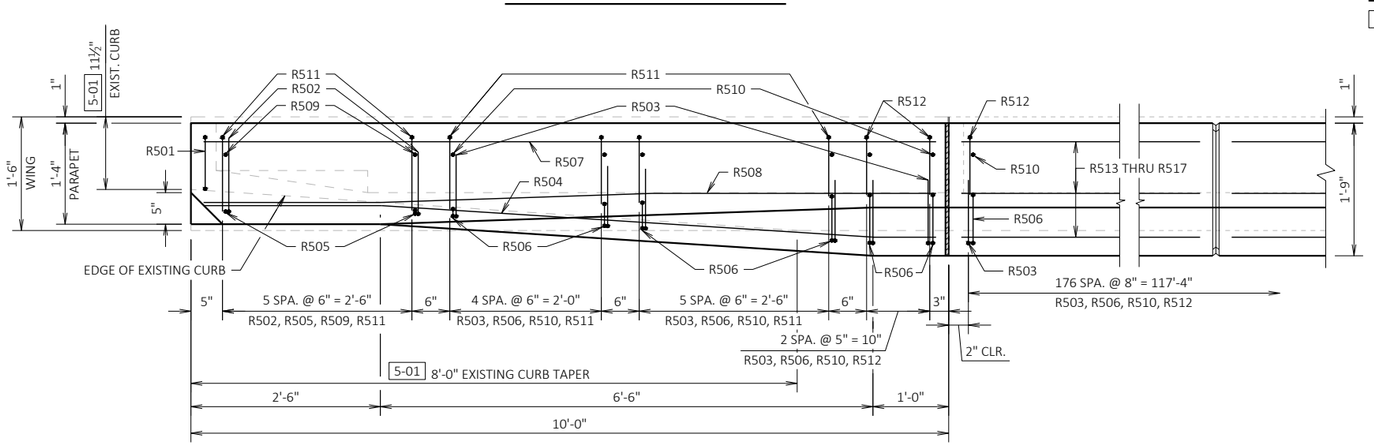
AT DEFLECTION JOINT

LEGEND & NOTES

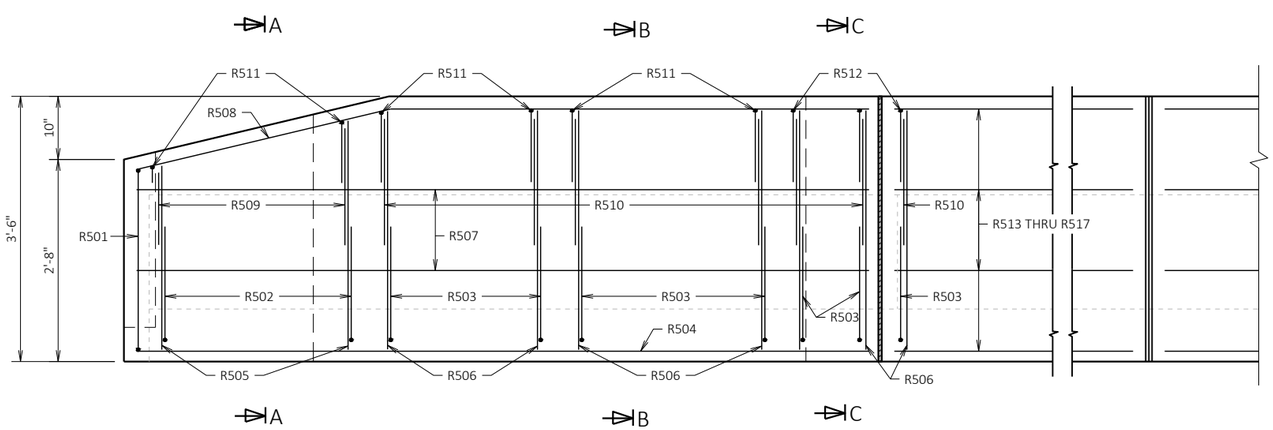
5-01 EXISTING CURB TAPER AT WEST ABUTMENT ONLY.

FOR SECTION VIEWS SEE SHEET 4.

INSIDE ELEVATION AT WINGS



PLAN



OUTSIDE ELEVATION

BILL OF BARS - PARAPETS

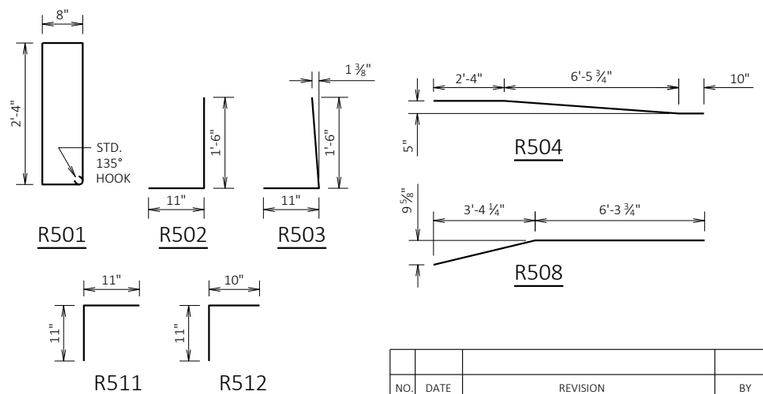
BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
COATED BARS						TOTAL WEIGHT = 5,660 LBS
R501	4	6'-8"	X		PARAPETS @ ENDS	VERT.
R502	24	2'-4"	X		PARAPETS - DOWELS IN CURB	VERT.
R503	410	2'-4"	X		PARAPETS - DOWELS IN CURB	VERT.
R504	4	9'-8"	X		PARAPETS @ TOE	HORIZ.
R505	24	2'-9"		X	PARAPETS @ FRONT	VERT.
R506	410	3'-2"			PARAPETS @ FRONT	VERT.
R507	16	9'-8"			PARAPETS	HORIZ.
R508	4	9'-9"	X		PARAPETS @ TOP	HORIZ.
R509	24	1'-3"		X	PARAPETS @ TOP OF EXISTING	VERT.
R510	402	1'-8"			PARAPETS @ TOP OF EXISTING	VERT.
R511	68	1'-9"	X		PARAPETS @ TOP	HORIZ.
R512	358	1'-8"	X		PARAPETS @ TOP	HORIZ.
R513	24	6'-6"			PARAPETS	HORIZ.
R514	24	22'-1"			PARAPETS	HORIZ.
R515	24	11'-8"			PARAPETS	HORIZ.
R516	24	11'-4"			PARAPETS	HORIZ.
R517	12	11'-2"			PARAPETS	HORIZ.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
R505	4 SERIES OF 6	2'-5" TO 3'-0"
R509	4 SERIES OF 6	0'-11" TO 1'-6"

BUNDLE AND TAG EACH SERIES SEPARATELY.



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-62-31

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY CORRE

PARAPET DETAILS 2

SHEET 5 OF 5

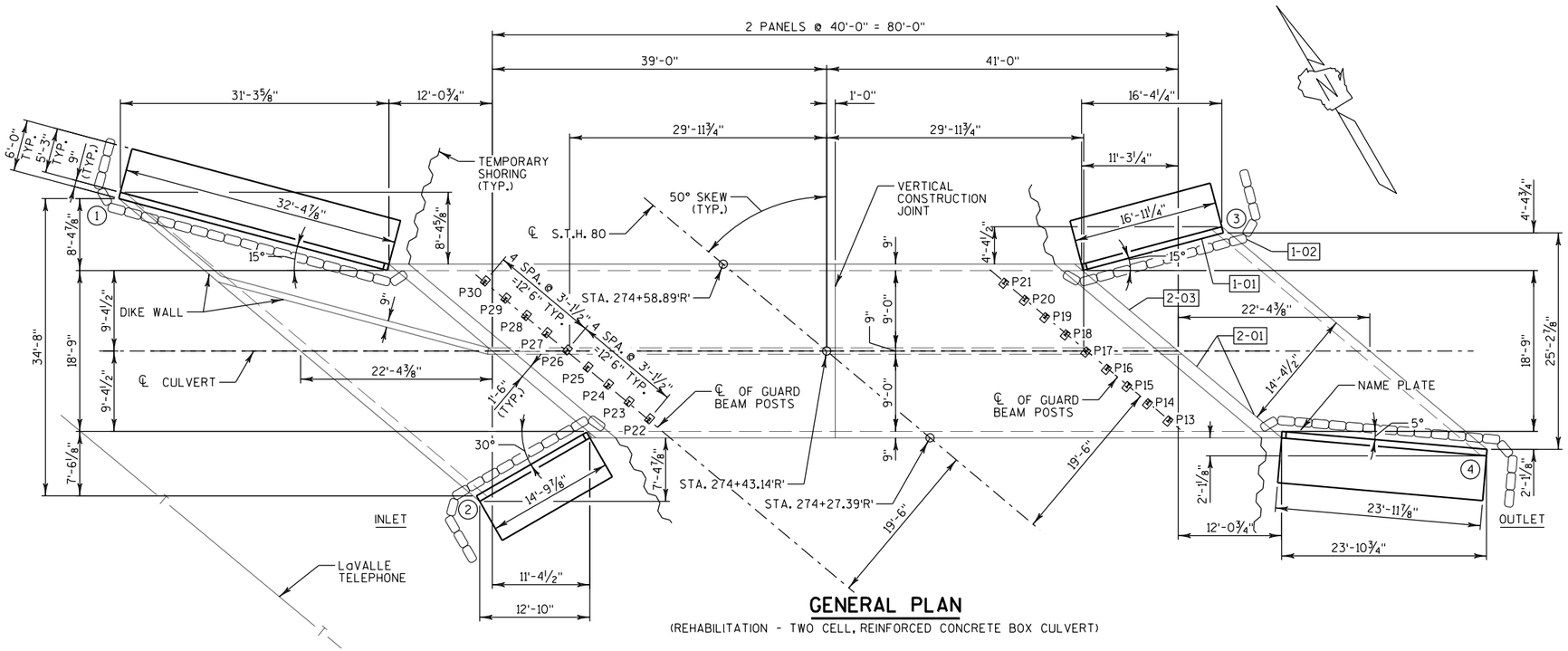
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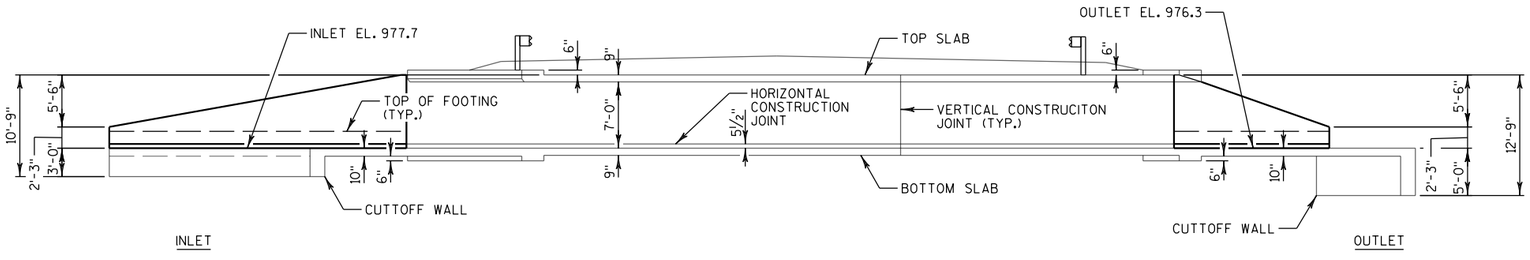
STATE PROJECT NUMBER

5040-03-70



GENERAL PLAN

(REHABILITATION - TWO CELL, REINFORCED CONCRETE BOX CULVERT)



SECTION ALONG ℄ OF STRUCTURE

(LOOKING UP STATION)

DESIGN DATA

LIVE LOAD:
- DESIGN LOADING — HS - 20 (FROM HSI)
- INVENTORY RATING — HS - 20 (FROM HSI)
- OPERATIONAL RATING — HS - 33 (FROM HSI)
- WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) — 190 KIPS (FROM HSI)

EARTH LOAD:
- DESIGNED FOR — 2.0' OF FILL (FROM HSI)

MATERIAL PROPERTIES

- CONCRETE MASONRY — f'c = 3,500 PSI
- HIGH STRENGTH BAR STEEL REINFORCEMENT — fy = 60,000 PSI

FOUNDATION DATA

WINGWALLS TO BE SUPPORTED BY UNDERLYING NATIVE SOILS WITH A REQUIRED BEARING RESISTANCE OF 3,000 PSF. A GEOTECHNICAL ENGINEER TO DETERMINE BEARING RESISTANCE BY VISUAL INSPECTION PRIOR TO CONSTRUCTION OF THE WINGWALLS.

TRAFFIC DATA

S.T.H. 80

ADT (2024) = 1850
ADT (2044) = 1960
RDS = 60 MPH

SCOPE OF WORK B-52-158

1. REPLACE ALL FOUR WINGS.
2. PERFORM CONCRETE SURFACE REPAIR AT LOCATIONS DESIGNATED BY ENGINEER.

LEGEND

(X) DENOTES WING NUMBER.

PXX DENOTES POST NUMBER. SEE SHEET 7 AND ROADWAY PLANS.

[X-XX] SEE SHEET 2 FOR ADDITIONAL CALLOUTS.

[1-01] REMOVE EXISTING WING DOWN TO EXISTING HORIZ. CONST. JT. SALVAGE EXISTING VERTICAL REINFORCEMENT AND EXTEND 1'-0" MIN. INTO NEW WORK, TYP. ALL 4 WINGS.

[1-02] SANDBAGS OR OTHER TECHNIQUE TO DIVERT WATER FROM WING REPLACEMENT, INCLUDED IN BID ITEM "COFFERDAMS B-52-158" TYP. ALL 4 WINGS.

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. NOTES, QUANTITIES AND MISC. DETAILS
3. WING 1 DETAILS
4. WING 2 DETAILS
5. WING 3 DETAILS
6. WING 4 DETAILS
7. POST ANCHORAGE DETAILS



BUREAU OF STRUCTURES CONTACT:
AARON BONK, P.E. (608) 261-0261

CONSULTANT CONTACT:
ERIC PRICE, P.E. (608) 826-6146

NO.	DATE	REVISION	BY

CORRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 08/01/24
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-52-158

S.T.H. 80 OVER MELANCTHON CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
RICHLAND	HENRIETTA

DESIGN SPEC. REHABILITATION N/A

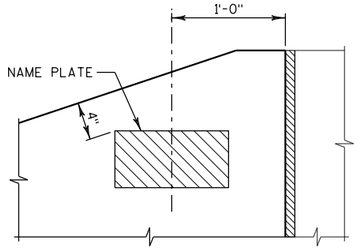
DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BH	ETP	TKB	BH

GENERAL PLAN AND ELEVATION

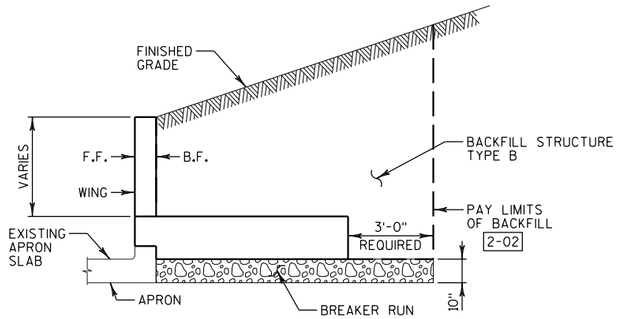
SHEET 1 OF 7

STATE PROJECT NUMBER

5040-03-70



NAME PLATE
LOCATION WING 4



TYPICAL SECTION
THRU WING WALL

GENERAL NOTES

1. DRAWINGS SHALL NOT BE SCALED.
2. DIMENSIONS AND ELEVATIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS FROM 1994.
3. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
4. THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
5. BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.
6. THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES CULVERTS B-52-158 SHALL BE THE EXISTING GROUNDLINE.
7. THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE B" REQUIRED BEHIND WING FOOTINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.
8. ALL CONCRETE REMOVAL SHALL BE DEFINED BY A ½-INCH SAW CUT.
9. CONCRETE SURFACE REPAIR AS DIRECTED BY THE FIELD ENGINEER. QUANTITIES SHOWN ARE APPROXIMATE.
10. PLACE 18" (MIN.) WIDE SHEET OF "RUBBERIZED MEMBRANE WATERPROOFING" ON VERTICAL AND HORIZONTAL WING CONSTRUCTION JOINTS.
11. THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 504.3.4 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOWN ORIGINAL CONSTRUCTION YEAR 1994. WORK SHALL BE INCLUDED IN THE BID ITEM "CONCRETE MASONRY CULVERTS".
12. SEE ROADWAY PLANS FOR CONSTRUCTION STAGING DETAILS.

LEGEND

2-01 CONCRETE SURFACE REPAIR QUANTITIES ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE THE FIELD IDENTIFICATION AND DETERMINATION OF ALL REPAIR LOCATIONS WITH THE ENGINEER.

2-02 BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

2-03 DEBRIS CONTAINMENT SHALL ONLY BE USED FOR CONCRETE SURFACE REPAIRS OVER THE WATERWAY.

TOTAL ESTIMATED QUANTITIES

	BID ITEM NUMBER	BID ITEM	UNIT	TOTALS
	203.0270.02	REMOVING STRUCTURE OVER WATERWAY DEBRIS CAPTURE B-52-158	EACH	1
2-03	203.0335.06	DEBRIS CONTAINMENT OVER WATERWAY B-52-158	EACH	1
	206.2001.02	EXCAVATION FOR STRUCTURES CULVERTS B-52-158	EACH	1
	206.5001.02	COFFERDAMS B-52-158	EACH	1
	210.2500	BACKFILL STRUCTURE TYPE B	TON	205
	311.0110	BREAKER RUN	TON	45
	504.0100	CONCRETE MASONRY CULVERTS	CY	46
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	3,500
2-01	509.1500	CONCRETE SURFACE REPAIR	SF	50
	511.1200.02	TEMPORARY SHORING B-52-158	SF	630
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	20
		NON-BID ITEMS		
		FILLER	SIZE	3/4"

ALL ITEMS ARE CATEGORY 0040

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-158

DRAWN BY TKB | PLANS CK'D. BH

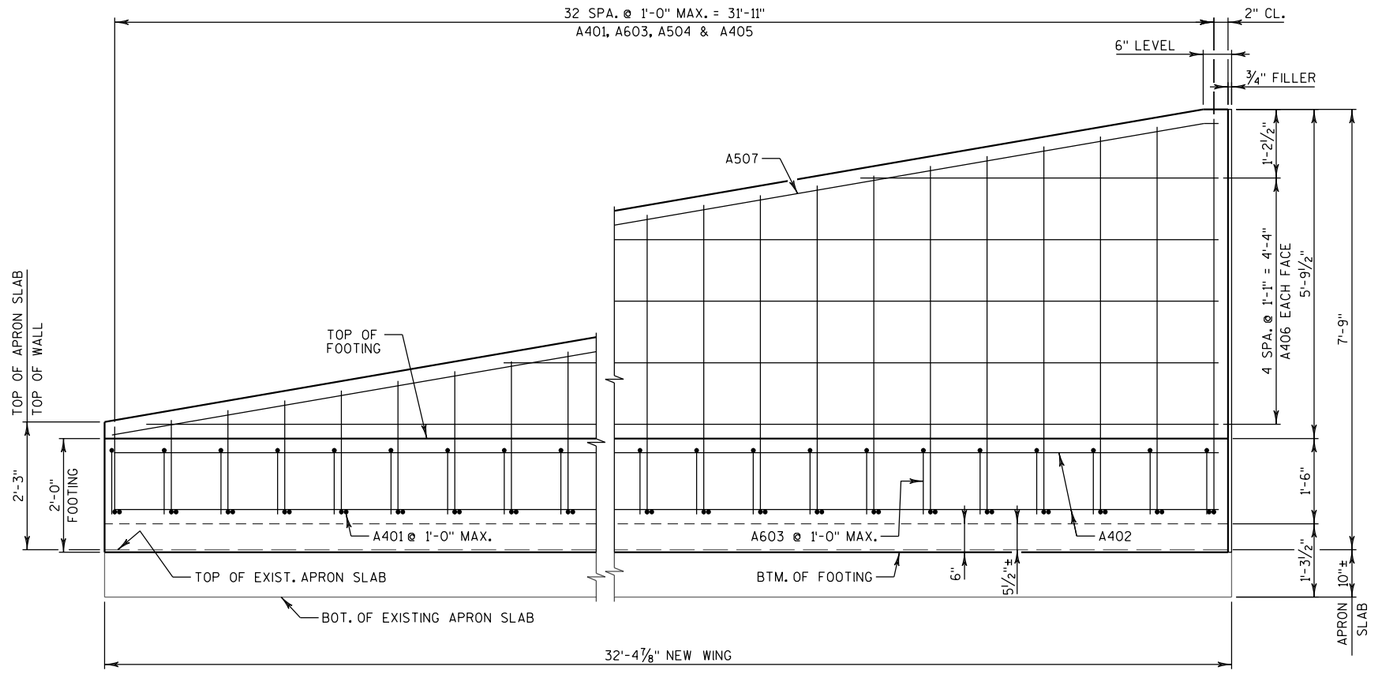
NOTES, QUANTITIES AND MISC. DETAILS

SHEET 2 OF 7

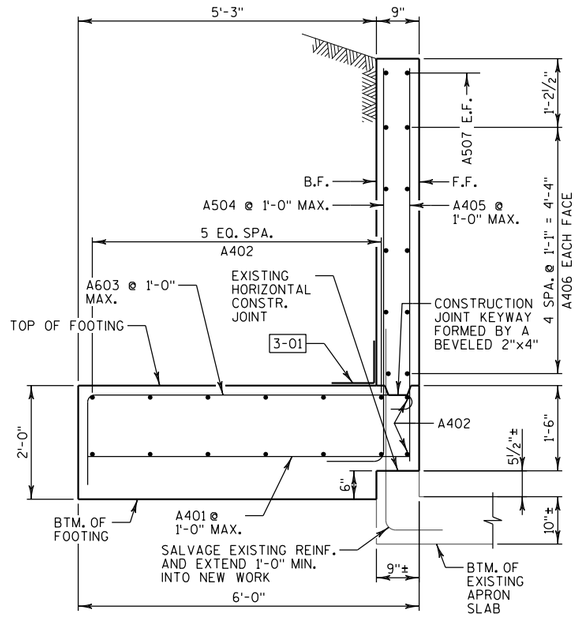
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PLOT SCALE : 1:2

STATE PROJECT NUMBER

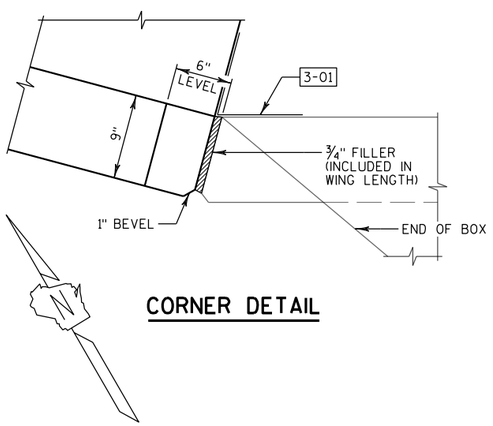
5040-03-70



ELEVATION WING 1



SECTION THRU WING 1



CORNER DETAIL

BILL OF BARS WING 1

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
COATED BARS					TOTAL WEIGHT = 1,270 LBS	
A401	33	5'-8"			FOOTING - BOTTOM	TRANS.
A402	14	32'-0"			FOOTING	LONG.
A603	33	7'-9"	X		FOOTING - TOP	TRANS.
A504	33	4'-10"	X	X	WING 1 - B.F.	VERT.
A405	33	4'-2"		X	WING 1 - F.F.	VERT.
A406	10	18'-10"		X	WING 1 - BOTH FACES	HORIZ.
A507	2	32'-6"	X		WING 1 - TOP	HORIZ.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR

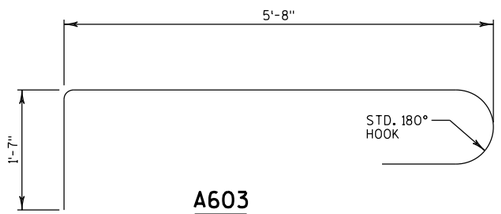
BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
A504	1 SERIES OF 33	2'-1" TO 7'-7"
A405	1 SERIES OF 33	1'-5" TO 6'-11"
A406	2 SERIES OF 5	6'-4" TO 31'-3"

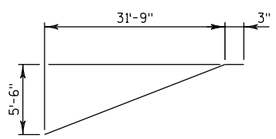
BUNDLE & TAG EACH SERIES SEPARATELY



A504



A603



A507

LEGEND

3-01 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL & VERTICAL JOINT AT BACK FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-158

DRAWN BY TKB | PLANS CK'D. BH

WING 1 DETAILS

SHEET 3 OF 7

223

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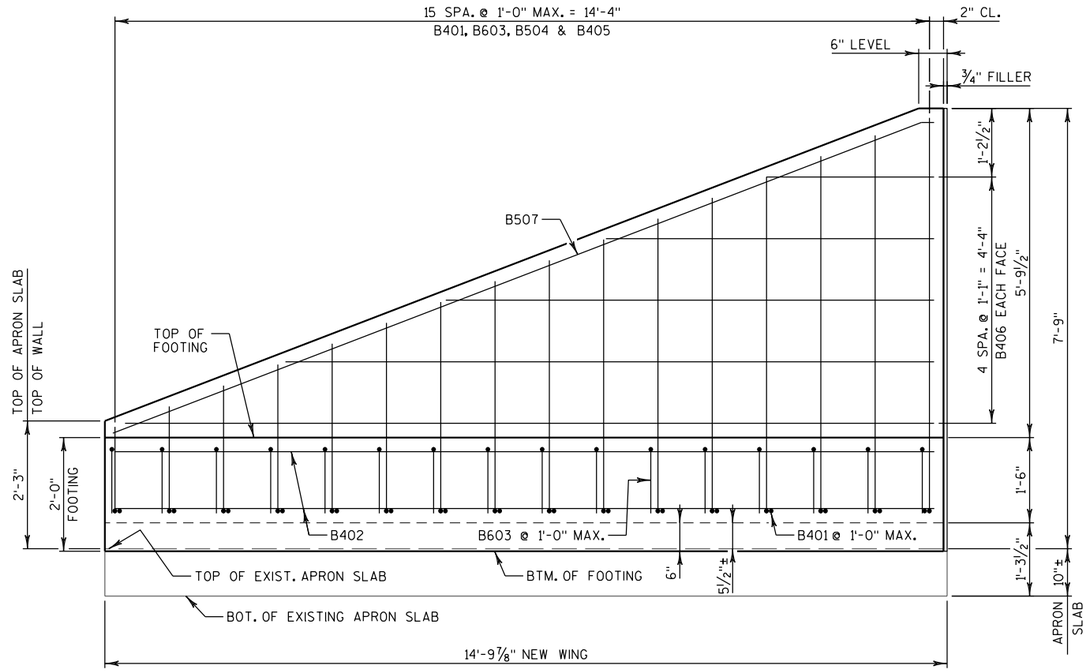
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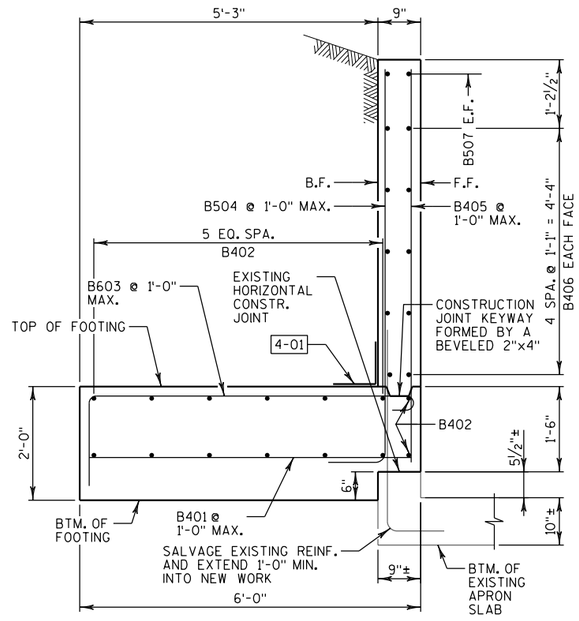
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STATE PROJECT NUMBER

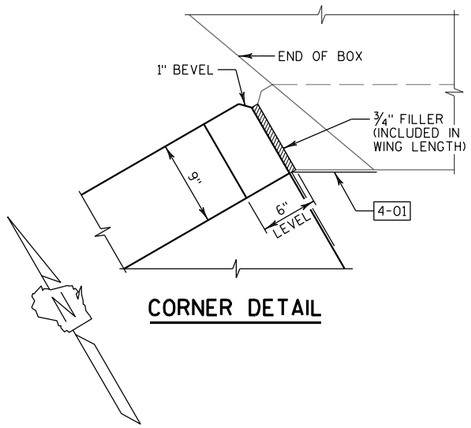
5040-03-70



ELEVATION WING 2



SECTION THRU WING 2



CORNER DETAIL

BILL OF BARS WING 2

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
COATED BARS					TOTAL WEIGHT = 600 LBS	
B401	16	5'-8"			FOOTING - BOTTOM	TRANS.
B402	14	14'-5"			FOOTING	LONG.
B603	16	7'-9"	X		FOOTING - TOP	TRANS.
B504	16	4'-11"	X	X	WING 2 - B.F.	VERT.
B405	16	4'-3"		X	WING 2 - F.F.	VERT.
B406	10	8'-7"		X	WING 2 - BOTH FACES	HORIZ.
B507	2	15'-6"	X		WING 2 - TOP	HORIZ.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR

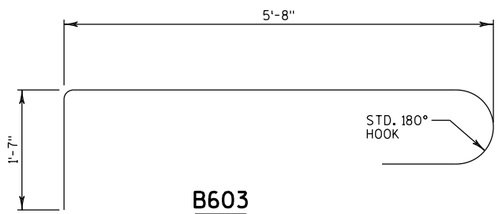
BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
B504	1 SERIES OF 16	2'-2" TO 7'-7"
B405	1 SERIES OF 16	1'-6" TO 6'-11"
B406	2 SERIES OF 5	2'-11" TO 14'-2"

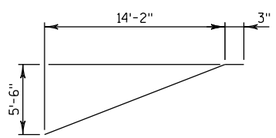
BUNDLE & TAG EACH SERIES SEPARATELY



B504



B603



B507

LEGEND

4-01 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL & VERTICAL JOINT AT BACK FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-158

DRAWN BY TKB | PLANS CK'D. BH

WING 2 DETAILS

SHEET 4 OF 7

224

8

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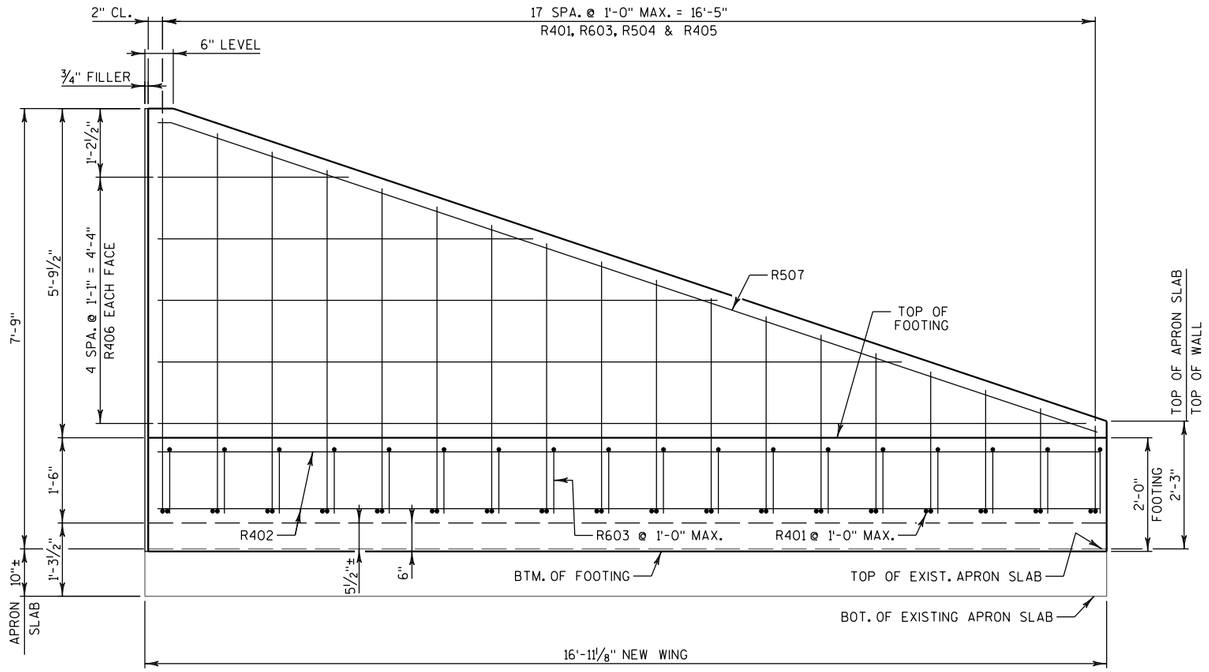
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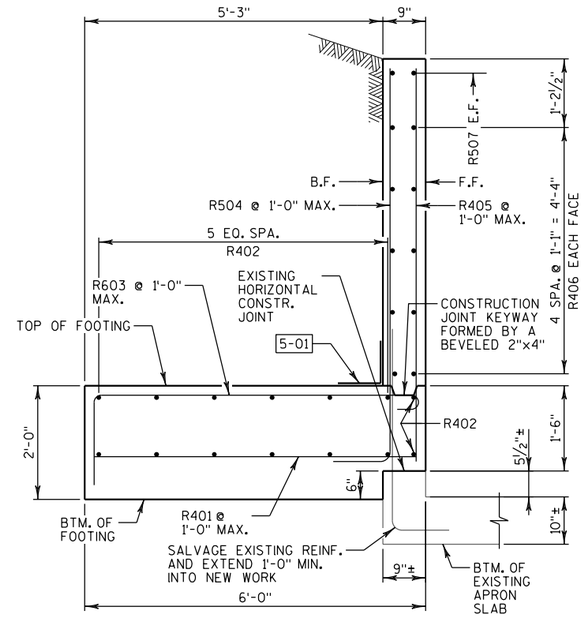
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STATE PROJECT NUMBER

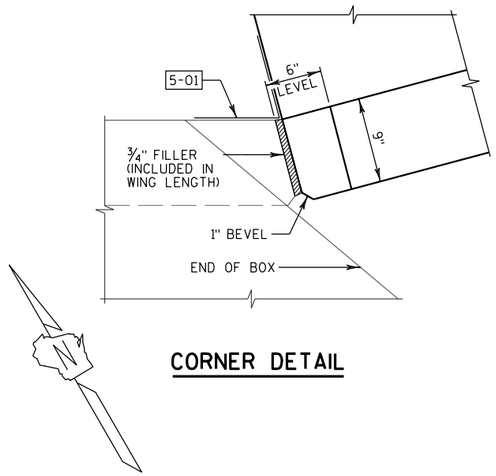
5040-03-70



ELEVATION WING 3



SECTION THRU WING 3



CORNER DETAIL

BILL OF BARS WINGS 3

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
COATED BARS					TOTAL WEIGHT = 680 LBS	
R401	18	5'-8"			FOOTING - BOTTOM	TRANS.
R402	14	16'-7"			FOOTING	LONG.
R603	18	7'-9"	X		FOOTING - TOP	TRANS.
R504	18	4'-11"	X	X	WING 3 - B.F.	VERT.
R405	18	4'-3"		X	WING 3 - F.F.	VERT.
R406	10	9'-10"		X	WING 3 - BOTH FACES	HORIZ.
R507	2	17'-6"	X		WING 3 - TOP	HORIZ.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR

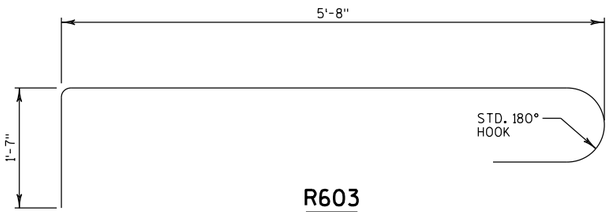
BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
R504	1 SERIES OF 18	2'-2" TO 7'-7"
R405	1 SERIES OF 18	1'-6" TO 6'-11"
R406	2 SERIES OF 5	3'-5" TO 16'-3"

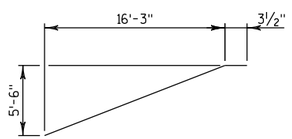
BUNDLE & TAG EACH SERIES SEPARATELY



R504



R603



R507

LEGEND

5-01 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL & VERTICAL JOINT AT BACK FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-158

DRAWN BY TKB | PLANS CK'D. BH

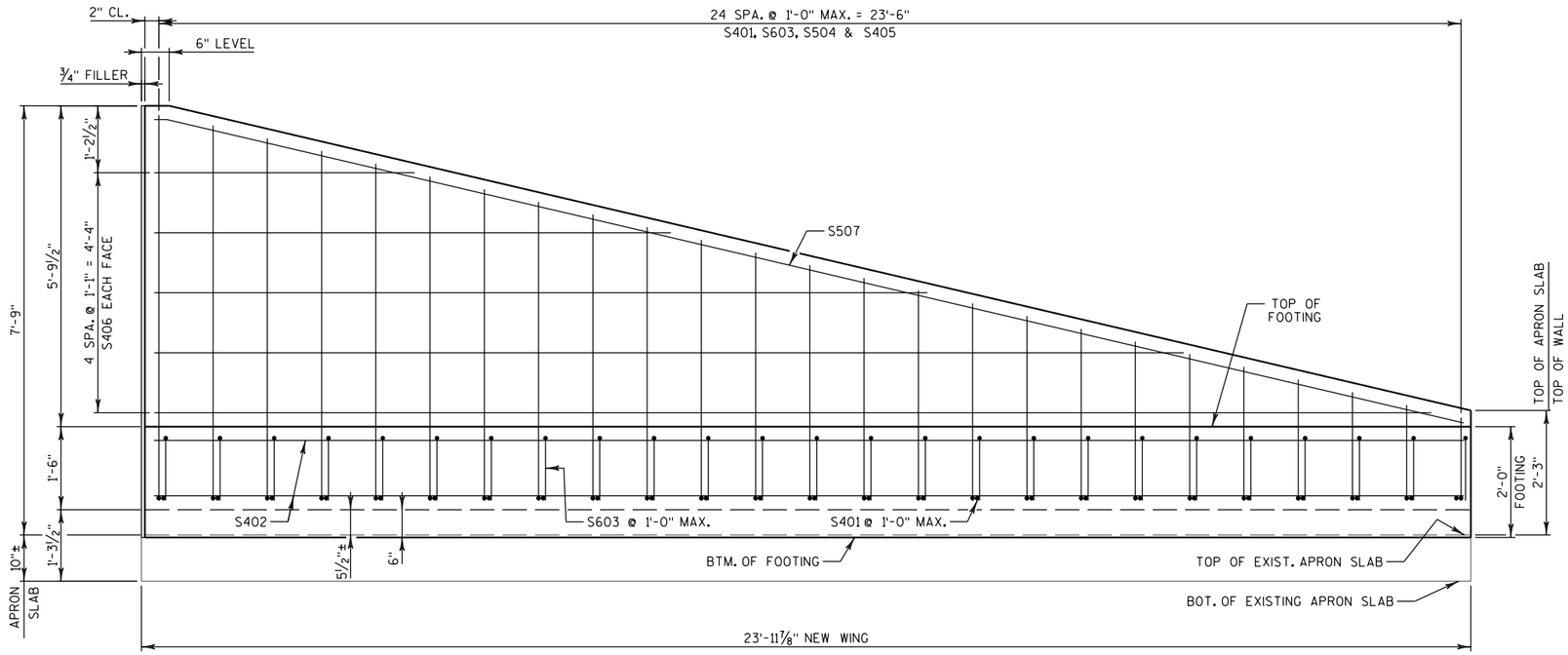
WING 3 DETAILS

SHEET 5 OF 7

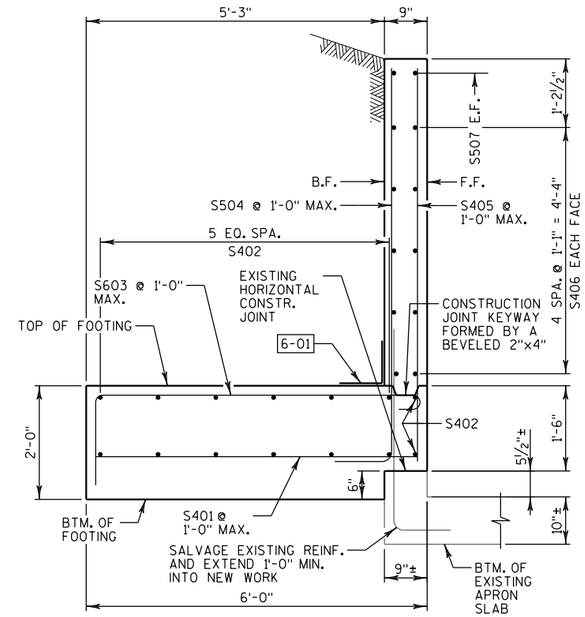
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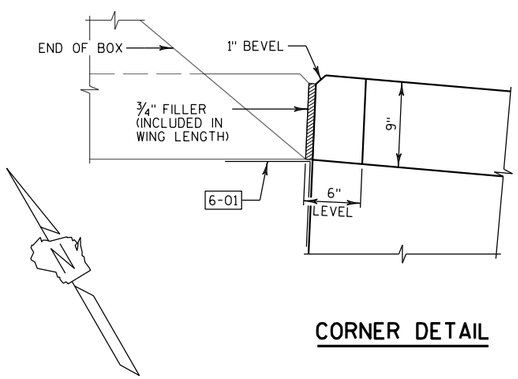
5040-03-70



ELEVATION WING 4



SECTION THRU WING 4



CORNER DETAIL

BILL OF BARS WINGS 4

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
COATED BARS					TOTAL WEIGHT = 950 LBS	
S401	25	5'-8"			FOOTING - BOTTOM	TRANS.
S402	14	23'-7"			FOOTING	LONG.
S603	25	7'-9"	X		FOOTING - TOP	TRANS.
S504	25	4'-10"	X	X	WING 3 - B.F.	VERT.
S405	25	4'-2"		X	WING 3 - F.F.	VERT.
S406	10	13'-11"		X	WING 3 - BOTH FACES	HORIZ.
S507	2	24'-3"	X		WING 3 - TOP	HORIZ.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR

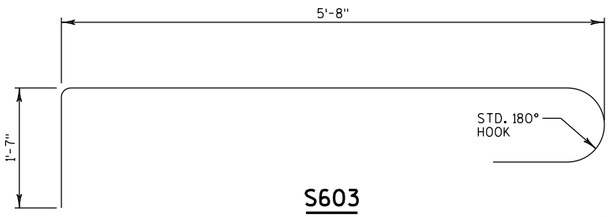
BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
S504	1 SERIES OF 25	2'-1" TO 7'-7"
S405	1 SERIES OF 25	1'-5" TO 6'-11"
S406	2 SERIES OF 5	4'-9" TO 23'-1"

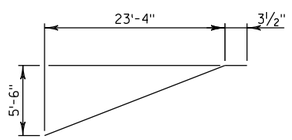
BUNDLE & TAG EACH SERIES SEPARATELY



S504



S603



S507

LEGEND

6-01 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL & VERTICAL JOINT AT BACK FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-158

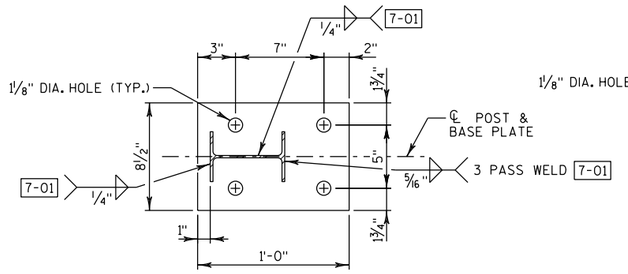
DRAWN BY TKB | PLANS CK'D. BH

WING 4 DETAILS

SHEET 6 OF 7

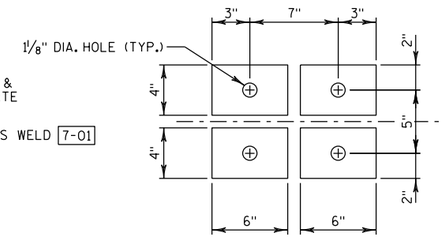
STATE PROJECT NUMBER

5040-03-70



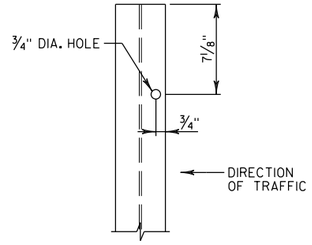
SECTION A-A

POST & BASE PLATE



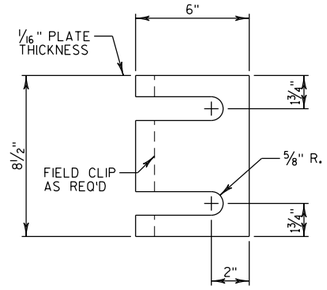
SECTION B-B

(4)-BOTTOM PLATES



SECTION C-C

HOLE IN POST FLANGE ON APPROACHING TRAFFIC SIDE



STEEL SHIM DETAIL

(4 PER POST)

NOTES

DETAILS SHOWN FOR POSTS, PLATES, ANCHORAGE SYSTEM AND INSTALLATION, BLOCKS, AND GUARDRAIL ARE NOT PART OF THE STRUCTURE CONTRACT, BUT ARE BID PER THE ROADWAY DESIGN PLANS.

POST BASE PLATES (AND BOTTOM PLATES IF USED) SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

CUT BOTTOM OF POST SO THAT POST WILL BE VERTICAL WHEN POST ASSEMBLY IS PLACED ON TOP OF THE CULVERT. ALONG THE ROADWAY THE POST WILL BE NORMAL TO GRADE LINE. HEX BOLTS AND THREADED RODS ARE TO BE PLACED PERPENDICULAR TO THE BASE PLATE (AND BOTTOM PLATE IF USED).

POST, BASE PLATE (AND BOTTOM PLATE IF USED), AND SHIMS SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING, ALL STEEL POSTS AND PLATES SHALL BE GIVEN A NO. 6 COMMERCIAL BLAST CLEANING BY SSPC SPECS.

ALL MATERIAL USED IN POSTS AND PLATES SHALL BE MADE FROM MATERIAL CONFORMING TO ASTM DESIGNATION A709 GRADE 50 OR 50S.

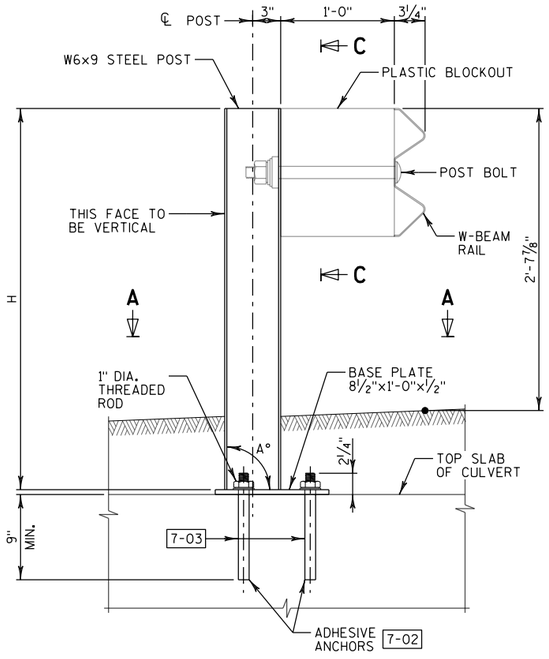
HEX BOLTS, THREADED RODS, HEX NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F1554 GRADE 36, AND SHALL BE GALVANIZED. RODS ARE TO BE FULLY THREADED AND BOLTS TO BE THREADED 3". CHAMFER TOP OF BOLTS AND RODS BEFORE THREADING.

STEEL SHIMS MAY BE USED BETWEEN PLATES AND SLAB WHERE REQUIRED FOR ALIGNMENT.

7-01 WELDING IS TO BE COMPLETED USING THE GAS-METAL ARC WELDING (GMAW) PROCESS WITH ER70S-3 WELDING WIRE AND ARGON-OXYGEN OR CO2 COVER GAS.

7-02 ADHESIVE ANCHORS (1-INCH DIA. THREADED ROD). EMBED IN CONCRETE AS DETAILED. CHARACTERISTIC BOND STRENGTH SMALL MEET OR EXCEED 1305 PSIFOR UNCRACKED CONCRETE. SEE STANDARD SPECIFICATION 502.3.14 AN DAPPLY TO THREADED RODS.

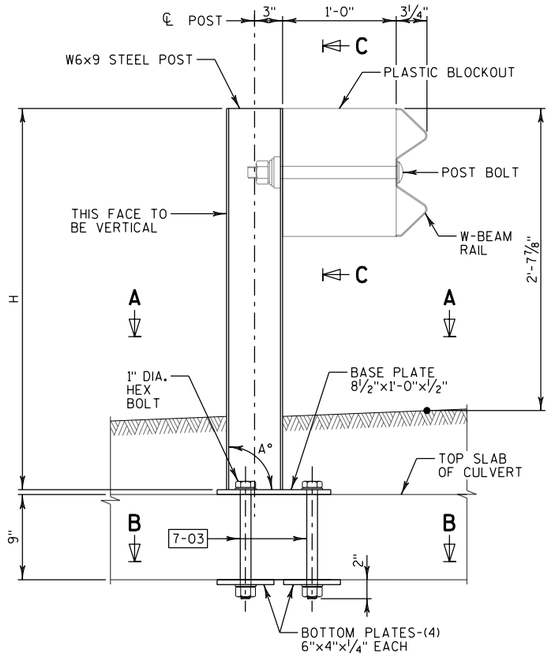
7-03 THRU-BOLTS (1-INCH DIA. HEX BOLT). DRILL THRU TOP SLAB WHEN THE CONCRETE HAS ACHIEVED ITS DESIGN STRENGTH (f'c).



ELEVATION

GUARDRAIL POST ANCHORS TYPE 1

(REQUIRED AT POSTS 17 & 26 ONLY)



ELEVATION

GUARDRAIL POST ANCHORS TYPE 2

(REQUIRED AT ALL POSTS UNLESS OTHERWISE NOTED)

ANCHOR POST TABLE

POST NO.	STATION	OFFSET	A	H
13	274+07.3 'R'	19.50 RT	88°26'	4.81'
14	274+10.4 'R'	19.50 RT	88°26'	4.86'
15	274+13.5 'R'	19.50 RT	88°26'	4.91'
16	274+16.6 'R'	19.50 RT	88°26'	4.95'
17	274+19.8 'R'	19.50 RT	88°26'	5.00'
18	274+22.9 'R'	19.50 RT	88°26'	5.04'
19	274+26.0 'R'	19.50 RT	88°26'	5.09'
20	274+29.1 'R'	19.50 RT	88°26'	5.13'
21	274+32.3 'R'	19.50 RT	88°26'	5.17'
22	274+54.0 'R'	19.50 LT	91°33'	4.36'
23	274+57.1 'R'	19.50 LT	91°33'	4.41'
24	274+60.3 'R'	19.50 LT	91°33'	4.46'
25	274+63.4 'R'	19.50 LT	91°33'	4.51'
26	274+66.5 'R'	19.50 LT	91°33'	4.57'
27	274+69.6 'R'	19.50 LT	91°33'	4.64'
28	274+72.8 'R'	19.50 LT	91°33'	4.69'
29	274+75.9 'R'	19.50 LT	91°33'	4.75'
30	274+79.0 'R'	19.50 LT	91°33'	4.81'

OFFSET MEASURED TO C/L OF W6X9 POST

SEE SHEET 1 OR ROADWAY PLANS FOR POST LOCATIONS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-158

DRAWN BY TKB | PLANS CK'D. EP

POST ANCHORAGE DETAILS

SHEET 7 OF 7

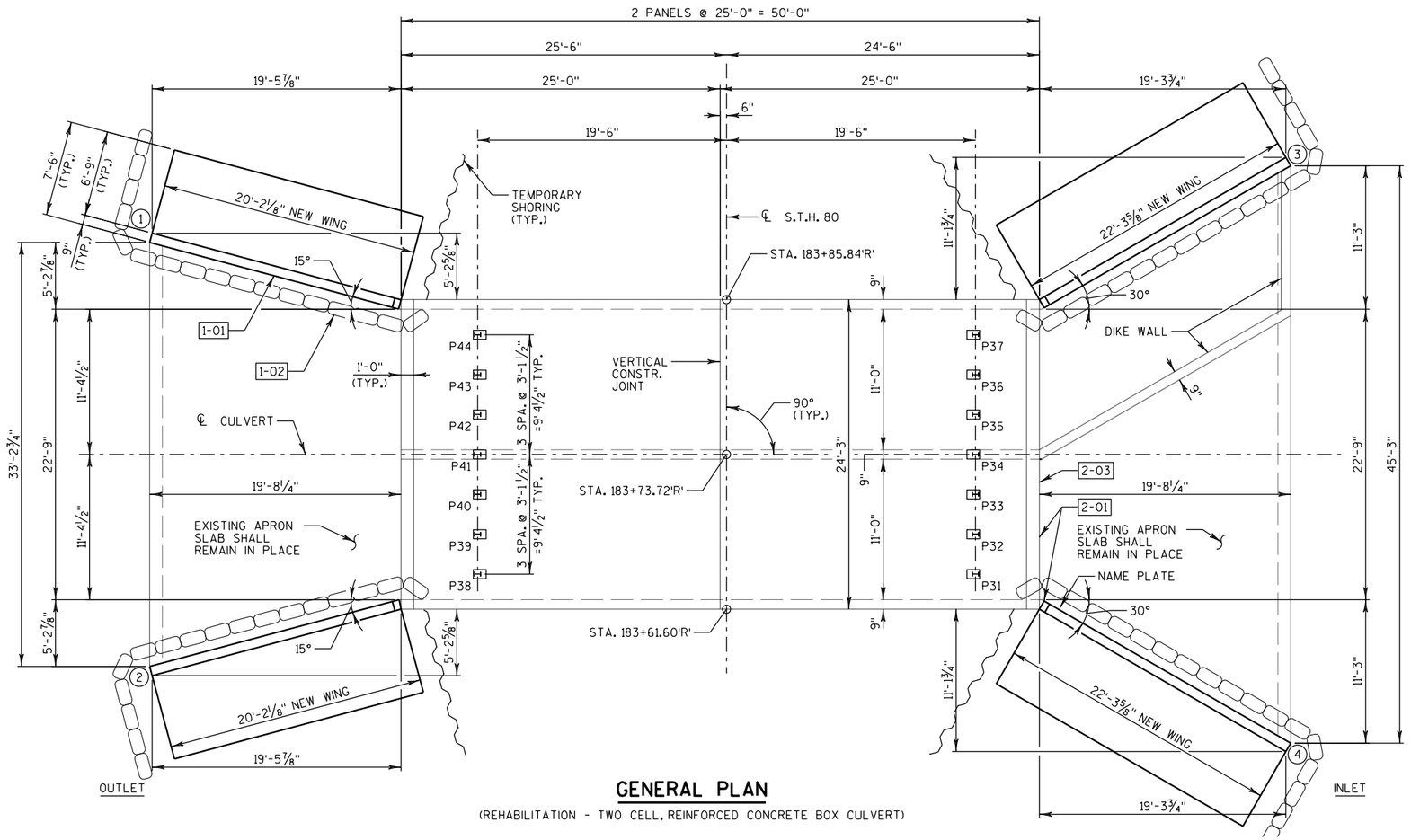
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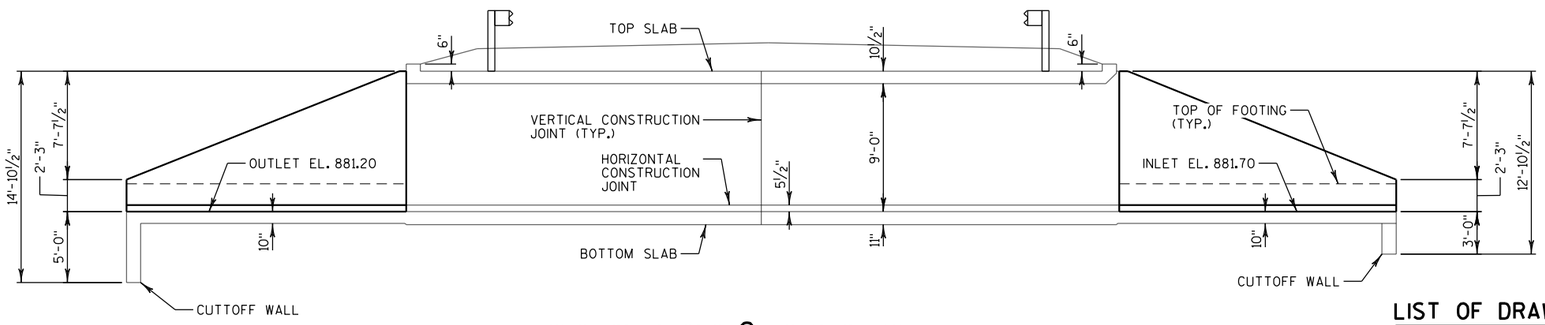
STATE PROJECT NUMBER

5040-03-70



GENERAL PLAN

(REHABILITATION - TWO CELL, REINFORCED CONCRETE BOX CULVERT)



SECTION ALONG ℄ STRUCTURE

(LOOKING UP STATION)

DESIGN DATA

LIVE LOAD:
- DESIGN LOADING — HS - 20 (FROM HSI)
- INVENTORY RATING — HS - 20 (FROM HSI)
- OPERATIONAL RATING — HS - 33 (FROM HSI)
- WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) — 190 KIPS (FROM HSI)

EARTH LOAD:
- DESIGNED FOR — 2.0' OF FILL (FROM HSI)

MATERIAL PROPERTIES

- CONCRETE MASONRY — f'c = 3,500 PSI
- HIGH STRENGTH BAR STEEL REINFORCEMENT — fy = 60,000 PSI

FOUNDATION DATA

WINGWALLS TO BE SUPPORTED BY UNDERLYING NATIVE SOILS WITH A REQUIRED BEARING RESISTANCE OF 3,500 PSF. A GEOTECHNICAL ENGINEER TO DETERMINE BEARING RESISTANCE BY VISUAL INSPECTION PRIOR TO CONSTRUCTION OF THE WINGWALLS.

TRAFFIC DATA

S.T.H. 80

ADT (2024) = 1850
ADT (2044) = 1960
RDS = 60 MPH

SCOPE OF WORK B-52-153

1. REPLACE ALL FOUR WINGS.
2. PERFORM CONCRETE SURFACE REPAIR AT LOCATIONS DESIGNATED BY ENGINEER.

LEGEND

- (X) DENOTES WING NUMBER.
- PXX DENOTES POST NUMBER. SEE SHEET 5 AND ROADWAY PLANS.
- [X-XX] SEE SHEET 2 FOR ADDITIONAL CALLOUTS.
- [1-01] REMOVE EXISTING WING DOWN TO EXISTING HORIZ. CONST. JT. SALVAGE EXISTING VERTICAL REINFORCEMENT AND EXTEND 1'-0" MIN. INTO NEW WORK, TYP. ALL 4 WINGS.
- [1-02] SANDBAGS OR OTHER TECHNIQUE TO DIVERT WATER FROM WING REPLACEMENT, INCLUDED IN BID ITEM "COFFERDAMS B-52-153" TYP. ALL 4 WINGS.

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. NOTES, QUANTITIES AND MISC. DETAILS
3. OUTLET WING DETAILS
4. INLET WING DETAILS
5. POST ANCHORAGE DETAILS

WISCONSIN
ERIC T. PRICE
E-39027
MADISON
WI
PROFESSIONAL ENGINEER

July 30, 2024

NO.	DATE	REVISION	BY

CORRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 08/01/24
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-52-153

S.T.H. 80 OVER MELANCTHON CREEK

COUNTY: RICHLAND
TOWN/~~CITY/VILLAGE~~: HENRIETTA

DESIGN SPEC.: REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BH	ETP	TKB	BH

GENERAL PLAN AND ELEVATION

SHEET 1 OF 5

228

BUREAU OF STRUCTURES CONTACT:
AARON BONK P.E. (608) 261-0261

CONSULTANT CONTACT:
ERIC PRICE, P.E. (608) 826-6146

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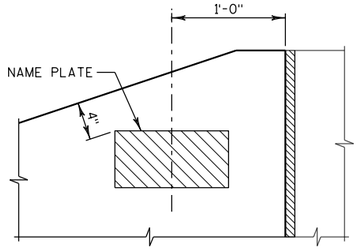
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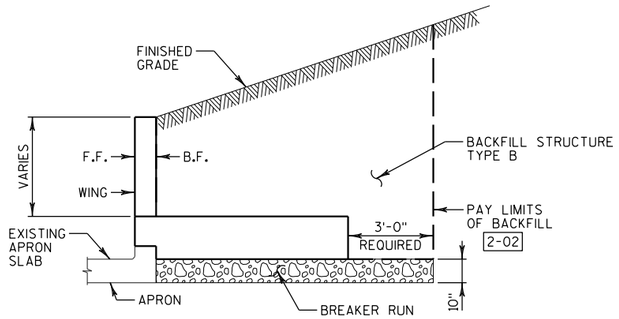
PLOT SCALE : 1:2

STATE PROJECT NUMBER

5040-03-70



NAME PLATE
LOCATION WING 4



TYPICAL SECTION
THRU WING WALL

GENERAL NOTES

1. DRAWINGS SHALL NOT BE SCALED.
2. DIMENSIONS AND ELEVATIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS FROM 1994.
3. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
4. THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
5. BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.
6. THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES CULVERTS B-52-153 SHALL BE THE EXISTING GROUNDLINE.
7. THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE B" REQUIRED BEHIND WING FOOTINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.
8. ALL CONCRETE REMOVAL SHALL BE DEFINED BY A ½-INCH SAW CUT.
9. CONCRETE SURFACE REPAIR AS DIRECTED BY THE FIELD ENGINEER. QUANTITIES SHOWN ARE APPROXIMATE.
10. PLACE 18" (MIN.) WIDE SHEET OF "RUBBERIZED MEMBRANE WATERPROOFING" ON VERTICAL AND HORIZONTAL WING CONSTRUCTION JOINTS.
11. THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 504.3.4 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOWN ORIGINAL CONSTRUCTION YEAR 1994. WORK SHALL BE INCLUDED IN THE BID ITEM "CONCRETE MASONRY CULVERTS".
12. SEE ROADWAY PLANS FOR CONSTRUCTION STAGING DETAILS.

LEGEND

2-01 CONCRETE SURFACE REPAIR QUANTITIES ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE THE FIELD IDENTIFICATION AND DETERMINATION OF ALL REPAIR LOCATIONS WITH THE ENGINEER.

2-02 BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

2-03 DEBRIS CONTAINMENT SHALL ONLY BE USED FOR CONCRETE SURFACE REPAIRS OVER THE WATERWAY.

TOTAL ESTIMATED QUANTITIES

	BID ITEM NUMBER	BID ITEM	UNIT	TOTALS
	203.0270.01	REMOVING STRUCTURE OVER WATERWAY DEBRIS CAPTURE B-52-153	EACH	1
2-03	203.0335.05	DEBRIS CONTAINMENT OVER WATERWAY B-52-153	EACH	1
	206.2001.01	EXCAVATION FOR STRUCTURES CULVERTS B-52-153	EACH	1
	206.5001.01	COFFERDAMS B-52-153	EACH	1
	210.2500	BACKFILL STRUCTURE TYPE B	TON	285
	311.0110	BREAKER RUN	TON	51
	504.0100	CONCRETE MASONRY CULVERTS	CY	56
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	6,410
2-01	509.1500	CONCRETE SURFACE REPAIR	SF	50
	511.1200.01	TEMPORARY SHORING B-52-153	SF	860
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	21
		NON-BID ITEMS		
		FILLER	SIZE	3/4"

ALL ITEMS ARE CATEGORY 0050

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-153

DRAWN BY TKB | PLANS CK'D. BH

NOTES, QUANTITIES AND MISC. DETAILS

SHEET 2 OF 5

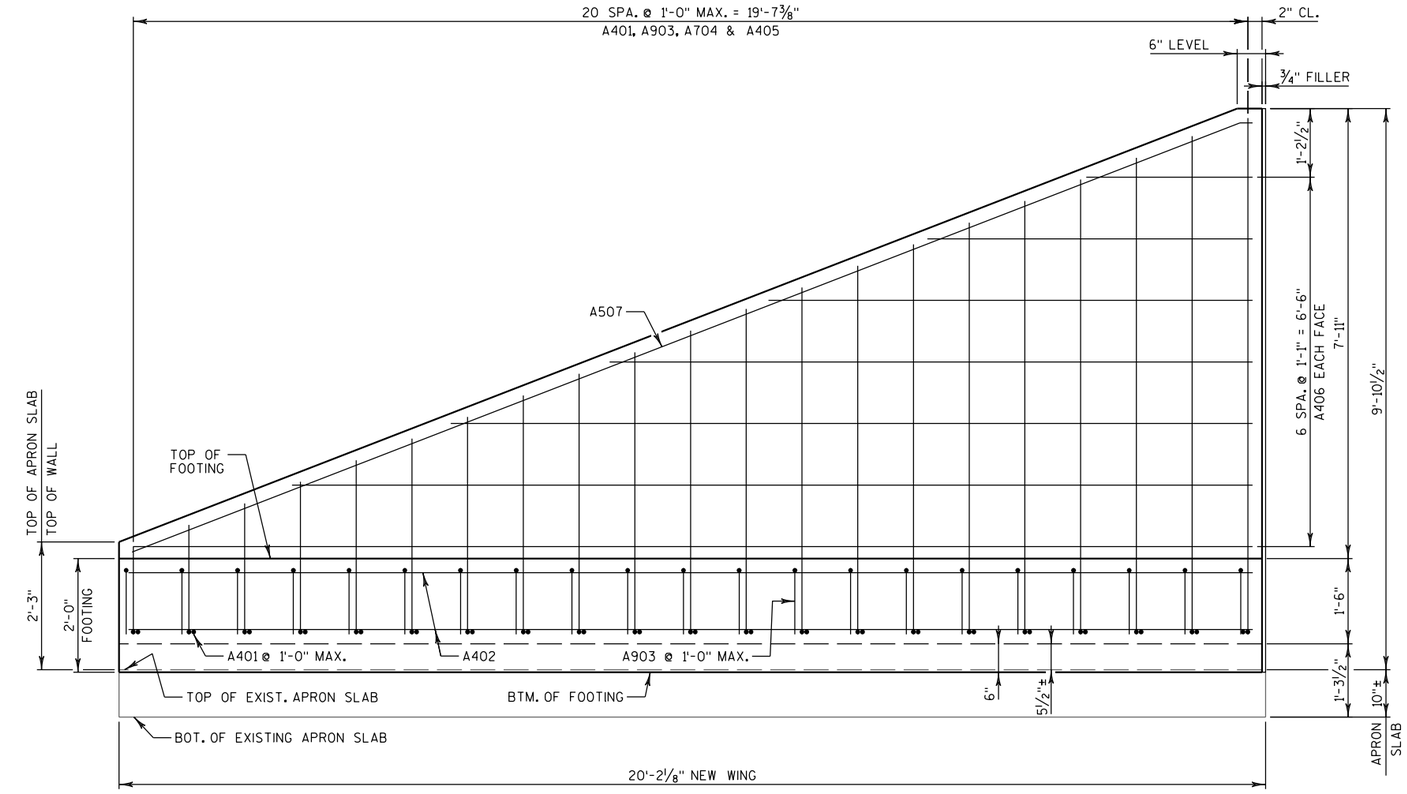
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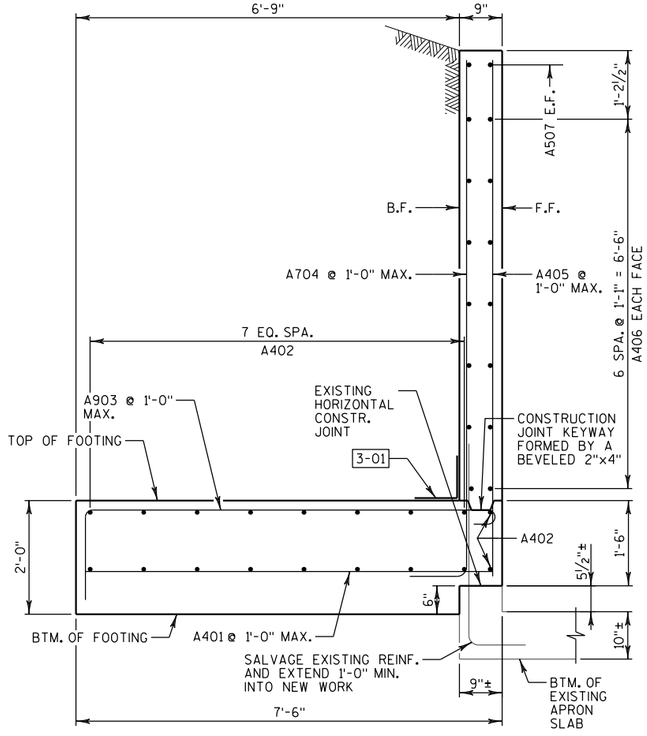
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STATE PROJECT NUMBER

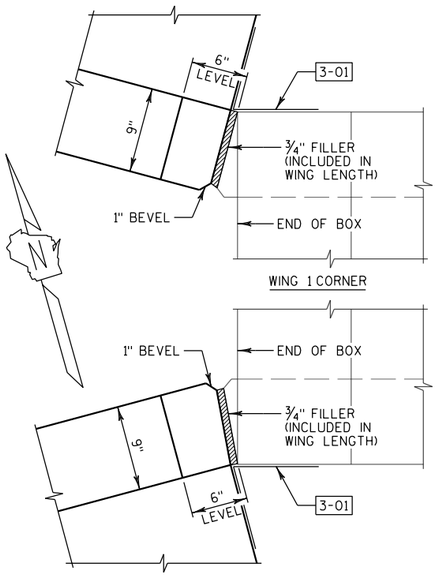
5040-03-70



ELEVATION WING 1 OR 2



SECTION THRU WINGS 1 & 2



CORNER DETAILS

BILL OF BARS WINGS 1 & 2

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
COATED BARS					TOTAL WEIGHT = 3,060 LBS	
A401	42	7'-2"			FOOTING - BOTTOM	TRANS.
A402	36	19'-9"			FOOTING	LONG.
A903	42	9'-9"	X		FOOTING - TOP	TRANS.
A704	42	6'-3"	X	X	WINGS - B.F.	VERT.
A405	42	5'-3"		X	WINGS - F.F.	VERT.
A406	28	11'-4"		X	WINGS - BOTH FACES	HORIZ.
A507	4	21'-2"	X		WINGS - TOP	HORIZ.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR
TOTALS INCLUDE BOTH WINGS

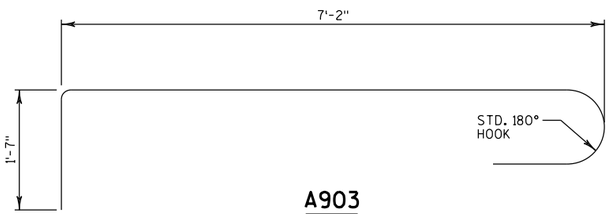
BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
A704	2 SERIES OF 21	2'-5" TO 10'-0"
A405	2 SERIES OF 21	1'-5" TO 9'-0"
A406	4 SERIES OF 7	2'-11" TO 19'-8"

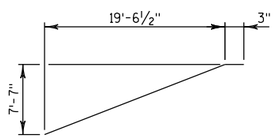
BUNDLE & TAG EACH SERIES SEPARATELY



A704



A903



A507

LEGEND

3-01 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL & VERTICAL JOINT AT BACK FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-153

DRAWN BY TKB | PLANS CK'D. BH

OUTLET WING DETAILS

SHEET 3 OF 5

230

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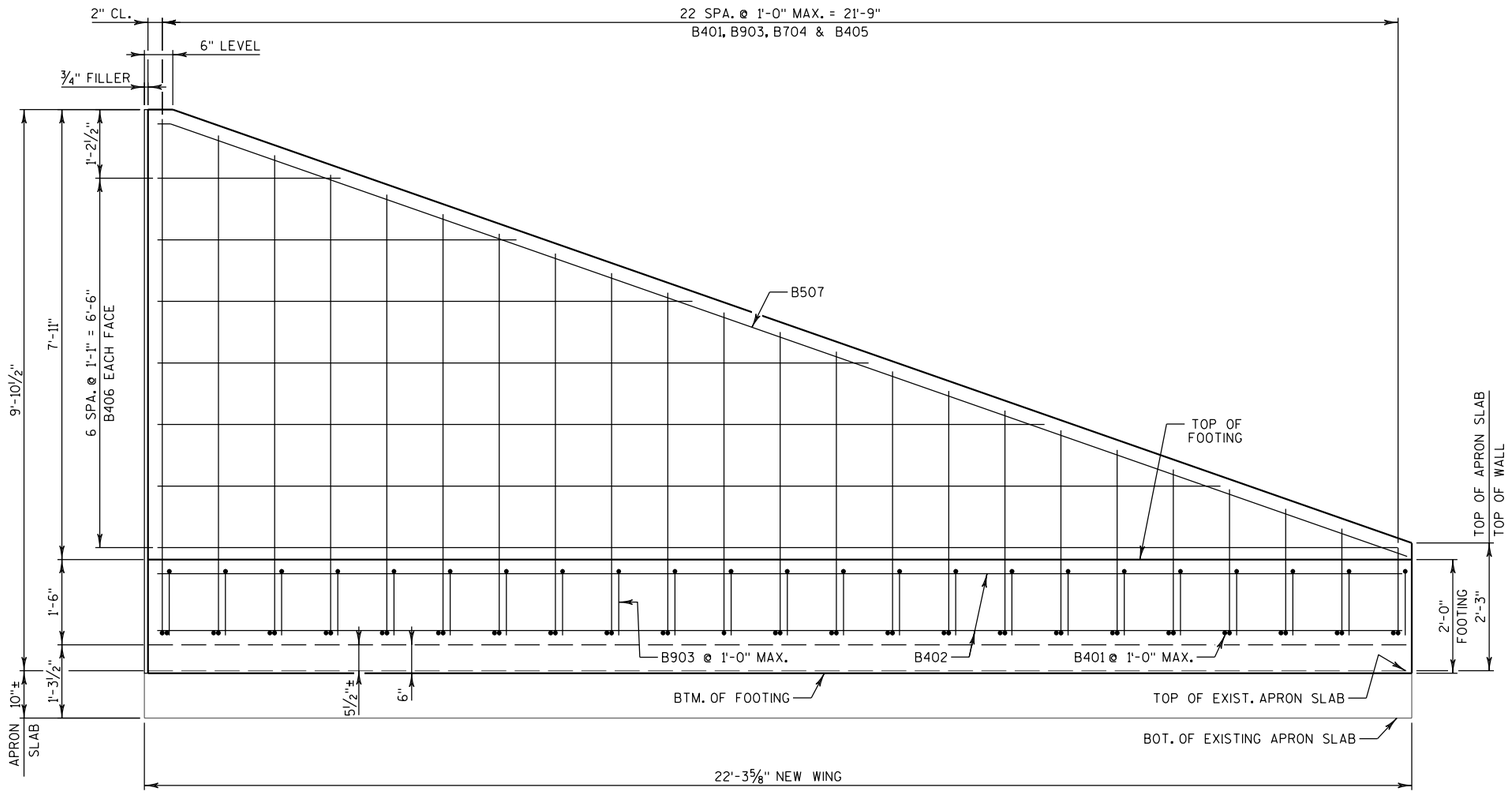
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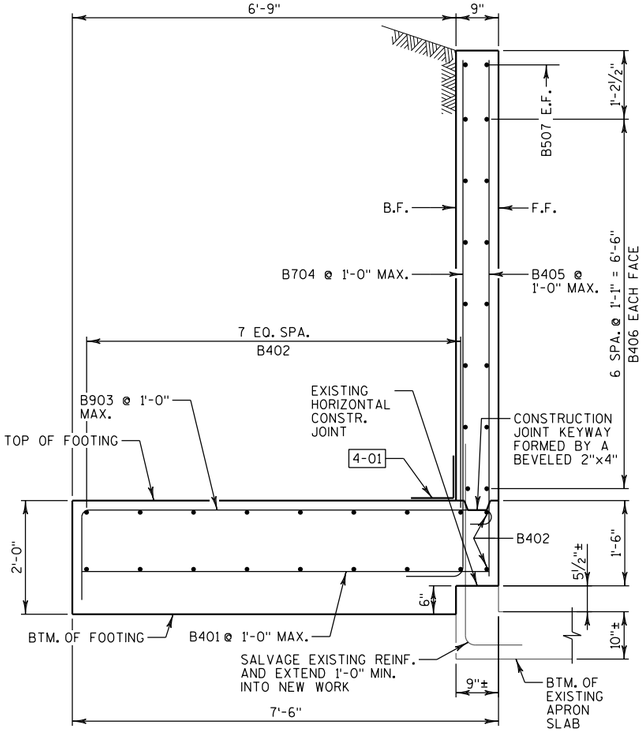
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STATE PROJECT NUMBER

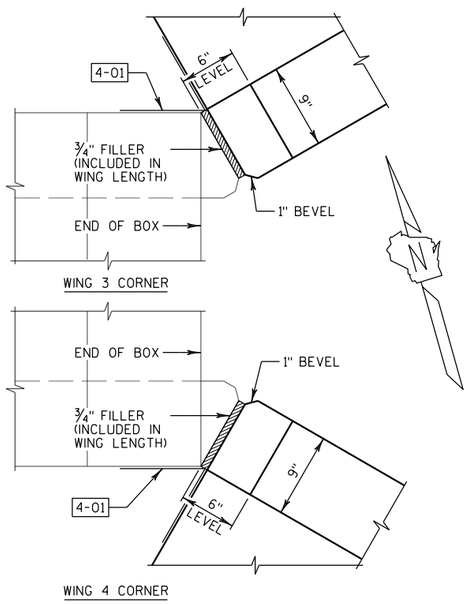
5040-03-70



ELEVATION WING 3 OR 4



SECTION THRU WINGS 3 & 4



CORNER DETAILS

BILL OF BARS WINGS 3 & 4

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
COATED BARS					TOTAL WEIGHT = 3,350 LBS	
B401	46	7'-2"			FOOTING - BOTTOM	TRANS.
B402	36	21'-10"			FOOTING	LONG.
B903	46	9'-9"	X		FOOTING - TOP	TRANS.
B704	46	6'-3"	X	X	WINGS - B.F.	VERT.
B405	46	5'-3"		X	WINGS - F.F.	VERT.
B406	28	12'-6"		X	WINGS - BOTH FACES	HORIZ.
B507	4	23'-2"	X		WINGS - TOP	HORIZ.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR
TOTALS INCLUDE BOTH WINGS

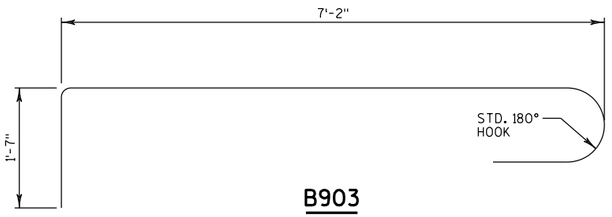
BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
B704	2 SERIES OF 23	2'-5" TO 10'-0"
B405	2 SERIES OF 23	1'-5" TO 9'-0"
B406	4 SERIES OF 7	3'-3" TO 21'-9"

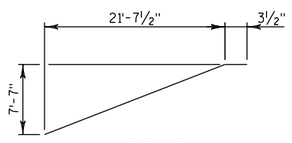
BUNDLE & TAG EACH SERIES SEPARATELY



B704



B903



B507

LEGEND

4-01 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL & VERTICAL JOINT AT BACK FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-153

DRAWN BY TKB | PLANS CK'D. BH

INLET WING DETAILS

SHEET 4 OF 5

231

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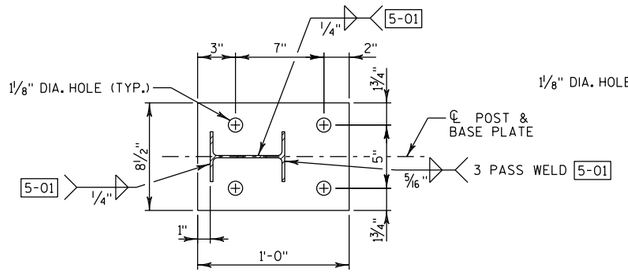
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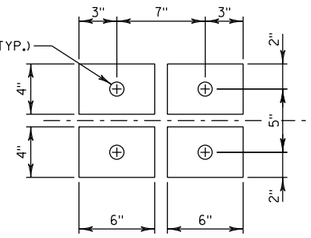
STATE PROJECT NUMBER

5040-03-70



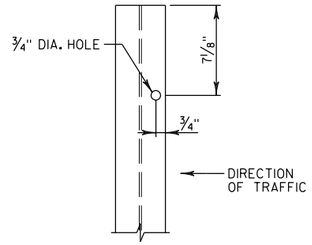
SECTION A-A

POST & BASE PLATE



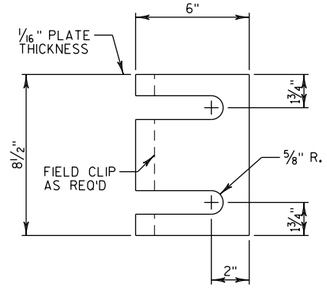
SECTION B-B

(4)-BOTTOM PLATES



SECTION C-C

HOLE IN POST FLANGE ON APPROACHING TRAFFIC SIDE



STEEL SHIM DETAIL

(4 PER POST)

NOTES

DETAILS SHOWN FOR POSTS, PLATES, ANCHORAGE SYSTEM AND INSTALLATION, BLOCKS, AND GUARDRAIL ARE NOT PART OF THE STRUCTURE CONTRACT, BUT ARE BID PER THE ROADWAY DESIGN PLANS.

POST BASE PLATES (AND BOTTOM PLATES IF USED) SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

CUT BOTTOM OF POST SO THAT POST WILL BE VERTICAL WHEN POST ASSEMBLY IS PLACED ON TOP OF THE CULVERT. ALONG THE ROADWAY THE POST WILL BE NORMAL TO GRADE LINE. HEX BOLTS AND THREADED RODS ARE TO BE PLACED PERPENDICULAR TO THE BASE PLATE (AND BOTTOM PLATE IF USED).

POST, BASE PLATE (AND BOTTOM PLATE IF USED), AND SHIMS SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING, ALL STEEL POSTS AND PLATES SHALL BE GIVEN A NO. 6 COMMERCIAL BLAST CLEANING BY SSPC SPECS.

ALL MATERIAL USED IN POSTS AND PLATES SHALL BE MADE FROM MATERIAL CONFORMING TO ASTM DESIGNATION A709 GRADE 50 OR 50S.

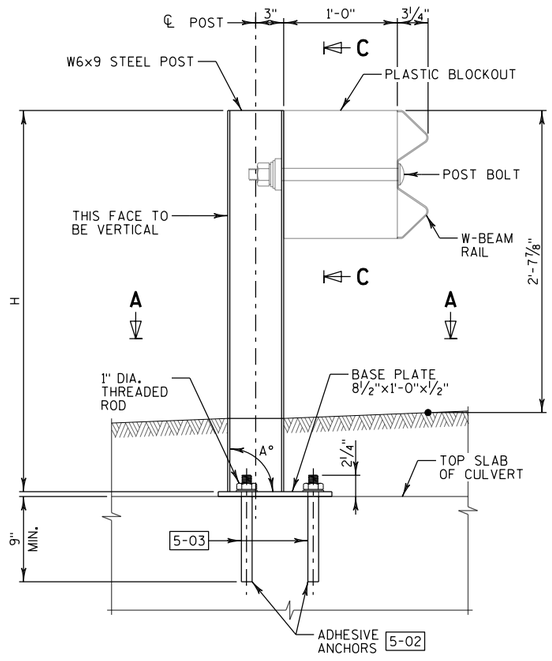
HEX BOLTS, THREADED RODS, HEX NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F1554 GRADE 36, AND SHALL BE GALVANIZED. RODS ARE TO BE FULLY THREADED AND BOLTS TO BE THREADED 3". CHAMFER TOP OF BOLTS AND RODS BEFORE THREADING.

STEEL SHIMS MAY BE USED BETWEEN PLATES AND SLAB WHERE REQUIRED FOR ALIGNMENT.

5-01 WELDING IS TO BE COMPLETED USING THE GAS-METAL ARC WELDING (GMAW) PROCESS WITH ER70S-3 WELDING WIRE AND ARGON-OXYGEN OR CO2 COVER GAS.

5-02 ADHESIVE ANCHORS (1-INCH DIA. THREADED ROD). EMBED IN CONCRETE AS DETAILED. CHARACTERISTIC BOND STRENGTH SMALL MEET OR EXCEED 1305 PSIFOR UNCRACKED CONCRETE. SEE STANDARD SPECIFICATION 502.3.14 AN DAPPLY TO THREADED RODS.

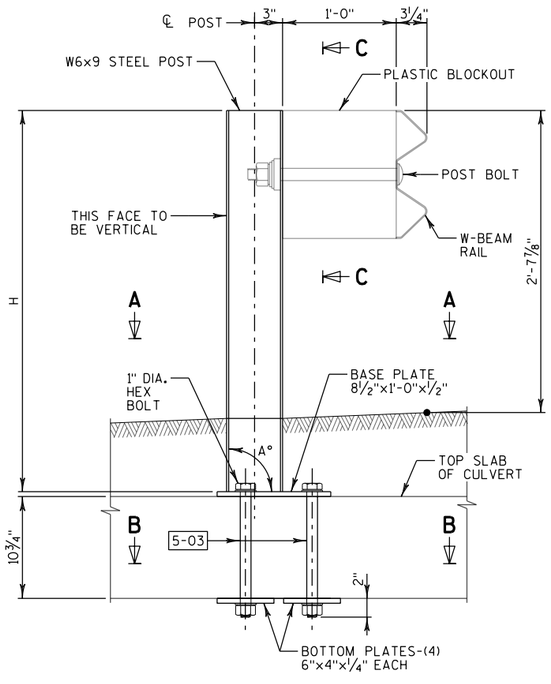
5-03 THRU-BOLTS (1-INCH DIA. HEX BOLT). DRILL THRU TOP SLAB WHEN THE CONCRETE HAS ACHIEVED ITS DESIGN STRENGTH (f'c).



ELEVATION

GUARDRAIL POST ANCHORS TYPE 1

(REQUIRED AT POSTS 34 & 41 ONLY)



ELEVATION

GUARDRAIL POST ANCHORS TYPE 2

(REQUIRED AT ALL POSTS UNLESS OTHERWISE NOTED)

ANCHOR POST TABLE

POST NO.	STATION	OFFSET	A	H
31	183+64.4 'R'	19.50 RT	90°34'	4.70'
32	183+67.5 'R'	19.50 RT	90°34'	4.71'
33	183+70.7 'R'	19.50 RT	90°34'	4.72'
34	183+73.8 'R'	19.50 RT	90°34'	4.73'
35	183+76.9 'R'	19.50 RT	90°34'	4.74'
36	183+80.0 'R'	19.50 RT	90°34'	4.75'
37	183+83.2 'R'	19.50 RT	90°34'	4.77'
38	183+64.3 'R'	19.50 LT	89°25'	5.08'
39	183+67.4 'R'	19.50 LT	89°25'	5.09'
40	183+70.5 'R'	19.50 LT	89°25'	5.10'
41	183+73.6 'R'	19.50 LT	89°25'	5.11'
42	183+76.8 'R'	19.50 LT	89°25'	5.12'
43	183+79.9 'R'	19.50 LT	89°25'	5.13'
44	183+83.0 'R'	19.50 LT	89°25'	5.15'

OFFSET MEASURED TO C/L OF W6X9 POST

SEE SHEET 1 OR ROADWAY PLANS FOR POST LOCATIONS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-153

DRAWN BY TKB | PLANS CK'D. EP

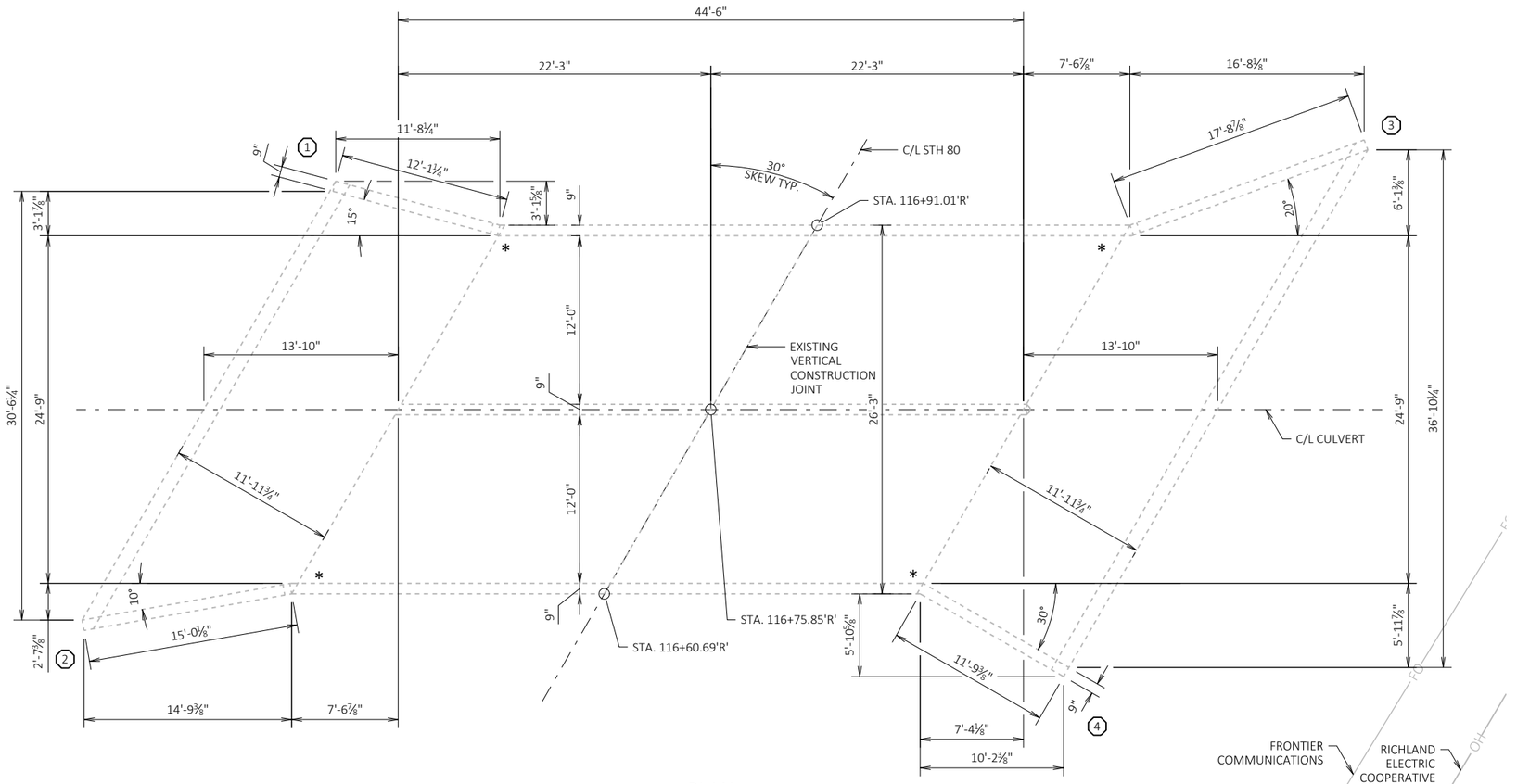
POST ANCHORAGE DETAILS

SHEET 5 OF 5

232

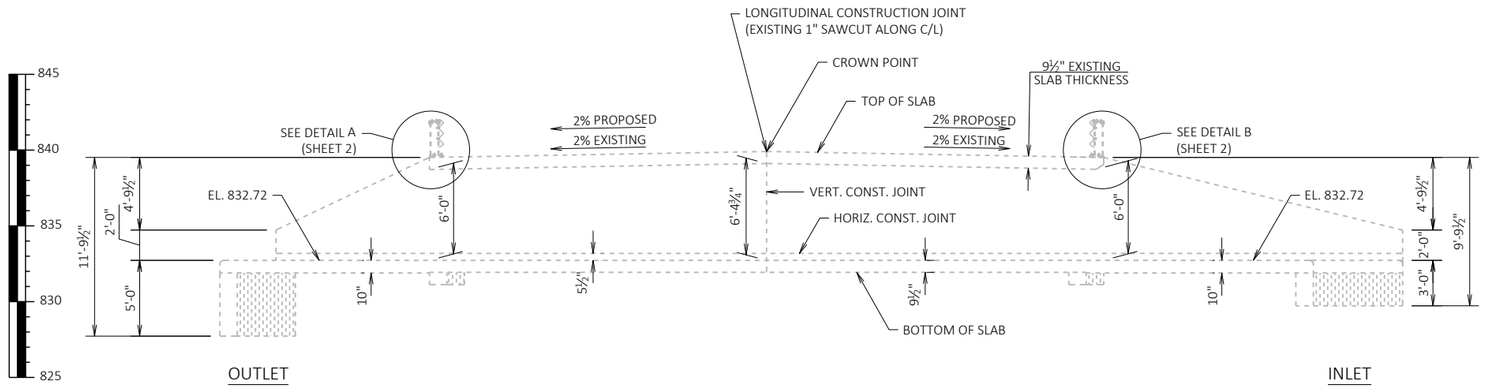
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PLAN

(REHABILITATION - TWO CELL, REINFORCED CONCRETE BOX CULVERT)



OUTLET

INLET

ELEVATION

(NORMAL TO HANZEL CREEK)

STATE PROJECT NUMBER

5040-03-70

DESIGN DATA

LIVELOAD:

DESIGN LOADING	HS20 (FROM HSI)
INVENTORY RATING	HS21 (FROM HSI)
OPERATIONAL RATING	HS35 (FROM HSI)
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV)	250 KIPS (FROM HSI)

EARTHLOAD: DESIGNED FOR 0' OF FILL.

MATERIAL PROPERTIES:

CONCRETE MASONRY	f'c = 3,500 PSI
HIGH-STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 PSI

TRAFFIC DATA

STH 80

ADT (2024) = 1850

ADT (2044) = 1960

DESIGN SPEED = 60 MPH

LEGEND

⬡ DENOTES WING NUMBER

* EXISTING THRIE BEAM CONNECTION

SCOPE OF WORK

1. CONCRETE SURFACE REPAIR AT LOCATIONS DIRECTED BY ENGINEER. INCLUDE CATHODIC PROTECTION AT EDGE OF SLAB ONLY.
2. PLACEMENT OF FLASHING AT EDGE OF SLAB

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES

WISCONSIN
ERIC T. PRICE
E-39027
MADISON
WI
PROFESSIONAL ENGINEER

July 30, 2024

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
TELEPHONE: (608) 261-0261

CONSULTANT CONTACT
ERIC PRICE, P.E.
TELEPHONE: (608) 826-6145

NO.	DATE	REVISION	BY

CORRE ENGINEERING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED SDR 08/01/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-52-103

STH 80 OVER HANZEL CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
RICHLAND	HENRIETTA

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BH	ETP	PKF	BH

GENERAL PLAN

SHEET 1 of 2

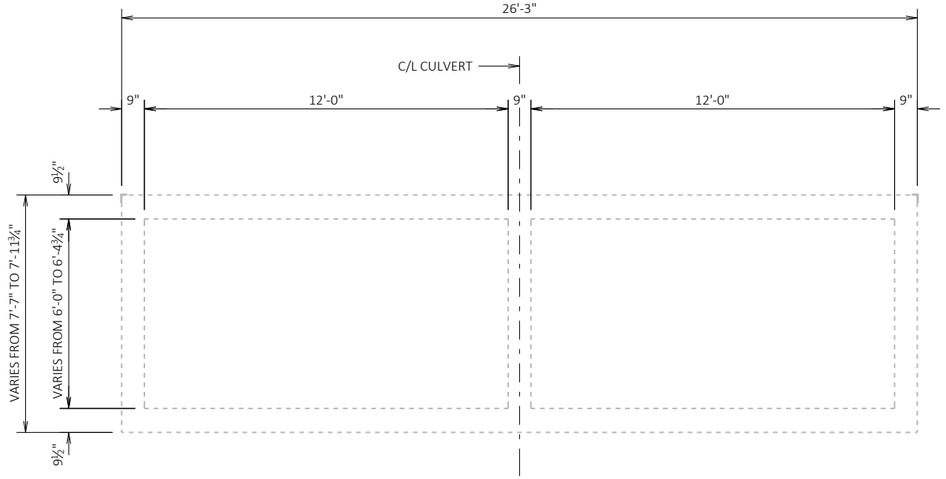
233

8

8

STATE PROJECT NUMBER

5040-03-70



SECTION THRU BOX

BILL OF BARS

	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	
*	S701	--	2	30'-0"	--	--	EDGE OF SLAB	LONGIT.
	TOTAL WEIGHT =							130 LBS.

* ESTIMATED LENGTH, ANTICIPATE FIELD CUTTING REQUIRED.

GENERAL NOTES

1. DRAWINGS SHALL NOT BE SCALED.
2. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
3. ELEVATIONS ARE BASED ON THE INSPECTION REPORT OR EXISTING PLANS.
4. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
5. THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
6. CLEAN, STRAIGHTEN, AND EXTEND EXISTING BAR STEEL REINFORCEMENT 24 BAR DIAMETERS INTO NEW CONSTRUCTION WHERE APPLICABLE.
7. ALL CONCRETE REMOVAL SHALL BE DEFINED BY A ½" DEEP SAW CUT.
8. MATERIALS, EQUIPMENT, ETC. SHALL NOT BE STOCKPILED/STORED ON THE STRUCTURE WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
9. PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE EDGES AND BOTTOM 1-FOOT OF THE EXISTING TOP SLAB.
10. THE BID ITEM "FLASHING STAINLESS STEEL" SHALL INCLUDE PROVIDING AND INSTALLING THE STAINLESS STEEL FLASHING, 3/16" AND ¼" STAINLESS STEEL, HEX HEAD CONCRETE SCREWS AND CLEANING THE EDGE OF THE TOP SLAB PRIOR TO APPLYING PROTECTIVE SURFACE TREATMENT OR FLASHING.
11. SEE ROADWAY PLANS FOR CONSTRUCTION STAGING DETAILS.

CATHODIC PROTECTION REPAIR NOTES

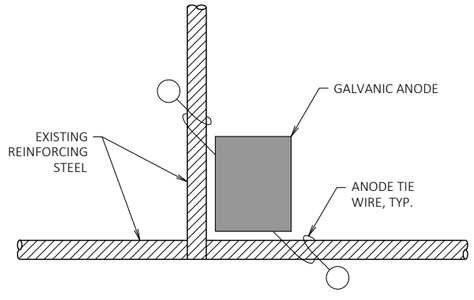
SURFACE REPAIR AREAS WITH CATHODIC PROTECTION ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. THE PLAN QUANTITY FOR THE BID ITEM "EMBEDDED GALVANIC ANODES" IS BASED ON A MAXIMUM SPACING OF 24-INCHES AROUND THE SURFACE REPAIR PERIMETER. THE ACTUAL QUANTITY SHALL BE BASED ON THE FIELD CONDITIONS AND AS RECOMMENDED BY THE GALVANIC ANODE SUPPLIER.

SURFACE REPAIRS SHALL BE FILLED WITH REPAIR MATERIALS COMPATIBLE WITH CATHODIC PROTECTION, AS RECOMMENDED BY THE ANODE SUPPLIER.

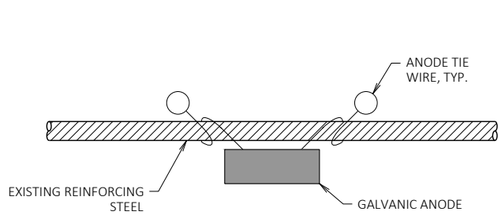
EXISTING REINFORCING STEEL TO BE COMPLETELY CLEANED OF CORRODED MATERIAL AND CONCRETE TO PROVIDE SUFFICIENT ELECTRICAL CONNECTION AND BOND. CATHODIC PROTECTION PREPARATIONS ARE INCLUDED IN THE BID ITEM "EMBEDDED GALVANIC ANODES".

ANODES NEAREST TO EDGE OF REPAIR TO BE WITHIN 6" OF EDGE.

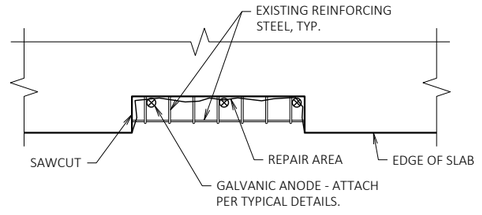
AFTER PLACEMENT, GALVANIC ANODES SHOULD MAINTAIN A MINIMUM TOP COVER OF 1 ½" AND A MINIMUM BOTTOM COVER OF ¾"



TYPICAL INSTALLATION AT BAR STEEL INTERSECTION



TYPICAL INSTALLATION FOR BAR STEEL



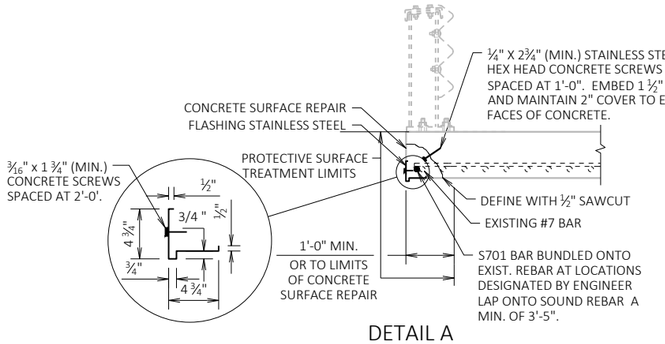
PART. PLAN TYPICAL CATHODIC PROTECTION REPAIR DETAIL

(APPLICABLE FOR CONCRETE SURFACE REPAIR LOCATIONS AT EDGE OF SLAB ONLY)

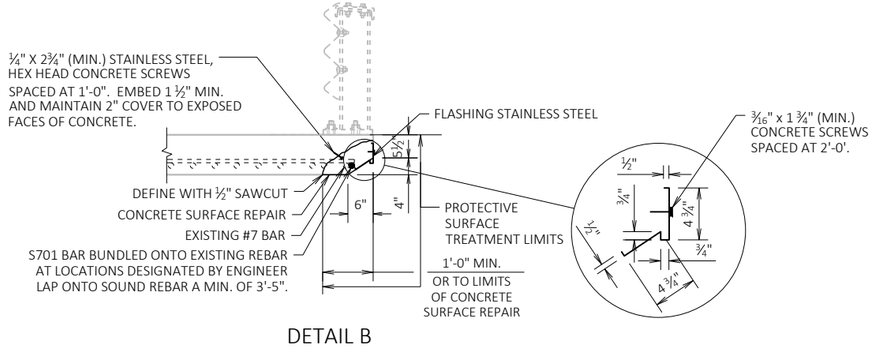
TOTAL ESTIMATED QUANTITIES

	ITEM NUMBER	BID ITEMS	UNIT	TOTAL
●	203.0335.04	DEBRIS CONTAINMENT OVER WATERWAY B-52-103	EACH	1
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	20
	505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	130
	509.1500	CONCRETE SURFACE REPAIR	SF	200
	SPV.0060.01	EMBEDDED GALVANIC ANODES	EACH	120
	SPV.0090.01	FLASHING STAINLESS STEEL	LF	62
		NON-BID ITEMS		
*		JOINT SEALER	LS	1

ALL BID ITEMS ARE CATEGORY 0060



DETAIL A



DETAIL B

LEGEND

* REPLACE JOINT SEALER AT EXISTING WING/BOX JOINTS

● DEBRIS CONTAINMENT IS TO BE USED ONLY FOR CONCRETE SURFACE REPAIR OVER THE WATER. USE OF DEBRIS CONTAINMENT AT OTHER LOCATIONS WILL NOT BE ALLOWED OR PAID FOR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-103

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY CORRE

CROSS SECTION & QUANTITIES

SHEET 2 OF 2

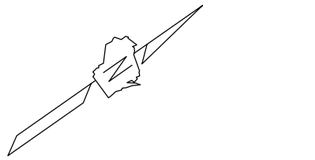
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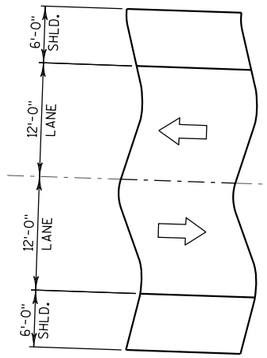
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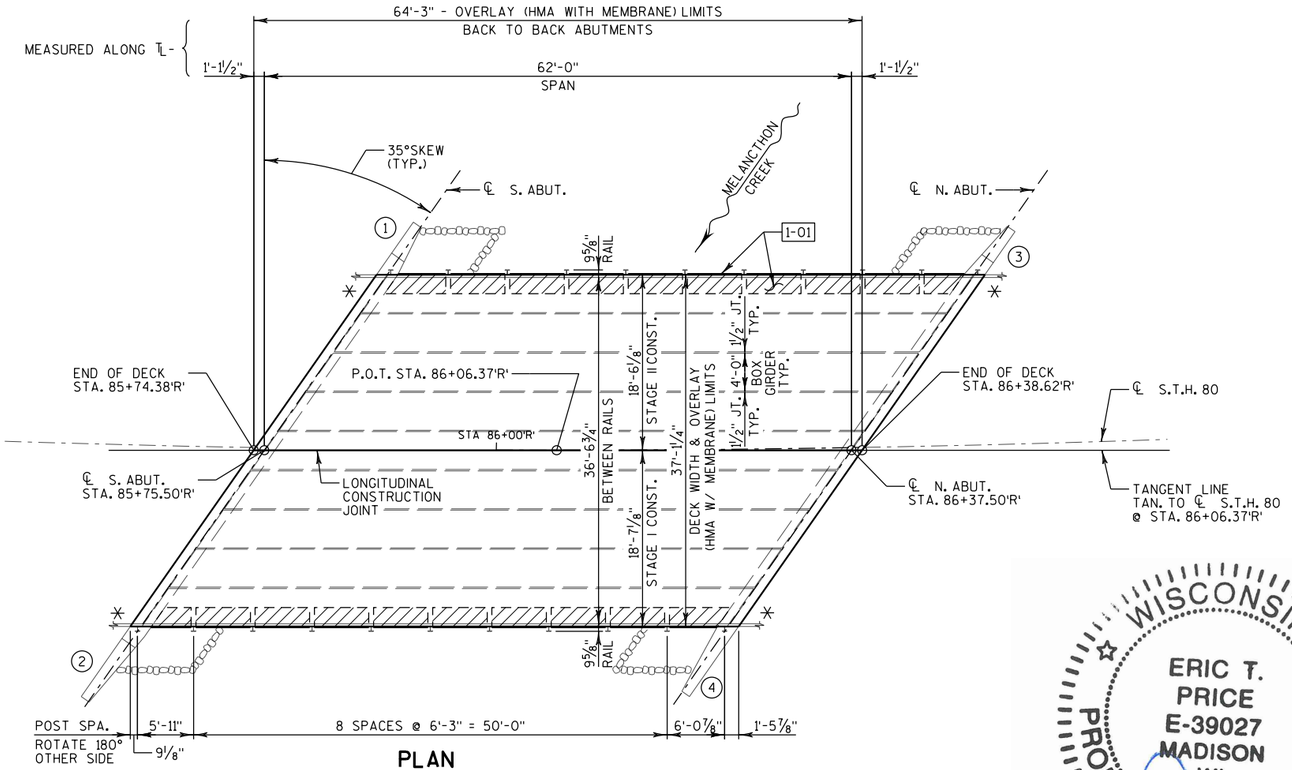
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STATE PROJECT NUMBER

5040-03-70

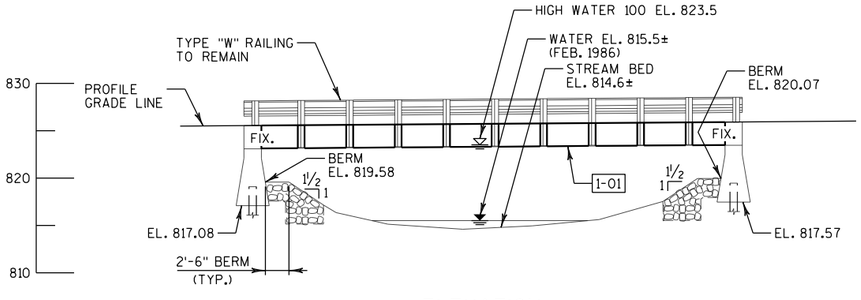






PLAN

(REHABILITATION - SINGLE SPAN PRESTRESSED BOX GIRDER BRIDGE)



ELEVATION

(NORMAL TO MELANCTHON CREEK)

GENERAL NOTES

1. DRAWINGS SHALL NOT BE SCALED.
2. DIMENSIONS AND ELEVATIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS FROM 1988.
3. CONCRETE SURFACE REPAIR AND FRP WRAP AS DIRECTED BY THE FIELD ENGINEER. QUANTITIES SHOWN ARE APPROXIMATE.
4. THE EXISTING STRUCTURE B-52-102 TO BE REHABILITATED, IS A SINGLE SPAN PRESTRESSED BOX GIRDER BRIDGE, 64.25 FT. LONG WITH A 36.56 FT. CLEAR ROADWAY WIDTH.
5. ANY EXCAVATION NECESSARY TO COMPLETE THE OVERLAY AT THE ABUTMENTS IS TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "HMA PAVEMENT 4 LT 58-28 S".
6. PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 2" PLACED ABOVE THE DECK SURFACE. EXPECTED AVERAGE OVERLAY THICKNESS IS 2½". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURES DESIGN SECTION.
7. THE AVERAGE OVERLAY THICKNESS IS BASED ON THE MINIMUM OVERLAY THICKNESS PLUS ½" TO ACCOUNT FOR VARIATIONS IN THE DECK SURFACE.
8. THE PLAN QUANTITY FOR THE BID ITEM "HMA PAVEMENT 4 LT 58-28-S" IS BASED ON THE AVERAGE OVERLAY THICKNESS.
9. AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT.
10. PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 REPAIR AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY DECK REPAIR".
11. REPAIRS USING CONCRETE REQUIRE A MINIMUM CURE TIME OF 7 DAYS BEFORE PLACING OVERLAY.
12. SEE ROADWAY PLANS FOR CONSTRUCTION STAGING DETAILS.

WISCONSIN
ERIC T. PRICE
E-39027
MADISON
WI
PROFESSIONAL ENGINEER

July 30, 2024

DESIGN DATA

LIVE LOAD:

DESIGN LOADING — HS20
INVENTORY RATING — HS18
OPERATING RATING — HS30
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) — 190 KIPS

MATERIAL PROPERTIES

CONCRETE MASONRY, DECK PATCHING & SUPERSTRUCTURE — f'c = 4,000 PSI
ALL OTHER — f'c = 3,500 PSI

TRAFFIC DATA

S.T.H. 80
ADT (2024) = 1850
ADT (2044) = 1960
DESIGN SPEED = 60 MPH

SCOPE OF WORK B-52-102

1. PERFORM CONCRETE SURFACE REPAIR AT LOCATIONS DESIGNATED BY ENGINEER.
2. INSTALL FIBER WRAP REINFORCING AT LOCATIONS DESIGNATED BY ENGINEER.
3. PERFORM DECK PREPARATION AT LOCATIONS DIRECTED BY ENGINEER.
4. INSTALL ASPHALTIC OVERLAY WITH SHEET MEMBRANE WATERPROOFING.

LEGEND

- EXISTING THRIE BEAM ATTACHMENT.
- (X) INDICATES WING NUMBER.
- 1-01 CONCRETE SURFACE REPAIR AND FIBER WRAP REINFORCING ALONG EXTERIOR BOX GIRDER, TYP. BOTH SIDES OF BRIDGE, SEE "EXTERIOR BOX GIRDER REPAIR" SHEET FOR DETAILS.

EXISTING CURVE DATA

P.I. STA. = 93+69.56
△ = 40°29'25"
D = 2°15'00"
T = 939.20'
L = 1799.57'
R = 2546.48'
S.E. = 4.8%

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. EXTERIOR BOX GIRDER REPAIR

BUREAU OF STRUCTURES CONTACT:
AARON BONK, P.E. (608) 261-0261

CONSULTANT CONTACT:
ERIC PRICE, P.E. (608) 826-6146

NO.	DATE	REVISION	BY

CORRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 08/01/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-52-102

S.T.H. 80 OVER MELANCTHON CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
RICHLAND	HENRIETTA

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BH	ETP	TKB	BH

GENERAL PLAN

SHEET 1 OF 3

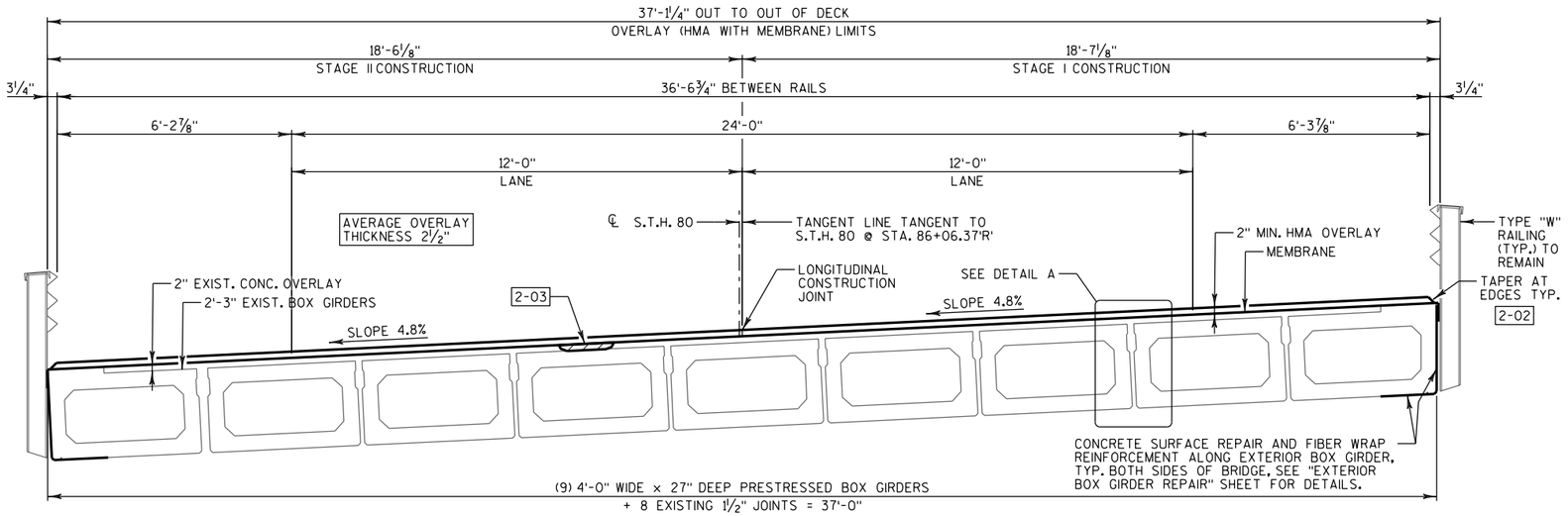
235

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STATE PROJECT NUMBER

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PROPOSED CROSS SECTION

(LOOKING NORTH)

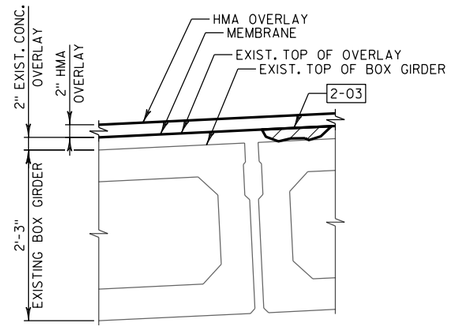
LEGEND

2-01 CONCRETE SURFACE REPAIR LIMITS ON EXTERIOR BOX GIRDERS, AND OTHER LOCATIONS, TO BE DETERMINED BY THE ENGINEER.

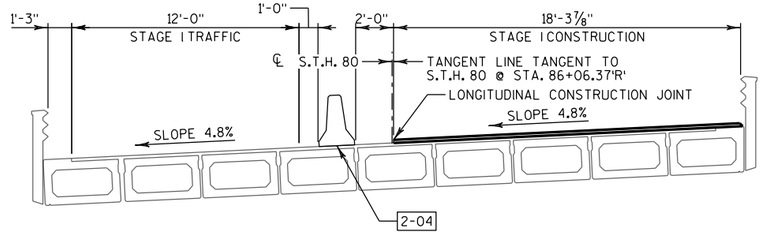
2-02 TAPER OVERLAY AT EDGES AS SHOWN. EXTEND SHEET MEMBRANE WATERPROOFING TO OVERLAP FIBER WRAP REINFORCING AS DIRECTED BY ENGINEER.

2-03 "PREPARATION DECKS", "SAWING PAVEMENT DECK PREPARATION AREAS", AND "CONCRETE MASONRY DECK REPAIR" APPLIES TO WORK REQUIRED IN THE EXISTING CONCRETE OVERLAY ONLY.

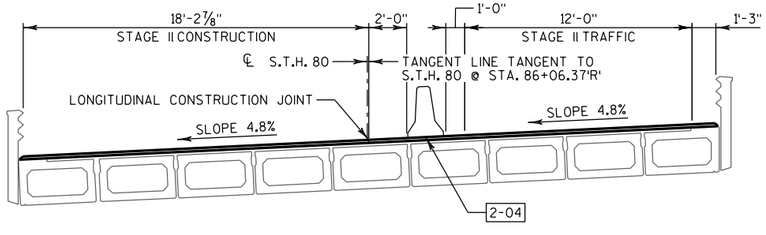
2-04 CONCRETE BARRIER TEMPORARY PRECAST, INCLUDED IN ROADWAY QUANTITIES. SEE ROADWAY PLANS FOR FURTHER DETAILS.



DETAIL A



STAGE I TRAFFIC CONTROL



STAGE II TRAFFIC CONTROL

TOTAL ESTIMATED QUANTITIES

	BID ITEM NUMBER	BID ITEM	UNIT	SOUTH ABUTMENT	NORTH ABUTMENT	SUPER.	TOTALS
	203.0335.03	DEBRIS CONTAINMENT OVER WATERWAY B-52-102	EACH	--	--	--	1
	455.0605	TACK COAT	GAL	--	--	2	2
	460.5224	HMA PAVEMENT 4 LT 58-28 S	TON	--	--	39	39
	509.0301	PREPARATION DECKS TYPE 1	SY	--	--	5	5
	509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	--	--	50	50
2-01	509.1500	CONCRETE SURFACE REPAIR	SF	25	25	250	300
	509.2100.S	CONCRETE MASONRY DECK REPAIR	CY	--	--	1	1
	516.0600.S	SHEET MEMBRANE WATERPROOFING	SY	--	--	280	280
2-01	SPV.0165.01	CONCRETE SURFACE REPAIR FULL-DEPTH	SF	--	--	55	55
	SPV.0165.02	FIBER WRAP REINFORCING NON-STRUCTURAL	SF	--	--	570	570
		NON-BID ITEMS					

ALL ITEMS ARE CATEGORY 0070.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-102

DRAWN BY TKB | PLANS CK'D. BH

CROSS SECTION & QUANTITIES

SHEET 2 OF 3

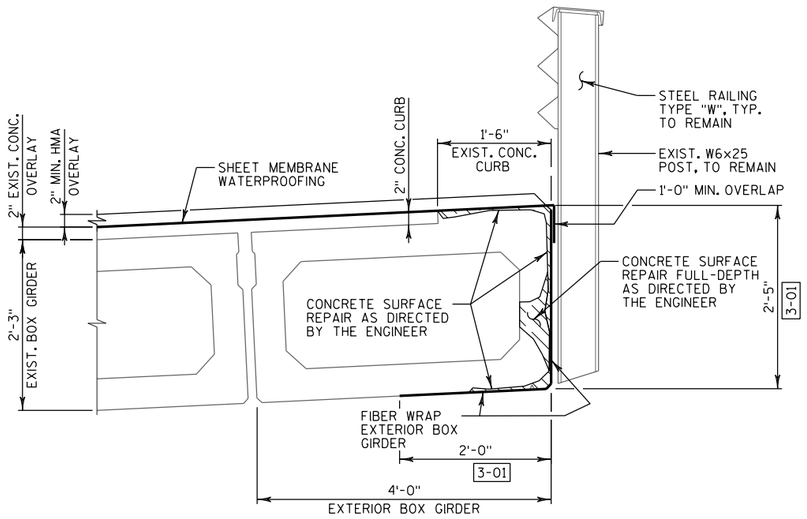
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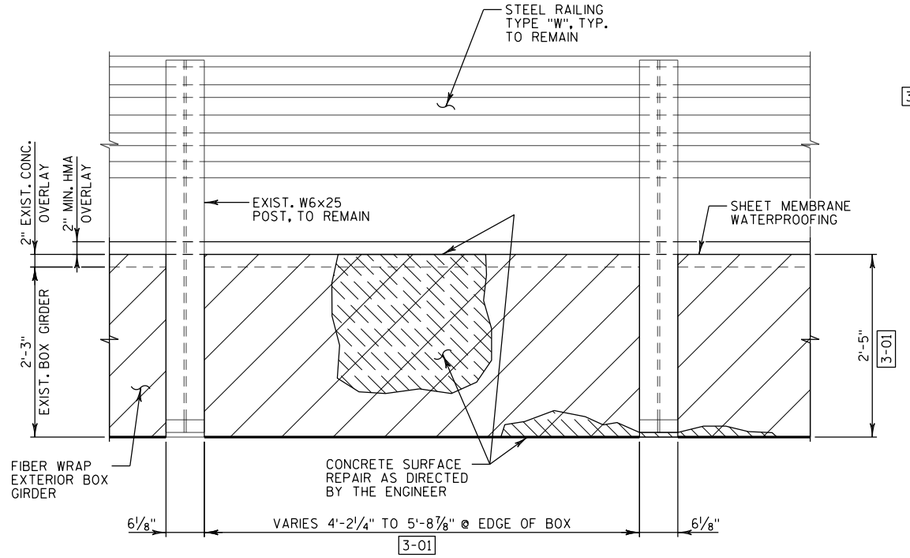
8

STATE PROJECT NUMBER

5040-03-70



SECTION A-A



ELEVATION

LOOKING AT EDGE OF EXTERIOR BOX GIRDER

LEGEND

3-01 LIMITS OF FIBER WRAP ON EXTERIOR BOX GIRDER.

NOTES

WORK PERFORMED FOR EXTERIOR BOX GIRDER REPAIRS SHALL BE INCLUDED IN THE BID ITEMS "CONCRETE SURFACE REPAIR", "CONCRETE SURFACE REPAIR FULL-DEPTH" AND "FIBER WRAP REINFORCING NON-STRUCTURAL".

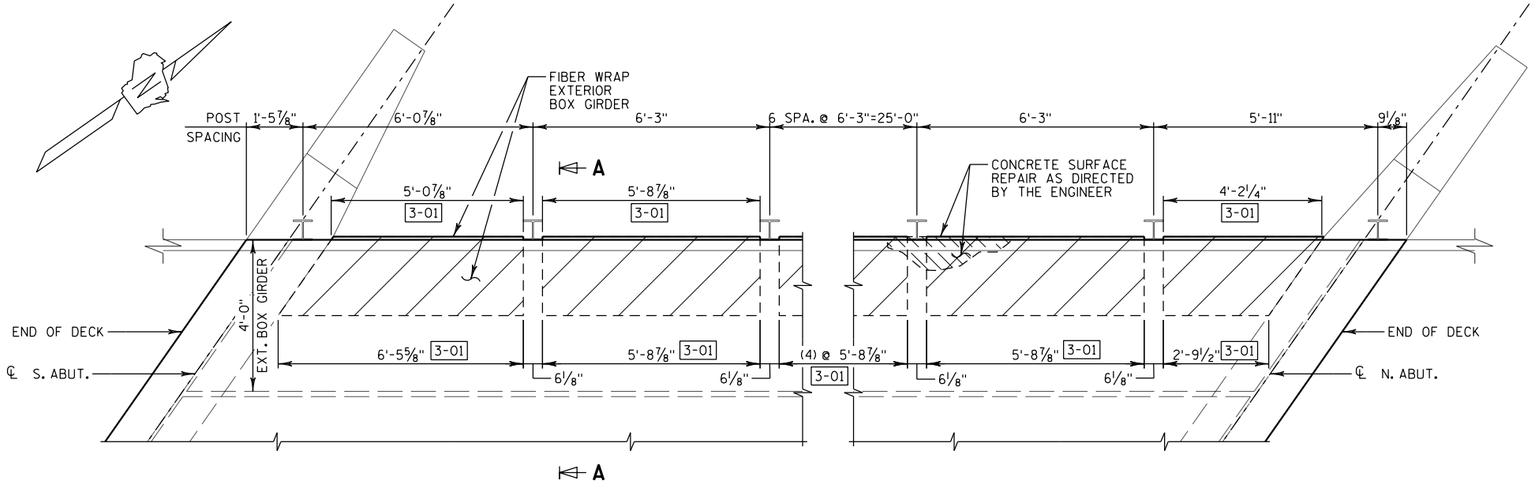
USE CAUTION WHEN PERFORMING CONCRETE SURFACE REPAIR TO NOT EXPOSE ADDITIONAL PRESTRESSING STRANDS IN THE BOX GIRDERS OR THE POST TENSIONING DUCTS. EXPOSED STRANDS OR DUCTS SHALL BE CLEANED AS THE ENGINEER DIRECTS.

PERFORM "CONCRETE SURFACE REPAIR" AND "CONCRETE SURFACE REPAIR FULL-DEPTH" PRIOR TO INSTALLATION OF "FIBER WRAP REINFORCING NON-STRUCTURAL".

PERFORM "CONCRETE SURFACE REPAIR" AND "CONCRETE SURFACE REPAIR FULL-DEPTH" TO THE BOTTOM, SIDE AND TOP CURB OF THE EXTERIOR BOX GIRDERS AS DIRECTED BY THE ENGINEER.

REMOVAL AND REPLACEMENT OF THE RAILING MAY BE REQUIRED TO COMPLETE CONCRETE SURFACE REPAIRS AND IS CONSIDERED INCIDENTAL TO THE CONCRETE SURFACE REPAIR BID ITEM.

CONCRETE SURFACE REPAIR FULL-DEPTH SHALL FOLLOW THE APPLICABLE REQUIREMENTS OF SECTION 509.3.7 AND 509.3.8 OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS.



PLAN

TOP OF DECK SHOWN AT WEST SIDE OF STRUCTURE, EAST SIDE ROTATED 180°

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-102

DRAWN BY TKB | PLANS CK'D. BH

EXTERIOR BOX GIRDER REPAIR

SHEET 3 OF 3

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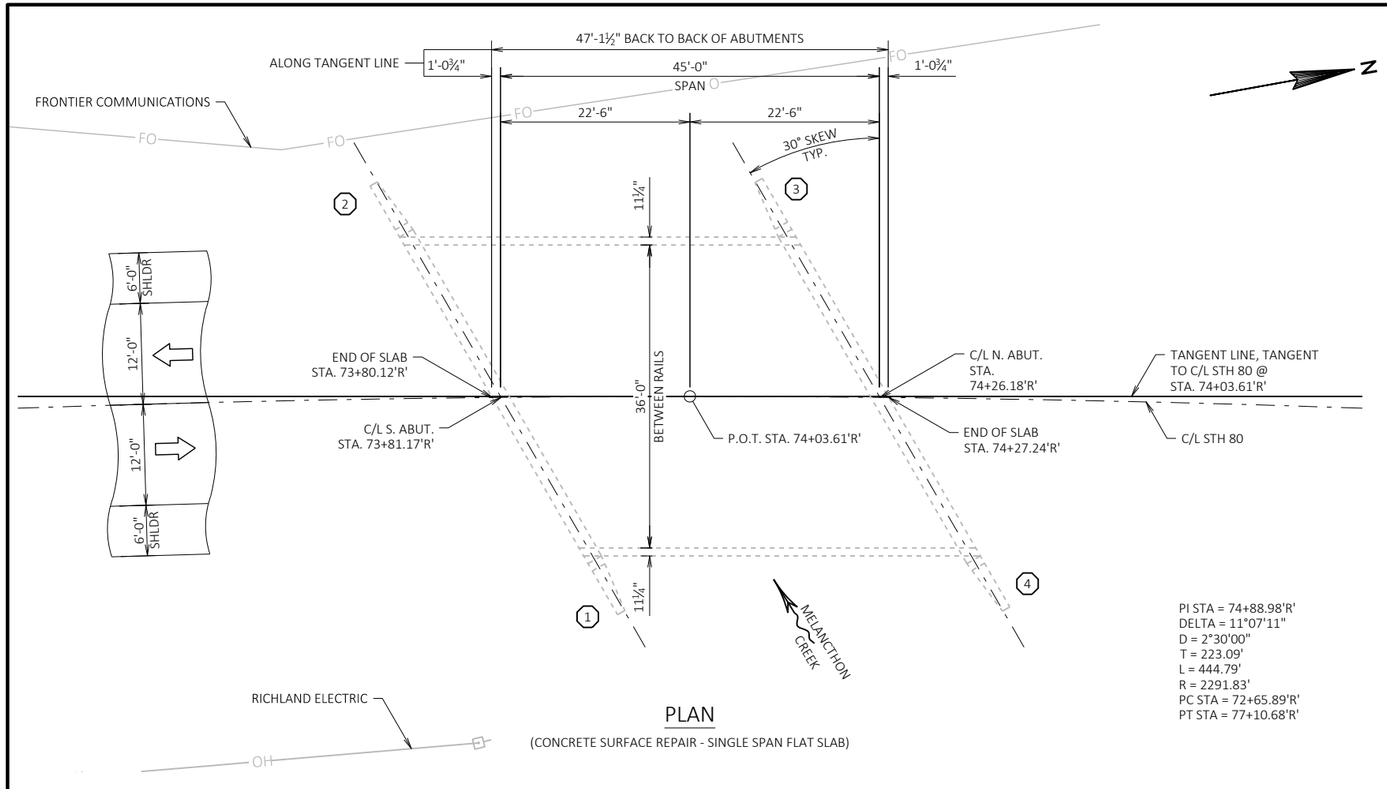
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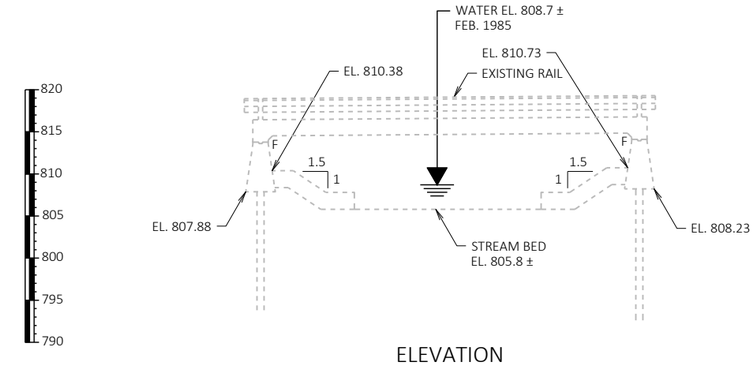
PLOT SCALE : 1:2



PLAN

(CONCRETE SURFACE REPAIR - SINGLE SPAN FLAT SLAB)

PI STA = 74+88.98'R'
DELTA = 11°07'11"
D = 2°30'00"
T = 223.09'
L = 444.79'
R = 2291.83'
PC STA = 72+65.89'R'
PT STA = 77+10.68'R'



ELEVATION

(NORMAL TO MELANCTHON CREEK)

STATE PROJECT NUMBER

5040-03-70

DESIGN DATA

LIVE LOAD:

DESIGN LOADING	HS20
INVENTORY RATING	HS28 (FROM HSI)
OPERATIONAL RATING	HS47 (FROM HSI)
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV)	250 KIPS (FROM HSI)

MATERIAL PROPERTIES:

CONCRETE MASONRY	
SUPERSTRUCTURE	f'c = 4,000 PSI
OTHER	f'c = 3,500 PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 PSI

TRAFFIC DATA

STH 80

ADT (2024) = 1850

ADT (2044) = 1960

DESIGN SPEED = 60 MPH

LEGEND

⬡ DENOTES WING NUMBER

SCOPE OF WORK

1. CONCRETE SURFACE REPAIR AT LOCATIONS DIRECTED BY ENGINEER. INCLUDE CATHODIC PROTECTION AT EDGE OF SLAB ONLY.
2. PLACEMENT OF FLASHING AT EDGE OF SLAB

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES

WISCONSIN PROFESSIONAL ENGINEER
ERIC T. PRICE
E-39027
MADISON
WI

July 30, 2024

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
TELEPHONE: (608) 261-0261

CONSULTANT CONTACT
ERIC PRICE, P.E.
TELEPHONE: (608) 826-6145

NO.	DATE	REVISION	BY

CORRE ENGINEERING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED SDR 08/01/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-52-101

STH 80 OVER MELANCTHON CREEK

COUNTY: RICHLAND	TOWN/~~CITY/VILLAGE~~: HENRIETTA
DESIGN SPEC.: REHABILITATION N/A	

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BH	ETP	PKF	BH

GENERAL PLAN

SHEET 1 of 2

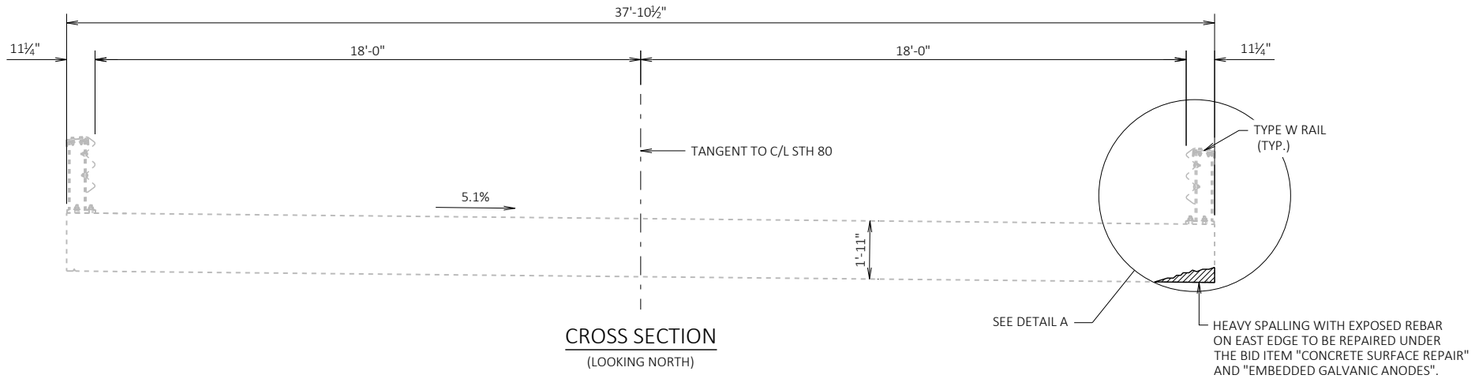
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FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\503_STRUCTURES\503.3_FINAL\B-52-101\080101_GP_B-52-101.DWG PLOT DATE : 7/27/2024 12:24 PM PLOT BY : PAULETTE FENSKE

STATE PROJECT NUMBER

5040-03-70



CROSS SECTION

(LOOKING NORTH)

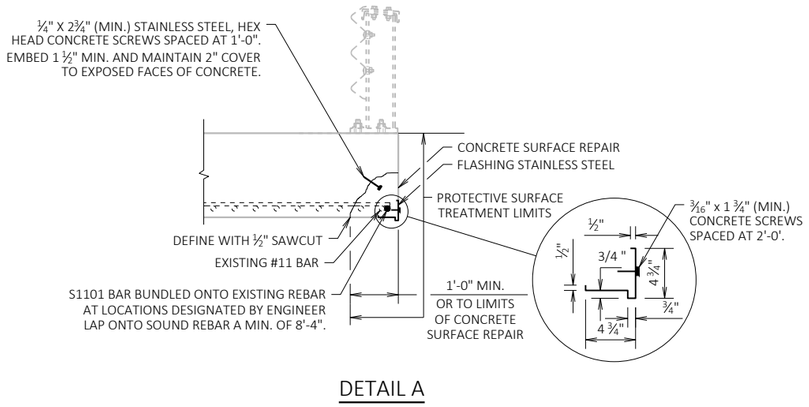
GENERAL NOTES

1. DRAWINGS SHALL NOT BE SCALED.
2. DIMENSIONS & ELEVATIONS SHOWN ARE BASED ON THE EXISTING STRUCTURE PLANS OR INSPECTION REPORT.
3. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
4. THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
5. CONCRETE SURFACE REPAIR AND DRIP EDGE REPAIR UNDER THE BID ITEM "CONCRETE SURFACE REPAIR". SURFACES SHALL BE BLAST CLEANED AND ANY EXPOSED STEEL SHALL BE BRUSHED CLEAN PRIOR TO THE CONCRETE SURFACE REPAIRS BEING COMPLETED. REPAIR AREAS SHALL BE DETERMINED BY THE ENGINEER.
6. THE BID ITEM "FLASHING STAINLESS STEEL" SHALL INCLUDE PROVIDING AND INSTALLING THE STAINLESS STEEL FLASHING, $\frac{3}{16}$" AND $\frac{1}{4}$" STAINLESS STEEL, HEX HEAD CONCRETE SCREWS, AND CLEANING THE EDGE OF THE DECK PRIOR TO APPLYING PROTECTIVE SURFACE TREATMENT OR FLASHING.
7. FLASHING TO BE INSTALLED AFTER PROTECTIVE SURFACE TREATMENT APPLICATION.
8. CONCRETE SCREWS SHALL BE 410 STAINLESS STEEL.
9. EXTEND FLASHING TO B.F. OF ABUTMENT DIAPHRAGM.
10. PROVIDE 2" MINIMUM FLASHING OVERLAP, FASTEN WITH $\frac{3}{16}$" x 2" (MIN.) CONCRETE SCREWS.
11. SEE ROAD PLANS FOR TRAFFIC CONTROL DETAILS.

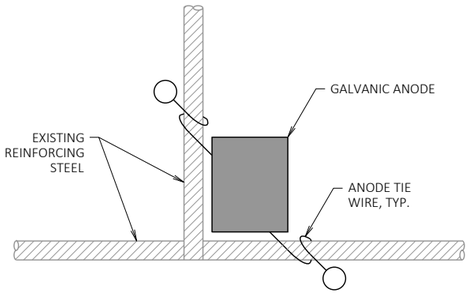
BILL OF BARS

	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	
*	S1101	--	2	46'-9"	--	--	EDGE OF DECK	LONGIT.
	TOTAL WEIGHT =							500 LBS.

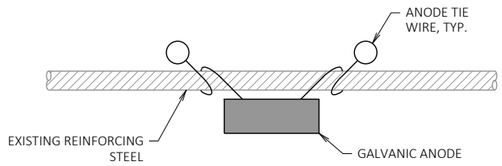
* ESTIMATED LENGTH, ANTICIPATE FIELD CUTTING REQUIRED.



DETAIL A



TYPICAL INSTALLATION AT BAR STEEL INTERSECTION



TYPICAL INSTALLATION FOR BAR STEEL

CATHODIC PROTECTION REPAIR NOTES

SURFACE REPAIR AREAS WITH CATHODIC PROTECTION ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. THE PLAN QUANTITY FOR THE BID ITEM "EMBEDDED GALVANIC ANODES" IS BASED ON A MAXIMUM SPACING OF 24-INCHES AROUND THE SURFACE REPAIR PERIMETER. THE ACTUAL QUANTITY SHALL BE BASED ON THE FIELD CONDITIONS AND AS RECOMMENDED BY THE GALVANIC ANODE SUPPLIER.

SURFACE REPAIRS SHALL BE FILLED WITH REPAIR MATERIALS COMPATIBLE WITH CATHODIC PROTECTION, AS RECOMMENDED BY THE ANODE SUPPLIER.

EXISTING REINFORCING STEEL TO BE COMPLETELY CLEANED OF CORRODED MATERIAL AND CONCRETE TO PROVIDE SUFFICIENT ELECTRICAL CONNECTION AND BOND. CATHODIC PROTECTION PREPARATIONS ARE INCLUDED IN THE BID ITEM "EMBEDDED GALVANIC ANODES".

ANODES NEAREST TO EDGE OF REPAIR TO BE WITHIN 6" OF EDGE.

AFTER PLACEMENT, GALVANIC ANODES SHOULD MAINTAIN A MINIMUM TOP COVER OF 1 ½" AND A MINIMUM BOTTOM COVER OF ¾"

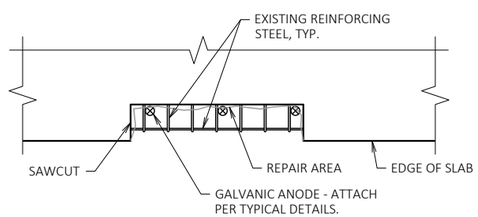
LEGEND

■ DEBRIS CONTAINMENT IS TO BE USED FOR CONCRETE SURFACE REPAIR OVER THE WATER ONLY. USE OF DEBRIS CONTAINMENT AT OTHER LOCATIONS WILL NOT BE ALLOWED OR PAID FOR.

TOTAL ESTIMATED QUANTITIES

	ITEM NUMBER	BID ITEMS	UNIT	WEST ABUT.	EAST ABUT.	SUPER	TOTAL
■	203.0335.02	DEBRIS CONTAINMENT OVER WATERWAY B-52-101	EACH	----	----	----	1
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	----	----	20	20
	505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	----	----	500	500
	509.1500	CONCRETE SURFACE REPAIR	SF	25	25	225	275
	SPV.0060.01	EMBEDDED GALVANIC ANODES	EACH	----	----	50	50
	SPV.0090.01	FLASHING STAINLESS STEEL	LF	----	----	45	45
		NON-BID ITEMS					
		JOINT SEALER					

ALL BID ITEMS ARE CATEGORY 0080



PART. PLAN TYPICAL CATHODIC PROTECTION REPAIR DETAIL

(APPLICABLE FOR CONCRETE SURFACE REPAIR LOCATIONS AT EDGE OF SLAB ONLY)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-101

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY CORRE

CROSS SECTION & QUANTITIES

SHEET 2 OF 2

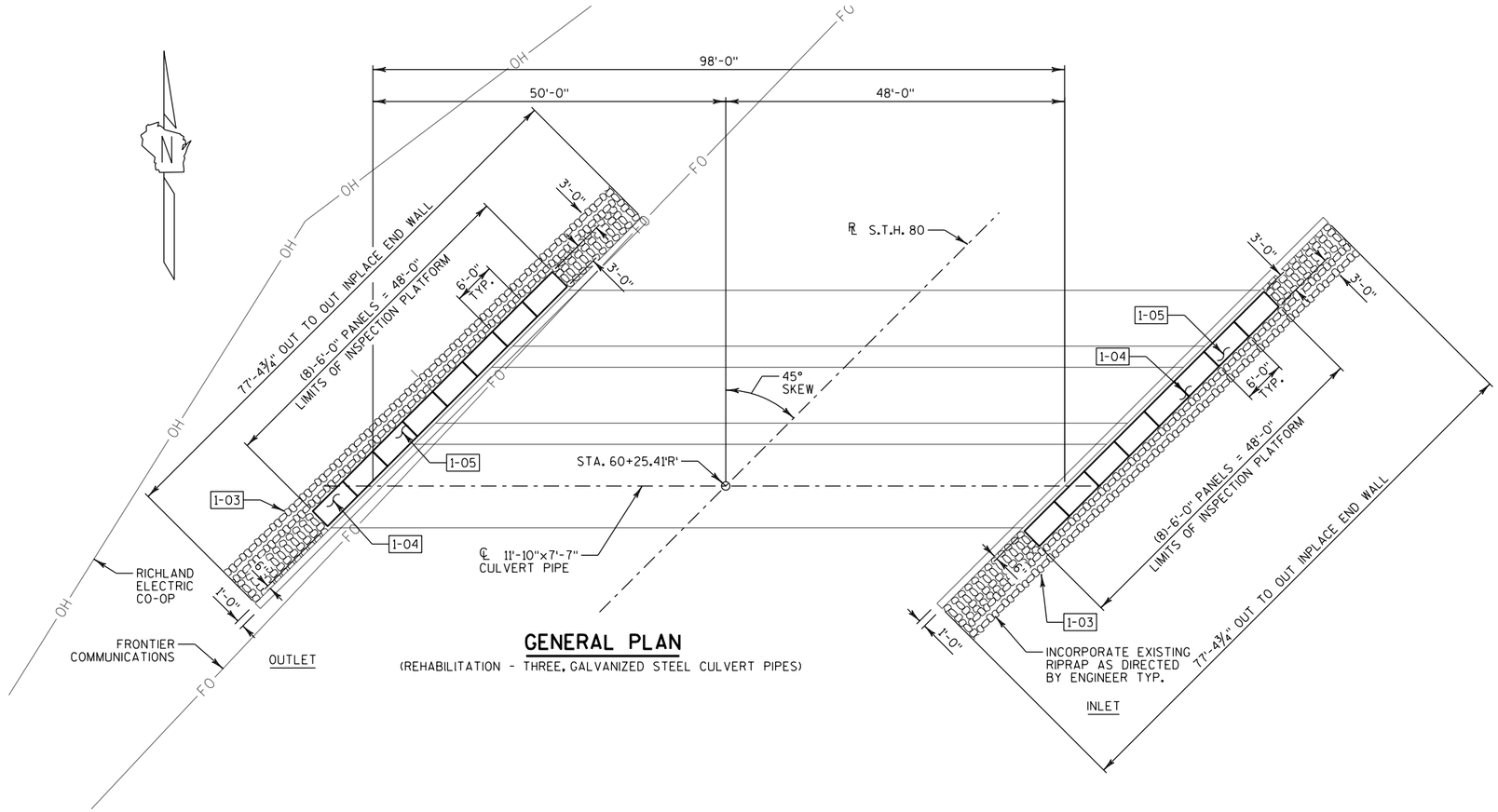
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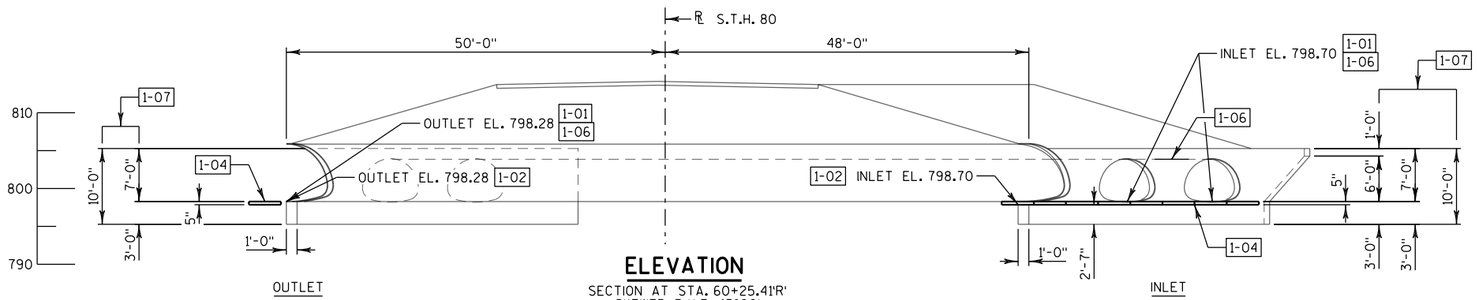
STATE PROJECT NUMBER

5040-03-70



GENERAL PLAN

(REHABILITATION - THREE, GALVANIZED STEEL CULVERT PIPES)



ELEVATION

SECTION AT STA. 60+25.41'R'
SKEWED R.H.F. 45°00'

OUTLET

INLET

DESIGN DATA

LIVE LOAD:
- DESIGN LOADING — H - 20 (FROM HSI)
- INVENTORY RATING — HS - 16 (FROM HSI)
- OPERATIONAL RATING — HS - 27 (FROM HSI)
- WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) — 170 KIPS (FROM HSI)

EARTH LOAD:
- DESIGNED FOR — 6.0' OF FILL (FROM HSI)

MATERIAL PROPERTIES

- CONCRETE MASONRY — f'c = 3,500 PSI
- HIGH-STRENGTH BAR STEEL REINFORCEMENT — fy = 60,000 PSI
- STRUCTURAL CARBON STEEL, ASTM A709, GRADE 36 — fy = 36,000 PSI

TRAFFIC DATA

S.T.H. 80

ADT (2024) = 1850
ADT (2044) = 1960
RDS = 60 MPH

SCOPE OF WORK B-52-865

1. REPAIR EXISTING ENDWALLS.
2. INSTALL INSPECTION PLATFORM & RIPRAP.

LEGEND

1-01 (2) 7'-11"x5'-7" GALVANIZED STEEL CULVERT PIPES.

1-02 (1) 11'-10"x7'-7" GALVANIZED STEEL CULVERT PIPE.

1-03 RIPRAP HEAVY & GEOTEXTILE TYPE HR (TYP.)

1-04 3'-0"x6'-0"x0'-5" PRECAST INSPECTION PLATFORM SLAB (TYP.). TOP OF PLATFORM TO MATCH EXISTING INVERT ELEVATIONS.

1-05 EXCAVATE 2'-0" & PLACE GEOTEXTILE TYPE C. BACKFILL WITH BREAKER RUN BELOW INSPECTION PLATFORMS & BETWEEN PLATFORMS & STRUCTURE (TYP.)

1-06 DIMENSIONS AND ELEVATIONS ARE BASED ON AS-BUILT PLANS. OBSERVED TOP OF WALL & INVERT ELEVATIONS DIFFER FROM AS-BUILTS. INVERT ELEVATIONS FOR THE TWO NORTHERN PIPES WERE CHANGED TO MATCH THE SOUTHERN PIPE BASED ON FIELD OBSERVATIONS.

1-07 DIMENSIONS AT SOUTH END OF WALL PER AS-BUILT PLAN.

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. NOTES, DETAILS & QUANTITIES

WISCONSIN
ERIC T. PRICE
E-39027
MADISON
WI
PROFESSIONAL ENGINEER

July 30, 2024

BUREAU OF STRUCTURES CONTACT:
AARON BONK, P.E. (608) 261-0261

CONSULTANT CONTACT:
ERIC PRICE, P.E. (608) 826-6146

NO.	DATE	REVISION	BY

CORRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 08/01/24
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-52-865

S.T.H. 80 OVER MELANCTHON CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
RICHLAND	HENRIETTA

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	BH	DESIGN CK'D.	ETP	DRAWN BY	TKB	PLANS CK'D.	BH

GENERAL PLAN AND ELEVATION

SHEET 1 OF 2

240

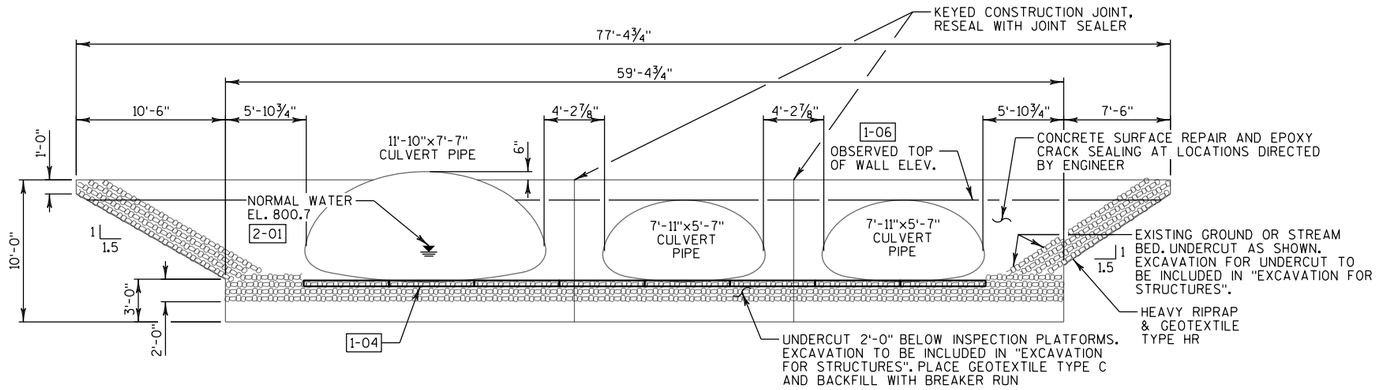
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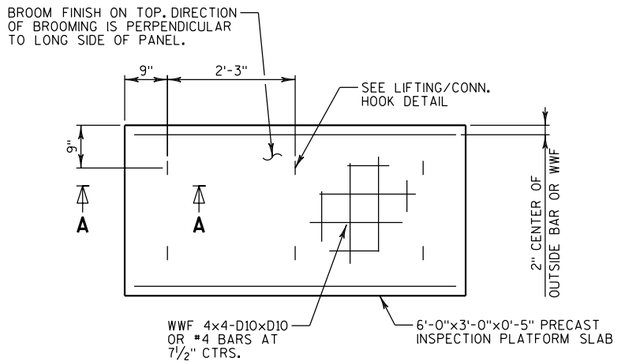
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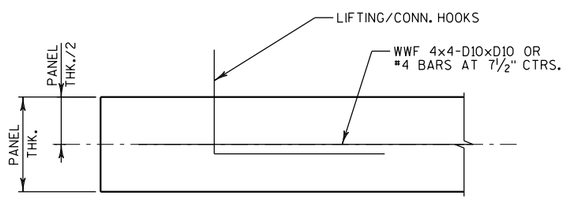
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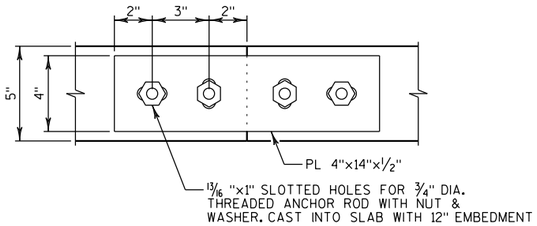
SKEWED END VIEW



PLAN - INSPECTION PLATFORM PANEL

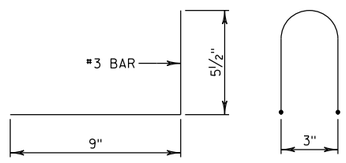


SECTION A-A



CONNECTION PLATE DETAIL

2-CONNECTION PLATES PER PANEL CONNECTION
1-PLATE PER SIDE



LIFTING/CONN. HOOK DETAIL

BURN OFF FLUSH WITH CONCRETE AFTER INSTALLATION IS COMPLETE

INSPECTION PLATFORM DETAILS

STATE PROJECT NUMBER

5040-03-70

GENERAL NOTES

1. DRAWINGS SHALL NOT BE SCALED.
2. DIMENSIONS AND ELEVATIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
3. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
4. THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.
5. THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS B-52-865" SHALL BE THE EXISTING GROUNDLINE OR EXISTING STREAM BED.
6. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR TEMPORARY STREAM DIVERSION REQUIREMENTS.

LEGEND

[1-XX] SEE SHEET 1 FOR CALLOUTS.

[2-01] PER 1974 AS-BUILT PLAN.

TOTAL ESTIMATED QUANTITIES

BID ITEMS

206.2001.03	EXCAVATION FOR STRUCTURES CULVERTS B-52-865	1	EACH
311.0110	BREAKER RUN	50	TON
509.1500	CONCRETE SURFACE REPAIR	50	SF
509.9020.S	EPOXY CRACK SEALING	100	LF
606.0300	RIPRAP HEAVY	60	CY
645.0105	GEOTEXTILE TYPE C	90	SY
645.0120	GEOTEXTILE TYPE HR	160	SY
SPV.0060.02	PRECAST INSPECTION PLATFORM SLAB B-52-865	16	EACH

NON-BID ITEMS

JOINT SEALER	1	LS

ALL BID ITEMS ARE CATEGORY 0090.

INSPECTION PLATFORM NOTES:

BID ITEM SHALL BE "PRECAST INSPECTION PLATFORM SLAB" WHICH INCLUDES CONCRETE, REINFORCEMENT, CONNECTION PLATES, ANCHOR RODS, NUTS, WASHERS, AND ALL INCIDENTALS.

ALL STEEL MATERIAL SHALL CONFORM TO ASTM A709, GRADE 36. THREADED ANCHOR RODS SHALL CONFORM TO ASTM F1554, GRADE 55.

PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL FINISHED SURFACES SHALL BE FINISHED BY AN AUTOMATIC PROCESS.

ALL STRUCTURAL STEEL SHOWN SHALL BE GALVANIZED. THREADED ANCHOR RODS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C.

CUTTING, DRILLING, AND WELDING OF STEEL SHALL BE DONE IN FABRICATION SHOP, PRIOR TO GALVANIZING.

USE MINIMUM ANCHOR ROD "STICK OUT" TO ACCOMMODATE NUT & WASHER INSTALLATION BETWEEN STRUCTURE AND PLATFORMS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-865

DRAWN BY TKB | PLANS CK'D. BH

NOTES, DETAILS & QUANTITIES

SHEET 2 OF 2

8

8

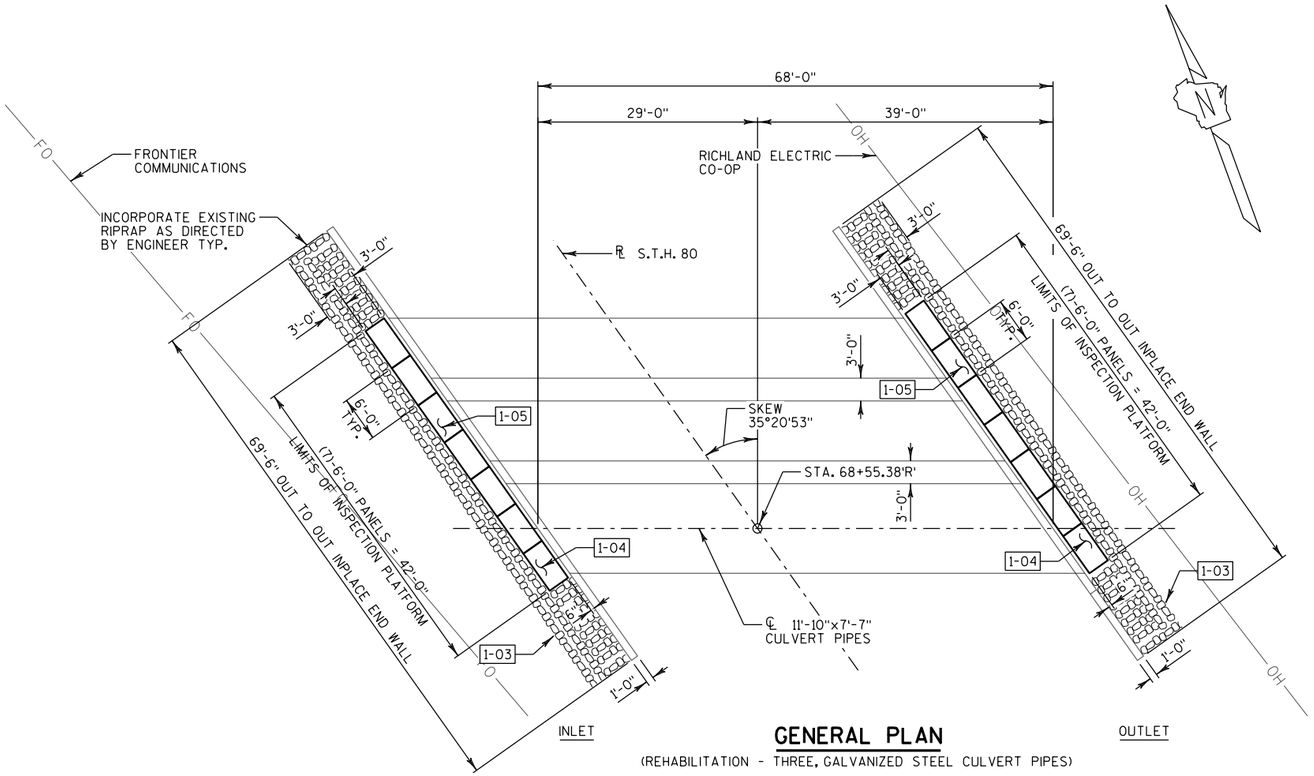
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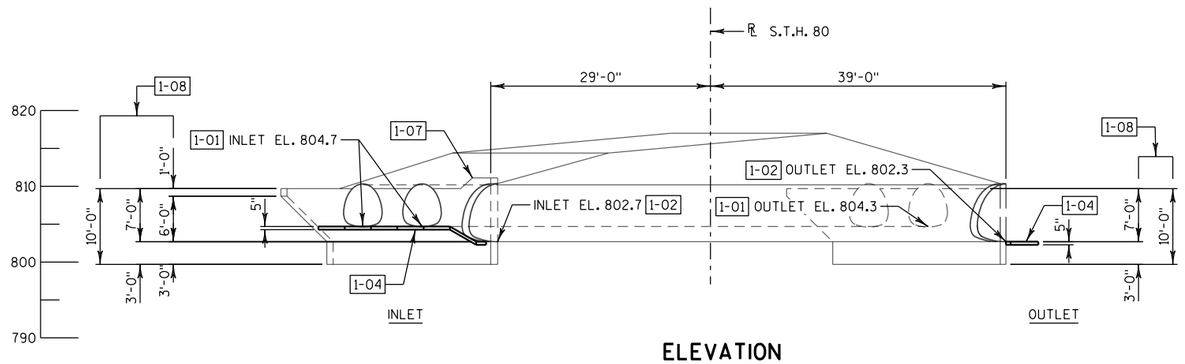
STATE PROJECT NUMBER

5040-03-70



GENERAL PLAN

(REHABILITATION - THREE, GALVANIZED STEEL CULVERT PIPES)



ELEVATION

SECTION AT STA. 68+55.38'R'
SKEWED L.H.F. 35°20'53"

DESIGN DATA

LIVE LOAD:
- DESIGN LOADING — H - 20 (FROM HSI)
- INVENTORY RATING — HS - 16 (FROM HSI)
- OPERATIONAL RATING — HS - 27 (FROM HSI)
- WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) — 170 KIPS (FROM HSI)

EARTH LOAD:
- DESIGNED FOR — 6.0' OF FILL (FROM HSI)

MATERIAL PROPERTIES

- CONCRETE MASONRY — f'c = 3,500 PSI
- HIGH-STRENGTH BAR STEEL REINFORCEMENT — fy = 60,000 PSI
- STRUCTURAL CARBON STEEL, ASTM A709, GRADE 36 — fy = 36,000 PSI

TRAFFIC DATA

S.T.H. 80

ADT (2024) = 1850
ADT (2044) = 1960
RDS = 60 MPH

SCOPE OF WORK B-52-866

1. REPAIR EXISTING ENDWALLS.
2. INSTALL INSPECTION PLATFORM & RIPRAP.

LEGEND

1-01 (2) 7'-11"x5'-7" GALVANIZED STEEL CULVERT PIPES.

1-02 (1) 11'-10"x7'-7" GALVANIZED STEEL CULVERT PIPE.

1-03 RIPRAP HEAVY & GEOTEXTILE TYPE HR (TYP.)

1-04 3'-0"x6'-0"x0'-5" PRECAST INSPECTION PLATFORM SLAB (TYP.). TOP OF PLATFORM TO MATCH EXISTING INVERT ELEVATIONS.

1-05 EXCAVATE 2'-0" & PLACE GEOTEXTILE TYPE C. BACKFILL WITH BREAKER RUN BELOW INSPECTION PLATFORMS & BETWEEN PLATFORMS AND STRUCTURE (TYP.)

1-06 DIMENSIONS AND ELEVATIONS ARE BASED ON AS-BUILT PLANS.

1-07 TOP OF WALL EXTENDS OVER PIPE AT THIS LOCATION. OBSERVED DURING FIELD REVIEW. NOT SHOWN ON AS-BUILTS.

1-08 DIMENSIONS AT SOUTH END OF WALL PER AS-BUILT PLAN.

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. NOTES, DETAILS & QUANTITIES



BUREAU OF STRUCTURES CONTACT:
AARON BONK, P.E. (608) 261-0261

CONSULTANT CONTACT:
ERIC PRICE, P.E. (608) 826-6146

NO.	DATE	REVISION	BY

CORRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 08/01/24
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-52-866

S.T.H. 80 OVER MELANCTHON CREEK

COUNTY: RICHLAND
TOWN/~~CITY/VILLAGE~~: HENRIETTA

DESIGN SPEC.: REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BH	ETP	TKB	BH

GENERAL PLAN AND ELEVATION

SHEET 1 OF 2

242

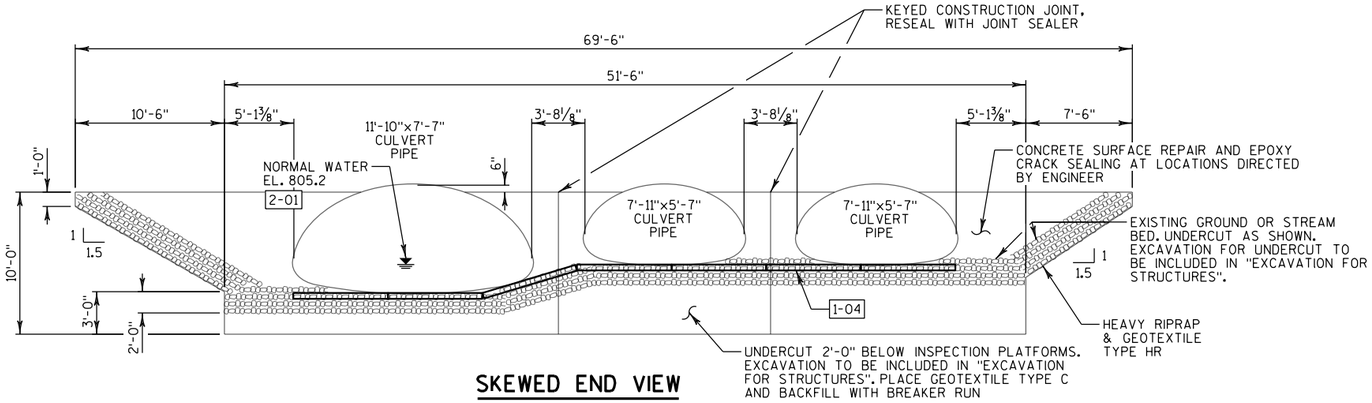
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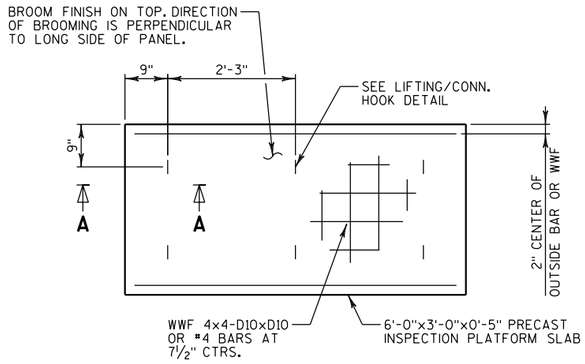
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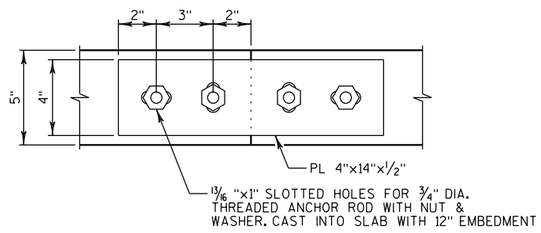
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SKEWED END VIEW

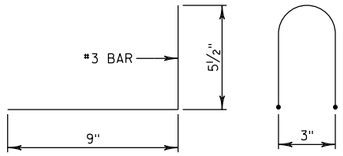


PLAN - INSPECTION PLATFORM PANEL



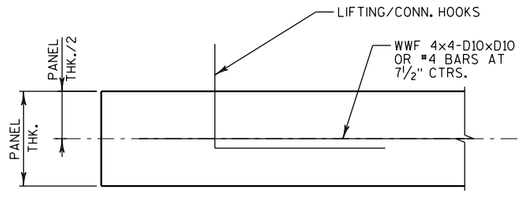
CONNECTION PLATE DETAIL

2-CONNECTION PLATES PER PANEL CONNECTION
1-PLATE PER SIDE
(8 LOCATIONS TOTAL)

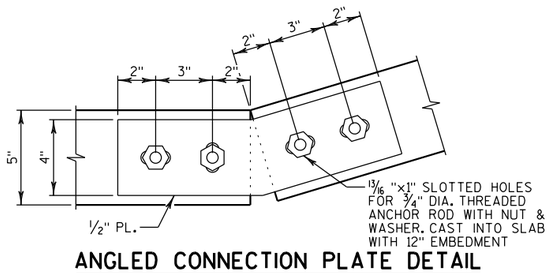


LIFTING/CONN. HOOK DETAIL

BURN OFF FLUSH
WITH CONCRETE AFTER
INSTALLATION IS COMPLETE

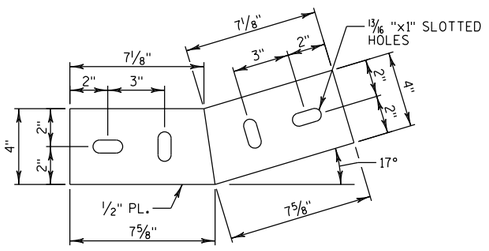


SECTION A-A



ANGLED CONNECTION PLATE DETAIL

2-CONNECTION PLATES PER PANEL CONNECTION
1-PLATE PER SIDE
(4 LOCATIONS TOTAL)



ANGLED CONNECTION PLATE

(4 TOTAL)

INSPECTION PLATFORM DETAILS

GENERAL NOTES

1. DRAWINGS SHALL NOT BE SCALED.
2. DIMENSIONS AND ELEVATIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
3. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
4. THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.
5. THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS B-52-866" SHALL BE THE EXISTING GROUNDLINE OR EXISTING STREAM BED.
6. SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR TEMPORARY STREAM DIVERSION REQUIREMENTS.

LEGEND

[1-XX] SEE SHEET 1 FOR CALLOUTS.

[2-01] PER 1974 AS-BUILT PLAN.

TOTAL ESTIMATED QUANTITIES

BID ITEMS

206.2001.04	EXCAVATION FOR STRUCTURES CULVERTS B-52-866	1	EACH
311.0110	BREAKER RUN	45	TON
509.1500	CONCRETE SURFACE REPAIR	50	SF
509.9020.S	EPOXY CRACK SEALING	100	LF
606.0300	RIPRAP HEAVY	50	CY
645.0105	GEOTEXTILE TYPE C	80	SY
645.0120	GEOTEXTILE TYPE HR	150	SY
SPV.0060.03	PRECAST INSPECTION PLATFORM SLAB B-52-866	14	EACH

NON-BID ITEMS

	JOINT SEALER	1	LS

ALL BID ITEMS ARE CATEGORY 0100.

INSPECTION PLATFORM NOTES:

BID ITEM SHALL BE "PRECAST INSPECTION PLATFORM SLAB" WHICH INCLUDES CONCRETE, REINFORCEMENT, CONNECTION PLATES, ANCHOR RODS, NUTS, WASHERS, AND ALL INCIDENTALS.

ALL STEEL MATERIAL SHALL CONFORM TO ASTM A709, GRADE 36. THREADED ANCHOR RODS SHALL CONFORM TO ASTM F1554, GRADE 55.

PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL FINISHED SURFACES SHALL BE FINISHED BY AN AUTOMATIC PROCESS.

ALL STRUCTURAL STEEL SHOWN SHALL BE GALVANIZED. THREADED ANCHOR RODS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C.

CUTTING, DRILLING, AND WELDING OF STEEL SHALL BE DONE IN FABRICATION SHOP, PRIOR TO GALVANIZING.

USE MINIMUM ANCHOR ROD "STICK OUT" TO ACCOMMODATE NUT & WASHER INSTALLATION BETWEEN STRUCTURE AND PLATFORMS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-52-866

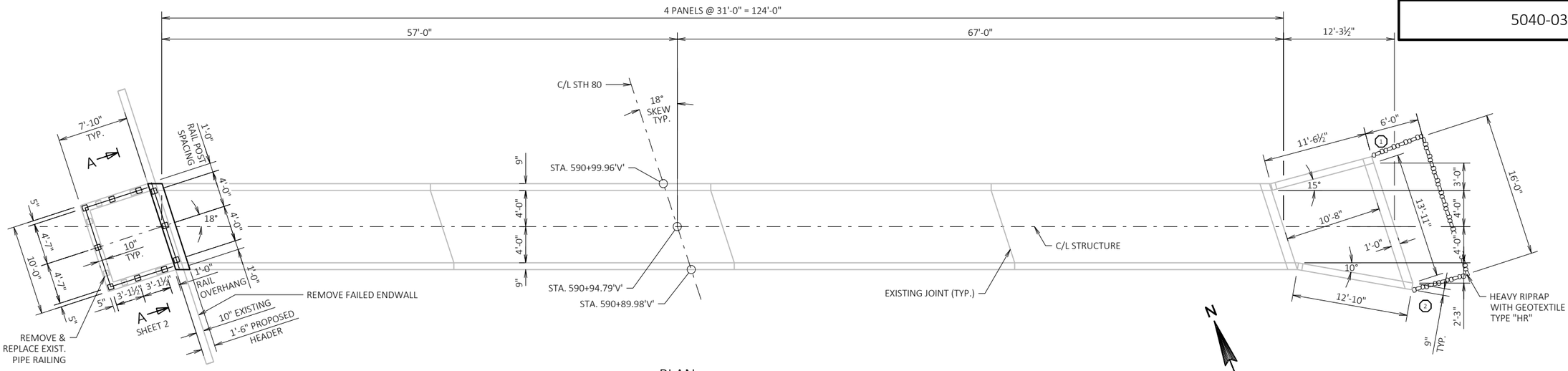
DRAWN BY TKB | PLANS CK'D. BH

NOTES, DETAILS & QUANTITIES

SHEET 2 OF 2

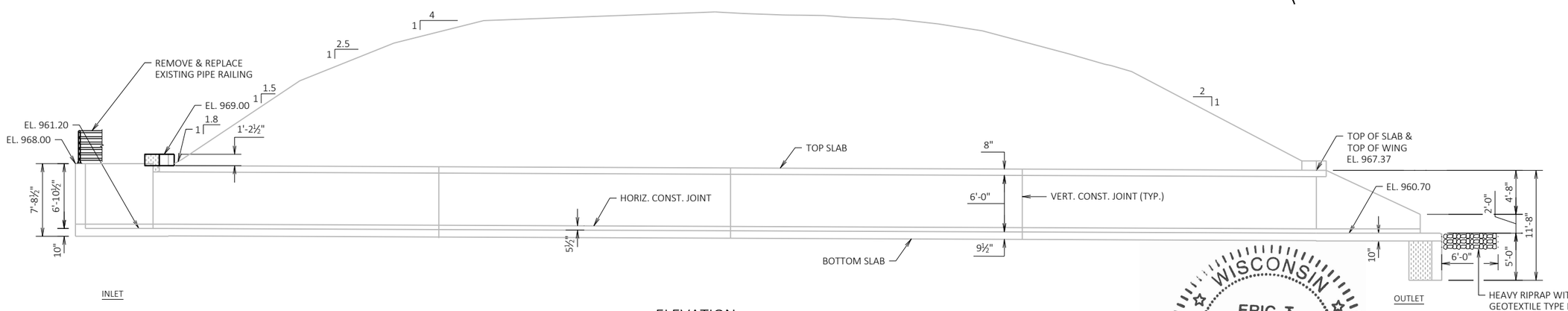
STATE PROJECT NUMBER

5040-03-70



PLAN

(REHABILITATION - SINGLE CELL, REINFORCED CONCRETE BOX CULVERT)



ELEVATION

SCOPE OF WORK

1. REMOVE WEST ENDWALL AND BUILD NEW HEADER. NOTE, EXISTING ENDWALL WILL NOT BE REPLACED. SEE ROADWAY PLANS FOR GRADING CHANGES.
2. REPLACE/INSTALL PIPE RAILING AT WEST END OF CULVERT
3. INSTALL HEAVY RIPRAP AND GEOTEXTILE AT EAST END OF CULVERT (OUTLET END)
4. PERFORM CONCRETE SURFACE REPAIRS AT LOCATIONS DIRECTED BY ENGINEER

DESIGN DATA

LIVELOAD: DESIGN LOADING —— H20 (EXISTING CULVERT - FROM HSI)
EARTHLOAD: DESIGNED FOR 15'-6" OF FILL (EXISTING CULVERT - FROM HSI)

MATERIAL PROPERTIES:

CONCRETE —— f'c = 3,500 PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT —— fy = 60,000 PSI

TRAFFIC DATA

STH 80
ADT (2024) = 1850
ADT (2044) = 1960
DESIGN SPEED = 60 MPH

LEGEND

○ DENOTES WING NUMBER

WISCONSIN
ERIC T. PRICE
E-39027
MADISON
WI
PROFESSIONAL ENGINEER

July 30, 2024

LIST OF DRAWINGS

1. GENERAL PLAN
2. MISC. DETAILS & QUANTITIES
3. RAILING PIPE DETAILS

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
TELEPHONE: (608) 261-0261

CONSULTANT CONTACT
ERIC PRICE, P.E.
TELEPHONE: (608) 826-6145

NO.	DATE	REVISION	BY

CORRE ENGINEERING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED SDR 08/01/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE C-62-60

STH 80 OVER FLOWING STREAM

COUNTY	TOWN/~~CITY/VILLAGE~~
VERNON	GREENWOOD

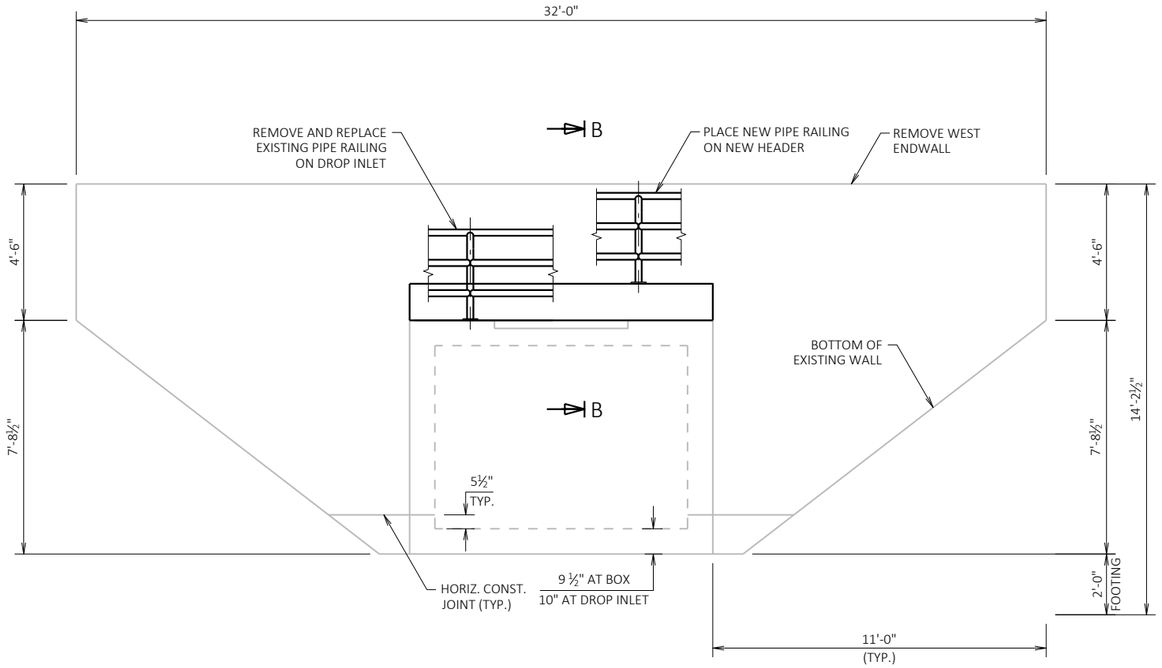
DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BH	ETP	PKF	BH

GENERAL PLAN

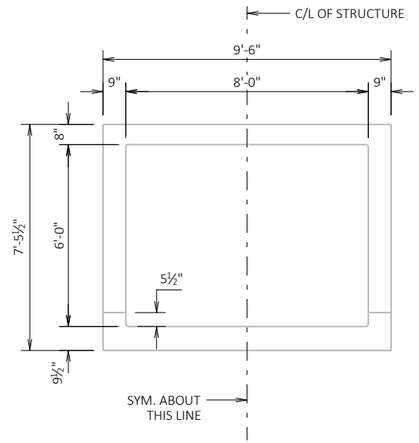
SHEET 1 of 3

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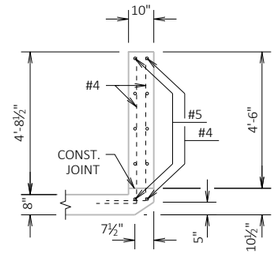


SECTION THRU DROP INLET & WEST ENDWALL

(SECTION A-A FROM SHEET 1)



SECTION THRU BARREL



SECTION B-B

(EXISTING CONDITIONS AT WALL OVER BOX)

LEGEND

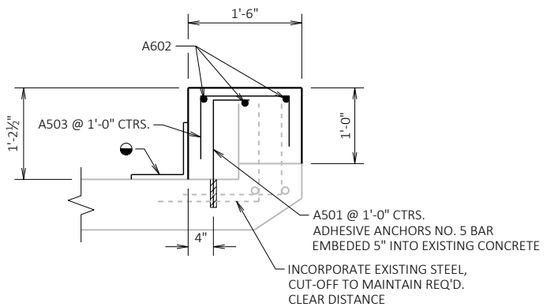
* ITEM INCLUDES REMOVAL OF THE EXISTING ENDWALL AND PIPE RAILING AT THE INLET END.

◒ 18" RUBBERIZED MEMBRANE WATERPROOFING (RMW). SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

TOTAL ESTIMATED QUANTITIES

	ITEM NUMBER	BID ITEMS	UNIT	QUANTITY
*	203.0250.03	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS C-62-60	EACH	1
	502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	11
	504.0100	CONCRETE MASONRY CULVERTS	CY	1
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	100
	509.1500	CONCRETE SURFACE REPAIR	SF	50
	513.2001	RAILING PIPE	LF	30
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	2
	606.0300	RIPRAP HEAVY	CY	10
	645.0120	GEOTEXTILE TYPE HR	SY	22
		NON-BID ITEMS		

ALL BID ITEMS ARE CATEGORY 0120



SECTION B-B

(PROPOSED CONDITIONS)

GENERAL NOTES

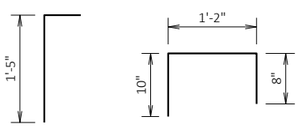
1. DRAWINGS SHALL NOT BE SCALED.
2. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
3. ELEVATIONS ARE BASED ON THE INSPECTION REPORT OR EXISTING PLANS.
4. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
5. THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.
6. CLEAN, STRAIGHTEN, AND EXTEND EXISTING BAR STEEL REINFORCEMENT 24 BAR DIAMETERS INTO NEW CONSTRUCTION WHERE APPLICABLE.
7. ALL CONCRETE REMOVAL SHALL BE DEFINED BY A ½" DEEP SAW CUT.
8. "CONCRETE SURFACE REPAIR" QUANTITIES ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE THE FIELD IDENTIFICATION AND DETERMINATION OF ALL REPAIR LOCATIONS WITH THE ENGINEER.
9. SEE ROADWAY PLANS FOR CONSTRUCTION STAGING DETAILS.
10. REMOVAL OF THE EXISTING ENDWALL AND PIPE RAILING IS COVERED UNDER THE "REMOVING STRUCTURE" ITEM.
11. SEE ROADWAY PLANS FOR REQUIRED GRADING TO ELIMINATE EXISTING ENDWALL. EXCAVATION AND GRADING ARE COVERED IN THE ROAD PLANS.

BILL OF BARS - HEADER

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
COATED BARS						TOTAL WEIGHT = 100 LBS
A501	11	2'-2"	X	---	HEADER	VERT.
A602	3	9'-7"	---	---	HEADER	LONG.
A503	11	2'-5"	X	---	HEADER	VERT.

THE FIRST DIGIT OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT-TO-OUT OF BAR.



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-62-60

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY CORRE

MISC. DETAILS & QUANTITIES

SHEET 2 OF 3

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STATE PROJECT NUMBER

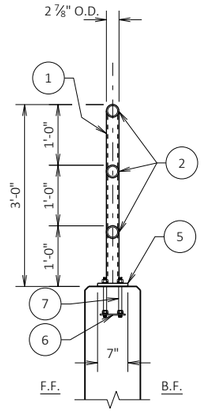
5040-03-70

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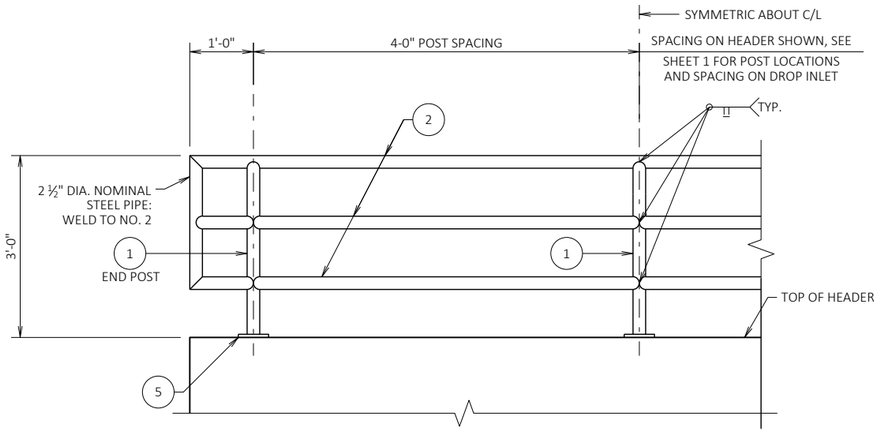
STATE PROJECT NUMBER

5040-03-70



SECTION THRU INLET WALL OR HEADER

(ADJUST REINFORCEMENT AT ANCHORAGES)



ELEVATION OF NEW HEADER

(DETAILS AT DROP INLET SIMILAR)

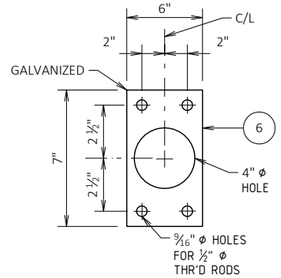
LEGEND

1. 2 ½" DIA. STANDARD STEEL PIPE FOR POSTS. POSTS ARE TO BE SET VERTICAL: WELD TO NO. 5.
2. 2 ½" DIA. STANDARD STEEL PIPE FOR RAILS: WELD TO NO. 1.
3. 2" DIA. STANDARD PIPE SLEEVE FOR NO. 2. PROVIDE "SLIDING FIT".
4. 2" DIA. STANDARD PIPE SLEEVE X 1'-10" LONG. PROVIDE ½" DIA. SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 2. PROVIDE ⅜" DIA. X ½" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.
5. PLATE ⅝" X 7" X 8" WITH 9/16" X 1 ¼" SLOTTED HOLES.
6. ¼" X 6" X 7" ANCHOR PLATE WITH 9/16" DIA. HOLES FOR THREADED RODS NO. 7.
7. ½" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. DROP INLET AND ALTERNATE RAIL POST ANCHORAGE - CONCRETE ADHESIVE ANCHORS ½" DIA. EMBED 7" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.

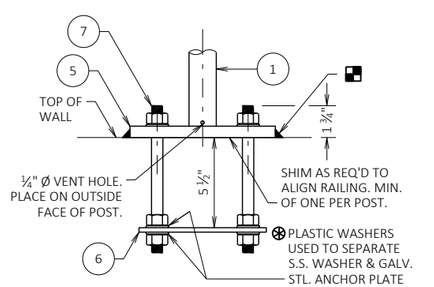
RAILING NOTES

1. BID ITEM SHALL BE "RAILING PIPE" WHICH SHALL INCLUDE ALL ITEMS SHOWN.
2. POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.
3. NO. 5 & 6 SHALL CONFORM TO ASTM A709 GRADE 36. PIPE RAILING SHALL CONFORM TO ASTM A500 GRADE B (NO. 1, 2, 3 AND NO. 4).
4. ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.
5. CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.
6. STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.
7. ■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 5, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING NON-BITUMINOUS JOINT SEALER. COLOR TO MATCH WALL COLOR.
8. ALL MATERIAL (EXCEPT NO. 7) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS.
9. VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.
10. RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.
11. TOUCH-UP TO THE GALVANIZING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.
12. HORIZONTAL COMPONENTS SHALL RUN PARALLEL TO THE TOP OF THE WALL.

TYPICAL RAIL POST BASE PLATE

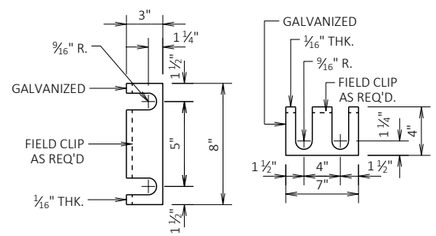


ANCHOR PLATE



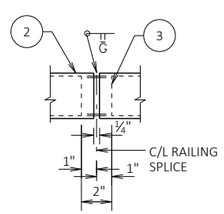
ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



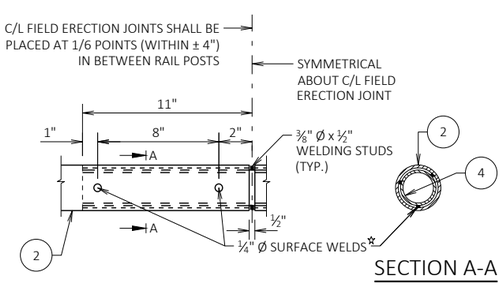
RAIL POST SHIM DETAIL

(2 SETS PER POST)



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



FIELD ERECTION JOINT DETAIL

☆MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.

SECTION A-A

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-62-60

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY
CORRE

RAILING PIPE DETAILS

SHEET 3 OF 3

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8

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STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
20+84.04	2084.04	0.00	0.00	0.00	0.00	0	0	0	0	0	0
21+00.00	2100.00	15.96	0.00	0.00	57.21	0	0	17	0	21	-21
21+02.13	2102.13	2.13	0.01	0.00	46.93	0	0	4	0	26	-26
21+25.00	2125.00	22.87	0.00	0.00	7.47	0	0	23	0	55	-55
21+25.25	2125.25	0.25	0.00	0.00	7.45	0	0	0	0	55	-55
21+50.61	2150.61	25.36	0.00	0.00	2.72	0	0	5	0	61	-61
21+75.97	2175.97	25.36	0.00	0.00	0.62	0	0	2	0	64	-64
22+00.00	2200.00	24.03	0.00	0.00	0.60	0	0	1	0	65	-65
22+16.14	2216.14	16.14	0.00	0.00	0.11	0	0	0	0	65	-65
22+40.79	2240.79	24.65	0.00	0.00	2.95	0	0	1	0	66	-66
22+65.45	2265.45	24.66	0.00	0.00	5.79	0	0	4	0	71	-71
22+75.00	2275.00	9.55	0.00	0.00	2.87	0	0	2	0	74	-74
22+76.00	2276.00	1.00	0.00	0.00	0.00	0	0	0	0	74	-74
22+99.00	2299.00	23.00	0.00	0.00	0.00	0	0	0	0	74	-74
23+00.00	2300.00	1.00	0.00	0.00	1.07	0	0	0	0	74	-74
23+00.00	2300.00	0.00	0.00	0.00	1.07	0	0	0	0	74	-74
23+25.94	2325.94	25.94	0.00	0.00	3.83	0	0	2	0	76	-76
23+50.00	2350.00	24.06	0.00	0.00	1.09	0	0	2	0	79	-79
23+85.94	2385.94	35.94	0.00	0.00	0.03	0	0	1	0	80	-80
23+87.00	2387.00	1.06	0.00	0.00	0.00	0	0	0	0	80	-80

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
20+84.04	2084.04	0.00	0.00	0.00	7.06	0	0	0	0	0	0
21+25.25	2125.25	41.21	0.00	0.00	0.88	0	0	6	0	8	-8
21+50.61	2150.61	25.36	0.00	0.00	8.20	0	0	4	0	13	-13
21+75.97	2175.97	25.36	0.00	0.00	9.98	0	0	9	0	24	-24
22+00.00	2200.00	24.03	0.00	0.00	10.33	0	0	9	0	35	-35
22+16.14	2216.14	16.14	0.00	0.00	8.92	0	0	6	0	43	-43
22+40.79	2240.79	24.65	0.00	0.00	9.09	0	0	8	0	53	-53
22+65.45	2265.45	24.66	0.01	0.00	4.77	0	0	6	0	60	-60
22+75.00	2275.00	9.55	0.00	0.00	1.43	0	0	1	0	61	-61
22+76.00	2276.00	1.00	0.00	0.00	0.00	0	0	0	0	61	-61

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
24+30.00	2430.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
24+30.73	2430.73	0.73	0.00	0.00	1.63	0	0	0	0	0	0
24+50.00	2450.00	19.27	0.00	0.00	1.19	0	0	1	0	1	-1
24+87.98	2487.98	37.98	0.00	0.00	14.63	0	0	11	0	15	-15
25+00.00	2500.00	12.02	0.00	0.00	11.89	0	0	6	0	23	-23
25+00.73	2500.73	0.73	0.00	0.00	0.00	0	0	0	0	23	-23
25+45.00	2545.00	44.27	0.00	0.00	0.00	0	0	0	0	23	-23
25+45.24	2545.24	0.24	0.00	0.00	1.38	0	0	0	0	23	-23
25+51.23	2551.23	5.99	0.00	0.00	2.83	0	0	0	0	23	-23
25+76.23	2576.23	25.00	0.00	0.00	1.77	0	0	2	0	25	-25
26+00.00	2600.00	23.77	0.00	0.00	0.09	0	0	1	0	26	-26
26+01.23	2601.23	1.23	0.00	0.00	0.06	0	0	0	0	26	-26
26+05.20	2605.20	3.97	0.00	0.00	0.13	0	0	0	0	26	-26
26+07.00	2607.00	1.80	0.00	0.00	0.14	0	0	0	0	26	-26
27+00.00	2700.00	93.00	0.00	0.00	0.02	0	0	0	0	26	-26
27+25.00	2725.00	25.00	0.00	0.00	8.6928744	0	0	0	0	26	-26
27+40.00	2740.00	15.00	10.10	0.00	0.00	3	0	0	3	26	-23
27+40.50	2740.50	0.50	0.00	0.00	0.00	0	0	0	3	26	-23
28+00.00	2800.00	59.50	0.00	0.00	0.00	0	0	0	3	26	-23
28+20.00	2820.00	20.00	0.00	0.00	0.17	0	0	0	3	26	-23
28+25.00	2825.00	5.00	0.00	0.00	0.38	0	0	0	3	26	-23
28+44.98	2844.98	19.98	0.00	0.00	3.32	0	0	1	3	28	-25
28+69.98	2869.98	25.00	0.00	0.00	5.53	0	0	4	3	33	-30
29+00.00	2900.00	30.02	0.00	0.00	3.24	0	0	5	3	39	-36
29+92.71	2992.71	92.71	0.00	0.00	6.41	0	0	17	3	60	-57
29+94.00	2994.00	1.29	0.00	0.00	0.00	0	0	0	3	60	-57

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
56+79.64	5679.64	0.00	0.00	0.00	0.00	0	0	0	0	0	0
57+00.00	5700.00	20.36	0.00	0.00	0.02	0	0	0	0	0	0
57+25.00	5725.00	25.00	0.01	0.00	0.04	0	0	0	0	0	0
57+56.00	5756.00	31.00	0.00	0.00	0.00	0	0	0	0	0	0
57+57.00	5757.00	1.00	0.00	0.00	0.00	0	0	0	0	0	0
57+78.00	5778.00	21.00	0.00	0.00	0.50	0	0	0	0	0	0
57+79.36	5779.36	1.36	0.00	0.00	2.97	0	0	0	0	0	0
58+00.00	5800.00	20.64	0.00	0.00	6.61	0	0	4	0	5	-5
58+24.75	5824.75	24.75	0.00	0.00	4.05	0	0	5	0	11	-11
58+29.87	5829.87	5.12	0.00	0.00	2.33	0	0	1	0	13	-13
58+49.36	5849.36	19.49	0.00	0.00	0.04	0	0	1	0	14	-14
58+50.00	5850.00	0.64	0.00	0.00	0.04	0	0	0	0	14	-14
58+50.50	5850.50	0.50	0.00	0.00	0.00	0	0	0	0	14	-14
60+99.00	6099.00	248.50	0.00	0.00	0.00	0	0	0	0	14	-14
61+00.00	6100.00	1.00	0.00	0.00	0.00	0	0	0	0	14	-14
61+78.89	6178.89	78.89	0.00	0.00	0.67	0	0	1	0	15	-15
62+00.00	6200.00	21.11	0.00	0.00	0.51	0	0	0	0	15	-15
62+03.89	6203.89	3.89	0.00	0.00	0.64	0	0	0	0	15	-15
62+28.89	6228.89	25.00	0.00	0.00	1.27	0	0	1	0	16	-16
63+00.00	6300.00	71.11	0.00	0.00	1.74	0	0	4	0	21	-21
63+50.64	6350.64	50.64	0.00	0.00	0.23	0	0	2	0	24	-24
63+75.64	6375.64	25.00	0.00	0.00	2.06	0	0	1	0	25	-25
64+00.00	6400.00	24.36	0.00	0.00	2.46	0	0	2	0	28	-28
64+00.64	6400.64	0.64	0.00	0.00	2.57	0	0	0	0	28	-28
64+26.25	6426.25	25.61	0.00	0.00	0.00	0	0	1	0	29	-29
64+27.00	6427.00	0.75	0.00	0.00	0.00	0	0	0	0	29	-29

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
60+00.00	6000.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
60+19.00	6019.00	19.00	0.00	0.00	0.00	0	0	0	0	0	0
60+19.99	6019.99	0.99	0.00	0.00	0.00	0	0	0	0	0	0
61+00.00	6100.00	80.01	0.00	0.00	11.10	0	0	16	0	20	-20
61+25.00	6125.00	25.00	0.00	0.00	0.51	0	0	5	0	26	-26
61+26.00	6126.00	1.00	0.00	0.00	0.00	0	0	0	0	26	-26
61+99.00	6199.00	73.00	0.00	0.00	0.00	0	0	0	0	26	-26
62+00.00	6200.00	1.00	0.00	0.00	0.73	0	0	0	0	26	-26
62+03.89	6203.89	3.89	0.00	0.00	2.02	0	0	0	0	26	-26
62+28.89	6228.89	25.00	0.00	0.00	9.28	0	0	5	0	33	-33
63+00.00	6300.00	71.11	0.00	0.00	2.43	0	0	15	0	51	-51
63+49.39	6349.39	49.39	0.00	0.00	0.00	0	0	2	0	54	-54
63+50.64	6350.64	1.25	0.00	0.00	0.00	0	0	0	0	54	-54
64+00.00	6400.00	49.36	0.00	0.00	0.00	0	0	0	0	54	-54

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
69+00.00	6900.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
69+02.14	6902.14	2.14	0.00	0.00	0.00	0	0	0	0	0	0
69+17.74	6917.74	15.60	9.50	0.00	0.00	3	0	0	3	0	3
69+30.15	6930.15	12.41	8.12	0.00	0.00	4	0	0	7	0	7
69+42.41	6942.41	12.26	3.80	0.00	0.00	3	0	0	10	0	10
69+66.00	6966.00	23.59	2.34	0.00	0.00	3	0	0	13	0	13
69+67.38	6967.38	1.38	2.26	0.00	0.00	0	0	0	13	0	13

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
77+00.00	7700.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
77+94.00	7794.00	94.00	0.00	0.00	0.00	0	0	0	0	0	0
77+94.59	7794.59	0.59	0.00	0.00	0.02	0	0	0	0	0	0
78+00.00	7800.00	5.41	0.00	0.00	2.56	0	0	0	0	0	0
78+06.85	7806.85	6.85	0.00	0.00	3.33	0	0	1	0	1	-1
78+31.85	7831.85	25.00	0.00	0.00	7.54	0	0	5	0	8	-8
79+00.00	7900.00	68.15	0.00	0.00	1.24	0	0	11	0	21	-21
79+52.35	7952.35	52.35	2.02	0.00	0.00	2	0	1	2	23	-21
79+53.00	7953.00	0.65	0.00	0.00	0.00	0	0	0	2	23	-21

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
83+75.00	8375.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
83+75.78	8375.78	0.78	0.00	0.00	0.29	0	0	0	0	0	0
84+00.00	8400.00	24.22	0.00	0.00	1.52	0	0	1	0	1	-1
84+10.46	8410.46	10.46	0.00	0.00	2.34	0	0	1	0	3	-3
84+35.43	8435.43	24.97	0.00	0.00	0.56	0	0	1	0	4	-4
84+48.29	8448.29	12.86	0.00	0.00	0.57	0	0	0	0	4	-4
84+49.00	8449.00	0.71	0.00	0.00	0.00	0	0	0	0	4	-4

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
84+00.00	8400.00	0.00	0.00	0.00	0.61	0	0	0	0	0	0
84+10.46	8410.46	10.46	0.00	0.00	1.94	0	0	0	0	0	0
84+22.00	8422.00	11.54	0.00	0.00	3.41	0	0	1	0	1	-1
84+22.79	8422.79	0.79	0.00	0.00	3.53	0	0	0	0	1	-1
84+35.43	8435.43	12.64	0.00	0.00	3.53	0	0	2	0	4	-4
84+60.25	8460.25	24.82	0.00	0.00	1.44	0	0	2	0	6	-6
84+95.19	8495.19	34.94	0.00	0.00	0.00	0	0	1	0	8	-8
84+96.28	8496.28	1.09	0.00	0.00	0.00	0	0	0	0	8	-8

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
87+95.00	8795.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
87+95.79	8795.79	0.79	0.00	0.00	0.01	0	0	0	0	0	0
88+00.00	8800.00	4.21	0.00	0.00	2.01	0	0	0	0	0	0
88+05.00	8805.00	5.00	0.00	0.00	4.35	0	0	1	0	1	-1
88+30.19	8830.19	25.19	0.00	0.00	10.36	0	0	7	0	10	-10
89+00.00	8900.00	69.81	0.00	0.00	4.35	0	0	19	0	34	-34
89+29.40	8929.40	29.40	0.00	0.00	5.10	0	0	5	0	40	-40
89+50.00	8950.00	20.60	0.00	0.00	0.00	0	0	2	0	43	-43

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
114+57.00	11457.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
114+58.64	11458.64	1.64	0.00	0.00	0.04	0	0	0	0	0	0
115+00.00	11500.00	41.36	0.00	0.00	0.43	0	0	0	0	0	0
115+60.68	11560.68	60.68	0.00	0.00	0.73	0	0	1	0	1	-1
115+65.42	11565.42	4.74	0.00	0.00	0.99	0	0	0	0	1	-1
115+79.15	11579.15	13.73	0.00	0.00	0.54	0	0	0	0	1	-1
115+85.68	11585.68	6.53	0.00	0.00	0.08	0	0	0	0	1	-1
115+87.00	11587.00	1.32	0.00	0.00	0.00	0	0	0	0	1	-1

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
114+99.00	11499.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
115+00.00	11500.00	1.00	0.00	0.00	1.84	0	0	0	0	0	0
115+33.38	11533.38	33.38	0.00	0.00	6.30	0	0	5	0	6	-6
115+50.01	11550.01	16.63	0.00	0.00	33.49	0	0	12	0	21	-21
115+51.00	11551.00	0.99	0.00	0.00	35.45	0	0	1	0	23	-23
115+60.68	11560.68	9.68	0.00	0.00	47.17	0	0	15	0	41	-41
115+65.42	11565.42	4.74	0.00	0.00	49.93	0	0	9	0	53	-53
115+71.19	11571.19	5.77	0.24	0.00	9.68	0	0	6	0	60	-60
115+79.15	11579.15	7.96	1.69	0.00	0.39	0	0	1	0	61	-61
115+85.68	11585.68	6.53	0.04	0.00	0.02	0	0	0	0	61	-61

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
117+40.66	11740.66	0.00	5.01	0.00	0.00	0	0	0	0	0	0
117+65.66	11765.66	25.00	48.38	0.00	0.00	25	0	0	25	0	25
117+70.28	11770.28	4.62	44.89	0.00	0.00	8	0	0	33	0	33
117+90.00	11790.00	19.72	0.00	0.00	2.24	16	0	1	49	1	48
117+90.66	11790.66	0.66	0.00	0.00	1.88	0	0	0	49	1	48
117+95.28	11795.28	4.62	0.00	0.00	0.44	0	0	0	49	1	48
118+00.00	11800.00	4.72	0.00	0.00	0.66	0	0	0	49	1	48
118+20.14	11820.14	20.14	0.00	0.00	1.46	0	0	1	49	3	47
118+58.52	11858.52	38.38	0.00	0.00	0.11	0	0	1	49	4	45
118+70.78	11870.78	12.26	0.00	0.00	37.76	0	0	9	49	15	34
118+72.00	11872.00	1.22	0.00	0.00	42.25	0	0	2	49	18	32
118+85.39	11885.39	13.39	0.24	0.00	45.31	0	0	22	49	45	4
119+00.00	11900.00	14.61	0.00	0.00	23.74	0	0	19	49	69	-20
119+08.11	11908.11	8.11	0.00	0.00	0.04	0	0	4	49	74	-25

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
117+65.66	11765.66	0.00	0.00	0.00	0.00	0	0	0	0	0	0
117+70.28	11770.28	4.62	0.00	0.00	0.16	0	0	0	0	0	0
117+90.66	11790.66	20.38	0.00	0.00	3.49	0	0	1	0	1	-1
117+95.28	11795.28	4.62	0.00	0.00	3.48	0	0	1	0	3	-3
118+00.00	11800.00	4.72	0.00	0.00	3.49	0	0	1	0	4	-4
118+20.14	11820.14	20.14	0.00	0.00	3.28	0	0	3	0	8	-8
118+85.39	11885.39	65.25	0.00	0.00	0.08	0	0	4	0	13	-13
119+00.00	11900.00	14.61	0.00	0.00	0.20	0	0	0	0	13	-13
119+01.00	11901.00	1.00	0.00	0.00	0.20	0	0	0	0	13	-13

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
143+49.00	14349.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
143+49.99	14349.99	0.99	0.00	0.00	0.00	0	0	0	0	0	0
144+00.00	14400.00	50.01	0.00	0.00	2.45	0	0	2	0	3	-3
144+39.65	14439.65	39.65	0.00	0.00	8.49	0	0	8	0	13	-13
144+64.65	14464.65	25.00	0.00	0.00	6.18	0	0	7	0	21	-21
144+89.65	14489.65	25.00	0.00	0.00	0.24	0	0	3	0	25	-25
144+91.00	14491.00	1.35	0.00	0.00	0.00	0	0	0	0	25	-25
146+00.00	14600.00	109.00	0.00	0.00	0.00	0	0	0	0	25	-25
146+99.50	14699.50	99.50	0.00	0.00	0.00	0	0	0	0	25	-25
147+00.00	14700.00	0.50	0.00	0.00	1.10	0	0	0	0	25	-25
148+00.00	14800.00	100.00	0.00	0.00	6.47	0	0	14	0	43	-43
149+00.00	14900.00	100.00	0.00	0.00	2.77	0	0	17	0	64	-64
150+00.00	15000.00	100.00	0.00	0.00	0.19	0	0	5	0	70	-70
150+00.50	15000.50	0.50	0.00	0.00	0.00	0	0	0	0	70	-70
150+73.50	15073.50	73.00	0.00	0.00	0.00	0	0	0	0	70	-70
150+74.00	15074.00	0.50	0.00	0.00	0.00	0	0	0	0	70	-70
151+00.00	15100.00	26.00	0.00	0.00	2.27	0	0	1	0	71	-71
151+27.00	15127.00	27.00	0.00	0.00	0.81	0	0	2	0	74	-74
151+27.50	15127.50	0.50	0.00	0.00	0.83	0	0	0	0	74	-74
152+00.00	15200.00	72.50	0.00	0.00	1.04	0	0	3	0	78	-78
152+45.00	15245.00	45.00	0.00	0.00	2.30	0	0	3	0	81	-81
152+45.29	15245.29	0.29	0.00	0.00	2.31	0	0	0	0	81	-81
152+70.50	15270.50	25.21	0.00	0.00	26.66	0	0	14	0	99	-99
152+95.29	15295.29	24.79	0.00	0.00	31.53	0	0	27	0	133	-133
153+00.00	15300.00	4.71	0.00	0.00	30.36	0	0	5	0	139	-139
154+00.00	15400.00	100.00	0.00	0.00	2.06	0	0	60	0	214	-214
154+01.00	15401.00	1.00	0.00	0.00	0.00	0	0	0	0	214	-214

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
180+00.00	18000.00	0.00	0.00	0.00	1.77	0	0	0	0	0	0
180+32.05	18032.05	32.05	0.00	0.00	5.61	0	0	4	0	5	-5
180+33.00	18033.00	0.95	0.49	0.00	5.65	0	0	0	0	5	-5
180+66.00	18066.00	33.00	0.00	0.00	0.00	0	0	3	0	9	-9
180+67.38	18067.38	1.38	0.00	0.00	1.25	0	0	0	0	9	-9
180+82.55	18082.55	15.17	0.00	0.00	14.16	0	0	4	0	14	-14
181+00.00	18100.00	17.45	0.00	0.00	6.04	0	0	7	0	23	-23
181+07.55	18107.55	7.55	0.00	0.00	4.97	0	0	2	0	25	-25
181+32.55	18132.55	25.00	0.00	0.00	0.11	0	0	2	0	28	-28

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
181+32.00	18132.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
181+32.55	18132.55	0.55	0.00	0.00	0.00	0	0	0	0	0	0
182+00.00	18200.00	67.45	0.00	0.00	6.25	0	0	8	0	10	-10
182+04.95	18204.95	4.95	0.00	0.00	6.43	0	0	1	0	11	-11
182+29.95	18229.95	25.00	0.00	0.00	1.27	0	0	4	0	16	-16
182+31.00	18231.00	1.05	0.00	0.00	0.00	0	0	0	0	16	-16

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
1000+06.66	100006.66	0.00	0.00	0.00	0.68	0	0	0	0	0	0
1000+16.56	100016.56	9.90	0.00	0.00	3.33	0	0	1	0	1	-1
1000+42.22	100042.22	25.66	0.00	0.00	1.19	0	0	2	0	4	-4
1000+66.53	100066.53	24.31	0.00	0.00	0.00	0	0	1	0	5	-5

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
188+71.86	18871.86	0.00	0.00	0.00	0.00	0	0	0	0	0	0
189+00.00	18900.00	28.14	0.00	0.00	0.23	0	0	0	0	0	0
189+92.36	18992.36	92.36	0.00	0.00	16.25	0	0	28	0	35	-35
190+00.00	19000.00	7.64	0.00	0.00	13.28	0	0	4	0	40	-40
190+17.20	19017.20	17.20	0.00	0.00	6.84	0	0	6	0	48	-48
190+42.05	19042.05	24.85	0.00	0.00	0.11	0	0	3	0	51	-51
191+00.00	19100.00	57.95	0.00	0.00	0.00	0	0	0	0	51	-51
192+00.00	19200.00	100.00	0.00	0.00	0.00	0	0	0	0	51	-51
192+96.95	19296.95	96.95	0.00	0.00	0.22	0	0	0	0	51	-51
193+00.00	19300.00	3.05	0.00	0.00	0.19	0	0	0	0	51	-51
193+21.80	19321.80	21.80	0.00	0.00	7.76	0	0	3	0	55	-55
193+46.64	19346.64	24.84	0.00	0.00	14.12	0	0	10	0	68	-68
194+00.00	19400.00	53.36	0.00	0.00	9.43	0	0	23	0	96	-96
194+67.13	19467.13	67.13	0.00	0.00	0.04	0	0	12	0	111	-111
194+68.00	19468.00	0.87	0.00	0.00	0.00	0	0	0	0	111	-111

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

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STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
209+99.00	20999.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
210+00.00	21000.00	1.00	0.00	0.00	0.41	0	0	0	0	0	0
211+00.00	21100.00	100.00	0.00	0.00	8.98	0	0	17	0	21	-21
212+00.00	21200.00	100.00	0.00	0.00	8.52	0	0	32	0	61	-61
213+00.00	21300.00	100.00	0.00	0.00	7.88	0	0	30	0	99	-99
214+00.00	21400.00	100.00	0.00	0.00	6.74	0	0	27	0	133	-133
215+00.00	21500.00	100.00	0.00	0.00	12.60	0	0	36	0	178	-178
216+00.00	21600.00	100.00	0.00	0.00	14.22	0	0	50	0	240	-240
217+00.00	21700.00	100.00	0.00	0.00	0.94	0	0	28	0	275	-275
218+00.00	21800.00	100.00	0.00	0.00	6.49	0	0	14	0	293	-293
219+00.00	21900.00	100.00	0.00	0.00	6.97	0	0	25	0	324	-324
220+00.00	22000.00	100.00	0.00	0.00	5.89	0	0	24	0	354	-354
221+00.00	22100.00	100.00	0.00	0.00	6.81	0	0	24	0	384	-384
222+00.00	22200.00	100.00	0.00	0.00	2.79	0	0	18	0	406	-406
223+00.00	22300.00	100.00	0.00	0.00	1.12	0	0	7	0	415	-415
223+06.64	22306.64	6.64	0.00	0.00	1.32	0	0	0	0	415	-415
223+31.59	22331.59	24.95	0.00	0.00	26.36	0	0	13	0	431	-431
223+56.55	22356.55	24.96	0.00	0.00	24.30	0	0	23	0	460	-460
224+00.00	22400.00	43.45	0.00	0.00	10.31	0	0	28	0	495	-495
224+77.05	22477.05	77.05	0.00	0.00	0.01	0	0	15	0	514	-514
224+78.00	22478.00	0.95	0.00	0.00	0.00	0	0	0	0	514	-514

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
271+99.00	27199.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
271+99.99	27199.99	0.99	0.00	0.00	0.00	0	0	0	0	0	0
272+23.13	27223.13	23.14	0.00	0.00	5.37	0	0	2	0	3	-3
272+48.13	27248.13	25.00	0.00	0.00	1.01	0	0	3	0	6	-6
272+50.00	27250.00	1.87	0.00	0.00	0.53	0	0	0	0	6	-6
272+51.00	27251.00	1.00	0.00	0.00	0.00	0	0	0	0	6	-6
274+91.00	27491.00	240.00	0.00	0.00	0.00	0	0	0	0	6	-6
274+92.13	27492.13	1.13	0.00	0.00	3.27	0	0	0	0	6	-6
274+99.99	27499.99	7.86	0.00	0.00	1.93	0	0	1	0	8	-8
275+17.13	27517.13	17.14	0.00	0.00	0.87	0	0	1	0	9	-9
275+67.63	27567.63	50.50	0.00	0.00	0.15	0	0	1	0	10	-10
275+69.00	27569.00	1.37	0.00	0.00	0.00	0	0	0	0	10	-10

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

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STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
275+00.00	27500.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
275+03.76	27503.76	3.76	0.00	0.00	0.00	0	0	0	0	0	0
275+17.13	27517.13	13.37	0.00	0.00	1.57	0	0	0	0	0	0
275+50.00	27550.00	32.87	0.00	0.00	0.01	0	0	1	0	1	-1
275+51.00	27551.00	1.00	0.00	0.00	0.00	0	0	0	0	1	-1
276+37.00	27637.00	86.00	0.00	0.00	0.00	0	0	0	0	1	-1
276+37.62	27637.62	0.62	0.00	0.00	0.31	0	0	0	0	1	-1
276+38.13	27638.13	0.51	0.00	0.00	6.13	0	0	0	0	1	-1
276+63.13	27663.13	25.00	0.00	0.00	7.83	0	0	6	0	9	-9
277+00.00	27700.00	36.87	0.00	0.00	0.02	0	0	5	0	15	-15
277+28.85	27728.85	28.85	0.00	0.00	0.00	0	0	0	0	15	-15

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
284+67.38	28467.38	0.00	0.00	0.00	0.00	0	0	0	0	0	0
285+00.00	28500.00	32.62	0.00	0.00	8.83	0	0	5	0	6	-6
285+46.79	28546.79	46.79	0.00	0.00	21.65	0	0	26	0	39	-39
285+71.55	28571.55	24.76	0.00	0.00	22.70	0	0	20	0	64	-64
285+96.32	28596.32	24.77	0.00	0.00	0.72	0	0	11	0	78	-78
286+00.00	28600.00	3.68	0.00	0.00	0.77	0	0	0	0	78	-78
287+00.00	28700.00	100.00	0.00	0.00	1.00	0	0	3	0	81	-81
287+83.43	28783.43	83.43	0.00	0.00	0.22	0	0	2	0	84	-84
288+00.00	28800.00	16.57	0.00	0.00	0.00	0	0	0	0	84	-84
288+90.00	28890.00	90.00	0.00	0.00	0.21	0	0	0	0	84	-84
288+91.11	28891.11	1.11	0.00	0.00	0.23	0	0	0	0	84	-84
289+00.00	28900.00	8.89	0.00	0.00	0.51	0	0	0	0	84	-84
289+01.83	28901.83	1.83	0.00	0.00	0.62	0	0	0	0	84	-84
289+26.83	28926.83	25.00	0.00	0.00	24.22	0	0	11	0	98	-98
289+51.83	28951.83	25.00	0.00	0.00	12.09	0	0	17	0	119	-119
290+00.00	29000.00	48.17	0.00	0.00	2.40	0	0	13	0	135	-135
290+39.77	29039.77	39.77	0.00	0.00	1.85	0	0	3	0	139	-139

Notes:	
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2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.25	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
293+85.74	29385.74	0.00	0.00	0.00	0.00	0	0	0	0	0	0
294+00.00	29400.00	14.26	0.00	0.00	3.66	0	0	1	0	1	-1
294+87.25	29487.25	87.25	0.00	0.00	14.04	0	0	29	0	38	-38
295+00.00	29500.00	12.75	0.00	0.00	15.94	0	0	7	0	46	-46
295+12.25	29512.25	12.25	0.00	0.00	11.96	0	0	6	0	54	-54
295+27.97	29527.97	15.72	0.00	0.00	0.79	0	0	4	0	59	-59
295+37.25	29537.25	9.28	0.00	0.00	0.00	0	0	0	0	59	-59
296+00.00	29600.00	62.75	0.00	0.00	0.00	0	0	0	0	59	-59
296+17.19	29617.19	17.19	0.00	0.00	2.04	0	0	1	0	60	-60
297+00.00	29700.00	82.81	0.00	0.00	6.04	0	0	12	0	75	-75
298+00.00	29800.00	100.00	0.00	0.00	6.20	0	0	23	0	104	-104
299+00.00	29900.00	100.00	0.00	0.00	8.94	0	0	28	0	139	-139
299+75.03	29975.03	75.03	0.00	0.00	0.10	0	0	13	0	155	-155
299+80.00	29980.00	4.97	0.00	0.00	0.00	0	0	0	0	155	-155
302+57.90	30257.90	277.90	0.00	0.00	0.00	0	0	0	0	155	-155
302+62.71	30262.71	4.81	0.00	0.00	0.00	0	0	0	0	155	-155
302+83.06	30283.06	20.35	0.00	0.00	14.49	0	0	5	0	161	-161
303+00.00	30300.00	16.94	0.00	0.00	10.12	0	0	8	0	171	-171
303+08.21	30308.21	8.21	0.00	0.00	9.24	0	0	3	0	175	-175
303+33.73	30333.73	25.52	0.00	0.00	0.22	0	0	4	0	180	-180

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.25	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
321+49.27	32149.27	0.00	0.00	0.00	1.87	0	0	0	0	0	0
321+76.92	32176.92	27.65	0.00	0.00	5.58	0	0	4	0	5	-5
322+00.00	32200.00	23.08	0.00	0.00	8.94	0	0	6	0	13	-13
322+01.92	32201.92	1.92	0.00	0.00	9.07	0	0	1	0	14	-14
322+26.92	32226.92	25.00	0.00	0.00	0.16	0	0	4	0	19	-19
322+33.24	32233.24	6.32	0.00	0.00	0.00	0	0	0	0	19	-19
322+35.00	32235.00	1.76	0.00	0.00	0.00	0	0	0	0	19	-19
322+63.00	32263.00	28.00	0.00	0.00	0.00	0	0	0	0	19	-19
322+64.44	32264.44	1.44	0.00	0.00	0.67	0	0	0	0	19	-19
323+00.00	32300.00	35.56	0.00	0.00	0.89	0	0	1	0	20	-20
324+00.00	32400.00	100.00	0.00	0.00	1.45	0	0	4	0	25	-25
325+00.00	32500.00	100.00	0.00	0.00	2.59	0	0	7	0	34	-34
325+20.67	32520.67	20.67	0.00	0.00	1.04	0	0	1	0	35	-35
325+45.67	32545.67	25.00	0.00	0.00	24.46	0	0	12	0	50	-50
325+70.67	32570.67	25.00	0.00	0.00	2.33	0	0	12	0	65	-65
325+73.22	32573.22	2.55	0.00	0.00	0.00	0	0	0	0	65	-65

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
326+13.28	32613.28	0.00	0.00	0.00	0.00	0	0	0	0	0	0
326+27.08	32627.08	13.80	0.00	0.00	0.65	0	0	0	0	0	0
326+52.08	32652.08	25.00	0.00	0.00	5.80	0	0	3	0	4	-4
326+61.09	32661.09	9.01	0.00	0.00	1.85	0	0	1	0	5	-5
326+77.08	32677.08	15.99	0.00	0.00	0.00	0	0	1	0	6	-6
327+00.00	32700.00	22.92	0.00	0.00	0.00	0	0	0	0	6	-6
327+09.17	32709.17	9.17	0.00	0.00	0.00	0	0	0	0	6	-6
328+00.00	32800.00	90.83	0.00	0.00	4.65	0	0	8	0	16	-16
329+00.00	32900.00	100.00	0.00	0.00	0.49	0	0	10	0	29	-29
329+28.89	32928.89	28.89	0.00	0.00	0.74	0	0	1	0	30	-30
329+30.00	32930.00	1.11	0.00	0.00	0.00	0	0	0	0	30	-30
331+80.00	33180.00	250.00	0.00	0.00	0.00	0	0	0	0	30	-30
331+83.37	33183.37	3.37	0.00	0.00	0.00	0	0	0	0	30	-30
332+00.00	33200.00	16.63	0.00	0.00	0.50	0	0	0	0	30	-30
333+00.00	33300.00	100.00	0.00	0.00	4.13	0	0	9	0	41	-41
334+00.00	33400.00	100.00	0.00	0.00	1.75	0	0	11	0	55	-55
334+93.20	33493.20	93.20	0.00	0.00	0.00	0	0	3	0	59	-59
335+00.00	33500.00	6.80	0.00	0.00	0.00	0	0	0	0	59	-59
335+18.38	33518.38	18.38	0.00	0.00	3.12	0	0	1	0	60	-60
335+43.63	33543.63	25.25	0.00	0.00	3.73	0	0	3	0	64	-64
336+00.00	33600.00	56.37	0.00	0.00	3.92	0	0	8	0	74	-74
336+60.34	33660.34	60.34	0.00	0.00	0.93	0	0	5	0	80	-80

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
449+48.04	44948.04	0.00	0.00	0.00	0.00	0	0	0	0	0	0
449+56.85	44956.85	8.81	0.00	0.00	0.00	0	0	0	0	0	0
449+73.07	44973.07	16.22	0.00	0.00	53.35	0	0	16	0	20	-20
449+98.11	44998.11	25.04	0.00	0.00	88.85	0	0	66	0	103	-103
450+00.00	45000.00	1.89	0.00	0.00	86.18	0	0	6	0	110	-110
451+00.00	45100.00	100.00	0.00	0.00	28.91	0	0	213	0	376	-376
451+18.62	45118.62	18.62	0.00	0.00	0.00	0	0	10	0	389	-389

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
477+49.99	47749.99	0.00	0.00	0.00	0.00	0	0	0	0	0	0
477+87.87	47787.87	37.88	0.00	0.00	2.91	0	0	2	0	3	-3
478+00.00	47800.00	12.13	0.00	0.00	0.00	0	0	1	0	4	-4
478+34.63	47834.63	34.63	0.00	0.00	17.00	0	0	11	0	18	-18
478+35.13	47835.13	0.50	0.00	0.00	17.92	0	0	0	0	18	-18
478+60.13	47860.13	25.00	0.00	0.00	20.96	0	0	18	0	40	-40
478+75.19	47875.19	15.06	0.00	0.00	0.34	0	0	6	0	48	-48
478+85.13	47885.13	9.94	0.00	0.00	0.00	0	0	0	0	48	-48
479+14.92	47914.92	29.79	0.00	0.00	0.00	0	0	0	0	48	-48
479+28.24	47928.24	13.32	0.00	0.00	0.06	0	0	0	0	48	-48
479+39.92	47939.92	11.68	0.00	0.00	1.25	0	0	0	0	48	-48
480+00.00	48000.00	60.08	0.00	0.00	4.10	0	0	6	0	55	-55
481+00.00	48100.00	100.00	0.00	0.00	3.84	0	0	15	0	74	-74
482+00.00	48200.00	100.00	0.00	0.00	4.27	0	0	15	0	93	-93
482+50.00	48250.00	50.00	0.00	0.00	14.11	0	0	17	0	114	-114
483+00.00	48300.00	50.00	0.00	0.00	7.54	0	0	20	0	139	-139
483+31.78	48331.78	31.78	0.00	0.00	0.29	0	0	5	0	145	-145
483+47.59	48347.59	15.81	0.00	0.00	11.34	0	0	3	0	149	-149

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
477+84.62	47784.62	0.00	0.00	0.00	0.00	0	0	0	0	0	0
478+00.00	47800.00	15.38	0.00	0.00	5.98	0	0	2	0	3	-3
478+35.13	47835.13	35.13	0.00	0.00	15.46	0	0	14	0	20	-20
478+60.13	47860.13	25.00	0.00	0.00	16.61	0	0	15	0	39	-39
478+85.13	47885.13	25.00	0.00	0.00	13.56	0	0	14	0	56	-56
478+89.92	47889.92	4.79	0.00	0.00	16.60	0	0	3	0	60	-60
479+00.00	47900.00	10.08	0.00	0.00	17.28	0	0	6	0	68	-68
479+14.92	47914.92	14.92	0.00	0.00	18.22	0	0	10	0	80	-80
479+28.25	47928.25	13.33	0.00	0.00	0.00	0	0	4	0	85	-85
479+39.92	47939.92	11.67	0.00	0.00	0.00	0	0	0	0	85	-85
479+95.00	47995.00	55.08	0.00	0.00	0.00	0	0	0	0	85	-85
480+00.00	48000.00	5.00	0.00	0.00	2.47	0	0	0	0	85	-85
481+00.00	48100.00	100.00	0.00	0.00	10.04	0	0	23	0	114	-114
482+00.00	48200.00	100.00	0.00	0.00	28.77	0	0	72	0	204	-204
483+00.00	48300.00	100.00	0.00	0.00	11.40	0	0	74	0	296	-296
483+47.59	48347.59	47.59	0.00	0.00	7.71	0	0	17	0	318	-318
483+72.24	48372.24	24.65	0.00	0.00	74.85	0	0	38	0	365	-365
483+97.59	48397.59	25.35	0.00	0.00	48.77	0	0	58	0	438	-438
484+00.00	48400.00	2.41	0.00	0.00	44.51	0	0	4	0	443	-443
484+48.11	48448.11	48.11	0.00	0.00	0.69	0	0	40	0	493	-493
484+50.00	48450.00	1.89	0.00	0.00	0.00	0	0	0	0	493	-493

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

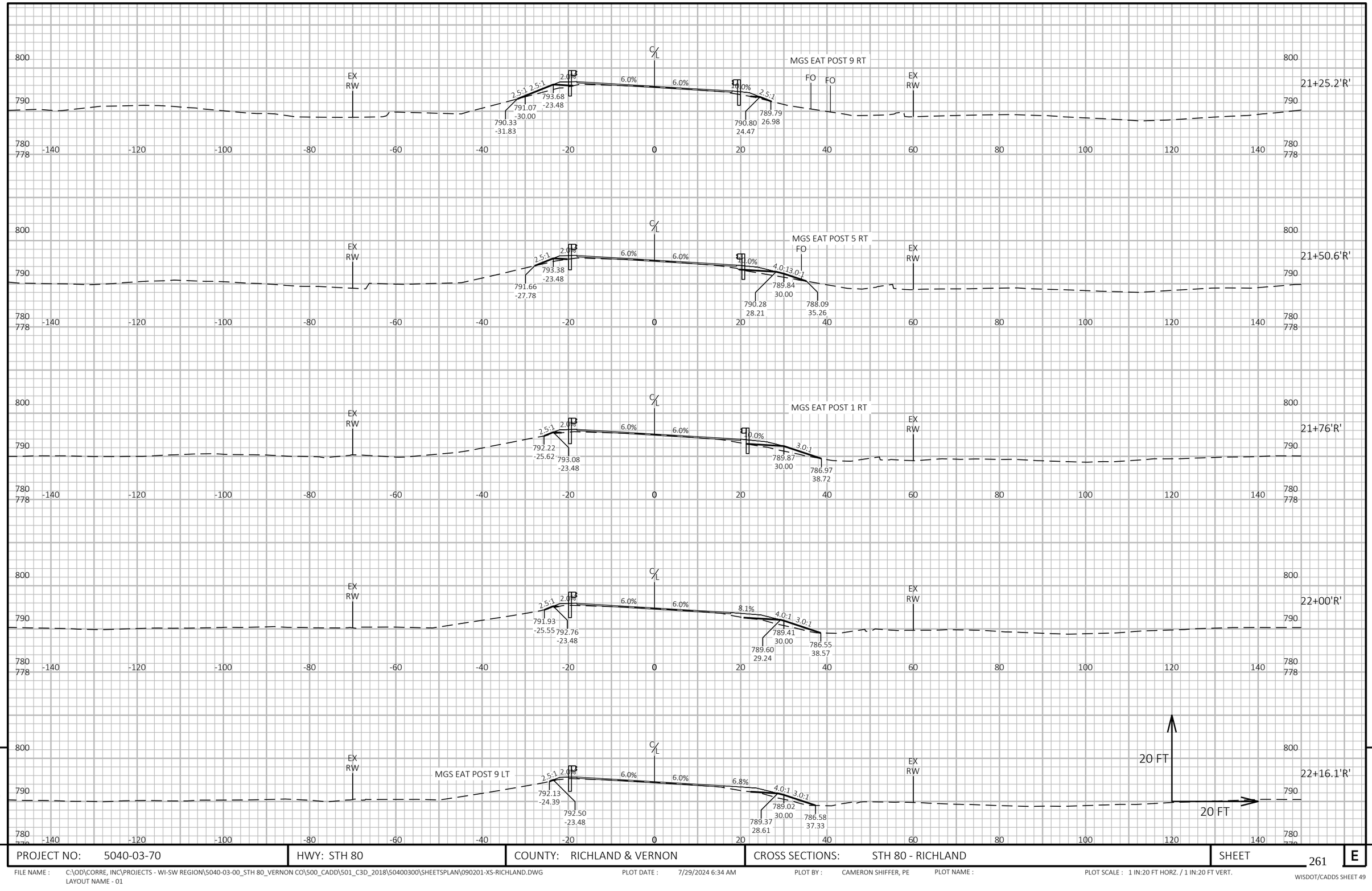
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
3000+62.99	300062.99	0.00	0.00	0.00	21.93	0	0	0	0	0	0
3001+08.07	300108.07	45.08	0.00	0.00	5.74	0	0	23	0	29	-29
3001+33.07	300133.07	25.00	0.00	0.00	5.27	0	0	5	0	35	-35
3001+58.07	300158.07	25.00	0.00	0.00	0.09	0	0	2	0	38	-38

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
569+79.39	56979.39	0.00	0.00	0.00	0.00	0	0	0	0	0	0
569+89.34	56989.34	9.95	0.00	0.00	0.00	0	0	0	0	0	0
569+96.67	56996.67	7.33	0.00	0.00	1.31	0	0	0	0	0	0
570+00.00	57000.00	3.33	0.00	0.00	1.34	0	0	0	0	0	0
570+04.39	57004.39	4.39	0.00	0.00	1.34	0	0	0	0	0	0
570+50.01	57050.01	45.62	0.00	0.00	0.00	0	0	1	0	1	-1
570+66.07	57066.07	16.06	0.00	0.00	0.00	0	0	0	0	1	-1

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
590+50.00	59050.00	0.00	5.42	0.00	0.00	0	0	0	0	0	0
590+75.00	59075.00	25.00	39.55	0.00	0.00	21	0	0	21	0	21
591+00.00	59100.00	25.00	38.01	0.00	2.41	36	0	1	57	1	56
591+02.00	59102.00	2.00	44.59	0.00	2.44	3	0	0	60	1	59
591+12.56	59112.56	10.56	54.43	0.00	2.88	19	0	1	79	3	77
591+22.00	59122.00	9.44	39.07	0.00	5.71	16	0	2	95	5	90
591+25.00	59125.00	3.00	31.75	0.00	6.61	4	0	1	99	6	93
591+50.00	59150.00	25.00	27.93	0.00	0.00	28	0	3	127	10	117
591+75.00	59175.00	25.00	4.40	0.00	0.00	15	0	0	142	10	132

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
635+00.00	63500.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
635+03.30	63503.30	3.30	0.00	0.00	0.74	0	0	0	0	0	0
635+40.75	63540.75	37.45	0.00	0.00	2.97	0	0	3	0	4	-4
635+50.01	63550.01	9.26	0.00	0.00	1.74	0	0	1	0	5	-5
635+65.75	63565.75	15.74	0.00	0.00	0.00	0	0	1	0	6	-6

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

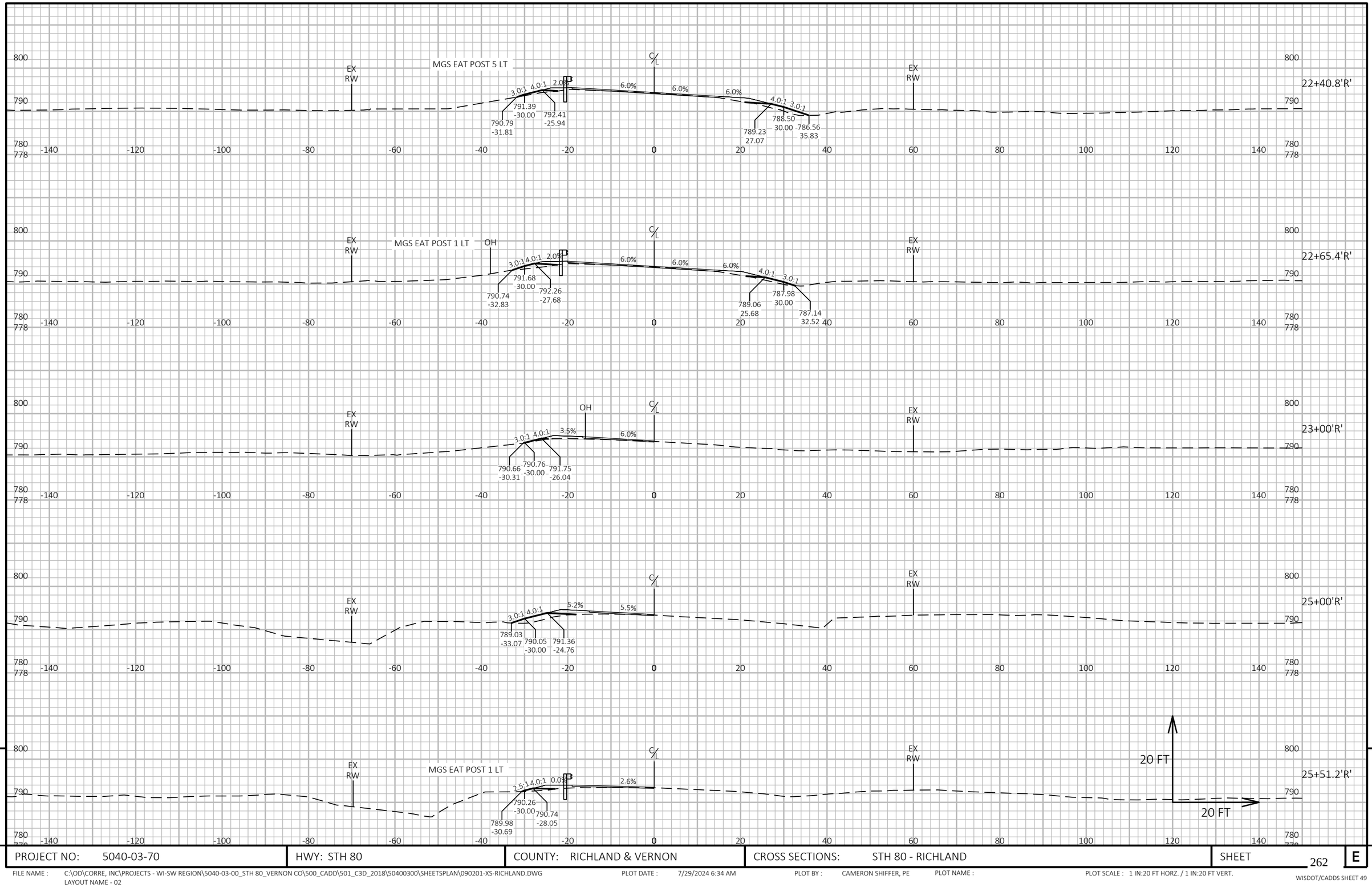


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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 261	E

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LAYOUT NAME - 01
PLOT DATE : 7/29/2024 6:34 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 262	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 02

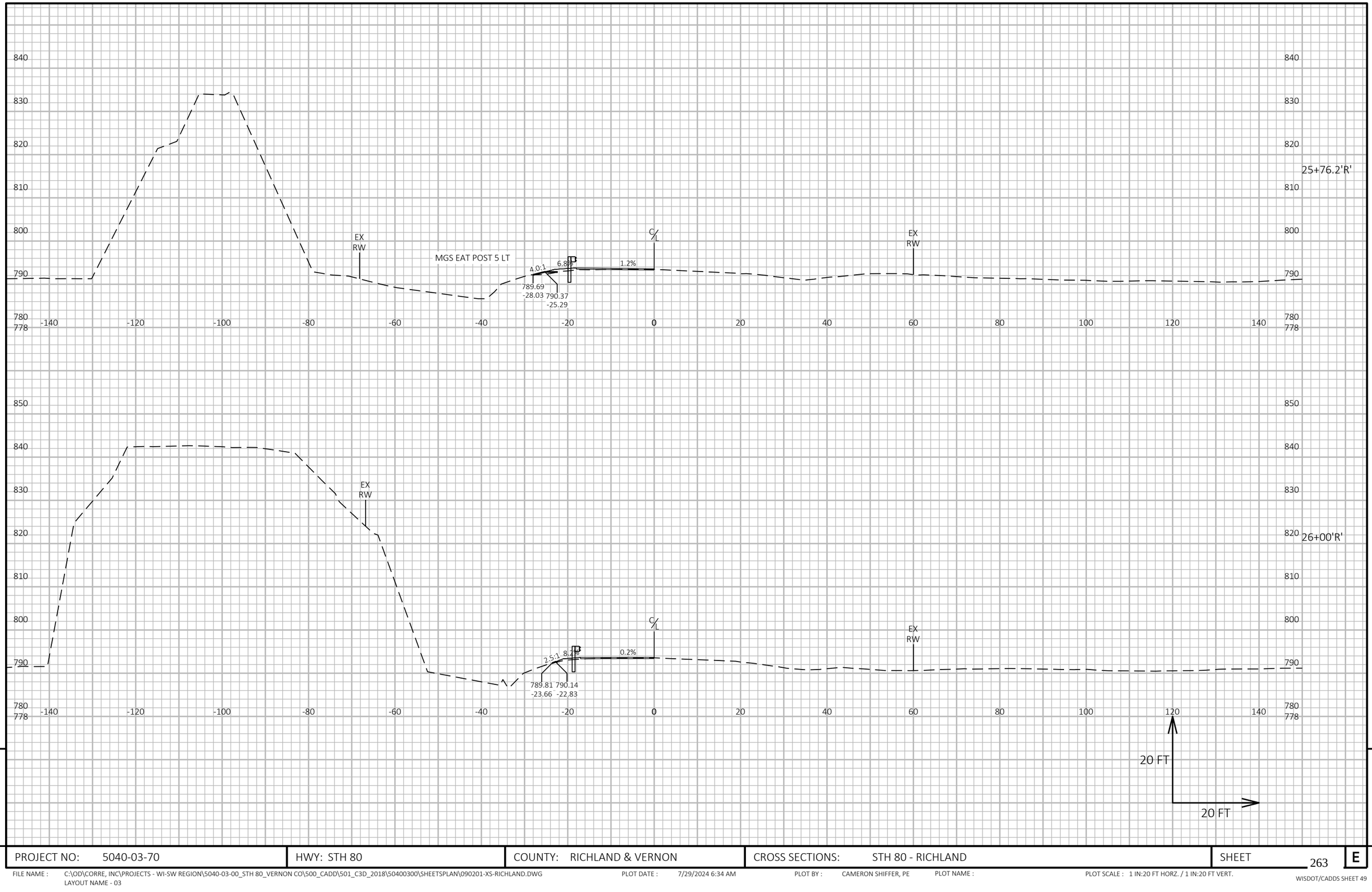
PLOT DATE : 7/29/2024 6:34 AM

PLOT BY : CAMERON SHIFFER, PE

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: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 263	E

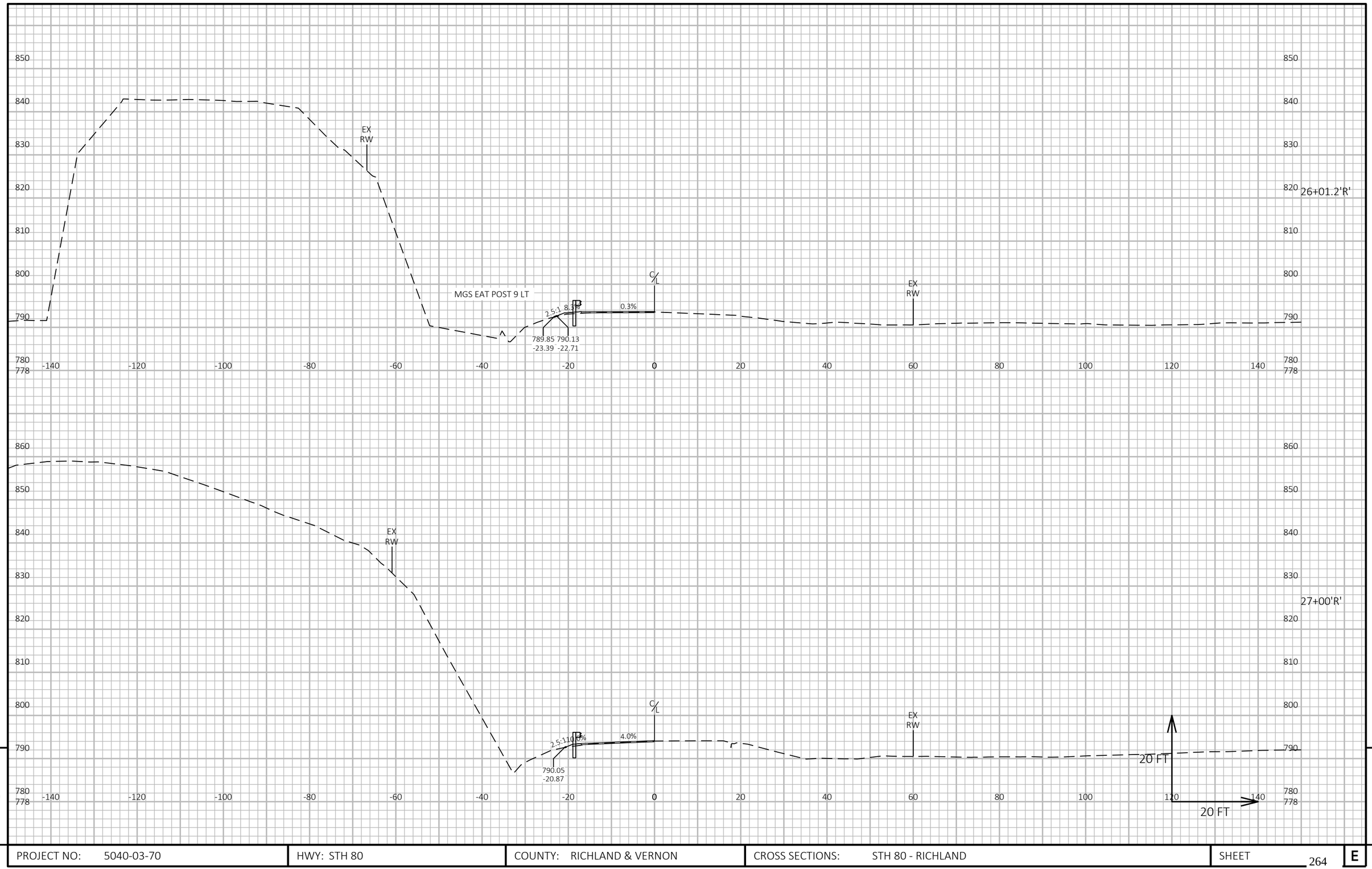
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LAYOUT NAME - 03

PLOT DATE : 7/29/2024 6:34 AM

PLOT BY : CAMERON SHIFFER, PE

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 264	E

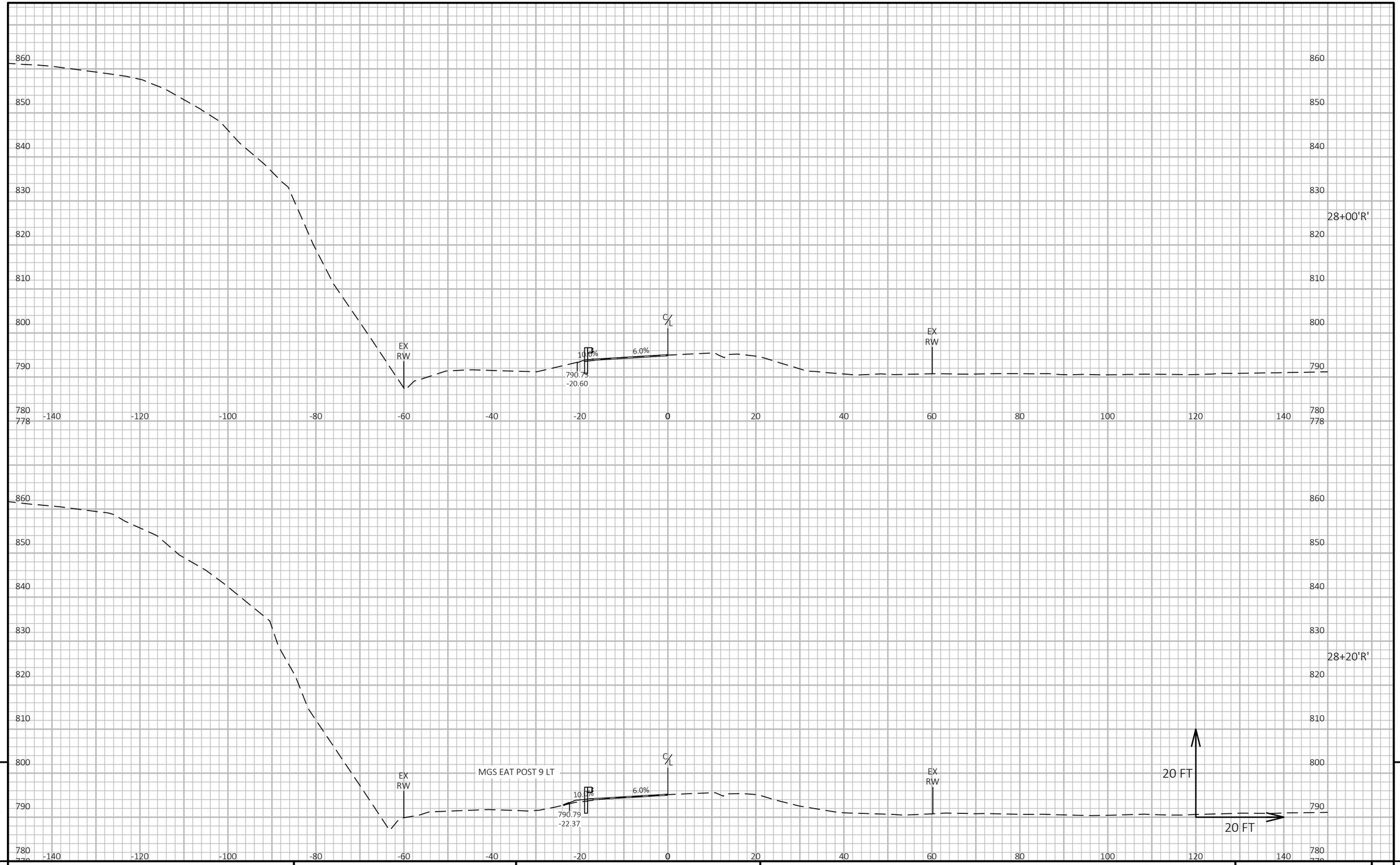
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LAYOUT NAME - 04

PLOT DATE : 7/29/2024 6:34 AM

PLOT BY : CAMERON SHIFFER, PE

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



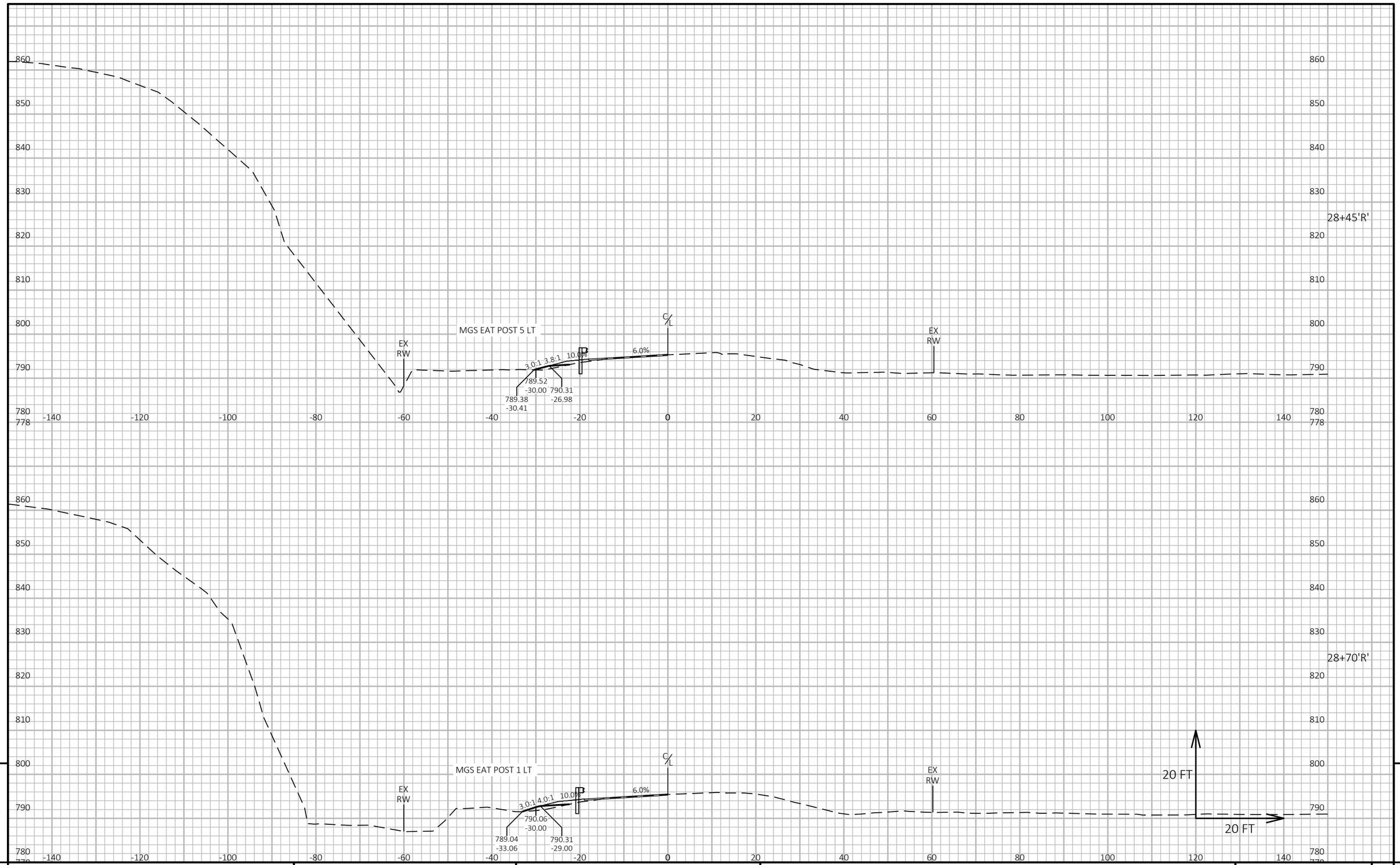
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 265	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 05

PLOT DATE : 7/29/2024 6:34 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

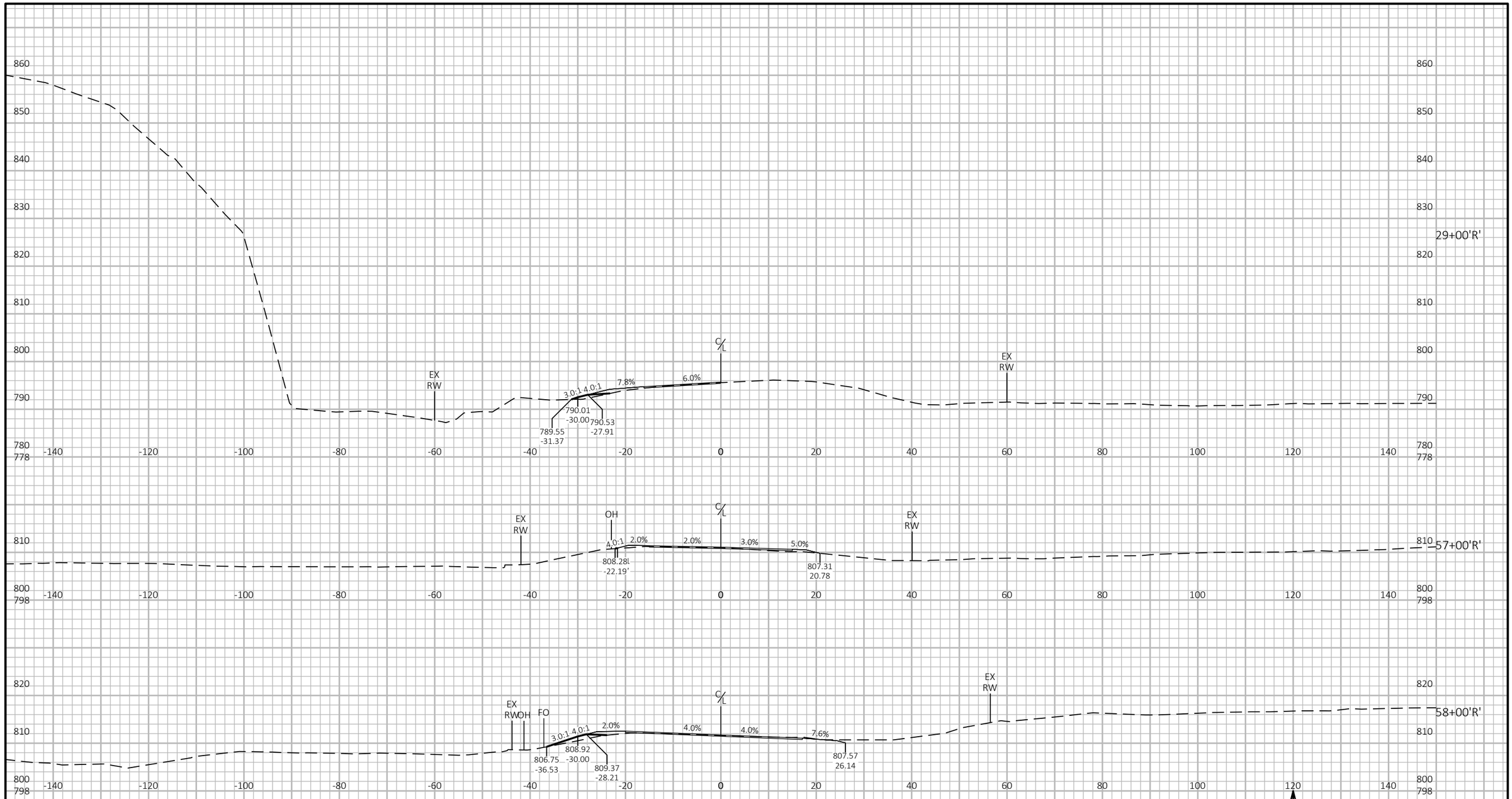


PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 266	E

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LAYOUT NAME - 06

PLOT DATE : 7/29/2024 6:34 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

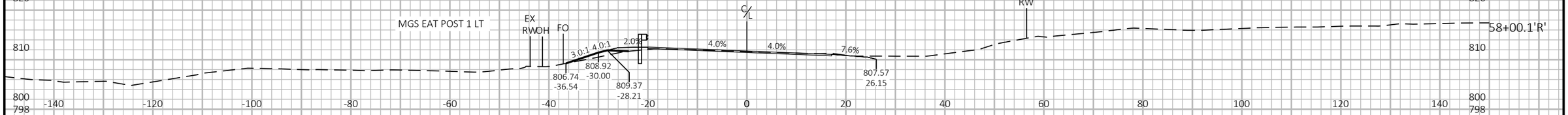
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 267	E

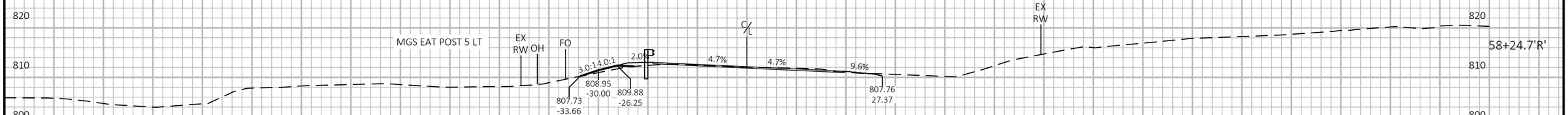
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LAYOUT NAME - 07

PLOT DATE : 7/29/2024 6:34 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

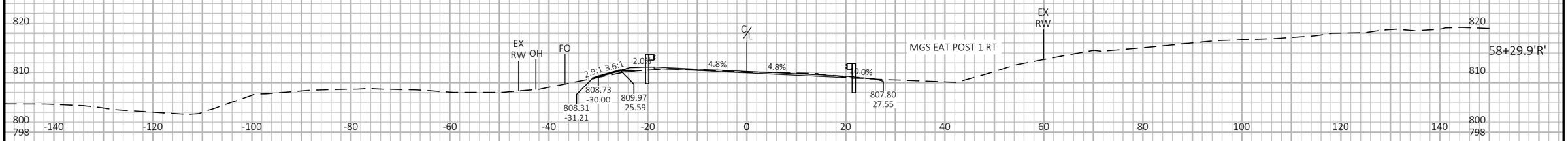
MGS EAT POST 1 LT



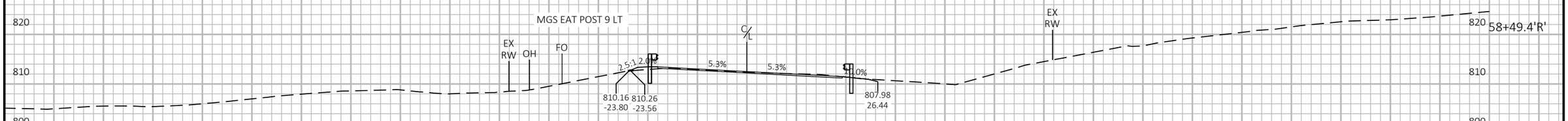
MGS EAT POST 5 LT



MGS EAT POST 1 RT



MGS EAT POST 9 LT



9

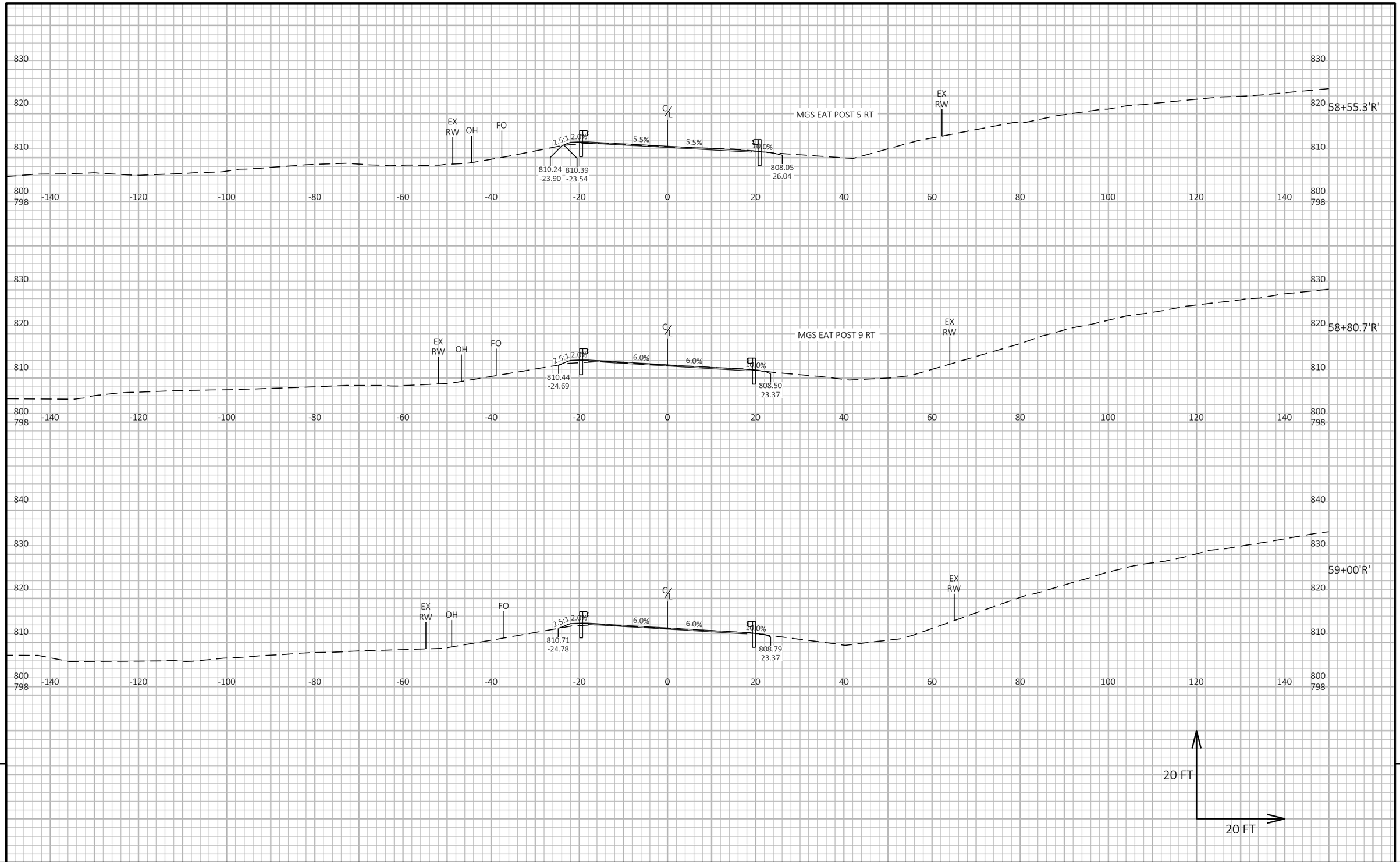
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 268	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 08

PLOT DATE : 7/29/2024 6:34 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

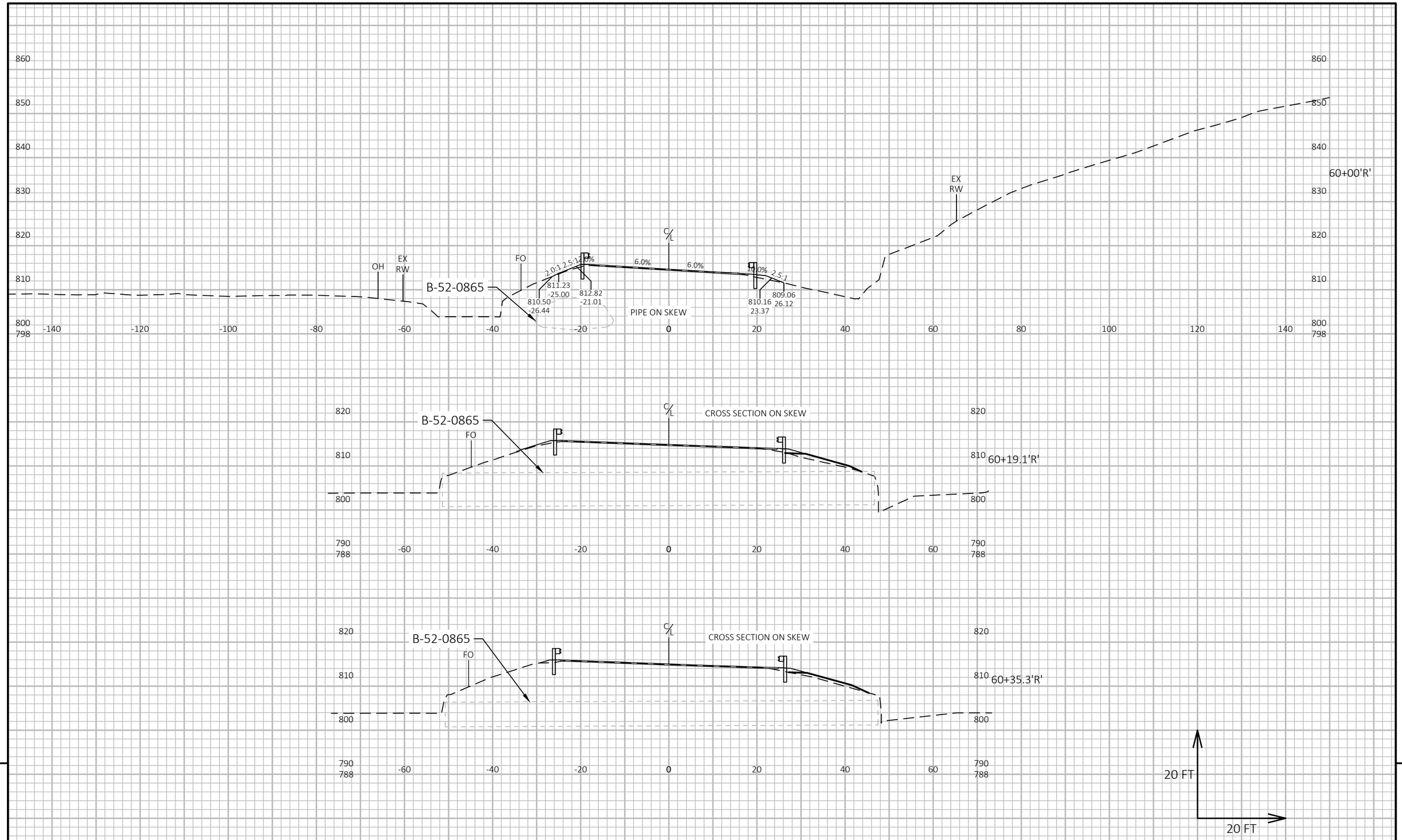


PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 269	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 09

PLOT DATE : 7/29/2024 6:34 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



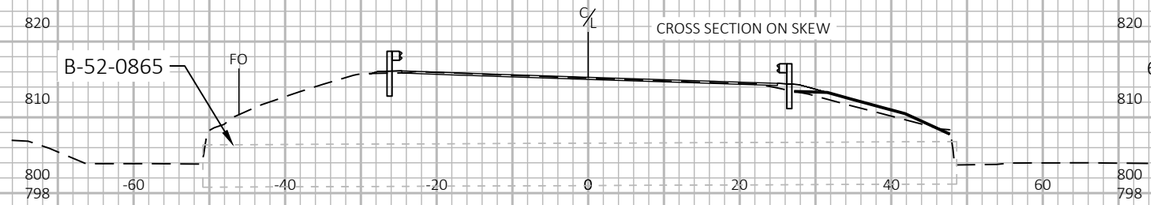
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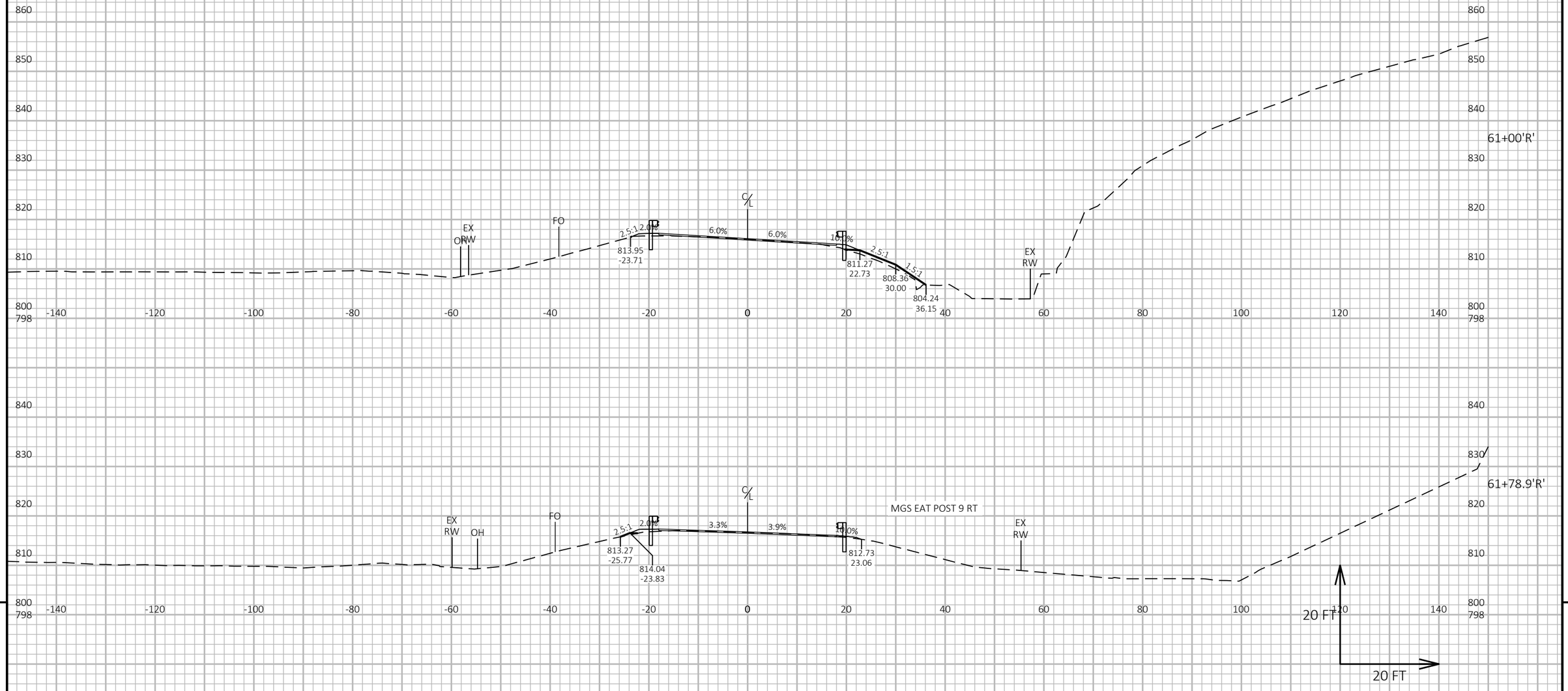
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 270	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 10

PLOT DATE : 7/29/2024 6:34 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.





9

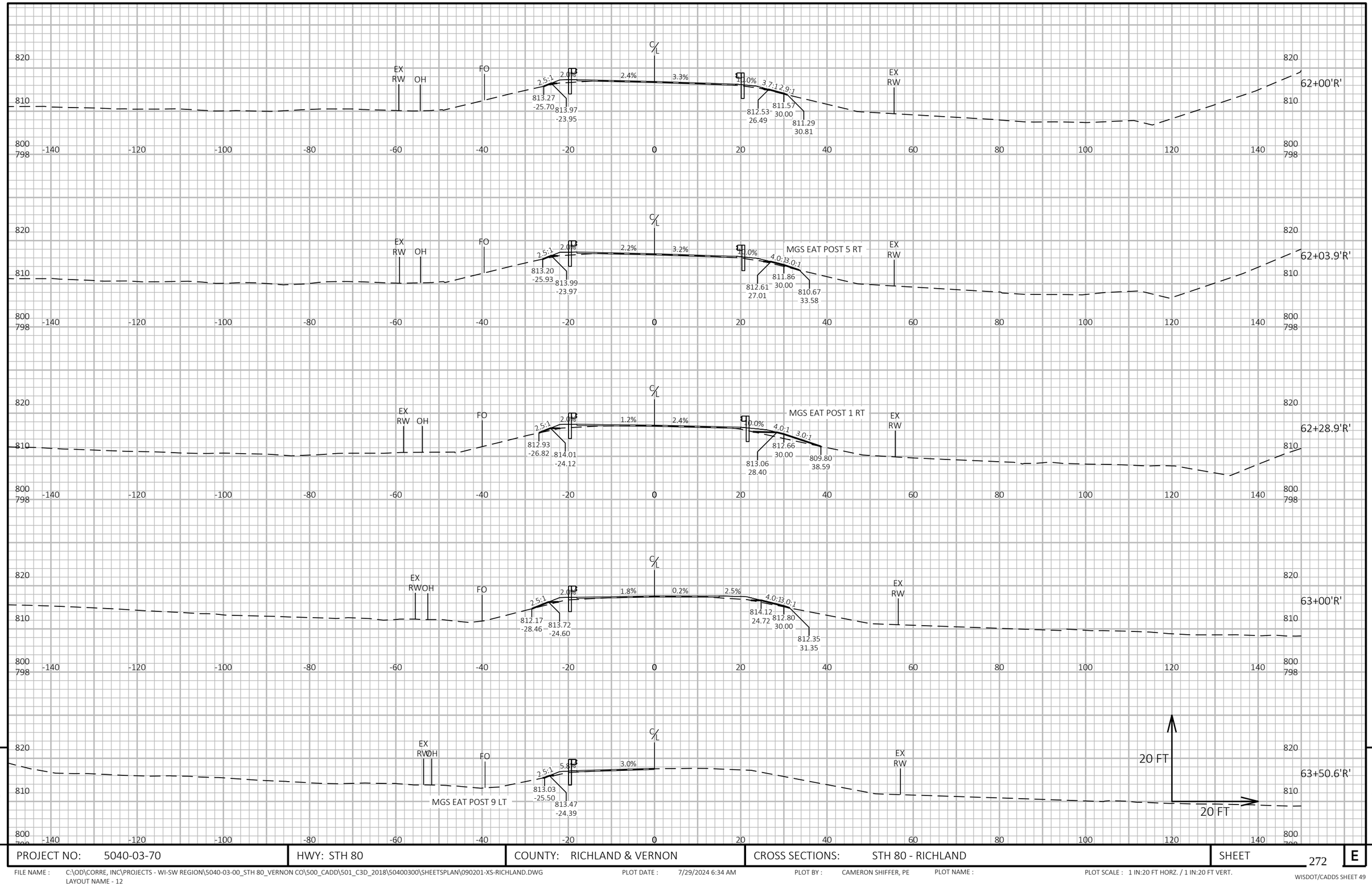
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 271	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 11

PLOT DATE : 7/29/2024 6:34 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 272	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 12

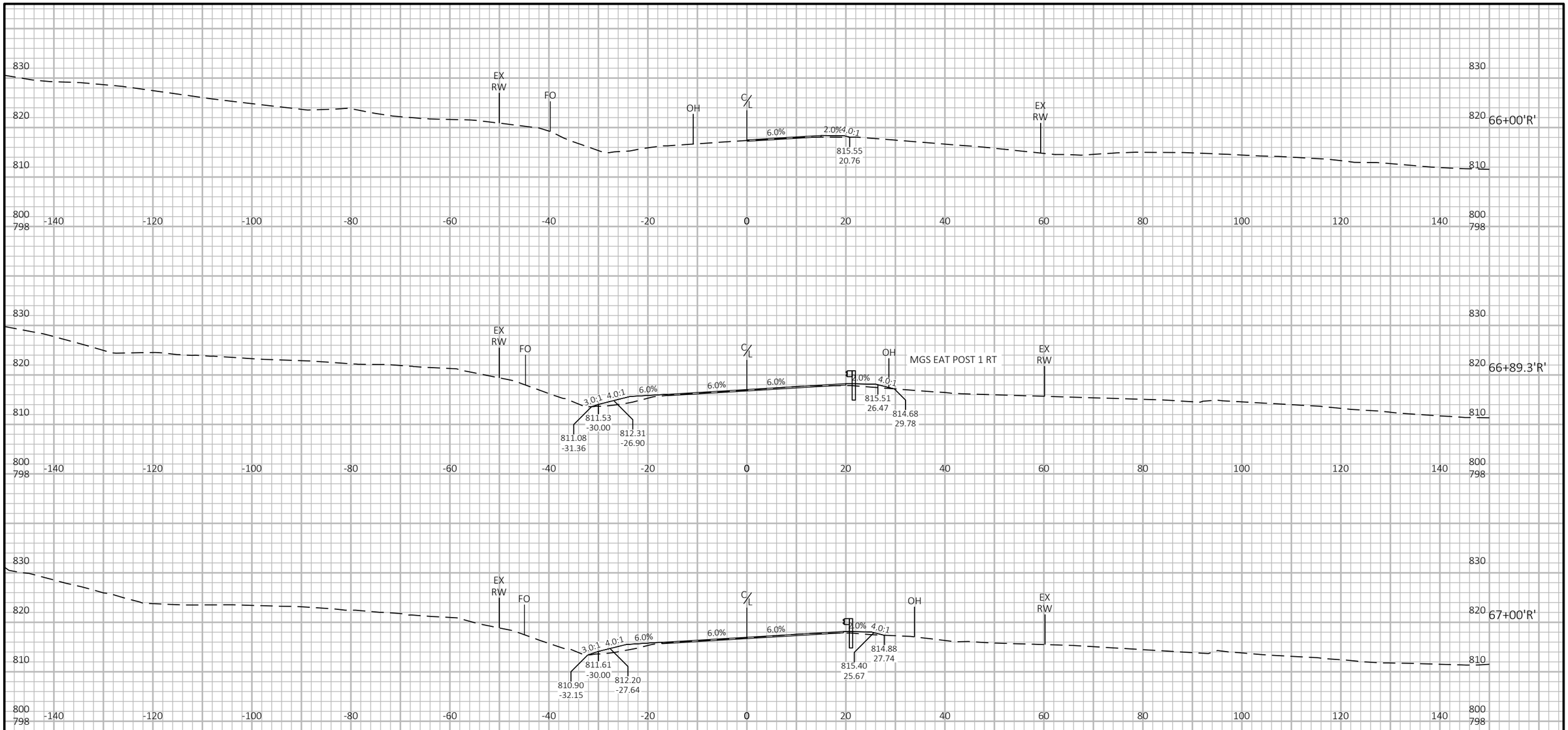
PLOT DATE : 7/29/2024 6:34 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 273	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 13

PLOT DATE : 7/29/2024 6:35 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



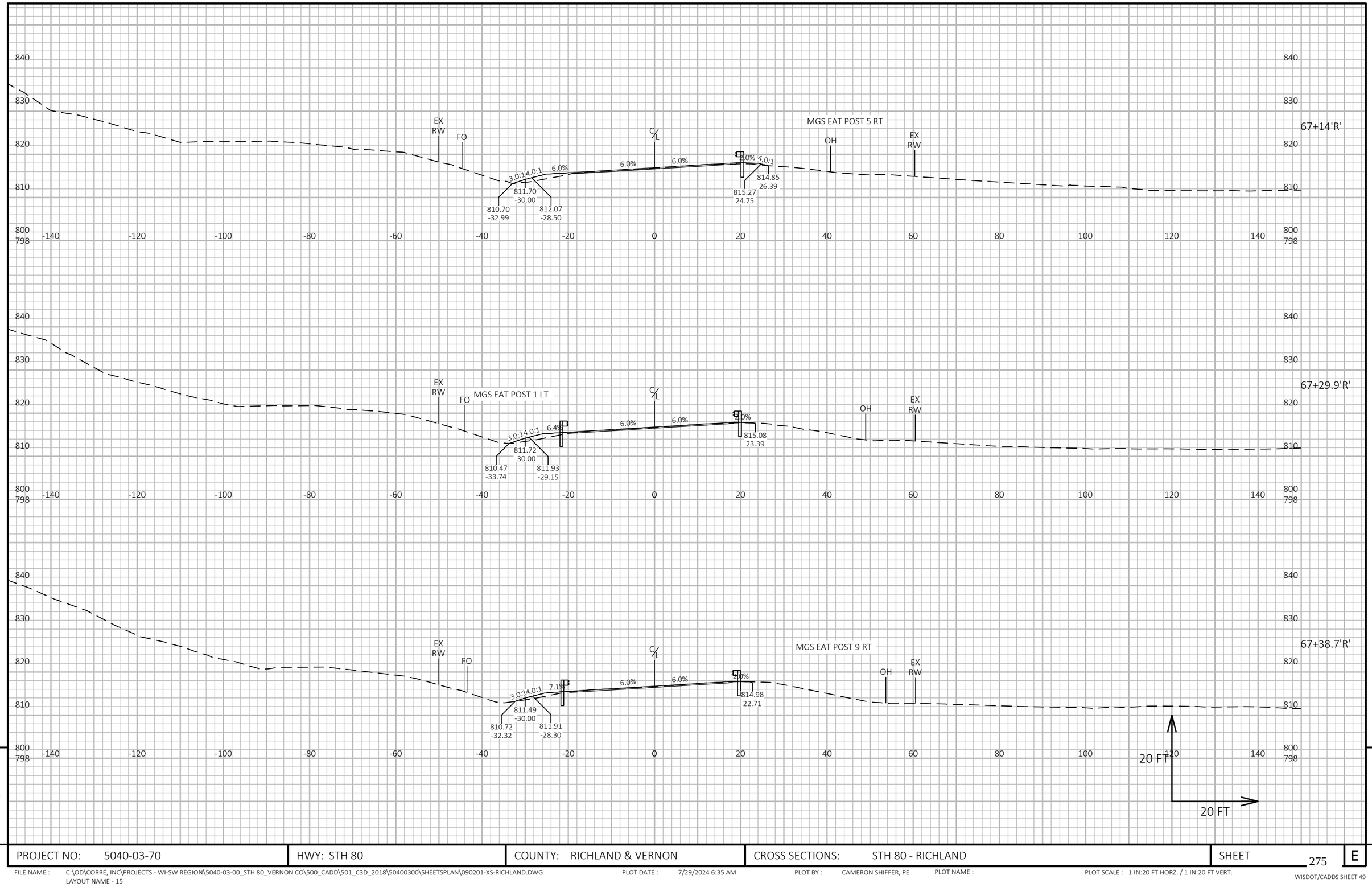
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 274	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 14

PLOT DATE : 7/29/2024 6:35 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

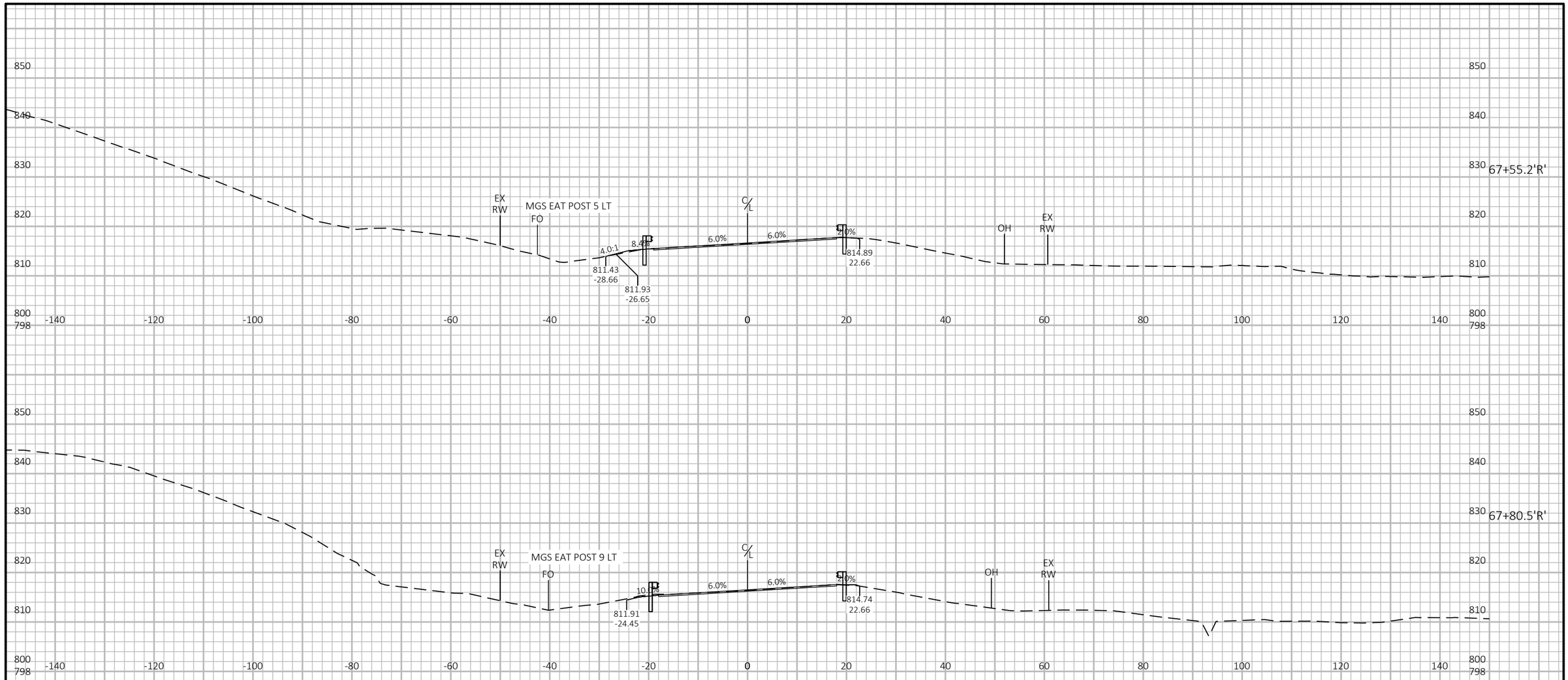


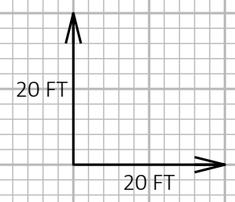
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9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 275	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 15
PLOT DATE : 7/29/2024 6:35 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49





9

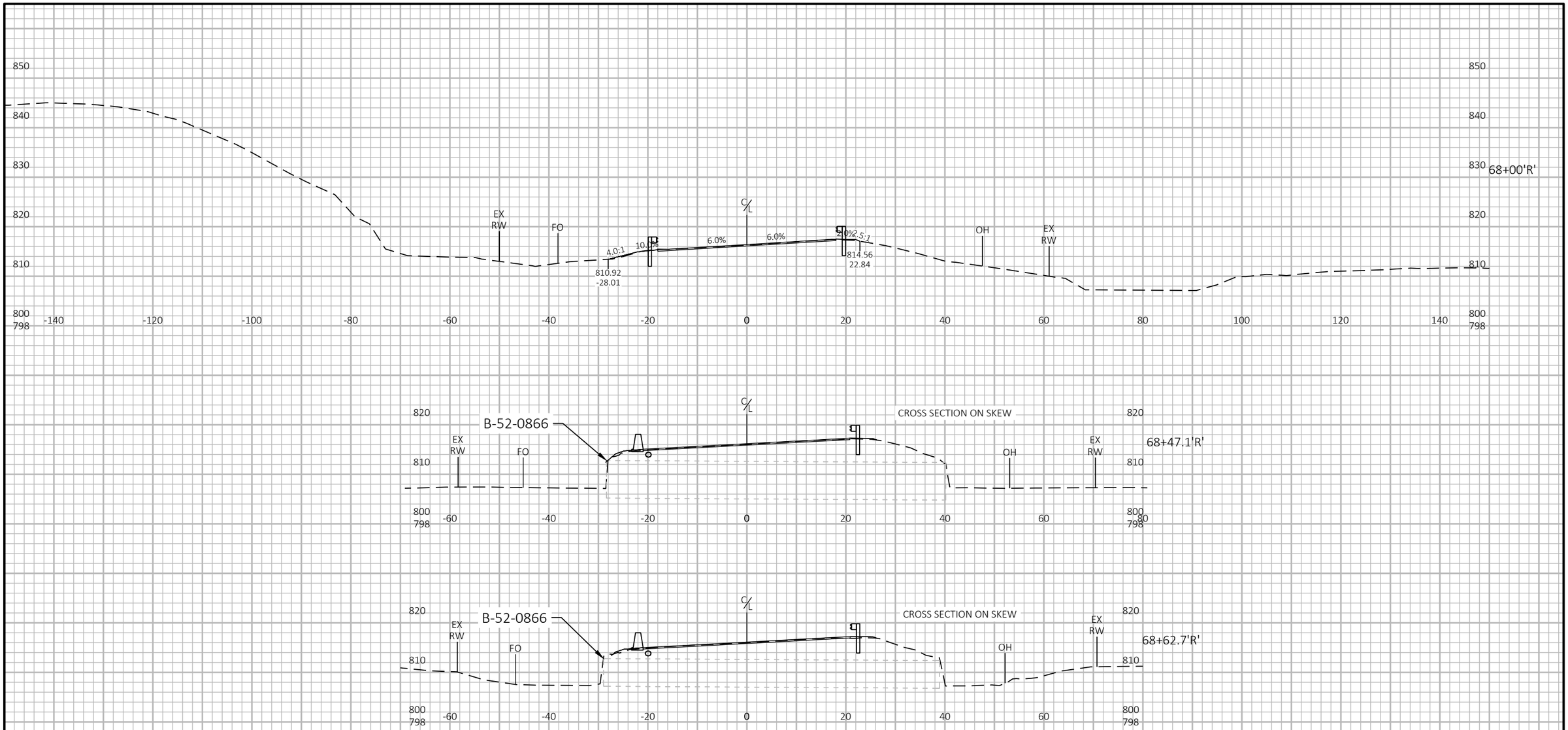
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 276	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 16

PLOT DATE : 7/29/2024 6:35 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



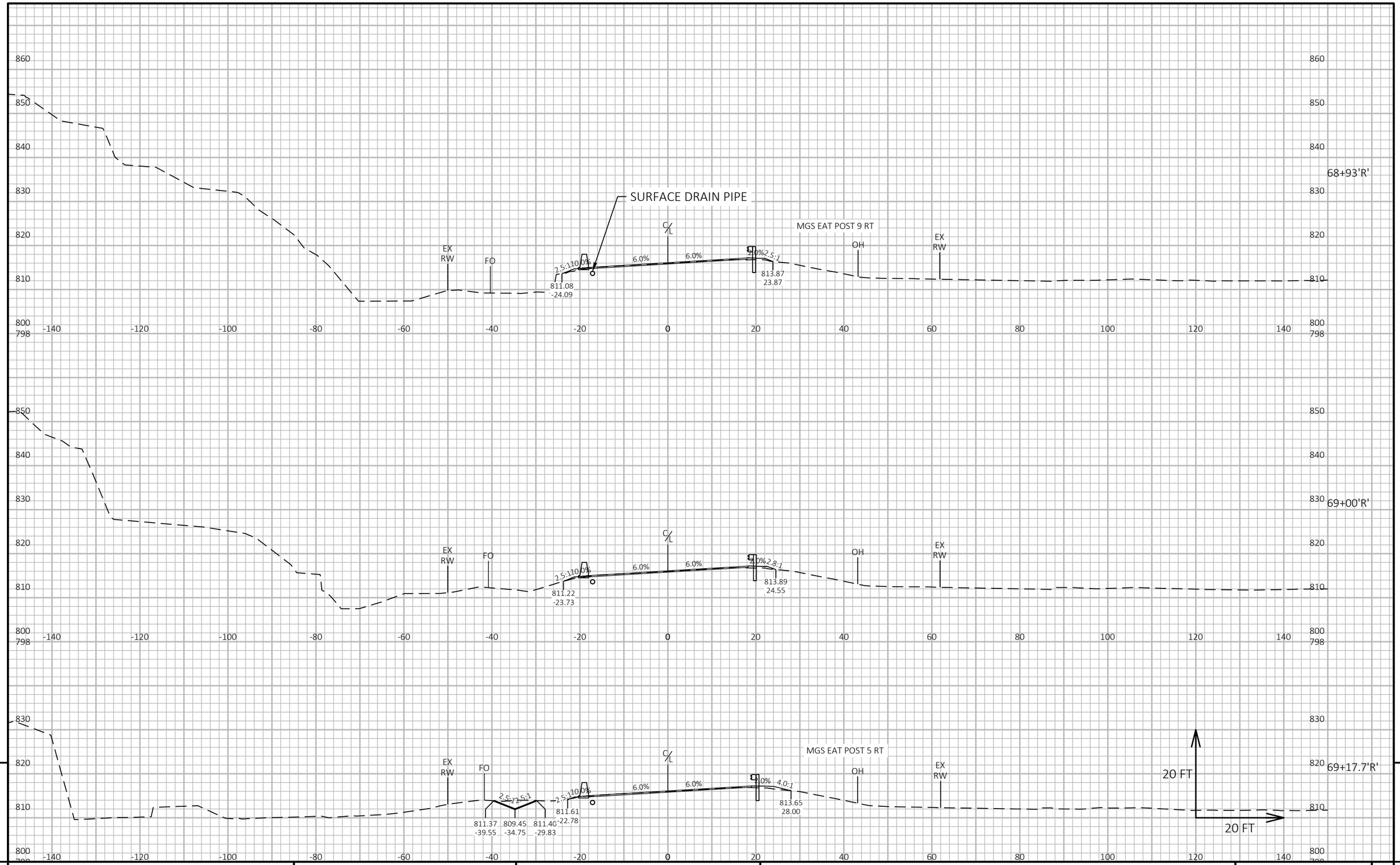
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9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 277	E

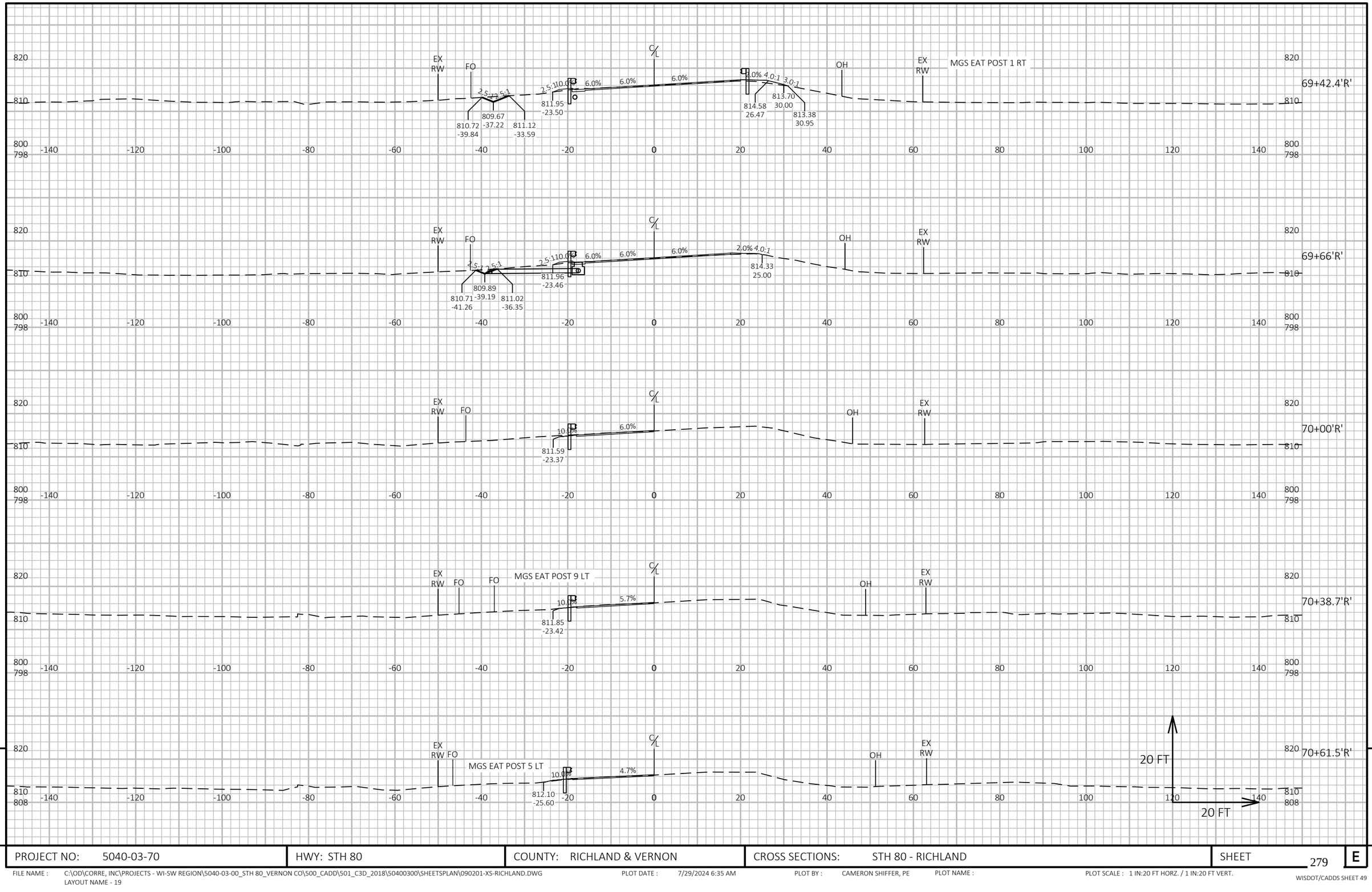
FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 17

PLOT DATE : 7/29/2024 6:35 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



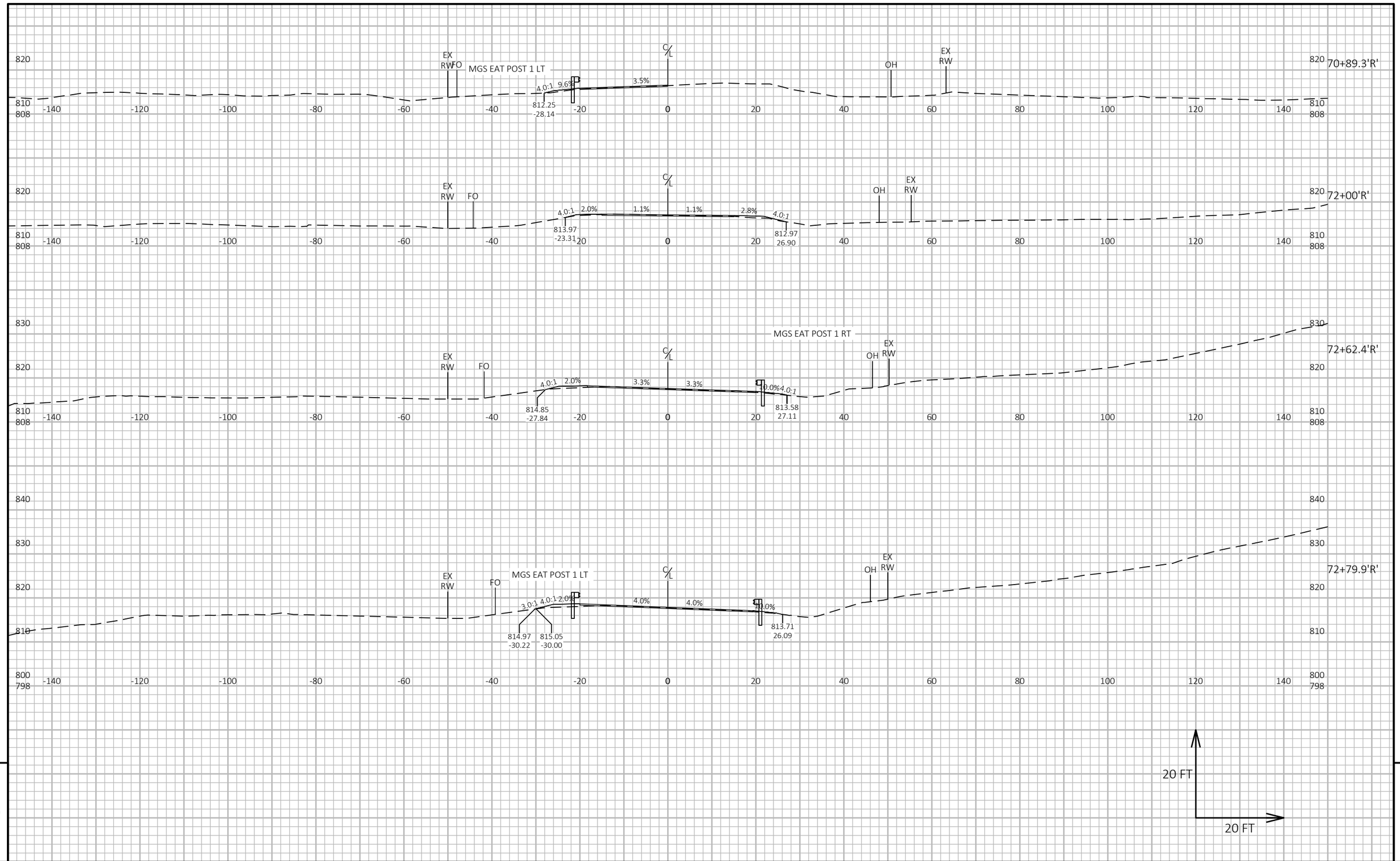
PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 278	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 18
PLOT DATE : 7/29/2024 6:35 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 279	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 19
PLOT DATE : 7/29/2024 6:35 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



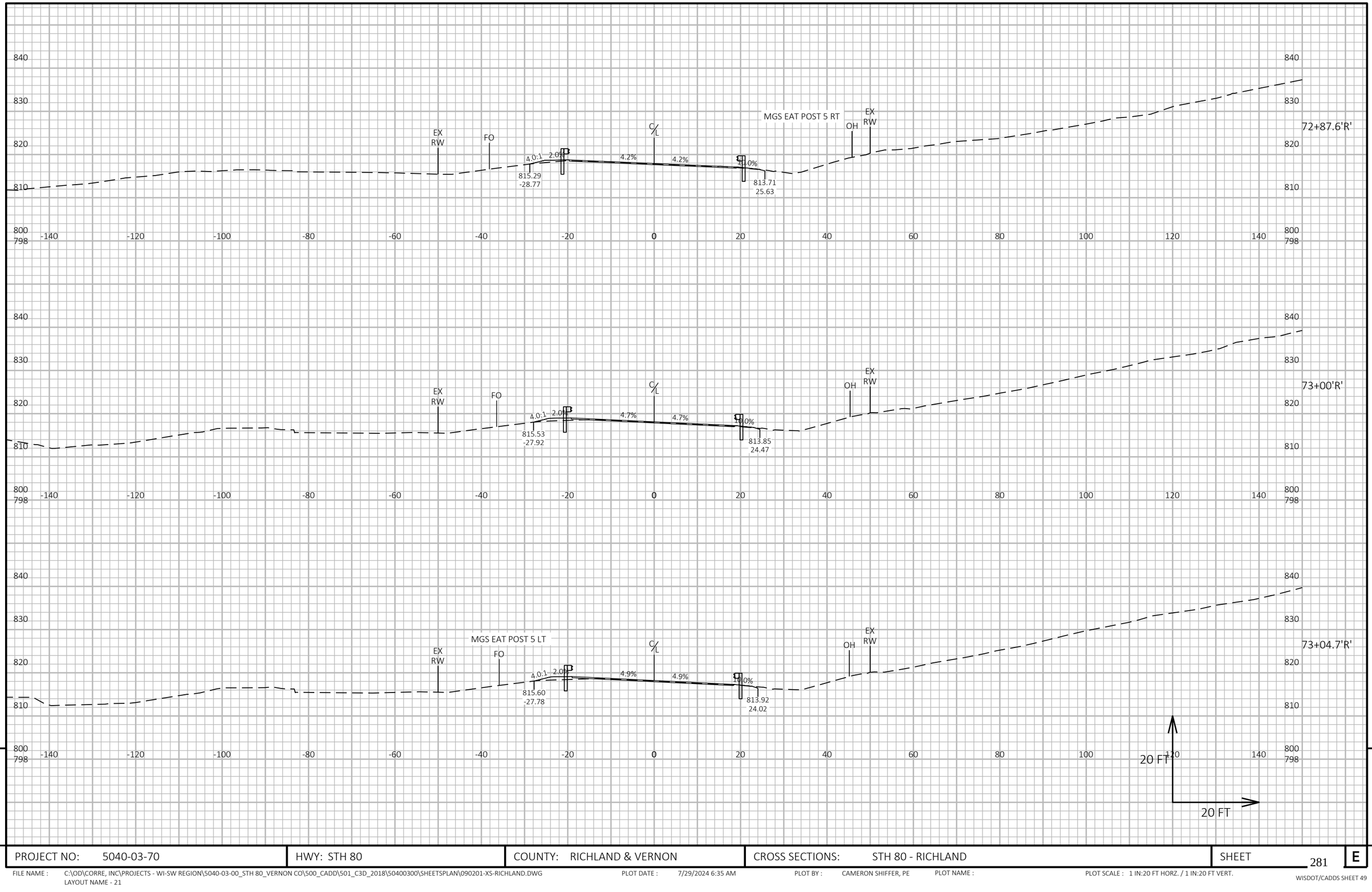
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9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 280	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 20

PLOT DATE : 7/29/2024 6:35 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 281	E

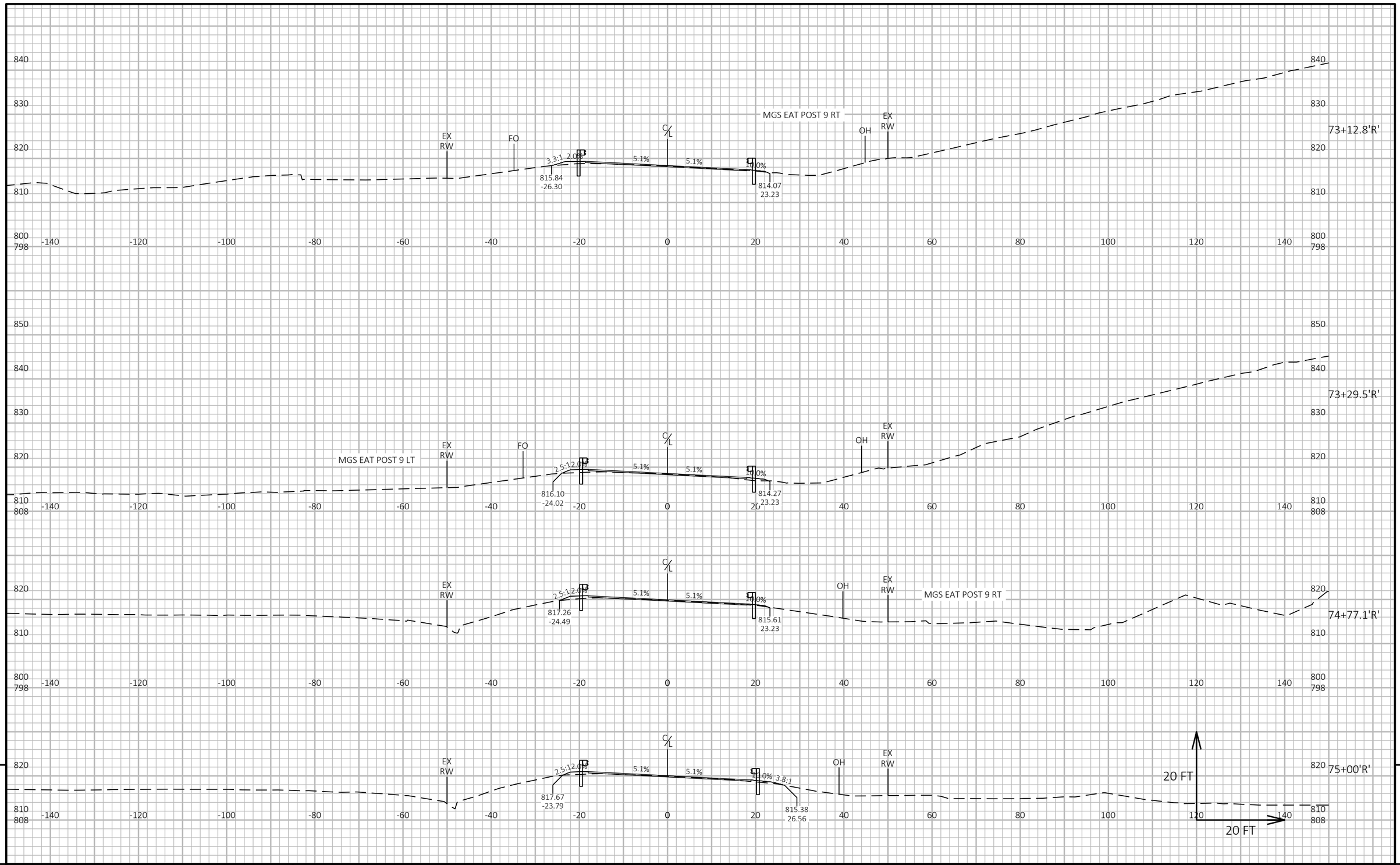
FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 21

PLOT DATE : 7/29/2024 6:35 AM

PLOT BY : CAMERON SHIFFER, PE

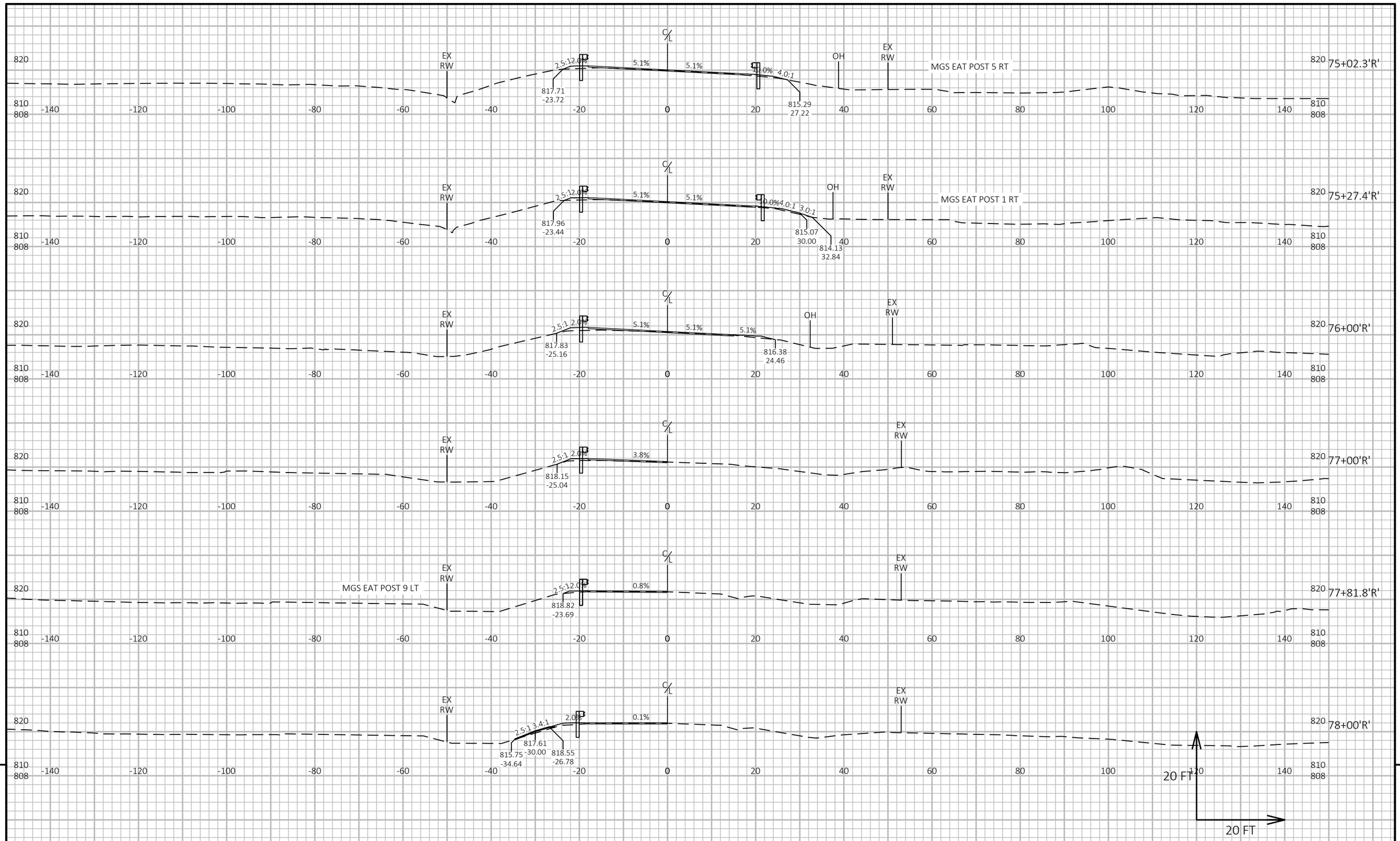
PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



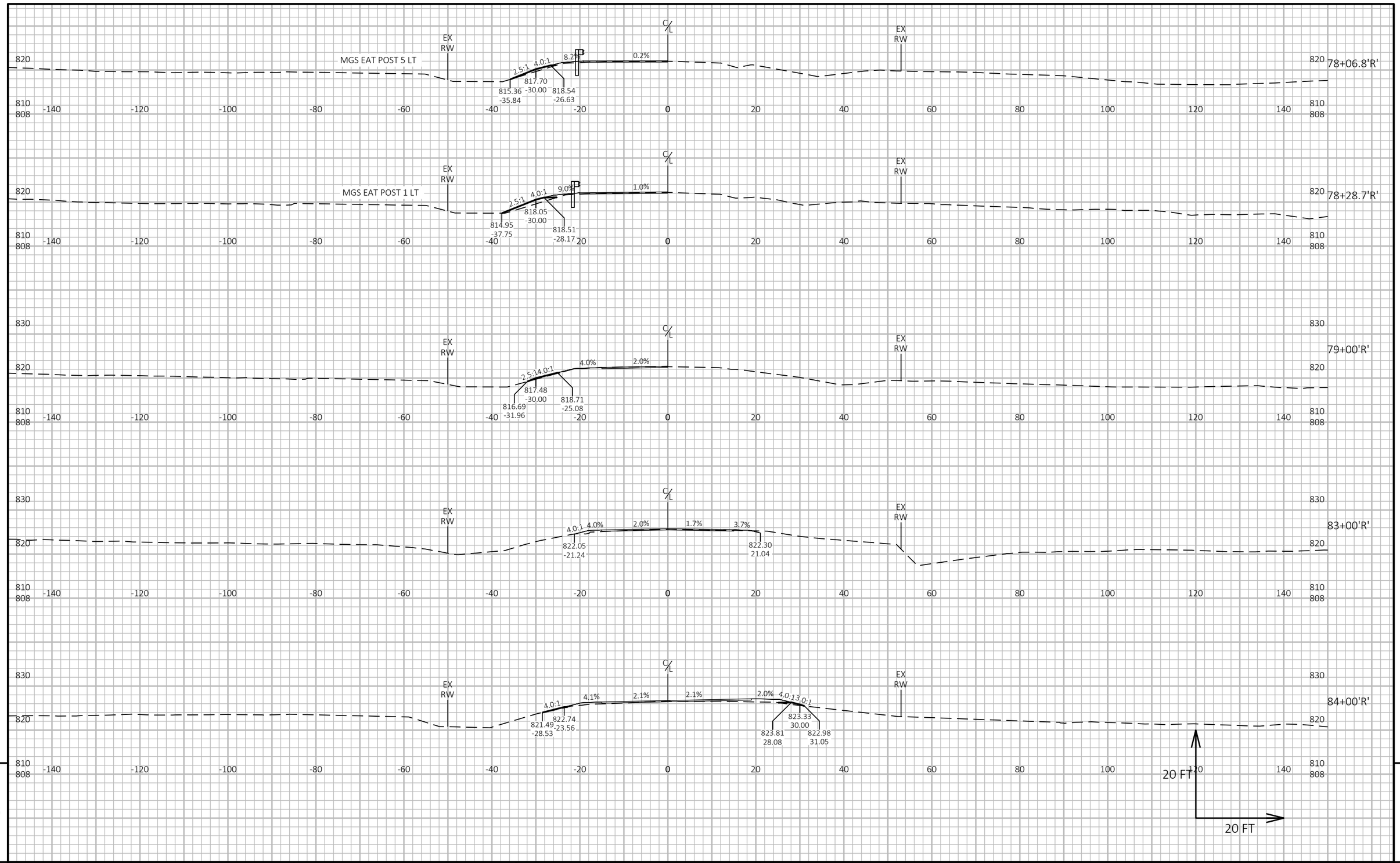
PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 282	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 22
PLOT DATE : 7/29/2024 6:35 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 283	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 23
PLOT DATE : 7/29/2024 6:35 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49

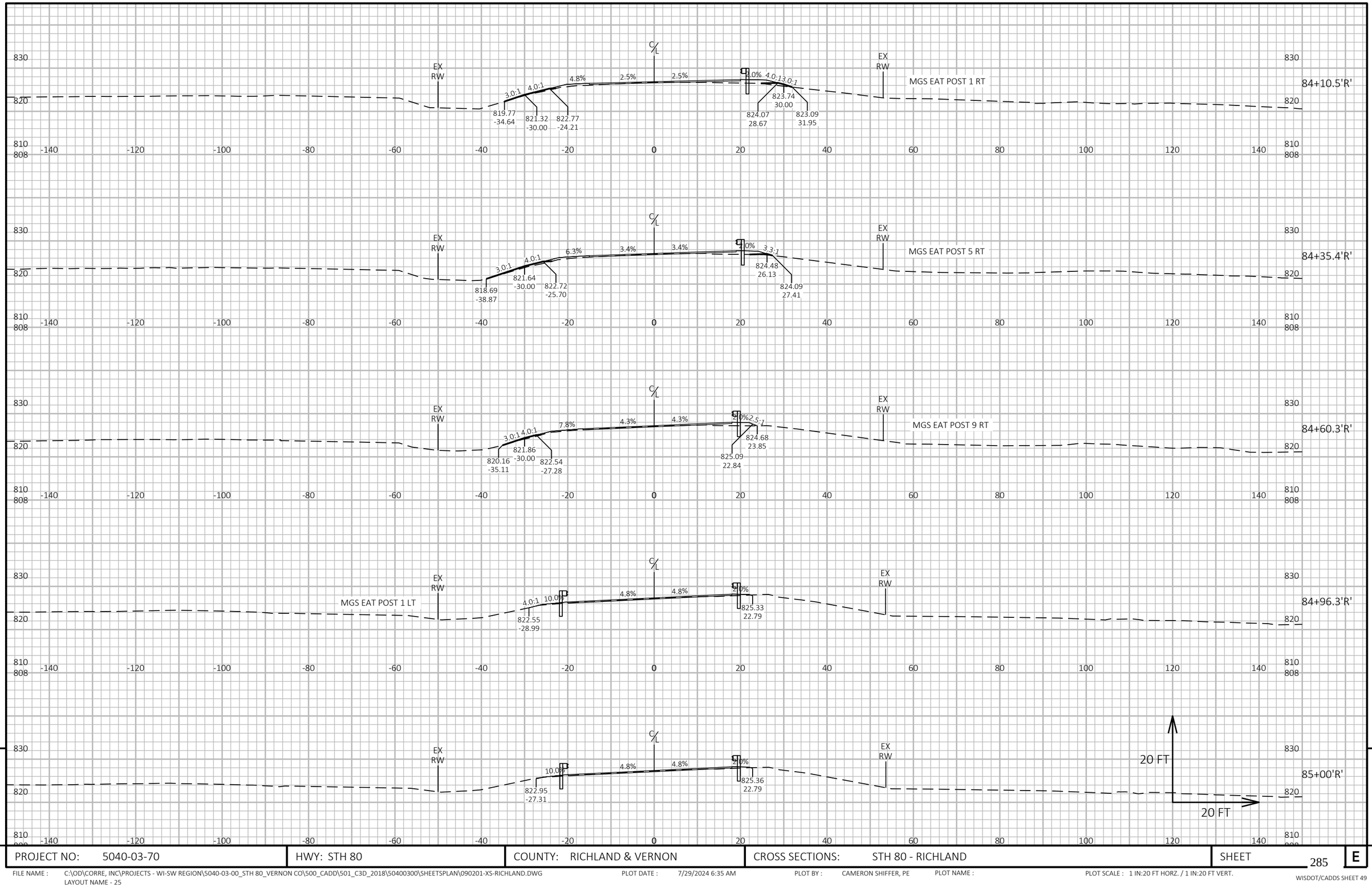


PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 284	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 24

PLOT DATE : 7/29/2024 6:35 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 285	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 25

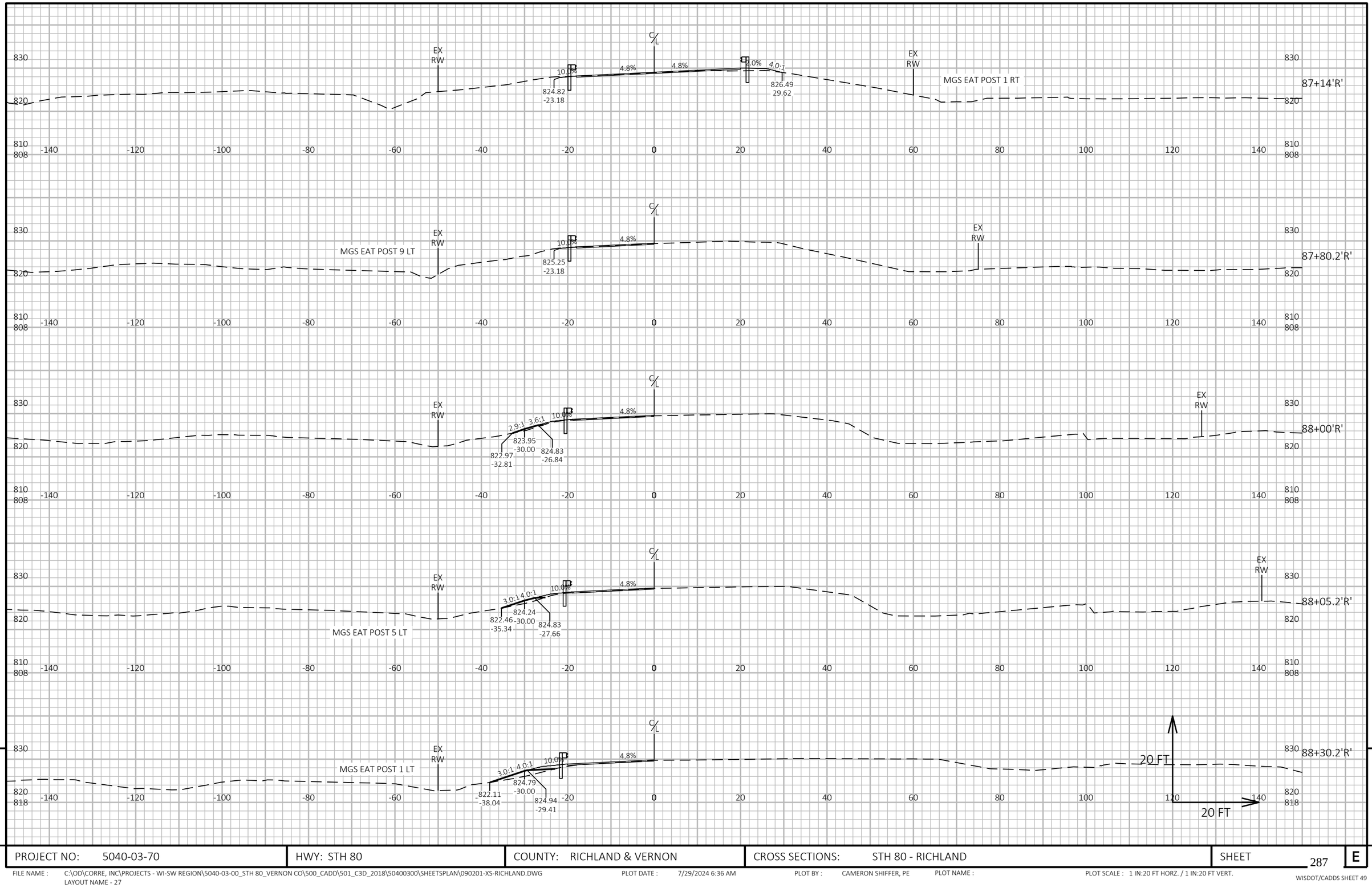
PLOT DATE : 7/29/2024 6:35 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 286	E



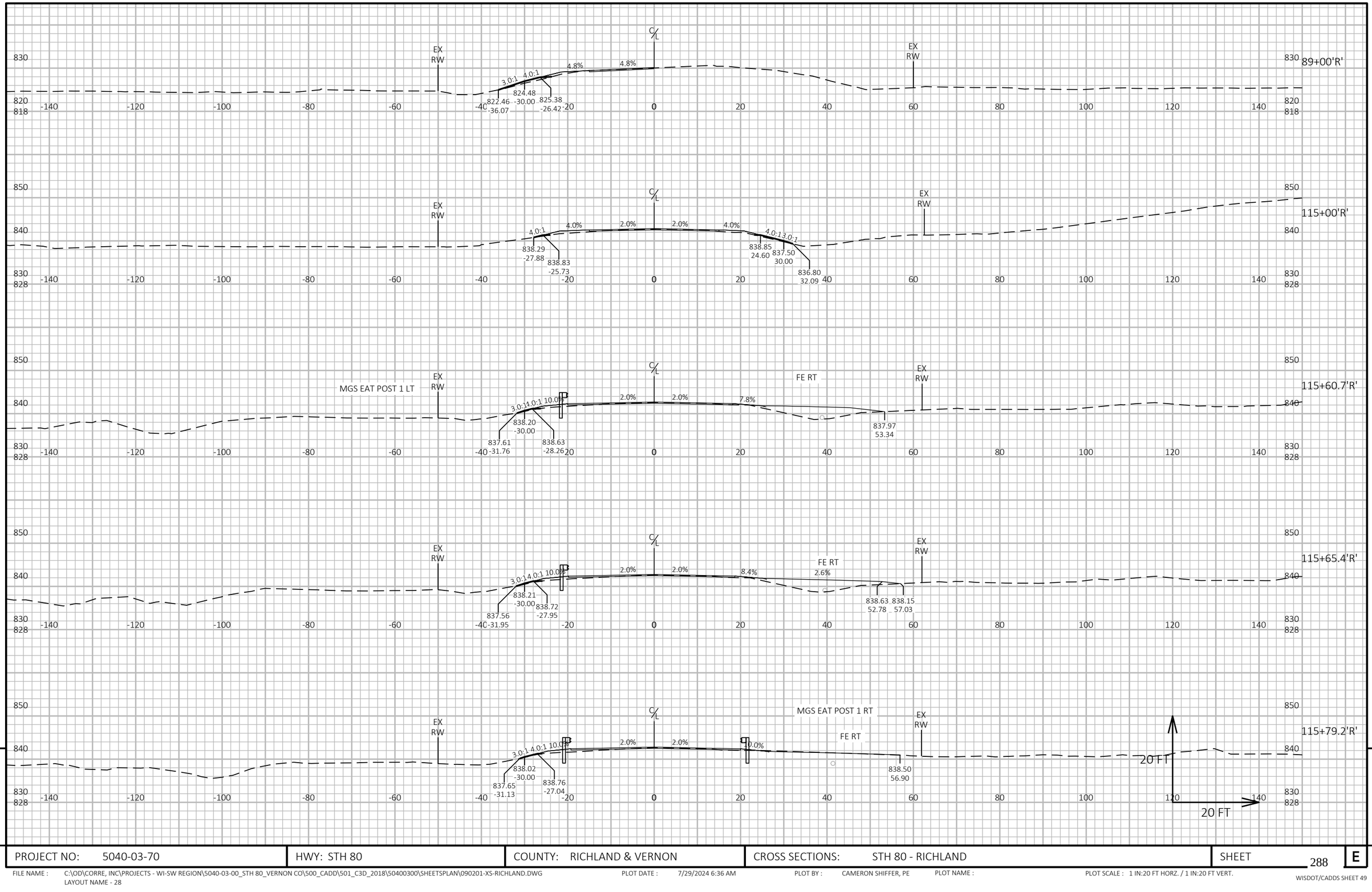
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9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 287	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 27

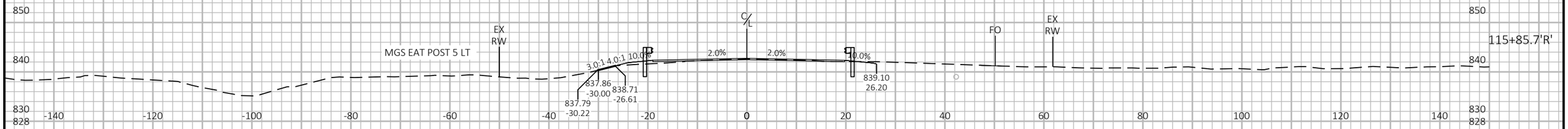
PLOT DATE : 7/29/2024 6:36 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



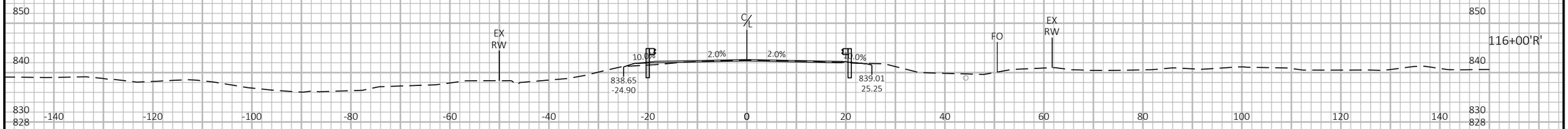
PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 288	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 28
PLOT DATE : 7/29/2024 6:36 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49

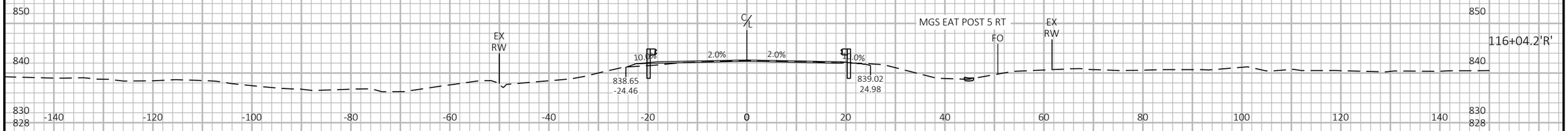
115+85.7'R'



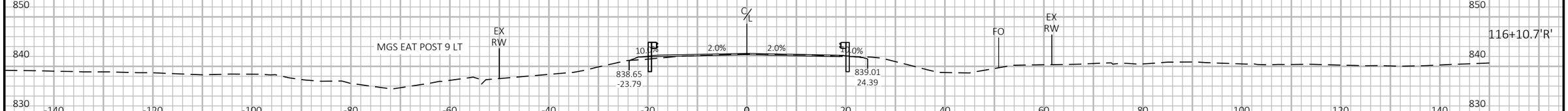
116+00'R'



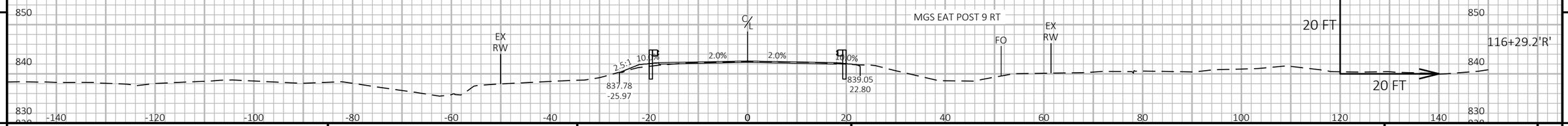
116+04.2'R'



116+10.7'R'



116+29.2'R'



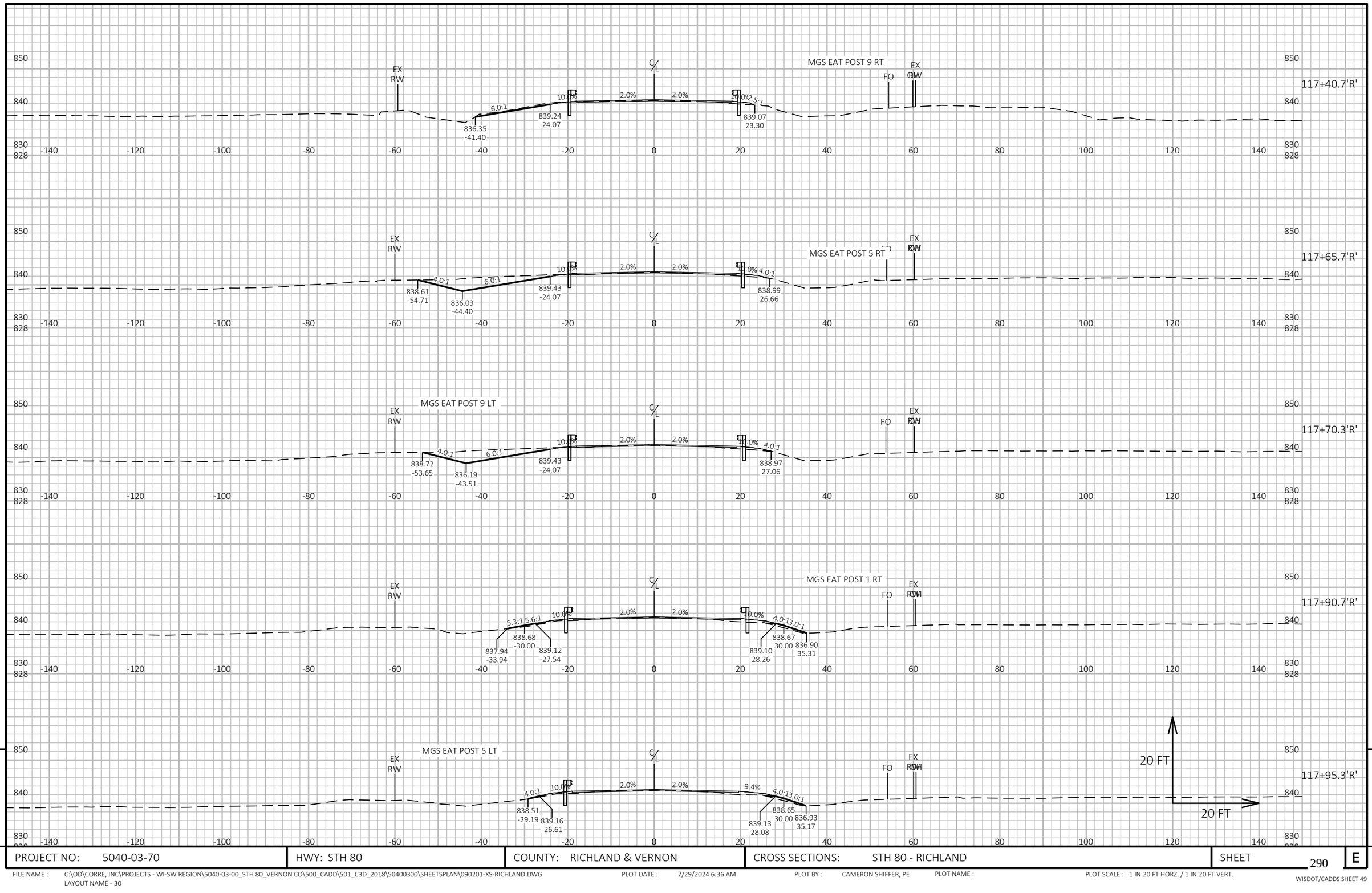
9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 289	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 29

PLOT DATE : 7/29/2024 6:36 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



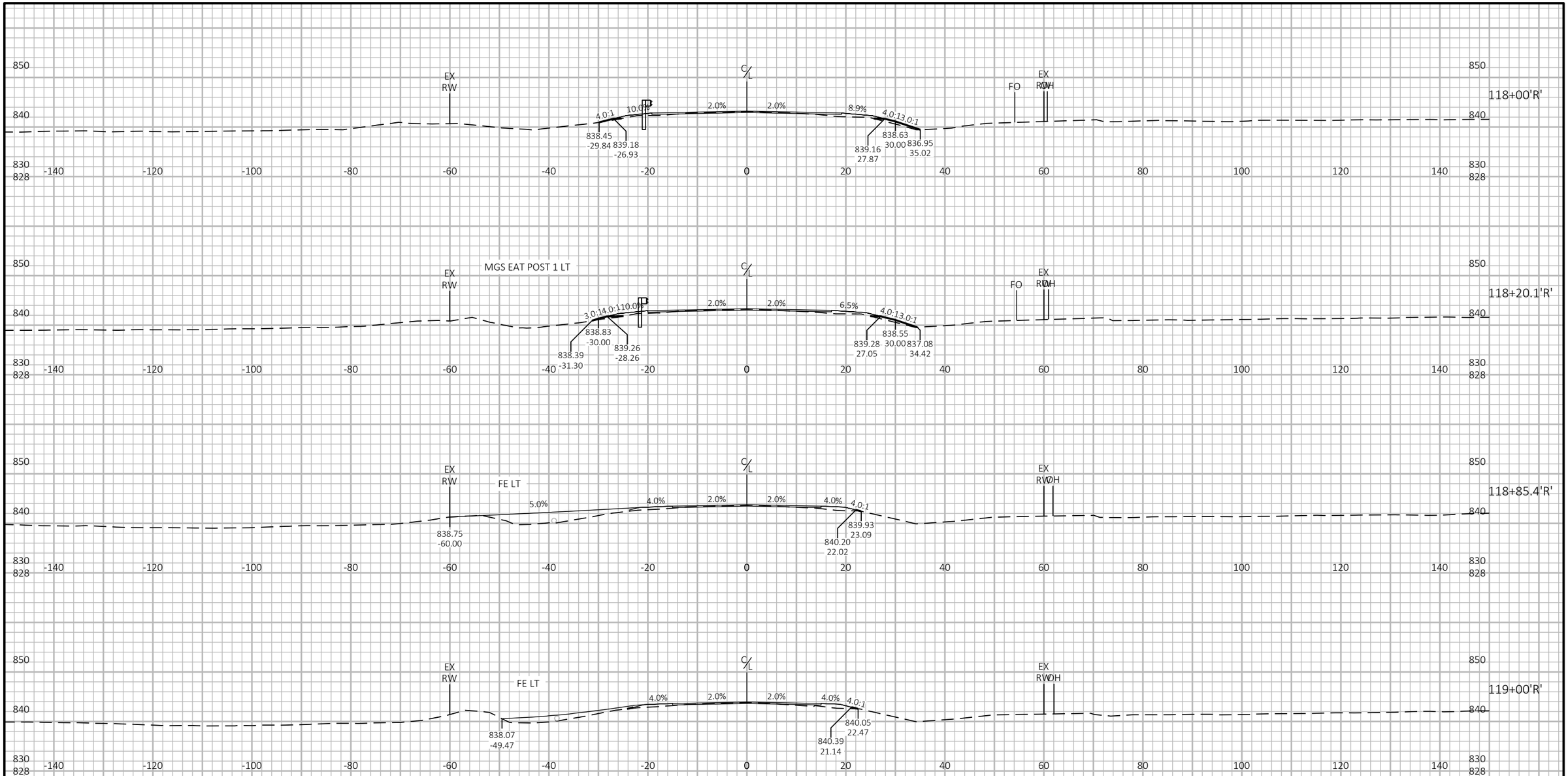
9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 290	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 30

PLOT DATE : 7/29/2024 6:36 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

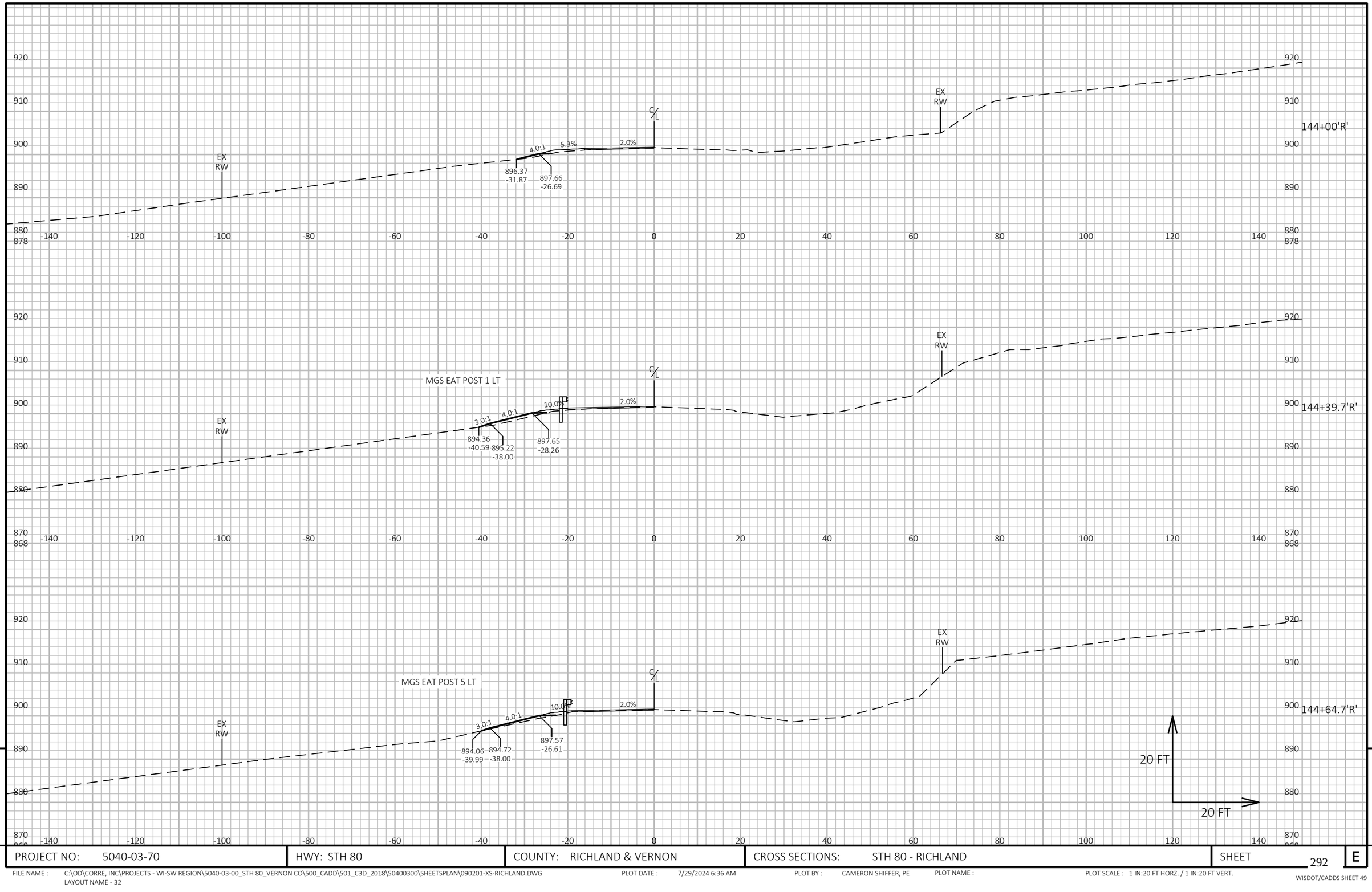
9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 291	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 31

PLOT DATE : 7/29/2024 6:36 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

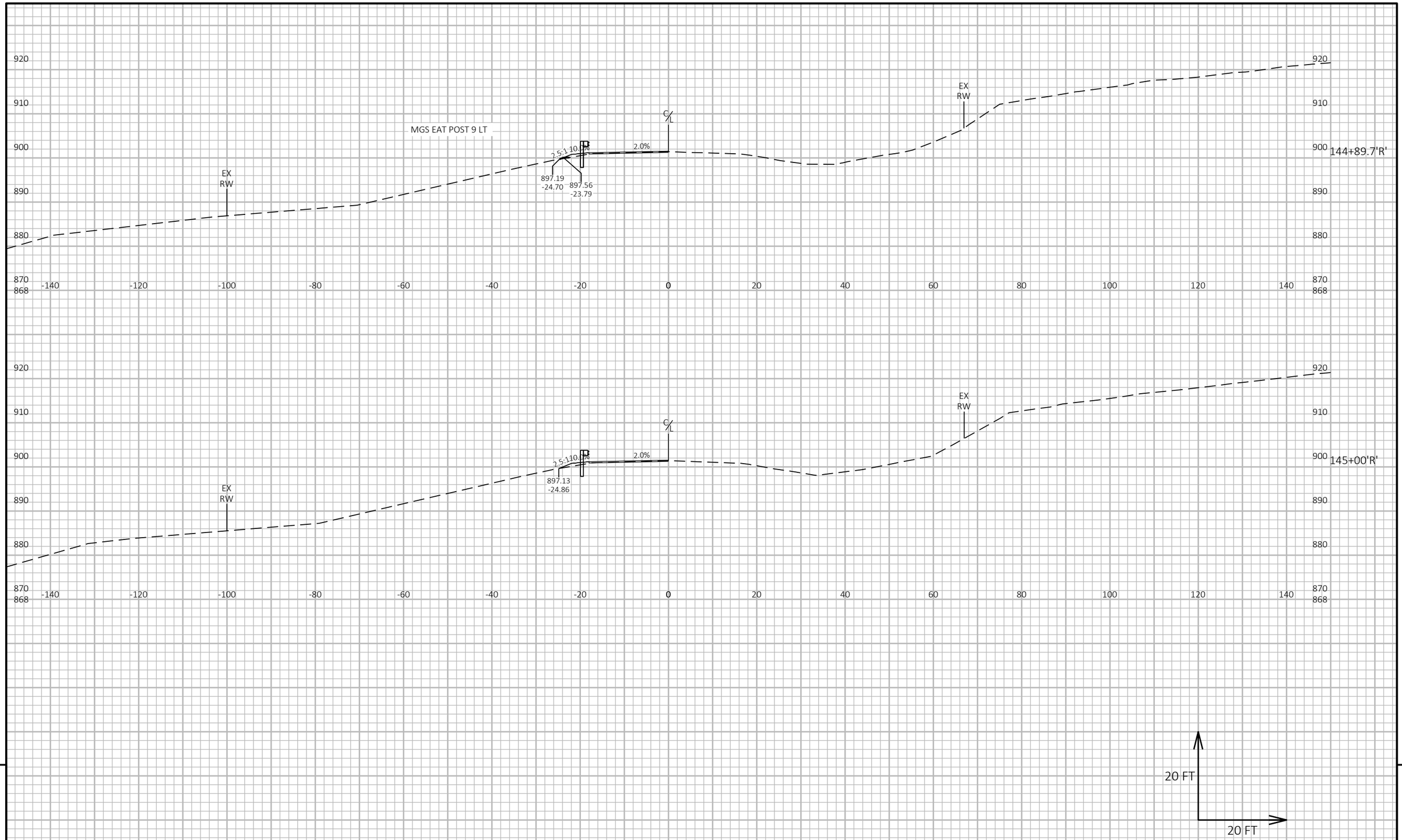
9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 292	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 32

PLOT DATE : 7/29/2024 6:36 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

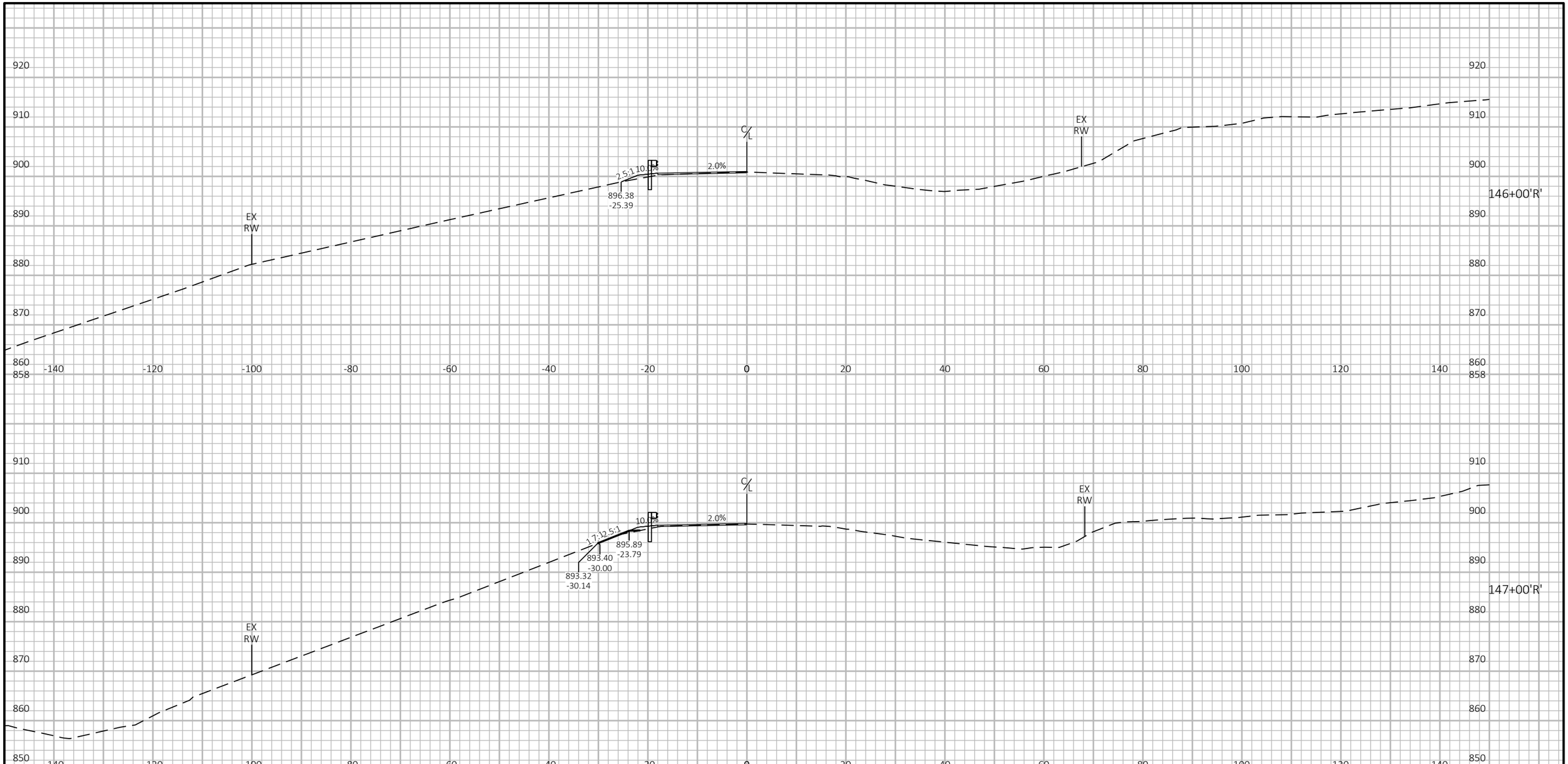


9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 293	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 33
PLOT DATE : 7/29/2024 6:36 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



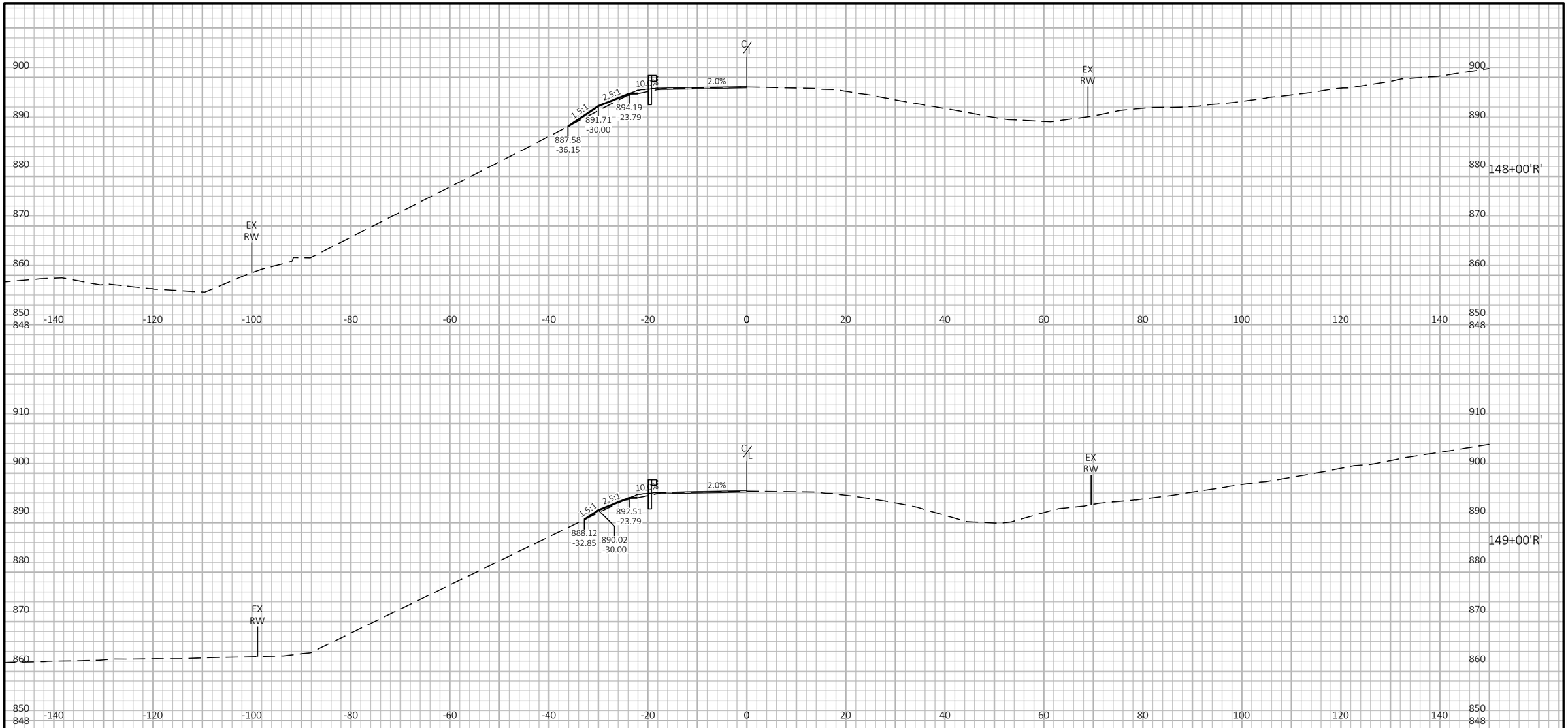
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9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 294	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 34

PLOT DATE : 7/29/2024 6:36 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

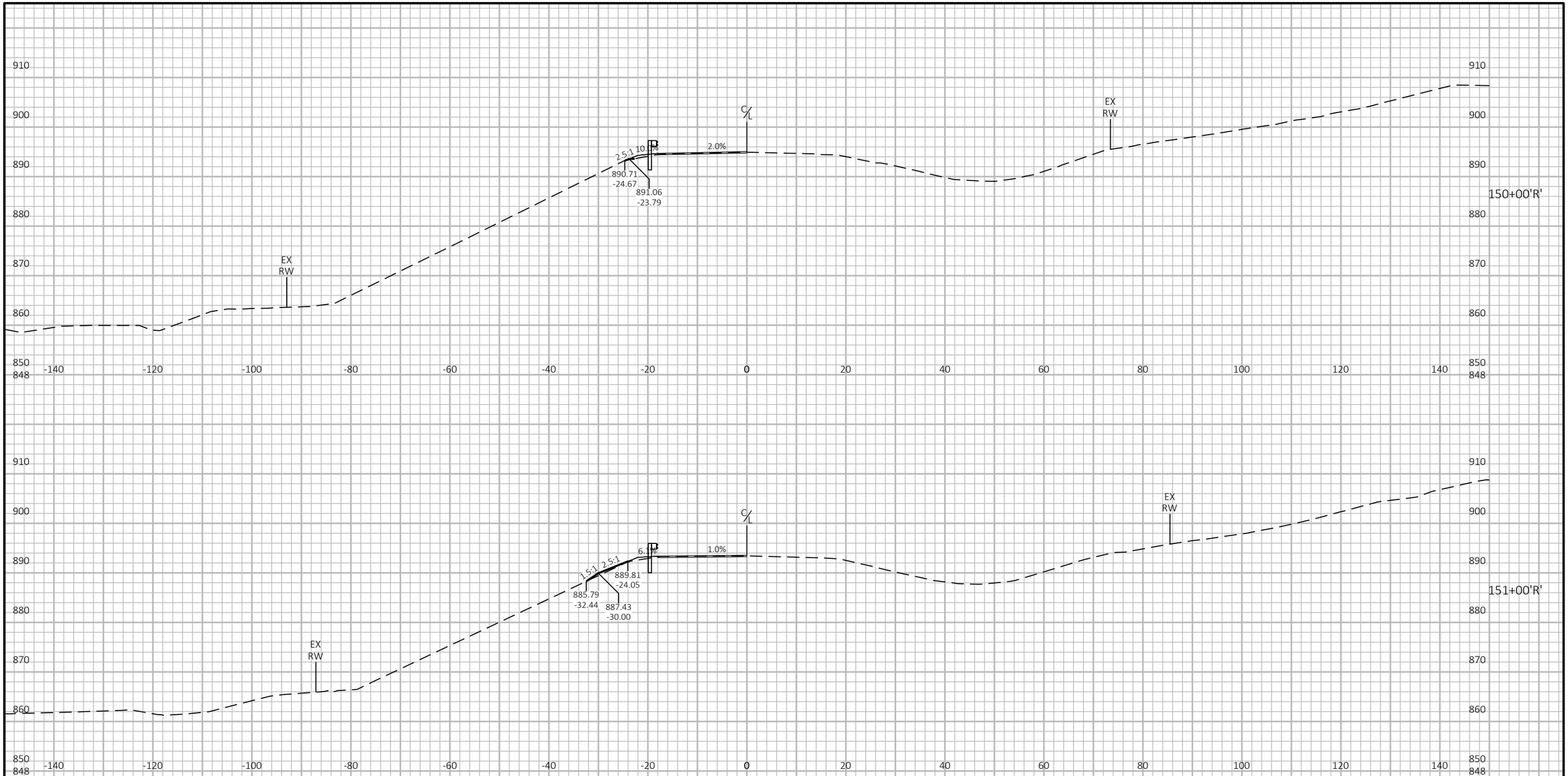
9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 295	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 35

PLOT DATE : 7/29/2024 6:36 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

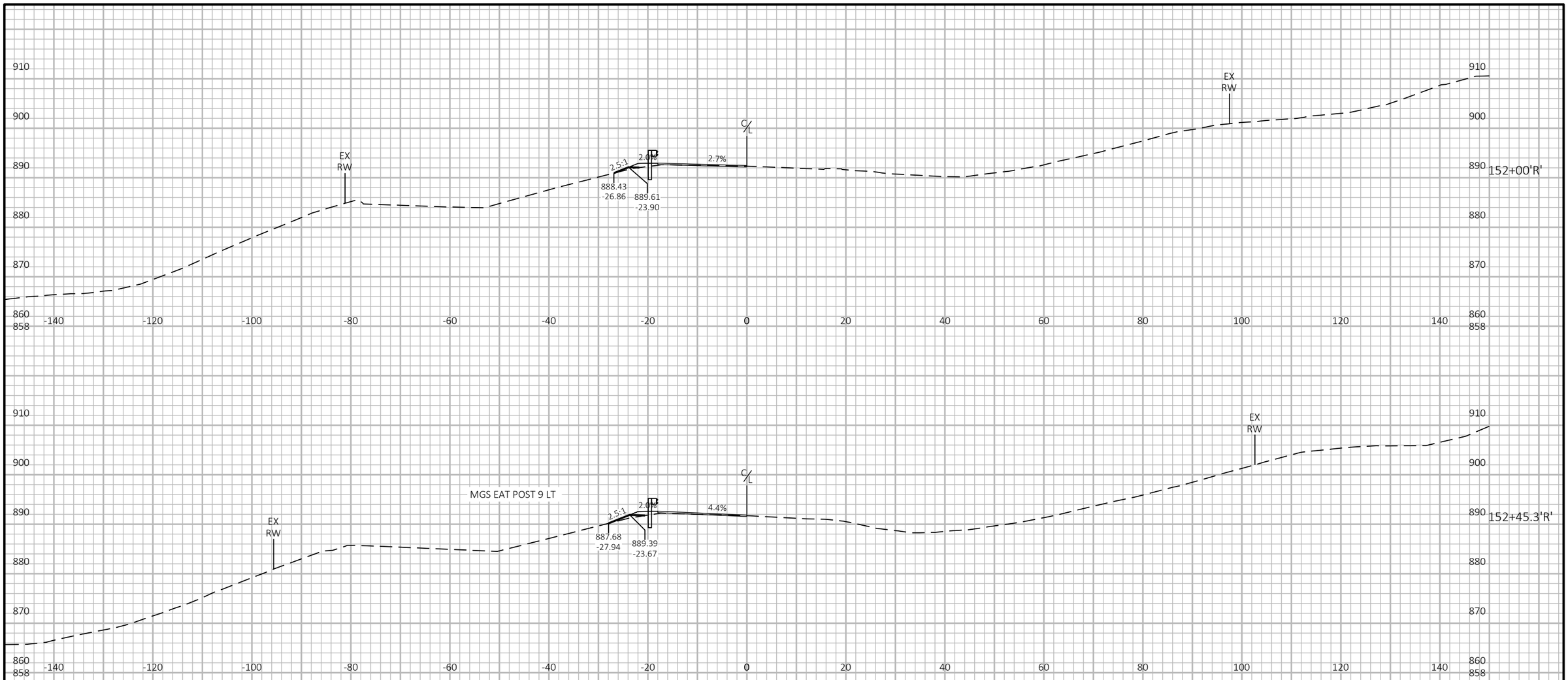
9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 296	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 36

PLOT DATE : 7/29/2024 6:36 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



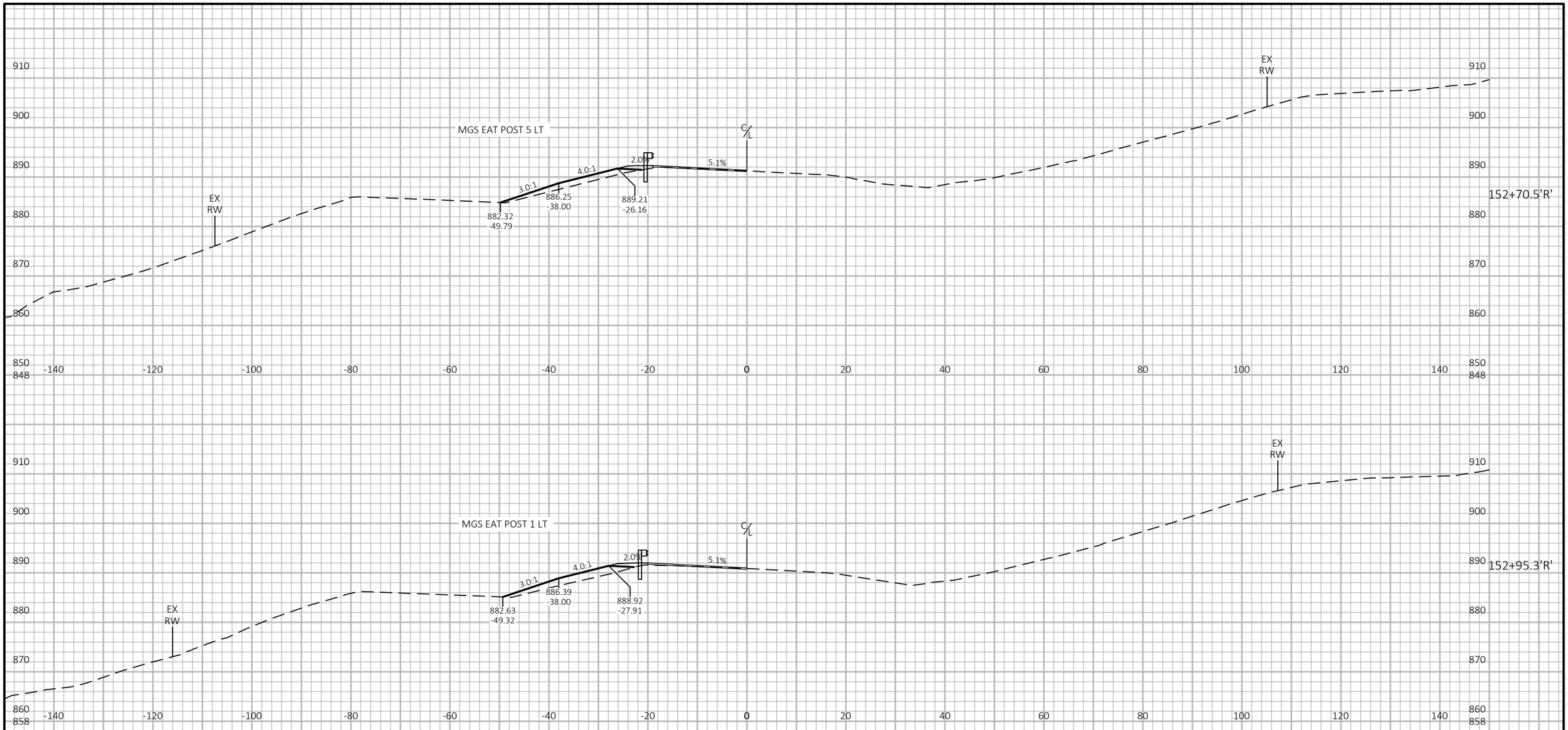
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 297	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 37

PLOT DATE : 7/29/2024 6:36 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 298	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 38

PLOT DATE : 7/29/2024 6:36 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

153+00'R'

EX RW

EX RW

C/L

3.0:1

4.0:1

1.3%

5.1%

882.66
-48.77

886.25
-38.00

888.83
-27.68

910
900
890
880
870
860
858

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

154+00'R'

EX RW

EX RW

C/L

4.0:1

5.1%

5.1%

885.16
-30.13

887.13
-22.22

920
910
900
890
880
870
860
858

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

20 FT

20 FT

9

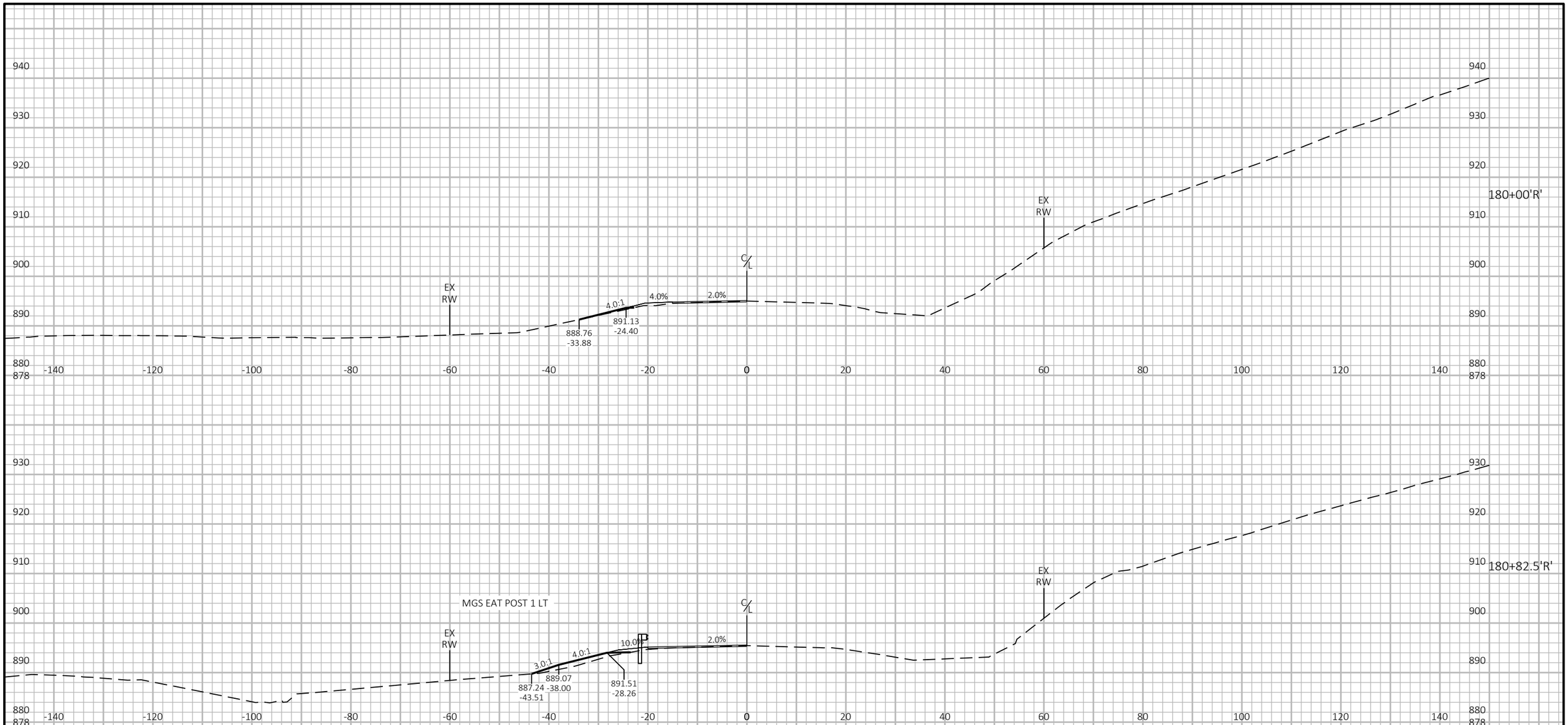
9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 299	E

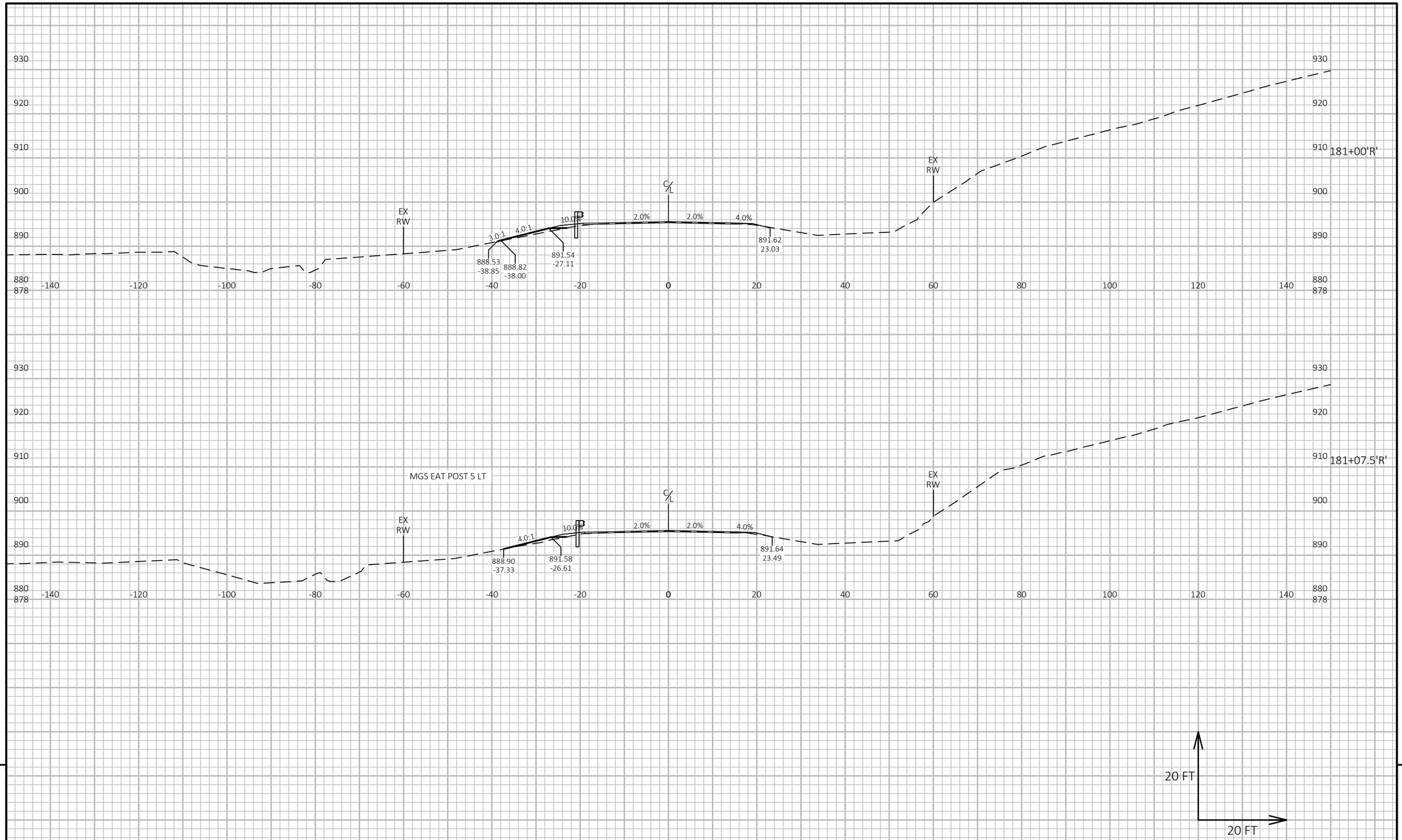
FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 39

PLOT DATE : 7/29/2024 6:36 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 300	E



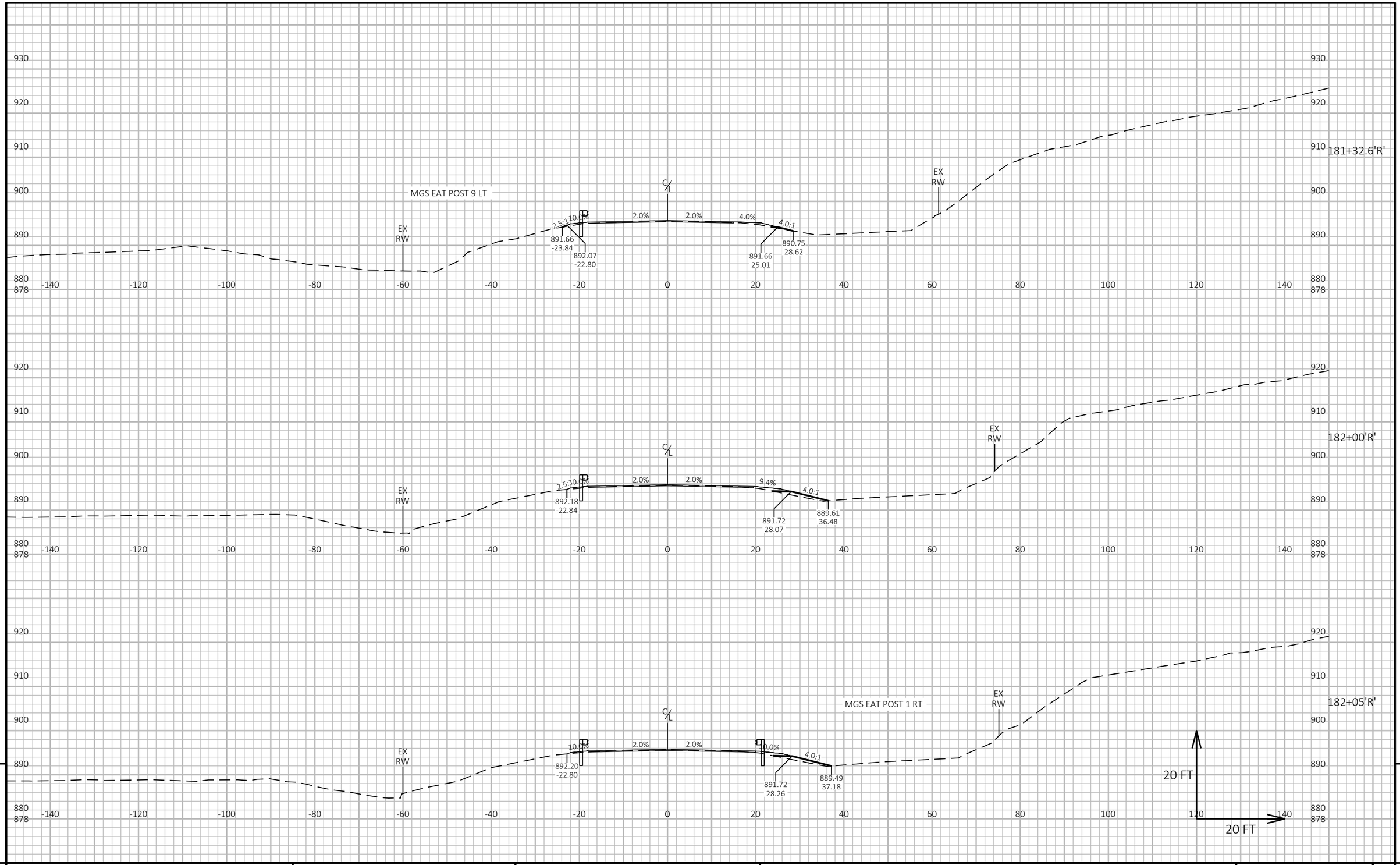
9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 301	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 41

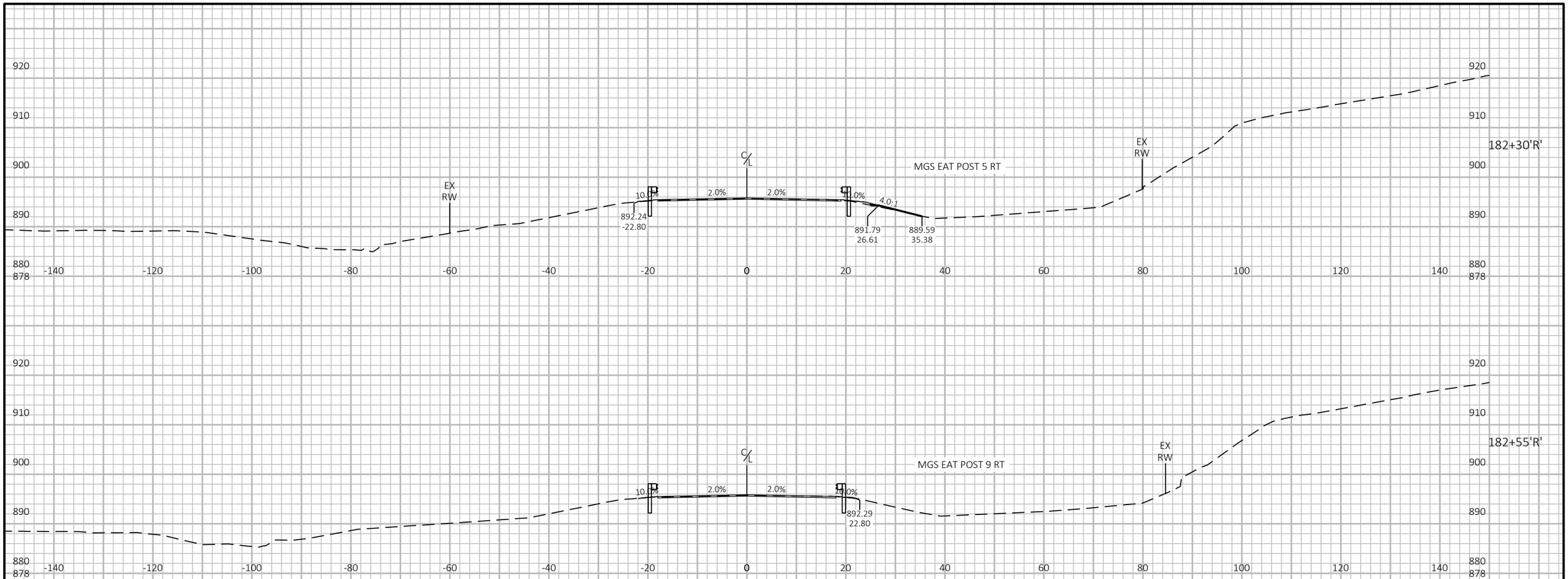
PLOT DATE : 7/29/2024 6:37 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 302	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 42
PLOT DATE : 7/29/2024 6:37 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



9

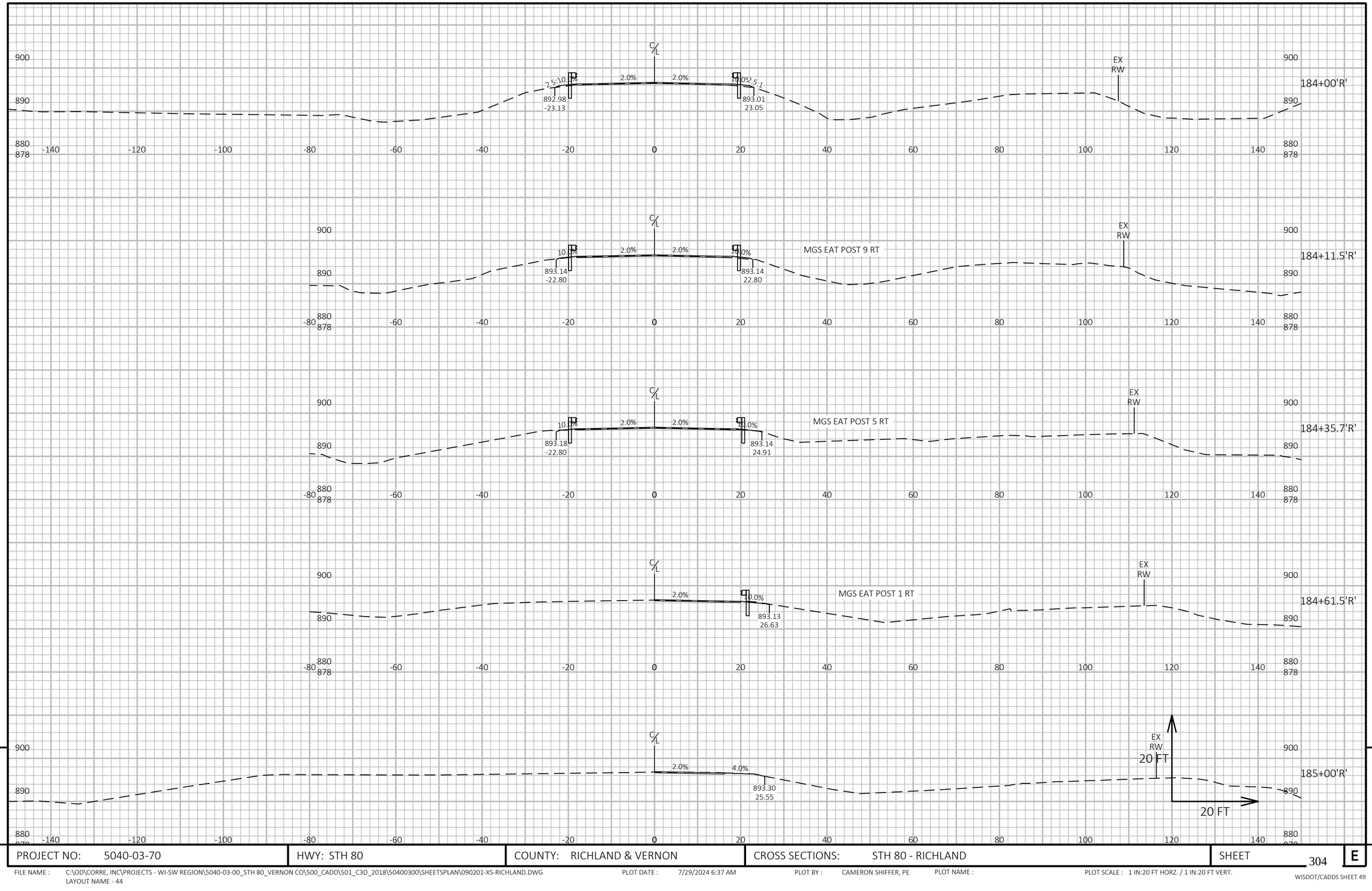
9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 303	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 43

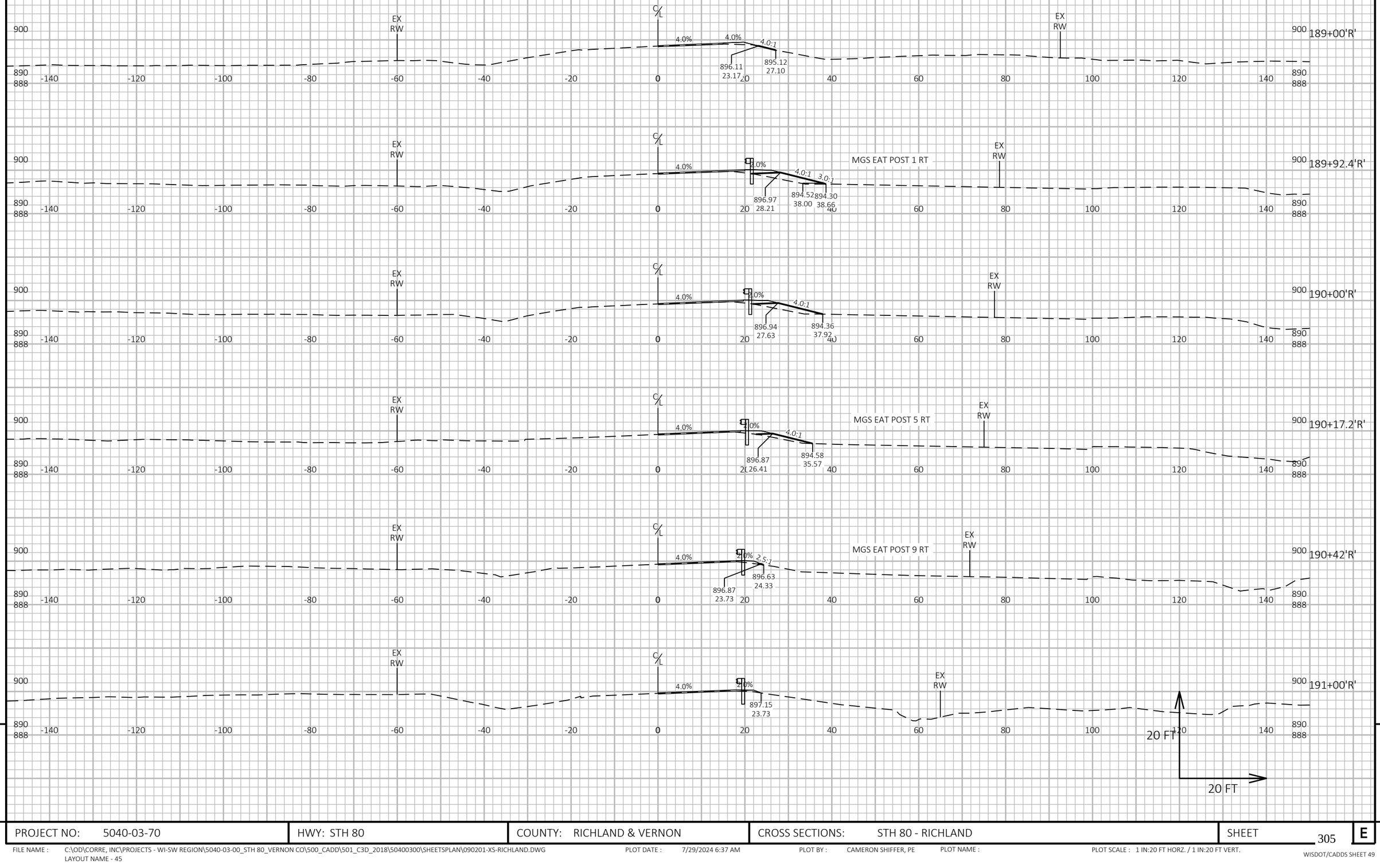
PLOT DATE : 7/29/2024 6:37 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 304	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 44
PLOT DATE : 7/29/2024 6:37 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49

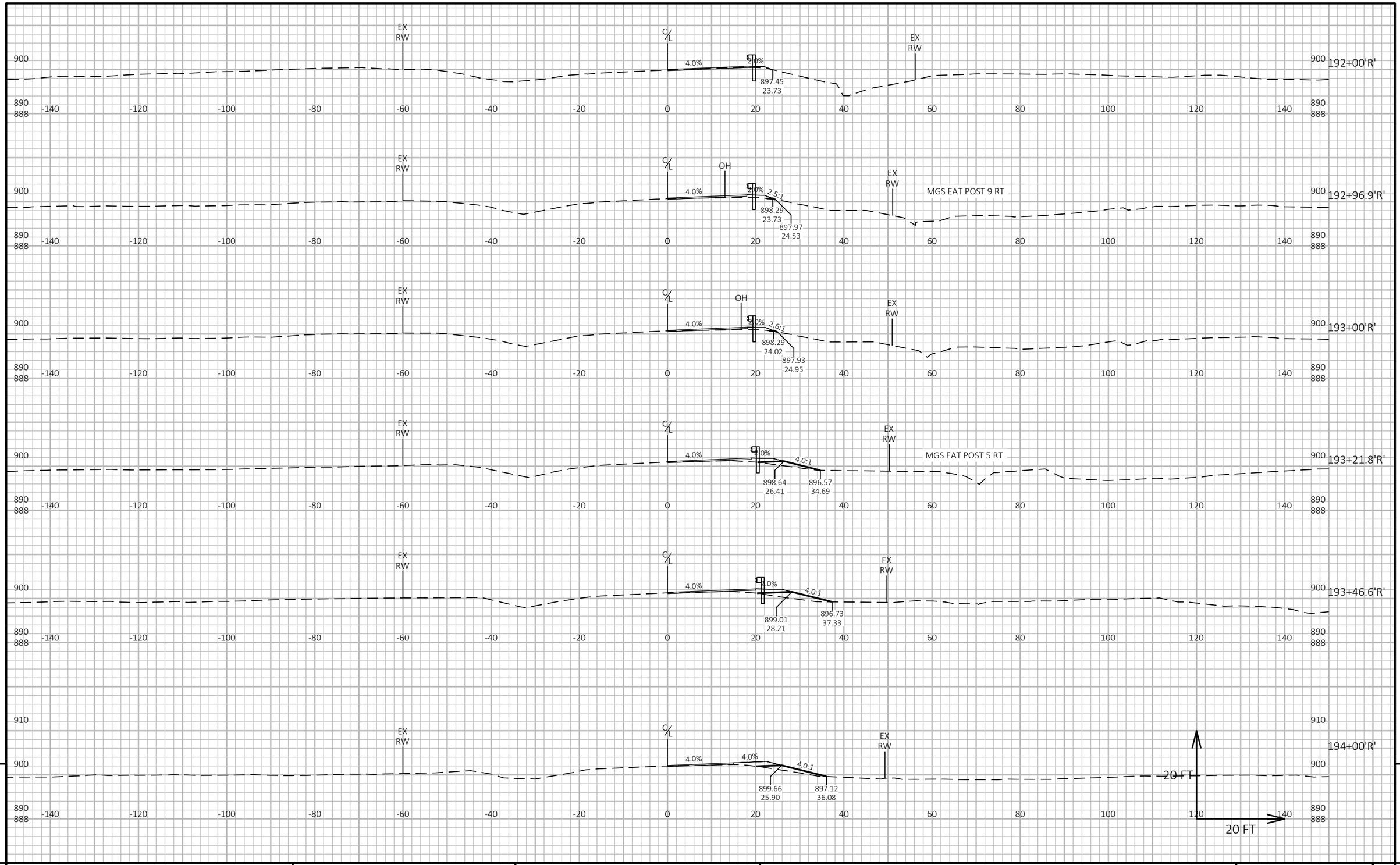


PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 305 E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 45

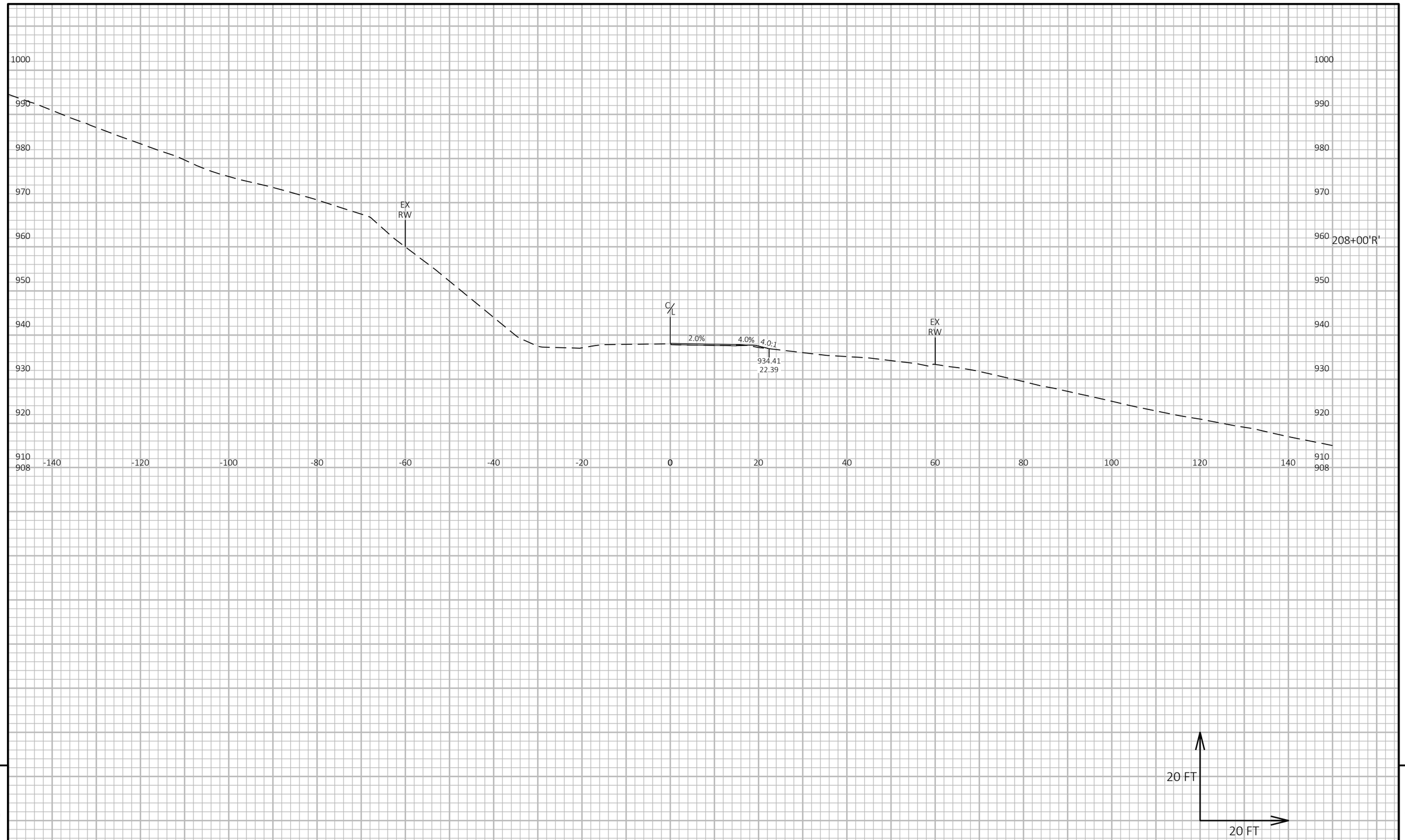
PLOT DATE : 7/29/2024 6:37 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 306	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 46
PLOT DATE : 7/29/2024 6:37 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



9

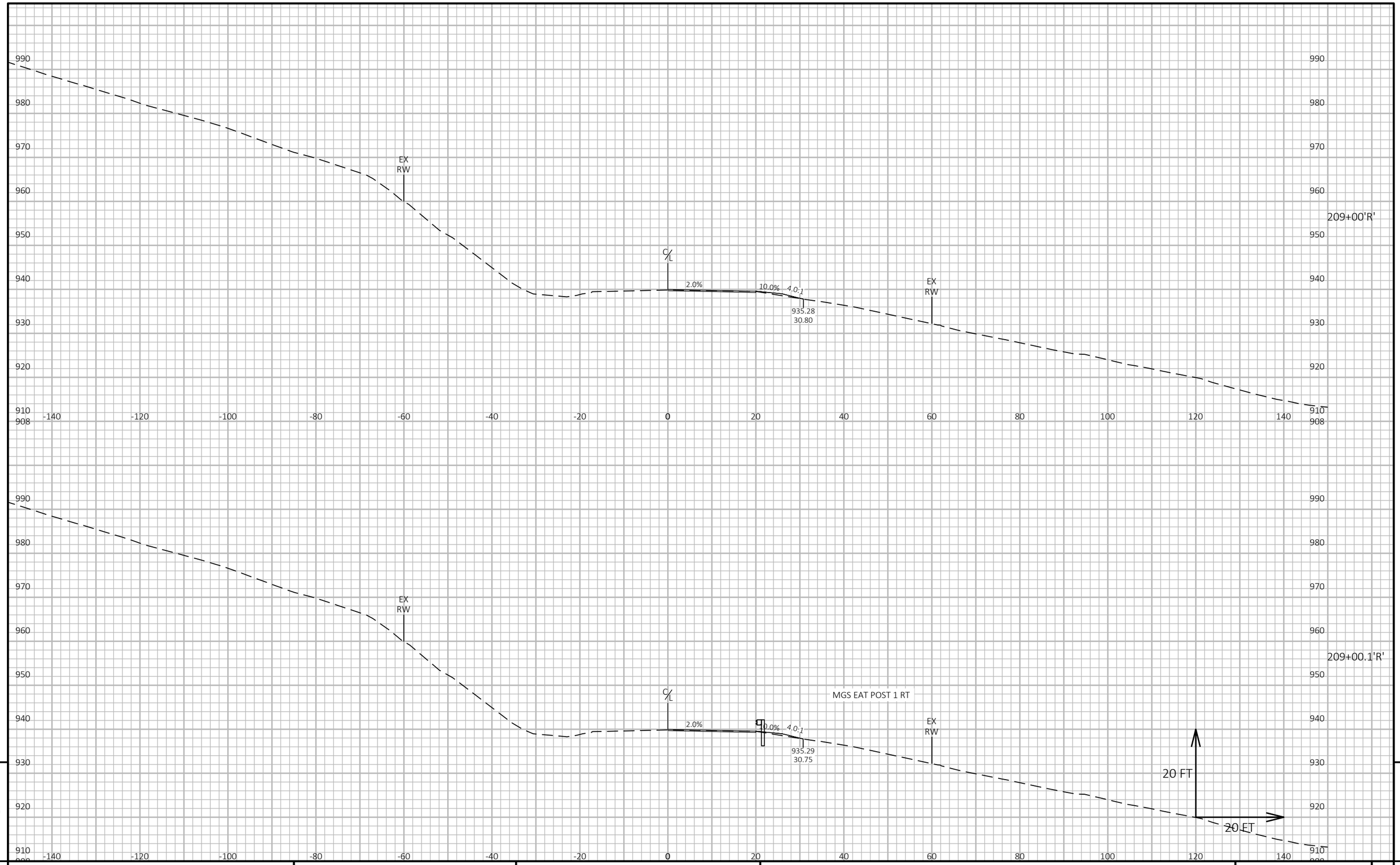
9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 307	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 47

PLOT DATE : 7/29/2024 6:37 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 308	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 48

PLOT DATE : 7/29/2024 6:37 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

990
980
970
960
950
940
930
920
910
900
898

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

EX RW

C/L

2.0%

4.0%

936.77
24.98

MGS EAT POST 5 RT

EX RW

209+25.1'R'

20 FT

20 FT

9

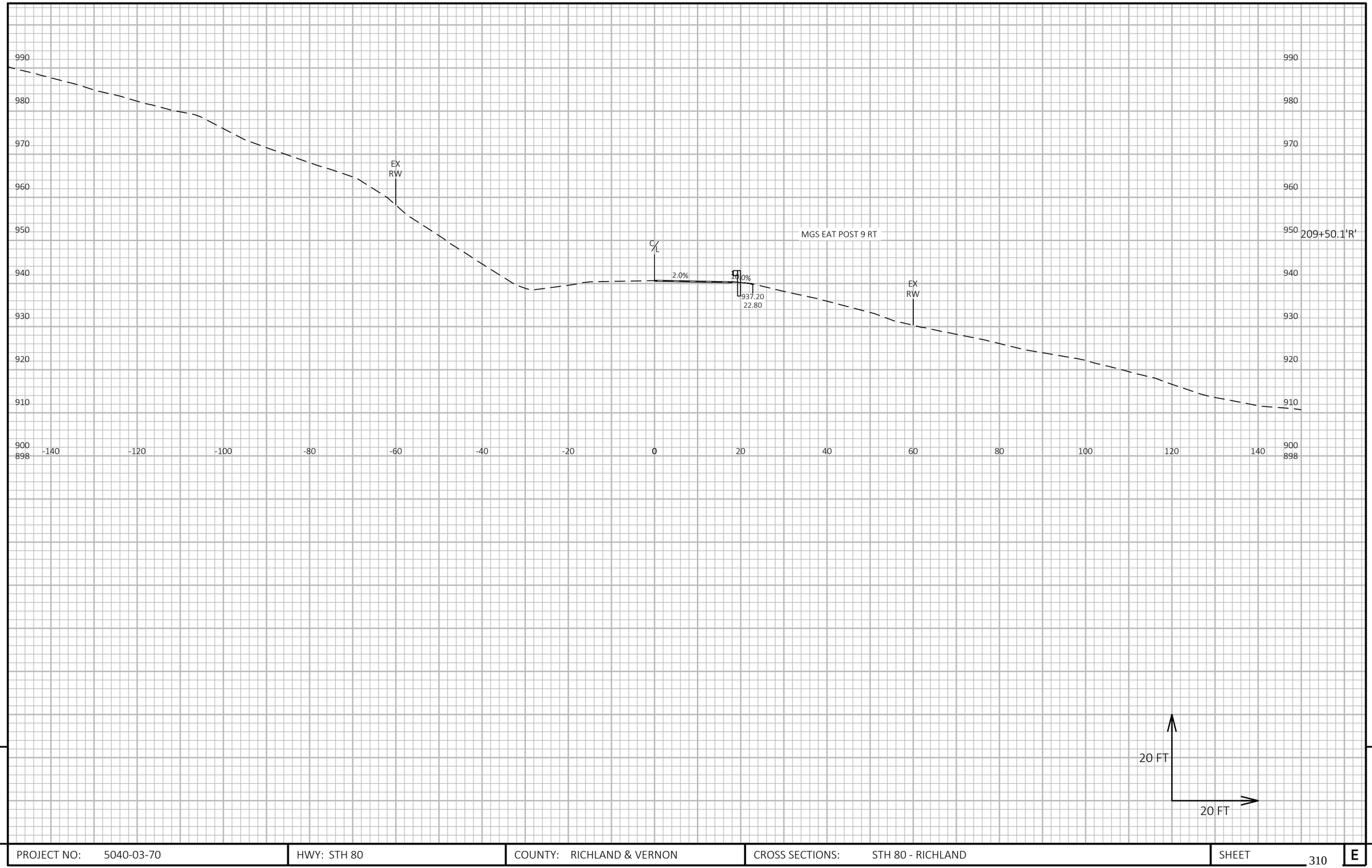
9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 309	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 49

PLOT DATE : 7/29/2024 6:37 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 310	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 50

PLOT DATE : 7/29/2024 6:37 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

990
980
970
960
950
940
930
920
910
900
898

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

EX RW

C/L

2.0%

4.0%

2.5:1

937.42
23.79

936.32
26.54

EX RW

210+00'R'

20 FT

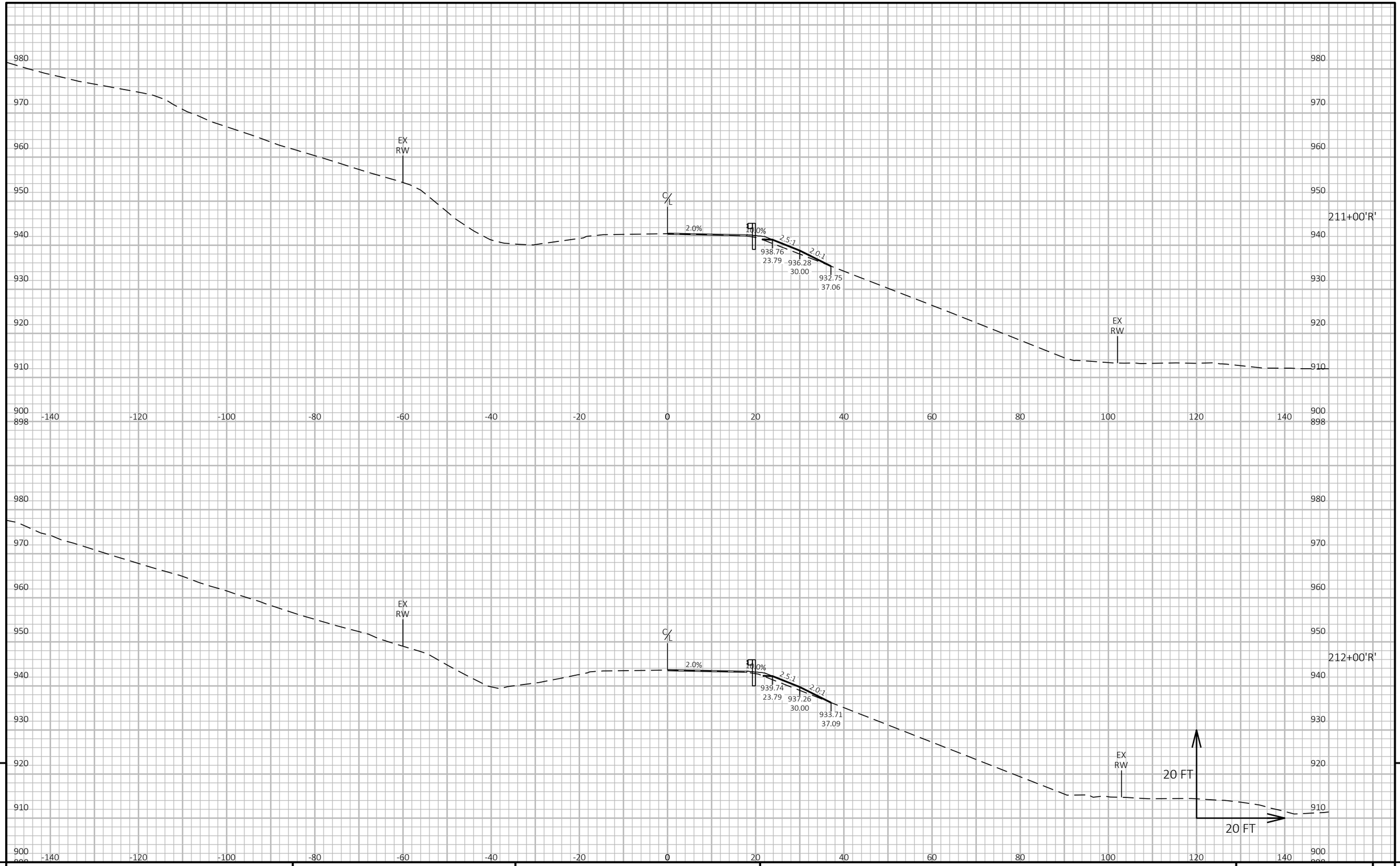
20 FT

9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 311	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 51
PLOT DATE : 7/29/2024 6:37 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



9

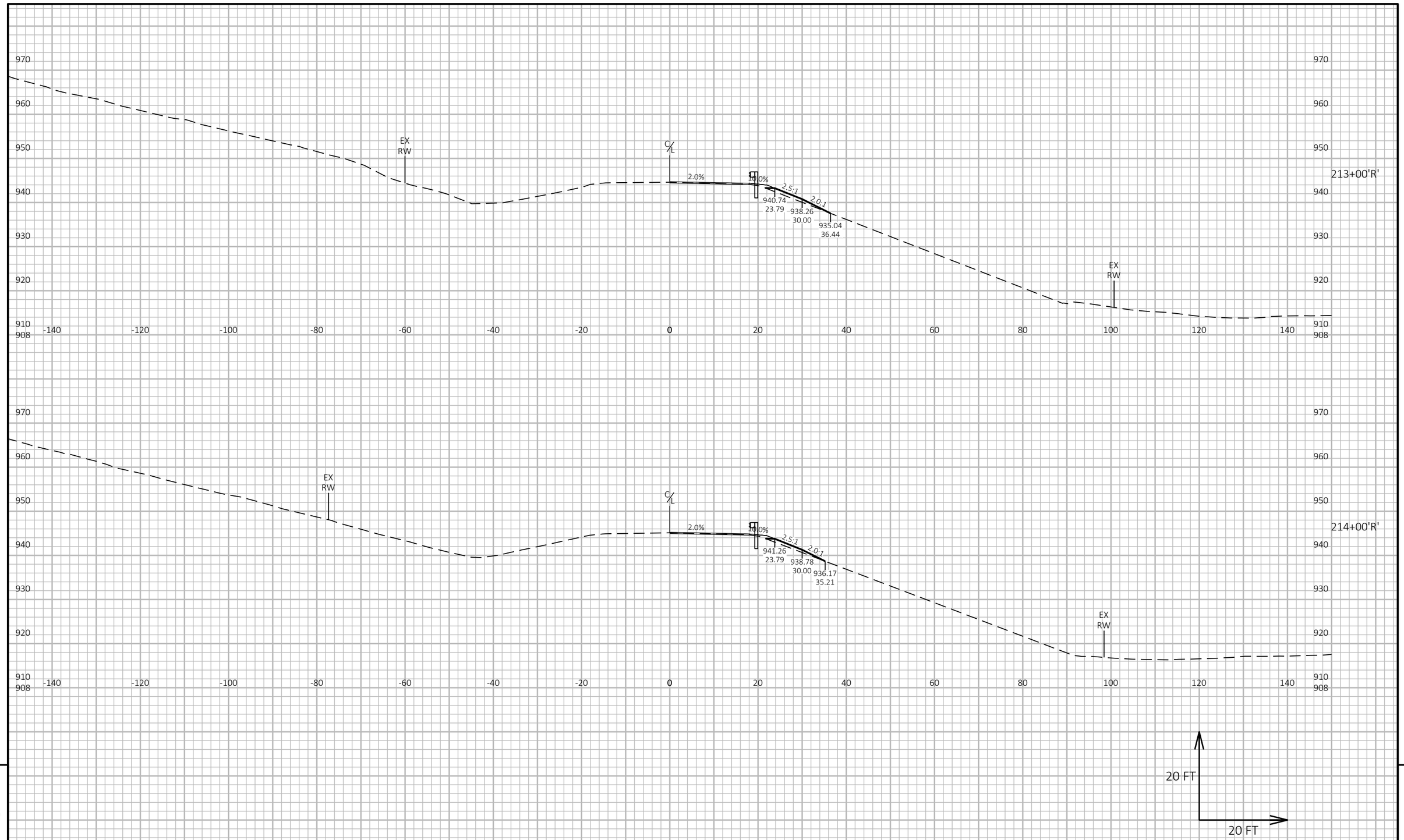
9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 312	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 52

PLOT DATE : 7/29/2024 6:37 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



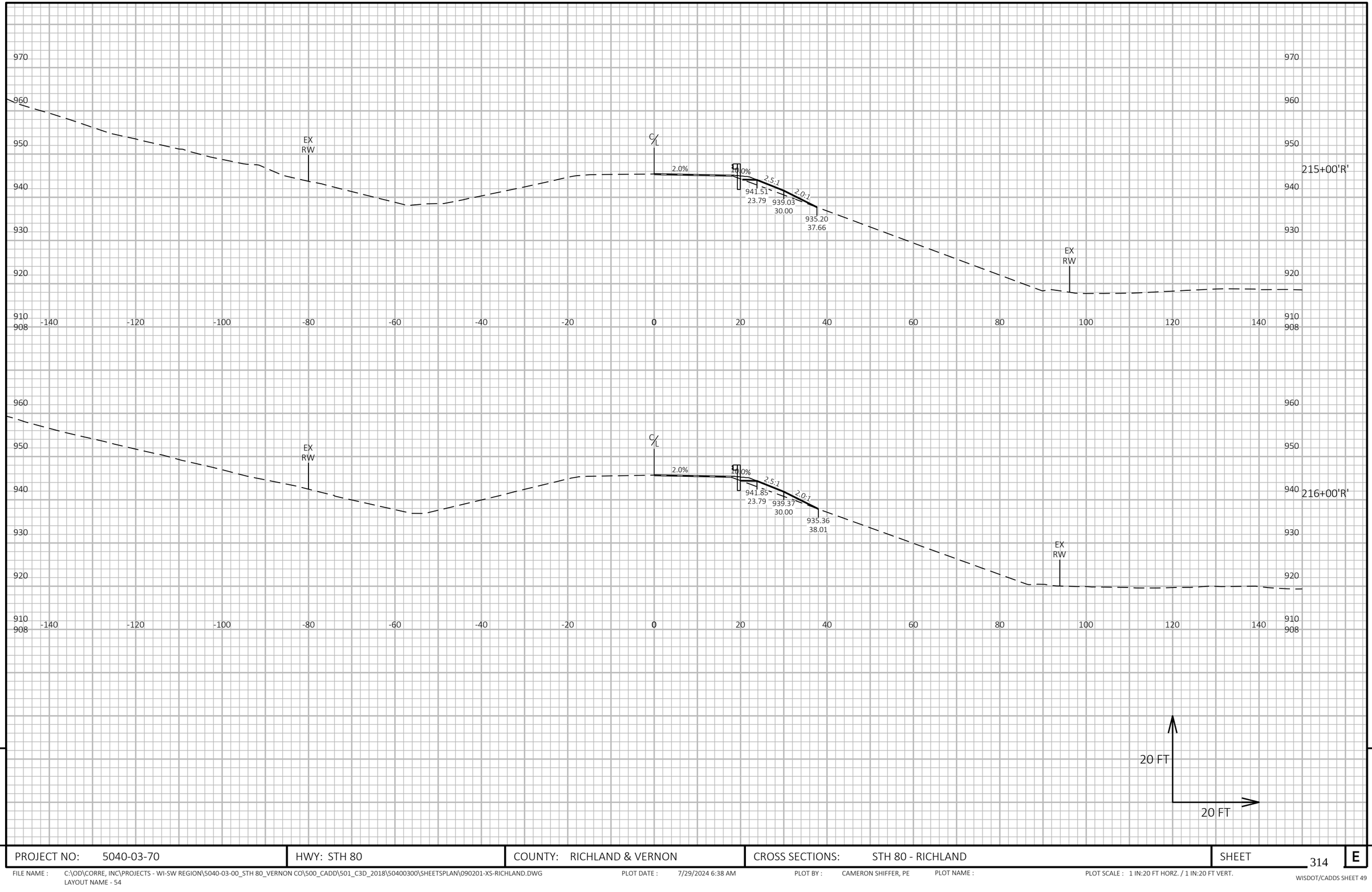
9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 313	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 53

PLOT DATE : 7/29/2024 6:38 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

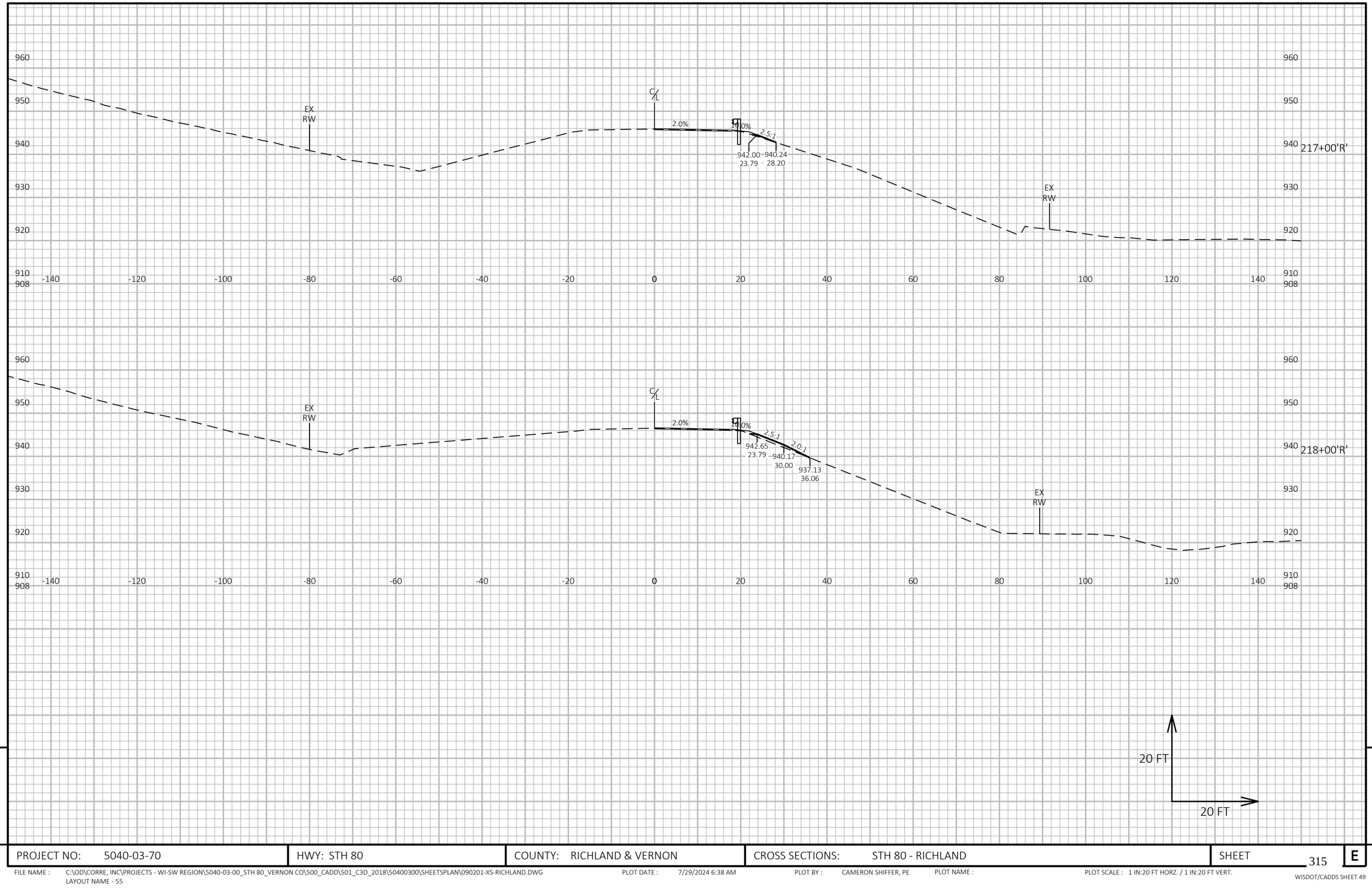
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 314	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 54

PLOT DATE : 7/29/2024 6:38 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



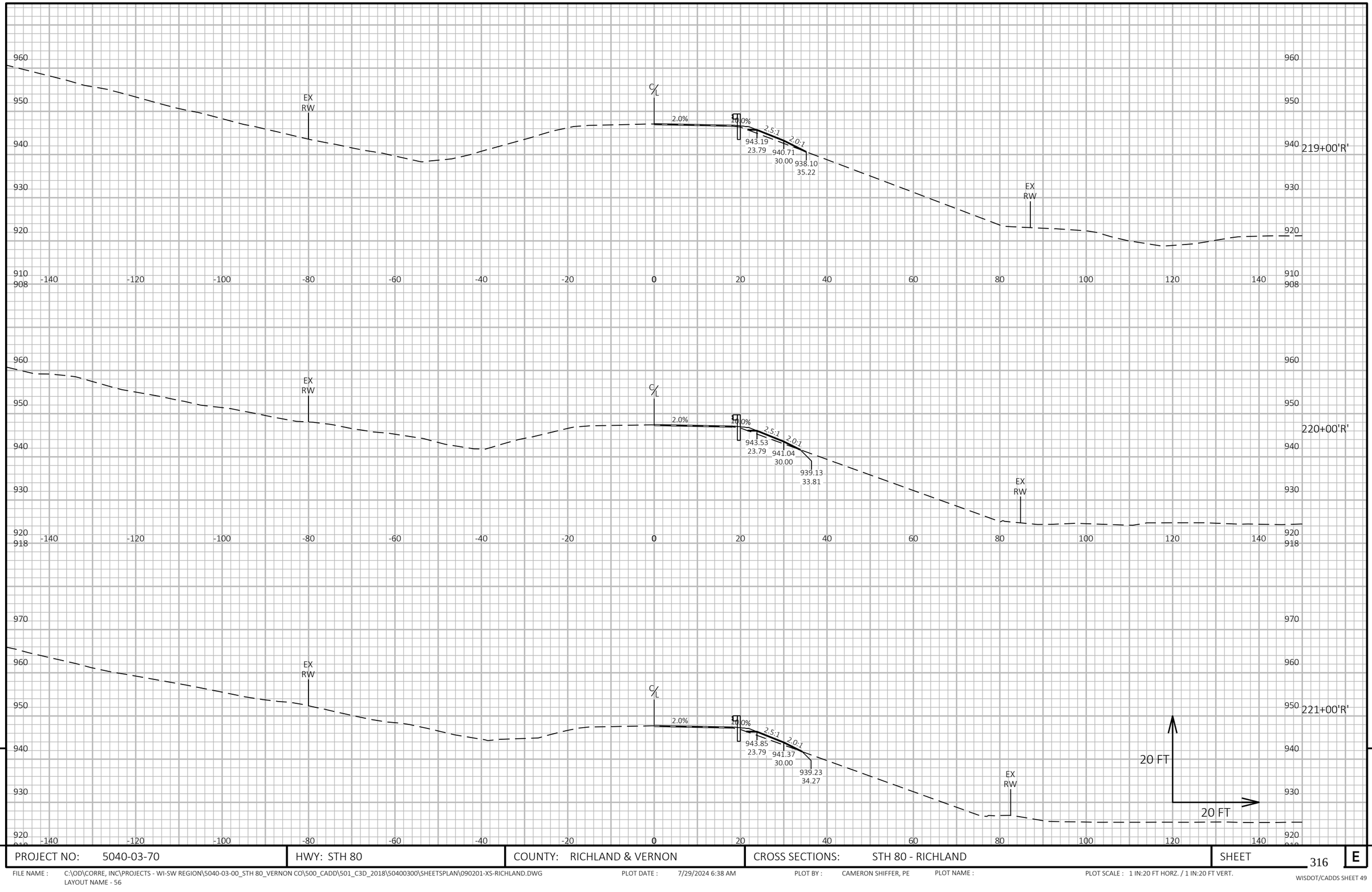
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 315	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 55

PLOT DATE : 7/29/2024 6:38 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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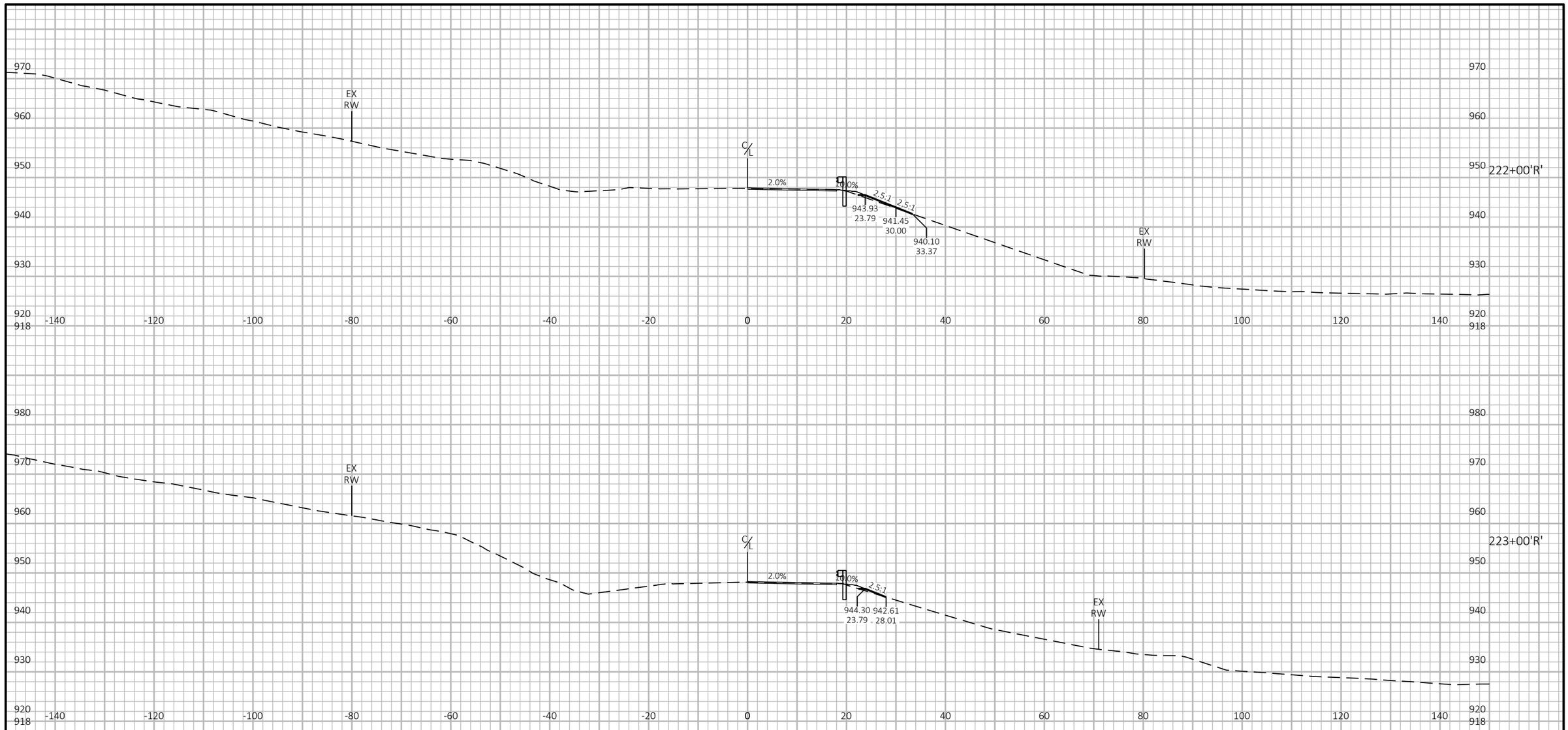
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 316	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 56

PLOT DATE : 7/29/2024 6:38 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



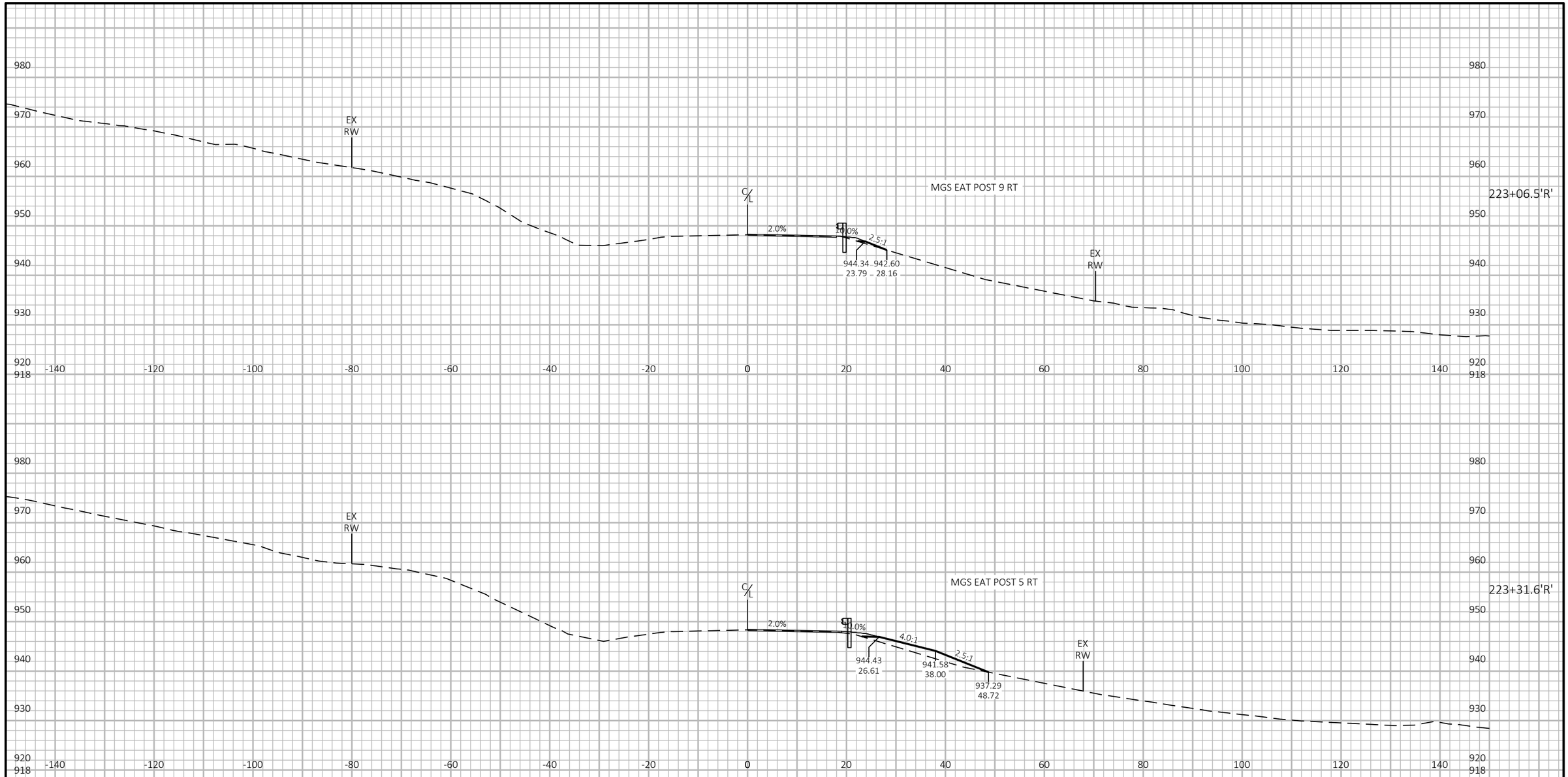
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 317	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 57

PLOT DATE : 7/29/2024 6:38 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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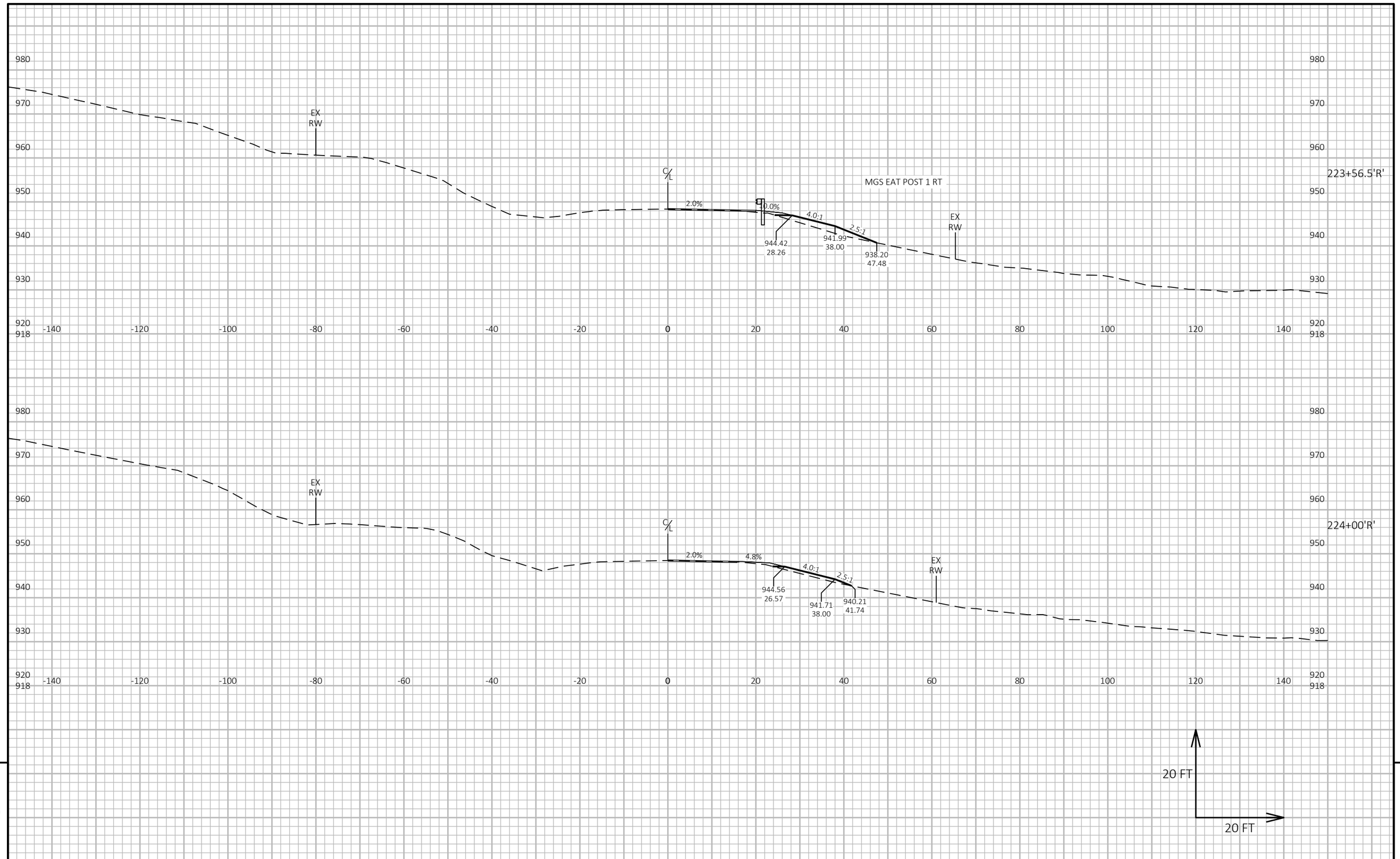
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 318	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 58

PLOT DATE : 7/29/2024 6:38 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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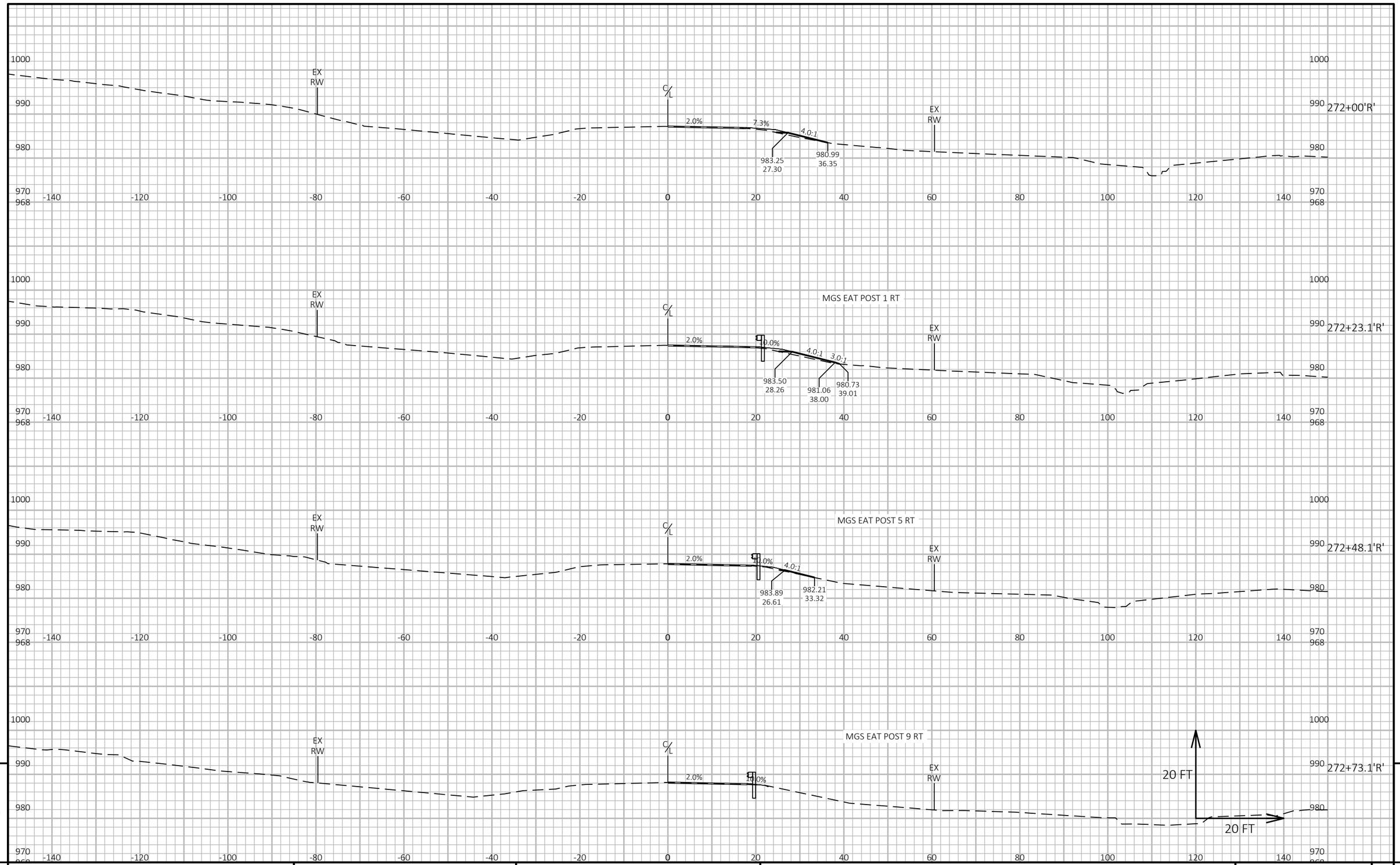
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 319	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 59

PLOT DATE : 7/29/2024 6:38 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



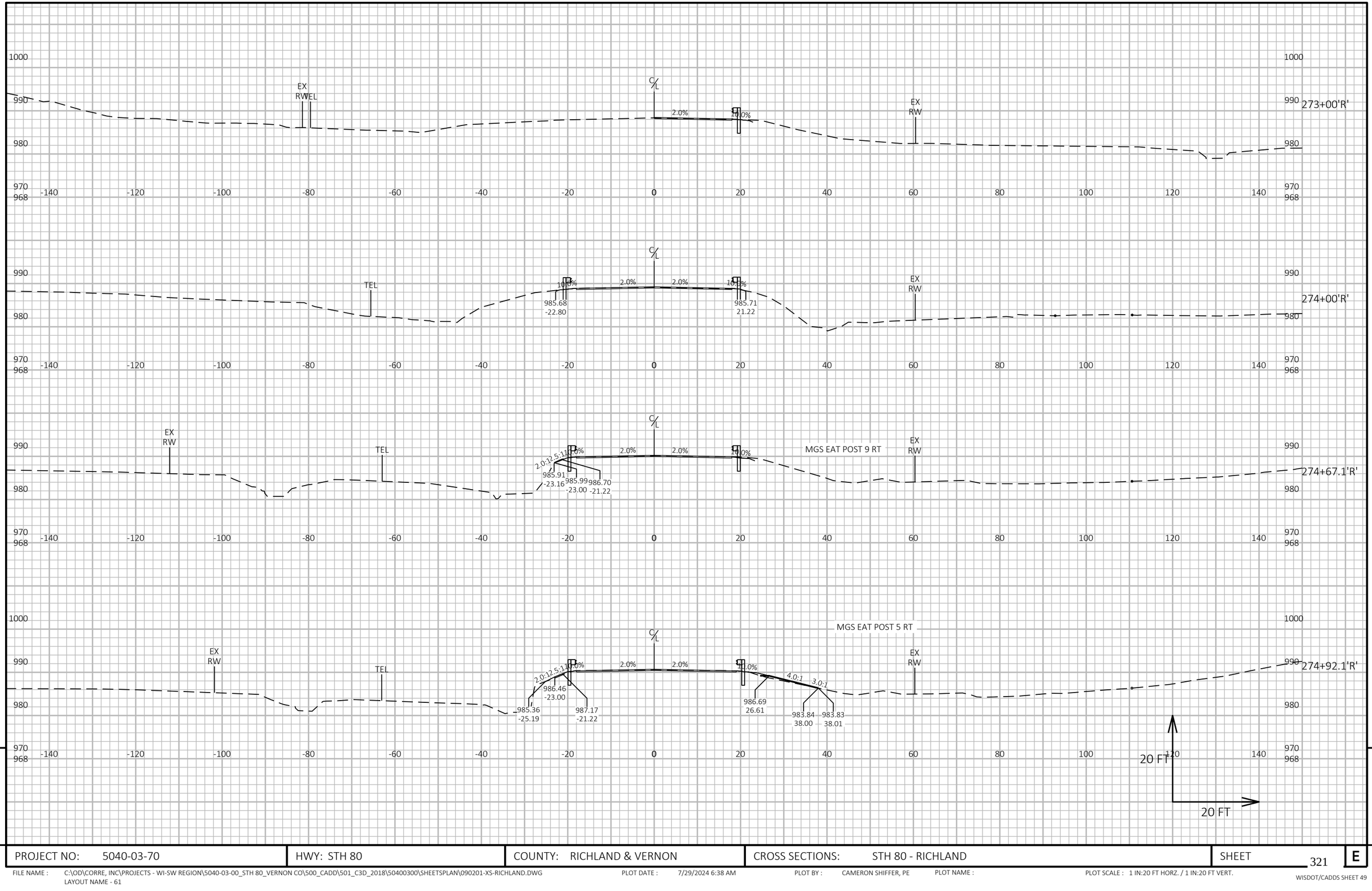
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 320	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 60

PLOT DATE : 7/29/2024 6:38 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 321	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 61

PLOT DATE : 7/29/2024 6:38 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



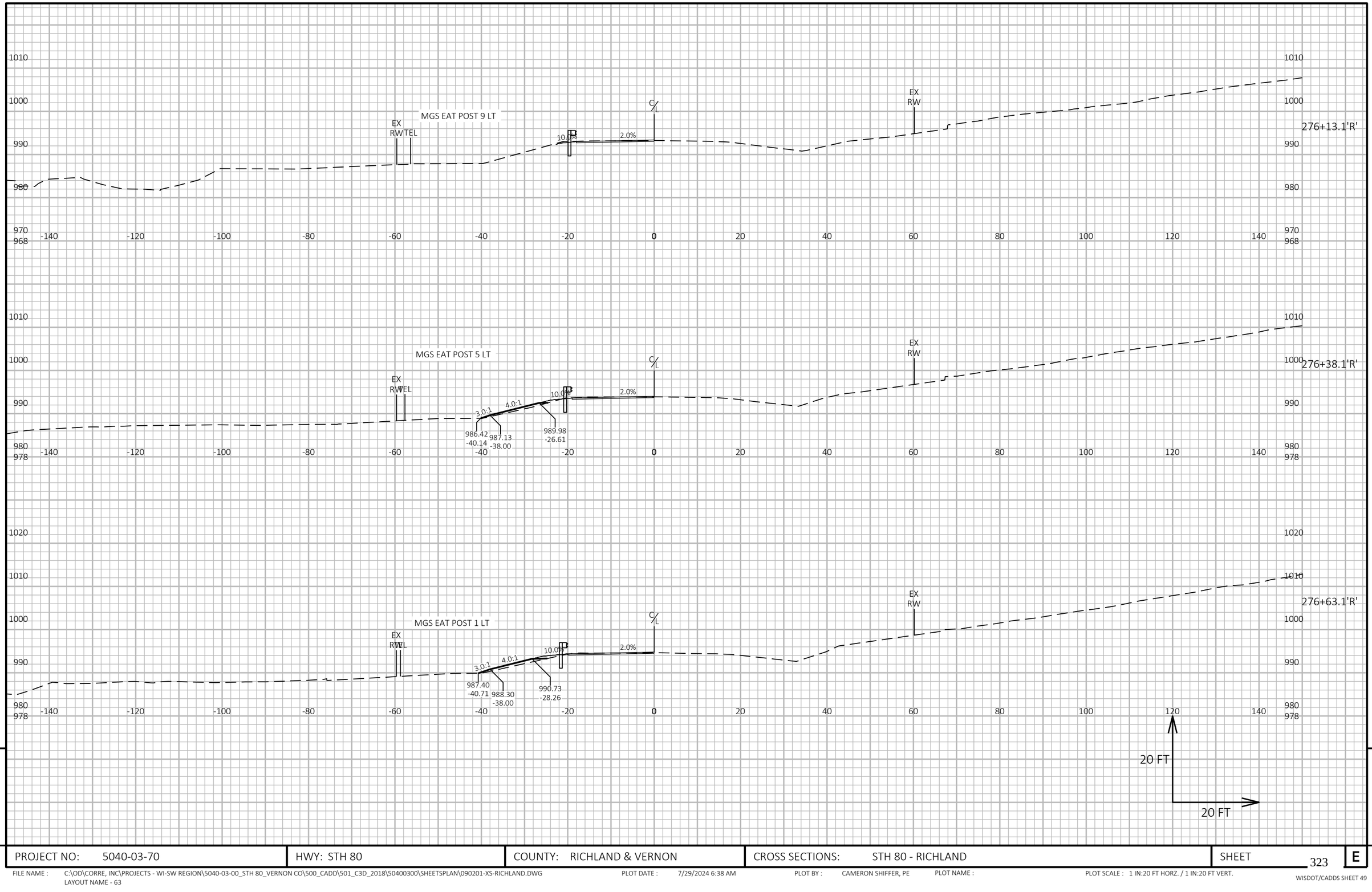
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 322	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 62

PLOT DATE : 7/29/2024 6:38 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



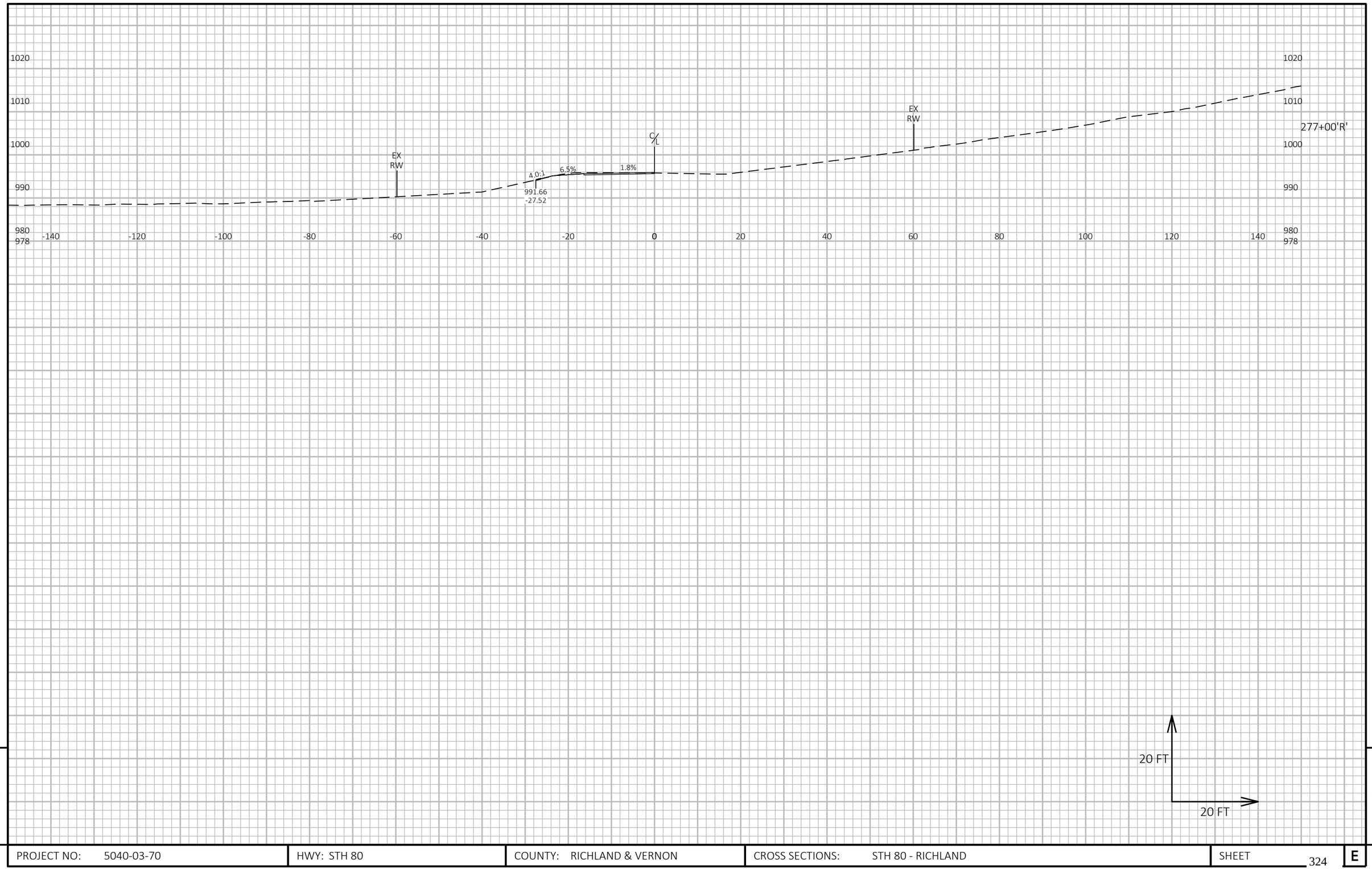
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 323	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 63

PLOT DATE : 7/29/2024 6:38 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

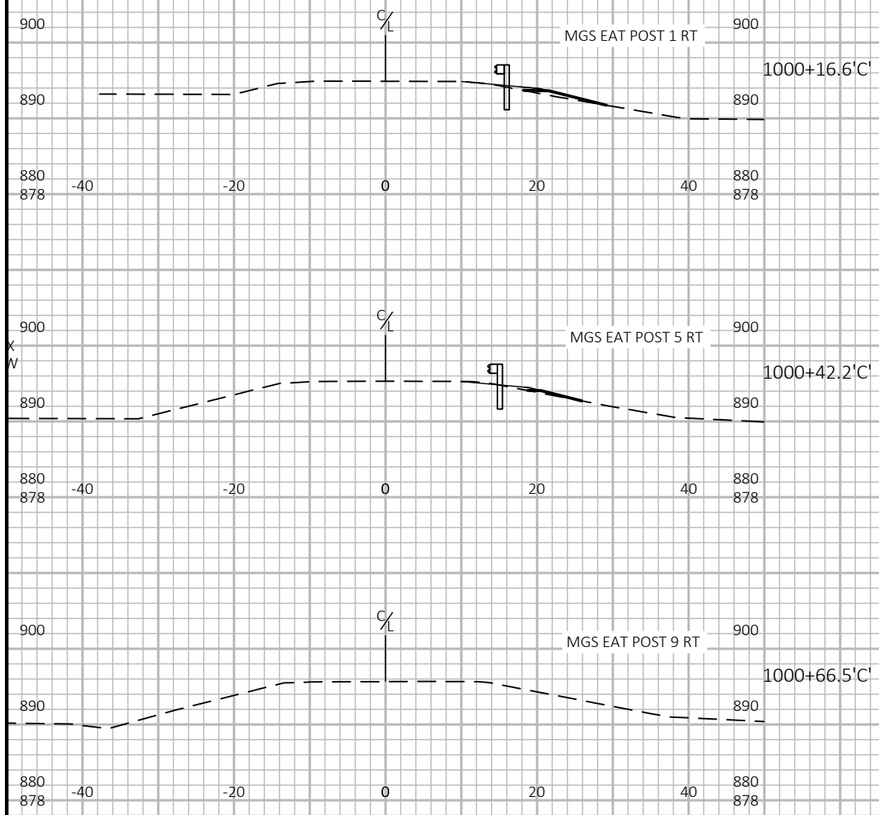


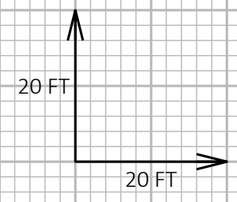
PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - RICHLAND	SHEET 324	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - 64

PLOT DATE : 7/29/2024 6:38 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



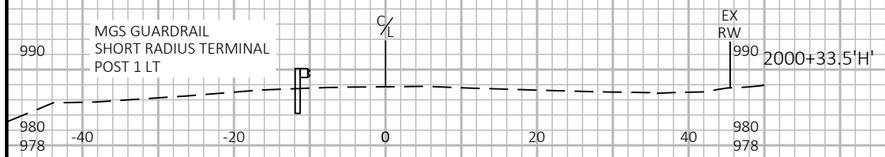


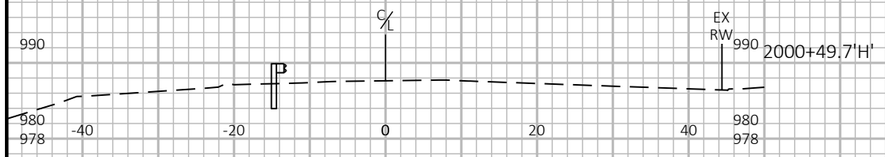
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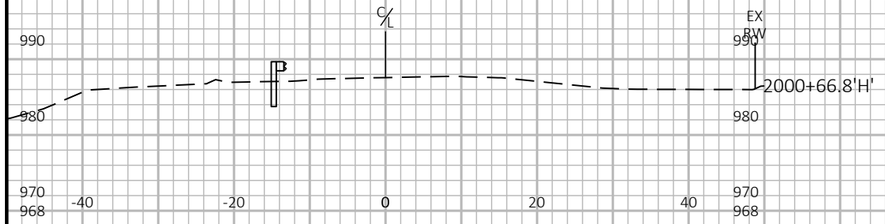
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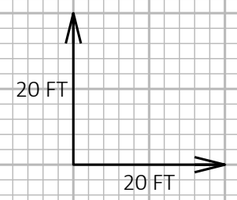
PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: CENTURY FARM ROAD - RICHLAND	SHEET 325	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - C1
PLOT DATE : 7/29/2024 6:38 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49









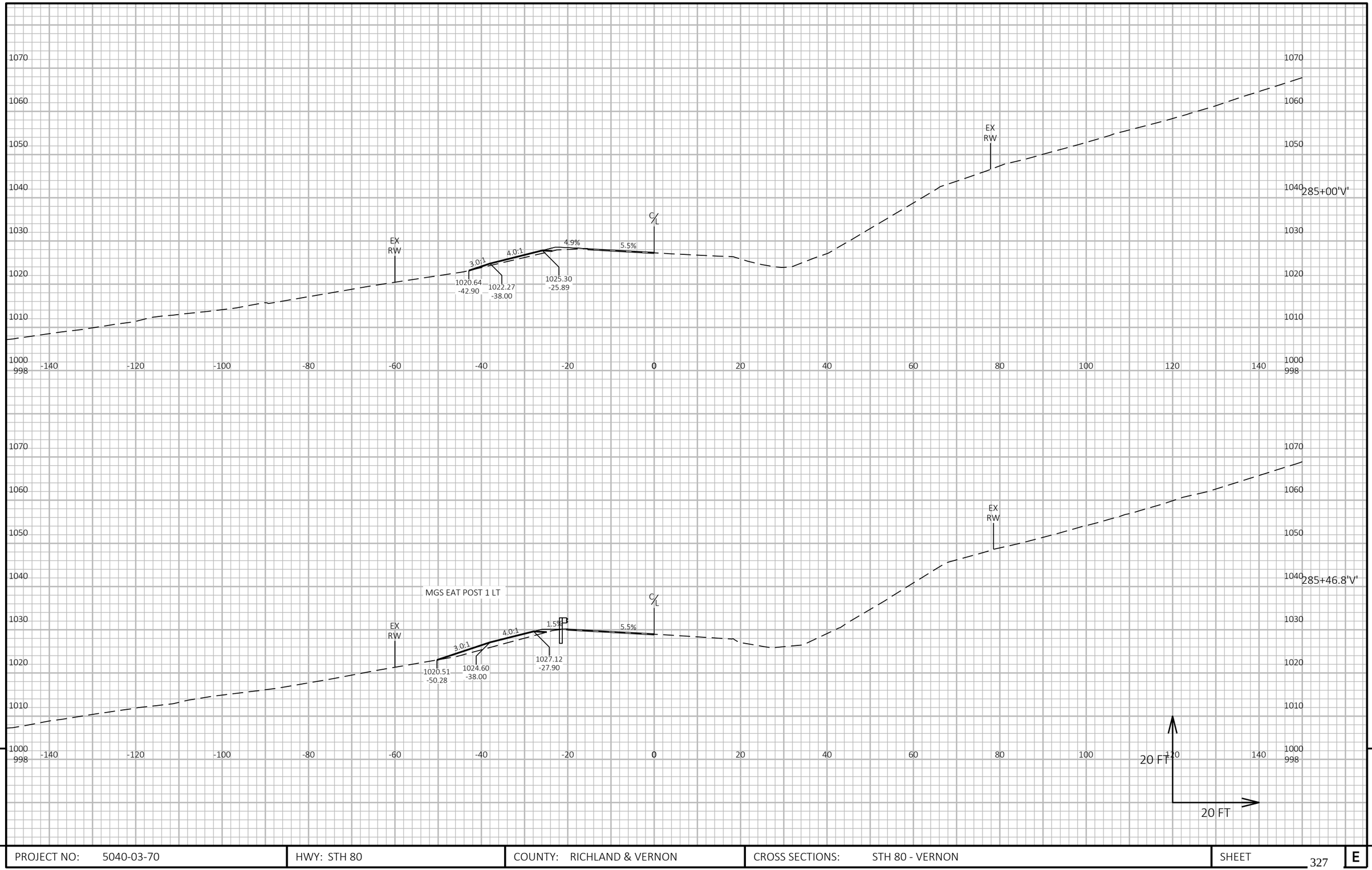
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: HAWK LANE - RICHLAND	SHEET 326	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-RICHLAND.DWG
LAYOUT NAME - H1

PLOT DATE : 7/29/2024 6:39 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



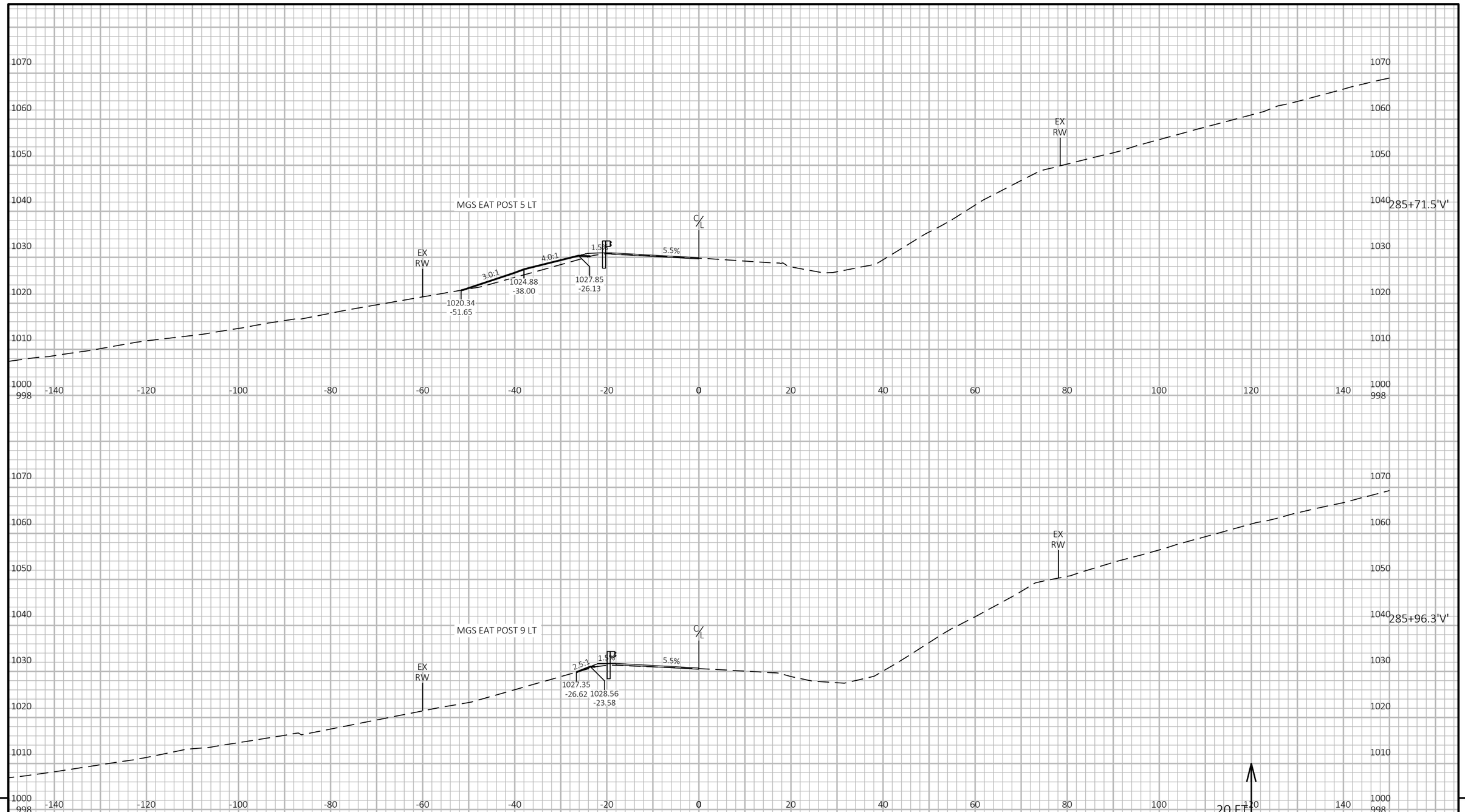
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 327	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 01-Vernon

PLOT DATE : 7/29/2024 6:42 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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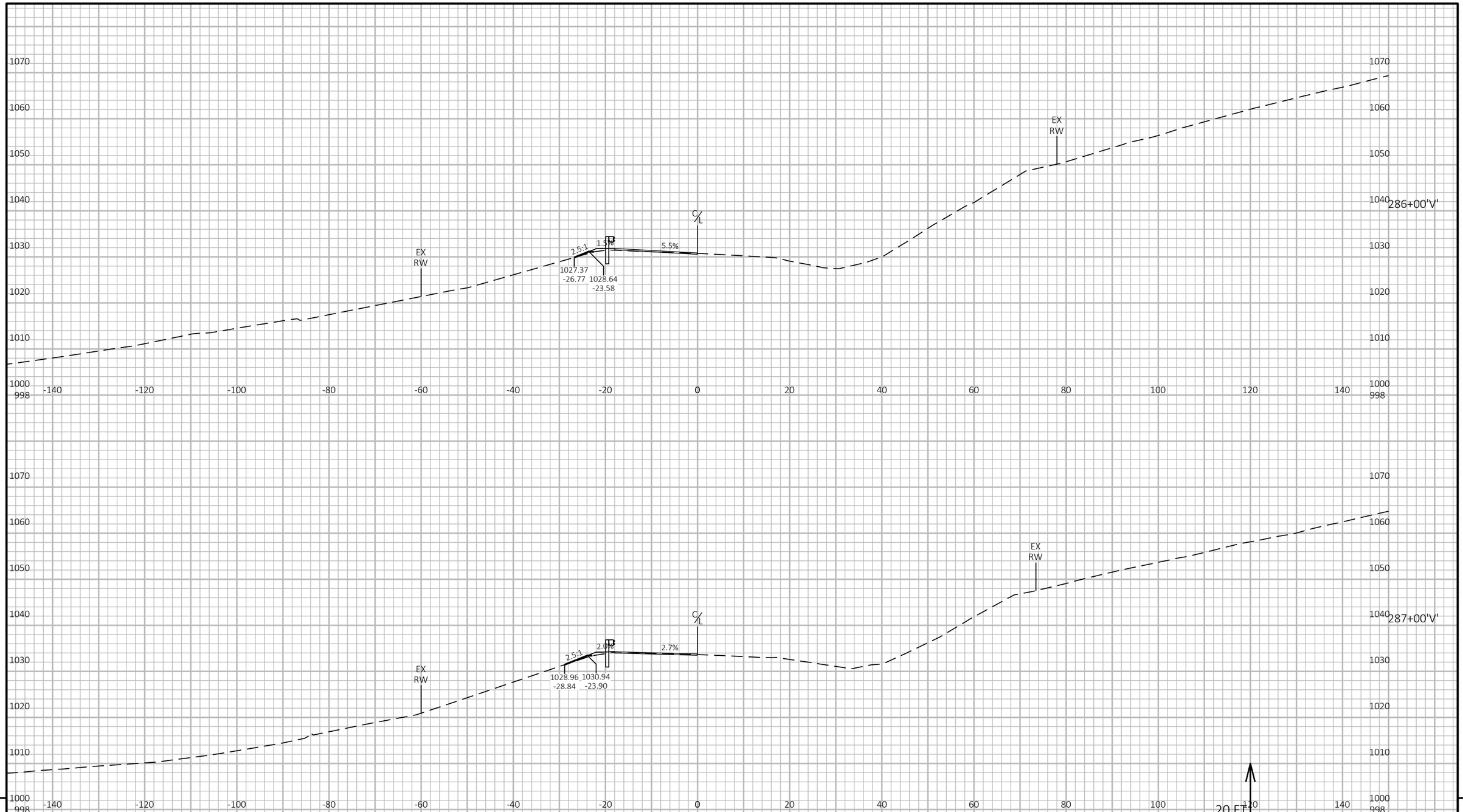
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 328	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 02-Vernon

PLOT DATE : 7/29/2024 6:42 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

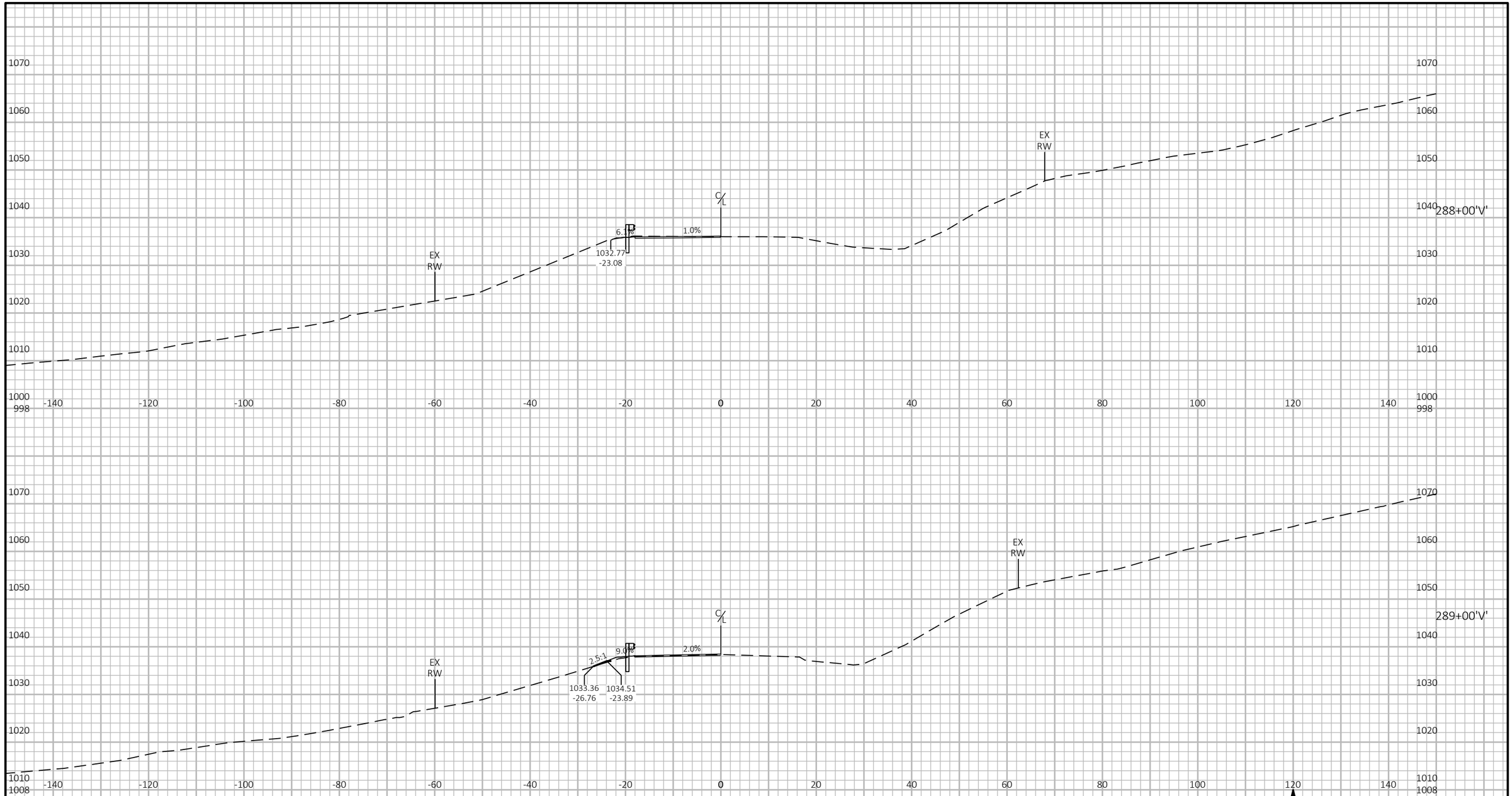


PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 329	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 03-Vernon

PLOT DATE : 7/29/2024 6:42 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



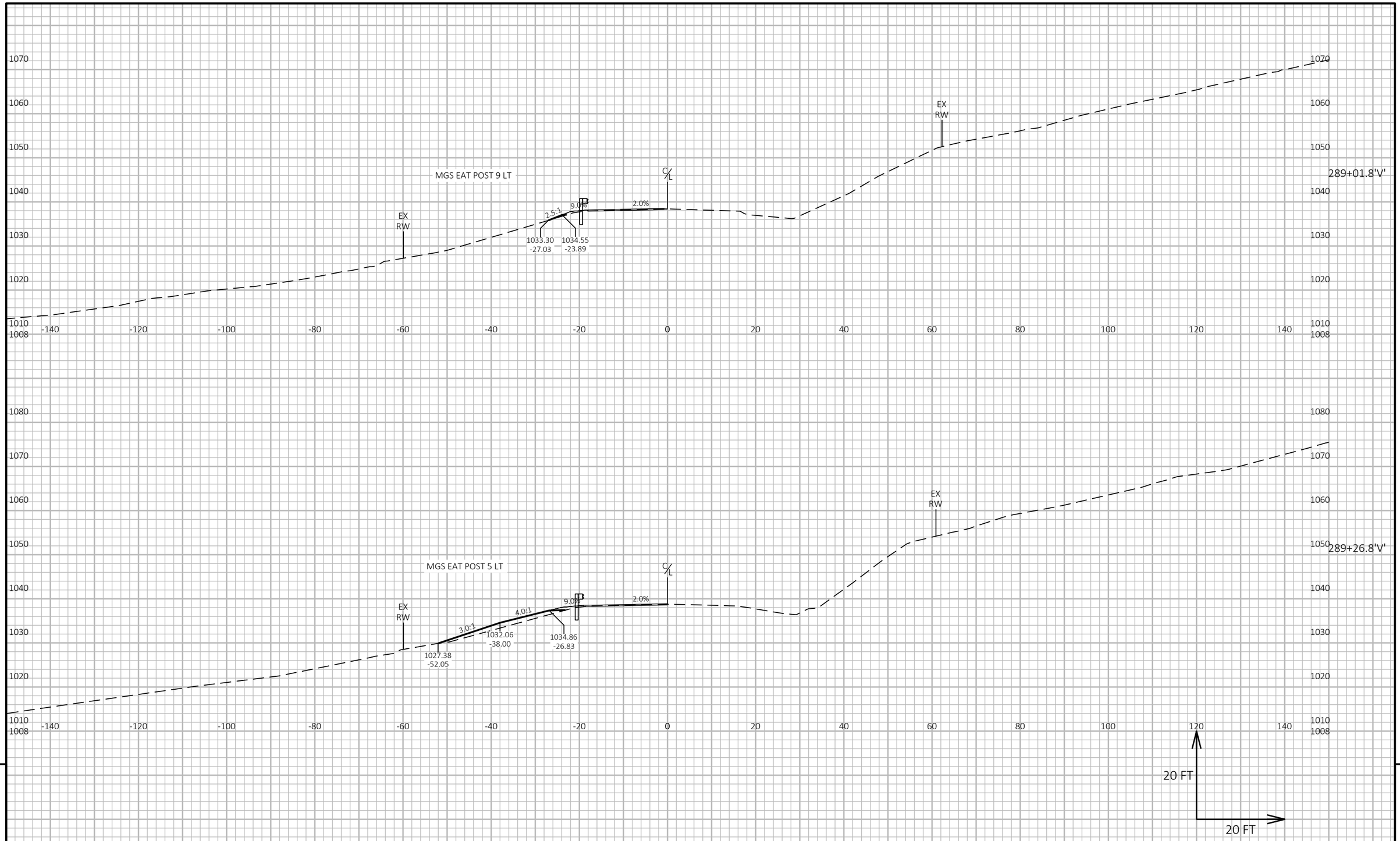
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 330	E

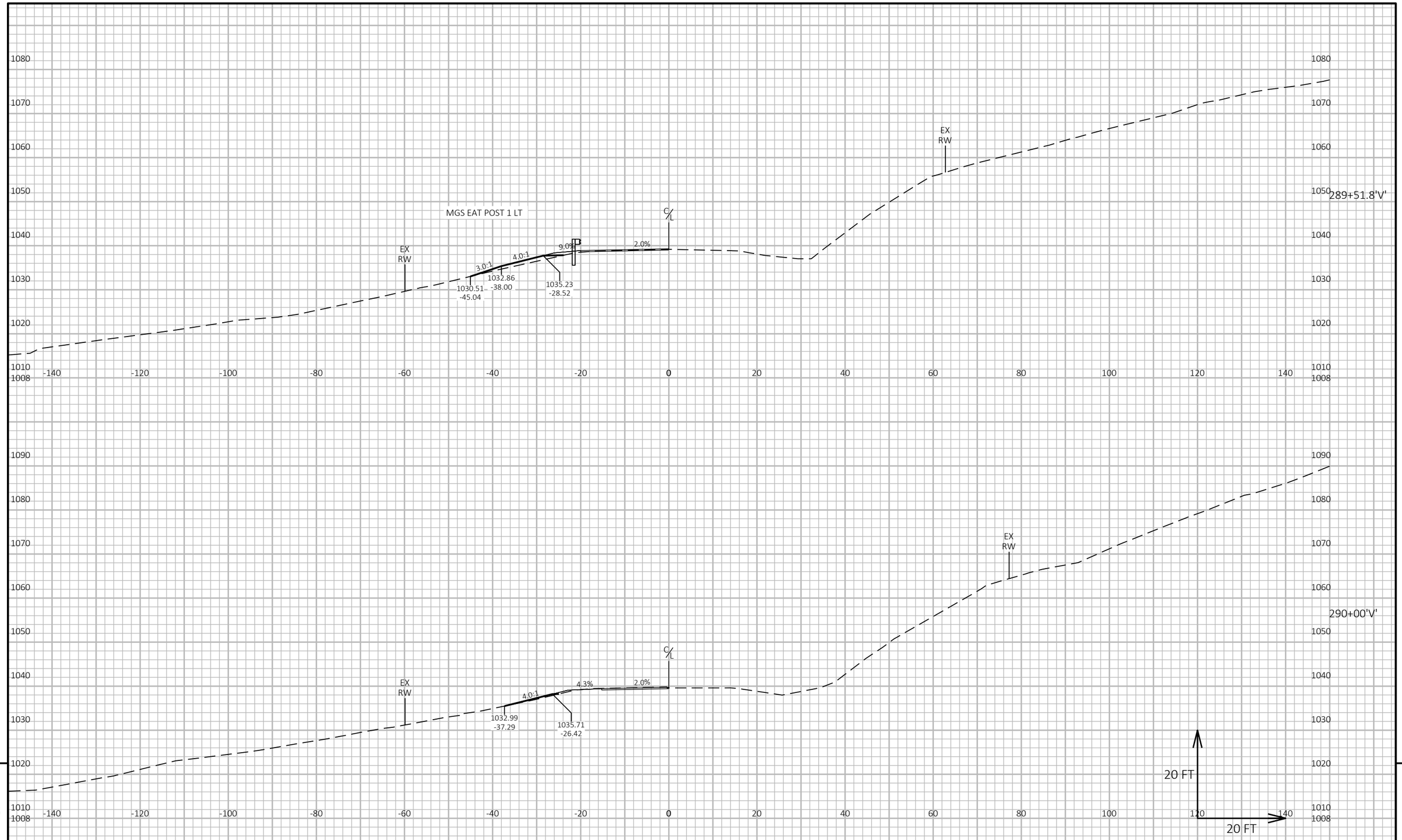
FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 04-Vernon

PLOT DATE : 7/29/2024 6:42 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 331	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 05-Vernon
PLOT DATE : 7/29/2024 6:42 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



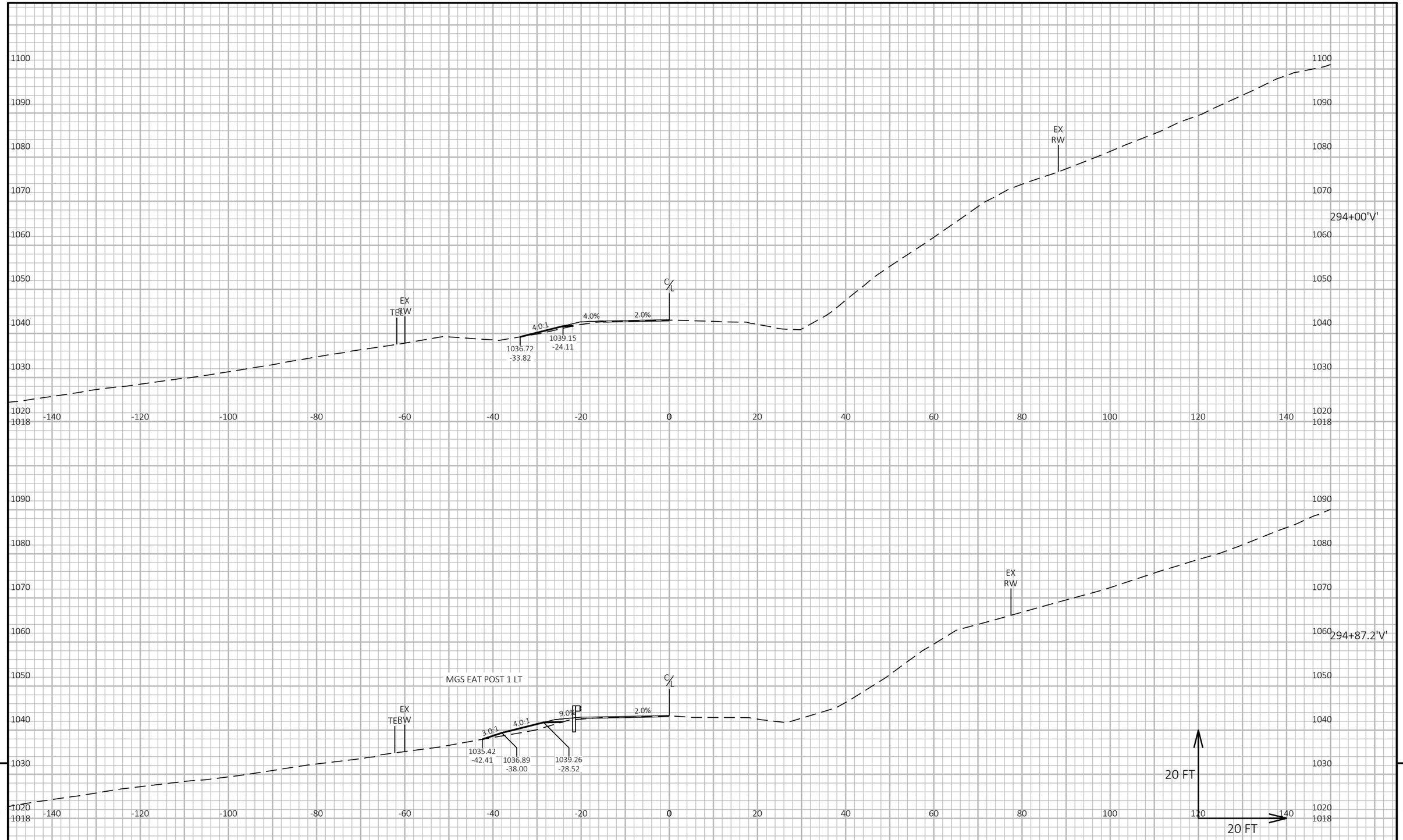
PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 332	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 06-Vernon

PLOT DATE : 7/29/2024 6:43 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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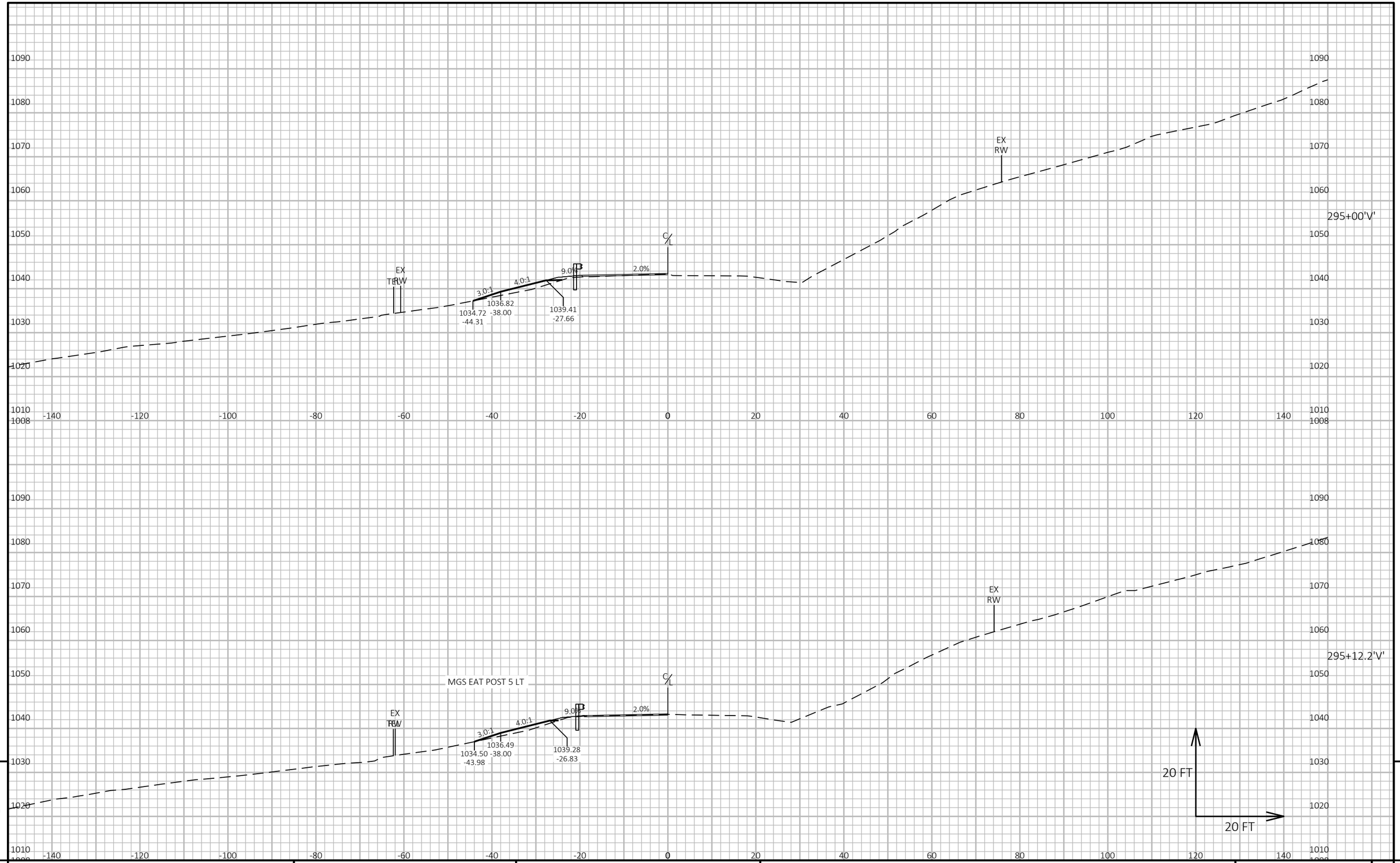
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 333	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 07-Vernon

PLOT DATE : 7/29/2024 6:43 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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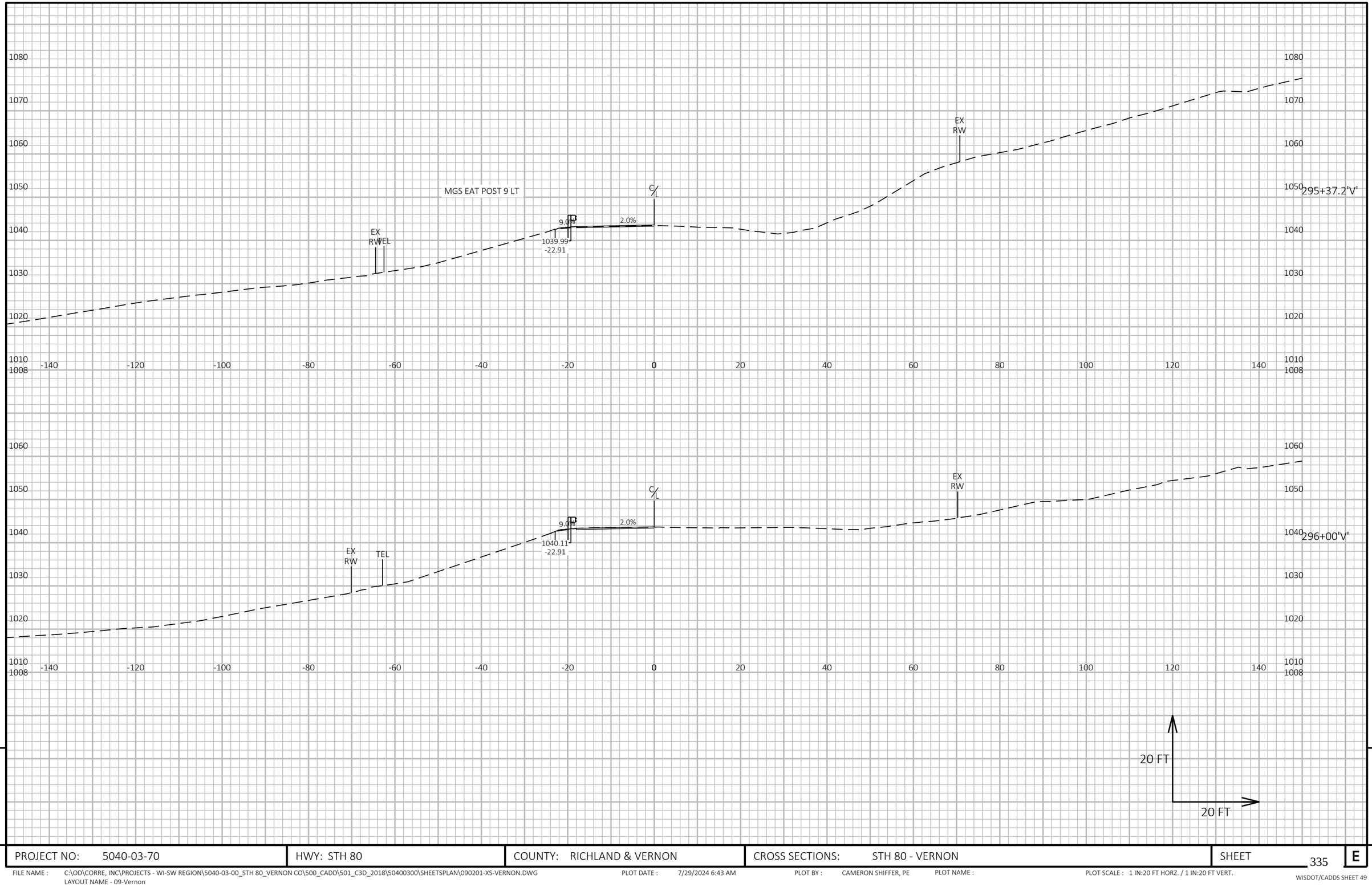
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 334	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 08-Vernon

PLOT DATE : 7/29/2024 6:43 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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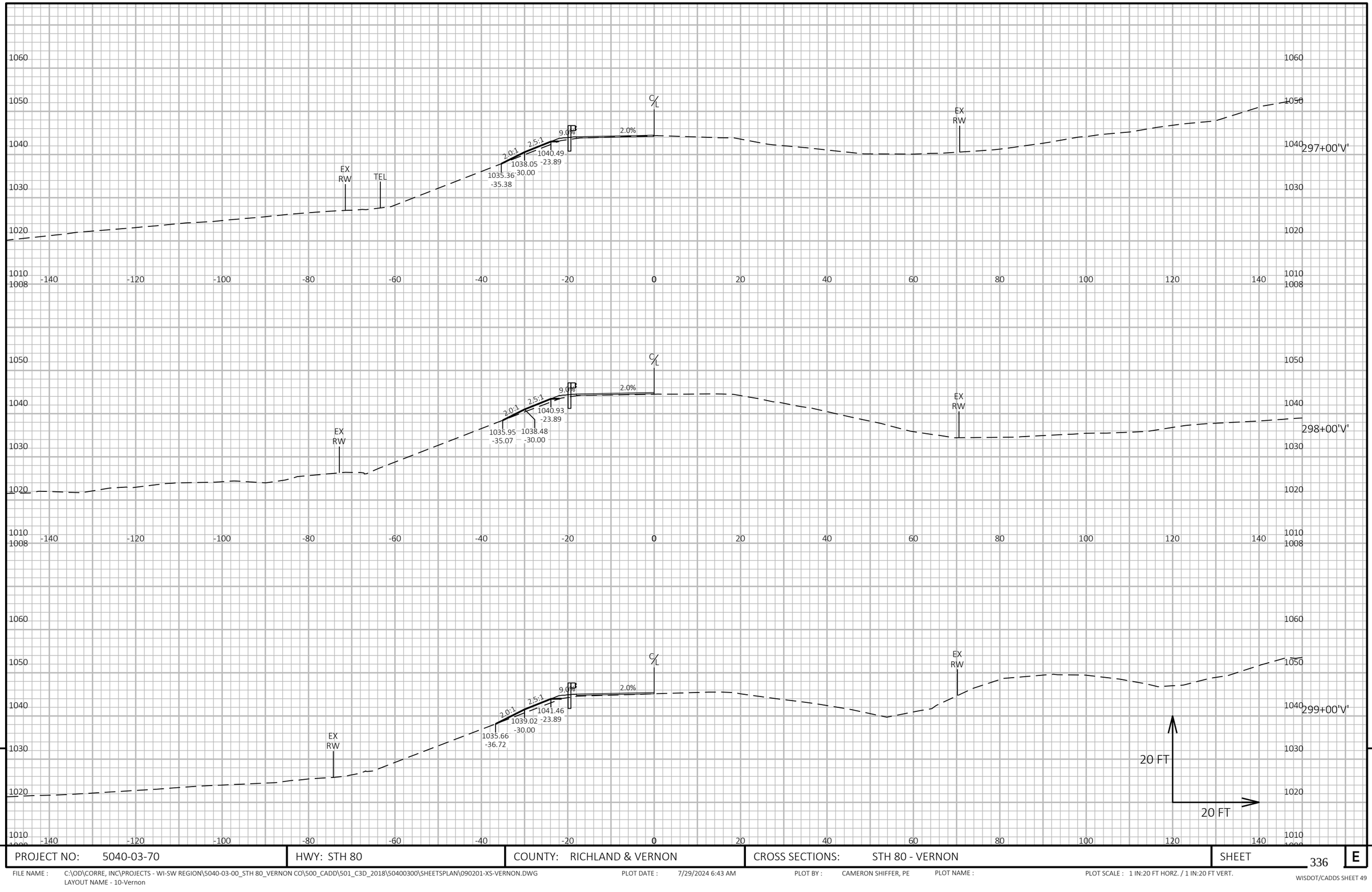
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 335	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 09-Vernon

PLOT DATE : 7/29/2024 6:43 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



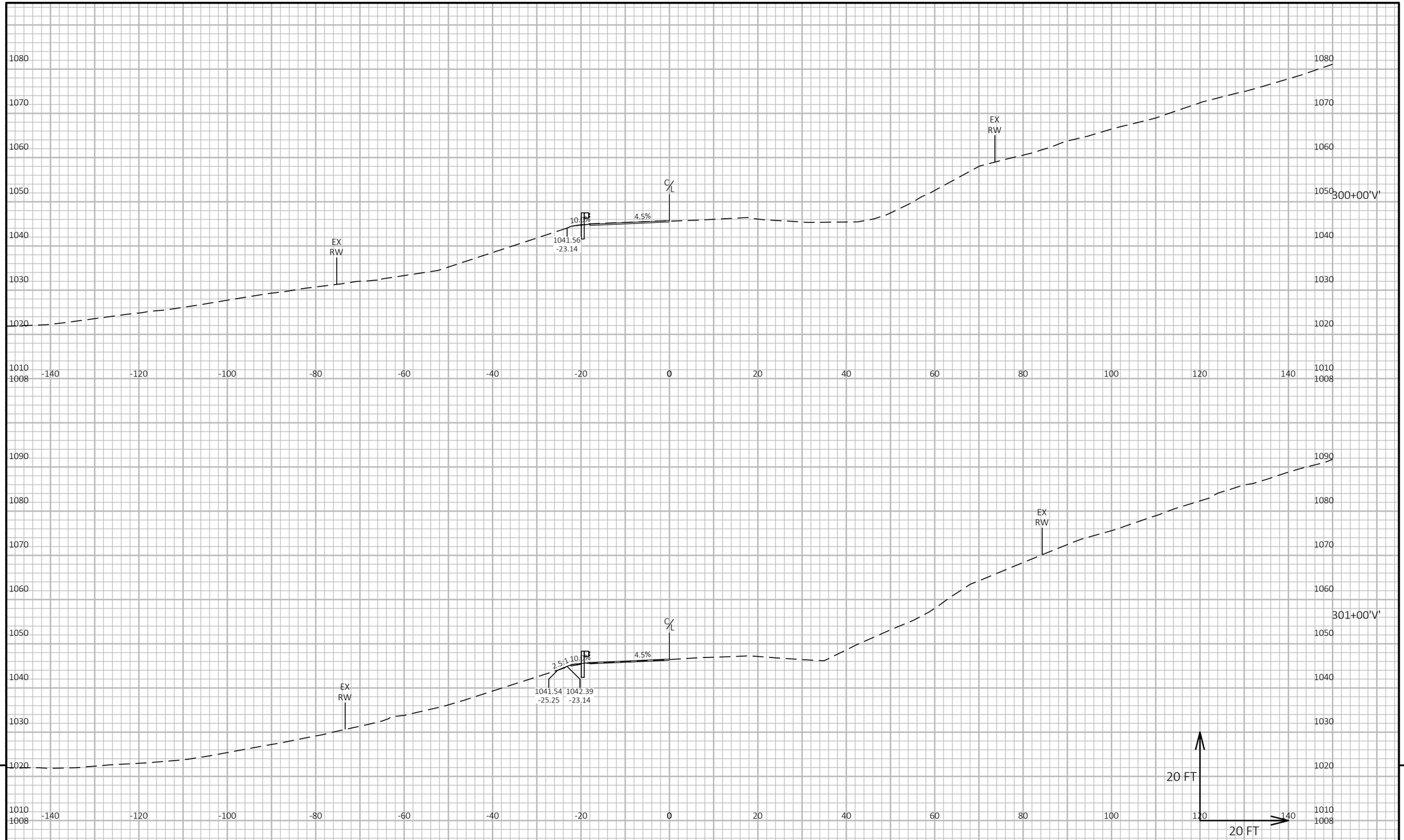
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 336	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 10-Vernon

PLOT DATE : 7/29/2024 6:43 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

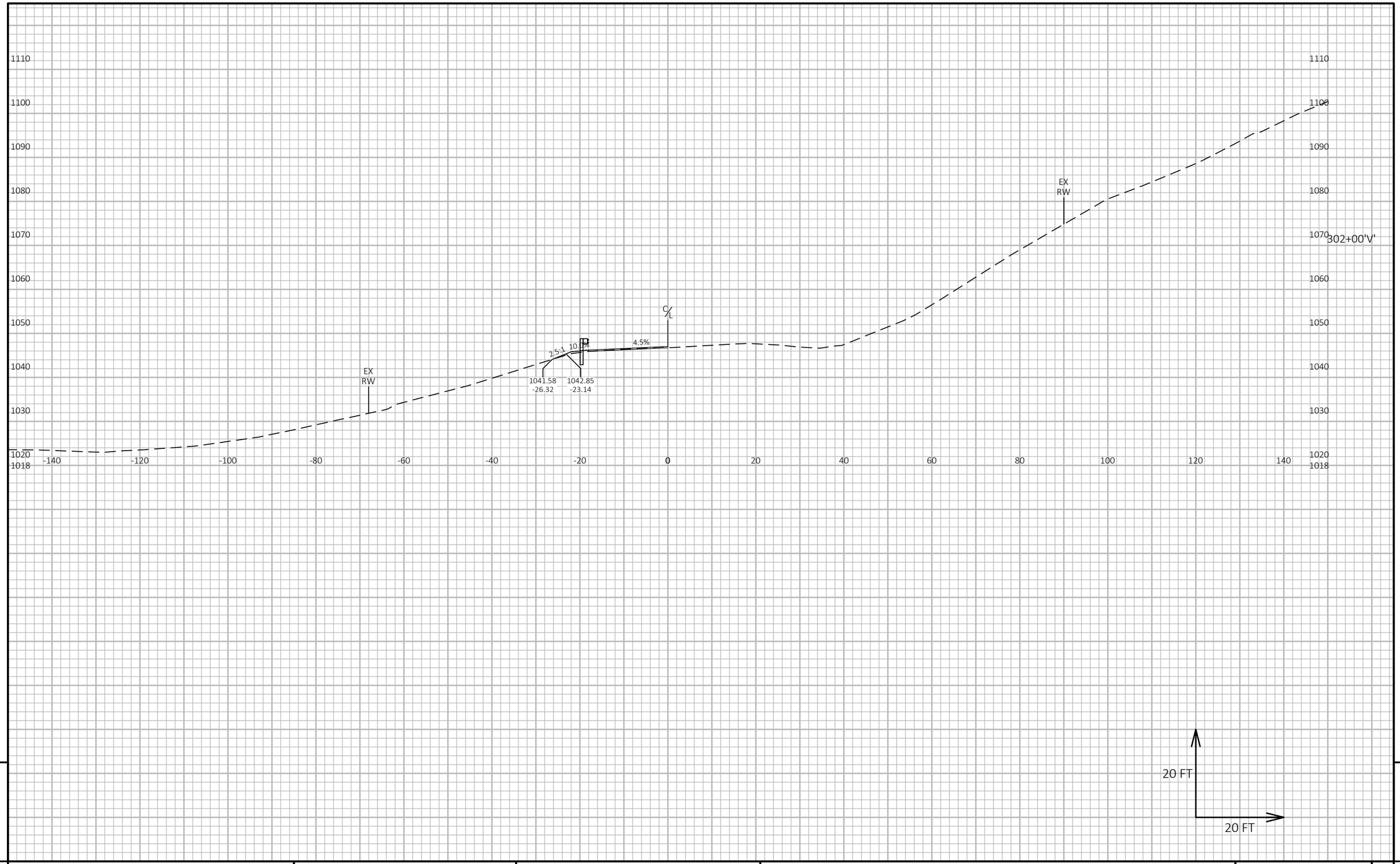


PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 337	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 11-Vernon

PLOT DATE : 7/29/2024 6:43 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



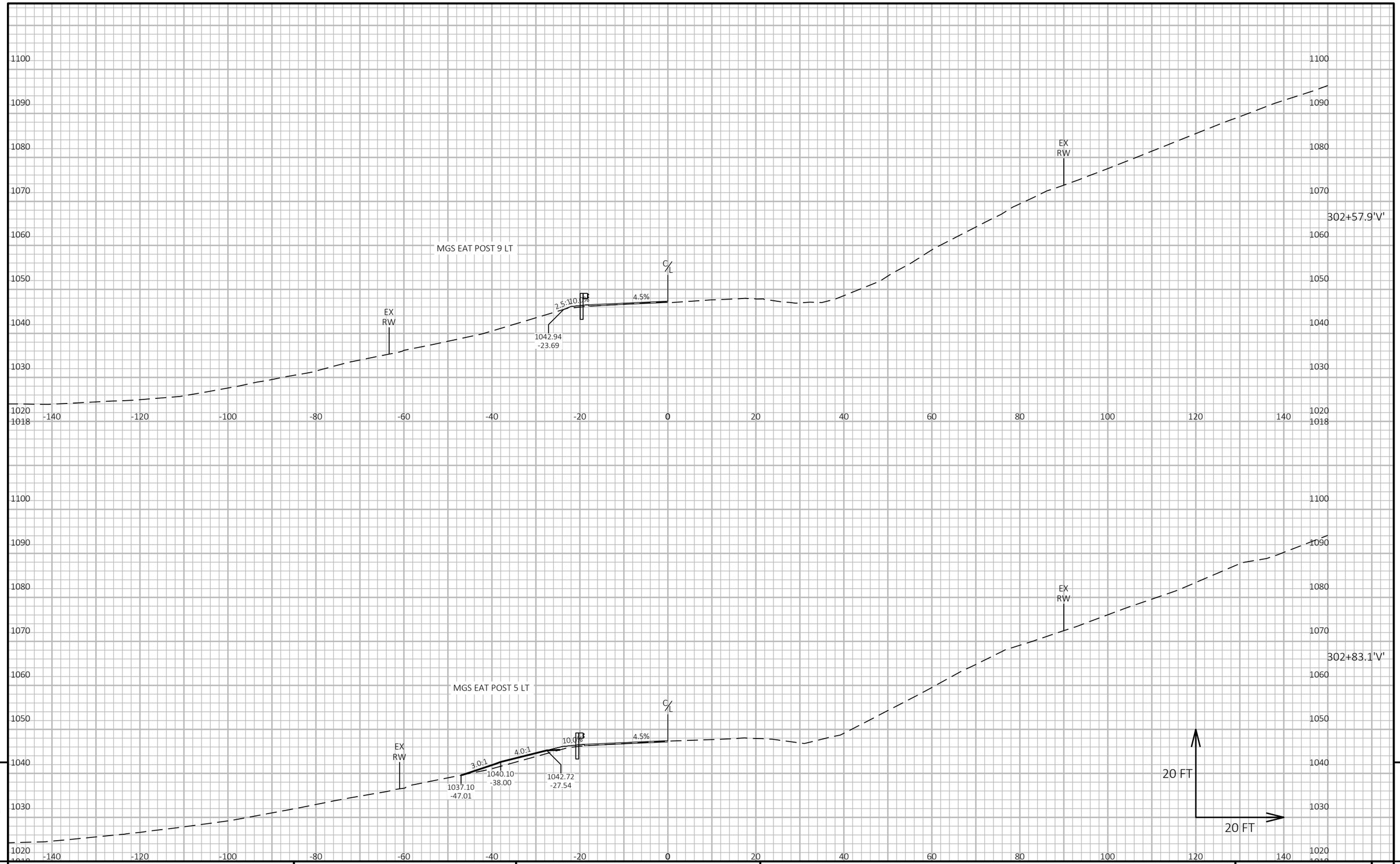
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9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 338	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 12-Vernon

PLOT DATE : 7/29/2024 6:43 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 339	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 13-Vernon

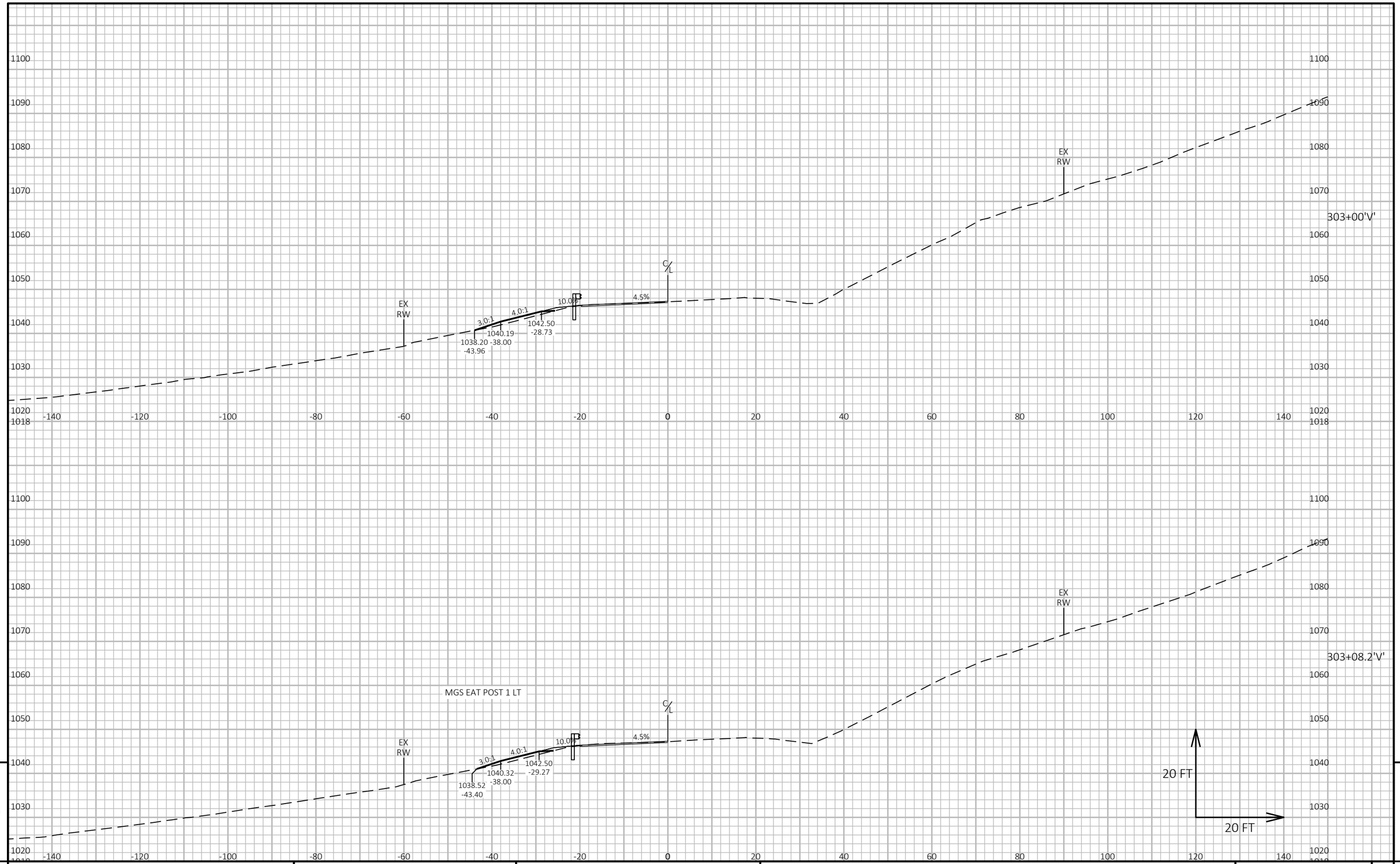
PLOT DATE : 7/29/2024 6:43 AM

PLOT BY : CAMERON SHIFFER, PE

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: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 340	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 14-Vernon

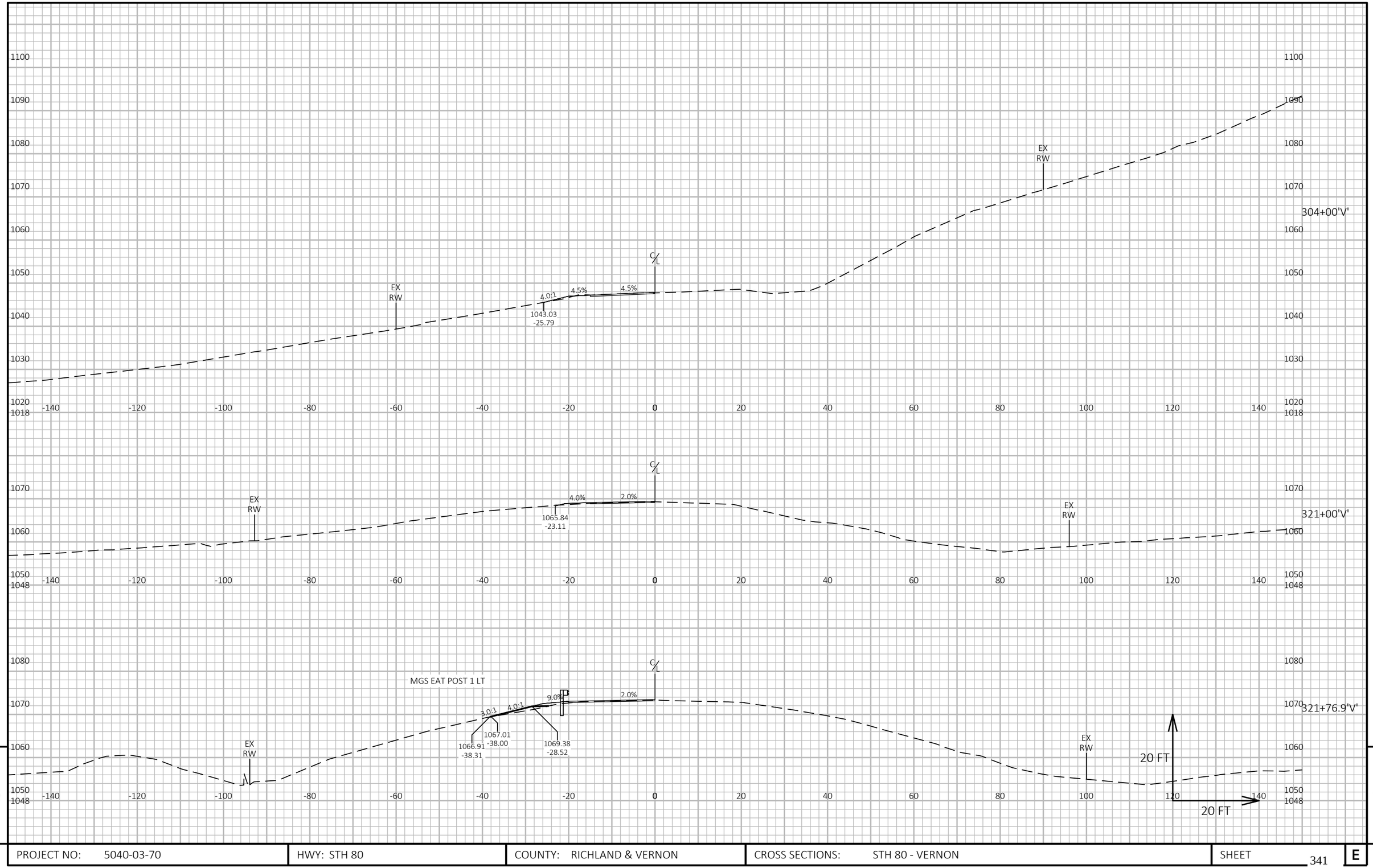
PLOT DATE : 7/29/2024 6:44 AM

PLOT BY : CAMERON SHIFFER, PE

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

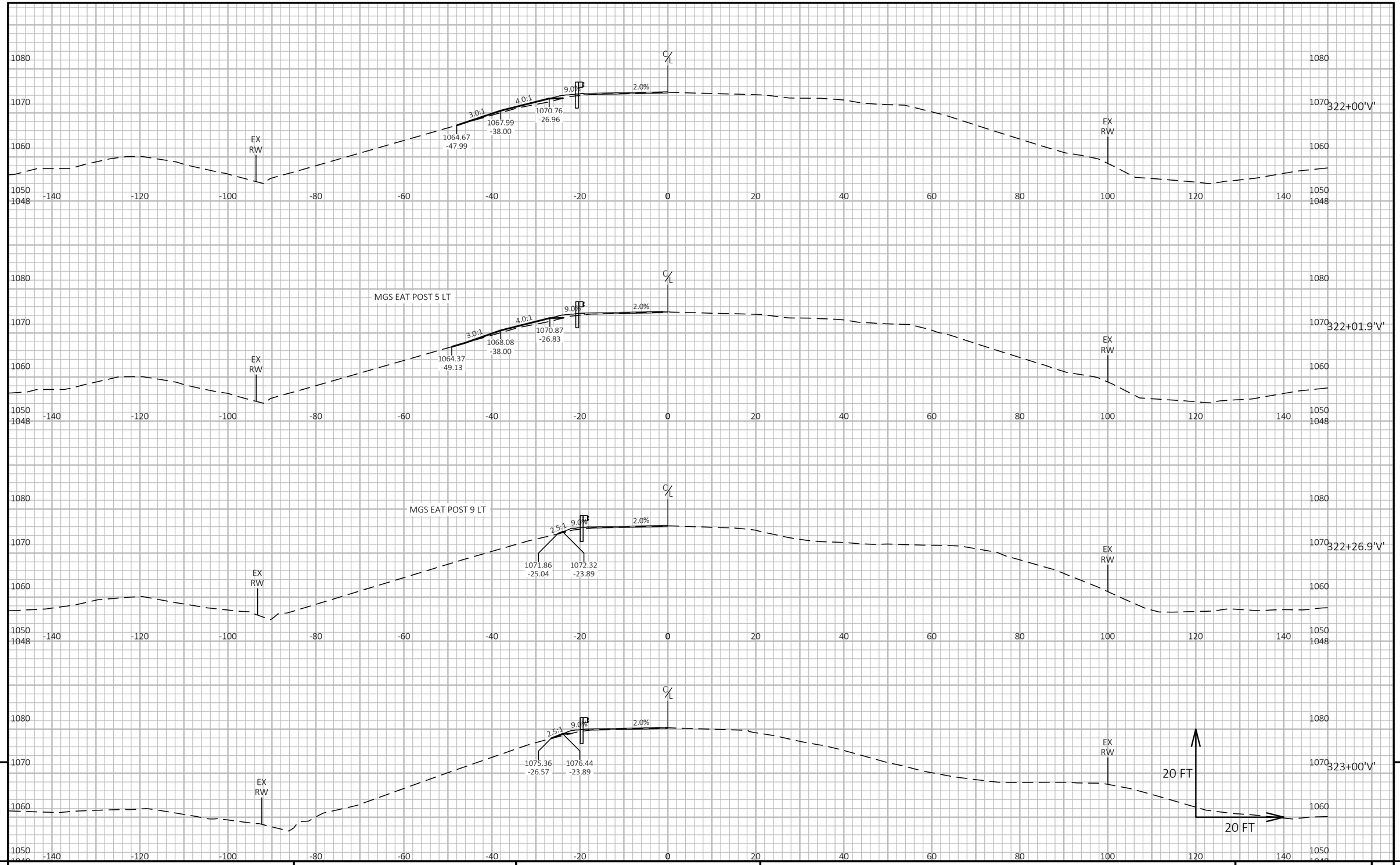


PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 341	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 15-Vernon

PLOT DATE : 7/29/2024 6:44 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

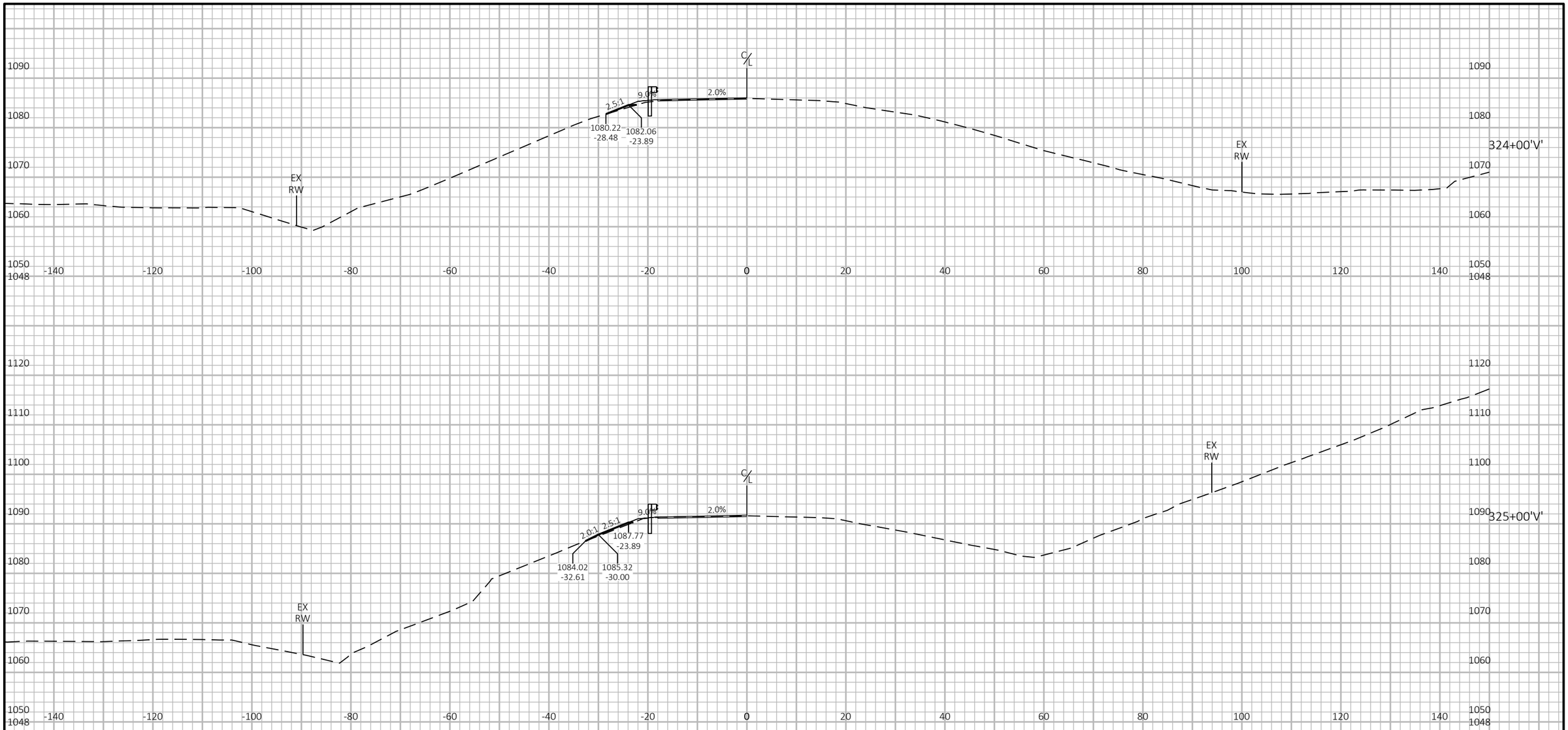
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 342	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 16-Vernon

PLOT DATE : 7/29/2024 6:44 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 343	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 17-Vernon

PLOT DATE : 7/29/2024 6:44 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

MGS EAT POST 9 LT

EX RW

C/L

2.0%

9.0%

2.0:1 2.5:1

1089.20
-23.89

1086.63
-30.26

1086.76
-30.00

EX RW

325+20.7'V'

MGS EAT POST 5 LT

EX RW

C/L

2.0%

9.0%

2.0:1 4.0:1

1087.81
-38.00

1090.60
-26.83

1081.74
-50.13

EX RW

325+45.7'V'

20 FT

20 FT

9

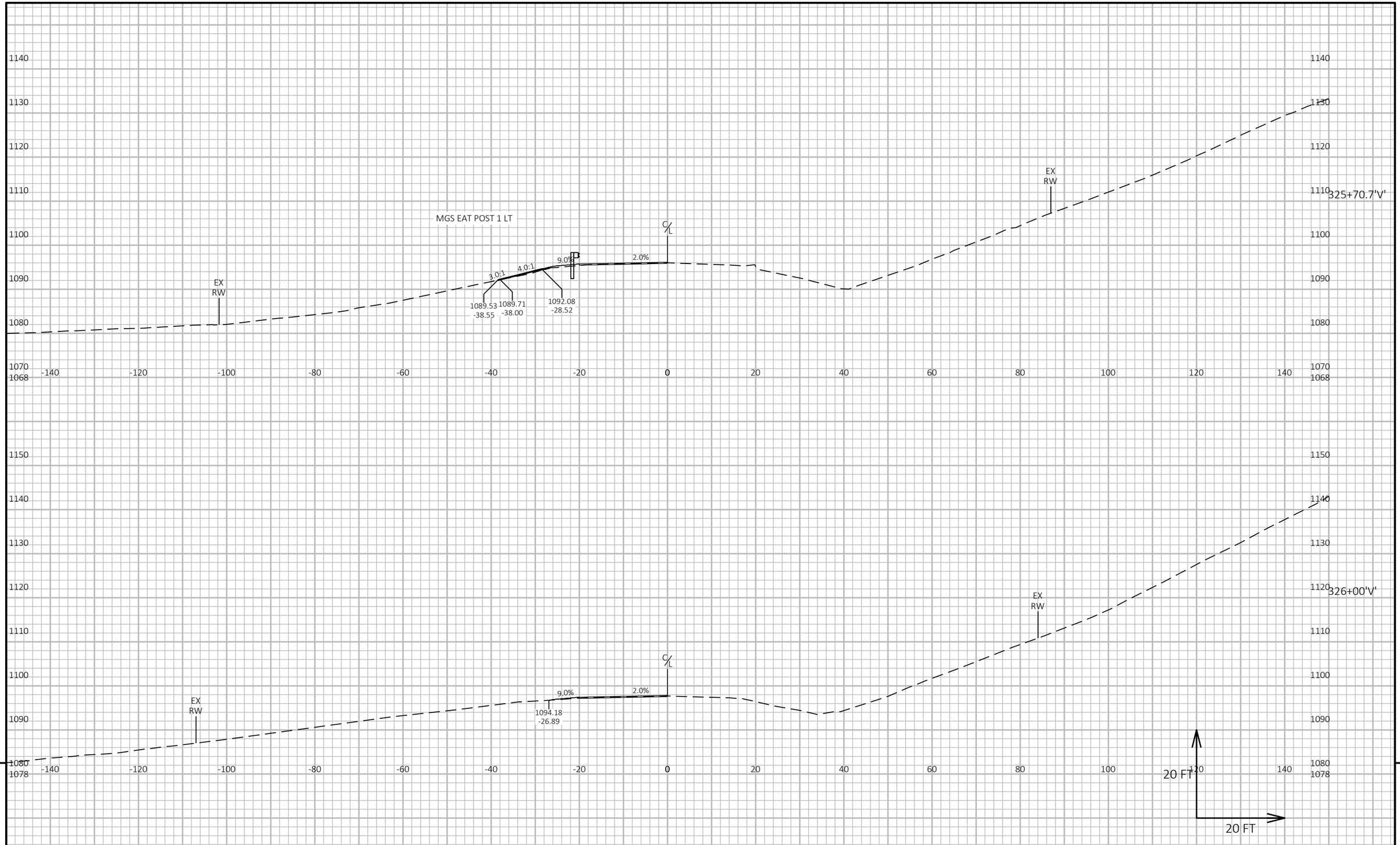
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 344	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 18-Vernon

PLOT DATE : 7/29/2024 6:44 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

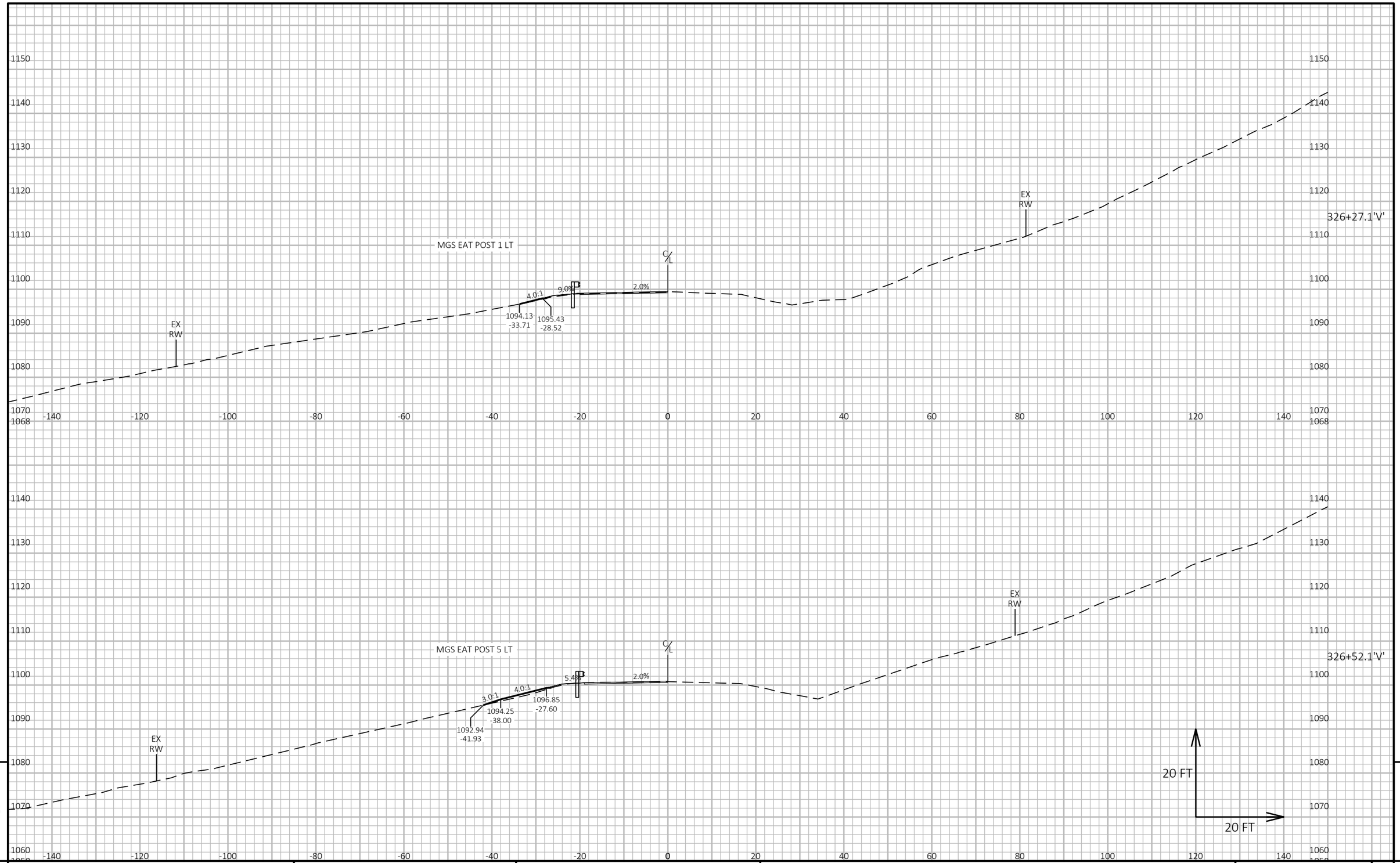


PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 345	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 19-Vernon

PLOT DATE : 7/29/2024 6:44 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

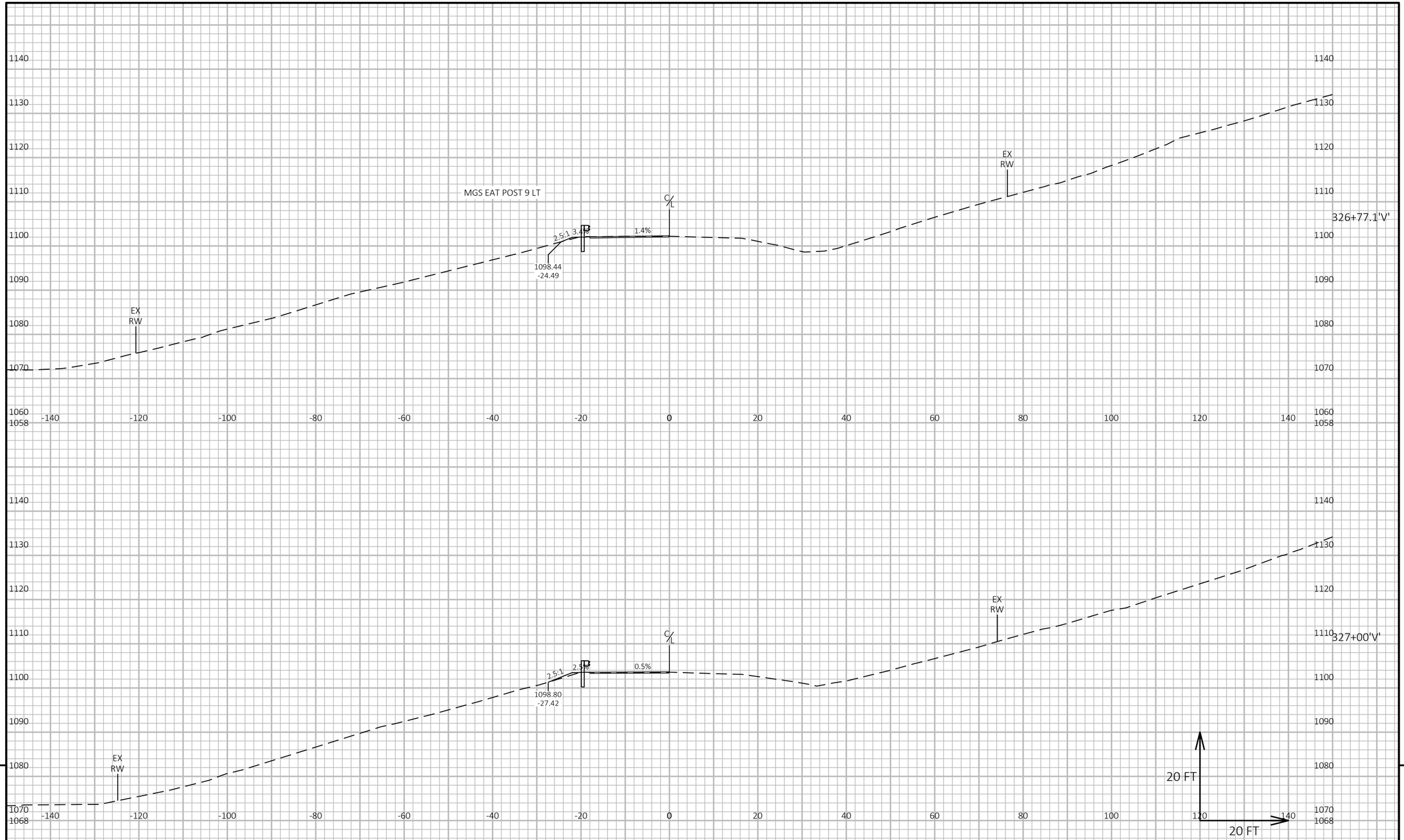


PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 346	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 20-Vernon

PLOT DATE : 7/29/2024 6:44 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 347	E

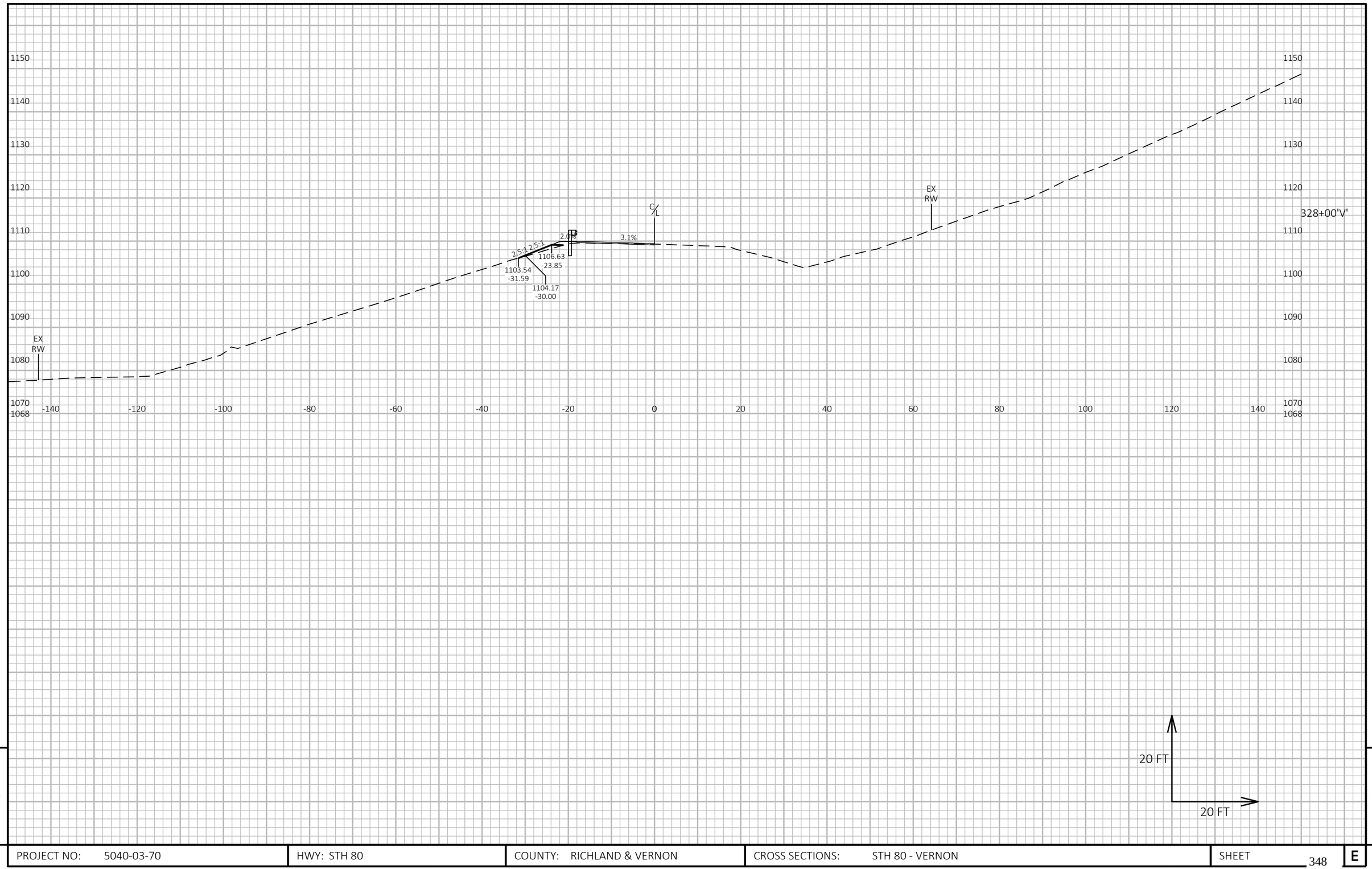
FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 21-Vernon

PLOT DATE : 7/29/2024 6:44 AM

PLOT BY : CAMERON SHIFFER, PE

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



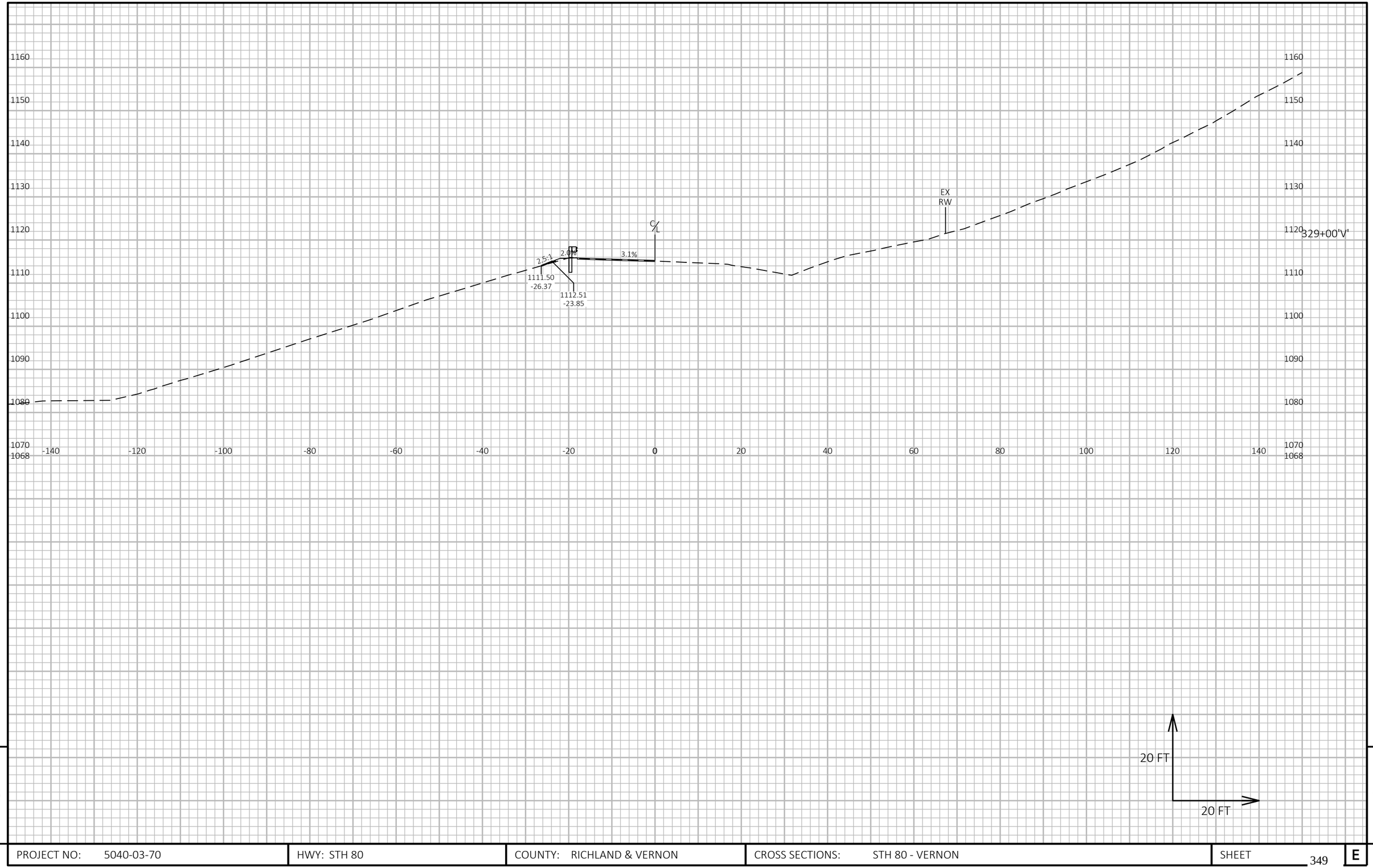
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9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 348	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 22-Vernon

PLOT DATE : 7/29/2024 6:45 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



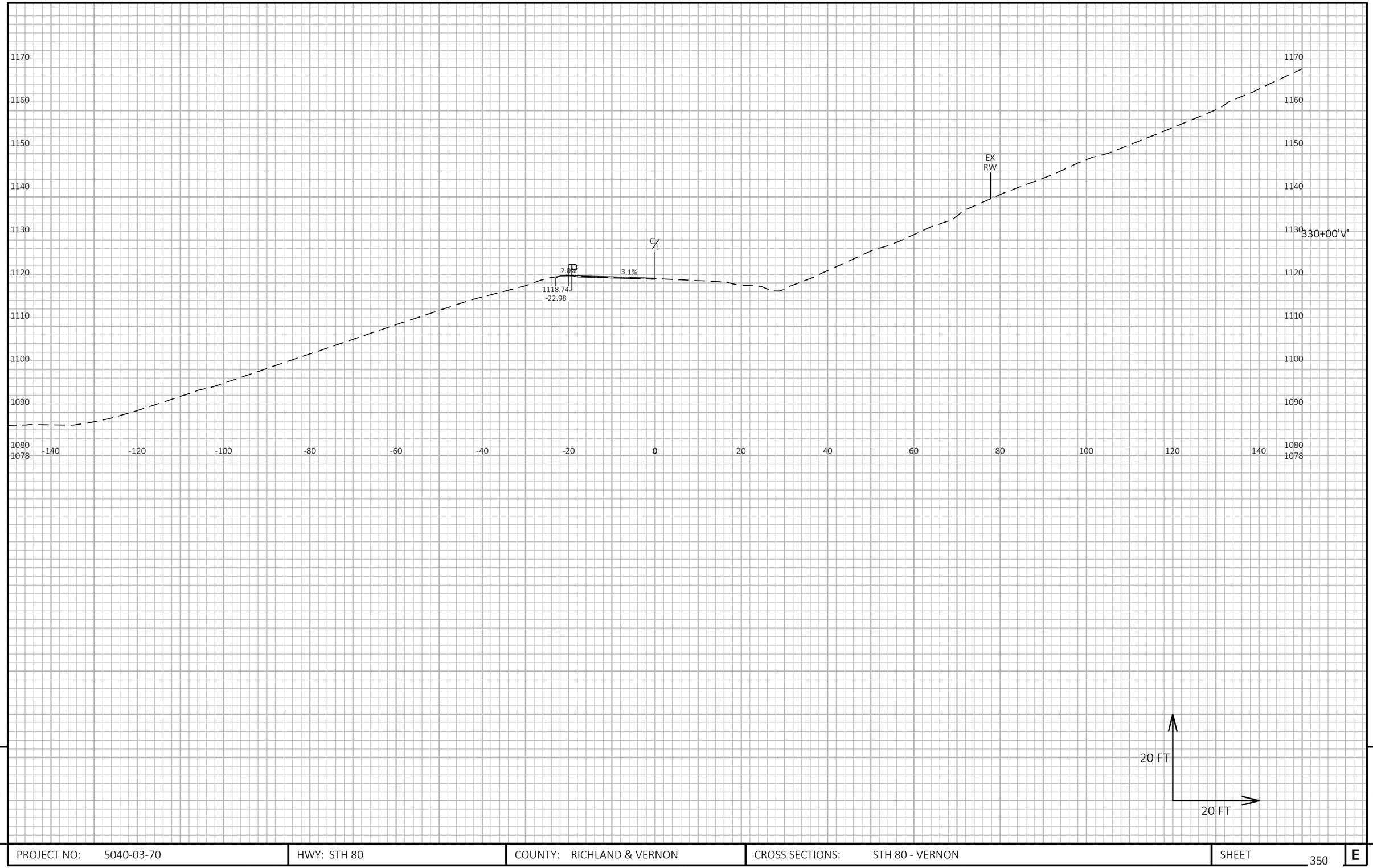
9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 349	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 23-Vernon

PLOT DATE : 7/29/2024 6:45 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

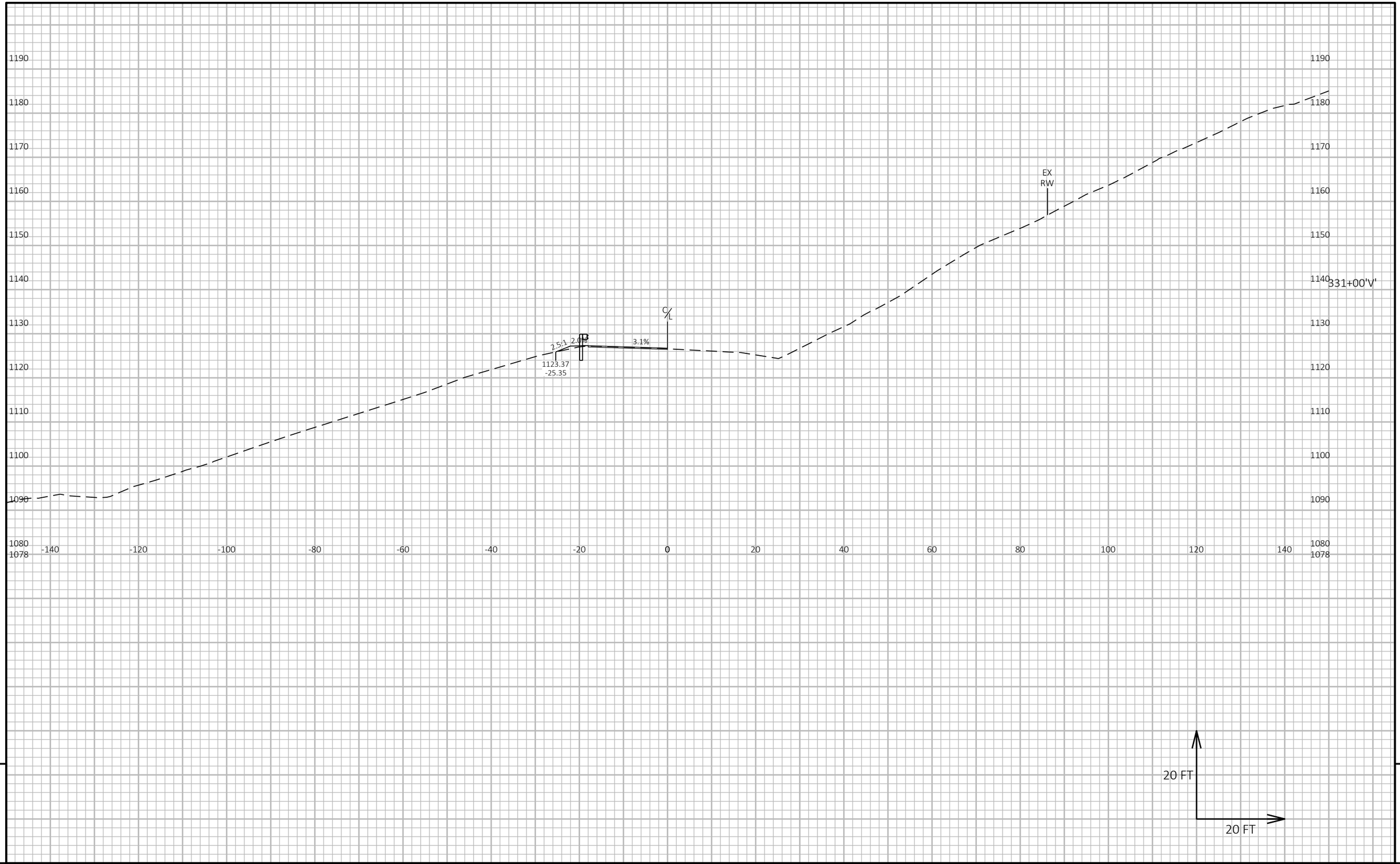


PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 350	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 24-Vernon

PLOT DATE : 7/29/2024 6:45 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 351	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 25-Vernon

PLOT DATE : 7/29/2024 6:45 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

1190
1180
1170
1160
1150
1140
1130
1120
1110
1100
1090
1088

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

EX
RW

332+00'V'

C/L

2.5:1
2.0%
3.1%

1129.15
-25.92

1129.98
-23.85

20 FT
20 FT

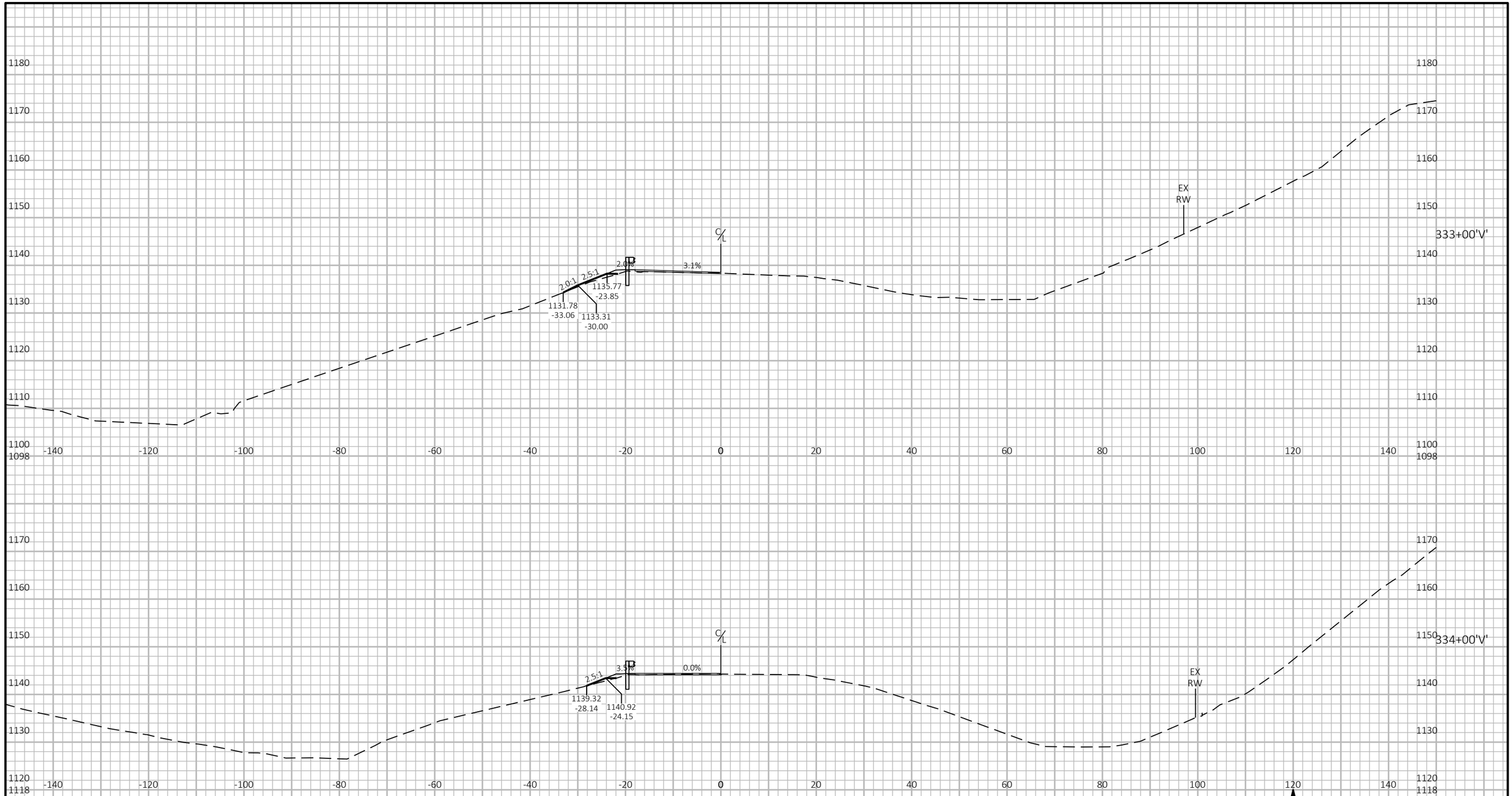
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9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 352	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 26-Vernon

PLOT DATE : 7/29/2024 6:45 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



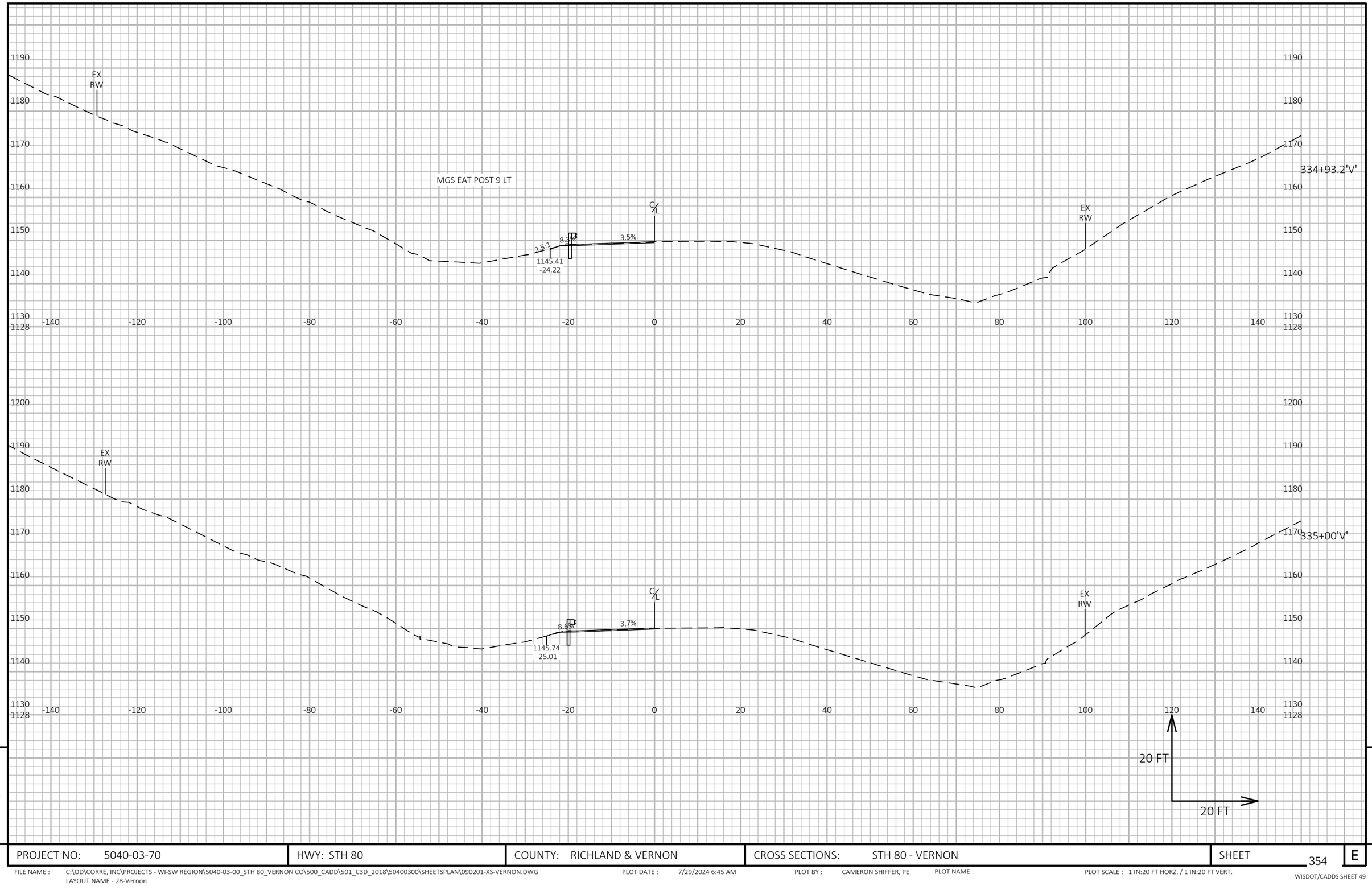
9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 353	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 27-Vernon

PLOT DATE : 7/29/2024 6:45 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



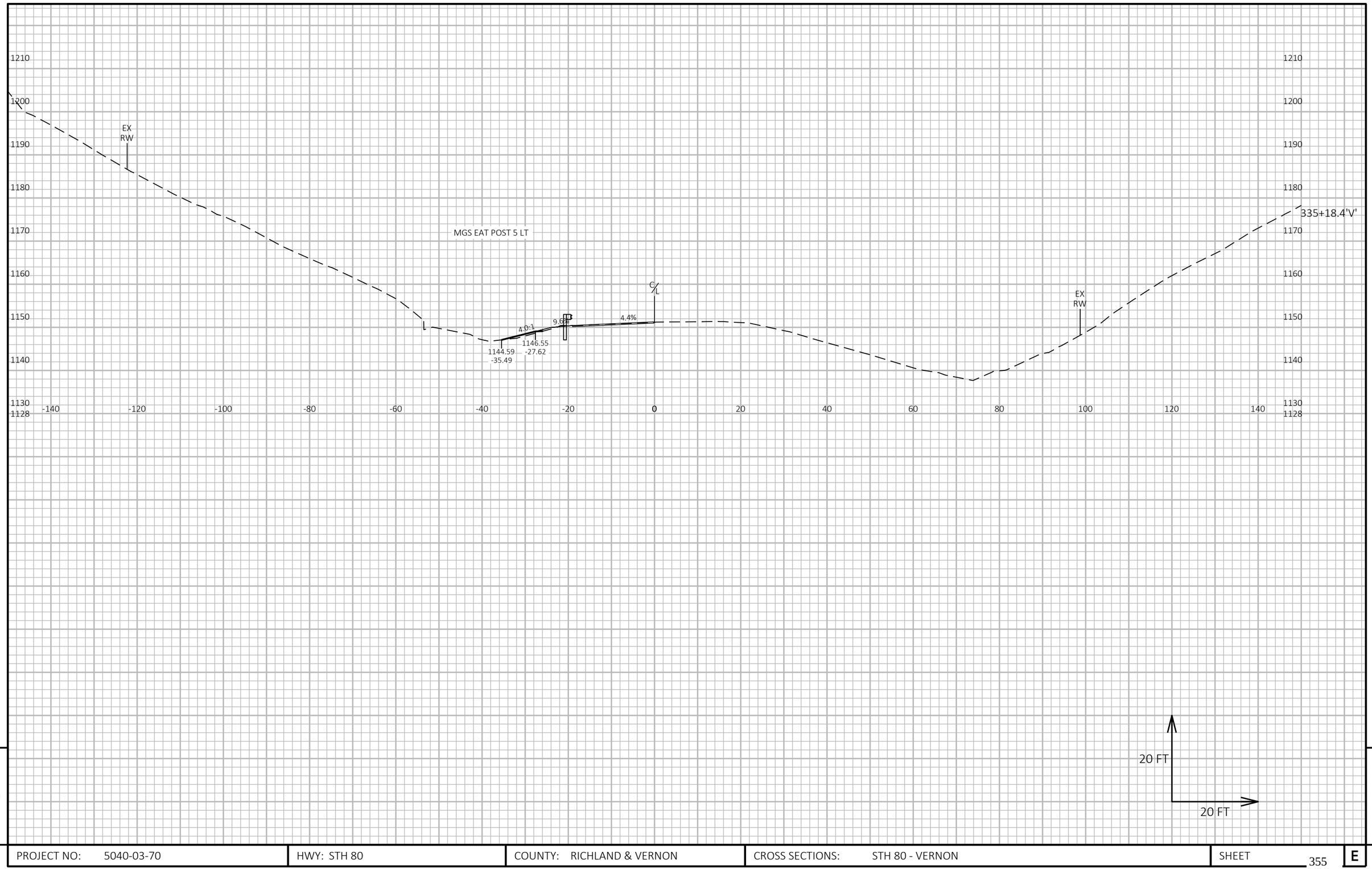
9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 354	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 28-Vernon

PLOT DATE : 7/29/2024 6:45 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

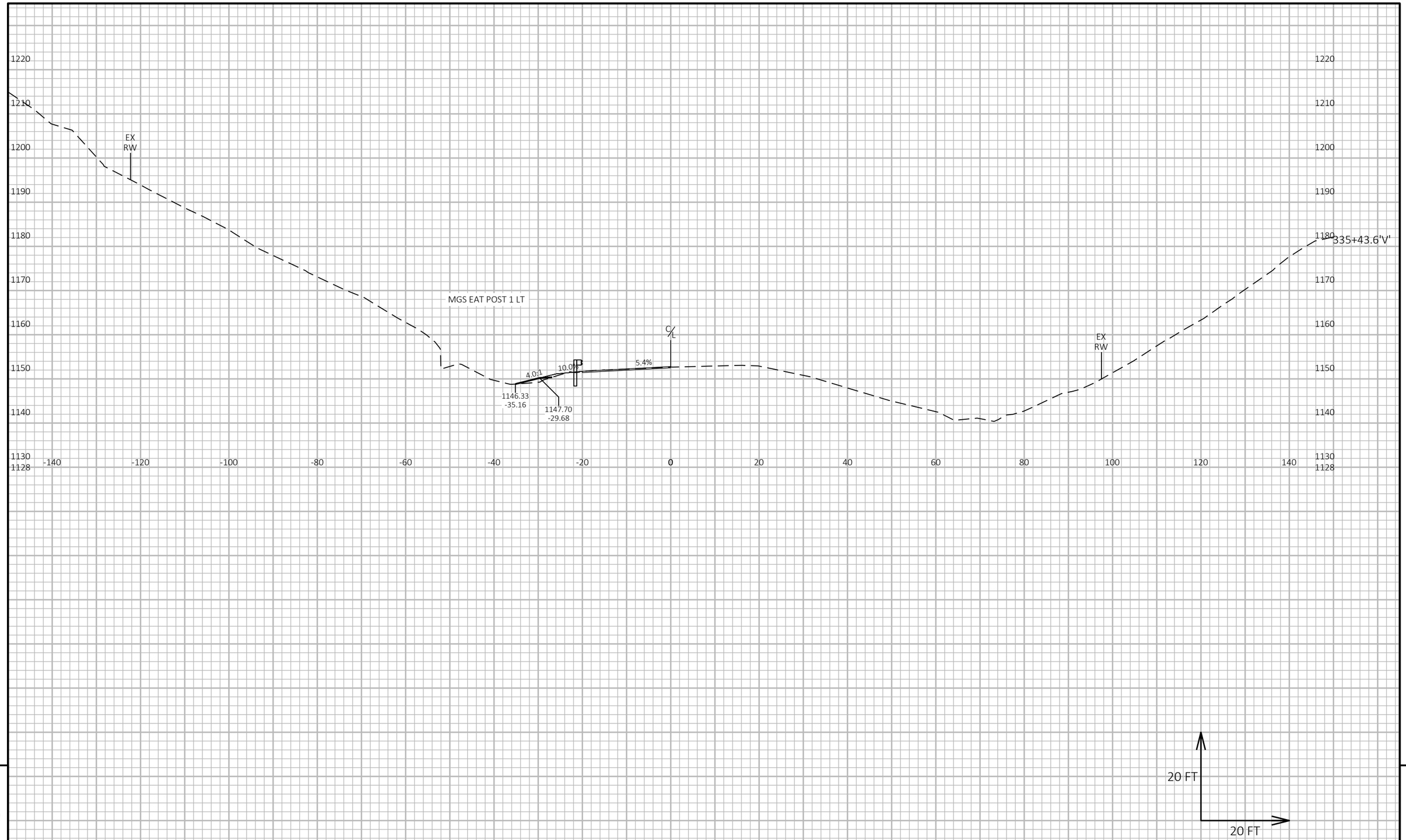
PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 355	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 29-Vernon

PLOT DATE : 7/29/2024 6:46 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

9



9

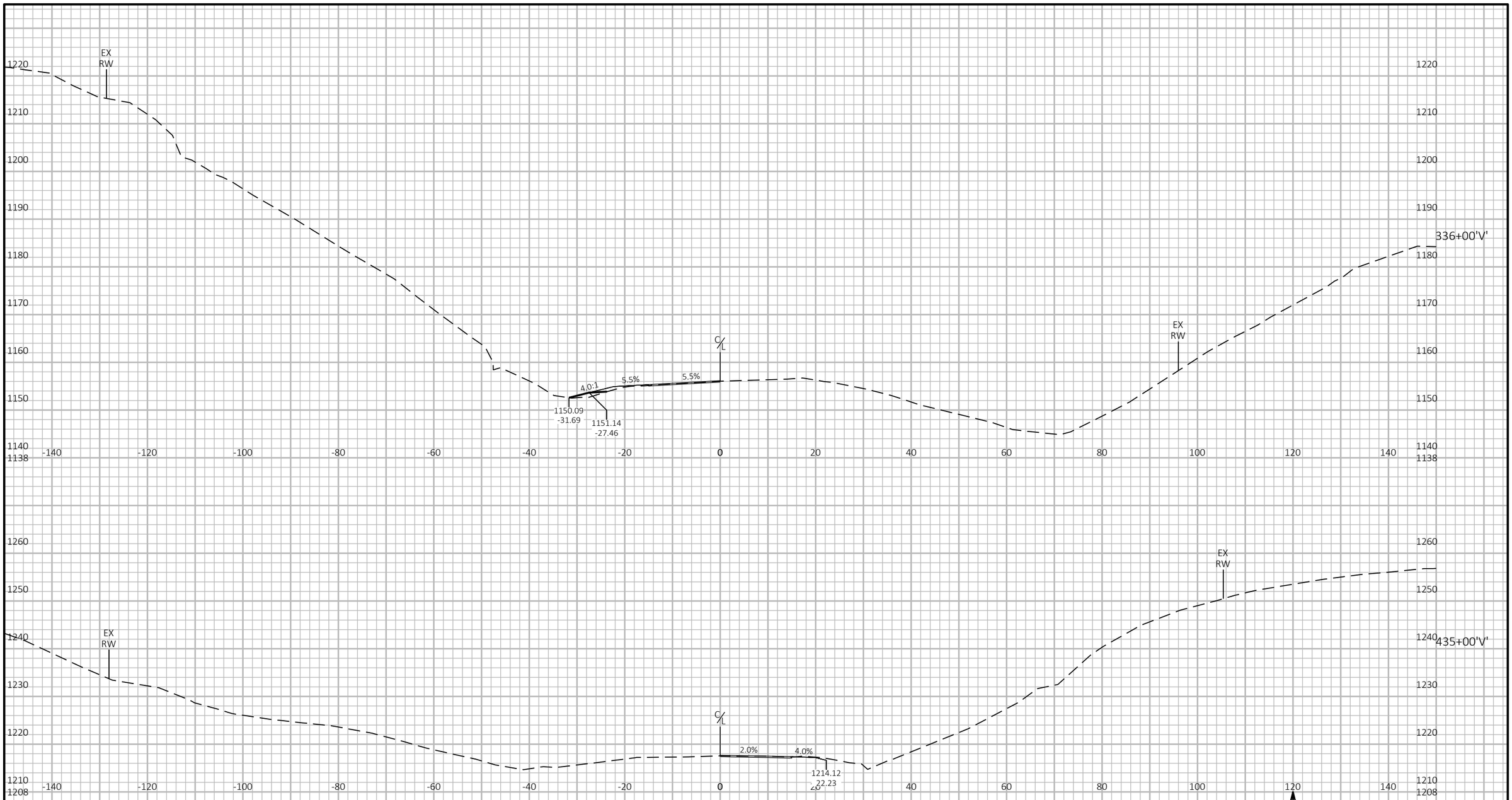
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 356	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 30-Vernon

PLOT DATE : 7/29/2024 6:46 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



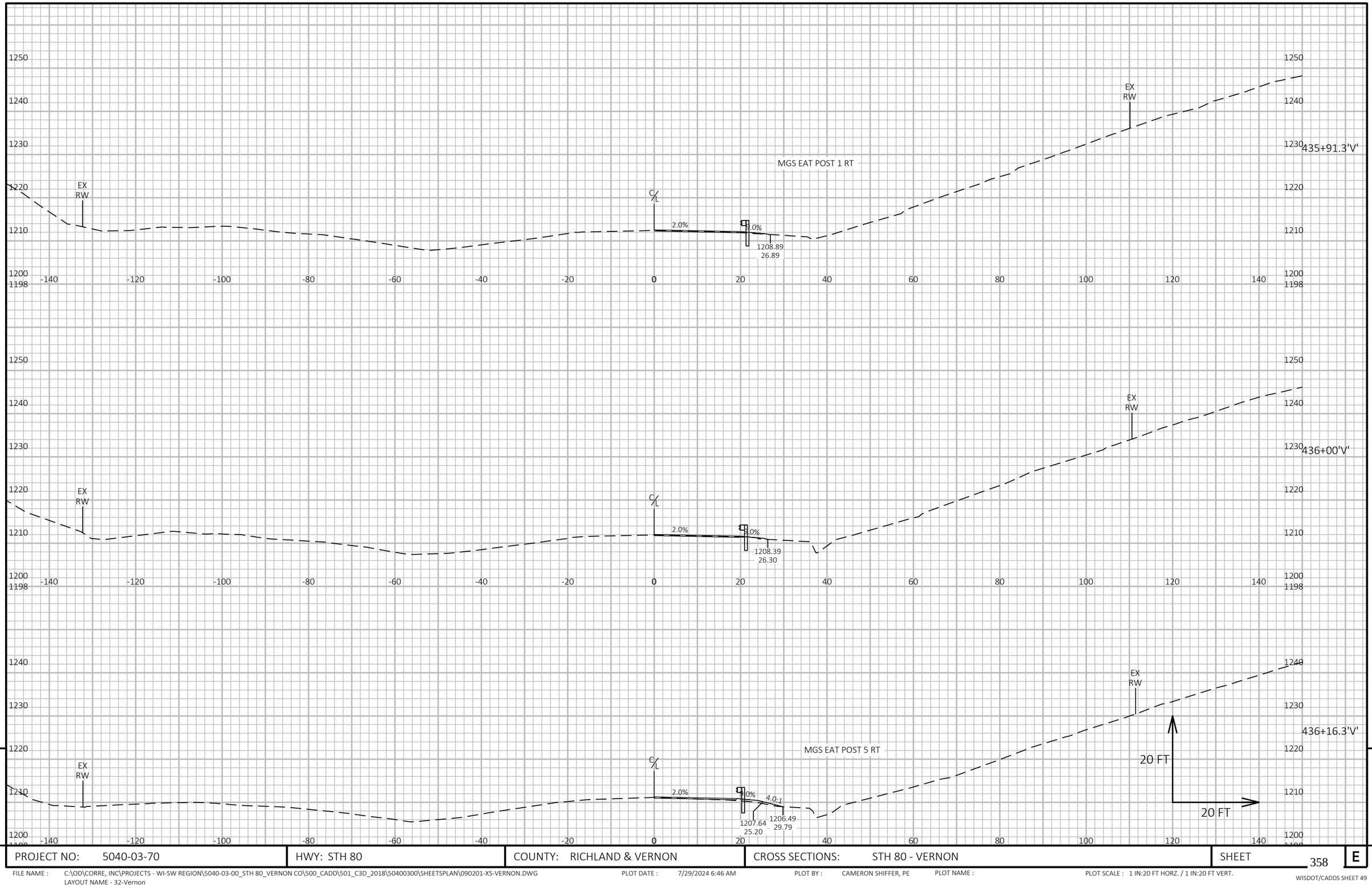
9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 357	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 31-Vernon

PLOT DATE : 7/29/2024 6:46 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



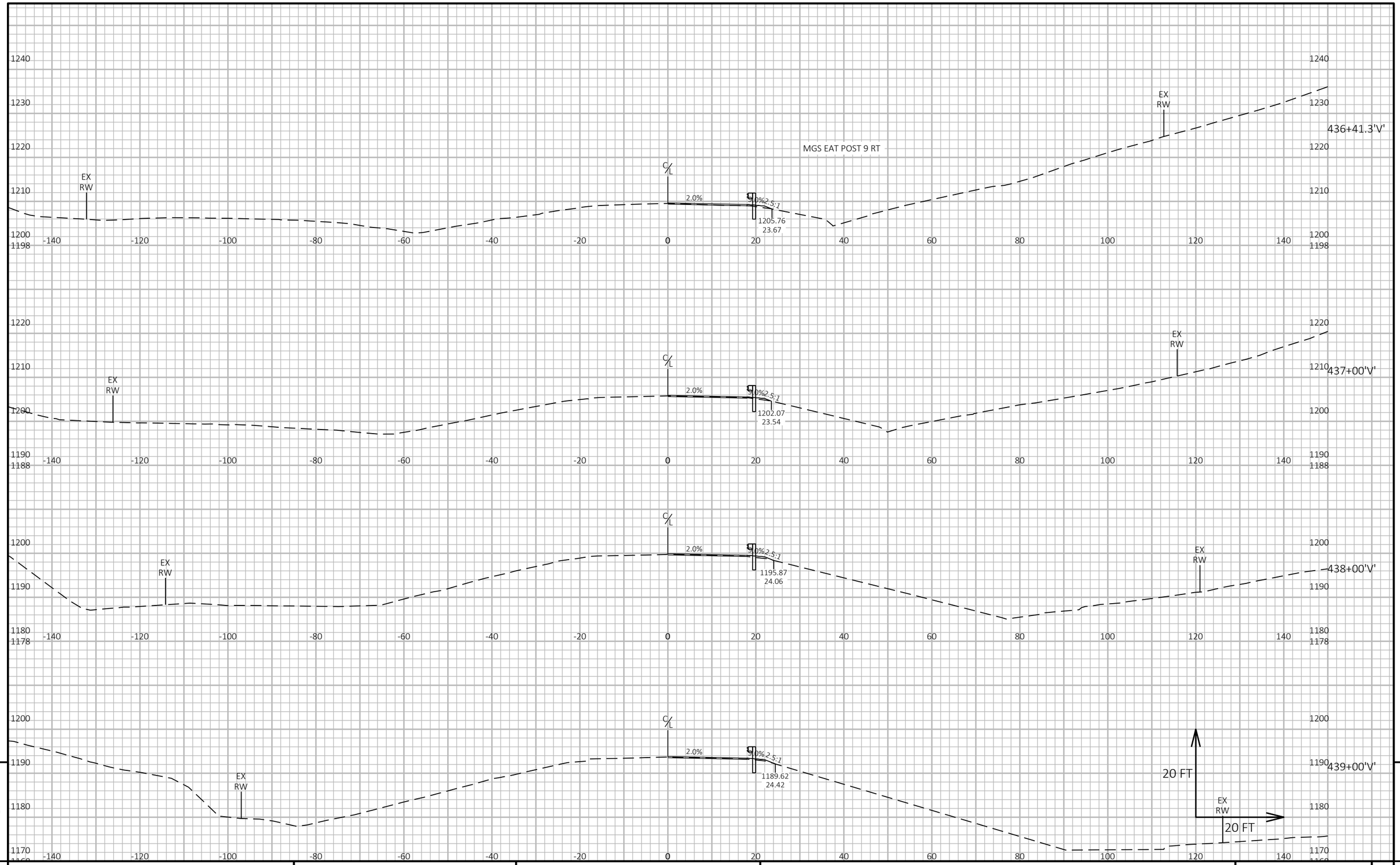
9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 358	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 32-Vernon

PLOT DATE : 7/29/2024 6:46 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



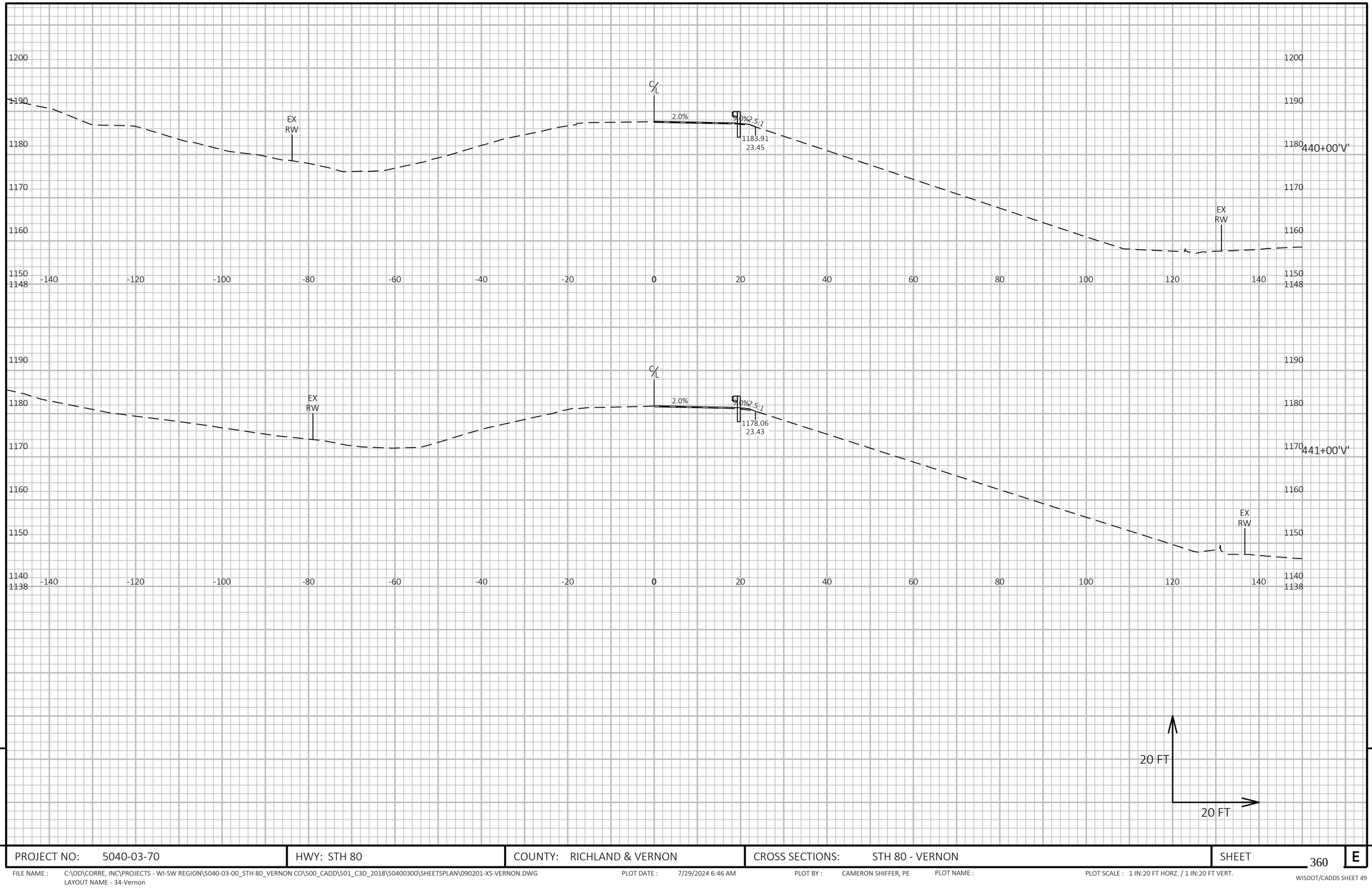
9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 359	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 33-Vernon

PLOT DATE : 7/29/2024 6:46 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



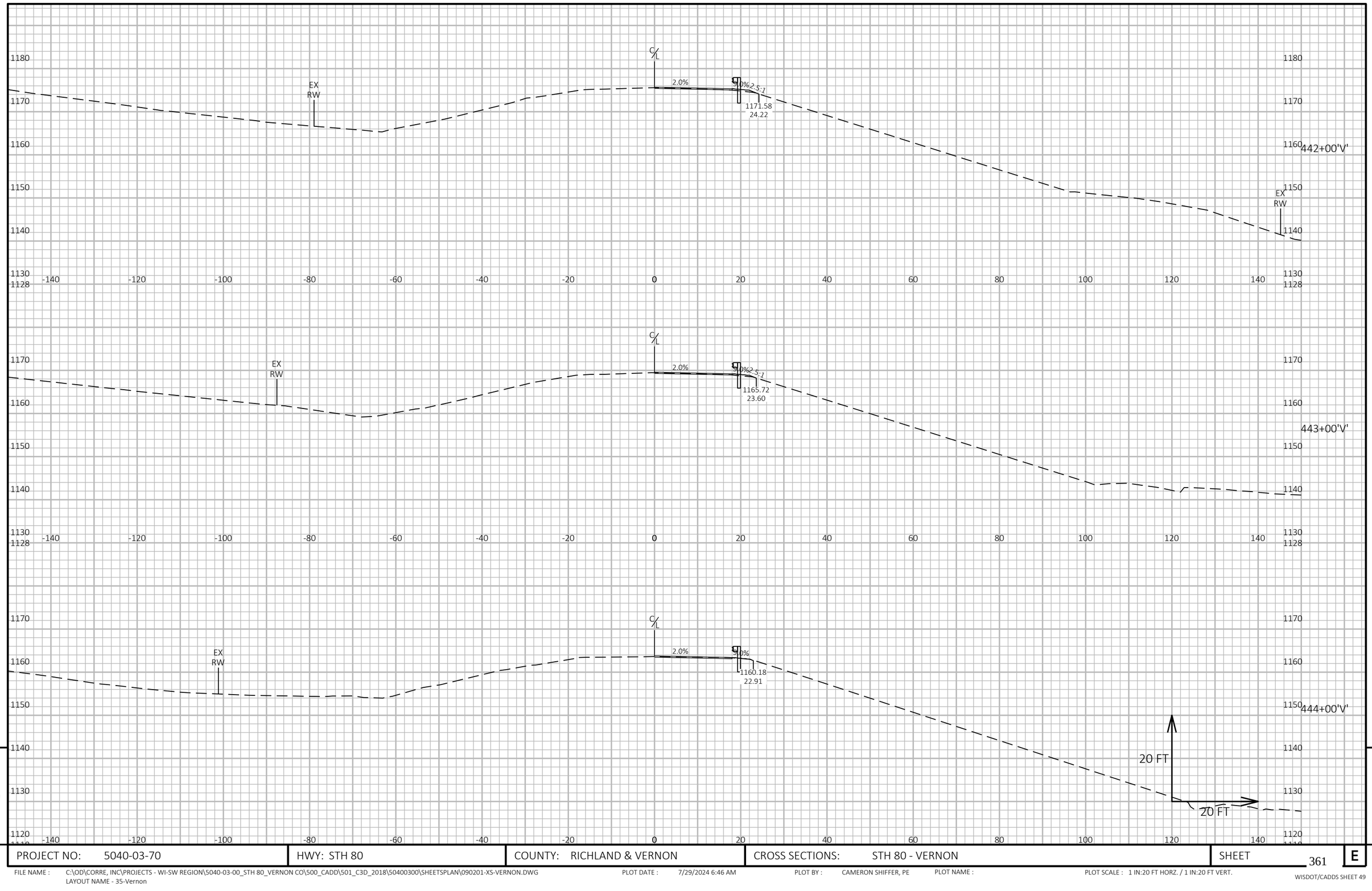
9

9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 360	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 34-Vernon

PLOT DATE : 7/29/2024 6:46 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



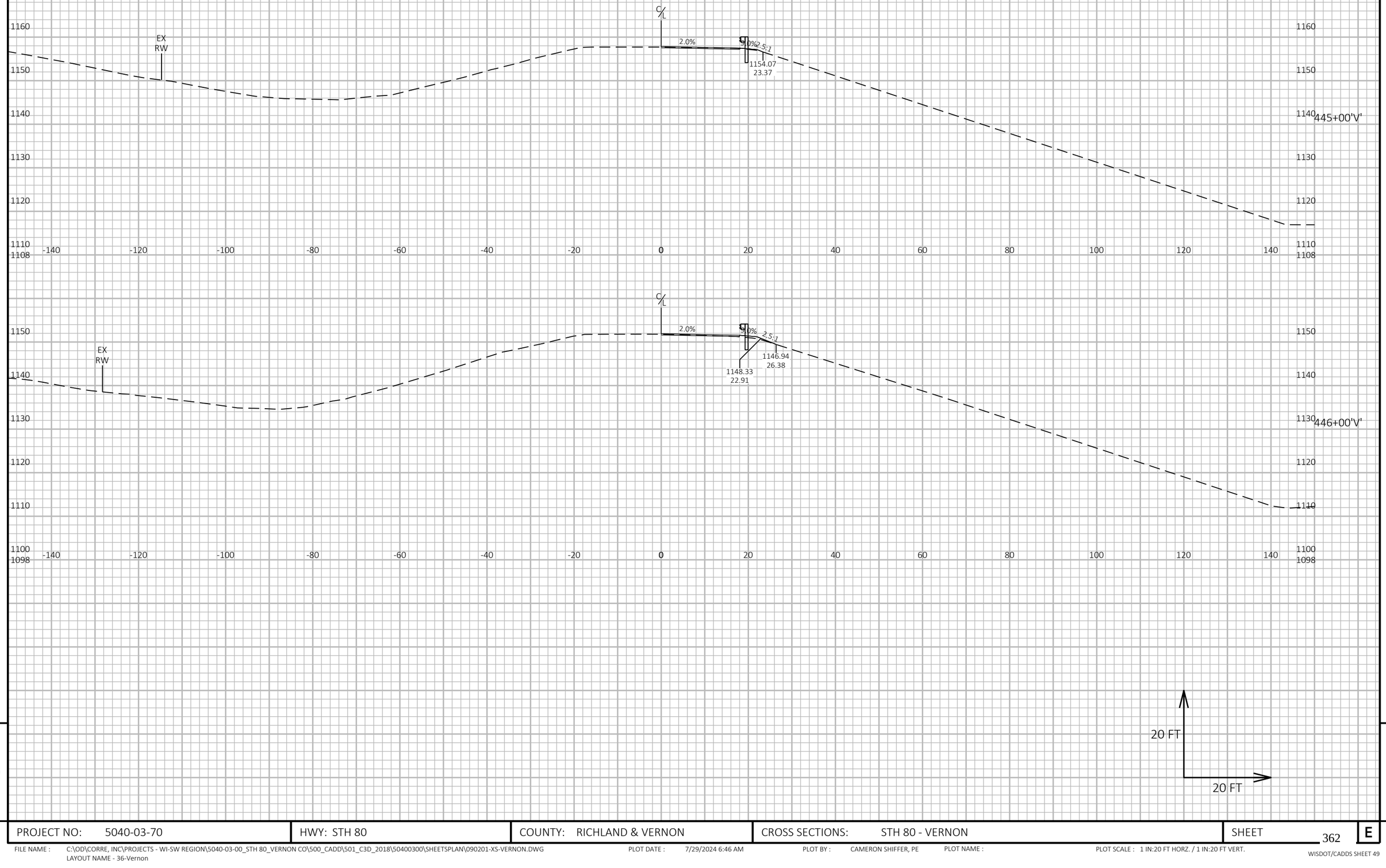
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9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 361	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 35-Vernon

PLOT DATE : 7/29/2024 6:46 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



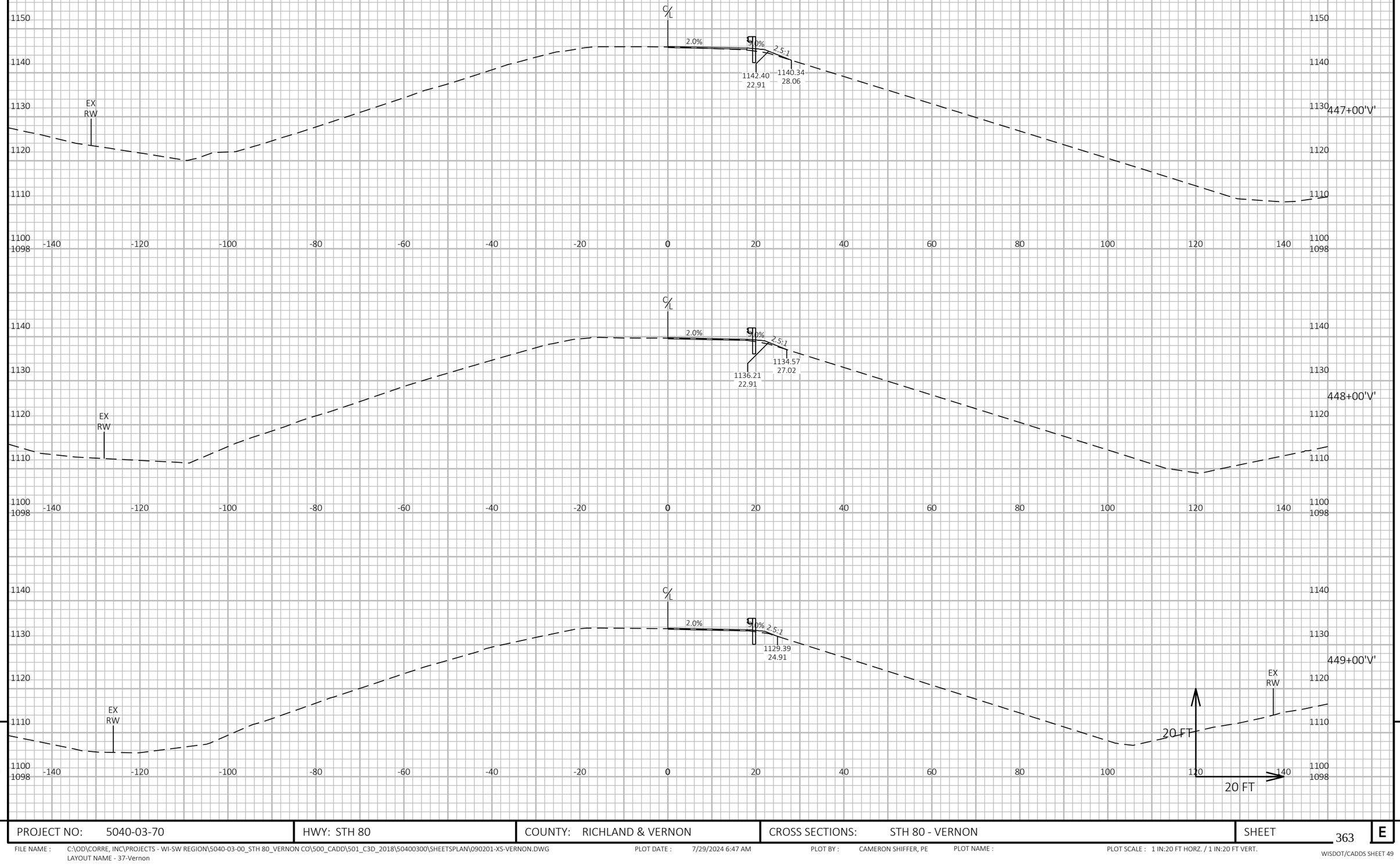
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 362	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 36-Vernon

PLOT DATE : 7/29/2024 6:46 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

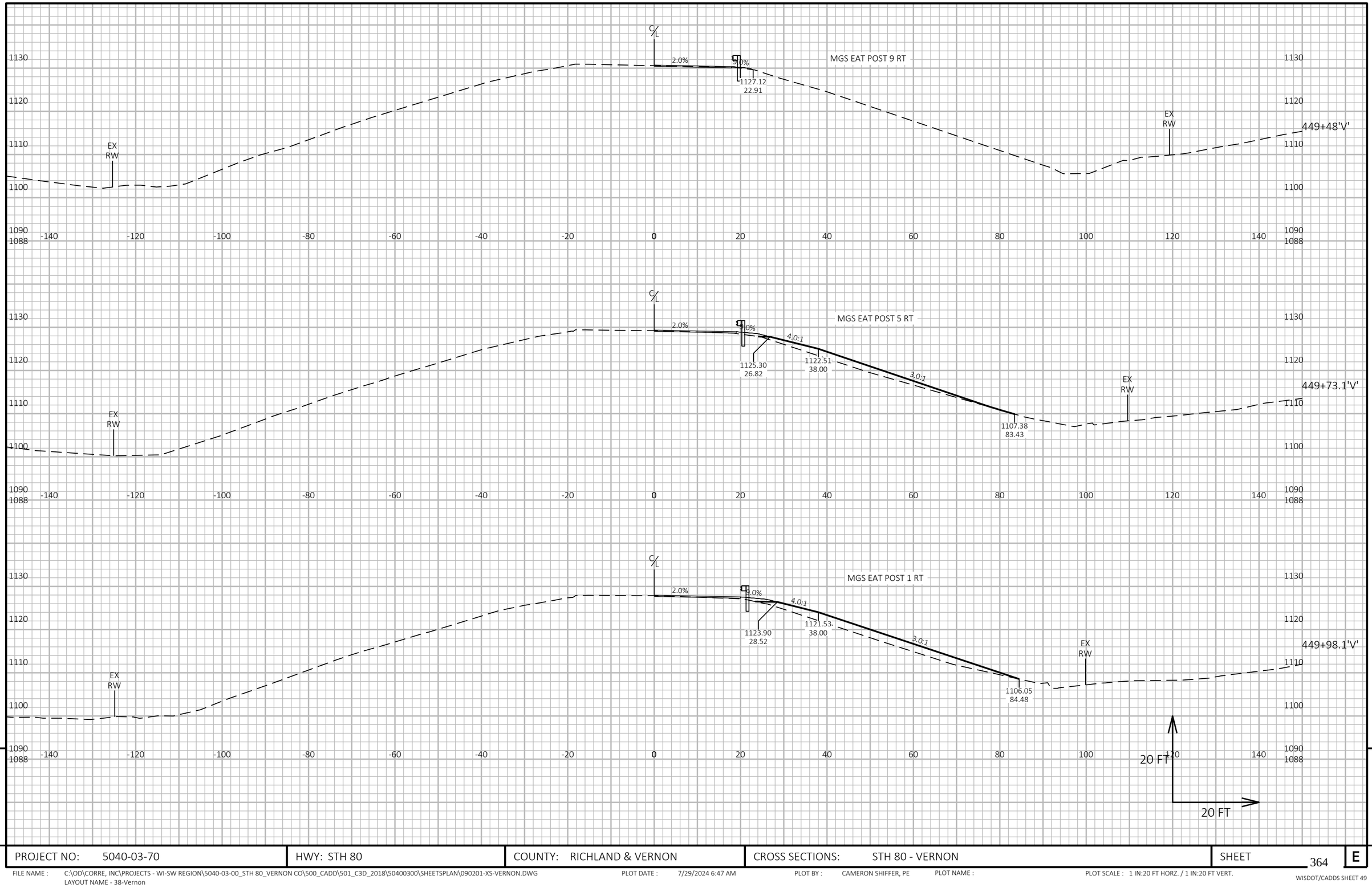


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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 363	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 37-Vernon
PLOT DATE : 7/29/2024 6:47 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49

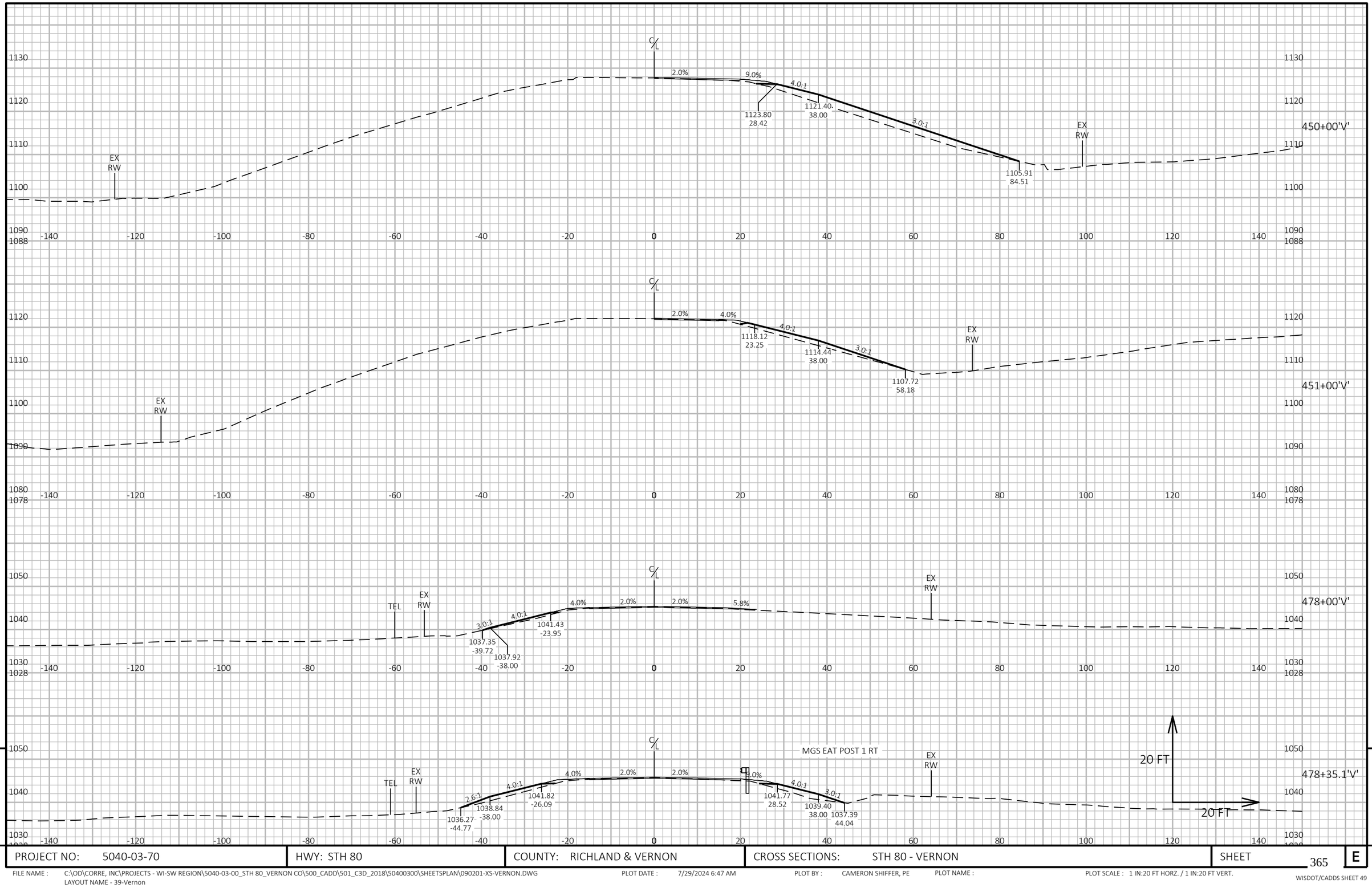


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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 364	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 38-Vernon

PLOT DATE : 7/29/2024 6:47 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 365	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 39-Vernon

PLOT DATE : 7/29/2024 6:47 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

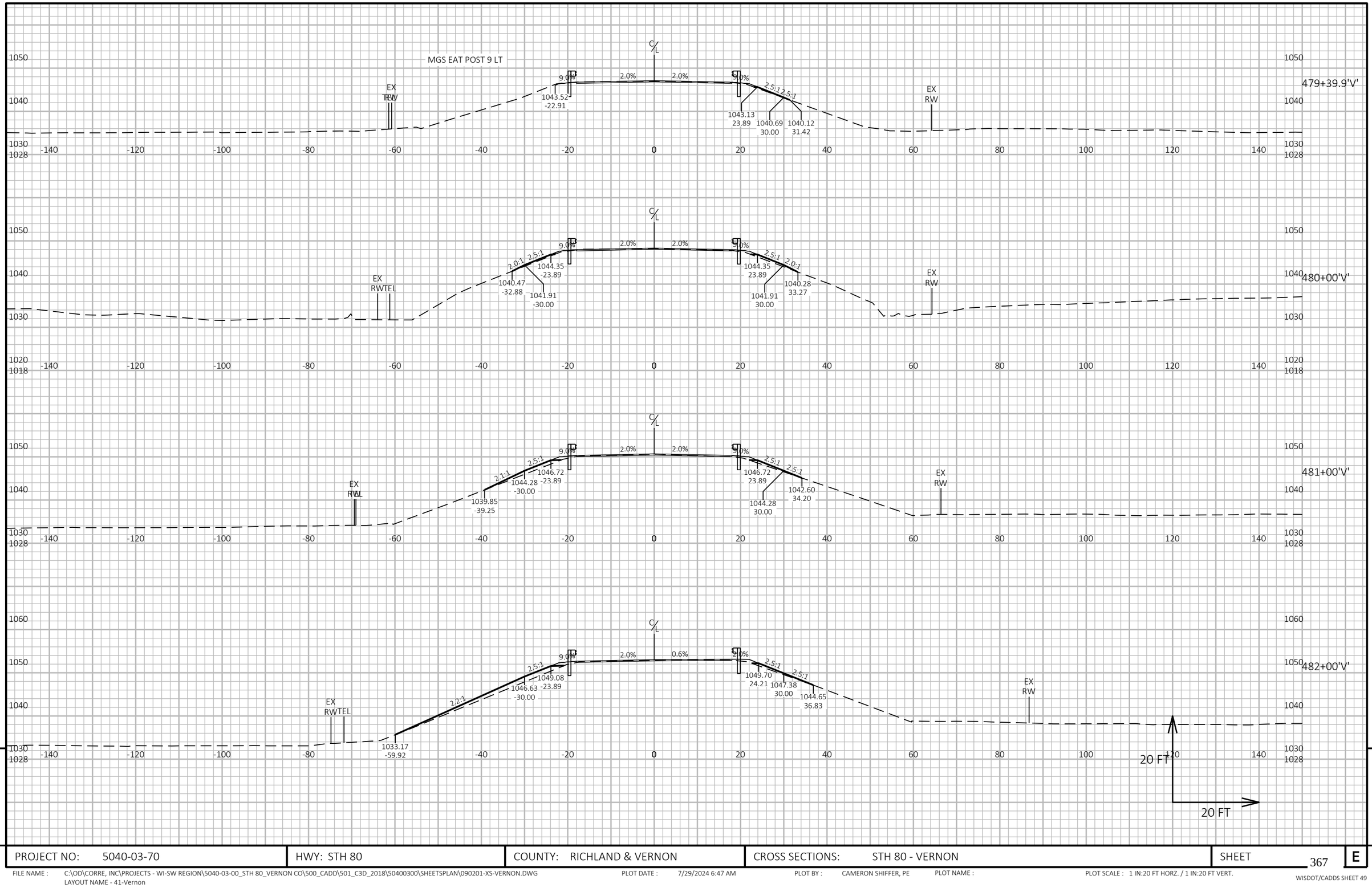


PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 366	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 40-Vernon

PLOT DATE : 7/29/2024 6:47 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

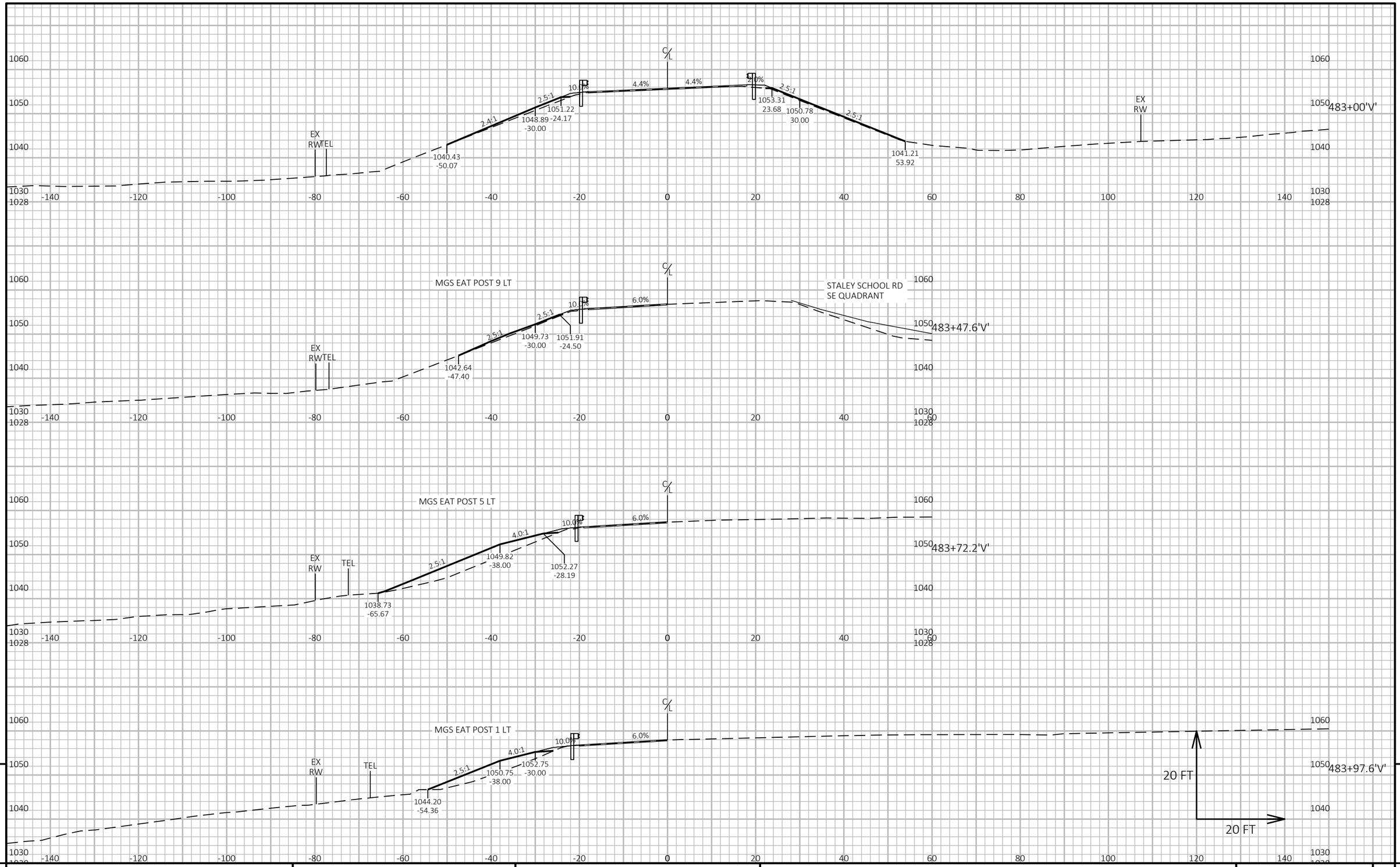


PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 367	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 41-Vernon

PLOT DATE : 7/29/2024 6:47 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



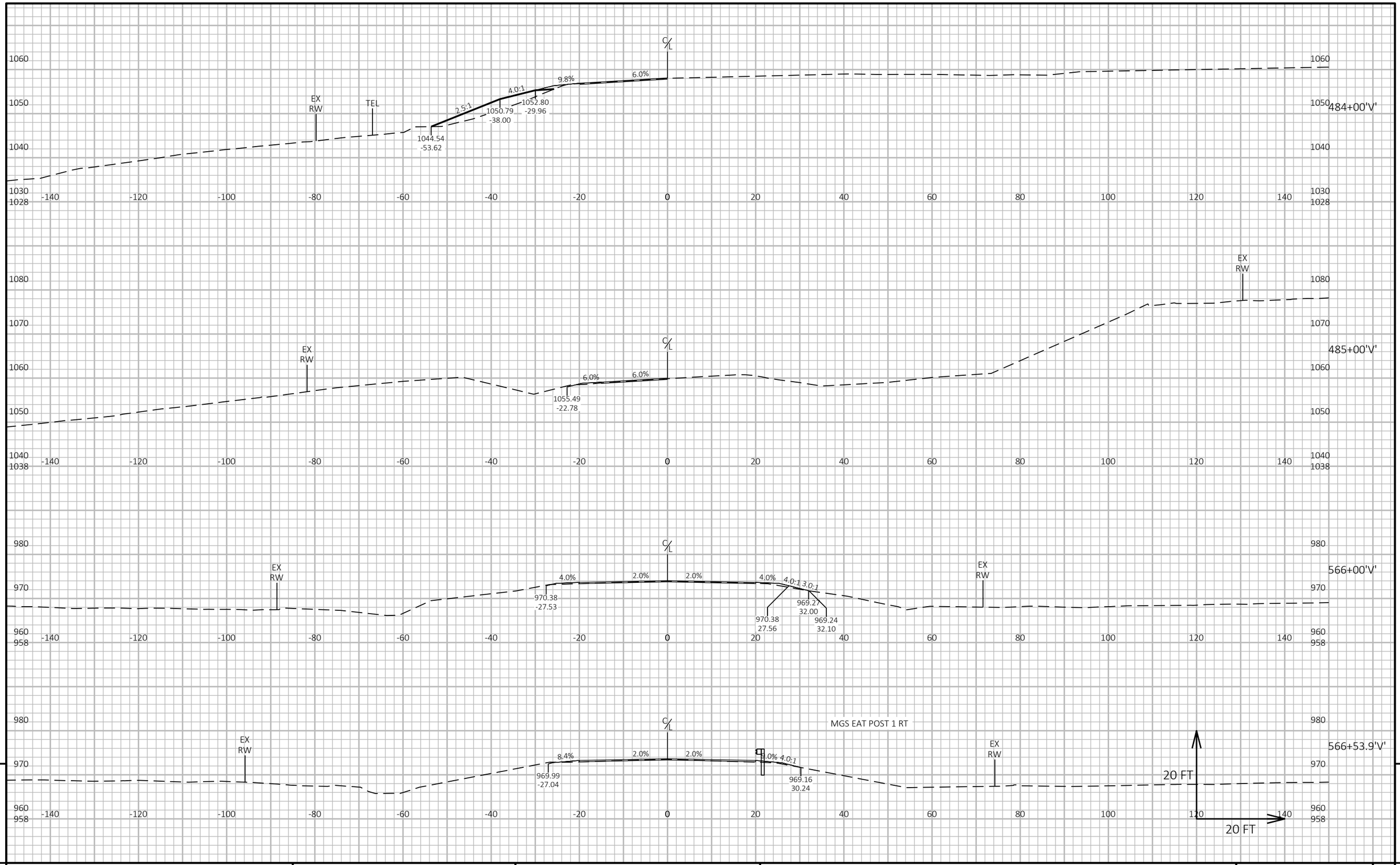
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9

PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 368	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 42-Vernon

PLOT DATE : 7/29/2024 6:47 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



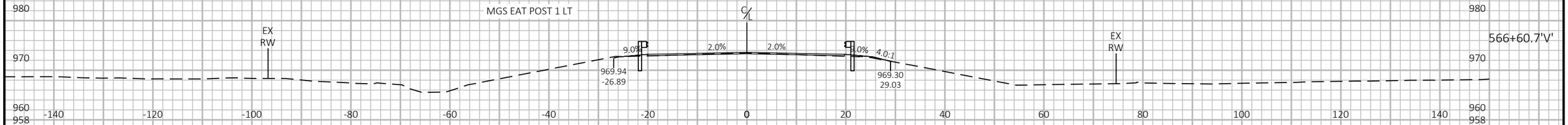
PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 369	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 43-Vernon

PLOT DATE : 7/29/2024 6:47 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

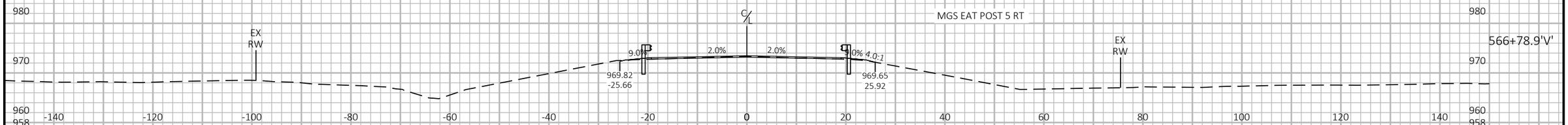
WISDOT/CADDS SHEET 49

MGS EAT POST 1 LT



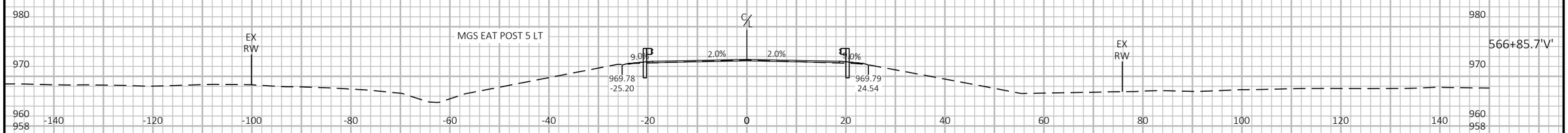
566+60.7'V'

MGS EAT POST 5 RT

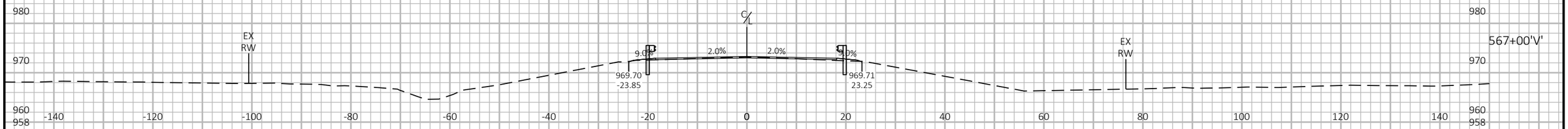


566+78.9'V'

MGS EAT POST 5 LT

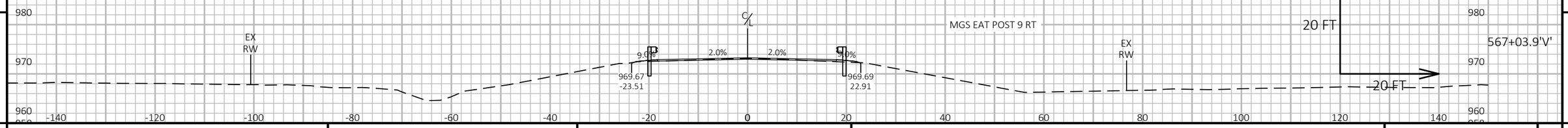


566+85.7'V'



567+00'V'

MGS EAT POST 9 RT



567+03.9'V'

9

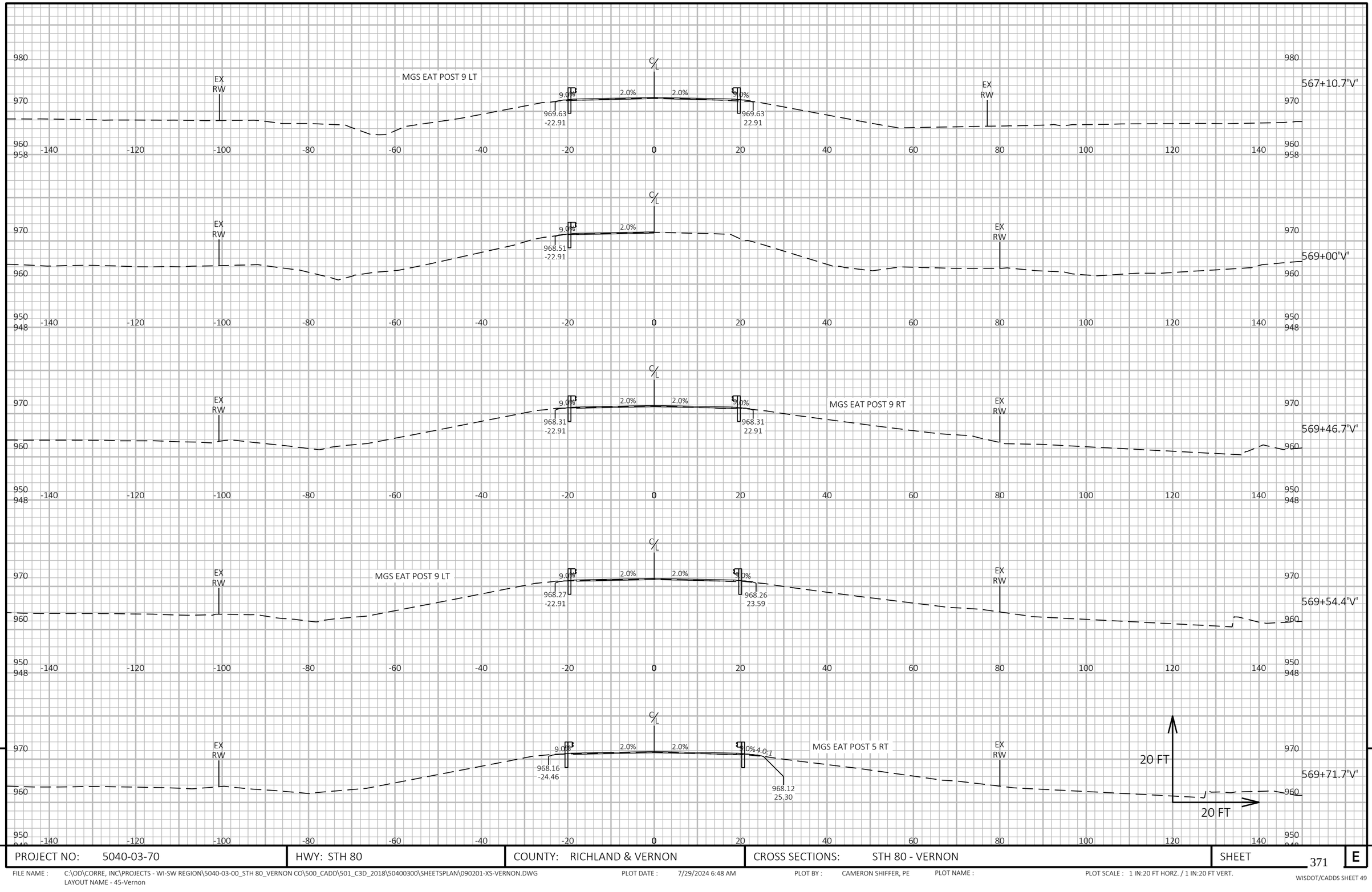
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 370	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 44-Vernon

PLOT DATE : 7/29/2024 6:47 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



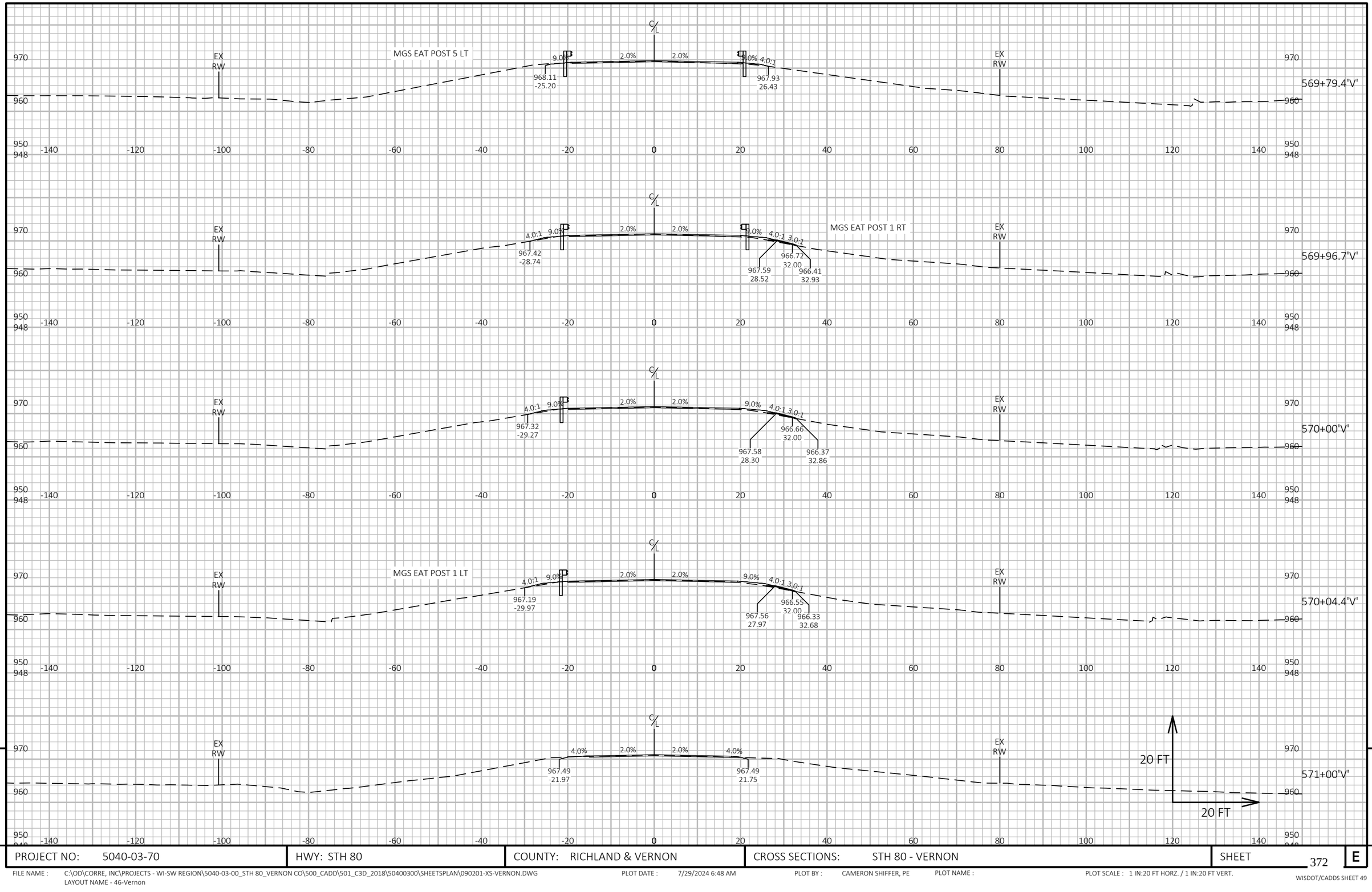
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 371	E

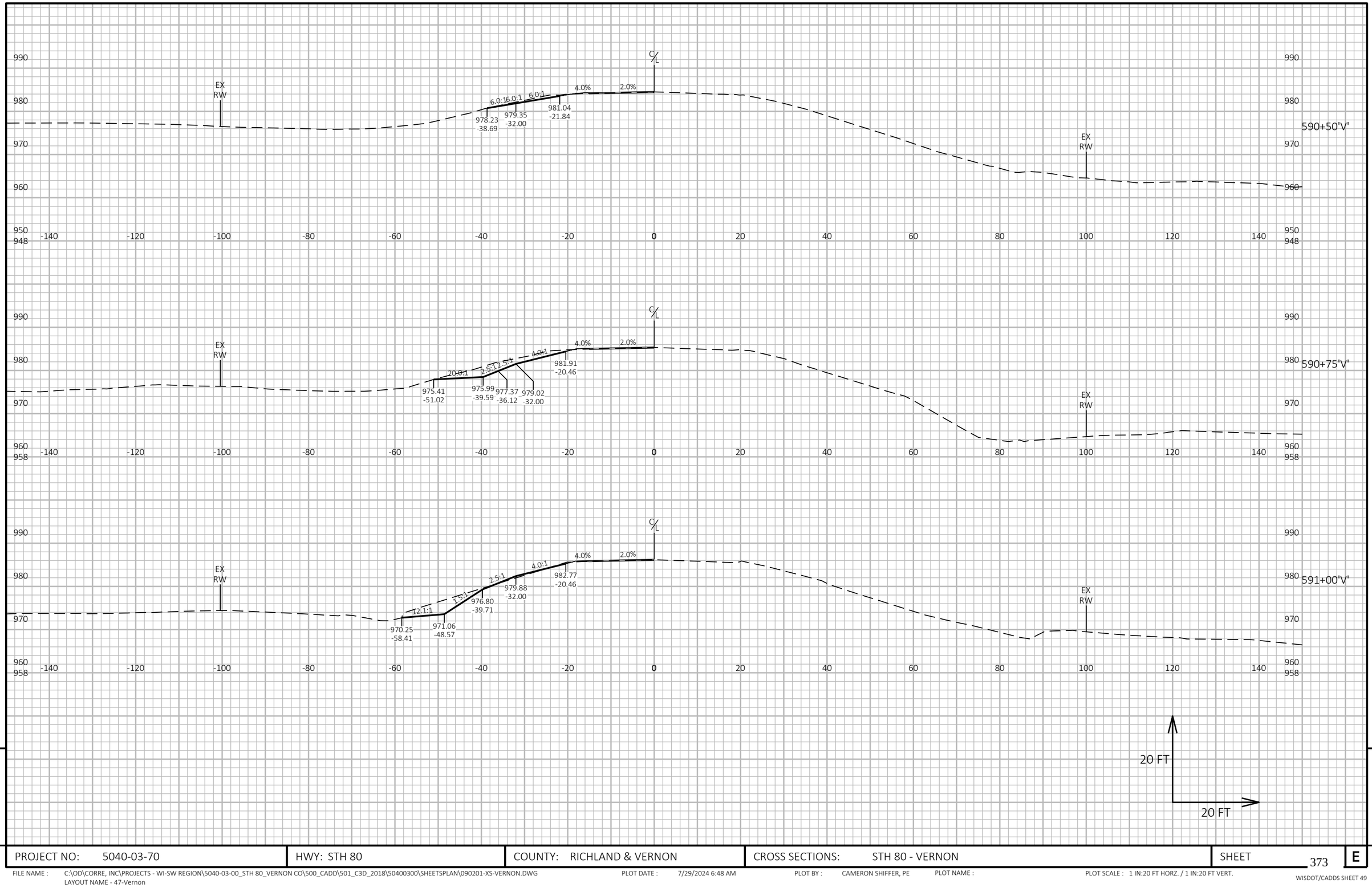
FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 45-Vernon

PLOT DATE : 7/29/2024 6:48 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 372	E

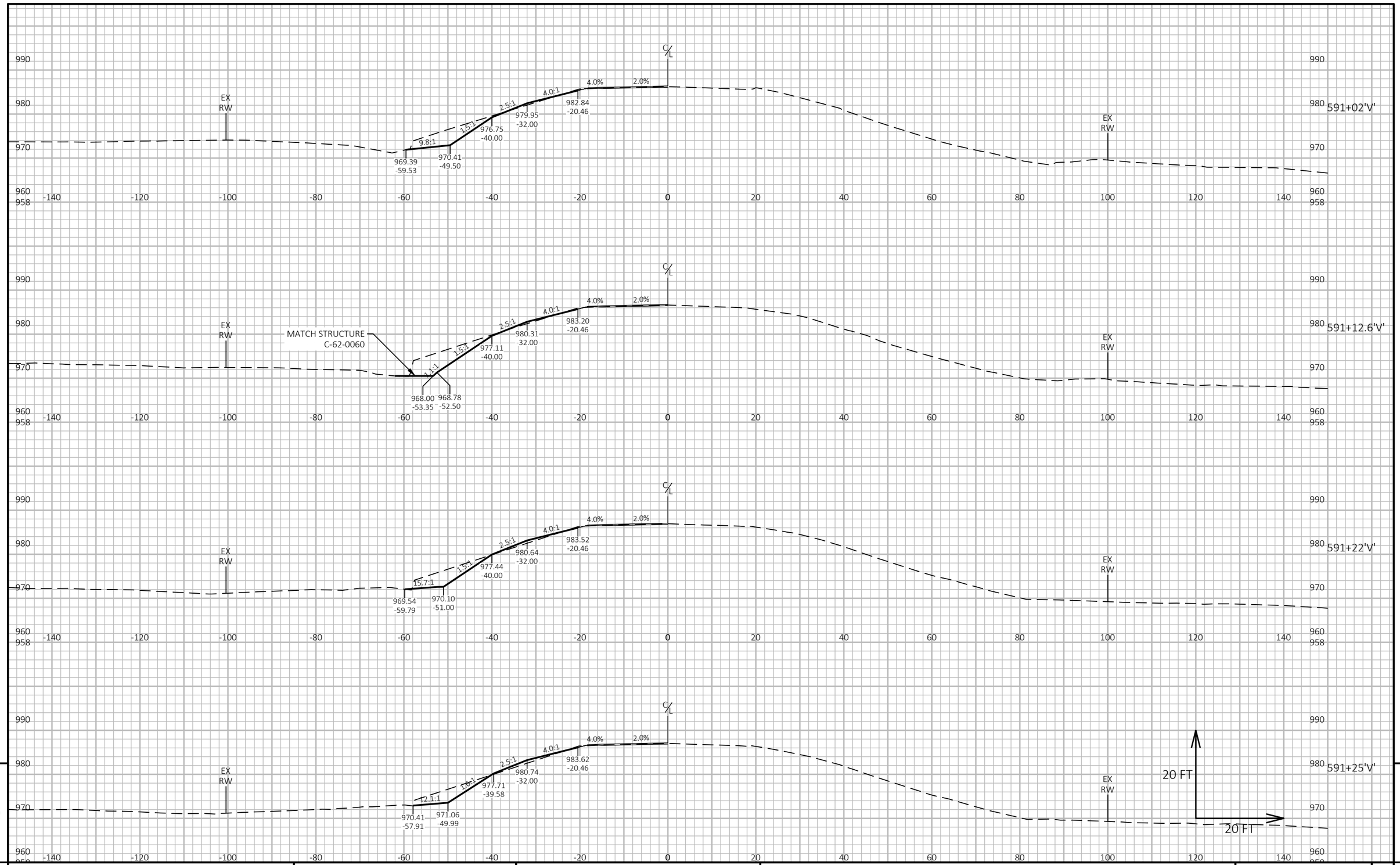
FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 46-Vernon
PLOT DATE : 7/29/2024 6:48 AM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 373	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 47-Vernon

PLOT DATE : 7/29/2024 6:48 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

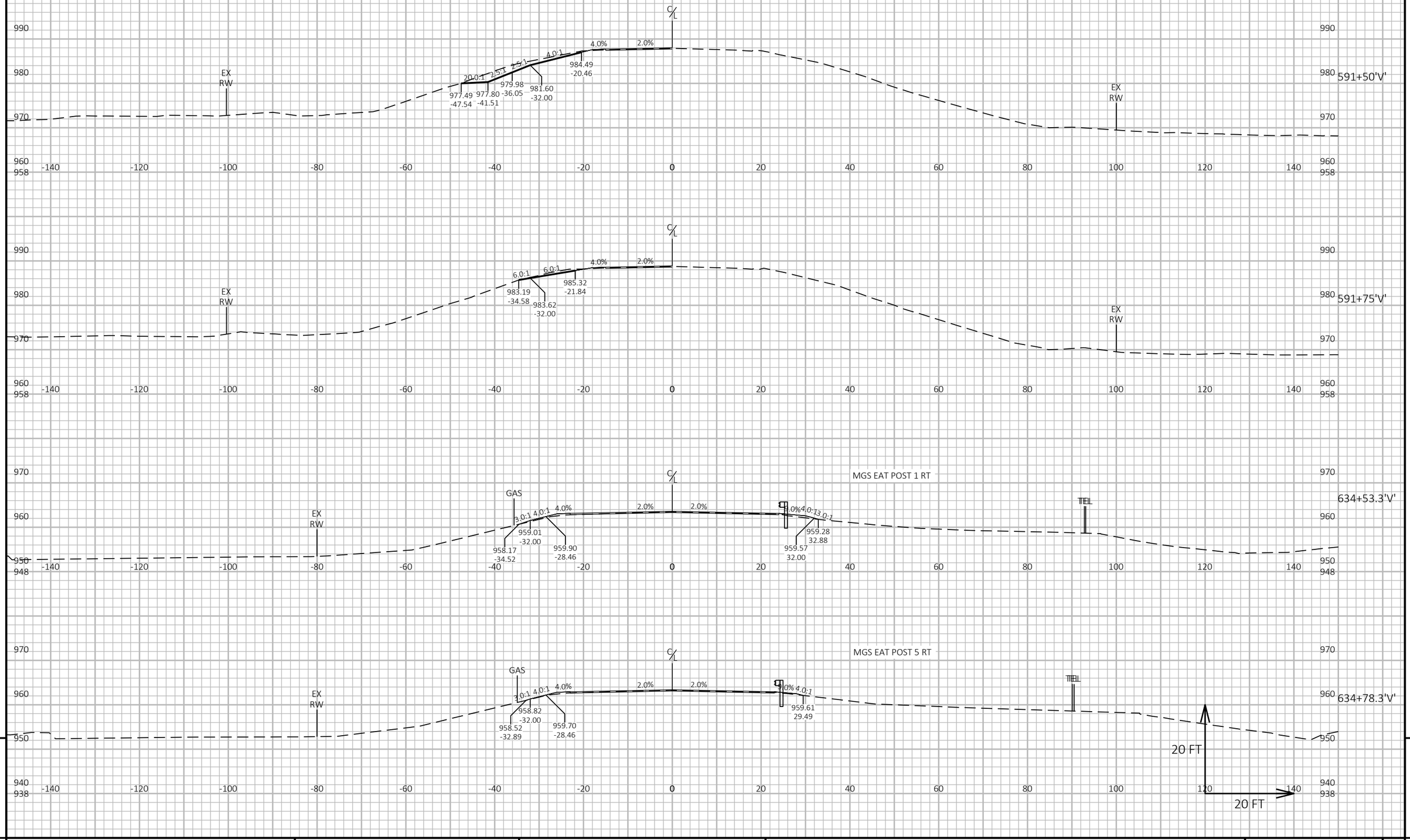


PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 374	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 48-Vernon

PLOT DATE : 7/29/2024 6:48 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

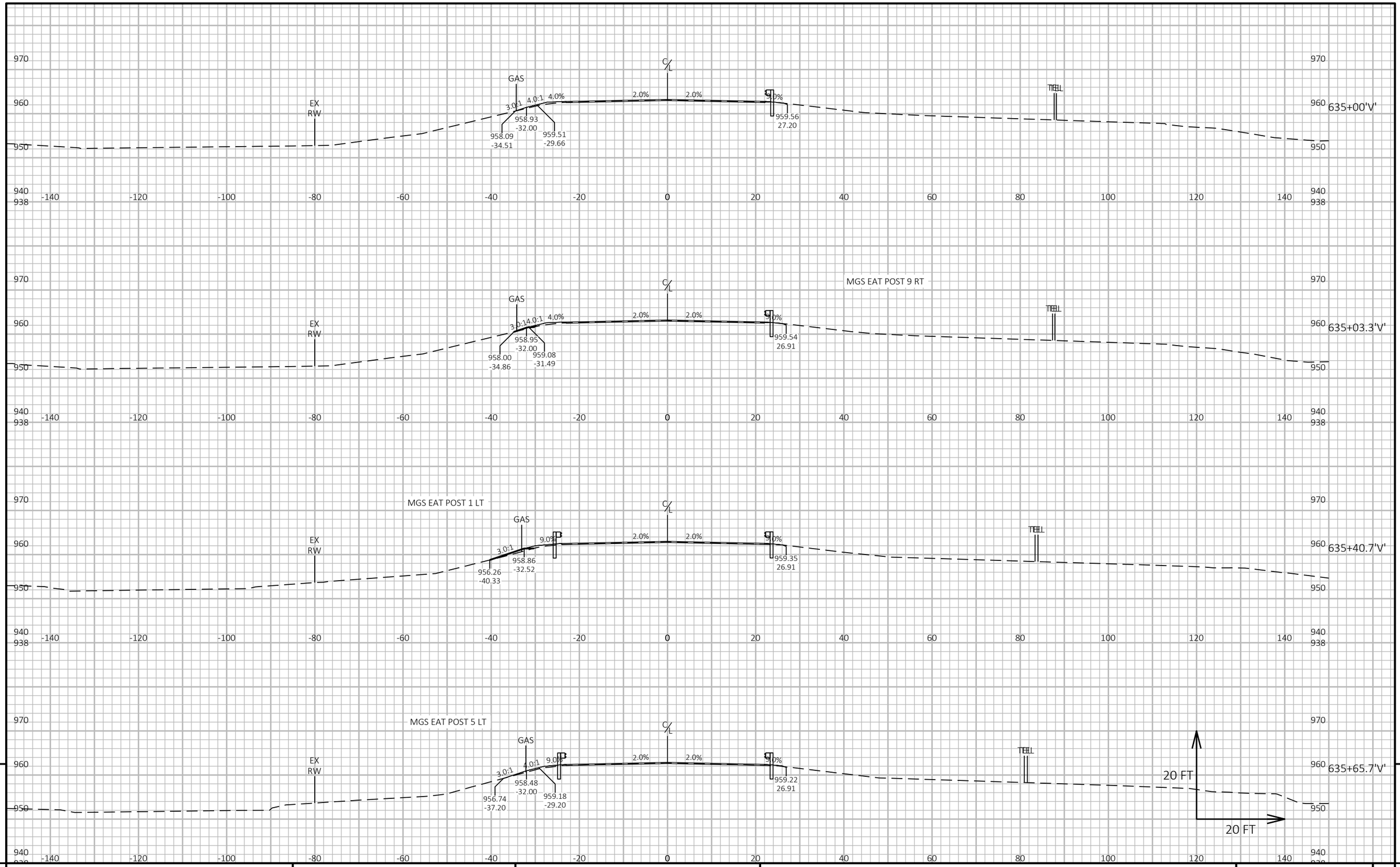
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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 375	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 49-Vernon

PLOT DATE : 7/29/2024 6:48 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

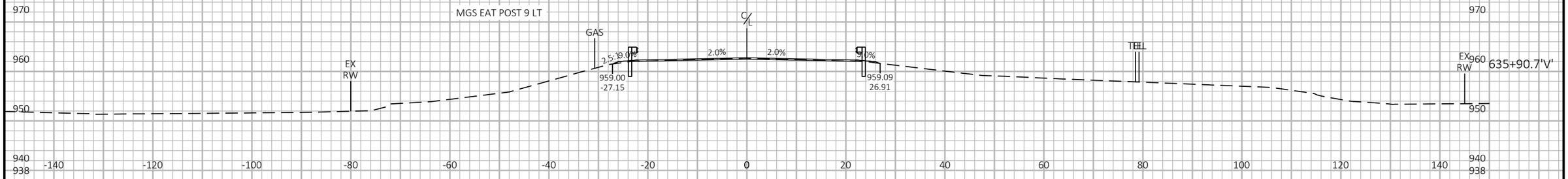
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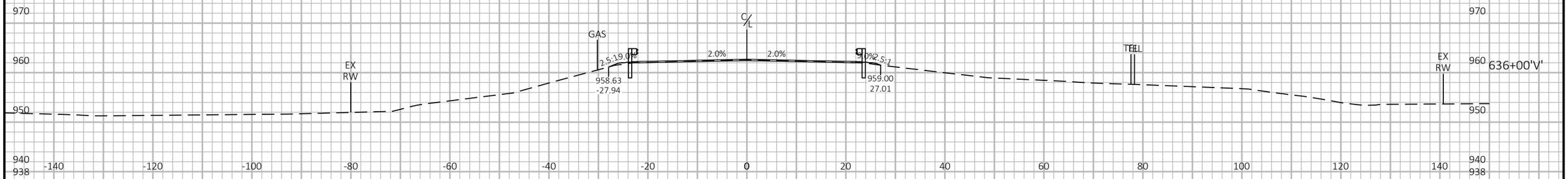
PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 376	E

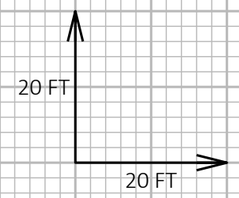
FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 50-Vernon

PLOT DATE : 7/29/2024 6:48 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

MGS EAT POST 9 LT







9

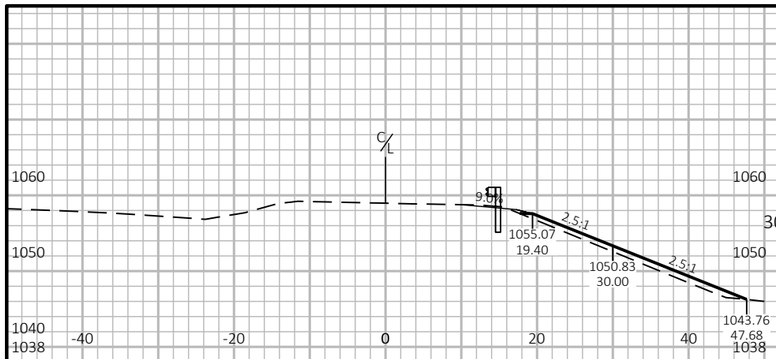
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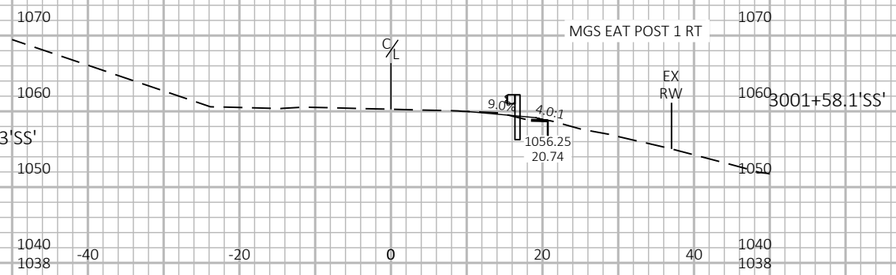
PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STH 80 - VERNON	SHEET 377	E

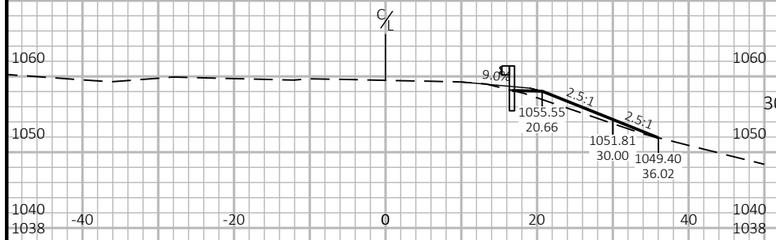
FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 51-Vernon

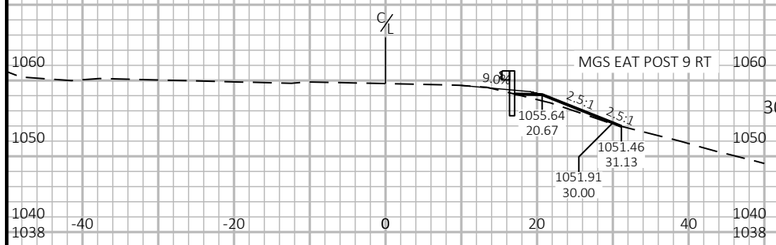
PLOT DATE : 7/29/2024 6:48 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

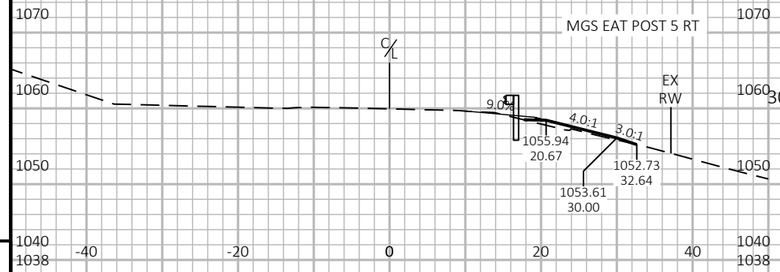
WISDOT/CADDS SHEET 49

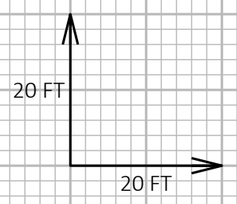












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PROJECT NO: 5040-03-70	HWY: STH 80	COUNTY: RICHLAND & VERNON	CROSS SECTIONS: STALEY SCHOOL ROAD - VERNON	SHEET 378	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\5040-03-00_STH 80_VERNON CO\500_CADD\501_C3D_2018\50400300\SHEETSPLAN\090201-XS-VERNON.DWG
LAYOUT NAME - 01-StaleySchool

PLOT DATE : 7/29/2024 6:48 AM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov