LAX

PROJECT ID: 5190-04-72

WITH: N/A

COUNTY: RICHLAND/CRAWFORD

DECEMBER 2026

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 = 100

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5190-04-72	WISC 2027068	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

BOSCOBEL - GOTHAM

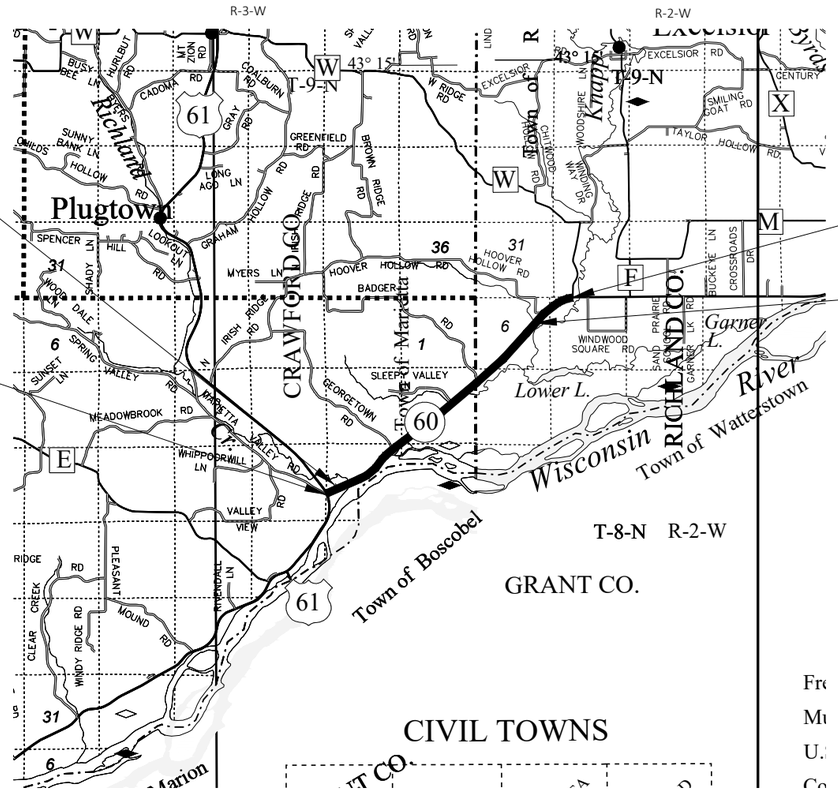
NORTH JUNCTION USH 61 TO CTH W

STH 60

CRAWFORD COUNTY

STATE PROJECT NUMBER
5190-04-72





NET EXCEPTION TO CL LENGTH
STA 15+05 - STA 16+36

BEGIN PROJECT ID 5190-04-72
STA 00+12
X = 435308.848
Y = 164644.056

END PROJECT
STA 213+43

NET EXCEPTION TO CL LENGTH
STA 187+32 - STA 188+09

DESIGN DESIGNATION

A.A.D.T.	(2027)	=	1400
A.A.D.T.	(2047)	=	1500
D.H.V.		=	
D.D.		=	
T.		=	12.5 %
DESIGN SPEED		=	60 MPH
ESALS		=	410,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

CIVIL TOWNS

LAYOUT

SCALE 0

TOTAL NET LENGTH OF CENTERLINE = 4.04 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), CRAWFORD 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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	JOHN SAVOLDELLI
Project Manager	PAUL VALENTI
Regional Examiner	SW REGION
Regional Supervisor	RANDY BYOM

APPROVED FOR THE DEPARTMENT

DATE: 07/20/2026 Paul M Valenti (Signature)

E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\010101_TI.DWG PLOT DATE : 6/26/2026 9:40 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

UTILITIES CONTACTS

BRIGHTSPEED OF WESTERN WISCONSIN, LLC
COMMUNICATION LINE
DOUG MCGOWAN
135 N BONSON ST
PLATTEVILLE, WI 53818
PHONE: 608-482-5377
EMAIL: DOUG.MCGOWAN1@BRIGHTSPEED.COM

DAIRYLAND POWER COOPERATIVE
ELECTRICITY
MICHAEL LYDON
3200 EAST AVE S
LA CROSSE, WI 54602
PHONE: 608-787-1381
EMAIL: MICHAEL.LYDON@DAIRYLANDPOWER.COM

RICHLAND ELECTRIC COOPERATIVE
ELECTRICITY
CURT BROCKWAY
30 EAST ROBB ROAD
RICHLAND CENTER, WI 53581
PHONE: 608-475-2444
EMAIL: CBROCKWAY@REC.COOP

RICHLAND GRANT TELEPHONE COOPERATIVE
COMMUNICATION LINE
JOSH LIEN
202 N EAST ST
BLUE RIVER, WI 53518
PHONE: 608-434-2796
EMAIL: JOSHL@RGTC.COOP

SCENIC RIVERS ENERGY COOPERATIVE
ELECTRICITY
CHAD OLMSTEAD
206 COUNTY RD K
LANCASTER, WI 53813
PHONE: 608-723-2121, EXT. 561
EMAIL: COLMSTEAD@SREC.NET

WISCONSIN DNR LIAISON

KAREN KALVELAGE
ENVIRONMENTAL ANALYSIS & REVIEW SPECIALIST
3550 MORMON COULEE RD
LA CROSSE, WI 54601
PHONE: 608-785-9115
EMAIL: KAREN.KALVELAGE@WISCONSIN.GOV

DESIGN PROJECT MANAGER

PAUL VALENTI
WISDOT SW REGION
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
PHONE: 608-785-9053
EMAIL: PAUL.VALENTI@DOT.WI.GOV

DESIGN PROJECT LEADER

JOHN SAVOLDELLI
WISDOT SW REGION
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
PHONE: 608-246-5310
EMAIL: JOHN.SAVOLDELLI@DOT.WI.GOV

COUNTY HIGHWAY COMMISSIONER

KYLE KOZELKA
CRAWFORD COUNTY
21515 STH 27
SENECA, WI 54654
PHONE: 608-734-9500
EMAIL: KKOZELKA@CO.CRAWFORD.WI.GOV

COUNTY HIGHWAY COMMISSIONER

JOSH ELDER
RICHLAND COUNTY
120 BOWEN CIRCLE
RICHLAND CENTER, WI 53581
PHONE: 608-647-4707
EMAIL: JOSH.ELDER@CO.RICHLAND.WI.US

GENERAL NOTES

THERE ARE UTILITY FACILITIES LOCATED WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR DIRECT A CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

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

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

APPLY TACK COAT AT A RATE OF 0.05 GAL/SY BETWEEN LAYERS OF HMA PAVEMENT.

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

THE EXACT LOCATION AND WIDTH OF DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. DRIVEWAYS SHALL BE REPLACED IN KIND.

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

PRIOR TO PLACEMENT OF BEAM GUARD THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED.

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PAVING OR PIPE LAYING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAYS SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER OPERATIONS ARE COMPLETED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

DO NOT DRIVE OR STORE EQUIPMENT, OR STORE CONSTRUCTION MATERIALS IN ENVIRONMENTALLY SENSITIVE AREAS, WETLANDS OR WATERWAYS.

2

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 STRIPTURF:	.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 SLOPETURF:			.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 = 4.29 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.01 ACRES

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

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
EROSION CONTROL
SUPERELEVATION

STANDARD ABBREVIATIONS

ABUT	ABUTMENT	LT	LEFT
AC	ACRE	LHF	LEFT HAND FORWARD
AGG	AGGREGATE	L	LENGTH OF CURVE
AH	AHEAD	LF	LINEAR FOOT
∠	ANGLE	LC	LONG CHORD OF CURVE
AADT	ANNUAL AVERAGE DAILY TRAFFIC	LS	LUMP SUM
AEW	APRON ENDWALL	MGAL	ONE THOUSAND GALLONS
ASPH	ASPHALTIC	MH	MANHOLE
BK	BACK	ML OR M/L	MATCH LINE
BC	BACK OF CURB	NOM	NOMINAL
BAD	BASE AGGREGATE DENSE	NC	NORMAL CROWN
BL OR B/L	BASE LINE	NB	NORTHBOUND
BM	BENCH MARK	NO	NUMBER
CB	CATCH BASIN	OD	OUTSIDE DIAMETER
CL OR C/L	CENTER LINE	PAVT	PAVEMENT
Δ	CENTRAL ANGLE OR DELTA	PLE	PERMANENT LIMITED EASEMENT
CE	COMMERCIAL ENTRANCE	PC	POINT OF CURVATURE
CONC	CONCRETE	PI	POINT OF INTERSECTION
CSW	CONCRETE SIDEWALK	PT	POINT OF TANGENCY
CONST	CONSTRUCTION	PCC	PORTLAND CEMENT CONCRETE
CP	CONTROL POINT	LB	POUND
CO	COUNTY	PSI	POUNDS PER SQUARE INCH
CTH	COUNTY TRUCK HIGHWAY	PE	PRIVATE ENTRANCE
CY	CUBIC YARD	PROJ	PROJECT
CP	CULVERT PIPE	PL	PROPERTY LINE
CPCA	CULVERT PIPE CORRUGATED ALUMINUM	PRW	PROPOSED RIGHT OF WAY
CPCPE	CULVERT PIPE CORRUGATED POLYETHYLENE	R	RADIUS
CPCPP	CULVERT PIPE CORRUGATED POLYPROPYLENE	RL OR R/L	REFERENCE LINE
CPCS	CULVERT PIPE CORRUGATED STEEL	REQD	REQUIRED
CPCSAC	CULVERT PIPE CORRUGATED STEEL ALUMINUM COATED	RT	RIGHT
CPCSPC	CULVERT PIPE CORRUGATED STEEL POLYMER COATED	RHF	RIGHT HAND FORWARD
CPRC	CULVERT PIPE REINFORCED CONCRETE	R/W	RIGHT OF WAY
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL	RD	ROAD
CPS	CULVERT PIPE SALVAGED	RDWY	ROADWAY
CPT	CULVERT PIPE TEMPORARY	SHLDR	SHOULDER
C & G	CURB AND GUTTER	SW	SIDEWALK
D	DEGREE OF CURVE	SB	SOUTHBOUND
DHV	DESIGN HOUR VOLUME	SPECS	SPECIFICATIONS
DIA	DIAMETER	SF	SQUARE FEET
DD	DIRECTIONAL DISTRIBUTION	SY	SQUARE YARD
DE	DRAINAGE EASEMENT	SDD	STANDARD DETAIL DRAWINGS
DWY	DRIVEWAY	STH	STATE TRUNK HIGHWAY
EA	EACH	STA	STATION
EB	EASTBOUND	SSPC	STORM SEWER PIPE COMPOSITE
EL OR ELEV	ELEVATION	SSCPE	STORM SEWER PIPE CORRUGATED POLYETHYLENE
EMB	EMBANKMENT	SSCPP	STORM SEWER PIPE CORRUGATED POLYPROPYLENE
EW	ENDWALL	SSPNRC	STORM SEWER PIPE NON-REINFORCED CONCRETE
EAT	ENERGY ABSORBING TERMINAL	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
ESALS	EQUIVALENT SINGLE AXLE LOADS	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
EXC	EXCAVATION	SSPRCHE	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
EBS	EXCAVATION BELOW SUBGRADE	SE	SUPERELEVATION
EXIST	EXISTING	SL OR S/L	SURVEY LINE
FERT	FERTILIZER	TEMP	TEMPORARY
FE	FIELD ENTRANCE	TI	TEMPORARY INTEREST
FL OR F/L	FLOW LINE	TLE	TEMPORARY LIMITED EASEMENT
FT	FOOT	TC	TOP OF CURB
FTMS	FREE TRAFFIC MANAGEMENT SYSTEM	TL OR T/L	TRANSIT LINE
HES	HIGH EARLY STRENGTH	T	TRUCKS (PERCENT OF)
HE	HIGHWAY EASEMENT	TYP	TYPICAL
CWT	HUNDRED WEIGHT	USH	UNITED STATES HIGHWAY
IN DIA	INCH DIAMETER	VAR	VARIABLE
INL	INLET	VC	VERTICAL CURVE
ID	INSIDE DIAMETER	VPC	VERTICAL POINT OF CURVATURE
INTERS	INTERSECTION	VPI	VERTICAL POINT OF INTERSECTION
IH	INTERSTATE HIGHWAY	VPT	VERTICAL POINT OF TANGENCY
INV	INVERT	W	WEST
JT	JOINT	WB	WESTBOUND

SOIL BORING SUMMARY

Boring No.	Log Mile	Offset [ft]	Existing Asphalt Depth [in]	Base Aggregate Depth [in]	Pavement Structure Depth [in]	Subgrade Type	Remarks
	0.000						Intersection of HWY 61 & 60
B-1	0.056	3L	7.50	12.50	20.00	sand/silt	
B-2	0.419	6L	8.75	10.50	19.25	sand	
B-3	0.628	9L	8.00	8.00	16.00	sand	
B-4	0.829	3R	9.25	6.00	15.25	sand	
B-5	1.052	6R	7.50	11.50	19.00	sand	
B-6	1.242	9R	5.00	14.00	19.00	sand/silt	
B-7	1.485	3L	7.75	12.50	20.25	sand/silt	
B-8	1.650	6L	7.00	10.00	17.00	sand/silt	
B-9	1.871	9L	8.50	9.00	17.50	sand	
B-10	2.065	3R	7.50	14.00	21.50	sand	
B-11	2.277	6R	7.25	11.50	18.75	sand/silt	
B-12	2.469	9R	6.50	14.00	20.50	sand/silt	
B-13	2.674	3L	7.50	13.50	21.00	sand/silt	
B-14	2.879	6L	8.75	13.00	21.75	sand/silt	
B-15	3.085	9L	8.00	10.50	18.50	sand/silt	
B-16	3.293	3R	7.75	16.00	23.75	sand/silt	
B-17	3.508	6R	6.50	11.50	18.00	sand	
B-18	3.732	9R	9.25	8.00	17.25	sand	
B-19	3.949	3L	10.50	10.00	20.50	sand	
B-20	4.193	6L	9.3	16.00	25.25	silt/sand	
	4.235						CTH W

*EXISTING ASPHALT DEPTHS MAY INCLUDE UNDERLYING RAP MATERIAL

2

MYERS LN

HOOVER HOLLOW RD

HOOVER HOLLOW RD

BADGER

IRISH RIDGE RD

RD

36

6

W

F

2

ENVIRONMENTALLY SENSITIVE SITE

END PROJECT
STA 213+43

PCMS MESSAGE:
ROADWORK
STARTING
XX/XX

MB

ENVIRONMENTALLY SENSITIVE SITE

WINDWOOD SQUARE RD

ENVIRONMENTALLY SENSITIVE SITE

61

SLEEPY VALLEY LN

ENVIRONMENTALLY SENSITIVE SITE

GEORGETOWN RD

ENVIRONMENTALLY SENSITIVE SITE

Lower L.

ENVIRONMENTALLY SENSITIVE SITE

60

ENVIRONMENTALLY SENSITIVE SITE

MARIETTA VALLEY RD

Cr.

ENVIRONMENTALLY SENSITIVE SITE

ENVIRONMENTALLY SENSITIVE SITE

WHIPPOORWILL LN

BEGIN PROJECT
STA 0+12

MB

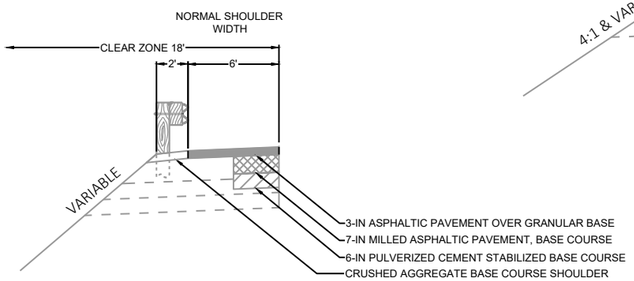
PCMS MESSAGE:
ROADWORK
STARTING
XX/XX

VALLEY RD

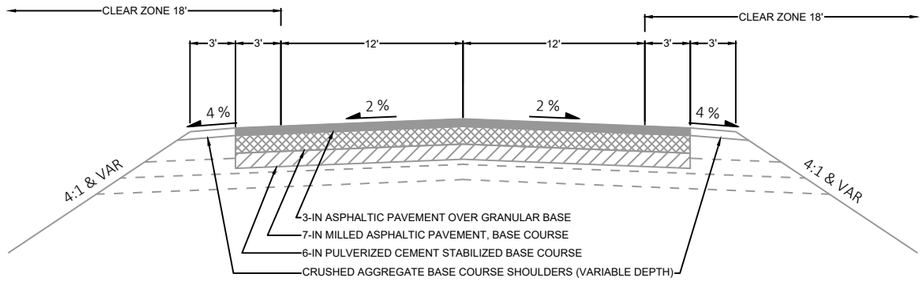
Wisconsin

PROJECT NO: 5190-04-02	HWY: STH 60	COUNTY: CRAWFORD	PROJECT OVERVIEW	SHEET 4	E

2

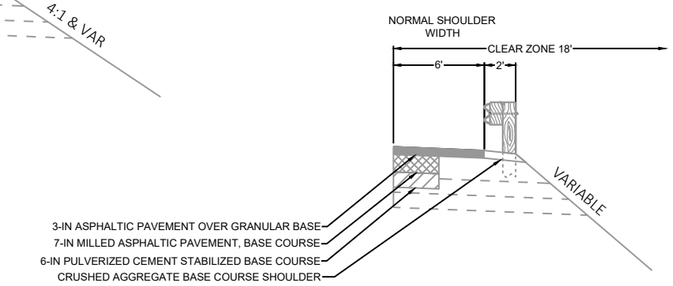


BEAMGUARD SECTION

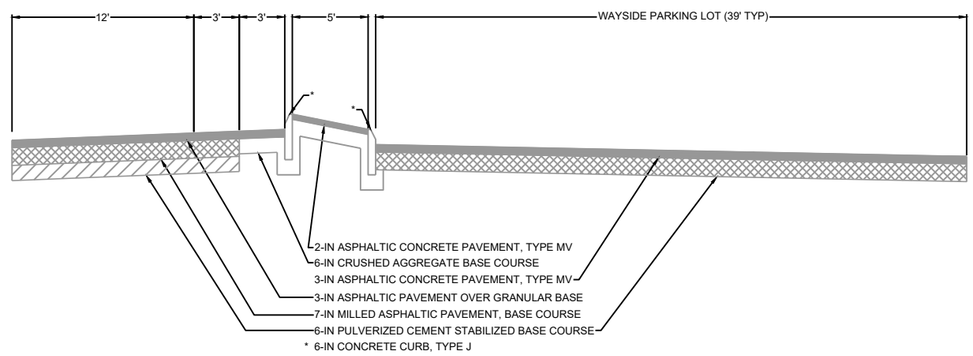


TYPICAL EXISTING SECTION STH 60

STA 00+12 - 15+05
STA 16+36 - 187+32
STA 188+09 - 220+54



BEAMGUARD SECTION

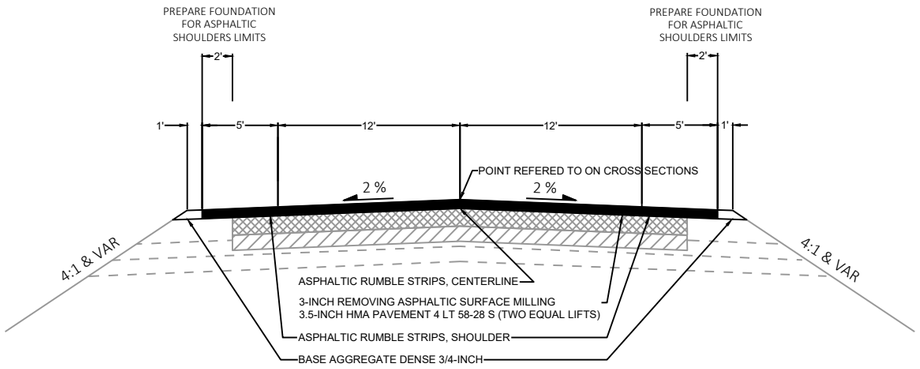


TYPICAL EXISTING SECTION WAYSIDE

STA 24+17 - 26+71

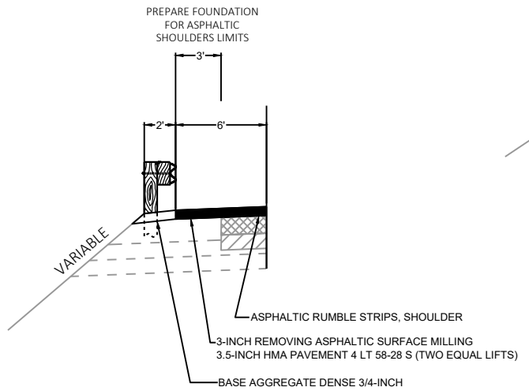
PROJECT NO: 5190-04-02	HWY: STH 60	COUNTY: CRAWFORD	TYPICAL SECTIONS	SHEET 5	E

2



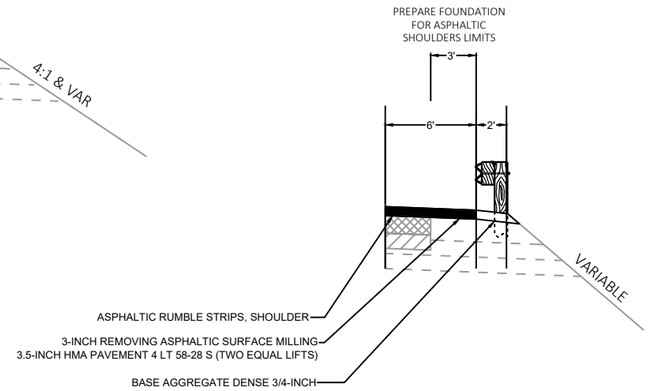
TYPICAL FINISHED SECTION STH 60

STA 00+12 - 15+05
STA 16+36 - 187+32
STA 188+09 - 220+54



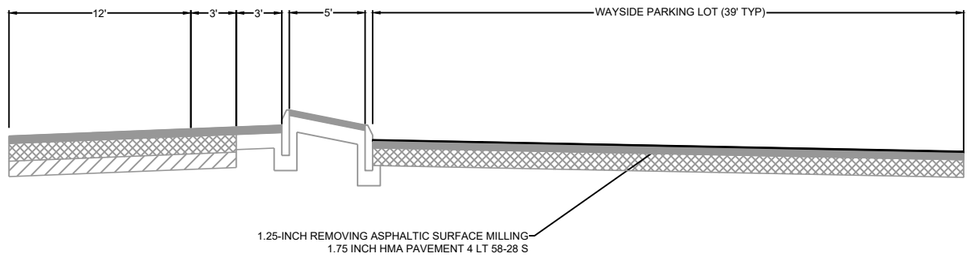
BEAMGUARD SECTION

STA 14+41 - 15+05
STA 16+36 - 19+18
STA 104+35 - 105+93
STA 133+89 - 135+99
STA 186+55 - 190+26



BEAMGUARD SECTION

STA 13+03 - 15+05
STA 16+37 - 19+27
STA 27+10 - 47+88
STA 101+87 - 105+26
STA 133+54 - 136+14
STA 185+89 - 189+61



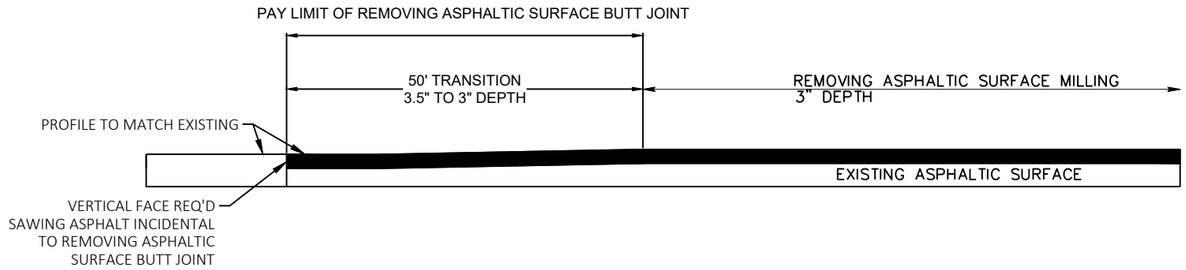
TYPICAL FINISHED SECTION WAYSIDE

STA 24+17 - 26+71

PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	TYPICAL SECTIONS	SHEET 6	E

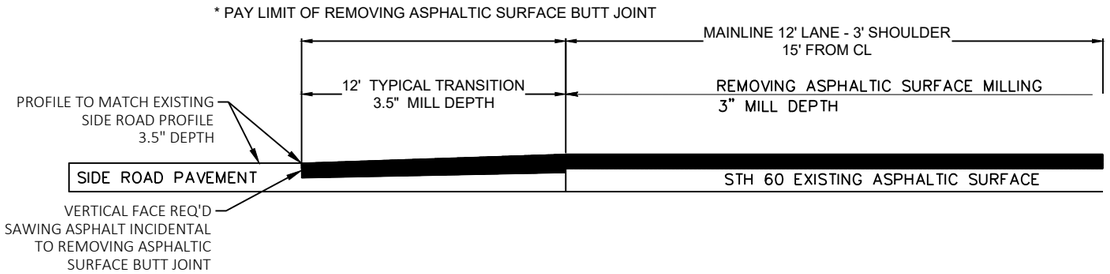
FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 02-10ft
PLOT DATE : 10/19/2026 3:06 PM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



MAINLINE PROFILE TRANSITION - REMOVING ASPHALTIC SURFACE BUTT JOINT DETAIL

STA 0+12 - STA 0+52 - BEGINNING OF PROJECT
STA 14+55 - STA 15+05 - STRUCTURE B-12-023 WEST ABUTMENT
STA 16+37 - STA 16+87 - STRUCTURE B-12-023 EAST ABUTMENT
STA 212+93 - STA 213+43 - END OF PROJECT

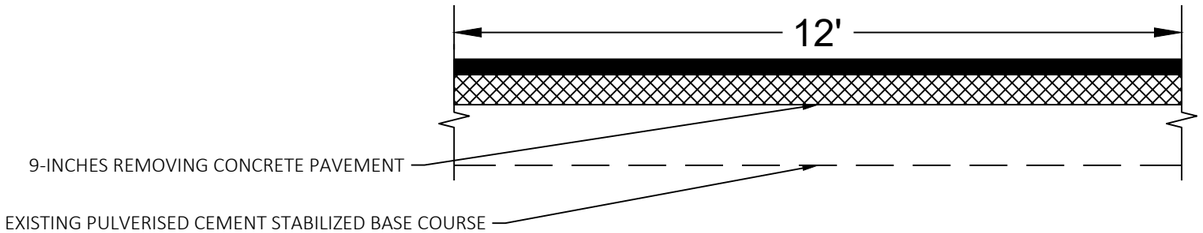


SIDE ROAD PROFILE TRANSITION DETAIL

GEORGETOWN RD
SLEEP VALLEY LN
BADGER RD
HOOVER HOLLOW RD

* LIMITS TO BE DETERMINED IN THE FIELD BY THE ENGINEER. ADJUST TRANSITION WIDTH AS NEEDED TO PROVIDE A SMOOTH PROFILE.

2

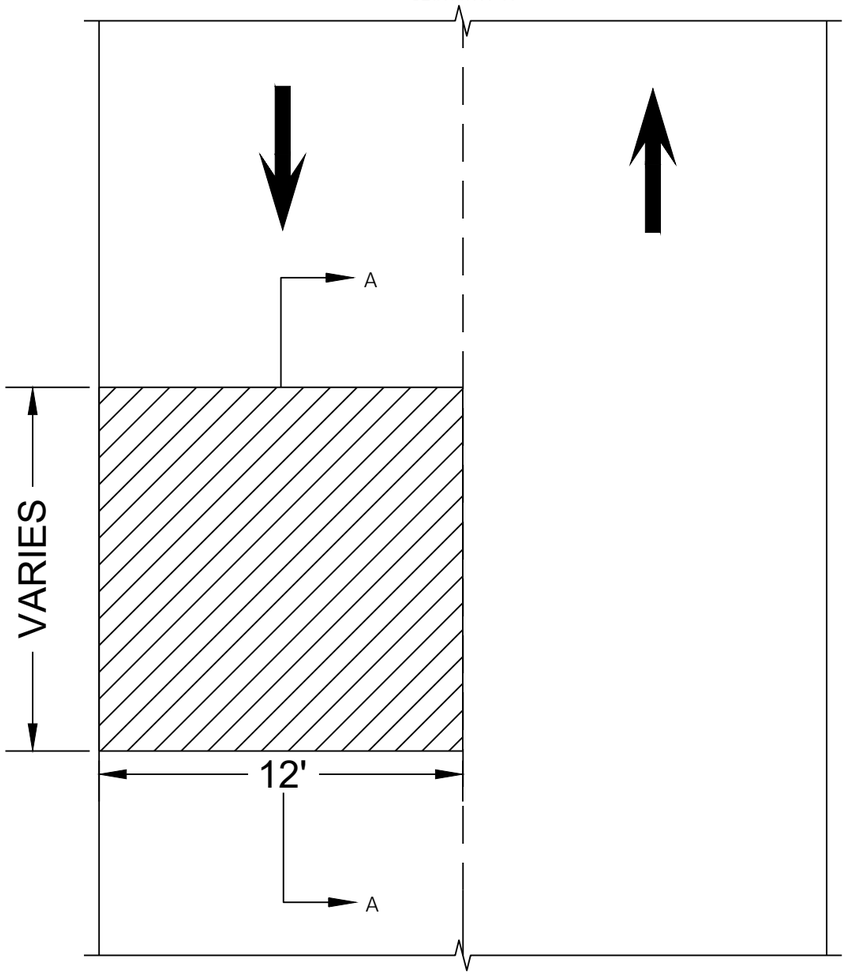


ASPHALTIC SURFACE
TEMPORARY - 3-INCH DEPTH

BASE AGGREGATE
DENSE 1 1/4-INCH

REMOVING EXISTING CONCRETE
TRANSVERSE RUMBLE STRIPS

SECTION A - A



PLAN VIEW

REMOVING CONCRETE
PAVEMENT

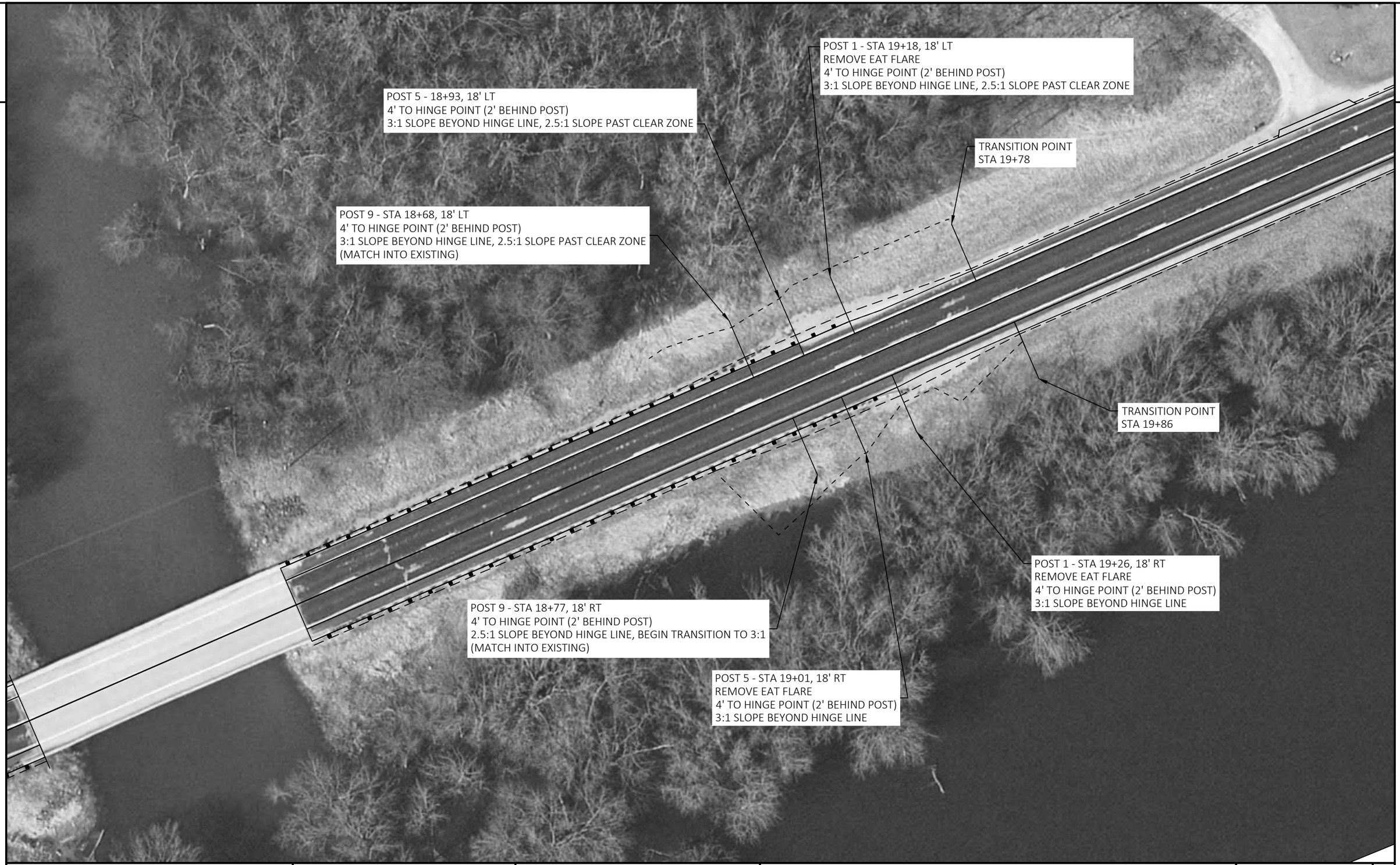
TRAVEL DIRECTION

PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CONSTRUCTION DETAILS	SHEET 8	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 021001-cd - 02
PLOT DATE : 10/19/2026 3:07 PM
PLOT BY : SAVOLDELLI, JOHN EDW
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

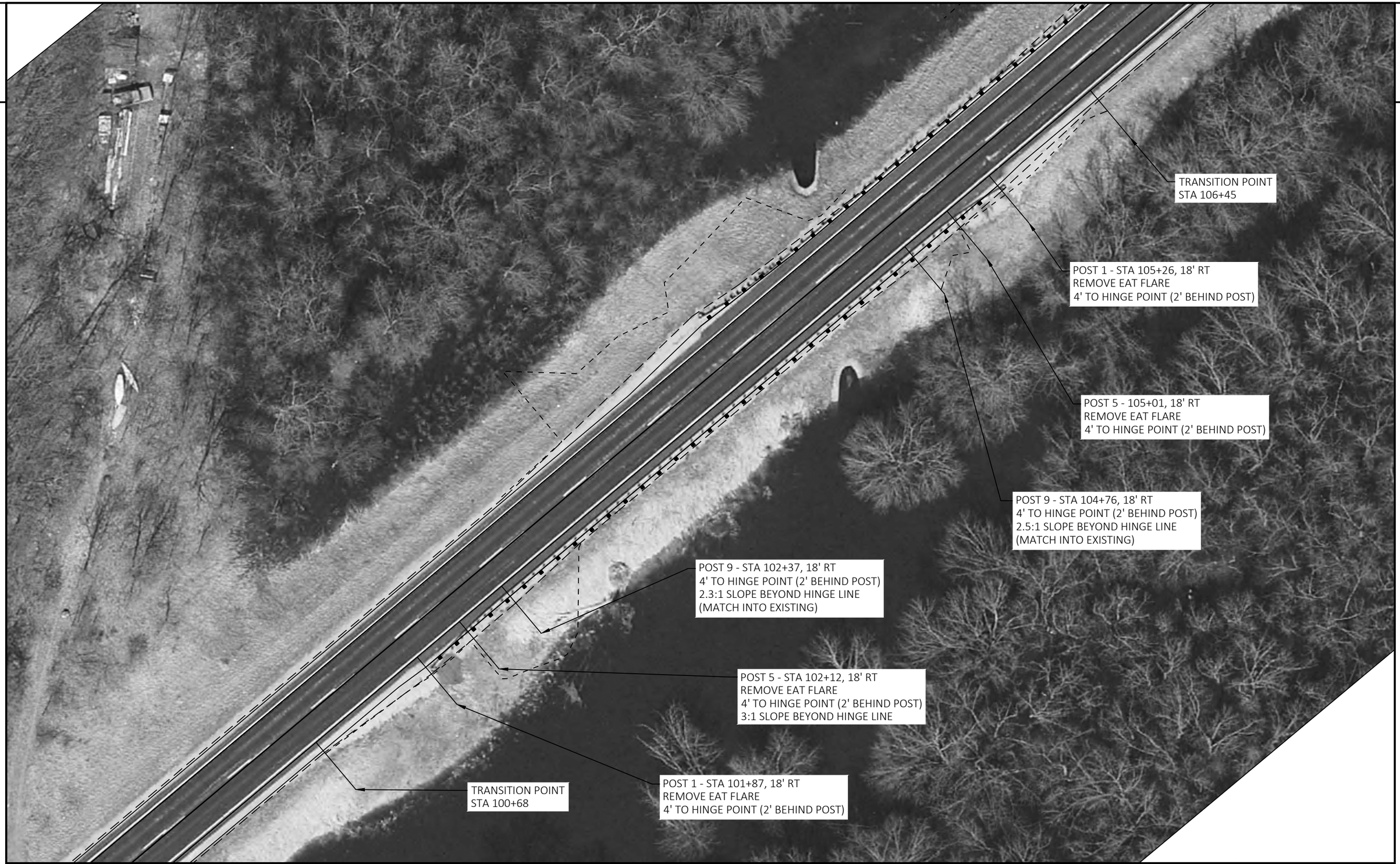
2

2



PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	GRADING DETAILS - GUARDRAIL SECTION 1	SHEET 9	E

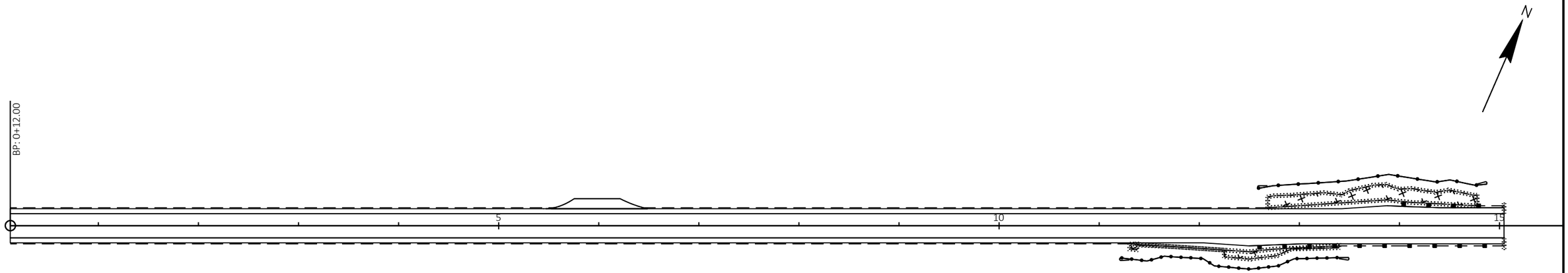
2



2

PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	GRADING DETAILS - GUARDRAIL SECTION 2	SHEET 10	E

FILE NAME : N:\PDS\C3D\51900402\DESIGN\CORRIDORS\PAVEMENTCORRIDORS\021001-CD - 03.DWG
LAYOUT NAME - 021001-cd - 04
PLOT DATE : 10/19/2026 3:07 PM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

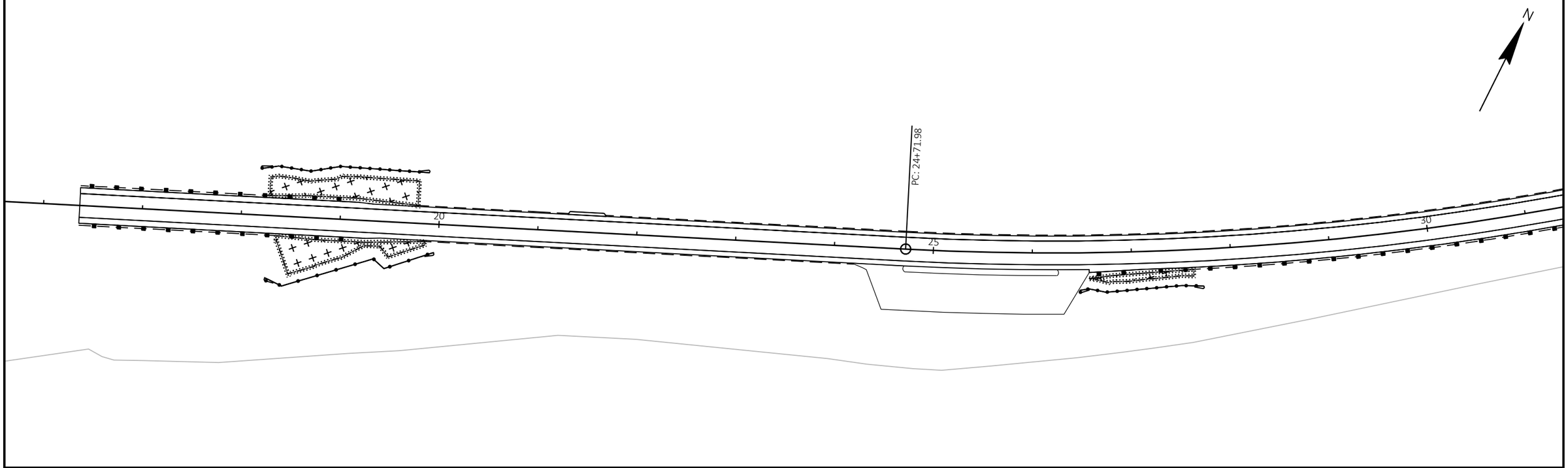


LEGEND

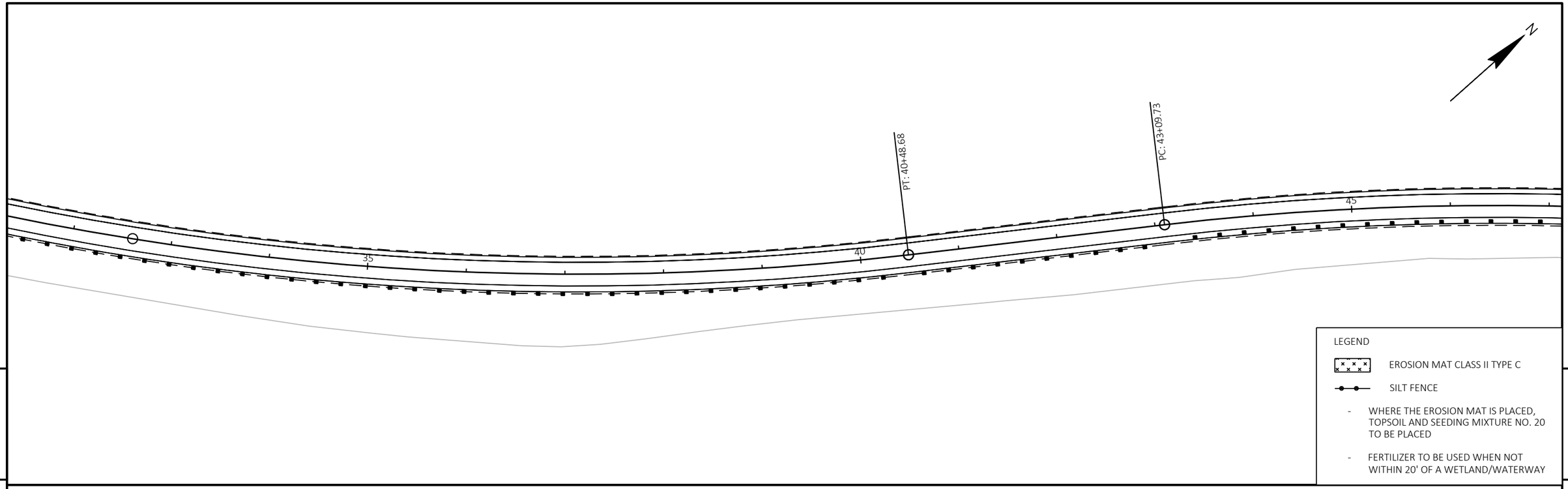
EROSION MAT CLASS II TYPE C

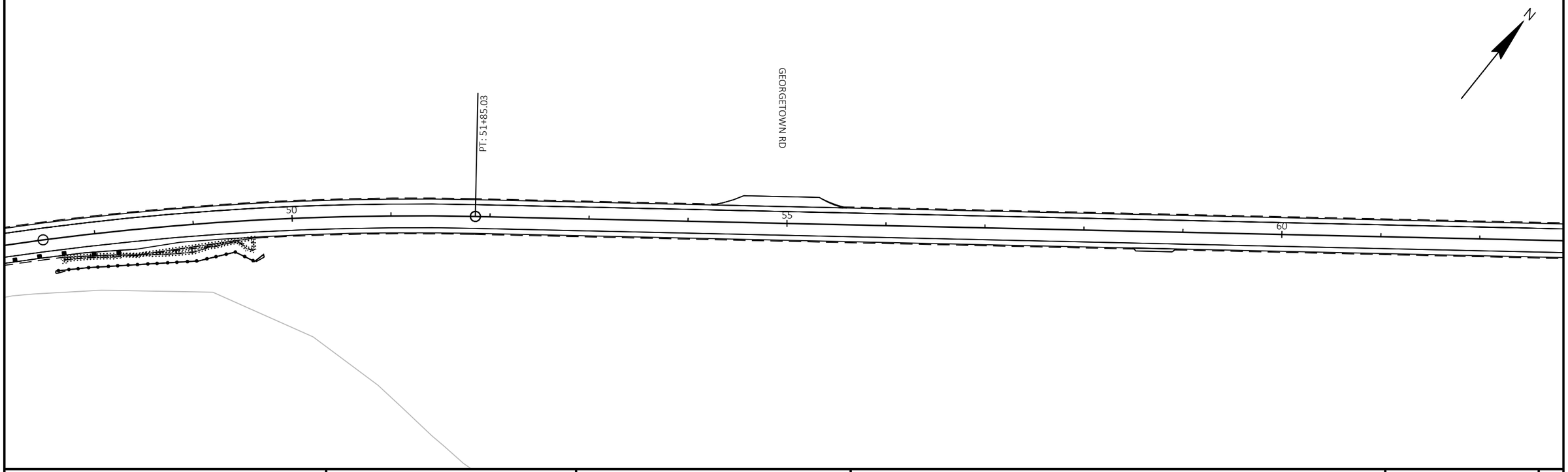
SILT FENCE

- WHERE THE EROSION MAT IS PLACED, TOPSOIL AND SEEDING MIXTURE NO. 20 TO BE PLACED
- FERTILIZER TO BE USED WHEN NOT WITHIN 20' OF A WETLAND/WATERWAY



PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	EROSION CONTROL	SHEET 11	E

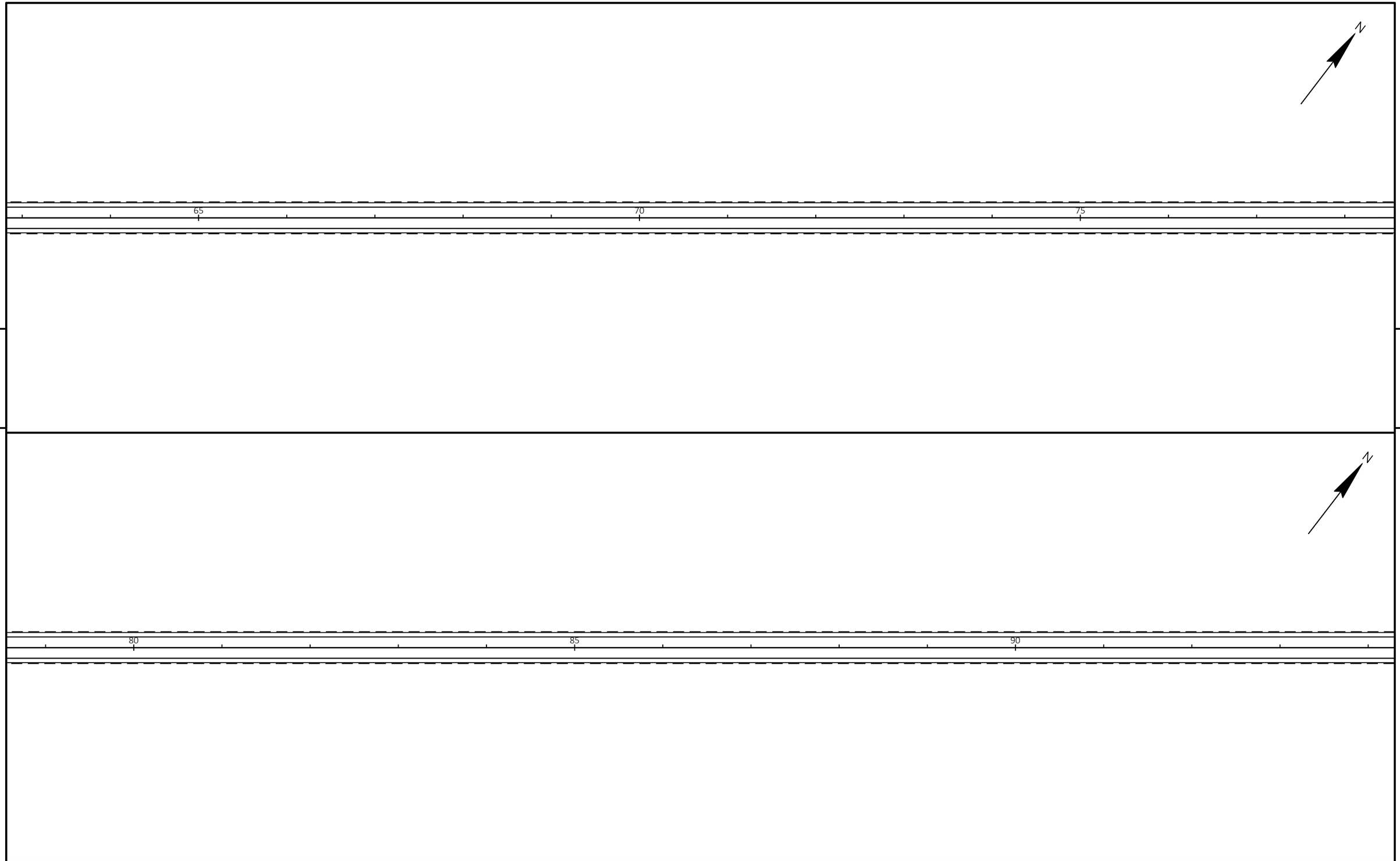




PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	EROSION CONTROL	SHEET 12	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 02

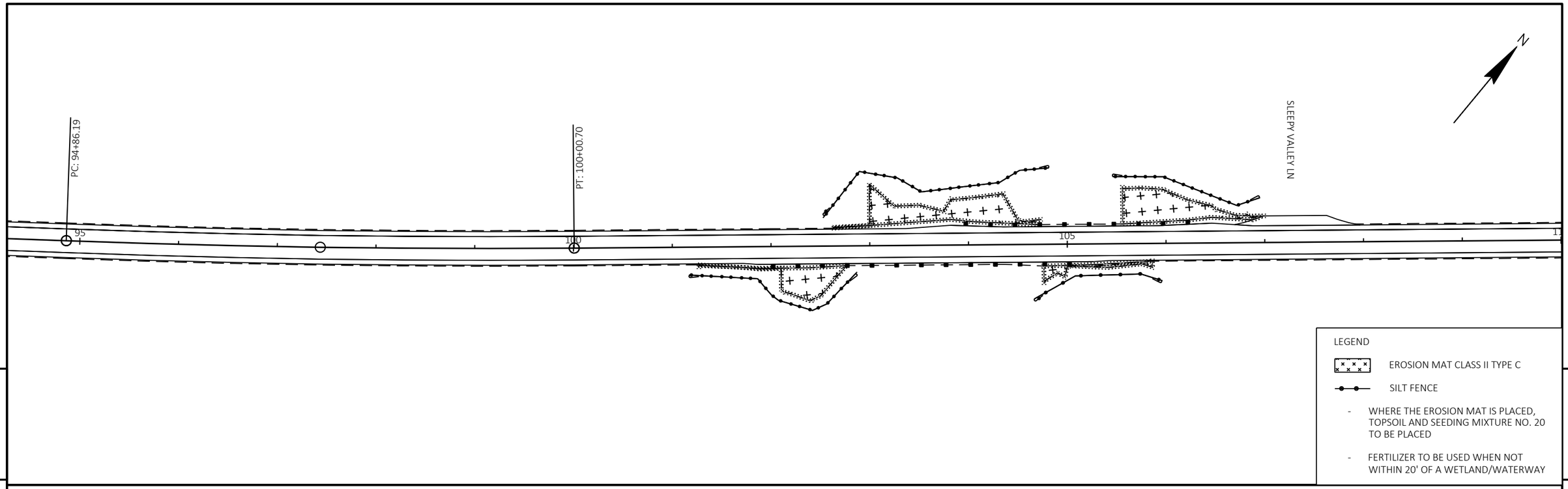
PLOT DATE : 7/20/2026 11:23 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME : PLOT SCALE : 1 IN:100 FT



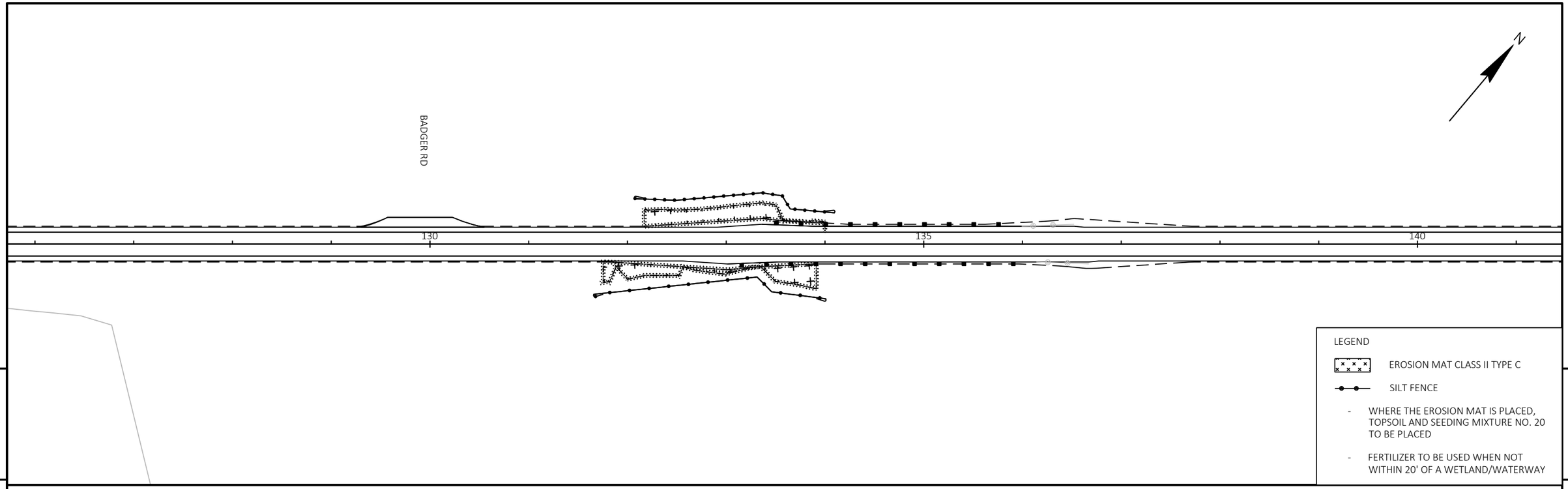
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	EROSION CONTROL	SHEET 13	E

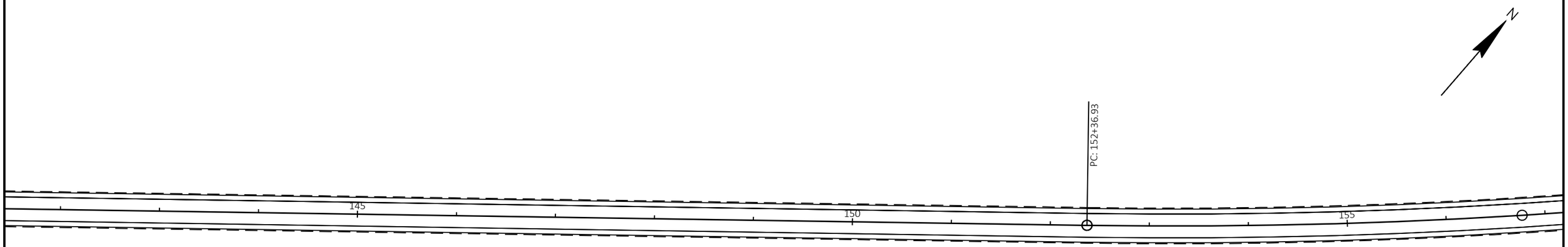
FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 03

PLOT DATE : 7/20/2026 11:23 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	EROSION CONTROL	SHEET 14	E

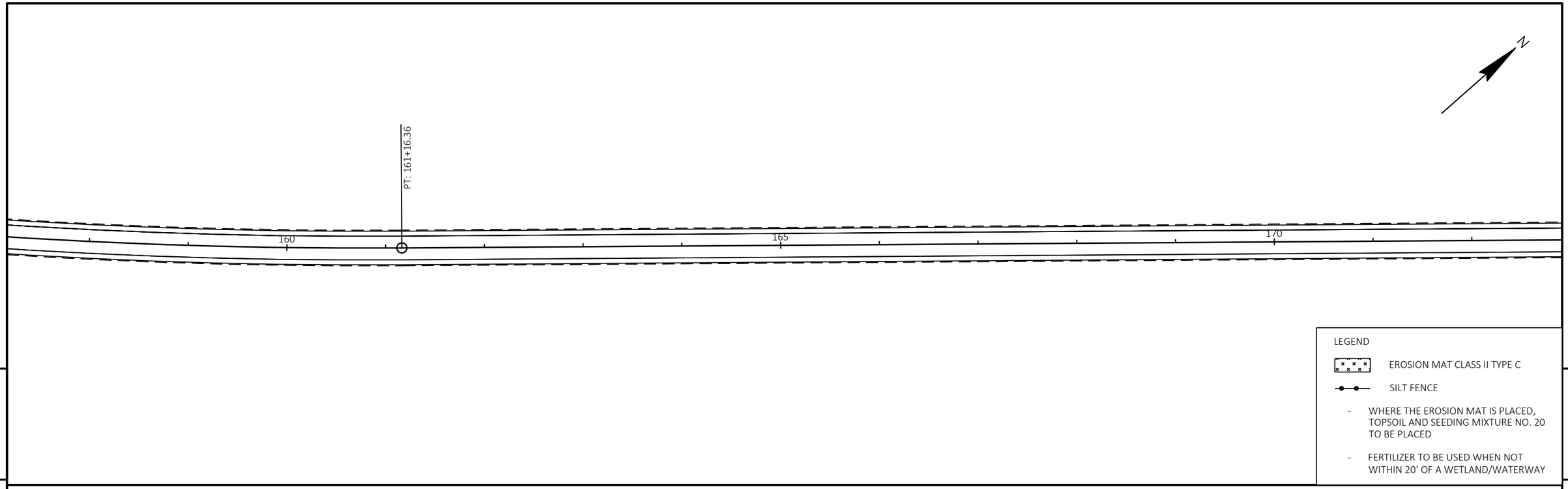




PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	EROSION CONTROL	SHEET 15	E

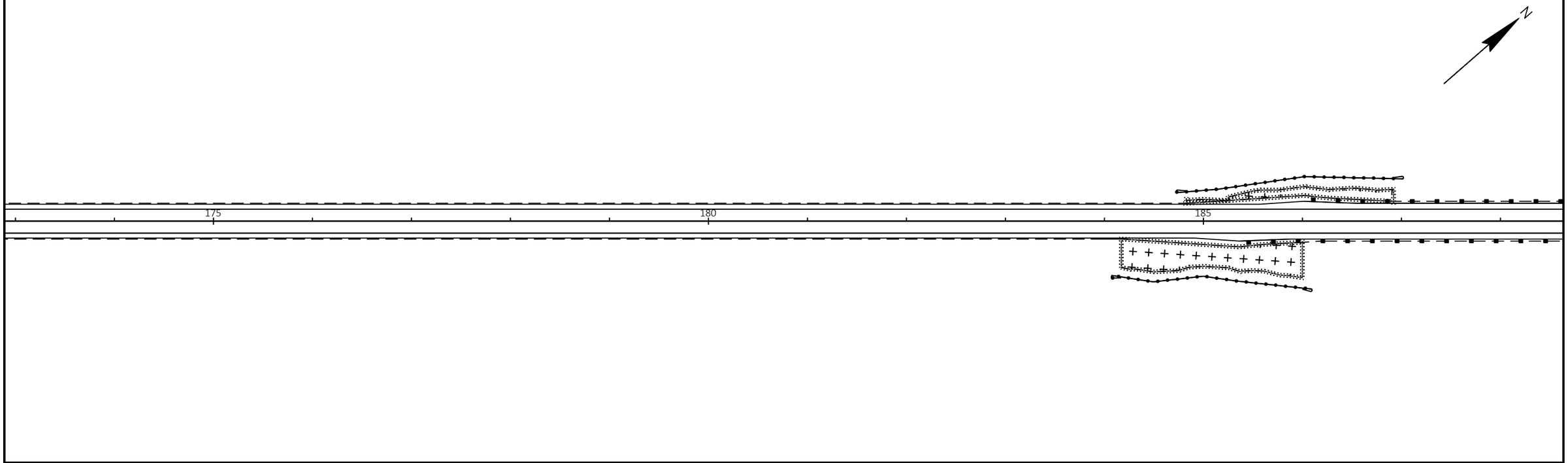
FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 05

PLOT DATE : 7/20/2026 11:23 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME : PLOT SCALE : 1 IN:100 FT

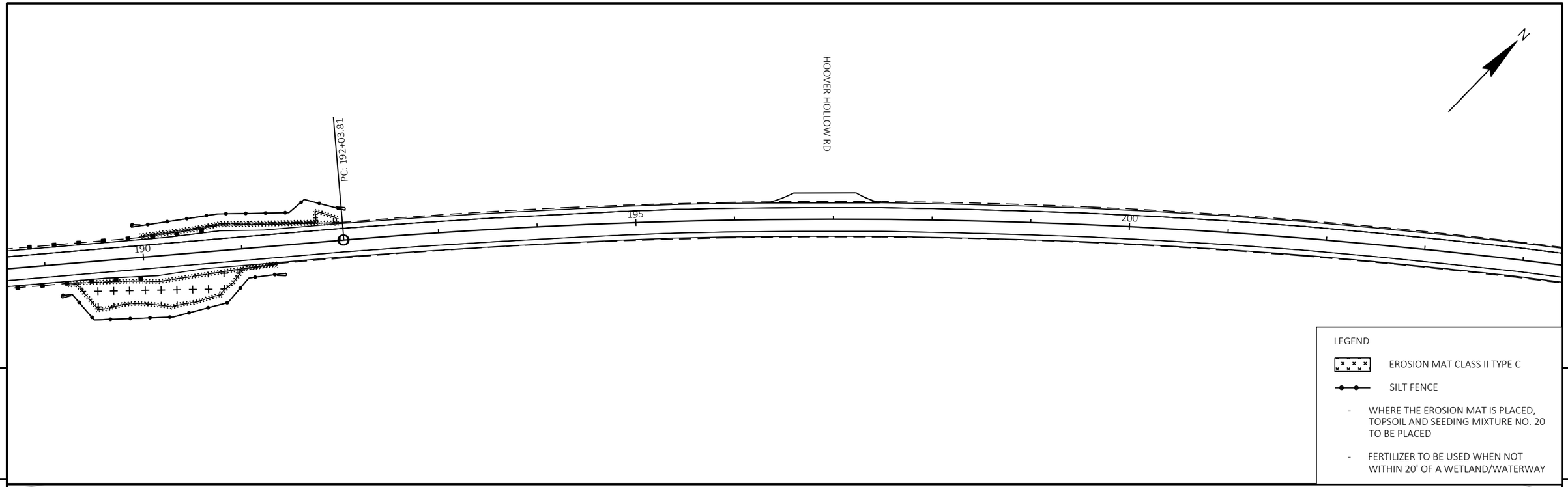


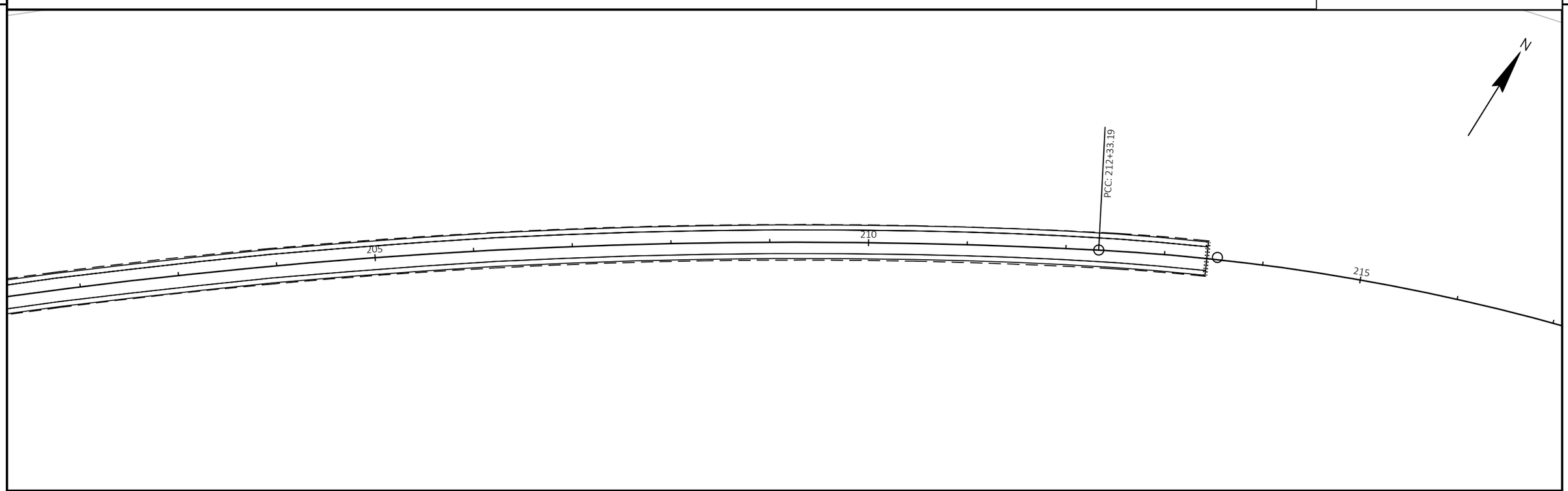
2

2



PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	EROSION CONTROL	SHEET 16	E





PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	EROSION CONTROL	SHEET 17	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 07
PLOT DATE : 7/20/2026 11:23 AM
PLOT BY : SAVOLDELLI, JOHN EDW
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

ALIGN-STH60						
SUPERELEVATION TRANSITION EVENT POINTS		RATE				NOTES
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE		
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	
PROJECT LIMITS						
BEGIN ALIGNMENT	0+12.00'	-4.00%	-2.00%	-2.00%	-4.00%	
CURVE 1						
EndNormalShoulder	23+69.31'	-4.00%	-2.00%	-2.00%	-4.00%	
EndNormalCrown	23+69.31'	-4.00%	-2.00%	-2.00%	-2.00%	
LevelCrown	24+20.65'	-4.00%	-2.00%	0.00%	0.00%	
ReverseCrown	24+71.98'	-4.00%	-2.00%	2.00%	2.00%	
BeginFullSuper	24+97.65'	-4.00%	-3.00%	3.00%	3.00%	
EndFullSuper	40+23.02'	-4.00%	-3.00%	3.00%	3.00%	
ReverseCrown	40+48.68'	-4.00%	-2.00%	2.00%	2.00%	
LevelCrown	41+00.02'	-4.00%	-2.00%	0.00%	0.00%	
BeginNormalCrown	41+51.35'	-4.00%	-2.00%	-2.00%	-2.00%	
BeginNormalShoulder	41+51.35'	-4.00%	-2.00%	-2.00%	-4.00%	
CURVE 2						
EndNormalShoulder	42+07.06'	-4.00%	-2.00%	-2.00%	-4.00%	
EndNormalCrown	42+07.06'	-2.00%	-2.00%	-2.00%	-4.00%	
LevelCrown	42+58.39'	0.00%	0.00%	-2.00%	-4.00%	
ReverseCrown	43+09.73'	2.00%	2.00%	-2.00%	-4.00%	
BeginFullSuper	43+35.39'	4.00%	4.00%	-4.00%	-4.00%	
EndFullSuper	51+59.37'	4.00%	4.00%	-4.00%	-4.00%	
ReverseCrown	51+85.03'	2.00%	2.00%	-2.00%	-4.00%	
LevelCrown	52+36.37'	0.00%	0.00%	-2.00%	-4.00%	
BeginNormalCrown	52+87.70'	-2.00%	-2.00%	-2.00%	-4.00%	
BeginNormalShoulder	52+87.70'	-4.00%	-2.00%	-2.00%	-4.00%	
CURVE 3						
EndNormalShoulder	151+49.50'	-4.00%	-2.00%	-2.00%	-4.00%	
EndNormalCrown	151+49.50'	-4.00%	-2.00%	-2.00%	-2.00%	
LevelCrown	152+00.93'	-4.00%	-2.00%	0.00%	0.00%	
ReverseCrown	152+52.35'	-4.00%	-2.00%	2.00%	2.00%	
BeginFullSuper	152+54.93'	-4.00%	-2.10%	2.10%	2.10%	
EndFullSuper	160+98.36'	-4.00%	-2.10%	2.10%	2.10%	
ReverseCrown	161+00.93'	-4.00%	-2.00%	2.00%	2.00%	
LevelCrown	161+52.36'	-4.00%	-2.00%	0.00%	0.00%	
BeginNormalCrown	162+03.79'	-4.00%	-2.00%	-2.00%	-2.00%	
BeginNormalShoulder	162+03.79'	-4.00%	-2.00%	-2.00%	-4.00%	
CURVE 4						
EndNormalShoulder	191+16.38'	-4.00%	-2.00%	-2.00%	-4.00%	
EndNormalCrown	191+16.38'	-2.00%	-2.00%	-2.00%	-4.00%	
LevelCrown	191+67.81'	0.00%	0.00%	-2.00%	-4.00%	
ReverseCrown	192+19.24'	2.00%	2.00%	-2.00%	-4.00%	
BeginFullSuper	192+21.81'	2.10%	2.10%	-2.10%	-4.00%	
PROJECT LIMITS						
END ALIGNMENT	213+43.00'	2.10%	2.10%	-2.10%	-4.00%	

Estimate Of Quantities

5190-04-72

Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Concrete Pavement	SY	100.000	100.000
0004	204.0110	Removing Asphaltic Surface	SY	703.000	703.000
0006	204.0115	Removing Asphaltic Surface Butt Joints	SY	334.000	334.000
0008	204.0120	Removing Asphaltic Surface Milling	SY	71,619.000	71,619.000
0010	204.0165	Removing Guardrail	LF	4,914.000	4,914.000
0012	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 5190-04-72	EACH	1.000	1.000
0014	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	427.000	427.000
0016	213.0100	Finishing Roadway (project) 01. 5190-04-72	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,223.000	1,223.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	34.000	34.000
0022	455.0605	Tack Coat	GAL	9,883.000	9,883.000
0024	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0026	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0028	460.2005	Incentive Density PWL HMA Pavement	DOL	11,150.000	11,150.000
0030	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	4,270.000	4,270.000
0032	460.2010	Incentive Air Voids HMA Pavement	DOL	16,080.000	16,080.000
0034	460.5224	HMA Pavement 4 LT 58-28 S	TON	16,039.000	16,039.000
0036	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	19.000	19.000
0038	465.0125	Asphaltic Surface Temporary	TON	17.000	17.000
0040	465.0520	Asphaltic Rumble Strips, Shoulder	LF	40,272.000	40,272.000
0042	465.0560	Asphaltic Rumble Strips, Centerline	LF	18,742.000	18,742.000
0044	465.0580	Asphaltic Rumble Strips, Transverse	SY	78.000	78.000
0046	509.1500	Concrete Surface Repair	SF	47.000	47.000
0048	517.3001.S	Structure Overcoating Cleaning and Priming (structure) 01. B-12-23	EACH	1.000	1.000
0050	517.4001.S	Containment and Collection of Waste Materials (structure) 01. B-12-23	EACH	1.000	1.000
0052	517.6001.S	Portable Decontamination Facility	EACH	1.000	1.000
0054	614.0010	Barrier System Grading Shaping Finishing	EACH	16.000	16.000
0056	614.2330	MGS Guardrail 3 K	LF	3,907.000	3,907.000
0058	614.2500	MGS Thrie Beam Transition	LF	160.000	160.000
0060	614.2610	MGS Guardrail Terminal EAT	EACH	16.000	16.000
0062	618.0100	Maintenance and Repair of Haul Roads (project) 01. 5190-04-72	EACH	1.000	1.000
0064	619.1000	Mobilization	EACH	1.000	1.000
0066	624.0100	Water	MGAL	33.000	33.000
0068	628.1504	Silt Fence	LF	3,282.000	3,282.000
0070	628.1520	Silt Fence Maintenance	LF	3,282.000	3,282.000
0072	628.1905	Mobilizations Erosion Control	EACH	8.000	8.000
0074	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0076	634.0612	Posts Wood 4x6-Inch x 12-FT	EACH	4.000	4.000
0078	634.0616	Posts Wood 4x6-Inch x 16-FT	EACH	3.000	3.000
0080	638.2102	Moving Signs Type II	EACH	7.000	7.000
0082	642.5001	Field Office Type B	EACH	1.000	1.000
0084	643.0900	Traffic Control Signs	DAY	1,037.000	1,037.000
0086	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0088	643.3165	Temporary Marking Line Paint 6-Inch	LF	42,662.000	42,662.000
0090	643.5000	Traffic Control	EACH	1.000	1.000
0092	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	62,653.000	62,653.000
0094	650.8000	Construction Staking Resurfacing Reference	LF	21,331.000	21,331.000
0096	650.9911	Construction Staking Supplemental Control (project) 01. 5190-04-72	EACH	1.000	1.000
0098	680.0100	Public Land Survey Monument Verify and Reset	EACH	1.000	1.000

Estimate Of Quantities

5190-04-72

Line	Item	Item Description	Unit	Total	Qty
0100	690.0150	Sawing Asphalt	LF	350.000	350.000
0102	740.0440	Incentive IRI Ride	DOL	8,080.000	8,080.000
0104	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 15+05	EACH	1.000	1.000
0106	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 02. 187+32	EACH	1.000	1.000
0108	999.2100.S	Installing and Maintaining Climbing Turtle Exclusion Fence	LF	3,644.000	3,644.000
0110	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,200.000	1,200.000
0112	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	600.000	600.000
0114	SPV.0060	Special 01. Strapping B-52-31	EACH	1.000	1.000
0116	SPV.0090	Special 01. Painting Beam Guard	LF	3,054.000	3,054.000

3

BASE AGGREGATE

CATEGORY	STATION	TO	STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL	REMARKS
0010	0+12	-	13+00	RT		35.0		1.0	
0010	0+12	-	14+37	LT		38.0		1.0	
0010	13+00	-	15+05	RT		8.0		1.0	
0010	14+37	-	15+05	LT		3.0		1.0	
0010	16+37	-	20+11	RT		13.0		1.0	
0010	16+37		20+03	LT		13.0		1.0	
0010	20+03		102+63	LT		206.0		4.0	
0010	20+11		26+57	RT		19.0		1.0	
0010	26+57		49+85	RT		99.0		2.0	
0010	49+85		101+27	RT		127.0		2.0	
0010	101+27		105+86	RT		17.0		1.0	
0010	102+63		106+71	LT		15.0		1.0	
0010	105+86		131+57	RT		66.0		1.0	
0010	106+71		131+92	LT		79.0		2.0	
0010	131+57		133+76	RT		6.0		1.0	
0010	131+92		134+11	LT		6.0		1.0	
0010	134+11		184+58	LT		136.0		3.0	
0010	133+76		183+92	RT		136.0		3.0	
0010	184+58		192+23	LT		48.0		1.0	
0010	183+92		191+33	RT		26.0		1.0	
0010	191+33		213+43	RT		58.0		1.0	
0010	192+23		213+43	LT		69.0		2.0	
		UNDISTRIBUTED					34		
				TOTAL 0010	0	1,223	34	33	
0040	0+12		213+43	RT/LT	427				
				TOTAL 0040	427	0	0	0	

ASPHALT PAVING

CATEGORY	STATION	TO	STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	211.0101.01 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) (01. 5190-04-72) EACH	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	REMARKS
0010	0+12	-	213+43			334	56,531		6,784	11,080		17	MAINLINE
0010	0+12	-	213+43	RT			7,067		848	1,386			SHOULDER - RT
0010	0+12	-	213+43	LT			7,067		848	1,385			SHOULDER - LT
0010	24+14	-	27+10				954		115	94			WAYSIDE
0010	5+25		6+64	LT	100				9	15			
0010	21+29		21+68	LT	22				2		3		
0010	54+10		55+69	LT	146				14	23	8		GEORGETOWN RD
0010	58+46		58+96	RT	52				5		8		PE
0010	106+59		108+03	LT	127				12	21			SLEEPY VALLEY LN
0010	129+08	-	130+67	LT	132				12	20			BADGER RD
0010	196+21	-	197+58	LT	124				12	19			HOOVER HOLLOW RD
0010		PROJECT						1					
				TOTAL 0010	703	334	71,619	1	8,661	14,043	19	17	
0040	129+08	-	130+67	RT					627	1,025			SHOULDER - RT
0040	196+21	-	197+58	LT					595	971			SHOULDER - LT
				TOTAL 0040	0	0	0	0	1,222	1,996	0	0	
				PROJECT TOTAL	703	334	71619	1	9883	16039	19	17	

3

ASPHALTIC RUMBLE STRIPS

CATEGORY	STATION	TO	STATION	LOCATION	204.0100 REMOVING CONCRETE PAVEMENT SY	465.0520 ASPHALTIC RUMBLE STRIPS, SHOULDER LF	465.0560 ASPHALTIC RUMBLE STRIPS, CENTERLINE LF	465.0580 ASPHALTIC RUMBLE STRIPS, TRANSVERSE SY	REMARKS
0010	0+12	-	4+99	CL			487		
0010	6+99	-	14+80	CL			781		
0010	16+62	-	23+42	CL			680		
0010	27+48	-	52+94	CL			2546		
0010	56+94	-	105+31	CL			4837		
0010	109+31	-	127+90	CL			1859		
0010	131+90	-	135+74	CL			384		
0010	137+74		194+91	CL			5717		
0010	198+92	-	213+43	CL			1451		
0010	3+04	-	3+24	LT	27			26	See Plan Sheet for Asphaltic Rumble Strip Location
0010	8+16	-	8+41	LT	33			26	" "
0010	13+32	-	13+62	LT	40			26	" "
				TOTAL 0010	100	0	18,742	78	
0040	0+62	-	23+17	RT		2,073			
0040	0+62	-	5+28	LT		466			
0040	6+74	-	21+02	LT		1,246			
0040	21+96		53+74	LT		3,175			
0040	27+21		58+24	RT		3,105			
0040	56+60		106+23	LT		4,962			
0040	59+19		213+43	RT		15,422			
0040	108+97		128+80	LT		1,984			
0040	131+54		136+29	LT		475			
0040	137+19		195+37	LT		5,863			
0040	198+46		213+43	LT		1,501			
				TOTAL 0040	0	40,272	0	0	
				PROJECT TOTAL	100	40272	18742	78	

PWL SUMMARY

CATEGORY	STATION	TO	STATION	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	REMARKS
0010		-			1	2	
0010		-					
0010		-					
0010		-					
0010		-					
0010		-					
				TOTAL 0010	1	2	

3

BARRIER SYSTEM GRADING

					614.0010		FOR INFORMATIONAL PURPOSES ONLY							
CATEGORY	STATION	TO	STATION	LOCATION	BARRIER SYSTEM GRADING SHAPING FINISHING EACH	REMARKS	CONSTRUCTION STAKING SLOPE STAKES LF	BORROW CY	TOPSOIL SY	EROSION MAT CLASS II TYPE C SY	FERTILIZER TYPE A CWT	SEEDING MIXTURE NO. 20 LB	SEEDING TEMPORARY LB	SEED WATER MGAL
0010	11+20	-	14+10	RT	1		155	16	116	116	0.1	0.4	3.1	16.00
0010	12+58	-	15+10	LT	1		158	91	314	314	0.2	1.1	8.5	44.00
0010	18+25	-	21+10	RT	1		95	467	771	771	0.5	2.8	20.8	108.00
0010	17+90	-	21+10	LT	1		100	112	656	656	0.4	2.4	17.7	92.00
0010	26+47	-	28+09	RT	1		57	6	99	99	0.1	0.4	2.7	14.00
0010	48+05	-	50+10	RT	1		109	32	103	103		0.4	2.8	15.00
0010	101+16	-	103+10	RT	1		97	93	185	185		0.7	5.0	26.00
0010	102+90	-	104+82	LT	1		207	87	585	585	0.4	2.1	15.8	82.00
0010	104+66	-	107+10	RT	1		103	10	449	449		1.6	12.1	63.00
0010	106+11	-	106+95	LT	1		108	114	91	91	0.1	0.3	2.4	13.00
0010	131+65	-	134+01	RT	1		176	48	232	232	0.1	0.8	6.3	33.00
0010	132+07	-	134+10	LT	1		163	64	231	231	0.1	0.8	6.2	32.00
0010	184+07	-	185+71	RT	1		196	274	418	418	0.3	1.5	11.3	59.00
0010	184+73	-	187+02	LT	1		157	30	173	173	0.1	0.6	4.7	24.00
0010	189+13	-	191+42	RT	1		176	155	414	414	0.3	1.5	11.2	58.00
0010	190+33	-	192+07	LT	1		164	2	37	37	0.0	0.1	1.0	5.00
				TOTAL 0010	16		2221	1601	4877	4877	3	18	132	684

GUARDRAIL

					204.0165	614.2330	614.2500	614.2610	SPV.0090.01	
CATEGORY	STATION	TO	STATION	LOCATION	REMOVING GUARDRAIL LF	MGS GUARDRAIL 3 K LF	MGS THRIE BEAM TRANSITION LF	MGS GUARDRAIL TERMINAL EAT EACH	SPECIAL (01. PAINTING BEAM GUARD) LF	REMARKS
0010	13+88		15+05	RT	118	25	40	1	25	B-12-023
0010	13+77	-	15+05	LT	128	35	40	1		
0010	18+00		19+27	RT	127	34	40	1	34	
0010	18+00		19+18	LT	118	25	40	1		
0010	26+58	-	48+41	RT	2183	2,077		2	2,077	
0010	101+87	-	105+26	RT	339	233		2	233	C-12-020
0010	103+82	-	106+47	LT	265	159		2		
0010	133+01		136+67	RT	366	313		1	313	C-52-023
0010	133+36		136+52	LT	316	263		1		
0010	185+36		190+14	RT	478	372		2	372	B-52-031
0010	186+02		190+79	LT	477	371		2		
				TOTAL 0010	4,914	3,907	160	16	3,054	

3

EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	REMARKS
0010	11+20	-	14+10	RT	234	234			B-12-023
0010	12+58	-	15+10	LT	232	232			B-12-023
0010	18+25	-	21+10	RT	184	184			
0010	17+90		21+10	LT	171	171			
0010	26+47		28+09	RT	127	127			
0010	48+05		50+10	RT	217	217			
0010	101+16		103+10	RT	196	196			C-12-020
0010	102+90		104+82	LT	260	260			C-12-020
0010	104+66		107+10	RT	137	137			
0010	106+11		106+95	LT	156	156			
0010	131+65		134+01	RT	244	244			C-52-023
0010	132+07		134+10	LT	211	211			C-52-023
0010	184+07		185+71	RT	205	205			B-52-031
0010	184+73	-	187+02	LT	230	230			B-52-031
0010	189+13		191+42	RT	253	253			
0010	190+33		192+07	LT	225	225			
0010		PROJECT					8	4	
				UNDISTRIBUTED					
				TOTAL 0010	3,282	3,282	8	4	

PERMANENT SIGNING

CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN CODE		634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH	REMARKS
0010	1-01M	14+99	LT	W5-52-L	BRIDGE HASH MARKS	1		1	
0010	1-02M	14+99	RT	W5-52-R	BRIDGE HASH MARKS	1		1	
0010	1-03M	16+46	LT	W5-52-R	BRIDGE HASH MARKS	1		1	
0010	1-04M	16+46	RT	W5-52-L	BRIDGE HASH MARKS	1		1	
0010	1-05M	17+99	LT	W14-3	NO PASSING ZONE		1	1	
0010	4-01M	106+49	LT	W8-14	FALLEN ROCKS		1	1	
0010	6-01M	187+41	LT	W14-3	NO PASSING ZONE		1	1	
					TOTAL 0010	4	3	7	

TRAFFIC CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.5000 TRAFFIC CONTROL EACH	REMARKS
0010		-						
0010	0+12	-	213+43	PROJECT	1,037	14	1	
0010		-						
				TOTAL 0010	1,037	14	1	

PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	LOCATION	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH WHITE SOLID LF	YELLOW SKIPS (3') LF	SOLID & YELLOW SKIPS (3') LF	DOUBLE YELLOW LF	REMARKS
0010	0+12	-	11+57			2,209		1,431		
0010	11+57	-	17+88			631	158			
0010	17+88	-	27+28			1,780		1,175		
0010	27+28	-	65+61			7,572			7,666	
0010	65+61	-	76+62			1,101		1,376		
0010	76+62	-	148+45			14,186	1,796			
0010	148+45	-	157+32			1,774		1,109		
0010	157+32	-	164+87			1,510			1,510	
0010	164+87	-	175+85			2,196		1,373		
0010	175+85	-	187+40			2,310	289			
0010	187+40	-	198+39			2,111		1,374		
0010	198+39	-	213+43			3,008			3,008	
	0+12	-	213+43	PROJECT	42,662					
				SUBTOTAL		40,388	2,243	7,838	12,184	
				TOTAL 0010	42,662			62,653		

CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 5190-04-72) EACH	REMARKS
0010	0+12	-	213+43	PROJECT	21,331	1	
0010		-					
0010		-					
0010		-					
0010		-					
0010		-					
				TOTAL 0010	21,331	1	

SAWING ASPHALT

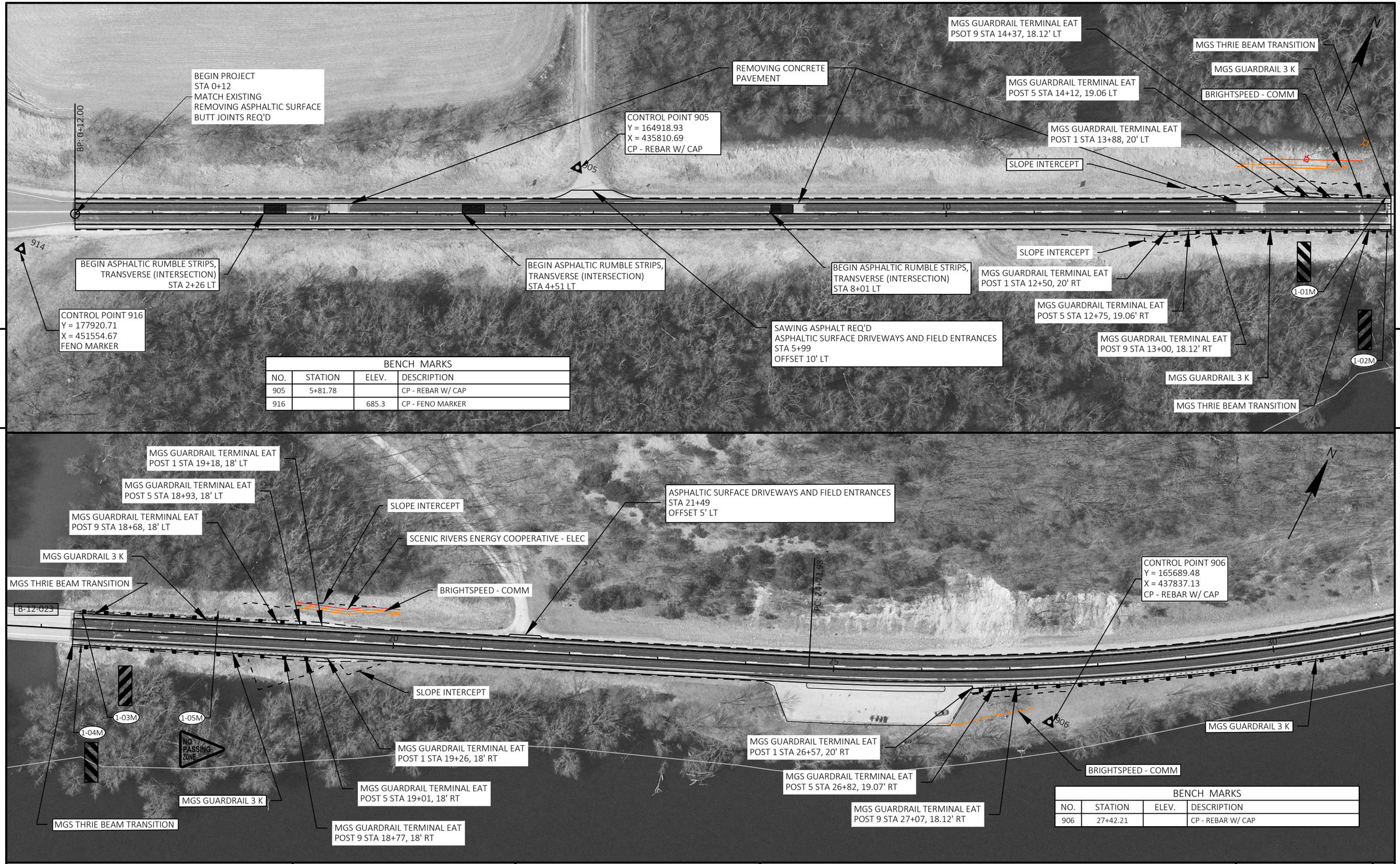
CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	REMARKS
0010	5+75	-	6+22	LT	47	
0010	54+56	-	55+32	LT	76	
0010	58+53	-	58+87	RT	34	
0010	106+99	-	107+63	LT	64	
0010	129+57	-	130+23	LT	66	
0010	196+60	-	197+23	LT	63	
				TOTAL 0010	350	

999.2100.S

CATEGORY	STATION	TO	STATION	LOCATION	999.2000.S.01 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (01. 15+05) EACH	999.2000.S.02 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION) (02. 187+32) EACH	999.2100.S INSTALLING AND MAINTAINING CLIMBING TURTLE EXCLUSION FENCE LF	REMARKS
0010	11+20	-	14+10	RT			257	
0010	12+58	-	15+10	LT			254	
0010	18+25	-	21+10	RT			206	
0010	17+90	-	21+10	LT			194	
0010	26+47	-	28+09	RT			150	
0010	48+05	-	50+10	RT			239	
0010	101+16	-	103+10	RT			218	
0010	102+90	-	104+82	LT			281	
0010	104+66	-	107+10	RT			160	
0010	106+11	-	106+95	LT			179	
0010	131+65	-	134+01	RT			267	
0010	132+07	-	134+10	LT			234	
0010	184+07	-	185+71	RT			227	
0010	184+73	-	187+02	LT			254	
0010	189+13	-	191+42	RT			277	
0010	190+33	-	192+07	LT			247	
					1	1		
				TOTAL 0010	1	1	3,644	

PWL MIXTURE USE TABLE

Location	Station	Mixture Use:	Underlying Surface	Bid Item	Tons	Thickness	Quality Management Program to be used for:	
							Mixture Acceptance	*Density Acceptance*
12 foot Driving Lane	0+12 - 15+05 16+37 - 213+43	Upper Layer	4 LT 58-28S	4 LT 58-28S	5,575	1 ¾ "	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
12 foot Driving Lane	0+12 - 15+05 16+37 - 213+43	Lower Layer	Existing Base Aggregate Dense	4 LT 58-28S	5,574	1 ¾ "	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
5 foot shoulder	0+12 - 15+05 16+37 - 213+43	Upper Layer	4 LT 58-28S	4 LT 58-28S	2,323	1 ¾ "	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive
5 foot shoulder	0+12 - 15+05 16+37 - 213+43	Lower Layer	Existing Base Aggregate Dense	4 LT 58-28S	2,323	1 ¾ "	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive
Side Roads	0+12 - 213+43	Upper Layer	4 LT 58-28S	4 LT 58-28S	48	1 ¾ "	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive
Side Roads	0+12 - 213+43	Lower Layer	Varies	4 LT 58-28S	48	1 ¾ "	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the department; Not eligible for incentive



BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
905	5+81.78		CP - REBAR W/ CAP
916		685.3	CP - FENO MARKER

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
906	27+42.21		CP - REBAR W/ CAP

PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	PLAN	SHEET 27	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 01

PLOT DATE : 10/19/2026 3:09 PM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

PI STA = 32+80.84
Y = 165945.160
X = 438307.584
DELTA = 31°31'14" RT
D = 1°59'57"
T = 808.85'
L = 1576.70'
R = 2866.00'
PC STA = 24+71.98
PT STA = 40+48.68

MGS GUARDRAIL 3 K

PT: 40+48.68

PC: 43+09.73

PI STA = 47+50.82
Y = 167182.846
X = 439174.311
DELTA = 17°30'17" RT
D = 1°59'59"
T = 441.09'
L = 875.30'
R = 2865.00'
PC STA = 43+09.73
PT STA = 51+85.03

MGS GUARDRAIL 3 K

PT: 51+85.03

41120
STA. 52+88, LT
ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

41120
STA. 54+04, LT
ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

GEORGETOWN RD

SAWING ASPHALT REQ'D
HMA PAVEMENT 4 LT 58-28 S
STA 54+94
OFFSET 10' LT

BRIGHTSPEED - COMM

SLOPE INTERCEPT

MGS GUARDRAIL TERMINAL EAT
POST 1 STA 48+41, 20' RT

MGS GUARDRAIL TERMINAL EAT
POST 5 STA 48+16, 19.18' RT

MGS GUARDRAIL TERMINAL EAT
POST 9 STA 47+90, 18.14' RT

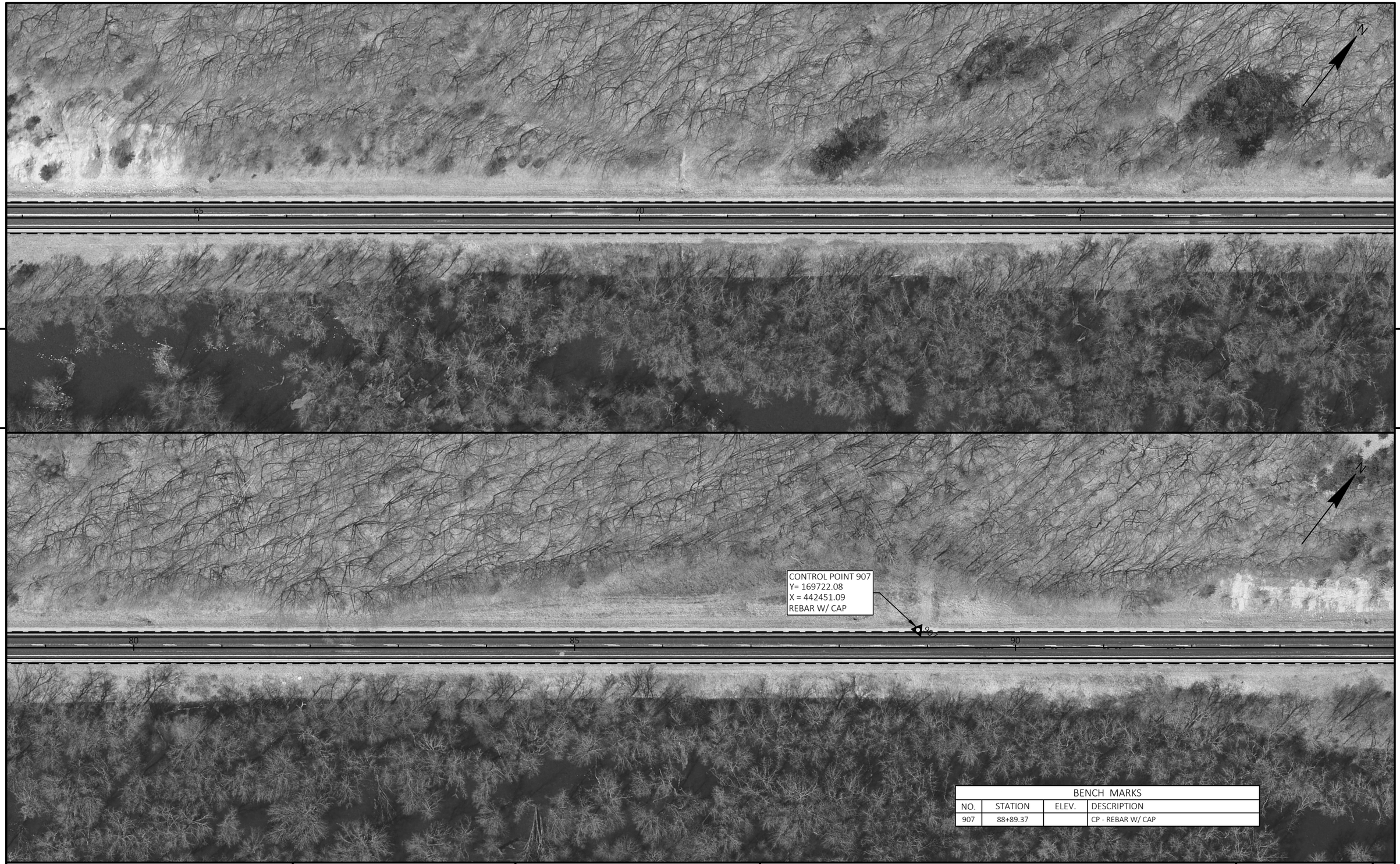
40977
STA 58+70, RT
ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
SAWING ASPHALT REQ'D

PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	PLAN	SHEET 28	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 02

PLOT DATE : 10/19/2026 3:09 PM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



5

5

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
907	88+89.37		CP - REBAR W/ CAP

PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	PLAN	SHEET 29	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 03

PLOT DATE : 10/19/2026 3:09 PM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME : PLOT SCALE : 1 IN:100 FT



5 5

PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	PLAN	SHEET 30	E



5 5

PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	PLAN	SHEET 31	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 05

PLOT DATE : 10/19/2026 3:09 PM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
908	160+22.09		CP - REBAR W/ CAP

PT 161+16.36

160 165 170

908

CONTROL POINT 908
Y = 174292.64
X = 447925.51
REBAR W/ CAP

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
910	187+82.70		CP - REBAR W/ CAP
911	181+65.78		CP - REBAR W/ CAP
912	186+49.68		CP - REBAR W/ CAP
915	184+00.37	670.3	CP - FENO MARKER

MGS GUARDRAIL TERMINAL EAT
POST 9 STA 186+52, 18.12' LT

MGS GUARDRAIL TERMINAL EAT
POST 5 STA 186+27, 19.06' LT

MGS GUARDRAIL TERMINAL EAT
POST 1 STA 186+02, 20' LT

NO PASSING ZONE

6-01M

CONTROL POINT 915
Y = 176116.51
X = 449453.20
FENO MARKER

SLOPE INTERCEPT

CONTROL POINT 910
Y = 176399.80
X = 449710.05
REBAR W/ CAP

175 180 185

915

910

912

911

STA. 181+48, 18' RT
EXISTING F.E. (B.A.D.)
TO REMAIN

CONTROL POINT 911
Y = 175903.06
X = 449340.95
REBAR W/ CAP

B-52-031

MGS GUARDRAIL 3 K

SLOPE INTERCEPT

MGS GUARDRAIL TERMINAL EAT
POST 1 STA 185+36, 20' RT

MGS GUARDRAIL TERMINAL EAT
POST 5 STA 185+61, 19.06' RT

MGS GUARDRAIL TERMINAL EAT
POST 9 STA 185+86, 18.12' RT

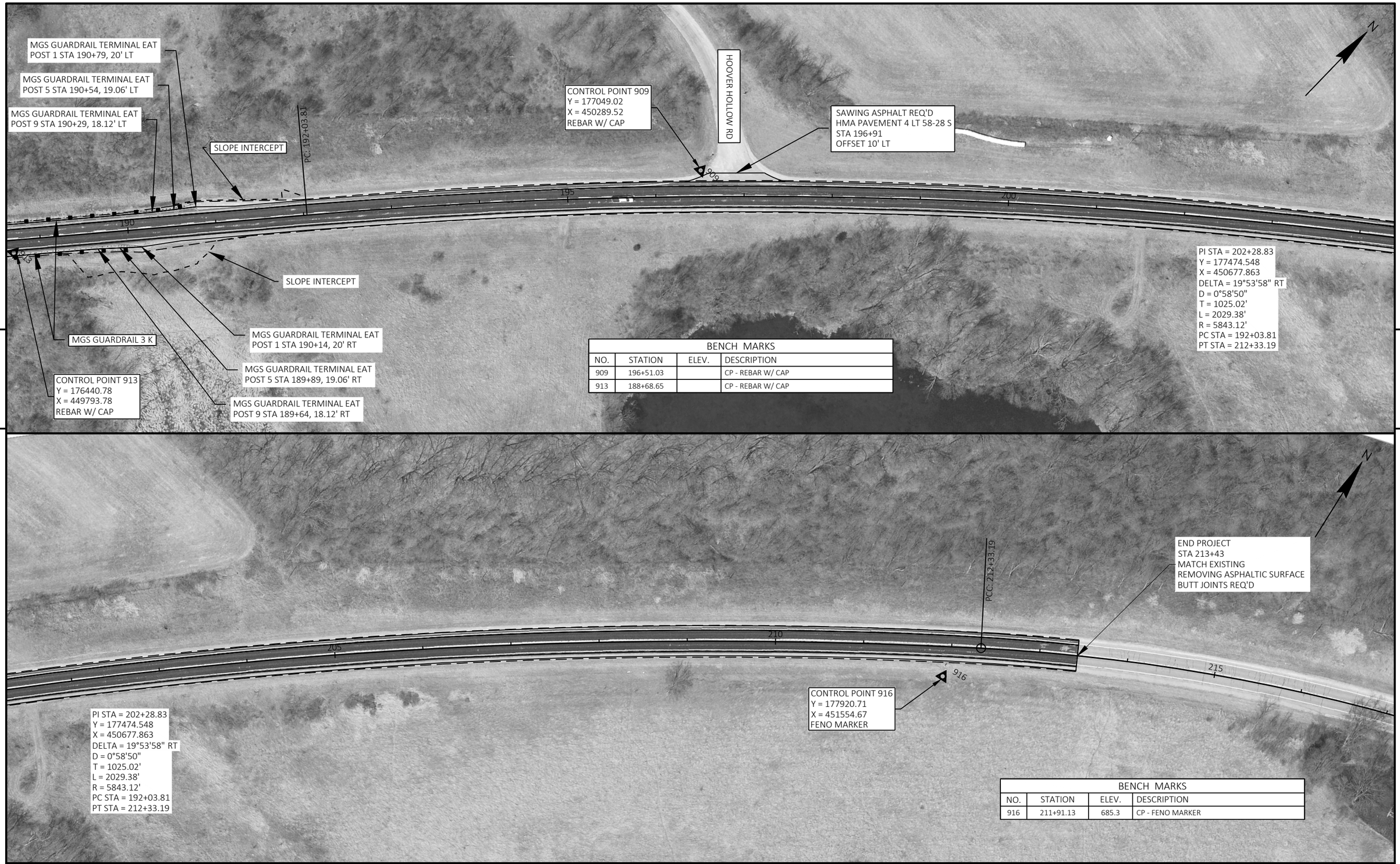
CONTROL POINT 912
Y = 176275.75
X = 449649.86
REBAR W/ CAP

PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	PLAN	SHEET 32	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 06

PLOT DATE : 10/19/2026 3:09 PM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



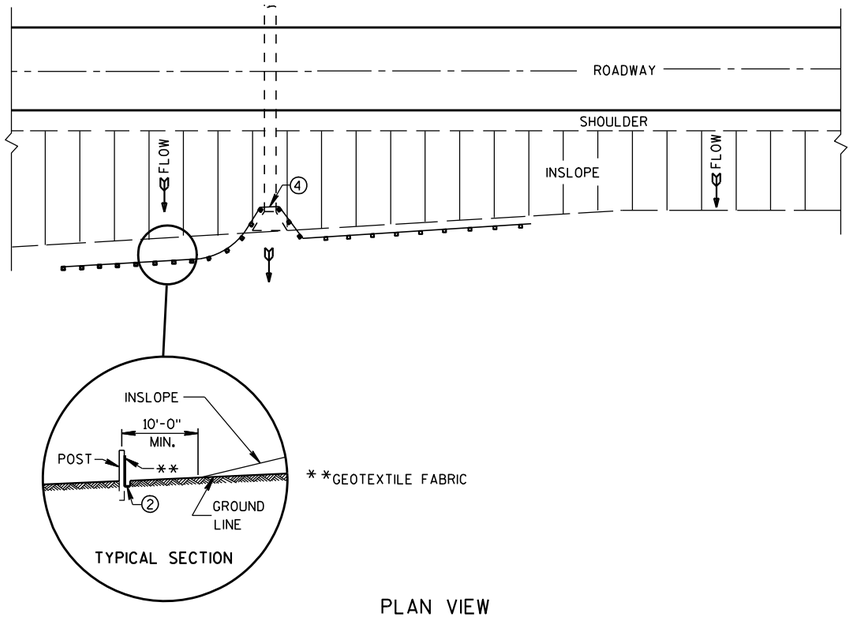
5 5

PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	PLAN	SHEET 33	E

Standard Detail Drawing List

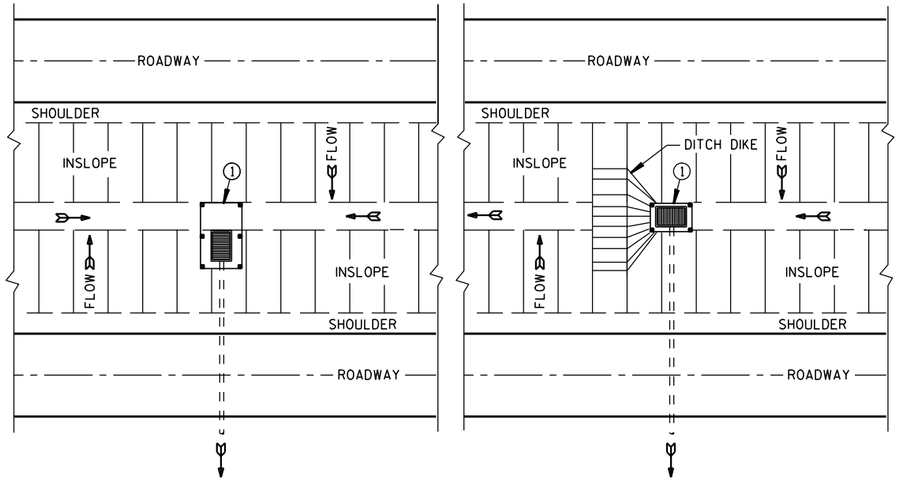
08E09-06	SILT FENCE
09A14-01	DRIVEWAYS WITHOUT CURB AND GUTTER
09A15-01	DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL
13A08-02	TRANSVERSE RUMBLE STRIPS, ASPHALTIC
13A10-03A	SHOULDER RUMBLE STRIPS ASPHALT
13A10-03G	SHOULDER AND EDGE LINE RUMBLE STRIPS - CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS
13A10-03H	SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13C19-03	HMA LONGITUDINAL JOINTS
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)
14D01-01	TURTLE EXCLUSION FENCE CLIMBING TURTLE
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-24A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-24B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C11-11B	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
15C19-11A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

6



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



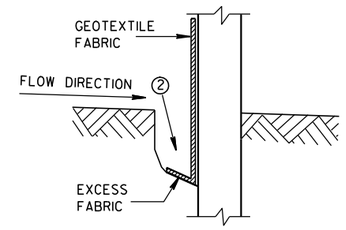
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

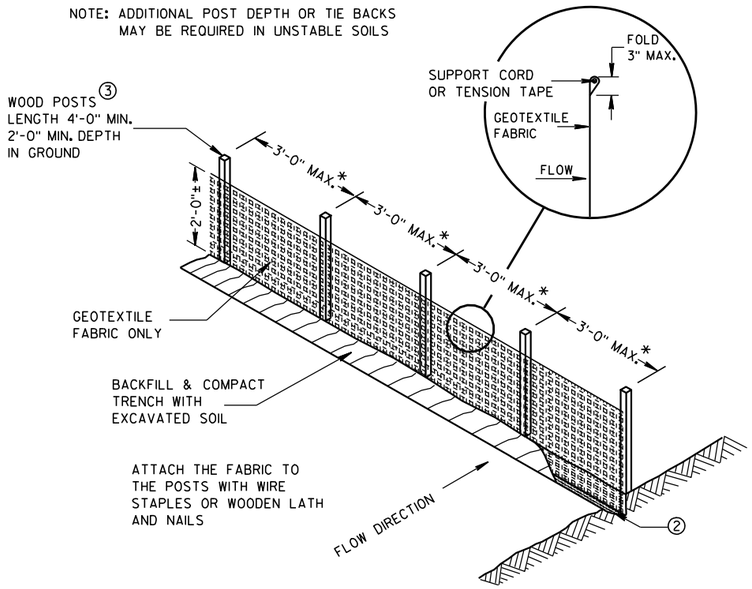
GENERAL NOTES

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

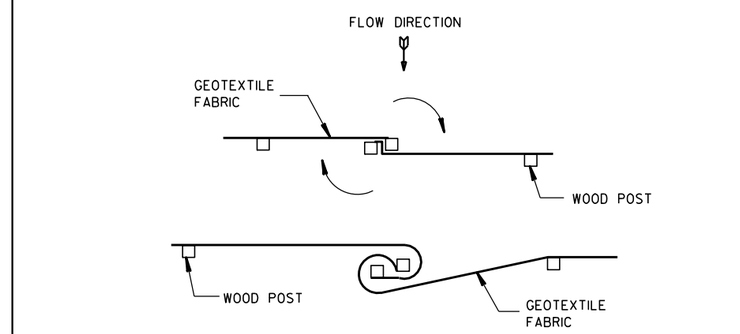
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



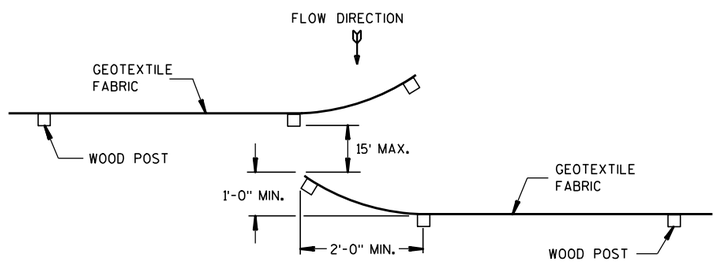
TRENCH DETAIL



SILT FENCE

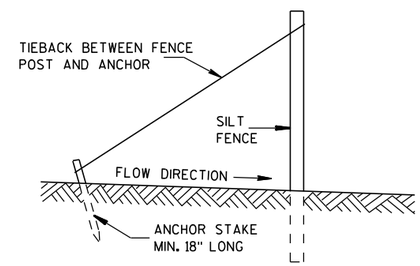


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

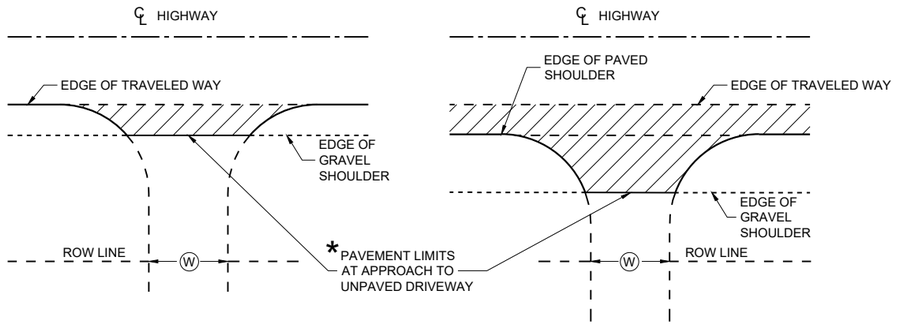
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6

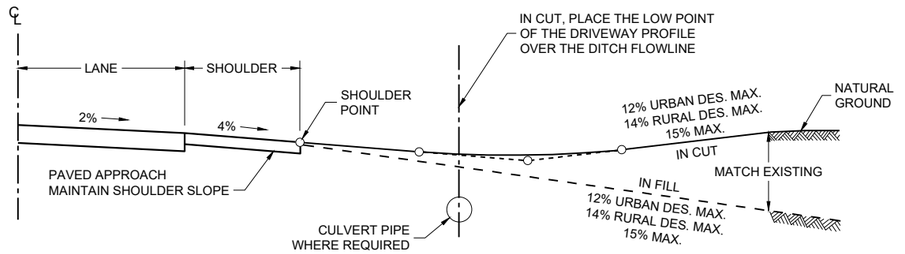


* WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

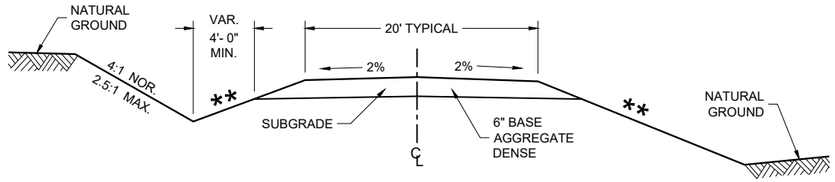
PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

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



TYPICAL DRIVEWAY PROFILES

Ⓦ : DRIVEWAY WIDTHS (MEASURED AT ROW LINE)
~ COMMERCIAL & INDUSTRIAL 16' MIN. - 35' MAX.
~ RESIDENTIAL & AGRICULTURAL (NONCOMMERCIAL) 16' MIN. - 24' MAX.

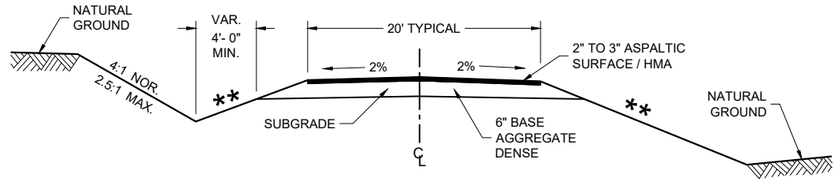


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

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

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



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

6

SDD 09A14-01

SDD 09A14-01

DRIVEWAYS WITHOUT CURB AND GUTTER

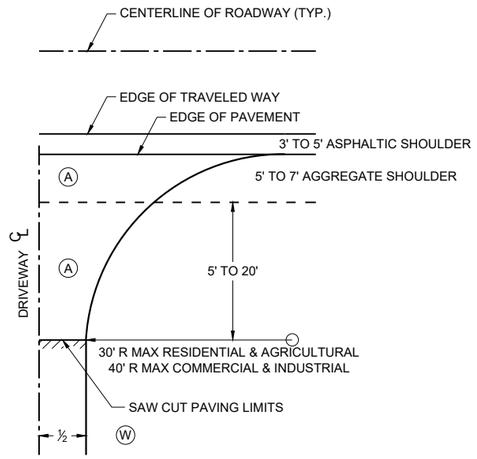
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

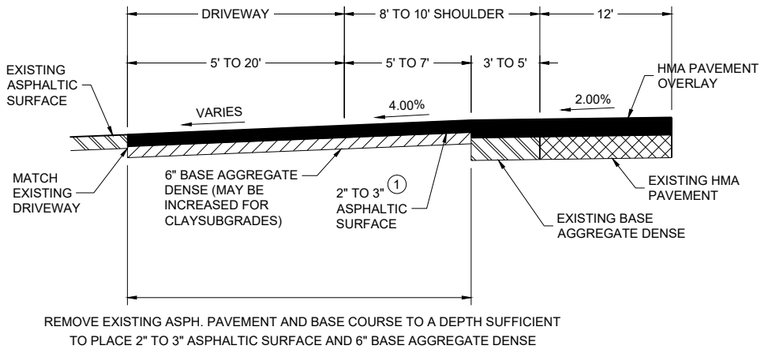
GENERAL NOTES

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



PLAN VIEW

HALF SECTION



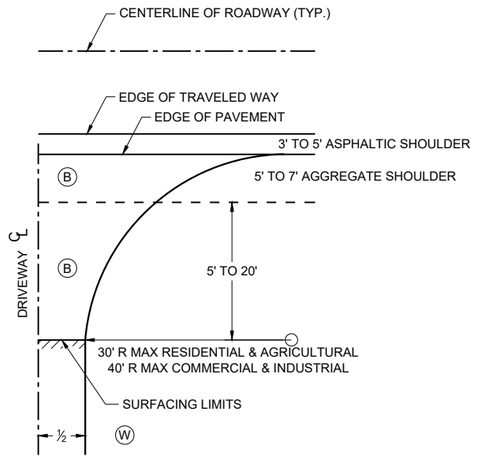
PROFILE VIEW

RURAL ENTRANCE WITH ASPHALTIC SURFACE RESURFACING PROJECTS

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

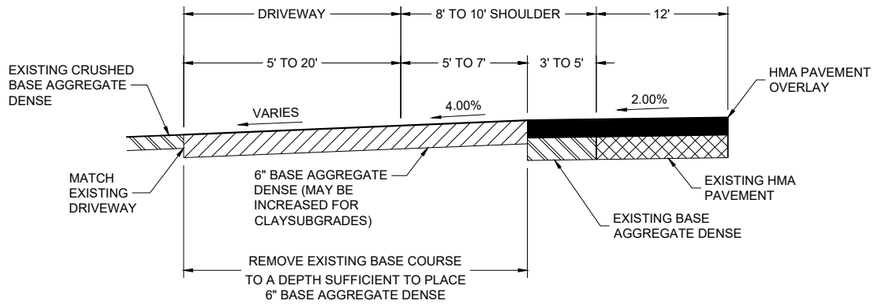
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 1/4" (TON)

(W) : DRIVEWAY WIDTHS (MEASURED AT ROW LINE)
- ~ COMMERCIAL & INDUSTRIAL 16' MIN. - 35' MAX.
- ~ RESIDENTIAL & AGRICULTURAL (NONCOMMERCIAL) 16' MIN. - 24' MAX.



PLAN VIEW

HALF SECTION



PROFILE VIEW

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

DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 (DATE)
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

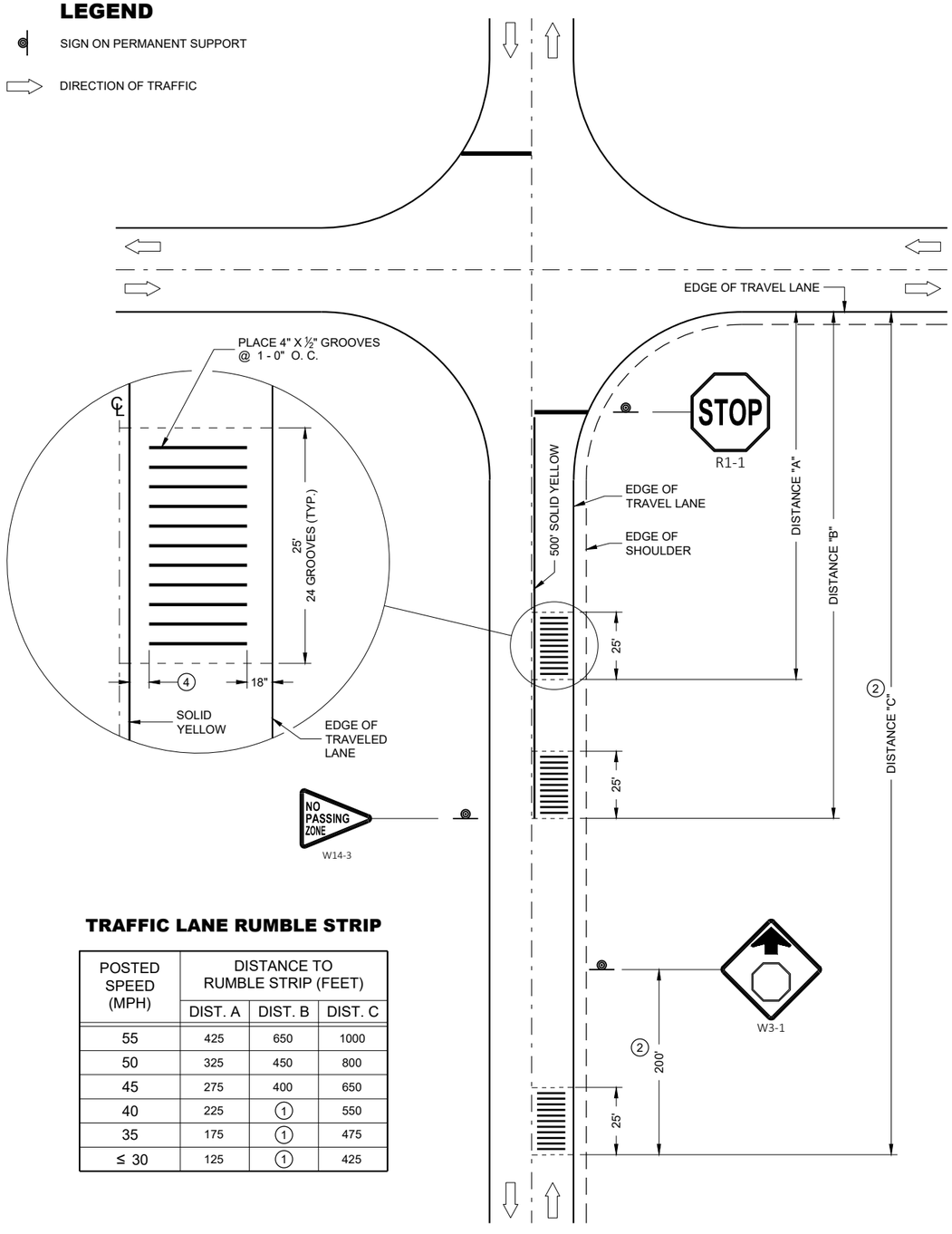
FHWA

6
SDD 09A15-01

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TRAFFIC LANE RUMBLE STRIP

POSTED SPEED (MPH)	DISTANCE TO RUMBLE STRIP (FEET)		
	DIST. A	DIST. B	DIST. C
55	425	650	1000
50	325	450	800
45	275	400	650
40	225	(1)	550
35	175	(1)	475
≤ 30	125	(1)	425

RUMBLE STRIP LOCATION

GENERAL NOTES

CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

WHEN ASPHALTIC PAVEMENT IS NEW IN THE RUMBLE AREA, THE CONTRACTOR SHALL ALLOW THE PAVEMENT TO CURE A MINIMUM OF 7 DAYS PRIOR TO RUMBLE INSTALLATION.

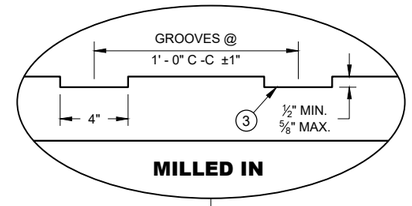
PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDE ELSEWHERE IN THE CONTRACT.

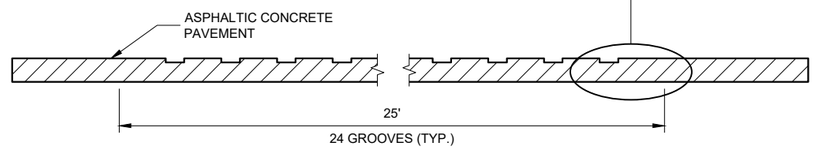
(1) ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.

(2) LOCATE RUMBLE STRIP 200 FEET IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE "C".

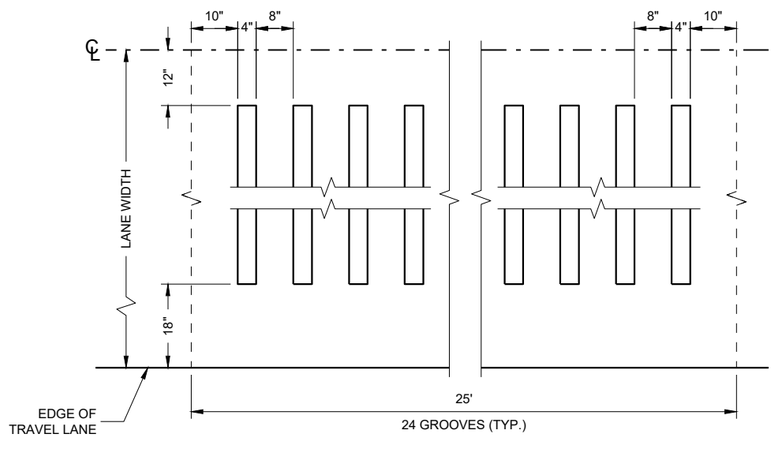
(3) TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY $\frac{1}{16}$".

(4) 12 INCH CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.





ELEVATION VIEW



PLAN VIEW

ASPHALTIC PAVEMENT MILLED IN

TRANSVERSE RUMBLE STRIPS, ASPHALTIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY DESIGN STANDARDS UNIT SUPERVISOR

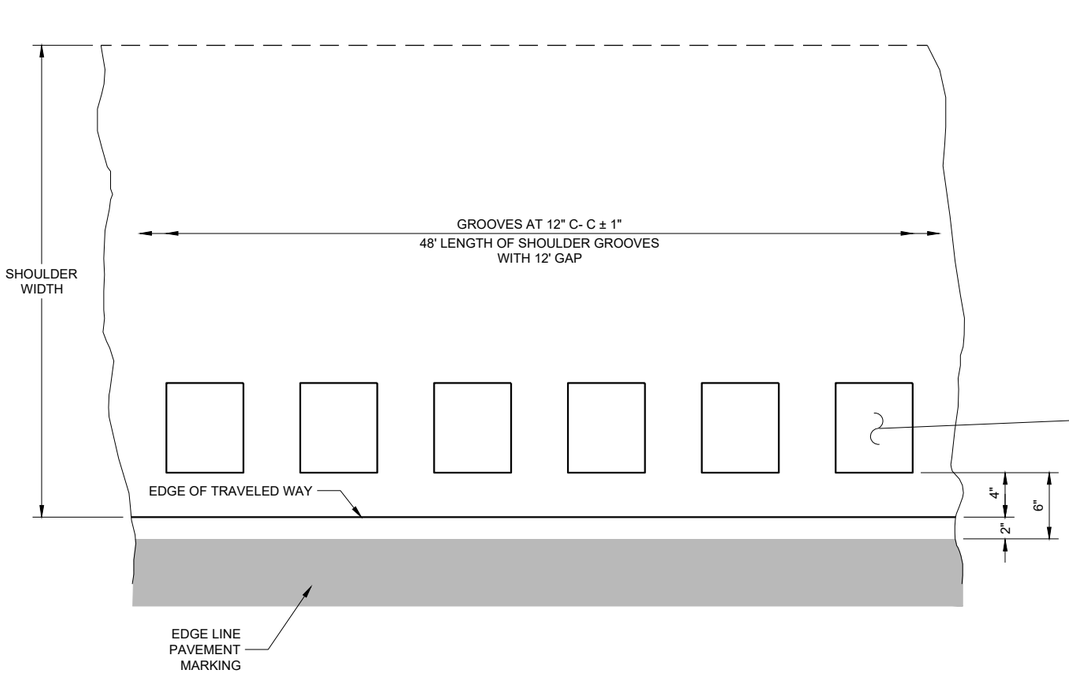
FHWA

6

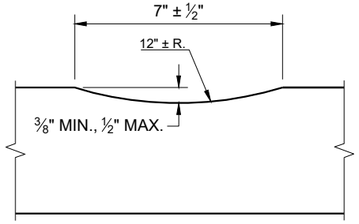
SDD 13A08 - 02

6

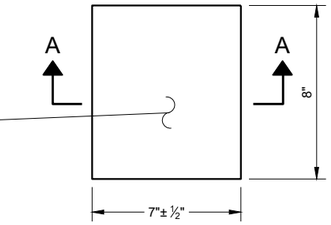
SDD 13A08 - 02



PLAN DETAIL VIEW
SHOULDER WITH GROOVES



SECTION A - A

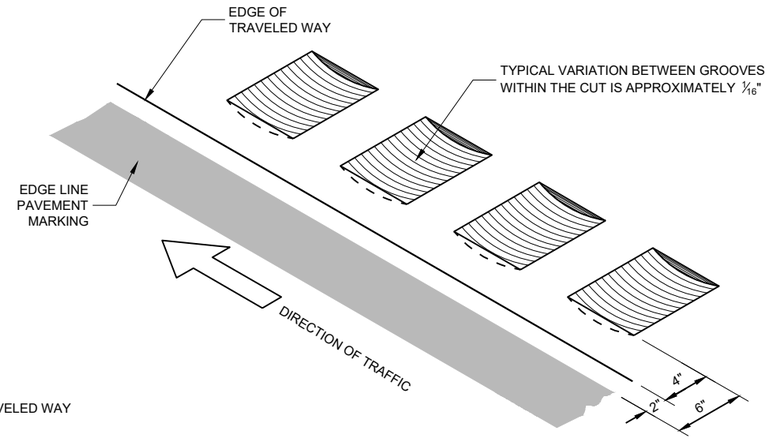


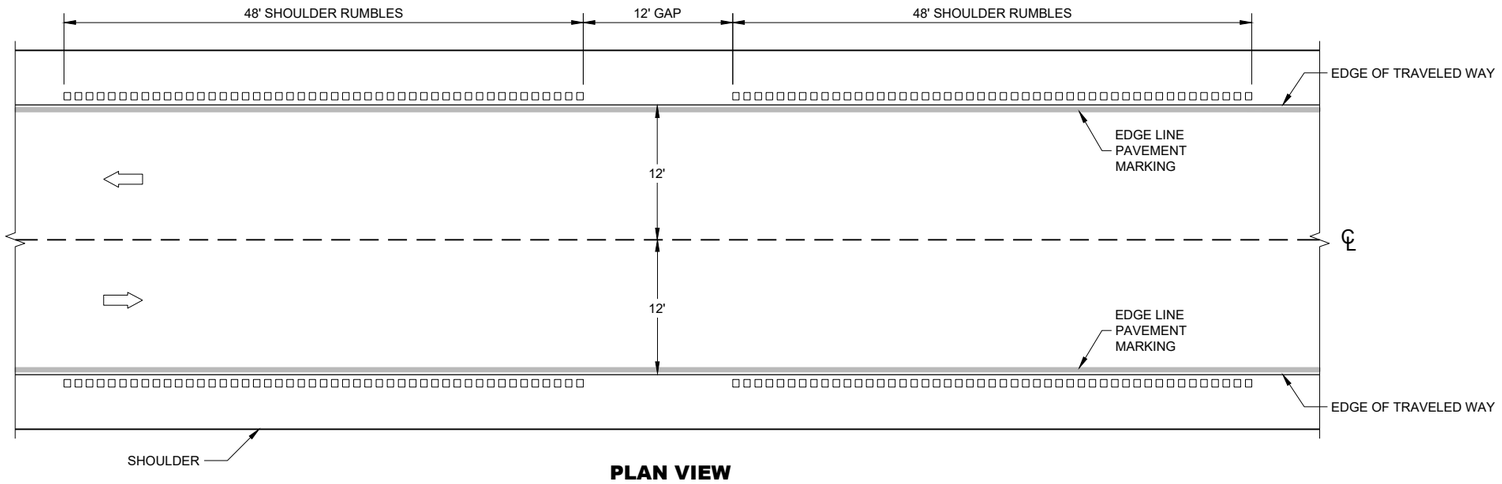
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

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

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





PLAN VIEW

SHOULDER RUMBLE STRIPS - ASPHALT

6

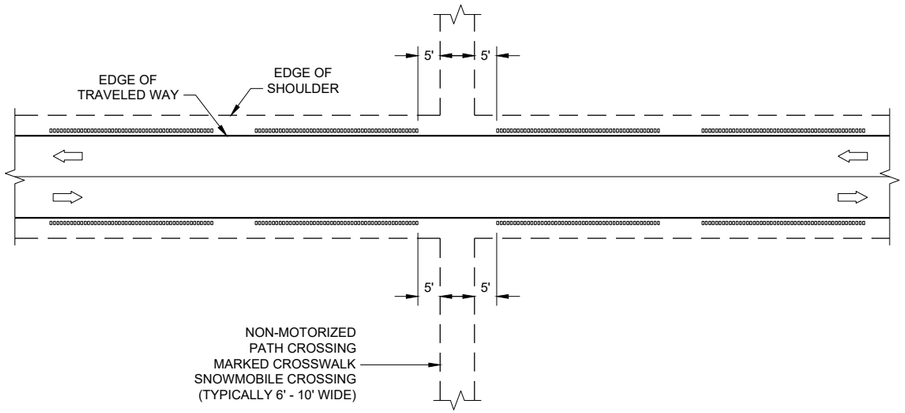
SDD 13A10 - 03a

SHOULDER RUMBLE STRIPS ASPHALT

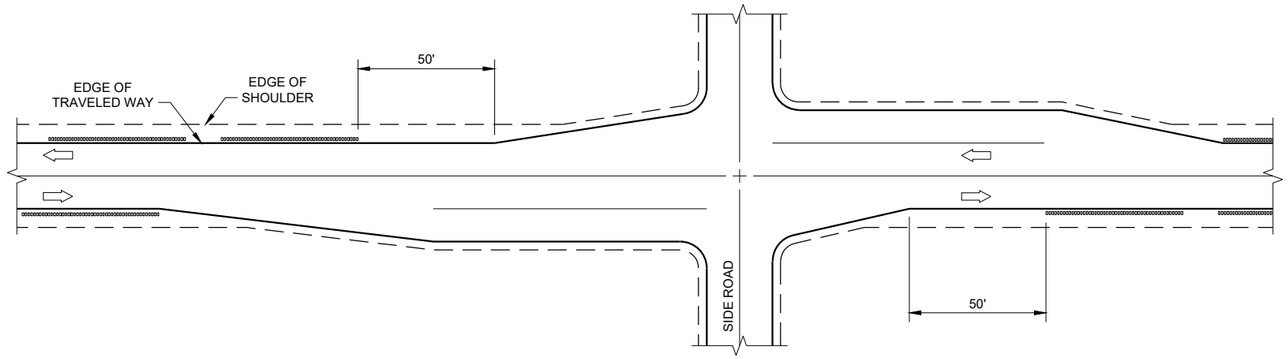
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

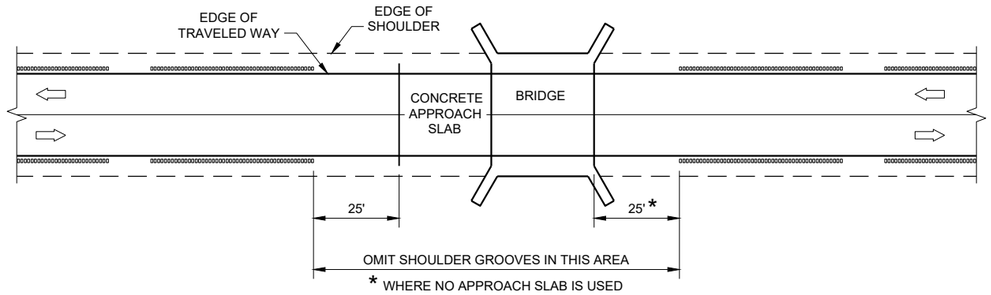
SDD 13A10 - 03a



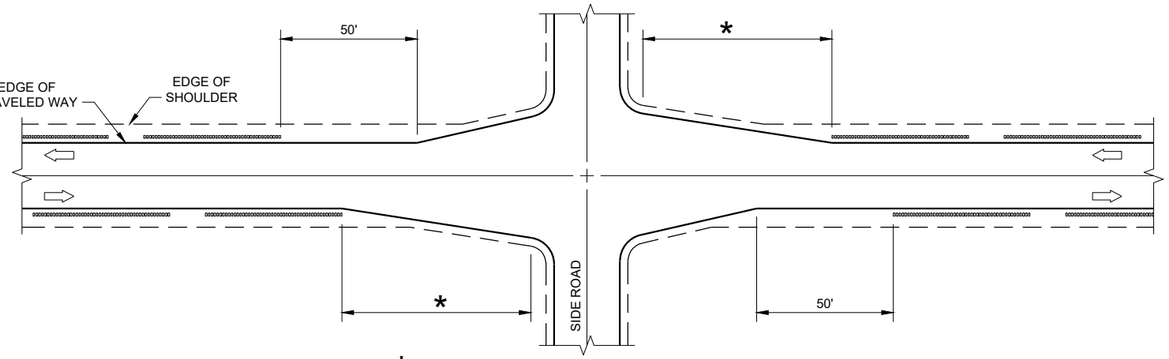
GROOVES AT MISCELLANEOUS CROSSINGS



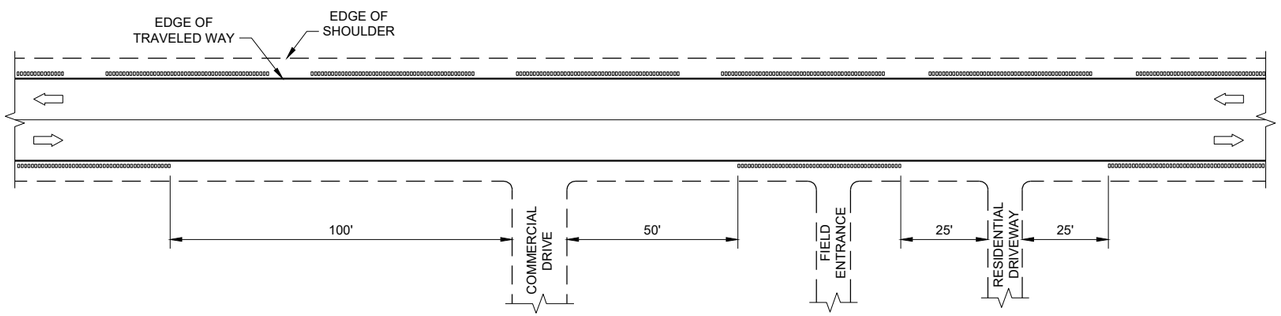
GROOVES AT RIGHT TURN LANE



GROOVES AT BRIDGES



GROOVES AT INTERSECTIONS WITH APPROACH TAPER



GROOVES AT DRIVEWAYS ①

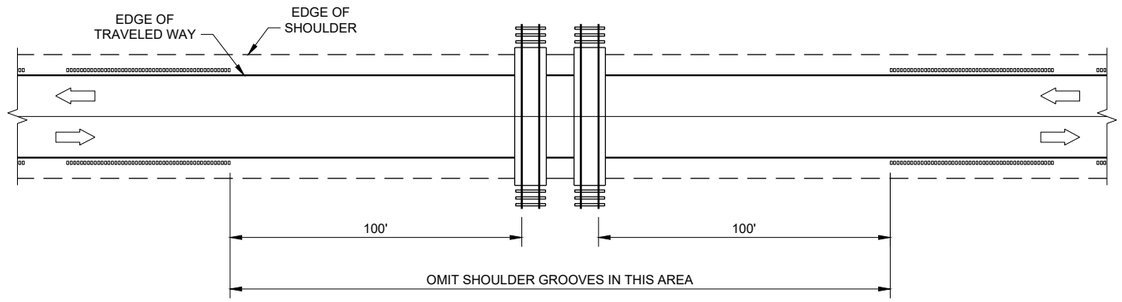
GENERAL NOTES

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

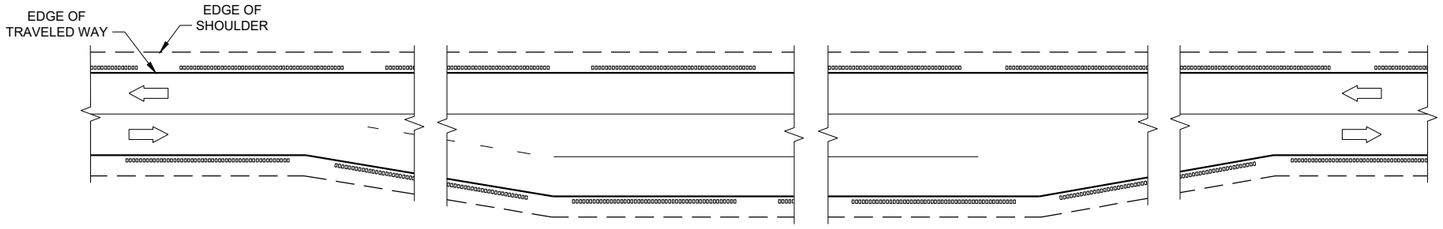
SHOULDER AND EDGE LINE RUMBLE STRIPS CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

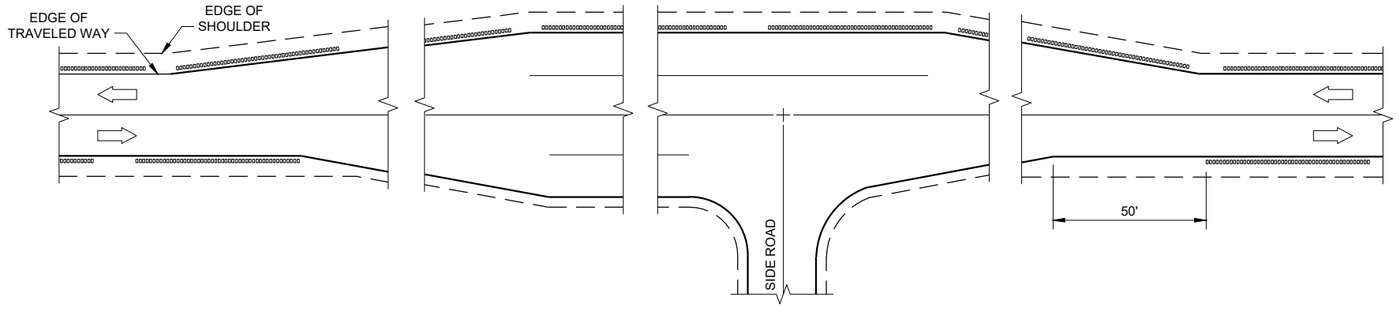
6
SDD 13A10 - 03g



GROOVES AT RAILROADS



GROOVES AT PASSING AND CLIMBING LANES



GROOVES AT BYPASS LANES

6

6

SDD 13A10 - 03h

SDD13A10 - 03h

SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

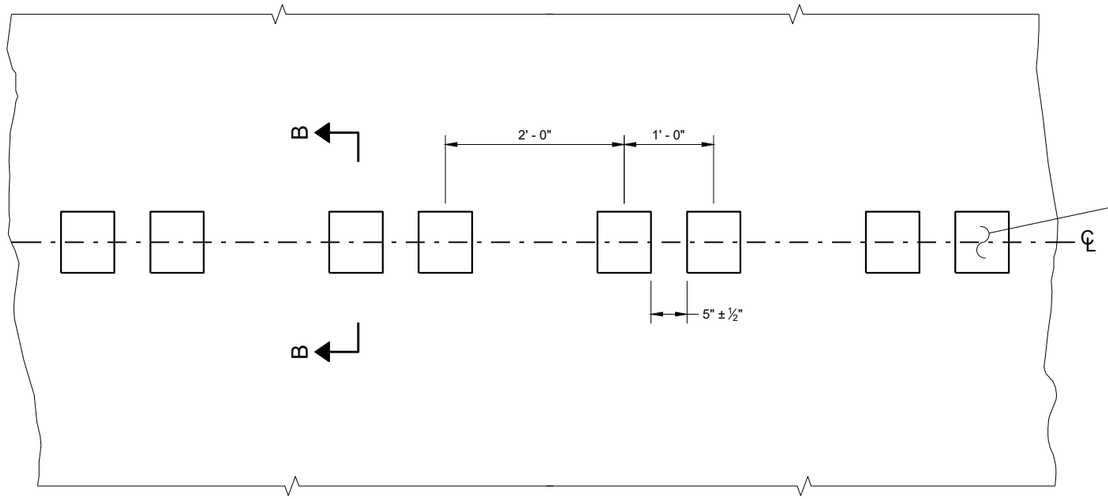
/S/ John Jenkins
ROADWAY STANDARDS DEVE ENGINEER

FHWA

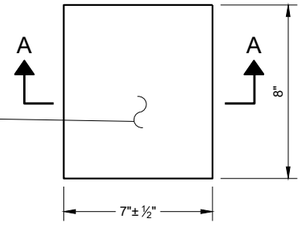
GENERAL NOTES

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

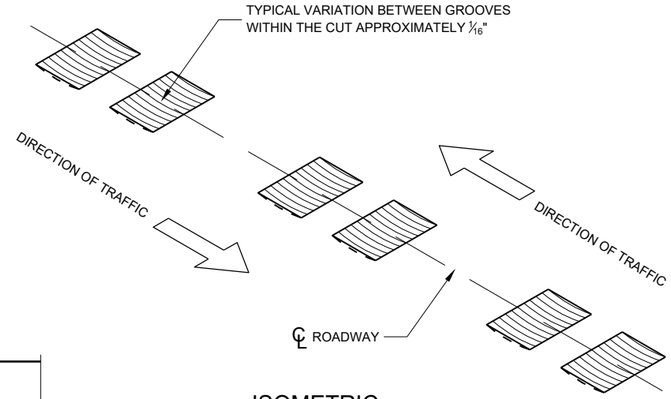
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



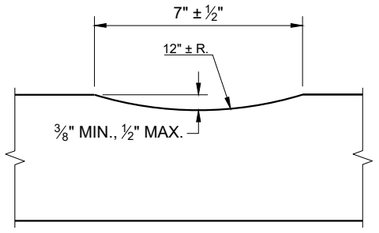
PLAN DETAIL VIEW



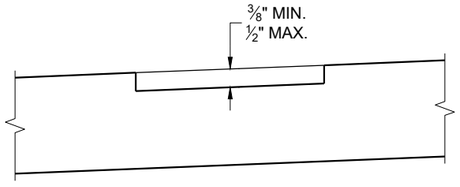
PLAN VIEW
(SINGLE GROOVE)



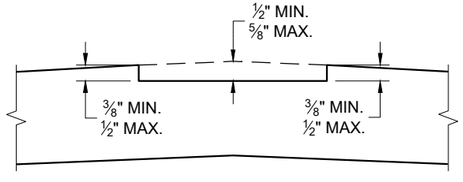
ISOMETRIC



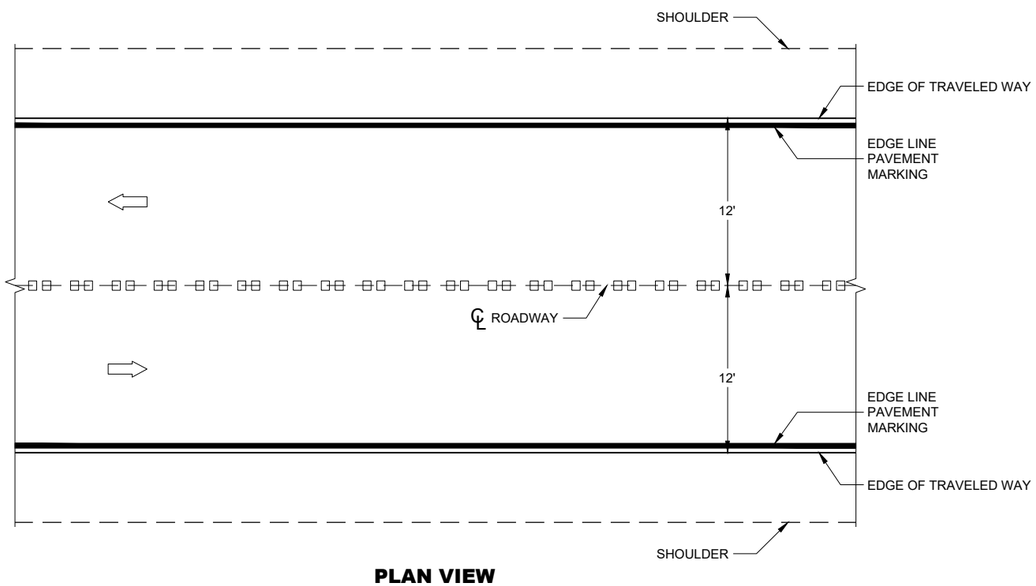
SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



PLAN VIEW

CENTERLINE RUMBLE STRIPS - ASPHALT

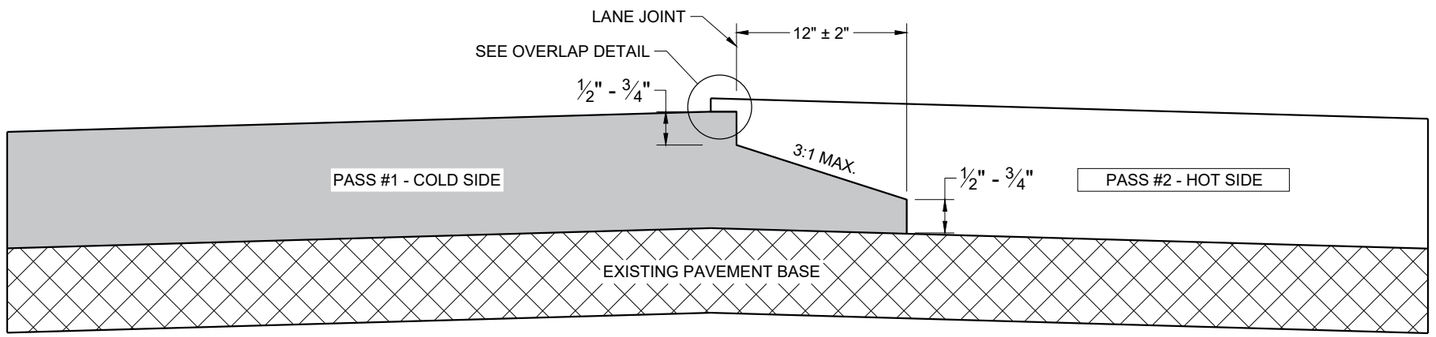
CENTERLINE RUMBLE STRIPS - ASPHALT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTA	42

6

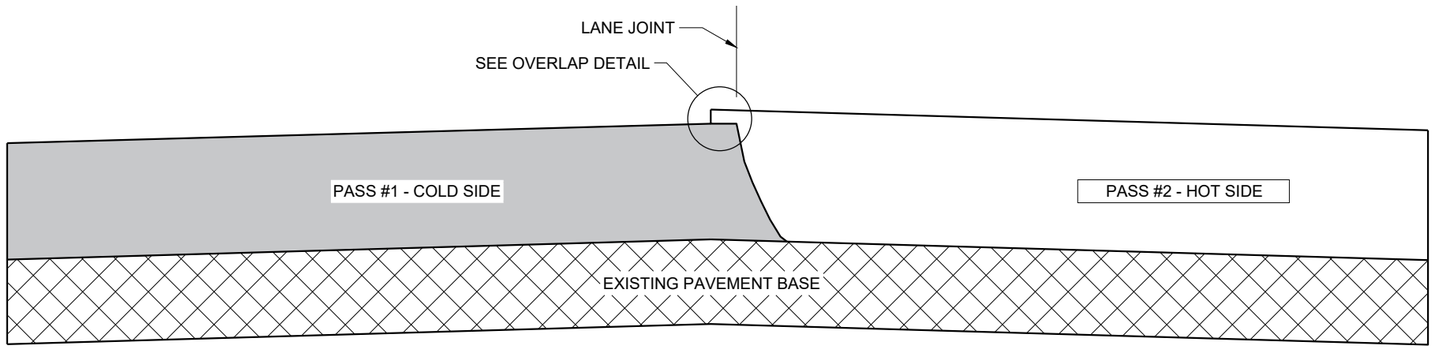
SDD 13A11 - 04a

6

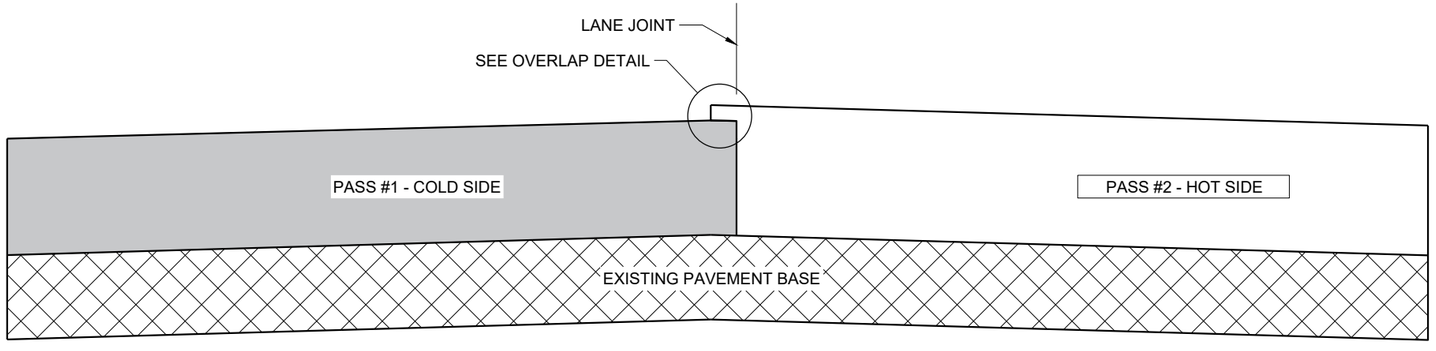
SDD 13A11 - 04a



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

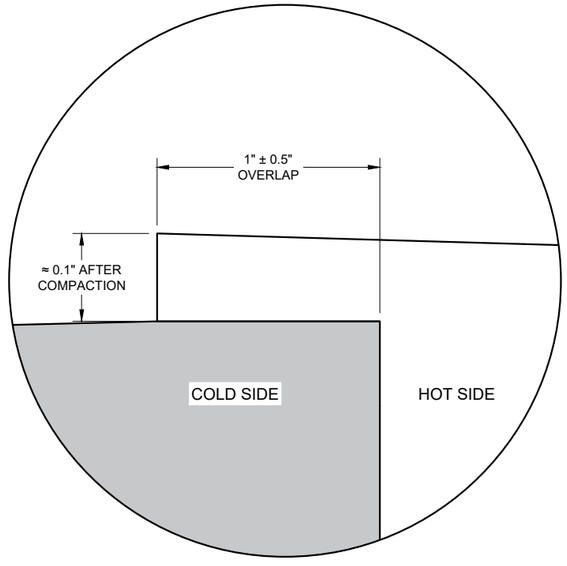
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

(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.

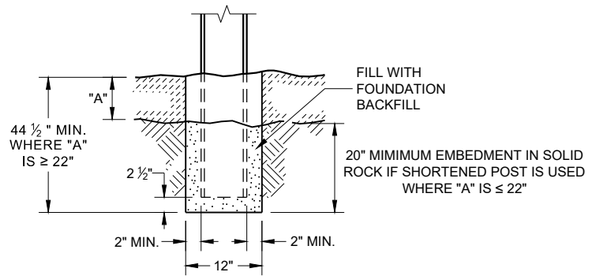
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

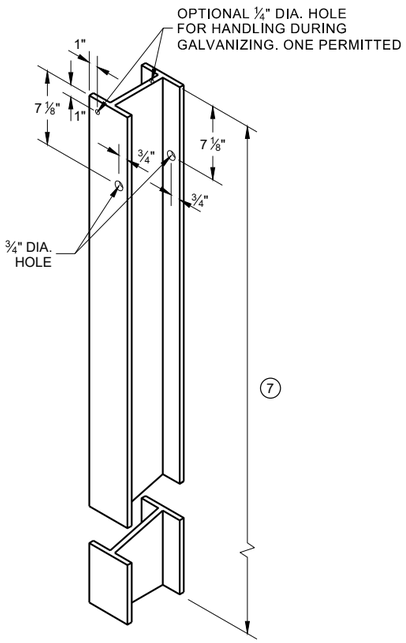
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

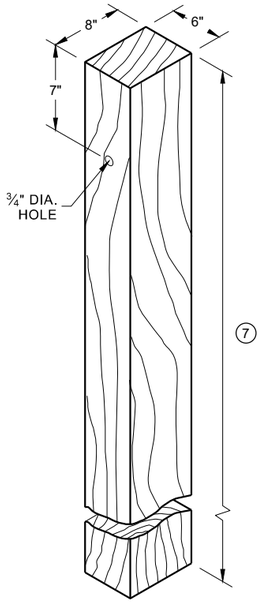
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



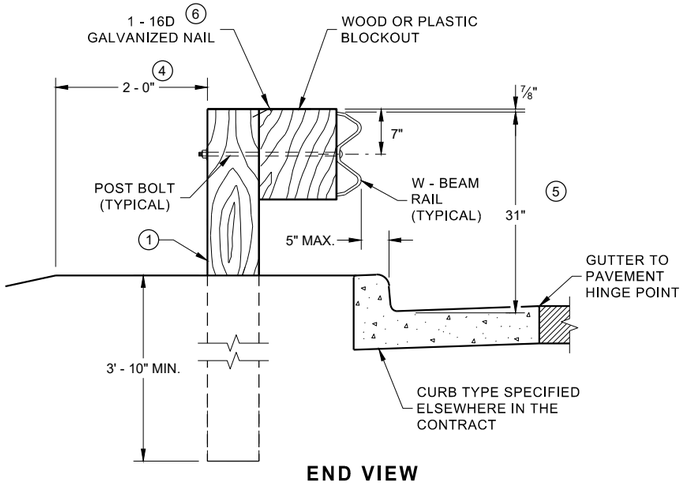
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



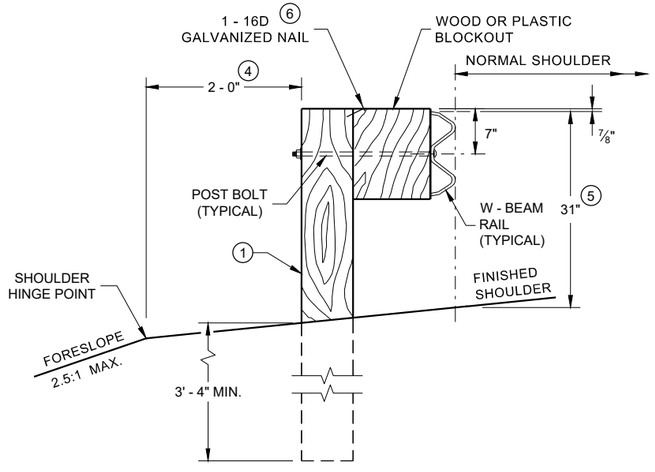
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



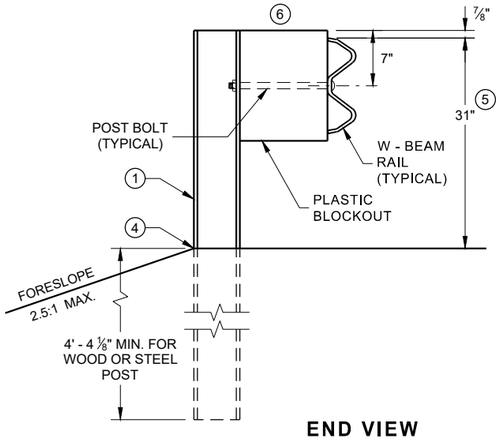
WOOD POST (6" X 8") NOMINAL (1)



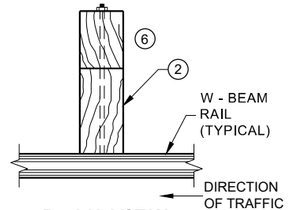
END VIEW
LOCATED ALONG A CURBED ROADWAY



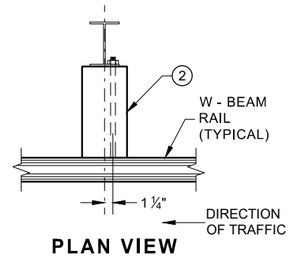
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



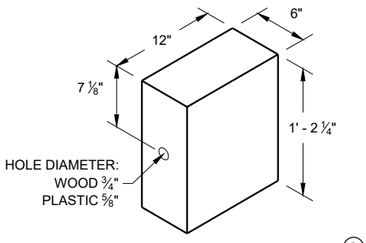
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM

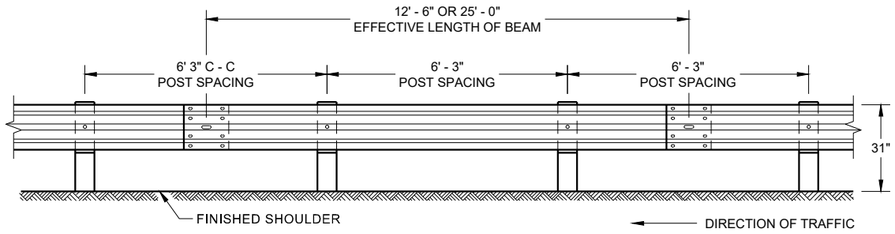


WOOD OR PLASTIC BLOCKOUT (2)

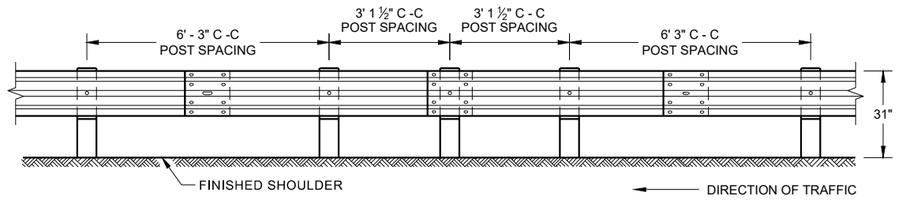
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

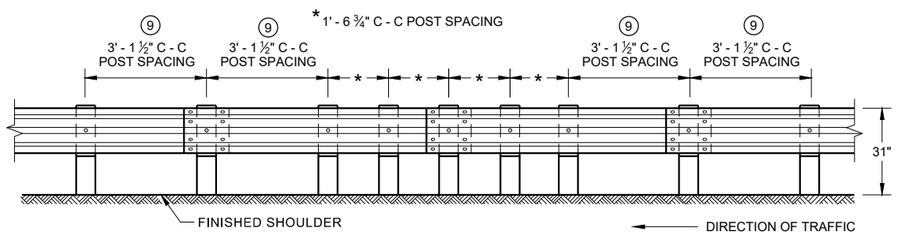
6
SDD 14B42 - 07a



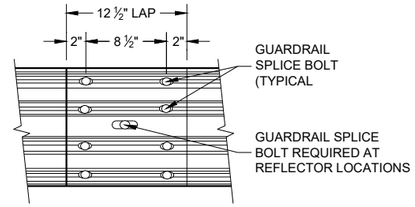
FRONT VIEW
POST SPACING STANDARD INSTALLATION



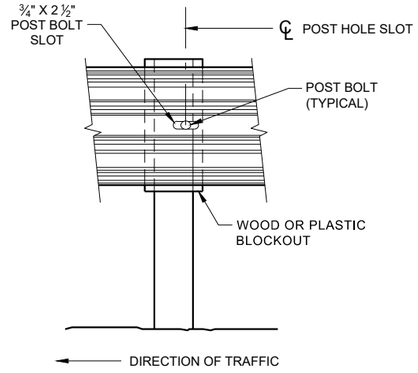
FRONT VIEW
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



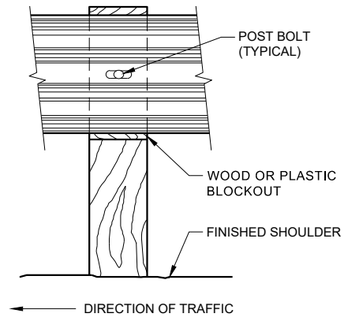
FRONT VIEW
QUARTER POST SPACING (QS)



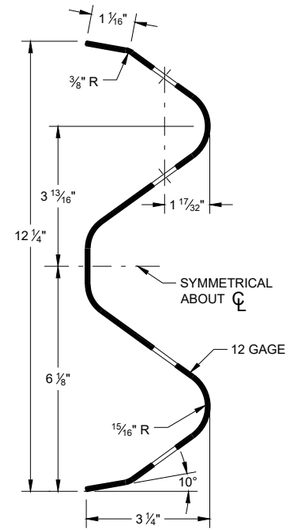
FRONT VIEW
MID-SPAN BEAM SPLICE



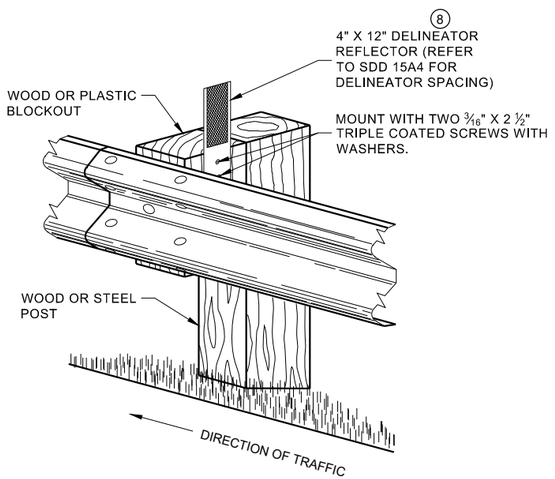
FRONT VIEW AT STEEL POST



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.

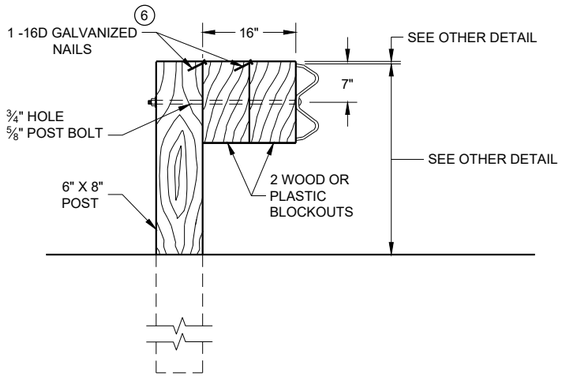
POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

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

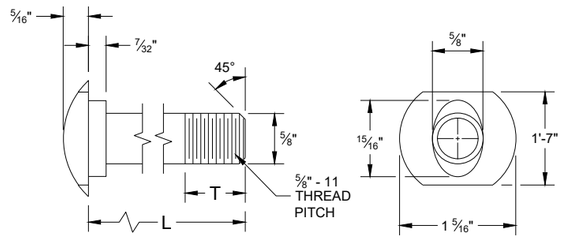


DETAIL FOR 16" BLOCKOUT DEPTH

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.

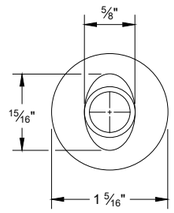
NOTE:

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.

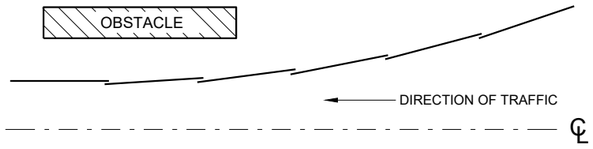


POST BOLT TABLE

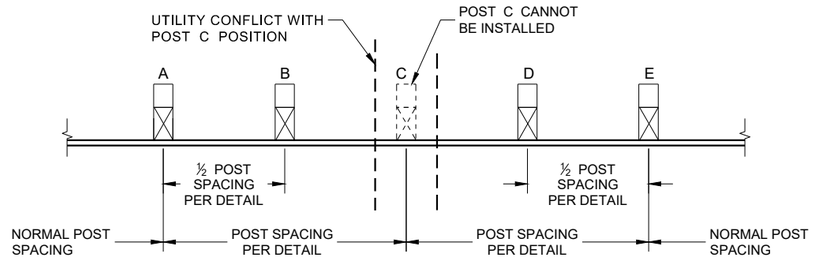
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



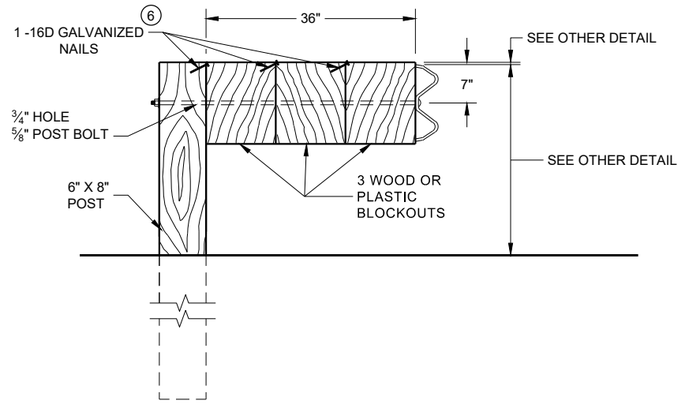
ALTERNATE BOLT HEAD



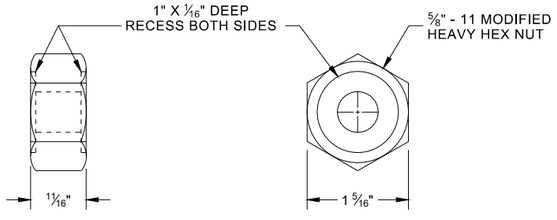
PLAN VIEW
BEAM LAPPING DETAIL



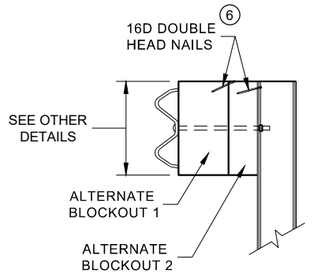
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



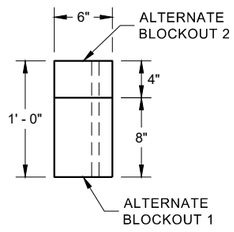
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

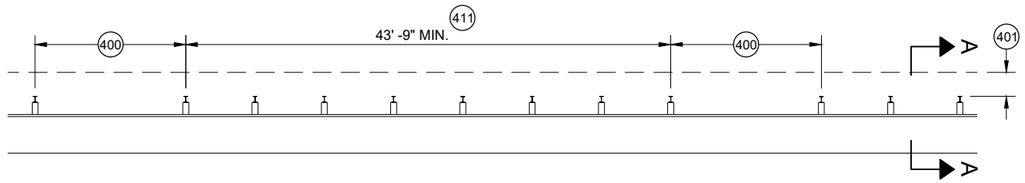
ALTERNATE WOOD BLOCKOUT DETAIL

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.

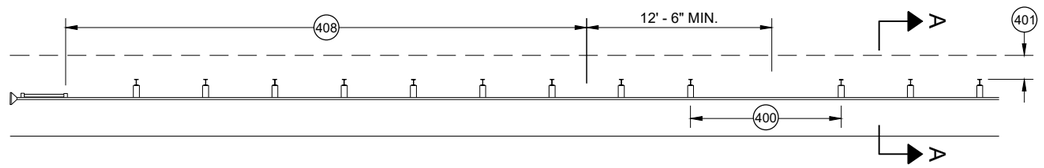
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(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.

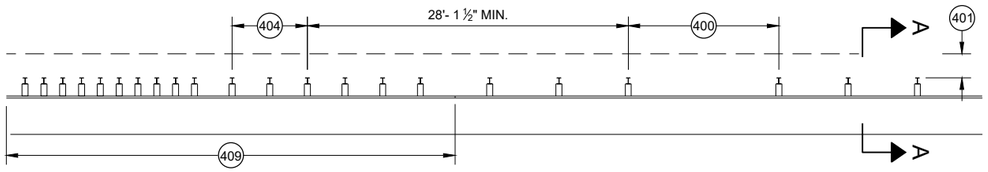
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



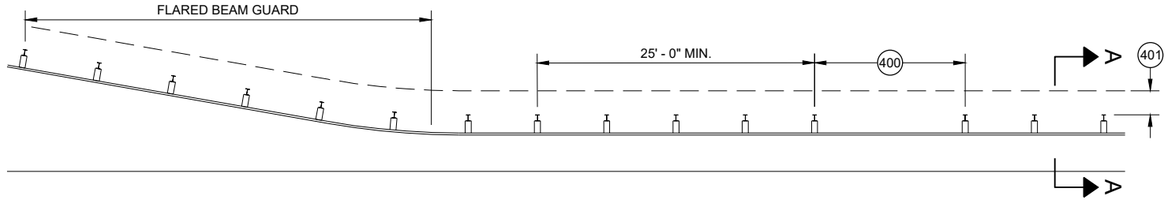
MISSING POST IN MGS GUARDRAIL



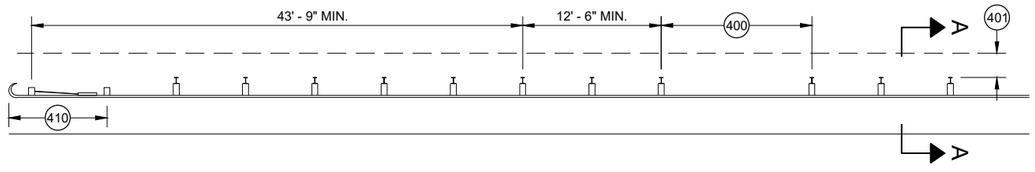
MISSING POST IN MGS GUARDRAIL NEAR EAT



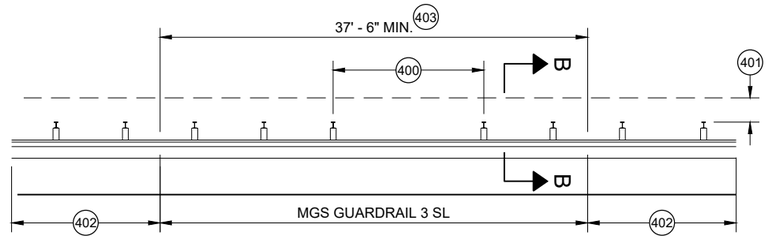
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

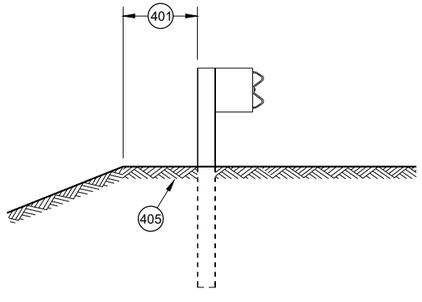


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

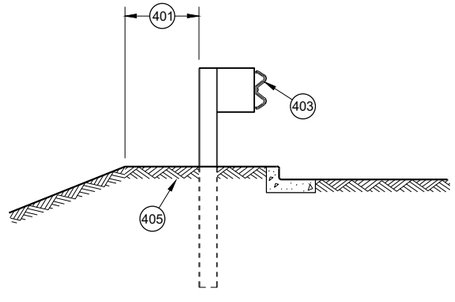


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(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.

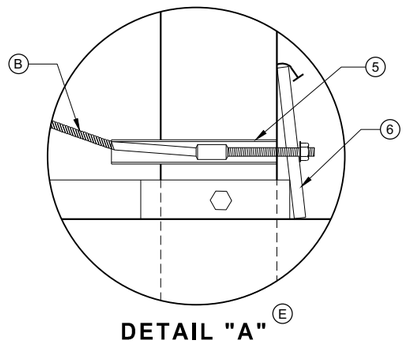
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

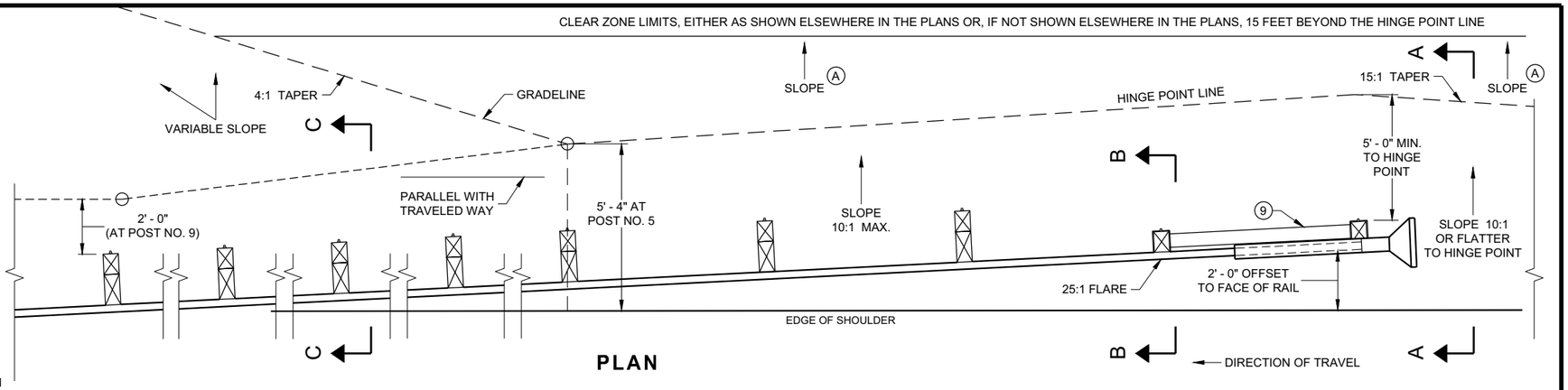
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

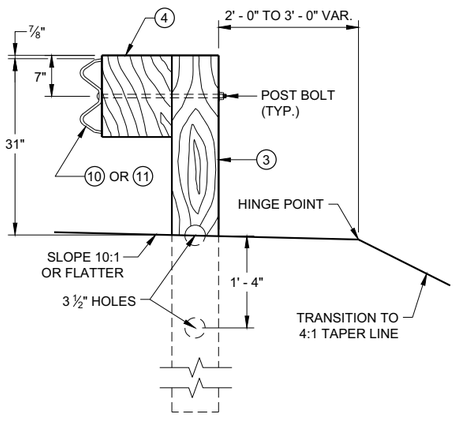
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

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.

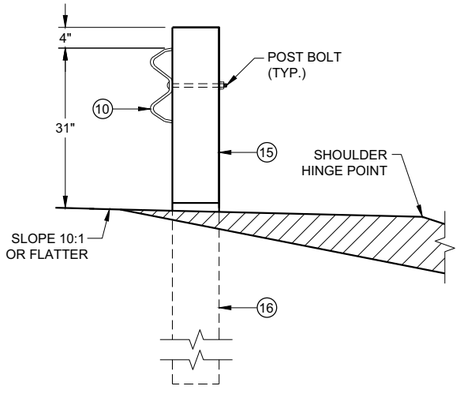


DETAIL "A" (E)

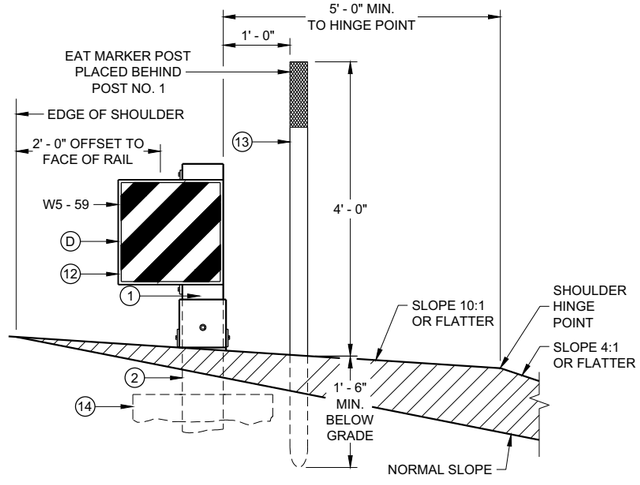




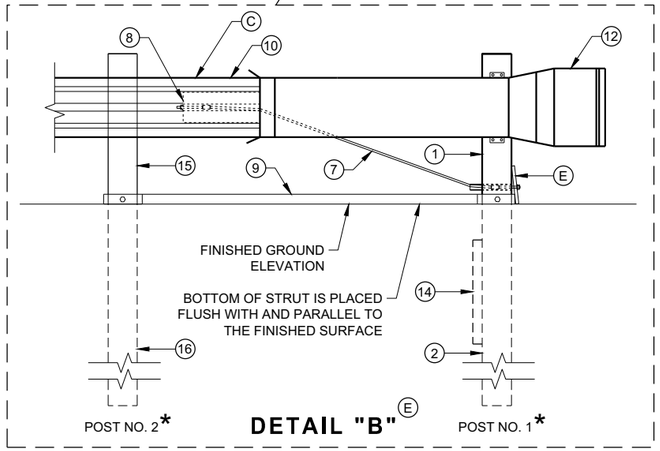
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



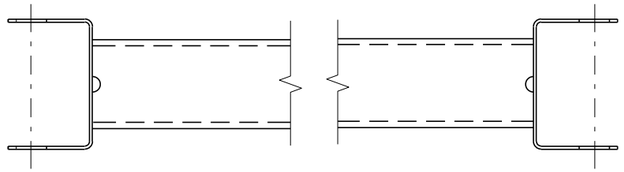
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

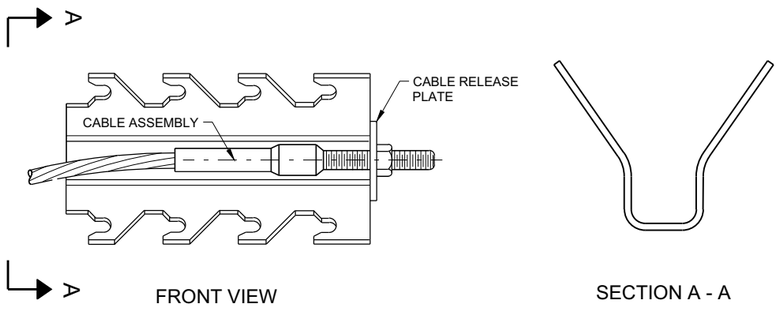
SDD 14B44 - 04a



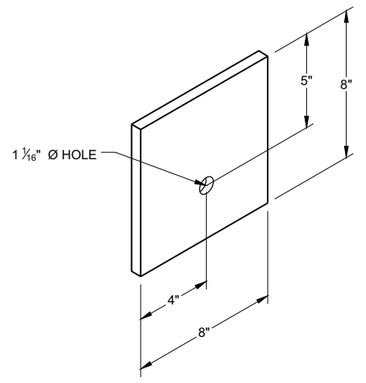
GENERIC GROUND STRUT ⑨ Ⓔ

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

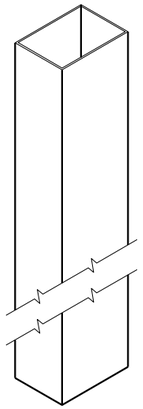
6

SDD 14B44 - 04b

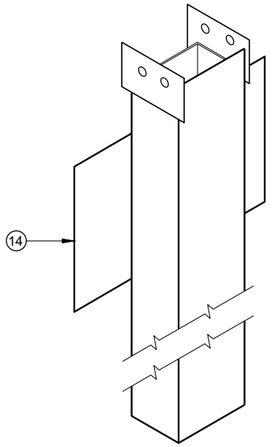
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

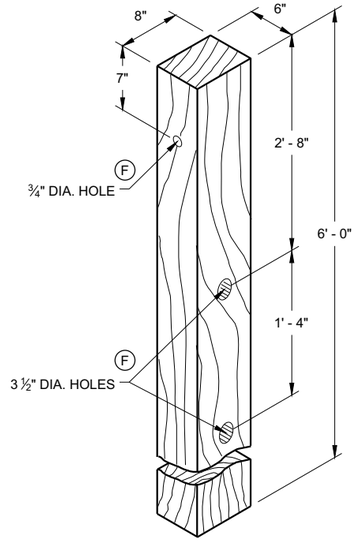
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



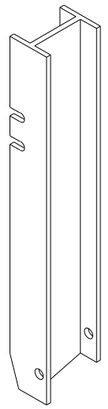
UPPER POST NO. 1 (1) (E)



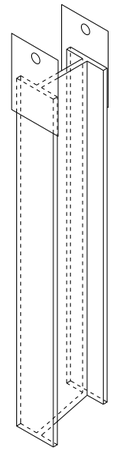
LOWER POST NO. 1 (2) (E)



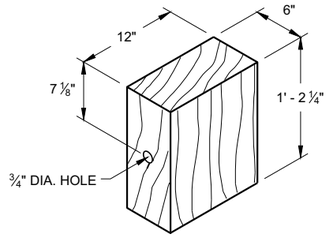
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



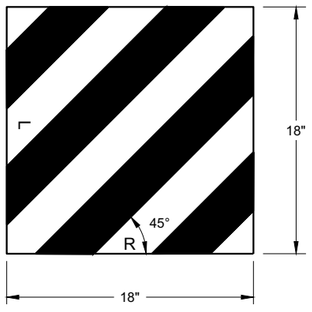
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

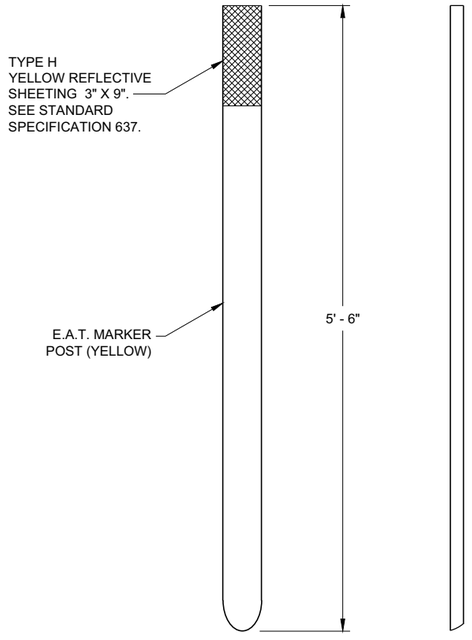


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



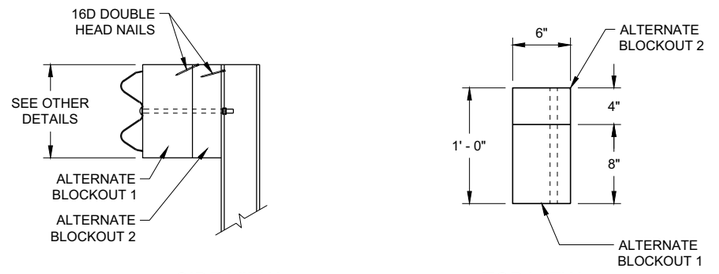
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

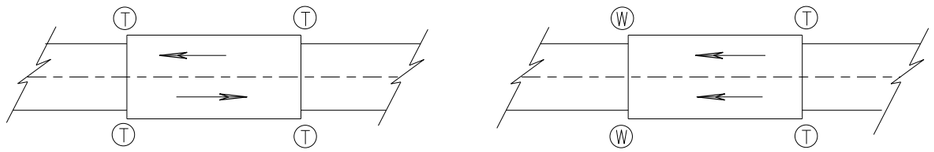
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

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

TRANSITION USES STEEL POSTS ONLY.

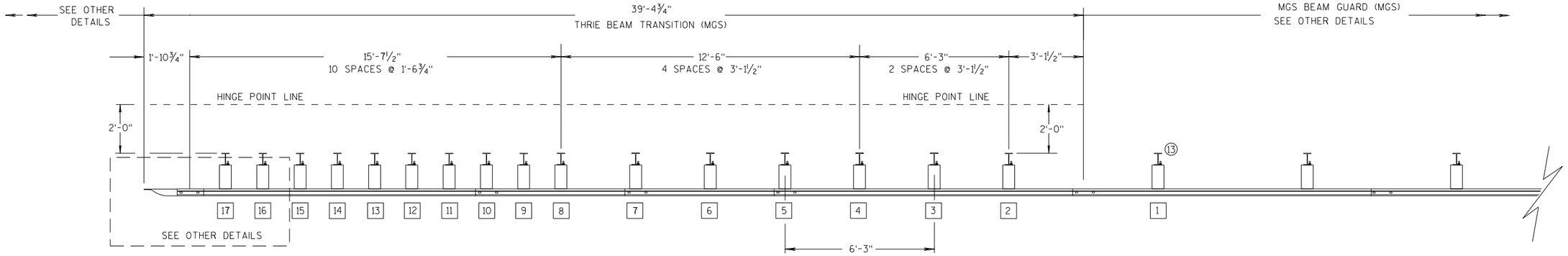
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

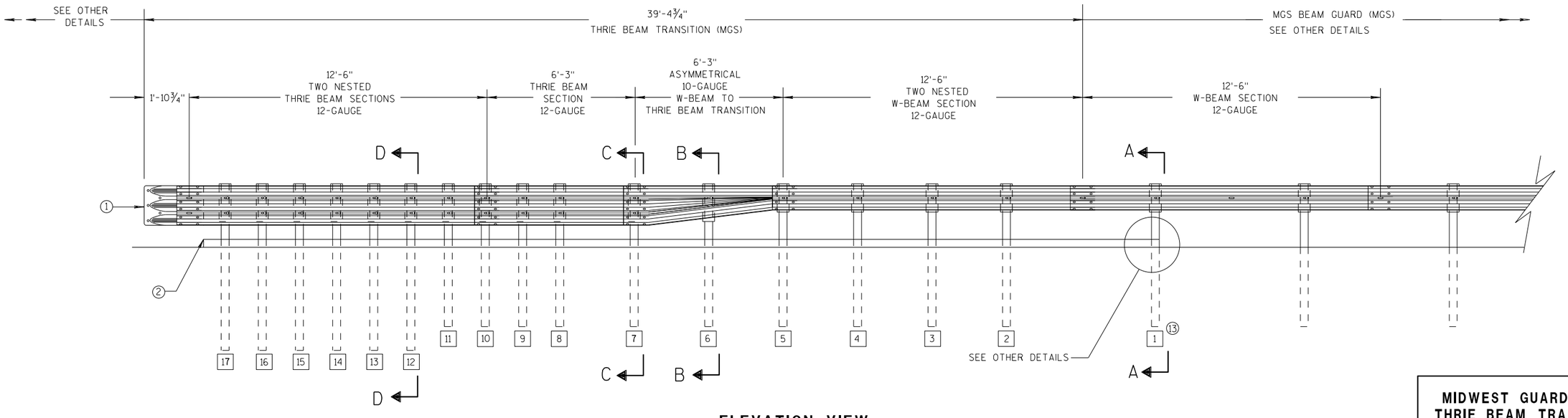
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

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

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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

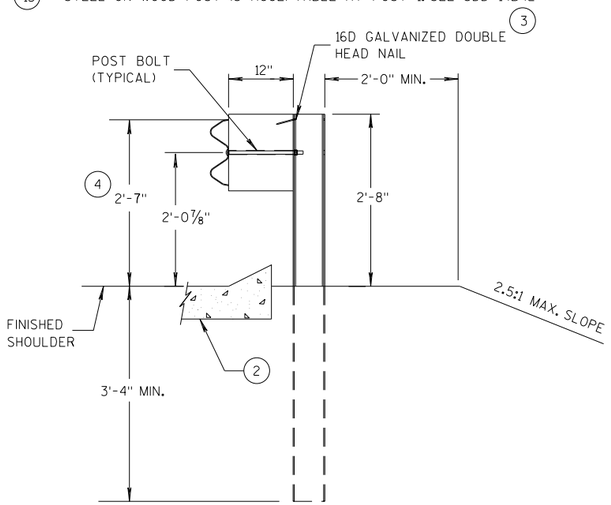
GENERAL NOTES

(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.

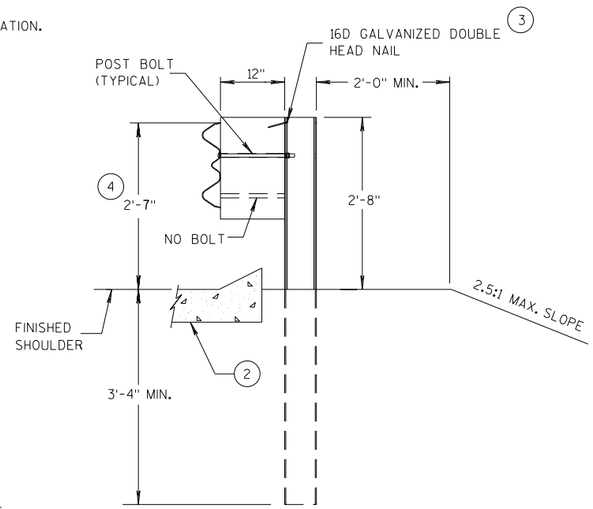
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



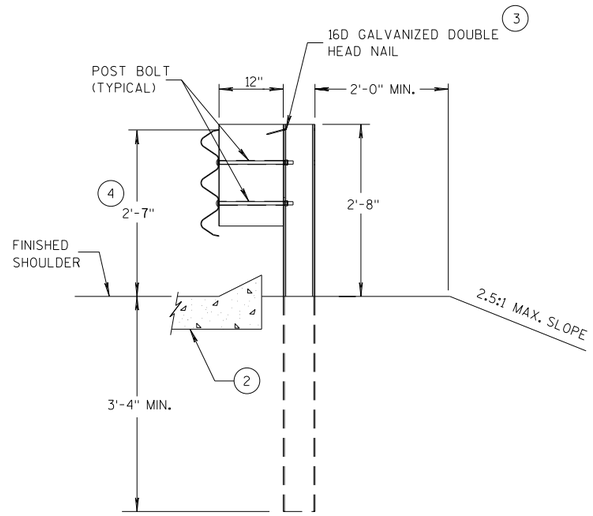
SECTION A-A (13)

POSTS 1-5



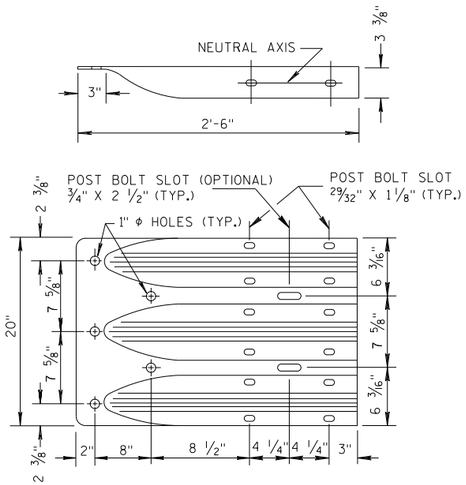
SECTION B-B

POST 6

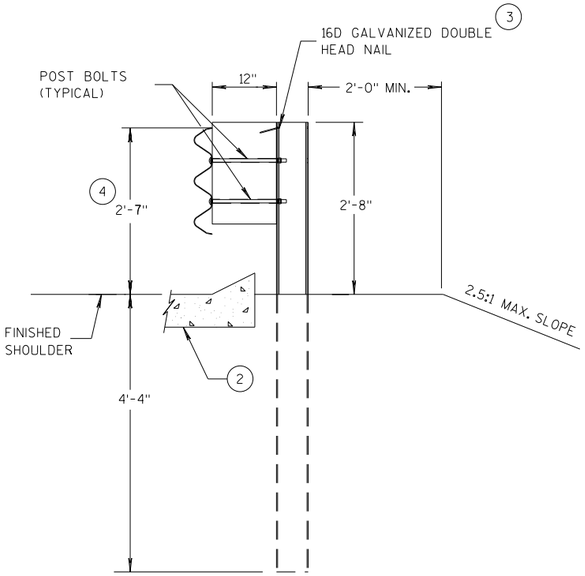


SECTION C-C

POSTS 7-11

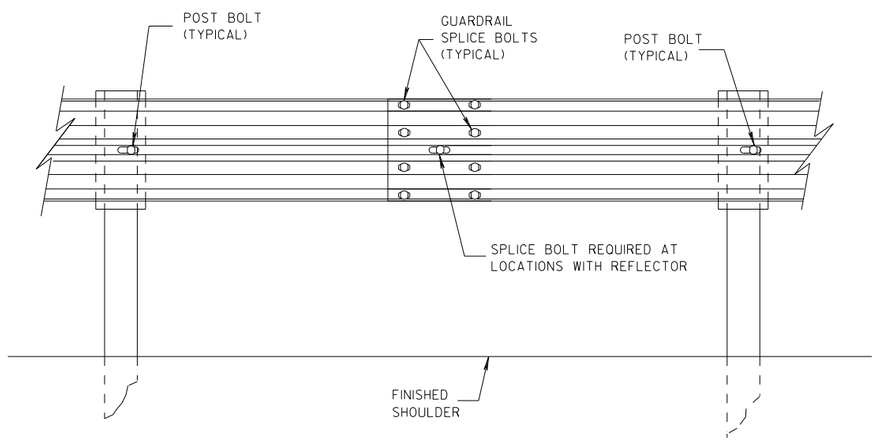


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

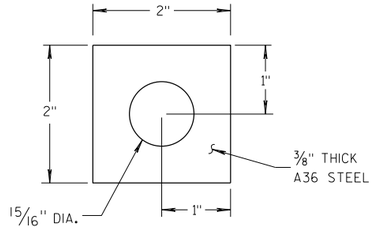
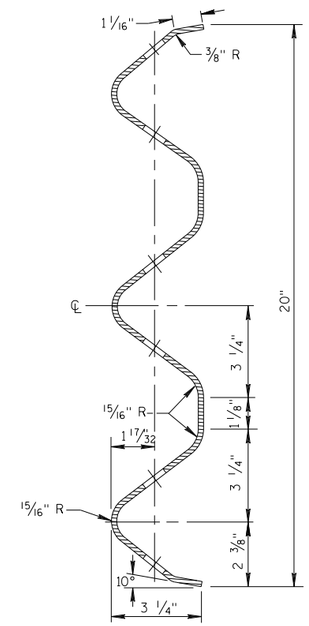


PLATE WASHER DETAIL



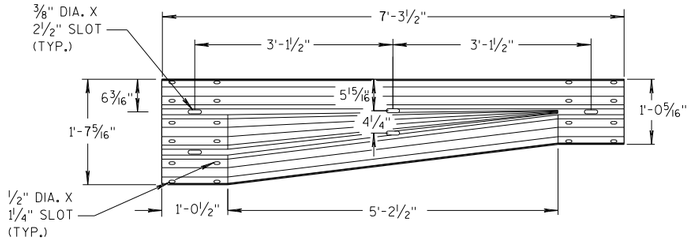
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

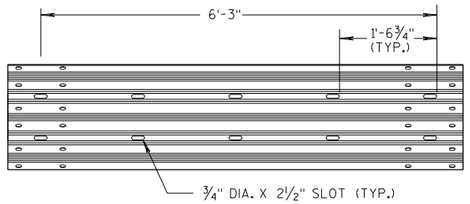
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

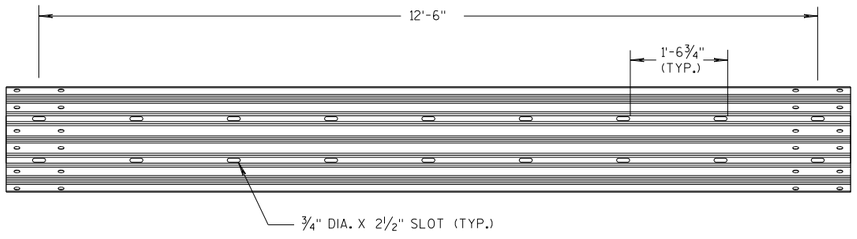
S.D.D. 14 B 45-5b



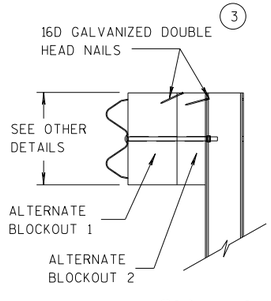
W-BEAM TO THRIE BEAM TRANSITION SECTION



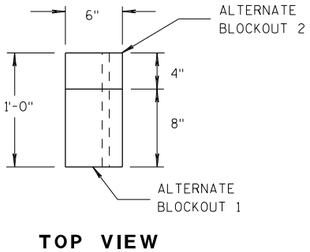
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

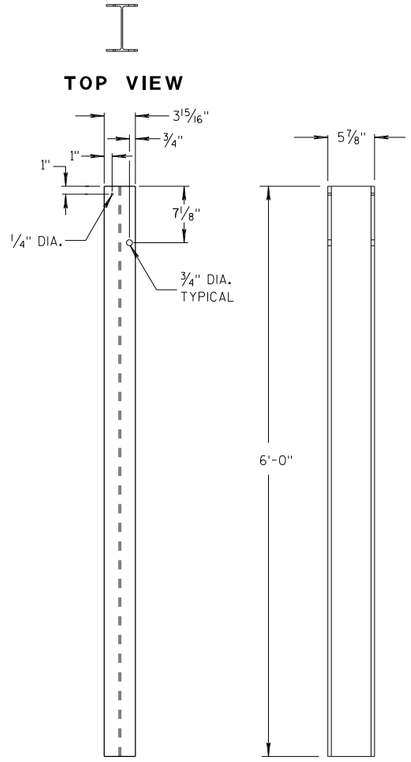


SIDE VIEW



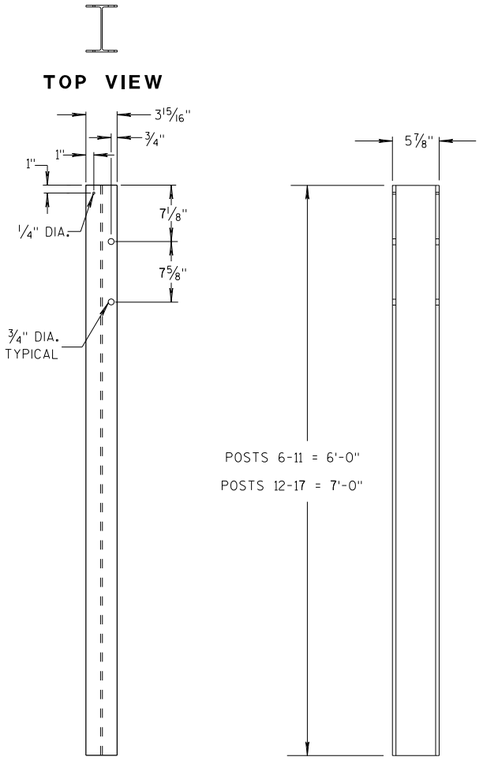
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



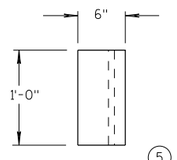
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

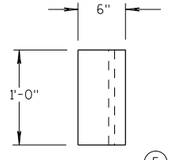


FRONT VIEW SIDE VIEW

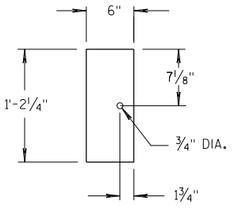
STEEL POSTS 6-17



TOP VIEW (5)

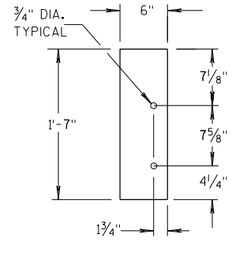


TOP VIEW (5)



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.

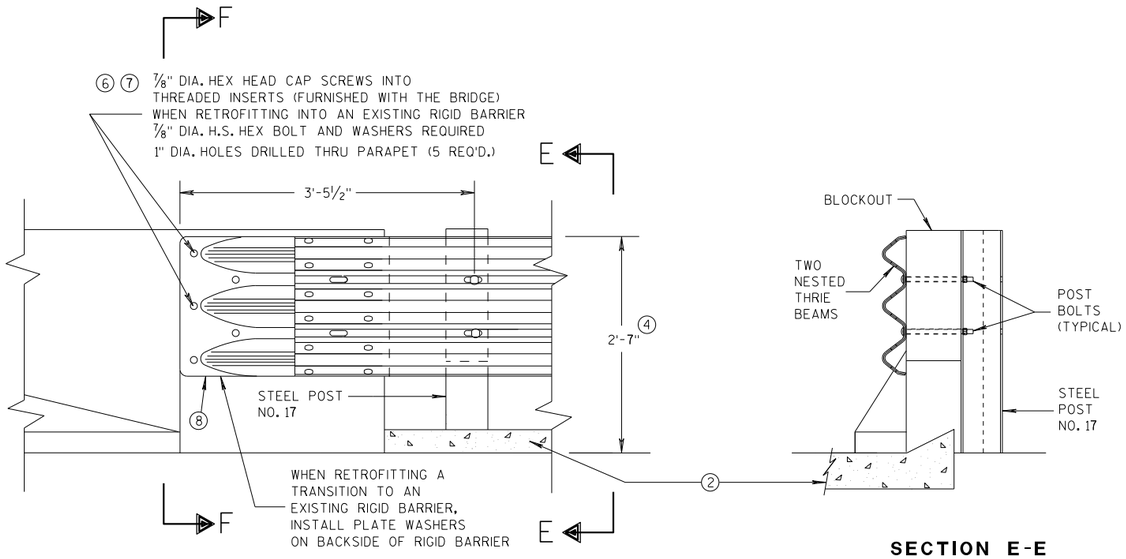
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

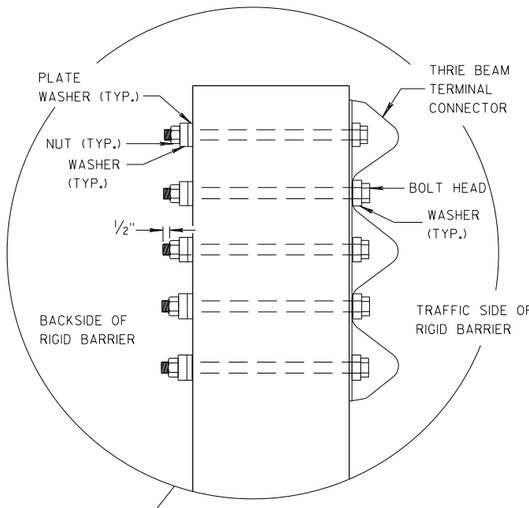
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

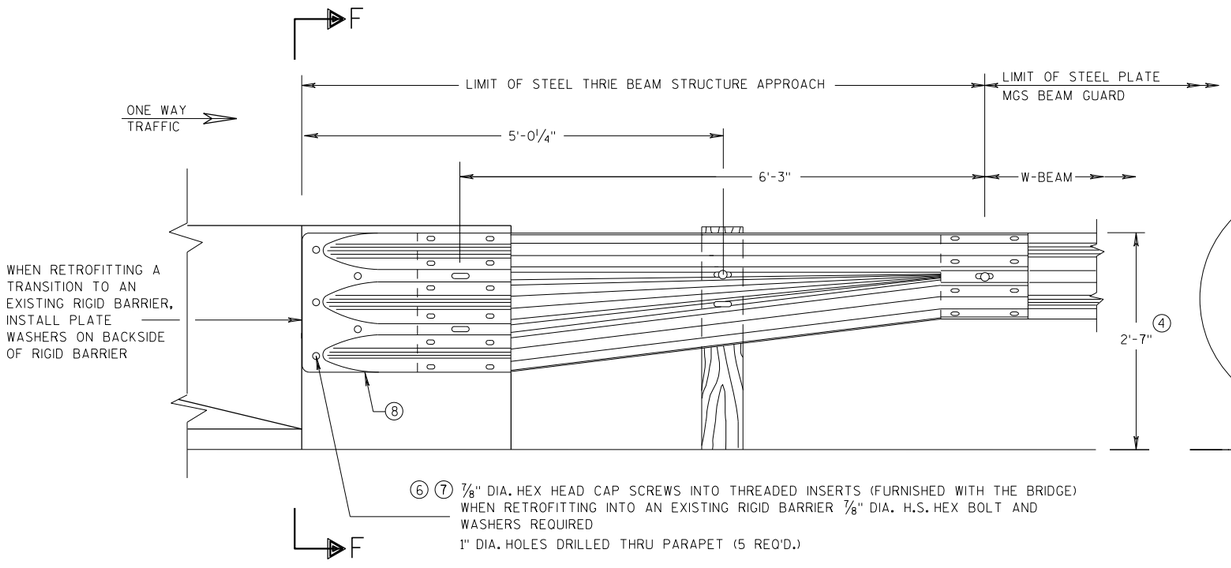
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

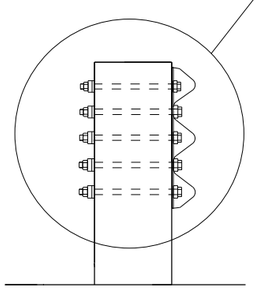
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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

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

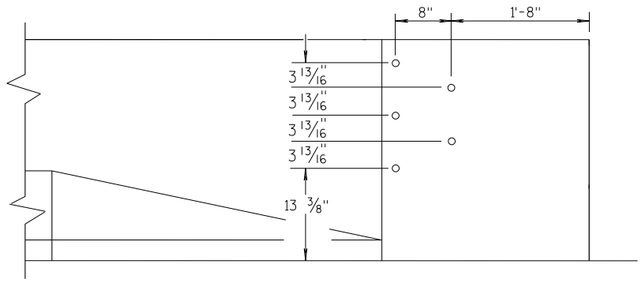




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D[UNIT SUPERVIS
NT
FHWA

6

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

6

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

GENERAL NOTES

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

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

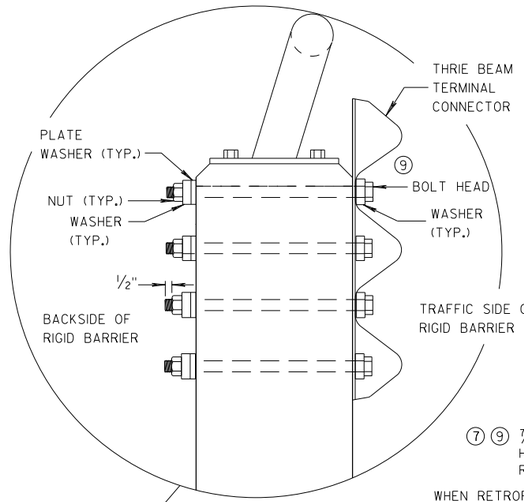
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

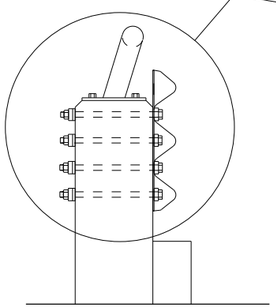
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

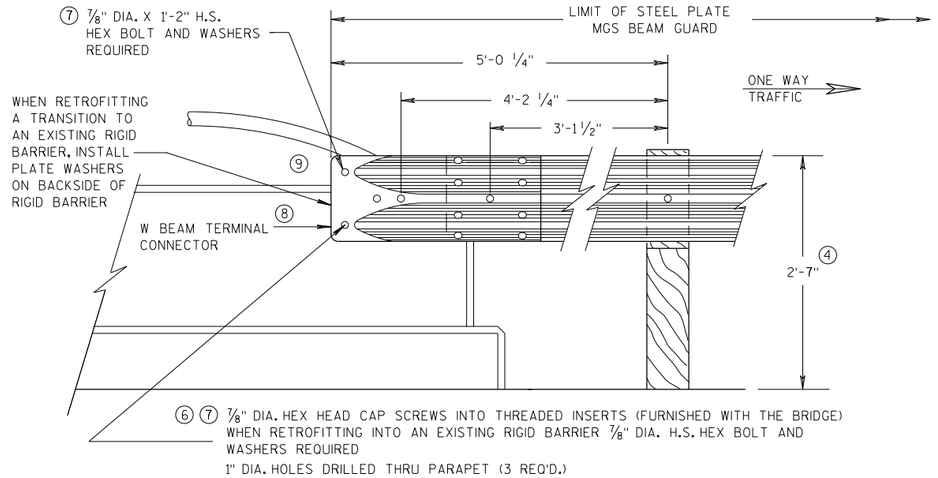
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





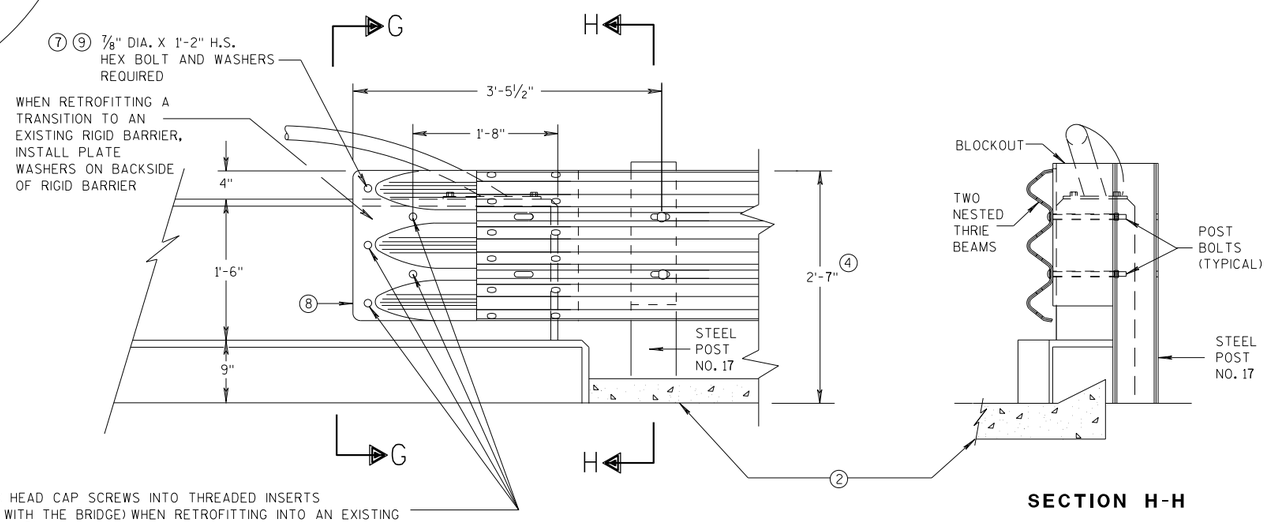
SECTION G-G



FRONT VIEW

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

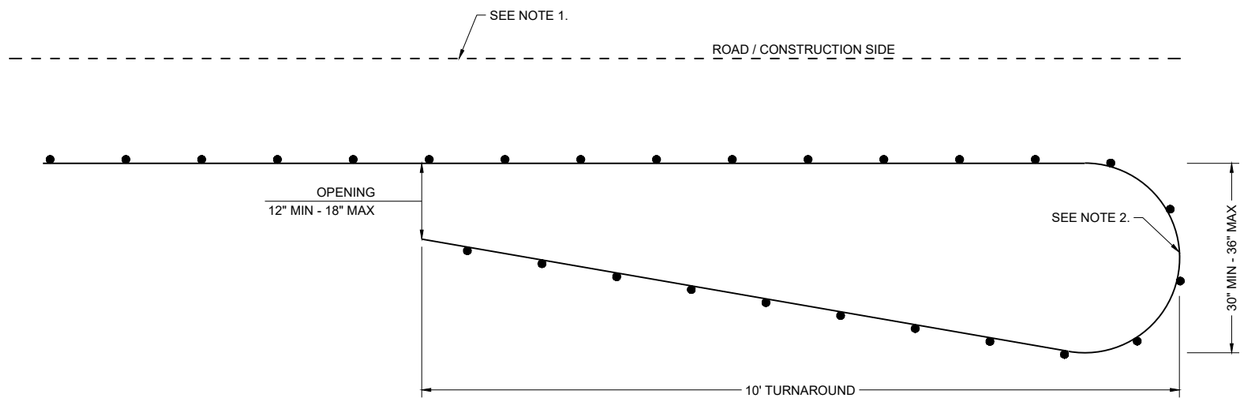
APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D UNIT SUPERVIS — NT
FHWA

6

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

6

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



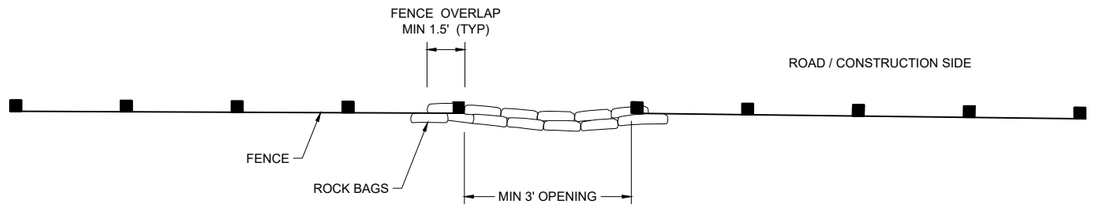
PLAN VIEW

CLIMBING TURTLE EXCLUSION FENCE DETAIL

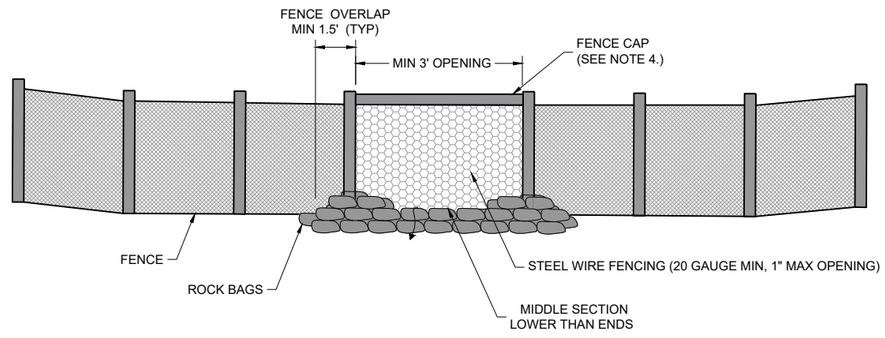
GENERAL NOTES:

1. WHERE SILT FENCE IS REQUIRED, IT SHALL BE PLACED ON THE CONSTRUCTION SIDE OF THE EXCLUSION FENCING, OR COMBINED WITH THE EXCLUSION FENCING AS ALLOWED IN THE SPECIFICATIONS. STAKES ON THIS DETAIL ARE OPPOSITE OF STANDARD SILT FENCE FOR SEDIMENT CONTROL.
2. PLACE TURNAROUNDS AT ALL TERMINI ENDS OF THE EXCLUSION FENCING.
3. IF TEMPORARY ACCESS POINTS ARE NEEDED DURING CONSTRUCTION THAT REQUIRE OPENINGS IN THE EXCLUSION FENCING, ACCESS OPENINGS SHOULD BE TIGHTLY SECURED WITH BALES OF HAY OR STRAW WHENEVER CONSTRUCTION RELATED ACTIVITIES ARE NOT OCCURRING. REINSTALL EXCLUSION FENCING WHEN THE WORK REQUIRING THE TEMPORARY ACCESS OPENING IS COMPLETED.
4. THE FENCE CAP MAY BE A 6" UNDER DRAIN PIPE, SLIT DOWN THE CENTER AND PLACED OVER THE FENCE. COMMERCIALLY AVAILABLE SAFETY CAPS WITH A LIP MAY BE USED. OTHER DNR APPROVED METHODS TO PREVENT TURTLES FROM PASSING OVER THE TOP OF THE FENCE MAY BE USED.

   SECURELY FASTEN THE CAP TO PREVENT IT FROM BEING DISLODGED.



PLAN VIEW



FRONT VIEW

CLIMBING TURTLE FENCE RELIEF DETAIL

TURTLE EXCLUSION FENCE
CLIMBING TURTLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
AUGUST 2025
DATE

/S/ ALYSSA BARRETTE
CHIEF STATEWIDE ENVIRONMENTAL SERVICES
BUREAU OF TECHNICAL SER

FHWA

6
SDD 14D01-01

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.

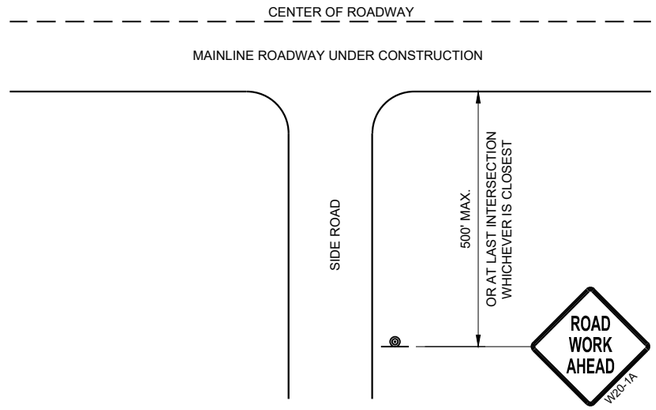
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

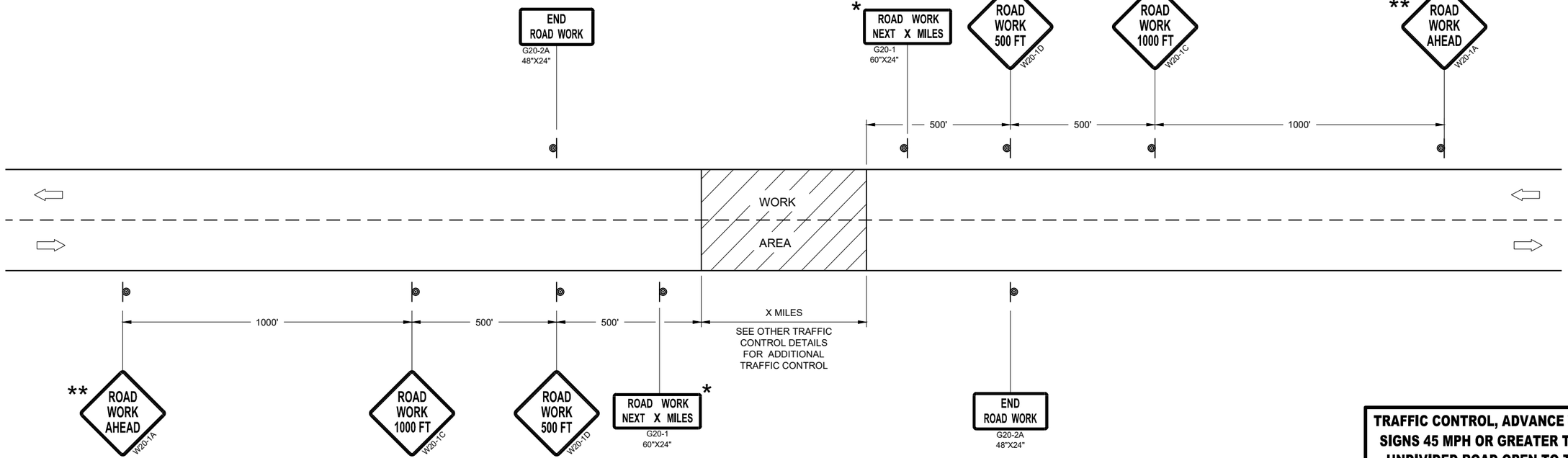
** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



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

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

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

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

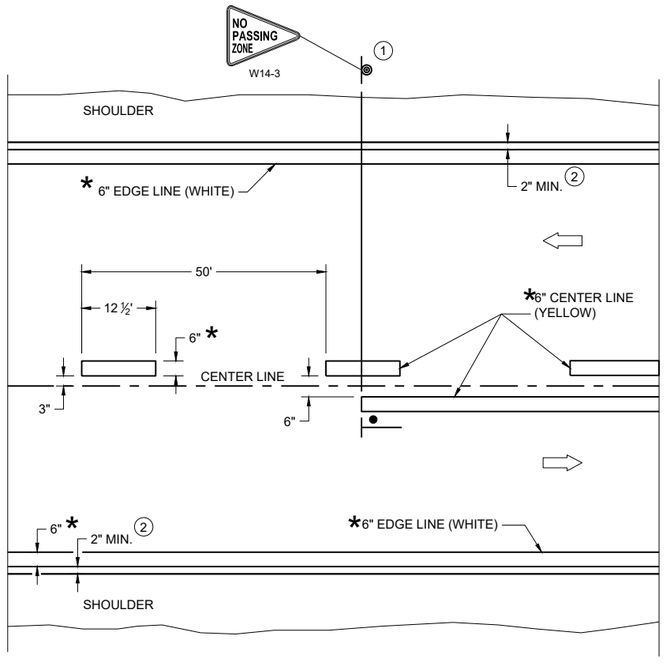
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

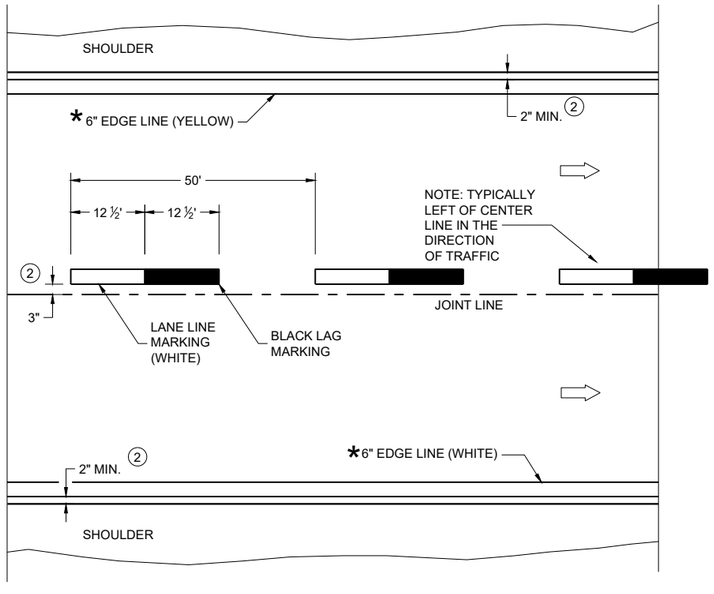
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

SDD 15C08-24a

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

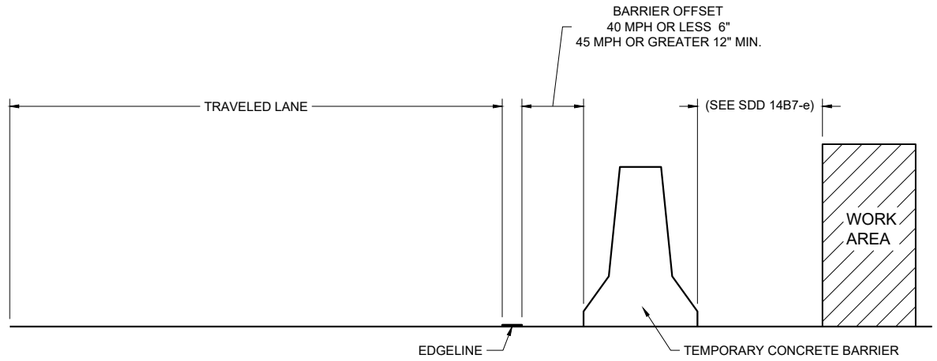
APPROVED
December 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

SDD 15C08-24a



TEMPORARY BARRIER OFFSET FROM EDGELINE

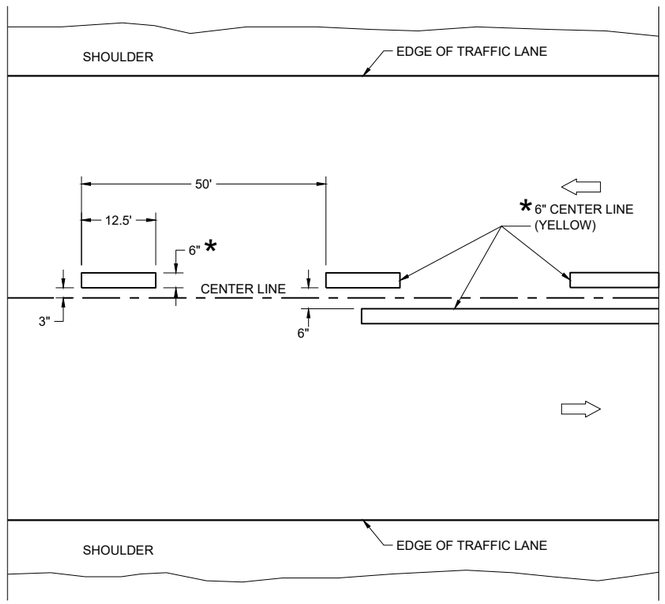
GENERAL NOTES

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

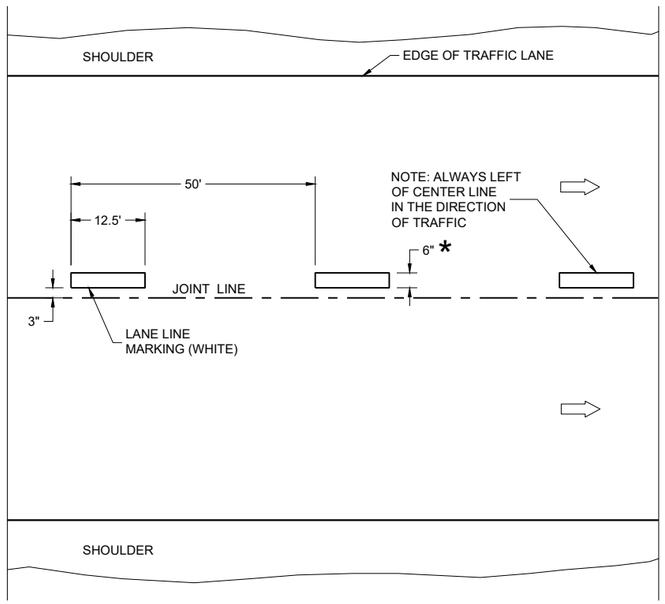
LEGEND

DIRECTION OF TRAFFIC

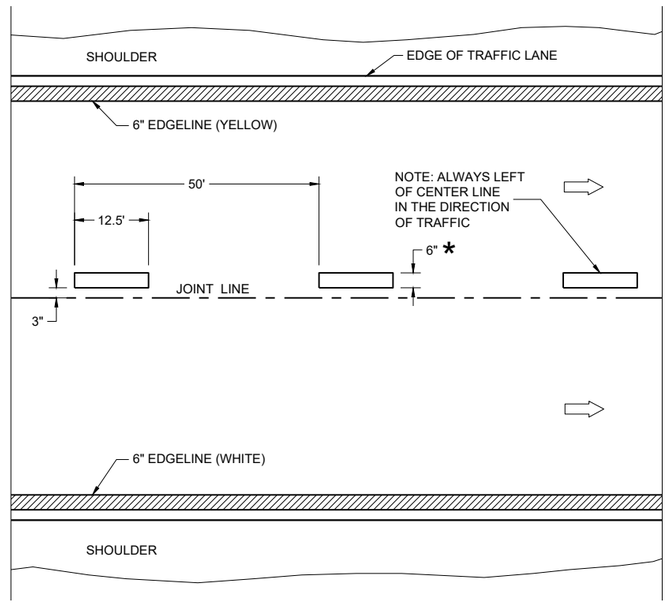
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

SDD 15C08-24b

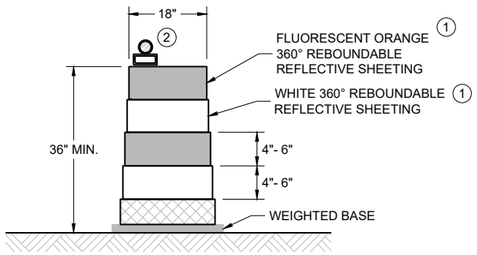
6

SDD 15C08-24b

GENERAL NOTES

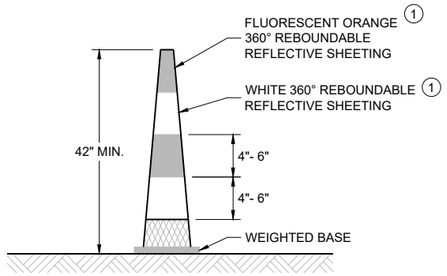
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

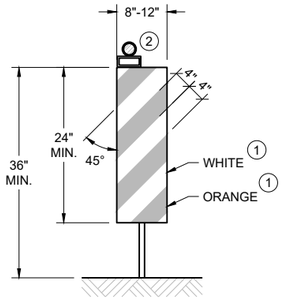
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

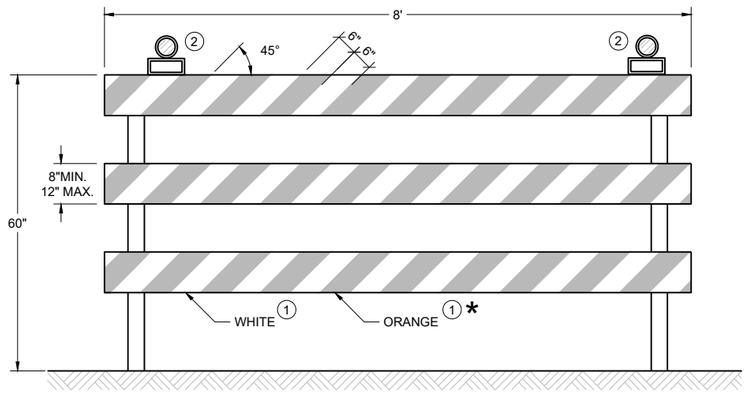
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



VERTICAL PANEL

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



TYPE 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
February 2026 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6
SDD 15C11-11b

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.

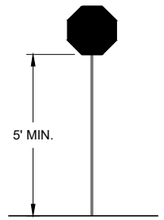
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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

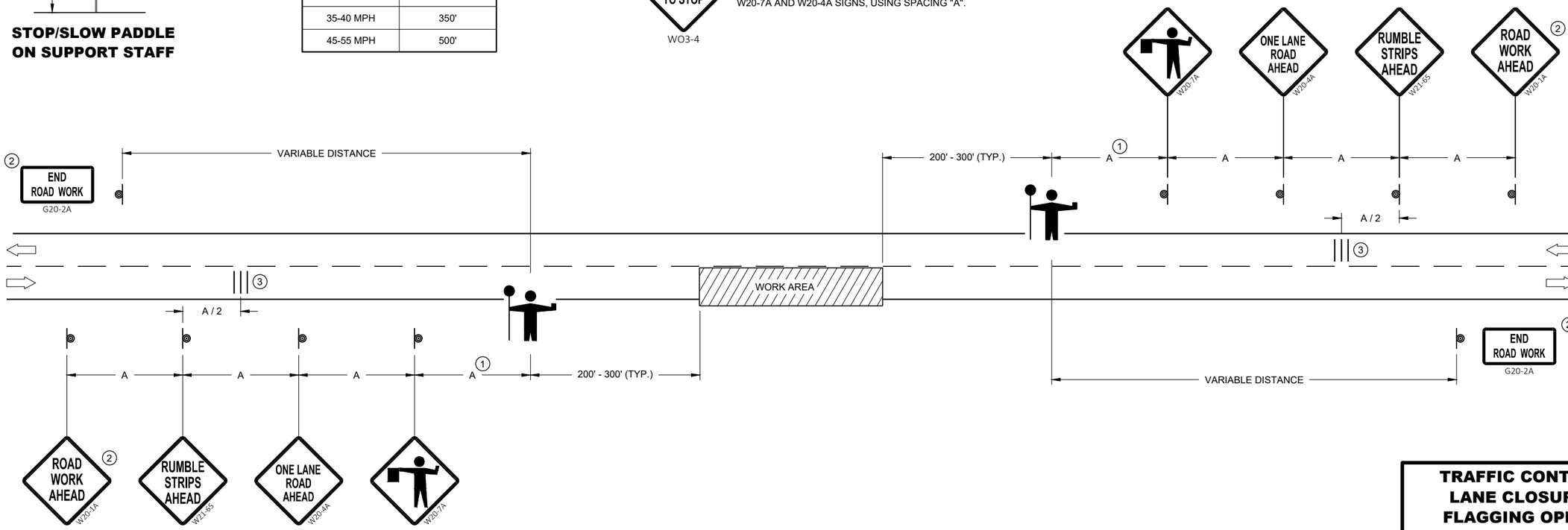
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

SDD 15C12 - 09a

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

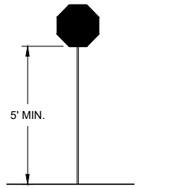
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

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.

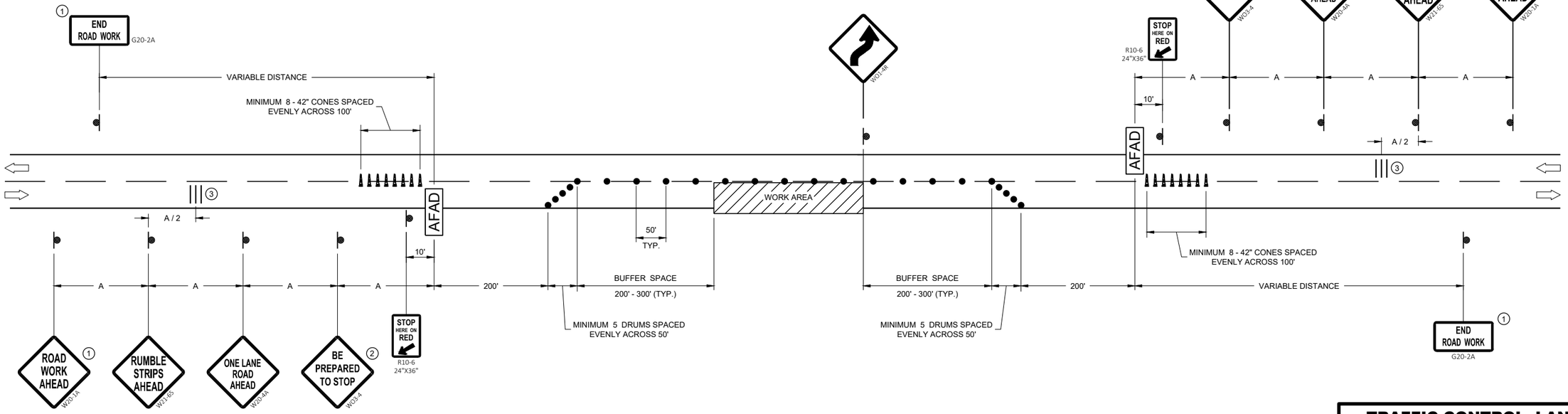
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



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 ENGINEE

FHWA

6

SDD 15C12 - 09b

6

SDD 15C12 - 09b

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH

WORKERS SHALL NOT PERFORM WORK FROM ANY SHADOW OR PROTECTION VEHICLES.

UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

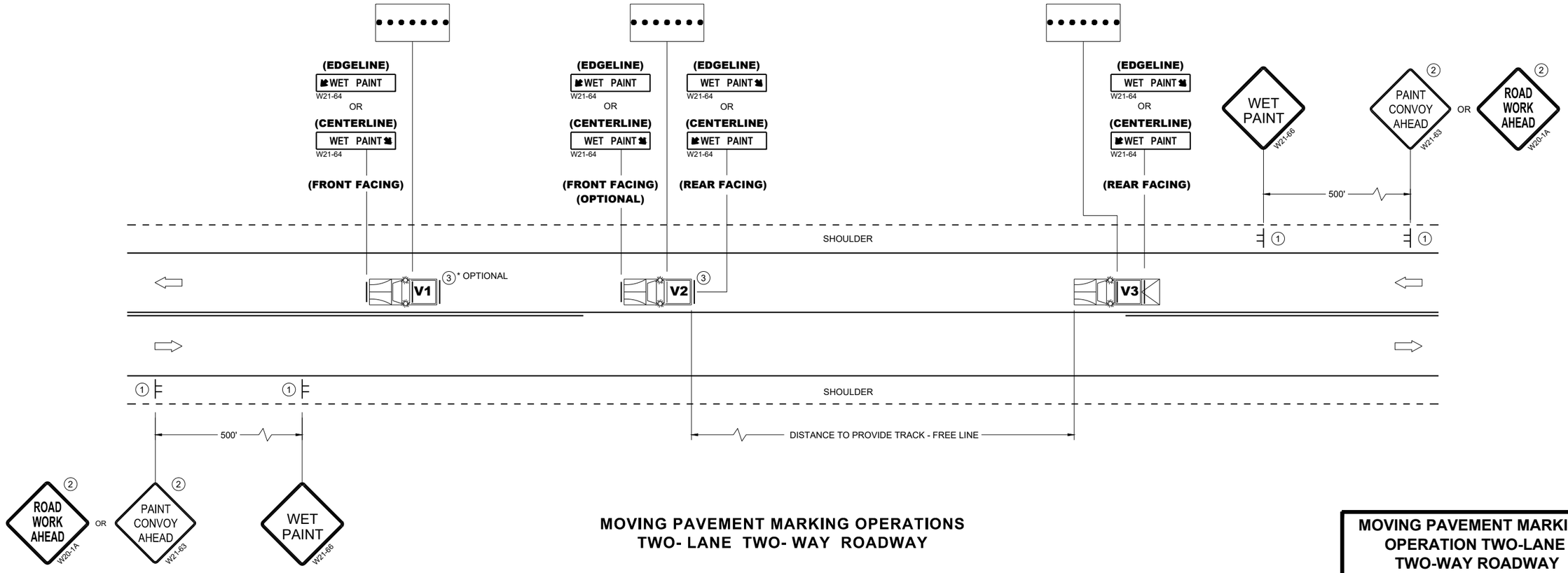
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY MAJOR INTERSECTION.

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

(3) V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

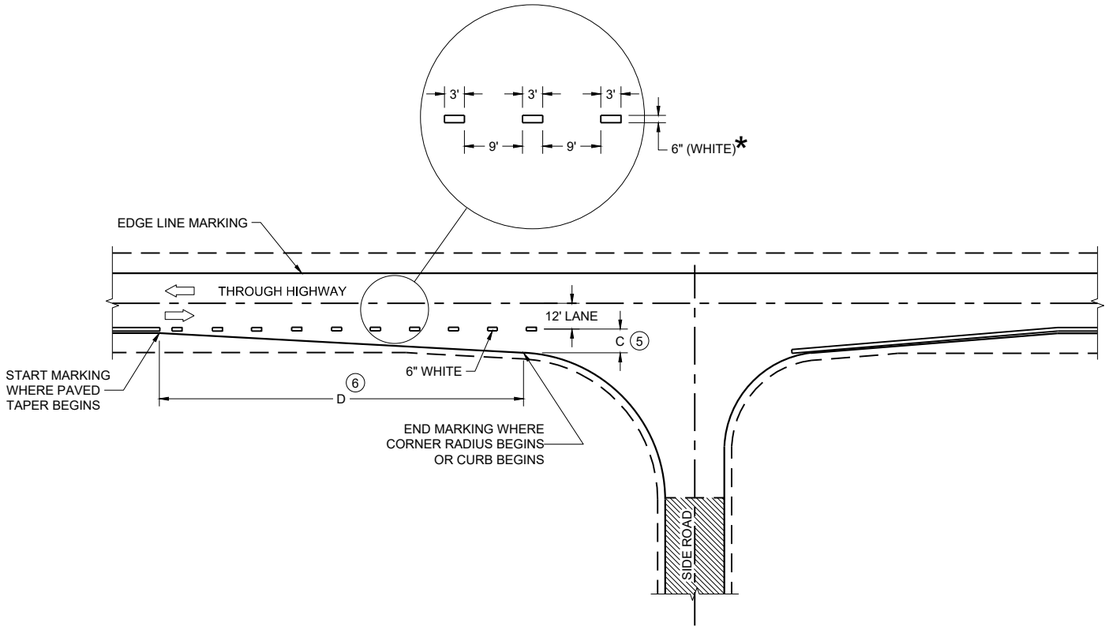
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — STATE ELECTRICAL ENGINEER

FHWA

6

SDD 15C19-11a



MINOR INTERSECTION

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

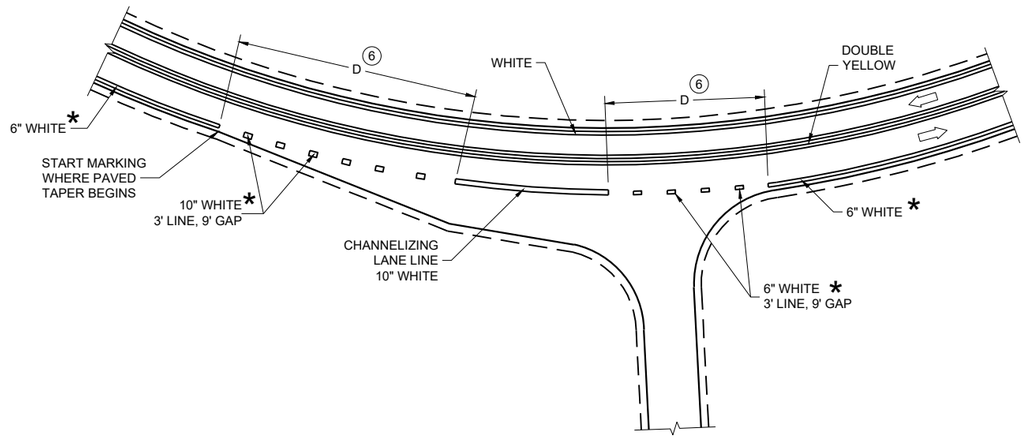
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

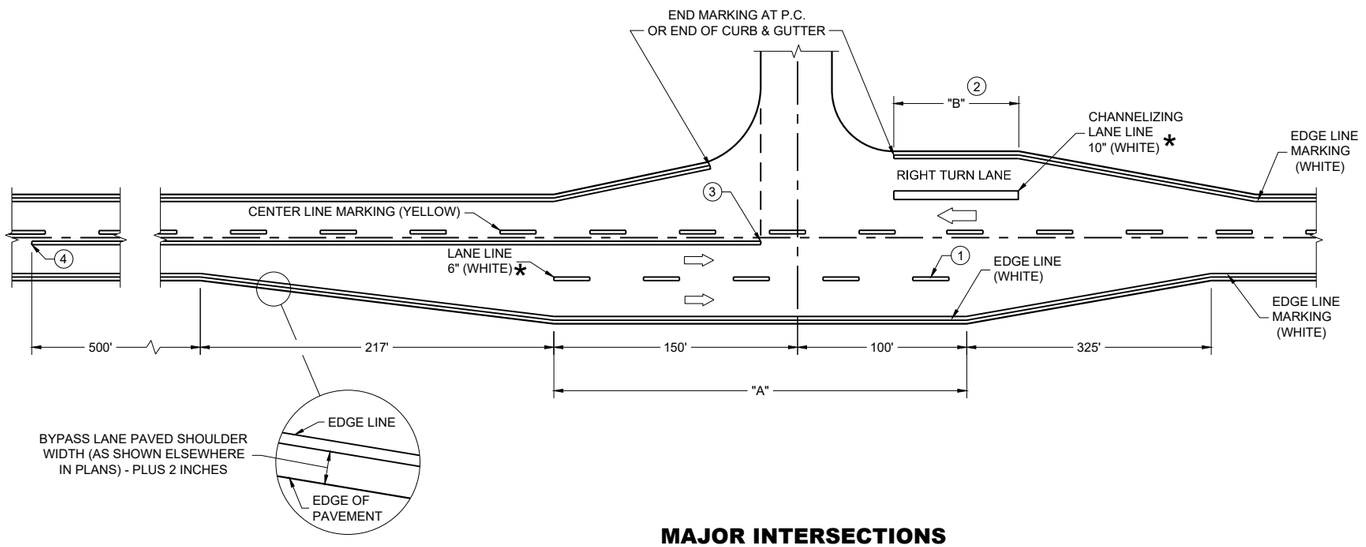
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35-06a

6

GENERAL NOTES

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

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

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

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

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

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

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

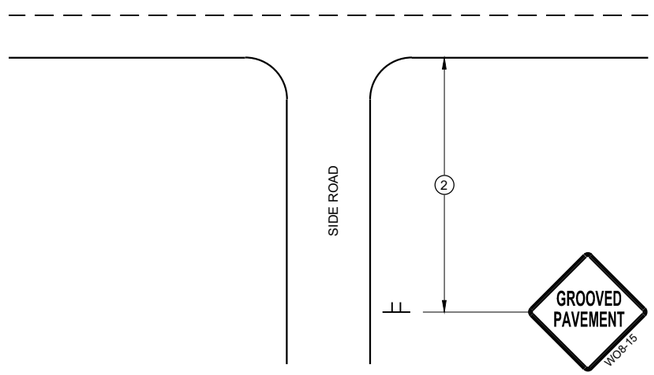
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

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

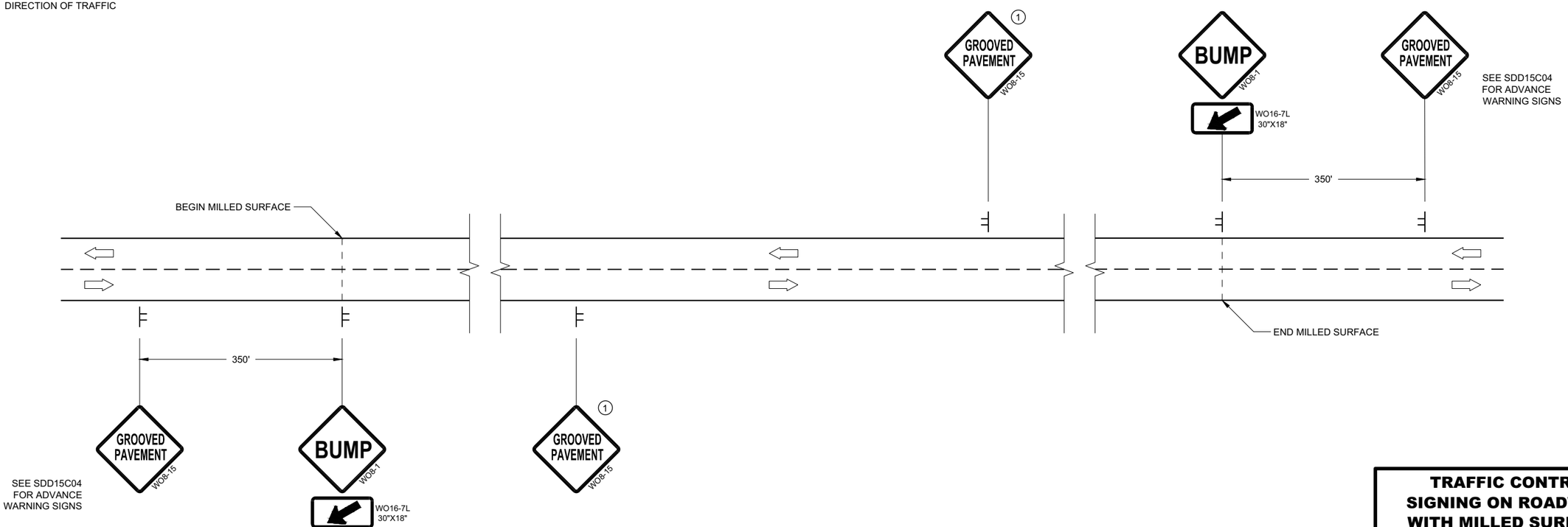
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

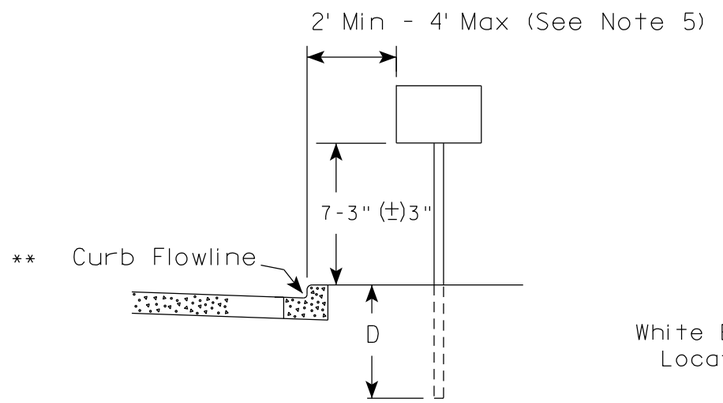
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

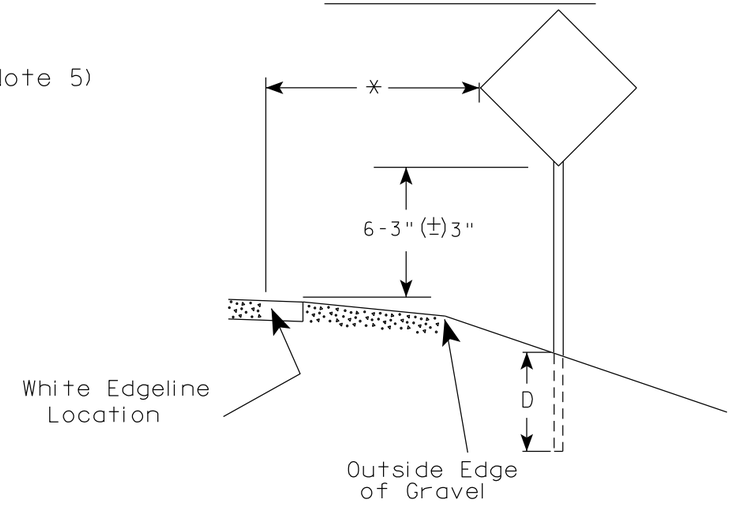
SDD 15D44 - 02

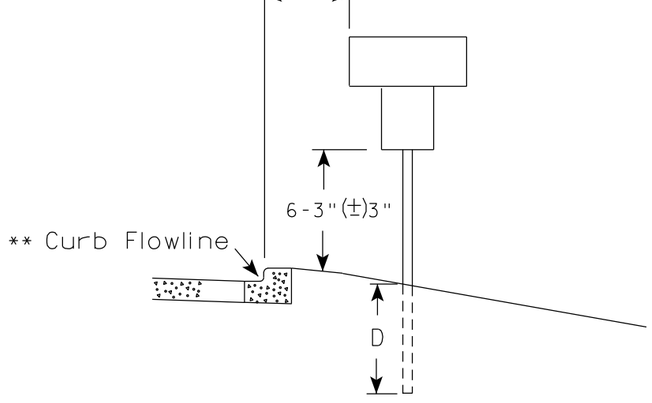
SDD 15D44 - 02

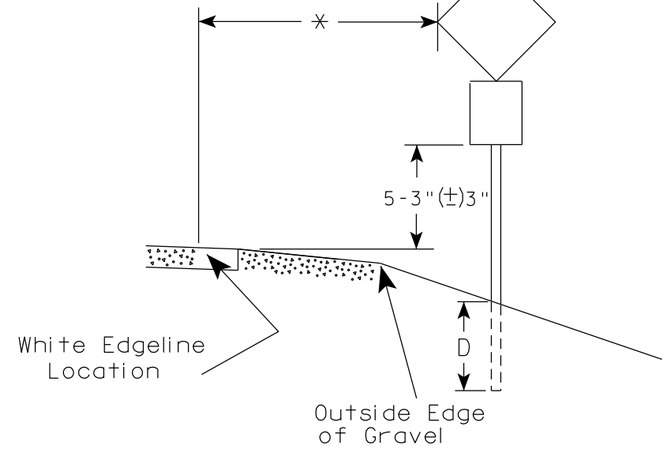
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

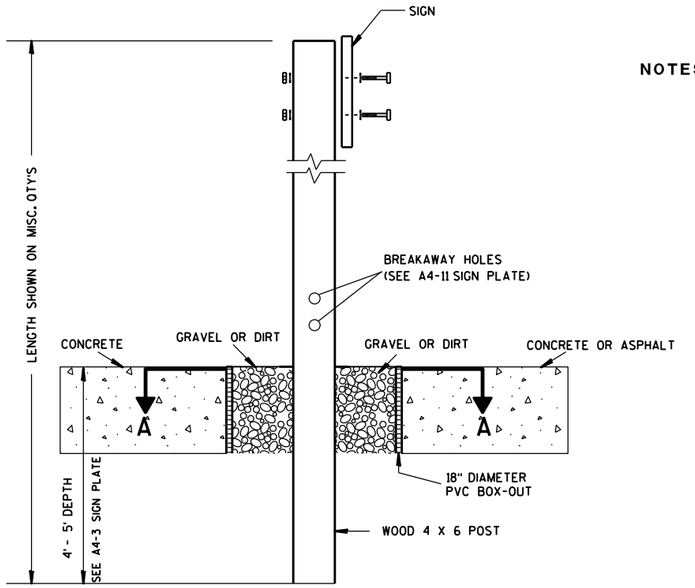
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

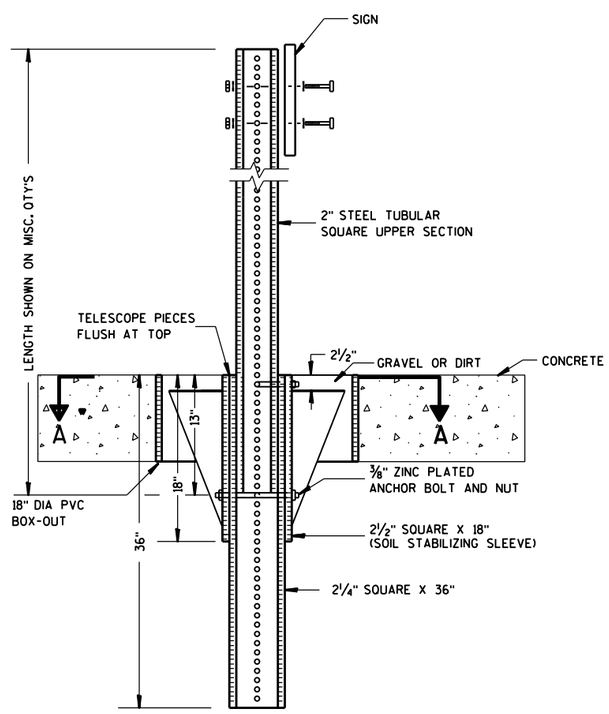
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 66	E



ELEVATION VIEW

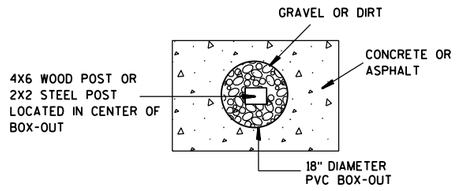
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

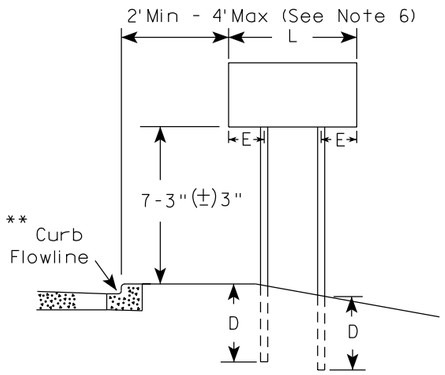
WISCONSIN DEPT OF TRANSPORTATION

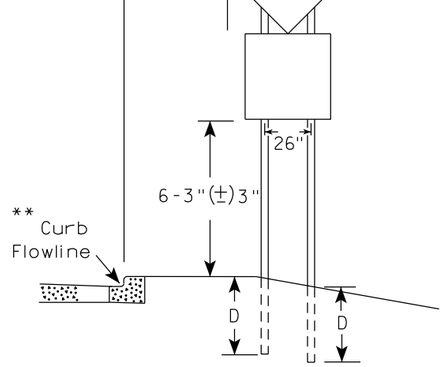
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

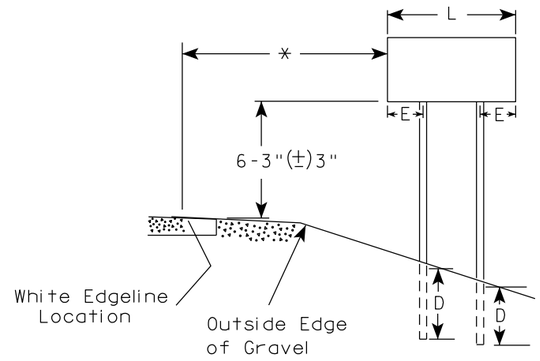
URBAN AREA

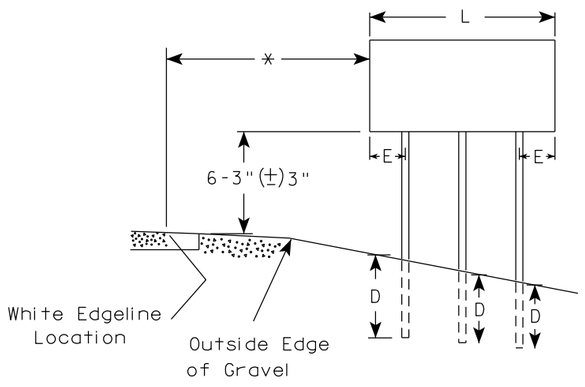


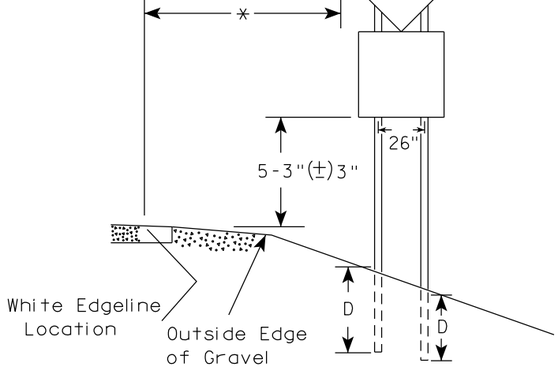


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

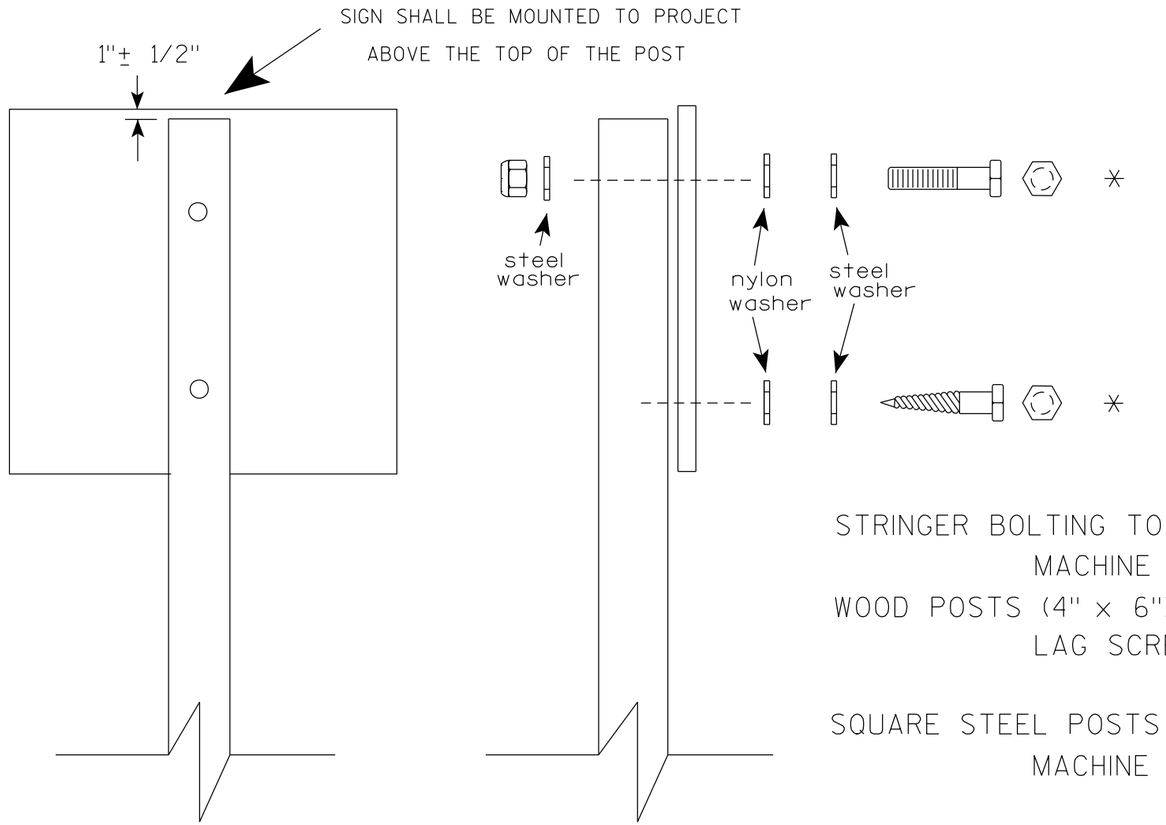
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 68	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

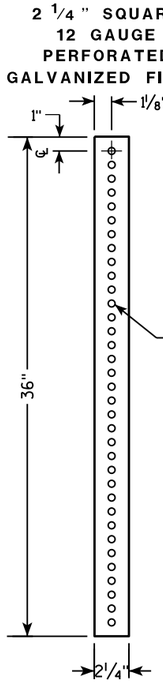
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

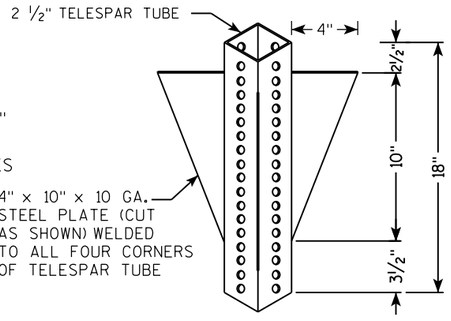
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

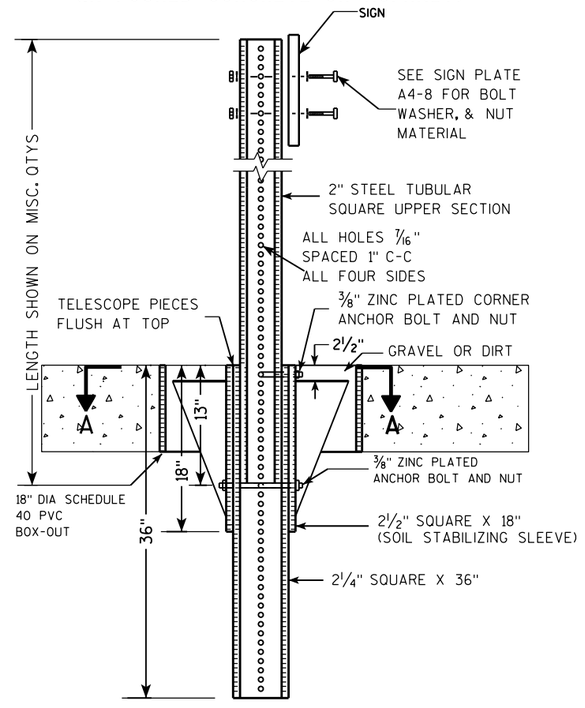
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



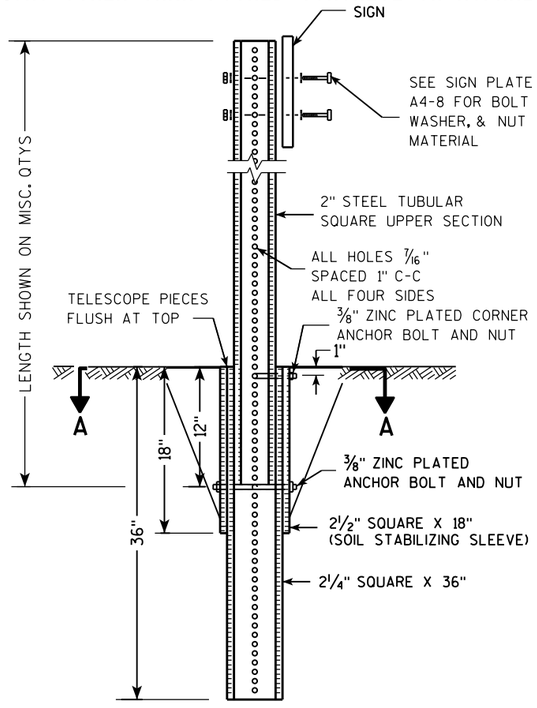
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

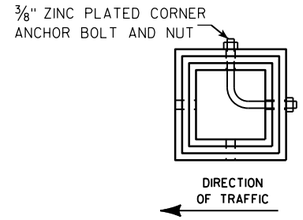


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

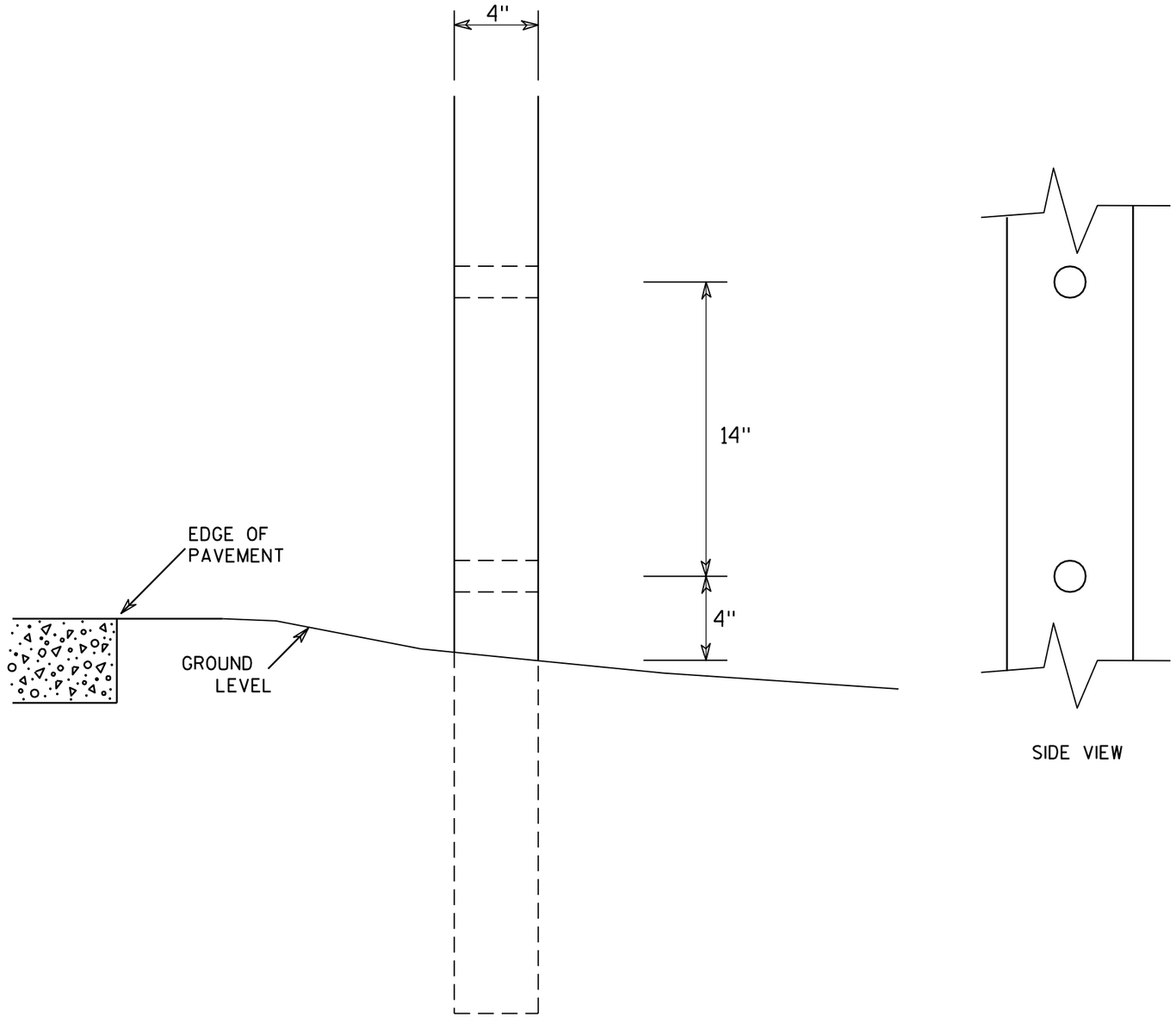
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 70 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

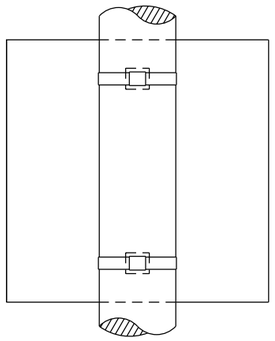
APPROVED Chester J Spang
for State Traffic Engineer

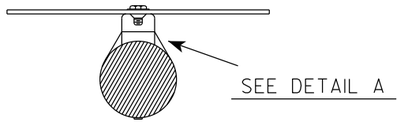
DATE 3/27/97 PLATE NO. A4-11.2

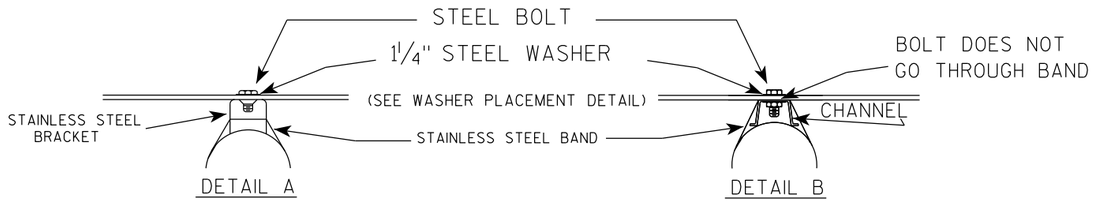
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 71	E

BANDING

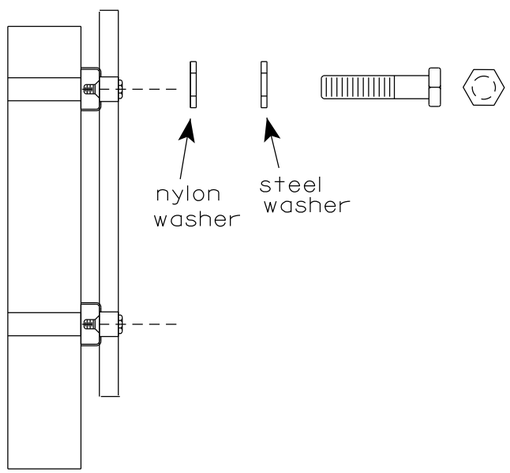
SINGLE SIGN







WASHER PLACEMENT

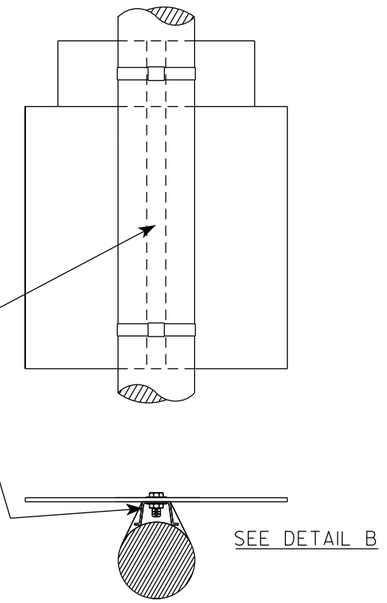


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

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

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

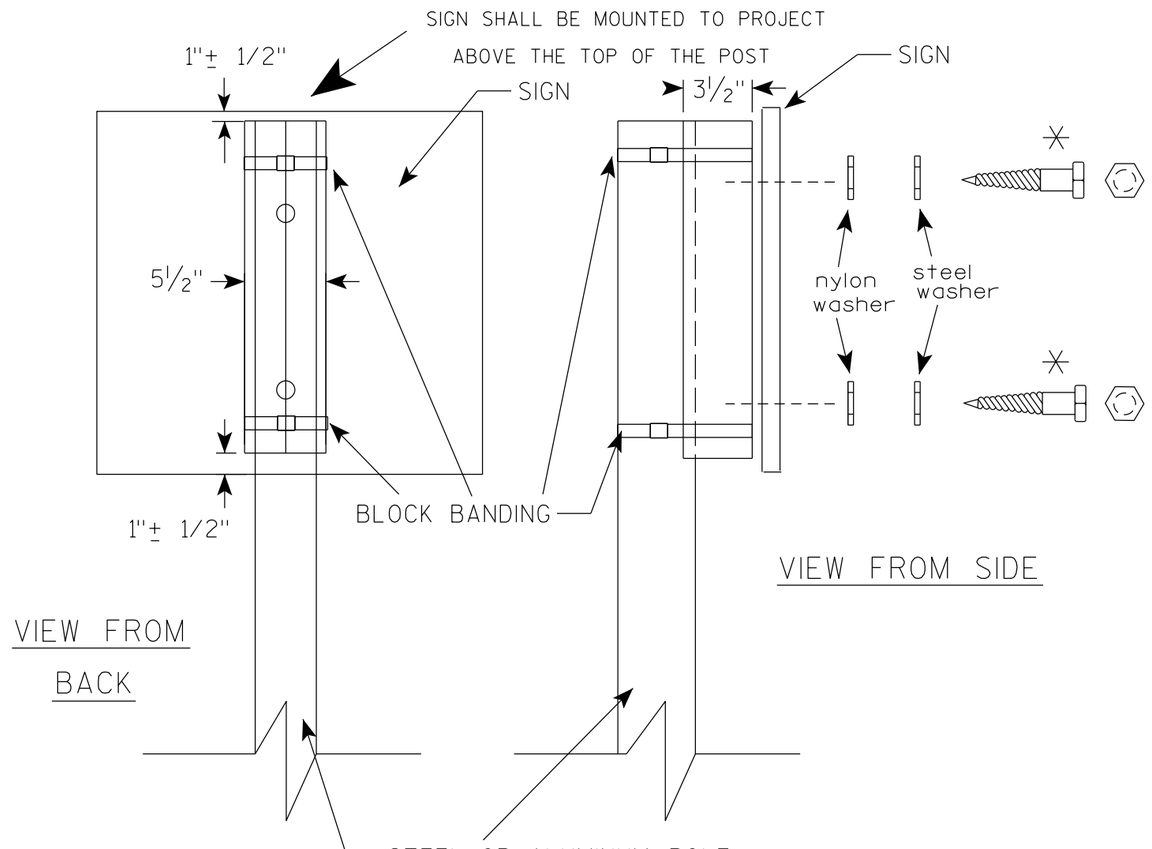
DATE 6/10/19 PLATE NO. A5-9.4

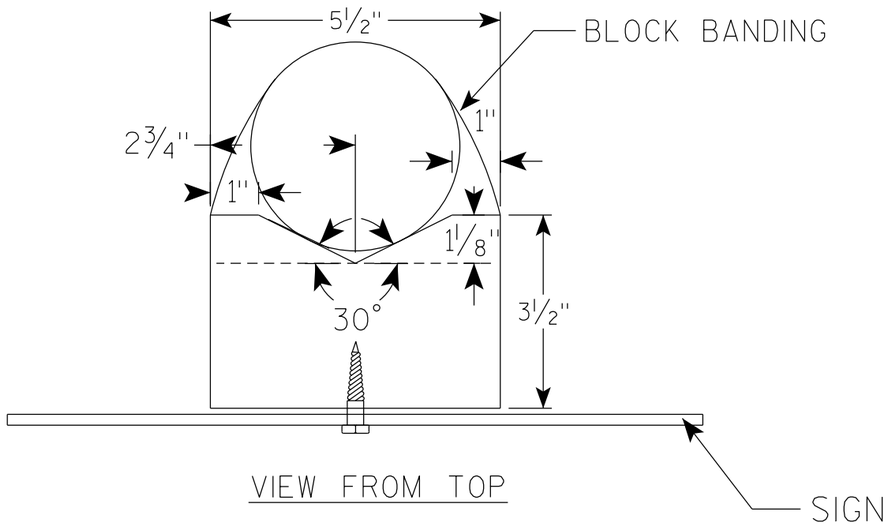
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 72	E

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

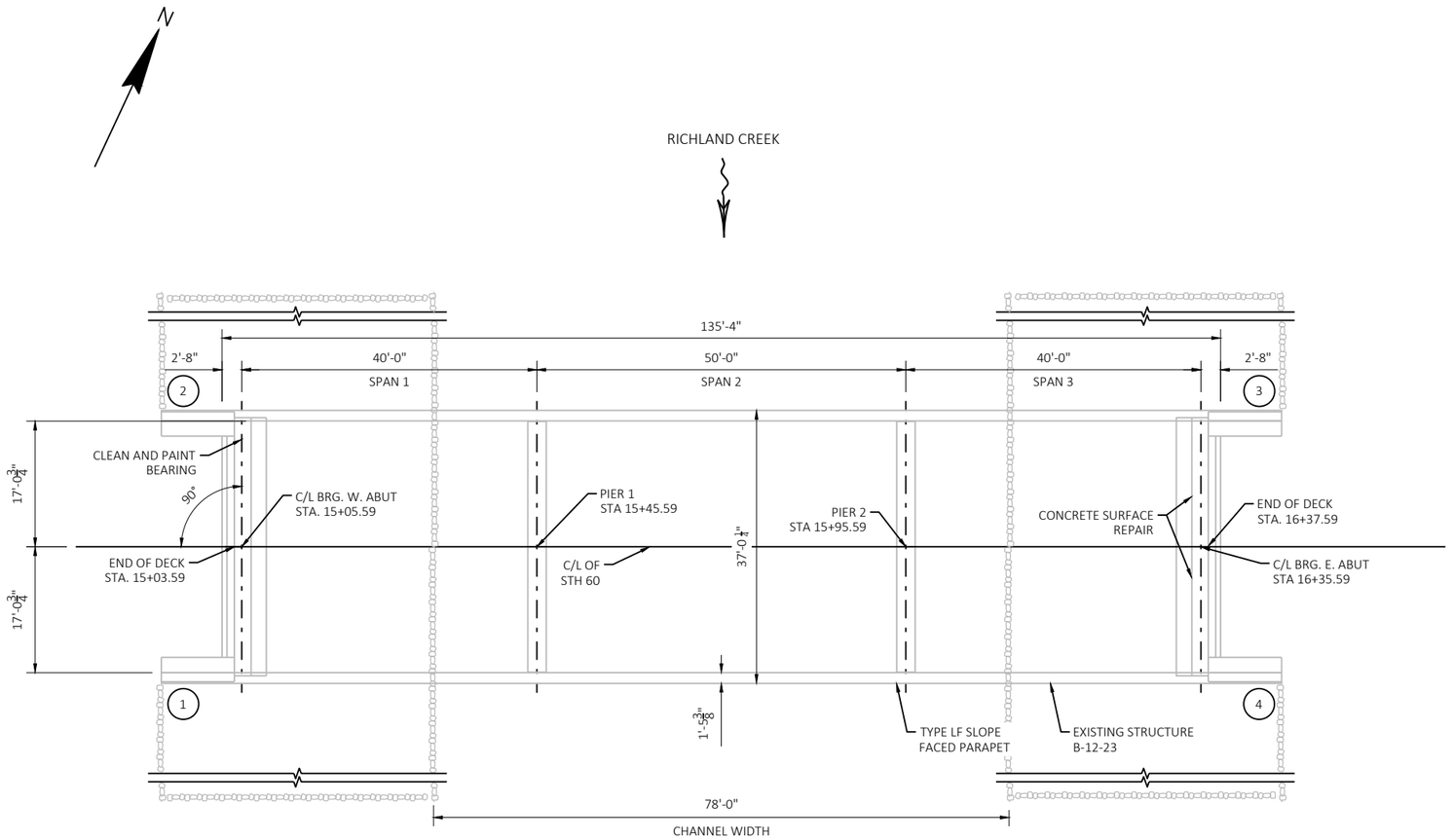
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 73 E

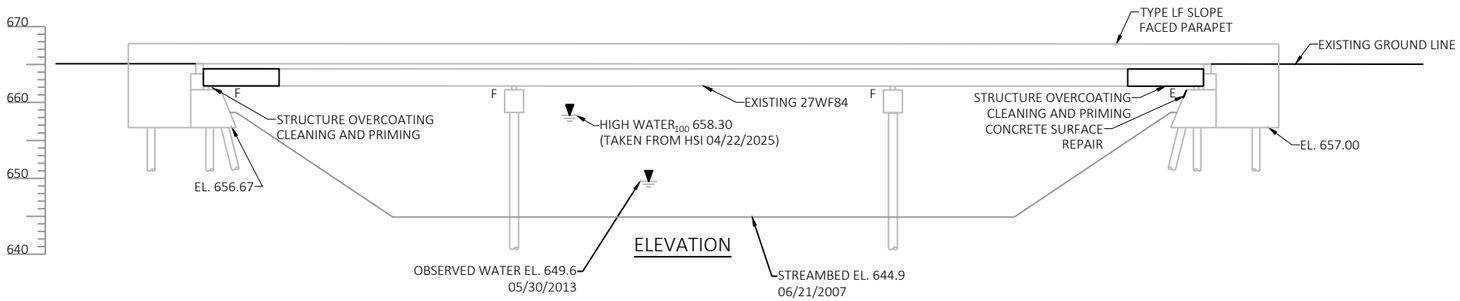
STATE PROJECT NUMBER

5190-04-72



PLAN

THREE SPAN STEEL GIRDER BRIDGE
(CLEANING, PAINTING, AND CONCRETE REPAIR)



ELEVATION

DESIGN DATA

LIVE LOAD:
TAKEN FROM HSI, 11/13/2023
INVENTORY RATING: HS19
OPERATING RATING: HS32
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 190 KIPS

MATERIAL PROPERTIES
CONCRETE MASONRY -SURFACE REPAIR f'c = 3,500 PSI

TRAFFIC DATA
ADT (2027) = 1,400
ADT (2047) = 1,500
DESIGN SPEED = 55 MPH

LEGEND

(X) DENOTES WING NUMBER

LIST OF DRAWINGS	
SHEET NO.	SHEET TITLE
1	GENERAL PLAN
2	QUANTITIES AND NOTES

BRIDGE OFFICE CONTACT
AARON BONK, PE
(608) 261-0261

CONSULTANT CONTACT.
KHALED ABOUEID, PE
(312) 577-3321

WISCONSIN
KHALED ABOUEID
E-48167
SCHILLER PARK
IL
PROFESSIONAL ENGINEER

7/28/2026
DATE

NO.	DATE	REVISION	BY

WSP USA

STATE OF WISCONSIN DEPARTMENT OF TRANSPORATION

ACCEPTED JLR 08/13/26
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-12-23

STH 60 OVER RICHLAND CREEK

COUNTY	TOWN
CRAWFORD	MARIETTA

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
RMM	LAS	RMM	LAS

GENERAL PLAN

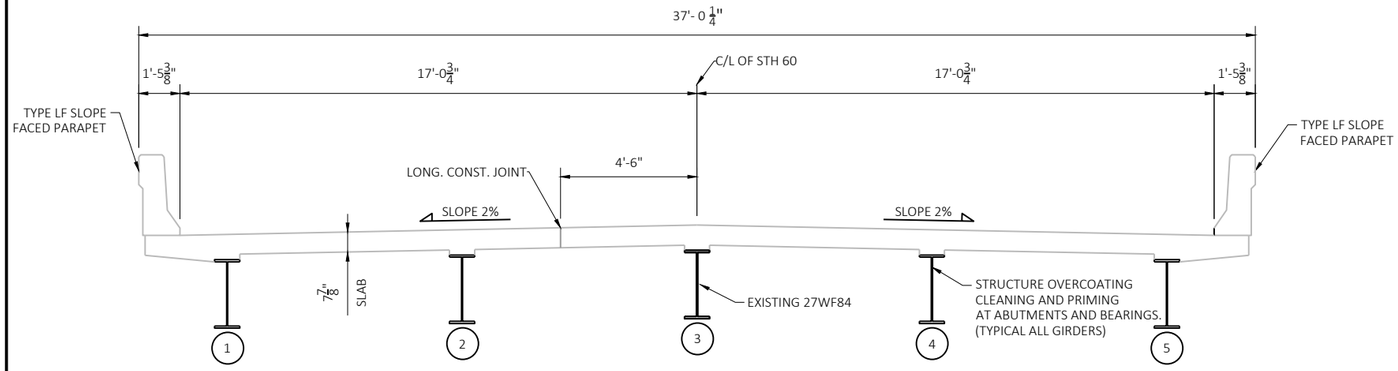
SHEET 1 OF 2
74

I.D.
DATE:
SCALE =

8
8

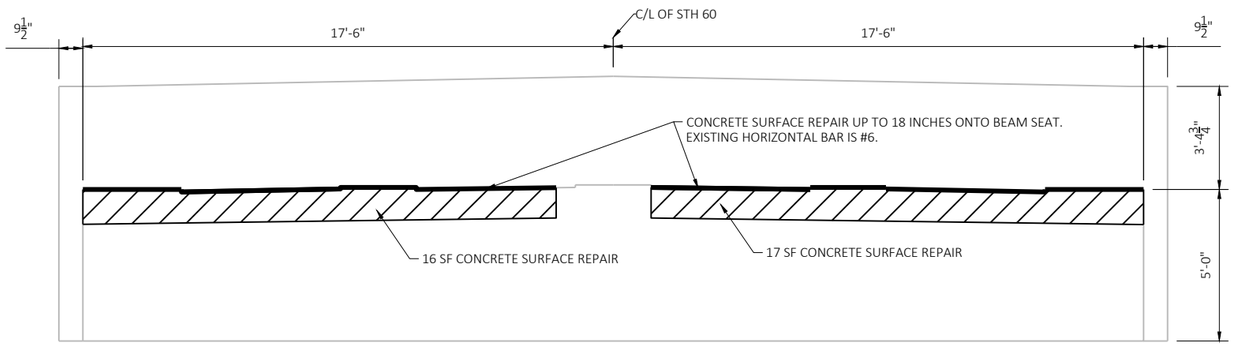
STATE PROJECT NUMBER

5190-04-72



TYPICAL SECTION THRU BRIDGE

LOOKING EAST



EAST ABUTMENT

LOOKING EAST

GENERAL NOTES

B-12-23, BUILT IN 1961, IS A THREE SPAN STEEL GIRDER, CONCRETE DECK WITH A CONCRETE ABUTMENT SUPPORTED ON TIMBER PILES AND PIERS SUPPORTED ON 14" CIP CONCRETE PILES, 34'-1 1/2" CLEAR ROADWAY WIDTH X 135'-4" FROM BACK OF ABUTMENT TO BACK OF ABUTMENT.

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

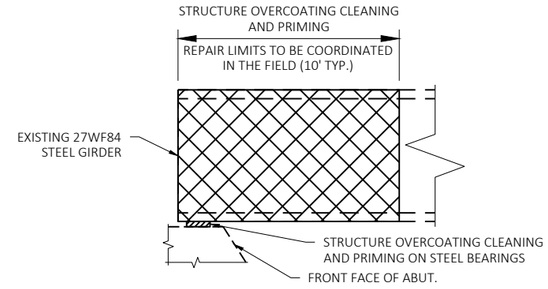
REPLACING DETERIORATED BAR REINFORCEMENT IN CONCRETE SURFACE REPAIR AREA IS INCIDENTAL TO CONCRETE SURFACE REPAIR ITEM.

THE FINISH COLOR SHALL BE AMS STANDARD COLOR NO. 24260, GREEN.

SCOPE OF WORK

STRUCTURE OVERCOATING CLEANING AND PRIMING ON GIRDERS AND BEARINGS

CONCRETE SURFACE REPAIR AT LOCATIONS DIRECTED BY ENGINEER



GIRDER END PAINTING DETAIL

TYPICAL AT BOTH ABUTMENTS

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEM DESCRIPTION	UNIT	QUANTITY
509.1500	CONCRETE SURFACE REPAIR	SF	33
517.3001.S	STRUCTURE OVERCOATING CLEANING AND PRIMING B-12-23	EACH	1
517.4001.S	CONTAINMENT AND COLLECTION OF WASTE MATERIALS B-12-23	EACH	1
517.6001.S	PORTABLE DECONTAMINATION FACILITY	EACH	1

LEGEND

CONCRETE SURFACE REPAIR

STRUCTURE OVERCOATING CLEANING AND PRIMING

NO.	DATE	REVISION	BY

WSP USA

STRUCTURE B-12-23

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
RMM	LAS	RMM	LAS

QUANTITIES AND NOTES

SHEET 2 OF 2

75

SCALE =

I.D.

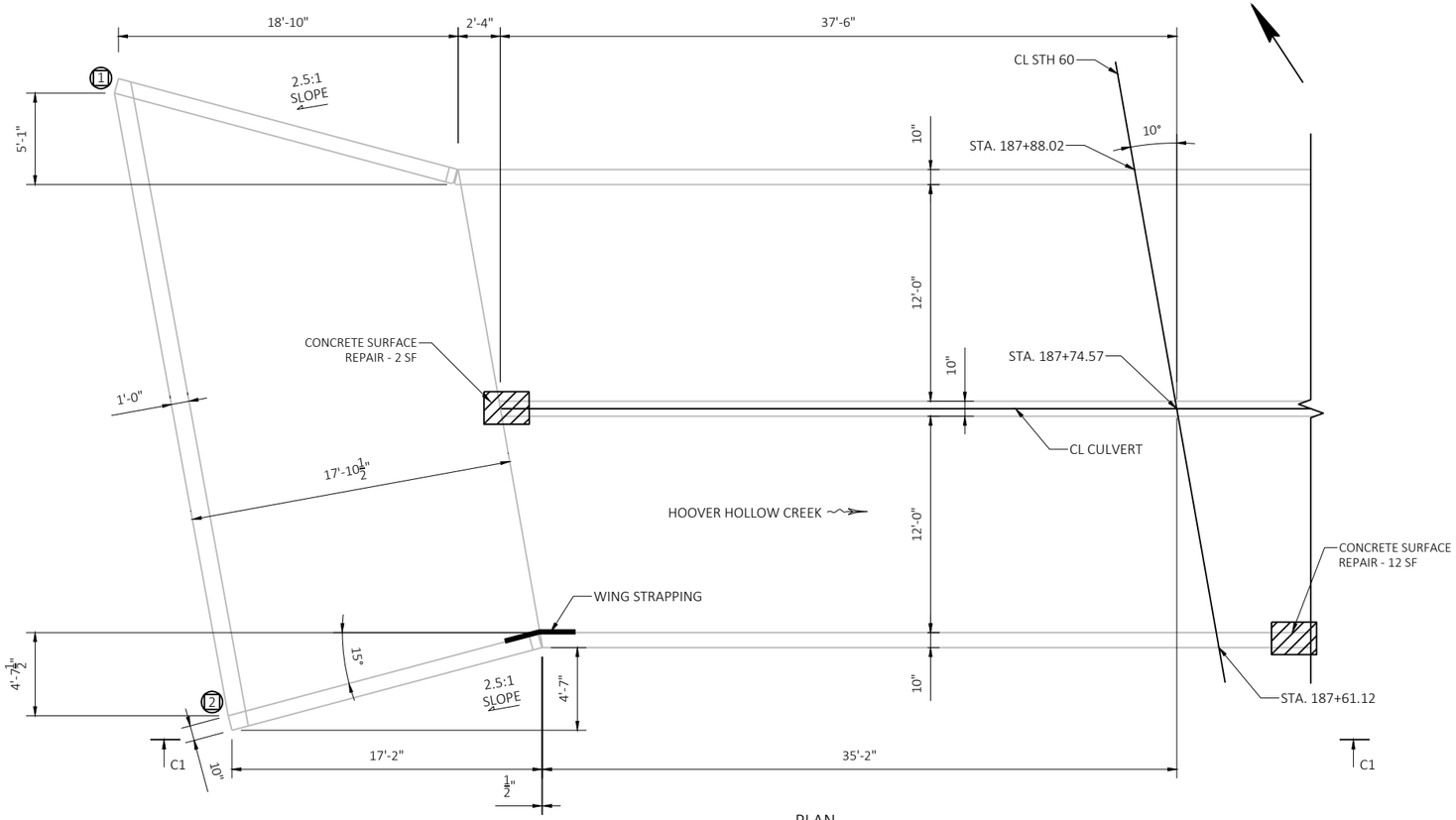
DATE:

8

8

STATE PROJECT NUMBER

5190-04-72

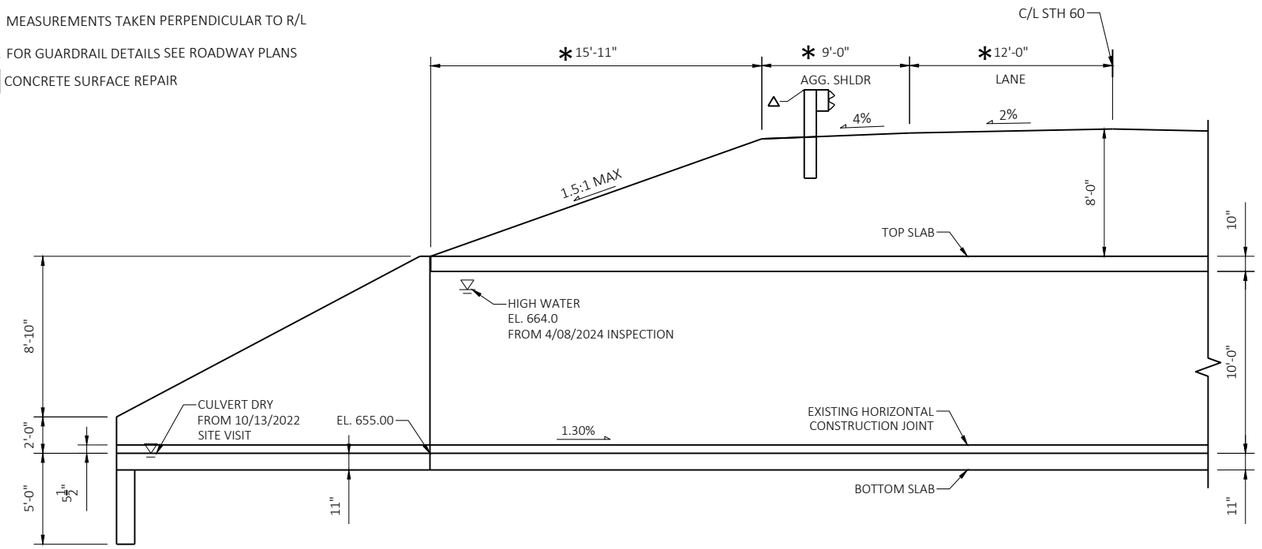


PLAN

TWIN CELL BOX CULVERT

LEGEND

- INDICATES WING NUMBER
- ✱ MEASUREMENTS TAKEN PERPENDICULAR TO R/L
- △ FOR GUARDRAIL DETAILS SEE ROADWAY PLANS
- CONCRETE SURFACE REPAIR



SECTION C1

DESIGN DATA

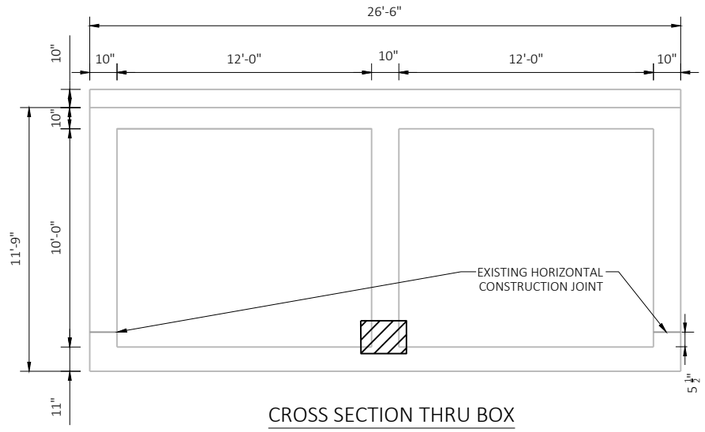
LIVE LOAD: (TAKEN FROM HSI, 06/02/2023)
INVENTORY RATING FACTOR: HS34
OPERATIONAL RATING FACTOR: HS58
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 190 KIPS

MATERIAL PROPERTIES
WING STRAPPING STEEL ----------FY = 36,000 PSI
CONCRETE MASONRY - SURFACE REPAIR ----------f'c = 3,500 PSI

TRAFFIC DATA

ADT (2027)	= 1,400
ADT (2047)	= 1,500
DESIGN SPEED	= 55 MPH

LIST OF DRAWINGS
1. GENERAL PLAN
2. WING STRAPPING AND QUANTITIES



CROSS SECTION THRU BOX

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEM DESCRIPTION	UNIT	QUANTITY
509.1500	CONCRETE SURFACE REPAIR	SF	14
SPV.0060	STRAPPING B-52-31	EACH	1

KHALED ABOUEID E-48167 SCHILLER PARK IL
WISCONSIN PROFESSIONAL ENGINEER

7/29/2026
DATE

BRIDGE OFFICE CONTACT:
AARON BONK (608)261-0261

CONSULTANT CONTACT:
KHALED ABOUEID (312)577-3321

NO.	DATE	REVISION	BY

WSP USA

STATE OF WISCONSIN DEPARTMENT OF TRANSPORATION

ACCEPTED JLR 08/13/26
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-52-31

STH 60 OVER HOOVER HOLLOW CREEK

COUNTY	TOWN
RICHLAND	RICHWOOD

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
RMM	KA	RMM	KA

GENERAL PLAN

SHEET 1 OF 2
76

I.D.

DATE:

SCALE =

8

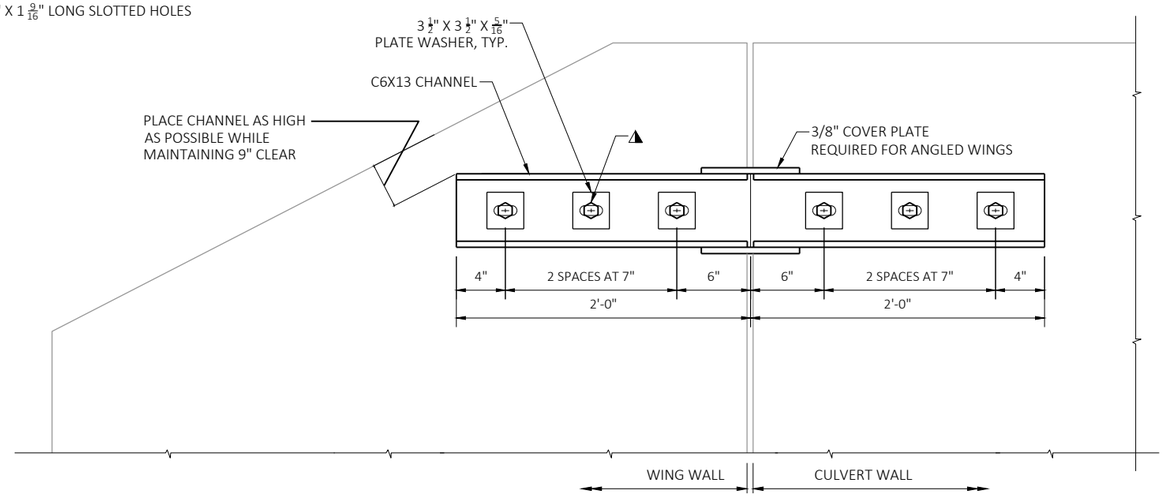
8

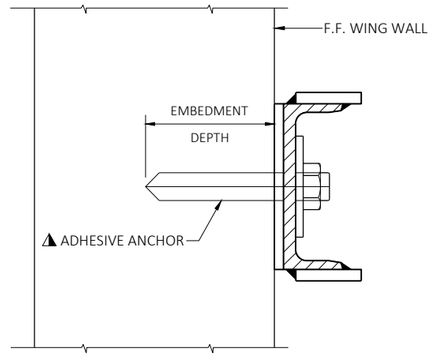
STATE PROJECT NUMBER

5190-04-72

⚠ ADHESIVE ANCHORS 5/8-INCH.
EMBED 5" IN CONCRETE.
SEE DETAIL "A"

USE $\frac{11}{16}$" X 1 $\frac{9}{16}$" LONG SLOTTED HOLES





SECTION THRU CHANNEL
(DETAIL A)

GENERAL NOTES

EXISTING STRUCTURE IS A TWIN CELL CONCRETE BOX CULVERT.

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL PROVIDED STEEL MATERIAL SHALL CONFORM TO ASTM A36.

ALL STRUCTURAL STEEL SHOWN SHALL BE GALVANIZED. THREADED RODS, MASONRY ANCHORS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C.

CUTTING AND DRILLING OF CHANNEL SHALL BE DONE IN FABRICATION SHOP, PRIOR TO GALVANIZING.

IF WELDING COVER PLATE IN FIELD, PRIOR TO WELDING, REMOVE GALVANIZING FROM AREA TO BE WELDED. TOUCH UP WITH PAINT ALL AREAS LACKING GALVANIZING WHEN COMPLETE.

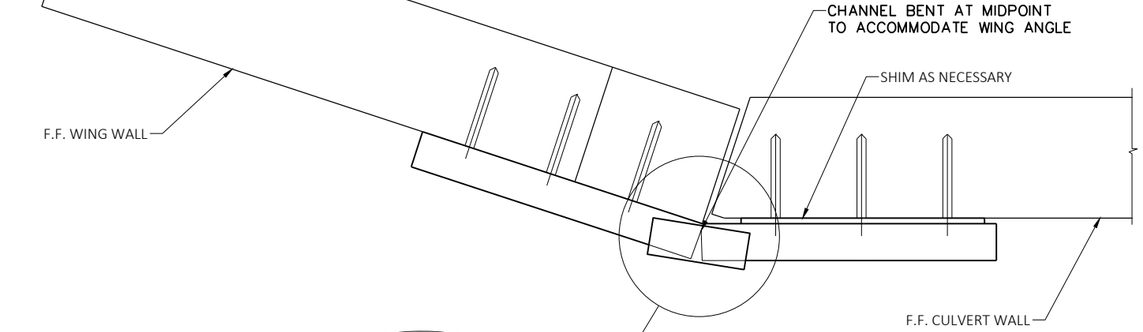
CAULK AROUND PERIMETER OF CHANNEL AND FILL PORTION OF HOLE AROUND ANCHOR BOLT AND SHIM WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.

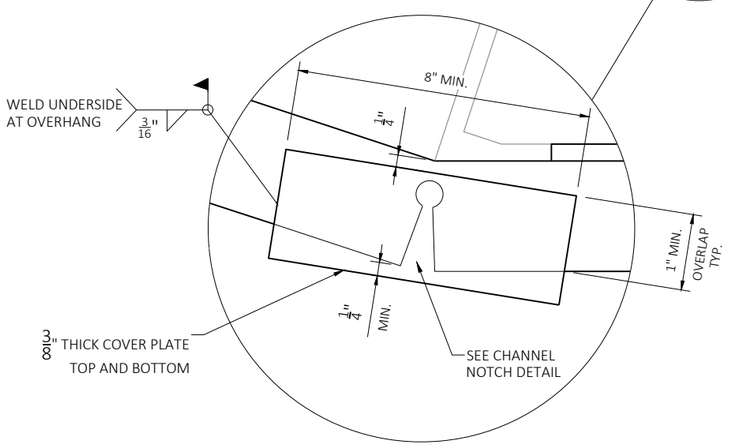
SCOPE OF WORK

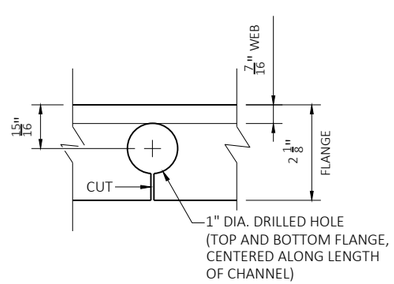
BID ITEM SHALL BE "STRAPPING B-52-31" WHICH INCLUDES ALL ITEMS SHOWN.

CONCRETE SURFACE REPAIR AT LOCATIONS DIRECTED BY ENGINEER



PLAN





CHANNEL NOTCH DETAIL

NO.	DATE	REVISION	BY

WSP USA

STATE OF WISCONSIN DEPARTMENT
OF TRANSPORATION

ACCEPTED _____ _____
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-52-31

STH 60 OVER HOOVER HOLLOW CREEK

COUNTY	TOWN
RICHLAND	RICHWOOD

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
RMM	KA	RMM	KA

WING STRAPPING

SHEET 2 OF 2
77

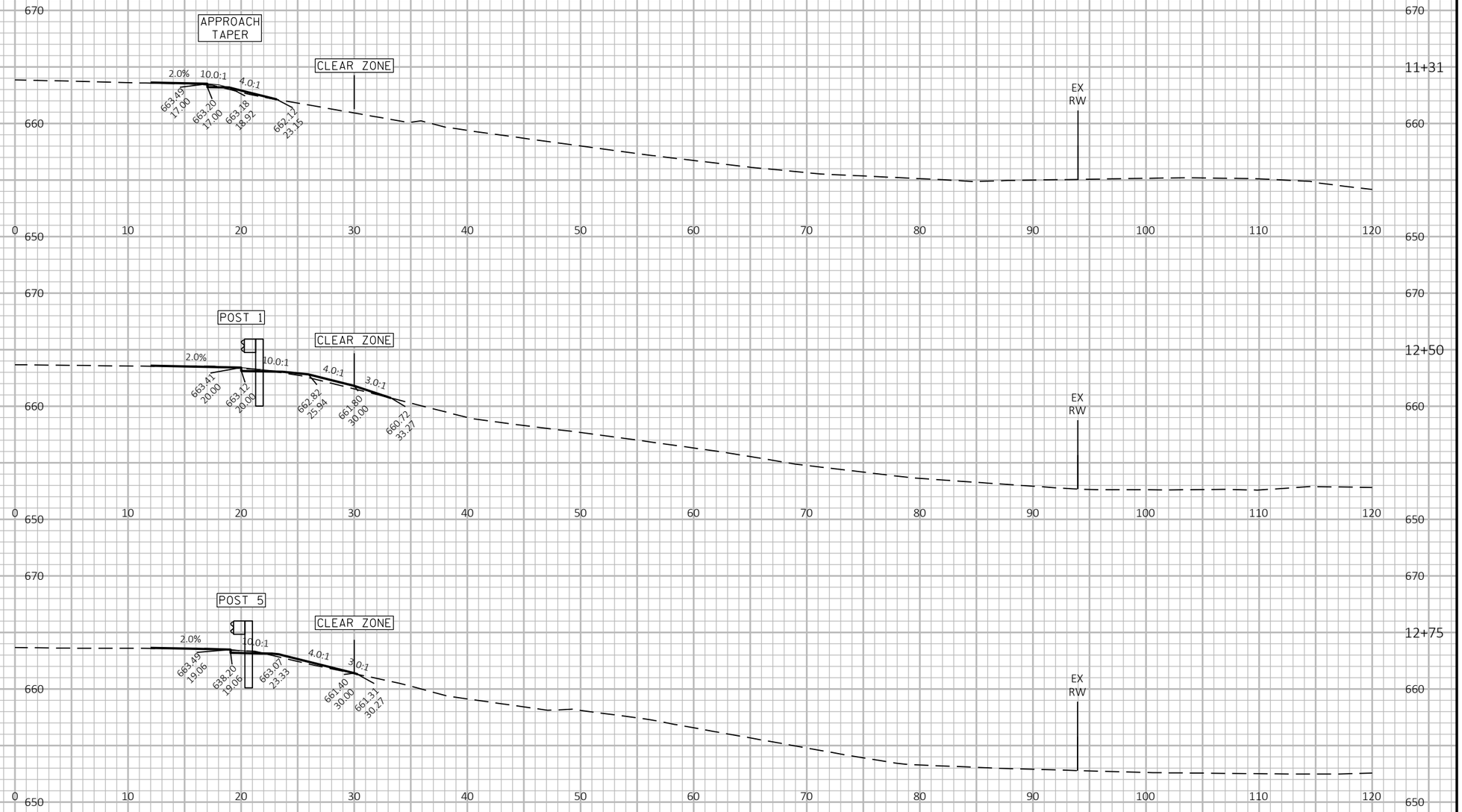
SCALE =

I.D.

DATE:

8

8



9

9

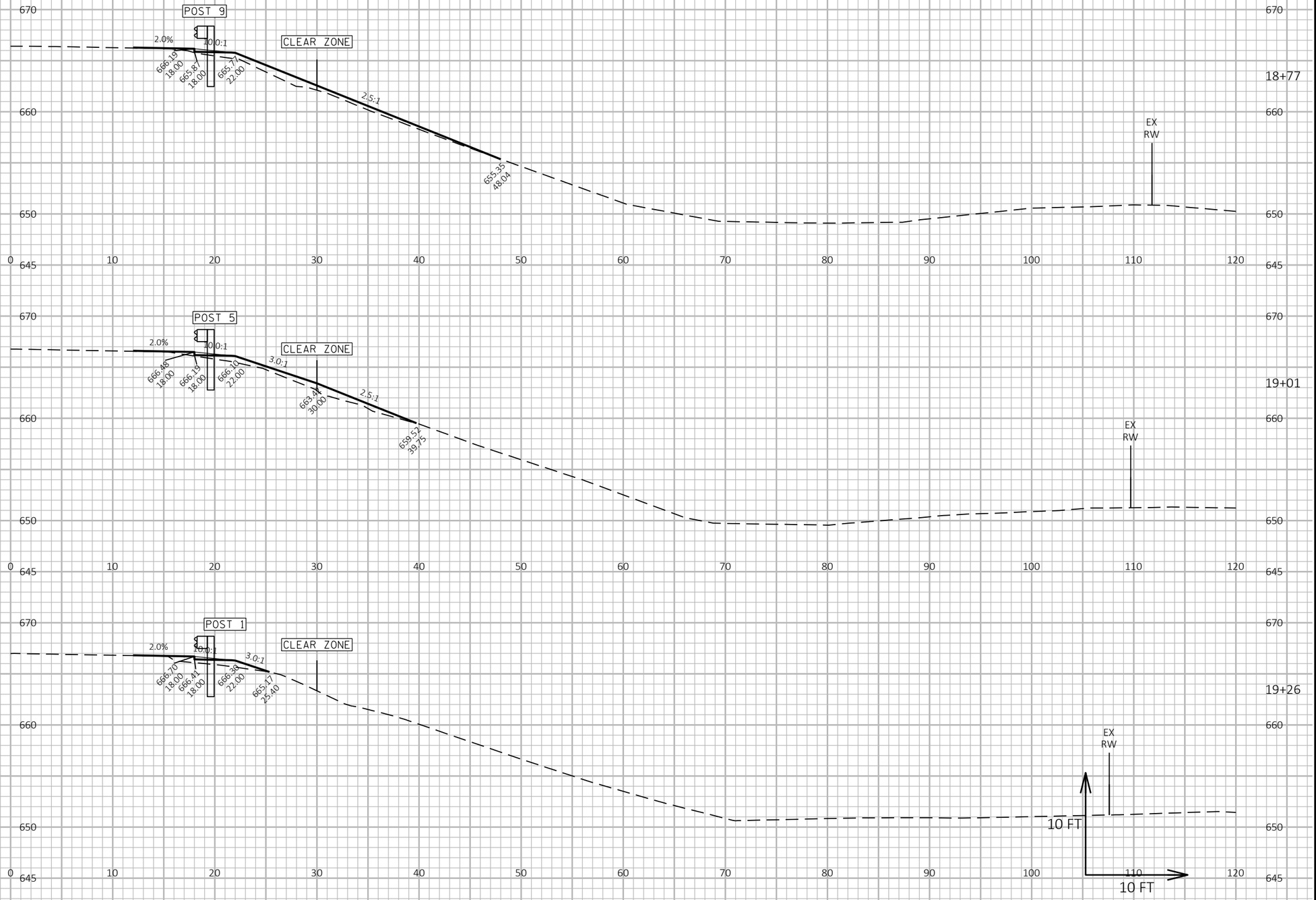
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: SECTION 1 11+46 - 13+00 RT	SHEET 78	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090201-XS.DWG
LAYOUT NAME - 090201-xs-01

PLOT DATE : 6/26/2026 10:33 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

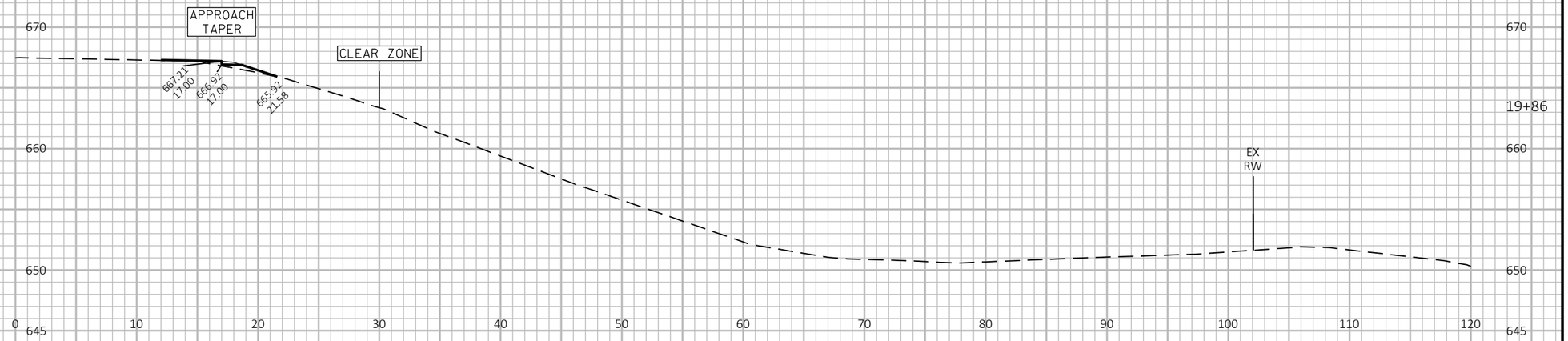
WISDOT/CADDS SHEET 49

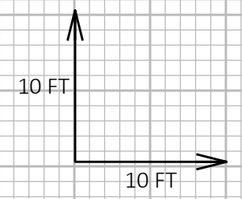


9

9

PROJECT NO: 5190-04-02	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: SECTION 2 18+77 - 19+26 RT	SHEET 79	E





9

9

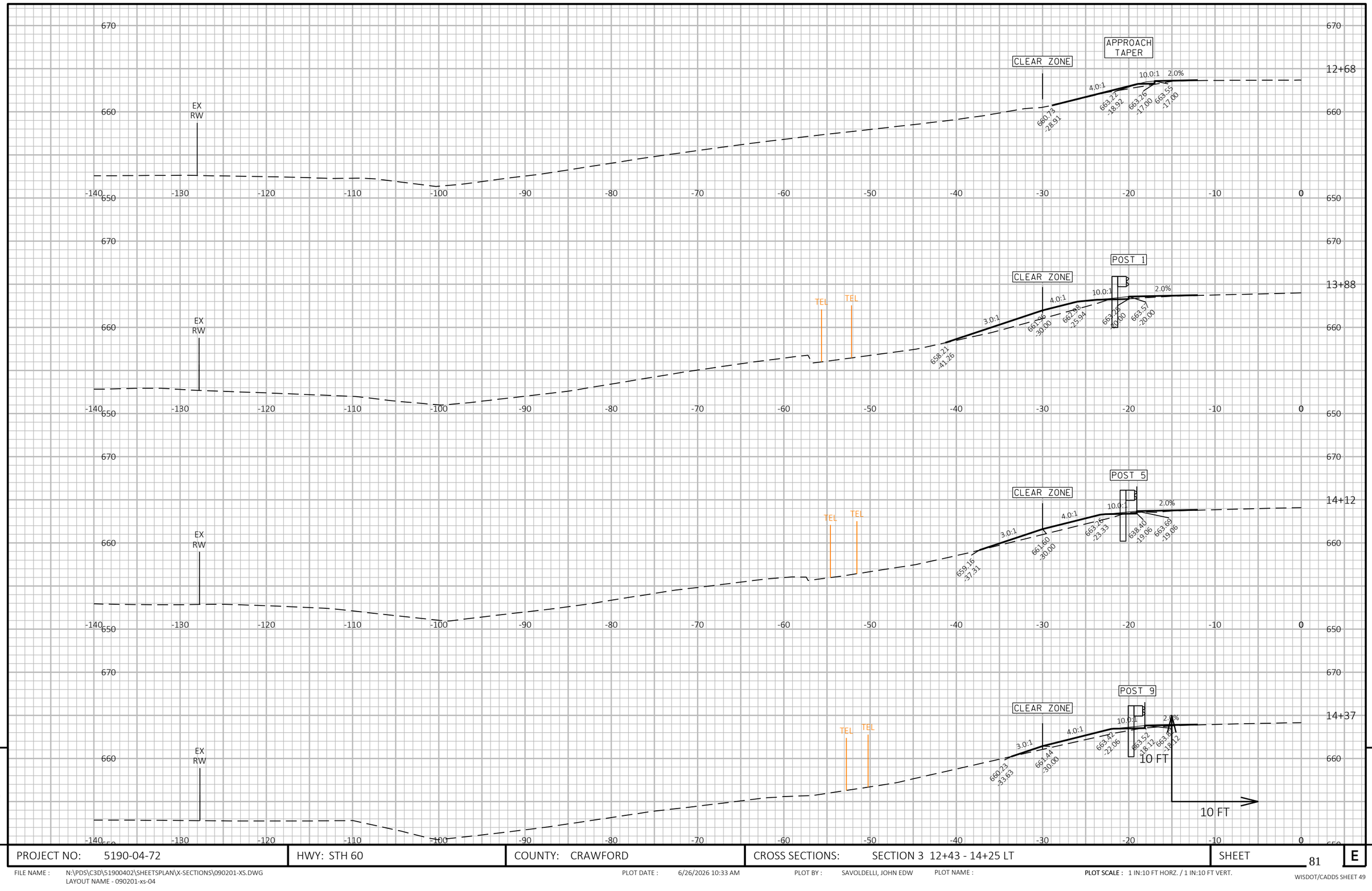
PROJECT NO: 5190-04-02	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: SECTION 2 20+31 RT	SHEET 80	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090201-XS.DWG
LAYOUT NAME - 090201-xs-03

PLOT DATE : 6/26/2026 10:33 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

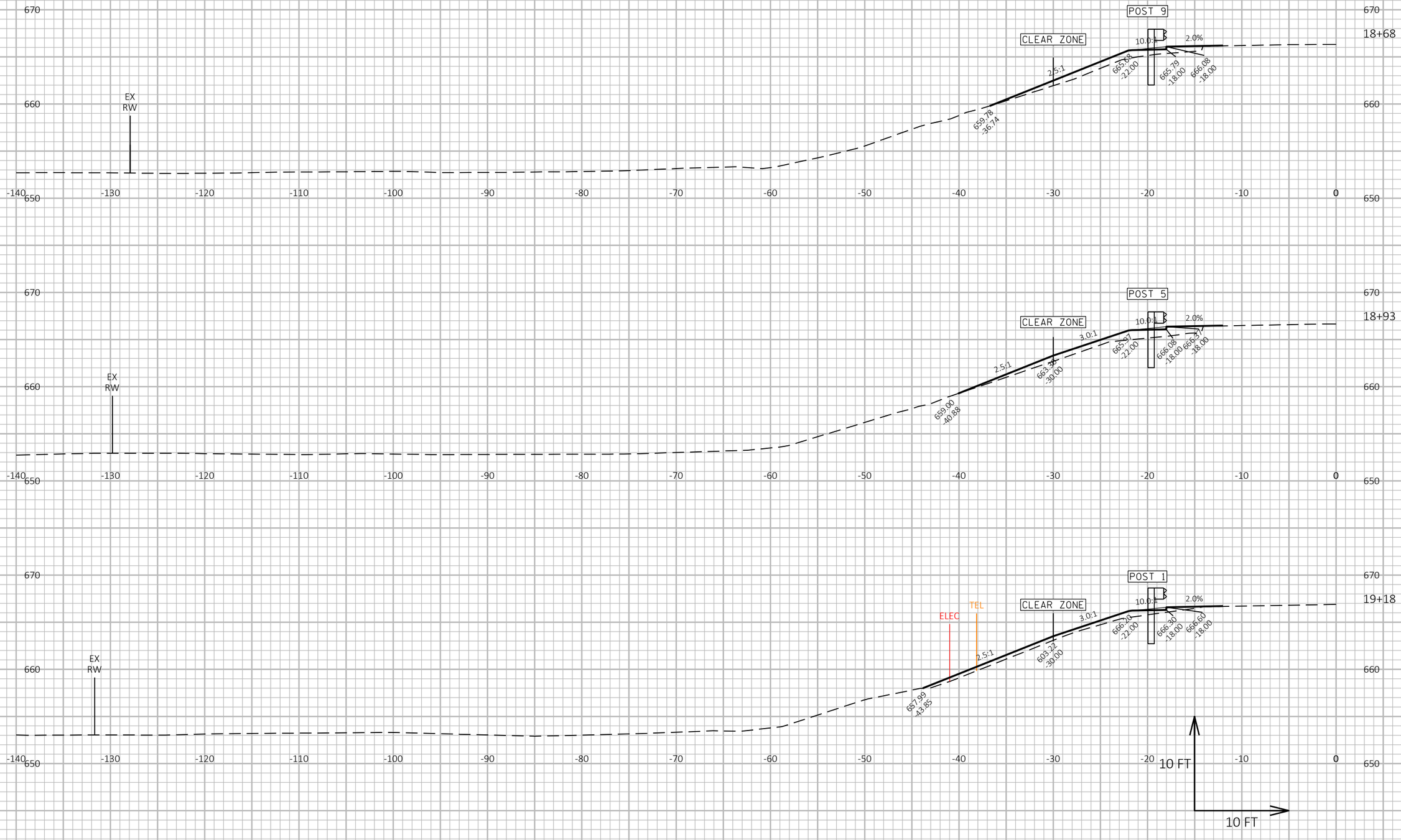
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: SECTION 3 12+43 - 14+25 LT	SHEET 81	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090201-XS.DWG
LAYOUT NAME - 090201-xs-04

PLOT DATE : 6/26/2026 10:33 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: SECTION 4 18+39 - 18+89 LT	SHEET 82	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090201-XS.DWG
LAYOUT NAME - 090201-xs-05

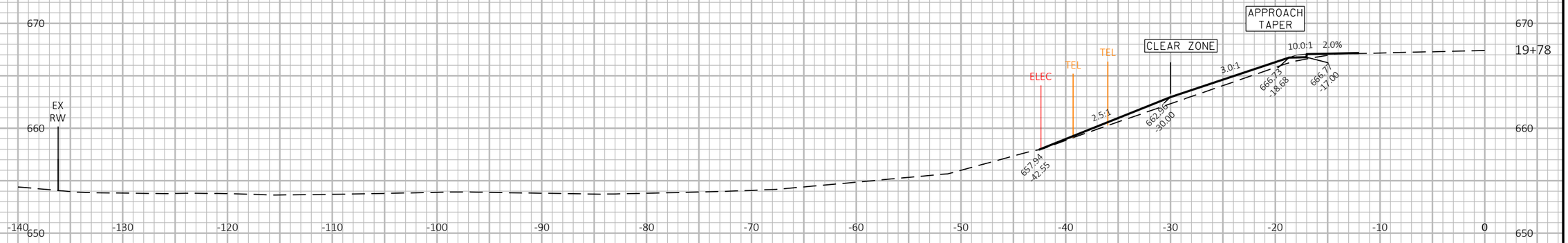
PLOT DATE : 6/26/2026 10:33 AM

PLOT BY : SAVOLDELLI, JOHN EDW

PLOT NAME :

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

WISDOT/CADDS SHEET 49



10 FT

10 FT

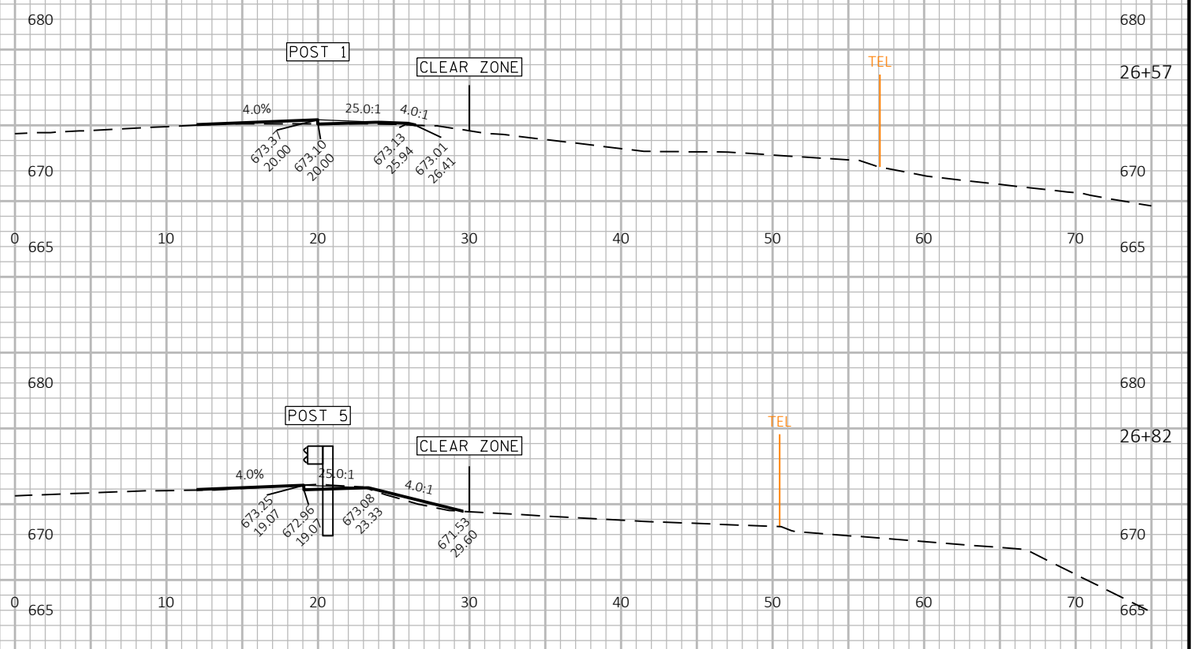
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: SECTION 4 19+93 LT	SHEET 83	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090201-XS.DWG
LAYOUT NAME - 090201-xs-06

PLOT DATE : 6/26/2026 10:33 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

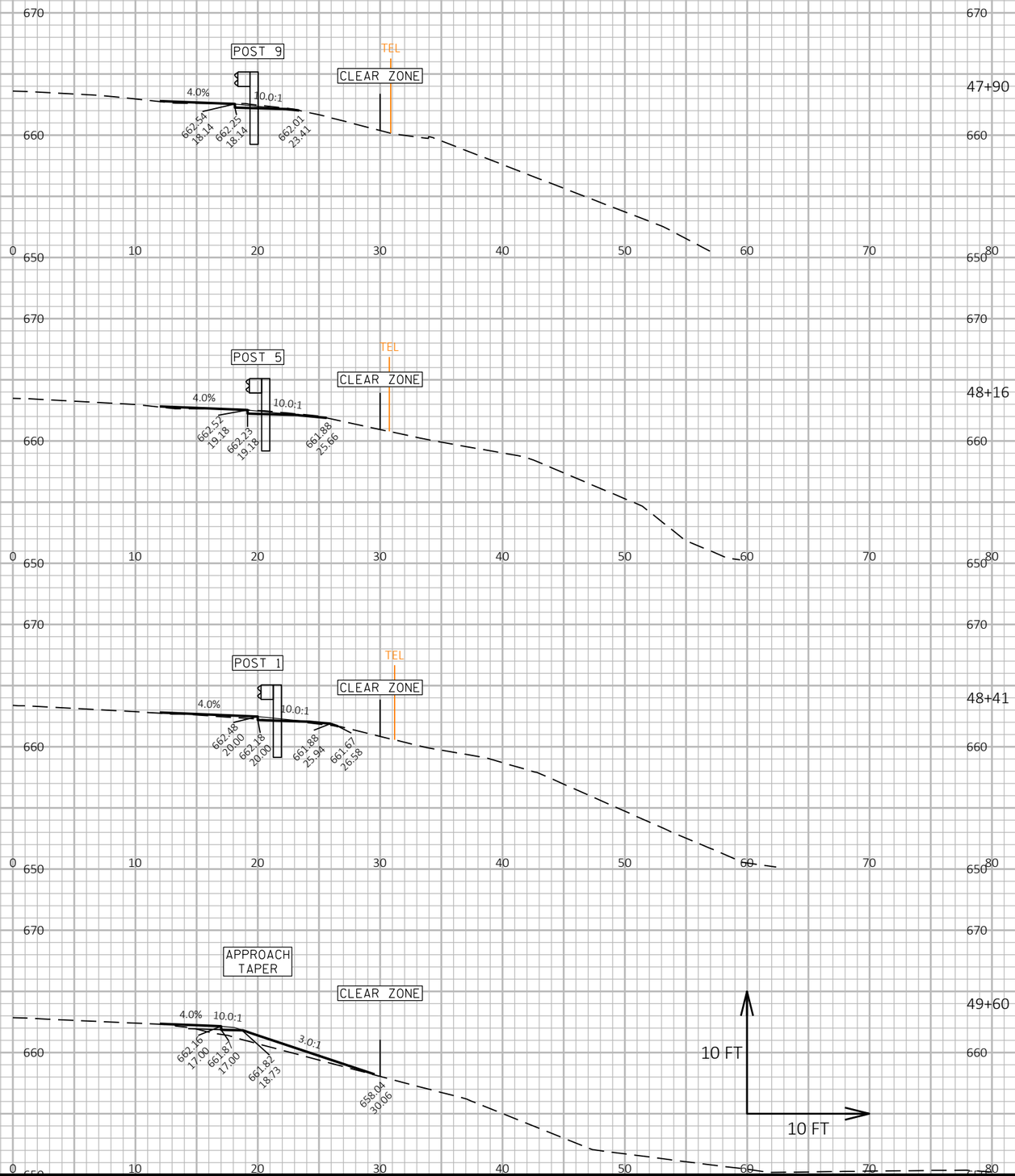
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 25+54 - 27+07 RT	SHEET 84	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090202-XS.DWG
LAYOUT NAME - 090201-xs-01

PLOT DATE : 6/26/2026 10:35 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

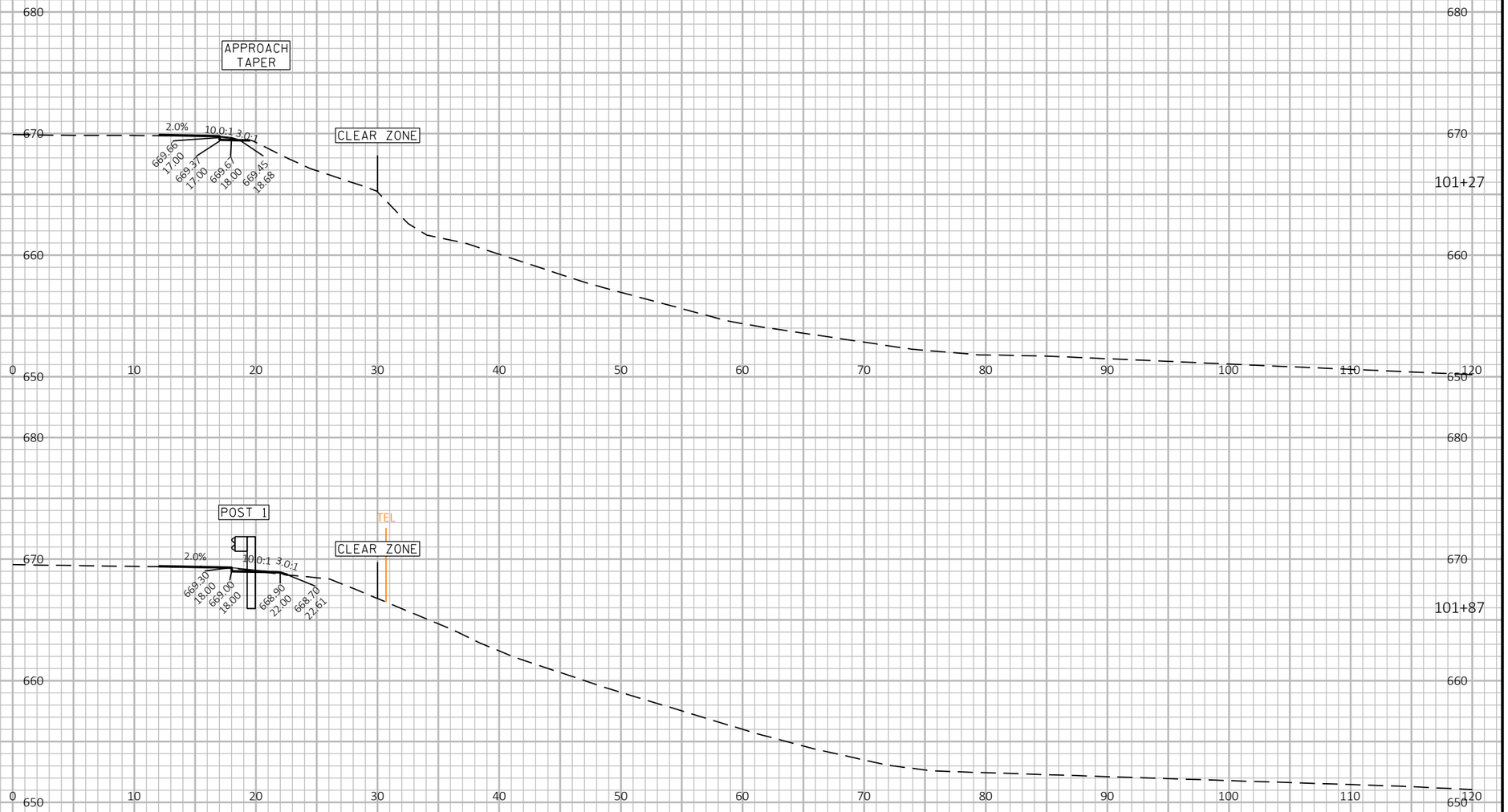
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 47+90 - 48+88RT	SHEET 85	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090202-XS.DWG
LAYOUT NAME - 090201-xs-02

PLOT DATE : 6/26/2026 10:35 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49



10 FT

10 FT

9

9

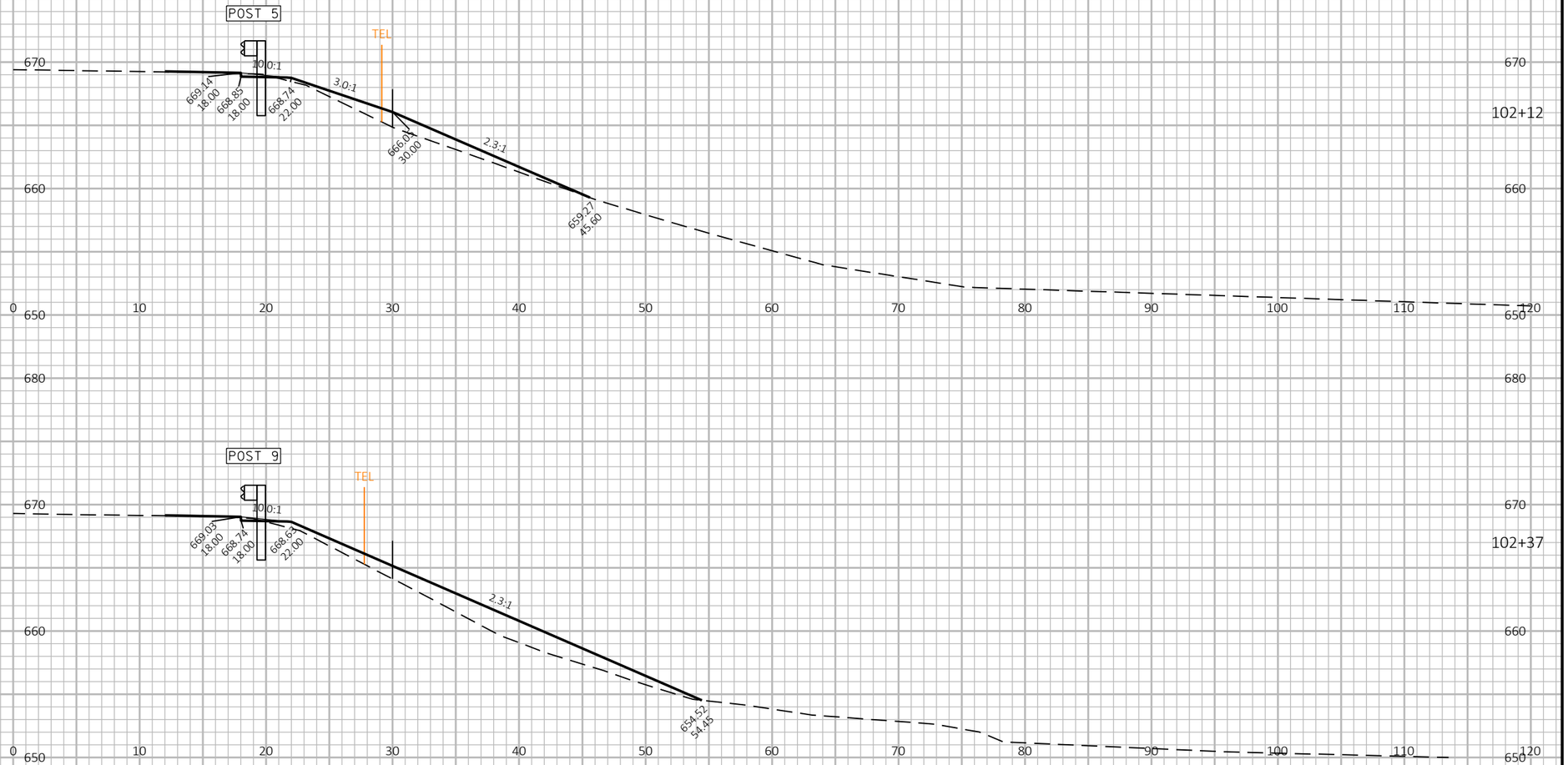
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 100+83 - 102+37 RT	SHEET 86	E

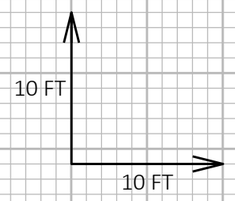
FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090203-XS.DWG
LAYOUT NAME - 090201-xs-01

PLOT DATE : 6/26/2026 10:37 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49





9

9

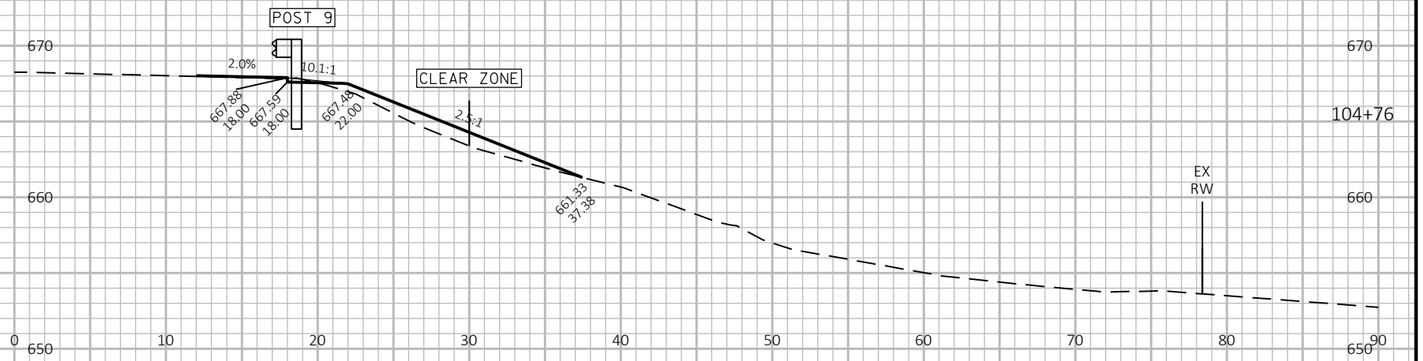
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 100+83 - 102+37 RT	SHEET 87	E

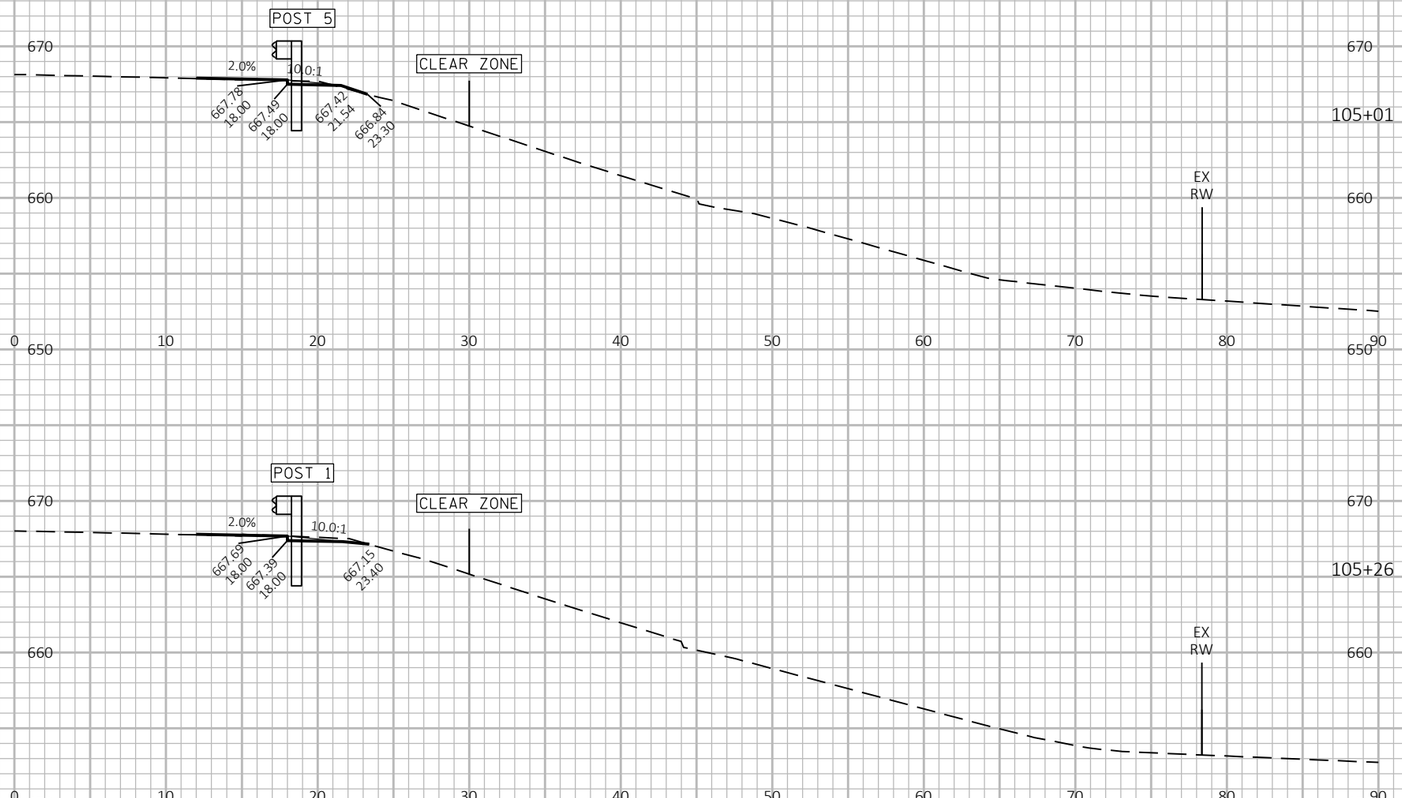
FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090203-XS.DWG
LAYOUT NAME - 090201-xs-02

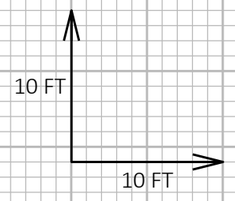
PLOT DATE : 6/26/2026 10:37 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49







9

9

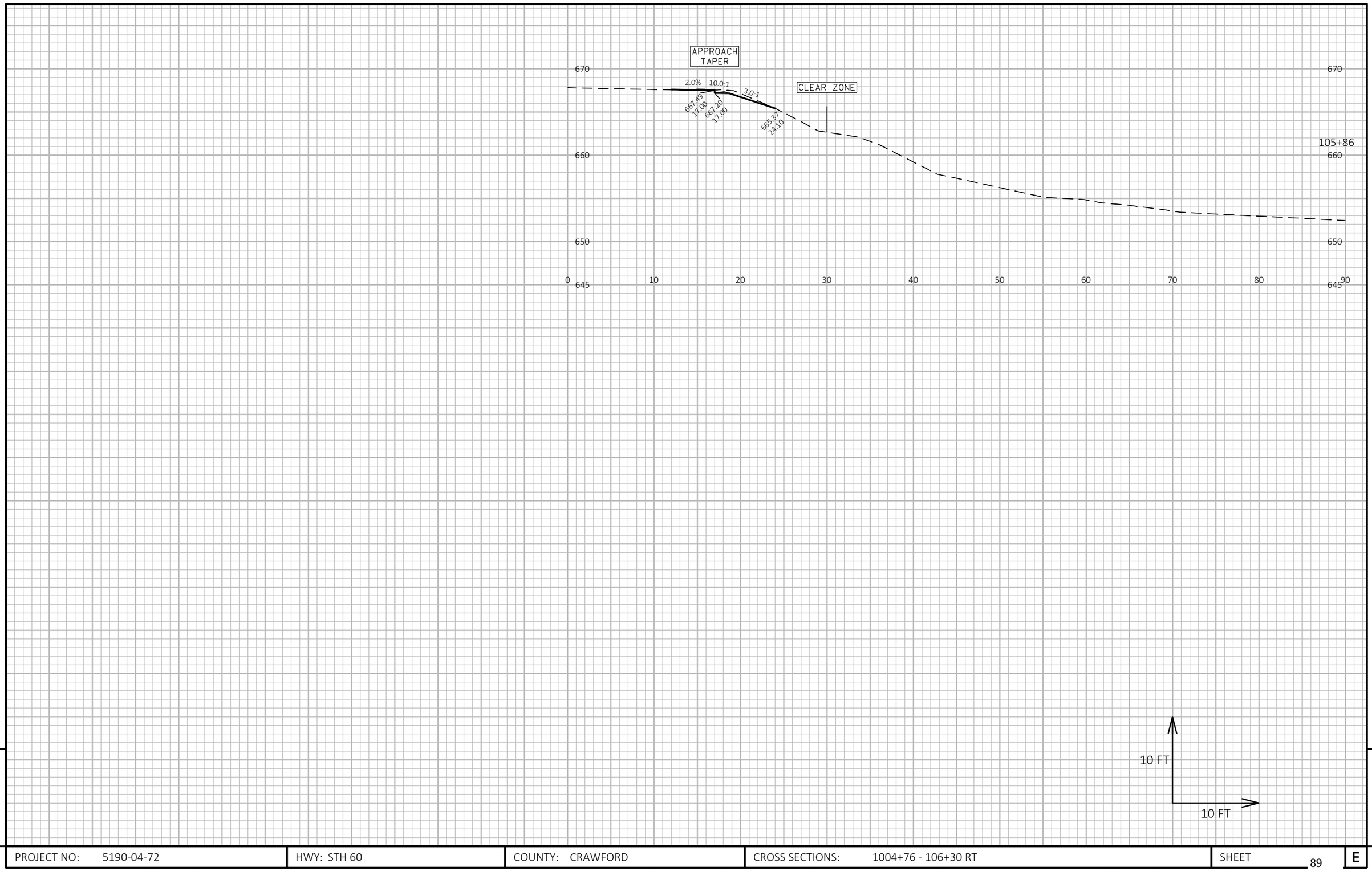
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 104+76 - 106+30 RT	SHEET 88	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090203-XS.DWG
LAYOUT NAME - 090201-xs-03

PLOT DATE : 6/26/2026 10:37 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

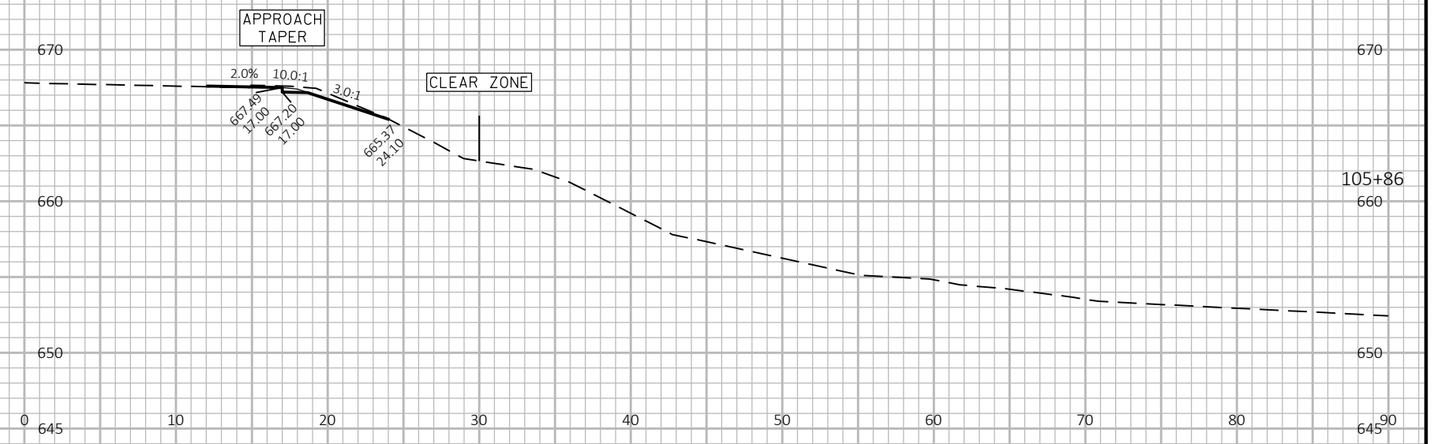
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 1004+76 - 106+30 RT	SHEET 89	E

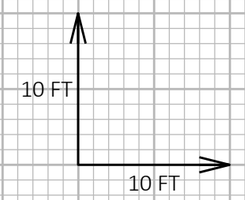
FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090203-XS.DWG
LAYOUT NAME - 090201-xs-04

PLOT DATE : 6/26/2026 10:37 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49





9

9

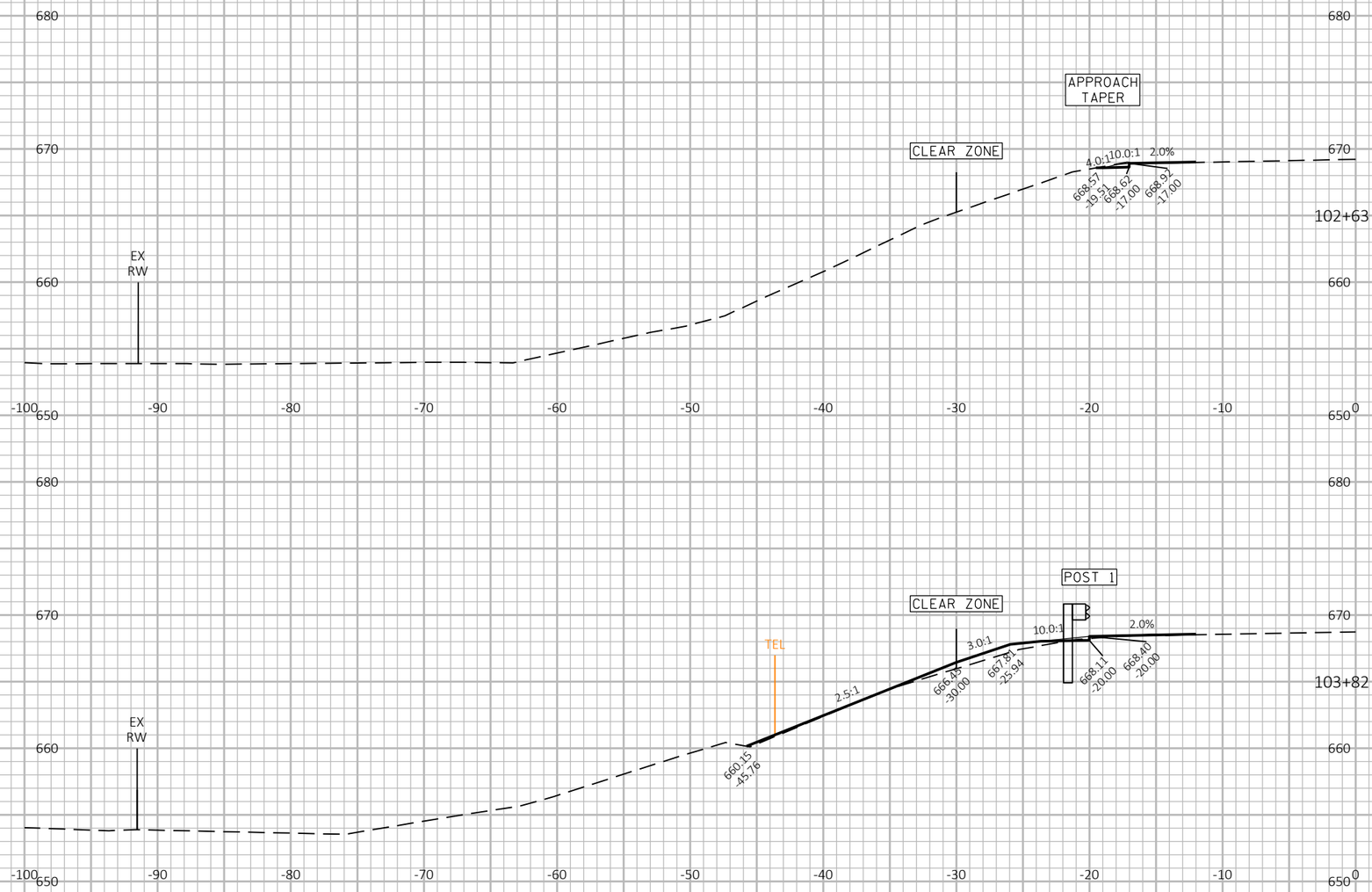
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 1004+76 - 106+30 RT	SHEET 90	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090203-XS.DWG
LAYOUT NAME - 090201-xs-04

PLOT DATE : 6/26/2026 10:37 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49



10 FT

10 FT

9

9

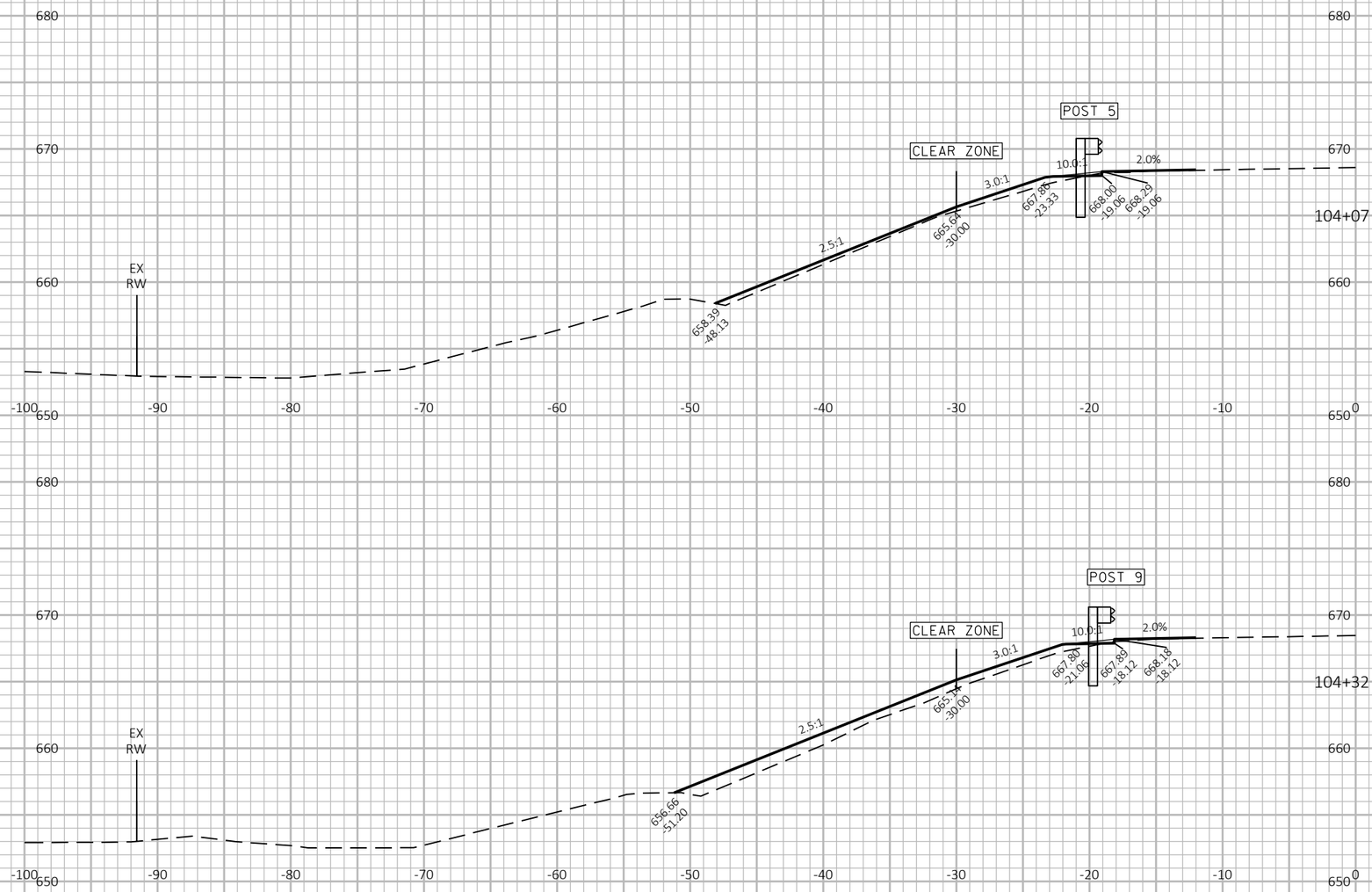
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 102+78 - 104+32 LT	SHEET 91	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090203-XS.DWG
LAYOUT NAME - 090201-xs-05

PLOT DATE : 6/26/2026 10:37 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49



10 FT

10 FT

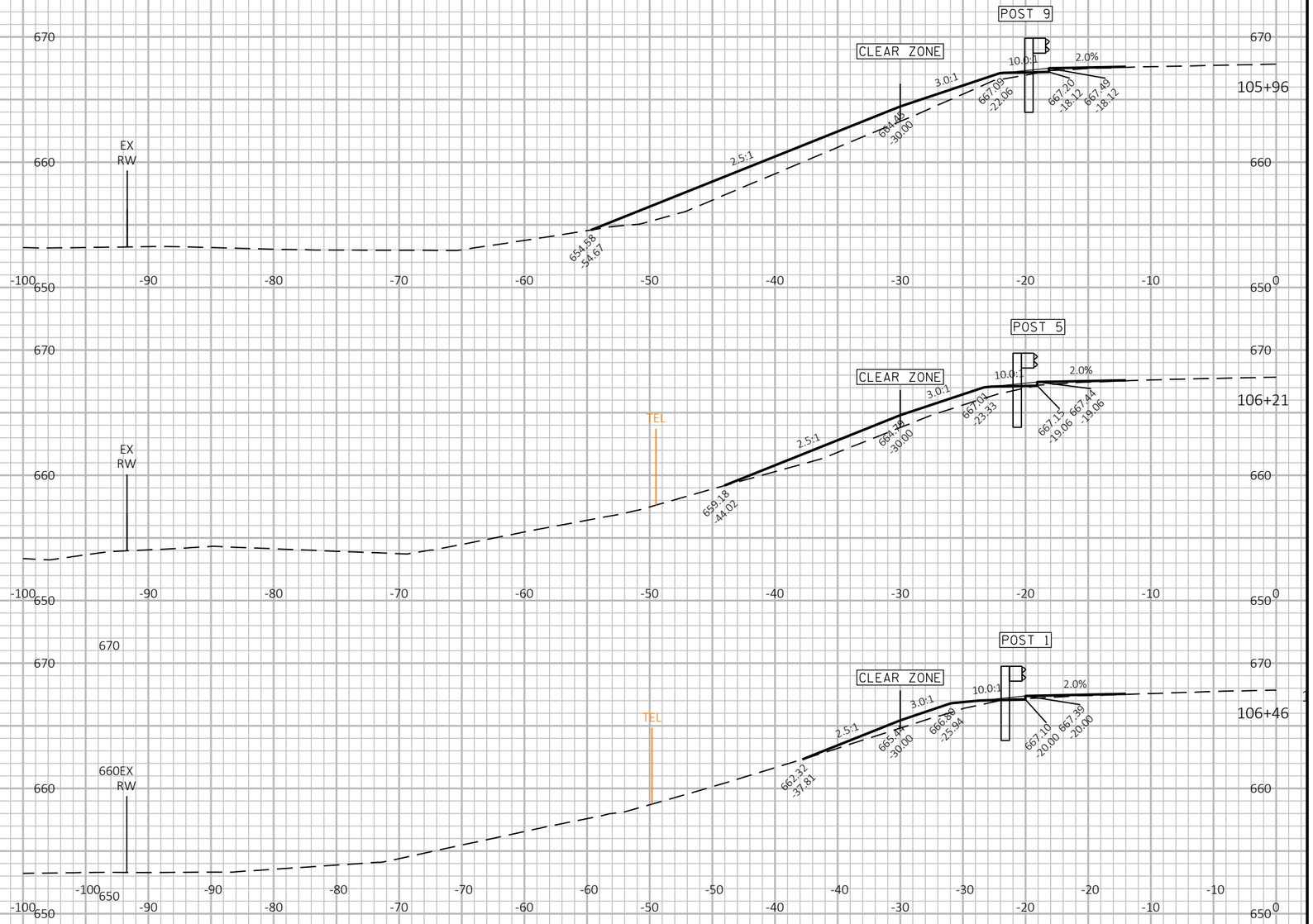
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 102+78 - 104+32 LT	SHEET 92	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090203-XS.DWG
LAYOUT NAME - 090201-xs-06

PLOT DATE : 6/26/2026 10:37 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49



10 FT

10 FT

9

9

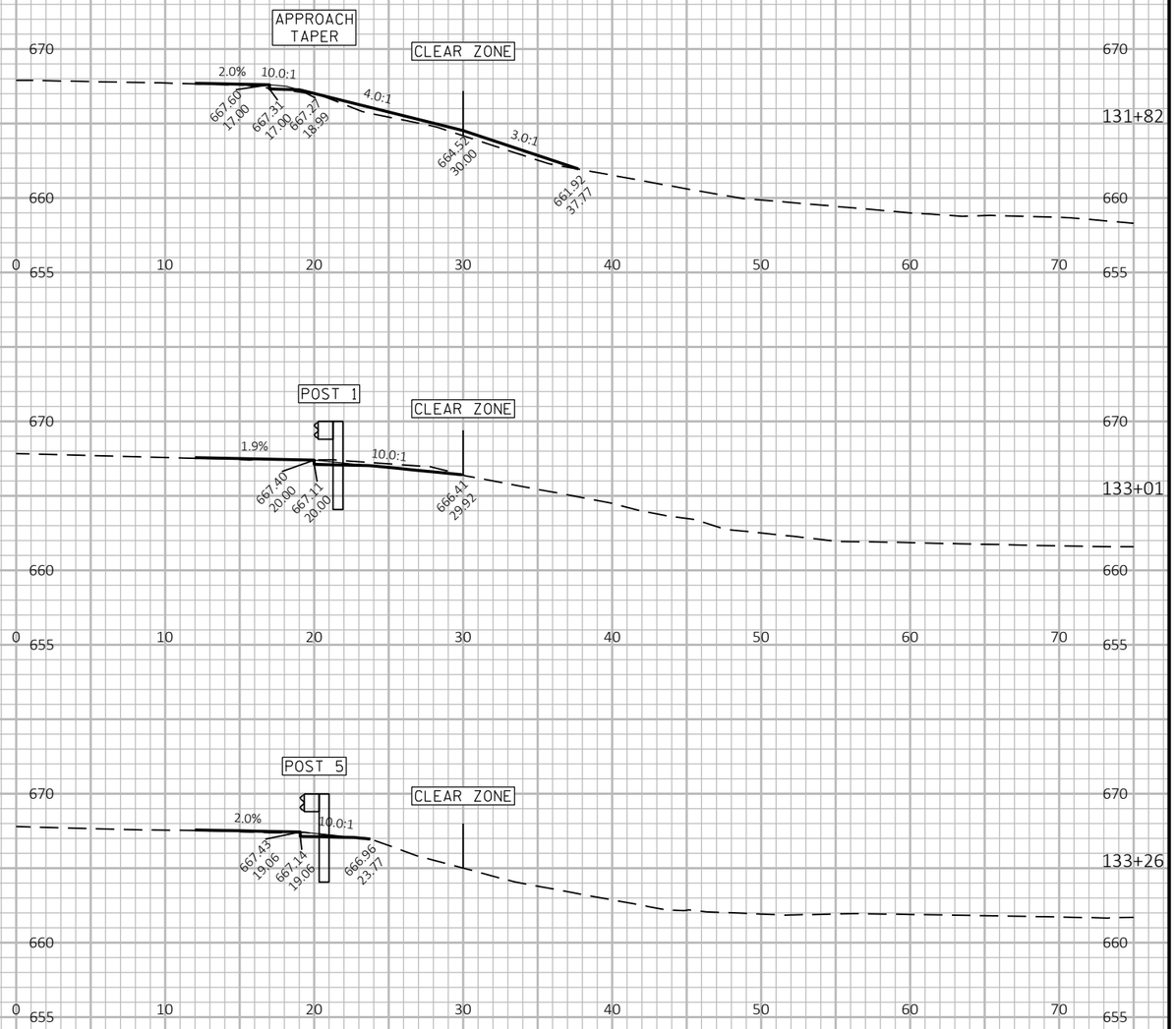
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 105+96 - 106+46 - LT	SHEET 93	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090203-XS.DWG
LAYOUT NAME - 090201-xs-08

PLOT DATE : 6/26/2026 10:37 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49



10 FT

10 FT

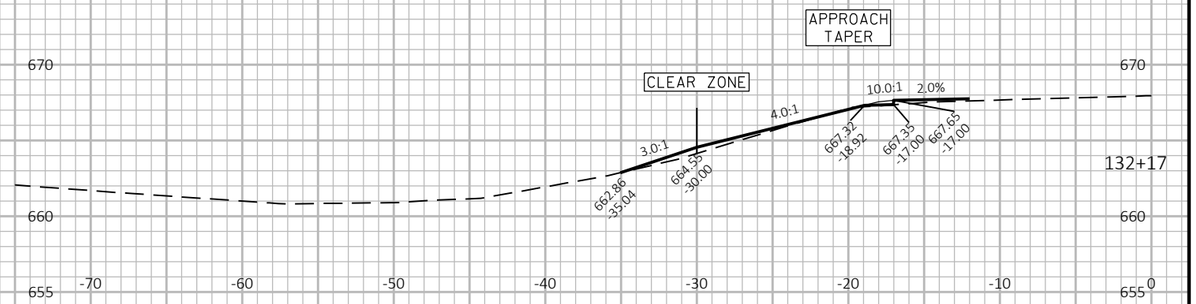
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 131+97 - 133+51 RT	SHEET 94	E

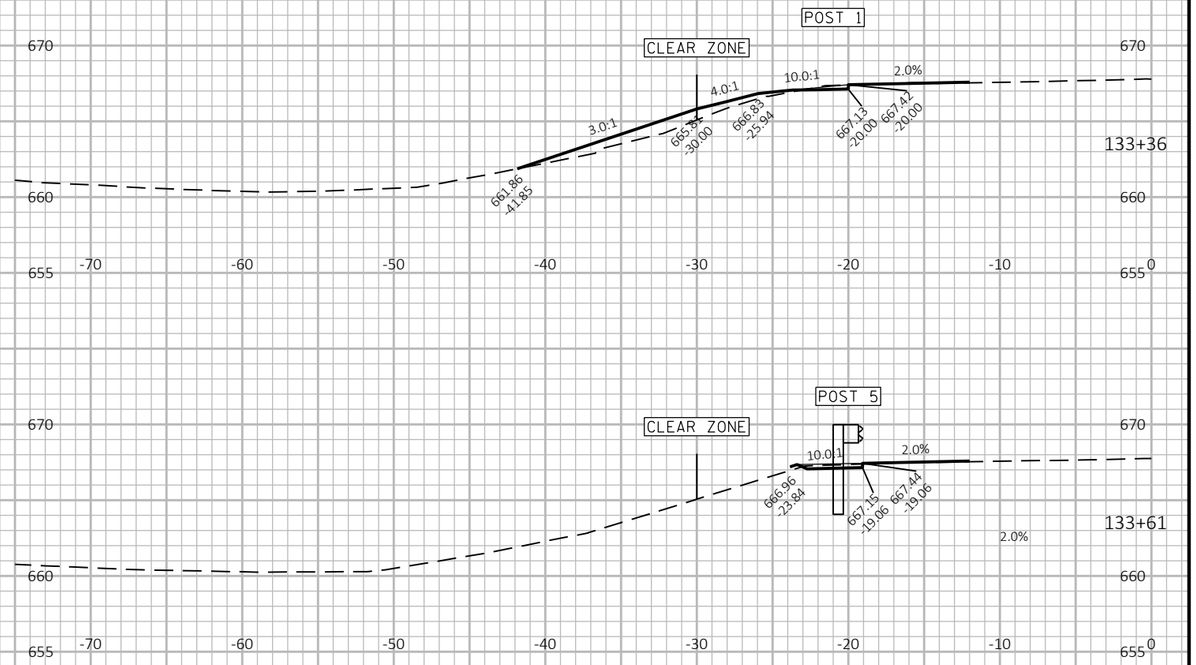
FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090204-XS.DWG
LAYOUT NAME - 090201-xs-01

PLOT DATE : 6/26/2026 10:39 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

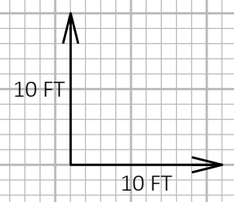
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49









9

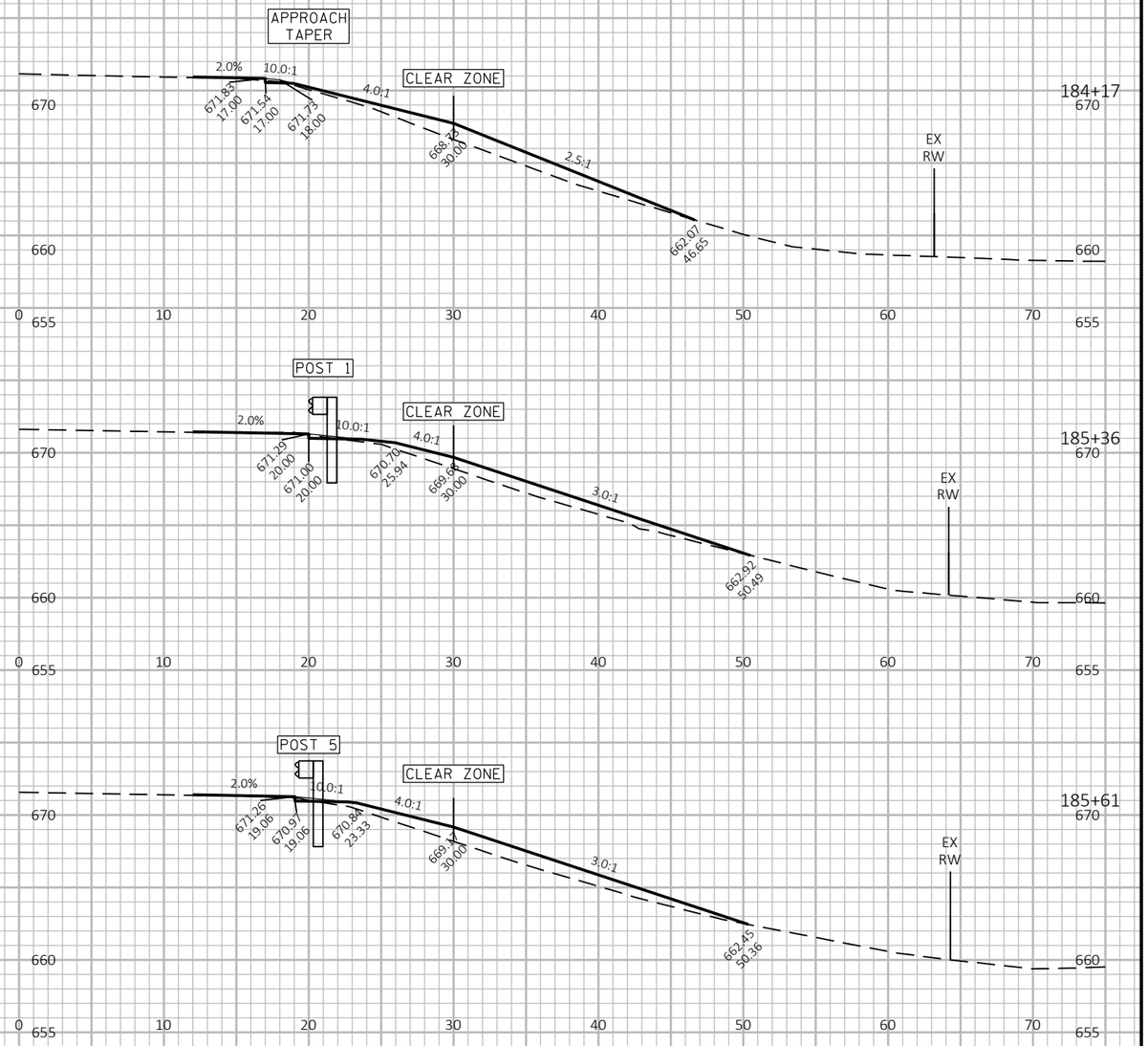
9

PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 132+32 - 133+86 LT	SHEET 95 E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090204-XS.DWG
LAYOUT NAME - 090201-xs-02

PLOT DATE : 6/26/2026 10:39 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



10 FT

10 FT

9

9

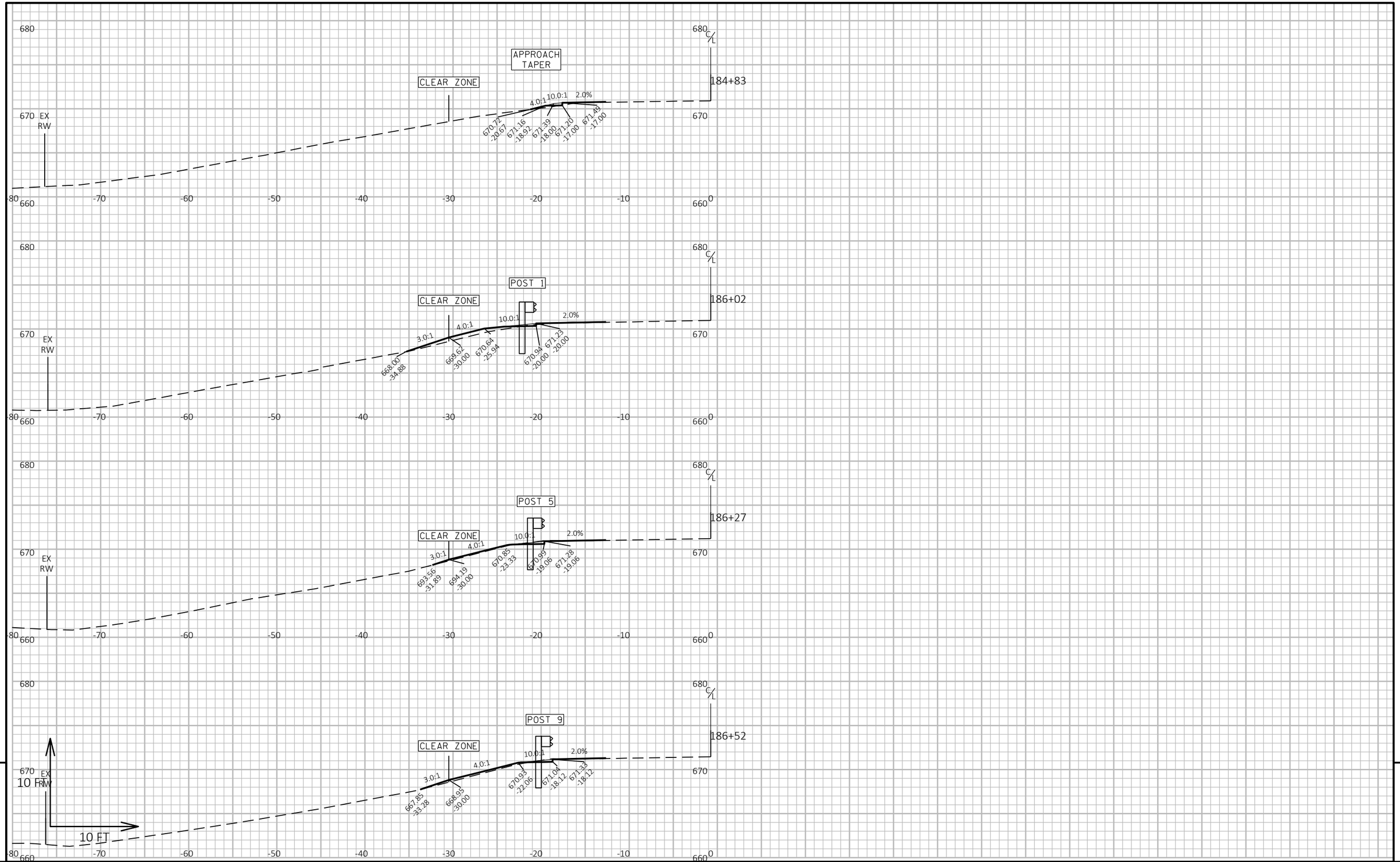
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 184+32 - 185+86 RT	SHEET 96	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090205-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 6/26/2026 10:40 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49



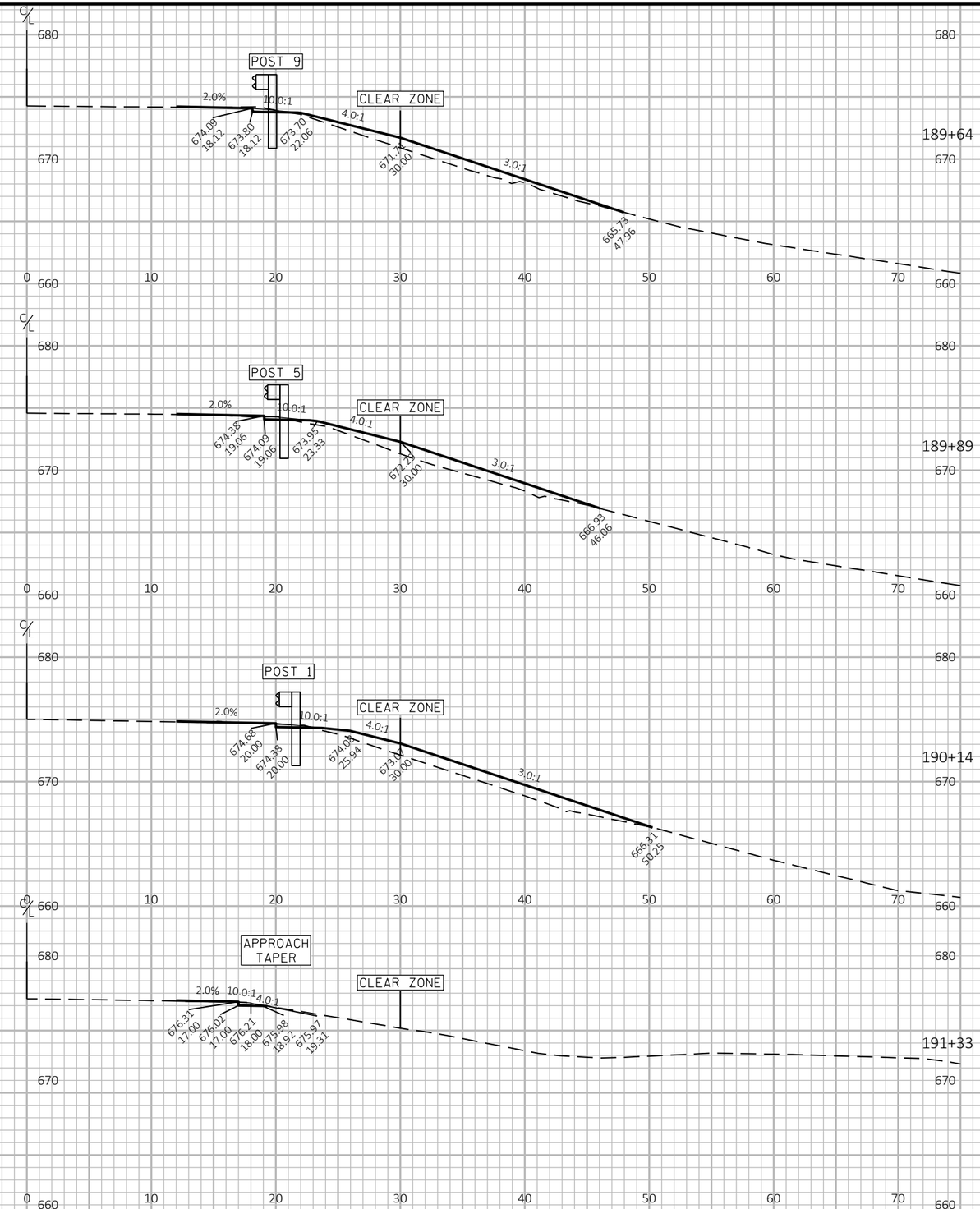
9

9

PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 184+32 - 185+98 LT	SHEET 97	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090205-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 6/26/2026 10:40 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



10 FT

10 FT

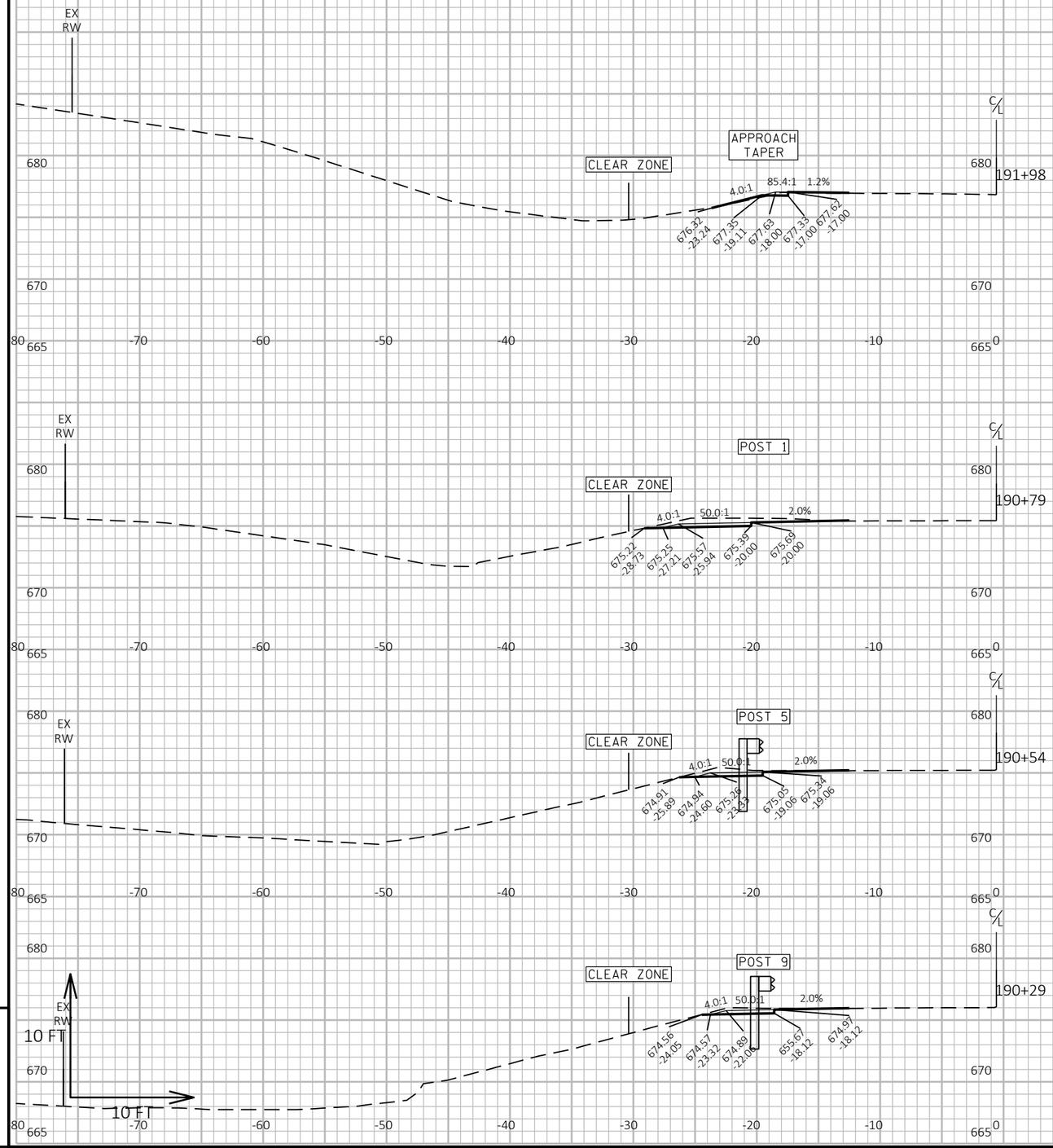
PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 189+64 - 191+18 RT	SHEET 98	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090205-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 6/26/2026 10:40 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 5190-04-72	HWY: STH 60	COUNTY: CRAWFORD	CROSS SECTIONS: 190+29 - 191+83 LT	SHEET 99	E

FILE NAME : N:\PDS\C3D\51900402\SHEETSPLAN\X-SECTIONS\090205-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 6/26/2026 10:40 AM PLOT BY : SAVOLDELLI, JOHN EDW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov