WKE MAY 2018

PROJECT ID: 2709-03-70
WITH: N/A

COUNTY: WASHINGTON

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 = 1188



13

N

DESIGN DESIGNATION

A.A.D.T. (2018)	=	9,700
A.A.D.T. (2038)	=	11,800
D.H.V.	=	1,350
D.D.	=	58/42
T.	=	9.4%
DESIGN SPEED	=	60 MPH
ESALS	=	2,044,000

CONVENTIONAL SYMBOLS

COUNTY LINE
CORPORATE LIMITS
PROPERTY LINE
LIMITED EASEMENT
EXISTING RIGHT OF WAY
PROPOSED OR NEW R/W LINE
FENCE
EXISTING GUARD RAIL
SLOPE INTERCEPT
ORIGINAL GROUND
MARSH OR ROCK PROFILE (To be noted as such) — ROCK
MARSH AREA
WOODED OR SHRUB AREA
STREAM OR WATER EDGE
BUSH
PINE TREE (SIZE)
TREE (SIZE)
TRAFFIC SIGNAL CONTROL CABINET
TRAFFIC SIGNAL
TRAFFIC SIGNAL MAST-ARM
TRAFFIC SIGNAL WITH LIGHT
EXISTING PULL BOX
BOLLARD

COMBUSTIBLE FLUIDS
UNDERGROUND UTILITIES
GAS — (SIZE) G
SANITARY SEWER — (SIZE) SAN
STORM SEWER — (SIZE) SS
WATER — (SIZE) W
ELECTRIC — E
TELEPHONE — T
FIBER OPTIC — FO
CABLE TELEVISION — TV
FORCE MAIN — FM
MANHOLE — MH
UTILITY PEDESTAL
FIBER OPTIC HAND HOLE — HH
POWER POLE
TELEPHONE POLE
RAILROAD
HYDRANT
LIGHT POLE
RAILROAD SIGNAL
SIGN
TRANSMISSION TOWER
VALVE — (TYPE)
CURB STOP — CS
EXISTING CULVERT — (SIZE, TYPE)
PROPOSED CULVERT (Box or Pipe)

CAUTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

LOVERS LANE

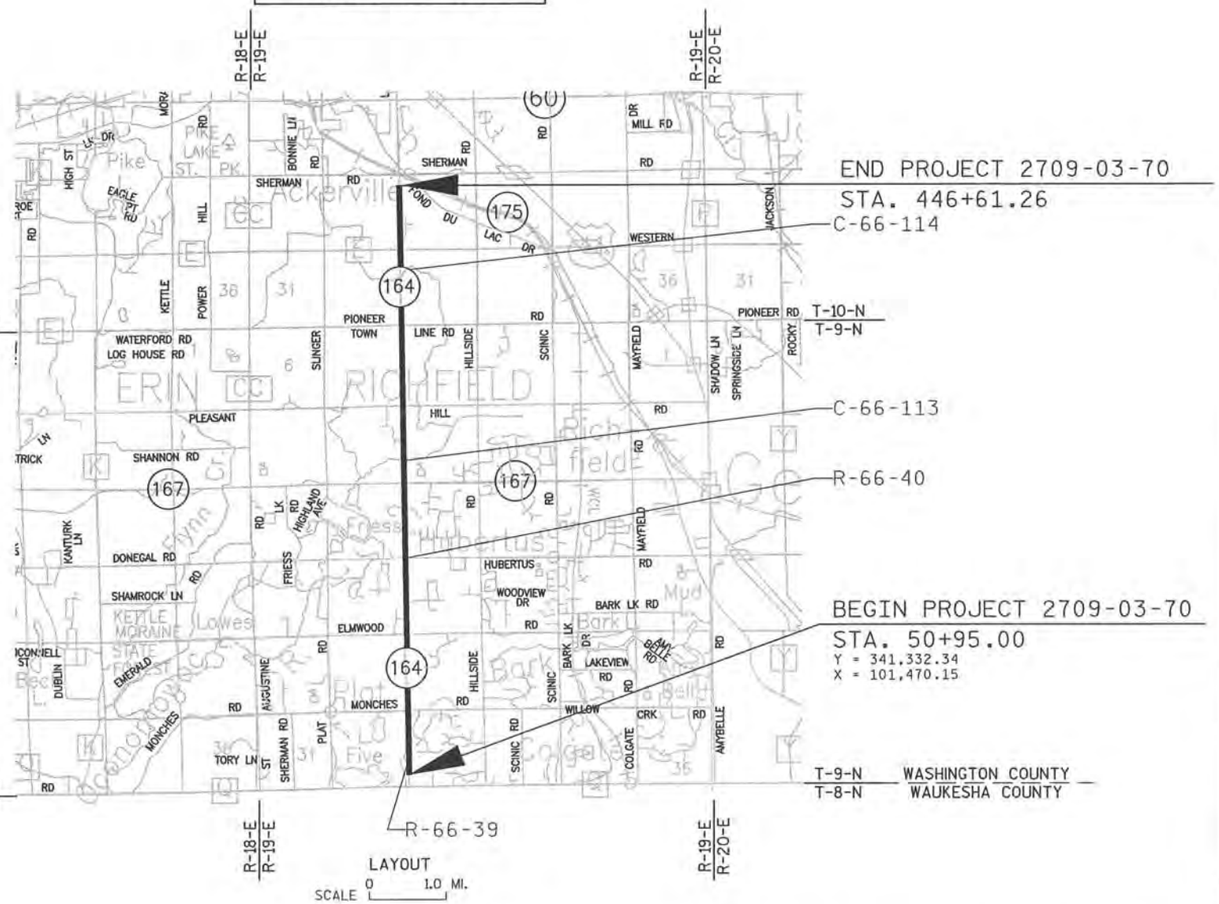
CTH Q - CTH E

STH 164

WASHINGTON COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2709-03-70	WISC 2018239	1

STATE PROJECT NUMBER
2709-03-70



LAYOUT
SCALE 0 1.0 MI.

TOTAL NET LENGTH OF CENTERLINE = 7.494 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WASHINGTON COUNTY, NAD83 (2007) ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 NAV88 (2007)

ORIGINAL PLANS PREPARED BY
raSmith
CREATIVITY BEYOND ENGINEERING
rasmith.com



1/29/18 (DATE) (SIGNATURE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	raSmith (NAV)
Designer	raSmith (RAD/JWB)
Project Manager	DOUG CAIN
Regional Examiner	
Regional Supervisor	BEN ERUCHALU
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 1-30-18 (Signature)

E

FILE NAME = T:\1107717\CADD\CIVIL 3D\27090300\SHEETS\PLAN\010101_TT.DWG PLOT DATE = 1/28/2011 8:38 AM PLOT BY = BLACKWOOD_ITM PLOT NAME =

STANDARD ABBREVIATIONS

AC	ACRE	MPH	MILES PER HOUR
AC	ASPHALT CEMENT	N	NORTH
ACP	ASPHALTIC CONCRETE PAVEMENT	NB	NORTHBOUND
ADJ	ADJUST	NC	NORMAL CROWN
AADT	AVERAGE ANNUAL DAILY TRAFFIC	NO	NUMBER
AECPRC	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL	NOM	NOMINAL
		OD	OUTSIDE DIAMETER
		OH	OVERHEAD
AH	AHEAD	OPT	OPTIONAL
AP	ACCESS POINT	PACS	PIPE ARCH CORRUGATED STEEL
ASPH	ASPHALTIC	PAVT	PAVEMENT
AVG	AVERAGE	PC	POINT OF CURVATURE
BAD	BASE AGGREGATE DENSE	PCC	POINT OF COMPOUND CURVATURE
BK	BACK	PCC	PORTLAND CEMENT CONCRETE
BM	BENCHMARK	PE	PRIVATE ENTRANCE
C & G	CURB AND GUTTER	PGL	PROFILE GRADE LINE
C/L	CENTER LINE	PI	POINT OF INTERSECTION
C/L CONST	CENTER LINE CONSTRUCTION	PL	PROPERTY LINE
CABC	CRUSHED AGGREGATE BASE COURSE	PLE	PERMANENT LIMITED EASEMENT
CB	CATCH BASIN	PSF	POUNDS PER SQUARE FOOT
CFS	CUBIC FEET PER SECOND	PSI	POUNDS PER SQUARE INCH
CL	CLASS	PT	POINT
CMCP	CORRUGATED METAL CULVERT PIPE	PT	POINT OF TANGENCY
CMP	CORRUGATED METAL PIPE	PVC	POLYVINYL CHLORIDE
CONC	CONCRETE	Q100	100-YEAR FLOW RATE
CONC	CONCRETE	R	RADIUS
CONST	CONSTRUCTION	R	RANGE
CP	CONTROL POINT	R/L	R/L
CPCS	CULVERT PIPE CORRUGATED STEEL	R/W	RIGHT-OF-WAY
CPRC	CULVERT PIPE REINFORCED CONCRETE	RD	ROAD
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL	RDWY	ROADWAY
		REINF	REINFORCING OR REINFORCEMENT
CTH	COUNTY TRUNK HIGHWAY	REQD	REQUIRED
CWT	HUNDRED WEIGHT	RR	RAILROAD
CY	CUBIC YARD	RT	RIGHT
D	DEGREE OF CURVE	S	SOUTH
DD	DIRECTIONAL DISTRIBUTION	SB	SOUTHBOUND
DHV	DESIGN HOUR VOLUME	SDD	STANDARD DETAIL DRAWINGS
DIA	DIAMETER	SEC	SECTION
DWY	DRIVEWAY	SE	SUPERELEVATION
E	EAST	SF	SQUARE FEET
EB	EASTBOUND	SHLDR	SHOULDER
EBS	EXCAVATION BELOW SUBGRADE	SQ	SQUARE
EL	ELEVATION	SS	STORM SEWER
ESALS	EQUIVALENT SINGLE AXLE LOADS	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
EXC	EXCAVATION	ST	STREET
EXIST	EXISTING	STA	STATION
FE	FIELD ENTRANCE	STH	STATE TRUNK HIGHWAYS
FERT	FERTILIZE	STR	STRUCTURE OR STRUCTURAL
FL	FLOW LINE	SW	SIDEWALK
FPS	FEET PER SECOND	SY	SQUARE YARD
FT	FOOT	T	TANGENT
GN	GRID NORTH	T	TOWN
HES	HIGH EARLY STRENGTH	T	TRUCKS (PERCENT OF)
HMA	HOT MIX ASPHALT	TEMP	TEMPORARY
HP	HIGH POINT	TI	TEMPORARY INTEREST
HW	HIGH WATER	TLE	TEMPORARY LIMITED EASEMENT
HWD	HYDRANT	TYP	TYPICAL
I	INTERSECTION ANGLE	UG	UNDERGROUND
ID	INSIDE DIAMETER	USH	UNITED STATES HIGHWAY
INL	INLET	VAR	VARIABLE
INV	INVERT	VC	VERTICAL CURVE
IP	IRON PIPE OR PIN	VCL	VERTICAL CURVE LENGTH
JT	JOINT	VERT	VERTICAL
LB	POUND	VOL	VOLUME
LF	LINEAR FOOT	VPC	VERTICAL POINT OF CURVATURE
LP	LOW POINT	VPI	VERTICAL POINT OF INTERSECTION
LS	LUMP SUM	VPT	VERTICAL POINT OF TANGENCY
LT	LEFT	W	WEST
L	LENGTH OF CURVE	WB	WESTBOUND
MAX	MAXIMUM	WM	WATERMAIN
MGAL	MEGAGALLON	WV	WATER VALVE
MH	MANHOLE	X	EAST GRID COORDINATE
MIN	MINIMUM	Y	NORTH GRID COORDINATE
MON	MONUMENT	YD	YARD
MGAL	MEGAGALLON	Δ	CENTRAL ANGLE OR DELTA

GENERAL NOTES

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

2 EROSION CONTROL BMP'S ARE SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS ECIP AND BY THE ENGINEER. EROSION CONTROL BMP'S SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER REQUIRED.

3 EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.

4 RE-TOPSOIL OF GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. SEED, FERTILIZE AND MULCH/EROSION MAT TOPSOILED AREAS, AS DESIGNATED BY THE ENGINEER, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL. IF GRADED AREAS ARE TO BE LEFT EXPOSED FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, SEED THOSE AREAS WITH TEMPORARY SEED AND MULCH.

5 STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS, AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS TO BE LEFT FOR MORE THAN FOURTEEN (14) DAYS, RESTORE THE STOCKPILE WITH TEMPORARY SEED AND MULCH.

6 RESHAPE, RESTORE, AND FINISH ALL PREVIOUSLY GRASSED AREAS DISTURBED OUTSIDE THE NORTMAL CONSTRUCTION LIMITS AT NO EXPENSE TO THE DEPARTMENT.

7 PLACE TOPSOIL 1 INCH BELOW TO TOP OF ADJACENT CONCRETE CURBS OR SIDEWALKS IN SOD AREAS.

8 THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS IN THE AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK.

9 SEE SUBSURFACE EXPLORATION REPORTS FOR SOIL BORING INFORMATION. REPORTS ARE AVAILABLE FROM THE WISDOT SE REGION BY CONTACTING DOUG CAIN, WISDOT PROJECT MANAGER, 262-548-5603.

10 VOLUMES FOR EXCAVATION COMMON INCLUDE REMOVAL OF EXISTING CONCRETE PAVEMENT, ASPHALT, AND BASE COURSE TO THE PROPOSED SUBGRADE.

11 WHEN DEFINING THE PAVEMENT STRUCTURE, THE BOTTOM OF BASE AGGREGATE DENSE IS CONSIDERED THE SUBGRADE LINE. THE BREAKER RUN LAYER IS A SUBGRADE IMPROVEMENT. ANY EXCAVATION REQUIRED FOR THE SUBGRADE IMPROVEMENT IS NOTED AS EBS IN THE EARTHWORK TABLES.

12 CROSS SECTIONS SHOWN INCLUDE THE THICKNESS OF TOPSOIL REQUIRED. TOPSOIL SHALL BE REPLACED WITH 4-INCH TYPICAL DEPTH.

13 HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS AND GRADATIONS:

THICKNESS	LAYERS
4-INCH	1 3/4" UPPER LAYER 4 MT 58-28-S 2 1/4" LOWER LAYER 3MT 58-28-S
6 1/4-INCH	1 3/4" UPPER LAYER 4 MT 58-28-S 2 1/4" LOWER LAYER 3 MT 58-28-S 2 1/4" LOWER LAYER 3 MT 58-28-S

14 WHEN THE QUANTITY OF ITEMS OF BASE AGGREGATE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

15 THE EXACT LOCATION OF PRIVATE ENTRANCES AND DRIVEWAYS IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

16 STATIONING, DISTANCES AND OFFSETS FOR SIGNS SHOWN ON THE PLANS ARE APPROXIMATE AND THE LOCATIONS OF SIGNS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

17 ALL CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE LINE UNLESS OTHERWISE NOTED.

18 CURB AND GUTTER GRADES ARE TO THE FLANGE LINE UNLESS OTHERWISE NOTED.

19 PAVEMENT REMOVAL WILL BE TO THE NEAREST JOINT, OR AS DIRECTED BY THE ENGINEER.

20 ALL CURB AND GUTTER GRADES IN RESURFACING SECTIONS SHALL BE VERIFIED BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE CURB AND GUTTER SINCE THERE IS NO MAINLINE PROFILE IN THE MILL AND OVERLAY SEGMENTS.

21 VERIFY EXISTING PAVEMENT ELEVATIONS AT ALL TIE-INS TO EXISTING PAVEMENT PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IF A DISCREPANCY IS FOUND BETWEEN PROPOSED PLAN ELEVATIONS AND EXISTING PAVEMENT ELEVATIONS.

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

23 SAWCUT EXISTING ASPHALT AND CONCRETE PAVEMENT AT THE MATCHLINE INDICATED ON THE PLANS UNLESS OTHERWISE IDENTIFIED IN THE THE PLAN OR AS DIRECTED BY THE

24 CONSTRUCT INSIDE EDGE OF SIDEWALK OR TRUCK APRON 1/2-INCH HIGHER THAN TOP OF CURB WHEN THEY ARE ADJACENT TO EACH OTHER.

25 ALL OPENINGS OF HOLES BELOW SUBGRADE RESULTING FROM REMOVALS OR ABANDONMENTS SHALL BE BACKFILLED IN ACCORDANCE WITH SECTION 204 OF THE STANDARD SPECS. ALL BACKFILL MATERIAL IS INCIDENTAL TO THE REMOVAL ITEM.

26 PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL FIELD VERIFY RELATED DRAINAGE INFORMATION IN THE PLANS AND PROVIDE DOCUMENTATION TO THE ENGINEER IN ACCORDANCE WITH THE SPECIFICATIONS.

27 SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED AS DIRECTED BY THE ENGINEER AND PAID FOR AS COVERING SIGNS TYPE I OR TYPE II. IN LIEU OF COVERING WOOD POST MOUNTED SIGNS, THE CONTRACTOR MAY CHOOSE TO REMOVE AND REINSTALL THEM.

28 ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.

29 CONTRACTOR MUST CONTACT THE PROJECT ENGINEER, THE WASHINGTON COUNTY SURVEYOR, AND SEWRPC AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

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

31 THE FOLLOWING ENTITIES HAVE PREPARED PLANS FOR THIS PROJECT:
HIMALAYAN CONSULTANTS LLC: STORM SEWER, EROSION CONTROL
LAKESIDE ENGINEERS: TRAFFIC CONTROL, DETOURS
CH2M HILL: RETAINING WALL STRUCTURE PLANS
WISDOT: STREET LIGHTING, TRAFFIC SIGNAL REMOVAL, PAVEMENT MARKING, EXISTING SIGNING, PERMANENT SIGNING, ATR COUNTER, GEOTECHNICAL REPORT
PAVEMENT TYPE SELECTION REPORT

UTILITY CONTACTS

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dan.sande@we-energies.com

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dpw@richfield.gov

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kristina.betzold@wisconsin.gov

MR. ALBERT SCHULTEIS
TOWN OF POLK
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SLINGER, WI 53086
(262) 677-2423
townofpolk@att.net

MR. SCOTT SCHMIDT, P.E., PLS
WASHINGTON COUNTY HIGHWAY DEPT
900 LANG STREET
WEST BEND, WI 53095
(262) 335-6881
scott.schmidt@co.washington.wi.us

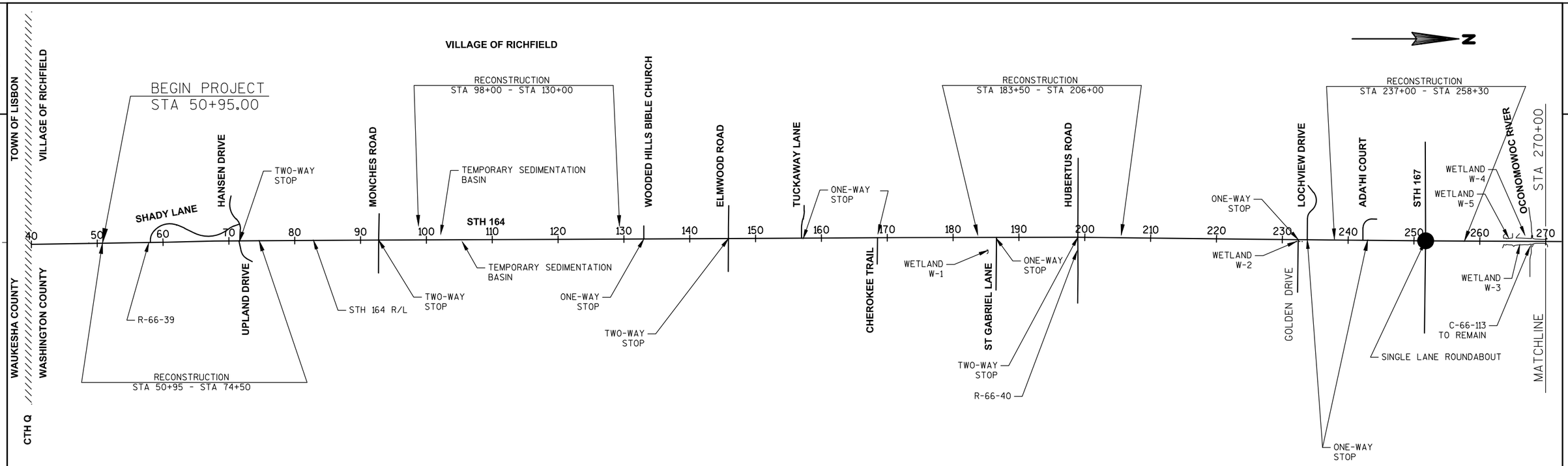
WASHINGTON COUNTY SURVEYOR
MR. TED DUMKE
WASHINGTON COUNTY PUBLIC AGENCY CENTER
333 EAST WASHINGTON STREET, SUITE 2300
PO BOX 2003
WEST BEND, WI 53095-2003
(262) 335-4436
ted.dumke@co.washington.wi.us

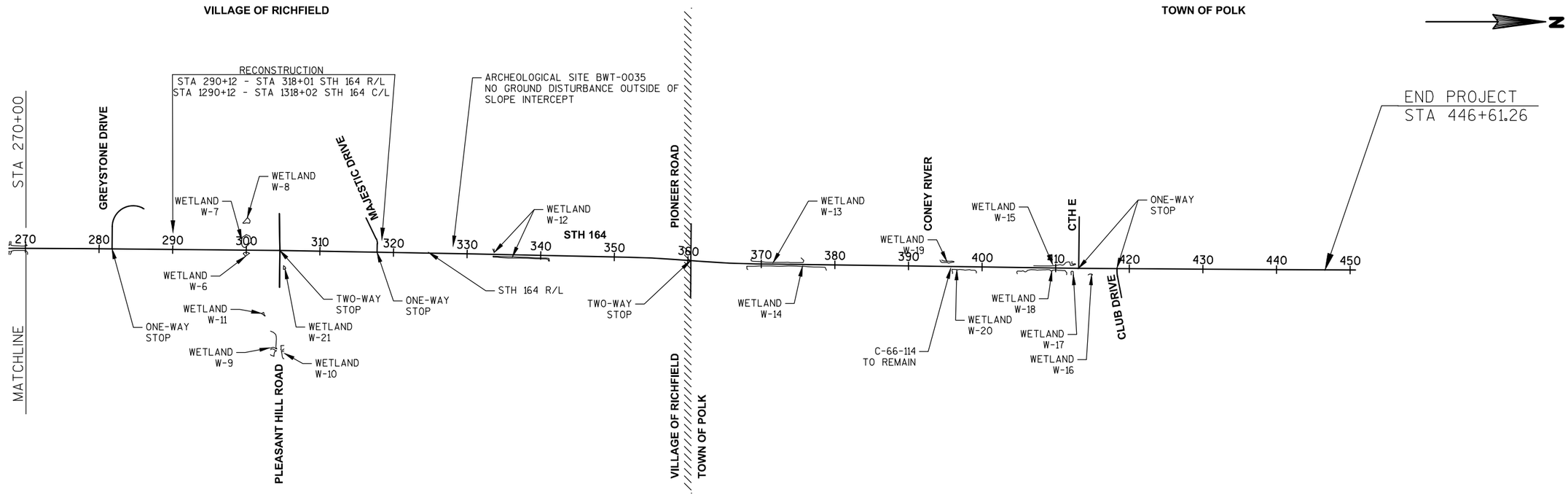
SEWRPC
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SOUTHEAST WISCONSIN REGIONAL PLANNING COMMISION
W239N1812 ROCKWOOD DRIVE
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(262) 547-6721
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ORDER OF SECTION 2 SHEETS

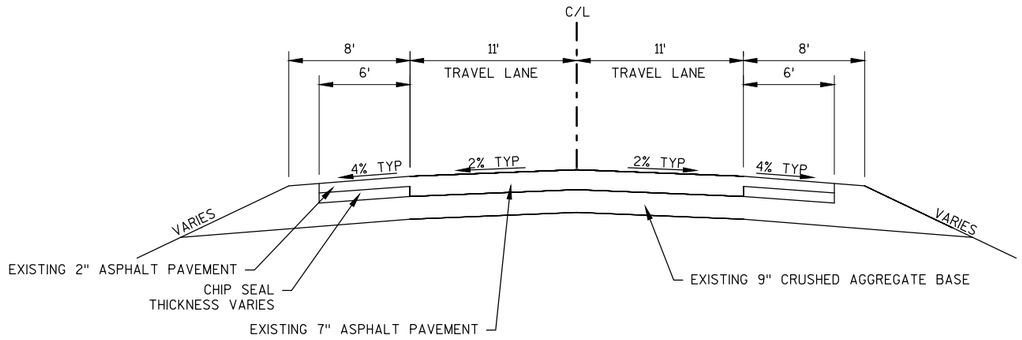
Project Overview
Typical Sections
Construction Details
Paving Details
ATR Counter
Erosion Control
Storm Sewer
Utility Plan
Signing
Lighting
Traffic Signals
Pavement Marking
Traffic Control and Construction Staging
Detour
Alignment

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



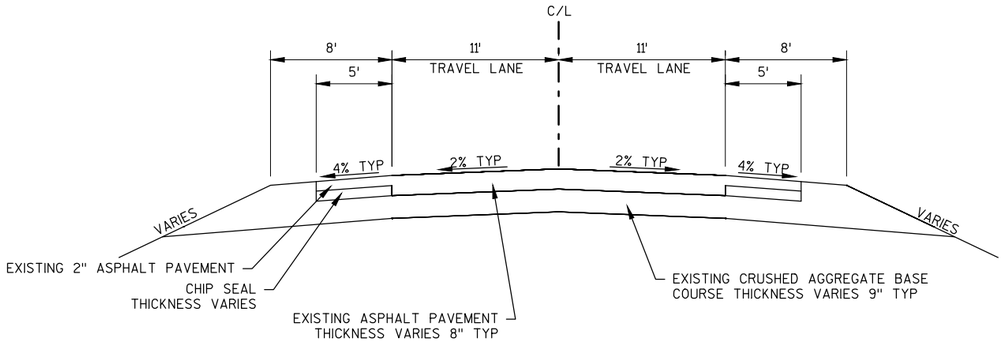


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PROJECT OVERVIEW	SCALE : NTS	SHEET 4	E



EXISTING TYPICAL SECTION - STH 164

STA 50+95 - STA 251+76

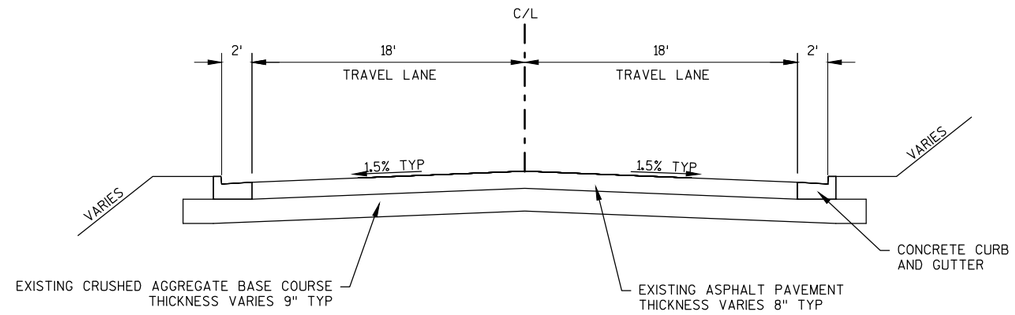


EXISTING TYPICAL SECTION - STH 164

STA 251+76 - STA 302+91 *
STA 306+37** - STA 446+61

* CURB AND GUTTER FROM STA 300+58 - STA 302+91 ON RIGHT SIDE
** CURB AND GUTTER FROM STA 306+37 - STA 306+42 ON RIGHT SIDE

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TYPICAL SECTION	SHEET 5	E

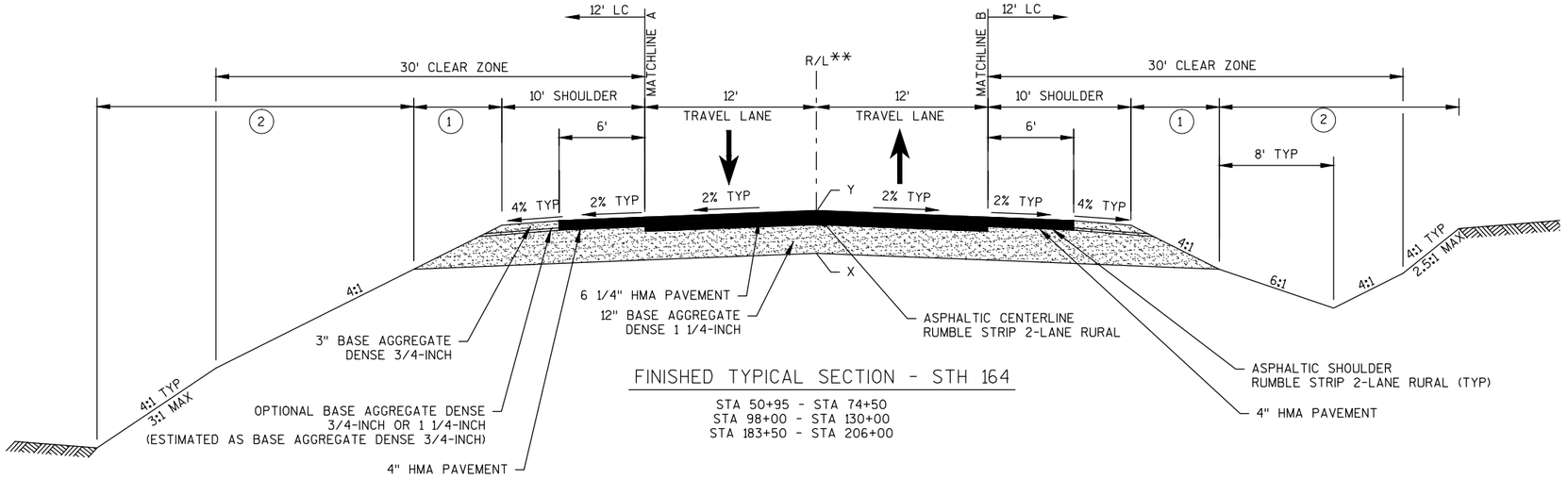


EXISTING TYPICAL SECTION - STH 164

NEAR PLEASANT HILL ROAD

STA 302+91 - STA 306+37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TYPICAL SECTION	SHEET 6	E



FINISHED TYPICAL SECTION - STH 164

STA 50+95 - STA 74+50
STA 98+00 - STA 130+00
STA 183+50 - STA 206+00

LEGEND

(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

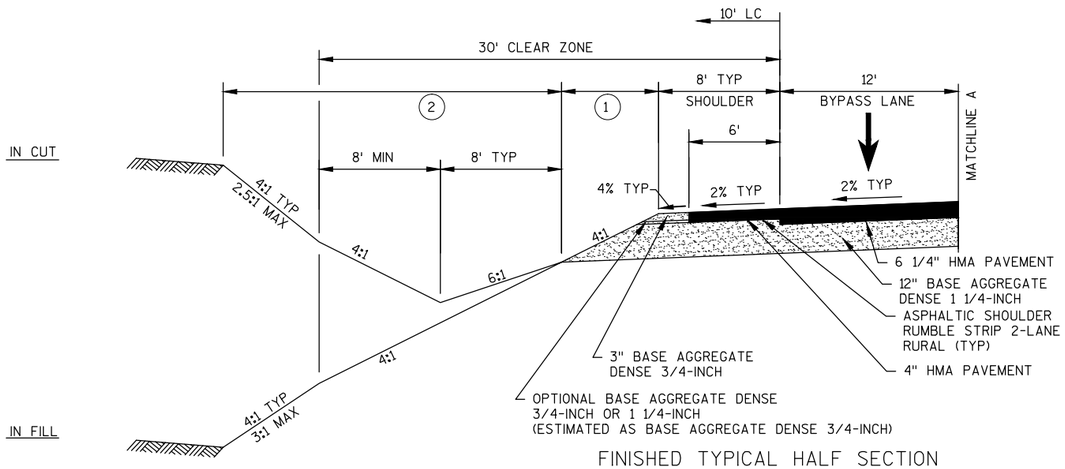
(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

** CENTERLINE OF CONSTRUCTION STA 290+12.20 TO STA 318+01.24 (STA 1290+11.74 TO STA 1318+01.95 ALONG CENTERLINE)

"X"= POINTS REFERRED TO ON CROSS SECTIONS

"Y"= POINTS REFERRED TO ON PROFILE

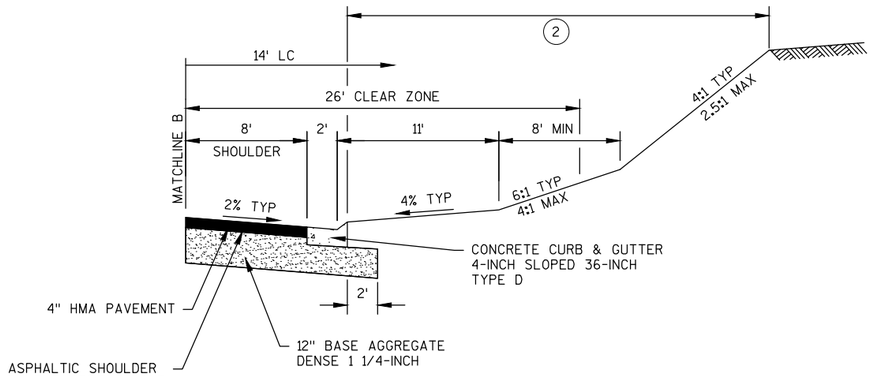
LC= LATERAL CLEARANCE



FINISHED TYPICAL HALF SECTION

BYPASS LANE

(MATCHLINE B IS A MIRROR IMAGE)
STA 129+34 - STA 130+00 RT
STA 183+50 - STA 190+78 LT



FINISHED TYPICAL HALF SECTION

SHOULDER CURB

(MATCHLINE A IS A MIRROR IMAGE)
STA 57+00 - STA 68+25 LT
STA 58+40 - STA 66+86 RT
STA 104+80 - STA 123+35 LT
STA 106+00 - STA 123+85 RT

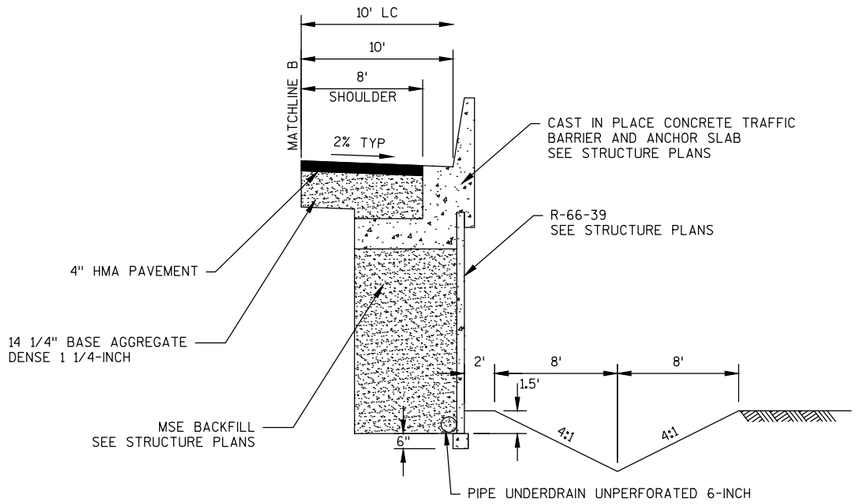
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TYPICAL SECTION	SHEET 7	E

LEGEND

(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

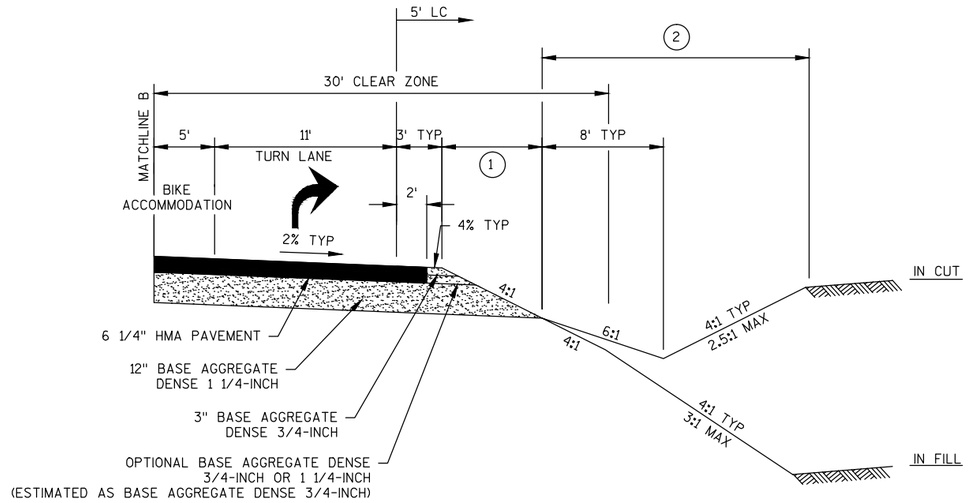
LC= LATERAL CLEARANCE



FINISHED TYPICAL HALF SECTION

RETAINING WALL

STA 57+25 - STA 58+40 RT

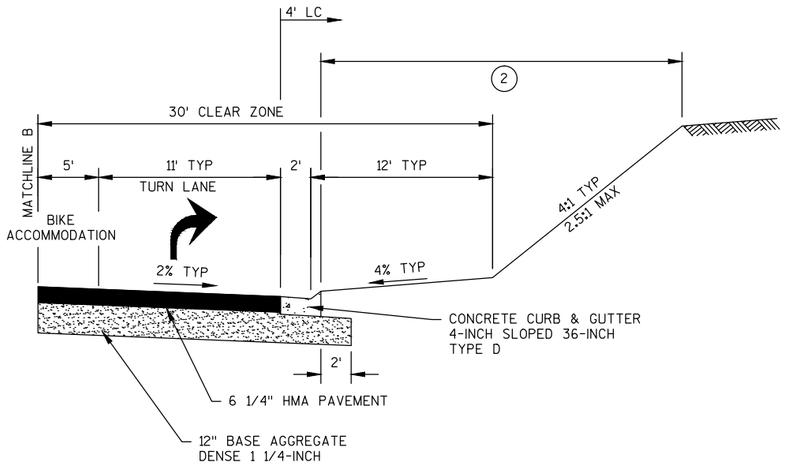


FINISHED TYPICAL HALF SECTION

RIGHT TURN LANE

(MATCHLINE A IS A MIRROR IMAGE)

STA 68+25 - STA 70+88 RT
STA 72+39 - STA 74+50 LT
STA 98+00 - STA 98+89 LT
STA 183+50 - STA 185+89 RT
STA 192+75 - STA 198+25 RT
STA 199+62 - STA 204+45 LT

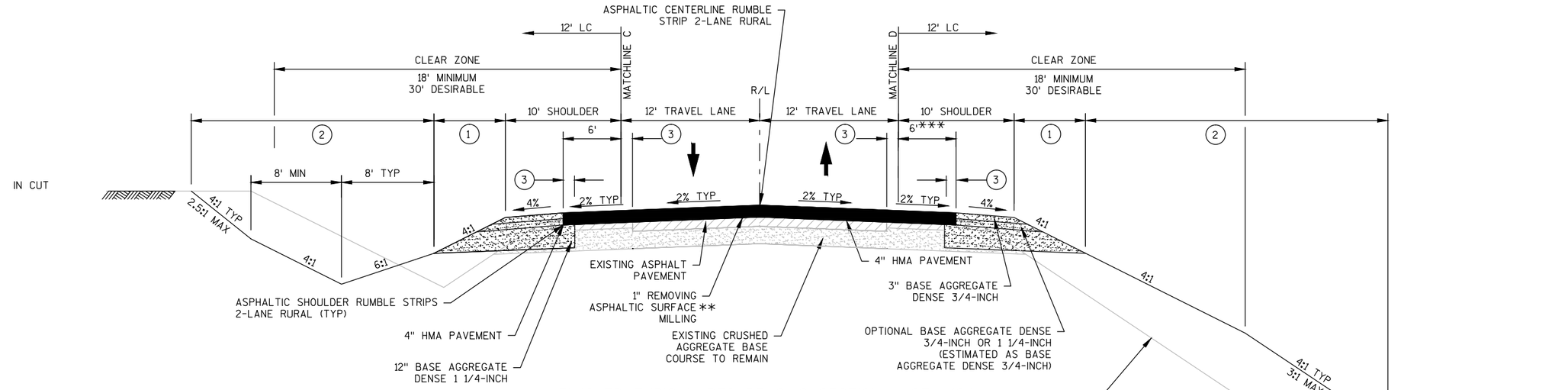


FINISHED TYPICAL HALF SECTION

RIGHT TURN LANE WITH SHOULDER CURB

(MATCHLINE A IS A MIRROR IMAGE)

STA 66+86 - STA 68+25 RT



FINISHED TYPICAL RESURFACING SECTION - STH 164

STA 74+50 - STA 98+00
STA 130+00 - STA 183+50
STA 206+00 - STA 237+00
STA 266+54 - STA 290+12
STA 318+01 - STA 400+17
STA 426+12 - STA 446+61

LEGEND

(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

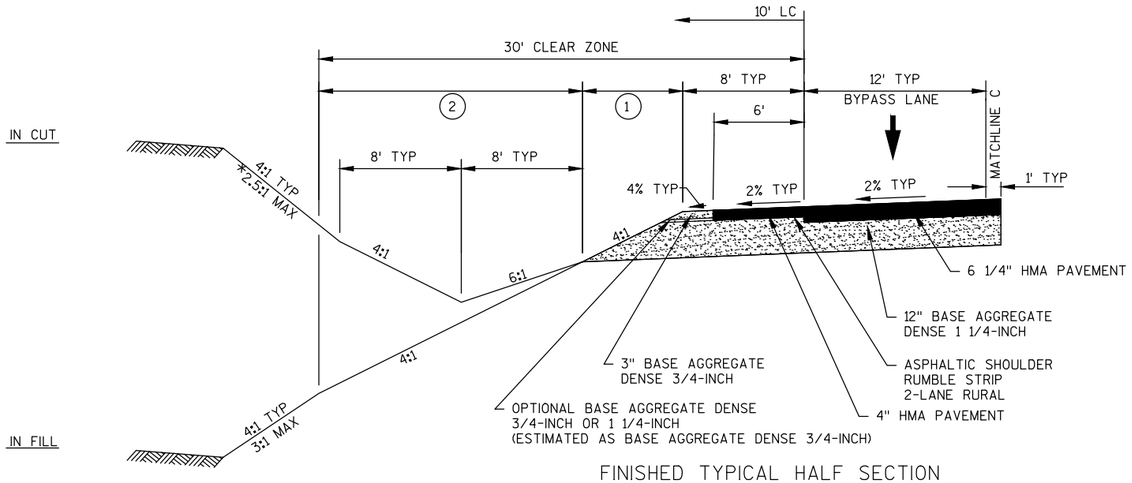
(3) WIDTH VARIES 0'-4'. BEGIN FULL DEPTH SHOULDER RECONSTRUCTION AT EXISTING EDGE OF PAVED SHOULDER

(4) WIDTH VARIES 0'-5'. BEGIN FULL DEPTH SHOULDER RECONSTRUCTION AT EDGE OF EXISTING PAVED SHOULDER

** REMOVE 1" AT REFERENCE LINE. PROFILE MILL PAVEMENT AT 2% CROSS SLOPE TO EXISTING EDGE OF PAVED SHOULDER SO THAT PAVEMENT CROWN IS LOCATED ON REFERENCE LINE

*** 10' STA 276+00 - STA 278+59

LC= LATERAL CLEARANCE

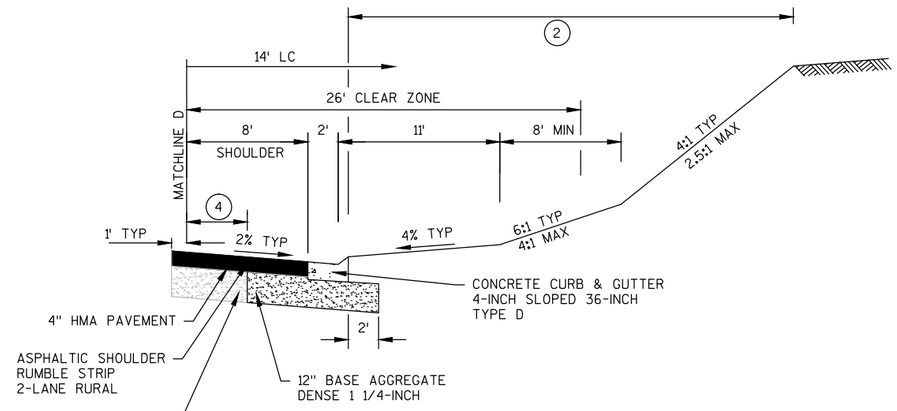


FINISHED TYPICAL HALF SECTION

BYPASS LANE

(MATCHLINE D IS A MIRROR IMAGE)

STA 130+00 - STA 137+26 RT
STA 153+31 - STA 161+23 RT
STA 164+26 - STA 172+70 LT
STA 182+35 - STA 183+50 LT
STA 228+15 - STA 233+23 LT
STA 278+09 - STA 286+01 RT
STA 318+01 - STA 322+02 RT

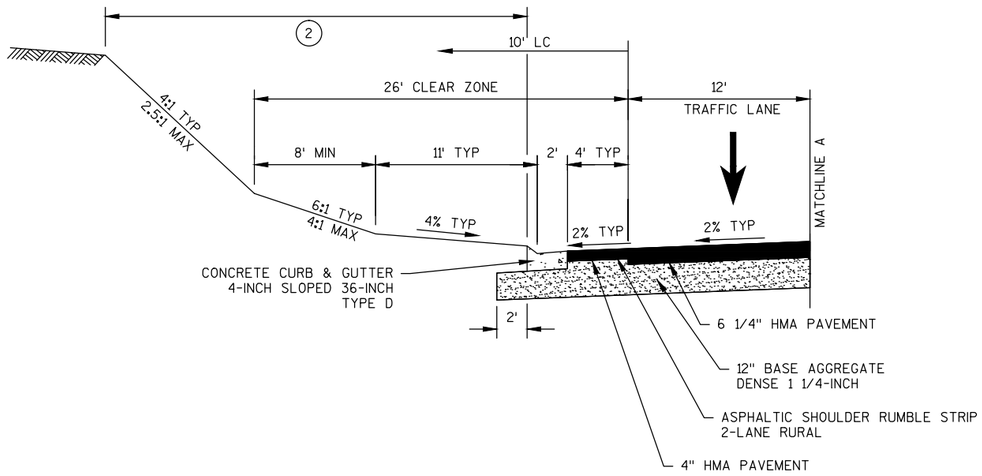


FINISHED TYPICAL HALF SECTION

SHOULDER CURB

(MATCHLINE C IS A MIRROR IMAGE)

STA 217+95 - STA 219+40 LT
STA 224+00 - STA 227+00 RT
STA 236+96 - STA 237+00 RT
STA 323+50 - STA 326+00 RT
STA 328+00 - STA 331+50 LT

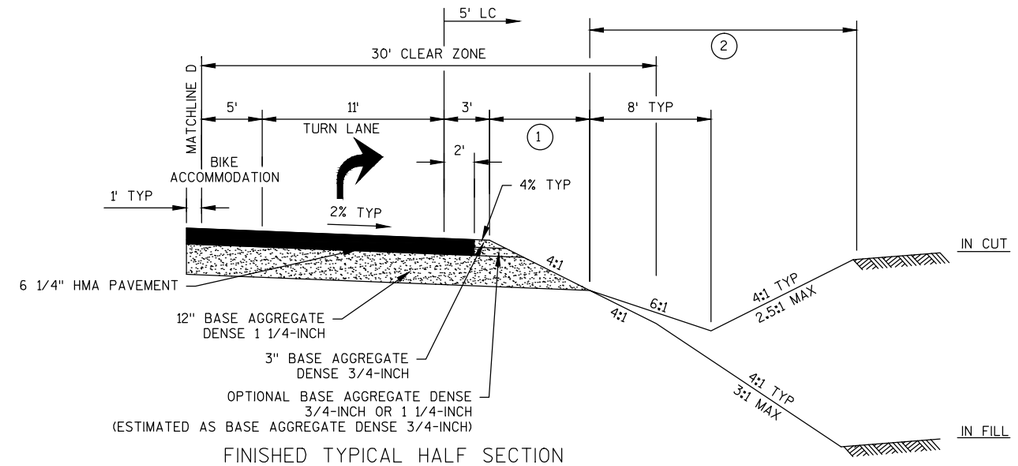


FINISHED TYPICAL HALF SECTION

BYPASS LANE WITH SHOULDER CURB

(MATCHLINE B IS A MIRROR IMAGE)

STA 232+96 - STA 236+96 RT



FINISHED TYPICAL HALF SECTION

RIGHT TURN LANE

(MATCHLINE C IS A MIRROR IMAGE)

STA 74+50 - STA 77+39 LT
STA 86+60 - STA 92+11 RT
STA 93+39 - STA 98+00 LT
STA 133+72 - STA 138+72 LT
STA 139+74 - STA 145+24 RT
STA 146+52 - STA 152+02 LT
STA 157+73 - STA 161+73 LT
STA 162+30 - STA 165+80 RT
STA 180+89 - STA 183+50 RT
STA 234+53 - STA 237+00 LT
STA 282+51 - STA 286+51 LT
STA 318+52 - STA 323+52 LT
STA 354+33 - STA 359+84 RT
STA 361+01 - STA 336+52 LT

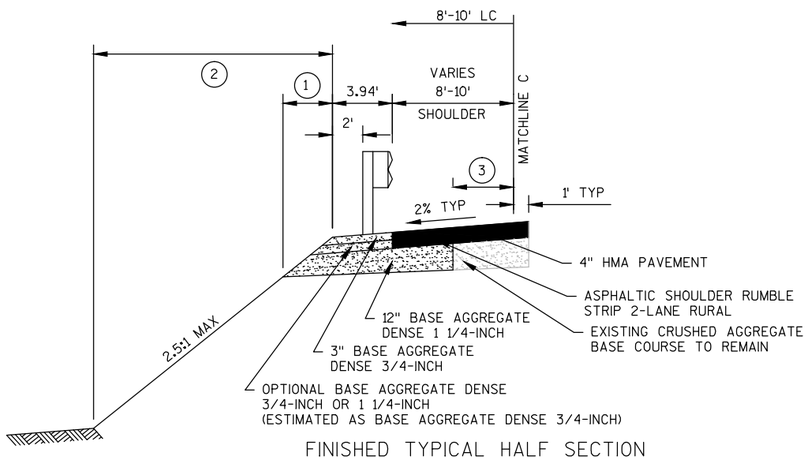
LC= LATERAL CLEARANCE

LEGEND

(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

(3) WIDTH VARIES 3'-5'. BEGIN FULL DEPTH SHOULDER RECONSTRUCTION AT EDGE OF EXISTING PAVED SHOULDER

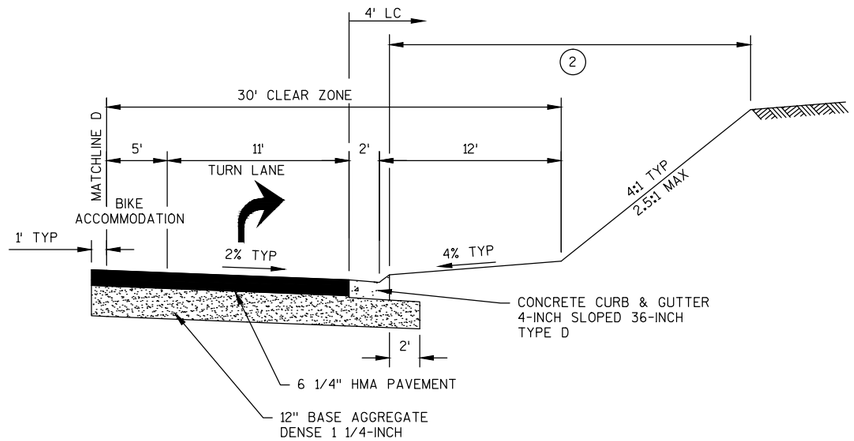


FINISHED TYPICAL HALF SECTION

BEAM GUARD SECTION

(MATCHLINE D IS A MIRROR IMAGE)

STA 265+70 - STA 268+88 RT
STA 266+93 - STA 270+11 LT
STA 393+46 - STA 397+83 LT
STA 395+34 - STA 397+06 RT



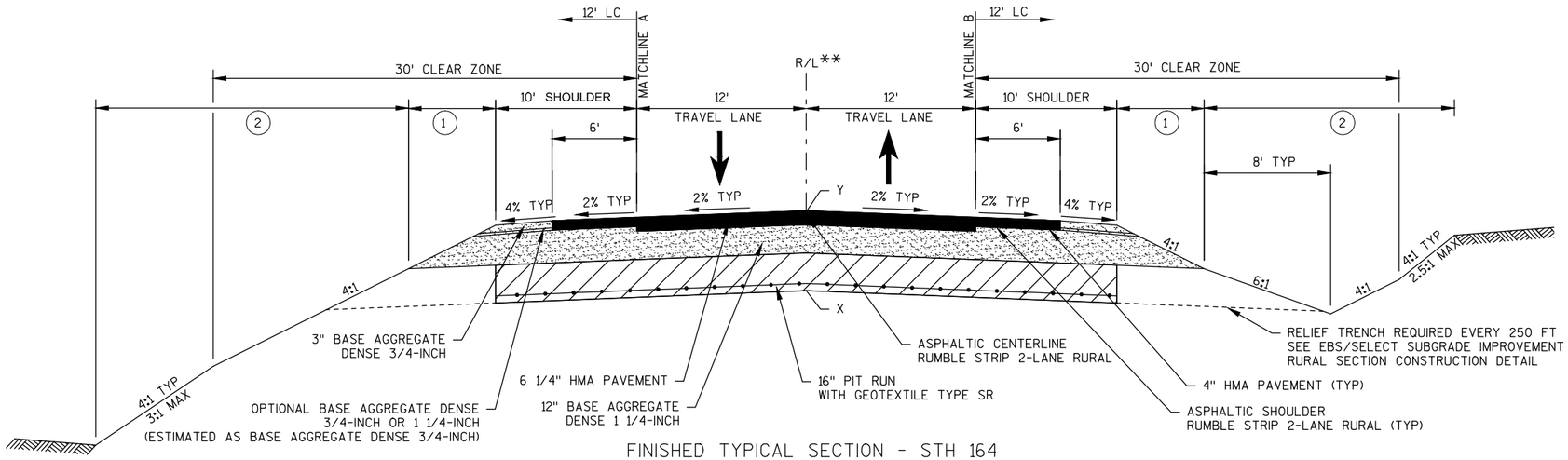
FINISHED TYPICAL HALF SECTION

RIGHT TURN LANE WITH SHOULDER CURB

(MATCHLINE C IS A MIRROR IMAGE)

STA 165+80 - STA 167+80 RT
STA 227+00 - STA 231+65 RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TYPICAL SECTION	SHEET 10 E



FINISHED TYPICAL SECTION - STH 164

STA 237+00 - STA 243+34
STA 1290+12 - STA 1318+02 STH 164 C/L

LEGEND

(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

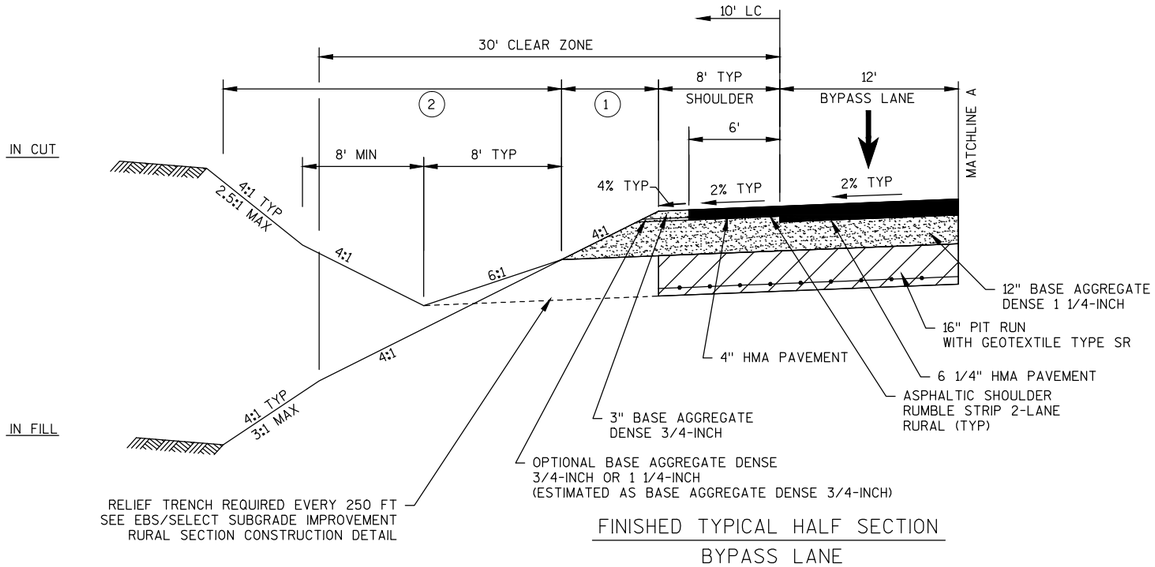
(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

** CENTERLINE OF CONSTRUCTION STA 290+12.20 TO STA 318+01.24 (STA 1290+11.74 TO STA 1318+01.95 ALONG CENTERLINE)

"X"= POINTS REFERRED TO ON CROSS SECTIONS

"Y"= POINTS REFERRED TO ON PROFILE

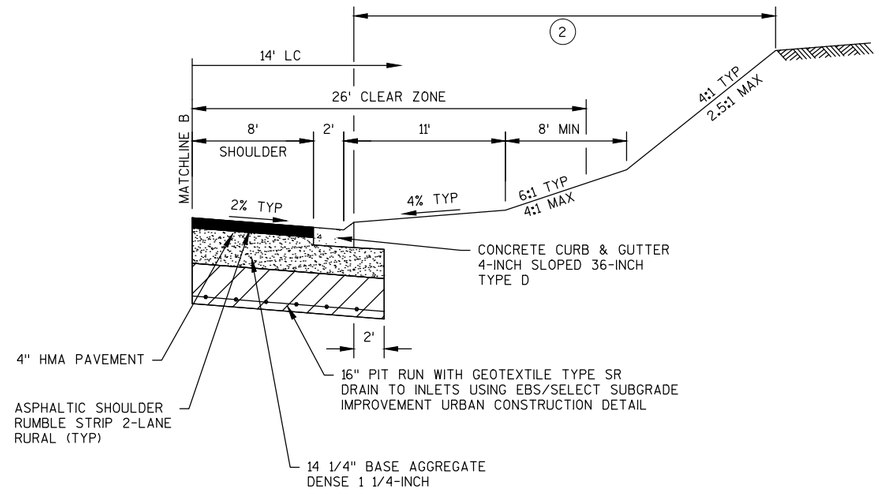
LC= LATERAL CLEARANCE



FINISHED TYPICAL HALF SECTION

BYPASS LANE

(MATCHLINE B IS A MIRROR IMAGE)
STA 237+00 - STA 238+03 RT
STA 1314+03 - STA 1318+02 RT STH 164 C/L

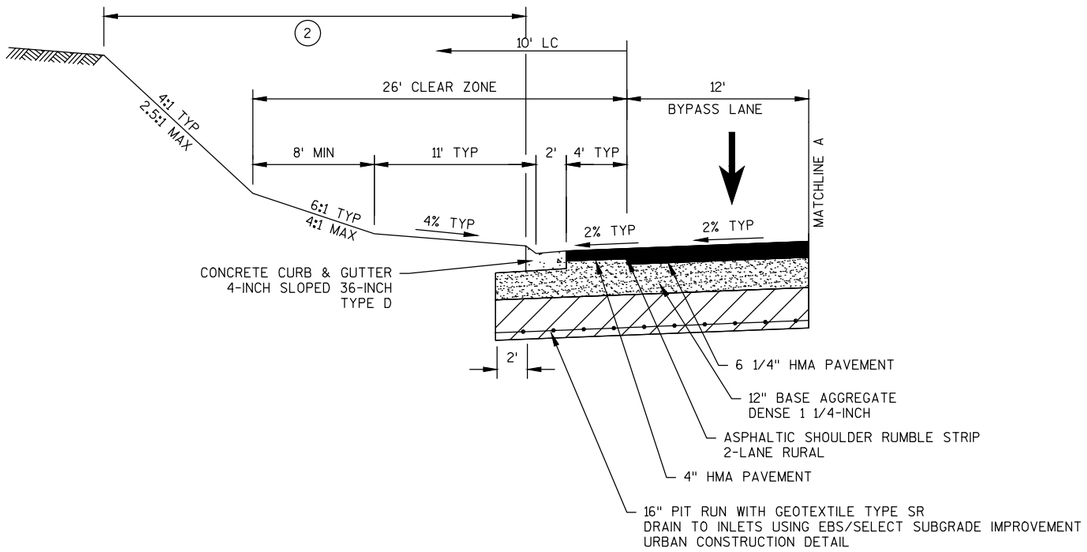


FINISHED TYPICAL HALF SECTION

SHOULDER CURB

(MATCHLINE A IS A MIRROR IMAGE)
STA 237+00 - STA 238+68 RT
STA 239+50 - STA 241+18 LT
STA 1305+15 - STA 1306+50 RT STH 164 C/L

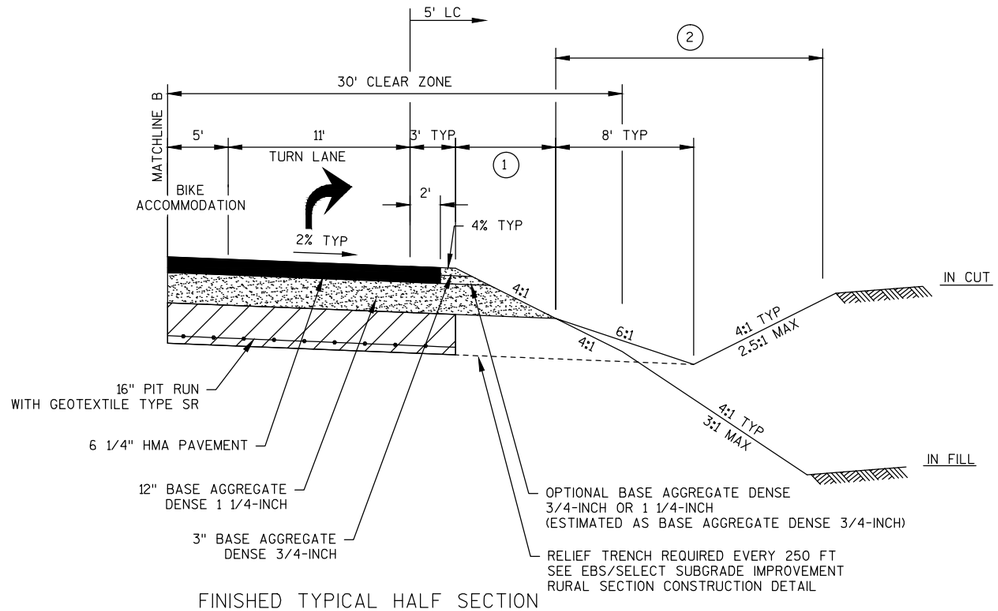
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TYPICAL SECTION	SHEET 11	E



FINISHED TYPICAL HALF SECTION

BYPASS LANE WITH SHOULDER CURB

(MATCHLINE B IS A MIRROR IMAGE)
STA 238+68 - STA 243+34 RT



FINISHED TYPICAL HALF SECTION

RIGHT TURN LANE

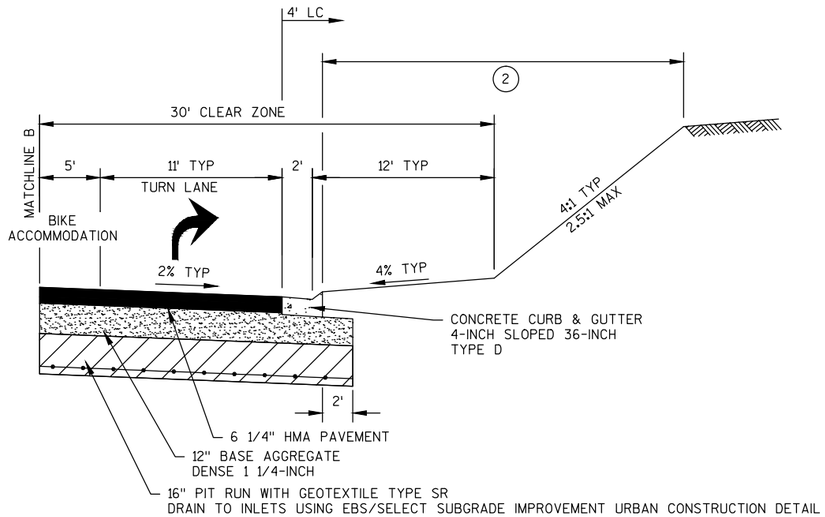
(MATCHLINE A IS A MIRROR IMAGE)
STA 237+00 - STA 239+50 LT
STA 1299+38 - STA 1302+00 RT
STA 1305+28 - STA 1310+28 LT

LEGEND

(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

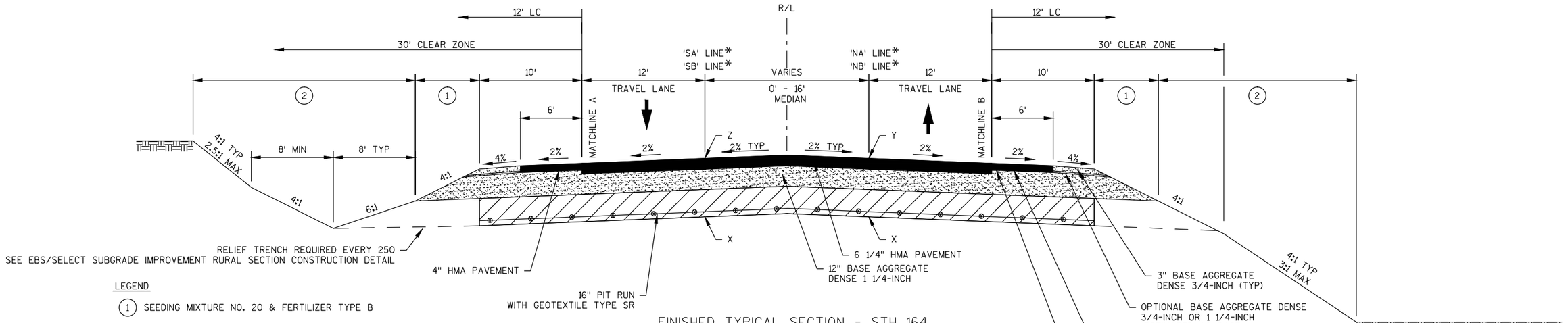
LC= LATERAL CLEARANCE



FINISHED TYPICAL HALF SECTION

RIGHT TURN LANE WITH SHOULDER CURB

(MATCHLINE A IS A MIRROR IMAGE)
STA 242+98 - STA 243+34 LT
STA 1302+00 - STA 1303+99 RT



FINISHED TYPICAL SECTION - STH 164

STA 243+34'NA' - STA 246+82'NA'
STA 243+34'SA' - 246+83'SA'
STA 257+48'NB' - STA 258+30'NB'
STA 257+49'SB' - STA 258+30'SB'

LEGEND

(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

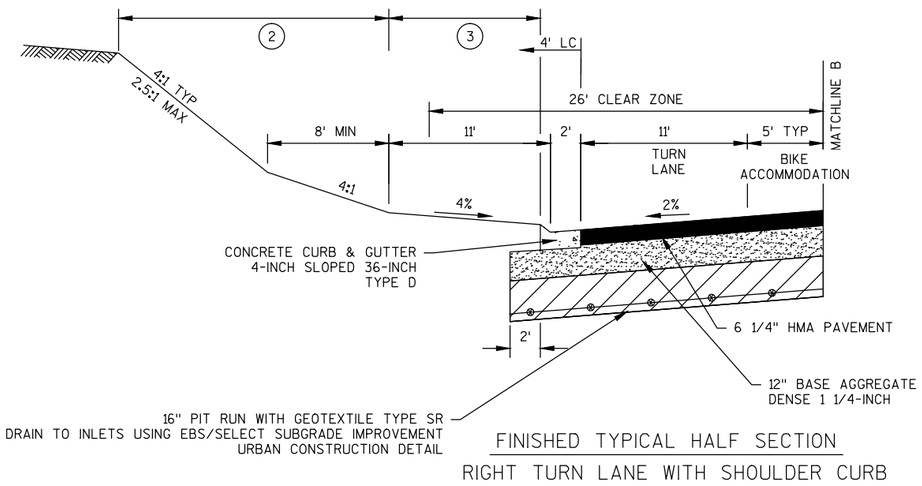
(3) SOD, TOPSOIL, AND FERTILIZER TYPE B

* NB PGL VARIES 6' LT TO 7' RT OF R/L
SB PBL VARIES 0' LT TO 22' LT OF R/L

** 8' STA 245+60'NA' - STA 246+82'NA' RT

LC= LATERAL CLEARANCE

"X"= POINTS REFERRED TO ON CROSS SECTIONS
"Y"= POINTS REFERRED TO ON 'NA' AND 'NB' PROFILE
"Z"= POINTS REFERRED TO ON 'SA' AND 'SB' PROFILE

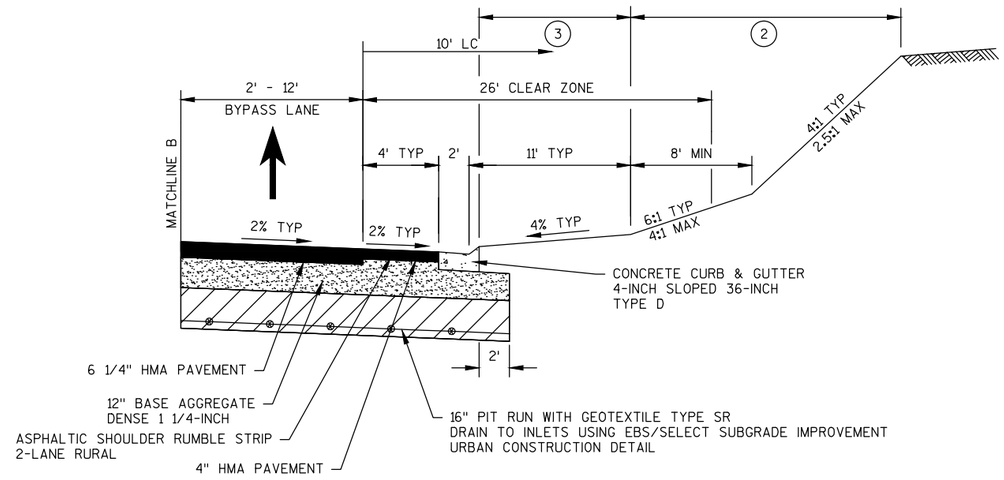


FINISHED TYPICAL HALF SECTION

RIGHT TURN LANE WITH SHOULDER CURB

(MATCHLINE A IS A MIRROR IMAGE)

STA 243+34'SA' - STA 246+83'SA' LT
STA 245+60'NA' - STA 246+82'NA' RT

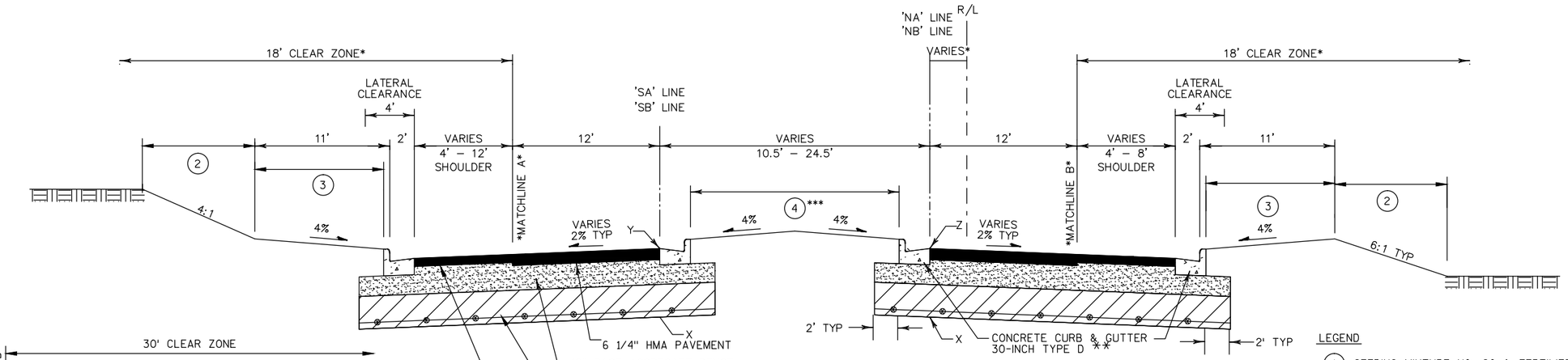


FINISHED TYPICAL HALF SECTION

BYPASS LANE WITH SHOULDER CURB

STA 243+34'NA' - STA 245+60'NA' RT

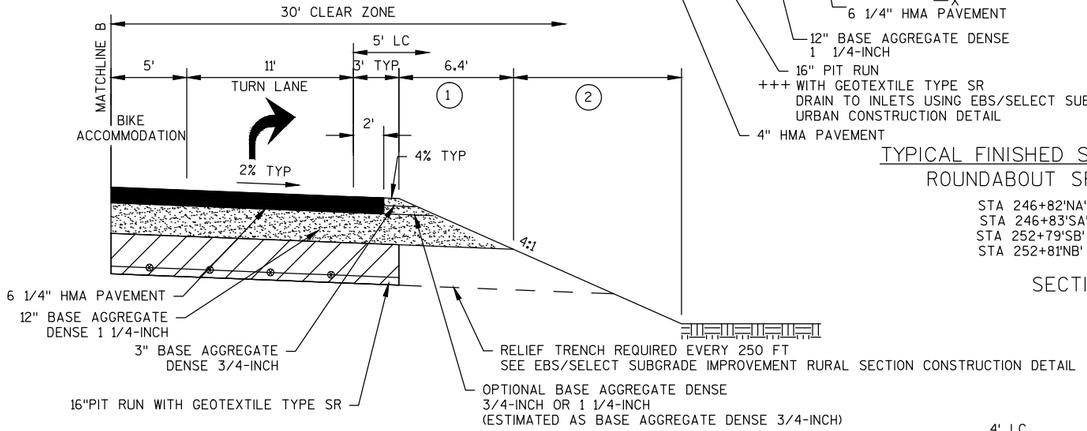
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TYPICAL SECTION	SHEET 13	E



TYPICAL FINISHED SECTION – STH 164
ROUNDABOUT SPLITTER ISLAND

STA 246+82'NA' - STA 251+34'NA'
STA 246+83'SA' - STA 251+31'SA'
STA 252+79'SB' - STA 257+49'SB'
STA 252+81'NB' - STA 257+48'NB'

SECTION C-C



+++ 16" BREAKER RUN WITH NO GEOTEXTILE TYPE SR FOR THE FOLLOWING STATIONS:

STA 250+84'NA' – STA 251+34'NA'
STA 250+81'SA' – STA 251+31'SA'
STA 252+79'SB' – STA 253+29'SB'
STA 252+81'NB' – STA 253+30'NB'

LEGEND

(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

(3) SOD, FERTILIZER TYPE B AND TOPSOIL

(4) SEED NO MOW FESCUE, TOPSOIL, FERTILIZER TYPE B, AND EROSION MAT

* VARIES 18' LT TO 10.5' RT

** CONCRETE CURB & GUTTER 4–INCH SLOPED 36–INCH TYPE D FROM STA 246+82'NA' TO STA 249+89'NA', STA 246+83'SA' TO STA 249+87'SA', STA 254+29'SB' TO 257+49'SB', AND STA 255+05'NB' TO STA 257+49'NB' FLANGE THICKNESS SHALL BE 8 INCHES

*** CONCRETE SIDEWALK 4–INCH WITH 4" BASE AGGREGATE DENSE 3/4–INCH WHEN MEDIAN WIDTH LESS THAN 6–FT WIDE

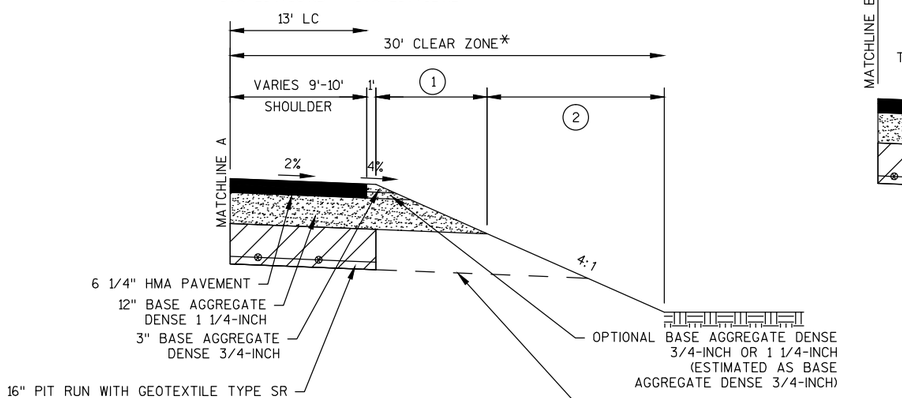
+++

LC= LATERAL CLEARANCE

"X"= POINTS REFERRED TO ON CROSS SECTIONS
"Y"= POINTS REFERRED TO ON 'NA' AND 'NB' PROFILE
"Z"= POINTS REFERRED TO ON 'SA' AND 'SB' PROFILE

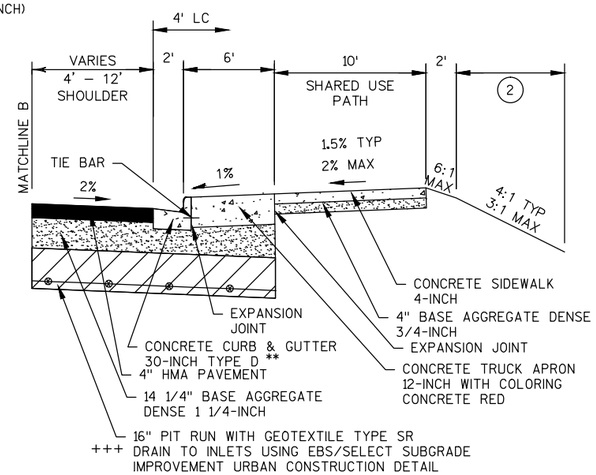
FINISHED TYPICAL HALF SECTION
RIGHT TURN LANE

STA 254+50'NB' - STA 257+62'NB'



FINISHED TYPICAL HALF SECTION
RURAL SHOULDER SECTION

STA 254+32'NB' - STA 254+50'NB' RT

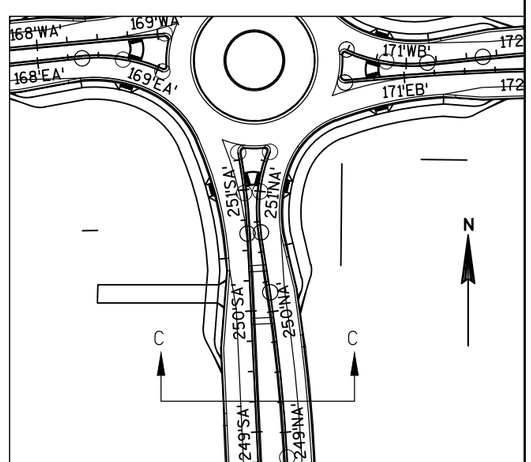


FINISHED TYPICAL HALF SECTION

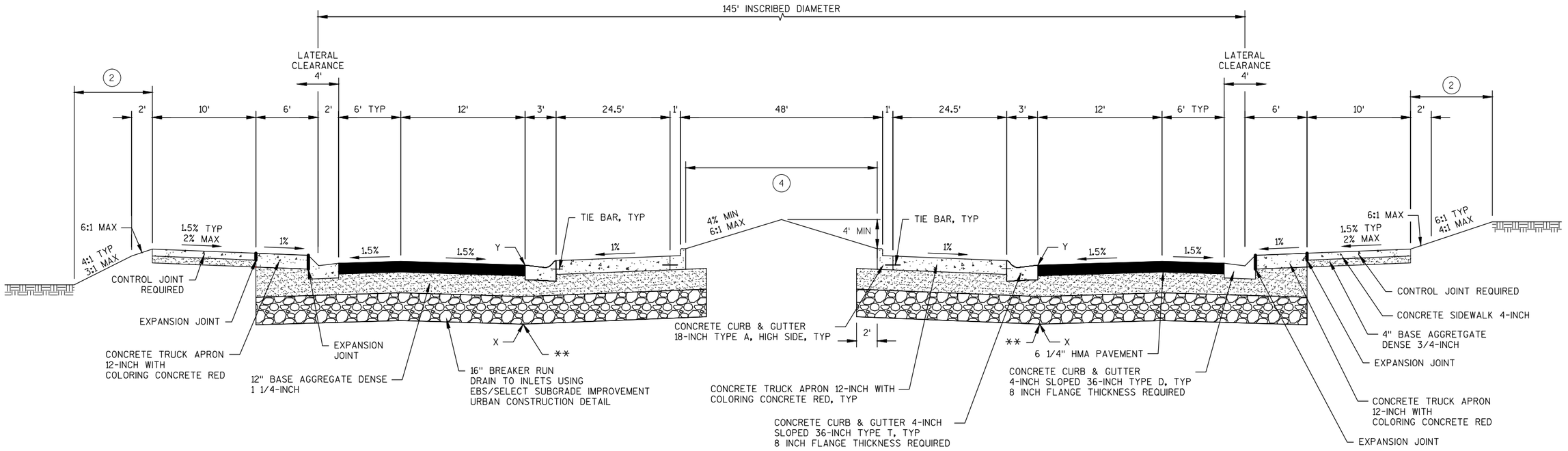
(MATCHLINE A IS A MIRROR IMAGE)
STA 249+60'SA' - STA 251+31'SA' LT
STA 250+06'NA' - STA 251+34'NA' RT
STA 252+79'SB' - STA 254+09'SB' LT
STA 252+81'NB' - STA 254+12'NB' RT

* CLEAR ZONE VARIES

STATION	SIDE	CLEAR ZONE
246+83'SA' - 249+15'SA'	LT	18'
246+82'NA' - 248+78'NA'	RT	18'
254+30'SB' - 255+30'SB'	LT	28'
255+30'SB' - 257+49'SB'	LT	30'
254+30'NB' - 255+05'NB'	RT	28'
255+05'NB' - 257+48'NB'	RT	30'



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TYPICAL SECTION	SHEET 14	E



TYPICAL FINISHED SECTION - ROUNDABOUT

SECTION B-B

"X" = POINTS REFERRED TO ON CROSS SECTIONS "Y" = POINTS REFERRED TO ON PROFILE

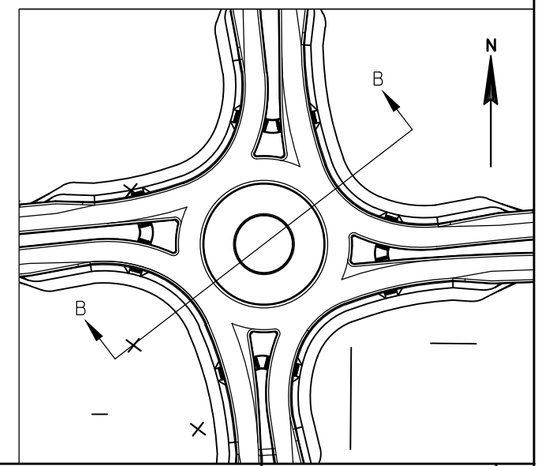
** INSTALL UNDERDRAIN 50 FEET OUT FROM INLETS AT LOW POINTS. SEE CONSTRUCTION DETAIL.

LEGEND

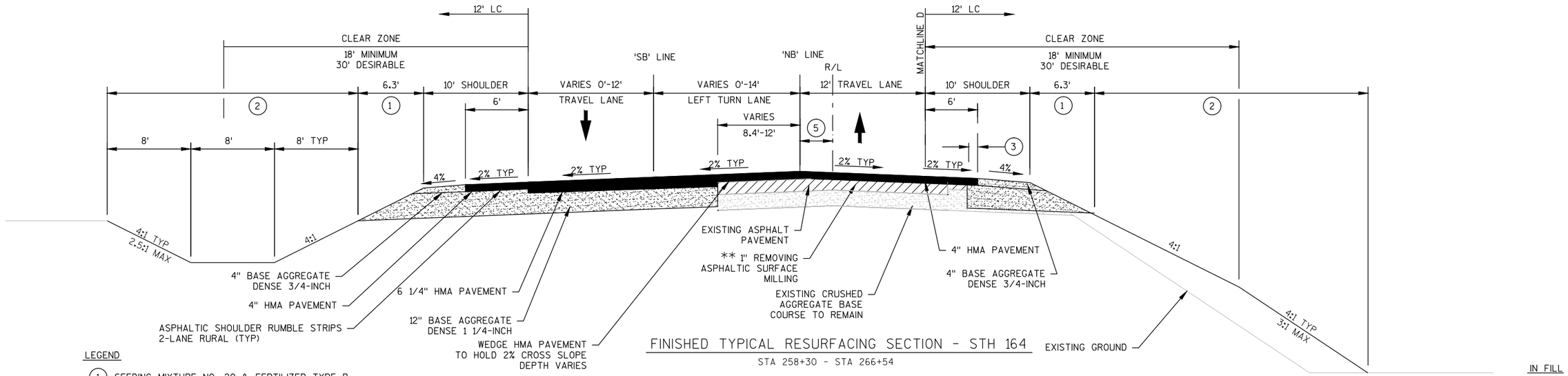
(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

(4) SEED NO MOW FESCUE, TOPSOIL, FERTILIZER TYPE B, AND EROSION MAT



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TYPICAL SECTION	SHEET 15	E



FINISHED TYPICAL RESURFACING SECTION - STH 164

STA 258+30 - STA 266+54

LEGEND

(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

(3) WIDTH VARIES 0'-4'. BEGIN FULL DEPTH SHOULDER RECONSTRUCTION AT EXISTING EDGE OF PAVED SHOULDER

(4) WIDTH VARIES 0'-4'. BEGIN FULL DEPTH SHOULDER RECONSTRUCTION AT EDGE OF EXISTING PAVED SHOULDER

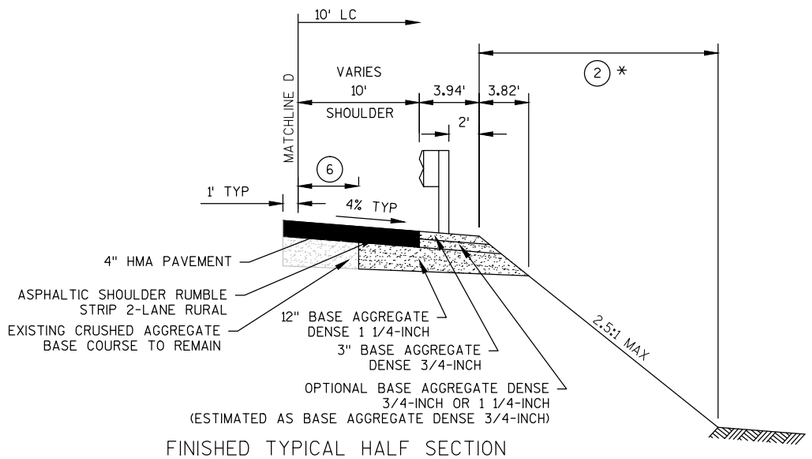
(5) WIDTH VARIES 0'-3.1'. SHIFT CROWN TO 'NB' LINE.

(6) WIDTH VARIES 4.1'-4.4'

* USE EROSION MAT ON SLOPES STEEPER THAN 3:1

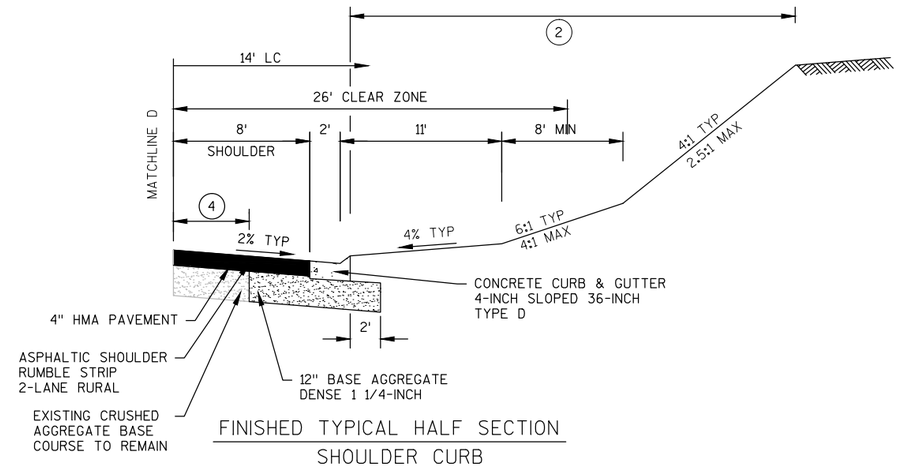
** REMOVE 1" AT REFERENCE LINE. PROFILE MILL PAVEMENT AT 2% CROSS SLOPE TO EXISTING EDGE OF PAVED SHOULDER ON RIGHT SIDE ONLY.

LC= LATERAL CLEARANCE



FINISHED TYPICAL HALF SECTION
BEAM GUARD SECTION

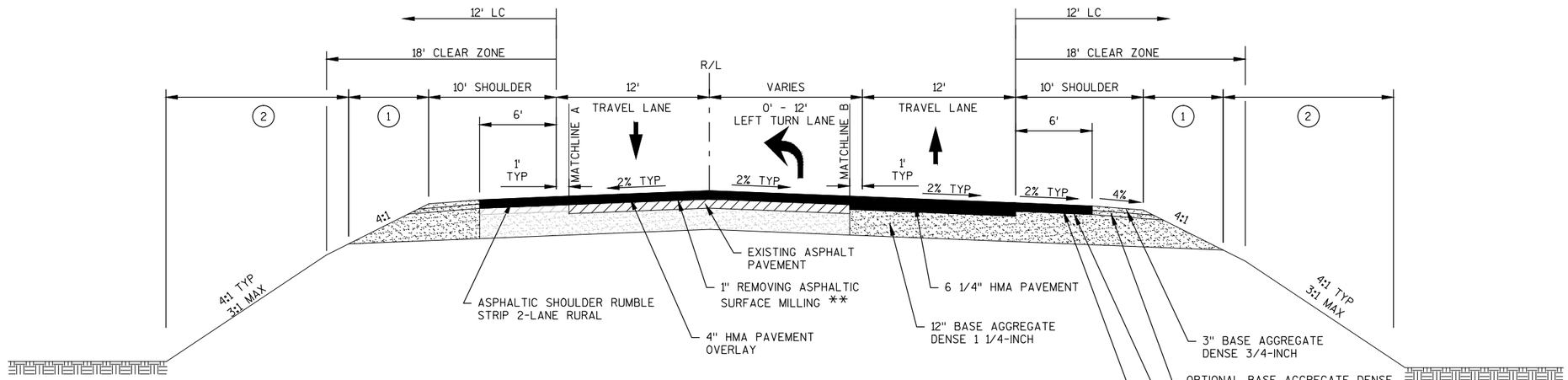
STA 265+70 - STA 266+54 RT



FINISHED TYPICAL HALF SECTION
SHOULDER CURB

STA 258+50 - 262+50 RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TYPICAL SECTION	SHEET 16	E



FINISHED TYPICAL SECTION - STH 164

STA 400+17 - STA 426+12

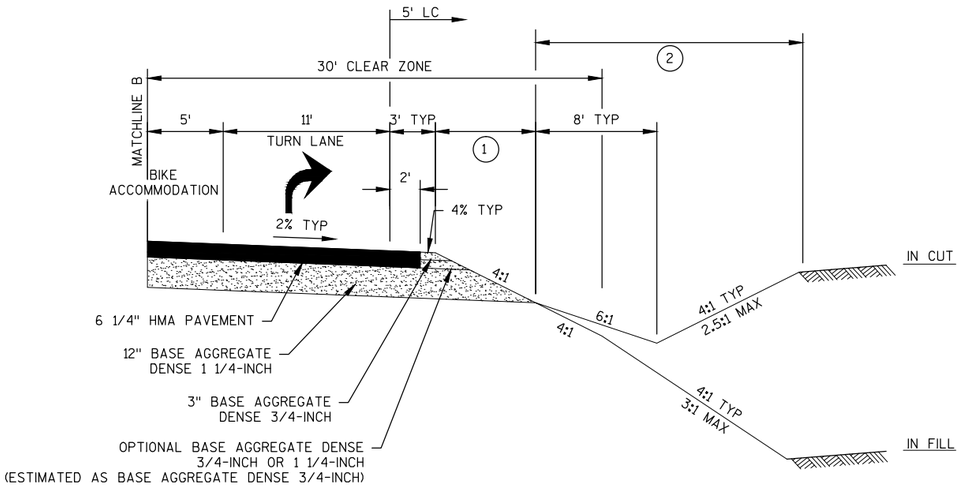
LEGEND

(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

** REMOVE 1" AT REFERENCE LINE. PROFILE MILL PAVEMENT AT 2% CROSS SLOPE TO EXISTING EDGE OF PAVED SHOULDER SO THAT PAVEMENT CROWN IS LOCATED ON REFERENCE LINE

LC= LATERAL CLEARANCE

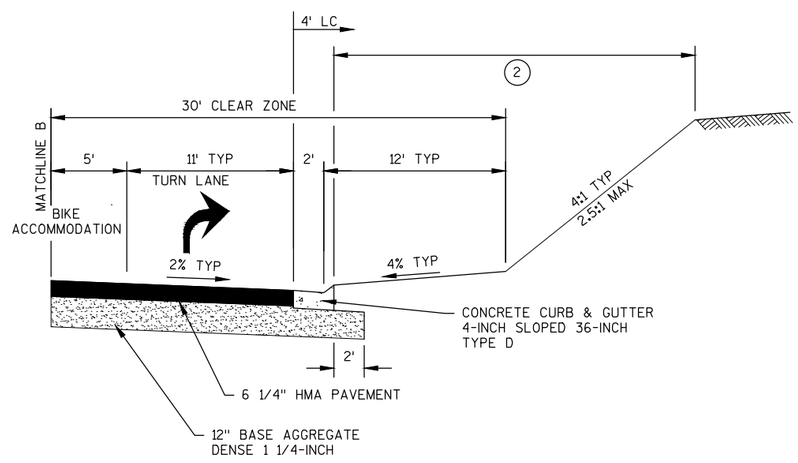


FINISHED TYPICAL HALF SECTION

RIGHT TURN LANE

STA 412+65 - STA 416+25 RT

STA 413+78 - STA 422+73 LT



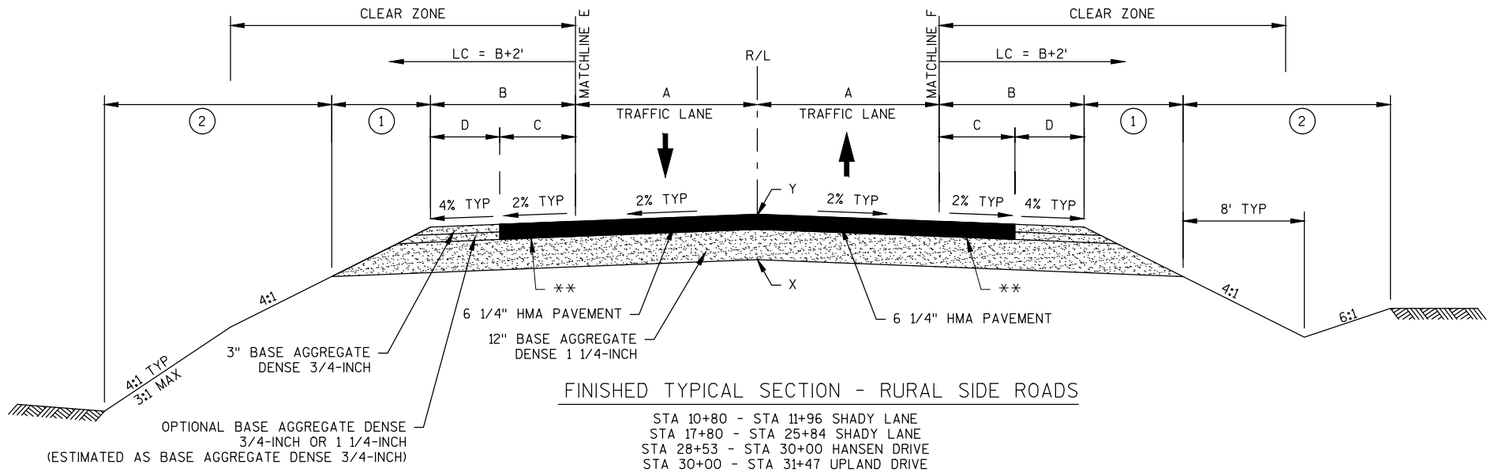
FINISHED TYPICAL HALF SECTION

RIGHT TURN LANE WITH SHOULDER CURB

(MATCHLINE A IS A MIRROR IMAGE)

STA 416+25 - STA 417+64 RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TYPICAL SECTION	SHEET 17	E



FINISHED TYPICAL SECTION - RURAL SIDE ROADS

STA 10+80 - STA 11+96 SHADY LANE
STA 17+80 - STA 25+84 SHADY LANE
STA 28+53 - STA 30+00 HANSEN DRIVE
STA 30+00 - STA 31+47 UPLAND DRIVE
STA 38+30 - STA 41+69 MONCHES ROAD
STA 48+56 - STA 50+00 WOODED HILLS CHURCH
STA 58+31 - STA 61+69 ELMWOOD ROAD
STA 68+53 - STA 70+00 TUCKAWAY LANE
STA 80+00 + STA 81+54 CHEROKEE TRAIL
STA 90+00 - STA 93+23 ST GABRIEL LANE
STA 103+28 - STA 118+00 HUBERTUS ROAD
STA 138+52 - STA 140+00 LOCHVIEW ROAD
STA 188+52 - STA 190+00 GREYSTONE DRIVE
STA 197+04 - STA 200+40 PLEASANT HILL ROAD
STA 208+52 - STA 210+00 MAJESTIC DRIVE
STA 218+36 - STA 221+64 PIONEER ROAD
STA 224+95 - STA 230+00 CTH E
STA 240+00 - STA 241+44 CLUB DRIVE

LEGEND

(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

(3) SOD, FERTILIZER TYPE B AND TOPSOIL

"X"= POINTS REFERRED TO ON CROSS SECTIONS

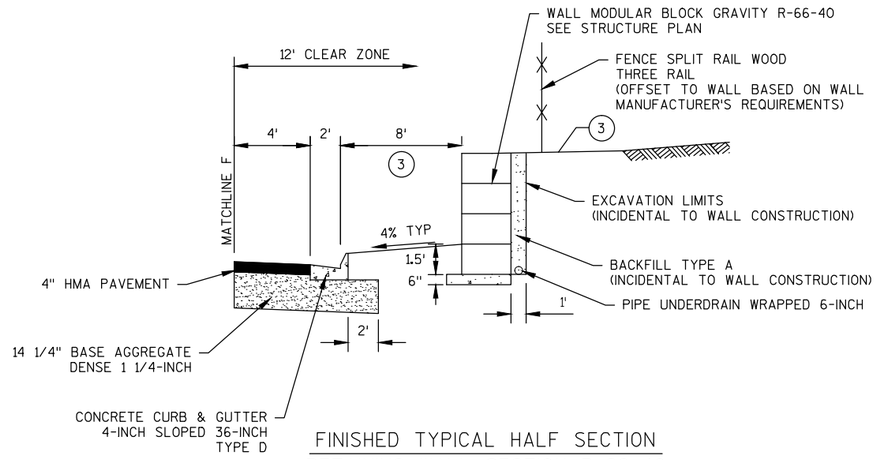
"Y"= POINTS REFERRED TO ON PROFILE

LC= LATERAL CLEARANCE

* USE CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D ON HUBERTUS ROAD AND WOODED HILLS

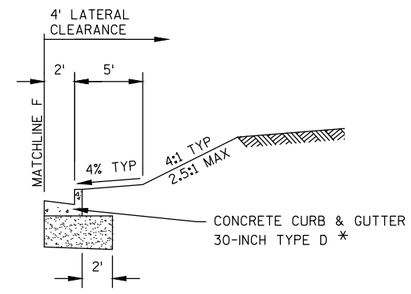
** PAVED SHOULDER THICKNESS IS 4" ON HUBERTUS ROAD AND CTH E

ROADWAY	CLEAR ZONE	TYPICAL WIDTHS			
		A	B	C	D
SHADY LANE	10'	11'	3'	0'	3'
UPLAND DRIVE	14'	11'	3'	0'	3'
HANSEN DRIVE	10'	12'	3'	0'	3'
MONCHES ROAD	14'	11'	3'	0'	3'
WOODED HILLS BIBLE CHURCH	14'	12'	3'	0'	3'
ELMWOOD ROAD	14'	11'	3'	0'	3'
TUCKAWAY LANE	10'	11.5'	3'	0'	3'
CHEROKEE TRAIL	10'	11'	3'	0'	3'
ST GABRIEL LANE	14'	12'	3'	0'	3'
HUBERTUS ROAD	14'	11'-16.5'	6'	5'	1'
GOLDEN DRIVE	SEE URBAN TYPICAL SECTIONS				
LOCHVIEW ROAD	10'	11.5'	3'	0'	3'
ADA'HI COURT	SEE URBAN TYPICAL SECTIONS				
STH 167	SEE STH 167 TYPICAL SECTIONS				
GREYSTONE DRIVE	10'	12'	3'	0'	3'
PLEASANT HILL ROAD	SEE PLEASANT HILL TYPICAL SECTIONS				
MAJESTIC DRIVE	10'	12'	3'	0'	3'
PIONEER ROAD	16'	11'	3'	0'	3'
CTH E	16'	12'	6'	5'	1'
CLUB DRIVE	14'	11.5'	3'	0'	3'



FINISHED TYPICAL HALF SECTION
RETAINING WALL SECTION R-66-40

STA 114+53 - STA 115+50 RT HUBERTUS ROAD

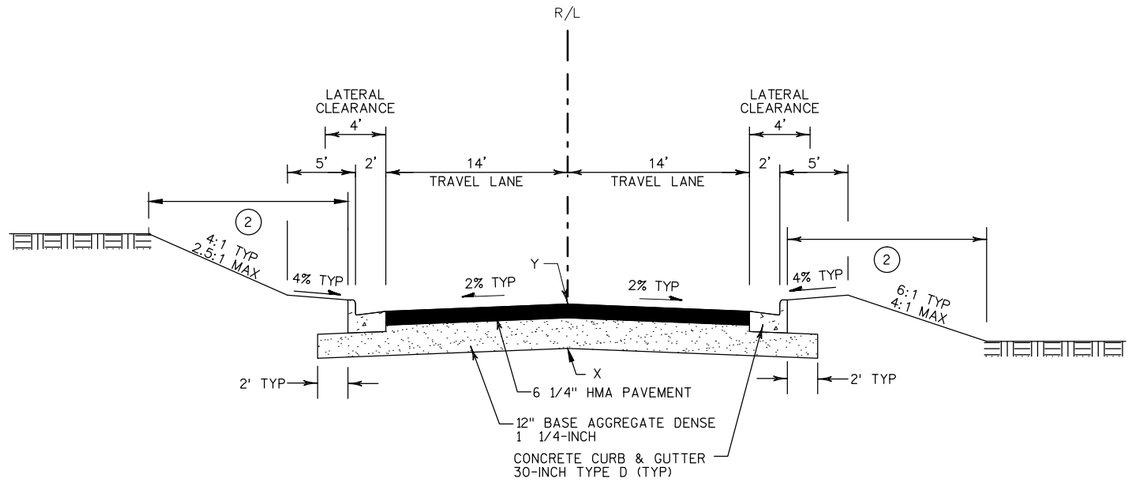


FINISHED TYPICAL HALF SECTION
SHOULDER CURB SECTION

(MATCHLINE E IS A MIRROR IMAGE)

STA 48+70 - STA 49+27 RT WOODED HILLS
STA 90+73 - STA 92+23 LT ST GABRIEL LANE
STA 113+25 - STA 114+85 LT HUBERTUS ROAD
STA 113+75 - STA 116+35 RT HUBERTUS ROAD

2



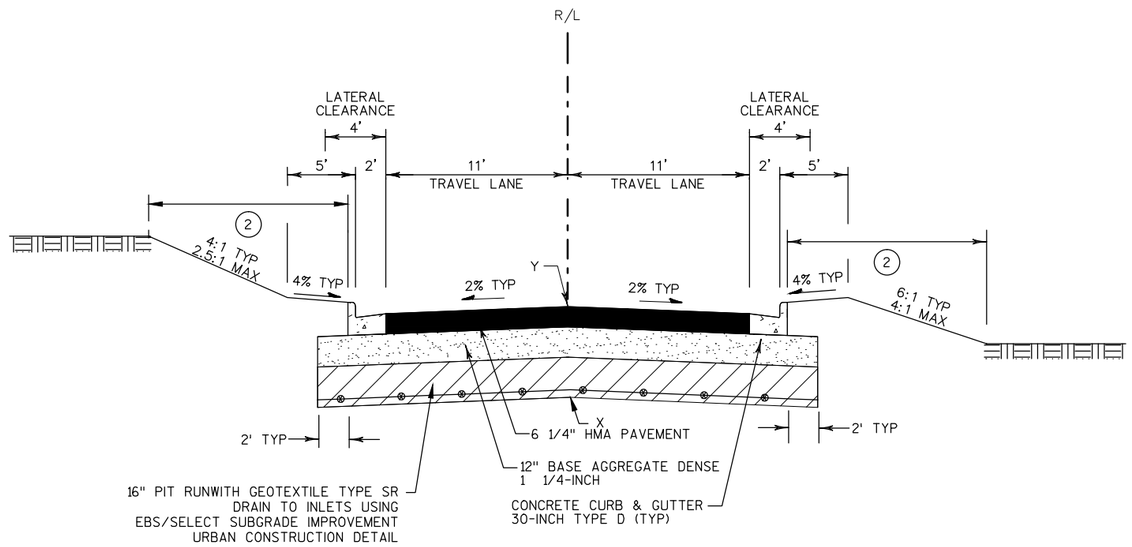
TYPICAL FINISHED SECTION

STA 130+00 - STA 133+00 GOLDEN DRIVE

"X" = POINTS REFERRED TO ON WB PROFILE
"Y" = POINTS REFERRED TO ON EB PROFILE
"Z" = POINTS REFERRED TO ON CROSS SECTIONS

LEGEND

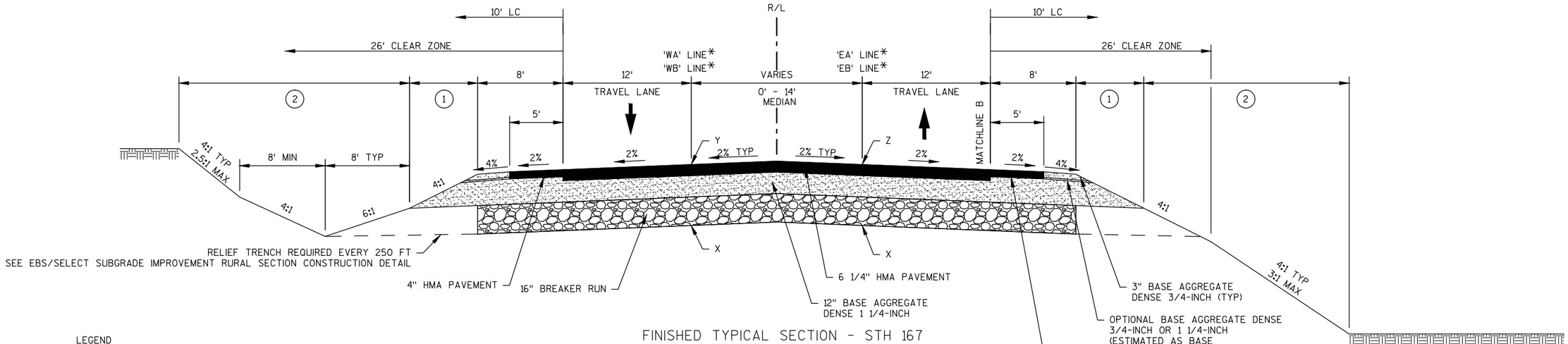
(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS



TYPICAL FINISHED SECTION

STA 147+55 - STA 150+00 ADA'HI COURT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TYPICAL SECTION	SHEET 19	E



FINISHED TYPICAL SECTION - STH 167

STA 158+75'EA' - STA 165+61'EA'
STA 158+75'WA' - STA 165+61'WA'
STA 174+05'EB' - STA 181+25'EB'
STA 174+05'WB' - STA 181+25'WB'

LEGEND

(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

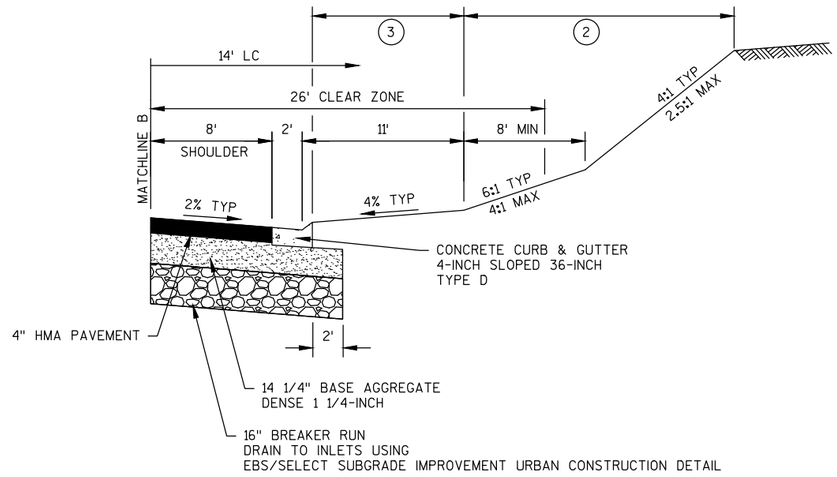
(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

(3) SOD, FERTILIZER TYPE B, AND TOPSOIL

* EB PGL VARIES 0' LT TO 21' LT
WB PGL VARIES 0' LT TO 35' LT

LC= LATERAL CLEARANCE

"X" = POINTS REFERRED TO ON CROSS SECTIONS
"Y" = POINTS REFERRED TO ON 'WA' AND 'WB' PROFILE
"Z" = POINTS REFERRED TO ON 'EA' AND 'EB' PROFILE

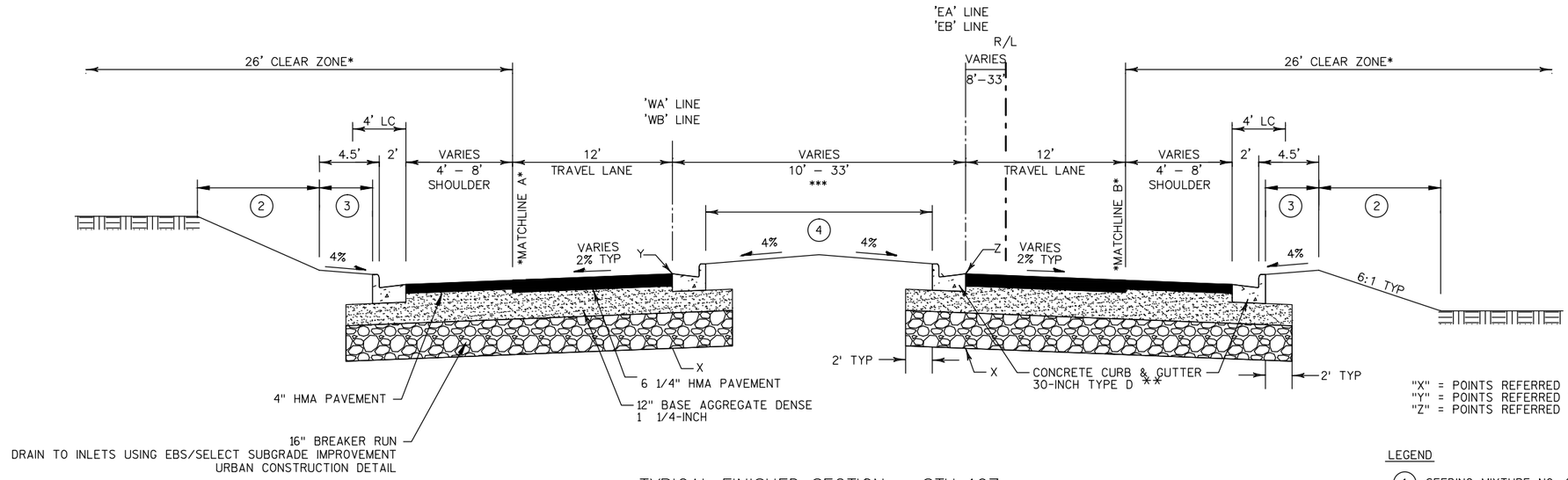


FINISHED TYPICAL HALF SECTION

SHOULDER CURB

STA 159+25'EA' - STA 165+61 'EA' RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TYPICAL SECTION	SHEET 20	E



"X" = POINTS REFERRED TO ON CROSS SECTIONS
"Y" = POINTS REFERRED TO ON 'WA' AND 'WB' PROFILE
"Z" = POINTS REFERRED TO ON 'EA' AND 'EB' PROFILE

TYPICAL FINISHED SECTION – STH 167
ROUNDABOUT SPLITTER ISLAND

STA 165+61'EA' - STA 169+04'EA'
STA 165+61'WA' - STA 169+06'WB'
STA 170+49'WB' - STA 174+05'WB'
STA 170+51'EB' - STA 174+05'EB'

LEGEND

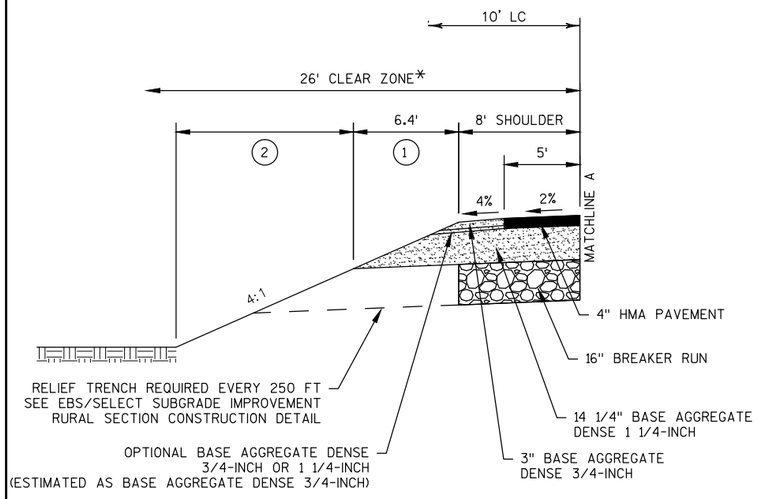
(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

(3) SOD, FERTILIZER TYPE B AND TOPSOIL

(4) SEED NO MOW FESCUE, TOPSOIL, FERTILIZER TYPE B, & EROSION MAT

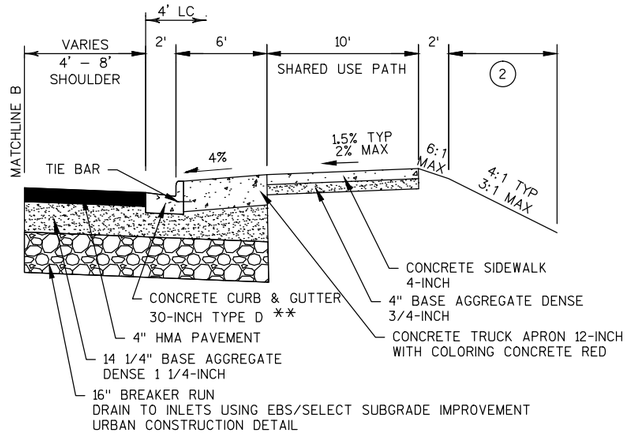
LC= LATERAL CLEARANCE



FINISHED TYPICAL HALF SECTION
RURAL SHOULDER SECTION

STA 165+61'WA' - STA 167+80'WA' LT

SECTION A-A



FINISHED TYPICAL HALF SECTION

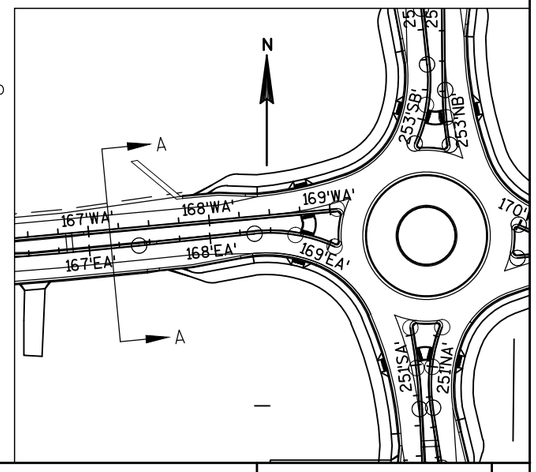
(MATCHLINE A IS A MIRROR IMAGE)
STA 167+74'EA' - STA 169+04'EA' RT
STA 167+99'WA' - STA 169+06'WA' LT
STA 170+49'WB' - STA 171+80'WB' LT
STA 170+51'EB' - STA 171+69'EB' RT

* CLEAR ZONE VARIES

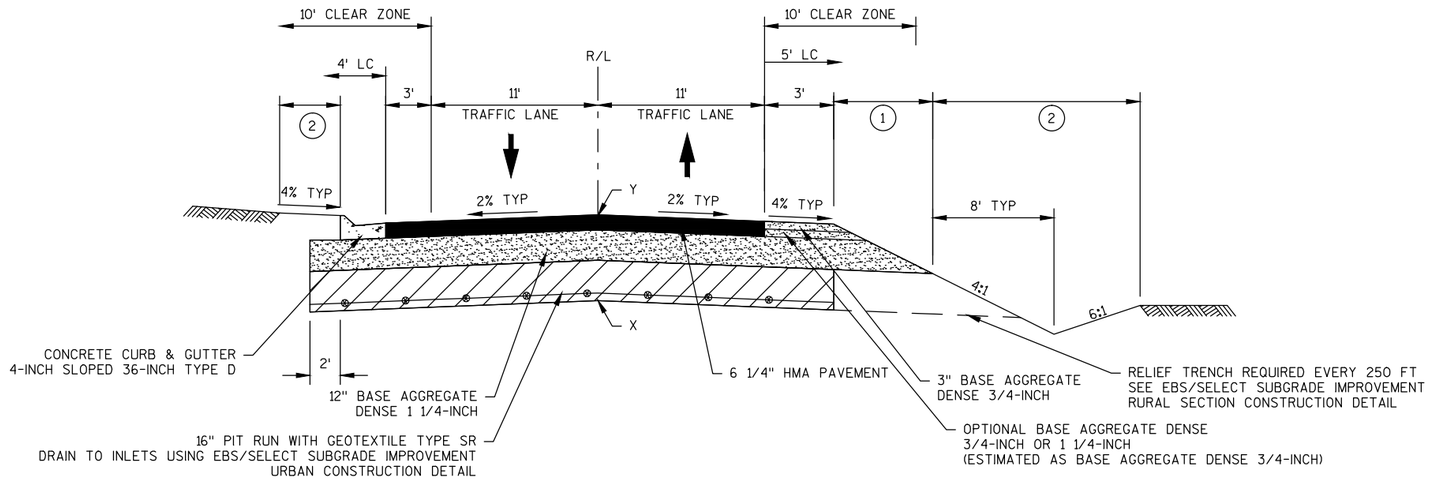
STATION	SIDE	CLEAR ZONE
165+61'WA' - 166+80'WA'	LT	26'
166+80'WA' - 167+80'WA'	LT	16'
165+61'EA' - 166+55'EA'	RT	26'
166+55'EA' - 167+55'EA'	RT	18'

** CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D FROM STA 165+61'WA' – STA 166+96'WA' LT AND STA 165+61'EA' – STA 167+56'EA' RT
8 INCH FLANGE THICKNESS

*** CONCRETE SIDEWALK 4-INCH WITH 4" BASE AGGREGATE DENSE 3/4-INCH WHEN MEDIAN WIDTH IS LESS THAN 6 FEET WIDE



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TYPICAL SECTION	SHEET 21	E



FINISHED TYPICAL SECTION

STA 197+04 - STA 200+40 PLEASANT HILL ROAD

LEGEND

(1) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

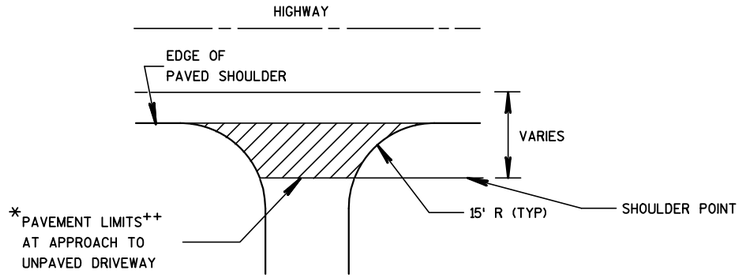
(2) SALVAGED TOPSOIL, FERTILIZER TYPE B, SEED MIXTURE NO. 20, & MULCH OR EROSION MAT AS INDICATED IN EROSION CONTROL PLANS

"X"= POINTS REFERRED TO ON CROSS SECTIONS

"Y"= POINTS REFERRED TO ON PROFILE

LC= LATERAL CLEARANCE

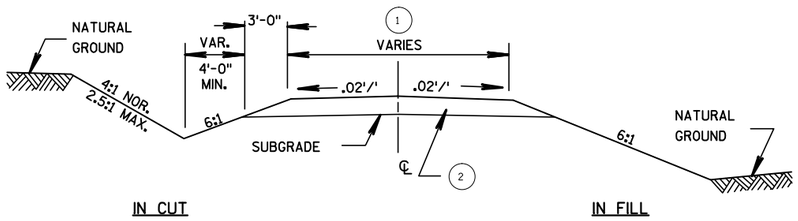
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*WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

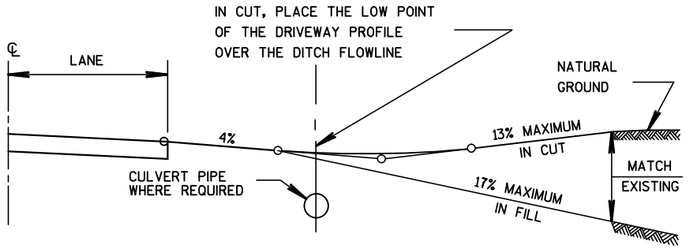
++ WHERE DRIVEWAY IS UNPAVED, APPROACH PAVEMENT SHALL BE PAID AS ASPHALTIC SURFACE FOR DRIVEWAYS AND FIELD ENTRANCES AT THE SAME DEPTH AS THE ADJACENT ASPHALT SHOULDERS.

PLAN VIEW



IN CUT IN FILL

TYPICAL CROSS SECTION

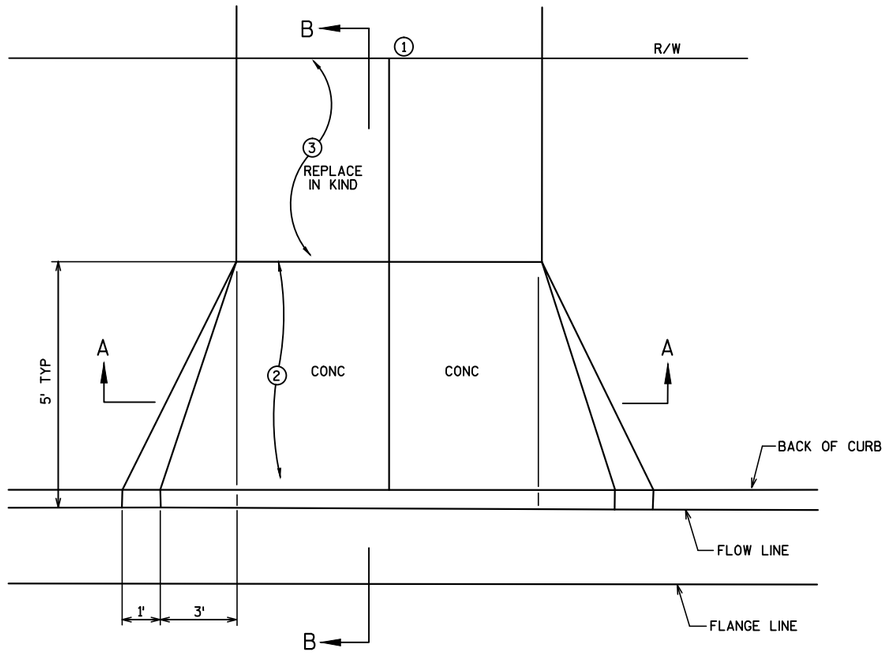


TYPICAL PROFILE

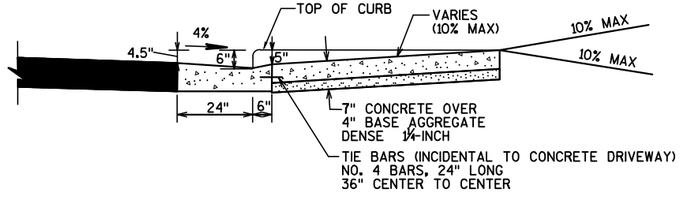
(1) DRIVEWAY WIDTHS:
COMMERCIAL, 35' MAX, 12' MIN
NON-COMMERCIAL, 24' MAX, 12' MIN
SEE PAVING DETAIL SHEETS FOR WIDTH REQUIRED

(2) DRIVEWAY SURFACE SHALL BE REPLACED
IN-KIND WITH MINIMUM SECTION OF:
ASPHALT - 3" ASPHALTIC SURFACE FOR DRIVEWAYS AND
FIELD ENTRANCES ON 4" BASE AGGREGATE DENSE 1 ¼-INCH
CONCRETE - 7" CONCRETE ON 4" BASE AGGREGATE DENSE 1 ¼-INCH
BASE AGGREGATE DENSE - 6" BASE AGGREGATE DENSE ¾-INCH

RURAL DRIVEWAY DETAIL



PLAN VIEW



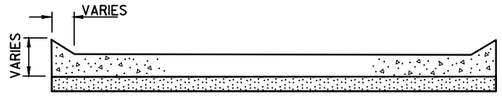
SECTION B-B

NOTES:

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

(2) ALL DRIVEWAY APPROACHES SHALL BE 7"
CONCRETE ON 4" BASE AGGREGATE
DENSE 1¼-INCH.

(3) DRIVEWAY SURFACE SHALL BE REPLACED IN-KIND
WITH MINIMUM SECTION OF:
ASPHALT - 3" ASPHALTIC SURFACE FOR DRIVEWAYS AND FIELD ENTRANCES
ON 4" BASE AGGREGATE DENSE 1 ¼-INCH
CONCRETE - 7" CONCRETE ON 4" BASE AGGREGATE DENSE 1 ¼-INCH
BASE AGGREGATE DENSE - 6" BASE AGGREGATE DENSE ¾-INCH



SECTION A-A

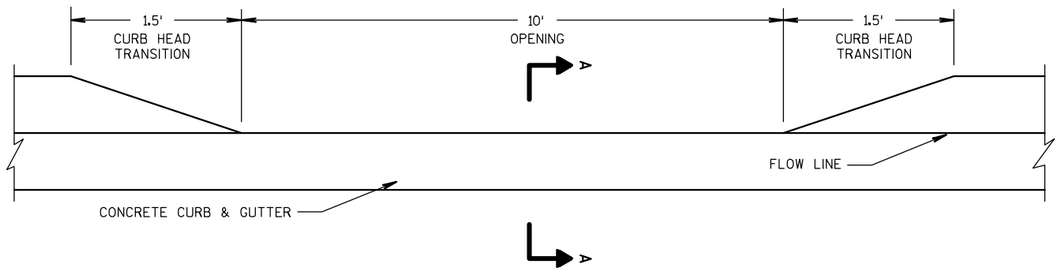
URBAN DRIVEWAY DETAIL

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\021001_CD.DWG PLOT DATE = 8/3/2008 8:36 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =

2

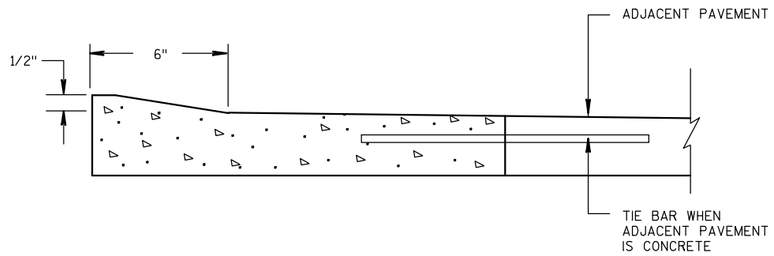
NOTE:

SEE SDD "CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES" FOR ADDITIONAL INFORMATION AND TYPICAL TIE BAR LOCATIONS.
ALL WORK SHALL BE INCLUDED IN CURB & GUTTER BID ITEMS

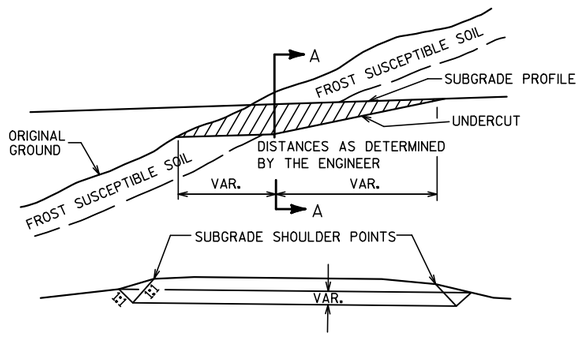


DETAIL OF CURB HEAD TRANSITION AT MAINTENANCE OPENING

SEE PLAN DETAILS FOR LOCATIONS



SECTION A-A



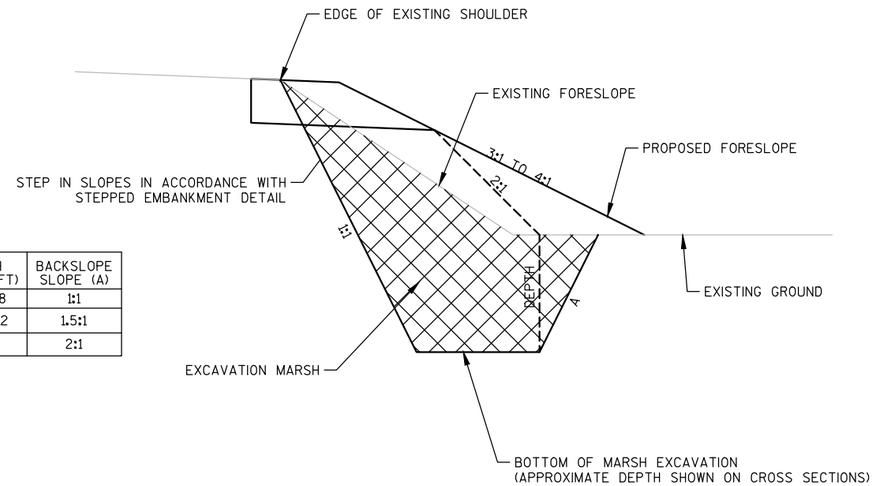
SECTION A-A

CROSS SECTION SHOWING UNDERCUT

CONSTRUCTION NOTES:

1. EXACT LOCATIONS AND EXTENT OF EBS SECTIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. EBS AREA TO BE BACKFILLED WITH BREAKER RUN.
3. THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL EBS IS COMPLETED.

DETAIL FOR EXCAVATION BELOW SUBGRADE AT CUTS



MARSH DEPTH (FT)	BACKSLOPE SLOPE (A)
0 TO 8	1:1
8 TO 12	1.5:1
12+	2:1

CONSTRUCTION NOTES:

1. EXACT LOCATIONS AND EXTENT OF EXCAVATION SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. EXCAVATION MARSH TO BE BACKFILLED WITH BACKFILL GRANULAR GRADE 2.
3. SEE GEOTECHNICAL REPORT FOR MARSH PROBES.

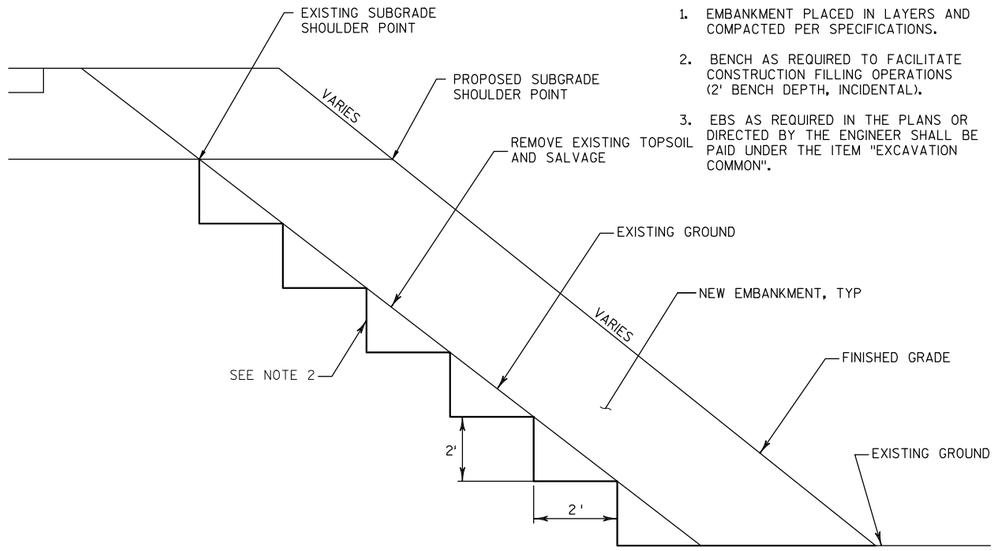
EXCAVATION MARSH DETAIL

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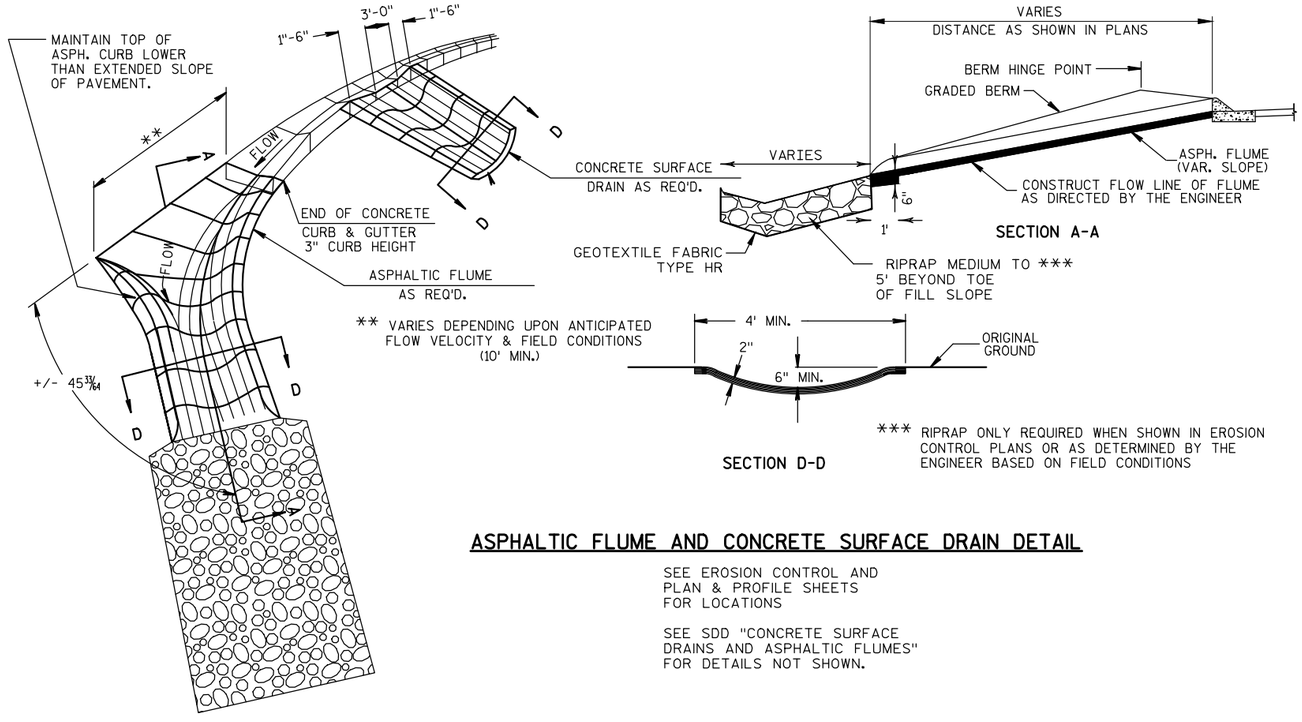
2

NOTES

1. EMBANKMENT PLACED IN LAYERS AND COMPACTED PER SPECIFICATIONS.
2. BENCH AS REQUIRED TO FACILITATE CONSTRUCTION FILLING OPERATIONS (2' BENCH DEPTH, INCIDENTAL).
3. EBS AS REQUIRED IN THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE PAID UNDER THE ITEM "EXCAVATION COMMON".



STEPPED EMBANKMENT DETAIL

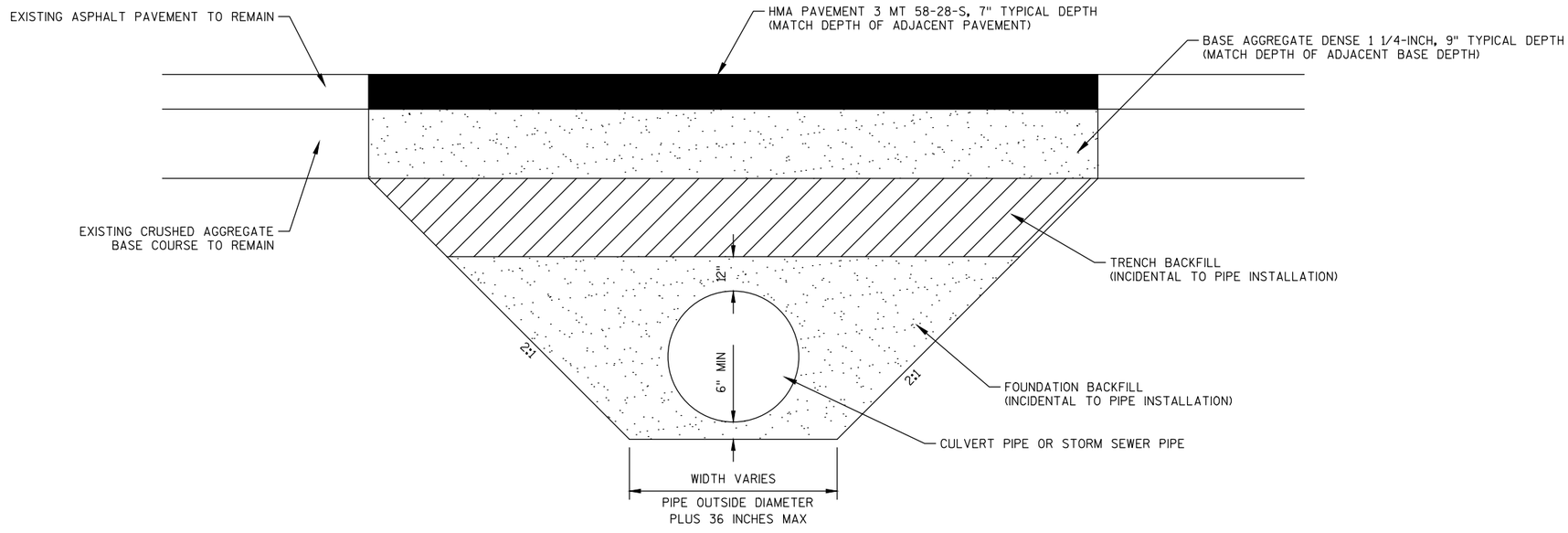


ASPHALTIC FLUME AND CONCRETE SURFACE DRAIN DETAIL

SEE EROSION CONTROL AND PLAN & PROFILE SHEETS FOR LOCATIONS

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

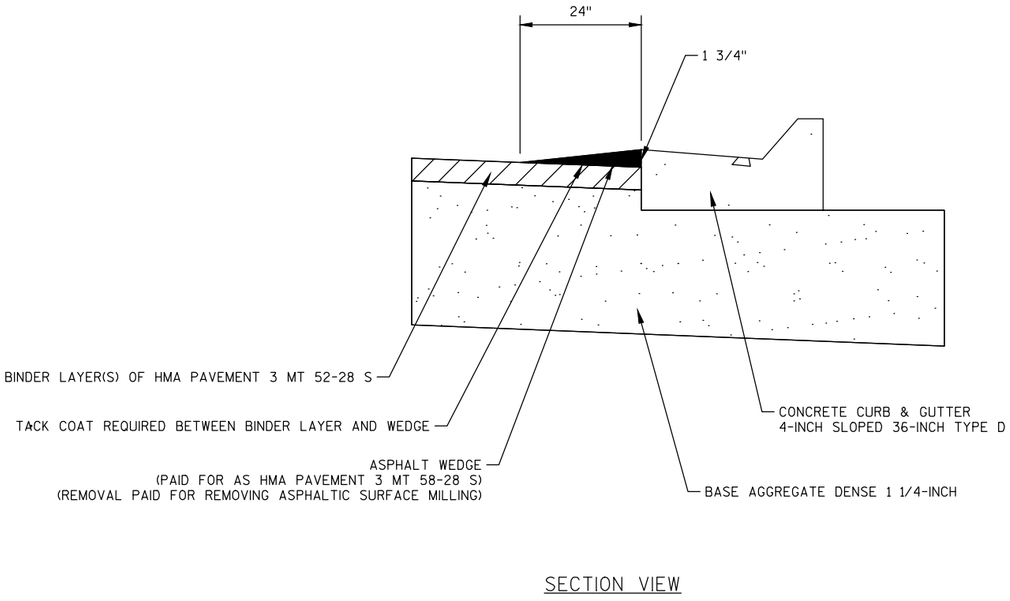
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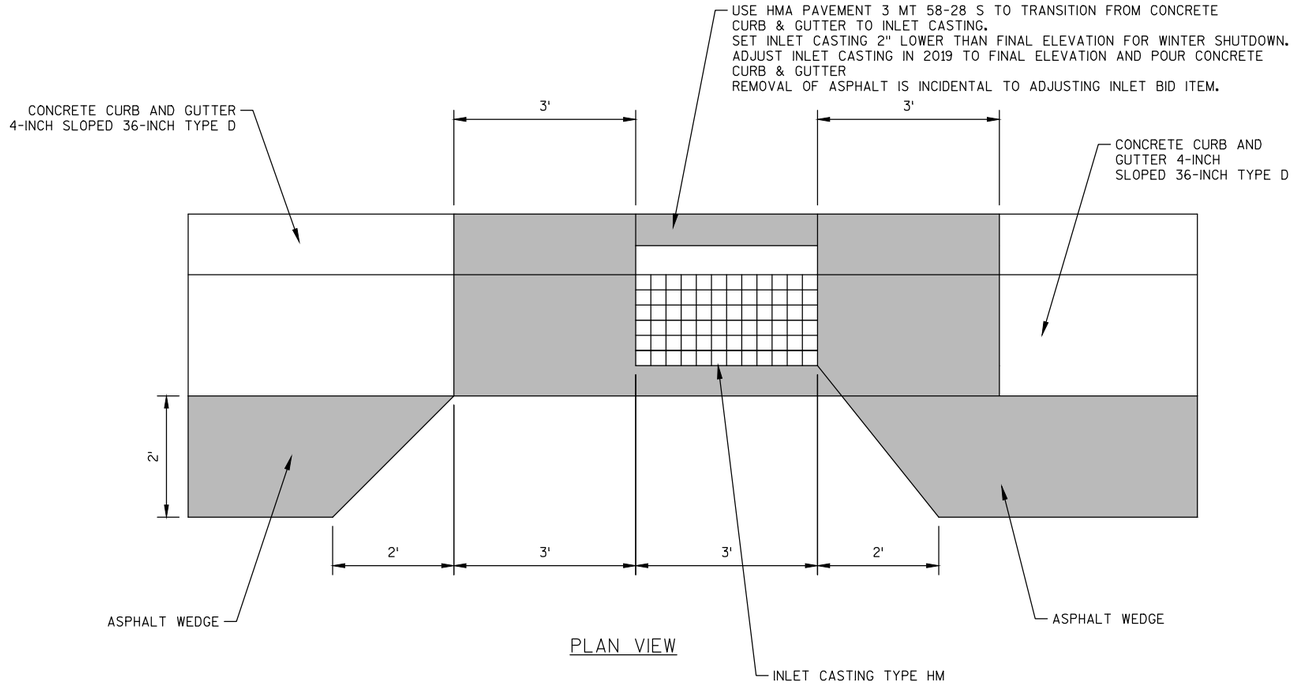
DETAIL FOR INSTALLATION OF PIPES UNDER EXISTING PAVEMENT

NOTES:
1. TO ONLY BE USED IN RECONDITIONING SEGMENTS WHERE EXISTING PAVEMENT IS TO REMAIN AFTER CONSTRUCTION.
2. ALL CULVERTS AND STORM SEWER TO BE INSTALLED PRIOR TO MILLING OF ASPHALT PAVEMENT.
3. VERTICAL TRENCH WALLS MAY BE USED WHEN A TRENCH BOX IS USED FOR INSTALLATION.
4. PAVEMENT RESTORATION OVER PIPES SHALL TAKE PLACE WITHIN 48 HOURS OF COMPLETION OF PIPE INSTALLATION. BACKFILL TRENCH WITH COMPACTED BASE AGGREGATE DENSE 1 1/4-INCH TO SURFACE UNTIL HMA PAVEMENT IS INSTALLED.
5. PIPES WITH MORE THAN 6 FEET OF EMBANKMENT ON TOP OF PIPE SHALL BE EXCAVATED USING A TRENCH BOX AND USE VERTICAL TRENCH WALLS.

2



SECTION VIEW

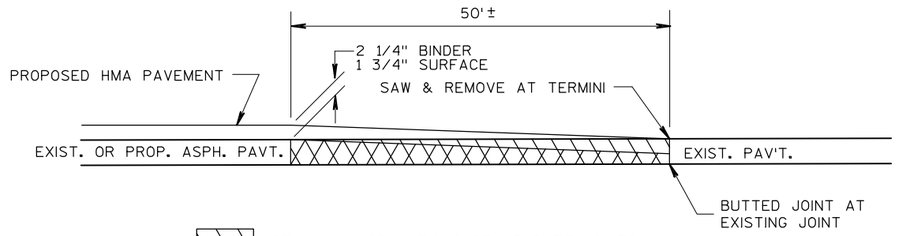


PLAN VIEW

ASPHALT WEDGE ALONG CONCRETE CURB AND GUTTER DETAIL

TO BE USED FOR ALL CURB AND GUTTER PLACED DURING 2018 CONSTRUCTION SEASON

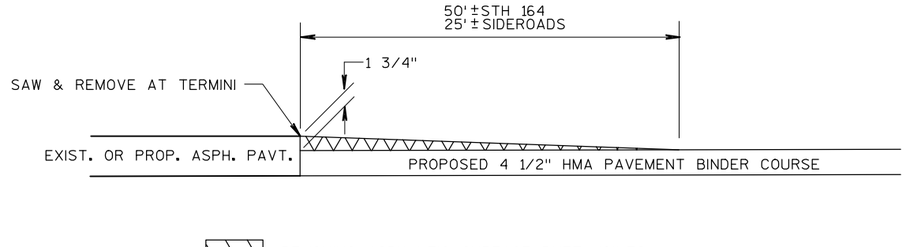
NOTES:
1. REMOVAL OF ASPHALT WEDGE TO BE PAID FOR AS REMOVING ASPHALTIC SURFACE MILLING.
2. INLET CASTINGS PLACED IN 2018 CONSTRUCTION SEASON TO BE SET 2 INCHES LOWER THAN FINAL ELEVATION.
3. ADJUST INLET CASTINGS TO FINAL ELEVATIONS PRIOR TO PAVING SURFACE COURSE OF ASPHALT PAVEMENT.
4. REMOVAL OF HMA PAVEMENT USED TO TRANSITION BETWEEN CONCRETE CURB AND GUTTER AND INLET CASTING IS INCIDENTAL TO ADJUSTING INLET.



ASPHALTIC SURFACE BUTT JOINT

STA 446+61 STH 164 IN 2019 CONSTRUCTION SEASON
TO BE INSTALLED AT TERMINI OF ANY SEGMENTS STARTED IN 2018

NOTES:
1. DETAIL TO BE USED ONLY FOR WEDGING LEFT OVER WINTER SHUTDOWN WHERE BINDER COURSE WILL REMAIN HIGHER THAN EXISTING PAVEMENT AT MATCH POINT EXCEPT AT STA 446+61 ON STH 164.
2. WEDGING NEEDED AT JOINTS BETWEEN LAYERS OF HMA PAVEMENT DURING PAVING SHALL BE A PAPER JOINT AND SHALL BE INCIDENTAL TO HMA PAVEMENT 3 MT 58-28 S. LENGTH OF TRANSITION NEEDED BETWEEN LAYERS OF HMA PAVEMENT TO BE DETERMINED BY ENGINEER AT TIME OF PAVING.

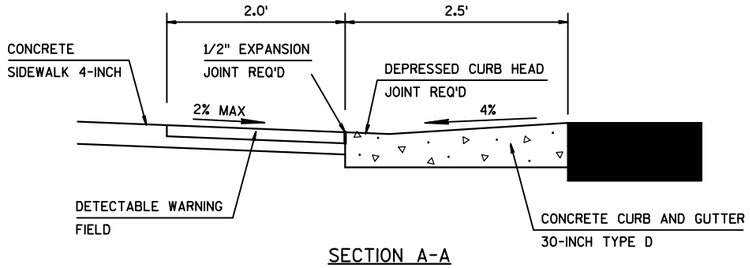


HMA PAVEMENT WEDGING

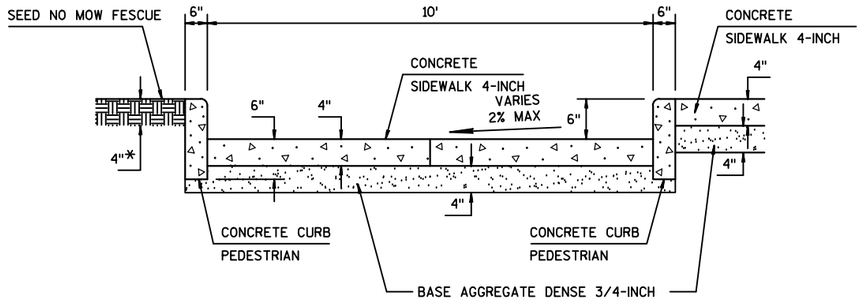
TO BE INSTALLED BEFORE WINTER SHUTDOWN
AT TERMINI OF ANY RECONSTRUCTION STARTED IN 2018

NOTES:
1. DETAIL TO BE USED ONLY FOR WEDGING LEFT OVER WINTER SHUTDOWN WHERE PROPOSED BINDER WILL REMAIN LOWER THAN EXISTING PAVEMENT AT MATCH POINT.
2. WEDGING NEEDED AT JOINTS BETWEEN LAYERS OF HMA PAVEMENT DURING PAVING SHALL BE A PAPER JOINT AND SHALL BE INCIDENTAL TO HMA PAVEMENT 3 MT 58-28 S. LENGTH OF TRANSITION NEEDED BETWEEN LAYERS OF HMA PAVEMENT TO BE DETERMINED BY ENGINEER AT TIME OF PAVING.

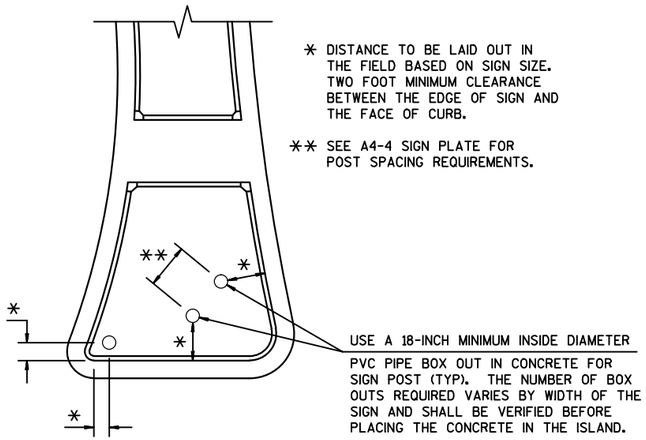
FILE NAME = I:\1102717\CADD\CIVIL 3D\2709030\SHEETSPLAN\021002_CD.DWG PLOT DATE = 8/3/2008 8:36 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =



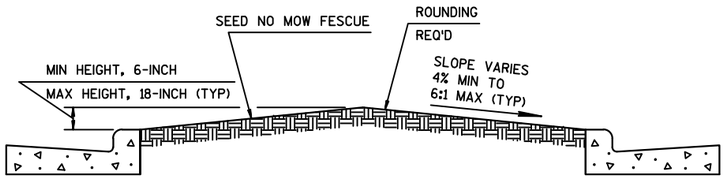
SECTION A-A



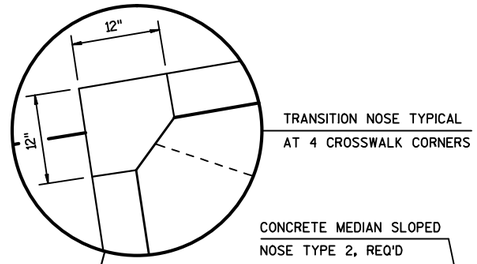
SECTION B-B

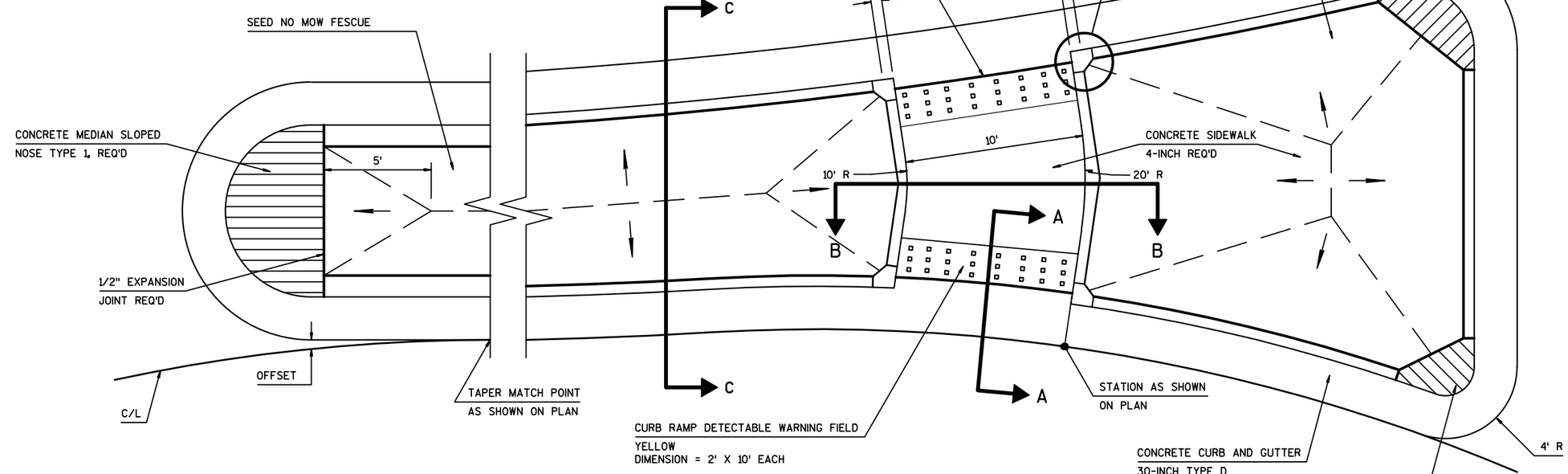


ISLAND SIGN LOCATION DETAIL (TYP)



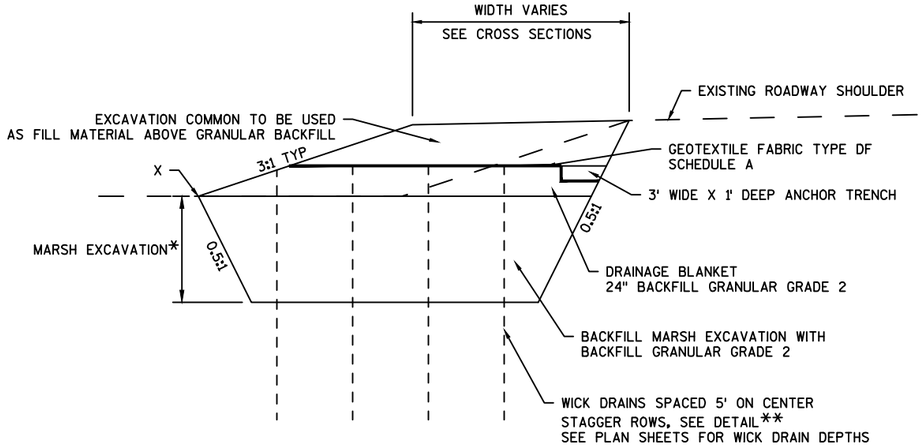
SECTION C-C



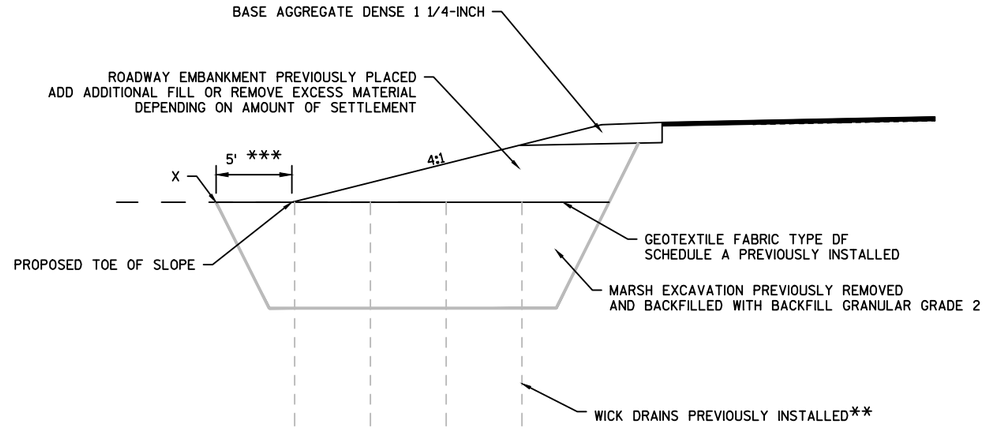


NOTE: INSTALL TRANSITION NOSE.
(INCIDENTAL TO OTHER PAY ITEMS.)
DO NOT MARK TRANSITION NOSE.

SPLITTER ISLAND DETAIL



DURING CONSOLIDATION



FINAL CONDITION

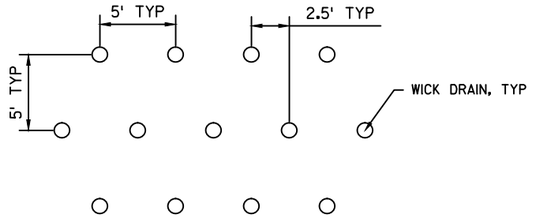
* DEPTH VARIES 0'-9', SEE GEOTECHNICAL REPORT FOR MARSH PROBE DEPTHS
EXCAVATE ONLY PEAT AND FIBROUS PEAT MATERIAL. ORGANIC SILT AND CLAY TO REMAIN.
** DO NOT INSTALL WICK DRAINS STA 409+50 - STA 410+50 LT
*** 5' TYPICAL, REDUCE DEPTH TO REMAIN WITHIN RIGHT OF WAY OR TLE IF NECESSARY
X ANTICIPATED LIMITS OF MARSH EXCAVATION (SEE CROSS SECTIONS FOR ANTICIPATED LIMITS)

DEEP MARSH EXCAVATION DETAIL

STA 370+00 - STA 376+00 LT
STA 370+00 - STA 376+00 RT
STA 409+50 - STA 410+50 LT

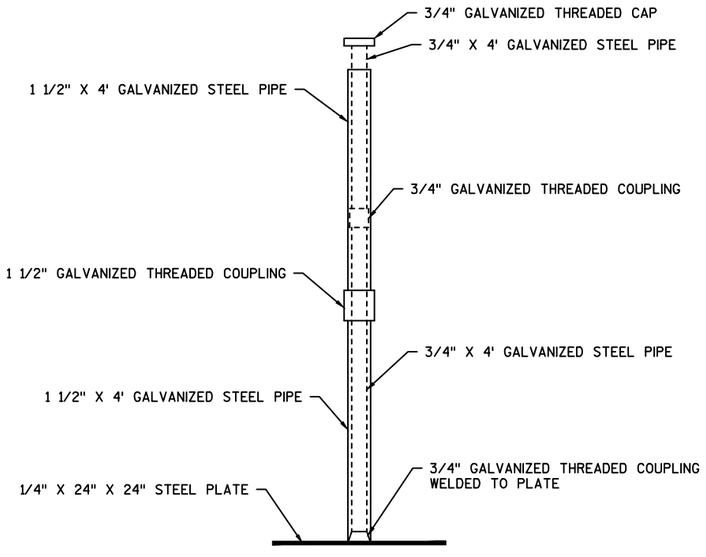
NOTES:
1. APPROXIMATELY 24-INCHES OF CONSOLIDATION IS EXPECTED. GRANULAR BACKFILL REMAINING ABOVE TOP OF MARSH ELEVATION AFTER CONSOLIDATION MAY REMAIN IN PLACE.

2. CONTRACTOR SHALL MAINTAIN ROADWAY DURING CONSOLIDATION SO THAT DURING CONSOLIDATION ROADWAY SIDE SLOPES ARE 3:1 OR FLATTER AND THERE ARE NO DROP-OFFS ALONG THE SHOULDER GREATER THAN 6 INCHES. MAINTANANCE OF THE ROADWAY DURING CONSOLIDATION IS INCIDENTAL TO EXCAVATION MARSH.



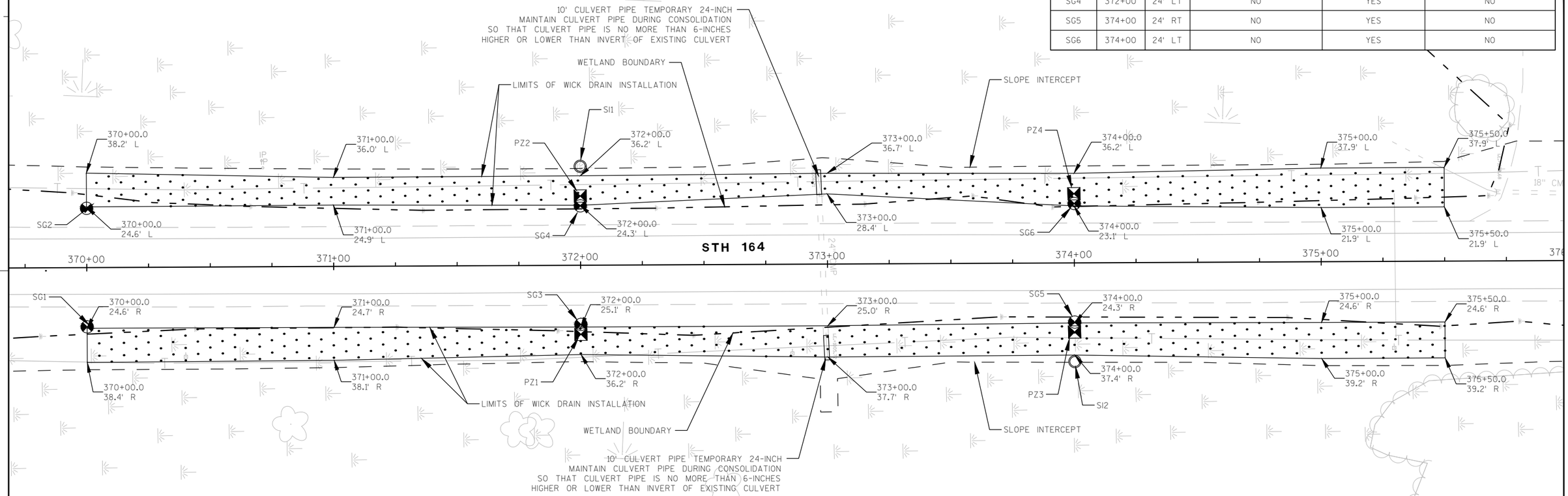
WICK DRAIN PLACEMENT DETAIL

STA 370+00 - STA 376+00 LT
STA 370+00 - STA 376+00 RT



SETTLEMENT GAUGE DETAIL

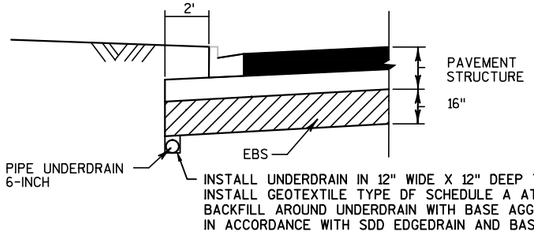
POINT NUMBER	STATION	OFFSET	PIEZOMETER (YES/NO, EST. TIP ELEV)	SETTLEMENT GAUGE (YES/NO)	INCLINOMETER (YES/NO, EST. TIP ELEV)
PZ1	372+00	28' RT	YES, 995'	NO	NO
PZ2	372+00	28' LT	YES, 995'	NO	NO
PZ3	374+00	28' RT	YES, 995'	NO	NO
PZ4	374+00	28' LT	YES, 995'	NO	NO
SI1	372+00	40' LT	NO	NO	YES, 960'
SI2	374+00	40' RT	NO	NO	YES, 960'
SG1	370+00	24' RT	NO	YES	NO
SG2	370+00	24' LT	NO	YES	NO
SG3	372+00	24' RT	NO	YES	NO
SG4	372+00	24' LT	NO	YES	NO
SG5	374+00	24' RT	NO	YES	NO
SG6	374+00	24' LT	NO	YES	NO



NOTES:
1. WICK DRAIN LIMITS SHOWN ARE APPROXIMATE. EXACT LIMITS TO BE DETERMINED IN FIELD BY ENGINEER.

2. NO GROUND DISTURBANCE IS ALLOWED OUTSIDE SLOPE INTERCEPT WITHIN WETLAND LIMITS.

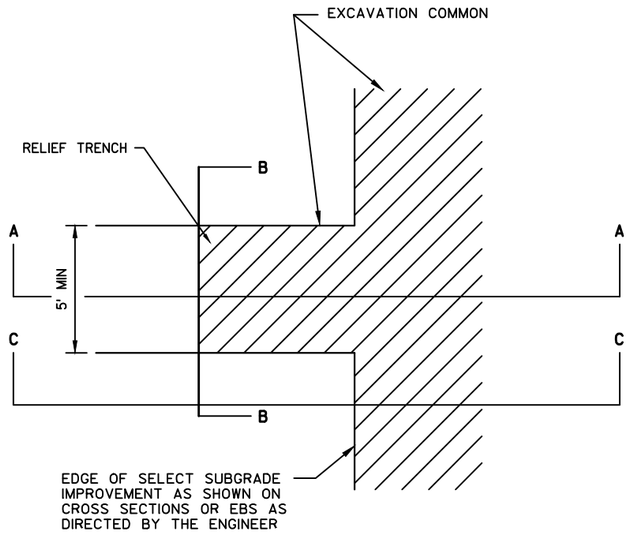
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CONSTRUCTION DETAILS - WICK DRAIN DETAILS	SHEET 31	E



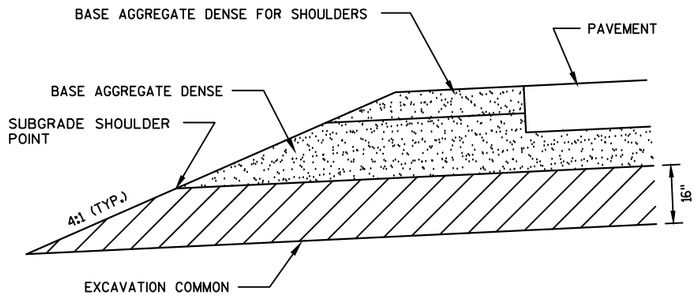
1. EXCAVATION REQUIRED FOR EBS OR SELECT SUBGRADE IMPROVEMENT SHALL BE PAID FOR AS EXCAVATION COMMON
2. FILL EBS AND SELECT SUBGRADE IMPROVEMENT VOID WITH MATERIAL AS NOTED IN TABLE ON THIS SHEET.
3. UNDERDRAIN TO EXTEND 50 FEET OUT FROM AVAILABLE INLETS AT LOW POINTS.
4. ADDITIONAL EBS LOCATIONS NOT SHOWN IN THE PLANS TO BE DETERMINED BY THE ENGINEER. DO NOT PERFORM EBS IN AREAS NOT SPECIFIED IN THE PLAN WITHOUT APPROVAL OF THE ENGINEER.

EBS / SELECT SUBGRADE IMPROVEMENT - URBAN

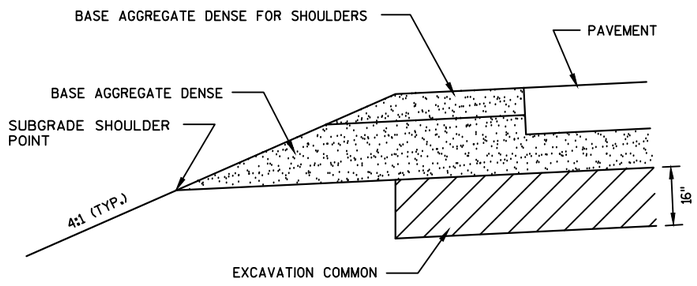
EBS/SELECT SUBGRADE IMPROVEMENT BACKFILL MATERIALS		
ROADWAY	STATION RANGE	MATERIAL
EXCAVATION BELOW SUBGRADE AREAS (EBS)	VARIES AS DETERMINED BY ENGINEER	16" PIT RUN WITH GEOTEXTILE TYPE SR
STH 164 R/L	237+00 - 243+34	
STH 164 'NA' LINE	243+34'NA' - 250+84'NA'	
STH 164 'SA' LINE	243+34'SA' - 250+81'SA'	
STH 164 'SB' LINE	253+29'SB' - 258+30'SB'	
STH 164 'NB' LINE	253+30'NB' - 258+30'NB'	
STH 164 C/L	1290+12 - 1318+02	
ADA'HI COURT	147+55 - 150+00	
PLEASANT HILL ROAD	197+04 - 200+40	
STH 164 'NA' LINE	250+84'NA' - 251+34'NA'	16" BREAKER RUN NO GEOTEXTILE FABRIC REQUIRED
STH 164 'SA' LINE	250+81'SA' - 251+31'SA'	
STH 164 'SB' LINE	252+79'SB - 253+29 'SB'	
STH 164 'NB' LINE	252+81'NB' - 253+30 'NB'	
STH 167 EB & WB	158+75 - 181+25	
CIRCULATORY ROADWAY	ENTIRE CIRCULATORY ROADWAY	



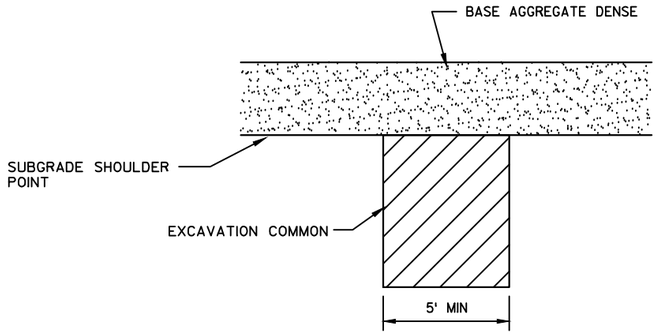
PLAN VIEW



SECTION A-A



SECTION C-C

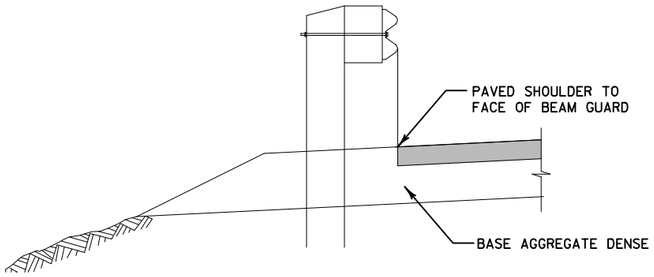


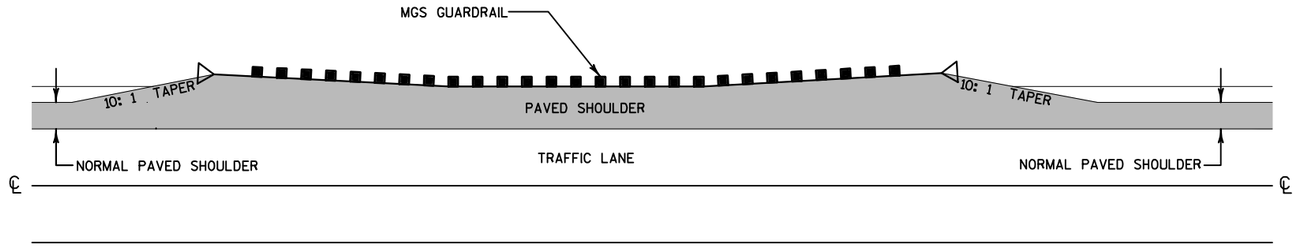
SECTION B-B

1. EXCAVATION REQUIRED FOR EBS OR SELECT SUBGRADE IMPROVEMENT SHALL BE PAID FOR AS EXCAVATION COMMON
2. FILL EBS AND SELECT SUBGRADE IMPROVEMENT VOID WITH MATERIAL AS NOTED IN THE TABLE ON THIS SHEET.
3. CONSTRUCT RELIEF TRENCHES AT LEAST EVERY 250' AND AT EACH SAG VERTICAL CURVE IN THE PROFILE.
4. EXCAVATION REQUIRED TO CONSTRUCT RELIEF TRENCHES INCLUDED IN THE ITEM EXCAVATION COMMON.
5. ADDITIONAL EBS LOCATIONS NOT SHOWN IN THE PLANS TO BE DETERMINED BY THE ENGINEER. DO NOT PERFORM EBS IN AREAS NOT SPECIFIED IN THE PLAN WITHOUT APPROVAL OF THE ENGINEER.

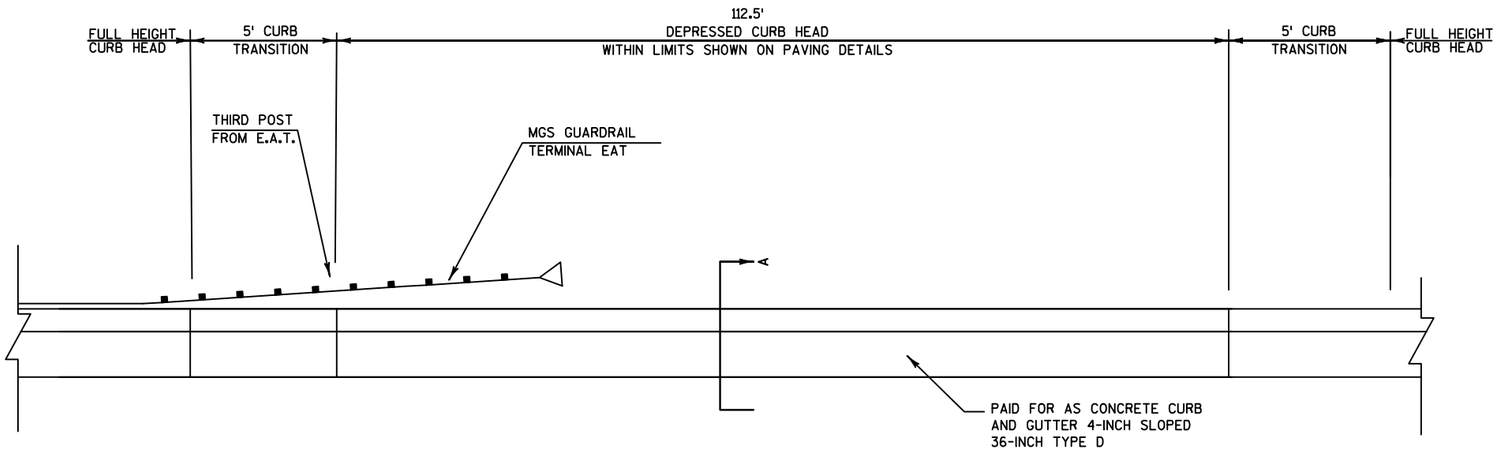
EBS / SELECT SUBGRADE IMPROVEMENT RURAL SECTION AND RELIEF TRENCH DETAIL

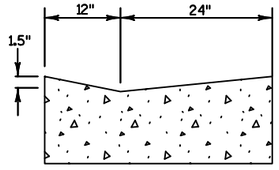
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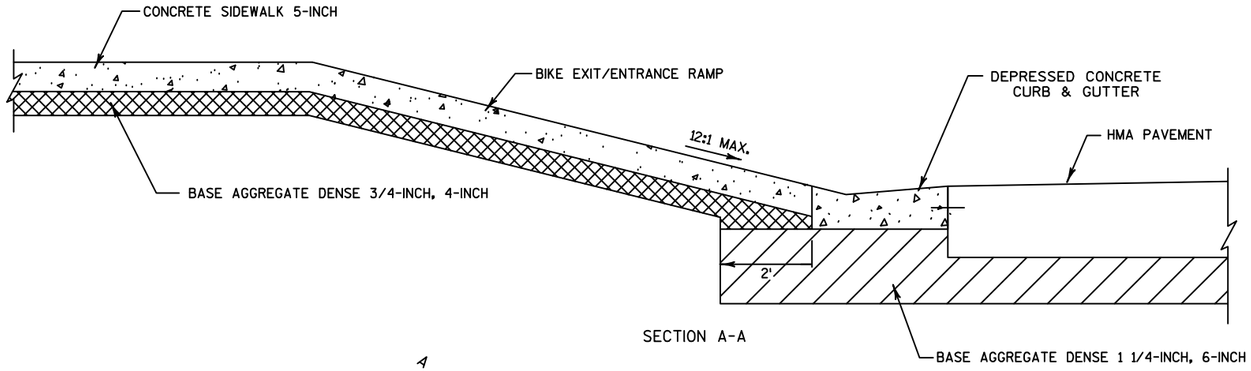
PAVED SHOULDER AT BEAM GUARD



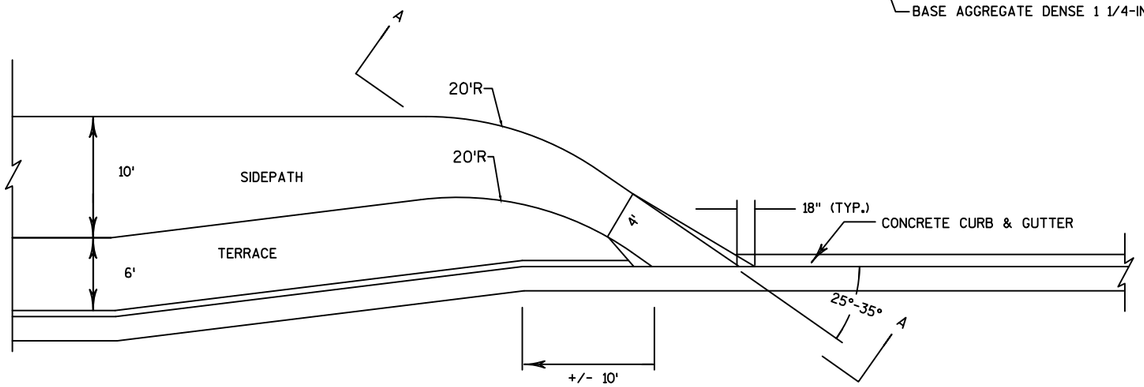


SECTION A-A
DEPRESSED CURB

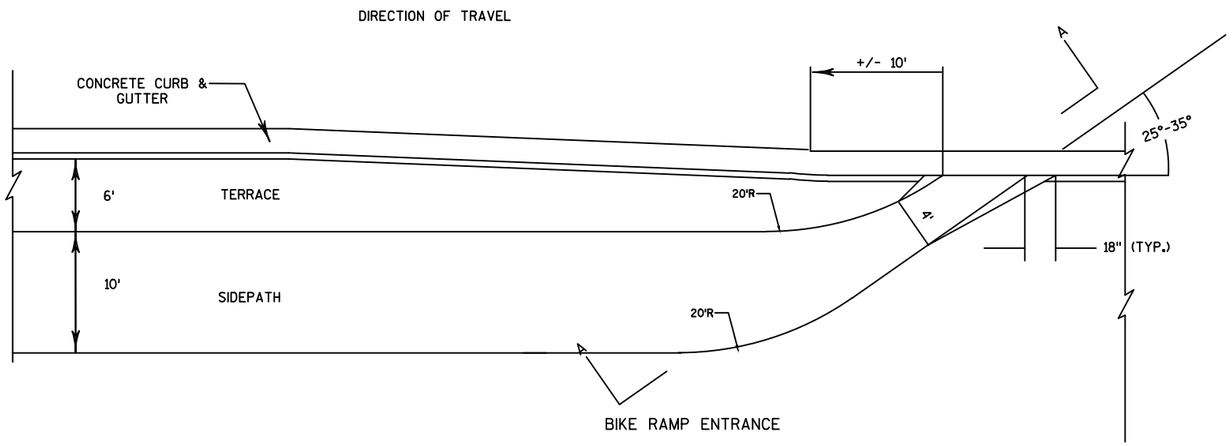
DEPRESSED CURB HEAD AT BEAM GUARD TERMINAL
STA 59+11 - STA 60+24



SECTION A-A

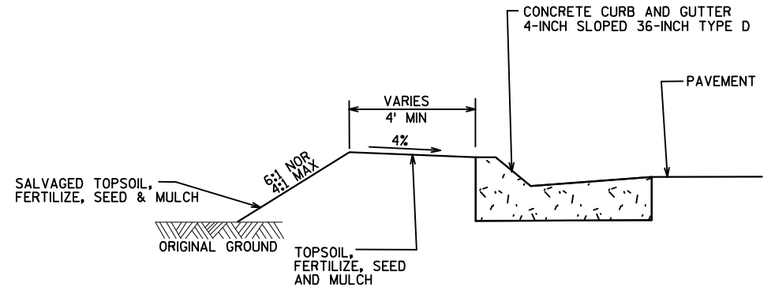


BIKE RAMP EXIT

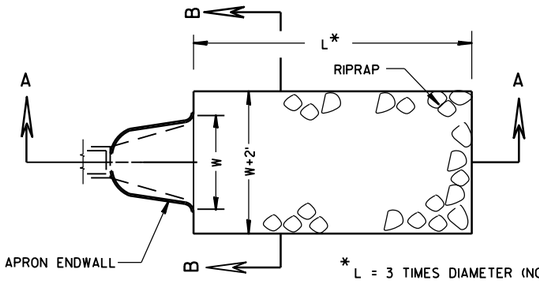


TYPICAL BIKE RAMP ENTRANCE & EXIT DETAIL

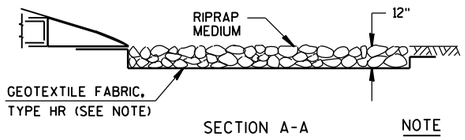
SEE PLAN DETAILS FOR LOCATIONS



TYPICAL PARTIAL SECTION AT INTERSECTION RADII



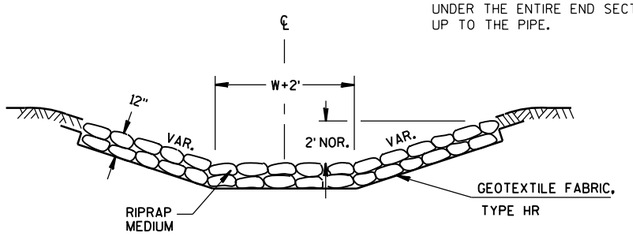
* L = 3 TIMES DIAMETER (NOR.) OR 10' MIN. OR AS DIRECTED BY THE ENGINEER



SECTION A-A

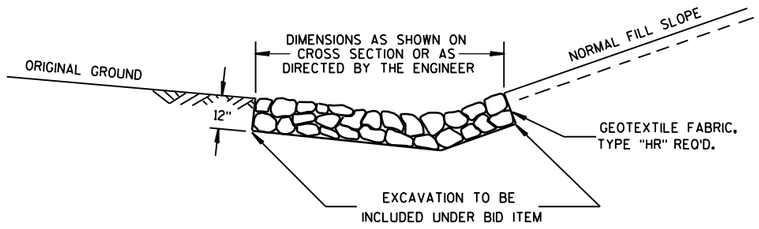
NOTE

FABRIC NEEDS TO BE PLACED UNDER THE ENTIRE END SECTION, UP TO THE PIPE.

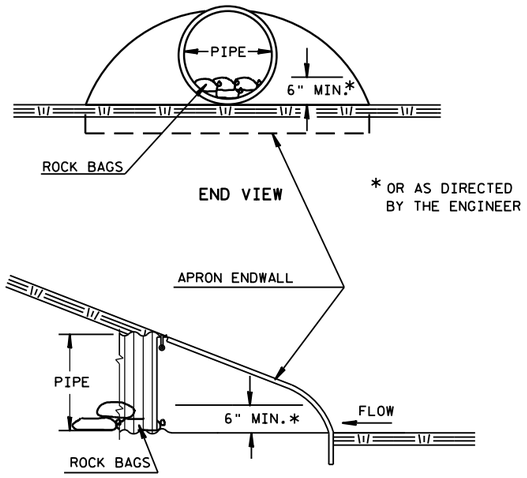


SECTION B-B

RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS

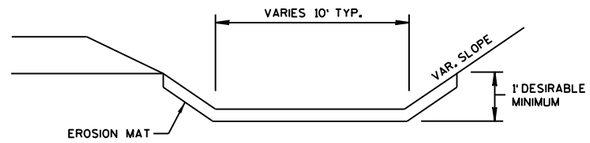


DETAIL FOR RIPRAP IN DITCHES

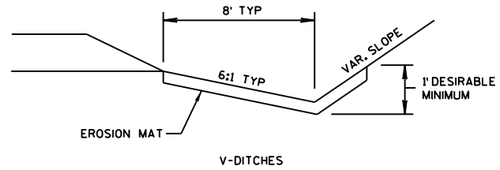


CULVERT PIPE CHECK

PIPE SIZE	ESTIMATED NUMBER OF ROCK BAGS
12"	1
15"	2
18"	2
24"	3
30"	5
36"	7
42"	7
48"	10
54"	10
60"	13
66"	14
72"	16
13"X17"	2
20"X28"	5
19"X30"	5
24"X35"	7
24"X38"	7
29"X45"	10
34"X53"	10
38"X60"	13
48"X76"	18



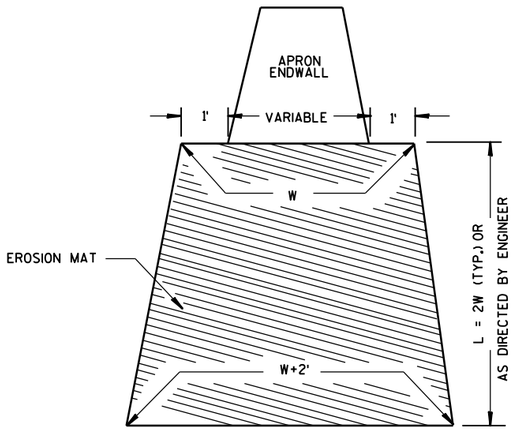
FLAT BOTTOM DITCHES



V-DITCHES

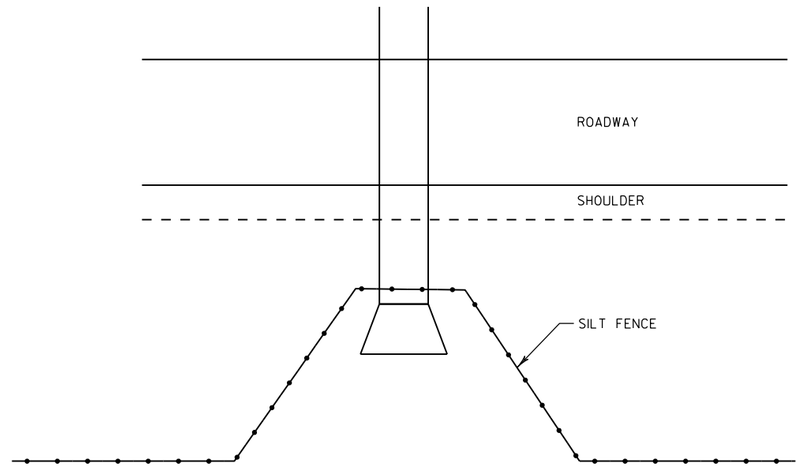
EROSION MAT DETAIL FOR DITCHES

SEE EROSION CONTROL PLANS FOR TYPES AND LOCATIONS



EROSION MAT TREATMENT AT CULVERTS

SEE EROSION CONTROL PLANS FOR TYPES AND LOCATIONS

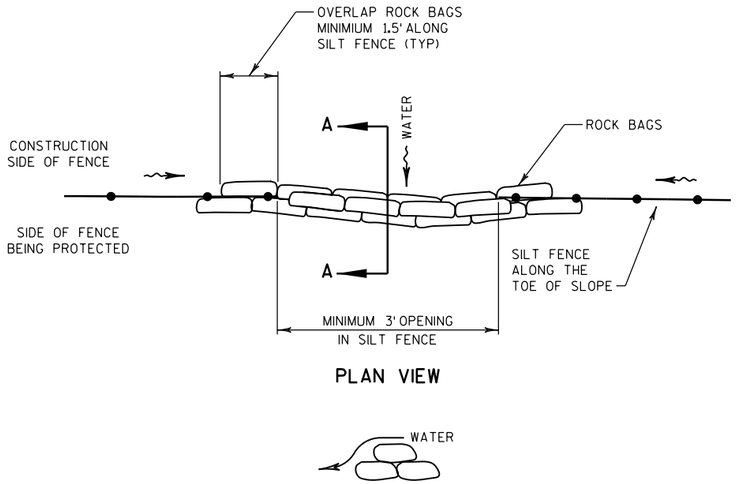


NOTE

SEE SILT FENCE SDD FOR ADDITIONAL INFORMATION.

TYPICAL SILT FENCE DETAIL AT PIPE INLET

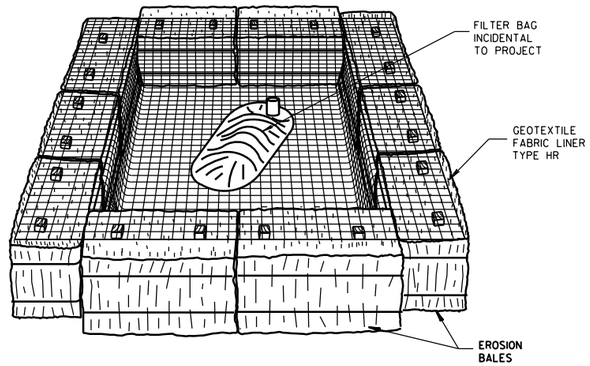
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CONSTRUCTION DETAILS	SHEET 35	E



PLAN VIEW

SECTION A-A

ROCK BAGS USED FOR SILT FENCE RELIEF DETAIL



NOTE:

GEOTEXTILE FABRIC AND EROSION BALES WILL BE PAID UNDER THE ITEMS "GEOTEXTILE TYPE HR" AND "EROSION BALES"

TEMPORARY SETTLING BASIN

(SIZE TO BE DETERMINED IN FIELD AS INDICATED BELOW:)

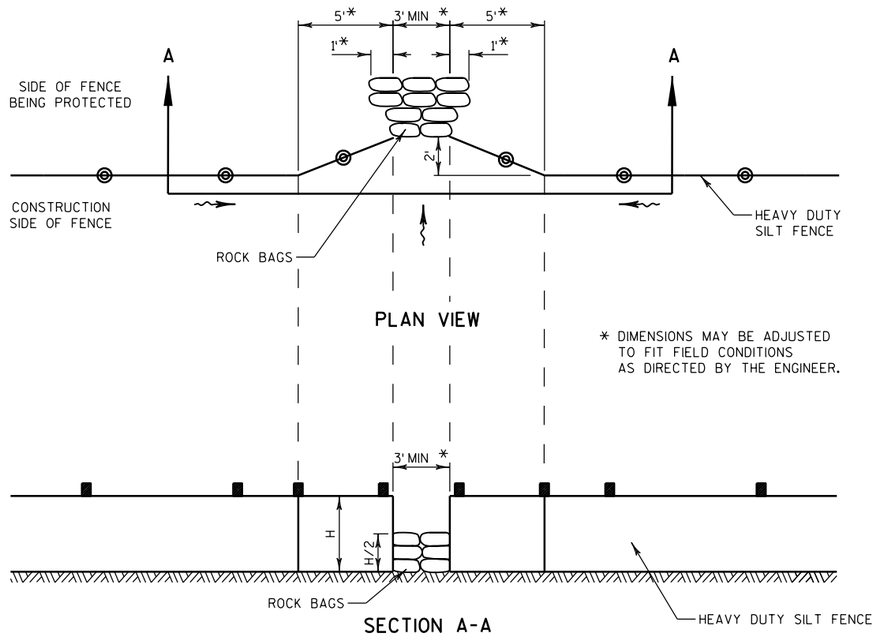
STORAGE VOLUME (C.F.) = 16 X GPM (PUMP RATE)

EXAMPLE:
CONTRACTOR INDICATES PUMP CAPABLE OF 50 GPM
HEIGHT OF BALES = 1.5 FT.

SOLUTION:
SV (C.F.) = 16 X 50
SV = 800 C.F.

$\frac{800\ C.F.}{1.5\ FT.}$ = 533 S.F.

USE A 20 FT. X 27 FT. BASIN



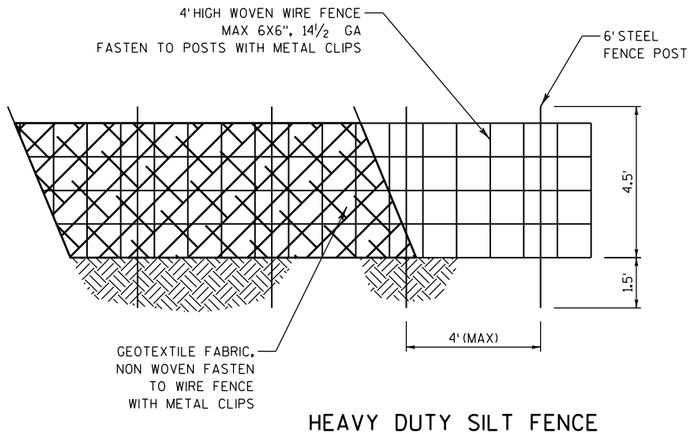
PLAN VIEW

* DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

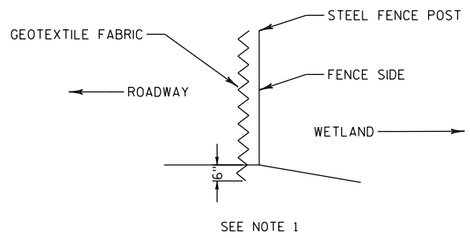
SECTION A-A

HEAVY DUTY SILT FENCE DRAINAGE OUTLET, ROCK BAGS

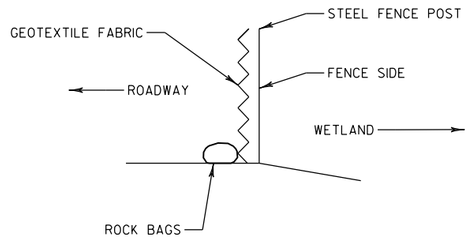
(FOR USE IN ENVIRONMENTALLY SENSITIVE AREAS)



HEAVY DUTY SILT FENCE



SEE NOTE 1

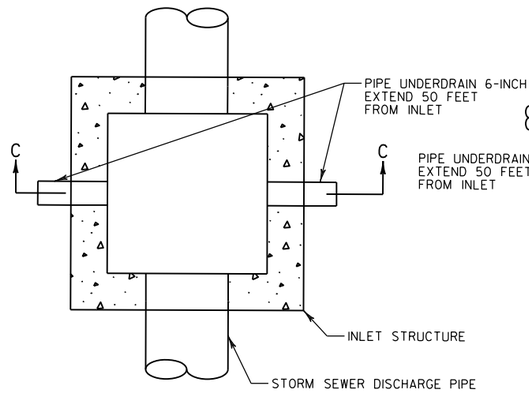


SEE NOTE 2

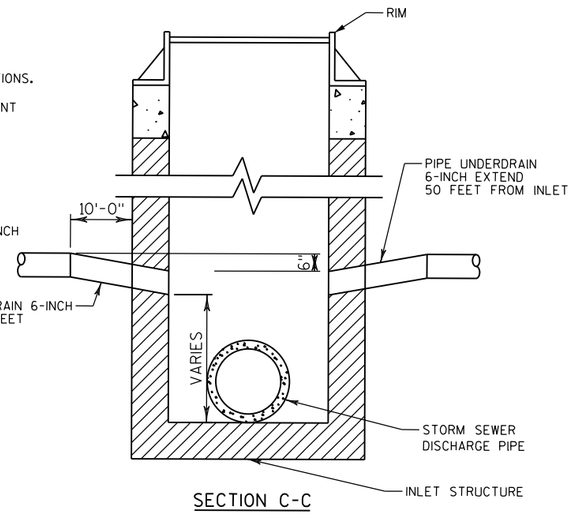
NOTE:

1. ANCHOR GEOTEXTILE FABRIC A MINIMUM OF 6" BELOW GRADE IN THE WETLAND AREA IF THE AREA IS DRY AT THE TIME OF INSTALLATION. TRENCH, ANCHOR AND BACKFILL SIMILAR TO REGULAR SILT FENCE INSTALLATION OUTSIDE OF WETLAND LIMITS.
2. ANCHOR HEAVY DUTY SILT FENCE TO THE EXISTING GROUND WITH ROCK BAGS OR SAND BAGS LAID END TO END WITH NO GAPS. THIS METHOD SHALL BE USED IF IN WET CONDITIONS, ANCHOR MATERIAL IS INCIDENTAL TO HEAVY DUTY SILT FENCE.

NOTES:
1. CONNECTIONS TO INLETS OR MANHOLES IN MEDIAN SHALL USE PIPE UNDERDRAIN, 6-INCH.
2. PROVIDE TWO 6" DIA. OPENINGS FOR UNDERDRAIN PIPE
3. SEE GEOTECHNICAL REPORT FOR SUBGRADE IMPROVEMENT LOCATIONS.
4. TO BE USED AT LOW POINTS IN EBS AND SUBGRADE IMPROVEMENT AREAS.



PLAN VIEW



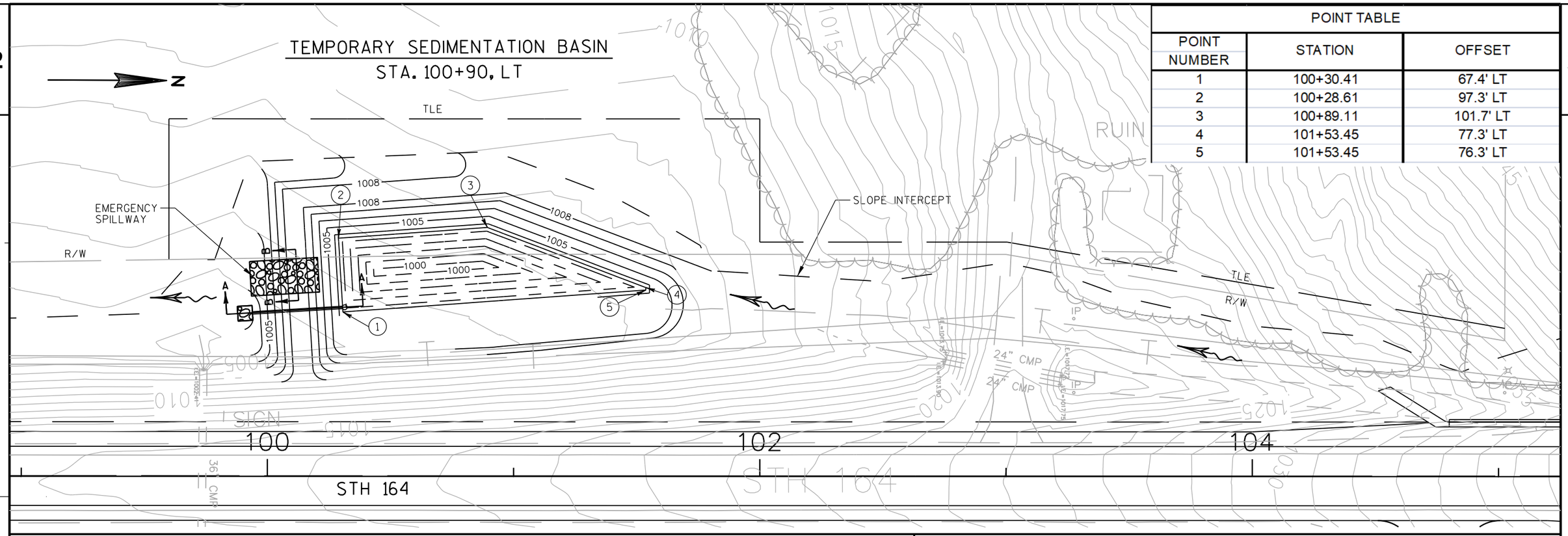
SECTION C-C

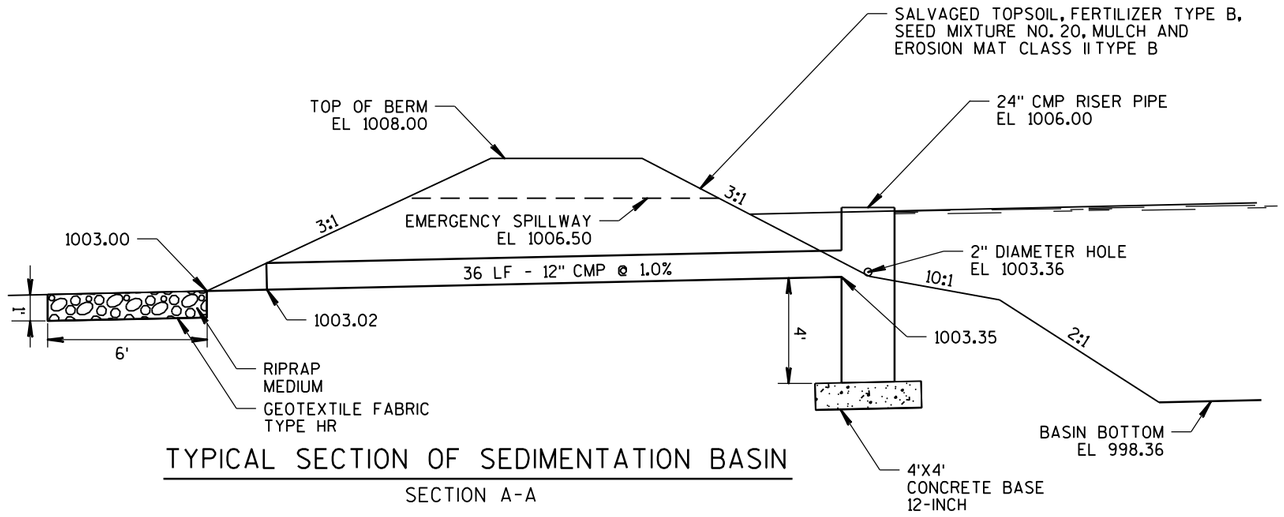
DRAINTILE OUTFALL AT INLET

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CONSTRUCTION DETAILS	SHEET 36 E

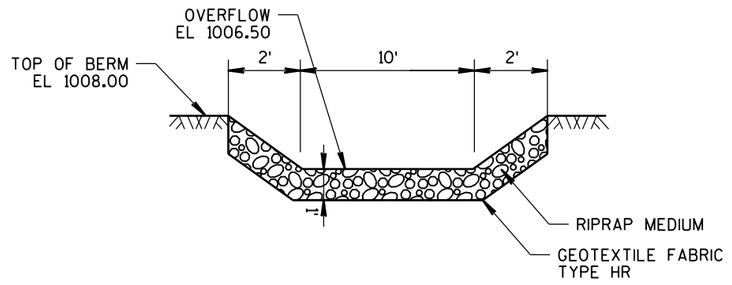
TEMPORARY SEDIMENTATION BASIN
STA. 100+90, LT

POINT TABLE		
POINT NUMBER	STATION	OFFSET
1	100+30.41	67.4' LT
2	100+28.61	97.3' LT
3	100+89.11	101.7' LT
4	101+53.45	77.3' LT
5	101+53.45	76.3' LT



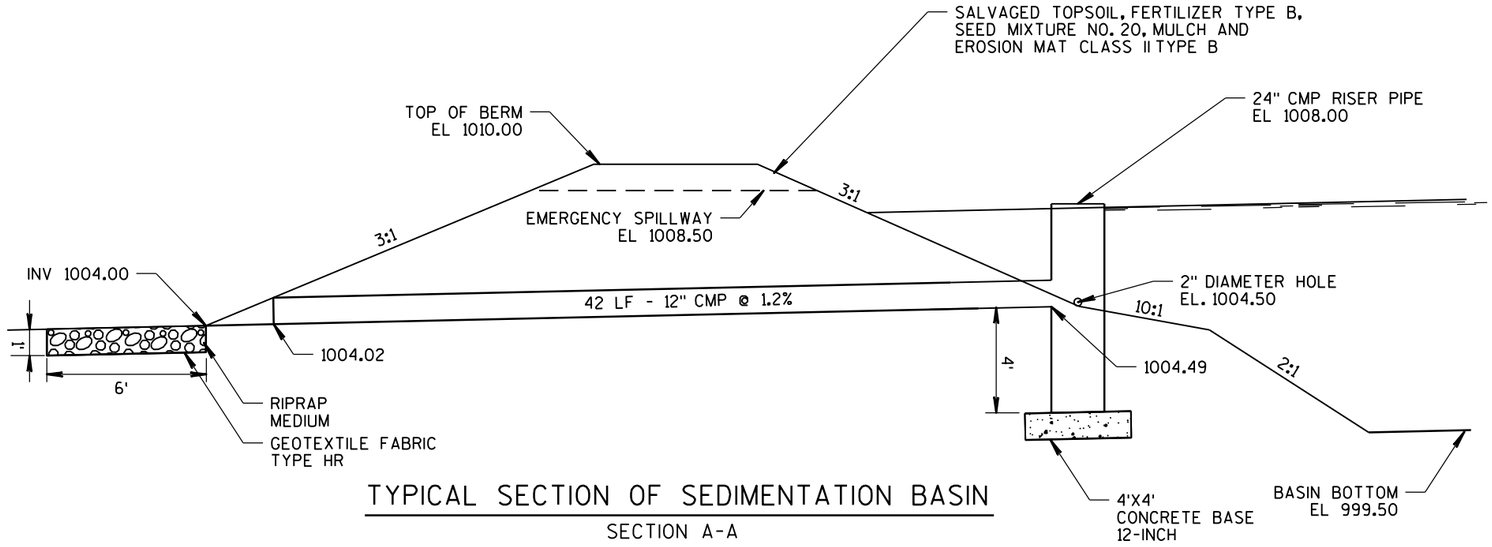


TYPICAL SECTION OF SEDIMENTATION BASIN
SECTION A-A



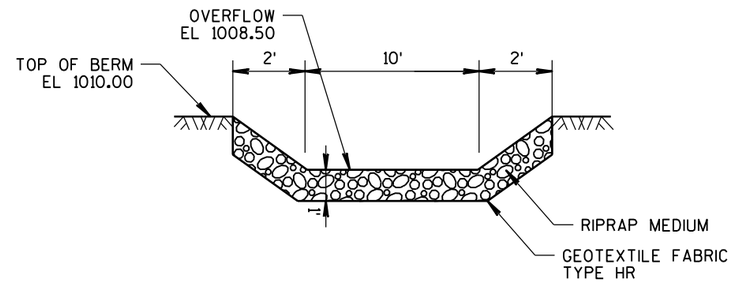
EMERGENCY SPILLWAY
SECTION B-B

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CONSTRUCTION DETAILS	SHEET 37	E



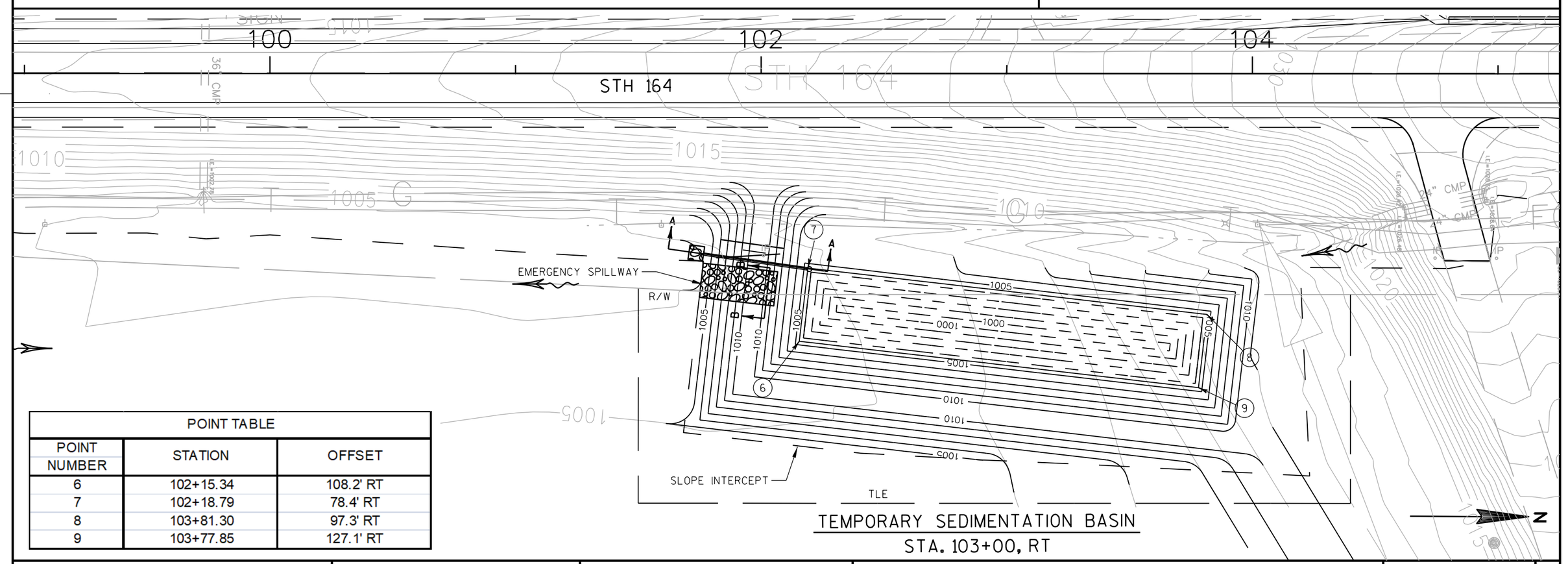
TYPICAL SECTION OF SEDIMENTATION BASIN

SECTION A-A



EMERGENCY SPILLWAY

SECTION B-B



POINT TABLE		
POINT NUMBER	STATION	OFFSET
6	102+15.34	108.2' RT
7	102+18.79	78.4' RT
8	103+81.30	97.3' RT
9	103+77.85	127.1' RT

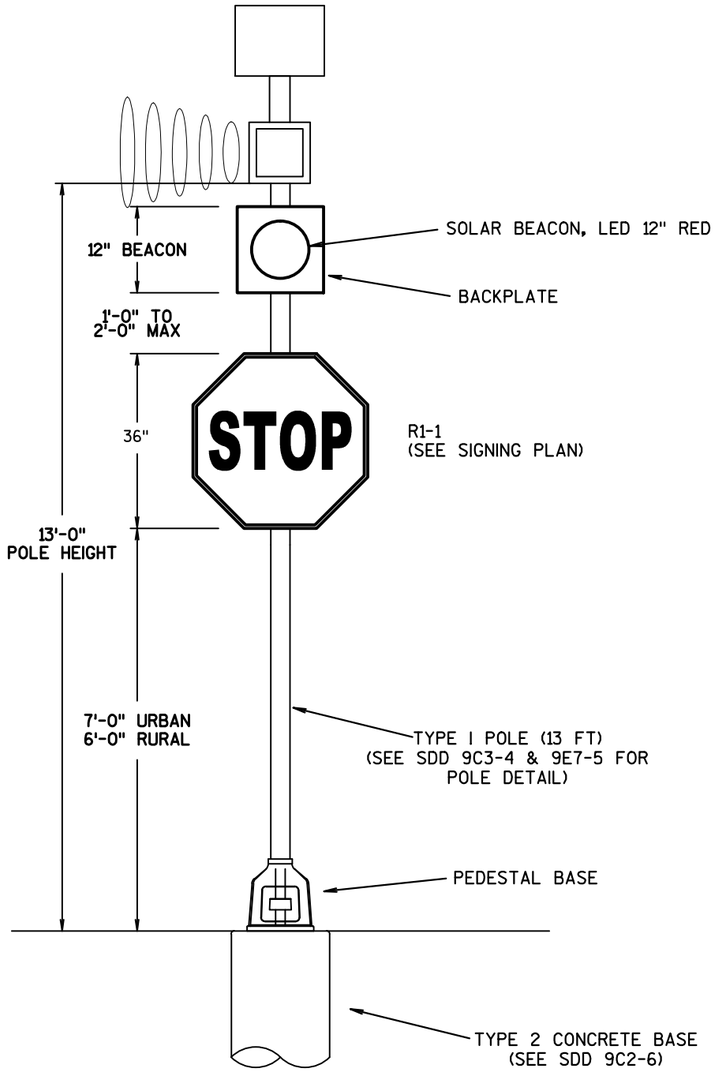
TEMPORARY SEDIMENTATION BASIN

STA. 103+00, RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CONSTRUCTION DETAILS	SHEET 38	E

2

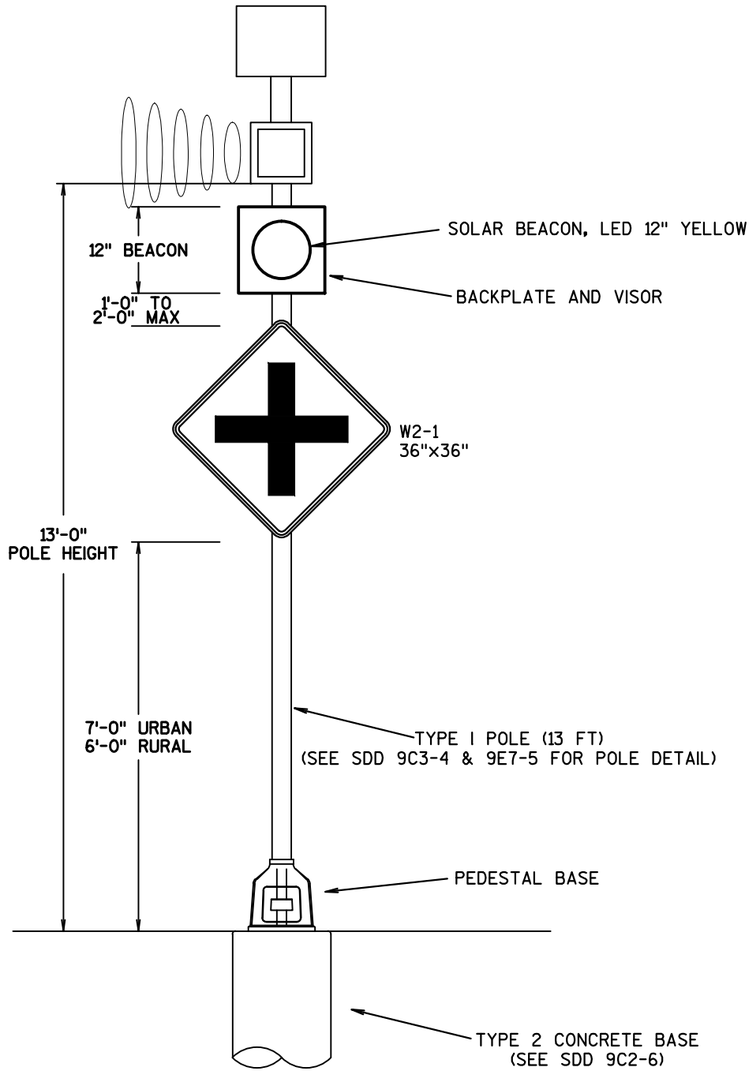
RADAR DETECTION UNIT & CONTROL BOX



13' SOLAR BEACON ASSEMBLY
(STOP SIGN APPLICATION)

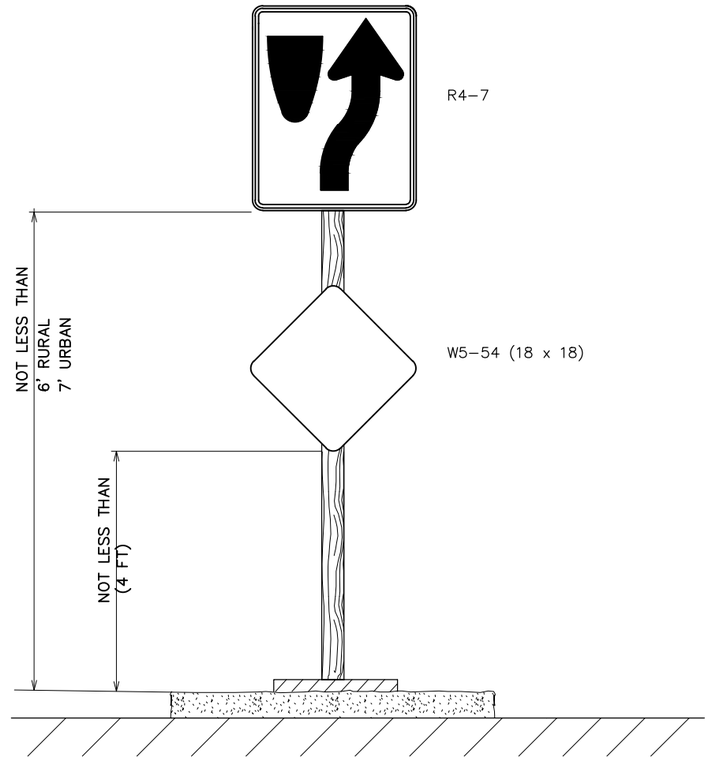
2

RADAR DETECTION UNIT & CONTROL BOX



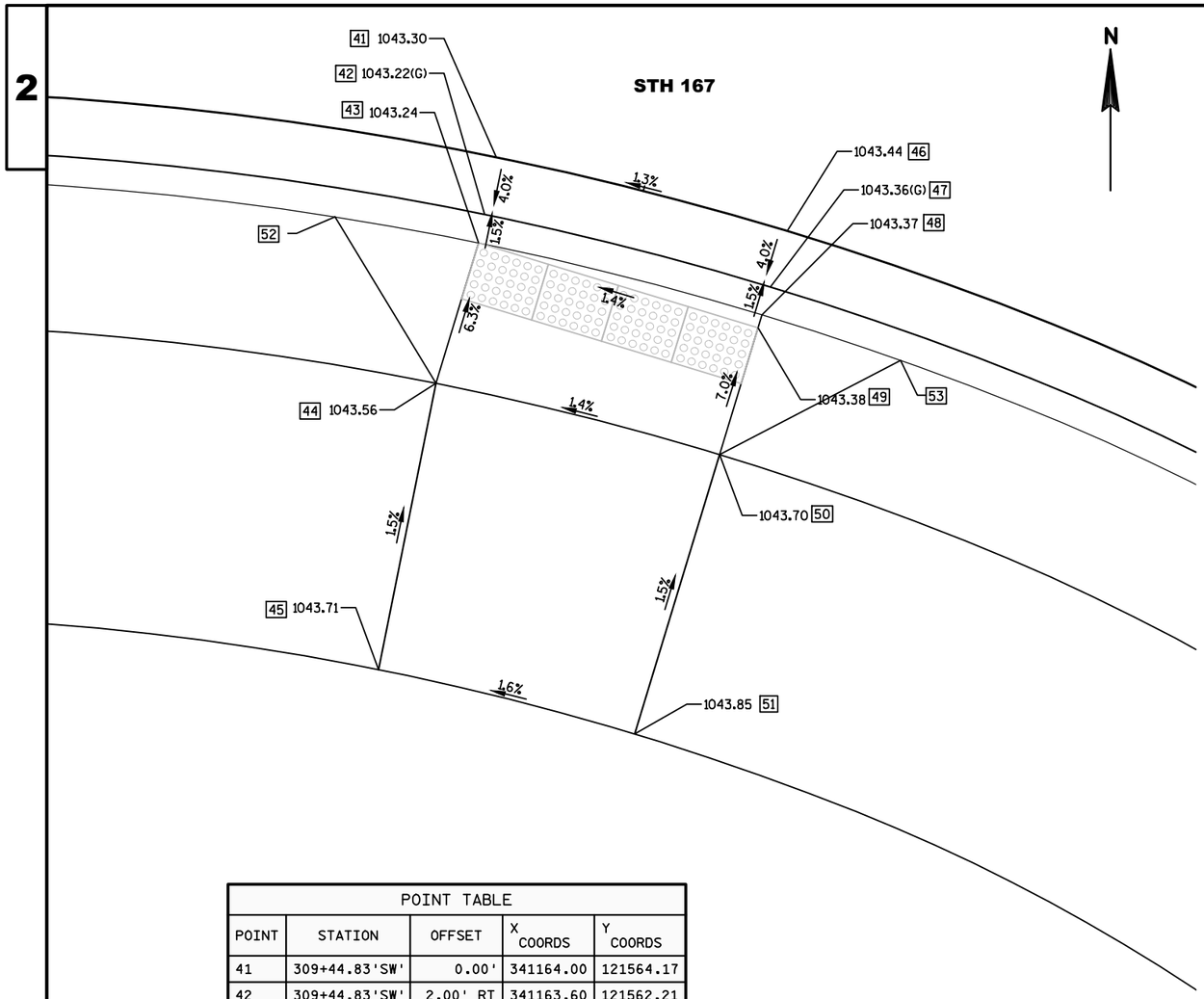
13' SOLAR BEACON ASSEMBLY
(WARNING SIGN APPLICATION)

2

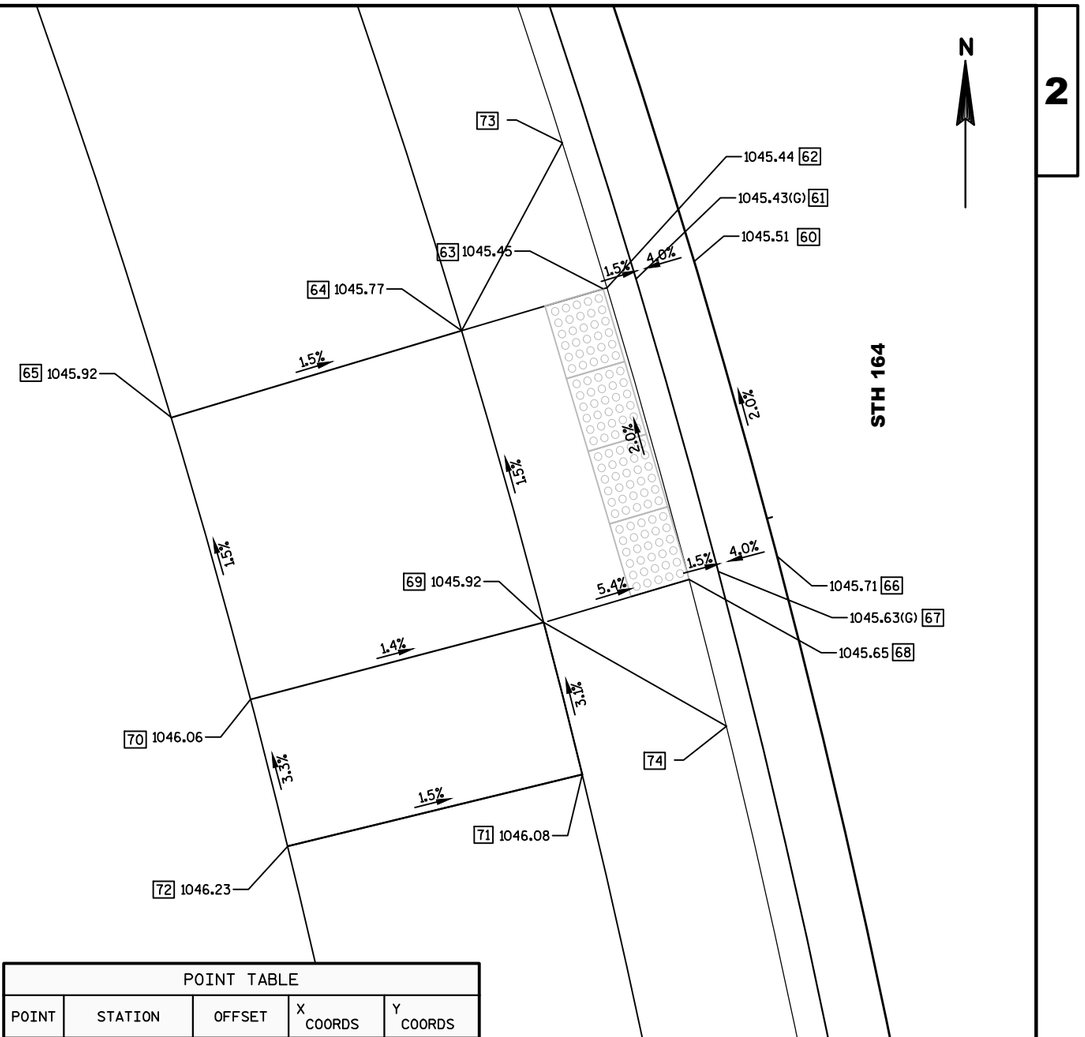


TYPICAL INSTALLATION FOR
TRANSITION TO DIVIDED HIGHWAY
OR OTHER SPECIAL NEEDS AREAS

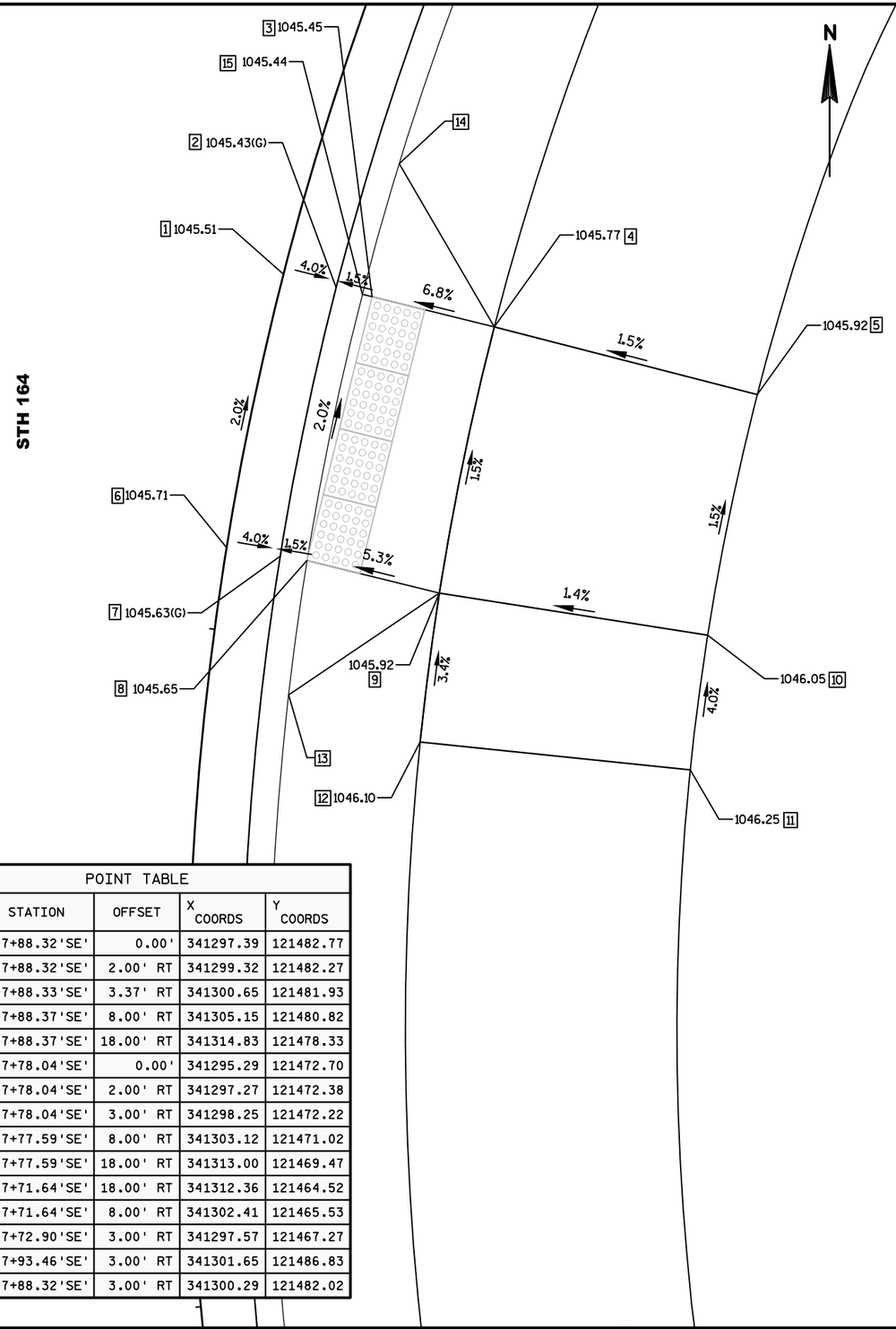
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TYPICAL DETAIL - SIGN ON MEDIAN NOSE	SHEET 41	E

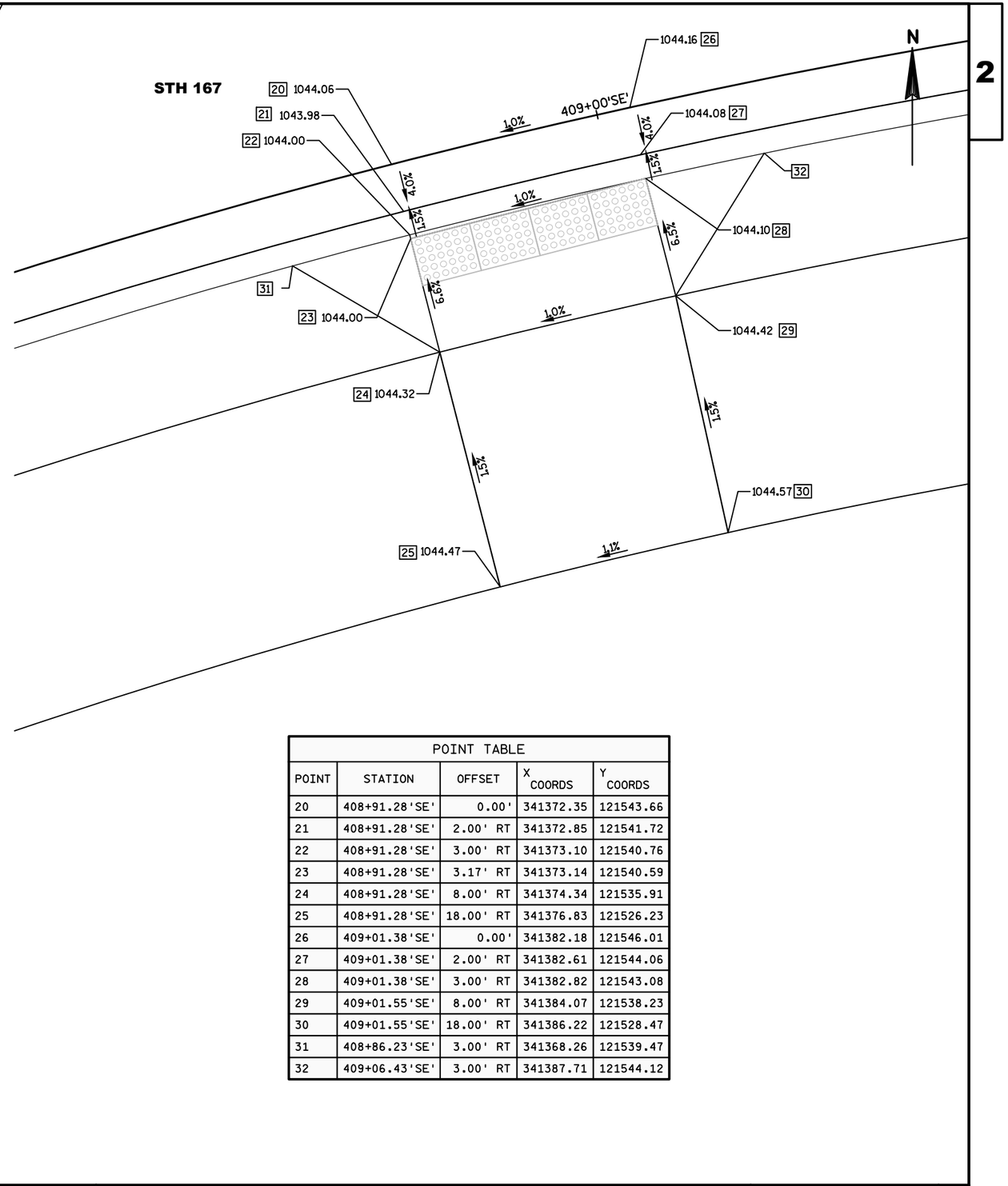


POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
41	309+44.83'SW'	0.00'	341164.00	121564.17
42	309+44.83'SW'	2.00' RT	341163.60	121562.21
43	309+44.83'SW'	3.00' RT	341163.39	121561.23
44	309+44.34'SW'	8.00' RT	341161.94	121556.42
45	309+44.34'SW'	18.00' RT	341159.97	121546.62
46	309+55.12'SW'	0.00'	341173.97	121561.64
47	309+55.12'SW'	2.00' RT	341173.39	121559.72
48	309+55.12'SW'	3.00' RT	341173.10	121558.77
49	309+55.12'SW'	3.46' RT	341172.96	121558.33
50	309+55.12'SW'	8.00' RT	341171.65	121553.98
51	309+55.12'SW'	18.00' RT	341168.74	121544.41
52	309+39.69'SW'	3.00' RT	341158.48	121562.12
53	309+60.26'SW'	3.00' RT	341177.85	121557.21



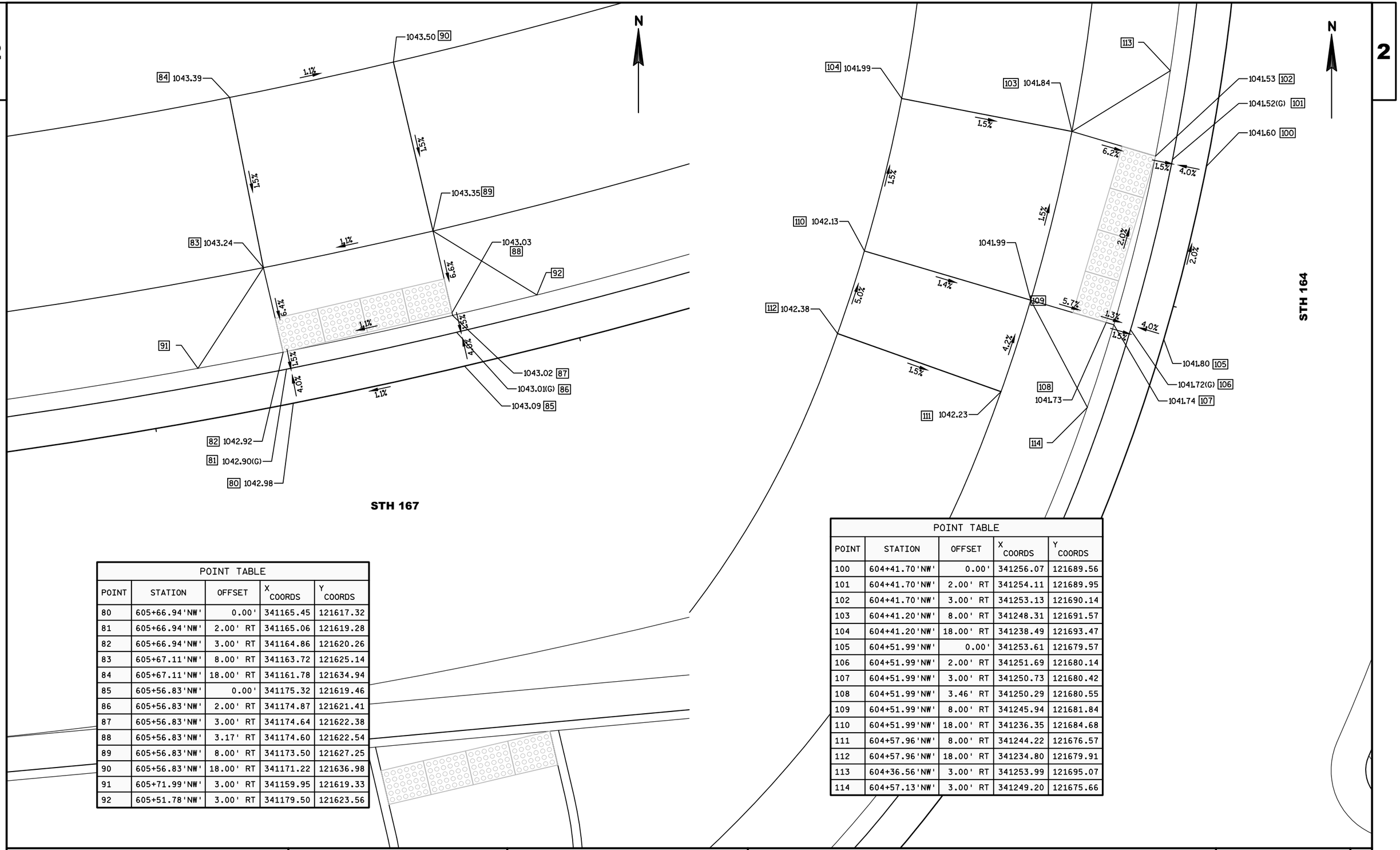
POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
60	310+66.19'SW'	0.00'	341240.74	121479.88
61	310+66.19'SW'	2.00' RT	341238.82	121479.31
62	310+66.19'SW'	3.00' RT	341237.87	121479.02
63	310+66.19'SW'	3.13' RT	341237.74	121478.98
64	310+66.17'SW'	8.00' RT	341233.07	121477.60
65	310+66.17'SW'	18.00' RT	341223.49	121474.73
66	310+76.29'SW'	0.00'	341243.47	121470.16
67	310+76.29'SW'	2.00' RT	341241.54	121469.65
68	310+76.29'SW'	3.00' RT	341240.57	121469.39
69	310+76.44'SW'	8.00' RT	341235.78	121467.97
70	310+76.44'SW'	18.00' RT	341226.10	121465.43
71	310+81.76'SW'	8.00' RT	341237.05	121462.96
72	310+81.76'SW'	18.00' RT	341227.33	121460.59
73	310+61.14'SW'	3.00' RT	341236.39	121483.80
74	310+81.34'SW'	3.00' RT	341241.81	121464.55





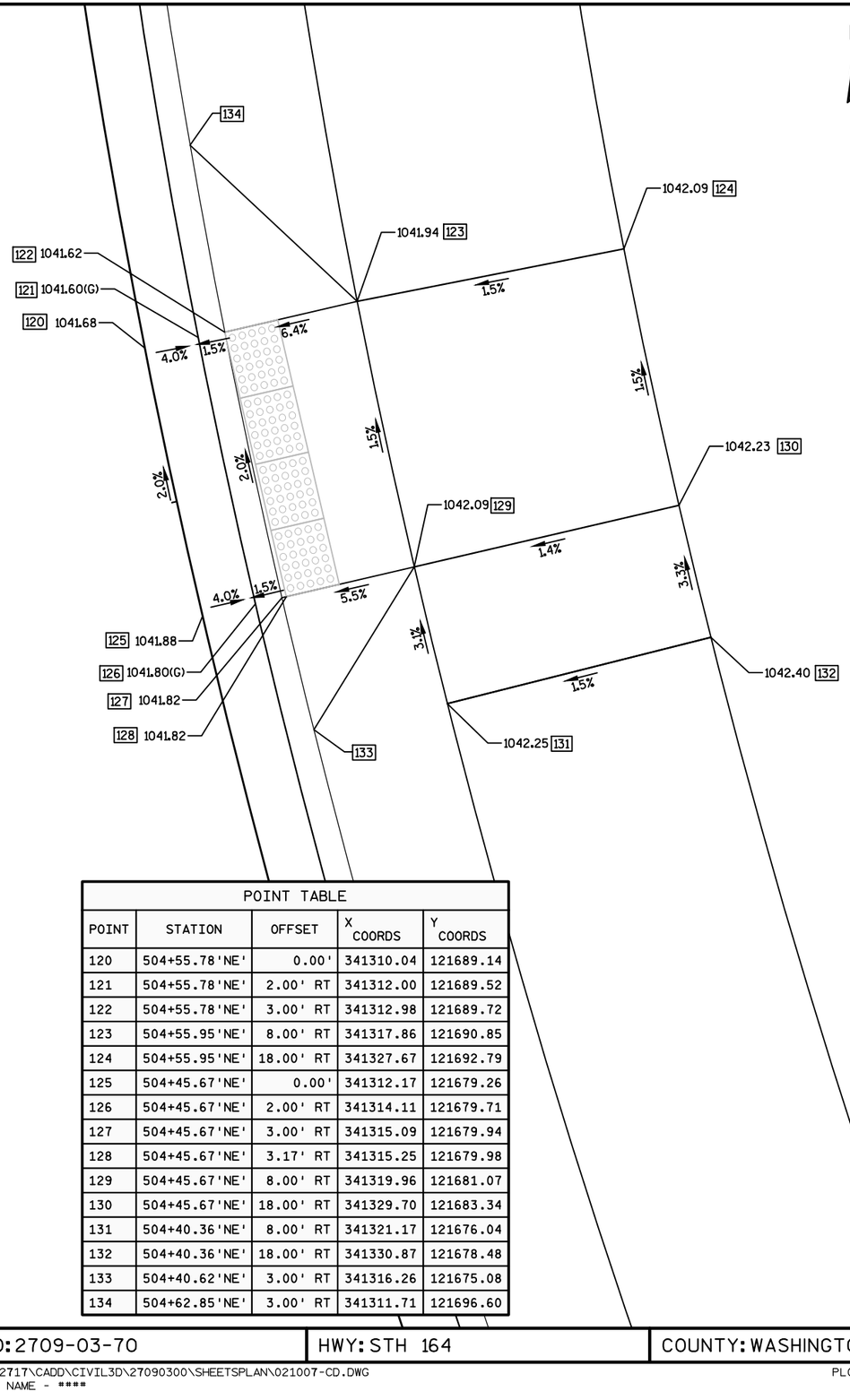
POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
1	407+88.32'SE'	0.00'	341297.39	121482.77
2	407+88.32'SE'	2.00' RT	341299.32	121482.27
3	407+88.33'SE'	3.37' RT	341300.65	121481.93
4	407+88.37'SE'	8.00' RT	341305.15	121480.82
5	407+88.37'SE'	18.00' RT	341314.83	121478.33
6	407+78.04'SE'	0.00'	341295.29	121472.70
7	407+78.04'SE'	2.00' RT	341297.27	121472.38
8	407+78.04'SE'	3.00' RT	341298.25	121472.22
9	407+77.59'SE'	8.00' RT	341303.12	121471.02
10	407+77.59'SE'	18.00' RT	341313.00	121469.47
11	407+71.64'SE'	18.00' RT	341312.36	121464.52
12	407+71.64'SE'	8.00' RT	341302.41	121465.53
13	407+72.90'SE'	3.00' RT	341297.57	121467.27
14	407+93.46'SE'	3.00' RT	341301.65	121486.83
15	407+88.32'SE'	3.00' RT	341300.29	121482.02

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
20	408+91.28'SE'	0.00'	341372.35	121543.66
21	408+91.28'SE'	2.00' RT	341372.85	121541.72
22	408+91.28'SE'	3.00' RT	341373.10	121540.76
23	408+91.28'SE'	3.17' RT	341373.14	121540.59
24	408+91.28'SE'	8.00' RT	341374.34	121535.91
25	408+91.28'SE'	18.00' RT	341376.83	121526.23
26	409+01.38'SE'	0.00'	341382.18	121546.01
27	409+01.38'SE'	2.00' RT	341382.61	121544.06
28	409+01.38'SE'	3.00' RT	341382.82	121543.08
29	409+01.55'SE'	8.00' RT	341384.07	121538.23
30	409+01.55'SE'	18.00' RT	341386.22	121528.47
31	408+86.23'SE'	3.00' RT	341368.26	121539.47
32	409+06.43'SE'	3.00' RT	341387.71	121544.12

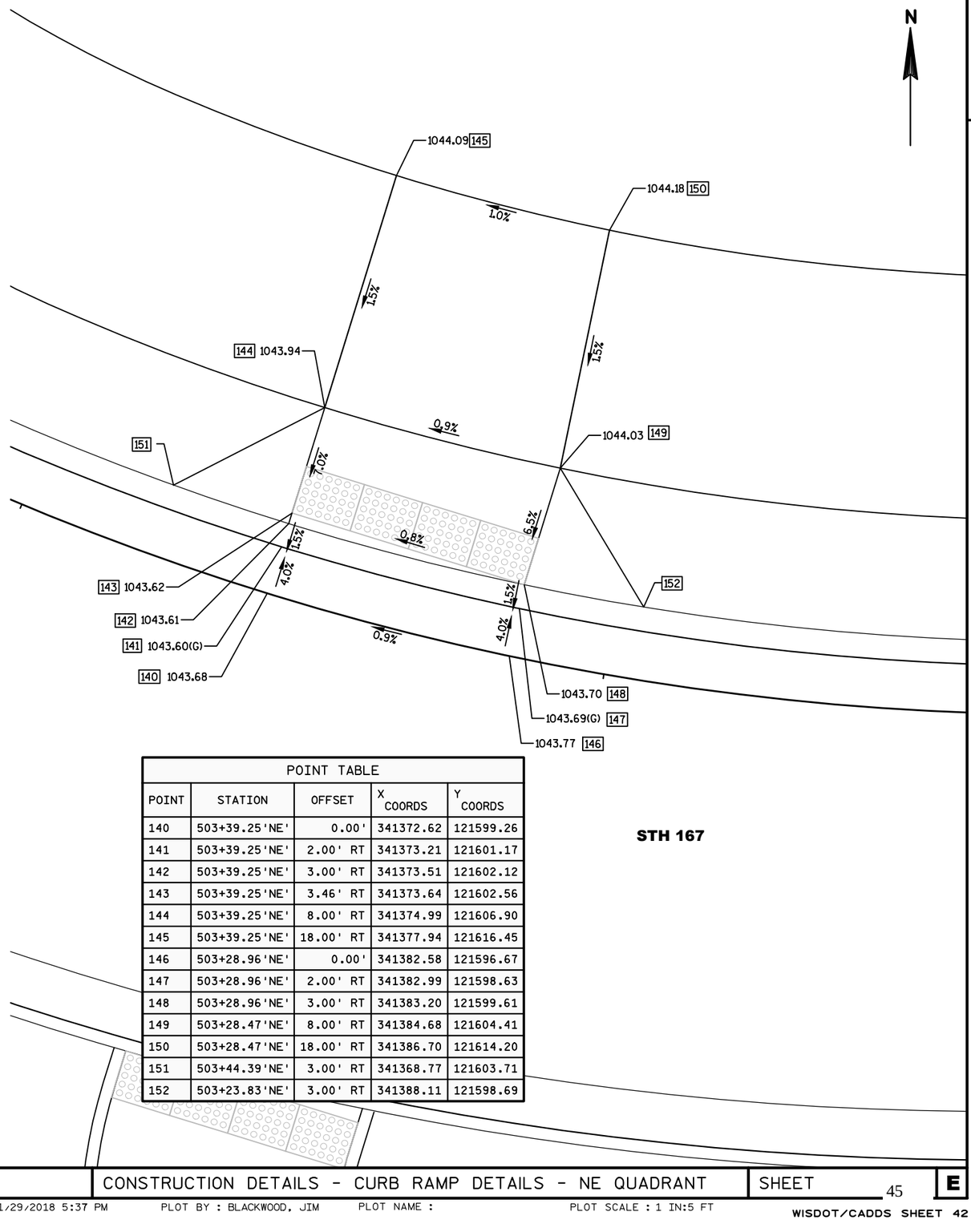


POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
80	605+66.94'NW'	0.00'	341165.45	121617.32
81	605+66.94'NW'	2.00' RT	341165.06	121619.28
82	605+66.94'NW'	3.00' RT	341164.86	121620.26
83	605+67.11'NW'	8.00' RT	341163.72	121625.14
84	605+67.11'NW'	18.00' RT	341161.78	121634.94
85	605+56.83'NW'	0.00'	341175.32	121619.46
86	605+56.83'NW'	2.00' RT	341174.87	121621.41
87	605+56.83'NW'	3.00' RT	341174.64	121622.38
88	605+56.83'NW'	3.17' RT	341174.60	121622.54
89	605+56.83'NW'	8.00' RT	341173.50	121627.25
90	605+56.83'NW'	18.00' RT	341171.22	121636.98
91	605+71.99'NW'	3.00' RT	341159.95	121619.33
92	605+51.78'NW'	3.00' RT	341179.50	121623.56

POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
100	604+41.70'NW'	0.00'	341256.07	121689.56
101	604+41.70'NW'	2.00' RT	341254.11	121689.95
102	604+41.70'NW'	3.00' RT	341253.13	121690.14
103	604+41.20'NW'	8.00' RT	341248.31	121691.57
104	604+41.20'NW'	18.00' RT	341238.49	121693.47
105	604+51.99'NW'	0.00'	341253.61	121679.57
106	604+51.99'NW'	2.00' RT	341251.69	121680.14
107	604+51.99'NW'	3.00' RT	341250.73	121680.42
108	604+51.99'NW'	3.46' RT	341250.29	121680.55
109	604+51.99'NW'	8.00' RT	341245.94	121681.84
110	604+51.99'NW'	18.00' RT	341236.35	121684.68
111	604+57.96'NW'	8.00' RT	341244.22	121676.57
112	604+57.96'NW'	18.00' RT	341234.80	121679.91
113	604+36.56'NW'	3.00' RT	341253.99	121695.07
114	604+57.13'NW'	3.00' RT	341249.20	121675.66



POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
120	504+55.78'NE'	0.00'	341310.04	121689.14
121	504+55.78'NE'	2.00' RT	341312.00	121689.52
122	504+55.78'NE'	3.00' RT	341312.98	121689.72
123	504+55.95'NE'	8.00' RT	341317.86	121690.85
124	504+55.95'NE'	18.00' RT	341327.67	121692.79
125	504+45.67'NE'	0.00'	341312.17	121679.26
126	504+45.67'NE'	2.00' RT	341314.11	121679.71
127	504+45.67'NE'	3.00' RT	341315.09	121679.94
128	504+45.67'NE'	3.17' RT	341315.25	121679.98
129	504+45.67'NE'	8.00' RT	341319.96	121681.07
130	504+45.67'NE'	18.00' RT	341329.70	121683.34
131	504+40.36'NE'	8.00' RT	341321.17	121676.04
132	504+40.36'NE'	18.00' RT	341330.87	121678.48
133	504+40.62'NE'	3.00' RT	341316.26	121675.08
134	504+62.85'NE'	3.00' RT	341311.71	121696.60



POINT TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
140	503+39.25'NE'	0.00'	341372.62	121599.26
141	503+39.25'NE'	2.00' RT	341373.21	121601.17
142	503+39.25'NE'	3.00' RT	341373.51	121602.12
143	503+39.25'NE'	3.46' RT	341373.64	121602.56
144	503+39.25'NE'	8.00' RT	341374.99	121606.90
145	503+39.25'NE'	18.00' RT	341377.94	121616.45
146	503+28.96'NE'	0.00'	341382.58	121596.67
147	503+28.96'NE'	2.00' RT	341382.99	121598.63
148	503+28.96'NE'	3.00' RT	341383.20	121599.61
149	503+28.47'NE'	8.00' RT	341384.68	121604.41
150	503+28.47'NE'	18.00' RT	341386.70	121614.20
151	503+44.39'NE'	3.00' RT	341368.77	121603.71
152	503+23.83'NE'	3.00' RT	341388.11	121598.69

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CONSTRUCTION DETAILS - CURB RAMP DETAILS - NE QUADRANT	SHEET 45	E

2

N

6" BASE AGGREGATE DENSE 3/4-INCH

BASE AGGREGATE DENSE 3/4-INCH

4" HMA PAVEMENT

RECONSTRUCTION

STH 164

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

+67.1 / 66.6' LT / R10'

+26.5 / 33.0' LT / R15'

+68.5 / 41.2' LT / R15'

+68.5 / 33.0' LT / R15'

+88.0 / 33.0' LT / R15'

+30.0 / 33.0' LT / R15'

R94'

+09.0 / 63.8' LT

+20.0 / 18.0' LT

12'

4'

6'

12'

2.0%

1003.05	1003.16	1003.13	1003.29	1003.62	1004.14	1004.83	1005.70	1006.75	1007.99	1009.40	1010.98	1012.52
1003.41	51		52		53		54		55		56	
	1003.40	1003.37	1003.53	1003.86	1004.38	1005.07	1005.94	1006.99	1008.23	1009.64	1011.22	1012.76
	1003.16	1003.13	1003.29	1003.62	1004.14	1004.83	1005.70	1006.75	1007.99	1009.40	1010.98	1012.52
1003.05												

STA 56+50

STH 164 R/L

6 1/4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

4" HMA PAVEMENT

+15.0 / 22.0' RT

+75.0 / 18.0' RT

+79.0 / 33.5' RT / R15'

+35.0 / 24.0' RT

+21.0 / 37.7' RT / R15'

+35.0 / 30.0' RT

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

12'

MSG GUARDRAIL TERMINAL EAT

+47.0 / 65.9' RT

R41'

R59'

+53.0 / 66.1' RT

STA 56+50

+73.5 / 107.7' RT

R30'

+41.6 / 154.3' RT

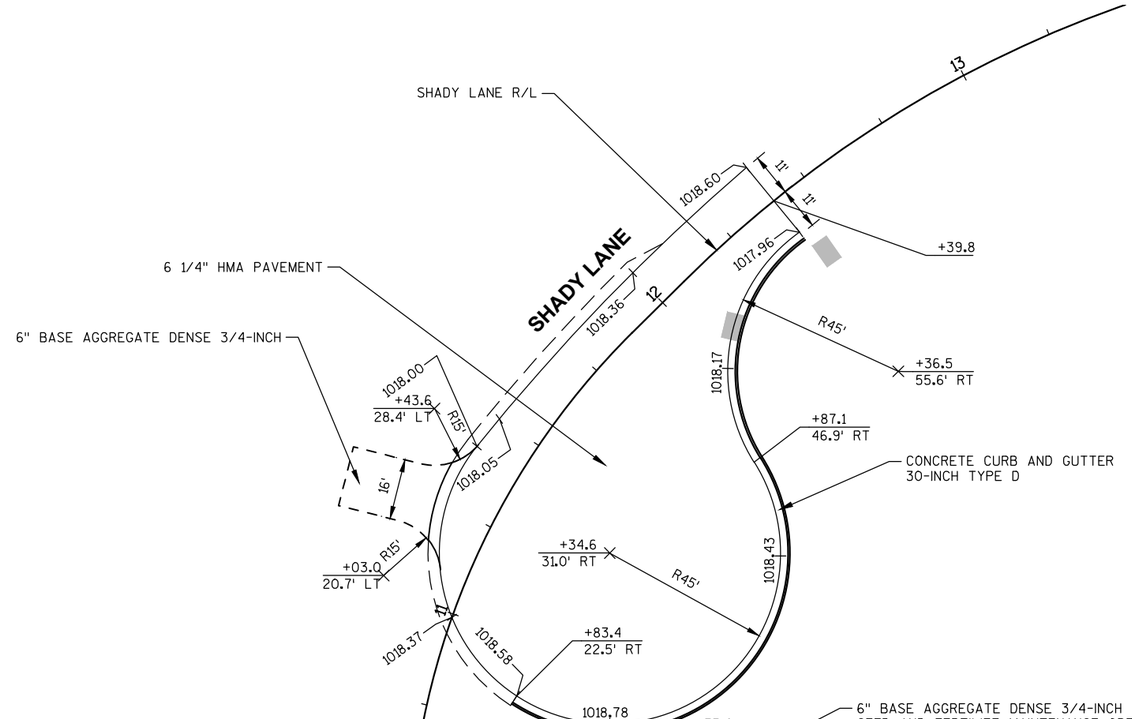
+71.6 / 156.2' RT

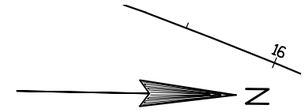
MATCHLINE

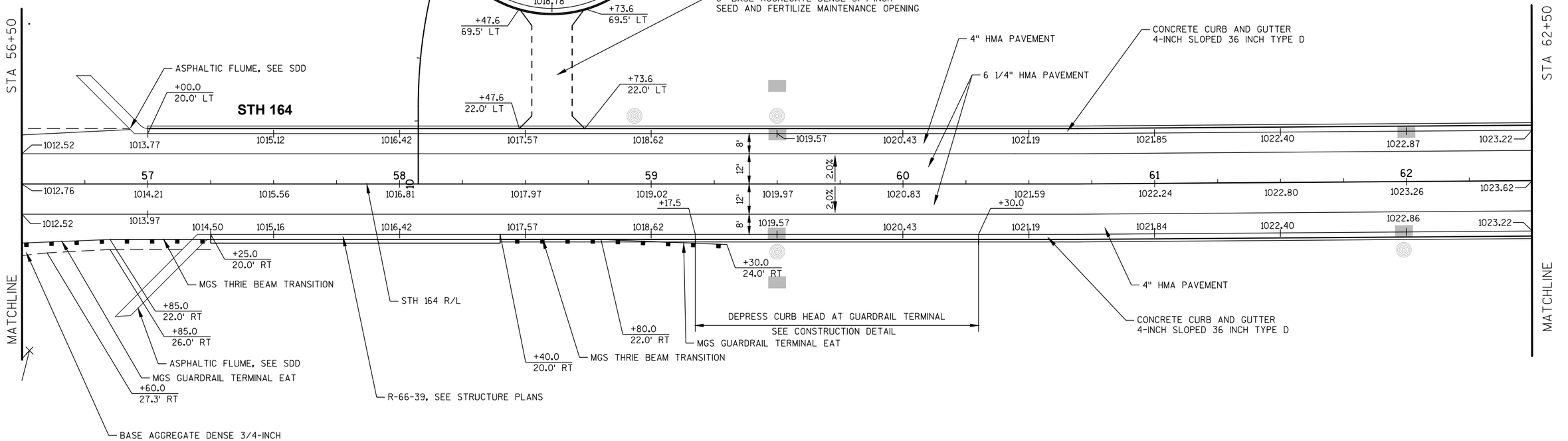
MATCHLINE

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET	E

FILE NAME = T:\1102717\CADD\CIVIL 3D\27090300\SHEETSPLAN\021101_TD.DWG PLOT DATE = 8/3/2008 8:36 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =







PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 47	E

2

N

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

BASE AGGREGATE DENSE 3/4-INCH

6 1/4" HMA PAVEMENT

SHADY LANE

HIGH POINT 18+68.15

SHADY LANE R/L

4" HMA PAVEMENT

CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE D

CONCRETE CURB AND GUTTER 30 INCH TYPE D

ASPHALTIC FLUME, SEE SDD

STA 62+50

STA 68+50

STH 164

HIGH POINT 64+07.53

STH 164 R/L

CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE D

4" HMA PAVEMENT

6 1/4" HMA PAVEMENT

6 1/4" HMA PAVEMENT

ASPHALTIC FLUME, SEE SDD

MATCHLINE

MATCHLINE

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 48	E

2

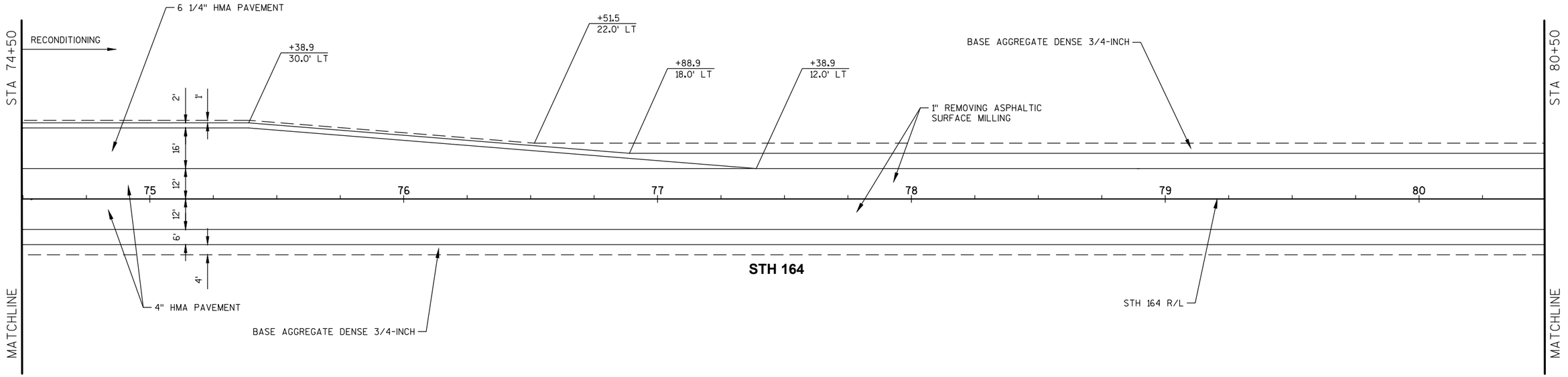
N

BASE AGGREGATE DENSE 3/4-INCH
6 1/4" HMA PAVEMENT
SHADY LANE R/L
MATCHLINE
STA 24+00
SHADY LANE
ASPHALTIC FLUME, SEE SDD
STA 68+50
BASE AGGREGATE DENSE 3/4-INCH
STH 164
ASPHALTIC FLUME, SEE SDD
CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D
HANSEN DRIVE
HANSEN DRIVE R/L
6 1/4" HMA PAVEMENT
ASPHALTIC FLUME, SEE SDD
6 1/4" HMA PAVEMENT
RECONSTRUCTION
STH 164 R/L
STA 74+50
MATCHLINE
6 1/4" HMA PAVEMENT
BASE AGGREGATE DENSE 3/4-INCH
SHADY LANE R/L
SHADY LANE
MATCHLINE
STA 24+00
HANSEN DRIVE R/L
CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D
ASPHALTIC FLUME, SEE SDD
UPLAND DRIVE
UPLAND DRIVE R/L
6 1/4" HMA PAVEMENT
ASPHALTIC FLUME, SEE SDD
CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D
4" HMA PAVEMENT
BASE AGGREGATE DENSE 3/4-INCH

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 49	E

2

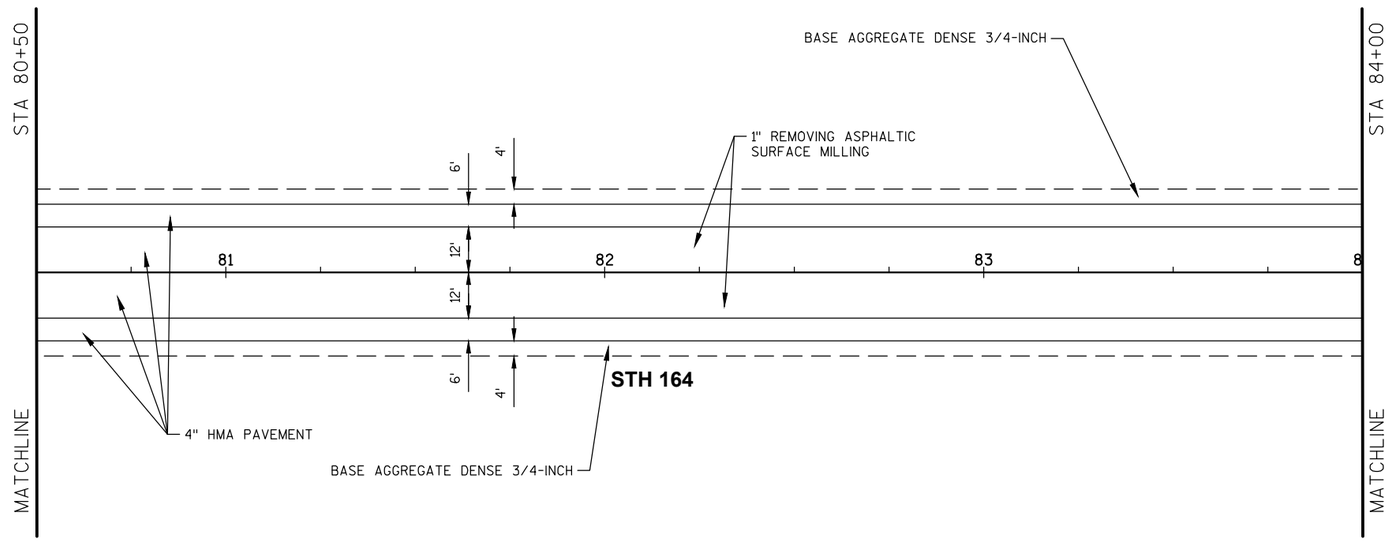
N



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 50	E

2

N



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 51	E

2

N

STA 84+00

STA 90+00

BASE AGGREGATE DENSE 3/4-INCH

1" REMOVING ASPHALTIC SURFACING MILLING

4" HMA PAVEMENT

STH 164

6'

4'

12'

12'

6'

4'

16'

2'

1'

84

85

86

87

88

89

90

MATCHLINE

BASE AGGREGATE DENSE 3/4-INCH

4" HMA PAVEMENT

STH 164 R/L

+60.8
12.0' RT

+10.7
18.0' RT

+48.2
22.0' RT

+60.7
30.0' RT

6 1/4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

MATCHLINE

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET 52	E

2

N

MONCHES ROAD

STA 90+00

STA 96+00

MATCHLINE

MATCHLINE

STH 164

+30.3
11' 11'

+77.9
11.0' RT

3'

3'

6 1/4" HMA PAVEMENT

MONCHES ROAD R/L

BASE AGGREGATE DENSE 3/4-INCH

16'

+27.9
17.0' RT

+30.3
23.0' LT

1010.89

1011.04

17'

23'

+09.5
74.0' LT

CONCRETE SURFACE DRAIN, SEE SDD

R50'

R40'

+39.2
68.0' LT

CONCRETE SURFACE DRAIN, SEE SDD

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

BASE AGGREGATE DENSE 3/4-INCH

+09.5
12.0' LT

+55.8
22.0' LT

+49.4
18.0' LT

+09.5
24.0' LT

1.5%

1010.32
LP

1.6%

1010.94

12'

2.1%

1010.22
LP

2.1%

+39.2
28.0' LT

16'

1010.89

1" REMOVING ASPHALTIC MILLING

4" HMA PAVEMENT

6 1/4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

2'

1'

16'

12'

12'

4" HMA PAVEMENT

6'

4'

12'

16'

2'

1'

STH 164 R/L

BASE AGGREGATE DENSE 3/4-INCH

6 1/4" HMA PAVEMENT

1010.86

1.5%

1010.39
LP

0.5%

+10.8
28.0' RT

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

CONCRETE SURFACE DRAIN, SEE SDD

R40'

+10.8
68.0' RT

23'

+68.5
23.0' RT

1010.55

17'

1010.69

+73.7
17.0' LT

1010.99

12'

1010.40
LP

1.5%

+41.0
24.0' RT

3'

0.8%

R50'

CONCRETE SURFACE DRAIN, SEE SDD

+41.0
74.0' RT

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

+01.0
18.0' RT

+94.5
22.0' RT

+41.0
12.0' RT

6 1/4" HMA PAVEMENT

6'

4'

BASE AGGREGATE DENSE 3/4-INCH

+24.1
10.9' LT

6 1/4" HMA PAVEMENT

3'

3'

11'

11'

+68.5

39

40

41

90

91

92

93

94

95

96

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 53	E

2

N

STA 96+00

STA 102+00

1" REMOVING ASPHALTIC SURFACE MILLING

6 1/4" HMA PAVEMENT

RECONDITIONING | RECONSTRUCTION

+89.3
30.0' LT

STH 164

+01.8
22.0' LT

+39.3
18.0' LT

+90.2
12.0' LT

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

2'
1'
16'
12'
12'
6'
4'

6
97
98
99
100
101

1014.21
1014.66
1015.23
1015.90
1016.73
1017.73
1018.89
1020.22
1021.71

1014.60
1014.97
1015.47
1016.14
1016.97
1017.97
1019.13
1020.46
1021.95

1014.36
1014.73
1015.23
1015.90
1016.73
1017.73
1018.89
1020.22
1021.71

2.0%
2.0%

4" HMA PAVEMENT

STH 164 R/L

BASE AGGREGATE DENSE 3/4-INCH

6 1/4" HMA PAVEMENT

4" HMA PAVEMENT

MATCHLINE

MATCHLINE

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 54	E

2

N

STA 102+00

STA 108+00

MATCHLINE

MATCHLINE

STH 164

ASPHALTIC FLUME, SEE SDD

BASE AGGREGATE DENSE 3/4-INCH

1032.19

4" HMA PAVEMENT

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

+00.0
18.0' LT

+80.0
20.0' LT

4'

6'

12'

2.0%

8'

1021.71 1023.36 1025.18 1027.15 1029.15 1031.15 1032.99 1032.47 1034.99 1036.99 1038.99 1040.99 1042.99 1044.99

2 103 104 105 106 107

1021.95 1023.60 1025.42 1027.39 1029.39 1031.39 1033.39 1035.39 1037.39 1039.39 1041.39 1043.39 1045.39

1021.71 1023.36 1025.18 1027.15 1029.15 1031.15 1033.15 1035.15 1037.25 1038.99 1040.99 1042.99 1044.99

+51.0
33.0' RT

R15'

+00.7
33.0' RT

+20.0
18.0' RT

+00.0
20.0' RT

1036.99

STH 164 R/L

BASE AGGREGATE DENSE 3/4-INCH

6 1/4" HMA PAVEMENT

ASPHALTIC FLUME, SEE SDD

4" HMA PAVEMENT

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES, 3-INCH

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 55	E

2

N

STA 108+00

STA 114+00

STH 164

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

4" HMA PAVEMENT

1044.99 1046.99 1048.01 1048.99 1050.99 1052.99 1054.99 1056.99 1058.99 1060.99 1062.99 1064.99 1066.99 1068.99

8'

2.0%

12'

108 109 110 111 112 113

1045.39 1047.39 1049.39 1051.39 1053.39 1055.39 1057.39 1059.39 1061.39 1063.39 1065.39 1067.39 1069.39

2.0%

12'

8'

1044.99 1046.99 1047.99 1048.99 1050.99 1052.99 1054.99 1056.98 1058.99 1060.99 1062.99 1064.99 1066.99 1068.99

STH 164 R/L

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

6 1/4" HMA PAVEMENT

4" HMA PAVEMENT

MATCHLINE

MATCHLINE

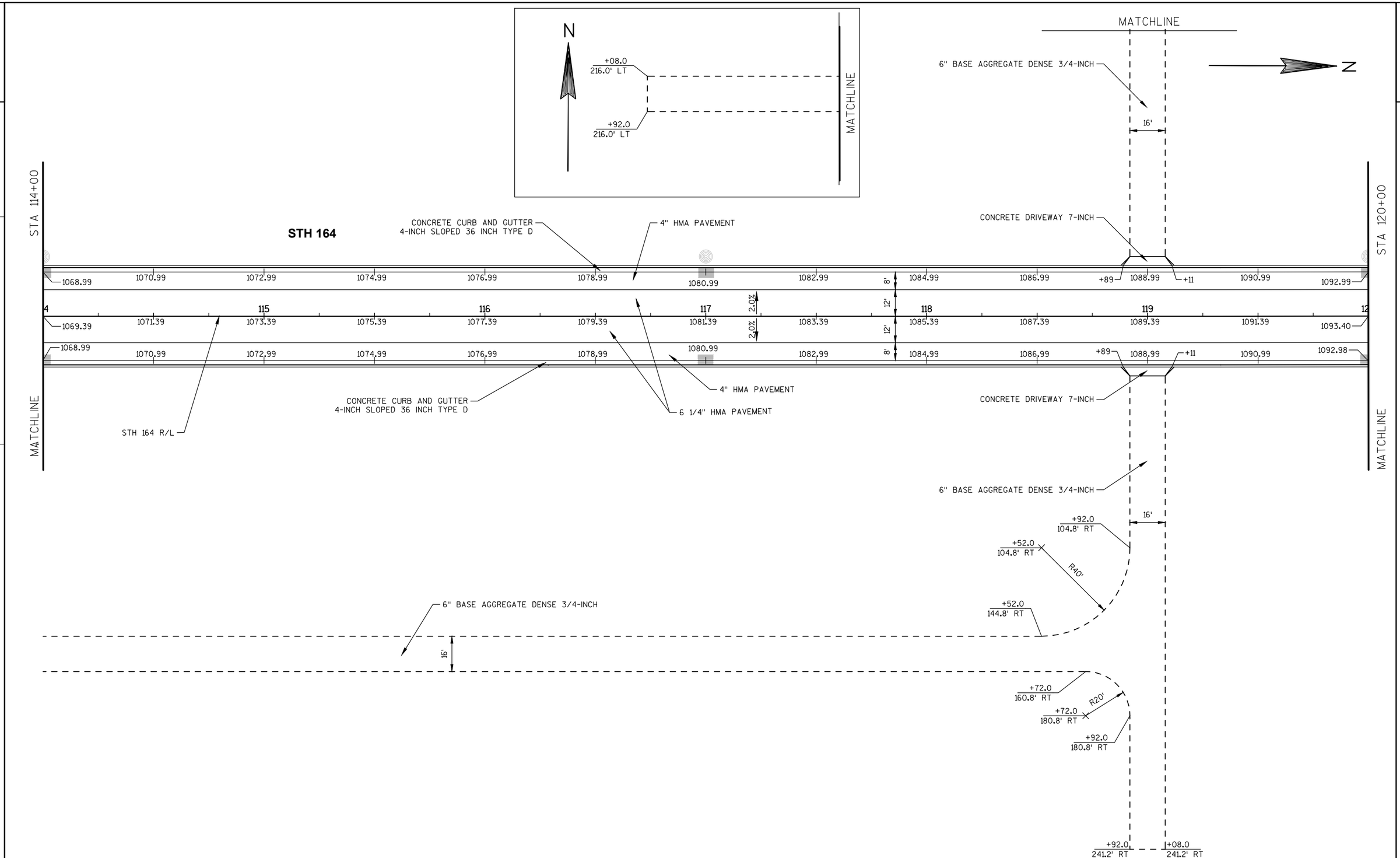
6" BASE AGGREGATE DENSE 3/4-INCH

+53.3
144.8' RT

+53.2
160.8' RT

16'

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET 56	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 57	E

2

N

STA 120+00

STH 164

4" HMA PAVEMENT

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

+35.0
20.0' LT

+10.0
18.0' LT

BASE AGGREGATE DENSE 3/4-INCH

6'

4'

1093.00 1094.99 1096.95 1098.80 1100.57 1102.24 1103.81 1104.86 1105.45 1106.83 1108.12 1109.32 1110.42 1111.43

8'

12'

2.0%

0 121 122 123 124 125 12

1093.40 1095.39 1097.35 1099.20 1100.97 1102.64 1104.21 1105.69 1107.07 1108.36 1109.56 1110.66 1111.67

12'

2.0%

12'

1092.99 1094.99 1096.95 1098.80 1100.57 1102.24 1103.81 1105.29 1106.27 1106.83 1108.12 1109.32 1110.42 1111.43

8'

6'

4'

STH 164 R/L

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

6 1/4" HMA PAVEMENT

4" HMA PAVEMENT

+85.0
20.0' RT

+80.0
18.0' RT

+61.0
22.0' RT

BASE AGGREGATE DENSE 3/4-INCH

MATCHLINE

STA 126+00

MATCHLINE

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET 58	E

2

N

STA 126+00

STA 132+00

MATCHLINE

MATCHLINE

STH 164

RECONSTRUCTION | RECONDITIONING

BASE AGGREGATE DENSE 3/4-INCH

4" HMA PAVEMENT

1" REMOVING ASPHALTIC SURFACE MILLING

6 1/4" HMA PAVEMENT

+83.5
22.0' LT

+37.0
12.0' LT

+77.0
18.0' LT

4" HMA PAVEMENT

6'

4'

12'

2.0%

1111.43 1112.34 1113.15 1113.88 1114.50 1115.04 1115.47 1115.82 1116.16

6 127 128 129 130 131 13

1111.67 1112.58 1113.39 1114.12 1114.74 1115.28 1115.71 1116.06 1116.40

1111.43 1112.34 1113.15 1113.88 1114.50 1115.04 1115.47 1115.81 1116.09

STH 164 R/L

BASE AGGREGATE DENSE 3/4-INCH

6 1/4" HMA PAVEMENT

4" HMA PAVEMENT

+34.0
18.0' RT

+70.6
22.0' RT

4" HMA PAVEMENT

6 1/4" HMA PAVEMENT

+51.0
30.0' RT

+51.0
32.0' RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 59	E

2

N

WOODED HILLS CHURCH

ASPHALTIC FLUME, SEE SDD

+56.2

12' 12'

WOODED HILLS R/L

6 1/4" HMA PAVEMENT

ASPHALTIC FLUME, SEE SDD

3'

+70.0
12.6' RT

1114.85

1115.34

1115.92

49

+26.7
15.0' RT

15'

+16.2
15.0' LT

+72.1
83.0' LT

+37.0
74.0' LT

15'

1115.68

R50'

R55'

2.6%

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

STA 132+00

+37.0
24.0' LT

2.3%

1116.82

1116.81

+72.1
28.0' LT

2'

1'

STH 164

1117.09

0.7%

1117.37

1.3%

12'

16'

1" REMOVING ASPHALTIC
SURFACE MILLING

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

+72.3
31.0' LT

+72.2
30.0' LT

+84.8
22.0' LT

STA 138+00

1119.67

2 133 50 134 135 136 137 13

12'

12'

12'

6'

4'

MATCHLINE

BASE AGGREGATE DENSE 3/4-INCH

2'

6'

+01.3
30.0' RT

+01.3
32.0' RT

6 1/4" HMA PAVEMENT

4" HMA PAVEMENT

STH 164 R/L

+72.2
22.0' RT

+26.3
18.0' RT

MATCHLINE

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET 60	E

2

N

STA 138+00

STA 144+00

MATCHLINE

MATCHLINE

6 1/4" HMA PAVEMENT

+22.2
18.0' LT

+72.1
12.0' LT

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

STH 164

4" HMA PAVEMENT

1" REMOVING ASPHALTIC SURFACE MILLING

4" HMA PAVEMENT

STH 164 R/L

BASE AGGREGATE DENSE 3/4-INCH

+74.2
12.0' RT

+24.1
18.0' RT

+61.6
22.0' RT

+74.1
30.0' RT

+74.1
31.0' RT

4" HMA PAVEMENT

6 1/4" HMA PAVEMENT

4'
6'
12'
12'
4'
6'
12'
12'
16'
2'
1'

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 61	E

2

N

ELMWOOD ROAD

+31.6

11' 11'

BASE AGGREGATE DENSE 3/4-INCH

ELMWOOD ROAD R/L

6 1/4" HMA PAVEMENT

+76.5
11.0' RT

3' 3'

+26.5
17.0' RT

ASPHALTIC FLUME, SEE SDD

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

1122.60

1122.46

+31.5
23.0' LT

+21.6
74.0' LT

17' 23'

+51.6
68.0' LT

CONCRETE SURFACE DRAIN, SEE SDD

R50'

R40'

0.5%

0.5%

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

+61.5
18.0' LT

+67.9
22.0' LT

+21.6
24.0' LT

+21.6
12.0' LT

+51.6
28.0' LT

STH 164

1122.40 LP

1122.61

1123.06

1122.66

0.7%

4.4%

STA 144+00

STA 150+00

6' 4' 3' 12' 2' 1' 16' 12' 12' 12' 6' 4'

4 145 146 147 148 149 15

09

1122.58

1.0%

1122.27 LP

1123.16

1.0%

1122.78

0.6%

+24.2
28.0' RT

+14.1
18.0' RT

+54.1
24.0' RT

+07.7
22.0' RT

+54.1
12.0' RT

CONCRETE SURFACE DRAIN, SEE SDD

4" HMA PAVEMENT

+24.2
68.0' RT

R40'

R50'

+54.1
74.0' RT

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

1" REMOVING ASPHALTIC
SURFACE MILLING

BASE AGGREGATE DENSE 3/4-INCH

STH 164 R/L

23' 17'

1122.43

1122.56

+68.8
23.0' RT

+73.1
17.0' LT

6 1/4" HMA PAVEMENT

ASPHALTIC FLUME, SEE SDD

3' 3'

+23.1
11.0' LT

BASE AGGREGATE DENSE 3/4-INCH

BASE AGGREGATE DENSE 3/4-INCH

6 1/4" HMA PAVEMENT

11' 11'

+68.8

MATCHLINE

MATCHLINE

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 62	E

2

N

STA 150+00

+01.6
28.0' LT

1"

2"

6 1/4" HMA PAVEMENT

+14.2
22.0' LT

+51.7
18.0' LT

+01.6
12.0' LT

6'

4"

1" REMOVING ASPHALTIC
SURFACE MILLING

BASE AGGREGATE DENSE 3/4-INCH

STH 164

4" HMA PAVEMENT

+89.5
22.0' LT

+83.0
18.0' LT

+43.0
12.0' LT

STA 156+00

0 151 152 153 154 155 15

12'

12'

6'

4'

BASE AGGREGATE DENSE 3/4-INCH

STH 164 R/L

+31.0
12.0' RT

+30.9
18.0' RT

+67.0
22.0' RT

4 "HMA PAVEMENT

12'

12'

2'

6'

+47.9
30.0' RT

+47.8
32.0' RT

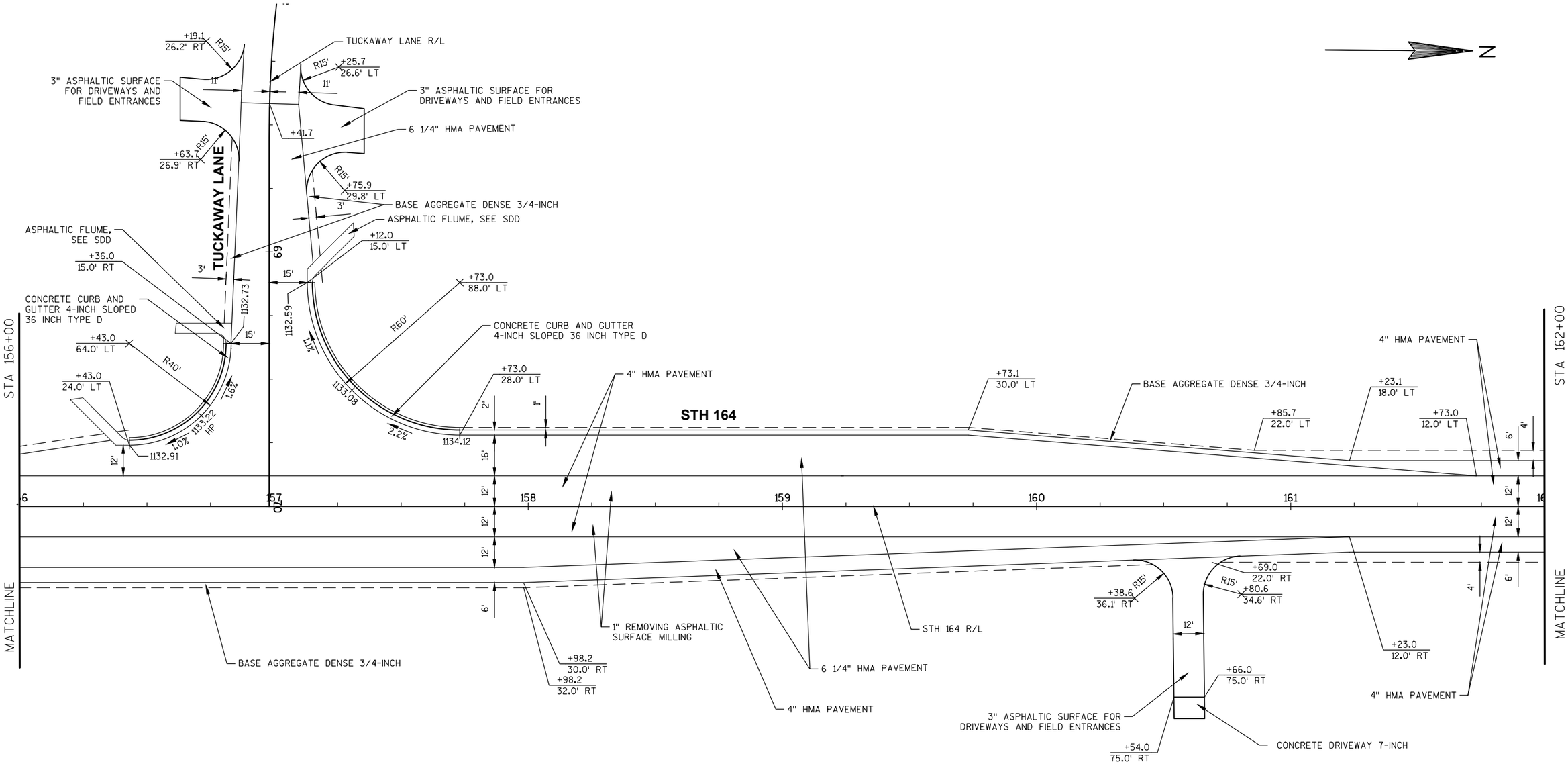
6 1/4" HMA PAVEMENT

MATCHLINE

4" HMA PAVEMENT

MATCHLINE

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET 63	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 64	E

2

N

STA 162+00

STA 168+00

STH 164

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

+26.2
18.0' LT

+26.3
12.0' LT

+80.3
22.0' LT

1" REMOVING ASPHALTIC SURFACE MILLING

6 1/4" HMA PAVEMENT

4" HMA PAVEMENT

+51.2
30.0' LT

+51.3
24.0' LT

4'

6'

12'

12'

6'

12'

12'

16'

162 163 164 165 166 167 16

4'

6'

MATCHLINE

MATCHLINE

+29.8
12.0' RT

+79.8
18.0' RT

+17.2
22.0' RT

STH 164 R/L

+65.0
45.0' RT

R15'

12'

R15'

+07.0
45.0' RT

1'

2'

+29.8
30.0' RT

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

6" BASE AGGREGATE DENSE 3/4-INCH

1151.09

1151.63

+37.9

1153.08

+62.0

1154.17

1154.62

1155.27

1155.95

+80.0
28.0' RT

ASPHALTIC FLUME
SEE SDD

CONCRETE DRIVEWAY 7-INCH

18'

3" ASPHALTIC SURFACE FOR
DRIVEWAYS AND FIELD ENTRANCES

+79.8
28.0' RT

+79.8
83.0' RT

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 65	E

2

N

STA 168+00

STA 174+00

MATCHLINE

MATCHLINE

STH 164

CHEROKEE TRAIL

4" HMA PAVEMENT

6 1/4" HMA PAVEMENT

6" BASE AGGREGATE DENSE 3/4-INCH

1" REMOVING ASPHALTIC SURFACE MILLING

BASE AGGREGATE DENSE 3/4-INCH

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE D

ASPHALTIC FLUME, SEE SDD

ASPHALTIC FLUME, SEE SDD

CHEROKEE TRAIL R/L

STH 164 R/L

+93.0 45.0' LT

+39.0 45.0' LT

+51.5 30.0' LT

+51.3 24.0' LT

+31.6 22.0' LT

+69.9 12.0' LT

+27.5 33.0' LT

+92.5 33.0' LT

+15.0 24.0' RT

+68.6 22.0' RT

+75.0 18.0' RT

+15.0 12.0' RT

+92.0 33.0' RT

+34.0 33.0' RT

+11.0 33.0' RT

+53.1 33.0' RT

+15.0 74.0' RT

+79.8 83.0' RT

+84.2 15.0' RT

+72.9 15.0' LT

+54.2

1158.47

1157.13

1156.99 HP

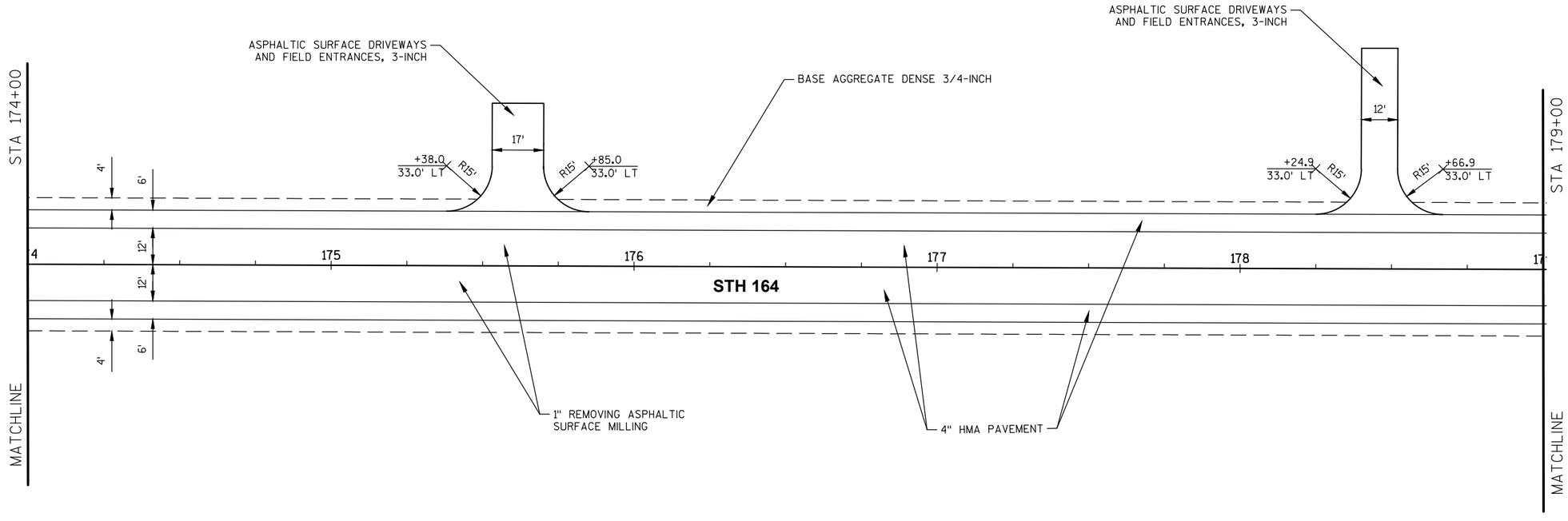
1156.83

1156.77

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 66	E

2

N



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 67	E

2

N

STA 179+00

STA 185+00

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

1" REMOVING ASPHALTIC SURFACE MILLING

STH 164 R/L

STH 164

+17.3 / 33.0' LT — R15' — +59.3 / 33.0' LT — 12'

+35.5 / 12.0' LT

+89.5 / 22.0' LT

+46.4 / 37.1' LT — R15' — +89.3 / 38.7' LT — 13'

6' — 4' — 12'

1141.70 — 1141.54 — 1141.37 — 1141.12

9 — 180 — 181 — 182 — 183 — 184 — 18

1142.03 — 1141.90 — 1141.77 — 1141.55

2.0% — 2.0% — 2.0%

12' — 16' — 2' — 1'

1141.47 — 1141.34 — 1141.21 — 1140.99

R15' — R15' — +09.7 / 33.0' RT — 13' — +52.5 / 33.0' RT

+89.4 / 12.0' RT — +39.3 / 18.0' RT — +76.8 / 22.0' RT

+89.3 / 30.0' RT

MATCHLINE

MATCHLINE

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

6 1/4" HMA PAVEMENT

4" HMA PAVEMENT

6 1/4" HMA PAVEMENT

RESURFACING | RECONSTRUCTION

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 68	E

2

N

STA 185+00

STA 191+00

MATCHLINE

MATCHLINE

STH 164

STH 164 R/L

12'

SALVAGE AND REINSTALL CRUSHED LIMESTONE DRIVEWAY
(MATCH DEPTH OF EXISTING DRIVEWAY)

+60.4
30.0' LT

+97.0
45.0' LT

R15'

R15'

+39.0
45.0' LT

+60.7
30.0' LT

+41.6
22.0' LT

+77.9
18.0' LT

4" HMA PAVEMENT

6 1/4" HMA PAVEMENT

4" HMA PAVEMENT

6 1/4" HMA PAVEMENT

6'

2'

4'

6'

12'

2.0%

2.0%

12'

12'

16'

2'

2.6%

2.4%

1.4%

1.8%

R55'

R50'

1141.12

1140.76

1140.33

1139.81

1139.19

1138.47

1137.64

1136.72

1135.73

1134.66

1133.48

1132.21

1130.80

5

186

187

188

189

190

1141.55

1141.23

1140.81

1140.29

1139.67

1138.95

1138.12

1137.20

1136.17

1135.04

1133.81

1132.48

1131.04

1140.57

1140.05

1139.43

1137.78

1136.96

1135.93

1134.80

1133.57

1132.24

1130.80

1140.99

1140.67

1140.35

1139.21

1138.72

1138.46

1139.15

1139.87

1140.27

1140.59

1140.92

1140.44

1141.88

+89.4
28.0' RT

+89.4
83.0' RT

+84.0
15.0' RT

+44.0
12.0' RT

+93.5
18.0' RT

+87.1
22.0' RT

+33.5
12.0' RT

+33.5
24.0' RT

+33.5
74.0' RT

+73.0
24.0' LT

+73.0
24.0' LT

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

CONCRETE SURFACE DRAIN, SEE SDD

ASPHALTIC FLUME, SEE SDD

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

TRANSITION FROM CONC C&G 30-INCH TYPE D TO CONC C&G 4-INCH SLOPED
36-INCH TYPE D OVER 10 FEET.
STA 90+73 TO STA 90+83 LT
(PAID FOR AS CONC C&G 4-INCH SLOPED 36-INCH TYPE D)

ST GABRIEL LANE

ST GABRIEL LANE R/L

CONCRETE CURB AND GUTTER
30 INCH TYPE D

3'

12

36

91

90

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

4'

6'

MATCHLINE

STA 91+50

MATCHLINE

STA 91+50

ST GABRIEL LANE

3'

92

93

1144.04

1144.28

1143.83

1146.12

1146.36

1145.99

1148.39

1148.43

1148.15

1149.15

12'

12'

+23.0
0.0' T

6 1/4" HMA PAVEMENT

CONCRETE CURB AND GUTTER
30 INCH TYPE D

ST GABRIEL LANE R/L

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 69	E

2

N

STA 191+00

STA 197+00

MATCHLINE

MATCHLINE

STH 164

STH 164 R/L

10'

10'

R8'

+42.4
90.4' LT

3" ASPHALTIC SURFACE FOR
DRIVEWAYS AND FIELD ENTRANCES

R20'

+52.6
51.1' LT

+99.3
33.0' LT

R15'

R15'

+46.4
33.0' LT

BASE AGGREGATE DENSE 3/4-INCH

4" HMA PAVEMENT

6 1/4" HMA PAVEMENT

6'

4'

12'

2.0%

1130.80 1129.27 1127.63 1125.89 1124.05 1122.11 1120.12 1118.13 1116.14 1114.15 1112.15 1110.16 1108.17

1 192 193 194 195 196 19

1131.04 1129.51 1127.87 1126.13 1124.29 1122.35 1120.36 1118.37 1116.38 1114.39 1112.39 1110.40 1108.41

1130.80 1129.27 1127.63 1125.89 1124.01 1121.99 1119.93 1117.85 1115.82 1113.83 1111.83 1109.84 1107.85

16'

2'

1'

+75.3
12.0' RT

+25.2
18.0' RT

+62.7
22.0' RT

+75.2
30.0' RT

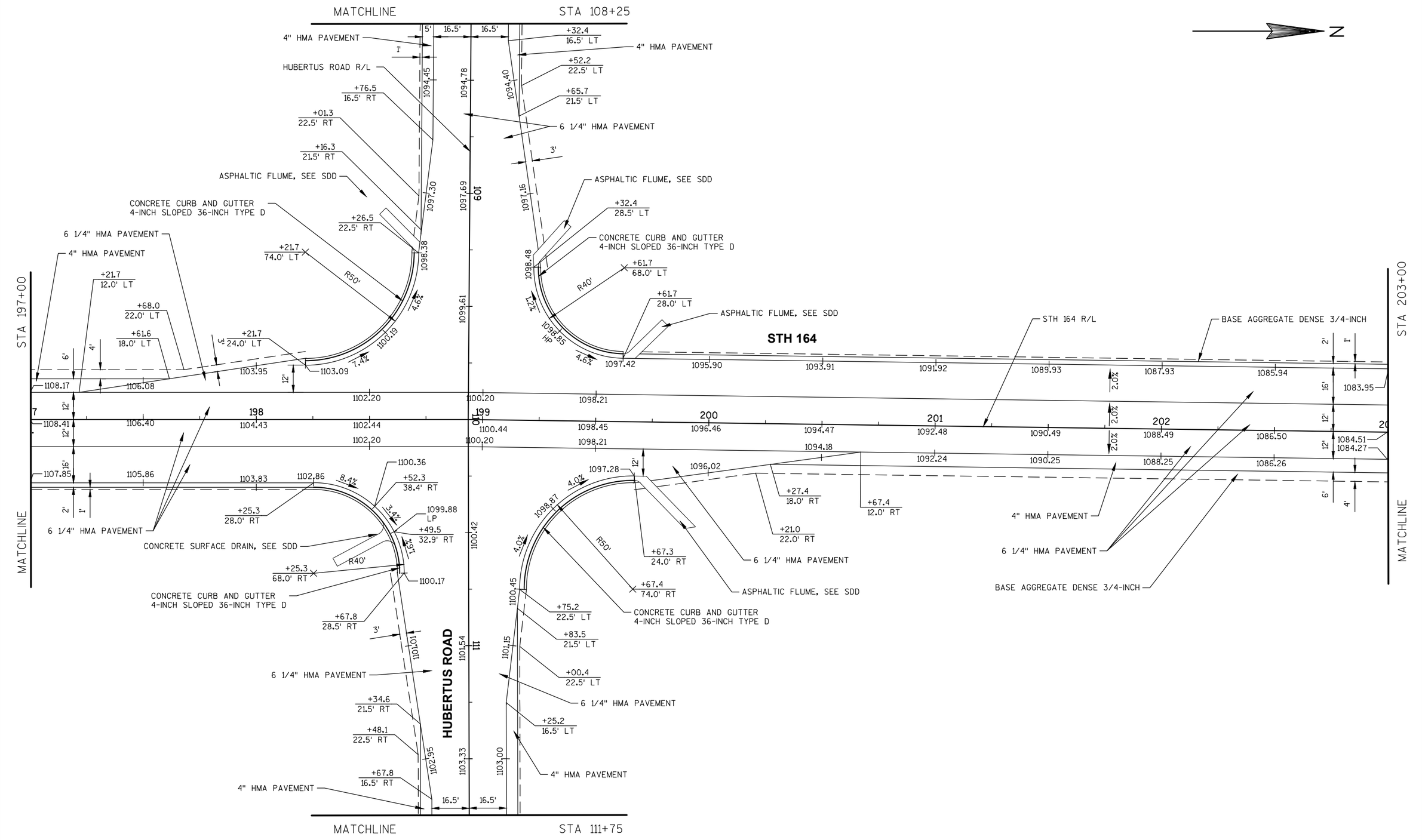
4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 70	E

FILE NAME = T:\110317\CADD\CIVIL 3D\270903001\SHEETSPLAN\021102_TD.DWG PLOT DATE = 8/13/2008 8:36 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =

2



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 71	E

2

N

RECONSTRUCTION | RECONDITIONING

STA 203+00

MATCHLINE

1083.95

+11.7 28.0' LT

+86.7 22.0' LT

+11.6 18.0' LT

+44.7 12.0' LT

+45.7 33.0' LT

+89.7 33.0' LT

+68.7 33.0' LT

+13.7 33.0' LT

+59.0 33.0' LT

+04.4 33.0' LT

+76.7 33.0' RT

+23.7 33.0' RT

+45.4 33.0' RT

+91.4 33.0' RT

+48.4 47.7' RT

R15'

R72'

12'

15'

16'

1'

2'

6'

4'

2.0%

1082.05

1080.18

1078.30

1076.30

1074.37

1072.54

1084.51

1084.27

1082.52

1080.53

1078.54

1076.54

1074.61

1072.78

1082.28

1080.29

1078.30

1076.30

1074.37

1072.54

STH 164

STH 164 R/L

204

205

206

207

208

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

6 1/4" HMA PAVEMENT

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

1" REMOVING ASPHALTIC SURFACE MILLING

STA 209+00

MATCHLINE

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 72	E

2

N

STA 209+00

STH 164

BASE AGGREGATE DENSE 3/4-INCH

3" ASPHALTIC SURFACE FOR DRIVEWAYS AND FIELD ENTRANCES

16'

+96.9 33.0' LT R15'

+50.9 33.0' LT R15'

STA 215+00

6'

4'

12'

12'

209

210

211

212

213

214

RT

+86.3 33.0' RT R15'

R15' +32.3 33.0' RT

16'

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

1" REMOVING ASPHALTIC SURFACE MILLING

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

MATCHLINE

MATCHLINE

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET 73	E

2

N

STA 215+00

STA 221+00

MATCHLINE

MATCHLINE

STH 164

BASE AGGREGATE DENSE 3/4-INCH

+03.3
18.0' LT

+21.6
22.0' LT

ASPHALTIC FLUME, SEE SDD

+95.0
20.0' LT

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES, 3-INCH

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

CONCRETE DRIVEWAY
7-INCH

+15.6

12'

1050.27

1050.37

1051.41

8'

+33.5

1052.77

+15.9

12'

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES, 3-INCH

CONCRETE DRIVEWAY
7-INCH

+36.0

+40.0
20.0' LT

1053.90

+76.7
18.0' LT

4'

6'

12'

12'

6'

4'

215

216

217

218

219

220

221

STH 164 R/L

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

1" REMOVING ASPHALTIC SURFACE MILLING

4" HMA PAVEMENT

+98.9
33.0' RT

R15'

R15'

+44.9
33.0' RT

16'

BASE AGGREGATE DENSE 3/4-INCH

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 74	E

FILE NAME = T:\110317\CADD\CIVIL3D\270903001\SHEETSPLAN\021103_TD.DWG PLOT DATE = 8/13/2008 8:36 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =

2

N

STA 221+00

STA 227+00

STH 164

BASE AGGREGATE DENSE 3/4-INCH

SAWCUT DRIVEWAY AT R/W LINE

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

+44.8 / 33.0' LT

R15'

17'

R15'

+91.8 / 33.0' LT

3" ASPHALTIC SURFACE FOR DRIVEWAYS AND FIELD ENTRANCES

+25.3 / 33.0' LT

R15'

18'

R15'

+73.8 / 33.0' LT

6 1/4" HMA PAVEMENT

4" HMA PAVEMENT

CONCRETE DRIVEWAY 7-INCH

4'

6'

12'

12'

6'

4'

221

222

223

224

225

226

12'

12'

8'

1069.52

1069.74

1071.21

1073.04

1074.58

1076.20

1077.40

1078.38

1078.17

MATCHLINE

MATCHLINE

STH 164 R/L

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

+63.0 / 18.0' RT

ASPHALTIC FLUME, SEE SDD

+99.7 / 20.0' RT

CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE D

1" REMOVING ASPHALTIC SURFACE MILLING

4" HMA PAVEMENT

+54.8

+33.7 / 12.0' RT

17'

R10'

+78.2

+85.2 / 40.0' RT

+00.2 / 20.0' RT

R5'

+80.2 / 72.4' RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 75	E

2

N

STA 227+00

STA 233+00

MATCHLINE

MATCHLINE

STH 164

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

BASE AGGREGATE DENSE 3/4-INCH

1" REMOVING ASPHALTIC SURFACE MILLING

4" HMA PAVEMENT

6 1/4" HMA PAVEMENT

STH 164 R/L

CONCRETE DRIVEWAY 7-INCH

CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE D

CONCRETE CURB AND GUTTER 30-INCH TYPE D

TRANSITION OVER 10'

TRANSITION CURB AND GUTTER OVER 10' (PAID FOR AS CONC C&G 4-INCH SLOPED 36-INCH TYPE D)

3" ASPHALTIC SURFACE FOR DRIVEWAYS AND FIELD ENTRANCES

6" BASE AGGREGATE DENSE 3/4-INCH

SALVAGED BRICK PAVERS, SEE CONSTRUCTION DETAIL

GOLDEN DRIVE R/L

GOLDEN DRIVE

MATCHLINE STA 123+25

MATCHLINE STA 123+25

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET 76	E

2

N

LOCHVIEW ROAD R/L

+52.0
12.0' RT

12'

12'

+52.0

+52.0
12.0' LT

3'

3'

6 1/4" HMA PAVEMENT

ASPHALTIC FLUME, SEE SDD

+12.0
15.0' LT

ASPHALTIC FLUME,
SEE SDD

+30.0
15.0' RT

LOCHVIEW ROAD

STA 233+00

+23.4
70.0' LT

R40'

1075.79

9.1%

1078.63

3.6%

1079.76

+23.4
30.0' LT

18'

140

1074.39

8.6%

1077.91

4.0%

1.4%

+06.8
50.1' LT

R60'

+53.4
88.0' LT

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

+32.0
31.9' LT

+53.4
28.0' LT

1079.18
HP

1078.87

2'

1'

16'

BASE AGGREGATE DENSE 3/4-INCH

6 1/4" HMA PAVEMENT

RECONDITIONING | RECONSTRUCTION

17'

17'

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES, 3-INCH

14'

+51.6
43.0' LT

R15'

+95.7
43.0' LT

R15'

1078.47

1078.72

+53.5
30.0' LT

+82.7
19.6' LT

+67.3
21.9' LT

1079.04

1079.37

1079.70

STA 239+00

2.0%

2.0%

2.0%

12'

8'

12'

16'

STH 164

234

235

236

237

237'NA'

238

238'NA'

239

1079.03

1079.28

1079.53

1079.78

1080.03

1079.50

1079.34

1078.93

1078.73

1078.69

1078.45

1078.65

1078.63

1078.61

1078.63

1078.88

1079.13

1079.38

1079.43

1079.59

1079.47

MATCHLINE

MATCHLINE

+95.3
24.0' RT

+13.0

+37.0

18'

CONCRETE DRIVEWAY 7-INCH

6" BASE AGGREGATE DENSE 3/4-INCH

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

+78.4
28.0' RT

4" HMA PAVEMENT

1" REMOVING ASPHALTIC SURFAC MILLING

4" HMA PAVEMENT

R/L STH 164

+96.0
20.0' RT

+05.9

21'

+32.4

CONCRETE DRIVEWAY 7-INCH

SAWCUT DRIVEWAY AT
R/W LINE

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES, 3-INCH

+14.4
12.0' RT

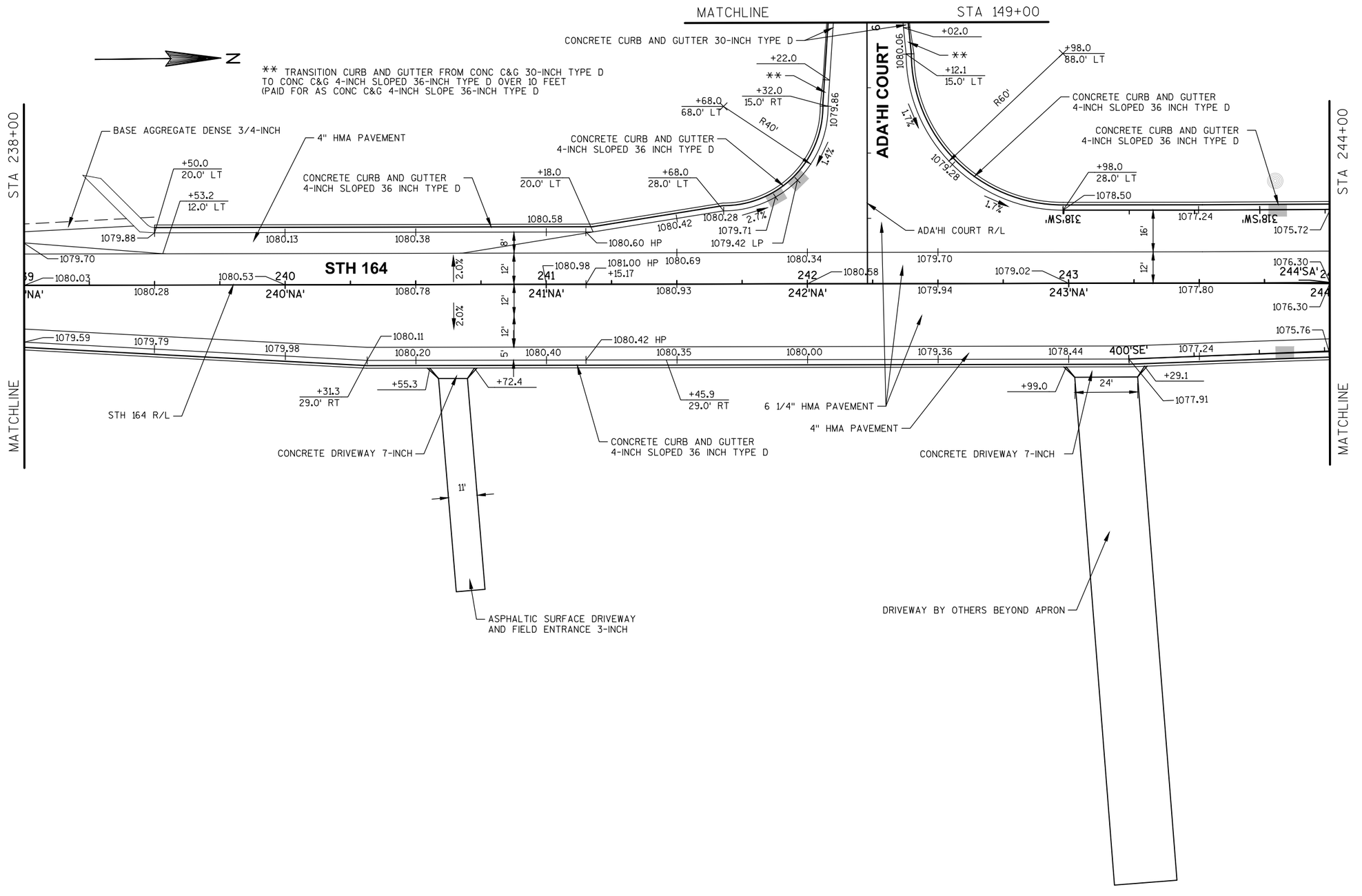
+03.4
12.0' RT

4" HMA PAVEMENT

6 1/4" HMA PAVEMENT

+68.8
20.0' RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 77	E

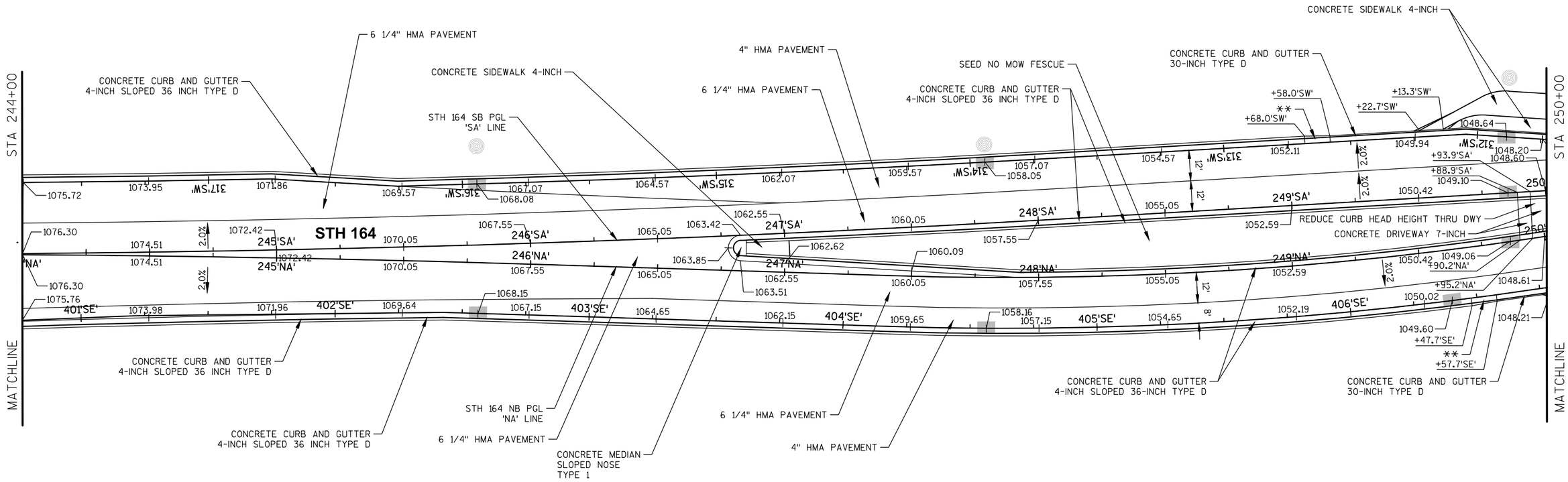


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 78 E

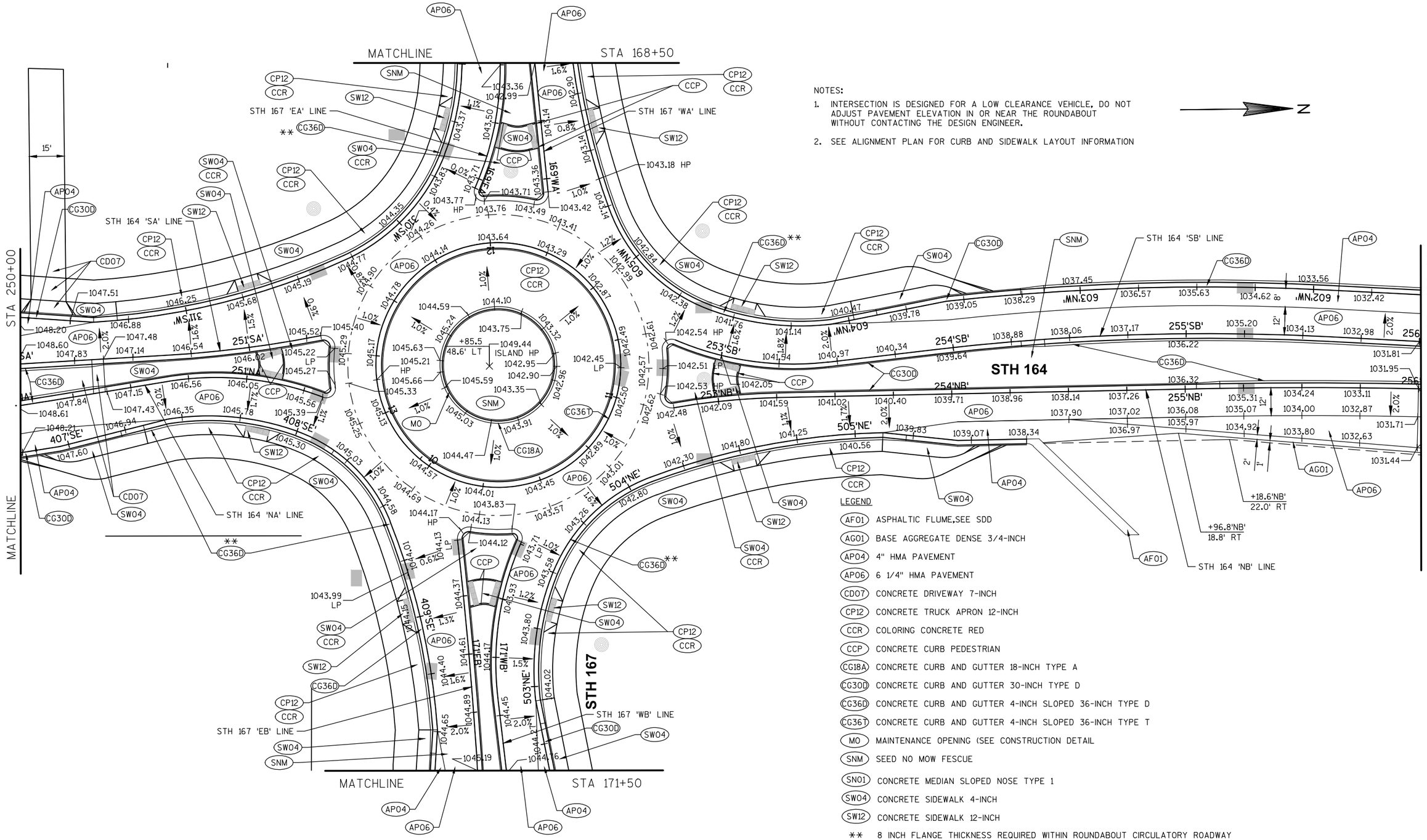
NOTE: SEE ALIGNMENT PLAN FOR CURB AND GUTTER LAYOUT INFORMATION

N

** TRANSITION CURB AND GUTTER FROM CONC C&G 30-INCH TYPE D
TO CONC C&G 4-INCH SLOPED 36-INCH TYPE D OVER 10 FEET
(PAID FOR AS CONC C&G 4-INCH SLOPE 36-INCH TYPE D



2



NOTES:

1. INTERSECTION IS DESIGNED FOR A LOW CLEARANCE VEHICLE, DO NOT ADJUST PAVEMENT ELEVATION IN OR NEAR THE ROUNDABOUT WITHOUT CONTACTING THE DESIGN ENGINEER.
2. SEE ALIGNMENT PLAN FOR CURB AND SIDEWALK LAYOUT INFORMATION

LEGEND

AF01	ASPHALTIC FLUME,SEE SDD
AG01	BASE AGGREGATE DENSE 3/4-INCH
AP04	4" HMA PAVEMENT
AP06	6 1/4" HMA PAVEMENT
CD07	CONCRETE DRIVEWAY 7-INCH
CP12	CONCRETE TRUCK APRON 12-INCH
CCR	COLORING CONCRETE RED
CCP	CONCRETE CURB PEDESTRIAN
CG18A	CONCRETE CURB AND GUTTER 18-INCH TYPE A
CG30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
CG36D	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
CG36T	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE T
MO	MAINTENANCE OPENING (SEE CONSTRUCTION DETAIL
SNM	SEED NO MOW FESCUE
SN01	CONCRETE MEDIAN SLOPED NOSE TYPE 1
SW04	CONCRETE SIDEWALK 4-INCH
SW12	CONCRETE SIDEWALK 12-INCH
**	8 INCH FLANGE THICKNESS REQUIRED WITHIN ROUNDABOUT CIRCULATORY ROADWAY

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 80	E

2

MATCHLINE

STA 168+50

** TRANSITION CURB AND GUTTER FROM CONC C&G 30-INCH TYPE D TO CONC C&G 4-INCH SLOPED 36-INCH TYPE D OVER 10 FEET (PAID FOR AS CONC C&G 4-INCH SLOPE 36-INCH TYPE D)

*** TRANSITION CURB AND GUTTER FROM CONC C&G 30-INCH TYPE D TO CONC C&G 4-INCH SLOPED 36-INCH TYPE D OVER 5 FEET (PAID FOR AS CONC C&G 4-INCH SLOPE 36-INCH TYPE D)

N

STA 250+00

STA 256+00

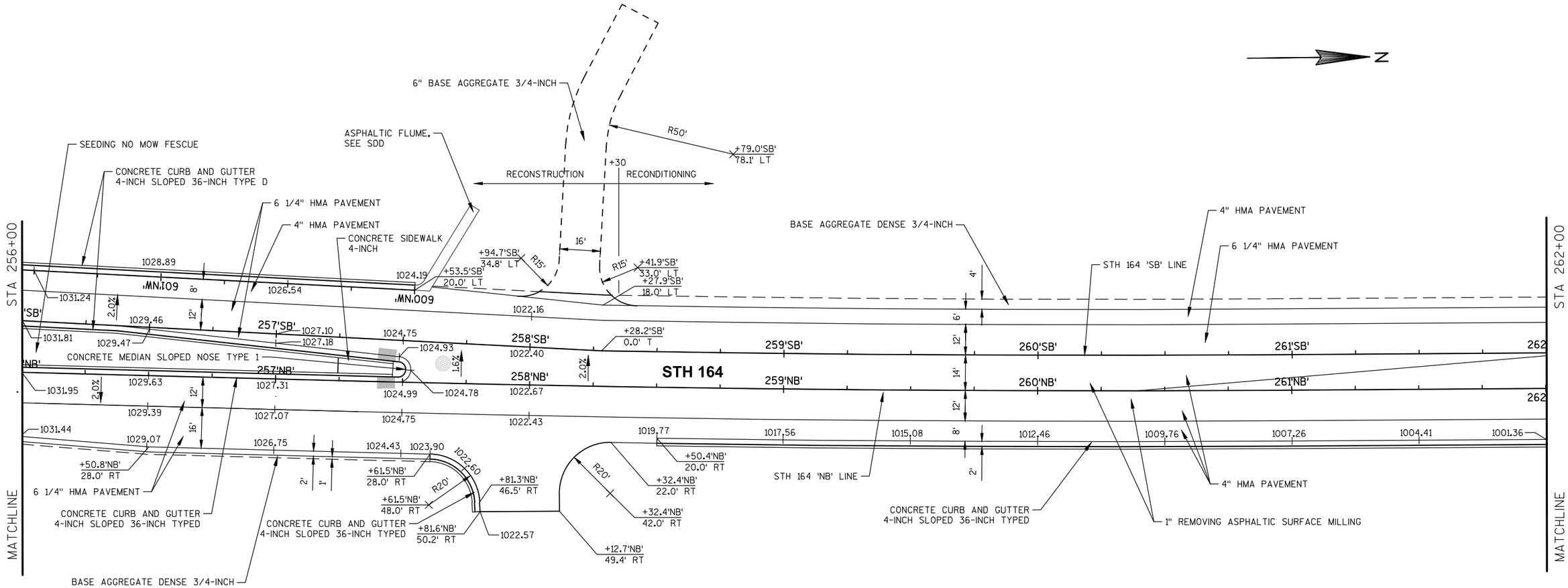
STH 164

STH 167

MATCHLINE

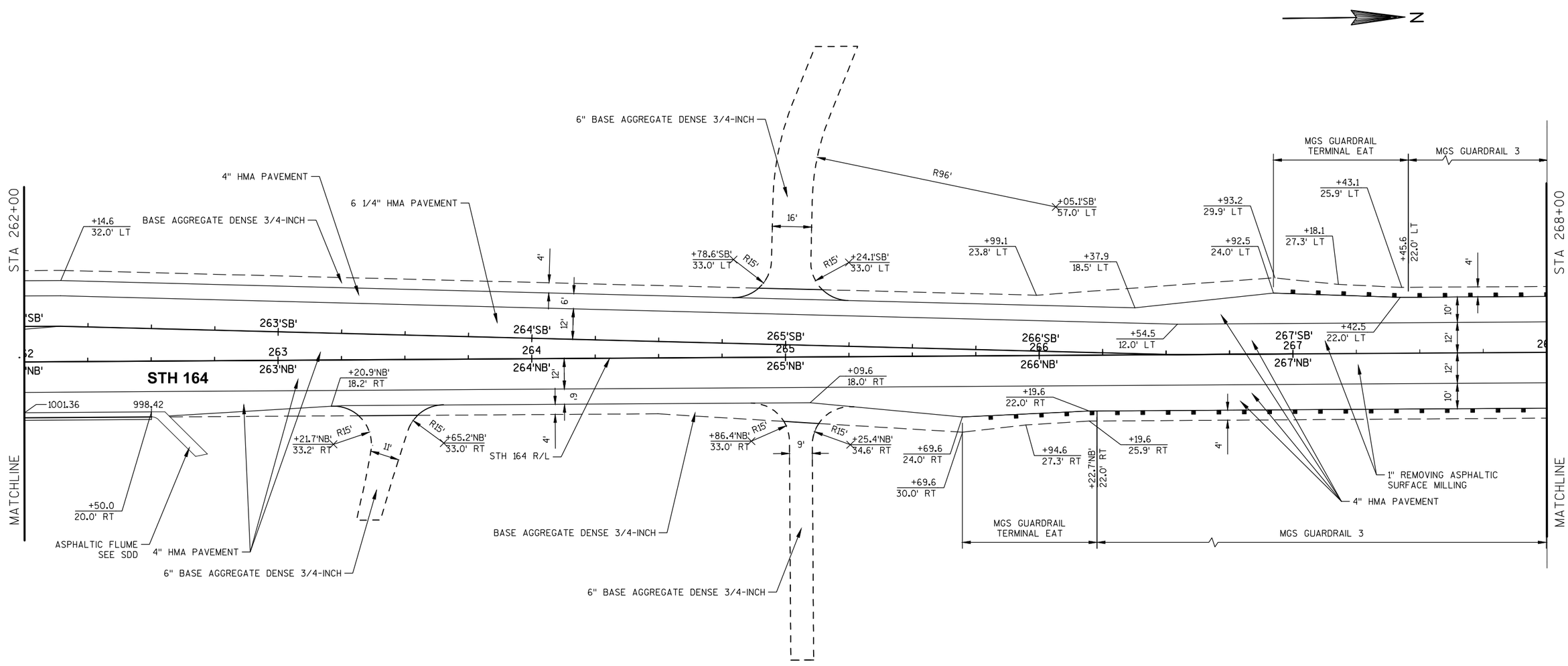
STA 171+50

NOTE: SEE ALIGNMENT PLAN FOR CURB AND GUTTER LAYOUT INFORMATION



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 82	E

2



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 83	E

2

N

MGS GUARDRAIL 3

MGS GUARDRAIL TERMINAL EAT

STA 268+00

STA 274+00

+11.2 30.0' LT

+11.2 24.0' LT

+58.1 22.0' LT

+86.2 27.3' LT

+61.2 25.9' LT

+61.2 22.0' LT

4"

10'

12'

12'

10'

4'

+38.3 22.0' RT

+48.3 18.0' RT

+88.3 24.0' RT

+88.3 30.0' RT

+63.3 27.3' RT

+38.3 25.9' RT

+35.2 22.0' RT

3'

MATCHLINE

MGS GUARDRAIL 3

MGS GUARDRAIL TERMINAL EAT

BASE AGGREGATE DENSE 3/4-INCH

4" HMA PAVEMENT

+31.2 22.0' LT

+71.2 18.0' LT

STH 164

268 269 270 271 272 273

+08.3 22.0' RT

BASE AGGREGATE DENSE 3/4-INCH

STH 164 R/L

1" REMOVING ASPHALTIC SURFACE MILLING

4"

9'

12'

12'

9'

4"

6" BASE AGGREGATE DENSE 3/4-INCH

+56.6 33.0' LT

R15'

13'

R15'

+99.1 33.0' LT

+61.3 33.0' RT

R15'

R15'

+02.5 33.0' RT

11'

6" BASE AGGREGATE DENSE 3/4-INCH

MATCHLINE

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 84	E

2

N

STA 274+00

STA 280+00

MATCHLINE

MATCHLINE

1" REMOVING ASPHALTIC SURFACE MILLING

4" HMA PAVEMENT

STH 164 R/L

6" BASE AGGREGATE DENSE 3/4-INCH

BASE AGGREGATE DENSE 3/4-INCH

4" HMA PAVEMENT

STH 164

4

275

276

277

278

279

28

4"

6"

12"

12"

6"

4"

12'

10'

6"

2'

+82.4
33.0' LT

R15'

12'

R15'

+24.3
33.0' LT

+08.6
12.0' RT

+42.1
21.9' RT

+26.4
18.0' RT

+00.0
22.0' RT

+78.0
37.0' RT

R15'

11'

R15'

+19.2
37.0' RT

+61.3
37.0' RT

R15'

21'

R15'

R15'

+10.4
37.0' RT

+12.2
37.0' RT

11'

R15'

+51.3
36.8' RT

+75.8
21.7' RT

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

6 1/4" HMA PAVEMENT

4" HMA PAVEMENT

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

6" BASE AGGREGATE DENSE 3/4-INCH

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 85	E

2

GREYSTONE DRIVE R/L

GREYSTONE DRIVE

+52.0

12' 12'

3' 3'

6 1/4" HMA PAVEMENT

ASPHALTIC FLUME, SEE SDD

+36.0
15.0' RT

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

ASPHALTIC FLUME, SEE SDD

+20.6
64.0' LT

R40'

1010.20

1.4%

1010.66
HP

1.8%

1010.09

+20.6
24.0' LT

BASE AGGREGATE DENSE 3/4-INCH

+20.6
12.0' LT

+67.0
22.0' LT

+60.6
18.0' LT

4' 3' 12' 6'

STA 280+00

0 281 282 283 284 285 28

190

STH 164

MATCHLINE

+25.4
30.0' RT

BASE AGGREGATE DENSE 3/4-INCH

4" HMA PAVEMENT

1" REMOVING ASPHALTIC
SURFACE MILLING

2'

+75.7
30.0' RT

+82.2
44.8' RT

R15'

14'

R15'

+26.2
43.1' RT

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES, 3-INCH

6 1/4" HMA PAVEMENT

16' 12' 12' 6'

189

1009.99

+50.6
88.0' LT

R60'

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D

1.5%

1010.71

2.7%

1011.96

+50.6
28.0' LT

2' 1'

BASE AGGREGATE DENSE 3/4-INCH

STH 164 R/L

+50.7
30.0' LT

+63.2
22.0' LT

+00.7
18.0' LT

STA 286+00

+45.8
38.7' RT

R15'

13'

R15'

+88.9
37.1' RT

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES, 3-INCH

+46.6
22.0' RT

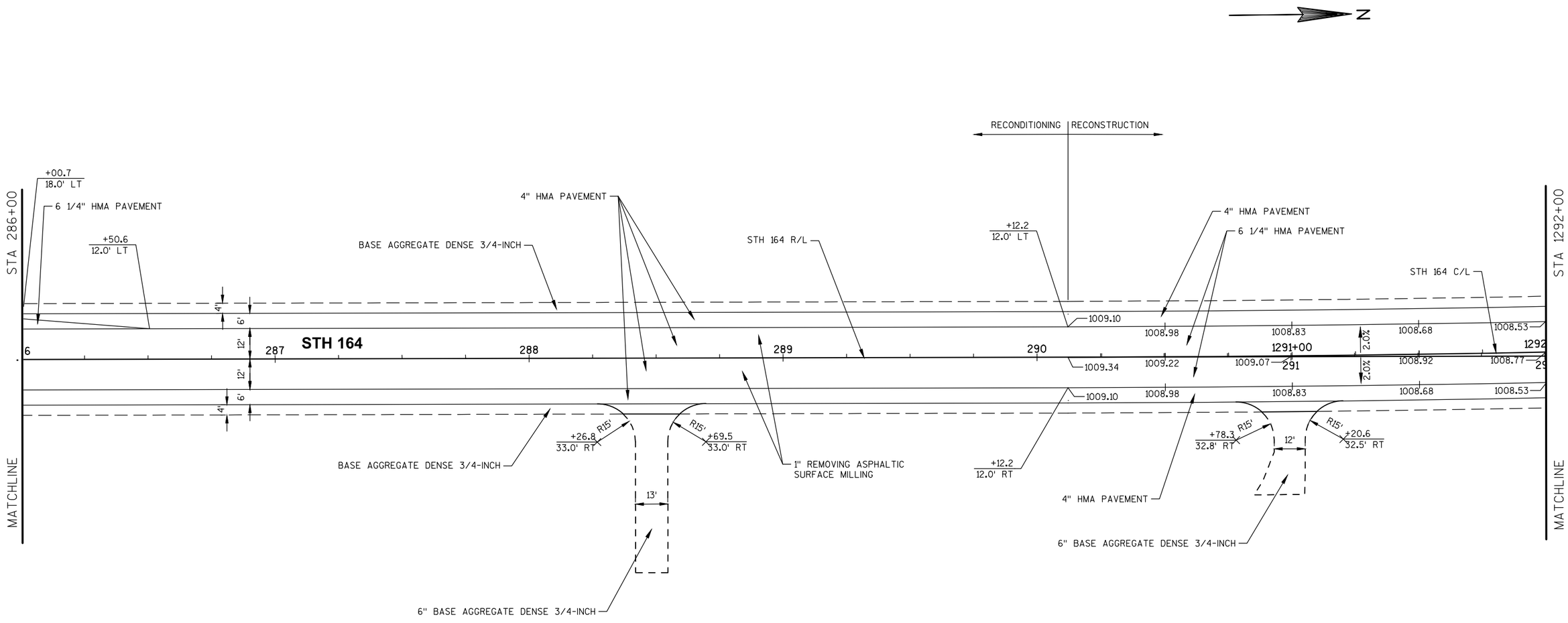
+00.6
12.0' RT

MATCHLINE

N

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 86	E

NOTE: ALL STATIONS AND OFFSETS TAKEN FROM STH 164 R/L THIS SHEET



PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET 87	E

2

ALL STATIONS/OFFSETS TAKEN FROM STH 164 C/L THIS SHEET

N

STA 1292+00

STA 1298+00

MATCHLINE

MATCHLINE

STH 164

STH 164 C/L

C/L STH 164

STH 164 R/L

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

6 1/4" HMA PAVEMENT

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

1008.53 1008.38 1008.23 1008.08 1007.93 1007.77 1007.62 1007.47 1007.32 1007.17 1007.03 1006.99 1007.11

1008.77 1008.62 1008.47 1008.32 1008.17 1008.01 1007.86 1007.71 1007.56 1007.41 1007.27 1007.23 1007.35

+00 1293+00 1294+00 1295+00 1296+00 1297+00 1298

2 293 294 295 296 297

2.0%

12' 6' 4' 16' 18' 14'

+15.6 33.0' RT R15'

+57.8 33.0' RT R15'

+83.2 33.0' RT R15'

+27.3 33.0' RT R15'

+73.3 33.0' RT R15'

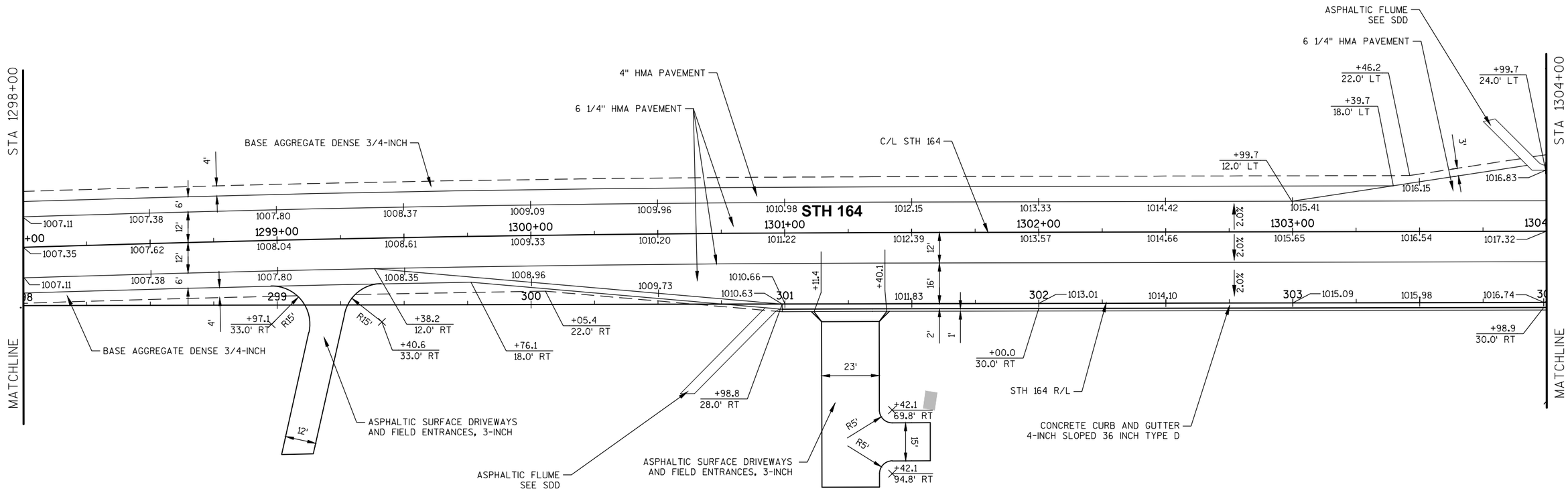
+22.6 33.0' RT R15'

+97.3 33.0' LT R15'

+42.8 33.0' LT R15'

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET 88	E

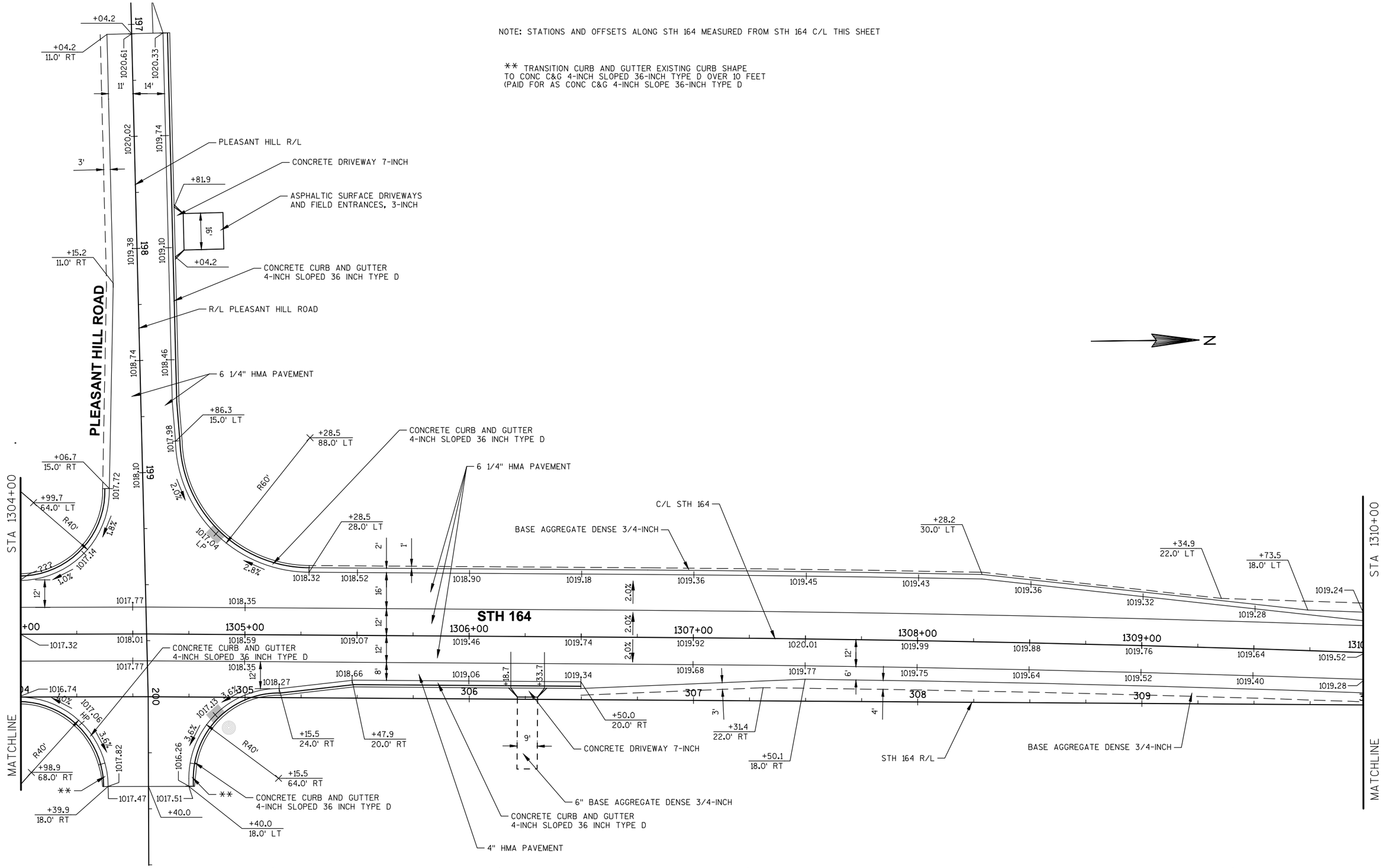
NOTE: ALL STATIONS AND OFFSETS TAKEN FROM STH 164 C/L THIS SHEET



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 89	E

NOTE: STATIONS AND OFFSETS ALONG STH 164 MEASURED FROM STH 164 C/L THIS SHEET

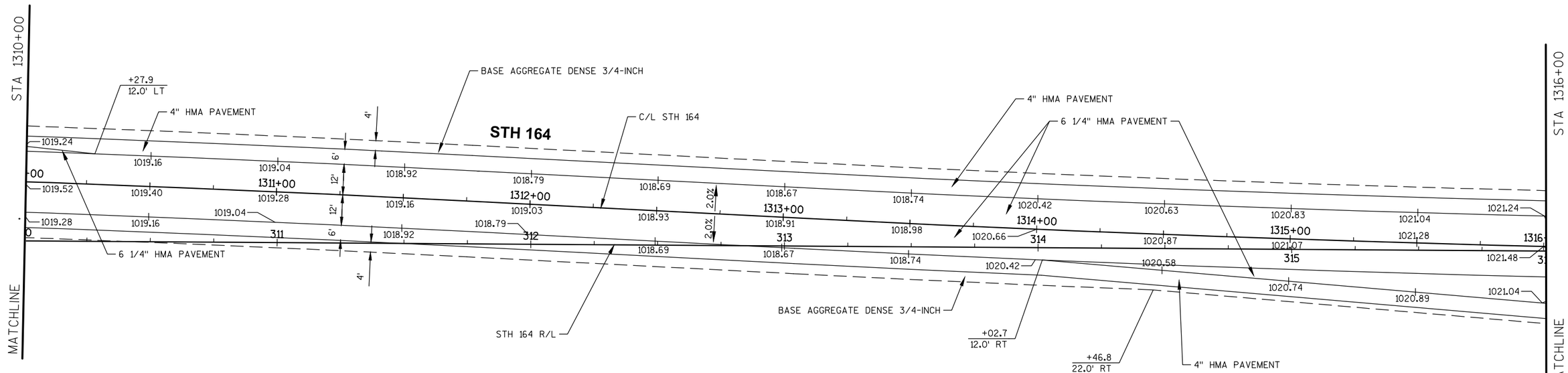
** TRANSITION CURB AND GUTTER EXISTING CURB SHAPE
TO CONC C&G 4-INCH SLOPED 36-INCH TYPE D OVER 10 FEET
(PAID FOR AS CONC C&G 4-INCH SLOPE 36-INCH TYPE D



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 90	E

FILE NAME = T:\1102717\CADD\CIVIL3D\270903001\SHEETSPLAN\031103_TD.DWG PLOT DATE = 8/3/2008 8:36 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =

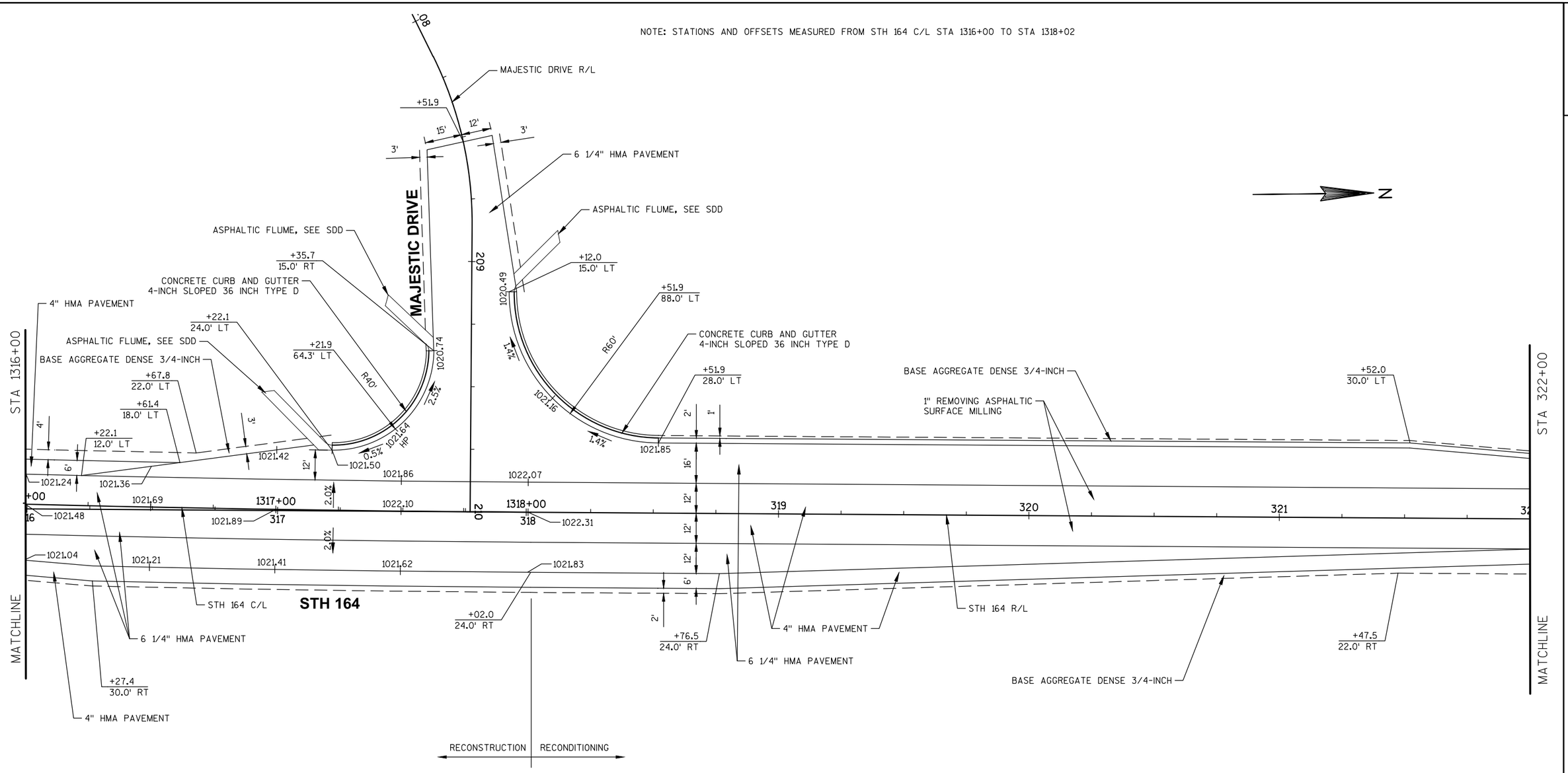
NOTE: STATIONS AND OFFSETS ALONG STH 164 MEASURED FROM STH 164 C/L THIS SHEET



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 91	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\021103_TD.DWG PLOT DATE = 8/3/2008 8:36 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =

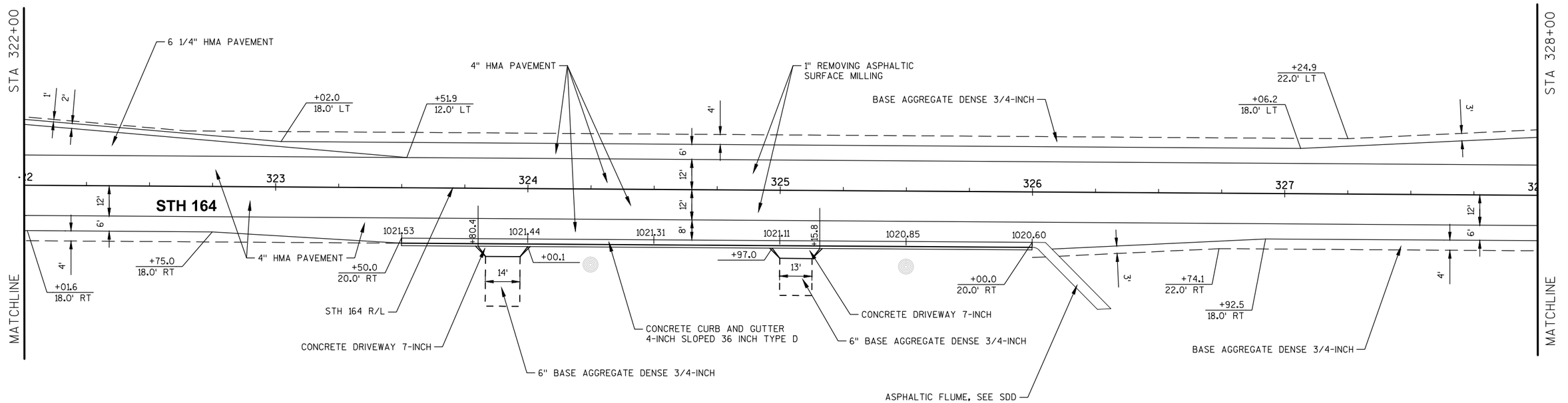
NOTE: STATIONS AND OFFSETS MEASURED FROM STH 164 C/L STA 1316+00 TO STA 1318+02



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 92	E

FILE NAME = T:\110317\CADD\CIVIL 3D\270903001\SHEETSPLAN\021103_TD.DWG PLOT DATE = 8/3/2008 8:36 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =

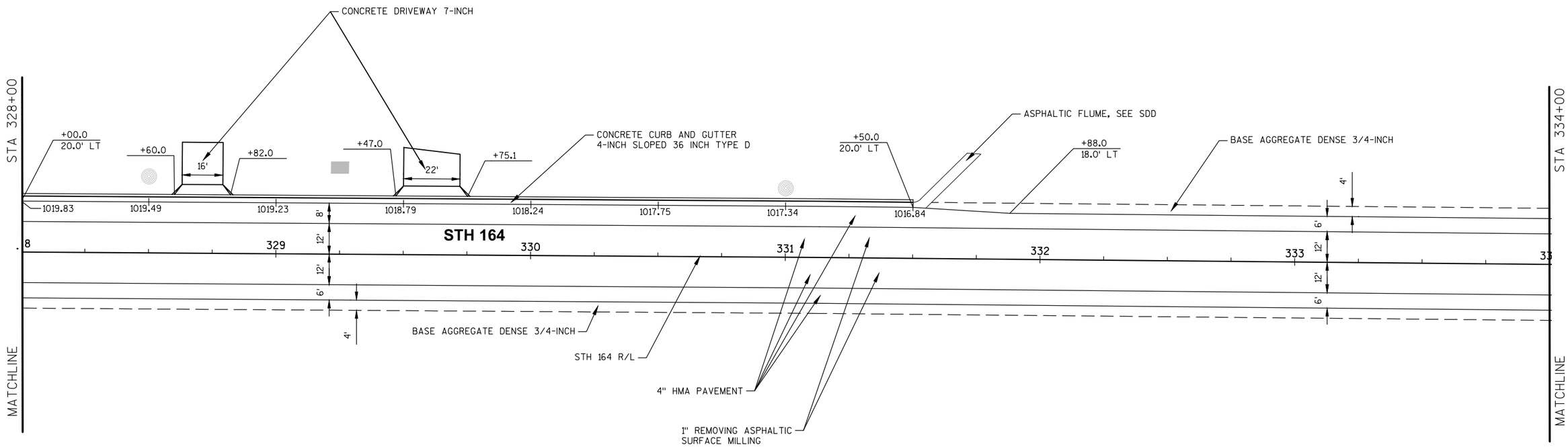
2



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 93	E

2

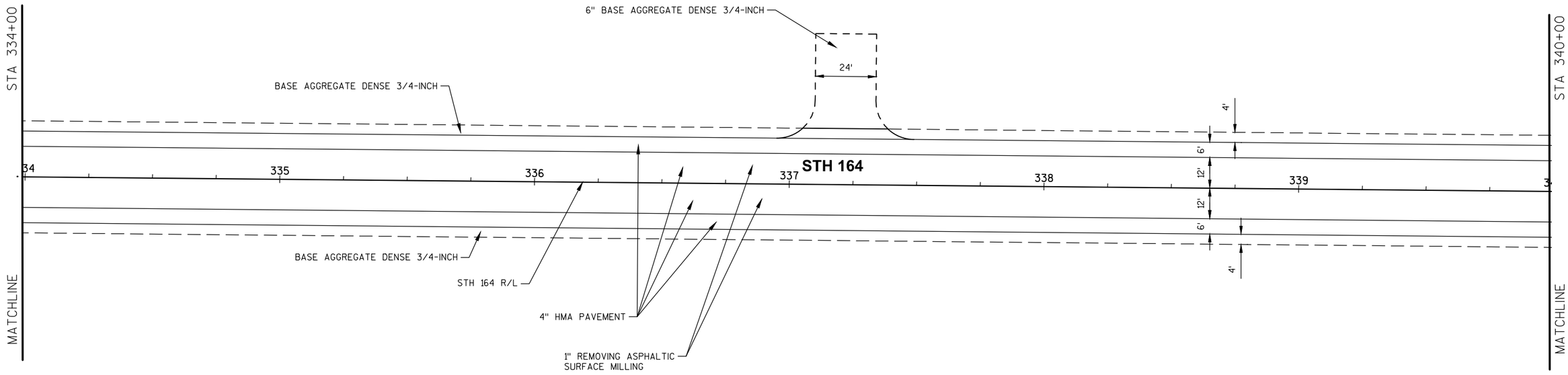
N



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 94	E

2

N



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 95	E

2

N

STA 340+00

STA 346+00

BASE AGGREGATE DENSE 3/4-INCH

STH 164

340

341

342

343

344

345

346

4'

6'

12'

12'

6'

4'

BASE AGGREGATE DENSE 3/4-INCH

STH 164 R/L

4" HMA PAVEMENT

1" REMOVING ASPHALTIC SURFACE MILLING

+12.0 R15' 33.0' RT

R15' +58.9 33.0' RT

+40.2 R15' 33.0' RT

R15' +79.4 33.0' RT

6" BASE AGGREGATE DENSE 3/4-INCH

14'

6" BASE AGGREGATE DENSE 3/4-INCH

9'

MATCHLINE

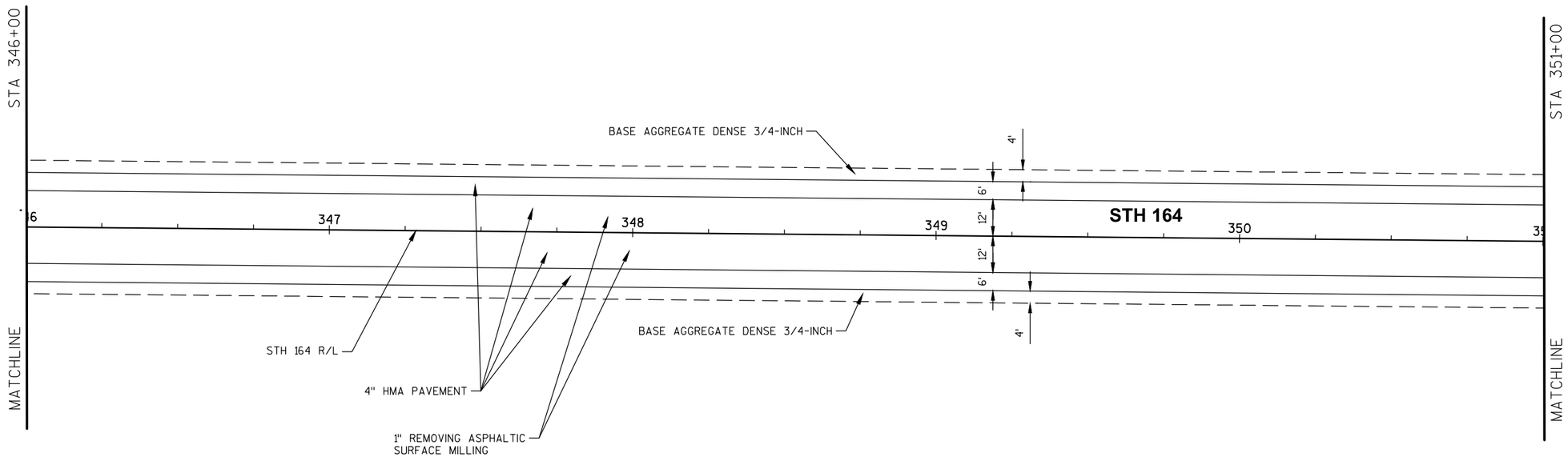
MATCHLINE

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET	E

FILE NAME = T:\1102717\CADD\CIVIL3D\2709030\SHEETSPLAN\021103_TD.DWG PLOT DATE = 8/3/2008 8:36 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =

2

N



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 97	E

2

N

STA 351+00

MATCHLINE

STH 164

351

352

353

354

355

356

STA 357+00

MATCHLINE

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

1" REMOVING ASPHALTIC SURFACE MILLING

4'

6'

12'

12'

6'

4'

4'

6'

12'

12'

16'

1'

2'

STH 164 R/L

BASE AGGREGATE DENSE 3/4-INCH

4" HMA PAVEMENT

+33.1
12.0' RT

+79.1
18.0' RT

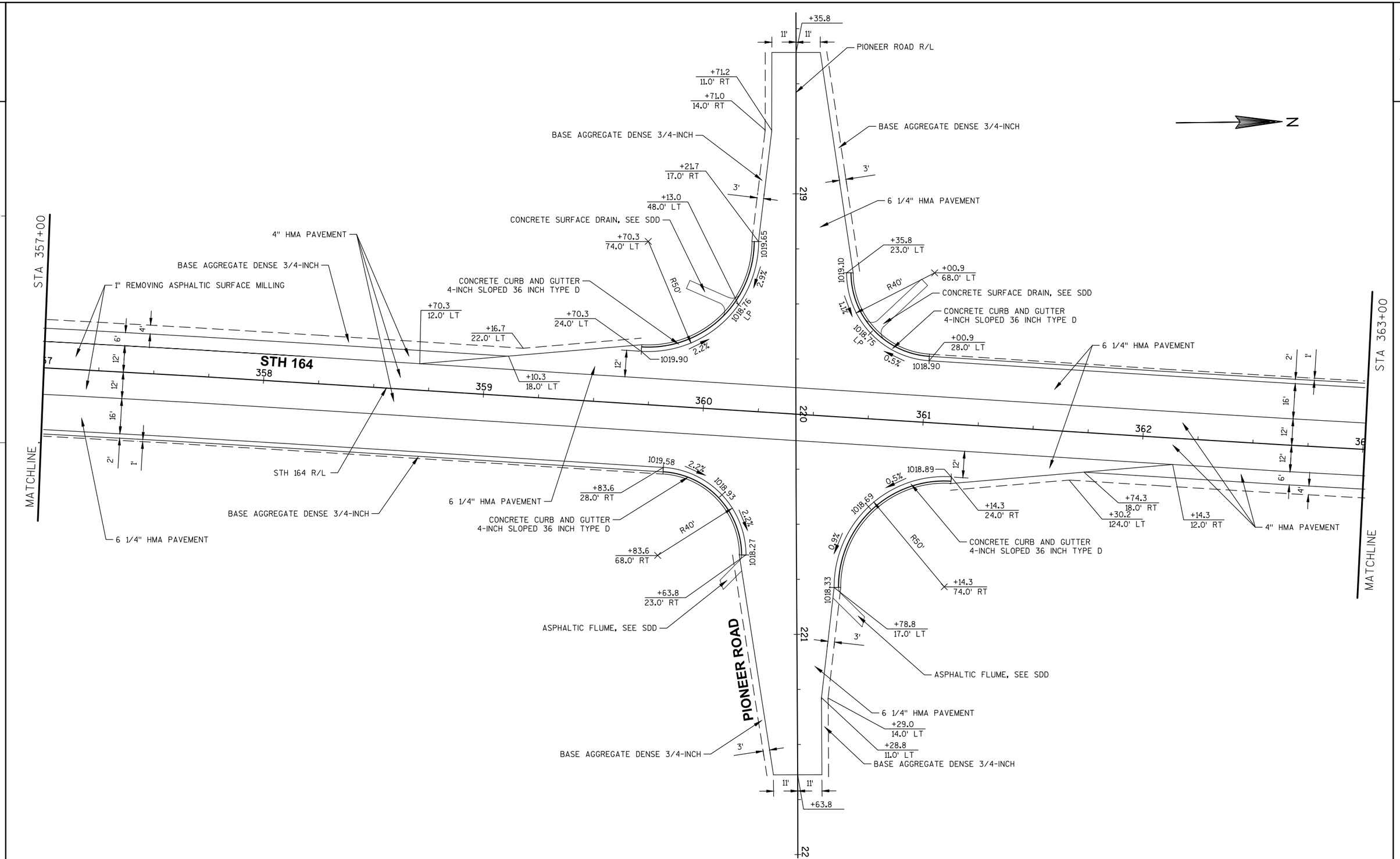
+15.1
22.0' RT

+33.0
30.0' RT

6 1/4" HMA PAVEMENT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 98	E

2



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 99	E

2

N

STA 363+00

MATCHLINE

6 1/4" HMA PAVEMENT

2'

1'

16'

12'

12'

6'

4'

+51.6
30.0' LT

+69.7
22.0' LT

+05.8
18.0' LT

STH 164 R/L

+51.9
12.0' LT

BASE AGGREGATE DENSE 3/4-INCH

4" HMA PAVEMENT

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES, 3-INCH

+58.7
33.0' LT

R15'

R15'

14'

+05.6
33.0' LT

363

364

365

366

STH 164

367

368

4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

1" REMOVING ASPHALTIC SURFACE MILLING

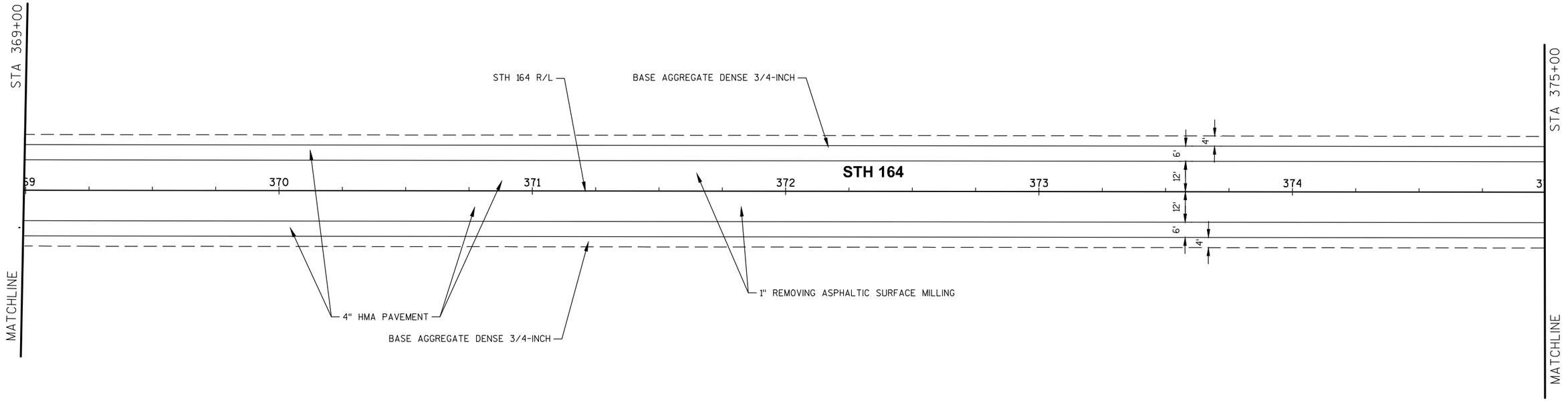
STA 369+00

MATCHLINE

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 100	E

2

N



PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET 101	E

2

N

6" BASE AGGREGATE DENSE 3/4-INCH

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

28'

+60.4 33.0' LT

R15'

R15'

+27.4 33.0' LT

STH 164 R/L

15'

+12.5 33.0' LT

R15'

R15'

+57.4 33.0' LT

BASE AGGREGATE DENSE 3/4-INCH

4" HMA PAVEMENT

STA 375+00

STA 381+00

STH 164

375

376

377

378

379

380

381

4'

6'

12'

12'

6'

4'

+78.1 33.0' RT

R15'

R15'

+30.1 33.0' RT

22'

6" BASE AGGREGATE DENSE 3/4-INCH

1" REMOVING ASPHALTIC SURFACE MILLING

BASE AGGREGATE DENSE 3/4-INCH

MATCHLINE

MATCHLINE

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET 102	E

2

N

STA 381+00

STH 164 R/L

BASE AGGREGATE DENSE 3/4-INCH

4" HMA PAVEMENT

STA 387+00

381 382 383 384 **STH 164** 385 386

4'
6'
12'
12'
6'
4'

+36.4 R15' / 33.0' RT
R15' +76.8 / 33.0' RT
10'
+97.5 R15' / 33.0' RT
20'
R15' +47.5 / 33.0' RT
+88.2 R15' / 33.0' RT
R15' +28.7 / 33.0' RT
10'

1" REMOVING ASPHALTIC SURFACE MILLING

BASE AGGREGATE DENSE 3/4-INCH

6" BASE AGGREGATE DENSE 3/4-INCH

6" BASE AGGREGATE DENSE 3/4-INCH

6" BASE AGGREGATE DENSE 3/4-INCH

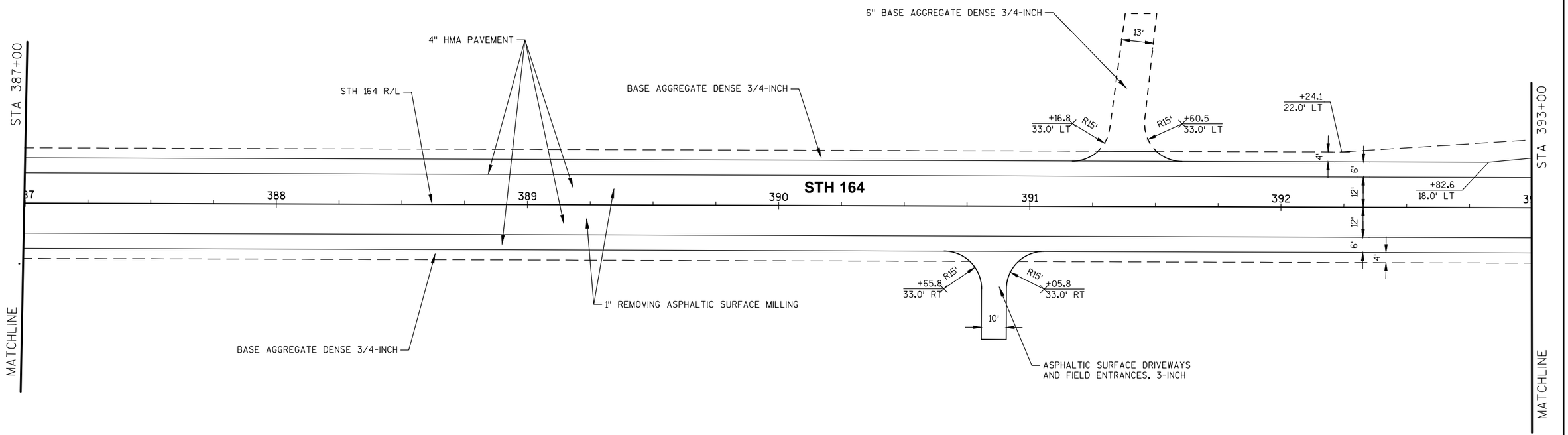
MATCHLINE

MATCHLINE

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 103	E

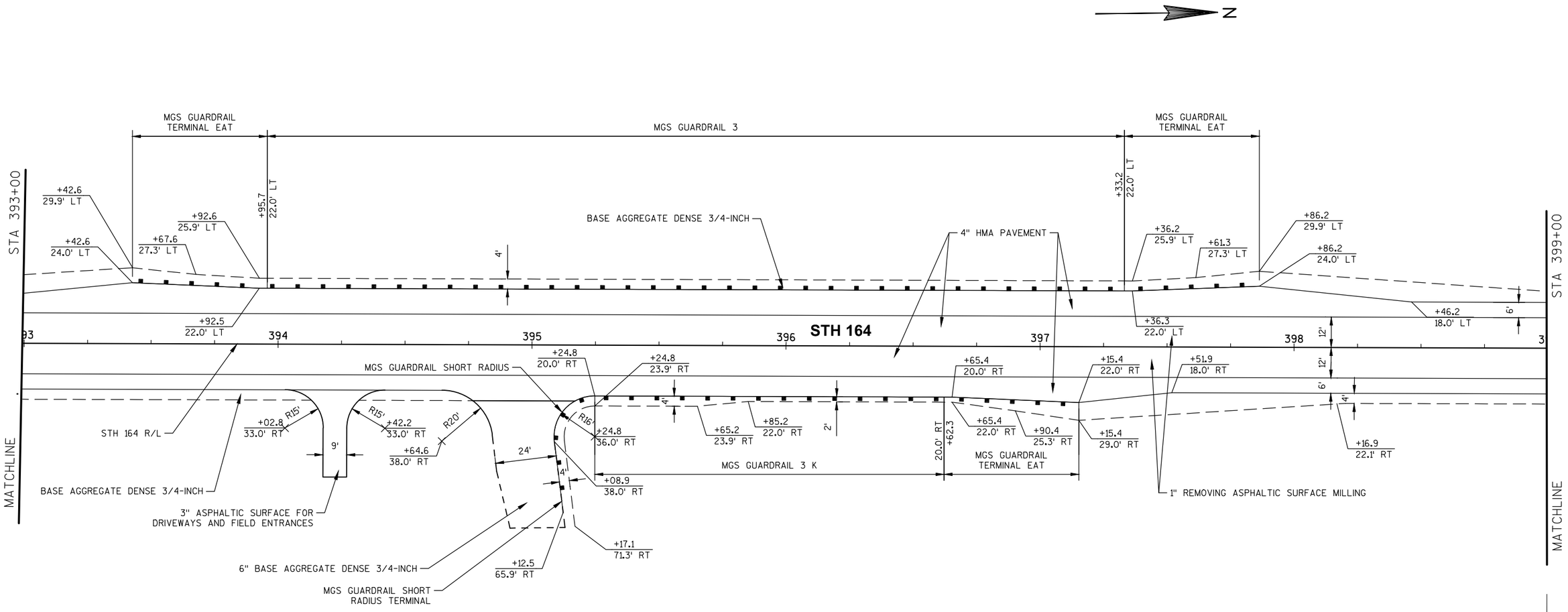
2

N



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 104	E

2



PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET 105	E

2

N

STA 399+00

+04.6
22.0' LT

4"

6"

12'

12'

6"

4"

MATCHLINE

BASE AGGREGATE DENSE 3/4-INCH

4" HMA PAVEMENT

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES, 3-INCH

17'

+49.6
33.0' LT

R15'

R15'

+96.2
33.0' LT

STH 164

399

400

401

402

403

404

405

4" HMA PAVEMENT

1" REMOVING ASPHALTIC SURFACE MILLING

STA 405+00

+17.3
0.0' T

+17.3
18.0' RT

BASE AGGREGATE DENSE 3/4-INCH

STH 164 R/L

+58.2
38.7' RT

R15'

R15'

+02.3
39.4' RT

6 1/4" HMA PAVEMENT

13'

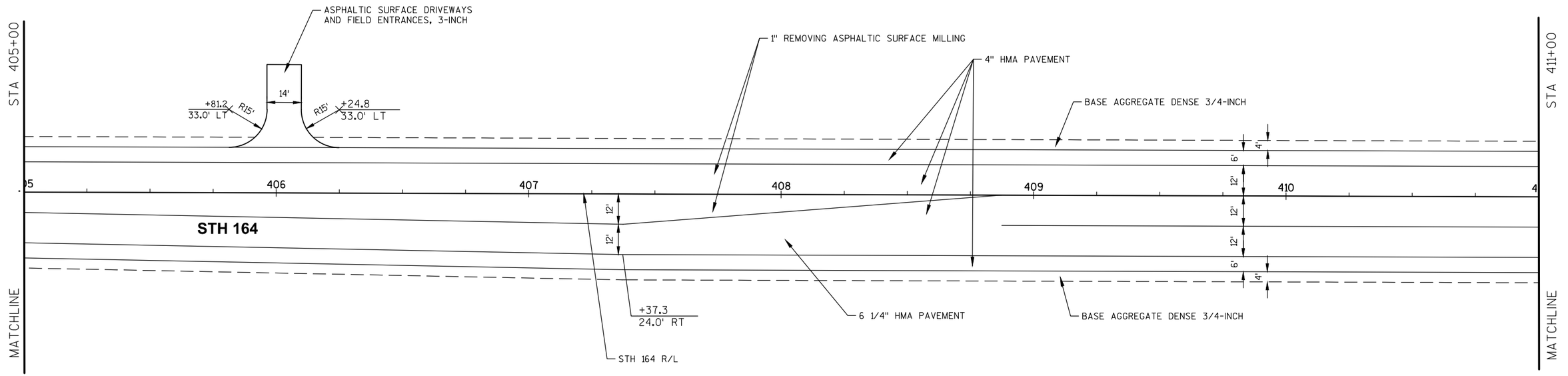
ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES, 3-INCH

MATCHLINE

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET 106	E

2

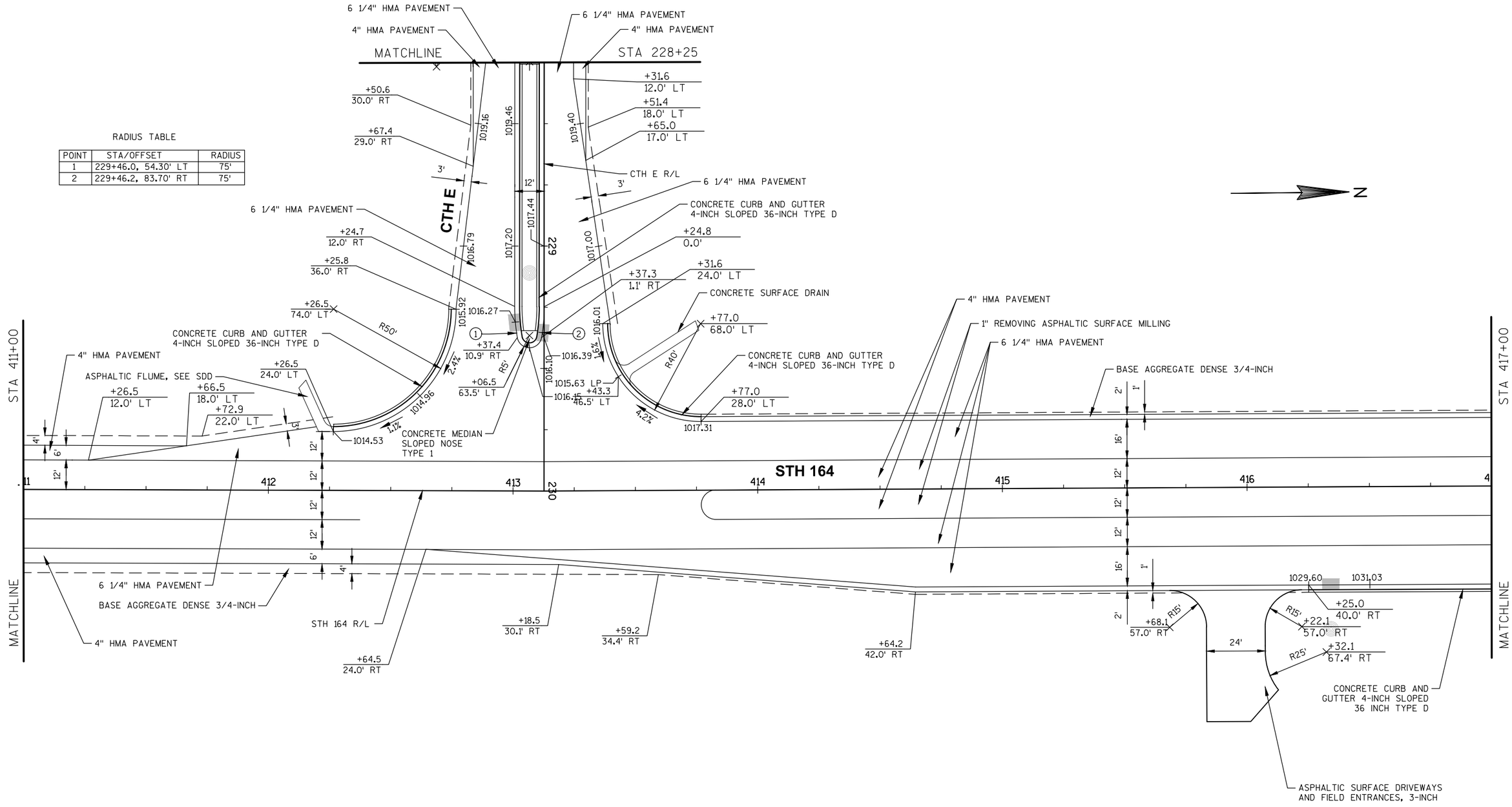
N



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 107	E

RADIUS TABLE

POINT	STA/OFFSET	RADIUS
1	229+46.0, 54.30' LT	75'
2	229+46.2, 83.70' RT	75'



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 108	E

2

N

STA 417+00

STA 423+00

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

BASE AGGREGATE DENSE 3/4-INCH

6 1/4" HMA PAVEMENT

4" HMA PAVEMENT

+06.3 45.0' LT

+56.3 45.0' LT

+83.6 30.0' LT

+46.4 22.0' LT

+00.6 18.0' LT

+72.9 12.0' LT

20'

R15'

2'

1'

16'

12'

12'

12'

16'

4'

6'

417

418

419

420

421

422

240

241

STH 164

CLUB DRIVE

MATCHLINE

MATCHLINE

1036.79

1037.60

6.8%

1040.40

+64.6 40.0' RT

CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE D

R60'

5.5%

1042.68

+64.3 100.0' RT

CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE D

1043.09

+85.3 14.6' RT

1044.26

+44.0 14.0' RT

14'

12'

+44.0

CLUB DRIVE R/L

1044.53

12'

6.3%

1042.46 LP

+91.7 36.0' RT

3'

CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE D

0.5%

CONCRETE SURFACE DRAIN

R40'

+91.7 76.0' RT

1042.61

+83.0 15.1' LT

6 1/4" HMA PAVEMENT

3'

+51.7 29.0' RT

R15'

+45.3 33.1' RT

+80.1 43.5' RT

+91.7 22.3' RT

37'

R15'

+46.8 42.4' RT

4" HMA PAVEMENT

1" REMOVING ASPHALTIC SURFACE MILLING

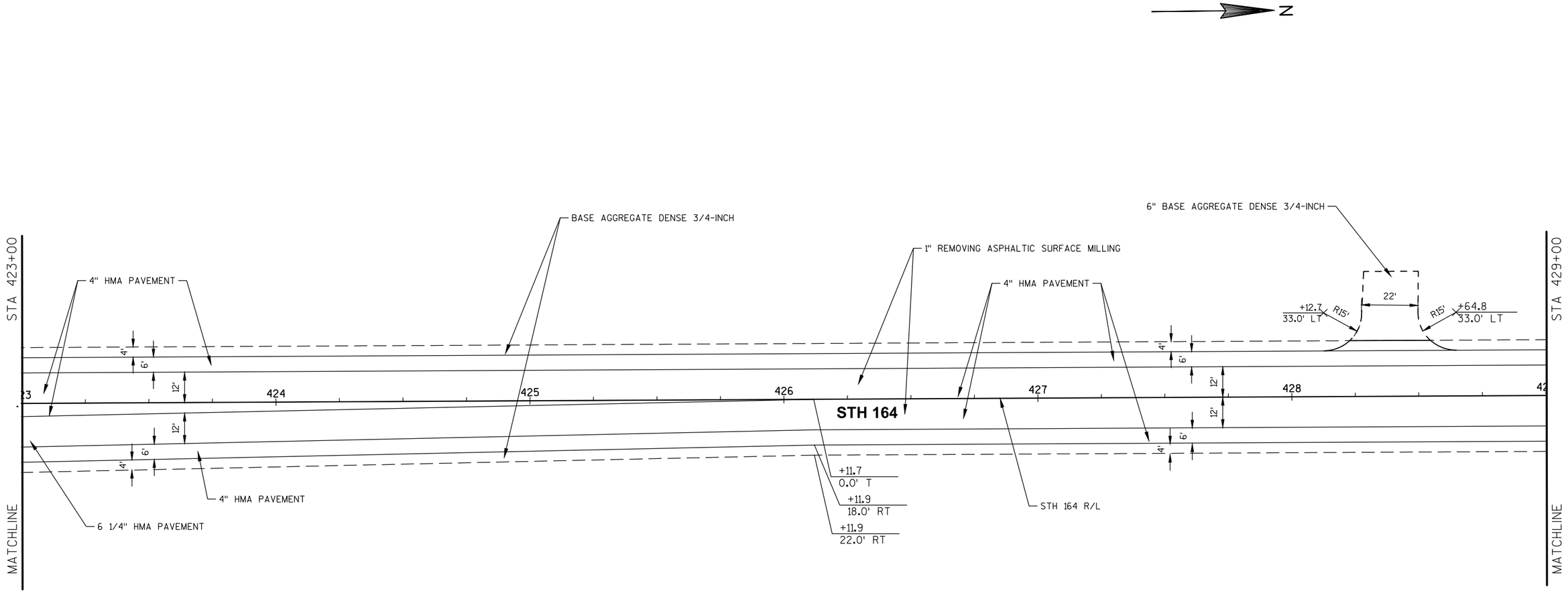
STH 164 R/L

BASE AGGREGATE DENSE 3/4-INCH

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 109	E

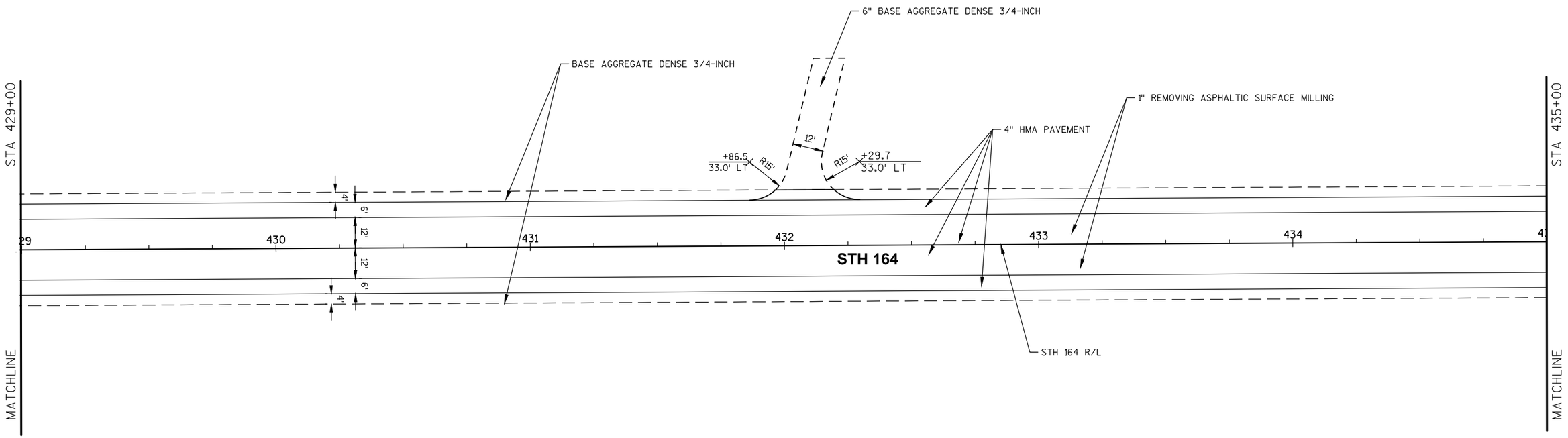
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 110	E

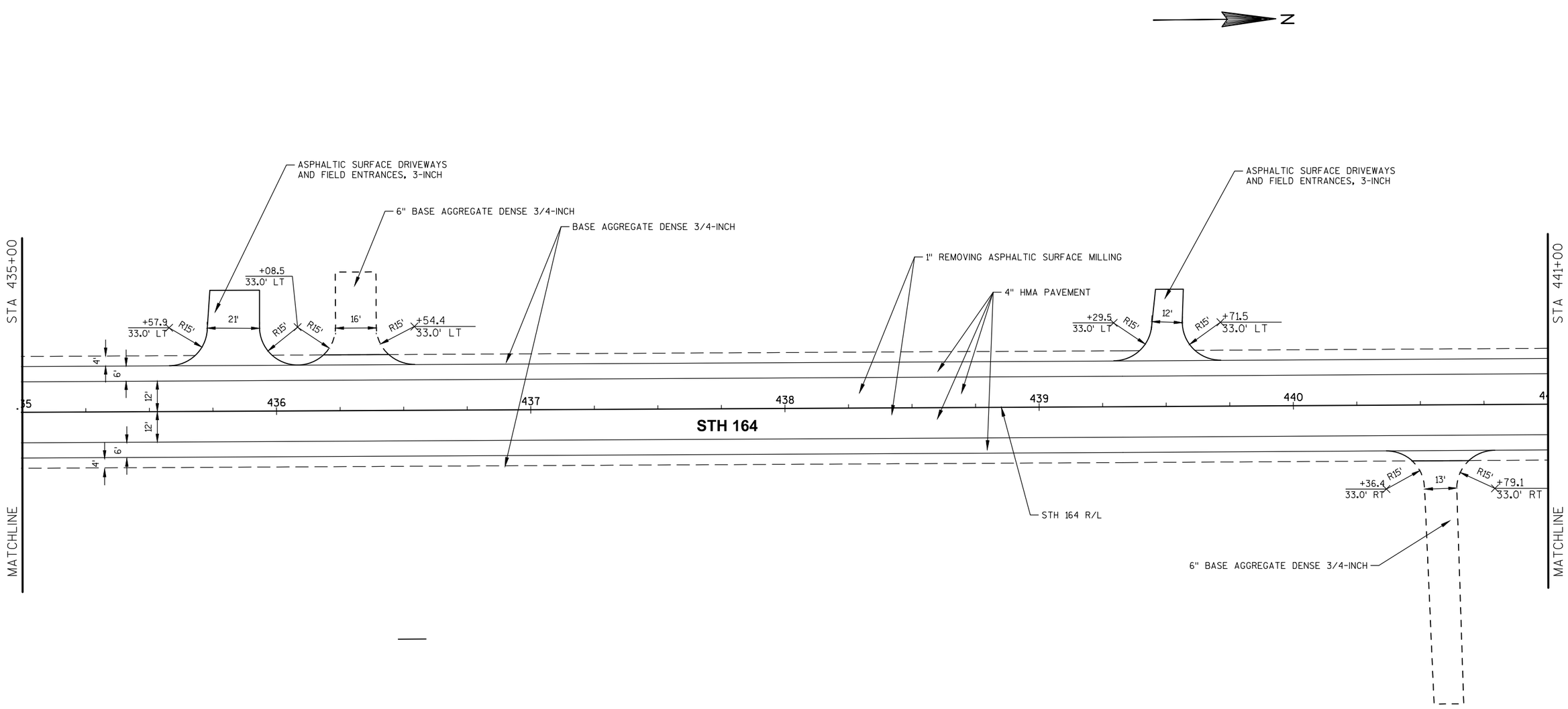
2

N



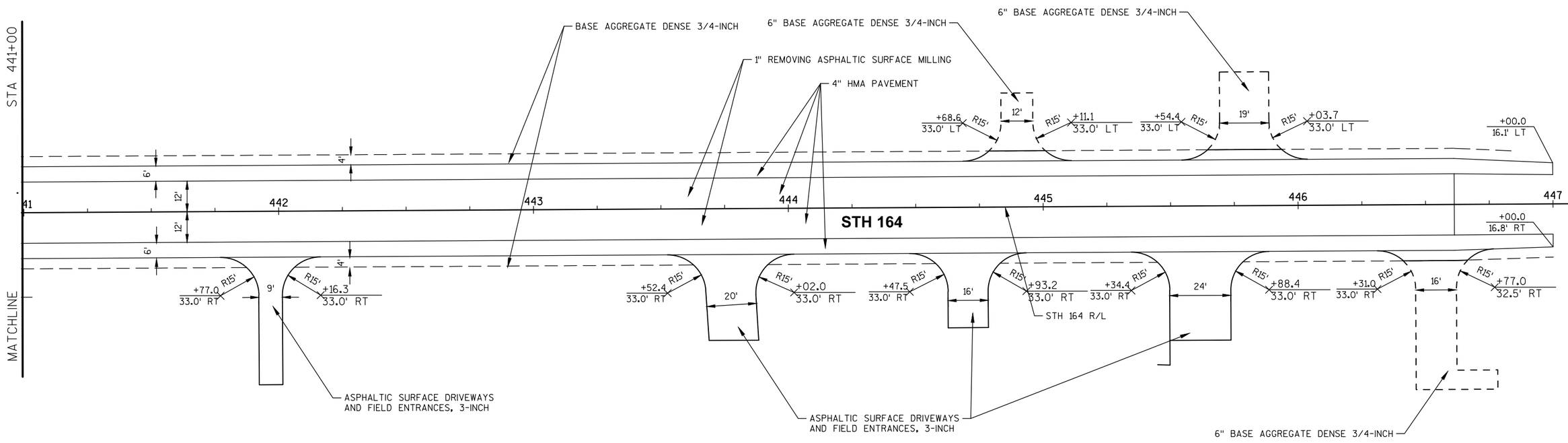
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 111	E

2



PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 164	SHEET 112	E

2



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 164	SHEET 113	E

2

N

4" HMA PAVEMENT

6 1/4" HMA PAVEMENT

BASE AGGREGATE DENSE 3/4-INCH

HUBERUS ROAD R/L

+40.2
21.5' LT

+47.7
16.0' LT

STA 108+25

5'

1'

11'

1061.49

1061.97

1063.42

1065.36

1067.78

1070.71

1074.14

1078.07

1082.24

1086.41

1090.58

103

104

105

106

107

108

+28.4

1061.71

1062.19

1063.67

1065.64

1068.09

1071.04

1074.47

1078.40

1082.57

1086.74

1090.91

2.0%

16.5'

HUBERTUS ROAD

1063.41

1065.36

1067.78

1070.71

1074.14

1078.07

1082.24

1086.41

1090.58

+09.1
32.8' RT

R15'

R15'

+64.8
34.4' RT

22'

+47.7
16.0' RT

+40.2
21.5' RT

BASE AGGREGATE DENSE 3/4-INCH

4" HMA PAVEMENT

6' BASE AGGREGATE DENSE 3/4-INCH

MATCHLINE

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - HUBERTUS ROAD	SHEET 114	E

2

N

STA 111+75

BASE AGGREGATE DENSE 3/4-INCH
4" HMA PAVEMENT
CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D
ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES, 3-INCH
HUBERUS ROAD R/L
6" BASE AGGREGATE DENSE 3/4-INCH
CONCRETE DRIVEWAY
7-INCH
ASPHALTIC FLUME
+25.0
20.5' LT
+50.0
9'
+61.1
20.5' LT
12'
+85.1
19.7' LT
+65.0
+58.5
+76.6
+98.0
32.6' LT
R15'
24'
+52.0
31.5' LT
+81.1
16.0' LT
5'
1'
4'
16.5'
2.0%

112	113	114	115	116	117	118
1105.79	1112.66	1120.03	1126.15	1130.99	1134.54	1137.47
1108.91	1116.49	1123.25	1128.73	1134.54	1136.00	

1105.46	1108.58	1112.33	1114.19	1116.08	1119.62	1122.84	1123.52	1124.93	1125.85	1128.46	1130.74	1132.69	1134.32	1135.78	1137.25

HUBERTUS ROAD

MATCHLINE

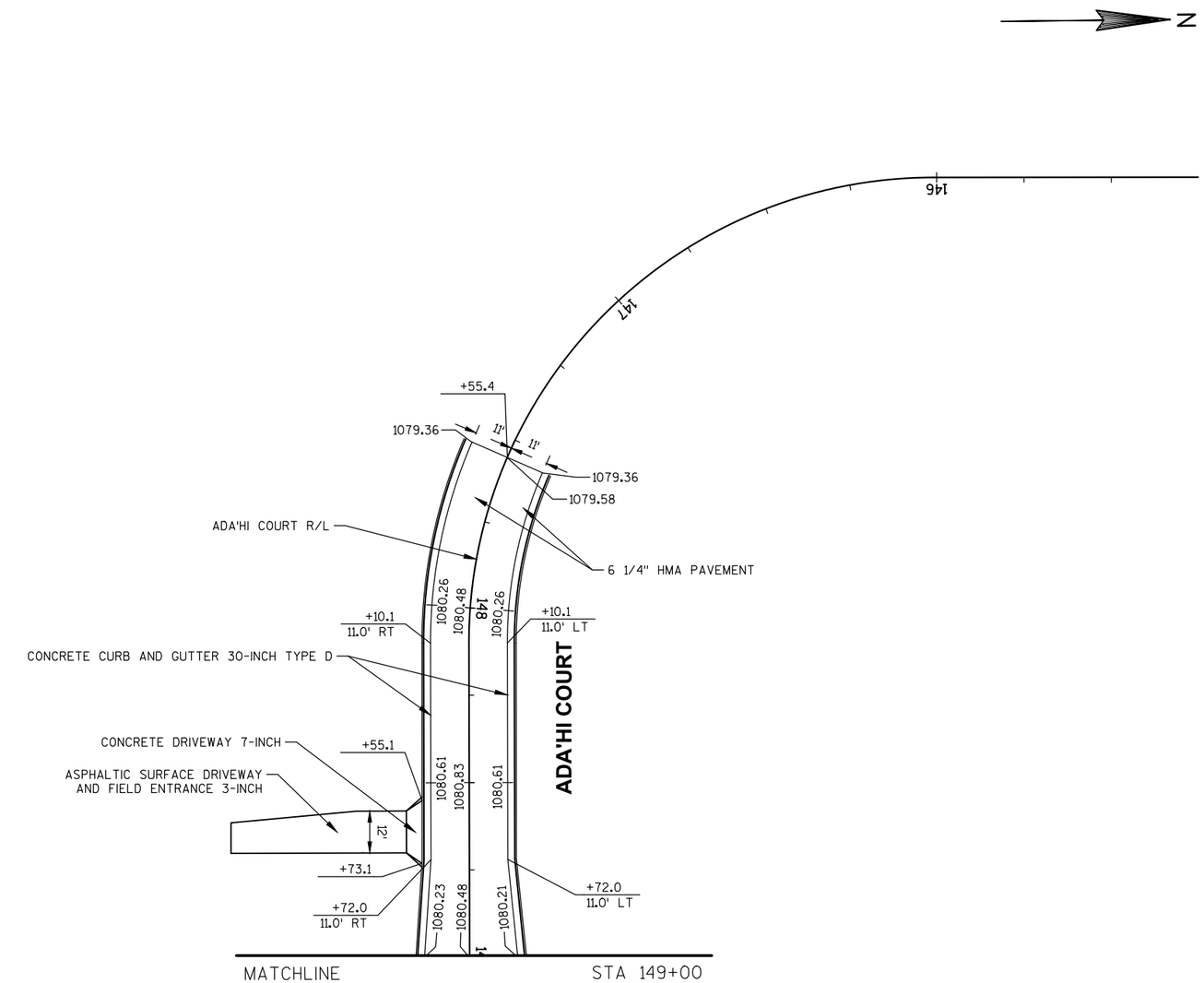
1105.46	1108.58	1112.33	1116.14	1117.89	1119.62	1122.84	1123.51	1125.76	1128.35	1130.64	1132.04	1132.68	1134.32	1135.78	1137.25

+32.3
+51.3
+75.0
20.5' RT
+61.0
20.5' RT
+58.6
+58.6
+49.4
+34.9
16.4' RT
+81.2
16.0' RT
+00.0
13'
11'

4" HMA PAVEMENT
6 1/4" HMA PAVEMENT
BASE AGGREGATE DENSE 3/4-INCH
ASPHALTIC FLUME
CONCRETE DRIVEWAY
7-INCH
ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES, 3-INCH
R-66-40,
SEE STRUCTURE PLANS
FENCE SPLIT RAIL THREE RAIL
OFFSET TO WALL TO BE DETERMINED
BASED ON WALL SYSTEM INSTALLED
CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE D
BASE AGGREGATE DENSE 3/4-INCH

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - HUBERTUS ROAD	SHEET 115	E

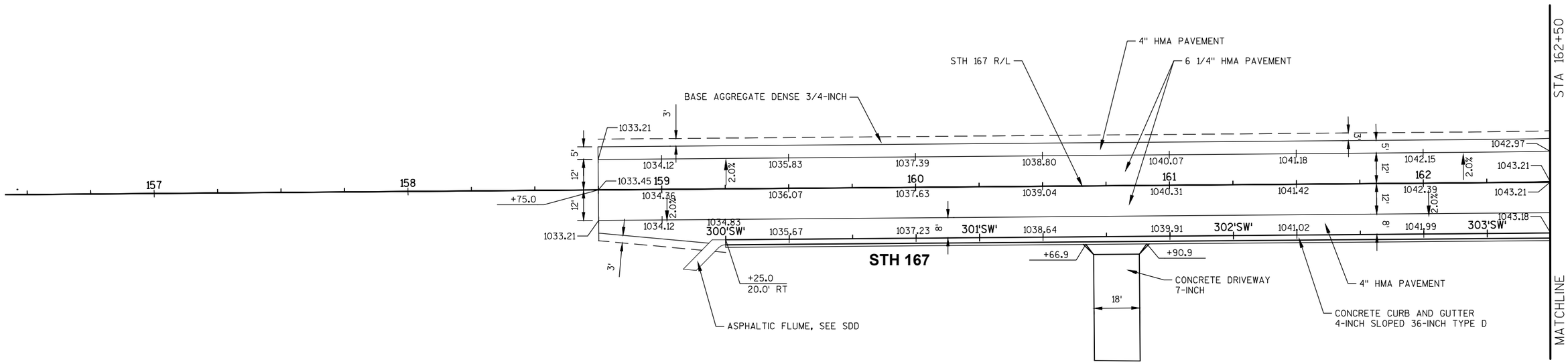
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PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - ADA'HI COURT	SHEET 116	E

2

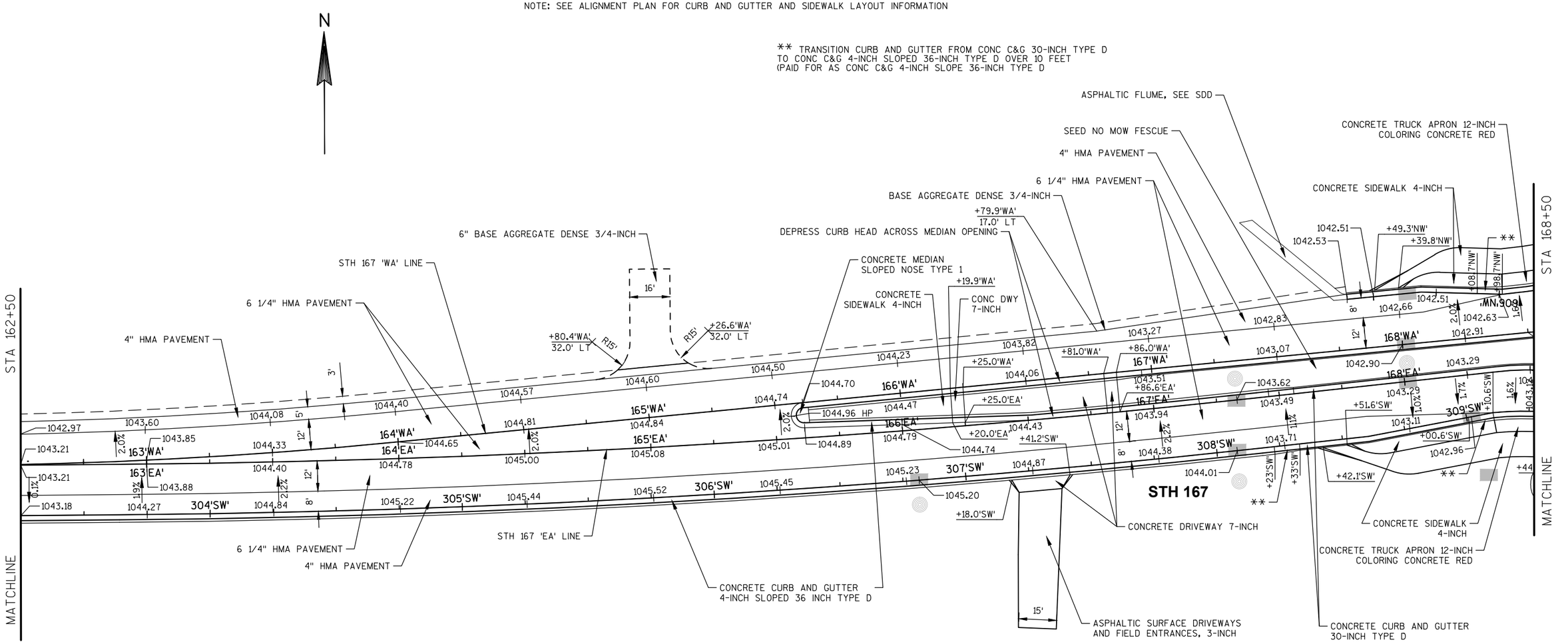
N



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 167	SHEET 117	E

NOTE: SEE ALIGNMENT PLAN FOR CURB AND GUTTER AND SIDEWALK LAYOUT INFORMATION

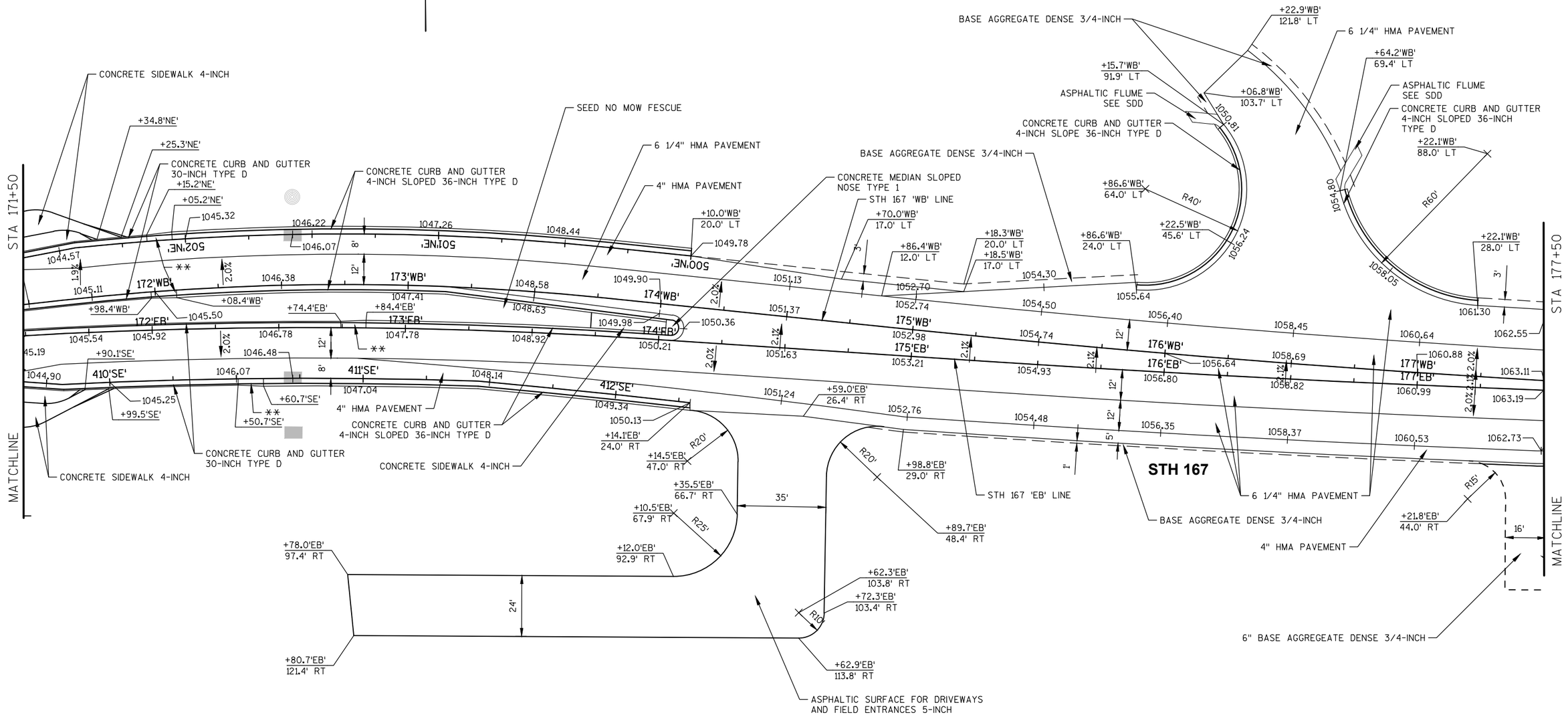
** TRANSITION CURB AND GUTTER FROM CONC C&G 30-INCH TYPE D
TO CONC C&G 4-INCH SLOPED 36-INCH TYPE D OVER 10 FEET
(PAID FOR AS CONC C&G 4-INCH SLOPE 36-INCH TYPE D


N
STA 162+50
STA 168+50
MATCHLINE
MATCHLINE
STH 167
6" BASE AGGREGATE DENSE 3/4-INCH
STH 167 'WA' LINE
6 1/4" HMA PAVEMENT
4" HMA PAVEMENT
16'
+80.4'WA'
32.0' LT
R15'
R15'
+26.6'WA'
32.0' LT
DEPRESS CURB HEAD ACROSS MEDIAN OPENING
CONCRETE MEDIAN
SLOPED NOSE TYPE 1
CONCRETE
SIDEWALK 4-INCH
CONC DWY
7-INCH
+79.9'WA'
17.0' LT
+19.9'WA'
BASE AGGREGATE DENSE 3/4-INCH
6 1/4" HMA PAVEMENT
4" HMA PAVEMENT
SEED NO MOW FESCUE
ASPHALTIC FLUME, SEE SDD
CONCRETE TRUCK APRON 12-INCH
COLORING CONCRETE RED
CONCRETE SIDEWALK 4-INCH
+49.3'NW'
+39.8'NW'
+108.7'NW'
+98.7'NW'
MN 909
+81.0'WA'
+86.0'WA'
+25.0'WA'
+25.0'EA'
+20.0'EA'
+41.2'SW'
+86.6'EA'
+51.6'SW'
+00.6'SW'
+10.6'SW'
+23'SW'
+33'SW'
+42.1'SW'
+18.0'SW'
1042.97
1043.21
1043.21
1043.18
1043.60
1043.85
1043.88
1044.27
1044.08
1044.33
1044.40
1044.84
1044.40
1044.57
1044.65
1044.78
1044.81
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1045.22
1044.60
1044.84
1045.08
1045.01
1044.50
1044.74
1044.89
1045.44
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1045.20
1044.23
1044.47
1044.79
1044.74
1044.87
1044.96 HP
1044.70
1043.82
1044.06
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1043.27
1043.51
1043.94
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1044.56
1044.57
1044.58
1044.59
1044.60
1044.61
1044.62
1044.63
1044.64

2

N

** TRANSITION CURB AND GUTTER FROM CONC C&G 30-INCH TYPE D
TO CONC C&G 4-INCH SLOPED 36-INCH TYPE D OVER 10 FEET
(PAID FOR AS CONC C&G 4-INCH SLOPE 36-INCH TYPE D

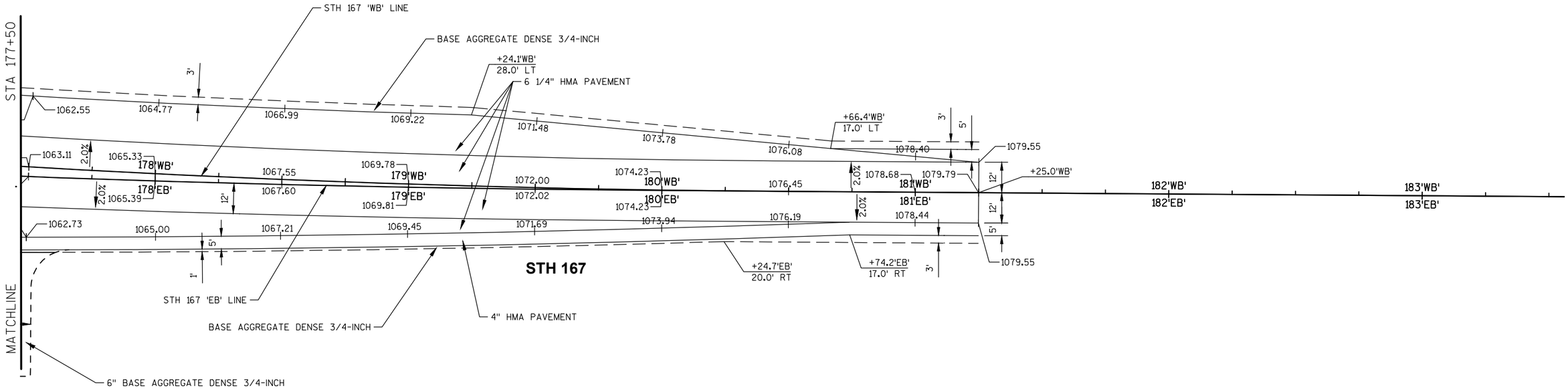


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - STH 167	SHEET 119	E

2

N

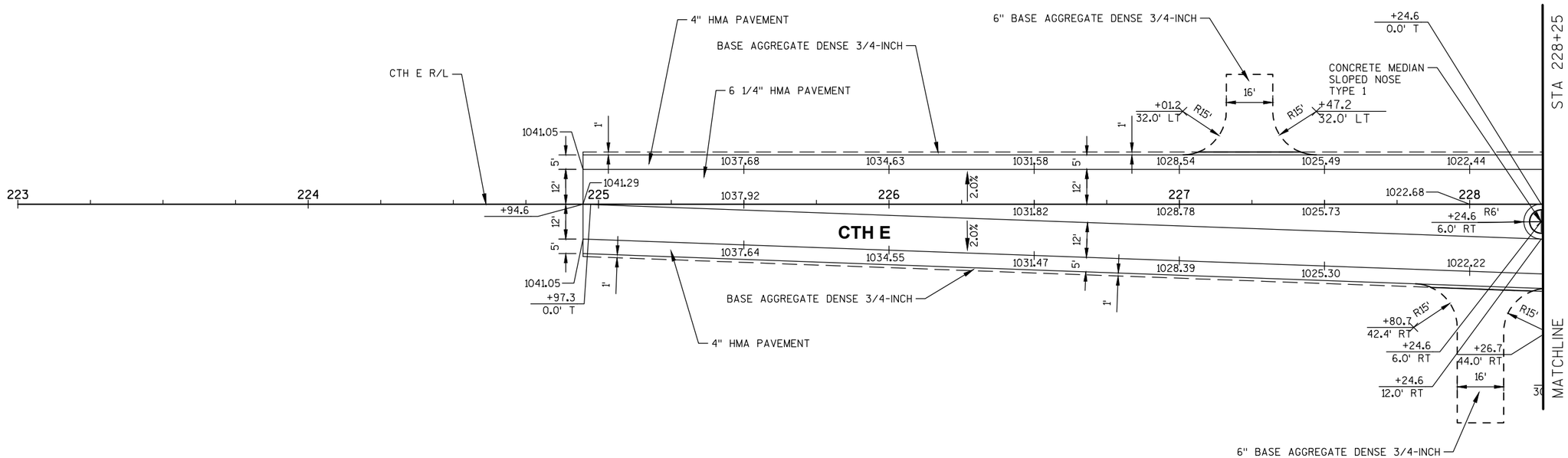
R



PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	PAVING DETAILS - STH 167	SHEET 120	E

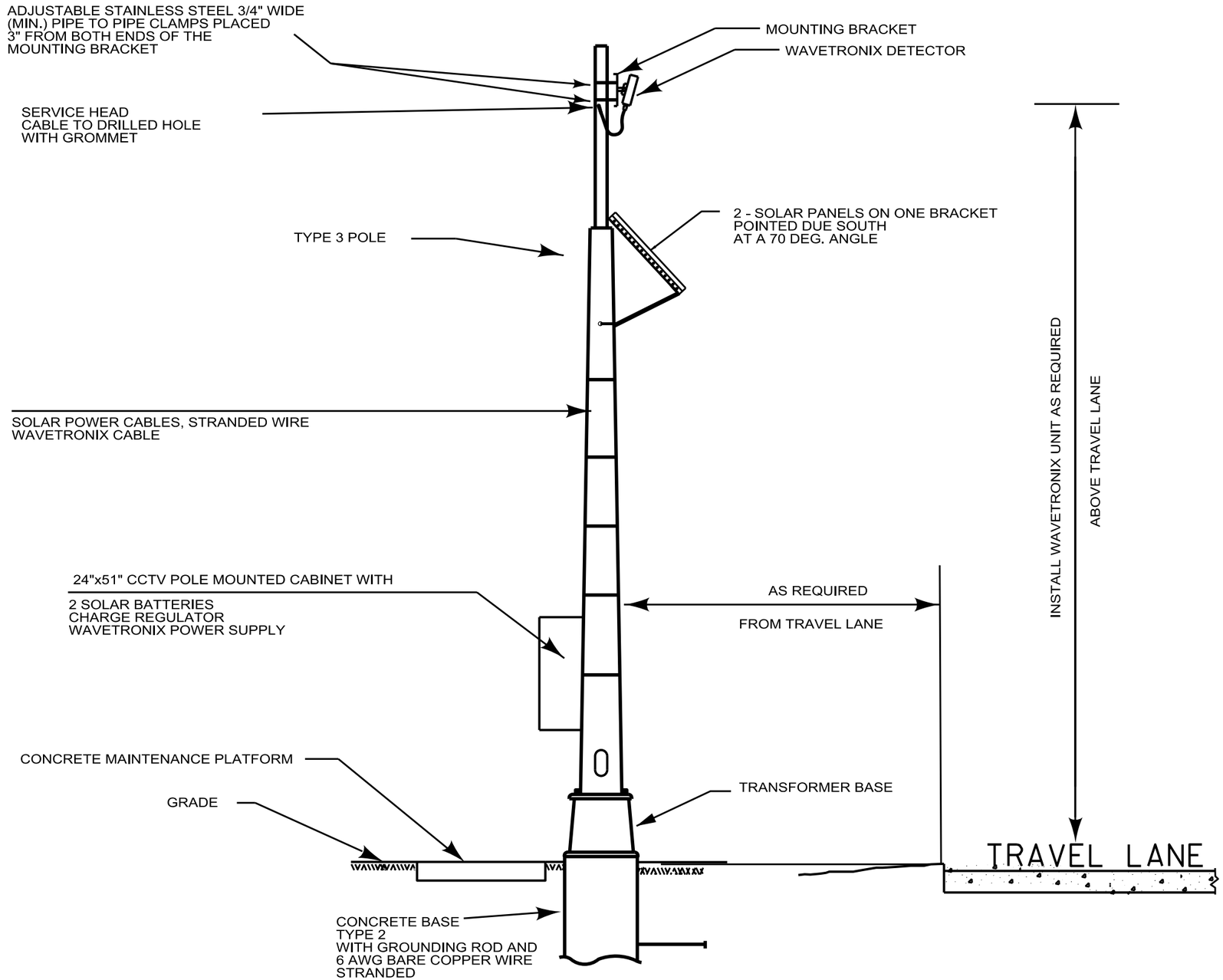
2

N



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVING DETAILS - CTH E	SHEET 121	E

2



WAVETRONIX DETECTOR INSTALLATION

SOLAR POWER, ON TYPE 3 POLE

(NOT TO SCALE)

DESIGNED BY WISDOT CO

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	WAVETRONIX DETECTOR POLE LAYOUT (ATR)	SHEET 122	E

FILE NAME : $$...designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$...plotscale...$$

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE, IF BASE IS NEEDED. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-325, (92,000 YIELD) HEAVY HEX NUT AND BE GALVANIZED IN ACCORDANCE WITH ASTM A-153, CLASS C.

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

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED AND U.L. LISTED MECHANICAL CONNECTOR (LUG) AL/CU RATED AND SIZED TO ACCEPT #10 AWG STRANDED WIRE, SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES, IF NEEDED.

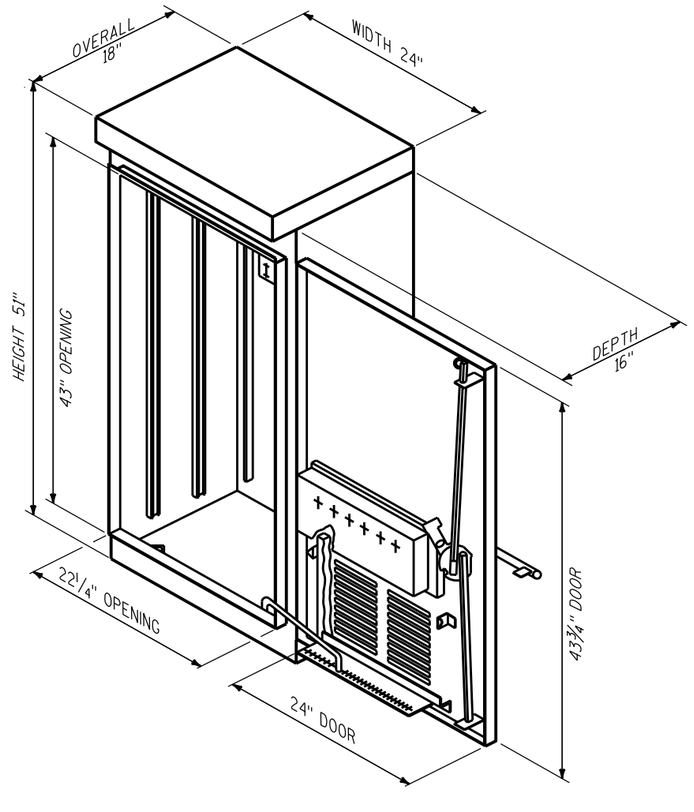
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4 " - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

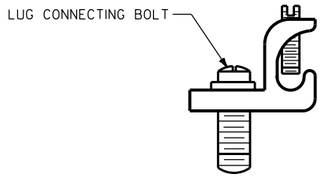
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

IF NEEDED, THE PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

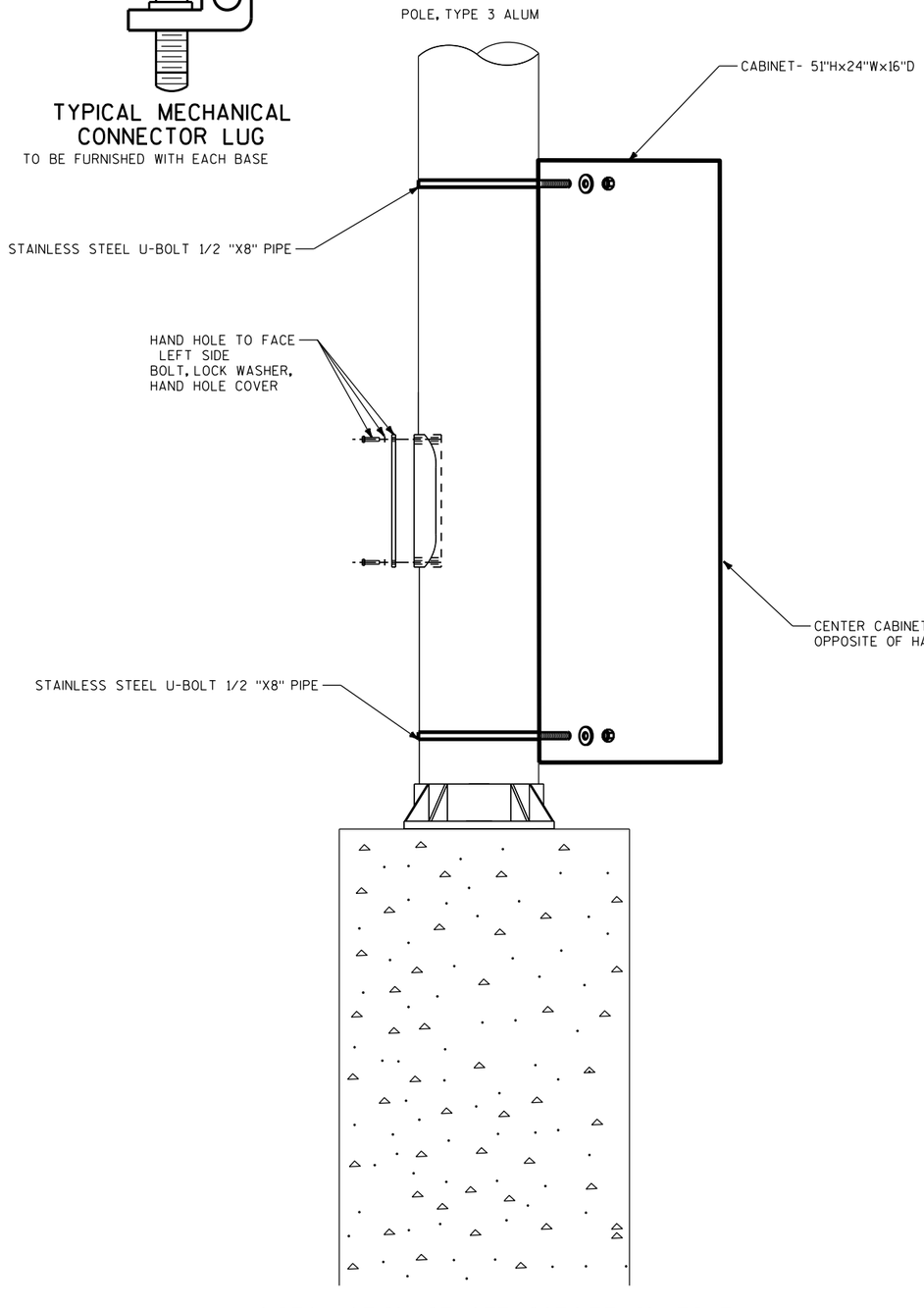
IF NEEDED, THE BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2 ", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

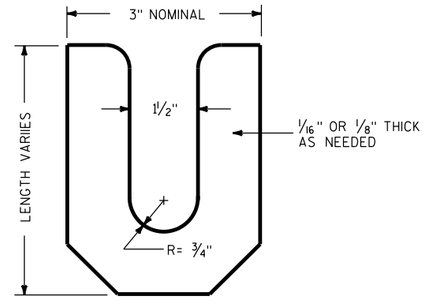




TYPICAL MECHANICAL CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE



INSTALLATION OF ATR CABINET ON POLE



LEVELING SHIM

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	INSTALLTION OF WAVETRONIX ATR CABINET	SHEET 123	E

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

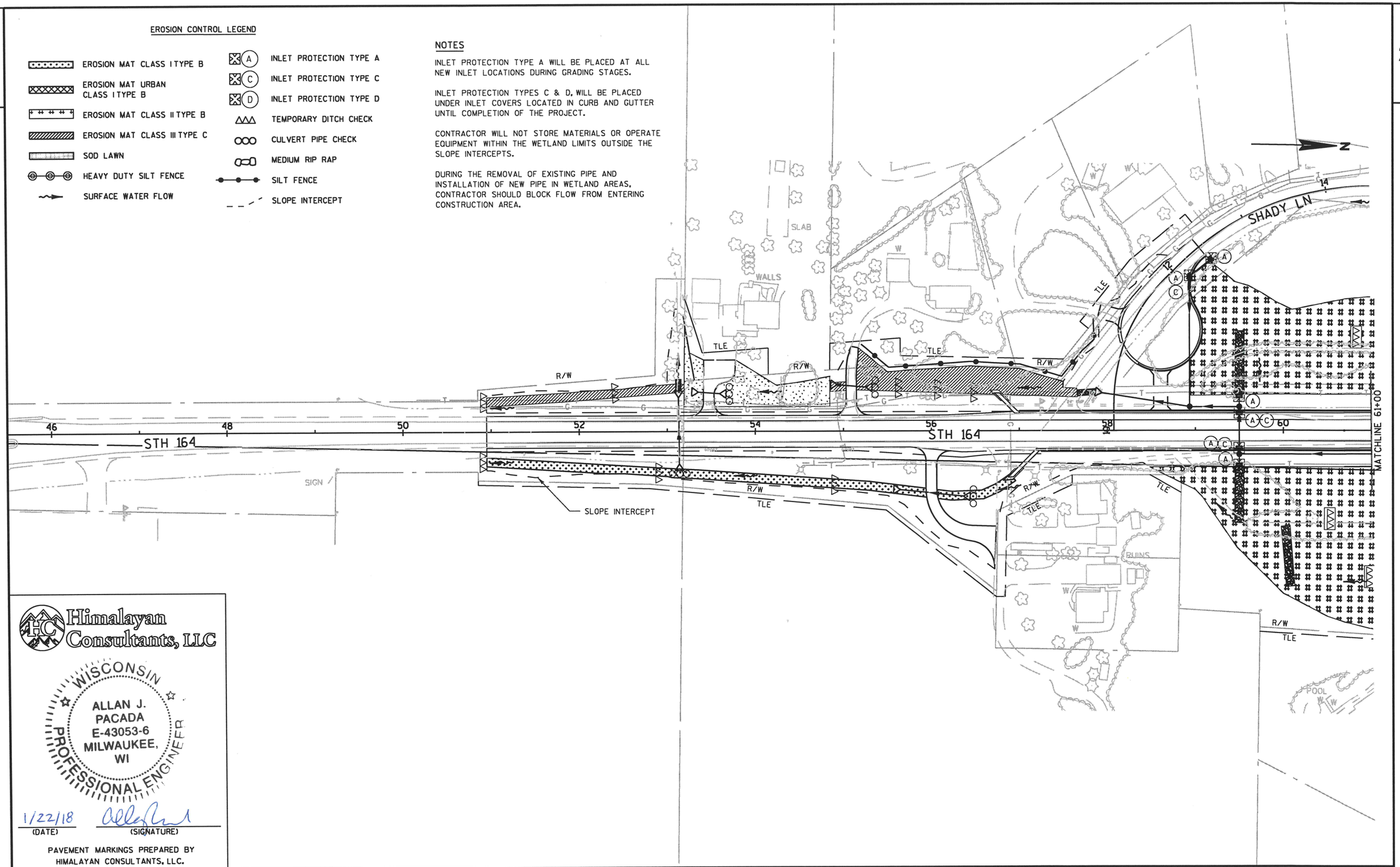
NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPES C & D, WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR WILL NOT STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETLAND AREAS, CONTRACTOR SHOULD BLOCK FLOW FROM ENTERING CONSTRUCTION AREA.



Himalayan Consultants, LLC

WISCONSIN
ALLAN J. PACADA
E-43053-6
MILWAUKEE, WI
PROFESSIONAL ENGINEER

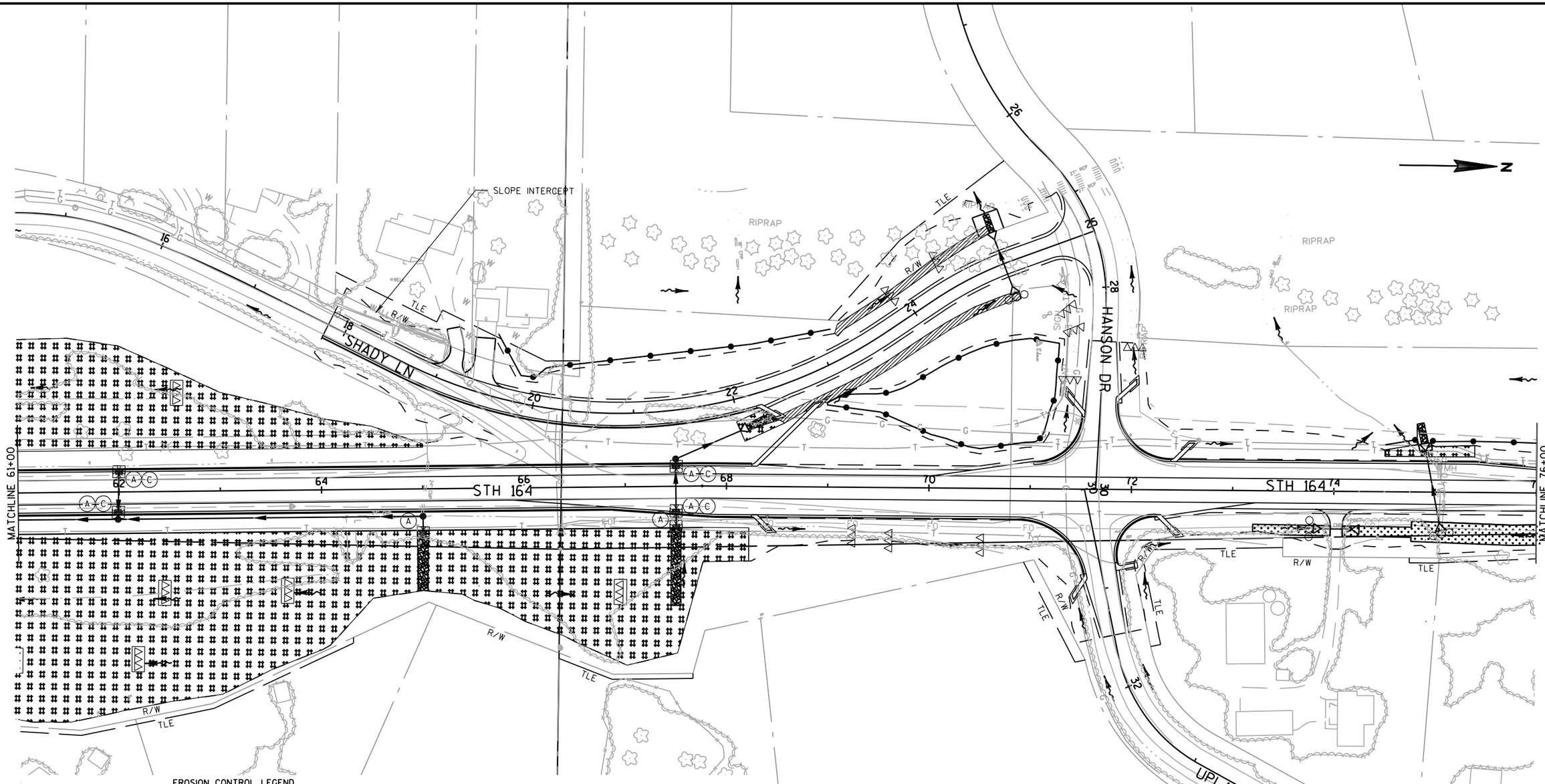
1/22/18
(DATE) (SIGNATURE)

PAVEMENT MARKINGS PREPARED BY HIMALAYAN CONSULTANTS, LLC.

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022001_ec.dgn PLOT DATE : 1/22/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100 WISDOT/CADDS SHEET 42

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPES C & D, WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR WILL NOT STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETLAND AREAS, CONTRACTOR SHOULD BLOCK FLOW FROM ENTERING CONSTRUCTION AREA.

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 125	E

2

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

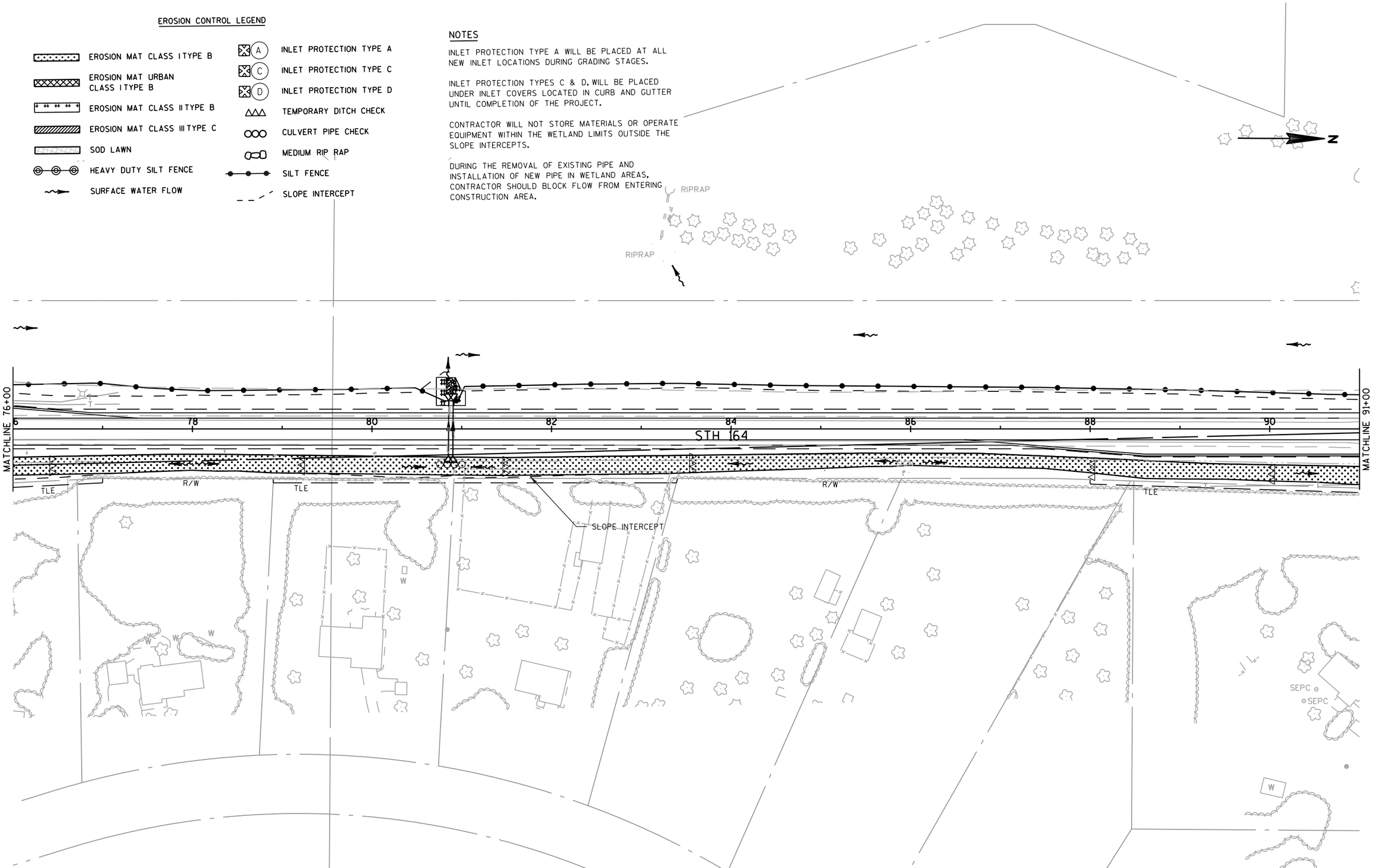
NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPES C & D, WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR WILL NOT STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETLAND AREAS, CONTRACTOR SHOULD BLOCK FLOW FROM ENTERING CONSTRUCTION AREA.

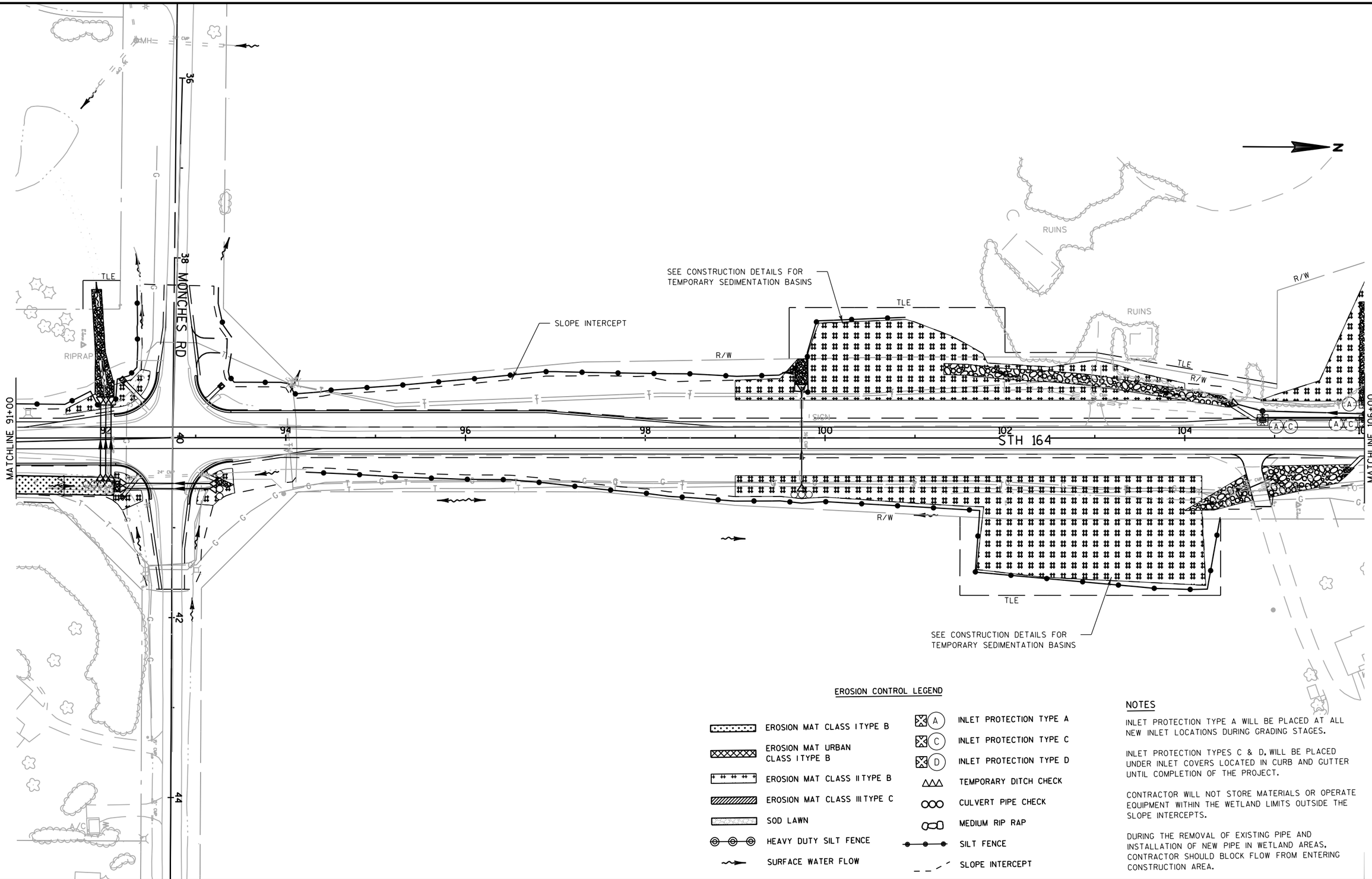


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET	E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022003_ec.dgn PLOT DATE : 1/22/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

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DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETLAND AREAS, CONTRACTOR SHOULD BLOCK FLOW FROM ENTERING CONSTRUCTION AREA.

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 127	E

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

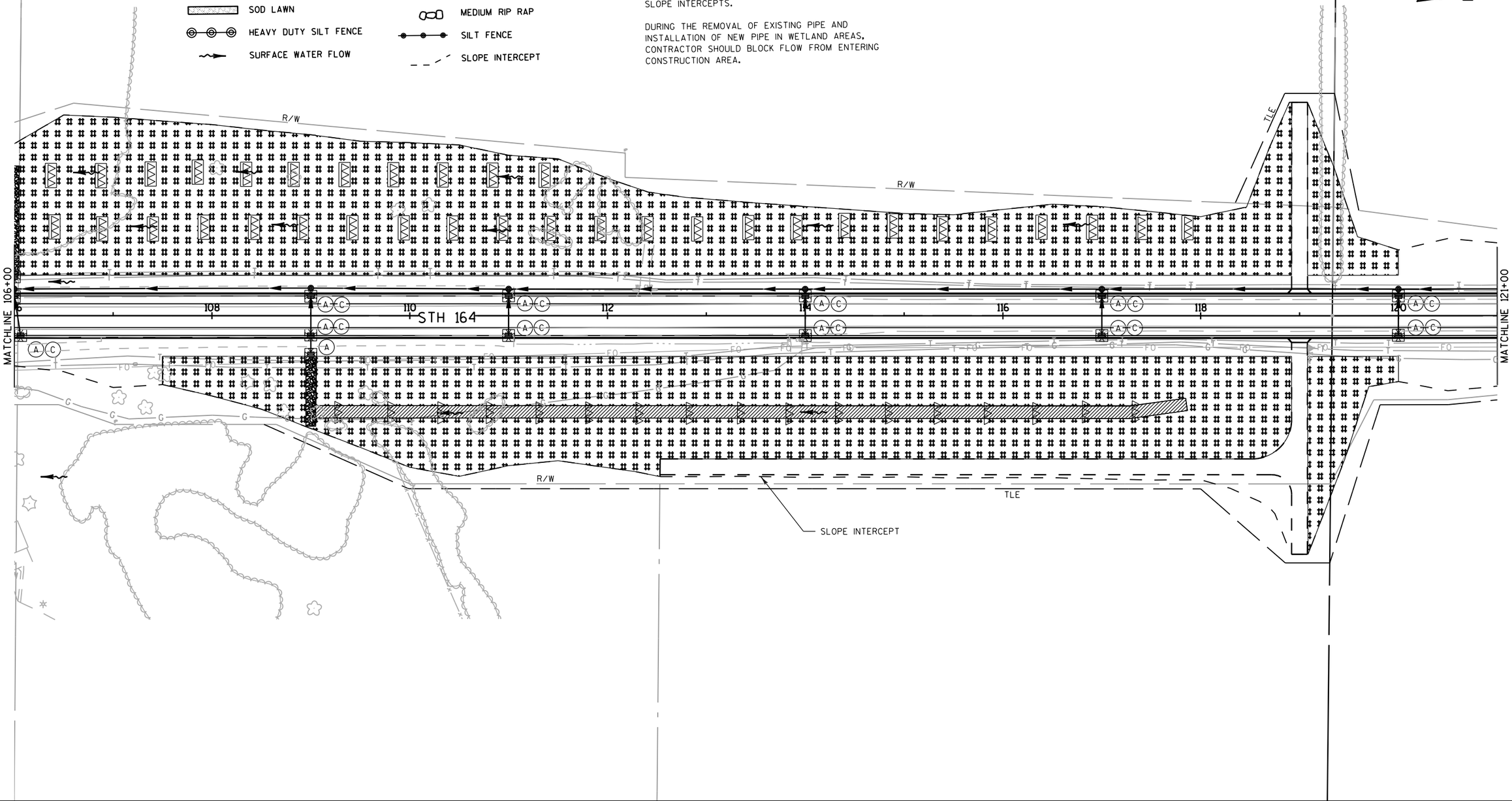
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INLET PROTECTION TYPES C & D, WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

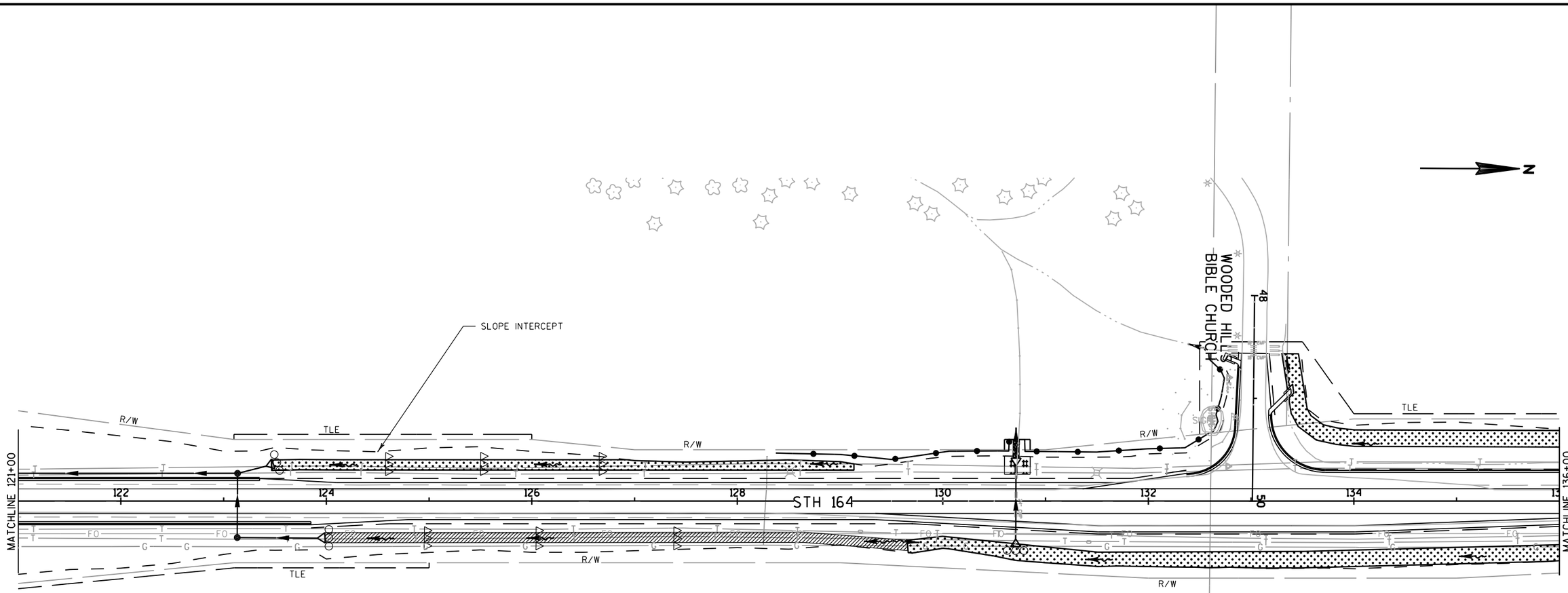
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 128	E

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

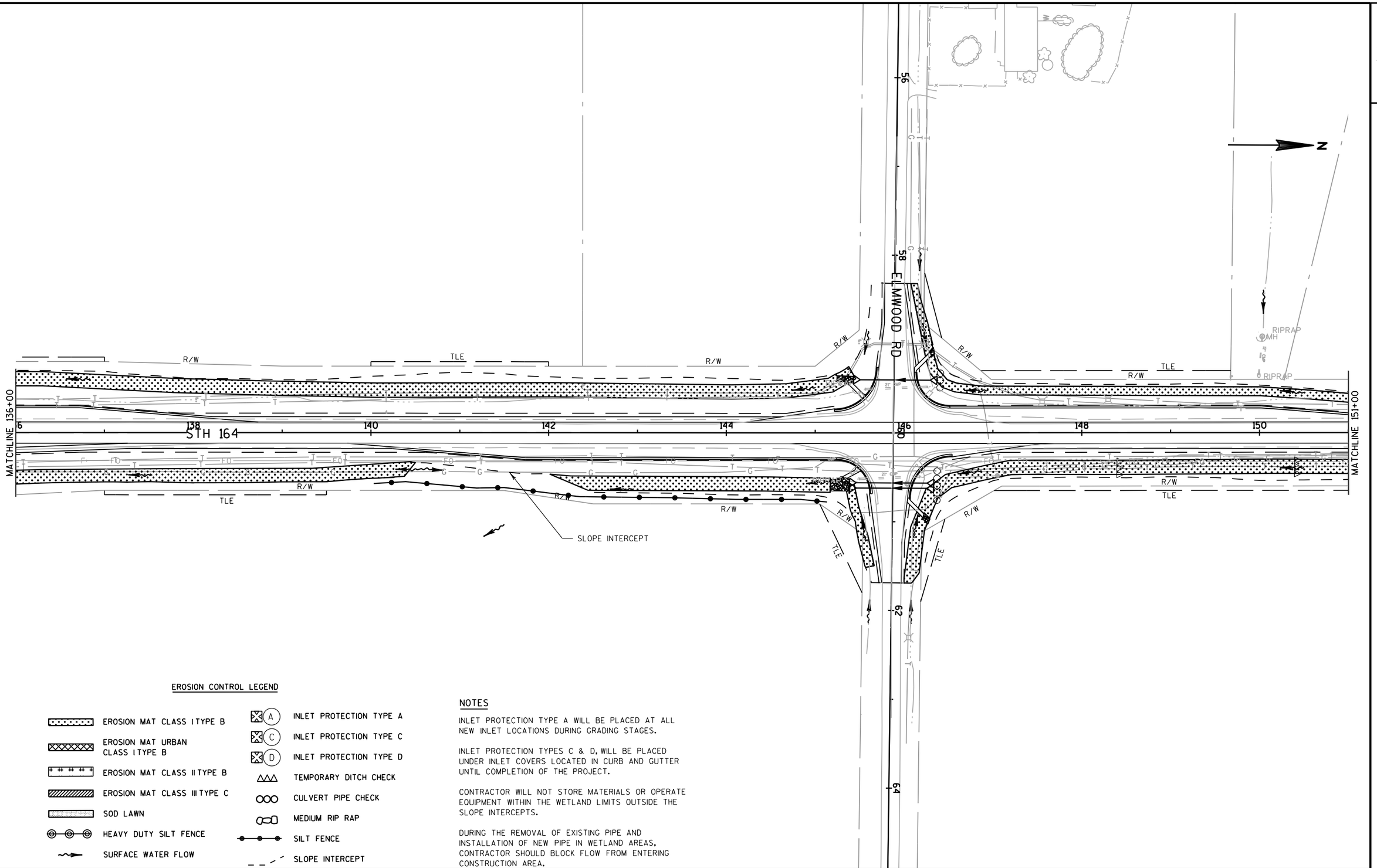
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DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETLAND AREAS, CONTRACTOR SHOULD BLOCK FLOW FROM ENTERING CONSTRUCTION AREA.

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 129	E

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

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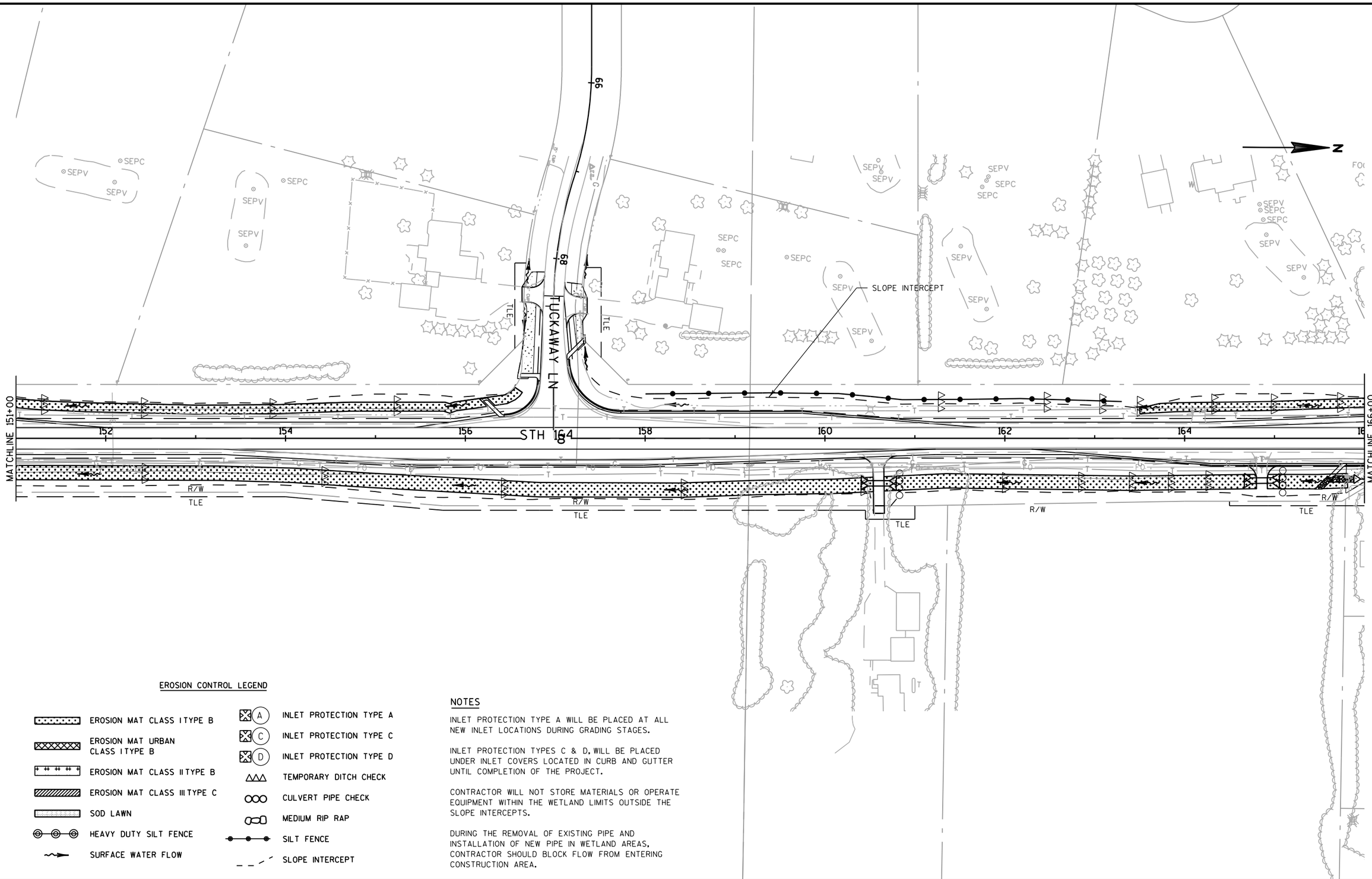
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DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETLAND AREAS, CONTRACTOR SHOULD BLOCK FLOW FROM ENTERING CONSTRUCTION AREA.

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 130	E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022007_ec.dgn PLOT DATE : 1/22/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

NOTES

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 131	E

2

2

N

TBRIDGE

SEPC

FLAG

TLE

R/W

STH 164

MATCHLINE 166+00

MATCHLINE 181+00

166

168

170

172

174

176

178

180

A C

A

CHEROKEE TR

82

84

POOL

W

SEPV

SLOPE INTERCEPT

EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
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- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

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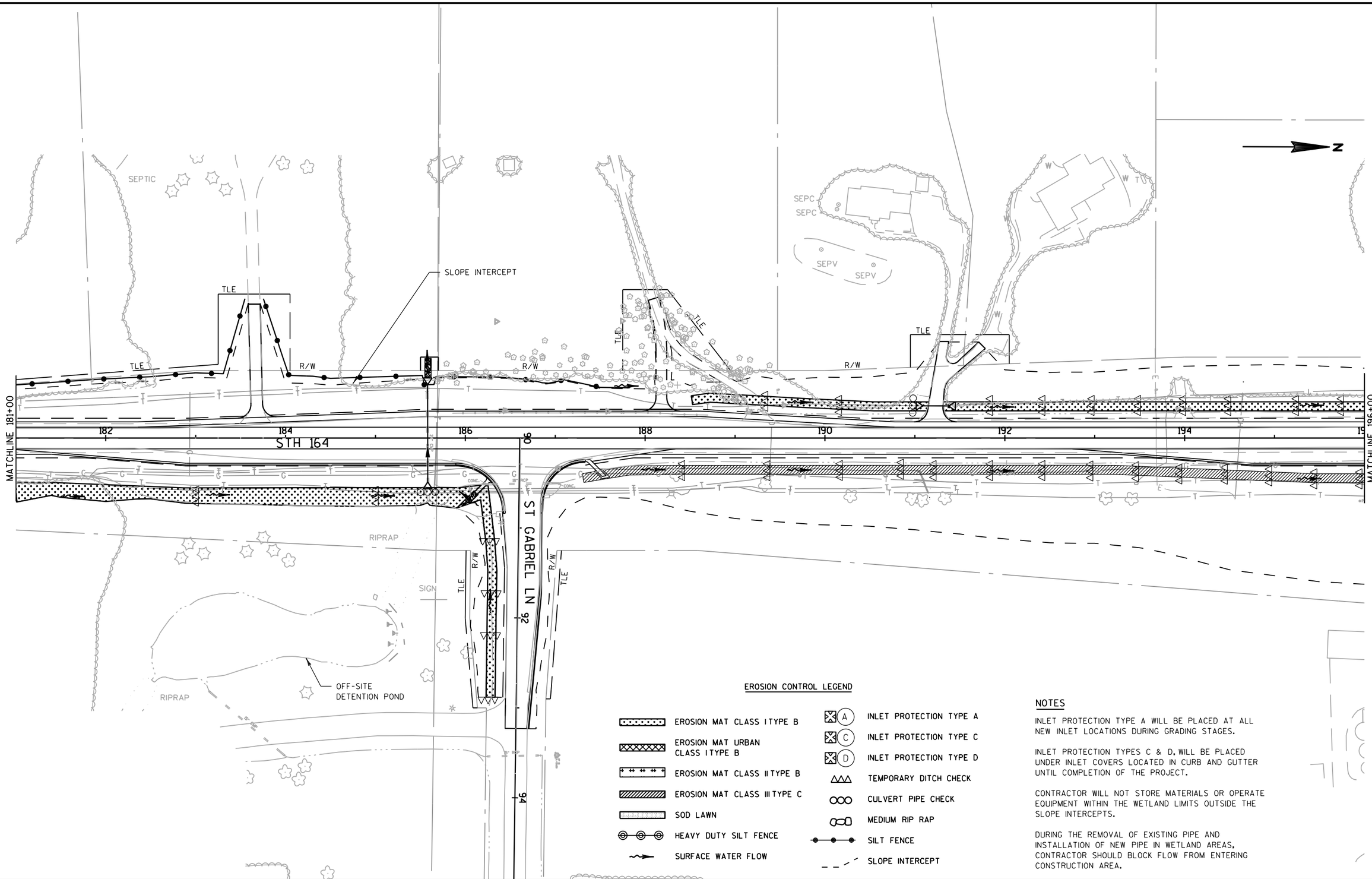
DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETLAND AREAS, CONTRACTOR SHOULD BLOCK FLOW FROM ENTERING CONSTRUCTION AREA.

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 132	E

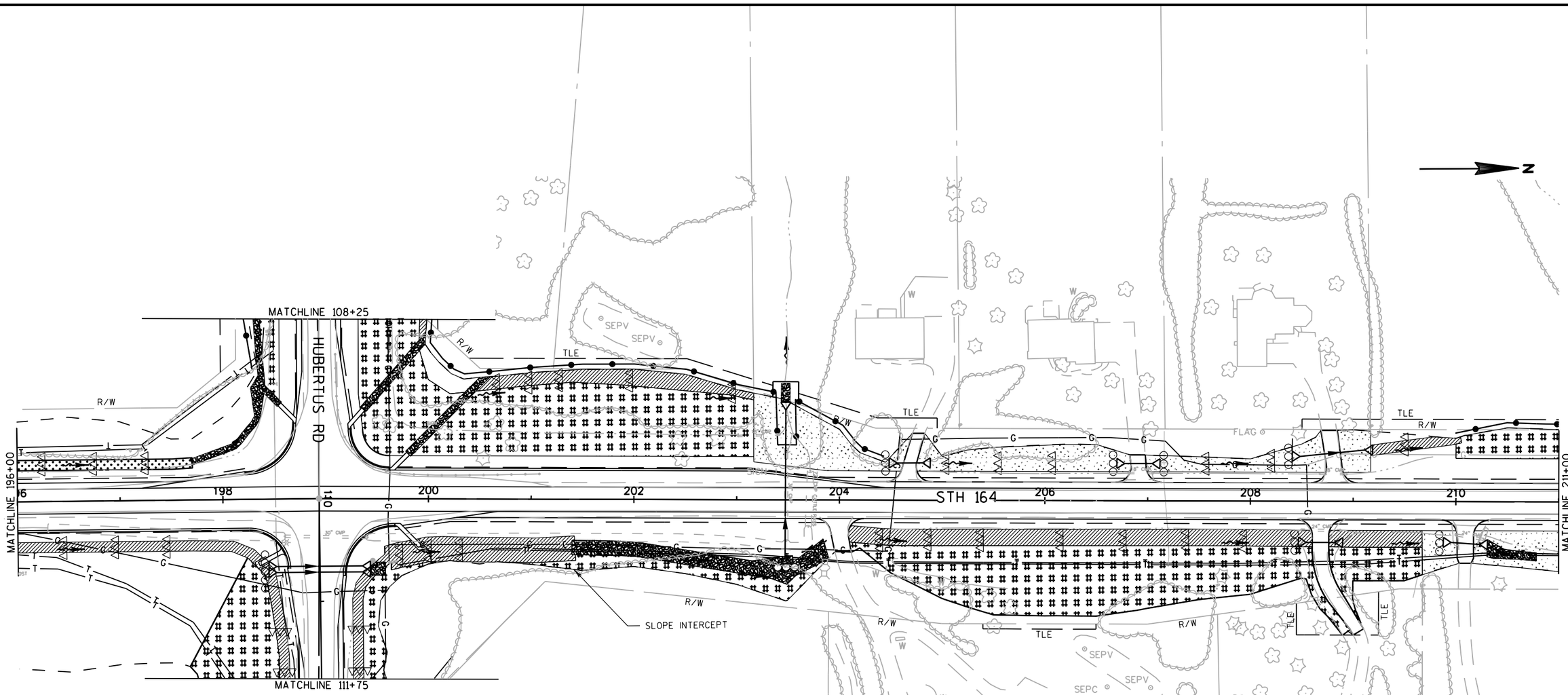
FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022009_ec.dgn PLOT DATE : 1/22/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2


N
SEPTIC
SEPC
SEPC
SEPV
SEPV
W
W
W
W
SLOPE INTERCEPT
TLE
TLE
TLE
TLE
TLE
R/W
R/W
R/W
T
T
T

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
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- CULVERT PIPE CHECK
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- SLOPE INTERCEPT

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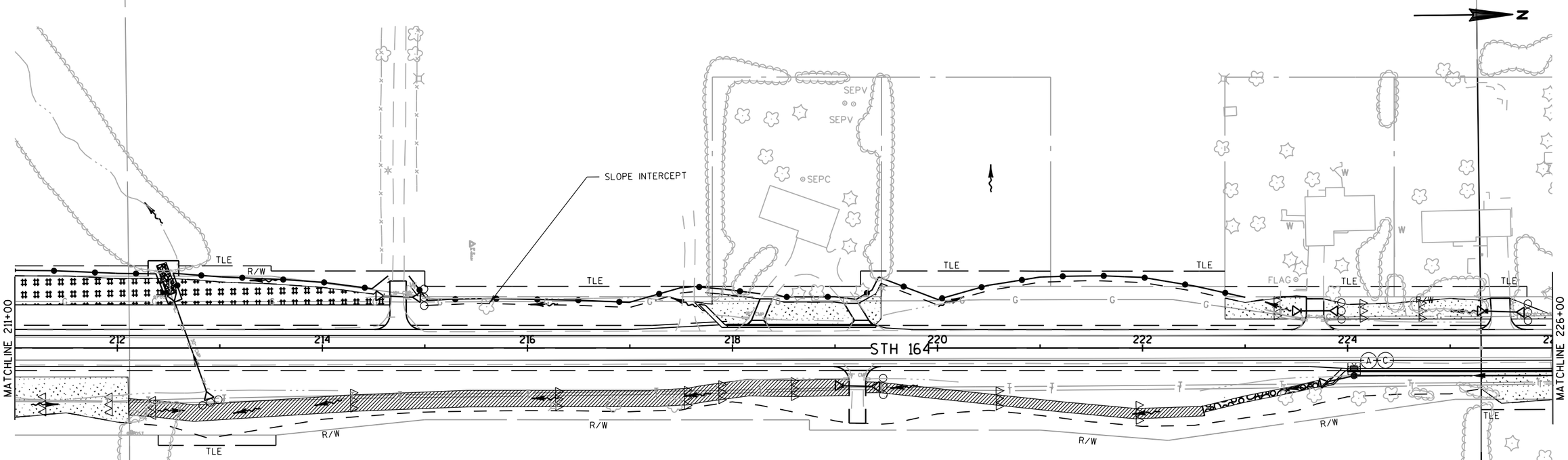
DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETLAND AREAS, CONTRACTOR SHOULD BLOCK FLOW FROM ENTERING CONSTRUCTION AREA.

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET	E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022011_ec.dgn PLOT DATE : 1/22/2018 5:12:34 PM PLOT BY : Himalayan-19 PLOT NAME : $FILE$ PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
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- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

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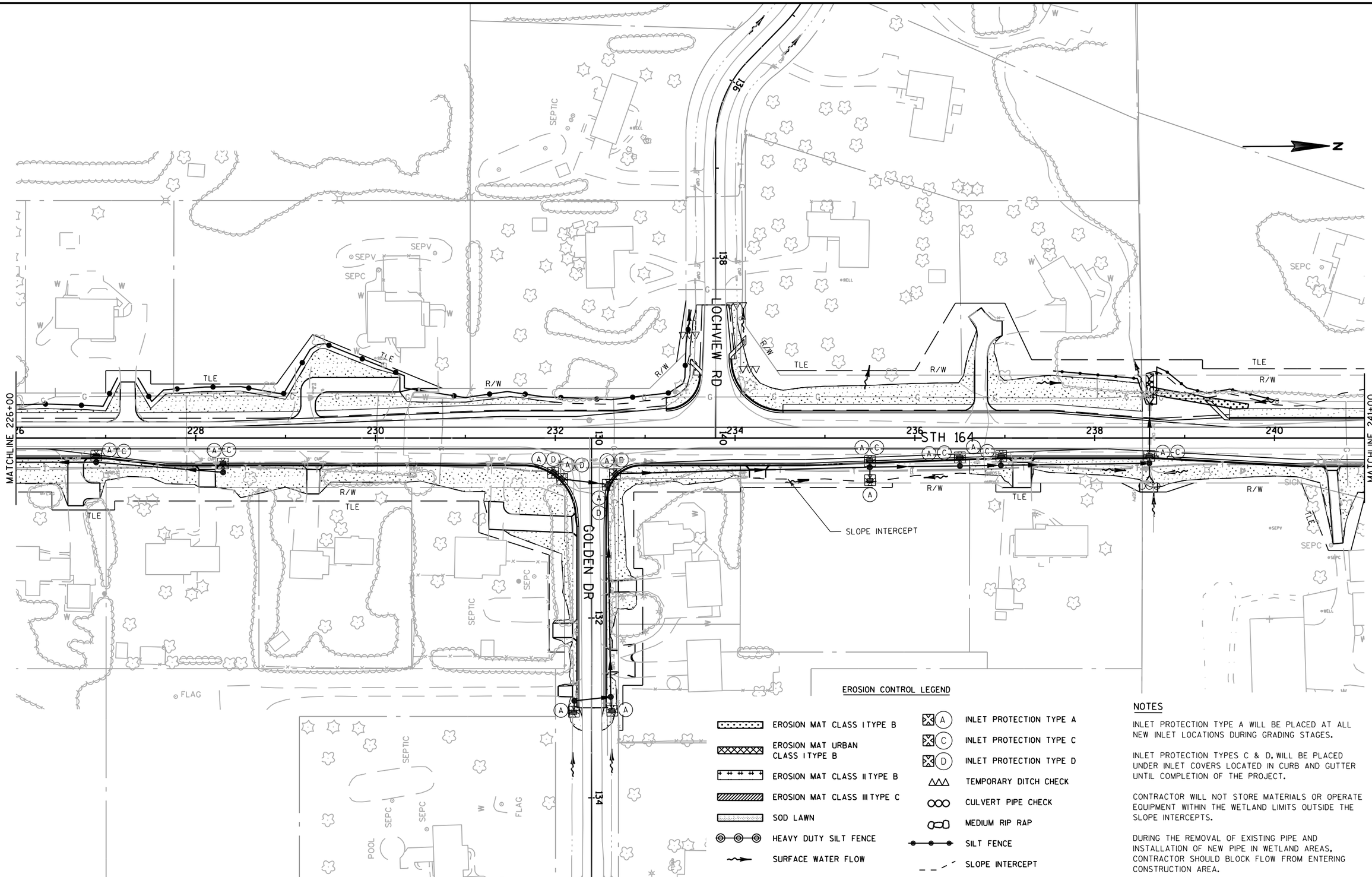
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DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETLAND AREAS, CONTRACTOR SHOULD BLOCK FLOW FROM ENTERING CONSTRUCTION AREA.

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET	E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022012_ec.dgn PLOT DATE : 1/22/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 136	E

2

MATCHLINE 165+50

MATCHLINE 241+00

MATCHLINE 256+00

MATCHLINE 174+50

STH 164

STH 167

ADA HICT

SLOPE INTERCEPT

TLE

R/W

SEPTIC

SEPC

RIPRAP

SIGN

POOL

PLAYGROUND

EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET	E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022014_ec.dgn PLOT DATE : 1/22/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100

2

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
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- SILT FENCE
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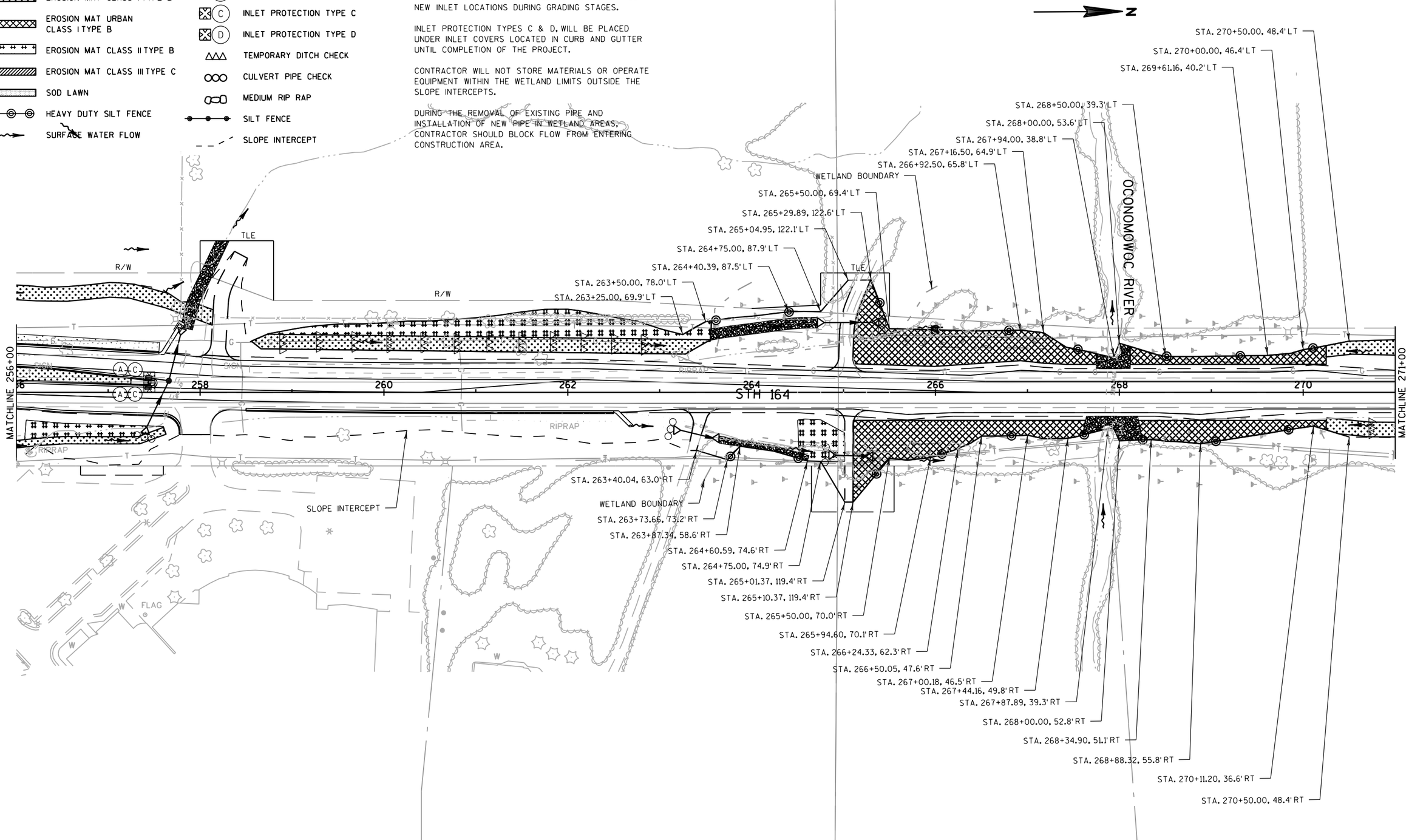
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DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETLAND AREAS, CONTRACTOR SHOULD BLOCK FLOW FROM ENTERING CONSTRUCTION AREA.



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET	E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022015_ec.dgn PLOT DATE : 1/22/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
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- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

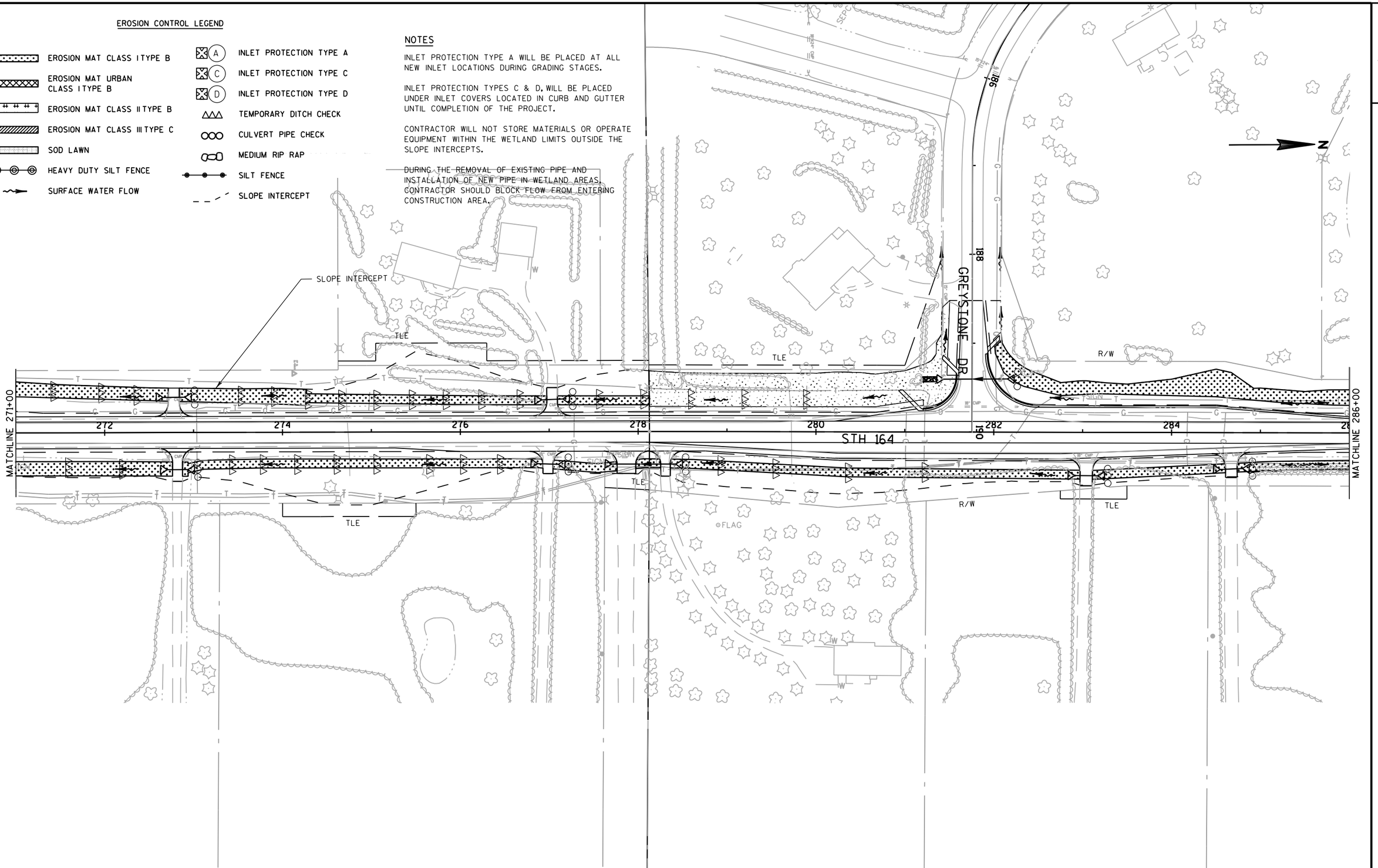
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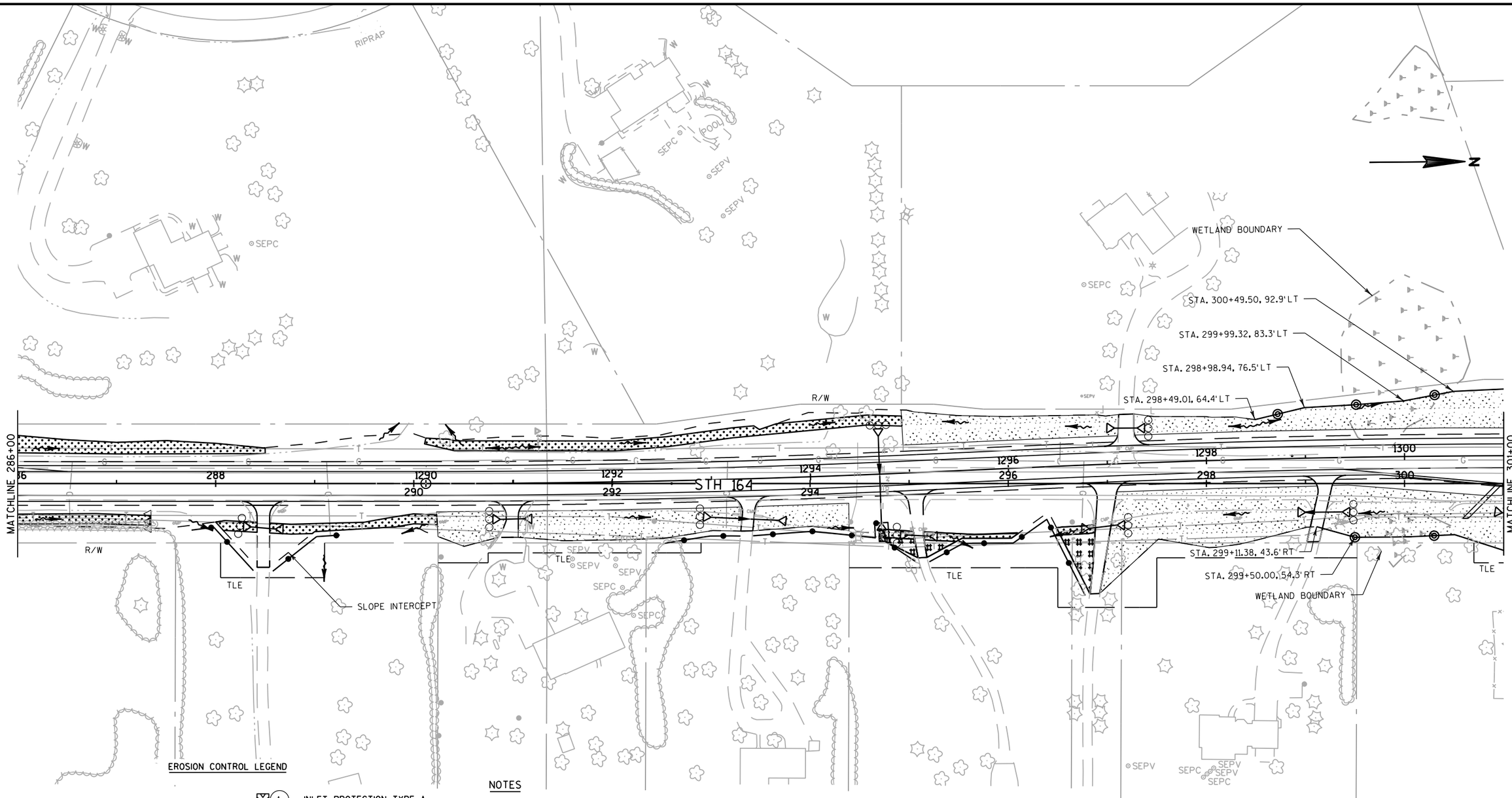


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET	E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022016_ec.dgn PLOT DATE : 1/22/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
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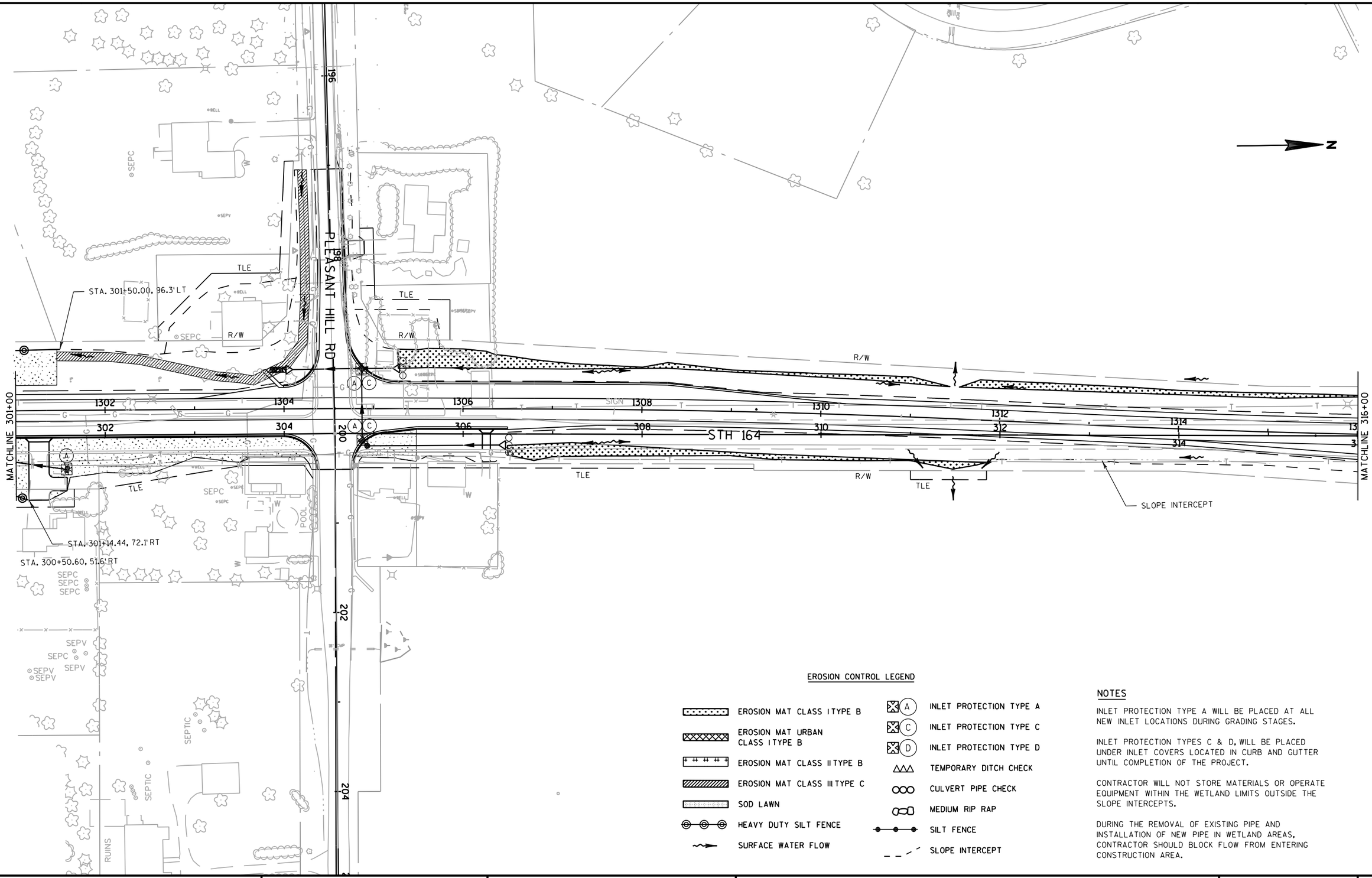
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET	E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022017_ec.dgn PLOT DATE : 1/22/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
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- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

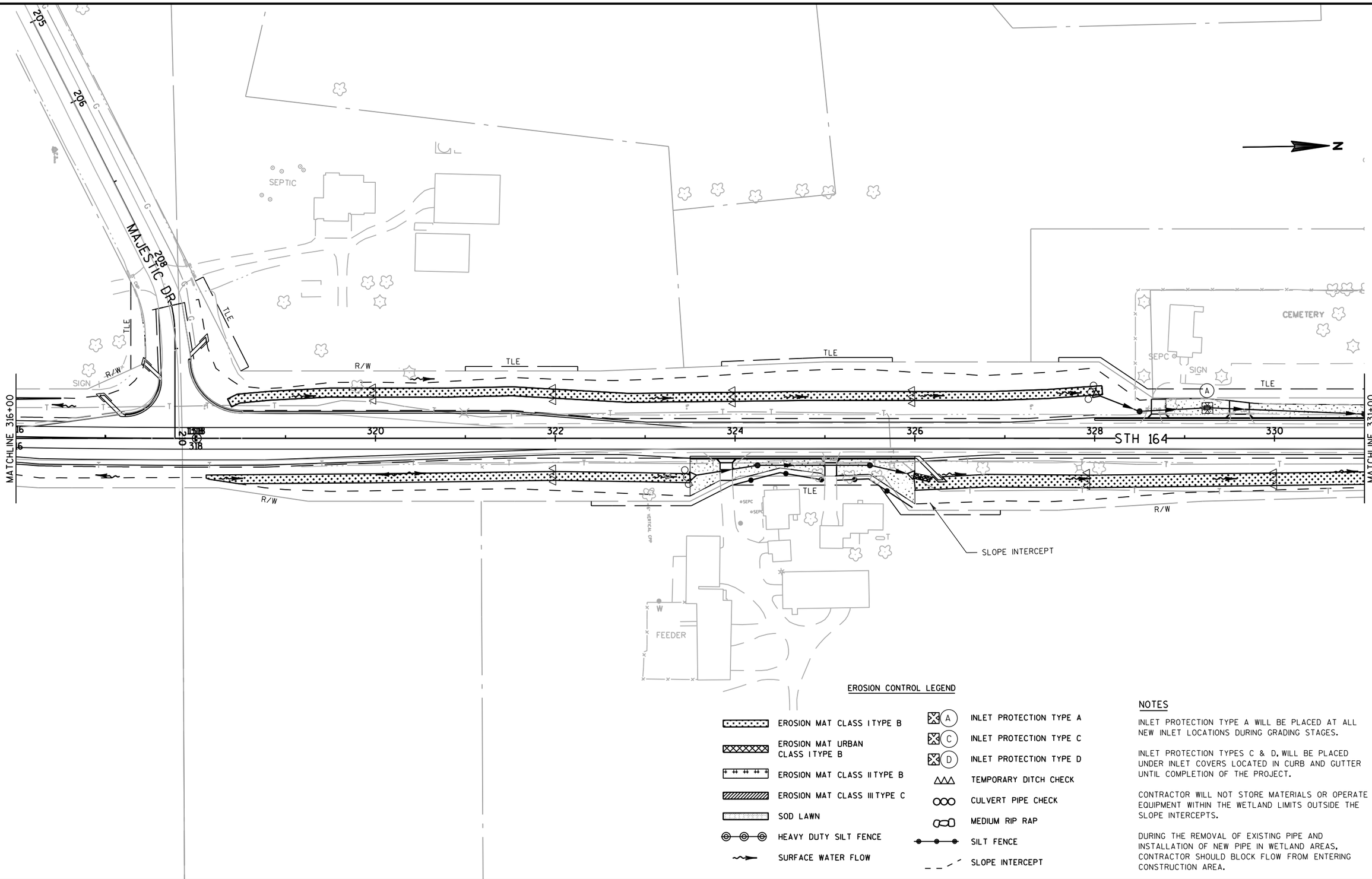
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CONTRACTOR WILL NOT STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETLAND AREAS, CONTRACTOR SHOULD BLOCK FLOW FROM ENTERING CONSTRUCTION AREA.

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 141	E

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

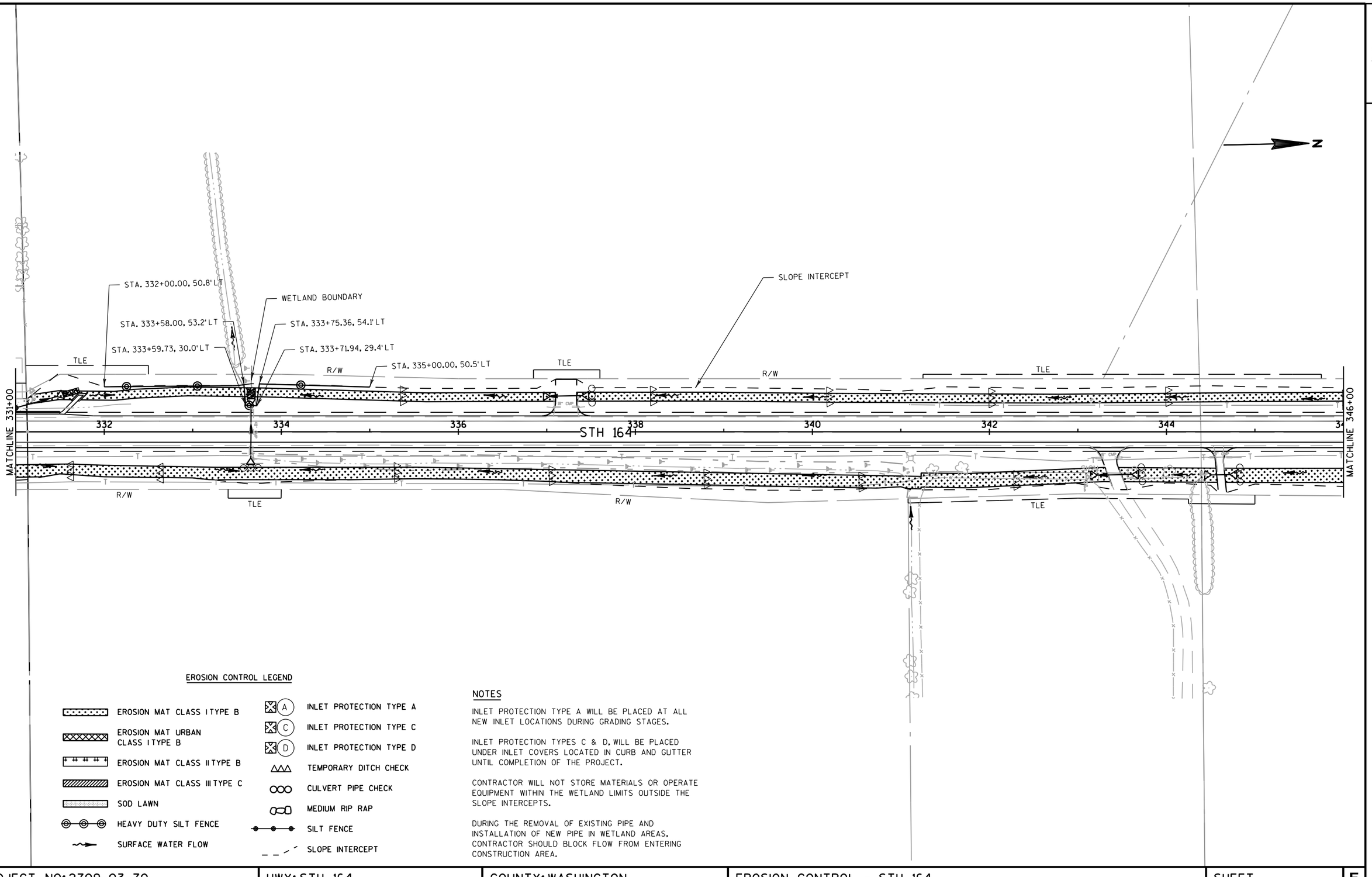
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 142	E

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

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INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

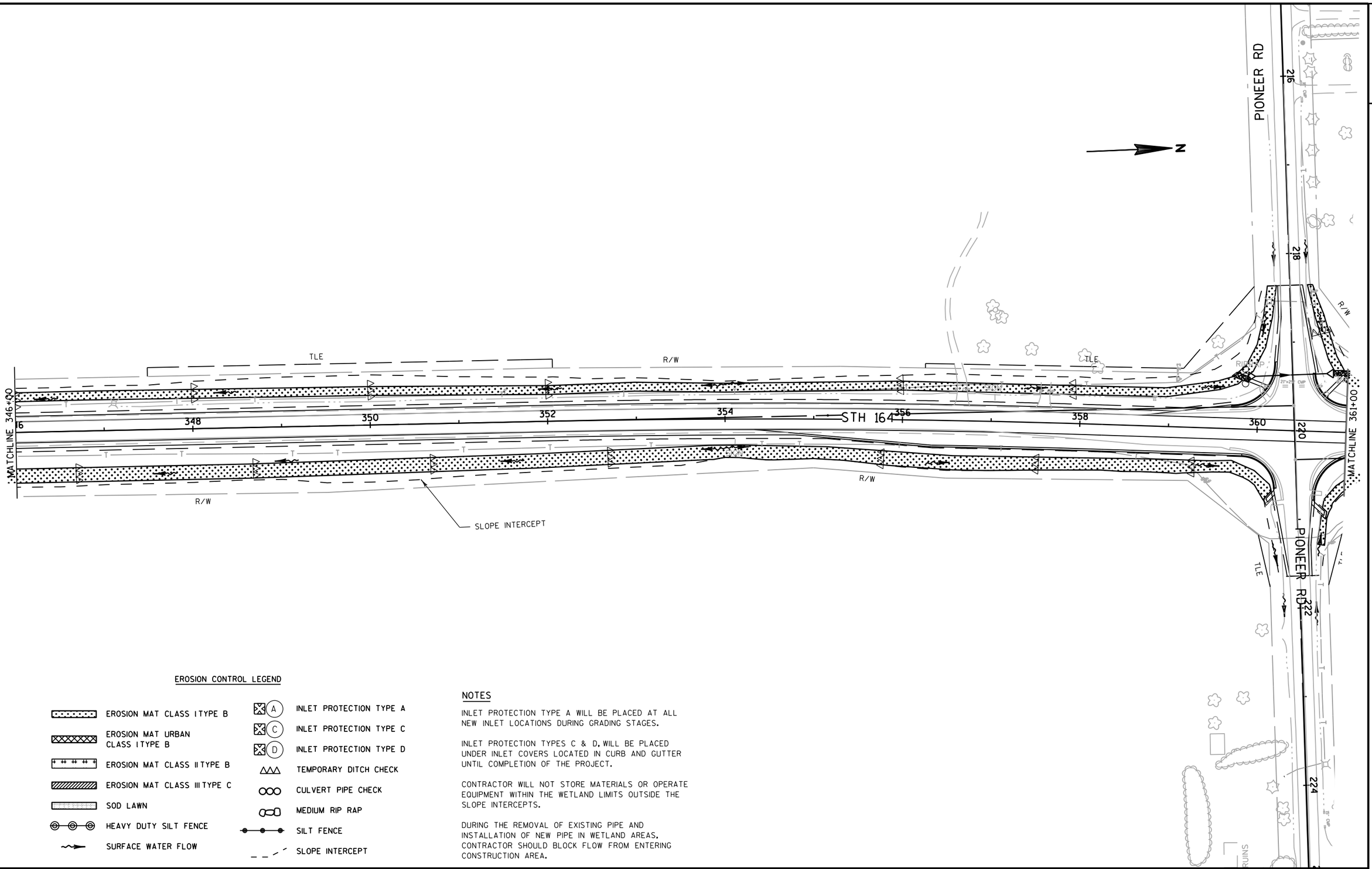
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 143	E

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
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- SILT FENCE
- SLOPE INTERCEPT

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INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

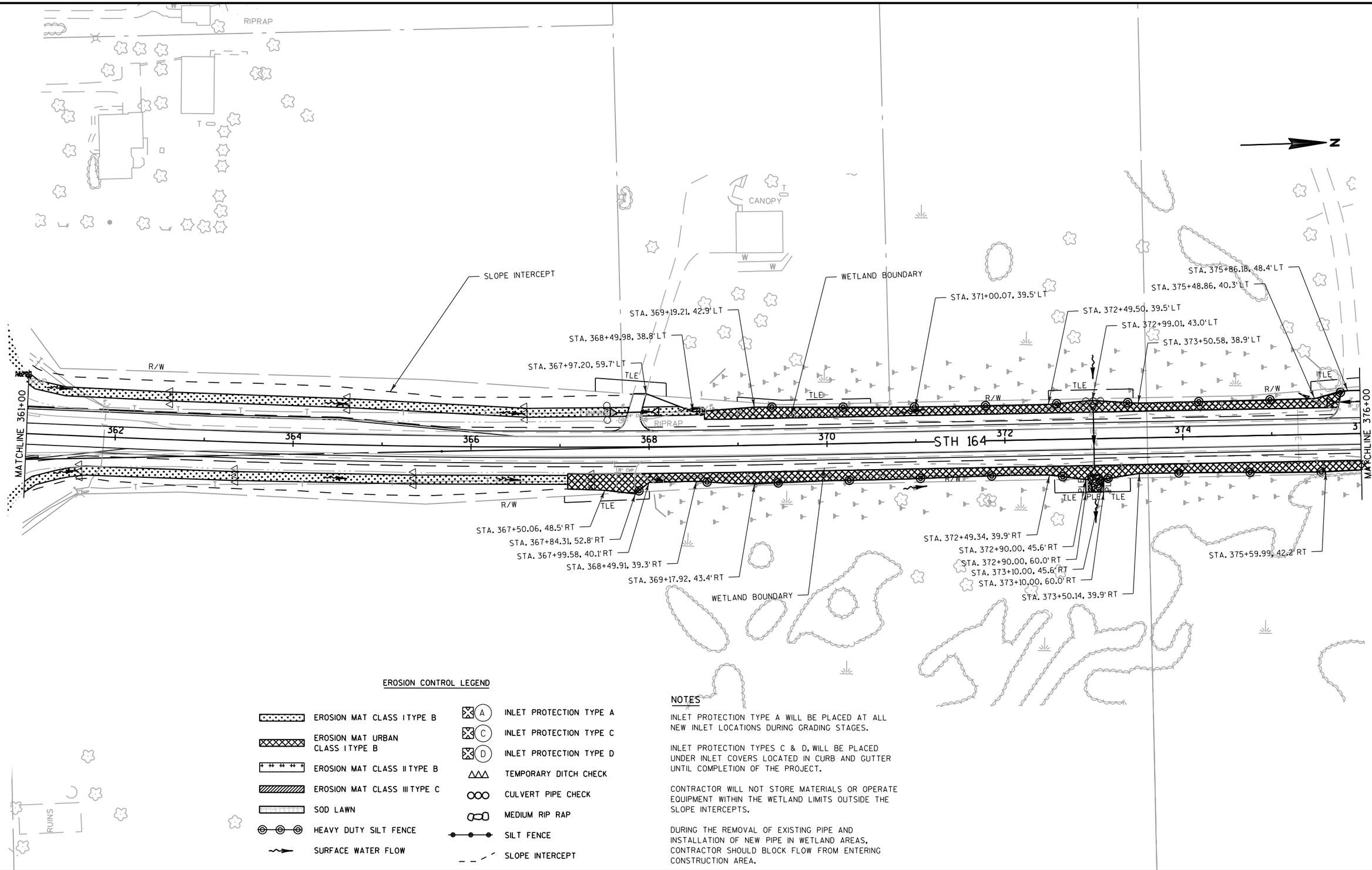
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 144	E

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 145	E

2

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

NOTES

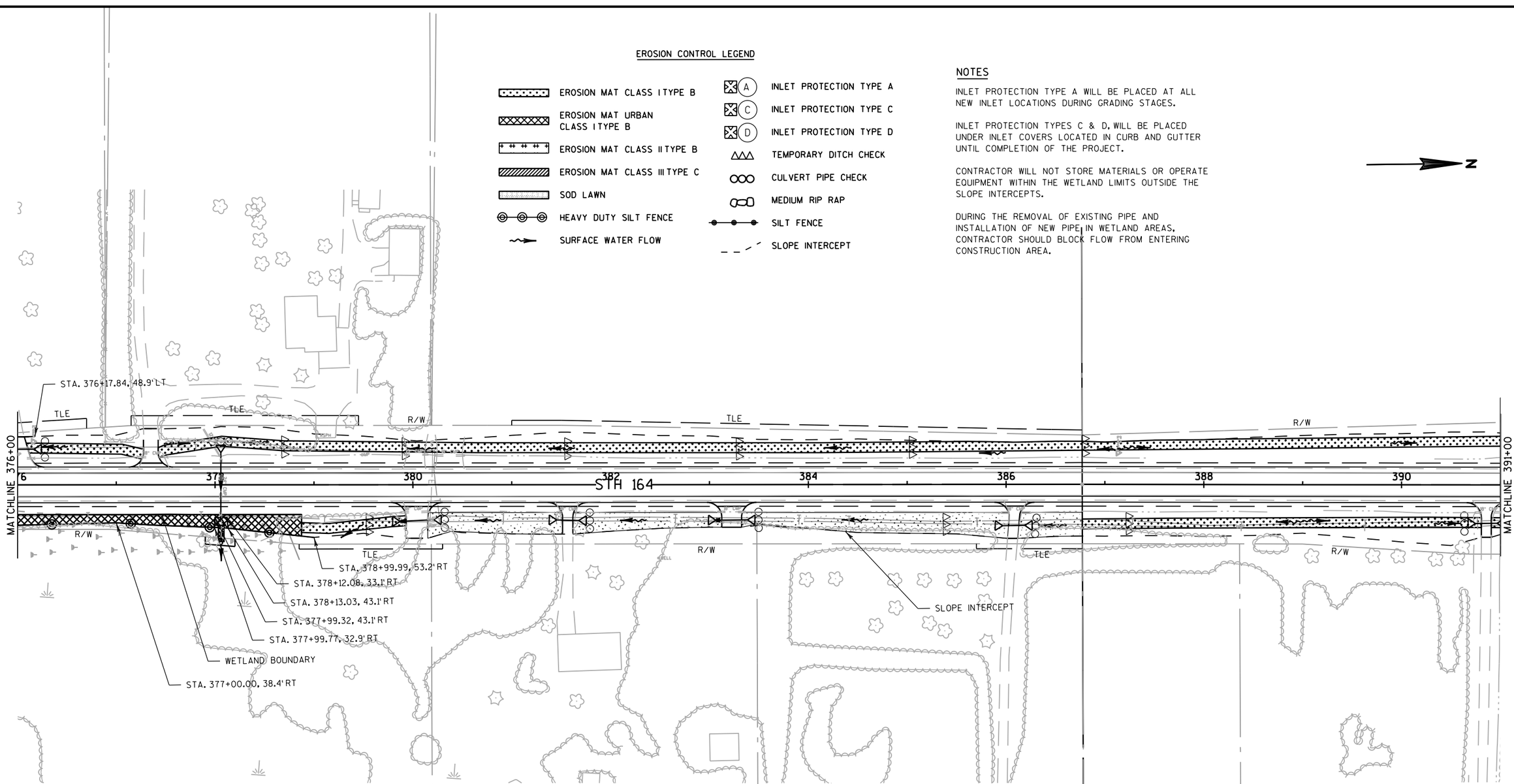
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DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETLAND AREAS, CONTRACTOR SHOULD BLOCK FLOW FROM ENTERING CONSTRUCTION AREA.

N



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 146	E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022023_ec.dgn PLOT DATE : 1/22/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
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- MEDIUM RIP RAP
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- SLOPE INTERCEPT

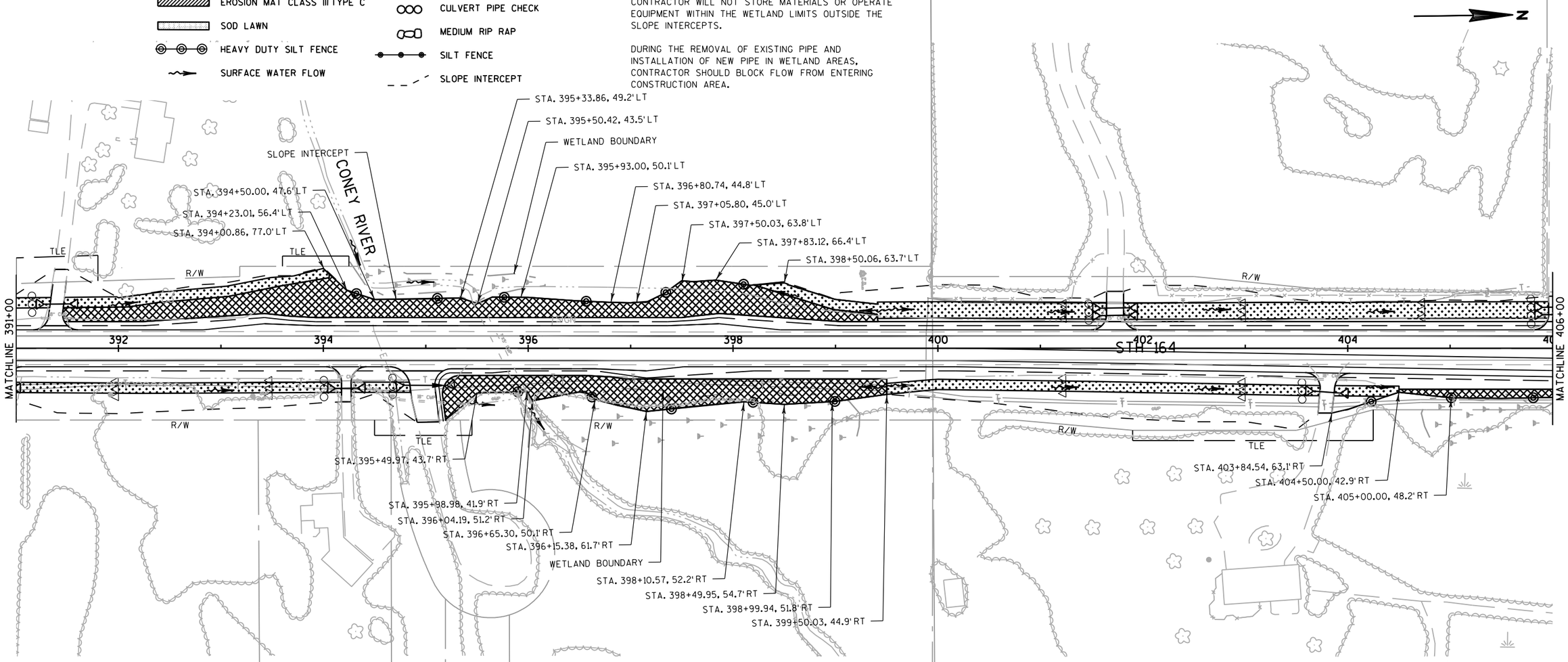
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 147	E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022024_ec.dgn PLOT DATE : 1/22/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
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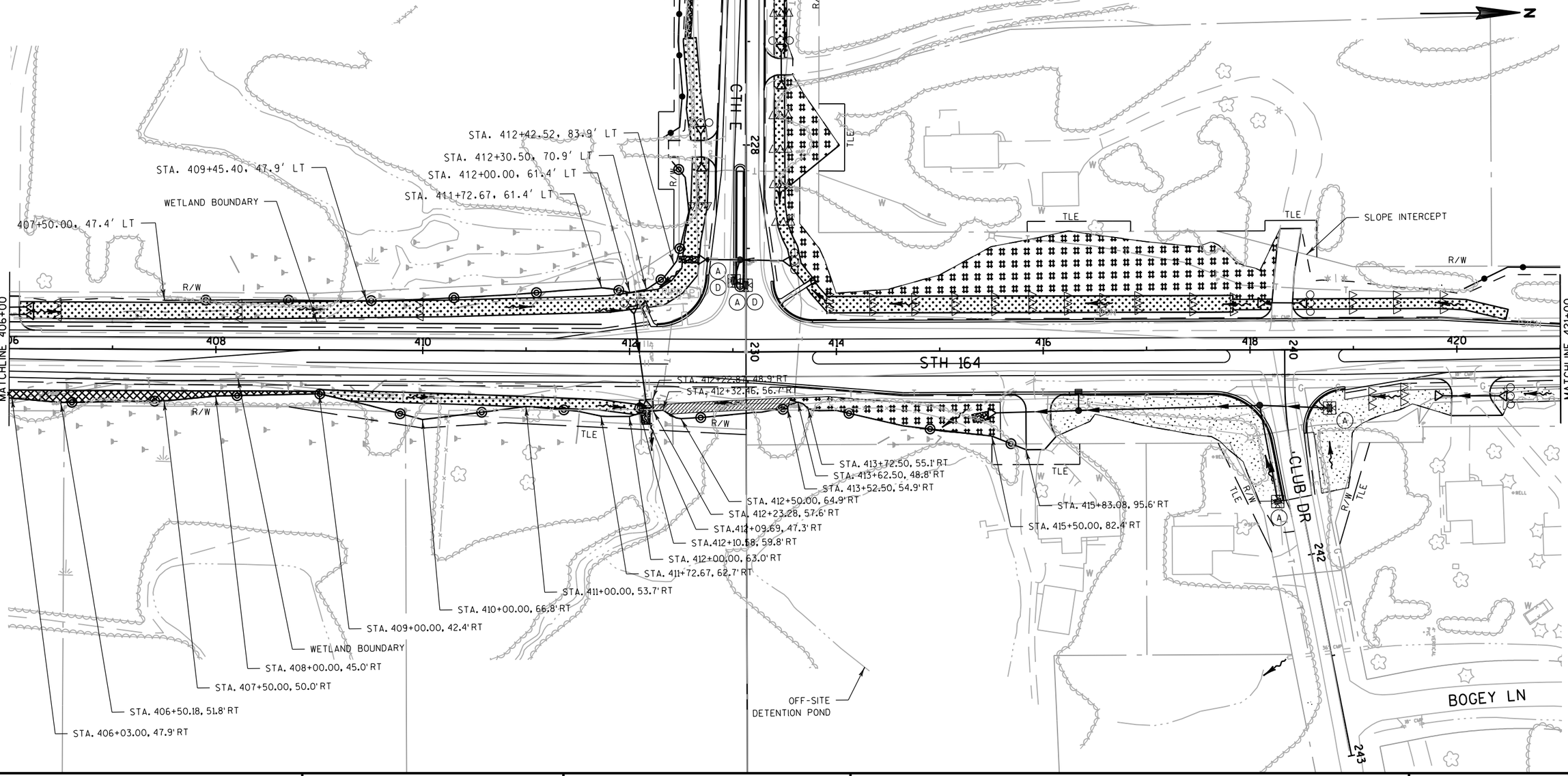
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 148	E

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
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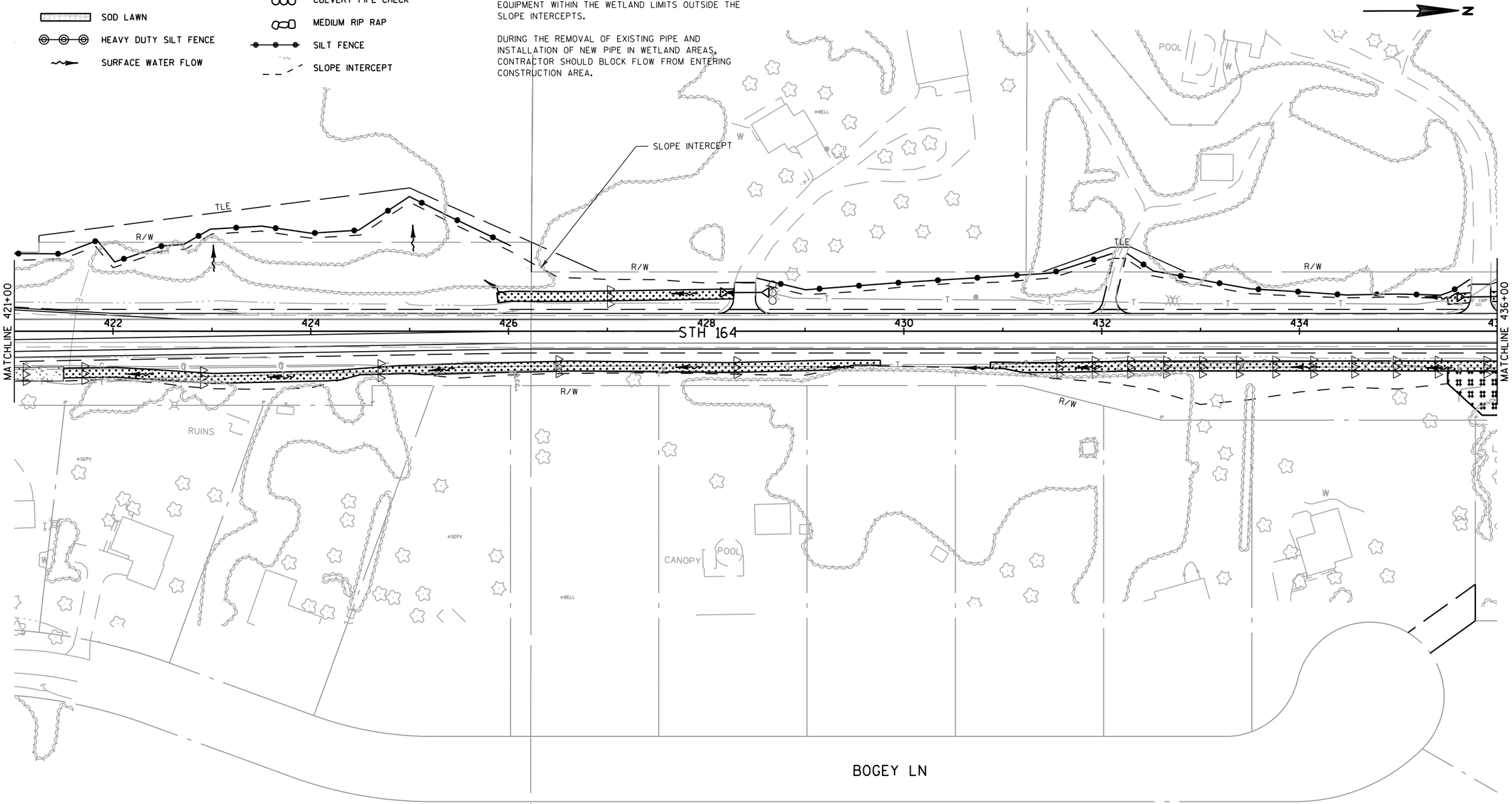
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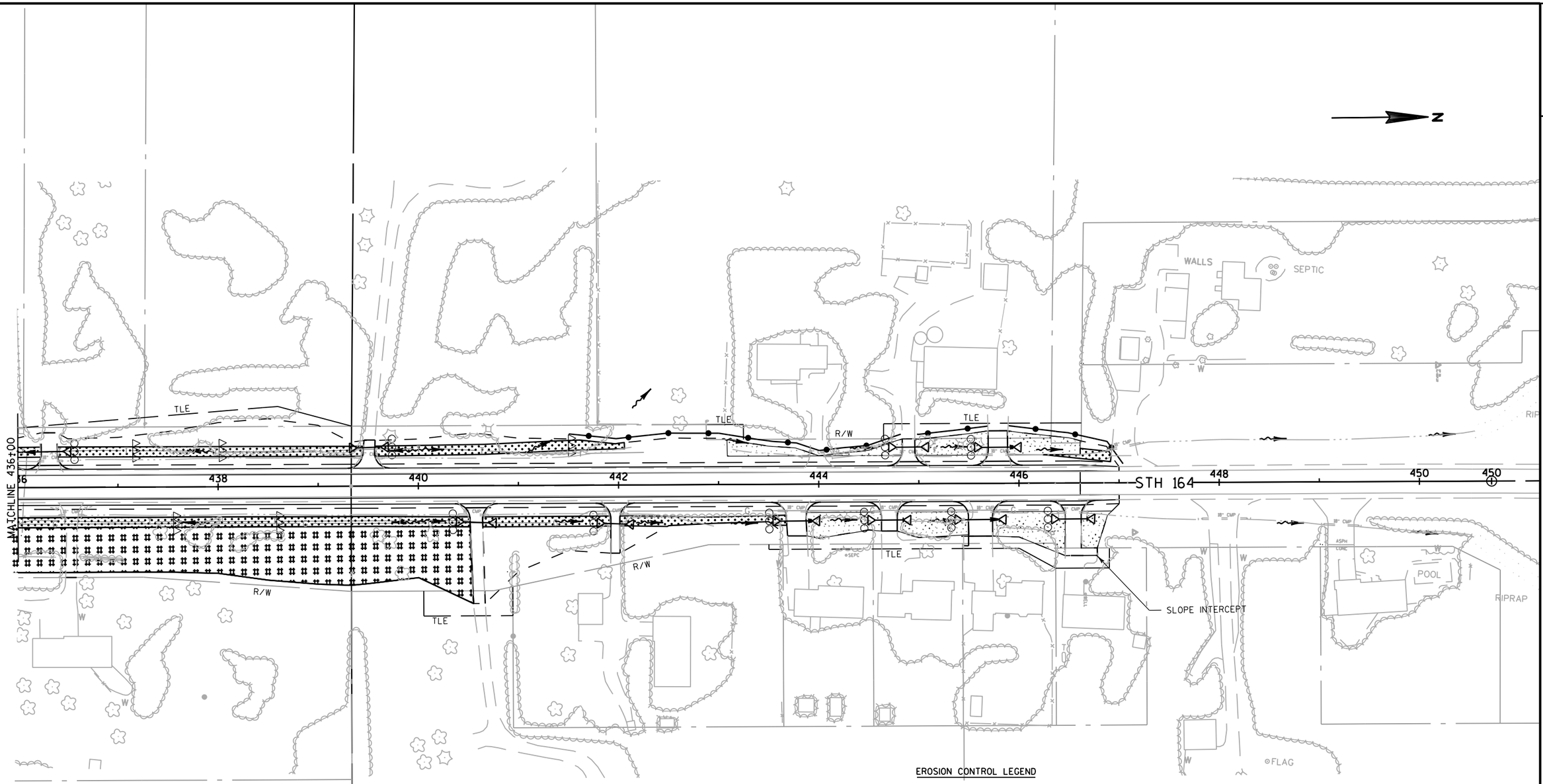


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 149	E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022026_ec.dgn PLOT DATE : 1/22/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE A
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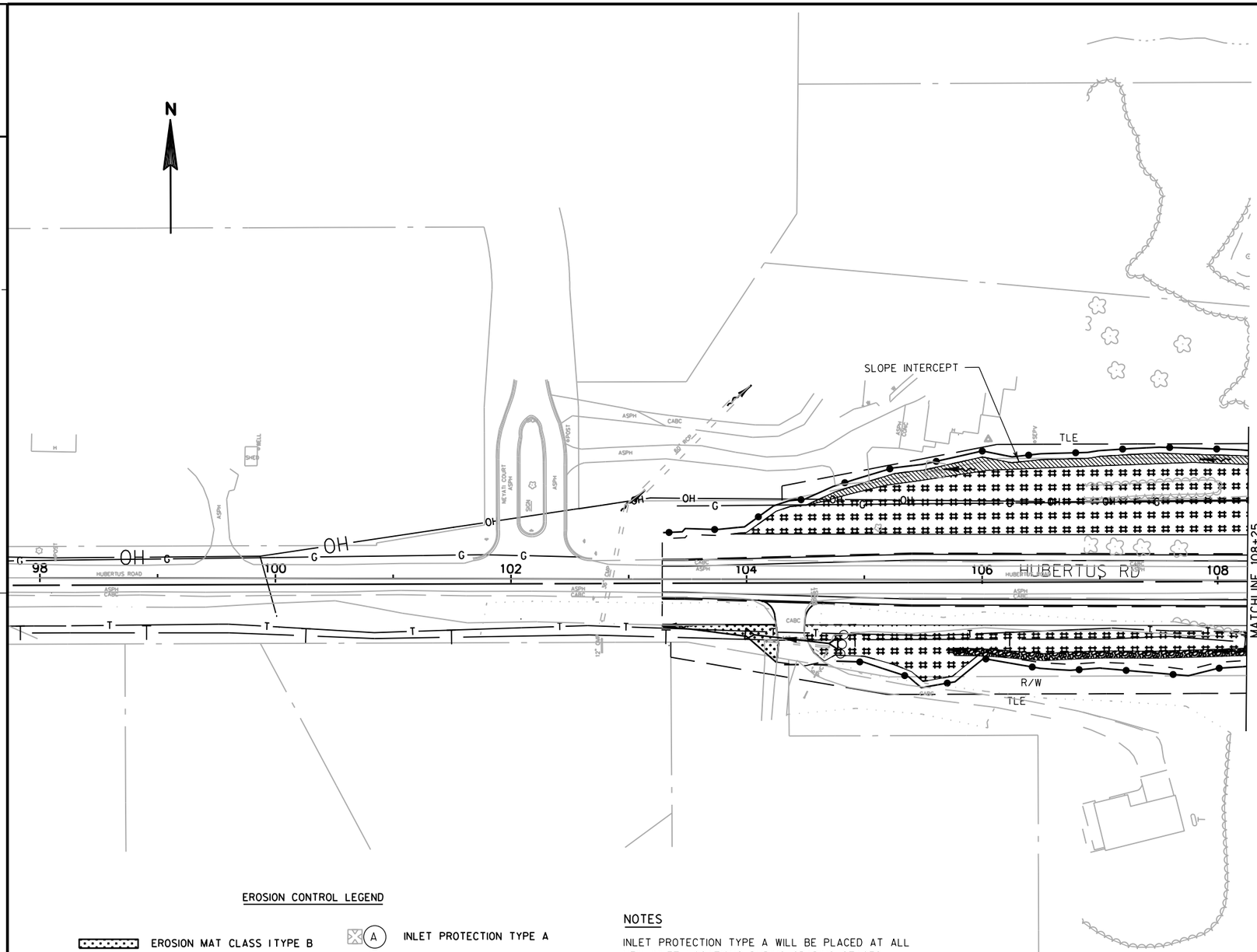
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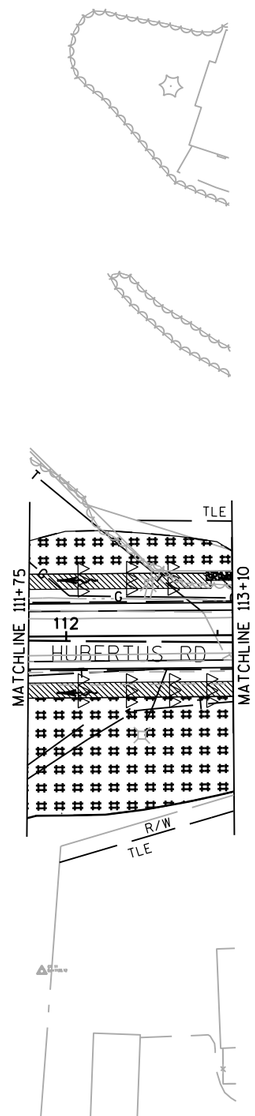
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 164	SHEET 150	E

2





EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- (A) INLET PROTECTION TYPE A
- (C) INLET PROTECTION TYPE C
- (D) INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- MEDIUM RIP RAP
- SILT FENCE
- SLOPE INTERCEPT

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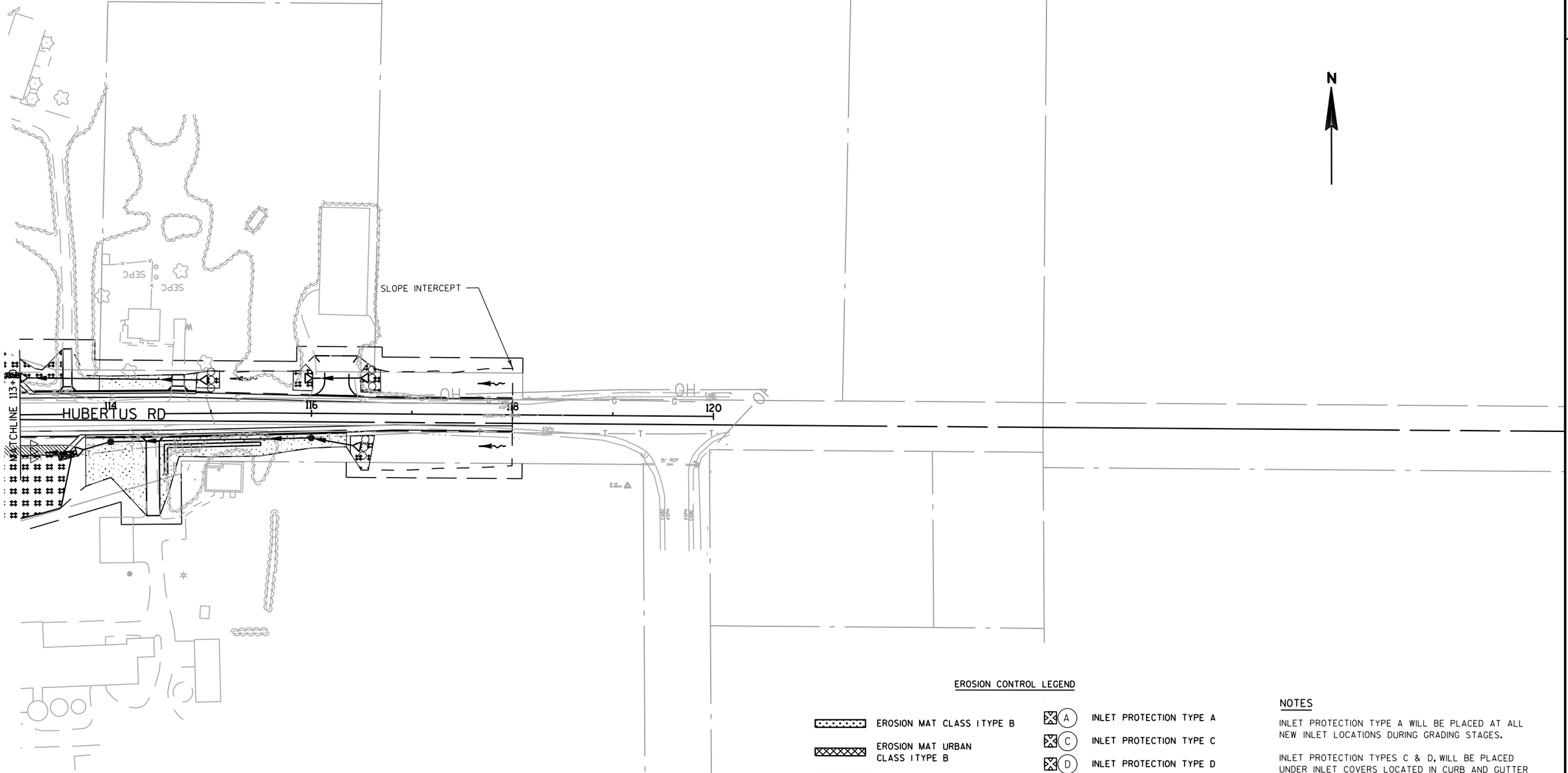
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - HUBERTUS ROAD	SHEET 151	E

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE C
- INLET PROTECTION TYPE D
- TEMPORARY DITCH CHECK
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - HUBERTUS ROAD	SHEET 152	E

2

N

EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE C
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- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
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- SLOPE INTERCEPT

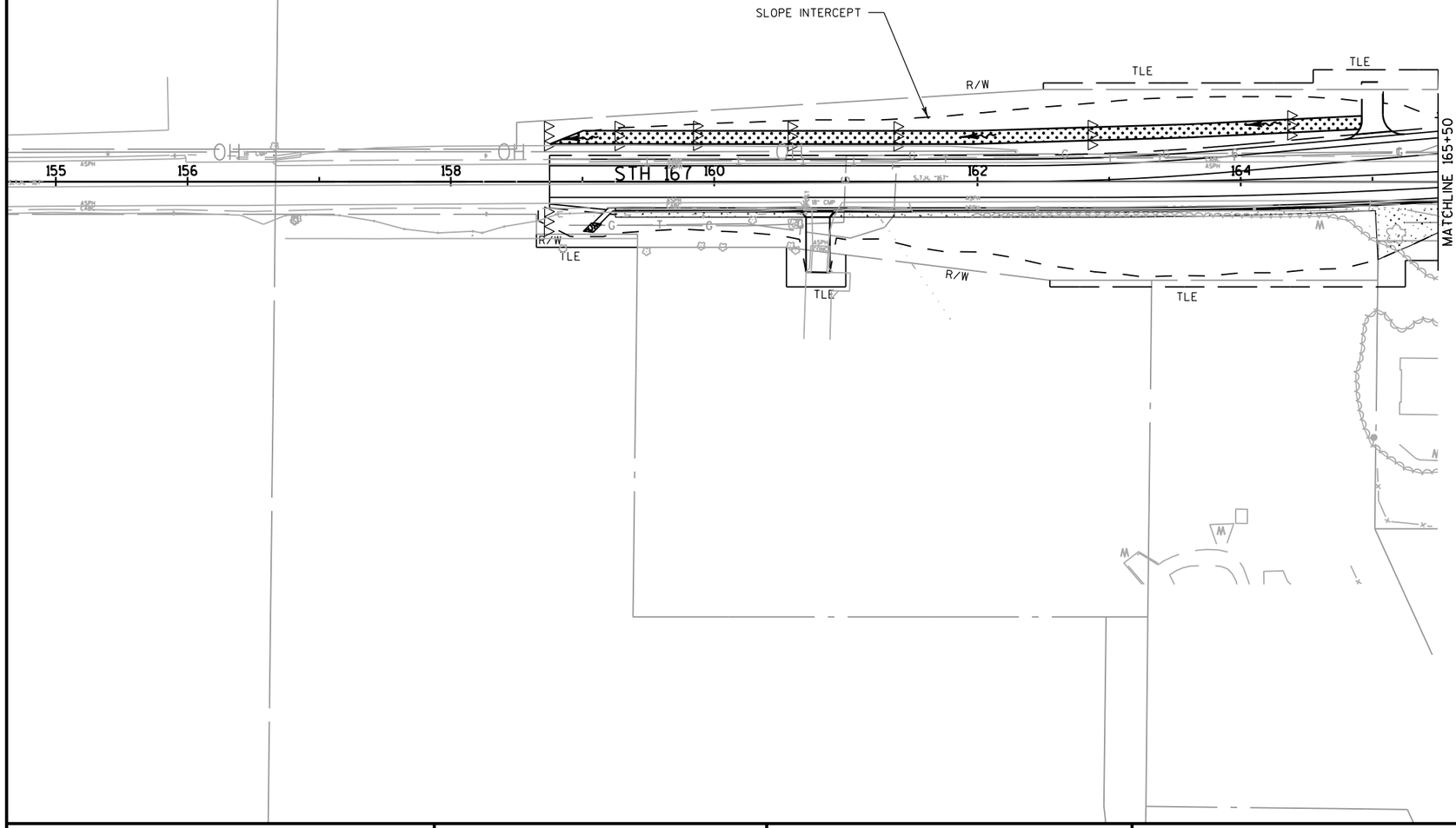
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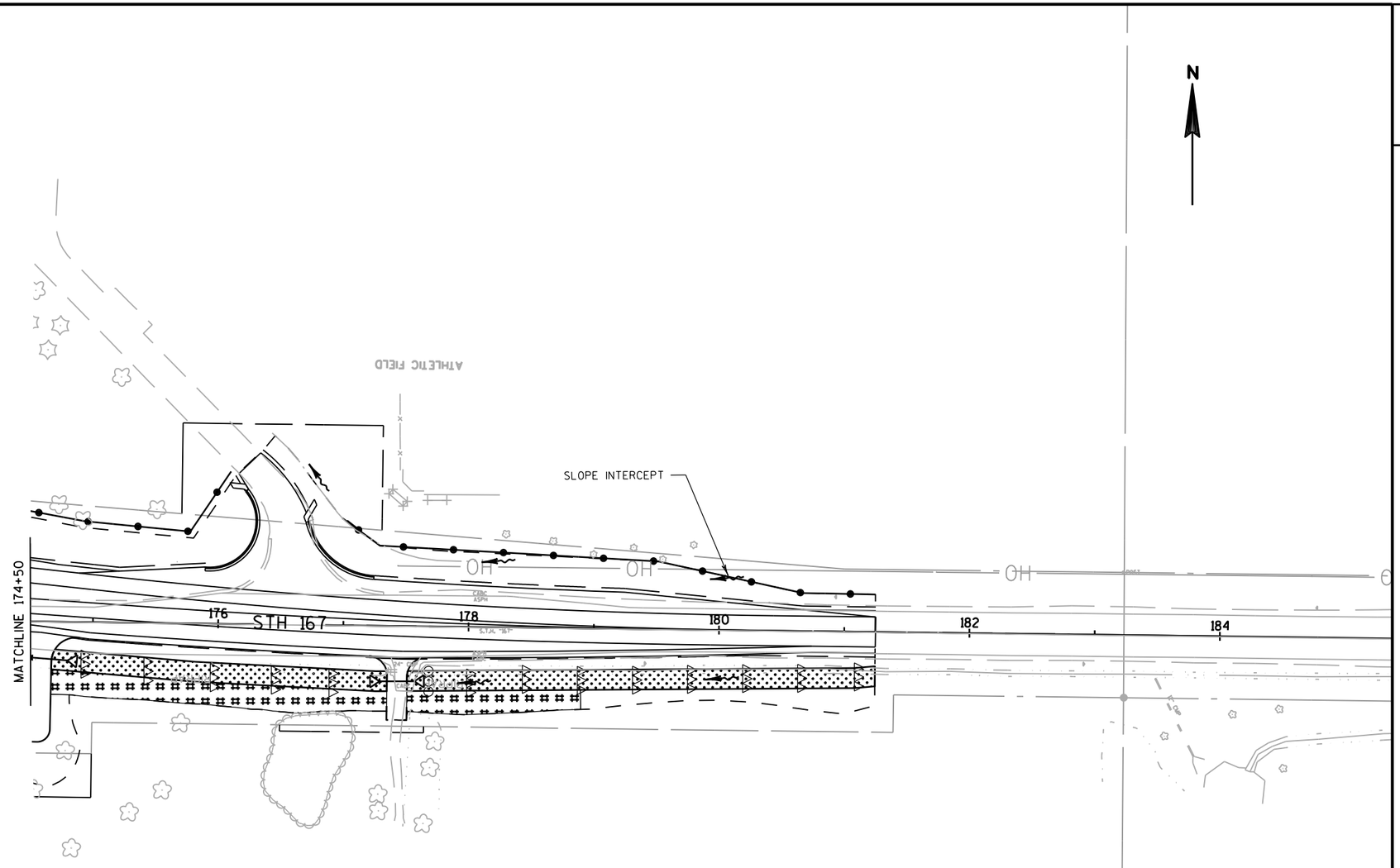


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 167	SHEET	E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022030_ec.dgn PLOT DATE : 1/22/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT CLASS III TYPE C
- SOD LAWN
- HEAVY DUTY SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE A
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EROSION CONTROL - STH 167	SHEET 154	E

GENERAL DRAINAGE NOTES

LOCATION OF STRUCTURES IN CURB AND GUTTER OR BARRIER SECTION REFER TO CURB AND GUTTER OR BARRIER FLOW LINE. LOCATION OF STRUCTURES NOT IN CURB AND GUTTER SECTION REFER TO CENTER OF STRUCTURE OR AS NOTED ON PLAN.

RIM ELEVATIONS ARE GIVEN AT FLOW LINE OF INLET OR AT CENTER OF MANHOLE. SEE STRUCTURE LOCATION DETAIL.

PLAN LENGTH REPRESENTS LENGTH OF PIPE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE AND IS USED FOR ESTIMATING. PIPE LENGTH REPRESENTS LENGTH OF PIPE MEASURED FROM INSIDE FACE OF STRUCTURE TO INSIDE FACE OF STRUCTURE AND IS USED TO COMPUTE PIPE SLOPE.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES AND PIPES SHOWN ON THE PLANS MAY BE ADJUSTED BY THE ENGINEER TO FIT EXISTING FIELD CONDITIONS.

VERIFY THE EXISTING STORM SEWER SYSTEM CONNECTION LOCATIONS AND ELEVATIONS PRIOR TO ORDERING DRAINAGE STRUCTURES AND PIPES. NOTIFY THE ENGINEER OF ANY DEVIATIONS FROM THE INFORMATION SHOWN ON THE PLANS PRIOR TO INSTALLING THE PROPOSED STORM SEWER.

UTILITY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE. LOCATIONS SHOWN ARE TAKEN FROM EXISTING RECORDS AND BEST INFORMATION AVAILABLE FROM EXISTING PLANS. IT IS EXPECTED THAT THERE MAY BE DISCREPANCIES AND OMISSIONS IN THE LOCATION OF UTILITIES AND STRUCTURES SHOWN. VERIFY ALL LOCATIONS IN THE FIELD.

COORDINATE WITH DIGGERS HOTLINE TO FIELD LOCATE UTILITIES. SHEETING SHALL NOT GO THROUGH UTILITIES. ANY UTILITIES DAMAGED DUE TO CONTRACTOR ACTIVITIES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE COMPLETE SATISFACTION OF THE UTILITY FACILITY.

PROVIDE TEMPORARY POSITIVE DRAINAGE THROUGHOUT THE PROJECT DURING ALL PROJECT STAGES. PROVIDING TEMPORARY POSITIVE DRAINAGE IS INCIDENTAL TO CONSTRUCTION.

SUPPORTING UTILITIES DURING STORM SEWER AND CULVERT PIPE CONSTRUCTION IS INCIDENTAL TO STORM SEWER PIPE AND/OR CULVERT PIPE AND/OR STORM SEWER STRUCTURE.

JOINT TIES FOR CONCRETE PIPE SHALL BE USED TO CONNECT ALL CONCRETE APRON ENDWALLS AND THE LAST THREE PIPE SEGMENTS PRECEDING THE APRON ENDWALL. THE COST OF JOINT TIES SHALL BE INCIDENTAL TO THE STORM SEWER PIPE.

SEE PLAN/PROFILE SHEETS FOR REMOVAL OF EXISTING STORM SEWER SYSTEM.

STORM SEWER PLAN & PROFILE NOTE:
PLAN VIEW HIGHLIGHTS CORRESPOND TO PROFILES SHOWN IN PROFILE BELOW PLAN VIEW (SAME SHEET). STORM SEWER STRUCTURES AND PIPES LABELED IN PLAN VIEW WITHOUT HIGHLIGHT ARE SHOWN ON THE NEXT PROFILE ONLY SHEET(S).

Himalayan Consultants, LLC

WISCONSIN
ALLAN J. PACADA
E-43053-6
MILWAUKEE, WI
PROFESSIONAL ENGINEER

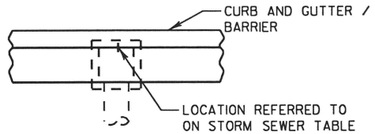
1/22/18 (DATE)

(SIGNATURE)

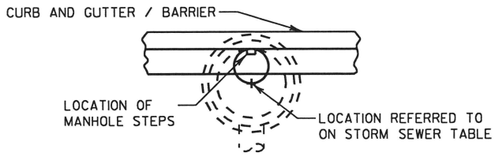
STORM SEWER PLANS PREPARED BY HIMALAYAN CONSULTANTS, LLC.

STORM SEWER LEGEND

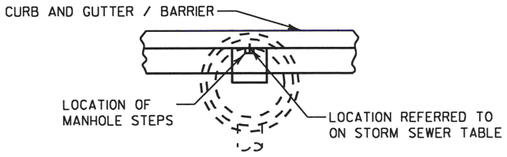
- (HXXX) PROPOSED DRAINAGE STRUCTURE
- ● PROPOSED MANHOLE
- ■ PROPOSED INLET
- △ PROPOSED ENDWALL
- P*** PROPOSED STORM SEWER PIPE
- (CXXX) PROPOSED CULVERT PIPE
- PROPOSED STORM SEWER PIPE PLAN VIEW
- PROPOSED CULVERT PIPE PLAN VIEW



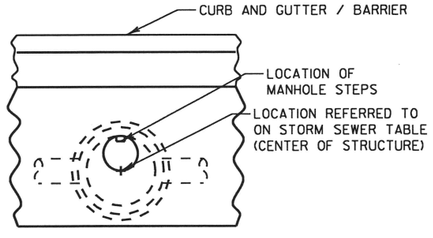
INLET IN CURB AND GUTTER / AT BARRIER



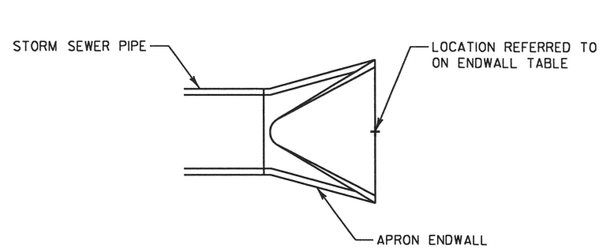
MANHOLE IN CURB AND GUTTER / AT BARRIER



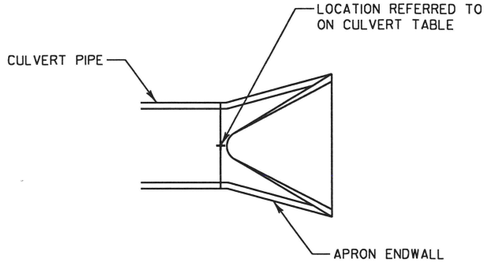
MANHOLE WITH INLET COVER IN CURB AND GUTTER / AT BARRIER



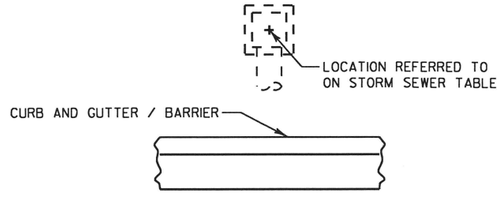
MANHOLE NOT IN CURB AND GUTTER / NOT AT BARRIER



APRON ENDWALL FOR STORM SEWER PIPE



CROSS CULVERT OR DRIVEWAY CULVERT WITH APRON ENDWALL



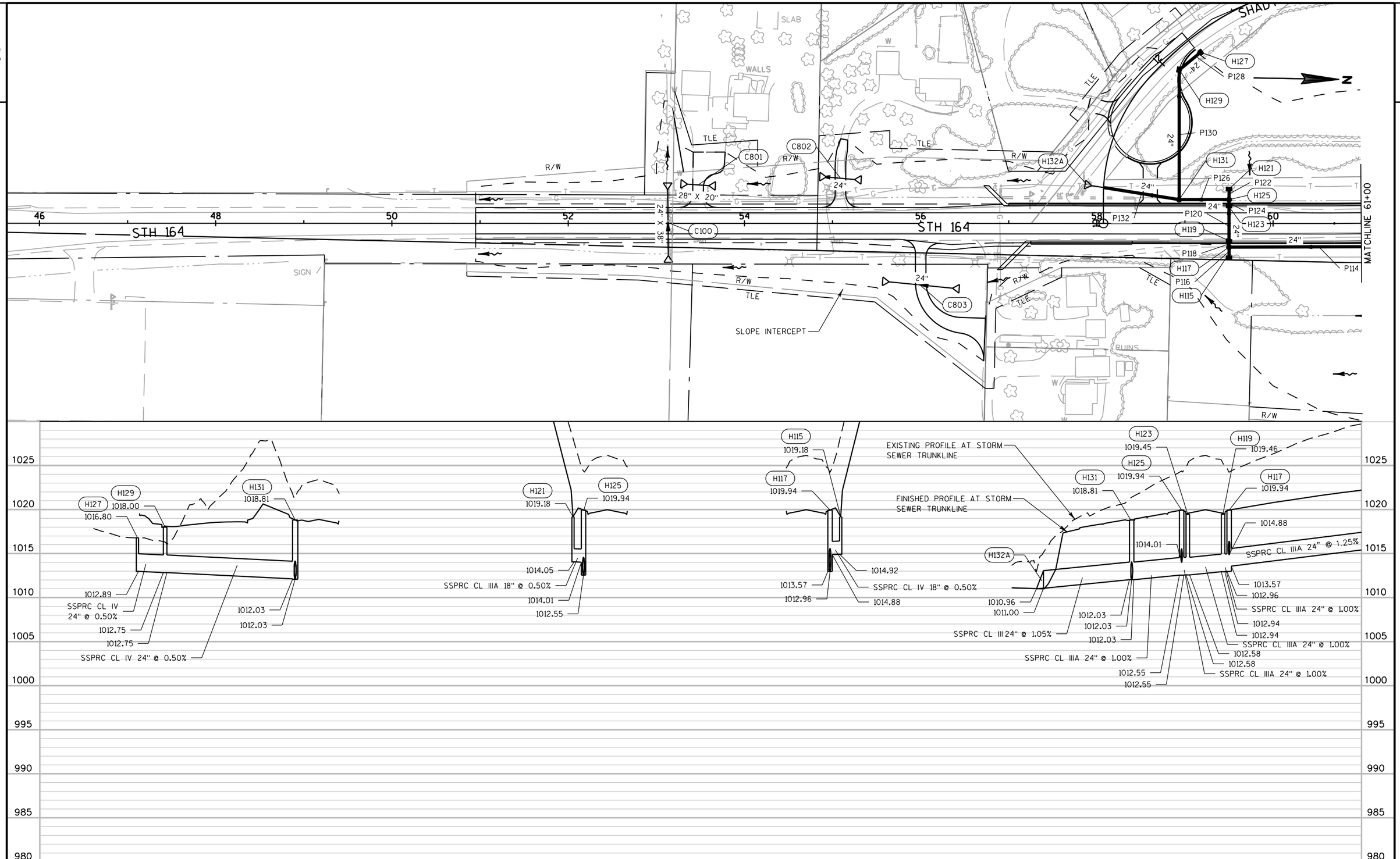
INLET NOT IN CURB AND GUTTER / NOT AT BARRIER

NOTE
1) LOCATION OF STRUCTURE MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
2) LOCATION AND SIZE OF STRUCTURE COVER OPENING DEPENDS ON TYPE OF CASTING. CASTING TYPES ARE SHOWN ON THE STORM SEWER TABLE.

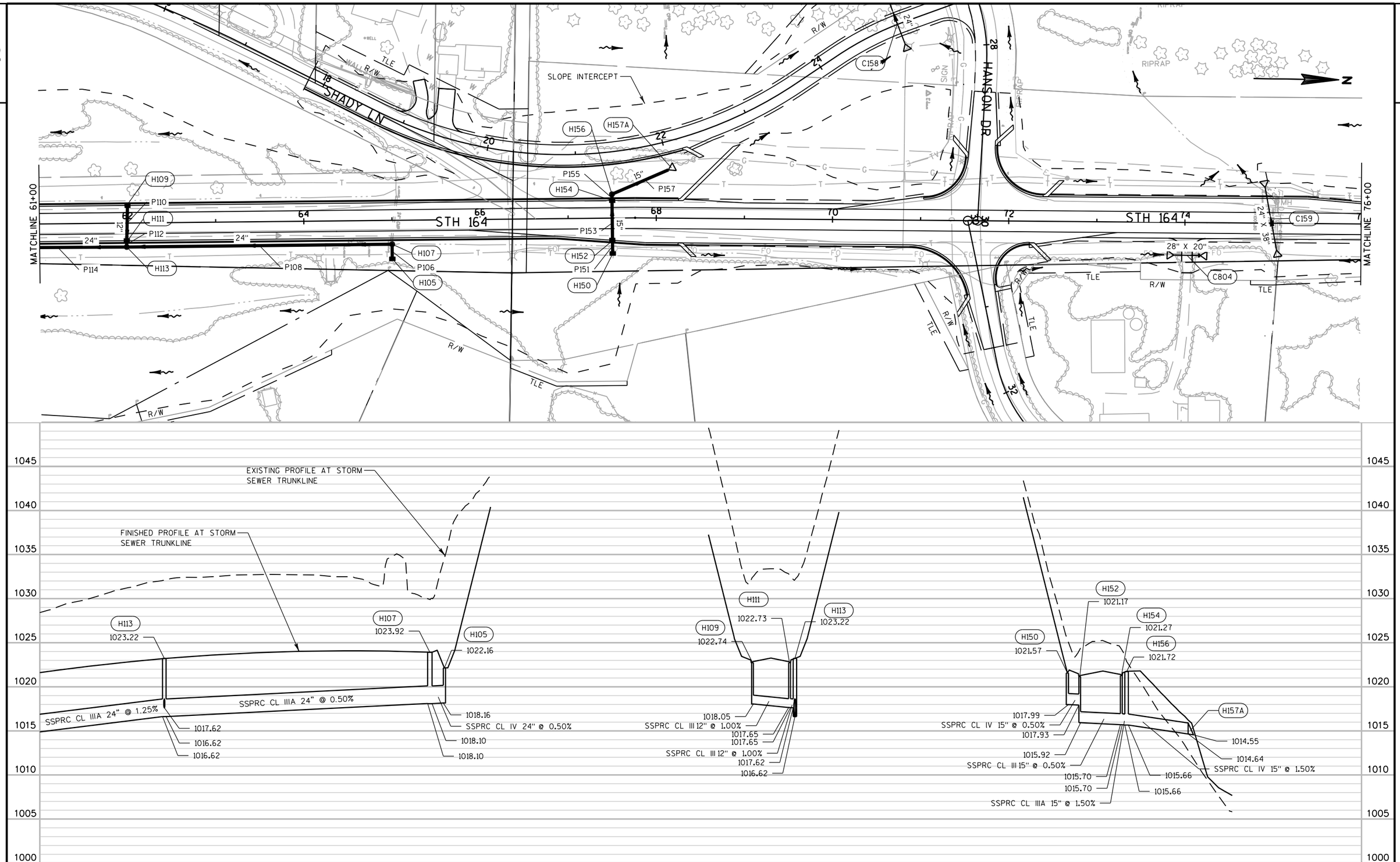
STRUCTURE LOCATION DETAIL

2

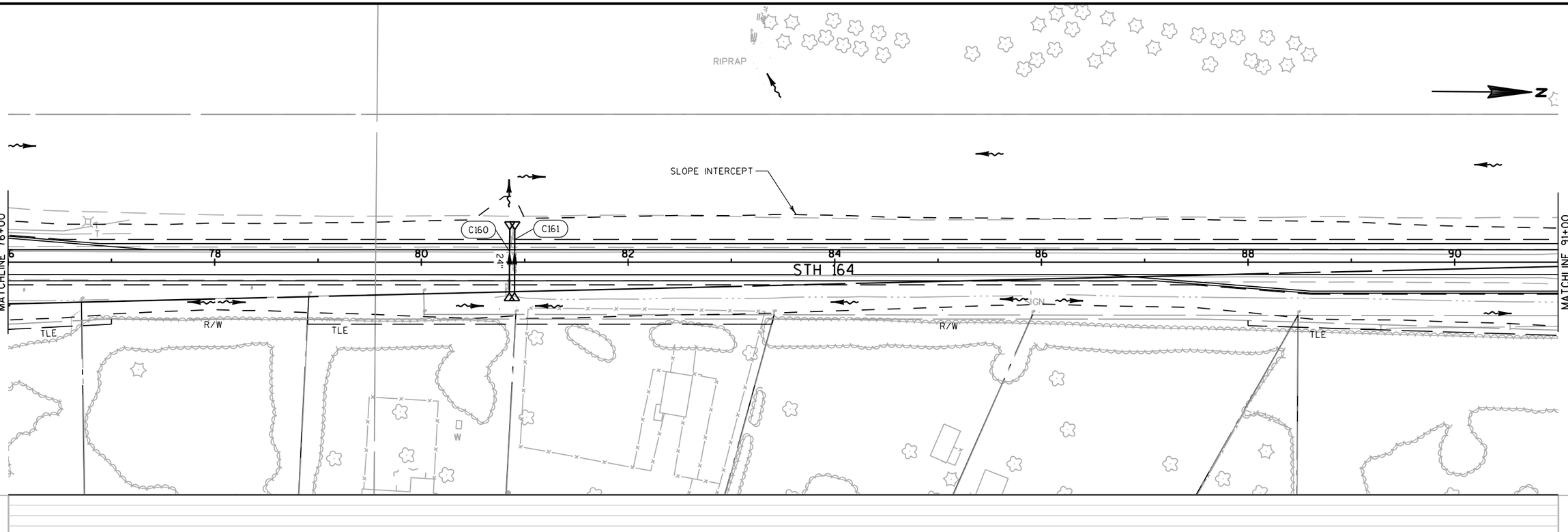
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PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - STH 164	SHEET 156	E


SHADY LN
HANSON DR
STH 164
SLOPE INTERCEPT
MATCHLINE 61+00
MATCHLINE 76+00
H109
H110
H111
H112
H113
H114
H105
H106
H107
H108
H150
H151
H152
H153
H154
H155
H156
H157A
P157
C158
C159
C804
24"
12"
15"
28" X 20"
24" X 38"
TLE
R/W
RIPRAP
EXISTING PROFILE AT STORM SEWER TRUNKLINE
FINISHED PROFILE AT STORM SEWER TRUNKLINE
1023.22
1023.92
1022.16
1017.62
1016.62
1016.62
1018.16
1018.10
1018.10
SSPRC CL IIIA 24" @ 1.25%
SSPRC CL IIIA 24" @ 0.50%
SSPRC CL IV 24" @ 0.50%
1022.74
1022.73
1023.22
1018.05
1017.65
1017.65
1017.62
1016.62
SSPRC CL III 12" @ 1.00%
SSPRC CL III 12" @ 1.00%
1021.57
1021.17
1021.27
1021.72
1017.99
1017.93
1015.92
1015.70
1015.70
1015.66
1015.66
1014.55
1014.64
SSPRC CL IV 15" @ 0.50%
SSPRC CL III 15" @ 0.50%
SSPRC CL IIIA 15" @ 1.50%
SSPRC CL IV 15" @ 1.50%
1045
1040
1035
1030
1025
1020
1015
1010
1005
1000

2



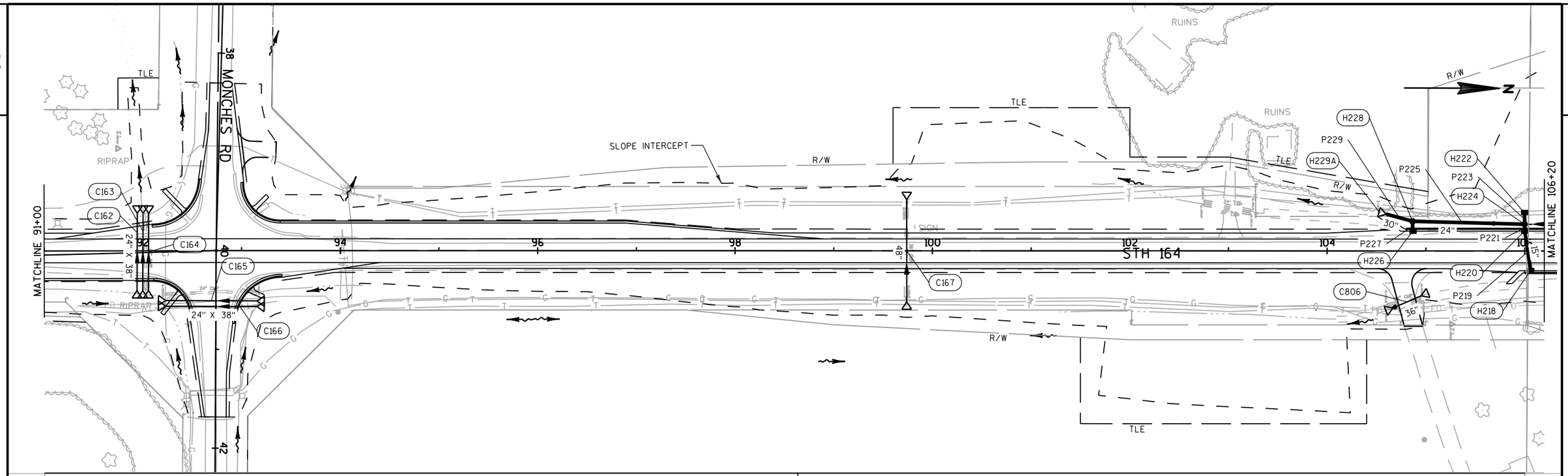
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PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - STH 164	SHEET 158	E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022503_ss.dgn PLOT DATE : 1/26/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100

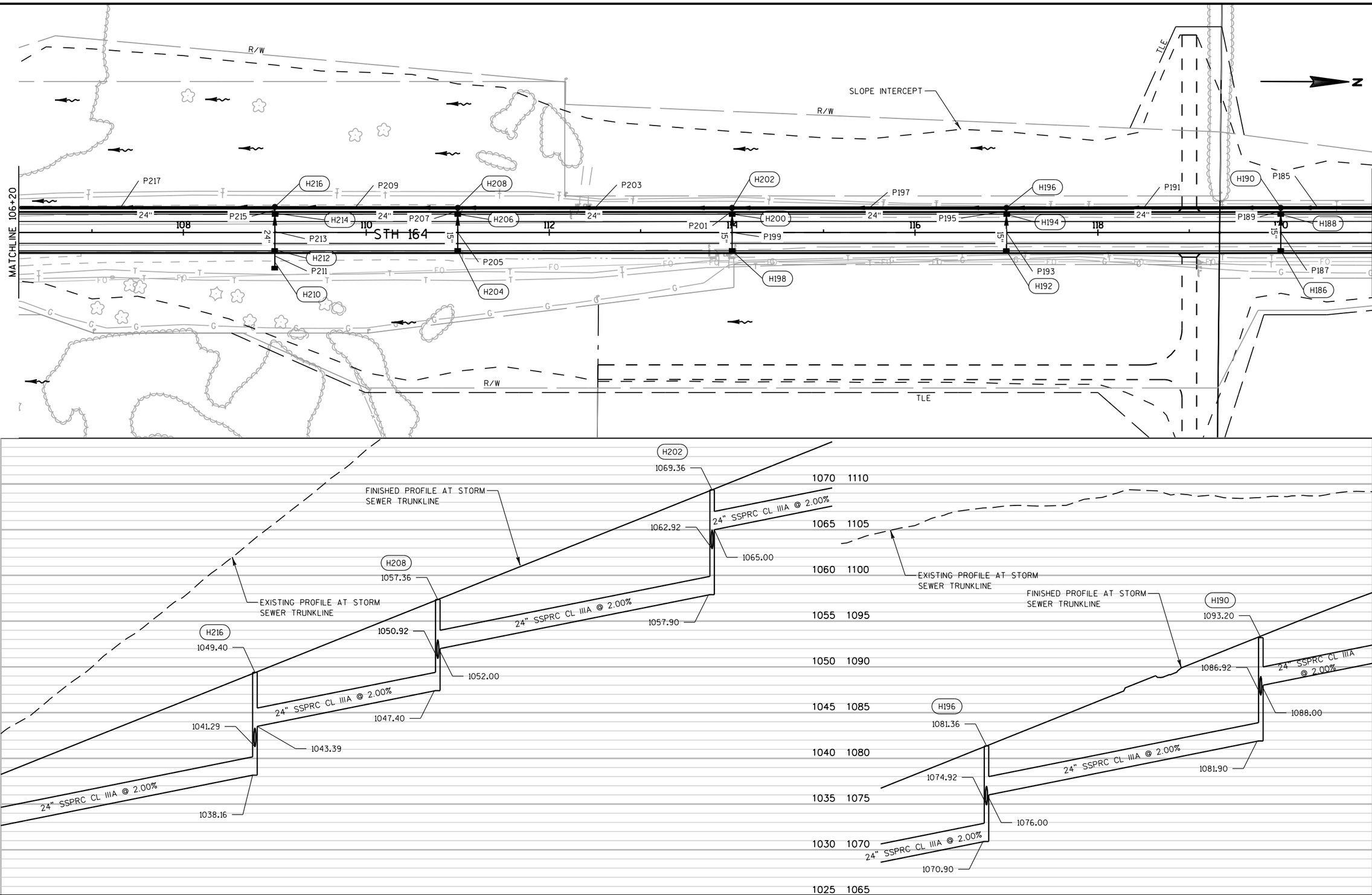
WISDOT/CADDS SHEET 41

2

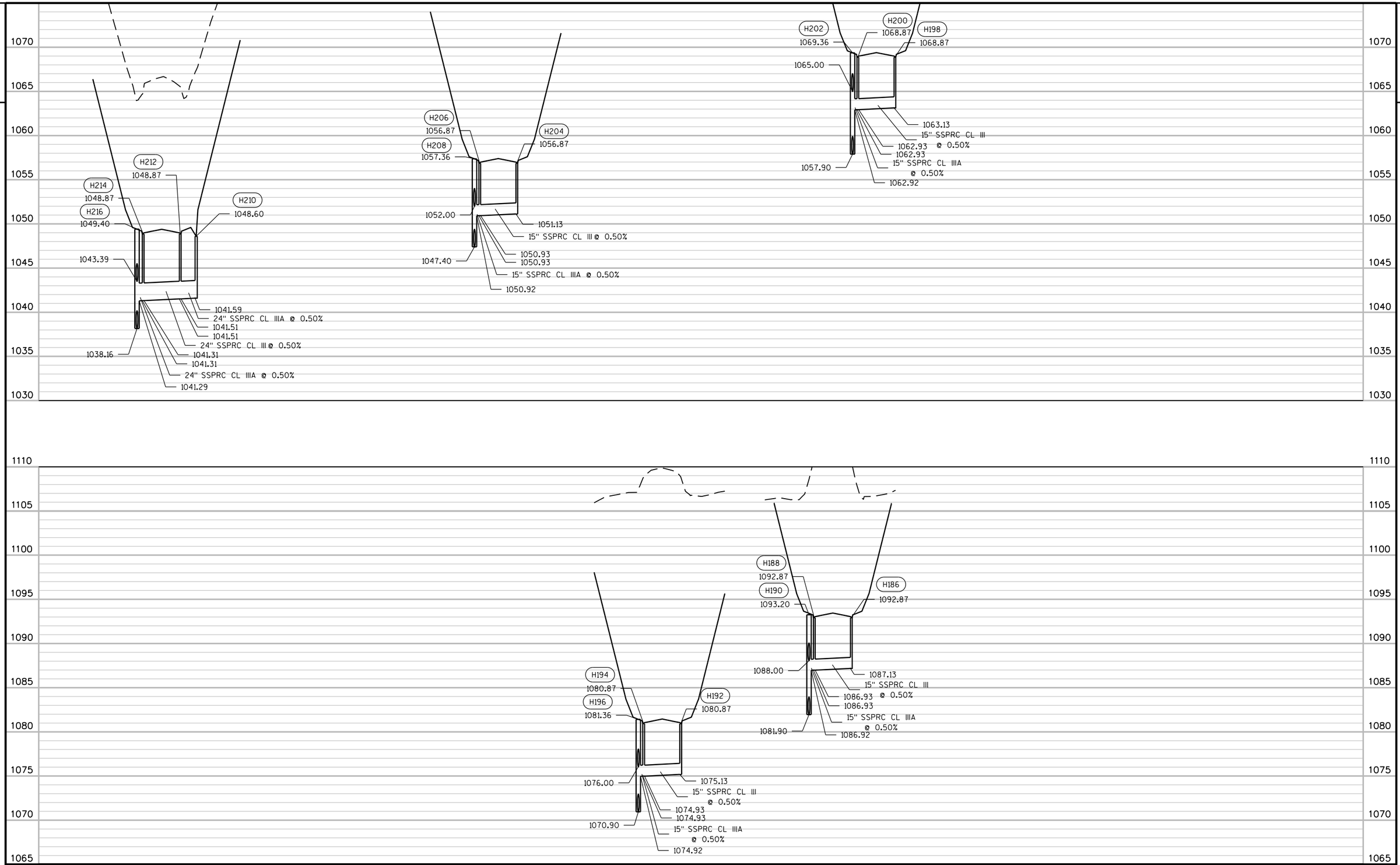


PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - STH 164	SHEET 159	E

2

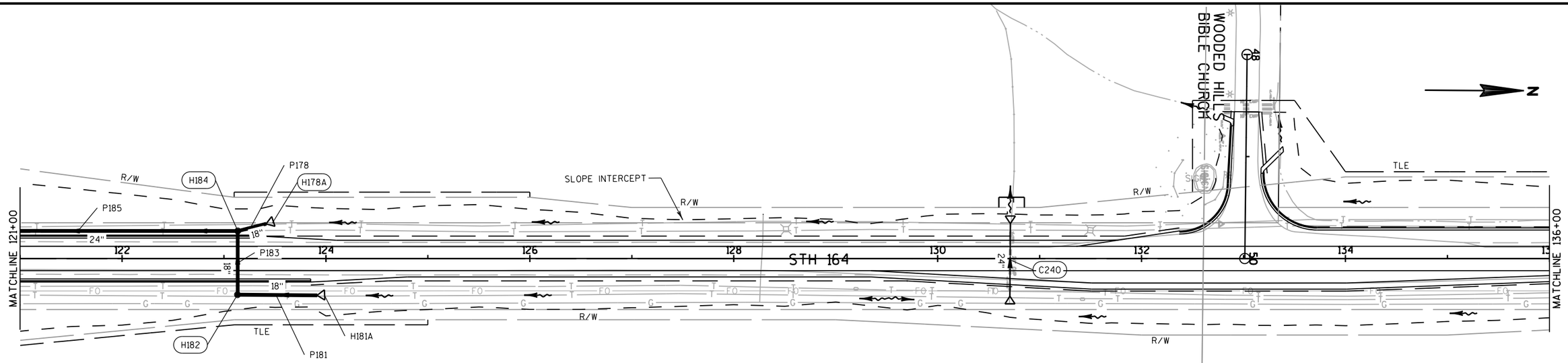


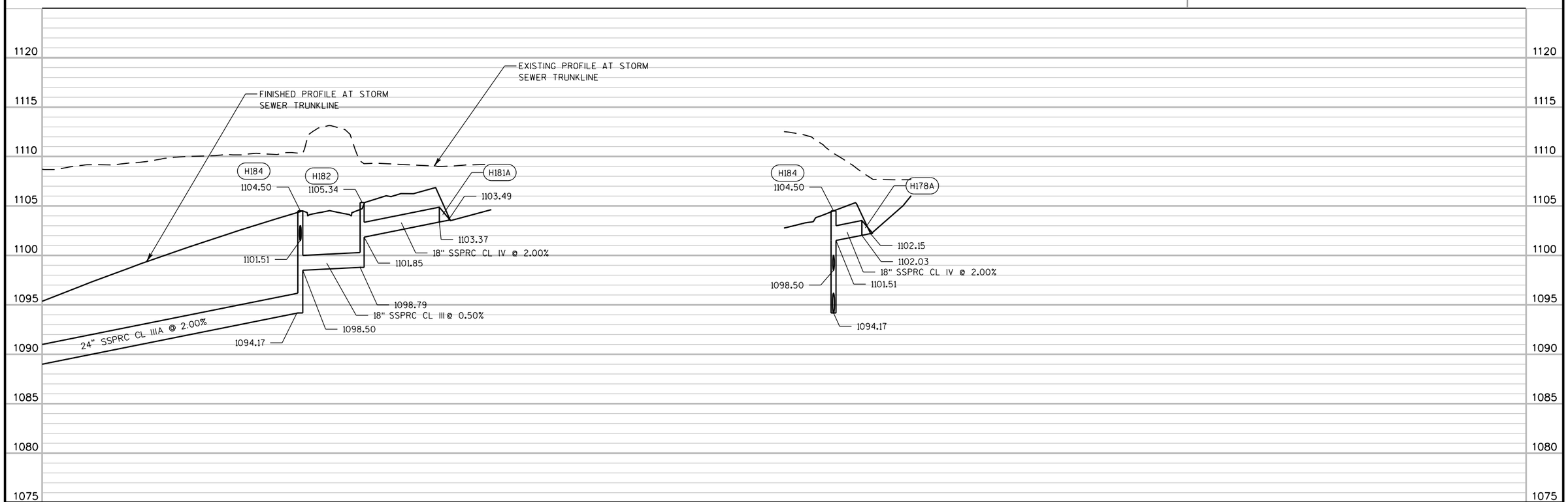
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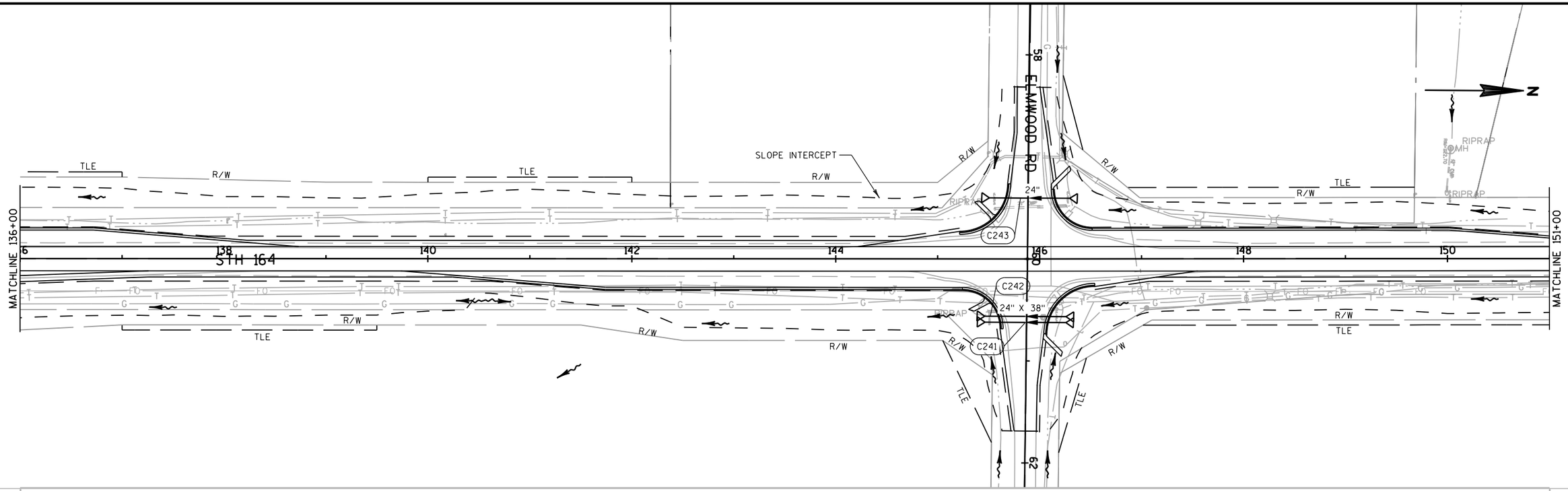
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	STORM SEWER - STH 164	SHEET 161	E

2





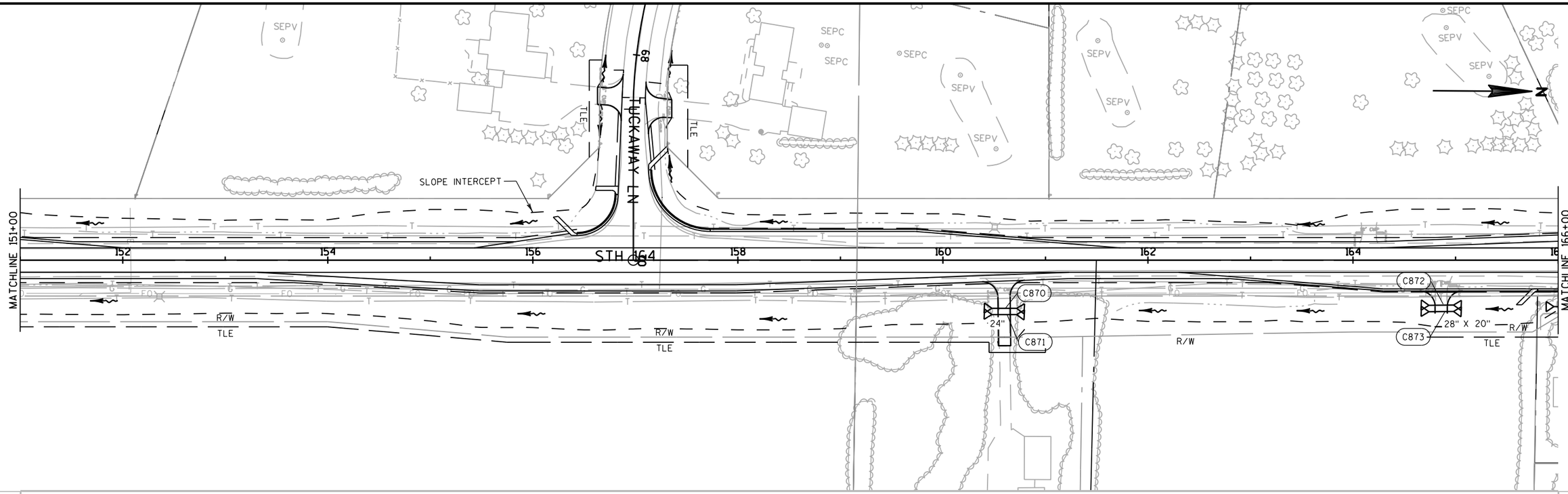
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NO PROFILE THIS SHEET

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - STH 164	SHEET 163	E

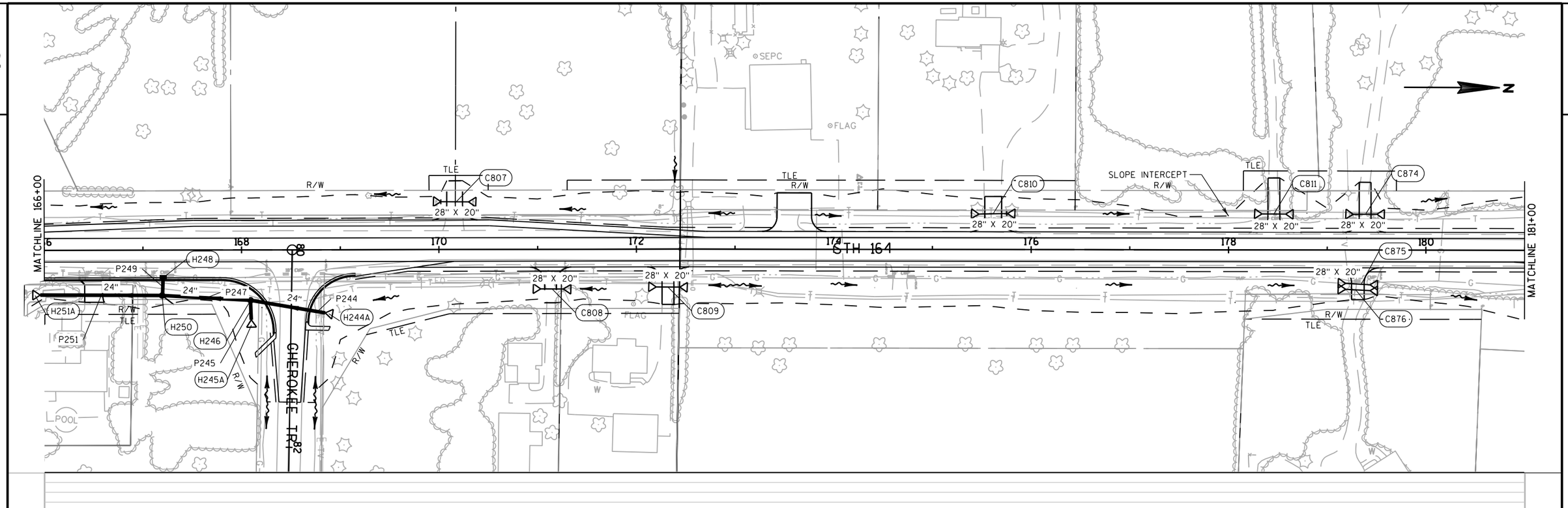
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PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - STH 164	SHEET 164	E

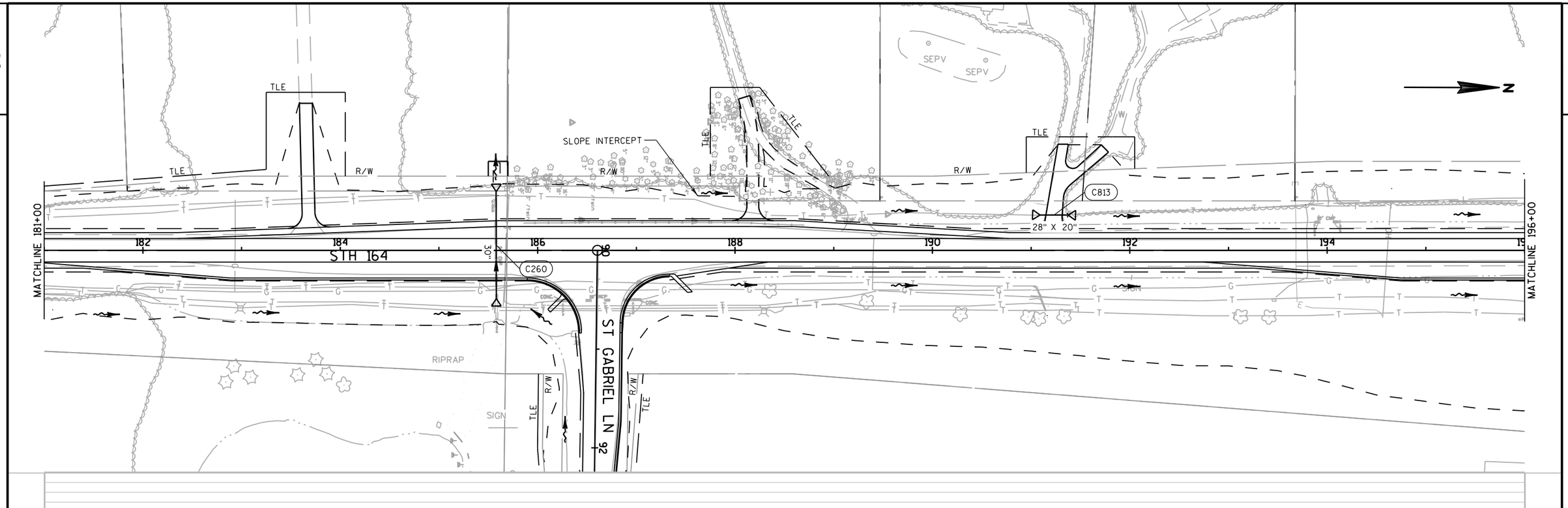
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PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - STH 164	SHEET	E

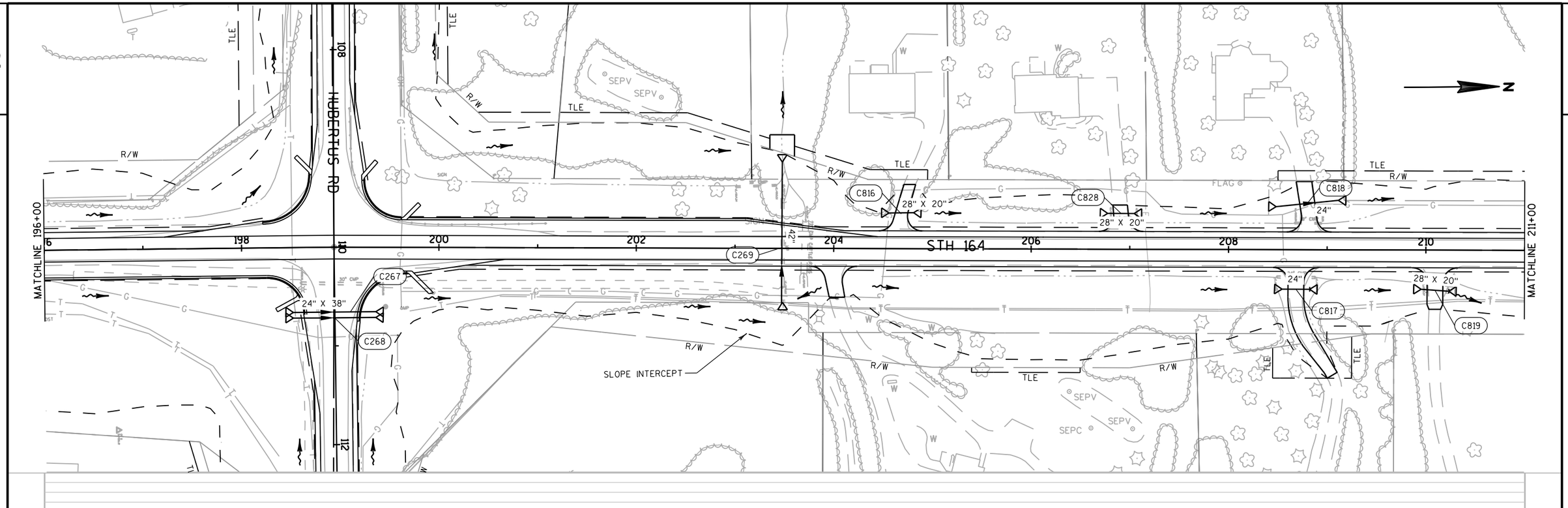
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NO PROFILE THIS SHEET

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - STH 164	SHEET 166	E



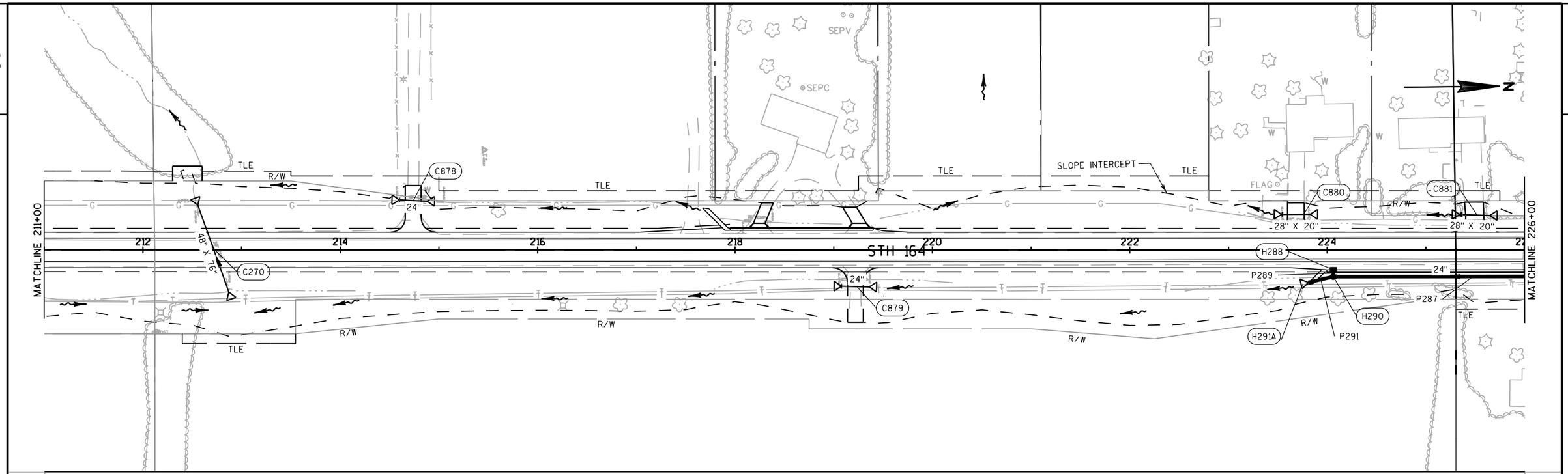
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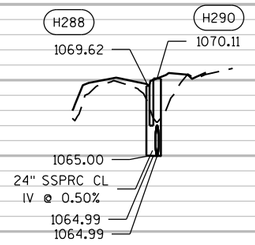
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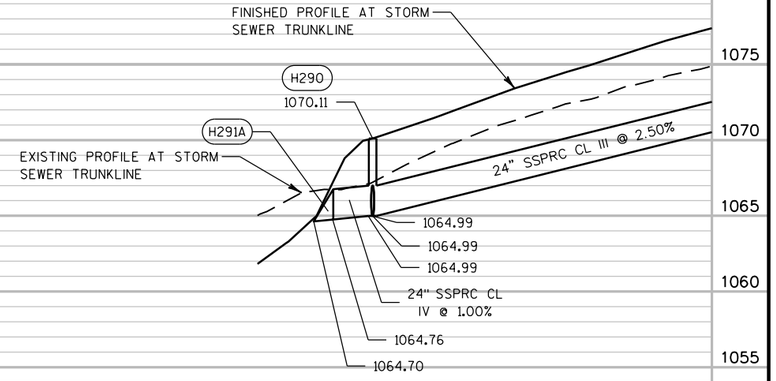
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WISDOT/CADDS SHEET 41

2



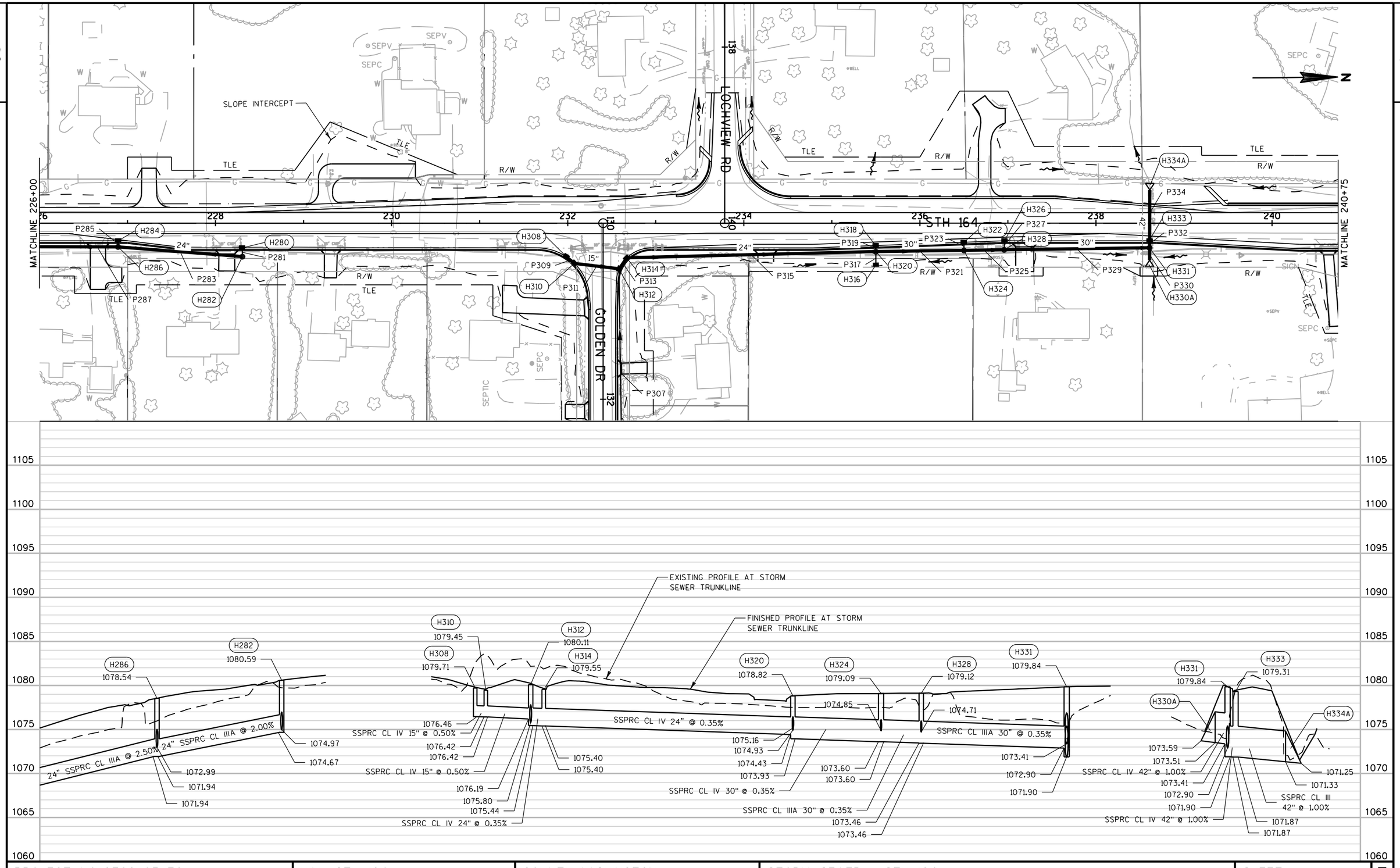




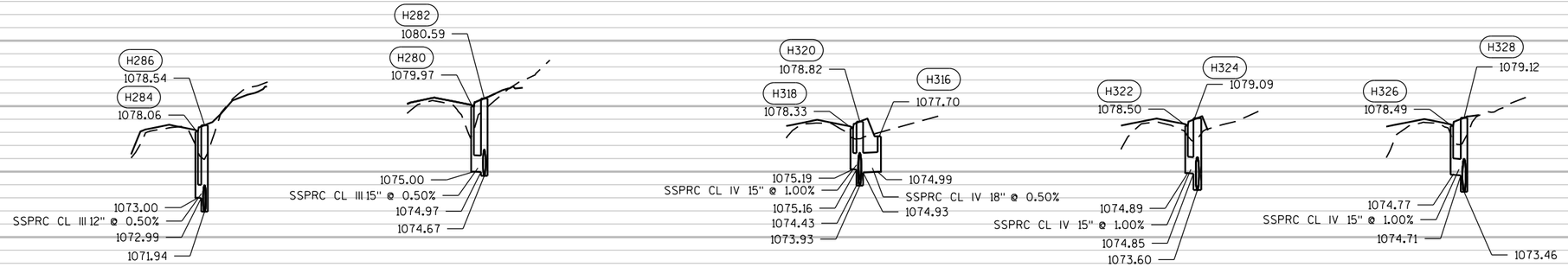
1075 1070 1065 1060 1055 1050 1045 1040 1035 1030

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - STH 164	SHEET 168	E

2

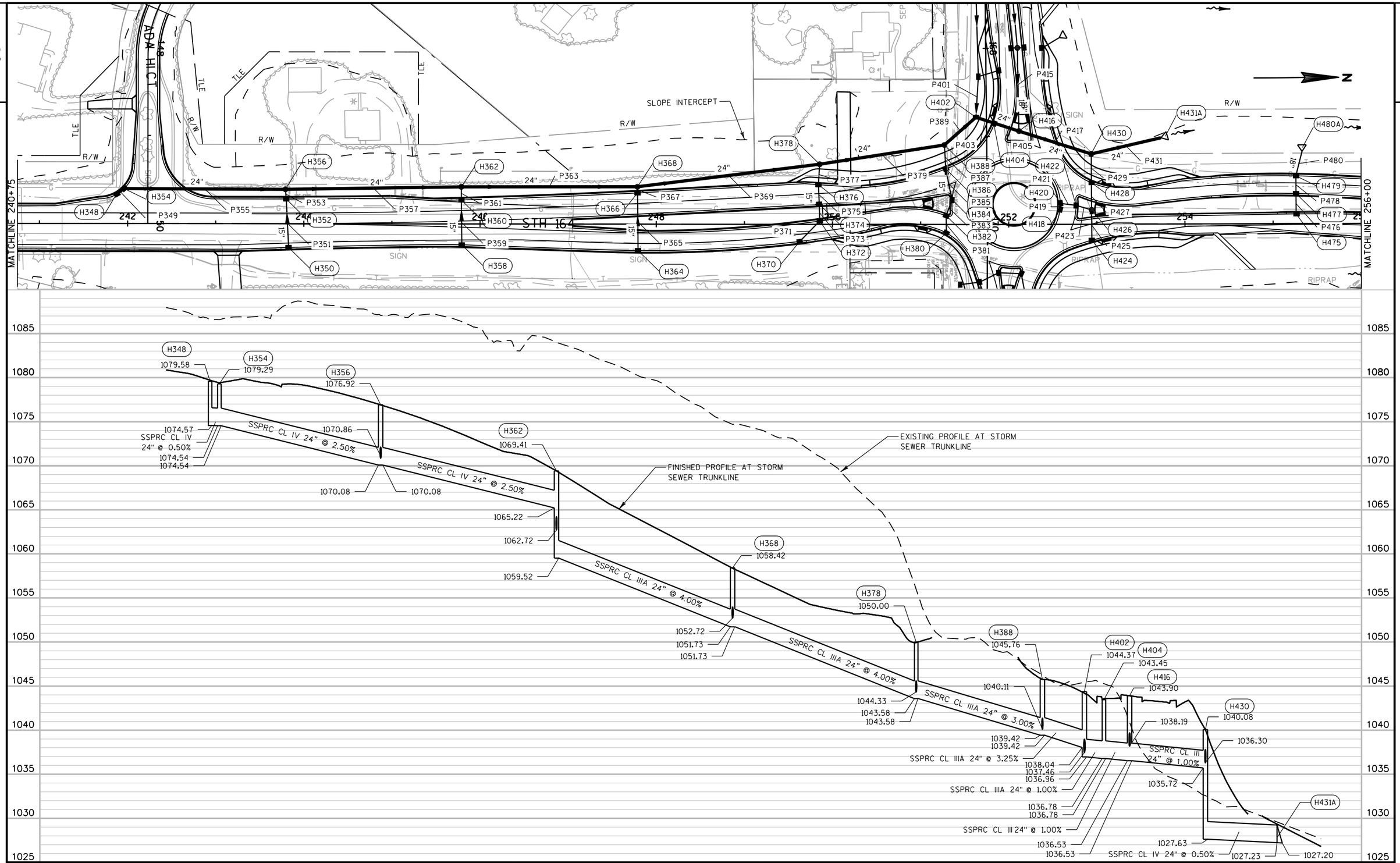


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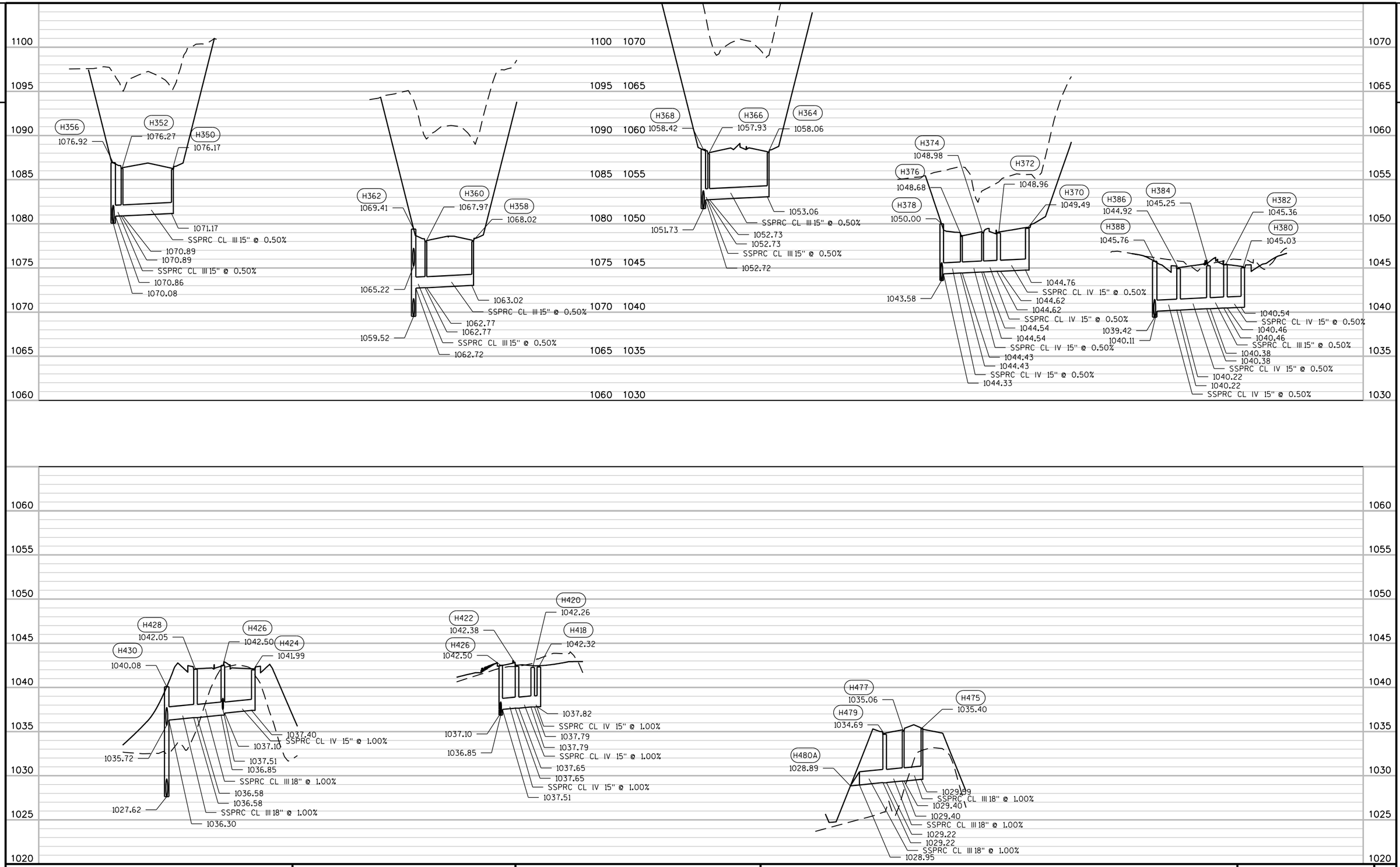

1100
1095
1090
1085
1080
1075
1070
1065
1060
H286
1078.54
H284
1078.06
1073.00
SSPRC CL III 12" @ 0.50%
1072.99
1071.94
H282
1080.59
H280
1079.97
1075.00
SSPRC CL III 15" @ 0.50%
1074.97
1074.67
H320
1078.82
H316
1077.70
H318
1078.33
1075.19
SSPRC CL IV 15" @ 1.00%
1075.16
1074.43
1073.93
1074.99
SSPRC CL IV 18" @ 0.50%
1074.93
H322
1078.50
H324
1079.09
1074.89
SSPRC CL IV 15" @ 1.00%
1074.85
1073.60
H326
1078.49
H328
1079.12
1074.77
SSPRC CL IV 15" @ 1.00%
1074.71
1073.46

2

2

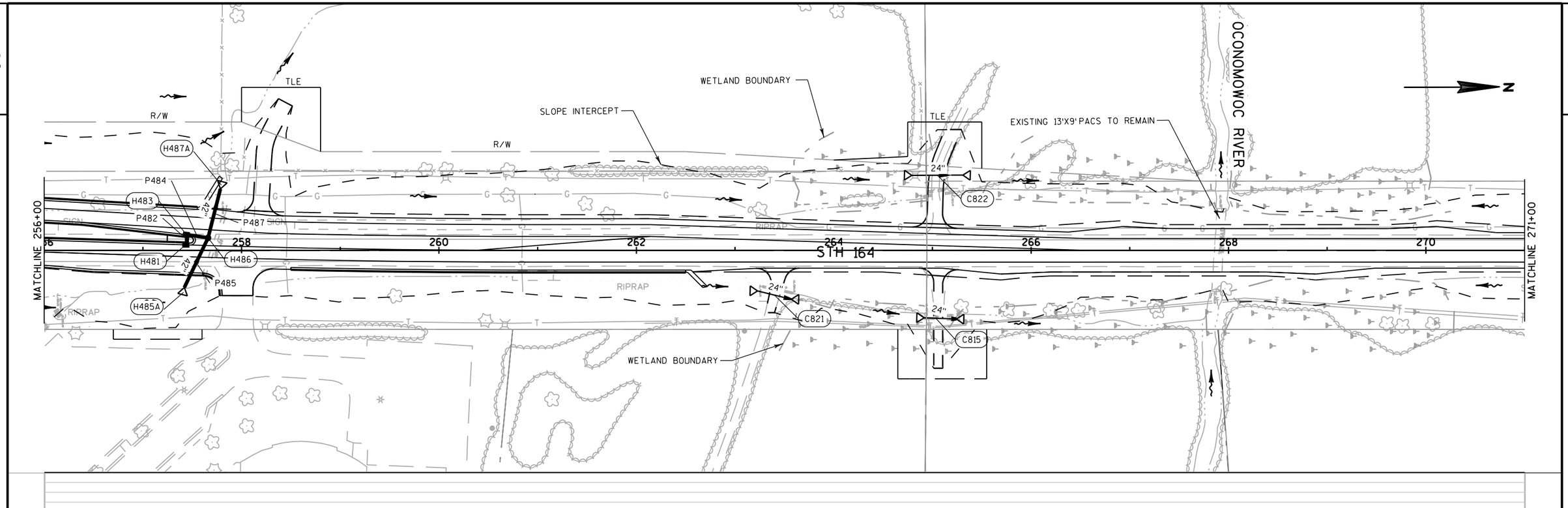


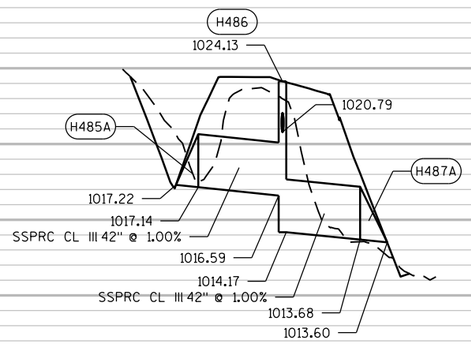
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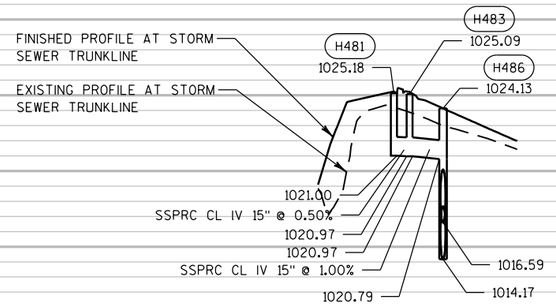


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	STORM SEWER - STH 164	SHEET 172 E

2

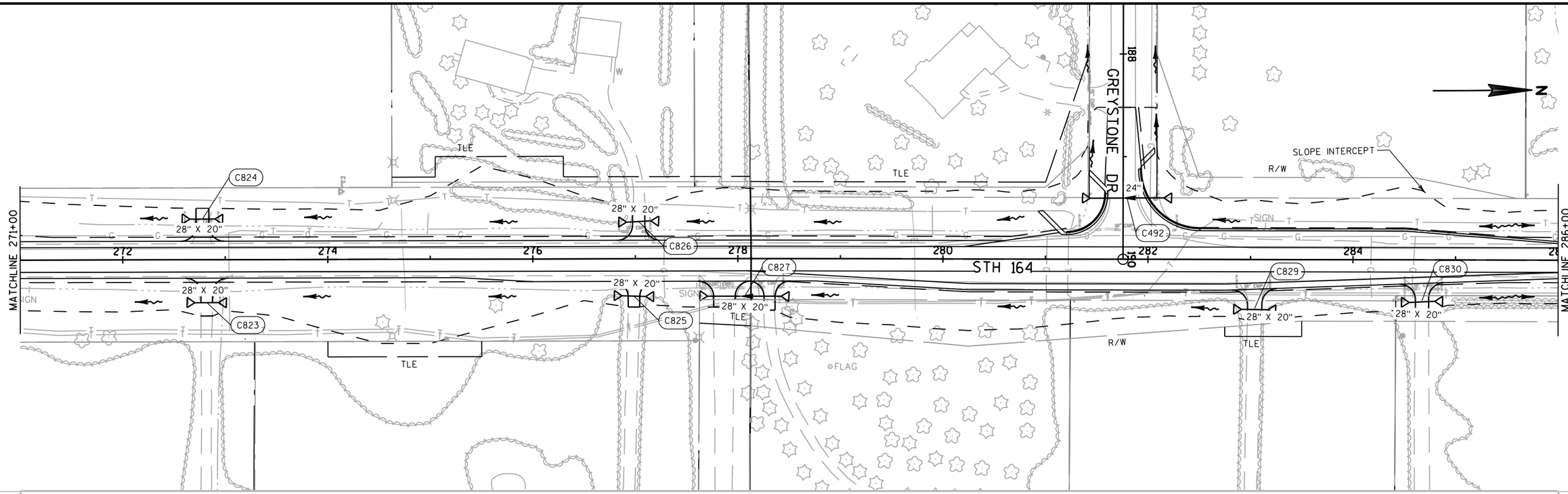






PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	STORM SEWER - STH 164	SHEET	E

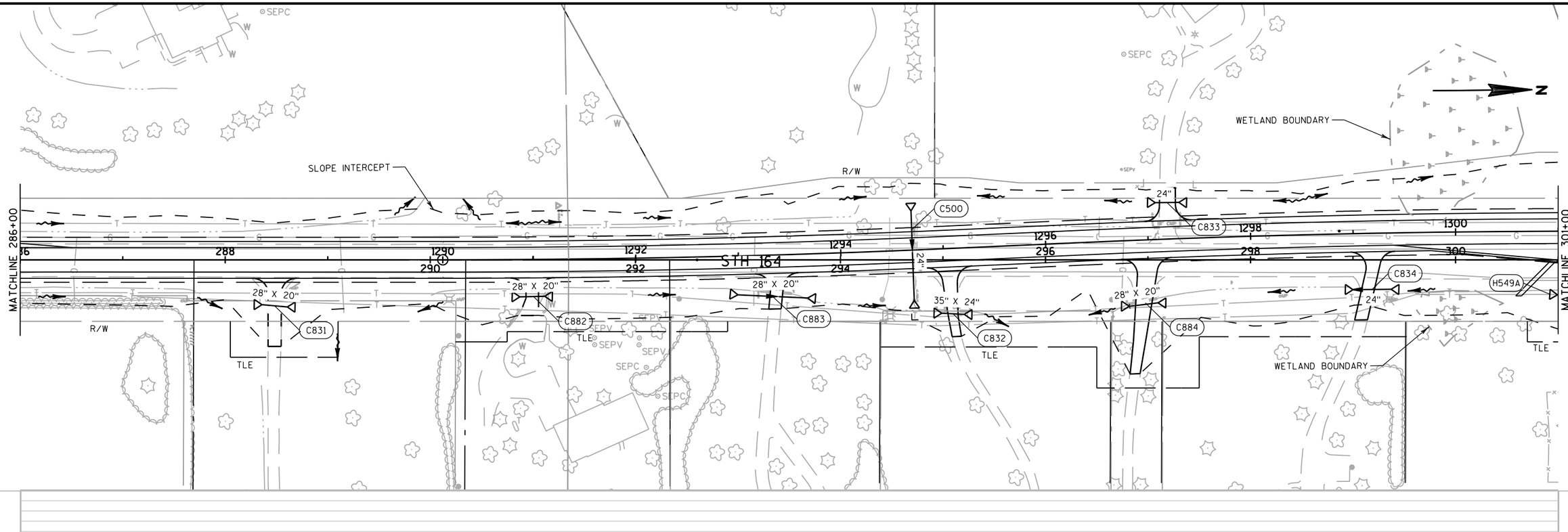
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NO PROFILE THIS SHEET

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - STH 164	SHEET 174	E

2

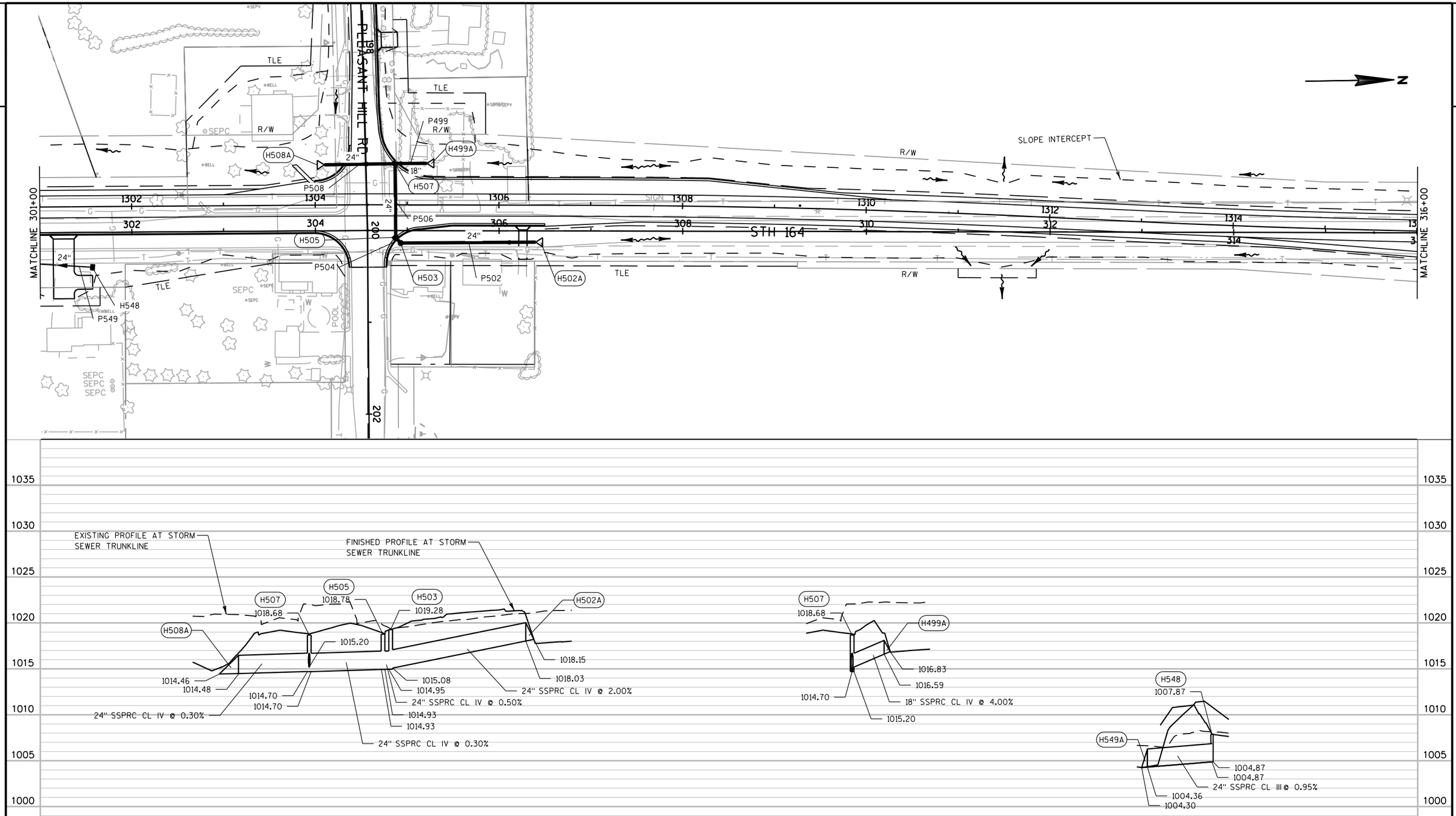


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PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - STH 164	SHEET 175	E

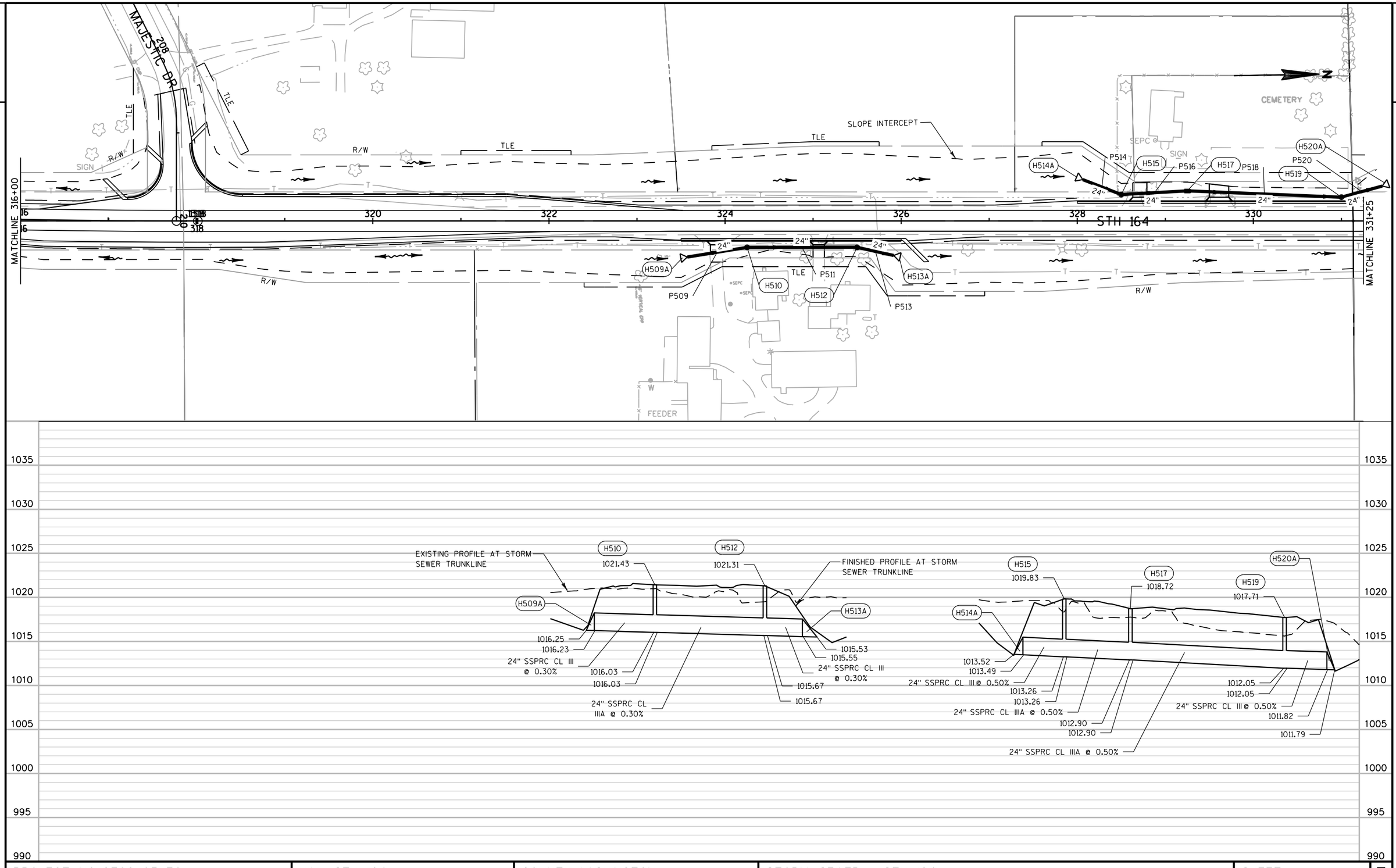
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WISDOT/CADDS SHEET 41

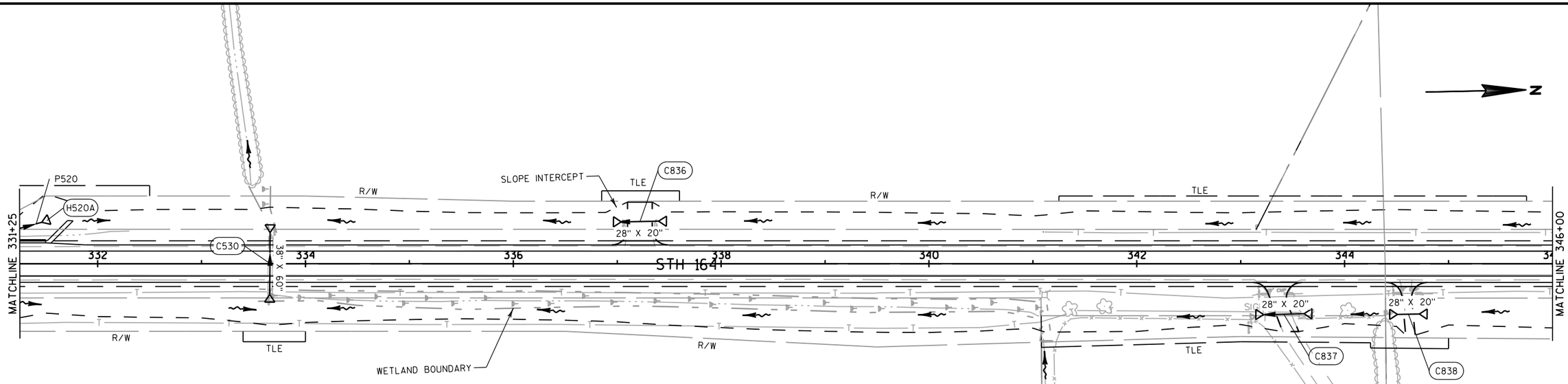


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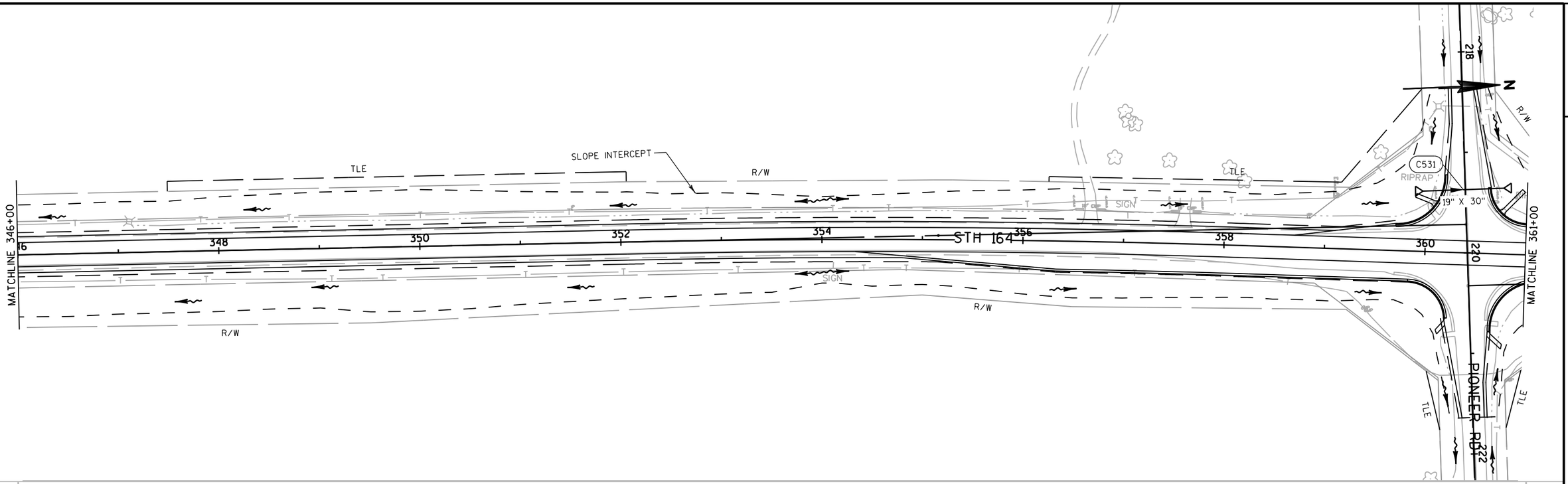
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	STORM SEWER - STH 164	SHEET 177 E

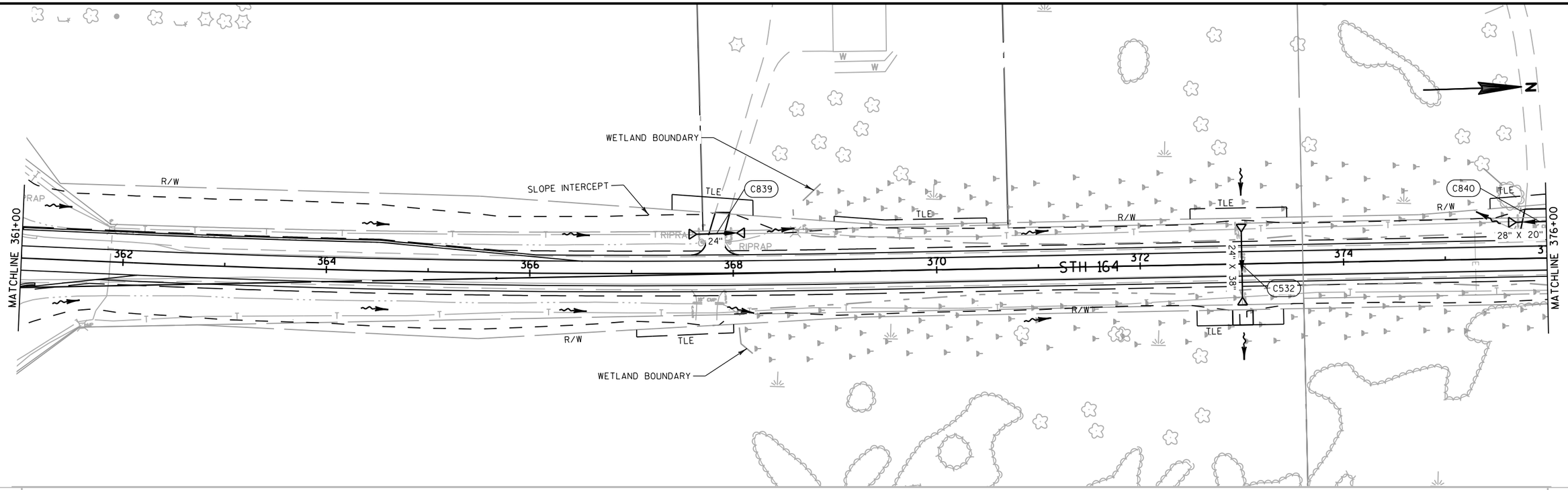


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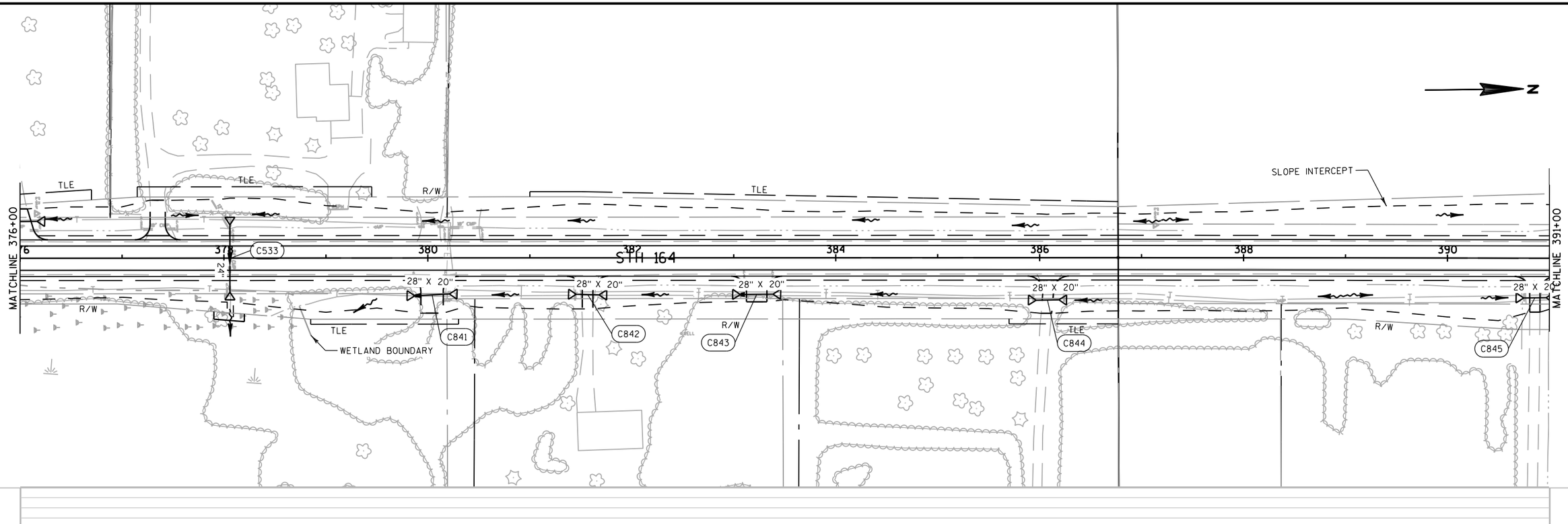
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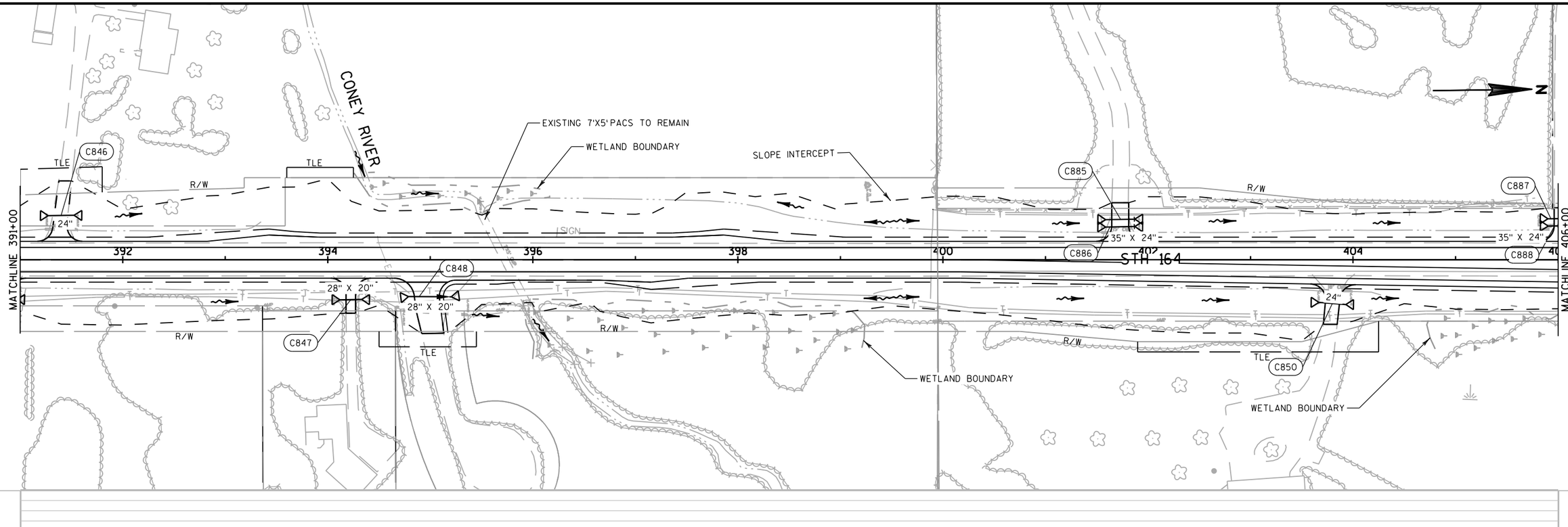
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NO PROFILE THIS SHEET

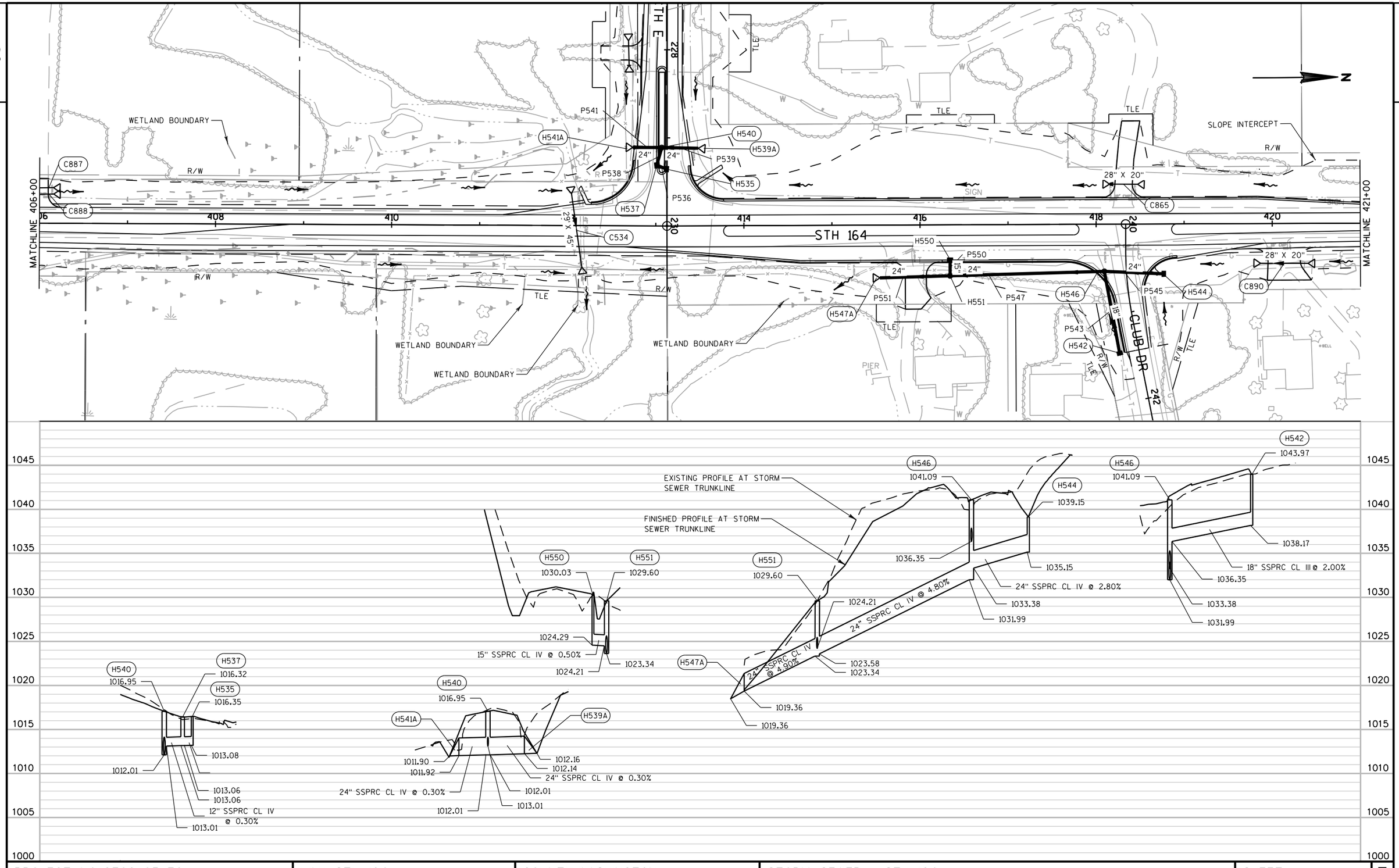
PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - STH 164	SHEET 181	E

2



NO PROFILE THIS SHEET

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	STORM SEWER - STH 164	SHEET 182	E

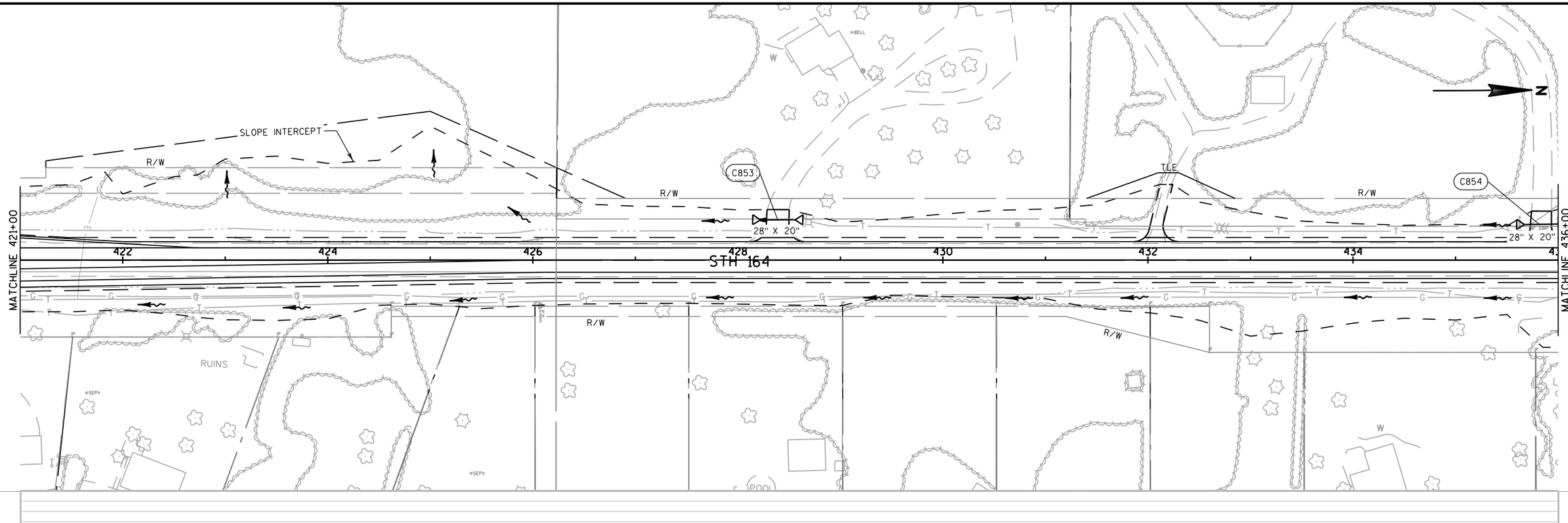


PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - STH 164	SHEET E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022525_ss.dgn PLOT DATE : 1/26/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100

WISDOT/CADDS SHEET 41

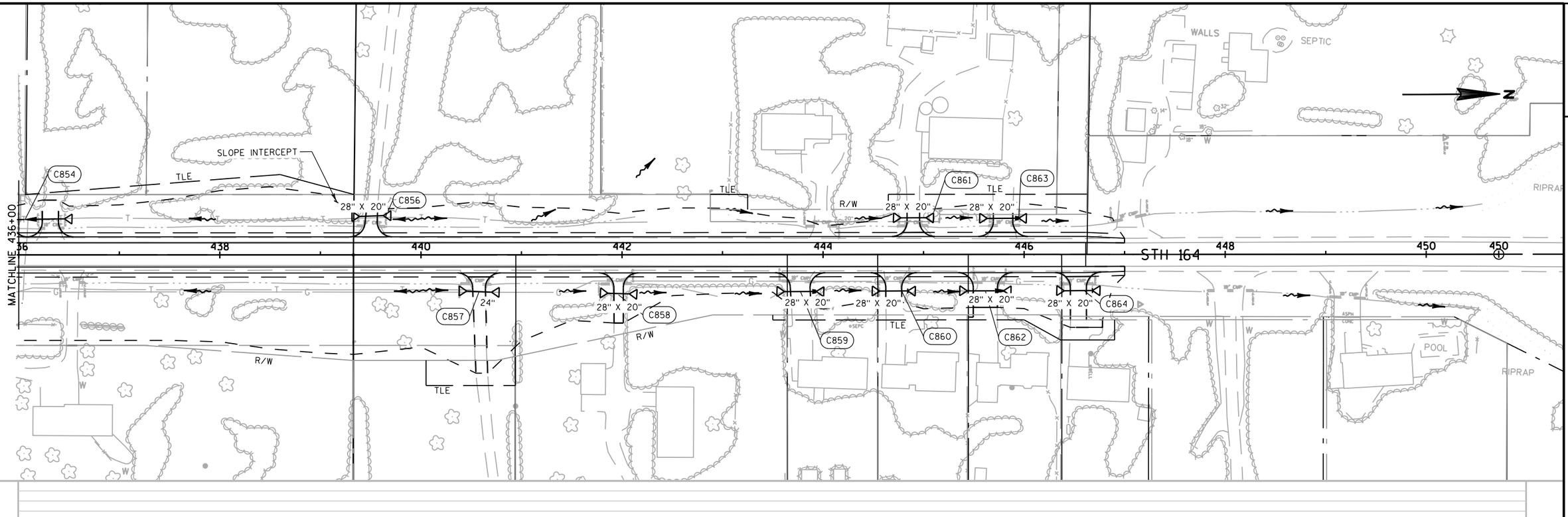
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NO PROFILE THIS SHEET

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - STH 164	SHEET 184	E

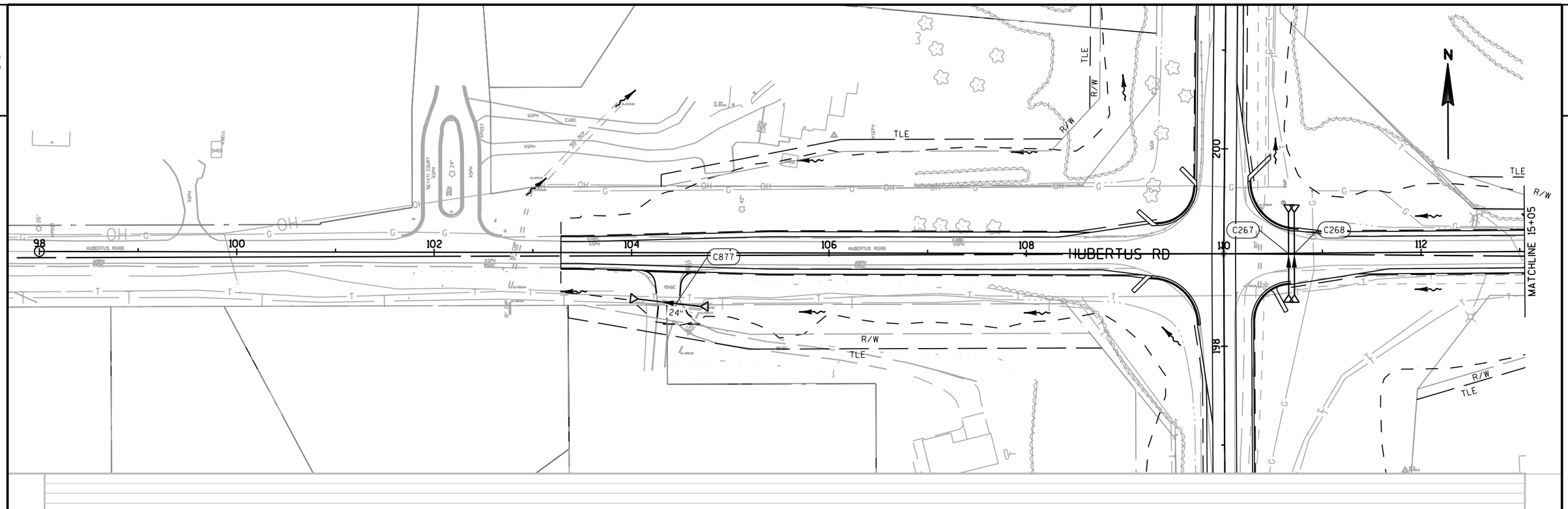
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NO PROFILE THIS SHEET

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - STH 164	SHEET 185	E

FILE NAME : Y:\Projects\11031.006 STH 164 (RASN)\Transportation\Roads\cds\022527_ss.dgn PLOT DATE : 1/26/2018 PLOT BY : Joe Jolie PLOT NAME : $FILE$ PLOT SCALE : 1:100



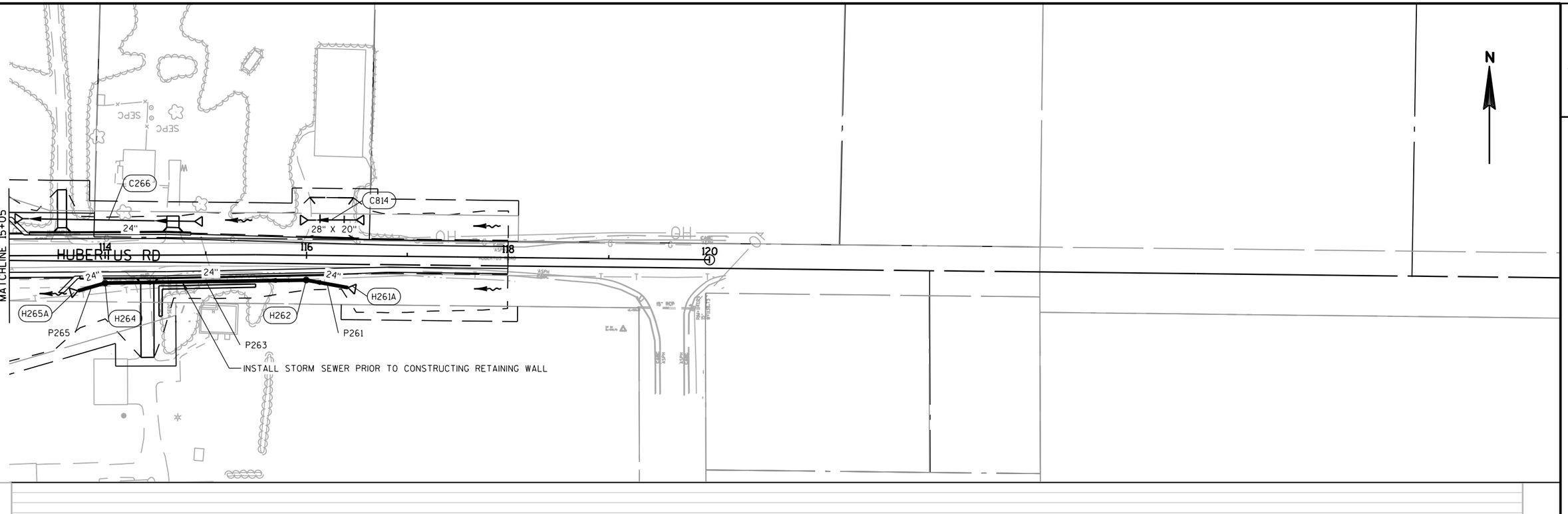
NO PROFILE THIS SHEET

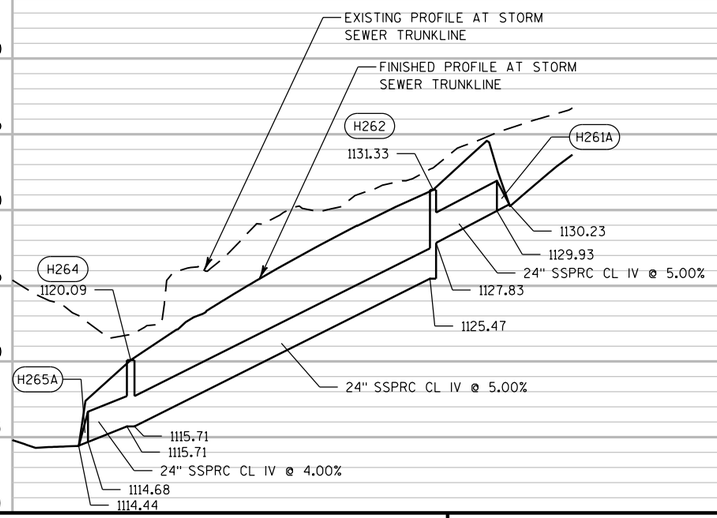
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PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - HUBERTUS ROAD	SHEET 186	E

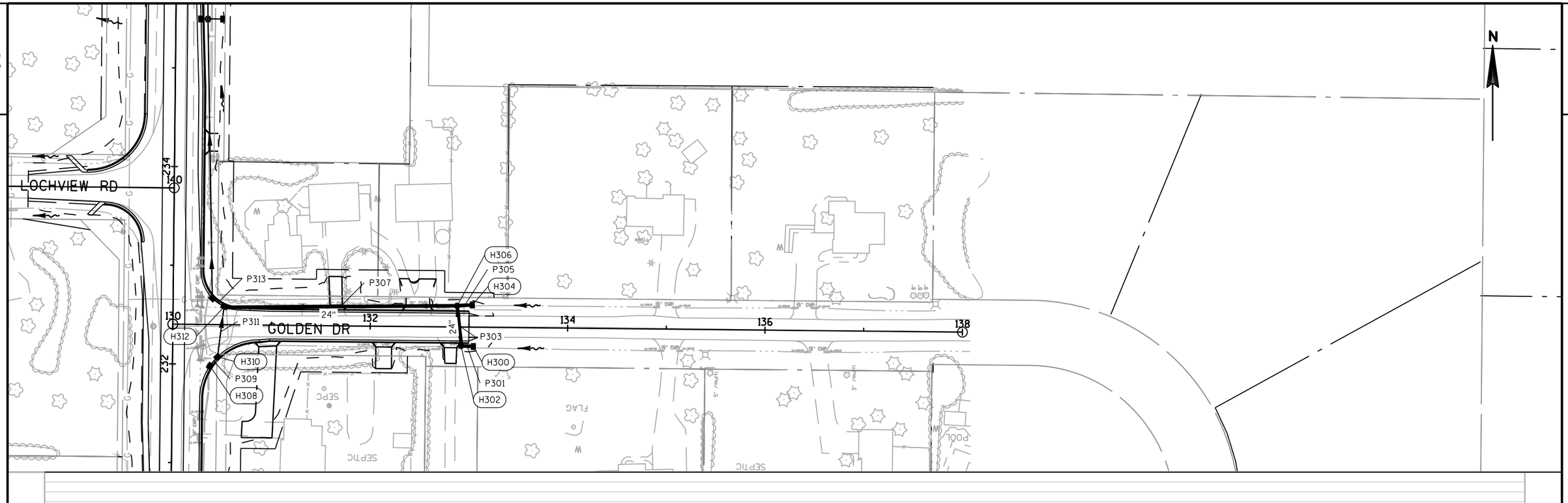
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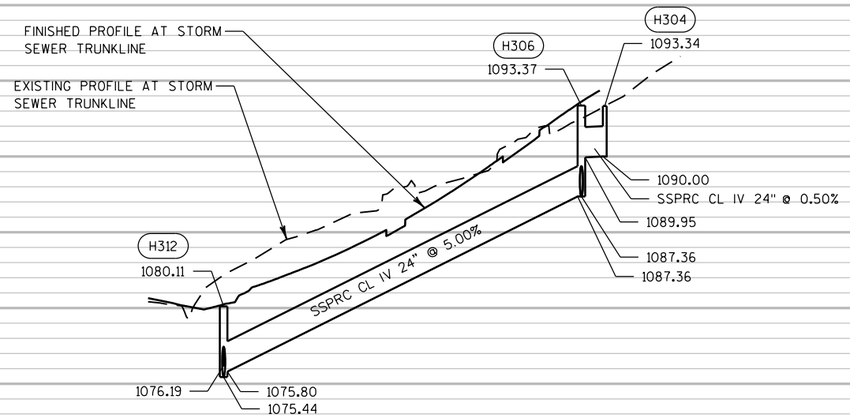
WISDOT/CADDS SHEET 41

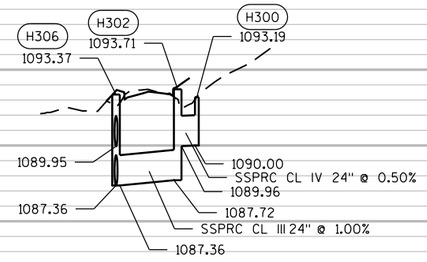




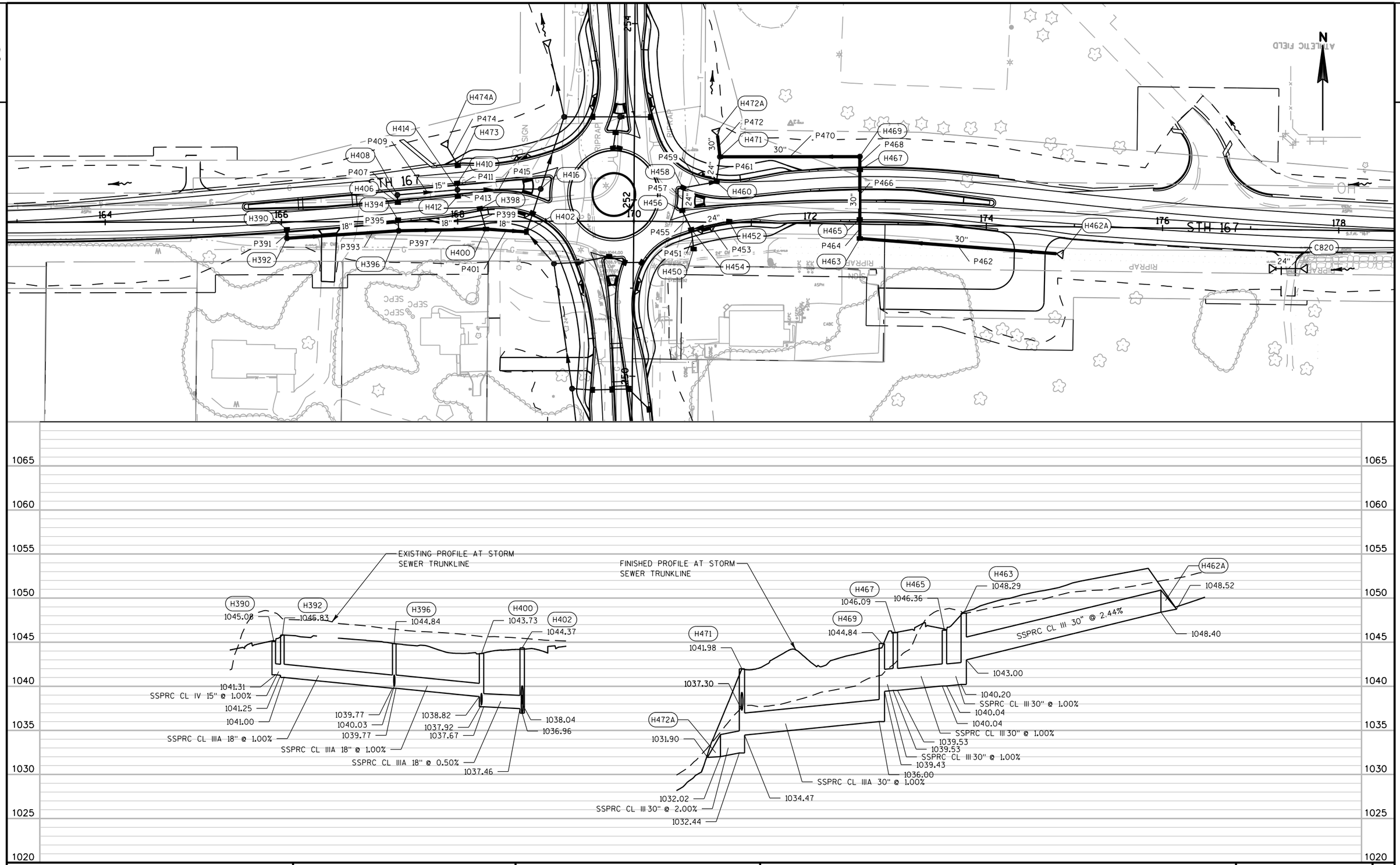
PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - HUBERTUS ROAD	SHEET 187 E



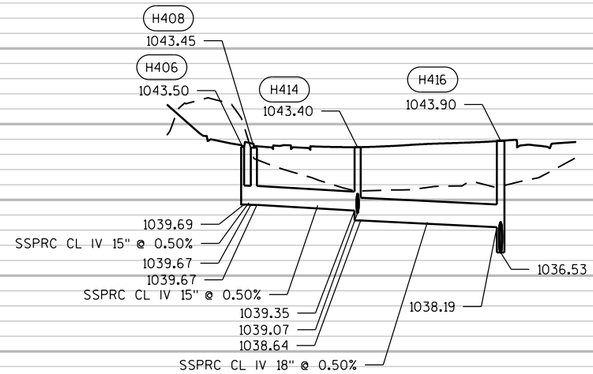


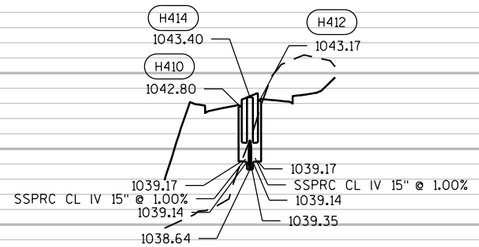


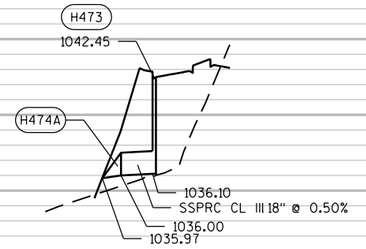
PROJECT NO:2709-03-70	HWY: STH 164	COUNTY:WASHINGTON	STORM SEWER - GOLDEN ROAD	SHEET 188 E

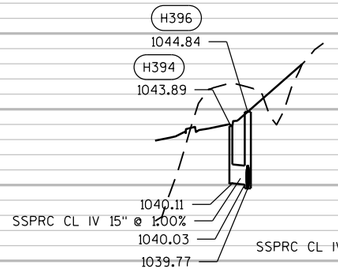


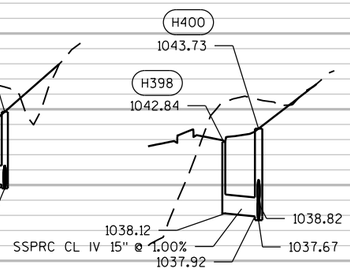
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	STORM SEWER - STH 167	SHEET 189 E

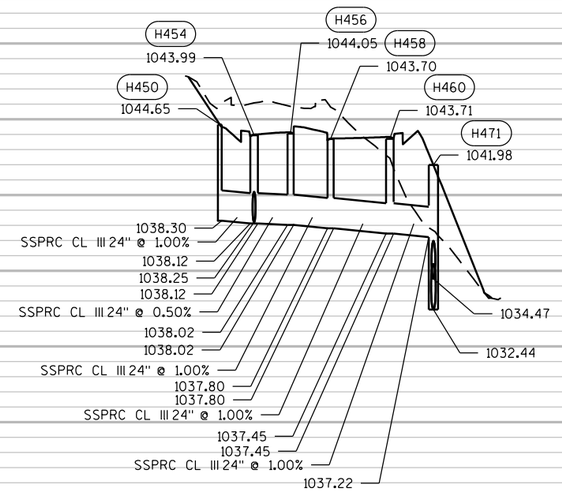


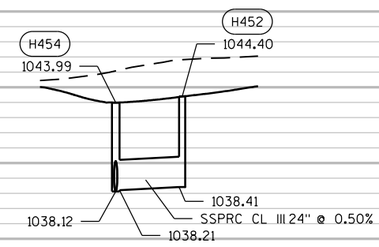




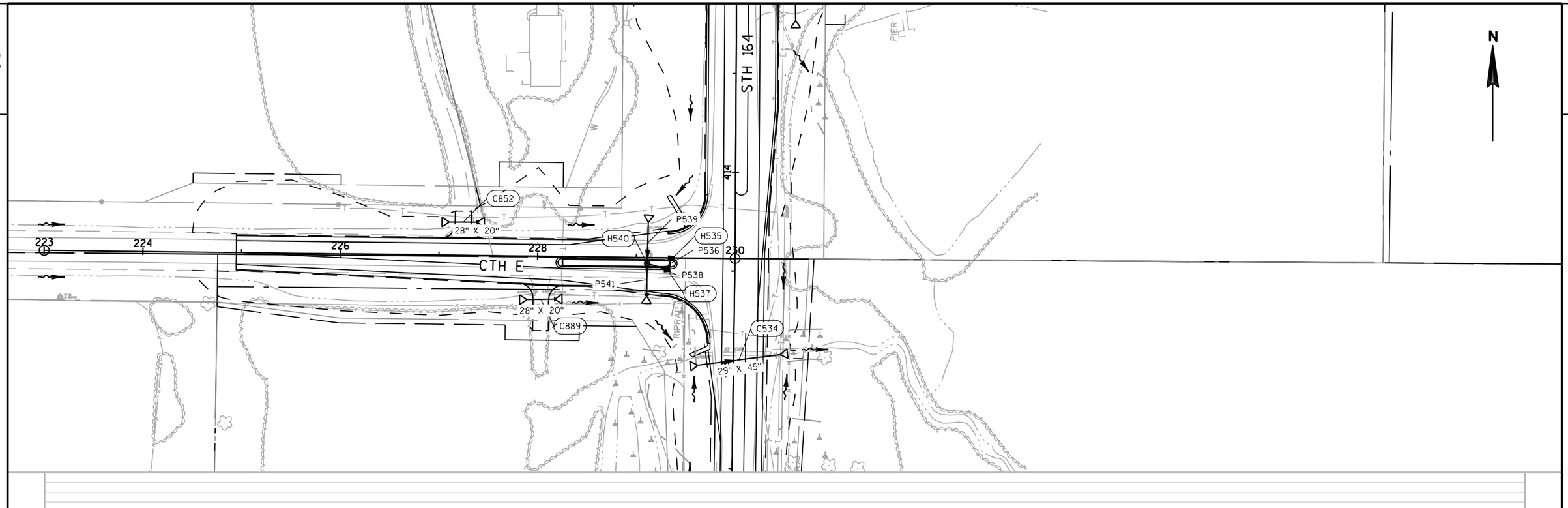








PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	STORM SEWER - STH 167	SHEET 190	E



NO PROFILE THIS SHEET

2

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

BURIED COMMUNICATIONS LINE INSTALLED AFTER FIELD SURVEY. APPROXIMATELY STA 50+95 TO 70+01 LT. ATT TO CONFIRM LIMITS OF CONFLICT.

BEGIN CONSTRUCTION
STA 50+95

STH 164

SHADY LANE

SLOPE INTERCEPT

SLOPE INTERCEPT

MATCHLINE 63+00

N

SHEET 1 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 192	E

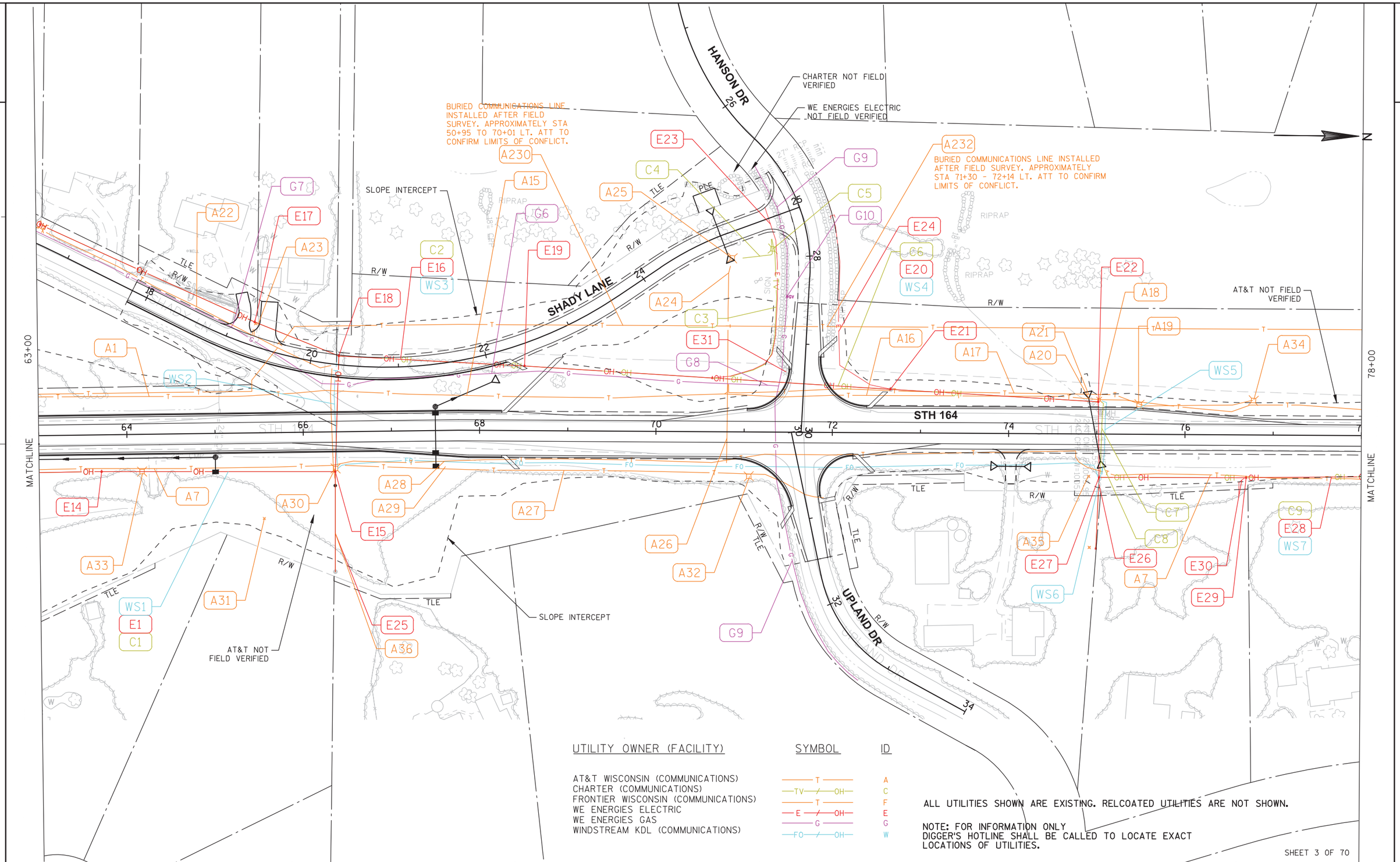
FILE NAME = T:\1102717\CADD\CIVIL3D\2709030\SHEETSPLAN\023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1" = 100' XREF

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET/LOCATION)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
1	A1	COMMUNICATIONS LINE	UG	50+95 - 70+25	29' LT - 45' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
1	A2	COMMUNICATIONS LINE	UG	53+12	34' LT	CULVERT	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
1	A3	COMMUNICATIONS LINE	UG	58+08	40' LT	STORM SEWER	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
1	A4	COMMUNICATIONS LINE	UG	58+93	43' LT	STORM SEWER	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
1	A5	COMMUNICATIONS LINE	UG	59+44	43' LT	STORM SEWER	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
1	A6	COMMUNICATIONS LINE	UG	54+52 - 54+94	39' LT - 42' RT	GRADING	YES	56+10-56+28 / 72' LT-126' RT / UG	---	YES	NO	YES	180	JOINT BURY WITH WE ENERGIES ELECTRIC AND CHARTER
1	A7	COMMUNICATIONS LINE	UG	54+52 - 77+24	19' RT - 49' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
1	A8	COMMUNICATIONS LINE	UG	59+05	39' RT	STORM SEWER	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
1	A9	COMMUNICATIONS LINE	UG	57+90 - 58+90	119' LT - 224' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
1	A10	2 PEDESTALS	UG	54+94	39' LT	GRADING/CLEAR ZONE	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
1	A11	PEDESTAL	UG	62+47	43' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
1	A12	PEDESTAL	UG	54+52	42' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
1	A13	PEDESTAL	UG	56+60	45' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
1	A14	PEDESTAL	UG	57+18	51' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
1	A230	COMMUNICATIONS LINE	UG	50+95 - 70+01	32' LT - 120' LT	GRADING	NO	---	---	NO	NO	NO	---	NOT FIELD VERIFIED DEEMED TO BE NOT IN CONFLICT BY AT&T
1	A231	COMMUNICATIONS LINE	UG	58+93	48' LT	STORM SEWER	NO	---	---	NO	NO	NO	---	NOT FIELD VERIFIED DEEMED TO BE NOT IN CONFLICT BY AT&T
1	C1	COMMUNICATIONS LINE	OH	50+71 - 66+36	86' LT - 45' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
1	C74	COMMUNICATIONS LINE	OH	57+24 - 58+41	43' RT	RETAINING WALL	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	120	JOINT BURY WITH WE ENERGIES ELECTRIC & AT&T
1	E1	ELECTRIC LINE	OH	50+71 - 66+36	34' LT - 45' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
1	E2	ELECTRIC SERVICE	OH	54+30 - 54+47	32' LT - 45' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
1	E3	ELECTRIC SERVICE	UG	54+30	53' LT - 32' LT	GRADING	YES	54+19 / 62' LT / UG	---	YES	NO	NO	90	---
1	E4	ELECTRIC SERVICE	OH	56+34 - 56+99	59' LT - 138' RT	GRADING	YES	56+28 - 56+61 / 72' LT - 126' RT / UG	---	YES	NO	YES	90	JOINT BURY WITH CHARTER AND AT&T
1	E5	POWER POLE	OH	51+81	32' LT	GRADING/CLEAR ZONE	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
1	E6	POWER POLE	OH	54+29	32' LT	GRADING/CLEAR ZONE	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	CONTRACTOR TO WORK AROUND RELOCATED POLE AT 54+19, 62' LT
1	E7	POWER POLE	OH	56+34	59' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	CONTRACTOR TO WORK AROUND RELOCATED POLE AT 56+28, 72' LT
1	E8	POWER POLE	OH	51+79	45' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
1	E9	POWER POLE	OH	54+47	45' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
1	E10	POWER POLE	OH	56+12	43' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
1	E11	POWER POLE	OH	56+61	43' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
1	E12	POWER POLE	OH	58+60	42' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
1	E13	POWER POLE	OH	61+07	42' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
1	E259	ELECTRIC LINE	OH	57+24 - 58+41	43' RT	RETAINING WALL	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
1	G1	GAS MAIN	UG	50+95 - 57+48	23' LT - 57' LT	GRADING	YES	50+88 - 71+25 / 28' LT - 310' LT / UG	---	YES	NO	NO	120	---
1	G2	GAS MAIN	UG	53+12	25' LT	CULVERT	YES	50+88 - 71+25 / 28' LT - 310' LT / UG	---	YES	NO	NO	120	---
1	G3	GAS LATERAL	UG	56+90	39' LT-70' RT	GRADING	YES	56+93 / 75' - 230' RT / UG	---	YES	NO	NO	120	---
1	G4	GAS MAIN	UG	57+91 - 58+95	109' LT - 219' LT	GRADING	YES	50+88 - 71+25 / 28' LT - 310' LT / UG	---	YES	NO	NO	120	---
1	G5	GAS LATERAL	UG	54+29 - 54+33	24' LT - 54' LT	GRADING		50+88 - 71+25 / 28' LT - 310' LT / UG	---	YES	NO	NO	120	---
1	WS1	FIBER OPTIC LINE	OH	50+71 - 66+36	32' LT - 45' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	EXISTING/PROPOSED ON WE ENERGIES POLES
1	WS16	FIBER OPTIC LINE	OH	57+24 - 58+41	43' RT	RETAINING WALL	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	EXISTING/PROPOSED ON WE ENERGIES POLES

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

FILE NAME : T:\1102717\cadd\civil3d\27090300\SheetsPlan\020101_gn.pptx PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

2



UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

SHEET 3 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 194	E

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET/LOCATION)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
3	A1	COMMUNICATIONS LINE	UG	50+95 - 70+25	29' LT - 45' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A7	COMMUNICATIONS LINE	UG	54+52 - 77+24	19' RT - 49' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A15	COMMUNICATIONS LINE	UG	67+85	39' LT	STORM SEWER	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A16	COMMUNICATIONS LINE	UG	71+05 - 82+10	26' LT - 44' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A17	COMMUNICATIONS LINE	UG	71+11 - 76+76	32' LT - 50' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A18	PEDESTAL	UG	75+02	39' LT	GRADING/CLEAR ZONE	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A19	PEDESTAL	UG	75+48	34' LT	GRADING/CLEAR ZONE	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A20	COMMUNICATIONS LINE	UG	74+91	39' LT	CULVERT	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A21	COMMUNICATIONS LINE	UG	74+91	42' LT	CULVERT	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A22	COMMUNICATIONS LINE	UG	64+15 - 66+35	177' LT - 53' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH 66+34-66+56 / 119' LT-159' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A23	PEDESTAL	UG	65+48	124' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A24	COMMUNICATIONS LINE	UG	70+81 - 70+86	151' - 197' LT	GRADING	YES	70+46-70+93 / 138' LT-68' RT / UG	---	YES	NO	YES	180	---
3	A25	PEDESTAL	UG	70+85	197' LT	CULVERT	YES	70+46-70+93 / 138' LT-68' RT / UG	---	YES	NO	YES	180	---
3	A26	COMMUNICATIONS LINE	UG	70+81	39' LT - 47' RT	GRADING	YES	70+46-70+93 / 138' LT-68' RT / UG	---	YES	NO	YES	180	---
3	A27	COMMUNICATIONS LINE	UG	65+54 - 71+91	38' RT - 97' RT	GRADING	YES	66+30-70+92 / 68'-177' RT / UG	---	YES	NO	YES	180	EXIST NOT COMPLETELY MARKED BY DIGGER'S HOTLINE
3	A28	COMMUNICATIONS LINE	UG	67+61	35' RT	STORM SEWER	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A29	COMMUNICATIONS LINE	UG	67+61	44' RT	STORM SEWER	YES	66+30-70+92 / 68'-177' RT / UG	---	YES	NO	YES	180	---
3	A30	PEDESTAL	UG	66+36	42' RT	GRADING	YES	66+30-70+92 / 68'-177' RT / UG	---	YES	NO	YES	180	---
3	A31	PEDESTAL	UG	65+54	97' RT	GRADING	YES	66+30-70+92 / 68'-177' RT / UG	---	YES	NO	YES	180	EXIST NOT COMPLETELY MARKED BY DIGGER'S HOTLINE
3	A32	PEDESTAL	UG	71+05	51' RT	GRADING	YES	66+30-70+92 / 68'-177' RT / UG	---	YES	NO	YES	180	---
3	A33	PEDESTAL	UG	64+16	42' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A34	PEDESTAL	UG	76+77	39' LT	CLEAR ZONE	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A35	PEDESTAL	UG	74+91	48' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
3	A36	COMMUNICATIONS LINE	OH	66+35	45' RT - 145' RT	GRADING	YES	66+30-70+92 / 68'-177' RT / UG	---	YES	NO	YES	180	---
3	A230	COMMUNICATIONS LINE	UG	50+95 - 70+01	32' LT - 120' LT	GRADING	NO	---	---	NO	NO	NO	---	NOT FIELD VERIFIED DEEMED TO BE NOT IN CONFLICT BY AT&T
3	A232	COMMUNICATIONS LINE	UG	71+30 - 72+14	120' LT	GRADING	NO	---	---	NO	NO	NO	---	NOT FIELD VERIFIED DEEMED TO BE NOT IN CONFLICT BY AT&T
3	C1	COMMUNICATIONS LINE	OH	50+71 - 66+36	86' LT - 45' RT	GRADING	YES	50+71 - 94+02 / 243' LT-34' LT / OH 66+35 - 66+56 / 119' LT-145' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
3	C2	COMMUNICATIONS LINE	OH	64+20 - 69+56	67' LT - 185' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
3	C3	COMMUNICATIONS LINE	UG	71+24 - 71+31	77' LT - 219' LT	GRADING	YES	70+46 - 71+37 / 266' LT - 61' LT / UG	---	YES	NO	YES	120	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC
3	C4	COMMUNICATIONS LINE	UG	70+97 - 71+31	197' LT - 219' LT	GRADING	YES	70+46 - 71+37 / 266' LT - 61' LT / UG	---	YES	NO	YES	120	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC
3	C5	PEDESTAL	UG	71+35	208' LT	GRADING	YES	70+46 - 71+37 / 266' LT - 61' LT / UG	---	NO	NO	YES	120	---
3	C6	COMMUNICATIONS LINE	OH	71+19 - 75+02	37' LT - 58' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
3	C7	COMMUNICATIONS LINE	UG	75+04 - 75+07	37' LT - 45' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH 75+00 - 76+73 / 138' LT-130' RT / UG	---	YES	NO	YES	120	JOINT BURY WITH WE ENERGIES
3	C8	COMMUNICATIONS LINE	UG	75+04	30' RT	CULVERT	YES	75+00 - 76+73 / 138' LT-130' RT / UG	---	YES	NO	YES	120	JOINT BURY WITH WE ENERGIES
3	C9	COMMUNICATIONS LINE	OH	75+03 - 83+93	44' RT - 49' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
3	E1	ELECTRIC LINE	OH	50+71 - 66+36	34' LT - 45' RT	GRADING	YES	50+71 - 94+02 / 243' LT-34' LT / OH 66+35 - 66+56 / 119' LT-145' RT / OH	---	NO	NO	YES	90	---
3	E14	POWER POLE	OH	63+71	42' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
3	E15	POWER POLE	OH	66+36	45' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
3	E16	ELECTRIC LINE	OH	64+15 - 69+56	67' LT - 187' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
3	E17	POWER POLE	OH	65+47	126' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	WORK AROUND PROPOSED POLE 19+23, 31' LT
3	E18	POWER POLE	OH	66+42	86' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
3	E19	POWER POLE	OH	68+51	73' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
3	E20	ELECTRIC LINE	OH	71+19 - 75+01	37' LT - 58' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
3	E21	POWER POLE	OH	72+66	49' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
3	E22	POWER POLE	OH	75+01	37' LT	GRADING/CLEAR ZONE	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---

FOR INFORMATION ONLY. CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
3	E23	ELECTRIC LINE	UG	71+25 - 71+37	81' LT - 255' LT	GRADING	YES	70+46 - 71+37 / 138' LT-147' LT / UG	---	YES	NO	YES	120	JOINT BURY WITH CHARTER
3	E24	ELECTRIC LINE	UG	72+07 - 72+66	49' LT - 145' LT	GRADING	YES	72+07 - 72+69 / 138' LT-150' LT / UG	---	YES	NO	YES	120	---
3	E25	ELECTRIC LINE	OH	66+35	45' RT - 145' RT	GRADING	YES	66+35 - 66+56 / 119' LT-145' RT / OH	---	NO	NO	YES	90	---
3	E26	ELECTRIC LINE	OH	75+01 - 75+03	37' LT - 61' RT	GRADING/CULVERT	YES	75+00 - 76+73 / 138' LT-130' RT / UG	---	NO	NO	YES	90	---
3	E27	POWER POLE	OH	75+03	49' RT	GRADING	YES	75+00 - 76+73 / 138' LT-130' RT / UG	---	NO	NO	YES	90	---
3	E28	ELECTRIC LINE	OH	75+03 - 83+93	44' RT - 49' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
3	E29	POWER POLE	OH	76+70	48' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
3	E30	ELECTRIC SERVICE	UG	76+62 - 76+70	48' RT - 53' RT	GRADING	YES	75+00 - 76+73 / 138' LT-130' RT / UG	---	YES	NO	YES	120	---
3	E31	LIGHT POLE	OH	71+46	67' LT	GRADING	NO	---	---	NO	NO	NO	---	BELONGS TO SUBDIVISION REMOVE AS PART OF PROJECT
3	G6	GAS MAIN	UG	64+14 - 69+71	53' LT - 174' LT	GRADING	YES	50+88 - 71+25 / 28' LT - 310' LT / UG	---	YES	NO	NO	120	---
3	G7	GAS LATERAL	UG	65+20 - 65+42	121' LT - 157' LT	GRADING	YES	65+33 - 65+42 / 142'-157' LT / UG	---	YES	NO	NO	120	---
3	G8	GAS MAIN	UG	71+17 - 71+39	54' LT - 52' LT	GRADING	YES	70+95 - 71+65 / 277' LT-182' RT / UG	---	YES	NO	NO	120	---
3	G9	GAS MAIN	UG	71+17 - 71+56	289' LT - 150' RT	GRADING	YES	70+95 - 71+65 / 277' LT-182' RT / UG	---	YES	NO	NO	120	---
3	G10	GAS VALVE	UG	71+48	154' LT	GRADING	YES	70+95 - 71+65 / 277' LT-182' RT / UG	---	YES	NO	NO	120	---
3	WS1	FIBER OPTIC LINE	OH	50+71 - 66+36	32' LT - 45' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	EXISTING/PROPOSED ON WE ENERGIES POLES
3	WS2	FIBER OPTIC LINE	UG	66+38 - 66+40	87' LT - 45' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	EXISTING/PROPOSED ON WE ENERGIES POLES
3	WS3	FIBER OPTIC LINE	OH	66+40 - 69+56	67' LT - 86' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	EXISTING/PROPOSED ON WE ENERGIES POLES
3	WS4	FIBER OPTIC LINE	OH	71+19 - 75+02	37' LT - 58' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	EXISTING/PROPOSED ON WE ENERGIES POLES
3	WS5	FIBER OPTIC LINE	UG	75+03 - 75+11	38' LT - 49' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	EXISTING/PROPOSED ON WE ENERGIES POLES
3	WS6	FIBER OPTIC LINE	UG	75+07	35' RT	CULVERT	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	EXISTING/PROPOSED ON WE ENERGIES POLES
3	WS7	FIBER OPTIC LINE	OH	75+03 - 83+93	44' RT - 49' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	EXISTING/PROPOSED ON WE ENERGIES POLES

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

78+00

93+00

MATCHLINE

MATCHLINE

STH 164

STH 164

R/W

TLE

SLOPE INTERCEPT

SIGN

RIPRAP

RIPRAP

MONCHES RD

BURIED COMMUNICATIONS LINE INSTALLED AFTER FIELD SURVEY. APPROXIMATELY STA 91+00 TO 91+40 LT/RT. ATT TO CONFIRM LIMITS OF CONFLICT.

A16 E32 C9 E28 WS7 A40 E33 A39 E34 E36 C10 E35 WS8 A233 WS9 A38 WS10 G13 A37 G11 E37 A41 C11 C12 A42 E38 A43 A44 E39 G12 A45 A46 G14

SHEET 6 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 197 E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1' = 100' XREF

2

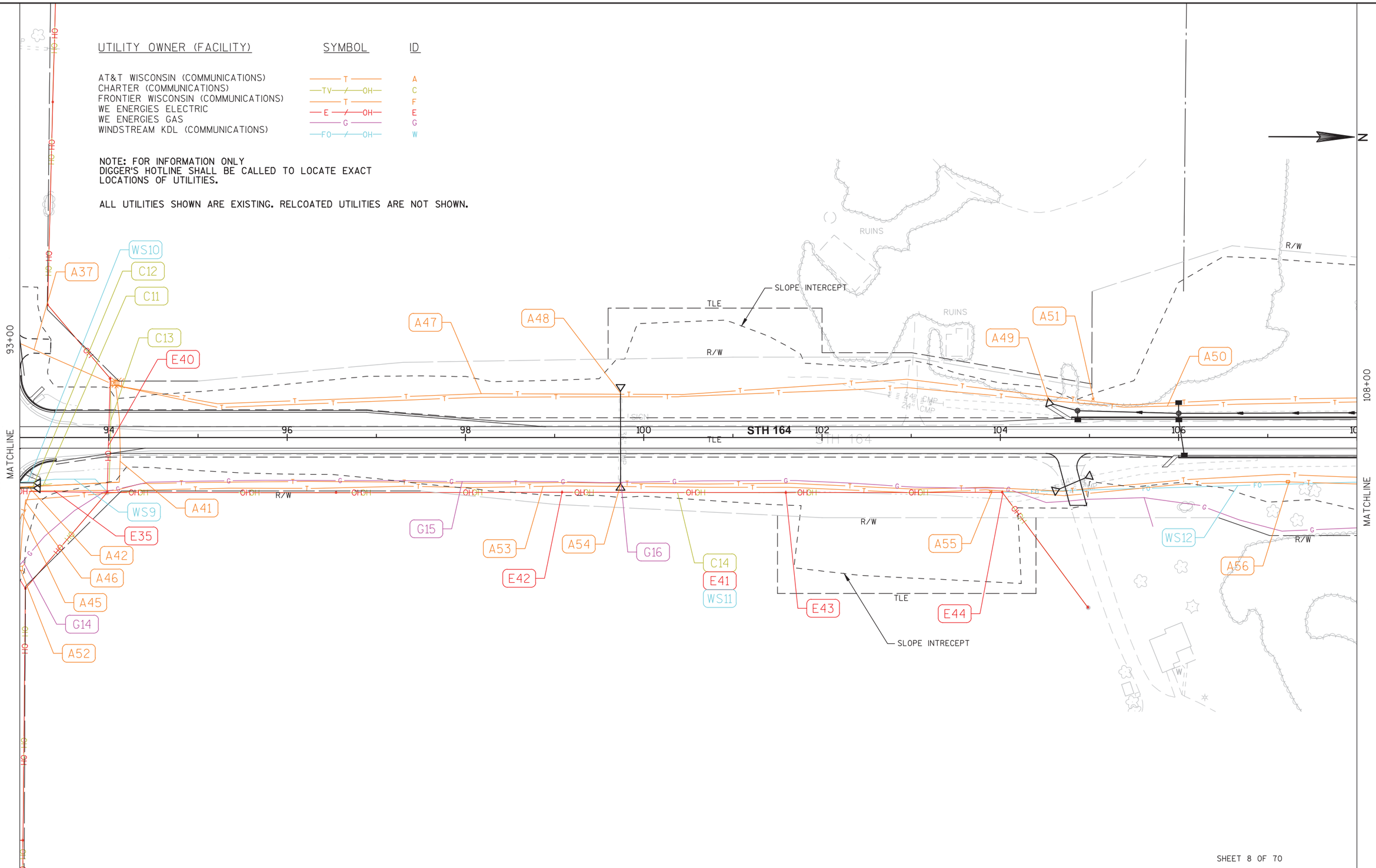
EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
6	A16	COMMUNICATIONS LINE	UG	71+05 - 82+10	26' LT - 44' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
6	A37	COMMUNICATIONS LINE	UG	90+65 - 93+34	29' LT - 107' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
6	A38	PEDESTAL	UG	91+14	28' LT	GRADING/CLEAR ZONE	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
6	A39	COMMUNICATIONS LINE	UG	80+04 - 82+15	45' RT - 53' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
6	A40	PEDESTAL	UG	80+75	46' RT	GRADING	YES	81+00 / 60' RT / OH	---	YES	NO	YES	180	---
6	A41	COMMUNICATIONS LINE	UG	91+29 - 94+13	58' LT - 65' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
6	A42	COMMUNICATIONS LINE	UG	92+23 - 93+15	55' RT - 59' RT	CULVERT	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
6	A43	COMMUNICATIONS LINE	UG	92+35 - 92+45	130' RT - 161' RT	GRADING	YES	92+43-93+06 / 140'-170' RT / UG	---	YES	NO	YES	180	---
6	A44	2 PEDESTALS	UG	92+44	150' RT	GRADING	NO	---	---	NO	NO	NO	---	WORK AROUND PEDESTAL
6	A45	COMMUNICATIONS LINE	UG	92+46 - 93+54	60' RT - 144' RT	GRADING	YES	92+43-93+06 / 140'-170' RT / UG	---	YES	NO	YES	180	---
6	A46	COMMUNICATIONS LINE	UG	92+48 - 93+27	68' RT - 147' RT	GRADING	YES	92+43-93+06 / 140'-170' RT / UG	---	YES	NO	YES	180	---
6	A233	COMMUNICATIONS LINE	UG	91+00 - 91+40	33' LT - 65' RT	GRADING	NO	---	---	NO	NO	NO	---	NOT FIELD VERIFIED DEEMED TO BE NOT IN CONFLICT BY AT&T
6	C9	COMMUNICATIONS LINE	OH	75+03 - 83+93	44' RT - 49' RT	GRADING	YES	50+71 - 94+02 / 243' LT-34' LT / UG 80+85 - 81+09 / 138' LT-59' RT / UG	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
6	C10	COMMUNICATIONS LINE	OH	88+55 - 91+33	54' RT - 58' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH 85+82 - 85+98 / 138'LT-49' RT / UG	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
6	C11	COMMUNICATIONS LINE	UG	91+33 - 93+98	52' RT - 62' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	NO	120	EXISTING/PROPOSED ON WE ENERGIES POLES
6	C12	COMMUNICATIONS LINE	UG	92+53 - 93+15	55' RT - 58' RT	CULVERT	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	NO	120	PROPOSED ON WE ENERGIES POLES
6	E31	LIGHT POLE	OH	71+46	67' LT	GRADING	NO	---	---	NO	NO	NO	---	BELONGS TO SUBDIVISION REMOVE AS PART OF PROJECT
6	E32	POWER POLE	OH	78+90	46' RT	GRADING/CULVERT	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
6	E33	POWER POLE	OH	80+92	44' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
6	E34	POWER POLE	OH	83+40	47' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
6	E35	ELECTRIC LINE	OH	88+55 - 93+46	54' RT - 61' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
6	E36	POWER POLE	OH	88+59	54' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
6	E37	POWER POLE	OH	91+33	58' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
6	E38	LIGHT POLE	OH	92+46	74' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
6	E39	ELECTRIC LINE	OH	92+46 - 93+00	74' RT - 160' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
6	G11	GAS MAIN	UG	92+23 - 92+54	170' LT - 168' RT	GRADING	YES	91+74 - 92+49 / 133' LT-200' RT / UG	---	YES	NO	NO	120	---
6	G12	GAS VALVE	UG	92+51	165' RT	GRADING	YES	91+74 - 92+49 / 133' LT-200' RT / UG	---	YES	NO	NO	120	---
6	G13	GAS MAIN	UG	92+23	54' RT	CULVERT	YES	91+74 - 92+49 / 133' LT-200' RT / UG	---	YES	NO	NO	120	---
6	G14	GAS MAIN	UG	92+48 - 93+06	136' RT - 142' RT	GRADING	YES	92+43 - 94+36 / 52' RT-185' RT / UG	---	YES	NO	NO	120	---
6	WS7	FIBER OPTIC LINE	OH	75+03 - 83+93	44' RT - 49' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	EXISTING/PROPOSED ON WE ENERGIES POLES
6	WS8	FIBER OPTIC LINE	OH	88+54 - 91+33	54' RT - 58' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	EXISTING/PROPOSED ON WE ENERGIES POLES
6	WS9	FIBER OPTIC LINE	UG	91+33 - 93+97	47' RT - 60' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	PROPOSED ON WE ENERGIES POLES
6	WS10	FIBER OPTIC LINE	UG	92+23 - 93+22	48' RT - 55' RT	CULVERT	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	PROPOSED ON WE ENERGIES POLES

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 199	E

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
8	A37	COMMUNICATIONS LINE	UG	90+65 - 93+34	29' LT - 107' LT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
8	A41	COMMUNICATIONS LINE	UG	91+29 - 94+13	58' LT - 65' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
8	A42	COMMUNICATIONS LINE	UG	92+23 - 93+15	55' RT - 59' RT	CULVERT	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
8	A45	COMMUNICATIONS LINE	UG	92+46 - 93+54	60' RT - 144' RT	GRADING	YES	92+43-93+06 / 140'-170' RT / UG	---	YES	NO	YES	180	---
8	A46	COMMUNICATIONS LINE	UG	92+48 - 93+27	68' RT - 147' RT	GRADING	YES	92+43-93+06 / 140'-170' RT / UG	---	YES	NO	YES	180	---
8	A47	2 PARALLEL COMM. LINES	UG	94+54 - 185+71	22' LT - 101' LT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH 104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
8	A48	2 PARALLEL COMM. LINES	UG	99+74	47' LT	CULVERT	YES	93+98-104+22 / 62' RT-89' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
8	A49	2 PARALLEL COMM. LINES	UG	104+56	41' LT	STORM SEWER	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	YES	180	---
8	A50	2 PARALLEL COMM. LINES	UG	105+87	35' LT	STORM SEWER	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	YES	180	---
8	A51	PEDESTAL	UG	105+04	43' LT	GRADING	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	YES	180	---
8	A52	PEDESTAL	UG	93+01	147' RT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
8	A53	2 PARALLEL COMM. LINES	UG	97+35 - 188+30	25' RT - 65' RT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH 104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
8	A54	2 PARALLEL COMM. LINES	UG	99+74	53' RT	CULVERT	YES	93+98-104+22 / 62' RT-89' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
8	A55	PEDESTAL	UG	103+89	61' RT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
8	A56	HANDHOLE	UG	107+22	50' RT	GRADING	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
8	C11	COMMUNICATIONS LINE	UG	91+33 - 93+98	52' RT - 62' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	NO	120	EXISTING/PROPOSED ON WE ENERGIES POLES
8	C12	COMMUNICATIONS LINE	UG	92+53 - 93+15	55' RT - 58' RT	CULVERT	YES	50+71-94+02 / 243' LT-34' LT / OH	---	YES	NO	NO	120	PROPOSED ON WE ENERGIES POLES
8	C13	COMMUNICATIONS LINE	UG	94+00 - 94+02	53' LT - 50' RT	GRADING	NO	---	---	---	---	YES	---	---
8	C14	COMMUNICATIONS LINE	OH	98+53 - 104+20	62' RT - 85' RT	GRADING	YES	96+55 - 104+22 / 62' RT-89' RT / OH	---	NO	NO	NO	120	EXISTING/PROPOSED ON WE ENERGIES POLES
8	E35	ELECTRIC LINE	OH	88+55 - 93+46	54' RT - 61' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	90	---
8	E40	ELECTRIC LINE	OH	93+98 - 94+01	54' LT - 50' RT	VERT CLEARANCE	NO	---	---	---	---	YES	---	---
8	E41	ELECTRIC LINE	OH	98+53 - 104+20	62' RT - 85' RT	GRADING	YES	96+55 - 104+22 / 62' RT-89' RT / OH	---	NO	NO	YES	90	---
8	E42	POWER POLE	OH	99+08	62' RT	GRADING	YES	96+55 - 104+22 / 62' RT-89' RT / OH	---	NO	NO	YES	90	---
8	E43	POWER POLE	OH	101+59	62' RT	GRADING	YES	96+55 - 104+22 / 62' RT-89' RT / OH	---	NO	NO	YES	90	---
8	E44	POWER POLE	OH	104+02	62' RT	GRADING	YES	96+55 - 104+22 / 62' RT-89' RT / OH	---	NO	NO	YES	90	---
8	G14	GAS MAIN	UG	92+48 - 93+06	136' RT - 142' RT	GRADING	YES	92+43 - 94+36 / 52' RT-185' RT / UG	---	YES	NO	NO	120	---
8	G15	GAS MAIN	UG	97+20 - 104+98	47' RT - 73' RT	GRADING	NO	---	---	---	---	YES	---	---
8	G16	GAS MAIN	UG	99+74	51' RT	CULVERT	NO	---	---	---	---	YES	---	---
8	WS9	FIBER OPTIC LINE	UG	91+33 - 93+97	47' RT - 60' RT	GRADING	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	PROPOSED ON WE ENERGIES POLES
8	WS10	FIBER OPTIC LINE	UG	92+23 - 93+22	48' RT - 55' RT	CULVERT	YES	50+71-94+02 / 243' LT-34' LT / OH	---	NO	NO	YES	60	PROPOSED ON WE ENERGIES POLES
8	WS11	FIBER OPTIC LINE	OH	98+53 - 104+02	62' RT	GRADING	YES	96+55 - 104+22 / 62' RT-89' RT / OH	---	NO	NO	YES	90	EXISTING/PROPOSED ON WE ENERGIES POLES
8	WS12	FIBER OPTIC LINE	UG	104+02 - 172+48	58' LT - 62' RT	GRADING	YES	96+55 - 104+22 / 62' RT-89' RT / OH 104+22-147+00 / 58' LT-162' RT UG 147+00-172+45 / 58' LT OH	---	NO	NO	YES	90	PROPOSED ON WE ENERGIES POLES WHEN OVERHEAD

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY PLAN	SHEET: 200	E

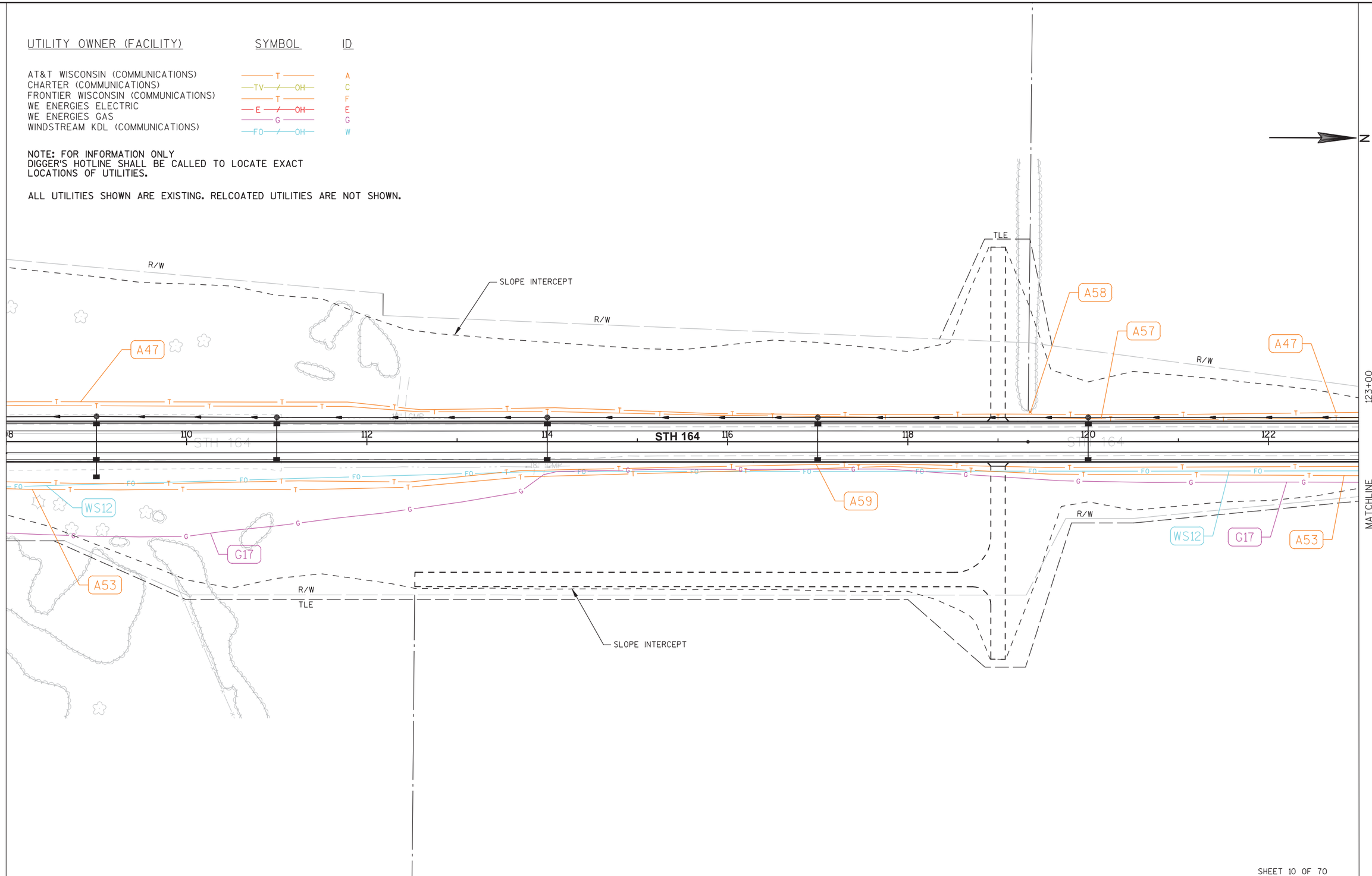
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2

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

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SHEET 10 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 201	E

FILE NAME = T:\1102717\CADD\CIVIL3D\2709030\SHEETSPLAND023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1" = 100' XREF

2

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFF)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
10	A47	2 PARALLEL COMM. LINES	UG	94+54 - 185+71	22' LT - 101' LT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH 104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
10	A53	2 PARALLEL COMM. LINES	UG	97+35 - 188+30	25' RT - 65' RT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH 104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
10	A57	COMMUNICATIONS LINE	UG	112+59 - 123+43	24' LT - 38' LT	STORM SEWER	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
10	A58	PEDESTAL	UG	119+36	33' LT	GRADING/STORM	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
10	A59	COMMUNICATIONS LINE	UG	117+00	25' RT	STORM SEWER	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
10	G17	GAS MAIN	UG	108+75 - 199+58	28' RT - 105' RT	GRADING	YES	108+42-167+94 / 53' RT-173' RT / UG 167+94 / 72' LT-62' RT / UG 167+94-198+16 / 70' LT-102' LT / UG	---	YES	NO	NO	120	---
10	WS12	FIBER OPTIC LINE	UG	104+02 - 172+48	58' LT - 62' RT	GRADING	YES	96+55 - 104+22 / 62' RT-89' RT / OH 104+22-147+00 / 58' LT-162' RT UG 147+00-172+45 / 58' LT OH	---	NO	NO	YES	90	PROPOSED ON WE ENERGIES POLES WHEN OVERHEAD

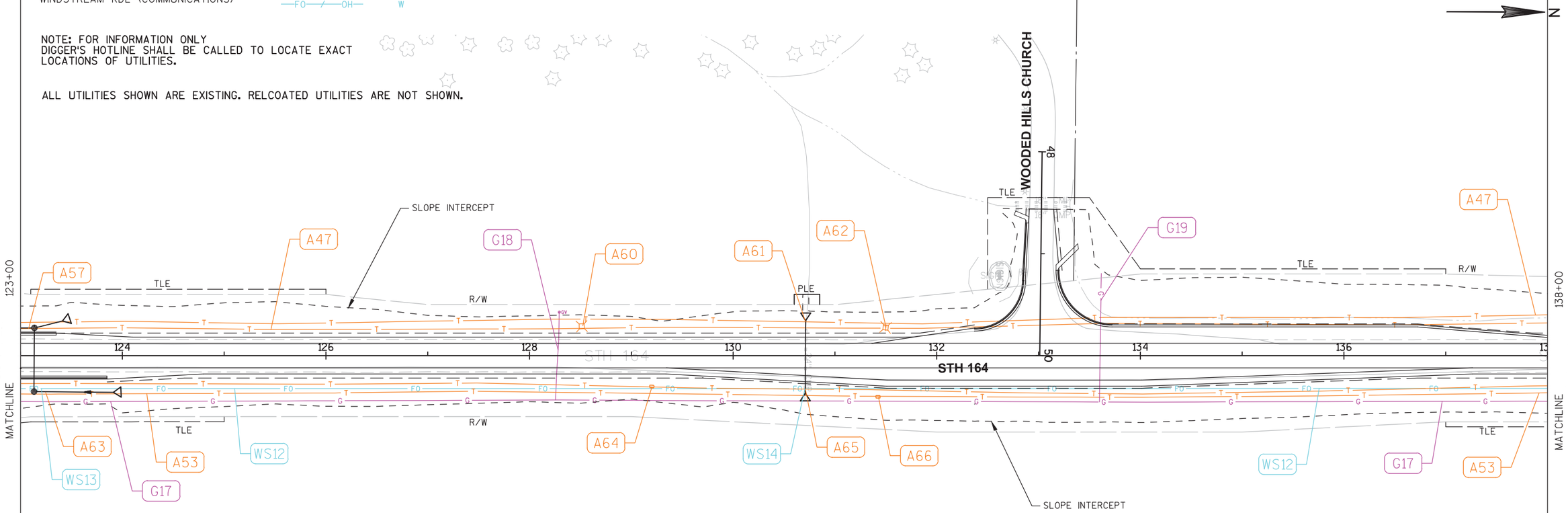
FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

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SHEET 12 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 203	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1.0' = 100.0' XREF

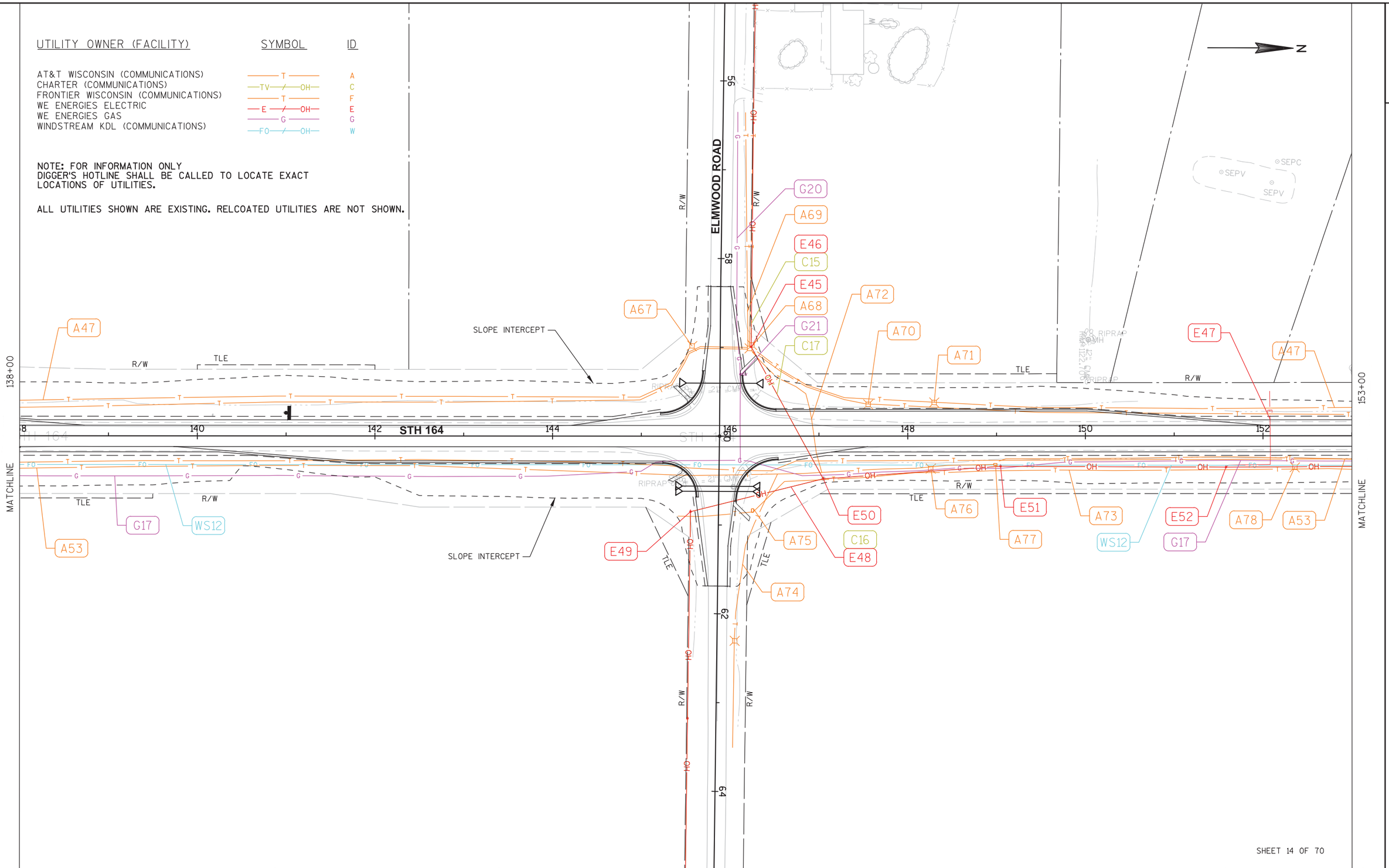
EXISTING UTILITY FACILITIES							RESOLUTION						
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
12	A47	2 PARALLEL COMM. LINES	UG	94+54 - 185+71	22' LT - 101' LT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH 104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
12	A53	2 PARALLEL COMM. LINES	UG	97+35 - 188+30	25' RT - 65' RT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH 104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
12	A57	COMMUNICATIONS LINE	UG	112+59 - 123+43	24' LT - 38' LT	STORM SEWER	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
12	A60	PEDESTAL	UG	128+51	29' LT	GRADING/CLEAR ZONE	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
12	A61	2 PARALLEL COMM. LINES	UG	130+70	30' LT	CULVERT	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
12	A62	PEDESTAL	UG	131+50	27' LT	GRADING/CLEAR ZONE	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
12	A63	2 PARALLEL COMM. LINES	UG	123+15 - 123+94	27' RT - 38' RT	STORM SEWER	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
12	A64	HANDHOLE	UG	129+20	30' RT	GRADING	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
12	A65	2 PARALLEL COMM. LINES	UG	130+70	33' RT - 39' RT	CULVERT	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
12	A66	HANDHOLE	UG	131+42	41' RT	GRADING	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
12	G17	GAS MAIN	UG	108+75 - 199+58	28' RT - 105' RT	GRADING	YES	108+42-167+94 / 53' RT-173' RT / UG 167+94 / 72' LT-62' RT / UG 167+94-198+16 / 70' LT-102' LT / UG	---	YES	NO	NO	120	---
12	G18	GAS LATERAL	UG	128+25 - 128+29	40' LT - 44' RT	GRADING	YES	128+29 / 43' LT - 63' RT / UG	---	YES	NO	NO	120	---
12	G19	GAS LATERAL	UG	133+60 - 133+62	84' LT - 46' RT	GRADING	YES	133+62 / 85' LT - 78' RT / UG	---	YES	NO	NO	120	---
12	WS12	FIBER OPTIC LINE	UG	104+02 - 172+48	58' LT - 62' RT	GRADING	YES	96+55 - 104+22 / 62' RT-89' RT / OH 104+22-147+00 / 58' LT-162' RT UG 147+00-172+45 / 58' LT OH	---	NO	NO	YES	90	PROPOSED ON WE ENERGIES POLES WHEN OVERHEAD
12	WS13	FIBER OPTIC LINE	UG	123+10 - 123+94	32' RT	STORM SEWER	YES	104+22-147+00 / 58' LT-162' RT UG	---	NO	NO	YES	90	---
12	WS14	FIBER OPTIC LINE	UG	130+70	32' RT	CULVERT	YES	104+22-147+00 / 58' LT-162' RT UG	---	NO	NO	YES	90	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

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SHEET 14 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 205	E

2

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
14	A47	2 PARALLEL COMM. LINES	UG	94+54 - 185+71	22' LT - 101' LT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH 104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
14	A53	2 PARALLEL COMM. LINES	UG	97+35 - 188+30	25' RT - 65' RT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH 104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
14	A67	PEDESTAL	UG	145+57	101' LT	GRADING	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
14	A68	2 PEDESTALS	UG	146+22	100' LT	GRADING	YES	146+22 -147+00 / 58'-113' LT / UG	---	YES	NO	NO	180	---
14	A69	2 PARALLEL COMM. LINES	UG	146+20	101' LT - 149' LT	GRADING	YES	146+22 -147+00 / 58'-113' LT / UG	---	YES	NO	NO	180	---
14	A70	PEDESTAL	UG	147+55	35' LT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
14	A71	PEDESTAL	UG	148+30	38' LT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
14	A72	COMMUNICATIONS LINE	UG	146+22 - 147+03	98' LT - 41' RT	GRADING	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
14	A73	COMMUNICATIONS LINE	UG	145+41 - 172+44	32' RT - 91' RT	GRADING	YES	104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 161+05 / 58' LT-74' RT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES
14	A74	COMMUNICATIONS LINE	UG	146+11 - 146+53	43' RT - 166' RT	GRADING	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
14	A75	HANDHOLE	UG	146+25	84' RT	GRADING	YES	104+22-147+03 / 54'-164' RT / UG	---	YES	NO	NO	180	---
14	A76	PEDESTAL	UG	148+26	37' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
14	A77	HANDHOLE	UG	148+99	32' RT	GRADING	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
14	A78	PEDESTAL	UG	152+36	36' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
14	C15	COMMUNICATIONS LINE	OH	146+24	100' LT -133' LT	GRADING	YES	146+24-147+00 / 58'-158' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
14	C16	COMMUNICATIONS LINE	OH	145+55 - 179+23	32' RT - 145' RT	GRADING	YES	145+47-147+00 / 58' LT-109' RT / OH 147+00-178+94 / 56'-58' LT / OH 178+94-209+72 / 58'-130' LT / UG	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES WHEN OVERHEAD
14	C17	COMMUNICATIONS LINE	UG	145+24 - 147+05	100' LT - 48' RT	GRADING	YES	146+24-147+00 / 58'-158' LT / OH	---	YES	NO	YES	120	PROPOSED ON WE ENERGIES POLES
14	E45	POWER POLE	OH	146+24	100' LT	GRADING	YES	146+24-147+00 / 58'-158' LT / OH	---	NO	NO	YES	90	---
14	E46	ELECTRIC LINE	OH	146+24 - 147+05	133' LT - 48' RT	GRADING	YES	146+24-147+00 / 58'-158' LT / OH	---	NO	NO	YES	90	---
14	E47	ELECTRIC LINE	UG	151+58 - 152+08	40' LT - 35' RT	GRADING	YES	152+08 / 58' LT / UG	---	YES	NO	NO	90	CONNECT TO PROPOSED POLE
14	E48	ELECTRIC LINE	OH	145+55 - 181+23	32' RT - 145' RT	GRADING	YES	145+47-147+00 / 58' LT-109' RT / OH 147+00-178+94 / 56'-58' LT / OH 178+94-193+67 / 58' LT-91' LT / UG	---	NO	NO	YES	90	---
14	E49	POWER POLE	OH	145+55	85' RT	GRADING	YES	146+24-147+00 / 58'-158' LT / OH	---	NO	NO	YES	90	---
14	E50	POWER POLE	OH	147+05	48' RT	GRADING	YES	147+00-178+94 / 56' LT-58' LT / OH	---	NO	NO	YES	90	---
14	E51	POWER POLE	OH	149+05	34' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 56' LT-58' LT / OH	---	NO	NO	YES	90	---
14	E52	POWER POLE	OH	151+58	35' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 56' LT-58' LT / OH	---	NO	NO	YES	90	---
14	G17	GAS MAIN	UG	108+75 - 199+58	28' RT - 105' RT	GRADING	YES	108+42-167+94 / 53' RT-173' RT / UG 167+94 / 72' LT-62' RT / UG 167+94-198+16 / 70' LT-102' LT / UG	---	YES	NO	NO	120	---
14	G20	GAS MAIN	UG	146+08 - 146+12	168' LT - 27' RT	GRADING	YES	144+92-146+08 / 180' LT-83' RT / UG	---	YES	NO	NO	120	---
14	G21	GAS VALVE	UG	146+11	69' LT	GRADING	YES	144+92-146+08 / 180' LT-83' RT / UG	---	YES	NO	NO	120	---
14	WS12	FIBER OPTIC LINE	UG	104+02 - 172+48	58' LT - 62' RT	GRADING	YES	96+55 - 104+22 / 62' RT-89' RT / OH 104+22-147+00 / 58' LT-162' RT UG 147+00-172+45 / 58' LT OH	---	NO	NO	YES	90	PROPOSED ON WE ENERGIES POLES WHEN OVERHEAD

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

N

TUCKAWAY LANE

STH 164

STH 164

153+00

168+00

MATCHLINE

MATCHLINE

SLOPE INTERCEPT

SLOPE INTERCEPT

FOOTBRIDGE

R/W

TLE

NOTE: FOR INFORMATION ONLY
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UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

FILE NAME = T:\1102717\CADD\CIVIL 3D\27090300\SHEETSPLAN023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1.0' = 100.0' XREF

2

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
16	A47	2 PARALLEL COMM. LINES	UG	94+54 - 185+71	22' LT - 101' LT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH 104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
16	A53	2 PARALLEL COMM. LINES	UG	97+35 - 188+30	25' RT - 65' RT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH 104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
16	A73	COMMUNICATIONS LINE	UG	145+41 - 172+44	32' RT - 91' RT	GRADING	YES	104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 161+05 / 58' LT-74' RT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES
16	A79	PEDESTAL	UG	160+51	32' LT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
16	A80	PEDESTAL	UG	161+30	34' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
16	A81	PEDESTAL	UG	166+92	37' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
16	A82	COMMUNICATIONS LINE	UG	167+20	39' RT	STORM SEWER	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
16	A83	2 PARALLEL COMM. LINES	UG	167+20	32' RT	STORM SEWER	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
16	C16	COMMUNICATIONS LINE	OH	145+55 - 179+23	32' RT - 145' RT	GRADING	YES	145+47-147+00 / 58' LT-109' RT / OH 147+00-178+94 / 56'-58' LT / OH 178+94-209+72 / 58'-130' LT / UG	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES WHEN OVERHEAD
16	E48	ELECTRIC LINE	OH	145+55 - 181+23	32' RT - 145' RT	GRADING	YES	145+47-147+00 / 58' LT-109' RT / OH 147+00-178+94 / 56'-58' LT / OH 178+94-193+67 / 58' LT-91' LT / UG	---	NO	NO	YES	90	---
16	E53	POWER POLE	OH	154+08	34' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 56'-58' LT / OH	---	NO	NO	YES	90	---
16	E54	POWER POLE	OH	156+59	34' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 56'-58' LT / OH	---	NO	NO	YES	90	---
16	E55	POWER POLE	OH	159+13	34' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 56'-58' LT / OH 159+10-159+74 / 58' LT-85' RT/OH	---	NO	NO	YES	90	---
16	E56	POWER POLE	OH	161+30	34' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 56'-58' LT / OH	---	NO	NO	YES	90	---
16	E57	POWER POLE	OH	163+57	34' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 56'-58' LT / OH	---	NO	NO	YES	90	---
16	E58	POWER POLE	OH	165+81	34' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 56'-58' LT / OH 165+79 / 58' LT-172' RT / UG	---	NO	NO	YES	90	BURIED CROSSING IS JOINT BURY WITH AT&T
16	E59	POWER POLE	OH	166+93	34' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 56'-58' LT / OH 166+95-167+00 / 58' LT-62' RT UG	---	NO	NO	YES	90	BURIED CROSSING IS JOINT BURY WITH CHARTER
16	E60	2 PARALLEL ELECTRIC SERVICES	UG	166+93	34' RT - 60' RT	GRADING	YES	166+95-167+00 / 58' LT-62' RT UG	---	NO	NO	YES	90	JOINT BURY WITH CHARTER
16	E61	2 PARALLEL ELECTRIC SERVICES	UG	166+93	46' RT	STORM SEWER	YES	166+95-167+00 / 58' LT-62' RT UG	---	NO	NO	YES	90	JOINT BURY WITH CHARTER
16	G17	GAS MAIN	UG	108+75 - 199+58	28' RT - 105' RT	GRADING	YES	108+42-167+94 / 53' RT-173' RT / UG 167+94 / 72' LT-62' RT / UG 167+94-198+16 / 70' LT-102' LT / UG	---	YES	NO	NO	120	---
16	G22	GAS MAIN	UG	157+24 - 157+25	173' LT - 29' RT	GRADING	YES	157+25-157+40 / 175' LT-78' RT / UG	---	YES	NO	NO	120	---
16	G23	GAS VALVE	UG	157+26	62' LT	GRADING	YES	157+25-157+40 / 175' LT-78' RT / UG	---	YES	NO	NO	120	---
16	G24	GAS MAIN	UG	167+20	29' RT	STORM SEWER	YES	108+42-167+94 / 53' RT-173' RT / UG	---	YES	NO	NO	120	---
16	WS12	FIBER OPTIC LINE	UG	104+02 - 172+48	58' LT - 62' RT	GRADING	YES	96+55 - 104+22 / 62' RT-89' RT / OH 104+22-147+00 / 58' LT-162' RT UG 147+00-172+45 / 58' LT OH	---	NO	NO	YES	90	PROPOSED ON WE ENERGIES POLES WHEN OVERHEAD
16	WS15	FIBER OPTIC LINE	UG	167+20	32' RT	STORM SEWER	YES	147+00-172+45 / 58' LT OH	---	NO	NO	YES	90	PROPOSED ON WE ENERGIES POLES WHEN OVERHEAD

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

N

168+00

183+00

MATCHLINE

MATCHLINE

STH 164

CHEROKEE TR

SLOPE INTERCEPT

SLOPE INTERCEPT

BURIED COMMUNICATIONS LINE INSTALLED AFTER FIELD SURVEY. APPROXIMATELY STA 172+43 TO 191+17 LT/RT. CHARTER TO CONFIRM LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT LOCATED BY DIGGER'S HOTLINE. APPROXIMATELY STA 176+46 TO 191+17 RT. CHARTER TO DETERMINE LIMITS OF CONFLICT.

BURIED GAS LATERAL NOT LOCATED BY DIGGER'S HOTLINE. APPROXIMATELY STA 172+10 RT. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

BURIED GAS LATERAL NOT LOCATED BY DIGGER'S HOTLINE. APPROXIMATELY STA 179+75 RT. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

BURIED ELECTRIC SERVICE NOT LOCATED BY DIGGER'S HOTLINE. WE ENERGIES ELECTRIC TO DETERMINE LIMITS OF CONFLICT.

SHEET 18 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 209	E

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
18	A47	2 PARALLEL COMM. LINES	UG	94+54 - 185+71	22' LT - 101' LT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH 104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
18	A53	2 PARALLEL COMM. LINES	UG	97+35 - 188+30	25' RT - 65' RT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH 104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
18	A73	COMMUNICATIONS LINE	UG	145+41 - 172+44	32' RT - 91' RT	GRADING	YES	104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
18	A84	PEDESTAL	UG	172+43	31' LT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
18	A85	PEDESTAL	UG	172+53	45' LT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
18	A86	PEDESTAL	UG	178+80	37' LT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
18	A87	PEDESTAL	UG	179+21	57' LT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
18	A88	PEDESTAL	UG	170+48	34' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
18	A89	PEDESTAL	UG	171+25	41' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
18	A90	HANDHOLE	UG	172+57	41' RT	GRADING	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
18	A91	COMMUNICATIONS LINE	UG	172+53 - 173+24	45' LT - 42' RT	GRADING	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
18	A92	COMMUNICATIONS LINE	UG	172+53 - 172+57	45' LT - 41' RT	GRADING	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
18	A93	PEDESTAL	UG	173+24	42' RT	GRADING	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
18	A94	COMMUNICATIONS LINE	UG	168+05 - 168+40	46' RT - 53' RT	STORM SEWER	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
18	A95	PEDESTAL	UG	179+23	41' RT	GRADING/CLEAR ZONE	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
18	A96	PEDESTAL	UG	181+85	43' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
18	A97	PEDESTAL	UG	182+98	59' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
18	A98	COMMUNICATIONS LINE	UG	181+85 - 191+17	31' RT - 67' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
18	A99	COMMUNICATIONS LINE	UG	181+85 - 185+65	32' - 57' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
18	A193	HANDHOLE	UG	168+49	92' RT	GRADING	YES	147+00-178+94 / 57'-58' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
18	C16	COMMUNICATIONS LINE	OH	145+55 - 179+23	32' RT - 145' RT	GRADING	YES	145+47-147+00 / 58' LT-109' RT / OH 147+00-178+94 / 56'-58' LT / OH 178+94-209+72 / 58'-130' LT / UG	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES WHEN OVERHEAD
18	C18	COMMUNICATIONS LINE	UG	176+46 - 191+17	40' RT - 57' RT	GRADING	YES	147+00-178+94 / 56'-58' LT / OH 178+94-209+72 / 58'-130' LT / UG	---	YES	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES WHEN OVERHEAD
18	C19	PEDESTAL	UG	181+09	61' RT	GRADING		178+94-209+72 / 58'-130' LT / UG	---	NO	NO	YES	120	---
18	C20	COMMUNICATIONS LINE	UG	168+80 - 168+81	34' RT - 137' RT	GRADING	YES	168+83-169+18 / 58' LT-160' RT / UG	---	YES	NO	YES	120	JOINT BURY WITH WE ENERGIES ELECTRIC
18	C21	COMMUNICATIONS LINE	OH	172+44 - 172+47	58' LT - 34' RT	GRADING	YES	171+23 / 58' LT-62' RT / UG	---	NO	NO	YES	120	JOINT BURY WITH WE ENERGIES ELECTRIC
18	C22	COMMUNICATIONS LINE	OH	176+45 - 176+46	51' LT - 40' RT	GRADING	YES	---	---	NO	NO	YES	120	---
18	C23	COMMUNICATIONS LINE	UG	168+81	63' RT	STORM SEWER	YES	168+83-169+18 / 58' LT-160' RT / UG	---	YES	NO	YES	120	JOINT BURY WITH WE ENERGIES ELECTRIC
18	C51	COMMUNICATIONS LINE	UG	179+17 - 179+23	56' LT - 41' RT	GRADING	YES	179+08 / 58' LT - 57' RT / UG	---	YES	NO	YES	120	---
18	C72	COMMUNICATIONS LINE	UG	172+43 - 194+56	40' LT - 42' RT	GRADING	YES	147+00-178+94 / 56'-58' LT / OH 178+94-209+72 / 58'-130' LT / UG	---	YES	NO	YES	120	---
18	E48	ELECTRIC LINE	OH	145+55 - 181+23	32' RT - 145' RT	GRADING	YES	145+47-147+00 / 58' LT-109' RT / OH 147+00-178+94 / 56'-58' LT / OH 178+94-193+67 / 58' LT-91' LT / UG	---	NO	NO	YES	90	WORK AROUND ANCHOR STA 172+45, 58' LT
18	E62	POWER POLE	OH	168+81	34' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 56'-58' LT / OH	---	NO	NO	YES	90	---
18	E63	POWER POLE	OH	171+23	34' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 56'-58' LT / OH	---	NO	NO	YES	90	---
18	E64	ELECTRIC SERVICE	UG	171+23 - 171+32	34' RT - 52' RT	GRADING	YES	171+23 / 58' LT-62' RT / UG	---	YES	NO	YES	90	---
18	E65	POWER POLE	OH	172+44	34' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 56'-58' LT / OH	---	NO	NO	YES	90	WORK AROUND ANCHOR STA 172+45, 58' LT

FOR INFORMATION ONLY. CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

FILE NAME : T:\1102717\cadd\civil3d\27090300\SheetsPlan\020101_gn.pptx PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

2

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
18	E66	ELECTRIC LINE	OH	172+44 - 172+47	58' LT - 34' RT	GRADING	YES	172+45 / 58' LT	---	NO	NO	YES	90	CONNECT TO PROPOSED POLE
18	E67	LIGHT POLE	OH	168+28	44' RT	GRADING	YES	---	---	NO	NO	YES	90	---
18	E68	POWER POLE	OH	174+42	39' RT	GRADING/CLEAR ZONE	YES	147+00-178+94 / 56'-58' LT / OH	---	NO	NO	YES	90	WORK AROUND POLE STA 174+43, 58' LT
18	E69	POWER POLE	OH	176+46	40' RT	GRADING/CLEAR ZONE	NO	---	---	NO	NO	YES	---	WORK AROUND ANCHOR
18	E70	ELECTRIC SERVICE	OH	176+45 - 176+46	51' LT - 40' RT	GRADING	YES	---	---	NO	NO	YES	90	---
18	E71	POWER POLE	OH	179+23	41' RT	GRADING/CLEAR ZONE	YES	178+94-193+67 / 58' LT-130' LT / UG	---	NO	NO	YES	90	---
18	E72	POWER POLE	OH	179+21	60' LT	GRADING	YES	178+94-193+67 / 58' LT-130' LT / UG	---	NO	NO	YES	90	---
18	E73	ELECTRIC SERVICE	OH	179+21 - 179+23	60' LT - 41' RT	GRADING	YES	---	---	NO	NO	YES	90	---
18	E74	POWER POLE	OH	181+23	43' RT	GRADING	YES	181+00 / 62' LT-82' RT / UG	---	---	NO	YES	90	JOINT BURY WITH AT&T
18	E75	2 PARALLEL ELEC LINES	UG	168+80 - 168+81	34' RT - 137' RT	GRADING	YES	168+83-169+18 / 58' LT-160' RT / UG	---	YES	NO	YES	90	JOINT BURY WITH CHARTER
18	E76	2 PARALLEL ELEC LINES	UG	168+81	63' RT	STORM SEWER	YES	168+83-169+18 / 58' LT-160' RT / UG	---	YES	NO	YES	90	JOINT BURY WITH CHARTER
18	E161	ELECTRIC SERVICE	UG	181+00 - 181+23	43' RT - 67' RT	GRADING	YES	181+00 / 62' LT-82' RT / UG	---	YES	NO	YES	90	JOINT BURY WITH AT&T
18	G17	GAS MAIN	UG	108+75 - 199+58	28' RT - 105' RT	GRADING	YES	108+42-167+94 / 53' RT-173' RT / UG 167+94 / 72' LT-62' RT / UG 167+94-198+16 / 70' LT-102' LT / UG	---	YES	NO	NO	120	---
18	G25	GAS VALVE	UG	168+04	29' RT	GRADING	YES	167+94-198+16 / 70' LT-102' LT / UG	---	YES	NO	NO	120	---
18	G26	GAS MAIN	UG	168+19 - 168+21	29' RT - 139' RT	GRADING	YES	167+94-168+16 / 72' LT-161' RT / UG	---	YES	NO	NO	120	---
18	G27	GAS VALVE	UG	168+21	59' RT	GRADING	YES	167+94-168+16 / 72' LT-161' RT / UG	---	YES	NO	NO	120	---
18	G28	GAS MAIN	UG	168+21	53' RT	STORM SEWER	YES	167+94-168+16 / 72' LT-161' RT / UG	---	YES	NO	NO	120	---
18	G29	GAS LATERAL	UG	172+10	29' RT - 53' RT	GRADING	YES	172+10 / 70' LT-54' RT / UG	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED
18	G30	GAS LATERAL	UG	173+82 - 173+83	56' LT - 30' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT LATERAL OUTSIDE GRADING LIMITS
18	G31	GAS LATERAL	UG	174+07 - 174+10	55' LT - 30' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT LATERAL OUTSIDE GRADING LIMITS
18	G32	GAS LATERAL	UG	174+91 - 174+93	57' LT - 30' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT LATERAL OUTSIDE GRADING LIMITS
18	G33	GAS LATERAL	UG	180+13 - 180+18	43' LT - 32' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT LATERAL OUTSIDE GRADING LIMITS
18	G34	GAS LATERAL	UG	182+94	67' LT - 42' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT LATERAL OUTSIDE GRADING LIMITS
18	G120	GAS LATERAL	UG	179+75	33'RT - 58' RT	GRADING	YES	---	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED PROPOSED NOT SHOWN ON WORK PLAN
18	WS12	FIBER OPTIC LINE	UG	104+02 - 172+48	58' LT - 62' RT	GRADING	YES	96+55 - 104+22 / 62' RT-89' RT / OH 104+22-147+00 / 58' LT-162' RT UG 147+00-172+45 / 58' LT OH	---	NO	NO	YES	90	PROPOSED ON WE ENERGIES POLES WHEN OVERHEAD

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

DO NOT TRIM OR REMOVE ADDITIONAL TREES BEYOND CLEARING/GRUBBING REQUIRED FOR ROADWAY CONSTRUCTION

BURIED ELECTRIC LINE NOT LOCATED BY DIGGER'S HOTLINE. APPROXIMATELY STA 184+50 TO 191+03 LT. WE ENERGIES ELECTRIC TO DETERMINE LIMITS OF CONFLICT.

N

183+00

198+00

MATCHLINE

MATCHLINE

184 186 188 190 192 194 196

STH 164

STH 164

STH 164

ST GABRIEL WAY

90 92 94

A47 A100 A78 A101 A103 E77 A104 G36 E80 C25 A105 A106 E85 C27 A115 A107 E169

A53 A99 A98 A108 A109 G17 C18 C24 C73 G35 A102 A111 A113 A112 E82 E81 C26 E79 A110 C72 A114 E83 E84 G17 E241 C66 E242

TLE R/W PLE RIPRAP SIGN SEPC SEPV W T OH G TV 18" CMP 15" RCP 18" RCP CONC SLOPE INTERCEPT

BURIED COMMUNICATIONS LINE NOT LOCATED BY DIGGER'S HOTLINE. APPROXIMATELY STA 176+46 TO 191+17 RT. CHARTER TO DETERMINE LIMITS OF CONFLICT.

WETLAND BOUNDARY

BURIED COMMUNICATIONS LINE INSTALLED AFTER FIELD SURVEY. APPROXIMATELY STA 172+43 TO 194+56 LT/RT. CHARTER TO CONFIRM LIMITS OF CONFLICT.

SLOPE INTERCEPT

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

SHEET 21 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 212	E

FILE NAME • T:\1102717\CADD\CIVIL3D\270903001\SHEETSPLAN\023001_UP.DWG PLOT DATE • 7/16/2013 7:54 AM PLOT BY • BLACKWOOD, JIM PLOT NAME • PLOT SCALE • 1" = 100' XREF

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
21	A47	2 PARALLEL COMM. LINES	UG	94+54 - 185+71	22' LT - 101' LT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH 104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A53	2 PARALLEL COMM. LINES	UG	97+35 - 188+30	25' RT - 65' RT	GRADING	YES	93+98-104+22 / 62' RT-89' RT / OH 104+22-147+03 / 54'-164' RT / UG 147+00-178+94 / 57'-58' LT / OH 178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A98	COMMUNICATIONS LINE	UG	181+85 - 191+17	31' RT - 67' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A99	COMMUNICATIONS LINE	UG	181+85 - 185+65	32' - 57' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A100	COMMUNICATIONS LINE	UG	183+58	55' LT	CULVERT	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A101	PEDESTAL	UG	183+60	55' LT	GRADING/CULVERT	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A102	PEDESTAL	UG	188+30	61' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A103	2 PARALLEL COMM. LINES	UG	185+65 - 185+71	54' LT - 57' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A104	COMMUNICATIONS LINE	UG	185+71 - 197+36	35' LT - 64' LT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A105	PEDESTAL	UG	193+79	45' LT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A106	HANDHOLE	UG	193+86	41' LT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A107	COMMUNICATIONS LINE	UG	193+79 - 197+41	44' LT - 63' LT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A108	COMMUNICATIONS LINE	UG	185+58	37' RT	CULVERT	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A109	COMMUNICATIONS LINE	UG	185+58	45' RT	CULVERT	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A110	COMMUNICATIONS LINE	UG	185+65 - 198+45	41' RT - 237' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A111	COMMUNICATIONS LINE	UG	188+30 - 191+50	55' RT - 61' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A112	COMMUNICATIONS LINE	UG	188+30 - 198+29	55' RT - 250' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A113	PEDESTAL	UG	191+17	67' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A114	HANDHOLE	UG	193+46	51' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	A115	COMMUNICATIONS LINE	UG	193+46 - 193+79	45' LT - 51' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
21	C18	COMMUNICATIONS LINE	UG	176+46 - 191+17	40' RT - 57' RT	GRADING	YES	147+00-178+94 / 56'-58' LT / OH 178+94-209+72 / 58'-130' LT / UG	---	YES	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES WHEN OVERHEAD
21	C24	COMMUNICATIONS LINE	UG	185+58	56' RT	CULVERT	YES	178+94-209+72 / 58'-130' LT / UG	---	YES	NO	YES	120	PROPOSED ON WE ENERGIES POLES
21	C25	COMMUNICATIONS LINE	OH	191+04 - 191+17	47' LT - 69' RT	GRADING	YES	---	---	NO	NO	YES	120	RECONNECT TO EXISTING OUTSIDE GRADING LIMITS
21	C26	COMMUNICATIONS LINE	OH	191+17 - 196+87	69' RT - 160' RT	GRADING	YES	178+94-209+72 / 58'-130' LT / UG	---	NO	NO	YES	120	EXISTING ON WE ENERGIES POLES
21	C27	COMMUNICATIONS LINE	OH	194+56 - 194+65	50' LT - 68' RT	GRADING	YES	---	---	NO	NO	YES	120	EXISTING ON WE ENERGIES POLES
21	C66	COMMUNICATIONS LINE	OH	111+97 - 112+62 HUBERTUS RD	33' LT - 117' RT	GRADING	YES	178+94-209+72 / 58'-130' LT / UG	---	NO	NO	YES	120	EXISTING ON WE ENERGIES POLES
21	C72	COMMUNICATIONS LINE	UG	172+43 - 194+56	40' LT - 42' RT	GRADING	YES	147+00-178+94 / 56'-58' LT / OH 178+94-209+72 / 58'-130' LT / UG	---	YES	NO	YES	120	---
21	C73	COMMUNICATIONS LINE	UG	185+58	42' RT	CULVERT	YES	178+94-209+72 / 58'-130' LT / UG	---	YES	NO	YES	120	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

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EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
21	E77	ELECTRIC LINE	UG	184+50 - 191+03	UNKNOWN	GRADING	YES	178+94-193+67 / 58' LT-130' LT / UG	---	YES	NO	YES	90	EXISTING NOT FIELD VERIFIED JOINT BURY WITH AT&T, CHARTER
21	E78	ELECTRIC LINE	UG	185+58	UNKNOWN	CULVERT	YES	178+94-193+67 / 58' LT-130' LT / UG	---	YES	NO	YES	90	EXISTING NOT FIELD VERIFIED JOINT BURY WITH AT&T, CHARTER
21	E79	ELECTRIC LINE	OH	191+04 - 196+87	47' LT - 161' RT	GRADING	YES	---	---	NO	NO	YES	90	---
21	E80	POWER POLE	OH	191+04	47' LT	GRADING	YES	178+94-193+67 / 58' LT-130' LT / UG	---	NO	NO	YES	90	JOINT BURY WITH AT&T, CHARTER
21	E81	POWER POLE	OH	191+17	57' RT	GRADING	YES	178+94-193+67 / 58' LT-130' LT / UG	---	NO	NO	YES	90	JOINT BURY WITH AT&T, CHARTER
21	E82	POWER POLE	OH	191+17	69' RT	GRADING	YES	178+94-193+67 / 58' LT-130' LT / UG	---	NO	NO	YES	90	JOINT BURY WITH AT&T, CHARTER
21	E83	POWER POLE	OH	194+56	68' RT	GRADING	YES	---	---	NO	NO	YES	90	---
21	E84	ELECTRIC SERVICE	UG	193+68 - 194+56	78' LT - 68' RT	GRADING	YES	---	---	YES	NO	YES	90	CONNECT TO EXISTING OUTSIDE GRADING LIMITS
21	E85	GUY POLE	OH	194+65	50' LT	GRADING	YES	---	---	NO	NO	YES	90	---
21	E169	GUY WIRE	OH	194+56 - 194+65	50' LT - 68' RT	GRADING	YES	---	---	NO	NO	YES	90	---
21	E241	POWER POLE	OH	111+97 HUBERTUS RD	117' RT	GRADING	YES	---	---	NO	NO	YES	90	---
21	E242	ELECTRIC LINE	OH	111+97 - 112+62 HUBERTUS RD	33' LT - 117' RT	GRADING	YES	---	---	NO	NO	YES	90	---
21	G17	GAS MAIN	UG	108+75 - 199+58	28' RT - 105' RT	GRADING	YES	108+42-167+94 / 53' RT-173' RT / UG 167+94 / 72' LT-62' RT / UG 167+94-198+16 / 70' LT-102' LT / UG	---	YES	NO	NO	120	---
21	G35	GAS MAIN	UG	185+58	41' RT	CULVERT	YES	167+94-198+16 / 70' LT-102' LT / UG	---	YES	NO	NO	120	---
21	G36	GAS LATERAL	UG	189+40	65' LT - 41' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

HUBERTUS ROAD

STH 164

198+00

213+00

SEE SHEET 57 OF 64 FOR
ADDITIONAL UTILITY CONFLICTS
ALONG HUBERTUS ROAD

SEE SHEET 59 OF 64 FOR
ADDITIONAL UTILITY CONFLICTS
ALONG HUBERTUS ROAD

DIGGER'S HOTLINE MARKINGS NOT COMPLETE

BURIED GAS LATERAL NOT LOCATED BY DIGGER'S HOTLINE. APPROXIMATELY STA 204+30 RT. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

BURIED GAS LATERAL NOT LOCATED BY DIGGER'S HOTLINE. APPROXIMATELY STA 203+60 RT. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT LOCATED BY DIGGER'S HOTLINE. APPROXIMATELY STA 199+45 TO STA 209+60 RT. CHARTER TO DETERMINE LIMITS OF CONFLICT.

SLOPE INTERCEPT

SLOPE INTERCEPT

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

SHEET 24 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 215	E

FILE NAME • T:\1102717\CADD\CIVIL3D\270903001\SHEETSPLAN\023001_UD.DWG PLOT DATE • 7/16/2013 7:54 AM PLOT BY • BLACKWOOD, JIM PLOT NAME • PLOT SCALE • 1" = 100' XREF

EXISTING UTILITY FACILITIES							RESOLUTION						
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
24	A110	COMMUNICATIONS LINE	UG	185+65 - 198+45	41' RT - 237' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
24	A112	COMMUNICATIONS LINE	UG	188+30 - 198+29	55' RT - 250' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
24	A116	COMMUNICATIONS LINE	UG	103+50 - 113+08	18' RT - 47' RT	GRADING	YES	103+00-108+68 / 58'-139' LT / UG 112+00-117+36 / 37'-87' LT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
24	A117	COMMUNICATIONS LINE	UG	104+03 - 108+64	47' RT - 62' RT	GRADING	YES	103+00-108+68 / 58'-139' LT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
24	A118	COMMUNICATIONS LINE	UG	199+71 - 203+88	48' RT - 65' RT	GRADING	YES	199+84-209+70 / 70'-198' LT / UG	---	YES	NO	NO	180	DIGGER'S DID NOT MARK PORTION OF EXISTING FACILITY
24	A119	COMMUNICATIONS LINE	UG	198+54	69' RT	CULVERT	YES	103+00-108+68 / 58'-139' LT / UG 112+00-117+36 / 37'-87' LT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
24	A120	PEDESTAL	UG	203+88	59' RT	GRADING	YES	199+84-209+70 / 70'-198' LT / UG	---	YES	NO	NO	180	DIGGER'S DID NOT MARK PORTION OF EXISTING FACILITY
24	A121	COMMUNICATIONS LINE	UG	200+58 - 203+86	49' RT - 58' RT	GRADING	YES	199+84-209+70 / 70'-198' LT / UG	---	YES	NO	NO	180	DIGGER'S DID NOT MARK PORTION OF EXISTING FACILITY
24	A122	2 PARALLEL COMM LINES	UG	204+38 - 230+40	33' RT - 63' RT	GRADING	YES	199+84-209+70 / 70'-198' LT / UG 209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
24	A123	PEDESTAL	UG	209+06	64' RT	GRADING	YES	199+84-209+70 / 70'-198' LT / UG	---	YES	NO	YES	180	DIGGER'S DID NOT MARK PORTION OF EXISTING FACILITY
24	A124	2 PARALLEL COMM LINES	UG	203+48	56' RT	CULVERT	YES	199+84-209+70 / 70'-198' LT / UG	---	YES	NO	YES	180	DIGGER'S DID NOT MARK PORTION OF EXISTING FACILITY
24	A125	PEDESTAL	UG	212+18	64' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
24	A126	2 PARALLEL COMM LINES	UG	212+89	50' RT	CULVERT	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
24	A194	COMMUNICATIONS LINE	UG	108+57 - 108+69	44' RT - 61' RT	GRADING	YES	103+00-108+68 / 58'-139' LT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
24	C28	COMMUNICATIONS LINE	UG	199+45 - 209+68	UNKNOWN	GRADING	YES	178+94-209+72 / 58'-130' LT / UG	---	YES	NO	YES	120	EXISTING NOT FIELD VERIFIED JOINT BURY WITH WE ENERGIES ELECTRIC FOR PART OF RELOCATION
24	C29	COMMUNICATIONS LINE	UG	203+48	UNKNOWN	CULVERT	YES	178+94-209+72 / 58'-130' LT / UG	---	YES	NO	YES	120	EXISTING NOT FIELD VERIFIED JOINT BURY WITH WE ENERGIES ELECTRIC FOR PART OF RELOCATION
24	C30	COMMUNICATIONS LINE	OH	210+86 - 223+89	50' RT - 55' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
24	C31	COMMUNICATIONS LINE	OH	104+59 - 118+00 HUBERTUS RD	18' LT - 67' LT	GRADING	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
24	E86	ELECTRIC SERVICE	OH	199+62 - 200+31	42' RT - 261' RT	GRADING	YES	---	---	NO	NO	NO	90	---
24	E87	LIGHT POLE	OH	199+62	42' RT	GRADING	YES	---	---	NO	NO	NO	90	---
24	E88	ELECTRIC LINE	OH	104+59 - 118+00 HUBERTUS RD	18' LT - 67' LT	GRADING	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	90	---
24	E89	POWER POLE	OH	199+62	142' LT	GRADING	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	90	---
24	E90	POWER POLE	OH	199+46	60' RT	GRADING/CULVERT	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	90	---
24	E91	ELECTRIC LINE	OH	201+44 - 203+82	65' RT	GRADING	YES	200+23-204+25 / 131' LT-65' RT / UG	---	NO	NO	YES	90	JOINT BURY WITH CHARTER
24	E92	POWER POLE	OH	201+44	65' RT	GRADING	YES	200+23-204+25 / 131' LT-65' RT / UG	---	NO	NO	YES	90	JOINT BURY WITH CHARTER
24	E93	ELECTRIC LINE	OH	204+42 - 207+20	64' RT	GRADING	YES	200+23-207+17 / 71' LT-131' LT / UG	---	NO	NO	YES	90	JOINT BURY WITH CHARTER
24	E94	POWER POLE	OH	207+20	64' RT	GRADING	YES	---	---	NO	NO	NO	90	---
24	E95	ELECTRIC LINE	UG	207+16 - 207+21	44' LT - 64' RT	GRADING	YES	---	---	YES	NO	NO	90	RECONNECT TO EXISTING SERVICE OUTSIDE GRADING LIMITS
24	E96	POWER POLE	OH	209+63	69' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
24	E97	ELECTRIC LINE	OH	210+86 - 223+93	48' LT - 66' LT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
24	E98	POWER POLE	OH	212+12	64' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

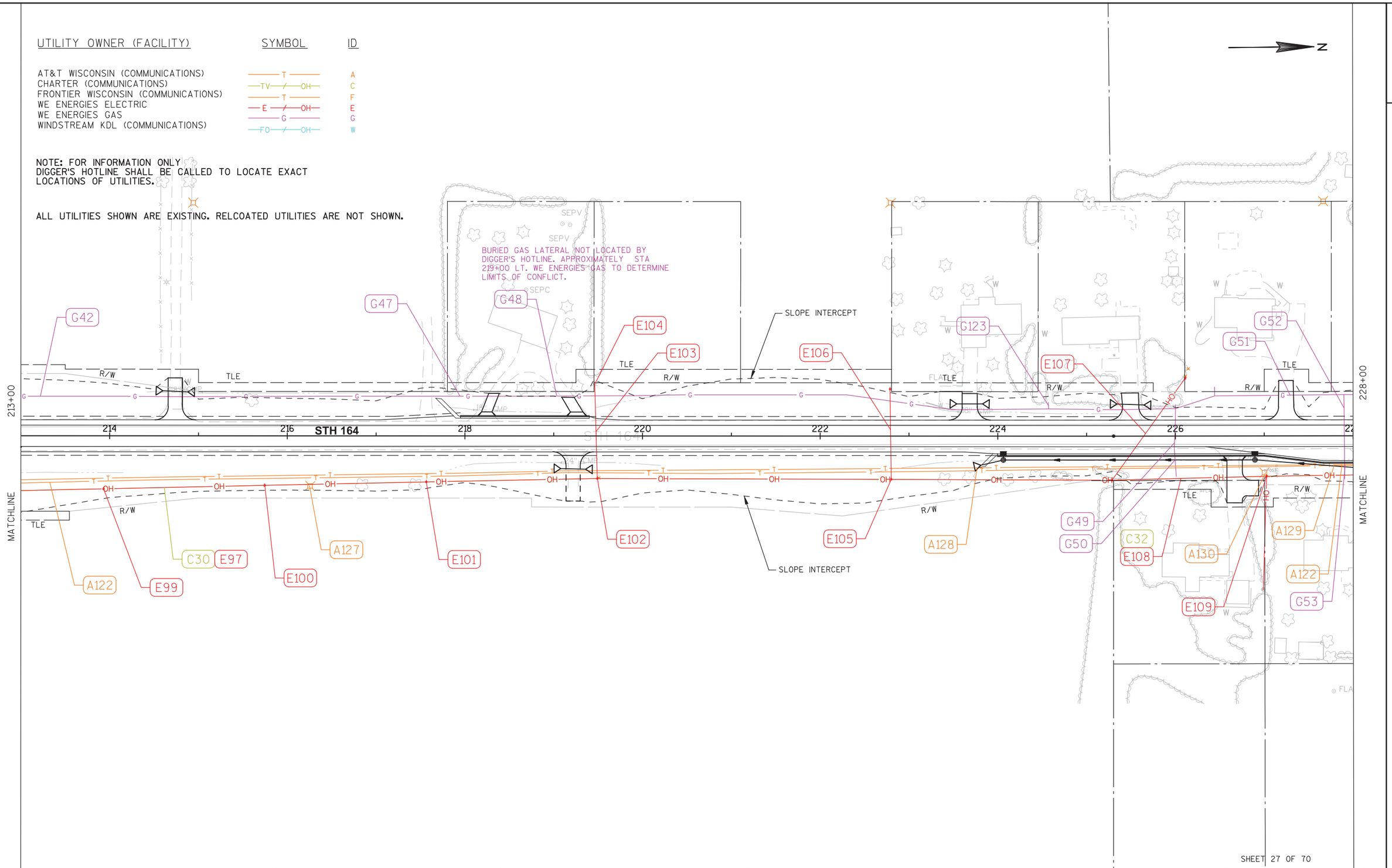
EXISTING UTILITY FACILITIES							RESOLUTION						
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
24	G17	GAS MAIN	UG	108+75 - 199+58	28' RT - 105' RT	GRADING	YES	108+42-167+94 / 53' RT-173' RT / UG 167+94 / 72' LT-62' RT / UG 167+94-198+16 / 70' LT-102' LT / UG	---	YES	NO	NO	120	---
24	G37	GAS MAIN	UG	104+50 - 118+00 HUBERTUS RD	15' LT - 70' LT	GRADING	YES	103+52-111+00 / 52' RT-80' RT / UG 111+00-118+07 / 44' LT-204' LT / UG HUBERTUS RD	---	YES	NO	NO	120	---
24	G38	GAS VALVE	UG	199+62	61' RT	GRADING	YES	103+52-111+00 / 52' RT-80' RT / UG	---	YES	NO	NO	120	---
24	G39	GAS VALVE	UG	199+58	90' RT	GRADING	YES	103+52-111+00 / 52' RT-80' RT / UG	---	YES	NO	NO	120	---
24	G40	GAS MAIN	UG	199+62 - 204+88	59' LT - 50' RT	GRADING	YES	198+16-232+73 / 58'-118' RT / UG	---	YES	NO	NO	120	---
24	G41	GAS MAIN	UG	203+48	48' RT	CULVERT	YES	198+16-232+73 / 58'-118' RT / UG	---	YES	NO	NO	120	---
24	G42	GAS MAIN	UG	207+31 - 214+98	34' LT - 45' LT	GRADING	YES	204+06-211+00 / 64' LT / UG 198+16-232+73 / 58'-118' RT / UG	---	YES	NO	NO	120	---
24	G43	GAS LATERAL	UG	208+41	34' LT - 53' LT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
24	G44	GAS LATERAL	UG	208+55 - 208+59	35' LT - 98' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
24	G45	GAS LATERAL	UG	211+31	45' LT - 65' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
24	G46	GAS MAIN	UG	212+56	45' LT	CULVERT	YES	198+16-232+73 / 58'-118' RT / UG	---	YES	NO	NO	120	---
24	G121	GAS LATERAL	UG	203+60	48' RT - 88' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
24	G122	GAS LATERAL	UG	204+30	50' RT - 55' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
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ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.



SHEET 27 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 218	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1.0000 '/ IN

EXISTING UTILITY FACILITIES							RESOLUTION						
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
27	A122	2 PARALLEL COMM LINES	UG	204+38 - 230+40	33' RT - 63' RT	GRADING	YES	199+84-209+70 / 70'-198' LT / UG 209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
27	A127	PEDESTAL	UG	216+25	56' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
27	A128	2 PARALLEL COMM LINES	UG	223+77	36' RT	STORM SEWER	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
27	A129	2 PARALLEL COMM LINES	UG	227+25 - 228+30	32' RT	STORM SEWER	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
27	A130	PEDESTAL	UG	227+00	41' RT	GRADING/CLEAR ZONE	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
27	C30	COMMUNICATIONS LINE	OH	210+86 - 223+89	50' RT - 55' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
27	C32	COMMUNICATIONS LINE	OH	225+44 - 235+84	44' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
27	E97	ELECTRIC LINE	OH	210+86 - 223+93	48' LT - 66' LT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
27	E99	POWER POLE	OH	213+93	60' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
27	E100	POWER POLE	OH	215+75	56' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
27	E101	POWER POLE	OH	217+57	52' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
27	E102	POWER POLE	OH	219+49	48' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
27	E103	ELECTRIC SERVICE	OH	219+46 - 219+49	58' LT - 48' RT	GRADING	YES	219+53-220+16 / 69' LT-70' RT / UG	---	NO	NO	YES	90	---
27	E104	LIGHT POLE	OH	219+46	58' LT	GRADING	YES	219+53-220+16 / 69' LT-70' RT / UG	---	NO	NO	YES	90	---
27	E105	POWER POLE	OH	222+80	49' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
27	E106	ELECTRIC SERVICE	OH	222+79 - 222+80	49' LT - 49' RT	GRADING	YES	222+79-223+06 / 53' LT-70' RT / OH	---	NO	NO	NO	90	---
27	E107	ELECTRIC SERVICE	OH	225+29 - 226+11	67' LT - 40' RT	VERTICAL CLEARANCE	YES	226+11-227+02 / 67' LT-53' RT / UG	---	NO	NO	NO	90	---
27	E108	ELECTRIC LINE	OH	225+44 - 238+95	44' RT - 48' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
27	E109	POWER POLE	OH	227+03	46' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
27	G42	GAS MAIN	UG	207+31 - 214+98	34' LT - 45' LT	GRADING	YES	204+06-211+00 / 64' LT / UG 198+16-232+73 / 58'-118' RT / UG	---	YES	NO	NO	120	---
27	G47	GAS MAIN	UG	217+18 - 226+04	30' LT - 46' LT	GRADING	YES	198+16-232+73 / 58'-118' RT / UG	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
27	G48	GAS LATERAL	UG	219+00	LT	GRADING	YES	FIELD VERIFY RELOCATED LOCATION	---	YES	NO	NO	120	EXIST NOT FIELD VERIFIED PROPOSED NOT SHOWN ON WORK PLAN
27	G49	GAS LATERAL	UG	225+99 - 226+02	32' LT - 50' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
27	G50	GAS LATERAL	UG	226+00	27' RT	STORM SEWER	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
27	G51	GAS MAIN	UG	227+08 - 230+32	45'-47' LT	GRADING	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
27	G52	GAS LATERAL	UG	227+90	46' LT - 51' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
27	G53	GAS LATERAL	UG	227+90	35' RT	STORM SEWER	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
27	G123	GAS LATERAL	UG	224+56 - 224+57	31' LT - 45' LT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

2

BURIED GAS LATERAL NOT LOCATED BY DIGGER'S HOTLINE. APPROXIMATELY STA 229+90 LT. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 230+50 LT/RT. CHARTER TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 230+50 LT/RT. AT&T WISCONSIN TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 236+80 LT/RT. CHARTER WO DETERMINE LIMITS OF CONFLICT.

BURIED GAS VALVE NOT LOCATED BY DIGGER'S HOTLINE. APPROXIMATELY 241+87 LT. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 241+70 LT/RT. CHARTER TO DETERMINE LIMITS OF CONFLICT.

GAS MAIN NOT LOCATED BY DIGGER'S TO PROJECT LIMITS. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICTS.

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

SHEET 29 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 220	E

EXISTING UTILITY FACILITIES							RESOLUTION						
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
29	A122	2 PARALLEL COMM LINES	UG	204+38 - 230+40	33' RT - 63' RT	GRADING	YES	199+84-209+70 / 70'-198' LT / UG 209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
29	A129	2 PARALLEL COMM LINES	UG	227+25 - 228+30	32' RT	STORM SEWER	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
29	A131	PEDESTAL	UG	230+40	33' RT	GRADING/CLEAR ZONE	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
29	A132	COMMUNICATIONS LINE	UG	230+40 - 231+05	LT/RT	GRADING	YES	---	---	YES	NO	NO	180	NOT LOCATED BY DIGGER'S HOTLINE DISCONTINUE EXISTING LINE WITH NO RELOCATION
29	A133	2 PARALLEL COMM LINES	UG	230+40 - 243+57	27' RT - 54' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
29	A134	PEDESTAL	UG	232+12	44' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
29	A135	COMMUNICATIONS LINE	UG	130+55-133+21	18' LT-25' RT	GRADING/STORM	YES	132+07-133+50 / 28' LT / UG 130+53-133+50 / 26' RT-40' RT / UG	---	YES	NO	NO	180	STATIONING ALONG GOLDEN DRIVE
29	A136	PEDESTAL	UG	234+08	40' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
29	A137	2 PARALLEL COMM LINES	UG	232+67 - 238+61	31' RT - 40' RT	STORM SEWER	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
29	A138	PEDESTAL	UG	239+25	35' RT	GRADING/CLEAR ZONE	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
29	A139	COMMUNICATIONS LINE	UG	242+12 - 242+19	240' LT - 250' LT	GRADING	NO	---	---	NO	NO	NO	---	ON ADA'HI COURT
29	C32	COMMUNICATIONS LINE	OH	225+44 - 235+84	44' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
29	C33	COMMUNICATIONS LINE	UG	230+50	LT/RT	GRADING	YES	230+44 / 46' LT-55' RT / UG	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED
29	C34	COMMUNICATIONS LINE	UG	236+80	LT/RT	GRADING	YES	---	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED DISCONTINUED IN PLACE WITH NO RELOCATION
29	C35	COMMUNICATIONS LINE	OH	238+37 - 239+95	44' RT - 48' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
29	C36	COMMUNICATIONS LINE	UG	241+70	LT/RT	GRADING	YES	241+83 / 243' LT - 76' RT / UG	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED
29	C37	COMMUNICATIONS LINE	OH	241+70 - 249+37	74' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
29	C38	COMMUNICATIONS LINE	OH	232+09 - 232+64	44' RT - 315' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
29	E108	ELECTRIC LINE	OH	225+44 - 238+95	44' RT - 48' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
29	E110	POWER POLE	OH	228+73	43' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
29	E111	POWER POLE	OH	230+44	44' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
29	E112	ELECTRIC LINE	UG	230+31 - 230+45	41' LT - 44' RT	GRADING	YES	230+41 / 46' LT-41' RT / UG	---	YES	NO	YES	90	JOINT BURY WITH CHARTER
29	E113	POWER POLE	OH	232+09	44' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	WORK AROUND POLE STA 232+00, 53' RT
29	E114	ELECTRIC LINE	OH	232+09 - 232+64	44' RT - 315' RT	GRADING	YES	232+00-232+69 / 53' RT-340' RT / OH	---	NO	NO	YES	90	WORK AROUND POLE STA 131+34, 28' RT GOLDEN DR
29	E115	POWER POLE	OH	234+10	44' RT	GRADING	NO	---	---	NO	NO	NO	90	WORK AROUND POLE
29	E116	ELECTRIC LINE	UG	236+49 - 236+82	62' LT - 44' RT	GRADING	YES	236+36-236+38 / 72' LT-50' RT / UG	---	YES	NO	NO	90	JOINT BURY WITH CHARTER & AT&T
29	E117	POWER POLE	OH	236+78	44' RT	CLEAR ZONE	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
29	E118	POWER POLE	OH	238+52	44' RT	GRADING/CLEAR ZONE	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
29	E119	ELECTRIC LINE	OH	241+70 - 249+37	74' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
29	E120	POWER POLE	OH	242+72	75' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
29	E121	ELECTRIC LINE	UG	241+25 - 241+73	250' LT - 75' RT	GRADING	YES	239+65-239+74 / 57' LT-50' RT / OH 239+74-241+82 / 57' LT-149' LT/UG	---	YES	NO	YES	90	JOINT BURY WITH CHARTER

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
29	G51	GAS MAIN	UG	227+08 - 230+32	45'-47' LT	GRADING	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
29	G54	GAS LATERAL	UG	230+02 - 230+03	46' LT - 49' RT	GRADING	YES	---	---	YES	NO	NO	120	---
29	G55	GAS LATERAL	UG	230+71 - 230+75	40' LT - 53' RT	GRADING	YES	---	---	YES	NO	NO	120	---
29	G56	GAS MAIN	UG	232+65 - 232+68	38' LT - 325' RT	GRADING	YES	232+73 / 53' LT-328' RT / UG	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED
29	G57	GAS VALVE	UG	232+66	39' RT	GRADING/STORM	YES	232+73 / 53' LT-328' RT / UG	---	YES	NO	NO	120	---
29	G58	GAS MAIN	UG	232+66	41' RT	STORM SEWER	YES	232+73 / 53' LT-328' RT / UG	---	YES	NO	NO	120	---
29	G59	GAS MAIN	UG	232+68	285' RT- 305' RT	STORM SEWER	YES	232+73 / 53' LT-328' RT / UG	---	YES	NO	NO	120	ON GOLDEN DRIVE
29	G60	GAS MAIN	UG	233+22 - 251+37	15' LT - 66' LT	GRADING	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
29	G61	2 GAS VALVES	UG	234+08	50' LT	GRADING	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
29	G62	GAS LATERAL	UG	237+93	44' LT - 40' RT	GRADING	YES	237+93 / 68' LT - 40' RT / UG	---	YES	NO	NO	120	FIELD VERIFY FINAL LOCATION NOT SHOWN IN WORK PLAN
29	G63	GAS LATERAL	UG	238+03	44' LT - 66' LT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
29	G64	GAS MAIN	UG	238+61	45' LT	STORM SEWER	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
29	G65	GAS LATERAL	UG	240+80 - 240+83	40' LT - 83' RT	GRADING	YES	240+83 / 68' LT-84' RT / UG	---	YES	NO	NO	120	FIELD VERIFY FINAL LOCATION NOT SHOWN IN WORK PLAN
29	G66	GAS MAIN	UG	241+87 - 242+18	40' LT - 250' LT	GRADING	YES	241+84-242+07 / 68' LT-223' LT / UG	---	YES	NO	NO	120	ON ADA'HI COURT
29	G124	GAS LATERAL	UG	229+90	46' LT - 81' LT	GRADING	YES	---	---	YES	NO	NO	120	---
29	G125	GAS MAIN	UG	234+07 - 234+08	45' LT - 108' LT	GRADING	YES	234+10 / 64' LT-154' LT / UG	---	YES	NO	NO	120	ON LOCHVIEW RD
29	G126	GAS VALVE	UG	241+87	45' LT	GRADING	YES	241+84-242+07 / 68' LT-223' LT / UG	---	YES	NO	NO	120	---
29	G127	GAS MAIN	UG	241+94 - 242+84	40' LT	STORM SEWER	YES	241+84-242+07 / 68' LT-223' LT / UG	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED IN SOME LOCATIONS

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

N

MATCHLINE

243+00

258+00

MATCHLINE

STH 164

STH 167

SLOPE INTERCEPT

R/W

TLE

BURIED COMMUNICATIONS LINE ALONG SOUTH SIDE OF STH 167 NOT LOCATED BY DIGGER'S HOTLINE. AT&T WISCONSIN TO DETERMINE LIMITS OF CONFLICT.

SEE SHEET 61 OF 64 FOR ADDITIONAL UTILITY CONFLICTS ALONG STH 167

ENTIRE BURIED ELECTRIC LINE NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES ELECTRIC TO DETERMINE LIMITS OF CONFLICT.

GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 247+25 LT. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT

ENTIRE BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGERS HOTLINE. AT&T WISCONSIN TO DETERMINE LIMITS OF CONFLICTS.

BURIED ELECTRIC SERVICE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 249+75 LT/RT. WE ENERGIES ELECTRIC TO DETERMINE LIMITS OF CONFLICT.

ADDITIONAL AT&T WISCONSIN BURIED COMMUNICATIONS LINE NOT LOCATED BY DIGGER'S HOTLINE. AT&T WISCONSIN TO DETERMINE LIMITS OF CONFLICT.

ADDITIONAL AT&T WISCONSIN BURIED COMMUNICATIONS LINE NOT LOCATED BY DIGGER'S HOTLINE. AT&T WISCONSIN TO DETERMINE LIMITS OF CONFLICT.

ADDITIONAL AT&T WISCONSIN BURIED COMMUNICATIONS LINE NOT LOCATED BY DIGGER'S HOTLINE. AT&T WISCONSIN TO DETERMINE LIMITS OF CONFLICT.

BURIED ELECTRIC SERVICE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 252+94 RT. WE ENERGIES ELECTRIC TO DETERMINE LIMITS OF CONFLICT.

SEE SHEET 63 OF 64 FOR ADDITIONAL UTILITY CONFLICTS ALONG STH 167

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

SHEET 32 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 223	E

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
32	A133	2 PARALLEL COMM LINES	UG	230+40 - 243+57	27' RT - 54' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
32	A140	COMMUNICATION LINE	UG	243+57 - 249+50	54' RT - 69' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	2ND PARALLEL LINE NOT LOCATED BY DIGGER'S PROPOSED ON WE ENERGIES POLES
32	A141	2 PEDESTALS	UG	247+05	63' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
32	A142	COMMUNICATION LINE	UG	247+05	35' LT - 63' RT	GRADING/STORM	YES	246+44-246+59 / 82' LT - 100' RT / OH	---	YES	NO	YES	180	ENTIRE LINE NOT MARKED BY DIGGER'S HOTLINE PROPOSED ON WE ENERGIES POLES
32	A143	COMMUNICATION LINE	UG	250+17 - 258+48	81' LT - 44' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
32	A144	PEDESTAL	UG	250+16	38' LT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
32	A145	PEDESTAL	UG	251+30	80' LT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
32	A146	COMMUNICATION LINE	UG	251+28	66' LT	STORM SEWER	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
32	A147	PEDESTAL	UG	252+86	86' LT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
32	A148	COMMUNICATION LINE	UG	252+94	76' LT	STORM SEWER	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
32	A149	COMMUNICATION LINE	UG	255+30	69' LT	STORM SEWER	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
32	A150	PEDESTAL	UG	257+73	80' LT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
32	A151	COMMUNICATION LINE	UG	159+05 - 170+74	15' LT - 131' LT	GRADING	YES	158+51-171+05 / 25'-127' LT / OH	---	YES	NO	YES	180	STATIONING ALONG STH 167 R/L ON WE ENERGIES POLES
32	A152	PEDESTAL	UG	166+90	32' LT	GRADING	YES	158+51-171+05 / 25'-127' LT / OH	---	YES	NO	YES	180	STATIONING ALONG STH 167 R/L ON WE ENERGIES POLES
32	A153	COMMUNICATION LINE	UG	166+70 - 166+90	32' LT - 45' RT	GRADING	YES	158+51-171+05 / 25'-127' LT / OH	---	YES	NO	YES	180	STATIONING ALONG STH 167 R/L ON WE ENERGIES POLES
32	A154	PEDESTAL	UG	166+70	45' RT	GRADING	YES	158+51-171+05 / 25'-127' LT / OH	---	YES	NO	YES	180	STATIONING ALONG STH 167 R/L ON WE ENERGIES POLES
32	A155	COMMUNICATION LINE	UG	158+75 - 169+19	RT	GRADING	YES	158+51-171+05 / 25'-127' LT / OH	---	YES	NO	YES	180	NOT LOCATED BY DIGGER'S HOTLINE STATIONING ALONG STH 167 R/L ON WE ENERGIES POLES
32	A156	COMMUNICATION LINE	UG	167+30 - 168+40	27' LT - 42' LT	STORM SEWER	YES	158+51-171+05 / 25'-127' LT / OH	---	YES	NO	YES	180	STATIONING ALONG STH 167 R/L ON WE ENERGIES POLES
32	A157	COMMUNICATION LINE	UG	252+86	82' LT	STORM SEWER	YES	158+51-171+05 / 25'-127' LT / OH	---	YES	NO	YES	180	PROPOSED STATIONING ALONG STH 167 R/L ON WE ENERGIES POLES
32	A158	COMMUNICATION LINE	UG	252+87 - 252+99	30' LT - 25' RT	STORM SEWER	YES	158+51-171+05 / 25'-127' LT / OH	---	YES	NO	YES	180	PROPOSED STATIONING ALONG STH 167 R/L ON WE ENERGIES POLES
32	A159	PEDESTAL	UG	253+06	75' RT	GRADING	YES	158+51-171+05 / 25'-127' LT / OH	---	YES	NO	YES	180	PROPOSED STATIONING ALONG STH 167 R/L ON WE ENERGIES POLES
32	A160	COMMUNICATION LINE	UG	250+49 - 254+26	37' RT - 76' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
32	A161	COMMUNICATION LINE	UG	251+65 - 252+20	54' RT - 64' RT	STORM SEWER	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
32	A162	COMMUNICATION LINE	UG	256+63 - 257+41	73' RT - 69' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
32	A229	COMMUNICATION LINE	UG	255+40	64' LT	LIGHT POLE	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
32	C37	COMMUNICATIONS LINE	OH	241+70 - 249+37	74' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
32	C39	COMMUNICATIONS LINE	OH	251+25 - 254+22	77' RT - 78' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
32	C40	COMMUNICATIONS LINE	OH	158+75 - 179+79 STH 167	23' LT - 119' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
32	C71	COMMUNICATIONS LINE	OH	252+88	41' RT	LIGHT POLE	NO	---	---	---	---	---	---	PROPOSED LIGHT POLE LOCATION MOVED TO AVOID CONFLICT
32	E119	ELECTRIC LINE	OH	241+70 - 249+37	74' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
32	E122	POWER POLE	OH	244+30	74' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
32	E123	POWER POLE	OH	247+32	74' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	WORK AROUND PROPOSED POLE STA 246+59, 100' RT
32	E124	ELECTRIC LINE	OH	251+25 - 254+22	77' RT - 78' RT	GRADING	YES	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

EXISTING UTILITY FACILITIES							RESOLUTION						
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
32	E125	POWER POLE	OH	252+94	78' RT	GRADING	NO	209+70-254+32 / 50' RT-106' RT / OH	---	NO	NO	YES	90	---
32	E126	ELECTRIC LINE	OH	243+76 - 244+30	46' LT - 74' RT	GRADING	YES	---	---	NO	NO	YES	90	---
32	E127	POWER POLE	OH	243+76	46' LT	GRADING	YES	---	---	NO	NO	YES	90	---
32	E128	ELECTRIC LINE	UG	247+01 - 247+32	42' LT - 75' RT	GRADING	YES	246+44-246+59 / 82' LT-100' RT / OH	---	YES	NO	YES	90	EXISTING NOT FIELD VERIFIED
32	E129	ELECTRIC SERVICE	OH	249+76 - 250+13	89' LT - 45' RT	GRADING	YES	249+56-250+22 / 155' LT-79' RT / OH	---	NO	NO	YES	90	---
32	E130	ELECTRIC LINE	OH	158+75 - 179+79 STH 167	23' LT - 119' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	90	---
32	E131	POWER POLE	OH	166+87 STH 167	38' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	90	---
32	E132	POWER POLE	OH	252+25	147' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	90	---
32	E133	POWER POLE	OH	172+68 STH 167	49' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	90	---
32	E134	ELECTRIC LINE	UG	247+01	42' LT	STORM SEWER	YES	246+44-246+59 / 82' LT-100' RT / OH	---	YES	NO	YES	90	EXISTING NOT FIELD VERIFIED
32	E162	ELECTRIC SERVICE	UG	249+75	LT/RT	GRADING	YES	---	---	YES	NO	YES	90	EXISTING NOT FIELD VERIFIED
32	E163	ELECTRIC SERVICE	UG	252+94	77'RT - 100' RT	GRADING	YES	---	---	YES	NO	YES	90	EXISTING NOT FIELD VERIFIED
32	E254	GUY POLE	OH	172+80 STH 167	48' RT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	90	---
32	E258	ELECTRIC LINE	OH	252+88	41' RT	LIGHT POLE	NO	---	---	---	---	---	---	PROPOSED LIGHT POLE LOCATION MOVED TO AVOID CONFLICT
32	G60	GAS MAIN	UG	233+22 - 251+37	15' LT - 66' LT	GRADING	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G67	GAS MAIN	UG	243+81	17' LT	STORM SEWER	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G68	GAS MAIN	UG	245+80	17' LT	STORM SEWER	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G69	GAS LATERAL	UG	247+25	LT	GRADING/STORM	YES	FIELD VERIFY PROPOSED LOCATION	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED
32	G70	GAS MAIN	UG	247+78	17' LT	STORM SEWER	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G71	GAS MAIN	UG	249+85	17' LT	STORM SEWER	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G72	GAS LATERAL	UG	250+41 - 250+44	17' LT - 41' RT	GRADING	YES	FIELD VERIFY PROPOSED LOCATION	---	YES	NO	NO	120	PROPOSED LOCATION NOT SHOWN ON WORK PLAN
32	G73	2 GAS VALVES	UG	250+52	16' LT	GRADING	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G74	GAS MAIN	UG	251+28	49' LT	STORM SEWER	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G75	GAS MAIN	UG	251+37 - 304+33	21' LT - 63' LT	GRADING	YES	224+69-271+33 / 23' LT-140' LT / UG 292+36-302+85 / 46' RT-88' RT / UG	---	YES	NO	NO	120	EXISTING MAIN TO REMAIN 271+33-292+36
32	G76	GAS MAIN	UG	252+94	63' LT	STORM SEWER	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G77	GAS VALVE	UG	253+14	63' LT	GRADING	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G78	GAS MAIN	UG	255+26	55' LT	STORM SEWER	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G79	GAS MAIN	UG	257+77	56' LT	STORM SEWER	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G80	GAS MAIN	UG	165+24 - 169+34 STH 167	31' RT - 38' RT	GRADING	YES	158+72 - 168+66 / 38' RT - 73' RT STH 167	---	YES	NO	NO	120	---
32	G81	GAS MAIN	UG	251+42	103' LT	STORM SEWER	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G82	GAS LATERAL	UG	167+82 STH 167	31' RT - 48' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING OUTSIDE GRADING LIMITS
32	G83	GAS MAIN	UG	158+76 - 169+30 STH 167	50' LT - 33' RT	GRADING	YES	158+72 - 168+66 / 38' RT - 73' RT STH 167	---	YES	NO	NO	120	---
32	G84	GAS MAIN	UG	168+00 STH 167	44' LT	STORM SEWER	YES	158+72 - 168+66 / 38' RT - 73' RT STH 167	---	YES	NO	NO	120	---
32	G85	GAS MAIN	UG	252+23	102' LT	STORM SEWER	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G86	GAS VALVE	UG	252+36	73' LT	GRADING	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G128	GAS VALVE	UG	169+20 STH 167	34' RT	GRADING	YES	158+72 - 168+66 / 38' RT - 73' RT STH 167	---	YES	NO	NO	120	---
32	G140	GAS MAIN	UG	168+82 STH 167	30' RT	PULL BOX	YES	158+72 - 168+66 / 38' RT - 73' RT STH 167	---	YES	NO	NO	120	---
32	G141	GAS MAIN	UG	165+34 STH 167	26' RT	LIGHT POLE	YES	158+72 - 168+66 / 38' RT - 73' RT STH 167	---	YES	NO	NO	120	---
32	G142	GAS MAIN	UG	253+22	61' LT	PULL BOX	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G143	GAS MAIN	UG	253+29	60' LT	LIGHT POLE	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
32	G144	GAS MAIN	UG	257+51	55' LT	LIGHT POLE	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---

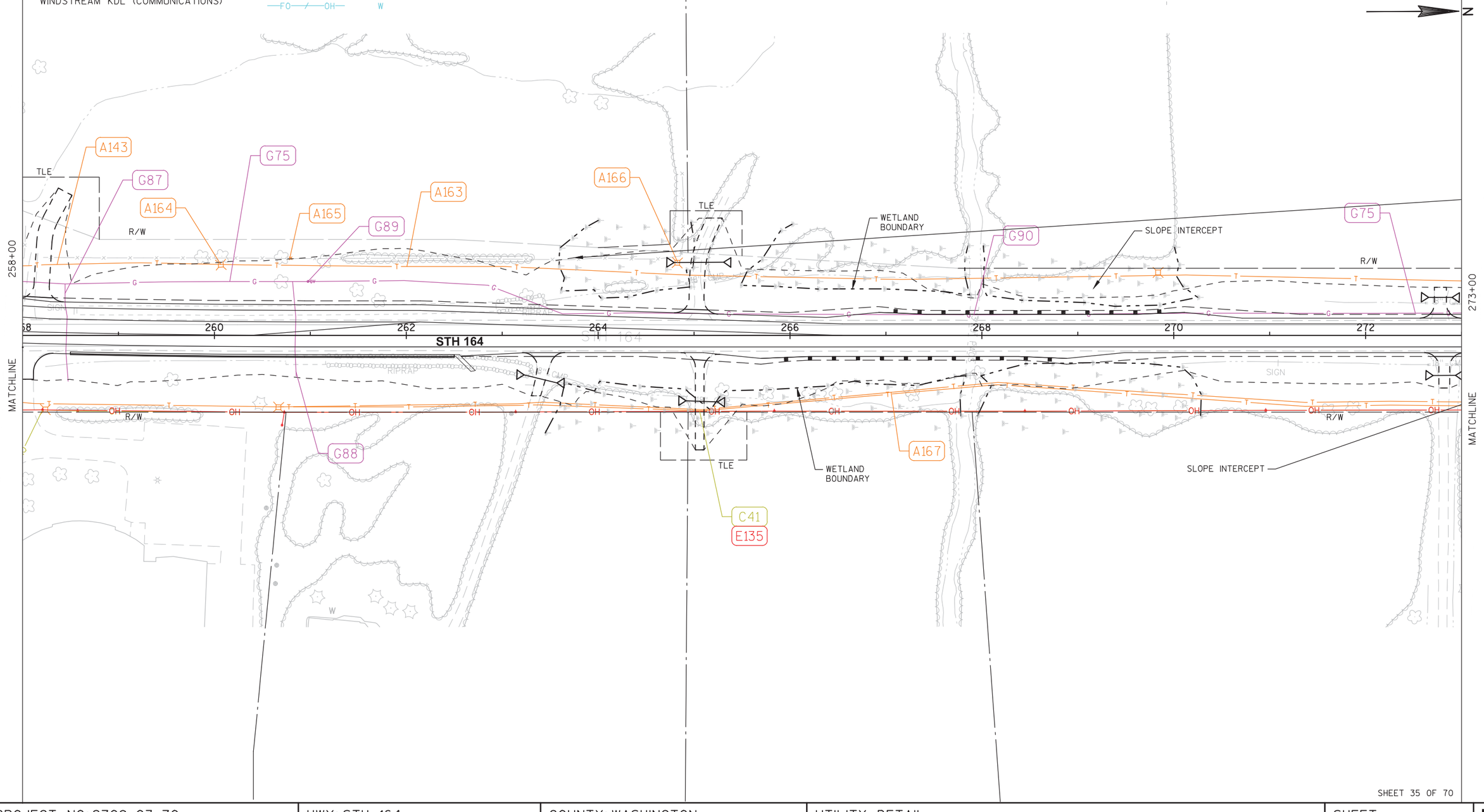
FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

FILE NAME : T:\1102717\cadd\civil3d\27090300\SheetsPlan\020101_gn.pptx PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.



SHEET 35 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 226	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1" = 100' XREF

2

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
35	A143	COMMUNICATION LINE	UG	250+17 - 258+48	81' LT - 44' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
35	A163	COMMUNICATION LINE	UG	259+87 - 267+87	58' LT - 74' LT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
35	A164	PEDESTAL	UG	260+07	74' LT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
35	A165	PEDESTAL	UG	260+80	80' LT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
35	A166	PEDESTAL	UG	264+82	76' LT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
35	A167	2 PARALLEL COMM LINES	UG	264+76 - 268+88	49' RT - 74' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
35	C41	COMMUNICATION LINE	OH	264+78 - 265+43	79' RT	GRADING/VERT CLEARANCE	NO	---	---	---	---	---	---	EXISTING ON WE ENERGIES POLES
35	E135	ELECTRIC LINE	OH	264+78 - 265+43	79' RT	GRADING/VERT CLEARANCE	NO	---	---	---	---	---	---	---
35	G75	GAS MAIN	UG	251+37 - 304+33	21' LT - 63' LT	GRADING	YES	224+69-271+33 / 23' LT-140' LT / UG 292+36-302+85 / 46' RT-88' RT / UG	---	YES	NO	NO	120	EXISTING MAIN TO REMAIN 271+33-292+36
35	G87	GAS LATERAL	UG	258+44 - 258+47	53' LT - 46' RT	GRADING	YES	FIELD VERIFY PROPOSED LOCATION	---	YES	NO	NO	120	PROPOSED LOCATION NOT SHOWN ON WORK PLAN
35	G88	GAS LATERAL	UG	260+82 - 260+85	56' LT - 44' RT	GRADING	YES	FIELD VERIFY PROPOSED LOCATION	---	YES	NO	NO	120	PROPOSED LOCATION NOT SHOWN ON WORK PLAN
35	G89	GAS VALVE	UG	260+98	56' LT	GRADING	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---
35	G90	GAS MAIN	UG	266+92 - 270+11	22' LT	BEAM GUARD POSTS	YES	224+69-271+33 / 23' LT-140' LT / UG	---	YES	NO	NO	120	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

N

GREYSTONE DR

STH 164

MATCHLINE

273+00

288+00

274 276 278 280 282 284 286

BURIED COMMUNICATIONS LINE NOT LOCATED BY DIGGER'S HOTLINE. APPROXIMATELY STA 274+65 LT/RT. CHARTER TO DETERMINE LIMITS OF CONFLICT.

ENTIRE BURIED ELECTRIC LINE NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES ELECTRIC TO DETERMINE LIMITS OF CONFLICT.

ENTIRE GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

NO GAS FACILITIES MARKED BY DIGGER'S HOTLINE FROM MAIN TO VALVE. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT MARKED BY BY DIGGER'S HOTLINE. APPROXIMATELY STA 278+12 TO STA 281+97 LT/RT. AT&T WISCONSIN TO DETERMINE LIMITS OF CONFLICT.

ENTIRE BURIED ELECTRIC LINE NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT APPROXIMATELY STA 278+25 - STA 279+65 LT.

ENTIRE GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

ENTIRE GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

BURIED ELECTRIC SERVICE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 281+86 RT. WE ENERGIES ELECTRIC TO DETERMINE LIMITS OF CONFLICT.

ENTIRE GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

ENTIRE GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

SLOPE INTERCEPT

SHEET 37 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 228	E

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EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
37	A168	COMMUNICATION LINE	UG	273+05 - 274+53	51' LT - 50' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
37	A169	COMMUNICATION LINE	UG	274+84 - 282+01	61' LT - 38' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
37	A170	PEDESTAL	UG	278+12	48' LT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
37	A171	COMMUNICATION LINE	UG	282+01 - 304+28	295' LT - 31' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
37	A172	2 PARALLEL COMM LINE	UG	274+02 - 275+27	69' RT - 75' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
37	A173	PEDESTAL	UG	274+63	75' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
37	A174	2 PARALLEL COMM LINE	UG	277+70 - 293+60	33' RT - 55' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
37	A175	PEDESTAL	UG	281+97	36' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
37	A176	PEDESTAL	UG	284+51	38' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
37	A195	COMMUNICATION LINE	UG	278+12 - 281+97	LT/RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	EXIST NOT FIELD VERIFIED PROPOSED ON WE ENERGIES POLES
37	C42	COMMUNICATION LINE	UG	274+65 - 275+16	51' LT - 78' RT	GRADING	YES	274+65-274+81 / 77' LT-81' RT / UG	---	YES	NO	YES	120	EXISTING NOT FIELD VERIFIED JOINT BURY WITH WE ENERGIES ELECTRIC
37	C43	COMMUNICATION LINE	OH	279+26 - 296+65	37' RT - 63' RT	GRADING	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
37	C44	COMMUNICATION LINE	OH	281+86 - 282+07	148' LT - 38' RT	GRADING/VERT CLEARANCE	NO	---	---	---	---	---	---	CHARTER DOES NOT HAVE AN EXISTING FACILITY IN THIS LOCATION
37	E136	POWER POLE	OH	275+16	78' RT	GRADING	NO	---	---	---	---	---	---	---
37	E137	ELECTRIC LINE	UG	274+72 - 275+16	54' LT - 78' RT	GRADING	YES	274+65-274+81 / 77' LT-81' RT / UG	---	YES	NO	YES	90	EXISTING NOT FIELD VERIFIED JOINT BURY WITH CHARTER
37	E138	ELECTRIC LINE	OH	279+26 - 306+40	23' RT - 63' RT	GRADING	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	90	EXIST TO REMAIN 302+51-305+49
37	E139	ELECTRIC LINE	UG	278+25 - 279+76	66' LT - 58' RT	GRADING	YES	279+00-279+75 / 71' LT-73' RT / UG	---	YES	NO	YES	90	EXISTING NOT FIELD VERIFIED
37	E140	POWER POLE	OH	279+76	58' RT	GRADING	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	90	---
37	E141	POWER POLE	OH	281+86	38' RT	GRADING/CLEAR ZONE	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	90	---
37	E142	GUY POLE	OH	282+07	59' RT	GRADING/STORM SEWER	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	90	---
37	E143	POWER POLE	OH	284+48	39' RT	GRADING/CLEAR ZONE	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	90	---
37	E144	POWER POLE	OH	287+60	39' RT	GRADING/CLEAR ZONE	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	90	---
37	E164	ELECTRIC SERVICE	UG	281+86	38' RT	GRADING	YES	277+24-277+86 / 66'-77' RT / UG	---	NO	NO	YES	90	EXIST NOT FIELD VERIFIED
37	G75	GAS MAIN	UG	251+37 - 304+33	21' LT - 63' LT	GRADING	YES	224+69-271+33 / 23' LT-140' LT / UG 292+36-302+85 / 46' RT-88' RT / UG	---	YES	NO	NO	120	EXISTING MAIN TO REMAIN 271+33-292+36
37	G91	GAS LATERAL	UG	274+97 - 275+00	23' LT - 62' LT	GRADING	NO	---	---	---	---	---	---	---
37	G92	GAS LATERAL	UG	277+29	20' LT - 46' RT	GRADING	NO	---	---	---	---	---	---	---
37	G93	GAS VALVE	UG	277+72	43' LT	GRADING	NO	---	---	---	---	---	---	---
37	G94	GAS LATERAL	UG	279+90	23' LT - 66' LT	GRADING	NO	---	---	---	---	---	---	---
37	G95	GAS LATERAL	UG	281+02	22' LT - 65' RT	GRADING	NO	---	---	---	---	---	---	---
37	G96	GAS MAIN	UG	282+02 - 282+04	23' LT - 148' LT	GRADING	YES	282+03-282+49 / 22' LT-225' LT / UG	---	YES	NO	NO	120	AT GREYSTONE DR
37	G97	GAS VALVE	UG	282+02	58' LT	GRADING/STORM SEWER	YES	282+03-282+49 / 22' LT-225' LT / UG	---	YES	NO	NO	120	AT GREYSTONE DR
37	G98	GAS MAIN	UG	282+02	60' LT	STORM SEWER	YES	282+03-282+49 / 22' LT-225' LT / UG	---	YES	NO	NO	120	AT GREYSTONE DR
37	G99	GAS LATERAL	UG	284+18 - 284+19	22' LT - 51' RT	GRADING	NO	---	---	---	---	---	---	---
37	G100	GAS LATERAL	UG	284+59 - 284+61	22' LT - 50' RT	GRADING	NO	---	---	---	---	---	---	---
37	G101	GAS LATERAL	UG	286+52 - 286+56	21' LT - 43' RT	GRADING	NO	---	---	---	---	---	---	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY PLAN	SHEET: 229	E

FILE NAME : T:\1102717\cadd\civil3d\27090300\SheetsPlan\020101_gn.pptx PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

2

UTILITY OWNER (FACILITY) | SYMBOL | ID

AT&T WISCONSIN (COMMUNICATIONS) — T — A
CHARTER (COMMUNICATIONS) — TV / OH — C
FRONTIER WISCONSIN (COMMUNICATIONS) — T — F
WE ENERGIES ELECTRIC — E / OH — E
WE ENERGIES GAS — G — G
WINDSTREAM KDL (COMMUNICATIONS) — FO / OH — W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

ENTIRE BURIED ELECTRIC LINE NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES ELECTRIC TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 294+40 LT/RT. CHARTER TO DETERMINE LIMITS OF CONFLICT

BURIED GAS LATERAL NOT LOCATED BY DIGGER'S HOTLINE. APPROXIMATELY STA 300+50 LT/RT. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

ENTIRE BURIED GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

BURIED ELECTRIC SERVICE NOT LOCATED BY DIGGER'S HOTLINE. APPROXIMATELY STA 294+41 RT. WE ENERGIES ELECTRIC TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 294+41 RT. CHARTER TO DETERMINE LIMITS OF CONFLICT.

BURIED ELECTRIC SERVICE NOT LOCATED BY DIGGER'S HOTLINE. WE ENERGIES ELECTRIC TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 296+65 RT. CHARTER TO DETERMINE LIMITS OF CONFLICT.

ENTIRE BURIED GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES GAS TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 296+65 - STA 302+50 RT. CHARTER TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 296+65 RT. CHARTER TO DETERMINE LIMITS OF CONFLICT.

WETLAND BOUNDARY

SLOPE INTERCEPT

R/W

TLE

STH 164

MATCHLINE

288+00

303+00

SHEET 39 OF 70

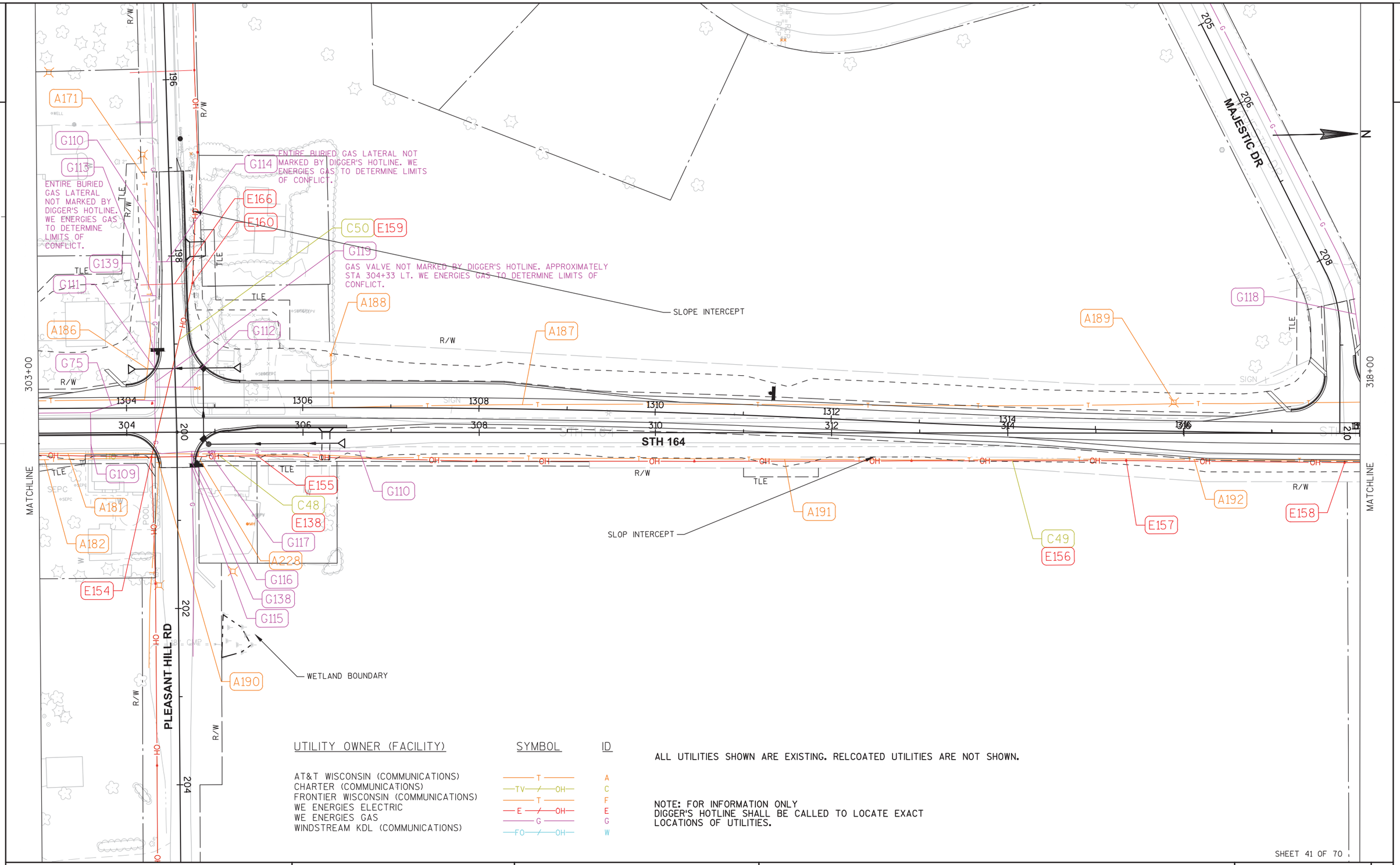
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 230	E

FILE NAME = T:\1102717\CADD\CIVIL3D\2709030\SHEETSPLANS\023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1" = 100' YPSS

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
39	A171	COMMUNICATION LINE	UG	282+01 - 304+28	295' LT - 31' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
39	A174	2 PARALLEL COMM LINE	UG	277+70 - 293+60	33' RT - 55' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
39	A177	PEDESTAL	UG	302+53	40' LT	GRADING/CLEAR ZONE	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
39	A178	PEDESTAL	UG	290+18	39' RT	GRADING/CLEAR ZONE	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
39	A179	COMMUNICATION LINE	UG	294+80 - 296+09	51' RT - 56' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
39	A180	COMMUNICATION LINE	UG	294+94 - 295+38	64' RT - 65' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
39	A181	COMMUNICATION LINE	UG	296+51 - 306+85	22' RT - 49' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
39	A182	COMMUNICATION LINE	UG	296+57 - 303+55	29' RT - 60' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
39	A183	PEDESTAL	UG	296+71	77' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
39	A184	PEDESTAL	UG	299+35	39' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
39	A185	PEDESTAL	UG	302+63	32' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
39	A196	COMMUNICATION LINE	UG	294+69	35' LT	CULVERT	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
39	C43	COMMUNICATION LINE	OH	279+26 - 296+65	37' RT - 63' RT	GRADING	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
39	C45	COMMUNICATION LINE	UG	294+40	71' LT - 39' RT	GRADING	YES	294+35-294+48 / 81' LT-60' RT / UG	---	YES	NO	YES	120	EXISTING NOT FIELD VERIFIED JOINT BURY WITH WE ENERGIES ELECTRIC
39	C46	COMMUNICATION LINE	UG	296+65 - 302+50	RT	GRADING	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
39	C47	COMMUNICATION LINE	UG	294+41	RT	GRADING	YES	294+36 / 60' RT - 75' RT / UG	---	YES	NO	YES	120	EXISTING NOT FIELD VERIFIED JOINT BURY WITH WE ENERGIES ELECTRIC
39	C48	COMMUNICATION LINE	OH	302+51 - 306+40	24' RT - 29' RT	GRADING	NO	---	---	---	---	---	---	EXISTING ON WE ENERGIES POLES
39	C52	COMMUNICATION LINE	UG	296+65	RT	GRADING	YES	296+33-296+70 / 58' RT-92' RT / UG	---	YES	NO	YES	120	EXISTING NOT FIELD VERIFIED
39	E138	ELECTRIC LINE	OH	279+26 - 306+40	23' RT - 63' RT	GRADING	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	90	EXIST TO REMAIN 302+51-305+49
39	E145	POWER POLE	OH	290+22	39' RT	GRADING/CLEAR ZONE	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	90	---
39	E146	POWER POLE	OH	292+43	38' RT	GRADING/CLEAR ZONE	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	90	---
39	E147	POWER POLE	OH	294+41	39' RT	GRADING	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	90	---
39	E148	ELECTRIC LINE	UG	294+41 - 294+48	71' LT - 39' RT	GRADING	YES	294+35-294+48 / 81' LT-60' RT / UG	---	YES	NO	YES	90	JOINT BURY WITH CHARTER
39	E149	POWER POLE	OH	296+65	39' RT	GRADING	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	90	---
39	E150	ELECTRIC SERVICE	UG	296+65	RT	GRADING	YES	296+33-296+66 / 58' RT-66' RT / UG	---	YES	NO	YES	90	EXISTING NOT FIELD VERIFIED
39	E151	POWER POLE	OH	299+63	31' RT	GRADING	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	90	---
39	E152	POWER POLE	OH	302+51	24' RT	GRADING	NO	---	---	---	---	---	---	WORK AROUND EXISTING POLE
39	E153	GUY POLE	OH	302+53	40' LT	GRADING/CLEAR ZONE	YES	302+46 / 91' LT / OH	---	NO	NO	YES	90	---
39	E165	ELECTRIC SERVICE	UG	294+41	RT	GRADING	YES	294+36 / 60' RT - 75' RT	---	NO	NO	YES	90	JOINT BURY WITH CHARTER
39	G75	GAS MAIN	UG	251+37 - 304+33	21' LT - 63' LT	GRADING	YES	224+69-271+33 / 23' LT-140' LT / UG 292+36-302+85 / 46' RT-88' RT / UG	---	YES	NO	NO	120	EXISTING MAIN TO REMAIN 271+33-292+36
39	G102	GAS LATERAL	UG	289+12 - 289+16	21' LT - 48' RT	GRADING	NO	---	---	---	---	---	---	---
39	G103	GAS LATERAL	UG	293+16 - 293+17	22' LT - 48' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
39	G104	GAS MAIN	UG	294+70	23' LT	CULVERT	YES	292+36-302+85 / 46' RT-88' RT / UG	---	YES	NO	NO	120	---
39	G105	GAS LATERAL	UG	296+52 - 296+53	22' LT - 69' LT	GRADING	YES	FIELD VERIFY PROPOSED LOCATION	---	YES	NO	NO	120	PROPOSED LOCATION NOT SHOWN IN WORK PLAN
39	G106	GAS LATERAL	UG	296+73 - 296+77	22' LT - 93' RT	GRADING	YES	296+73 / 66' RT-93' RT / UG	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
39	G107	GAS LATERAL	UG	301+79 - 301+81	22' LT - 42' RT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
39	G108	GAS LATERAL	UG	300+50	RT	GRADING	YES	---	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2



UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

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EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
41	A171	COMMUNICATION LINE	UG	282+01 - 304+28	295' LT - 31' RT	GRADING	YES	209+70-312+91 / 24' RT-106' RT / OH 302+46-304+22 / 295' LT -24' RT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES
41	A181	COMMUNICATION LINE	UG	296+51 - 306+85	22' RT - 49' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
41	A182	COMMUNICATION LINE	UG	296+57 - 303+55	29' RT - 60' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
41	A186	COMMUNICATION LINE	UG	304+24	72' LT	STORM SEWER	YES	209+70-312+91 / 24' RT-106' RT / OH 302+46-304+22 / 295' LT -24' RT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES
41	A187	COMMUNICATION LINE	UG	306+31 - 325+74	88' LT - 28' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH 312+91-315+36 / 47' LT-32' RT / OH 315+36-328+00 / 47'-79' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
41	A188	PEDESTAL	UG	306+32	88' LT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
41	A189	PEDESTAL	UG	315+89	33' LT	GRADING/CLEAR ZONE	YES	315+36-328+00 / 47'-79' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
41	A190	COMMUNICATION LINE	UG	304+24 - 304+36	29' RT - 40' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
41	A191	COMMUNICATION LINE	UG	311+06 - 311+86	30' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
41	A192	COMMUNICATION LINE	UG	313+36 - 359+33	26' RT - 51' RT	GRADING	YES	312+91-315+36 / 47' LT-32' RT / OH 315+36-328+00 / 47'-79' LT / OH 328+00-361+30 / 43'-96' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES
41	A228	HANDHOLE	UG	304+83	32' RT	SIGN BASE	YES	209+70-312+91 / 24'-106' RT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
41														
41	C48	COMMUNICATION LINE	OH	302+51 - 306+40	24' RT - 29' RT	GRADING	NO	---	---	---	---	---	---	EXISTING ON WE ENERGIES POLES
41	C49	COMMUNICATION LINE	OH	313+45 - 327+79	32' RT	GRADING/CLEAR ZONE	YES	312+91-328+00 / 79' LT-32' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
41	C50	COMMUNICATION LINE	OH	304+28 - 304+77	225' LT - 28' RT	GRADING	NO	---	---	---	---	---	---	EXISTING ON WE ENERGIES POLES
41	E138	ELECTRIC LINE	OH	279+26 - 306+40	23' RT - 63' RT	GRADING	YES	277+58-302+51 / 24'-80' RT / OH	---	NO	NO	YES	90	EXIST TO REMAIN 302+51-305+49
41	E154	POWER POLE	OH	304+28	28' RT	GRADING	NO	---	---	---	---	---	---	WORK AROUND EXISTING POLE
41	E155	POWER POLE	OH	305+49	27' RT	GRADING	NO	---	---	---	---	---	---	WORK AROUND EXISTING POLE
41	E156	ELECTRIC LINE	OH	313+45 - 328+49	43' LT - 33' RT	GRADING/CLEAR ZONE	YES	312+91-328+00 / 79' LT-32' RT / OH	---	NO	NO	YES	90	---
41	E157	POWER POLE	OH	315+35	31' RT	GRADING/CLEAR ZONE	YES	312+91-328+00 / 79' LT-32' RT / OH	---	NO	NO	YES	90	---
41	E158	POWER POLE	OH	317+82	33' RT	GRADING/CLEAR ZONE	YES	312+91-328+00 / 79' LT-32' RT / OH	---	NO	NO	YES	90	---
41	E159	ELECTRIC LINE	OH	304+28 - 304+77	225' LT - 28' RT	GRADING/CLEAR ZONE	NO	---	---	---	---	---	---	---
41	E160	POWER POLE	OH	304+74	169' LT	GRADING/CLEAR ZONE	NO	---	---	---	---	---	---	WORK AROUND EXISTING POLE
41	E166	ELECTRIC SERVICE	UG	304+13 - 304+74	167' LT - 169' LT	GRADING	NO	---	---	---	---	---	---	---

41	G75	GAS MAIN	UG	251+37 - 304+33	21' LT - 63' LT	GRADING	YES	224+69-271+33 / 23' LT-140' LT / UG 292+36-302+85 / 46' RT-88' RT / UG	---	YES	NO	NO	120	EXISTING MAIN TO REMAIN 271+33-292+36
41	G109	GAS LATERAL	UG	303+59	28' RT	GRADING	YES	FIELD VERIFY PROPOSED LOCATION	---	YES	NO	NO	120	PROPOSED LOCATION NOT SHOWN ON WORK PLAN
41	G110	GAS MAIN	UG	304+33 - 306+71	295' LT - 21' RT	GRADING	YES	304+37-304+76 / 307'-158' RT / UG	---	YES	NO	NO	120	---
41	G111	GAS MAIN	UG	304+33	72' LT	STORM SEWER	YES	304+37-304+76 / 307'-158' RT / UG	---	YES	NO	NO	120	---
41	G112	GAS LATERAL	UG	304+33 - 304+79	51' LT	GRADING	YES	---	---	YES	NO	NO	120	---
41	G113	GAS LATERAL	UG	304+11 - 304+34	51' LT	GRADING	YES	304+11-304+34 / 155' LT / UG	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL
41	G114	GAS LATERAL	UG	304+35 - 304+75	194' LT	GRADING	YES	---	---	YES	NO	NO	120	RECONNECT TO EXISTING LATERAL AT NEW MAIN
41	G115	GAS MAIN	UG	304+74	22' RT - 40' RT	GRADING	YES	304+37-304+76 / 307'-158' RT / UG	---	YES	NO	NO	120	---
41	G116	GAS VALVE	UG	304+74	26' RT	GRADING	YES	304+37-304+76 / 307'-158' RT / UG	---	YES	NO	NO	120	---
41	G117	GAS VALVE	UG	304+93	22' RT	GRADING	YES	---	---	YES	NO	NO	120	---
41	G118	GAS MAIN	UG	317+92 - 318+00	102' LT - 152' LT	GRADING	YES	---	---	YES	NO	NO	120	---
41	G119	GAS VALVE	UG	304+33	LT	GRADING	YES	304+37-304+76 / 307'-158' RT / UG	---	YES	NO	NO	120	---
41	G138	GAS MAIN	UG	304+74	34' RT	SIGN BASE	YES	304+37-304+76 / 307'-158' RT / UG	---	YES	NO	NO	120	---
41	G139	GAS MAIN	UG	304+32	90' LT	SIGN BASE	YES	304+37-304+76 / 307'-158' RT / UG	---	YES	NO	NO	120	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

2

N

318+00

333+00

MATCHLINE

MATCHLINE

STH 164

320 322 324 326 328 330 332

SEPTIC

CEMETERY

SEPC

SIGN

FEEDER

VERTICAL CPP

SLOPE INTERCEPT

SLOPE INTERCEPT

R/W

TLE

A187 E168 A197 E156 E173 A192 E156 C49 E167 E169 E170 A201 E171 A202 A198 A199 A200 E172 C49 A192

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

SHEET 43 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 234	E

FILE NAME = T:\2110217\CADD\CIVIL3D\27090300\SHEETSPLAN\023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1.0000 '/ INCH

2

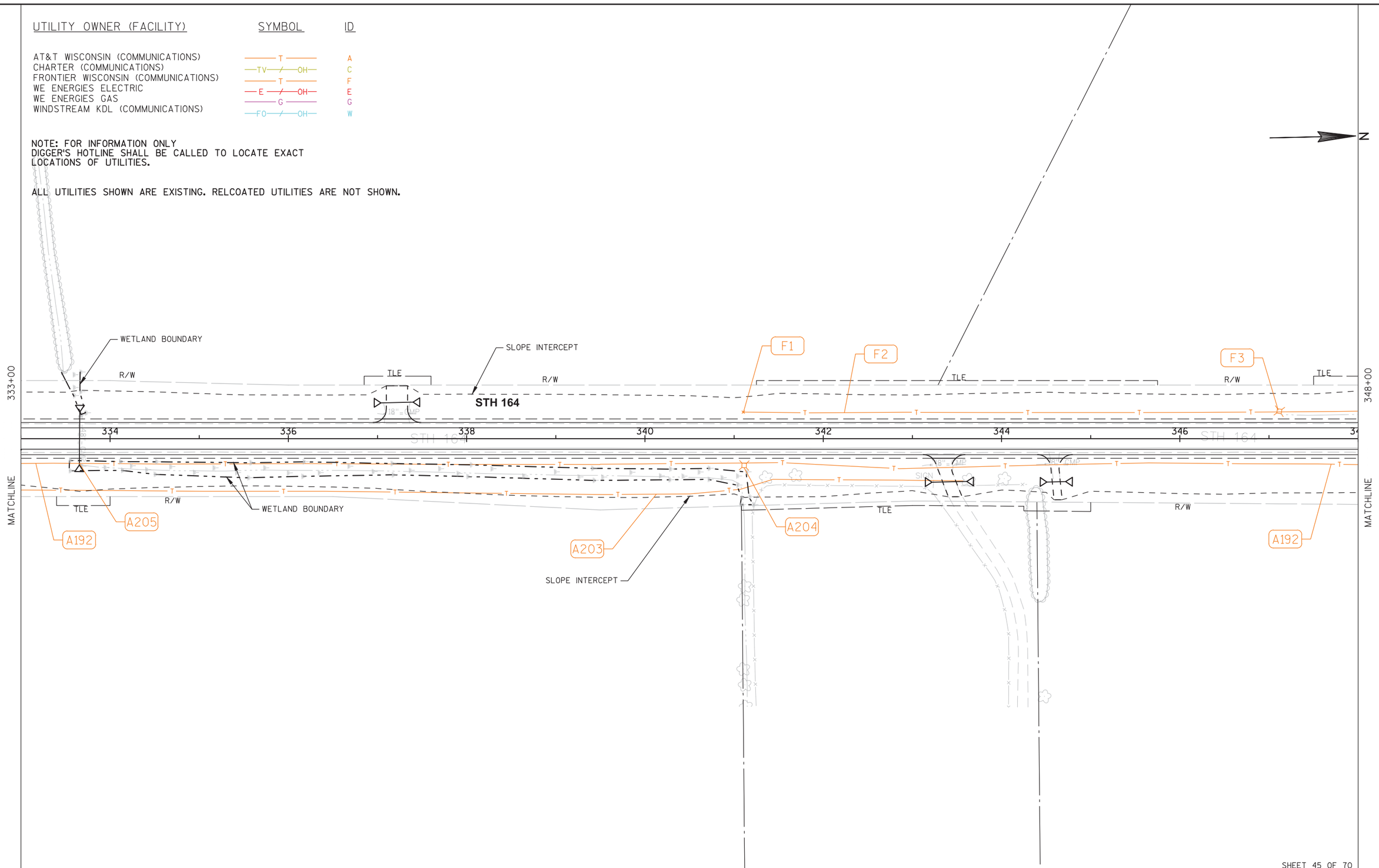
EXISTING UTILITY FACILITIES							RESOLUTION						
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
43	A187	COMMUNICATION LINE	UG	306+31 - 325+74	88' LT - 28' RT	GRADING	YES	209+70-312+91 / 24'-106' RT / OH 312+91-315+36 / 47' LT-32' RT / OH 315+36-328+00 / 47'-79' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
43	A192	COMMUNICATION LINE	UG	313+36 - 359+33	26' RT - 51' RT	GRADING	YES	312+91-315+36 / 47' LT-32' RT / OH 315+36-328+00 / 47'-79' LT / OH 328+00-361+30 / 43'-96' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES
43	A197	PEDESTAL	UG	320+99	28' LT	GRADING/CLEAR ZONE	YES	315+36-328+00 / 47'-79' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
43	A198	PEDESTAL	UG	325+75	31' RT	GRADING/CLEAR ZONE	YES	315+36-328+00 / 47'-79' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
43	A199	COMMUNICATION LINE	UG	325+74 - 329+25	28' RT - 60' RT	GRADING	YES	315+36-328+00 / 47'-79' LT / OH 328+00-361+30 / 43'-96' LT / UG	---	YES	NO	NO	180	ON WE ENERGIES POLES
43	A200	PEDESTAL	UG	327+83	33' RT	GRADING/CLEAR ZONE	YES	315+36-328+00 / 47'-79' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
43	A201	COMMUNICATION LINE	UG	324+22 - 325+53	28' RT	STORM SEWER	YES	315+36-328+00 / 47'-79' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
43	A202	COMMUNICATION LINE	UG	325+98	37' RT	STORM SEWER	YES	315+36-328+00 / 47'-79' LT / OH	---	YES	NO	YES	180	ON WE ENERGIES POLES
43	C49	COMMUNICATION LINE	OH	313+45 - 327+79	32' RT	GRADING/CLEAR ZONE	YES	312+91-328+00 / 79' LT-32' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
43	E156	ELECTRIC LINE	OH	313+45 - 328+49	43' LT - 33' RT	GRADING/CLEAR ZONE	YES	312+91-328+00 / 79' LT-32' RT / OH	---	NO	NO	YES	90	---
43	E167	POWER POLE	OH	320+08	33' RT	GRADING/CLEAR ZONE	YES	312+91-328+00 / 79' LT-32' RT / OH	---	NO	NO	YES	90	---
43	E168	ELECTRIC SERVICE	OH	320+08 - 320+24	62' LT - 33' RT	GRADING	YES	---	---	NO	NO	NO	90	RECONNECT TO EXISTING SERVICE OUTSIDE GRADING LIMITS
43	E169	POWER POLE	OH	321+94	32' RT	GRADING/CLEAR ZONE	YES	312+91-328+00 / 79' LT-32' RT / OH	---	NO	NO	YES	90	---
43	E170	POWER POLE	OH	323+38	32' RT	GRADING/CLEAR ZONE	YES	312+91-328+00 / 79' LT-32' RT / OH	---	NO	NO	YES	90	---
43	E171	POWER POLE	OH	325+69	32' RT	GRADING/CLEAR ZONE	YES	312+91-328+00 / 79' LT-32' RT / OH	---	NO	NO	YES	90	---
43	E172	POWER POLE	OH	327+79	32' RT	GRADING/CLEAR ZONE	YES	312+91-328+00 / 79' LT-32' RT / OH	---	NO	NO	YES	90	---
43	E173	POWER POLE	OH	328+49	43' LT	GRADING	YES	312+91-328+00 / 79' LT-32' RT / OH	---	NO	NO	YES	90	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.



SHEET 45 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 236	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAND023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1" = 100' XREF

2

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
45	A192	COMMUNICATION LINE	UG	313+36 - 359+33	26' RT - 51' RT	GRADING	YES	312+91-315+36 / 47' LT-32' RT / OH 315+36-328+00 / 47'-79' LT / OH 328+00-361+30 / 43'-96' LT / UG	---	YES	NO	YES	180	ON WE ENERGIES POLES
45	A203	COMMUNICATION LINE	UG	338+00 - 343+57	46' RT - 64' RT	GRADING	YES	328+00-361+30 / 43'-96' LT / UG	---	YES	NO	NO	180	---
45	A204	PEDESTAL	UG	341+11	30' RT	GRADING/CLEAR ZONE	YES	328+00-361+30 / 43'-96' LT / UG	---	YES	NO	NO	180	---
45	A205	PEDESTAL	UG	333+66	28' RT	CULVERT	YES	328+00-361+30 / 43'-96' LT / UG	---	YES	NO	NO	180	---
45	F1	PEDESTAL	UG	341+10	30' LT	GRADING/CLEAR ZONE	YES	---	---	YES	NO	NO	45	---
45	F2	COMMUNICATION LINE	UG	341+10 - 359+29	29' LT - 61' LT	GRADING	YES	347+10-359+30 / 52'-63' LT / UG	---	YES	NO	NO	45	---
45	F3	PEDESTAL	UG	347+12	31' LT	GRADING/CLEAR ZONE	YES	347+10 / 59' LT / UG	---	YES	NO	NO	45	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

PROJECT NO: 2709-03-70	**HWY: STH 164**	**COUNTY: WASHINGTON**	**UTILITY PLAN**	**SHEET:** 237 **E**

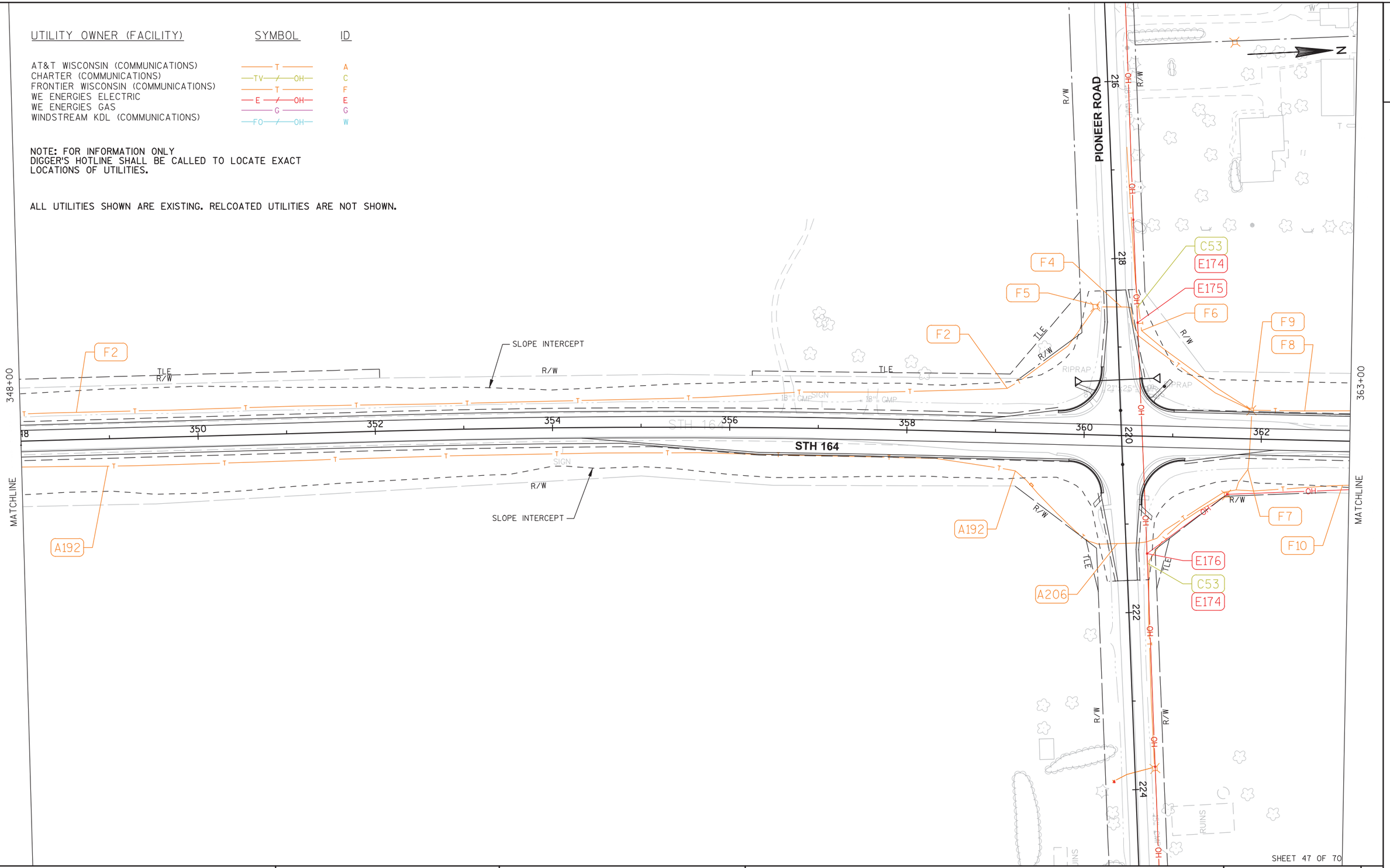
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2

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.



SHEET 47 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 238	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1.0000 '/ IN

2

EXISTING UTILITY FACILITIES							RESOLUTION						
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
47	A192	COMMUNICATION LINE	UG	313+36 - 359+33	26' RT - 51' RT	GRADING	YES	312+91-315+36 / 47' LT-32' RT / OH 315+36-328+00 / 47'-79' LT / OH 328+00-361+30 / 43'-96' LT / UG	---	YES	NO	YES	180	---
47	A206	COMMUNICATION LINE	UG	360+20 - 360+81	117' RT - 123' RT	GRADING	YES	312+91-315+36 / 47' LT-32' RT / OH 315+36-328+00 / 47'-79' LT / OH 328+00-361+30 / 43'-96' LT / UG	---	YES	NO	YES	180	---
47	C53	COMMUNICATION LINE	OH	360+55 - 360+76	165' LT - 162' RT	GRADING	YES	360+49-360+96 / 244' LT-373' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
47	E174	ELECTRIC LINE	OH	360+55 - 360+76	165' LT - 162' RT	GRADING	YES	360+49-360+96 / 244' LT-373' RT / OH	---	NO	NO	YES	90	---
47	E175	POWER POLE	OH	360+57	128' LT	GRADING/CLEAR ZONE	YES	360+49-360+96 / 244' LT-373' RT / OH	---	NO	NO	YES	90	---
47	E176	POWER POLE	OH	360+75	132' RT	GRADING/CLEAR ZONE	YES	360+49-360+96 / 244' LT-373' RT / OH	---	NO	NO	YES	90	---
47	F2	COMMUNICATION LINE	UG	341+10 - 359+29	29' LT - 61' LT	GRADING	YES	347+10-359+30 / 52'-63' LT / UG	---	YES	NO	NO	45	---
47	F4	COMMUNICATION LINE	UG	359+92 - 361+88	33' LT - 145' LT	GRADING	YES	359+30-367+70 / 52'-251' LT / UG	---	YES	NO	NO	45	---
47	F5	PEDESTAL	UG	360+09	145' LT	GRADING/CLEAR ZONE	YES	359+30-367+70 / 52'-251' LT / UG	---	YES	NO	NO	45	---
47	F6	COMMUNICATION LINE	UG	360+55 - 361+88	165' LT - 33' LT	GRADING	YES	359+30-367+70 / 52'-251' LT / UG	---	YES	NO	NO	45	---
47	F7	COMMUNICATION LINE	UG	361+77 - 361+88	33' LT - 47' RT	GRADING	YES	359+30-367+70 / 52'-251' LT / UG	---	YES	NO	NO	45	---
47	F8	COMMUNICATION LINE	UG	361+88 - 404+21	38' LT - 53' RT	GRADING	YES	359+30-367+70 / 52'-251' LT / UG 376+80-399+90 / 42'-72' LT / UG 399+90 / 72' LT-71' RT / UG 399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	NO PROPOSED FACILITY 367+70-376+80
47	F9	PEDESTAL	UG	361+88	33' LT	GRADING/CLEAR ZONE	YES	359+30-367+70 / 52'-251' LT / UG	---	YES	NO	NO	45	---
47	F10	COMMUNICATION LINE	UG	362+73 - 369+66	35' RT - 51' RT	GRADING	YES	359+30-367+70 / 52'-251' LT / UG	---	YES	NO	NO	45	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

BURIED ELECTRIC SERVICE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 367+71 LT. WE ENERGIES ELECTRIC TO DETERMINE LIMITS OF CONFLICT.

ENTIRE BURIED ELECTRIC SERVICE NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT APPROXIMATELY 375+30 LT/RT.

N

363+00

378+00

MATCHLINE

MATCHLINE

STH 164

STH 164

STH 164

364 366 368 370 372 374 376

F8 F11 F12 F8

E183 E182 E181 E188

F10 E178 E177 E179 E180 F10 E184 F13 E185 F14 E186 E187 F13 E189

R/W TLE WETLAND BOUNDARY SLOPE INTERCEPT PLE

CANOPY

RIPRAP

SHEET 49 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 240	E

FILE NAME • T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\023001_UP.DWG PLOT DATE • 7/16/2013 7:54 AM PLOT BY • BLACKWOOD, JIM PLOT NAME • PLOT SCALE • 1" = 100' XREF

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
49	E177	ELECTRIC LINE	OH	363+41 - 370+48	36' RT - 52' RT	GRADING	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
49	E178	POWER POLE	OH	363+69	51' RT	GRADING	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
49	E179	POWER POLE	OH	365+74	43' RT	GRADING/CLEAR ZONE	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
49	E180	POWER POLE	OH	367+96	37' RT	GRADING/CLEAR ZONE	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
49	E181	ELECTRIC SERVICE	OH	367+71 - 367+96	45' LT - 37' RT	GRADING	YES	---	---	NO	NO	NO	90	RECONNECT TO EXISTING OUTSIDE GRADING LIMITS
49	E182	POWER POLE	OH	367+71	45' LT	GRADING	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
49	E183	ELECTRIC SERVICE	UG	367+71	45' LT - 58' LT	GRADING	YES	---	---	NO	NO	NO	90	EXISTING NOT FIELD VERIFIED RECONNECT TO EXISTING OUTSIDE GRADING LIMITS
49	E184	POWER POLE	OH	370+40	36' RT	GRADING/CLEAR ZONE	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	WORK AROUND ANCHOR 369+90 / 44' LT
49	E185	POWER POLE	OH	372+86	36' RT	GRADING/CLEAR ZONE	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	WORK AROUND ANCHOR 373+50 / 44' LT
49	E186	ELECTRIC LINE	OH	372+51 - 393+31	35' RT - 47' RT	GRADING	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
49	E187	POWER POLE	OH	375+29	35' RT	GRADING/CLEAR ZONE	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
49	E188	ELECTRIC SERVICE	UG	375+30	35' LT - 31' RT	GRADING	YES	---	---	YES	NO	NO	90	EXISTING NOT FIELD VERIFIED RECONNECT TO EXISTING OUTSIDE GRADING LIMITS
49	E189	POWER POLE	OH	377+67	35' RT	GRADING/CLEAR ZONE	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
49	F8	COMMUNICATION LINE	UG	361+88 - 404+21	38' LT - 53' RT	GRADING	YES	359+30-367+70 / 52'-251' LT / UG 376+80-399+90 / 42'-72' LT / UG 399+90 / 72' LT-71' RT / UG 399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	NO PROPOSED FACILITY 367+70-376+80
49	F10	COMMUNICATION LINE	UG	362+73 - 369+66	35' RT - 51' RT	GRADING	YES	359+30-367+70 / 52'-251' LT / UG	---	YES	NO	NO	45	---
49	F11	PEDESTAL	UG	368+62	40' LT	GRADING/CLEAR ZONE	YES	---	---	YES	NO	NO	45	---
49	F12	COMMUNICATION LINE	UG	373+00	34' LT	CULVERT	YES	---	---	YES	NO	NO	45	---
49	F13	COMMUNICATION LINE	UG	372+51 - 404+09	35' RT - 57' RT	GRADING	YES	359+30-367+70 / 52'-251' LT / UG	---	YES	NO	NO	45	---
49	F14	COMMUNICATION LINE	UG	373+00	33' RT	CULVERT	YES	359+30-367+70 / 52'-251' LT / UG	---	YES	NO	NO	45	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
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N

ENTIRE BURIED ELECTRIC LINE NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT APPROXIMATELY STA 380+18 - 380+20 LT/RT.

SLOPE INTERCEPT

F16 F8 E191 F17 E196

TLE R/W ASPH T 54" STP 18" CMP

STH 164

378+00 380 382 384 386 388 390 392 393+00

MATCHLINE

OH T R/W TLE

F15 E186 F13 E190 F18 E192 E193 F19 E194 E195 E186 F13 F8

WETLAND BOUNDARY

SLOPE INTERCEPT

MATCHLINE

SHEET 51 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 242	E

EXISTING UTILITY FACILITIES							RESOLUTION						
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
51	E186	ELECTRIC LINE	OH	372+51 - 393+31	35' RT - 47' RT	GRADING	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
51	E190	POWER POLE	OH	380+18	36' RT	GRADING/CLEAR ZONE	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
51	E191	ELECTRIC SERVICE	UG	380+18 - 380+20	45' LT - 36' RT	GRADING	YES	---	---	YES	NO	NO	90	EXISTING NOT FIELD VERIFIED RECONNECT TO EXISTING OUTSIDE GRADING LIMITS
51	E192	POWER POLE	OH	382+61	39' RT	GRADING/CLEAR ZONE	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
51	E193	POWER POLE	OH	385+65	41' RT	GRADING/CLEAR ZONE	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
51	E194	POWER POLE	OH	388+31	43' RT	GRADING/CLEAR ZONE	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
51	E195	POWER POLE	OH	391+92	45' RT	GRADING	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
51	E196	ELECTRIC LINE	OH	391+92 - 392+01	49' LT - 45' RT	GRADING	YES	---	---	YES	NO	NO	90	EXISTING NOT FIELD VERIFIED RECONNECT TO EXISTING OUTSIDE GRADING LIMITS
51	F8	COMMUNICATION LINE	UG	361+88 - 404+21	38' LT - 53' RT	GRADING	YES	359+30-367+70 / 52'-251' LT / UG 376+80-399+90 / 42'-72' LT / UG 399+90 / 72' LT-71' RT / UG 399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	NO PROPOSED FACILITY 367+70-376+80
51	F13	COMMUNICATION LINE	UG	372+51 - 404+09	35' RT - 57' RT	GRADING	YES	376+80-399+90 / 42'-72' LT / UG 399+90 / 72' LT-71' RT / UG 399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
51	F15	COMMUNICATION LINE	UG	378+06	32' RT	CULVERT	YES	---	---	YES	NO	NO	45	---
51	F16	COMMUNICATION LINE	UG	378+06	37' LT	CULVERT	YES	376+80-399+90 / 42'-72' LT / UG	---	YES	NO	NO	45	---
51	F17	PEDESTAL	UG	380+19	39' LT	GRADING/CLEAR ZONE	YES	376+80-399+90 / 42'-72' LT / UG	---	YES	NO	NO	45	---
51	F18	PEDESTAL	UG	382+73	38' RT	GRADING/CLEAR ZONE	YES	376+80-399+90 / 42'-72' LT / UG	---	YES	NO	NO	45	---
51	F19	PEDESTAL	UG	386+79	44' RT	GRADING	YES	376+80-399+90 / 42'-72' LT / UG	---	YES	NO	NO	45	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV/OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E/OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO/OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE.
APPROXIMATELY STA 394+28 - STA 394+86 LT/RT.
CHARTER TO DETERMINE LIMITS OF CONFLICT.

ENTIRE BURIED ELECTRIC LINE NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT APPROXIMATELY STA 394+38 - STA 394+70 LT/RT.

BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 402+96 LT. FRONTIER TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 403+09 - STA 403+39 LT. CHARTER TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 393+39 RT. FRONTIER TO DETERMINE LIMITS OF CONFLICT.

ENTIRE COMMUNICATION LINE NOT MARKED BY DIGGER'S HOTLINE. FRONTIER TO DETERMINE LIMITS OF CONFLICT APPROXIMATELY STA 399+88 - STA 399+91 LT/RT.

STH 164

WETLAND BOUNDARY

SLOPE INTERCEPT

MATCHLINE

393+00

408+00

394 396 398 400 402 404 406

SHEET 53 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 244	E

2

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
53	C54	COMMUNICATION LINE	UG	394+28 - 394+86	LT/RT	GRADING/BEAM GUARD POSTS	YES	393+36-393+90/ 78' LT-71' RT / OH 393+36-394+76 / 68'-71' RT / UG	---	YES	NO	YES	120	EXISTING NOT FIELD VERIFIED JOINT BURY WITH WE ENERGIES ELECTRIC
53	C55	COMMUNICATION LINE	UG	401+85 - 402+51	LT	GRADING	YES	401+86-402+51 / 49' LT-69' LT / UG	---	YES	NO	YES	120	EXISTING NOT FIELD VERIFIED
53	C56	COMMUNICATION LINE	OH	401+85 - 403+44	49' LT - 57' LT	GRADING	NO	---	---	---	---	YES	---	EXISTING ON WE ENGERIES POLES WORK AROUND EXISTING POLE
53	E186	ELECTRIC LINE	OH	372+51 - 393+31	35' RT - 47' RT	GRADING	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
53	E197	ELECTRIC SERVICE	UG	394+38 - 394+70	52' LT - 44' RT	GRADING	YES	393+36-393+90/ 78' LT-71' RT / OH 393+36-395+33 / 68'-71' RT / UG	---	YES	NO	YES	90	EXISTING NOT FIELD VERIFIED JOINT BURY WITH CHARTER
53	E198	ELECTRIC LINE	OH	401+85 - 403+44	49' LT - 57' LT	GRADING	NO	---	---	NO	NO	YES	---	WORK AROUND EXISTING POLE
53	E199	POWER POLE	OH	402+51	49' LT	GRADING	NO	---	---	NO	NO	YES	---	WORK AROUND EXISTING POLE
53	E200	ELECTRIC SERVICE	OH	402+51 - 402+57	49' LT - 72' RT	GRADING	NO	---	---	NO	NO	YES	---	WORK AROUND EXISTING POLE
53	E201	POWER POLE	OH	393+31	47' RT	GRADING	YES	360+66-402+51/ 47' LT-147' LT / OH	---	NO	NO	YES	90	---
53	F8	COMMUNICATION LINE	UG	361+88 - 404+21	38' LT - 53' RT	GRADING	YES	359+30-367+70 / 52'-251' LT / UG 376+80-399+90 / 42'-72' LT / UG 399+90 / 72' LT-71' RT / UG 399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	NO PROPOSED FACILITY 367+70-376+80
53	F13	COMMUNICATION LINE	UG	372+51 - 404+09	35' RT - 57' RT	GRADING	YES	376+80-399+90 / 42'-72' LT / UG 399+90 / 72' LT-71' RT / UG 399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
53	F20	PEDESTAL	UG	393+39	50' RT	GRADING	YES	393+40 / 72' RT / UG	---	YES	NO	NO	45	---
53	F21	COMMUNICATION LINE	UG	393+39	RT	GRADING	YES	393+40 / 70' LT-72' RT / UG	---	YES	NO	NO	45	EXISTING NOT FIELD VERIFIED
53	F22	COMMUNICATION LINE	UG	395+14	31' RT	BEAM GUARD POSTS	YES	376+80-399+90 / 42'-72' LT / UG	---	YES	NO	NO	45	---
53	F23	COMMUNICATION LINE	UG	395+10	40' RT	BEAM GUARD POSTS	YES	376+80-399+90 / 42'-72' LT / UG	---	YES	NO	NO	45	---
53	F24	COMMUNICATION LINE	UG	399+88 - 399+91	48' LT - 39' RT	GRADING	YES	399+90 / 72' LT-71' RT / UG	---	YES	NO	NO	45	EXISTING NOT FIELD VERIFIED
53	F25	PEDESTAL	UG	399+91	48' LT	GRADING	YES	399+90 / 72' LT-71' RT / UG	---	YES	NO	NO	45	---
53	F26	COMMUNICATION LINE	UG	399+91 - 402+96	48' LT - 49' LT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
53	F27	PEDESTAL	UG	402+96	49' LT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
53	F28	COMMUNICATION LINE	UG	399+91 - 404+87	47' LT - 48' LT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
53	F29	COMMUNICATION LINE	UG	402+96	LT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	EXISTING NOT FIELD VERIFIED
53	F30	COMMUNICATION LINE	UG	406+15 - 418+34	29' RT - 177' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
53	F31	COMMUNICATION LINE	UG	406+33 - 413+53	48' RT - 51' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	0

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

N

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

F36
ENTIRE BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. FRONTIER TO DETERMINE LIMITS OF CONFLICT.

E257
A234
E203
E202
C57
E204
F34
F35
C68
E205
E208
F36
E206
C58
SLOPE INTERCEPT
E214
E216
E215
C60
F44
C61
G123
G124
F45
G120
E217
F46
G127
F41
G125
G126
E211
E210
F39
E212
F40
E213
F42
C59
E207
F43
E209
C38
G120
G122
G121
F30
F31
F32
F33
F37
WETLAND BOUNDARY
CTH E
STH 164
CLUB DRIVE
BOGEY LN
MATCHLINE
408+00
423+00
226
228
230
240
242
243
TLE
R/W
OH
W
T
E
G
SIGN
RUIN
18" CMP
4" VERTICAL

ENTIRE BURIED GAS SERVICE NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.

ENTIRE BURIED ELECTRIC SERVICE NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.

ENTIRE BURIED GAS SERVICE NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.

SHEET 55 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 246	E

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
55	A234	COMMUNICATION LINE	UG	413+55 - 413+60	544' LT - 43' RT	GRADING	YES	413+66-413+84 / 70'-643' LT / OH	---	YES	NO	YES	180	EXISTING PARTIALLY NOT MARKED BY DIGGER'S ON WE ENERGIES POLES
55	C57	COMMUNICATION LINE	OH	412+53 - 413+65	156' LT - 168' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
55	C58	COMMUNICATION LINE	OH	415+80 - 419+24	62' LT - 106' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
55	C59	COMMUNICATION LINE	OH	417+90 - 418+19	65' LT - 165' RT	GRADING	YES	417+91-418+18 / 86' LT-158' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
55	C60	COMMUNICATION LINE	OH	420+26 - 433+50	32' LT - 64' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
55	C61	COMMUNICATION LINE	OH	419+65 - 419+83	57' LT - 55' RT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	120	EXISTING ON WE ENERGIES POLES
55	C68	COMMUNICATION LINE	OH	409+96	48' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
55	E202	ELECTRIC LINE	OH	412+53 - 413+65	156' LT - 168' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
55	E203	POWER POLE	OH	412+65	173' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	WORK AROUND PROPOSED ANCHOR 411+83, 68' LT
55	E204	POWER POLE	OH	413+62	157' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
55	E205	POWER POLE	OH	409+96	48' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
55	E206	ELECTRIC LINE	OH	415+80 - 419+24	62' LT - 106' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
55	E207	ELECTRIC LINE	OH	417+90 - 418+19	65' LT - 165' RT	GRADING	YES	417+91-418+18 / 86' LT-158' RT / OH	---	NO	NO	YES	90	---
55	E208	ELECTRIC LINE	OH	413+61 - 413+63	540' LT - 48' RT	GRADING	YES	---	---	NO	NO	NO	90	DISCONTINUE EXISTING LINE IN PLACE
55	E209	ELECTRIC LINE	UG	413+71 - 417+99	51' RT - 86' RT	GRADING	YES	415+48-416+99 / 102' LT-98' RT / OH	---	NO	NO	NO	90	---
55	E210	ELECTRIC LINE	UG	416+22 - 416+32	47' RT - 48' RT	STORM SEWER	YES	415+48-416+99 / 102' LT-98' RT / OH	---	NO	NO	NO	90	---
55	E211	ELECTRIC LINE	UG	417+72 - 418+65	54' RT - 140' RT	GRADING	YES	417+91-418+77 / 87' LT-164' RT / UG	---	NO	NO	NO	90	---
55	E212	ELECTRIC LINE	UG	418+04 - 418+48	55' RT - 61' RT	STORM SEWER	YES	417+91-418+77 / 87' LT-164' RT / UG	---	NO	NO	NO	90	---
55	E213	POWER POLE	OH	418+01	87' RT	GRADING	YES	417+91-418+77 / 87' LT-164' RT / UG	---	NO	NO	YES	90	---
55	E214	POWER POLE	OH	417+90	65' LT	GRADING	YES	417+91-418+77 / 87' LT-164' RT / UG	---	NO	NO	YES	90	---
55	E215	ELECTRIC LINE	OH	420+26 - 433+50	32' LT - 64' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
55	E216	POWER POLE	OH	421+76	61' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	NO	90	---
55	E217	ELECTRIC SERVICE	UG	421+56 - 421+76	61' LT - 39' RT	GRADING	YES	421+50 / 79' LT-81' RT / UG	---	YES	NO	YES	90	EXISTING NOT FIELD VERIFIED
55	E257	POWER POLE	OH	413+65	402' LT	GRADING	YES	413+66-413+84 / 114'-642' LT / OH	---	NO	NO	NO	90	---
55	F30	COMMUNICATION LINE	UG	406+15 - 418+34	29' RT - 177' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
55	F31	COMMUNICATION LINE	UG	406+33 - 413+53	48' RT - 51' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
55	F32	COMMUNICATION LINE	UG	412+16	32' RT	CULVERT	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
55	F33	COMMUNICATION LINE	UG	412+16	48' RT	CULVERT	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
55	F34	COMMUNICATION LINE	UG	412+34 - 413+54	34' RT - 173' LT	GRADING	YES	---	---	YES	NO	NO	45	---
55	F35	COMMUNICATION LINE	UG	412+75	89' LT	STORM SEWER	YES	---	---	YES	NO	NO	45	---
55	F36	COMMUNICATION LINE	UG	413+55 - 413+60	544' LT - 43' RT	GRADING	YES	---	---	YES	NO	NO	45	EXISTING NOT FIELD VERIFIED
55	F37	PEDESTAL	UG	413+09	51' RT	GRADING/ CLEAR ZONE	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
55	F38	PEDESTAL	UG	414+99	51' RT	GRADING/ CLEAR ZONE	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
55	F39	COMMUNICATION LINE	UG	418+05	53' RT	STORM SEWER	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
55	F40	PEDESTAL	UG	418+00	85' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
55	F41	COMMUNICATION LINE	UG	418+00 - 419+08	72' RT - 85' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
55	F42	COMMUNICATION LINE	UG	418+10	83' RT	STORM SEWER	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
55	F43	COMMUNICATION LINE	UG	418+29	146' RT	STORM SEWER	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
55	F44	COMMUNICATION LINE	UG	415+86 - 419+83	57' LT - 107' LT	GRADING	YES	415+53-419+60 / 112' LT-87' RT / UG	---	YES	NO	NO	45	---
55	F45	COMMUNICATION LINE	UG	419+65 - 424+44	36' RT - 55' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
55	F46	COMMUNICATION LINE	UG	419+74 - 443+55	33' RT - 58' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

FILE NAME : T:\1102717\cadd\civil3d\27090300\SheetsPlan\020101_gn.pptx PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

2

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
55	G120	GAS MAIN	UG	415+99 - 446+85	26' RT - 44' RT	GRADING	YES	415+73-447+75 / 53' RT-103' RT / UG 435+43-447+75 / 43' LT-58' LT / UG	---	YES	NO	NO	120	---
55	G121	GAS LATERAL	UG	416+04 - 416+05	44' RT - 58' RT	GRADING	YES	---	---	YES	NO	NO	120	EXIST NOT FIELD VERIFIED RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
55	G122	GAS LATERAL	UG	416+04	52' RT	STORM SEWER	YES	---	---	YES	NO	NO	120	EXIST NOT FIELD VERIFIED RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS
55	G123	GAS VALVE	UG	417+87	36' RT	GRADING	YES	415+73-447+75 / 53' RT-103' RT / UG	---	YES	NO	NO	120	---
55	G124	GAS MAIN	UG	240+38 - 241+44 CLUB DR	19' LT - 26' LT	GRADING	YES	240+98-241+79 / 26' LT-65' LT / UG CLUB DR	---	YES	NO	NO	120	---
55	G125	GAS MAIN	UG	240+57 CLUB DR	21' LT	STORM SEWER	YES	240+98-241+79 / 26' LT-65' LT / UG CLUB DR	---	YES	NO	NO	120	---
55	G126	GAS VALVE	UG	240+89 CLUB DR	25' LT	GRADING	YES	240+98-241+79 / 26' LT-65' LT / UG CLUB DR	---	YES	NO	NO	120	---
55	G127	GAS LATERAL	UG	420+45 - 420+47	36' RT - 58' RT	GRADING	YES	---	---	YES	NO	NO	120	EXIST NOT FIELD VERIFIED RECONNECT TO EXISTING LATERAL OUTSIDE GRADING LIMITS

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

423+00

MATCHLINE

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

N

E218
E215
C60
E219
TLE
R/W
OH
STH 164
424
426
428
430
432
434
436
438+00
E222
E220
F47
F48
SLOPE INTERCEPT
E221
F49
C63
C64
E224
BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 432+70 - STA 432+80 LT. CHARTER TO DETERMINE LIMITS OF CONFLICT.
E225
C62
F52
POOL
WELL
SEPV
CANOPY
G
T
F45
F46
G120
G128
G129
ENTIRE BURIED GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.
F50
F51
E223
G130
ENTIRE BURIED GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.
F53
F54
F55
G131
ENTIRE BURIED COMMUNICATION LINE NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.
BURIED GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 437+15 RT. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.
PLE

SHEET 58 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 249	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1" = 100' YPSS

2

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
58	C60	COMMUNICATION LINE	OH	420+26 - 433+50	32' LT - 64' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
58	C62	COMMUNICATION LINE	OH	437+69 - 439+05	58' LT - 59' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
58	C63	PEDESTAL	UG	432+70	31' LT	GRADING/CLEAR ZONE	YES	---	---	NO	NO	YES	120	---
58	C64	COMMUNICATION LINE	UG	432+70 - 432+80	31' LT	GRADING	YES	---	---	NO	NO	YES	120	EXISTING NOT FIELD VERIFIED
58	E215	ELECTRIC LINE	OH	420+26 - 433+50	32' LT - 64' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
58	E218	POWER POLE	OH	423+10	62' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	FILL AROUND POLE 423+93 / 89' LT
58	E219	POWER POLE	OH	426+19	64' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
58	E220	POWER POLE	OH	428+64	37' LT	GRADING/CLEAR ZONE	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
58	E221	POWER POLE	OH	430+73	35' LT	GRADING/CLEAR ZONE	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
58	E222	ELECTRIC SERVICE	UG	428+64	37' LT - 45' LT	GRADING	YES	---	---	YES	NO	YES	90	RECONNECT TO EXISTING OUTSIDE GRADING LIMITS
58	E223	GUY POLE	OH	432+75	50' RT	GRADING	YES	---	---	NO	NO	YES	90	---
58	E224	POWER POLE	OH	432+80	32' LT	GRADING/CLEAR ZONE	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
58	E225	ELECTRIC LINE	OH	437+69 - 439+05	58' LT - 59' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
58	F45	COMMUNICATION LINE	UG	419+65 - 424+44	36' RT - 55' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
58	F46	COMMUNICATION LINE	UG	419+74 - 443+55	33' RT - 58' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
58	F47	PEDESTAL	UG	428+69	37' LT	GRADING/CLEAR ZONE	YES	428+61 / 57' LT / UG	---	YES	NO	NO	45	---
58	F48	COMMUNICATION LINE	UG	428+71 - 435+93	27' LT - 48' LT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
58	F49	PEDESTAL	UG	432+74	31' LT	GRADING/CLEAR ZONE	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
58	F50	COMMUNICATION LINE	OH	432+77 - 432+80	32' LT - 51' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
58	F51	PEDESTAL	UG	432+76	44' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
58	F52	COMMUNICATION LINE	UG	435+73 - 443+37	30' LT - 40' LT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
58	F53	COMMUNICATION LINE	UG	436+04 - 436+10	35' LT - 46' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
58	F54	PEDESTAL	UG	436+04	49' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
58	F55	COMMUNICATION LINE	UG	435+62 - 436+04	49' RT - 64' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	EXISTING NOT FIELD VERIFIED
58	G120	GAS MAIN	UG	415+99 - 446+85	26' RT - 44' RT	GRADING	YES	415+73-447+75 / 53' RT-103' RT / UG 435+43-447+75 / 43' LT-58' LT / UG	---	YES	NO	NO	120	---
58	G128	GAS LATERAL	UG	428+57 - 428+60	30' LT - 36' RT	GRADING	YES	FIELD VERIFY PROPOSED	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED PROPOSED LOCATION NOT SHOWN ON WORK PLAN
58	G129	GAS LATERAL	UG	430+10 - 430+11	29' LT - 36' RT	GRADING	YES	FIELD VERIFY PROPOSED	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED PROPOSED LOCATION NOT SHOWN ON WORK PLAN
58	G130	GAS LATERAL	UG	435+68	30' LT - 36' RT	GRADING	YES	---	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED RECONNECT TO EXISTING OUTSIDE GRADING LIMITS
58	G131	GAS LATERAL	UG	437+15	RT	GRADING	YES	---	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED RECONNECT TO EXISTING OUTSIDE GRADING LIMITS

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

N

438+00

MATCHLINE

ENTIRE BURIED GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATIONS LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 445+44 - STA 447+00 LT. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.

BURIED ELECTRIC LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 445+44 - STA 447+00 LT. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.

E225 C62 F52 E226 G133 G135 E228 E227 C65 F62 C70 E233 E232 C69 F63 E231 F64

SLOPE INTERCEPT

TLE R/W OH T G

WALLS SEPTIC RIPRAP

END CONSTRUCTION
STA. 446+61.26

STH 164

438 440 442 444 446 448 450 450

F46 G120 G132 F56 G134 F58 E229 E230 F59 F57 F60 E236 E234 E237 E238 G120 F61 E235

BURIED GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 442+40 RT. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.

BURIED ELECTRIC LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 445+44 LT/RT. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.

BURIED ELECTRIC LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 445+44 - STA 447+00 RT. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.

POOL ASPH CONC FLAG

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 251	E

FILE NAME = T:\1102717\CADD\CIVIL3D\270903001\SHEETSPLAN\023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1' = 100' YPSF

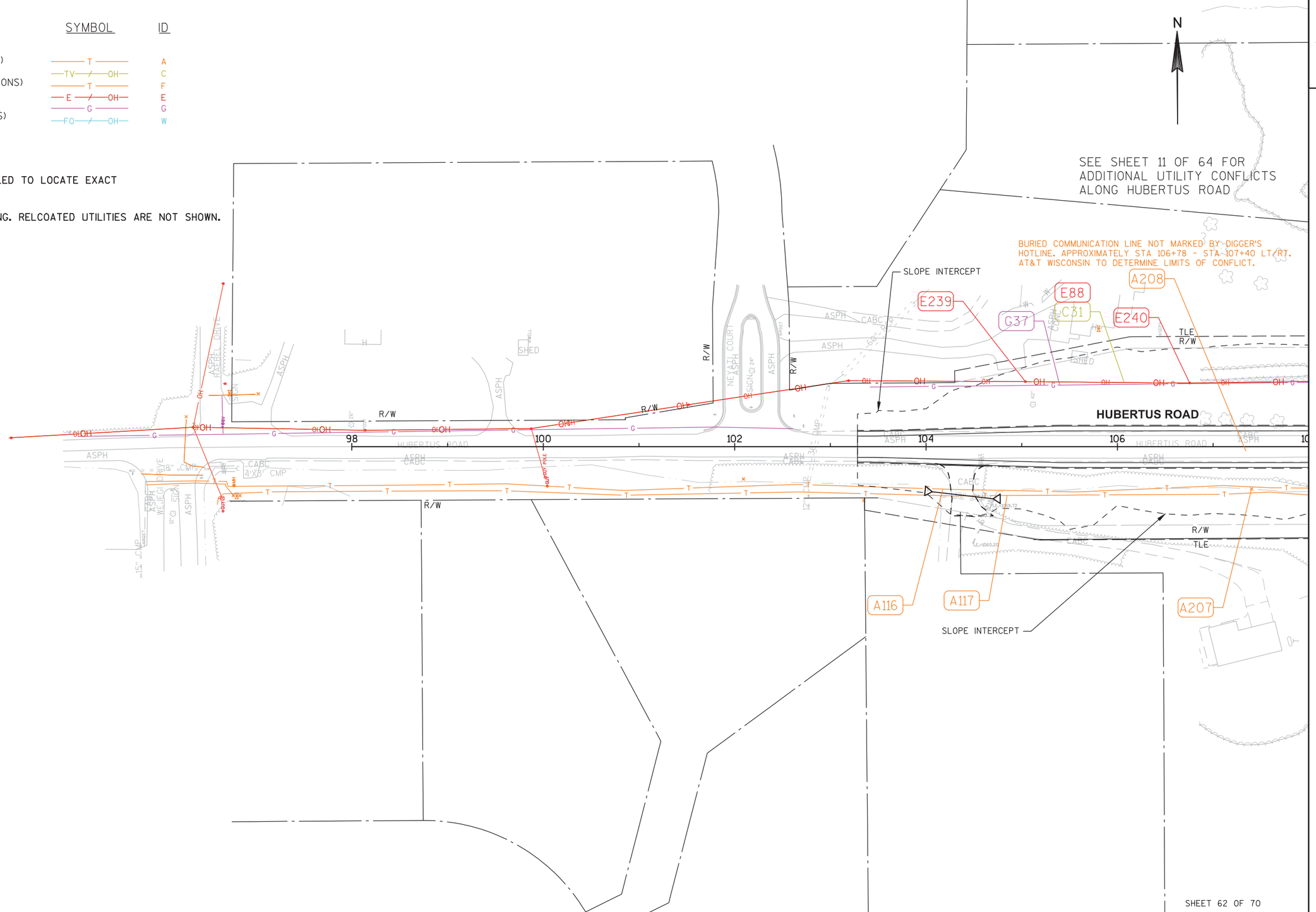
EXISTING UTILITY FACILITIES							RESOLUTION						
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
60	C62	COMMUNICATION LINE	OH	437+69 - 439+05	58' LT - 59' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
60	C65	COMMUNICATION LINE	OH	442+31 - 443+06	39' LT - 45' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
60	C69	COMMUNICATION LINE	OH	444+66 - 445+44	39' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
60	C70	COMMUNICATION LINE	UG	445+44 - 447+00	LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
60	E225	ELECTRIC LINE	OH	437+69 - 439+05	58' LT - 59' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
60	E226	POWER POLE	OH	438+66	58' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	WORK AROUND POLE 438+22 / 59' LT
60	E227	ELECTRIC LINE	OH	442+31 - 443+45	39' LT - 45' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
60	E228	POWER POLE	OH	443+06	39' LT	GRADING/CLEAR ZONE	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
60	E229	ELECTRIC SERVICE	OH	443+06 - 443+58	39' LT - 34' RT	GRADING	YES	442+88-443+64 / 46' LT-55' RT / UG	---	NO	NO	YES	90	---
60	E230	POWER POLE	OH	443+58	34' RT	GRADING/CLEAR ZONE	YES	443+64 / 55' RT / OH	---	NO	NO	YES	90	---
60	E231	ELECTRIC LINE	OH	444+66 - 445+44	39' LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
60	E232	POWER POLE	OH	445+44	39' LT	GRADING/CLEAR ZONE	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	---
60	E233	ELECTRIC LINE	UG	445+44 - 447+00	LT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	YES	NO	YES	90	EXISTING NOT FIELD VERIFIED
60	E234	ELECTRIC LINE	UG	445+44	LT/RT	GRADING	YES	445+43 / 44' LT-54' RT / OH	---	YES	NO	YES	90	EXISTING NOT FIELD VERIFIED
60	E235	ELECTRIC LINE	UG	445+44 - 447+00	RT	GRADING	YES	407+53-446+65 / 42' LT-114' LT / OH	---	NO	NO	YES	90	EXISTING NOT FIELD VERIFIED
60	E236	POWER POLE	OH	445+43	40' RT	GRADING/CLEAR ZONE	YES	445+42 / 54' RT / OH	---	NO	NO	YES	90	---
60	E237	POWER POLE	OH	446+37	48' RT	GRADING	YES	446+36 / 65' RT / OH	---	NO	NO	YES	90	---
60	E238	TRANSFORMER	UG	446+33	51' RT	GRADING	YES	447+28 / 62' RT / UG	---	NO	NO	YES	90	---
60	F46	COMMUNICATION LINE	UG	419+74 - 443+55	33' RT - 58' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
60	F52	COMMUNICATION LINE	UG	435+73 - 443+37	30' LT - 40' LT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
60	F56	PEDESTAL	UG	440+89	87' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
60	F57	2 PEDESTALS	UG	443+57	33' RT	GRADING/CLEAR ZONE	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
60	F58	COMMUNICATION LINE	UG	443+18 - 443+57	43' LT - 33' RT	GRADING	YES	---	---	YES	NO	NO	45	---
60	F59	2 PARALLEL COMM. LINES	UG	443+57 - 446+84	33' RT - 51' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
60	F60	2 PEDESTALS	UG	445+43	38' RT	GRADING/CLEAR ZONE	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
60	F61	2 PEDESTALS	UG	446+34	49' RT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
60	F62	COMMUNICATION LINE	UG	444+70 - 446+66	41' LT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
60	F63	PEDESTAL	UG	445+42	39' LT	GRADING/CLEAR ZONE	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
60	F64	COMMUNICATION LINE	UG	446+25 - 446+67	41' LT - 48' LT	GRADING	YES	399+90-446+40 / 47'-235' RT / UG	---	YES	NO	NO	45	---
60	G120	GAS MAIN	UG	415+99 - 446+85	26' RT - 44' RT	GRADING	YES	415+73-447+75 / 53' RT-103' RT / UG 435+43-447+75 / 43' LT-58' LT / UG	---	YES	NO	NO	120	---
60	G132	GAS VALVE	UG	439+33	36' RT	GRADING	YES	415+73-447+75 / 53' RT-103' RT / UG	---	YES	NO	NO	120	---
60	G133	GAS LATERAL	UG	441+02 - 441+03	24' LT - 36' RT	GRADING	YES	---	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED
60	G134	GAS LATERAL	UG	442+40	RT	GRADING	YES	---	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED
60	G135	GAS LATERAL	UG	443+36	28' LT - 28' RT	GRADING	YES	---	---	YES	NO	NO	120	EXISTING NOT FIELD VERIFIED

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.



SHEET 62 OF 70

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 253	E

FILE NAME = T:\1102717\CADD\CIVIL3D\270903001\SHEETSPLAN\023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1" = 100' XREF

EXISTING UTILITY FACILITIES							RESOLUTION						
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
62	A116	COMMUNICATIONS LINE	UG	103+50 - 113+08	18' RT - 47' RT	GRADING	YES	103+00-108+68 / 58'-139' LT / UG 112+00-117+36 / 37'-87' LT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
62	A117	COMMUNICATIONS LINE	UG	104+03 - 108+64	47' RT - 62' RT	GRADING	YES	103+00-108+68 / 58'-139' LT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
62	A207	PEDESTAL	UG	107+40	44' RT	GRADING	YES	103+00-108+68 / 57'-139' LT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
62	A208	COMMUNICATIONS LINE	UG	106+78 - 107+40	LT/RT	GRADING	YES	103+00-108+68 / 57'-139' LT / UG	---	YES	NO	NO	180	LINE NOT MARKED BY DIGGER'S HOTLINE STATIONING ALONG HUBERTUS ROAD
62	C31	COMMUNICATIONS LINE	OH	104+59 - 118+00 HUBERTUS RD	18' LT - 67' LT	GRADING	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
62	E88	ELECTRIC LINE	OH	104+59 - 118+00 HUBERTUS RD	18' LT - 67' LT	GRADING	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	90	---
62	E239	POWER POLE	OH	105+04 HUBERTUS RD	68' LT	GRADING	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	90	---
62	E240	POWER POLE	OH	106+76 HUBERTUS RD	67' LT	GRADING	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	90	---
62	G37	GAS MAIN	UG	104+50 - 118+00 HUBERTUS RD	15' LT - 70' LT	GRADING	YES	103+52-111+00 / 52' RT-80' RT / UG 111+00-118+07 / 44' LT-204' LT / UG HUBERTUS RD	---	YES	NO	NO	120	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

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BURIED COMMUNICATION LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 110+66 - STA 117+36 LT/RT. AT&T WISCONSIN TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATION LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 113+08 - STA 117+36 RT. AT&T WISCONSIN TO DETERMINE LIMITS OF CONFLICT.

BURIED GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 116+25 LT. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATION LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 114+25 - STA 117+36 LT/RT. AT&T WISCONSIN TO DETERMINE LIMITS OF CONFLICT.

SLOPE INTERCEPT

SLOPE INTERCEPT

BURIED GAS LATERAL NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 114+50 LT. WE ENERGIES TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATION LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 115+25 - STA 117+36 RT. AT&T WISCONSIN TO DETERMINE LIMITS OF CONFLICT.

BURIED COMMUNICATION LINE NOT MARKED BY DIGGER'S HOTLINE. APPROXIMATELY STA 112+49 - STA 117+36 RT. AT&T WISCONSIN TO DETERMINE LIMITS OF CONFLICT.

SEE SHEET 11 OF 64 FOR ADDITIONAL UTILITY CONFLICTS ALONG HUBERTUS ROAD

HUBERTUS ROAD

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 255	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETS\PLAN023001_UP.DWG PLOT DATE = 7/16/2013 7:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1.0000 '/ IN

EXISTING UTILITY FACILITIES							RESOLUTION							
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
64	A110	COMMUNICATIONS LINE	UG	185+65 - 198+45	41' RT - 237' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
64	A112	COMMUNICATIONS LINE	UG	188+30 - 198+29	55' RT - 250' RT	GRADING	YES	178+94-200+31 / 58'-133' LT / UG	---	YES	NO	YES	180	PARTIAL JOINT BURY WITH WE ENERGIES ELECTRIC & CHARTER
64	A116	COMMUNICATIONS LINE	UG	103+50 - 113+08	18' RT - 47' RT	GRADING	YES	103+00-108+68 / 58'-139' LT / UG 112+00-117+36 / 37'-87' LT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
64	A209	PEDESTAL	UG	112+49	66' RT	GRADING	YES	112+00-117+36 / 37'-87' LT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
64	A210	COMMUNICATIONS LINE	UG	112+49 - 117+36	17' RT - 66' RT	GRADING	YES	112+00-117+36 / 37'-87' LT / UG 115+58-117+36 / 46' RT / UG	---	YES	NO	NO	180	LINE NOT MARKED BY DIGGER'S HOTLINE STATIONING ALONG HUBERTUS ROAD
64	A211	COMMUNICATIONS LINE	UG	112+37 - 118+00	18' RT - 49' RT	GRADING	YES	112+00-117+36 / 37'-87' LT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
64	A212	COMMUNICATIONS LINE	UG	113+68	39' RT	STORM SEWER	YES	112+00-117+36 / 37'-87' LT / UG 112+75-117+36 / 46'-113' RT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
64	A213	COMMUNICATIONS LINE	UG	115+72 - 116+04	24' RT - 26' RT	STORM SEWER	YES	112+00-117+36 / 37'-87' LT / UG 112+75-117+36 / 46'-113' RT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
64	A214	PEDESTAL	UG	115+86	25' RT	GRADING/STORM SEWER	YES	112+00-117+36 / 37'-87' LT / UG 112+75-117+36 / 46'-113' RT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
64	A215	MANHOLE	UG	117+36	17' RT	GRADING	YES	---	117+36 / 17' RT	NO	NO	NO	5	STATIONING ALONG HUBERTUS ROAD PROVIDE AT&T 5 DAYS NOTICE OF NEED TO ADJUST MANHOLE
64	A216	COMMUNICATIONS LINE	UG	113+08 - 117+36	18' RT	GRADING/STORM SEWER	YES	112+00-117+36 / 37'-87' LT / UG 11275-117+36 / 46'-113' RT / UG	---	YES	NO	NO	180	LINE NOT MARKED BY DIGGER'S HOTLINE STATIONING ALONG HUBERTUS ROAD
64	A217	COMMUNICATIONS LINE	UG	110+66 - 117+36	76' LT - 17' RT	GRADING/STORM SEWER	YES	112+00-117+36 / 37'-87' LT / UG 112+75-117+36 / 46'-113' RT / UG	---	YES	NO	NO	180	LINE NOT MARKED BY DIGGER'S HOTLINE STATIONING ALONG HUBERTUS ROAD
64	A218	COMMUNICATIONS LINE	UG	112+26 - 113+08	70' LT - 18' RT	GRADING	YES	112+00-117+36 / 37'-87' LT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
64	A219	PEDESTAL	UG	114+96	18' LT	GRADING	YES	112+00-117+36 / 37'-87' LT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
64	A220	2 PEDESTALS	UG	112+56	37' LT	GRADING	YES	112+00-117+36 / 37'-87' LT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
64	A221	COMMUNICATIONS LINE	UG	114+25 - 117+36	LT/RT	GRADING/STORM SEWER	YES	112+00-117+36 / 37'-87' LT / UG	---	YES	NO	NO	180	STATIONING ALONG HUBERTUS ROAD
64	A222	COMMUNICATIONS LINE	UG	114+96 - 115+10	18' LT - 29' RT	GRADING/STORM SEWER	YES	112+00-117+36 / 37'-87' LT / UG	---	YES	NO	NO	180	ENTIRE LINE NOT MARKED BY DIGGER'S HOTLINE STATIONING ALONG HUBERTUS ROAD
64	A223	COMMUNICATIONS LINE	UG	115+25 - 117+36	RT	GRADING/STORM SEWER	YES	112+75-117+36 / 46'-113' RT / UG	---	YES	NO	NO	180	LINE NOT MARKED BY DIGGER'S HOTLINE STATIONING ALONG HUBERTUS ROAD
64	C31	COMMUNICATIONS LINE	OH	104+59 - 118+00 HUBERTUS RD	18' LT - 67' LT	GRADING	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
64	C66	COMMUNICATIONS LINE	OH	111+97 - 112+62 HUBERTUS RD	33' LT - 117' RT	GRADING	YES	178+94-209+72 / 58'-130' LT / UG	---	NO	NO	YES	120	EXISTING ON WE ENERGIES POLES
64	E86	ELECTRIC SERVICE	OH	199+62 - 200+31	42' RT - 261' RT	GRADING	YES	---	---	NO	NO	NO	90	---
64	E88	ELECTRIC LINE	OH	104+59 - 118+00 HUBERTUS RD	18' LT - 67' LT	GRADING	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	90	---
64	E242	ELECTRIC LINE	OH	111+97 - 112+62 HUBERTUS RD	33' LT - 117' RT	GRADING	YES	---	---	NO	NO	YES	90	---
64	E243	2 POWER POLES	OH	112+62 HUBERTUS RD	33' LT	GRADING	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	90	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

EXISTING UTILITY FACILITIES							RESOLUTION						
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
64	E244	POWER POLE	OH	113+84 HUBERTUS RD	19' LT	GRADING	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	90	---
64	E245	ELECTRIC LINE	OH	113+83 - 114+00 HUBERTUS RD	39' LT - 63' RT	GRADING	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	90	---
64	E246	POWER POLE	OH	114+97 HUBERTUS RD	18' LT	GRADING	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	90	---
64	E247	POWER POLE	OH	116+74 HUBERTUS RD	18' LT	GRADING	YES	99+88-119+07 / 19' LT-130' LT / OH HUBERTUS RD	---	NO	NO	YES	90	---
64	G37	GAS MAIN	UG	104+50 - 118+00 HUBERTUS RD	15' LT - 70' LT	GRADING	YES	103+52-111+00 / 52' RT-80' RT / UG 111+00-118+07 / 44' LT-204' LT / UG HUBERTUS RD	---	YES	NO	NO	120	---
64	G136	GAS LATERAL	UG	114+50 HUBERTUS RD	LT	GRADING/STORM SEWER	YES	---	---	YES	YES	NO	120	EXISTING NOT FIELD VERIFIED RECONNECT TO EXISTING OUTSIDE GRADING LIMITS
64	G137	GAS LATERAL	UG	116+25 HUBERTUS RD	LT	GRADING	YES	---	---	YES	YES	NO	120	EXISTING NOT FIELD VERIFIED RECONNECT TO EXISTING OUTSIDE GRADING LIMITS

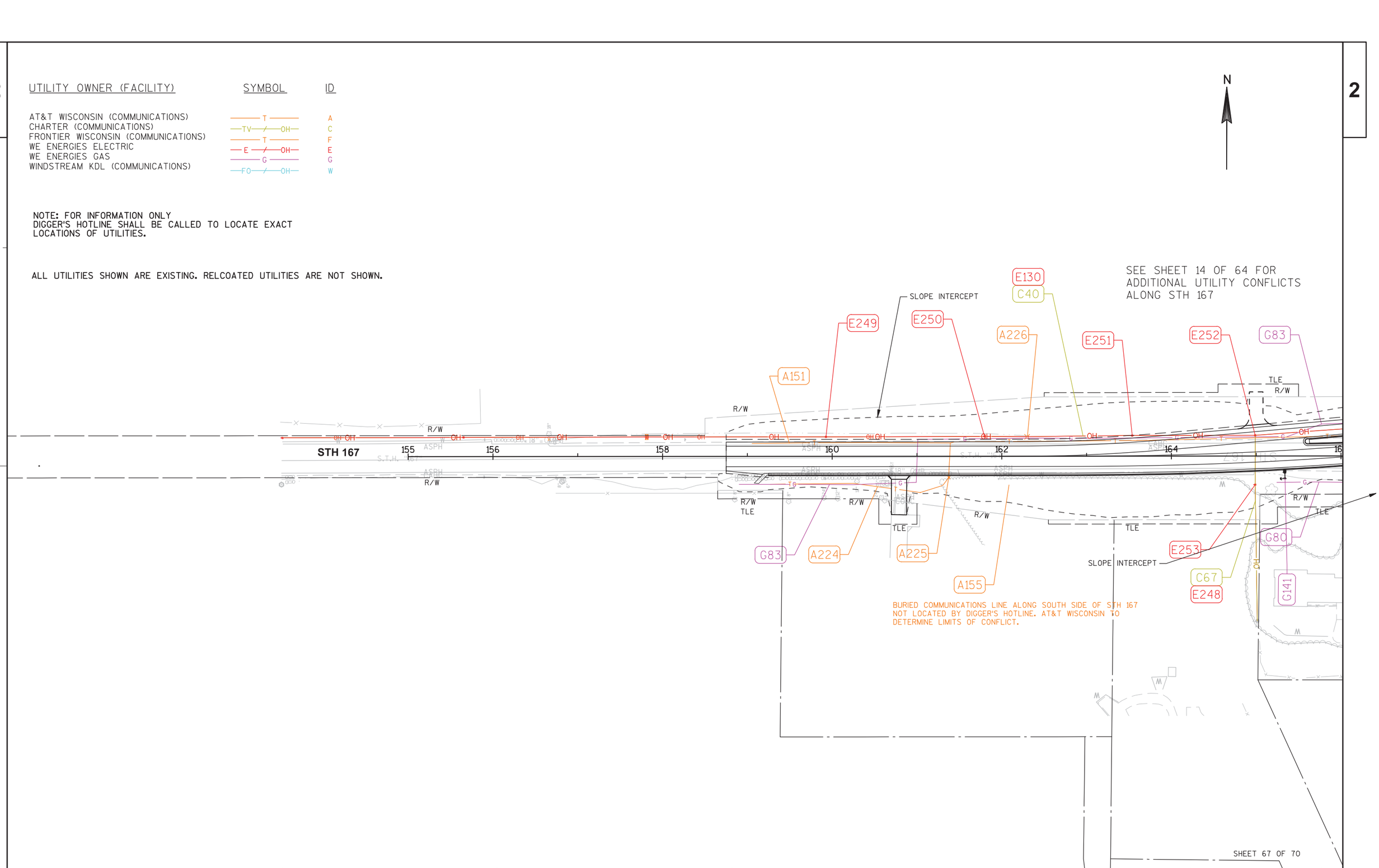
FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	UTILITY DETAIL	SHEET 258	E

2

EXISTING UTILITY FACILITIES							RESOLUTION						
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS						CONFLICT ANTICIPATED (YES/NO)	RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
67	A151	COMMUNICATION LINE	UG	159+05 - 170+74	15' LT - 131' LT	GRADING	YES	158+51-171+05 / 25'-127' LT / OH	---	YES	NO	YES	180	STATIONING ALONG STH 167 R/L ON WE ENERGIES POLES
67	A155	COMMUNICATION LINE	UG	158+75 - 169+19	RT	GRADING	YES	158+51-171+05 / 25'-127' LT / OH	---	YES	NO	YES	180	NOT LOCATED BY DIGGER'S HOTLINE STATIONING ALONG STH 167 R/L ON WE ENERGIES POLES
67	A224	COMMUNICATION LINE	UG	159+27 - 161+39	16' LT - 33' RT	GRADING	YES	158+51-171+05 / 25'-127' LT / OH	---	YES	NO	YES	180	STATIONING ALONG STH 167 R/L ON WE ENERGIES POLES
67	A225	PEDESTAL	UG	161+38	25' RT	GRADING	YES	158+51-171+05 / 25'-127' LT / OH	---	YES	NO	YES	180	STATIONING ALONG STH 167 R/L ON WE ENERGIES POLES
67	A226	PEDESTAL	UG	162+30	23' LT	GRADING	YES	158+51-171+05 / 25'-127' LT / OH	---	YES	NO	YES	180	NOT LOCATED BY DIGGER'S HOTLINE STATIONING ALONG STH 167 R/L ON WE ENERGIES POLES
67	C40	COMMUNICATIONS LINE	OH	158+75 - 179+79 STH 167	23' LT - 119' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
67	C67	COMMUNICATIONS LINE	OH	164+99 STH 167	25' LT - 61' RT	GRADING	YES	164+65-164+98 / 63' LT-62' RT / OH	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
67	E130	ELECTRIC LINE	OH	158+75 - 179+79 STH 167	23' LT - 119' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	90	---
67	E248	ELECTRIC LINE	OH	164+99 STH 167	25' LT- 61' RT	GRADING	YES	164+65-164+98 / 63' LT-62' RT / OH	---	NO	NO	YES	120	---
67	E249	POWER POLE	OH	159+93 STH 167	23' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	90	---
67	E250	POWER POLE	OH	161+80 STH 167	23' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	90	---
67	E251	POWER POLE	OH	163+54 STH 167	24' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	90	---
67	E252	POWER POLE	OH	164+99 STH 167	25' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	90	---
67	E253	POWER POLE	OH	164+99 STH 167	34' RT	GRADING	YES	164+98 / 62' RT / OH	---	NO	NO	YES	90	---
67	G80	GAS MAIN	UG	165+24 - 169+34 STH 167	31' RT - 38' RT	GRADING	YES	158+72 - 168+66 / 38' RT - 73' RT STH 167	---	YES	NO	NO	120	---
67	G83	GAS MAIN	UG	158+76 - 169+30 STH 167	50' LT - 33' RT	GRADING	YES	158+72 - 168+66 / 38' RT - 73' RT STH 167	---	YES	NO	NO	120	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

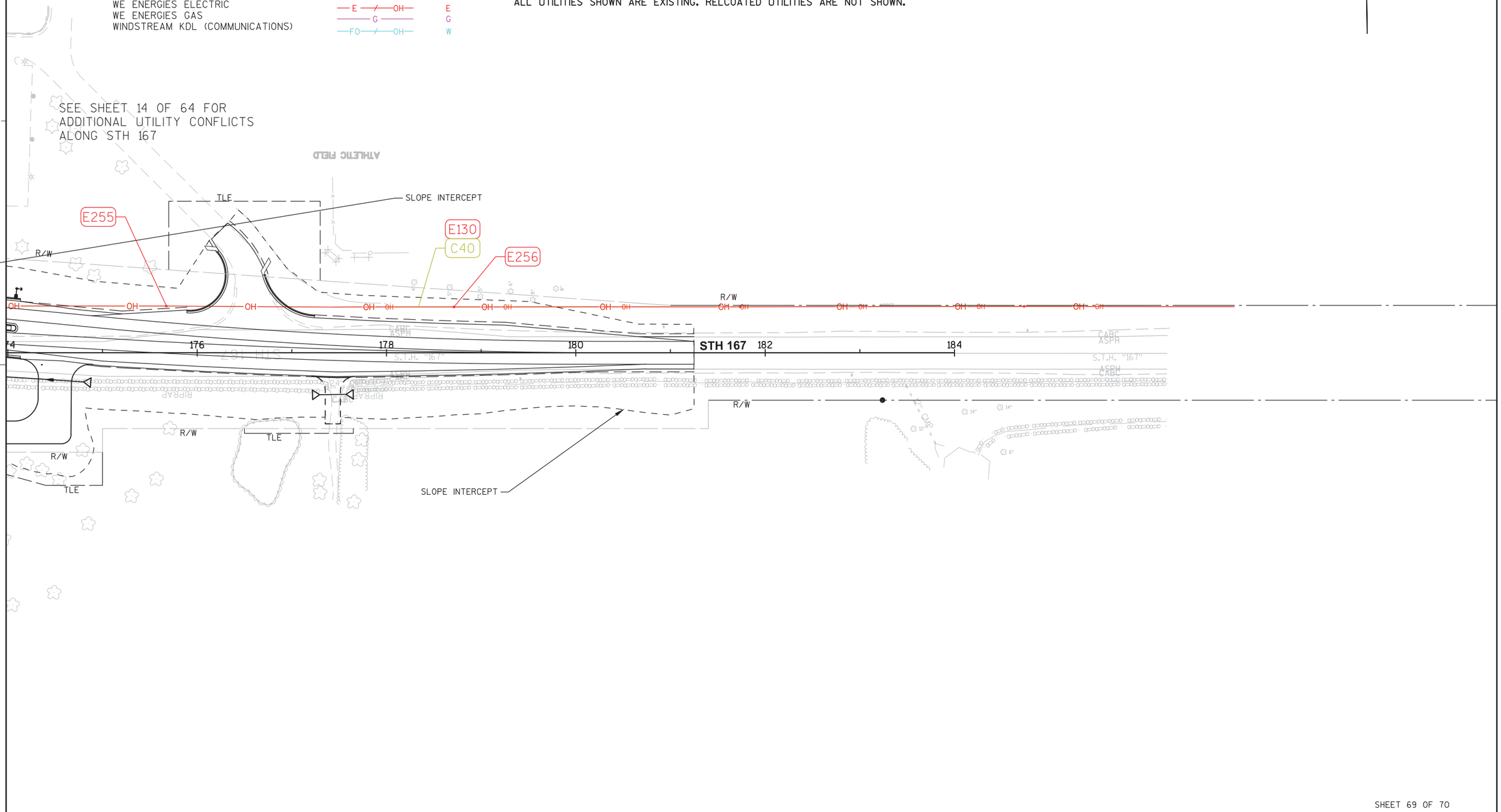
UTILITY OWNER (FACILITY)	SYMBOL	ID
AT&T WISCONSIN (COMMUNICATIONS)	T	A
CHARTER (COMMUNICATIONS)	TV / OH	C
FRONTIER WISCONSIN (COMMUNICATIONS)	T	F
WE ENERGIES ELECTRIC	E / OH	E
WE ENERGIES GAS	G	G
WINDSTREAM KDL (COMMUNICATIONS)	FO / OH	W

NOTE: FOR INFORMATION ONLY
DIGGER'S HOTLINE SHALL BE CALLED TO LOCATE EXACT LOCATIONS OF UTILITIES.

ALL UTILITIES SHOWN ARE EXISTING. RELCOATED UTILITIES ARE NOT SHOWN.

N

SEE SHEET 14 OF 64 FOR
ADDITIONAL UTILITY CONFLICTS
ALONG STH 167



2

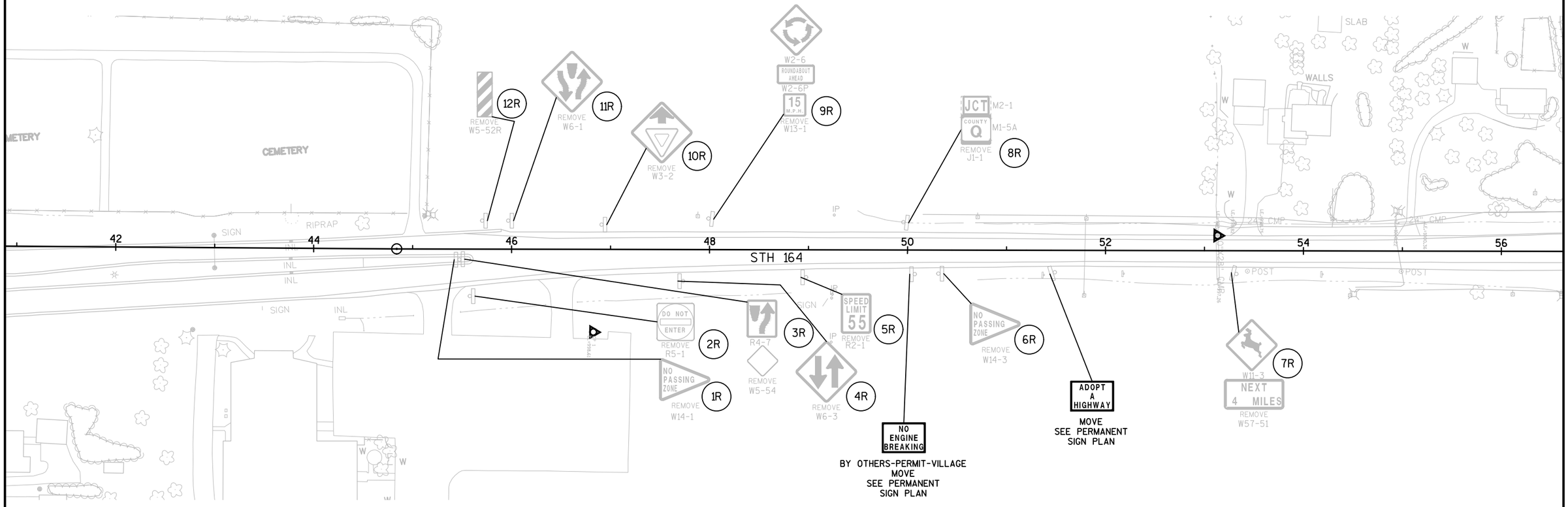
EXISTING UTILITY FACILITIES							CONFLICT ANTICIPATED (YES/NO)	RESOLUTION						
UTILITY DETAIL SHEET	POTENTIAL UTILITY CONFLICTS							RELOCATION		DISCONTINUTED		COORDINATE WITH OTHER UTILITIES (YES/NO)	WORKING DAYS TO PERFORM	ADDITIONAL INFORMATION
	CONFLICT ID	FACILITY TYPE	LOCATION	EXISTING FACILITIES (STA)	OFFSET (LT/RT)	IN CONFLICT WITH:		PRIOR TO CONSTRUCTION (STA/OFFSET)	DURING CONSTRUCTION (STA/OFFSET)	IN-PLACE (YES/NO)	HAZ MAT (YES/NO)			
69	C40	COMMUNICATIONS LINE	OH	158+75 - 179+79 STH 167	23' LT - 119' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	120	EXISTING/PROPOSED ON WE ENERGIES POLES
69	E130	ELECTRIC LINE	OH	158+75 - 179+79 STH 167	23' LT - 119' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	90	---
69	E255	POWER POLE	OH	175+68 STH 167	49' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	90	---
69	E256	POWER POLE	OH	178+71 STH 167	49' LT	GRADING	YES	158+51-181+74 / 127' LT-25' LT / OH STH 167	---	NO	NO	YES	90	---

FOR INFORMATION ONLY
CONTACT DIGGER'S HOTLINE FOR ACTUAL UTILITY LOCATIONS

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE COUNTY SIGN SHOP. CONTACT DENNIS NEWTON, 414-266-1165 FOR DISTRIBUTION COUNTY LOCATION.

SIGNS SHALL BE CAREFULLY REMOVED FROM SIGN SUPPORTS. THE SIGNS SHALL BE PALLETIZED FOR HANDLING WITH A FORKLIFT (SEE STANDARD SPEC 638.3.4). THE REGIONAL SIGN SHOP (414-266-1165) SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS.

WHEN AN EXISTING STOP SIGN SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED, THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POST SIZES, FOR TYPE II SIGNS ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

STREET NAME SIGNS ARE PROPERTY OF THE MUNICIPALITY (CITY, VILLAGE OR TOWN). THE MUNICIPALITY SHALL BE CONTACTED TO REMOVE THEIR STREET NAME SIGNS PRIOR TO CONSTRUCTION AND IT IS THEIR RESPONSIBILITY TO REINSTALL THE OLD SIGNS OR REPLACE THEM FOLLOWING CONSTRUCTION. WISDOT DOES NOT FURNISH OR INSTALL STREET NAME SIGNS. THE STREET NAME SIGNS SHALL NOT BE PLACED ON TOP OF THE STOP SIGNS.

LOCATE NO PASSING PENNANTS BASED ON ESTABLISHING NO PASSING ZONES PAY ITEM. PLACE SIGNS BASED ON WHERE THE PAVEMENT MARKING FOR NO PASSING ZONES BEGIN.

SHEET 1 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 262	E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

13R STOP — REMOVE R1-1 WITH BLINDERS (TURN BLINDERS AND STOP SIGN OVER TO SIGN SHOP)

14R SPEED LIMIT 25 — REMOVE R2-1

15R SPEED LIMIT 55 — REMOVE R2-1

16R — REMOVE W2-2

17R SPEED LIMIT 25 — REMOVE R2-1

SHADY LN STREET NAME SIGN BY OTHER VILLAGE

19R STOP — REMOVE R1-1 ON PRIVATE LIGHT POLE REMOVE BY OTHERS

20R STOP — REMOVE R1-1 WITH BLINDERS (TURN BLINDERS AND STOP SIGN OVER TO SIGN SHOP)

21R 22R — REMOVE S3-1

23R — REMOVE W2-1

SHADY LANE

STH 164

HANSEN DRIVE

UPLAND DRIVE

RIPRAP

RUINS

WELL

WALLS

24" CMP

27" RCP

21" RCP

58 60 62 64 66 68 70

N

SHEET 2 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 263 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023102_PS

PLOT DATE : 11/17/2017 3:21 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

HANSEN DR
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

72 74 76 78 80 82 84 86

STH 164

STOP
REMOVE R1-1
24R

UPLAND DR
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

SPEED LIMIT 55
REMOVE R2-1
25R

NO PASSING ZONE
REMOVE W14-3
26R

YOUR SPEED IS
ELECTRONIC SIGN
SOLAR MOVE
SEE PERMANENT
SIGN PLAN
CONTACT TAPCO
TO MOVE

Monches Rd
REMOVE D1-61
27R

SHEET 3 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 264	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023103_PS

PLOT DATE : 11/17/2017 3:21 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

SPEED LIMIT 55
REMOVE R2-1
31R

STOP
REMOVE R1-1
30R

MONCHES ROAD

RIPRAH

Monches Rd
REMOVE D1-61
29R

SIGN

88 90 92 94 96 98 100 102

STH 164

MH 36" CMP

36" CMP

24" CMP

IP

STOP
REMOVE R1-1
28R

MONCHES RD
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

MONCHES ROAD

SHEET 4 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 265 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023104_PS

PLOT DATE : 11/17/2017 3:21 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

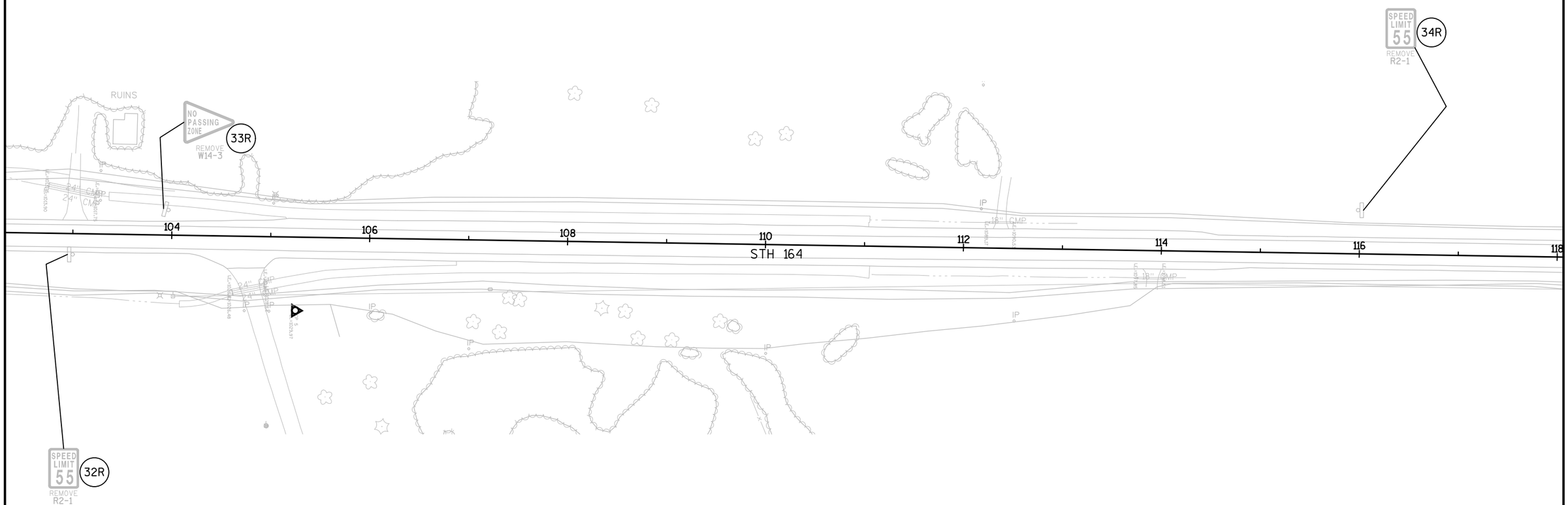
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 5 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 266	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023105_PS

PLOT DATE : 11/17/2017 3:21 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

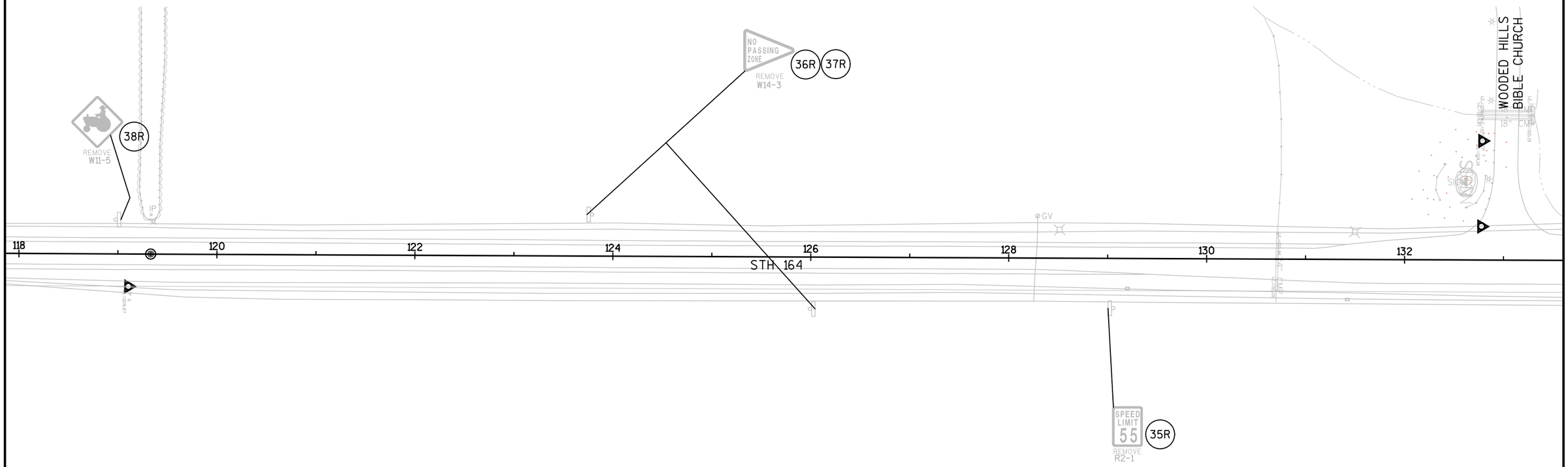
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



2

SHEET 6 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 267	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023106_PS

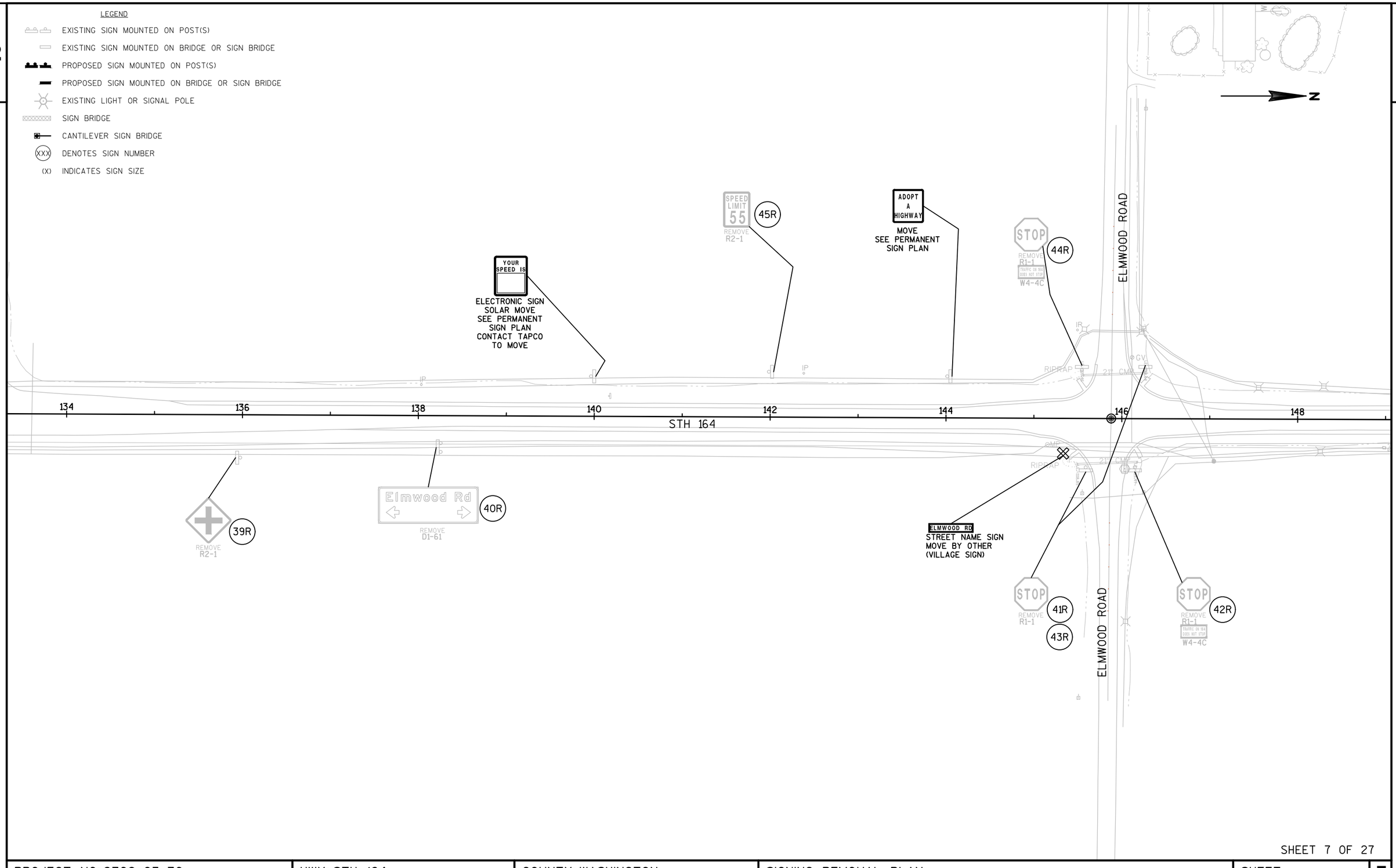
PLOT DATE : 11/17/2017 3:21 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 7 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 268	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023107_PS

PLOT DATE : 11/17/2017 3:22 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

NO PASSING ZONE
REMOVE W14-3
52R

Elmwood Rd
REMOVE D1-61
51R

REMOVE W2-1
50R

STOP
REMOVE R1-1
49R

TUCKAWAY LN
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

TUCKAWAY LANE

SEPV
SEPC
RIPRAP
MH
CMP
IP
GV
18" CMP

150 152 154 156 158 160 162 164

STH 164

SPEED LIMIT 55
REMOVE R2-1
46R

SPEED LIMIT 50
REMOVE W3-5
47R

REMOVE W11-8
48R

2

SHEET 8 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 269	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023108_PS

PLOT DATE : 11/17/2017 3:22 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

SPEED LIMIT 55 REMOVE R2-1 — 56R

55R REMOVE W2-2

166 168 170 STH 164 172 174 176 178

CHEROKEE TRAIL

CHEROKEE TRAIL STREET NAME SIGN MOVE BY OTHER (VILLAGE SIGN)

STOP REMOVE R1-1 — 53R

SPEED LIMIT 50 REMOVE R2-1 — 54R

FLAG

SHEET 9 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 270	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023109_PS

PLOT DATE : 11/17/2017 3:22 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

63R
REMOVE W11-6

62R
SPEED LIMIT 50
REMOVE R2-1

180 182 184 186 188 190 192 194

STH 164

ST. GABRIEL LANE

RIPRAP

SIGN

57R
SPEED LIMIT 50
REMOVE R2-1

ST. GABRIEL LN
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

58R
STOP
REMOVE R1-1

59R 60R
W2-1
40 M.P.H.
REMOVE W13-1

61R
Hubertus Rd
REMOVE D1-61

SHEET 10 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 271 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023110_PS

PLOT DATE : 11/17/2017 3:22 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

HUBERTUS ROAD

STH 164

196 198 200 202 204 206 208 210

SPEED LIMIT 40 — REMOVE R2-1 — PART OF 79R

78R 79R — REMOVE W3-1

STOP — REMOVE R1-1 — 76R

DO NOT ENTER — REMOVE R5-1 — 77R

STOP R1-1 — TRAFFIC ON 164 DOES NOT STOP W4-4C — 75R
BLINKER STOP
MOVE
SEE PERMANENT
SIGN PLAN

STOP — REMOVE R1-1 — 74R

Hubertus Rd — REMOVE D1-61 — 73R

SPEED LIMIT 50 — REMOVE R2-1 — 72R

HUBERTUS RD
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

STOP — REMOVE R1-1 — 64R

SPEED LIMIT 40 — REMOVE R2-1 — 65R

STOP R1-1 — TRAFFIC ON 164 DOES NOT STOP W4-4C — 66R
BLINKER STOP
MOVE
SEE PERMANENT
SIGN PLAN

STOP — REMOVE R1-1 — 67R

DO NOT ENTER — REMOVE R5-1 — 68R

69R 70R — REMOVE W3-1

SPEED LIMIT 50 — REMOVE R2-1 — 71R

NO PASSING ZONE — REMOVE W14-3
PART OF 71R

SHEET 11 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 272 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023111_PS

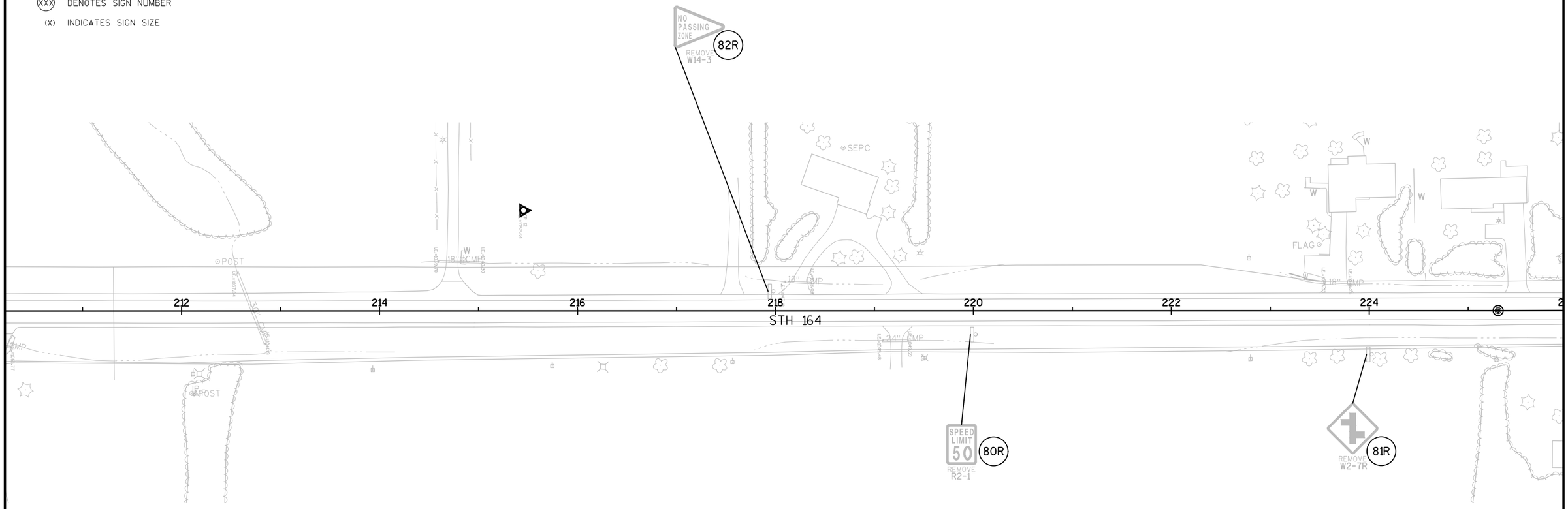
PLOT DATE : 11/17/2017 3:22 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 12 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 273	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023112_PS

PLOT DATE : 11/17/2017 3:22 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

SPEED LIMIT 50 — REMOVE R2-1 — 86R

STOP — REMOVE R1-1 — 85R

LOCKVIEW RD

LOCKVIEW RD
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

226 228 230 232 234 236 238 240

STH 164

GOLDEN DRIVE

GOLDEN DR
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

STOP — REMOVE R1-1 — 83R

JCT 167 — REMOVE J1-1 — 84R

SHEET 13 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 274	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023113_PS

PLOT DATE : 11/17/2017 3:22 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

STH 164

STH 167

ADA'HI COURT

242 244 246 248 250 252 254 256

87R REMOVE W3-1

88R M3-1 M3-4 WEST NORTH EAST M3-2 167 164 167 M1-6 M5-1L M5-1R REMOVE J2-3 M6-1

89R Holy Hill Richfield REMOVE D1-2

90R S1-1 AHEAD FINES HIGHER S16-9P R2-6P REMOVE

91R SOLAR BEACON STOP ALL WAY R1-3P REMOVE ON TYPE I POLE TURN OVER TO SIGN SHOP WISDOT

92R M3-4 WEST EAST M3-2 M1-6 167 167 M6-1 REMOVE J3-2 PART OF SIGN 92R NO PASSING ZONE REMOVE W14-3

93R M3-3 SOUTH NORTH M3-1 M1-6 164 164 M6-1 REMOVE J3-2 PART OF 93R NO PASSING ZONE REMOVE W14-3

94R SOLAR BEACON STOP ALL WAY R1-3P REMOVE ON TYPE I POLE TURN OVER TO SIGN SHOP WISDOT

95R STOP REMOVE R1-1

96R NORTH M3-1 164 M1-6 REMOVE J4-1

97R Richfield Holy Hill REMOVE D1-2

98R SOLAR BEACON STOP ALL WAY R1-3P REMOVE ON TYPE I POLE TURN OVER TO SIGN SHOP WISDOT

99R M3-2 EAST WEST M3-4 M1-6 167 167 M6-1 REMOVE J3-2 PART OF 99R NO PASSING ZONE REMOVE W14-3

100R SOLAR BEACON STOP ALL WAY R1-3P REMOVE ON TYPE I POLE TURN OVER TO SIGN SHOP WISDOT

101R 164 M1-6 M6-4 REMOVE J3-1 NO PASSING ZONE REMOVE W14-3 PART OF 101R

102R STOP REMOVE R1-1

103R SOUTH M3-3 164 M1-6 REMOVE J4-1

104R SPEED LIMIT 50 R2-1 END SCHOOL ZONE S5-2 REMOVE

105R W11-3 NEW ALIGN REMOVE W57-51

106R STOP REMOVE R1-1

107R REMOVE W2-7R

108R SPEED LIMIT 45 R2-1 REMOVE EAST M3-2 167 M1-6 REMOVE J4-1 PART OF 109R

109R 110R REMOVE W3-1

111R M3-4 M3-3 SOUTH WEST NORTH M3-1 M1-6 164 167 164 M5-1L M5-1R REMOVE J2-3 M6-1

112R JCT M2-1 164 M1-6 REMOVE J1-1

113R S1-1 AHEAD FINES HIGHER S16-9P R2-6P REMOVE

116R 117R 119R 118R REMOVE W3-1 JCT M2-1 164 M1-6 REMOVE J1-1

120R S1-1 AHEAD FINES HIGHER S16-9P R2-6P REMOVE PART OF 119R

115R RIDESHARE INFO CALL 1-800-455-POOL REMOVE D12-2

114R SPEED LIMIT 45 R2-1 END SCHOOL ZONE S5-2 REMOVE

ADOPT A HIGHWAY MOVE SEE PERMANENT SIGN PLAN

WEST M3-4 167 M1-6 REMOVE J4-1 PART OF 118R

ADOPT A HIGHWAY MOVE SEE PERMANENT SIGN PLAN

SHEET 14 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 275	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023114_PS

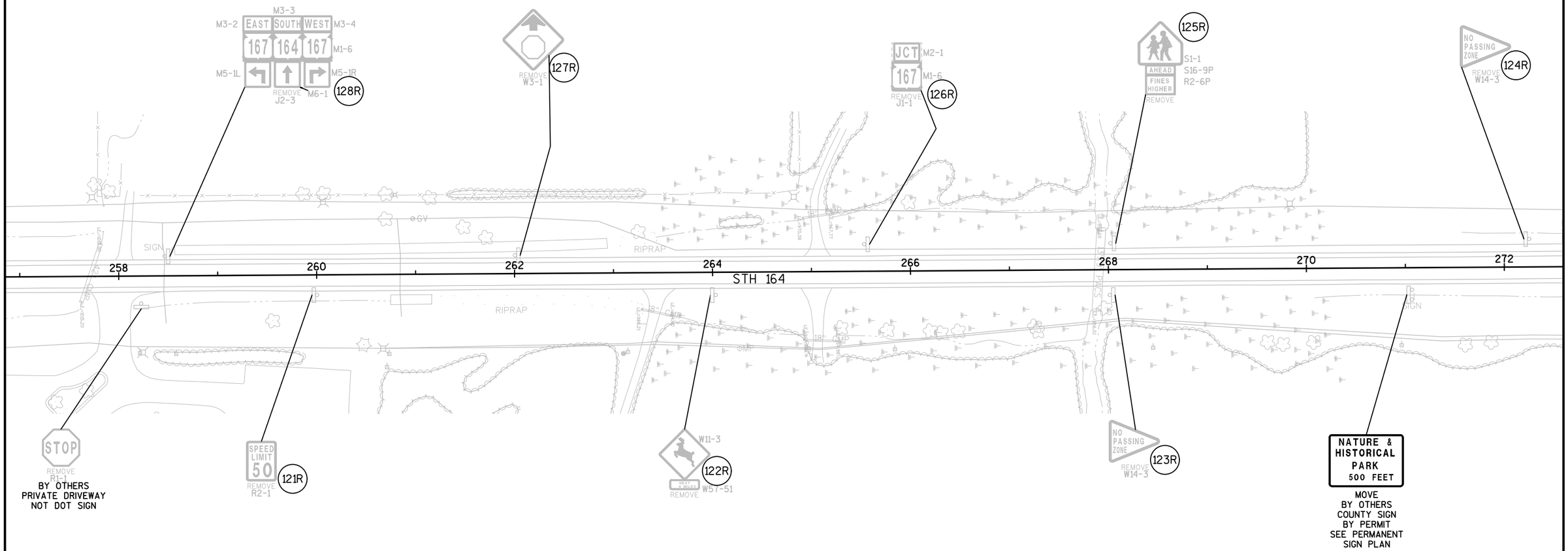
PLOT DATE : 11/17/2017 3:23 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 15 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 276	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023115_PS

PLOT DATE : 11/17/2017 3:23 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

GREYSTONE DRIVE

SPEED LIMIT 50 REMOVE R2-1 — 131R

STOP REMOVE R1-1 — 130R

GREYSTONE DR
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

NATURE & HISTORICAL PARK
500 FEET
MOVE
BY OTHERS
COUNTY SIGN
BY PERMIT
SEE PERMANENT
SIGN PLAN

274 276 278 280 282 284 286

STH 164

NATURE & HISTORICAL PARK →
MOVE
BY OTHERS
COUNTY SIGN
BY PERMIT
SEE PERMANENT
SIGN PLAN

NATURE & HISTORICAL PARK ←
MOVE
BY OTHERS
COUNTY SIGN
BY PERMIT
SEE PERMANENT
SIGN PLAN

SPEED LIMIT 50 REMOVE R2-1 — 129R

2

SHEET 16 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 277	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023116_PS

PLOT DATE : 11/17/2017 3:23 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

NO PASSING ZONE
REMOVE W14-3
141R

W11-3
REMOVE W57-51
140R

SPEED LIMIT 50
REMOVE R2-1
139R

ADOPT A HIGHWAY
MOVE
SEE PERMANENT SIGN PLAN

NO PARKING
REMOVE R7-1R
138R

288 290 292 294 296 298 300 302

STH 164

SPEED LIMIT 40
REMOVE W3-5
132R

DEAF CHILD AREA
AHEAD
REMOVE W16-9P
133R

SPEED LIMIT 40
REMOVE
YOUR SPEED
134R

REMOVE
ELECTRONIC SIGN
SEE PERMANENT
SIGN PLAN

135R

MOVE
SOLAR BEACON
SEE PERMANENT
SIGN PLAN
(TAPCO)

Pleasant Hill Rd
REMOVE D1-61
136R

NO PARKING
REMOVE R7-1L
137R

SHEET 17 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 278	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023117_PS

PLOT DATE : 11/17/2017 3:23 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

PLEASANT HILL ROAD

MAJESTIC DRIVE

PLEASANT HILL RD
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

152R
NO PARKING ANY TIME
REMOVE R7-1L

Pleasant Hill Rd
REMOVE D1-61
151R

SOLAR BEACON
150R
W2-1
MOVE
POLE AND BEACON
SEE PERMANENT
SIGN PLAN

SPEED LIMIT 40
REMOVE
YOUR SPEED
149R
MOVE
ELECTRONIC SIGN
SEE PERMANENT
SIGN PLAN
TAPCO

STOP
148R
REMOVE R1-1

MAJESTIC DR
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

304 306 308 310 312 314 316 318

STH 164

142R
STOP
REMOVE R1-1

143R 144R
STOP
REMOVE R1-1
BEACON HARD
WIRED SEE
ELECTRICAL
PLAN FOR
REMOVAL

CROSS TRAFFIC
DOES NOT STOP
PART OF 143R &
144R REMOVAL

ADOPT A HIGHWAY
MOVE
SEE PERMANENT
SIGN PLAN

SPEED LIMIT 55
145R
REMOVE R2-1

NO PASSING ZONE
146R
REMOVE W14-3

SPEED LIMIT 40
147R
REMOVE W3-5

SHEET 18 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 279	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023118_PS

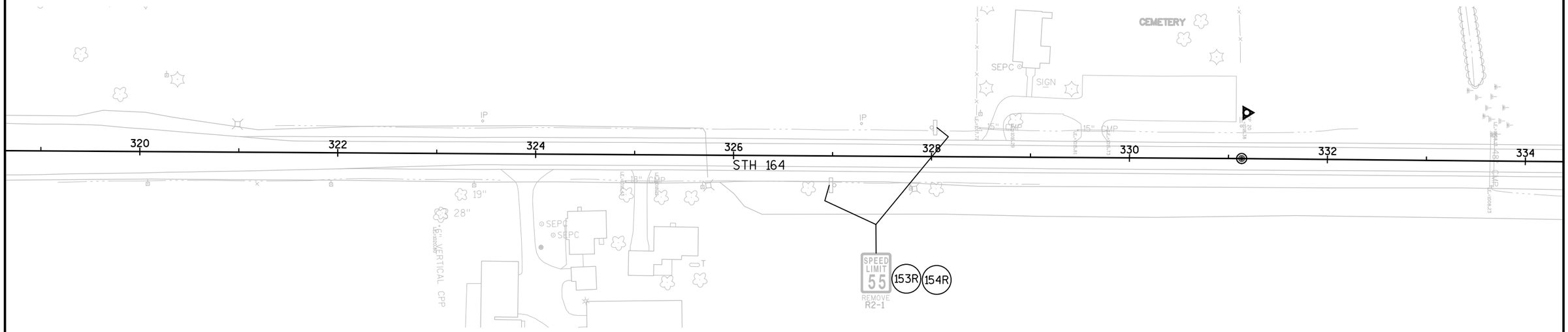
PLOT DATE : 1/12/2018 11:57 AM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 19 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 280	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023119_PS

PLOT DATE : 11/17/2017 3:23 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

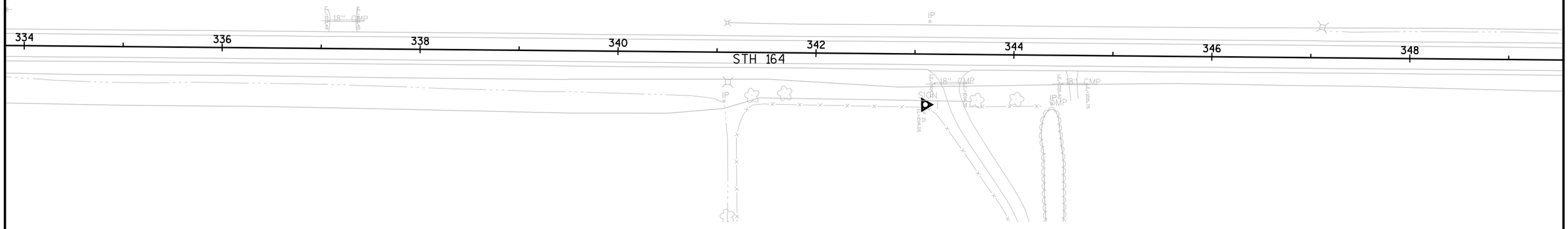
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

NO SIGNS ON THIS SHEET



SHEET 20 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 281	E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

PIONEER ROAD

STH 164

350 352 354 356 358 360 362 364

SPEED LIMIT 55
REMOVE R2-1
161R

RICHFIELD
POPULATION 11,385
REMOVE I2-3
160R

NO ENGINE BREAKING
MOVE PERMIT BY OTHERS VILLAGE

RIPRAP

21"X25" CMP

RIPRAP

Pioneer Rd
REMOVE D1-61
156R

155R
REMOVE W2-1

PIONEER RD
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

PIONEER ROAD

STOP
REMOVE R1-1
157R 158R

SPEED LIMIT 55
REMOVE R2-1
159R

RUINS

SHEET 21 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 282 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023121_PS

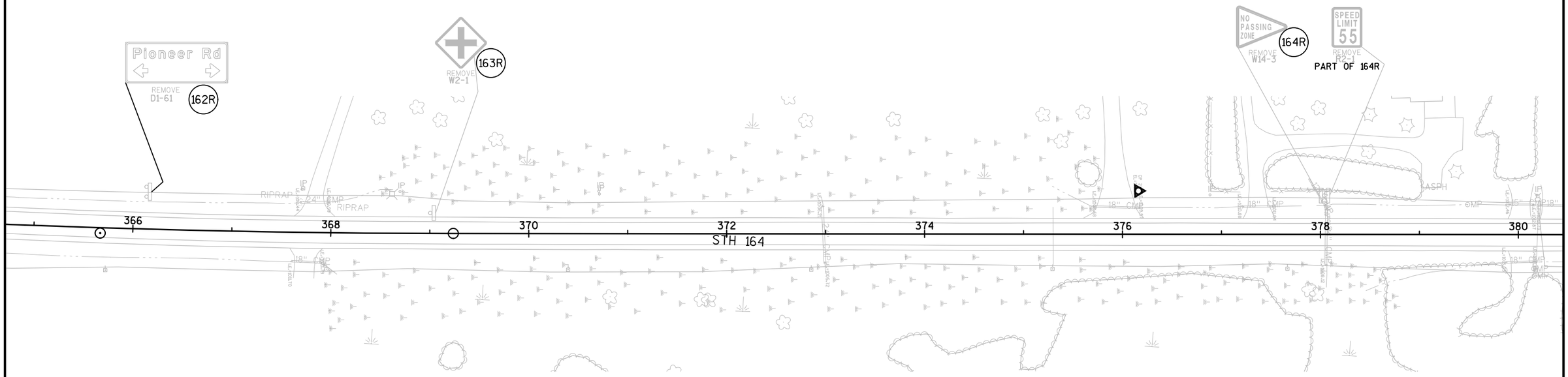
PLOT DATE : 11/17/2017 3:24 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 22 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 283	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023122_PS

PLOT DATE : 11/17/2017 3:24 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

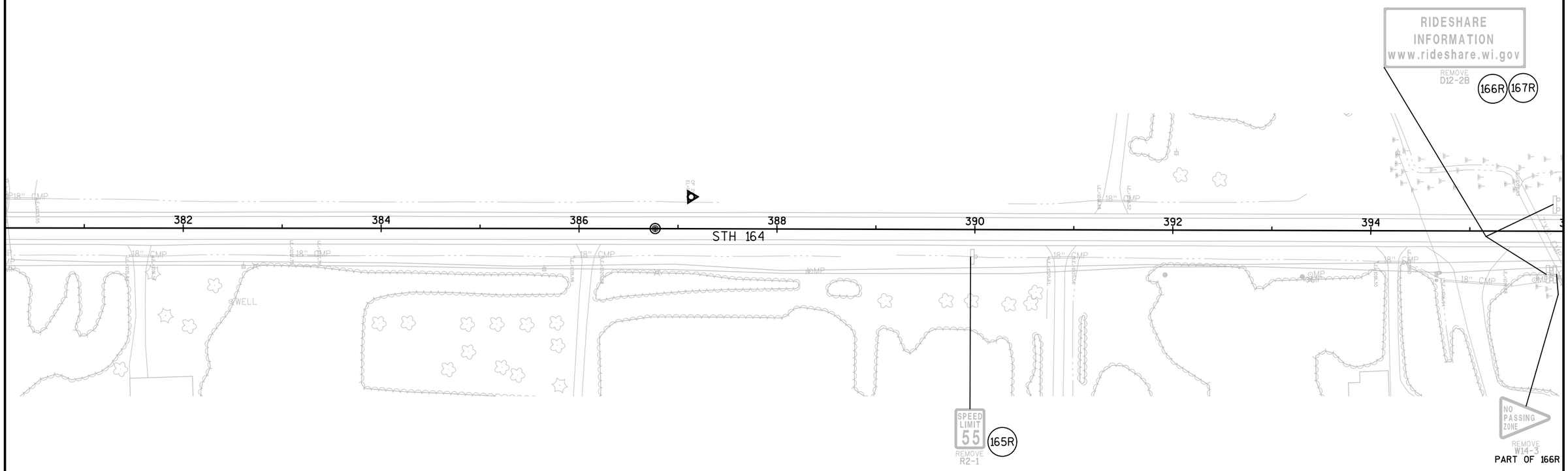
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 23 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 284	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023123_PS

PLOT DATE : 11/17/2017 3:24 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

NO PASSING ZONE
REMOVE R2-1
PART OF SIGN 170R

SPEED LIMIT 55
REMOVE R2-1
170R

ADOPT A HIGHWAY
MOVE
SEE PERMANENT SIGN PLAN

396 398 400 402 404 406 408 410

STH 164

JCT
COUNTY E
168R
REMOVE J1-1

Heritage Trails County Park

SIGN BY OTHERS
PERMIT TO COUNTY
MOVE BY COUNTY
SEE PERMANENT
SIGN PLAN FOR
LOCATION

COUNTY E
169R
REMOVE J2-1

1 MILE FAITH
UCC CHURCH

FINGERBOARD BY OTHERS
PERMIT TO CHURCH
THEY HAVE TO MOVE
PER WHERE SHOWN ON
FINAL SIGN PLAN

SHEET 24 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 285 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023124_PS

PLOT DATE : 11/17/2017 3:24 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

CTH E

STH 164

CLUB DRIVE

412 414 416 418 420 422 424 426

164 REMOVE J3-1 180R

STOP REMOVE R1-1 179R

178R

COUNTY E REMOVE J3-1 177R

Heritage Trails County Park

SIGN BY OTHERS
PERMIT TO COUNTY
MOVE BY COUNTY
SEE PERMANENT SIGN PLAN FOR LOCATION

1 MILE FAITH UCC CHURCH

FINGERBOARD BY OTHERS
PERMIT TO CHURCH
THEY HAVE TO MOVE
PER WHERE SHOWN ON
FINAL SIGN PLAN

0.2 SENIC VIEW GOLF CLUB

MOVE BY OTHERS
TODS-PERMIT
GOLF COURSE-
COUNTY

COUNTY E REMOVE J2-1 176R

JCT COUNTY E REMOVE J1-1 175R

COUNTY E REMOVE J3-1 171R

REMOVE W1-7 172R

ADOPT A HIGHWAY
MOVE
SEE PERMANENT SIGN PLAN

SENIC VIEW GOLF CLUB 0.2
MOVE BY OTHERS
TODS-PERMIT
GOLF COURSE-
COUNTY

SPEED LIMIT 55 REMOVE R2-1 173R

STOP REMOVE R1-1 174R

CLUB DRIVE
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 25 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 286 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023125_PS

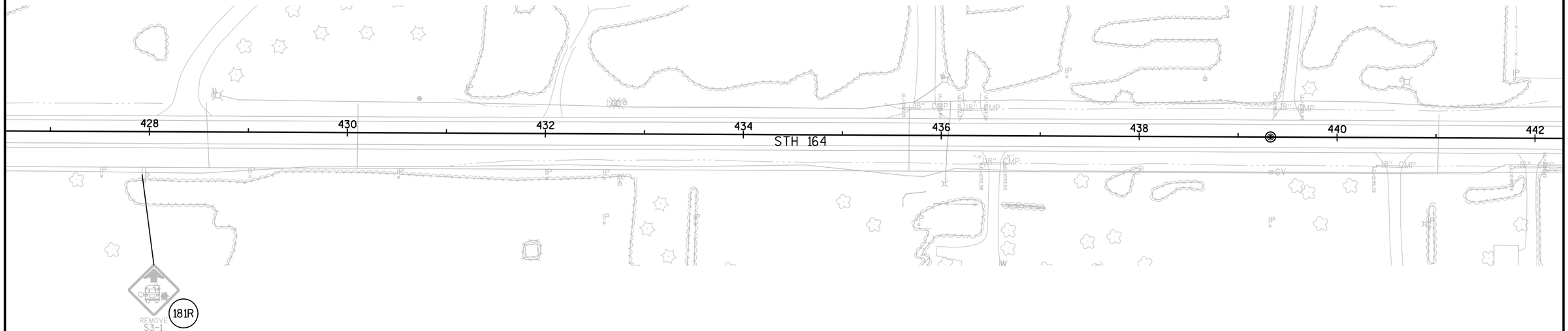
PLOT DATE : 11/17/2017 3:24 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



2

SHEET 26 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 287	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023126_PS

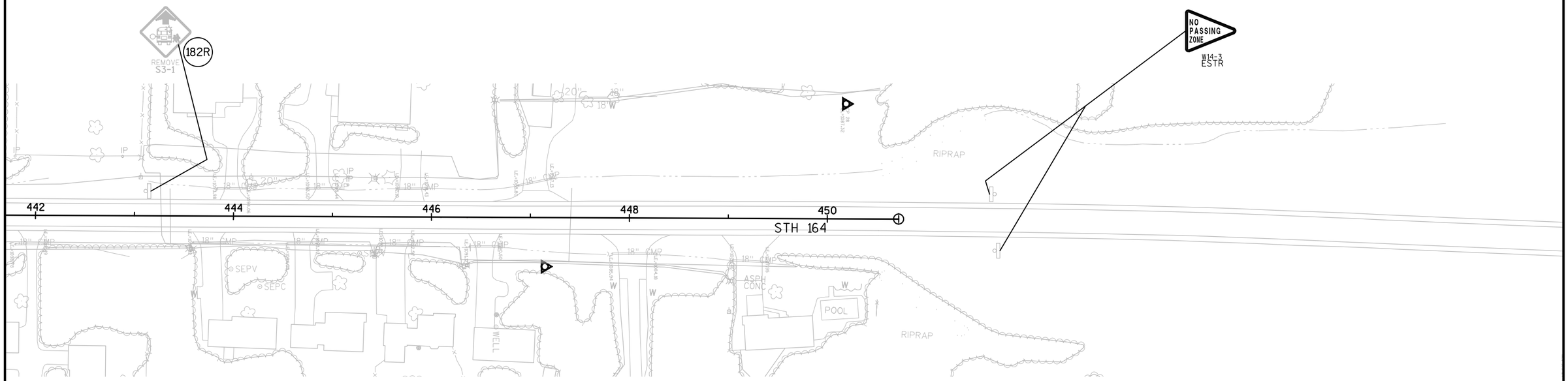
PLOT DATE : 11/17/2017 3:24 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 27 OF 27

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 288 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023101_PS.DWG
LAYOUT NAME - 023127_PS

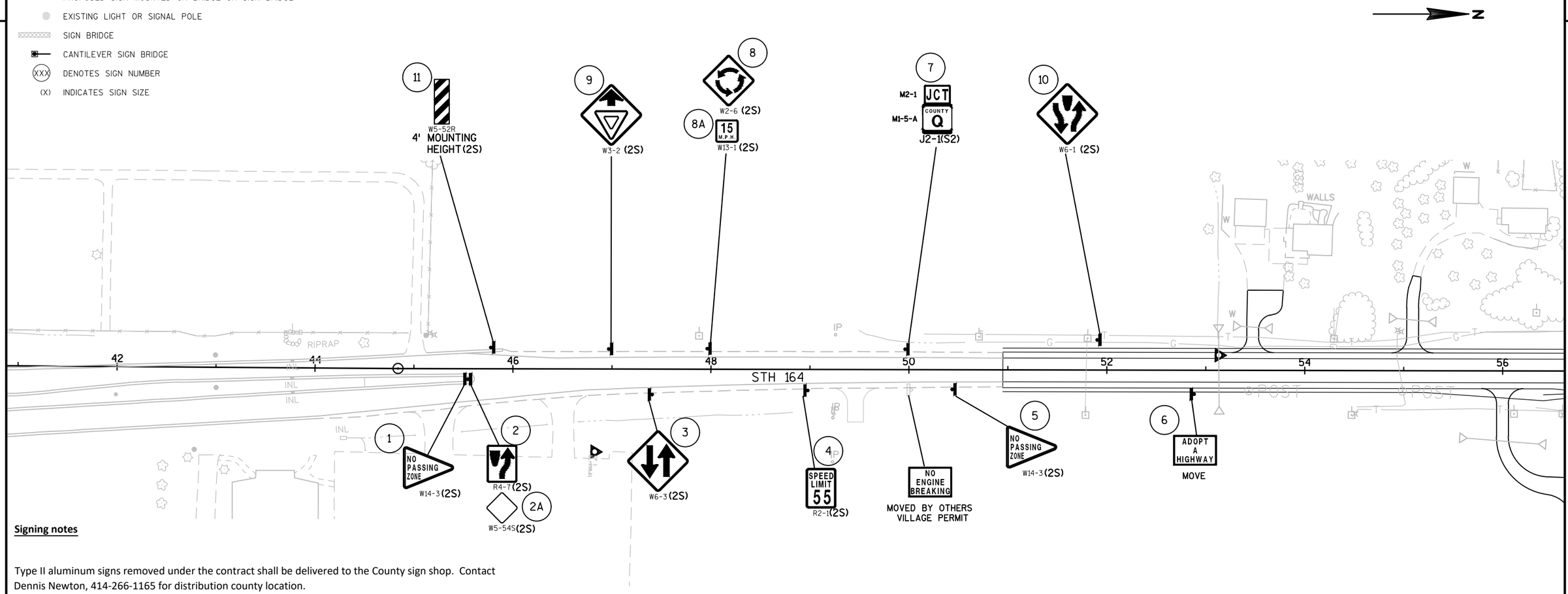
PLOT DATE : 11/17/2017 3:25 PM PLOT BY : MANYEN, WAYNE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



Signing notes

Type II aluminum signs removed under the contract shall be delivered to the County sign shop. Contact Dennis Newton, 414-266-1165 for distribution county location.

Signs shall be carefully removed from sign supports. The signs shall be palletized for handling with a forklift (see special provision 638.3.4). The Regional sign shop (414-266-1165) shall be notified three working days prior to delivery of the signs.

When an existing stop sign support is to be removed and a new stop sign and support erected, the work shall be done concurrently. For other signs and supports that are to be removed and new signs and supports erected, the removal of the existing sign/support and erection of the new sign/support should be done as concurrently as possible. In no case shall a new sign/support be down for more than 24 hours and there shall not be more than one sign of the same legend missing in a row.

Wood posts sizes, for type ii signs are estimated lengths and the actual length will be determined in the field.

Street name signs are property of the municipality (city, village or town). The municipality shall be contacted to remove their street name signs prior to construction and it is their responsibility to reinstall the old signs or replace them following construction. WisDOT does not furnish or install street name signs. The street name signs shall not be placed on top of the STOP signs.

Locate no passing pennants based on establishing no passing zones pay item. Place signs based on where the pavement marking for no passing zones begin.

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

22 W1-6 (2S)

21 W1-1L (2S)

19 DEAD END W14-1 (2S)

18 W1-7 (2S)

20 SPEED LIMIT 25 R2-1 (2S)

24 SPEED LIMIT 25 R2-1 (2S)

25 26 27 W5-56 (2S) 4' MOUNTING HEIGHT

23 SPEED LIMIT 55 R2-1 (2S)

16 STOP R1-1 (2S)

17 STOP R1-1 (2S) PRIVATE LIGHT POLE REMOVE BY OTHERS

HANSEN DR VILLAGE STREET NAME SIGN MOVED BY OTHERS

HANSEN DRIVE

SHADY LANE

STH 164

12 W2-1 (2S)

13 14 S3-1 (2S)

15 Hansen Dr / Upland Dr D1-2

UPLAND DRIVE

RUINS

SHEET 2 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 290	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023202_PS

PLOT DATE : 1/24/2018 1:44 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

33
Upland Dr
Hansen Dr
D1-2

STH 164

28 STOP R1-1 (2S)
UPLAND DR
MOVE BY OTHERS VILLAGE SIGN

29 SPEED LIMIT 55 R2-1 (2S)

30 NO PASSING ZONE W14-3 (2S)

31 YOUR SPEED IS
SOLAR ELECTRONIC SIGN MOVE
SEE MISC. QTYS ON TYPE I SIGNAL POLE & BASE
CONTACT TAPCO

32
Monches Rd
D1-61 (2S)

SHEET 3 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 291 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023203_PS
PLOT DATE : 1/24/2018 1:44 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME :
PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

MONCHES ROAD

36 STOP R1-1(S2)

37 SPEED LIMIT 55 R2-1(S2)

35 Monches Rd D1-61(2S)

RIPRAP

RUINS

STH 164

88 90 92 94 96 98 100 102

MONCHES RD
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

34 STOP R1-1(S2)

MONCHES ROAD

SHEET 4 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 292	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023204_PS

PLOT DATE : 1/24/2018 1:44 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

39
NO PASSING ZONE
W14-3 (2S)

40
SPEED LIMIT 55
R2-1 (2S)

38
SPEED LIMIT 55
R2-1 (2S)

RUINS

104 106 108 110 112 114 116 118

STH 164

SHEET 5 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 293	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023205_PS

PLOT DATE : 1/24/2018 1:44 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

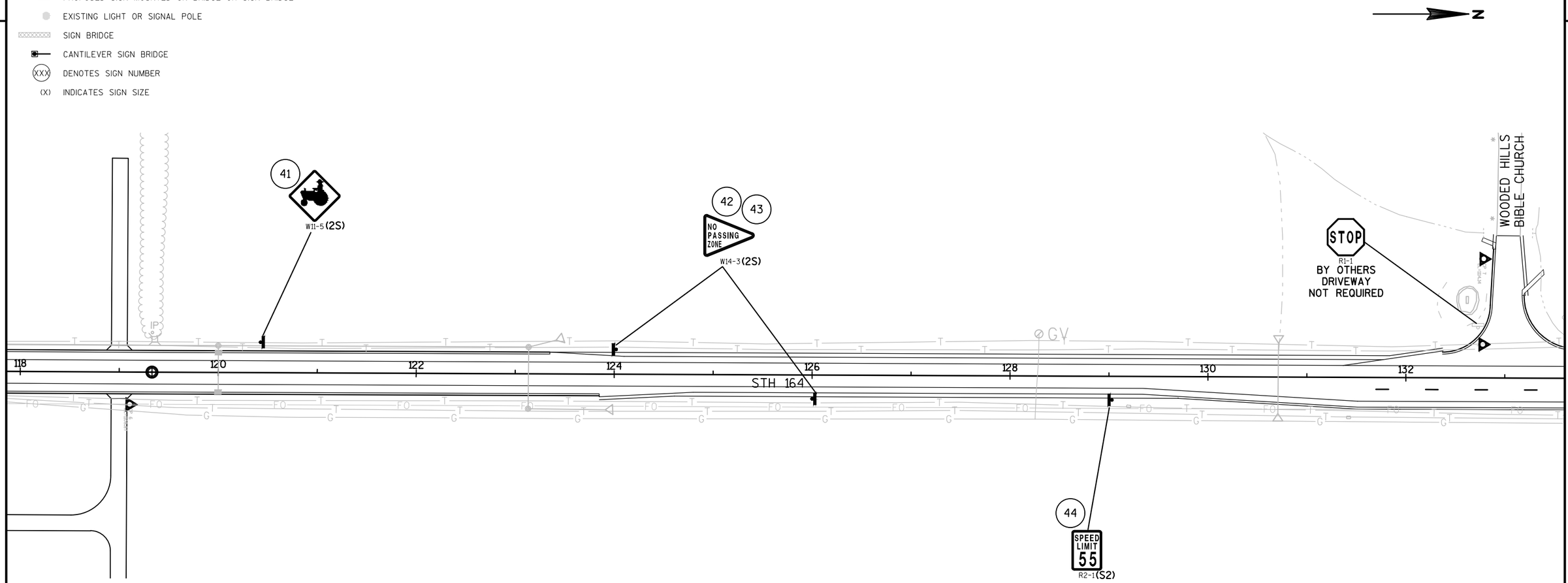
EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

CANTILEVER SIGN BRIDGE

XXX DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE



SHEET 6 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 294	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023206_PS

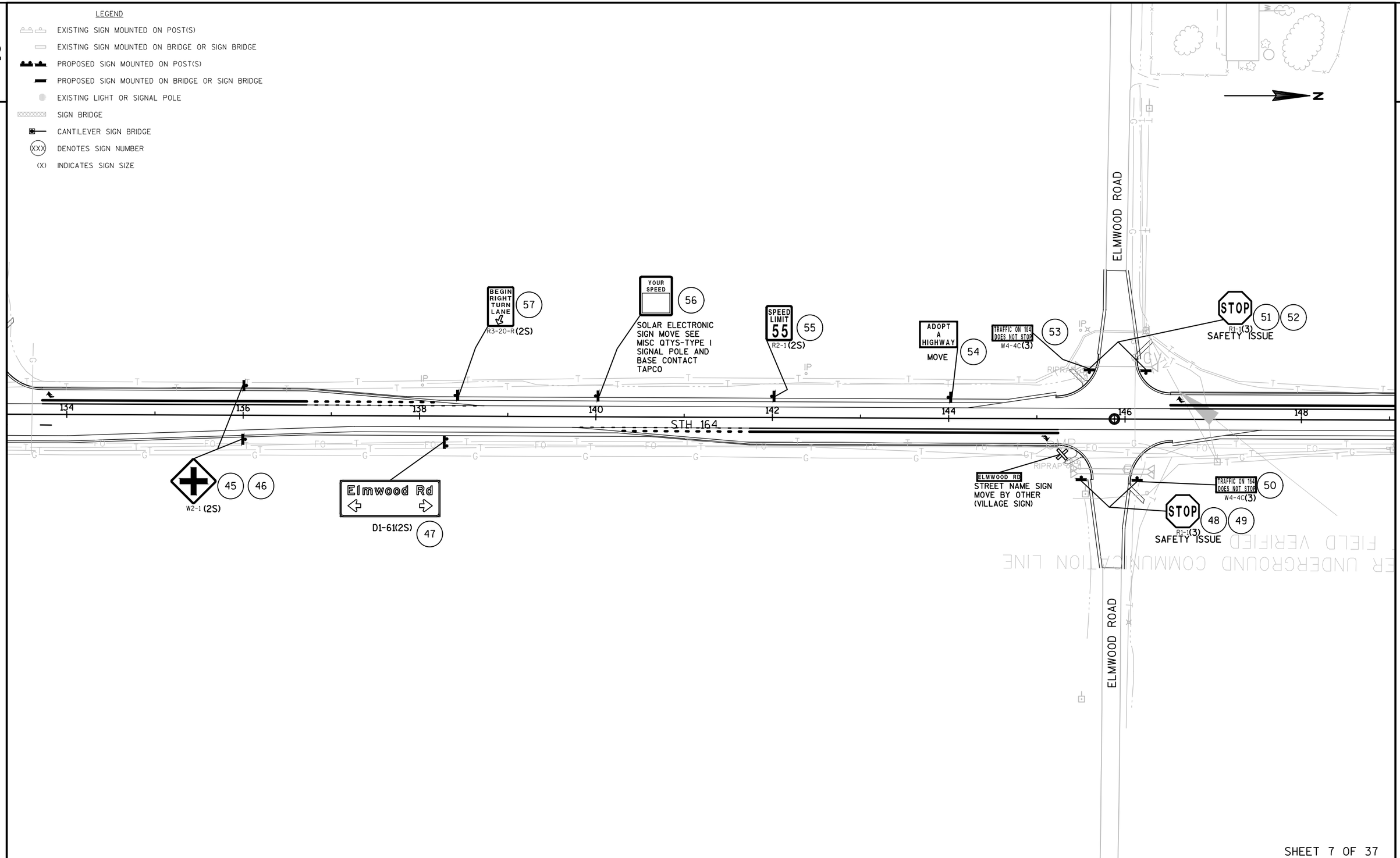
PLOT DATE : 1/24/2018 1:44 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 7 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 295	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023207_PS

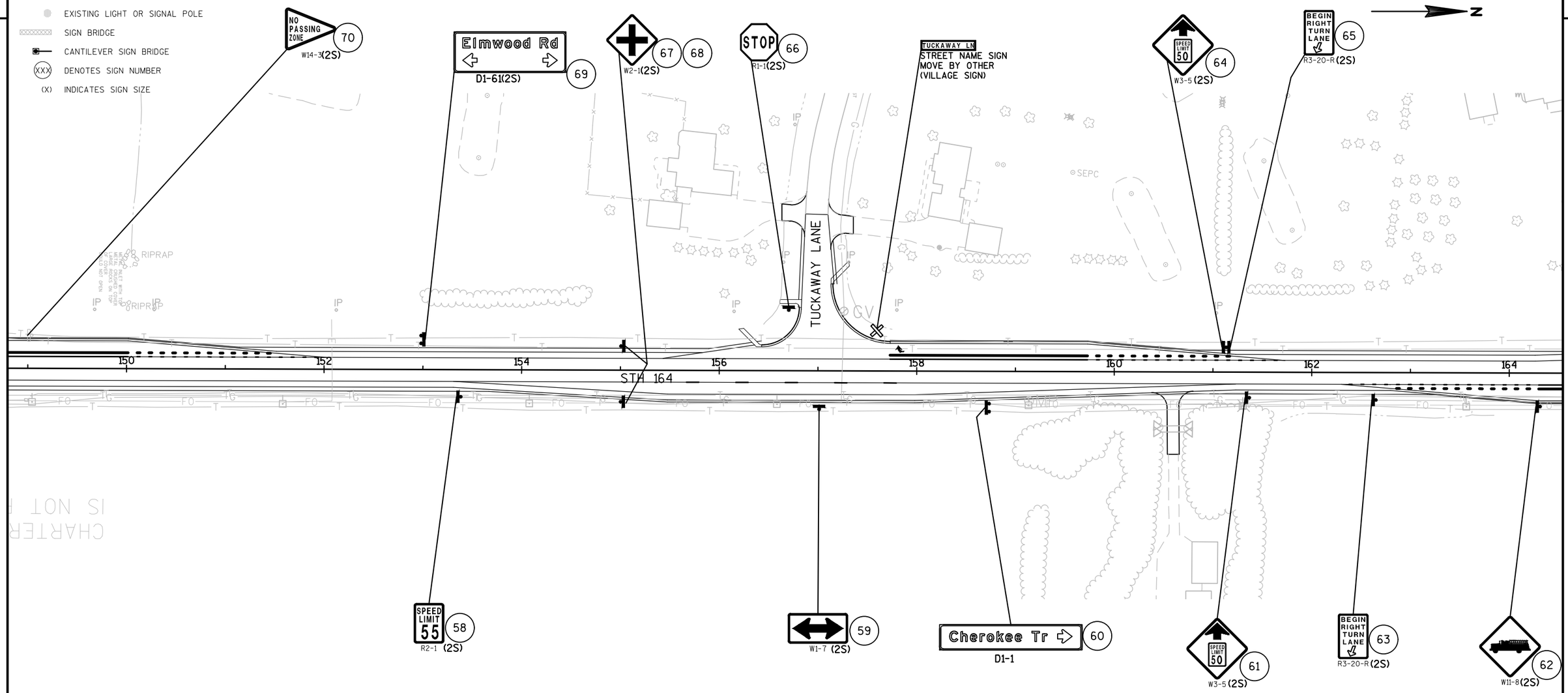
PLOT DATE : 1/24/2018 1:45 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



2

SHEET 8 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 296	E

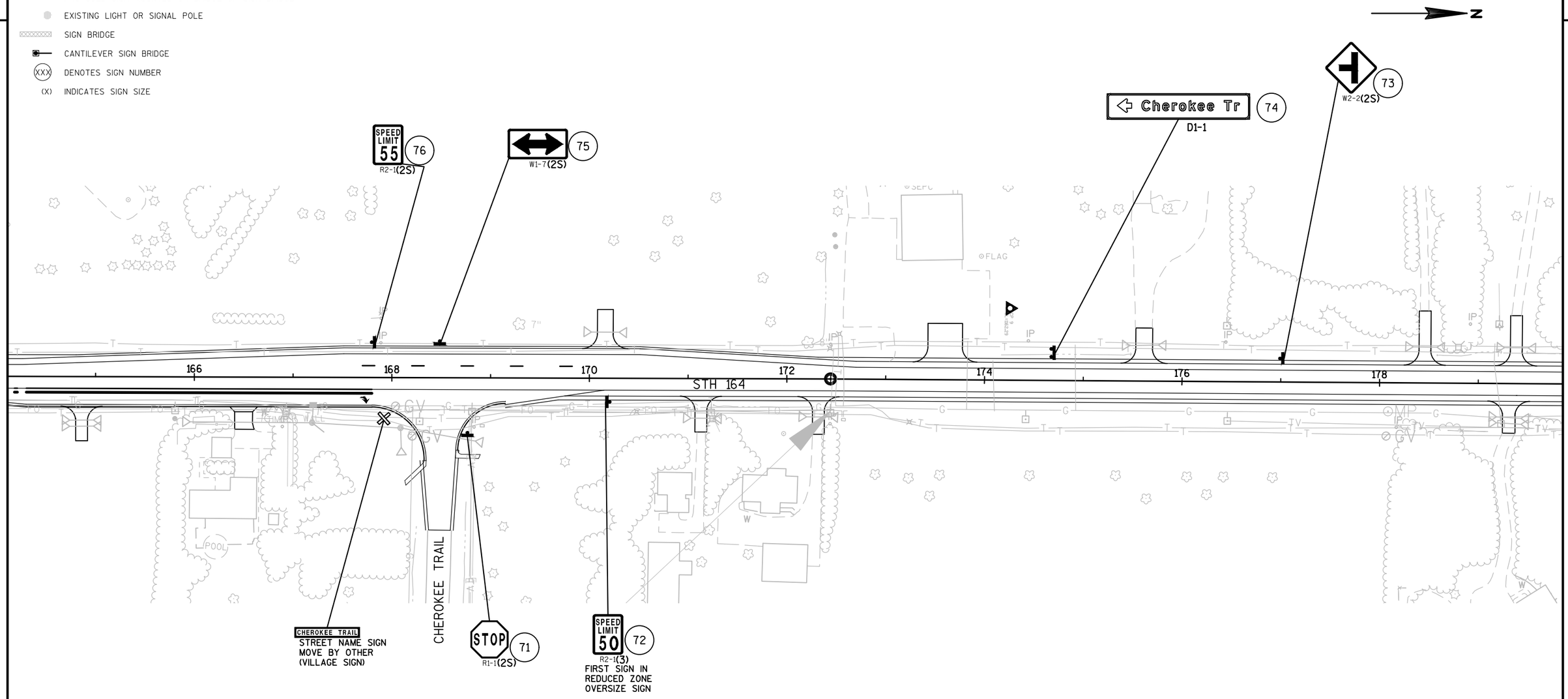
FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023208_PS

PLOT DATE : 1/24/2018 1:45 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 9 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 297 E

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

84 W11-8(2S)

83 W1-7(2S)

SPEED LIMIT 50 82 R2-1(2S)

180 182 184 186 188 190 192 194

STH 164

GUY

RIPRAP

CONC

ST. GABRIEL LANE

SPEED LIMIT 50 77 R2-1(2S)

BEGIN RIGHT TURN LANE 78 R3-20-R(2S)

ST. GABRIEL LN
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

STOP 79 R1-1(2S)

80 W2-1(2S)

80A 40 M.P.H. W13-1(2S)

Hubertus Rd
D1-61(2S) 81

SHEET 10 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 298	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023210_PS

PLOT DATE : 1/24/2018 1:45 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

HUBERTUS ROAD

STOP 92
R1-1
MOVE BLINKER STOP SIGN
TRAFFIC ON 164 DOES NOT STOP 92A
W4-4C (3)

SEE SHEET 32

STOP 91
R1-1(3)
SAFETY ISSUE

Hubertus Rd 90
D1-61(2S)

SPEED LIMIT 50 89
R2-1(2S)

HUBERTUS RD
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

STOP 85
R1-1(3)
SAFETY ISSUE

SEE SHEET 32

STOP 86
R1-1
MOVE BLINKER STOP SIGN
TRAFFIC ON 164 DOES NOT STOP 86A
W4-4C (3)

SPEED LIMIT 50 87
R2-1(2S)

NO PASSING ZONE 88
W14-3 (2S)

PI: 110+00.00

STH 164

SHEET 11 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 299 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023211_PS

PLOT DATE : 1/24/2018 1:45 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

NO PASSING ZONE 95
W14-3(2S)

SEPC

TIMBER WOLF

212 214 216 218 220 222 224

STH 164

SWAMP ST

SPEED LIMIT 50 93
R2-1(2S)

94
W2-7R(2S)

SHEET 12 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 300	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023212_PS

PLOT DATE : 1/24/2018 1:45 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

SPEED LIMIT 50 (102) R2-1(2S)

(100) W1-7 (2S)

STOP (101) R1-1(2S)

LOCHVIEW DR
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

BEGIN RIGHT TURN LANE (99) R3-20-R(2S)

LOCHVIEW DRIVE

226 228 230 232 234 236 238 240

STH 164

GOLDEN DRIVE

BEGIN RIGHT TURN LANE (96) R3-20-R(2S)

GOLDEN DR
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

STOP (97) R1-1(2S)

(98) W1-7 (2S)

SHEET 13 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 301 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023213_PS

PLOT DATE : 1/24/2018 1:45 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

CANTILEVER SIGN BRIDGE

XXX DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

N

ADA HI CT

STH 164

238

240

242

JCT 167 103 J1-1(2S)

16X16 TEMP FLAGS INCIDENTAL

104 W2-6(2S)

15 M.P.H. 104A W13-1(2S)

SHEET 14 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 302 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023214_PS

PLOT DATE : 1/24/2018 1:45 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

CANTILEVER SIGN BRIDGE

XXX DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

N

114 W6-3 (2S)

DO NOT ENTER 113 R5-1 (2S)

SPEED LIMIT 50 111 R2-1(2S)

112 R3-4(2S)

110 W6-2(2S)

244

246

248

STH 164

164 NORTH
167 WEST Holy Hill Rd
167 EAST Holy Hill Rd
105

D1-62
DIAGRAMATIC
TYPE II SIGN ON
STEEL POSTS

16X16 TEMP FLAGS
INCIDENTAL
106 W3-2

107 R4-7(2S)
107A W5-54 (2S)

108 W6-1(2S)

Holy Hill
Richfield
109 D1-2(2S)

SHEET 15 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 303 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023215_PS

PLOT DATE : 1/24/2018 1:45 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SEE SHEET 34

HOLY HILL RD

163+00

135 W11-2(2S) 135A W16-7L(2S)

16X16 TEMP FLAGS INCIDENTAL
136 R1-2(2S)
ONE WAY 136A R6-2-R(2S) 6' HEIGHT

16X16 TEMP FLAGS INCIDENTAL
146 R1-2(2S)
TO TRAFFIC FROM LEFT 146A R1-54(2S) 6' HEIGHT

134 R1-6(2S) 2' HEIGHT

167 WEST Holy Hill Rd D1-2 133

132 W11-2(2S) 132A W16-7L(2S)

16X16 TEMP FLAGS INCIDENTAL
131 R1-2(2S)
TO TRAFFIC FROM LEFT 131A R1-54(2S) 6' HEIGHT

16X16 TEMP FLAGS INCIDENTAL
129 R1-2(2S)
ONE WAY 129A R6-2-R(2S) 6' HEIGHT

130 W11-2(2S) 130A W16-7L(2S)

SOUTH 164 148 D1-1

147 W11-2(2S) 147A W16-7L(2S)

DO NOT ENTER 149 R5-1(2S)

150 R1-6(2S) 2' HEIGHT

SOUTH 164 152 J4-1(2S)

151 R4-7(2S)

STH 164

250

137 138 139 140
ONE WAY R6-1-R(2S)
B6-4-B(2S)
141 142 143 144

170+00

252 170+00.00

STH 164 254

115 R3-4(2S)

118 W12-1R(2S) 2' HEIGHT

117 W11-2(2S) 117A W16-7L(2S)

16X16 TEMP FLAGS INCIDENTAL
145 R1-2(2S)
ONE WAY 145A R6-2-R(2S) 6' HEIGHT

16X16 TEMP FLAGS INCIDENTAL
119 R1-2(2S)
TO TRAFFIC FROM LEFT 119A R1-54(2S) 6' HEIGHT

116 S1-1(2S) AHEAD S16-9P(2S) 116A
FINES HIGHER R2-6P(2S) 116B

167 EAST Holy Hill Rd D1-2 120

121 W11-2(2S) 121A W16-7L(2S)

122 R1-6(2S) 2' HEIGHT

HOLY HILL RD

171+00

SEE SHEET 35

127 W11-2(2S) 127A W16-7L(2S)

NORTH 164 126 D1-1

153 R1-6(2S) 2' HEIGHT

NORTH 164 128 J4-1(2S)

16X16 TEMP FLAGS INCIDENTAL
125 R1-2(2S)
TO TRAFFIC FROM LEFT 125A R1-54(2S) 6' HEIGHT

16X16 TEMP FLAGS INCIDENTAL
124 R1-2(2S)
ONE WAY 124A R6-2-R(2S) 6' HEIGHT

123 W11-2(2S) 123A W16-7L(2S)

RIPRAP

SHEET 16 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 304 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023216_PS

PLOT DATE : 1/24/2018 1:45 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

Richfield
Holy Hill
164
D1-2(2S)

163
W6-1 (2S)

162
R4-7(2S)

162A
W5-54 (2S)

NO PASSING ZONE
170
W14-3 (2S)

16X16 TEMP FLAGS INCIDENTAL
161
W3-2(2S)

164 SOUTH
167 EAST
167 WEST
Holy Hill Rd
Holy Hill Rd
160
D1-62
DIAGRAMATIC
TYPE II SIGN ON
STEEL POSTS

STH 164

256
258
260

RIPRAP
RIPRAP
RIPRAP

BEGIN RIGHT TURN LANE
154
R3-20-R(2S)

155
R3-4(2S)

156
W6-2(2S)

DO NOT ENTER
157
R5-1(2S)

STOP
158
R1-1(2S)

SPEED LIMIT 50
159
R2-1(2S)

SHEET 17 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 305 E

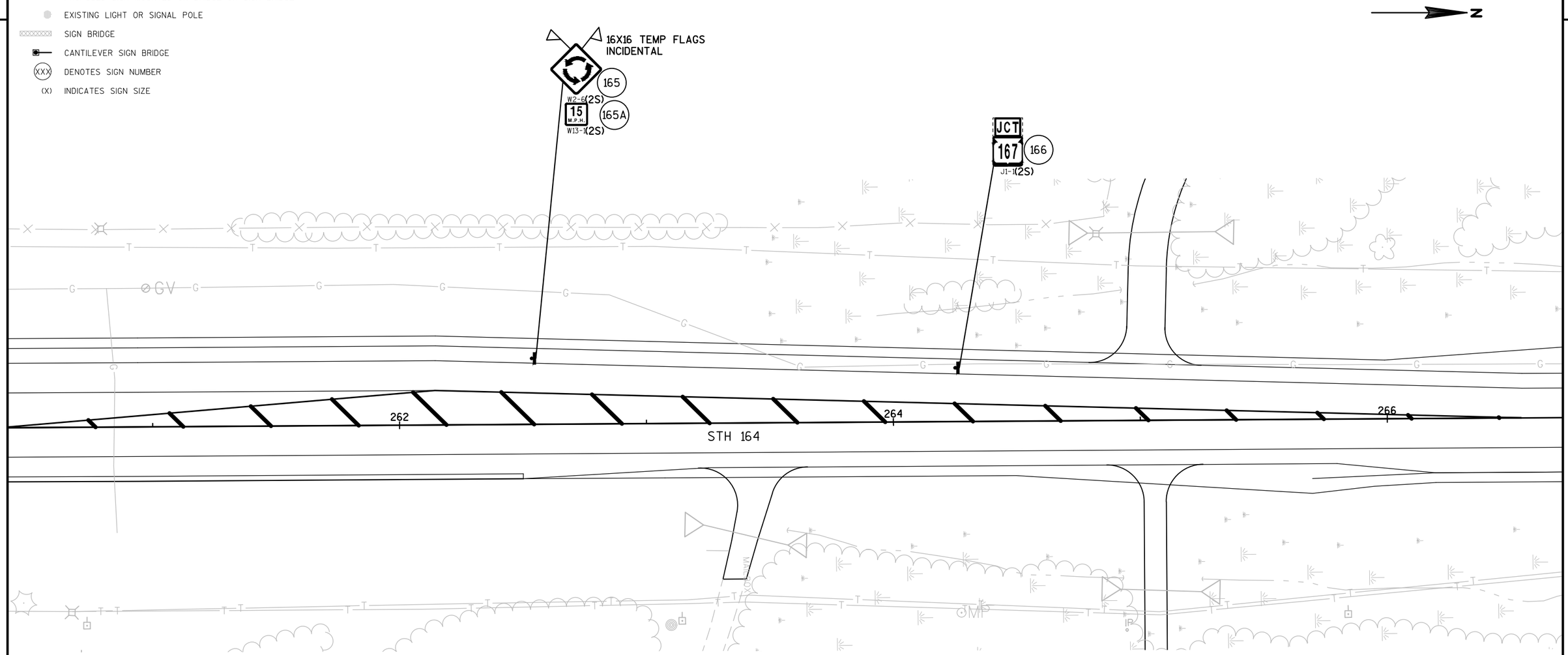
FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023217_PS

PLOT DATE : 1/24/2018 1:45 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 18 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 306 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023218_PS

PLOT DATE : 1/24/2018 1:46 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

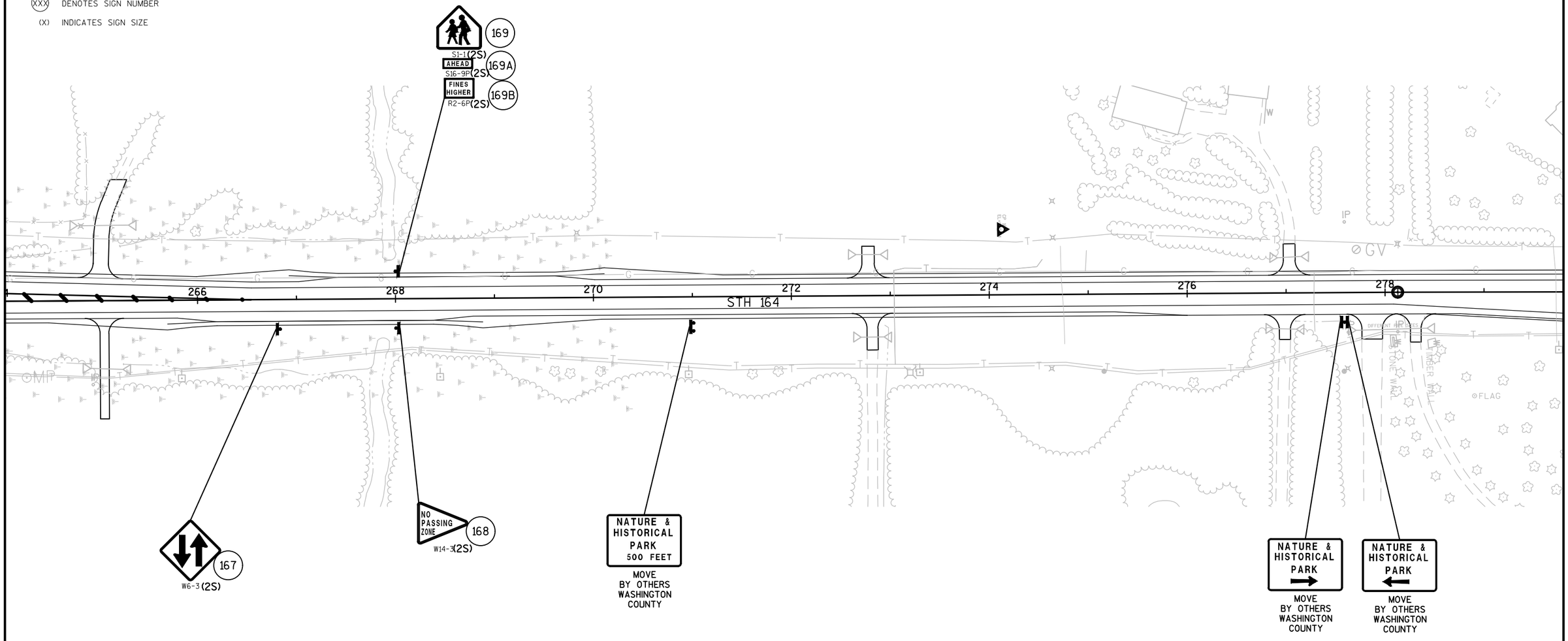
2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 19 OF 37

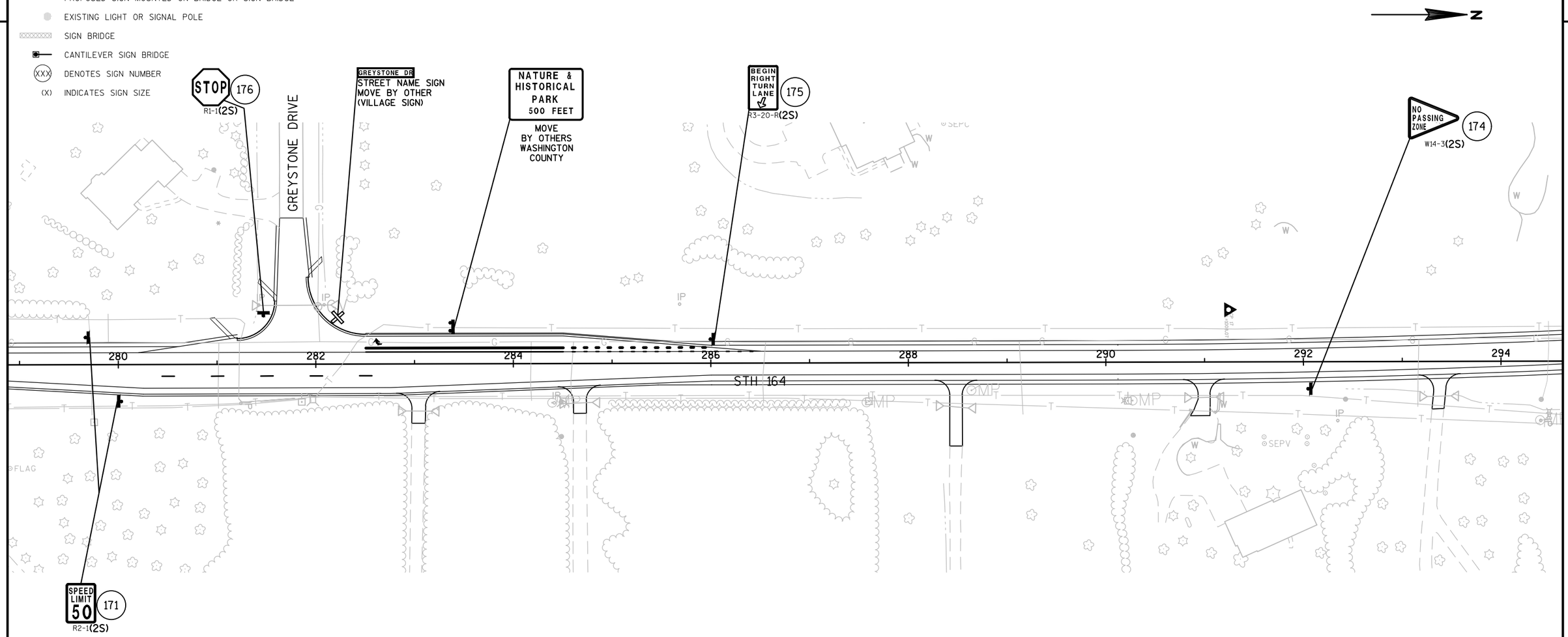
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 307 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023219_PS

PLOT DATE : 1/24/2018 1:46 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 308 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023220_PS
PLOT DATE : 1/24/2018 1:46 PM
PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

STH 164

PLEASANT HILL ROAD

294 296 298 300 302 304 306 308

177 SPEED LIMIT 50 R2-1(3)
178 YOUR SPEED
ELECTRONIC SIGN
REMOVE
TYPE 1 SIGNAL
POLE AND BASE

179 W2-1(3)
MOVE
SOLAR BEACON
TYPE I SIGNAL
POLE AND BASE

180 Pleasant Hill Rd
D1-61(2S)

181 STOP R1-1(3)
SAFETY ISSUE

182 NO PARKING ANY TIME R7-1-L(2S)

183 STOP R1-1(3)
183A TRAFFIC ON 164 DOES NOT STOP W4-4C(3)
MOVE
SOLAR BEACON &
STOP SIGN &
TYPE 1 POLE
MOVE FROM
STH 164 & 167
TO HERE

184 ADOPT A HIGHWAY
MOVE

185 STOP R1-1(3)
SAFETY ISSUE

186 STOP R1-1(3)
186A TRAFFIC ON 164 DOES NOT STOP W4-4C(3)
MOVE
SOLAR BEACON &
STOP SIGN &
TYPE 1 POLE
MOVE FROM
STH 164 & 167
TO HERE

187 NO PARKING ANY TIME R7-1-R(2S)

188 ADOPT A HIGHWAY
MOVE

189 SPEED LIMIT 50 R2-1(2S)

190 NO PARKING ANY TIME R7-1-L(2S)

SHEET 21 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 309 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023221_PS

PLOT DATE : 1/24/2018 1:46 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

MAJESTIC DRIVE

STH 164

310 312 314 316 318 320 322

200 W2-1(3) MOVE SOLAR BEACON TYPE I SIGNAL POLE AND BASE

198 SPEED LIMIT 50 R2-1(3)

199 YOUR SPEED MOVE ELECTRONIC SIGN TYPE 1 SIGNAL POLE AND BASE

197 STOP R1-1(2S)

MAJESTIC DR STREET NAME SIGN MOVE BY OTHER (VILLAGE SIGN)

196 BEGIN RIGHT TURN LANE R3-20-R(2S)

191 SPEED LIMIT 55 R2-1(2S)

192 NO PASSING ZONE W14-3(2S)

193 Pleasant Hill Rd D1-61(2S)

16X16 TEMP FLAGS INCIDENTAL

194 SPEED LIMIT 50 W3-5(2S)

195

SHEET 22 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 310	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023222_PS

PLOT DATE : 1/24/2018 1:46 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

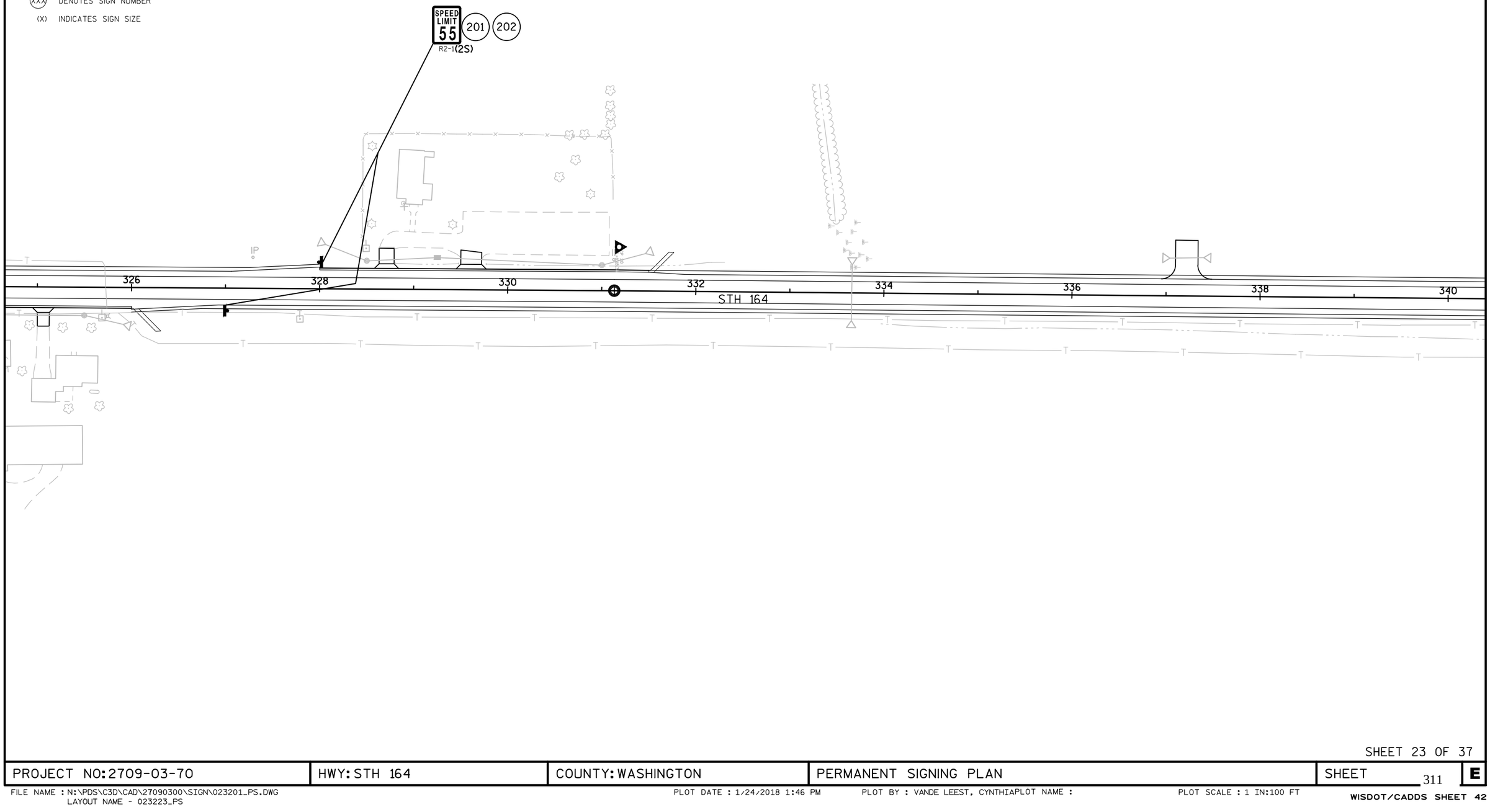
SIGN BRIDGE

CANTILEVER SIGN BRIDGE

XXX DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

N



SHEET 23 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 311	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023223_PS

PLOT DATE : 1/24/2018 1:46 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

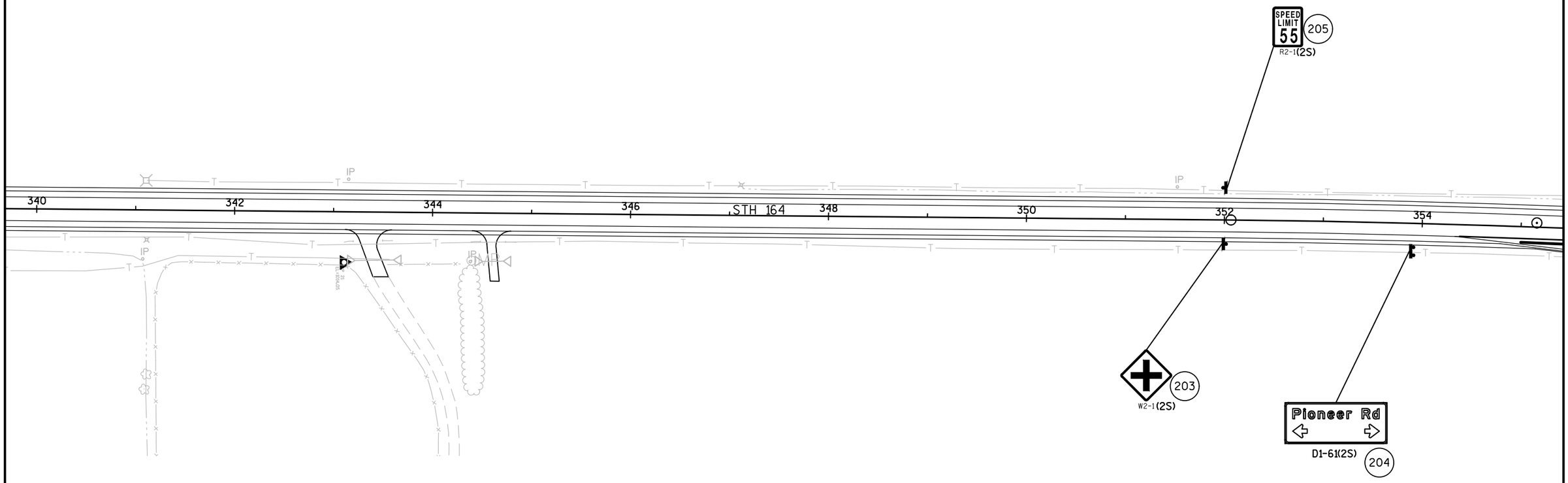
2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 24 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 312	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023224_PS

PLOT DATE : 1/24/2018 1:46 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

RICHFIELD
POPULATION 11,385
I2-3(2S) 211

NO ENGINE BREAKING 210
MOVE PERMIT BY OTHERS VILLAGE

PIONEER ROAD

STOP 209
R1-1(2S)

Pioneer Rd
D1-61(2S) 208

CANOPY

207
W2-1(2S)

PIONEER RD
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

SPEED LIMIT 55 206
R2-1(2S)

STH 164

356 358 360 362 364 366 368 370

RIPRAP

IP

MP

W

T

RUINS

SHEET 25 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 313 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023225_PS

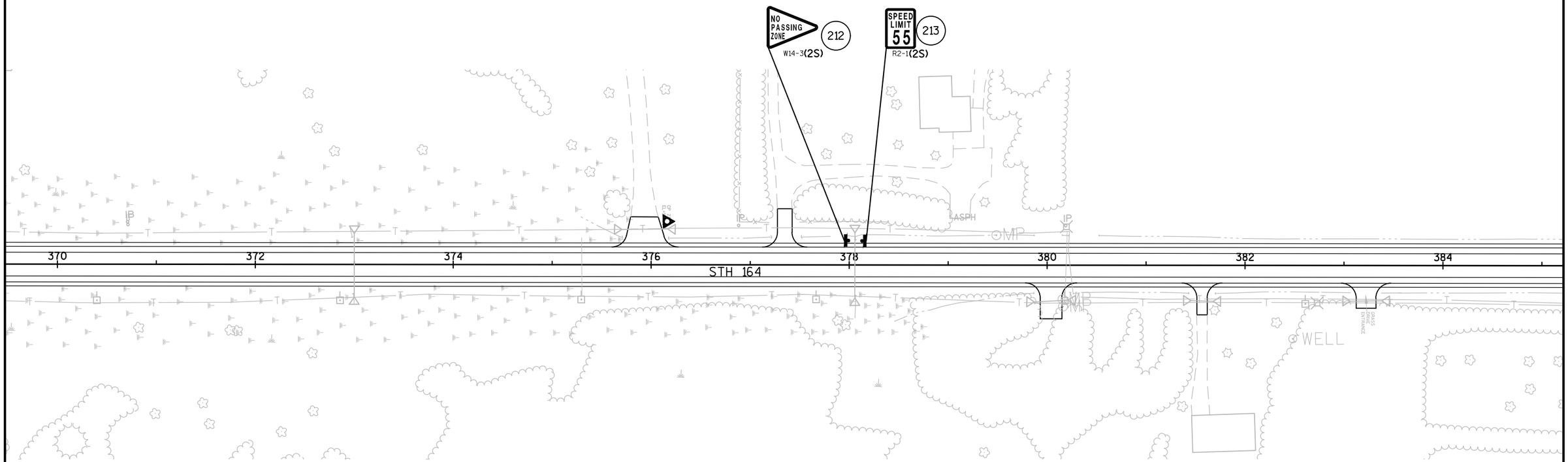
PLOT DATE : 1/24/2018 1:46 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 26 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 314 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023226_PS

PLOT DATE : 1/24/2018 1:46 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

386 388 390 392 394 396 398 400

STH 164

NO PASSING ZONE 217
W14-3(2S)

SPEED LIMIT 55 214
R2-1(2S)

RIDESHARE INFORMATION www.rideshare.wi.gov 215 216
D12-2B

SHEET 27 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 315	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023227_PS

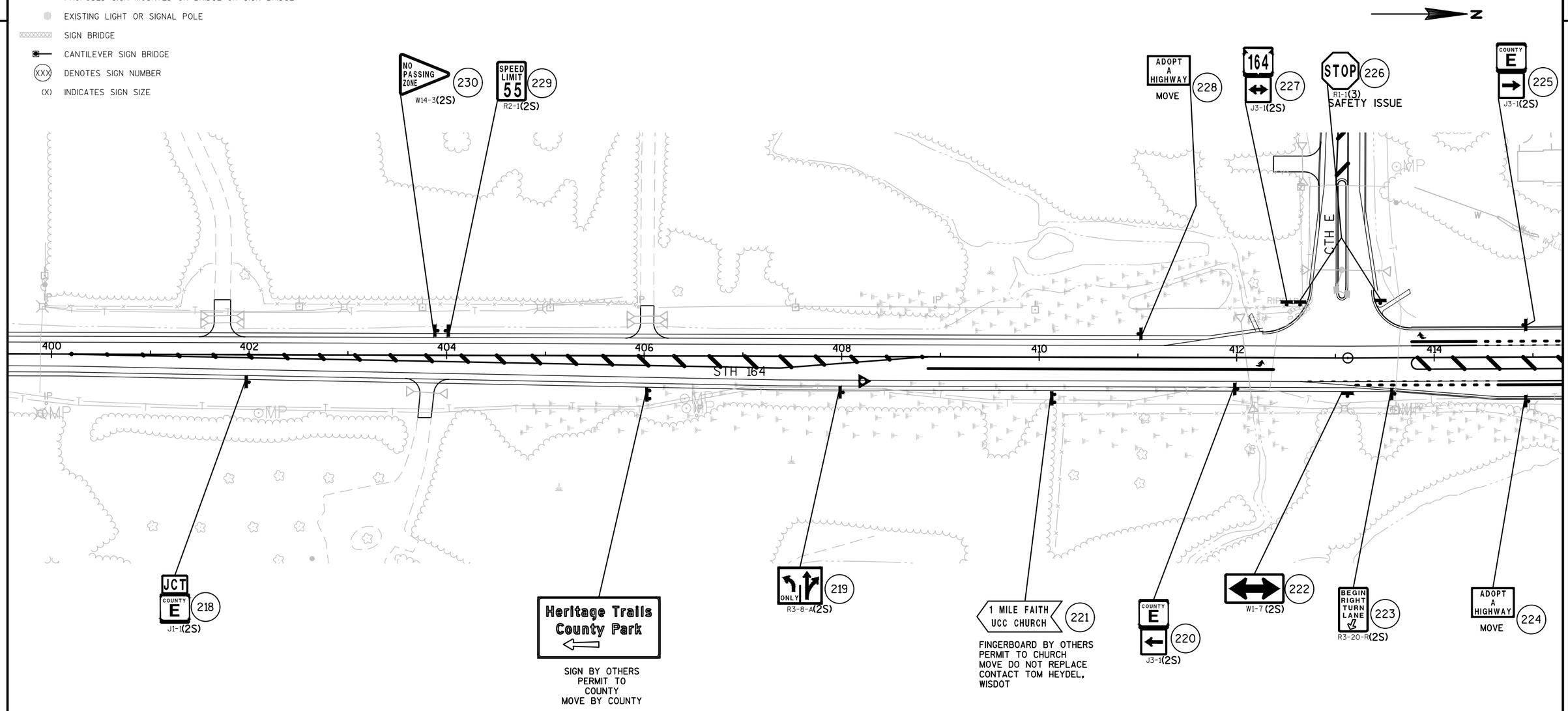
PLOT DATE : 1/24/2018 1:46 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 28 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 316 E

2

N

Heritage Trails
County Park

SIGN BY OTHERS
PERMIT TO
COUNTY
MOVE BY COUNTY

236
W1-7 (2S)

1 MILE FAITH
UCC CHURCH
235

FINGERBOARD BY OTHERS
PERMIT TO CHURCH
MOVE DO NOT REPLACE
CONTACT TOM HEYDEL,
WISDOT

SENIC VIEW
0.2 GOLF CLUB

MOVE BY OTHERS
TODS-PERMIT
GOLF COURSE-
COUNTY

JCT
COUNTY
E
234
J1-1(2S)

416 418 420 422 424 426 428 430

STH 164

CLUB DRIVE

SENIC VIEW
GOLF CLUB
0.2

MOVE BY OTHERS
TODS-PERMIT
GOLF COURSE-
COUNTY

STOP
231
R1-1(2S)

CLUB DRIVE
STREET NAME SIGN
MOVE BY OTHER
(VILLAGE SIGN)

SPEED
LIMIT
55
232
R2-1(2S)

233
S3-1(2S)

LEGEND

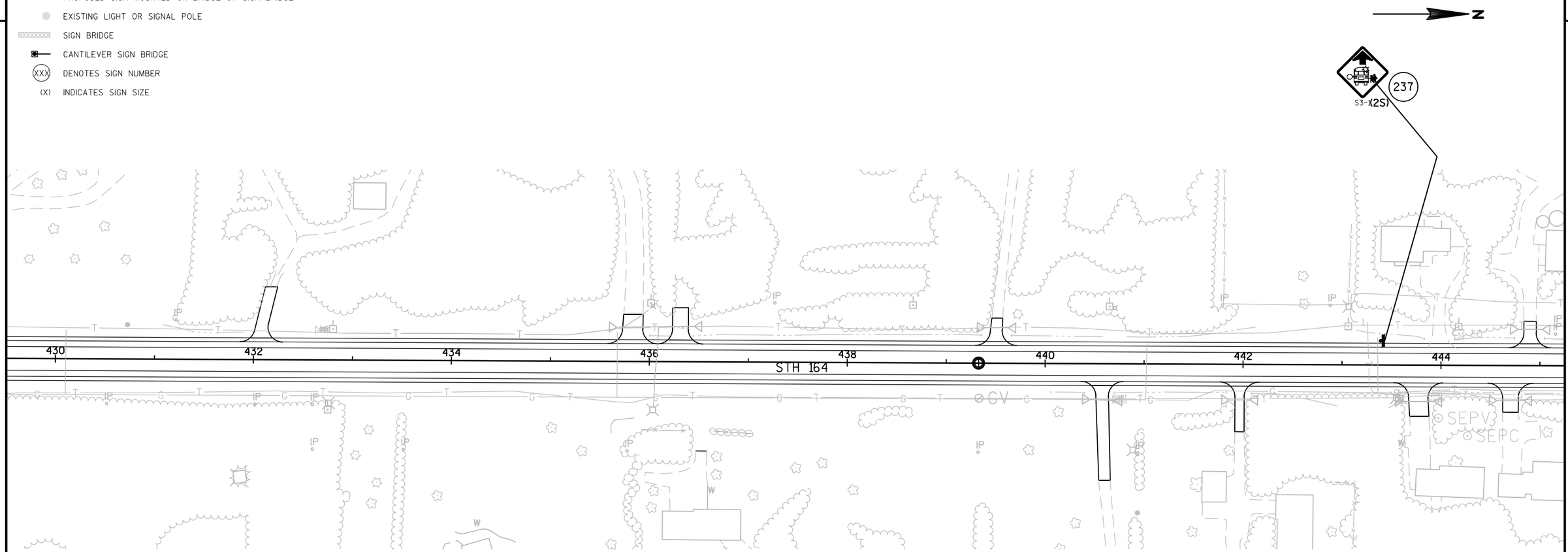
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 30 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 318	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023230_PS

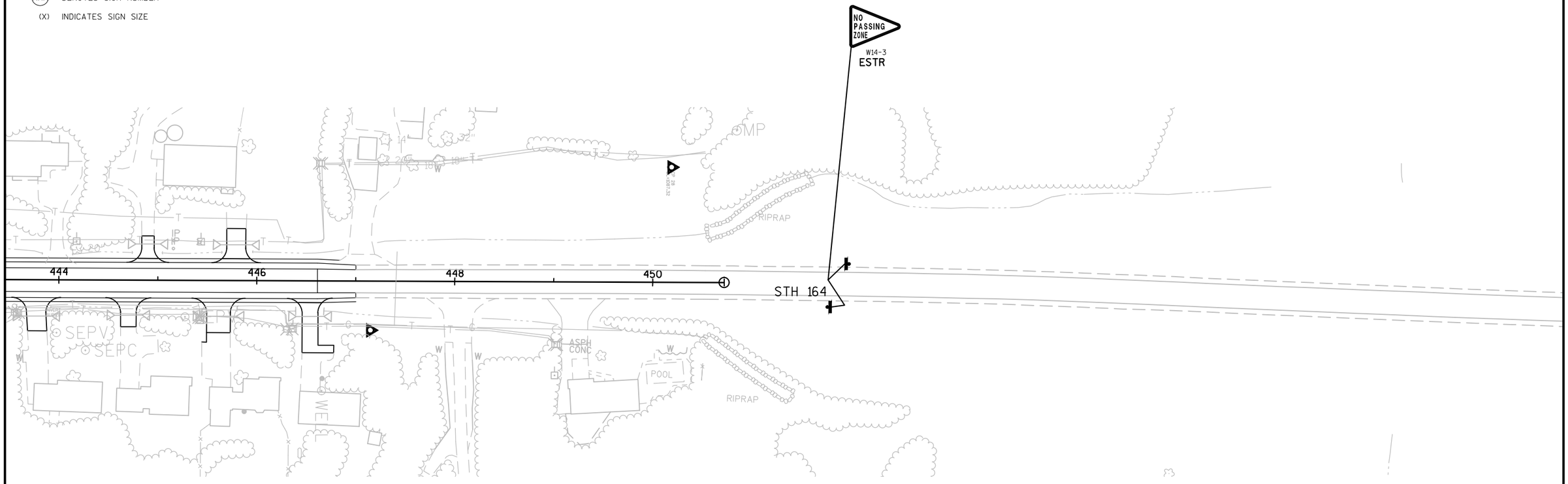
PLOT DATE : 1/24/2018 1:47 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 31 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 319	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023231_PS

PLOT DATE : 1/24/2018 1:47 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

2

2

N

239 240
W3-1(2S)
600'-700'
FROM INTERSECTION

SPEED LIMIT 35 241
R2-1(2S)

243
ONLY
R3-8-A(2S)

238
ONLY
R3-8-A(2S)

SPEED LIMIT 40 242
R2-1(2S)

244 245
W3-1(2S)
600'-700'
FROM INTERSECTION

HUBERTUS ROAD

STH 164

PI: 110+00.00

PI: 115+49.67

103+00 104+00 105+00 106+00 107+00 108+00 109+00 110+00 111+00 112+00 113+00 114+00 115+00 116+00 117+00 118+00

202 198 196

ASPH SHED OH G T CABC GV GUY POST IP

SHEET 32 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 320	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023232_PS

PLOT DATE : 1/24/2018 1:47 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

158+00 159+00 160+00 161+00 162+00 163+00

STH 167

RIDESHARE INFO CALL 1-800-455-POOL
D12-2A (2S) 250

249
W6-3(2S)

JCT 164
246
J1-1(2S)

16X16 TEMP FLAGS INCIDENTAL
247
W2-6(2S)
15 M.P.H.
247A
W13-1(2S)

167 EAST
Holy Hill Rd
NORTH 164
SOUTH 164
248
D1-62

SHEET 33 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 321 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023233_PS

PLOT DATE : 3/15/2018 7:14 AM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

255 R4-7(2S)

255A W5-54S(2S)

259 DO NOT ENTER R5-1(2S)

260 SPEED LIMIT 45 R2-1(2S)

260A END SCHOOL ZONE S5-2(2S)

258 R3-4(2S)

257 W6-2(2S)

256 WEST 167 J4-1(2S)

261 ADOPT A HIGHWAY MOVE

164+00 165+00 166+00 167+00 168+00 169+00

STH 167

16X16 TEMP FLAGS INCIDENTAL

251 W3-2(2S)

252 W6-1(2S)

253 S1-1(2S)

253A AHEAD S16-9P(2S)

253B FINES HIGHER R2-6P(2S)

254 Slinger / Sussex / Pewaukee D1-2(2S)

SHEET 34 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 322	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023234_PS

PLOT DATE : 1/24/2018 1:47 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

CANTILEVER SIGN BRIDGE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

N

Sussex
Pewaukee
Slinger
269
D1-3

268
R4-7(2S)

268A
W5-54 (2S)

267
W6-1(2S)

16X16 TEMP FLAGS
INCIDENTAL

266
W3-2(2S)

STH 167

171+00 172+00 173+00 174+00 175+00 176+00

263
R3-4(2S)

DO NOT
ENTER
265
R5-1(2S)

EAST
167
262
J4-1(2S)

264
W6-2 (2S)

OLD PHONE PEDESTAL
SEPC
ASPH
CABC
TIMBER WALL
STONE WALL
DECK
RIPRAP

SHEET 35 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 323 E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023235_PS

PLOT DATE : 1/24/2018 1:47 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

16X16 TEMP FLAGS
INCIDENTAL

275
W2-6(2S)

15 M.P.H.
W13-1(2S)
275A

167 WEST
Holy Hill Rd
SOUTH 164
NORTH 164
277
D1-62

BEGIN RIGHT TURN LANE
276
R3-20-R(2S)

4" 5" 5" 6" 8" 8"

OH OH OH OH OH OH OH OH OH OH OH

176+00 177+00 178+00 179+00 180+00 181+00 182+00

STH 167

CABLE RIPRAP

ADOPT A HIGHWAY
MOVE
270

271
W6-3(2S)

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 36 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 324	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023236_PS

PLOT DATE : 3/15/2018 7:14 AM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

JCT
164
273
J1-1(2S)

OH OH OH OH POST OH OH OH OH OH OH OH OH

EP: 184+00.00

182+00 183+00

STH 167

CABC
ASPH

S.T.H. "167"

ASPH
CABC

272
S1-1(2S)
AHEAD
S16-9P(2S)
272A
FINES HIGHER
R2-6P(2S)
272B

150 FEET

SPEED LIMIT 45
R2-1(2S)
274
END SCHOOL ZONE
S5-2(2S)
274A

14" 14" 12" 6"

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 37 OF 37

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET 325	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIGN\023201_PS.DWG
LAYOUT NAME - 023237_PS

PLOT DATE : 1/24/2018 1:47 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

2

GENERAL NOTES:

HIGHWAY LIGHTING SHALL BE INSTALLED IN COMPLIANCE WITH WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 652 TO 657 AND 659 EXCEPT:

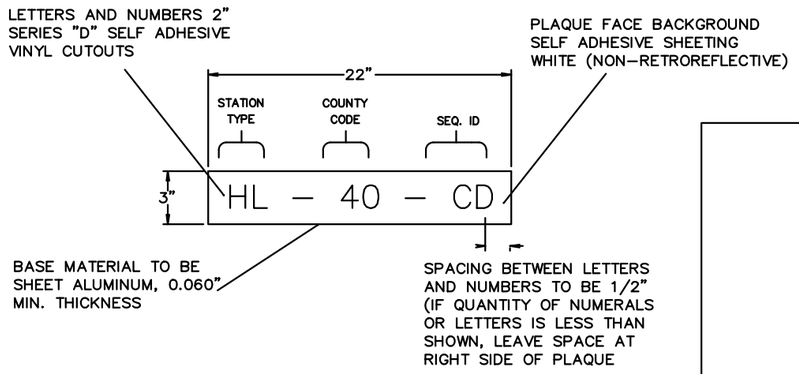
1. DETAILS OF CONSTRUCTION MATERIALS AND WORKMANSHIP NOT SHOWN ON THESE DRAWINGS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
2. LOCATIONS OF THE PVC CONDUITS ARE INDENTIFIED IN THE PLANS WHERE THEY ARE REQUIRED. HOWEVER, INSTALLATION WILL REQUIRE INTEGRATION WITH EXISTING FIELD CONDITIONS. UNDER THE APPROVAL OF THE ENGINEER, APPROPRIATE ADJUSTMENT OF CONDUIT LOCATIONS MAY BE MADE IF THE FIELD CONDITIONS ARE SUCH THAT THE CONDUIT CANNOT BE INSTALLED AT THE SPECIFIED LOCATIONS. FIELD MARK EACH CONDUIT LOCATION IN RED TO ILLUSTRATE AS BUILT CONDITIONS.
3. THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.
4. ALL OPEN AND UNTERMINATED CONDUITS SHALL BE CAPPED OR PLUGGED WITH ENGINEER APPROVED FITTINGS IMMEDIATLY AFTER INSTALLATION.
5. BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR IMMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.
6. ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON ALL CONDUITS.
7. PRIOR TO CONDUIT ACCEPTANCE, ALL CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND BE CAPPED WITH THE APPROPRIATE CAST PLASTIC CAP WHICH FITS SNUGGLY ON THE CONDUIT THAT CAN BE EASILY REMOVED. DUCT TAPE OR ANY OTHER CAPPING METHOD IS NOT ACCEPTABLE.
8. CONDUIT RUNS SHALL BE THE SAME SIZE PIPE FROM ONE END TO THE OTHER (FROM PULL BOX-TO-PULL BOX, JUNCTION BOX OR BASE-TO-BASE, ETC.) UNLESS OTHERWISE NOTED ON PLANS.
9. PULL ROPE (3/8-INCH NYLON) SHALL BE INSTALLED IN ALL NEW CONDUITS.
10. CONTRACTOR SHALL SUPPLY AS-BUILT DRAWINGS (PDF FORMAT) FOR ALL THE WORK BEING DONE.
11. CONDUIT LATERALS SHALL BE TRENCHED UNDER PAVEMENT BEFORE PAVEMENT CONSTRUCTION.
12. PITCH ALL CONDUITS TOWARD PULL BOXES. INSTALL A 2" DRAIN DUCT TO STORM SEWER OR DRAIN SUMP AS REQUIRED FOR DRAINAGE. THE 2" DRAIN DUCT OR SUMP IS INCIDENTAL TO THE PULL BOX BID ITEM AND IS NOT SHOWN.
13. THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE, IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
14. HAND DIGGING MAY BE REQUIRED FOR LOCATIONS ADJACENT TO EXISTING GAS AND POWER LINES. HAND EXCAVATION SHOULD BE ANTICIPATED & WILL BE CONSIDERED INCIDENTAL TO THE CONCRETE BASES BID ITEM. COORDINATE ALL WORK NEAR GAS LINE WITH WE ENERGIES.
15. UNDERGROUND WIRE & CONDUIT SHOWN ON REMOVAL PLANS FOR REMOVAL SHALL BE ABANDONED IN PLACE UNLESS DIRECTED BY THE ENGINEER. CONTRACTOR MAY CHOOSE TO REMOVE CONDUCTOR AT THEIR OWN EXPENSE.
16. EXISTING CONDUIT AND CID NO LONGER BEING USED IS ABANDONED IN PLACE. THE CONTRACTOR MAY REMOVE ABANDONED WIRING A THE CONTRACTOR'S EXPENSE. ABANDONED PULL BOX REMOVAL IS INCIDENTAL TO THE ROAD CONSTRUCTION.
17. ALL UNDERGROUND WIRING AND CONDUIT FOR POLES BEING REMOVED IS ABANDONED IN PLACE UNLESS NOTED OTHERWISE. CONTRACTOR MAY SALVAGE ABANDONED WIRING AT HIS OWN EXPENSE.
18. PROVIDE REMOVABLE SEALANT SUCH AS DUCT SEAL IN THE CONDUITS AT THE CABINET, PULL BOXES, AND JUNCTION BOXES TO AVOID CONDENSATION CAUSED BY AIRFLOW THROUGH THE CONDUITS DUE TO TEMPERATURE DIFFERENCE. THIS WORK SHALL BE INCIDENTAL TO THE ASSOCIATED CONDUIT PAY ITEM.
19. PROVIDE MINIMUM CABLE SLACK AS MENTIONED BELOW:

PULL BOXES:	10-FT
EMBEDDED JUCTION BOXES:	3-FT
DISTRIBUTION CENTER/LOAD CENTER:	10-FT
POLES:	5-FT IN AND 5-FT OUT

2

GENERAL NOTES:

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

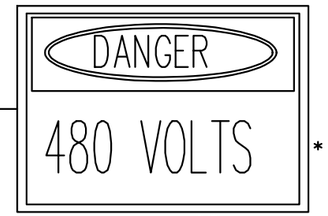


DISTRIBUTION CENTER IDENTIFICATION PLAQUE

CHAMBERS

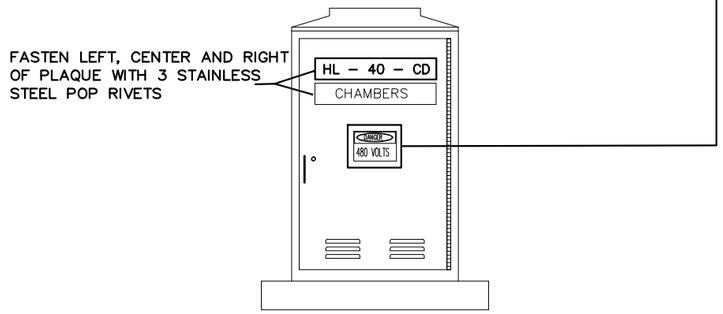
MNEMONIC
(SEE MISC. QTYS.)
(NO. OF CHARACTERS VARIES THIRD PLAQUE MAY BE NECESSARY)

TWO REQUIRED CABINET AND METER PEDESTALS



APROX. 101/2" x 7"

*SOME LOCATIONS WILL BE 240 VOLTS



DISTRIBUTION CENTER IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS
(TYPICAL ALL CONTROL CABINETS)

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	LIGHTING DETAIL - CABINET PLAQUES	SHEET 327	E

LEGEND

- CONTROL CABINET
- CONDUIT - 2" UNLESS OTHERWISE NOTED
- INSTALL LIGHTING UNIT WITH LED-C LUMINAIRE
- CONDUIT STUBOUT
- PULL BOX, 24" X 42"

N

3*8 A,N,B
1*8 GND

168+45.3, 4.1' RT
LPB102

168+53.4, 4.9' RT
LED-A-5(T)-15-ASC2

3*8 A,N,B
3*8 C,N,D
2*8 GND

168+82.4, 30.2' RT
LPB101

3-2"

168+82.0, 42.1' RT
HL-66-SC

3*8 A,N,B
1*8 GND

169+17.8, 57.2' RT
LED-A-5(T)-15-BSC2

169+27.2, 86.9' RT
LPB108

3" C
3*8 A,N,B
1*8 GND

3" C
3*8 C,N,D
1*8 GND

252+59.6, -154.6' LT
LPB103

252+70.3, -106.7' LT
LED-A-5(T)-15-DSC2

253+22.5, -60.8' LT
LPB104

253+29.5, -60.0' LT
LED-A-5(T)-15-CSC2

3*8 C,N,D
1*8 GND

3" C
3*8 C,N,D
1*8 GND

253+20.3, 33.5' RT
LPB105

253+00.4, 38.2' RT
LED-A-5(T)-15-DSC4

250+84.5, 19.7' RT
LED-A-5(T)-15-ASC4

250+92.2, 20.2' RT
LPB107

3*8 A,N,B
1*8 GND

251+42.1, 57.5' RT
LED-A-5(T)-15-BSC4

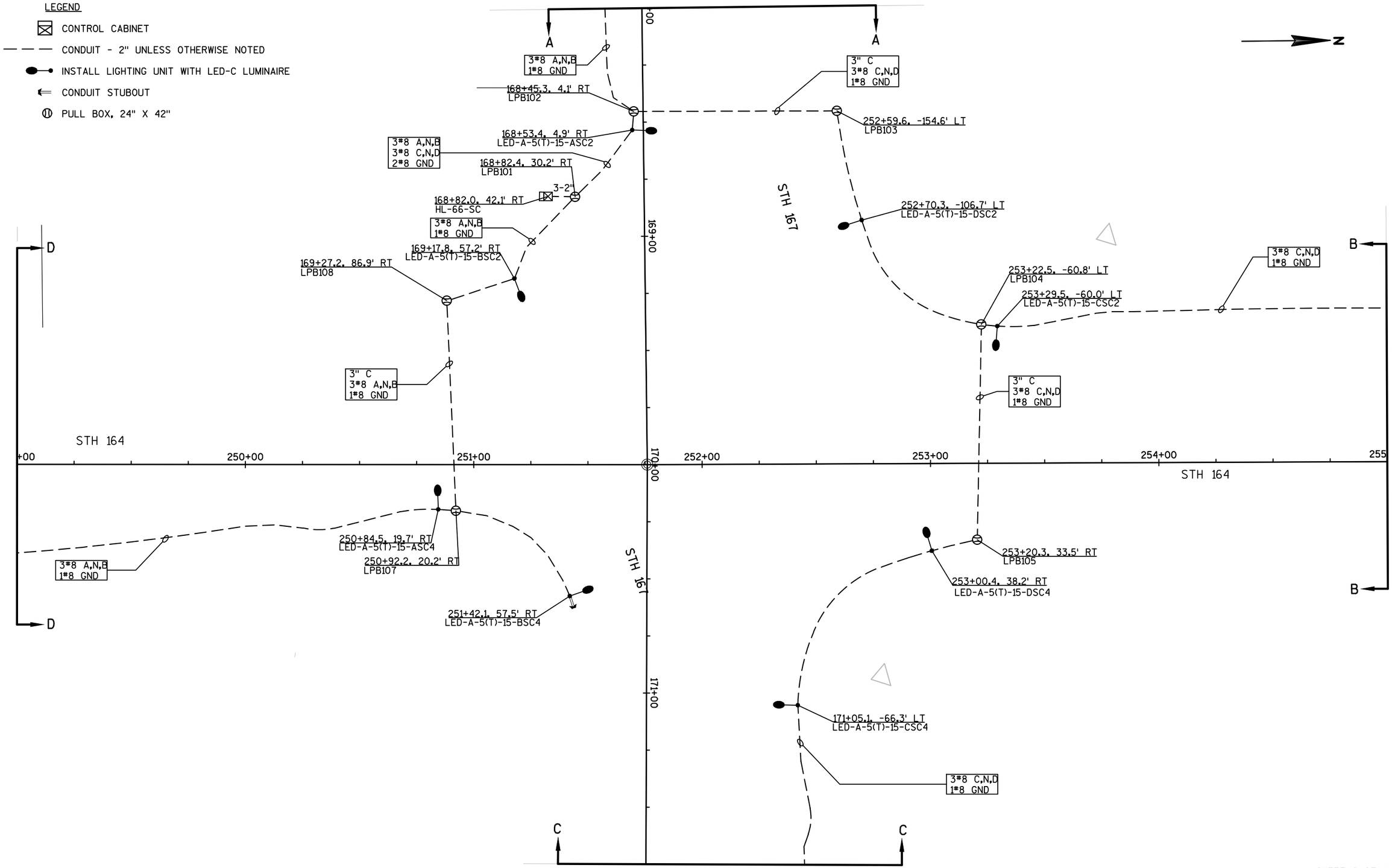
171+05.1, -66.3' LT
LED-A-5(T)-15-CSC4

3*8 C,N,D
1*8 GND

STH 164
STH 167
R/W
TLE
TLE
CONC
IP
18" CMP
24" RCP
24" CMP
24" CMP
24" RCP
24" CMP
24" RCP
24" CMP
24" RC

LEGEND

- CONTROL CABINET
- CONDUIT - 2" UNLESS OTHERWISE NOTED
- INSTALL LIGHTING UNIT WITH LED-C LUMINAIRE
- CONDUIT STUBOUT
- PULL BOX, 24" X 42"

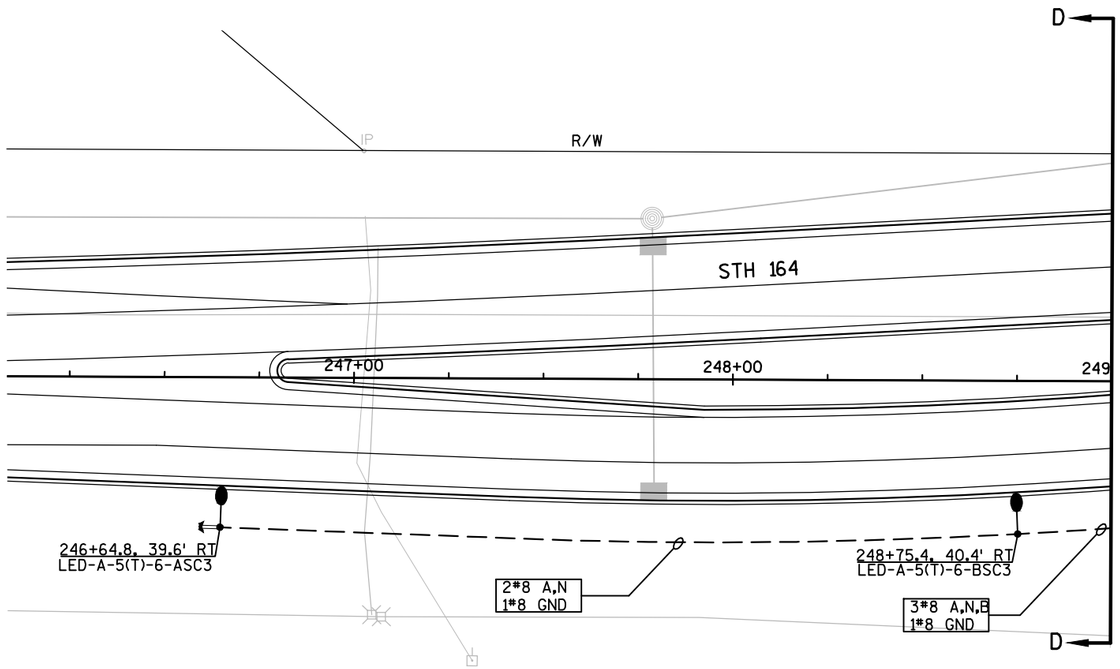


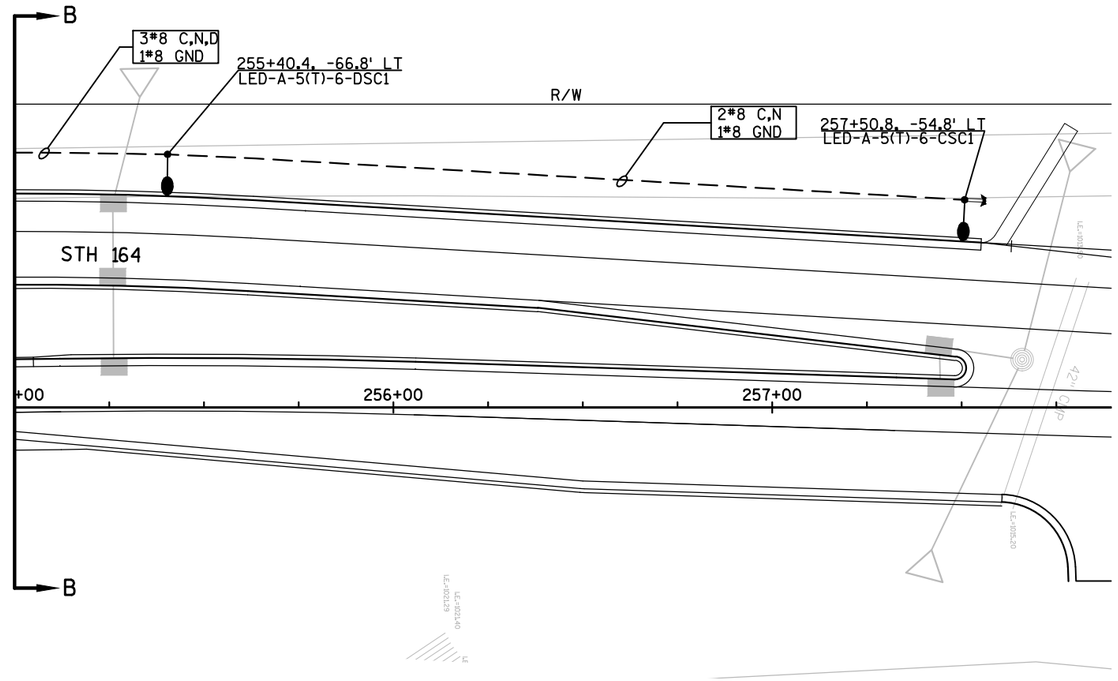
SHEET 2 OF 6

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	LIGHTING PLAN-SCHEMATIC	SHEET 329	E

2

N





SHEET 3 OF 6

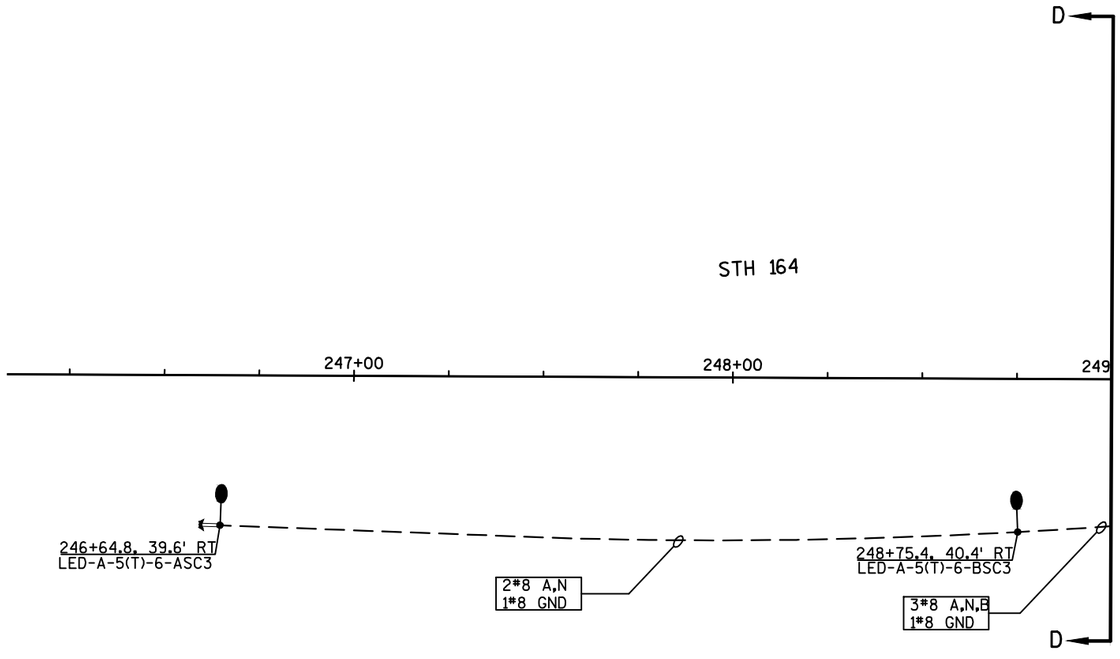
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	LIGHTING PLAN	SHEET 330	E

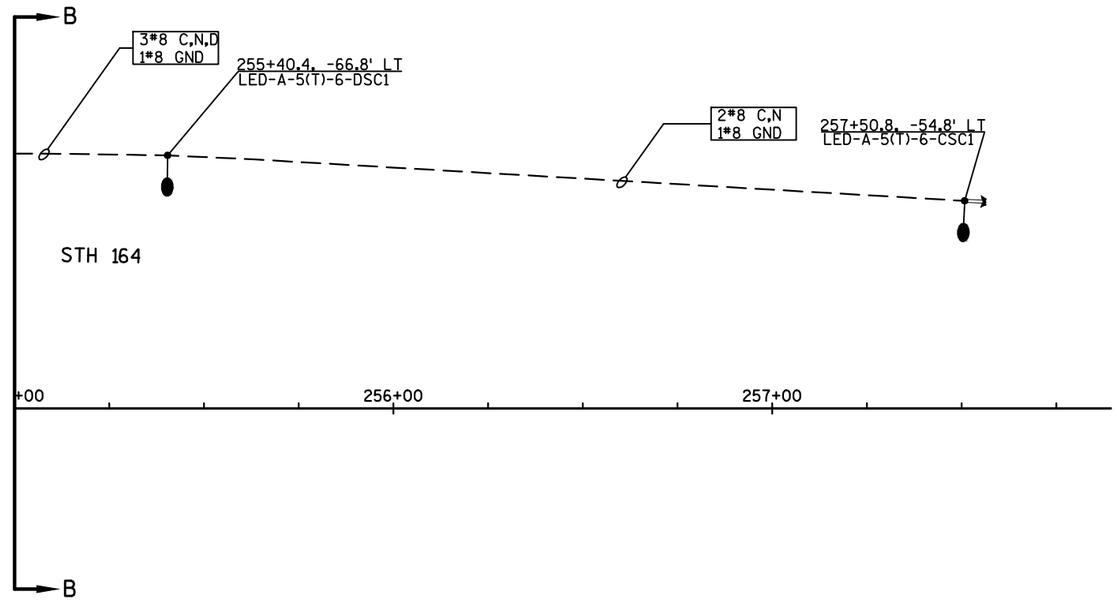
FILE NAME : N:\PDS\C3D\CAD\27090300\LTG\023601_LP.DWG
LAYOUT NAME - 023603_LP

PLOT DATE : 3/5/2018 12:40 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

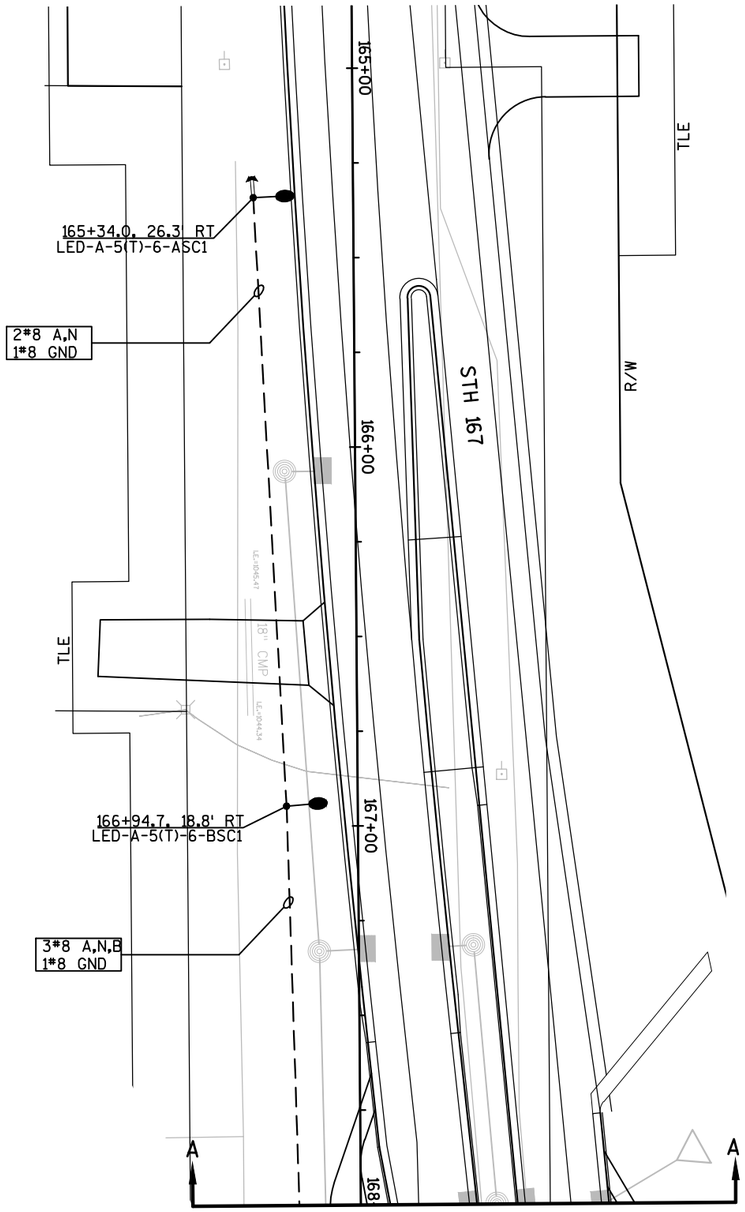
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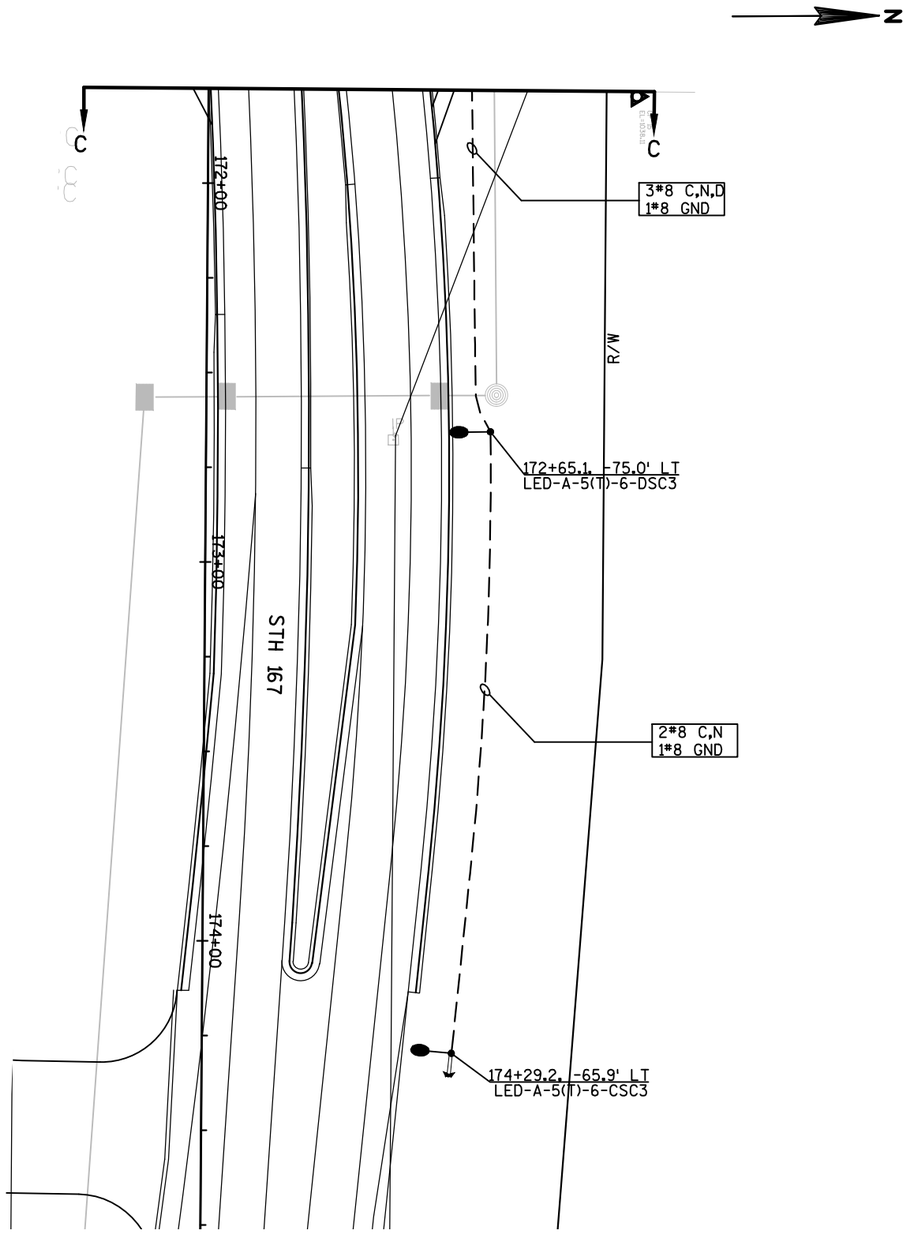




SHEET 4 OF 6

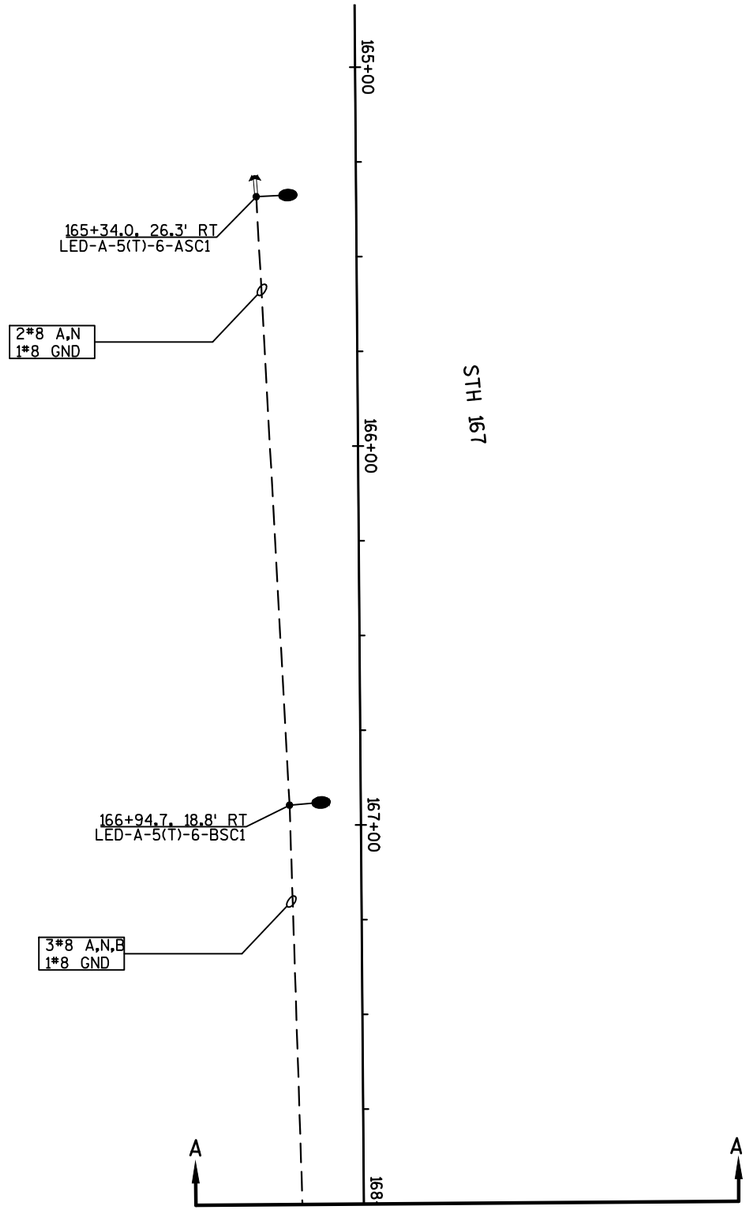
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	LIGHTING PLAN-SCHEMATIC	SHEET 331	E

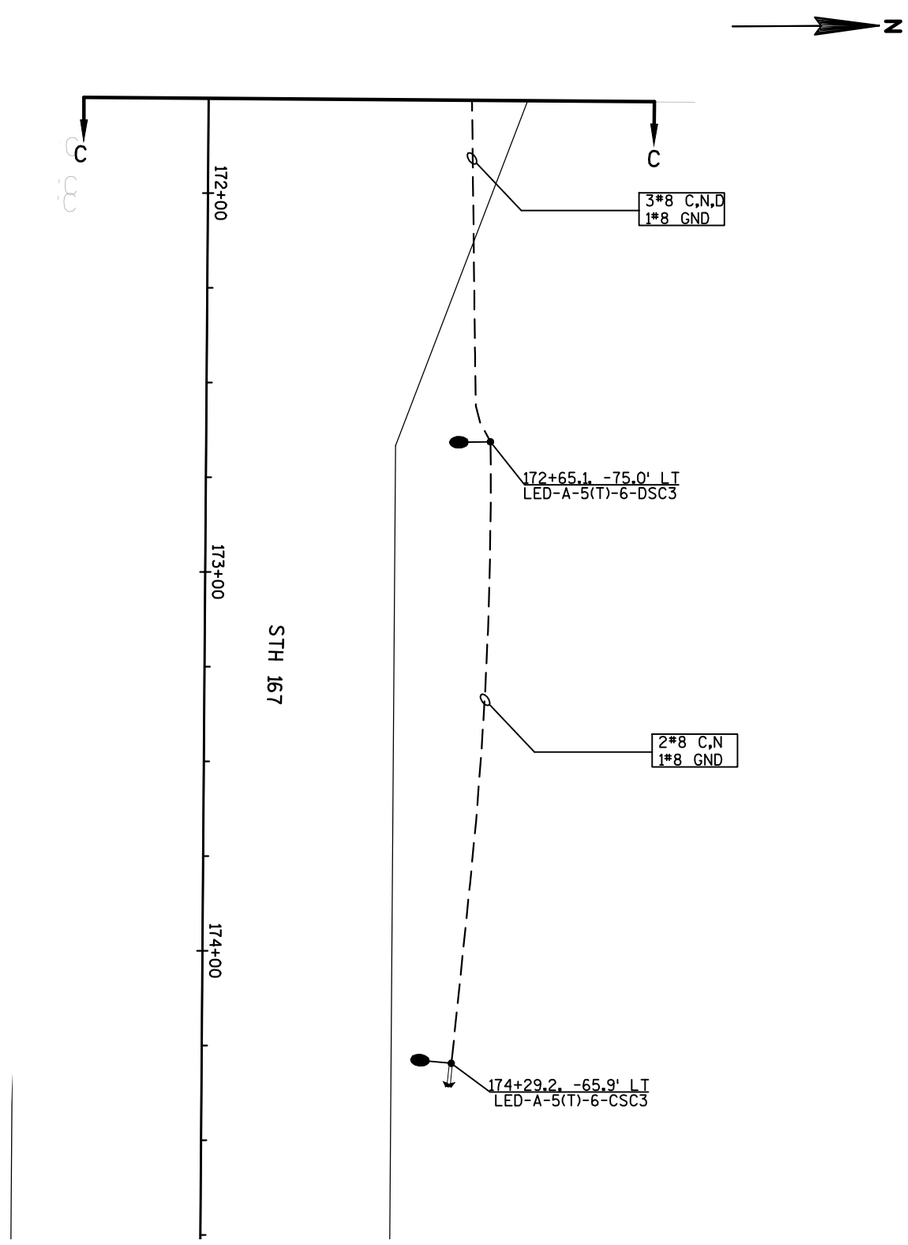




PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	LIGHTING PLAN	SHEET 332	E

FILE NAME : N:\PDS\C3D\CAD\27090300\LTG\023601_LP.DWG
LAYOUT NAME - 023605_LP
PLOT DATE : 3/5/2018 12:41 PM
PLOT BY : WAGNER, SCOTT H
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42





2

SHEET 6 OF 6

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	LIGHTING PLAN-SCHEMATIC	SHEET 333	E

2

N

CONSTRUCTION NOTES:
1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. DRAWINGS ARE A SCHEMATIC FOR SIGHT LOCATION PURPOSES ONLY AND DO NOT REPRESENT ACCURATE GEOMETRY OF THE INTERSECTION OR EXACT LOCATION OF EQUIPMENT.
3. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
4. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
5. COORDINATE WITH THE PROJECT ON REMOVAL OF POLES.

PLEASANT HILL RD

STH 164

STH 164

WP1
ON WOOD
POLE

SB1
2
R
ON SIGNAL
POLE

POOL

LEGEND
- SERVICE POLE
- OVERHEAD SPAN WIRE
- FLASHER HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR FLASHER

TRAFFIC CONTROL SIGNAL
STH 164 & PLEASANT HILL RD.
TOWN OF RICHFIELD
WASHINGTON COUNTY

SIGNAL NO. F66-0490

REGION CONTACT: S. SWARD
DESIGNED BY: S. WAGNER
REVISED BY:

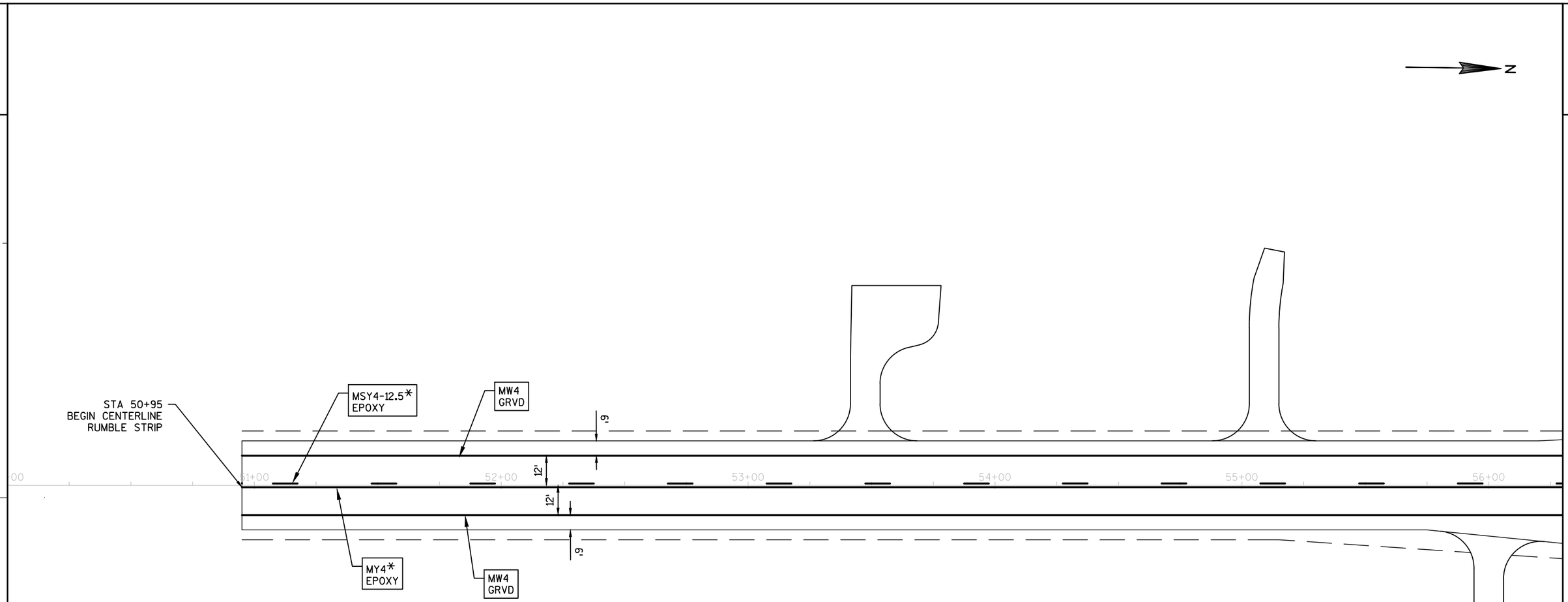
PAGE 1 OF 1

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	FLASHER SIGNAL REMOVAL PLAN	SHEET 334	E

FILE NAME : N:\PDS\C3D\CAD\27090300\SIG\F66-0490_REM.DWG
LAYOUT NAME - F66-0490_REM

PLOT DATE : 1/16/2018 9:17 AM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



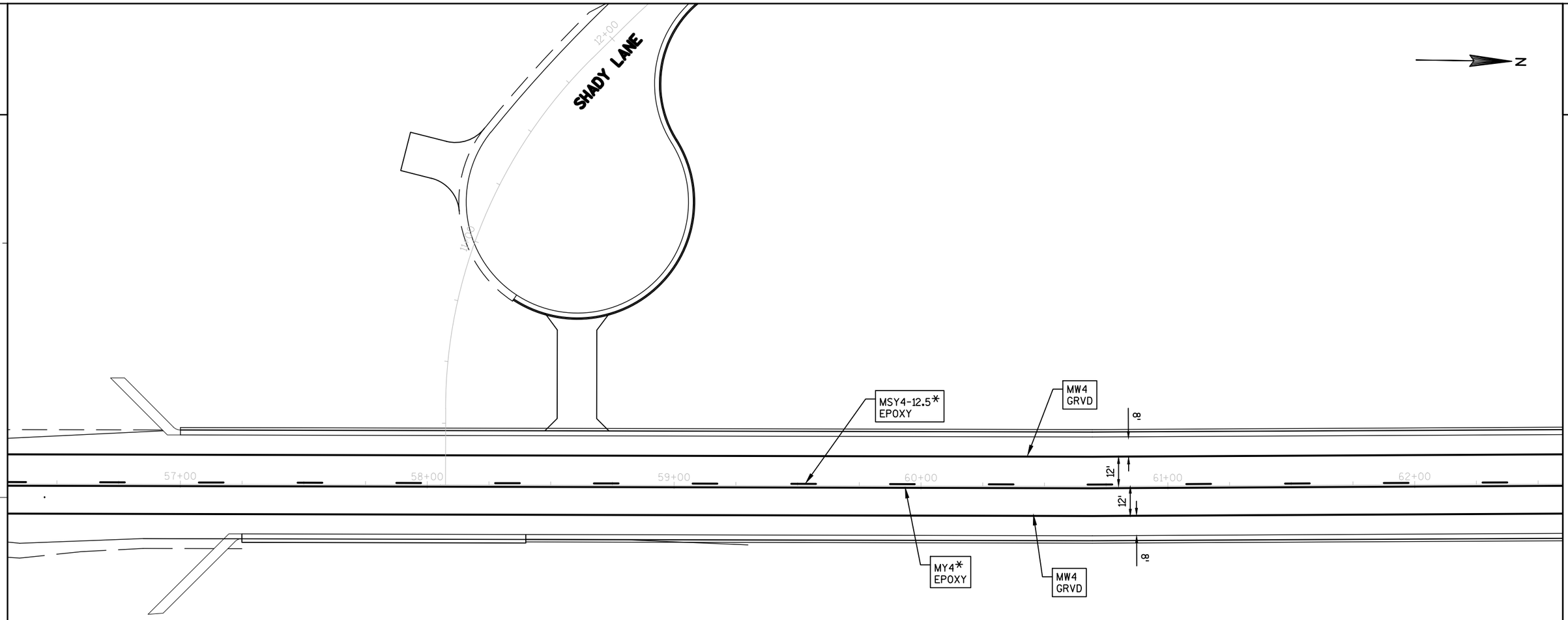
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 50+95 TO 69+50
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 1 OF 71

2



2

PAVEMENT MARKING LEGEND

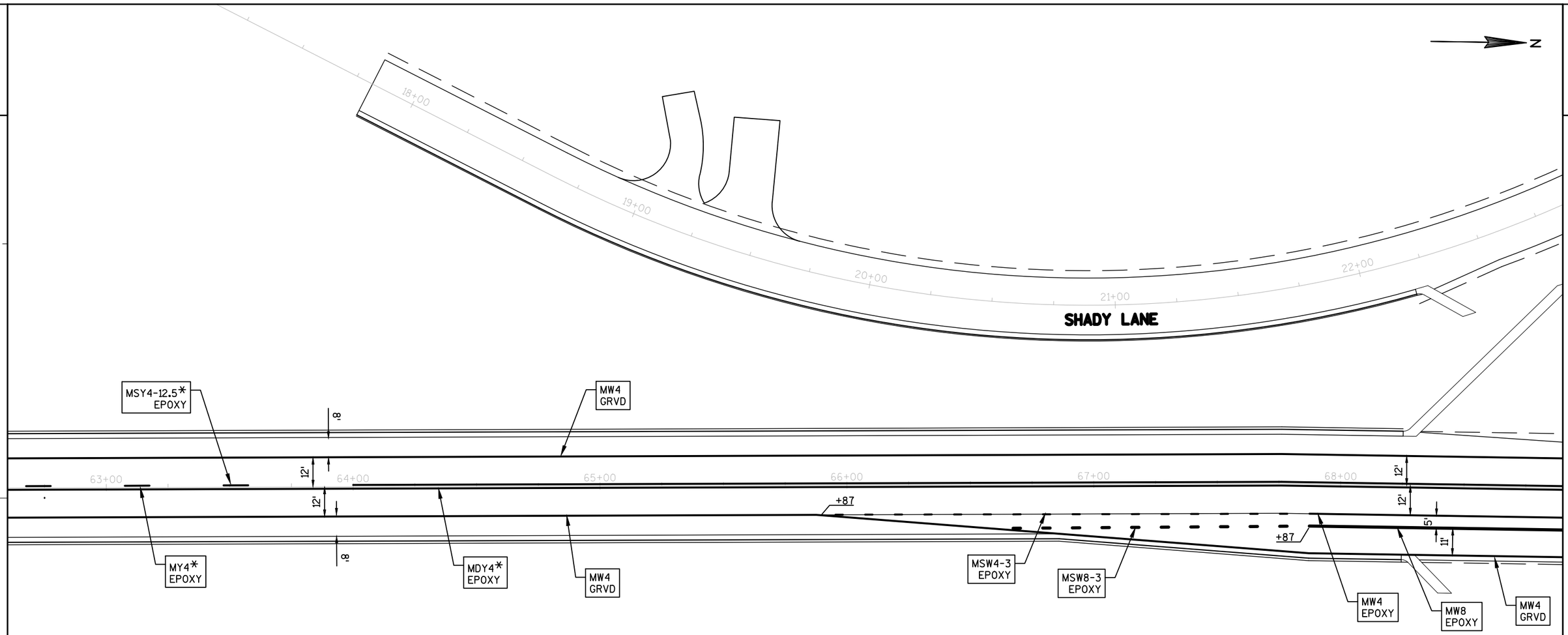
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 50+95 TO 69+50
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 2 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 336	E

2



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 50+95 TO 69+50
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PAVEMENT MARKING LEGEND

N

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 50+95 TO 69+50
CENTERLINE RUMBLE STRIP STA 73+50 TO 89+75
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHADY LANE

HANSEN DRIVE

UPLAND DRIVE

STA 69+50
END CENTERLINE
RUMBLE STRIP

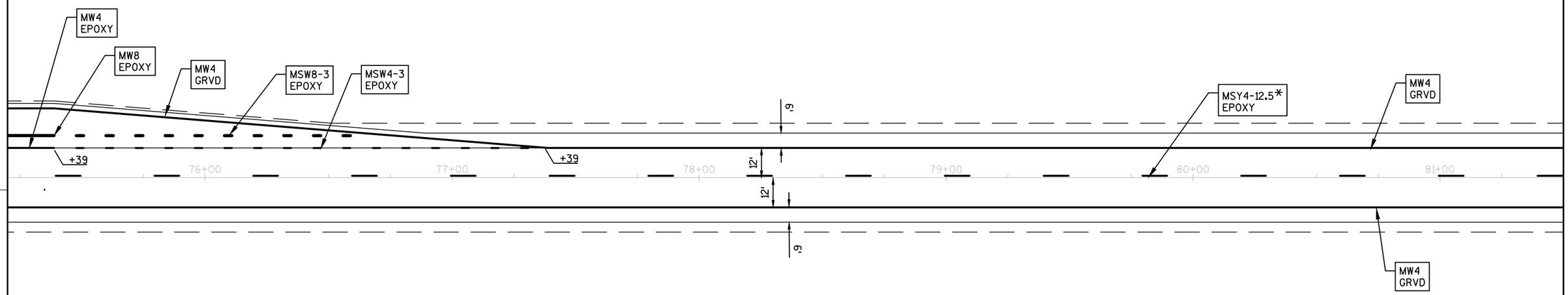
STA 73+50
BEGIN CENTERLINE
RUMBLE STRIP

MDY4* EPOXY
MW4 GRVD
SLW18 EPOXY
MW4 GRVD
MW8 EPOXY
MW4 EPOXY
MSY4-12.5* EPOXY
MW4 GRVD
MW4 EPOXY
MW8 EPOXY
MW4 GRVD
SLW18 EPOXY

SHEET 4 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 338	E

2



PAVEMENT MARKING LEGEND

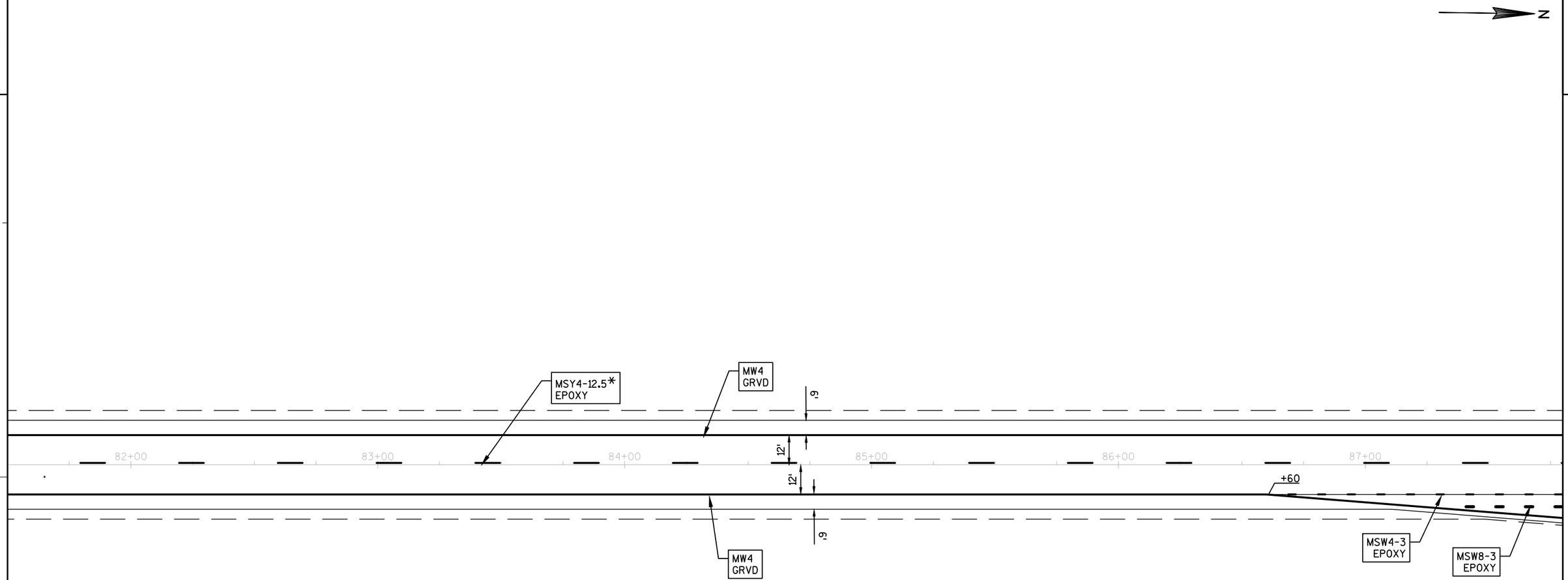
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 73+50 TO 89+75
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 339	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024505_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



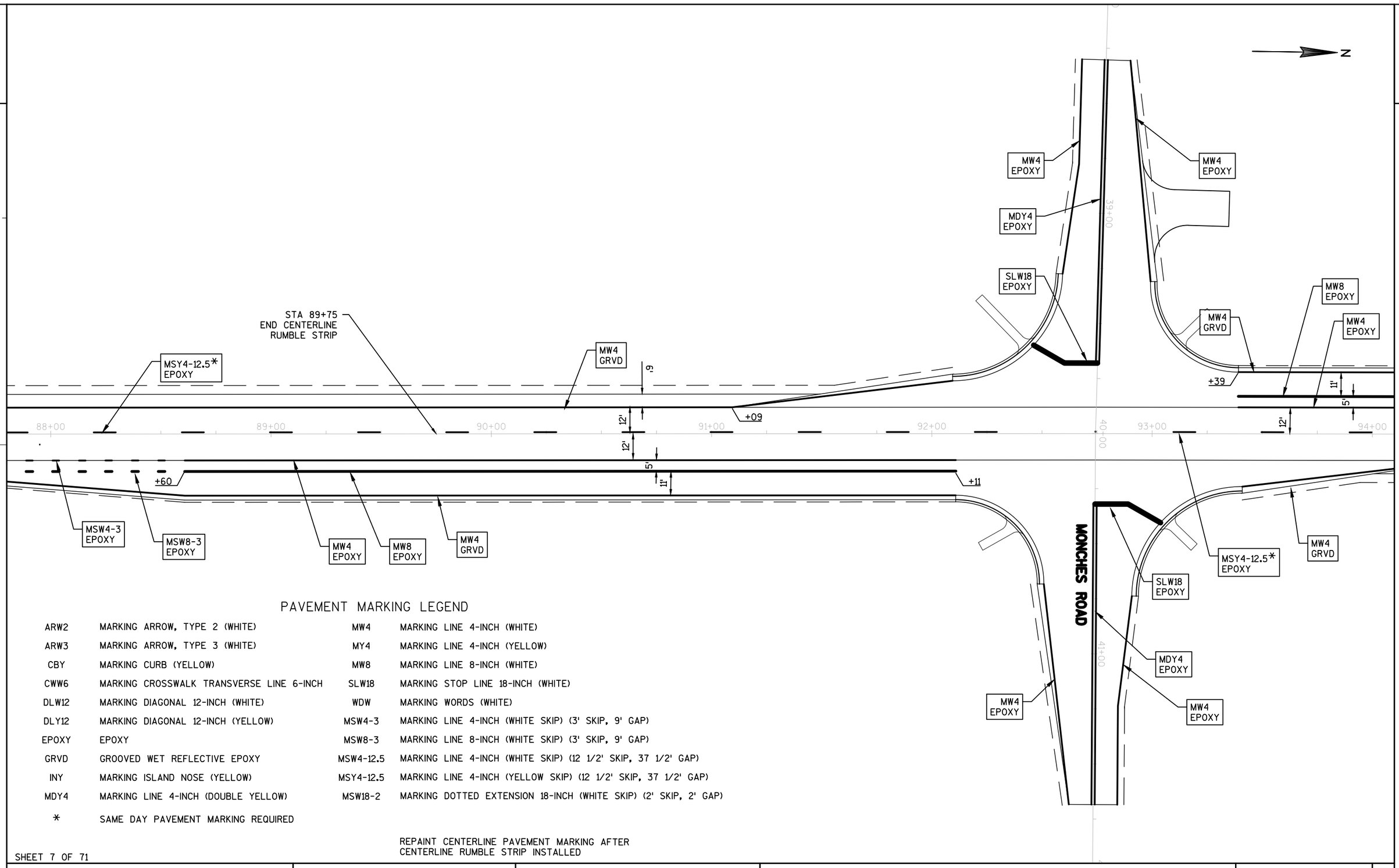
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 73+50 TO 89+75
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 340	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024506_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

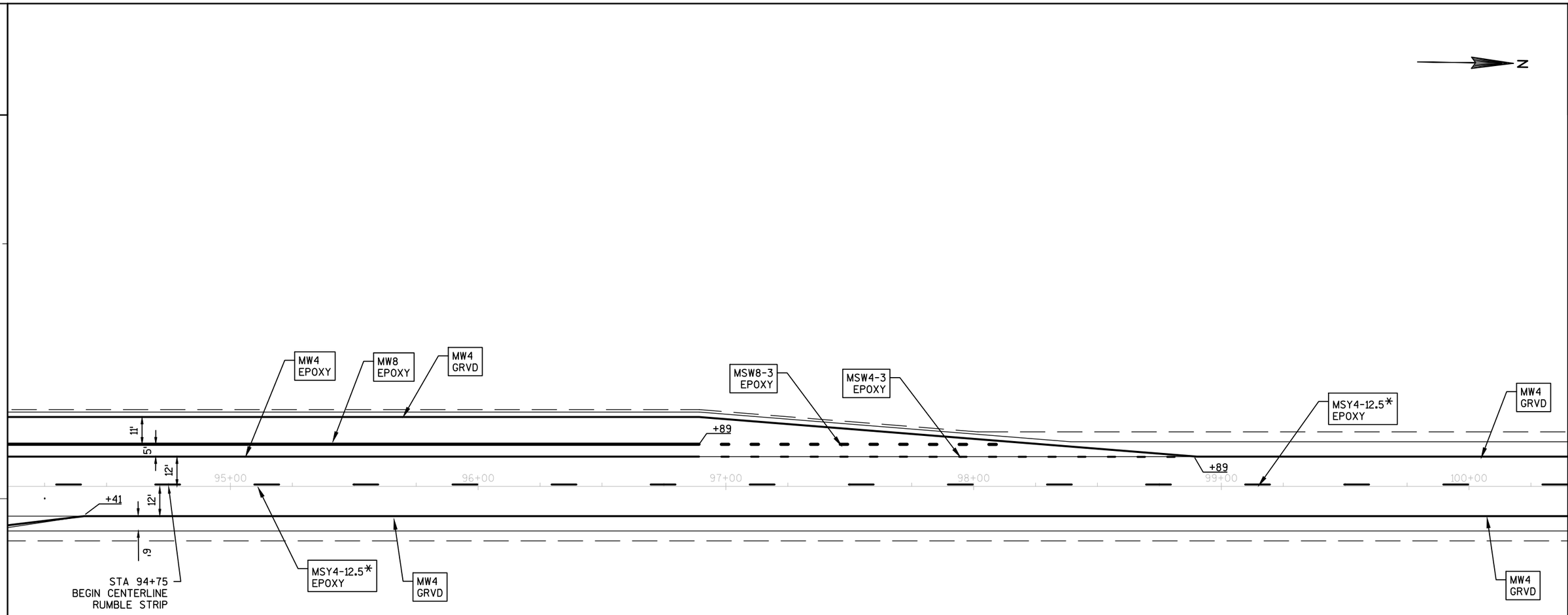
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 7 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 341	E

2



PAVEMENT MARKING LEGEND

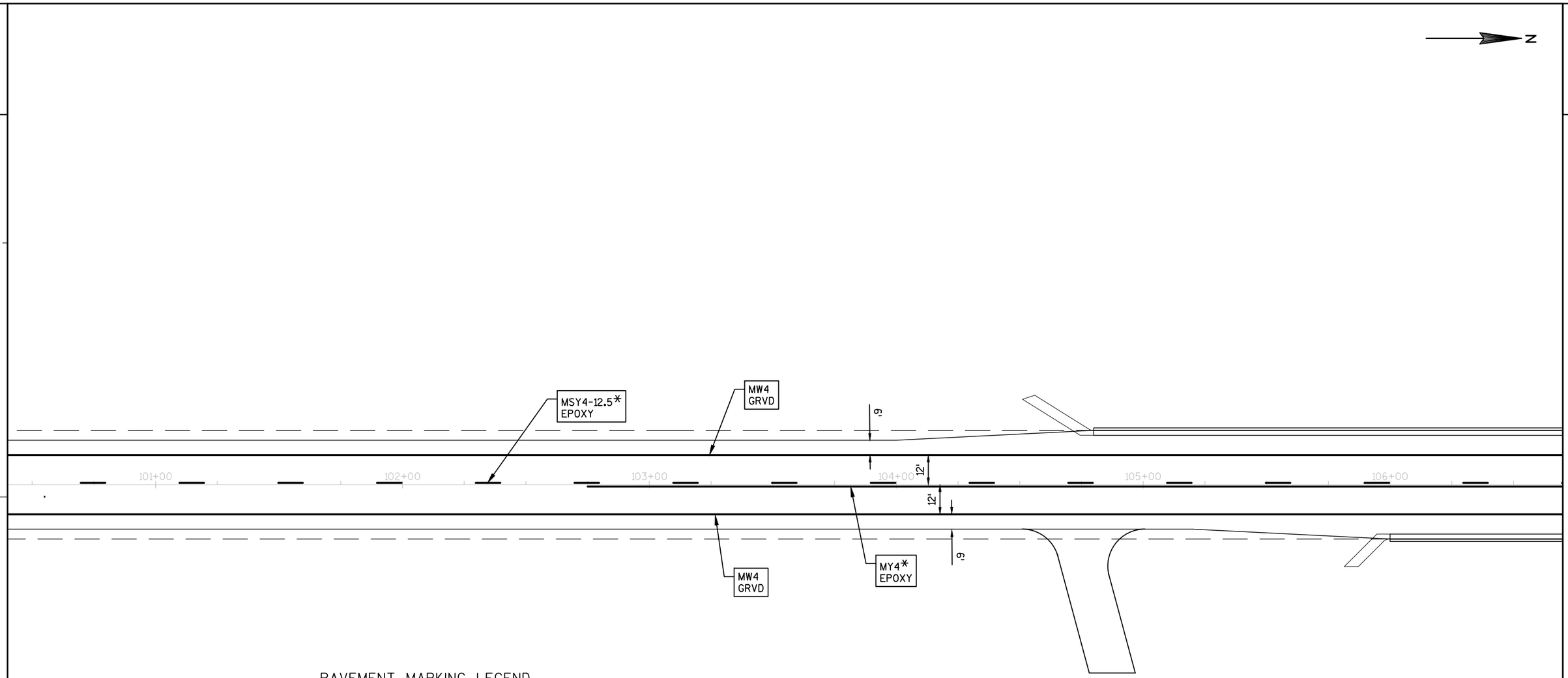
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 94+75 TO 131+00
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 8 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 342	E

2



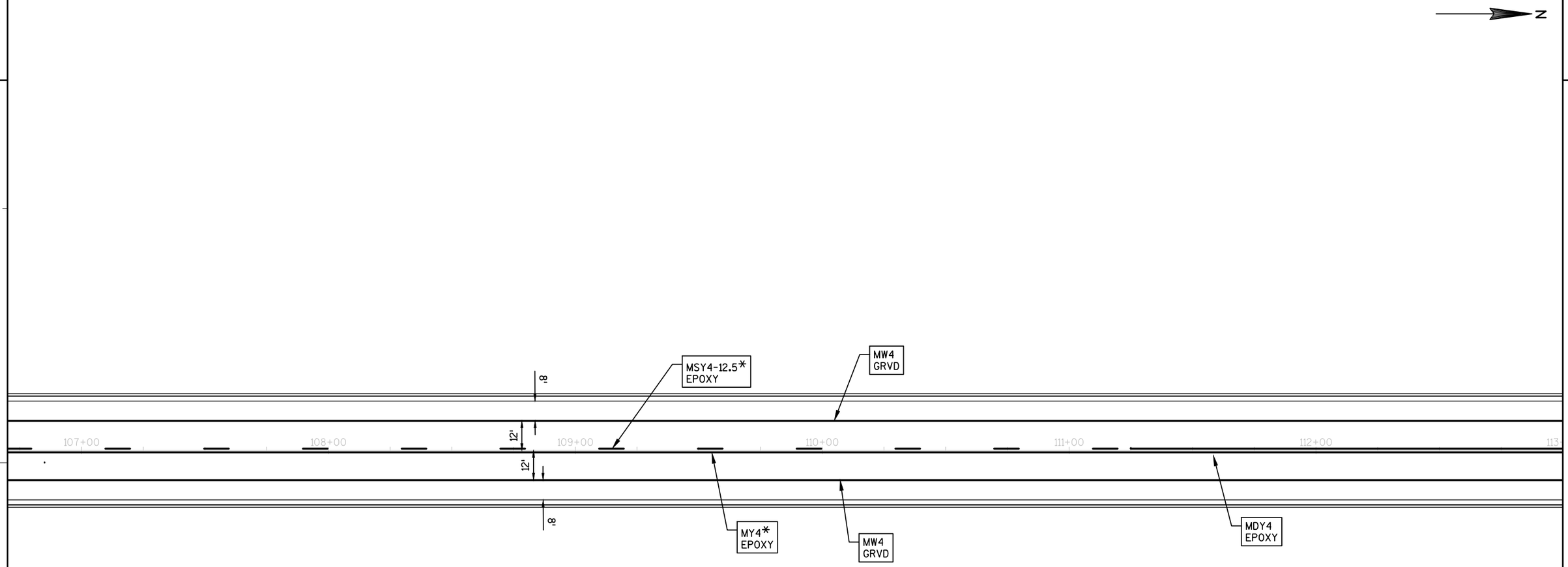
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 94+75 TO 131+00
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 343	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024509_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : _____ PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



2

PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 94+75 TO 131+00
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 344	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024510_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : _____ PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

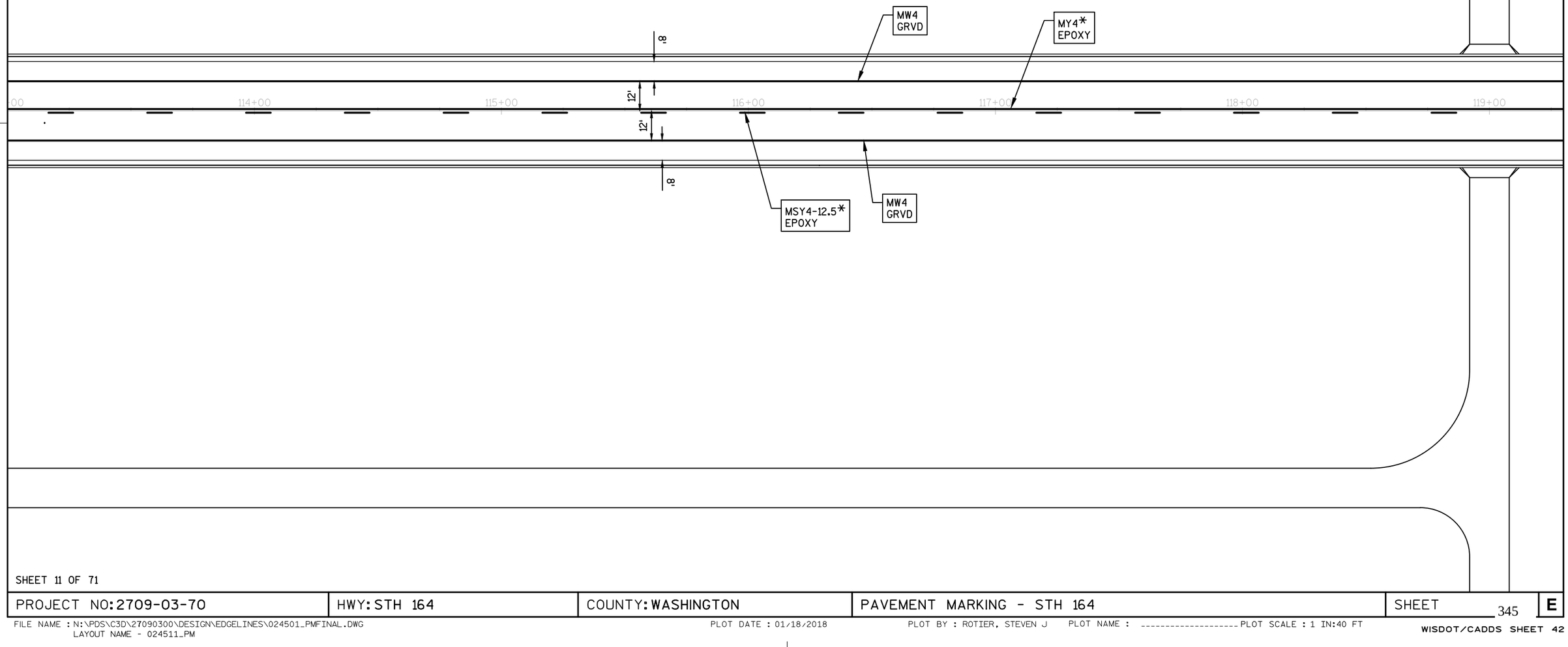
2

PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 94+75 TO 131+00
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

N



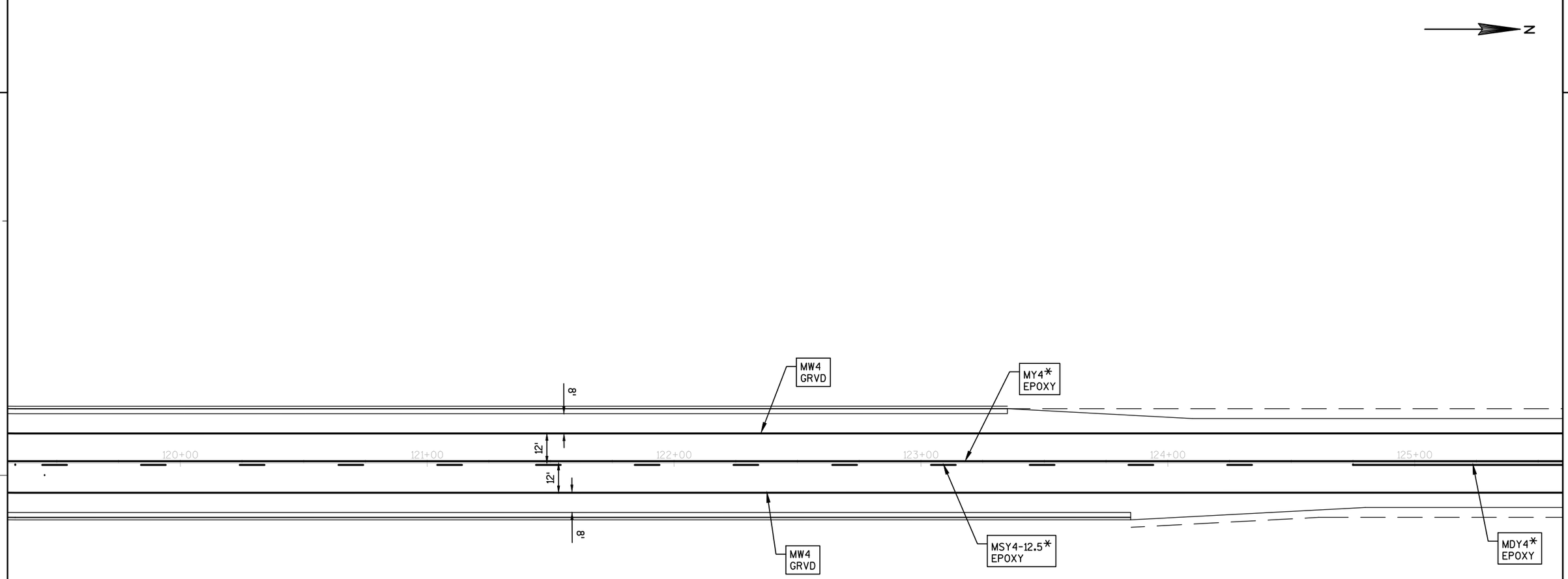
SHEET 11 OF 71

PROJECT NO:2709-03-70	HWY:STH 164	COUNTY:WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 345	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024511_PM

PLOT DATE : 01/18/2018 PLOT BY : ROTIER, STEVEN J PLOT NAME : _____ PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

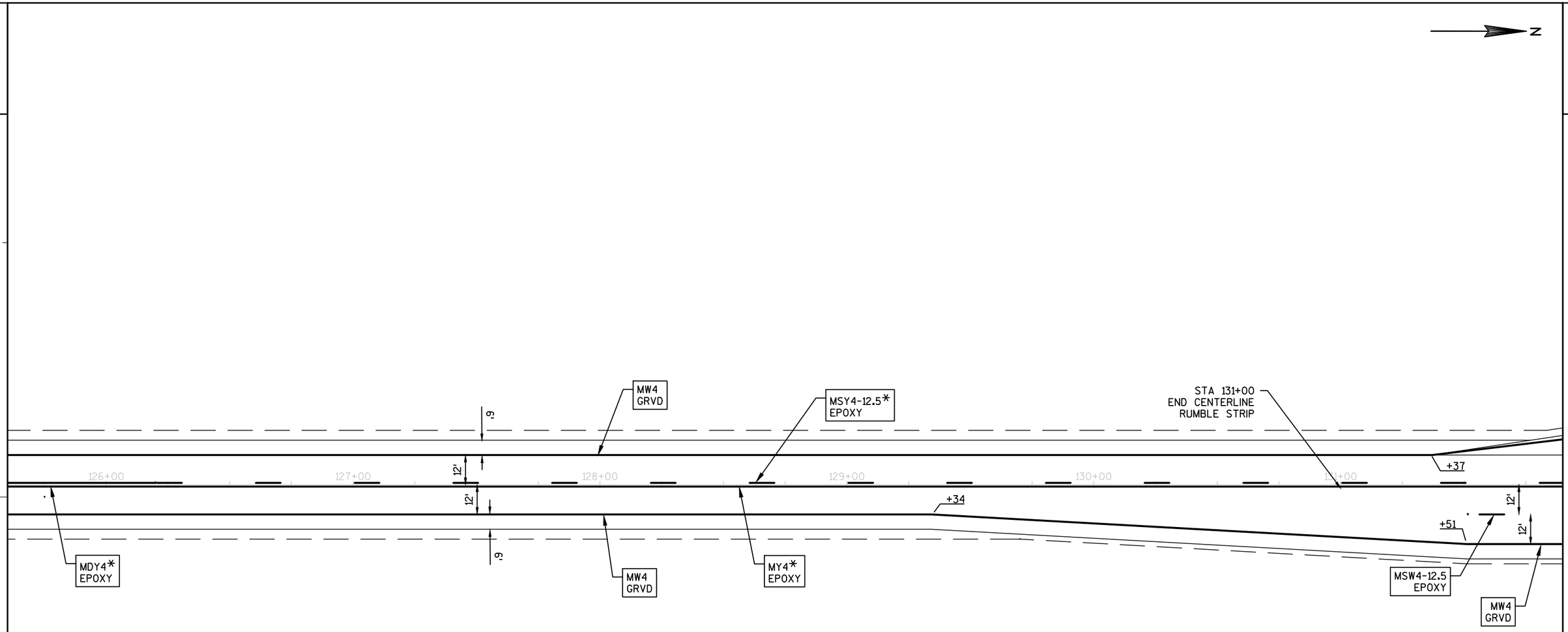
NOTE: CENTERLINE RUMBLE STRIP STA 94+75 TO 131+00
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 12 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 346	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024512_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

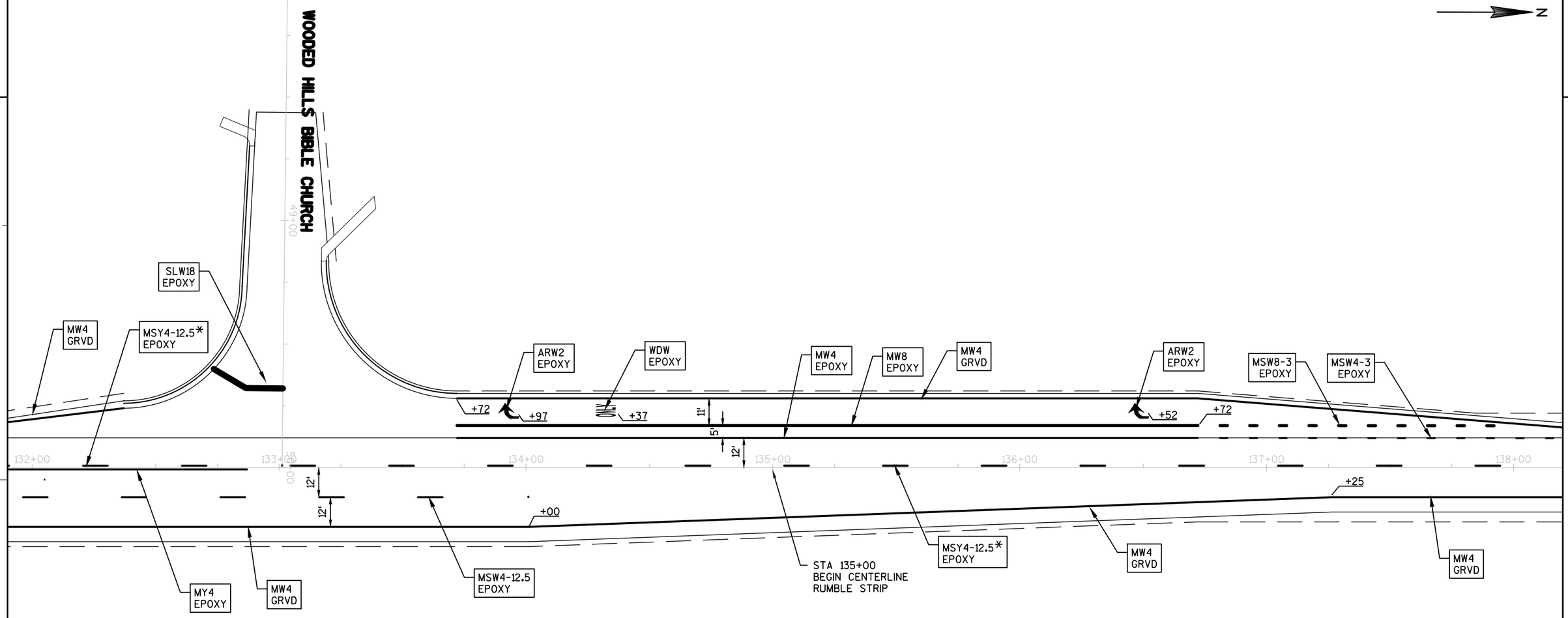


PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 94+75 TO 131+00
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 13 OF 71



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

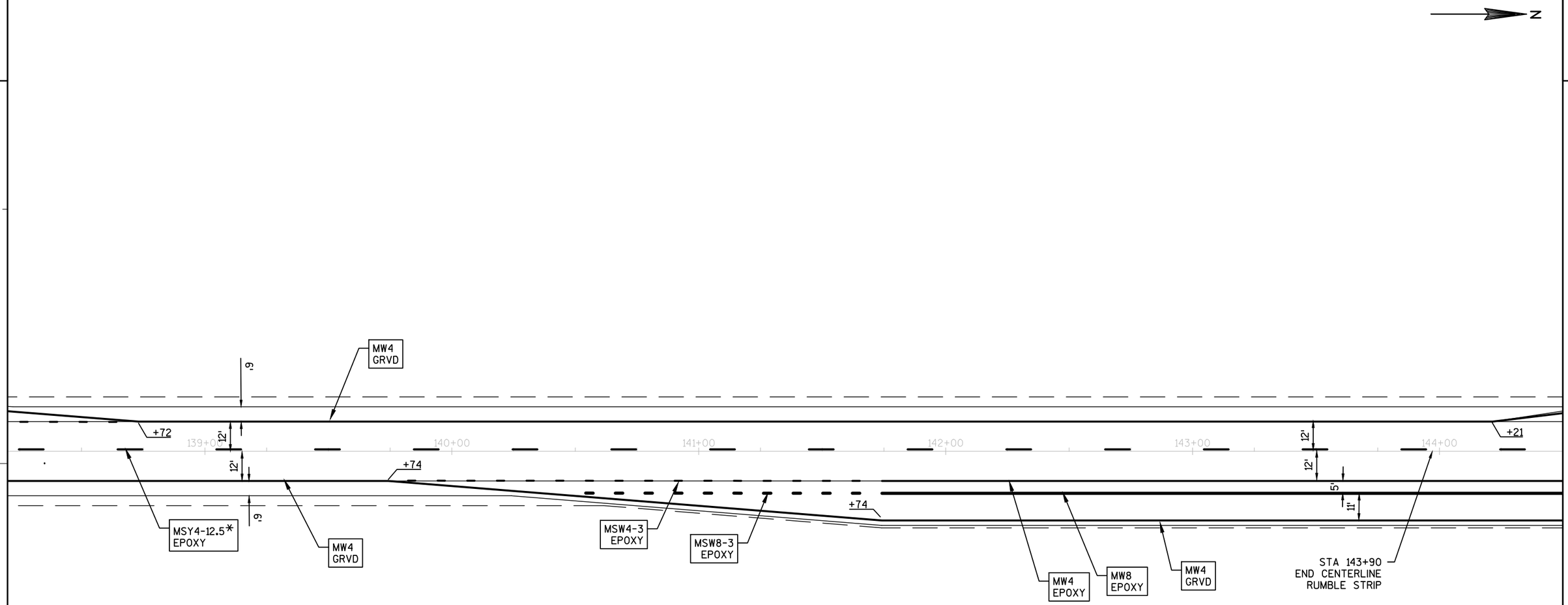
NOTE: CENTERLINE RUMBLE STRIP STA 135+00 TO 143+90
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 14 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 348	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024514_PM

PLOT DATE : 01/18/2018 PLOT BY : ROTIER, STEVEN J PLOT NAME : _____ PLOT SCALE : 1 IN:40 FT



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 135+00 TO 143+90
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 15 OF 71

2

N

ELMWOOD ROAD

59+00

61+00

MDY4 EPOXY

MW4 EPOXY

MW4 EPOXY

SLW18 EPOXY

MW4 GRVD

MW4 EPOXY

MW8 EPOXY

MW4 GRVD

MSW8-3 EPOXY

MSW4-3 EPOXY

+51

+01

11'

5'

12'

9'

145+00

146+00

147+00

148+00

149+00

150+00

+54

+24

MW4 EPOXY

MW8 EPOXY

MW4 GRVD

SLW18 EPOXY

MDY4 EPOXY

MW4 EPOXY

MW4 EPOXY

MSY4-12.5* EPOXY

MW4 GRVD

MY4* EPOXY

MSY4-12.5* EPOXY

STA 147+90
BEGIN CENTERLINE
RUMBLE STRIP

PAVEMENT MARKING LEGEND

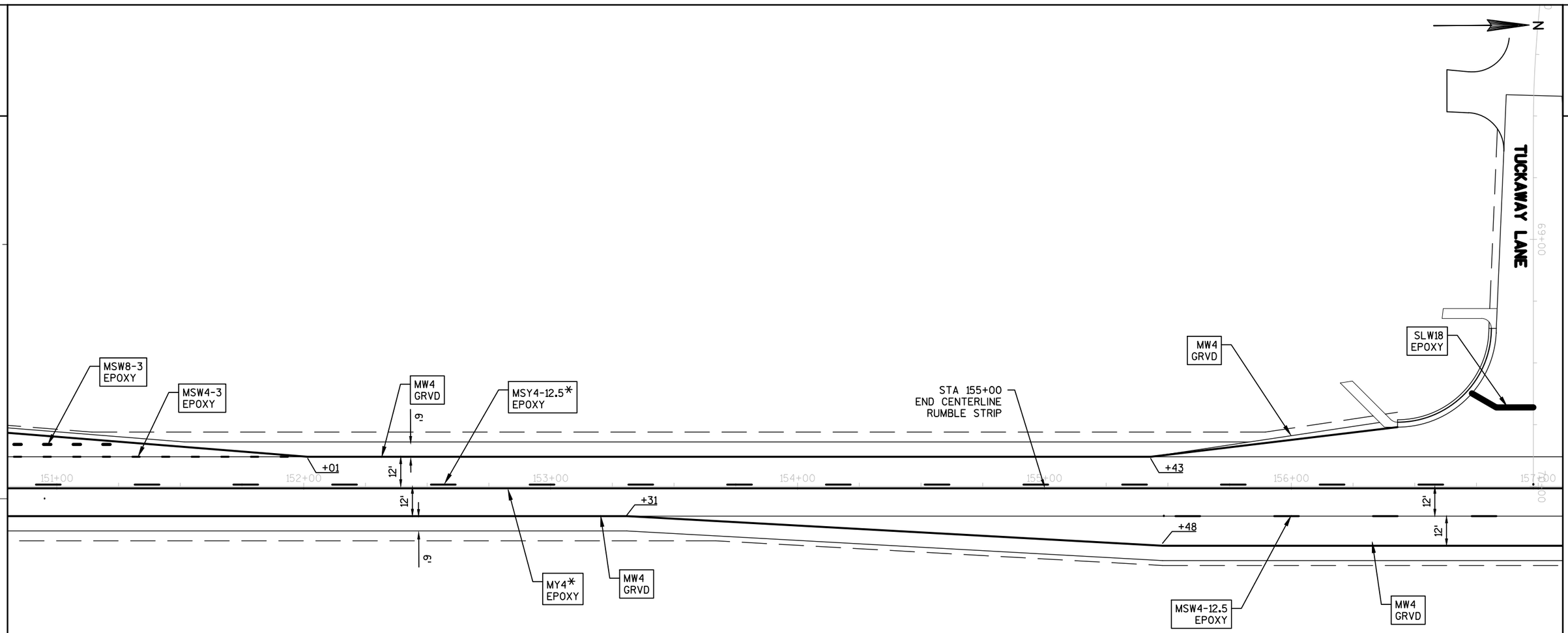
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 147+90 TO 155+00
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 16 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 350	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024516_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

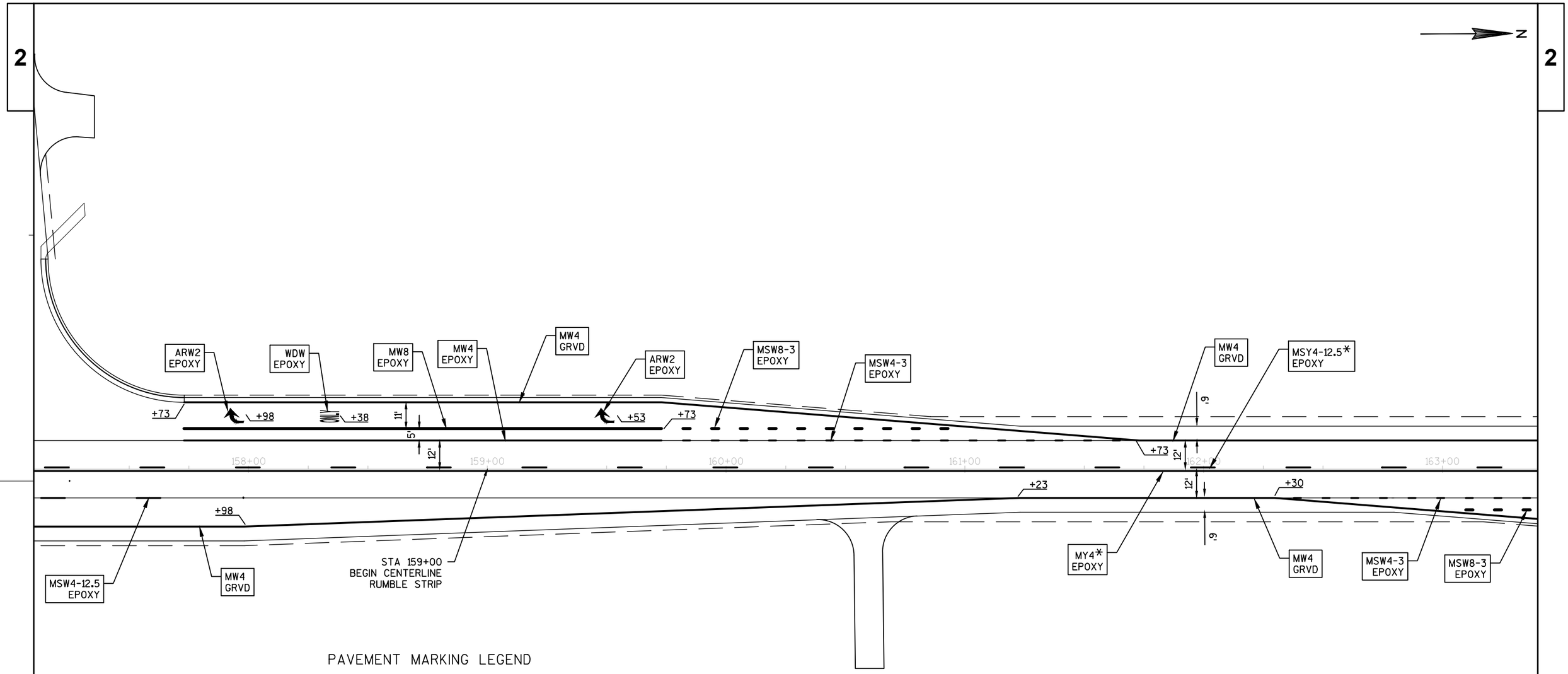
NOTE: CENTERLINE RUMBLE STRIP STA 147+90 TO 155+00
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 17 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 351	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024517_PM

PLOT DATE : 01/18/2018 PLOT BY : ROTIER, STEVEN J PLOT NAME : _____ PLOT SCALE : 1 IN:40 FT



PAVEMENT MARKING LEGEND

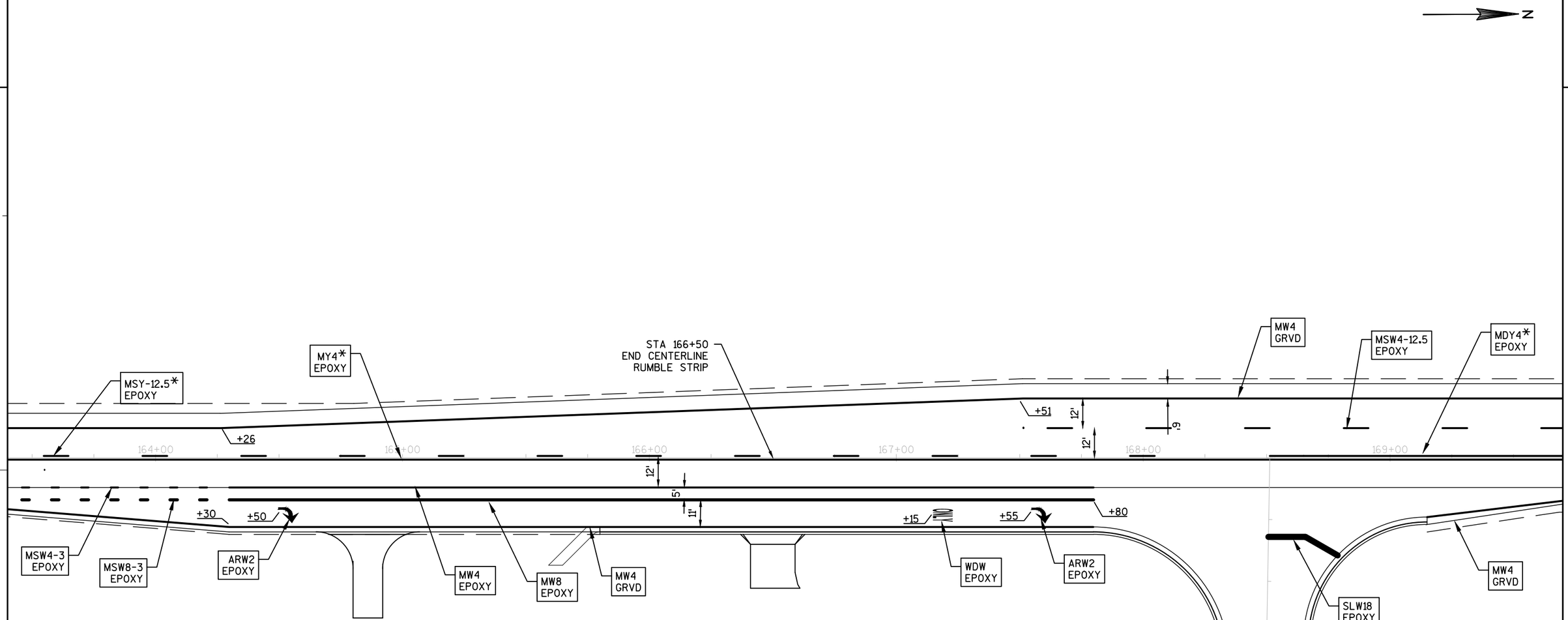
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 159+00 TO 166+50
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 352	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024518_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : _____ PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



PAVEMENT MARKING LEGEND

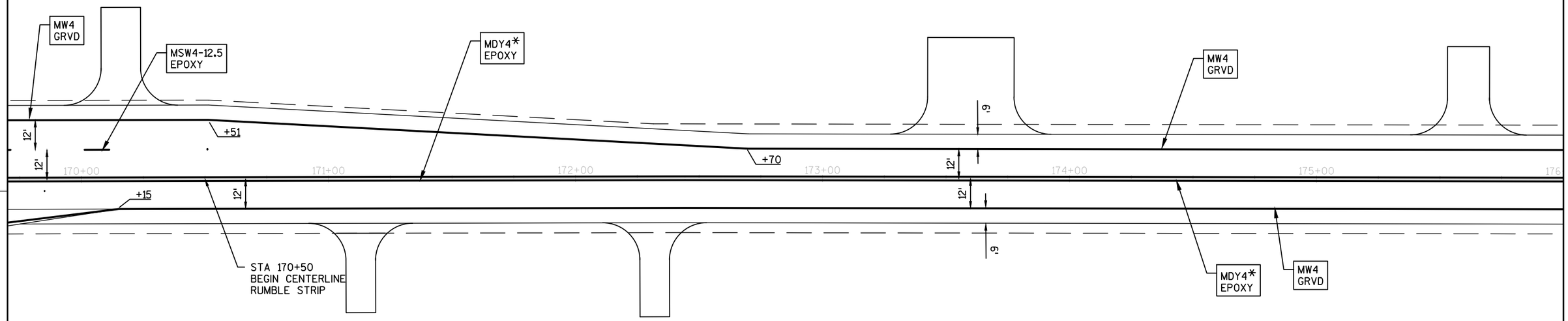
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 159+00 TO 166+50
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 353	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024519_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



PAVEMENT MARKING LEGEND

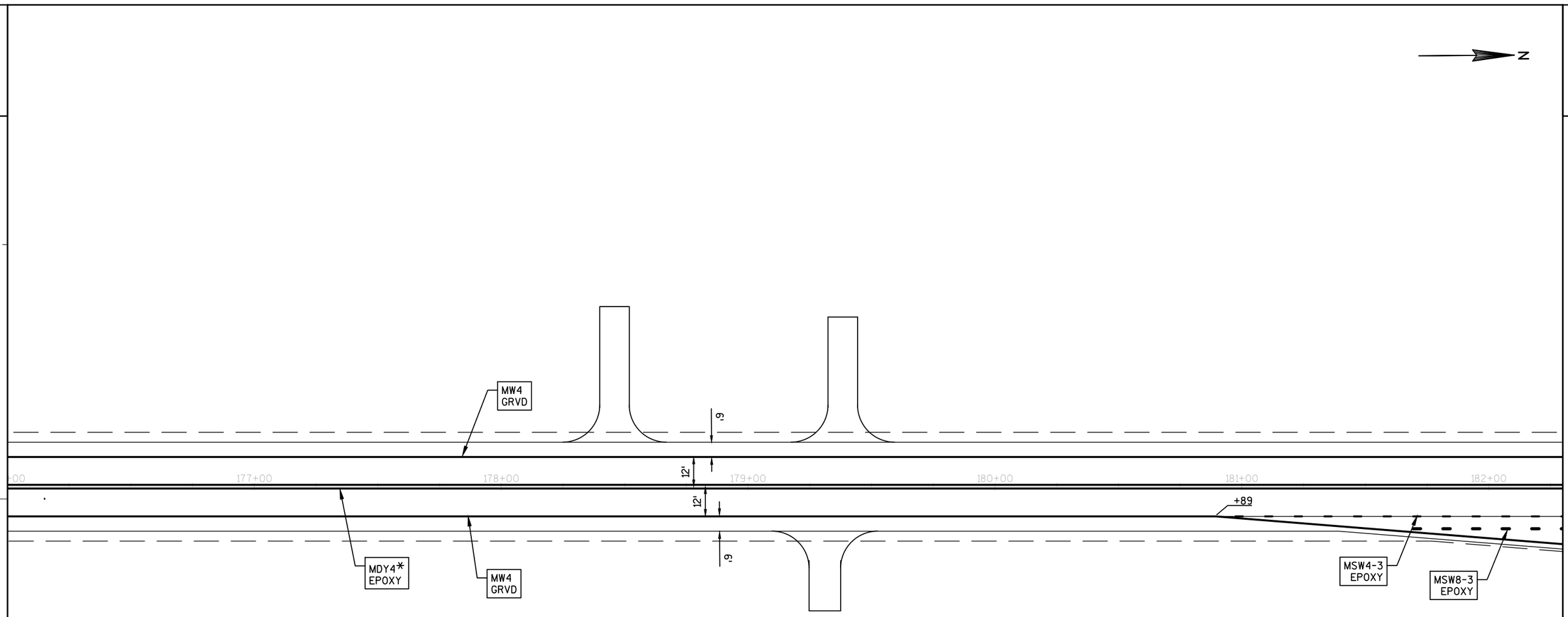
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 170+50 TO 184+60
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 20 OF 71

2

2



PAVEMENT MARKING LEGEND

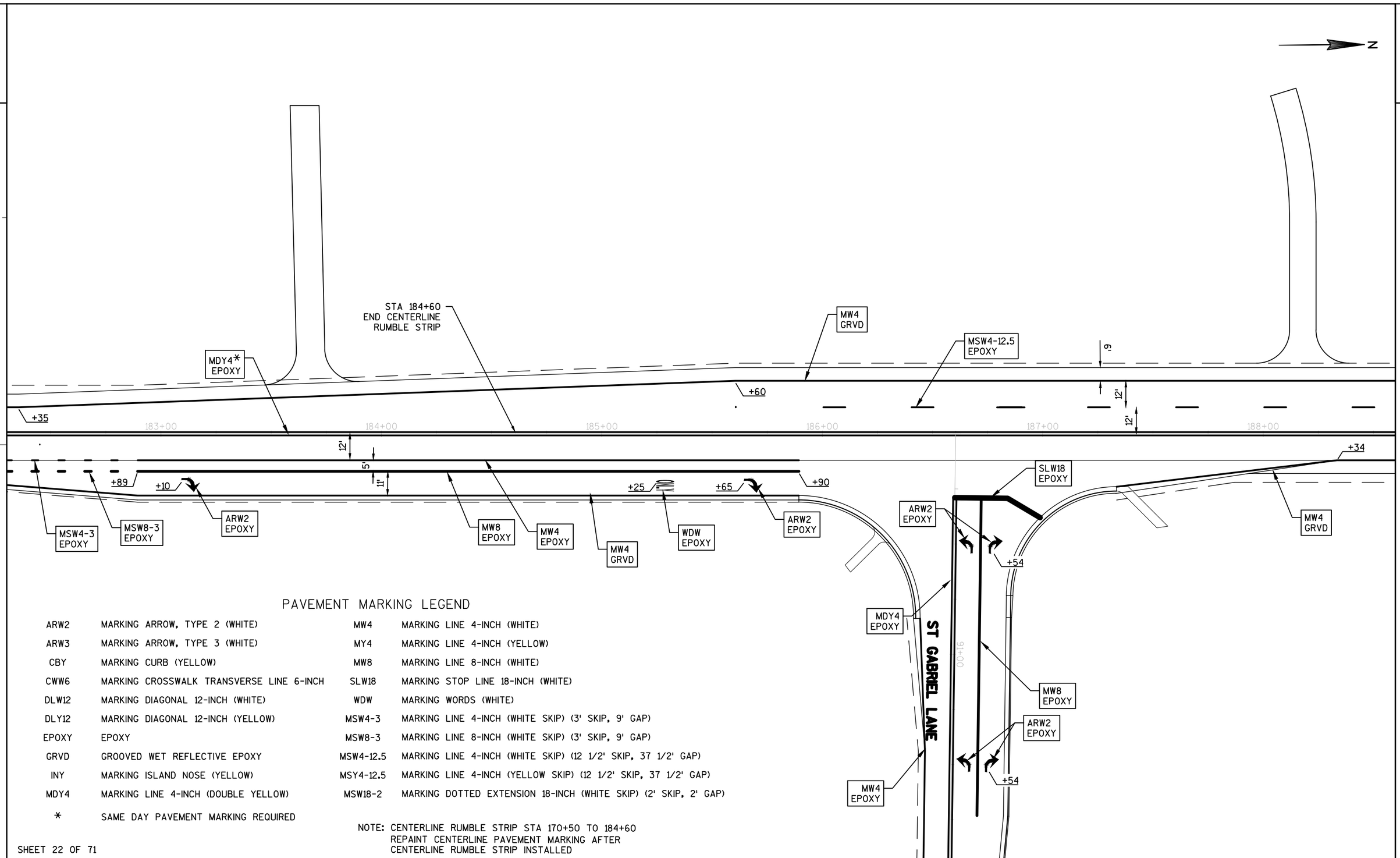
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 170+50 TO 184+60
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 355	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024521_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



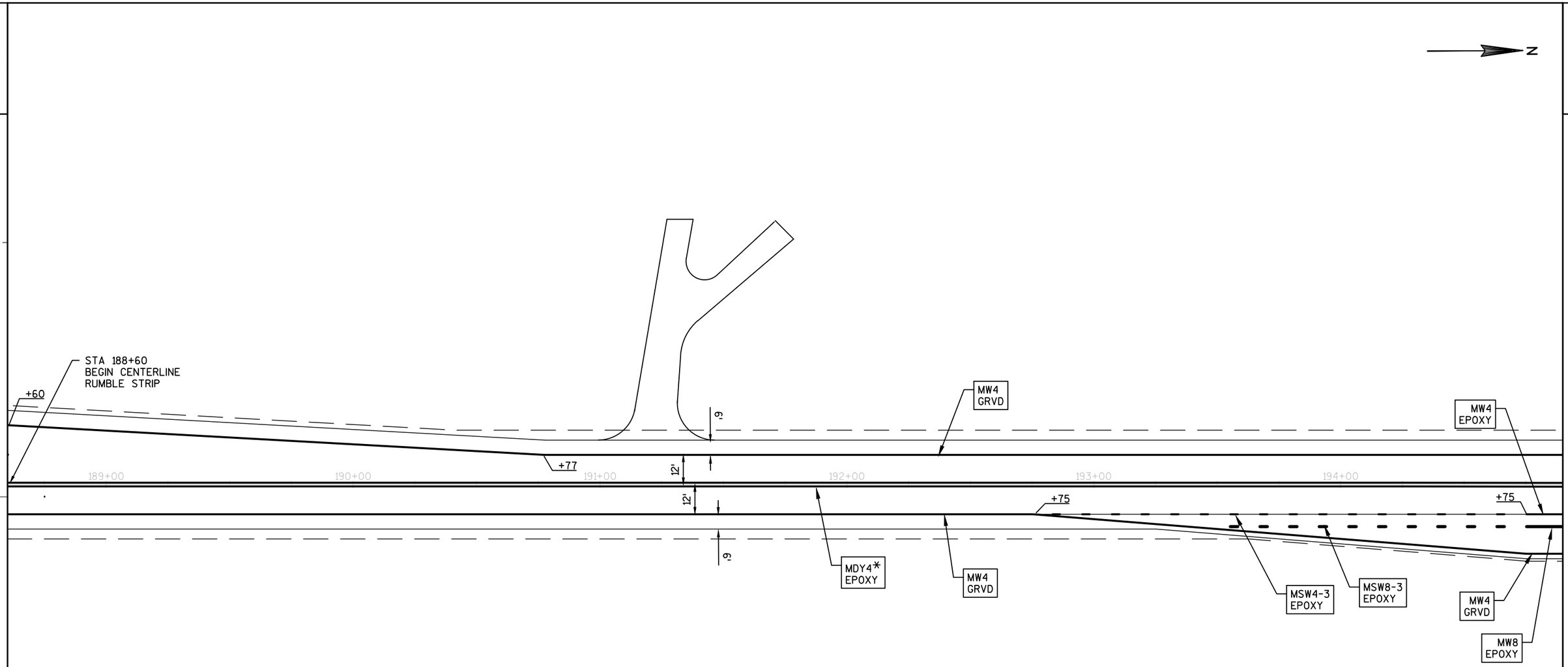
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 170+50 TO 184+60
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 22 OF 71

2



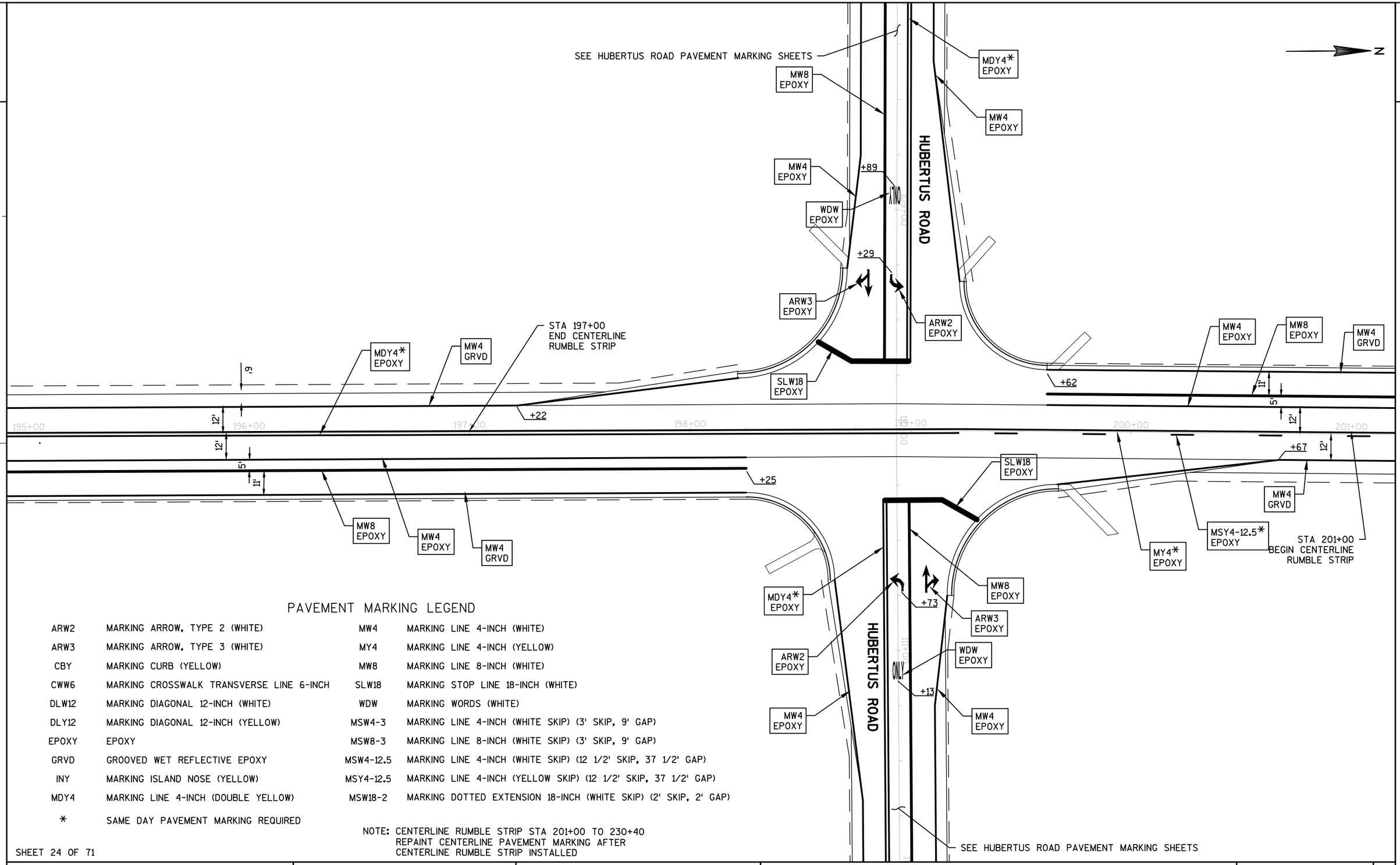
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 188+60 TO 197+00
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 357	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024523_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : _____ PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

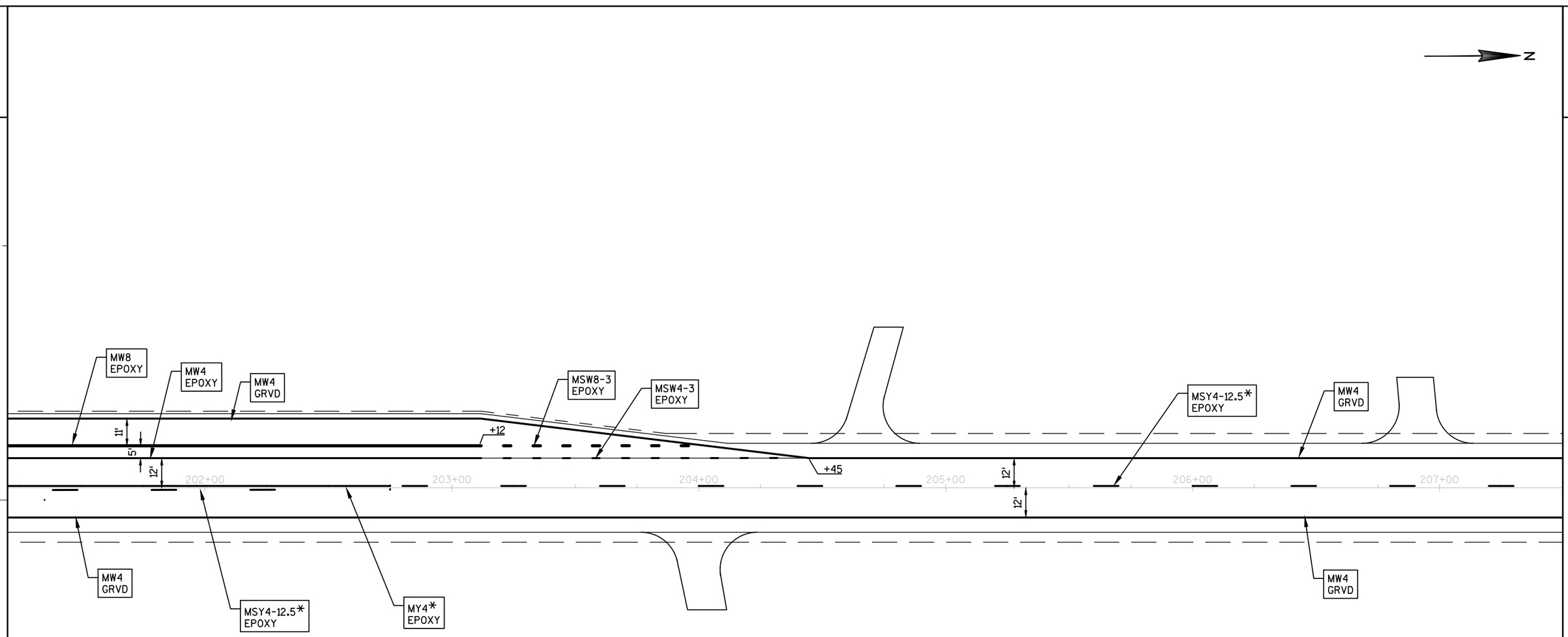
NOTE: CENTERLINE RUMBLE STRIP STA 201+00 TO 230+40
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 24 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 358	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024524_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



PAVEMENT MARKING LEGEND

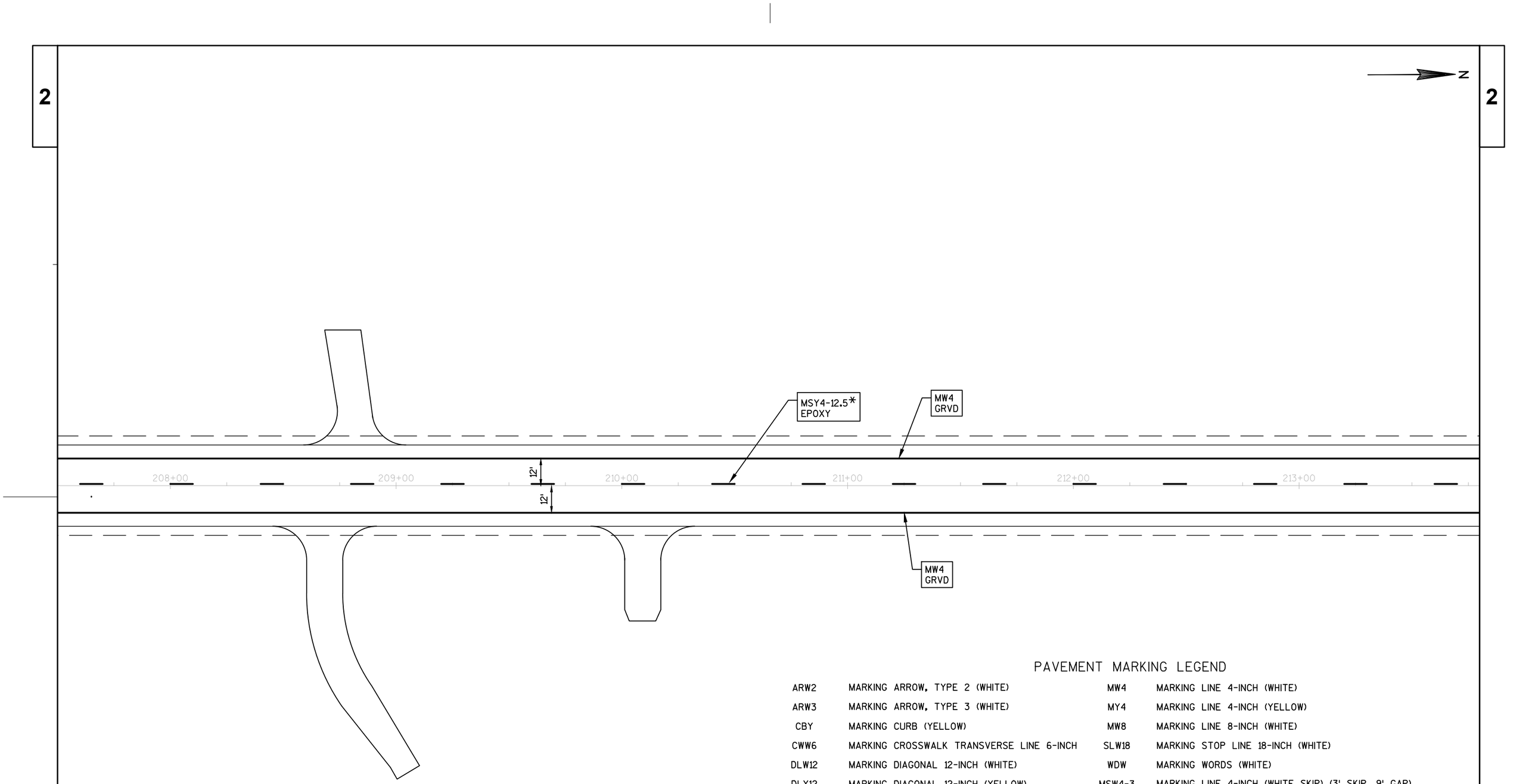
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 201+00 TO 230+40
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 25 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 359	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024525_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



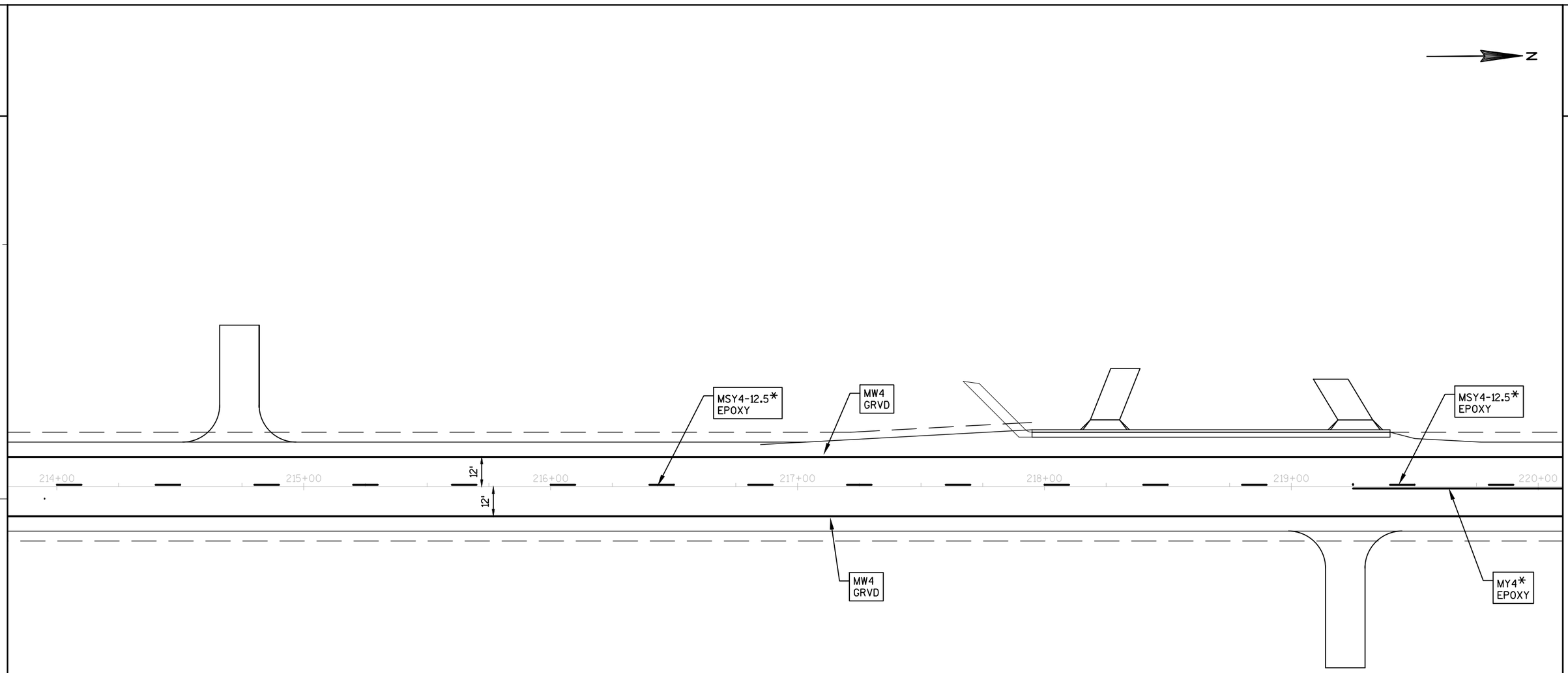
2

PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 201+00 TO 230+40
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 26 OF 71



2

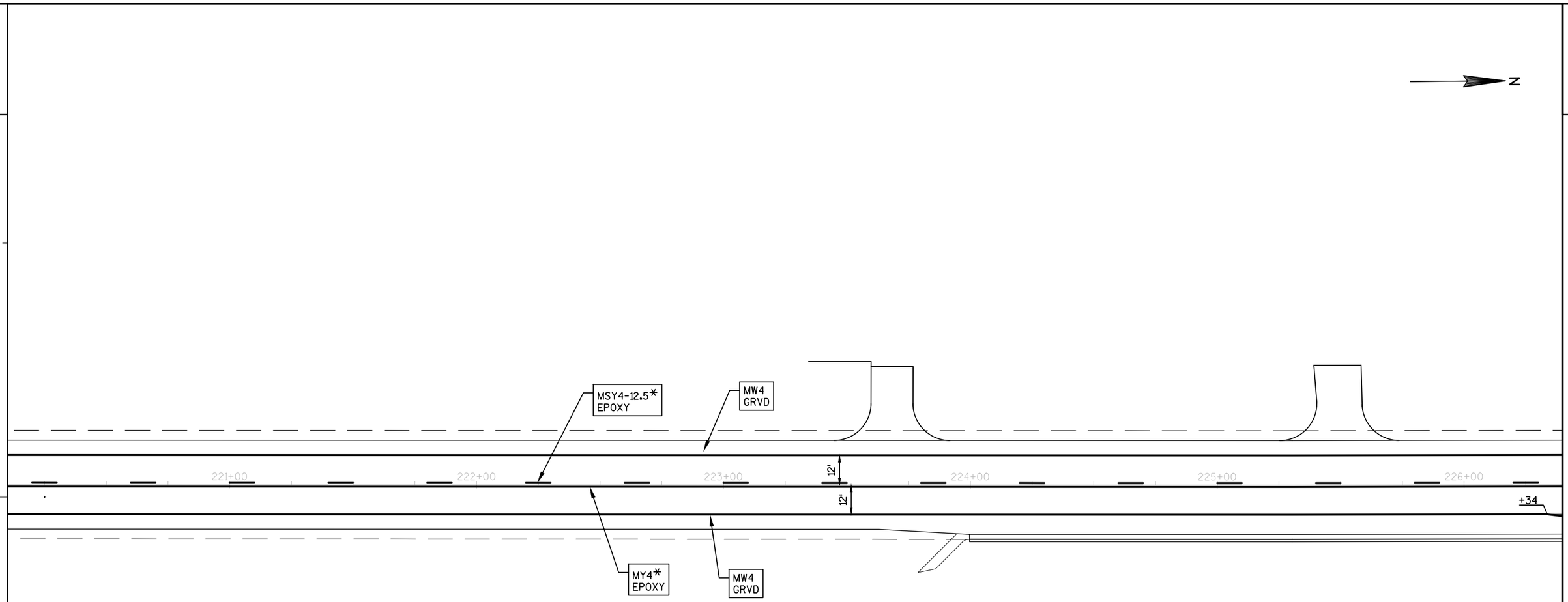
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 201+00 TO 230+40
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 27 OF 71

2

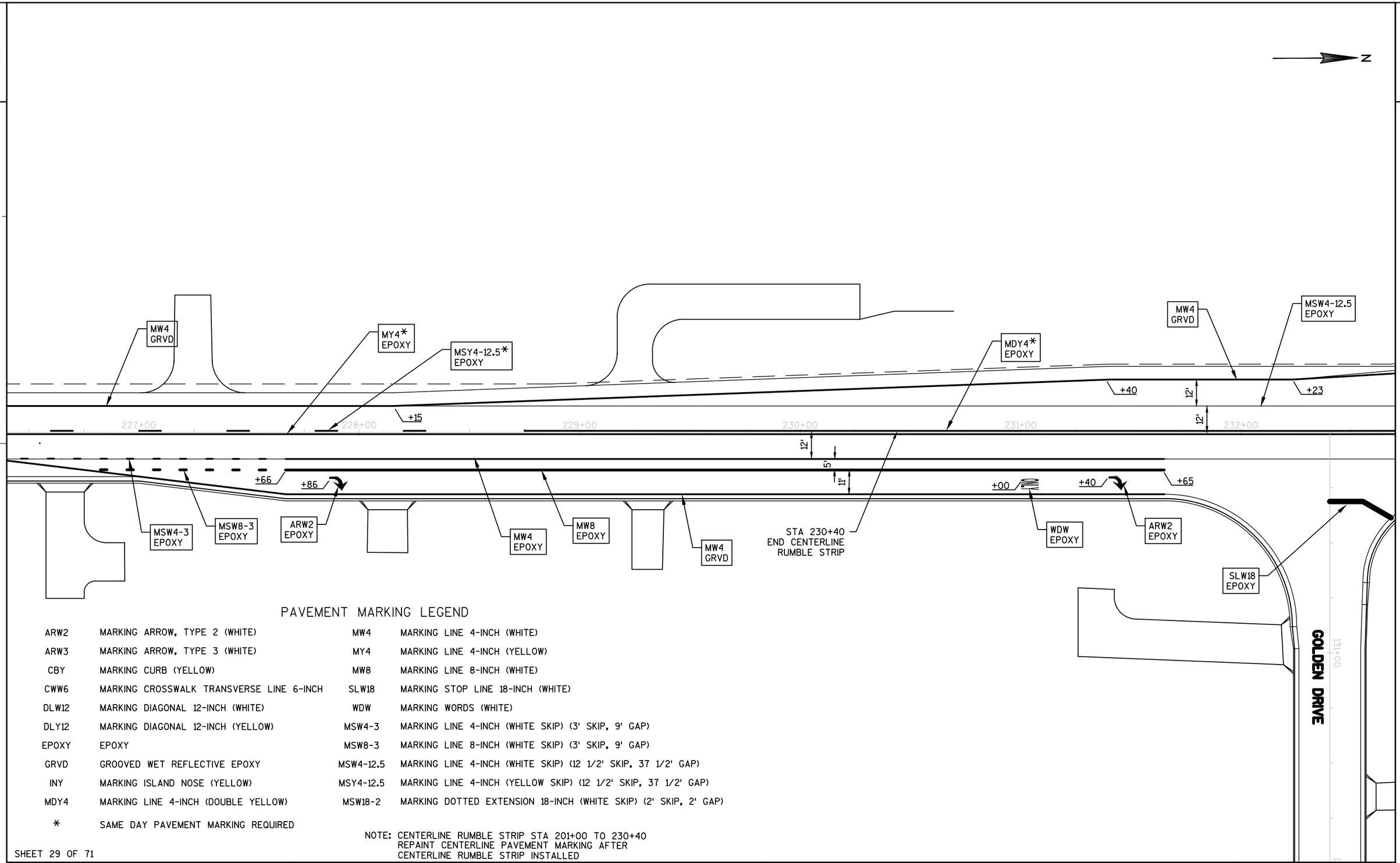


PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 201+00 TO 230+40
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 28 OF 71



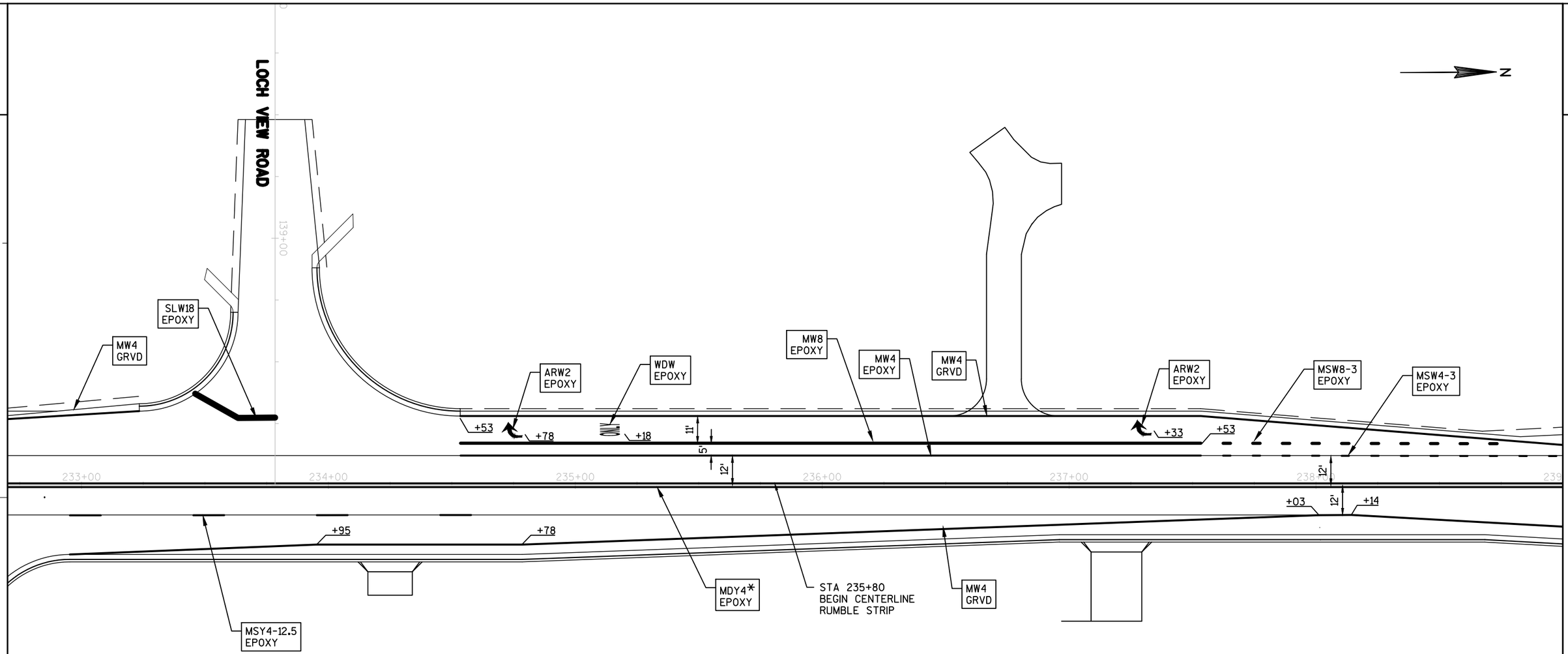
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 201+00 TO 230+40
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 363	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024529_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



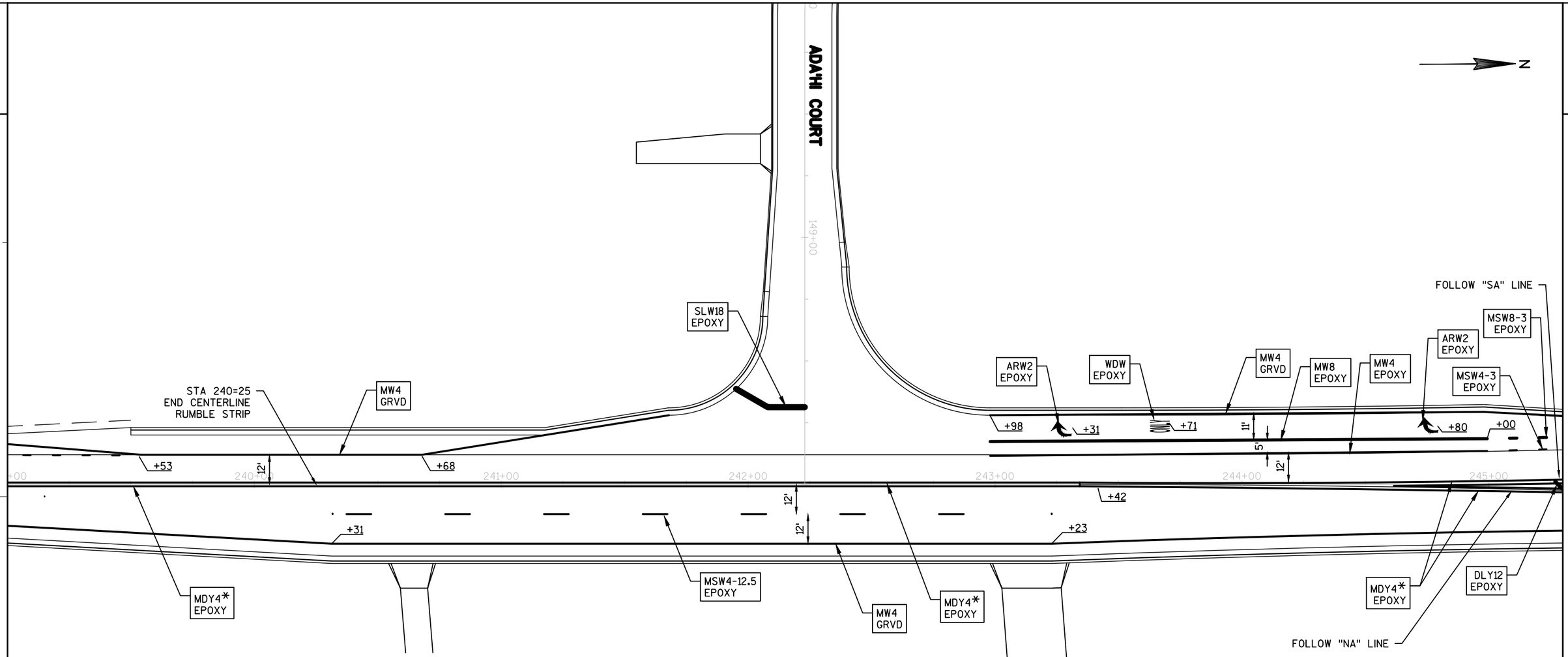
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 235+80 TO 240+25
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 364	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024530_PM
PLOT DATE : 01/18/2018 PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

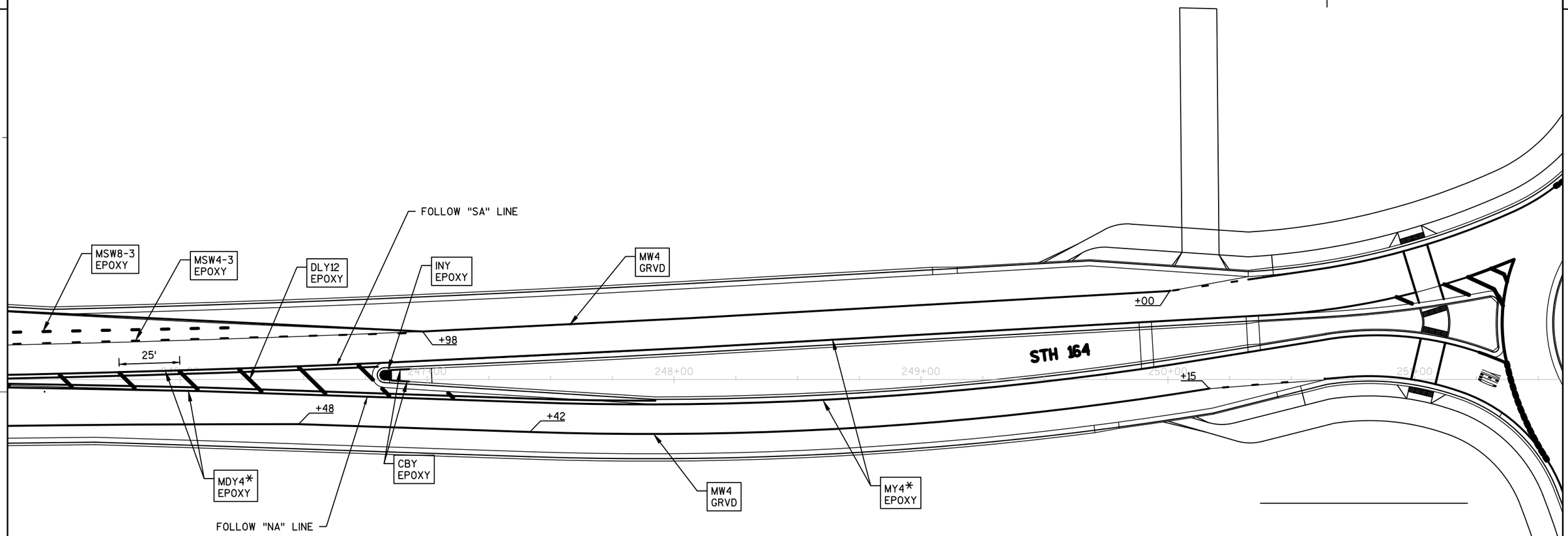
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 235+80 TO 240+25
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 365	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024531_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

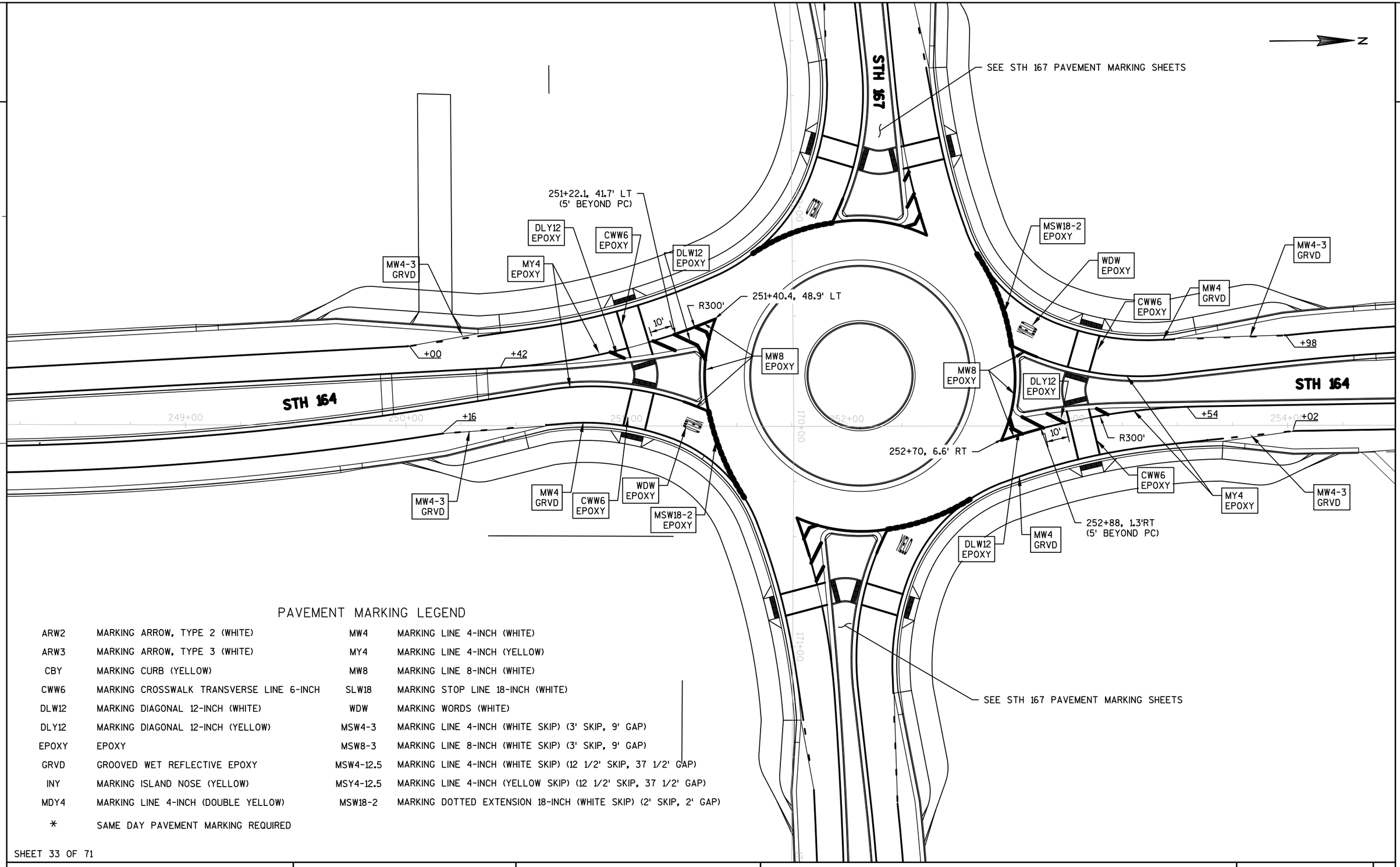
SHEET 32 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 366	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024532_PM

PLOT DATE : 01/18/2018 PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT

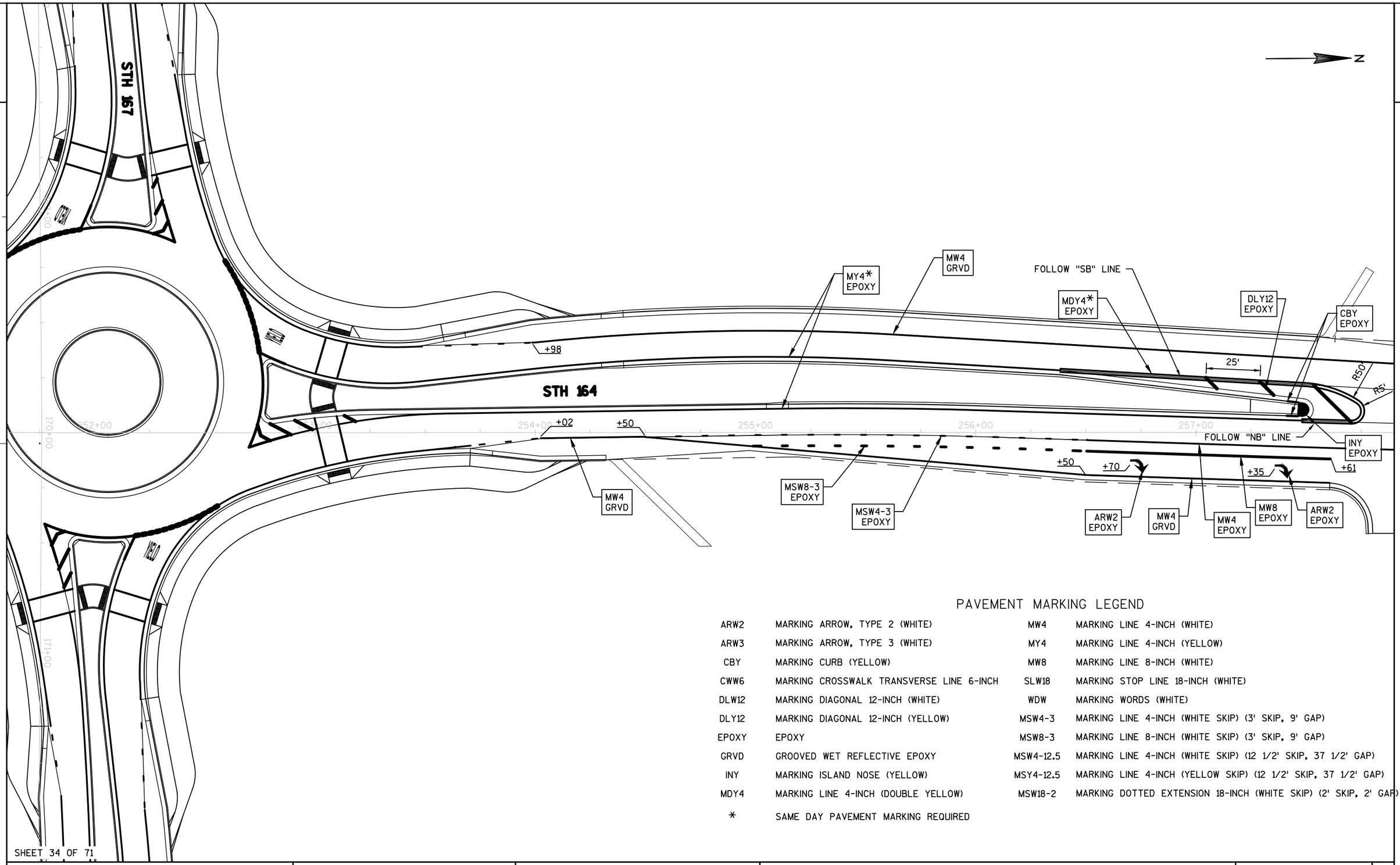
2



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

SHEET 33 OF 71

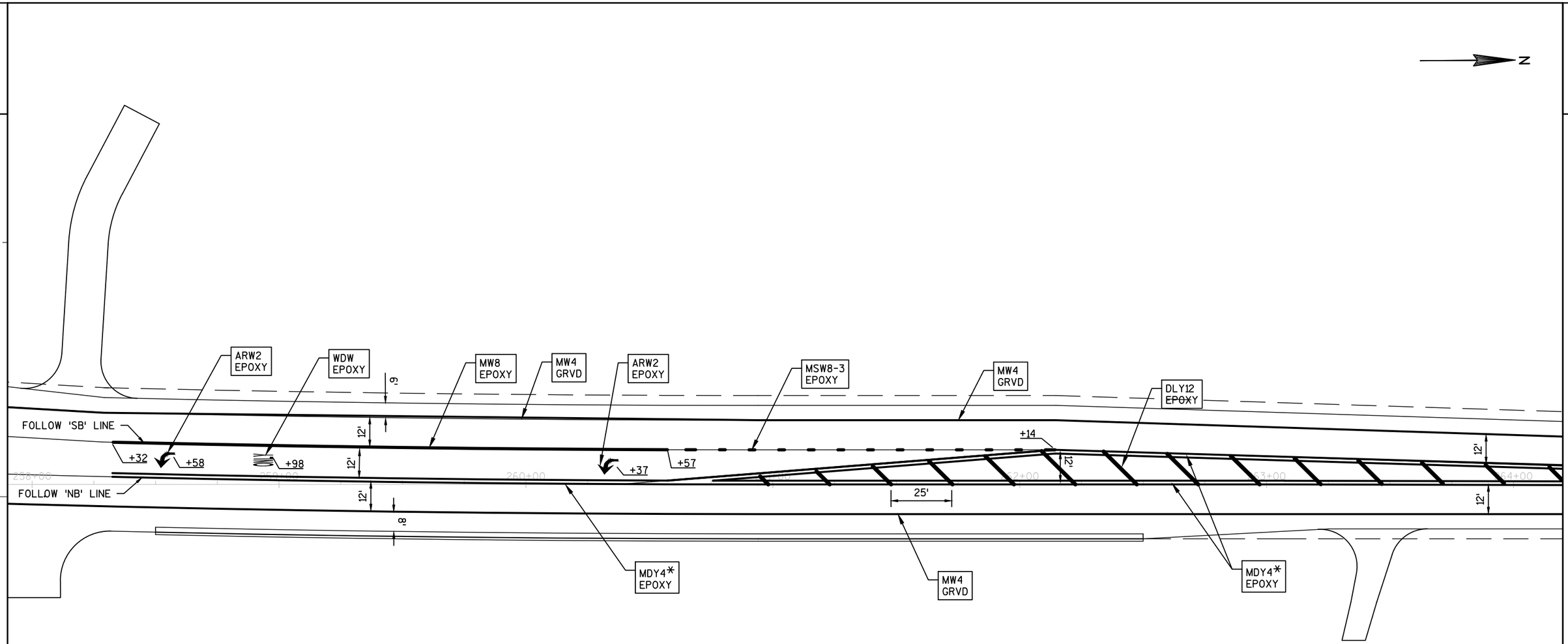


PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

SHEET 34 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 368	E



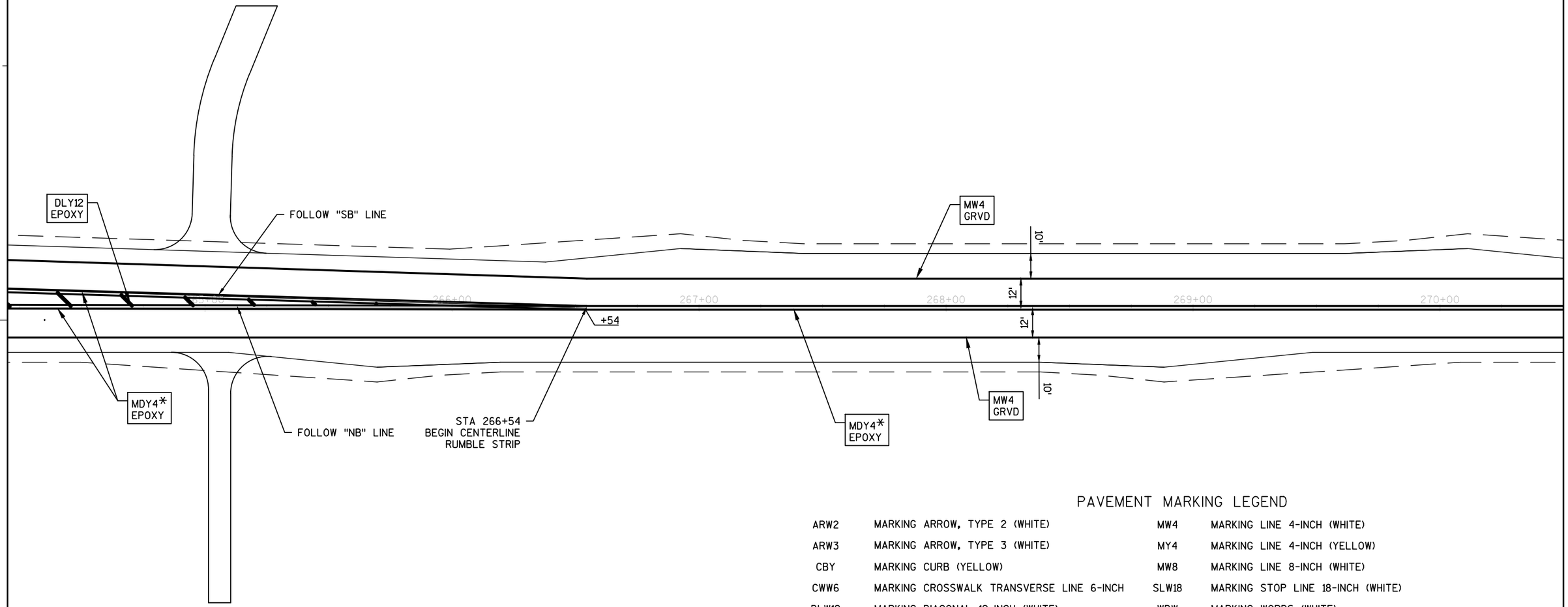
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

SHEET 35 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 369	E

2



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

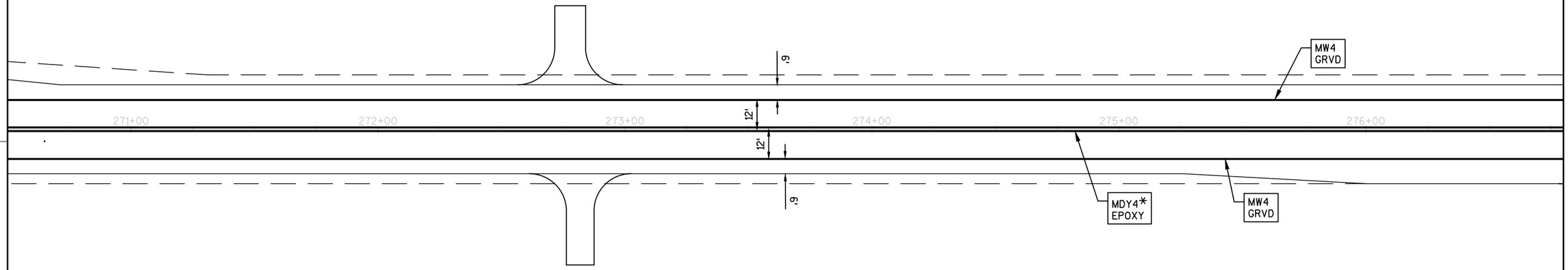
NOTE: CENTERLINE RUMBLE STRIP STA 266+54 TO 279+75
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 36 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 370	E

2

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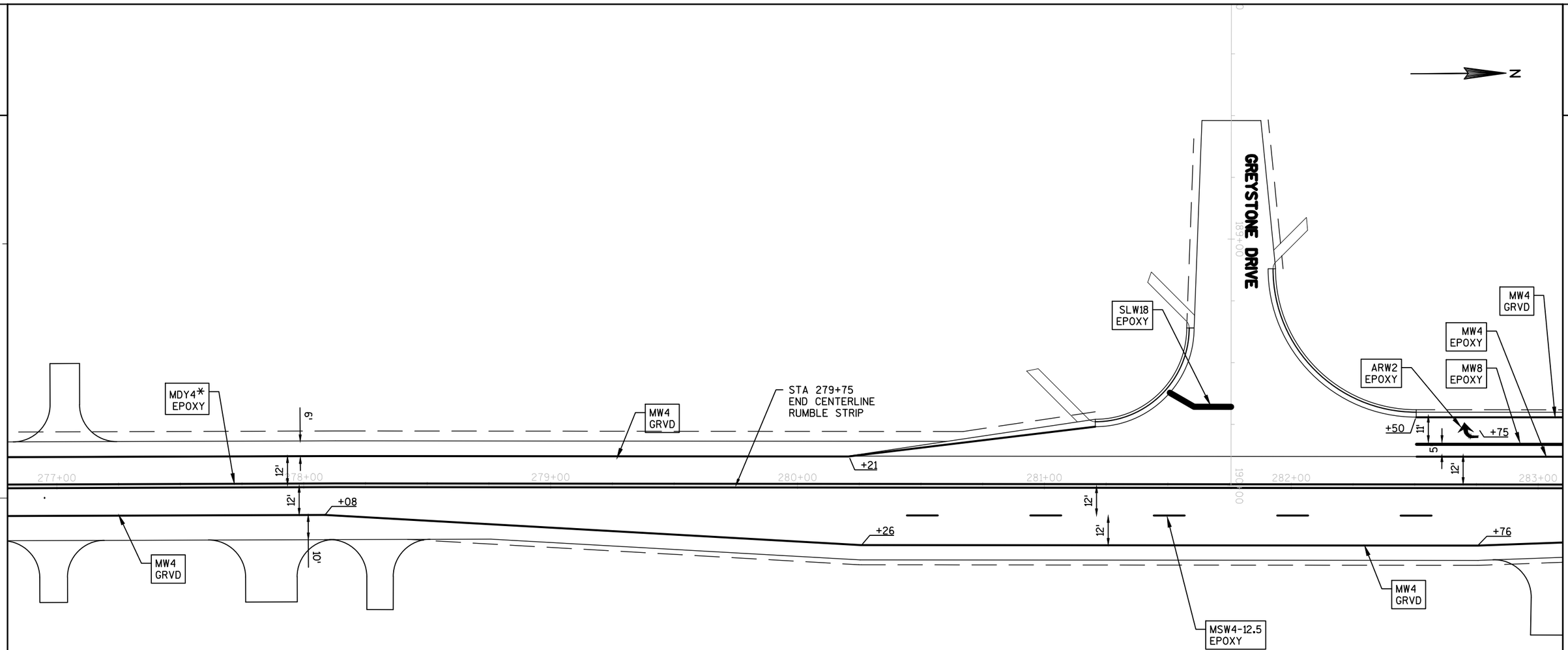
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 266+54 TO 279+75
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 37 OF 71

2



PAVEMENT MARKING LEGEND

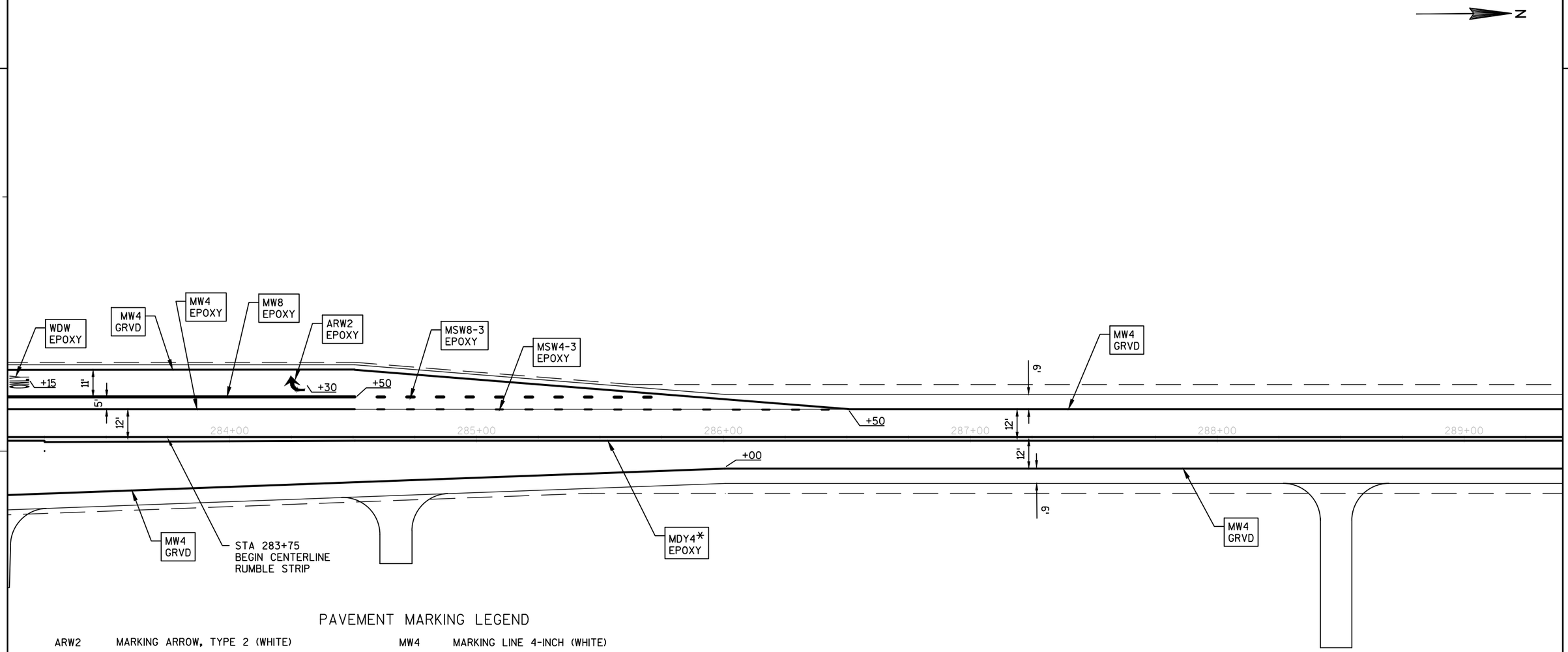
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 266+54 TO 279+75
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 38 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 372	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024537_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



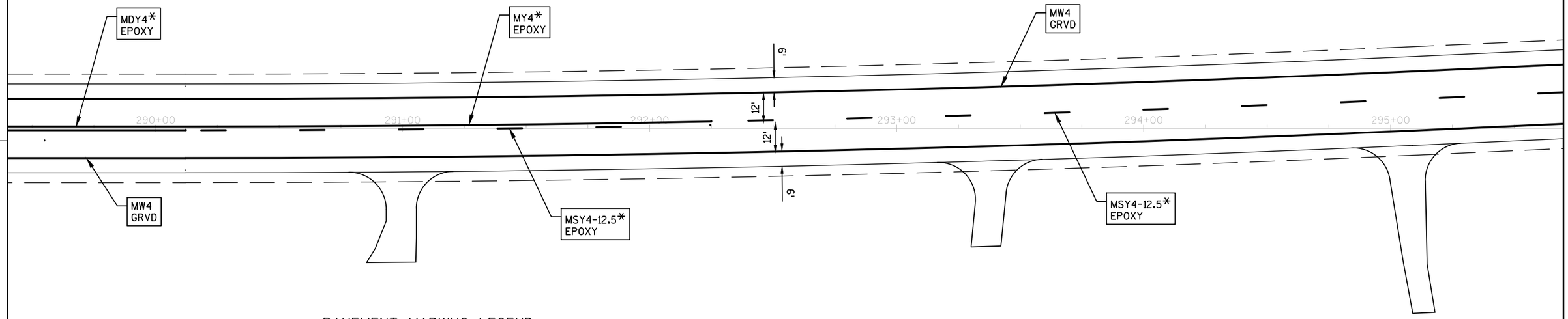
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 283+75 TO 302+60
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 39 OF 71

2



PAVEMENT MARKING LEGEND

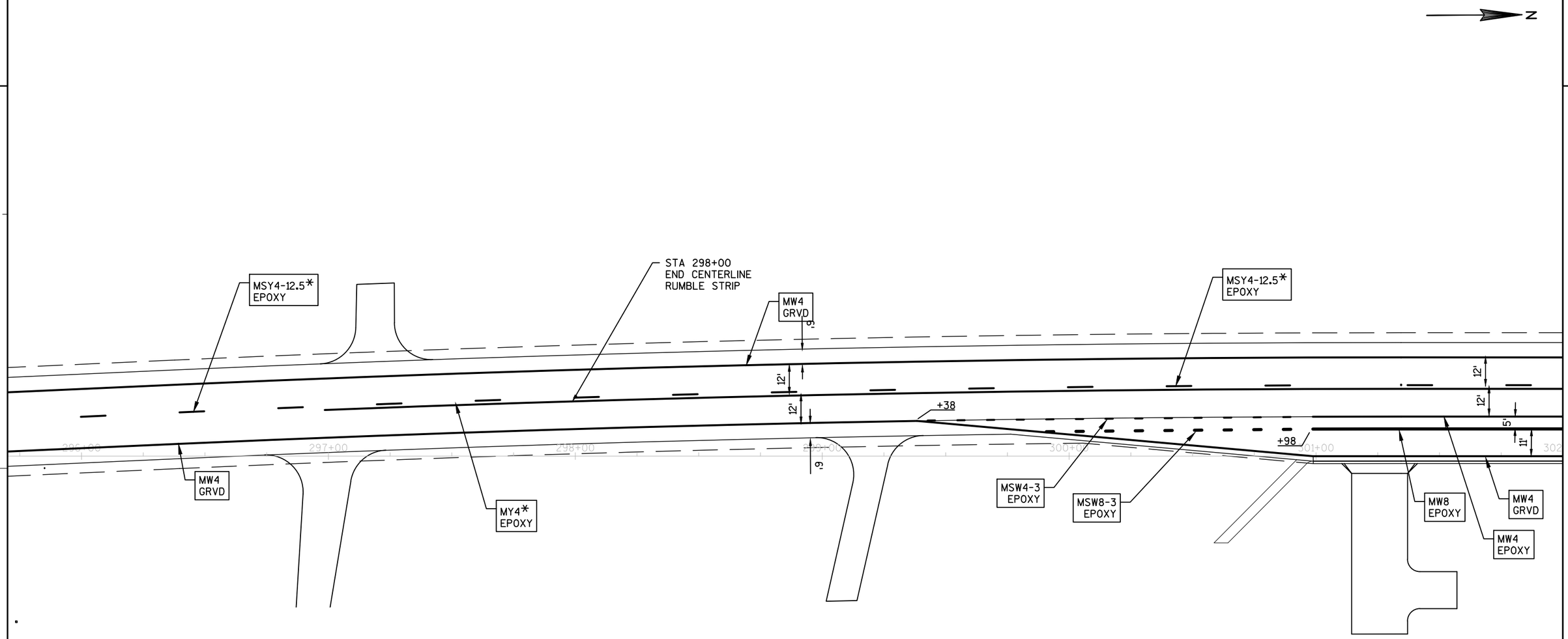
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 283+75 TO 302+60
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 40 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 374	E

2



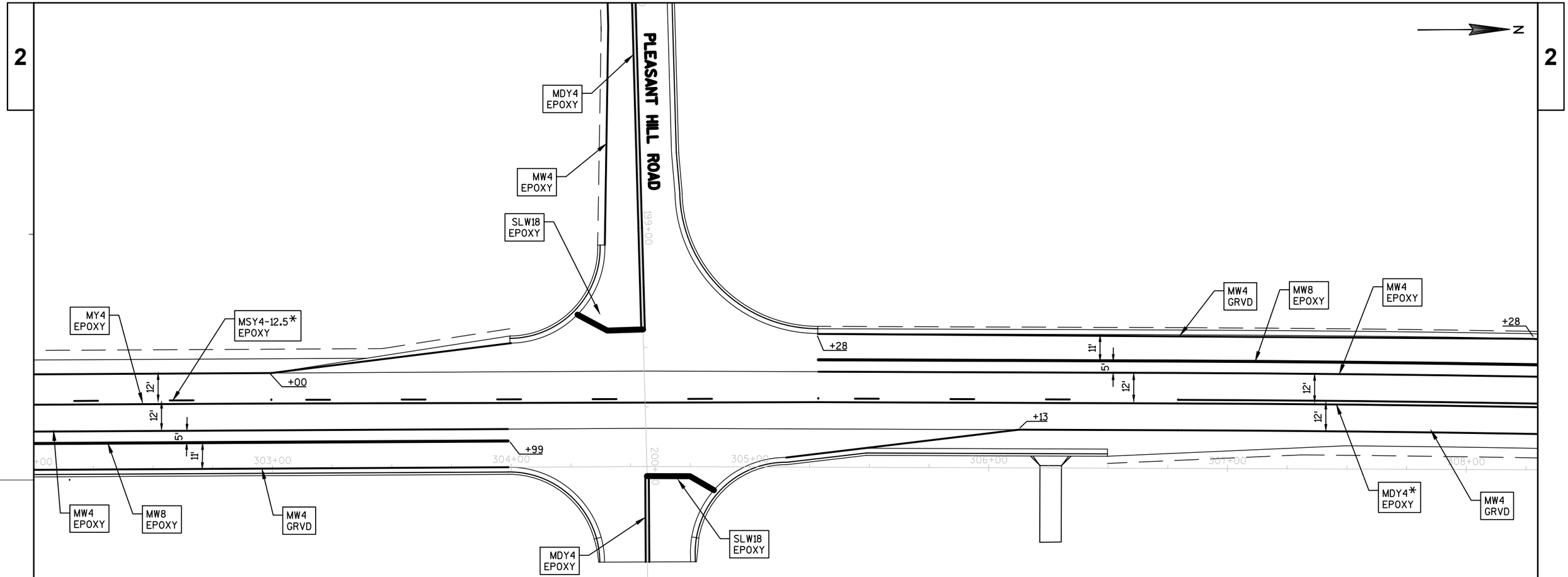
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 283+75 TO 302+60
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 375	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024540_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

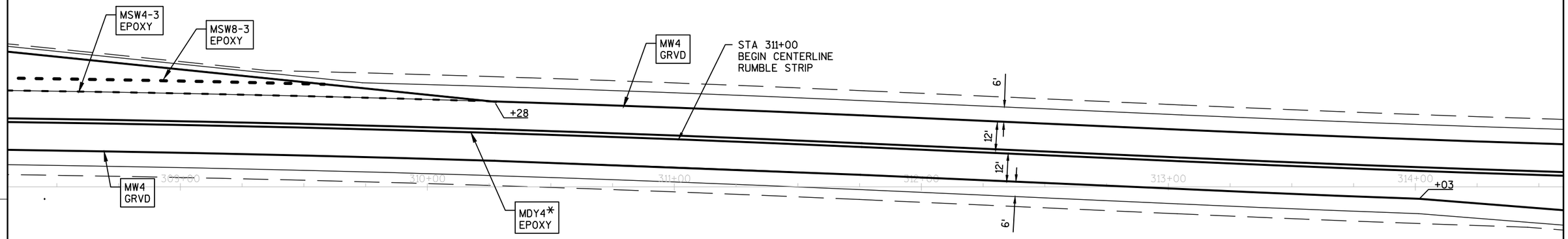
SHEET 42 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 376	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024541_PM

PLOT DATE : 01/18/2018 PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT

2



PAVEMENT MARKING LEGEND

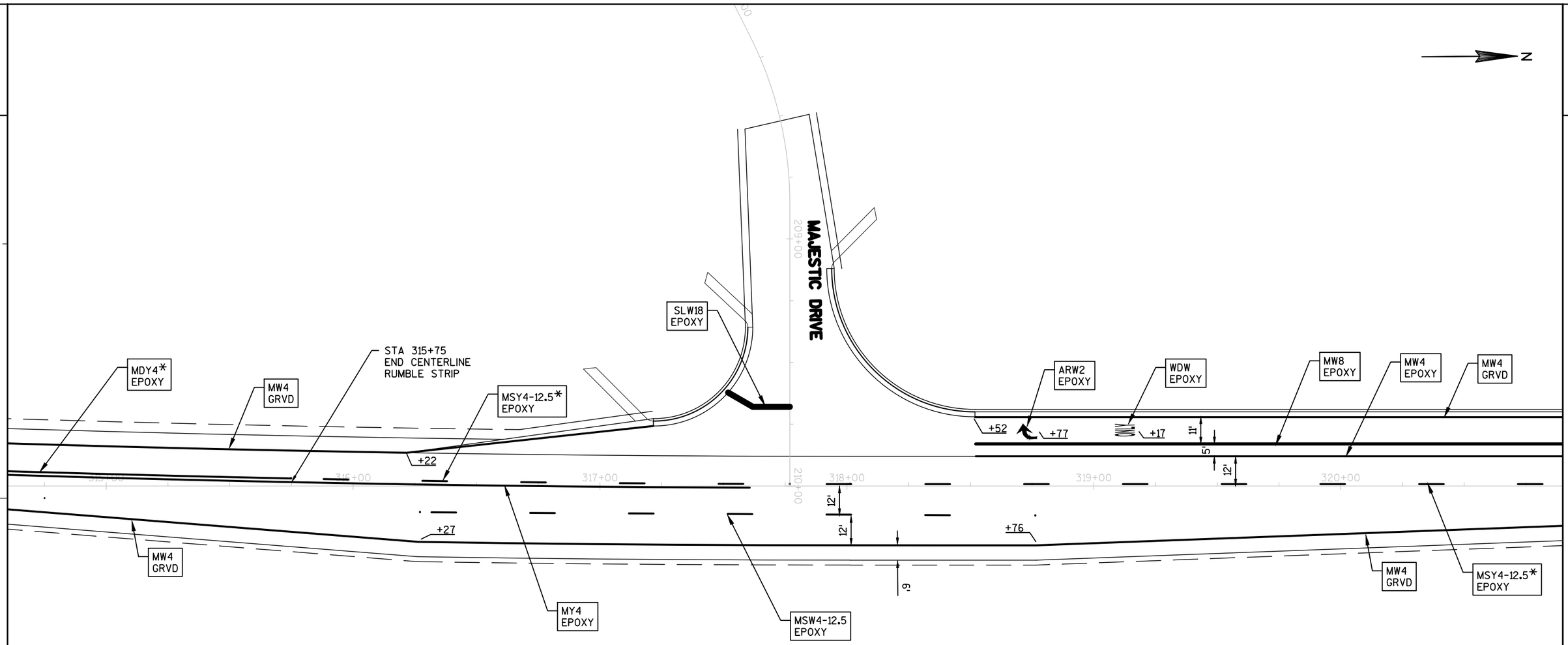
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 311+00 TO 315+75
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 377	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024542_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



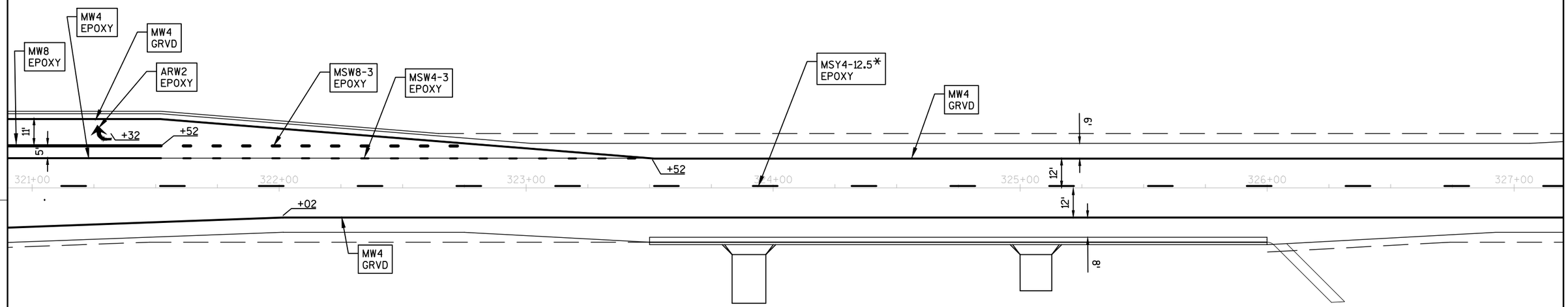
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 311+00 TO 315+75
CENTERLINE RUMBLE STRIP STA 319+75 TO 358+50
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 378	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024543_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



PAVEMENT MARKING LEGEND

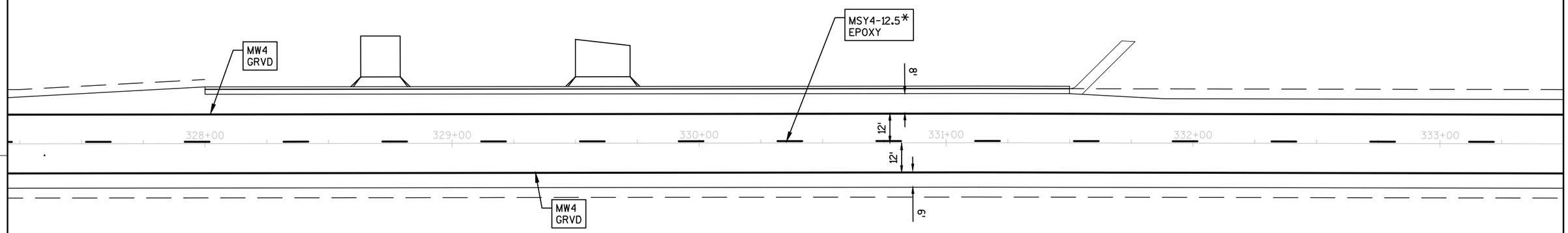
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 319+75 TO 358+50
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 45 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 379	E

2



PAVEMENT MARKING LEGEND

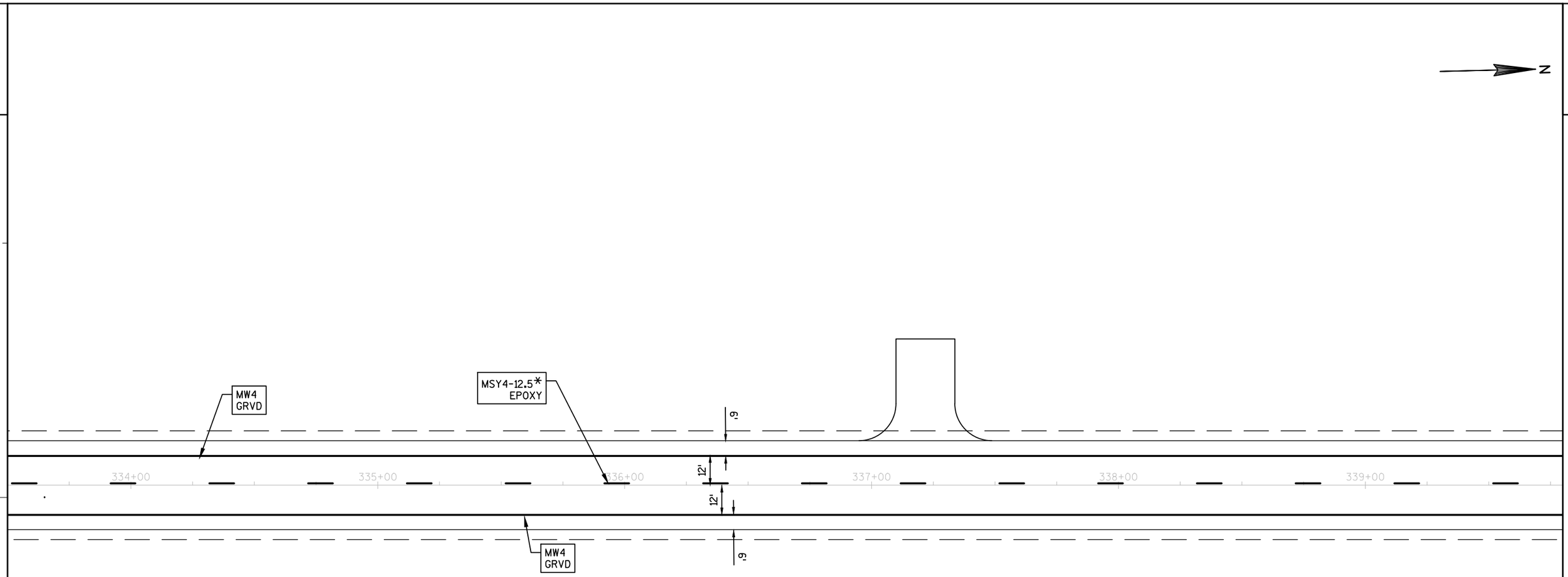
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 319+75 TO 358+50
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 380	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024545_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : _____ PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



PAVEMENT MARKING LEGEND

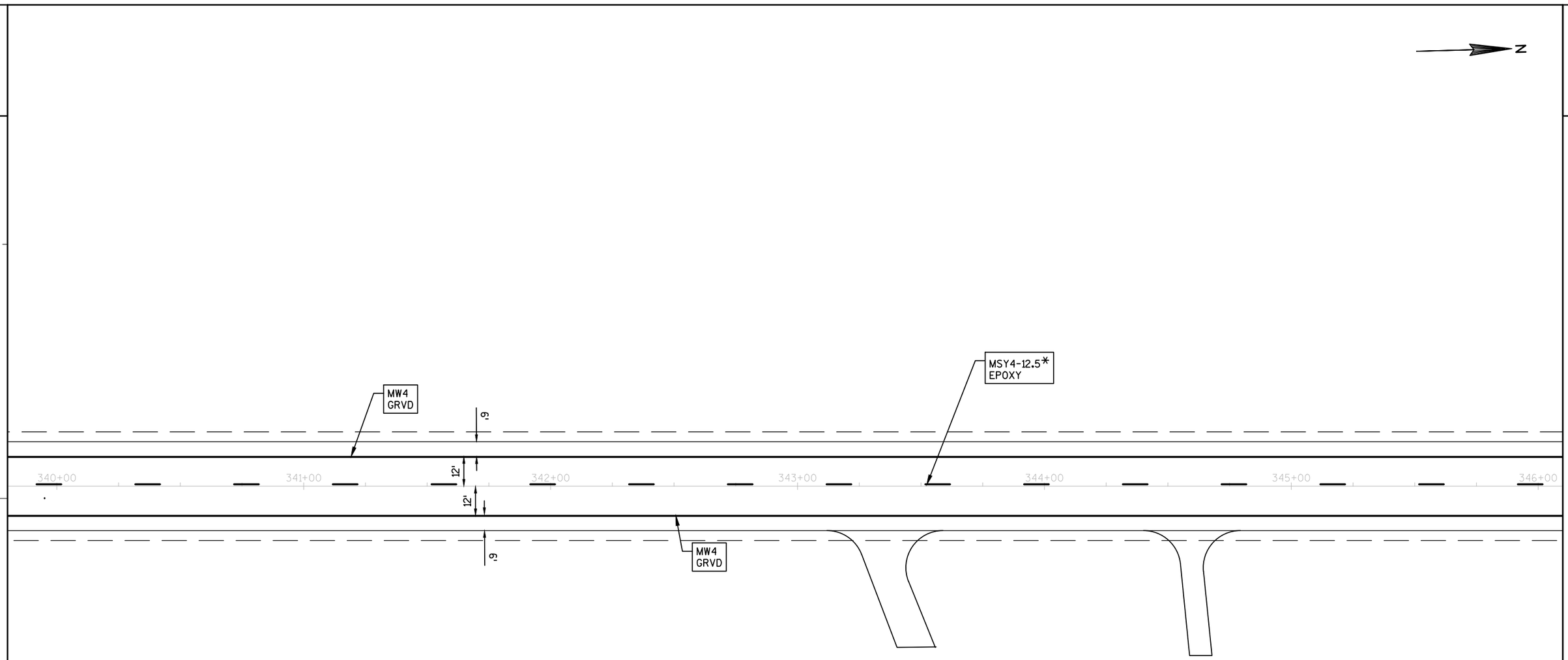
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 319+75 TO 358+50
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 381	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024546_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ----------PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



PAVEMENT MARKING LEGEND

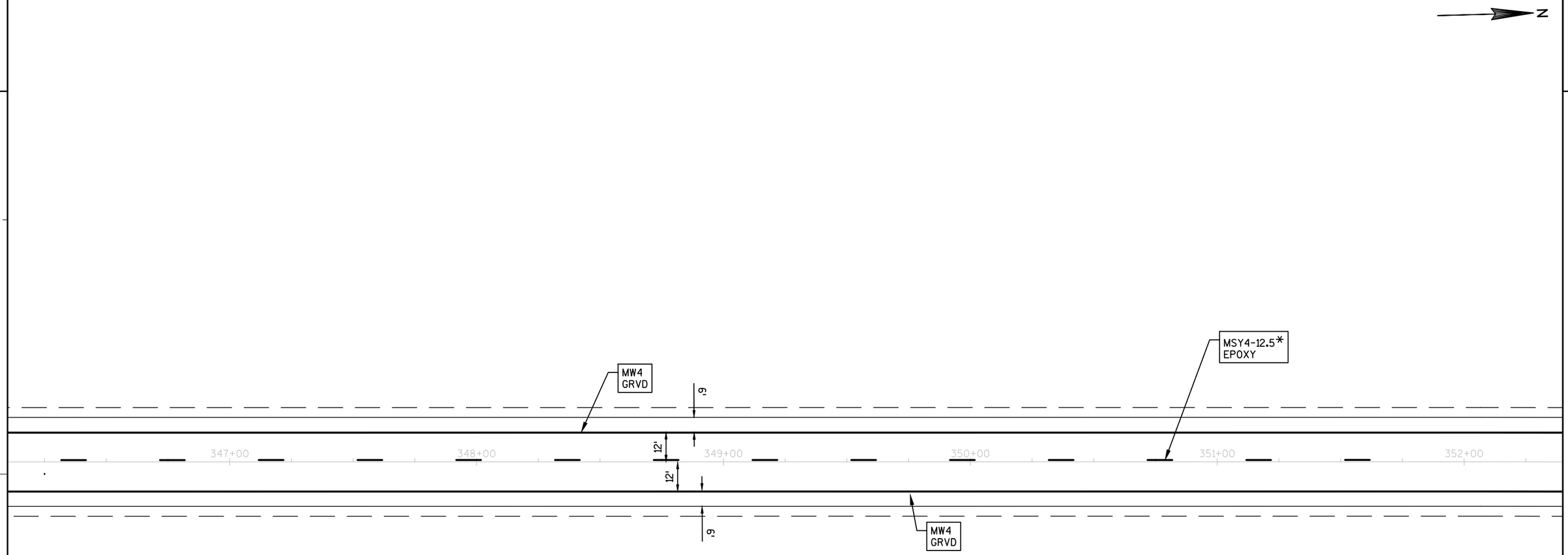
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 319+75 TO 358+50
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 382	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024547_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



PAVEMENT MARKING LEGEND

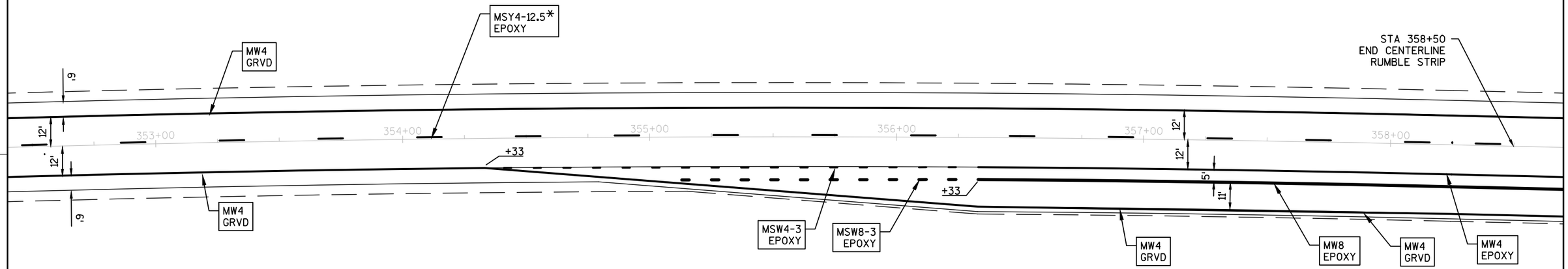
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 319+75 TO 358+50
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 383	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024548_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

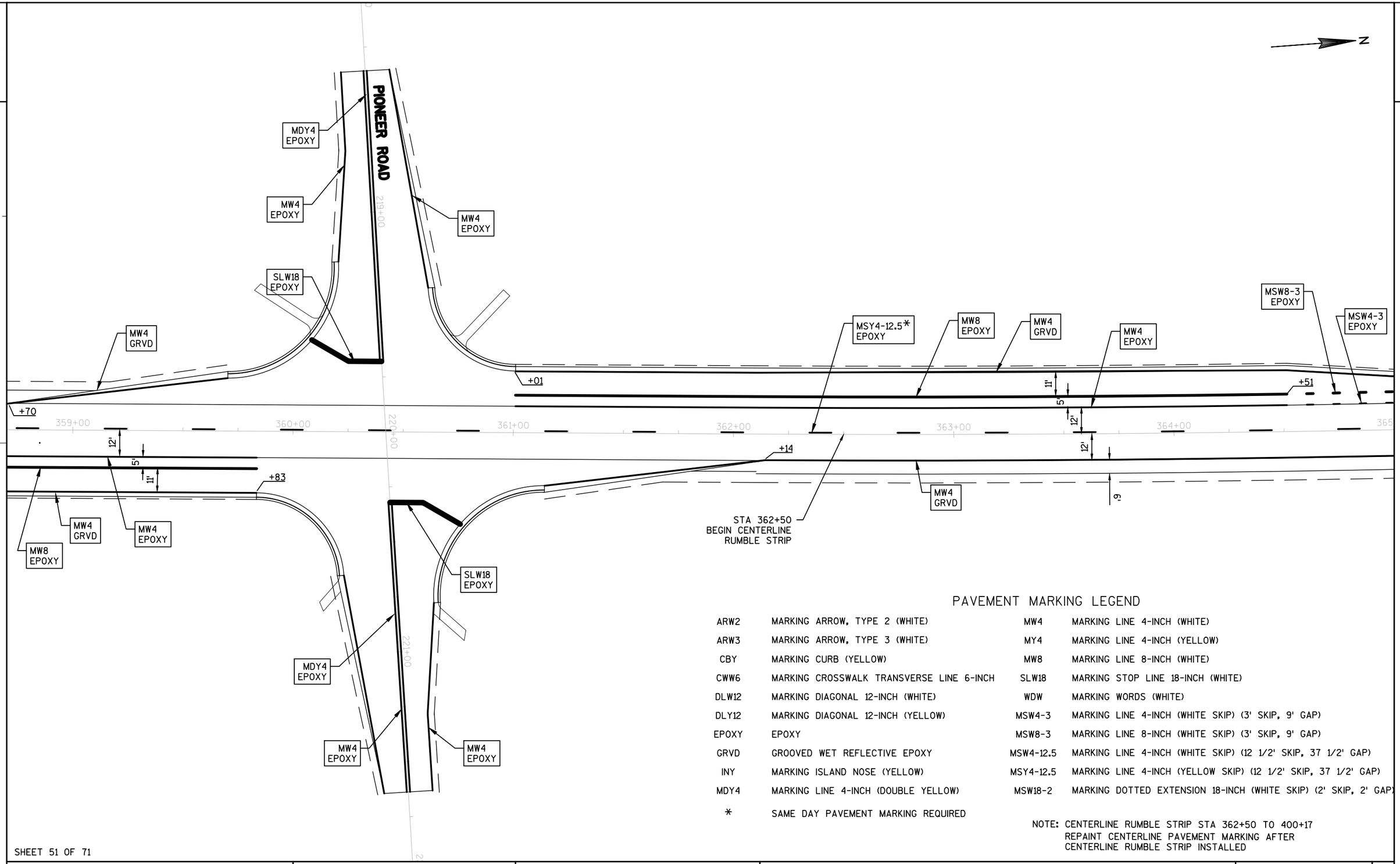


PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 319+75 TO 358+50
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 50 OF 71

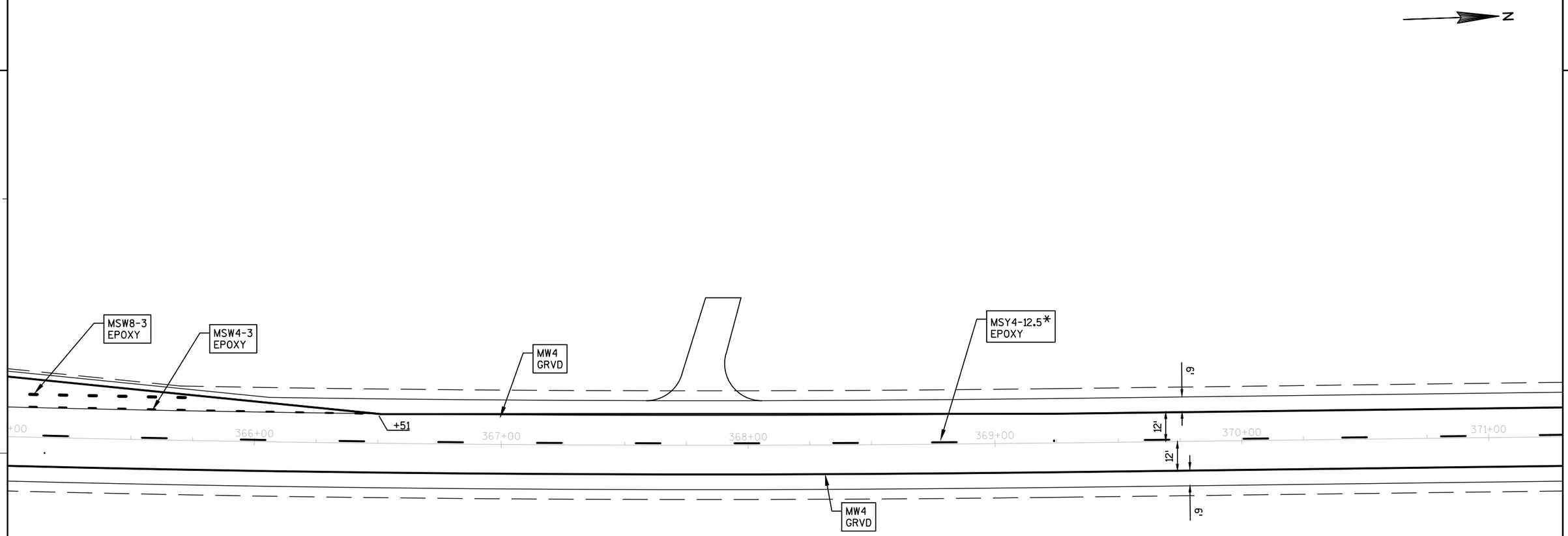


PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 362+50 TO 400+17
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 51 OF 71



2

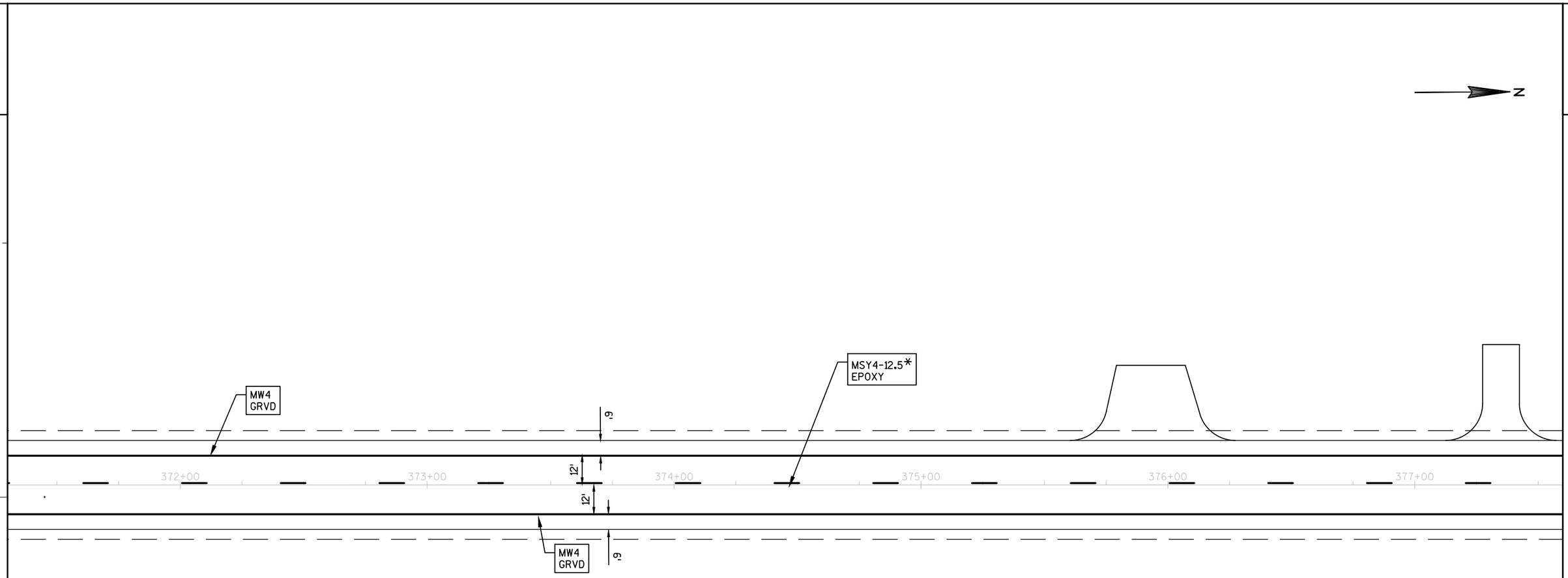
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 362+50 TO 400+17
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 52 OF 71

2



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 362+50 TO 400+17
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

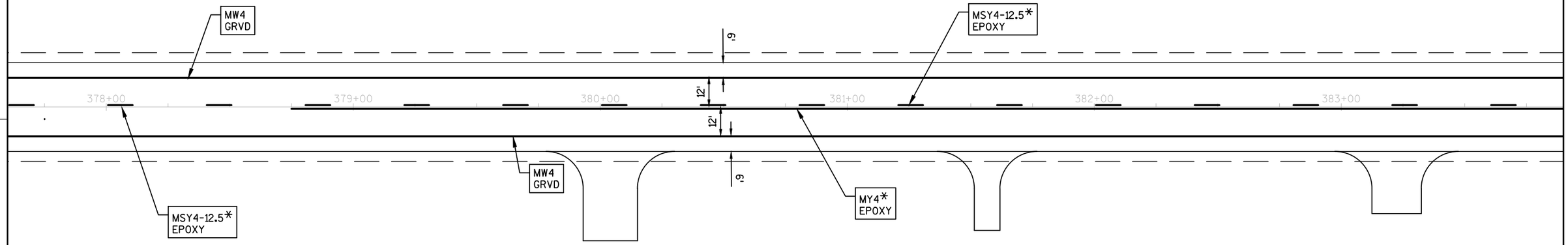
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 387	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024552_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 362+50 TO 400+17
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 54 OF 71

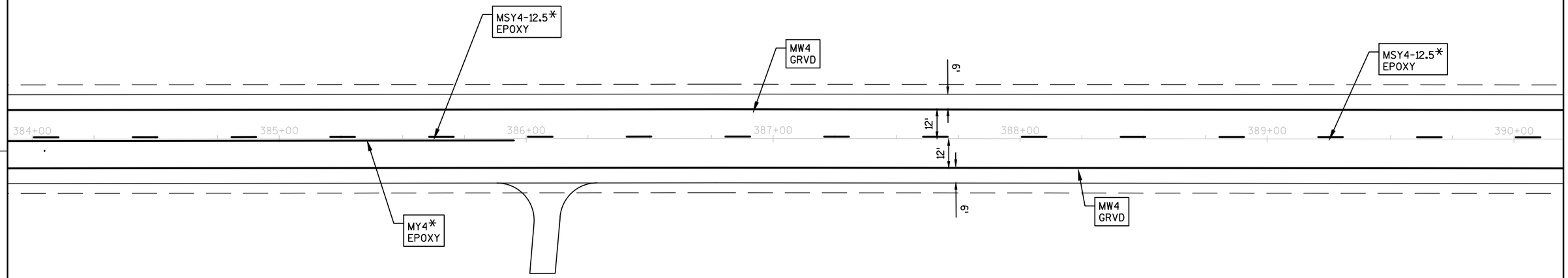
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 388	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024553_PM

PLOT DATE : 01/18/2018 PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT

2

N



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

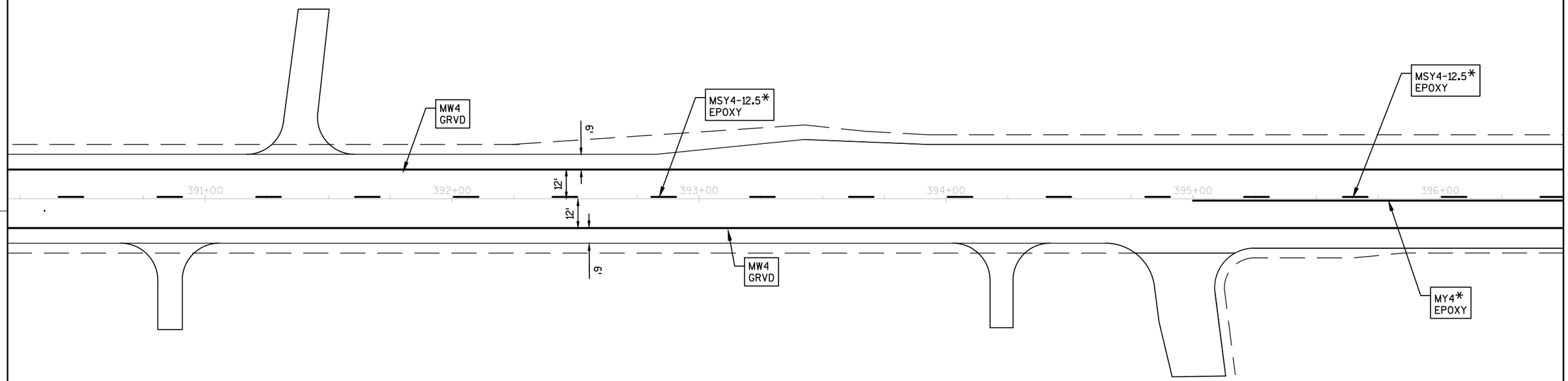
NOTE: CENTERLINE RUMBLE STRIP STA 362+50 TO 400+17
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 389	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024554_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

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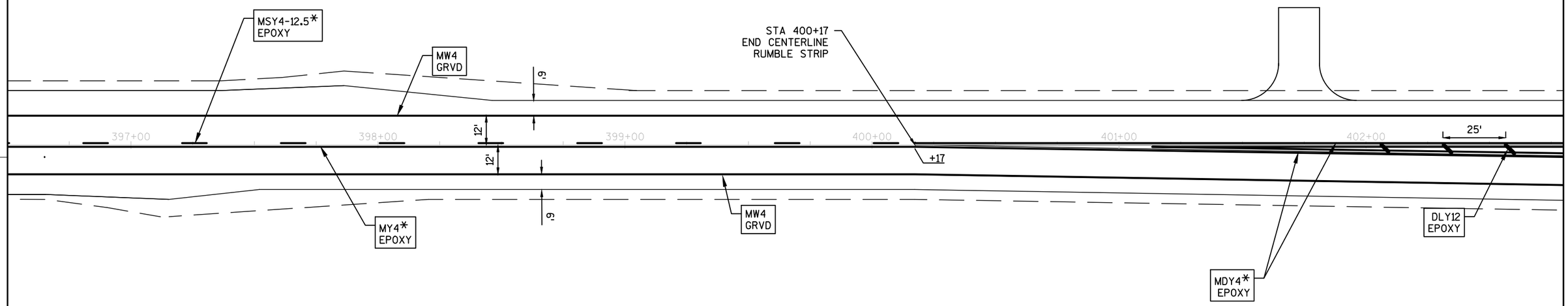
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 362+50 TO 400+17
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 56 OF 71

2



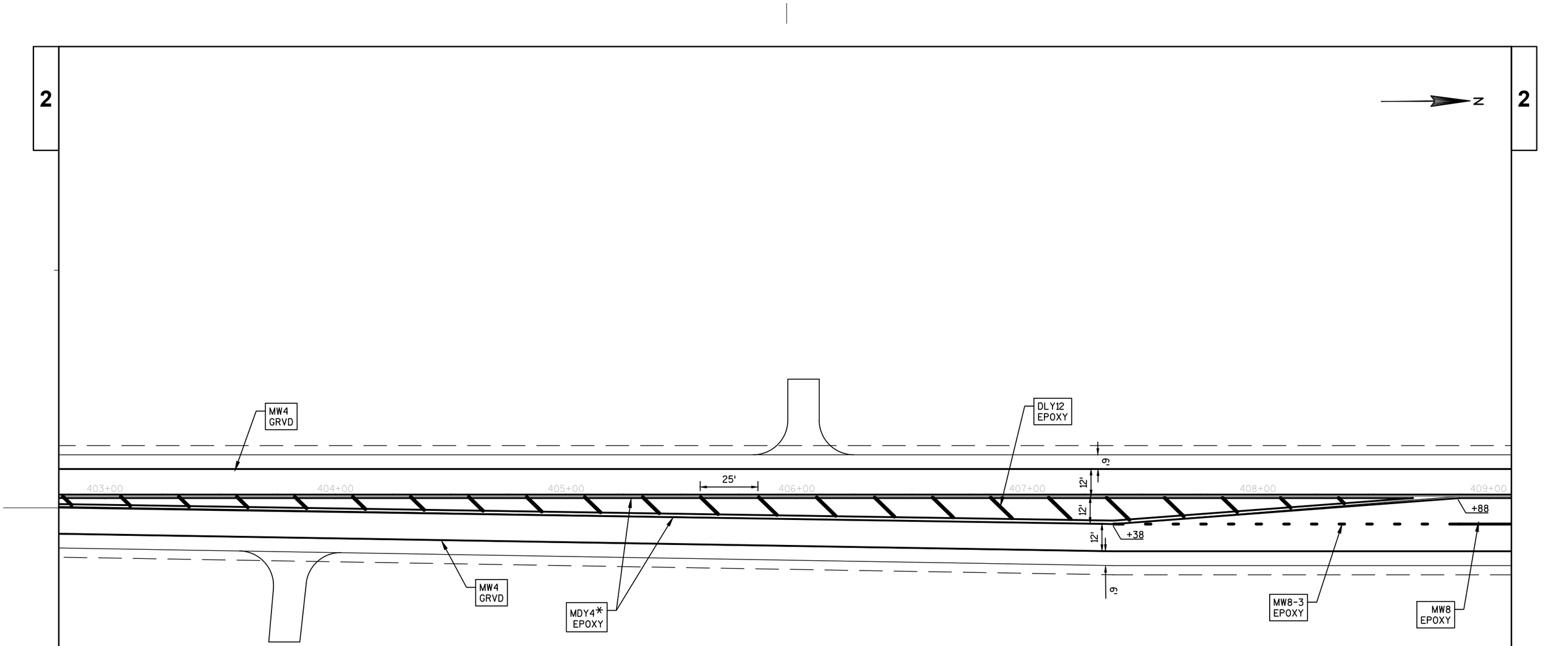
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 362+50 TO 400+17
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 57 OF 71

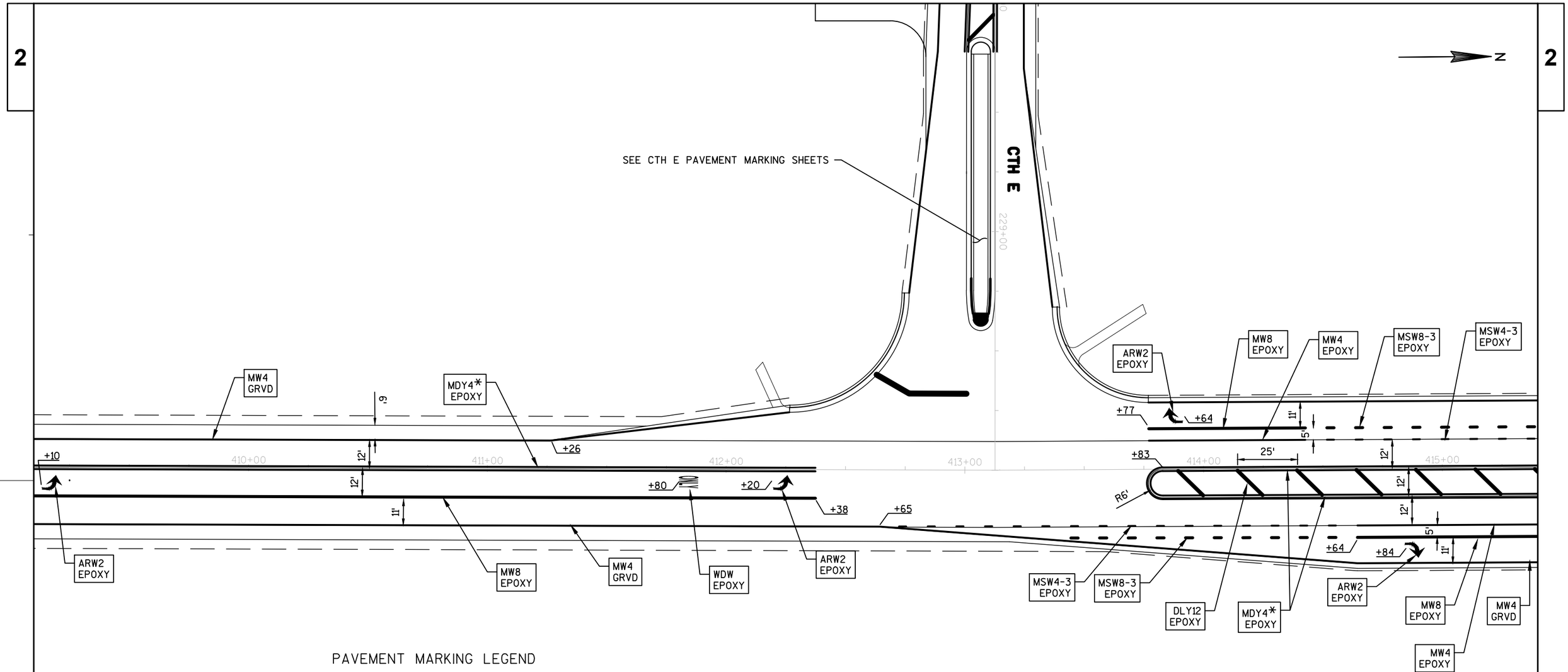
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 391	E



2

PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

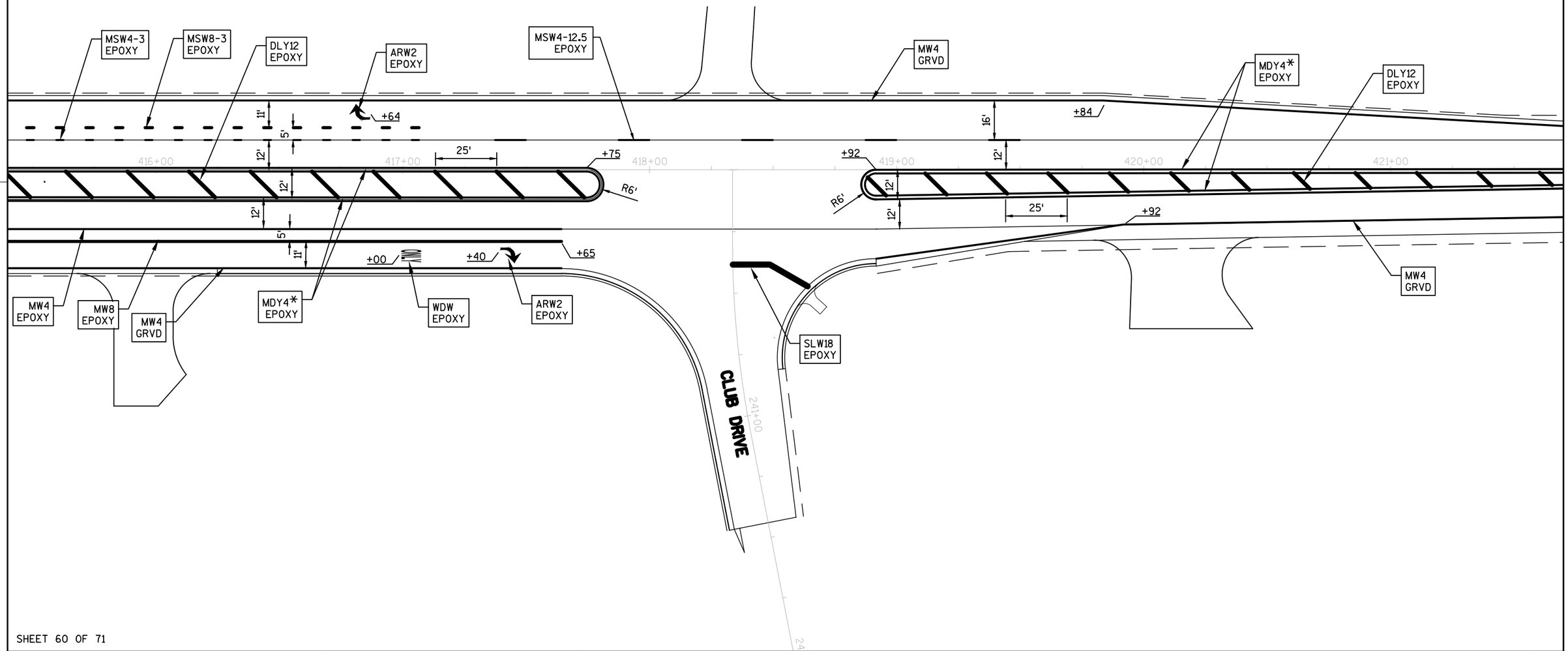
SHEET 59 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 393	E

PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

N



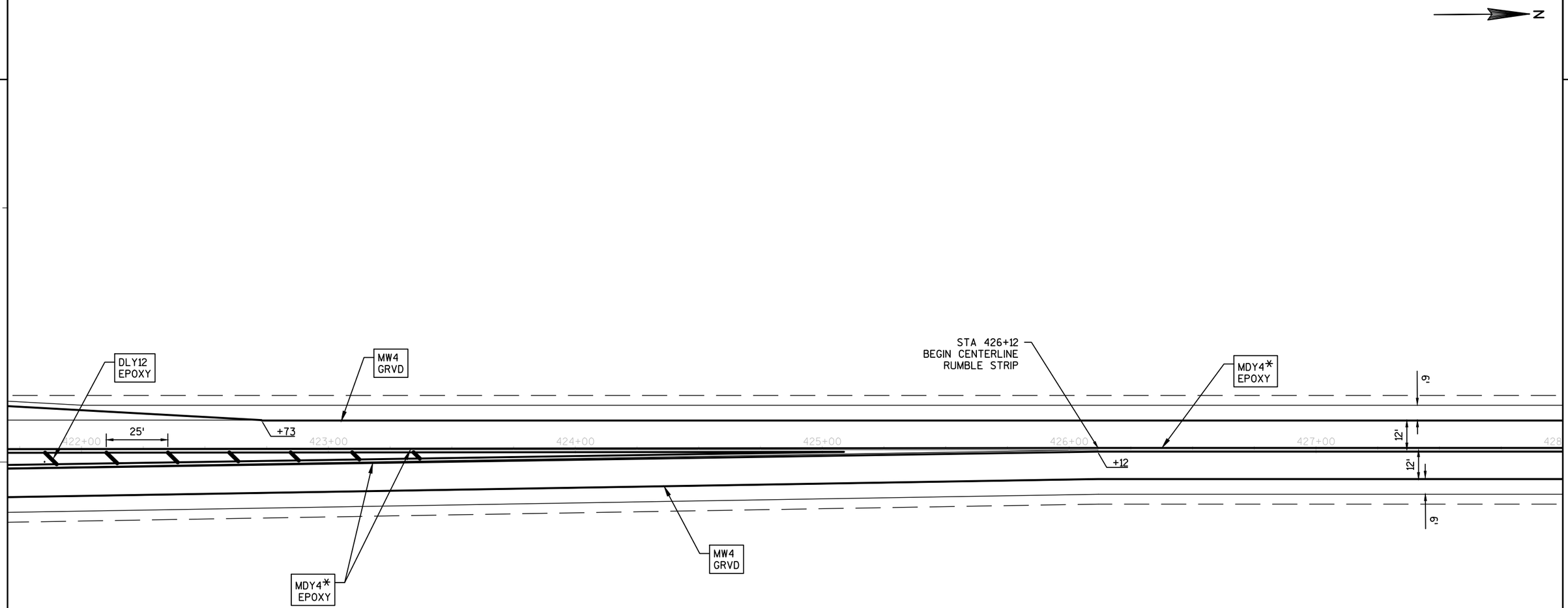
SHEET 60 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 394	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024559_PM

PLOT DATE : 01/18/2018 PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT

2



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

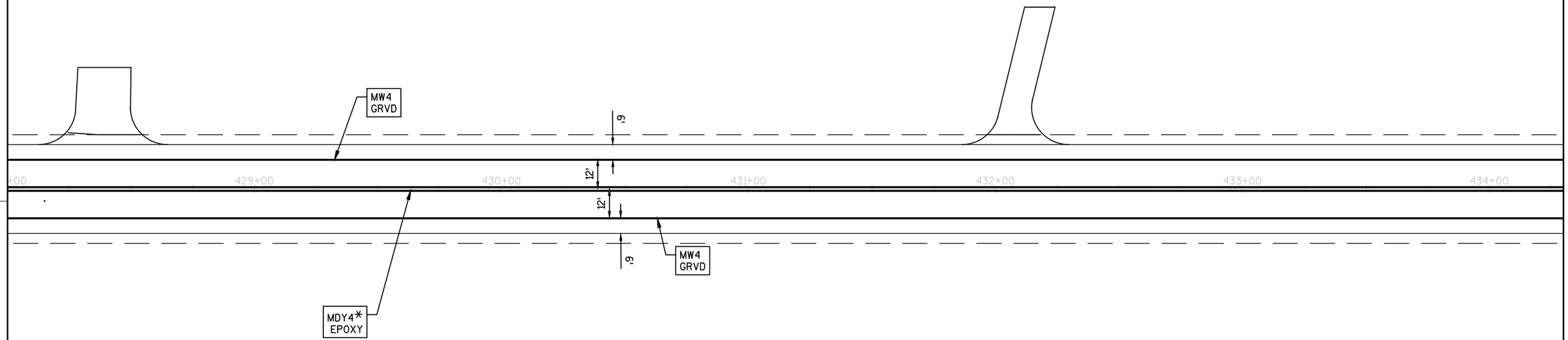
NOTE: CENTERLINE RUMBLE STRIP STA 426+12 TO 446+61
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 395	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024560_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 426+12 TO 446+61
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 62 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 396	E

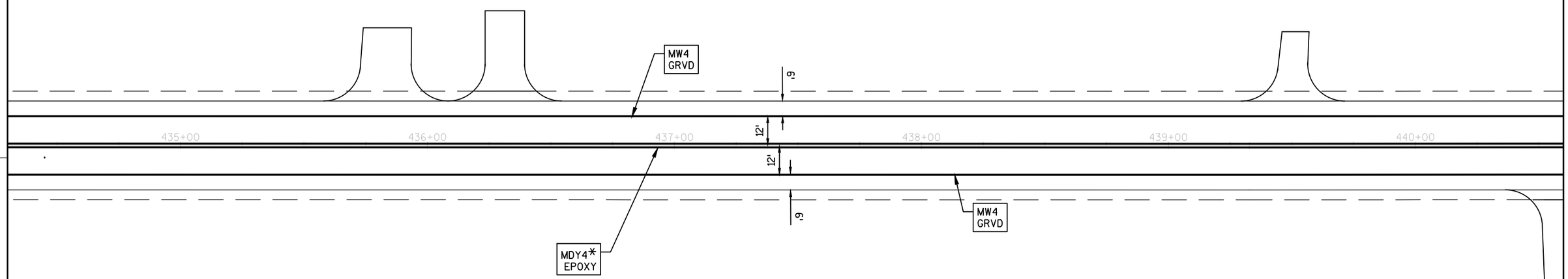
FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024561_PM

PLOT DATE : 01/18/2018 PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT

2

2

N



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 426+12 TO 446+61
REPAINT CENTERLINE PAVEMENT MARKING AFTER
CENTERLINE RUMBLE STRIP INSTALLED

SHEET 63 OF 71

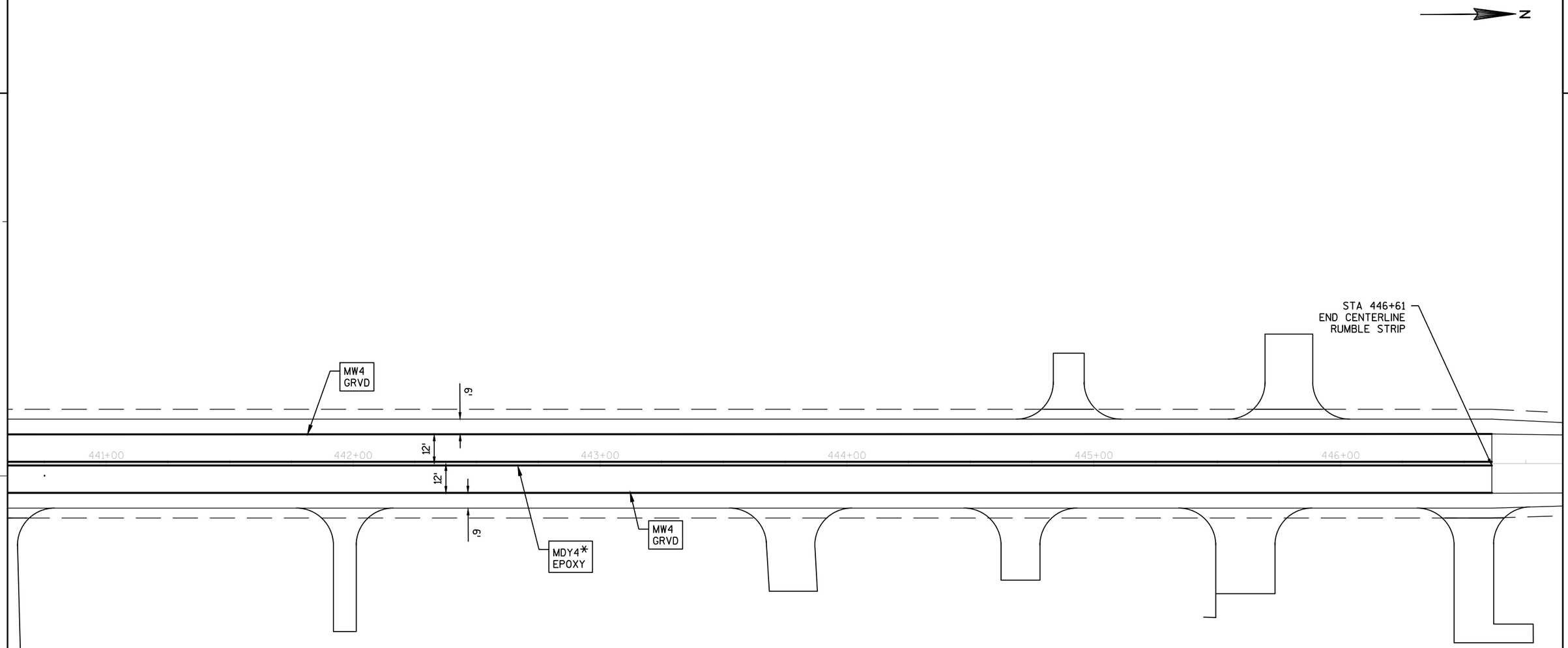
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 397	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024562_PM

PLOT DATE : 01/18/2018 PLOT BY : ROTIER, STEVEN J PLOT NAME : _____ PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



PAVEMENT MARKING LEGEND

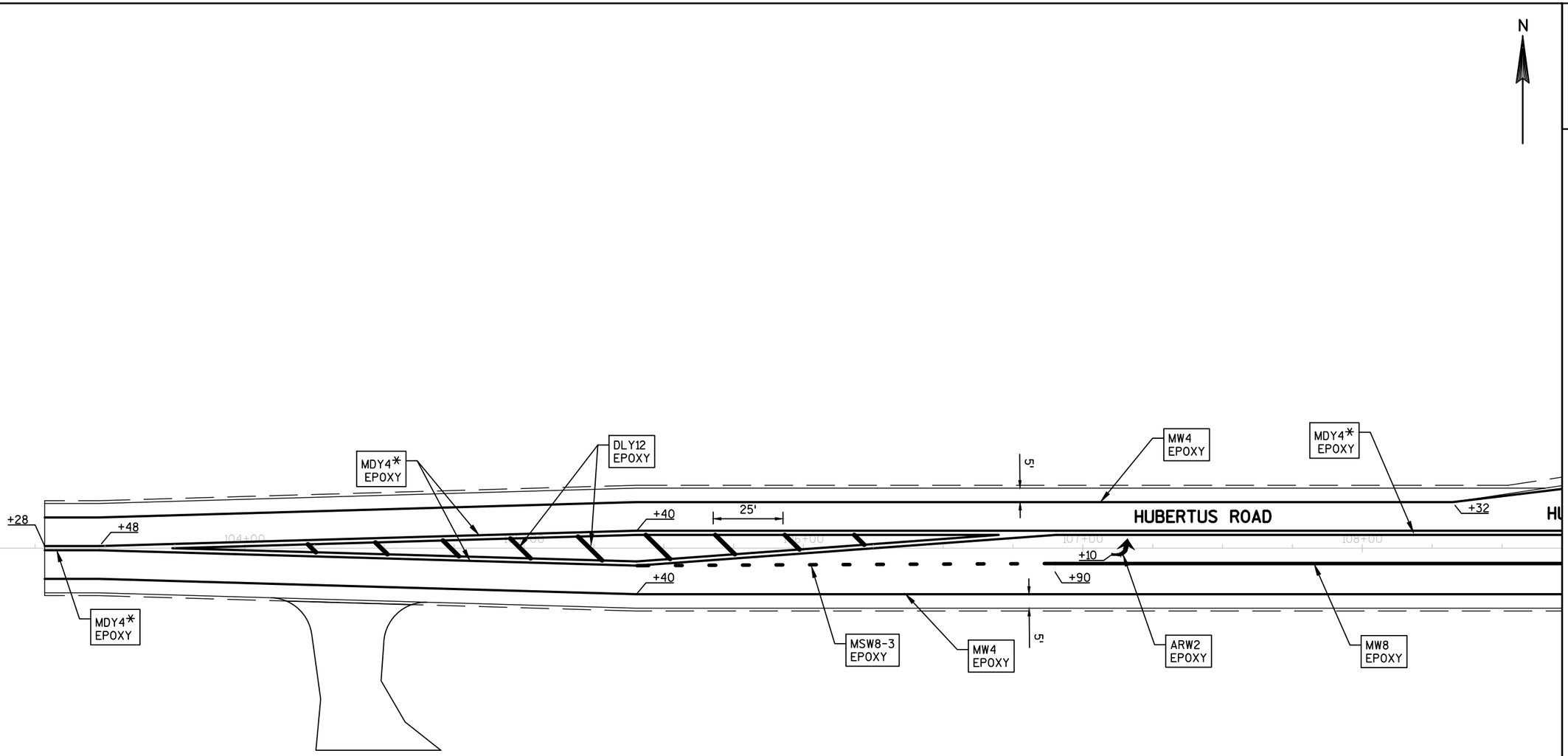
ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

NOTE: CENTERLINE RUMBLE STRIP STA 426+12 TO 446+61

SHEET 64 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 164	SHEET 398	E

2



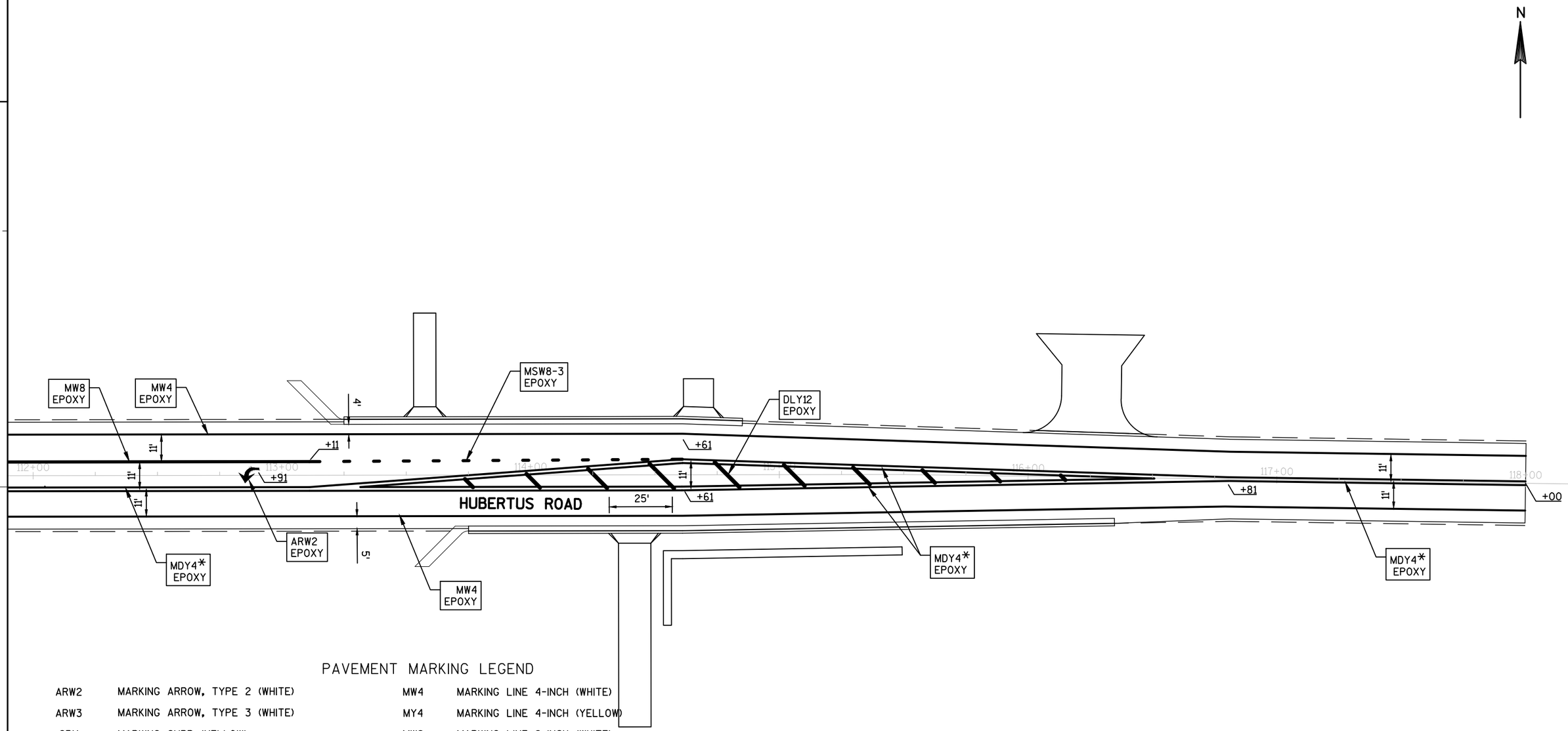
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - HUBERTUS ROAD	SHEET 399	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024571_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



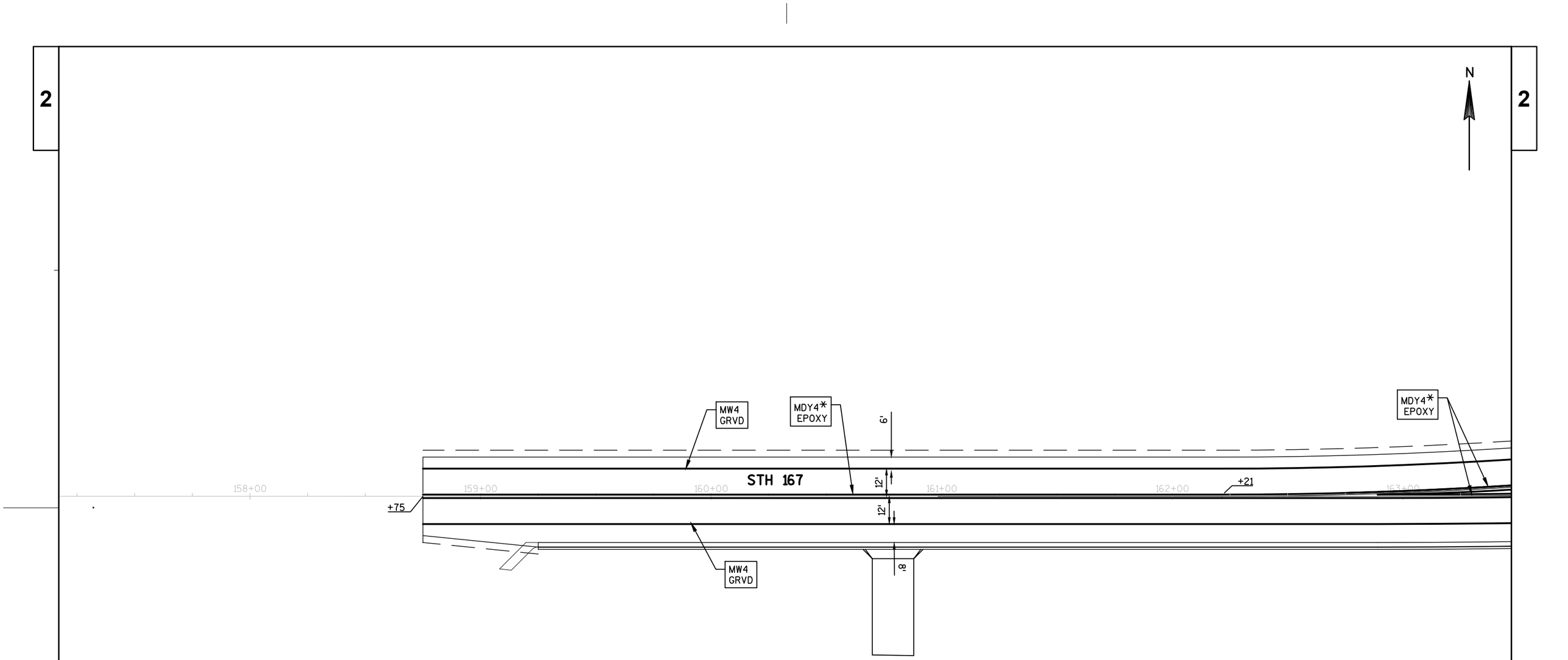
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - HUBERTUS ROAD	SHEET 400	E

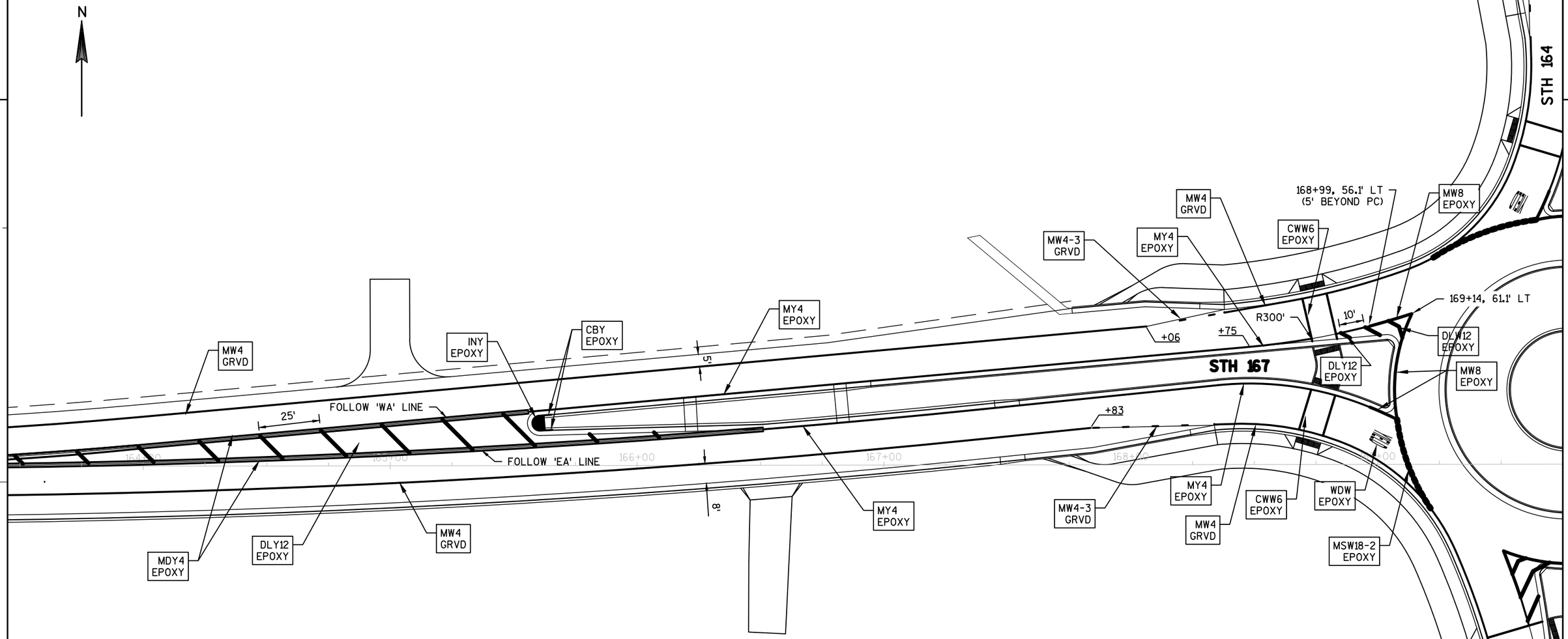
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LAYOUT NAME - 024572_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

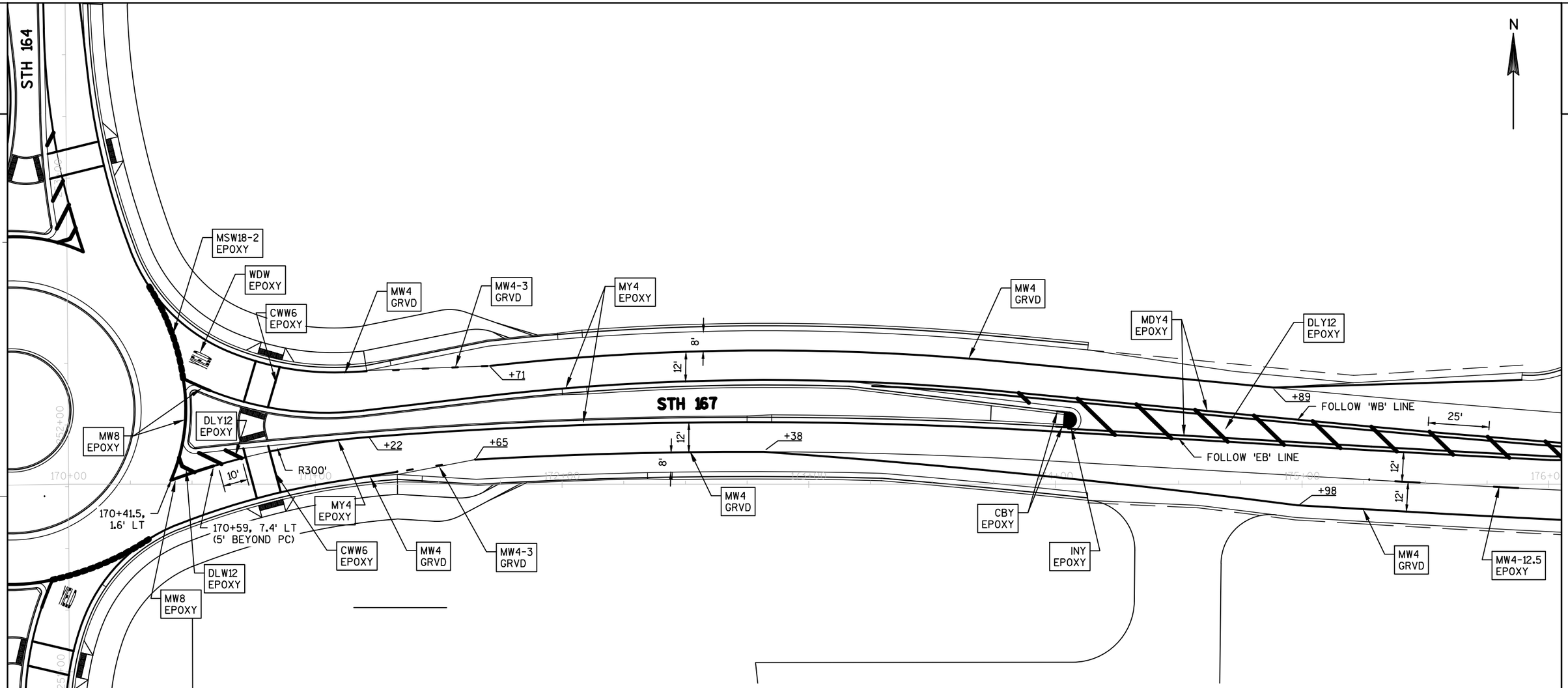


PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 167	SHEET 402	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024567_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



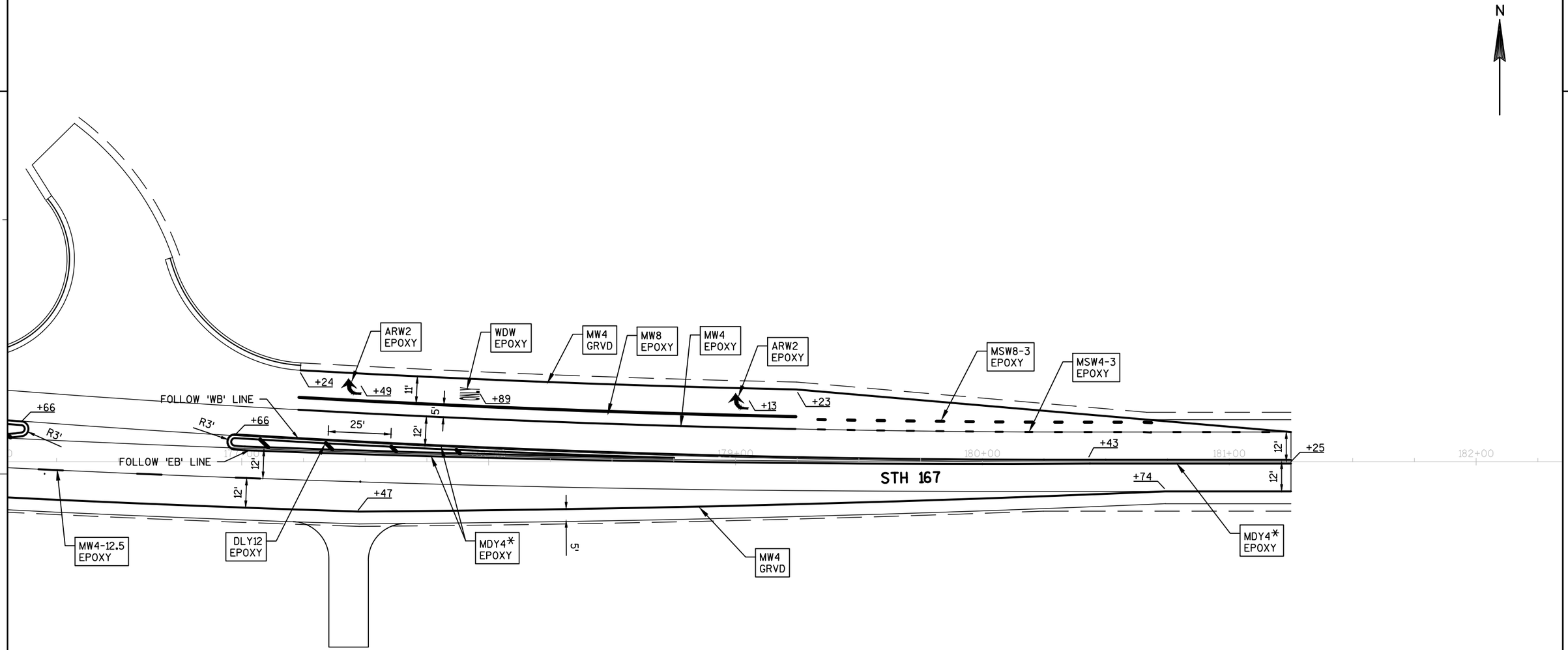
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 167	SHEET 403	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024568_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

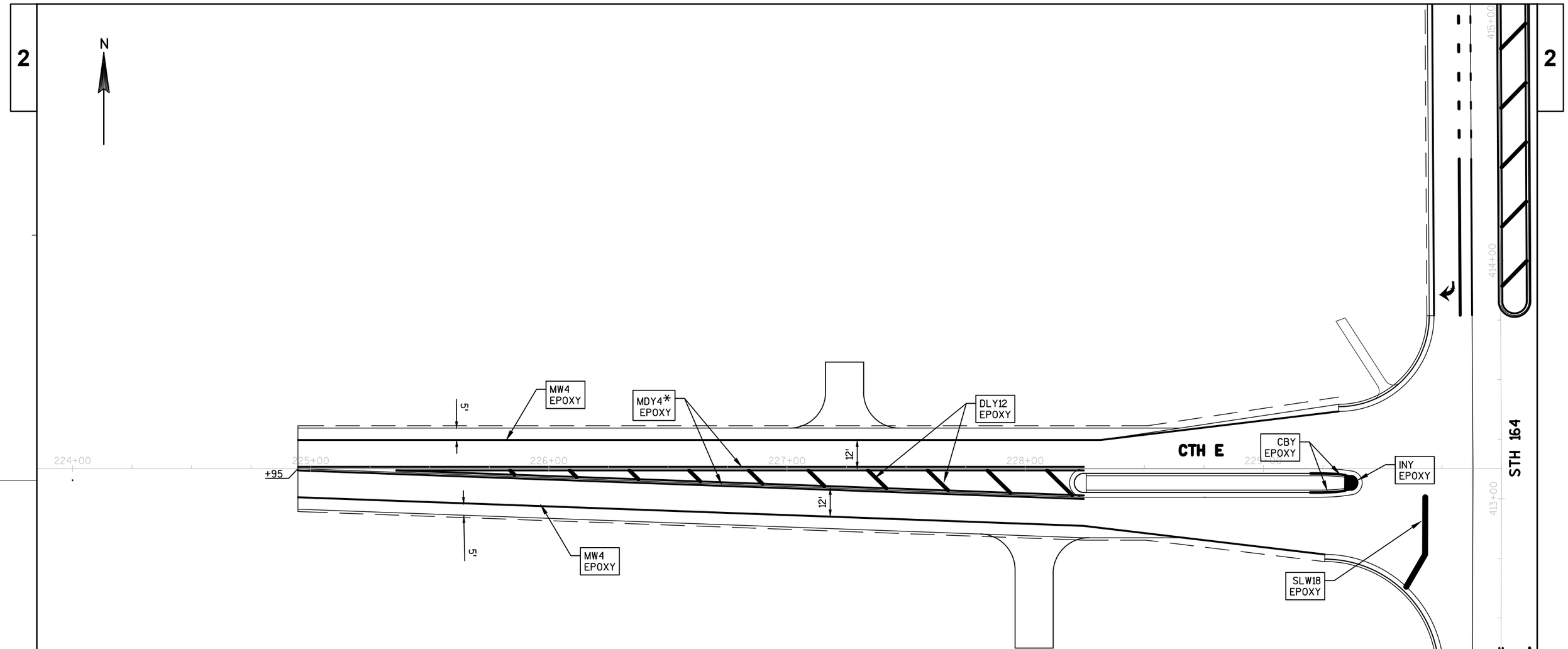


PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
CBY	MARKING CURB (YELLOW)	MW8	MARKING LINE 8-INCH (WHITE)
CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
EPOXY	EPOXY	MSW8-3	MARKING LINE 8-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
GRVD	GROOVED WET REFLECTIVE EPOXY	MSW4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12 1/2' SKIP, 37 1/2' GAP)
INY	MARKING ISLAND NOSE (YELLOW)	MSY4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12 1/2' SKIP, 37 1/2' GAP)
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 167	SHEET 404	E

FILE NAME : N:\PDS\C3D\27090300\DESIGN\EDGELINES\024501_PMFINAL.DWG
LAYOUT NAME - 024569_PM
PLOT DATE : 01/18/2018
PLOT BY : ROTIER, STEVEN J PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

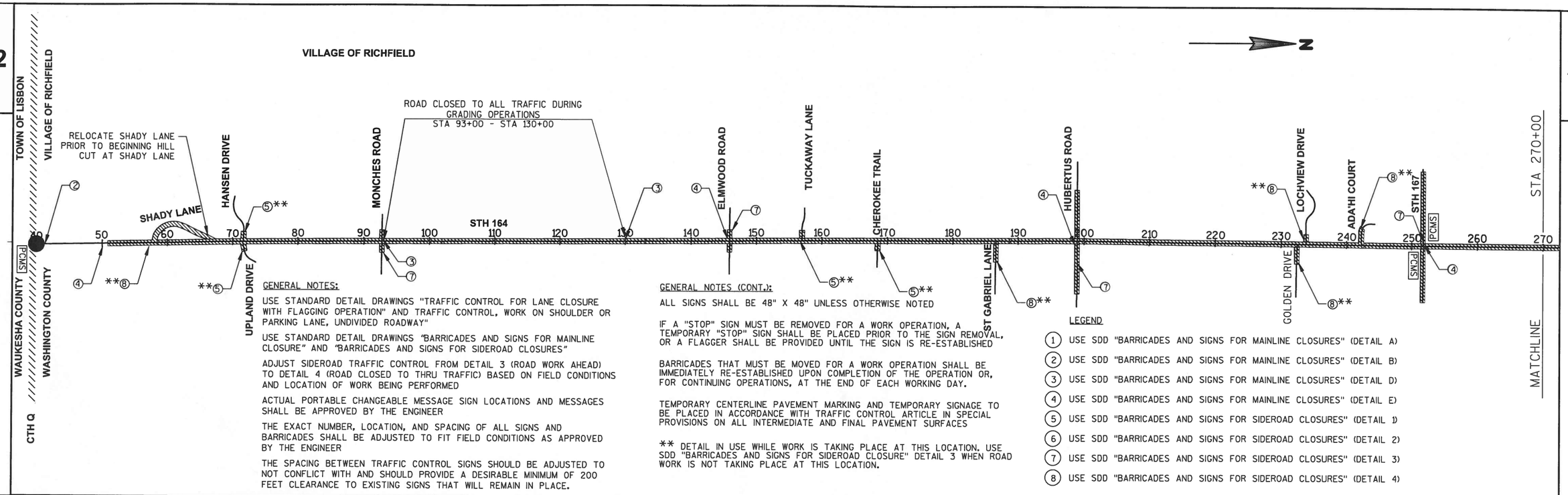


PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MW4	MARKING LINE 4-INCH (WHITE)
ARW3	MARKING ARROW, TYPE 3 (WHITE)	MY4	MARKING LINE 4-INCH (YELLOW)
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CWW6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH	SLW18	MARKING STOP LINE 18-INCH (WHITE)
DLW12	MARKING DIAGONAL 12-INCH (WHITE)	WDW	MARKING WORDS (WHITE)
DLY12	MARKING DIAGONAL 12-INCH (YELLOW)	MSW4-3	MARKING LINE 4-INCH (WHITE SKIP) (3' SKIP, 9' GAP)
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MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)	MSW18-2	MARKING DOTTED EXTENSION 18-INCH (WHITE SKIP) (2' SKIP, 2' GAP)
*	SAME DAY PAVEMENT MARKING REQUIRED		

SHEET 71 OF 71

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PAVEMENT MARKING - CTH E	SHEET 405	E



GENERAL NOTES:

USE STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" AND TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY"

USE STANDARD DETAIL DRAWINGS "BARRICADES AND SIGNS FOR MAINLINE CLOSURE" AND "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"

ADJUST SIDEROAD TRAFFIC CONTROL FROM DETAIL 3 (ROAD WORK AHEAD) TO DETAIL 4 (ROAD CLOSED TO THRU TRAFFIC) BASED ON FIELD CONDITIONS AND LOCATION OF WORK BEING PERFORMED

ACTUAL PORTABLE CHANGEABLE MESSAGE SIGN LOCATIONS AND MESSAGES SHALL BE APPROVED BY THE ENGINEER

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

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

GENERAL NOTES (CONT.):

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED

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 RE-ESTABLISHED

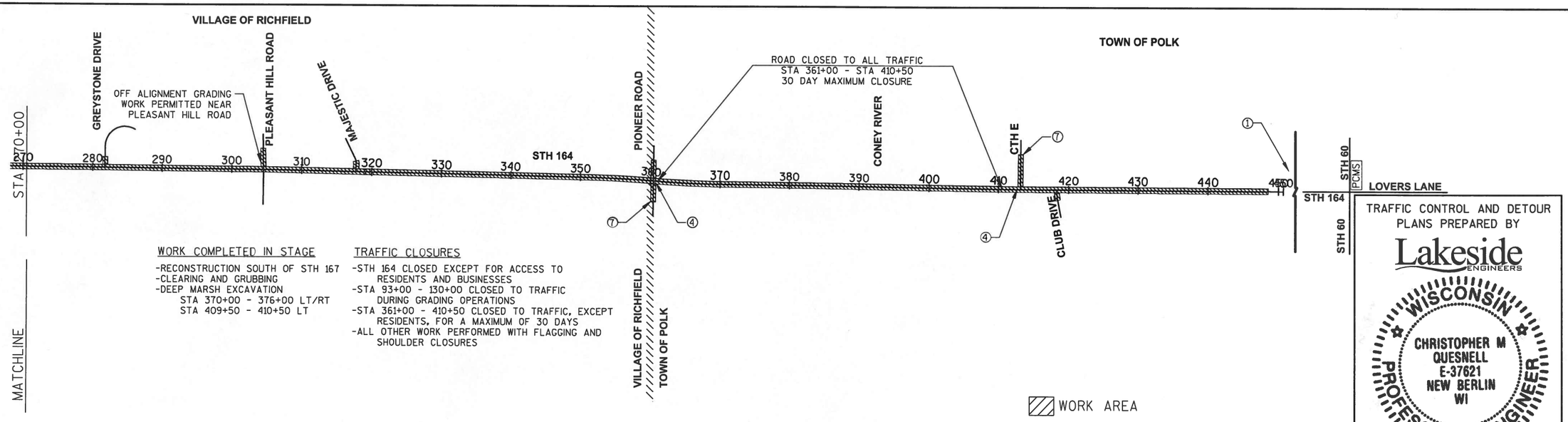
BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

TEMPORARY CENTERLINE PAVEMENT MARKING AND TEMPORARY SIGNAGE TO BE PLACED IN ACCORDANCE WITH TRAFFIC CONTROL ARTICLE IN SPECIAL PROVISIONS ON ALL INTERMEDIATE AND FINAL PAVEMENT SURFACES

** DETAIL IN USE WHILE WORK IS TAKING PLACE AT THIS LOCATION. USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURE" DETAIL 3 WHEN ROAD WORK IS NOT TAKING PLACE AT THIS LOCATION.

LEGEND

(1) USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL A)
(2) USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL B)
(3) USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL D)
(4) USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL E)
(5) USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 1)
(6) USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 2)
(7) USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 3)
(8) USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 4)



WORK COMPLETED IN STAGE

-RECONSTRUCTION SOUTH OF STH 167
-CLEARING AND GRUBBING
-DEEP MARSH EXCAVATION
STA 370+00 - 376+00 LT/RT
STA 409+50 - 410+50 LT

TRAFFIC CLOSURES

-STH 164 CLOSED EXCEPT FOR ACCESS TO RESIDENTS AND BUSINESSES
-STA 93+00 - 130+00 CLOSED TO TRAFFIC DURING GRADING OPERATIONS
-STA 361+00 - 410+50 CLOSED TO TRAFFIC, EXCEPT RESIDENTS, FOR A MAXIMUM OF 30 DAYS
-ALL OTHER WORK PERFORMED WITH FLAGGING AND SHOULDER CLOSURES

WORK AREA

TRAFFIC CONTROL AND DETOUR PLANS PREPARED BY

Lakeside ENGINEERS

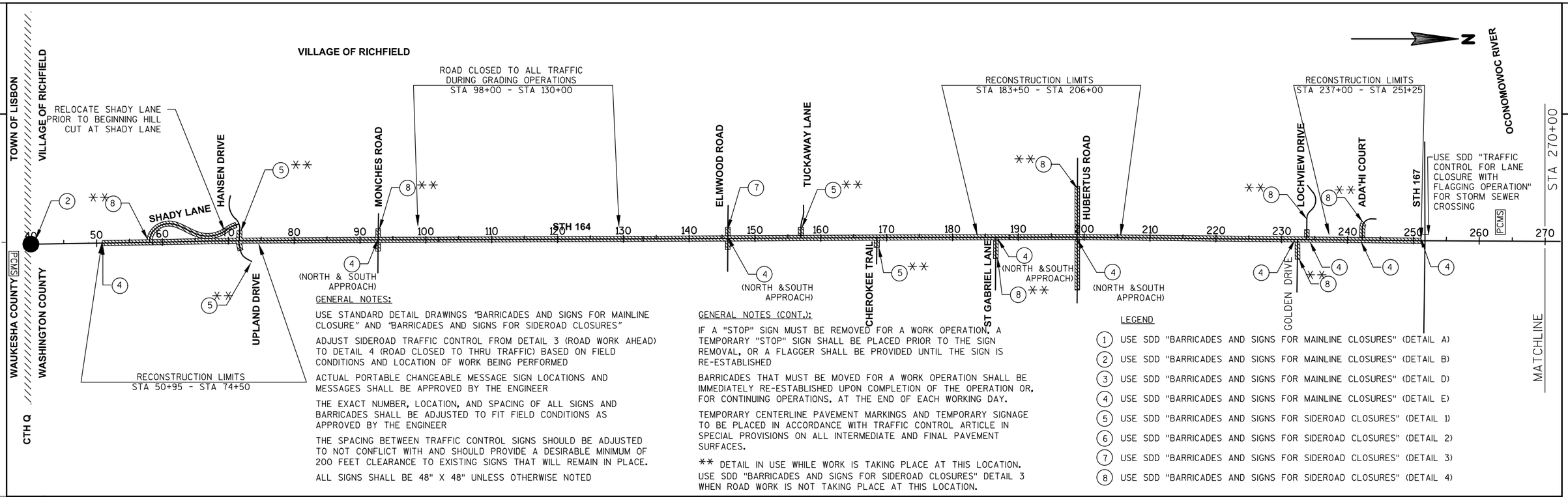
WISCONSIN
CHRISTOPHER M QUESNELL
E-37621
NEW BERLIN
WI
PROFESSIONAL ENGINEER

1/24/18 (Date) (Signature)

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 1	SCALE : NTS	SHEET	E

FILE NAME : L:\DESIGN PROJECTS\2709-03-00 STH 164\2709-03-00 DESIGN\SHEETSPLAN\25001_TC.DWG PLOT DATE : 1/24/2018 1:50 PM PLOT BY : REBECCA SUTTON PLOT NAME : ----------

WISDOT/CADDS S



GENERAL NOTES:

USE STANDARD DETAIL DRAWINGS "BARRICADES AND SIGNS FOR MAINLINE CLOSURE" AND "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"

ADJUST SIDEROAD TRAFFIC CONTROL FROM DETAIL 3 (ROAD WORK AHEAD) TO DETAIL 4 (ROAD CLOSED TO THRU TRAFFIC) BASED ON FIELD CONDITIONS AND LOCATION OF WORK BEING PERFORMED

ACTUAL PORTABLE CHANGEABLE MESSAGE SIGN LOCATIONS AND MESSAGES SHALL BE APPROVED BY THE ENGINEER

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED

GENERAL NOTES (CONT.):

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 RE-ESTABLISHED

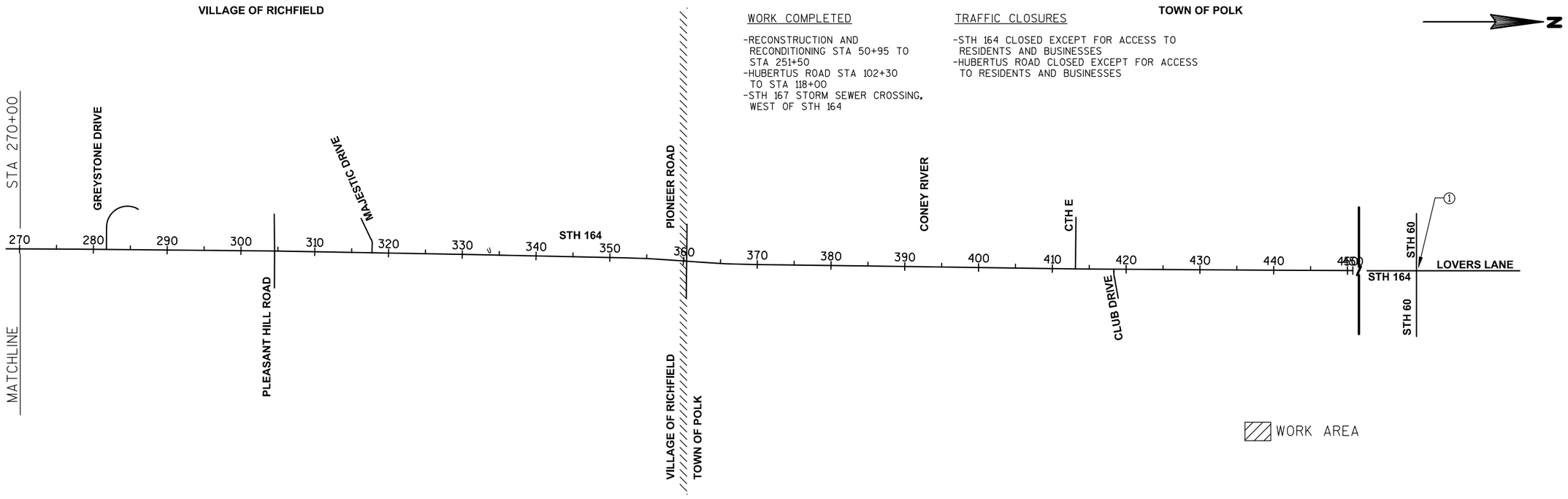
BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

TEMPORARY CENTERLINE PAVEMENT MARKINGS AND TEMPORARY SIGNAGE TO BE PLACED IN ACCORDANCE WITH TRAFFIC CONTROL ARTICLE IN SPECIAL PROVISIONS ON ALL INTERMEDIATE AND FINAL PAVEMENT SURFACES.

** DETAIL IN USE WHILE WORK IS TAKING PLACE AT THIS LOCATION.
USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" DETAIL 3 WHEN ROAD WORK IS NOT TAKING PLACE AT THIS LOCATION.

LEGEND

(1) USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL A)
(2) USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL B)
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(4) USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL E)
(5) USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 1)
(6) USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 2)
(7) USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 3)
(8) USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 4)



WORK COMPLETED

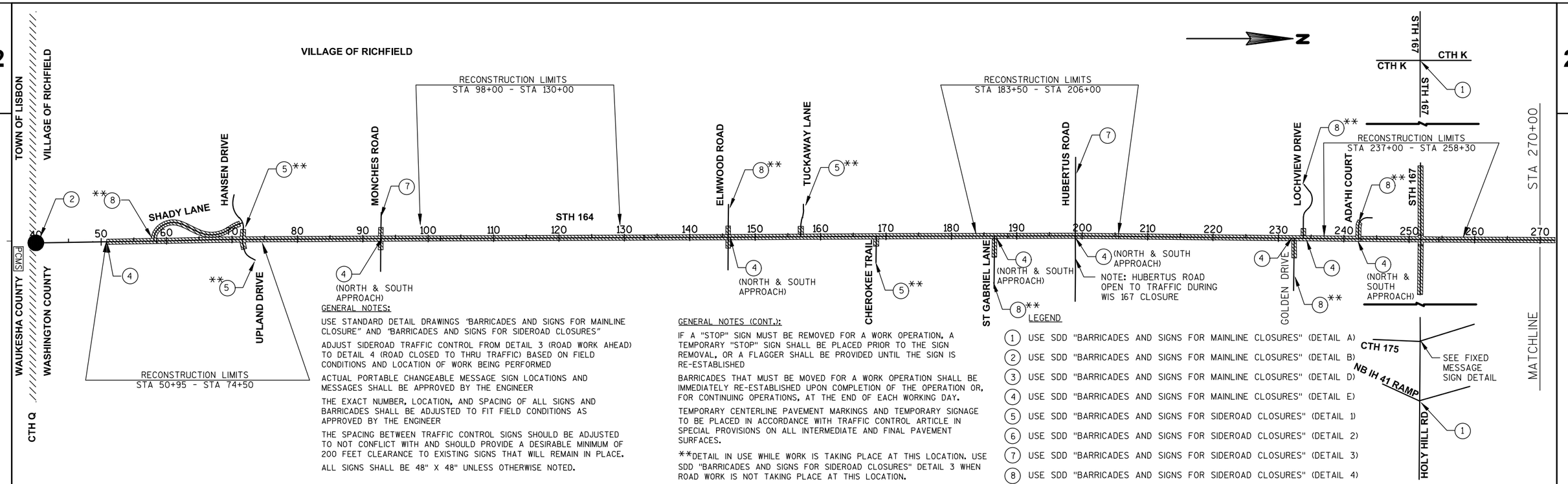
-RECONSTRUCTION AND RECONDITIONING STA 50+95 TO STA 251+50
-HUBERTUS ROAD STA 102+30 TO STA 118+00
-STH 167 STORM SEWER CROSSING, WEST OF STH 164

TRAFFIC CLOSURES

-STH 164 CLOSED EXCEPT FOR ACCESS TO RESIDENTS AND BUSINESSES
-HUBERTUS ROAD CLOSED EXCEPT FOR ACCESS TO RESIDENTS AND BUSINESSES

WORK AREA

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 2	SCALE : NTS	SHEET 407	E



GENERAL NOTES:

USE STANDARD DETAIL DRAWINGS "BARRICADES AND SIGNS FOR MAINLINE CLOSURE" AND "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"

ADJUST SIDEROAD TRAFFIC CONTROL FROM DETAIL 3 (ROAD WORK AHEAD) TO DETAIL 4 (ROAD CLOSED TO THRU TRAFFIC) BASED ON FIELD CONDITIONS AND LOCATION OF WORK BEING PERFORMED

ACTUAL PORTABLE CHANGEABLE MESSAGE SIGN LOCATIONS AND MESSAGES SHALL BE APPROVED BY THE ENGINEER

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED.

GENERAL NOTES (CONT.):

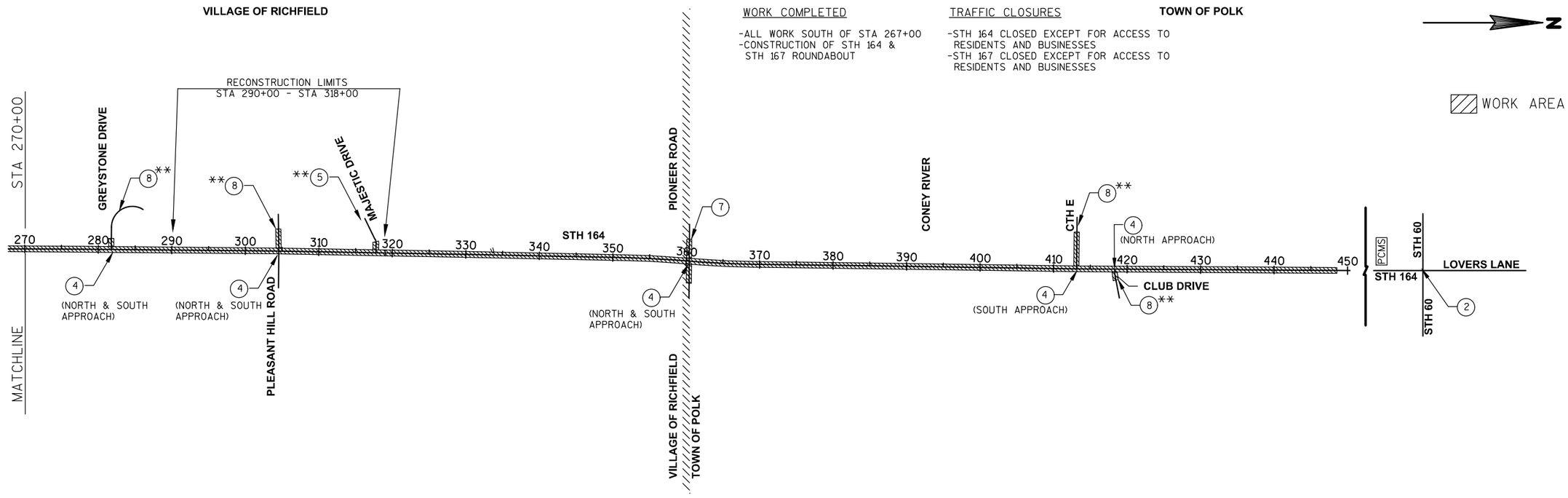
IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED

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

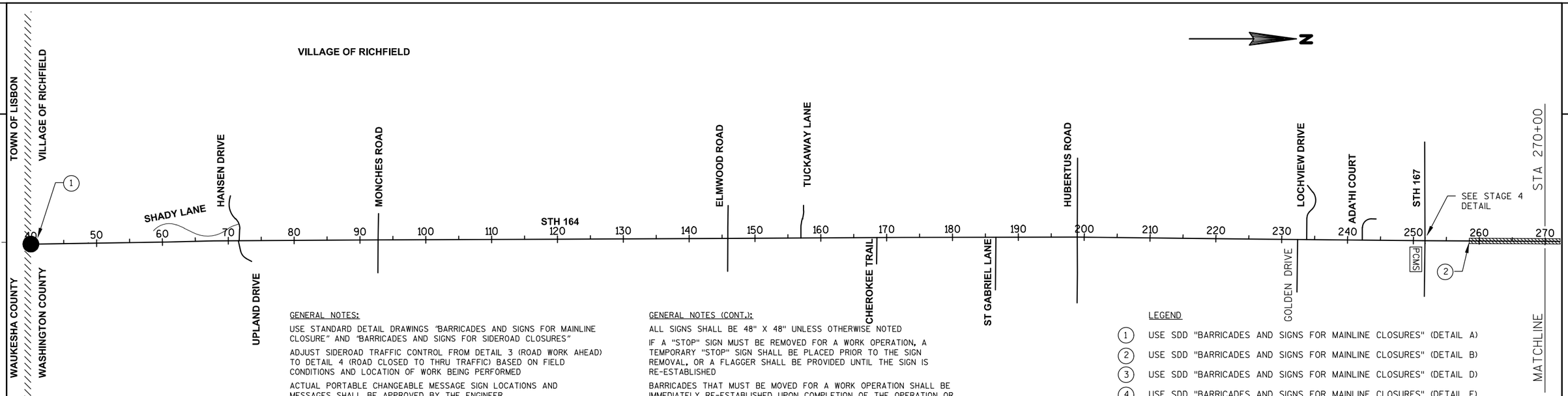
TEMPORARY CENTERLINE PAVEMENT MARKINGS AND TEMPORARY SIGNAGE TO BE PLACED IN ACCORDANCE WITH TRAFFIC CONTROL ARTICLE IN SPECIAL PROVISIONS ON ALL INTERMEDIATE AND FINAL PAVEMENT SURFACES.

**DETAIL IN USE WHILE WORK IS TAKING PLACE AT THIS LOCATION. USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" DETAIL 3 WHEN ROAD WORK IS NOT TAKING PLACE AT THIS LOCATION.

(1) USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL A)
(2) USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL B)
(3) USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL D)
(4) USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL E)
(5) USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 1)
(6) USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 2)
(7) USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 3)
(8) USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 4)



PROJECT NO:2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 3	SCALE : NTS	SHEET 408	E



GENERAL NOTES:

USE STANDARD DETAIL DRAWINGS "BARRICADES AND SIGNS FOR MAINLINE CLOSURE" AND "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"

ADJUST SIDEROAD TRAFFIC CONTROL FROM DETAIL 3 (ROAD WORK AHEAD) TO DETAIL 4 (ROAD CLOSED TO THRU TRAFFIC) BASED ON FIELD CONDITIONS AND LOCATION OF WORK BEING PERFORMED

ACTUAL PORTABLE CHANGEABLE MESSAGE SIGN LOCATIONS AND MESSAGES SHALL BE APPROVED BY THE ENGINEER

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

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

GENERAL NOTES (CONT.):

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED

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 RE-ESTABLISHED

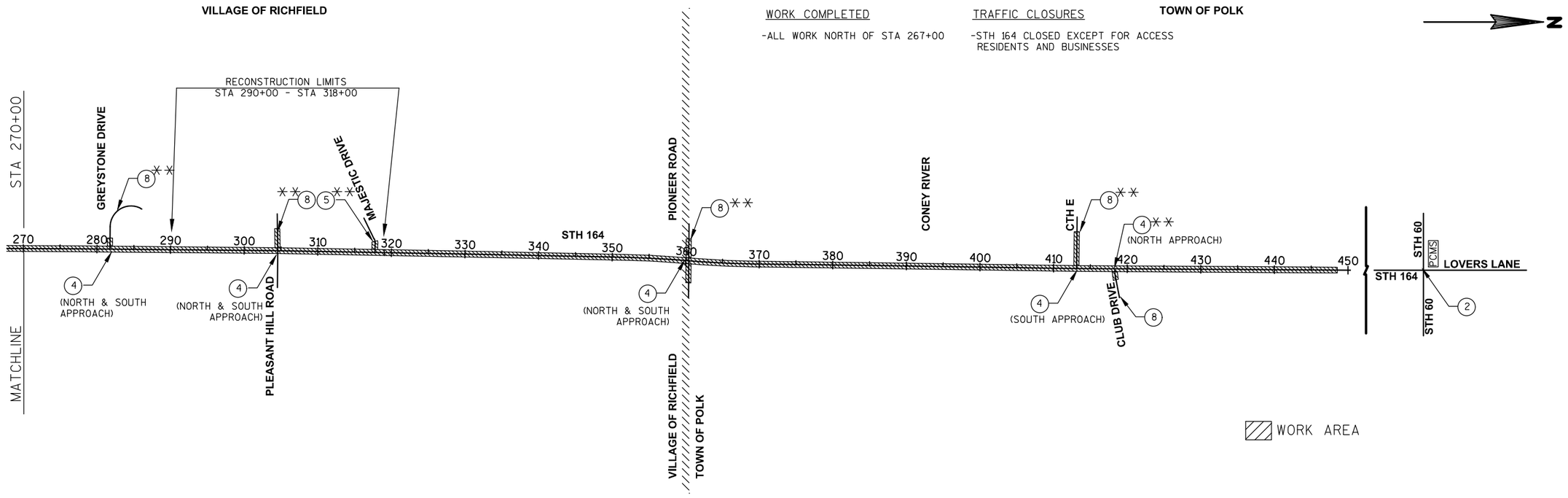
BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

TEMPORARY CENTERLINE PAVEMENT MARKINGS AND TEMPORARY SIGNAGE TO BE PLACED IN ACCORDANCE WITH TRAFFIC CONTROL ARTICLE IN SPECIAL PROVISIONS ON ALL INTERMEDIATE AND FINAL PAVEMENT SURFACES.

**DETIAL IN USE WHILE WORK IS TAKING PLACE AT THIS LCATION. USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" DETAIL 3 WHEN ROAD WORK IS NOT TAKING PLACE AT THIS LOCATION.

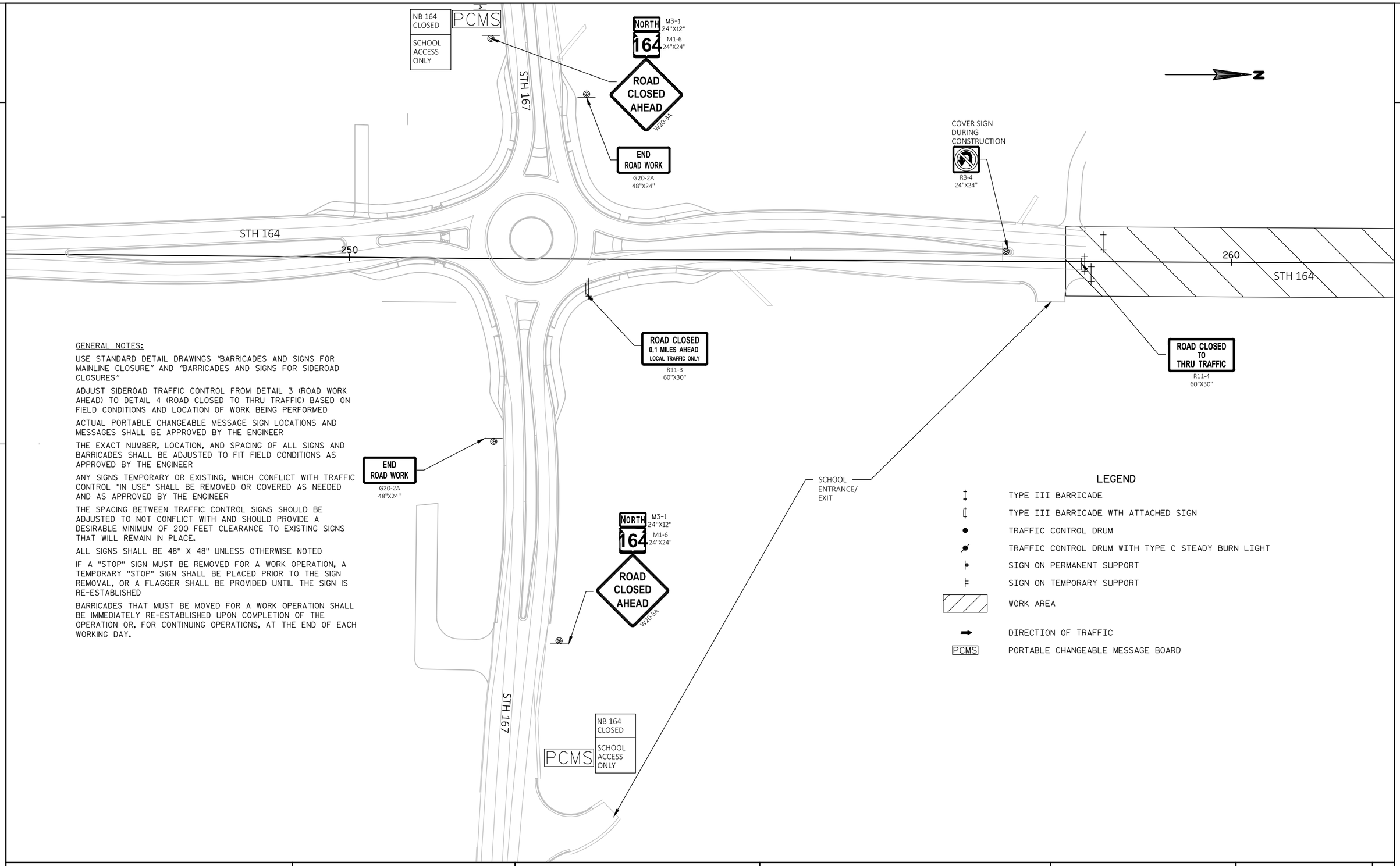
LEGEND

1. USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL A)
2. USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL B)
3. USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL D)
4. USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" (DETAIL E)
5. USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 1)
6. USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 2)
7. USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 3)
8. USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" (DETAIL 4)



PROJECT NO:2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 4	SCALE : NTS	SHEET 409	E

2



GENERAL NOTES:

USE STANDARD DETAIL DRAWINGS "BARRICADES AND SIGNS FOR MAINLINE CLOSURE" AND "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"

ADJUST SIDEROAD TRAFFIC CONTROL FROM DETAIL 3 (ROAD WORK AHEAD) TO DETAIL 4 (ROAD CLOSED TO THRU TRAFFIC) BASED ON FIELD CONDITIONS AND LOCATION OF WORK BEING PERFORMED

ACTUAL PORTABLE CHANGEABLE MESSAGE SIGN LOCATIONS AND MESSAGES SHALL BE APPROVED BY THE ENGINEER

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

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

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

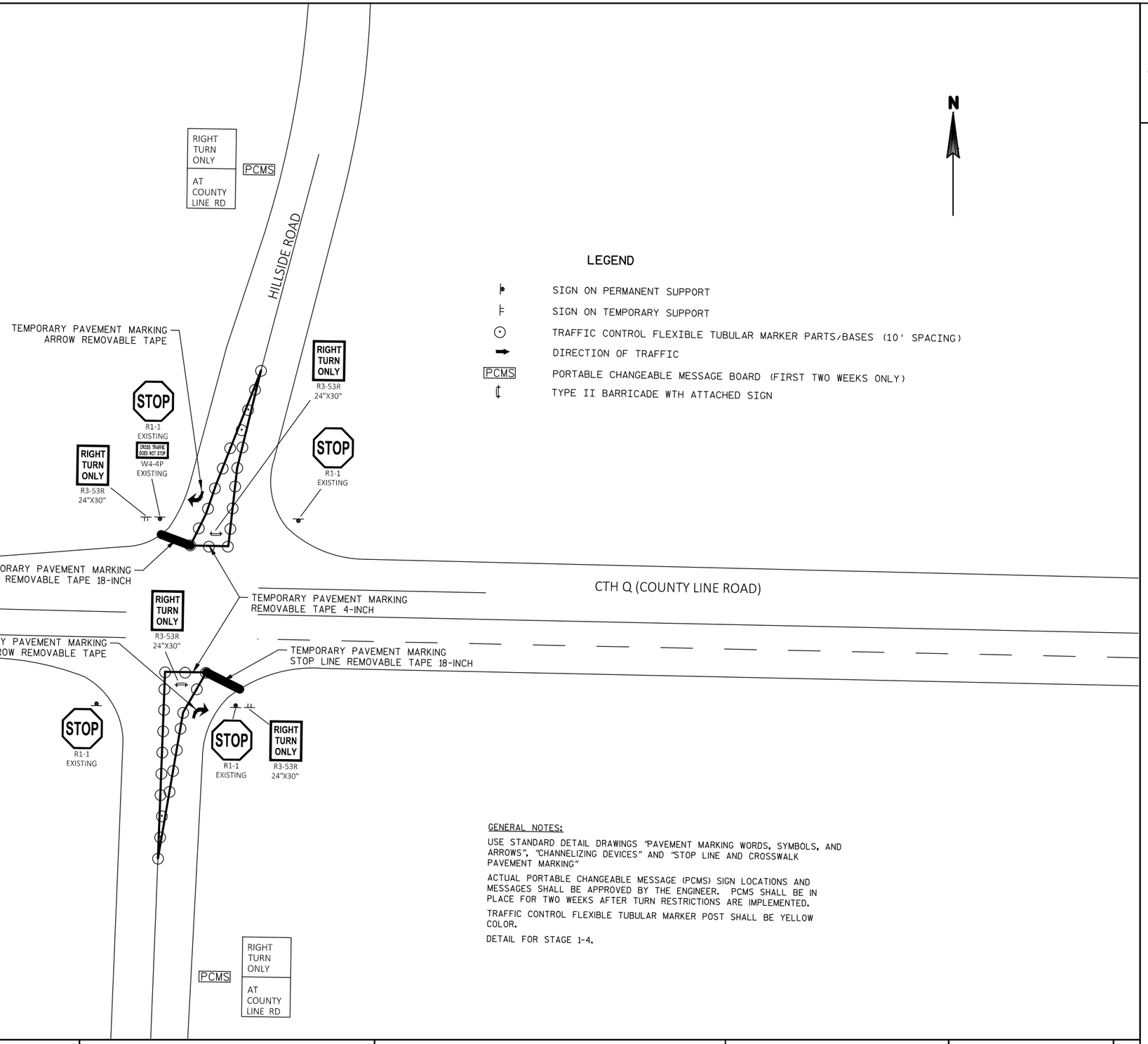
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED

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 RE-ESTABLISHED

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

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 4 DETAIL	SCALE : 1" = 100'	SHEET 410	E

2



GENERAL NOTES:

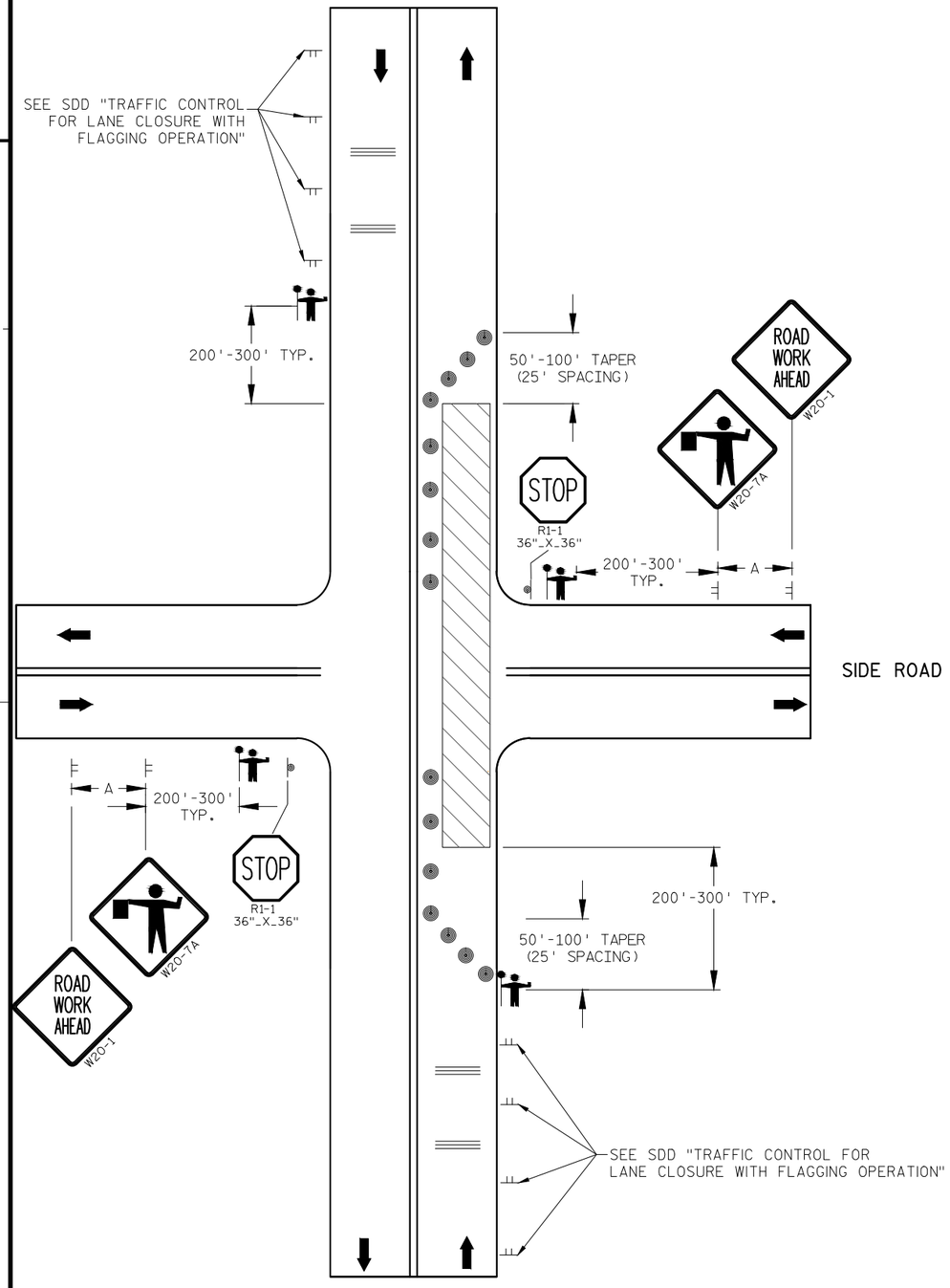
USE STANDARD DETAIL DRAWINGS "PAVEMENT MARKING WORDS, SYMBOLS, AND ARROWS", "CHANNELIZING DEVICES" AND "STOP LINE AND CROSSWALK PAVEMENT MARKING"

ACTUAL PORTABLE CHANGEABLE MESSAGE (PCMS) SIGN LOCATIONS AND MESSAGES SHALL BE APPROVED BY THE ENGINEER. PCMS SHALL BE IN PLACE FOR TWO WEEKS AFTER TURN RESTRICTIONS ARE IMPLEMENTED.

TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POST SHALL BE YELLOW COLOR.

DETAIL FOR STAGE 1-4.

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TRAFFIC CONTROL - HILLSIDE ROAD	SCALE : 1" = 50'	SHEET 411	E



LANE CLOSURE THROUGH AN INTERSECTION
FLAGGER ON SIDE ROAD
(WORK AREA ON THROUGH ROAD)

SPEED LIMIT (MPH)	SIGN SPACING A (FT)
25	200
30	200
35	350
40	350
45	500
50	500
55	500

LEGEND

- DRUMS
- TEMPORARY SIGN SUPPORT
- WORK ZONE
- TRAFFIC FLOW
- FLAGGER
- TEMPORARY PORTABLE RUMBLE STRIPS

NOTES

1. DEPENDING ON TRAFFIC CONDITIONS, CONSIDER ADDITIONAL TRAFFIC CONTROL ON THE SIDE ROAD APPROACHES, SUCH AS FLAGGERS AND APPROPRIATE SIGNS.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATION, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP QUEUE.

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

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, THE "FLAGGER AHEAD", THE "ROAD CONSTRUCTION AHEAD" AND THE ONE LANE ROAD AHEAD" SIGN SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

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

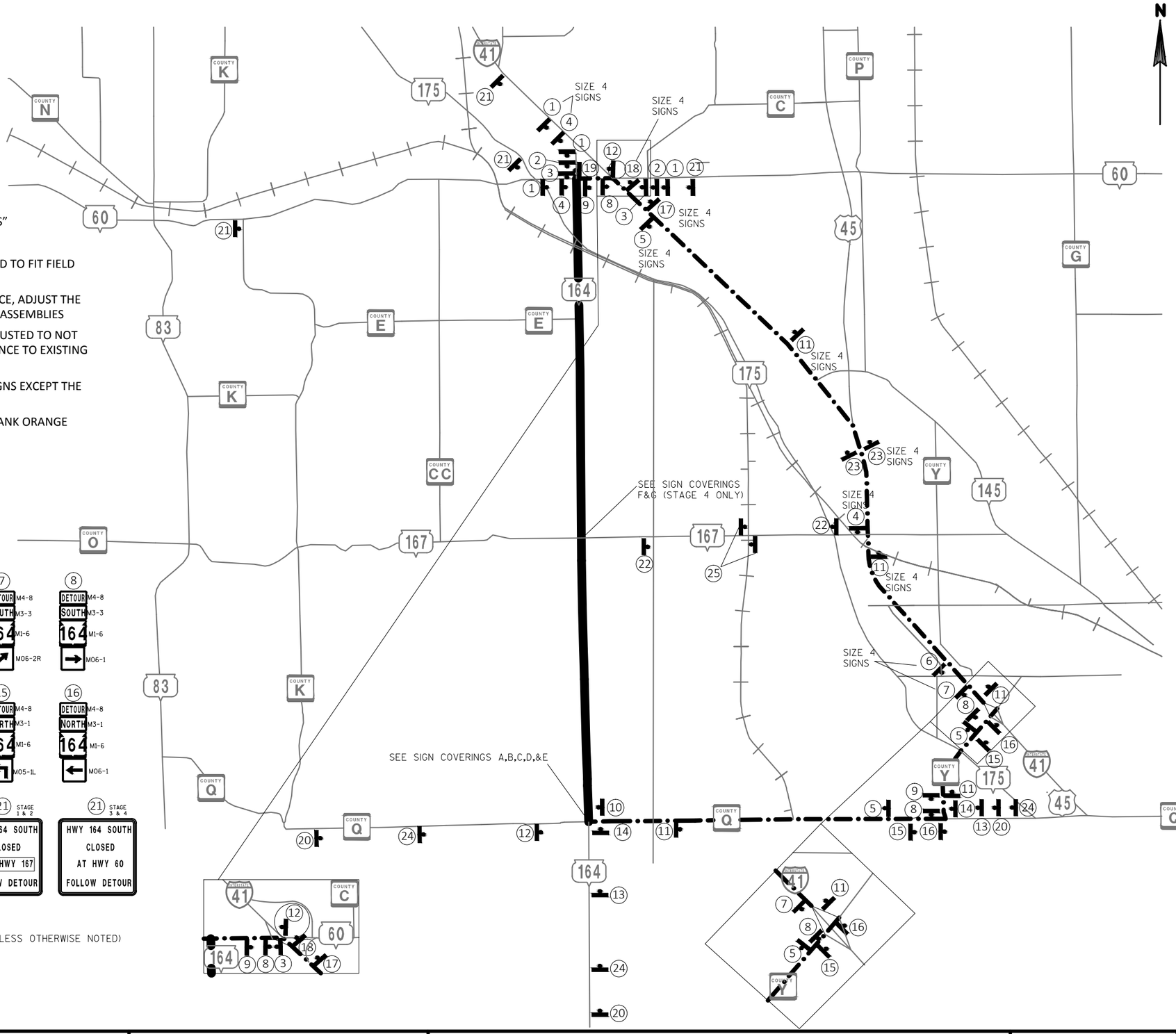
LEGEND

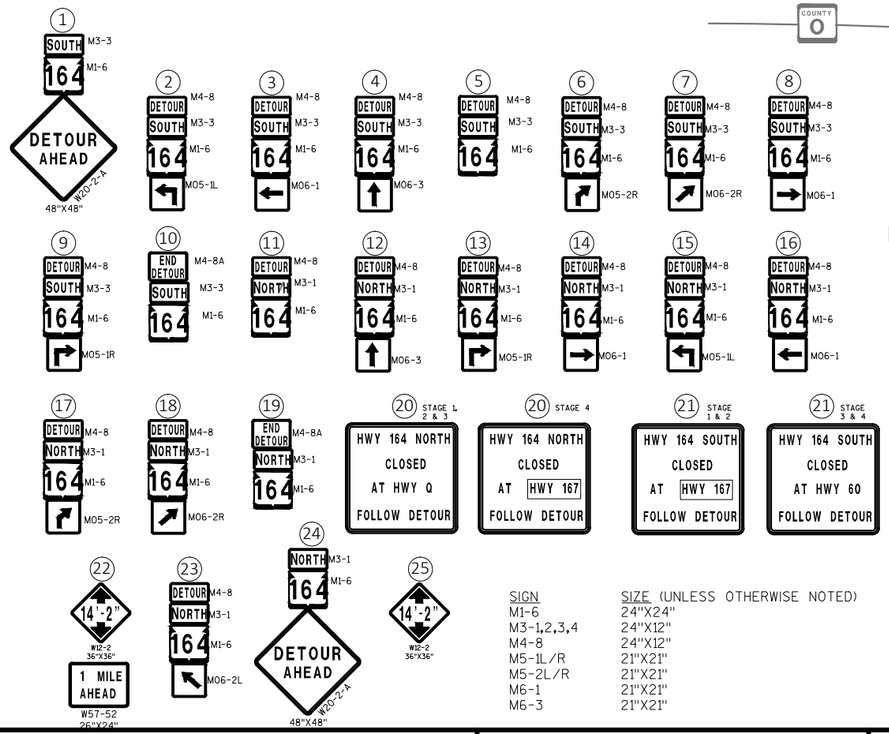
PROJECT LIMITS

DETOUR ROUTE

GENERAL NOTES:

1. USE STANDARD DETAIL DRAWINGS "DETOUR SIGNING FOR MAINLINE CLOSURES"
2. SEE TRAFFIC CONTROL FIXED MESSAGE SIGNS SHEET FOR ADDITIONAL DETAILS
3. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER
4. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES
5. THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE
6. "WO" SIGNS ARE THE SAME AS "W" AND "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE
7. ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK ORANGE PANEL





SIGN	SIZE (UNLESS OTHERWISE NOTED)
M1-6	24"X24"
M3-1,2,3,4	24"X12"
M4-8	24"X12"
M5-1L/R	21"X21"
M5-2L/R	21"X21"
M6-1	21"X21"
M6-3	21"X21"

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	DETOUR PLAN - WIS 164 (STAGE 1-4)	SHEET 413 - E

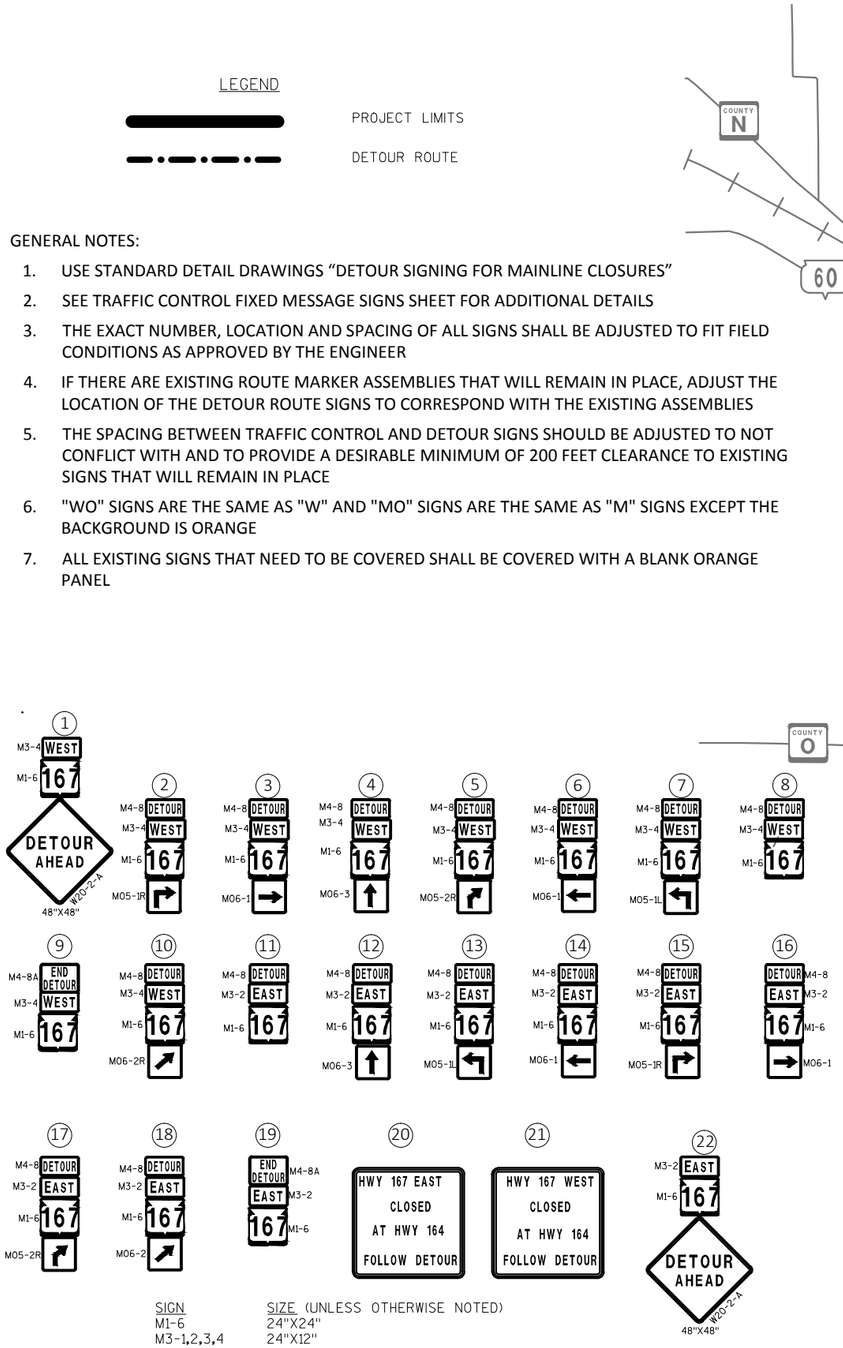
LEGEND

PROJECT LIMITS

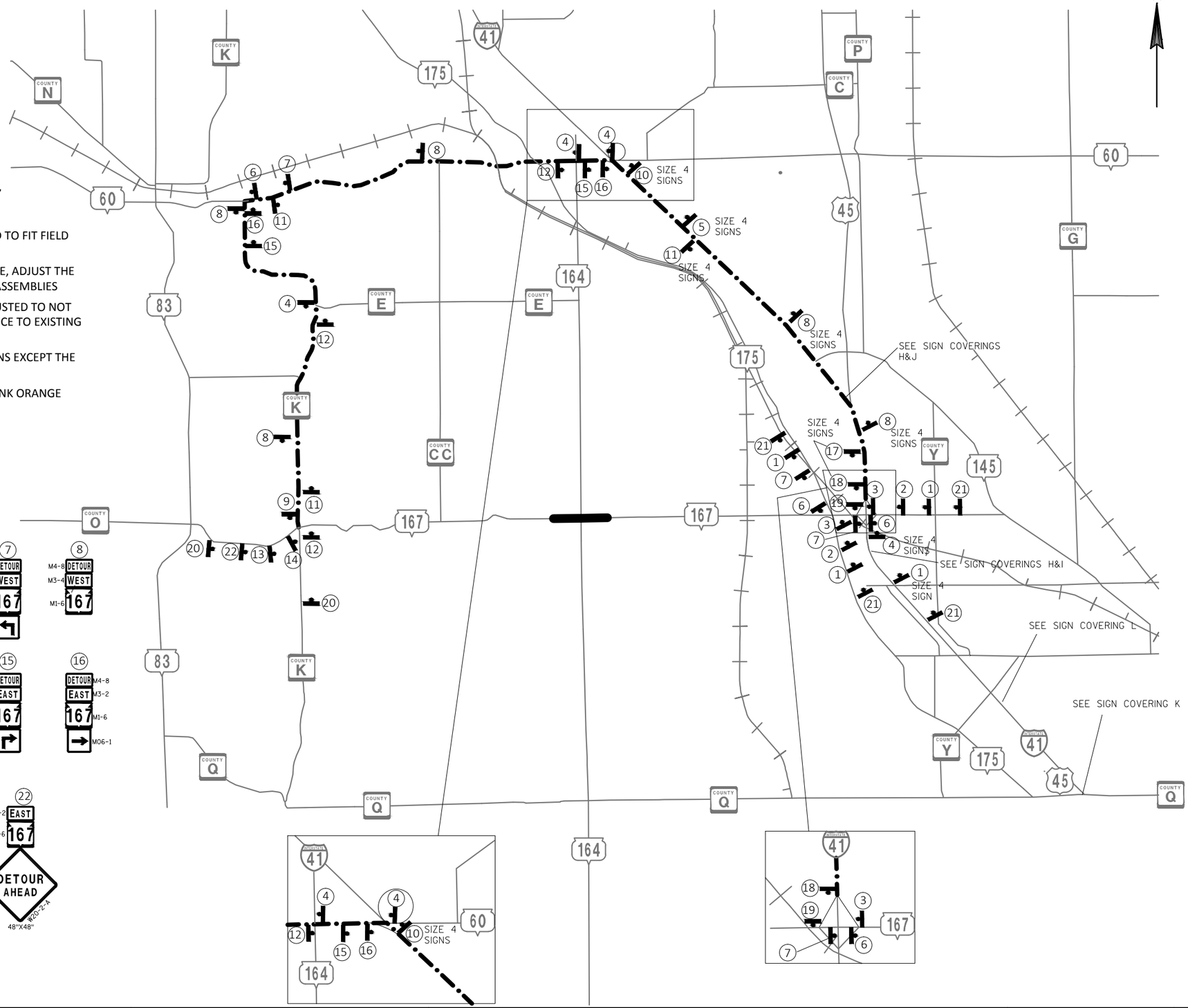
DETOUR ROUTE

GENERAL NOTES:

1. USE STANDARD DETAIL DRAWINGS "DETOUR SIGNING FOR MAINLINE CLOSURES"
2. SEE TRAFFIC CONTROL FIXED MESSAGE SIGNS SHEET FOR ADDITIONAL DETAILS
3. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER
4. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES
5. THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE
6. "WO" SIGNS ARE THE SAME AS "W" AND "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE
7. ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK ORANGE PANEL



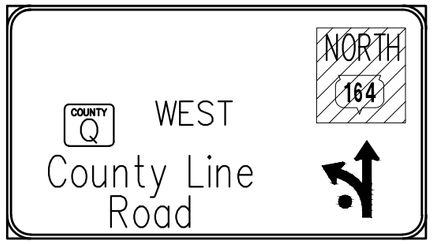
SIGN	SIZE (UNLESS OTHERWISE NOTED)
M1-6	24"X24"
M3-1,2,3,4	24"X12"
M4-8	24"X12"
M5-1L/R	21"X21"
M5-2L/R	21"X21"
M6-1	21"X21"
M6-3	21"X21"



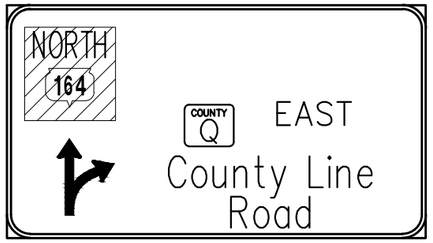
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	DETOUR PLAN - WIS 167 (STAGE 3)	SHEET 414 -- E

CTH Q ROUNDABOUT

NB WIS 164 (A)



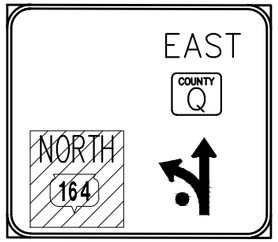
(B)



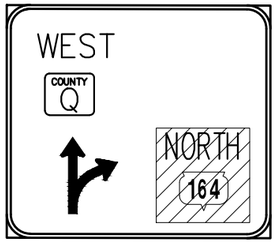
(C)



EB CTH Q (D)

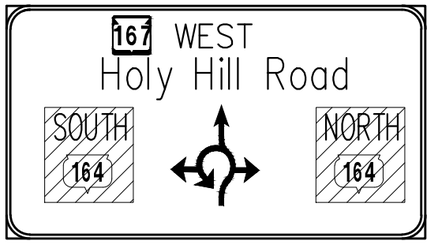


WB CTH Q (E)

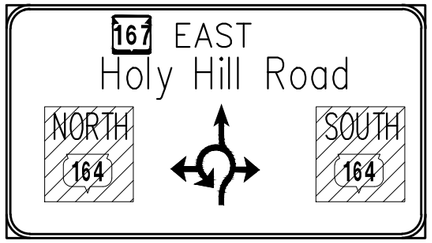


WIS 167 ROUNDABOUT

(F)

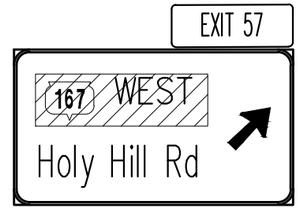


(G)

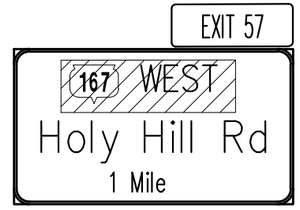


IH - 41

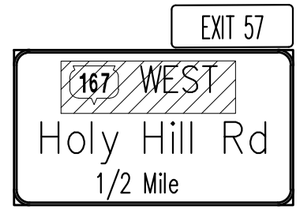
(H)



(I)



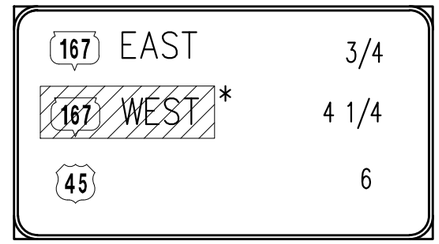
(J)



(K)



(L)



*REPLACE WITH "HOLY HILL RD". SEE FIXED MESSAGE SIGN DETAILS.

2

CONTROL POINTS

POINT NUMBER	DESCRIPTION	STATION/OFFSET	Y	X
CP 1	24" FENO SPIKE	STA 46+82.82, 83.49' RT	101059.46	341422.89
CP 2	24" FENO SPIKE	STA 57+25.60, 33.37' LT	102100.09	341288.16
CP 51	SECTION CORNER	STA 40+00.04, 0.00' RT	100375.32	341348.71

SHADY LANE CURVE 1
PI STA = 11+14.17
Y = 102180.51
X = 341205.96
DELTA = 45°11'08"
D = 28°38'52"
T = 83.22'
L = 157.73'
R = 200.00'
PC STA = 10+30.95
PT STA = 11+88.67
BK=S89°00'59.9"W
AH=N45°47'52.1"W

SHADY LANE CURVE 2
PI STA = 14+07.85
Y = 102391.34
X = 340989.18
DELTA = 65°17'24"
D = 18°21'51"
T = 199.88'
L = 355.53'
R = 312.00'
PC STA = 12+07.97
PT STA = 15+63.50
BK=N45°47'52.1"W
AH=N19°29'31.6"E

SHADY LANE CURVE 3
PI STA = 16+29.74
Y = 102642.20
X = 341077.98
DELTA = 6°18'46"
D = 4°46'29"
T = 66.17'
L = 132.21'
R = 1200.00'
PC STA = 15+63.56
PT STA = 16+95.78
BK=N19°29'31.6"E
AH=N25°48'17.5"E

N

SHADY LANE 3
SHADY LANE 2
SHADY LANE 1
PI: 14+07.85
PC: 12+07.97
PT: 11+88.67
PI: 11+14.17
PT: 15+63.56
PI: 16+29.74
PT: 16+95.78
N45°47'52.1"W
19.30'
N25°48'17.5"E
169.10'
PI: 60+69.43
CP 2
PC: 10+30.95
BP: 10+00.00
S89°00'59.9"W
30.95'
N0°18'13.2"E
STA 65+00
MATCHLINE
PI: 44+84.00
STH 164 R/L
STH 164
N0°41'45.9"W
484.00'
N0°59'00.1"W
1585.43'
N1°24'46.4"W
706.61'
40
45
50
55
60
CP 51
CP 1
PI 1
STA 44+84.00
Y=100859.24
X=341342.83
BEGIN PROJECT
STA 50+95.00
PI 2
STA 60+69.43
Y=102444.44
X=341315.62
BEGIN STH 164 R/L
STA 40+00.00
Y=100375.28
X=341348.71
S89°52'32.3"E
CONCRETE MONUMENT
W/ BRASS CAP
N=100375.277
E=341348.709
CONCRETE MONUMENT
W/ BRASS CAP
N=100369.555
E=343984.734
T 9 N R 19 E
5 32 33 4

SHEET 1 OF 15

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN	SHEET 416	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\027021_AD.DWG PLOT DATE : 1/28/2018 11:42 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : ----------

SHADY LANE CURVE 4
PI STA = 21+41.81
Y = 103103.33
X = 341300.95
DELTA = 60°29'13"
D = 12°03'44"
T = 276.94'
L = 501.46'
R = 475.00'
PC STA = 18+64.87
PT STA = 23+66.33
BK=N25°48'17.5"E
AH=N34°40'55.7"W

SHADY LANE CURVE 5
PI STA = 24+66.39
Y = 103413.35
X = 341086.43
DELTA = 14°02'55"
D = 16°22'13"
T = 43.13'
L = 85.82'
R = 350.00'
PC STA = 24+23.26
PT STA = 25+09.08
BK=N34°40'55.7"W
AH=N20°38'00.4"W

HANSEN DRIVE CURVE 1
PI STA = 25+10.22
Y = 103357.10
X = 340848.03
DELTA = 59°30'53"
D = 19°05'55"
T = 171.51'
L = 311.62'
R = 300.00'
PC STA = 23+38.71
PT STA = 26+50.32
BK=S77°43'33.4"E
AH=N42°45'33.9"E

HANSEN DRIVE CURVE 2
PI STA = 27+42.92
Y = 103551.01
X = 341027.34
DELTA = 49°41'11"
D = 28°38'52"
T = 92.60'
L = 173.44'
R = 200.00'
PC STA = 26+50.32
PT STA = 28+23.76
BK=N42°45'33.9"E
AH=S87°33'14.7"E

COMPUTED
N=103010.317
E=338714.252

T 9 N R 19 E: 32 32 / 32 32

N89°58'08.9"E
2648.43'

BEGIN HANSEN DRIVE R/L
STA 22+71.06
Y=103407.94
X=340614.34

67.64'
S77°43'33.4"E
PC: 23+38.71
HANSEN DRIVE CURVE 1
PI: 25+10.22
PC: 24+66.39
PT: 23+66.33
PT: 25+09.08
EP: 25+95.32
PT: 26+50.32
PI: 27+42.92
HANSEN DRIVE CURVE 2
PT: 28+23.76
STA 65+00
PC: 18+64.87
SHADY LANE
20
PI: 67+76.04
BEGIN UPLAND DRIVE R/L
STA 30+00.00
Y=103528.33
X=341296.00
176.24'
S87°33'14.7"E
END HANSEN DRIVE R/L
STA 30+00.00
Y=103539.54
X=341295.93
STH 164 R/L
STH 164
N1°24'46.4"W
706.61'
CP 3
N1°43'00.5"W
2638.50'
N0°20'02.4"W
2498.27'
PI 3
STA 67+76.04
Y=103150.83
X=341298.20
CP 35
CONCRETE MONUMENT
W/ BRASS CAP
N=103011.743
E=341362.682
T 9 N R 19 E: 32 32 / 33 33
N89°58'52.0"E
2592.96'
MATCHLINE
UPLAND DRIVE
165.45'
N77°36'29.8"E
PC: 31+65.45
UPLAND DRIVE CURVE 1
N28°06'22.1"E
94.10'
PI: 32+40.39
PT: 33+05.90
END UPLAND DRIVE R/L
STA 34+00.00
Y=103729.03
X=341610.43
CONCRETE MONUMENT
W/ BRASS CAP
N=103012.598
E=343955.638
T 9 N R 19 E: 33 33 / 33 33

UPLAND DRIVE CURVE 1
PI STA = 32+40.39
Y = 103579.92
X = 341530.79
DELTA = 49°30'08"
D = 35°14'45"
T = 74.94'
L = 140.45'
R = 162.56'
PC STA = 31+65.45
PT STA = 33+05.90
BK=N77°36'29.8"E
AH=N28°06'22.1"E

CONTROL POINTS

POINT NUMBER	DESCRIPTION	STATION/OFFSET	Y	X
CP 3	24" FENO SPIKE	STA 71+10.99, 23.53' LT	103485.64	341272.71
CP 4	24" FENO SPIKE	STA 91+74.67, 103.62' LT	105548.82	341180.59
CP 35	SECTION CORNER	STA 66+35.40, 61.04' RT	103011.74	341362.68
CP 36	SECTION CORNER	STA 92+74.31, 0.00' T	105649.06	341283.63

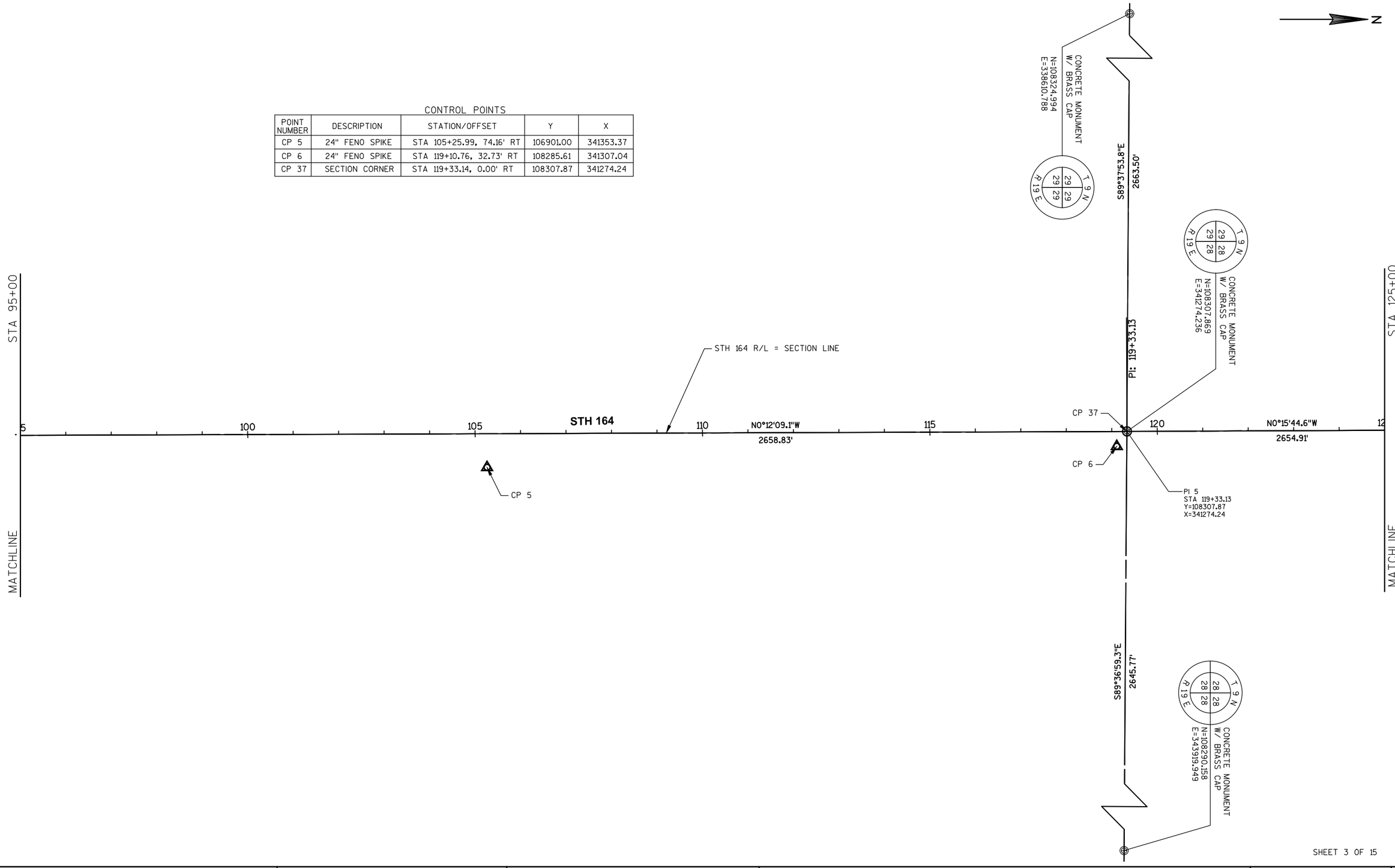
CONCRETE MONUMENT
W/ BRASS CAP
N=105667.898
E=338631.890
T 9 N R 19 E: 32 29 / 32 29
N89°35'34.7"W
2651.81'
BEGIN MONCHES ROAD R/L
STA 36+00.00
Y=105658.47
X=340883.74
MONCHES ROAD
S88°39'09.1"E
400.00'
PI: 92+74.31
PI: 40+00.00
CP 4
CP 36
N0°12'09.1"W
2658.83'
PI MONCHES 1
STA 40+00.00
Y=105649.06
X=341283.63
STH 164 R/L
= SECTION LINE
PI 4
STA 92+74.31
Y=105649.06
X=341283.63
STA 95+00
CONCRETE MONUMENT
W/ BRASS CAP
N=105649.059
E=341283.634
T 9 N R 19 E: 32 33 / 29 28
S89°55'30.2"E
2642.49'
45
END MONCHES ROAD
STA 45+00.00
Y=105648.41
X=341783.63
CONCRETE MONUMENT
W/ BRASS CAP
N=105645.603
E=343926.121
T 9 N R 19 E: 33 33 / 28 28
MATCHLINE

SHEET 2 OF 15

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN	SHEET 417	E

CONTROL POINTS

POINT NUMBER	DESCRIPTION	STATION/OFFSET	Y	X
CP 5	24" FENO SPIKE	STA 105+25.99, 74.16' RT	106901.00	341353.37
CP 6	24" FENO SPIKE	STA 119+10.76, 32.73' RT	108285.61	341307.04
CP 37	SECTION CORNER	STA 119+33.14, 0.00' RT	108307.87	341274.24

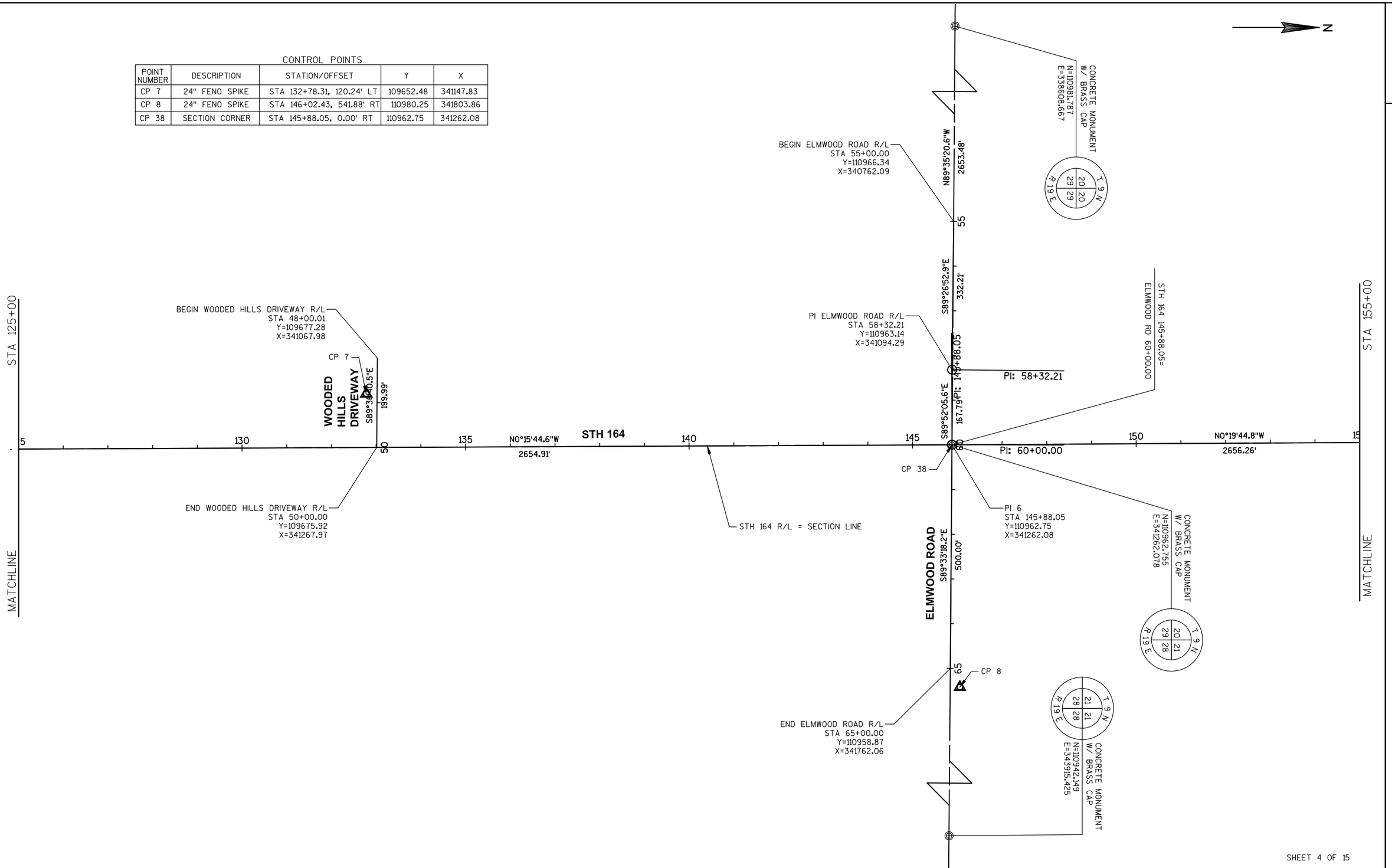


SHEET 3 OF 15

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN	SHEET 418	E

CONTROL POINTS

POINT NUMBER	DESCRIPTION	STATION/OFFSET	Y	X
CP 7	24" FENO SPIKE	STA 132+78.31, 120.24' LT	109652.48	341147.83
CP 8	24" FENO SPIKE	STA 146+02.43, 541.88' RT	110980.25	341803.86
CP 38	SECTION CORNER	STA 145+88.05, 0.00' RT	110962.75	341262.08



SHEET 4 OF 15

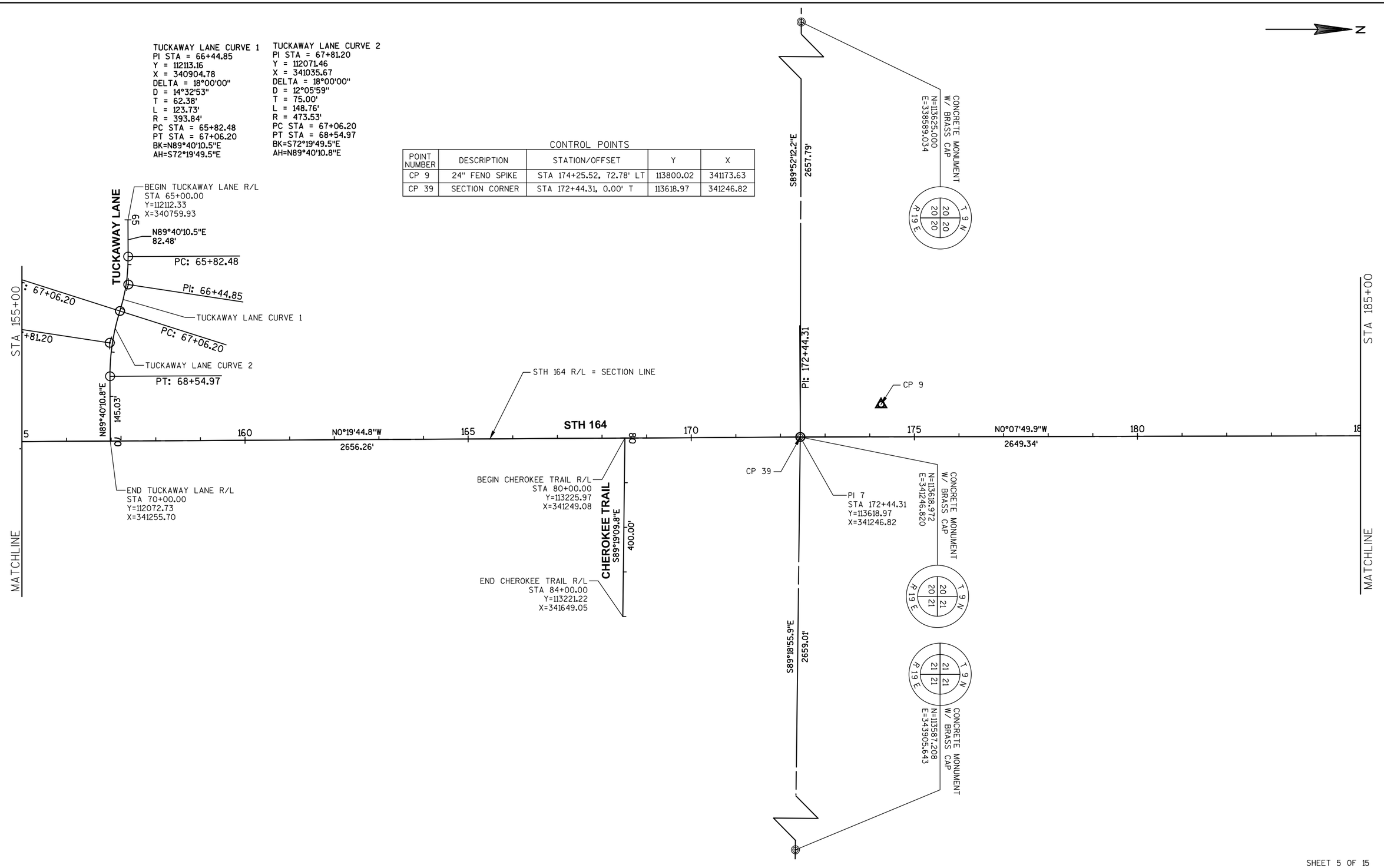
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN	SHEET 419	E

TUCKAWAY LANE CURVE 1
PI STA = 66+44.85
Y = 112113.16
X = 340904.78
DELTA = 18°00'00"
D = 14°32'53"
T = 62.38'
L = 123.73'
R = 393.84'
PC STA = 65+82.48
PT STA = 67+06.20
BK=N89°40'10.5"E
AH=S72°19'49.5"E

TUCKAWAY LANE CURVE 2
PI STA = 67+81.20
Y = 112071.46
X = 341035.67
DELTA = 18°00'00"
D = 12°05'59"
T = 75.00'
L = 148.76'
R = 473.53'
PC STA = 67+06.20
PT STA = 68+54.97
BK=S72°19'49.5"E
AH=N89°40'10.8"E

CONTROL POINTS

POINT NUMBER	DESCRIPTION	STATION/OFFSET	Y	X
CP 9	24" FENO SPIKE	STA 174+25.52, 72.78' LT	113800.02	341173.63
CP 39	SECTION CORNER	STA 172+44.31, 0.00' T	113618.97	341246.82



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN	SHEET 420	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\027205_AD.DWG PLOT DATE : 1/28/2018 11:43 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : ----------
WISDOT/CADDS SHEET 42

2

2

CONTROL POINTS

POINT NUMBER	DESCRIPTION	STATION/OFFSET	Y	X
CP 10	24" FENO SPIKE	STA 187+01.77, 352.57' RT	115077.23	341596.06
CP 11	24" FENO SPIKE	STA 196+73.13, 182.77' RT	116048.20	341424.06
CP 40	SECTION CORNER	STA 198+93.65, 0.00' RT	116268.31	341240.78

MATCHLINE STA 105+00

S89°43'07.5"E
1200.00'

S89°58'52.2"W
2655.99'

HUBERTUS ROAD

PI: 198+93.65

STA 185+00

MATCHLINE

185

190

S0°07'49.9"E
2649.34'

STH 164

195

200

PI: 110+00.00

CP 40

STH 164 R/L = SECTION LINE

205

MATCHLINE STA 105+00

N0°39'20.6"E
2636.70'

210

STA 215+00

MATCHLINE

BEGIN HUBERTUS ROAD R/L
STA 98+00.00
Y=116274.20
X=340040.80

98

S89°58'52.2"W
2655.99'

100

HUBERTUS ROAD

S89°43'07.5"E
1200.00'

T 9 N
R 19 E
17 20 17 20

CONCRETE MONUMENT
W/ BRASS CAP
N=116267.434
E=338584.790

N

BEGIN ST GABRIEL LANE R/L
STA 90+00.00
Y=115035.18
X=341243.59

90

ST GABRIEL LANE

S89°21'14.9"E

CP 10

95

END ST GABRIEL LANE R/L
STA 98+00.00
Y=115026.17
X=342043.54

CP 11

PI 8
STA 198+93.65
Y=116268.31
X=341240.78

STH 164 198+93.65=
HUBERTUS RD 110+00.00

CONCRETE MONUMENT
W/ BRASS CAP
N=116268.307
E=341240.784

N89°43'28.5"E
549.67'

T 9 N
R 19 E
17 20 21 16

S89°23'40.9"E

115

PI: 115+49.67

PI HUBERTUS 1
STA 115+49.67
Y=116270.95
X=341790.45

S89°23'40.9"E
2655.96'

S89°23'44.2"E
450.33'

T 9 N
R 19 E
21 16 21 16

CONCRETE MONUMENT
W/ BRASS CAP
N=116240.248
E=343896.591

END HUBERTUS ROAD R/L
STA 120+00.00
Y=116266.20
X=342240.75

120

SHEET 6 OF 15

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN	SHEET 421	E

LOCHVIEW DRIVE CURVE 1
PI STA = 136+22.99
Y = 119756.46
X = 340896.85
DELTA = 44°16'37"
D = 45°06'53"
T = 51.67'
L = 98.14'
R = 127.00'
PC STA = 135+71.32
PT STA = 136+69.46
BK=S45°10'37.6"E
AH=S89°27'14.6"E

LOCHVIEW DRIVE CURVE 2
PI STA = 134+05.95
Y = 119952.87
X = 340699.22
DELTA = 82°16'37"
D = 28°56'14"
T = 172.96'
L = 284.33'
R = 198.00'
PC STA = 132+32.98
PT STA = 135+17.31
BK=N52°32'45.4"E
AH=S45°10'37.6"E

N

BEGIN LOCHVIEW DRIVE R/L
STA 131+00.00
Y=119766.82
X=340456.35

131 N52°32'45.4"E 132.98'

PC: 132+32.98

LOCHVIEW DRIVE CURVE 1

PI: 134+05.95

PT: 135+17.31

135

PI: 136+22.99

S45°10'37.6"E
54.01'

PC: 135+71.32

PT: 136+69.46

LOCHVIEW DRIVE CURVE 2

BEGIN ADA'HI COURT R/L
STA 145+25.18
Y=120809.45
X=340966.27

S0°35'39.6"W
75.91'

PC: 146+01.08

PI: 147+34.20

PT: 148+10.11

STA 215+00

STA 245+00

CP 12

CP 41

CP 13

CP 14

STH 164 R/L = SECTION LINE

N89°50'57.5"E
2285.50'

PI: 225+30.35

LOCHVIEW DRIVE
S89°27'14.6"E
330.54'

ADA'HI COURT
S89°27'14.6"E
183.89'

N0°39'20.6"E
2636.70'

N0°32'45.4"E
2645.62'

STH 164

215 220 225 230 130 140 235 240 150

PI 9
STA 225+30.35
Y=118904.84
X=341270.96

BEGIN GOLDEN DRIVE R/L
STA 130+00.00
Y=119614.70
X=341277.72

END LOCHVIEW DRIVE R/L
STA 140+00.00
Y=119752.82
X=341279.04

END ADA'HI COURT R/L
STA 150+00.00
Y=120597.36
X=341287.09

CONCRETE MONUMENT
W/ BRASS CAP
N=118904.836
E=341270.959

S89°21'55.5"E
2655.18'

GOLDEN DRIVE
S89°27'14.6"E
800.00'

135

END GOLDEN DRIVE R/L
STA 138+00.00
Y=119607.08
X=342077.69

138

CONCRETE MONUMENT
W/ BRASS CAP
N=118875.428
E=343925.981

MATCHLINE

MATCHLINE

CONTROL POINTS

POINT NUMBER	DESCRIPTION	STATION/OFFSET	Y	X
CP 12	24" FENO SPIKE	STA 215+45.60, 101.46' LT	117921.30	341158.24
CP 13	24" FENO SPIKE	STA 229+27.64, 44.87' LT	119302.53	341229.87
CP 14	24" FENO SPIKE	STA 242+97.49, 71.35' RT	120671.21	341359.14
CP 41	SECTION CORNER	STA 225+30.35, 0.00' RT	118904.84	341270.96

SHEET 7 OF 15

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN	SHEET 422	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\027207_AD.DWG PLOT DATE : 1/28/2018 11:43 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : ----------

2

N

MATCHLINE STA 162+00

BEGIN STH 167 R/L
STA 155+00.00
Y=121546.38
X=339796.17

CONCRETE MONUMENT
W/ BRASS CAP
N=121543.312
E=338629.956

T 9 N
R 19 E
8 8
17 17

STH 167

N89°50'56.6"E
1500.00'

PI: 251+75.97

CP 42

STA 245+00

STA 275+00

STH 164 R/L = SECTION LINE

CP 16

N0°32'45.4"E
2645.62'

N0°17'27.7"E
2636.88'

PI: 170+00.00

STH 164

MATCHLINE STA 162+00

MATCHLINE

MATCHLINE STA 180+00

PI 10
STA 251+75.97
Y=121550.34
X=341296.17

CP 15

CONCRETE MONUMENT
W/ BRASS CAP
N=121550.336
E=341296.168

T 9 N
R 19 E
8 9
17 16

S89°17'04.1"E
1400.00'

END STH 167 R/L
STA 155+00.00
Y=121532.85
X=342696.06

CONCRETE MONUMENT
W/ BRASS CAP
N=121517.281
E=343942.835

T 9 N
R 9 E
9 9
16 16

MATCHLINE STA 180+00

CONTROL POINTS

POINT NUMBER	DESCRIPTION	STATION/OFFSET	Y	X
CP 15	24" FENO SPIKE	STA 252+87.75, 177.18' RT	121661.22	341473.92
CP 16	24" FENO SPIKE	STA 274+12.77, 66.11' LT	123787.44	341241.42
CP 42	SECTION CORNER	STA 251+75.97, 0.00' RT	121550.34	341296.17

SHEET 8 OF 15

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN	SHEET 423	E

2

GREYSTONE DRIVE CURVE 1
PI STA = 185+77.87
Y = 124556.93
X = 340553.15
DELTA = 116°22'49"
D = 20°14'45"
T = 456.26'
L = 574.83'
R = 283.00'
PC STA = 181+21.62
PT STA = 186+96.45
BK=S26°54'39.1"W
AH=S89°28'09.9"E

PI: 185+77.87

CONCRETE MONUMENT W/ BRASS CAP
N=124176.762
E=338664.782

T 9 N R 19 E (8 8 8 8)

S89°46'27.0"W
2644.80'

GREYSTONE DRIVE CURVE 1

BEGIN GREYSTONE DRIVE R/L
STA 181+00.00
Y=124983.06
X=340769.43

181
185
PC: 181+21.62
PT: 186+96.45

GREYSTONE DRIVE
S89°28'09.9"E
303.55'

END GREYSTONE DRIVE R/L
STA 190+00.00
Y=124549.90
X=341312.92

STA 275+00

PI: 278+12.86

CP 43

N0°17'27.7"E
2636.88'

PI 11
STA 278+12.86
Y=124187.19
X=341309.56

CONCRETE MONUMENT W/ BRASS CAP
N=124187.186
E=341309.562

T 9 N R 19 E (8 8 9 9)

MATCHLINE

S89°16'33.6"E
2649.26'

CONCRETE MONUMENT W/ BRASS CAP
N=124153.711
E=343958.607

T 9 N R 19 E (9 9 9 9)

275 280 285 290 295 300 305

STH 164 R/L = SECTION LINE

STH 164

N0°31'50.1"E
2644.00'

PC: 1290+11.74

BEGIN STH 164 C/L
STA 1290+11.74
Y=125386.48
X=341320.67

PI: 1292+59.75

STH 164 CL CURVE 1

CP 17

STH 164 CL CURVE 1
PI STA = 1292+59.75
Y = 125634.48
X = 341322.96
DELTA = 2°33'36"
D = 0°30'58"
T = 248.01'
L = 495.94'
R = 11100.00'
PC STA = 1290+11.74
PT STA = 1295+07.67
BK=N0°31'50.1"E
AH=N2°01'45.6"W

STH 164 CL CURVE 2
PI STA = 1298+86.57
Y = 126260.98
X = 341300.77
DELTA = 2°33'36"
D = 0°30'58"
T = 248.01'
L = 495.94'
R = 11100.00'
PC STA = 1296+38.56
PT STA = 1301+34.49
BK=N2°01'45.6"W
AH=N0°31'50.1"E

N2°01'45.6"W
130.88'

PT: 1295+07.67
PC: 1296+38.56
PI: 1298+86.57
PT: 1301+34.49
PI: 304+56.86
PI: 1304+56.98
PI: 200+00.00

STH 164 CL CURVE 2

STH 164 C/L

28'

N0°31'50.1"E
322.49'

STH 164 R/L

CP 44

PI 12
STA 304+56.86
Y=126831.08
X=341334.05

CONCRETE MONUMENT W/ BRASS CAP
N=126831.076
E=341334.046

T 9 N R 19 E (5 5 8 8)

S89°32'09.4"W
2629.78'

CONCRETE MONUMENT W/ BRASS CAP
N=126809.777
E=338704.349

T 9 N R 19 E (5 5 8 8)

BEGIN PLEASANT HILL ROAD R/L
STA 195+00.00
Y=126824.22
X=340834.09

195

N89°12'49.9"E
500.00'

S89°31'10.5"E
500.00'

END PLEASANT HILL ROAD R/L
STA 195+00.00
Y=126826.88
X=341834.03

205

CONCRETE MONUMENT W/ BRASS CAP
N=126795.147
E=343983.761

T 9 N R 19 E (9 9 4 4)

S89°13'23.3"E
2649.96'

STA 305+00

MATCHLINE

CONTROL POINTS

POINT NUMBER	DESCRIPTION	STATION/OFFSET	Y	X
CP 17	24" FENO SPIKE	STA 291+24.35, 52.91' LT	125499.11	341268.80
CP 43	SECTION CORNER	STA 278+12.86, 0.00' RT	124187.19	341309.56
CP 44	SECTION CORNER	STA 304+56.86, 0.00' RT	126831.08	341334.05

SHEET 9 OF 15

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN	SHEET 424	E

2

MAJESTIC DRIVE CURVE 1
PI STA = 208+51.29
Y = 128153.62
X = 341207.99
DELTA = 26°41'55"
D = 38°11'50"
T = 35.59'
L = 69.90'
R = 150.00'
PC STA = 208+15.69
PT STA = 208+85.59
BK=N64°20'23.4"E
AH=S88°57'41.6"E

N

CONCRETE MONUMENT
W/ BRASS CAP
N=129470.070
E=338749.894

T 19 N
R 19 E
5 5
5 5

S89°37'38.9"W
2632.35'

STA 305+00

BEGIN MAJESTIC DRIVE R/L
STA 205+00.00
Y=128001.50
X=340891.35

205

MAJESTIC DRIVE

N64°20'23.4"E
315.69'

STH 164 CL CURVE 3

N1°02'18.4"E
222.45'

PC: 1306+79.43

PI: 1309+27.90

PT: 1311+76.28

N3°36'11.0"E
128.83'

PC: 1313+05.11

STH 164 CL CURVE 4

CP 19

END MAJESTIC DRIVE R/L
STA 210+00.00
Y=128150.90
X=341357.97

MAJESTIC DRIVE CURVE 1

PC: 208+15.69

PI: 208+51.29

PT: 208+85.59

S88°57'41.6"E
114.41'

STH 164 R/L = SECTION LINE

STH 164

PI: 331+13.41

CP 20

CP 45

N1°12'05.0"E
2927.78'

STA 335+00

28'

305
305
310
1310
315
1315
320
325
330

N1°02'18.4"E
2656.55'

CP 18

PI: 1315+53.57

PT: 1318+01.95

END STH 164 C/L
STA 1318+01.95
Y=128175.24
X=341358.41

N1°02'18.4"E
2656.55'

PI 13
STA 331+13.41
Y=129487.19
X=341382.19

CONCRETE MONUMENT
W/ BRASS CAP
N=129487.185
E=341382.191

T 19 N
R 19 E
5 4
4 4

S89°16'07.0"E
2641.14'

T 19 N
R 19 E
4 4
4 4

CONCRETE MONUMENT
W/ BRASS CAP
N=129453.472
E=344023.116

MATCHLINE

MATCHLINE

STH 164 CL CURVE 3
PI STA = 1309+27.90
Y = 127302.30
X = 341314.58
DELTA = 2°33'53"
D = 0°30'58"
T = 248.46'
L = 496.85'
R = 11100.00'
PC STA = 1306+79.43
PT STA = 1311+76.28
BK=N1°02'18.4"E
AH=N3°36'11.0"E

STH 164 CL CURVE 4
PI STA = 1315+53.57
Y = 127926.81
X = 341353.91
DELTA = 2°33'53"
D = 0°30'58"
T = 248.46'
L = 496.85'
R = 11100.00'
PC STA = 1313+05.11
PT STA = 1318+01.95
BK=N3°36'11.0"E
AH=N1°02'18.4"E

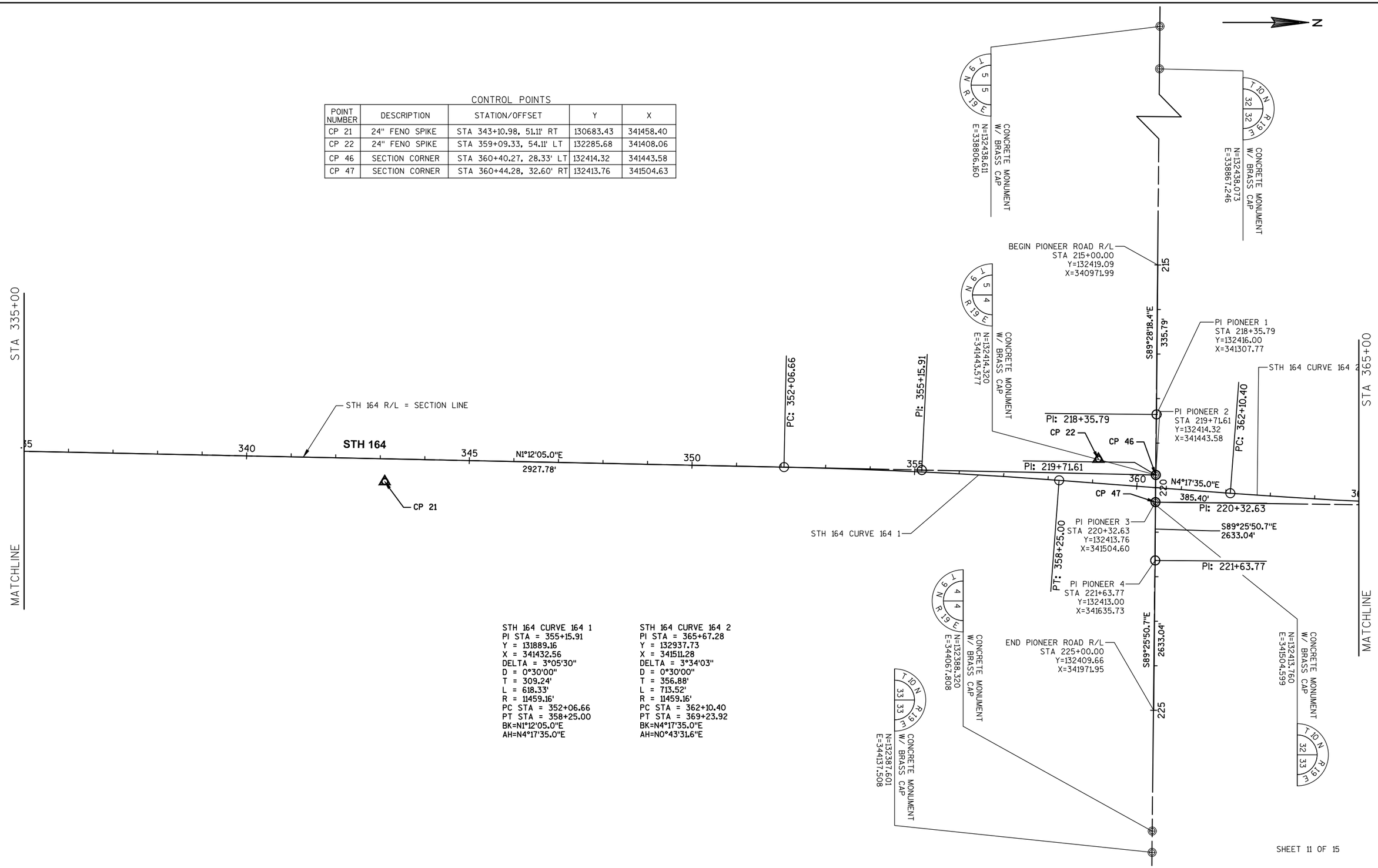
CONTROL POINTS

POINT NUMBER	DESCRIPTION	STATION/OFFSET	Y	X
CP 18	24" FENO SPIKE	STA 305+69.68, 122.49' LT	126946.10	341213.62
CP 19	24" FENO SPIKE	STA 316+42.94, 321.30' LT	128022.79	341034.30
CP 20	24" FENO SPIKE	STA 331+18.12, 46.47' LT	129492.87	341335.83
CP 45	SECTION CORNER	STA 331+13.41, 0.00' RT	129487.18	341382.19

SHEET 10 OF 15

CONTROL POINTS

POINT NUMBER	DESCRIPTION	STATION/OFFSET	Y	X
CP 21	24" FENO SPIKE	STA 343+10.98, 51.11' RT	130683.43	341458.40
CP 22	24" FENO SPIKE	STA 359+09.33, 54.11' LT	132285.68	341408.06
CP 46	SECTION CORNER	STA 360+40.27, 28.33' LT	132414.32	341443.58
CP 47	SECTION CORNER	STA 360+44.28, 32.60' RT	132413.76	341504.63



SHEET 11 OF 15

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN	SHEET 426	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\027211_AD.DWG PLOT DATE : 1/28/2018 11:44 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : ----------

2

2

CONTROL POINTS

POINT NUMBER	DESCRIPTION	STATION/OFFSET	Y	X
CP 23	24" FENO SPIKE	STA 376+16.06, 43.84' LT	133987.21	341480.72
CP 24	24" FENO SPIKE	STA 387+13.30, 32.13' LT	135084.27	341506.40
CP 48	SECTION CORNER	STA 386+76.97, 0.00' RT	135047.48	341537.99

N

STA 365+00

STH 164 CURVE 164 2

PT: 369+23.92

370

STH 164

375

CP 23

STH 164 R/L

N0°43'31.6"E
1753.05'
STH 164 R/L

380

385

CP 48

PI: 386+76.97

CP 24

390

STH 164 R/L = SECTION LINE

N0°50'09.5"E
2635.65'

STA 395+00

N89°22'54.2"W
2641.04'

CONCRETE MONUMENT
W/ BRASS CAP
N=135075.980
E=338897.107

T 10 N
R 19 E
32 32
32 32

S0°43'35.1"W
2633.93'
SECTION LINE

PI 14
STA 386+76.97
Y=135047.48
X=341537.99

CONCRETE MONUMENT
W/ BRASS CAP
N=135047.481
E=341537.992

T 10 N
R 19 E
32 33
32 33

S89°27'09.2"E
2632.48'

T 10 N
R 19 E
33 33
33 33

CONCRETE MONUMENT
W/ BRASS CAP
N=135022.329
E=344170.349

MATCHLINE

PI: 365+67.28

STH 164 CURVE 164 2
PI STA = 365+67.28
Y = 132937.73
X = 341511.28
DELTA = 3°34'03"
D = 0°30'00"
T = 356.88'
L = 713.52'
R = 11459.16'
PC STA = 362+10.40
PT STA = 369+23.92
BK=N4°17'35.0"E
AH=N0°43'31.6"E

MATCHLINE

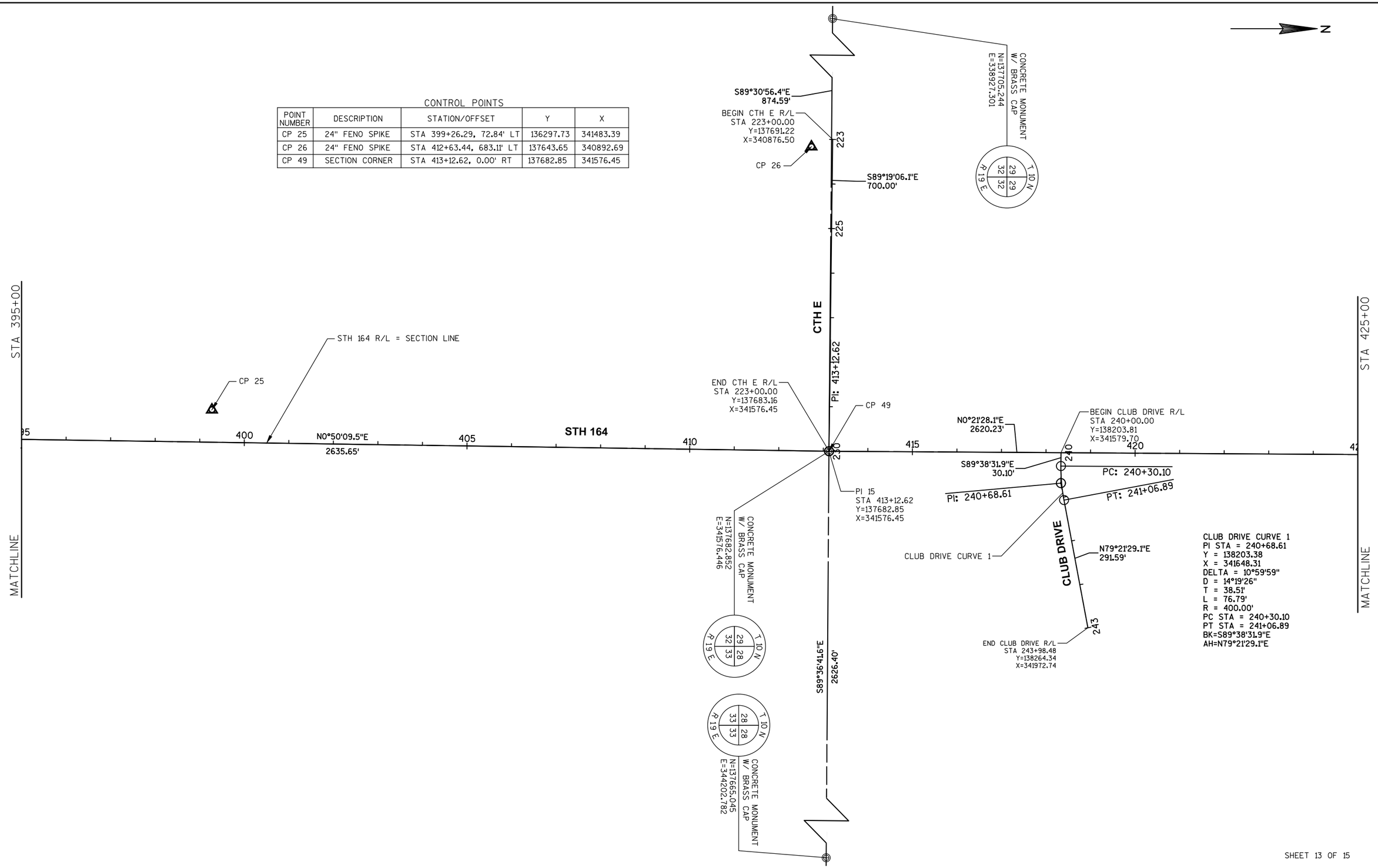
SHEET 12 OF 15

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN	SHEET 427	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\027212_AD.DWG PLOT DATE : 1/28/2018 11:44 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : ----------

CONTROL POINTS

POINT NUMBER	DESCRIPTION	STATION/OFFSET	Y	X
CP 25	24" FENO SPIKE	STA 399+26.29, 72.84' LT	136297.73	341483.39
CP 26	24" FENO SPIKE	STA 412+63.44, 683.11' LT	137643.65	340892.69
CP 49	SECTION CORNER	STA 413+12.62, 0.00' RT	137682.85	341576.45



SHEET 13 OF 15

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN	SHEET 428	E

2

2

CONTROL POINTS

POINT NUMBER	DESCRIPTION	STATION/OFFSET	Y	X
CP 27	24" FENO SPIKE	STA 426+07.83, 44.40' RT	138977.76	341628.93
CP 28	24" FENO SPIKE	STA 450+18.69, 116.20' LT	141389.51	341482.75
CP 50	SECTION CORNER	STA 439+32.91, 0.00' LT	140303.09	341592.81

N

COMPUTED
N= 140347.821
E= 338948.208

T 10 N
R 19 E
29 29
29 29

N89°01'47.1"W
2644.98'

STA 425+00

STH 164 R/L = SECTION LINE

425 430 435 440 445 450

S0°21'28.1"W
2620.23'

N0°19'26.9"E
1139.32'

CP 27

CP 50

CP 28

PI: 439+32.85

PI 16
STA 439+32.85
Y=140303.03
X=341592.81

CONCRETE MONUMENT
W/ BRASS CAP
N=140303.088
E=341592.809

END PROJECT
STA 446+61.26

END STH 164 R/L
STA 450+72.17
Y=141442.34
X=341599.25

T 10 N
R 19 E
29 28
29 28

S89°36'03.1"E
2633.72'

T 10 N
R 19 E
28 28
28 28

CONCRETE MONUMENT
W/ BRASS CAP
N=140284.686
E=344226.464

T 10 N
R 19 E
29 28
20 21

COMPUTED FROM TIES
N=142938.998
E=341607.729

MATCHLINE

SHEET 14 OF 15

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN	SHEET 429	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\027214_AD.DWG PLOT DATE : 1/28/2018 11:44 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : ----------

WISDOT/CADDS SHEET 42

SUPERELEVATION TABLES

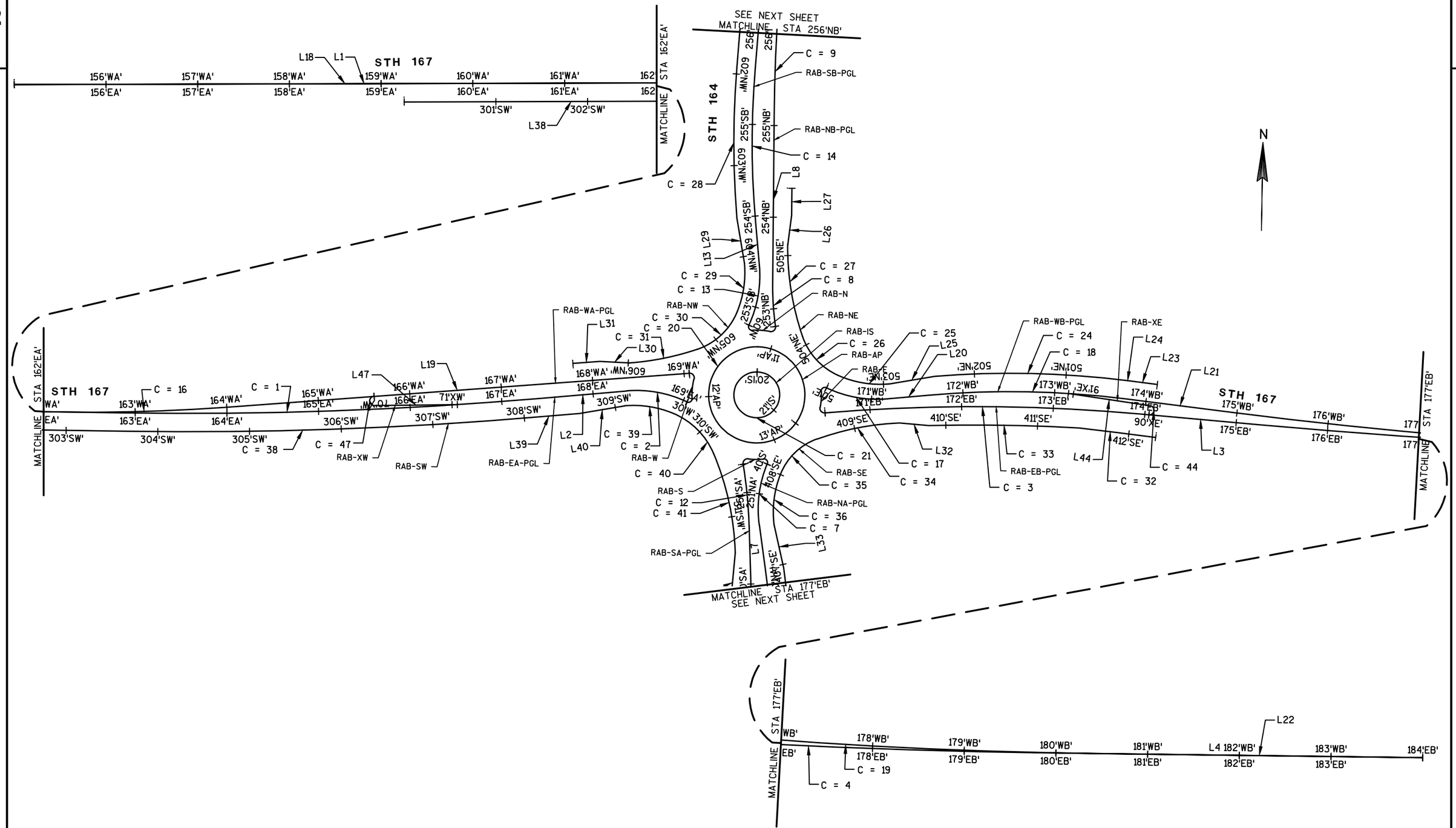
NOTE: SEE PAVING DETAILS FOR PAVEMENT WARPING

STH 167 EB CURVE 1

SUPERELEVATION DESCRIPTION	STATION	SLOPE RT OF CROWN
END NORMAL CROWN	161+75	-2.00%
REMOVE CROWN	162+35	0.00%
BEGIN FULL SUPER	163+16	+2.70%
END FULL SUPER	167+15	+2.70%
END TRANSITION	168+34	+2.00%

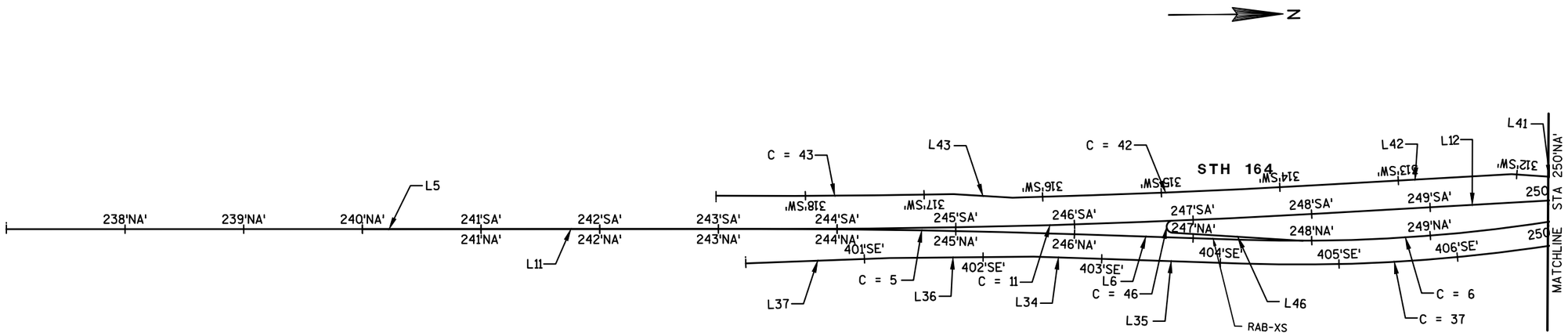
STH 167 WB CURVE 1

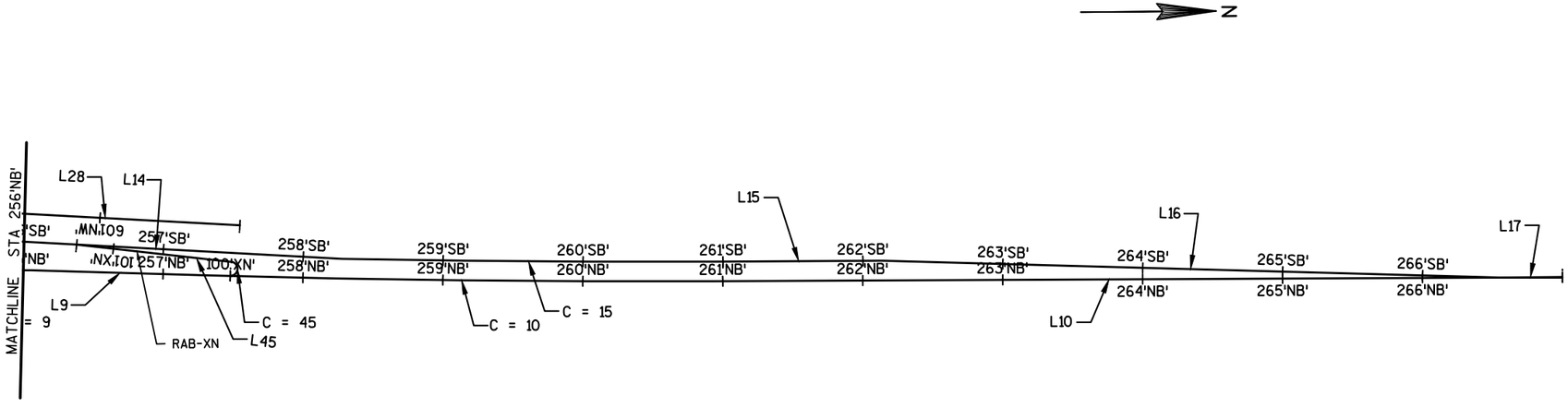
SUPERELEVATION DESCRIPTION	STATION	SLOPE LT OF CROWN
BEGIN TRANSITION	161+99	-2.00%
BEGIN FULL SUPER	162+57	-4.40%
END FULL SUPER	163+63	-4.40%
END TRANSITION	164+21	-2.00%



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN - ROUNDABOUT CURB FLANGE	SHEET 431	E

2





PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN - ROUNDABOUT CURB FLANGE	SHEET 432	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\027216_AD.DWG
LAYOUT NAME - 027216_AD - SHEET - (2)
PLOT DATE : 1/28/2018 11:47 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : PLOT SCALE : 1 IN:100 FT

RAB-EA-PGL																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L1	155+00.00	162+89.05	121546.38 339796.17	121548.46 340585.22						789.05'						N89°50'56.6"E
C = 1					165+15.22	121549.06 340811.39	5°44'39"	1°16'16"	226.17'	451.96'	5.67'	4508.00'	162+89.05	167+41.01	N89°50'56.6"E	N84°06'17.2"E
L2	167+41.01	168+36.63	121572.29 341036.36	121582.11 341131.47						95.62'						N84°06'17.2"E
C = 2					168+71.27	121585.67 341165.94	30°17'35"	44°45'44"	34.65'	67.68'	4.61'	128.00'	168+36.63	169+04.30	N84°06'17.2"E	S65°36'07.5"E

RAB-EB-PGL																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
C = 3					172+23.06	121579.36 341519.57	9°50'28"	2°51'53"	172.18'	343.52'	7.40'	2000.00'	170+50.88	173+94.40	N84°15'46.7"E	S85°53'45.2"E
L3	173+94.40	175+27.68	121567.04 341691.31	121557.50 341824.25						133.28'						S85°53'45.3"E
C = 4					177+60.47	121540.84 342056.44	3°23'19"	0°43'41"	232.79'	465.44'	3.44'	7870.00'	175+27.68	179+93.12	S85°53'45.3"E	S89°17'04.1"E
L4	179+93.12	184+00.00	121537.93 342289.21	121532.85 342696.06						406.88'						S89°17'04.1"E

RAB-NA-PGL																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L5	237+00.00	243+34.38	120074.43 341282.10	120708.78 341288.15						634.38'						N0°32'45.4"E
C = 5					244+71.28	120845.67 341289.45	1°56'46"	0°42'39"	136.90'	273.78'	1.16'	8060.00'	243+34.38	246+08.15	N0°32'45.4"E	N2°29'31.7"E
L6	246+08.15	247+42.11	120982.45 341295.41	121116.27 341301.23						133.95'						N2°29'31.6"E
C = 6					248+79.47	121253.50 341307.20	11°11'30"	4°05'12"	137.36'	273.85'	6.71'	1402.00'	247+42.11	250+15.96	N2°29'31.6"E	N8°41'58.3"W
L7	250+15.96	250+65.96	121389.29 341286.43	121438.71 341278.86						50.00'						N8°41'58.3"W
C = 7					251+00.56	121472.92 341273.63	30°15'21"	44°45'44"	34.60'	67.59'	4.59'	128.00'	250+65.96	251+33.55	N8°41'58.3"W	N21°33'22.5"E

RAB-NB-PGL																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
C = 8					253+03.42	121677.90 341288.94	8°43'32"	19°13'36"	22.73'	45.38'	0.87'	298.00'	252+80.68	253+26.06	N9°15'25.9"W	N0°31'54.3"W
L8	253+26.06	255+11.89	121700.63 341288.73	121886.44 341287.00						185.82'						N0°31'54.3"W
C = 9					255+58.82	121933.37 341286.57	2°41'18"	2°51'53"	46.93'	93.84'	0.55'	2000.00'	255+11.89	256+05.73	N0°31'54.3"W	N2°09'24.0"E
L9	256+05.73	257+32.69	121980.27 341288.33	122107.14 341293.11						126.96'						N2°09'24.0"E
C = 10					259+13.42	122287.74 341299.91	1°51'56"	0°30'58"	180.73'	361.43'	1.47'	11100.00'	257+32.69	260+94.12	N2°09'24.0"E	N0°17'27.7"E
L10	260+94.12	267+00.00	122468.47 341300.83	123074.34 341303.91						605.88'						N0°17'27.7"E

RAB-SA-PGL																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L11	240+00.00	243+51.26	120374.42 341284.96	120725.66 341288.31						351.26'						N0°32'45.4"E
C = 11					245+79.40	120953.79 341290.48	3°14'33"	0°42'39"	228.13'	456.15'	3.23'	8060.00'	243+51.26	248+07.41	N0°32'45.4"E	N2°41'47.9"W
L12	248+07.41	250+63.62	121181.67 341279.75	121437.60 341267.70						256.21'						N2°41'47.9"W
C = 12					250+97.41	121471.35 341266.11	7°43'59"	11°27'35"	33.79'	67.48'	1.14'	499.97'	250+63.62	251+31.10	N2°41'47.9"W	N10°25'46.6"W

RAB-SB-PGL																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
C = 13					253+13.30	121687.65 341277.44	29°55'36"	44°45'44"	34.21'	66.86'	4.49'	128.00'	252+79.09	253+45.95	N23°52'18.7"E	N6°03'17.5"W
L13	253+45.95	253+92.06	121721.67 341273.83	121767.53 341268.97						46.12'						N6°03'17.5"W
C = 14					254+76.77	121851.76 341260.03	9°41'00"	5°43'46"	84.70'	169.00'	3.58'	1000.00'	253+92.06	255+61.07	N6°03'17.5"W	N3°37'42.1"E
L14	255+61.07	258+28.18	121936.29 341265.39	122202.87 341282.30						267.12'						N3°37'42.1"E
C = 15					259+61.05	122335.68 341286.16	1°22'24"	0°31'01"	132.86'	265.72'	0.80'	11086.00'	258+28.18	260+93.90	N1°39'51.6"E	N0°17'27.7"E
L15	260+93.90	262+14.12	122468.55 341286.83	122588.77 341287.44						120.22'						N0°17'27.7"E
L16	262+14.12	266+54.35	122588.77 341287.44	123028.69 341303.68						440.22'						N2°06'48.5"E
L17	266+54.35	267+00.00	123028.69 341303.68	123074.34 341303.91						45.65'						N0°17'27.7"E

RAB-WA-PGL																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L18	155+00.00	162+21.40	121546.38 339796.17	121548.28 340517.57						721.40'						N89°50'56.6"E
C = 16					163+09.84	121548.52 340606.01	5°03'50"	2°51'53"	88.44'	176.76'	1.95'	2000.00'	162+21.40	163+98.16	N89°50'56.6"E	N84°47'07.0"E
L19	163+98.16	169+05.65	121556.56 340694.08	121602.68 341199.47						507.49'						N84°47'07.0"E

RAB-WB-PGL																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
C = 17					170+84.07	121574.95 341381.25	30°35'00"	44°45'44"	35.00'	68.32'	4.70'	128.00'	170+49.07	171+17.39	S65°28'18.2"E	N83°56'41.6"E
L20	171+17.39	171+63.45	121578.64 341416.05	121583.50 341461.85						46.05'						N83°56'41.6"E
C = 18					172+70.82	121594.83 341568.63	12°15'28"	5°43'46"	107.38'	213.94'	5.75'	1000.00'	171+63.45	173+77.38	N83°56'41.6"E	S83°47'50.9"E
L21	173+77.38	174+97.70	121583.23 341675.38	121570.23 341794.99						120.32'						S83°47'50.9"E
C = 19					177+70.85	121540.71 342066.54	5°29'13"	1°00'19"	273.14'	545.87'	6.54'	5700.00'	174+97.70	180+43.57	S83°47'50.9"E	S89°17'04.1"E
L22	180+43.57	184+00.00	121537.30 342339.66	121532.85 342696.06						356.43'						S89°17'04.1"E

RAB-AP																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
C = 20					10+00.00	121550.29 341316.37	359°59'58"	109°08'06"	0.00'	329.87'	105.00'	52.50'	10+00.00	13+29.87	N35°08'17.9"E	N35°08'19.6"E

RAB-IS																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
C = 21					20+00.00	121605.50 341273.44	359°59'59"	229°10'59"	0.00'	157.08'	50.00'	25.00'	20+00.00	21+57.08	S89°59'59.0"W	S90°00'00.0"W

RAB-NE																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L23	500+00.00	500+32.58	121599.59 341709.93	121603.11 341677.54						32.58'						N83°47'50.9"W
L24	500+32.58	500+32.58	121603.11 341677.54	121603.11 341677.54						0.00'						S83°47'13.0"E
C = 24					501+38.48	121614.55 341572.26	11°51'19"	5°37'02"	105.90'	211.05'	5.48'	1020.00'	500+32.58	502+43.63	N83°47'50.2"W	S84°20'50.8"W
L25	502+43.63	502+93.84	121604.12 341466.87	121594.89 341417.51						50.21'						S79°24'16.8"W
C = 25					503+22.93	121591.82 341388.58	29°07'04"	51°09'25"	29.09'	56.92'	3.72'	112.00'	502+93.84	503+50.76	S83°56'42.6"W	N66°56'13.6"W
C = 26					503+82.10	121615.49 341332.98	47°02'48"	79°34'39"	31.34'	59.12'	6.53'	72.00'	503+50.76	504+09.88	N66°56'13.6"W	N19°53'25.7"W
C = 27					504+61.39	121693.40 341304.80	19°21'31"	18°58'20"	51.51'	102.04'	4.36'	302.00'	504+09.88	505+11.92	N19°53'25.7"W	N0°31'54.3"W
L26	505+11.92	505+44.17	121744.91 341304.32	121776.94 341308.02						32.25'						N6°35'35.8"E
L27	505+44.17	505+73.64	121776.94 341308.02	121806.41 341307.75						29.46'						N0°31'54.3"W

RAB-NW																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L28	600+00.00	601+92.48	122129.65 341257.61	121937.56 341245.43						192.48'						S3°37'42.1"W
C = 28					602+75.20	121855.00 341240.20	9°15'45"	5°36'39"	82.72'	165.08'	3.35'	1021.14'	601+92.48	603+57.56	S3°37'32.7"W	S5°38'12.6"E
L29	603+57.56	604+07.94	121772.68 341248.33	121723.15 341257.58						50.38'						S10°35'13.9"E
C = 29					604+35.27	121695.98 341260.47	27°25'35"	51°09'25"	27.33'	53.61'	3.29'	112.00'	604+07.94	604+61.55	S6°03'16.9"E	S21°22'18.3"W
C = 30					604+94.44	121639.91 341238.53	49°05'26"	79°34'39"	32.88'	61.69'	7.15'	72.00'	604+61.55	605+23.24	S21°22'18.3"W	S70°27'44.1"W
C = 31					605+61.19	121616.22 341171.78	14°19'23"	18°58'20"	37.95'	75.49'	2.37'	302.00'	605+23.24	605+98.74	S70°27'44.1"W	S84°47'06.7"W
L30	605+98.74	606+30.99	121612.77 341133.99	121613.85 341101.76						32.25'						N88°05'22.9"W
L31	606+30.99	606+60.45	121613.85 341101.76	121611.17 341072.42						29.46'						S84°47'07.0"W

RAB-SE																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L37	400+00.00	401+21.29	120697.17 341317.04	120818.41 341313.58						121.29'						N1°37'57.6"W
L36	401+21.29	402+42.57	120818.41 341313.58	120939.70 341313.67						121.29'						N0°02'32.7"E
L34	402+42.57	402+84.49	120939.70 341313.67	120981.58 341315.39						41.92'						N2°20'34.0"E
L35	402+84.49	404+18.44	120981.58 341315.39	121115.40 341321.21						133.95'						N2°29'31.6"E
C = 37					405+57.72	121254.55 341327.27	11°11'18"	4°01'45"	139.28'	277.68'	6.80'	1422.00'	404+18.44	406+96.11	N2°29'31.6"E	N8°41'45.9"W
L33	406+96.11	407+43.11	121392.23 341306.21	121437.91 341295.17						46.99'						N13°34'56.7"W
C = 36					407+72.38	121466.84 341290.72	29°17'48"	51°09'25"	29.27'	57.27'	3.76'	112.00'	407+43.11	408+00.37	N8°44'34.8"W	N20°33'13.4"E
C = 35					408+30.61	121522.56 341311.62	48°34'29"	85°30'58"	30.23'	56.80'	6.51'	67.00'	408+00.37	408+57.18	N20°33'13.4"E	N69°07'42.8"E
C = 34					409+03.51	121549.84 341383.16	17°26'46"	18°58'20"	46.34'	91.96'	3.53'	302.00'	408+57.18	409+49.13	N69°07'42.8"E	N86°34'29.2"E
L32	409+49.13	409+81.25	121552.61 341429.42	121550.27 341461.45						32.11'						S85°48'57.8"E
C = 33					410+63.48	121553.87 341543.60	4°45'23"	2°53'37"	82.23'	164.37'	1.71'	1980.00'	409+81.25	411+45.62	N87°29'22.4"E	S87°45'14.5"E
C = 32					411+87.58	121546.62 341667.54	1°17'39"	1°32'32"	41.96'	83.92'	0.24'	3715.25'	411+45.62	412+29.54	S84°29'43.1"E	S83°12'03.9"E

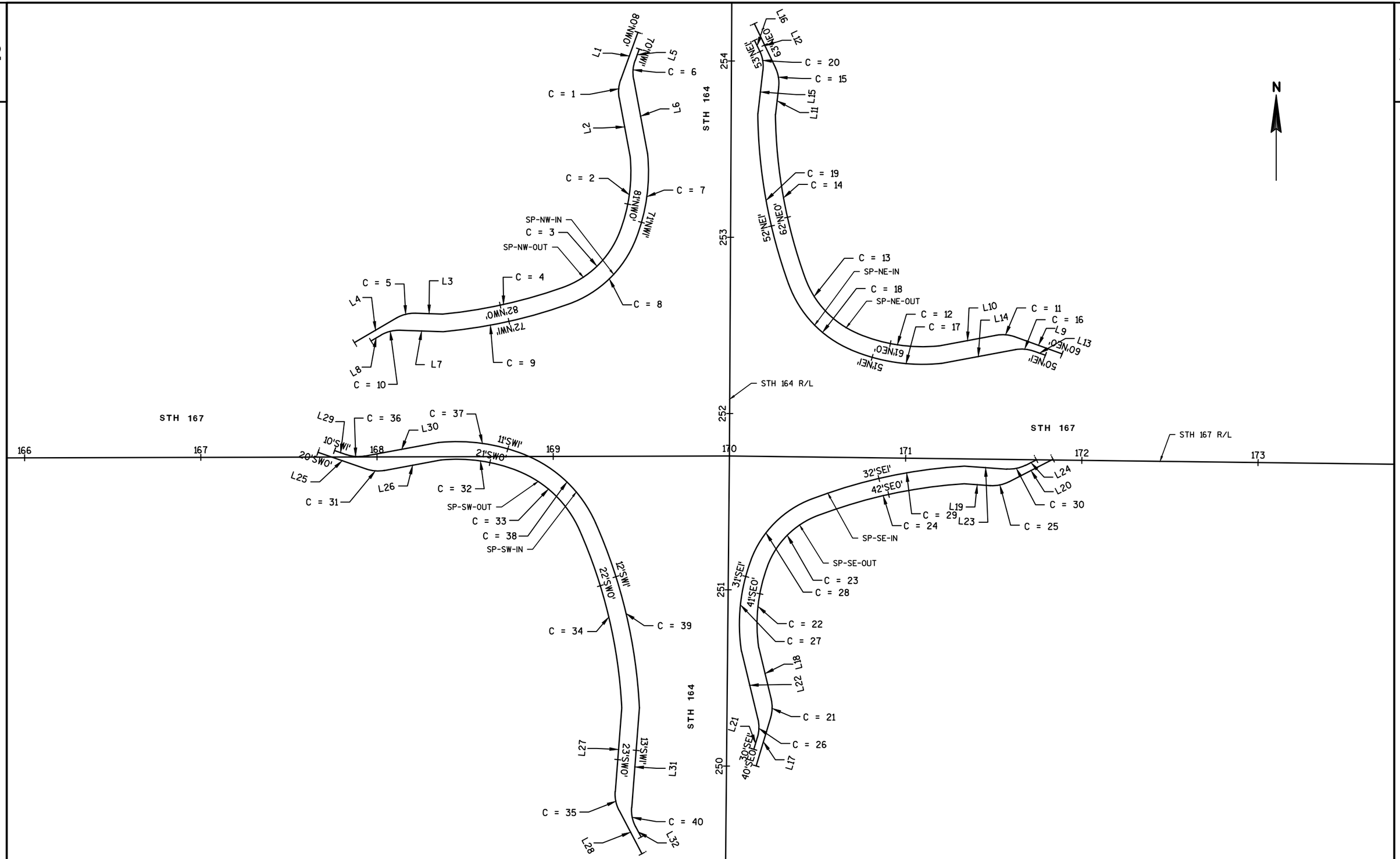
RAB-SW																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L38	300+00.00	303+64.05	121527.50 340221.22	121528.46 340585.27						364.05'						N89°50'56.6"E
C = 38					305+91.22	121529.06 340812.44	5°44'39"	1°15'55"	227.17'	453.96'	5.70'	4528.00'	303+64.05	308+18.01	N89°50'56.6"E	N84°06'17.2"E
L39	308+18.01	308+60.45	121552.39 341038.42	121556.75 341080.63						42.44'						N84°06'17.2"E
L40	308+60.45	309+10.61	121556.75 341080.63	121565.87 341129.96						50.16'						N79°31'51.1"E
C = 39					309+38.21	121568.70 341157.40	27°40'49"	51°09'25"	27.59'	54.11'	3.35'	112.00'	309+10.61	309+64.72	N84°06'17.9"E	S68°12'52.9"E
C = 40					309+98.13	121546.06 341214.05	44°19'53"	69°52'23"	33.41'	63.45'	6.54'	82.00'	309+64.72	310+28.17	S68°12'52.9"E	S23°53'00.3"E
C = 41					310+84.71	121463.81 341250.47	21°12'37"	18°58'19"	56.55'	111.80'	5.25'	302.00'	310+28.17	311+39.97	S23°53'00.3"E	S2°40'23.0"E
L41	311+39.97	312+04.46	121407.33 341253.10	121343.02 341248.12						64.50'						S4°25'42.2"W
L42	312+04.46	313+67.13	121343.02 341248.12	121180.54 341255.78						162.66'						S2°41'47.9"E
C = 42					314+96.29	121051.52 341261.85	1°50'30"	0°42'47"	129.16'	258.30'	1.04'	8036.00'	313+67.13	316+25.43	S2°41'47.9"E	S0°51'18.0"E
L43	316+25.43	316+75.30	120922.38 341263.78	120872.62 341260.37						49.87'						S3°55'21.3"W
C = 43					317+75.30	120772.62 341261.23	1°18'34"	0°39'17"	100.01'	200.00'	0.57'	8751.23'	316+75.30	318+75.30	S0°29'33.1"E	S0°49'00.9"W

RAB-XE																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
C = 44					92+73.01	121546.77 341973.78	177°54'06"	1145°54'56"	273.01'	15.52'	268.05'	5.00'	90+00.00	90+15.52	S85°53'45.3"E	N83°47'50.9"W
L44	90+15.52	91+05.51	121576.27 341702.36	121588.03 341613.15						89.98'						N82°29'25.1"W

RAB-XN																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
C = 45					101+17.33	122239.74 341297.93	175°07'10"	1145°54'56"	117.33'	15.28'	112.43'	5.00'	100+00.00	100+15.28	N2°04'38.6"E	S6°57'28.3"W
L45	100+15.28	101+26.45	122123.27 341283.72	122012.93 341270.25						111.17'						S6°57'28.3"W

RAB-XS																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
C = 46					80+96.85	120960.25 341287.71	174°05'21"	1145°54'56"	96.85'	15.19'	91.98'	5.00'	80+00.00	80+15.19	S1°48'36.3"E	N4°06'02.9"E
L46	80+15.19	81+25.37	121056.85 341294.64	121166.74 341302.52						110.17'						N4°06'02.9"E

RAB-XW																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
C = 47					73+57.50	121538.87 340500.32	178°23'51"	1145°54'56"	357.50'	15.57'	352.53'	5.00'	70+00.00	70+15.57	S84°47'07.0"W	N86°23'16.3"E
L47	70+15.57	71+05.69	121561.39 340857.11	121563.98 340947.20						90.13'						N88°21'32.4"E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	ALIGNMENT PLAN - ROUNDABOUT SIDEPATHS	SHEET 436 E

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SP-NW-Out																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L1	80+00.00	80+28.55	121790.66 341244.21	121763.82 341234.49						28.55'						S19°54'22.9"W
C = 1					80+34.00	121758.69 341232.63	30°30'02"	286°28'44"	5.45'	10.65'	0.73'	20.00'	80+28.55	80+39.20	S19°54'22.9"W	S10°35'39.5"E
L2	80+39.20	80+72.44	121753.33 341233.63	121720.65 341239.75						33.25'						S10°35'39.5"E
C = 2					80+95.06	121698.15 341241.99	27°03'18"	60°57'11"	22.62'	44.39'	2.68'	94.00'	80+72.44	81+16.83	S5°40'59.9"E	S21°22'18.4"W
C = 3					81+41.49	121654.12 341224.76	49°05'26"	106°06'12"	24.66'	46.27'	5.36'	54.00'	81+16.83	81+63.10	S21°22'18.4"W	S70°27'44.1"W
C = 4					81+98.22	121634.13 341168.42	14°06'01"	20°10'28"	35.12'	69.89'	2.16'	284.00'	81+63.10	82+32.99	S70°27'44.1"W	S84°33'45.2"W
L3	82+32.99	82+48.45	121630.80 341133.45	121631.31 341118.00						15.47'						N88°05'22.9"W
C = 5					82+54.21	121631.51 341112.24	32°07'30"	286°28'44"	5.76'	11.21'	0.81'	20.00'	82+48.45	82+59.67	N88°05'22.9"W	S59°47'07.0"W
L4	82+59.67	82+87.36	121628.61 341107.26	121614.68 341083.34						27.69'						S59°47'07.0"W

SP-NW-In																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L5	70+00.00	70+06.98	121781.16 341245.02	121774.60 341242.65						6.98'						S19°54'22.9"W
C = 6					70+12.43	121769.47 341240.79	30°30'02"	286°28'44"	5.45'	10.65'	0.73'	20.00'	70+06.98	70+17.63	S19°54'22.9"W	S10°35'39.5"E
L6	70+17.63	70+60.39	121764.11 341241.79	121722.08 341249.65						42.76'						S10°35'39.5"E
C = 7					70+85.64	121696.96 341252.26	27°17'50"	55°05'32"	25.25'	49.55'	3.02'	104.00'	70+60.39	71+09.93	S5°55'31.8"E	S21°22'18.4"W
C = 8					71+39.16	121646.22 341232.41	49°05'26"	89°31'29"	29.23'	54.83'	6.36'	64.00'	71+09.93	71+64.77	S21°22'18.4"W	S70°27'44.1"W
C = 9					72+01.46	121624.18 341170.29	14°13'35"	19°29'18"	36.69'	73.00'	2.28'	294.00'	71+64.77	72+37.77	S70°27'44.1"W	S84°41'19.6"W
L7	72+37.77	72+62.27	121620.78 341133.76	121621.60 341109.26						24.51'						N88°05'22.9"W
C = 10					72+68.03	121621.79 341103.51	32°07'30"	286°28'44"	5.76'	11.21'	0.81'	20.00'	72+62.27	72+73.49	N88°05'22.9"W	S59°47'07.0"W
L8	72+73.49	72+80.16	121618.89 341098.53	121615.54 341092.76						6.67'						S59°47'07.0"W

SP-NE-Out																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L9	60+00.00	60+28.55	121608.25 341484.93	121617.97 341458.09						28.55'						N70°05'48.4"W
C = 11					60+34.00	121619.83 341452.96	30°29'55"	286°28'44"	5.45'	10.65'	0.73'	20.00'	60+28.55	60+39.20	N70°05'48.4"W	S79°24'16.8"W
L10	60+39.20	60+72.43	121618.83 341447.60	121612.72 341414.93						33.23'						S79°24'16.8"W
C = 12					60+96.48	121610.35 341391.00	28°42'06"	60°57'11"	24.05'	47.09'	3.03'	94.00'	60+72.43	61+19.52	S84°21'40.0"W	N66°56'13.6"W
C = 13					61+43.03	121628.98 341347.24	47°02'48"	106°06'12"	23.51'	44.34'	4.89'	54.00'	61+19.52	61+63.86	N66°56'13.6"W	N19°53'25.7"W
C = 14					62+11.73	121696.10 341322.96	19°08'10"	20°10'28"	47.87'	94.85'	4.01'	284.00'	61+63.86	62+58.71	N19°53'25.7"W	N0°45'15.8"W
L11	62+58.71	62+74.46	121743.97 341322.33	121759.61 341324.14						15.74'						N6°35'35.8"E
C = 15					62+80.22	121765.33 341324.80	32°07'30"	286°28'44"	5.76'	11.21'	0.81'	20.00'	62+74.46	62+85.67	N6°35'35.8"E	N25°31'54.3"W
L12	62+85.67	63+13.44	121770.53 341322.32	121795.58 341310.35						27.77'						N25°31'54.3"W

SP-NE-In																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L13	50+00.00	50+06.98	121607.44 341475.43	121609.82 341468.87						6.98'						N70°05'48.4"W
C = 16					50+12.43	121611.67 341463.74	30°29'55"	286°28'44"	5.45'	10.65'	0.73'	20.00'	50+06.98	50+17.63	N70°05'48.4"W	S79°24'16.8"W
L14	50+17.63	50+60.38	121610.67 341458.38	121602.81 341416.36						42.75'						S79°24'16.8"W
C = 17					50+87.22	121600.06 341389.65	28°56'46"	55°05'32"	26.84'	52.54'	3.41'	104.00'	50+60.38	51+12.92	S84°07'00.0"W	N66°56'13.6"W
C = 18					51+40.78	121621.49 341339.32	47°02'48"	89°31'29"	27.86'	52.55'	5.80'	64.00'	51+12.92	51+65.47	N66°56'13.6"W	N19°53'25.7"W
C = 19					52+15.36	121694.60 341312.87	19°15'44"	19°29'18"	49.89'	98.84'	4.20'	294.00'	51+65.47	52+64.31	N19°53'25.7"W	N0°37'41.4"W
L15	52+64.31	52+89.09	121744.49 341312.32	121769.11 341315.17						24.78'						N6°35'35.8"E
C = 20					52+94.85	121774.83 341315.83	32°07'30"	286°28'44"	5.76'	11.21'	0.81'	20.00'	52+89.09	53+00.31	N6°35'35.8"E	N25°31'54.3"W
L16	53+00.31	53+07.06	121780.02 341313.35	121786.12 341310.44						6.76'						N25°31'54.3"W

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SP-SE-Out																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L17	40+00.00	40+28.68	121374.44 341311.34	121401.90 341319.58						28.68'						N16°42'10.2"E
C = 21					40+34.09	121407.09 341321.14	30°17'07"	286°28'44"	5.41'	10.57'	0.72'	20.00'	40+28.68	40+39.25	N16°42'10.2"E	N13°34'56.7"W
L18	40+39.25	40+69.10	121412.35 341319.87	121441.36 341312.86						29.85'						N13°34'56.7"W
C = 22					40+93.28	121465.29 341309.37	28°51'12"	60°57'11"	24.18'	47.34'	3.06'	94.00'	40+69.10	41+16.43	N8°17'58.7"W	N20°33'13.4"E
C = 23					41+38.55	121508.64 341325.62	48°34'29"	116°55'49"	22.11'	41.54'	4.76'	49.00'	41+16.43	41+57.98	N20°33'13.4"E	N69°07'42.8"E
C = 24					42+00.98	121531.84 341386.46	17°13'13"	20°10'28"	43.00'	85.36'	3.24'	284.00'	41+57.98	42+43.33	N69°07'42.8"E	N86°20'56.0"E
L19	42+43.33	42+58.20	121534.57 341429.38	121533.49 341444.21						14.87'						S85°48'03.9"E
C = 25					42+63.83	121533.07 341449.82	31°25'23"	286°28'44"	5.63'	10.97'	0.78'	20.00'	42+58.20	42+69.17	S85°48'03.9"E	N62°46'32.9"E
L20	42+69.17	42+97.24	121535.65 341454.82	121548.49 341479.78						28.06'						N62°46'32.9"E

SP-SE-In																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L21	30+00.00	30+07.06	121383.86 341309.99	121390.62 341312.02						7.06'						N16°42'10.2"E
C = 26					30+12.47	121395.80 341313.58	30°17'07"	286°28'44"	5.41'	10.57'	0.72'	20.00'	30+07.06	30+17.63	N16°42'10.2"E	N13°34'56.7"W
L22	30+17.63	30+57.12	121401.07 341312.30	121439.45 341303.03						39.49'						N13°34'56.7"W
C = 27					30+84.13	121466.16 341299.01	29°06'50"	55°05'32"	27.01'	52.85'	3.45'	104.00'	30+57.12	31+09.97	N8°33'36.7"W	N20°33'13.4"E
C = 28					31+36.59	121516.37 341317.84	48°34'29"	97°06'41"	26.62'	50.02'	5.73'	59.00'	31+09.97	31+59.99	N20°33'13.4"E	N69°07'42.8"E
C = 29					32+04.86	121541.85 341384.64	17°21'19"	19°29'18"	44.87'	89.05'	3.40'	294.00'	31+59.99	32+49.04	N69°07'42.8"E	N86°29'01.5"E
L23	32+49.04	32+73.29	121544.60 341429.43	121542.82 341453.61						24.25'						S85°48'03.9"E
C = 30					32+78.91	121542.41 341459.22	31°25'23"	286°28'44"	5.63'	10.97'	0.78'	20.00'	32+73.29	32+84.26	S85°48'03.9"E	N62°46'32.9"E
L24	32+84.26	32+91.15	121544.98 341464.23	121548.14 341470.35						6.89'						N62°46'32.9"E

SP-SW-Out																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L25	20+00.00	20+29.10	121552.39 341062.67	121542.86 341090.17						29.10'						S70°53'42.8"E
C = 31					20+34.38	121541.13 341095.16	29°34'26"	286°28'44"	5.28'	10.32'	0.69'	20.00'	20+29.10	20+39.42	S70°53'42.8"E	N79°31'51.1"E
L26	20+39.42	20+72.11	121542.09 341100.35	121548.03 341132.49						32.68'						N79°31'51.1"E
C = 32					20+94.90	121550.21 341155.18	27°15'41"	60°57'11"	22.79'	44.73'	2.72'	94.00'	20+72.11	21+16.83	N84°31'26.4"E	S68°12'53.0"E
C = 33					21+42.90	121532.07 341200.56	44°19'52"	89°31'29"	26.07'	49.52'	5.11'	64.00'	21+16.83	21+66.35	S68°12'52.6"E	S23°53'00.6"E
C = 34					22+18.96	121460.13 341232.41	20°59'19"	20°10'28"	52.61'	104.04'	4.83'	284.00'	21+66.35	22+70.38	S23°53'00.6"E	S2°53'41.5"E
L27	22+70.38	23+18.10	121407.59 341235.07	121360.01 341231.39						47.72'						S4°25'42.2"W
C = 35					23+23.86	121354.27 341230.94	32°07'30"	286°28'44"	5.76'	11.21'	0.81'	20.00'	23+18.10	23+29.31	S4°25'42.2"W	S27°41'47.9"E
L28	23+29.31	23+57.00	121349.17 341233.62	121324.66 341246.49						27.69'						S27°41'47.9"E

SP-SW-In																
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	PI (STA)	PI (Y,X)	DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PT (STA)	BEARING BACK	BEARING AHEAD
L29	10+00.00	10+07.31	121553.36 341072.09	121550.96 341079.00						7.31'						S70°53'42.8"E
C = 36					10+12.59	121549.24 341083.98	29°34'26"	286°28'44"	5.28'	10.32'	0.69'	20.00'	10+07.31	10+17.63	S70°53'42.8"E	N79°31'51.1"E
L30	10+17.63	10+60.26	121550.20 341089.18	121557.94 341131.09						42.62'						N79°31'51.1"E
C = 37					10+85.71	121560.48 341156.42	27°30'27"	55°05'32"	25.46'	49.93'	3.07'	104.00'	10+60.26	11+10.19	N84°16'39.8"E	S68°12'53.0"E
C = 38					11+40.33	121539.84 341208.05	44°19'52"	77°25'36"	30.15'	57.26'	5.91'	74.00'	11+10.19	11+67.44	S68°12'52.6"E	S23°53'00.6"E
C = 39					12+22.24	121462.18 341242.44	21°06'52"	19°29'18"	54.79'	108.34'	5.06'	294.00'	11+67.44	12+75.79	S23°53'00.6"E	S2°46'08.7"E
L31	12+75.79	13+32.54	121407.45 341245.09	121350.86 341240.71						56.75'						S4°25'42.2"W
C = 40					13+38.30	121345.12 341240.26	32°07'30"	286°28'44"	5.76'	11.21'	0.81'	20.00'	13+32.54	13+43.76	S4°25'42.2"W	S27°41'47.9"E
L32	13+43.76	13+50.43	121340.02 341242.94	121334.11 341246.04						6.67'						S27°41'47.9"E

2709-03-70

Line	Item	Item Description	Unit	Total	Qty
0002	108.4400	CPM Progress Schedule	EACH	1.000	1.000
0004	201.0105	Clearing	STA	231.000	231.000
0006	201.0205	Grubbing	STA	231.000	231.000
0008	203.0100	Removing Small Pipe Culverts	EACH	143.000	143.000
0010	203.0200	Removing Old Structure (station) 01. 203+71	LS	1.000	1.000
0012	204.0100	Removing Pavement	SY	565.000	565.000
0014	204.0110	Removing Asphaltic Surface	SY	85.000	85.000
0016	204.0115	Removing Asphaltic Surface Butt Joints	SY	335.000	335.000
0018	204.0125	Removing Asphaltic Surface Milling	TON	4,840.000	4,840.000
0020	204.0150	Removing Curb & Gutter	LF	4,335.000	4,335.000
0022	204.0155	Removing Concrete Sidewalk	SY	45.000	45.000
0024	204.0165	Removing Guardrail	LF	1,082.000	1,082.000
0026	204.0170	Removing Fence	LF	2,210.000	2,210.000
0028	204.0190	Removing Surface Drains	EACH	14.000	14.000
0030	204.0195	Removing Concrete Bases	EACH	1.000	1.000
0032	204.0210	Removing Manholes	EACH	1.000	1.000
0034	204.0220	Removing Inlets	EACH	2.000	2.000
0036	204.0245	Removing Storm Sewer (size) 01. 18-INCH	LF	285.000	285.000
0038	204.0245	Removing Storm Sewer (size) 02. 24 INCH	LF	300.000	300.000
0040	204.0245	Removing Storm Sewer (size) 03. 30-INCH	LF	130.000	130.000
0042	204.9060.S	Removing (item description) 01. PIPE GATE	EACH	1.000	1.000
0044	204.9060.S	Removing (item description) 02. PRIVATE SIGN	EACH	3.000	3.000
0046	204.9060.S	Removing (item description) 03. BOLLARDS	EACH	2.000	2.000
0048	204.9060.S	Removing (item description) 04. LIGHT POLE	EACH	1.000	1.000
0050	204.9060.S	Removing (item description) 05. SOLAR FLASHING BEACONS AND POLES	EACH	4.000	4.000
0052	204.9105.S	Removing (item description) 01. TIMBER RETAINING WALL STA 74+35 RT	LS	1.000	1.000
0054	204.9105.S	Removing (item description) 02. TIMBER RETAINING WALL STA 163+00 RT STH 167	LS	1.000	1.000
0056	204.9105.S	Removing (item description) 03. MODULAR BLOCK RETAINING WALL STA 230+30 LT	LS	1.000	1.000
0058	204.9105.S	Removing (item description) 04. STONE WALL STA 18+25 LT SHADY LANE	LS	1.000	1.000
0060	204.9105.S	Removing (item description) 05. STONE WALL STA 19+25 LT SHADY LANE	LS	1.000	1.000
0062	204.9105.S	Removing (item description) 06. STONE WALL STA 18+75 RT SHADY LANE	LS	1.000	1.000
0064	204.9105.S	Removing (item description) 09. Traffic Signals STH 164 & Pleasant Hill Road	LS	1.000	1.000
0066	204.9105.S	Removing (item description) 10. SOLAR DEVICE AND POLE	LS	1.000	1.000

2709-03-70

Line	Item	Item Description	Unit	Total	Qty
0068	204.9180.S	Removing (item description) 01. CONCRETE DITCH LINING	SY	3,730.000	3,730.000
0070	205.0100	Excavation Common	CY	625,149.000	625,149.000
0072	205.0400	Excavation Marsh	CY	11,129.000	11,129.000
0074	205.2000.S	Settlement Gauges	EACH	6.000	6.000
0076	209.2500	Backfill Granular Grade 2	TON	26,160.000	26,160.000
0078	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 2709-03-70	LS	1.000	1.000
0080	213.0100	Finishing Roadway (project) 01. 2709-03-70	EACH	1.000	1.000
0082	305.0110	Base Aggregate Dense 3/4-Inch	TON	13,790.000	13,790.000
0084	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	150,385.000	150,385.000
0086	310.0110	Base Aggregate Open-Graded	TON	110.000	110.000
0088	311.0110	Breaker Run	TON	14,140.000	14,140.000
0090	313.0110	Pit Run	TON	54,853.000	54,853.000
0092	371.1000.S	QMP Base Aggregate Dense 1 1/4-Inch Compaction	TON	150,385.000	150,385.000
0094	405.0100	Coloring Concrete WisDOT Red	CY	375.000	375.000
0096	415.5110.S	Concrete Pavement Joint Layout	LS	1.000	1.000
0098	416.0170	Concrete Driveway 7-Inch	SY	900.000	900.000
0100	416.0512	Concrete Truck Apron 12-Inch	SY	1,050.000	1,050.000
0102	416.0610	Drilled Tie Bars	EACH	8.000	8.000
0104	416.1010	Concrete Surface Drains	CY	16.300	16.300
0106	440.4410	Incentive IRI Ride	DOL	32,800.000	32,800.000
0108	450.4000	HMA Cold Weather Paving	TON	10,000.000	10,000.000
0110	455.0605	Tack Coat	GAL	27,055.000	27,055.000
0112	460.2005	Incentive Density PWL HMA Pavement	DOL	38,730.000	38,730.000
0114	460.2010	Incentive Air Voids HMA Pavement	DOL	38,730.000	38,730.000
0116	460.6223	HMA Pavement 3 MT 58-28 S	TON	44,575.000	44,575.000
0118	460.6224	HMA Pavement 4 MT 58-28 S	TON	23,200.000	23,200.000
0120	465.0110	Asphaltic Surface Patching	TON	400.000	400.000
0122	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	1,458.000	1,458.000
0124	465.0315	Asphaltic Flumes	SY	717.000	717.000
0126	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	55,986.000	55,986.000
0128	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	28,000.000	28,000.000
0130	502.3200	Protective Surface Treatment	SY	83.000	83.000
0132	504.0500	Concrete Masonry Retaining Walls	CY	67.000	67.000
0134	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	11,325.000	11,325.000
0136	516.0500	Rubberized Membrane Waterproofing	SY	23.000	23.000
0138	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	16.000	16.000
0140	520.2024	Culvert Pipe Temporary 24-Inch	LF	20.000	20.000
0142	520.3324	Culvert Pipe Class III-A 24-Inch	LF	308.000	308.000

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Line	Item	Item Description	Unit	Total	Qty
0144	521.0342	Apron Endwalls for Culvert Pipe Sloped Cross Drains Steel 42-Inch 4 to 1	EACH	2.000	2.000
0146	521.0535	Apron Endwalls for Pipe Arch Sloped Cross Drains Steel 35x24-Inch 4 to 1	EACH	24.000	24.000
0148	521.0542	Apron Endwalls for Pipe Arch Sloped Cross Drains Steel 42x29-Inch 4 to 1	EACH	2.000	2.000
0150	521.0557	Apron Endwalls for Pipe Arch Sloped Cross Drains Steel 57x38-Inch 4 to 1	EACH	2.000	2.000
0152	521.0571	Apron Endwalls for Pipe Arch Sloped Cross Drains Steel 71x47-Inch 4 to 1	EACH	2.000	2.000
0154	521.1524	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 24-Inch 6 to 1	EACH	24.000	24.000
0156	521.1536	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 36-Inch 6 to 1	EACH	2.000	2.000
0158	521.1728	Apron Endwalls for Pipe Arch Sloped Side Drains Steel 28x20-Inch 6 to 1	EACH	110.000	110.000
0160	521.1735	Apron Endwalls for Pipe Arch Sloped Side Drains Steel 35x24-Inch 6 to 1	EACH	10.000	10.000
0162	521.3124	Culvert Pipe Corrugated Steel 24-Inch	LF	380.000	380.000
0164	521.3136	Culvert Pipe Corrugated Steel 36-Inch	LF	31.000	31.000
0166	521.3728	Pipe Arch Corrugated Steel 28x20-Inch	LF	1,700.000	1,700.000
0168	521.3735	Pipe Arch Corrugated Steel 35x24-Inch	LF	131.000	131.000
0170	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	395.000	395.000
0172	522.0130	Culvert Pipe Reinforced Concrete Class III 30-Inch	LF	108.000	108.000
0174	522.0142	Culvert Pipe Reinforced Concrete Class III 42-Inch	LF	136.000	136.000
0176	522.0148	Culvert Pipe Reinforced Concrete Class III 48-Inch	LF	103.000	103.000
0178	522.0424	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	323.000	323.000
0180	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	1.000	1.000
0182	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	5.000	5.000
0184	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	36.000	36.000
0186	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	5.000	5.000
0188	522.1042	Apron Endwalls for Culvert Pipe Reinforced Concrete 42-Inch	EACH	4.000	4.000
0190	522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	EACH	2.000	2.000
0192	522.2348	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 48x76-Inch	LF	94.000	94.000
0194	522.2419	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	80.000	80.000

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Line	Item	Item Description	Unit	Total	Qty
0196	522.2424	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	LF	957.000	957.000
0198	522.2429	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch	LF	84.000	84.000
0200	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	2.000	2.000
0202	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	155.000	155.000
0204	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	3,195.000	3,195.000
0206	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	20,585.000	20,585.000
0208	601.0582	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type T	LF	320.000	320.000
0210	601.0600	Concrete Curb Pedestrian	LF	130.000	130.000
0212	602.0405	Concrete Sidewalk 4-Inch	SF	16,380.000	16,380.000
0214	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	320.000	320.000
0216	606.0200	Riprap Medium	CY	2,131.000	2,131.000
0218	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	54.000	54.000
0220	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	499.000	499.000
0222	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	313.000	313.000
0224	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	951.000	951.000
0226	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	341.000	341.000
0228	608.0342	Storm Sewer Pipe Reinforced Concrete Class III 42-Inch	LF	164.000	164.000
0230	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	49.000	49.000
0232	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	616.000	616.000
0234	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	263.000	263.000
0236	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	2,477.000	2,477.000
0238	608.0430	Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	LF	128.000	128.000
0240	608.0442	Storm Sewer Pipe Reinforced Concrete Class IV 42-Inch	LF	23.000	23.000
0242	608.3015	Storm Sewer Pipe Class III-A 15-Inch	LF	30.000	30.000
0244	608.3018	Storm Sewer Pipe Class III-A 18-Inch	LF	284.000	284.000
0246	608.3024	Storm Sewer Pipe Class III-A 24-Inch	LF	3,820.000	3,820.000
0248	608.3030	Storm Sewer Pipe Class III-A 30-Inch	LF	370.000	370.000

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Line	Item	Item Description	Unit	Total	Qty
0250	611.0535	Manhole Covers Type J-Special	EACH	51.000	51.000
0252	611.0612	Inlet Covers Type C	EACH	4.000	4.000
0254	611.0624	Inlet Covers Type H	EACH	7.000	7.000
0256	611.0627	Inlet Covers Type HM	EACH	68.000	68.000
0258	611.0642	Inlet Covers Type MS	EACH	27.000	27.000
0260	611.0651	Inlet Covers Type S	EACH	1.000	1.000
0262	611.0652	Inlet Covers Type T	EACH	2.000	2.000
0264	611.2004	Manholes 4-FT Diameter	EACH	16.000	16.000
0266	611.2005	Manholes 5-FT Diameter	EACH	37.000	37.000
0268	611.2006	Manholes 6-FT Diameter	EACH	6.000	6.000
0270	611.2007	Manholes 7-FT Diameter	EACH	1.000	1.000
0272	611.3004	Inlets 4-FT Diameter	EACH	29.000	29.000
0274	611.3230	Inlets 2x3-FT	EACH	44.000	44.000
0276	611.3901	Inlets Median 1 Grate	EACH	1.000	1.000
0278	611.3902	Inlets Median 2 Grate	EACH	13.000	13.000
0280	611.8115	Adjusting Inlet Covers	EACH	19.000	19.000
0282	612.0106	Pipe Underdrain 6-Inch	LF	1,500.000	1,500.000
0284	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	35.000	35.000
0286	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	245.000	245.000
0288	612.0806	Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	EACH	1.000	1.000
0290	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	2.000	2.000
0292	614.2300	MGS Guardrail 3	LF	764.000	764.000
0294	614.2330	MGS Guardrail 3 K	LF	125.000	125.000
0296	614.2350	MGS Guardrail Short Radius	LF	40.000	40.000
0298	614.2500	MGS Thrie Beam Transition	LF	40.000	40.000
0300	614.2610	MGS Guardrail Terminal EAT	EACH	8.000	8.000
0302	614.2630	MGS Guardrail Short Radius Terminal	EACH	1.000	1.000
0304	616.0700.S	Fence Safety	LF	260.000	260.000
0306	618.0100	Maintenance And Repair of Haul Roads (project) 01. 2709-03-70	EACH	1.000	1.000
0308	619.1000	Mobilization	EACH	1.000	1.000
0310	620.0300	Concrete Median Sloped Nose	SF	690.000	690.000
0312	621.0100	Landmark Reference Monuments	EACH	5.000	5.000
0314	624.0100	Water	MGAL	3,160.000	3,160.000
0316	625.0100	Topsoil	SY	43,545.000	43,545.000
0318	625.0500	Salvaged Topsoil	SY	435,890.000	435,890.000
0320	627.0200	Mulching	SY	251,181.000	251,181.000
0322	628.1104	Erosion Bales	EACH	500.000	500.000
0324	628.1504	Silt Fence	LF	20,770.000	20,770.000

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Line	Item	Item Description	Unit	Total	Qty
0326	628.1520	Silt Fence Maintenance	LF	29,465.000	29,465.000
0328	628.1905	Mobilizations Erosion Control	EACH	25.000	25.000
0330	628.1910	Mobilizations Emergency Erosion Control	EACH	15.000	15.000
0332	628.2004	Erosion Mat Class I Type B	SY	69,395.000	69,395.000
0334	628.2008	Erosion Mat Urban Class I Type B	SY	10,318.000	10,318.000
0336	628.2023	Erosion Mat Class II Type B	SY	102,890.000	102,890.000
0338	628.2037	Erosion Mat Class III Type C	SY	12,174.000	12,174.000
0340	628.7005	Inlet Protection Type A	EACH	95.000	95.000
0342	628.7015	Inlet Protection Type C	EACH	69.000	69.000
0344	628.7020	Inlet Protection Type D	EACH	8.000	8.000
0346	628.7504	Temporary Ditch Checks	LF	5,775.000	5,775.000
0348	628.7555	Culvert Pipe Checks	EACH	720.000	720.000
0350	628.7560	Tracking Pads	EACH	6.000	6.000
0352	628.7570	Rock Bags	EACH	430.000	430.000
0354	629.0210	Fertilizer Type B	CWT	498.000	498.000
0356	630.0120	Seeding Mixture No. 20	LB	13,750.000	13,750.000
0358	630.0200	Seeding Temporary	LB	12,040.000	12,040.000
0360	630.0400	Seeding Nurse Crop	LB	20.000	20.000
0362	631.0300	Sod Water	MGAL	910.000	910.000
0364	631.1000	Sod Lawn	SY	36,390.000	36,390.000
0366	633.5200	Markers Culvert End	EACH	87.000	87.000
0368	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	197.000	197.000
0370	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	11.000	11.000
0372	634.0816	Posts Tubular Steel 2x2-Inch X 16-FT	EACH	74.000	74.000
0374	635.0200	Sign Supports Structural Steel HS	LB	1,200.000	1,200.000
0376	636.0100	Sign Supports Concrete Masonry	CY	2.400	2.400
0378	636.0500	Sign Supports Steel Reinforcement	LB	136.000	136.000
0380	637.2210	Signs Type II Reflective H	SF	943.110	943.110
0382	637.2215	Signs Type II Reflective H Folding	SF	1.000	1.000
0384	637.2230	Signs Type II Reflective F	SF	726.420	726.420
0386	638.2102	Moving Signs Type II	EACH	13.000	13.000
0388	638.2602	Removing Signs Type II	EACH	181.000	181.000
0390	638.3000	Removing Small Sign Supports	EACH	202.000	202.000
0392	643.0300	Traffic Control Drums	DAY	12,540.000	12,540.000
0394	643.0310.S	Temporary Portable Rumble Strips	LS	1.000	1.000
0396	643.0410	Traffic Control Barricades Type II	DAY	722.000	722.000
0398	643.0420	Traffic Control Barricades Type III	DAY	20,196.000	20,196.000
0400	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	120.000	120.000
0402	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	80.000	80.000
0404	643.0705	Traffic Control Warning Lights Type A	DAY	37,414.000	37,414.000

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Line	Item	Item Description	Unit	Total	Qty
0406	643.0900	Traffic Control Signs	DAY	107,392.000	107,392.000
0408	643.0910	Traffic Control Covering Signs Type I	EACH	14.000	14.000
0410	643.0920	Traffic Control Covering Signs Type II	EACH	13.000	13.000
0412	643.1000	Traffic Control Signs Fixed Message	SF	485.250	485.250
0414	643.1050	Traffic Control Signs PCMS	DAY	866.000	866.000
0416	643.5000	Traffic Control	EACH	1.000	1.000
0418	645.0111	Geotextile Type DF Schedule A	SY	2,955.000	2,955.000
0420	645.0120	Geotextile Type HR	SY	4,261.000	4,261.000
0422	645.0135	Geotextile Type SR	SY	31,700.000	31,700.000
0424	646.1020	Marking Line Epoxy 4-Inch	LF	47,536.000	47,536.000
0426	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	79,733.000	79,733.000
0428	646.3020	Marking Line Epoxy 8-Inch	LF	8,445.000	8,445.000
0430	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	68,419.000	68,419.000
0432	646.5020	Marking Arrow Epoxy	EACH	42.000	42.000
0434	646.5120	Marking Word Epoxy	EACH	21.000	21.000
0436	646.6120	Marking Stop Line Epoxy 18-Inch	LF	720.000	720.000
0438	646.6320	Marking Dotted Extension Epoxy 18-Inch	LF	84.000	84.000
0440	646.6464.S	Cold Weather Marking Epoxy 4-Inch	LF	25,000.000	25,000.000
0442	646.6468.S	Cold Weather Marking Epoxy 8-Inch	LF	1,000.000	1,000.000
0444	646.7120	Marking Diagonal Epoxy 12-Inch	LF	1,821.000	1,821.000
0446	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	276.000	276.000
0448	646.8120	Marking Curb Epoxy	LF	68.000	68.000
0450	646.8220	Marking Island Nose Epoxy	EACH	5.000	5.000
0452	648.0100	Locating No-Passing Zones	MI	9.590	9.590
0454	649.0105	Temporary Marking Line Paint 4-Inch	LF	50,774.000	50,774.000
0456	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	800.000	800.000
0458	649.0550	Temporary Marking Arrow Removable Tape	EACH	4.000	4.000
0460	649.0850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	66.000	66.000
0462	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,960.000	1,960.000
0464	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	345.000	345.000
0466	653.0140	Pull Boxes Steel 24x42-Inch	EACH	7.000	7.000
0468	654.0102	Concrete Bases Type 2	EACH	1.000	1.000
0470	654.0105	Concrete Bases Type 5	EACH	16.000	16.000
0472	654.0224	Concrete Control Cabinet Bases Type L24	EACH	1.000	1.000
0474	655.0610	Electrical Wire Lighting 12 AWG	LF	2,088.000	2,088.000
0476	655.0615	Electrical Wire Lighting 10 AWG	LF	165.000	165.000
0478	655.0620	Electrical Wire Lighting 8 AWG	LF	8,625.000	8,625.000
0480	655.0640	Electrical Wire Lighting 1 AWG	LF	18.000	18.000
0482	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. STH 164 & STH 167	LS	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0484	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	17.000	17.000
0486	657.0310	Poles Type 3	EACH	1.000	1.000
0488	657.0322	Poles Type 5-Aluminum	EACH	16.000	16.000
0490	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	8.000	8.000
0492	657.0715	Luminaire Arms Truss Type 4 1/2-Inch Clamp 15-FT	EACH	8.000	8.000
0494	659.1125	Luminaires Utility LED C	EACH	16.000	16.000
0496	659.2124	Lighting Control Cabinets 120/240 24-Inch	EACH	1.000	1.000
0498	690.0150	Sawing Asphalt	LF	21,470.000	21,470.000
0500	690.0250	Sawing Concrete	LF	338.000	338.000
0502	715.0502	Incentive Strength Concrete Structures	DOL	500.000	500.000
0504	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	8,000.000	8,000.000
0506	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	12,000.000	12,000.000
0508	SPV.0045	Special 01. Portable Speed Trailer	DAY	722.000	722.000
0510	SPV.0060	Special 02. Vibrating Wire Piezometer Instrumentation System	EACH	4.000	4.000
0512	SPV.0060	Special 03. Moving Solar Device and Pole	EACH	7.000	7.000
0514	SPV.0060	Special 04. Installing Pole Mounted Wired Cabinet	EACH	1.000	1.000
0516	SPV.0060	Special 05. Installing Two Solar Panels on One Bracket	EACH	1.000	1.000
0518	SPV.0060	Special 06. Installing Wavetronix Detector Module	EACH	1.000	1.000
0520	SPV.0060	Special 07. Installing Concrete Maintenance Platform	EACH	1.000	1.000
0522	SPV.0060	Special 08. HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	4.000	4.000
0524	SPV.0060	Special 09. HMA Percent Within Limits (PWL) Test Strip Density	EACH	4.000	4.000
0526	SPV.0060	Special 10. Field Facilities Office Space	EACH	1.000	1.000
0528	SPV.0075	Special 01. Construction Staking Miscellaneous	HRS	40.000	40.000
0530	SPV.0085	Special 01. Seed No Mow Fescue	LB	115.000	115.000
0532	SPV.0090	Special 01. Fence Split Rail Three Rail	LF	120.000	120.000
0534	SPV.0090	Special 02. Wick Drains	LF	13,200.000	13,200.000
0536	SPV.0090	Special 03. Heavy Duty Silt Fence	LF	8,850.000	8,850.000
0538	SPV.0090	Special 04. Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 38x60-Inc	LF	59.000	59.000
0540	SPV.0105	Special 01. Geotechnical Instrumentation	LS	1.000	1.000
0542	SPV.0105	Special 02. Deep Marsh Excavation Culvert Pipe Maintenance	LS	1.000	1.000
0544	SPV.0105	Special 03. Lighting System Integrator	LS	1.000	1.000
0546	SPV.0105	Special 04. Lighting System Survey	LS	1.000	1.000
0548	SPV.0105	Special 05. Survey Project 2709-03-70	LS	1.000	1.000
0550	SPV.0105	Special 06. Temporary Sedimentation Basin Installation and Maintenance STA 100+90 LT	LS	1.000	1.000
0552	SPV.0105	Special 07. Temporary Sedimentation Basin Installation	LS	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
		and Maintenance STA 103+00 RT			
0554	SPV.0105	Special 08. Salvage and Reinstall Crushed Limestone Driveway	LS	1.000	1.000
0556	SPV.0165	Special 01. Concrete Sidewalk 12-Inch	SF	480.000	480.000
0558	SPV.0165	Special 02. Remove and Salvage Brick Pavers	SF	525.000	525.000
0560	SPV.0165	Special 03. Install Salvaged Brick Pavers	SF	260.000	260.000
0562	SPV.0165	Special 04. Wall Concrete Panel Mechanically Stabilized Earth R-66-39	SF	755.000	755.000
0564	SPV.0165	Special 05. Wall Modular Block Gravity R-66-40	SF	545.000	545.000

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CLEARING & GRUBBING

ROADWAY	STATION	-	STATION	SIDE	201.0105 CLEARING STA	201.0205 GURBBING STA
STH 164	53+00	-	69+00	LT/RT	16	16
	103+00	-	113+00	LT/RT	10	10
	119+00	-	120+00	LT/RT	1	1
	159+00	-	162+00	LT/RT	3	3
	169+00	-	170+00	LT/RT	1	1
	171+00	-	173+00	LT/RT	2	2
	175+00	-	176+00	LT/RT	1	1
	178+00	-	183+00	LT/RT	5	5
	185+00	-	187+00	LT/RT	2	2
	188+00	-	198+00	LT/RT	10	10
	199+00	-	210+00	LT/RT	11	11
	212+00	-	213+00	LT/RT	1	1
	215+00	-	218+00	LT/RT	3	3
	223+00	-	226+00	LT/RT	3	3
	228+00	-	232+00	LT/RT	4	4
	233+00	-	235+00	LT/RT	2	2
	237+00	-	239+00	LT/RT	2	2
	240+00	-	247+00	LT/RT	7	7
	247+00	-	251+00	LT	4	4
	247+00	-	250+00	RT	3	3
	256+00	-	257+00	LT	1	1
	257+00	-	258+00	LT/RT	1	1
	259+00	-	268+00	LT/RT	9	9
	274+00	-	288+00	LT/RT	14	14
	290+00	-	291+00	LT/RT	1	1
	292+00	-	293+00	LT/RT	1	1
	294+00	-	295+00	LT/RT	1	1
	296+00	-	299+00	LT/RT	3	3
	302+00	-	307+00	LT/RT	5	5
	323+00	-	329+00	LT/RT	6	6
	341+00	-	345+00	LT/RT	4	4
	376+00	-	384+00	LT/RT	8	8
	385+00	-	388+00	LT/RT	3	3
	391+00	-	397+00	LT/RT	6	6
	402+00	-	404+00	LT/RT	2	2
	408+00	-	419+00	LT/RT	11	11
	420+00	-	427+00	LT/RT	7	7
	431+00	-	434+00	LT/RT	3	3
	435+00	-	447+00	LT/RT	12	12
STH 164 SUBTOTAL					189	189

CLEARING & GRUBBING

ROADWAY	STATION	-	STATION	SIDE	201.0105 CLEARING STA	201.0205 GURBBING STA
SHADY LANE	17+00	-	23+00	LT/RT	6	6
	24+00	-	26+00	LT/RT	2	2
UPLAND DRIVE	30+00	-	32+00	LT/RT	2	2
HUBERTUS ROAD	103+00	-	109+00	LT/RT	6	6
	112+00		118+00	LT/RT	6	6
GOLDEN DRIVE	130+00	-	132+00	LT/RT	2	2
ADA'HI COURT	147+00	-	150+00	LT/RT	3	3
STH 167	160+00	-	166+00	LT/RT	6	6
	168+00	-	169+00	LT	1	1
	168+00	-	169+00	RT	1	1
	172+00	-	174+00	RT	2	2
	173+00	-	174+00	LT	1	1
	174+00	-	175+00	LT/RT	1	1
PLEASANT HILL ROAD	198+00	-	199+00	LT/RT	1	1
CTH E	227+00	-	229+00	LT/RT	2	2
SIDEROAD SUBTOTAL					42	42
PROJECT TOTALS					231	231

REMOVING PAVEMENT

ROADWAY	STATION	-	STATION	SIDE	204.0100 SY
STH 164	160+54	-	160+64	RT	60
	204+62	-	204+83	LT	45
	225+39	-	225+58	LT	30
	226+52	-	226+93	RT	150
	230+19	-	230+69	LT	30
	293+28	-	293+47	RT	45
	328+60	-	328+79	LT	20
	329+33	-	329+72	LT	25
	444+62	-	444+78	RT	30
STH 164 SUBTOTAL					435
STH 167	160+70	-	160+90	RT	35
	168+35	-	168+47	RT	95
STH 167 SUBTOTAL					130
PROJECT TOTAL					565

NOTE: PAVEMENT REMOVAL IS TO REMOVE CONCRETE DRIVEWAYS

REMOVING OLD STRUCTURE

ROADWAY	STATION	* DESCRIPTION	203.0200.01 LS
STH 164	203+71	72" CMCP	1
PROJECT TOTAL			1

* FOR INFORMATION ONLY

REMOVING ASPHALTIC SURFACE

ROADWAY	STATION	-	STATION	SIDE	204.0110 SY
STH 164	250+37	-	251+21	RT	85
STH 164 SUBTOTAL					85
PROJECT TOTAL					85

NOTE: TO BE USED FOR PARKING LOT REMOVAL

ALL ITEMS CATEGORY 0010 UNLESS NOTED

REMOVING SMALL PIPE CULVERTS

* FOR INFORMATION ONLY ROADWAY	STATION	SIDE	* DESCRIPTION	* LENGTH	203.0100 EACH
STH 164	53+13	LT/RT	28" X 20" PACS	54'	1
	53+45	LT	24" CMCP	26'	1
	55+08	LT	24" CMCP	27'	1
	56+81	RT	24" CMCP	33'	1
	57+67	LT	24" CMCP	150'	1
	57+82	LT	24" CMCP	19'	1
	64+59	RT	24" CMCP	27'	1
	65+02	LT/RT	24" CMCP	53'	1
	74+02	RT	18" CMCP	26'	1
	80+85	LT/RT	24" CMCP	51'	1
	92+03	LT/RT	24" CMCP	68'	1
	99+74	LT/RT	36" CMCP	91'	1
	103+00	LT	2 - 24" CMCP	49'	2
	104+78	RT	2 - 24" CMCP	34'	2
	112+37	LT	18" CMCP	25'	1
	113+91	RT	18" CMCP	27'	1
	130+71	LT/RT	24" CMCP	58'	1
	160+60	RT	18" CMCP	26'	1
	164+16	LT	18" CMCP	27'	1
	164+86	RT	18" CMCP	29'	1
	166+50	RT	18" CMCP	26'	1
	167+18	RT	18" CMCP	27'	1
	170+16	LT	18" CMCP	35'	1
	171+13	RT	18" CMCP	27'	1
	174+68	RT	18" CMCP	27'	1
	175+62	LT	18" CMCP	26'	1
	178+46	LT	18" CMCP	28'	1
	179+35	LT	21" X 15" PACS	26'	1
	179+40	RT	18" CMCP	24'	1
	185+58	LT/RT	24" CMCP	123'	1
	189+24	LT	18" CMCP	26'	1
	193+99	LT	18" CMCP	23'	1
	203+21	LT	18" CMCP	41'	1
	203+48	LT/RT	36" CMCP	91'	1
	206+93	LT	18" CMCP	24'	1
	208+69	RT	24" CMCP	39'	1
	208+81	LT	18" CMCP	27'	1
	210+13	RT	24" CMCP	28'	1
	212+71	LT/RT	30" CMCP	77'	1
	214+82	LT	18" CMCP	45'	1
	218+23	LT	18" CMCP	27'	1
	219+22	RT	24" CMCP	26'	1
	223+67	LT	18" CMCP	26'	1
	226+62	RT	18" CMCP	27'	1
	228+13	RT	18" CMCP	27'	1
	229+31	RT	18" CMCP	27'	1
	231+38	RT	18" CMCP	27'	1
	232+81	RT	18" CMCP	29'	1
	236+80	RT	18" CMCP	26'	1
	237+20	RT	18" CMCP	31'	1
SUBTOTAL					52

REMOVING SMALL PIPE CULVERTS

* FOR INFORMATION ONLY ROADWAY	STATION	SIDE	* DESCRIPTION	* LENGTH	203.0100 EACH
STH 164	238+61	LT/RT	36" CMCP	63'	1
	240+64	RT	18" CMCP	27'	1
	244+00	LT	18" CMCP	27'	1
	245+20	LT	18" CMCP	28'	1
	254+78	LT	24" CMCP	27'	1
	257+71	LT/RT	42" CMCP	63'	1
	263+44	RT	18" CMCP	31'	1
	265+06	LT	18" CMCP	30'	1
	265+08	RT	18" CMCP	33'	1
	272+77	LT	18" CMCP	30'	1
	272+81	RT	18" CMCP	30'	1
	276+99	RT	18" CMCP	25'	1
	277+00	LT	18" CMCP	27'	1
	278+03	RT	18" CMCP	79'	1
	283+02	RT	18" CMCP	29'	1
	284+67	RT	18" CMCP	31'	1
	293+37	RT	18" CMCP	30'	1
	294+73	LT/RT	24" CMCP	76'	1
	295+10	RT	18" CMCP	30'	1
	296+95	RT	18" CMCP	28'	1
	297+19	LT	18" CMCP	24'	1
	325+06	RT	18" CMCP	30'	1
	328+65	LT	18" CMCP	32'	1
	329+62	LT	15" CMCP	29'	1
	333+66	LT/RT	48" CMCP	52'	1
	337+22	LT	18" CMCP	29'	1
	343+34	RT	18" CMCP	30'	1
	344+60	RT	18" CMCP	25'	1
	356+66	LT	18" CMCP	29'	1
	357+61	LT	18" CMCP	30'	1
	367+75	RT	18" CMCP	29'	1
	367+82	LT	24" CMCP	28'	1
	372+98	LT/RT	24" CMCP	57'	1
	375+95	LT	18" CMCP	46'	1
	377+36	LT	18" CMCP	30'	1
	377+96	LT	12" CMCP PARTIAL REMOVAL	32'	1
	378+06	LT/RT	24" CMCP	57'	1
	380+02	RT	18" CMCP	29'	1
	380+03	LT	15" CMCP	24'	1
	380+37	LT	18" CMCP	30'	1
	381+57	RT	18" CMCP	24'	1
	383+22	RT	18" CMCP	28'	1
	386+09	RT	18" CMCP	30'	1
	390+86	RT	18" CMCP	26'	1
	391+38	LT	18" CMCP	30'	1
	394+22	RT	18" CMCP	30'	1
	395+00	RT	18" CMCP	63'	1
	401+73	LT	15" CMCP	35'	1
	403+80	RT	18" CMCP	30'	1
	406+03	LT	18" CMCP	30'	1
SUBTOTAL					50

ALL ITEMS CATEGORY 0010 UNLESS NOTED

REMOVING SMALL PIPE CULVERTS

* FOR INFORMATION ONLY ROADWAY	STATION	SIDE	* DESCRIPTION	* LENGTH	203.0100 EACH
STH 164	412+16	LT/RT	42" CMCP	72'	1
	415+58	RT	24" CMCP	71'	1
	418+31	LT	18" CMCP	28'	1
	420+06	RT	18" CMCP	24'	1
	435+82	LT	18" CMCP	38'	1
	436+32	LT	18" CMCP	24'	1
	436+54	RT	18" CMCP	24'	1
	439+51	LT	18" CMCP	27'	1
	440+58	RT	18" CMCP	30'	1
	441+96	RT	18" CMCP	30'	1
	443+75	RT	18" CMCP	32'	1
	443+99	LT	18" CMCP	30'	1
	444+70	RT	18" CMCP	30'	1
	444+90	LT	18" CMCP	30'	1
	445+65	RT	18" CMCP	30'	1
	445+79	LT	18" CMCP	30'	1
	446+54	RT	18" CMCP	30'	1
	SUBTOTAL				17
MONCHES RD	40+42	LT/RT	24" CMCP	93'	1
	MONCHES RD SUBTOTAL				1
ELMWOOD RD	59+50	LT/RT	21" CMCP	70'	1
	60+50	LT/RT	21" CMCP	68'	1
	ELMWOOD RD SUBTOTAL				2
TUCKAWAY LN	68+41	RT	15" CMCP	24'	1
	TUCKAWAY LN SUBTOTAL				1
CHEROKEE TR	80+25	LT/RT	18" CMCP	60'	1
	CHEROKEE TR SUBTOTAL				1
ST GABRIEL LN	90+51	LT/RT	18" CPRC	71'	1
	ST GABRIEL LN SUBTOTAL				1
HUBERTUS RD	104+36	RT	18" CMCP	55'	1
	110+37	LT/RT	30" CMCP	81'	1
	113+55	LT	18" CMCP	24'	1
	114+35	RT	18" CMCP	27'	1
	HUBERTUS RD SUBTOTAL				4
GOLDEN DR	130+28	LT/RT	18" CMCP	36'	1
	131+65	LT	15" CMCP	25'	1
	132+13	RT	15" CMCP	20'	1
	132+49	LT	15" CMCP	34'	1
	132+81	RT	15" CMCP	24'	1
	GOLDEN DR SUBTOTAL				5
STH 167	160+81	RT	18" CMCP	28'	1
	166+55	RT	18" CMCP	31'	1
	177+46	RT	24" CMCP	30'	1
	STH 167 SUBTOTAL				3
GREYSTONE DR	189+71	LT/RT	18" CMCP	94'	1
	GREYSTONE DR SUBTOTAL				1
PIONEER RD	219+50	LT/RT	28" X 20" PACS	64'	1
	PIONEER RD SUBTOTAL				1
CTH E	227+25	LT	BURIED	34'	1
	228+04	RT	18" CMCP	24'	1
	229+11	LT/RT	24" CMCP	66'	1
	CTH E SUBTOTAL				3
CLUB DR	240+29	LT/RT	18" CMCP	36'	1
	CLUB DR SUBTOTAL				1
	PROJECT TOTAL				143

REMOVING CURB & GUTTER

ROADWAY	STATION		STATION	SIDE	204.0150 LF
STH 164	71+21	-	71+51	LT	50
	71+87	-	72+44	LT	95
	91+96	-	92+56	RT	95
	92+19	-	92+59	LT	65
	92+92	-	93+31	RT	65
	92+94	-	93+56	LT	100
	145+07	-	145+69	RT	95
	145+31	-	145+70	LT	65
	146+05	-	146+41	RT	60
	146+07	-	146+66	LT	95
	156+43	-	156+81	LT	60
	157+16	-	157+74	LT	90
	185+85	-	186+43	RT	90
	186+86	-	187+23	RT	60
	241+68	-	241+93	LT	40
	242+53	-	242+71	LT	30
	250+95	-	251+50	LT	90
	251+14	-	251+51	RT	55
	252+01	-	252+55	RT	90
	252+02	-	252+38	LT	60
	281+35	-	281+63	LT	50
	281+91	-	282+31	LT	70
	300+58	-	304+37	RT	395
	302+90	-	304+35	LT	155
	304+76	-	306+37	LT	175
	304+78	-	306+43	RT	180
	317+22	-	317+60	LT	60
	317+96	-	318+53	LT	90
	359+70	-	360+30	RT	90
	359+86	-	360+21	LT	65
	360+55	-	361+14	LT	95
	360+64	-	361+03	RT	65
	412+57	-	412+94	LT	60
	413+30	-	413+88	LT	90
	STH 164 SUBTOTAL				3,090
ST GABRIEL	90+67	-	92+83	LT	220
	ST GABRIEL SUBTOTAL				220
ADA'HI CT	147+56	-	149+52	RT	205
	147+56	-	149+53	LT	195
	148+49	-	149+59	MED	245
	ADA'HI CT SUBTOTAL				645
STH 167	168+65	-	169+27	RT	65
	170+51	-	171+14	RT	65
	176+02	-	176+39	LT	65
	176+75	-	177+32	LT	90
	STH 167 SUBTOTAL				285
PLEASANT HILL RD	198+97	-	199+66	RT	70
	199+41	-	199+64	LT	25
	PLEASANT HILL RD SUBTOTAL				95
	PROJECT TOTAL				4,335

REMOVING ASPHALTIC SURFACE MILLING

ROADWAY	STATION		STATION	204.0125 TON
STH 164	61+00	-	76+00	30
	76+00	-	91+00	270
	91+00	-	106+00	120
	121+00	-	136+00	85
	136+00	-	151+00	245
	151+00	-	166+00	240
	166+00	-	181+00	270
	181+00	-	196+00	40
	196+00	-	211+00	110
	211+00	-	226+00	310
	226+00	-	241+00	160
	256+00	-	271+00	175
	271+00	-	286+00	255
	286+00	-	301+00	80
	316+00	-	331+00	230
	331+00	-	346+00	300
	346+00	-	361+00	275
	361+00	-	376+00	275
	376+00	-	391+00	300
	391+00	-	406+00	280
	406+00	-	421+00	220
	421+00	-	436+00	280
	436+00	-	451+00	215
	REMOVE C&G WEDGE			75
	PROJECT TOTAL			4,840

REMOVING ASPHALTIC SURFACE BUTT JOINTS

ROADWAY	LOCATION	204.0115 SY
STH 164	50+95	200
	446+61	135
	STH 164 SUBTOTAL	335
	PROJECT TOTAL	335

REMOVING CONCRETE SIDEWALK

ROADWAY	STATION		STATION	SIDE	204.0155 SY
STH 164	303+53	-	303+56	RT	5
	304+77	-	305+23	RT	40
	STH 164 SUBTOTAL				45
	PROJECT TOTAL				45

ALL ITEMS CATEGORY 0010 UNLESS NOTED

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REMOVING GUARDRAIL

ROADWAY	STATION		STATION	SIDE	204.0165 LF
STH 164	56+91	-	58+95	RT	205
	185+86	-	188+71	LT	285
	199+09	-	201+09	LT	290
	423+09	-	426+10	LT	302
	STH 164 SUBTOTAL				1,082
	PROJECT TOTAL				1,082

REMOVING SURFACE DRAINS

ROADWAY	STATION	SIDE	204.0190 EACH
STH164	92+31	RT	1
	92+36	LT	1
	93+08	RT	1
	93+17	LT	1
	145+47	RT	1
	145+55	LT	1
	146+17	RT	1
	146+27	LT	1
	251+35	RT	1
	251+39	LT	1
	360+10	LT	1
	360+75	LT	1
	413+52	LT	1
	STH 164 SUBTOTAL		13
ST GABRIEL LN	90+65	LT	1
	ST GABRIEL LN SUBTOTAL		1
	PROJECT TOTAL		14

REMOVING FENCE

ROADWAY	STATION		STATION	SIDE	204.0170 LF
STH 164	165+83	-	166+34	RT	60
	166+64	-	166+80	RT	20
	178+69	-	179+10	RT	45
	241+33	-	241+46	RT	20
	242+96	-	243+01	RT	25
	243+24	-	243+34	RT	10
	257+77	-	258+01	LT	60
	258+20	-	258+46	LT	25
	260+84	-	262+63	LT	180
	263+62	-	264+89	LT	145
	341+25	-	343+24	RT	210
	343+54	-	344+28	RT	75
	376+90	-	377+19	LT	40
	377+50	-	378+41	LT	90
	399+94	-	401+30	LT	150
	402+14	-	403+29	LT	125
	410+94	-	412+67	LT	175
	416+05	-	416+89	RT	90
	435+93	-	436+37	RT	45
	436+32	-	436+44	RT	20
	436+63	-	436+75	RT	20
	436+65	-	437+05	RT	45
	STH 164 SUBTOTAL				1,675
HUBERTUS RD	112+31	-	113+31	LT	110
CTH E	225+17	-	229+47	RT	425
	SIDE ROADS SUBTOTAL				535
	PROJECT TOTAL				2,210

REMOVING MANHOLES AND INLETS

ROADWAY	STATION	SIDE	204.0210 REMOVING MANHOLES EACH	204.0220 REMOVING INLETS EACH
STH 164	75+04	LT	1	---
	251+28	RT	---	1
	251+31	LT	---	1
	STH 164 SUBTOTAL		1	2
	PROJECT TOTAL		1	2

REMOVING STORM SEWER

ROADWAY	STATION		STATION	SIDE	204.0245.01 REMOVING STORM SEWER 18-INCH LF	204.0245.02 REMOVING STORM SEWER 24-INCH LF	204.0245.03 REMOVING STORM SEWER 30-INCH LF
STH 164	74+90	-	75+04	LT	---	20	---
	75+03	-	75+04	LT/RT	---	55	---
	250+63	-	251+32	LT	70	---	---
	250+63	-	251+32	RT	70	---	---
	251+32	-	252+25	LT	---	95	---
	251+29	-	252+56	RT	---	---	130
	STH 164 SUBTOTAL				140	170	130
STH 167	168+16	-	169+57	RT	145	---	---
	170+34	-	171+60	RT	---	130	---
	STH 167 SUBTOTAL				145	130	0
	PROJECT TOTAL				285	300	130

REMOVING PIPE GATE

ROADWAY	STATION	SIDE	204.9060.S.01 EACH
STH 164	436+30	LT	1
	STH 164 SUBTOTAL		1
	PROJECT TOTAL		1

ALL ITEMS CATEGORY 0010 UNLESS NOTED

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REMOVING PRIVATE SIGN

ROADWAY	STATION	SIDE	204.9060.S.02 EACH
STH 164	200+00	LT	1
	252+60	LT	1
	252+65	LT	1
	STH 164 SUBTOTAL		3
	PROJECT TOTAL		3

REMOVING BOLLARDS

ROADWAY	STATION	SIDE	204.9060.S.03 EACH
STH 167	171+55	RT	2
	STH 167 SUBTOTAL		2
	PROJECT TOTAL		2

REMOVING LIGHT POLE

ROADWAY	STATION	SIDE	204.9060.S.04 EACH
STH 167	171+55	RT	1
	STH 167 SUBTOTAL		1
	PROJECT TOTAL		1

REMOVING CONCRETE DITCH LINING

ROADWAY	STATION		STATION	SIDE	204.9180.S.01 SY
STH 164	57+04	-	59+19	RT	140
	64+24	-	64+45	RT	50
	103+37	-	111+04	LT	865
	104+08	-	104+63	RT	40
	104+93	-	111+06	RT	655
	196+29	-	198+58	RT	215
	199+40	-	203+74	RT	395
	248+04	-	250+63	RT	250
	248+05	-	250+65	LT	240
	258+56	-	262+94	LT	485
	260+75	-	261+16	RT	45
	STH 164 SUBTOTAL				3,380
HUBERTUS RD	110+40	-	114+21	RT	350
	HUBERTUS RD SUBTOTAL				350
	PROJECT TOTAL				3,730

3

REMOVING RETAINING WALLS

ROADWAY	STATION	SIDE	204.9105.S.01 REMOVING TIMBER RETAINING WALL STA 74+35 RT LS	204.9105.S.02 REMOVING TIMBER RETAINING WALL STA 163+00 RT STH 167 LS	204.9105.S.03 REMOVING MODULAR BLOCK RETAINING WALL STA 230+30 LT LS	204.9105.S.04 REMOVING STONE WALL STA 18+25 LT SHADY LN LS	204.9105.S.05 REMOVING STONE WALL STA 19+25 LT SHADY LN LS	204.9105.S.06 REMOVING STONE WALL STA 18+75 RT SHADY LN LS
STH 164	74+35	RT	1	---	---	---	---	---
	205+00	RT	---	---	---	---	---	---
	223+30	LT	---	---	---	---	---	---
	230+30	LT	---	---	1	---	---	---
	STH 164 SUBTOTALS		1	0	1	0	0	0
SHADY LN	18+25	LT	---	---	---	1	---	---
	18+75	RT	---	---	---	---	---	1
	19+25	LT	---	---	---	---	1	---
	SHADY LN SUBTOTALS		0	0	0	1	1	1
STH 167	163+00	RT	---	1	---	---	---	---
	STH 167 SUBTOTALS		0	1	0	0	0	0
	PROJECT TOTALS		1	1	1	1	1	1

ALL ITEMS CATEGORY 0010 UNLESS NOTED

Earthwork Summary

Division	From/To Station	Location	A Item #205.0100 Excavation Common (1) (CY) Cut (2)(14) (CY)	B Item #205.0100 EBS Excavation (3)(4)(5) (CY)	C * Salvaged/Unusable Pavement Material (6) (CY)	D * Available Material (7) (CY)	E Item #205.0400 Excavation Marsh (8)(9) (CY)	F Item #209.2500 Expanded Marsh Backfill (10) (TON) Factor 1.40	G Item #313.0110 Expanded Pit Run (3) (TON) Factor 1.20	H * Unexpanded Fill (CY)	I * Expanded Fill (11) (CY) Factor 1.20	J * Mass Ordinate +/- (5)(12) (CY)	K * Waste (CY)	L Item #208.0100 Borrow (14) (CY)
1	51+00 - 237+00	STH 164	423,924	0	8294	415,630	0	0	0	35,398	42,478	373,153		
	237+00-251+25	'NA' LINE	39,258	0	1085	38,173	0	0	5,192	682	819	37,354		
	243+50-251+25	'SA' LINE	21,629	0	206	21,423	0	0	4,943	0	0	21,423		
	369+50-410+50	STH 164 DEEP MARSH EX	0	0	0	0	4,210	10,021	0	440	527	-527		
	11+00 - 12+39	SHADY LANE SOUTH	2,952	0	69	2,883	0	0	0	165	198	2,686		
	17+82 - 25+84	SHADY LANE NORTH	5,145	0	122	5,023	0	0	0	2,990	3,588	1,435		
	28+54 - 29+25	HANSON DRIVE	685	0	44	641	0	0	0	1	1	640		
	30+75 - 31+47	UPLAND DRIVE	183	0	37	146	0	0	0	17	21	126		
	38+30 - 41+68	MONCHES ROAD	888	0	143	746	0	0	0	62	74	672		
	48+56 - 49+25	WOODED HILLS	171	0	36	135	0	0	0	36	43	91		
	58+31 - 61+69	ELMWOOD ROAD	1,085	0	153	932	0	0	0	96	115	817		
	68+42 - 69+25	TUCKAWAY LANE	277	0	44	234	0	0	0	2	2	231		
	80+75 - 81+54	CHEROKEE TRAIL	371	0	42	329	0	0	0	8	9	320		
	90+75 - 93+00	ST GABRIEL LANE	850	0	183	667	0	0	0	1	2	665		
	103+28 - 118+00	HUBERTUS ROAD	14,602	0	785	13,816	0	0	0	7,965	9,557	4,259		
	130+75 - 133+00	GOLDEN DRIVE	1,437	0	104	1,333	0	0	0	21	26	1,307		
	138+52 - 139+25	LOCHVIEW ROAD	182	0	40	142	0	0	0	1	2	140		
	147+55 - 149+25	ADAHI COURT	1,393	0	154	1,239	0	0	626	0	0	1,239		
Division 1 Subtotal			515,033	0	11,539	503,494	4,210	10,021	10,761	47,885	57,462	446,032	446,032	
2	253+00 - 261+00	'NB LINE'	3,051	0	349	2,701	0	0	1,822	2,072	2,486	215		
	253+00 - 258+00	'SB LINE'	338	0	83	255	0	0	2,232	7,239	8,686	-8,432		
	261+00 - 290+12	STH 164	10,192	0	329	9,864	2535	5707	0	4,745	5,694	4,170		
	1290+12 - 1318+02	STH 164 CL	14,556	0	2,588	11,968	0	0	16,490	7,205	8,645	3,322		
	318+02 - 447+00	STH 164	38,221	0	1,476	36,746	4383	10432	0	14,431	17,317	19,428		
	158+75 - 169+00	EA' LINE	15,168	0	760	14,408	0	0	0	380	456	13,952		
	166+00 - 169+00	'WA' LINE	125	0	0	125	0	0	0	1,787	2,145	-2,020		
	170+75 - 174+00	'EB' LINE	2,263	0	1,161	1,101	0	0	0	479	575	526		
	170+75 - 181+25	'WB' LINE	7,568	0	3	7,565	0	0	0	2,392	2,870	4,695		
	10+00 - 13+30	164/167 RAB	2,229	0	397	1,832	0	0	0	1,634	1,961	-129		
	188+52 - 189+40	GREYSTONE DRIVE	408	0	53	355	0	0	0	14	17	338		
	197+04 - 199+00	PLEASANT HILL ROAD	1,264	0	122	1,142	0	0	748	9	10	1,131		
	208+52 - 209+25	MAJESTIC DRIVE	207	0	53	154	0	0	0	0	0	154		
	218+35 - 221+64	PIONEER ROAD	624	0	116	508	0	0	0	7	9	499		
	224+95 - 229+12	CTH E	3,367	0	404	2,964	0	0	0	285	342	2,622		
	240+75 - 241+44	CLUB LANE	535	0	39	496	0	0	0	7	8	488		
Division 2 Subtotal			100,116	0	7,933	92,183	6,918	16,139	21,292	42,686	51,223	40,960	40,960	
Undistributed (13)				10,000					22,800					
Grand Total			615,149	10,000	19,472	595,677	11,129	26,160	54,853	90,571	108,685	486,992	496,992	0
		Total Common Exc		625,149										

1) Common Excavation is the sum of the Cut (A) and EBS Excavation (B) columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material (C) and excavation for Select Subgrade Improvement are included in Cut (A).
3) EBS Excavation (B) and Select Subgrade Improvement to be backfilled with Pit Run in areas noted in the typical sections and construction details. Pit Run may be available within the project site. See Geotechnical Report for additional details. All EBS and select subgrade improvement backfill (H) material shall be approved by the engineer prior to placement of the backfill material. No organic material shall be allowed in backfill. Additional Select Subgrade Improvement excavations will be backfilled with Breaker Run as noted in the typical sections and construction details.
4) EBS Excavation (B) volumes were taken from Geotechnical Report. Actual EBS locations to be determined by engineer.
5) EBS Excavation Material (B) shall be removed from the site and shall not be used as fill material. EBS Excavation material (B) is not included in the Mass Ordinate (J) but is included in waste volume (K).
6) Salvaged/Unusable Pavement Material (C) is included in the Cut (A). This assumes the existing pavement structure is salvaged or wasted by the contractor. The existing pavement structure is not shown on the cross sections.
7) Available Material (D) = Cut (A) - Salvaged/Unusuable Pavement Material (C)
8) Marsh Excavation (E) locations have been taken from Geotechnical Report. Actual locations to be detemined by engineer.
9) Marsh Excavation (E) material shall be removed from the site and shall not be used as fill material. Marsh Excavation (E) material is not included in the Mass Ordinate (J) or waste (K) volume.
10) Expanded Marsh Backfill (F) is to be backfilled with Backfill Granular Grade 2 (Item 209.2500). Volume shown include volume of material required for placing backfill 2 feet about top of marsh.
11) Expanded Fill (I) = (Unexpanded Fill (F)) * Expanded Fill Factor (1.20)
12) The Mass Ordinate (J) + or - Qty calculated for the Division. Plus quantity indicates a waste volume of material within the Division. Minus indicates a borrow volume of material within the Division.
13) Undistributed EBS Excavation (B) is to be used at discretion of engineer for unstable soils
14) Fill material required for embankment above deep marsh excavation shall be excavated from elsewhere on the project and hauled to the site. No additional payment shall be made for borrow material. Costs of hauling material are incidental to Excavation Common.
15) Pit Run (G) is the Cut (A) volume required * the Expanded Fill Factor (1.20). The volume shown is to backfill areas determined to be backfilled with Pit Run. Areas to be backfilled with Breaker Run are not included in this volume. Pit Run (G) is not included in the Mass Ordinate (J) or the Waste (K) volumes.

ALL ITEMS CATEGORY 0010 UNLESS NOTED

DEEP MARSH EXCAVATION

ROADWAY	STATION	-	STATION	SIDE	205.2000.S SETTLEMENT GAUGES EACH	520.1024 ** AEW FOR CULV PIPE 24-INCH EACH	520.2024 CULV PIPE TEMP 24-INCH LF	645.0111 ** GEOTEXILE TYPE DF SCHEDULE A SY	SPV.0060.02 VIBRATING WIRE PIEZOMETER INSTRUMENTATION SYSTEM EACH	SPV.0090.02 WICK DRAINS LF	SPV.0105.01 GEOTECHNICAL INSTRUMENTATION LS	SPV.0105.02 DEEP MARSH EXCAVATION CULVERT PIPE MAINTENANCE LS
STH 164	370+00	-	375+00	LT	3	1	10	1,100	2	6,900	---	---
	370+00	-	375+00	RT	3	1	10	1,100	2	6,300	---	---
	409+50	-	410+50	LT	---	---	---	85	---	---	---	--
	STH 164 SUBTOTAL				6	2	20	2,285	4	13,200	1	1
	PROJECT TOTAL				6	2	20	2,285	4	13,200	1	1

NOTE: SEE WICK DRAIN CONSTRUCTION DETAILS FOR EXACT LOCATION OF SETTLEMENT GAUGES, PIEZOMETERS, AND GEOTECHNICAL INSTRUMENTATION
** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PREPARE FOUNDATION FOR ASPHALTIC PAVING

ROADWAY	PROJECT	211.0100 LS
STH 164	2709-03-70	1
	PROJECT TOTAL	1

FINISHING ROADWAY

ROADWAY	PROJECT	213.0100 EACH
STH 164	2709-03-70	1
	PROJECT TOTAL	1

BASE AGGREGATE DENSE

ROADWAY	STATION	-	STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	371.1000.S QMP BASE AGGREGATE DENSE 1 1/4-INCH COMPACTION TON
STH 164	50+95	-	61+00	365	4,360	4,360
	61+00	-	76+00	230	6,960	6,960
	76+00	-	91+00	395	2,810	2,810
	91+00	-	106+00	470	5,810	5,810
	106+00	-	121+00	730	6,190	6,190
	121+00	-	136+00	415	6,100	6,100
	136+00	-	151+00	345	4,270	4,270
	151+00	-	166+00	405	4,250	4,250
	166+00	-	181+00	415	3,560	3,560
	181+00	-	196+00	530	7,000	7,000
	196+00	-	211+00	425	5,910	5,910
	211+00	-	226+00	385	2,190	2,190
	226+00	-	241+00	145	5,990	5,990
	241+00	-	256+00	290	8,490	8,490
	256+00	-	271+00	665	4,680	4,680
	271+00	-	286+00	410	3,710	3,710
	286+00	-	301+00	680	5,290	5,290
	301+00	-	316+00	445	7,300	7,300
	316+00	-	331+00	320	4,080	4,080
	331+00	-	346+00	480	2,220	2,220
	346+00	-	361+00	360	3,420	3,420
	361+00	-	376+00	385	2,880	2,880
	376+00	-	391+00	505	2,190	2,190
	391+00	-	406+00	610	3,030	3,030
	406+00	-	421+00	395	6,130	6,130
	421+00	-	436+00	510	2,700	2,700
	436+00	-	451+00	450	1,650	1,650
	STH 164 SUBTOTAL			11,760	123,170	123,170

BASE AGGREGATE DENSE

ROADWAY	STATION	-	STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	371.1000.S QMP BASE AGGREGATE DENSE 1 1/4-INCH COMPACTION TON
	SHADY LN SOUTH			80	815	815
	SHADY LN NORTH			215	2,335	2,335
	HANSEN DR			25	205	205
	UPLAND DR			25	215	215
	MONCHES RD			100	690	690
	WOODED HILLS			15	195	195
	ELMWOOD RD			75	670	670
	TUCKAWAY LN			20	245	245
	CHEROKEE TR			30	235	235
	ST GABRIEL			40	825	825
	HUBERTUS RD			350	5,420	5,420
	GOLDEN DR			50	670	670
	LOCHVIEW RD			25	205	205
	ADA'HI CT			0	405	405
STH 167	158+75	-	173+00	430	5,755	5,755
STH 167	173+00	-	181+25	220	4,805	4,805
	GREYSTONE DR			25	205	205
	PLEASANT HILL RD			40	540	540
	MAJESTIC DR			30	215	215
	PIONEER RD			70	605	605
	CTH E			150	1,780	1,780
	CLUB DR			15	180	180
	SIDE ROADS SUBTOTAL			2,030	27,215	27,215
	PROJECT TOTALS			13,790	150,385	150,385

ALL ITEMS CATEGORY 0010 UNLESS NOTED

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BREAKER RUN

ROADWAY	STATION	-	STATION	311.0110 TON
STH 164	250+73	-	253+27	2,530
	STH 164 SUBTOTAL			2,530
STH 167	158+75	-	169+07	5,100
	170+47	-	181+25	6,510
	STH 167 SUBTOTAL			11,610
	PROJECT TOTALS			14,140

CONCRETE ROUNDABOUT TRUCK APRON

ROADWAY	STATION		STATION	SIDE	405.0100 COLORING CONCRETE WISDOT RED CY	416.0512 CONCRETE TRUCK APRON 12-INCH SY	415.5110.S CONCRETE PAVEMENT JOINT LAYOUT LS
STH 164	250+42	-	251+89	LT	35	105	---
	250+55	-	251+75	RT	35	105	---
	251+12	-	252+99	LT/RT	235	640	---
	252+41	-	253+58	LT	35	95	---
	252+23	-	253+70	RT	35	105	---
	PROJECT TOTAL				375	1,050	1

DRILLED TIE BARS

ROADWAY	416.0610 EACH
UNDISTRIBUTED	8
	8

NOTE:
TO CONNECT PROPOSED CURB AND GUTTER
TO EXISTING CURB AND GUTTER

CONCRETE DRIVEWAY 7-INCH

ROADWAY	STATION	SIDE	416.0170 SY
STH 164	119+00	LT	15
	119+00	RT	15
	160+59	RT	15
	166+50	RT	15
	218+23	LT	10
	219+25	LT	15
	226+67	RT	145
	228+13	RT	15
	229+31	RT	15
	234+25	RT	10
	237+19	RT	15
	240+64	RT	20
	243+15	RT	35
	250+14	LT	30
	250+14	MED	60
	301+25	RT	15
	306+26	RT	10
	323+90	RT	15
	325+06	RT	10
	328+71	LT	45
	329+62	LT	50
	STH 164 SUBTOTAL		575
HUBERTUS RD	113+58	LT	10
	114+42	RT	10
	114+68	LT	10
	HUBERTUS RD SUBTOTAL		30
GOLDEN DR	130+95	RT	15
	131+67	LT	25
	132+13	RT	15
	132+49	LT	20
	132+82	RT	10
	GOLDEN DR SUBTOTAL		85
ADA'HI CT	148+64	RT	10
	ADA'HI CT SUBTOTAL		10
STH 167	160+79	RT	100
	166+55	RT	15
	166+55	MED	70
	STH 167 SUBTOTAL		185
PLEASANT HILL RD	197+93	LT	15
	PLEASANT HILL RD SUBTOTAL		15
	PROJECT TOTAL		900

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ALL ITEMS CATEGORY 0010 UNLESS NOTED

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ASPHALT PAVEMENT

ROADWAY	STATION	-	STATION	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON
STH 164	50+95	-	61+00	520	930	450
	61+00	-	76+00	1,000	1,990	860
	76+00	-	91+00	780	1,010	670
	91+00	-	106+00	930	1,670	800
	106+00	-	121+00	800	1,420	690
	121+00	-	136+00	920	1,610	790
	136+00	-	151+00	1,000	1,580	860
	151+00	-	166+00	960	1,440	820
	166+00	-	181+00	890	1,220	770
	181+00	-	196+00	970	1,890	840
	196+00	-	211+00	950	1,760	820
	211+00	-	226+00	740	830	640
	226+00	-	241+00	1,100	1,930	940
	241+00	-	256+00	1,100	2,070	880
	256+00	-	271+00	950	1,420	820
	271+00	-	286+00	920	1,300	800
	286+00	-	301+00	730	1,230	630
	301+00	-	316+00	940	2,080	810
	316+00	-	331+00	910	1,400	810
	331+00	-	346+00	730	850	630
	346+00	-	361+00	910	1,300	780
	361+00	-	376+00	800	1,070	690
	376+00	-	391+00	720	830	620
	391+00	-	406+00	790	920	680
	406+00	-	421+00	1,230	2,150	1,060
	421+00	-	436+00	760	900	650
	436+00	-	451+00	520	570	450
	CURB & GUTTER WEDGE			90	75	---
	STH 164 SUBTOTAL			23,660	37,445	20,260

ASPHALT PAVEMENT

ROADWAY	STATION	-	STATION	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON
SHADY LN SOUTH	---	-	---	115	250	100
SHADY LN NORTH	---	-	---	250	565	215
HANSEN DR	---	-	---	25	50	20
UPLAND DR	---	-	---	25	55	25
MONCHES RD	---	-	---	80	180	70
WOODED HILLS	---	-	---	25	55	20
ELMWOOD RD	---	-	---	80	175	70
TUCKAWAY LN	---	-	---	30	60	25
CHEROKEE TR	---	-	---	30	60	25
ST GABRIEL	---	-	---	110	240	95
HUBERTUS RD	---	-	---	710	1,425	620
GOLDEN DR	---	-	---	80	170	70
LOCHVIEW RD	---	-	---	25	50	20
ADA'HI CT	---	-	---	50	110	45
STH 167	158+75	-	173+00	685	1,300	590
STH 167	173+00	-	181+25	635	1,420	550
GREYSTONE DR	---	-	---	25	50	20
PLEASANT HILL RD	---	-	---	65	140	55
MAJESTIC DR	---	-	---	25	55	25
PIONEER RD	---	-	---	70	155	60
CTH E	---	-	---	230	515	200
CLUB DR	---	-	---	25	50	20
	SIDE ROADS SUBTOTAL			3,395	7,130	2,940
	PROJECT TOTALS			27,055	44,575	23,200

INCENTIVE IRI RIDE

ROADWAY	LOCATION	* LANE MILES	440.4410 DOL
STH 164	50+95 - 446+61	14.9	29,800
HUBERTUS ROAD	103+28 - 118+00	0.6	1,200
STH 167	158+75 - 181+25	0.9	1,800
	PROJECT TOTAL		32,800

* FOR INFORMATION ONLY

NOTE: LENGTHS OMIT AREA WITHIN STH 164/STH 167 ROUNDABOUT

CONCRETE SURFACE DRAINS

ROADWAY	STATION	SIDE	416.1010 CY
STH 164	92+35	LT	1.7
	92+35	RT	1.6
	93+12	LT	1.2
	93+12	RT	1.0
	145+45	LT	1.3
	145+45	RT	1.2
	186+23	RT	1.2
	198+48	RT	1.5
	360+00	LT	1.3
	360+80	LT	1.7
	413+52	LT	2.0
	418+66	RT	0.6
	PROJECT TOTAL		16.3

HMA COLD WEATHER PAVING

ROADWAY	450.4000 TON
UNDISTRIBUTED	10,000
PROJECT TOTAL	10,000

ALL ITEMS CATEGORY 0010 UNLESS NOTED

HMA PERCENT WITHIN LIMITS

Location	Station Range	Mixture Use	Underlying Surface	Bid Item	Thickness	Tons	Quality Management Program Used		460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT DOL	460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT DOL	SPV.0060.08 HMA PWL TEST STRIP VOLUMETRICS EACH	SPV.0060.09 HMA PWL TEST STRIP DENSITY EACH
							Mixture Acceptance	Density Acceptance				
2-12' Driving Lanes Shoulders Turn Lanes	50+95 - 74+50	Lower Layer #2	Base Aggregate	3 MT 58-28S	2 1/4"	1464	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
2-12' Driving Lanes Shoulders (reconstruct areas only) Bypass/Turn Lanes	50+95 - 250+50	Lower Layer	Existing Milled Asphalt 3 MT 58-28S	3 MT 58-28S	2 1/4"	11749	PWL Incentive Air Voids 460.2010	Incentive Density PWL HMA Pavement 460.2005	11,749	11,749	1	1
2-12' Driving Lanes Shoulders (All locations) Bypass/Turn Lanes	50+95 - 250+50	Upper Layer	3 MT 58-28S	4 MT 58-28S	1 3/4"	9938	PWL Incentive Air Voids 460.2010	Incentive Density PWL HMA Pavement 460.2005	9,938	9,938	1	1
Turn Lanes	74+50 - 98+00	Lower Layer #2	Base Aggregate	3 MT 58-28S	2 1/4"	399	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
Shoulders	74+50 - 98+00	Lower Layer	Existing Milled Asphalt Base Aggregate	3 MT 58-28S	2 1/4"	260	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
2-12' Driving Lanes Shoulders	98+00 - 130+00	Lower Layer #2	Base Aggregate	3 MT 58-28S	2 1/4"	1820	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
Turn Lanes/Bypass Lanes	130+00 - 183+50	Lower Layer #2	Base Aggregate	3 MT 58-28S	2 1/4"	1411	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
Shoulders	130+00 - 183+50	Lower Layer	Existing Milled Asphalt Base Aggregate	3 MT 58-28S	2 1/4"	376	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
2-12' Driving Lanes Shoulders Turn Lanes	183+50 - 206+00	Lower Layer #2	Base Aggregate	3 MT 58-28S	2 1/4"	1543	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
Turn Lanes/Bypass Lanes	206+00 - 237+00	Lower Layer #2	Base Aggregate	3 MT 58-28S	2 1/4"	460	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
Shoulders	206+00 - 237+00	Lower Layer	Existing Milled Asphalt Base Aggregate	3 MT 58-28S	2 1/4"	392	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
2-12' Driving Lanes Shoulders Turn Lanes	237+00 - 250+50	Lower Layer #2	Base Aggregate	3 MT 58-28S	2 1/4"	977	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
2-12' Driving Lanes Shoulders Turn Lanes	253+50 - 258+30	Lower Layer #2	Base Aggregate	3 MT 58-28S	2 1/4"	336	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
2-12' Driving Lanes Shoulders (reconstruct areas only) Bypass/Turn Lanes/SB Widening	253+50 - 267+00	Lower Layer	Existing Milled Asphalt 3 MT 58-28S	3 MT 58-28S	2 1/4"	847	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
2-12' Driving Lanes Shoulders Bypass/Turn Lanes	253+50 - 267+00	Upper Layer	3 MT 58-28S	4 MT 58-28S	1 3/4"	1177	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
SB Widening	258+30 - 266+54	Lower Layer #2	Base Aggregate	3 MT 58-28S	2 1/4"	219	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
Shoulders	258+30 - 267+00	Lower Layer	Existing Milled Asphalt Base Aggregate	3 MT 58-28S	2 1/4"	110	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
Turn Lanes/Bypass Lanes	267+00 - 290+12	Lower Layer #2	Base Aggregate	3 MT 58-28S	2 1/4"	309	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
Shoulders	267+00 - 290+12	Lower Layer	Existing Milled Asphalt Base Aggregate	3 MT 58-28S	2 1/4"	332	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
2-12' Driving Lanes Shoulders (reconstruct areas only) Bypass/Turn Lanes	267+00 - 444+61	Lower Layer	Existing Milled Asphalt 3 MT 58-28S	3 MT 58-28S	2 1/4"	8662	PWL Incentive Air Voids 460.2010	Incentive Density PWL HMA Pavement 460.2005	8,662	8,662	1	1
2-12' Driving Lanes Shoulders (All locations) Bypass/Turn Lanes	267+00 - 444+61	Upper Layer	3 MT 58-28S	4 MT 58-28S	1 3/4"	8382	PWL Incentive Air Voids 460.2010	Incentive Density PWL HMA Pavement 460.2005	8,382	8,382	1	1
2-12' Driving Lanes Shoulders Turn Lanes	290+12 - 318+02	Lower Layer #2	Base Aggregate	3 MT 58-28S	2 1/4"	1706	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
Turn Lanes/Bypass Lanes	318+02 - 444+61	Lower Layer #2	Base Aggregate	3 MT 58-28S	2 1/4"	1601	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
Shoulders	318+02 - 444+61	Lower Layer	Existing Milled Asphalt Base Aggregate	3 MT 58-28S	2 1/4"	1783	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
Intersections/Roundabout Sideroads	Various	All Layers	Various	3 MT 58-28S 4 MT 58-28S	6 1/4" Total	11522	QMP as per SS 460	Acceptance testing by the department; not eligible for incentive	---	---	---	---
								Totals	38,730	38,730	4	4

ALL ITEMS CATEGORY 0010 UNLESS NOTED

3

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

ROADWAY	STATION		STATION	465.0120 TON
STH 164	50+95	-	61+00	71
	61+00	-	76+00	5
	91+00	-	106+00	23
	151+00	-	166+00	17
	166+00	-	181+00	107
	181+00	-	196+00	75
	196+00	-	211+00	102
	211+00	-	226+00	56
	226+00	-	241+00	142
	241+00	-	256+00	26
	256+00	-	271+00	18
	271+00	-	286+00	49
	286+00	-	301+00	87
	301+00	-	316+00	41
	331+00	-	346+00	12
	361+00	-	376+00	37
	376+00	-	391+00	27
	391+00	-	406+00	43
	406+00	-	421+00	103
	421+00	-	436+00	21
	436+00	-	451+00	82
	STH 164 SUBTOTAL			1,144
	SHADY LN SOUTH			5
	SHADY LN NORTH			32
	MONCHES RD			5
	TUCKAWAY LN			21
	HUBERTUS RD			30
	GOLDEN DR			41
	ADA'HI CT			11
STH 167	158+75	-	173+00	22
STH 167	173+00	-	181+25	137
	PLEASANT HILL RD			6
	CTH E			4
	SIDE ROADS SUBTOTAL			314
	PROJECT TOTALS			1,458

ASPHALTIC SURFACE PATCHING

LOCATION	465.0110 TONS
UNDISTRIBUTED	400
PROJECT TOTAL	400

NOTE: TO BE USED TO PATCH DISTRESSED PAVEMENT IN RESURFACING SEGMENTS

ASPHALTIC FLUMES

ROADWAY	STATION	SIDE	465.0315 SY
STH 164	56+95	LT	15
	57+20	RT	21
	68+28	LT	40
	68+28	RT	10
	72+27	RT	13
	72+43	LT	12
	104+75	LT	13
	106+00	RT	9
	156+39	LT	12
	165+80	RT	10
	187+39	RT	12
	199+64	LT	11
	199+69	RT	15
	217+92	LT	15
	223+96	RT	10
	239+50	LT	14
	254+35	RT	26
	257+60	LT	17
	262+50	RT	10
	281+15	LT	14
	300+99	RT	23
	304+00	LT	13
	317+17	LT	15
	326+06	RT	16
	331+53	LT	14
	412+22	LT	10
	STH 164 SUBTOTAL		390
SHADY LN	22+23	RT	11
HANSEN DR	29+11	LT	13
	29+27	RT	12
UPLAND DR	30+84	LT	10
	30+84	RT	12
WOODED HILLS	48+65	RT	8
	49+13	LT	14
ELMWOOD RD	59+28	LT	12
	60+75	LT	12
TUCKAWAY LN	69+10	LT	12
	69+30	RT	12
CHEROKEE TR	80+79	LT	13
	80+88	RT	14
HUBERTUS RD	109+25	RT	11
	109+30	LT	11
	113+22	LT	12
	113+72	RT	11
LOCHVIEW RD	139+10	LT	11
	139+28	RT	9
STH 167	159+22	RT	8
	167+75	LT	22
	176+22	LT	6
	176+70	LT	8
GREYSTONE DR	189+07	LT	10
	189+34	RT	12
MAJESTIC DR	209+08	LT	13
	209+33	RT	12
PIONEER RD	220+67	RT	7
	220+82	LT	9
	SIDEROADS SUBTOTAL		327
	PROJECT TOTAL		717

CONCRETE CURB AND GUTTER

ROADWAY	STATION		STATION	601.0405 18-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	601.0553 4-INCH SLOPED 36-INCH TYPE D LF	601.0582 4-INCH SLOPED 36-INCH TYPE T LF
STH 164	50+95	-	61+00	---	---	670	---
	61+00	-	76+00	---	---	1,780	---
	91+00	-	106+00	---	---	400	---
	106+00	-	121+00	---	---	3,000	---
	121+00	-	136+00	---	---	700	---
	136+00	-	151+00	---	---	280	---
	151+00	-	166+00	---	---	180	---
	166+00	-	181+00	---	---	340	---
	181+00	-	196+00	---	---	160	---
	196+00	-	211+00	---	---	280	---
	211+00	-	226+00	---	---	350	---
	226+00	-	241+00	---	---	1,870	---
	241+00	-	256+00	155	930	3,510	320
	256+00	-	271+00	---	---	900	---
	271+00	-	286+00	---	---	160	---
	301+00	-	316+00	---	---	710	---
	316+00	-	331+00	---	---	710	---
	331+00	-	346+00	---	---	50	---
	346+00	-	361+00	---	---	260	---
	361+00	-	376+00	---	---	15	---
	406+00	-	421+00	---	---	430	---
	STH 164 SUBTOTAL			155	930	16,755	320
SIDE ROADS							
	SHADY LN SOUTH			---	195	---	---
	SHADY LN NORTH			---	---	450	---
	WOODED HILLS			---	---	50	---
	ST GABRIEL			---	250	---	---
	HUBERTUS RD			---	---	430	---
	GOLDEN DR			---	410	---	---
	ADA'HI CT			---	330	---	---
STH 167	158+75	-	173+00	---	1,080	1,780	---
STH 167	173+00	-	181+25	---	---	620	---
	PLEASANT HILL RD			---	---	190	---
	CTH E			---	---	250	---
	CLUB DR			---	---	60	---
	SIDE ROADS SUBTOTAL			0	2,265	3,830	0
	PROJECT TOTALS			155	3,195	20,585	320

ALL ITEMS CATEGORY 0010 UNLESS NOTED

3

CONCRETE SIDEWALK

ROADWAY	STATION		STATION	601.0600 CONCRETE CURB PEDESTRIAN LF	602.0405 CONCRETE SIDEWALK 4-INCH SF	SPV.0165.01 12-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF
STH 164	246+84	-	251+73	25	5,180	120	80
	252+38	-	257+47	35	4,440	120	80
	STH 164 SUBTOTAL			60	9,620	240	160
STH 167	165+63	-	169+06	40	3,460	120	80
	170+49	-	174+03	30	3,300	120	80
	STH 167 SUBTOTAL			70	6,760	240	160
	PROJECT TOTALS			130	16,380	480	320

ADJUSTING INLET COVERS

LOCATION	611.8115 EACH
UNDISTRIBUTED	19
PROJECT TOTAL	19

NOTE: TO BE USED AT ALL INLETS
PLACED IN 2018 CONSTRUCTION SEASON

MAINTENANCE AND REPAIR OF HAUL ROADS

PROJECT	618.0100 EACH
2709-03-70	1
PROJECT TOTAL	1

FENCE SAFETY

ROADWAY	STATION		STATION	SIDE	616.0700.S LF
STH 164	57+25	-	58+40	LT	130
HUBERTUS	114+53	-	115+50	RT	130
PROJECT TOTAL					260

NOTE:
PLACED ABOVE RETAINING WALLS DURING CONSTRUCTION

3

GEOTEXTILE TYPE SR

ROADWAY	STATION		STATION	645.0135 SY
STH 164	237+00	-	250+73	10650
	253+27	-	258+30	4000
	1290+12	-	1318+02	17,050
	PROJECT TOTALS			31,700

NOTE: TO BE USED AT ALL LOCATIONS WHERE
EXCAVATION COMMON IS USED AS SUBGRADE
IMPROVEMENT BACKFILL

GUARDRAIL

ROADWAY	STATION		STATION	SIDE	614.2300 MGS GUARDRAIL 3 LF	614.2330 MGS GUARDRAIL 3 K LF	614.2350 MGS GUARDRAIL SHORT RADIUS LF	* CRT POSTS	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2630 MGS GUARDRAIL SHORT RADIUS TERMINAL EACH
STH 164	56+41	-	57+75	RT	---	---	---	---	40	1	---
	265+70	-	268+88	RT	213	---	---	---	---	2	---
	266+93	-	270+11	LT	213	---	---	---	---	2	---
	393+43	-	398+86	LT	338	---	---	---	---	2	---
	395+13	-	397+12	RT	---	125	40	2	---	1	1
PROJECT TOTAL					764	125	40	2	40	8	1

* FOR INFORMATION ONLY

CONCRETE MEDIAN SLOPED NOSE

ROADWAY	STATION		STATION	620.0300 TYPE 1 SF	TYPE 2 SF
STH 164	241+00	-	256+00	235	85
	256+00	-	271+00	60	---
	STH 164 SUBTOTAL			295	85
STH 167	158+75	-	173+00	60	85
	173+00	-	181+25	60	---
	STH 167 SUBTOTAL			120	85
CTH E	224+95	-	23+00	70	35
	CTH E SUBTOTAL			70	35
	PROJECT TOTALS			690	

LANDMARK REFERENCE MONUMENTS

ROADWAY	STATION	OFFSET	621.0100 EACH	NOTES
STH 164	44+84.00	---	1	POINT OF INTERSECTION
	60+69.43	---	1	POINT OF INTERSECTION
	67+76.04	---	1	POINT OF INTERSECTION
	355+15.91	4.17' LT	1	POINT OF INTERSECTION
	365+67.28	5.56' RT	1	POINT OF INTERSECTION
	PROJECT TOTAL		5	

SUBGRADE IMPROVEMENT DRAINAGE

LOCATION	310.0110 BASE AGGREGATE OPEN GRADED TON	612.0106 PIPE UNDERDRAIN 6-INCH LF	** 645.0111 GEOTEXTILE TYPE DF SCHEDULE A SY
UNDISTRIBUTED	110	1,500	670
PROJECT TOTAL	110	1,500	670

NOTE: TO BE USED AT LOW POINTS IN SUBGRADE IMPROVEMENT/EBS AREAS
** ADDITIONAL QUANTITY FOUND ELSEWHERE - DEEP MARSH EXCAVATION

WATER

ROADWAY	624.0100 MGAL
UNDISTRIBUTED	3,160
PROJECT TOTAL	3,160

ALL ITEMS CATEGORY 0010 UNLESS NOTED

3

RESTORATION ITEMS

ROADWAY	STATION		STATION	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0200 SEEDING TEMPORARY LB	630.0400 SEEDING NURSE CROP LB	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY	SPV.0085.01 SEED NO MOW FESCUE LB
STH 164	50+95	-	61+00	620	11,520	5,593	12.1	340	170	---	16	620	---
	61+00	-	76+00	---	20,590	8,080	20.3	590	300	---	---	---	---
	76+00	-	91+00	---	7,100	4,049	8.7	250	130	---	---	---	---
	91+00	-	106+00	---	15,840	8,652	16.7	480	240	---	---	---	---
	106+00	-	121+00	---	38,260	9,429	36.5	1,050	530	---	---	---	---
	121+00	-	136+00	---	9,840	6,988	10.8	310	160	---	---	---	---
	136+00	-	151+00	---	10,240	5,545	11.5	330	170	---	---	---	---
	151+00	-	166+00	85	8,385	4,915	9.8	280	140	---	2	85	---
	166+00	-	181+00	1,020	8,280	5,388	10.1	280	140	---	26	1,020	---
	181+00	-	196+00	---	18,330	15,231	19.2	550	280	---	---	---	---
	196+00	-	211+00	2,180	15,840	6,485	18.1	480	240	---	55	2,180	---
	211+00	-	226+00	1,610	10,180	8,563	12.3	330	170	---	40	1,610	---
	226+00	-	241+00	5,670	2,710	2,618	6.9	100	50	---	142	5,670	---
	241+00	-	256+00	4,190	12,950	4,224	15.1	360	180	9	76	3,030	55
	256+00	-	271+00	350	12,435	7,612	13.5	380	190	2	4	175	10
	271+00	-	286+00	1,470	9,030	5,569	11.2	300	150	---	37	1,470	---
	286+00	-	301+00	5,130	5,600	4,099	10.4	210	110	---	128	5,130	---
	301+00	-	316+00	1,560	7,210	5,449	9.3	240	120	---	39	1,560	---
	316+00	-	331+00	930	9,930	7,493	11.5	320	160	---	23	930	---
	331+00	-	346+00	25	10,305	6,368	11.7	340	170	---	1	25	---
	346+00	-	361+00	---	9,270	5,009	10.7	310	160	---	---	---	---
	361+00	-	376+00	---	7,210	3,714	8.8	260	130	---	---	---	---
	376+00	-	391+00	1,370	6,830	4,241	9.2	240	120	---	34	1,370	---
	391+00	-	406+00	---	9,790	5,286	11.2	320	160	---	---	---	---
	406+00	-	421+00	1,660	8,120	926	10.4	270	140	---	42	1,660	---
	421+00	-	436+00	80	10,610	8,689	12.0	350	180	---	2	80	---
	436+00	-	447+00	1,190	7,140	2,835	8.8	240	120	---	30	1,190	---
STH 164 SUBTOTAL				29,140	303,545	163,050	346.8	9,510	4,810	11	695	27,805	65

ALL ITEMS CATEGORY 0010 UNLESS NOTED

RESTORATION ITEMS

LOCATION	ROADWAY	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0200 SEEDING TEMPORARY LB	630.0400 SEEDING NURSE CROP LB	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY	SPV.0085.01 SEED NO MOW FESCUE LB
SIDE ROADS	SHADY LN SOUTH	---	1,740	1,740	1.8	60	30	---	---	---	---
	SHADY LN NORTH	---	4,820	4,820	5.4	160	80	---	---	---	---
	HANSON DR.	---	305	305	0.4	20	10	---	---	---	---
	UPLAND DR.	---	240	240	0.3	10	10	---	---	---	---
	MONCHES RD.	---	875	875	1.1	40	20	---	---	---	---
	WOODED HILLS	---	325	325	0.3	10	10	---	---	---	---
	ELMWOOD RD.	---	805	805	1.0	30	20	---	---	---	---
	TUCKWAY LN.	170	130	130	0.4	10	10	---	4	170	---
	CHEROKEE TR.	---	380	380	0.4	20	10	---	---	---	---
	ST. GABRIEL LN.	---	1,000	1,000	1.1	40	20	---	---	---	---
	HUBERTUS RD.	940	13,060	7,598	14.0	390	200	---	24	940	---
	GOLDEN DR.	690	330	330	0.7	10	10	---	17	690	---
	LOCHVIEW RD.	80	35	35	0.2	10	10	---	2	80	---
	ADA HI CT.	250	545	545	0.7	20	10	---	6	250	---
STH 167	158+75 - 173+00	1,980	7,780	7,109	9.2	230	120	4	39	1,540	20
STH 167	173+00 - 181+25	180	6,790	5,649	7.4	210	110	1	3	100	5
	GREYSTONE DR.	65	155	155	0.3	10	10	---	2	65	---
	PLEASANT HILL RD.	---	770	770	0.8	30	20	---	---	---	---
	MAJESTIC DR.	---	195	195	0.3	10	10	---	---	---	---
	PIONEER RD.	---	680	680	0.9	30	20	---	---	---	---
	CTH E	---	3,600	3,600	4.0	120	60	---	---	---	---
	CLUB DR.	---	605	605	0.6	20	10	---	---	---	---
	SIDE ROADS. SUBTOTAL	4,355	45,165	37,891	51.2	1,490	810	5	96	3,835	25
	WASTE SITE	---	---	---	---	---	4,010	---	---	---	---
UNDISTRIBUTED		10,050	87,180	50,240	100.0	2,750	2,410	4	119	4,750	25
	PROJECT TOTALS	43,545	435,890	251,181	498.0	13,750	12,040	20	910	36,390	115

ALL ITEMS CATEGORY 0010 UNLESS NOTED

SAWING

ROADWAY	STATION		STATION	SIDE	690.0150 ASPHALT LF	690.0250 CONCRETE LF
STH 164			50+95	LT/RT	35	---
	55+09	-	55+17	LT	10	---
	56+75	-	56+88	RT	15	---
	74+50	-	77+39	LT/RT	325	---
	86+60	-	94+41	RT	800	---
	91+09	-	98+00	LT/RT	730	---
	104+79	-	104+96	RT	20	---
	130+00	-	137+26	LT/RT	765	---
	131+37	-	138+72	LT	750	---
	139+74	-	147+55	RT	795	---
	144+22	-	151+02	LT	795	---
	153+31	-	161+23	RT	810	---
	155+43	-	161+73	LT	645	---
	160+54	-	160+66	RT	---	15
	162+30	-	170+15	RT	800	---
	164+26	-	172+70	LT	860	---
	172+26	-	172+37	RT	15	---
	172+56	-	174+05	LT	150	---
	175+53	-	175+70	LT	20	---
	178+41	-	178+50	LT	10	---
	179+25	-	179+37	RT	15	---
	179+33	-	179+43	LT	10	---
	180+89	-	183+50	LT/RT	415	---
	183+59	-	183+72	LT	15	---
	191+27	-	191+37	LT	15	---
	191+71	-	191+78	LT	15	---
	203+96	-	204+12	RT	20	---
	204+71	-	204+82	LT	---	15
			206+00	LT/RT	40	---
	206+83	-	206+98	LT	15	---
	208+68	-	208+83	LT	15	---
	210+03	-	210+15	RT	15	---
	214+68	-	214+80	LT	15	---
	218+27	-	218+39	LT	15	---
	219+03	-	219+13	LT	15	---
	223+59	-	223+77	LT	25	---
	225+39	-	225+57	LT	---	20
	226+34	-	237+00	LT/RT	1,900	---
	226+58	-	226+75	RT	---	20
	227+16	-	227+32	LT	20	---
	228+04	-	228+22	RT	20	---
	229+24	-	229+37	RT	15	----
	230+27	-	230+70	LT	---	65
	231+26	-	231+42	RT	20	---
	236+97	-	236+98	LT	20	---
	236+98	-	237+29	RT	35	---
	240+66	-	240+76	RT	15	---
	250+67	-	251+07	RT	40	---
	257+80	-	258+11	RT	35	---
	258+30	-	266+55	LT/RT	880	---
	276+93	-	277+04	RT	15	---
	277+76	-	277+97	RT	25	---
	278+09	-	286+01	RT	815	---
	280+21	-	286+51	LT	645	---
	282+96	-	283+11	RT	15	---
	284+61	-	284+73	RT	15	---
			290+12	LT/RT	40	---
	290+86	-	291+05	RT	20	---
	293+31	-	293+42	RT	---	15
	296+83	-	296+92	RT	10	---
SUBTOTAL					13,610	150

ALL ITEMS CATEGORY 0010 UNLESS NOTED

SAWING

ROADWAY	STATION		STATION	SIDE	690.0150 ASPHALT LF	690.0250 CONCRETE LF
	297+12	-	297+26	LT	15	---
	299+02	-	299+14	RT	15	---
	301+15	-	301+37	RT	25	---
	303+53	-	303+56	RT	---	5
	304+75	-	305+23	RT	---	60
	318+01	-	323+52	LT/RT	990	---
	328+63	-	328+79	LT	---	20
	329+33	-	329+72	LT	---	40
	329+73	-	329+83	LT	15	---
	354+33	-	362+14	RT	795	---
	358+70	-	366+52	LT	800	---
	367+83	-	367+97	LT	15	---
	375+79	-	376+07	LT	30	---
	390+81	-	390+90	RT	10	---
	394+18	-	394+27	RT	10	---
	400+17	-	426+12	RT	2,610	---
	401+65	-	401+81	LT	20	---
	403+71	-	403+84	RT	15	---
	405+96	-	406+10	LT	15	---
	411+26	-	422+73	LT	1,165	---
	415+83	-	415+98	RT	15	---
	416+01	-	416+12	RT	20	---
	418+29	-	418+50	LT	25	---
	419+94	-	420+12	RT	20	---
	420+29	-	420+44	RT	15	---
	435+74	-	435+93	LT	20	---
	436+48	-	436+58	RT	15	---
	439+46	-	439+57	LT	15	---
	441+92	-	442+01	RT	10	---
	443+69	-	443+88	RT	20	---
	444+62	-	444+78	RT	---	20
	445+45	-	445+73	RT	40	---
	446+61	-	447+00	LT/RT	115	---
	SUBTOTAL				6,875	145
SOUTH SHADY LN			12+40	LT/RT	25	---
	SOUTH SHADY LN SUBTOTAL				25	0
NORTH SHADY LN			17+80	LT/RT	25	---
	18+91	-	19+04	LT	15	---
	19+25	-	19+45	LT	20	---
	NORTH SHADY LN SUBTOTAL				60	0
HANSON DR			28+53	LT/RT	25	---
	HANSON DR SUBTOTAL				25	0
UPLAND DR			31+47	LT/RT	25	---
	UPLAND DR SUBTOTAL				25	0
MONCHES RD			38+30	LT/RT	25	---
			41+68	LT/RT	25	---
	MONCHES RD SUBTOTAL				50	0
WOODED HILLS			48+56	LT/RT	25	---
	WOODED HILLS SUBTOTAL				25	0
ELMWOOD RD			58+31	LT/RT	25	---
			61+69	LT/RT	25	---
	ELMWOOD RD SUBTOTAL				50	0

SAWING

ROADWAY	STATION		STATION	SIDE	690.0150 ASPHALT LF	690.0250 CONCRETE LF
TUCKAWAY LN	68+33	-	68+49	RT	20	---
	68+43	-	68+61	LT	20	---
			68+42	LT/RT	25	---
	TUCKAWAY LN SUBTOTAL				65	0
CHEROKEE TR			81+54	LT/RT	25	---
	CHEROKEE TR SUBTOTAL				25	0
ST GABRIEL LN	9289	-	93+23	LT/RT	60	---
	ST GABRIEL LN SUBTOTAL				60	0
HUBERTUS RD			103+28	LT/RT	35	---
	111+53	-	111+62	LT	10	---
	114+33	-	114+48	RT	15	---
			118+00	LT/RT	25	---
	HUBERTURS RD SUBTOTAL				85	0
GOLDEN DR			133+00	LT/RT	25	---
	GOLDEN DR SUBTOTAL				25	0
LOCKVIEW RD			138+52	LT/RT	25	---
	LOCHVIEW RD SUBTOTAL				25	0
ADA'HI CT			147+55	LT/RT	25	5
	148+61	-	148+70	RT	10	---
	ADA'HI CT SUBTOTAL				35	5
STH 167			158+75	LT/RT	30	---
	160+69	-	160+89	RT	---	20
	166+45	-	166+60	RT	15	---
	168+35	-	168+47	RT	---	15
	171+15	-	171+60	RT	45	---
	176+15	-	176+32	LT	25	---
			181+25	LT/RT	35	---
	STH 167 SUBTOTAL				150	35
GREYSTONE DR			188+52	LT/RT	25	---
	GREYSTONE DR SUBTOTAL				25	0
PLEASANT HILL RD			197+04	LT/RT	25	---
	197+85	-	198+01	LT	20	---
			200+40	LT/RT	40	3
	PLEASANT HILL RD SUBTOTAL				85	3
MAJESTIC DR			208+52	LT/RT	30	---
	MAJESTIC DR SUBTOTAL				30	0
PIONEER RD			218+36	LT/RT	25	---
			221+64	LT/RT	25	---
	PIONEER RD SUBTOTAL				50	0
CTH E			224+95	LT/RT	40	---
	CTH E SUBTOTAL				40	0
CLUB DR			241+44	LT/RT	25	---
	CLUB DR SUBTOTAL				25	0
	PROJECT TOTAL				21,470	338

3

SALVAGE AND REINSTALL CRUSHED LIMESTONE DRIVEWAY

ROADWAY	STATION			SIDE	SPV.0105.08 LS
STH 164	188+05	-	189+50	LT	1
	STH 164 SUBTOTAL				1
	PROJECT TOTAL				1

BRICK PAVERS

ROADWAY	STATION	SIDE	SPV.0165.02 REMOVE AND SALVAGE BRICK PAVERS SF	SPV.0165.03 INSTALL SALVAGED BRICK PAVERS SF
GOLDEN DR	131+67	LT	525	260
	PROJECT TOTAL		525	260

3

FENCE SPLIT RAIL THREE RAIL

ROADWAY	STATION		STATION	SIDE	SPV.0090.01 LF
HUBERTUS	114+53	-	115+50	RT	120
PROJECT TOTAL					120

ATR WAVETRONIX DETECTOR

CATEGORY 0040

ROADWAY	STATION	SIDE	LOCATION ID	654.0102 CONCRETE BASES TYPE 2 EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0310 POLES TYPE 3 EACH	SPV.0060.04 INSTALLING POLE MOUNTED WIRED CABINET EACH	SPV.0060.05 INSTALLING TWO SOLAR PANELS ON ONE BRACKET EACH	SPV.0060.06 INSTALLING WAVETRONIX DETECTOR MODULE EACH	SPV.0060.07 INSTALLING CONC MAINTENANCE PLATFORM EACH
STH 164	370+00	LT	ATR 660289	1	1	1	1	1	1	1
	STH 164 SUBTOTAL			1	1	1	1	1	1	1
	PROJECT TOTAL			1	1	1	1	1	1	1

NOTE: DEPARTMENT WILL PROVIDE THE FOLLOWING ITEMS:
CCTV MOUNTED WIRED ATR CABINET
WAVETRONIX HD-126 UNIT & 40' CABLE
WIRE AND HARDWARE NEEDED FOR INSTALLATION

ALL ITEMS CATEGORY 0010 UNLESS NOTED

STORM SEWER STRUCTURES										STORM SEWER PIPES									
ROADWAY	STRUCTURE NO.	STATION	OFFSET (FT)	LOCATION	RIM OR FLOW ELEV	STRUCTURE TYPE	INLET/MANHOLE COVERS TYPE	DEPTH[1] (FT)	STRUCTURE COMMENTS	PIPE ID	FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE[A] %	PIPE LENGTH[B] (FT)	PIPE LENGTH[C] (FT)	PIPE CLASS	PIPE SIZE (INCH)	PIPE COMMENTS
STH 164	H105	65+00.00	43.6	RT	1022.16	INLETS MEDIAN 2 GRATE	MS	4.00	---	P106	H105	H107	1018.16	1018.10	0.50	13	17	IV	24	---
STH 164	H107	65+00.00	27.1	RT	1023.92	MANHOLES 5-FT DIAMETER	J	5.82	---	P108	H107	H113	1018.10	1016.62	0.50	297	301	IIIA	24	---
STH 164	H109	62+00.00	22.0	LT	1022.74	INLETS 2X3-FT	HM	4.69	---	P110	H109	H111	1018.05	1017.65	1.00	40	42	III	12	---
STH 164	H111	61+99.05	22.0	RT	1022.73	INLETS 2X3-FT	HM	5.08	---	P112	H111	H113	1017.65	1017.62	1.00	3	6	III	12	---
STH 164	H113	61+98.72	27.1	RT	1023.22	MANHOLES 4-FT DIAMETER	J	6.60	---	P114	H113	H117	1016.62	1013.57	1.25	244	248	IIIA	24	---
STH 164	H115	59+50.01	39.0	RT	1019.18	INLETS MEDIAN 2 GRATE	MS	4.26	---	P116	H115	H117	1014.92	1014.88	0.50	8	12	IV	18	---
STH 164	H117	59+50.00	26.9	RT	1019.94	MANHOLES 5-FT DIAMETER	J	6.98	---	P118	H117	H119	1012.96	1012.94	1.00	2	7	IIIA	24	---
STH 164	H119	59+500.00	22.0	RT	1019.46	INLETS 4-FT DIAMETER	S	6.52	---	P120	H119	H123	1012.94	1012.58	1.00	36	40	III	24	---
STH 164	H121	59+49.99	39.0	LT	1019.18	INLETS MEDIAN 2 GRATE	MS	5.13	---	P122	H121	H125	1014.05	1014.01	0.50	8	12	IIIA	18	---
STH 164	H123	59+50.00	22.0	LT	1019.45	INLETS 4-FT DIAMETER	HM	6.87	---	P124	H123	H125	1012.58	1012.55	1.00	3	7	IIIA	24	---
STH 164	H125	59+50.00	27.0	LT	1019.94	MANHOLES 5-FT DIAMETER	J	7.39	---	P126	H125	H131	1012.55	1012.03	1.00	52	57	IIIA	24	---
SHADY LANE	H127	12+42.45	19.2	RT	1016.80	INLETS MEDIAN 2 GRATE	MS	3.91	---	P128	H127	H129	1012.89	1012.75	0.50	28	31	IV	24	---
SHADY LANE	H129	12+10.17	19.4	RT	1018.00	INLETS 4-FT DIAMETER	HM	5.25	---	P130	H129	H131	1012.75	1012.03	0.50	143	148	IV	24	---
STH 164	H131	58+93.33	27.0	LT	1018.81	MANHOLES 6-FT DIAMETER	J	6.78	---	P132	H131	H132A	1012.03	1011.00	1.00	95	98	III	24	---
STH 164	H150	67+50.00	40.2	RT	1021.57	INLETS MEDIAN 2 GRATE	MS	3.58	---	P151	H150	H152	1017.99	1017.93	0.50	12	14	IV	15	---
STH 164	H152	67+50.00	27.2	RT	1021.17	INLETS 2X3-FT	HM	5.25	---	P153	H152	H154	1015.92	1015.70	0.50	45	47	III	15	---
STH 164	H154	67+50.00	22.0	LT	1021.27	INLETS 2X3-FT	HM	5.57	---	P155	H154	H156	1015.70	1015.66	1.50	3	6	IIIA	15	---
STH 164	H156	67+50.00	27.0	LT	1021.72	MANHOLES 4-FT DIAMETER	J	6.06	---	P157	H156	H157A	1015.66	1014.64	1.50	68	70	IV	15	---
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---	---	---	---	---	---	---	---	---	---	P181	H181A	H182	1103.37	1101.85	2.00	76	78	IV	18	---
STH 164	H182	123+13.25	35.5	RT	1105.34	MANHOLES 4-FT DIAMETER	J	6.55	---	P183	H182	H184	1098.79	1098.50	0.50	58	62	III	18	---
STH 164	H184	123+13.56	27.0	LT	1104.50	MANHOLES 4-FT DIAMETER	J	10.33	---	P185	H184	H190	1094.17	1088.00	2.00	309	314	IIIA	24	---
STH 164	H186	119+99.97	22.0	RT	1092.87	INLETS 2X3-FT	HM	5.74	---	P187	H186	H188	1087.13	1086.93	0.50	40	42	III	15	---
STH 164	H188	120+00.00	22.0	LT	1092.87	INLETS 2X3-FT	HM	5.94	---	P189	H188	H190	1086.93	1086.92	0.50	3	6	IIIA	15	---
STH 164	H190	119+99.97	27.0	LT	1093.20	MANHOLES 5-FT DIAMETER	J	11.30	---	P191	H190	H196	1081.90	1076.00	2.00	295	300	IIIA	24	---
STH 164	H192	117+00.05	22.0	RT	1080.87	INLETS 2X3-FT	HM	5.74	---	P193	H192	H194	1075.13	1074.93	0.50	40	42	III	15	---
STH 164	H194	117+00.00	22.0	LT	1080.87	INLETS 2X3-FT	HM	5.94	---	P195	H194	H196	1074.93	1074.92	0.50	3	6	IIIA	15	---
STH 164	H196	117+00.04	27.0	LT	1081.36	MANHOLES 5-FT DIAMETER	J	10.46	---	P197	H196	H202	1070.90	1065.00	2.00	295	300	IIIA	24	---
STH 164	H198	114+00.06	22.0	RT	1068.87	INLETS 2X3-FT	HM	5.74	---	P199	H198	H200	1063.13	1062.93	0.50	40	42	III	15	---

[1]DEPTH = RIM OR FLOW ELEV - LOWEST PIPE INVERT ELEVATION.

[A] SLOPE CALCULATED BASED ON PIPE LENGTH. PIPE LENGTH REPRESENTS LENGTH OF PIPE MEASURED FROM INSIDE FACE OF STRUCTURE TO INSIDE FACE OF STRUCTURE

[B]PIPE LENGTH SHOWN FOR SLOPE CALCULATION ONLY. NOT INTENDED FOR PAY QUANTITY.

[C]PLAN LENGTH SHOWN FOR PAY QUANTITY.

ALL ITEMS CATEGORY 0010

STORM SEWER STRUCTURES										STORM SEWER PIPES										
ROADWAY	STRUCTURE NO.	STATION	OFFSET (FT)	LOCATION	RIM OR FLOW ELEV	STRUCTURE TYPE	INLET/MANHOLE COVERS TYPE	DEPTH[1] (FT)	STRUCTURE COMMENTS	PIPE ID	FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE[A] %	PIPE LENGTH[B] (FT)	PLAN LENGTH[C] (FT)	PIPE CLASS	PIPE SIZE (INCH)	PIPE COMMENTS
STH 164	H200	114+00.01	22.0	LT	1068.87	INLETS 2X3-FT	HM	5.94	---	P201	H200	H202	1062.93	1062.92	0.50	2	6	IIIA	15	---
STH 164	H202	113+99.99	27.0	LT	1069.36	MANHOLES 5-FT DIAMETER	J	11.46	---	P203	H202	H208	1057.90	1052.00	2.00	295	300	IIIA	24	---
STH 164	H204	111+00.01	22.0	RT	1056.87	INLETS 2X3-FT	HM	5.74	---	P205	H204	H206	1051.13	1050.93	0.50	40	42	III	15	---
STH 164	H206	111+00.02	22.0	LT	1056.87	INLETS 2X3-FT	HM	5.94	---	P207	H206	H208	1050.93	1050.92	0.50	2	6	IIIA	15	---
STH 164	H208	111+00.06	27.0	LT	1057.36	MANHOLES 5-FT DIAMETER	J	9.96	---	P209	H208	H216	1047.40	1043.39	2.00	195	200	IIIA	24	---
STH 164	H210	109+00.00	39.0	RT	1048.60	INLETS MEDIAN 2 GRATE	MS	7.01	---	P211	H210	H212	1041.59	1041.51	0.50	16	18	IIIA	24	---
STH 164	H212	109+00.00	22.0	RT	1048.87	INLETS 2X3-FT	HM	7.36	---	P213	H212	H214	1041.51	1041.31	0.50	40	42	III	24	---
STH 164	H214	109+00.00	22.0	LT	1048.87	INLETS 2X3-FT	HM	7.56	---	P215	H214	H216	1041.31	1041.29	0.50	3	7	IIIA	24	---
STH 164	H216	109+0.00	27.9	LT	1049.40	MANHOLES 5-FT DIAMETER	J	11.24	---	P217	H216	H224	1038.16	1032.26	2.00	295	300	IIIA	24	---
STH 164	H218	106+06.50	22.0	RT	1037.13	INLETS 2X3-FT	HM	5.56	---	P219	H218	H220	1031.57	1031.17	1.00	40	43	III	15	---
STH 164	H220	106+00.00	22.0	LT	1036.87	INLETS 2X3-FT	HM	5.70	---	P221	H220	H224	1031.17	1031.15	1.00	2	6	III	15	---
STH 164	H222	106+00.00	39.0	LT	1036.60	INLETS MEDIAN 2 GRATE	MS	6.03	---	P223	H222	H224	1030.57	1030.53	0.50	8	12	IV	24	---
STH 164	H224	106+00.00	27.0	LT	1037.36	MANHOLES 5-FT DIAMETER	J	8.00	---	P225	H224	H228	1029.36	1027.19	2.00	109	114	IIIA	24	---
STH 164	H226	104+86.65	22.0	LT	1032.33	INLETS 2X3-FT	HM	4.49	---	P227	H226	H228	1027.84	1027.81	0.50	6	9	IV	15	---
STH 164	H228	104+86.50	30.0	LT	1032.94	MANHOLES 5-FT DIAMETER	J	6.38	---	P229	H228	H229A	1026.56	1026.43	0.50	25	28	IV	30	---
STH 164	---	---	---	---	---	---	---	---	---	P244	H244A	H246	1152.35	1151.20	1.50	74	77	IV	24	---
STH 164	---	---	---	---	---	---	---	---	---	P245	H245A	H246	1152.90	1152.70	1.00	17	20	IV	24	---
STH 164	H246	168+09.00	51.0	RT	1157.13	MANHOLES 5-FT DIAMETER	J	5.93	---	P247	H246	H250	1151.20	1149.93	1.50	85	90	IIIA	24	---
STH 164	H248	167+20.56	30.0	RT	1154.50	INLETS 2X3-FT	HM	3.50	---	P249	H248	H250	1151.00	1150.93	0.50	14	17	IV	12	---
STH 164	H250	167+19.40	46.0	RT	1154.89	MANHOLES 5-FT DIAMETER	J	4.96	---	P251	H250	H251A	1149.93	1148.11	1.50	121	124	IV	24	---
STH 164	---	---	---	---	---	---	---	---	---	P261	H261A	H262	1129.93	1127.83	5.00	40	42	IV	24	---
HUBERTUS ROAD	H262	116+00.00	24.5	RT	1131.33	MANHOLES 4-FT DIAMETER	J	5.86	---	P263	H262	H264	1125.47	1115.71	5.00	195	200	IV	24	---
HUBERTUS ROAD	H264	114+00.00	27.5	RT	1120.09	MANHOLES 5-FT DIAMETER	J	4.38	---	P265	H264	H265A	1115.71	1114.68	4.00	26	28	IV	24	---
STH 164	H280	228+30.35	30.0	RT	1079.97	INLETS 2X3-FT	HM	4.97	---	P281	H280	H282	1075.00	1074.97	0.50	6	9	III	15	---
STH 164	H282	228+30.55	38.0	RT	1080.59	MANHOLES 5-FT DIAMETER	J	5.92	---	P283	H282	H286	1074.67	1071.94	2.00	137	142	III	24	---
STH 164	H284	226+89.41	22.0	RT	1078.06	INLETS 2X3-FT	HM	5.06	---	P285	H284	H286	1073.00	1072.99	0.50	2	6	III	12	---
STH 164	H286	226+89.32	26.9	RT	1078.54	MANHOLES 5-FT DIAMETER	J	6.60	---	P287	H286	H290	1071.94	1064.99	2.50	278	283	IIIA	24	---
STH 164	H288	224+06.36	22.0	RT	1069.62	INLETS 2X3-FT	HM	4.62	---	P289	H288	H290	1065.00	1064.99	0.50	2	6	IV	24	---
STH 164	H290	224+06.20	27.0	RT	1070.11	MANHOLES 5-FT DIAMETER	J	5.12	---	P291	H290	H291A	1064.99	1064.76	1.00	23	26	IV	24	---

[1]DEPTH = RIM OR FLOW ELEV - LOWEST PIPE INVERT ELEVATION.

[A] SLOPE CALCULATED BASED ON PIPE LENGTH. PIPE LENGTH REPRESENTS LENGTH OF PIPE MEASURED FROM INSIDE FACE OF STRUCTURE TO INSIDE FACE OF STRUCTURE

[B]PIPE LENGTH SHOWN FOR SLOPE CALCULATION ONLY. NOT INTENDED FOR PAY QUANTITY.

[C]PLAN LENGTH SHOWN FOR PAY QUANTITY.

ALL ITEMS CATEGORY 0010

STORM SEWER STRUCTURES										STORM SEWER PIPES										
ROADWAY	STRUCTURE NO.	STATION	OFFSET (FT)	LOCATION	RIM OR FLOW ELEV	STRUCTURE TYPE	INLET/MANHOLE COVERS TYPE	DEPTH[1] (FT)	STRUCTURE COMMENTS	PIPE ID	FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE[A] %	PIPE LENGTH[B] (FT)	PLAN LENGTH[C] (FT)	PIPE CLASS	PIPE SIZE (INCH)	PIPE COMMENTS
GOLDEN DRIVE	H300	133+04.73	19.6	RT	1093.19	INLETS MEDIAN 2 GRATE	MS	3.19	---	P301	H300	H302	1090.00	1089.96	0.50	9	13	IV	24	---
GOLDEN DRIVE	H302	132+92.14	19.0	RT	1093.71	MANHOLES 5-FT DIAMETER	J	5.99	---	P303	H302	H306	1087.72	1087.36	1.00	36	41	III	24	---
GOLDEN DRIVE	H304	133+03.24	22.5	LT	1093.34	INLETS MEDIAN 2 GRATE	MS	3.34	---	P305	H304	H306	1090.00	1089.95	0.50	12	15	IV	24	---
GOLDEN DRIVE	H306	132+87.80	21.5	LT	1093.37	MANHOLES 5-FT DIAMETER	J	6.01	---	P307	H306	H312	1087.36	1075.80	5.00	231	236	IV	24	---
STH 164	H308	231+97.27	39.6	RT	1079.71	INLETS 4-FT DIAMETER	HM	3.25	---	P309	H308	H310	1076.46	1076.42	0.50	8	12	IV	15	---
STH 164	H310	232+06.28	47.0	RT	1079.45	INLETS 4-FT DIAMETER	HM	3.03	---	P311	H310	H312	1076.42	1076.19	0.50	46	51	IV	15	---
STH 164	H312	232+60.52	52.6	RT	1080.11	MANHOLES 5-FT DIAMETER	HM	4.67	---	P313	H312	H314	1075.44	1075.40	0.35	10	15	IV	24	---
STH 164	H314	232+68.37	41.1	RT	1079.55	INLETS 4-FT DIAMETER	HM	4.15	---	P315	H314	H320	1075.40	1074.43	0.35	279	283	IV	24	---
STH 164	H316	235+49.99	47.4	RT	1077.70	INLETS MEDIAN 2 GRATE	MS	2.71	---	P317	H316	H320	1074.99	1074.93	0.50	11	15	IV	18	---
STH 164	H318	235+49.95	27.4	RT	1078.33	INLETS 2X3-FT	HM	3.14	---	P319	H318	H320	1075.19	1075.16	1.00	3	6	IV	15	---
STH 164	H320	235+49.96	32.4	RT	1078.82	MANHOLES 5-FT DIAMETER	J	4.89	---	P321	H320	H324	1073.93	1073.60	0.35	95	100	IV	30	---
STH 164	H322	236+50.03	23.7	RT	1078.50	INLETS 2X3-FT	HM	3.61	---	P323	H322	H324	1074.89	1074.85	1.00	4	8	IV	15	---
STH 164	H324	236+50.07	31.0	RT	1079.09	MANHOLES 6-FT DIAMETER	J	5.49	---	P325	H324	H328	1073.60	1073.46	0.35	40	46	IIIA	30	---
STH 164	H326	236+96.10	22.0	RT	1078.49	INLETS 2X3-FT	HM	3.72	---	P327	H326	H328	1074.77	1074.71	1.00	6	9	IV	15	---
STH 164	H328	236+95.67	30.4	RT	1079.12	MANHOLES 5-FT DIAMETER	J	5.66	---	P329	H328	H331	1073.46	1072.90	0.35	159	165	IIIA	30	---
STH 164	---	---	---	---	---	---	---	---	---	P330	H330A	H331	1073.51	1073.41	1.00	11	14	IV	42	---
STH 164	H331	238+60.84	28.0	RT	1079.84	MANHOLES 7-FT DIAMETER	J	7.94	---	P332	H331	H333	1071.90	1071.87	1.00	3	9	IV	42	---
STH 164	H333	238+60.85	22.0	RT	1079.31	MANHOLES 6-FT DIAMETER	HM	7.44	---	P334	H333	H334A	1071.87	1071.33	1.00	54	57	III	42	---
STH 164	H348	241+86.79	35.0	LT	1079.58	INLETS 4-FT DIAMETER	HM	5.01	UNDERDRAIN CONNECTION	P349	H348	H354	1074.57	1074.54	0.50	7	11	IV	24	---
STH 164	H350	243+82.87	28.9	RT	1076.17	INLETS 2X3-FT	HM	5.00	---	P351	H350	H352	1071.17	1070.89	0.50	55	57	III	15	---
STH 164	H352	243+79.93	30.1	LT	1076.27	INLETS 2X3-FT	HM	5.38	---	P353	H352	H356	1070.89	1070.86	0.50	7	10	III	15	---
STH 164	H354	241+95.75	41.1	LT	1079.29	INLETS 4-FT DIAMETER	HM	4.75	UNDERDRAIN CONNECTION	P355	H354	H356	1074.54	1070.08	2.50	179	183	IV	24	---
STH 164	H356	243+79.16	39.1	LT	1076.92	MANHOLES 5-FT DIAMETER	J	6.84	---	P357	H356	H362	1070.08	1065.22	2.50	195	200	IV	24	---
STH 164	H358	245+79.33	25.7	RT	1068.02	INLETS 2X3-FT	HM	5.00	---	P359	H358	H360	1063.02	1062.77	0.50	51	53	III	15	---
STH 164	H360	245+78.69	29.2	LT	1067.97	INLETS 2X3-FT	HM	5.20	---	P361	H360	H362	1062.77	1062.72	0.50	10	14	III	15	---

[1]DEPTH = RIM OR FLOW ELEV - LOWEST PIPE INVERT ELEVATION.

[A] SLOPE CALCULATED BASED ON PIPE LENGTH. PIPE LENGTH REPRESENTS LENGTH OF PIPE MEASURED FROM INSIDE FACE OF STRUCTURE TO INSIDE FACE OF STRUCTURE

[B]PIPE LENGTH SHOWN FOR SLOPE CALCULATION ONLY. NOT INTENDED FOR PAY QUANTITY.

[C]PLAN LENGTH SHOWN FOR PAY QUANTITY.

ALL ITEMS CATEGORY 0010

STORM SEWER STRUCTURES										STORM SEWER PIPES										
ROADWAY	STRUCTURE NO.	STATION	OFFSET (FT)	LOCATION	RIM OR FLOW ELEV	STRUCTURE TYPE	INLET/MANHOLE COVERS TYPE	DEPTH[1] (FT)	STRUCTURE COMMENTS	PIPE ID	FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE[A] %	PIPE LENGTH[B] (FT)	PLAN LENGTH[C] (FT)	PIPE CLASS	PIPE SIZE (INCH)	PIPE COMMENTS
STH 164	H362	245+78.70	42.0	LT	1069.41	MANHOLES 5-FT DIAMETER	J	9.89	---	P363	H362	H368	1059.52	1051.73	4.00	195	200	IIIA	24	---
STH 164	H364	247+79.38	32.0	RT	1058.06	INLETS 2X3-FT	HM	5.00	---	P365	H364	H366	1053.06	1052.73	0.50	65	67	III	15	---
STH 164	H366	247+78.66	37.4	LT	1057.93	INLETS 2X3-FT	HM	5.20	---	P367	H366	H368	1052.73	1052.72	0.50	3	6	III	15	---
STH 164	H368	247+78.56	42.4	LT	1058.42	MANHOLES 5-FT DIAMETER	J	6.69	---	P369	H368	H378	1051.73	1043.58	4.00	204	208	IIIA	24	---
STH 164	H370	249+63.07	21.4	RT	1049.49	INLETS 4-FT DIAMETER	HM	4.73	---	P371	H370	H372	1044.76	1044.62	0.50	28	32	IV	15	---
STH 164	H372	249+85.44	5.8	LT	1048.96	INLETS 4-FT DIAMETER	HM	4.34	---	P373	H372	H374	1044.62	1044.54	0.50	15	18	IV	15	---
STH 164	H374	249+84.97	21.0	LT	1048.98	INLETS 2X3-FT	HM	4.44	---	P375	H374	H376	1044.54	1044.43	0.50	22	24	IV	15	---
STH 164	H376	249+83.95	47.0	LT	1048.68	INLETS 2X3-FT	HM	4.25	---	P377	H376	H378	1044.43	1044.33	0.50	19	22	IV	15	---
STH 164	H378	249+85.30	68.2	LT	1050.00	MANHOLES 4-FT DIAMETER	J	6.42	---	P379	H378	H388	1043.58	1039.42	3.00	139	143	IIIA	24	---
STH 164	H380	251+28.29	11.3	RT	1045.03	INLETS 4-FT DIAMETER	HM	4.49	---	P381	H380	H382	1040.54	1040.46	0.50	16	20	IV	15	---
STH 164	H382	251+29.56	11.9	LT	1045.36	INLETS 4-FT DIAMETER	H	4.90	---	P383	H382	H384	1040.46	1040.38	0.50	15	19	III	15	---
STH 164	H384	251+35.56	28.2	RT	1045.25	INLETS 4-FT DIAMETER	H	4.87	---	P385	H384	H386	1040.38	1040.22	0.50	32	36	IV	15	---
STH 164	H386	251+27.71	65.0	LT	1044.92	INLETS 4-FT DIAMETER	HM	4.70	---	P387	H386	H388	1040.22	1040.11	0.50	23	27	IV	15	---
STH 164	H388	251+26.89	90.2	LT	1045.76	MANHOLES 5-FT DIAMETER	J	6.34	---	P389	H388	H402	1039.42	1038.04	3.25	43	48	IIIA	24	---
STH 167	H390	166+06.33	10.9	RT	1045.08	INLETS 2X3-FT	HM	3.77	---	P391	H390	H392	1041.31	1041.25	1.00	6	9	IV	15	---
STH 167	H392	166+06.34	18.6	RT	1045.83	MANHOLES 4-FT DIAMETER	J	4.83	---	P393	H392	H396	1041.00	1039.77	1.00	123	127	IIIA	18	---
STH 167	H394	167+32.55	0.2	RT	1043.89	INLETS 2X3-FT	HM	3.78	---	P395	H394	H396	1040.11	1040.03	1.00	8	11	IV	15	---
STH 167	H396	167+33.04	10.4	RT	1044.84	MANHOLES 4-FT DIAMETER	J	5.07	---	P397	H396	H400	1039.77	1038.82	1.00	95	99	IIIA	18	---
STH 167	H398	168+25.84	12.5	LT	1042.84	INLETS 2X3-FT	HM	4.72	UNDERDRAIN CONNECTION	P399	H398	H400	1038.12	1037.92	1.00	20	23	IV	15	---
STH 167	H400	168+32.04	8.7	RT	1043.73	MANHOLES 5-FT DIAMETER	C	6.06	---	P401	H400	H402	1037.67	1037.46	0.50	41	46	IIIA	18	---
STH 167	H402	168+78.09	11.9	RT	1044.37	MANHOLES 5-FT DIAMETER	C	7.41	---	P403	H402	H404	1036.96	1036.78	1.00	18	22	III	24	---
STH 167	H404	168+84.52	7.2	LT	1043.45	INLETS 4-FT DIAMETER	HM	6.67	---	P405	H404	H416	1036.78	1036.53	1.00	25	29	III	24	---
STH 167	H406	167+32.06	23.8	LT	1043.50	INLETS 2X3-FT	HM	3.81	---	P407	H406	H408	1039.69	1039.67	0.50	4	7	IV	15	---
STH 167	H408	167+31.66	30.3	LT	1043.45	MANHOLES 4-FT DIAMETER	J	3.78	---	P409	H408	H414	1039.67	1039.35	0.50	64	68	IV	15	---
STH 167	H410	167+99.95	41.4	LT	1042.80	INLETS 2X3-FT	H	3.63	---	P411	H410	H414	1039.17	1039.14	1.00	3	6	IV	15	---
STH 167	H412	167+99.83	30.6	LT	1043.17	INLETS 2X3-FT	H	4.00	---	P413	H412	H414	1039.17	1039.14	1.00	3	6	IV	15	---
STH 167	H414	168+99.90	35.9	LT	1043.40	MANHOLES 4-FT DIAMETER	J	4.76	---	P415	H414	H416	1038.64	1038.19	0.50	90	94	IV	18	---

[1]DEPTH = RIM OR FLOW ELEV - LOWEST PIPE INVERT ELEVATION.

[A] SLOPE CALCULATED BASED ON PIPE LENGTH. PIPE LENGTH REPRESENTS LENGTH OF PIPE MEASURED FROM INSIDE FACE OF STRUCTURE TO INSIDE FACE OF STRUCTURE

[B]PIPE LENGTH SHOWN FOR SLOPE CALCULATION ONLY. NOT INTENDED FOR PAY QUANTITY.

[C]PLAN LENGTH SHOWN FOR PAY QUANTITY.

ALL ITEMS CATEGORY 0010

STORM SEWER STRUCTURES										STORM SEWER PIPES										
ROADWAY	STRUCTURE NO.	STATION	OFFSET (FT)	LOCATION	RIM OR FLOW ELEV	STRUCTURE TYPE	INLET/MANHOLE COVERS TYPE	DEPTH[1] (FT)	STRUCTURE COMMENTS	PIPE ID	FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE[A] %	PIPE LENGTH[B] (FT)	PLAN LENGTH[C] (FT)	PIPE CLASS	PIPE SIZE (INCH)	PIPE COMMENTS
STH 167	H416	168+94.33	36.7	LT	1043.90	MANHOLES 5-FT DIAMETER	J	7.37	---	P417	H416	H430	1036.53	1035.72	1.00	81	86	III	24	---
STH 164	H418	252+56.55	17.4	LT	1042.32	INLETS 4-FT DIAMETER	T	4.50	UNDERDRAIN CONNECTION	P419	H418	H420	1037.82	1037.79	1.00	3	7	IV	15	---
STH 164	H420	252+56.84	23.4	LT	1042.26	INLETS 4-FT DIAMETER	T	4.47	UNDERDRAIN CONNECTION	P421	H420	H422	1037.79	1037.65	1.00	14	18	IV	15	---
STH 164	H422	252+78.44	21.4	LT	1042.38	INLETS 4-FT DIAMETER	H	4.73	---	P423	H422	H426	1037.65	1037.51	1.00	14	18	IV	15	---
STH 164	H424	252+94.30	20.2	RT	1041.99	INLETS 4-FT DIAMETER	HM	4.59	---	P425	H424	H426	1037.40	1037.10	1.00	30	34	IV	15	---
STH 164	H426	252+94.12	16.2	LT	1042.50	MANHOLES 4-FT DIAMETER	J	5.65	---	P427	H426	H428	1036.85	1036.58	1.00	27	31	III	18	---
STH 164	H428	252+93.95	49.2	LT	1042.05	INLETS 4-FT DIAMETER	HM	5.47	---	P429	H428	H430	1036.58	1036.30	1.00	28	33	III	18	---
STH 167	H430	169+21.13	118.4	LT	1040.08	MANHOLES 5-FT DIAMETER	J	12.45	---	P431	H430	H431A	1027.63	1027.23	0.50	79	81	IV	24	---
STH 167	H450	170+68.23	30.8	RT	1044.65	INLETS MEDIAN 2 GRATE	MS	6.35	---	P451	H450	H454	1038.30	1038.12	1.00	19	23	III	24	---
STH 167	H452	171+08.17	1.0	RT	1044.40	INLETS 4-FT DIAMETER	HM	5.99	---	P453	H452	H454	1038.41	1038.21	0.50	39	44	III	24	---
STH 167	H454	170+65.80	10.8	RT	1043.99	MANHOLES 5-FT DIAMETER	HM	5.87	UNDERDRAIN CONNECTION	P455	H454	H456	1038.12	1038.02	0.50	20	24	III	24	---
STH 167	H456	170+53.35	14.6	LT	1044.05	INLETS 4-FT DIAMETER	H	6.03	---	P457	H456	H458	1038.02	1037.80	1.00	22	26	III	24	---
STH 167	H458	170+53.74	37.2	LT	1043.70	INLETS 4-FT DIAMETER	H	5.90	---	P459	H458	H460	1037.80	1037.45	1.00	35	39	III	24	---
STH 167	H460	170+93.45	48.2	LT	1043.71	MANHOLES 5-FT DIAMETER	HM	6.26	---	P461	H460	H471	1037.45	1037.22	1.00	23	29	III	24	---
STH 167	---	---	---	---	---	---	---	---	---	P462	H462A	H463	1048.40	1043.00	2.40	221	224	III	30	---
STH 167	H463	172+56.64	16.3	RT	1048.29	MANHOLES 6-FT DIAMETER	C	8.09	---	P464	H463	H465	1040.20	1040.04	1.00	16	22	III	30	---
STH 167	H465	172+56.40	3.0	LT	1046.36	MANHOLES 5-FT DIAMETER	HM	6.32	---	P466	H465	H467	1040.04	1039.53	1.00	51	56	III	30	---
STH 167	H467	172+55.64	63.8	LT	1046.09	MANHOLES 5-FT DIAMETER	HM	6.56	---	P468	H467	H469	1039.53	1039.43	1.00	10	15	III	30	---
STH 167	H469	172+55.48	76.6	LT	1044.84	MANHOLES 6-FT DIAMETER	J	8.84	---	P470	H469	H471	1036.00	1034.47	1.00	153	159	IIIA	30	---
STH 167	H471	170+96.69	74.2	LT	1041.98	MANHOLES 6-FT DIAMETER	J	9.54	---	P472	H471	H472A	1032.44	1032.02	2.00	21	24	III	30	---
STH 167	H473	167+99.91	65.5	LT	1042.45	INLETS 2X3-FT	HM	6.35	UNDERDRAIN CONNECTION	P474	H473	H474A	1036.10	1036.00	0.50	21	22	III	18	---
STH 164	H475	255+26.20	13.0	LT	1035.40	INLETS 2X3-FT	HM	5.81	---	P476	H475	H477	1029.59	1029.40	1.00	19	21	III	18	---
STH 164	H477	255+26.10	32.2	LT	1035.06	INLETS 2X3-FT	HM	5.66	---	P478	H477	H479	1029.40	1029.22	1.00	18	21	III	18	---
STH 164	H479	255+25.98	56.2	LT	1034.69	INLETS 4-FT DIAMETER	HM	5.47	---	P480	H479	H480A	1029.22	1028.95	1.00	27	29	III	18	---

[1]DEPTH = RIM OR FLOW ELEV - LOWEST PIPE INVERT ELEVATION.

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[B]PIPE LENGTH SHOWN FOR SLOPE CALCULATION ONLY. NOT INTENDED FOR PAY QUANTITY.

[C]PLAN LENGTH SHOWN FOR PAY QUANTITY.

ALL ITEMS CATEGORY 0010

STORM SEWER STRUCTURES										STORM SEWER PIPES										
ROADWAY	STRUCTURE NO.	STATION	OFFSET (FT)	LOCATION	RIM OR FLOW ELEV	STRUCTURE TYPE	INLET/MANHOLE COVERS TYPE	DEPTH[1] (FT)	STRUCTURE COMMENTS	PIPE ID	FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE[A] %	PIPE LENGTH[B] (FT)	PIPE LENGTH[C] (FT)	PIPE CLASS	PIPE SIZE (INCH)	PIPE COMMENTS
STH 164	H481	257+43.54	7.5	LT	1025.18	INLETS 2X3-FT	HM	4.18	---	P482	H481	H483	1021.00	1020.97	0.50	6	9	IV	15	---
STH 164	H483	257+43.96	13.9	LT	1025.09	INLETS 4-FT DIAMETER	HM	4.12	---	P484	H483	H486	1020.97	1020.79	1.00	18	22	IV	15	---
STH 164	---	---	---	---	---	---	---	---	---	P485	H485A	H486	1017.14	1016.59	1.00	53	56	III	42	---
STH 164	H486	257+66.02	12.6	LT	1024.13	MANHOLES 5-FT DIAMETER	J	9.96	---	P487	H486	H487A	1014.17	1013.68	1.00	49	51	III	42	---
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STH 164	H503	304+92.88	13.6	RT	1019.28	MANHOLES 4-FT DIAMETER	J	4.33	---	P504	H503	H505	1014.95	1014.93	0.50	4	8	IV	24	---
STH 164	H505	304+88.58	8.9	RT	1018.78	INLETS 4-FT DIAMETER	HM	3.85	---	P506	H505	H507	1014.93	1014.70	0.30	76	80	IV	24	---
STH 164	H507	304+87.83	74.4	LT	1018.68	INLETS 4-FT DIAMETER	HM	3.98	---	P508	H507	H508A	1014.70	1014.48	0.30	75	77	IV	24	---
STH 164	---	---	---	---	---	---	---	---	---	P509	H509A	H510	1016.23	1016.03	0.30	67	69	III	24	---
STH 164	H510	324+25.00	30.0	RT	1021.43	MANHOLES 4-FT DIAMETER	J	5.40	---	P511	H510	H512	1016.03	1015.67	0.30	121	125	IIIA	24	---
STH 164	H512	325+50.00	30.0	RT	1021.31	MANHOLES 4-FT DIAMETER	J	5.64	---	P513	H512	H513A	1015.67	1015.55	0.30	41	43	III	24	---
STH 164	---	---	---	---	---	---	---	---	---	P514	H514A	H515	1013.49	1013.26	0.50	45	47	III	24	---
STH 164	H515	328+50.00	30.0	LT	1019.83	MANHOLES 4-FT DIAMETER	J	6.57	---	P516	H515	H517	1013.26	1012.90	0.50	71	75	IIIA	24	---
STH 164	H517	329+25.00	34.0	LT	1018.72	INLETS 4-FT DIAMETER	C	5.82	---	P518	H517	H519	1012.90	1012.05	0.50	171	175	IIIA	24	---
STH 164	H519	331+00.02	27.0	LT	1017.71	MANHOLES 4-FT DIAMETER	J	5.66	---	P520	H519	H520A	1012.05	1011.82	0.50	46	48	III	24	---
CTH E	H535	229+35.34	2.8	RT	1016.35	INLETS 2X3-FT	HM	3.27	---	P536	H535	H537	1013.08	1013.06	0.30	8	11	IV	12	---
CTH E	H537	229+30.85	9.7	RT	1016.32	INLETS 4-FT DIAMETER	HM	3.26	---	P538	H537	H540	1013.06	1013.01	0.30	16	21	IV	12	---
CTH E	---	---	---	---	---	---	---	---	---	P539	H539A	H540	1012.14	1012.01	0.30	39	41	IV	24	---
CTH E	H540	229+11.00	6.0	RT	1016.95	MANHOLES 5-FT DIAMETER	J	4.94	---	P541	H540	H541A	1012.01	1011.92	0.30	30	33	IV	24	---
CLUB DRIVE	H542	241+43.52	22.0	RT	1043.97	INLETS MEDIAN 1 GRATE	MS	5.82	---	P543	H542	H546	1038.15	1036.35	2.00	91	95	III	18	---
STH 164	H544	418+76.65	56.6	RT	1039.15	INLETS MEDIAN 2 GRATE	MS	4.00	---	P545	H544	H546	1035.15	1033.38	3.00	64	68	IV	24	---
STH 164	H546	418+09.16	53.6	RT	1041.09	MANHOLES 5-FT DIAMETER	J	9.10	---	P547	H546	H551	1031.99	1023.58	5.00	172	175	IV	24	---
STH 164	H548	301+57.12	38.1	RT	1007.87	INLETS MEDIAN 2 GRATE	MS	3.00	---	P549	H548	H549A	1004.87	1004.30	0.95	58	60	III	24	---
STH 164	H550	416+34.00	42.0	RT	1030.03	INLETS 2X3-FT	HM	5.74	---	P550	H550	H551	1024.29	1024.21	0.50	13	16	IV	15	---
STH 164	H551	416+34.00	58.0	RT	1029.60	MANHOLES 5-FT DIAMETER	J	6.26	---	P551	H551	H547A	1023.34	1019.36	5.00	79	81	IV	24	---

[1]DEPTH = RIM OR FLOW ELEV - LOWEST PIPE INVERT ELEVATION.

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ALL ITEMS CATEGORY 0010

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STORM SEWER ITEM TOTALS

611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.2007 MANHOLES 7-FT DIAMETER EACH	611.3230 INLETS 2x3-FT EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	611.0535 MANHOLE COVERS TYPE J SPECIAL EACH	611.0612 INLET COVERS TYPE C EACH	611.0627 INLET COVERS TYPE HM EACH	611.0642 INLET COVERS TYPE MS EACH	611.0624 INLET COVERS TYPE H EACH	611.0651 INLET COVERS TYPE S EACH	611.0652 INLET COVERS TYPE T EACH
16	37	6	1	44	29	1	13	51	4	68	27	7	1	2

608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0342 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 42-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	608.0430 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	608.0442 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 42-INCH LF
54	499	313	951	341	164	49	616	263	2477	128	23

608.3015 STORM SEWER PIPE CLASS III-A 15-INCH LF	608.3018 STORM SEWER PIPE CLASS III-A 18-INCH LF	608.3024 STORM SEWER PIPE CLASS III-A 24-INCH LF	608.3030 STORM SEWER PIPE CLASS III-A 30-INCH LF
30	284	3820	370

ALL ITEMS CATEGORY 0010

ENDWALL AND PIPE GRATES FOR STORM SEWER

ROADWAY	PIPE ID	ENDWALL ID	ENDWALL ELEVATION	ENDWALL STATION	ENDWALL OFFSET	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1024 * * APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1030 * * APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1042 * * APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 42-INCH EACH	521.0342 APRON ENDWALLS FOR CULVERT PIPE SLOPED CROSS DRAINS STEEL 42-INCH 4:1-SLOPE EACH	633.5200 * * MARKERS CULVERT END EACH
STH 164												
	P132	H132A	1010.97	58+02	42'LT	--	--	1	--	--	--	1
	P157	H157A	1014.55	68+09	52'LT	1	--	--	--	--	--	1
	P178	H178A	1102.15	123+47	36'LT	--	1	--	--	--	--	1
	P181	H181A	1103.49	123+97	36'RT	--	1	--	--	--	--	1
	P229	H229A	1026.40	104+54	39'LT	--	--	--	1	--	--	1
	P244	H244A	1152.44	168+91	66'RT	--	--	1	--	--	--	1
	P245	H245A	1152.96	168+10	77'RT	--	--	1	--	--	--	1
	P251	H251A	1148.02	165+90	46'RT	--	--	1	--	--	--	1
	P291	H291A	1064.70	223+75	34'RT	--	--	1	--	--	--	1
	P330	H330A	1073.59	238+61	51'RT	--	--	--	--	1	--	1
	P334	P334A	1071.25	238+61	45'LT	--	--	--	--	1	--	1
	P431	H431A	1027.20	253+79	99'LT	--	--	1	--	--	--	1
	P480	H480A	1028.89	255+35	88'LT	--	1	--	--	--	--	1
	P485	H485A	1017.22	257+39	45'RT	--	--	--	--	--	1	1
	P487	H487A	1013.60	257+81	70'LT	--	--	--	--	--	1	1
	P499	H499A	1016.83	305+27	73'LT	--	1	--	--	--	--	1
	P502	H502A	1018.15	306+46	12'RT	--	--	1	--	--	--	1
	P508	H508A	1014.46	304+04	72'LT	--	--	1	--	--	--	1
	P509	H509A	1016.25	323+51	42'RT	--	--	1	--	--	--	1
	P513	H513A	1015.53	325+97	41'RT	--	--	1	--	--	--	1
	P514	H514A	1013.52	328+01	49'LT	--	--	1	--	--	--	1
	P520	H520A	1011.79	331+52	41'LT	--	--	1	--	--	--	1
	P539	H539A	1012.16	413+55	88'LT	--	--	1	--	--	--	1
	P541	H541A	1011.90	412+68	89'LT	--	--	1	--	--	--	1
	P549	H549A	1004.30	300+99	34'RT	--	--	1	--	--	--	1
	P551	H547A	1019.36	415+48	60'RT	--	--	1	--	--	--	1
STH 167												
	P462	H462A	1048.52	174+87	32'RT	--	--	--	1	--	--	1
	P472	H472A	1031.90	170+93	104'LT	--	--	--	1	--	--	1
	P474	H474A	1035.97	167+86	89'LT	--	1	--	---	--	--	1
HUBERTUS ROAD												
	P261	H261A	1130.23	116+47	33'RT	--	--	1	--	--	--	1
	P265	H265A	1114.44	113+67	37'RT	--	--	1	--	--	--	1
TOTALS						1	5	18	3	2	2	31

ALL ITEMS CATEGORY 0010
* * ADDITIONAL QUANTITIES FOUND ELSEWHERE

									CROSS CULVERTS											
		UPSTREAM			DOWNSTREAM			SLOPE	522.0124 CULVERT PIPE REINFORCED CONCRETE CLASS III	522.0130 CULVERT PIPE REINFORCED CONCRETE CLASS III	522.0142 CULVERT PIPE REINFORCED CONCRETE CLASS III	522.0148 CULVERT PIPE REINFORCED CONCRETE CLASS III	522.0424 CULVERT PIPE REINFORCED CONCRETE CLASS IV	522.1024 APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE	522.1030 APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE	522.1042 APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE	522.1048 APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE	633.5200 MARKERS CULVERT END	
ROADWAY	CULVERT ID	STA	OFFSET	ELEV	STA	OFFSET	ELEV	%	24-INCH LF	30-INCH LF	42-INCH LF	48-INCH LF	24-INCH LF	* * 24-INCH EACH	30-INCH EACH	42-INCH EACH	48-INCH EACH	* * EACH	PIPE COMMENTS
SHADY LANE	C158	25+00.09	23.89'RT	997.56	25+00.48	25.63.'LT	997.16	0.81	---	---	---	---	50	2	---	---	---	2	---
STH 164	C160	80+85.14	29.70'RT	1005.66	80+85.49	31.47.'LT	1005.05	1.00	---	---	---	---	61	2	---	---	---	2	---
STH 164	C161	80+90.13	29.74'RT	1005.66	80+90.44	31.48.'LT	1005.05	1.00	---	---	---	---	61	2	---	---	---	2	---
STH 164	C167	99+73.95	51.68'RT	1002.77	99+73.88	51.77.'LT	1002.43	0.32	---	---	---	103	---	---	---	---	2	2	---
STH 164	C240	130+70.90	36.93'RT	1111.11	130+71.23	34.22.'LT	1110.75	0.50	71	---	---	---	---	2	---	---	---	2	---
ELMWOOD ROAD	C243	59+40.25	40.98.'LT	1118.25	59+40.40	37.77'RT	1117.85	0.51	---	---	---	---	79	2	---	---	---	2	---
STH 164	C260	185+58.14	48.91'RT	1133.06	185+57.96	59.49.'LT	1130.44	2.42	---	108	---	---	---	---	2	---	---	2	---
HUBERTUS ROAD	C266	114+89.14	33.26.'LT	1122.67	113+18.30	36.66.'LT	1112.42	6.00	171	---	---	---	---	2	---	---	---	2	---
STH 164	C269	203+48.23	54.71'RT	1069.71	203+47.66	81.17'RT	1060.88	6.50	---	---	136	---	---	---	---	2	---	2	---
GREYSTONE DRIVE	C492	189+40.11	39.80.'LT	1006.49	189+40.55	32.09'RT	1006.13	0.50	---	---	---	---	72	2	---	---	---	2	---
STH 164	C500	294+68.83	47.65.'LT	1000.97	294+72.02	39.60'RT	999.66	1.50	87	---	---	---	---	2	---	---	---	2	---
STH 164	C533	378+05.82	32.58.'LT	1009.17	378+05.82	33.42'RT	1008.51	1.00	66	---	---	---	---	2	---	---	---	2	---
									395	108	136	103	323	18	2	2	2	24	

ALL ITEMS CATEGORY 0010
* * ADDITIONAL QUANTITIES FOUND ELSEWHERE
STATION, OFFSETS AND ELEVATIONS ARE FOR THE END OF THE CULVERT PIPE NOT INCLUDING THE ENDWALL.

									CROSS CULVERTS										
		UPSTREAM			DOWNSTREAM			SLOPE	522.2348 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III	522.2419 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV	522.2424 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV	522.2429 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV	SPV.0090.04 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV	522.2619 APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL	521.0535 APRON ENDWALL FOR PIPE ARCH SLOPED CROSS DRAINS STEEL	521.0542 APRON ENDWALL FOR PIPE ARCH SLOPED CROSS DRAINS STEEL	521.0557 APRON ENDWALL FOR PIPE ARCH SLOPED CROSS DRAINS STEEL	521.0571 APRON ENDWALL FOR PIPE ARCH SLOPED CROSS DRAINS STEEL	633.5200 MARKERS CULVERT END	
ROADWAY	CULVERT ID	STA	OFFSET	ELEV	STA	OFFSET	ELEV	%	48X76-INCH LF	19X30-INCH LF	24X38-INCH LF	29X45-INCH LF	38X60-INCH LF	19X30-INCH EACH	35X24-INCH 4:1-SLOPE EACH	42X29-INCH 4:1-SLOPE EACH	57X38-INCH 4:1-SLOPE EACH	71X47-INCH 4:1-SLOPE EACH	* * EACH	PIPE COMMENTS
STH 164	C100	53+13.68	36.59'RT	998.01	53+12.93	38.34.'LT	997.60	0.55	---	---	75	---	---	---	2	---	---	---	2	---
STH 164	C159	75+04.23	30.53'RT	1005.65	74+90.63	40.47.'LT	1005.30	0.50	---	---	72	---	---	---	2	---	---	---	2	---
STH 164	C162	91+93.96	40.34'RT	1006.00	91+94.43	37.88.'LT	1005.90	0.13	---	---	78	---	---	---	2	---	---	---	2	---
STH 164	C163	91+99.77	40.39'RT	1006.00	92+00.23	37.84.'LT	1005.90	0.13	---	---	78	---	---	---	2	---	---	---	2	---
STH 164	C164	92+05.56	40.42'RT	1006.00	92+06.02	37.83.'LT	1005.90	0.13	---	---	78	---	---	---	2	---	---	---	2	---
MONCHES ROAD	C165	40+50.68	41.45.'LT	1006.50	40+50.86	50.79'RT	1006.04	0.50	---	---	92	---	---	---	2	---	---	---	2	---
MONCHES ROAD	C166	40+56.47	41.46.'LT	1006.50	40+56.59	50.75'RT	1006.04	0.50	---	---	92	---	---	---	2	---	---	---	2	---
ELMWOOD ROAD	C241	60+61.92	38.42.'LT	1118.66	60+62.56	40.85'RT	1118.37	0.37	---	---	79	---	---	---	2	---	---	---	2	---
ELMWOOD ROAD	C242	60+56.08	38.57.'LT	1118.66	60+56.68	41.20'RT	1118.37	0.36	---	---	80	---	---	---	2	---	---	---	2	---
HUBERTUS ROAD	C267	110+65.57	42.10'RT	1096.31	110+65.97	41.46.'LT	1095.00	1.57	---	---	84	---	---	---	2	---	---	---	2	---
HUBERTUS ROAD	C268	110+71.38	42.12'RT	1096.31	110+71.78	41.43.'LT	1095.00	1.57	---	---	84	---	---	---	2	---	---	---	2	---
STH 164	C270	212+87.10	42.60'RT	1040.27	212+55.63	45.53.'LT	1039.80	0.50	94	---	---	---	---	---	---	---	---	2	2	---
STH 164	C530	333+65.62	29.51'RT	1008.22	333+66.04	29.81.'LT	1008.16	0.10	---	---	---	---	59	---	---	---	2	---	2	---
PIONEER ROAD	C531	219+37.29	42.07'RT	1015.40	219+36.67	38.39.'LT	1015.21	0.24	---	80	---	---	---	2	---	---	---	---	2	---
STH 164	C532	372+99.99	31.35.'LT	1006.19	372+99.98	32.76'RT	1005.71	0.75	---	---	64	---	---	---	2	---	---	---	2	---
STH 164	C534	412+04.14	36.13.'LT	1008.24	412+16.09	47.19'RT	1007.38	1.02	---	---	---	84	---	---	---	2	---	---	2	---
									94	80	957	84	59	2	24	2	2	2	32	

ALL ITEMS CATEGORY 0010
* * ADDITIONAL QUANTITIES FOUND ELSEWHERE
STATION, OFFSETS AND ELEVATIONS ARE FOR THE END OF THE CULVERT PIPE NOT INCLUDING THE ENDWALL.

									DRIVEWAY CULVERTS										
		UPSTREAM			DOWNSTREAM			SLOPE	520.1024 APRON ENDWALLS FOR CULVERT PIPE * *	520.3324 CULVERT PIPE CLASS III-A	521.3124 CULVERT PIPE CORRUGATED STEEL	521.3136 CULVERT PIPE CORRUGATED STEEL	521.1524 APRON ENDWALL FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL	521.1536 APRON ENDWALL FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL	521.3728 PIPE ARCH CORRUGATED STEEL	521.3735 PIPE ARCH CORRUGATED STEEL	521.1728 APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS STEEL	521.1735 APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS STEEL	
ROADWAY	CULVERT ID	STA	OFFSET	ELEV	STA	OFFSET	ELEV	%	24-INCH EACH	24-INCH LF	24-INCH LF	36-INCH LF	24-INCH 6:1-SLOPE EACH	36-INCH 6:1-SLOPE EACH	28X20-INCH LF	35X24-INCH LF	28X20-INCH 6:1-SLOPE EACH	35X24-INCH 6:1-SLOPE EACH	PIPE COMMENTS
STH 164	C801	53+59.57	42.81.'LT	999.48	53+35.47	44.51.'LT	998.70	3.27	---	---	---	---	---	---	24	---	2	---	---
STH 164	C802	55+24.96	49.84.'LT	1001.47	54+93.01	52.65.'LT	1000.41	3.30	---	---	32	---	2	---	---	---	---	---	---
STH 164	C803	56+36.30	75.50'RT	1000.18	55+64.00	66.30'RT	999.18	1.37	2	73	---	---	---	---	---	---	---	---	---
STH 164	C804	73+87.63	37.14'RT	1006.65	74+17.63	37.31'RT	1006.50	0.50	---	---	---	---	---	---	30	---	2	---	---
STH 164	C806	104+95.22	45.39'RT	1028.35	104+66.50	57.72'RT	1023.61	15.14	---	---	---	31	---	2	---	---	---	---	---
STH 164	C807	170+30.00	46.63.'LT	1155.41	170+02.00	46.79.'LT	1155.31	0.36	---	---	---	---	---	---	28	---	2	---	---
STH 164	C808	171+26.04	40.16'RT	1156.55	171+02.95	40.03'RT	1156.38	0.72	---	---	---	---	---	---	23	---	2	---	---
STH 164	C809	172+44.00	38.48'RT	1157.40	172+20.00	38.34'RT	1157.24	0.65	---	---	---	---	---	---	24	---	2	---	---
STH 164	C810	175+47.00	35.91.'LT	1155.74	175+76.01	36.53.'LT	1155.35	1.34	---	---	---	---	---	---	29	---	2	---	---
STH 164	C811	178+33.89	36.43.'LT	1149.25	178+57.89	36.37.'LT	1148.29	4.01	---	---	---	---	---	---	24	---	2	---	---
STH 164	C813	191+09.00	35.76.'LT	1127.44	191+37.51	35.70.'LT	1126.57	3.03	---	---	---	---	---	---	29	---	2	---	---
HUBERTUS ROAD	C814	116+48.99	35.50.'LT	1128.21	116+01.00	34.88.'LT	1126.49	3.58	---	---	---	---	---	---	48	---	2	---	---
STH 164	C815	264+91.58	68.30'RT	970.29	265+24.31	69.49'RT	967.74	7.79	2	33	---	---	---	---	---	---	---	---	---
STH 164	C816	204+55.88	36.10.'LT	1074.94	204+80.83	36.38.'LT	1073.92	4.09	---	---	---	---	---	---	25	---	2	---	---
STH 164	C817	208+54.31	40.00'RT	1059.96	208+82.44	40.00'RT	1059.03	3.31	---	---	28	---	2	---	---	---	---	---	---
STH 164	C818	208+48.13	43.59.'LT	1059.22	209+11.27	50.04.'LT	1054.93	6.75	---	---	63	---	2	---	---	---	---	---	---
STH 164	C819	209+95.29	39.72'RT	1055.13	210+23.30	41.61'RT	1053.61	5.41	---	---	---	---	---	---	28	---	2	---	---
STH 167	C820	177+57.32	43.97'RT	1059.37	177+29.32	44.32'RT	1058.14	4.39	---	---	28	---	2	---	---	---	---	---	---
STH 164	C821	263+22.82	41.17'RT	989.04	263+56.98	49.53'RT	984.68	12.39	2	35	---	---	---	---	---	---	---	---	---
STH 164	C822	264+79.12	75.92.'LT	972.37	265+30.78	76.18.'LT	968.66	7.18	2	52	---	---	---	---	---	---	---	---	---
STH 164	C823	272+93.52	41.78'RT	972.99	272+70.28	41.90'RT	972.05	4.04	---	---	---	---	---	---	23	---	2	---	---
STH 164	C824	272+90.08	39.63.'LT	972.98	272+65.58	39.51.'LT	971.80	4.82	---	---	---	---	---	---	25	---	2	---	---
STH 164	C825	277+10.20	36.73'RT	993.94	276+86.93	35.97'RT	992.97	4.18	---	---	---	---	---	---	23	---	2	---	---
STH 164	C826	277+15.34	36.84.'LT	994.34	276+91.36	35.69.'LT	993.17	4.87	---	---	---	---	---	---	24	---	2	---	---
STH 164	C827	278+42.18	36.64'RT	999.41	277+70.39	36.56'RT	996.53	4.01	---	---	---	---	---	---	72	---	2	---	---
STH 164	C828	206+77.49	36.25.'LT	1066.65	207+04.36	36.25.'LT	1065.79	3.22	---	---	---	---	---	---	27	---	2	---	---
STH 164	C829	283+17.10	48.85'RT	1009.02	282+91.17	48.59'RT	1008.89	0.50	---	---	---	---	---	---	26	---	2	---	---
STH 164	C830	284+79.85	40.35'RT	1009.85	284+54.84	41.48'RT	1009.73	0.48	---	---	---	---	---	---	25	---	2	---	---
STH 164	C831	288+35.75	43.78'RT	1006.33	288+60.53	45.98'RT	1005.56	3.10	---	---	---	---	---	---	25	---	2	---	---
STH 164	C832	294+98.84	52.11'RT	998.83	295+20.75	53.22'RT	998.10	3.33	---	---	---	---	---	---	---	22	---	2	---
STH 164	C833	297+30.12	55.99.'LT	1005.05	297+07.04	55.78.'LT	1004.85	0.87	2	23	---	---	---	---	---	---	---	---	---
STH 164	C834	299+61.30	28.76'RT	1001.14	299+00.00	29.10'RT	1000.92	0.59	---	---	37	---	2	---	---	---	---	---	---
STH 164	C836	337+39.85	40.86.'LT	1010.02	337+03.85	40.12.'LT	1009.76	0.72	---	---	---	---	---	---	36	---	2	---	---
STH 164	C837	343+60.95	48.13'RT	1013.40	343+21.98	48.95'RT	1012.87	1.34	---	---	---	---	---	---	39	---	2	---	---
STH 164	C838	344+71.85	48.31'RT	1013.90	344+50.83	48.75'RT	1013.75	0.69	---	---	---	---	---	---	21	---	2	---	---
STH 164	C839	367+64.26	38.51.'LT	1011.14	368+03.73	39.49.'LT	1010.68	1.18	---	---	39	---	2	---	---	---	---	---	---
STH 164	C840	376+16.70	36.17.'LT	1009.93	375+70.40	35.64.'LT	1009.13	1.72	---	---	---	---	---	---	46	---	2	---	---
STH 164	C841	380+21.07	35.37'RT	1014.27	379+87.08	37.14'RT	1013.50	2.26	---	---	---	---	---	---	34	---	2	---	---
STH 164	C842	381+67.85	36.29'RT	1015.80	381+45.43	35.74'RT	1015.65	0.70	---	---	---	---	---	---	22	---	2	---	---
STH 164	C843	383+38.46	35.67'RT	1017.84	383+06.46	36.07'RT	1017.38	1.43	---	---	---	---	---	---	32	---	2	---	---
STH 164	C844	386+18.87	41.47'RT	1019.38	385+96.52	41.75'RT	1019.19	0.88	---	---	---	---	---	---	22	---	2	---	---
STH 164	C845	390+74.84	39.11'RT	1019.81	390+96.77	38.79'RT	1019.74	0.35	---	---	---	---	---	---	22	---	2	---	---
STH 164	C846	391+27.29	42.95.'LT	1017.71	391+52.57	43.32.'LT	1017.64	0.26	---	---	25	---	2	---	---	---	---	---	---
STH 164	C847	394+11.80	39.11'RT	1018.07	394+33.16	38.80'RT	1017.97	0.47	---	---	---	---	---	---	21	---	2	---	---

ALL ITEMS CATEGORY 0010

* * ADDITIONAL QUANTITIES FOUND ELSEWHERE

STATION, OFFSETS AND ELEVATIONS ARE FOR THE END OF THE CULVERT PIPE NOT INCLUDING THE ENDWALL.

									DRIVEWAY CULVERTS										
		UPSTREAM			DOWNSTREAM			SLOPE	520.1024 APRON ENDWALLS FOR CULVERT PIPE * * 24-INCH EACH	520.3324 CULVERT PIPE CLASS III-A 24-INCH LF	521.3124 CULVERT PIPE CORRUGATED STEEL 24-INCH LF	521.3136 CULVERT PIPE CORRUGATED STEEL 36-INCH LF	521.1524 APRON ENDWALL FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 24-INCH 6:1-SLOPE EACH	521.1536 APRON ENDWALL FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 36-INCH 6:1-SLOPE EACH	521.3728 PIPE ARCH CORRUGATED STEEL 28X20-INCH LF	521.3735 PIPE ARCH CORRUGATED STEEL 35X24-INCH LF	521.1728 APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS STEEL 28X20-INCH 6:1-SLOPE EACH	521.1735 APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS STEEL 35X24-INCH 6:1-SLOPE EACH	
ROADWAY	CULVERT ID	STA	OFFSET	ELEV	STA	OFFSET	ELEV	%											PIPE COMMENTS
STH 164	C848	394+78.70	36.01'RT	1017.97	395+20.45	42.43'RT	1017.27	1.68	---	---	---	---	---	---	42	---	2	---	---
STH 164	C850	403+66.67	41.73'RT	1012.06	403+93.10	43.76'RT	1011.68	1.44	---	---	26	---	2	---	---	---	---	---	---
CTH E	C852	227+10.19	32.58.'LT	1024.81	227+38.19	32.82.'LT	1023.16	5.89	---	---	---	---	---	---	28	---	2	---	---
STH 164	C853	428+55.88	39.26.'LT	1061.00	428+21.96	39.05.'LT	1060.90	0.29	---	---	---	---	---	---	34	---	2	---	---
STH 164	C854	436+45.39	35.87.'LT	1092.96	435+67.08	34.58.'LT	1090.24	3.48	---	---	---	---	---	---	78	---	2	---	---
STH 164	C856	439+62.58	39.01.'LT	1098.74	439+38.90	38.25.'LT	1098.50	1.01	---	---	---	---	---	---	24	---	2	---	---
STH 164	C857	440+45.56	36.08'RT	1099.30	440+70.19	37.22'RT	1099.01	1.17	---	---	25	---	2	---	---	---	---	---	---
STH 164	C858	441+86.05	38.30'RT	1097.94	442+07.26	38.98'RT	1097.70	1.13	---	---	---	---	---	---	21	---	2	---	---
STH 164	C859	443+61.68	36.80'RT	1095.36	443+93.23	36.62'RT	1094.78	1.82	---	---	---	---	---	---	32	---	2	---	---
STH 164	C860	444+56.46	36.34'RT	1094.42	444+84.21	36.18'RT	1093.68	2.67	---	---	---	---	---	---	28	---	2	---	---
STH 164	C861	444+77.63	36.52.'LT	1093.69	445+02.30	36.66.'LT	1093.19	2.02	---	---	---	---	---	---	25	---	2	---	---
STH 164	C862	445+43.42	36.21'RT	1092.44	445+79.42	36.00'RT	1091.80	1.78	---	---	---	---	---	---	36	---	2	---	---
STH 164	C863	445+63.40	35.95.'LT	1092.02	445+94.72	36.12.'LT	1091.58	1.19	---	---	---	---	---	---	31	---	2	---	---
STH 164	C864	446+39.95	36.06'RT	1090.26	446+67.97	35.90'RT	1089.45	2.89	---	---	---	---	---	---	28	---	2	---	---
STH 164	C865	418+47.29	45.19.'LT	1039.48	418+15.45	45.45.'LT	1037.74	5.47	---	---	---	---	---	---	32	---	2	---	---
STH 164	C870	160+71.81	47.02'RT	1132.11	160+47.81	47.02'RT	1131.61	2.08	---	---	24	---	2	---	---	---	---	---	---
STH 164	C871	160+71.88	53.02'RT	1132.11	160+47.88	53.02'RT	1131.61	2.08	---	---	24	---	2	---	---	---	---	---	---
STH 164	C872	164+98.00	43.83'RT	1145.63	164+74.00	44.04'RT	1144.88	3.10	---	---	---	---	---	---	24	---	2	---	---
STH 164	C873	164+98.00	50.03'RT	1145.63	164+74.00	50.24'RT	1144.88	3.10	---	---	---	---	---	---	24	---	2	---	---
STH 164	C874	179+26.34	36.22.'LT	1146.24	179+50.34	36.32.'LT	1145.77	1.97	---	---	---	---	---	---	24	---	2	---	---
STH 164	C875	179+18.71	33.77'RT	1147.28	179+43.49	35.13'RT	1146.33	3.83	---	---	---	---	---	---	25	---	2	---	---
STH 164	C876	179+18.71	39.77'RT	1147.28	179+43.49	41.14'RT	1146.33	3.83	---	---	---	---	---	---	25	---	2	---	---
HUBERTUS ROAD	C877	104+70.07	54.37'RT	1057.67	104+06.49	47.08'RT	1056.48	1.87	2	64	---	---	---	---	---	---	---	---	---
STH 164	C878	214+88.04	49.40.'LT	1041.15	214+59.88	50.75.'LT	1040.45	2.48	2	28	---	---	---	---	---	---	---	---	---
STH 164	C879	219+35.89	37.39'RT	1049.83	219+07.89	36.75'RT	1049.29	1.93	---	---	28	---	2	---	---	---	---	---	---
STH 164	C880	223+82.79	36.28.'LT	1065.76	223+53.79	36.17.'LT	1064.54	4.20	---	---	---	---	---	---	29	---	2	---	---
STH 164	C881	225+64.72	35.00.'LT	1071.93	225+34.25	36.06.'LT	1070.92	3.32	---	---	---	---	---	---	31	---	2	---	---
STH 164	C882	290+87.35	36.17'RT	1007.31	291+11.55	35.53'RT	1007.31	0.00	---	---	---	---	---	---	24	---	2	---	---
STH 164	C883	293+00.00	34.12'RT	1006.30	293+68.13	37.18'RT	1005.00	1.91	---	---	---	---	---	---	68	---	2	---	---
STH 164	C884	297+09.88	41.96'RT	998.34	296+81.68	45.36'RT	998.06	1.00	---	---	---	---	---	---	28	---	2	---	---
STH 164	C885	401+58.65	39.10.'LT	1014.14	401+87.22	39.56.'LT	1013.99	0.50	---	---	---	---	---	---	---	29	---	2	---
STH 164	C886	401+58.65	31.90.'LT	1014.13	401+87.22	32.36.'LT	1013.99	0.50	---	---	---	---	---	---	---	29	---	2	---
STH 164	C887	405+90.11	39.96.'LT	1011.03	406+15.83	40.37.'LT	1010.90	0.50	---	---	---	---	---	---	---	26	---	2	---
STH 164	C888	405+90.34	32.76.'LT	1011.03	406+16.06	33.18.'LT	1010.90	0.51	---	---	---	---	---	---	---	26	---	2	---
CTH E	C889	227+89.74	44.00'RT	1018.96	228+17.74	43.27'RT	1017.36	5.71	---	---	---	---	---	---	28	---	2	---	---
STH 164	C890	420+40.60	45.32'RT	1048.58	419+86.56	45.13'RT	1046.18	5.30	---	---	---	---	---	---	54	---	2	---	---
									14	308	380	31	24	2	1700	131	110	10	

ALL ITEMS CATEGORY 0010
* * ADDITIONAL QUANTITIES FOUND ELSEWHERE
STATION, OFFSETS AND ELEVATIONS ARE FOR THE END OF THE CULVERT PIPE
NOT INCLUDING THE ENDWALL.

EROSION CONTROL ITEMS

LOCATION	STATION	TO	STATION	OFFSET	628.1104 EROSION BALES EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2004 EROSION MAT CLASS I TYPE B SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2023 EROSION MAT CLASS II TYPE B SY	628.2037 EROSION MAT CLASS III TYPE C SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7570 ROCK BAGS EACH	628.7555 CULVERT PIPE CHECKS EACH	SPV.0090.03 HEAVY DUTY SILT FENCE LF
STH 164																	
	50+95	-	61+00	RT	--	--	--	--	--	646	--	2,786	--	60	--	10	--
	50+95	-	61+00	LT	--	319	319	--	--	--	--	2,496	1,023	84	--	8	--
	61+00	-	76+00	RT	--	--	--	--	--	430	--	9,280	--	84	--	12	--
	61+00	-	76+00	LT	--	1,092	1,092	--	--	--	--	2,955	389	84	--	3	--
	76+00	-	91+00	RT	--	--	--	--	--	3,051	--	--	--	72	--	6	--
	76+00	-	91+00	LT	--	1,514	1,514	--	--	--	--	67	--	--	--	--	--
	91+00	-	106+00	RT	--	1,160	1,160	--	--	242	--	4,112	--	12	--	38	--
	91+00	-	106+00	LT	--	1,218	1,218	--	--	--	--	3,102	--	--	--	--	--
	106+00	-	121+00	RT	--	--	--	--	--	--	--	11,916	1,256	204	--	--	--
	106+00	-	121+00	LT	--	--	--	--	--	--	--	15,659	--	420	--	--	--
	121+00	-	136+00	RT	--	--	--	--	--	1,062	--	--	631	36	--	5	--
	121+00	-	136+00	LT	--	537	537	--	--	1,159	--	41	--	36	--	2	--
	136+00	-	151+00	RT	--	511	511	--	--	2,403	--	--	--	24	--	14	--
	136+00	-	151+00	LT	--	--	--	--	--	2,292	--	--	--	--	--	3	--
	151+00	-	166+00	RT	--	--	--	--	--	2,568	--	--	--	120	--	16	--
	151+00	-	166+00	LT	--	530	530	--	--	902	--	--	--	132	--	--	--
	166+00	-	181+00	RT	--	--	--	--	--	1,544	--	--	--	72	--	26	--
	166+00	-	181+00	LT	--	320	320	--	--	1,348	--	--	--	60	--	20	--
	181+00	-	196+00	RT	--	--	--	--	--	1,328	--	--	958	240	--	5	--
	181+00	-	196+00	LT	--	804	804	--	--	813	--	--	--	120	--	5	--
	196+00	-	211+00	RT	--	--	--	--	--	--	--	4,280	1,956	204	--	22	--
	196+00	-	211+00	LT	--	696	696	--	--	--	--	3,419	590	168	--	18	--
	211+00	-	226+00	RT	--	--	--	--	--	--	--	--	1,617	120	--	21	--
	211+00	-	226+00	LT	--	1,260	1,260	--	--	--	--	877	--	36	--	13	--
	226+00	-	241+00	RT	--	--	--	--	--	--	--	--	--	--	--	7	--
	226+00	-	241+00	LT	--	1,218	1,218	--	--	92	--	--	--	36	--	--	--
	241+00	-	256+00	RT	--	359	359	--	--	631	--	3,558	--	--	--	13	--
	241+00	-	256+00	LT	--	466	466	--	--	1,798	--	3,984	--	--	--	3	--
	256+00	-	271+00	RT	--	--	777	--	--	276	1,294	445	--	12	--	25	777
	256+00	-	271+00	LT	--	--	751	--	--	1,326	1,097	945	--	144	--	13	751
	271+00	-	286+00	RT	--	--	--	--	--	1,698	--	--	--	168	--	30	--
	271+00	-	286+00	LT	--	--	--	--	--	1,763	--	--	--	204	--	6	--
	286+00	-	301+00	RT	--	661	853	--	--	444	--	192	--	12	--	3	192
	286+00	-	301+00	LT	--	--	254	--	--	865	--	--	--	--	--	2	254
	301+00	-	316+00	RT	--	--	--	--	--	399	--	--	--	--	--	3	--
	301+00	-	316+00	LT	--	--	--	--	--	832	--	--	530	--	--	3	--
	316+00	-	331+00	RT	--	197	197	--	--	1,350	--	--	--	36	--	23	--
	316+00	-	331+00	LT	--	--	--	--	--	1,087	--	--	--	48	--	5	--
	331+00	-	346+00	RT	--	--	--	--	--	2,339	--	--	--	84	--	--	--
	331+00	-	346+00	LT	--	--	343	--	--	1,598	--	--	--	60	--	5	343
	346+00	-	361+00	RT	--	--	--	--	--	2,502	--	--	--	84	--	--	--
	346+00	-	361+00	LT	--	--	--	--	--	1,759	--	--	--	72	--	10	--
	361+00	-	376+00	RT	--	--	885	--	--	683	1,178	--	--	48	--	25	885
	361+00	-	376+00	LT	--	--	808	--	--	816	819	--	--	36	--	8	808
	376+00	-	391+00	RT	--	--	320	--	--	577	396	--	--	36	--	13	320

ALL ITEMS CATEGORY 0010

CONTINUED ON NEXT PAGE

EROSION CONTROL ITEMS (CONTINUED)

LOCATION	STATION	TO	STATION	OFFSET	628.1104 EROSION BALES EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2004 EROSION MAT CLASS I TYPE B SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2023 EROSION MAT CLASS II TYPE B SY	628.2037 EROSION MAT CLASS III TYPE C SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7570 ROCK BAGS EACH	628.7555 CULVERT PIPE CHECKS EACH	SPV.0090.03 HEAVY DUTY SILT FENCE LF
STH 164																	
	376+00	-	391+00	LT	--	--	18	--	--	1,616	--	--	--	72	--	31	18
	391+00	-	406+00	RT	--	--	629	--	--	956	1,235	--	--	48	--	5	629
	391+00	-	406+00	LT	--	--	468	--	--	1,574	1,815	--	--	36	--	26	468
	406+00	-	421+00	RT	--	--	1,026	--	--	337	233	462	143	24	--	--	1,026
	406+00	-	421+00	LT	--	406	1,015	--	--	3,033	--	2,986	--	336	--	5	609
	421+00	-	436+00	RT	--	--	--	--	--	1,437	187	--	--	216	--	--	--
	421+00	-	436+00	LT	--	1,268	1,268	--	--	297	--	--	--	12	--	--	--
	436+00	-	446+61	RT	--	--	--	--	--	793	--	2,579	--	24	--	28	--
	436+00	-	446+61	LT	--	534	534	--	--	933	--	--	--	36	--	20	--
SUBTOTALS					--	15,070	22,150	--	--	53,599	8,254	76,141	9,093	4,272	--	559	7,080
HUBERTUS ROAD																	
	103+28	-	113+10	LT	--	511	511	--	--	--	--	2,615	446	36	--	--	--
	103+28	-	113+10	RT	--	413	413	--	--	105	--	2,187	150	48	--	3	--
	113+10	-	118+00	LT	--	--	--	--	--	--	--	198	--	--	--	8	--
	113+10	-	118+00	RT	--	--	--	--	--	--	--	349	50	12	--	3	--
SUBTOTALS					--	924	924	--	--	105	--	5,349	646	96	--	14	--
STH 167																	
	158+75	-	165+50	LT	--	--	--	--	--	671	--	--	--	84	--	--	--
	158+75	-	165+50	RT	--	--	--	--	--	--	--	--	--	12	--	--	--
	174+50	-	181+25	LT	--	622	622	--	--	--	--	--	--	--	--	--	--
	174+50	-	181+25	RT	--	--	--	--	--	1,141	--	822	--	156	--	3	--
SUBTOTALS					--	622	622	--	--	1,812	--	822	--	252	--	3	--
UNDISTRIBUTED					500	4,154	5,769	25	15	13,879	2,064	20,578	2,435	1,155	430	144	1,770
TOTALS					500	20,770	29,465	25	15	69,395	10,318	102,890	12,174	5,775	430	720	8,850

ALL ITEMS CATEGORY 0010

3

INLET PROTECTION

LOCATION	STATION	TO	STATION	OFFSET	628.7005 TYPE A EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH
STH 164							
	50+95	-	61+00	LT	4	2	--
	50+95	-	61+00	RT	2	1	--
	61+00	-	76+00	LT	2	2	--
	61+00	-	76+00	RT	4	2	--
	91+00	-	106+00	LT	3	2	--
	91+00	-	106+00	RT	1	--	--
	106+00	-	121+00	LT	5	5	--
	106+00	-	121+00	RT	6	6	--
	166+00	-	181+00	RT	2	1	--
	211+00	-	226+00	RT	1	1	--
	226+00	-	241+00	RT	13	6	4
	241+00	-	256+00	LT	27	23	2
	241+00	-	256+00	RT	16	14	--
	256+00	-	271+00	LT	1	1	--
	256+00	-	271+00	RT	1	1	--
	301+00	-	316+00	LT	1	1	--
	301+00	-	316+00	RT	2	1	--
	316+00	-	331+00	LT	1	--	--
	406+00	-	421+00	LT	2	--	2
	406+00	-	421+00	RT	1	--	--
TOTALS					95	69	8

TRACKING PADS

CATEGORY	LOCATION	628.7560 TRACKING PADS EACH
0010	UNDISTRIBUTED	6
	TOTAL	6

TEMPORARY SEDIMENTATION BASIN INSTALLATION AND MAINTENANCE

CATEGORY	STATION	SPV.0105.06 STA. 100+90, LT LS	SPV.0105.07 STA. 103+00, RT LS
0010	100+90, LT	1	--
	103+00, RT	--	1
	TOTAL	1	1

RIPRAP ITEMS

LOCATION	STATION	OFFSET	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
STH 164				
	53+12	46' LT	4	8
	57+90	36' LT	8	16
	59+43	40' LT	40	81
	59+50	41' RT	35	70
	60+02	108' RT	38	76
	65+00	47' RT	29	59
	67+59	42' RT	43	85
	68+20	54' LT	12	24
	70+60	253' LT	6	12
	74+89	48' LT	8	16
	80+87	39' LT	11	22
	92+00	46' LT	78	155
	92+11	48' RT	4	8
	92+14	66' RT	2	3
	92+15	65' LT	2	5
	93+21	49' RT	6	12
	93+24	58' LT	2	4
	99+74	61' LT	22	44
	103+00	58' LT	213	425
	104+43	55' RT	73	146
	105+27	30' RT	138	277
	106+00	41' LT	61	123
	109+00	41' RT	39	78
	130+72	42' LT	6	12
	145+27	53' RT	17	34
	145+33	58' LT	6	12
	146+20	97' RT	3	6
	146+29	92' LT	2	4
	165+78	42' RT	15	30
	180+25	39' RT	147	295
	185+58	68' LT	8	16
	185+90	77' RT	7	14
	197+99	44' LT	74	148
	199+34	89' LT	36	71
	199+51	62' RT	10	20
	199+78	46' LT	41	82
	202+52	49' RT	209	418
	203+43	94' LT	9	18
	210+50	47' RT	27	54
	212+53	53' LT	17	33

RIPRAP ITEMS

LOCATION	STATION	OFFSET	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
	223+16	43' RT	39	78
	238+61	46' LT	12	24
	252+66	268' LT	3	5
	252+80	89' RT	7	14
	253+81	97' LT	6	12
	255+33	90' LT	13	25
	257+85	70' LT	75	150
	264+05	54' RT	35	70
	264+25	67' LT	78	155
	267+92	26' LT	35	70
	267+91	26' RT	66	131
	281+27	56' LT	5	10
	294+72	47' RT	4	7
	303+92	69' LT	6	12
	326+07	40' RT	6	12
	331+63	42' LT	6	12
	333+66	38' LT	6	12
	359+70	60' LT	6	12
	360+93	64' LT	6	13
	373+00	41' RT	17	34
	378+06	41' RT	5	11
	412+16	55' RT	7	14
	412+55	303' LT	69	138
	412+55	86' LT	6	12
	413+74	70' LT	1	2
	415+31	61' RT	7	14
SUBTOTALS			2,033	4,065
HUBERTUS ROAD				
	105+77	58' RT	83	166
	112+93	36' LT	6	12
	113+47	40' RT	6	12
SUBTOTALS			95	190
STH 167				
	159+00	38' RT	3	6
SUBTOTALS			3	6
TOTALS			2,131	4,261

ALL ITEMS CATEGORY 0010

TYPE II SIGN REMOVAL and REMOVAL OF SOLAR FLASHING BEACON AND POLE CATEGORY 0010 **2709-03-70 STH 164**

SIGN NO.	SIGN CODE	SIGN MESSAGE	**638.2602** REM SIGNS TYPE II [EA]	**638.3000** REM SMALL SIGN SUP [EA]	**204.9060.05** REMOVING SOLAR FLASHING BEACON AND POLE (EA)	**204.9105.S.10** REMOVING SOLAR DEVICE AND POLE L.S	REMARKS / SIGN LOCATION
1R	W14-1		1	1			
2R	R5-1		1	1			
3R	R4-7		1	1			REMOVE W5-54 PART OF SIGN # 3R
4R	W6-3		1	1			
5R	R2-1		1	1			
6R	W14-3		1	1			
7R	W11-3		1	1			W57-51 REMOVE PART OF SIGN # 7R
8R	J1-1		1	1			
9R	W2-6		1	1			REMOVE W2-6P AND W13-1 PART OF SIGN 9R
10R	W3-2		1	1			
11R	W6-1		1	1			
12R	W5-52R		1	1			
13R	R1-1		1	1			TURN OVER BLINDERS ON STOP SIGN TO SIGN SHOP CONTACT CHUCK SALDIVAR 414-266-1164
14R	R2-1		1	1			
15R	R2-1		1	1			
16R	W2-2		1	1			
17R	R2-1		1	1			
18R	NOT USED						
19R	R1-1		1				POLE IS PRIVATE OWNER LIGHT POLE - REMOVE BY OTHERS
20R	R1-1		1	1			TURN OVER BLINDERS ON STOP SIGN TO SIGN SHOP CONTACT CHUCK SALDIVAR 414-266-1164
21R	S3-1		1	1			
22R	S3-1		1	1			
23R	W2-1		1	1			
24R	R1-1		1	1			
25R	R2-1		1	1			
26R	W14-3		1	1			
27R	D1-61		1	2			
28R	R1-1		1	1			
29R	D1-61		1	2			
30R	R1-1		1	1			
31R	R2-1		1	1			

TYPE II SIGN REMOVAL and REMOVAL OF SOLAR FLASHING BEACON AND POLE CATEGORY 0010 **2709-03-70 STH 164**

SIGN NO.	SIGN CODE	SIGN MESSAGE	**638.2602** REM SIGNS TYPE II [EA]	**638.3000** REM SMALL SIGN SUP [EA]	**204.9060.05** REMOVING SOLAR FLASHING BEACON AND POLE (EA)	**204.9105.S.10** REMOVING SOLAR DEVICE AND POLE L.S	REMARKS / SIGN LOCATION
32R	R2-1		1	1			
33R	W14-3		1	1			
34R	R2-1		1	1			
35R	R2-1		1	1			
36R	W14-3		1	1			
37R	W14-3		1	1			
38R	W11-5		1	1			
39R	R2-1		1	1			
40R	D1-61		1	2			
41R	R1-1		1	1			
42R	R1-1		1	1			REMOVE PLAQUE AS PART OF SIGN 42R
43R	R1-1		1	1			
44R	R1-1		1	1			REMOVE PLAQUE AS PART OF SIGN # 44R
45R	R2-1		1	1			
46R	R2-1		1	1			
47R	W3-5		1	1			
48R	W11-8		1	1			
49R	R1-1		1	1			
50R	W2-1		1	1			
51R	D1-61		1	2			
52R	W14-3		1	1			
53R	R1-1		1	1			
54R	R2-1		1	1			
55R	W2-2		1	1			
56R	R2-1		1	1			
57R	R2-1		1	1			
58R	R1-1		1	1			
59R	W2-1		1	1			REMOVE W13-1 AS PART OF SIGN # 59R
60R	W2-1		1	1			REMOVE W13-1 AS PART OF SIGN # 60R
61R	D1-61		1	2			
62R	R2-1		1	1			
63R	W11-8		1	1			
64R	R1-1		1	1			
65R	R2-1		1	1			
66R	W4-4C		1	1			THE BLINKER STOP IS TO BE MOVED SEE PERMANENT SIGNING PLAN QTYS
67R	R1-1		1	1			
68R	R5-1		1	1			
69R	W3-1		1	1			

TYPE II SIGN REMOVAL and REMOVAL OF SOLAR FLASHING BEACON AND POLE CATEGORY 0010 **2709-03-70 STH 164**

SIGN NO.	SIGN CODE	SIGN MESSAGE	**638.2602** REM SIGNS TYPE II [EA]	**638.3000** REM SMALL SIGN SUP [EA]	**204.9060.05** REMOVING SOLAR FLASHING BEACON AND POLE (EA)	**204.9105.S.10** REMOVING SOLAR DEVICE AND POLE L.S	REMARKS / SIGN LOCATION
70R	W3-1		1	1			
71R	R2-1		1	1			
72R	R2-1		1	1			
73R	D1-61		1	2			
74R	R1-1		1	1			
75R	W4-4C		1	1			THE BLINKER STOP IS TO BE MOVED SEE PERMANENT SIGNING PLAN QTYS
76R	R1-1		1	1			
77R	R5-1		1	1			
78R	W3-1		1	1			
79R	W3-1		1	1			
80R	R2-1		1	1			
81R	W2-7R		1	1			
82R	W14-3		1	1			
83R	R1-1		1	1			
84R	J1-1		1	1			
85R	R1-1		1	1			
86R	R2-1		1	1			
87R	W3-1		1	1			
88R	J2-3		1	2			
89R	D1-2		1	2			
90R	S1-1		1	1			REMOVAL OF PLAQUES PART OF SIGN 90R
91R	R1-1		1		1		REMOVE POLE WITH RED SOLAR BEACON. PLACE AT PLEASANT HILL ROAD PER PERMANENT SIGNING PLAN
92R	J3-2		1	1			REMOVAL OF W14-3 IS PART OF 92R
93R	J3-2		1	1			REMOVAL OF W14-3 IS PART OF 93R
94R	R1-1		1		1		REMOVE POLE WITH RED SOLAR BEACON. TURN OVER TO ELECTRICAL UNIT - CONTACT DENNIS CAULEY, 414-266-1170
95R	R1-1		1	1			
96R	J4-1		1	1			
97R	D1-2		1	2			

TYPE II SIGN REMOVAL and REMOVAL OF SOLAR FLASHING BEACON AND POLE CATEGORY 0010 **2709-03-70 STH 164**

SIGN NO.	SIGN CODE	SIGN MESSAGE	**638.2602** REM SIGNS TYPE II [EA]	**638.3000** REM SMALL SIGN SUP [EA]	**204.9060.05** REMOVING SOLAR FLASHING BEACON AND POLE (EA)	**204.9105.S.10** REMOVING SOLAR DEVICE AND POLE L.S	REMARKS / SIGN LOCATION
98R	R1-1		1		1		REMOVE POLE WITH RED SOLAR BEACON PLACE AT PLEASANT HILL ROAD PER PERMANENT SIGNING PLAN
99R	J3-2		1	1			W14-3 REMOVAL IS PART OF ITEM
100R	R1-1		1		1		REMOVE POLE WITH RED SOLAR BEACON TURN OVER TO ELECTRICAL UNIT - CONTACT DENNIS CAULEY , 414-266-1170
101R	J3-1		1	1			W14-3 IS PART OF REMOVAL
102R	R1-1		1	1			
103R	J4-1		1	1			
104R	R2-1		1	1			REMOVAL OF S5-2 IS PART OF ITEM
105R	W11-3		1	1			PLAQUE REMOVAL IS PART OF 105R
106R	R1-1		1	1			
107R	W2-7R		1	1			
108R	R2-1		1	1			
109R	W3-1		1	1			
110R	W3-1		1	1			
111R	J2-3		1	2			
112R	J1-1		1	1			
113R	S1-1		1	1			REMOVAL OF PLAQUE PART OF 113R
114R	R2-1		1	1			REMOVAL OF S5-2 PART OF 114R
115R	D12-2		1	2			
116R	W3-1		1	1			
117R	W3-1		1	1			
118R	W3-1		1	1			REMOVAL OF J4-1 PART OF ITEM
119R	W3-1		1	1			REMOVAL OF J1-1 PART OF ITEM
120R	S1-1		1	1			REMOVAL OF PLAQUES PART OF ITEM
121R	R2-1		1	1			
122R	W11-3		1	1			REMOVAL OF PLAQUE PART OF ITEM
123R	W14-3		1	1			
124R	W14-3		1	1			
125R	S1-1		1	1			REMOVAL OF PLAQUE PART OF ITEM

TYPE II SIGN REMOVAL and REMOVAL OF SOLAR FLASHING BEACON AND POLE CATEGORY 0010 **2709-03-70 STH 164**

SIGN NO.	SIGN CODE	SIGN MESSAGE	**638.2602** REM SIGNS TYPE II [EA]	**638.3000** REM SMALL SIGN SUP [EA]	**204.9060.05** REMOVING SOLAR FLASHING BEACON AND POLE (EA)	**204.9105.S.10** REMOVING SOLAR DEVICE AND POLE L.S	REMARKS / SIGN LOCATION
126R	J1-1		1	1			
127R	W3-1		1	1			
128R	J2-3		1	2			
129R	R2-1		1	1			
130R	R1-1		1	1			
131R	R2-1		1	1			
132R	W3-5		1	1			
133R	W16-9P		1	1			REMOVAL OF DEAF CHILD SIGN PART OF ITEM
134R	R2-1		1			1	REMOVING ELECTRONIC SIGN - DYNAMIC SPEED SIGN
135R	W3-1		1				MOVING SOLAR BEACON ASSEMBLY- SEE PERMANENT SIGN QTYS
136R	D1-61		1	2			
137R	R7-1L		1	1			
138R	R7-1R		1	1			
139R	R2-1		1	1			
140R	W11-3		1	1			REMOVAL OF PLAQUE PART OF 140R
141R	W14-3		1	1			
142R	R1-1		1	1			
143R	R1-1		1	1			SEE ELECTRICAL PLAN FOR REMOVAL OF HARD WIRED BEACON
							REMOVAL OF W4-4C PART OF 143R
144R	R1-1		1	1			SEE ELECTRICAL PLAN FOR REMOVAL OF HARD WIRED BEACON
							REMOVAL OF W4-4C PART OF 144R
145R	R2-1		1	1			
146R	W14-3		1	1			
147R	W3-5		1	1			
148R	R1-1		1	1			
149R	R2-1		1				MOVING ELECTRONIC SIGN - SEE PERMANENT SIGN QTYS
150R	W2-1		1				MOVING OF SOLAR BEACON AND POLE SEE PERMANENT SIGN PLAN
151R	D1-61		1	2			

TYPE II SIGN REMOVAL and REMOVAL OF SOLAR FLASHING BEACON AND POLE CATEGORY 0010 **2709-03-70 STH 164**

SIGN NO.	SIGN CODE	SIGN MESSAGE	**638.2602** REM SIGNS TYPE II [EA]	**638.3000** REM SMALL SIGN SUP [EA]	**204.9060.05** REMOVING SOLAR FLASHING BEACON AND POLE (EA)	**204.9105.S.10** REMOVING SOLAR DEVICE AND POLE L.S	REMARKS / SIGN LOCATION
152R	R7-1L		1	1			
153R	R2-1		1	1			
154R	R2-1		1	1			
155R	W2-1		1	1			
156R	D1-61		1	2			
157R	R1-1		1	1			
158R	R1-1		1	1			
159R	R2-1		1	1			
160R	I2-3		1	2			
161R	R2-1		1	1			
162R	D1-61		1	2			
163R	W2-1		1	1			
164R	W14-3		1	1			REMOVAL OF R2-1 PART OF 164R
165R	R2-1		1	1			
166R	D12-2B		1	2			W14-3 REMOVAL PART OF 166R
167R	D12-2B		1	2			
168R	J1-1		1	1			
169R	J2-1		1	1			
170R	R2-1		1	1			
171R	J3-1		1	1			
172R	W1-7		1	1			
173R	R2-1		1	1			
174R	R1-1		1	1			
175R	J1-1		1	1			
176R	J2-1		1	1			
177R	J3-1		1	1			
178R	R1-1		1	1			
179R	R1-1		1	1			
180R	J3-1		1	1			
181R	S3-1		1	1			
182R	S3-1		1	1			
TOTALS			181	191 *	4	1	

* ADDITIONAL QTYS SHOWN ELSEWHERE

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS (EA)	634.0618 POSTS WOOD 4"x6"x18' [EA]	634.0622 POSTS WOOD 4"x6"x22' [EA]	634.0816 POSTS TUBULAR STEEL 2"x2"x16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	SPV.0060.03 MOVING SOLAR DEVICE AND POLE EACH	TYPE I SIGN SIZE W x H [FT.] x [FT.]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
1	W14-3(2S)		48 X 36		5.560				1				SQ FOOTAGE OF 5.56 IS PER STATE PLATE										
2	R4-7(2S)		24 X 30	5.000								1											
2a	W5-54(2S)		18 X 18		2.250							2											
3	W6-3(2S)		36 X 36		9.000				1														
4	R2-1(2S)		24 X 30	5.000					1														
5	W14-3(2S)		48 X 36		5.560																		
6		ADOPT A HIGHWAY					1	1	1														
7	J2-1(2S)		24 X 39	6.500					1														
	M2-1		21 X 15																				
	M1-5A	CTH Q																					
8	W2-6(2S)		30 X 30		6.250				1														
8A	W13-1(2s)		18 x 18		2.250																		
9	W3-2(2S)		36 X 36		9.000				1														
10	W6-1(2S)		36 X 36		9.000				1														
11	W5-52R(2S)		12 X 36		3.000				1				4 FOOT MOUNTING HEIGHT										
12	W2-1(2S)		30 X 30		6.250				1														
13	S3-1(2S)		36 X 36		9.000				1														
14	S3-1(2S)		36 X 36		9.000				1														
15	D1-2	HANSEN DR AND UPLAND DR	78 X 30	16.250					2														
16	R1-1(2S)		30 X 30	5.180							1												
17	R1-1(2S)		30 X 30	5.180									PRIVATE LIGHT POLE REMOVE BY OTHERS										
18	W1-7(2S)		24 X 48		8.000				1														
19	W14-1(2S)		30 X 30		6.250						1												
20	R2-1(2S)	SPEED LIMIT 25	24 X 30	5.000							1												
21	W1-1L(2S)		36 X 36		9.000						1												
22	W1-6(2S)		24 X 48		8.000						1												
23	R2-1(2S)	SPEED LIMIT 55	24 X 30						1														
24	R2-1(2S)	SPEED LIMIT 25	24 X 30								1												
25	W5-56(2S)		18 X 18	2.250					1														
26	W5-56(2S)		18 X 18	2.250					1														
27	W5-56(2S)		18 X 18	2.250					1														
28	R1-1(2S)		30 X 30	5.180					1														
29	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS (EA)	634.0618 POSTS WOOD 4"x6"x18' [EA]	634.0622 POSTS WOOD 4"x6"x22' [EA]	634.0816 POSTS TUBULAR STEEL 2"x2"x16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	SPV.0060.03 MOVING SOLAR DEVICE AND POLE EACH	TYPE I SIGN SIZE W [FT.] x H [FT.]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
30	W14-3(2S)		48 X 36		5.560				1														
31	NONE	YOUR SPEED IS ELECTRONIC SIGN											MOVING EXISTING SOLAR SPEED ELECTRONIC SIGN	1									
32	D1-61(2S)	MONCHES RD	66 X 24	11.000					2														
33	D1-2	UPLAND DR AND HANSEN DR	78 X 30	16.250					2														
34																							
35	R1-1(2S)		30 X 30	5.180					1														
36	R1-1(2S)		30 X 30	5.180					1														
37	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
38	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
39	W14-3(2S)		48 X 36		5.560				1														
40	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
41	W11-5(2S)		30 X 30		6.250				1														
42	W14-3(2S)		48 X 36		5.560				1														
43	W14-3(2S)		48 X 36		5.560				1														
44	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
45	W2-1(2S)		30 X 30		6.250				1														
46	W2-1(2S)		30 X 30		6.250				1														
47	D1-61(2S)	ELMWOOD RD	66 X 24	11.000					2														
48	R1-1(3)		36 X 36	7.460					1														
49	R1-1(3)		36 X 36	7.460					1														
50	W4-4C(3)		36 X 15		3.750							49											
51	R1-1(3)		36 X 36	7.460					1														
52	R1-1(3)		36 X 36	7.460					1														
53	W4-4C(3)		36 X 15		3.750							52											
54		ADOPT A HIGHWAY					1	1	1														
55	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
56	NONE	YOUR SPEED IS SIGN											YOUR SPEED ELECTRONIC SIGN	1									
57	R3-20R(2S)		24 X 36	6.000					1														
58	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
59	W1-7(2S)		24 X 48		8.000				1														
60	D1-1	CHEROKEE TR	84 X 15	8.750					2														

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS (EA)	634.0618 POSTS WOOD 4"x6"x18' [EA]	634.0622 POSTS WOOD 4"x6"x22' [EA]	634.0816 POSTS TUBULAR STEEL 2"x2"x16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	SPV.0060.03 MOVING SOLAR DEVICE AND POLE EACH	TYPE I SIGN SIZE W x H [FT.] x [FT.]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
61	W3-5(2S		36 X 36		9.000				1														
62	W11-8(2S)		30 X 30		6.250				1														
63	R3-20R(2S)		24 X 36	6.000					1														
64	W3-5(2S)		36 X 36		9.000				1														
65	R3-20R(2S)		24 X 36	6					1														
66	R1-1(2S)		30 X 30	5.18					1														
67	W2-1(2S)		30 X 30		6.250				1														
68	W2-1(2S)		30 X 30		6.250				1														
69	D1-61(2S)	ELMWOOD RD	66 X 24	11.000					2														
70	W14-3(2S)		48 X 36		5.560				1														
71	R1-1(2S)		30 X 30	5.180					1														
72	R2-1(3)	SPEED LIMIT 50	36 X 48	12.000					2				FIRST SPEED LIMIT SIGN IN REDUCED ZONE IS INCREASED SIZE TO EMPHASIZE REDUCED SPEED LIMIT										
73	W2-2(2S)		30 X 30		6.250				1														
74	D1-1	CHEROKEE TR	84 X 15	8.750					2														
75	W1-7(2S)		24 X 48		8.000				1														
76	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
77	R2-1(2S)	SPEED LIMIT 50	24 X 30	5.000					1														
78	R3-20R(2S)		24 X 36	6.000					1														
79	R1-1(2S)		30 X 30	5.180					1														
80	W2-1(2S)		30 X 30		6.250				1														
80A	W13-1(2S)	40 MPH	18 X 18		2.250							80											
81	D1-61(2S)	HUBERTUS RD	72 X 24	12.000					2														
82	R2-1(2S)	SPEED LIMIT 50	24 X 30	5.000					1														
83	W1-7(2S)		24 X 48		8.000				1														
84	W11-8(2S)		30 X 30		6.250				1														

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS (EA)	634.0618 POSTS WOOD 4"x6"x18' [EA]	634.0622 POSTS WOOD 4"x6"x22' [EA]	634.0816 POSTS TUBULAR STEEL 2"x2"x16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	SPV.0060.03 MOVING SOLAR DEVICE AND POLE EACH	TYPE I SIGN SIZE W x H [FT.] x [FT.]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
85	R1-1(3)		36 X 36		7.460				1				LARGER SIGN DUE TO SAFETY ISSUE										
86	R1-1						1	1	1				MOVE BLINKER STOP SIGN . REUSE BLINKER SIGN										
86A	W4-4C(3)	TRAFFIC ON 164 DOES NOT STOP	36 X 15		3.750							86	LARGER SIGN UNDER LARGER STOP SIGN										
87	R2-1(2S)	SPEED LIMIT 50	24 X 30	5.000					1														
88	W14-3(2S)		48 X 36		5.560				1				SQ FOOTAGE PER STATE PLATE										
89	R2-1(2S)	SPEED LIMIT 50	24 X 30	5.000					1														
90	D1-61(2S)	HUBERTUS RD	72 X 24	12.000					2														
91	R1-1(3)		36 X 36	7..46					1				LARGER SIGN DUE TO SAFETY ISSUES										
92	R1-1						1	1	1				MOVE BLINKER STOP SIGN . REUSE BLINKER STOP SIGN										
92A	W4-4C(3)	TRAFFIC ON 164 DOES NOT STOP	36 X 15		3.750							92	LARGER SIGN UNDER LARGER STOP SIGN										
93	R2-1(2S)	SPEED LIMIT 50	24 X 30	5.000					1														
94	W2-7R(2S)		30 X 30		6.250				1														
95	W14-3(2S)		48 X 36		5.560				1														
96	R3-20R(2S)		24 X 36	6.000					1														
97	R1-1(2S)		30 X 30	5.180					1														
98	W1-7(2S)		24 X 48		8.000				1														
99	R3-20R(2S)		24 X 36	6.000					1														
100	W1-7(2S)		24 X 48		8.000				1														
101	R1-1(2S)		30 X 30	5.180					1														
102	R2-1(2S)	SPEED LIMIT 50	24 X 30	5.000					1														
103	J1-1(2S)		24 X 39	6.250					1														
	M2-1		21 X 15																				
	M1-6	STH 167	24 X 24																				
104	W2-6(2S)		30 X 30		6.250				1				16 X 16 TEMP FLAGS INCIDENTAL TO SIGN										
104A	W13-1(2S)	15 MPH	18 X 18		2.250							104											
105	D1-62	DIAGRAMMATIC SIGN	144 X 66	66.000									MOUNT TYPE II SIGN ON STEEL POSTS			A	1.2	68	600				
106	W3-2(2S)		36 X 36		9.000				1				16 X 16 TEMP FLAGS INCIDENTAL TO SIGN										
107	R4-7(2S)		24 X 30	5.000							1												
107A	W5-54(2S)		18 X 18		2.250							107											
108	W6-1(2S)		36 X 36		9.000						1												
109	D1-2(2S)	HOLY HILL AND RICHFIELD	66 X 30	13.750							2												
110	W6-2(2S)		36 X 36		9.000						1												
111	R2-1(2S)	SPEED LIMIT 50	24 X 30	5.000							1												
112	R3-4(2S)		24 X 24	4.000							1												
113	R5-1(2S)		30 X 30	6.250								111											

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS (EA)	634.0618 POSTS WOOD 4"x6"x18' [EA]	634.0622 POSTS WOOD 4"x6"x22' [EA]	634.0816 POSTS TUBULAR STEEL 2"x2"x16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	SPV.0060.03 MOVING SOLAR DEVICE AND POLE EACH	TYPE I SIGN SIZE W x H [FT.] x [FT.]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
114	W6-3(2S)		36 X 36		9.000				1														
115	R3-4(2S)		24 X 24	4.000							1												
116	S1-1(2S)		36 X 36		6.750						1												
116A	S16-9P(2S)		30 X 18		3.750							116											
116B	R2-6P(2S)		24 X 18	3.000								116											
117	W11-2(2S)		30 X 30		6.250						1												
117A	W16-7L(2S)		24 X 12		2.000							117											
118	NOT USED																						
119	R1-2(2S)		36 X 31	3.880							1		16 X 16 TEMP FLAGS INCIDENTAL										
119A	R1-54(2S)		24 X 15	2.500								119											
120	D1-2	167 EAST, HOLY HILL RD	84 X 30	17.500							2												
121	W11-2(2S)		30 X 30		6.250						1												
121A	W16-7L(2S)		24 X 12		2.000							121											
122	R1-6(2S)		12 X 36	3.000							1		2 FOOT MOUNTING HEIGHT										
123	W11-2(2S)		30 X 30		6.250						1												
123A	W16-7L(2S)		24 X 12		2.000							123											
124	R1-2(2S)		36 X 31	3.880							1		16 X 16 TEMP FLAGS INCIDENTAL										
124A	R6-2R(2S)		24 X 30	5.000								124											
125	R1-2(2S)		36 X 31	3.880							1		16 X 16 TEMP FLAGS INCIDENTAL										
125A	R1-54(2S)		24 X 15	2.500								125											
126	D1-1	NORTH 164	42 X 30	8.750							1												
127	W11-2(2S)		30 X 30		6.250						1												
127A	W16-7L(2S)		24 X 12		2.000							127											
128	J4-1(2S)		24 X 36	6.000							1												
	M3-1		24 X 12																				
	M1-6	STH 164	24 X 24																				
129	R1-2(2S)		36 X 31	3.880							1		16 X 16 TEMP FLAGS INCIDENTAL										
129A	R6-2R(2S)		24 X 30	5.000								129											
130	W11-2(2S)		30 X 30		6.250						1												
130A	W16-7L(2S)		24 X 12		2.000							130											
131	R1-2(2S)		36 X 31	3.880							1		16 X 16 TEMP FLAGS INCIDENTAL										
131A	R1-54(2S)		24 X 15	2.500								131											
132	W11-2(2S)		30 X 30		6.250						1												
132A	W16-7L(2S)		24 X 12		2.000							132											
133	D1-2	167 WEST, HOLY HILL RD	84 X 30	17.500							2												
134	R1-6(2S)		12 X 36	3.000							1		2 FOOT MOUNTING HEIGHT										

TYPE II PERMANENT SIGNING AND MOVING SOLAR DEVICE AND POLES

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS (EA)	634.0618 POSTS WOOD 4"x6"x18' [EA]	634.0622 POSTS WOOD 4"x6"x22' [EA]	634.0816 POSTS TUBULAR STEEL 2"x2"x16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	SPV.0060.03 MOVING SOLAR DEVICE AND POLE EACH	TYPE I SIGN SIZE W x H [FT.] x [FT.]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
135	W11-2(2S)		30 X 30		6.250						1												
135A	W16-7L(2S)		24 X 12		2.000							135											
136	R1-2(2S)		36 X 31	3.880							1		16 X 16 TEMP FLAGS INCIDENTAL										
136A	R6-2R(2S)		24 X 30	5.000								136											
137	R6-1R(2S)		36 X 12	3.000							2												
138	R6-1R(2S)		36 X 12	3.000							2												
139	R6-1R(2S)		36 X 12	3.000							2												
140	R6-1R(2S)		36 X 12	3.000							2												
141	R6-4B(2S)		60 X 24	10.000								137											
142	R6-4B(2S)		60 X 24	10.000								138											
143	R6-4B(2S)		60 X 24	10.000								139											
144	R6-4B(2S)		60 X 24	10.000								140											
145	NOT USED																						
146	R1-2(2S)		36 X 31	3.880							1		16 X 16 TEMP FLAGS INCIDENTAL										
146A	R1-54(2S)		24 X 15	2.500								146											
147	W11-2(2S)		30 X 30		6.250						1												
147A	W16-7L(2S)		24 X 12		2.000							147											
148	D1-1	SOUTH 164	42 X 30	8.750							1												
149	R5-1(2S		30 X 30	6.250							1												
150	R1-6(2S)		12 X 36	3.000							1		2 FOOT MOUNTING HEIGHT										
151	R4-7(2S)		24 X 30	5.000							1												
152	J4-1(2S)		24 X 36	6.000							1												
	M3-3		24 X 12																				
	M1-6	STH 164	24 X 24																				
153	NOT USED																						
154	R3-20R(2S)		24 X 36	6.000							1												
155	R3-4(2S)		24 X 24	4.000							1												
156	W6-2(2S)		36 X 36		9.000						1												
157	R5-1(2S)		30 X 30	6.250							1												
158	R1-1(2S)		30 X 30	5.180					1														
159	R2-1(2S)	SPEED LIMIT 50	24 X 30	5.000					1														
160	D1-62	DIAGRAMMATIC SIGN	144 X 66	66.000									TYPE II SIGN ON STEEL POSTS			A	1.2	68	600				
161	W3-2(2S)		36 X 36		9.000				1				16 X 16 TEMP FLAGS INCIDENTAL										
162	R4-7(2S)		24 X 30	5.000							1												
162A	W5-54(2S)		18 X 18		2.250							162											
163	W6-1(2S)		36 X 36		9.000						1												
164	D1-2(2S)	RICHFIELD AND HOLY HILL	66 X 30	13.750							2												
165	W2-6(2S)		30 X 30		6.250				1				16 X 16 TEMP FLAGS INCIDENTAL										
165A	W13-1(2S)	15 MPH	18 X 18		2.250							165											
166	J1-1(2S)		24 X 39	6.500					1														
	M2-1		24 X 15																				
	M1-6	STH 167	24 X 24																				
167	W6-3(2S)		36 X 36		9.000				1														
168	W14-3(2S)		48 X 36		5.560				1														

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	MISCELLANEOUS QUANTITIES – PERMANENT SIGNING	SHEET:	E

TYPE II PERMANENT SIGNING AND MOVING SOLAR DEVICE AND POLES

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS (EA)	634.0618 POSTS WOOD 4"x6"x18' [EA]	634.0622 POSTS WOOD 4"x6"x22' [EA]	634.0816 POSTS TUBULAR STEEL 2"x2"x16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	SPV.0060.03 MOVING SOLAR DEVICE AND POLE EACH	TYPE I SIGN SIZE W x H [FT.] x [FT.]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
169	S1-1(2S)		36 X 36		6.750				1														
169A	S16-9P(2S)		30 X 18		3.750							169											
169B	R2-6P(2S)		24 X 18	3.000								169											
170	W14-3(2S)		48 X 36		5.560				1				SHEET 17										
171	R2-1(2S)		24 X 30	5.000					1														
172	NOT USED																						
173	NOT USED																						
174	W14-3(2S)		48 X 36		5.560				1														
175	R3-20R(2S)		24 X 36	6.000					1														
176	R1-1(2S)		30 X 30	5.180					1														
177	R2-1(3)	SPEED LIMIT 50	36 X 48	12.000									MOUNT ON ELECTRONIC SIGN USING LARGER SIGN FOR EMPHASIS FOR ELECTRONIC SPEED SIGN										
178	NONE	ELECTRONIC SIGN											REMOVE-TURN OFER TO SIGN SHOP (SEE REMOVAL QTYS)										
179	W2-1(3)		36 X 36		9.000								SOLAR BEACON ON POLE LARGER SIGN FOR SAFETY ISSUE	1									
180	D1-61(2S)	PLEASANT HILL RD	90 X 24	15.000					2														
181	R1-1(3)		36 X 36	7.460					1				SAFETY ISSUE										
182	R7-1L(2S)		18 X 24	3.000					1														
183	R1-1(3)		36 X 36	7.460									MOVE SOLAR BEACON AND POLE FROM 164 AT 167 TO PLEASANT HILL RD. REPLACE SIGN	1									
183A	W4-4C(3)		36 X 15		3.750							183											
184	NONE	ADOPT A HIGHWAY					1	1	1														
185	R1-1(3)		36 X 36	7.460					1				SAFETY ISSUE										
186	R1-1(3)		36 X 36	7.460									MOVE SOLAR BEACON AND POLE FROM STH 164 AT 167 TO PLEASANT HILL. REPLACE SIGN	1									
186A	W4-4C(3)		36 X 15		3.750							186											
187	R71-R(2S)		18 X 24	3.000					1														
188	NONE	ADOPT A HIGHWAY					1	1	1														
189	R2-1(2S)	SPEED LIMIT 50	24 X 30	5.000					1														
190	R7-1L(2S)		18 X 24	3.000					1														
191	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
192	W14-3(2S)		48 X 36		5.560				1														
193	D1-61(2S)	PLEASANT HILL RD	90 X 24	15.000					2														
194	W3-5(2S)	40 MPH	36 X 36		9.000				1				16 X 16 TEMP FLAGS INCIDENTAL										
195	W3-5(2S)	40 MPH	36 X 36		9.000				1				16 X 16 TEMP FLAGS INCIDENTAL										
196	R3-20R(2S)		24 X 36	6.000					1														
197	R1-1(2S)		30 X 30	5.180					1														
198	R2-1(3)	50 MPH	36 X 48	12.000									MOUNT ABOVE YOUR SPEED SIGN										
199	NONE	YOUR SPEED ELECTRONIC SIGN											YOUR SPEED ELECTRONIC SIGN	1									
200	W2-1(3)		36 X 36		9.000								SAFETY ISSUE MOVE ELECTRONIC SIGN AND POST	1									

TYPE II PERMANENT SIGNING AND MOVING SOLAR DEVICE AND POLES

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS (EA)	634.0618 POSTS WOOD 4"x6"x18' [EA]	634.0622 POSTS WOOD 4"x6"x22' [EA]	634.0816 POSTS TUBULAR STEEL 2"x2"x16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	SPV.0060.03 MOVING SOLAR DEVICE AND POLE EACH	TYPE I SIGN SIZE W x H [FT.] x [FT.]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
201	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
202	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
203	W2-1(2S)		30 X 30		6.250				1														
204	D1-61(2S)	PIONEER RD	60 X 24	10.000					2														
205	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
206	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
207	W2-1(2S)		30 X 30		6.250				1														
208	D1-61(2S)	PIONEER RD	60 X 24	10.000					2														
209	R1-1(2S)		30 X 30	5.180					1														
210	NONE	ENGINE BRAKING SIGN					1	1	1				PERMIT BY OTHERS VILLAGE										
211	I2-3(2S)	POPULATION RICHFIELD 11, 385	60 X 24	10.000					2														
212	W14-3(2S)		48 X 36		5.560				1														
213	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
214	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
215	D12-2B(2S)		84 X 36	21.000					2														
216	D12-2B(2S)		84 X 36	21.000					2														
217	W14-3(2S)		48 X 36		5.560				1														
218	J1-1(2S)		24 X 39	6.500					1														
	M2-1		24 X 15																				
	M1-5A	CTH E	24 X 24																				
219	R3-8A(2S)		36 X 30	7.500					1														
220	J3-1(2S)		24 X 45	7.500					1														
	M1-5A	CTH E	24 X 24																				
	M6-1		21 X 21																				
221	NONE	FINGER BOARD					1						PERMIT SIGN BY OTHERS										
222	W1-7(2S)		24 X 48	8.000					1														
223	R2-20R(2S)		24 X 36	6.000					1														
224	NONE	ADOPT A HIGHWAY					1	1	1														
225	J3-1(2S)		24 X 45	7.500					1														
	M1-5A	CTH E	24 X 24																				
	M6-1		21 X 21																				
226	R1-1(3)		36 X 36	7.460					1				SAFETY ISSUE										
227	J3-1(2S)		24 X 45	7.500					1														
	M1-6	STH 164	24 X 24																				
	M6-4		21 X 21																				
228	NONE	ADOPT A HIGHWAY					1	1	1														
229	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
230	W14-3(2S)		48 X 36		5.560				1														
231	R1-1(2S)		30 X 30	5.180					1														
232	R2-1(2S)	SPEED LIMIT 55	24 X 30	5.000					1														
233	S3-1(2S)		36 X 36		9.000				1														
234	J1-1(2S)		24 X 39	6.500					1														
	M2-1		24 X 15																				
	M1-5A	CTH E	24 X 24																				

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	MISCELLANEOUS QUANTITIES – PERMANENT SIGNING	SHEET:	E

TYPE II PERMANENT SIGNING AND MOVING SOLAR DEVICE AND POLES

2709-03-70 STH 164

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.] x H [IN.]	**637.2210** SIGNS TYPE II REFLECTIVE H [SF]	**637.2230** SIGNS TYPE II RELFECTIVE F [SF]	**637.2215** SIGNS TYPE II REFLECTIVE H FOLDING [SF]	**638.2102** MOVING SIGNS TYPE II [EA]	**638.3000** REMOVING SMALL SIGN SUPPORTS (EA)	**634.0618** POSTS WOOD 4"x6"x18' [EA]	**634.0622** POSTS WOOD 4"x6"x22' [EA]	**634.0816** POSTS TUBULAR STEEL 2"x2"x16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	**SPV.0060.03** MOVING SOLAR DEVICE AND POLE EACH	TYPE I SIGN SIZE W [FT.] x H [FT.]	STEEL POST TYPE	**636.0100** SIGN SUPPORTS CONCRETE MASONRY [CY]	**636.0500** SIGN SUPPORTS STEEL REINF. [LBS]	**635.0200** SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
235	NONE	FINGER BOARD					1						PERMIT SIGN BY OTHERS										
236	W1-7(2S)		24 X 48	8.000					1														
237	S3-1(2S)		36 X 36		9.000				1														
238	R3-8(2S)		36 X 30	7.500					1														
239	W3-1(2S)		36 X 36		9.000				1														
240	W3-1(2S)		36 X 36		9.000				1														
241	R2-1(2S)	SPEED LIMIT 35	24 X 30	5.000					1														
242	R2-1(2S)	SPEED LIMIT 40	24 X 30	5.000					1														
243	R3-8A(2S)		36 X 30	7.500					1														
244	W3-1(2S)		36 X 36		9.000				1														
245	W3-1(2S)		36 X 36		9.000				1														
246	J1-1(2S)		24 X 39	6.500					1														
	M2-1		24 X 15																				
	M1-6	STH 164	24 X 24																				
247	W2-6(2S)		30 X 30		6.250				1				16 X 16 TEMP FLAGS INCIDENTAL										
247A	W13-1(2S)	15 MPH	18 X 18		2.250							247											
248	D1-62	DIAGRAMMATIC	108 X 78	58.500						3													
249	W6-3(2S)		36 X 36		9.000				1														
250	D12-2A(2S)		60 X 42	17.500					2														
251	W3-2(2S)		36 X 36		9.000				1				16 X 16 TEMP FLAGS INCIDENTAL										
252	W6-1(2S)		36 X 36		9.000				1														
253	S1-1(2S)		36 X 36		6.750						1												
253A	S16-9P(2S)		30 X 18		3.750							253											
253B	R2-6P(2S)		24 X 18	3.000								253											
254	D1-2(2S)	SLINGER AND SUSSEX AND PEWAUKEE	72 X 36	18.000							2												
255	R4-7(2S)		24 X 30	5.000							1												
255A	W5-54(2S)		18 X 18		2.250							255											
256	J4-1(2S)		24 X 36	6.000							1												
	M3-4		24 X 12																				
	M1-6	STH 167	24 X 24																				
257	W6-2(2S)		36 X 36		9.000						1												
258	R3-4(2S)		24 X 24	4.000							1												
259	R5-1(2S)		30 X 30	6.250							1												
260	R2-1(2S)	SPEED LIMIT 45	24 X 30	5.000								259											
260A	S5-2(2S)		24 X 30	5.000								259											
261	NONE	ADOPT A HIGHWAY					1	1	1														
262	J4-1(2S)		24 X 36	6.000							1												
	M3-2		24 X 12																				
	M1-6	STH 167	24 X 24																				
263	R3-4(2S)		24 X 24								1												
264	W6-2(2S)		36 X 36								1												
265	R5-1(2S)		30 X 30	6.250								264											
266	W3-2(2S)		36 X 36		9.000				1				16 X 16 TEMP FLAGS INCIDENTAL										
267	W6-1(2S)		36 X 36		9.000						1												
268	R4-7(2S)		24 X 30	5.000							1												
268A	W5-54(2S)		18 X 18		2.250							268											
269	D1-3	SUSSEX, PEWAUKEE SLINGER	72 X 36	18.000							2												
270	NONE	ADOPT A HIGHWAY					1	1	1														
271	W6-3(2S)		36 X 36		9.000				1														

TYPE II PERMANENT SIGNING AND MOVING SOLAR DEVICE AND POLES

2709-03-70 STH 164

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	**637.2210** SIGNS TYPE II REFLECTIVE H [SF]	**637.2230** SIGNS TYPE II RELFECTIVE F [SF]	**637.2215** SIGNS TYPE II REFLECTIVE H FOLDING [SF]	**638.2102** MOVING SIGNS TYPE II [EA]	**638.3000** REMOVING SMALL SIGN SUPPORTS (EA)	**634.0618** POSTS WOOD 4"x6"x18' [EA]	**634.0622** POSTS WOOD 4"x6"x22' [EA]	**634.0816** POSTS TUBULAR STEEL 2"x2"x16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	**SPV.0060.03** MOVING SOLAR DEVICE AND POLE EACH	TYPE I SIGN SIZE W x H [FT.] x [FT.]	STEEL POST TYPE	**636.0100** SIGN SUPPORTS CONCRETE MASONRY [CY]	**636.0500** SIGN SUPPORTS STEEL REINF. [LBS]	**635.0200** SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
272	S1-1(2S)		36 X 36		6.750				1														
272A	S16-9P(2S)		30 X 18		3.750							272											
272B	R2-6P(2S)		24 X 18	3.000								272											
273	J1-1(2S)		24 X 39	6.500					1														
	M2-1		24 X 15																				
	M1-6	STH 164	24 X 24																				
274	R2-1(2S)	SPEED LIMIT 45	24 X 30	5.000					1														
274A	S5-2(2S)		24 X 30	5.000								274											
275	W2-6(2S)		30 X 30		6.250				1				16 X 16 TEMP FLAGS INCIDENTAL										
275A	W13-1(2S)	15 MPH	18 X 18		2.250							275											
276	R3-20R(2S)		24 X 36	6.000					1														
277	D1-62	DIAGRAMMATIC	108 X 78							3													
	undistributed					1.000				5													
totals				943.110	726.420	1.000	13	11 *	197	11	74			7			2.4	136	1200				

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

MARKING

STATION	TO	STATION	646.1020 * LINE EPOXY 4-INCH (3' SKIP) (WHITE) LF	646.1020 * LINE EPOXY 4-INCH (3' SKIP) (WHITE) LF	646.1020 * LINE EPOXY 4-INCH (12.5' SKIP) (WHITE) LF	646.1020 * LINE EPOXY 4-INCH (12.5' SKIP) (YELLOW) LF	646.1040 LINE GROOVED WET REF EPOXY 4-INCH (WHITE) LF	646.1040 LINE GROOVED WET REF EPOXY 4-INCH (3' SKIP) (WHITE) LF	646.3020 LINE EPOXY 8-INCH (WHITE) LF	646.3020 LINE EPOXY 8-INCH (3' SKIP) (WHITE) LF	646.4520 LINE SAME DAY EPOXY 4-INCH (YELLOW) LF	646.4520 LINE SAME DAY EPOXY 4-INCH (12.5' SKIP) (YELLOW) LF	646.5020 ARROW EPOXY TYPE 2 EACH	646.5020 ARROW EPOXY TYPE 3 EACH	646.5120 WORD EPOXY (ONLY) EACH	646.5120 WORD EPOXY (YIELD) EACH	646.6120 STOP LINE EPOXY 18-INCH LF	646.6320 DOTTED EXTENSION EPOXY 18-INCH (WHITE)(2'SKIP) LF	646.7120 DIAGONAL EPOXY 12-INCH (WHITE) LF	646.7120 DIAGONAL EPOXY 12-INCH (YELLOW) LF	646.7420 CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) LF	646.8120 CURB EPOXY (YELLOW) LF	646.8220 ISLAND NOSE EPOXY (YELLOW) EACH
50+95	TO	72+00	300	50	--	--	4,015	--	300	32	2,905	325	--	--	--	--	--	--	--	--	--	--	--
HANSEN DRIVE			--	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--	--	--	--	--
UPLAND DRIVE			--	--	--	--	--	--	--	--	--	--	--	--	--	--	34	--	--	--	--	--	--
72+00	TO	93+00	650	100	--	--	3,963	--	650	70	2,100	1,055	--	--	--	--	--	--	--	--	--	--	--
MONCHES ROAD			395	--	--	550	--	--	--	--	--	--	--	--	--	--	63	--	--	--	--	--	--
93+00	TO	133+00	350	50	63	--	7,865	--	--	--	3,345	935	--	--	--	--	--	--	--	--	--	--	--
WOODED HILLS BIBLE CHURCH			--	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--	--	--	--	--
133+00	TO	146+00	650	100	--	--	2,377	--	650	70	1,300	325	2	--	1	--	--	--	--	--	--	--	--
ELMWOOD ROAD			394	--	--	548	--	--	--	--	--	--	--	--	--	--	64	--	--	--	--	--	--
146+00	TO	157+00	350	50	63	--	2,034	--	350	35	775	280	--	--	--	--	--	--	--	--	--	--	--
TUCKAWAY LANE			--	--	--	--	--	--	--	--	--	--	--	--	--	--	27	--	--	--	--	--	--
157+00	TO	169+00	550	100	63	--	2,231	--	550	70	1,200	300	4	--	2	--	--	--	--	--	--	--	--
CHEROKEE TRAIL			--	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--	--	--	--	--
169+00	TO	187+00	300	50	63	--	3,477	--	300	35	3,435	--	2	--	1	--	--	--	--	--	--	--	--
ST. GABRIEL LANE			240	--	--	588	--	--	144	--	--	--	4	--	--	--	41	--	--	--	--	--	--
187+00	TO	199+00	350	50	--	--	2,218	--	350	35	2,388	--	--	--	--	--	--	--	--	--	--	--	--
HUBERTUS ROAD			2,665	--	--		--	--	560	76	4,216	--	4	2	2	--	87	--	--	244	--	--	--
199+00	TO	242+50	1,050	105	75	--	8,232	--	1,050	69	3,982	745	6	--	3	--	64	--	--	--	--	--	--
ADA'HI COURT			--	--	--	--	--	--	--	--	--	--	--	--	--	--	30	--	--	--	--	--	--
242+50	TO	267+00	460	72	--	--	4,692	54	151	72	6,518	--	6	--	2	2	--	44	50	403	140	20	2
STH 167 HOLY HILL ROAD			200	50	63	--	3,626	48	383	36	5,256	--	2	--	1	2	--	40	37	290	136	20	2
267+00	TO	305+00	500	100	63	--	7,274	--	500	70	5,642	372	2	--	1	--	26	--	--	--	--	--	--
PLEASANT HILL ROAD			203	--	--	478	--	--	--	--	--	--	--	--	--	--	59	--	--	--	--	--	--
305+00	TO	318+00	200	50	63	--	2,484	--	500	70	2,129	113	--	--	--	--	--	--	--	--	--	--	--
MAJESTIC DRIVE			--	--	--	--	--	--	--	--	--	--	--	--	--	--	27	--	--	--	--	--	--
318+00	TO	360+50	650	100	--	--	8,303	--	--	--	--	1,075	2	--	1	--	--	--	--	--	--	--	--
PIONEER ROAD			374	--	--	538	--	--	--	--	--	--	--	--	--	--	68	--	--	--	--	--	--
360+50	TO	412+65	350	50	--	--	10,281	--	700	85	6,325	1,000	2	--	1	--	--	--	--	238	--	--	--
CTH E			869	--	--	--	--	--	--	--	1,320	--	--	--	--	--	40	--	--	117	--	28	1
412+65	TO	446+61	366	116	75	--	6,559	--	366	116	8,662	--	4	--	2	--	--	--	--	442	--	--	--
UNDISTRIBUTED			--	--	--	1,584	--	--	--	--		396	--	--	--	--	--	--	--	--	--	--	--
SUBTOTAL			12,416	1,193	591	4,286	79,631	102	7,504	941	61,498	6,921	40	2	17	4	720	84	87	1,734	276	68	5
TOTAL			18,486				79,733		8,445		68,419		42		21		720	84	1,821		276	68	5

NOTE: * ADDITIONAL QUANTITES SHOWN ELSEWHERE (SEE ASPHALTIC CENTERLINE RUMBLE STRIPS)

COLD WEATHER MARKING EPOXY

ROADWAY	4-INCH 646.6464.S LF	8-INCH 646.6468.S LF
STH 164	25,000	1,000
TOTAL	25,000	1,000

ALL ITEMS CATEGORY 0010

ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL

STATION	TO	STATION		465.0425 LF
50+95	TO	65+87	RT	1,492
73+75	TO	86+61	RT	1,286
94+91	TO	129+25	RT	3,434
137+25	TO	139+75	RT	250
148+04	TO	162+30	RT	1,426
170+65	TO	180+89	RT	1,024
188+84	TO	192+75	RT	391
201+17	TO	226+34	RT	2,517
233+00	TO	246+77	RT	1,377
258+75	TO	299+38	RT	4,063
311+00	TO	354+33	RT	4,333
362+64	TO	412+64	RT	5,000
420+42	TO	446+61	RT	2,619
50+95	TO	69+53	LT	1,858
77+39	TO	90+60	LT	1,321
98+90	TO	103+30	LT	440
120+50	TO	130+87	LT	1,037
138+72	TO	143+72	LT	500
152+01	TO	154+93	LT	292
161+73	TO	196+71	LT	3,498
204+45	TO	231+75	LT	2,730
258+67	TO	279+70	LT	2,103
286+50	TO	302+50	LT	1,600
310+30	TO	315+72	LT	542
323+52	TO	358+20	LT	3,468
366+52	TO	410+76	LT	4,424
417+00	TO	446+61	LT	2,961
TOTAL				55,986

NOTE: NO SHOULDER RUMBLE STRIP 103+30 LT TO 120+50 LT

LOCATING NO-PASSING ZONES

STATION	TO	STATION	648.0100 MI
50+95	TO	446+61	7.49
WINTER SHUTDOWN			1.80
UNDISTRIBUTED			0.30
TOTAL			9.59

ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL

STATION	TO	STATION	465.0475 ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL LF	* 646.1020 MARKING LINE EPOXY 4-INCH (YELLOW) LF	(12.5' SKIP) (YELLOW) LF
50+95	TO	69+50	1,855	2,405	330
73+50	TO	89+75	1,625	-	410
94+75	TO	131+00	3,625	3,342	825
135+00	TO	143+90	890	-	225
147+90	TO	155+00	710	575	180
159+00	TO	166+50	750	750	190
170+50	TO	184+60	1,410	2,820	-
188+60	TO	197+00	840	1,680	-
201+00	TO	230+40	2,940	1,075	720
235+80	TO	240+25	445	890	-
266+54	TO	279+75	1,321	2,642	-
283+75	TO	298+00	1,425	1,588	200
311+00	TO	315+75	475	950	-
319+75	TO	358+50	3,875	-	970
362+50	TO	400+15	3,765	1,240	945
426+12	TO	446+61	2,049	4,098	-
SUBTOTAL			28,000	24,055	4,995
TOTAL			28,000	29,050	

NOTE: * ADDITIONAL QUANTITES SHOWN ELSEWHERE

TEMPORARY MARKING

ROADWAY	STAGE	649.0105 LINE PAINT 4-INCH (WHITE) LF	(YELLOW) LF
STH 164	2	--	5,184
HUBERTUS RD	2	--	393
SIDE ROADS	2	--	425
STH 164	WINTER SHUTDOWN	18,220	12,290
STH 164	3	--	6,818
STH 167	3	--	563
SIDE ROADS	3	--	890
STH 164	4	--	5,408
SIDE ROADS	4	--	585
SUBTOTAL		18,220	32,554
TOTAL		50,774	

ALL ITEMS CATEGORY 0010

3

HILLSIDE TRAFFIC CONTROL

ROADWAY	STAGE	643.0410 TRAFFIC CONTROL BARRICADES TYPE II DAY	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW) LF	649.0850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE) LF	649.0550 TEMPORARY MARKING ARROW REMOVABLE TAPE EACH
HILLSIDE RD	STAGE 1	266	35	35	400	33	2
	STAGE 2-4	456	35	35	400	33	2
	REPLACEMENT	--	50	10	---	--	--
	PROJECT TOTALS	722	120	80	800	66	4

TRAFFIC CONTROL FIXED MESSAGE SIGNS

SIGN SIZE	NO. OF SIGNS	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	MESSAGE
4.00 X 5.50	2	44.00	HWY 167 EAST CLOSED AT HWY 164 FOLLOW DETOUR
6.00 X 11.50	1	69.00	HWY 167 WEST CLOSED AT HWY 164 FOLLOW DETOUR
4.00 X 5.50	3	66.00	HWY 167 WEST CLOSED AT HWY 164 FOLLOW DETOUR
4.00 X 5.50	2	44.00	HWY 164 NORTH CLOSED AT HWY Q FOLLOW DETOUR
4.00 X 5.50	2	44.00	HWY 164 SOUTH CLOSED AT HWY 60 FOLLOW DETOUR
6.00 X 11.50	1	69.00	HWY 164 SOUTH CLOSED AT HWY 60 FOLLOW DETOUR
2.00 X 9.00	2	36.00	HOLY HILL RD
1.00 X 3.00	5	15.00	WIS 167
1.50 X 5.50	1	8.25	WIS 167
3.00 X 3.00	10	90.00	ACCESS TO XXX (undistributed quantity)
PROJECT TOTAL		485.25	

TRAFFIC CONTROL

STAGE	ROADWAY	* DURATION DAYS	643.0300 TRAFFIC CONTROL DRUMS * DRUMS	DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III * BARRICADES	DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A * LIGHTS	DAY	643.0900 TRAFFIC CONTROL SIGNS * SIGNS	DAY	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I CYCLES *	EACH	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II CYCLES*	EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.5000 TRAFFIC CONTROL EACH	643.0310.S TEMPORARY PORTABLE RUMBLE STRIPS LS	SPV.0045.01 PORTABLE SPEED TRAILER DAY
VARIOUS	VARIOUS	--	20	4,560	--	--	--	--	--	--	--	--	2	5	--	1	1	722
STAGE 1-4	HILLSIDE RD	--	--	--	--	--	--	--	4	1,444	--	--	--	--	56	--	--	--
DETOUR	STH 164	361	--	--	--	--	--	--	169	61,009	2	8	2	2	--	--	--	--
DETOUR	STH 167	74	--	--	--	--	--	--	153	11,322	1	6	--	--	--	--	--	--
NO PASSING ZONE		10	--	--	--	--	--	--	45	450	--	--	--	--	--	--	--	--
				4,560		0		0		74,225		14		7	56	1	1	722
STAGE 1	STH 164	133	60	7,980	19	2,527	26	3,458	79	10,507	--	--	--	--	--	--	--	--
	MONCHES RD - ELMWOOD RD	133	--	--	11	1,463	16	2,128	12	1,596	--	--	--	--	266	--	--	--
	PIONEER RD - CTH E	30	--	--	4	120	8	240	8	240	--	--	--	--	60	--	--	--
	STAGE 1 SUBTOTAL			7,980		4,110		5,826		12,343		0		0	326	0	0	0
STAGE 2	STH 164	70	--	--	34	2,380	66	4,620	31	2,170	--	--	--	--	140	--	--	--
	SHADY LN	70	--	--	2	140	4	280	3	210	--	--	--	--	--	--	--	--
	HANSEN DR	70	--	--	5	350	10	700	3	210	--	--	--	--	--	--	--	--
	UPLAND DR	70	--	--	5	350	10	700	3	210	--	--	--	--	--	--	--	--
	MONCHES RD	70	--	--	4	280	8	560	6	420	--	--	--	--	--	--	--	--
	ELMWOOD RD	70	--	--	--	--	--	--	2	140	--	--	--	--	--	--	--	--
	TUCKAWAY LN	70	--	--	5	350	10	700	3	210	--	--	--	--	--	--	--	--
	CHEROKEE TR	70	--	--	5	350	10	700	3	210	--	--	--	--	--	--	--	--
	ST GABRIEL LN	70	--	--	2	140	4	280	3	210	--	--	--	--	--	--	--	--
	HUBERTUS RD	70	--	--	4	280	8	560	6	420	--	--	--	--	--	--	--	--
	GOLDEN DR	70	--	--	2	140	4	280	3	210	--	--	--	--	--	--	--	--
	LOCHVIEW DR	70	--	--	2	140	4	280	3	210	--	--	--	--	--	--	--	--
	ADA'HI CT	70	--	--	2	140	4	280	3	210	--	--	--	--	--	--	--	--
BUSINESS SIGNS (UNDISTRIBUTED)		70	--	--	--	--	--	--	4	280	--	--	--	--	--	--	--	--
	STAGE 2 SUBTOTAL			0		5,040		9,940		5,040		0		0	140	0	0	0
	PAGE TOTAL			12,540		9,150		15,766		91,608		14		7	522	1	1	722

TRAFFIC CONTROL

STAGE	ROADWAY	* DURATION DAYS	643.0300 TRAFFIC CONTROL DRUMS * DRUMS	DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III * BARRICADES	DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A * LIGHTS	DAY	643.0900 TRAFFIC CONTROL SIGNS * SIGNS	DAY	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I CYCLES*	EACH	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II * CYCLES*	EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.5000 TRAFFIC CONTROL EACH	643.0310.S TEMPORARY PORTABLE RUMBLE STRIPS LS	SPV.0045.01 PORTABLE SPEED TRAILER DAY
STAGE 3	STH 164 S OF STH 167	74	--	--	32	2,368	62	4,588	53	3,922	--	--	--	--	74	--	--	--
	STH 164 N OF STH 167	74	--	--	18	1,332	36	2,664	15	1,110	--	--	--	--	74	--	--	--
	SHADY LN	74	--	--	2	148	4	296	3	222	--	--	--	--	--	--	--	--
	HANSEN DR	74	--	--	5	370	10	740	3	222	--	--	--	--	--	--	--	--
	UPLAND DR	74	--	--	5	370	10	740	3	222	--	--	--	--	--	--	--	--
	MONCHES RD	74	--	--	--	--	--	--	2	148	--	--	--	--	--	--	--	--
	ELMWOOD RD	74	--	--	4	296	8	592	6	444	--	--	--	--	--	--	--	--
	TUCKAWAY LN	74	--	--	5	370	10	740	3	222	--	--	--	--	--	--	--	--
	CHEROKEE TR	74	--	--	5	370	10	740	3	222	--	--	--	--	--	--	--	--
	ST GABRIEL LN	74	--	--	2	148	4	296	3	222	--	--	--	--	--	--	--	--
	HUBERTUS RD	74	--	--	--	--	--	--	2	148	--	--	--	--	--	--	--	--
	GOLDEN DR	74	--	--	2	148	4	296	3	222	--	--	--	--	--	--	--	--
	LOCHVIEW DR	74	--	--	2	148	4	296	3	222	--	--	--	--	--	--	--	--
	ADA'HI CT	74	--	--	2	148	4	296	3	222	--	--	--	--	--	--	--	--
	STH 167	74	--	--	8	592	12	888	22	1,628	--	--	--	--	--	--	--	--
	GREYSTONE DR	74	--	--	2	148	4	296	3	222	--	--	--	--	--	--	--	--
	PLEASANT HILL RD	74	--	--	2	148	4	296	3	222	--	--	--	--	--	--	--	--
	MAJESTIC DR	74	--	--	5	370	10	740	3	222	--	--	--	--	--	--	--	--
	PIONEER RD	74	--	--	--	--	--	--	2	148	--	--	--	--	--	--	--	--
	CTH E	74	--	--	2	148	4	296	3	222	--	--	--	--	--	--	--	--
	CLUB DR	74	--	--	2	148	4	296	3	222	--	--	--	--	--	--	--	--
BUSINESS SIGNS (UNDISTRIBUTED)		74	--	--	--	--	--	--	8	592	--	--	--	--	--	--	--	--
STAGE 3 SUBTOTAL				0		7,770		15,096		11,248		0		0	148	0	0	0
STAGE 4	STH 164	84	--	--	24	2,016	48	4,032	22	1,848	--	--	1	1	168	--	--	--
	STH 167	84	--	--	--	--	--	--	10	840	--	--	1	5	28	--	--	--
	GREYSTONE DR	84	--	--	2	168	4	336	3	252	--	--	--	--	--	--	--	--
	PLEASANT HILL RD	84	--	--	2	168	4	336	3	252	--	--	--	--	--	--	--	--
	MAJESTIC DR	84	--	--	5	420	10	840	3	252	--	--	--	--	--	--	--	--
	PIONEER RD	84	--	--	2	168	4	336	3	252	--	--	--	--	--	--	--	--
	CTH E	84	--	--	2	168	4	336	3	252	--	--	--	--	--	--	--	--
	CLUB DR	84	--	--	2	168	4	336	3	252	--	--	--	--	--	--	--	--
BUSINESS SIGNS (UNDISTRIBUTED)		84	--	--	--	--	--	--	4	336	--	--	--	--	--	--	--	--
				0		3,276		6,552		4,536		0		6	196	0	0	0
PROJECT TOTALS				12,540		20,196		37,414		107,392		14		13	866	1	1	722

*FOR INFORMATION ONLY

CATEGORY 0020
LIGHTING SYSTEM ITEMS

654.0224	CONCRETE CONTROL CABINET BASES TYPE L24
655.0640	ELECTRICAL WIRE LIGHTING 1 AWG
656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL
659.2124	LIGHTING CONTROL CABINETS 120/240 24 - INCH
SPV.0105.03	LIGHTING SYSTEM INTEGRATOR
SPV.0105.04	LIGHTING SYSTEM SURVEY

SYSTEM	LOCATION	654.0224 CONCRETE CONTROL CABINET BASES TYPE L24 EACH	655.0640 ELECTRICAL WIRE LIGHTING 1 AWG LF	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS	659.2124 LIGHTING CONTROL CABINETS 120/240 24 - INCH EACH	SPV.0105.03 LIGHTING SYSTEM INTEGRATOR LS	SPV.0105.04 LIGHTING SYSTEM SURVEY LS
HL-66-SC	168+82.0, 42.1' RT (SW QUADRANT OF STH 164 AND STH 167)	1	18	1	1	1	1
	TOTAL (0020)	1	18	1	1	1	1

PLAQUE TEXT HL-66-SC
STH 164 / STH 167 LOVERS LANE
240 VAC WARNING DECAL (METER PEDESTAL AND CABINET DOOR)

CATEGORY 0020
LIGHTING PULL BOX QUANTITIES

653.0140	PULL BOXES STEEL 24 X 42-INCH
655.0615	ELECTRICAL WIRE LIGHTING 10 AWG (GROUNDING WIRE)

SYSTEM	LOCATION	LABEL	653.0140 PULL BOXES STEEL 24 X 42 EACH	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	COMMENTS
HL-66-SC	164+82.4, 30.2' RT	LPB101	1	15	STH 167
HL-66-SC	164+45.3, 4.1' RT	LPB102	1	10	STH 167
HL-66-SC	252+59.6, 154.6' LT	LPB103	1	50	STH 167
HL-66-SC	253+22.5, 60.8' LT	LPB104	1	10	STH 164
HL-66-SC	253+20.3, 33.5' RT	LPB105	1	35	STH 164
HL-66-SC	169+27.2, 86.9' RT	LPB106	1	35	STH 164
HL-66-SC	250+92.2, 20.2' RT	LPB107	1	10	STH 164
	TOTAL (0020)		7	165	

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	MISCELLANEOUS QUANTITIES	SHEET:	E

3

3

CATEGORY 0020
LIGHTING BRANCH CIRCUIT CONDUIT

652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

SYSTEM	LOCATION TO LOCATION	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF
HL-66-SC	LIGHTING CONTROL CABINET (HL-66-SC) TO LPB 101	--	40
HL-66-SC	LPB101 TO POLE ASC2	35	--
HL-66-SC	POLE ASC2 TO LPB102	10	--
HL-66-SC	LPB102 TO POLE BSC1	150	--
HL-66-SC	POLE BSC1 TO POLE ASC1	155	--
HL-66-SC	POLE ASC1 TO STUBOUT WEST	15	--
HL-66-SC	LPB102 TO LPB103	--	100
HL-66-SC	LPB103 TO POLE DSC2	45	--
HL-66-SC	POLE DSC2 TO LPB104	80	--
HL-66-SC	LPB104 TO POLE CSC2	10	--
HL-66-SC	POLE CSC2 TO POLE DSC1	205	--
HL-66-SC	POLE DSC1 TO POLE CSC1	205	--
HL-66-SC	POLE CSC1 TO STUBOUT NORTH	15	--
HL-66-SC	LPB104 TO LPB105	--	105
HL-66-SC	LPB105 TO POLE DSC4	30	--
HL-66-SC	POLE DSC4 TO POLE CSC4	80	--
HL-66-SC	POLE CSC4 TO POLE DSC3	160	--
HL-66-SC	POLE DSC3 TO POLE CSC3	170	--
HL-66-SC	POLE CSC3 TO STUBOUT EAST	15	--
HL-66-SC	LPB101 TO POLE BSC2	40	--
HL-66-SC	POLE BSC2 TO LPB106	30	--
HL-66-SC	LPB106 TO LPB107	--	100
HL-66-SC	LPB107 TO POLE ASC4	10	--
HL-66-SC	POLE ASC4 TO POLE BSC3	205	--
HL-66-SC	POLE BSC3 TO POLE ASC3	205	--
HL-66-SC	POLE ASC3 TO STUBOUT SOUTH	15	--
HL-66-SC	LPB107 TO POLE BSC4	60	--
HL-66-SC	POLE BSC4 TO STUBOUT NORTHWEST	15	--
	TOTAL (0020)	**1,960**	**345**

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3

CATEGORY 0020
LIGHTING WIRE QUANTITIES
120/240 VAC 3-WIRE ISOLATED NEUTRAL SYSTEM

655.0620 ELECTRICAL WIRE LIGHTING 8 AWG

SYSTEM	NETWORK	LOCATION TO LOCATION	DISTANCE	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF
HL-66-SC	A/B/N/G	LIGHT CONTROL CABINET (HL-66-SC) TO LPB 101 TO POLE ASC2	45	240
HL-66-SC	A/B/N/G	POLE ASC2 TO LPB102 TO POLE BSC1	160	680
HL-66-SC	A/B/N/G	POLE BSC1 TO POLE ASC1	155	555
HL-66-SC	A/B/N/G	LIGHT CONTROL CABINET (HL-66-SC) TO LPB 101 TO POLE BSC2	50	260
HL-66-SC	A/B/N/G	POLE BSC2 TO LPB106 TO LPB107 TO POLE ASC4	140	600
HL-66-SC	A/B/N/G	POLE ASC4 TO LPB107 TO POLE BSC4	70	240
HL-66-SC	A/B/N/G	POLE ASC4 TO POLE BSC3	205	860
HL-66-SC	A/B/N/G	POLE BSC3 TO POLE ASC3	205	645
HL-66-SC	C/D/N/G	LIGHTING CONTROL CABINET (HL-66-SC) TO LPB101 TO LPB102 TO LPB103 TO POLE DSC2	200	920
HL-66-SC	C/D/N/G	POLE DSC2 TO LPB104 TO POLE CSC2	90	420
HL-66-SC	C/D/N/G	POLE CSC2 TO POLE DSC1	205	860
HL-66-SC	C/D/N/G	POLE DSC1 TO POLE CSC1	205	645
HL-66-SC	C/D/N/G	POLE CSC2 TO LPB104 TO LPB105 TO POLE DSC4	145	660
HL-66-SC	C/D/N/G	POLE DSC4 TO POLE CSC4	80	360
HL-66-SC	C/D/N/G	POLE CSC4 TO POLE DSC3	160	680
HL-66-SC	C/D/N/G	POLE DSC3 TO POLE CSC3	170	540
		TOTAL (0020)		**8,625**

3

CATEGORY 0020
LIGHT POLE QUANTITIES
120/240 VAC

654.0105	CONCRETE BASES TYPE 5
655.0610	ELECTRICAL WIRE LIGHTING 12 AWG
657.0255	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE
657.0322	POLES TYPE 5-ALUMINUM
657.0610	LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT
657.0715	LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 15-FT
659.1115	LUMINAIRES UTILITY LED A

SYSTEM	STATION	OFFSET	SEQUENCE I.D.	654.0105 CONCRETE BASES TYPE 5	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	657.0322 POLES TYPE 5 ALUMINUM	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT	657.0715 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 15-FT	659.1115 LUMINAIRES UTILITY LED A
				EACH	LF	EACH	EACH	EACH	EACH	EACH
HL-66-SC	165+34.0	26.3' RT	ASC1	1	117	1	1	1	--	1
HL-66-SC	166+94.7	18.8' RT	BSC1	1	117	1	1	1	--	1
HL-66-SC	168+53.4	4.9' RT	ASC2	1	144	1	1	--	1	1
HL-66-SC	169+17.8	57.2' RT	BSC2	1	144	1	1	--	1	1
HL-66-SC	246+64.8	39.6' RT	ASC3	1	117	1	1	1	--	1
HL-66-SC	248+75.4	40.4' RT	BSC3	1	117	1	1	1	--	1
HL-66-SC	250+84.5	19.7' RT	ASC4	1	144	1	1	--	1	1
HL-66-SC	251+42.1	57.5' RT	BSC4	1	144	1	1	--	1	1
HL-66-SC	257+50.8	54.8' LT	CSC1	1	117	1	1	1	--	1
HL-66-SC	255+40.4	66.8' LT	DSC1	1	117	1	1	1	--	1
HL-66-SC	253+22.5	60.8' LT	CSC2	1	144	1	1	--	1	1
HL-66-SC	252+70.3	106.7' LT	DSC2	1	144	1	1	--	1	1
HL-66-SC	174+09.4	67.8' LT	CSC3	1	117	1	1	1	--	1
HL-66-SC	172+65.1	75.0' LT	DSC3	1	117	1	1	1	--	1
HL-66-SC	171+05.1	66.3' LT	CSC4	1	144	1	1	--	1	1
HL-66-SC	252+90.4	41.1' LT	DSC4	1	144	1	1	--	1	1
TOTAL (0020)				**16**	**2,088**	**16**	**16**	**8**	**8**	**16**

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	MISCELLANEOUS QUANTITIES	SHEET:	E

STH 164 & PLEASANT HILL RD.
WASHINGTON COUNTY
CATEGORY 0030
F66-0490

3

3

REMOVING CONCRETE BASES

SIGNAL BASE NO.	204.0195 REMOVING CONCRETE BASES EACH
SB1	1
TOTAL	1

REMOVE TRAFFIC SIGNALS

LOCATION	204.9105.S.01 REMOVE TRAFFIC SIGNALS L.S.
STH 164 & PLEASANT HILL RD.	1
TOTAL	1

FILE NAME : N:\PDS\C3D\CAD\27090300\SIG\F66-0490_mq.pptx PLOT DATE : 1/10/2018 PLOT BY : DOTSHW PLOT NAME : F66-0490_mq.pdf PLOT SCALE : 1:1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 2709-03-20

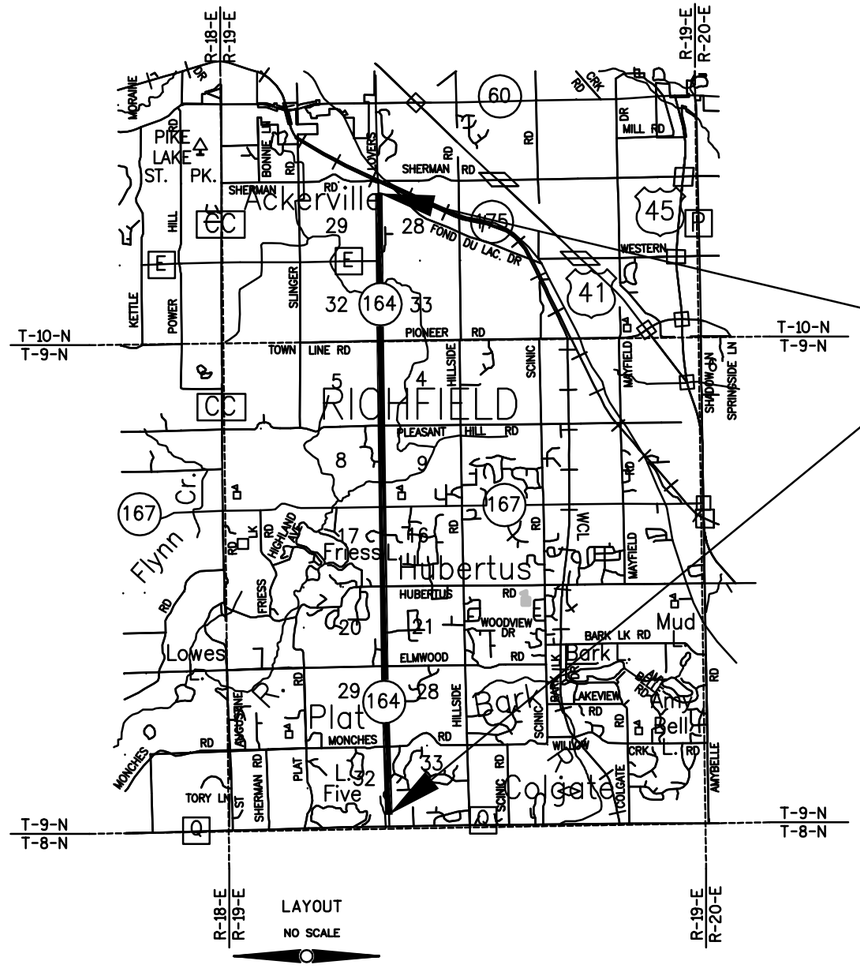
LOVERS LANE

CTH Q - CTH E

STH 164

WASHINGTON COUNTY





PROJECT LOCATION

GN

TOTAL NET LENGTH OF CENTERLINE = 7.494 MI.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	RECORDED AS	(100')
ACCESS RIGHTS	AR	REFERENCE LINE	R/L
ACRES	AC.	RELEASE OF RIGHTS	ROR
AND OTHERS	ET.AL.	REMAINING	REM.
BACK STATION	BK	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MARKER POST	MP	RADIUS	R
MONUMENT	MON.	DEGREE OF CURVE	D
PAGE	P.	CENTRAL ANGLE OR DELTA	DELTA
PERMANENT LIMITED EASEMENT	PLE	LENGTH OF CURVE	L
PROPERTY LINE	PL	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	⌀ (¾" UNLESS NOTED)	PROPOSED R/W LINE
R/W MONUMENT	⌀ ●(SET)	EXISTING H.E. LINE
R/W STANDARD	▲ ▲(SET)	PROPERTY LINE
SIGN	SIGN	LOT & TIE LINES
SECTION CORNER MONUMENT	●	SLOPE INTERCEPTS
SECTION CORNER SYMBOL		CORPORATE LIMITS
		RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONTROL)
FEE (HATCH VARIES)		RESTRICTED ACCESS (BY ACQUISITION)
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)
PERMANENT LIMITED EASEMENT		SECTION LINE
R/W BOUNDARY POINT	RWB20	QUARTER LINE
PARCEL NUMBER	02	SIXTEENTH LINE
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE
BUILDING		PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

WATER	—W—	
GAS	—G—	
TELEPHONE	—T—	
OVERHEAD TRANSMISSION LINES ELECTRIC	—OH—	
ELECTRIC	—E—	
CABLE TELEVISION	—TV—	
FIBER OPTIC	—FO—	
SANITARY SEWER	—SAN—	
STORM SEWER	—SS—	
	NON COMPENSABLE	COMPENSABLE
POWER POLE	○	●
TELEPHONE POLE	⌀	⌀
TELEPHONE PEDESTAL	⌧	⌧
ELECTRIC TOWER	⊠	

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY, NAD 83 2007 IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 164 ESTABLISHED FROM PREVIOUS PROJECT S-0140(3) AND S-014095) AND EXISTING SUBDIVISIONS AND CSM'S.

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

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

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

ORIGINAL PLAT PREPARED BY

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-1001
www.rasmithnational.com

TPP PROJECT NUMBER 2709-03-20 - 4.01
SHEET 2 OF 2

FILE NAME : S:\5165165\PLAT\TPP040101_RT.DWG
APPRAISAL PLAT DATE:

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.01

THAT PART OF LOT 6 OF TIMBER RIDGE ESTATES AND LOT 1 OF CSM 6593, AND THAT PART OF THE SW 1/4-SW 1/4 AND THE NW 1/4-SW 1/4, SECTION 33, ALSO THAT PART OF THE SE 1/4-SE 1/4 AND THE NE 1/4-SE 1/4, SECTION 32, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF THIS DOCUMENT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

25' INGRESS -EGRESS EASEMENT DOC.833758
PARCELS 7 & 8

25' HIGHWAY RESERVATION DOC.434410 V.747, P.38
PARCELS 7 & 8

PI	Y	X
44+84.00	100859.24	341342.83
60+69.43	102444.44	341315.62

(500) WE ENERGIES-ELEC
8' EASEMENT
DOC 435421
V.749, P. 506
PARCEL 6

NO RECORD OF
EASEMENT
PARCEL 6

(501) AT&T WISCONSIN
NO RECORD OF
EASEMENT
PARCELS 1 & 2

(502) WE ENERGIES-GAS
25' EASEMENT
DOC 434443
V.747, P. 95
PARCELS 7 & 8

66' WIDE CROSS ACCESS EASEMENT FOR
LANDS TO THE SOUTH AND LOT 1
PER CSM-6593
PARCEL 6

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 - 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

04/28/2015
NATHAN A. VAUGHN
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986
DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

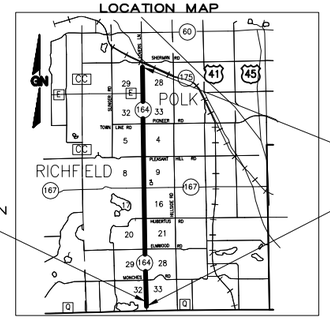
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DOCUMENT#: 1380534
Date:04-30-2015 Time:09:41:00 AM Pages: 2
Fee:$25.00 County: WASHINGTON State:WI

SHARON A MARTIN, REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 - 4.01
AMENDMENT NO: ___
SHEET 1 OF 2

LOCATION MAP



NOT TO SCALE

T 9 N R 19 E
32 32 32 32 33 33

COMPUTED
Y=103010.32
X=343874.25

BEGIN RELOCATION ORDER
50+00.00
999.89' N. & 14.74' W. OF THE
S.E. COR. SECTION 32-9-19

PI 40+00.00
CONCRETE MONUMENT W/ BRASS CAP
Y=100375.28
X=343148.71

PI 44+84.00

PI 60+69.43

CONCRETE MONUMENT W/ BRASS CAP
Y=103011.74
X=343362.68

N89°58'09"E 2648.43'
STATION 66+36.88

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
1	VERNON F. & BONNIE J. HEIM TRUST	FEE	0.095	0.424	0.519	-	-
2	PATRICK J. RISCH	FEE, PLE, TLE	0.115	0.234	0.349	0.072	0.008
3	LOUIS SWORSKE & THERESA MARGHERITA	FEE, TLE	0.065	0.546	0.611	0.085	-
4	SHAWN P. HACKER	FEE, TLE	0.011	0.086	0.097	0.030	-
5	KEVIN & VALERIE J. ZALEWSKI	TLE	-	-	-	0.028	-
6	SCHWENDIMANN FARMS, INC.	FEE, TLE	0.474	0.223	0.697	0.072	-
7	RICHARD A. & LINDA E. LENTZ	FEE, TLE	0.038	0.059	0.097	0.039	-
8	RICHARD LICHNER	TLE	-	-	-	0.011	-
9	JEFFREY M. PETERSON & DIANA K. MOLITOR	FEE, TLE	0.083	-	0.083	0.028	-

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT 2748-07-20	VARIES	2008
164	PROJECT S-0140(5)	VARIES	1961
164	TIMBER RIDGE ESTATES	VARIES	1975
164	CSM 6484	VARIES	1961
SHADY LANE	PROJECT S-0140(5)	VARIES	1961

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS
502	WE ENERGIES - GAS	RELEASE OF RIGHTS

TIMBER RIDGE ESTATES

50 SCALE, FEET
0 50 100

GN

218 504

FILE NAME: S:\5165165\Plat\TPP100P00.DWG
APPRAISAL PLAT DATE:

STH 164 2709-03-20 - 4.01

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.02

THAT PART OF LOT 4, AND LOT 5 OF TIMBER RIDGE ESTATES IN THE NW 1/4-SW 1/4, ALSO THAT PART OF LOT 14 AND LOT 15 OF COUNTRY SQUIRE ESTATES IN THE SW 1/4-NW 1/4, SECTION 33, ALSO THAT PART OF THE OUTLOT 2 OF FINAL PLAT OF THE PRESERVE AT HIGHLAND RIDGE IN THE SE 1/4-NE 1/4, ALSO THAT PART OF THE NE 1/4 -SE 1/4 AND THE SE 1/4-NE 1/4, SECTION 32, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS
503	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS

CURVE	ARC	RADIUS	BEARING	CHORD
535-536	165.94'	442.00'	N14°38'24"E	164.97'
C2	100.49'	167.00'	N75°12'28"E	98.98'
C3	22.94'	333.00'	N44°43'58"E	22.93'
C4	44.33'	167.00'	N50°21'52"E	44.20'

LINE	BEARING	DIST.
L1	N04°23'43"E	50.14'
L2	N08°53'43"E	49.99'
L3	N13°23'43"E	49.99'
L4	N17°53'43"E	49.99'
L5	N22°23'43"E	33.20'
534-535	N25°23'43"E	91.59'
L7	N64°36'17"W	13.00'
L8	N25°23'43"E	113.85'
L9	N01°24'46"W	33.47'
540-541	S69°22'00"W	20.00'
541-542	N20°38'00"W	26.00'
542-543	N69°22'00"E	20.00'

(500) WE ENERGIES-ELEC
12' EASEMENT DOC 375565 V.615, P.377 PARCELS 14 & 15
6' & 25' EASEMENT DOC 282870 V.409, P.67 PARCELS 16 & 17
12' EASEMENT FINAL PLAT OF THE PRESERVE AT HIGHLAND RIDGE DOC 1048261 PARCEL 13

(501) AT&T WISCONSIN
12' EASEMENT DOC 375565 V.615, P.377 PARCELS 14 & 15
10'X10' EASEMENT DOC 440137 V.761, P.9967 PARCEL 17
12' EASEMENT FINAL PLAT OF THE PRESERVE HIGHLAND RIDGE DOC 1048261 PARCEL 13
10' EASEMENT DOC 1033345 PARCEL 13
6' & 25' EASEMENT DOC 282870 V.409, P.67 PARCELS 16 & 17

(503) CHARTER COMMUNICATIONS
12' EASEMENT FINAL PLAT OF THE PRESERVE AT HIGHLAND RIDGE DOC 1048261 PARCEL 13

T 9 N R 19 E, SECTIONS 4, 5, 32, 33

CONCRETE MONUMENT W/ BRASS CAP Y=100375.28 X=343148.71

MATCH LINE SEE SHEET 4.01

N51°58'17"W 207.84'

PI 40+00.00

N51°58'17"W 45.98'

PI 44+84.00

S00°59'00"E 1585.43'

PI 60+69.43

PI 67+76.04

SHADY LANE

85.63' N40°20'17"W

126.75' N40°20'17"W

L1 L2 L3 L4 L5

C-5 PCC 15+63.56

C-6 N25°23'43"E 185.26'

PL

PI	Y	X
44+84.00	100859.24	341342.83
60+69.43	102444.44	341315.62
67+76.04	103150.83	341298.20

C-5 SHADY LANE
PI = 14+07.851
Y = 102391.338
X = 340989.182
DELTA = 65°17'24"RT
BACK = N45°47'52W
AHEAD = N19°29'32"E
D = 18°21'51"
T = 199.877'
L = 355.532'
R = 312.000'

C-6 SHADY LANE
PI = 16+29.74
Y = 102642.200
X = 341077.978
DELTA = 06°18'46"RT
BACK = N19°29'32"E
AHEAD = N25°48'17"E
D = 04°46'29"
T = 66.174'
L = 132.214'
R = 1200.000'

C-7 SHADY LANE
PI = 21+41.81
Y = 103103.334
X = 341300.947
DELTA = 60°29'13"LT
BACK = N25°48'17"E
AHEAD = N34°40'56"W
D = 12°03'44"
T = 276.940'
L = 501.456'
R = 475.000'
PC = 18+64.87
PT = 23+66.33

C-8 SHADY LANE
PI = 24+66.39
Y = 103413.348
X = 341086.426
DELTA = 14°02'55"RT
BACK = N34°40'56"W
AHEAD = N20°38'00"W
D = 16°22'13"
T = 43.126'
L = 85.819'
R = 350.000'
PC = 24+23.26
PT = 25+09.08

R/W EASEMENT PER DEED DOC.266537

R/W EASEMENT PER PROJ. S0140(5)

PLAT R/L

S00°59'00"E 1585.43'

S01°24'46"E 567.45'

STH 164

60 65 70

TLE, SLOPES & DRIVEWAY

S89°58'09"W 3.32'

17+74.73 29.74' RW533

17+73.29 32.73' RW534

17+65.08 49.68' RW535

18+64.87 33.39'

18+77.65 50.32'

18+77.95 63.31'

RW536

TLE, SLOPES & DRIVEWAY

P.I. 16+95.78

S89°58'09"W 36.54'

L7 153.0' 111.22'

WELL

10 11 12 13

20+05.40 45.63' 20+43.59 34.52' 20+42.27 50.32'

32.6

L8 L9

18+64.87 PC

N25°23'43"E 250.02'

20

N89°58'09"E 2648.43'

STA=66+36.87 ahd

20+36.92 104.16' EX537

SE-NE

COMPUTED X=338714.25 Y=103030.32

T 9 N R 19 E, SECTIONS 32, 33

FINAL PLAT OF THE PRESERVE AT HIGHLAND RIDGE

RW539 24+66.17 35.90'

TLE, SLOPES N49°04'32"W 105.00' N34°40'56"W 134.04'

RW538 23+34.24 31.99'

OUTLOT 2 23+21.05 39.74'

N02°26'45"E 259.81'

PLE541 25+42.66 42.35'

25+35.08 95.64'

N38°16'56"W 130.30'

N20°38'00"W 24.37'

24+26.07 67.83'

25+44.63 74.79'

25+12.26 53' PLE542

25+59.03 33' RW544

N20°38'00"W 46.76'

25+12.26 33' PLE543

24+88.25 33.68' PLE540

N34°40'56"W 86.93'

C-8

25

PLE, CULVERT

2"IP

S87°33'15"E 24.45'

12'

10'

HANSEN DR

S88°48'52"E 153.27'

NO ACCESS PER FINAL PLAT OF THE PRESERVE AT HIGHLAND RIDGE SUBDIVISION DOC.1048261

C-7

PI 67+76.04

N01°24'46"W 139.16'

N00°20'02"W 359.05'

5169'

2141.21'

MATCH LINE SEE SHEET 4.03

PI 92+74.31

S88°48'52"E 12.00'

N01°43'01"E 2638.50'

497.29'

61.05'

43.49'

32.93'

34.62'

N89°58'33"W 69.87'

N89°58'09"E 2592.96'

NO ACCESS PER TIMBER RIDGE ESTATES SUBDIVISION DOC.375416

MS-NW

SW-NW

CONCRETE MONUMENT W/ BRASS CAP Y=103012.60 X=343955.64

CONCRETE MONUMENT W/ BRASS CAP Y=103011.74 X=341362.68

FENCE EXEMPT FROM TLE - PARCEL 16

TLE, SLOPES

LOT 14 LOT 15

LOT 5 LOT 4

VILLAGE OF RICHFIELD

TIMBER RIDGE ESTATES

MATCH LINE SEE SHEET 4.01

N89°41'47"W 156.83'

NO0°18'13"E 2636.50'

SEC. LINE

2"IP

423.14'

514.69'

1698.67'

137.94'

S20°32'52"W 195.18'

S12°56'26"E 332.13'

57.24'

S01°24'46"E 79.00'

S75°09'51"E 44.00'

S71°36'15"W 20.43'

S12°17'54"E 77.67'

S25°55'01"E 236.26'

S66°53'57"E

62+91.53 214.80' RW551

62+90 210'

64+30 146.19' 151.68'

65+04.98 112.01' RW550

66+32.91 163.59'

66+32.78 168.93'

67+80 142.71' RW547

67+65 185' 190'

63+03 98+99 190'

63+98+99 185' RW549

TLE, SLOPES

TLE, SLOPES

14 15 16

5' 8.6' 12' 25'

70+94.01 72.48'

71+04.12 70.22' RW546

71+45.68 170.86'

71+55.83 168.69' RW545

S12°23'30"E 10.38'

S51°57'41"W 111.23'

N77°36'30"E 101.39'

17

UPLAND DR

COUNTRY SQUIRE ESTATES

LOCATION MAP

POLK, RICHFIELD, SHEET LOCATION, PROJECT LOCATION

NOT TO SCALE

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT 2748-07-20	VARIES	2008
164	PROJECT S-0140(5)	VARIES	1961
164	TIMBER RIDGE ESTATES	VARIES	1975
164	HIGHLAND RIDGE	VARIES	2004
164	COUNTRY SQUIRE ESTATES	VARIES	1965
SHADY LANE	PROJECT S-0140(5)	VARIES	1961

50 SCALE, FEET

0 50 100

GN

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
3	LOUIS SWORSKE & THERESA MARGHERITA	FEE	-	4.809	4.809	-	-
10	BRIAN D. & CECELIA M. BOELTER	FEE, TLE	0.012	0.114	0.126	0.068	-
11	JAMES J. LUSTIG	FEE, TLE	0.036	0.076	0.112	0.041	-
12	WISCONSIN PROVINCE OF THE SOCIETY OF JESUS	FEE, TLE	0.012	0.053	0.065	0.006	-
13	THE PRESERVE PARTNERS, LLC.	FEE, PLE, TLE	0.364	1.354	1.718	0.183	0.012
14	ROBERT B. & DAWN M. LEMKE	FEE, TLE	0.341	-	0.341	0.026	-
15	DAVID E. & DIANE L. SEILS	FEE	0.059	-	0.059	-	-
16	ALBERT BECHERIN	FEE, TLE	0.080	0.402	0.482	0.016	-
17	KERRY S. & CINDY A. WELCH	FEE, TLE	0.037	0.293	0.330	0.026	-

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 - 4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

6/04/2015

NATHAN A. VAUGHN — DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME — SIGNATURE — DATE:

DOCUMENT#: **1383095**
Date:**06-05-2015** Time:**08:52:00 AM** Pages: **1**
Fee:**$25.00** County: **WASHINGTON** State:**WI**

SHARON A MARTIN , REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 - 4.02
AMENDMENT NO: ____

FILE NAME: S:\5165165\Plat\TPP100P00.DWG
APPRAISAL PLAT DATE:

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.03

THAT PART OF OUTLOT 3 OF FINAL PLAT OF THE PRESERVE AT HIGHLAND RIDGE, BEING A PART OF THE NE 1/4-NE 1/4, SECTION 32, ALSO THAT PART OF LOT 17, LOT 18, LOT 19, LOT 20, LOT 21, AND LOT 22 OF COUNTRY SQUIRE ESTATES SUBDIVISION, BEING PART OF THE SW 1/4-NW 1/4 AND THE NW 1/4-NW 1/4, SECTION 33, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

(500) WE ENERGIES-ELEC
10 & 12' EASEMENT
DOC 282870
V.409, P.67
PARCELS 18, 19, 20, 23, 24, 25 & 26

12' EASEMENT
DOC 379886
V.625, P.153
PARCEL 13

NO RECORD OF EASEMENT
PARCELS 19 & 20

(501) AT&T WISCONSIN
10 & 12' EASEMENT
DOC 282870
V.409, P.67
PARCELS 18, 19, 20, 23, 24, 25 & 26

NO RECORD OF EASEMENT
PARCELS 18, 19, 20, 21, 22, 23, 24, 25 & 26

(503) CHARTER COMMUNICATIONS
NO RECORD OF EASEMENT
PARCEL 18

(505) WINDSTREAM KDL, INC
NO RECORD OF EASEMENT
PARCEL 18

SCALE, FEET
0 100 200

20' PEDESTRIAN EASEMENTS
COUNTRY SQUIRE ESTATES SUBDIVISION
DOC.283686
PARCELS 18, 19, 20, 21, 22, 23, 24, 25 & 26

20' DRAINAGE EASEMENTS
COUNTRY SQUIRE ESTATES SUBDIVISION
DOC.283686
PARCELS 19, 21 & 22

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WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK LAND SURVEYOR

NATHAN A. VAUGHN — 6/04/2015
AGENT FOR R.A. SMITH NATIONAL — DATE
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME | SIGNATURE | DATE:

DOCUMENT#: 1383096
Date:06-05-2015 Time:08:53:00 AM Pages: 1
Fee:$25.00 County: WASHINGTON State:WI

SHARON A MARTIN, REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 - 4.03
AMENDMENT NO: ____

CURVE	ARC	RADIUS	BEARING	CHORD
C1	100.49'	167.00'	S75°12'28"W	98.98'
552-553	202.06'	233.00'	N67°36'10"E	195.78'

LINE	BEARING	DIST.
562-563	S89°39'58"W	18.97'
563-564	S01°42'15"E	120.15'
564-565	S55°08'24"E	42.82'
565-566	N77°36'30"E	72.61'
L5	S12°23'30"E	66.00'
L6	S77°36'30"W	107.39'
L7	N88°48'52"W	12.00'
L8	N88°48'52"W	51.69'
L9	N88°48'52"W	153.27'
L10	N87°33'15"W	24.45'

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(5)	VARIES	1961
164	HIGHLAND RIDGE	VARIES	2004
164	COUNTRY SQUIRE ESTATES	VARIES	1965
UPLAND DRIVE	COUNTRY SQUIRE ESTATES	66'	1965
HANSEN DRIVE	HIGHLAND RIDGE	66'	2004

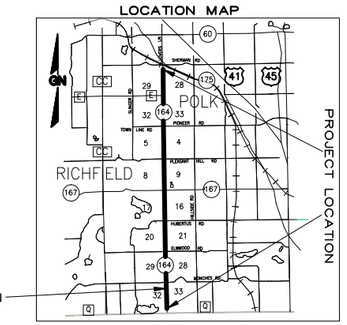
UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT & T WISCONSIN	RELEASE OF RIGHTS
503	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS
505	WINDSTREAM KDL, INC.	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
13	THE PRESERVE PARTNERS, LLC.	FEE, TLE	-	3.228	3.228	0.030	-
18	DANIEL R. & DAWN M. JORGENSEN	FEE, TLE	0.087	-	0.087	0.049	-
19	DANIEL R. & ALISON E. MORRIS	FEE, TLE	0.077	-	0.077	0.019	-
20	EARL G. & ANNE M. REMMEL LIVING TRUST	FEE, TLE	0.098	-	0.098	0.003	-
21	LYNETTE M. RUTZ	FEE, TLE	0.069	0.043	0.112	0.023	-
22	FEDERAL NATIONAL MORTGAGE ASSOCIATION	FEE, TLE	0.024	0.147	0.171	0.029	-
23	JULIUS & JUDITH L. CLOUTIER	FEE	0.023	0.185	0.208	-	-
24	DONALD A. & MARY L. WEILAND	FEE, TLE	0.025	0.218	0.243	0.005	-
25	DAVID A. GRILLAERT	FEE, TLE	0.001	-	0.001	0.001	-
26	ROGER J. & MARY S. BRIGGS TRUST	FEE, TLE	0.069	0.704	0.773	0.033	-

LOCATION MAP



NOT TO SCALE

PI	Y	X
67+76.04	103150.83	341298.20

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.04

THAT PART OF THE SE 1/4-SE 1/4 AND THE NE 1/4-SE 1/4, SECTION 29, ALSO THAT PART OF THE SW 1/4-SW 1/4 AND THE NW 1/4-SW 1/4, SECTION 28, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

(500) WE ENERGIES-ELEC
NO RECORD OF EASEMENT
PARCEL 29

(501) AT&T WISCONSIN
NO RECORD OF EASEMENT
PARCEL 28 & 30

(502) WE ENERGIES - GAS
NO RECORD OF EASEMENT
PARCEL 30

SCALE, FEET
0 100 200

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 – 4.04 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

Nathan A Vaughn 6/04/2015

NATHAN A. VAUGHN — DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME | SIGNATURE | DATE:

DOCUMENT#: **1383097**
Date:**06-05-2015** Time:**08:53:00 AM** Pages: **1**
Fee:**$25.00** County: **WASHINGTON** State:**WI**

SHARON A MARTIN, REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 – 4.04
AMENDMENT NO: ____

LOCATION MAP

NOT TO SCALE

CONCRETE MONUMENT W/ BRASS CAP Y=105667.90 X=338631.89

MATCH LINE SEE SHEET 4.03

MONCHES RD PL

N89°35'35"W 2651.81'

144.21'

N00°24'25"E 55.00'

EX567 93+30.84 143.61'

EX568 94+11.18 63.19'

RW569 95+00 63.25'

RW570 97+30 84.31'

N44°49'33"E 113.68'

N00°14'27"W 88.82'

N05°26'04"W 230.96'

N01°05'02"W 370.04'

0.04'E 0.03'S

PROJECT LOCATION

SHEET LOCATION

TLE, SLOPES & TEMPORARY BASIN

SE-SE

N89°36'44"W 1/16 LINE

VILLAGE OF RICHFIELD

RW571 101+00 90' 99+60 87.85' 145'

RW572 105+02.54 55' 103+00.43 95'

RW573 105+02.93 164' 102+00 95' 145'

RW574 106+60 215' RW875 103+00 90'

RUINS

N00°12'09"W 200.00'

N09°36'06"E 205.54'

N90°00'00"W 109.00'

N18°11'27"W 165.15'

N04°58'10"E 560.20'

RW575 112+17.92 164.50'

RW576 112+17.83 140'

N90°00'00"E 24.50'

0.07'E 0.33'S

NE-SE

TLE, SLOPES & DRIVEWAY

RW577 119+34.35 109.99' 118+85 225'

118+35 114.15'

N65°55'27"W 121.60'

225'

CONCRETE MONUMENT W/ BRASS CAP Y=108324.99 X=338610.79

MATCH LINE SEE SHEET 4.05

N89°37'54"W 2663.50'

119+35.61 225'

N02°11'45"E 717.02'

110.00'

170.01'

PI 92+74.31

CONCRETE MONUMENT W/ BRASS CAP Y=105649.06 X=341283.63

PLAT R/L = SEC. LINE

S00°12'09"E 335.98'

S05°30'29"W 150.75'

S02°39'36"W 300.37'

S45°03'50"E 151.69'

94+14.02 60'

EX583 93+06.50 167'

EX584

S00°04'30"W 33.00'

N89°55'30"W 2642.49'

33'

166.84'

RW582 97+50 60.00'

RW878 99+00 75'

500

29

101+50 87.50' 175'

RW581 102+00 90'

104+40 90' 175'

85'

S00°12'09"E 444.82'

TLE SLOPES & TEMPORARY BASIN

SW-SW

N00°12'09"W 2658.83'

1/16 LINE

RW580 106+44.82 90'

S19°05'15"W 60.54'

0.04'E 0.09'S

S00°12'09"E 163.04'

EX877 107+01.96 110'

108+52.69 110'

RW876 108+65 110'

S23°45'36"W 147.73'

RW579 110+00 170'

109+98.94 175'

170'

29

30

501

502

S00°12'09"E 931.40'

S89°40'50"E

MS-MN

118+00 175'

S41°01'43"W 113.79'

118+85.58 250'

RW578 119+31.40 170'

119+30.58 250'

N89°36'59"W 2645.77'

PI 119+33.13

CONCRETE MONUMENT W/ BRASS CAP Y=108307.87 X=341274.24

CONCRETE MONUMENT W/ BRASS CAP Y=108290.16 X=343919.95

CONCRETE MONUMENT W/ BRASS CAP Y=105645.60 X=343926.12

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(5)	VARIES	1961

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS
502	WE ENERGIES - GAS	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
28	STUETTGEN FARMS WI, LLC	FEE, TLE	2.357	5.196	7.553	0.537	-
29	ERWIN WICKLANDER	FEE, TLE	0.860	3.695	4.555	0.614	-
30	ELMWOOD ROAD LLC	FEE, TLE	1.986	0.661	2.647	0.230	-

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.05

THAT PART OF PARCEL 2 AND PARCEL 3 OF CSM 4494, AND THAT PART OF THE SE 1/4-NE 1/4 AND THE NE 1/4-NE 1/4, SECTION 29, ALSO THAT PART OF THE SW 1/4-NW 1/4 AND THE NW 1/4-NW 1/4, SECTION 28, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(5)	VARIES	1961
164	CSM 4494	VARIES	1995
ELMWOOD RD	CSM 4494	VARIES	1995
164 & ELMWOOD RD	DOC. 232937 V. 210 P. 383	VARIES	1956

(500) WE ENERGIES-ELEC
12' EASEMENT
DOC 840365
PARCEL 31

(501) AT&T WISCONSIN
NO RECORD OF EASEMENT
PARCEL 31
12' EASEMENT
DOC 840365
PARCEL 31

R.A. Smith National
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WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

6/04/2015
NATHAN A. VAUGHN — DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

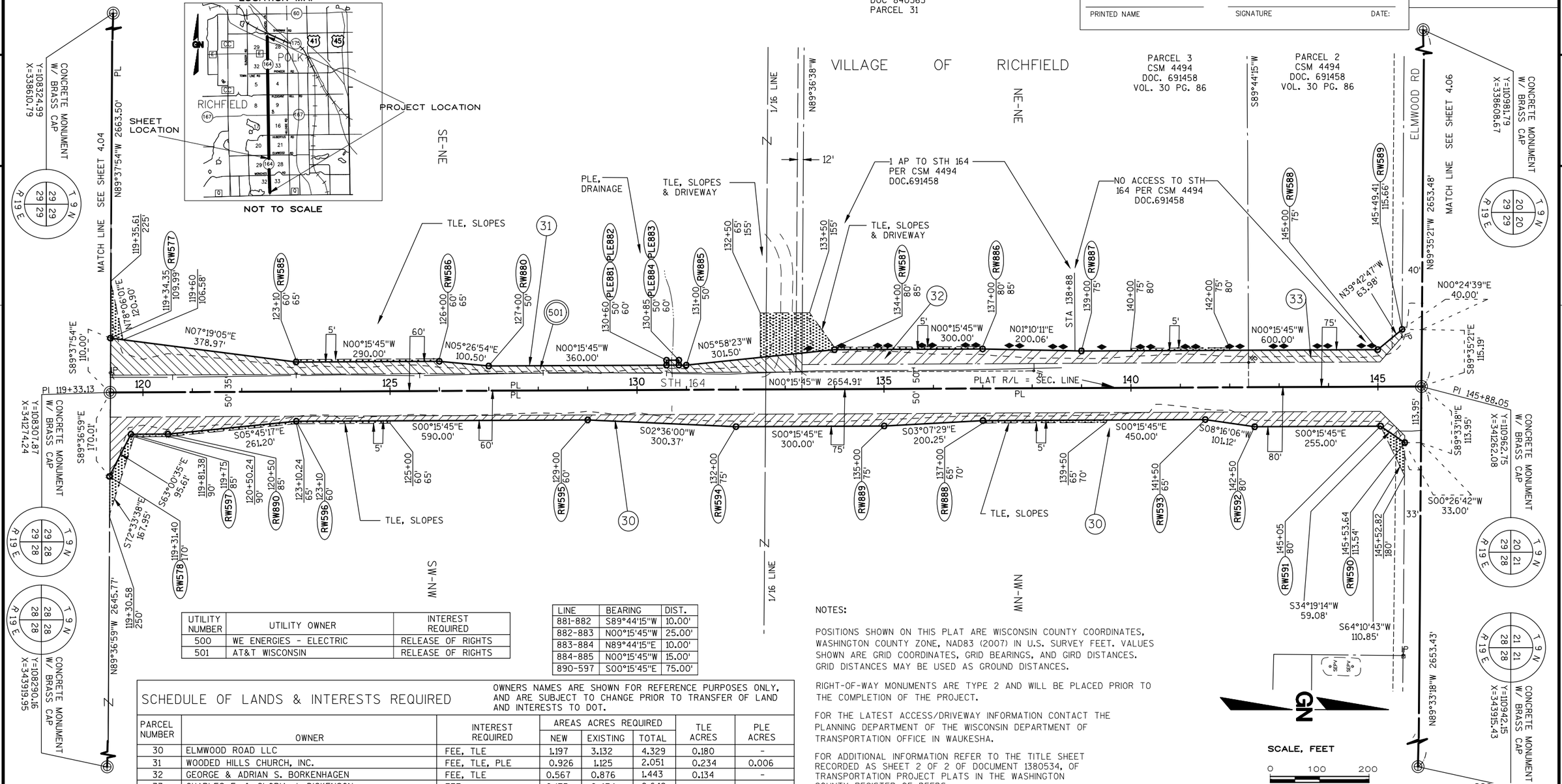
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Date:**06-05-2015** Time:**08:53:00 AM** Pages: **1**
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SHARON A MARTIN , REGISTER OF DEEDS
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 – 4.05
AMENDMENT NO: ____

LOCATION MAP



UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS

LINE	BEARING	DIST.
881-882	S89°44'15"W	10.00'
882-883	N00°15'45"W	25.00'
883-884	N89°44'15"E	10.00'
884-885	N00°15'45"W	15.00'
890-597	S00°15'45"E	75.00'

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
30	ELMWOOD ROAD LLC	FEE, TLE	1.197	3.132	4.329	0.180	-
31	WOODED HILLS CHURCH, INC.	FEE, TLE, PLE	0.926	1.125	2.051	0.234	0.006
32	GEORGE & ADRIAN S. BORKENHAGEN	FEE, TLE	0.567	0.876	1.443	0.134	-
33	CHARLES E. & GLORIA J. DICKENSON	FEE	0.175	0.474	0.649	-	-

NOTES:

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RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

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TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.06

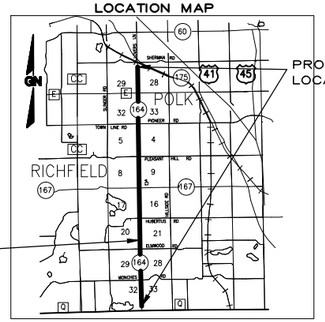
THAT PART OF LOT 13 AND LOT 14 OF MORAINE VIEW SUBDIVISION, AND PART OF THE SE 1/4-SE 1/4, AND THAT PART OF LOT 1 AND LOT 2 OF CSM 2233, BEING PART OF THE NE 1/4-SE 1/4, SECTION 20, ALSO THAT PART OF LOT 50 OF CHEROKEE HIGHLANDS SUBDIVISION, AND THAT PART OF THE SW 1/4-SW 1/4 AND THE NW 1/4-SW 1/4, SECTION 21, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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LOCATION MAP



NOT TO SCALE

SCALE, FEET
0 100 200

LINE	BEARING	DISTANCE
609-610	S00°19'45"E	233.25'
610-611	S14°21'55"E	82.46'
611-612	S59°05'51"E	93.56'
612-613	S00°19'45"E	66.01'
613-614	S66°15'05"W	114.43'
614-615	S00°19'45"E	170.00'
615-616	S31°17'34"E	29.15'
619-620	S30°19'08"E	104.45'
620-SEC LN	S00°26'42"W	33.00'
SEC LN-598	N00°24'39"E	33.00'
598-599	N39°39'59"E	98.66'
602-RW	S89°40'10"W	35.00'
L13	N00°19'50"W	66.00'
RW-605	N89°40'10"E	35.00'

CURVE	ARC	RADIUS	BEARING	CHORD
C1	50.05'	506.53'	N87°29'59"W	50.03'
C2	45.05'	440.53'	S87°24'04"E	45.03'

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WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

6/04/2015
NATHAN A. VAUGHN DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

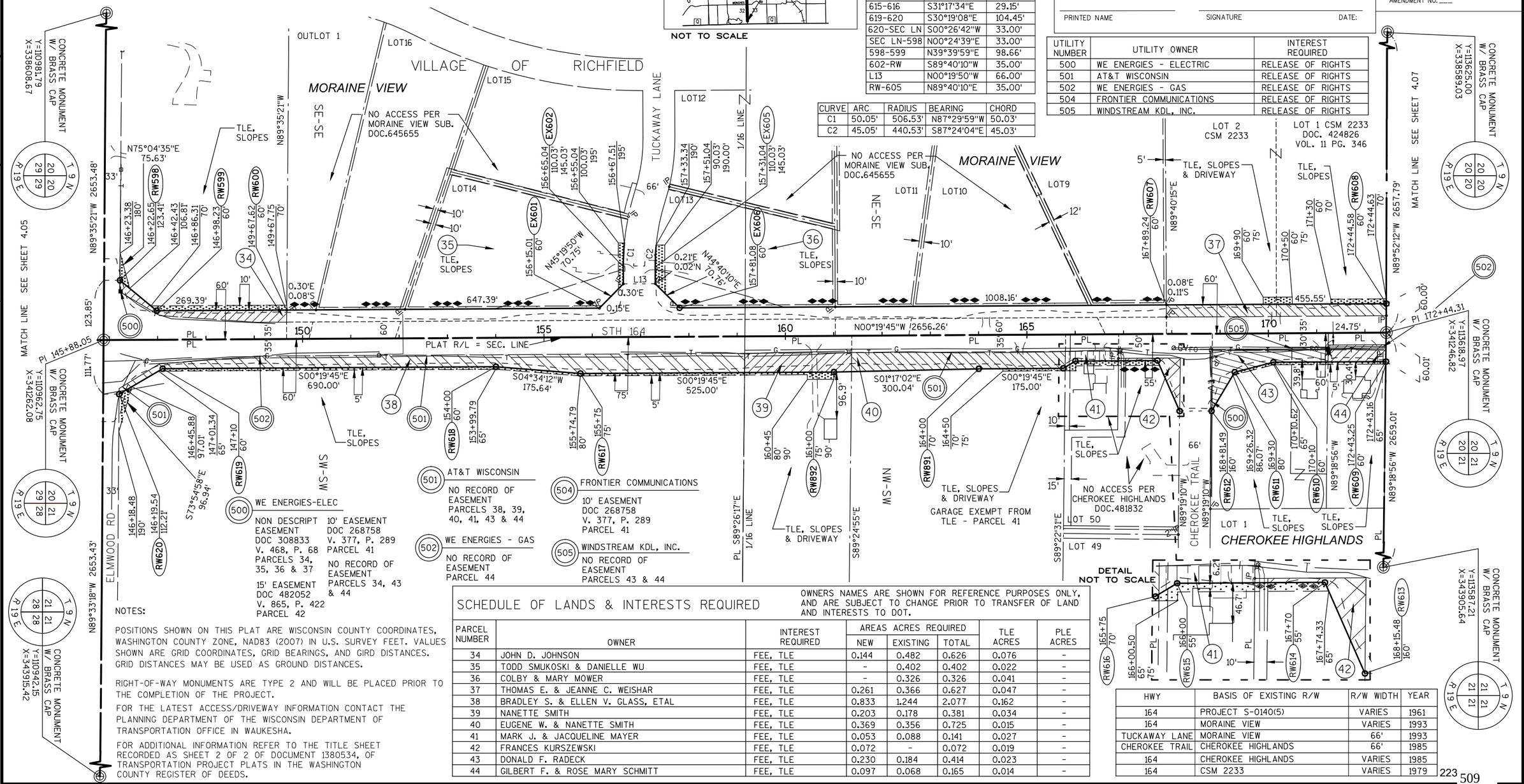
PRINTED NAME SIGNATURE DATE:

DOCUMENT#: **1383099**
Date:**06-05-2015** Time:**08:53:00 AM** Pages: **1**
Fee:**$25.00** County: **WASHINGTON** State:**WI**

SHARON A MARTIN , REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 - 4.06
AMENDMENT NO: ___

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS
502	WE ENERGIES - GAS	RELEASE OF RIGHTS
504	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
505	WINDSTREAM KDL, INC.	RELEASE OF RIGHTS



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

(501) AT&T WISCONSIN
NO RECORD OF EASEMENT
PARCELS 38, 39, 40, 41, 43 & 44

(500) WE ENERGIES-ELEC
NON DESCRIPT EASEMENT DOC 308833 V. 468, P. 68 PARCELS 34, 35, 36 & 37
15' EASEMENT DOC 482052 V. 865, P. 422 PARCEL 42
10' EASEMENT DOC 268758 V. 377, P. 289 PARCEL 41
NO RECORD OF EASEMENT PARCELS 34, 43 & 44

(502) WE ENERGIES - GAS
NO RECORD OF EASEMENT PARCEL 44

(504) FRONTIER COMMUNICATIONS
10' EASEMENT DOC 268758 V. 377, P. 289 PARCEL 41

(505) WINDSTREAM KDL, INC.
NO RECORD OF EASEMENT PARCELS 43 & 44

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
34	JOHN D. JOHNSON	FEE, TLE	0.144	0.482	0.626	0.076	-
35	TODD SMUKOSKI & DANIELLE WU	FEE, TLE	-	0.402	0.402	0.022	-
36	COLBY & MARY MOWER	FEE, TLE	-	0.326	0.326	0.041	-
37	THOMAS E. & JEANNE C. WEISHAR	FEE, TLE	0.261	0.366	0.627	0.047	-
38	BRADLEY S. & ELLEN V. GLASS, ETAL	FEE, TLE	0.833	1.244	2.077	0.162	-
39	NANETTE SMITH	FEE, TLE	0.203	0.178	0.381	0.034	-
40	EUGENE W. & NANETTE SMITH	FEE, TLE	0.369	0.356	0.725	0.015	-
41	MARK J. & JACQUELINE MAYER	FEE, TLE	0.053	0.088	0.141	0.027	-
42	FRANCES KURSZEWSKI	FEE, TLE	0.072	-	0.072	0.019	-
43	DONALD F. RADECK	FEE, TLE	0.230	0.184	0.414	0.023	-
44	GILBERT F. & ROSE MARY SCHMITT	FEE, TLE	0.097	0.068	0.165	0.014	-

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(5)	VARIES	1961
164	MORAINE VIEW	VARIES	1993
TUCKAWAY LANE	MORAINE VIEW	66'	1993
CHEROKEE TRAIL	CHEROKEE HIGHLANDS	66'	1985
164	CHEROKEE HIGHLANDS	VARIES	1985
164	CSM 2233	VARIES	1979

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.07

THAT PART OF CSM 953, PARCEL 2 AND PARCEL 3 OF CSM 2662, LOTS 1 AND LOT 2 OF CSM 4573, AND PARCEL 3 OF CSM 4656 AND THAT PART OF THE SE 1/4-NE 1/4 AND THE NE 1/4-NE 1/4, SECTION 20, ALSO THAT PART OF LOT 1 CSM 2551, LOT 1 AND LOT 2 OF CSM 5833, BEING PART OF THE SW 1/4-NW 1/4 AND THE NW 1/4-NW 1/4, SECTION 21, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

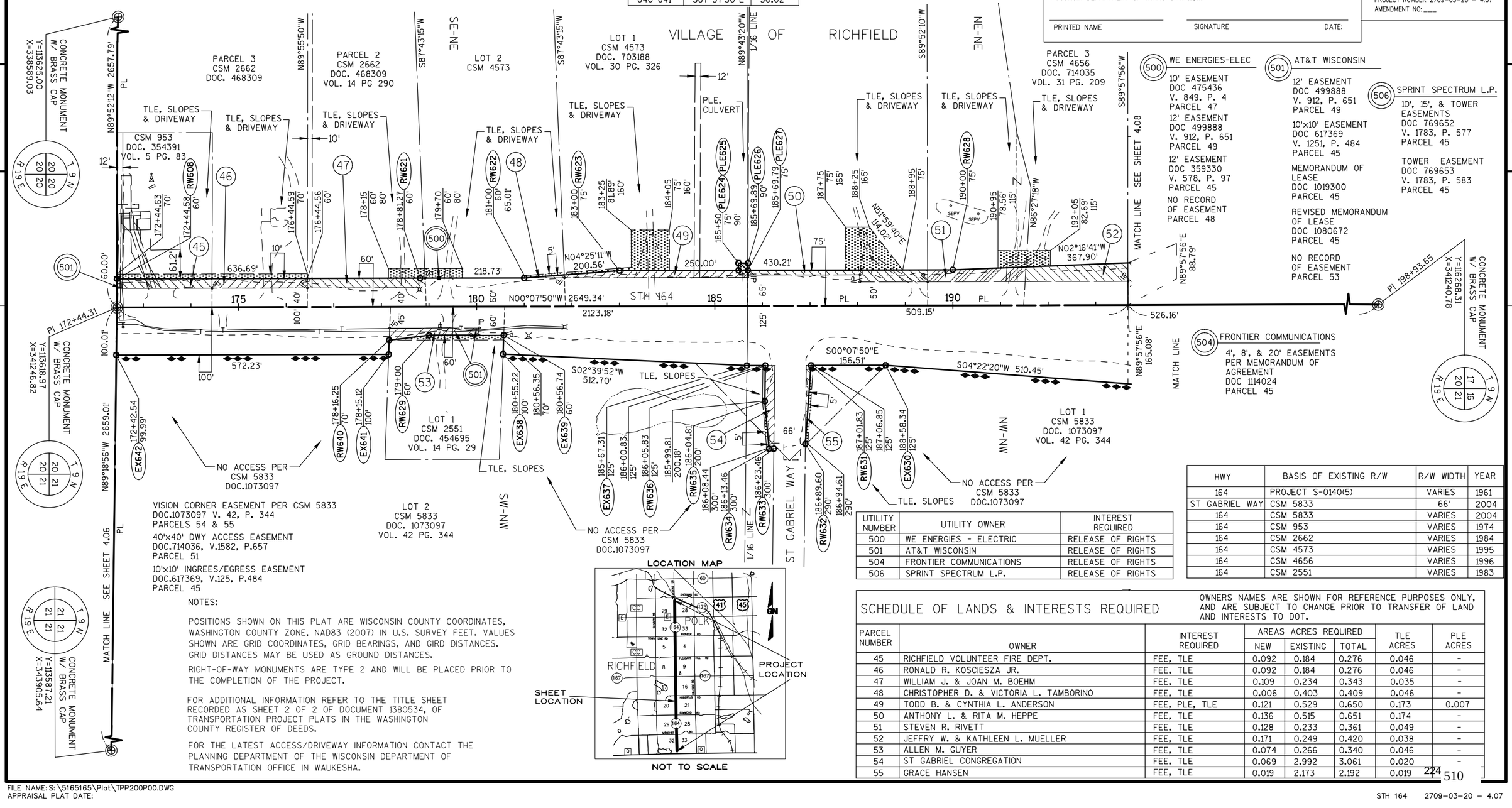
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LINE	BEARING	DISTANCE
624-625	S89°52'10"W	15.00'
625-626	N00°07'50"W	19.90'
626-627	S89°43'20"E	15.00'
626-624	S00°07'50"E	19.79'
631-632	S85°53'21"E	165.45'
632-633	S08°43'41"E	66.89'
633-634	S00°07'50"E	10.00'
634-635	S84°55'41"W	100.37'
635-636	N89°21'15"W	75.01'
636-637	S00°07'50"E	38.52'
638-639	N87°57'13"W	40.03'
639-629	S00°07'50"E	156.74'
629-640	S06°56'23"E	84.34'
640-641	S87°57'50"E	30.02'

SCALE, FEET

0 100 200

GN



VISION CORNER EASEMENT PER CSM 5833 DOC.1073097 V. 42, P. 344 PARCELS 54 & 55

40'x40' DWY ACCESS EASEMENT DOC.714036, V.1582, P.657 PARCEL 51

10'x10' INGREES/EGRESS EASEMENT DOC.617369, V.125, P.484 PARCEL 45

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

LOCATION MAP

NOT TO SCALE

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 – 4.07 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

Nathan A Vaughn 6/04/2015

NATHAN A. VAUGHN DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME SIGNATURE DATE:

DOCUMENT#: **1383100**
Date:**06-05-2015** Time:**08:53:00 AM** Pages: **1**
Fee:**$25.00** County: **WASHINGTON** State:**WI**

SHARON A MARTIN , REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 – 4.07
AMENDMENT NO: ___

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS
504	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
506	SPRINT SPECTRUM L.P.	RELEASE OF RIGHTS

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(5)	VARIES	1961
ST GABRIEL WAY	CSM 5833	66'	2004
164	CSM 5833	VARIES	2004
164	CSM 953	VARIES	1974
164	CSM 2662	VARIES	1984
164	CSM 4573	VARIES	1995
164	CSM 4656	VARIES	1996
164	CSM 2551	VARIES	1983

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
45	RICHFIELD VOLUNTEER FIRE DEPT.	FEE, TLE	0.092	0.184	0.276	0.046	-
46	RONALD R. KOSCIESZA JR.	FEE, TLE	0.092	0.184	0.276	0.046	-
47	WILLIAM J. & JOAN M. BOEHM	FEE, TLE	0.109	0.234	0.343	0.035	-
48	CHRISTOPHER D. & VICTORIA L. TAMBORINO	FEE, TLE	0.006	0.403	0.409	0.046	-
49	TODD B. & CYNTHIA L. ANDERSON	FEE, PLE, TLE	0.121	0.529	0.650	0.173	0.007
50	ANTHONY L. & RITA M. HEPPE	FEE, TLE	0.136	0.515	0.651	0.174	-
51	STEVEN R. RIVETT	FEE, TLE	0.128	0.233	0.361	0.049	-
52	JEFFRY W. & KATHLEEN L. MUELLER	FEE, TLE	0.171	0.249	0.420	0.038	-
53	ALLEN M. GUYER	FEE, TLE	0.074	0.266	0.340	0.046	-
54	ST GABRIEL CONGREGATION	FEE, TLE	0.069	2.992	3.061	0.020	-
55	GRACE HANSEN	FEE, TLE	0.019	2.173	2.192	0.019	-

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.08

THAT PART OF PARCEL 1 AND PARCEL 2 CSM 4656 BEING PART OF THE NE 1/4-NE 1/4, SECTION 20, ALSO PART OF LOT 6A AND LOT 6B CSM 3570 AND LOT 7 OF ATA GA' HI HEIGHTS BEING PART OF THE SE 1/4 -SE 1/4, SECTION 17, ALSO PART OF LOT 1 CSM 5833 BEING PART OF THE NW 1/4-NW 1/4, SECTION 21, ALSO PART OF THE SW 1/4-SW 1/4, SECTION 16, ALL IN TOWN 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(5)	VARIES	1961
HUB. RD & 164	CSM 5833	VARIES	2004
164	A TA GA' HI HEIGHTS	VARIES	1975
HUB. RD & 164	CSM 4656	VARIES	1996
HUB. RD & 164	CSM 3570	VARIES'	1990

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

R.A. Smith National
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262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 - 4.08 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

Nathan A Vaughn 6/04/2015
NATHAN A. VAUGHN — DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME | SIGNATURE | DATE:

DOCUMENT#: **1383101**
Date:**06-05-2015** Time:**08:54:00 AM** Pages: **1**
Fee:**$25.00** County: **WASHINGTON** State:**WI**

SHARON A MARTIN , REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 - 4.08
AMENDMENT NO: ___

(500) WE ENERGIES-ELEC

10' EASEMENT
DOC 764018
V. 1762, P. 299
PARCEL 63

10' EASEMENT DOC.764019
V. 1762, P. 301
PARCEL 62
THIS EAS. IS AFFECTED BY THE REMOVAL OF DOC.764018

12' EASEMENT
DOC 356349
V. 571, P. 330
PARCEL 59

NO RECORD OF EASEMENT
PARCELS 56, 59, & 61

(501) AT&T WISCONSIN

10' EASEMENT
DOC 764018
V. 1762, P. 299
PARCEL 63

10' EASEMENT DOC.764019
V. 1762, P. 301
PARCEL 62
THIS EAS. IS AFFECTED BY THE REMOVAL OF DOC.764018

NO RECORD OF EASEMENT
PARCELS 55, 59, 60 & 63

CONCRETE MONUMENT W/ BRASS CAP
Y=116267.43
X=338584.79
T 9 N, R 19 E, 17 17 20 20

CONCRETE MONUMENT W/ BRASS CAP
Y=118904.84
X=341270.96
T 9 N, R 19 E, 17 16 17 16

LOCATION MAP
SHEET LOCATION
PROJECT LOCATION
NOT TO SCALE

SCALE, FEET
0 100 200

LINE	BEARING	DISTANCE
647-648	N79°12'13"E	187.17'
648-649	N89°58'52"E	211.32'
649-508	N43°00'05"E	72.26'
508-650	N00°39'21"E	200.00'
650-651	N17°46'49"E	88.94'
651-652	N89°20'39"W	14.19'
652-653	N00°39'21"E	25.00'
653-654	S89°20'39"E	21.89'
654-655	N17°46'49"E	78.48'
655-R/W	N00°39'21"E	81.73'
657-658	S72°25'17"E	141.74'
658-659	S89°23'41"E	465.66'

PI	Y	X
115+49.67	116270.95	341790.45

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

33' ACCESS EASEMENT PER A TA GA' HI HEIGHTS
PARCEL 58

40'x40' DWY ACCESS EASEMENT DOC.714037, V.15822, P.657
PARCELS 62 & 63

50' DRAINAGE EASEMENT
CSM 3570
PARCEL 58

12.25' PLE FOR ROAD PURPOSES
DOC 1086466
PARCEL 61

CONCRETE MONUMENT W/ BRASS CAP
Y=113618.97
X=341246.82
T 9 N, R 19 E, 20 21 20 21

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
55	GRACE HANSEN	FEE, TLE	0.260	2.384	2.644	0.169	-
56	RAMON & VERNA ROBINSON	FEE, TLE	0.438	1.281	1.719	0.129	-
57	MICHAEL W. & MARY E. MANTEL	FEE, TLE	0.243	0.327	0.570	0.045	-
58	PATRICK T. & MARY R. BARRON	FEE, PLE, TLE	0.050	0.321	0.371	0.037	0.010
59	KALAGARI HOLDING LLC, C/O TERRY J. CULLEN	FEE, TLE	0.282	1.449	1.731	0.062	-
60	KALAGARI HOLDING LLC	FEE, TLE	0.159	0.155	0.314	0.089	-
61	UWM BOARD OF REGENTS	FEE, TLE	0.086	0.084	0.170	0.053	-
62	JAMES D. & REBECCA S. ALEXANDER	FEE, TLE	0.015	0.103	0.118	0.035	-
63	ANN C. WEBER	FEE, TLE	0.606	1.322	1.928	0.150	-

FILE NAME: S:\5165165\Plat\TPP200P00.DWG
APPRAISAL PLAT DATE:

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.09

THAT PART OF CSM 3239, AND THAT PART OF THE SE 1/4 -SE 1/4 AND THE NE 1/4 -SE 1/4, SECTION 17, ALSO THAT PART OF LOT 2 CSM 1082, AND THAT PART OF THE SW 1/4-SW 1/4 AND THE NW 1/4-SW 1/4, SECTION 16, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCALE, FEET

0 100 200

GN

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 - 4.09 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

NATHAN A. VAUGHN — 6/04/2015
NATHAN A. VAUGHN — DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME — SIGNATURE — DATE:

DOCUMENT#: **1383102**
Date:**06-05-2015** Time:**08:54:00 AM** Pages: **1**
Fee:**$25.00** County: **WASHINGTON** State:**WI**

SHARON A MARTIN , REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 - 4.09
AMENDMENT NO: ____

(500) WE ENERGIES-ELEC
12' EASEMENT
DOC 533263
V. 999, P. 630
PARCEL 64

12' EASEMENT
DOC 358861
V. 576, P. 648
PARCEL 71

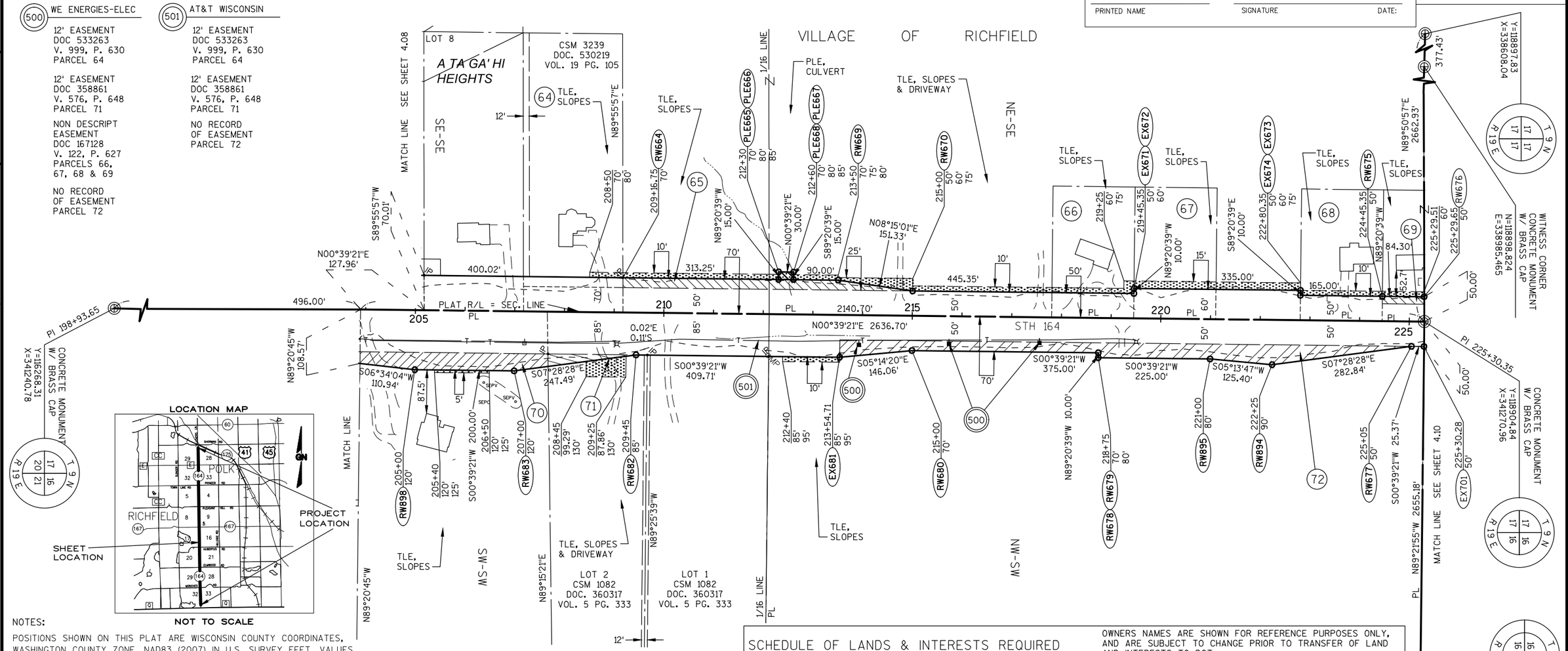
NON DESCRIPT EASEMENT
DOC 167128
V. 122, P. 627
PARCELS 66, 67, 68 & 69

NO RECORD OF EASEMENT
PARCEL 72

(501) AT&T WISCONSIN
12' EASEMENT
DOC 533263
V. 999, P. 630
PARCEL 64

12' EASEMENT
DOC 358861
V. 576, P. 648
PARCEL 71

NO RECORD OF EASEMENT
PARCEL 72



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(5)	VARIES	1961
164	CSM 3239	VARIES	1988
164	A TA GA' HI HEIGHTS	VARIES	1975
164	CSM 1082	VARIES	1974

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
64	JON ANTHONY & SHANNA LEE MANLEY	FEE, TLE	-	0.230	0.230	0.015	-
65	RONALD C. & HELGA A. ENGELKE	FEE, PLE, TLE	0.233	1.225	1.458	0.268	0.010
66	DOUGLAS J. & SUSAN A. JOHNSON	FEE, TLE	-	0.189	0.189	0.045	-
67	VINCENT BULLOCK SR.	FEE, TLE	-	0.227	0.227	0.057	-
68	JUNE A. WOLF TRUST	FEE, TLE	-	0.189	0.189	0.038	-
69	JOEL A. ELIASON & ALECIA A. OOSTDYK	FEE, TLE	0.029	0.068	0.097	0.019	-
70	BOYD D. & FRANCES J. GUTBROD	FEE, TLE	0.282	0.736	1.018	0.013	-
71	DEAN R. & KELLI A. SABEL	FEE, TLE	0.051	0.869	0.920	0.067	-
72	MOHAN K. & NIRMALA M. DUNGARANI, LLC	FEE, TLE	0.648	1.628	2.276	0.026	-

FILE NAME: S:\5165165\Plat\TPP200P00.DWG
APPRAISAL PLAT DATE:

STH 164 2709-03-20 - 4.09

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.10

THAT PART OF LOT 1 AND LOT 22 OF KIRK OF THE HILLS SUBDIVISION, AND THAT PART OF THE SE 1/4-NE 1/4, SECTION 17, ALSO THAT PART OF THE SW 1/4-NW 1/4, SECTION 16, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(5)	VARIES	1961
164	KIRK OF THE HILLS	VARIES	
LOCH VIEW RD	KIRK OF THE HILLS	66'	
GOLDEN DR	DOC 296741 V. 441 P. 1	60'	1965
GOLDEN DR	CSM 4812	70'	1997

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS
504	FRONTIER COMMUNCIATIONS	RELEASE OF RIGHTS

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 – 4.10 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

NATHAN A. VAUGHN — 6/04/2015
AGENT FOR R.A. SMITH NATIONAL — DATE
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

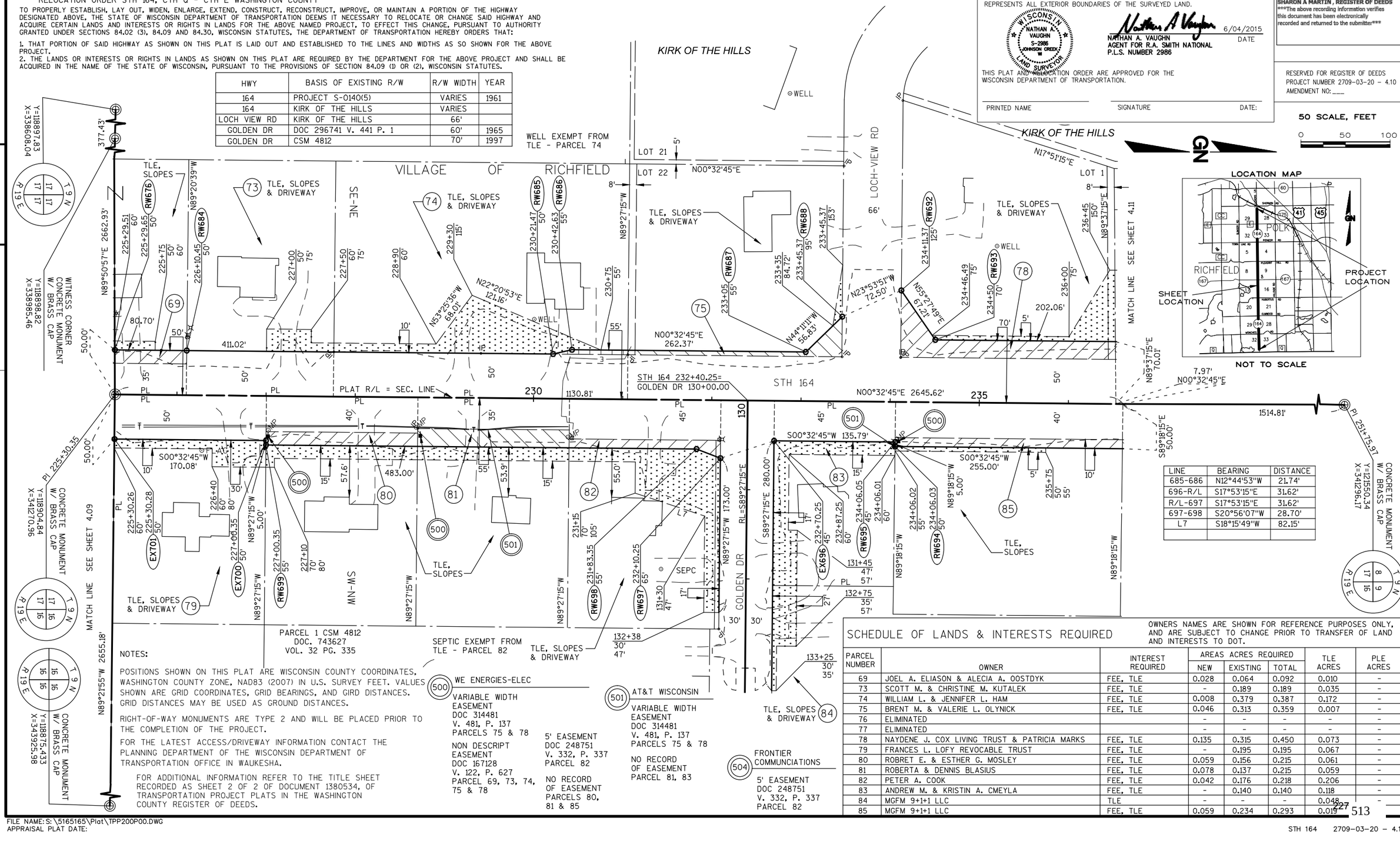
PRINTED NAME — SIGNATURE — DATE:

DOCUMENT#: **1383103**
Date:**06-05-2015** Time:**08:54:00 AM** Pages: **1**
Fee:**$25.00** County: **WASHINGTON** State:**WI**

SHARON A MARTIN, REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 – 4.10
AMENDMENT NO: ____

50 SCALE, FEET
0 50 100



LINE	BEARING	DISTANCE
685-686	N12°44'53"W	21.74'
696-R/L	S17°53'15"E	31.62'
R/L-697	S17°53'15"E	31.62'
697-698	S20°56'07"W	28.70'
L7	S18°15'49"W	82.15'

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

(500) WE ENERGIES-ELEC
VARIABLE WIDTH EASEMENT DOC 314481 V. 481, P. 137 PARCELS 75 & 78
NON DESCRIPT EASEMENT DOC 167128 V. 122, P. 627 PARCEL 69, 73, 74, 75 & 78
5' EASEMENT DOC 248751 V. 332, P. 337 PARCEL 82
NO RECORD OF EASEMENT PARCELS 80, 81 & 85

(501) AT&T WISCONSIN
VARIABLE WIDTH EASEMENT DOC 314481 V. 481, P. 137 PARCELS 75 & 78
NO RECORD OF EASEMENT PARCEL 81, 83

(504) FRONTIER COMMUNCIATIONS
5' EASEMENT DOC 248751 V. 332, P. 337 PARCEL 82

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
69	JOEL A. ELIASON & ALECIA A. OOSTDYK	FEE, TLE	0.028	0.064	0.092	0.010	-
73	SCOTT M. & CHRISTINE M. KUTALEK	FEE, TLE	-	0.189	0.189	0.035	-
74	WILLIAM L. & JENNIFER L. HAM	FEE, TLE	0.008	0.379	0.387	0.172	-
75	BRENT M. & VALERIE L. OLYNICK	FEE, TLE	0.046	0.313	0.359	0.007	-
76	ELIMINATED		-	-	-	-	-
77	ELIMINATED		-	-	-	-	-
78	NAYDENE J. COX LIVING TRUST & PATRICIA MARKS	FEE, TLE	0.135	0.315	0.450	0.073	-
79	FRANCES L. LOFY REVOCABLE TRUST	FEE, TLE	-	0.195	0.195	0.067	-
80	ROBRET E. & ESTHER G. MOSLEY	FEE, TLE	0.059	0.156	0.215	0.061	-
81	ROBERTA & DENNIS BLASIUS	FEE, TLE	0.078	0.137	0.215	0.059	-
82	PETER A. COOK	FEE, TLE	0.042	0.176	0.218	0.206	-
83	ANDREW M. & KRISTIN A. CMEYLA	FEE, TLE	-	0.140	0.140	0.118	-
84	MGFM 9+1+1 LLC	TLE	-	-	-	0.048	-
85	MGFM 9+1+1 LLC	FEE, TLE	0.059	0.234	0.293	0.015	-

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.11

THAT PART OF LOT 1, AND LOT 7 OF WA LIE HIE'YI WOODS SUBDIVISION BEING A PART OF THE NE 1/4-NE 1/4, AND THAT PART OF THE SE 1/4-NE 1/4, OF SECTION 17, ALSO THAT PART OF THE SW 1/4-NW 1/4 AND THE NW 1/4-NW 1/4, OF SECTION 16, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LINE	BEARING	DISTANCE
702-707	N32°15'17"W	95.18'
707-708	N62°10'11"E	35.87'
900-901	S89°27'15"E	10.00'
901-903	S00°32'45"W	20.00'
903-904	N89°27'15"W	10.00'
904-905	S00°32'45"W	168.97'
905-R/W	S00°32'45"W	20.00'

CURVE	ARC	RADIUS	BEARING	CHORD
C1	42.61'	100.00'	S77°14'46"E	42.29'

50 SCALE, FEET

0 50 100

GN

R.A. Smith National
Beyond Surveying and Engineering
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WISCONSIN NATHAN A VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

NATHAN A. VAUGHN 6/04/2015
NATHAN A. VAUGHN DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME SIGNATURE DATE:

DOCUMENT#: **1383111**
Date:**06-05-2015** Time:**09:54:00 AM** Pages: **1**
Fee:**$25.00** County: **WASHINGTON** State:**WI**

SHARON A MARTIN , REGISTER OF DEEDS
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 - 4.11
AMENDMENT NO: ___

VILLAGE OF RICHFIELD

WA LIE HIE' YI WOODS

ADA'HI CT

LOT1 LOT2 LOT3 LOT4 LOT5 LOT6 LOT7

SE-NE NE-NE

1/16 LINE

TLE, SLOPES & DRIVEWAY

NO ACCESS PER WA LIE HIE' YI WOODS DOC.412258

REMNANT AREA 1.218 AC

BUILDINGS TO BE RELOCATED

TLE, SLOPES & SEPTIC, WELL & BUILDING REMOVAL

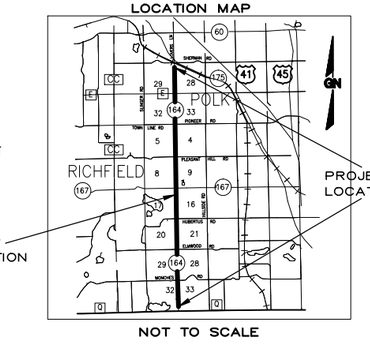
NON DESCRIPT EASEMENT DOC 167128 V. 122, P. 627 PARCEL 86

NO RECORD OF EASEMENT PARCELS 86, 89, 90 & 91

500 WE ENERGIES-ELEC
6' EASEMENT DOC 412808 V. 696, P. 319 PARCEL 89
6' EASEMENT DOC 412807 V. 696, P. 316 PARCEL 87
10' EASEMENT DOC.315380 V.483, P.174 PARCEL 86

501 AT&T WISCONSIN
10' EASEMENT DOC.315380 V.483, P.174 PARCEL 86
6' EASEMENT DOC 412807 V. 696, P. 316 PARCEL 87
6' EASEMENT DOC 412808 V. 696, P. 319 PARCEL 89

LOCATION MAP



NOT TO SCALE

CONCRETE MONUMENT W/ BRASS CAP
Y=181904.84 X=342012.96

PI 225+30.35

S89°37'15"W 70.01'

MATCH LINE SEE SHEET 4.10

237+00 150' 237+30 87'

N89°37'15"E

80'

N65°04'57"E 69.78'

86

530.89'

47.1'

50'

STH 164

PL

1122.84'

S00°32'45"W 7.97'

500

N89°18'15"W 50.00'

90

236+81.03 50' RW905

236+90 50' 60'

237+40 50' 60'

238+30 50' 60' RW904

238+50 50' 60' RW903

N89°19'30"W

1/16 LINE

238+53.05 50' RW902

238+70 50' 60' RW900

238+80 60' RW901

239+10 50'

TLE, SLOPES & DRIVEWAY

TLE, SLOPES & DRAINAGE

PLE, DRAINAGE

239+20 77' 87'

241+37.60 144.97'

241+74.60 145'

241+89.95 190'

242+55.95 190'

241+45.95 77'

241+82.95 70' RW702

78.6'

37'

7'

70'

87

TLE, SLOPES & DRIVEWAY

242+64.90 231.34'

242+71.31 228.42'

242+62.95 145'

242+62.95 121.56' RW707

242+80 90' RW708

243+10 90' 145'

243+60 90' 195'

242+85 90'

245+30 90' 195'

245+50 90' RW709

C1

6'

80'

N00°32'45"E 270.00'

90'

89

N04°12'38"W 106.47'

MATCH LINE SEE SHEET 4.12

N40°40'10"E 153.36'

IP

500

1120.18'

PLAT R/L = SEC. LINE

N00°32'45"E 2645.62'

240

245

250

PL

246.60'

156.00'

PI 254+75.97

S89°17'04"E 85.00'

MATCH LINE SEE SHEET 4.12

CONCRETE MONUMENT W/ BRASS CAP
Y=121550.34 X=341639.17

S00°32'45"W 160.00'

S14°35'40"W 144.19'

38.6'

SEPV

SEPC

WELL

POOL

240+30 50' RW899

240+60 125'

240+85 125'

241+00 67.52'

241+69.87 85' RW715

242+00 85'

242+75 105'

105'

243+10 105'

243+40 85'

244+00 85' RW714

S00°32'45"W 230.13'

TLE, SLOPES

TLE, SLOPES & DRIVEWAY

91

S05°18'35"W 301.04'

S00°32'45"W 100.00'

110'

S05°56'43"E 221.14'

247+00 110' RW712

248+00 110' RW711

250+19.72 85' RW710

MN-MS

MN-MN

85'

60'

35'

45'

NOTES:

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UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(5)	VARIES	1961
164	WA LIE HIE' YI WOODS	VARIES	1978
A DA' HI COURT	WA LIE HIE' YI WOODS	80'	1978

SCHEDULE OF LANDS & INTERESTS REQUIRED

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PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
86	DAVID M. PATTON	FEE, TLE	0.092	0.230	0.322	0.170	-
87	CHRISTOPHER & REBECCA RACH	FEE, TLE	0.190	0.382	0.572	0.146	-
88	ELIMINATED		-	-	-	-	-
89	PAUL M. REGETS	FEE, TLE	0.409	0.595	1.004	0.552	-
90	DENISE L. KRAETSCH	FEE, PLE, TLE	0.005	0.216	0.221	0.013	0.001
91	MGFM BARNEY LLC	FEE, PLE, TLE	0.372	1.913	2.285	0.117	0.004

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.12 - AMENDMENT NO: 1

AMENDS PARCEL 97 OF TRANSPORTATION PROJECT PLAT 2709-03-20-4.12 RECORDED AS DOCUMENT NUMBER 1383113.

THAT PART OF LOT 1 CSM 3925, LOT 2 AND LOT 3 OF WA LIE HIE'YI WOODS SUBDIVISION, AND THAT PART OF THE NE 1/4-NE 1/4, SECTION 17, ALSO THAT PART OF THE SE 1/4-SE 1/4, SECTION 8, ALSO THAT PART OF THE NW 1/4-NW 1/4, SECTION 16, ALSO THAT PART OF THE SW 1/4-SW 1/4, SECTION 9, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(5)	VARIES	1961
167	CSM 3925	VARIES	1992
167	PROJECT 2302-04-20	VARIES	1996

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I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 - 4.12 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

NATHAN A. VAUGHN — 10/06/2015 DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

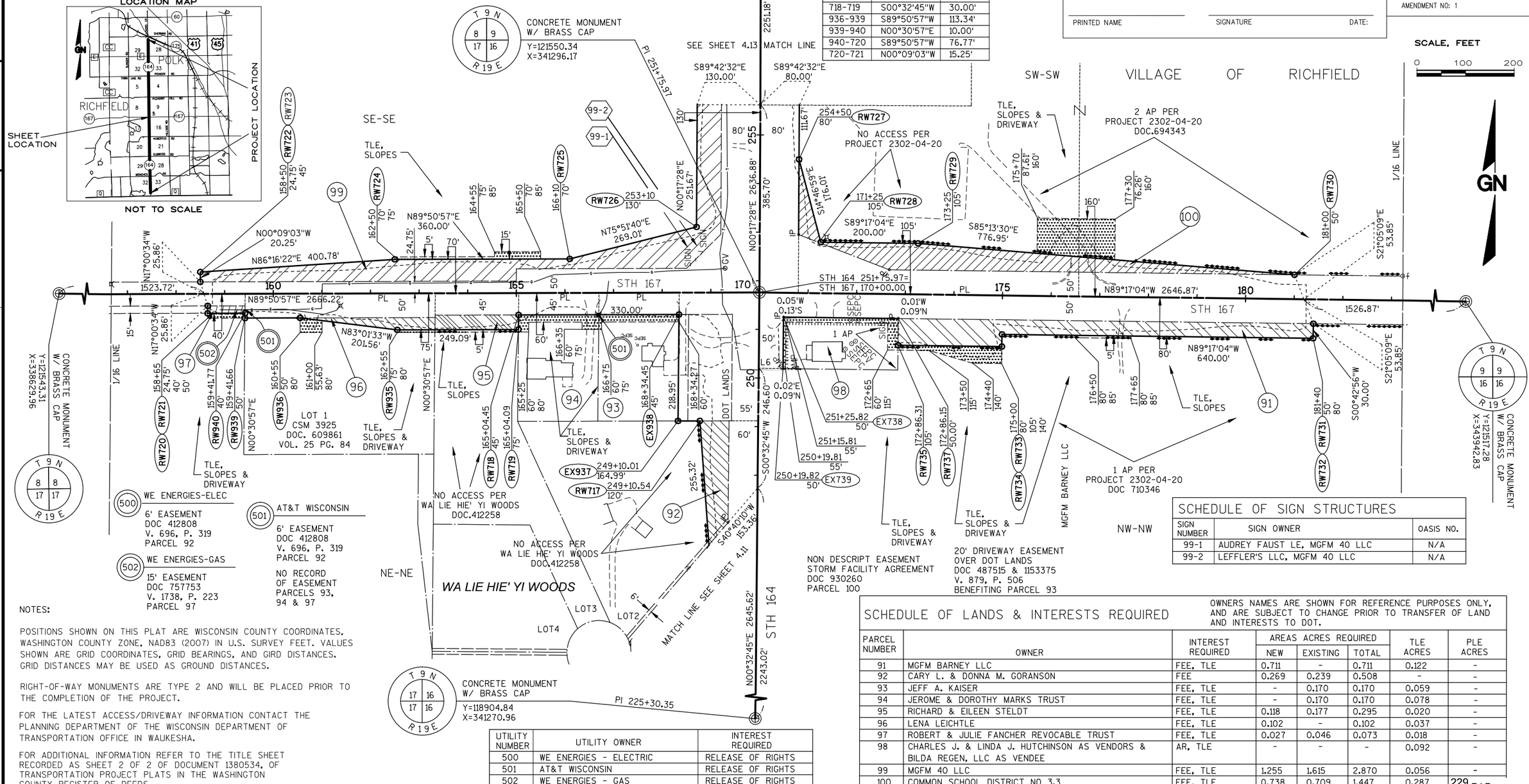
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME | SIGNATURE | DATE:

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 - 4.12
AMENDMENT NO: 1

LOCATION MAP

NOT TO SCALE



LINE	BEARING	DISTANCE
733-734	S00°42'56"W	25.00'
734-735	N89°17'04"W	213.69'
735-737	N00°32'45"E	55.00'
737-738	N89°17'04"W	236.00'
738-739	S00°32'45"W	106.00'
L6	N89°17'04"W	50.00'
R/W-717	N04°12'38"W	255.32'
717-937	S89°51'45"W	44.99'
937-938	N00°32'45"E	218.95'
718-719	S00°32'45"W	30.00'
936-939	S89°50'57"W	113.34'
939-940	N00°30'57"E	10.00'
940-720	S89°50'57"W	76.77'
720-721	N00°09'03"W	15.25'

CONCRETE MONUMENT W/ BRASS CAP
Y=124187.19
X=341309.56

CONCRETE MONUMENT W/ BRASS CAP
Y=121550.34
X=341296.17

CONCRETE MONUMENT W/ BRASS CAP
Y=118904.84
X=341270.96

CONCRETE MONUMENT W/ BRASS CAP
Y=121543.31
X=338629.96

CONCRETE MONUMENT W/ BRASS CAP
Y=121517.28
X=343942.83

(500) WE ENERGIES-ELEC
6' EASEMENT
DOC 412808
V. 696, P. 319
PARCEL 92

(501) AT&T WISCONSIN
6' EASEMENT
DOC 412808
V. 696, P. 319
PARCEL 92
NO RECORD OF EASEMENT
PARCELS 93, 94 & 97

(502) WE ENERGIES-GAS
15' EASEMENT
DOC 757753
V. 1738, P. 223
PARCEL 97

NOTES:

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UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS
502	WE ENERGIES - GAS	RELEASE OF RIGHTS

SCHEDULE OF SIGN STRUCTURES

SIGN NUMBER	SIGN OWNER	OASIS NO.
99-1	AUDREY FAUST LE, MGFM 40 LLC	N/A
99-2	LEFFLER'S LLC, MGFM 40 LLC	N/A

SCHEDULE OF LANDS & INTERESTS REQUIRED

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PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
91	MGFM BARNEY LLC	FEE, TLE	0.711	-	0.711	0.122	-
92	CARY L. & DONNA M. GORANSON	FEE	0.269	0.239	0.508	-	-
93	JEFF A. KAISER	FEE, TLE	-	0.170	0.170	0.059	-
94	JEROME & DOROTHY MARKS TRUST	FEE, TLE	-	0.170	0.170	0.078	-
95	RICHARD & EILEEN STELDT	FEE, TLE	0.118	0.177	0.295	0.020	-
96	LENA LEICHTLE	FEE, TLE	0.102	-	0.102	0.037	-
97	ROBERT & JULIE FANCHER REVOCABLE TRUST	FEE, TLE	0.027	0.046	0.073	0.018	-
98	CHARLES J. & LINDA J. HUTCHINSON AS VENDORS & BILDA REGEN, LLC AS VENDEE	AR, TLE	-	-	-	0.092	-
99	MGFM 40 LLC	FEE, TLE	1.255	1.615	2.870	0.056	-
100	COMMON SCHOOL DISTRICT NO 3.3	FEE, TLE	0.738	0.709	1.447	0.287	-

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.13

THAT PART OF CSM 710, AND THAT PART OF THE SE 1/4-SE 1/4 AND THE NE 1/4-SE 1/4, SECTION 8, ALSO THAT PART OF PARCEL 1 CSM 2364, AND THAT PART OF THE SW 1/4-SW 1/4 AND THE NW 1/4-SW 1/4, SECTION 9, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(3)	VARIES	1961
164	CSM 710	VARIES	1973
164	CSM 2364	160'	1981

SCALE, FEET
0 100 200

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262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 - 4.13 AND THAT SUCH PLAT CORRECTLY REPRESENTS AN EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

Nathan A Vaughn 6/04/2015

NATHAN A. VAUGHN DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

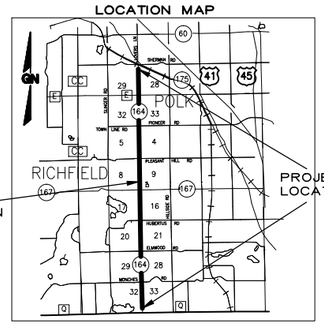
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DOCUMENT#: **1383114**
Date:**06-05-2015** Time:**09:56:00 AM** Pages: **1**
Fee:**$25.00** County: **WASHINGTON** State:**WI**

SHARON A MARTIN , REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 - 4.13
AMENDMENT NO: ____

LOCATION MAP



NOT TO SCALE

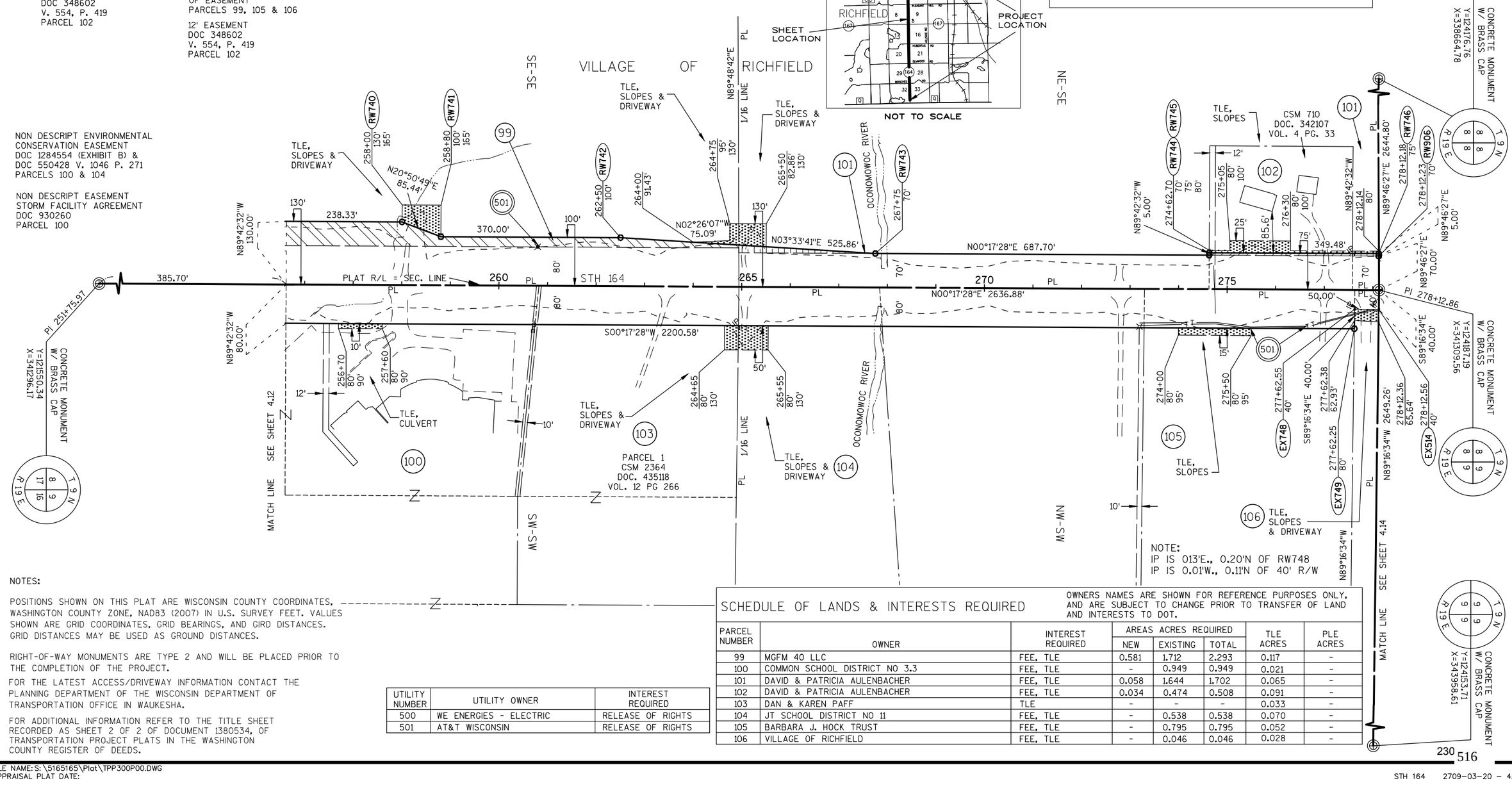
(500) WE ENERGIES-ELEC
12' EASEMENT
DOC 348602
V. 554, P. 419
PARCEL 102

(501) AT&T WISCONSIN
NO RECORD OF EASEMENT
PARCELS 99, 105 & 106

12' EASEMENT
DOC 348602
V. 554, P. 419
PARCEL 102

NON DESCRIPT ENVIRONMENTAL CONSERVATION EASEMENT
DOC 1284554 (EXHIBIT B) &
DOC 550428 V. 1046 P. 271
PARCELS 100 & 104

NON DESCRIPT EASEMENT
STORM FACILITY AGREEMENT
DOC 930260
PARCEL 100



NOTE:
IP IS 013'E., 0.20'N OF RW748
IP IS 0.01'W., 0.11'N OF 40' R/W

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
99	MGFM 40 LLC	FEE, TLE	0.581	1.712	2.293	0.117	-
100	COMMON SCHOOL DISTRICT NO 3.3	FEE, TLE	-	0.949	0.949	0.021	-
101	DAVID & PATRICIA AULENBACHER	FEE, TLE	0.058	1.644	1.702	0.065	-
102	DAVID & PATRICIA AULENBACHER	FEE, TLE	0.034	0.474	0.508	0.091	-
103	DAN & KAREN PAFF	TLE	-	-	-	0.033	-
104	JT SCHOOL DISTRICT NO 11	FEE, TLE	-	0.538	0.538	0.070	-
105	BARBARA J. HOCK TRUST	FEE, TLE	-	0.795	0.795	0.052	-
106	VILLAGE OF RICHFIELD	FEE, TLE	-	0.046	0.046	0.028	-

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.14

THAT PART OF LOT 1 AND LOT 17 OF GREYSTONE FIELDS SUBDIVISION, BEING PART OF THE SE 1/4-NE 1/4, SECTION 8, ALSO THAT PART OF PARCEL 1 AND PARCEL 2 CSM 1243, AND THAT PART OF THE SW 1/4-NW 1/4 AND THE NW 1/4-NW 1/4, SECTION 9, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(3)	VARIES	1961
164	GREYSTONE FIELDS	VARIES	1994
GREYSTONE DR	GREYSTONE FIELDS	66'	1994
164	CSM 1243	VARIES	1975

50 SCALE, FEET

0 50 100

GN

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

(500) WE ENERGIES-ELEC
10' EASEMENT DOC 664465 V. 1417 P. 108 PARCEL 107
12' EASEMENT DOC 405195 V. 681, P. 125 PARCEL 109
10' EASEMENT DOC 265005 V. 369, P. 52 PARCEL 111
5' EASEMENT DOC 248750 V. 332, P. 336 PARCEL 112
NO RECORD OF EASEMENT PARCEL 109

(501) AT&T WISCONSIN
10' EASEMENT DOC 664465 V. 1417 P. 108 PARCEL 107
NO RECORD OF EASEMENT PARCEL 109, 110, 111 & 112

(504) FRONTIER COMMUNICATIONS
10' EASEMENT DOC 265005 V. 369, P. 52 PARCEL 111

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 – 4.14 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

Nathan A Vaughn 6//04/2015
NATHAN A. VAUGHN DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

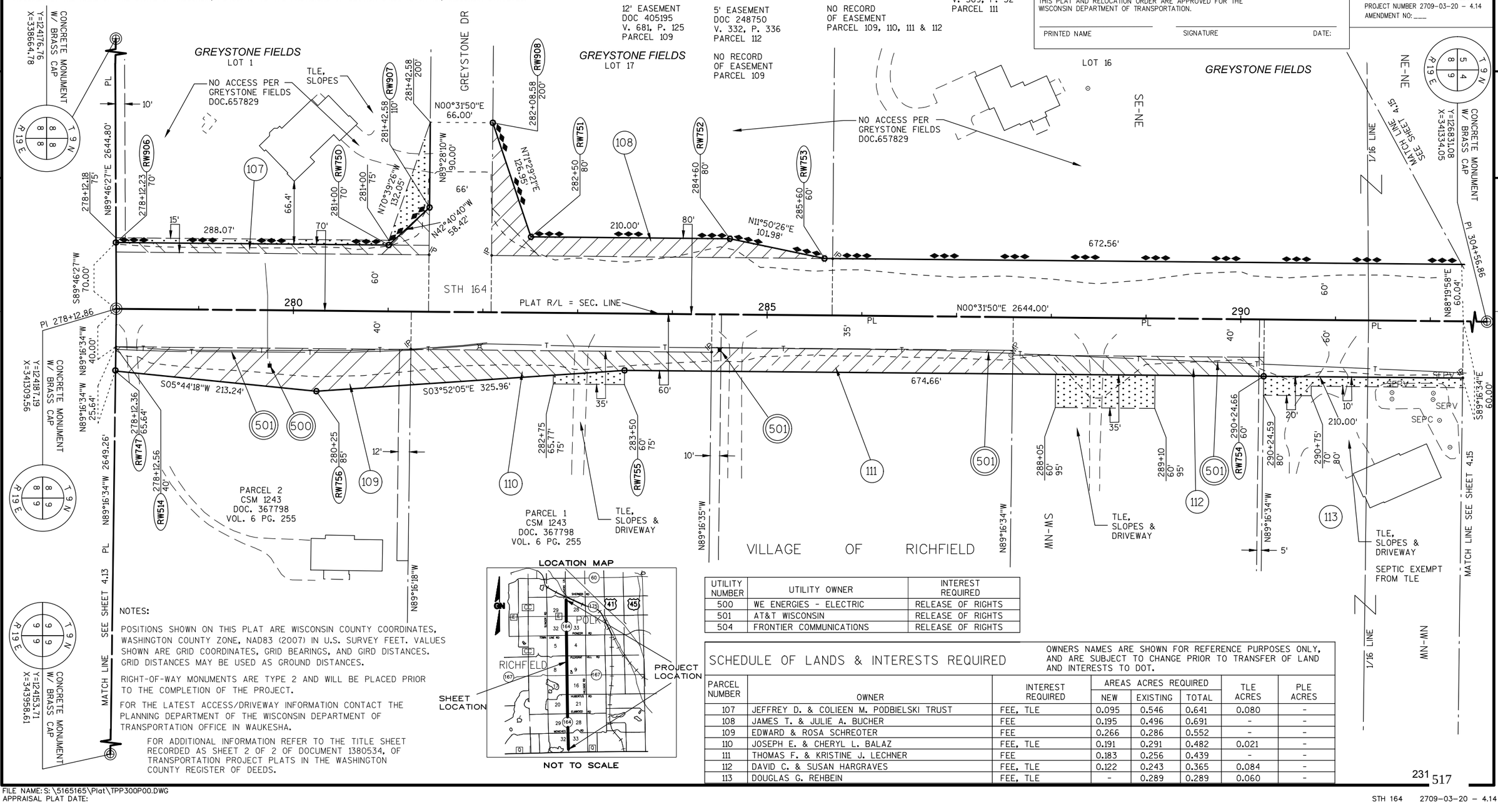
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME SIGNATURE DATE:

DOCUMENT#: **1383115**
Date:**06-05-2015** Time:**09:57:00 AM** Pages: **1**
Fee:**$25.00** County: **WASHINGTON** State:**WI**

SHARON A MARTIN , REGISTER OF DEEDS
****The above recording information verifies this document has been electronically recorded and returned to the submitter****

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 – 4.14
AMENDMENT NO: ___



LOCATION MAP

NOT TO SCALE

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS
504	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
107	JEFFREY D. & COLIEEN M. PODBIELSKI TRUST	FEE, TLE	0.095	0.546	0.641	0.080	-
108	JAMES T. & JULIE A. BUCHER	FEE	0.195	0.496	0.691	-	-
109	EDWARD & ROSA SCHREOTER	FEE	0.266	0.286	0.552	-	-
110	JOSEPH E. & CHERYL L. BALAZ	FEE, TLE	0.191	0.291	0.482	0.021	-
111	THOMAS F. & KRISTINE J. LECHNER	FEE	0.183	0.256	0.439	-	-
112	DAVID C. & SUSAN HARGRAVES	FEE, TLE	0.122	0.243	0.365	0.084	-
113	DOUGLAS G. REHBEIN	FEE, TLE	-	0.289	0.289	0.060	-

FILE NAME: S:\5165165\Plat\TPP300P00.DWG
APPRAISAL PLAT DATE:

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.15

THAT PART OF LOT 14 AND LOT 15 OF GREYSTONE FIELDS SUBDIVISION, LOT 1 CSM 4086, AND THAT PART OF THE NE 1/4-NE 1/4, SECTION 8, ALSO THAT PART OF CSM 940, LOT 2, LOT 3, AND LOT 4 OF CSM 3924, AND THAT PART OF THE NW 1/4-NW 1/4, SECTION 9, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(3)	VARIES	1961
164	CSM 940	VARIES	1974
164	CSM 3924	VARIES	1992
164	CSM 4086	VARIES	1993
164	GREYSTONE FIELDS	VARIES	1994
PLEASANT HILL RD	CSM 4086	33'	1993
PLEASANT HILL RD	CSM 4343	40'	1994

50 SCALE, FEET

0 50 100

GN

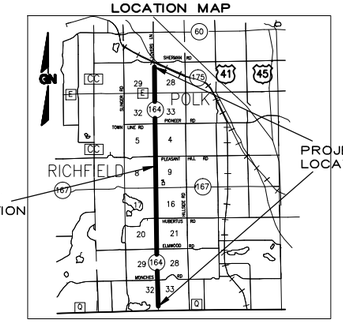
501 AT&T WISCONSIN
12' EASEMENT
DOC 664465
V. 1417 P. 108
PARCEL 115
NO RECORD OF EASEMENT
PARCEL 117, 119 & 123

504 FRONTIER COMMUNICATIONS
10' EASEMENT
DOC 274265
V. 389, P. 566
PARCELS 116 & 117

500 WE ENERGIES-ELEC
12' EASEMENT
DOC 358859
V. 576, P. 645
PARCEL 119
12' EASEMENT
DOC 664465
V. 1417 P. 108
PARCEL 115
NO RECORD OF EASEMENT
PARCEL 123

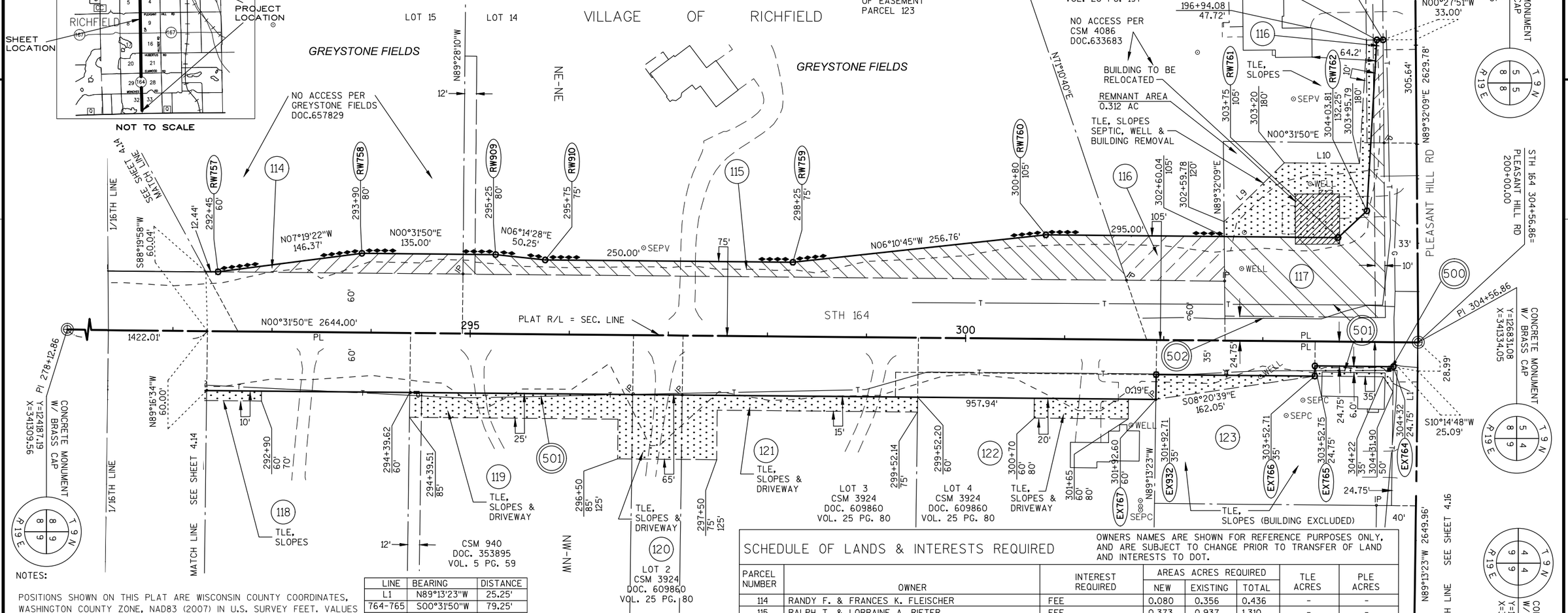
502 WE ENERGIES-GAS
NO RECORD OF EASEMENT
PARCEL 117

LOCATION MAP



NOT TO SCALE

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS
502	WE ENERGIES - GAS	RELEASE OF RIGHTS
504	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

LINE	BEARING	DISTANCE
L1	N89°13'23"W	25.25'
764-765	S00°31'50"W	79.25'
765-766	S89°13'23"E	10.25'
766-932	S00°31'50"W	160.00'
932-767	S89°13'23"E	25.00'
761-762	N42°52'28"W	39.65'
762-763	N86°39'22"W	172.88'
763-911	N00°27'51"W	6.27'
L9	N44°21'54"W	85.01'
L10	N00°31'50"E	75.79'

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
114	RANDY F. & FRANCES K. FLEISCHER	FEE	0.080	0.356	0.436	-	-
115	RALPH T. & LORRAINE A. RIETER	FEE	0.373	0.937	1.310	-	-
116	STEVE J. BIKSADSKI	FEE, TLE	0.133	-	0.133	0.024	-
117	JAMES L. & BRENDA R. GARCIA	FEE, TLE	0.343	0.244	0.587	0.204	-
118	DAVID & JODIE JANKA	FEE, TLE	-	0.282	0.282	0.013	-
119	DANIEL R. & DANIELLE L. EICHENBERGER	FEE, TLE	-	0.310	0.310	0.142	-
120	PAUL R. & CHRISTINE M. HANSEN	FEE, TLE	-	0.069	0.069	0.075	-
121	ROBERT H. & CAMILLE M. ZIMNEY REVOCABLE TRUST	FEE, TLE	-	0.314	0.314	0.123	-
122	ANDREW S. DIRNBAUER	FEE, TLE	-	0.193	0.193	0.044	-
123	ROSEMARY POWERS	FEE, TLE	-	0.202	0.202	0.066	-

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
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I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 – 4.15 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

NATHAN A. VAUGHN
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

6/04/2015
DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME | SIGNATURE | DATE:

DOCUMENT#: **1383165**
Date:**06-05-2015** Time:**12:13:00 PM** Pages: **1**
Fee:**$25.00** County: **WASHINGTON** State:**WI**

SHARON A MARTIN , REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 – 4.15
AMENDMENT NO: ___

FILE NAME: S:\5165165\Plat\TPP300P00.DWG
APPRAISAL PLAT DATE:

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.16

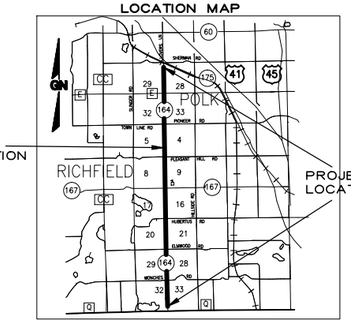
THAT PART OF LOT 34, OUTLOT 2, OUTLOT 3, AND OUTLOT 4 OF STEEPLE VIEW ESTATES SUBDIVISION, AND THAT PART OF THE SE 1/4-SE 1/4 AND THE NE 1/4-SE 1/4, OF SECTION 5, ALSO THAT PART OF THE SW 1/4-SW 1/4 AND THE NW 1/4 - SW 1/4, OF SECTION 4, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LOCATION MAP



NOT TO SCALE

SCALE, FEET

0 100 200

GN

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 – 4.16 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

NATHAN A. VAUGHN — 6/04/2015
NATHAN A. VAUGHN — DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

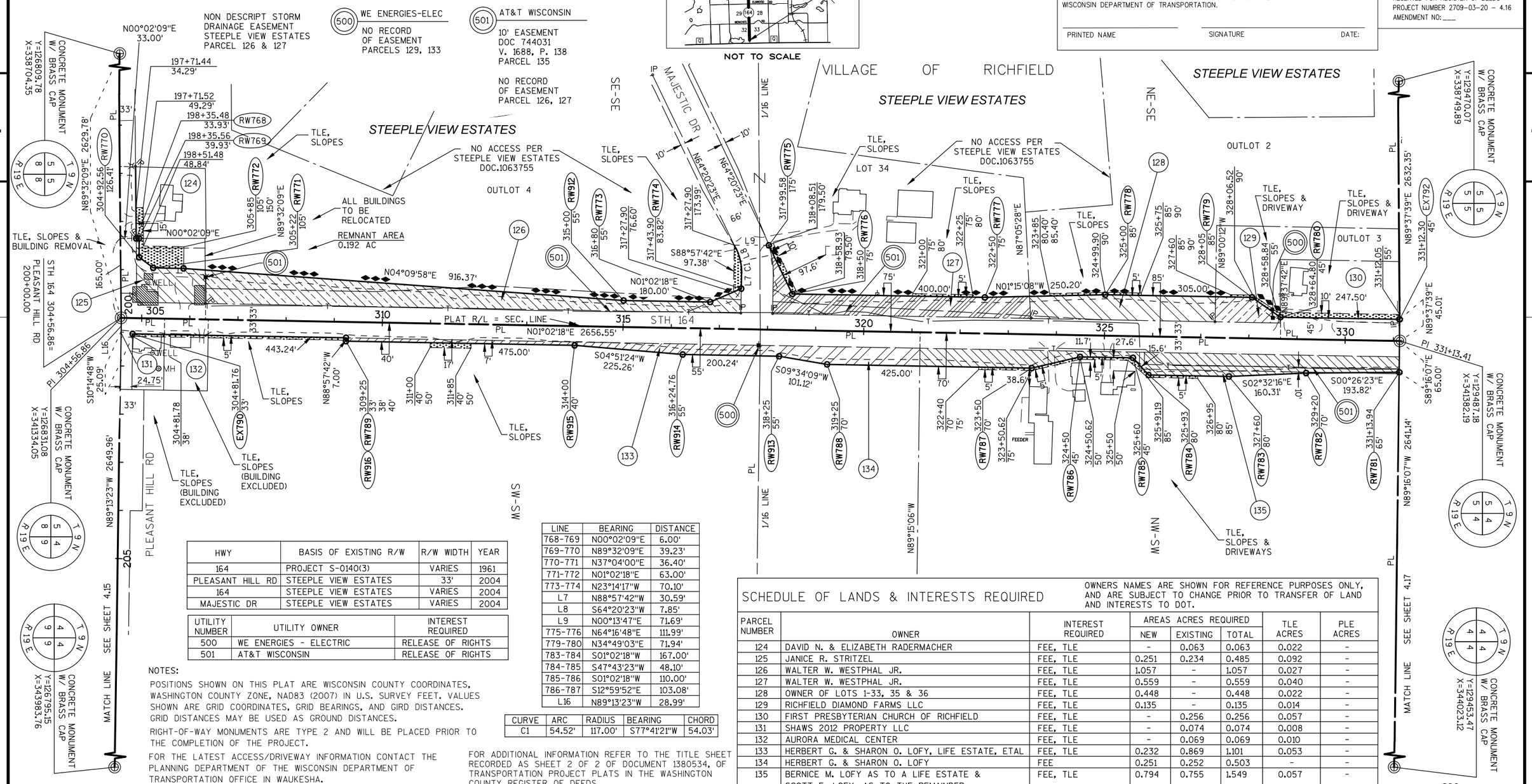
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME — SIGNATURE — DATE:

DOCUMENT#: **1383166**
Date:06-05-2015 Time:12:13:00 PM Pages: 1
Fee:$25.00 County: WASHINGTON State:WI

SHARON A MARTIN , REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 – 4.16
AMENDMENT NO: ___



HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(3)	VARIES	1961
PLEASANT HILL RD	STEEPLE VIEW ESTATES	33'	2004
164	STEEPLE VIEW ESTATES	VARIES	2004
MAJESTIC DR	STEEPLE VIEW ESTATES	VARIES	2004

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
501	AT&T WISCONSIN	RELEASE OF RIGHTS

LINE	BEARING	DISTANCE
768-769	N00°02'09"E	6.00'
769-770	N89°32'09"E	39.23'
770-771	N37°04'00"E	36.40'
771-772	N01°02'18"E	63.00'
773-774	N23°14'17"W	70.10'
L7	N88°57'42"W	30.59'
L8	S64°20'23"W	7.85'
L9	N00°13'47"E	71.69'
775-776	N64°16'48"E	111.99'
779-780	N34°49'03"E	71.94'
783-784	S01°02'18"W	167.00'
784-785	S47°43'23"W	48.10'
785-786	S01°02'18"W	110.00'
786-787	S12°59'52"E	103.08'
L16	N89°13'23"W	28.99'

CURVE	ARC	RADIUS	BEARING	CHORD
C1	54.52'	117.00'	S77°41'21"W	54.03'

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
124	DAVID N. & ELIZABETH RADERMACHER	FEE, TLE	-	0.063	0.063	0.022	-
125	JANICE R. STRITZEL	FEE, TLE	0.251	0.234	0.485	0.092	-
126	WALTER W. WESTPHAL JR.	FEE, TLE	1.057	-	1.057	0.027	-
127	WALTER W. WESTPHAL JR.	FEE, TLE	0.559	-	0.559	0.040	-
128	OWNER OF LOTS 1-33, 35 & 36	FEE, TLE	0.448	-	0.448	0.022	-
129	RICHFIELD DIAMOND FARMS LLC	FEE, TLE	0.135	-	0.135	0.014	-
130	FIRST PRESBYTERIAN CHURCH OF RICHFIELD	FEE, TLE	-	0.256	0.256	0.057	-
131	SHAWS 2012 PROPERTY LLC	FEE, TLE	-	0.074	0.074	0.008	-
132	AURORA MEDICAL CENTER	FEE, TLE	-	0.069	0.069	0.010	-
133	HERBERT G. & SHARON O. LOFY, LIFE ESTATE, ETAL	FEE, TLE	0.232	0.869	1.101	0.053	-
134	HERBERT G. & SHARON O. LOFY	FEE	0.251	0.252	0.503	-	-
135	BERNICE M. LOFY AS TO A LIFE ESTATE & SCOTT F. LOFY, AS TO THE REMAINDER	FEE, TLE	0.794	0.755	1.549	0.057	-

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.17

THAT PART OF LOT 1 AND LOT 2 CSM 5572 BEING A PART OF THE SE 1/4-NE 1/4 AND THE NE /4-NE 1/4, SECTION 5, ALSO THAT PART OF LOT 1 CSM 4446, AND THAT PART OF THE SW 1/4-NW 1/4 AND THE NW 1/4-NW 1/4, SECTION 4, ALL IN TOWNSHIP 9 NORTH, RANGE 19 EAST, VILLAGE OF RICHFIELD, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

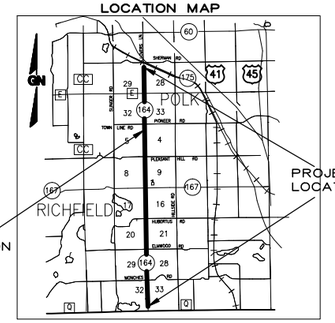
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LINE	BEARING	DISTANCE
797-798	N33°33'38"W	87.28'
L2	N89°28'19"W	46.32'
L4	S89°28'19"E	89.74'
L5	S89°28'19"E	28.39'
L6	S89°28'19"E	32.63'
L7	S89°25'51"E	95.19'
L9	N89°25'51"W	49.20'
799-800	S40°04'13"W	115.76'
L11	N04°17'35"E	217.14'

SCALE, FEET

0 100 200

LOCATION MAP



NOT TO SCALE

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 - 4.17 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

NATHAN A. VAUGHN — 6/04/2015
AGENT FOR R.A. SMITH NATIONAL — DATE
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME — SIGNATURE — DATE:

DOCUMENT#: **1383167**
Date:**06-05-2015** Time:**12:13:00 PM** Pages: **1**
Fee:**$25.00** County: **WASHINGTON** State:**WI**

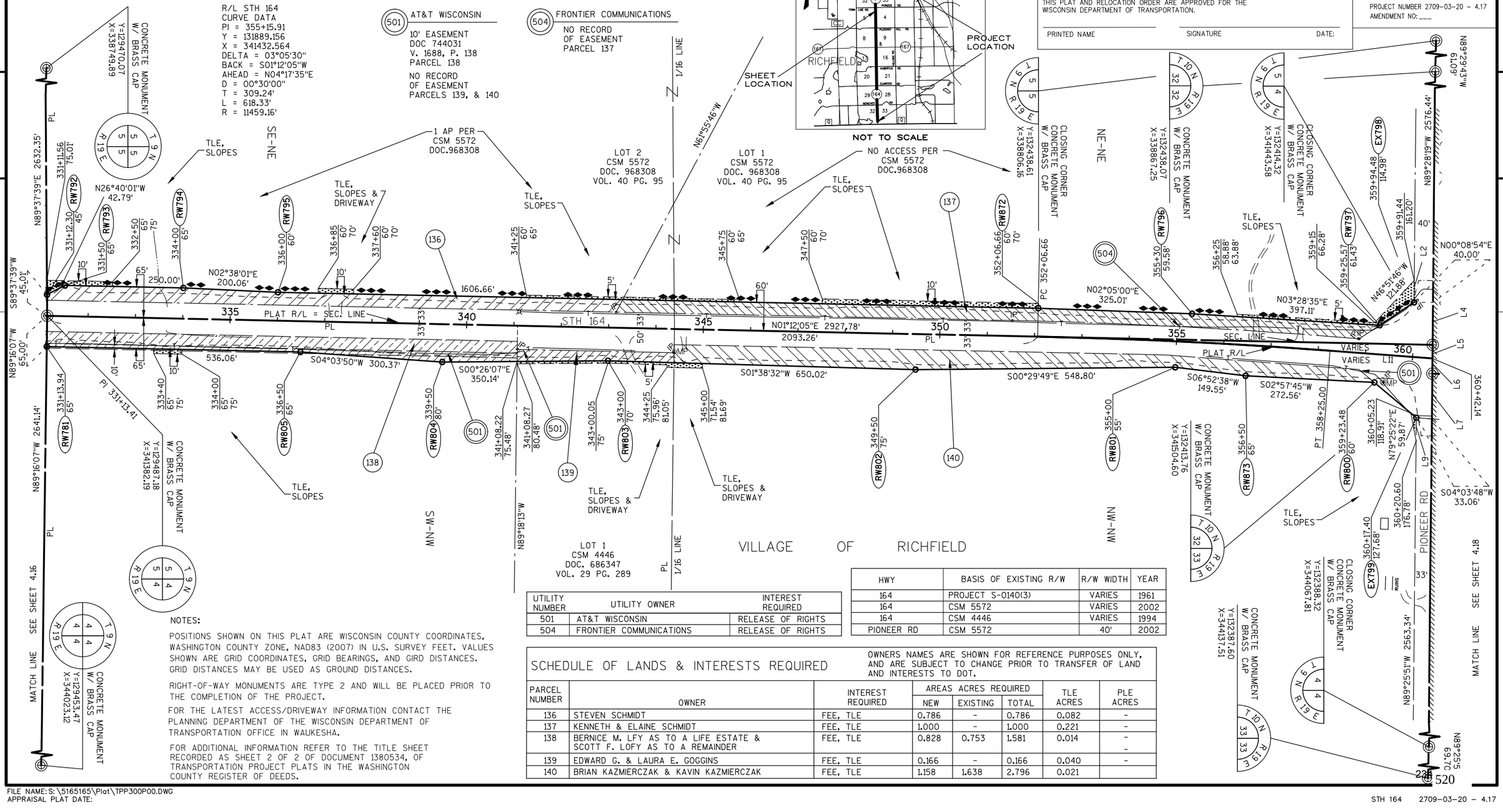
SHARON A MARTIN , REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 - 4.17
AMENDMENT NO:___

R/L STH 164
CURVE DATA
PI = 355+15.91
Y = 131889.156
X = 341432.564
DELTA = 03°05'30"
BACK = S01°12'05"W
AHEAD = N04°17'35"E
D = 00°30'00"
T = 309.24'
L = 618.33'
R = 11459.16'

501 AT&T WISCONSIN
10' EASEMENT
DOC 744031
V. 1688, P. 138
PARCEL 138
NO RECORD OF EASEMENT
PARCELS 139, & 140

504 FRONTIER COMMUNICATIONS
NO RECORD OF EASEMENT
PARCEL 137



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
501	AT&T WISCONSIN	RELEASE OF RIGHTS
504	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(3)	VARIES	1961
164	CSM 5572	VARIES	2002
164	CSM 4446	VARIES	1994
PIONEER RD	CSM 5572	40'	2002

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
136	STEVEN SCHMIDT	FEE, TLE	0.786	-	0.786	0.082	-
137	KENNETH & ELAINE SCHMIDT	FEE, TLE	1.000	-	1.000	0.221	-
138	BERNICE M. LFY AS TO A LIFE ESTATE & SCOTT F. LOFY AS TO A REMAINDER	FEE, TLE	0.828	0.753	1.581	0.014	-
139	EDWARD G. & LAURA E. GOGGINS	FEE, TLE	0.166	-	0.166	0.040	-
140	BRIAN KAZMIERCZAK & KAVIN KAZMIERCZAK	FEE, TLE	1.158	1.638	2.796	0.021	

FILE NAME: S:\5165165\Plat\TPP300P00.DWG
APPRAISAL PLAT DATE:

STH 164 2709-03-20 - 4.17

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.18

THAT PART OF LOT 1 AND LOT 3 CSM 2372, LOT 1 CSM 5922, AND THAT PART OF THE SE 1/4-SE 1/4 AND THE NE 1/4-SE 1/4, SECTION 32, ALSO THAT PART OF THE SW 1/4-SW 1/4 AND THE NW 1/4-SW 1/4, SECTION 33, ALL IN TOWNSHIP 10 NORTH, RANGE 19 EAST, TOWN OF POLK, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

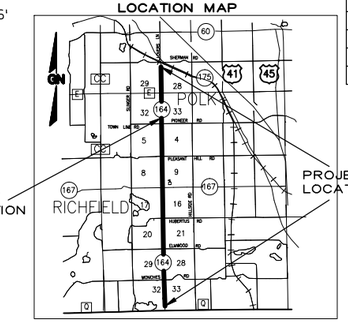
HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(3)	VARIES	1961
164	CSM 2372	VARIES	1981
PIONEER RD	CSM 2372	33'	1981

R/L STH 164
CURVE DATA
PI = 365+67.28
N = 132937.726
E = 341511.278
DELTA = 03°34'03"
BACK = S04°17'35"W
AHEAD = N00°43'32"E
D = 00°30'00"
T = 356.88'
L = 713.52'
R = 11459.16'

SCALE, FEET
0 100 200

LINE	BEARING	DISTANCE
L1	N89°28'19"W	32.63'
L2	N89°28'19"W	28.39'
L3	N04°17'35"E	168.26'
922-822	S00°43'35"W	115.32'
822-823	S34°39'22"E	98.63'
L6	S89°25'51"E	45.17'
918-919	S89°16'28"E	7.51'
919-920	S05°14'26"W	30.09'
920-921	N89°16'28"W	7.51'
816-817	S89°16'28"E	15.00'
817-818	S00°43'35"W	20.00'
818-819	N89°16'28"W	15.00'

LOCATION MAP



R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 – 4.18 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

NATHAN A. VAUGHN — 6/04/2015 DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

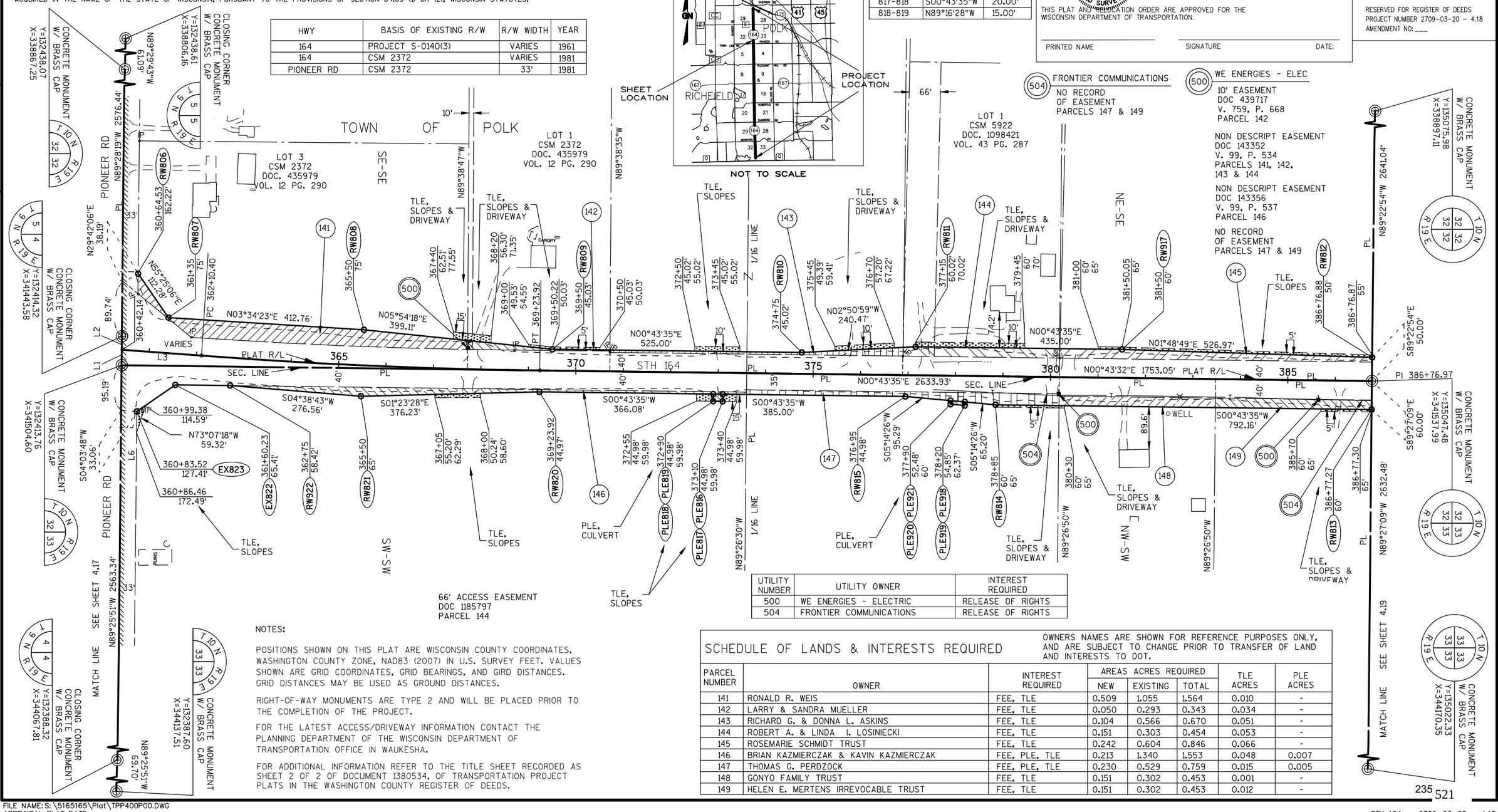
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME | SIGNATURE | DATE:

DOCUMENT#: **1383168**
Date:06-05-2015 Time:12:13:00 PM Pages: 1
Fee:$25.00 County: WASHINGTON State:WI

SHARON A MARTIN , REGISTER OF DEEDS
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 – 4.18
AMENDMENT NO: ___



UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
504	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
141	RONALD R. WEIS	FEE, TLE	0.509	1.055	1.564	0.010	-
142	LARRY & SANDRA MUELLER	FEE, TLE	0.050	0.293	0.343	0.034	-
143	RICHARD G. & DONNA L. ASKINS	FEE, TLE	0.104	0.566	0.670	0.051	-
144	ROBERT A. & LINDA I. LOSINIECKI	FEE, TLE	0.151	0.303	0.454	0.053	-
145	ROSEMARIE SCHMIDT TRUST	FEE, TLE	0.242	0.604	0.846	0.066	-
146	BRIAN KAZMIERCZAK & KAVIN KAZMIERCZAK	FEE, PLE, TLE	0.213	1.340	1.553	0.048	0.007
147	THOMAS G. PERDZOCK	FEE, PLE, TLE	0.230	0.529	0.759	0.015	0.005
148	GONYO FAMILY TRUST	FEE, TLE	0.151	0.302	0.453	0.001	-
149	HELEN E. MERTENS IRREVOCABLE TRUST	FEE, TLE	0.151	0.302	0.453	0.012	-

FILE NAME: S:\5165165\Plat\TPP400P00.DWG
APPRAISAL PLAT DATE:

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.19

THAT PART OF PARCEL 1 CSM 3338, AND THAT PART OF THE SE 1/4-NE 1/4 AND THE NE 1/4-NE 1/4, SECTION 32, ALSO THAT PART OF PARCEL 1, PARCEL 3, AND OUTLOT 1 OF CSM 4759, AND THAT PART OF THE SW 1/4-NW 1/4 AND THE NW 1/4-NW 1/4, SECTION 33, ALL IN TOWNSHIP 10 NORTH, RANGE 19 EAST, TOWN OF POLK, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

25' ROAD RESERVATION & DRAINAGE EASEMENT
CSM 4759
PARCELS 156, 157 & 158

100 YEAR FLOODPLAIN
CSM 4759
PARCEL 158

PERET CIRCLE
PRIVATE ROAD EASEMENT
DOC 732969 V. 1648, P. 577
PARCEL 157

SCALE, FEET
0 100 200

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(3)	VARIES	1961
164	CSM 3338	VARIES	1988
164	CSM 4759	VARIES	1996
CTH E	PROJECT S-0140(3)	VARIES	1961

(500) WE ENERGIES-ELEC
12' EASEMENT
DOC 281141
V. 405, P. 261
PARCEL 154
VARIABLE WIDTH EASEMENT
DOC 570591
V. 1101, P. 103
PARCEL 151

(504) FRONTIER COMMUNICATIONS
VARIABLE WIDTH EASEMENT
DOC 570591
V. 1101, P. 103
PARCEL 151
NO RECORD OF EASEMENT
PARCELS 151, 152, 158, 160 & 161

LOCATION MAP
SHEET LOCATION
PROJECT LOCATION
NOT TO SCALE

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 - 4.19 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

NATHAN A. VAUGHN 6/04/2015
AGENT FOR R.A. SMITH NATIONAL DATE
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME SIGNATURE DATE:

DOCUMENT#: 1383169
Date:06-05-2015 Time:12:14:00 PM Pages: 1
Fee:$25.00 County: WASHINGTON State:WI

SHARON A MARTIN , REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 - 4.19
AMENDMENT NO: ___

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
504	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
150	ROSEMARIE SCHMIDT REVOCABLE LIVING TRUST	FEE, TLE	0.398	1.728	2.126	0.061	-
151	ROBERT & NORA MAE WESTERMAN	FEE	0.183	0.689	0.872	-	-
152	DENNIS C. AND ROSEANNE M. SANG	FEE, TLE	0.354	-	0.354	0.074	-
153	HELEN E. MERTENS REVOCABLE TRUST	FEE	0.055	0.164	0.219	-	-
154	CALVIN E. & JOYCE E. WALTERS	FEE	0.253	0.517	0.770	-	-
155	ERIC J. & DEANNA R. WOJCIESZAK	FEE, TLE	0.060	0.149	0.209	0.006	-
156	JERALD H. & STEVEN M. SMITH	FEE, TLE	0.001	0.001	0.002	0.001	-
157	JERALD H. & STEVEN M. SMITH, ETAL	FEE, TLE	0.030	0.076	0.106	0.023	-
158	JERALD H. SMITH	FEE, TLE	0.212	0.530	0.742	0.004	-
159	WENDY LOU SCHRADER	FEE, TLE	0.149	0.907	1.056	0.071	-
160	WENDY LOU SCHRADER	FEE, TLE	0.173	0.250	0.423	0.016	-
161	HAR-MAR DEVELOPMENT CORP.	FEE, TLE	0.133	0.378	0.511	0.049	-

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.20

THAT PART OF LOT 1 CSM 2115, AND THAT PART OF THE SE 1/4-SE 1/4 AND THE NE 1/4-SE 1/4, SECTION 29, ALSO THAT PART OF LOT 15, LOT 17, LOT 18, LOT 19, LOT 20, LOT 21, LOT 22, AND LOT 23 OF GOLF VIEW PARK SUBDIVISION, AND THAT PART OF THE SW 1/4-SW 1/4 AND THE NW 1/4-SW 1/4, SECTION 28, ALL IN TOWNSHIP 10 NORTH, RANGE 19 EAST, TOWN OF POLK, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LINE	BEARING	DIST.
852-853	S89°38'32"E	20.00'
854-855	S89°38'32"E	15.00'
855-856	S00°21'28"W	62.04'
856-857	S73°00'08"E	80.32'
857-858	S08°01'06"W	69.66'
858-859	S64°23'19"W	75.27'

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(3)	VARIES	1961
164 & CTH E	CSM 2115	VARIES	1979
CTH E	PROJECT S-0140(3)	VARIES	1961
CLUB DR	GOLF VIEW PARK	66'	1976
164	GOLF VIEW PARK	VARIES	1976

SCALE, FEET
0 100 200

GN

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 - 4.20 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK WI LAND SURVEYOR

Nathan A Vaughn 6/04/2015

NATHAN A. VAUGHN — DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

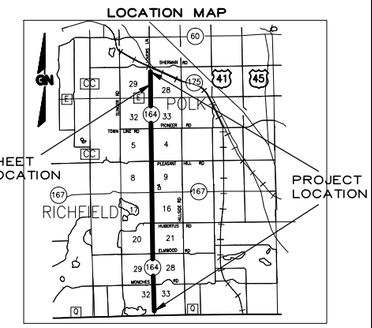
PRINTED NAME — SIGNATURE — DATE:

DOCUMENT#: **1383170**
Date:**06-05-2015** Time:**12:14:00 PM** Pages: **1**
Fee:**$25.00** County: **WASHINGTON** State:**WI**

SHARON A MARTIN , REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 - 4.20
AMENDMENT NO: ___

LOCATION MAP



NOT TO SCALE

TOWN OF POLK

N36°30'09"W 62.76'
N36°30'09"W 2.47' TO R/L
CONCRETE MONUMENT W/ BRASS CAP
Y=137705.24
X=338927.30
N89°30'57"W 2649.24'
N89°30'57"W 560.58'
RL=N89°19'06"W 434.60'
S89°19'06"E
S14°00'57"E
CTH E
STH 164 413+12.66=
CTH E 230+00.00
VARIES
PI 413+12.62
N68°52'49"E 53.85'
TLE, SLOPES
TLE, SLOPES & DRIVEWAY
LOT 1 CSM 2115 DOC. 417060 VOL. 11 PG. 55
SE-SE
NE-SE
1/16 LINE
N89°21'41"W
N89°14'32"W
MATCH LINE SEE SHEET 4.21
SEE SHEET 4.19
N89°36'42"W 2626.40'
MATCH LINE
PLAT R/L = SEC. LINE
STH 164 PL
N00°21'28"E 2620.23'
PI 439+32.85
CONCRETE MONUMENT W/ BRASS CAP
Y=137682.85
X=341576.45
Y=137665.04
X=344202.78
Y=140303.09
X=345192.81
T 10 N R 19 E
SIGN
WELL
SEPV
POOL
RUINS
PIER
CSM 2117 DOC. 417062 VOL. 11 PG. 58
CLUB DR
GOLF VIEW PARK
BOGEY LANE
NO ACCESS PER GOLF VIEW PARK DOC.378024
30' PLANTING STRIP EASEMENT GOLF VIEW PARK PLAT PARCELS 169, 170, 171, 172, 173, 174 & 175
MS-MS
MS-NW
ENT 1/4

(504) FRONTIER COMMUNICATIONS
VARIABLE WIDTH EASEMENT
DOC 380172
V. 625, P. 656
PARCELS 169, 170, 171, 172, 173, 174 & 175
NO RECORD OF EASEMENT
PARCEL 162 & 165

(500) WE ENERGIES-ELEC
VARIABLE WIDTH EASEMENT
DOC 380172
V. 625, P. 656
PARCELS 169, 170, 171, 172, 173, 174 & 175
12' EASEMENT
DOC 466870
V. 826, P. 394
PARCEL 165
NO RECORD OF EASEMENT
PARCEL 162

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS
504	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY ZONE, NAD83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GIRD DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1380534, OF TRANSPORTATION PROJECT PLATS IN THE WASHINGTON COUNTY REGISTER OF DEEDS.

SCHEDULE OF SIGN STRUCTURES

SIGN NUMBER	SIGN OWNER	OASIS NO.
162-1	HAR-MAR DEVELOPMENT CORPORATION, STEPHAN J. & KATHLEEN S. GEHRKE	N/A

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
162	STEPHAN J. & KATHLEEN S. GEHRKE	FEE, TLE	0.212	-	0.212	0.100	-
163	JACKY M. WAGNER	FEE, TLE	0.461	0.879	1.340	0.378	-
164	MICHAEL F. & JEAN M. BECKER	FEE, TLE	0.230	0.460	0.690	0.023	-
165	MATTHEW D. & DEBORAH D. YOGERST	FEE, TLE	0.296	0.368	0.664	0.047	-
166	HAR-MAR DEVELOMENT CORP.	FEE, TLE	-	0.799	0.799	0.039	-
167	PETER ROMANO	FEE, TLE	0.015	0.417	0.432	0.022	-
168	JAMES H. GRADE	FEE, TLE	0.034	0.618	0.652	0.021	-
169	MICHAEL S. & CRYSTAL A. WELTER	FEE	0.015	0.243	0.258	-	-
170	JEFFREY & MARY ELLEN DUEHR	FEE	0.017	0.068	0.085	-	-
171	ELDON C. & JOAN A. MEISSNER	FEE	0.034	0.155	0.189	-	-
172	KENNETH A. & THERESA M. RAYESKE	FEE	0.034	0.155	0.189	-	-
173	DAN S. TURDO & MELANIE PATENAUDE	FEE	0.034	0.155	0.189	-	-
174	DANIEL M. & KRISTINE E. STRASZEWSKI	FEE	0.054	0.155	0.209	-	-
175	JASON L. FLYNN	FEE	0.050	0.250	0.300	-	-

TRANSPORTATION PROJECT PLAT NO: 2709-03-20 - 4.21

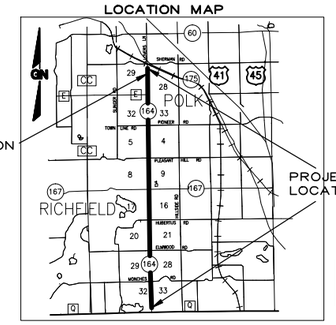
THAT PART OF LOT 1 CSM 2039, AND THAT PART OF THE NE 1/4-SE 1/4 AND THE SE 1/4-NE 1/4, SECTION 29, ALSO THAT PART OF LOT 1 AND LOT 24 OF GOLF VIEW PARK SUBDIVISION BEING PART OF THE NW 1/4-SW 1/4, SECTION 28, ALSO PART OF THE SW 1/4-NW 1/4, SECTION 28, ALL IN TOWNSHIP 10 NORTH, RANGE 19 EAST, TOWN OF POLK, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 164, CTH Q - CTH E WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT, TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LOCATION MAP



NOT TO SCALE

LINE	BEARING	DIST.
862-863	S88°53'32"E	5.00'
863-864	N00°19'27"E	30.00'
L3	S00°19'27"W	53.70'
865-866	N89°40'33"W	5.00'
866-867	S00°19'27"W	346.30'
867-868	S11°29'51"E	219.66'
L7	N04°08'30"W	254.93'
L8	N15°34'52"E	76.17'
L9	S29°10'42"W	41.45'
529-528	N35°15'12"W	83.90'
528-527	S89°38'32"E	36.90'
527-526	S35°15'12"E	56.15'

CURVE	ARC	RADIUS	BEARING	CHORD
526-529	30.86'	75.00'	S42°57'29"W	30.65'

R.A. Smith National
Beyond Surveying and Engineering
16745 W. Bluemound Road, Brookfield WI 53005
262-781-1000 Fax 262-781-8466
www.rasmithnational.com

I, NATHAN A. VAUGHN, PROFESIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2709-03-20 – 4.21 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN NATHAN A. VAUGHN S-2986 JOHNSON CREEK, WI LAND SURVEYOR

NATHAN A. VAUGHN — 6/04/2015
NATHAN A. VAUGHN — DATE
AGENT FOR R.A. SMITH NATIONAL
P.L.S. NUMBER 2986

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PRINTED NAME — SIGNATURE — DATE:

DOCUMENT#: **1383171**
Date:06-05-2015 Time:12:14:00 PM Pages: 1
Fee:$25.00 County: WASHINGTON State:WI

SHARON A MARTIN , REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to the submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2709-03-20 – 4.21
AMENDMENT NO: ___

(504) FRONTIER COMMUNICATIONS
5' EASEMENT
DOC 352115
V. 502, P. 197
PARCEL 181

19.5' EASEMENT
DOC 911257
PARCEL 185

16.5' EASEMENT
DOC 911258
PARCEL 178

NO RECORD
OF EASEMENT
PARCELS
181 & 184

(500) WE ENERGIES-ELEC
8' EASEMENT
DOC 909559
PARCEL 184

19.5' EASEMENT
DOC 911257
PARCEL 185

16.5' EASEMENT
DOC 911258
PARCEL 178

6' EASEMENT
DOC 380172 V. 625 P. 656
PARCEL 186

10' EASEMENT
DOC 414517 V. 699, P. 746
PARCEL 177

NO RECORD
OF EASEMENT
PARCELS 181 & 183

(502) WE ENERGIES-GAS
NO RECORD
OF EASEMENT
PARCEL 184

(503) CHARTER COMMUNICATIONS
19.5' EASEMENT
DOC 911257
PARCEL 185

16.5' EASEMENT
DOC 911258
PARCEL 178

8' EASEMENT
DOC 909559
PARCEL 184

COMPUTED
Y=140347.82
X=338948.21

CONCRETE MONUMENT
W/ BRASS CAP
Y=140303.03
X=341592.81

CONCRETE MONUMENT
W/ BRASS CAP
Y=137682.85
X=345176.45

CONCRETE MONUMENT
W/ BRASS CAP
Y=140284.69
X=344226.46

COMPUTED
Y=142939.00
X=341867.73

TOWN OF POLK

LOT 2
CSM 2039
DOC. 410531
VOL. 10 PG. 296

LOT 1
CSM 2039
DOC. 410531
VOL. 10 PG. 296

PARCEL 1
CSM 3088
DOC. 513826
VOL. 18 PG. 8

PARCEL 2
CSM 3088
DOC. 513826
VOL. 18 PG. 8

I AP PER PROJECT
2748-01-20
DOC. 879734

I AP PER PROJECT
2748-01-20 DOC
879734

I ACCESS POINT PER
PROJECT 2748-01-20
DOC 894611

END RELOCATION ORDER
446+65.00
732.14' N. & 4.14'E, OF THE
E.1/4 COR. SECTION 29-10-19

PL 1/16 LINE

PLAT R/L = SEC. LINE
N00°21'28"E 2620.23'
2039.39'

PLAT R/L = SEC. LINE
1907.09'

STH 164

N00°19'27"E 2636.01'

N89°40'33"W 2644.98'

N89°36'03"W 2633.72'

S04°29'13"W 208.32'

N88°53'32"W

S88°53'32"E

MATCH LINE SEE SHEET 4.20

MATCH LINE SEE SHEET 4.20

NE-SE

SE-NE

MS-MN

MN-MS

GOLF VIEW PARK

BOGEY LANE

30' PLANTING STRIP EASEMENT
GOLF VIEW PARK PLAT
PARCEL 179

NO ACCESS PER
GOLF VIEW PARK

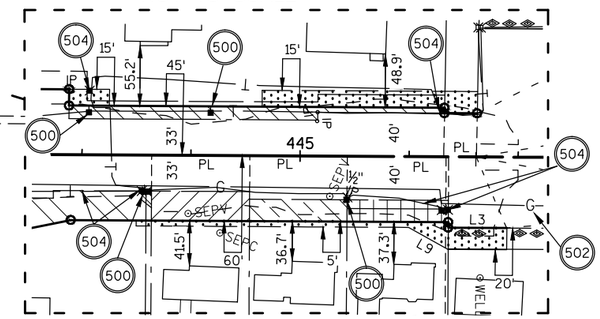
TLE, SLOPES

TLE, SLOPES & DRIVEWAY

HE, DRIVEWAY

TLE, SLOPES & DRIVEWAY

DETAIL
NOT TO SCALE



HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
164	PROJECT S-0140(3)	VARIES	1961
164	PROJECT 2748-01-20	VARIES	2000
164	GOLF VIEW PARK	VARIES	1976
164	CSM 2039	VARIES	1978
164	CSM 3088	VARIES	1987

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
500	WE ENERGIES-ELEC	RELEASE OF RIGHTS
502	WE ENERGIES-GAS	RELEASE OF RIGHTS
503	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS
504	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS

SCALE, FEET
0 100 200

NOTES:

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PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES	PLE ACRES
176	WASHINGTON COUNTY PLANNING & PARKS DEPT.	FEE, TLE	-	0.194	0.194	0.027	-
177	MARY K. BURKE	TLE	-	-	-	0.062	-
178	PHILIP A. MUELLER	FEE, TLE	0.076	-	0.076	0.071	-
179	RYAN M. & JENNIFER L. SCHULTZ	FEE, AR	0.036	0.733	0.769	-	-
180	KIM I. HORAK	FEE, TLE	0.055	0.333	0.388	0.052	-
181	SIEGFREID O. DANNENBERG	FEE, TLE	0.169	0.295	0.464	0.002	-
182	CJRF PROPERTIES LLC	FEE, TLE	0.056	0.068	0.124	0.010	-
183	ANDREA C. EWERT	FEE, TLE	0.041	0.082	0.123	0.010	-
184	BERNIE K. & JANE F. RODD	FEE, TLE	0.043	0.085	0.128	0.019	-
185	CODY L. & DOROTHY M. GRIVNO	TLE	-	-	-	0.025	-
186	MARK & DONNA PALBICKI	HE	0.047	-	0.047	-	-

FILE NAME: S: \5165165\Plat\TPP400P00.DWG
APPRAISAL PLAT DATE:

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP1	46+83, 83' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	998.61
CP2	57+26, 33' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1011.11

HEIM

= INDIVIDUAL TREE REMOVAL

GRADE SWALE TO WEST TO MAINTAIN POSITIVE DRAINAGE FROM CULVERT PIPE TO WEST

STA 53+45 REMOVE 1-24" CMCP

STA 57+82 REMOVE 1-24" CMCP

STA 55+08 REMOVE 1-24" CMCP

STA 57+86 REMOVE 1-24" CMCP

EMERGENCY ACCESS

SLOPE INTERCEPT

24' WIDE FIELD ENTRANCE BY OTHERS PRIOR TO CONSTRUCTION

STH 164

CP2

PC: 10+30.95

BP: 10+00.00

CP1

BEGIN PROJECT 2709-03-70

STA. 50+95.00

X = 341,332.34

Y = 101,470.15

STA 53+13 1-24"X38" CPRCHE REQ'D

STA 53+13 REMOVE 1-28" X 20" PACS

STH 164 R/L

STA 57+67 REMOVE 1-24" CMCP

R-66-39

SLOPE INTERCEPT

STA 56+81 REMOVE 1-24" CMCP

REMOVE GUARDRAIL

REMOVE CONCRETE LINED DITCH

EXISTING SEPTIC SYSTEM TO BE ABANDONED BY OTHERS PRIOR TO CONSTRUCTION

STA 58+07.42 STH 164 = STA 10+00.00 SHADY LANE

PI: 60+69.43

MATCHLINE

PEBBLE LAND WORKS LLC

SCHWENDIMANN

RISCH

SWORSKE

HACKER

LENTZ

LICHNER

HANSEN

PETERSON

WISDOT

SHADY LANE

RECONSTRUCTION

VCL = 1430.00

K = 252.76

VCL = 490.00

K = 139.21

VPT STA 55+85.00
VPT EL 1010.73

VPC STA 55+85.00
VPC EL 1010.73

VPC STA 50+95.00
VPC EL 1003.41

STA 50+95.00
ELEV 1003.41

51+31.97
1003.36

VPI STA 53+40.00
VPI EL 1002.76

FINISHED PROFILE

EXISTING PROFILE

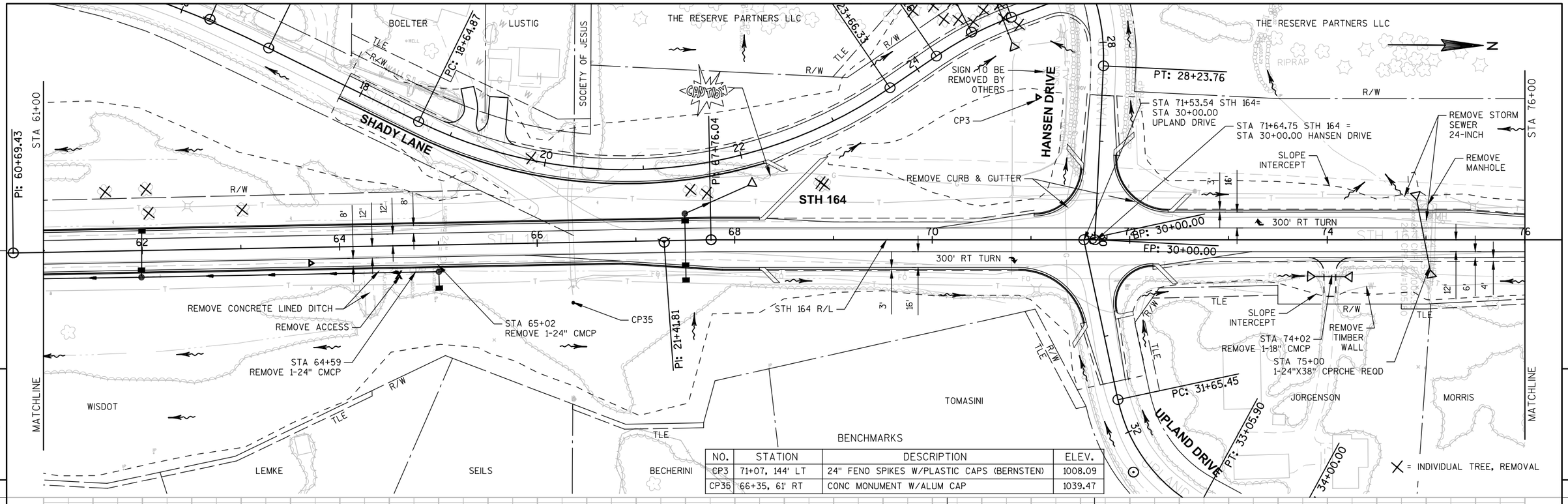
3.25%

-0.27%

EXISTING PROFILE ELEVATION

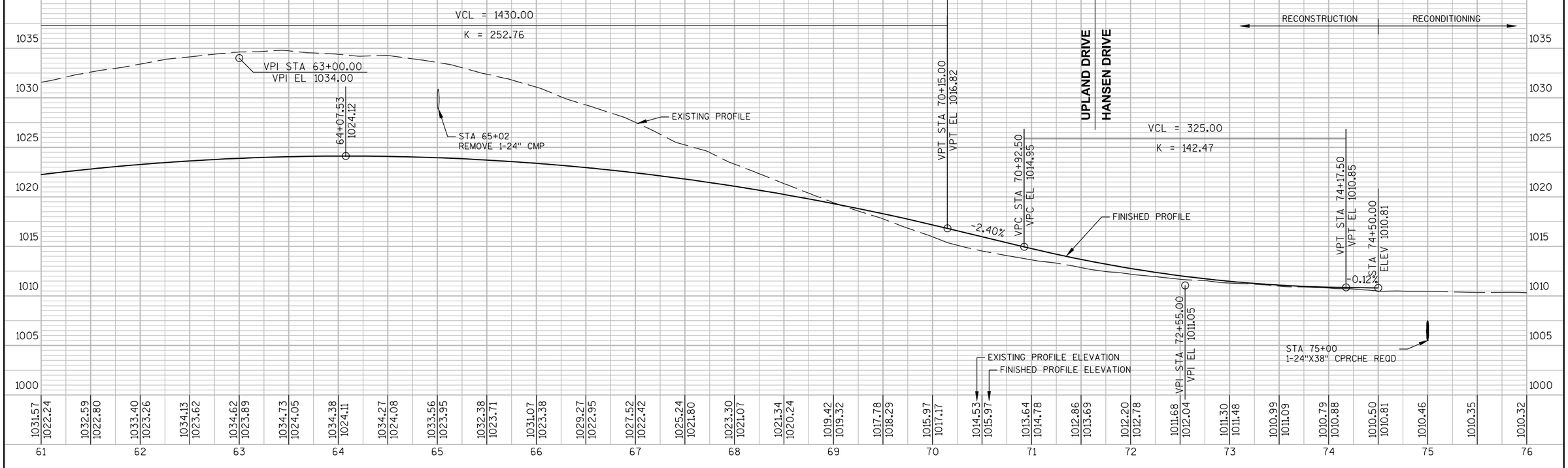
FINISHED PROFILE ELEVATION

| | | |



BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP3	71+07, 144' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1008.09
CP35	66+35, 61' RT	CONC MONUMENT W/ALUM CAP	1039.47



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 526	E

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP3	71+07, 144' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1008.09
CP4	91+75, 104' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1007.62

X = INDIVIDUAL TREE, REMOVAL

THE RESERVE PARTNERS LLC

RIPRAP

N

STA 76+00

STA 91+00

R/W

STA 80+85
2-24"CPRC REQD

SLOPE INTERCEPT

STH 164

4'
6'
12'

76 78 80 82 84 86 88 90

350' RIGHT TURN LANE

TLE

R/W

ALL TREES TO REMAIN ALONG PARCEL

STH 164 R/L

FENCE REMOVED BY OTHERS PRIOR TO CONSTRUCTION

STA 80+85
REMOVE 1-24" CMCP

SLOPE INTERCEPT

DO NOT DISTURB TREES ON THIS PARCEL

16'
3'

MATCHLINE

MORRIS

REMMEL

RUTZ

FIRST NATIONAL MORTGAGE ASSOCIATION

CLOUTIER

WEILAND

GRILLAERT

BRIGGS TRUST

5

1030
1025
1020
1015
1010
1005
1000
995

EXISTING PROFILE

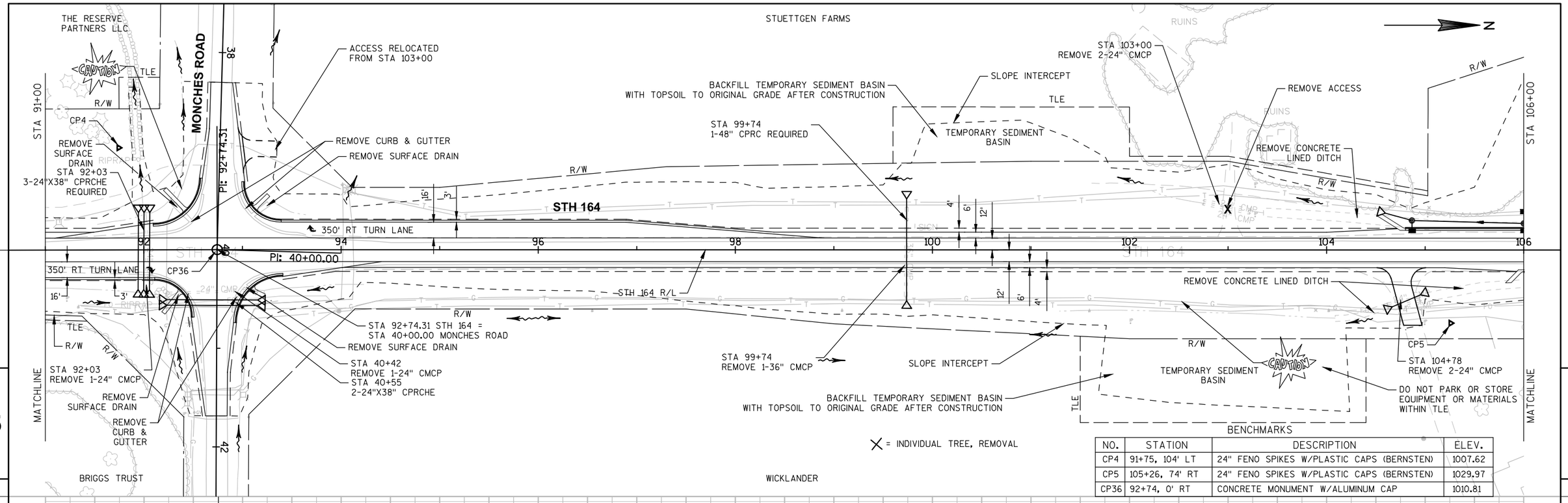
STA 80+85
2-24" CPRC REQD

EXISTING PROFILE ELEVATION

1010.32 1010.45 1010.43 1010.20 1010.39 1010.22 1010.25 1010.19 1010.34 1010.29 1010.38 1010.41 1010.48 1010.55 1010.44 1010.67 1010.72 1010.73 1010.74 1010.77 1010.94 1010.98 1010.93 1010.91 1010.86 1010.86 1010.91 1010.93 1011.04 1010.92 1011.12

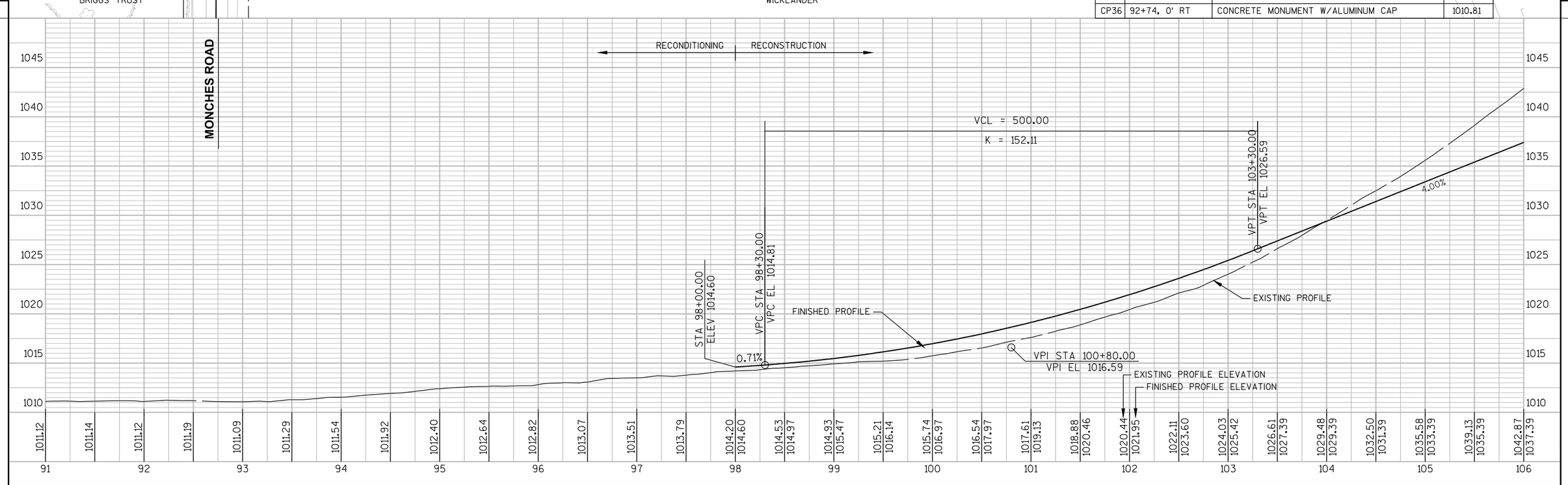
76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 527	E

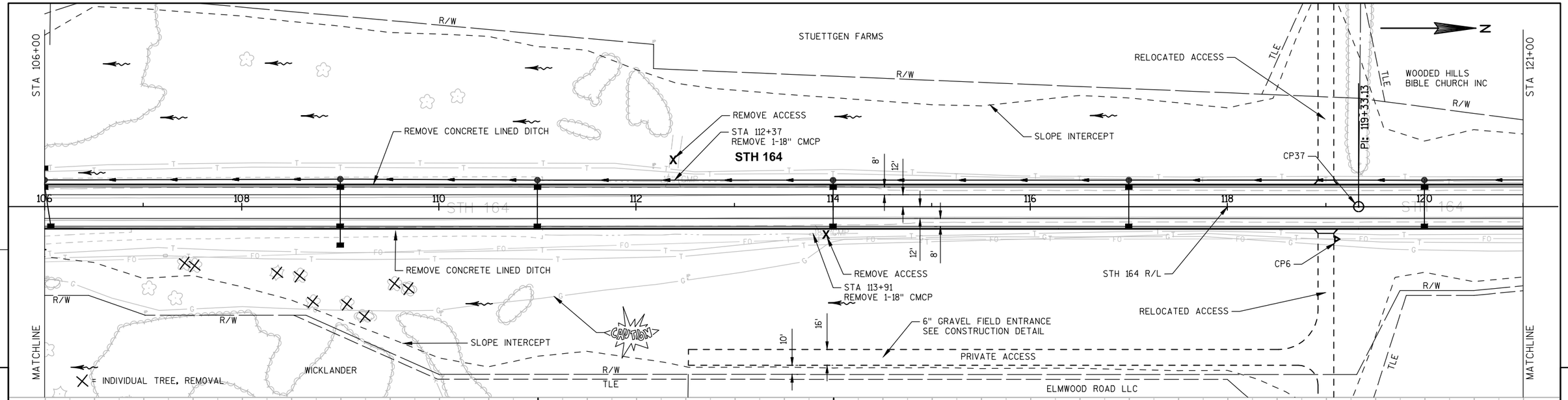


BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP4	91+75, 104' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1007.62
CP5	105+26, 74' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1029.97
CP36	92+74, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1010.81

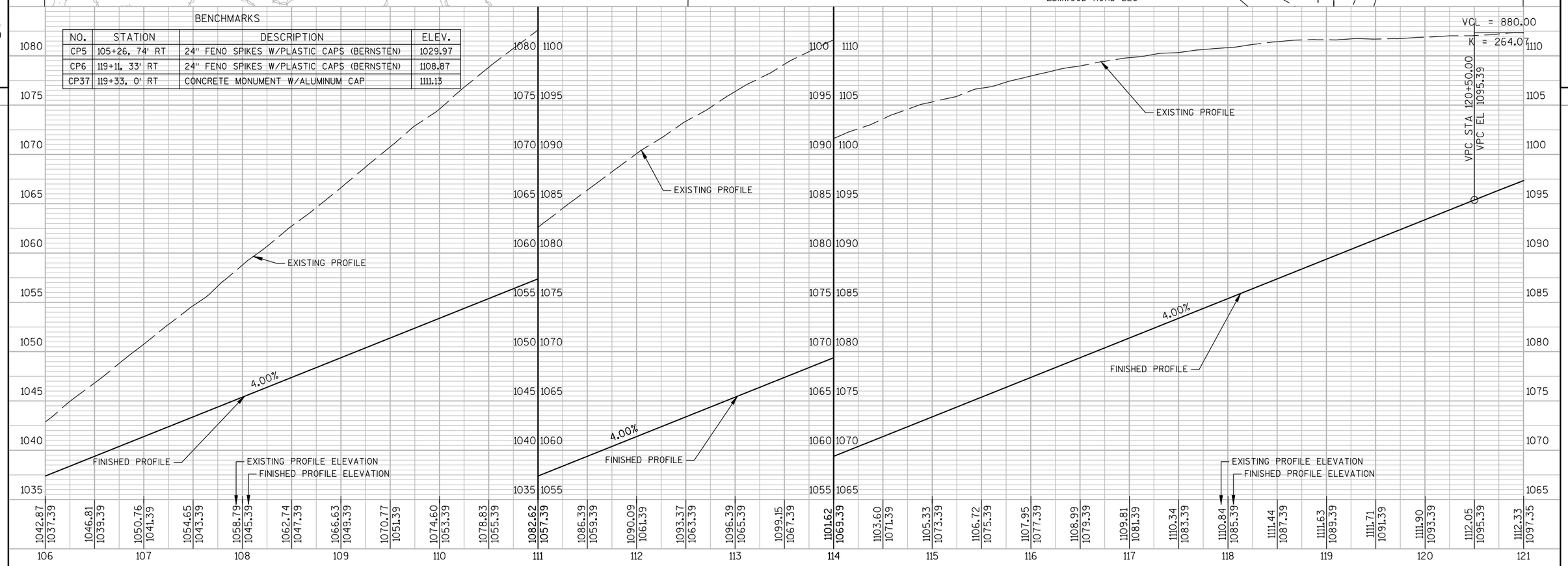


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 528	E



BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP5	105+26, 74' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1029.97
CP6	119+11, 33' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1108.87
CP37	119+33, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1111.13



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 529	E

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP6	119+11, 33' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1108.87
CP7	132+78, 120' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1114.14

WOODED HILLS CHURCH INC

N

STA 121+00

MATCHLINE

SLOPE INTERCEPT

R/W

TLE

8'

12'

STH 164

4'

6'

12'

122

124

126

128

130

132

134

136

STA 130+71
1-24" CPRC REQ'D

SIGN AND LANDSCAPING
TO REMAIN

PLE

CP7

TLE

WOODED HILLS CHURCH

BP: 48+00.01

3-18" CMCP TO REMAIN

BORKENHAGEN

R/W

TLE

16'

3'

300' RIGHT TURN LANE

STA 136+00

MATCHLINE

EP: 50+00.00

BYPASS LANE

12'

8'

TLE

CAUTION

R/W

STH 164 R/L

12'

6'

4'

24'

6'

12'

R/W

SLOPE INTERCEPT

STA 130+71
REMOVE 1-24" CMCP

STA 133+01.20 STH 164 =
STA 50+00.00 WOODED HILLS

X = INDIVIDUAL TREE, REMOVAL

ELMWOOD ROAD LLC

5

5

RECONSTRUCTION

RECONDITIONING

VCL = 880.00

K = 264.07

VPI STA 124+90.00
VPI EL 112.99

VPT STA 129+30.00
VPT EL 115.93

STA 130+00.00
ELEV 1116.40

WOODED HILLS BIBLE CHURCH

EXISTING PROFILE

0.67%

4.00%

1.18%

FINISHED PROFILE

STA 130+71
1-24" CPRC REQD

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136
1112.33 / 1097.35	1112.56 / 1099.20	1112.80 / 1100.97	1113.03 / 1102.64	1113.19 / 1104.21	1113.26 / 1105.69	1113.37 / 1107.07	1113.63 / 1108.36	1113.82 / 1109.56	1114.20 / 1110.66	1114.43 / 1111.67	1114.66 / 1112.58	1114.86 / 1113.39	1115.12 / 1114.12	1115.44 / 1114.74	1115.84 / 1115.28	1116.10 / 1115.71	1116.14 / 1116.06	1116.24 / 1116.40	1116.60	1116.93	1117.07	1117.22	1117.39	1117.55	1117.67	1117.96	1118.09	1118.20	1118.50	1118.66

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 530	E

BORKENHAGEN

DICKENSON

JOHNSON

MORAINE VIEW HOMEOWNERS ASSOCIATION

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP7	132+78, 120' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1114.14
CP38	145+88, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1122.80

STA 136+00

STA 151+00

MATCHLINE

MATCHLINE

ELMWOOD ROAD

STH 164

PI: 58+32.21

PI: 145+88.05

PI: 60+00.00

CP38

STA 59+50
REMOVE 1-21" CMCP

STA 59+41
1-24" CPRC REQD

REMOVE SURFACE DRAIN

REMOVE CURB & GUTTER

STA 145+88.05 STH 164 =
STA 60+00.00 ELMWOOD ROAD

REMOVE SURFACE DRAIN

REMOVE CURB & GUTTER

STORM SEWER TO REMAIN

MCDONALD

SLOPE INTERCEPT

SLOPE INTERCEPT

TLE

R/W

300' RT TURN LANE

350' RT TURN LANE

350' RT TURN LANE

STH 164 R/L

REMOVE CURB & GUTTER

REMOVE SURFACE DRAIN

REMOVE CURB & GUTTER

REMOVE SURFACE DRAIN

STA 60+57
2-24"X38" CPRCHE REQD

STA 60+50
REMOVE 1-21" CMCP

CAUTION

CAUTION

3'

16'

4'

6'

12'

58

62

136 138 140 142 144 146 148 150

5

5

ELMWOOD ROAD LLC

= INDIVIDUAL TREE, REMOVAL

GLASS TRUST

1135 1130 1125 1120 1115 1110 1105 1100

EXISTING PROFILE

EXISTING PROFILE ELEVATION

1118.66 1118.89 1119.00 1119.40 1119.82 1120.18 1120.34 1120.74 1120.85 1120.99 1121.30 1121.52 1121.61 1121.81 1122.09 1122.40 1122.50 1122.86 1122.88 1123.01 1123.37 1123.36 1123.68 1123.93 1124.21 1124.63 1124.70 1124.88 1125.22 1125.58 1125.92

136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 531	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\050107_PP.DWG PLOT DATE : 1/29/2018 11:51 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : ----------

WISDOT/CADDS SHEET 40

MCDONALD

FEHR

MOWER

RUNGE

HIRT

N

STA 151+00

STA 166+00

TUCKAWAY LANE

89

CAUTION

TREE TO REMAIN

PT: 68+54.97

TLE

SLOPE INTERCEPT

REMOVE CURB & GUTTER

STH 164

R/W

4'

6'

12'

STH 164 R/L

3'

16'

200' RIGHT TURN LANE

STA 164+16
REMOVE 1-18" CMCP

REMOVE ACCESS

X

CMP

152 154 156 158 160 162 164 166

EP: 70+00.00

BYPASS LANE

350' RIGHT TURN LANE

12'

6'

4'

6'

2'

15'

3'

TLE

SLOPE INTERCEPT

STA 160+60
REMOVE 1-18" CMCP

STA 164+86
REMOVE 1-18" CMCP

REMOVE FENCE

STA 156+98.04 STH 164 =
STA 70+00.00 TUCKAWAY LANE

MATCHLINE

MATCHLINE

5

5

X = INDIVIDUAL TREE. REMOVAL

GLASS TRUST

SMITH

SMITH

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP9	174+26, 73" LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1162.29
CP39	172+44, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1160.69

TUCKAWAY LANE

1155 1150 1145 1140 1135 1130 1125 1120

EXISTING PROFILE

EXISTING PROFILE ELEVATION

1125.92 1126.33 1126.83 1127.42 1127.95 1128.66 1129.25 1129.94 1130.70 1131.70 1132.33 1133.25 1133.77 1134.22 1134.76 1135.13 1135.85 1136.43 1137.19 1137.85 1138.80 1139.96 1141.18 1142.44 1143.71 1145.00 1146.30 1147.66 1149.21 1150.59 1151.94

151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 532	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN050108_PP.DWG PLOT DATE = 1/31/2018 5:39 PM PLOT BY = BLACKWOOD, JIM PLOT NAME =

OMLEY
WEISHER
RICHFIELD VOLUNTEER FIRE DEPARTMENT
KOSCIESZA
BOEHM
TAMBORINO
N
STA 166+00
STA 181+00
TREE TO REMAIN
STA 168+51.31 STH 164 = STA 80+00.00 CHEROKEE TRAIL
TREE TO REMAIN
TLE
R/W
24"
6'
BYPASS LANE
16'
STA 167+18 REMOVE 1-18" CMCP
166
168
170
172
174
176
178
180
BP: 80+00.00
350' RT TURN LANE
TLE
R/W
REMOVE FENCE
REMOVE ACCESS
REMOVE FENCE
STA 166+50 REMOVE 1-18" CMCP
MAYER
CAUTION
CHEROKEE TRAIL
28
STA 80+25 REMOVE 1-18" CMCP
TREE TO REMAIN
TREE TO REMAIN
TLE
R/W
STA 171+13 REMOVE 1-18" CMCP
STA 170+16 REMOVE 1-18" CMCP
CP39
PI: 172+44.31
CP9
SLOPE INTERCEPT
STA 175+62 REMOVE 1-18" CMCP
STH 164
4'
6'
12'
STA 178+46 REMOVE 1-18" CMCP
STA 179+35 REMOVE 1-15"X21" PACS
TLE
R/W
REMOVE ACCESS
STA 174+68 REMOVE 1-18" CMCP
CAUTION
SLOPE INTERCEPT
STH 164 R/L
12'
6'
4'
REMOVE FENCE
TLE
R/W
STA 179+40 REMOVE 1-18" CMCP
MATCHLINE
MATCHLINE
5
5

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP9	174+26, 73' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1162.29
CP39	172+44, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1160.69

X = INDIVIDUAL TREE, REMOVAL

KURSZEWSKI
RADECK
SCHMITT
ST GABRIEL CONGREGATION
SEPV
GUYER

CHEROKEE TRAIL
EXISTING PROFILE
EXISTING PROFILE ELEVATION

1165
1160
1155
1150
1145
1140
1135
1130

166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181
1151.94	1153.39	1154.48	1155.58	1156.70	1157.64	1158.46	1158.95	1159.59	1160.04	1160.32	1160.61	1160.83	1160.92	1160.95	1160.81	1160.47	1160.05	1159.55	1158.80	1157.97	1156.97	1156.03	1154.86	1153.72	1152.38	1150.83	1149.39	1147.90	1146.33	1145.08

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 533	E

TAMBORINO | ANDERSON | HEPPE | RIVETT | MUELLER | WEBER

N

STA 181+00

STA 196+00

STA 186+60.52 STH 164
STA 90+00.00 ST GABRIEL LANE

DO NOT DISTURB ANY ADDITIONAL TREES OTHER THAN TREES SHOWN FOR REMOVAL ON THIS SHEET ALONG HEPPE PARCEL

RESTORE EXISTING DRIVEWAY WITH SALVAGED TOPSOIL, SEED, FERTILIZER, AND MULCH

CONCRTE COLUMN AND LIGHT TO REMAIN

STA 185+58
REMOVE 1-24" CMP

STA 185+58
1-30" CPRC REQD

REMOVE GUARDRAIL

STA 189+24
REMOVE 1-18" CMCP

SLOPE INTERCEPT

REMOVE ACCESS

STA 193+99
REMOVE 1-18" CMCP

TLE | PLE | R/W | STH 164 | BYPASS LANE | BP: 90+00.00

182 | 184 | 186 | 188 | 190 | 192 | 194 | 196

300' RT TURN LANE

350' RT TURN LANE

REMOVE CURB & GUTTER

STH 164 R/L

STA 90+51
REMOVE 1-18" CPRC

CAUTION

SLOPE INTERCEPT

RIPRAP

WETLAND BOUNDARY

SIGN

ST GABRIEL CONGREGATION

ST GABRIEL LANE

HANSEN

MATCHLINE

5

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP9	174+26, 73' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1162.29
CP39	172+44, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1160.69
CP40	198+94, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1102.49

X = INDIVIDUAL TREE, REMOVAL

RECONDITIONING | RECONSTRUCTION

VCL = 920.00
K = 246.41

VPC STA 184+30.00
VPC EL 1141.83

-0.25%

VPI STA 188+90.00
VPI EL 1140.68

STA 183+50.00
ELEV 1142.03

VPT STA 193+50.00
VPT EL 1122.35

EXISTING PROFILE

FINISHED PROFILE

STA 185+58
1-30" CPRC REQD

ST GABRIEL LANE

-3.98%

EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

1145 | 1140 | 1135 | 1130 | 1125 | 1120 | 1115 | 1110

181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196
1145.08	1144.07	1143.33	1142.88	1142.43	1141.99 / 1142.03	1141.92 / 1141.90	1141.74 / 1141.77	1141.84 / 1141.55	1141.72 / 1141.23	1141.64 / 1140.81	1141.71 / 1140.29	1141.80 / 1139.67	1141.89 / 1138.95	1141.94 / 1138.12	1142.09 / 1137.20	1142.03 / 1136.17	1141.78 / 1135.04	1141.57 / 1133.81	1141.31 / 1132.48	1140.81 / 1131.04	1140.18 / 1129.51	1139.14 / 1127.87	1137.98 / 1126.13	1136.45 / 1124.29	1134.84 / 1122.35	1132.82 / 1120.36	1130.66 / 1118.37	1128.32 / 1116.38	1125.68 / 1114.39	1122.89 / 1112.39

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 534	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETS\PLAN050110_PP.DWG | PLOT DATE = 1/31/2018 5:40 PM | PLOT BY = BLACKWOOD, JIM | PLOT NAME =

WEBER
ROBINSON
MANTEL
BARRON
DART
MANLEY
ENGELKE
HANSEN
KALIGARRI HOLDING LLC
GUTBROD
SABEL
BLATZ
HUBERTUS ROAD
STH 164
N

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP11	196+73, 183' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1136.12
CP40	198+94, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1102.49

STA 198+93.65 STA 164
STA 110+00.00 HUBERTUS ROAD
PI: 198+93.65
PI: 110+00.00
CP40
CP11
REMOVING PRIVATE SIGN
REMOVE GUARDRAIL
STA 203+21
REMOVE 1-18" CMCP
350' RIGHT TURN LANE
DO NOT DISTURB
SEPTIC MOUND
REMOVE ACCESS
SLOPE INTERCEPT
PLE
STA 206+93
REMOVE 1-18" CMCP
FLAGPOLE REMOVED
BY OTHERS PRIOR
TO CONSTRUCTION
STA 208+81
REMOVE 1-18" CMCP
STA 110+68
2-24"X38" CPRCHE
REMOVE CONCRETE
LINED DITCH
STA 110+37
REMOVE 1-30" CMCP
STA 203+48
1-42" CPRC REQD
MODULAR BLOCK WALL REMOVED
BY OTHERS PRIOR TO CONSTRUCTION
STH 164 R/L
STA 203+48
REMOVE 1-36" CMCP
STA 203+71
REMOVING OLD STRUCTURE - 72" CMCP
STA 210+13
REMOVE 1-24" CMCP
STA 208+69
REMOVE 1-24" CMCP
DO NOT DISTURB
BERM WITHIN TLE
DO NOT DISTURB TREES
WITHIN TLE
= INDIVIDUAL TREE, REMOVAL

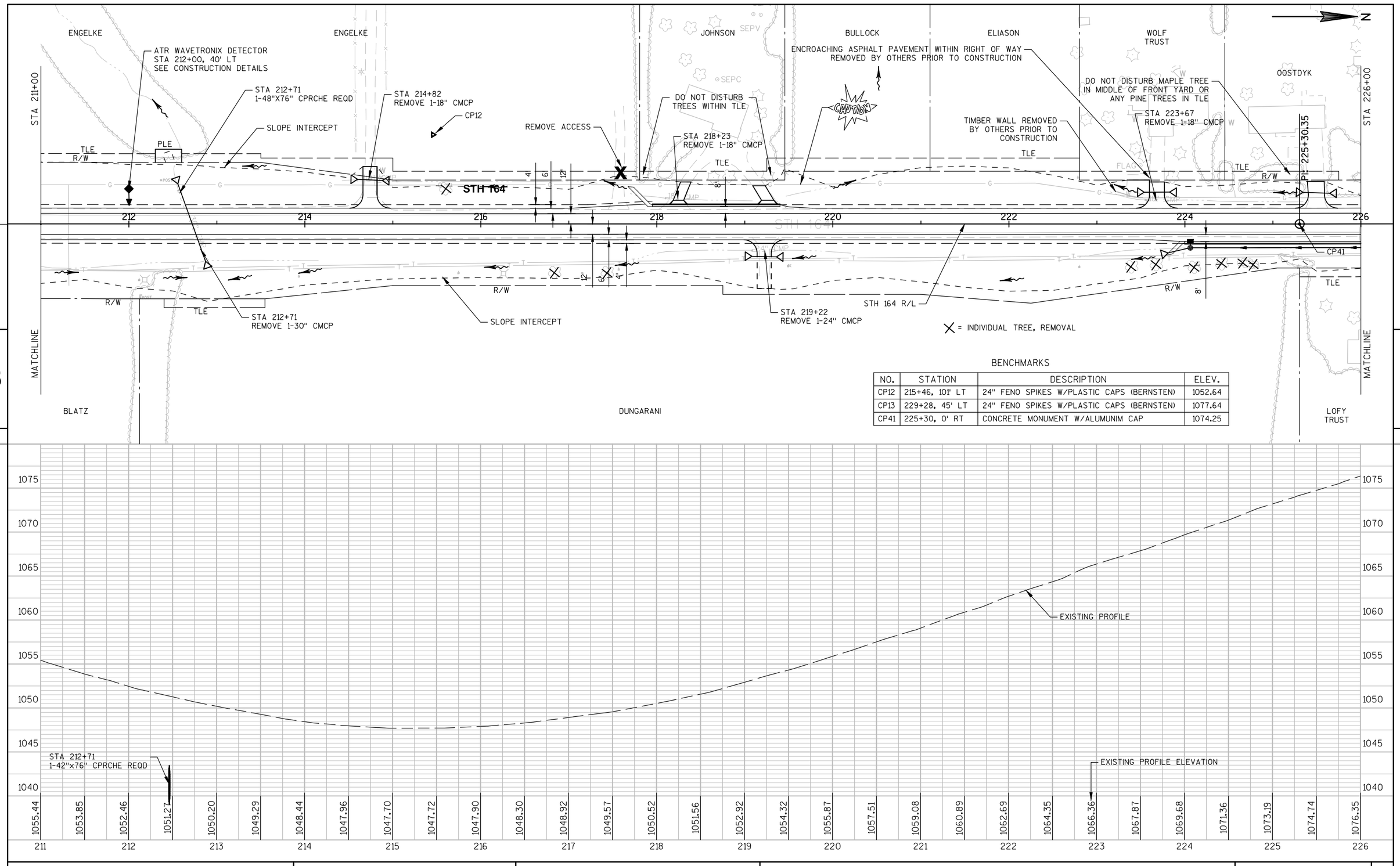
RECONSTRUCTION
RECONDITIONING
VCL = 95.00
K = 213.69
VPC STA 205+02.50
VPC EL 1076.44
VPT STA 205+97.50
VPT EL 1072.87
STA 206+00.00
ELEV 1072.78
VPI STA 205+50.00
VPI EL 1074.55
-3.98%
-3.54%
FINISHED PROFILE
EXISTING PROFILE
STA 203+71
REMOVE 1-72" CMP
STA 203+48
1-42" CPRC REQD
EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211
1122.89	1119.87	1116.76	1113.46	1109.63	1105.81	1102.40	1099.01	1095.74	1092.82	1090.14	1087.88	1086.01	1083.99	1082.34	1080.65	1079.25	1077.61	1076.09	1074.21	1072.41	1070.71	1069.10	1067.42	1065.61	1063.94	1062.35	1060.65	1058.79	1057.18	1055.44
1112.39	1110.40	1108.41	1106.42	1104.43	1102.44	1100.44	1098.45	1096.46	1094.47	1092.48	1090.49	1088.49	1086.50	1084.51	1082.52	1080.53	1078.54	1076.54	1074.61	1072.78										

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 535	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN050111_PP.DWG PLOT DATE = 1/31/2018 5:40 PM PLOT BY = BLACKWOOD, JIM PLOT NAME =

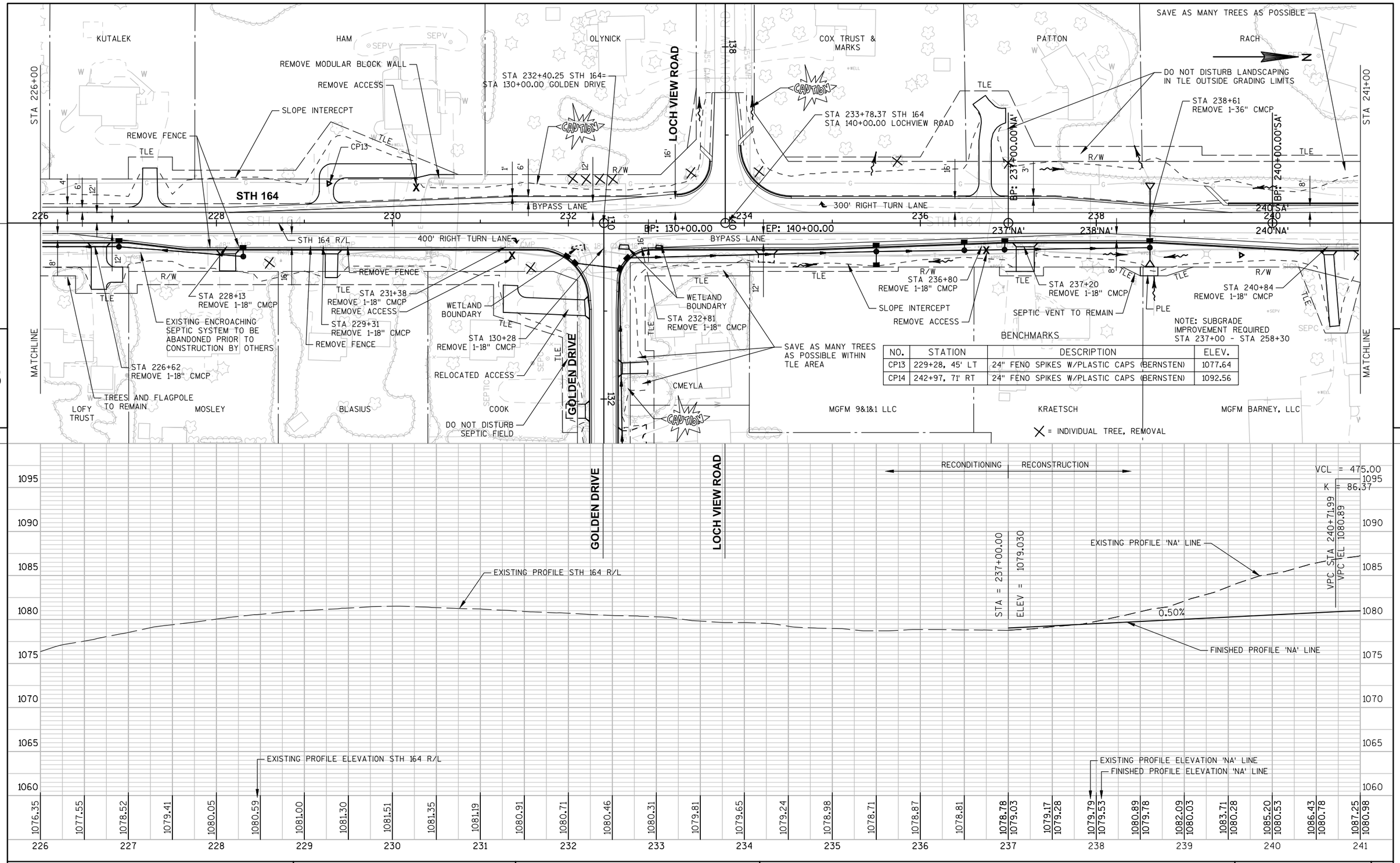
5
5



BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP12	215+46, 101' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1052.64
CP13	229+28, 45' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1077.64
CP41	225+30, 0' RT	CONCRETE MONUMENT W/ALUMUNIM CAP	1074.25

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 536	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 537	E

FILE NAME • T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN050113_PP.DWG PLOT DATE • 3/8/2018 3:58 PM PLOT BY • BLACKWOOD, JIM PLOT NAME •

GOLDEN DRIVE

LOCH VIEW ROAD

RESURFACING | RECONSTRUCTION

EXISTING PROFILE 'SA' LINE

VCL = 475.00
K = 86.36
VPC STA 240+71.99
VPC ELEV 1080.89
STA = 240+00.00
ELEV = 1080.529
0.50%

EXISTING PROFILE STH 164 R/L

FINISHED PROFILE 'SA' LINE

FINISHED PROFILE ELEVATION 'NA' LINE

EXISTING PROFILE ELEVATION 'NA' LINE

EXISTING PROFILE ELEVATION STH 164 R/L

1076.35	1077.55	1078.52	1079.41	1080.05	1080.59	1081.00	1081.30	1081.51	1081.35	1081.19	1080.91	1080.71	1080.46	1080.31	1079.81	1079.65	1079.24	1078.98	1078.71	1078.87	1078.81	1078.78	1079.17	1079.79	1080.89	1082.09	1083.71	1085.20	1080.53	1086.43	1080.78	1087.25	1080.98
226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241																		

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 538	E

RACH
GORANSON
MGFM 40 LLC
KAISER
BILDA REGAN LLC
MFGM BARNEY LLC
FRIESS LAKE SCHOOL
POOL
N

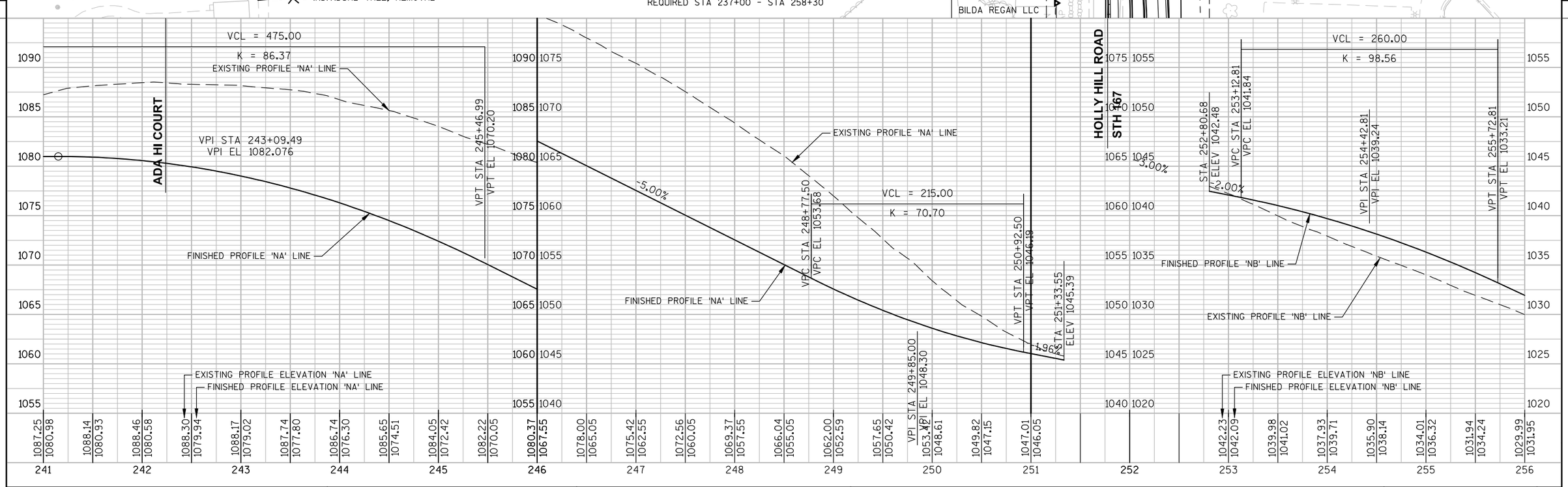
REMOVE CURB & GUTTER
STA 241+00
PT: 148+10.11
TLE
REGETS
RELOCATION
REMOVE ACCESS
RELOCATION
STA 245+20
REMOVE 1-18" CMCP
CAUTION
RELOCATED ACCESS
REMOVE CONCRETE LINED DITCH
SLOPE INTERCEPT
SAVE AS MANY TREES AS POSSIBLE WITHIN TLE
ADA 'HI COURT
STH 164
STA 244+00
REMOVE 1-18" CMCP
200' RIGHT TURN LANE
EP: 150+00.00
242'SA'
242
242'NA'
244'SA'
244
244'NA'
246'SA'
246
246'NA'
248'SA'
248
248'NA'
'SA' LINE
'NA' LINE
STH 164 R/L
REMOVE FENCE
DRIVEWAY BY OTHERS BEYOND APRON
CP14
STA 242+22.95 STH 164 = STA 150+00.00 ADA 'HI COURT
REMOVE FENCE
MATCHLINE
REMOVE CONCRETE LINED DITCH
SLOPE INTERCEPT
REMOVE ACCESS
REMOVE ASPHALT PARKING LOT TO R/W LINE
REMOVING STORM SEWER
REMOVE ACCESS
REMOVE ASPHALT DRIVEWAY TO R/W LINE
REMOVE BOLLARDS AND PRIVATE LIGHT POLE
REMOVE SURFACE DRAIN
TREE TO REMAIN
REMOVE INLET
REMOVE ACCESS
REMOVE CURB & GUTTER
REMOVE SURFACE DRAIN
REMOVING STORM SEWER
REMOVE CURB & GUTTER & GUTTER
REMOVING INLET
WISDOT
STH 167
168'EA'
168'WA'
172'EB'
172'WB'
CP42
CP15
PI: 251+75.97
PI: 170+00.00
STA 251+75.97 STH 164 = STA 170+00 STH 167
REMOVING PRIVATE SIGNS
'SB' LINE
REMOVE ACCESS
STA 254+78
REMOVE 1-24" CMCP
STA 256+00
254'SB'
256'SB'
254'NB'
256'NB'
'NB' LINE
REMOVE CURB & GUTTER
RIPRAP
R/W
TLE
SIGN
8'
12'
24'
5'
6'
4'

= INDIVIDUAL TREE, REMOVAL

NOTE: SUBGRADE IMPROVEMENT REQUIRED STA 237+00 - STA 258+30

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP14	242+94, 71' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1092.56
CP15	252+88, 177' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1038.11
CP42	251+76, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1045.68



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 539	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN050114_PP.DWG PLOT DATE = 3/8/2018 3:58 PM PLOT BY = BLACKWOOD, JIM PLOT NAME =

VCL = 475.00

K = 86.36

241+15.17
1081.00

VPI STA 243+09.49
VPI EL 1082.08

VPT STA 245+46.99
VPT EL 1070.20

EXISTING PROFILE 'SA' LINE

FINISHED PROFILE 'SA' LINE

-5.00%

VCL = 215.00

K = 71.31

VPC STA 248+77.50
VPC EL 1053.68

VPI STA 249+85.00
VPI EL 1048.30

VPT STA 250+92.50
VPT EL 1046.17

-1.95%

STA 251+31.10
ELEV 1045.40

HOLLY HILL ROAD
STH 167

VCL = 265.00

K = 98.02

STA 252+79.09
ELEV 1042.47

VPC STA 253+10.50
VPC EL 1041.84

2.00%

VPI STA 254+43.00
VPI EL 1039.19

VPT STA 255+75.50
VPT EL 1032.96

FINISHED PROFILE 'SB' LINE

EXISTING PROFILE 'SB' LINE

EXISTING PROFILE ELEVATION 'SA' LINE

FINISHED PROFILE ELEVATION 'SA' LINE

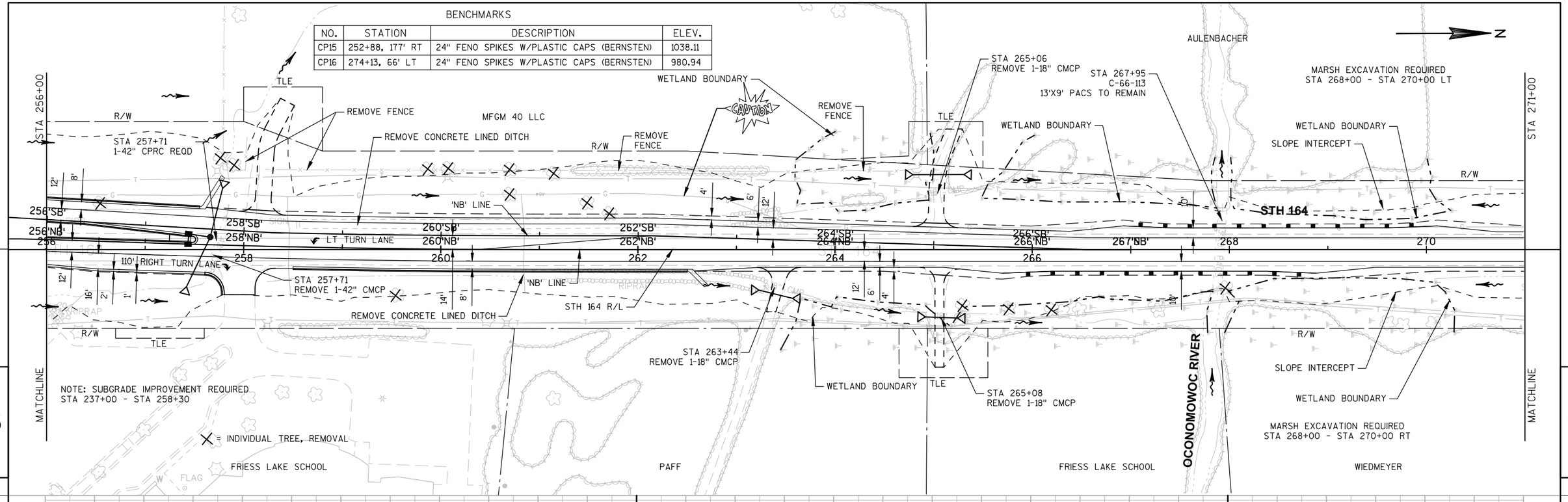
EXISTING PROFILE ELEVATION 'SB' LINE

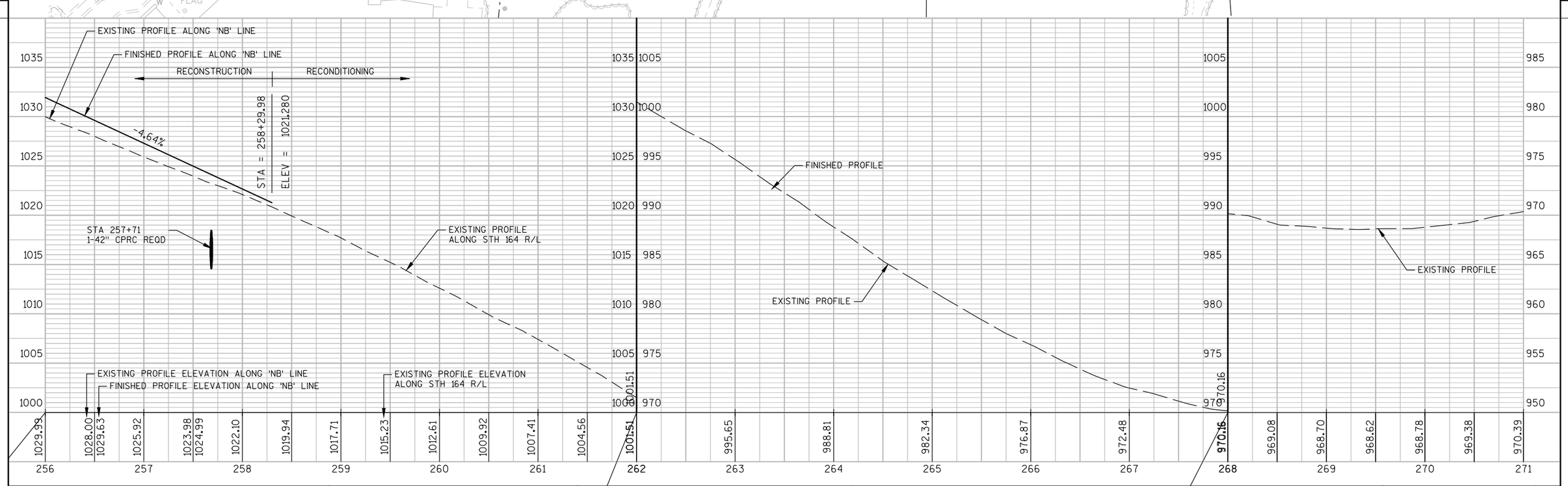
FINISHED PROFILE ELEVATION 'SB' LINE

241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256
1087.25 / 1080.98	1088.14 / 1080.93	1088.46 / 1080.58	1088.30 / 1079.94	1088.17 / 1079.02	1087.74 / 1077.80	1086.74 / 1076.30	1085.63 / 1074.51	1084.05 / 1072.42	1082.22 / 1070.05	1080.37 / 1067.55	1077.94 / 1065.05	1075.15 / 1062.55	1072.41 / 1060.05	1068.90 / 1057.55	1065.23 / 1055.05	1061.11 / 1052.59	1056.74 / 1050.42	1052.25 / 1048.60	1047.24 / 1047.14	1046.75 / 1046.02	1040.30 / 1042.05	1038.33 / 1040.97	1034.30 / 1039.64	1031.24 / 1038.06	1028.90 / 1036.22	1026.98 / 1034.13	1025.73 / 1031.81

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP15	252+88, 177' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1038.11
CP16	274+13, 66' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	980.94





PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 541	E

EXISTING PROFILE ALONG 'SB' LINE

FINISHED PROFILE ALONG 'SB' LINE

-4.70%

STA = 258+29.76

ELEV = 1021.000

EXISTING PROFILE
ALONG STH 164 R/L

RECONSTRUCTION | RESURFACING

EXISTING PROFILE ELEVATION ALONG 'SB' LINE

FINISHED PROFILE ELEVATION ALONG 'SB' LINE

EXISTING PROFILE ELEVATION
ALONG STH 164 R/L

1025.73	1024.31	1029.46	1022.93	1021.71	1024.75	1020.93	1019.28	1017.34	1014.82	1012.21	1009.40	1006.80	1004.09	1001.38	998.42	995.46	992.10	988.61	985.33	982.22	979.29	976.82	**974.40**	972.48	971.14	970.16	969.08	968.70	968.62	968.78	969.38	970.39
256		257		258		259		260		261		262		263		264		265		266	266	267	268	269		270		271				

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 542	E

AULENBACHER | AULENBACHER | PODBIELSKI TRUST | BUCHER

N

STA 271+00 | STA 286+00

SAVE AS MANY TREES AS POSSIBLE ALONG THIS PARCEL

FENCE REMOVED BY OTHERS PRIOR TO CONSTRUCTION

GREYSTONE DRIVE

CAUTION

STA 272+77
REMOVE 1-18" CMCP

CP16

STA 277+00
REMOVE 1-18" CMCP

TLE

R/W

PI: 278+12.86

SLOPE INTERCEPT

TREES TO REMAIN

REMOVE CURB & GUTTER

STH 164

FENCE REMOVED BY OTHERS PRIOR TO CONSTRUCTION

CP43

STA 189+40
1-24" CPRC REQD

STA 189+71
REMOVE 1-18"CMCP

REMOVE CURB & GUTTER

200' RIGHT TURN LANE

EP: 190+00.00

BYPASS LANE

STA 284+67
REMOVE 1-18" CMCP

STA 283+02
REMOVE 1-18" CMCP

DO NOT DISTURB TREES WITHIN TLE

STH 164 R/L

STA 272+81
REMOVE 1-18" CMCP

SLOPE INTERCEPT

STA 276+99
REMOVE 1-18" CMCP

TREES TO REMAIN

STA 278+03
REMOVE 1-18" CMCP

STA 281+58.58 STH 164 = STA 190+00.00 GREYSTONE DRIVE

VILLAGE PARK SIGN TO REMAIN

VILLAGE OF RICHFIELD

MATCHLINE | MATCHLINE

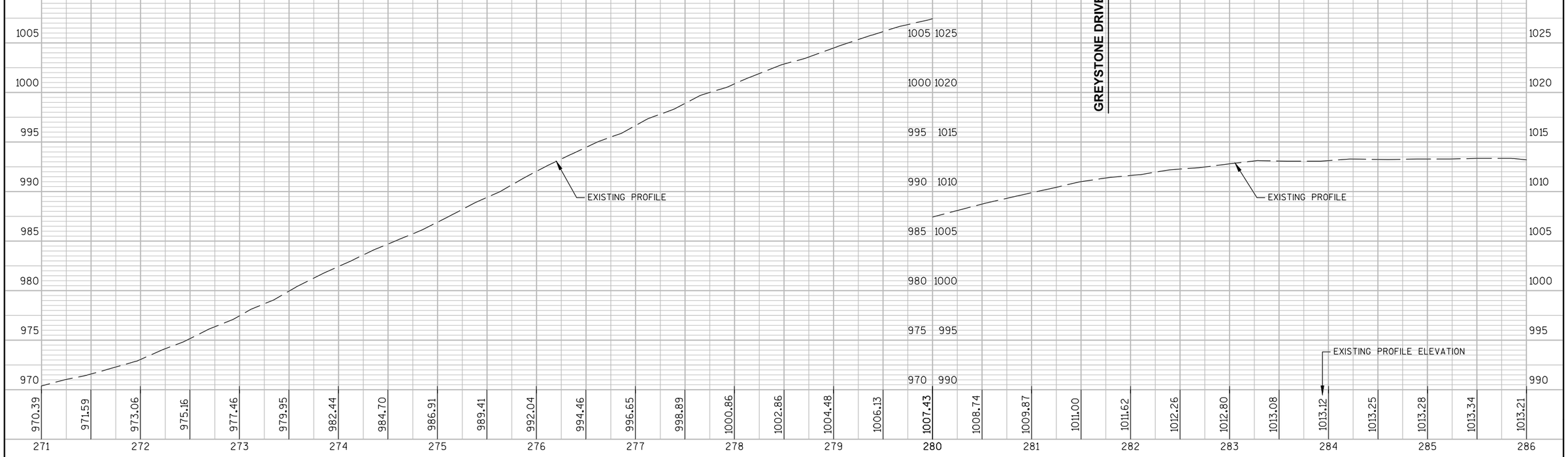
5 | 5

NO.	STATION	DESCRIPTION	ELEV.
CP16	274+13, 66' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	980.94
CP43	278+12, 0' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1001.29

BENCHMARKS

X = INDIVIDUAL TREE, REMOVAL

WIEDMEYER | HOCK TRUST | SCHREOTER | BALAZ | LECHNER



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 543	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\050116_PP.DWG PLOT DATE = 3/11/2018 7:18 PM PLOT BY = BLACKWOOD, JIM PLOT NAME =

WILK

EQUATION

STA 290+12.20 STH 164 R/L BK =
STA 1290+11.74 STH 164 C/L AH

FLEICHER

REITER

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP17	291+24, 53' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1008.07

N

WETLAND BOUNDARY

STA 286+00

STA 301+00

SLOPE INTERCEPT

R/W

4'

6'

12'

PC: 1290+11.74

CP17

STH 164

STA 294+73
REMOVE 1-24" CMP

STA 294+73
1-24" CPRC REQD

PT: 1295+07.67

PC: 1296+38.56

STH 164 C/L CONST

STA 297+19
REMOVE 1-18" CMCP

STH 164 R/L

PI: 1298+86.57

R/W

286 288 290 292 294 296 298 300

SLOPE INTERCEPT

TLE

REMOVE FENCE

BP: 1290+11.74

PI: 1292+59.75

DO NOT DISTURB
SEPTIC SYSTEM

STA 293+37
REMOVE 1-18" CMCP

STA 295+10
REMOVE 1-18" CMCP

NOTE: SUBGRADE IMPROVEMENT REQUIRED
STA 1290+12 - STA 1318+02

STA 296+95
REMOVE 1-18" CMCP

WETLAND BOUNDARY

CAUTION

REMOVE CURB
& GUTTER

MATCHLINE

MATCHLINE

5

5

LECHNER

HARGRAVES

REHBEIN

JANKA

EICHENBERGER

HANSEN

ZIMNEY

DIRNBAUER

= INDIVIDUAL TREE, REMOVAL

RECONDITIONING

RECONSTRUCTION

VCL = 460.00

K = 166.63

VPC STA 1296+85.00
VPC EL 1008.83

1297+35.36
1008.75

FINISHED PROFILE

EXISTING PROFILE

STA 1290+11.74
ELEV 1010.86

-0.30%

STA 294+73
1-24" CPRC REQD

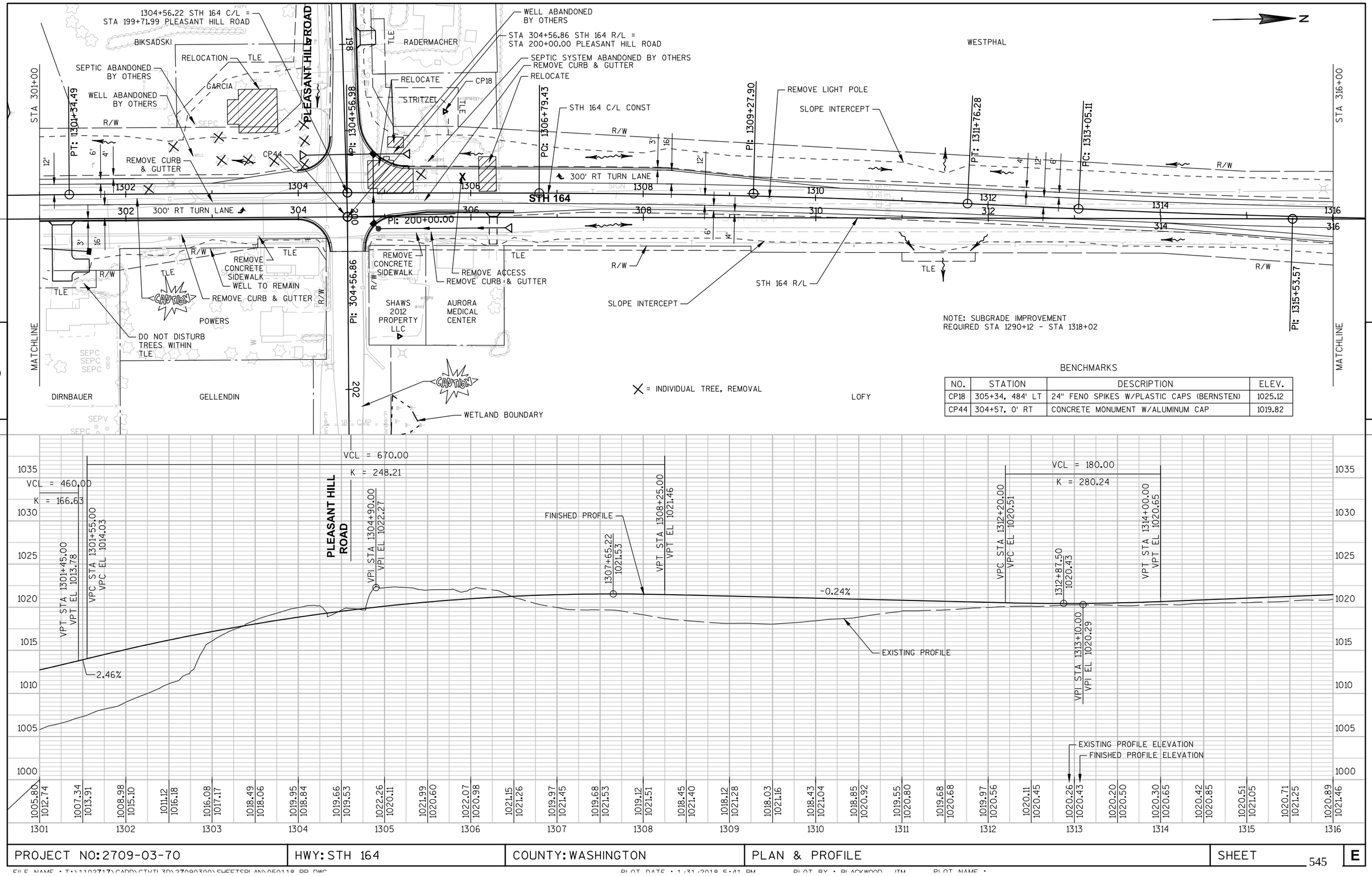
EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

1025 1020 1015 1010 1005 1000 995 990

286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301
1013.21	1012.82	1012.54	1012.18	1011.87	1011.52	1011.25	1011.01	1010.79	1010.66 / 1010.74	1010.30 / 1010.59	1009.88 / 1010.44	1009.53 / 1010.29	1009.36 / 1010.14	1008.97 / 1009.99	1008.40 / 1009.84	1008.10 / 1009.69	1007.62 / 1009.54	1007.30 / 1009.38	1006.97 / 1009.23	1006.45 / 1009.08	1005.82 / 1008.93	1005.12 / 1008.79	1004.22 / 1008.76	1004.02 / 1008.87	1003.52 / 1009.14	1003.78 / 1009.56	1003.93 / 1010.13	1004.35 / 1010.85	1005.08 / 1011.72	1005.80 / 1012.74

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 544	E

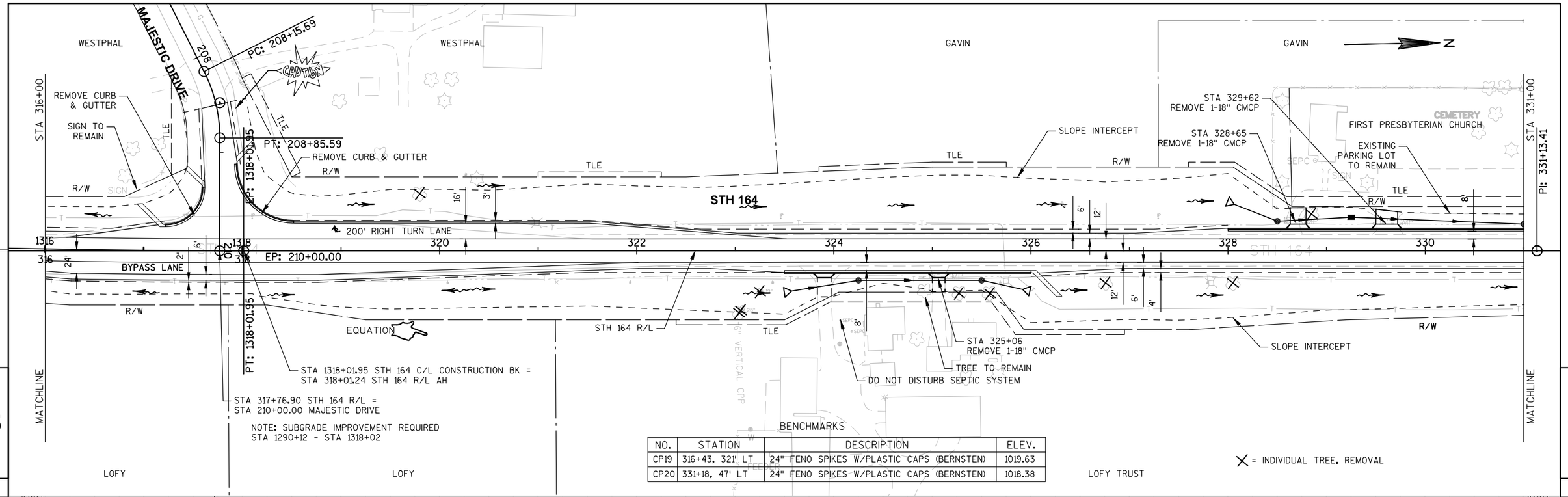


BENCHMARKS

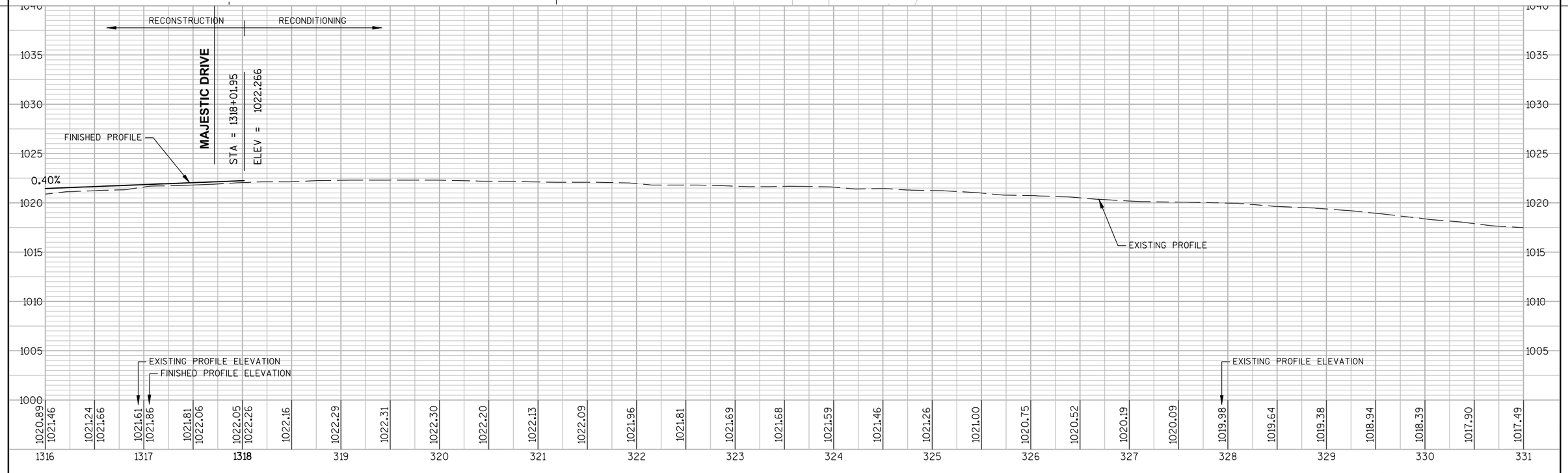
NO.	STATION	DESCRIPTION	ELEV.
CP18	305+34, 484' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1025.12
CP44	304+57, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1019.82

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 545	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN050118_PP.DWG PLOT DATE = 1/31/2018 5:41 PM PLOT BY = BLACKWOOD, JIM PLOT NAME =

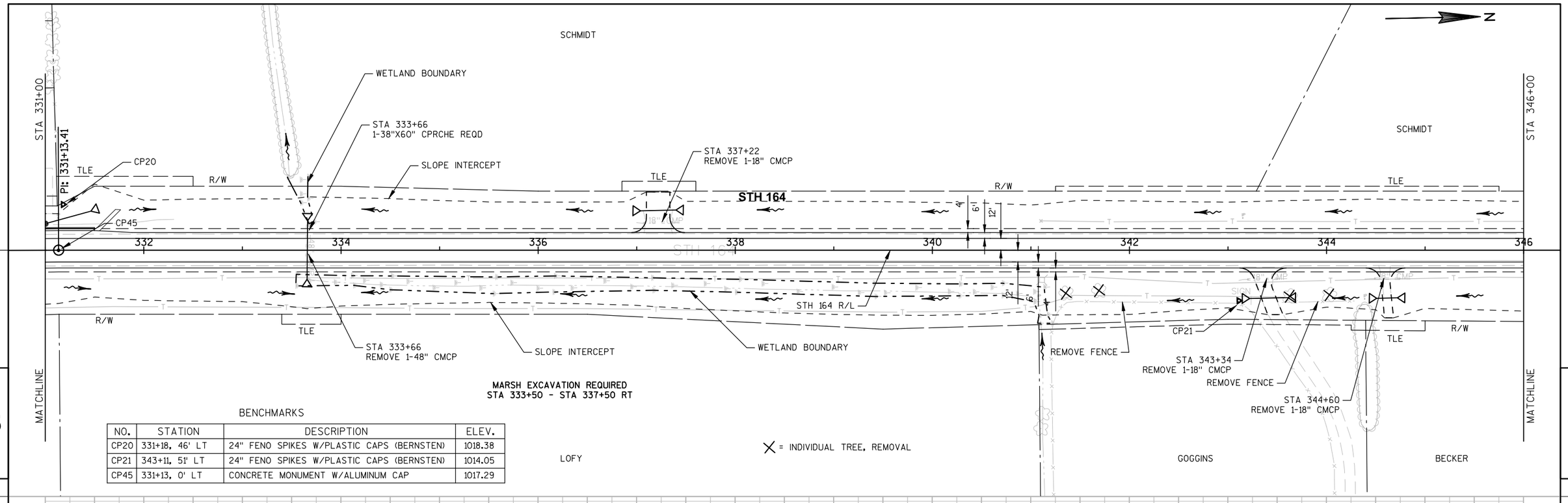


NO.	STATION	DESCRIPTION	ELEV.
CP19	316+43, 321' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1019.63
CP20	331+18, 47' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1018.38



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 546	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\050119_PP.DWG PLOT DATE = 1/31/2018 5:43 PM PLOT BY = BLACKWOOD, JIM PLOT NAME =



BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP20	331+18, 46' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1018.38
CP21	343+11, 51' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1014.05
CP45	331+13, 0' LT	CONCRETE MONUMENT W/ALUMINUM CAP	1017.29

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 547	E

SCHMIDT

STH 164 CURVE 1
PI STA=355+15.91
R=11,459.16'
SE=NC
DESIGN SPEED=60 MPH

STA 346+00

SLOPE INTERCEPT

TLE

R/W

STH 164

PC: 352+06.66

CURVE 1641

PI: 355+15.91

STA 356+66
REMOVE 1-18" CMCP

STA 357+61
REMOVE 1-18" CMCP

REMOVE ACCESS

PT: 358+25.00

STA 219+50
REMOVE 1-28"X20" PACS

STA 219+38
1-19"X30" CPRCHE REQD
REMOVE SURFACE DRAIN

REMOVE CURB & GUTTER

PI: 218+35.79

PIONEER ROAD

REMOVE SURFACE DRAIN

STA 361+00

CP22

CP46

PI: 219+71.61

350' RT TURN LANE

CP47

PI: 220+32.63

STA 360+42.14 STA 164 =
STA 220+00.00 PIONEER ROAD

REMOVE CURB & GUTTER

PI: 221+63.77

STH 164 R/L

SLOPE INTERCEPT

4'
6'
12'
12'
6'
4'
16'
31'

346 348 350 352 354 356 358 360

218 220 222

MATCHLINE

MATCHLINE

5

5

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP21	343+11, 51' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1014.05
CP22	359+09, 54' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1020.99
CP46	360+40, 28' LT	CONCRETE MONUMENT W/ALUMINUM CAP	1019.33
CP47	360+44, 33' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1018.92

X = INDIVIDUAL TREE, REMOVAL

BECKER

EXISTING PROFILE

EXISTING PROFILE ELEVATION

1035 1030 1025 1020 1015 1010 1005 1000

1020.50 1020.78 1021.19 1021.41 1021.84 1021.81 1022.18 1022.33 1022.60 1022.82 1022.66 1022.64 1022.83 1022.99 1023.12 1023.18 1023.16 1023.06 1023.00 1022.87 1022.71 1022.53 1022.29 1021.89 1021.57 1021.34 1020.70 1020.49 1019.59 1019.47 1019.22

346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 548	E

STH 164 CURVE 2
STA=365+67.28
R=11,459.16
SE=NC
DESIGN SPEED=60MPH

WEIS

MUELLER

ASKINS

BECKER

PERZDOCK

STA 361+00

STA 376+00

PC: 362+10.40

PI: 365+67.28

PT: 369+23.92

CURVE 1642

SLOPE INTERCEPT

SLOPE INTERCEPT

STH 164

350' RT TURN LANE

R/W

R/W

R/W

TLE

TLE

TLE

TLE

TLE

TLE

PLE

RIPRAP

RIPRAP

STA 367+82
REMOVE 1-24" CMCP

WETLAND BOUNDARY

WETLAND BOUNDARY

WETLAND BOUNDARY

STA 372+98
REMOVE 1-24"CMCP

STA 373+00
1-24"X38" CPRCHE REQD

MARSH EXCAVATION REQUIRED
STA 368+50 - STA 375+50 LT

STA 375+95
REMOVE 1-18" CMCP

WETLAND BOUNDARY

STH 164 R/L

REMOVE ACCESS

STA 367+75
REMOVE 1-18" CMCP
WETLAND BOUNDARY

WETLAND BOUNDARY

MARSH EXCAVATION REQUIRED
STA 368+50 - STA 379+50 RT

4'
6'
12'

12'
6'
4'

362
364
366
368
370
372
374
376

MATCHLINE

MATCHLINE

5

5

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP22	359+09, 54' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1020.99
CP23	376+16, 44' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1012.97
CP46	360+40, 28' LT	CONCRETE MONUMENT W/ALUMINUM CAP	1019.33
CP47	360+44, 33' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1018.92

X = INDIVIDUAL TREE, REMOVAL

1035
1030
1025
1020
1015
1010
1005
1000

EXISTING PROFILE

STA 372+99
1-24"X38" CPRCHE REQD

EXISTING PROFILE ELEVATION

1019.22 1019.07 1018.73 1018.54 1018.26 1018.00 1017.80 1017.39 1017.05 1016.79 1016.40 1016.17 1015.77 1015.43 1014.97 1013.90 1013.35 1013.02 1012.32 1011.51 1011.28 1011.32 1011.34 1011.49 1011.43 1011.32 1011.18 1011.40 1011.85 1012.29 1012.86

361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 549	E

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP23	376+16, 44' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1012.97
CP24	387+13, 32' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1021.07
CP48	386+77, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1023.35

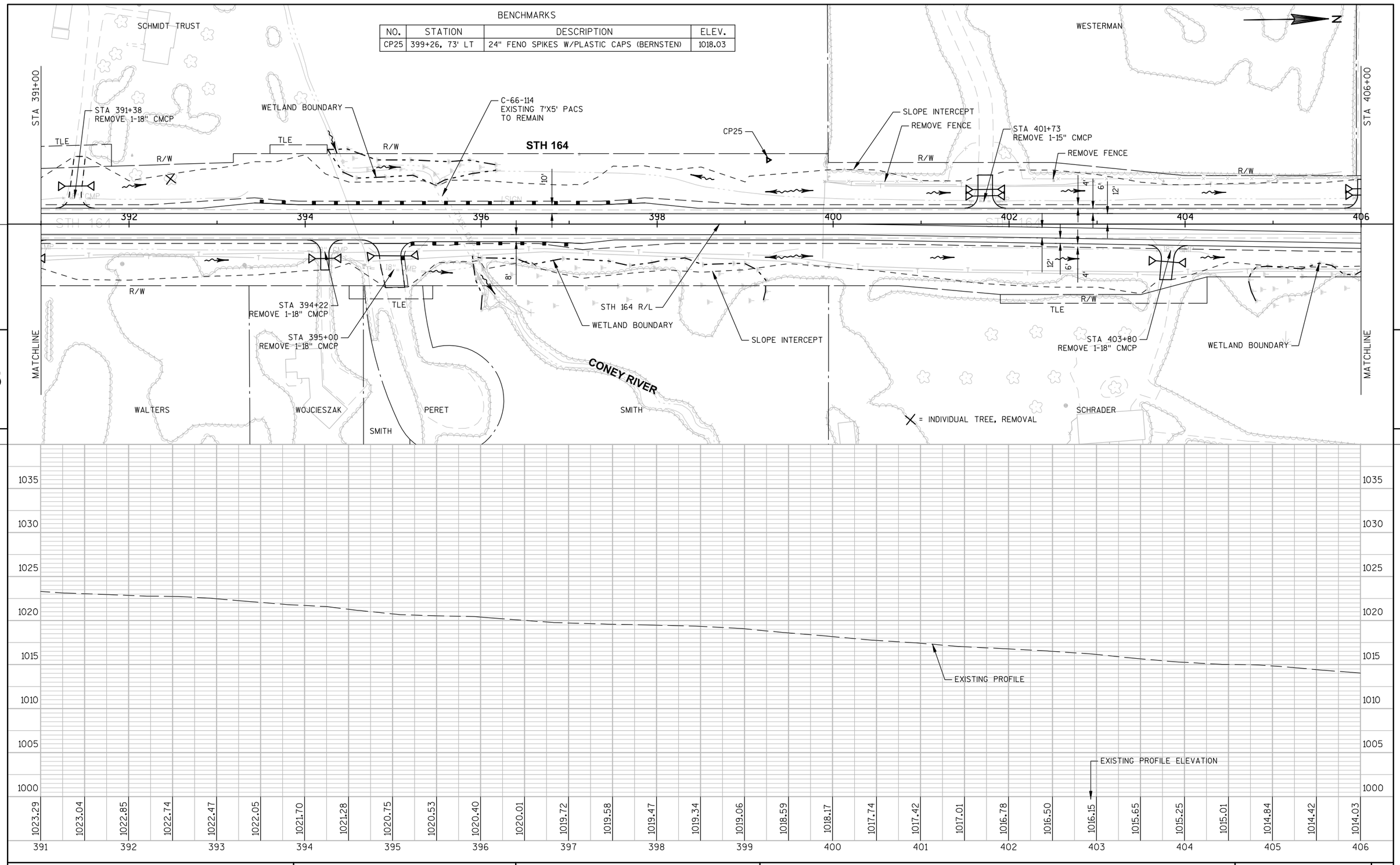
ASKINS
LOSINIECKI
SCHMIDT TRUST
SCHMIDT TRUST
N
STA 376+00
STA 391+00
REMOVE FENCE
STA 377+36
REMOVE 1-18" CMCP
STA 380+03
REMOVE 1-15" CMCP
REMOVE 12" CMP TO BACKSLOPE AND ADD ENDWALL
REMOVE FIELD ENTRANCE
STA 380+37
REMOVE 1-18" CMCP
CP23
TLE
STA 378+06
1-24" CPRC REQD
REMOVE FENCE
R/W
STH 164
TLE
SLOPE INTERCEPT
PI: 386+76.97
CP24
R/W
4'
6'
12'
376
378
380
382
384
386
388
390
WETLAND BOUNDARY
R/W
TLE
STA 378+06
REMOVE 1-24" CMCP
MARSH EXCAVATION REQUIRED
STA 368+50 - STA 379+50 RT
STA 380+02
REMOVE 1-18" CMCP
STA 381+57
REMOVE 1-18" CMCP
STH 164 R/L
SLOPE INTERCEPT
TLE
CP48
STA 383+22
REMOVE 1-18" CMCP
STA 386+09
REMOVE 1-18" CMCP
12'
6'
4'
R/W
TREE TO REMAIN
STA 390+86
REMOVE 1-18" CMCP
MATCHLINE
MATCHLINE
5
5
PERDZOCK
GONYO FAMILY TRUST
MERTENS
MERTENS
WALTERS
X = INDIVIDUAL TREE, REMOVAL

1035
1030
1025
1020
1015
1010
1005
1000
EXISTING PROFILE
STA 378+06
1-24" CPRC REQD
EXISTING PROFILE ELEVATION
1012.86
1013.51
1013.88
1014.29
1014.68
1015.12
1015.68
1016.24
1017.01
1017.60
1018.28
1018.76
1019.41
1019.95
1020.47
1021.08
1021.70
1022.15
1022.54
1022.93
1023.27
1023.56
1023.73
1023.83
1023.74
1023.83
1023.80
1023.74
1023.61
1023.52
1023.29
376
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391

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 550	E

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP25	399+26, 73' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1018.03



5

5

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 551	E

WESTERMAN
SANG
GEHRKE
WAGNER
SCHRADER
SCHRADER
HAR-MAR DEVELOPMENT CORP
HAR-MAR DEVELOPMENT CORP
ROMANO
RAYESKE

STA 406+00
STA 421+00
MATCHLINE
MATCHLINE

MARSH EXCAVATION REQURIED
STA 406+50 - STA 407+50 LT
STA 406+03
REMOVE 1-18" CMCP
SLOPE INTERCEPT
WETLAND BOUNDARY
R/W
12'
12'
MARSH EXCAVATION REQURIED
STA 406+00 - STA 407+50 RT
BENCHMARKS
4'
6'
WETLAND BOUNDARY

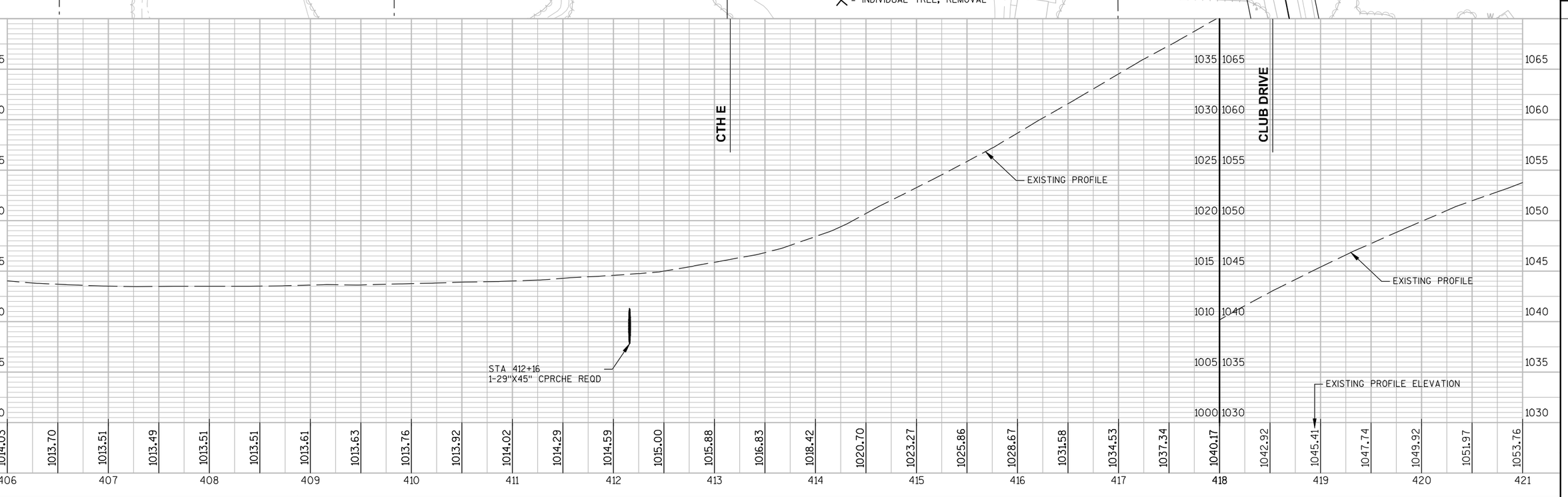
NO.	STATION	DESCRIPTION	ELEV.
CP27	412+63, 683' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1054.58
CP49	413+13, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1015.98

MARSH EXCAVATION REQURIED
STA 409+50 - STA 411+00 LT
REMOVE CURB & GUTTER
WETLAND BOUNDARY
TLE
R/W
STA 412+16
1-29"X45" CPRCHE REQD
REMOVE FENCE
STA 412+16
REMOVE 1-42" CMCP
STA 413+12.62 STH 164 =
STA 230+00.00 CTH E
MARSH EXCAVATION REQURIED
STA 409+50 - STA 412+00 RT
PI: 413+12.62
228
CTH E
CP49
TLE
R/W
WETLAND BOUNDARY
FENCE REMOVED BY OTHERS
PRIOR TO CONSTRUCTION
STA 415+58
REMOVE 1-24" CMCP

STA 229+11
REMOVE 1-24" CMP
WALL TO REMAIN
R/W
REMOVE CURB & GUTTER
REMOVE
SURFACE
DRAIN
16'
3'
STH 164
STH 164 R/L
RT TURN LANE
BYPASS
406
408
410
412
414
416
418
420
350' LT TURN LANE
EP: 230+00.00
BP: 240+00.00
240
16'
2'
300' RT TURN LANE
PC: 240+30.10
REMOVE FENCE
R/W
TLE
SLOPE INTERCEPT
STA 240+29
REMOVE 1-18"CMP
PT: 241+06.89
CLUB DRIVE
242
R/W
TLE
STA 420+06
REMOVE 1-18" CMCP
CAUTION

STA 418+31
REMOVE 1-18" CMCP
STA 418+20.25 STH 164 =
STA 240+00.00 CLUB DRIVE
R/W
TLE
R/W

X = INDIVIDUAL TREE, REMOVAL



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 552	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\050125_PP.DWG
PLOT DATE : 1/29/2018 11:57 AM
PLOT BY : BLACKWOOD, JIM
PLOT NAME : ----------

WISDOT/CADDS SHEET 40

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP27	426+08, 44' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1061.79

WAGNER

STA 421+00

SLOPE INTERCEPT

TLE

R/W

REMOVE GUARDRAIL

STH 164

BECKER

YOGERST

N

STA 436+00

STA 435+82
REMOVE 1-18" CMCP

4'
16'
12'

422 424 426 428 430 432 434 436

SLOPE INTERCEPT

CP27

CAUTION

STH 164 R/L

RUINS

MATCHLINE

5

GUELL WELTER DUEHR MEISSNER RAYESKE BADEN STRASZEWSKI FLYNN DALBICKI

= INDIVIDUAL TREE, REMOVAL

CANOPY

POOL

EXISTING PROFILE

EXISTING PROFILE ELEVATION

1085 1080 1075 1070 1065 1060 1055 1050

1105 1100 1095 1090 1085 1080 1075 1070

1053.76 1055.50 1057.11 1058.41 1059.49 1060.31 1061.27 1062.11 1062.53 1062.71 1062.96 1063.07 1063.42 1063.81 1064.25 1064.61 1065.21 1065.93 1066.91 1068.12 1069.88 1072.02 1074.63 1077.34 1080.08 1082.78 1085.49 1087.91 1090.28 1092.64 1094.60

421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 553	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\050126_PP.DWG PLOT DATE : 1/29/2018 11:57 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : ----------

WISDOT/CADDS SHEET 40

WASHINGTON COUNTY HERITAGE TRAILS COUNTY PARK

BURKE

MUELLER

WALLS

NELSON

SEPTIC

STA 436+00

STA 436+32
REMOVE 1-18" CMCP

REMOVE PIPE GATE

SLOPE INTERCEPT

TLE

4'
6'
12'

PI: 439+32.85

STA 439+51
REMOVE 1-18" CMCP

SAVE ARBORVITAE TREES

R/W

STH 164

REMOVE ACCESS

STA 443+99
REMOVE 1-18" CMCP

STA 444+90
REMOVE 1-18" CMCP

STA 445+79
REMOVE 1-18" CMCP

WASHINGTON COUNTY

CP28

R/W

EP: 450+72.17

RIPRAP

436 438 440 442 444 446 448 450 450

REMOVE FENCE

CP50

STA 441+96
REMOVE 1-18" CMCP

STH 164 R/L

STA 443+75
REMOVE 1-18" CMCP

STA 444+70
REMOVE 1-18" CMCP

SEPTIC SYSTEM TO BE ABANDONED BY OTHERS PRIOR TO CONSTRUCTION

STA 445+65
REMOVE 1-18" CMCP

STA 446+54
REMOVE 1-18" CMCP

HMA

18" CMP

ASPH

CONC

POOL

CAUTION

STA 440+58
REMOVE 1-18" CMCP

SLOPE INTERCEPT

MATCHLINE

STA 436+54
REMOVE 1-18" CMCP

REMOVE FENCE

REMOVE ACCESS
ACCESS MOVED TO BOGEY LANE
NEW DRIVEWAY BY OTHERS BEFORE
ROADWAY CONSTRUCTION

REMOVE DRIVEWAY TO R/W LINE
CONSTRUCT BERM WITHIN R/W

= INDIVIDUAL TREE, REMOVAL

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP28	450+19, 116' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1087.32
CP50	439+33, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1101.80

SCHULTZ

HORAK

DANNENBERG

CJRF PROPERTIES LLC

EWERT

RODD

GRIVNO

KIMBALL

HAFEMANN

END PROJECT 2709-03-70
STA. 446+61.26
SEE BUTT JOINT DETAIL

5

5

EXISTING PROFILE

EXISTING PROFILE ELEVATION

1105 1100 1095 1090 1085 1080 1075 1070

1094.60 1096.23 1097.74 1098.97 1100.09 1100.97 1101.67 1102.12 1102.48 1102.38 1102.12 1101.72 1101.37 1100.90 1100.19 1099.28 1098.41 1097.41 1096.28 1095.37 1094.66 1093.30 1091.66 1089.77 1087.82 1085.96 1084.17 1082.32 1080.48 1078.96

436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE	SHEET 554	E

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP2	57+26, 33' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1011.11
CP35	66+35, 61' RT	CONC MONUMENT W/ALUM CAP	1039.47

CURVE SHADY 1
PI STA 11+14.17
R = 200'
SE = NC
DESIGN SPEED = 30 MPH

CURVE SHADY 2
PI STA 14+07.85
R = 350'
SE = NC
DESIGN SPEED = 30 MPH

CURVE SHADY 3
PI STA 16+29.74
R = 1200'
SE = NC
DESIGN SPEED = 30 MPH

CURVE SHADY 4
PI STA 21+41.85
R = 475'
SE=NC
DESIGN SPEED = 30 MPH

GRORICH
SCHLAEFER
KELLER
OLIVO
BOELTER
LUSTIG
THE RESERVE PARTNERS LLC
ZALEWSKI
HACKER
SWORSKE
RISCH
SHADY LANE
TREE TO REMAIN
SLOPE INTERCEPT
SHADY LANE R/L
CURVE SHADY 2
CURVE SHADY 1
CURVE SHADY 3
CURVE SHADY 4
STA 57+86
REMOVE 1-24" CMCP
STA 57+67
REMOVE 1-24" CMCP
STH 164
STH 164 R/L
PC: 10+30.95
BP; 10+00.00
BM2
PC: 12+07.97
PT: 11+88.67
PI: 11+14.17
PI: 60+69.43
PC: 15+63.56
PT: 15+63.50
PI: 16+29.74
PT: 16+95.78
PC: 18+64.87
PI: 21+76.04
41.81
CP35
TLE
R/W
SLAB
WALLS
CAUTION
= INDIVIDUAL TREE, REMOVAL

END CONSTRUCTION 2709-03-70
STA. 12+39.83

EXISTING PROFILE
EXISTING PROFILE ELEVATION

1018.16	1015.42	1017.40	1018.48	1018.56	1018.67	1019.75	1020.46	1021.74	1023.23	1020.27				

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE SHADY LANE	SHEET 555	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETS\PLAN\050138_PP_SHADY_LANE.DWG PLOT DATE = 1/30/2018 8:51 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP3	71+07, 144' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1008.09
CP35	66+35, 61' RT	CONC MONUMENT W/ALUM CAP	1039.47

CURVE SHADY 4
PI STA 21+41.85
R = 475'
SE=NC
DESIGN SPEED = 30 MPH

CURVE SHADY 5
PI STA 24+66.39
R = 350'
SE=NC
DESIGN SPEED = 30 MPH

PI: 14+07
PT: 15+63.50
PC: 15+63.56
PI: 16+29.74
PT: 16+95.78
PC: 18+64.87
PI: 60+69.43
PI: 87+76.04
PC: 23+23.28
PI: 23+66.33
PI: 24+66.39
PI: 25+09.08
PC: 25+52.32
PC: 26+50.32
BP: 30+00.00
EP: 30+00.00
PT: 28+23.76

OLIVO
BOELTER
LUSTIG
THE RESERVE PARTNERS LLC
THE RESERVE PARTNERS LLC
HANSEN DRIVE
SHADY LANE
STH 164
SHADY LANE R/L
CURVE SHADY 3
CURVE SHADY 4
CURVE SHADY 5
REMOVE STONE WALL
CAUTION
SIGN TO BE REMOVED BY OTHERS
SLOPE INTERCEPT
SLOPE INTERCEPT
STA 25+00
T-24" CPRC REQD
CP3
CP35
END CONSTRUCTION
STA. 25+83.55
R/W
TLE
RIPRAP
= INDIVIDUAL TREE, REMOVAL

BEGIN CONSTRUCTION
STA. 17+80.00

VCL = 210.00
K = 58.02
VCL = 200.00
K = 51.29
VCL = 350.00
K = 50.00

VPC STA 17+80.00
VPC EL 1021.40
18+68.15
1022.07
VPI STA 18+85.00
VPI EL 1023.00
VPT STA 19+90.00
VPT EL 1020.79
VPC STA 20+25.00
VPC EL 1020.06
VPI STA 21+25.00
VPI EL 1017.96
VPT STA 22+25.00
VPT EL 1011.96
VPC STA 22+25.00
VPC EL 1011.96
VPI STA 24+00.00
VPI EL 1001.46
25+25.00
1002.96
STA 25+83.55
ELEV 1003.29

1.52%
-2.10%
-6.00%
1.00%

FINISHED PROFILE
EXISTING PROFILE
EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

1035 1030 1025 1020 1015 1010 1005 1000

1018.48 1018.56 1018.67 1019.75 1020.46 1021.74 1021.67 1023.23 1021.98 1020.27 1020.58 1012.92 1017.93 1006.27 1013.40 1003.68 1008.02 1005.75 1004.52 1007.80 1003.02

14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

5 5

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE-SHADY LANE	SHEET 556	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\050128A_PP_SHADY_LANE.DWG PLOT DATE = 3/11/2018 7:25 PM PLOT BY = BLACKWOOD, JIM PLOT NAME =

CURVE HANSEN 1
PI STA 25+10.22
R = 300.00'
SE = NC
DESIGN SPEED = 30 MPH

CURVE HANSEN 2
PI STA 27+42.92
R = 200.00'
SE = NC
DESIGN SPEED = 30 MPH

CURVE UPLAND 1
PI STA 32+40+39
R = 162.56'
SE = NC
DESIGN SPEED = 30 MPH

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP3	28+59, 65' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1008.09

THE RESERVE PARTNERS LLC
STA 71+64.75 STH 164 = STA 30+00.00 HANSEN DRIVE
SIGN TO BE REMOVED BY OTHERS
STH 164
HANSEN DRIVE
CURVE HANSEN 2
HANSEN DR R/L
CURVE HANSEN 1
PC: 26+50.32
PT: 26+50.32
EP: 25+95.32
BP: 22+71.06
PC: 23+38.71
PI: 27+42.92
PT: 28+23.76
R/W
HMA
TLE
JORGENSON
SLOPE INTERCEPT
PC: 31+65.45
PT: 33+05.90
EP: 34+00.00
UPLAND DRIVE
UPLAND DR R/L
CURVE UPLAND 1
PI: 32+40.39
CAUTION
CP3
PT: 25+09.08
STH 164 R/L
SLOPE INTERCEPT
PI: 24+66.39
PC: 24+23.26
THE RESERVE PARTNERS LLC
PI: 25+10.22
SHADY LANE
STA 71+53.54 STH 164
STA 30+00.00 UPLAND DRIVE
TOMASINI
= INDIVIDUAL TREE, REMOVAL
N

BEGIN CONSTRUCTION
STA. 28+53.50

END CONSTRUCTION
STA. 31+47+.06

VCL = 90.00
K = 10.40

STA 28+53.50
ELEV 1008.15
3.93%
STA 29+71.99
ELEV 1010.80
2.11%
FINISHED PROFILE
STA 30+00.00
ELEV 1013.40
STA 30+28.27
ELEV 1013.62
-2.37%
VPC STA 30+55.00
ELEV 1012.95
2.50%
VPC EL 1012.55
30+70.53
1012.43
VPI STA 31+00.00
VPI EL 1011.87
VPT STA 31+45.00
VPT EL 1015.09
7.16%
STA 31+47.06
ELEV 1015.24
EXISTING PROFILE
FINISHED PROFILE GRADE
EXISTING PROFILE GRADE

1001.08	1002.00	1003.65	1005.82	1008.07	1009.60	1009.98	1010.87	1011.95	1012.69	1013.40	1012.09	1012.62	1012.80	1012.85	1015.44	1019.39	1022.80	1024.82	1026.06	1027.40

1035 1030 1025 1020 1015 1010 1005

21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - HANSEN DRIVE & UPLAND DRIVE	SHEET 557	E

FILE NAME = T:\110271\CADD\CIVIL3D\270903001\SHEETS\PLAN\050139_PP_HANSON.DWG PLOT DATE = 1/30/2018 8:52 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP4	38+99, 103' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1007.62
CP36	40+00, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1010.81

X = INDIVIDUAL TREE, REMOVAL

STUETTGEN FARMS

WICKLANDER

N

STA 92+74.31 STH 164 =
STA 40+00.00 MONCHES ROAD

SLOPE INTERCEPT

BP: 36+00.00

PI: 40+00.00

STA 40+55
2-24"X38" CPRCHE REQD

STA 40+42
REMOVE 1-24" CMCP

SLOPE INTERCEPT

MONCHES RD R/L

EP: 45+00.00

MONCHES ROAD

PI: 92+74.31

STH 164

R/W

HMA

MONCHES RD

PRESERVE WAY

36" CMP

15" CMP

15" RCP

CP36

CP4

TLE

RIPRAP

STA 92+00
3-24"X38" CPRCHE REQD

STH 164 R/L

THE RESERVE
PARTNERS LLC

BRIGGS TRUST

SEPC

END CONSTRUCTION
STA. 41+68.45

BEGIN CONSTRUCTION
STA 38+30.27

STA 38+30.27
ELEV 1012.67

STA 39+72.00
ELEV 1010.79

STA 40+00.00
ELEV 1011.35

STA 40+28.00
ELEV 1010.79

STA 41+68.45
ELEV 1011.53

-1.33%

2.00%

-2.00%

0.52%

FINISHED PROFILE

EXISTING PROFILE

STA 40+42
2-24"X38" CPRCHE REQD

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

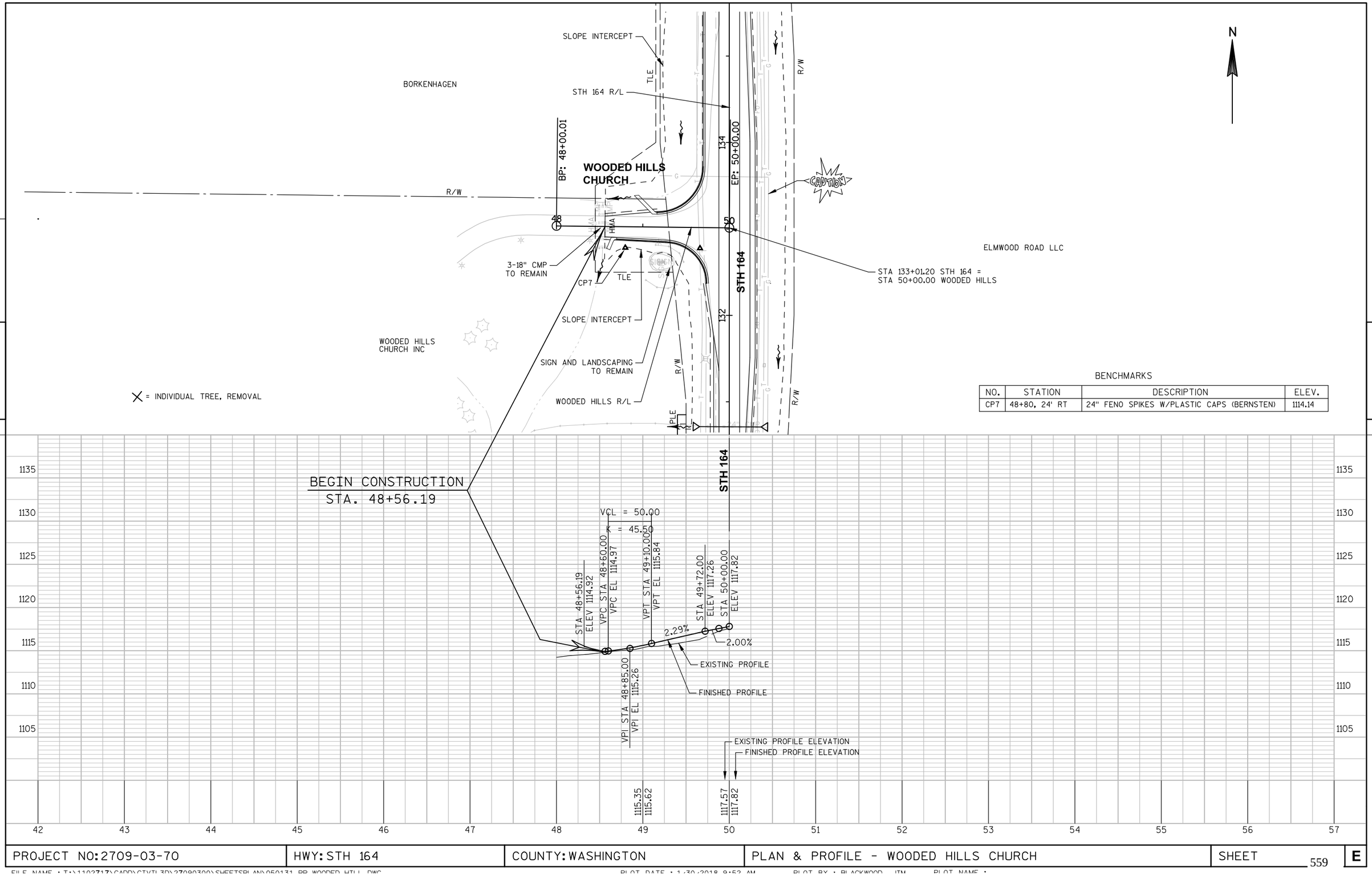
1035 1030 1025 1020 1015 1010 1005 1000

1015.69 1015.06 1014.51 1013.83 1013.21 1012.45 1012.41 1011.99 1011.75 1011.29 1011.09 1011.10 1011.35 1011.19 1010.91 1011.57 1011.17 1011.58 1011.43 1011.77 1011.64 1011.43 1011.71 1012.21 1012.65 1013.04

34 35 36 37 38 39 40 41 42 43 44 45 46 47

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - MONCHES ROAD	SHEET 558	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETS\PLAN0501130_PP_MONCHES.DWG PLOT DATE = 1/30/2018 8:52 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =



N

BENCHMARKS

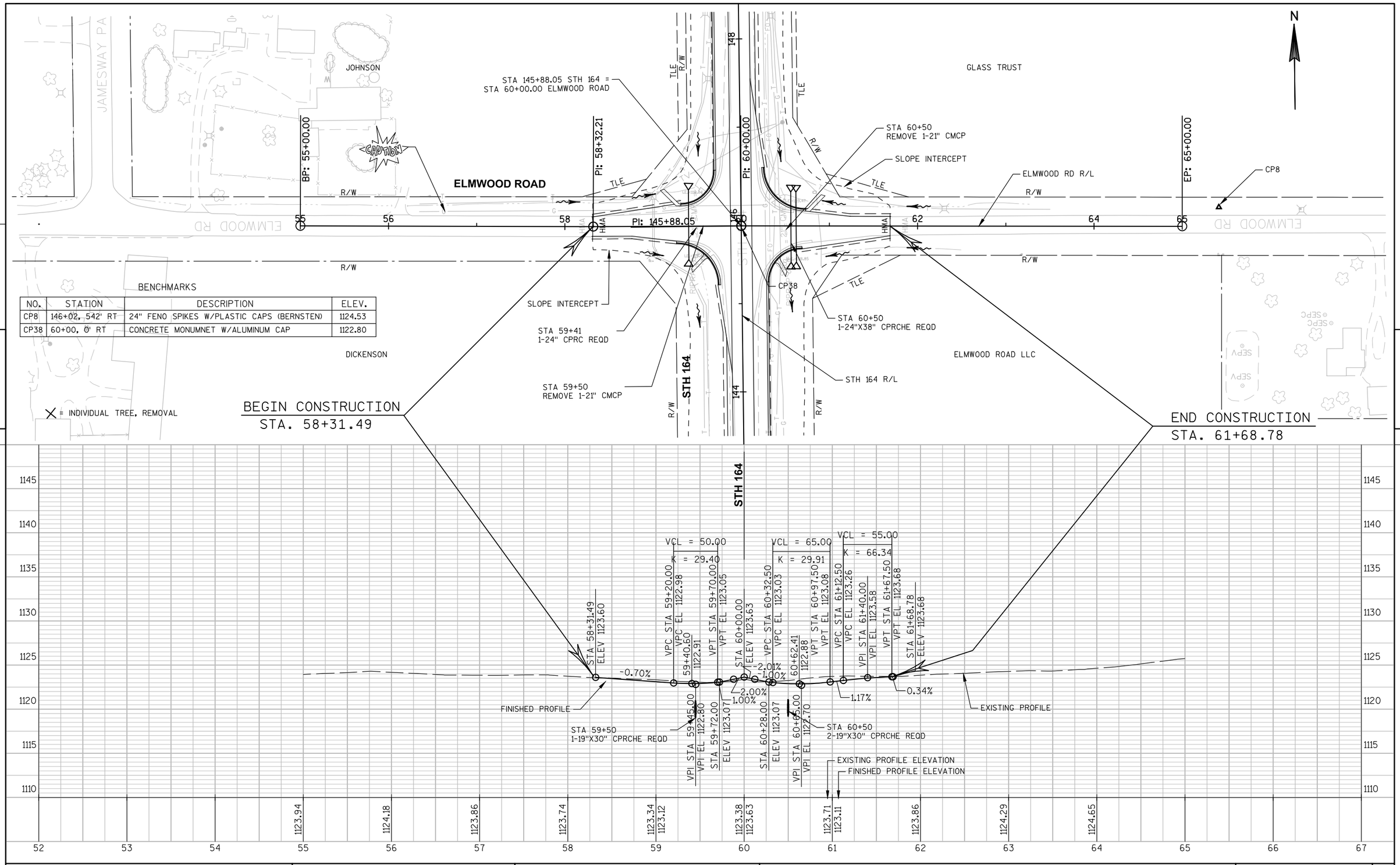
NO.	STATION	DESCRIPTION	ELEV.
CP7	48+80, 24' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1114.14

5

5

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - WOODED HILLS CHURCH	SHEET 559	E

FILE NAME = T:\1102717\CADD\CIVIL 3D\27090300\SHEETSPLAN\050131_PP_WOODED_HILL.DWG PLOT DATE = 1/30/2018 8:52 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =



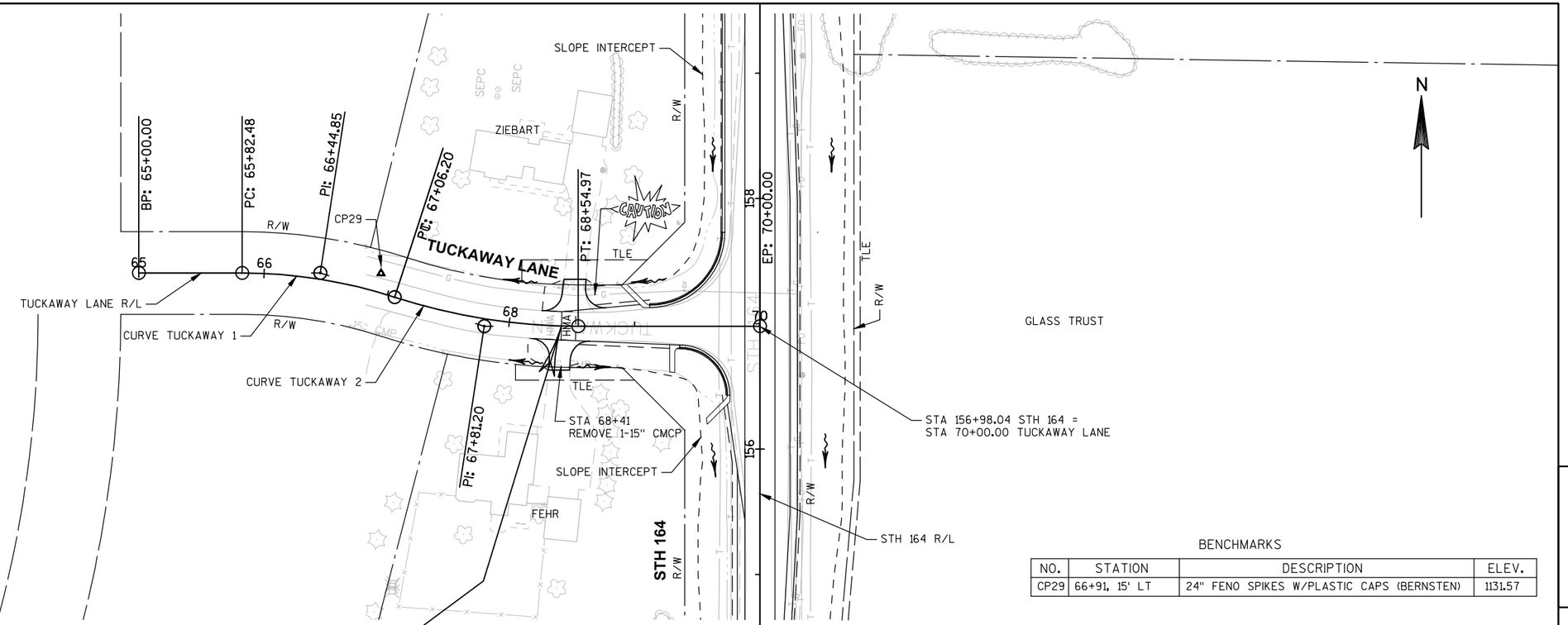
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - ELMWOOD ROAD	SHEET 560	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETS\PLAN\050132_PP_ELMWOOD.DWG PLOT DATE = 1/30/2018 8:53 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =

CURVE TUCKAWAY 1
PI STA 66+44.85
R = 393.84'
SE = NC
DESIGN SPEED = 30 MPH

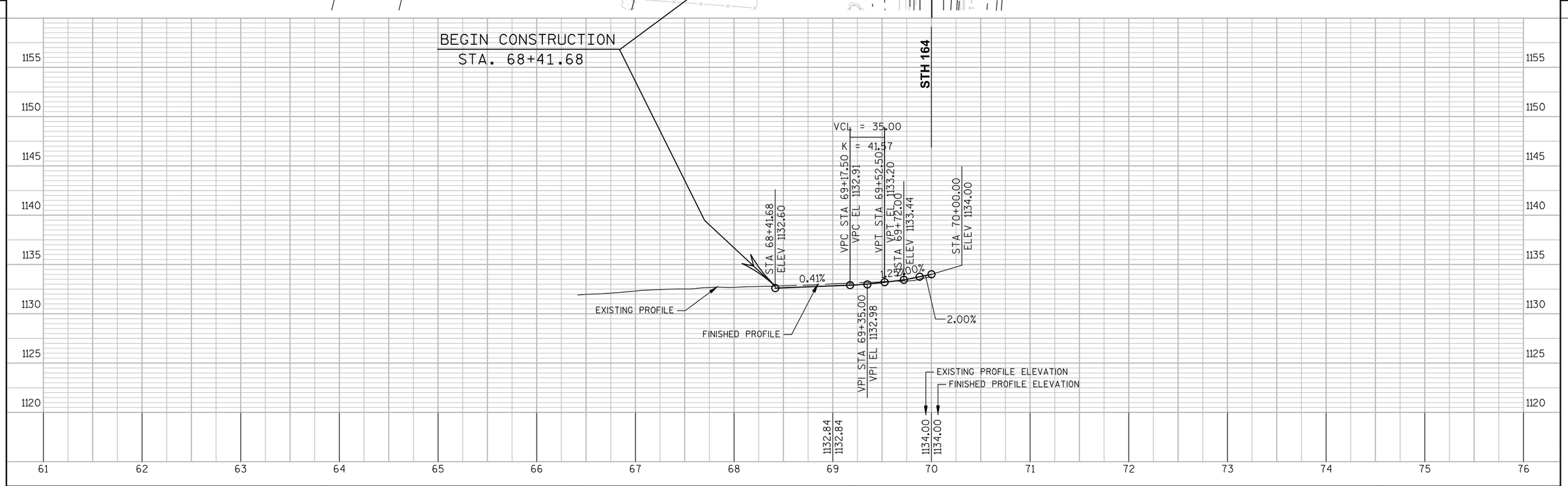
CURVE TUCKAWAY 2
PI STA 67+81.20
R = 473.53'
SE = NC
DESIGN SPEED = 30 MPH

X = INDIVIDUAL TREE, REMOVAL



BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP29	66+91, 15' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1131.57



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - TUCKAWAY LANE	SHEET 561	E

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP9	174+26, 73' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1162.29
CP39	172+44, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1160.69

N

WEISHAR

WEISHAR

OMLEY

RADECK

KURSZEWSKI

STA 168+51.31 STH 164 =
STA 80+00.00 CHEROKEE TRAIL

SLOPE INTERCEPT

STA 80+75
REMOVE 1-18" CMCP

CHEROKEE TRAIL

BP: 80+00.00

EP: 84+00.00

SLOPE INTERCEPT

STH 164 R/L

CHEROKEE TRAIL R/L

CAUTION

END CONSTRUCTION
STA. 81+54.25

STH 164

= INDIVIDUAL TREE, REMOVAL

VCL = 65.00
K = 59.82

STA 80+00.00
ELEV 1157.92

STA 80+28.00
ELEV 1157.35

VPC STA 80+77.50
VPC EL 1157.11

VPI STA 81+10.00
VPI EL 1156.94

VPT STA 81+42.50
VPT EL 1156.43

STA 81+54.25
ELEV 1156.24

-2.00%

0.50%

-1.59%

STA 80+25
REMOVE 1-18" CMP

FINISHED PROFILE

EXISTING PROFILE

EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

1157.67
1157.92

1157.11
1156.95

1155.43

1153.93

1153.28

1175 1170 1165 1160 1155 1150 1145 1140

75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - CHEROKEE TRAIL	SHEET 562	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETS\PLAN0501134_PP_CHEROKEE.DWG PLOT DATE = 1/30/2018 8:53 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP10	93+52, 46' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1151.83

N

HANSEN

HEPPE

ANDERSON

STA 186+60.52 STH 164 =
STA 90+00.00 ST GABRIEL LANE

STH 164

BP: 90+00.00

EP: 98+00.00

ST GABRIEL LANE

CP10

CAUTION

SLOPE INTERCEPT

REMOVE SURFACE DRAIN

REMOVE CURB & GUTTER

R/W

TLE

24'

12'

HMA

STA 90+51
REMOVE 1-18" CMP

WETLAND
BOUNDARY

ST GABRIEL CONGREGATION

ST GABRIEL LANE R/L

END CONSTRUCTION
STA. 93+23.00

STH 164 R/L

X = INDIVIDUAL TREE, REMOVAL

VCL = 160.00

K = 50.69

STA 90+00.00
ELEV 1140.17

STA 90+28.00
ELEV 1139.72
VPC STA 90+30.00
VPC EL 1139.74

VPT STA 91+90.00
VPT EL 1143.86

STA 93+23.00
ELEV 1149.39

VPI STA 91+10.00
VPI EL 1140.54

-1.98%

1.00%

4.16%

EXISTING PROFILE

FINISHED PROFILE

STA 90+03
REMOVE 18" CPRC

EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																	
1160	1155	1150	1145	1140	1135	1130	1125																									
					1141.72	1140.17	1141.01	1139.98	1141.13	1140.92	1142.70	1142.36	1144.63	1144.28	1146.58	1146.36	1148.51	1148.44	1150.55	1152.66	1154.17	1155.28	1155.90	1156.64	1157.13	1157.73	1158.57	1159.13					

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - ST GABRIEL LANE	SHEET 563	E

ROBINSON

SLOPE INTERCEPT

STA 198+93.65 STA 164
STA 110+00.00 HUBERTUS ROAD

STH 164

HUBERTUS ROAD

STH 164 R/L

KALIGARRI HOLDING LLC

KALIGARRI HOLDING LLC

UWM BOARD OF REGENTS

N

CAUTION

REMOVE FENCE

STA 113+55
REMOVE 1-18" CMCP

HUBERTUS ROAD R/L

PI: 115+49.67

PI: 110+00.00

PI: 198+93.65

STA 110+37
REMOVE 1-30" CMP

STA 110+68
2-24"X38" CPRCHE REQD

STA 104+36
REMOVE 1-18" CMCP

ALEXANDER

WEBER

R-66-40

INSTALL STORM SEWER PRIOR TO RETAINING WALL CONSTRUCTION

SEPTIC SYSTEM TO BE ABANDONED BY OTHERS

DO NOT DISTURB PINE TREES WEST OF HOUSE

SLOPE INTERCEPT

STA 114+35
REMOVE 1-18" CMCP
HANSEN

CP11

END CONSTRUCTION
STA. 118+00.00

= INDIVIDUAL TREE, REMOVAL

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP11	111+82, 221' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1136.12
CP34	119+15, 70' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1142.73
CP40	110+00, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1102.49

VCL = 320.00
K = 51.04

BEGIN CONSTRUCTION
STA. 103+28.42

STA 103+28.42
ELEV 1061.71

VPC STA 103+30.00
VPC EL 1061.74

VPT STA 106+50.00
VPT EL 1078.40

8.34%

2.07%

FINISHED PROFILE

EXISTING PROFILE

VPI STA 104+90.00
VPI EL 1065.05

VCL = 160.00
K = 25.22

VPI STA 108+91.41
VPI EL 1098.53

VPC STA 108+11.41
VPC EL 1091.86

VPT STA 109+71.41
VPT EL 1100.13

VPT STA 110+00.00
ELEV 1100.70

VPC STA 110+28.50
VPC EL 1100.14

STA 110+28.00
ELEV 1100.14

2.00%

1.98%

1.00%

2-24"X30" CPRCHE

STA 110+37
REMOVE 1-30" CMP

VPI STA 111+55.00
VPI EL 1101.41

VCL = 253.00
K = 37.43

VPT STA 112+81.50
VPT EL 1111.22

EXISTING PROFILE

FINISHED PROFILE

VCL = 375.00
K = 77.76

VPC STA 113+22.50
VPC EL 1114.41

VPI STA 115+10.00
VPI EL 1128.96

VPT STA 116+97.50
VPT EL 1134.46

2.94%

7.76%

STA 118+00.00
ELEV 1137.47

EXISTING PROFILE

FINISHED PROFILE

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118
1061.28	1063.71 / 1063.67	1067.94 / 1068.09	1074.60 / 1074.47	1082.52 / 1082.57	1090.86 / 1090.91	1098.61 / 1097.69	1102.79 / 1100.70	1104.56 / 1101.54	1110.37 / 1105.79	1117.23 / 1112.66	1123.58 / 1120.03	1128.00 / 1126.15	1131.72 / 1130.99	1135.37 / 1134.54	1137.56 / 1137.47

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - HUBERTUS ROAD	SHEET 564	E

BENCHMARKS			
NO.	STATION	DESCRIPTION	ELEV.
CP13	229+28, 45' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1077.64

LOCHVIEW ROAD
PT:
PC: 135+71.33
PT: 136+69.46
PT: 136+22.99
136
138
R/W
TLE
STA 232+40.25 STH 164
STA 130+00.00 GOLDEN DRIVE
OLYNICK
STH 164
WETLAND BOUNDARY
HAM
X = INDIVIDUAL TREE, REMOVAL
BP: 130+00.00
EP: 140+00.00
MGFM9&1&1 LLC
SLOPE INTERCEPT
CMEYLA
WETLAND BOUNDARY
CAUTION
REMOVE AND SALVAGE BRICK PAVERS
MGFM9&1&1 LLC
STA 131+64
REMOVE 1-15" CMCP
GOLDEN DRIVE
STA 132+49
REMOVE 1-15" CMCP
14'
130
132
134
136
138
HMA
REMOVE LIGHT POLE
SLOPE INTERCEPT
STA 132+13
REMOVE 1-15" CMCP
STA 132+81
REMOVE 1-15" CMCP
GOLDEN DRIVE R/L
COOK
HOLMES
BRAATZ
KEARNS
STA 130+28
REMOVE 1-18" CMCP
STH 164 R/L
END CONSTRUCTION
STA. 133+00.00
GRAFF
DUNNE
EP: 138+00.00
N

STH 164
VCL = 200.00
K = 38.98
STA 130+00.00
ELEV 1080.75
VPC STA 130+29.14
VPC EL 1080.21
STA 130+28.00
ELEV 1080.19
VPI STA 131+29.14
VPI EL 1082.21
VPI STA 132+29.14
VPI EL 1089.34
STA 133+00.00
ELEV 1094.39
2.00%
-2.00%
7.13%
FINISHED PROFILE
EXISTING PROFILE
STA 130+28
REMOVE 1-18" CMP
EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION
1080.50
1080.75
1086.10
1082.27
1089.67
1087.37
1094.25
1094.39
1101.89
1110.87
1119.45
1125.19
1127.05
1105
1100
1095
1090
1085
1080
1075
1070
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - GOLDEN DRIVE	SHEET 565	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\050136_PP GOLDEN.DWG PLOT DATE : 1/29/2018 12:02 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ----------

FRINGS

LEINWANDER TRUST

COX TRUST & MARKS

MGFM9&1&1 LLC

LOCHVIEW ROAD R/L

PC: 132+32.98

PT: 135+17.31

PC: 135+71.77

PT: 136+69.46

BP: 131+00.00

CAUTION

SLOPE INTERCEPT

LOCHVIEW ROAD

STH 164

STA 233+78.37 STH 164
STA 140+00.00 LOCH VIEW ROAD

CURVE LOCHVIEW 1

CURVE LOCHVIEW 2

ZIER

KASTELIC

OLYNICK

CMEYLA

WETLAND BOUNDARY

GOLDEN DRIVE

STH 164 R/L

PI: 136+22.99

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP13	139+54, 451' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1077.64

CURVE LOCHVIEW 1
PI STA 134+36.39
R = 213.00'
SE = NC
DESIGN SPEED = 30 MPH

CURVE LOCHVIEW 2
PI STA 136+13.87
R = 114.62'
SE = NC
DESIGN SPEED = 30 MPH

X = INDIVIDUAL TREE, REMOVAL

BEGIN CONSTRUCTION
STA. 138+52.00

FINISHED PROFILE

STA 139+72.00
ELEV 1079.34

STA 140+00.00
ELEV 1079.90

STA 138+52.00
ELEV 1070.04

7.75%

EXISTING PROFILE

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

1032.36 1038.72 1044.84 1050.97 1054.58 1057.40 1060.66 1066.36 1073.87 1073.76

131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - LOCHVIEW ROAD	SHEET 566	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETS\PLAN\050137_PP_LOCH_VIEW.DWG PLOT DATE = 1/30/2018 8:54 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =

STELDT

STELDT

GORANSON

TLE

R/W

RELOCATION

SLOPE INTERCEPT

BP: 145+25.18

REGETS

CURVE ADA'HI 1
PI STA 147+02.95
R = 133.00'
SE = NC
DESIGN SPEED = 30 MPH

R/W

PC: 146+01.08

HMA

HRYCIUK

PT: 148+10.11

ADA 'HI COURT

EP: 150+00.00

STA 242+95.90 STH 164 =
STA 150+00.00 ADA 'HI COURT

CP14

MGFM BARNEY LLC

NOTE: SUBGRADE IMPROVEMENT REQUIRED ENTIRE LENGTH OF ADA 'HI COURT RECONSTRUCTION

CURVE ADA'HI 1

PI: 147+34.20

SLOPE INTERCEPT

ADA'HI COURT R/L

STH 164 R/L

BEGIN CONSTRUCTION
STA. 147+55.44

JANES

REMOVE CURB & GUTTER

RACH

STH 164

= INDIVIDUAL TREE, REMOVAL

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP14	242+97, 71' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1092.56

N

VCL = 110.00
K = 33.56

STH 164

EXISTING PROFILE

STA 147+55.44
ELEV 1078.58
VPC STA 147+72.00
VPC ELEV 1079.96
VPI STA 148+27.00
VPI ELEV 1081.21
148+48.44
1080.83
VPT STA 148+82.00
VPT EL 1080.66
STA 149+72.00
ELEV 1079.76
STA 150+00.00
ELEV 1080.32
-2.00%
-1.00%

FINISHED PROFILE

EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

1079.65	1079.08	1078.37	1078.75	1079.46	1081.00	1080.48	1082.70	1080.83	1085.41	1080.48	1087.11	1079.98	1080.32

143 144 145 146 147 148 149 150 151 152

1100 1095 1090 1085 1080 1075 1070 1065

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - ADA 'HI COURT	SHEET 567	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\050138_PP ADA HI.DWG PLOT DATE : 1/29/2018 12:03 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ----------

WISDOT/CADDS SHEET 40

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP15	171+76, 113' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1038.11
CP42	170+00, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1045.68

SEE ALIGNMENT PLAN FOR CURVE INFORMATION OF THE FOLLOWING ALIGNMENTS: 'EA' LINE, 'EB' LINE, 'NA' LINE, 'NB' LINE, 'SA' LINE, 'SB' LINE, 'WA' LINE, 'WB' LINE

N

CAUTION

MGFM 40 LLC

RELOCATED ACCESS

SLOPE INTERCEPT

TLE

STH 167 R/L

R/W

12' 5' 3'

'WA' LINE

158'WA' 158 158'EA'

160'WA' 160 160'EA'

162'WA' 162 162'EA'

164'WA' 164 164'EA'

166'WA' 166'EA' 166

168'WA' 168'EA' 168

'EA' LINE

HMA

REMOVE TIMBER WALL

8" 12"

TLE

SLOPE INTERCEPT

STA 160+81
REMOVE 1-18" CMCP

STA 166+55
REMOVE 1-18" CMCP

DO NOT DISTURB TREES WITHIN TLE

SIGN TO BE REMOVED BY OTHERS

STA 251+75.97 STH 164 =
STA 170+00 STH 167

PI: 170+00.00

STH 167

STH 164

CP42

REMOVE ACCESS

REMOVE CURB & GUTTER

RELOCATE ACCESS

FRIESS LAKE SCHOOL

CP15

R/W

'WB' LINE

172'WB' 172'EB' 172

'EB' LINE

REMOVE ACCESS

TLE

REMOVE BOLLARDS AND PRIVATE LIGHT POLE

REMOVE CURB & GUTTER

REMOVE ACCESS

STH 164 R/L

STA 173+00

MATCHLINE

FANCHER TRUST

LEICHTLE

STELDT

MARKS

KAISER

WISDOT

BILDA REGAN LLC

MGFM BARNEY LLC

NOTE: SUBGRADE IMPROVEMENT REQUIRED ENTIRE LENGTH OF STH 167 RECONSTRUCTION

X = INDIVIDUAL TREE, REMOVAL

BEGIN CONSTRUCTION
STA. 158+75.00

5

5

VCL = 790.00
K = 168.52

VCL = 185.00
K = 92.50

VCL = 300.00
K = 177.64

STA 158+75.00
ELEV 1033.45
VPC STA 158+79.74
VPC EL 1033.62

3.69%

EXISTING PROFILE ALONG 'EA' LINE

VPI STA 162+74.74
VPI EL 1048.19

165+01.22
1045.08

VPT STA 166+69.74
VPT EL 1044.24

VPC STA 167+19.00
VPC EL 1043.75

-1.00%

168+11.50
1043.28

VPI STA 168+11.50
VPI EL 1042.82

1.00%

VPT STA 169+04.00
VPT EL 1043.75

STA 169+04.30
ELEV 1043.75

FINISHED PROFILE ALONG 'EA' LINE

EXISTING PROFILE ELEVATION ALONG 'EA' LINE

FINISHED PROFILE ELEVATION ALONG 'EA' LINE

STA = 170+50.88
ELEV = 1044.130
VPC STA 170+92.96
VPC EL 1044.54

EXISTING PROFILE ALONG 'EB' LINE

0.98%

VPI STA 172+42.96
VPI EL 1046.015

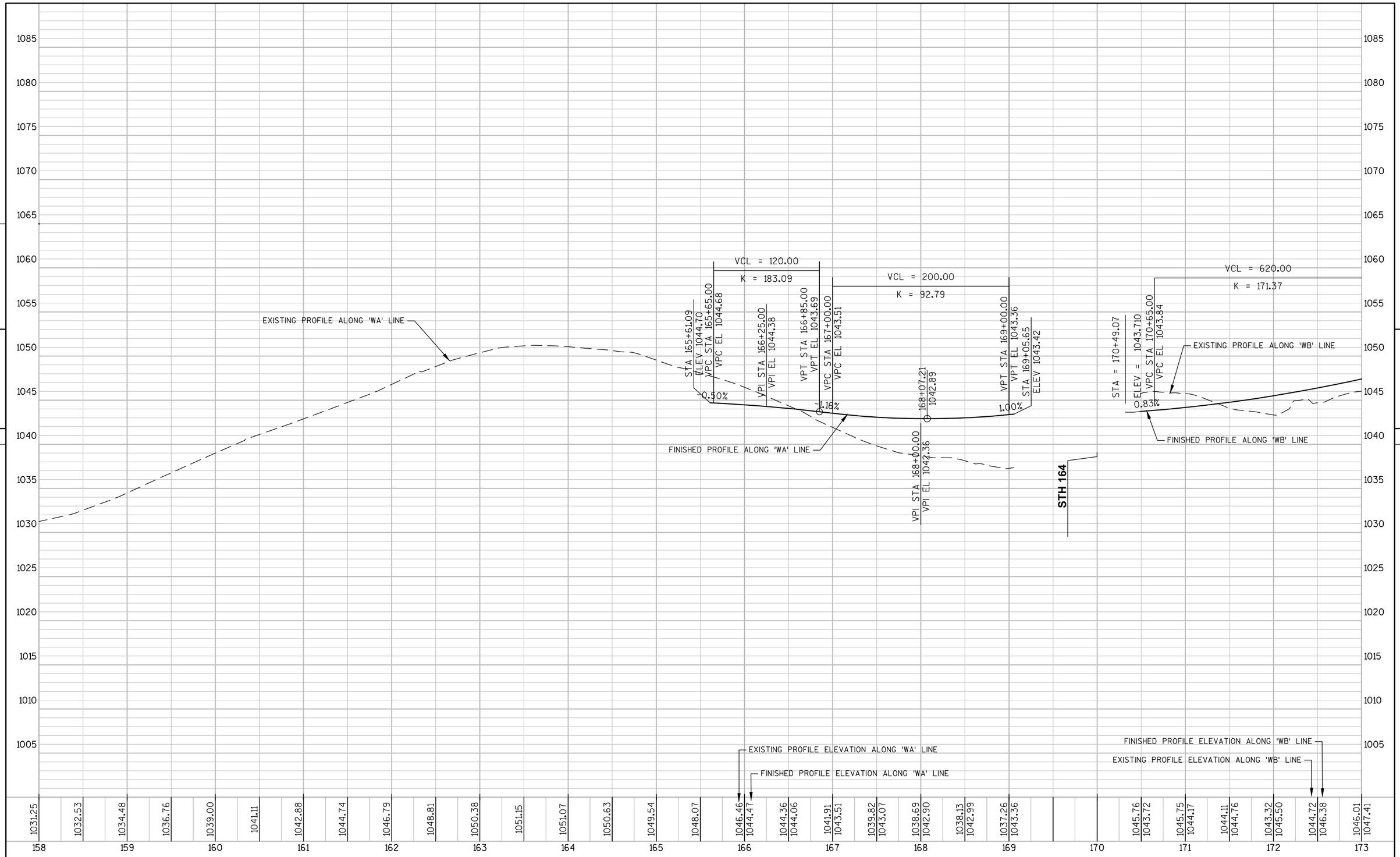
FINISHED PROFILE ALONG 'EB' LINE

FINISHED PROFILE ELEVATION ALONG 'EB' LINE

EXISTING PROFILE ELEVATION ALONG 'EB' LINE

158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173
1031.25	1032.53	1034.48 / 1034.36	1036.76 / 1036.07	1039.00 / 1037.63	1041.11 / 1039.04	1042.88 / 1040.31	1044.74 / 1041.42	1046.79 / 1042.39	1048.81 / 1043.21	1050.42 / 1043.88	1051.29 / 1044.40	1051.20 / 1044.78	1050.80 / 1045.00	1050.06 / 1045.08	1049.28 / 1045.01	1048.43 / 1044.79	1047.50 / 1044.43	1046.32 / 1043.94	1044.72 / 1043.49	1042.89 / 1043.29	1041.79 / 1043.36	1044.34 / 1043.71		1046.43 / 1044.61	1046.63 / 1045.19	1046.99 / 1045.92	1047.70 / 1046.78	1048.70 / 1047.78

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - STH 167	SHEET 568	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - STH 167	SHEET 569	E

FRIESS LAKE SCHOOL

ATHLETIC FIELD

DO NOT DISTURB SIGN

TLE

REMOVE CURB & GUTTER

SLOPE INTERCEPT

SEE ALIGNMENT PLAN FOR CURVE INFORMATION
OF THE FOLLOWING ALIGNMENTS:
'EB' LINE, 'WB' LINE

N

STA 173+00

R/W

'WB' LINE

174'WB'

174'EB'

174

STH 167 R/L

176'WB'

176'EB'

176

'EB' LINE

178'WB'

178

178'EB'

180'WB'

180

180'EB'

STH 167

182'WB'

182

182'EB'

EP: 184+00.00

184'WB'

184

184'EB'

HMA

CABC

ASPH

S.T.H. "167"

ASPH

CABC

MATCHLINE

TLE

RELOCATED ACCESS

R/W

TLE

STA 177+46
REMOVE 1-24" CMCP

SLOPE INTERCEPT

END CONSTRUCTION
STA. 181+25

MGFM BARNEY LLC

NOTE: SUBGRADE IMPROVEMENT REQUIRED ENTIRE
LENGTH OF STH 167 RECONSTRUCTION

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
CP15	171+76, 113' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1038.11

VCL = 620.00 WB

K = 171.37 WB

VPT STA 176+85.00 WB
VPT EL 1060.21 WB

VPI STA 173+75.00 WB
VPI EL 1046.42 WB

EXISTING PROFILE ALONG 'WB' LINE

FINISHED PROFILE ALONG 'WB' LINE

FINISHED PROFILE ALONG 'WB' LINE

4.45% WB

STA 181+25.00 WB
ELEV 1079.79 WB

EXISTING PROFILE ALONG 'WB' LINE

EXISTING PROFILE ELEVATION ALONG 'WB' LINE

FINISHED WB PROFILE ELEVATION ALONG 'WB' LINE

1075 1070 1065 1060 1055 1050 1045

1090 1085 1080 1075 1070 1065 1060

1046.01 1047.41 1047.46 1048.58 1048.61 1049.90 1050.59 1051.37 1052.78 1052.98 1055.33 1054.74 1057.19 1056.64 1058.53 1058.69 1060.56 1060.88 1062.80 1063.11 1064.67 1065.33 1066.63 1067.55 1068.66 1069.78 1070.77 1072.00 1073.23 1074.23 1076.03 1076.45 1078.68 1078.68 1080.79 1082.58 1084.23 1085.87 1087.50

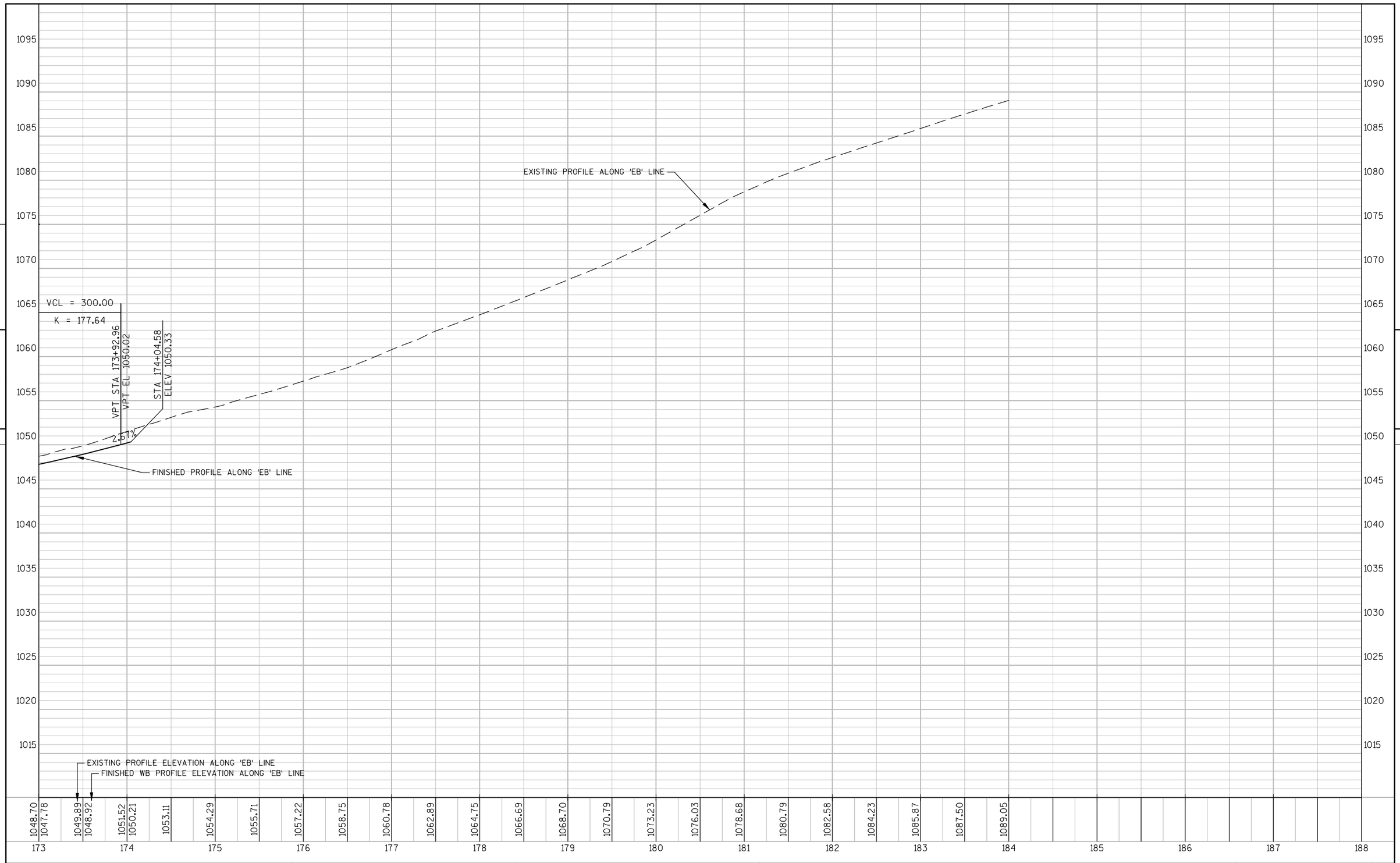
173 174 175 176 177 177 178 179 180 181 182 183 184 185 186 187 188

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - STH 167	SHEET 570	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\050139_RR_ZHOLY_HTL_SHEET_2_OF_2L.DWG PLOT DATE = 1/31/2018 5:43 PM PLOT BY = BLACKWOOD, JIM PLOT NAME =

5

5



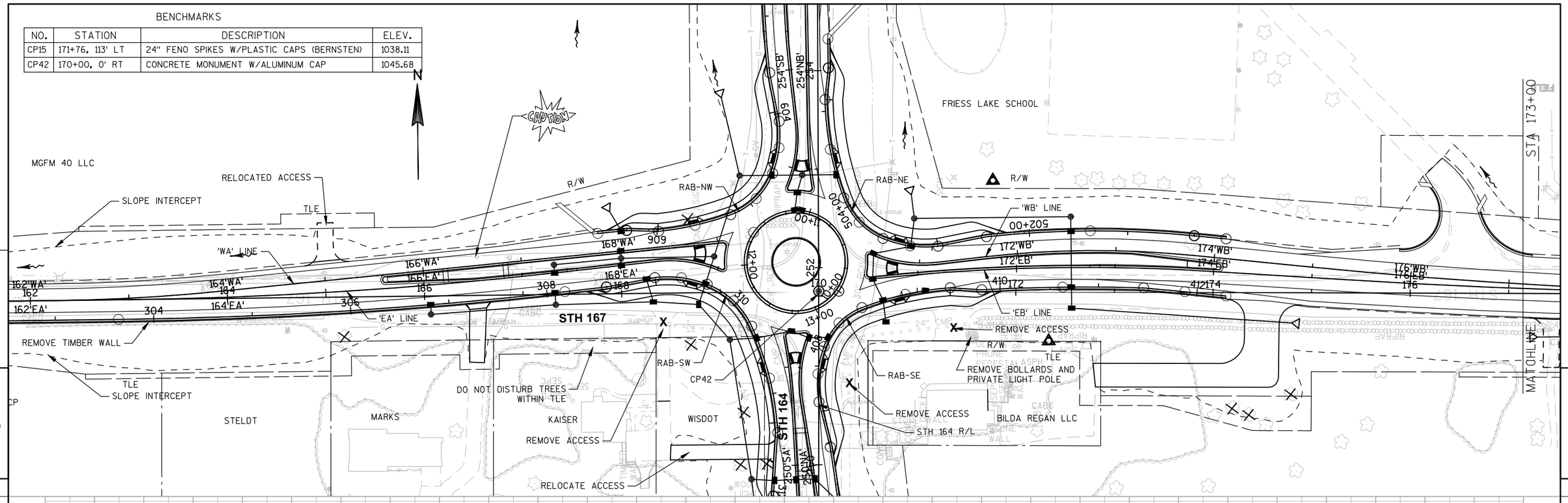
5

5

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - STH 167	SHEET 571	E

BENCHMARKS

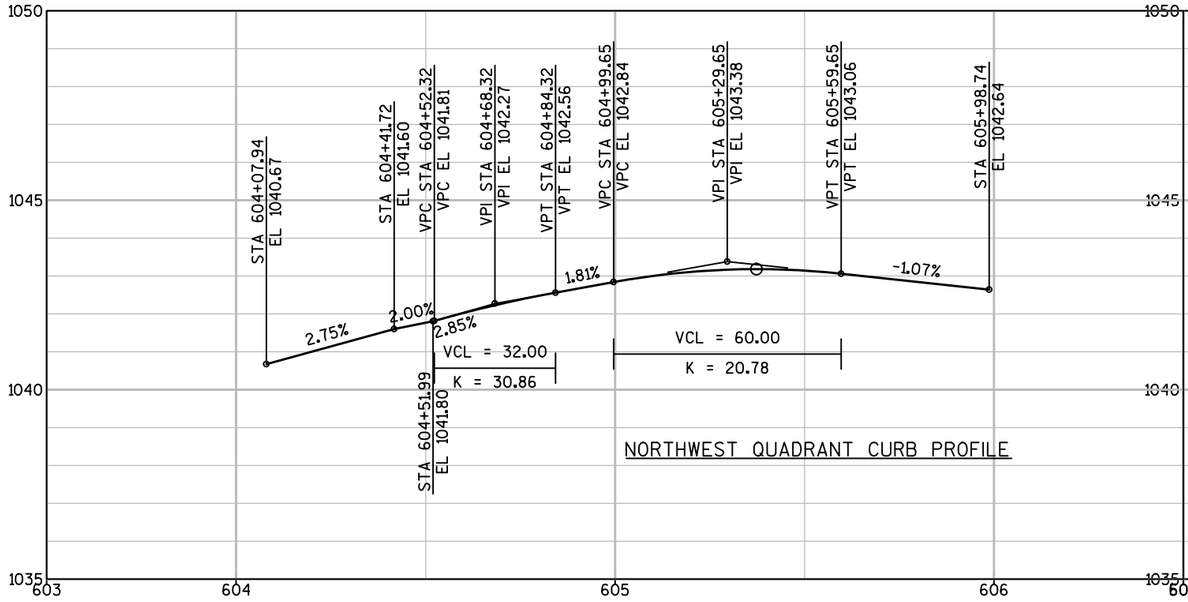
NO.	STATION	DESCRIPTION	ELEV.
CP15	171+76, 113' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1038.11
CP42	170+00, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1045.68

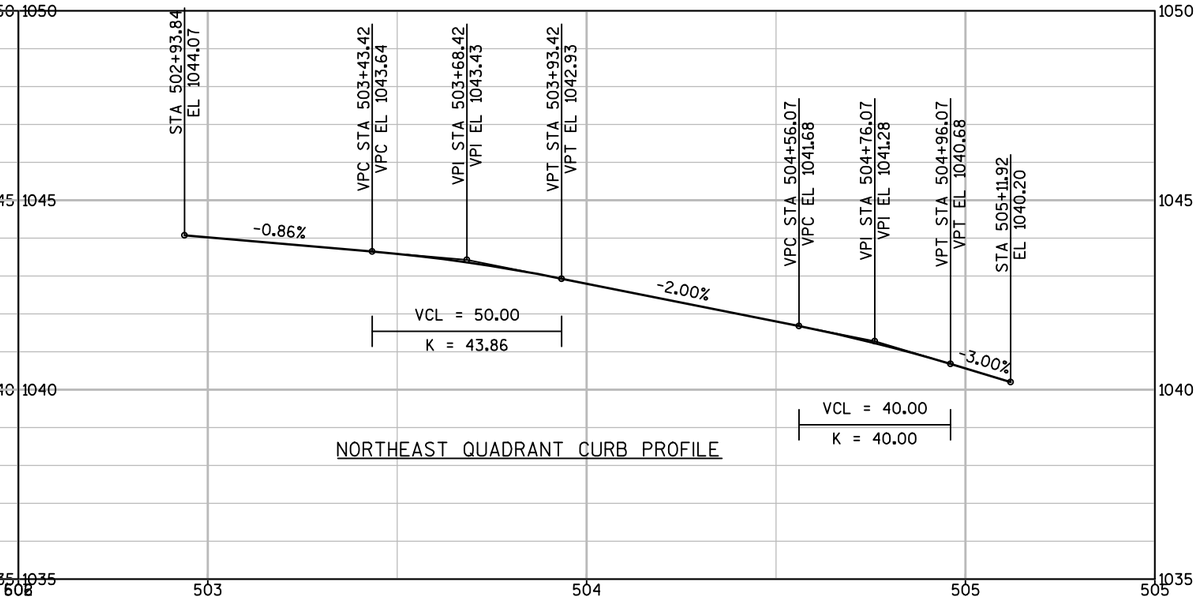


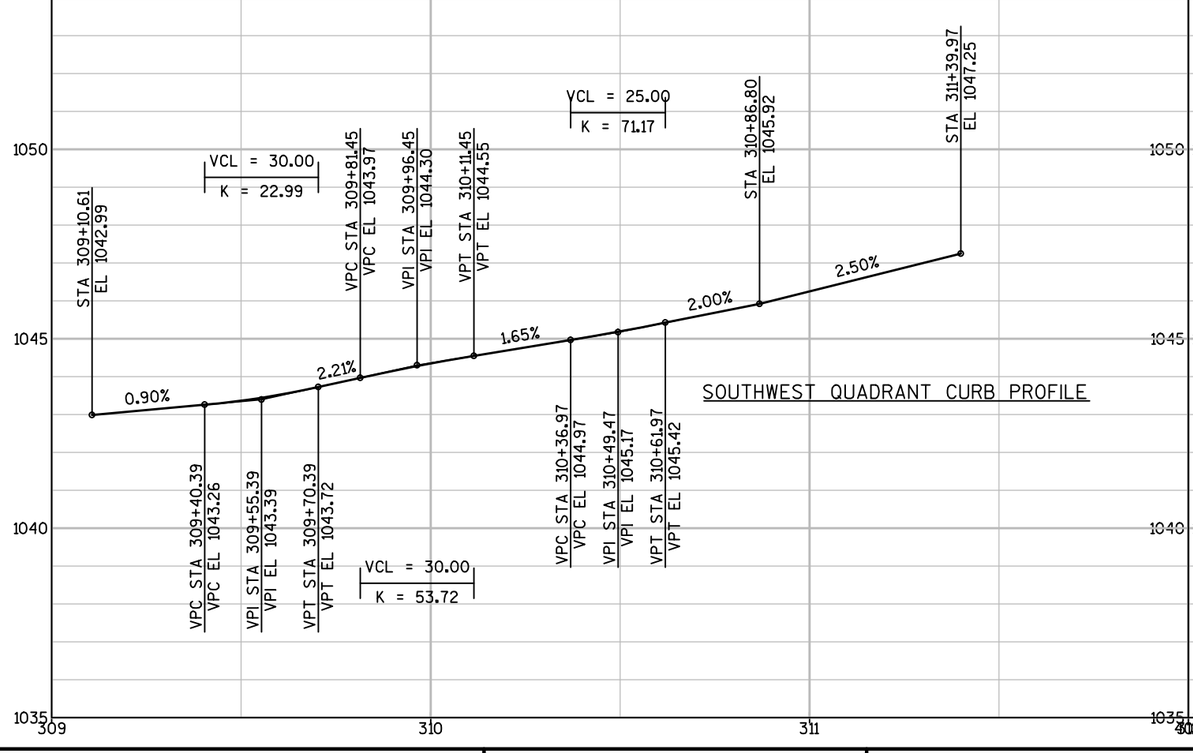
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - CIRCULATORY ROADWAY	SHEET 572	E

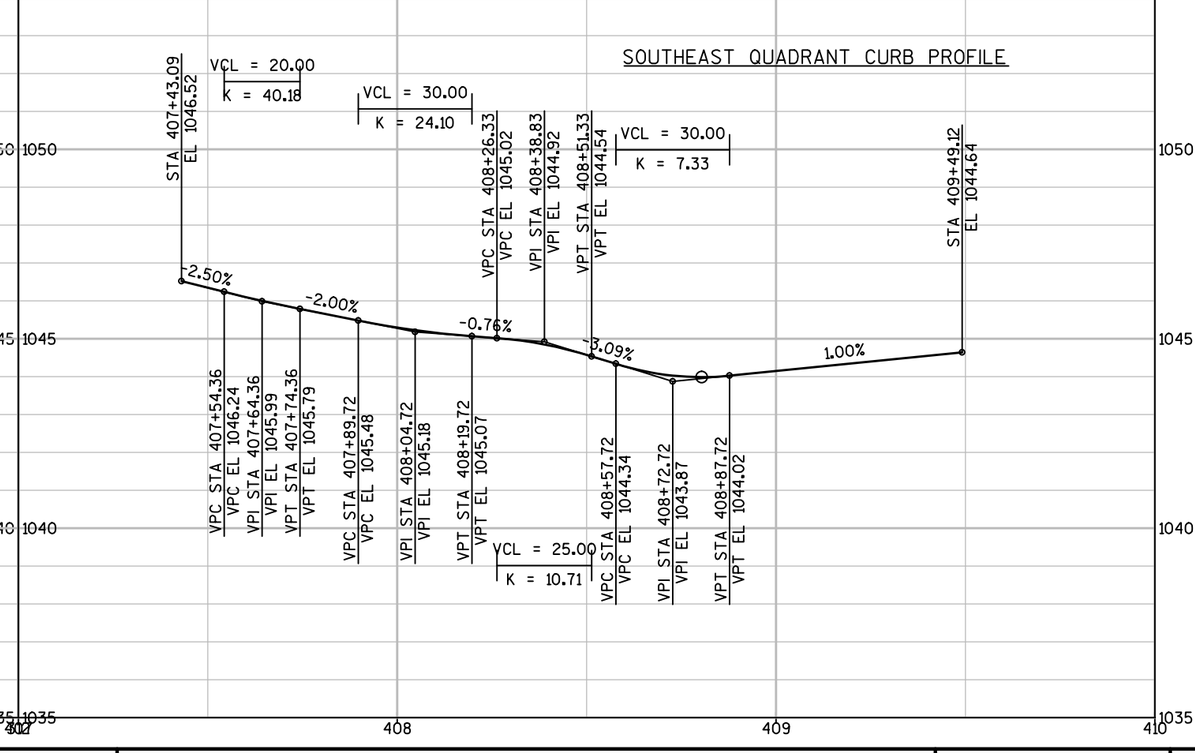
FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN0501394_PP_CENTRAL_ISLAND.DWG PLOT DATE = 1/30/2018 10:03 AM PLOT BY = BLACKWOOD, JIM PLOT NAME =

NOTE: CURB PROFILES SHOWN AT 40 SCALE FOR CLARITY









PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - ROUNDABOUT CURB PROFILES	SHEET 573 E

CURVE GREYSTONE 1
PI STA 155+77.87
R = 283.00'
SE = NC
DESIGN SPEED = 30 MPH

BUCHER

SLOPE INTERCEPT

BALAZ

STA 189+71
REMOVE 1-18" CMCP

CURVE GREYSTONE 1

PI: 185+77.87

PT: 186+96.45

CAUTION

GREYSTONE DRIVE

EP: 190+00.00

STA 189+40
1-24" CPRC REQUIRED

STA 281+75.58 STH 164 =
STA 190+00.00 GREYSTONE DRIVE

GREYSTONE DR R/L

SANDSTONE LANE

PODBIELSKI
TRUST

SLOPE INTERCEPT

STH 164

STH 164 R/L

SCHREOTER

R/W

TLE

HMA

= INDIVIDUAL TREE, REMOVAL

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
16	189+36, 763' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	980.94

BEGIN CONSTRUCTION
STA. 188+52.00

STH 164

VCL = 60.00
K = 45.38

STA 188+52.00
ELEV 1009.89

VPC STA 189+15.22
VPC EL 1010.31

VPT STA 189+75.22
VPT EL 1011.12

STA 190+00.00
ELEV 1011.61

0.68%

FINISHED PROFILE

EXISTING PROFILE

STA 184+71
1-18" CPRC REQD

VPI STA 189+45.22
VPI EL 1010.52

EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

1010.69 1011.14 1010.90 1009.98 1008.68 1008.35 1009.32 1010.36 1010.21 1011.36 1011.61

1030 1025 1020 1015 1010 1005 1000 995

182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - GREYSTONE DRIVE	SHEET 574	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\050140_PP GREYSTONE.DWG PLOT DATE : 1/29/2018 12:04 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ----------

WISDOT/CADDS SHEET 40

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
18	195+18, 92' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1028.12
44	200+00, 0' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1019.82

N

NOTE: SUBGRADE IMPROVEMENT REQUIRED ENTIRE LENGTH OF PLEASANT HILL ROAD RECONSTRUCTION

PC: 1306+79.43
SLOPE INTERCEPT
REMOVE ACCESS
SEPTIC TO BE ABANDONED BY OTHERS PRIOR TO CONSTRUCTION
STRITZEL
RELOCATION
WELL TO BE ABANDONED BY OTHERS PRIOR TO CONSTRUCTION
PI: 1304+56.98
WESTPHAL
RADERMACHER
CP18
TREE LINE TO REMAIN TRIM LOWER LIMBS
BP: 195+00.00
R/W
TLE
14'
HMA
11'
3'
CAUTION
UNDER GROUND CABLE SIGN
REMOVE ACCESS
REMOVE CURB & GUTTER
WELL TO BE ABANDONED BY OTHERS PRIOR TO CONSTRUCTION
BIKSADSKI
GARCIA
RELOCATION
SEPTIC TO BE ABANDONED BY OTHERS PRIOR TO CONSTRUCTION
WELL TO BE ABANDONED BY OTHERS PRIOR TO CONSTRUCTION
BEGIN CONSTRUCTION
STA. 197+04.18

SLOPE INTERCEPT
PI: 200+00.00
STH 164
AURORA MEDICAL CENTER
REMOVE CONCRETE STEPS
SHAWS 2012 PROPERTY LLC
WETLAND BOUNDARY
LOFY
EP: 205+00.00
PLEASANT HILL ROAD
PI: 304+56.86
PLEASANT HILL R/L
CP44
POWERS
GELLENOIN
STA 304+56.86 STH 164 = STA 200+00.00 PLEASANT HILL ROAD
STA 1304+56.22 STH 164 C/L = STA 199+71.99 PLEASANT HILL ROAD
STH 164 R/L
END CONSTRUCTION
STA. 200+39.95
X = INDIVIDUAL TREE, REMOVAL

STH 164
VC = 37.00
K = 30.53
STA 197+04.18
ELEV 1022.13
STA 199+45.17
ELEV 1019.04
STA 199+71.99
ELEV 1019.61
STA 200+01.18
ELEV 1019.05
VPC STA 200+01.50
VPC EL 1019.05
VPI STA 200+20.00
VPI EL 1018.73
VPT STA 200+38.50
VPT EL 1018.18
STA 200+40.05
ELEV 1018.14
-1.28%
FINSIHED PROFILE
2.17%
2.03%
-1.72%
-1.86%
-1.97%
-2.94%
EXISTING PROFILE
EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

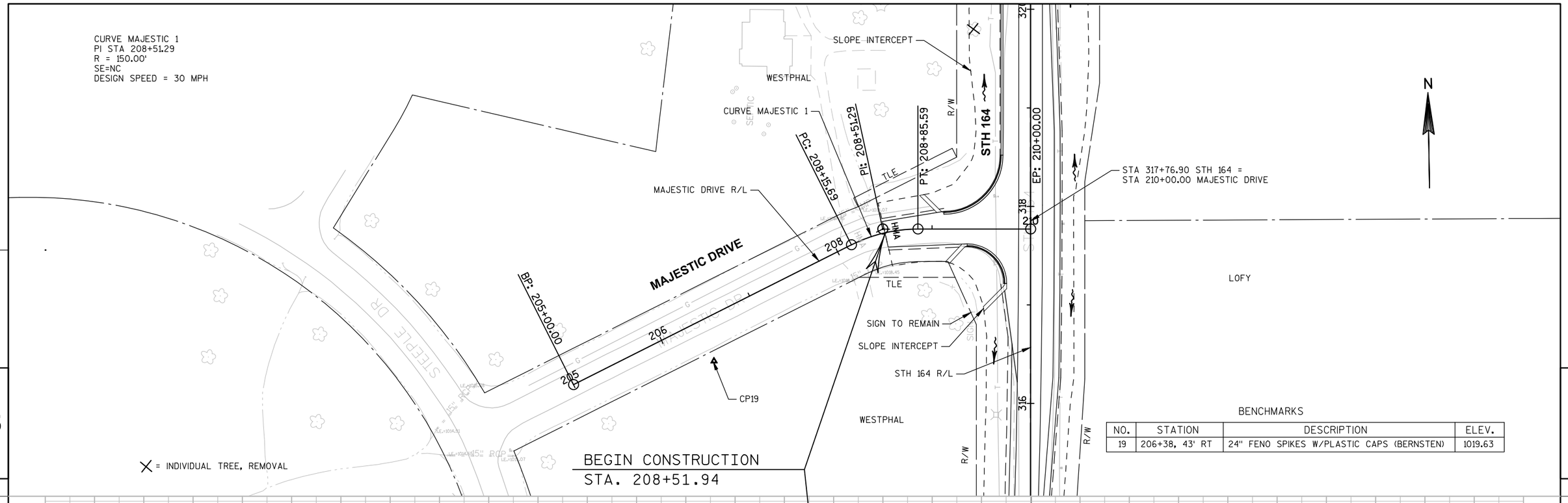
1035 1030 1025 1020 1015 1010 1005 1000

1023.46 1023.04 1022.14 1021.39 1020.90 1020.82 1019.62 1019.82 1019.07 1016.07 1013.49 1013.30 1015.38 1017.82

193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208

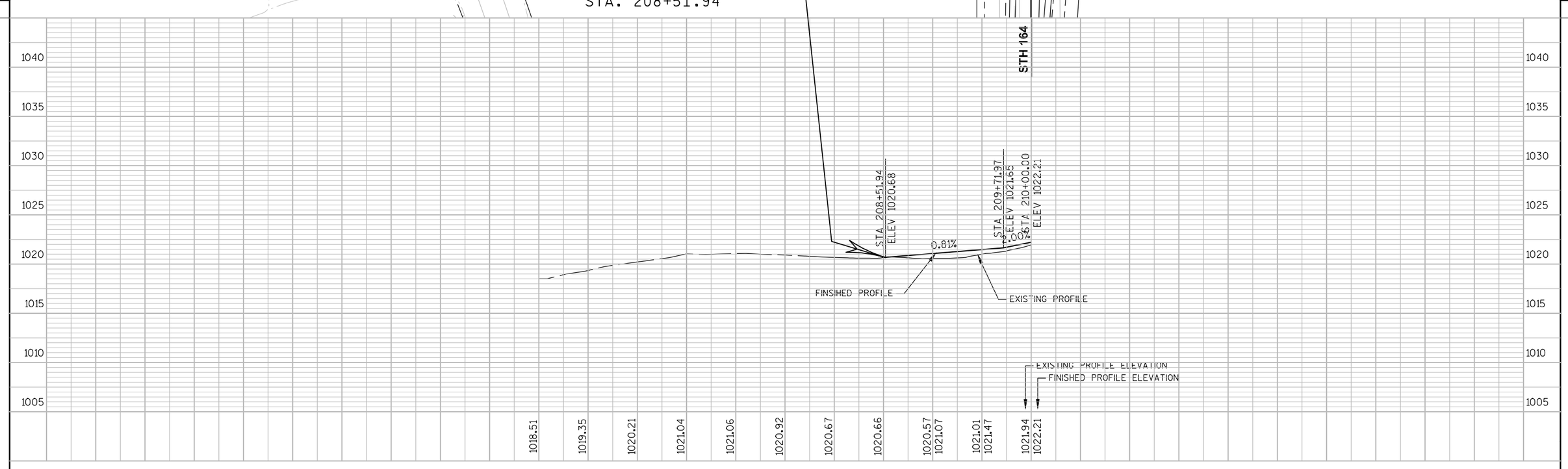
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - PLEASANT HILL ROAD	SHEET 575	E

CURVE MAJESTIC 1
PI STA 208+51.29
R = 150.00'
SE=NC
DESIGN SPEED = 30 MPH



BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
19	206+38, 43' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1019.63



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - MAJESTIC DRIVE	SHEET 576	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETS\PLAN0560142_PP_MAJESTIC_DRIVE1.DWG PLOT DATE = 1/31/2018 5:59 PM PLOT BY = BLACKWOOD, JIM PLOT NAME =

STA 219+38
1-19"X30" CPRCHE REQUIRED

PC: 362+10.40

WEIS

BECKER

SLOPE INTERCEPT

BP: 215+00.00

PI: 218+35.79

PI: 219+71.61

PI: 220+32.63

PI: 221+63.77

EP: 225+00.00

PIONEER ROAD

STH 164

R/W

TLE

HMA

RIPRAP

18" CMP

15" CMP

RUINS

PIONEER RD

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
22	219+38, 129' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1020.99
46	219+72, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1019.33
47	220+33, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1018.92

SCHMIDT

CP47

PIONEER ROAD R/L

STA 219+50
REMOVE 1-28"X20" PACS

SLOPE INTERCEPT

CP22

STA 360+42.14 STA 164 =
STA 220+00.00 PIONEER ROAD

CP46

STH 164 R/L

PT: 358+25.00

BEGIN CONSTRUCTION
STA. 218+35.78

END CONSTRUCTION
STA. 221+63.77

X = INDIVIDUAL TREE, REMOVAL

N

VCL = 50.00
K = 11.56

VCL = 50.00
K = 26.26

VPC STA 219+20.00
VPC EL 1020.05

VPT STA 219+70.00
VPT EL 1019.22

VPC STA 220+30.00
VPC EL 1019.19

VPT STA 220+80.00
VPT EL 1018.67

STA 218+35.79
ELEV 1023.27

STA 221+63.77
ELEV 1018.58

-3.82%

2.00%

-2.00%

-0.10%

0.50%

VPI STA 219+45.00
VPI EL 1019.10

STA 219+38
1-19"X30" CPRCHE

STA 219+64.22
ELEV 1019.21

STA 219+71.97
ELEV 1019.23

STA 220+00.00
ELEV 1019.79

VPI STA 220+55.00
VPI EL 1018.69

FINISHED PROFILE

EXISTING PROFILE

EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

1040 1035 1030 1025 1020 1015 1010 1005

1032.62 1031.59 1030.24 1029.08 1027.96 1026.41 1024.49 1022.59 1022.73 1020.67 1020.82 1019.35 1019.29 1019.55 1019.79 1018.74 1018.87 1018.77 1018.65 1018.36 1018.60 1018.35 1018.60 1018.89 1018.57 1017.70 1016.50

212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - PIONEER ROAD	SHEET 577	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\050143_PP PIONEER.DWG PLOT DATE : 1/29/2018 12:05 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ----------

WISDOT/CADDS SHEET 40

WAGNER

GEHRKE

HAR-MAR DEVELOPMENT CORP

HEPPE

SANG

STH 164

CTH E

BP: 223+00.00

EP: (230+00.00

PI: 413+12.62

CTH E R/L

TLE

REMOVE BURIED PIPE

R/W

WALL TO REMAIN
STA 227+25

SLOPE INTERCEPT

STA 229+11
REMOVE 1-24" CMP

WETLAND BOUNDARY

CP49

CP26

REMOVE FENCE

STA 228+04
REMOVE 1-18" CMCP

STA 413+12.62 STH 164 =
STA 230+00.00 CTH E

STH 164 R/L

BEGIN CONSTRUCTION
STA. 224+94.64

X = INDIVIDUAL TREE, REMOVAL

HMA

18" CMP

42" CMP

1'

5'

12'

HAR-MAR DEVELOPMENT CORP
BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
26	223+17, 47' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1054.58
49	230+00, 0' RT	CONCRETE MONUMENT W/ALUMINUM CAP	1015.98

STA 224+94.64
ELEV 1041.29

-6.09%

VCL = 140.00
K = 27.49

VPC STA 228+31.43
VPC EL 1020.77

VPT STA 229+71.43
VPT EL 1015.80

STA 230+00.00
ELEV 1016.36

-1.00%

2.00%

VPI STA 229+01.43
VPI EL 1016.50

STA 229+72.00
ELEV 1015.80

STA 229+11
1-24" CPRC REQD

EXISTING PROFILE

FINISHED PROFILE

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

| | | |

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEV.
27	241+92, 765' LT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1061.79

WAGNER

GEHRKE

RAYESKE

ROMANO

PACHEFSY

HAR-MAR DEVELOPMENT CORP

STA 240+29
REMOVE 1-18" CMP

SLOPE INTERCEPT

CAUTION

BOGEY LANE

CLUB DRIVE

CLUB DRIVE R/L

CURVE CLUB1

STA 418+20.25 STH 164 =
STA 240+00.00 CLUB DRIVE

STH 164 R/L

BR: 240+00.00

PC: 240+30.10

PI: 241+06.89

EP: 243+98.48

PI: 240+68.61

CURVE CLUB1
PI STA 240+68.61
R = 400.00'
SE = NC
DESIGN SPEED = 30 MPH

END CONSTRUCTION
STA. 241+43.99

X = INDIVIDUAL TREE, REMOVAL

STH 164
VCL = 30.00
K = 9.43

STA 240+00.00
ELEV 1042.29

240+28.86
1041.79

VPC STA 240+24.14
VPC EL 1041.81

VPT STA 240+54.14
VPT EL 1042.13

STA 241+44.01
ELEV 1044.54

-2.00%

2.68%

EXISTING PROFILE

FINISHED PROFILE

STA 240+29
1-18" CPRC REQD

VPI STA 240+39.14
VPI EL 1041.73

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

1042.04 1042.29 1041.62 1042.03 1043.26 1043.36 1044.72 1045.86 1047.29 1048.98 1051.38

1065 1060 1055 1050 1045 1040 1035 1030

232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247

PROJECT NO:2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PLAN & PROFILE - CLUB DRIVE	SHEET 579	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\050145_PP.DWG PLOT DATE : 1/29/2018 12:05 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ----------

WISDOT/CADDS SHEET 40

Standard Detail Drawing List

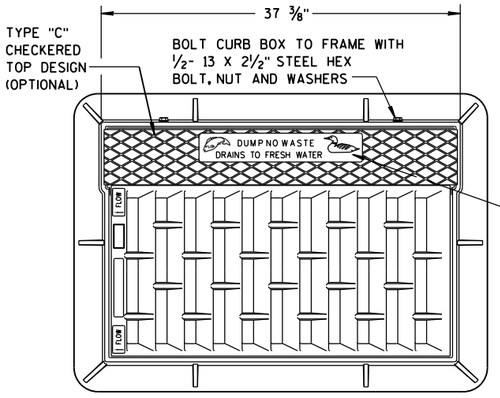
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-19A	CURB RAMPS TYPES 1 AND 1-A
08D05-19B	CURB RAMPS TYPES 2 AND 3
08D05-19C	CURB RAMPS TYPES 4A AND 4A1
08D05-19D	CURB RAMPS TYPE 4B AND 4B1
08D05-19E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-19F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-19G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D15-05A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08D15-05B	EDGEDRAIN AND BASE AGGREGATE OPEN GRADED
08D15-05C	EDGEDRAIN AND BASE AGGREGATE OPEN GRADED
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE FRAINS
08F08-02	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED CROSS DRAINS
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C14-02	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D04-02	LIGHTING CONTROL CABINET 120/240 VOLT
09E01-14D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
11B02-02	CONCRETE MEDIAN NOSE
13A10-01A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B29-01	SAFETY EDGE
14B42-05A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-05B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-05C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-05D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-03A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-03B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-03C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-04A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

6

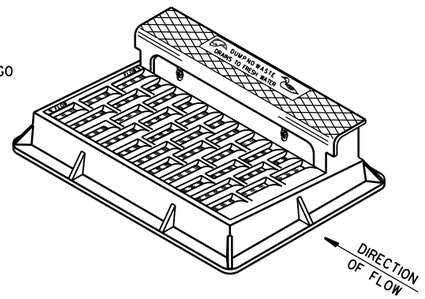
Standard Detail Drawing List

14B45-04K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B53-01A	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01B	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01C	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01D	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01E	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01F	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01G	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01H	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01I	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C08-18A	LONGITUDINAL MARKING (MAINLINE)
15C08-18B	PAVEMENT MARKING (TURN LANES)
15C11-07A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-06	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-04	MEDIAN ISLAND MARKING
15C26-03	END-OF-ROADWAY SIGNING
15C29-05A	BICYCLE LANE MARKING
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-01A	PAVEMENT MARKING (INTERSECTIONS)
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D29-05	TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD
15D32-04	TRAFFIC CONTROL, ONE LANE ROAD STOP CONDITION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-01	TRAFFIC CONTROL, DROP-OFF SIGNING
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS

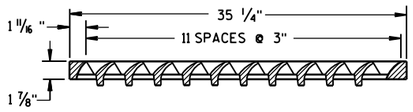
6

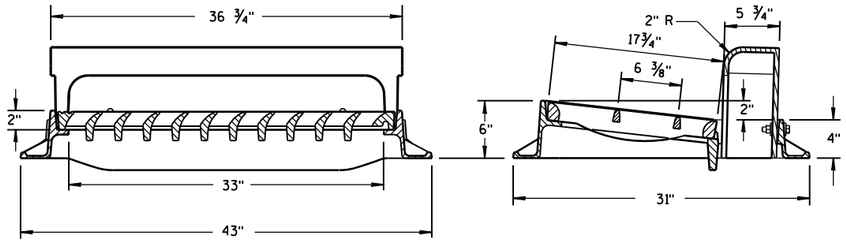


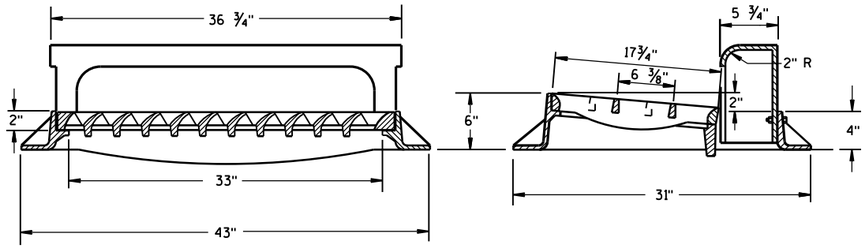
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

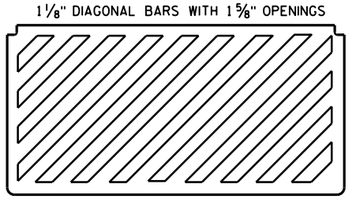






TYPE "H"

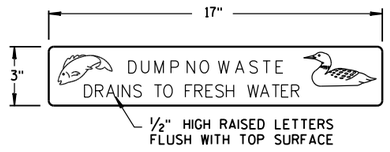
NOTE: EITHER CASTING IS ACCEPTABLE



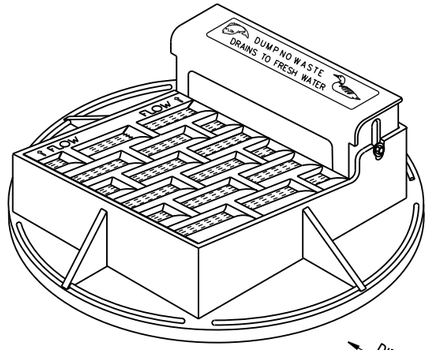
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

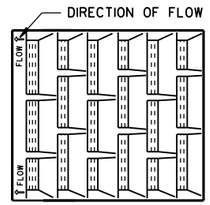
NOTE:
GRATE IS REVERSIBLE.

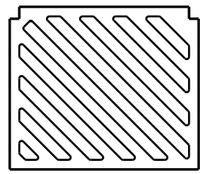
GENERAL NOTES

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

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

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

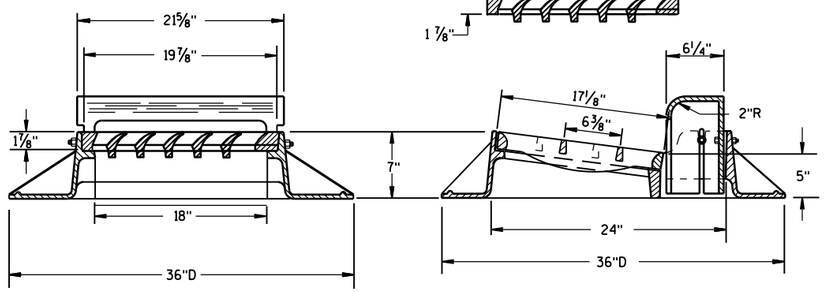




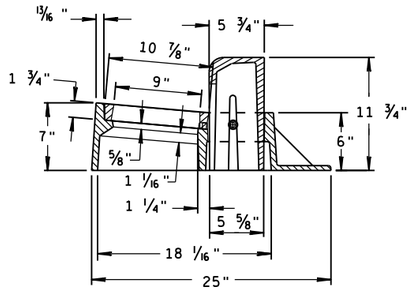
SPECIAL GRATE FOR TYPE "A" COVER

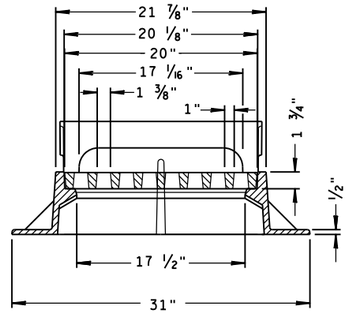
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

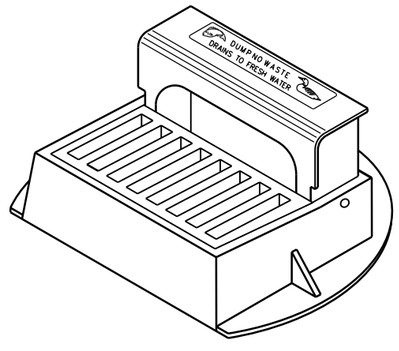


TYPE "A"





TYPE "Z"



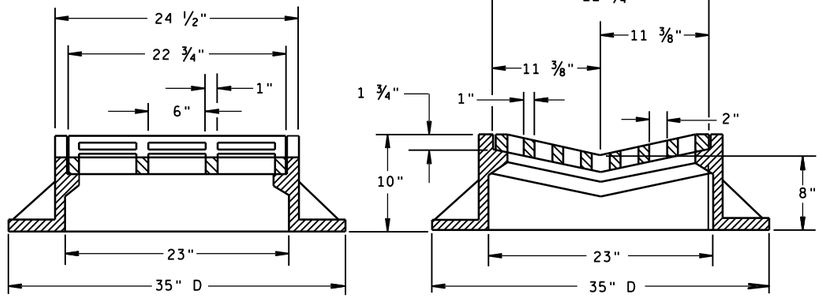
INLET COVERS
TYPE A, H, A-S, H-S & Z

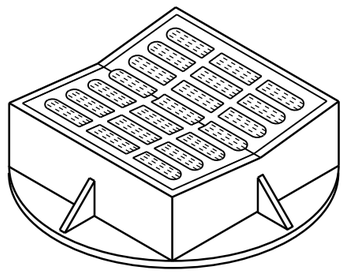
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

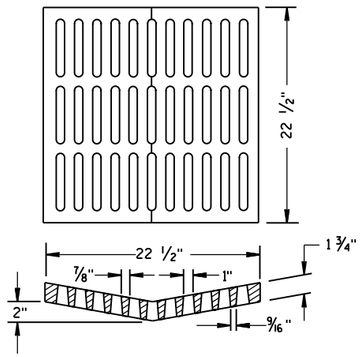
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S.D.D. 8 A 5-19a



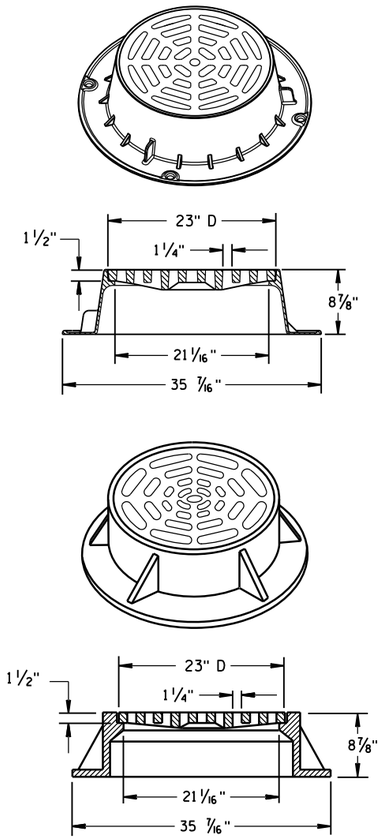


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

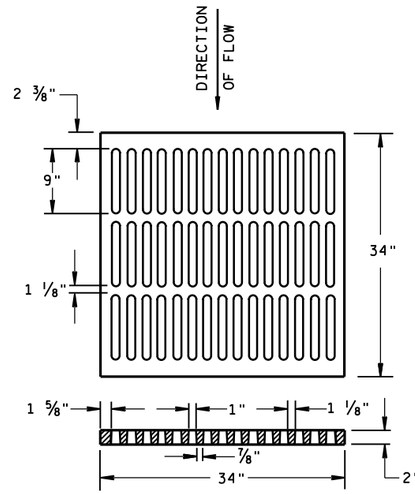
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

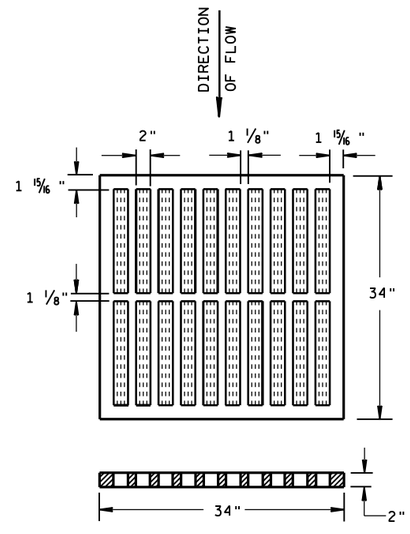
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



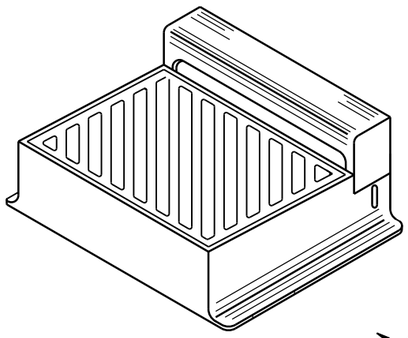
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

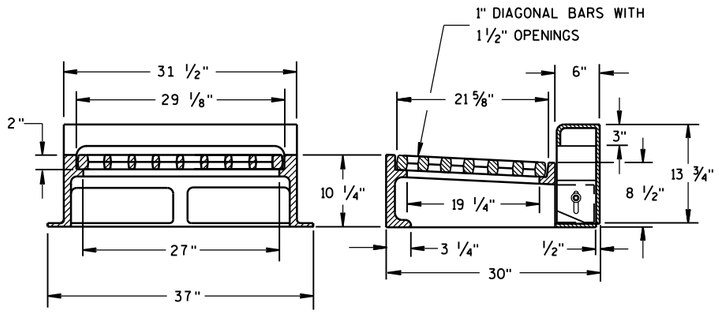


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

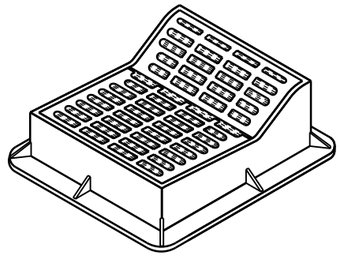
INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

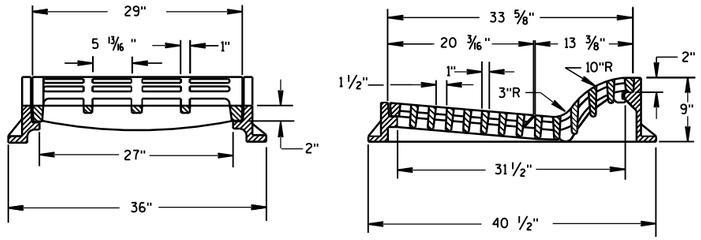
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

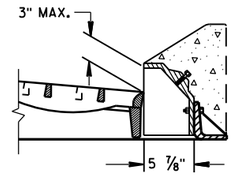
S.D.D. 8 A 5-19b





TYPE "F"

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



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

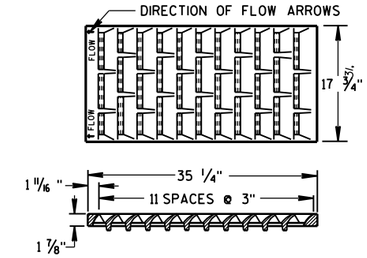
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

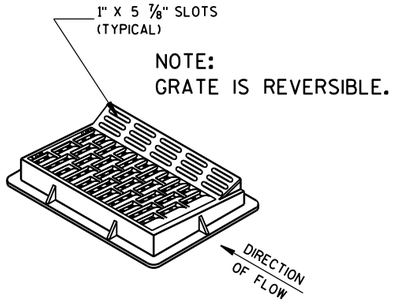
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

GENERAL NOTES

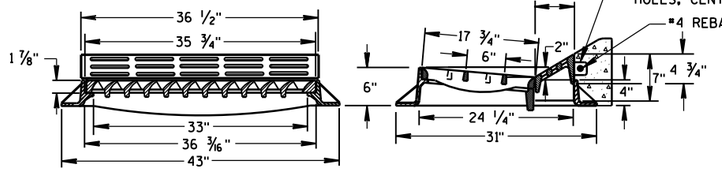
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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





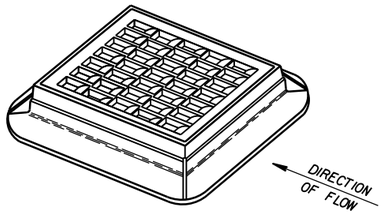
NOTE:
GRATE IS REVERSIBLE.

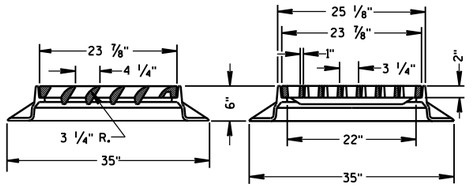


TYPE "HM"

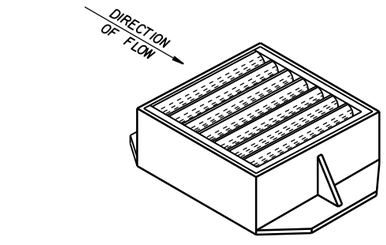
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

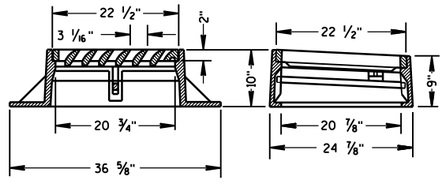
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



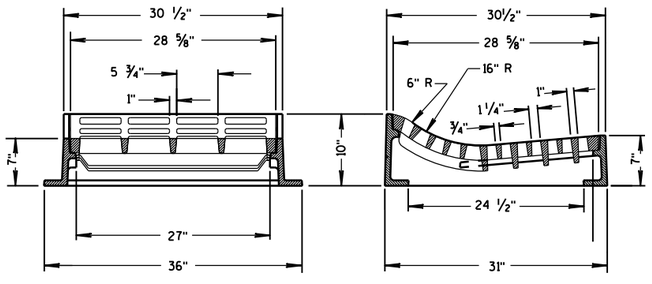


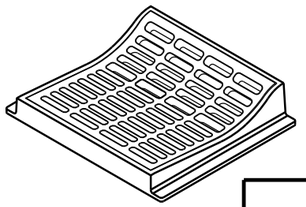
TYPE "S"





TYPE "V"





TYPE "T"

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE

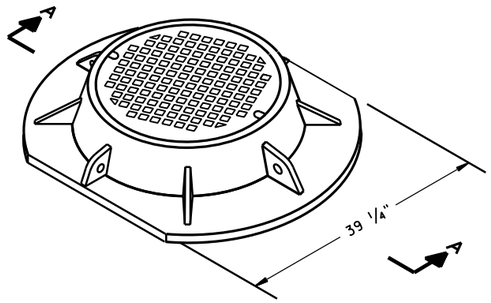
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

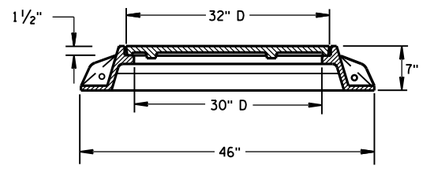
584

FHWA

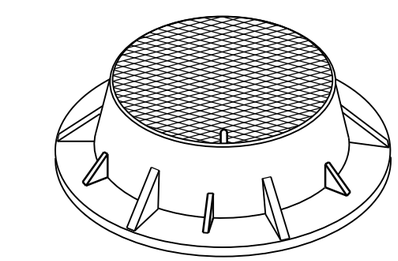
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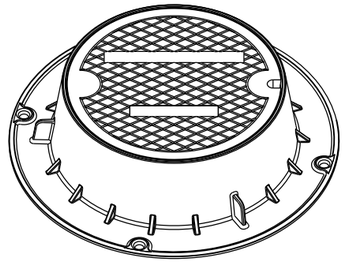
S.D.D. 8 A 5-19c

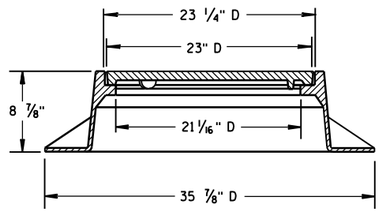


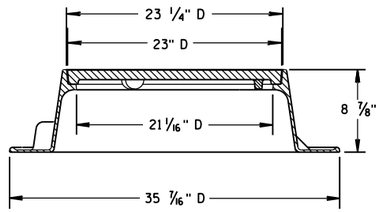


SECTION A-A
TYPE "K"









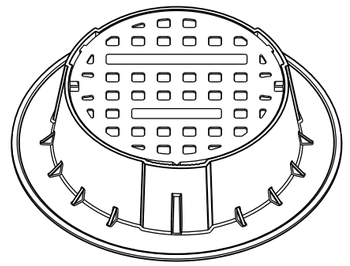
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

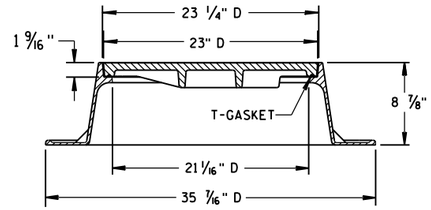
GENERAL NOTES

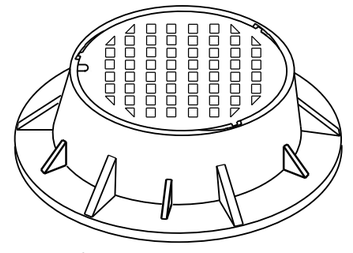
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

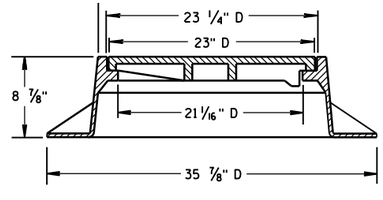
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

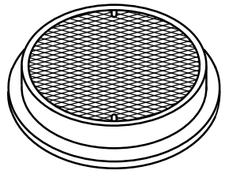


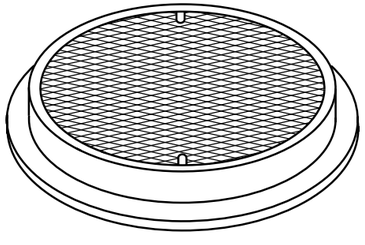


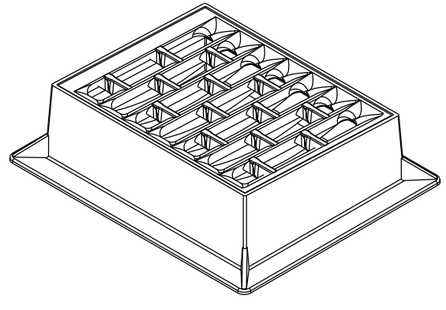


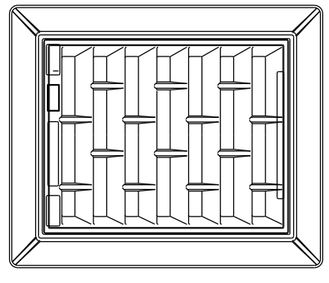


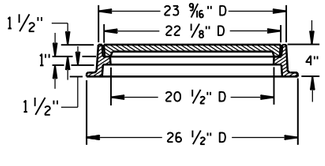
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



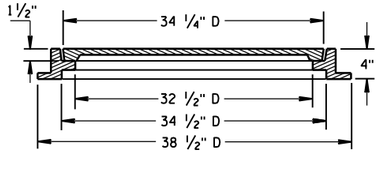




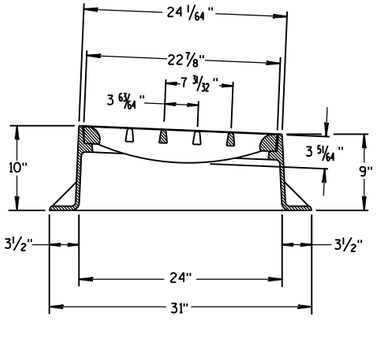


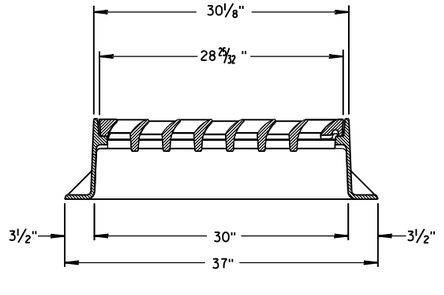


TYPE "L"



TYPE "M"





INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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11/27/2013
DATE
FHWA

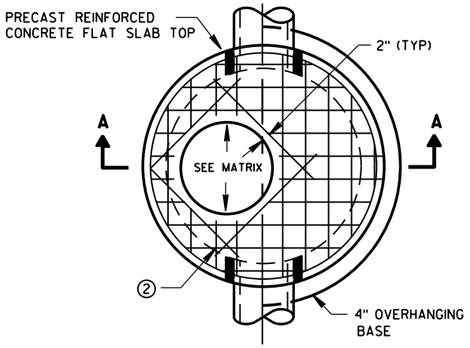
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

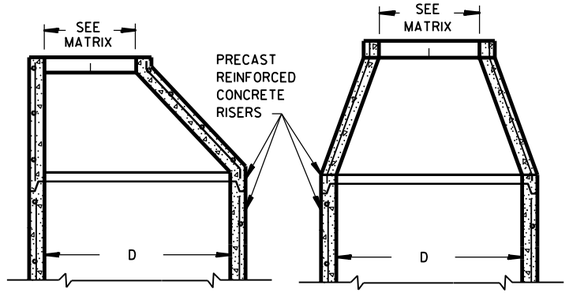
S.D.D. 8 A 5-19d

6

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

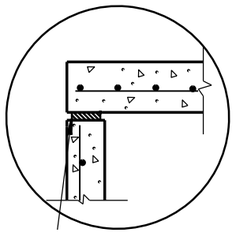


PLAN VIEW CIRCULAR OPENING

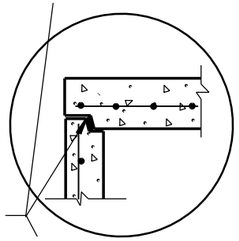


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

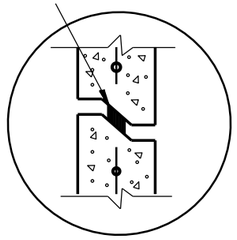


TOP WITH PLAIN END JOINT



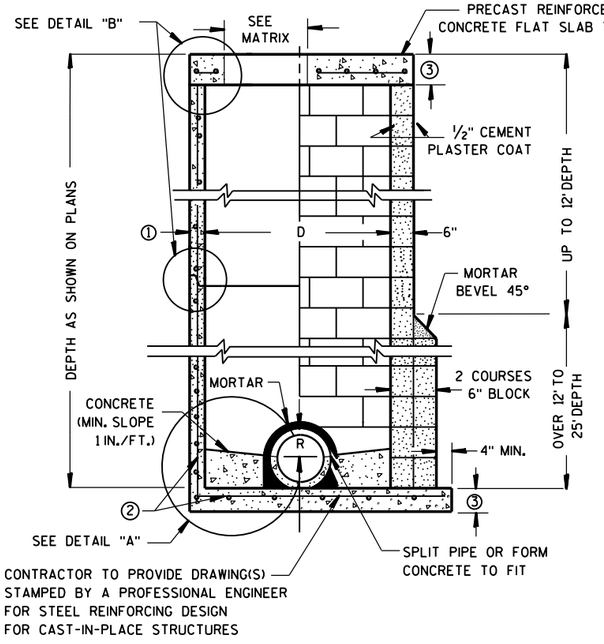
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



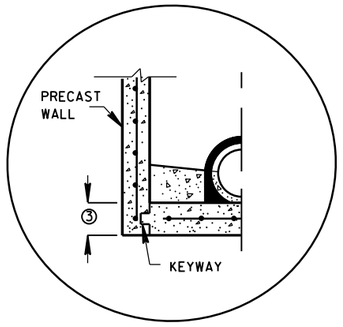
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

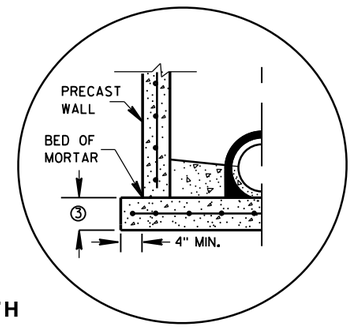


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

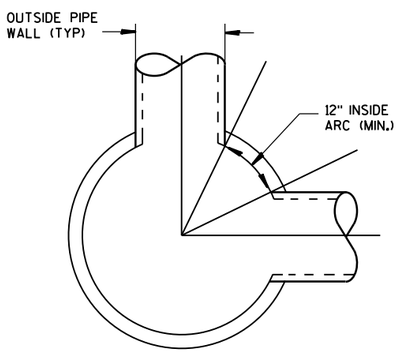


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

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

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

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

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

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

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

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DEPARTMENT OF TRANSPORTATION

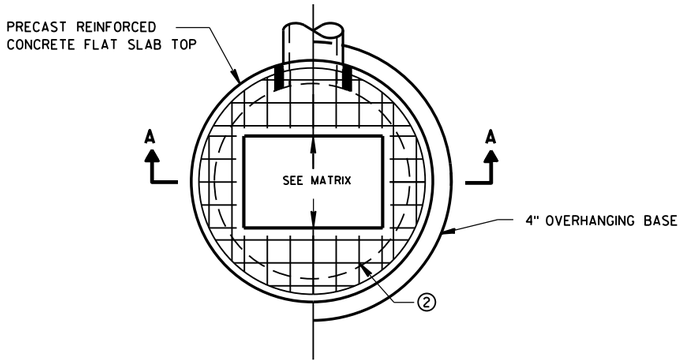
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Sept., 2016
DATE

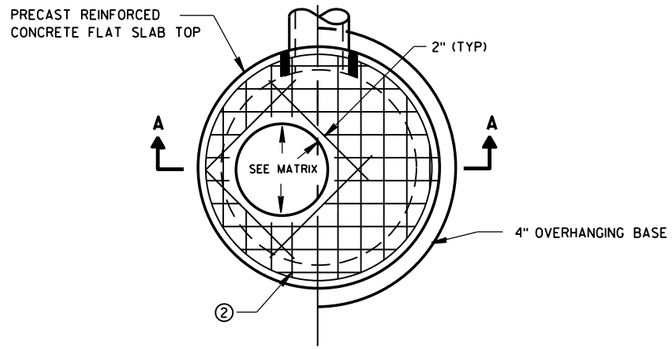
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
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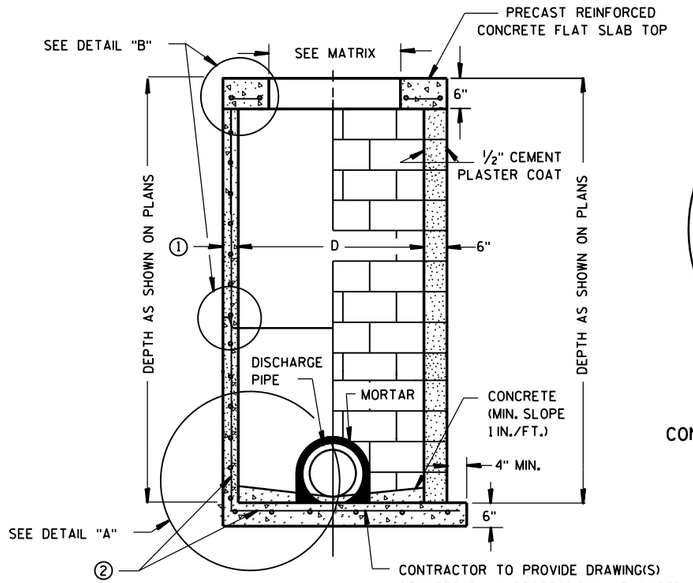
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PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

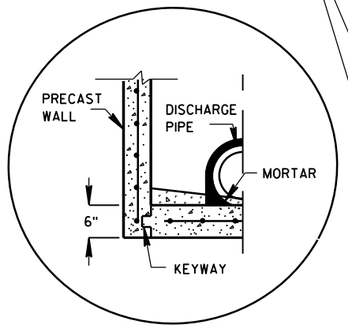


SECTION A-A

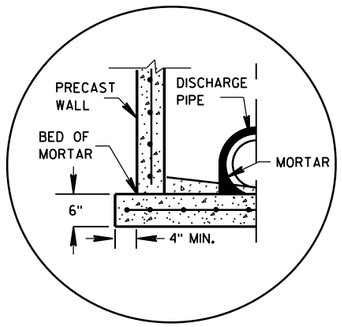
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

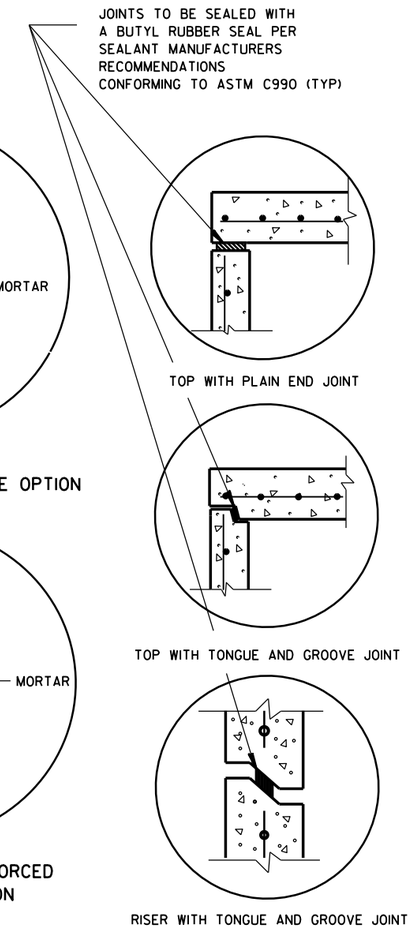


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

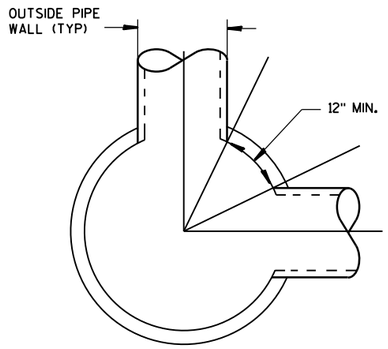
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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

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

INLET COVER OPENING MATRIX

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



DETAIL "C"

PIPE MATRIX

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

INLETS 3-FT AND 4-FT DIAMETER

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APPROVED
Sept., 2016 — /S/ Rodney Taylor
DATE — ROADWAY STANDARDS | ENT UNIT SUPERVI
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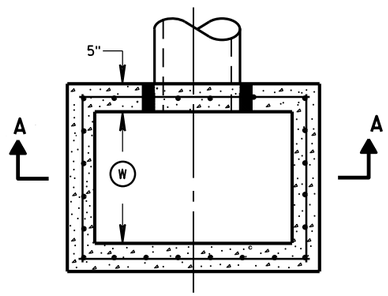
INLETS 3-FT AND 4-FT DIAMETER

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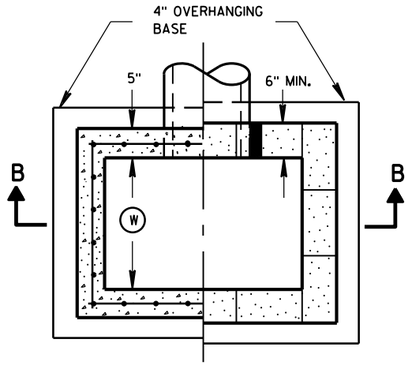
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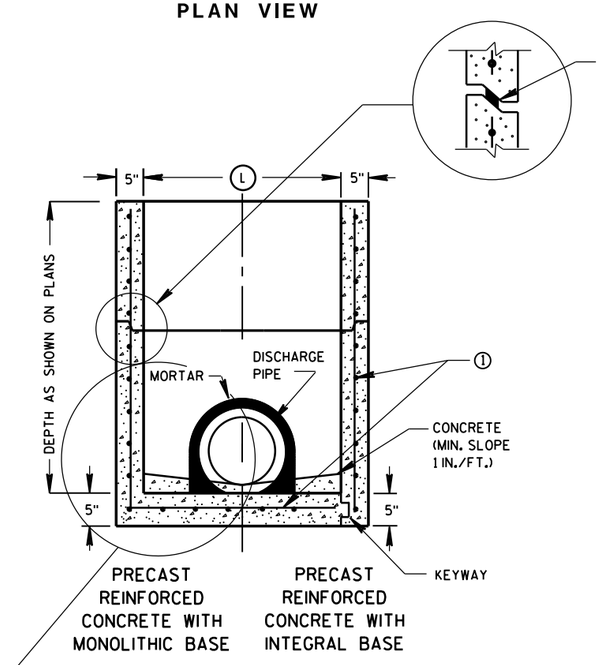
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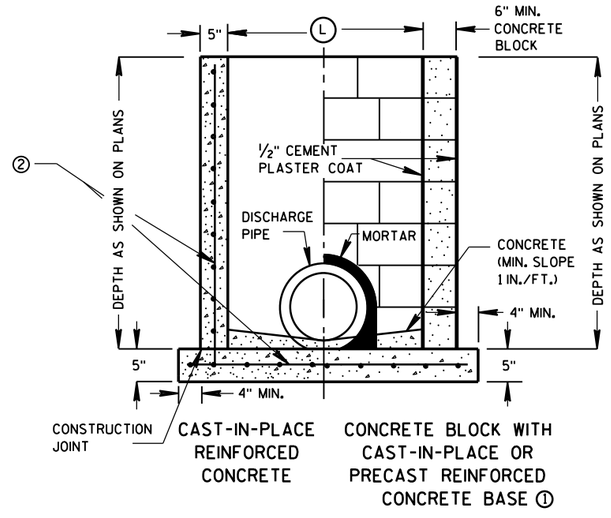
PLAN VIEW



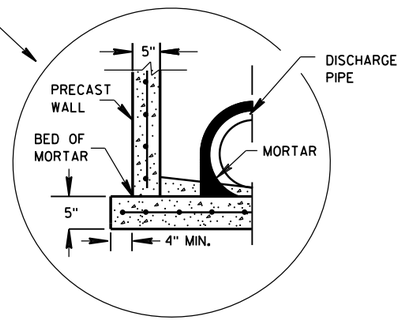
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

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

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

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

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

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

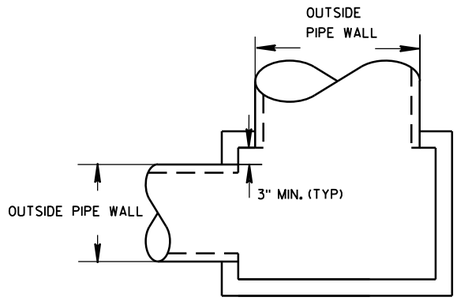
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

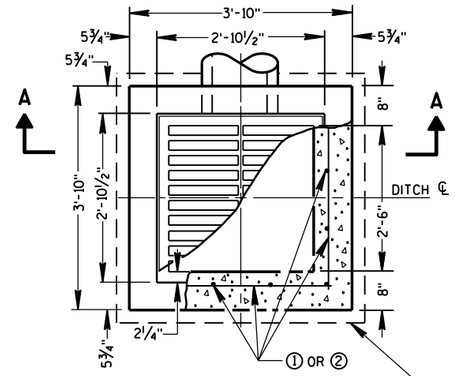
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/S/ Rodney Taylor
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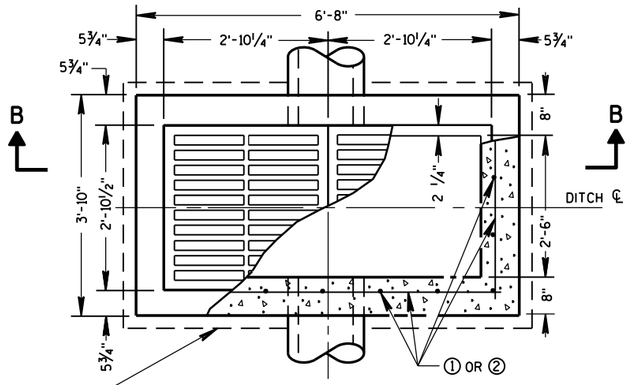
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S.D.D. 8 C 7-2

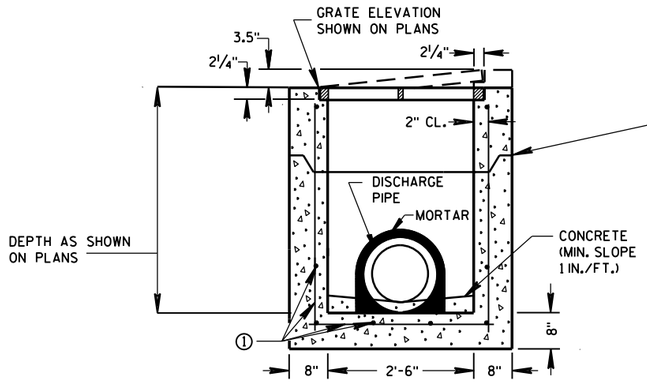


PLAN VIEW

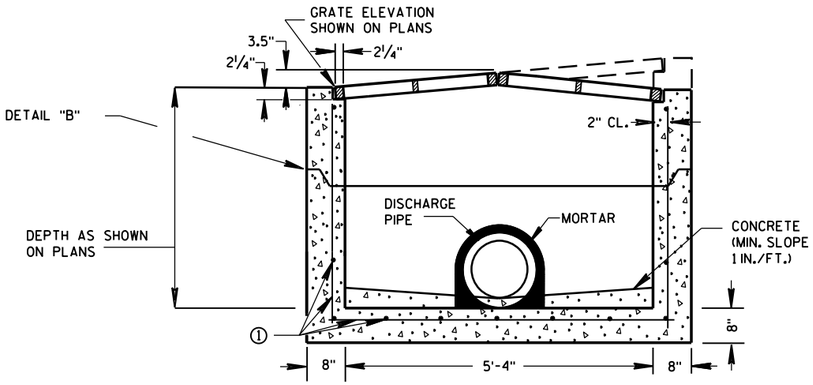


PLAN VIEW

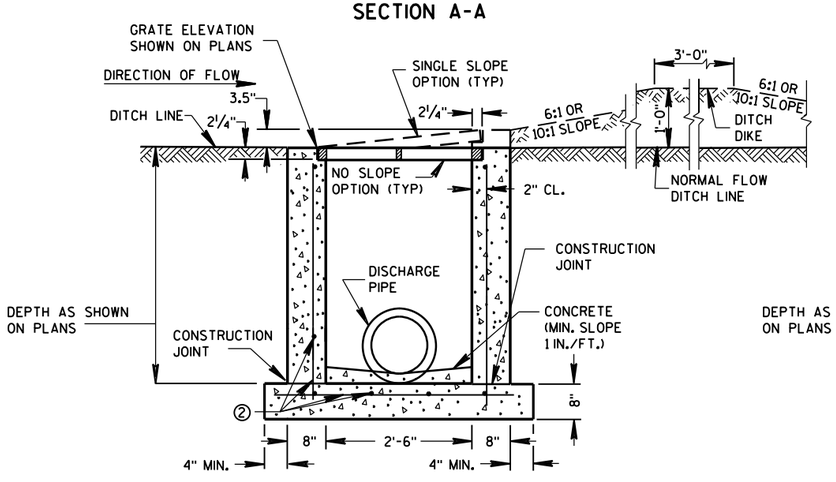
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



PRECAST REINFORCED CONCRETE SECTION A-A

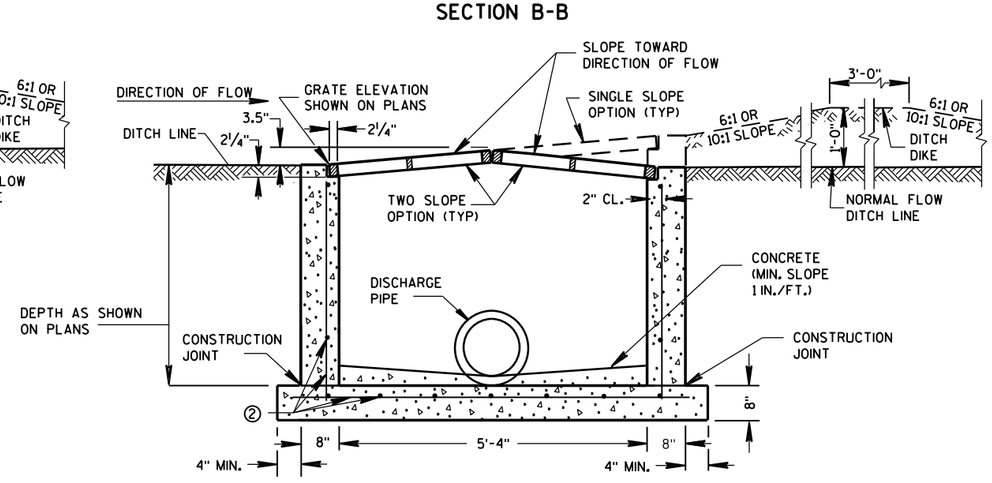


PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A

INLETS MEDIAN 1 GRATE



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 2 GRATE

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DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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

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

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

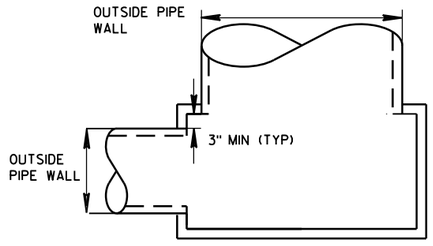
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

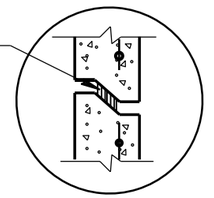
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

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



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

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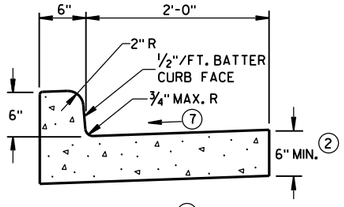
APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVI ENT
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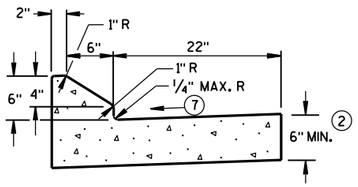
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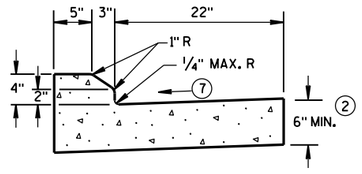
S.D.D. 8 C 8-2



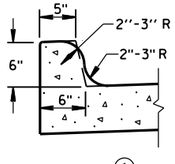
TYPES A (1) & D



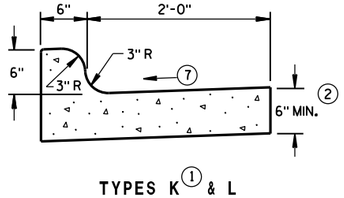
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

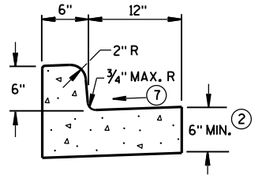


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



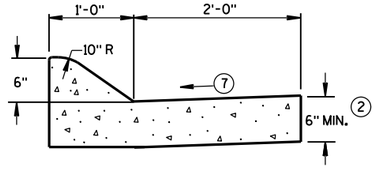
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

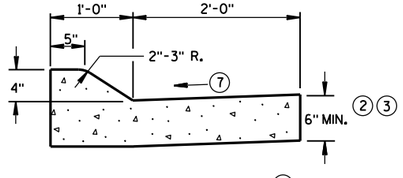


TYPES A (1) & D

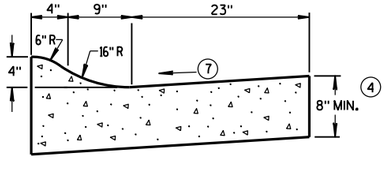
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

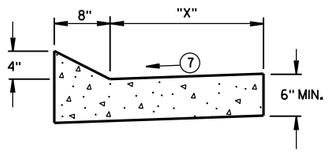


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

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

GENERAL NOTES

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

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

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

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

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

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

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

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

(5) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

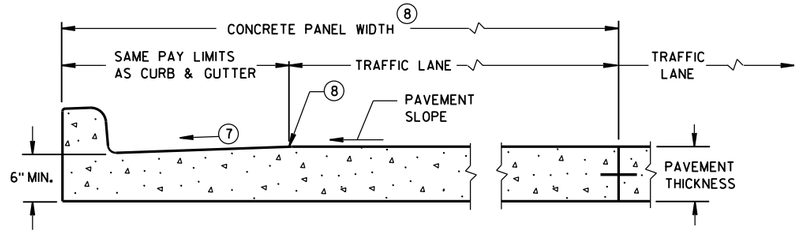
(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

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

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

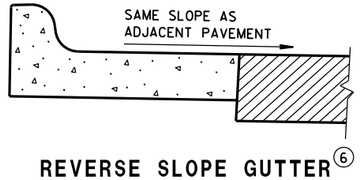
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER

* BIKE LANE IS NOT SHOWN.



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

CONCRETE CURB & GUTTER

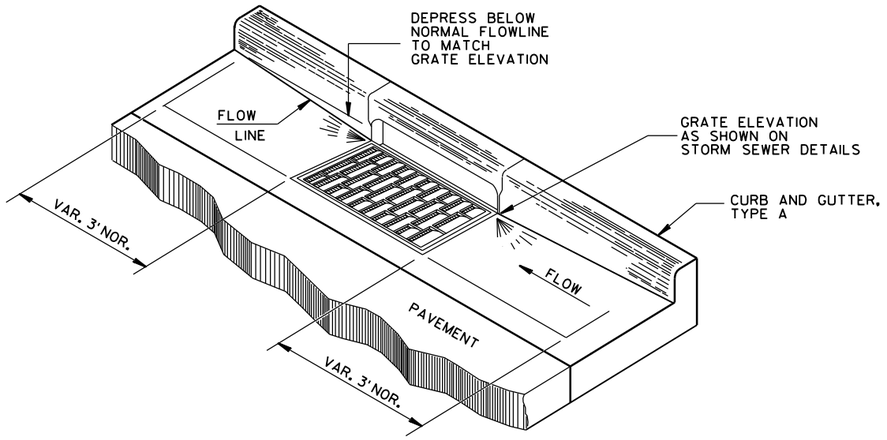
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 1-20a

6

S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

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

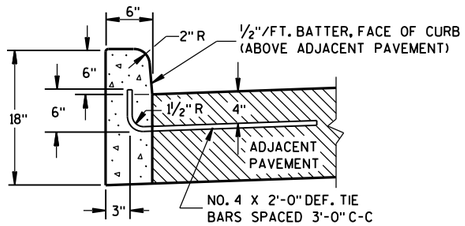
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

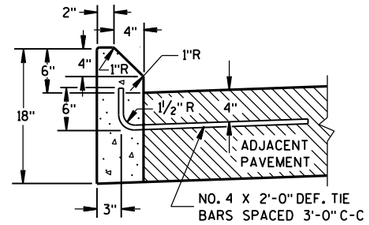
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

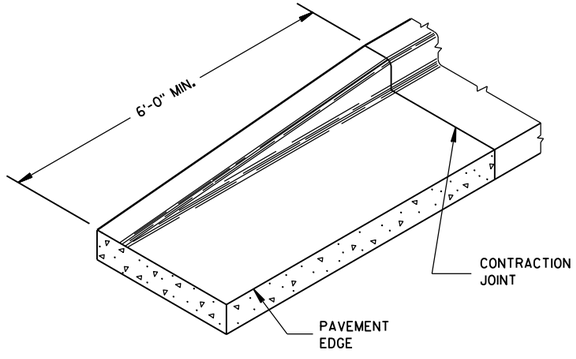


TYPES A(1) & D

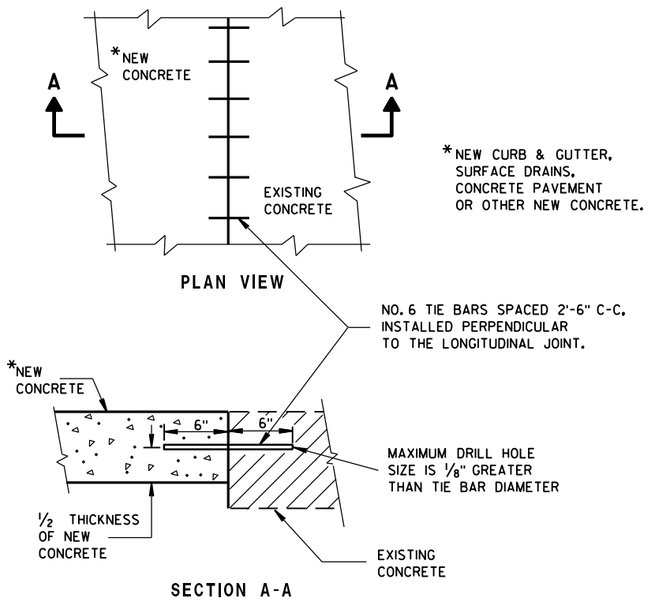


TYPES G(1) & J

CONCRETE CURB



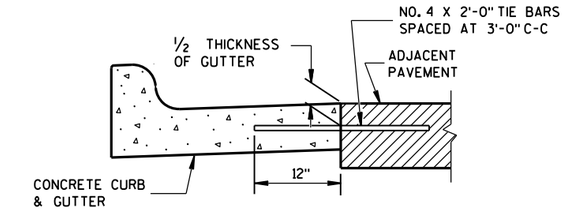
END SECTION CURB & GUTTER



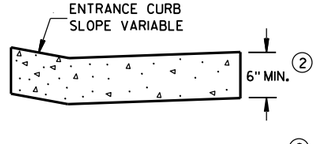
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

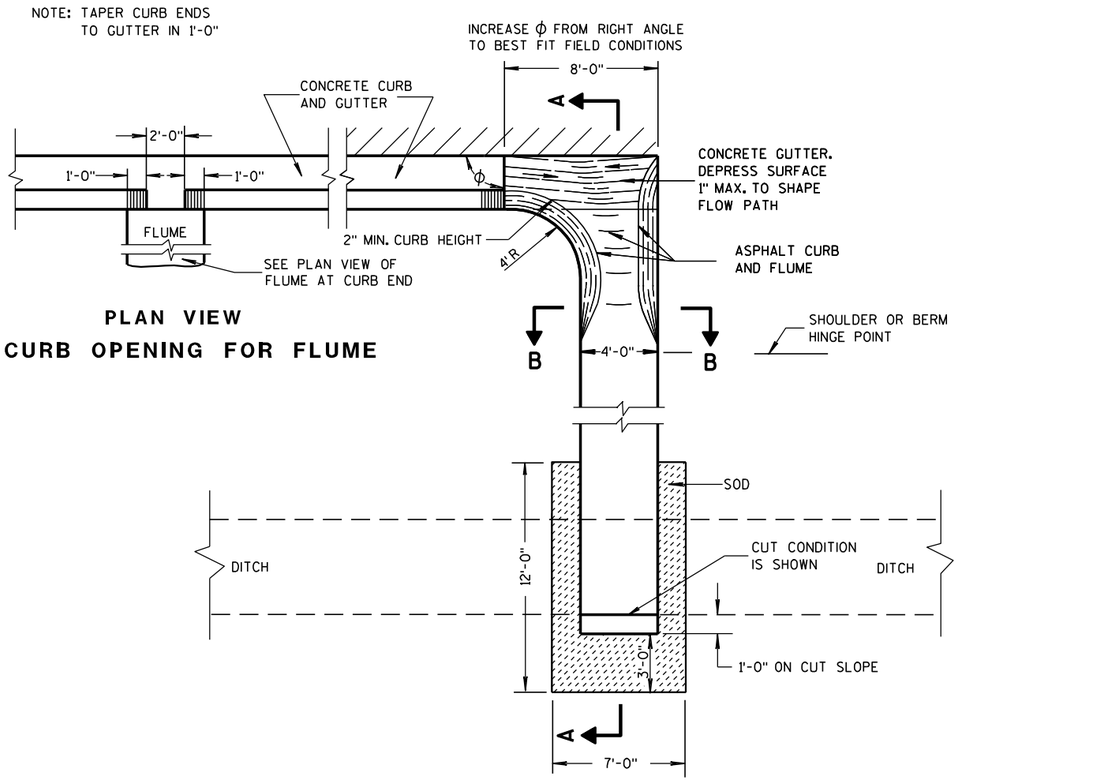
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS 591 ENT
UNIT SUPERVISOR
FHWA

6

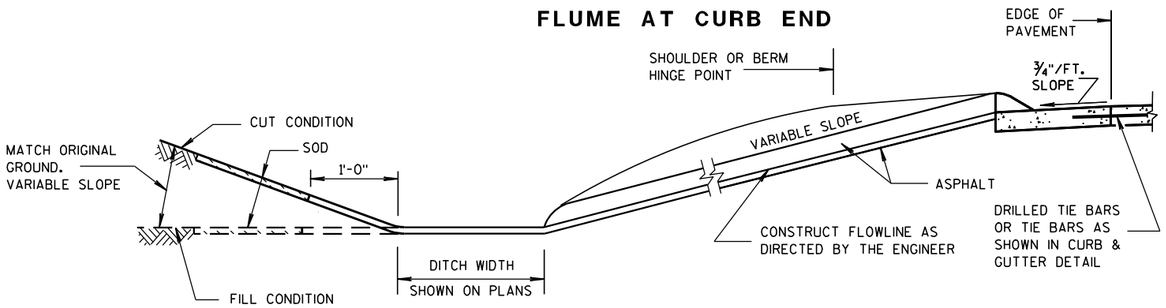
S.D.D. 8 D 1-20b

ASPHALTIC FLUME

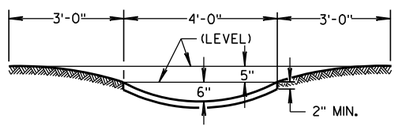


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

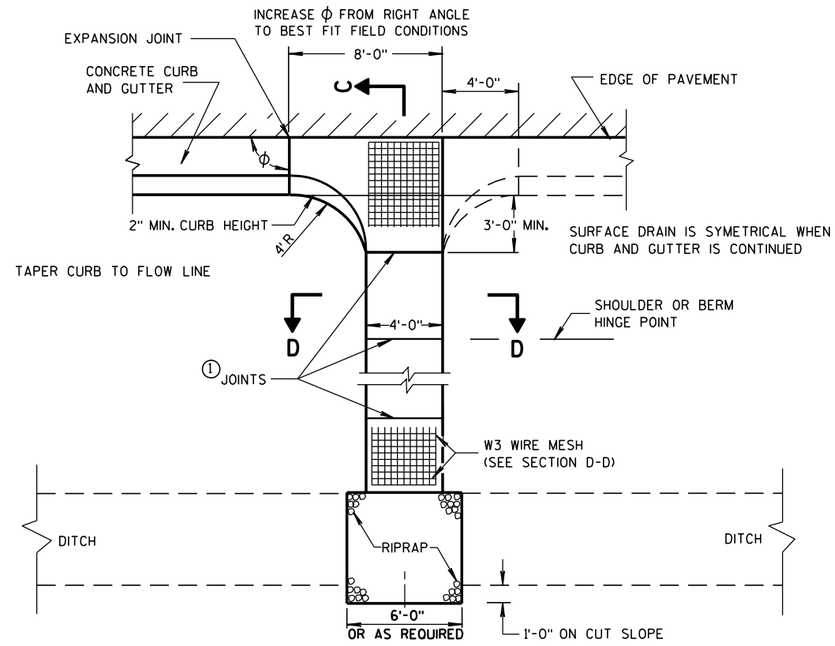
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

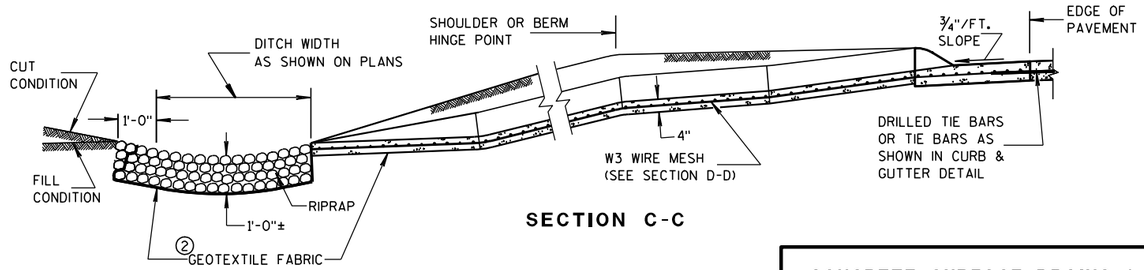
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

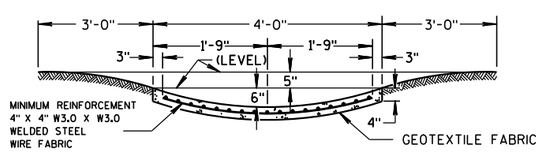
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

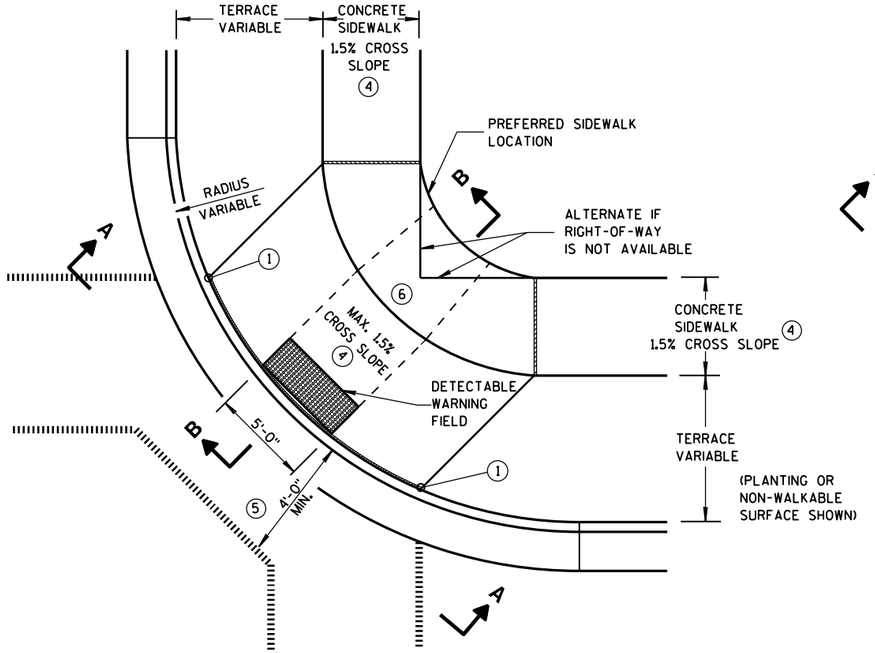
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
592
MENT
FHWA

6

S.D.D. 8 D 4-5

6

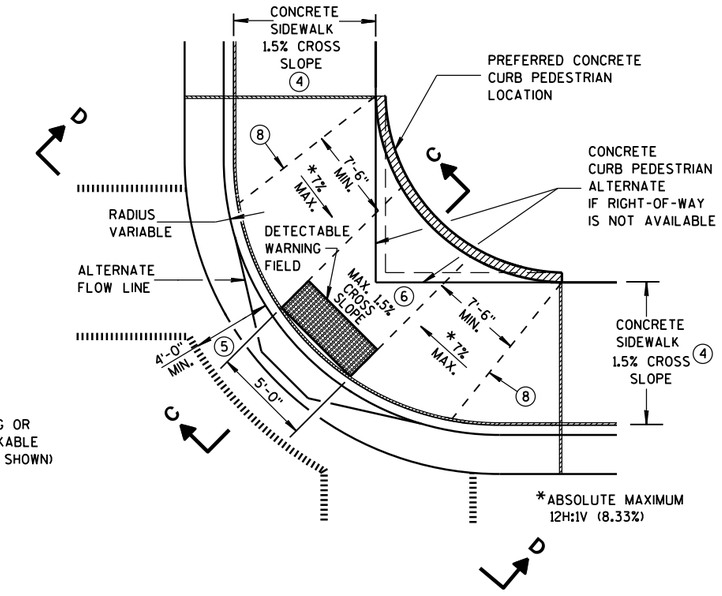
S.D.D. 8 D 4-5



PLAN VIEW

TYPE 1 RAMP

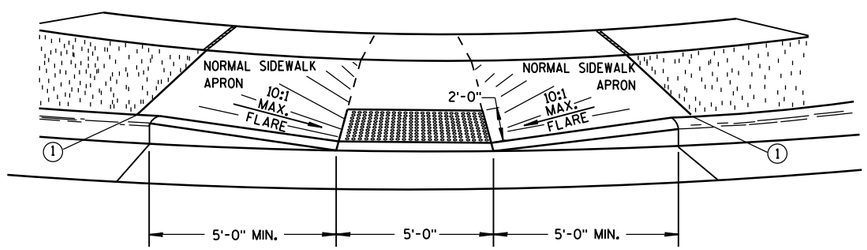
(CENTER OF CORNER RADIUS)



PLAN VIEW

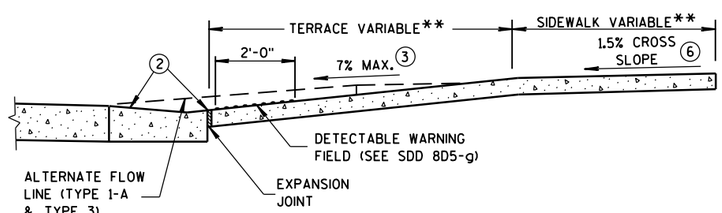
TYPE 1-A RAMP

(NO TERRACE)

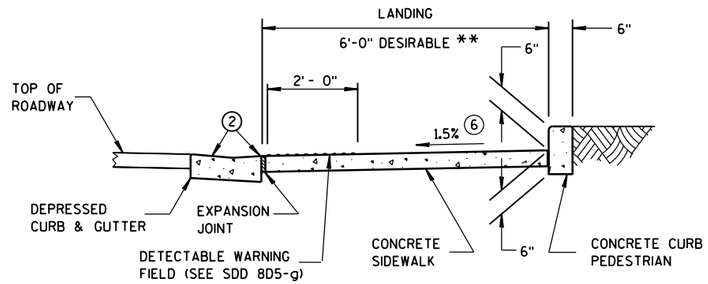


VIEW A-A

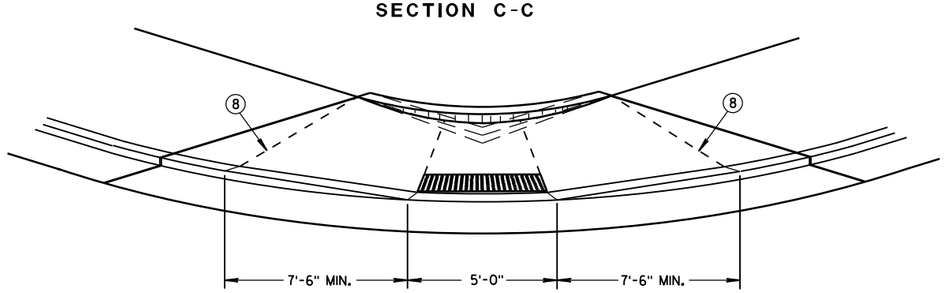
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



SECTION C-C



VIEW D-D

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

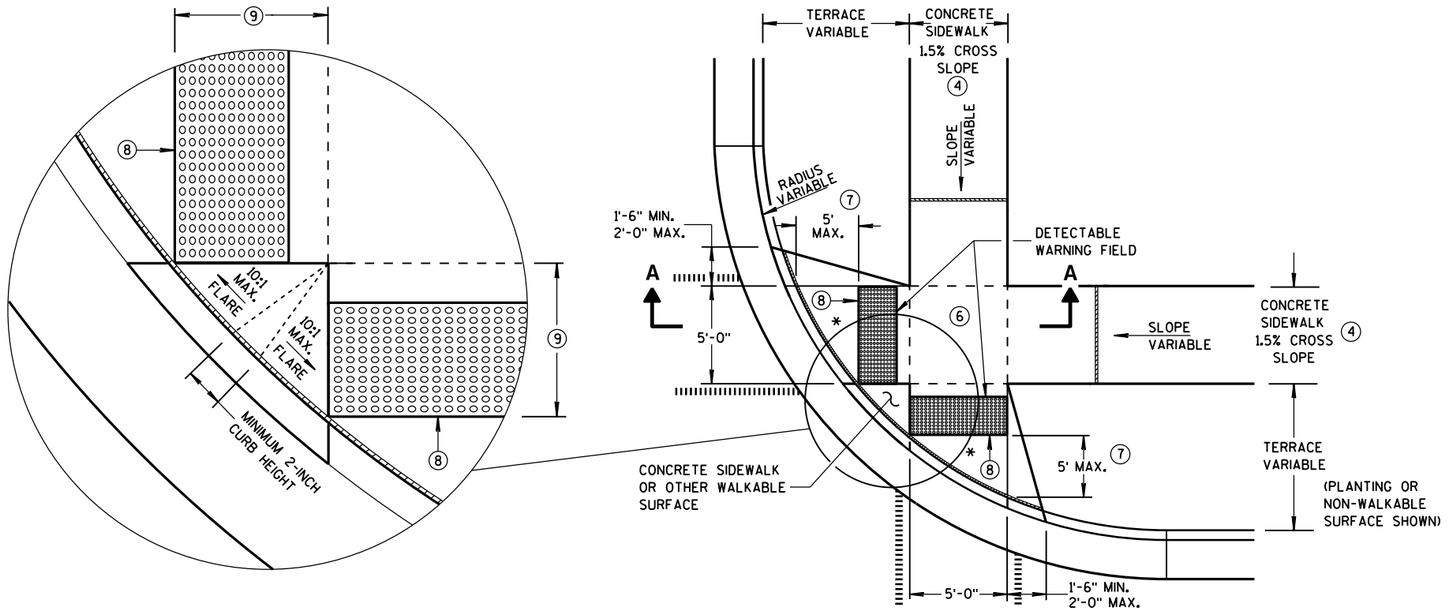
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

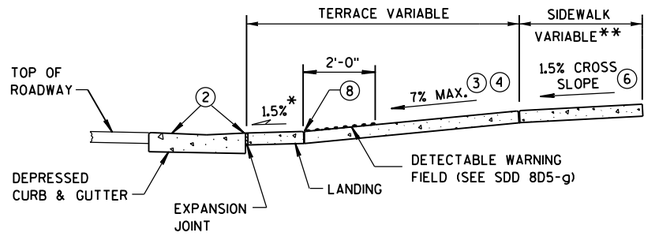
6

S.D.D. 8 D 5-19a



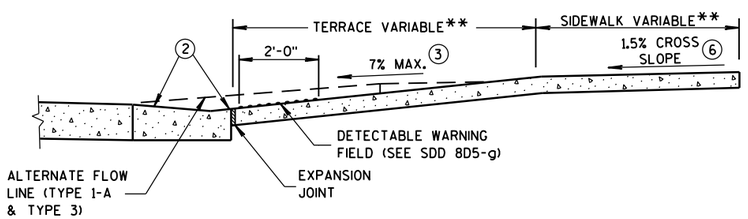
PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

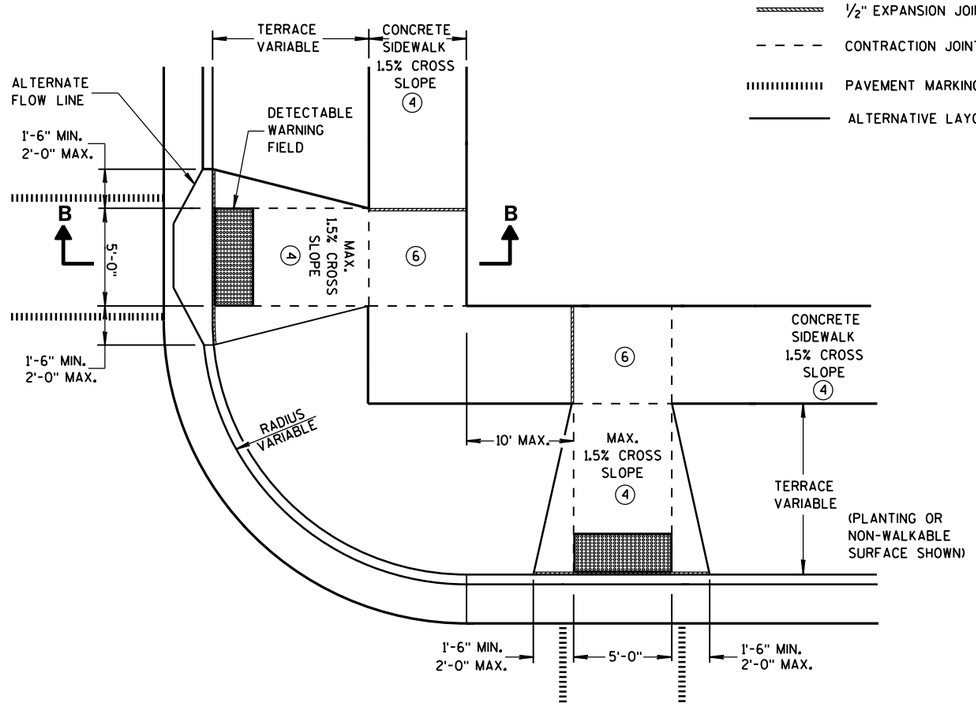


SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

LEGEND

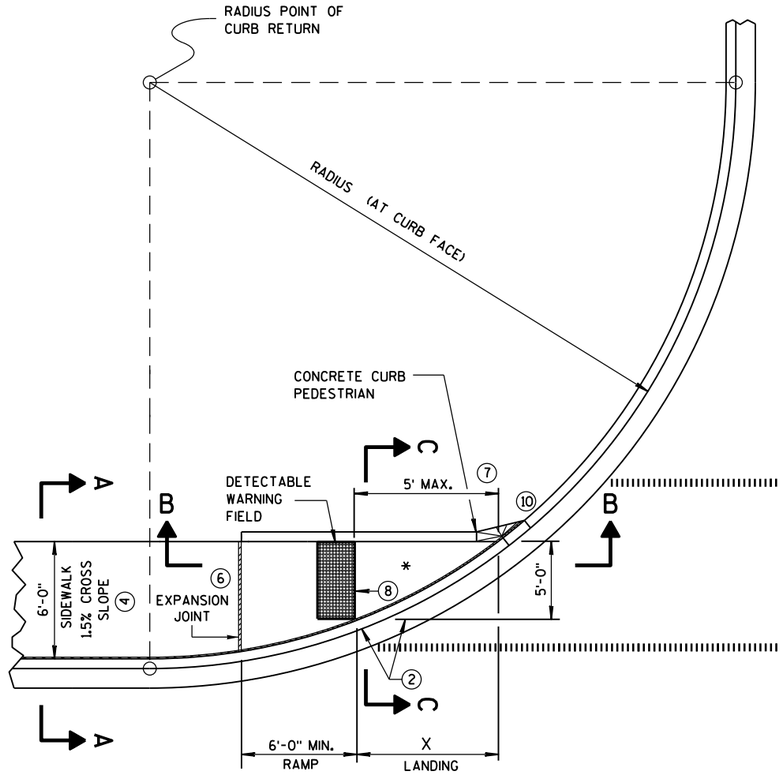
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

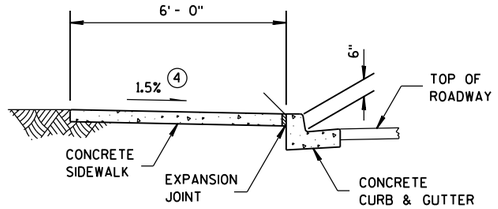
S.D.D. 8 D 5-19b



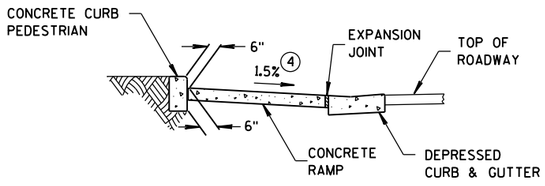
CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X
10 FEET	4'-7"
15 FEET	6'-5½"

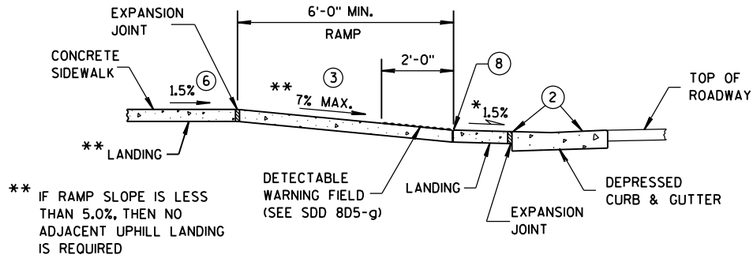
INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A



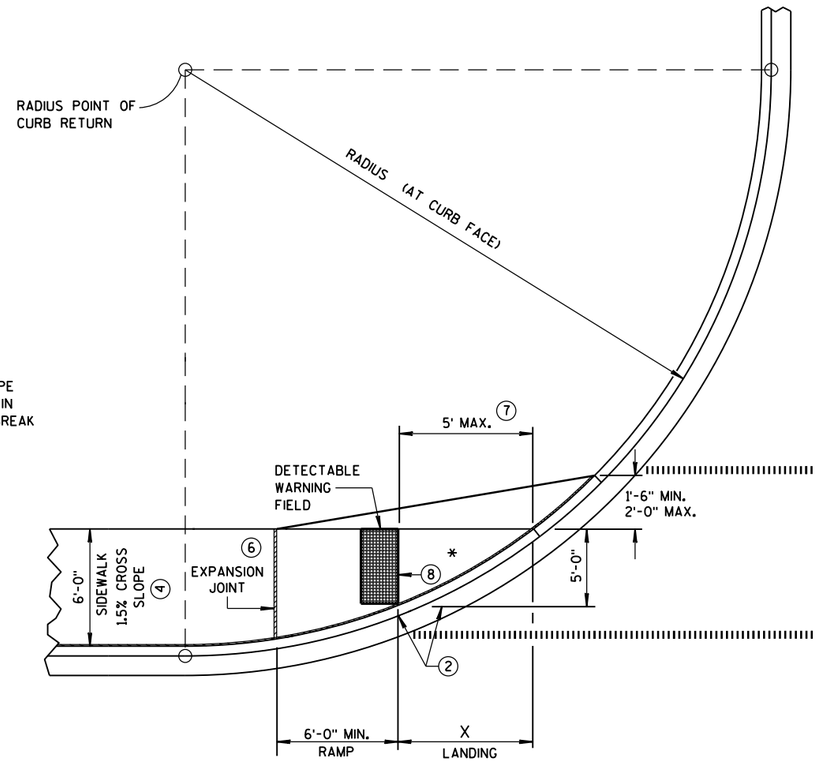
SECTION C-C FOR TYPE 4A



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4A

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



CURB RAMP TYPE 4A1
PLAN VIEW

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

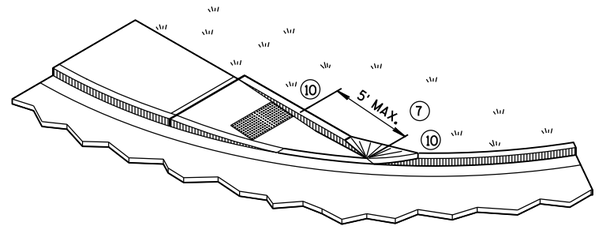
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

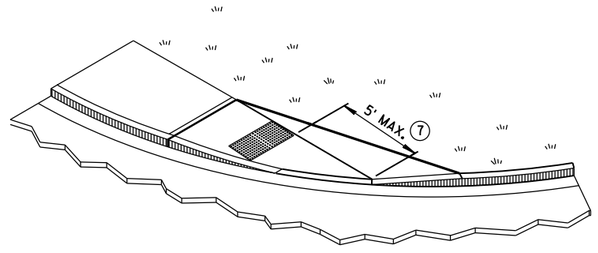
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

½" EXPANSION JOINT-SIDEWALK

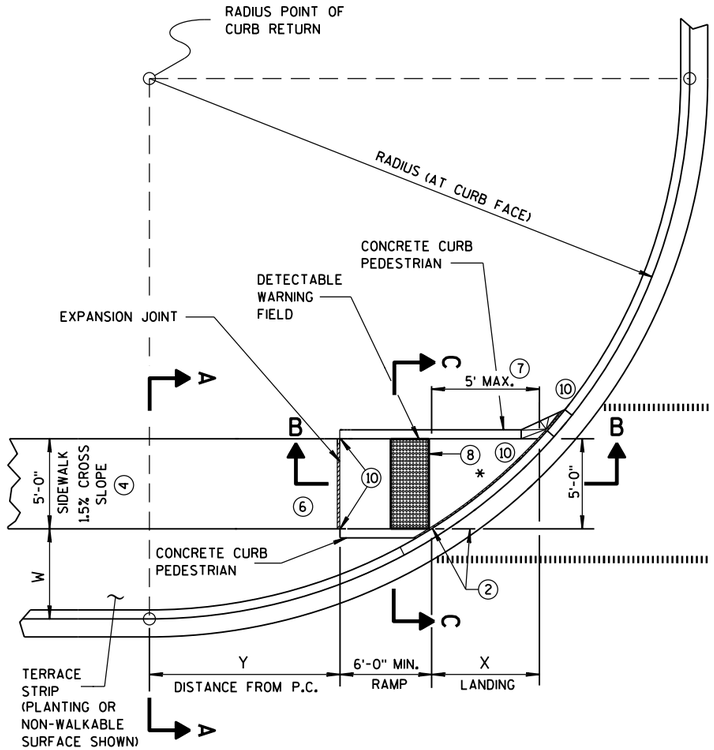
CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)

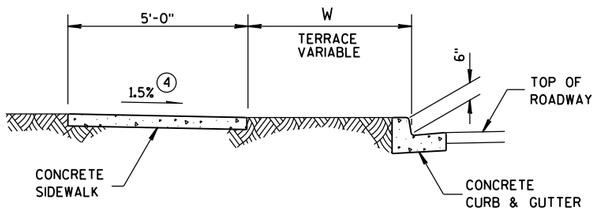
CURB RAMPS TYPES 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

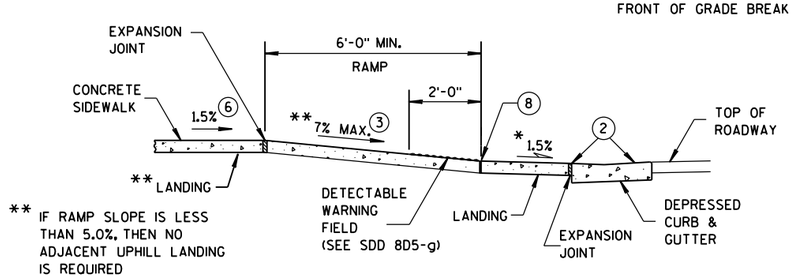
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S.D.D. 8 D 5-19c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



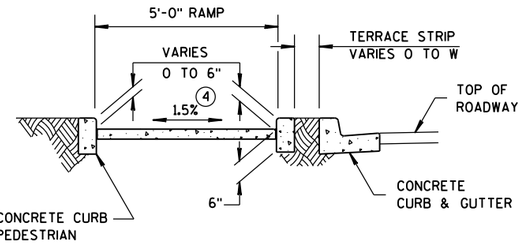
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"		W = 8'-0"		W = 9'-0"		W = 10'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2'-10¼"	0'-5"	2'-1"	1'-4½"	1'-5"	2'-1"	0'-10"	2'-7½"	0'-3¼"	3'-0¼"						
15 FEET	4'-6¾"	2'-1¾"	3'-9"	3'-5¼"	3'-1¼"	4'-6"	2'-6¾"	5'-4½"	2'-1"	6'-1"	1'-8"	6'-8½"	1'-3¼"	7'-2½"	0'-10¾"	7'-7¼"
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-7"	3'-3"	8'-6½"	2'-10"	9'-4½"	2'-5½"	10'-1¼"	2'-1¼"	10'-9"
30 FEET			6'-9¼"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"	4'-5½"	13'-7¾"	4'-0¾"	14'-8½"	3'-8½"	15'-8¼"
40 FEET									6'-1¾"	15'-8½"	5'-8"	17'-2"	5'-3"	18'-5¾"	4'-10¾"	19'-8¼"
50 FEET															5'-10¼"	23'-2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C-C FOR TYPE 4B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

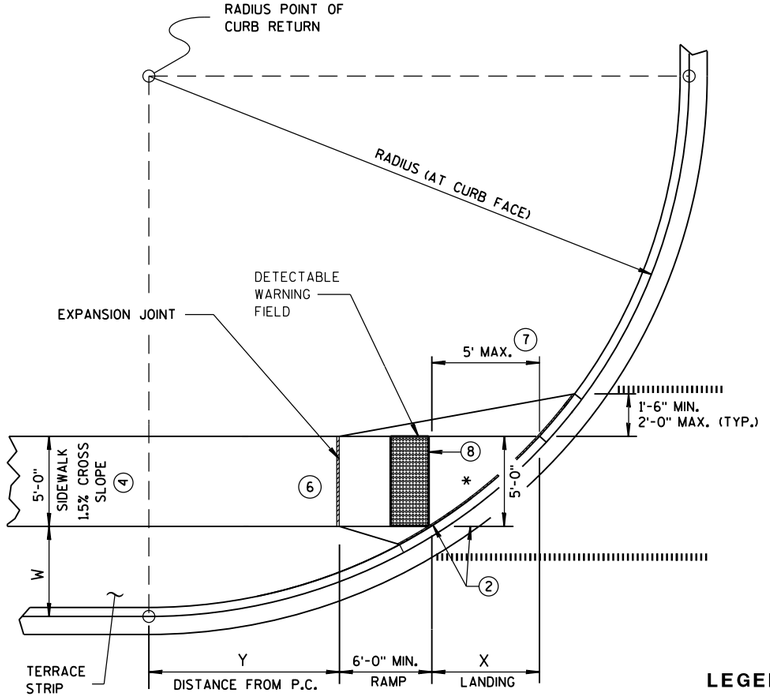
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

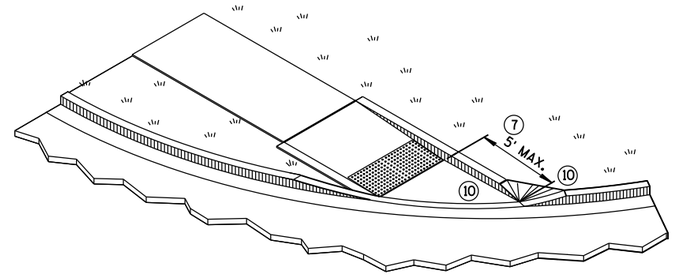
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

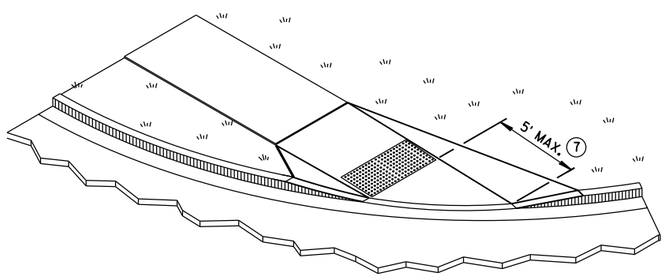
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

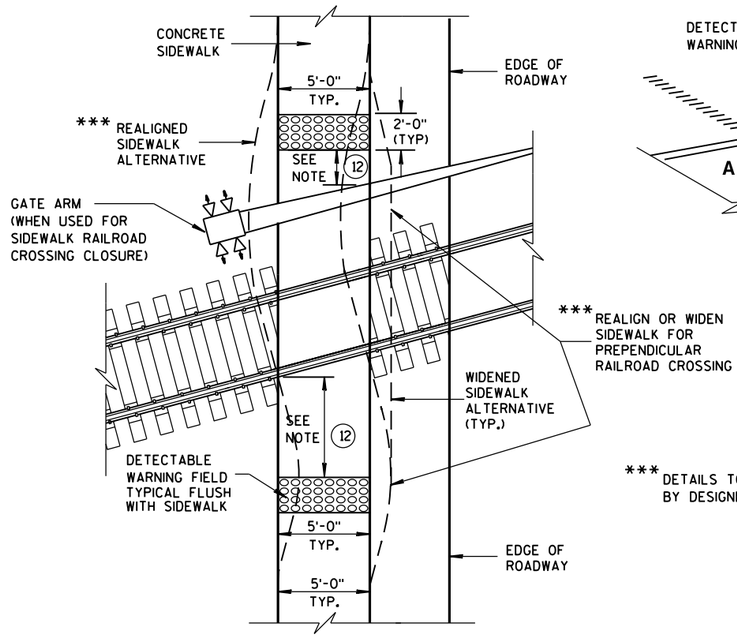
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

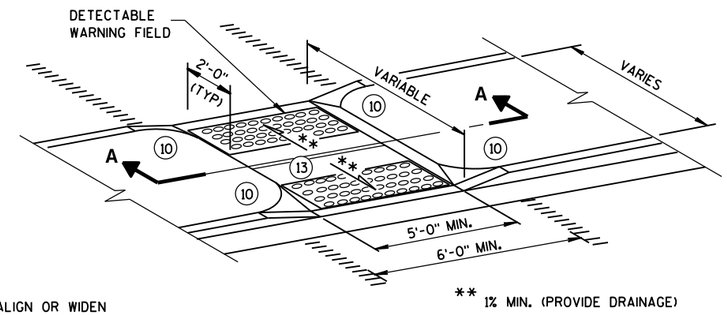
6

S.D.D. 8 D 5-19d



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING
TYPE 5

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

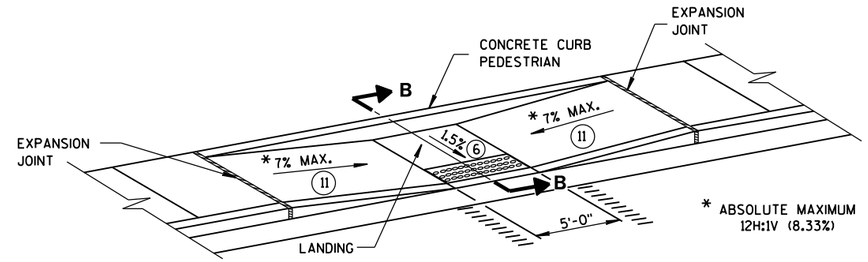
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

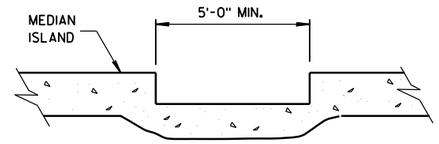
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

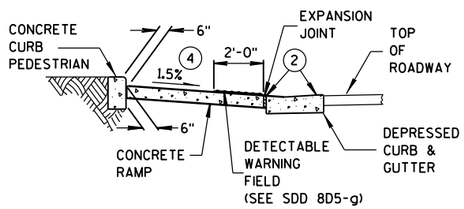
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2-FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.



MID-BLOCK CROSSING
TYPE 7A

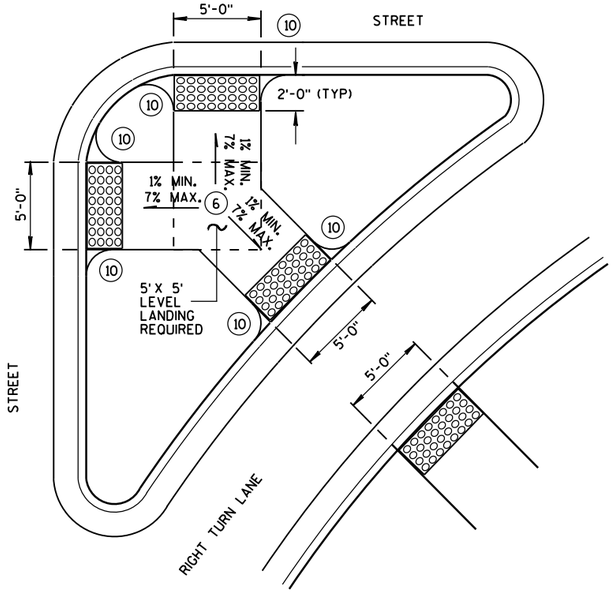


SECTION A-A

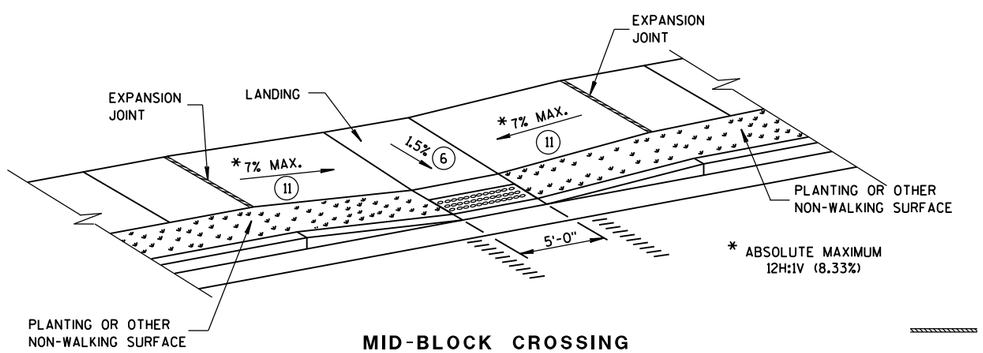


SECTION B-B

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

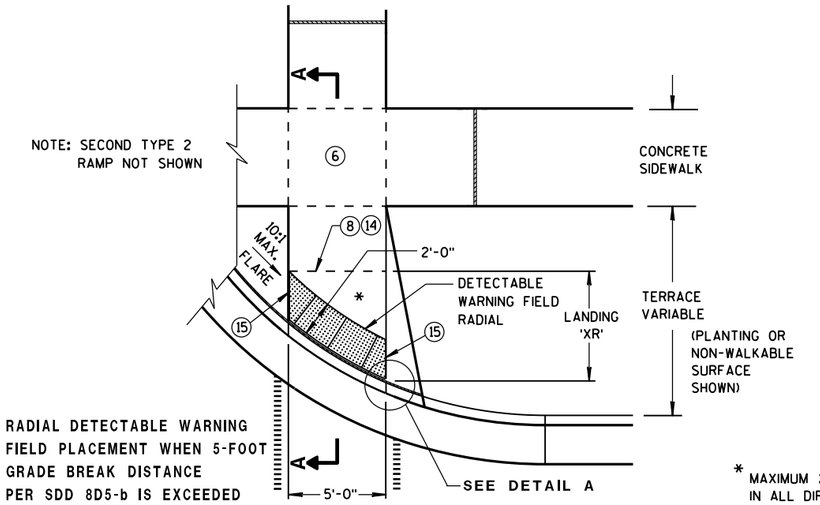
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

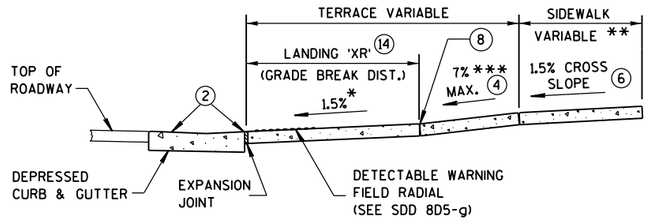
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S.D.D. 8 D 5-19e



TYPE 2 RAMP
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION A-A

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS (DWFs) THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

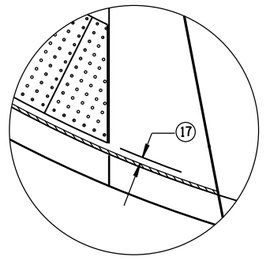
(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION 'XR') REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

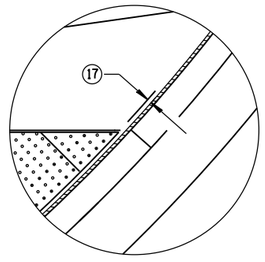
(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1'X 2' RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2'-0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

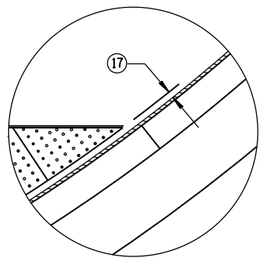
(17) A MAXIMUM 3-INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.



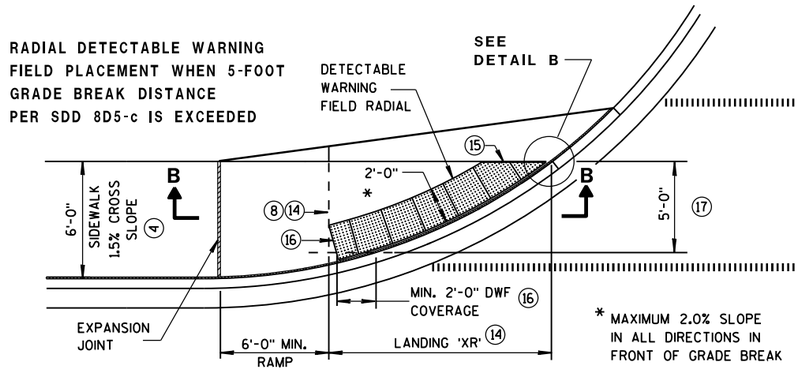
DETAIL A



DETAIL C

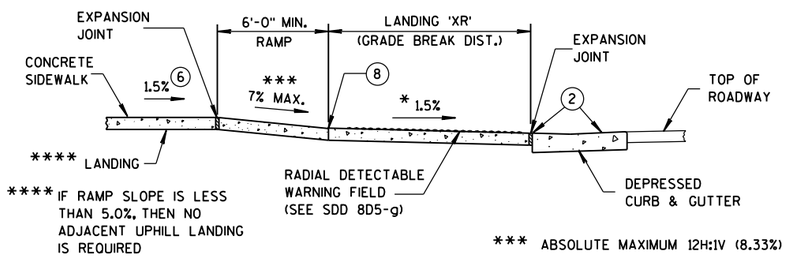


DETAIL B



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

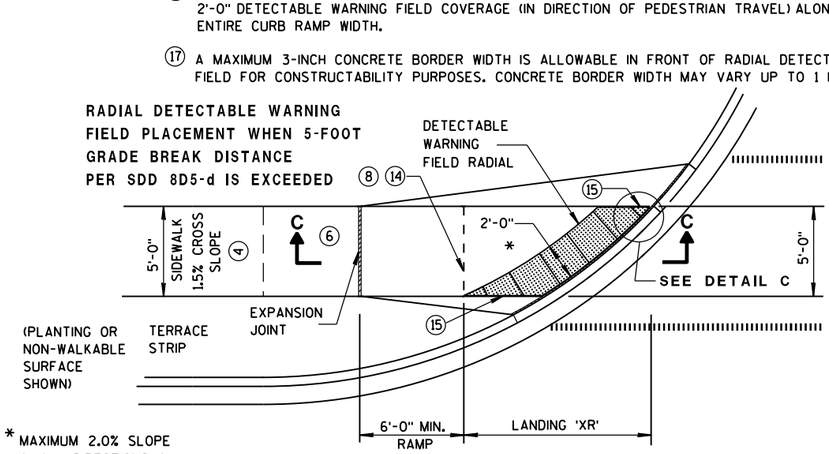
CURB RAMP TYPE 4A1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

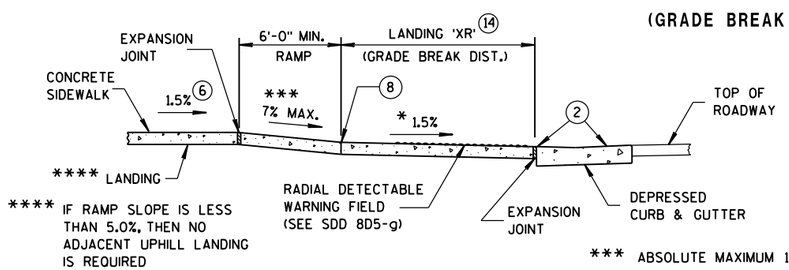
*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION B-B FOR TYPE 4A1



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

CURB RAMP TYPE 4B1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION C-C FOR TYPE 4B1

CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 598

6

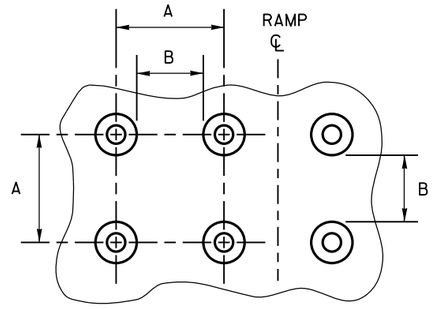
S.D.D. 8 D 5-19f

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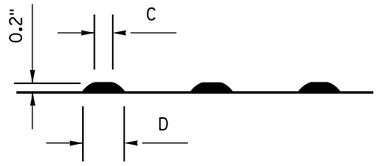
S.D.D. 8 D 5-19f

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES

DETECTABLE WARNING PATTERN DETAIL

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

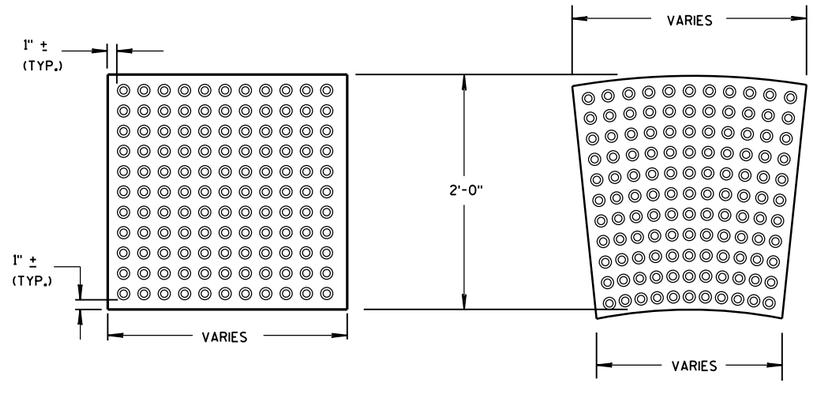
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGES IN COMBINATION WITH SQUARE PANELS ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

⑮ FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

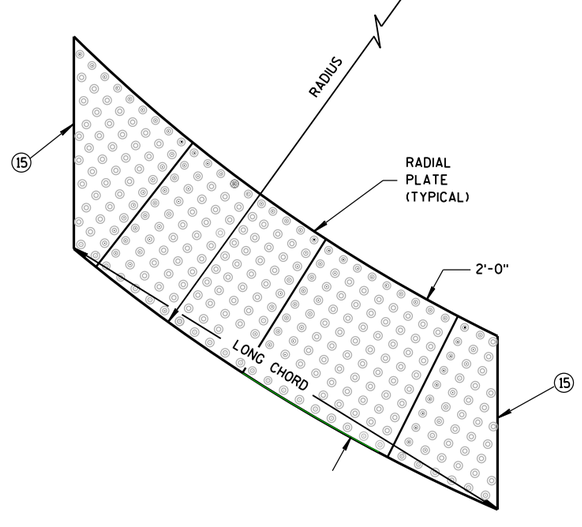


RECTANGULAR PLATES

RADIAL PLATES

DETECTABLE WARNING FIELDS (TYPICAL)

PLAN VIEW



RADIAL DETECTABLE WARNING FIELD ATTRIBUTES

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA

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S.D.D. 8 D 5-19g

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S.D.D. 8 D 5-19g

GENERAL NOTES

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

(1) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

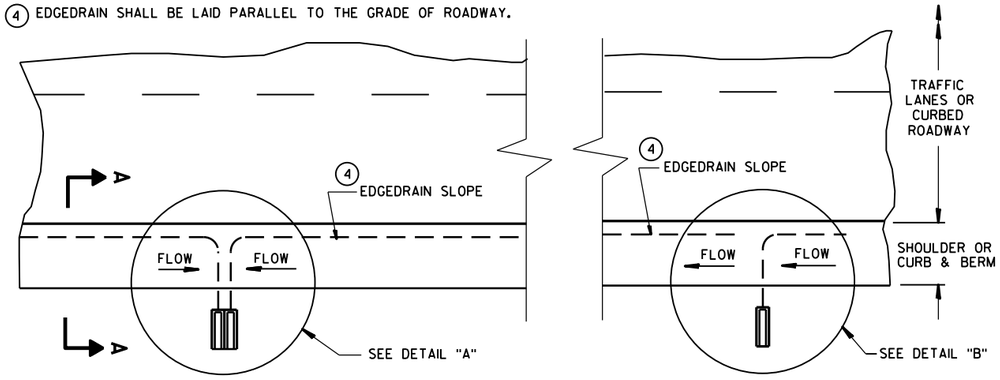
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

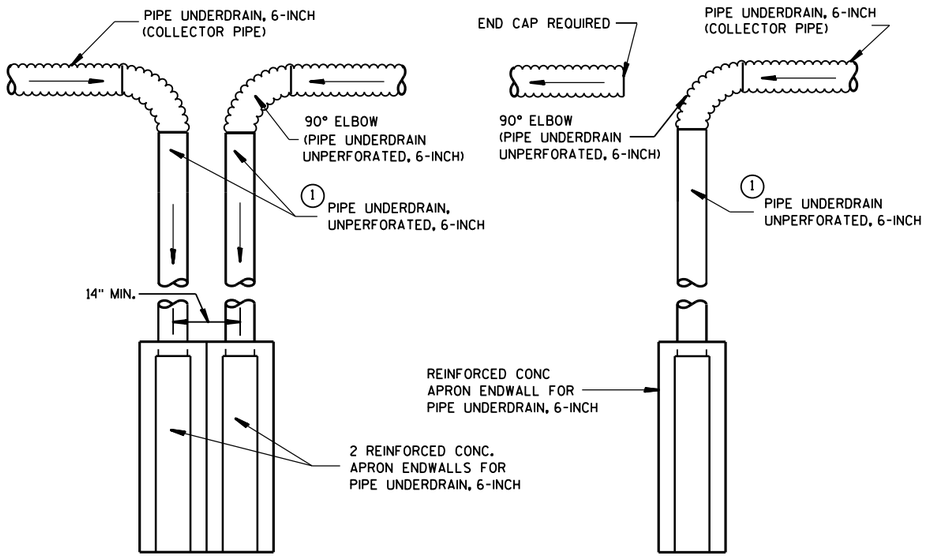
(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



PLAN VIEW

ROADWAY WITH SHOULDERS OR CURBS

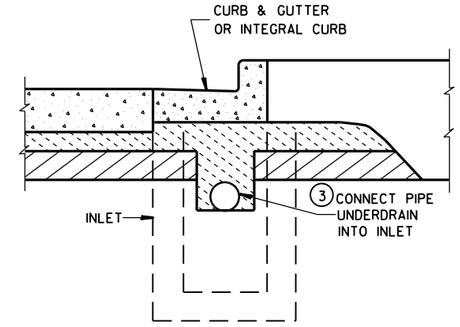
(EDGEDRAIN OUTLETS TO ROADSIDE)(2)



DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS

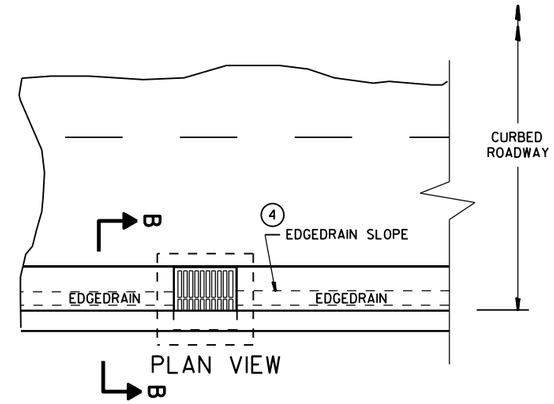
DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



SECTION B-B

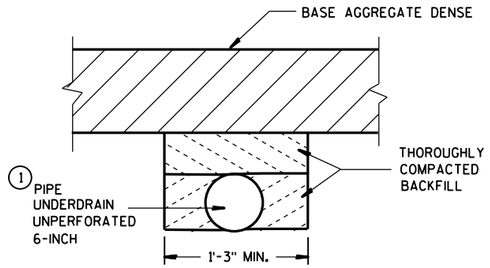
URBAN CROSS SECTION



PLAN VIEW

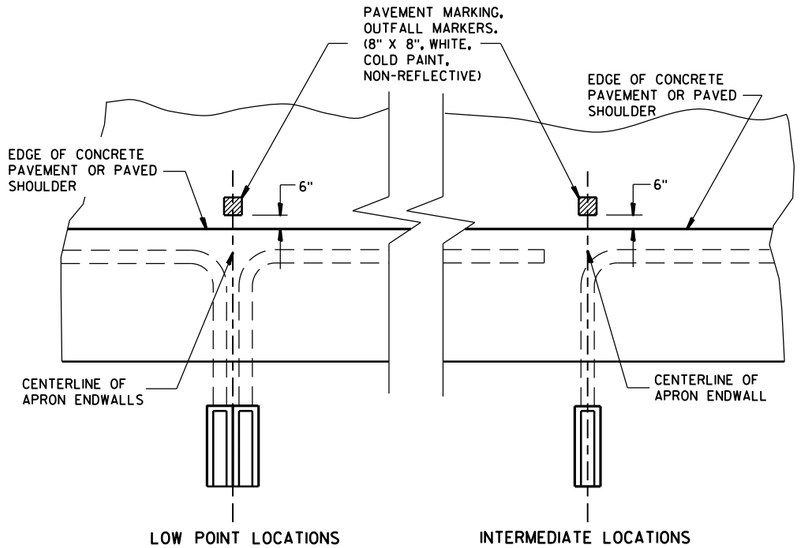
ROADWAY WITH CURBS

(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)



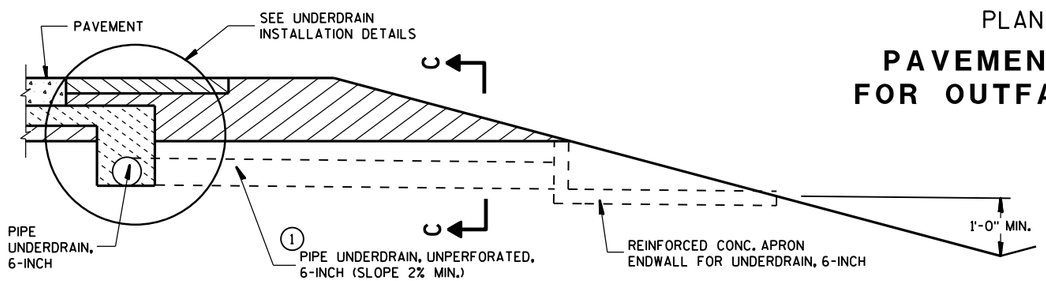
SECTION C-C

(TRENCH FOR OUTFALL PIPE)



PLAN VIEW

PAVEMENT MARKING FOR OUTFALL MARKERS



SECTION A-A

RURAL CROSS SECTION

EDGEDRAIN OUTLET AND OUTFALL MARKERS

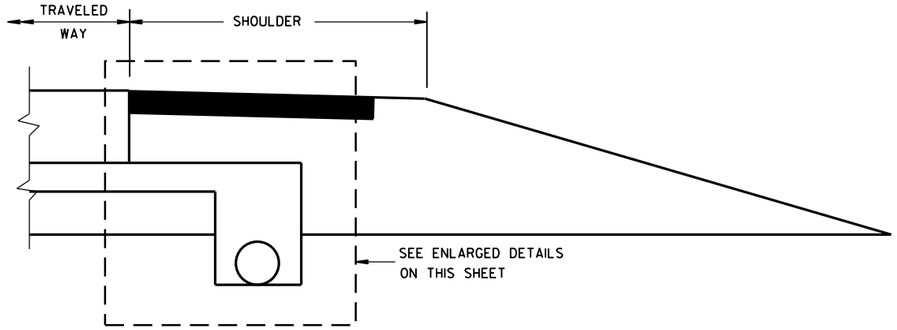
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 600

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S.D.D. 8 D 15-5a

6

S.D.D. 8 D 15-5a



RURAL CROSS SECTION

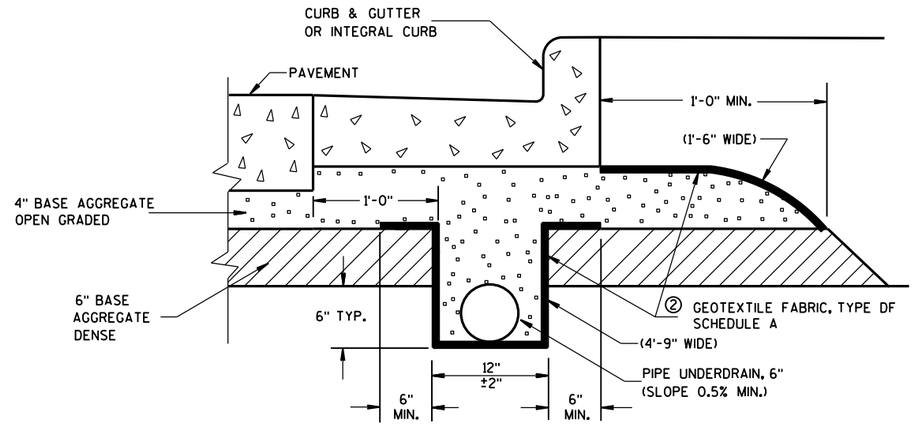
GENERAL NOTES

THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

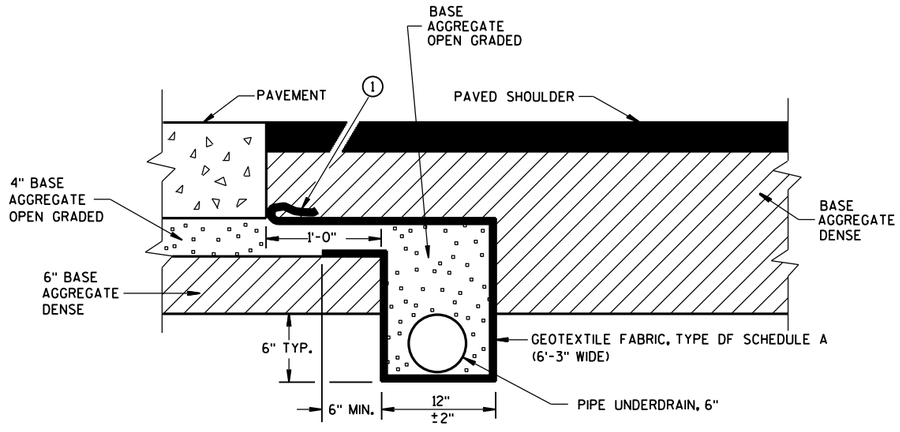
PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.

① FOLD OVER EXCESS GEOTEXTILE FABRIC AT THIS LOCATION.

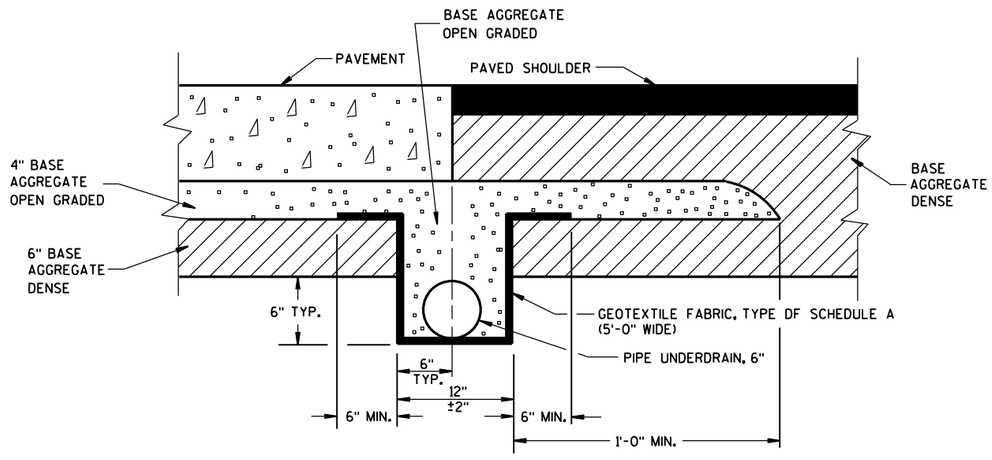
② TOTAL FABRIC WIDTH IS 6'-3" FOR PAYMENT.



EDGEDRAIN IN URBAN ROADWAY



POST PAVING INSTALLATION
(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATE

EDGEDRAIN IN RURAL ROADWAY

EDGEDRAIN AND BASE AGGREGATE OPEN GRADED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

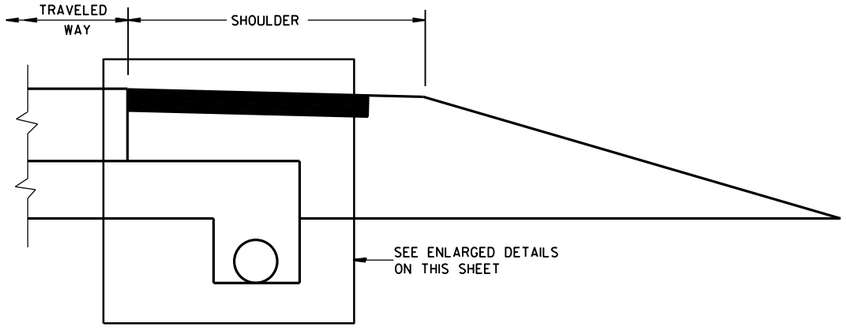
APPROVED
Sept. 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPE
FHWA

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S.D.D. 8 D 15-5b

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S.D.D. 8 D 15-5b

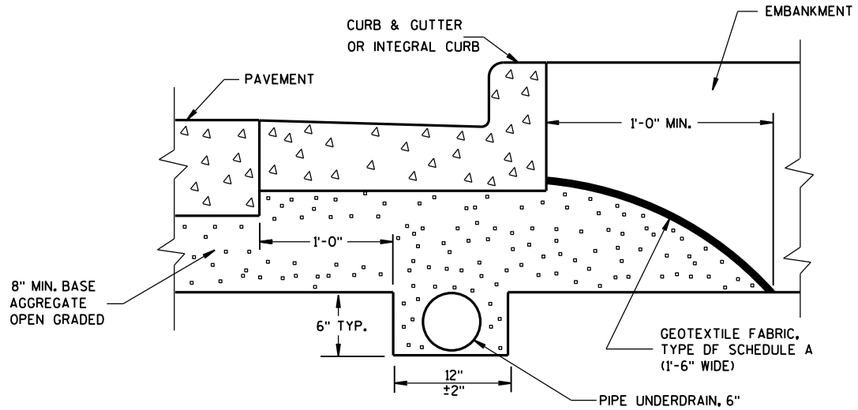


RURAL CROSS SECTION

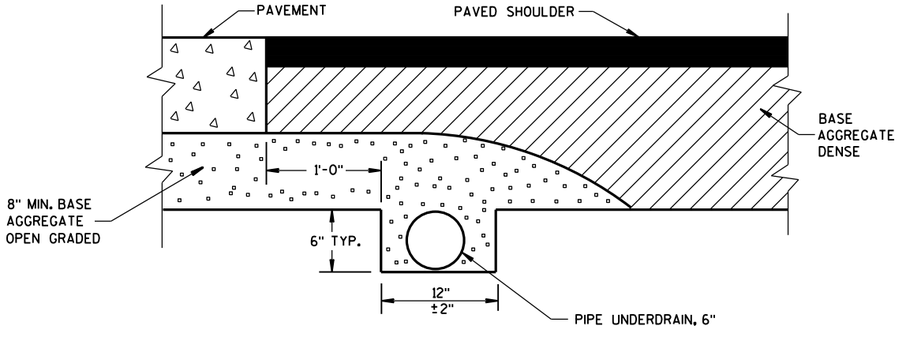
GENERAL NOTES

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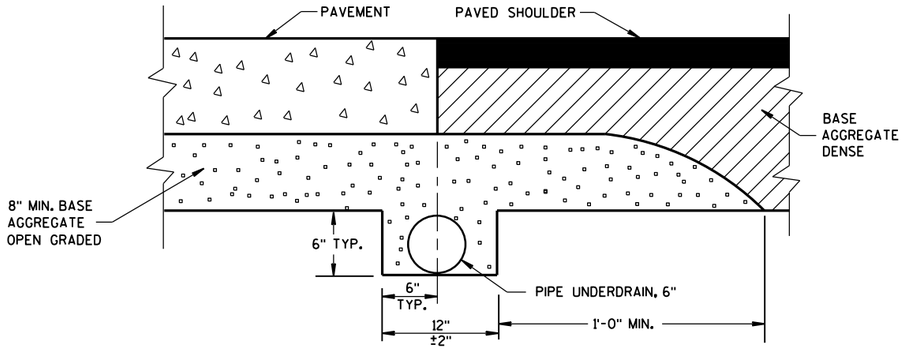
PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.



EDGEDRAIN IN URBAN ROADWAY



POST PAVING INSTALLATION
(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATIVE

EDGEDRAIN IN RURAL ROADWAY

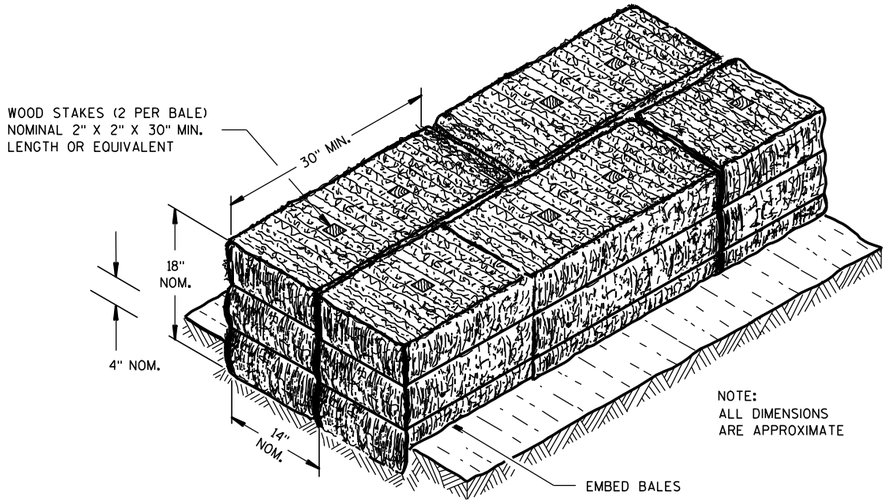
6

EDGEDRAIN AND BASE AGGREGATE OPEN GRADED

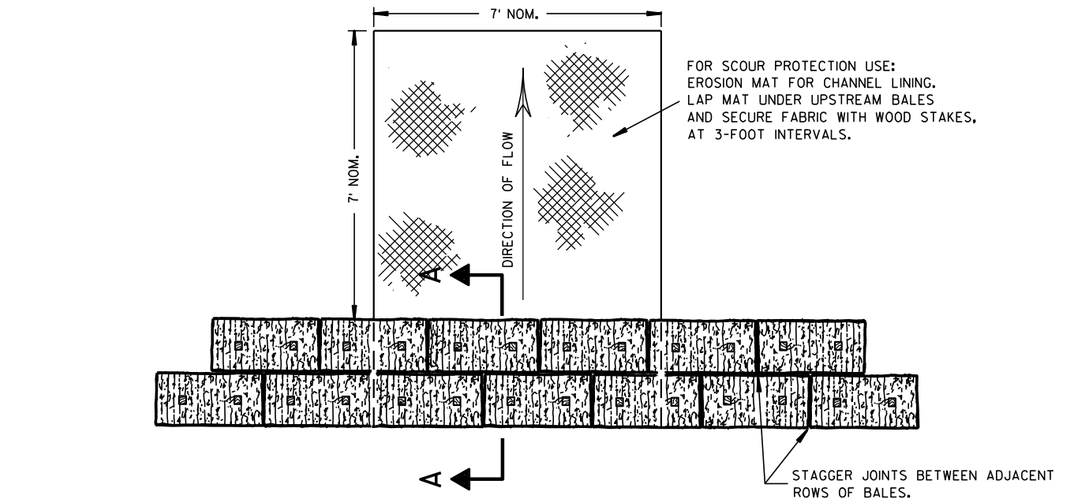
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPE
FHWA

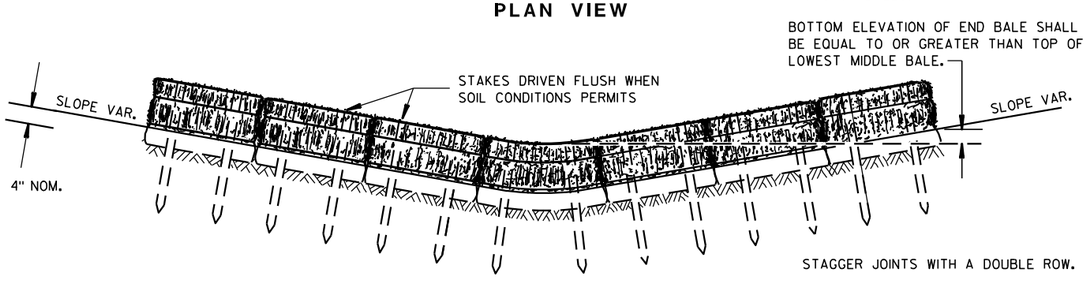
S.D.D. 8 D 15-5c



SECTION A-A



PLAN VIEW



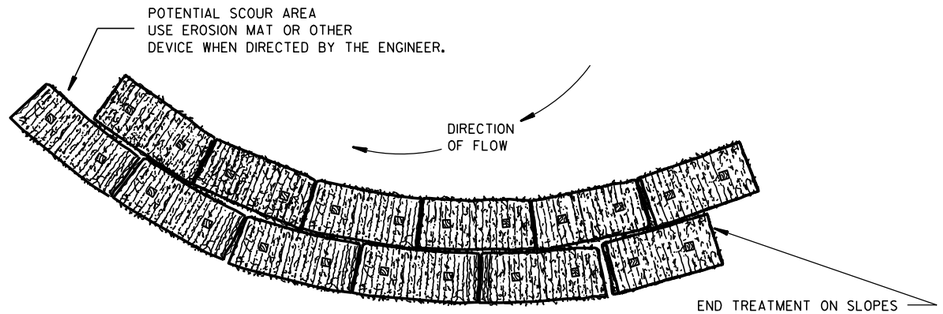
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

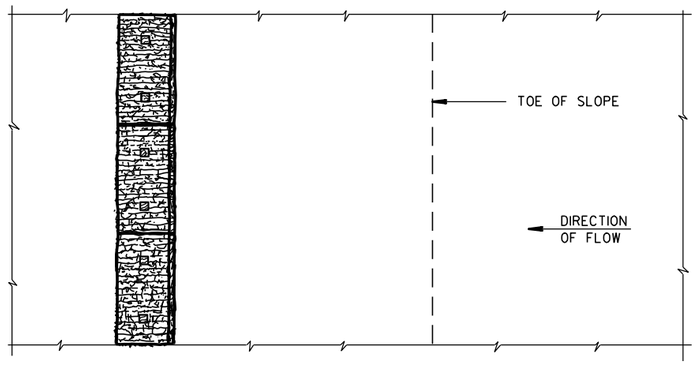
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

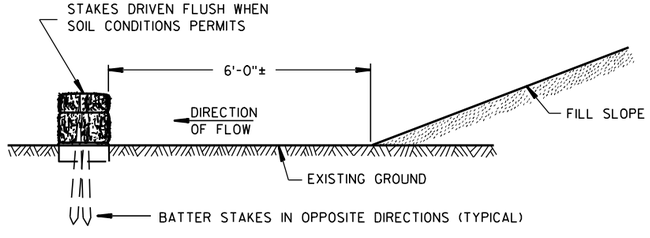


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

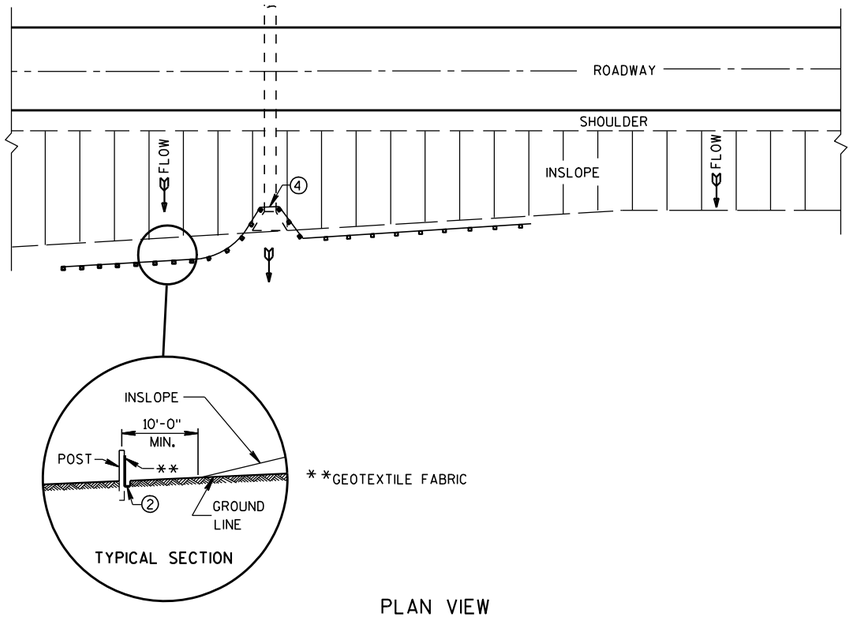
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S.D.D. 8 E 8-3

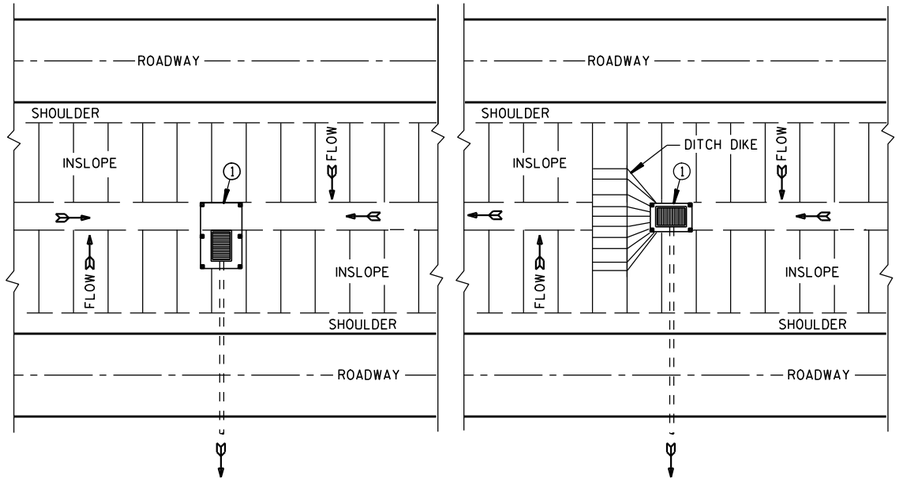
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

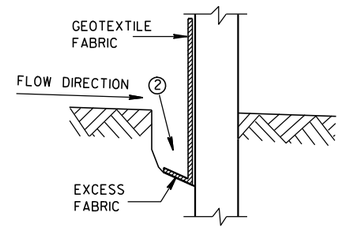
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

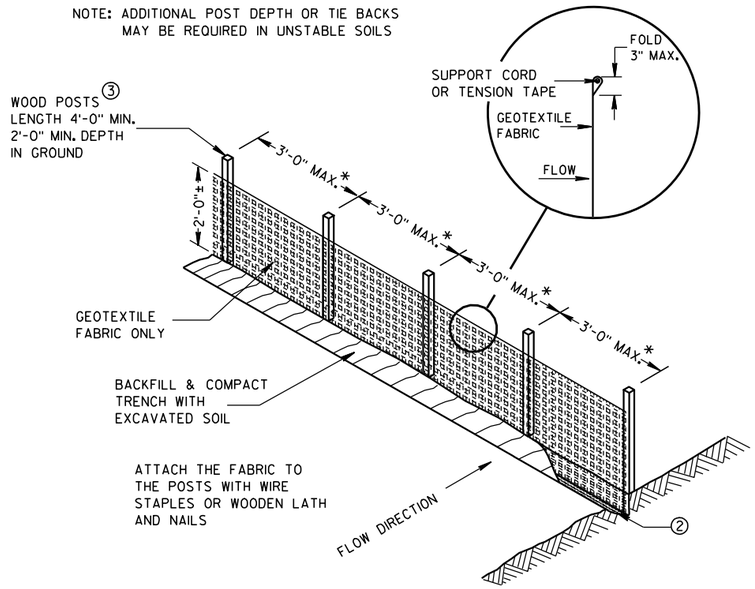
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

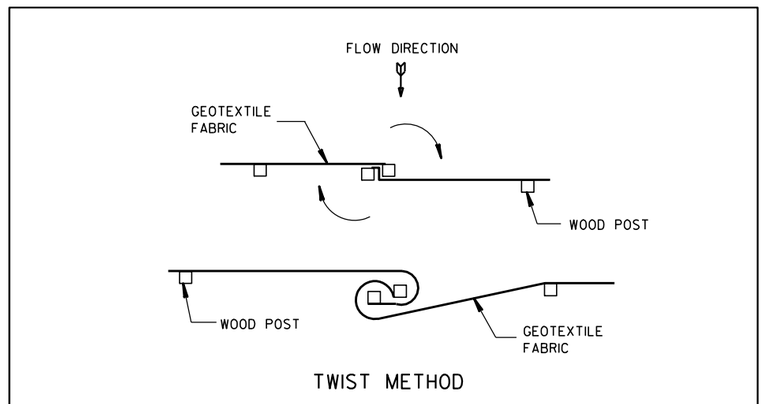
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



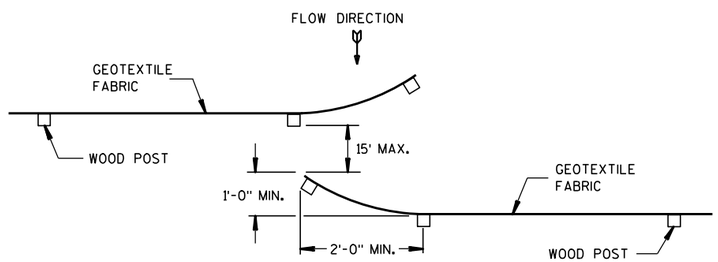
TRENCH DETAIL



SILT FENCE

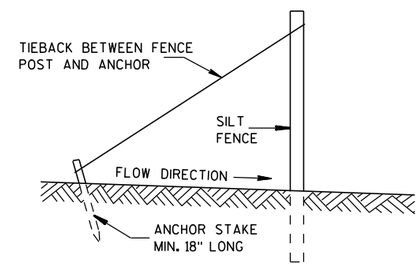


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

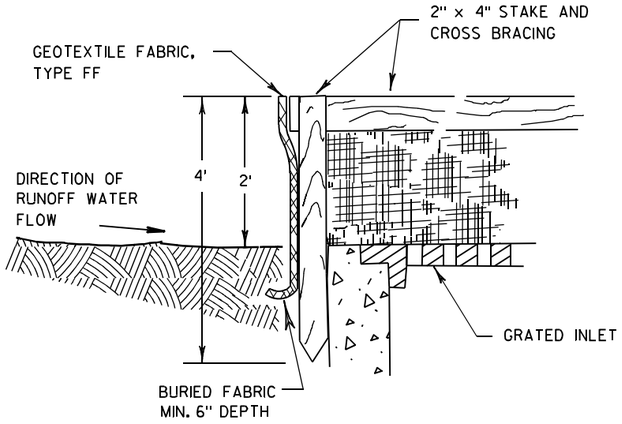
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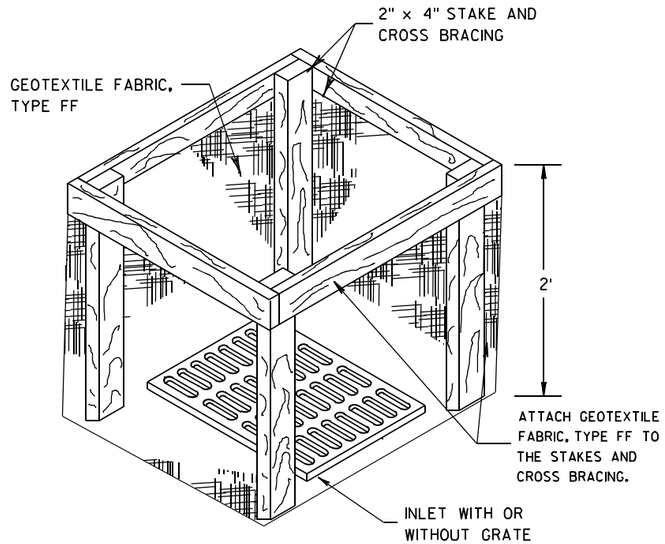
6

S.D.D. 8 E 9-6

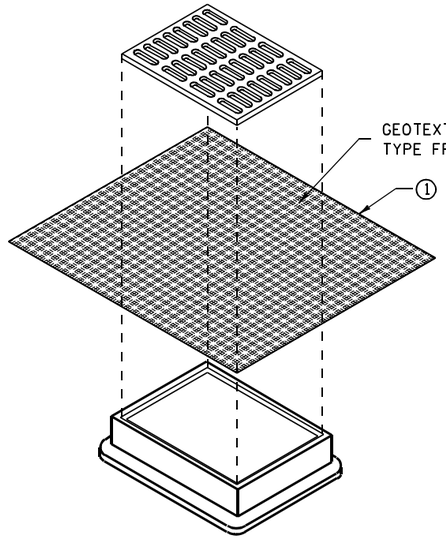
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S.D.D. 8 E 9-6



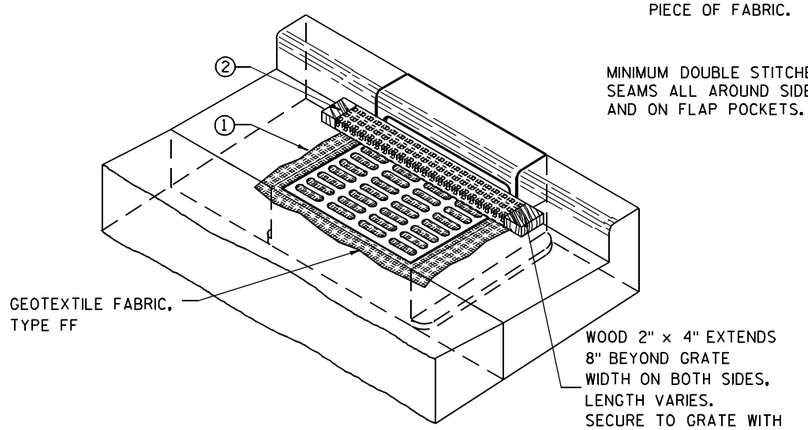


INLET PROTECTION, TYPE A

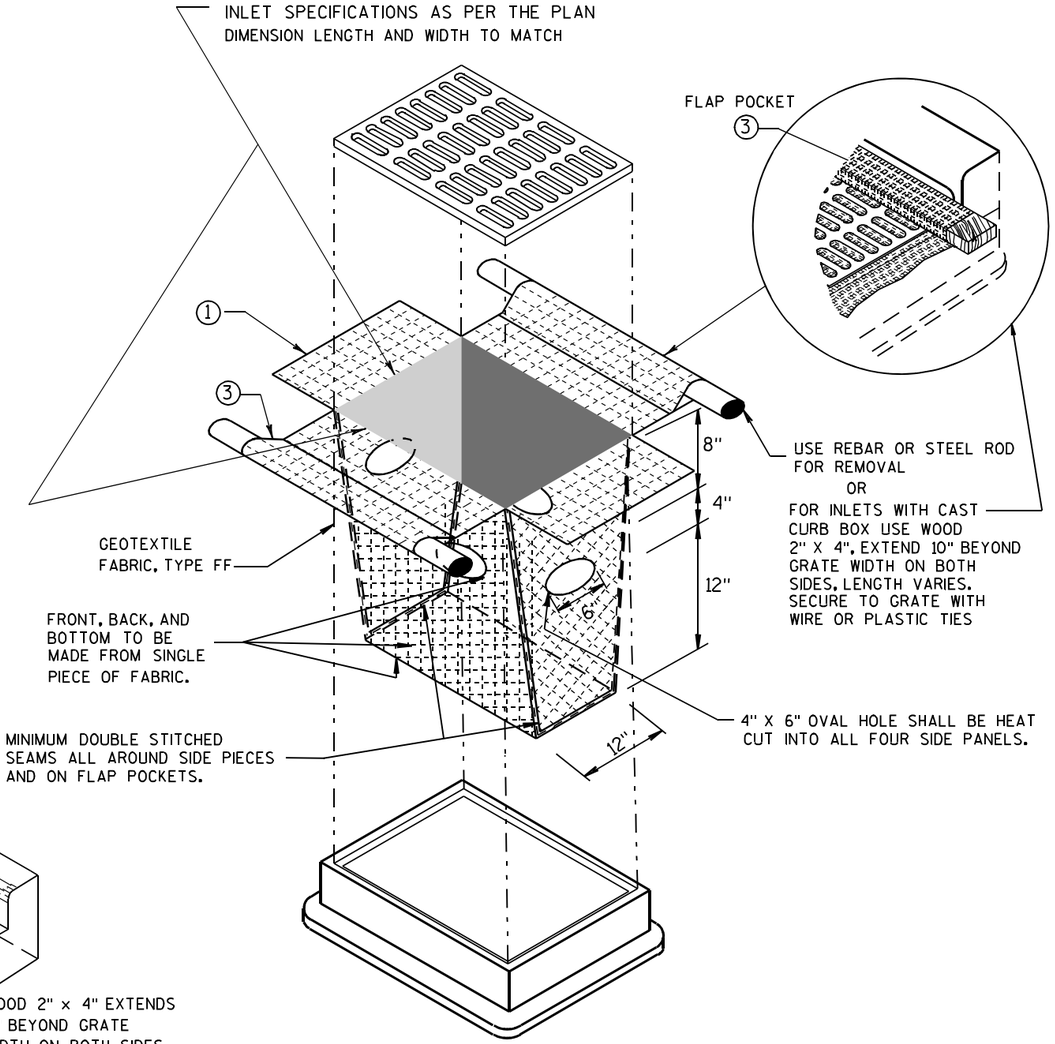


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

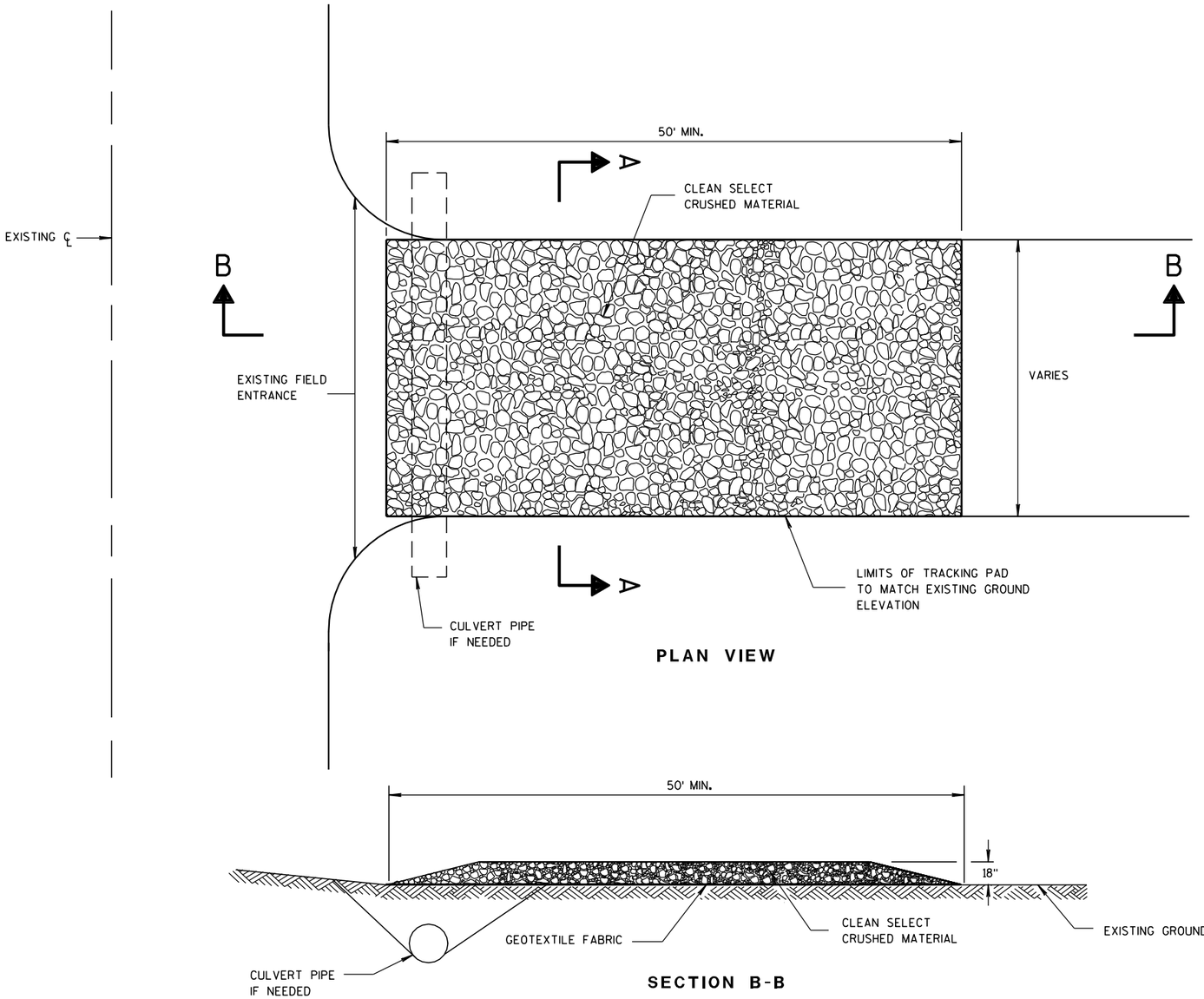
FHWA

6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



PLAN VIEW

SECTION B-B

GENERAL NOTES

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

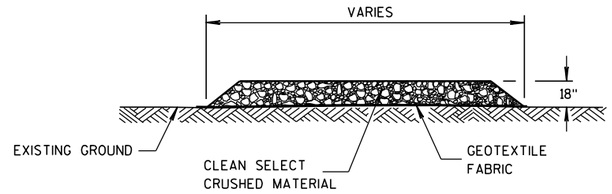
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

6

S.D.D. 8 E 14-1

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011	/S/ Jerry H. Zoda	
DATE	ROADWAY STANDARDS ENGINEER 606	ENT

FHWA

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

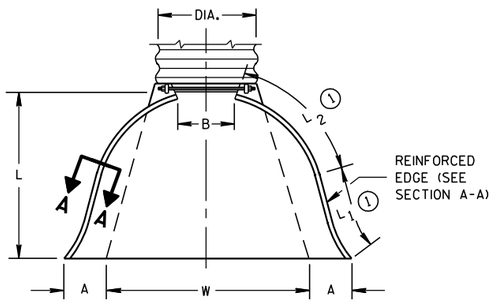
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

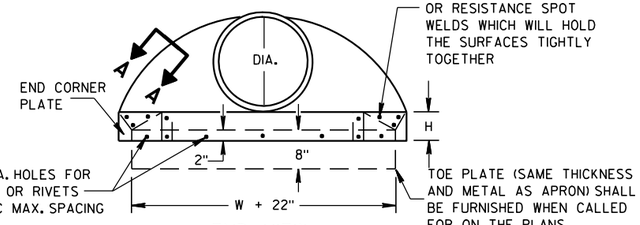
REINFORCED CONCRETE APRON ENDWALLS

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

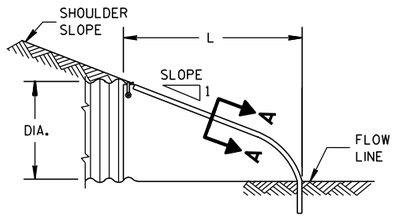
*MINIMUM
**MAXIMUM



PLAN VIEW

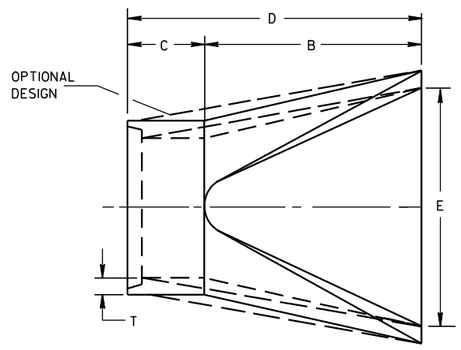


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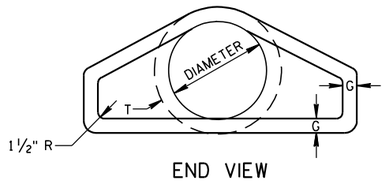


SIDE ELEVATION

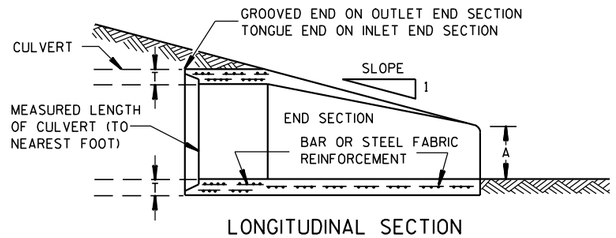
METAL ENDWALLS



PLAN

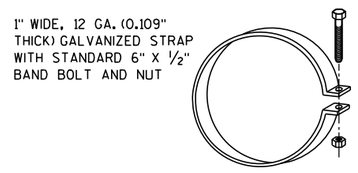


END VIEW



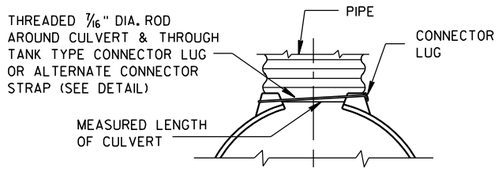
LONGITUDINAL SECTION

CONCRETE ENDWALLS

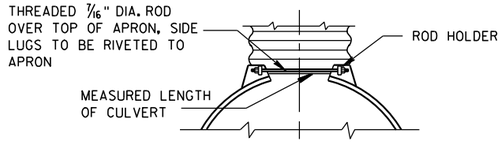


ALTERNATE FOR TYPE 1 CONNECTION

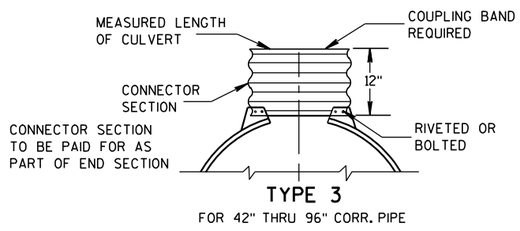
END SECTION CONNECTOR STRAP



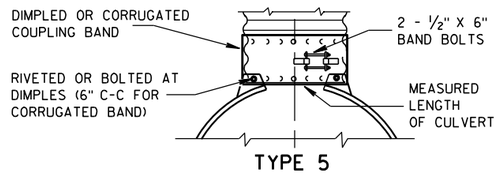
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

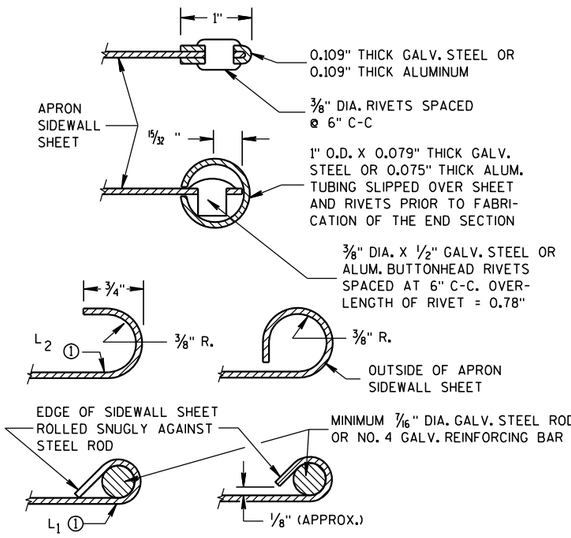
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

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

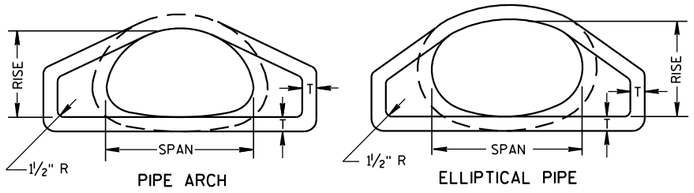
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

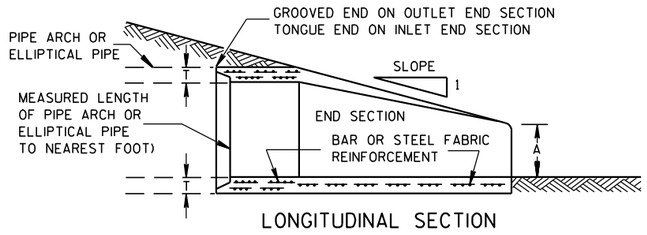
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith 607
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

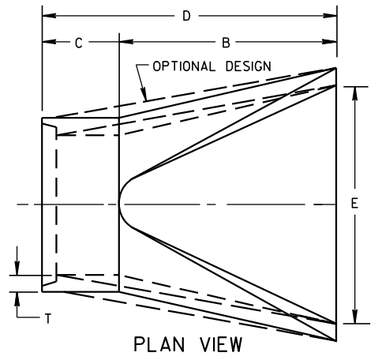
S.D.D. 8 F 1-11



END VIEW

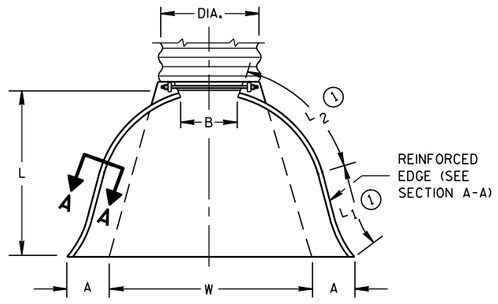


LONGITUDINAL SECTION

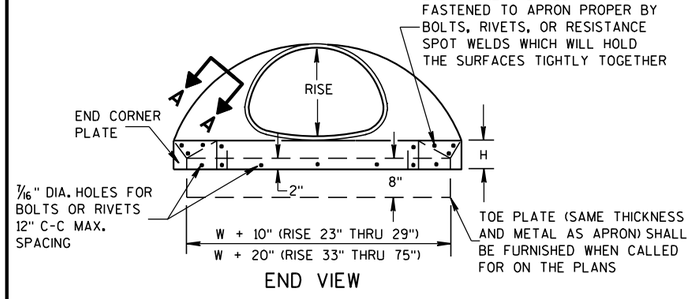


PLAN VIEW

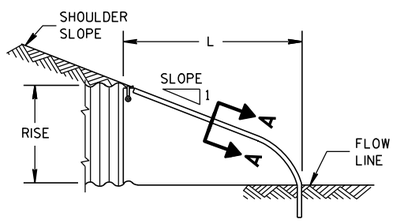
CONCRETE ENDWALLS



PLAN VIEW

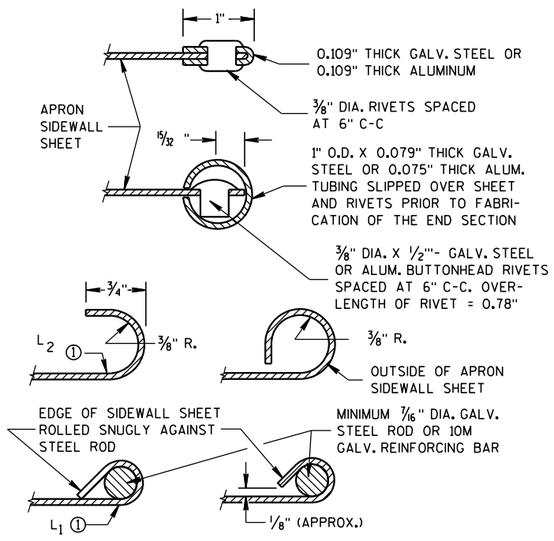


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

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

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

3" X 1" CORRUGATIONS

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

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

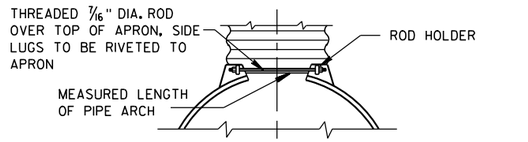
REINFORCED CONCRETE PIPE ARCH

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

REINFORCED CONCRETE ELLIPTICAL PIPE

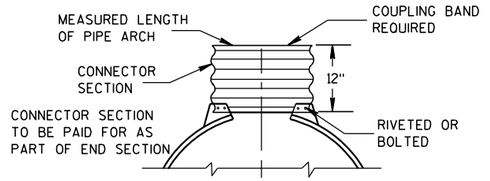
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48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

**NOMINAL SIZE



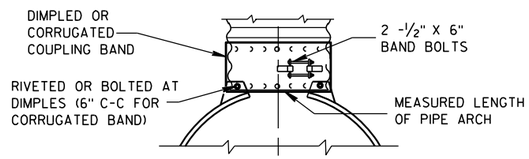
TYPE 2

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



TYPE 3

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



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

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

CONNECTION DETAILS

GENERAL NOTES

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

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

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

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

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

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

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

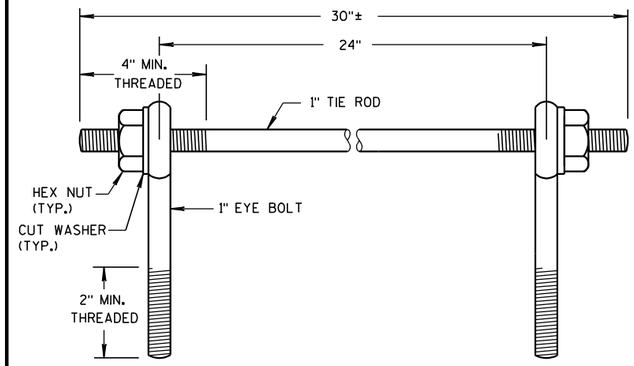
11/30/94 — DATE

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

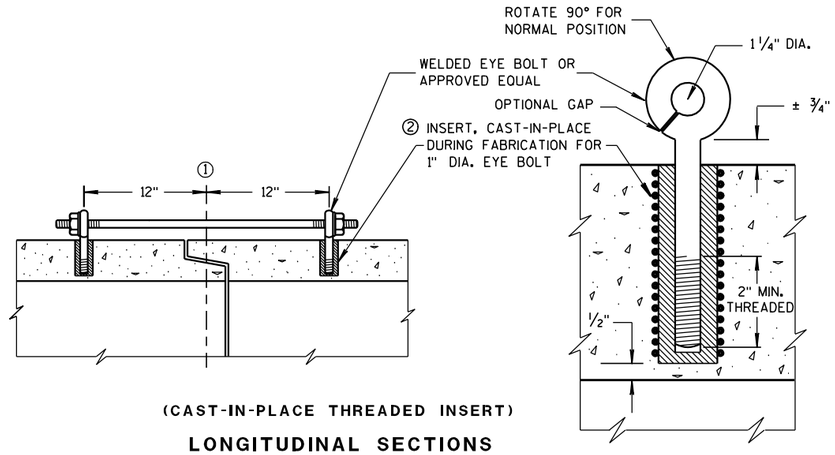
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EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

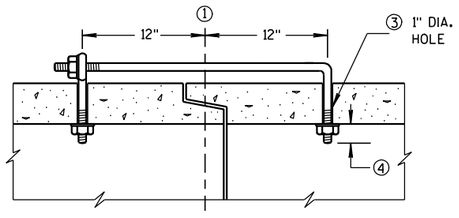
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

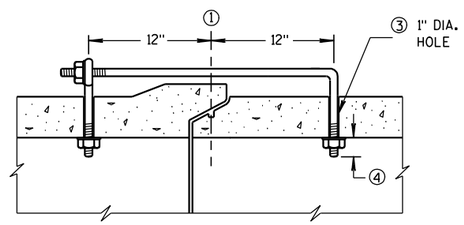
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

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



(TONGUE & GROOVE PIPE)

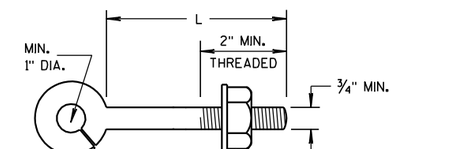


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

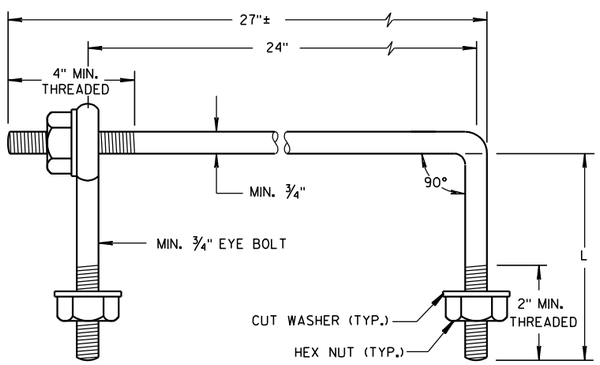
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

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



EYE BOLT AND TIE ROD

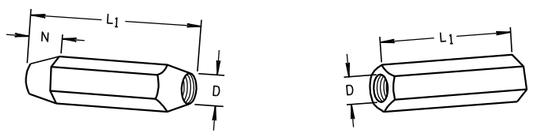
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

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

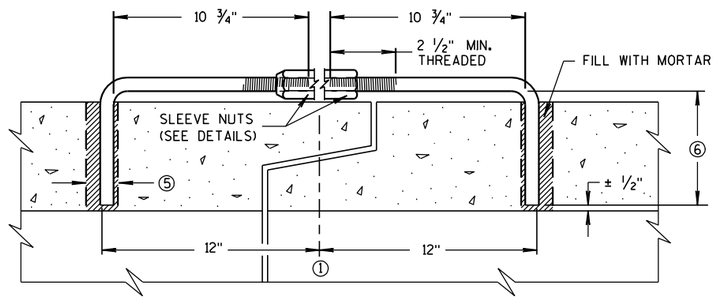
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

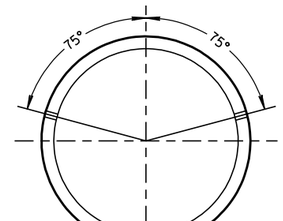
SLEEVE NUTS



LONGITUDINAL SECTION

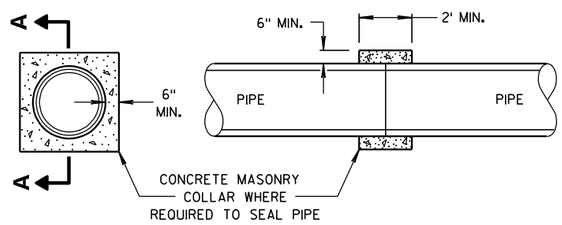
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

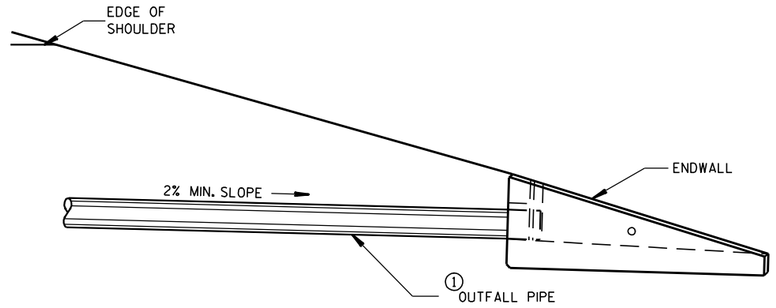
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
609
FHWA

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DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION DETAIL

GENERAL NOTES

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

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

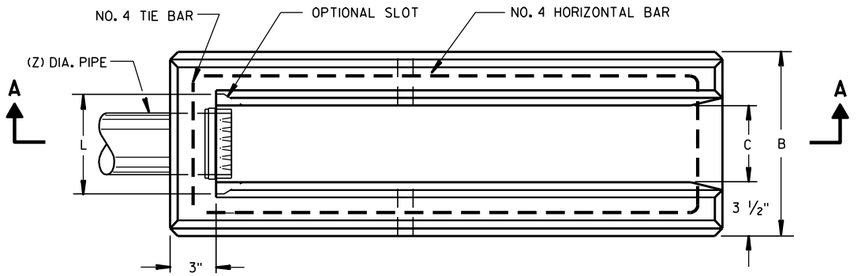
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

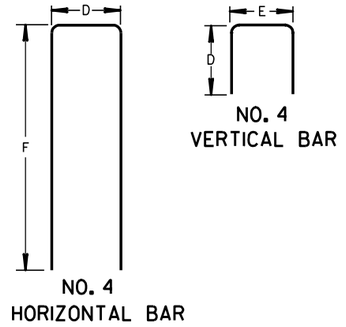
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

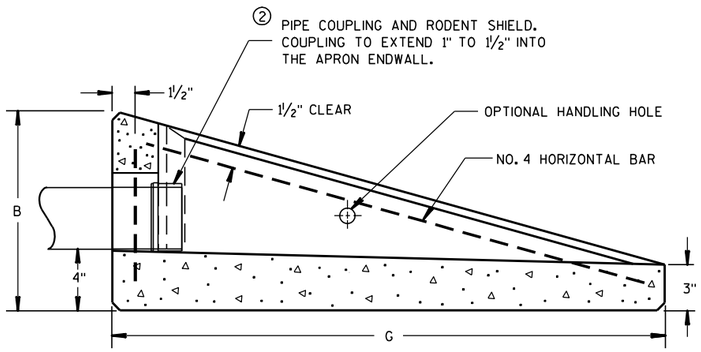
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



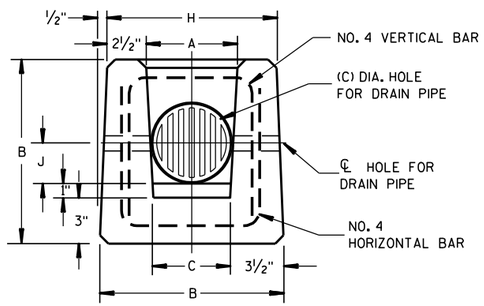
PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS

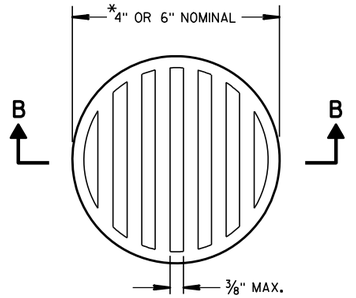


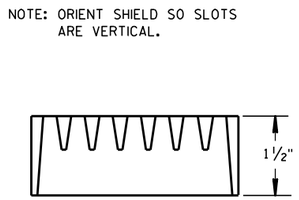
SECTION A-A



END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN





SECTION B-B

② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

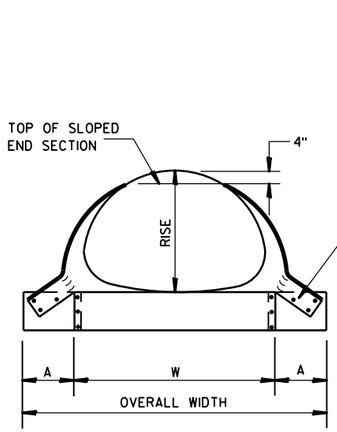
REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

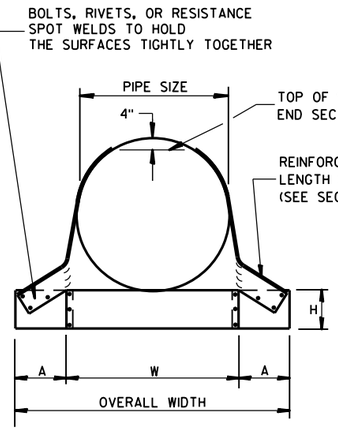
APPROVED
3/10/98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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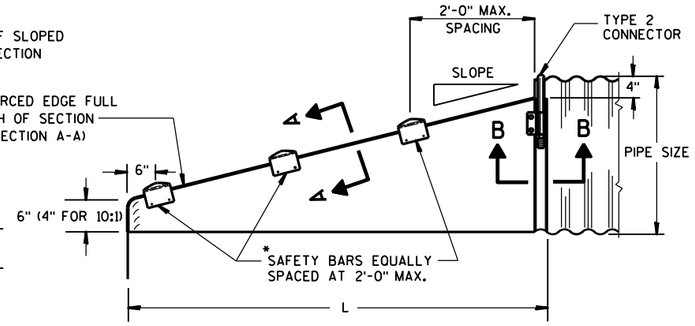
S.D.D. 8 F 6-4



FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

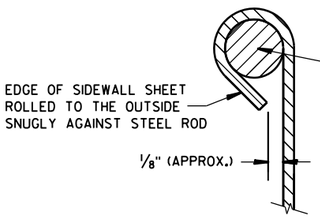
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE
SLOPED SIDE DRAINS

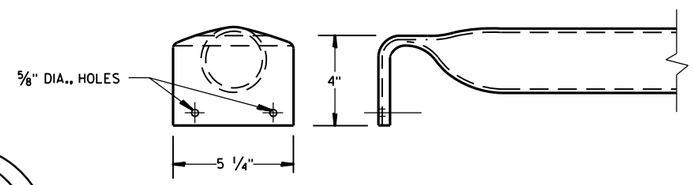
PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	——	——
48	.109	16	12	54	86	4:1	152	6:1	228	——	——
54	.109	16	12	60	92	4:1	176	6:1	264	——	——
60	.109	16	12	66	98	4:1	200	6:1	300	——	——



SECTION A-A

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.

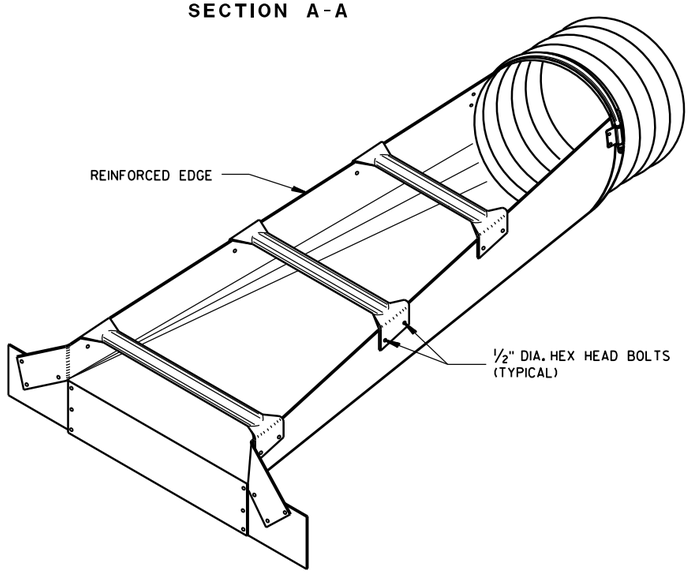


DETAIL OF SAFETY BAR

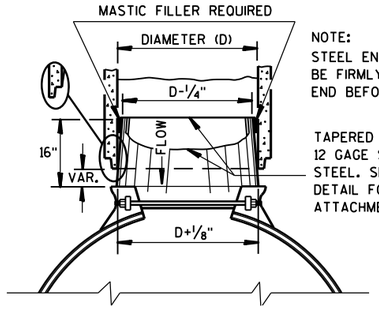
STEEL APRON ENDWALLS FOR PIPE ARCH
SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) ①	DIMENSIONS (Inches) A	H	W	OVERALL WIDTH	L DIMENSIONS SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	——	——
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	——	——
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	——	——

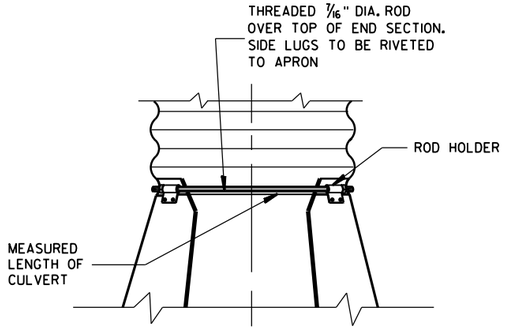
① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



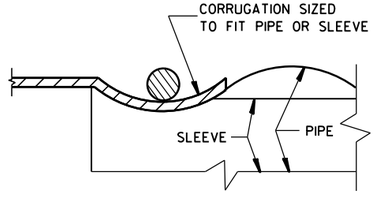
ISOMETRIC VIEW



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



TYPE 2
CONNECTION DETAIL



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

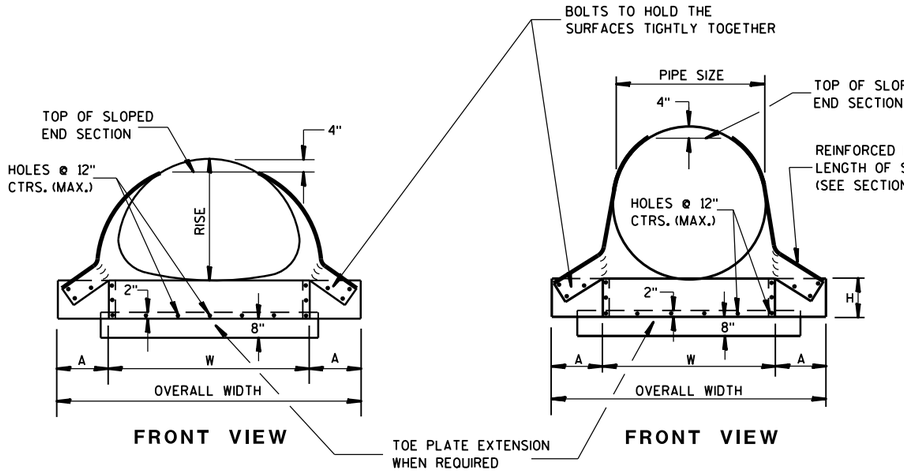
APPROVED
9/14/2012 DATE
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 F 7-5

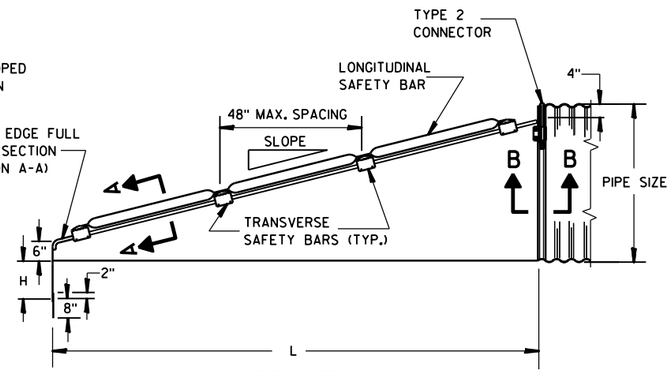
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S.D.D. 8 F 7-5



FRONT VIEW

FRONT VIEW



SIDE VIEW
(48" SIZE ILLUSTRATED)

GENERAL NOTES

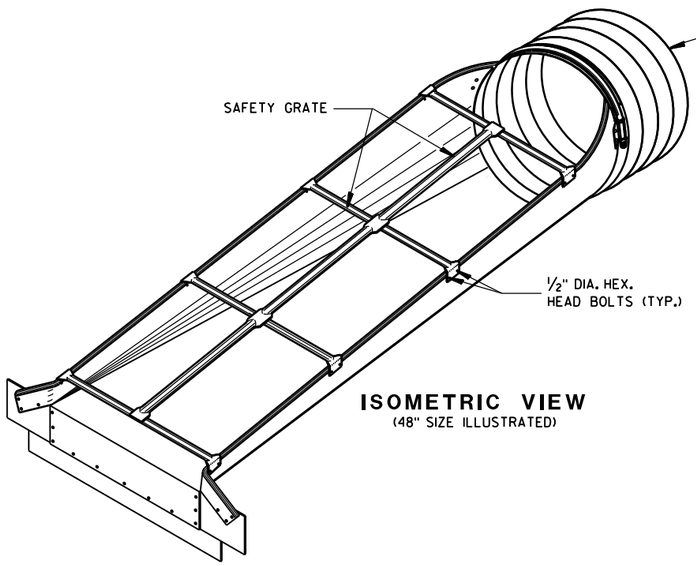
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

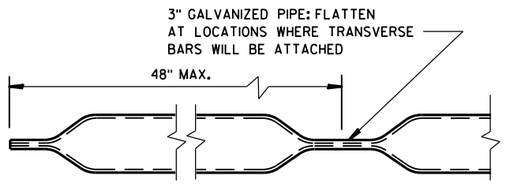
SLOPED STEEL ENDWALLS LOCATED AT THE ENDS OF CONCRETE CULVERT PIPE SHALL BE FURNISHED WITH STEEL ADAPTER SLEEVES.

STEEL APRON ENDWALLS FOR CULVERT PIPE CROSS DRAINS

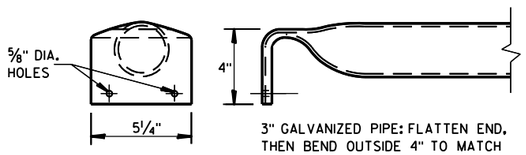
PIPE DIA. (IN.)	MIN. THICK.		DIMENSIONS (Inches)				L DIMENSIONS			
	IN.	GAGE	A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
36	.109	12	12	9	42	66	4:1	104	6:1	156
42	.109	12	16	12	48	80	4:1	128	6:1	192
48	.109	12	16	12	54	86	4:1	152	6:1	228
54	.109	12	16	12	60	92	4:1	176	6:1	264
60	.109	12	16	12	66	98	4:1	200	6:1	300



ISOMETRIC VIEW
(48" SIZE ILLUSTRATED)



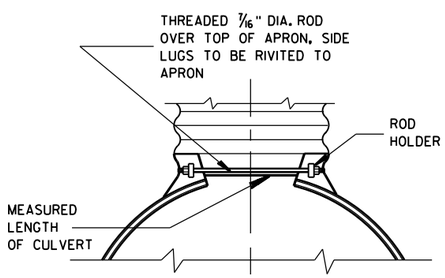
LONGITUDINAL SAFETY BAR



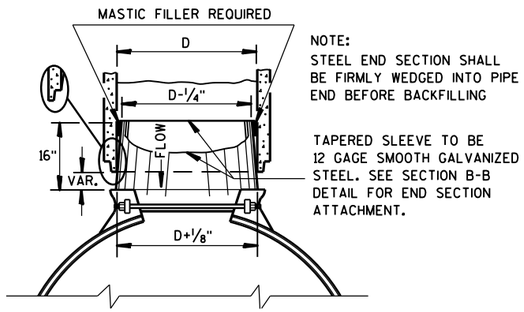
TRANSVERSE SAFETY BAR

STEEL APRON ENDWALLS FOR PIPE ARCH SLOPED CROSS DRAINS

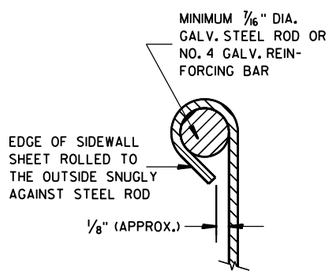
EQUIV. DIA. (IN.)	INCHES		MIN. THICK.		DIMENSIONS (Inches)				L DIMENSIONS			
	SPAN	RISE	IN.	GAGE	A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
30	35	24	.079	14	12	9	41	65	4:1	56	6:1	84
36	42	29	.109	12	12	9	48	72	4:1	76	6:1	114
42	49	33	.109	12	16	12	55	87	4:1	92	6:1	138
48	57	38	.109	12	16	12	63	95	4:1	112	6:1	168
54	64	43	.109	12	16	12	70	102	4:1	132	6:1	198
60	71	47	.109	12	16	12	77	109	4:1	148	6:1	222



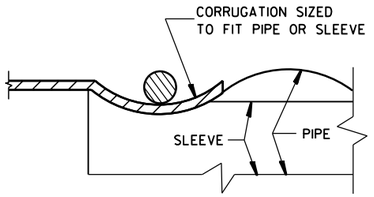
TYPE 2 CONNECTOR DETAIL



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



SECTION A-A



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED CROSS DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

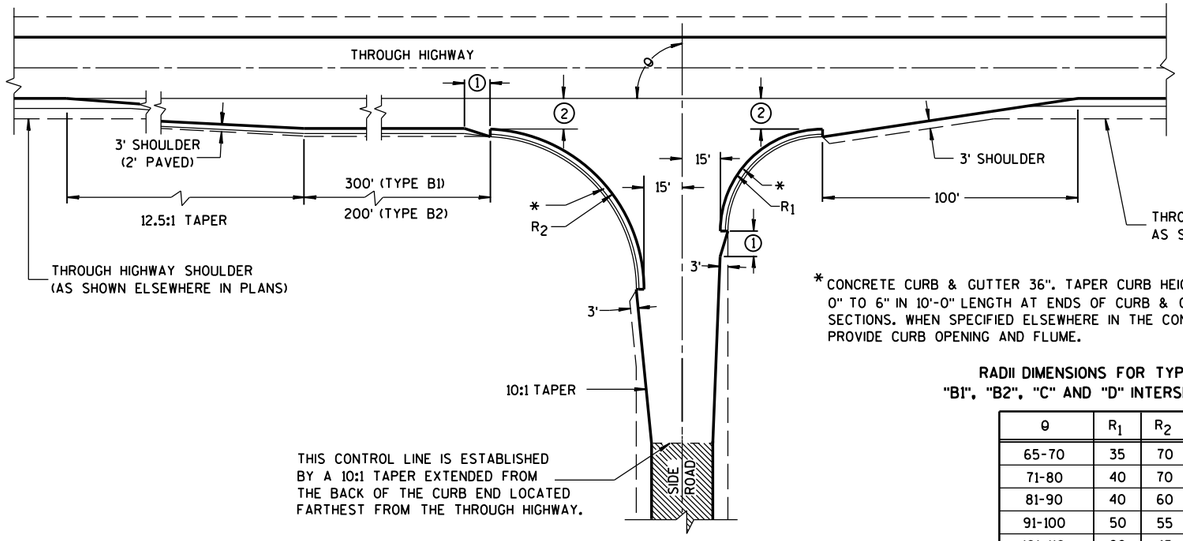
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 F 8-2

6

S.D.D. 8 F 8-2

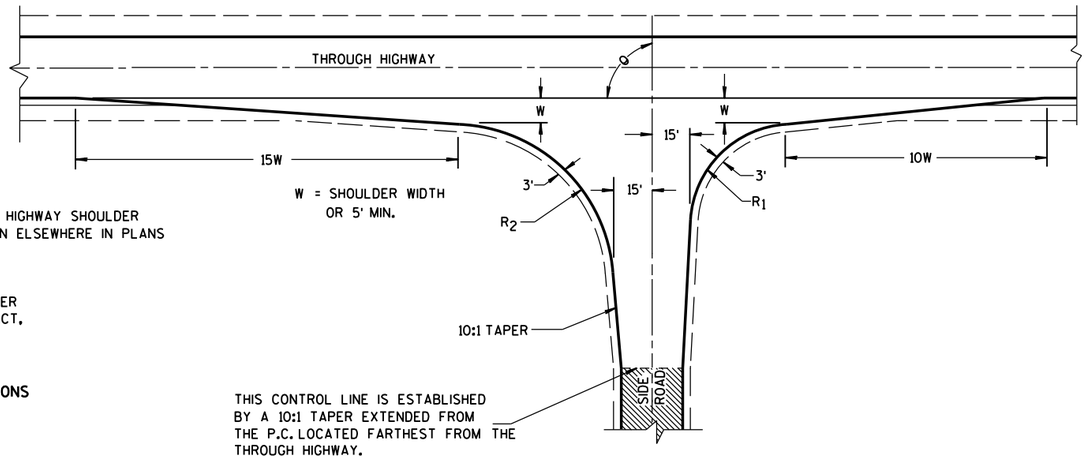


TYPE "B1" AND "B2"

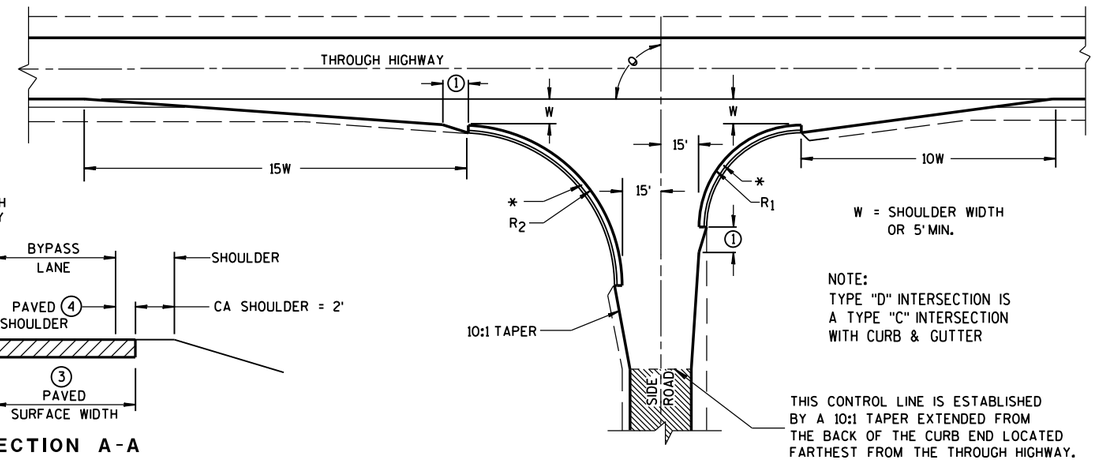
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

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

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



TYPE "C"



TYPE "D"

GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

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

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

EXISTING PAVED SURFACE

BYPASS LANE

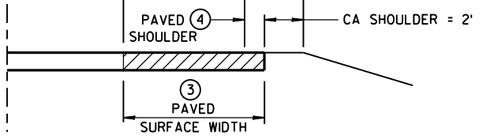
(1) 10-FT TYPICAL.

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

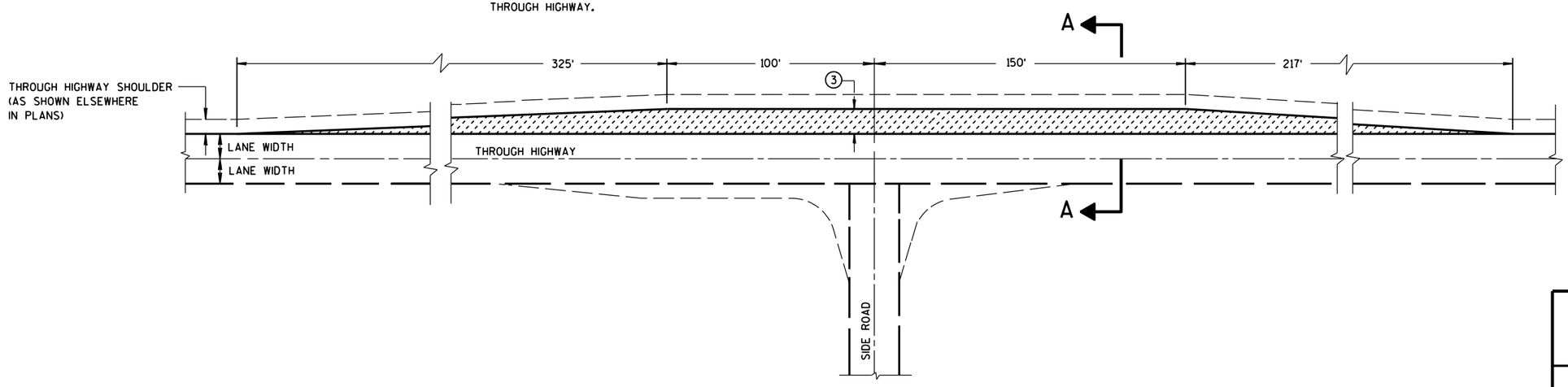
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

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

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



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



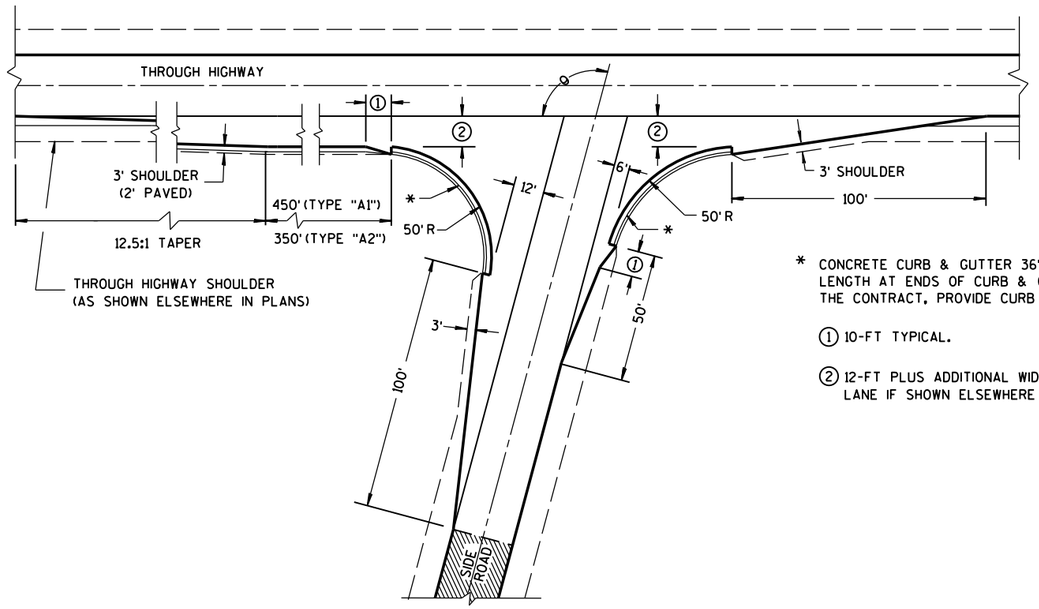
TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

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



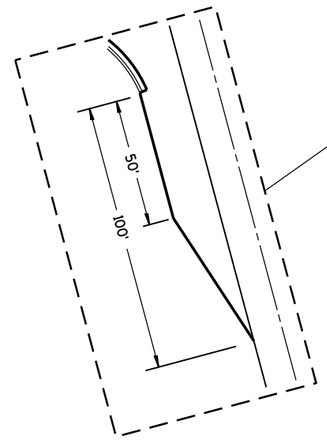
θ = MORE THAN 80°

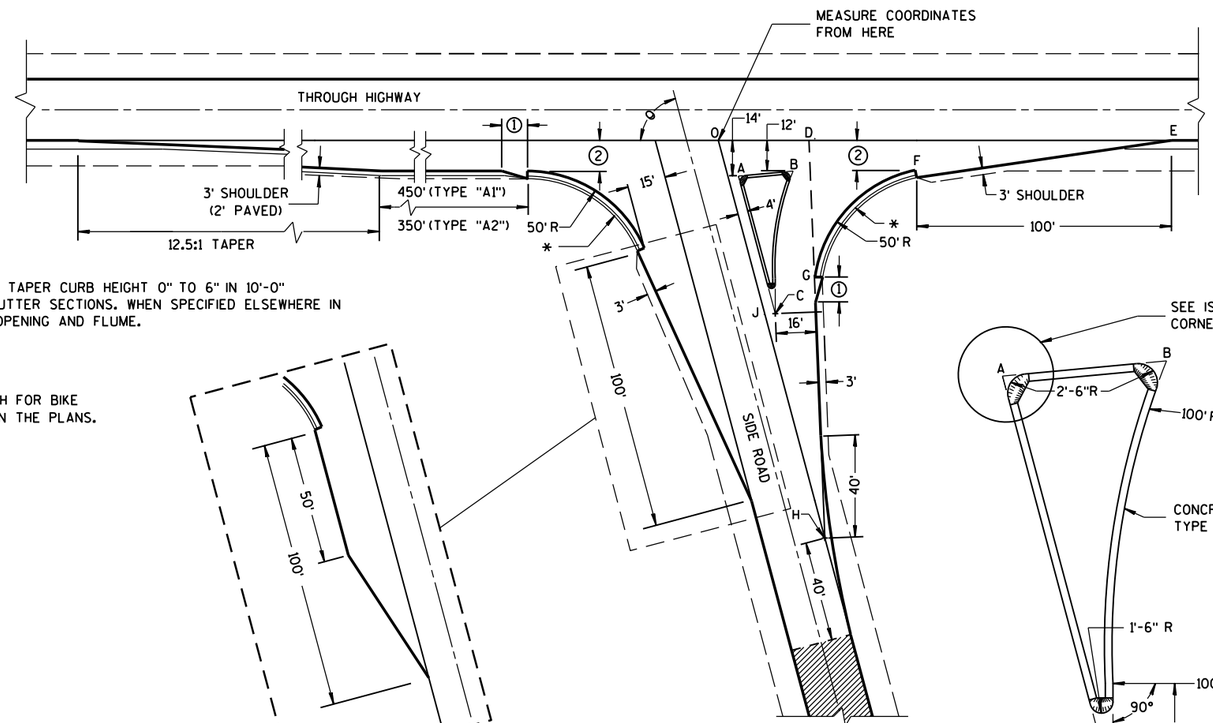
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

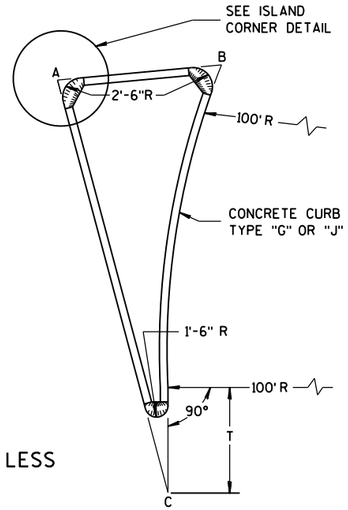
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.

EXISTING PAVED SURFACE





θ = ACUTE ANGLES 80° OR LESS

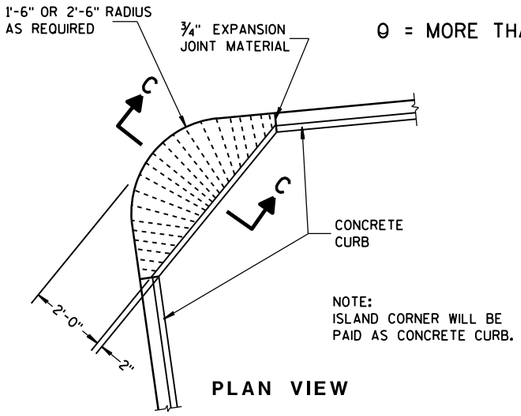


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS

TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

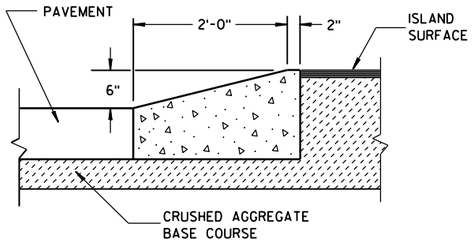
ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS



NOTE:
ISLAND CORNER WILL BE PAID AS CONCRETE CURB.

PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

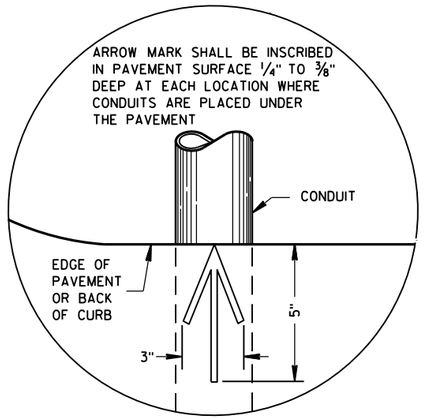
(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

AT-GRADE SIDE ROAD
INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

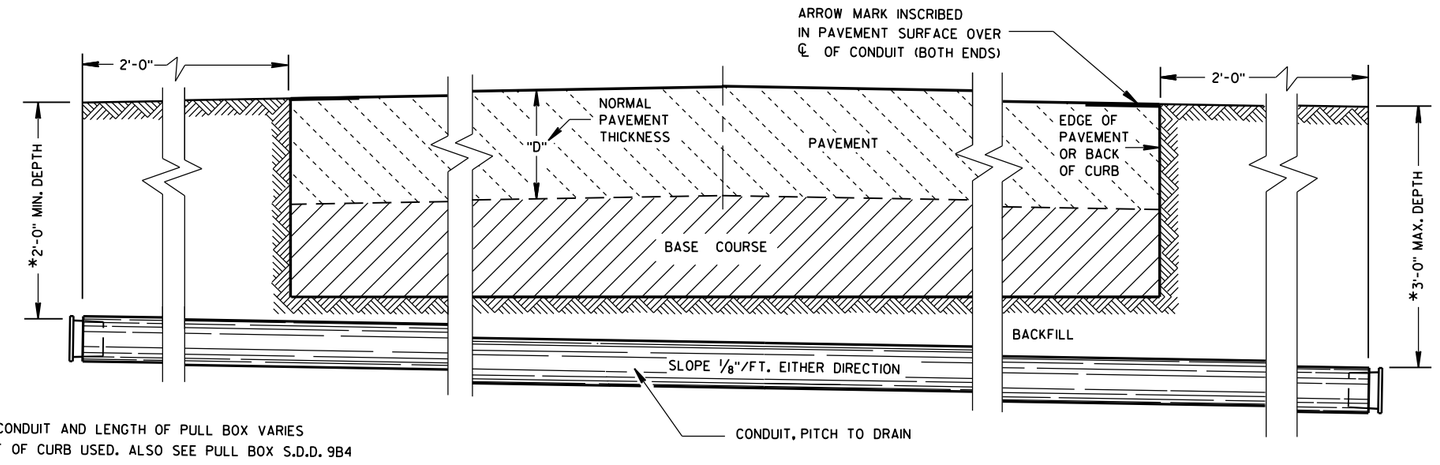
APPROVED
12/18/12 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 9 A 1-13b



PLAN VIEW

ARROW MARK



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

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

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

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

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

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

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

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

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

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

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

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

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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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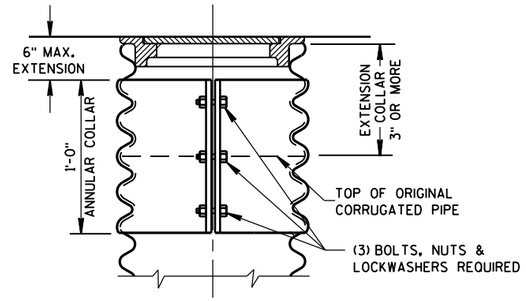
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

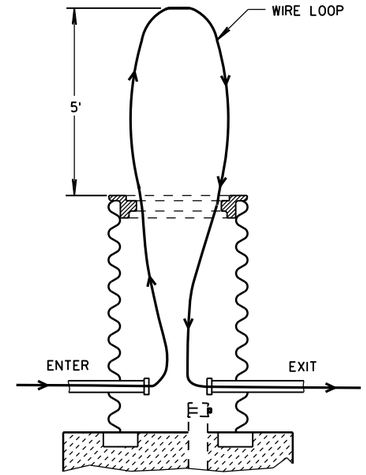
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

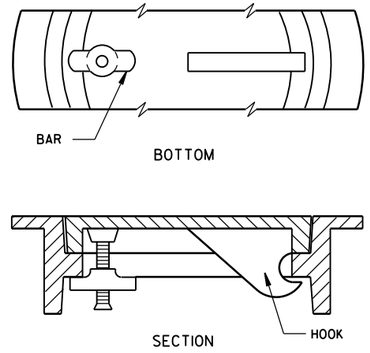
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

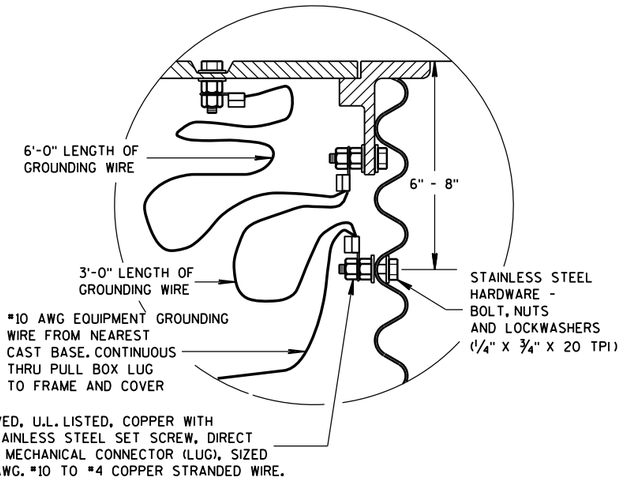


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

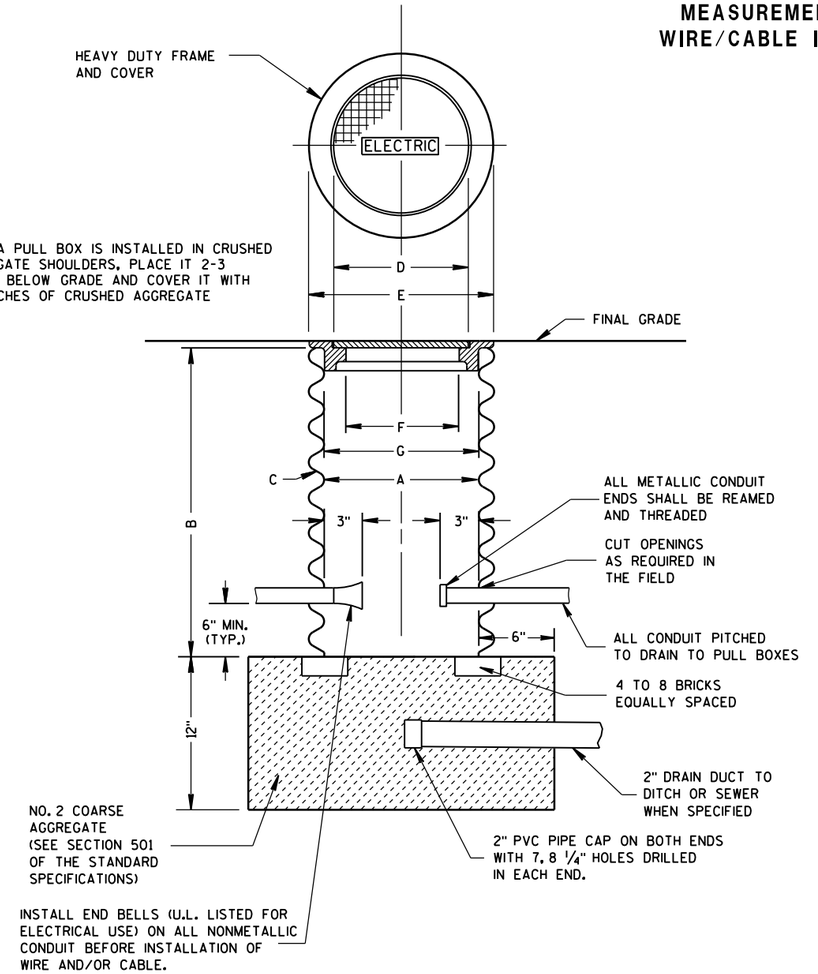
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

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

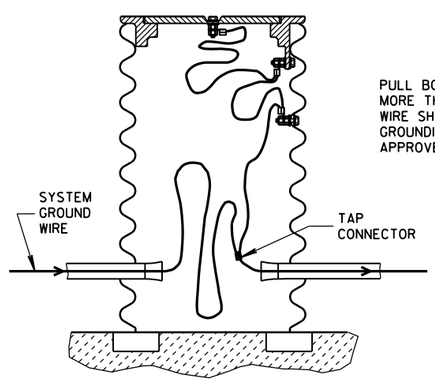
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

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

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

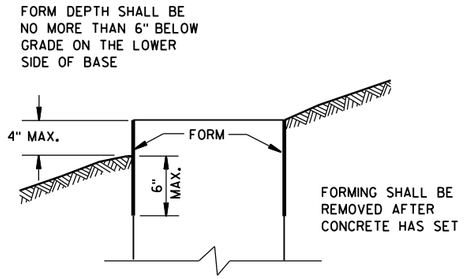
APPROVED
Sept. 2014 — DATE
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FORMING DETAIL

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

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

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

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

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

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

GENERAL NOTES (CONTINUED)

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

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

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

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

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

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

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

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

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

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

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

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

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

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

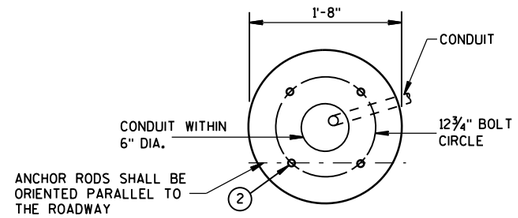
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

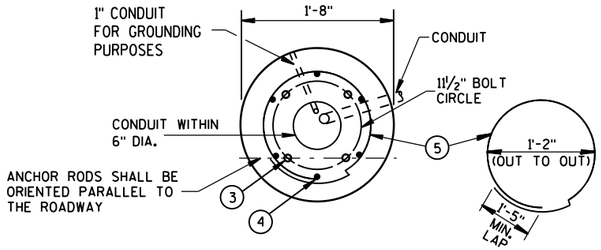
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

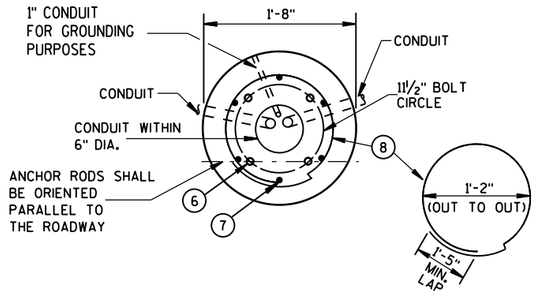
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

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

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

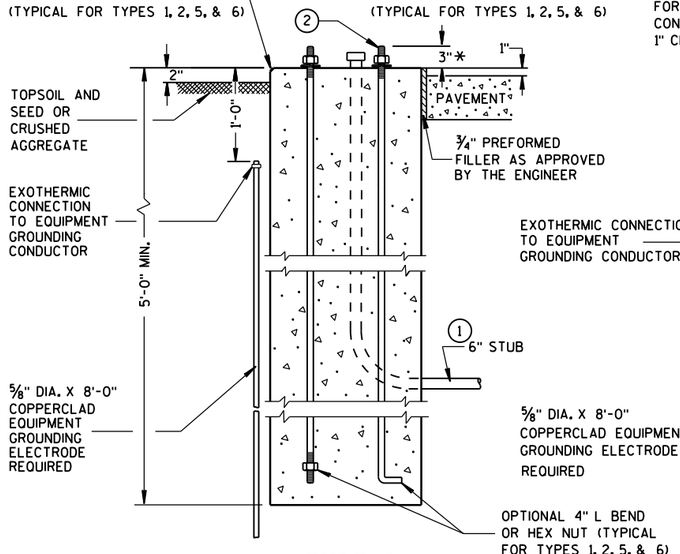




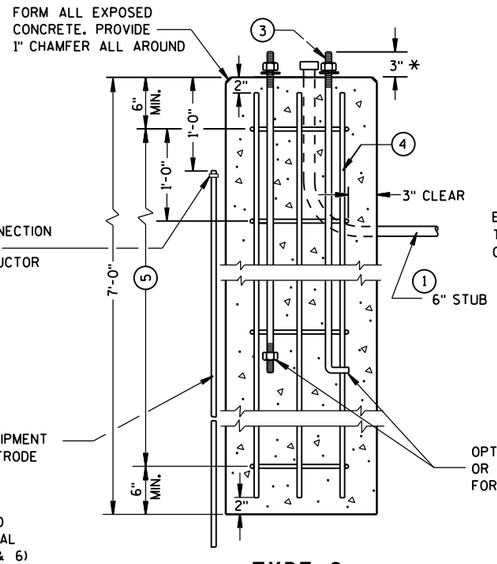


HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5, & 6)

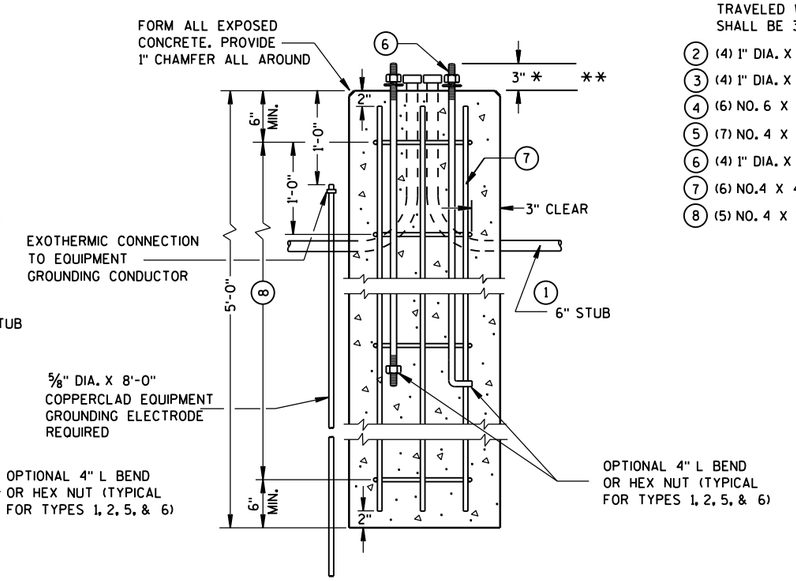
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 617
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GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

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

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

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

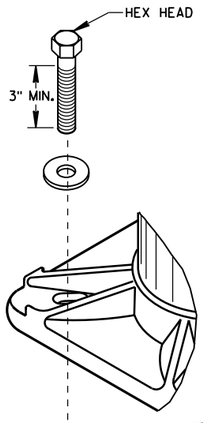
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

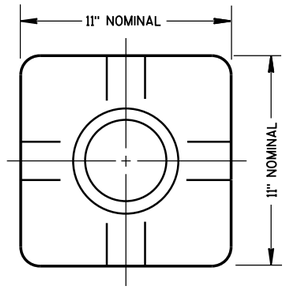
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

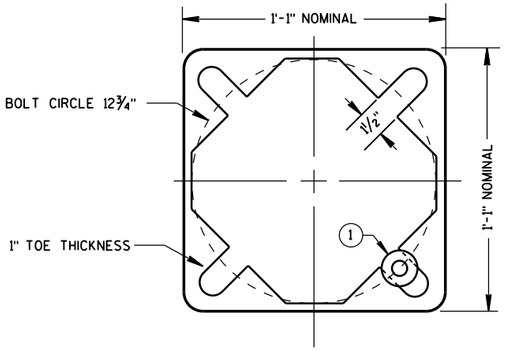
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

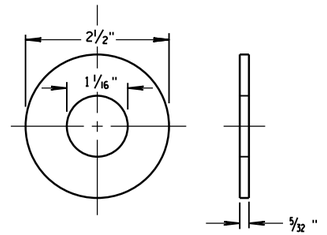




TOP VIEW
(PEDESTAL BASE)

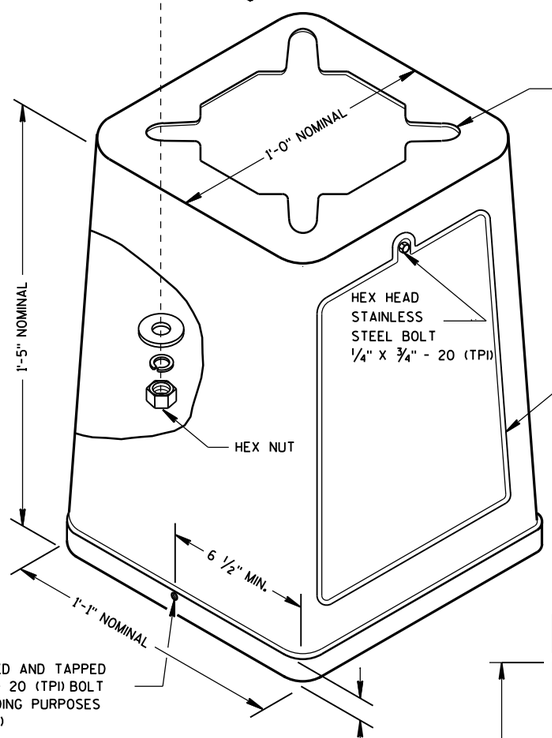


BOTTOM VIEW
(PEDESTAL BASE)

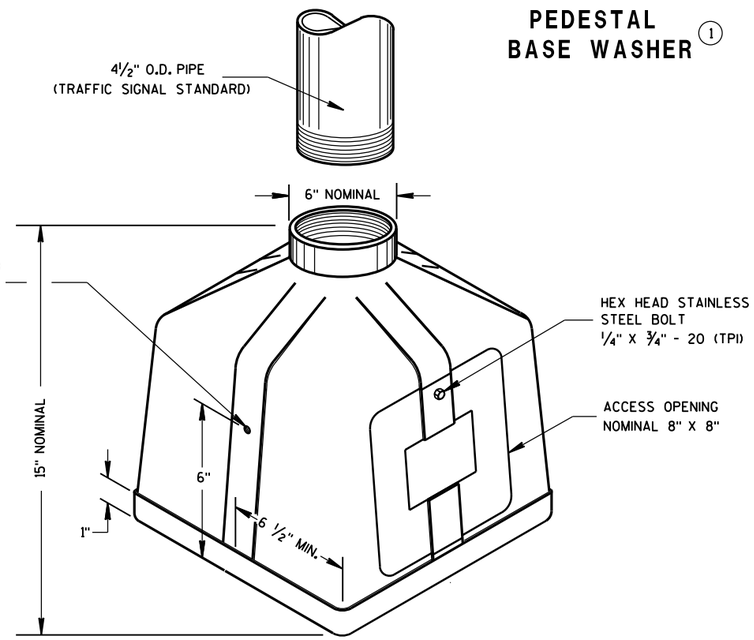


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

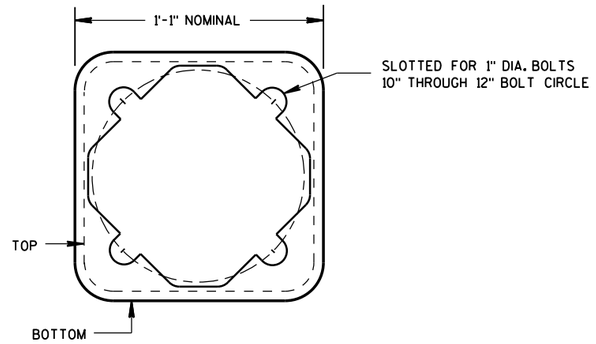


ISOMETRIC VIEW

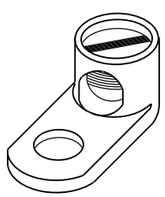


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

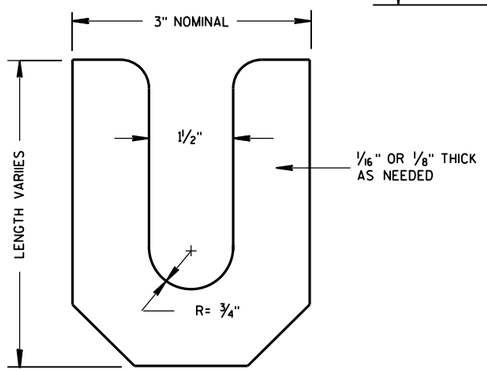


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

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



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

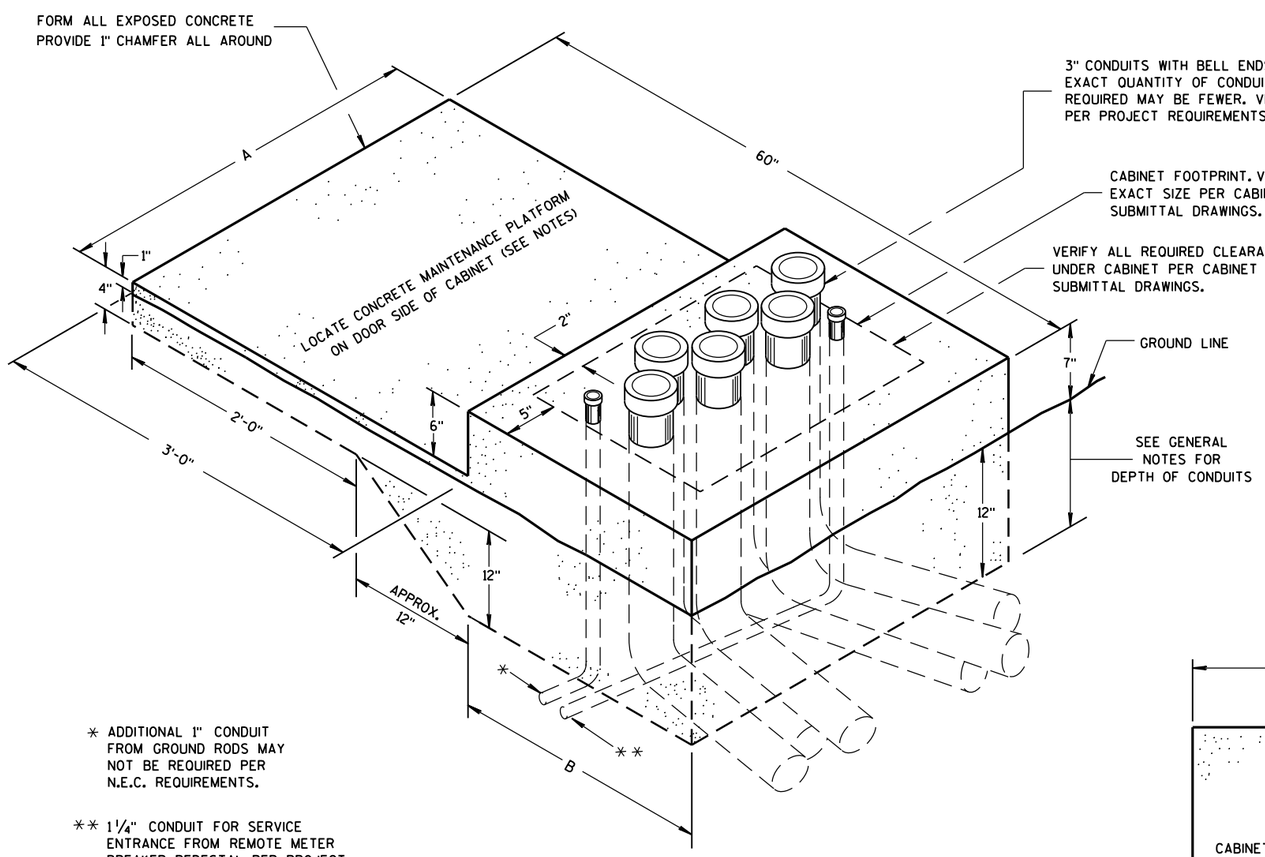
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* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

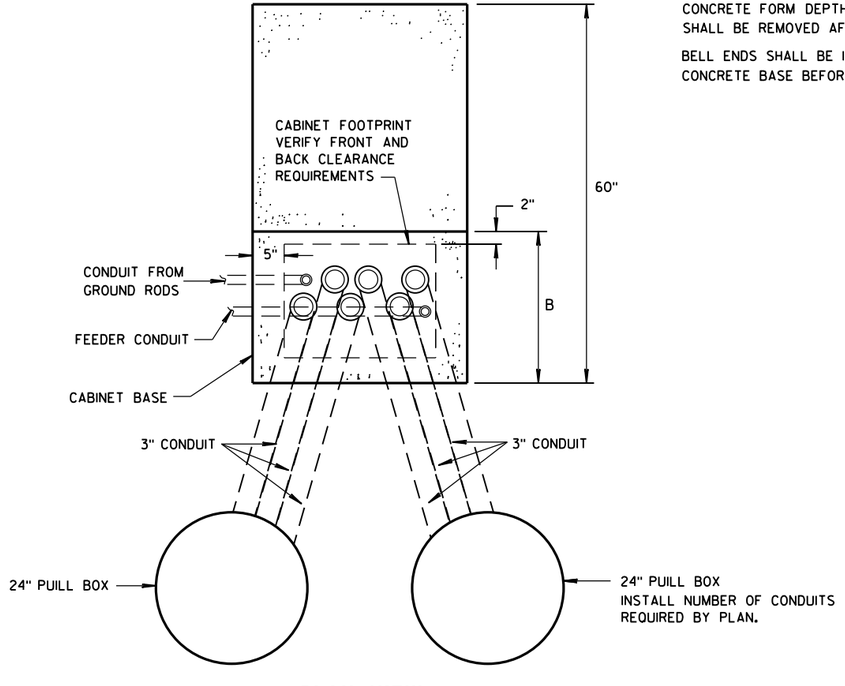
** 1¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

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



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

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

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

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

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

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

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

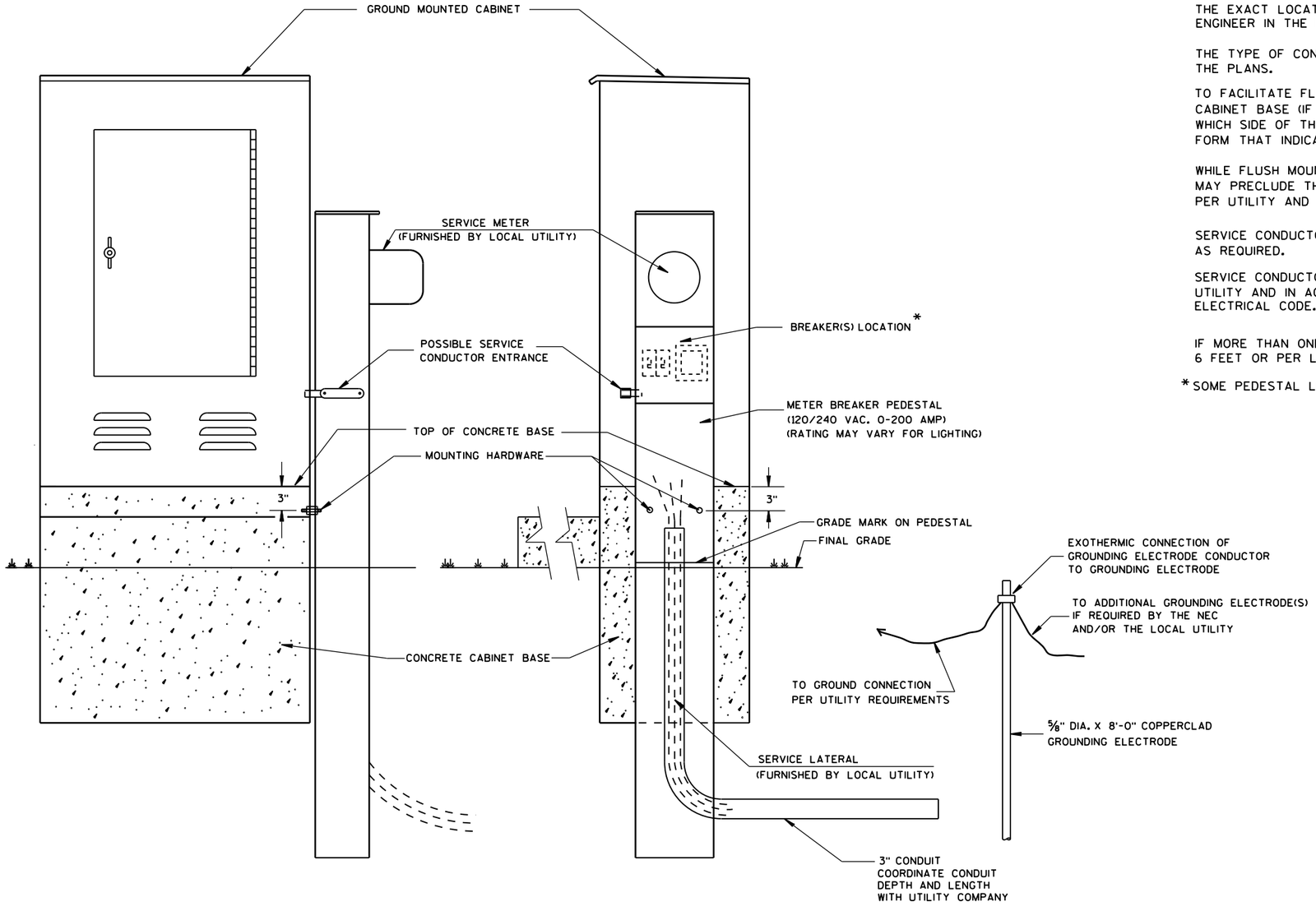
APPROVED
Nov. 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINE — WYS
FHWA

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TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

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

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

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

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

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

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

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

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
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GENERAL NOTES

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

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

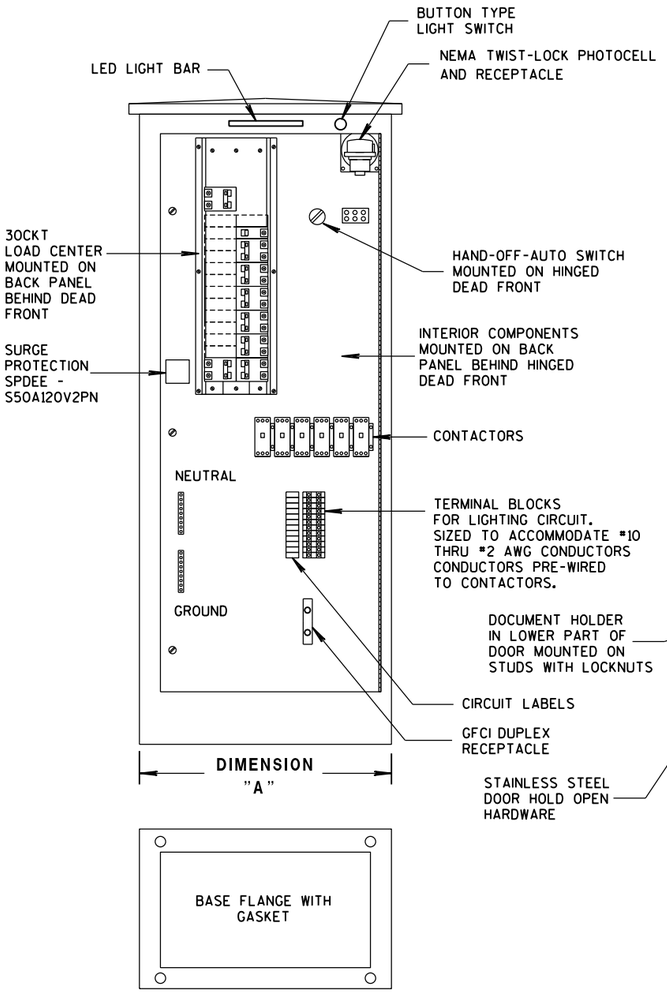
ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

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

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

FRONT INTERIOR ELEVATION



SIDE VIEW

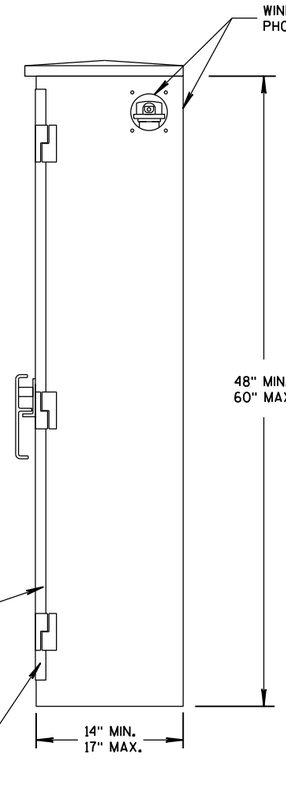
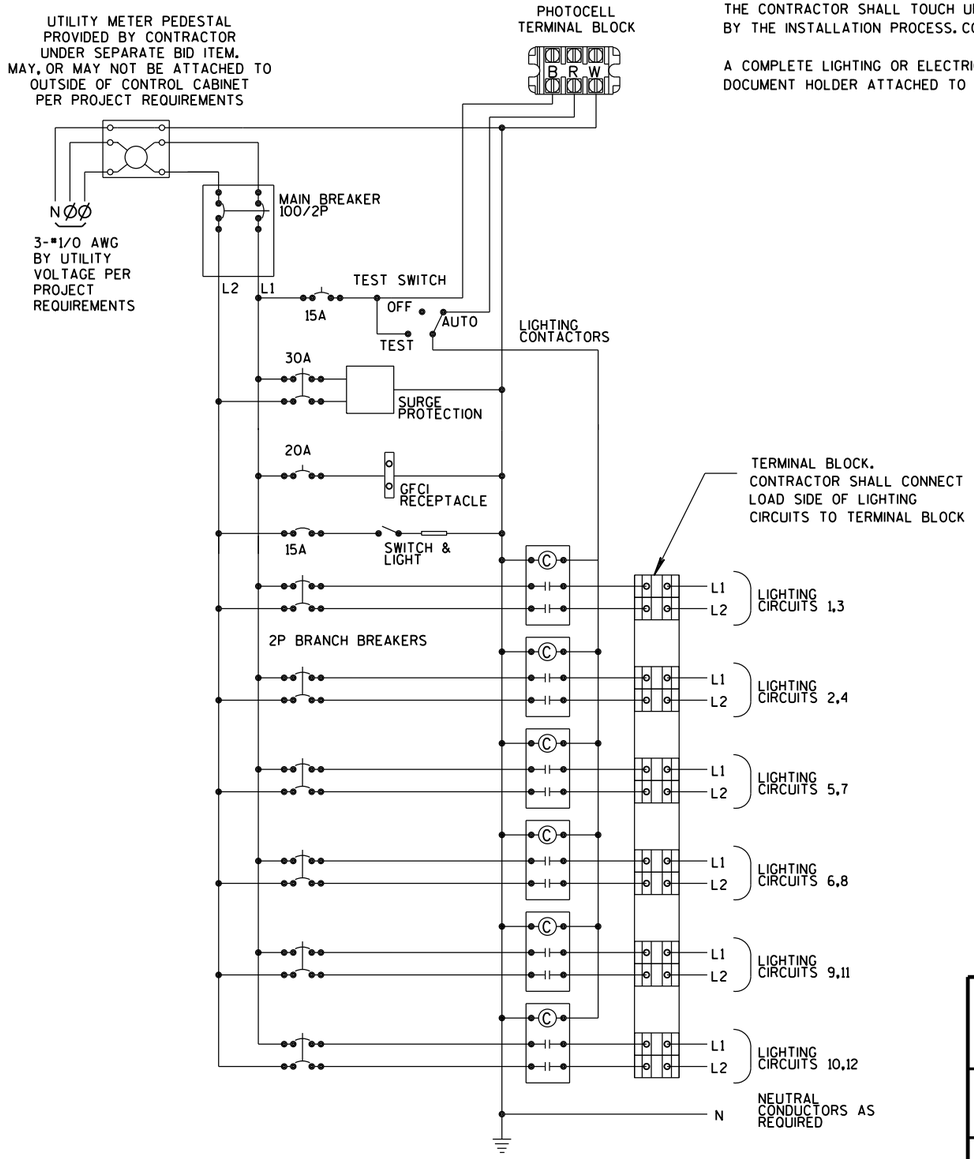


TABLE OF DIMENSIONS (INCHES)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

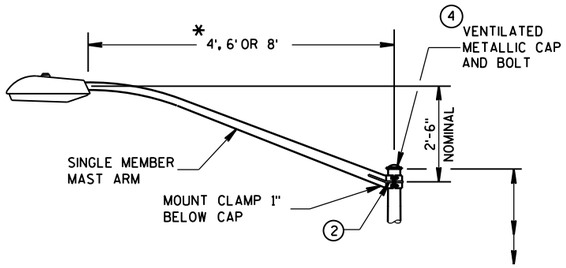
LIGHTING CONTROL CABINET 120/240 VOLT

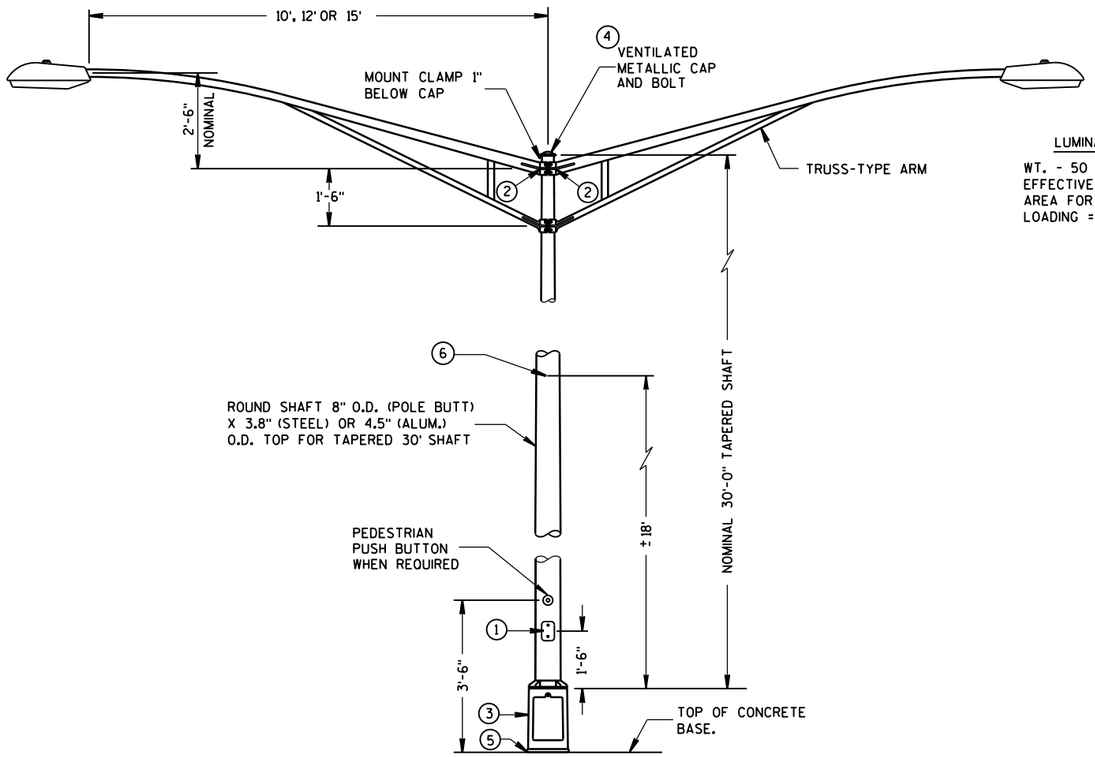
STATE OF WISCONSIN
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Sept. 2014 — DATE
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NYS.
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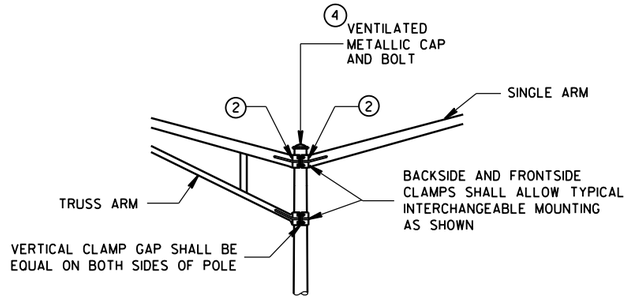
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S.D.D. 9 D 4-2

*RISE FOR 4' ARM SHALL BE 2'-0".





TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

GENERAL NOTES

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

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

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

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

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

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

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

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

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

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

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

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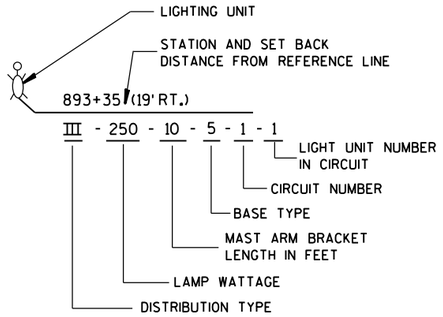
S.D.D. 9 E 1-14d

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

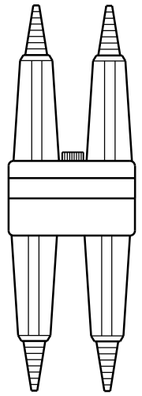
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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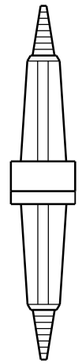
S.D.D. 9 E 1-14d



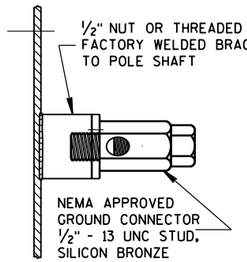
LIGHTING UNIT CODE
(TYPICAL)

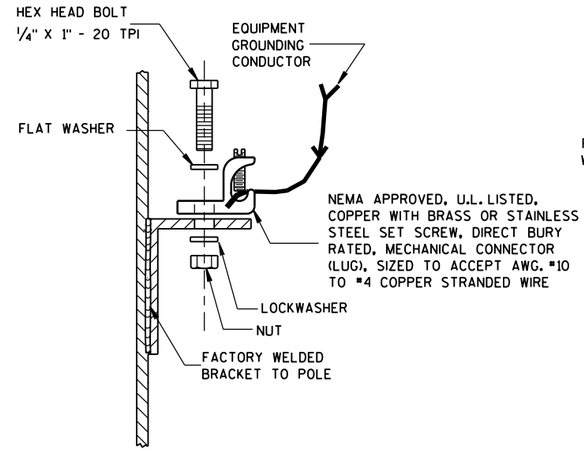


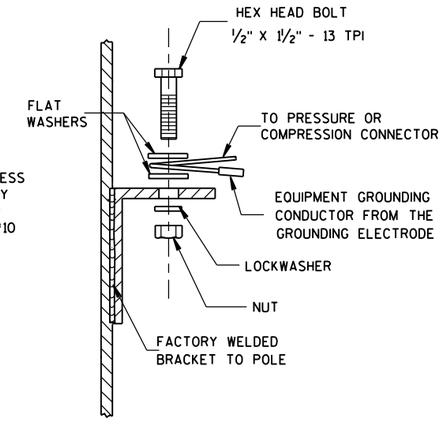
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



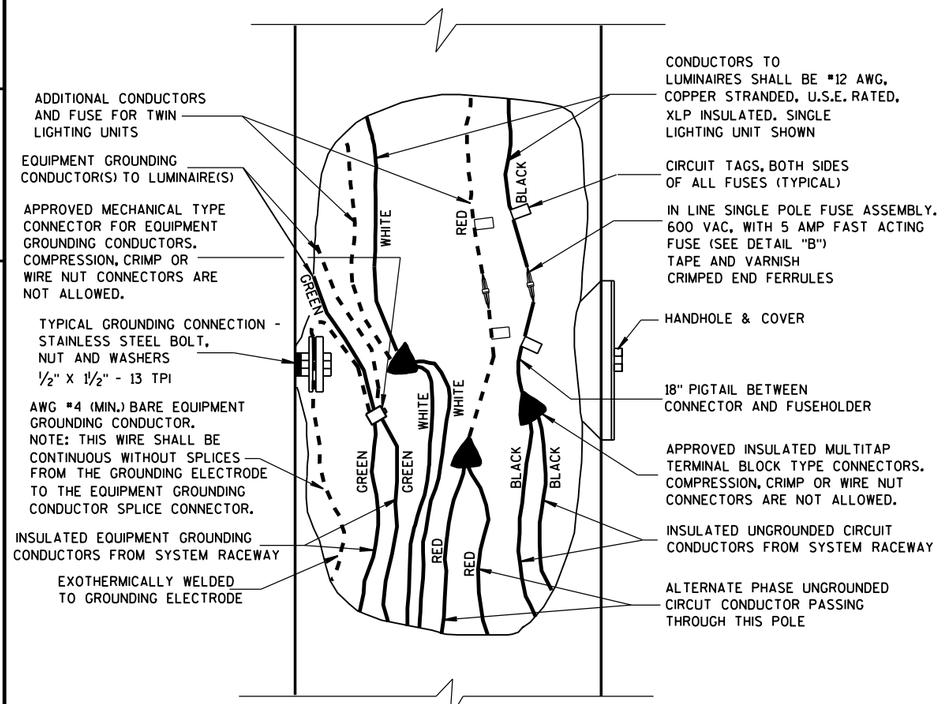
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



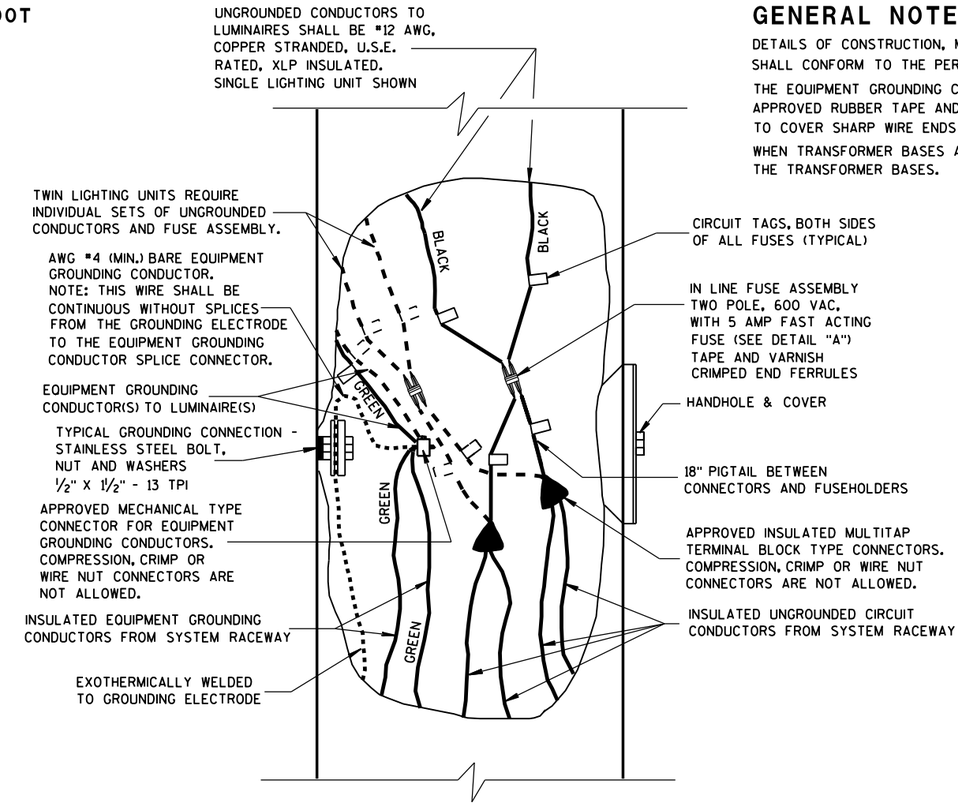




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

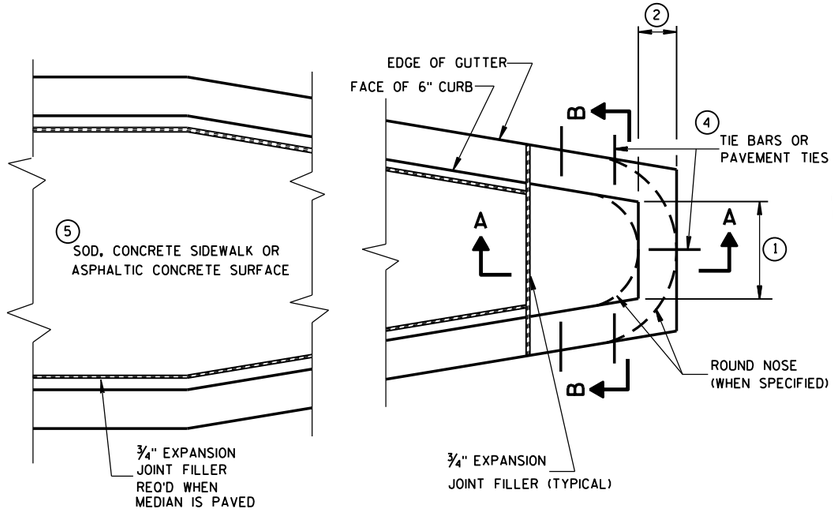
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

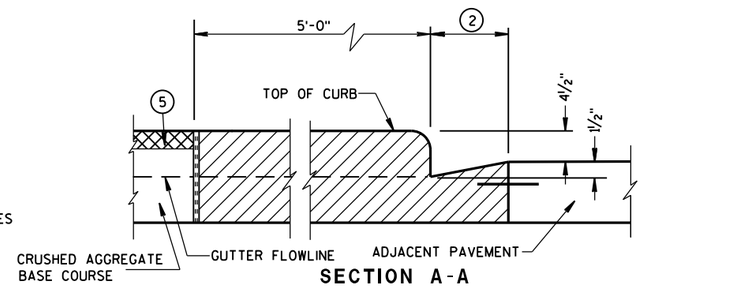
NON-FREEWAY LIGHTING UNIT POLE WIRING

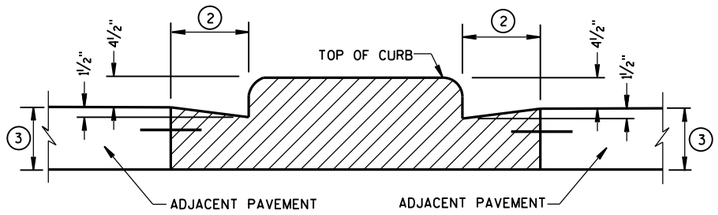
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

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

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

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

(1) NEW OR EXISTING CONCRETE PAVEMENT.

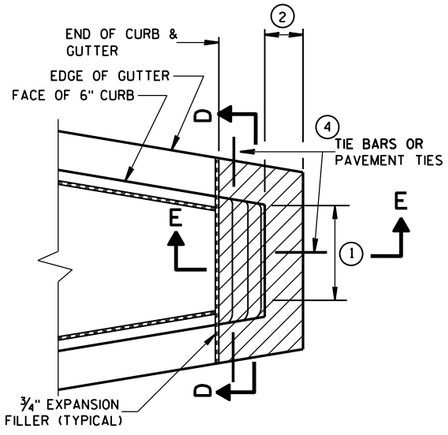
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

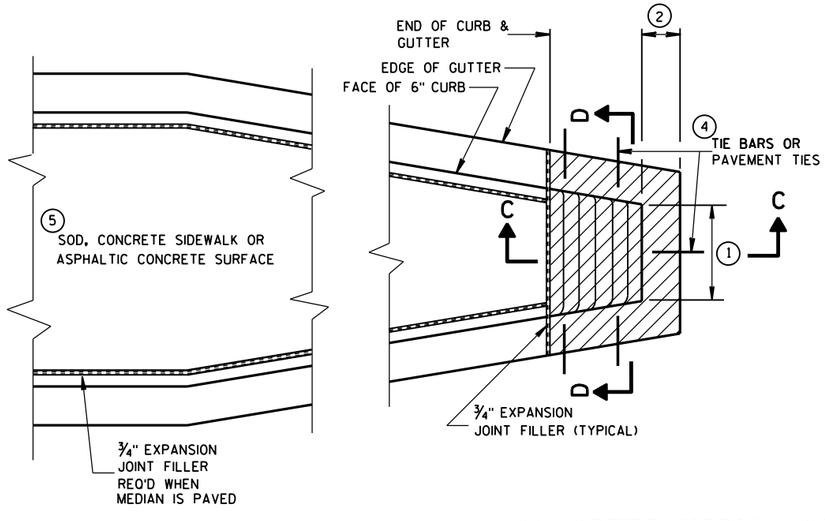
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

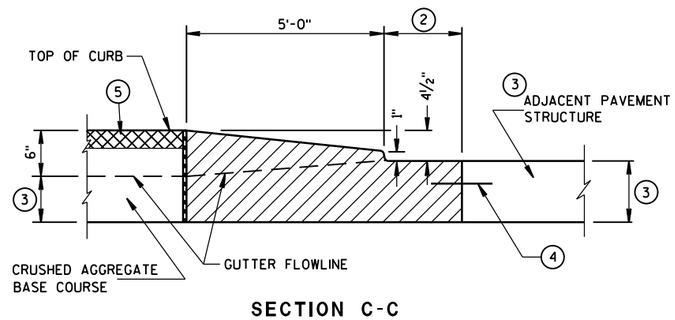
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

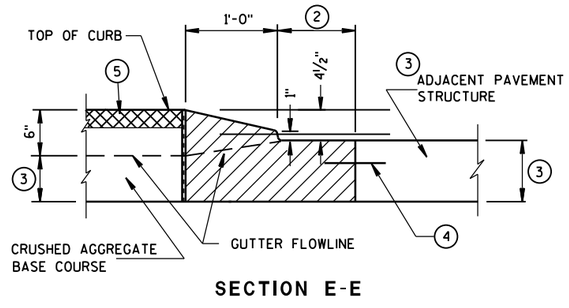
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

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



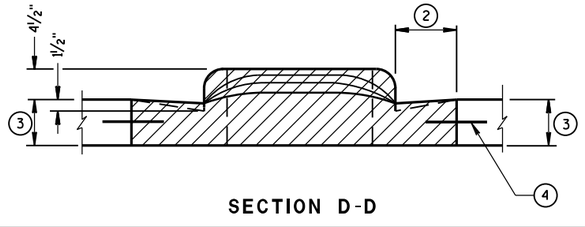






CONCRETE MEDIAN SLOPED NOSE TYPE 2

CONCRETE MEDIAN SLOPED NOSE TYPE 1



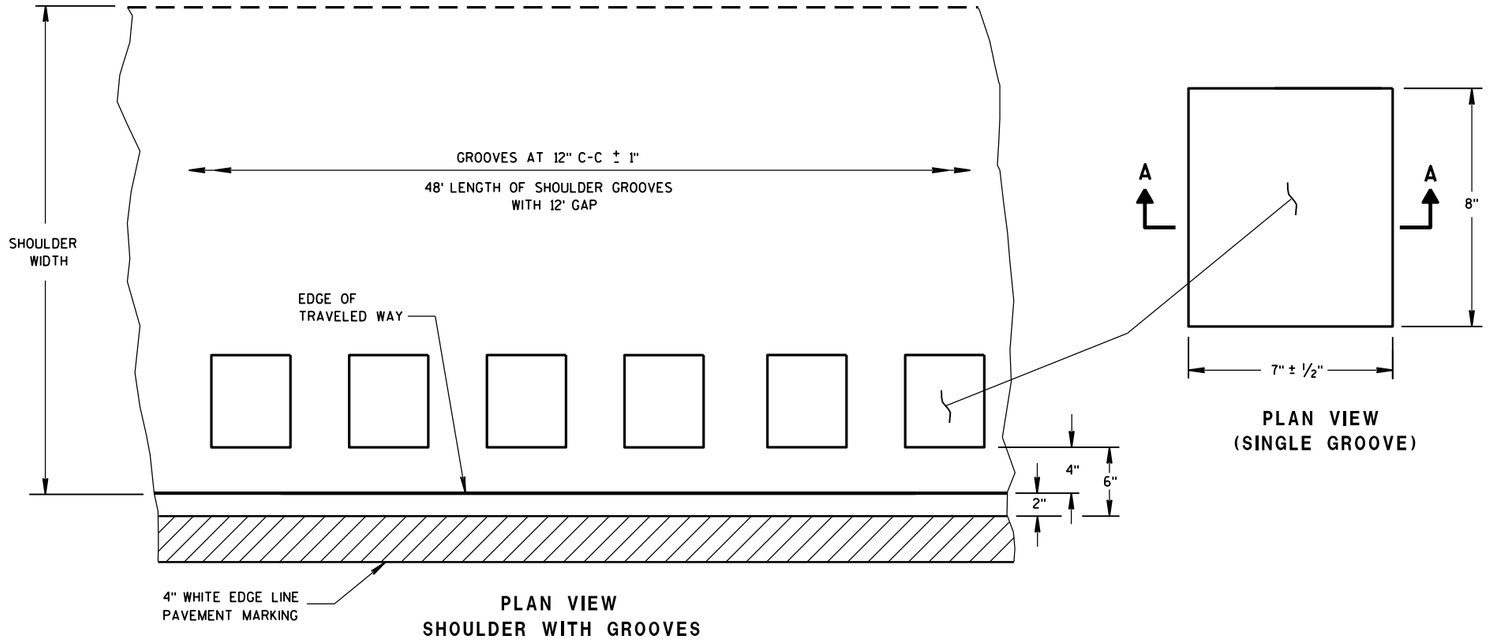
CONCRETE MEDIAN NOSE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 6/8/2006 DATE FHWA	/S/ Jerry H. Zogg ROADWAY STANDARDS D ENGINEER

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S.D.D. 11 B 2-2



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

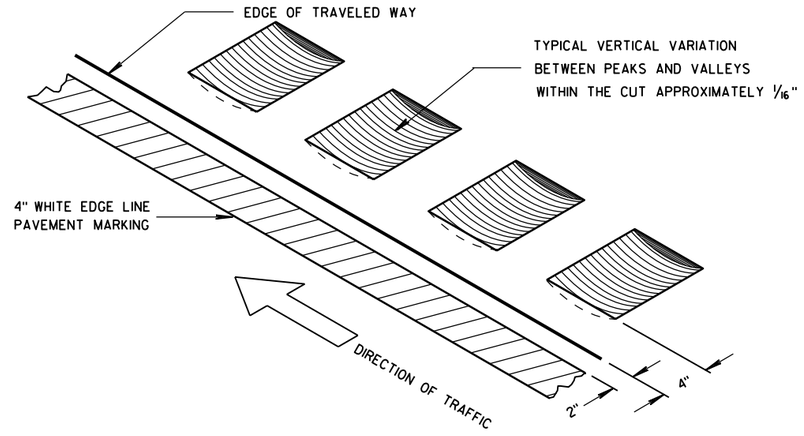
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

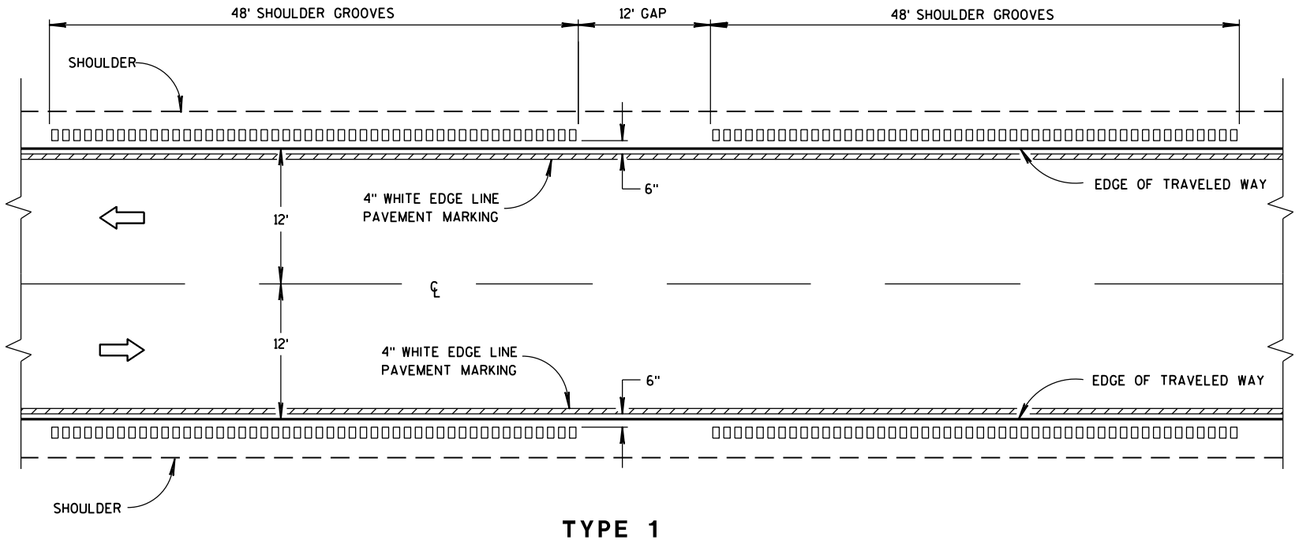
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

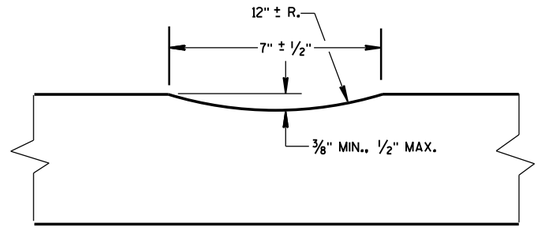
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



TYPE 1
2-LANE SHOULDER RUMBLE STRIP



SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

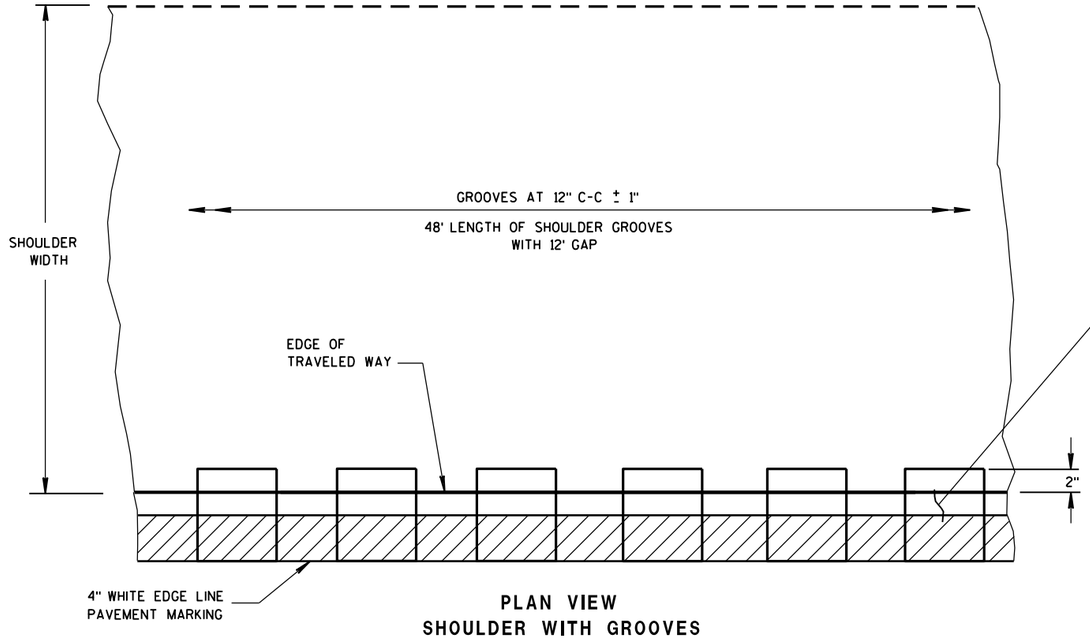
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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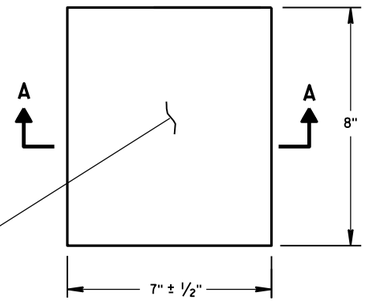
S.D.D. 13 A 10-1a

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S.D.D. 13 A 10-1a



PLAN VIEW
SHOULDER WITH GROOVES



PLAN VIEW
(SINGLE GROOVE)

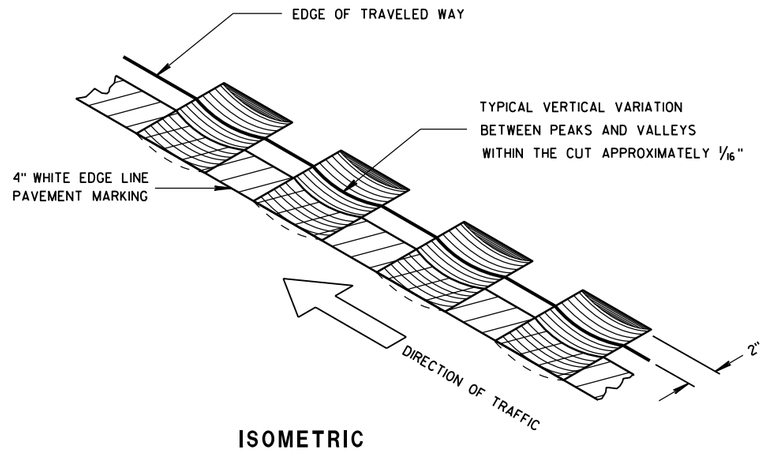
PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP

GENERAL NOTES

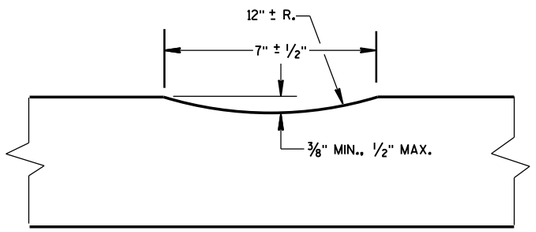
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

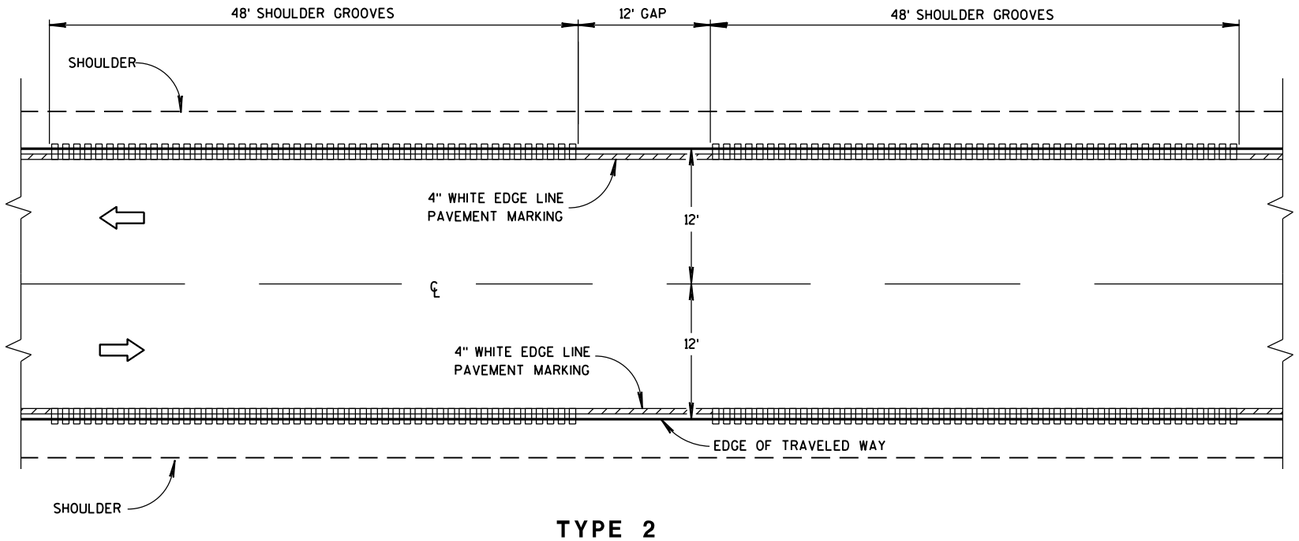
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



SECTION A-A



TYPE 2
2-LANE SHOULDER RUMBLE STRIP

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

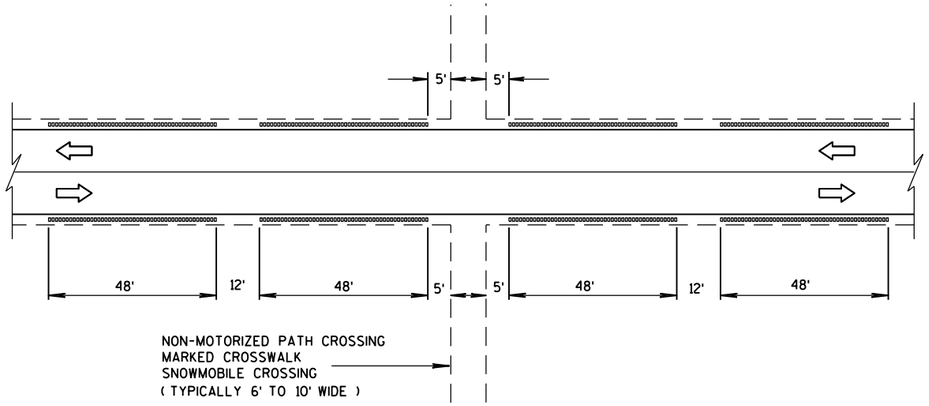
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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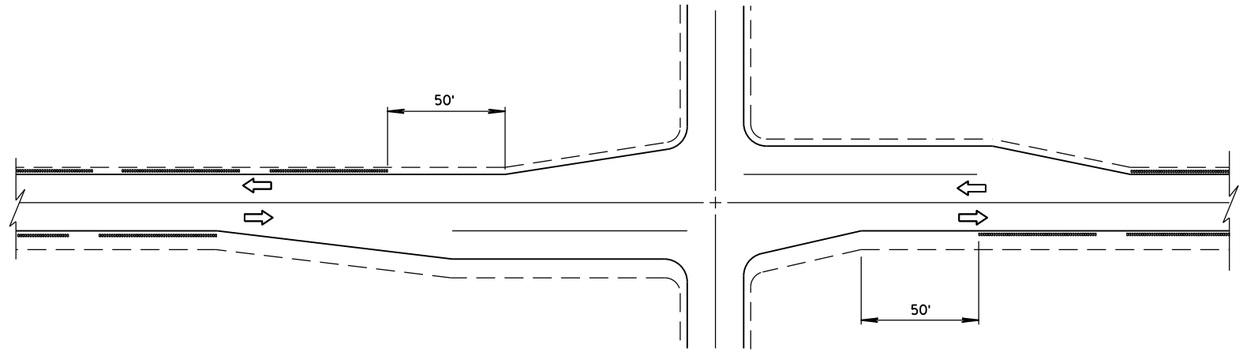
S.D.D. 13 A 10-1b

6

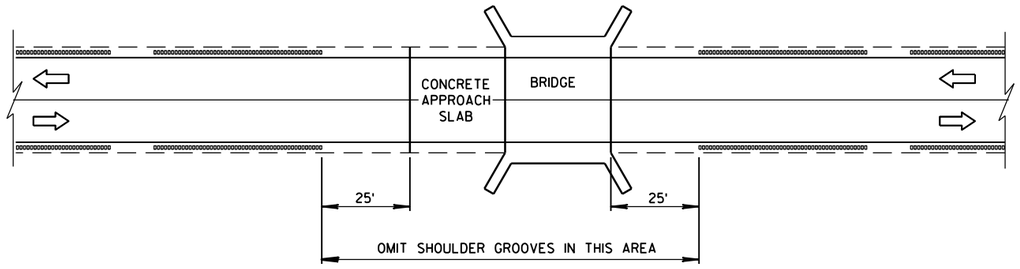
S.D.D. 13 A 10-1b



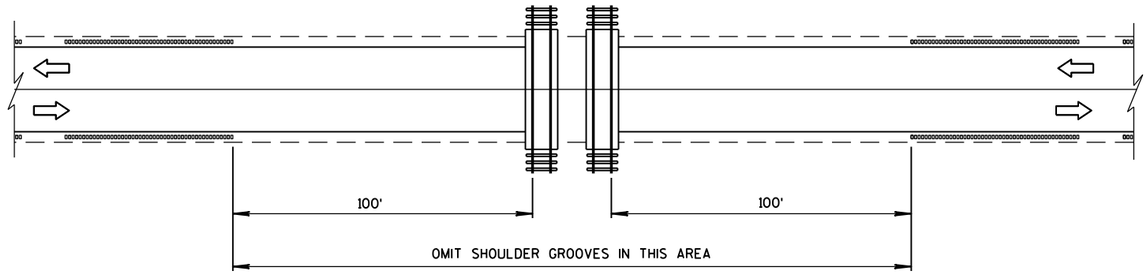
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



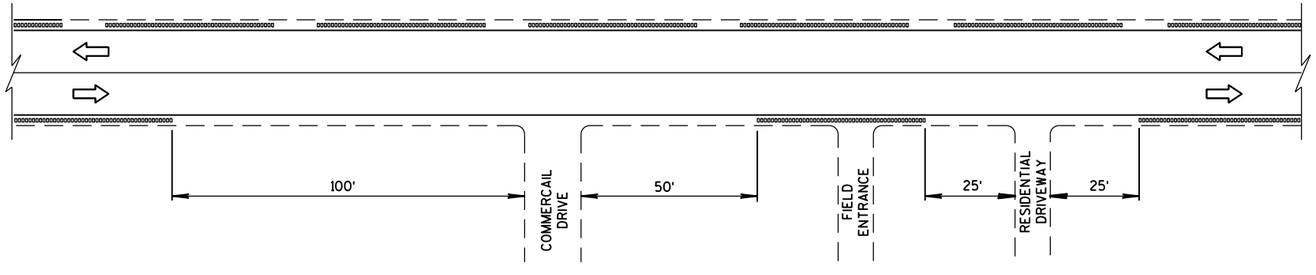
SHOULDER GROOVES AT INTERSECTIONS



SHOULDER GROOVES AT BRIDGES



SHOULDER GROOVES AT RAILROADS

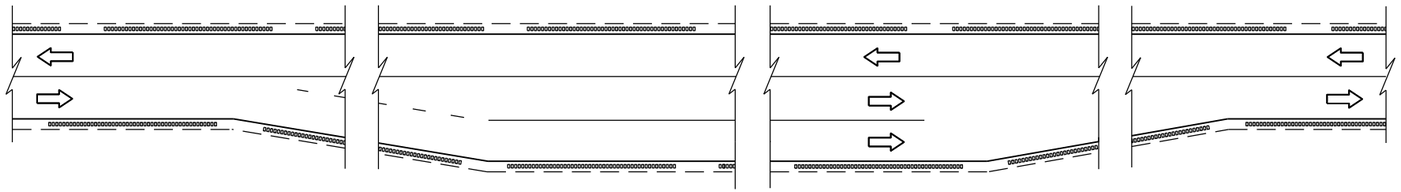


SHOULDER GROOVES AT DRIVEWAYS (1)

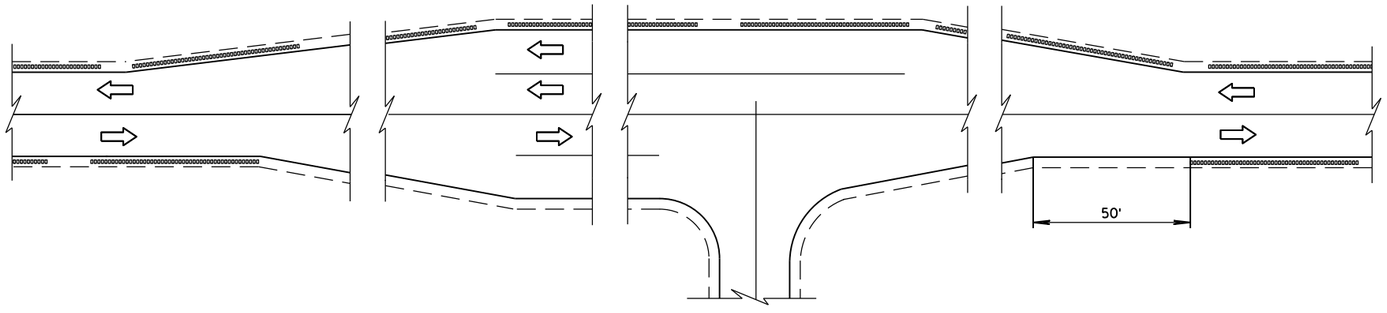
2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 13 A 10-1c



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

6

6

S.D.D. 13 A 10-1d

S.D.D. 13 A 10-1d

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

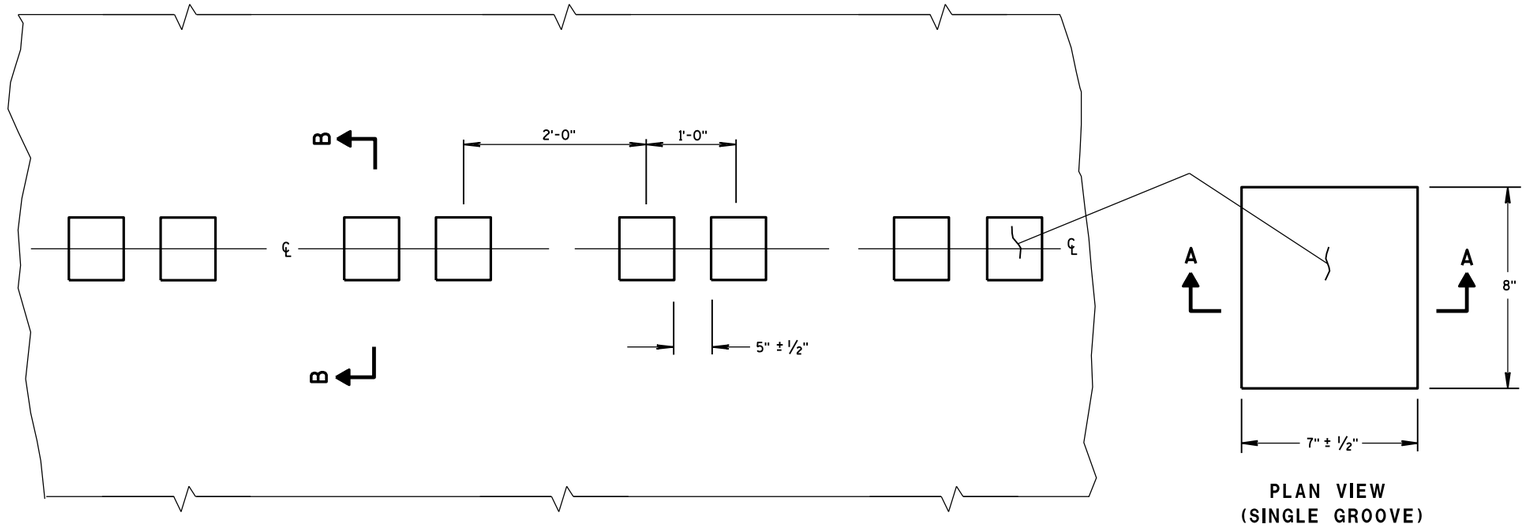
APPROVED

12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

628

FHWA



PLAN VIEW
CENTER LINE WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

GENERAL NOTES

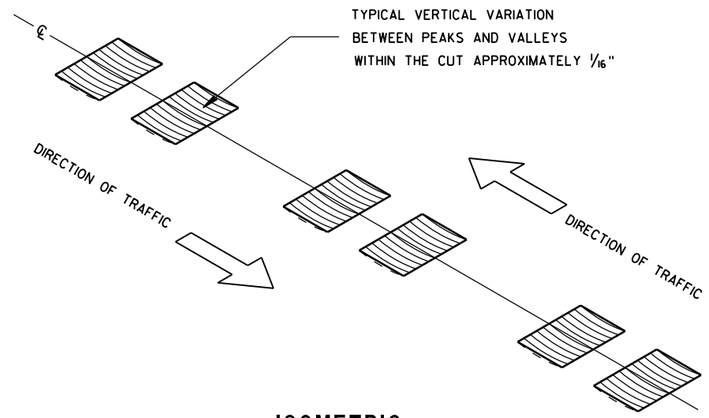
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

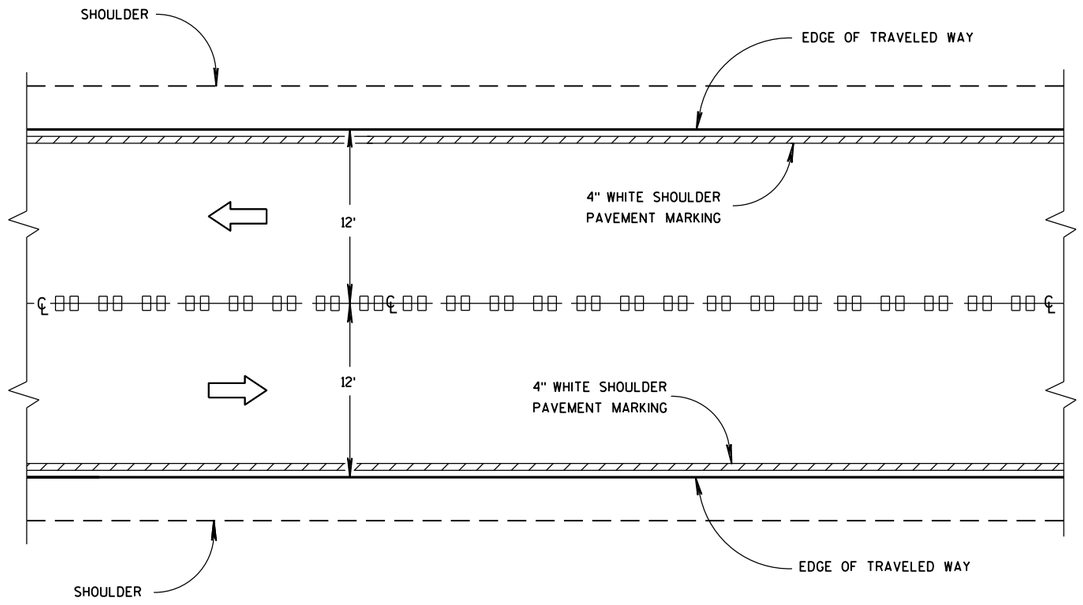
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

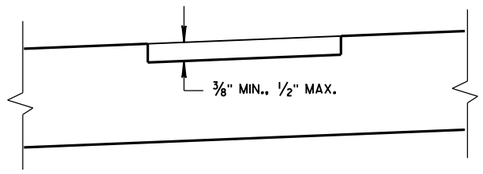
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



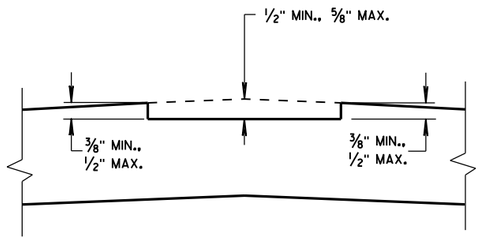
ISOMETRIC



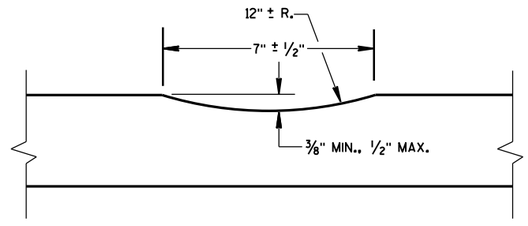
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY



SECTION A-A

6

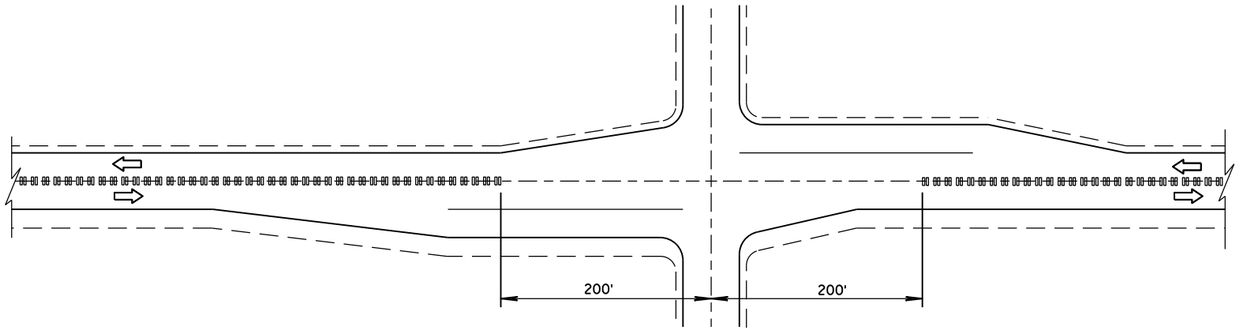
S.D.D. 13 A 11-2a

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

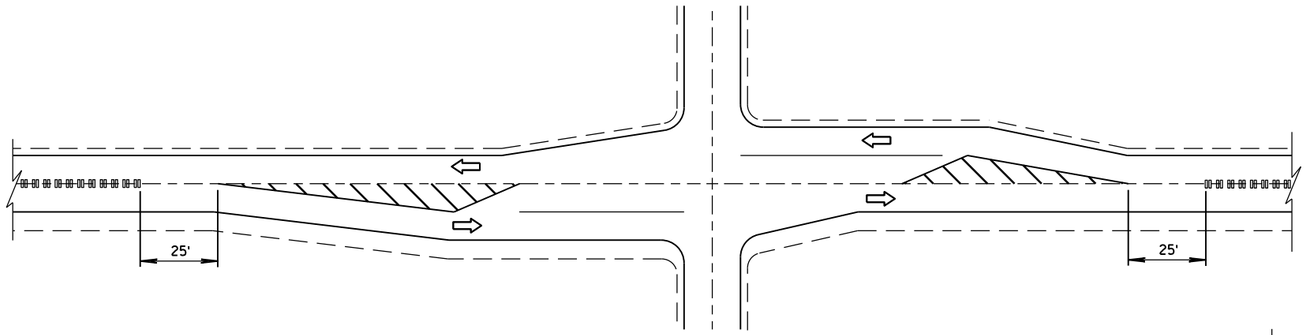
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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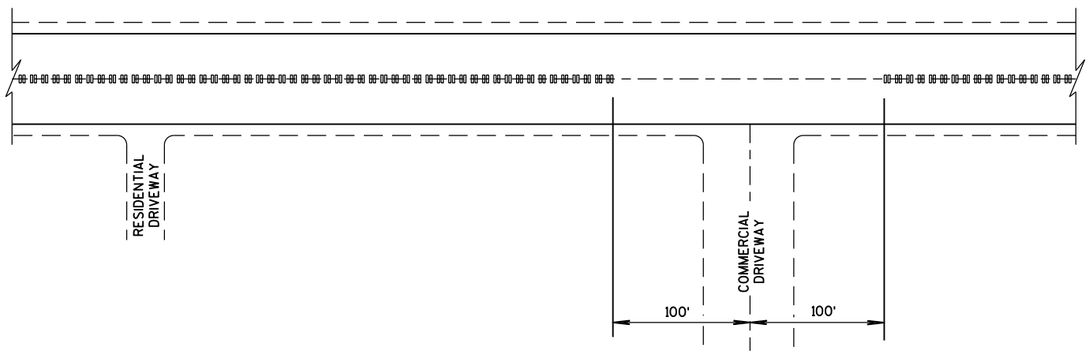
S.D.D. 13 A 11-2a



CENTER LINE GROOVES AT INTERSECTIONS

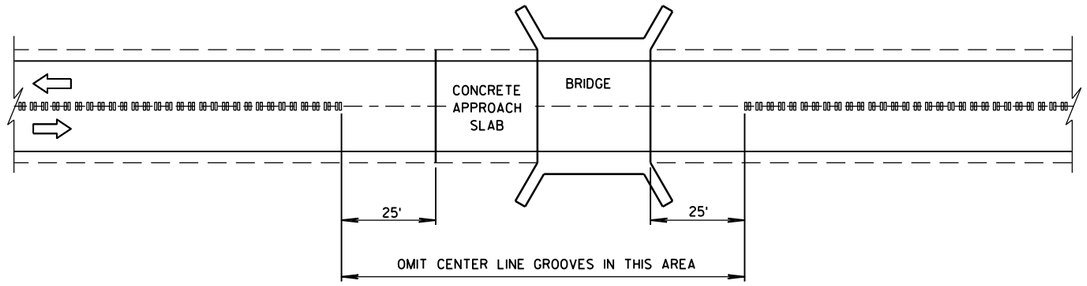


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

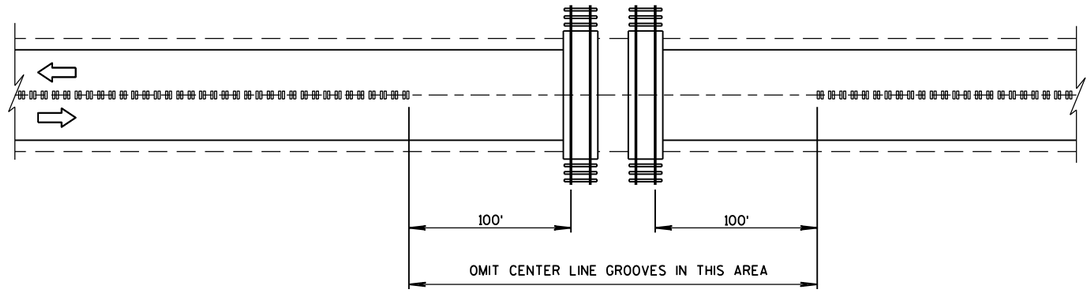


CENTER LINE GROOVES AT DRIVEWAYS (1)

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



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

6

S.D.D. 13 A 11-2b

2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/15/2013
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

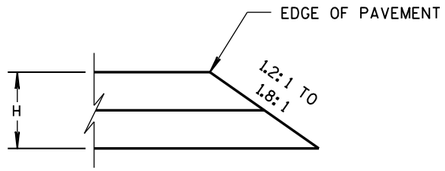
630

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FHWA

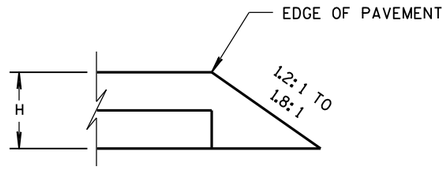
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S.D.D. 13 A 11-2b



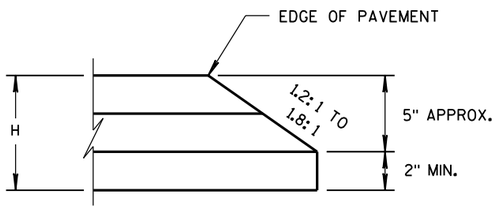
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



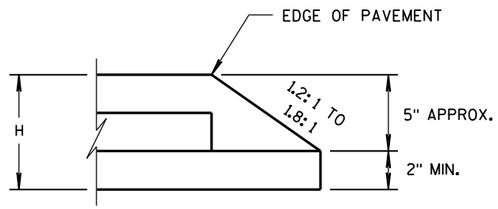
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

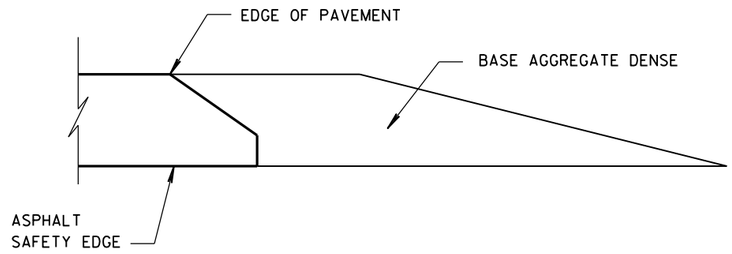
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

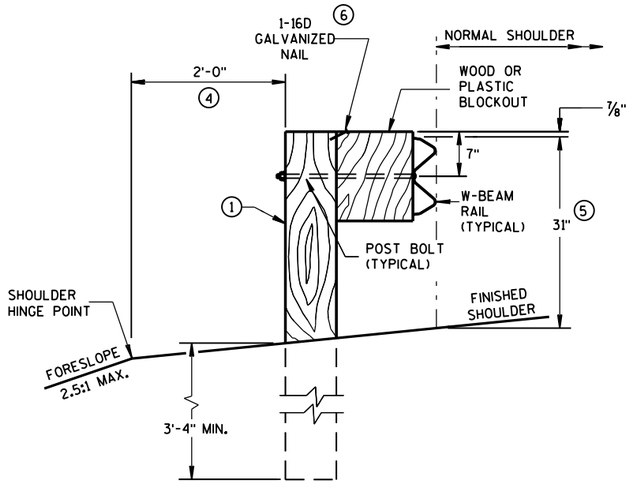
(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ 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).

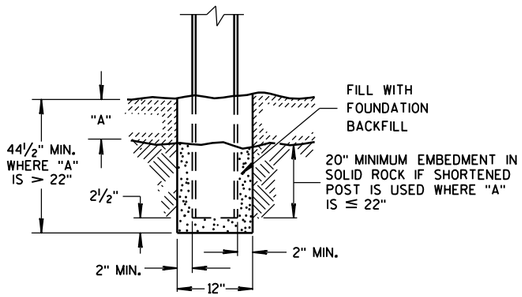
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

(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.



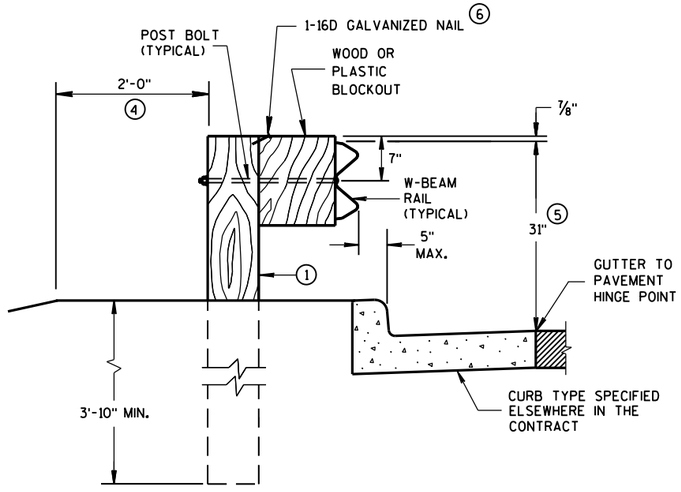
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



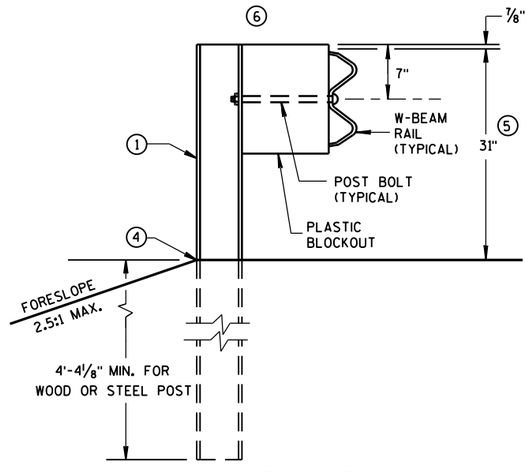
END VIEW

SETTING STEEL OR WOOD POST IN ROCK (3)



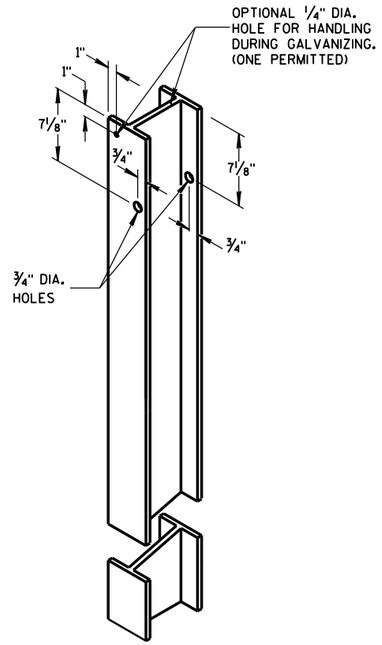
END VIEW

LOCATED ALONG A CURBED ROADWAY

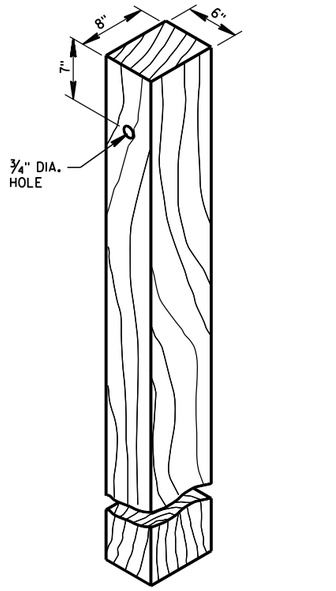


END VIEW

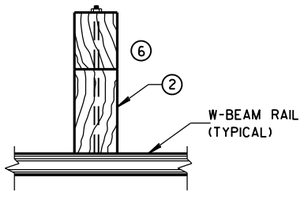
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



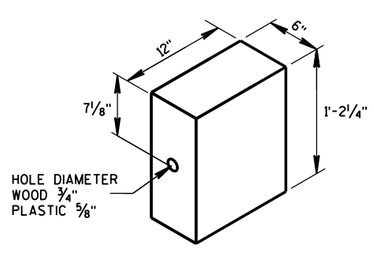
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) (1)



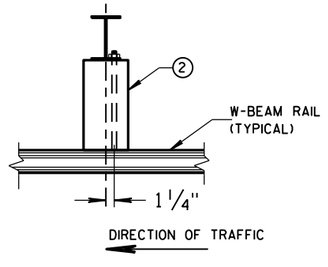
WOOD POST
(6" X 8") NOMINAL (1)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT (2)

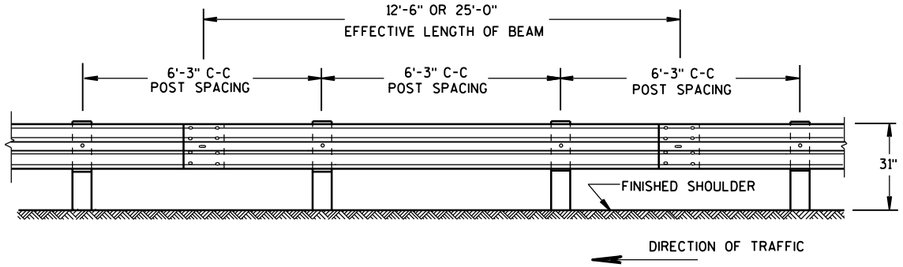


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

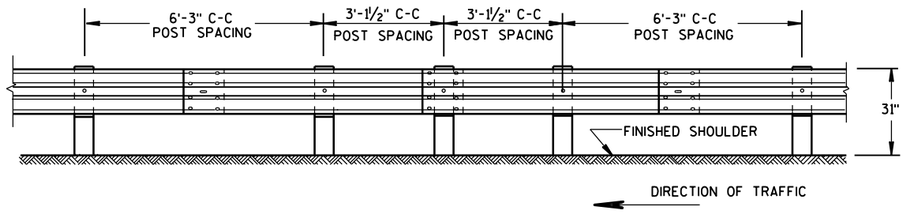
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 42-5a



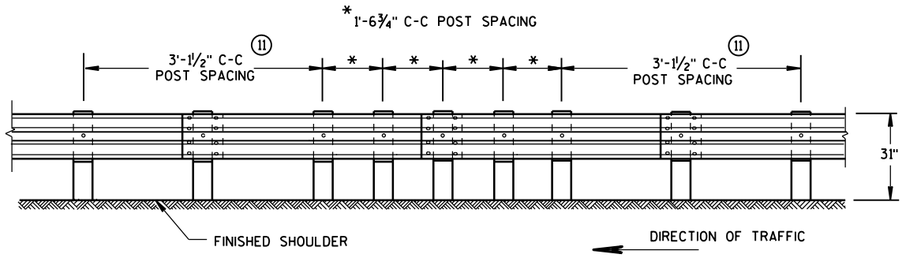
FRONT VIEW

POST SPACING STANDARD INSTALLATION



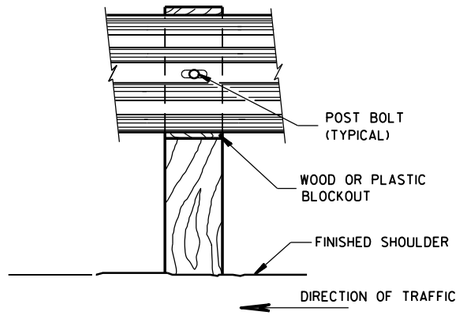
FRONT VIEW

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

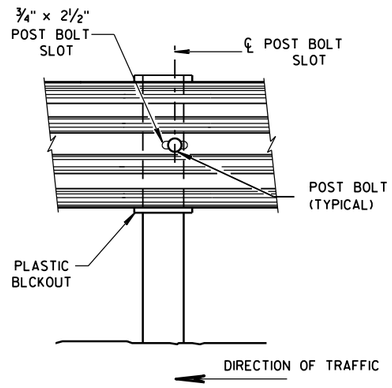


FRONT VIEW

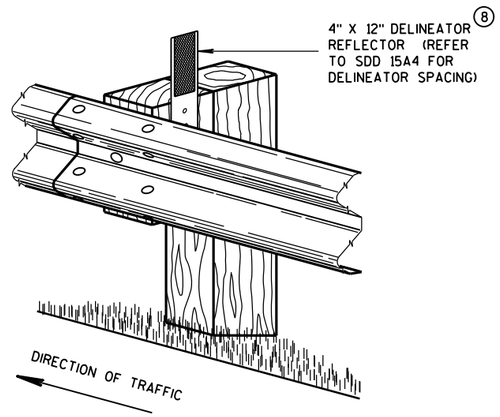
QUARTER POST SPACING (QS)



FRONT VIEW AT WOOD POST



FRONT VIEW AT STEEL POST



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

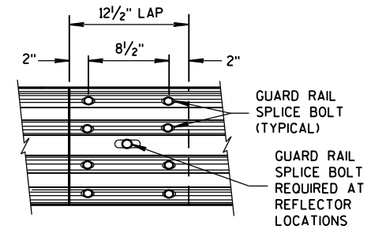
GENERAL NOTES

(8) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

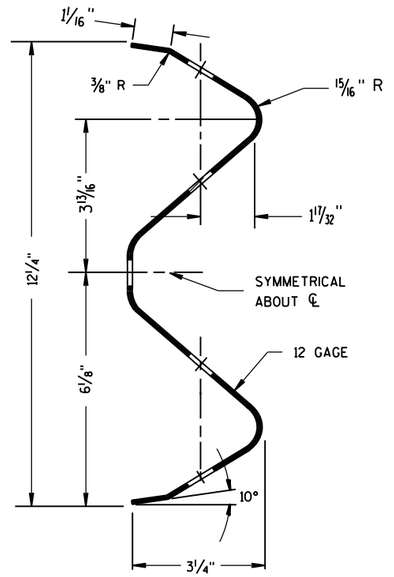
(11) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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

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



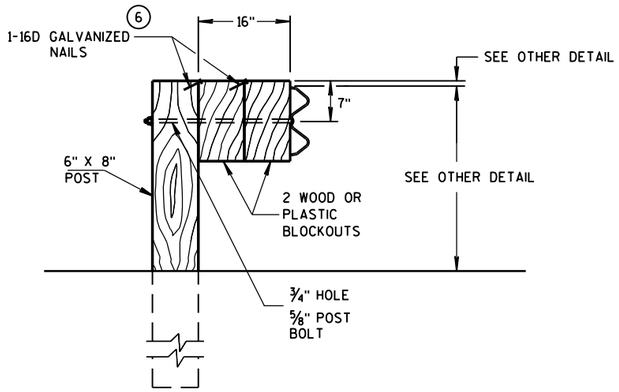
FRONT VIEW
MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL

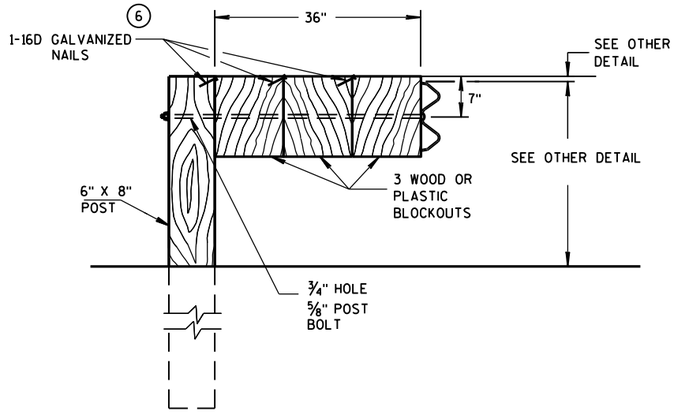
MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR



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.

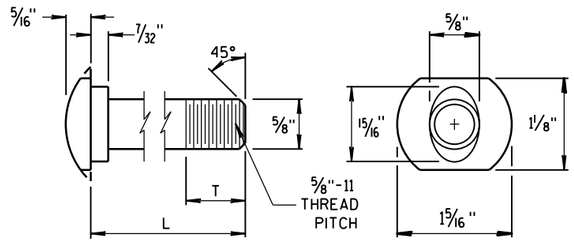


DETAIL FOR 36" BLOCKOUT DEPTH

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.

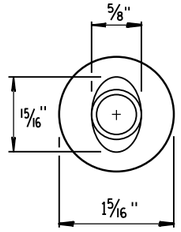
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

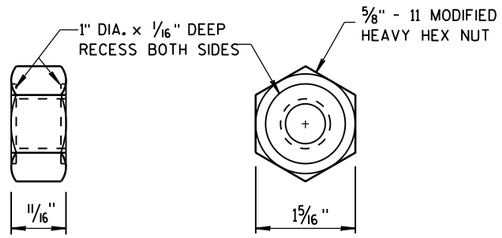


POST BOLT TABLE

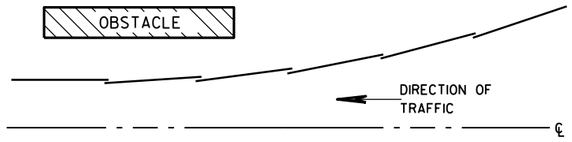
L	T (MIN.)
1¼"	1⅛"
2"	1¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

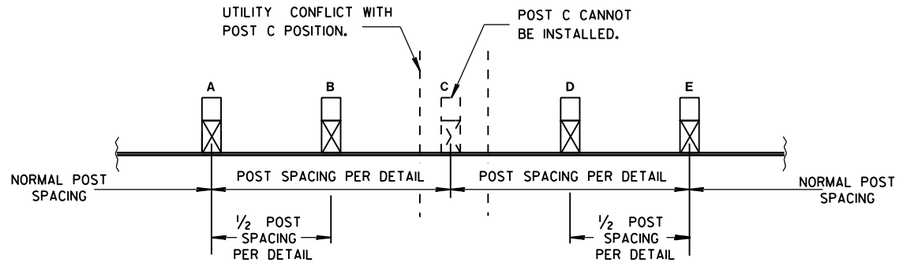


POST BOLT, SPLICE BOLT AND RECESS NUT

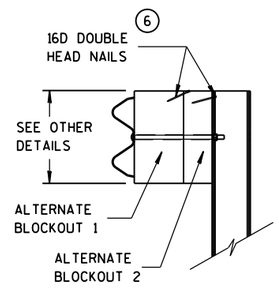


PLAN VIEW

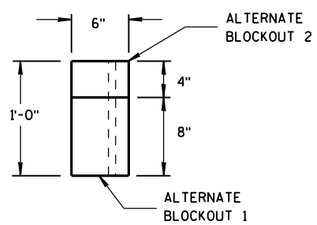
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

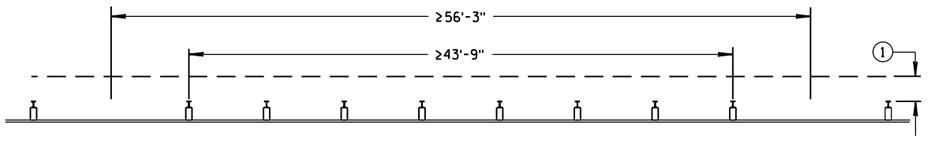
ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

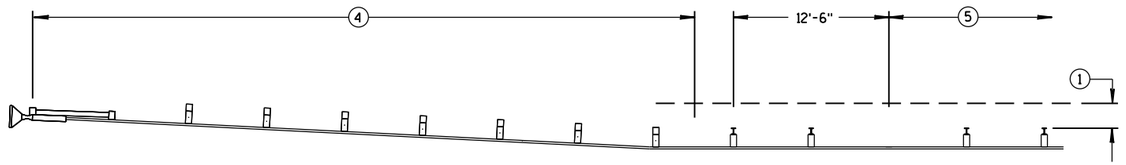
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

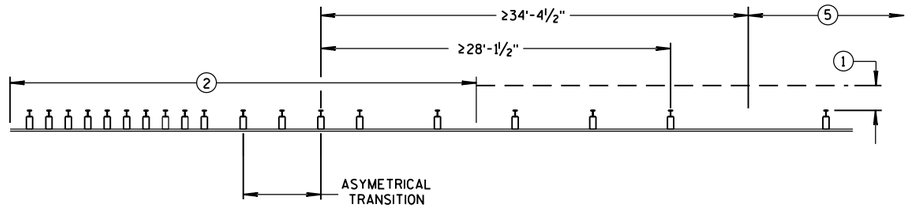
S.D.D. 14 B 42-5c



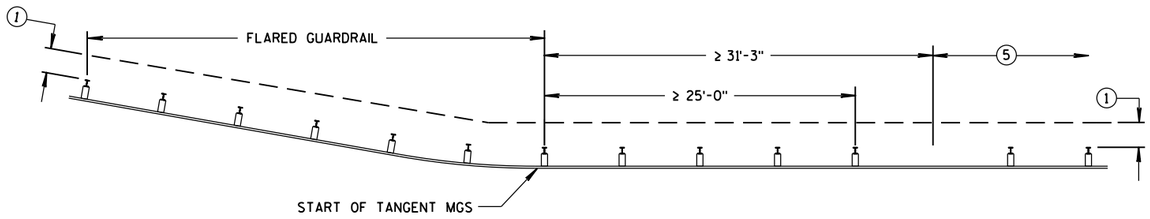
MISSING POST IN NORMAL BEAM GUARD RUN



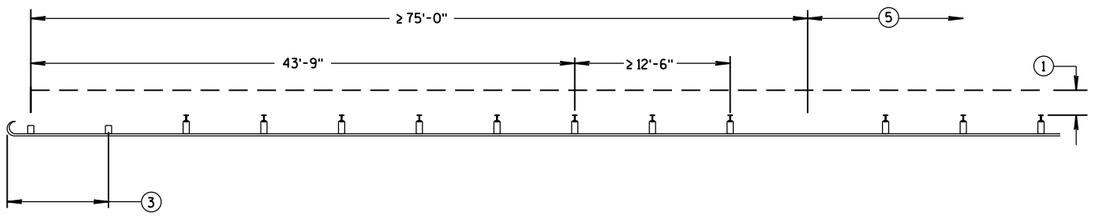
MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



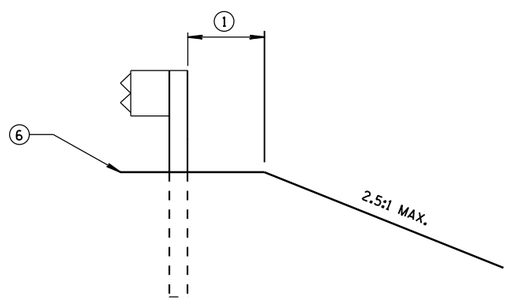
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



MISSING POST IN NORMAL BEAM GUARD RUN
NEAR FLARED BEAM GUARD



MISSING POST IN NORMAL BEAM GUARD RUN
NEAR TYPE 2 TERMINAL



CROSS SECTION VIEW

(1) MINIMUM OF 2 FEET OF GRADING BEHIND POST.

(2) SEE SDD 14B45 FOR MORE DETAILS.

(3) SEE SDD 14B47 FOR MORE DETAILS.

(4) SEE SDD 14B44 FOR MORE DETAILS.

(5) SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.

(6) SEE PLAN FOR SHOULDER DESIGN.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

635

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S.D.D. 14 B 42-5d

6

S.D.D. 14 B 42-5d

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 MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

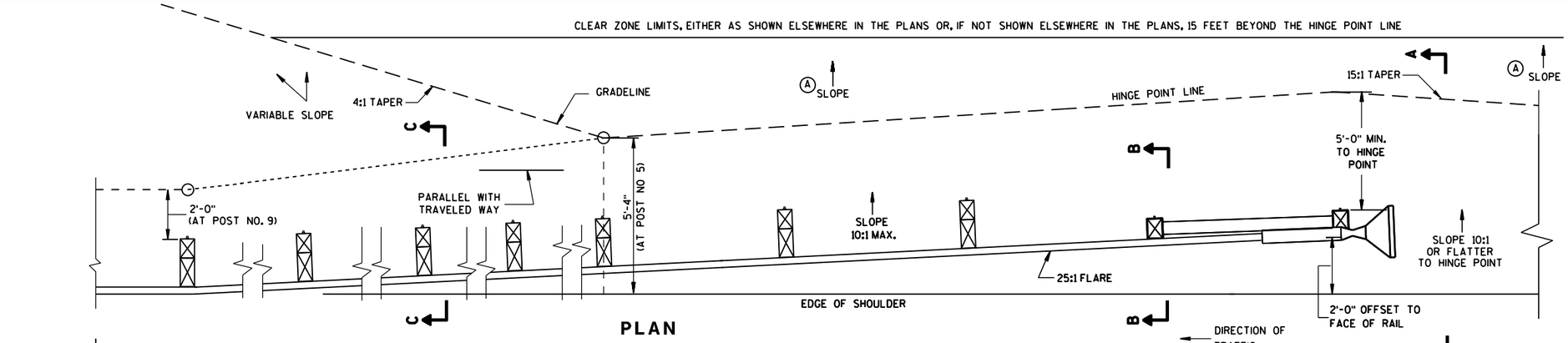
SEE SDD 14B42 FOR MORE INFORMATION.

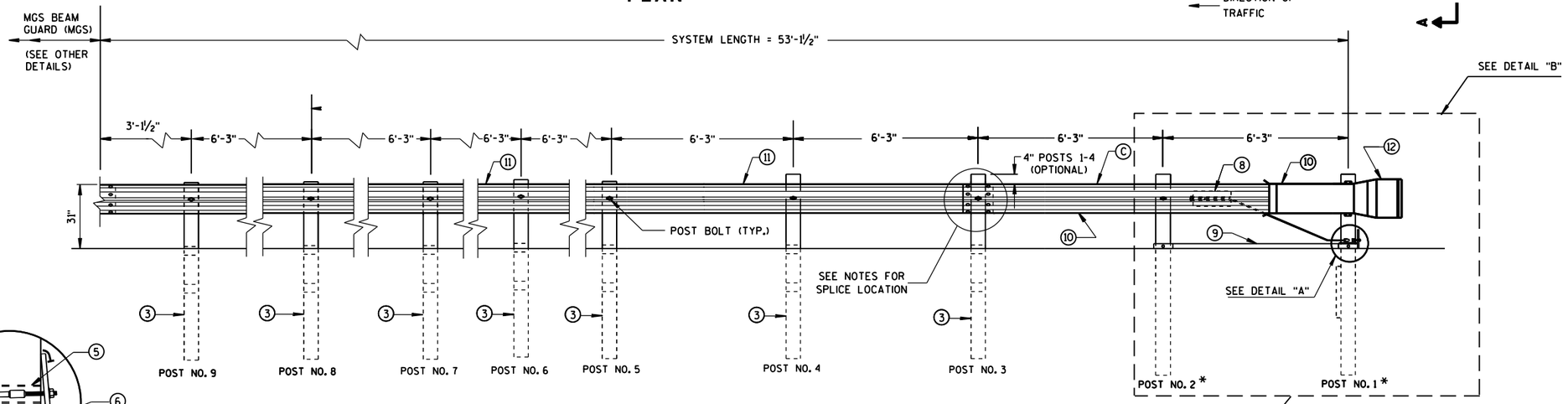
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

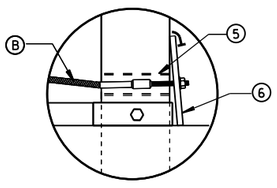
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

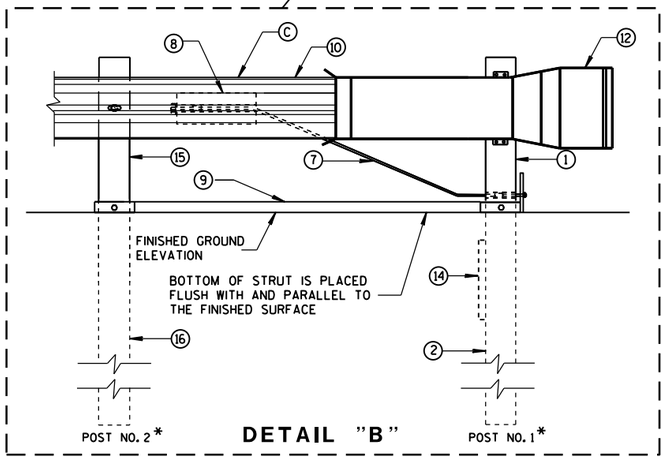
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

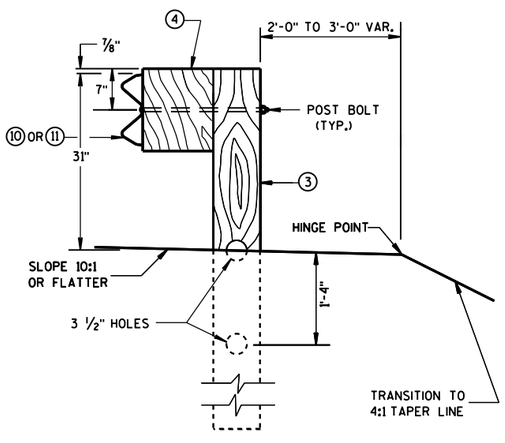
THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.

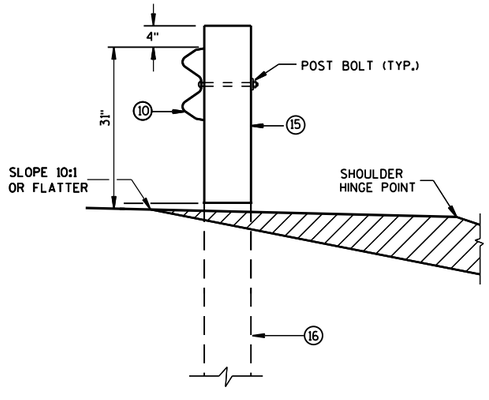


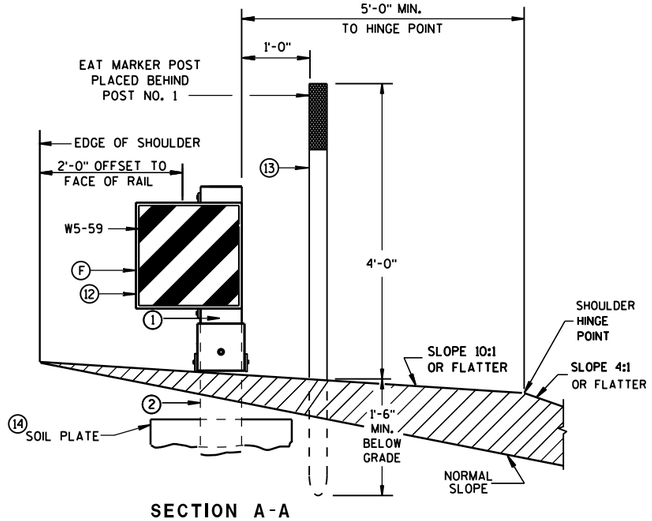






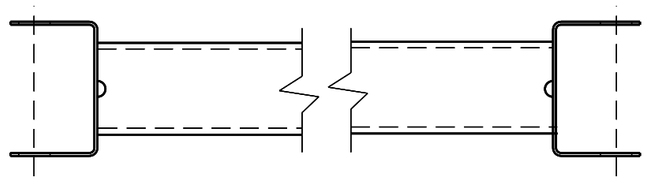






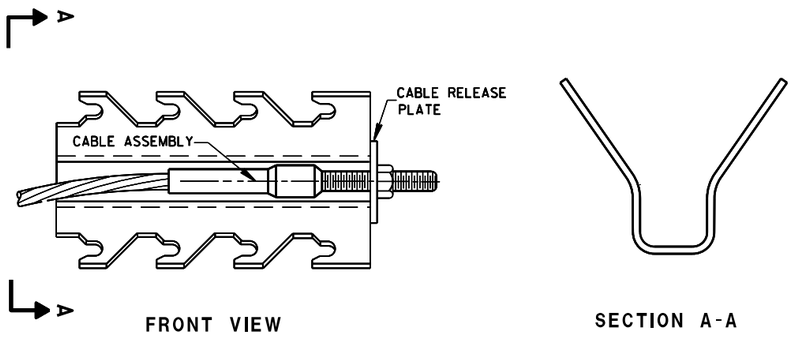
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
STATE OF WISCONSIN DEPARTMENT OF TRANSPO

6 S.D.D. 14 B 44-3a



(9) (H)

GENERIC GROUND STRUT



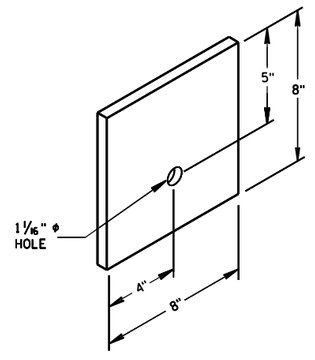
FRONT VIEW

SECTION A-A

GENERIC ANCHOR CABLE BOX (8) (H)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'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



BEARING PLATE (6)

6

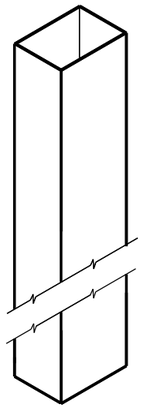
6

S.D.D. 14 B 44-3b

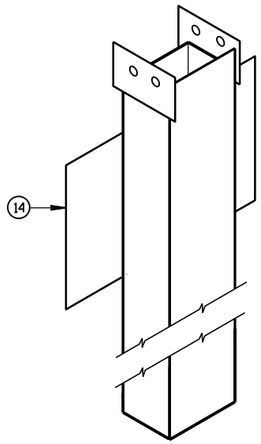
S.D.D. 14 B 44-3b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

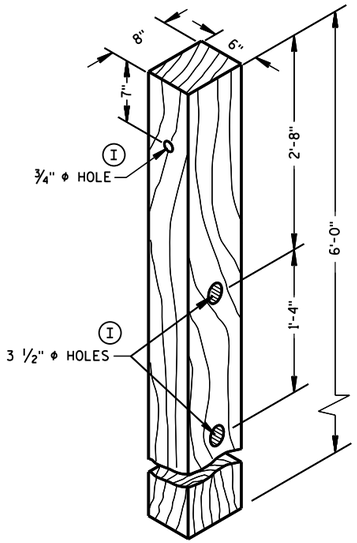
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR



UPPER POST NO. 1 (1)

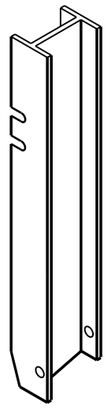


LOWER POST NO. 1 (2)

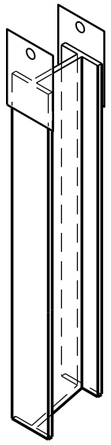


POSTS NUMBER 3-9

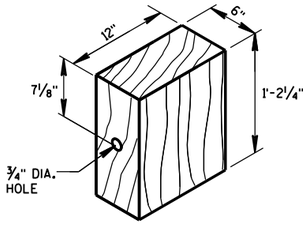
WOOD CRT POST (3)



UPPER POST NO. 2 (15)

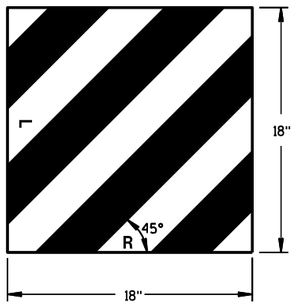


LOWER POST NO. 2 (16)



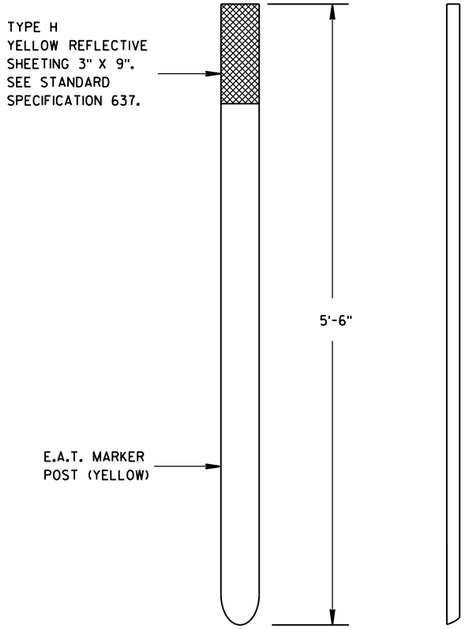
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



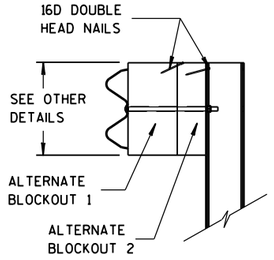
W5-59

REFLECTIVE SHEETING DETAIL (H)

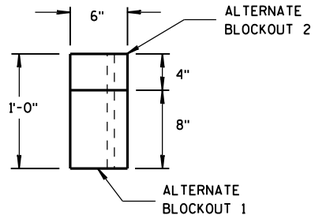


FRONT VIEW SIDE VIEW

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

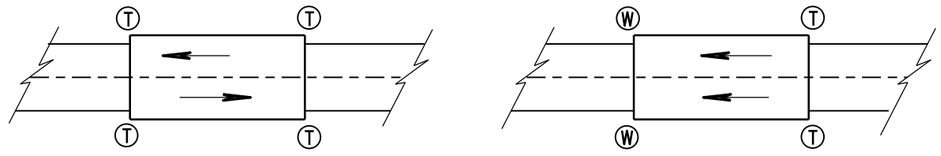
June 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA

6

S.D.D. 14 B 44-3c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

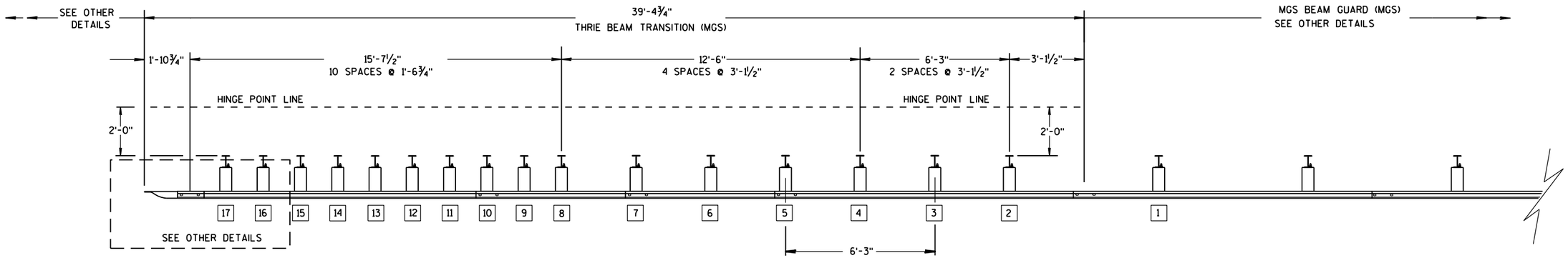
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

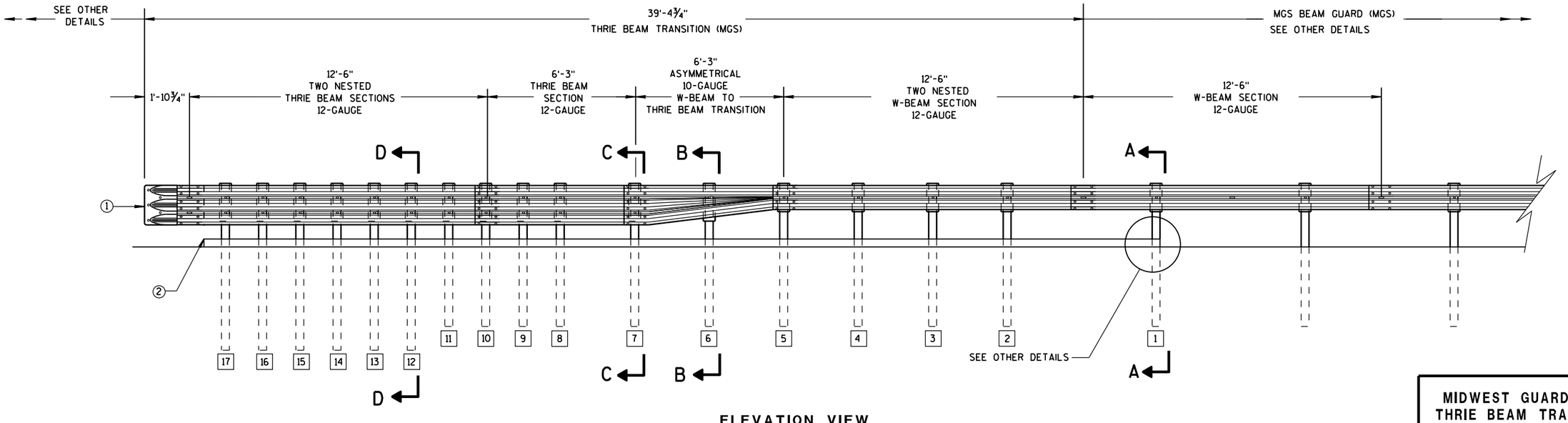
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

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

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



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 45-4a

6

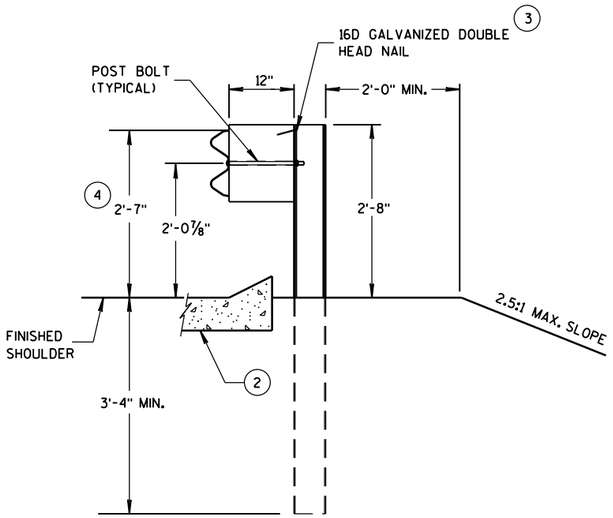
S.D.D. 14 B 45-4a

GENERAL NOTES

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

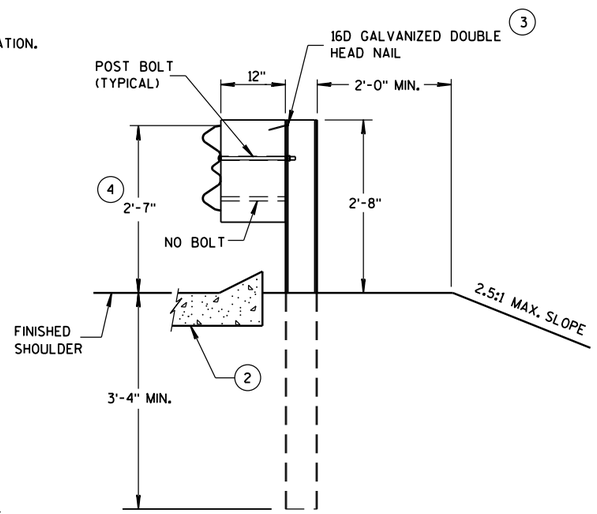
(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

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



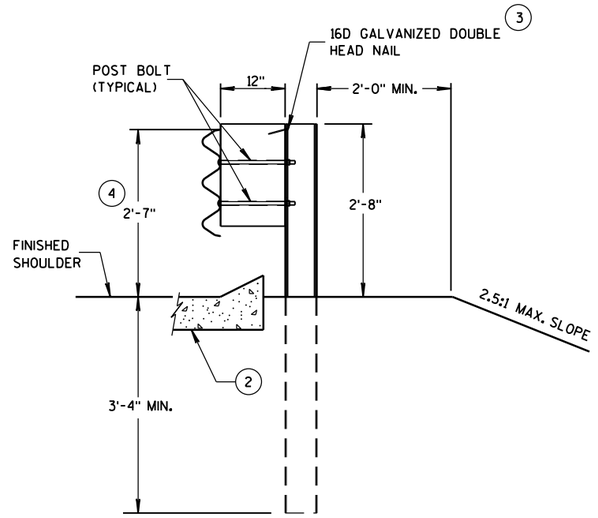
SECTION A-A

POSTS 1-5



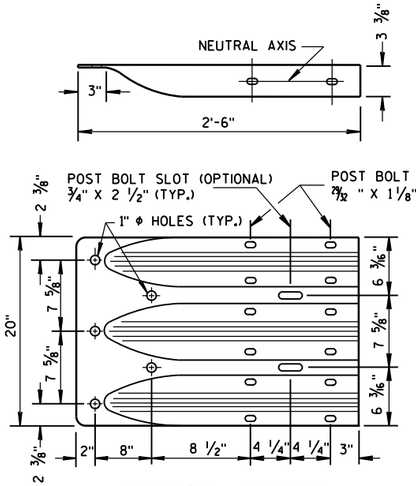
SECTION B-B

POST 6



SECTION C-C

POSTS 7-11



THRIE BEAM TERMINAL CONNECTOR

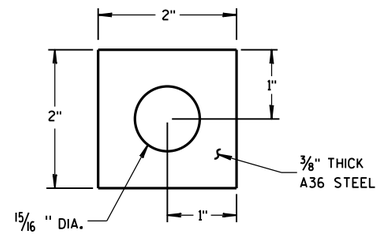
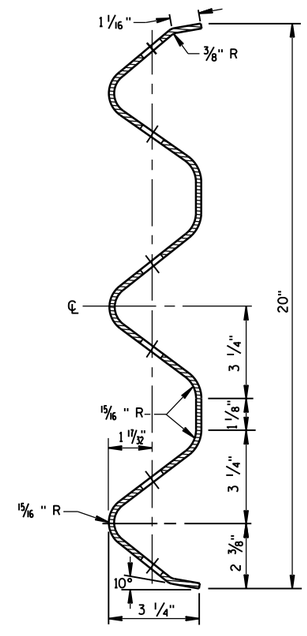
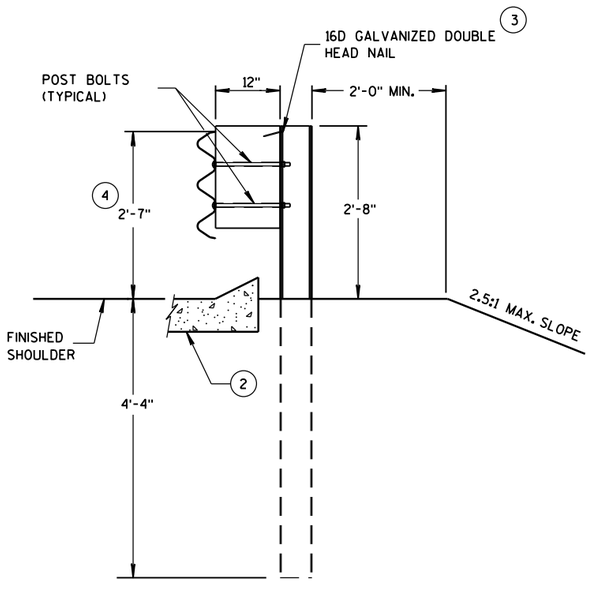


PLATE WASHER DETAIL

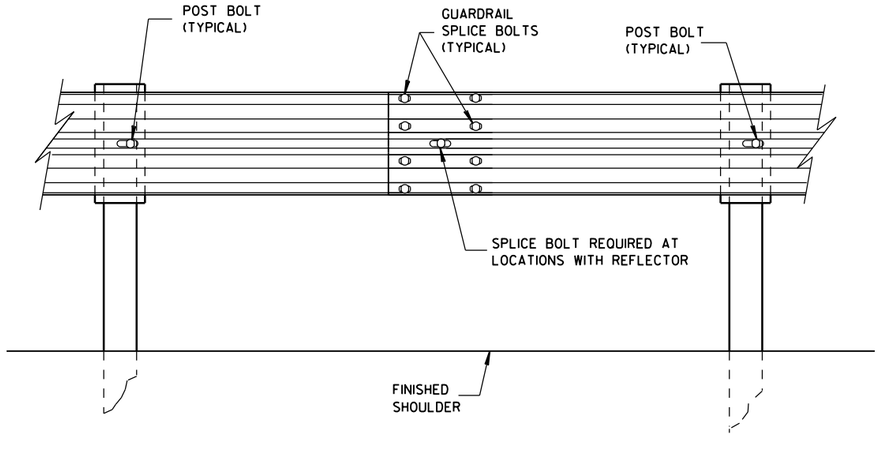


SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION D-D

POSTS 12-17



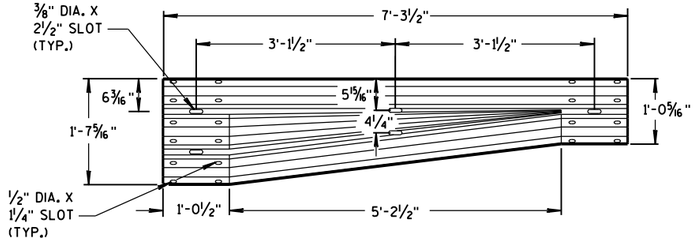
SPLICE DETAIL

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

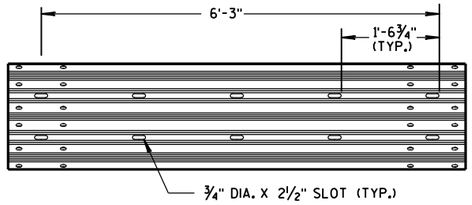
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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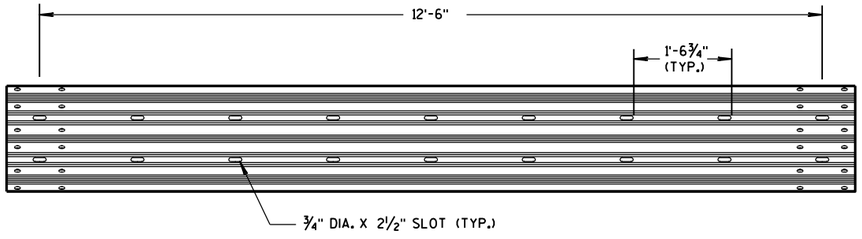
S.D.D. 14 B 45-4b



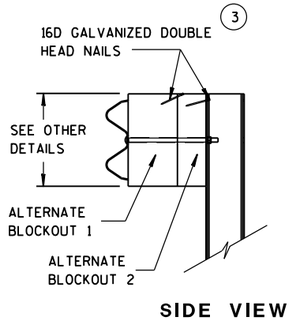
W-BEAM TO THRIE BEAM TRANSITION SECTION



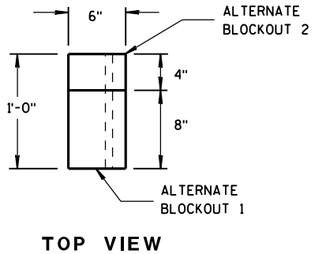
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

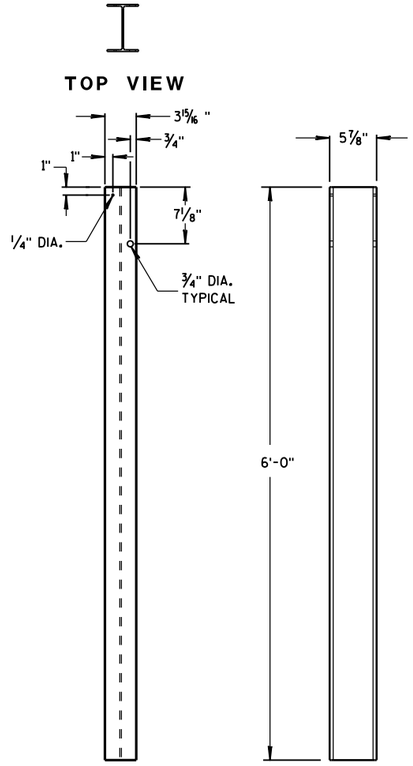


SIDE VIEW



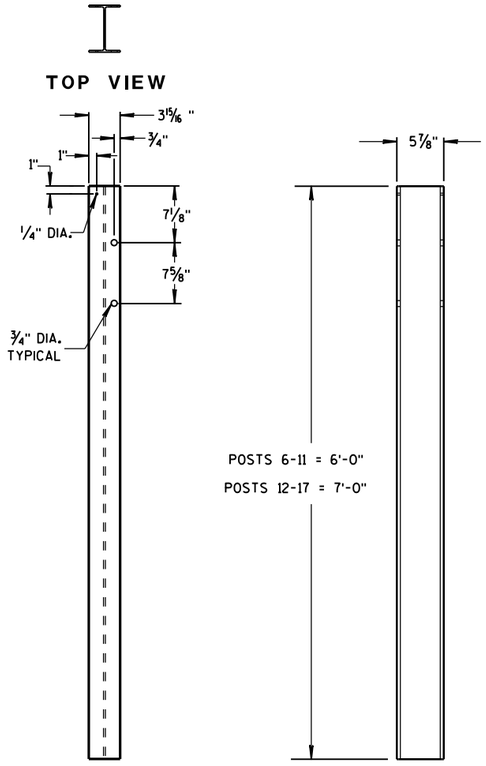
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



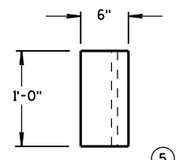
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5

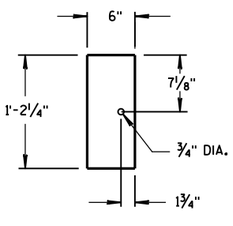


FRONT VIEW SIDE VIEW

STEEL POSTS 6-17

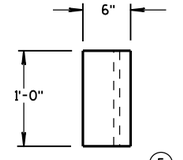


TOP VIEW

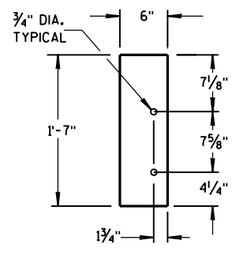


FRONT VIEW

BLOCKOUT POSTS 1-5



TOP VIEW



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.

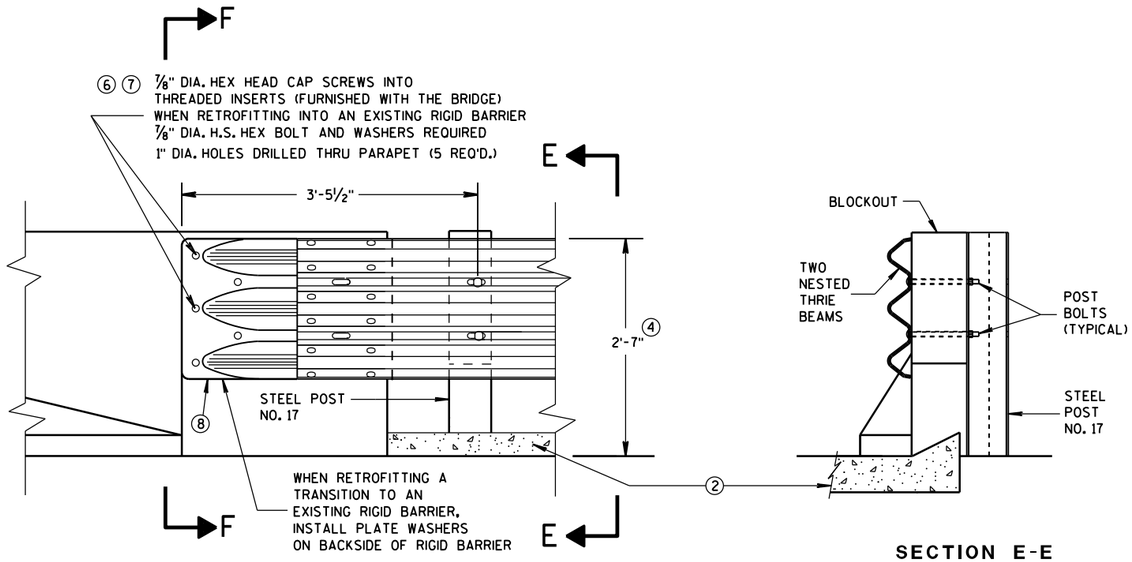
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 45-4c
S.D.D. 14 B 45-4c



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.

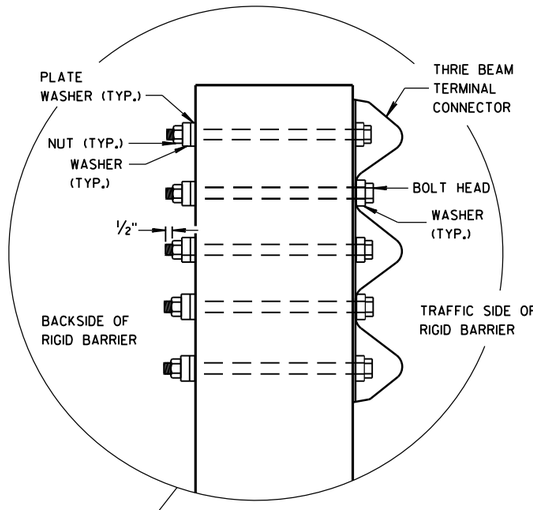
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

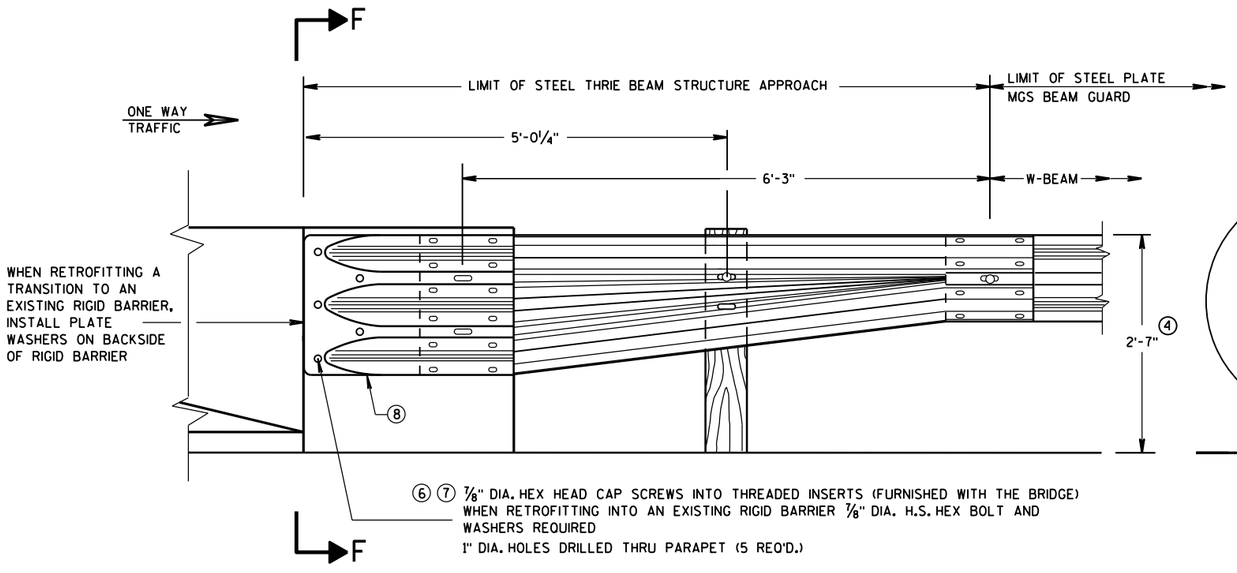
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

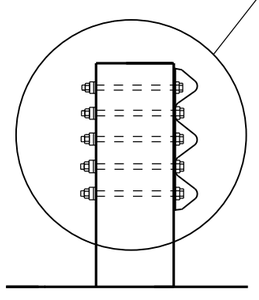
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" 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".

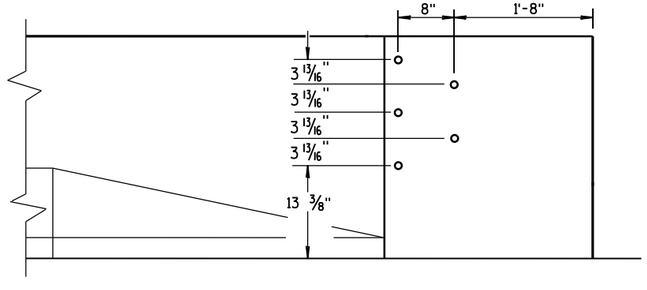




FRONT VIEW



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
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 14 B 45-4d

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S.D.D. 14 B 45-4d

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.

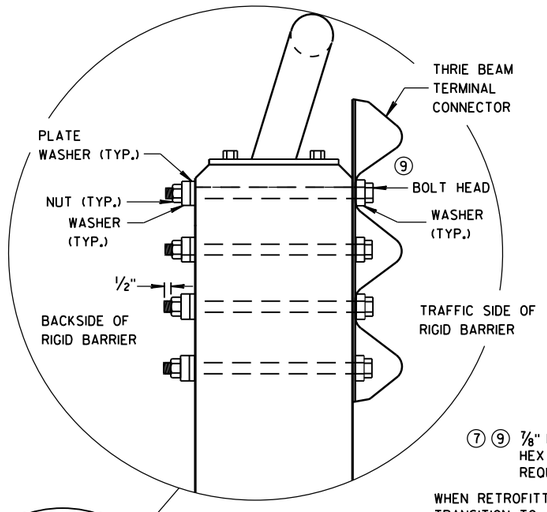
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

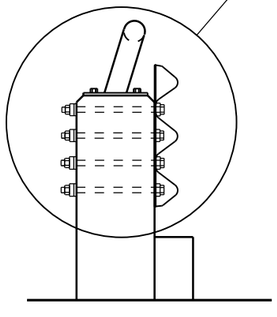
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

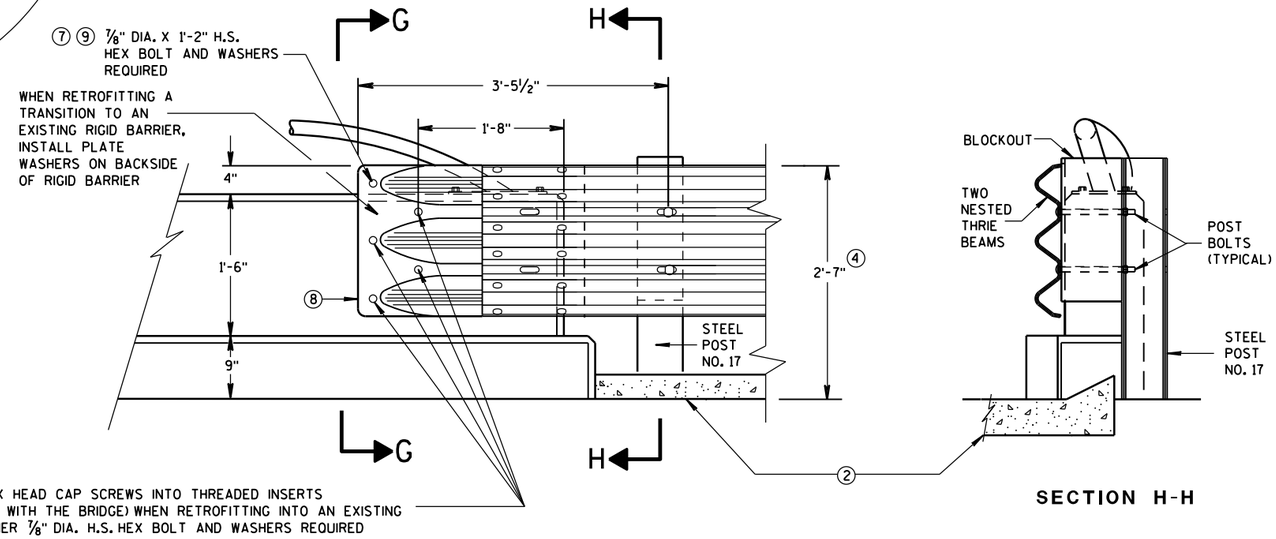
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

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





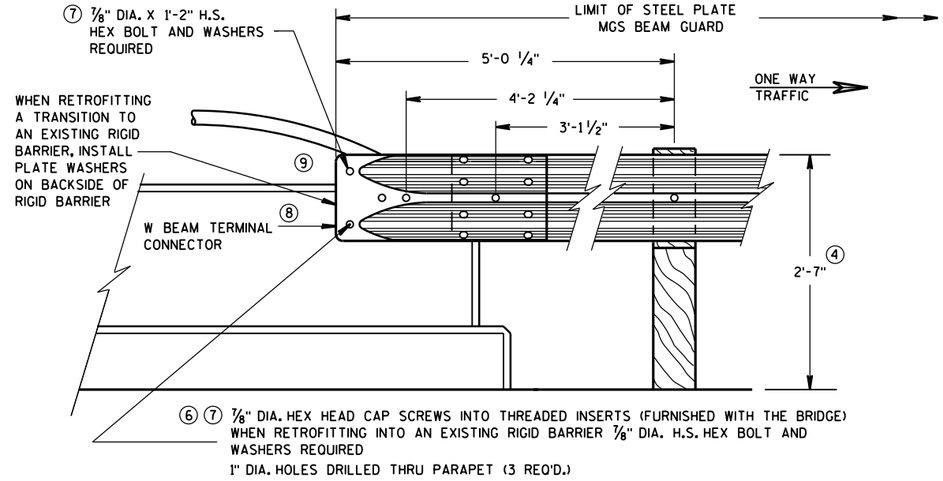
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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

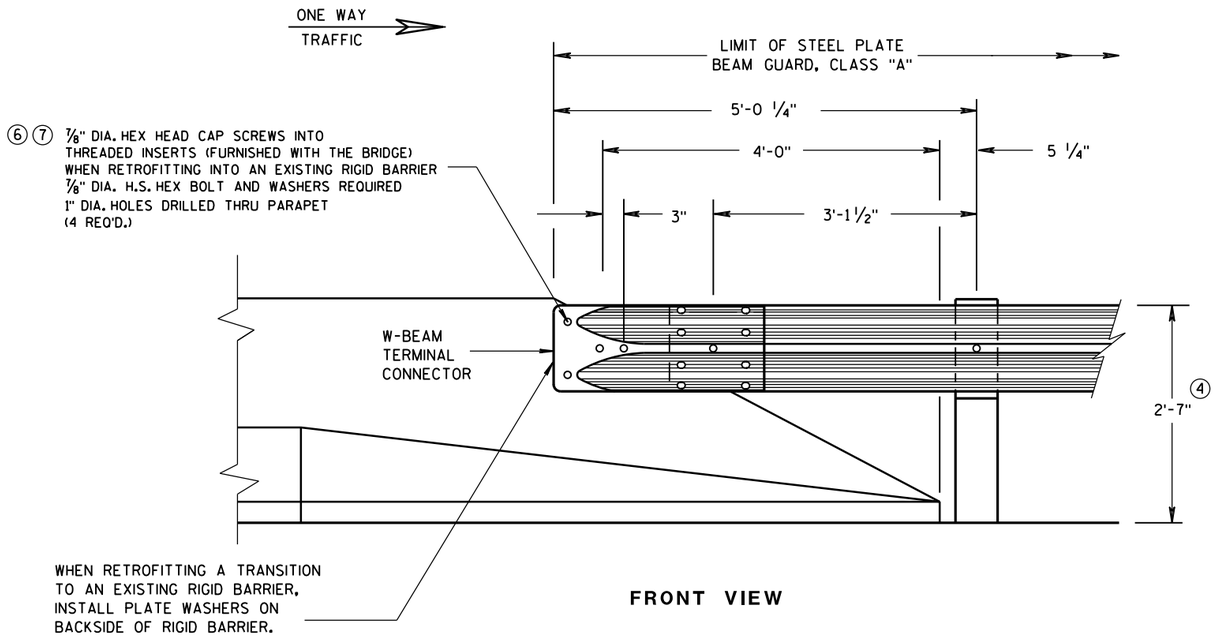
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
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S.D.D. 14 B 45-4e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

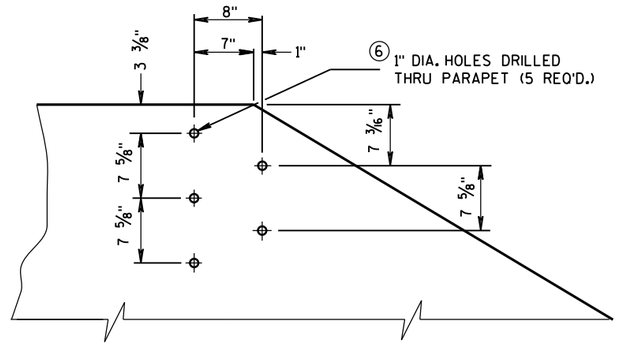
GENERAL NOTES

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

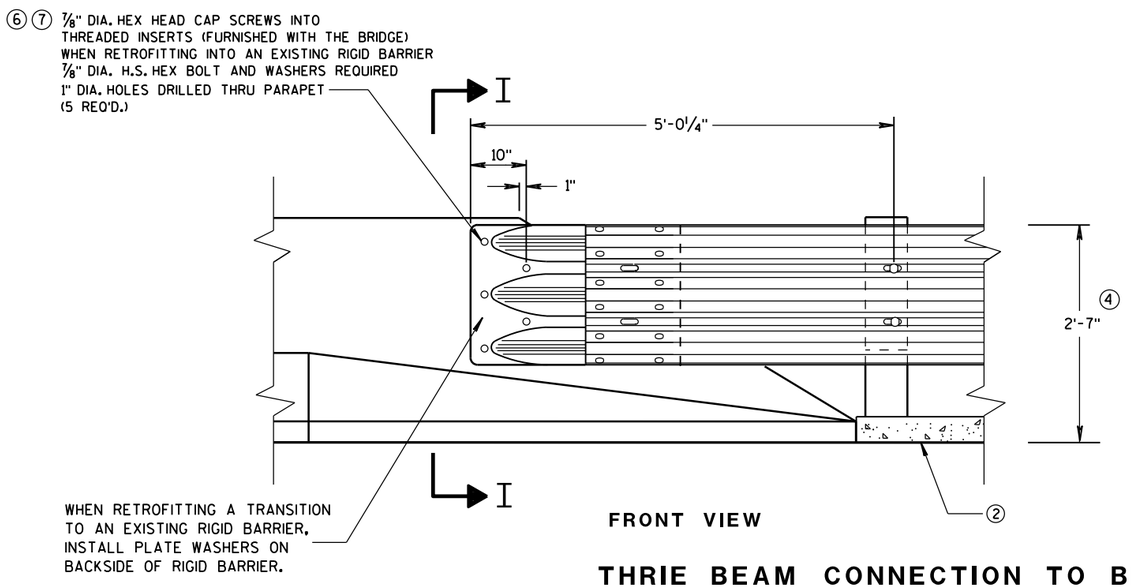
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

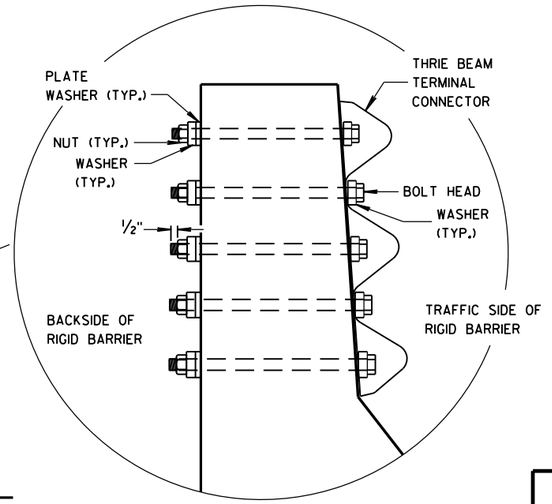


DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



FRONT VIEW

SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

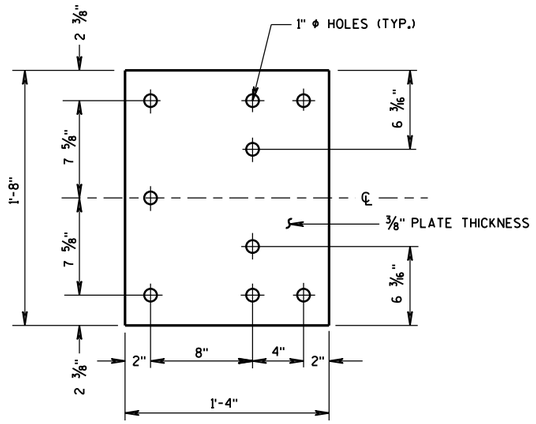
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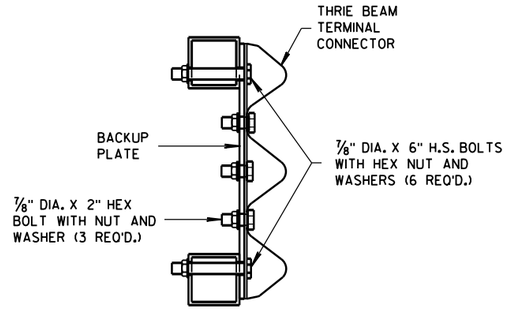
S.D.D. 14 B 45-4f

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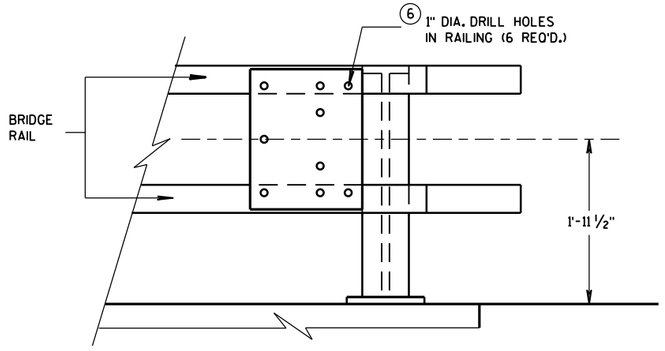
S.D.D. 14 B 45-4f



BACK-UP PLATE DETAIL



SECTION J-J

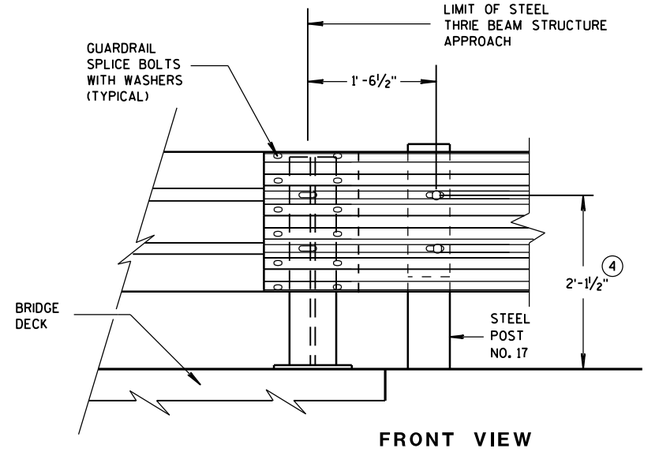


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

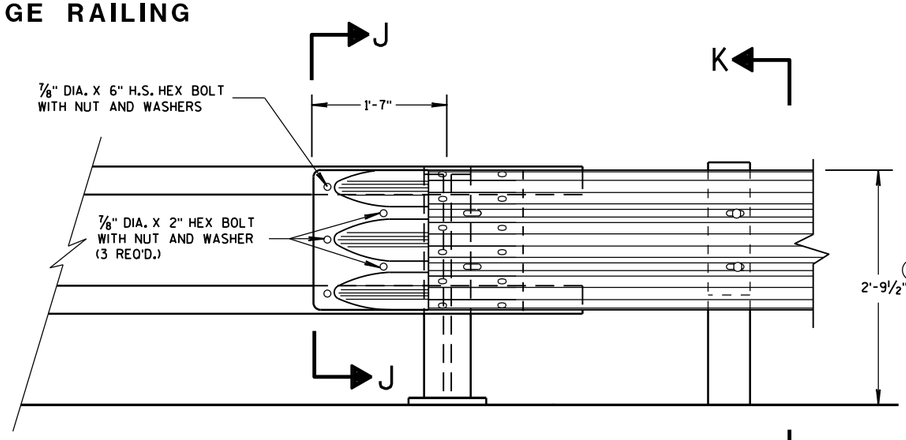
4 TOLERANCE FOR TOP OF BEAM IS ± 1".

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

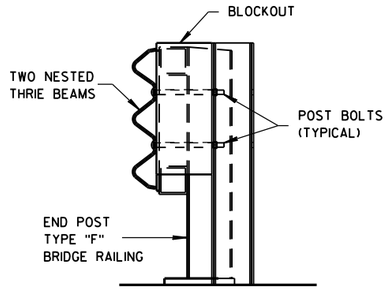


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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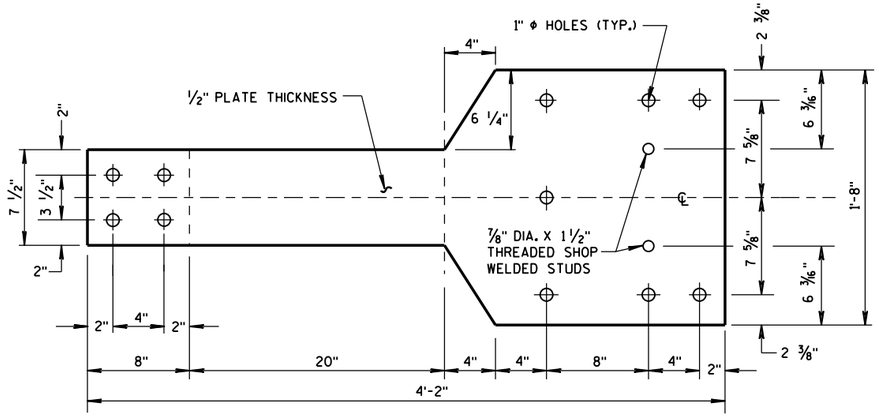
S.D.D. 14 B 45-4g

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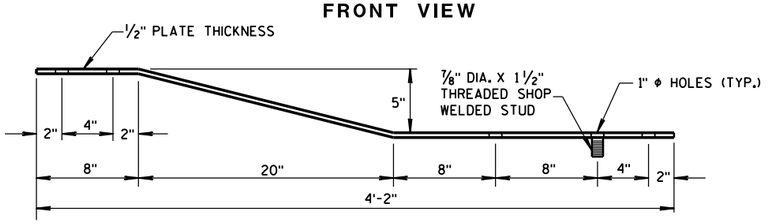
S.D.D. 14 B 45-4g

GENERAL NOTES

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

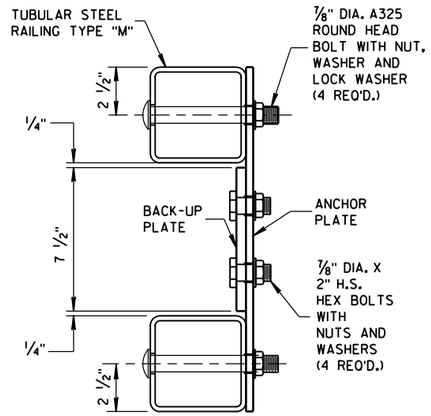


FRONT VIEW

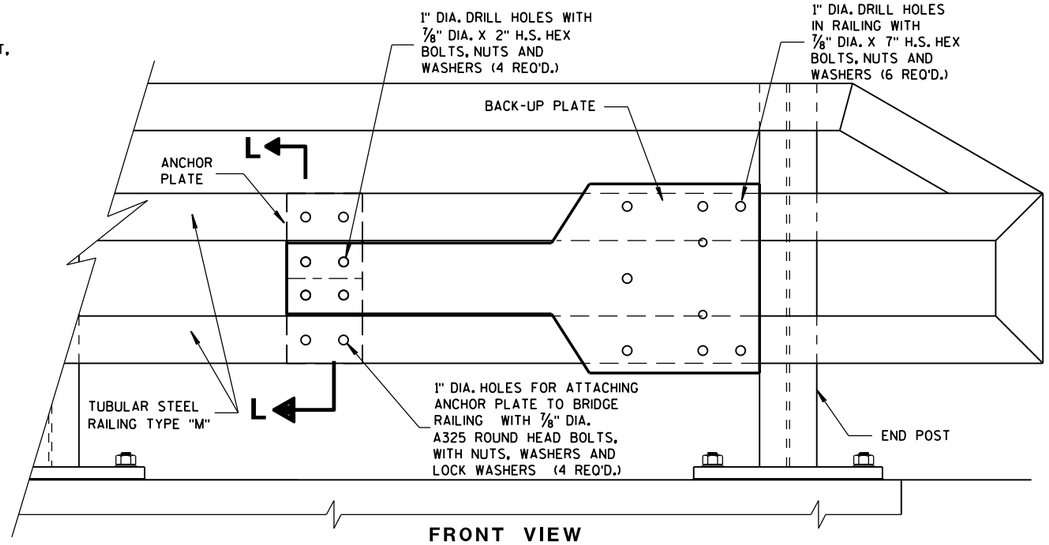


PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

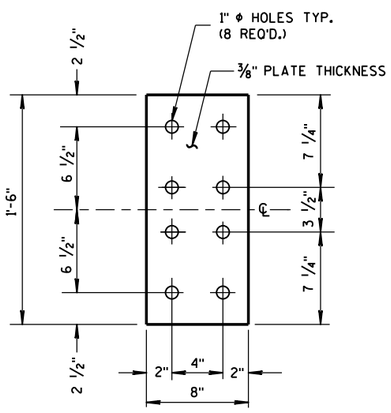


SECTION L-L



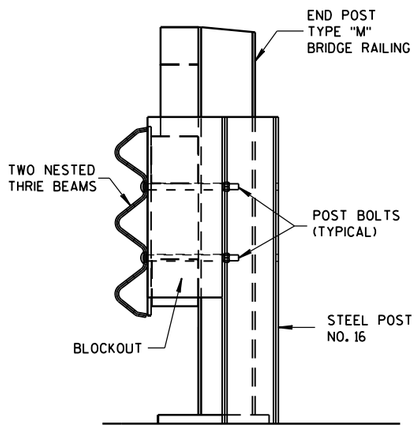
FRONT VIEW

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

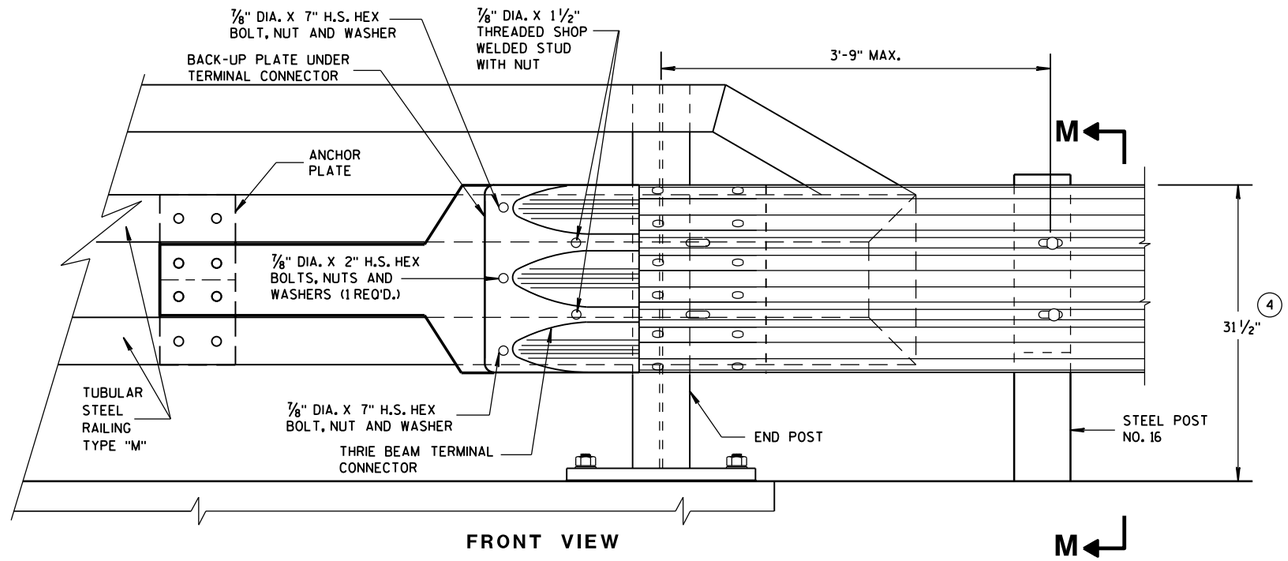


FRONT VIEW

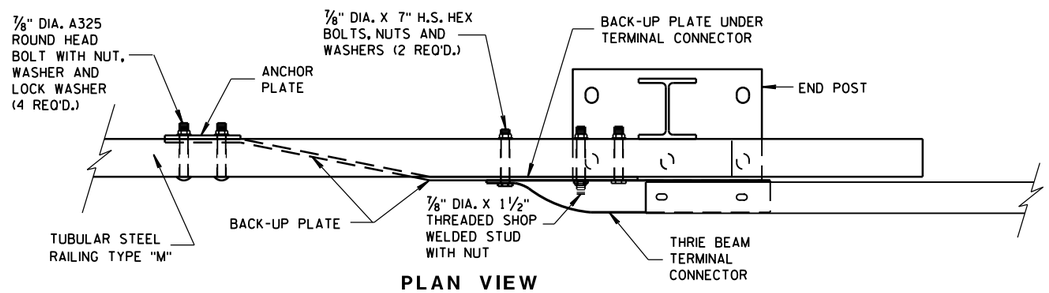
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

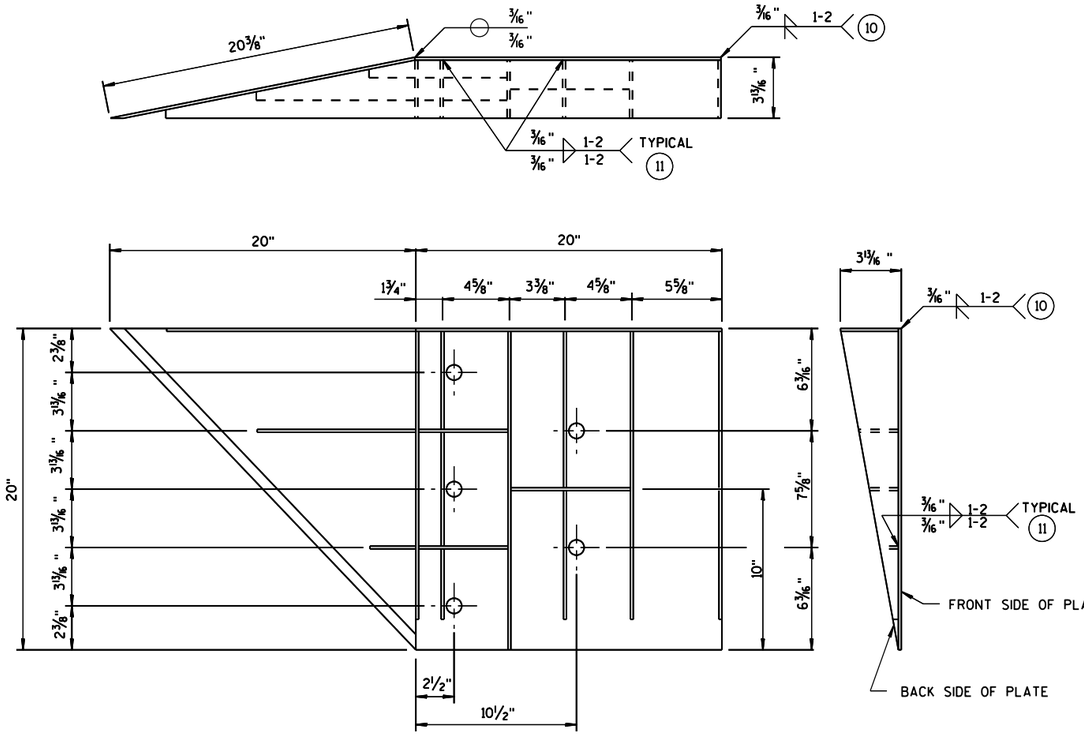
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June, 2015 — DATE
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WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

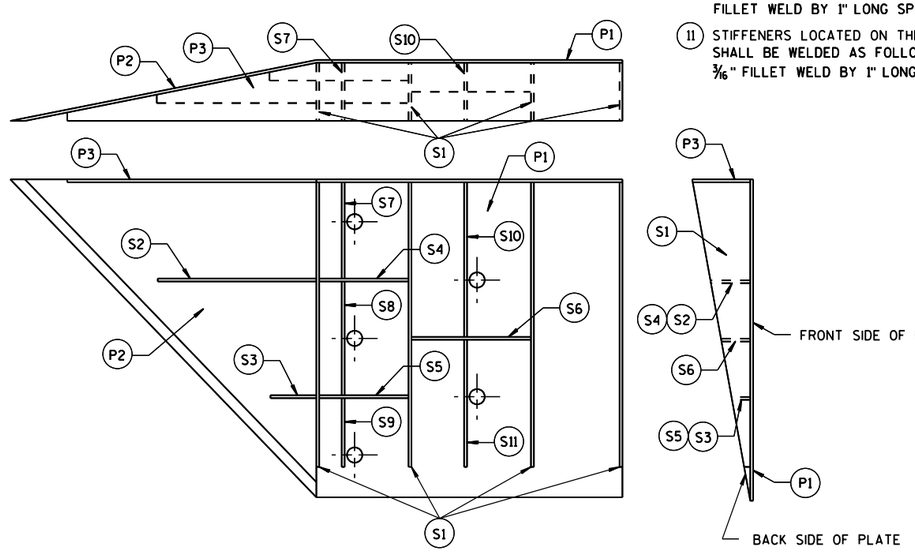


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE ⅜" THICK.

ALL STIFFENERS ARE ¼" THICK.

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

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

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND ⅜" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
⅜" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	⅜"
P2	1		20" x 20" x 28⁹⁄₁₆"	⅜"
P3	1		39" x 3⅝" x 20" x 19⁵⁄₁₆"	⅜"
S1	4		18⁷⁄₁₆" x 3⅜" x 18¾"	¼"
S2	1		10¼" x 2⁷⁄₁₆" x 10⅜" x ½"	¼"
S3	1		3" x 1¹⁄₁₆" x 3⅛" x ½"	¼"
S4	1		6⅛" x 2⁷⁄₁₆"	¼"
S5	1		6⅛" x 1¹⁄₁₆"	¼"
S6	1		7¾" x 1¾"	¼"
S7	1		2⁹⁄₁₆" x 6" x 3⅝" x 5⅞"	¼"
S8	1		1⁵⁄₃₂" x 7½" x 2½" x 7⅜"	¼"
S9	1		6¹⁄₁₆" x 6³⁄₁₆" x 1³⁄₃₂"	¼"
S10	1		1⅛" x 9⅞" x 3⅝" x 9¹¹⁄₁₆"	¼"
S11	1		8½" x 8¾" x 1¹³⁄₁₆"	¼"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

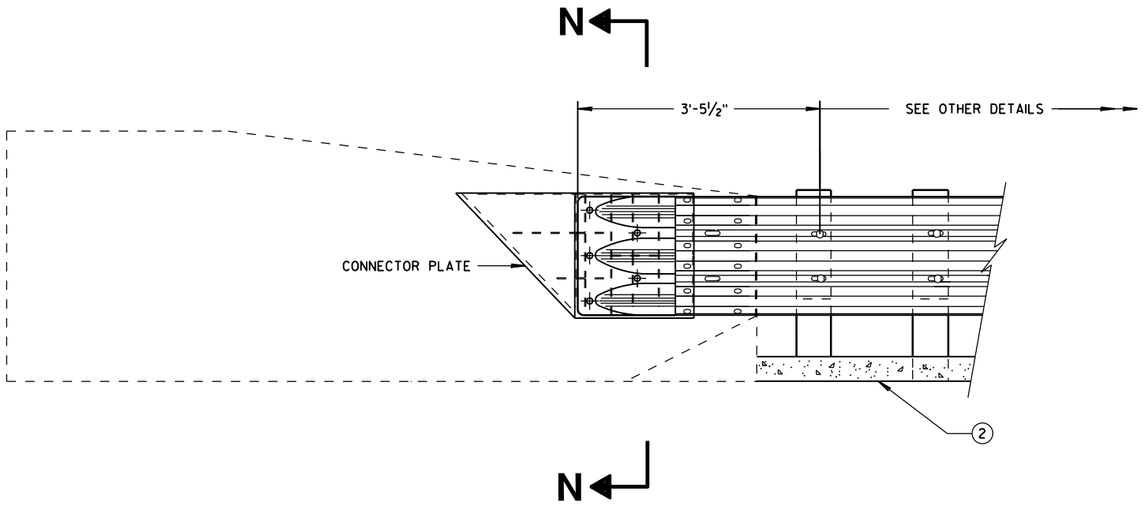
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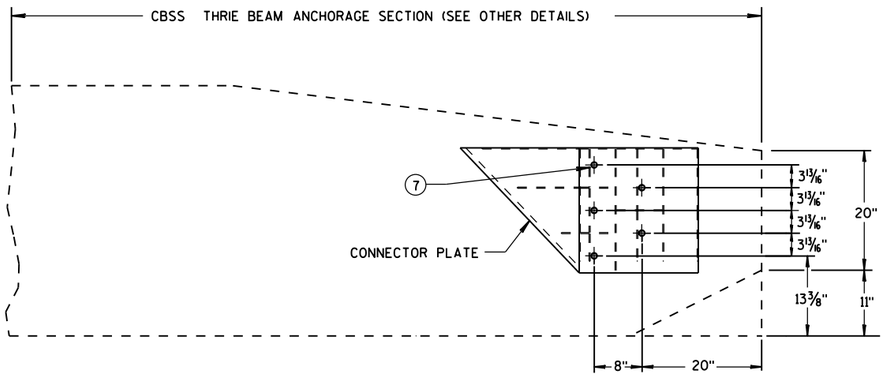
S.D.D. 14 B 45-4i

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S.D.D. 14 B 45-4i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



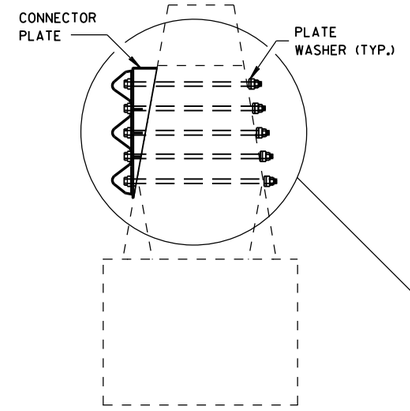
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

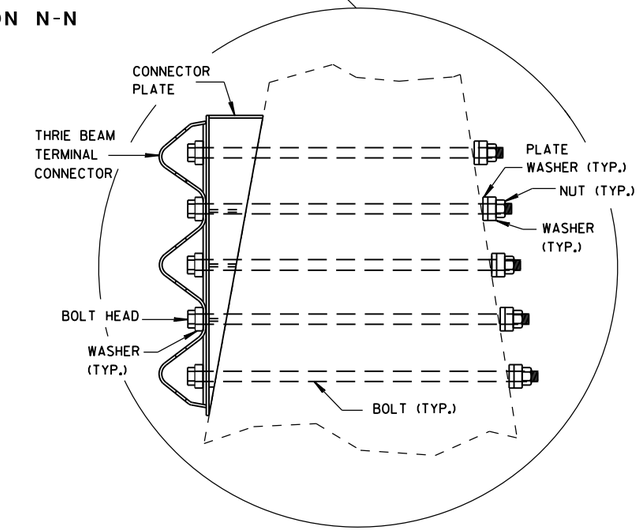
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

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



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

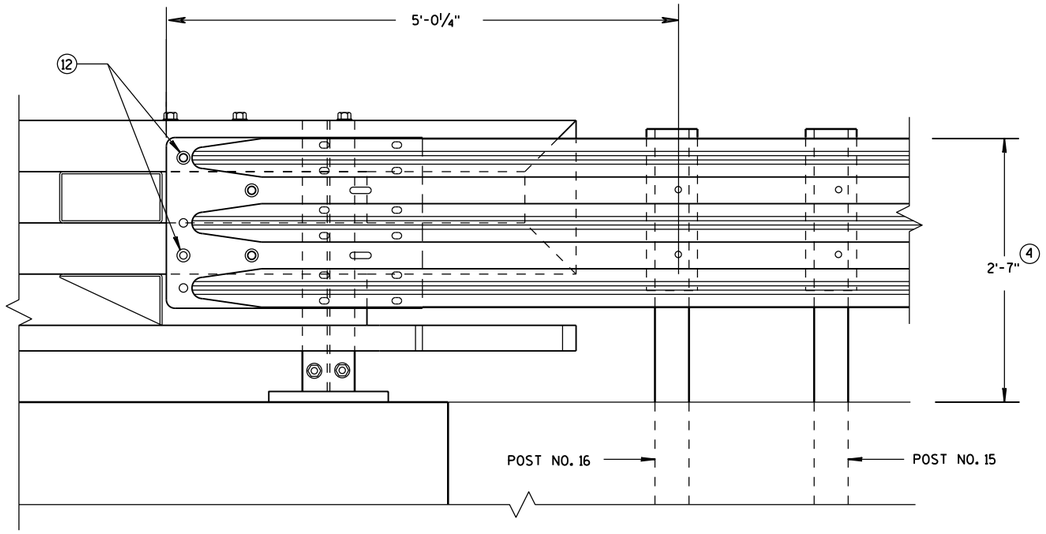
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June, 2015 — DATE
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S.D.D. 14 B 45-4j

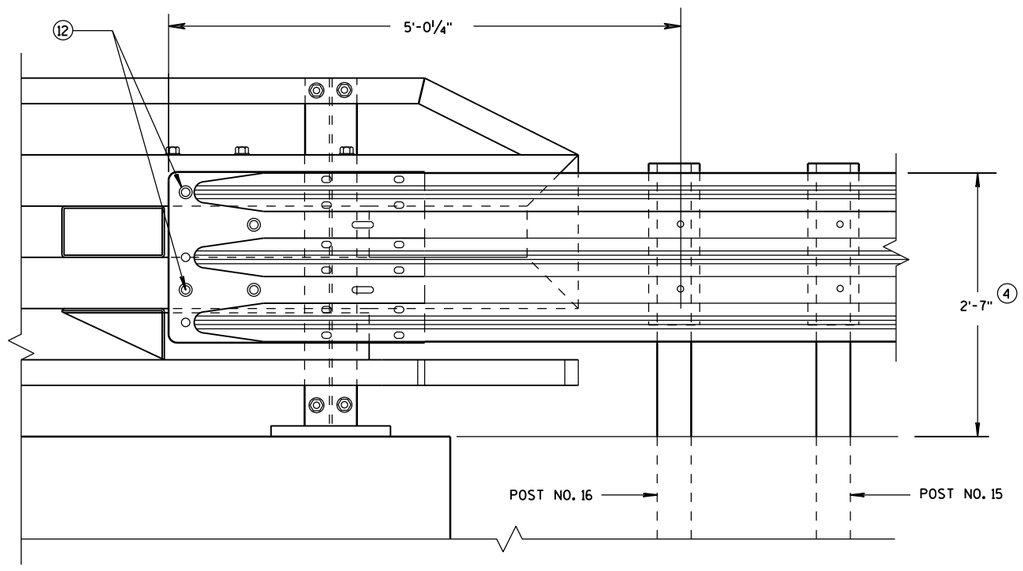
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S.D.D. 14 B 45-4j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

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

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND ½-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS D649 NT
ENGINEER

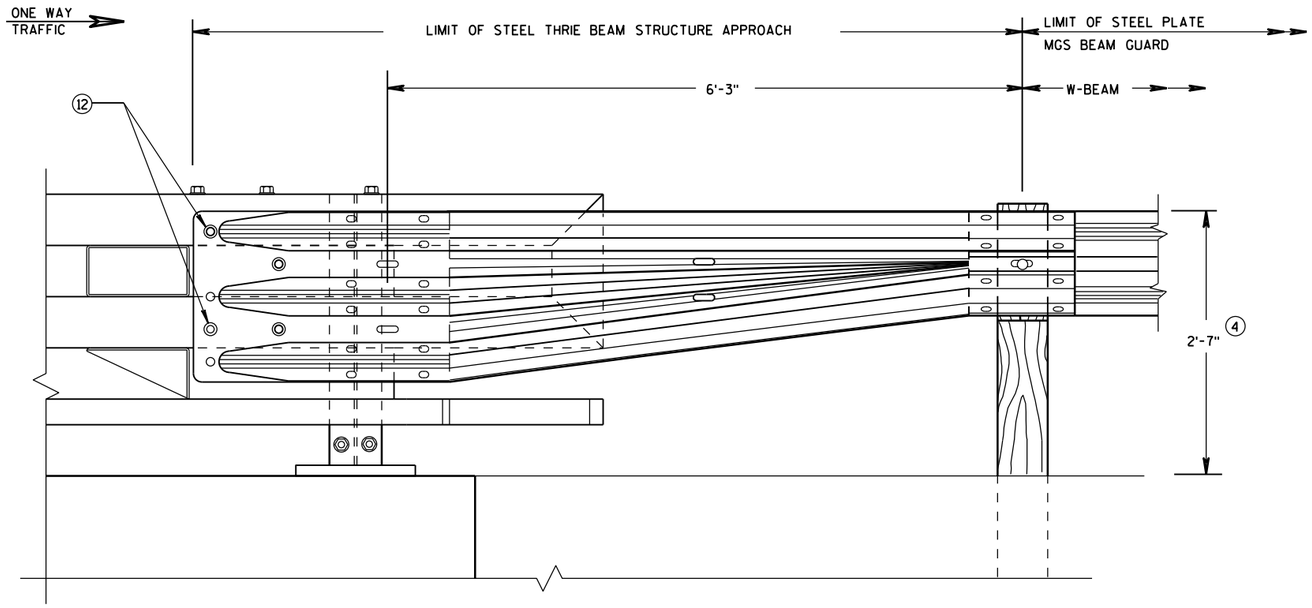
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S.D.D. 14 B 45-4k



FRONT VIEW

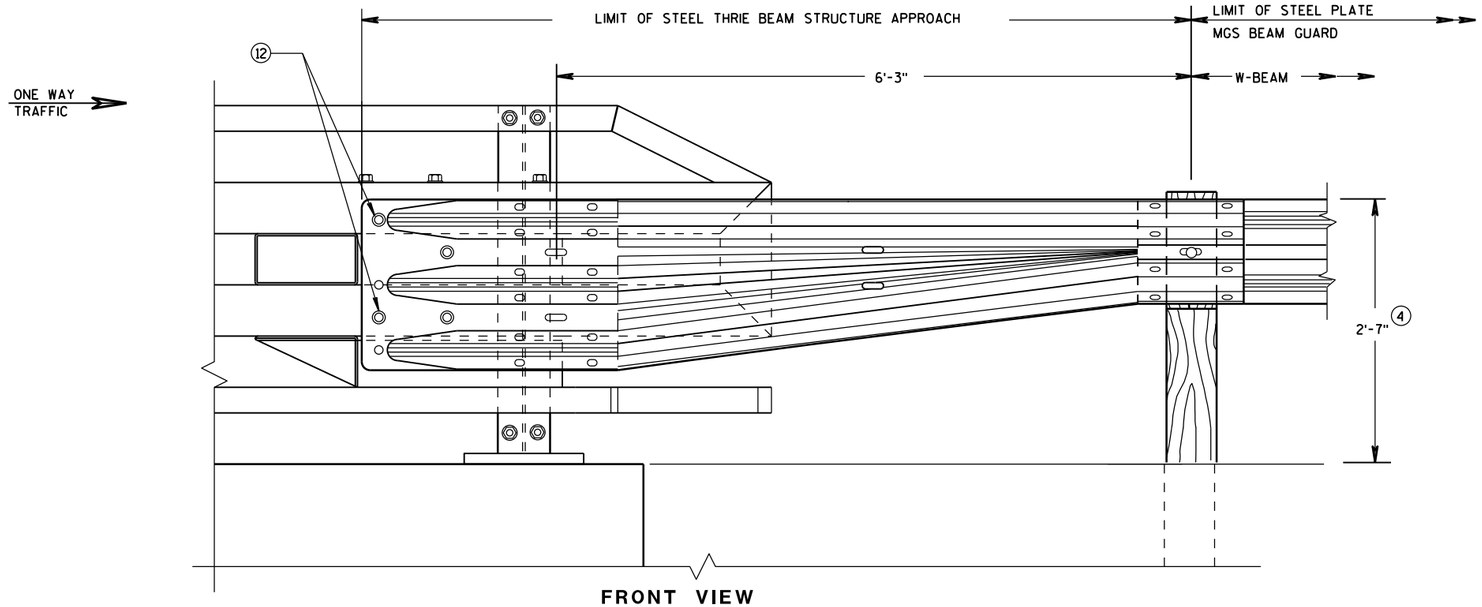
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

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

GENERAL NOTES

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

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND ½-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June, 2015 — DATE
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FHWA

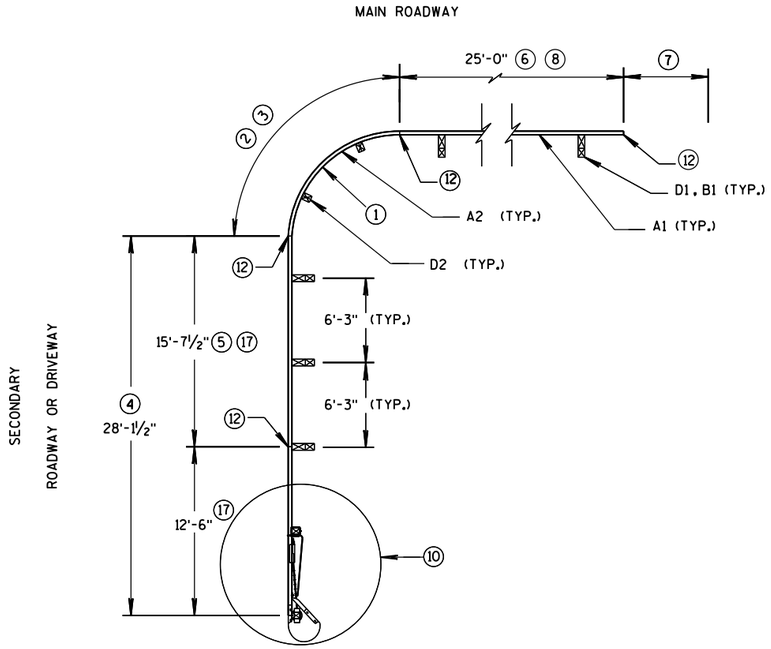
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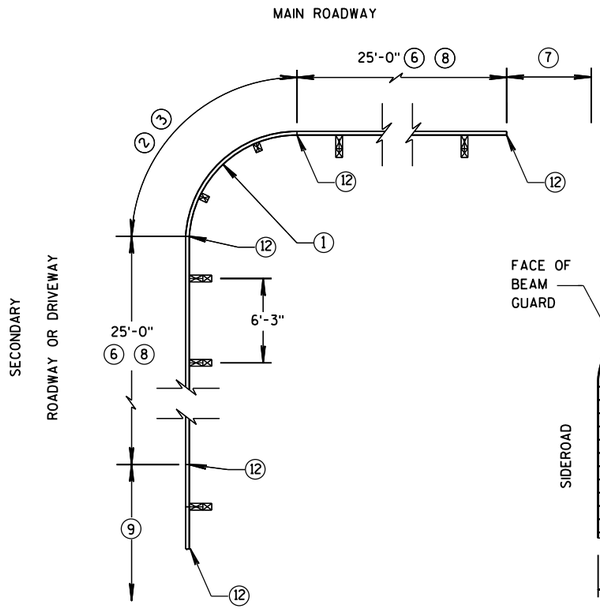
S.D.D. 14 B 45-4L

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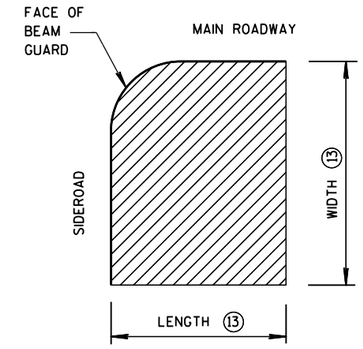
S.D.D. 14 B 45-4L



SHORT RADIUS BEAM GUARD WITH SHORT RADIUS TERMINAL ON SECONDARY ROAD OR DRIVEWAY PLAN VIEW



SHORT RADIUS BEAM GUARD WITH EAT, ADDITIONAL BEAM GUARD OR TRANSITION TO RIGID BARRIER ON SECONDARY ROAD OR DRIVEWAY PLAN VIEW



AREA FREE OF FIXED OBJECTS FOR RADIUS 32' AND LESS 16

TABLE FOR RADIUS OF 32' AND LESS

RADIUS FT	LENGTH FT	WIDTH FT
8	25	15
16	30	15
24	40	20
32	50	30

GENERAL NOTES

SEE PLANS FOR OTHER BARRIER SYSTEM AND LOCATION SPECIFICS.

SEE 14B42 FOR MORE INFORMATION ON BEAM GUARD INSTALLATION, PARTS, MATERIALS, AND INSTALLATION INFORMATION.

GALVANIZE PARTS AFTER FABRICATION.

WELDING IS TO FOLLOW CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI/AWS D1.1

UNLESS NOTED OTHERWISE, ALL PLATES ARE FLAT AND FREE OF WARP.

UNLESS NOTED OTHERWISE, ALL EDGES ARE SMOOTH, STRAIGHT AND VERITCAL.

ALL CUTS AND HOLES, EXCEPT IN BEAM GUARD RAIL ARE TO BE MACHINED OR MACHINE FLAME CUTS.

UNLESS NOTED OTHERWISE CUT OR PROVIDE BOLTS THAT ARE ¼" TO ½" BEYOND THE NUT

DRAWINGS ARE NOT TO SCALE.

(1) RADIUS MEASURE FROM INSIDE OF RAIL. LENGTH OF BEAM GUARD SHORT RADIUS GUARD MEASURED ALONG TRAFFIC SIDE OF RAIL. RADIUS BETWEEN 8 FEET TO 150 FEET. SEE PLAN FOR REQUIRED RADIUS. BEAM GUARD RAIL IN RADIUS IS SHOP BENT. ODD RAIL LENGTH OR FIELD CUTS MAY BE REQUIRED.

(2) CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE USED IN THE RADIUS. CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE SPACED 6'-3". SEE PLAN FOR NUMBER OF CONTROLLED RELEASE TERMINAL (CRT) POSTS.

(3) WITHIN RADIUS BEAM GUARD RAILS ARE NOT BOLTED TO POSTS. BEAM GUARD RAILS RESTED ON TOP OF LAG SCREW.

(4) MINIMUM LENGTH OF BEAM GUARD ALONG SIDE ROAD OR DRIVEWAY TO INSTALL SHORT RADIUS TERMINAL. BEAM GUARD IS PAID FOR WITH BEAM GUARD ITEM.

(5) ODD LENGTH OF BEAM GUARD REQUIRED TO INSTALL SHORT RADIUS TERMINAL.

(6) MINIMUM AMOUNT OF BEAM GUARD TO BE INSTALLED PRIOR TRANSITION TO RIGID BARRIER, ADDITIONAL BEAM GUARD, OR EAT. BEAM GUARD PAID FOR WITH BEAM GUARD ITEM. SEE PLANS FOR MORE DETAIL.

(7) BEAM GUARD, EAT OR TRANSITION TO RIGID BARRIER. SEE PLAN.

(8) TOP OF BEAM GUARD BY THE RADIUS IS 27". HEIGHT OF BEAM GUARD IS 31" BY TRANSITION TO RIGID BARRIER, ADDITIONAL BEAM GUARD OR EAT.

(9) ADDITIONAL BEAM GUARD, EAT OR TRANSITION TO RIGID BARRIER. BEAM GUARD SHOWN. SEE PLAN FOR DETAILS.

(10) SHORT RADIUS TERMINAL (SEE OTHER DETAILS)

(11) HEIGHT VARIES. SEE NOTE (8) AND (17).

(12) BEAM GUARD RAIL SPLICE LOCATION. SPLICE LOCATION REQUIRE PART F1 AND F2. SEE SDD 14B42 FOR DETAILS.

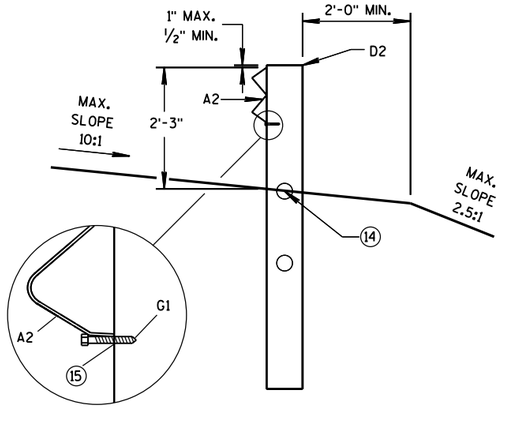
(13) SEE TABLE FOR VALUES.

(14) MAXIMUM HEIGHT FOR CENTER OF HOLE IS ¾" ABOVE FINISHED GROUND ±1".

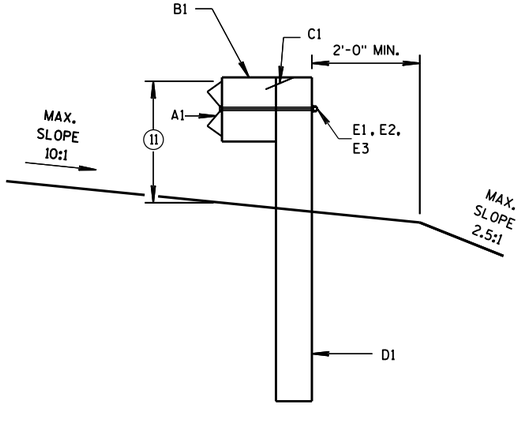
(15) DRILL 15/64" DIA. PILOT HOLE. DO NOT HAMMER LAG SCREW INTO POST.

(16) SMALL SIGNS ON BREAKAWAY HARDWARE ARE ACCEPTABLE.

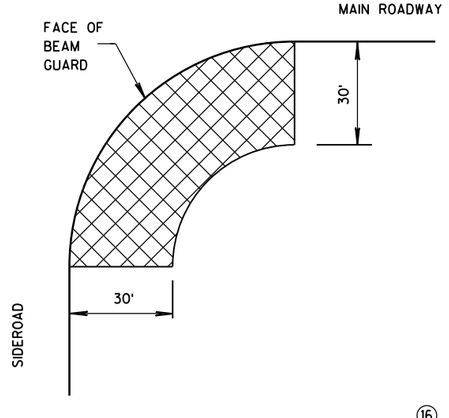
(17) TOP OF RAIL HEIGHT IS 27" WHEN USING A SHORT RADIUS TERMINAL.



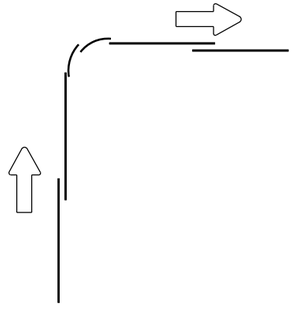
CONTROLLED RELEASE TERMINAL POST (CRT) IN RADIUS



BEAM GUARD POSTS IN HEIGHT TRANSITION



AREA FREE OF FIXED OBJECTS 16 RADIUS GREATER THAN 32'



LAP SPLICE DETAIL

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

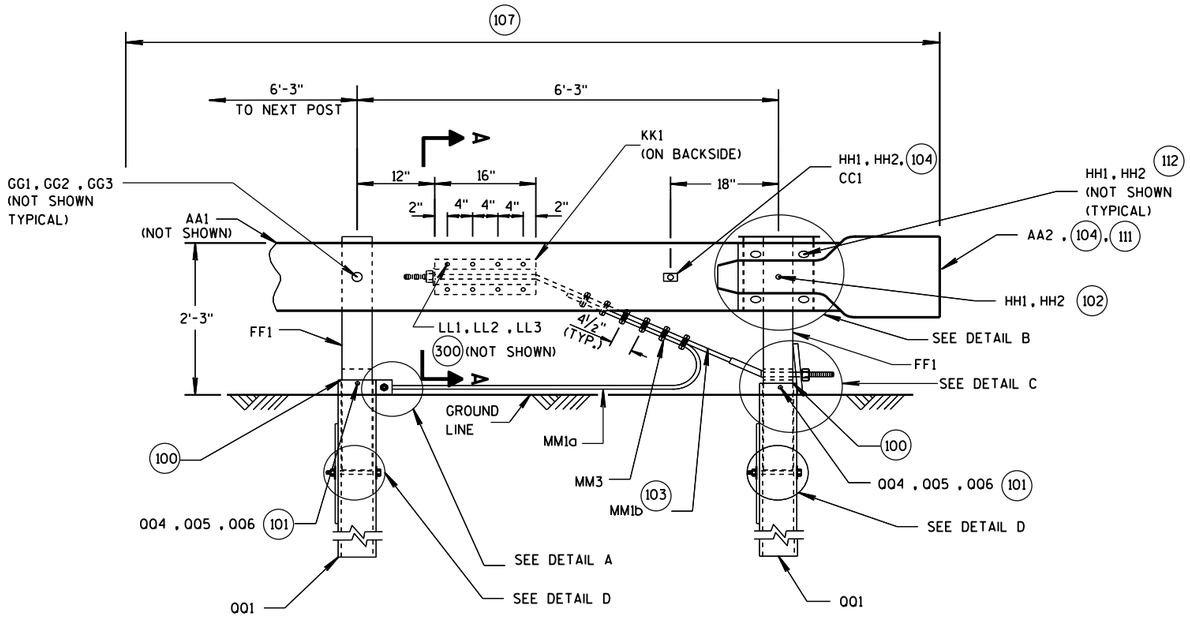
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 651

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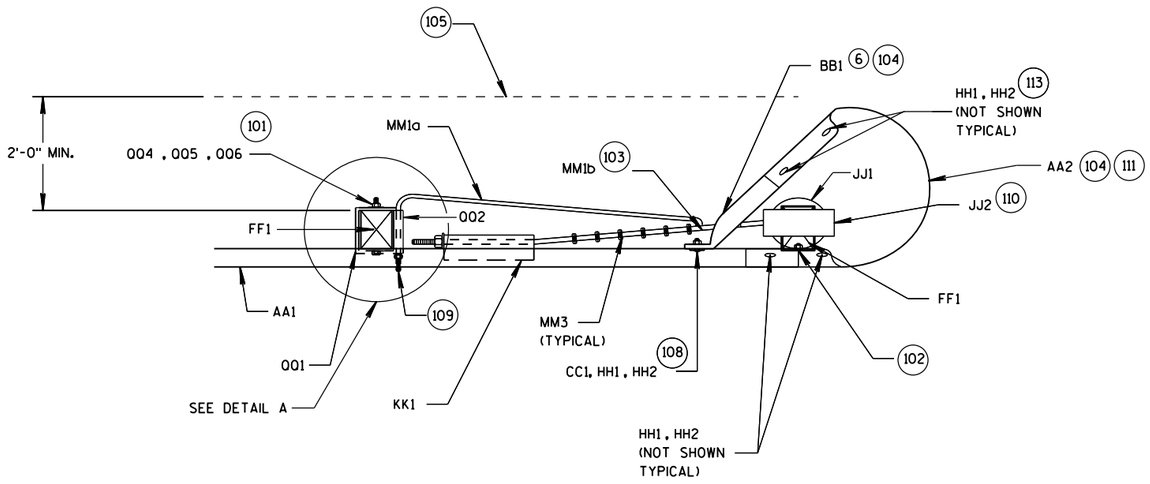
S.D.D. 14 B 53-1a

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S.D.D. 14 B 53-1a



SHORT RADIUS TERMINAL
PROFILE VIEW



SHORT RADIUS TERMINAL
TOP VIEW

(100) TOP OF FOUNDATION TUBE 2 INCHES MAXIMUM ABOVE FINISHED GROUND.

(101) WASHERS REQUIRED BETWEEN BOLT HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

(102) SPLICE BOLT AND NUT CONNECTS BEAM GUARD RAIL, W-BEAM END SECTION BUFFER, AND STEEL PIPE ASSEMBLY. NO WASHER REQUIRED. SEE DETAIL B.

(103) CABLE IS TAUT.

(104) ADJUST AA2 AND BB1 TO FIT.

(105) BREAK POINT OF SHOULDER.

(106) TACK WELD CABLE CONNECTOR TUBE PLATE TO CABLE CONNECTION TUBE. SEE DETAIL A PROFILE VIEW.

(107) PAY LIMIT FOR BEAM GUARD.

(108) SQUARE WASHER BETWEEN HEAD OF BOLT AND TRAFFIC FACE OF BEAM GUARD. ROUND WASHER REQUIRED BETWEEN NUT AND BB1.

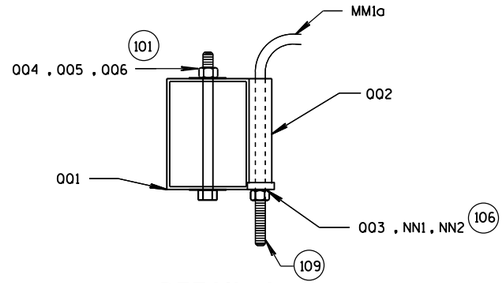
(109) CUT OR PROVIDE THREADED STUD THAT IS FLUSH WITH FACE OF BEAM GUARD RAIL KK1 (PLUS OR MINUS 1/2" TOLERANCE). DEBURR AFTER CUTTING.

(110) SEE STEEL PIPE ASSEMBLY DETAILS.

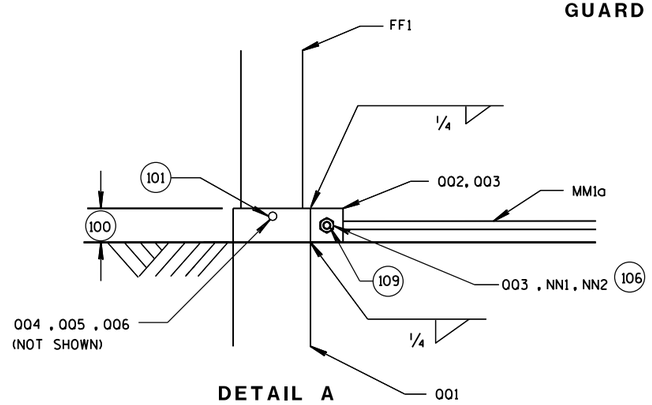
(111) ATTACH UU2 WITH UU3. SHOP APPLY UU1 TO UU2.

(112) FOUR HH1 AND HH2 REQUIRED TO ATTACH AA1 TO AA2.

(113) FOUR HH1 AND HH2 REQUIRED TO ATTACH AA2 TO BB1.



DETAIL A
TOP VIEW
(WOOD BREAKAWAY AND BEAM GUARD RAIL POSTS NOT SHOWN)



DETAIL A
PROFILE VIEW

STEEL PLATE BEAM GUARD
SHORT RADIUS TERMINAL
MGS

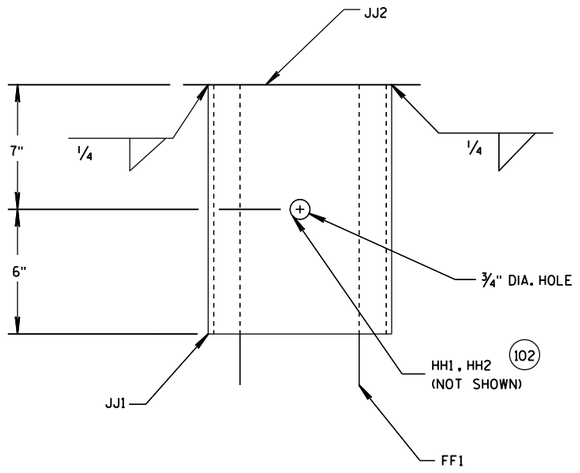
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 652

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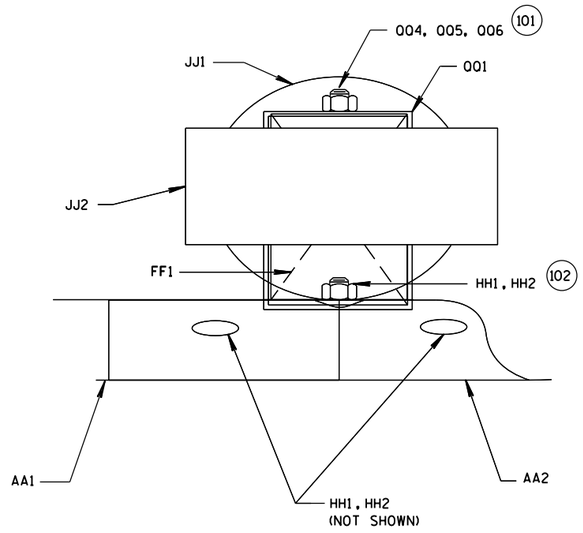
S.D.D. 14 B 53-1b

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S.D.D. 14 B 53-1b

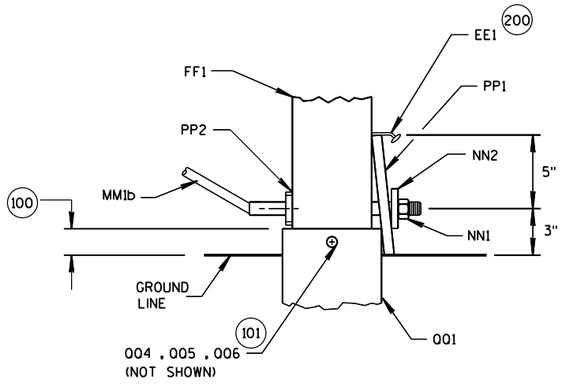


DETAIL B
PROFILE VIEW OF STEEL PIPE ASSEMBLY
(BEAM GUARD AND W-BEAM
END SECTION NOT SHOWN)

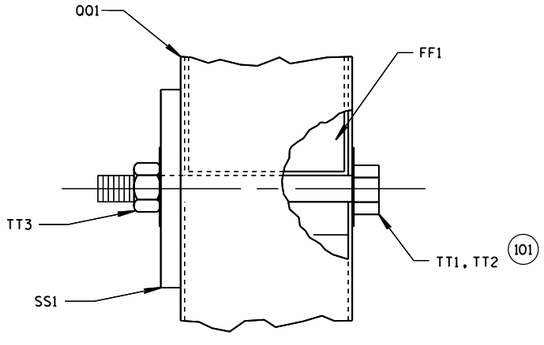


DETAIL B
PLAN VIEW OF STEEL PIPE ASSEMBLY

200 2 NAILS SPACED 4 INCHES CENTER TO CENTER.



DETAIL C
PROFILE VIEW



DETAIL D
PROFILE VIEW

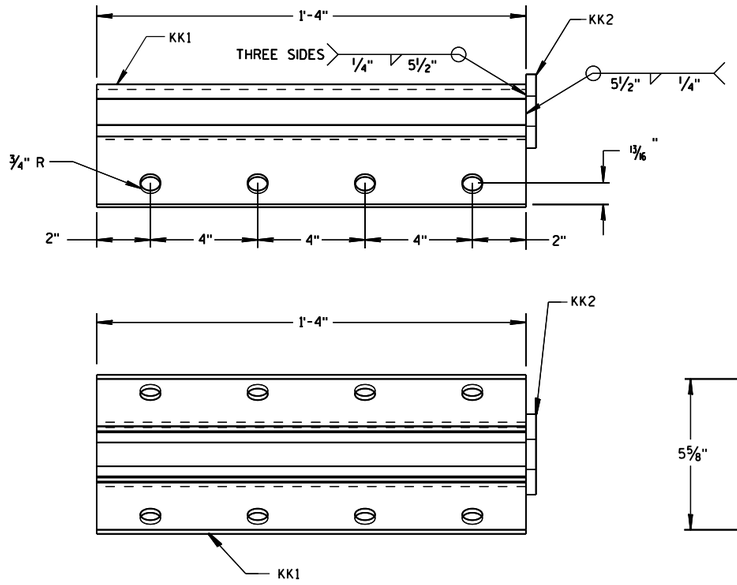
SHORT RADIUS BEAM GUARD
(MGS) SHORT RADIUS
TERMINAL (MGS)

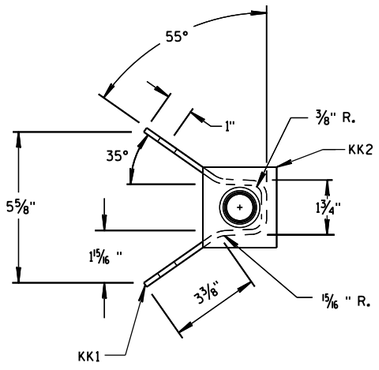
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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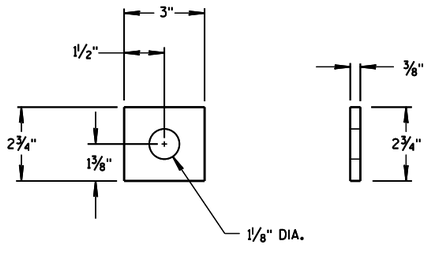
S.D.D. 14 B 53-1c

(300) WASHERS REQUIRED BETWEEN BOLT HEAD AND BEAM GUARD RAIL AND BETWEEN NUT AND ANCHOR BRACKET. EIGHT LL1 AND LL3 REQUIRED. SIXTEEN LL2 REQUIRED.

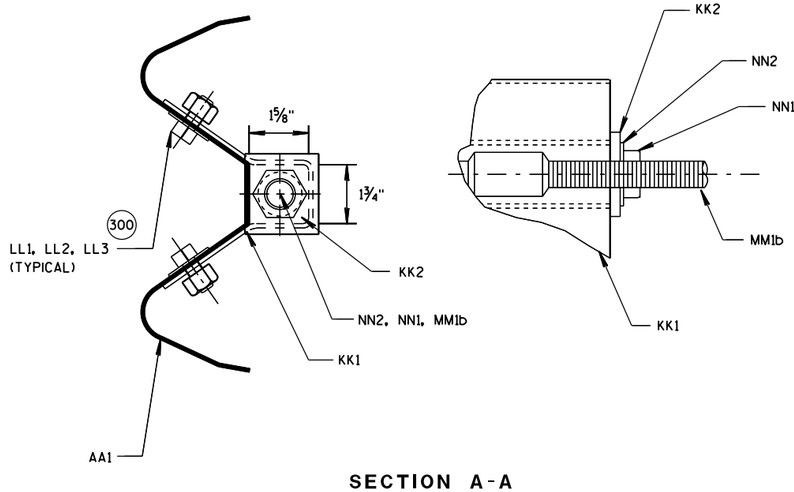




ANCHOR BRACKET (KK1, KK2)



ANCHOR BRACKET BEARING PLATE (KK2)

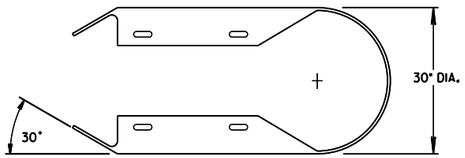


SECTION A-A

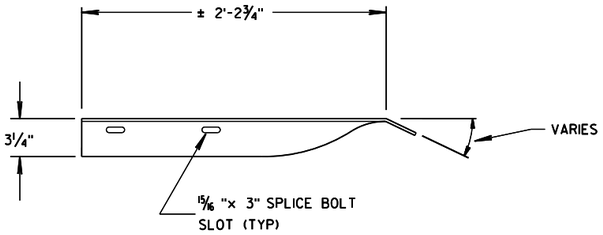
SHORT RADIUS BEAM GUARD
(MGS) SHORT RADIUS
TERMINAL (MGS)

STATE OF WISCONSIN
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S.D.D. 14 B 53-1d



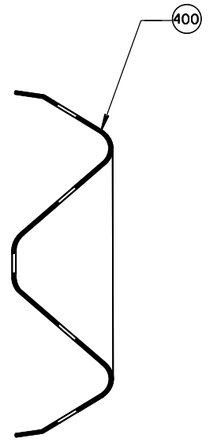
TOP VIEW



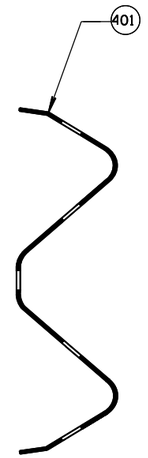
TOP VIEW

(400) CROSS SECTON OF PART IS TO FIT OVER AA1.

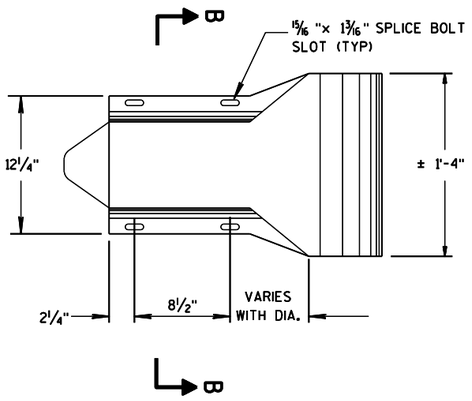
(401) CROSS SECTON OF PART IS TO FIT OVER OR UNDER AA1.



SECTION B-B

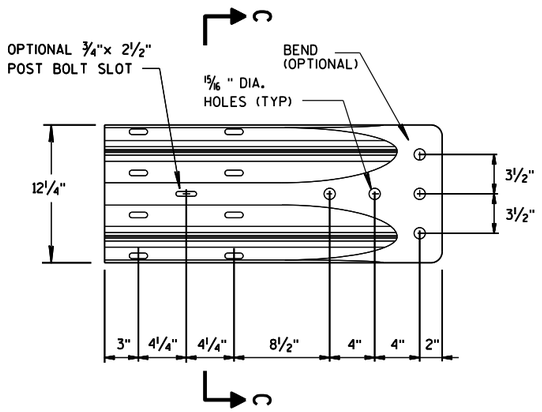


SECTION C-C



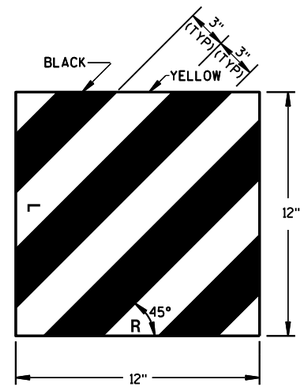
W-BEAM
END SECTION BUFFER (AA2)

PROFILE VIEW



W-BEAM
TERMINAL CONNECTOR (BB1)

PROFILE VIEW



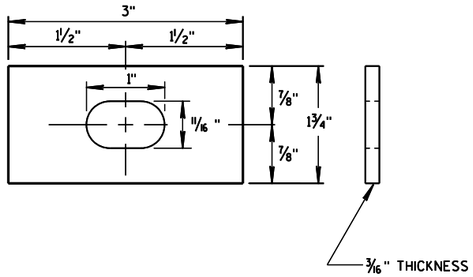
REFLECTIVE SHEETING
(UU1, UU2)

SHORT RADIUS BEAM GUARD
(MGS) SHORT RADIUS
TERMINAL (MGS)

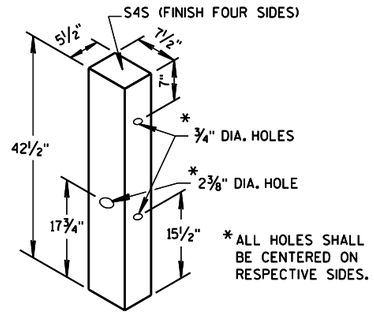
STATE OF WISCONSIN
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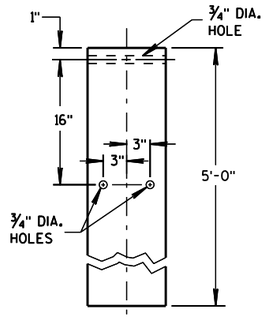
S.D.D. 14 B 53-1e



RECTANGULAR PLATE WASHER (CC1)



WOOD BREAKAWAY POST (FF1)



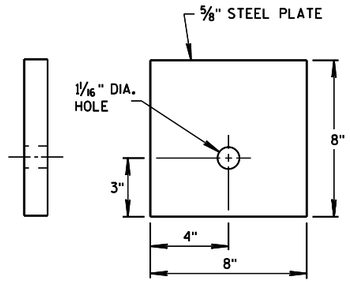
FOUNDATION TUBE (QQ1) (500)

(500) SEE DETAIL "D" FOR LOCATION AND ATTACHING SS1.

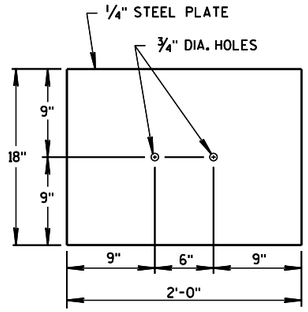
(501) FOR MM1a THREADED STUD ONLY REQUIRED ON ONE END. SWAGED FITTING REQUIRED.

(502) LOCATE HOLES ON THE CENTERLINE OF THE SIDE OF THE POST.

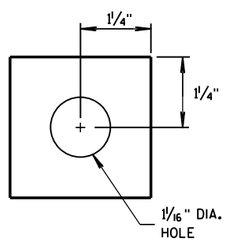
(503) MM1a MAY HAVE ONE THREADED STUD 4 INCHES LONG. SEE NOTE (109).



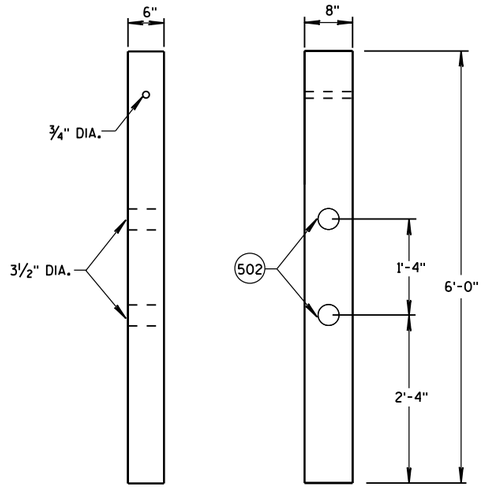
BEARING PLATE (PP1)



SOIL PLATE (SS1)

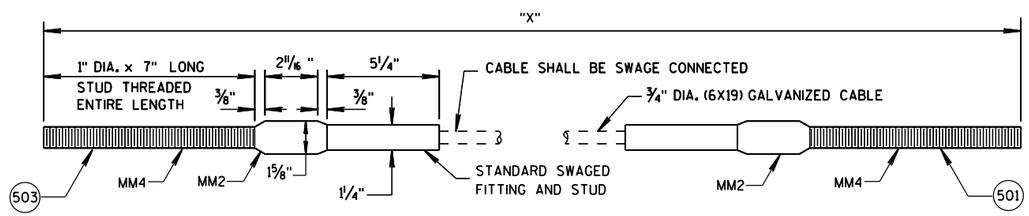


TUBE END PLATE (QQ3)



FRONT VIEW SIDE VIEW

CONTROLLED RELEASE TERMINAL POST (CRT) (D2)



"X" LENGTH

MM1a	9'-0"
MM1b	6'-8"

CABLE ASSEMBLY (MM1a , MM1b)

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 656

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S.D.D. 14 B 53-1f

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S.D.D. 14 B 53-1f

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	BEAM GUARD RAIL	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
A2	BEAM GUARD RAIL - SHOP BENT	INDICATE ON BACK OF RAIL RADIUS THAT RAIL WAS BENT TO. SHOP BEND RADIUS IS TO THE NEAREST FOOT. FOLLOW AASHTO M180 ON HOW TO MARK RADIUS INFORMATION.	
		AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
B1	BLOCK - WOOD	WISDOT SPEC. 614	SEE SDD 14B42
C1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEAD)	
D1	POST-STRONG POST-WOOD	WISDOT SPEC. 614	SEE SDD 14B42
D2	POST-CRT-WOOD	WISDOT SPEC. 614	
E1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
E2	POST BOLT-WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	5/8" DIA.
		GALV. AASHTO M111/ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329	
E3	POST BOLT - NUT		5/8" DIA. SEE SDD 14B42 FOR GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
F1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		ASTM A307 GRADE A OR SAE J429 GRADE 2	5/8" DIA. SEE SDD 14B42 FOR GEOMETRY AND OTHER INFORMATION
		UNC	
		AASHTO M180	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
F2	SPLICE BOLT - NUT	ASTM A563 GRADE A	5/8" DIA. SEE SDD 14B42 FOR GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
G1	LAG SCREW	ASTM A308 GRADE A ASTM A153 CLASS D	3/8" DIA. 3" LONG
H1	DELINEATOR - BEAM GUARD		SEE SDD 14B42 FOR MORE INFORMATION
H2	DELINEATION - SHEETING	YELLOW OR WHITE	
		WISDOT SPEC 637 TYPE SH	
		APPROVED PRODUCT LIST	
J1	FOUNDATION BACKFILL	STANDARD SPEC. 614	
AA1	BEAM GUARD RAIL - PUNCHED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
AA2	BEAM GUARD RAIL - END SECTION BUFFER	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
BB1	BEAM GUARD RAIL - TERMINAL CONNECTOR MODIFIED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
CC1	SHORT RADIUS - SQUARE WASHER	AASHTO M180	
		GALV. AASHTO M111 / ASTM A123	
EE1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)	
FF1	POST - BCT - WOOD	S4S FINISH ON 4 SIDES	
		WISDOT SPEC. 614	
GG1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	3/8" DIA. SEE SDD 14B42 FOR GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
GG2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	3/8" DIA.
		GALV. AASHTO M111 / ASTM A123 OR5 GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI 657

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S.D.D. 14 B 53-1g

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
GG3	POST BOLT - NUT	ASTM A563 GRADE A	3/8" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	SEE 14B42 FOR GEOMETRY
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
HH1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	3/8" DIA. SEE 14B42 FOR GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180 HEAD GEOMETRY	
HH2	SPLICE BOLT - NUT	ASTM A563 GRADE A	3/8" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	SEE 14B42 FOR GEOMETRY
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
JJ1	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	10" O.D.
JJ2	TOP PLATE	ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS 3/8" X 4" X 1'-0"
		GALV. AASHTO M111 / ASTM A123	
KK1	ANCHOR BRACKET	ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
KK2	ANCHOR BRACKET - BEARING PLATE	ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
LL1	ANCHOR BRACKET - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	5/8" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
LL2	ANCHOR BRACKET - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
		GALV. AASHTO M111 / ASTM A123 OR5 GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
LL3	ANCHOR BRACKET - NUT	ASTM A563 GRADE A	5/8" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A563	
		UNC	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
MM1a	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM1b	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM2	ANCHOR CABLE - SWAGE FITTING	ASTM A576 GRADE 1035	
		SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. WITH A BREAKING STRENGTH 40,000 LBS.	
		GALV. AASHTO M111 / ASTM A123	
		ASME B30.26 FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING INTO CONNECTION: NAME OF MANUFACTURER OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE.	
MM3	WIRE ROPE CABLE CLAMPS	FF-C-450D TYPE 1 CLASS 1	3/4"
		ASTM A153 HOT DIP CLASS D	
MM4	ANCHOR CABLE - SWAGE FITTING - STUD	ASTM F3125 GRADE A325 TYPE 1 OR SAE GRADE 5 OR ASTM A449 TYPE 1 HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
NN1	ANCHOR CABLE - NUT	ASTM A563 GRADE A	1" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A563	
		UNC	
NN2	ANCHOR CABLE - NUT - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	1" DIA.
		GALV. AASHTO M111 / ASTM A123 OR5 GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
PP1	BEARING PLATE AT POST	ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
PP2	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	2" DIA. x 6" LONG
QQ1	FOUNDATION TUBE	ASTM A500 GRADE B	8" X 6" X 3/16"
		GALV. AASHTO M111 / ASTM A123	
QQ2	SHORT RADIUS - FOUNDATION TUBE - ANCHOR CABLE - TUBE	ASTM A500 GRADE B	DIMENSIONS 2 1/2" X 2 1/4" X 1/4" X 8"
		GALV. AASHTO M111 / ASTM A123	

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S.D.D. 14 B 53-1h

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 53-1h

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
003	SHORT RADIUS - SOIL TUBE - ANCHOR CABLE - TUBE - END PLATE	ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS 2½" X 2½" X ¼"
		GALV. AASHTO M111 / ASTM A123	
004	GROUND STRUT AND YOKE - BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	⅝" DIA.
		ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	
		UNC	
005	GROUND PLATE AND YOKE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	⅝" DIA.
		GALV. AASHTO M111 / ASTM A123 OR5 GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
006	GROUND STRUT AND YOKE - NUT	HEAVY HEX	⅝" DIA.
		UNC	
		ASTM A563 GRADE A	
		OVER TAPPED NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
SS1	SOIL PLATE	ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
TT1	SOIL PLATE - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
TT2	SOIL PLATE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	⅝" DIA.
		GALV. AASHTO M111 / ASTM A123 OR5 GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
TT3	SOIL PLATE - NUT	GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	⅝" DIA.
UU1	OBJECT MARKER - SHEETING	MUTCD / WISDOT OBJECT MARKER TYPE 3	PATTERN AND COLOR FOR SHEETING SHEETING TYPE FOR MARKER
		WISDOT SPEC 637 TYPE F	
		APPROVED PRODUCT LIST	
UU2	OBJECT MARKER - ALUMINUM PLATE	WISDOT SPEC 637 ALUMINUM PLATE	MATERIAL AND THICKNESS OF MATERIALS
UU3	OBJECT MARKER - SCREWS	STAINLESS SELF-TAPPING SCREWS	
VV1	FOUNDATION BACKFILL	WISDOT SPEC 614	

6

S.D.D. 14 B 53-1i

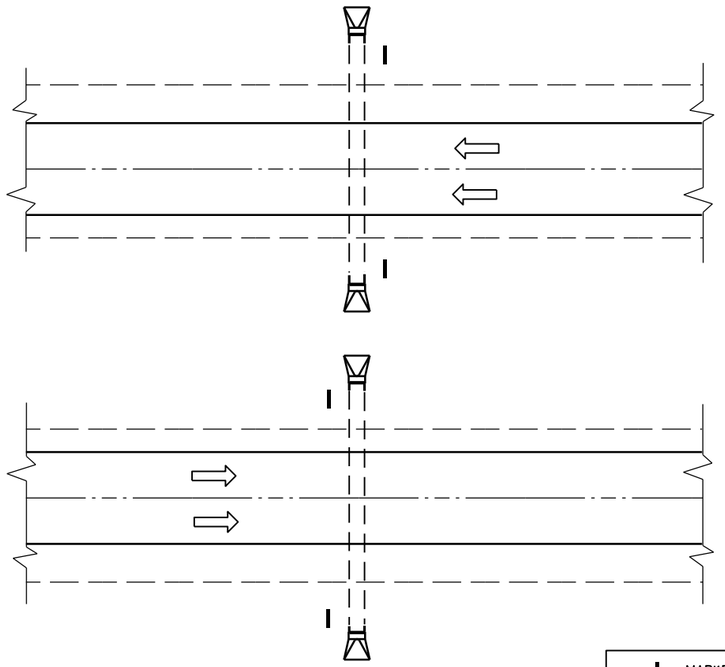
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S.D.D. 14 B 53-1i

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

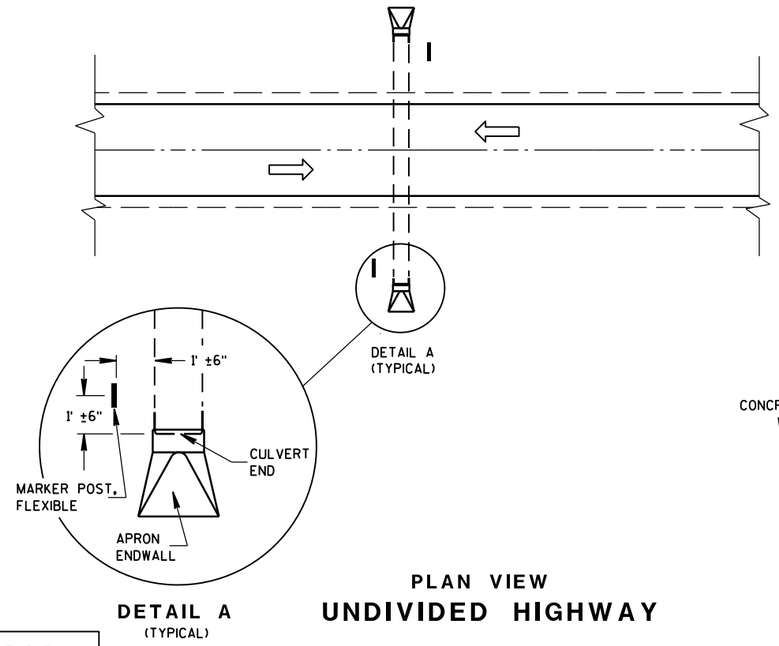
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVI
NT
FHWA



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

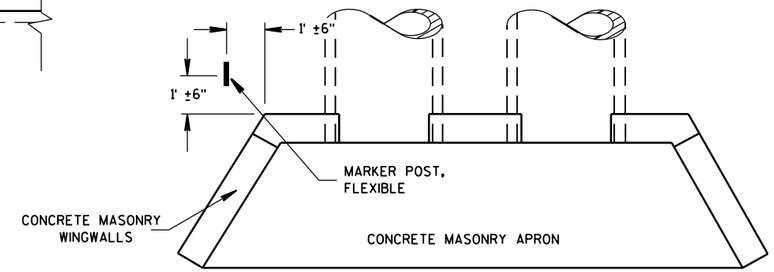
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

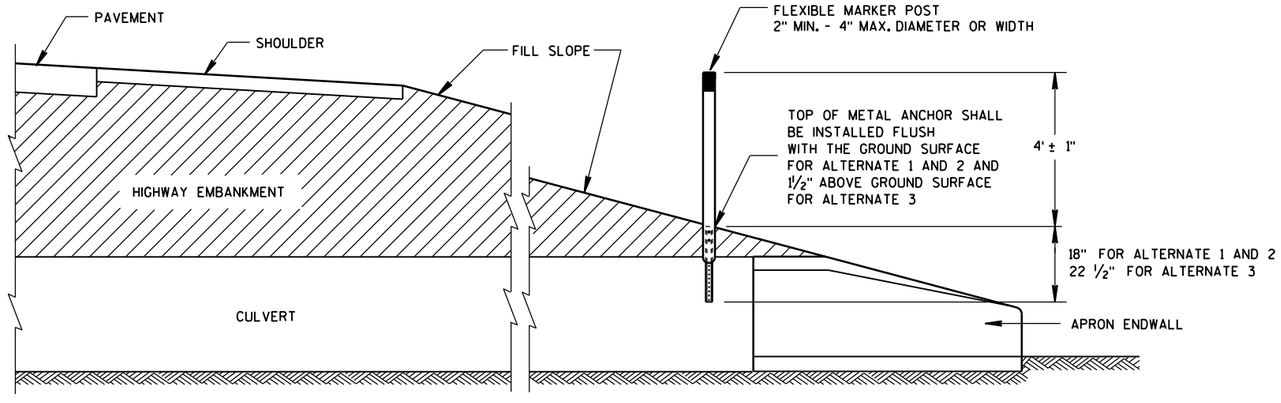
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

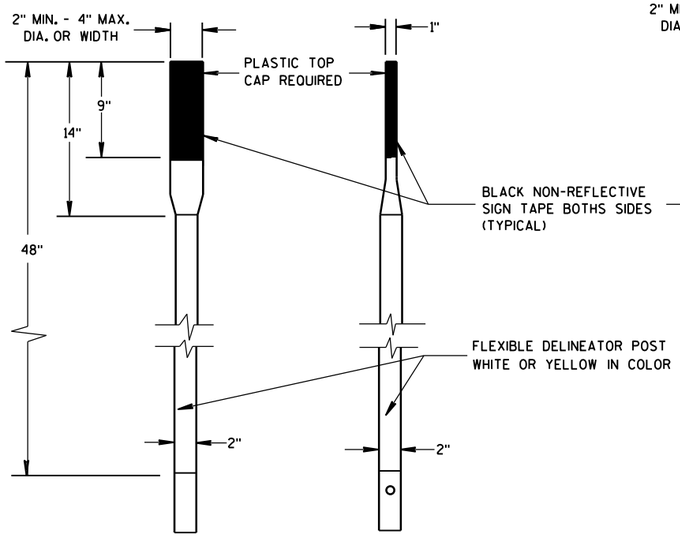
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI 660

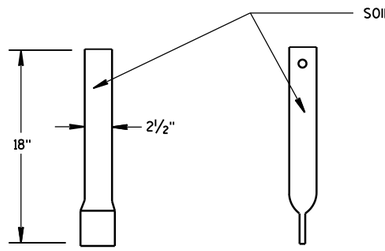
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S.D.D. 15 A 3-2a

6

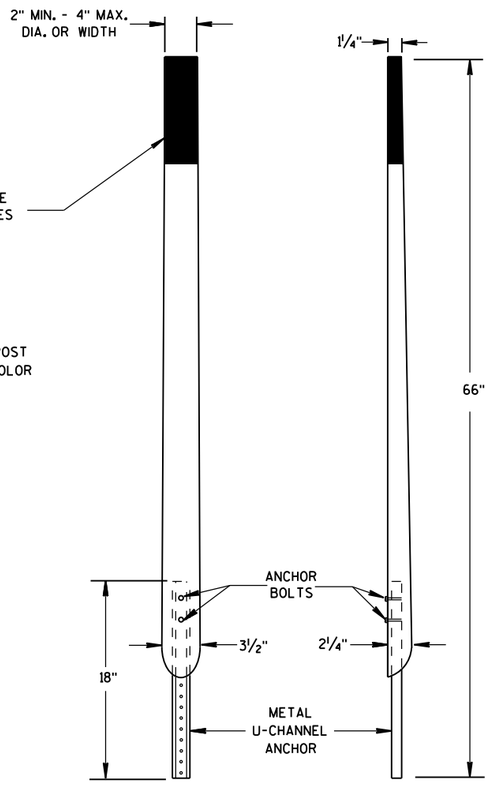
S.D.D. 15 A 3-2a





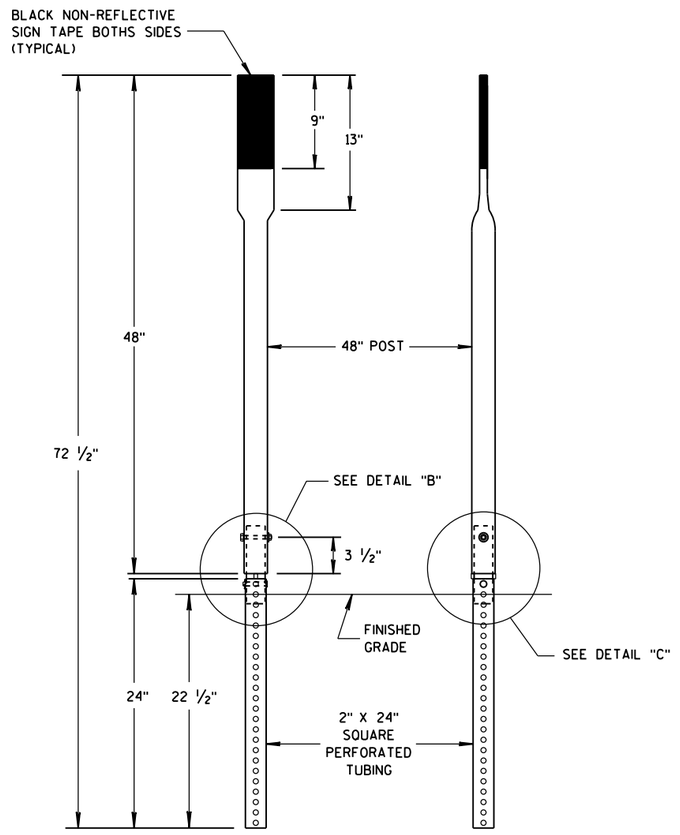
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

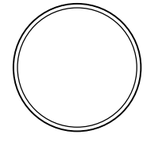
ALTERNATE 2



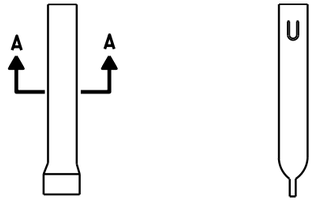
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

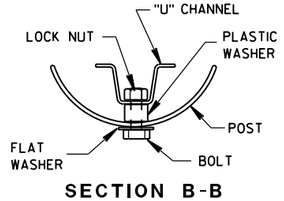


SECTION A-A

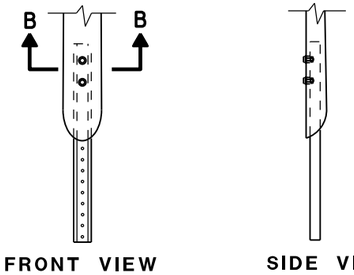


FRONT VIEW SIDE VIEW

ALTERNATE 1

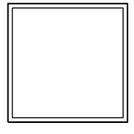


SECTION B-B

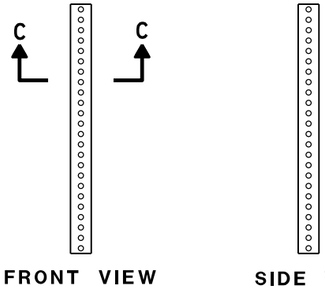


FRONT VIEW SIDE VIEW

ALTERNATE 2



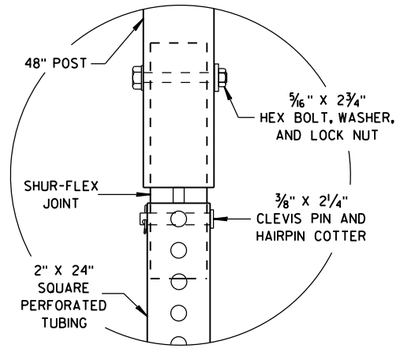
SECTION C-C



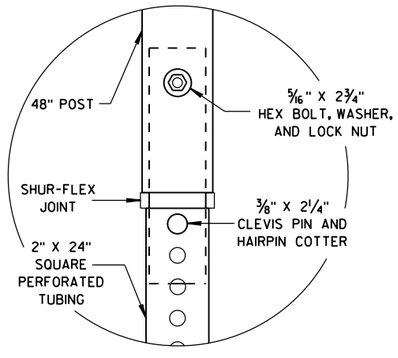
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

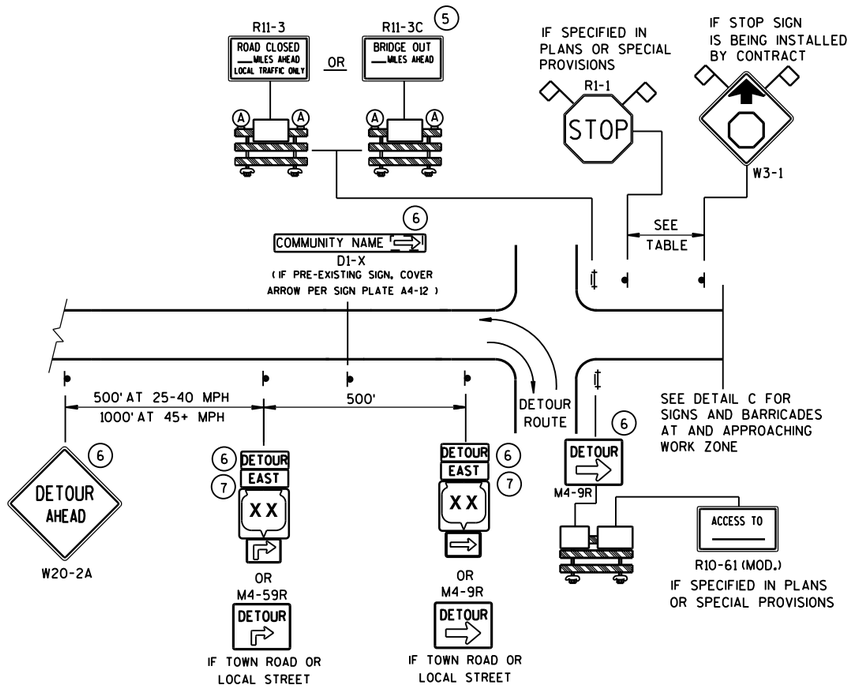
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

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

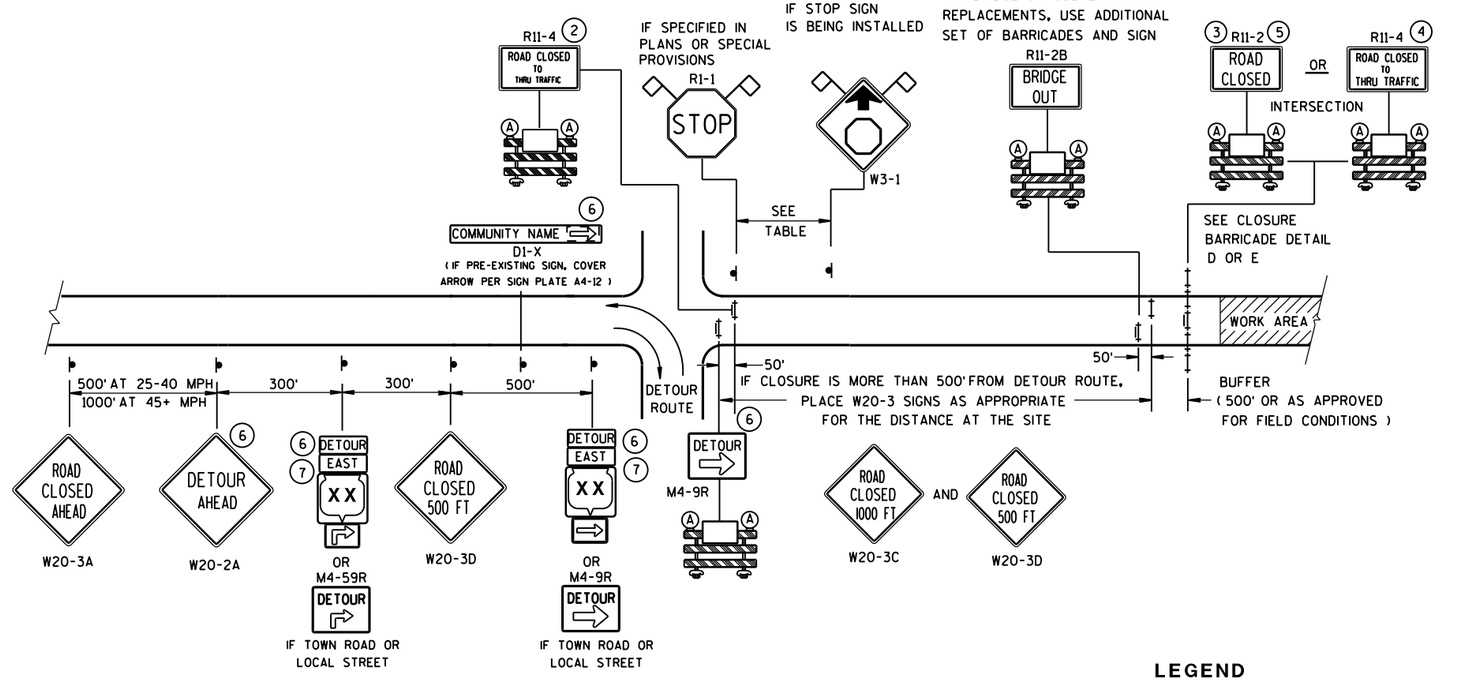
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S.D.D. 15 A 3-2b



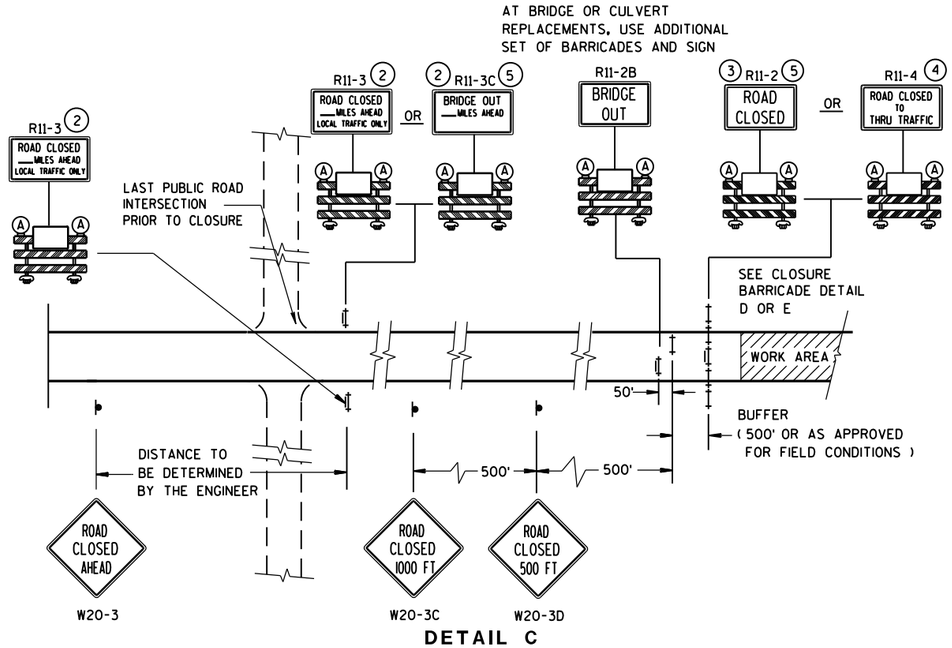
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

LEGEND

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

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

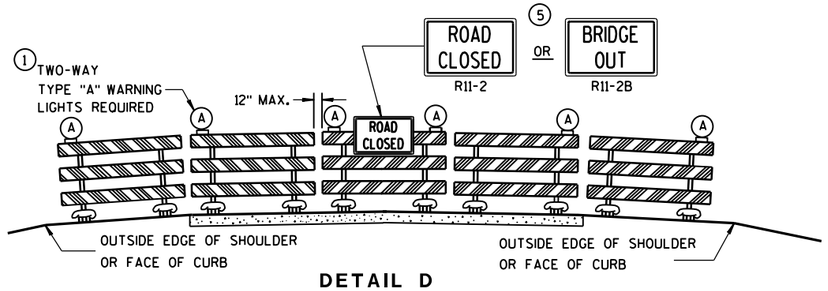
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

S.D.D. 15 C 2-6a

6

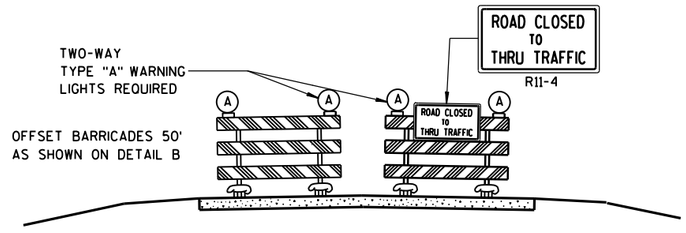
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

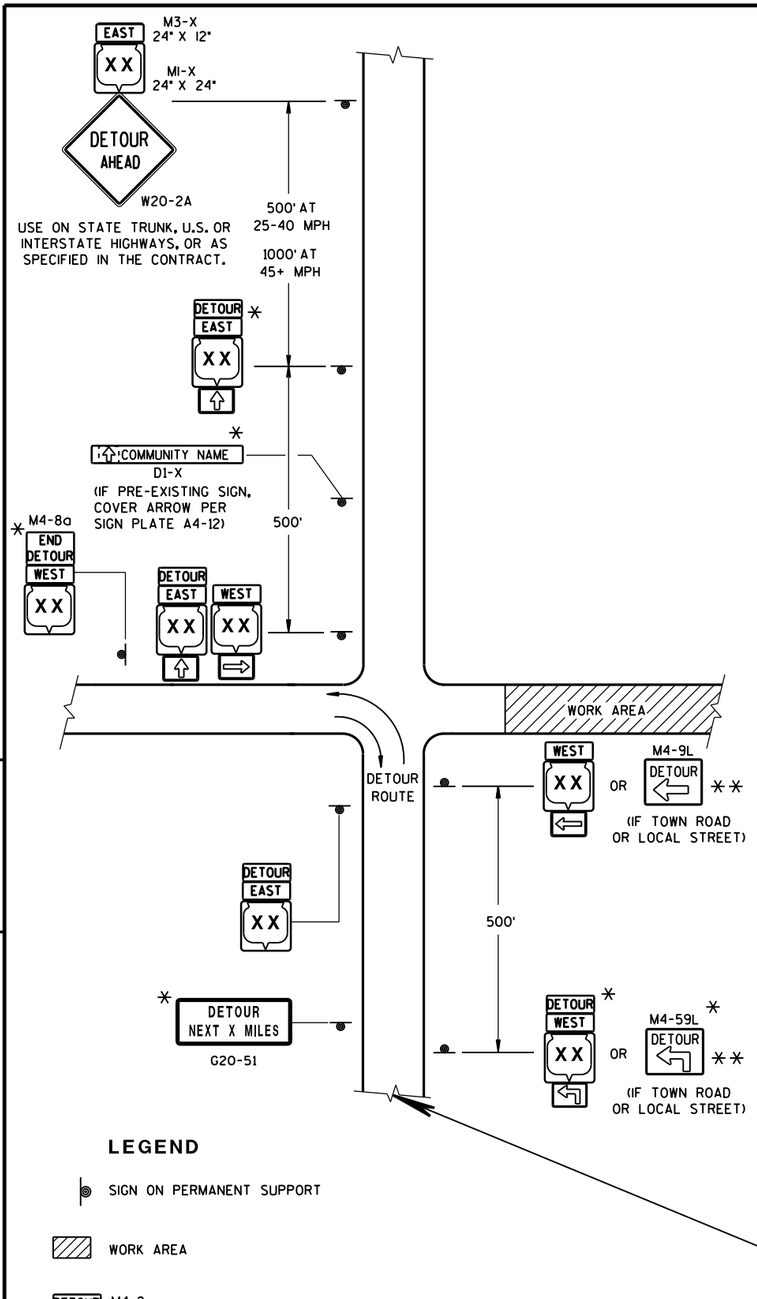
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

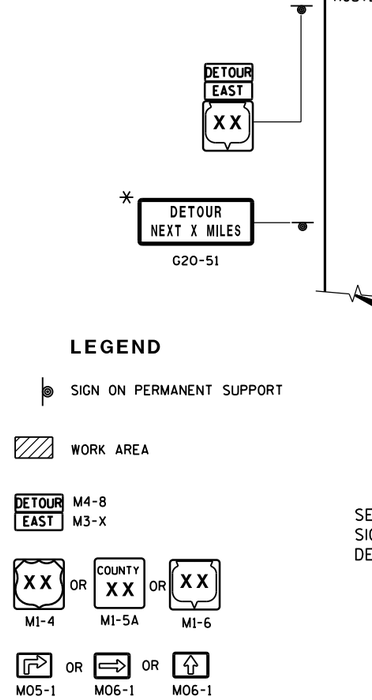
Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI — FHWA

6

S.D.D. 15 C 2-6b

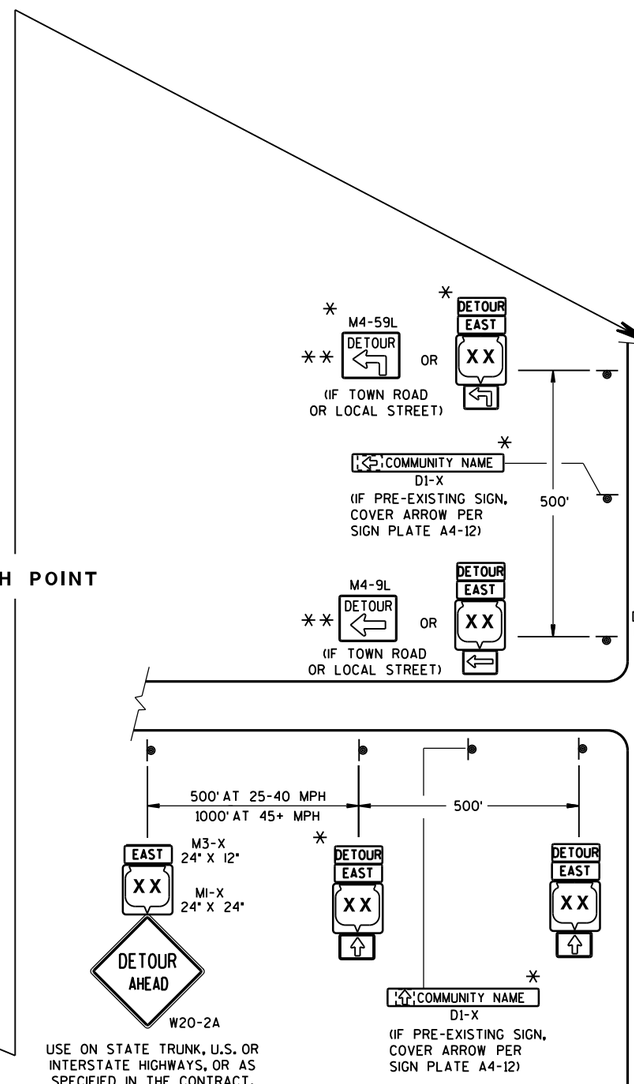




SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

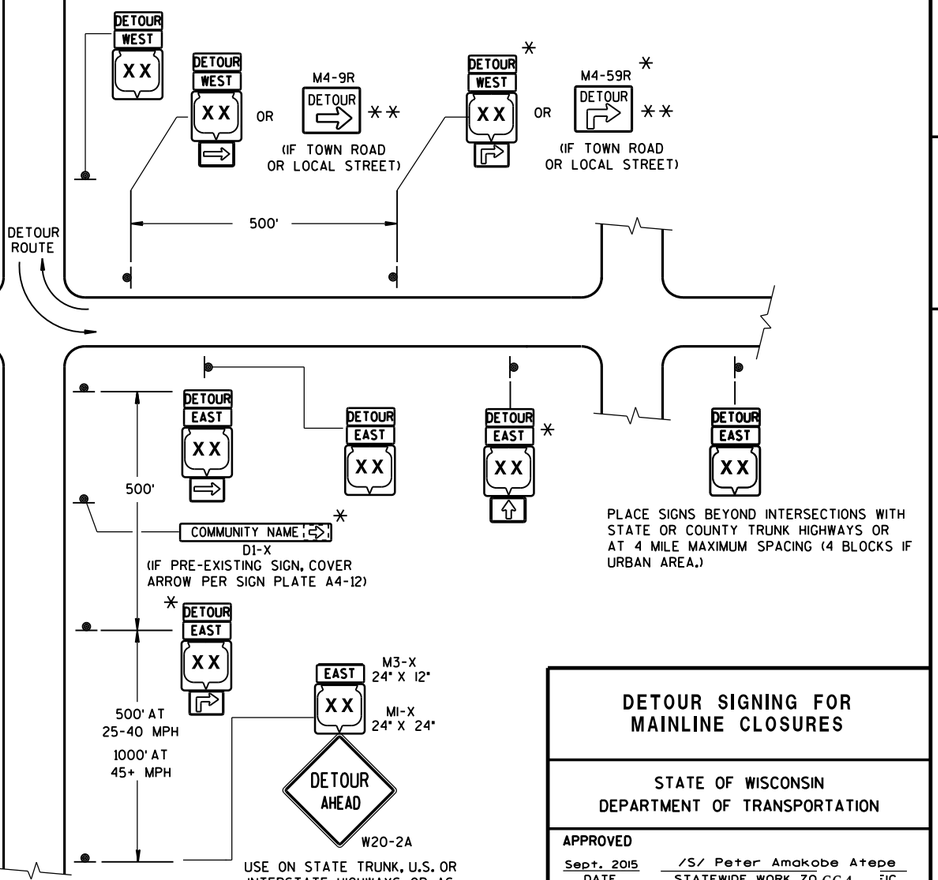
THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

MATCH POINT



DETAIL F

DETOUR SIGNING



GENERAL NOTES

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

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

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

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

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

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

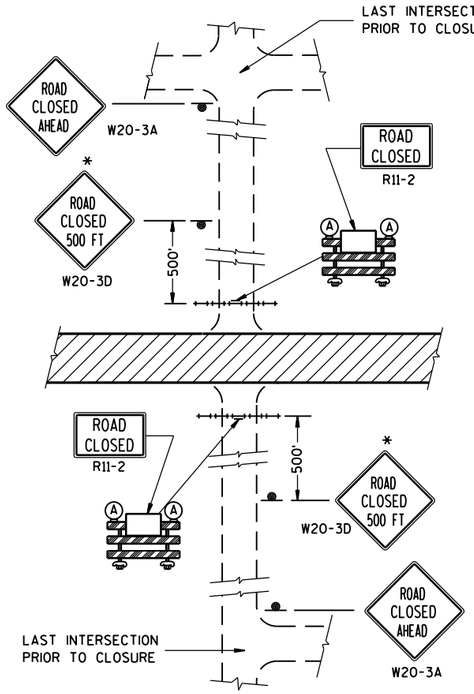
Sept. 2015
DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI

FHWA

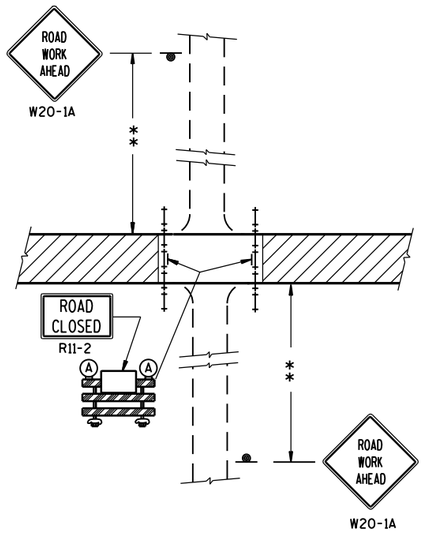
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S.D.D. 15 C 2-6c



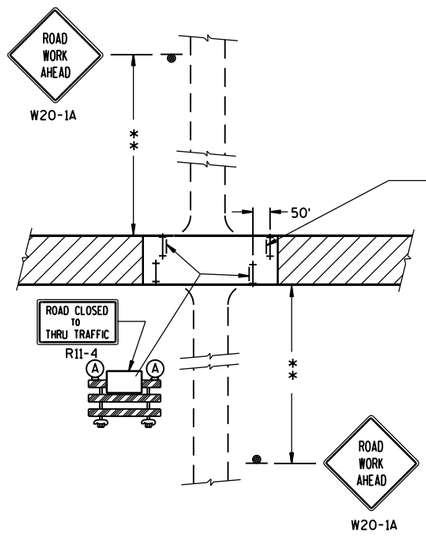
DETAIL 1

(NO ACCESS TO PROJECT)



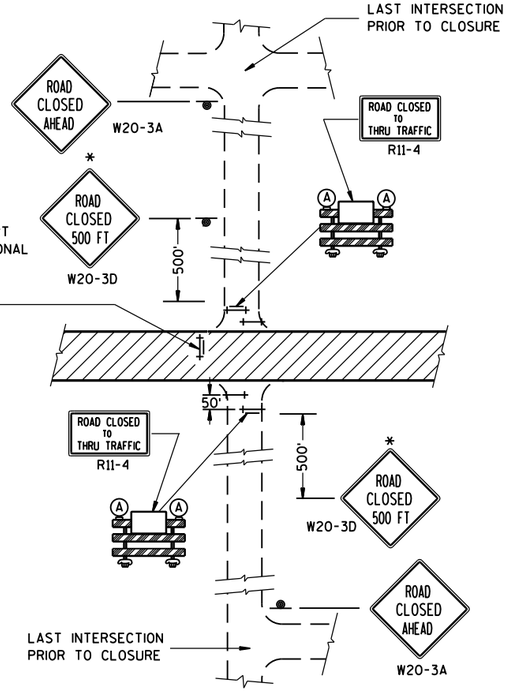
DETAIL 2

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



DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

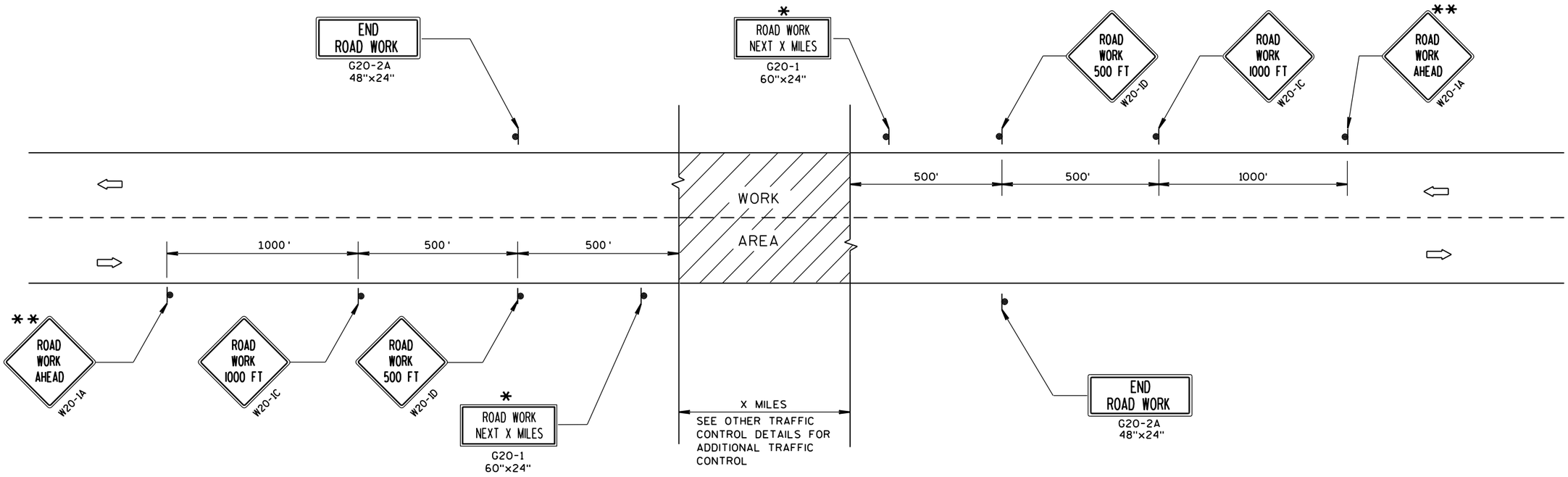
APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO... SAFETY ENGI... — FHWA

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S.D.D. 15 C 3-3

6

S.D.D. 15 C 3-3



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

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.

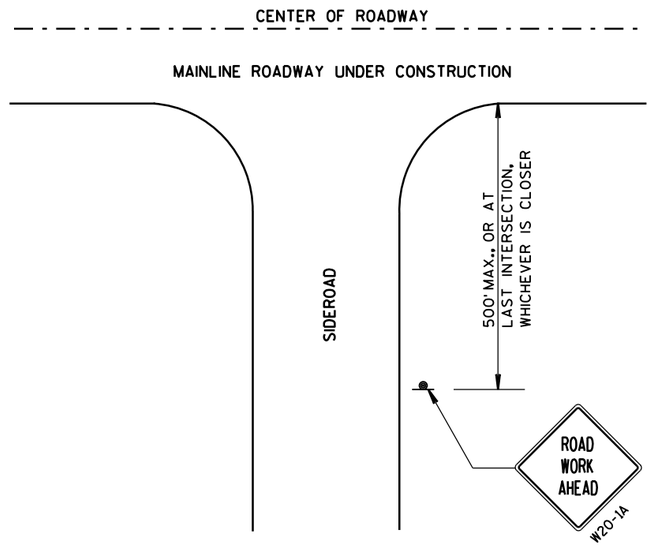
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 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 RE-ESTABLISHED.

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

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



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
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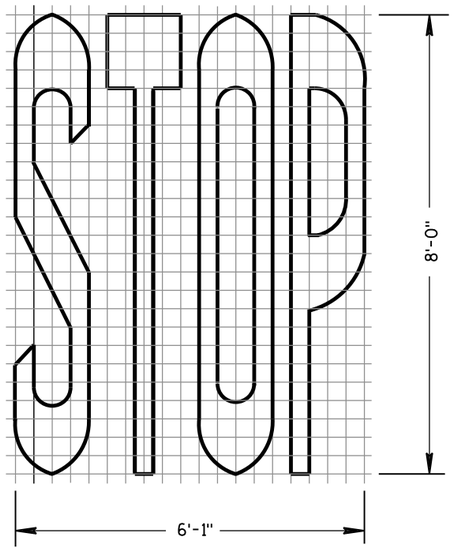
S.D.D. 15 C 4-3

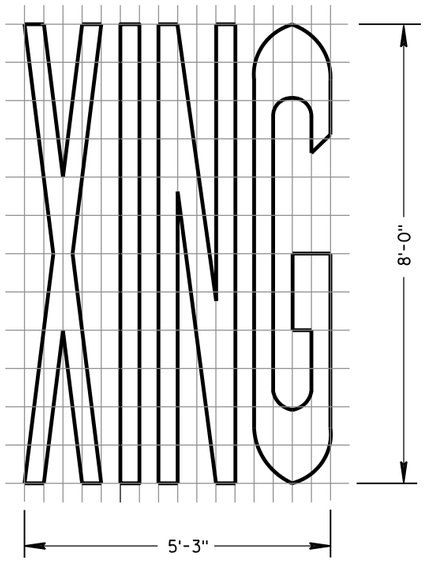
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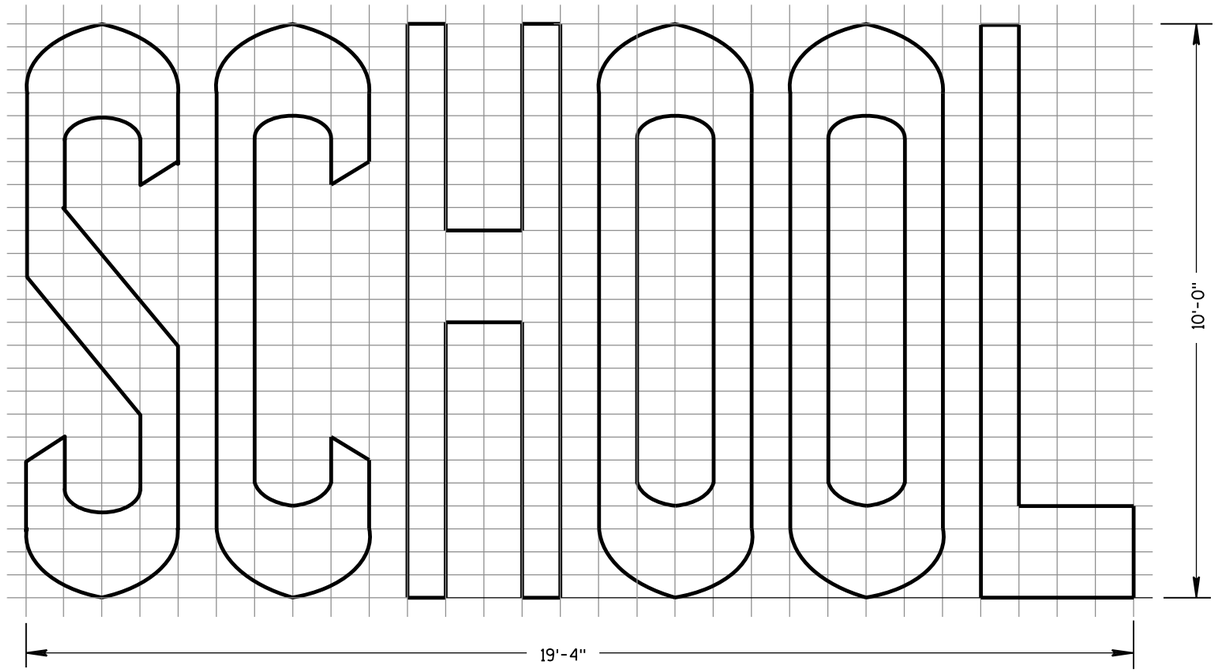
S.D.D. 15 C 4-3

GENERAL NOTES

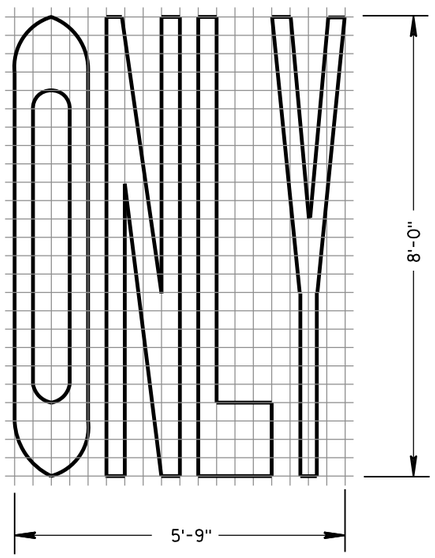
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

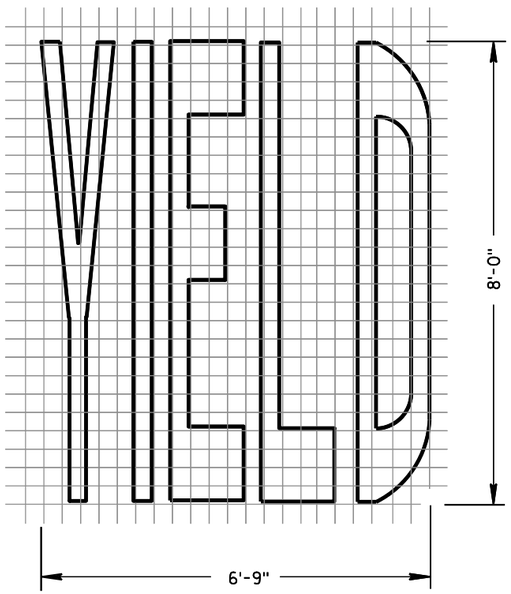


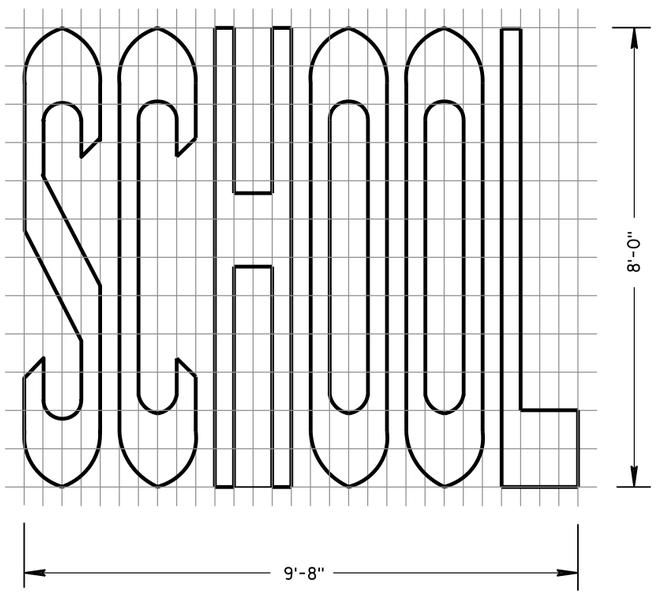




TWO-LANE







SINGLE-LANE

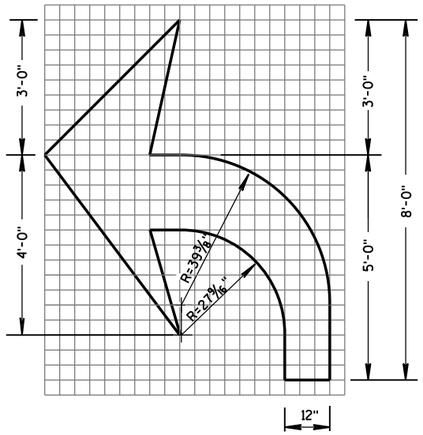
PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

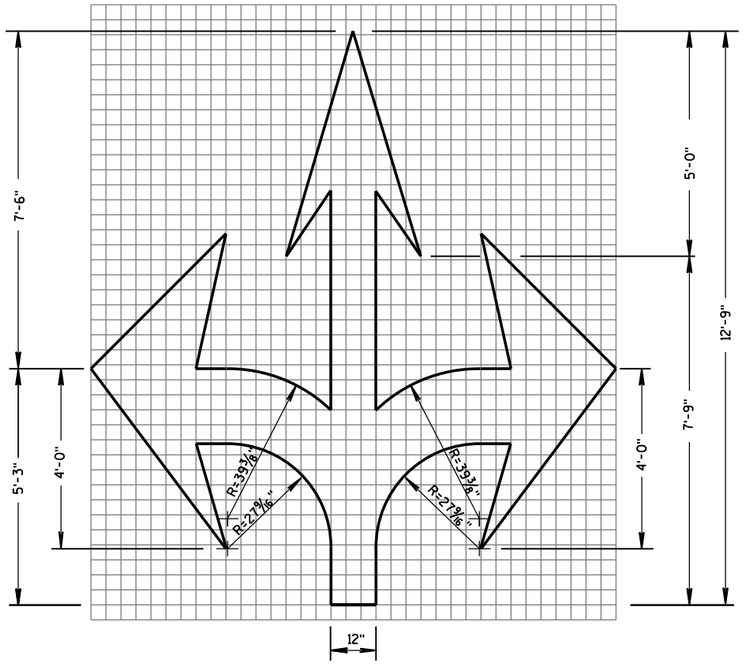
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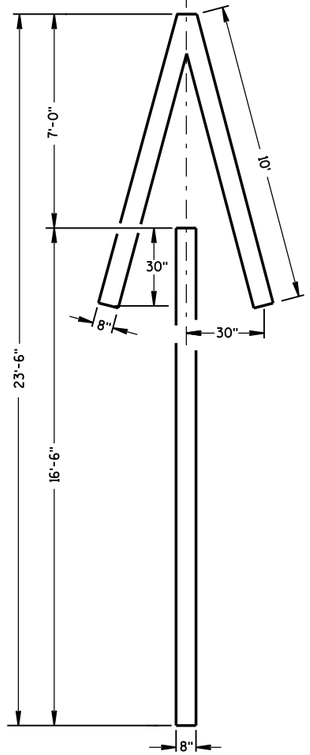
S.D.D. 15 C 7-14b



TYPE 2



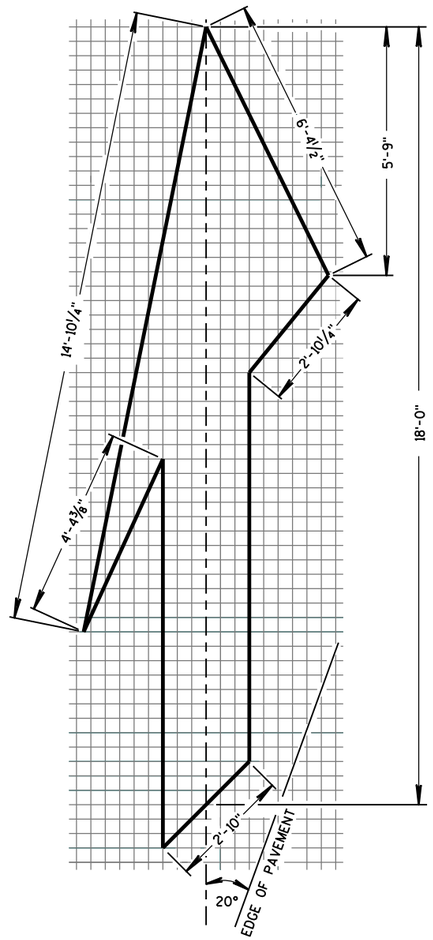
TYPE 6



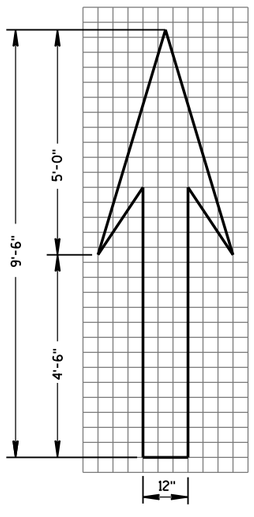
TYPE 4

GENERAL NOTES

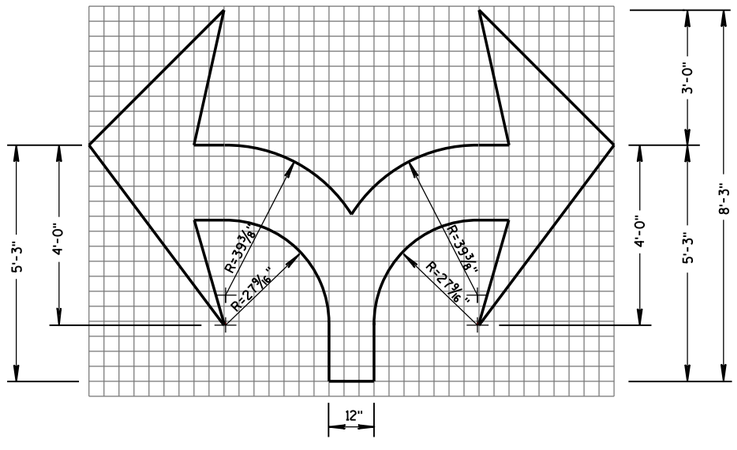
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



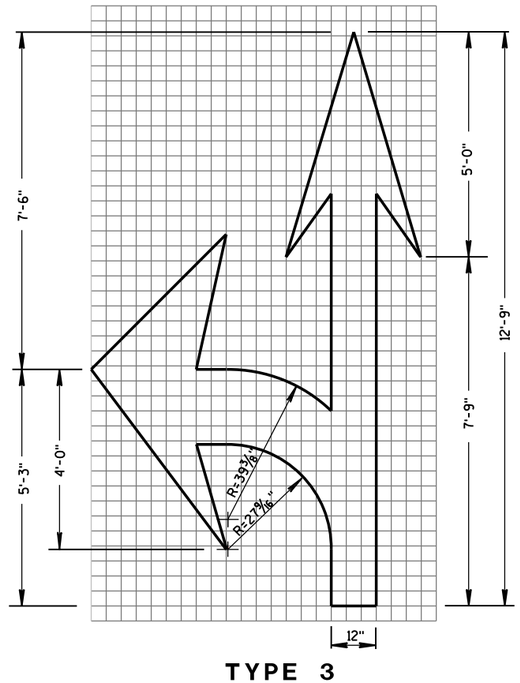
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

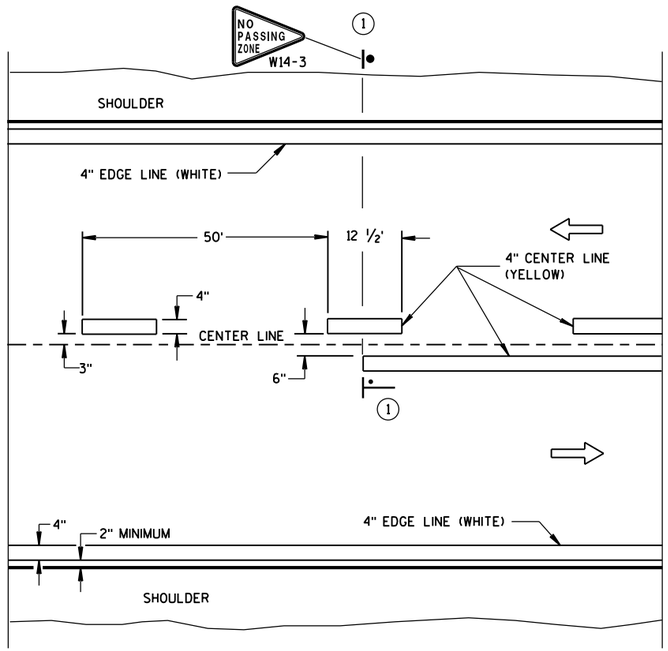
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June 2017 — DATE
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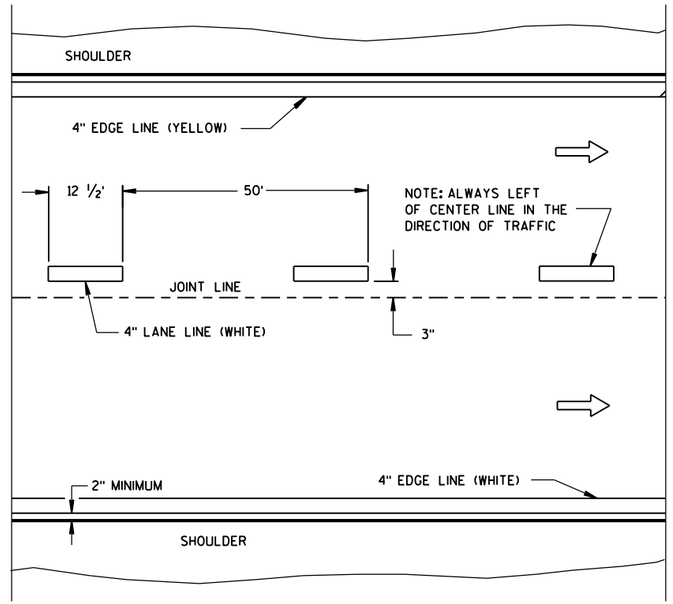
S.D.D. 15 C 7-14c

6

S.D.D. 15 C 7-14c



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

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

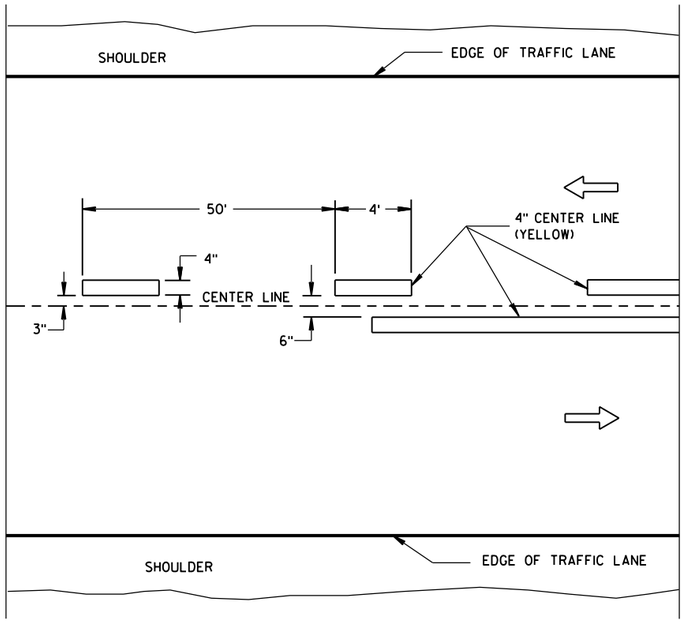
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

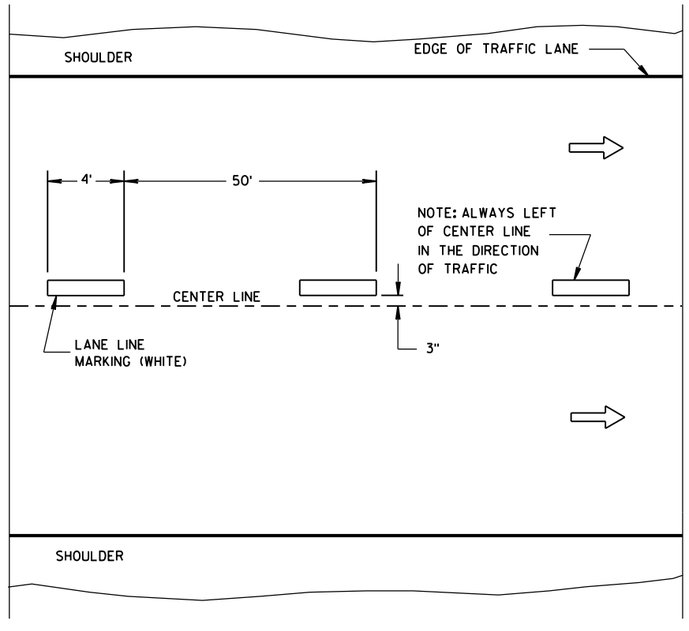
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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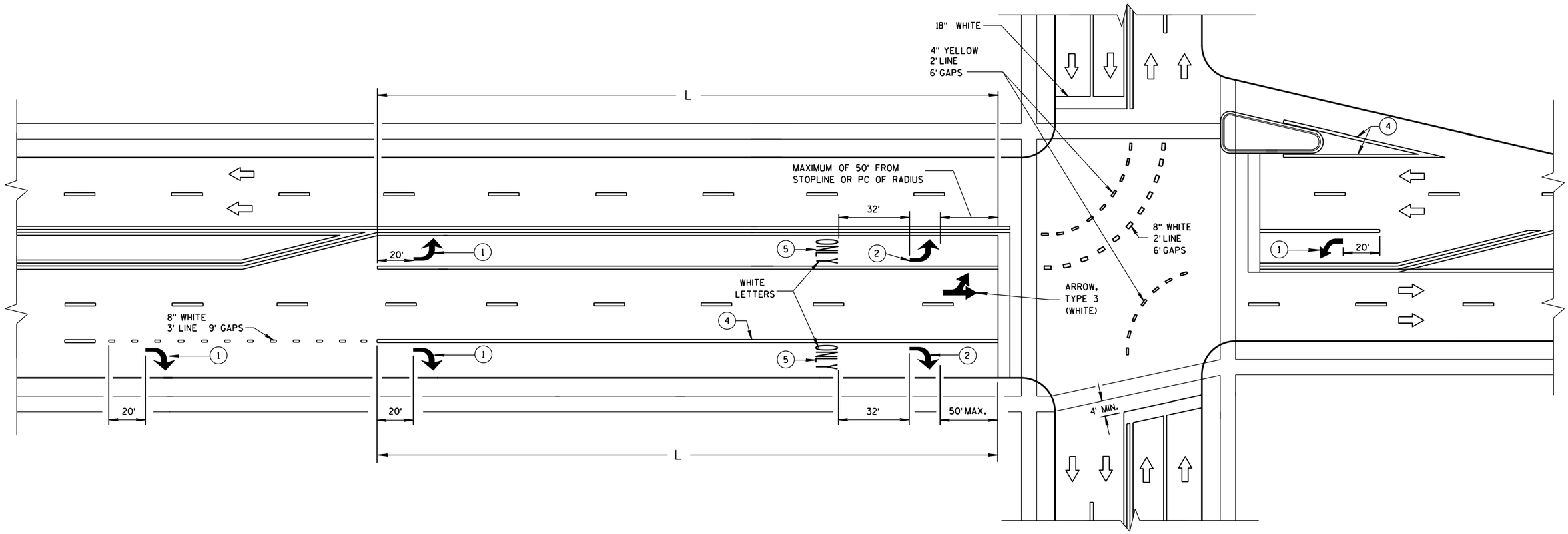
FHWA

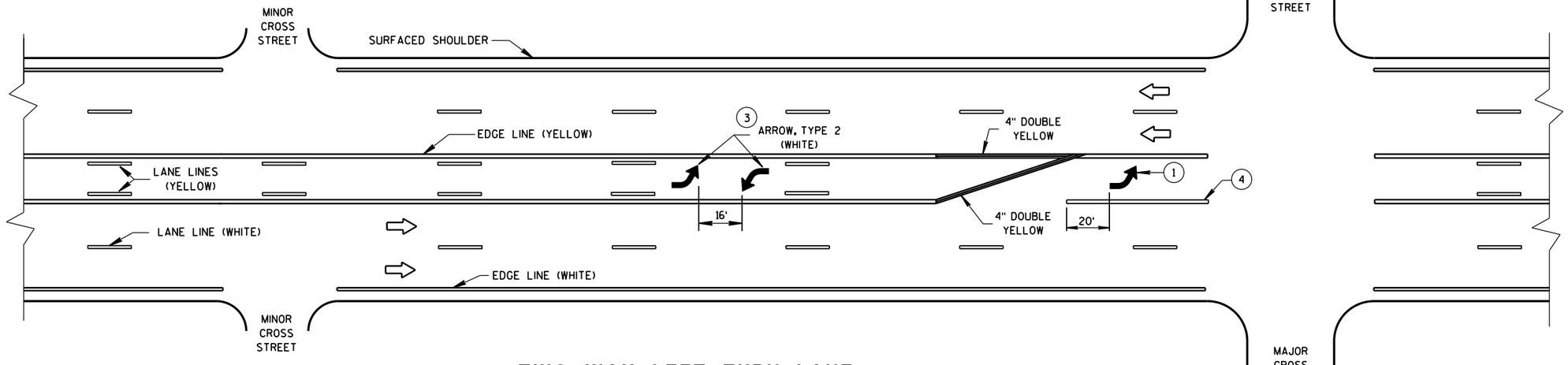
6

S.D.D. 15 C 8-18a

6

S.D.D. 15 C 8-18a





GENERAL NOTES

(1) REQUIRED ARROW, TYPE 2 (WHITE).

(2) REQUIRED ARROW, TYPE 2 (WHITE) WHEN L IS GREATER THAN 78 FEET AND LESS THAN OR EQUAL TO 166 FEET.

(3) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(4) 8" WHITE

(5) REQUIRED WORD ONLY WHEN L IS GREATER THAN 166 FEET.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

L = LENGTH OF TURN BAY

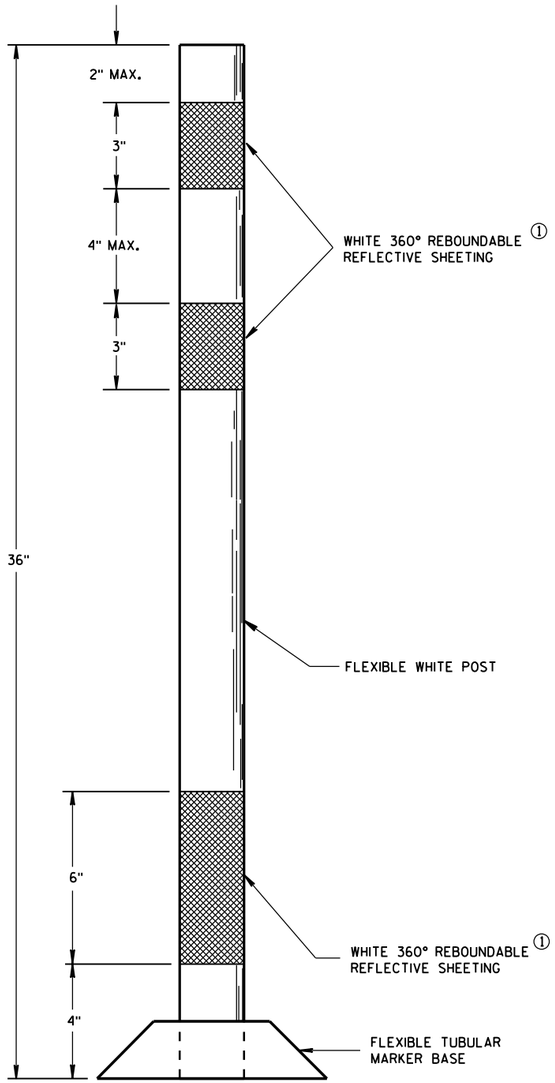
TWO WAY LEFT TURN LANE

PAVEMENT MARKING
(TURN LANES)

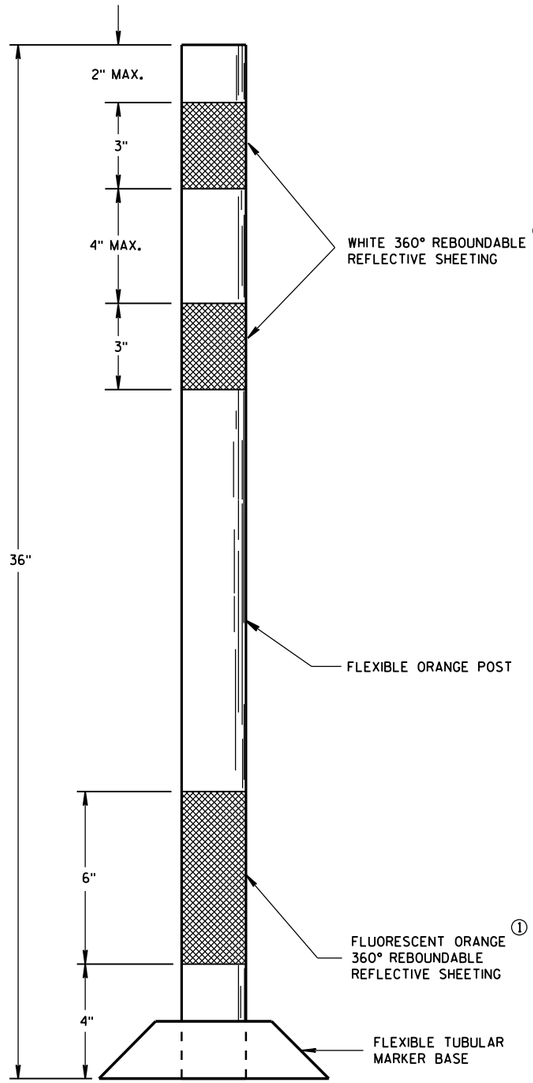
STATE OF WISCONSIN
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S.D.D. 15 C 8-18b



FLEXIBLE
TUBULAR MARKER POST
PERMANENT CROSSOVER



FLEXIBLE
TUBULAR MARKER POST
WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

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

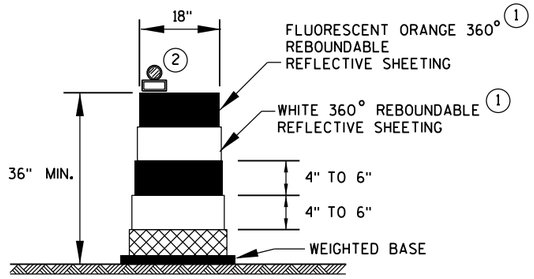
CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

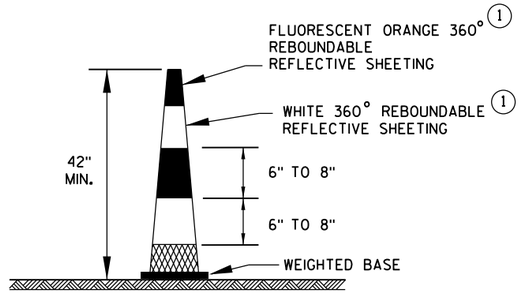
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S.D.D. 15 C 11-7a



DRUM

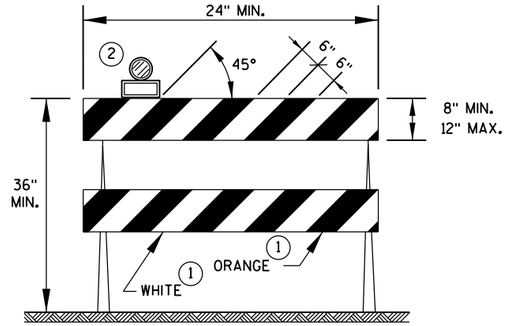


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

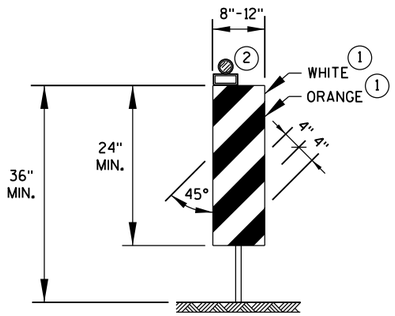
GENERAL NOTES

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.



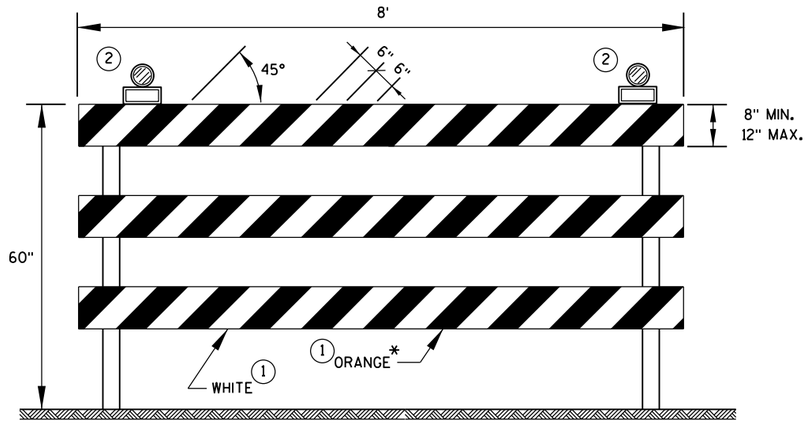
TYPE 2 BARRICADE

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



VERTICAL PANEL

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



TYPE 3 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

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S.D.D. 15 C 11-7b

LEGEND

- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

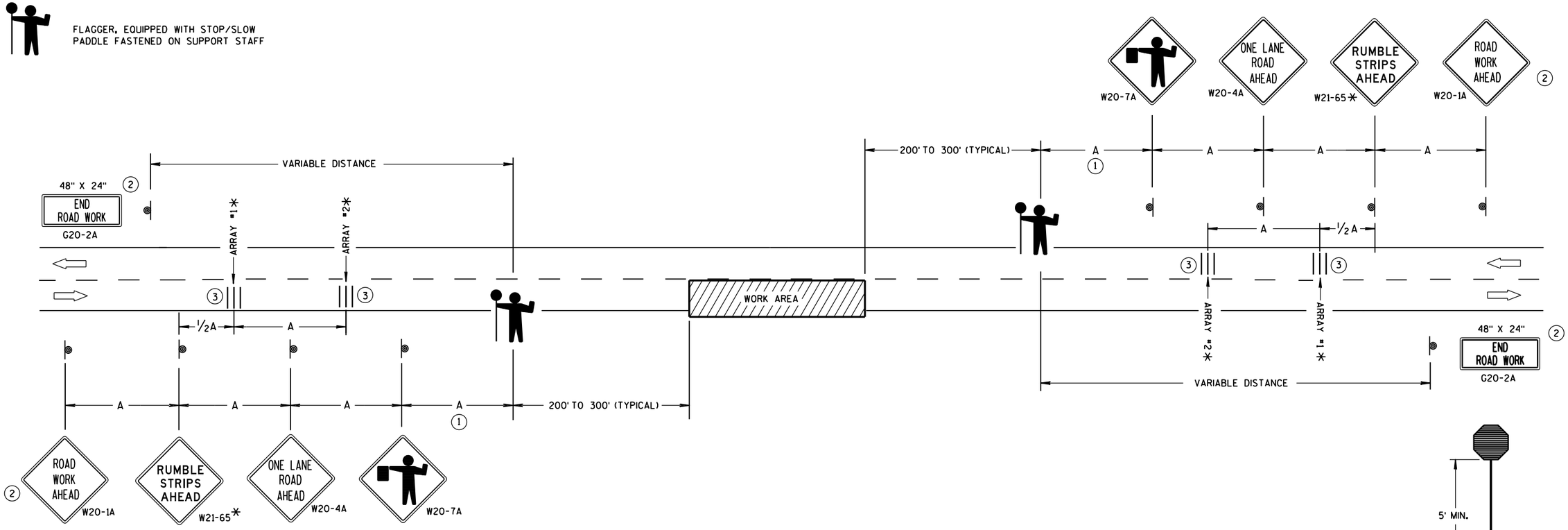
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING A
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

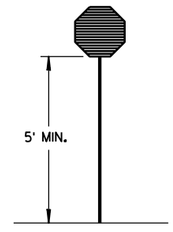


W03-4

USE OF THE "BE PREPARED TO STOP" 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



STOP/SLOW PADDLE ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE 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.

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

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.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

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 RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

(1) FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT 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.

(3) EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

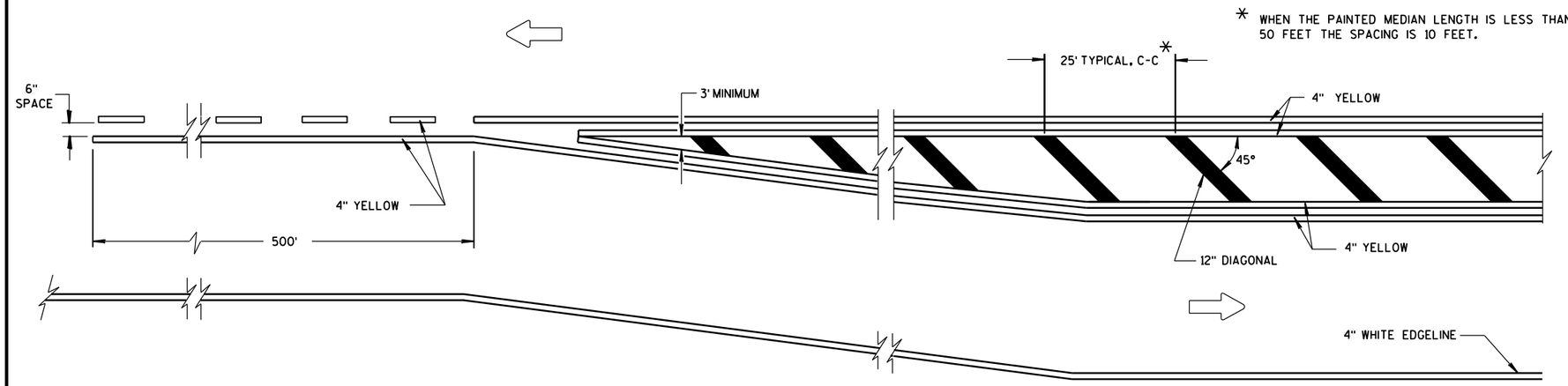
TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heldtke
WORK ZONE ENG
FHWA

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S.D.D. 15 C 12-6

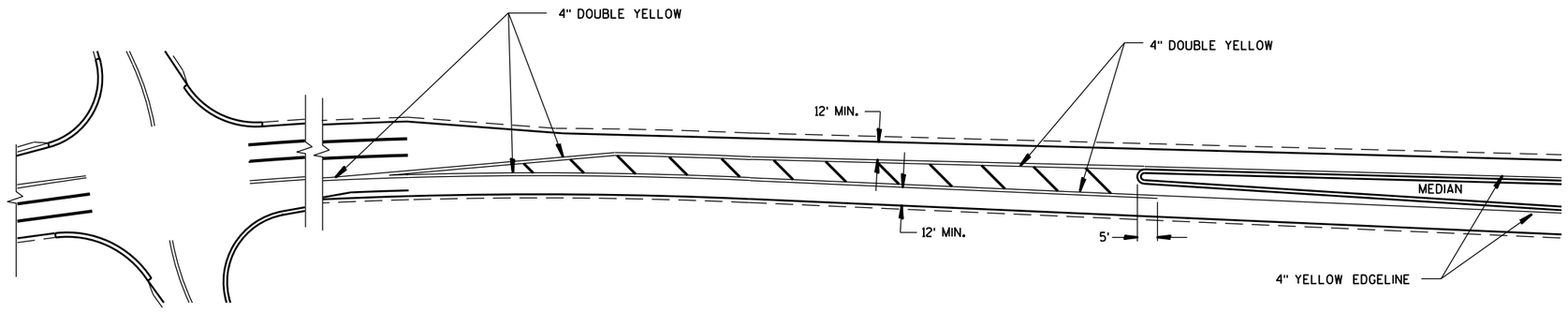


MEDIAN ISLAND DETAIL

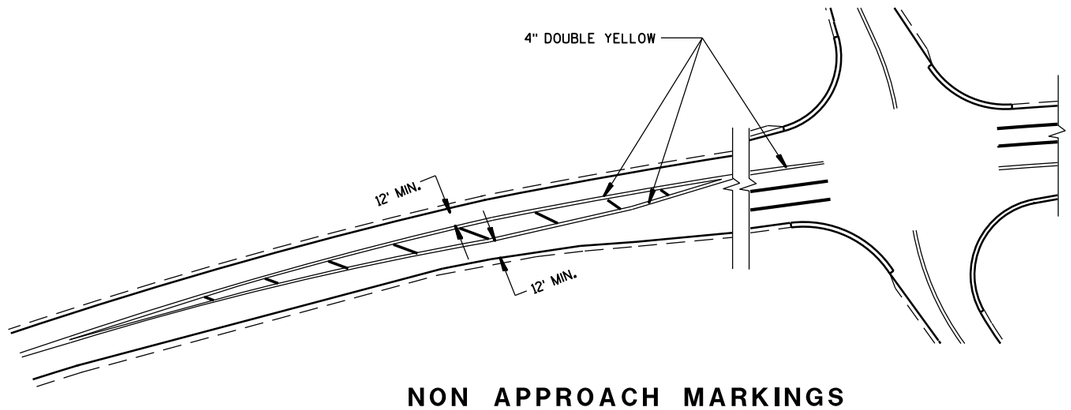
GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 15 C 18-4

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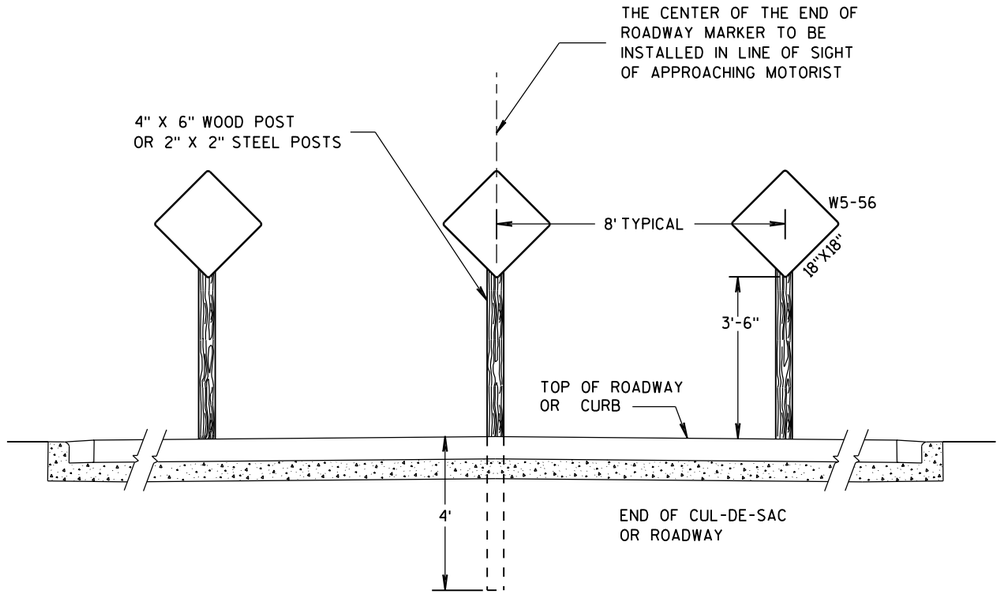
S.D.D. 15 C 18-4

GENERAL NOTES

SIGN LOCATIONS SHOWN ARE TYPICAL PLACEMENT AND MAY BE ADJUSTED BY THE ENGINEER AS FIELD CONDITIONS DICTATE.

THE MINIMUM NUMBER OF END-OF-ROADWAY SIGNS ARE THREE (AS SHOWN). ADDITIONAL END-OF-ROADWAY SIGNS MAY BE INSTALLED AS FIELD CONDITIONS DICTATE. (SEE SIGNING PLAN).

WHEN BEAMGUARD IS REQUIRED, PLACE END-OF-ROADWAY SIGNING BEHIND BEAMGUARD.



TYPICAL SIGN INSTALLATION

END-OF-ROADWAY SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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/S/ Matthew Rauch — STATE SIGNING AND MARK EER
FHWA

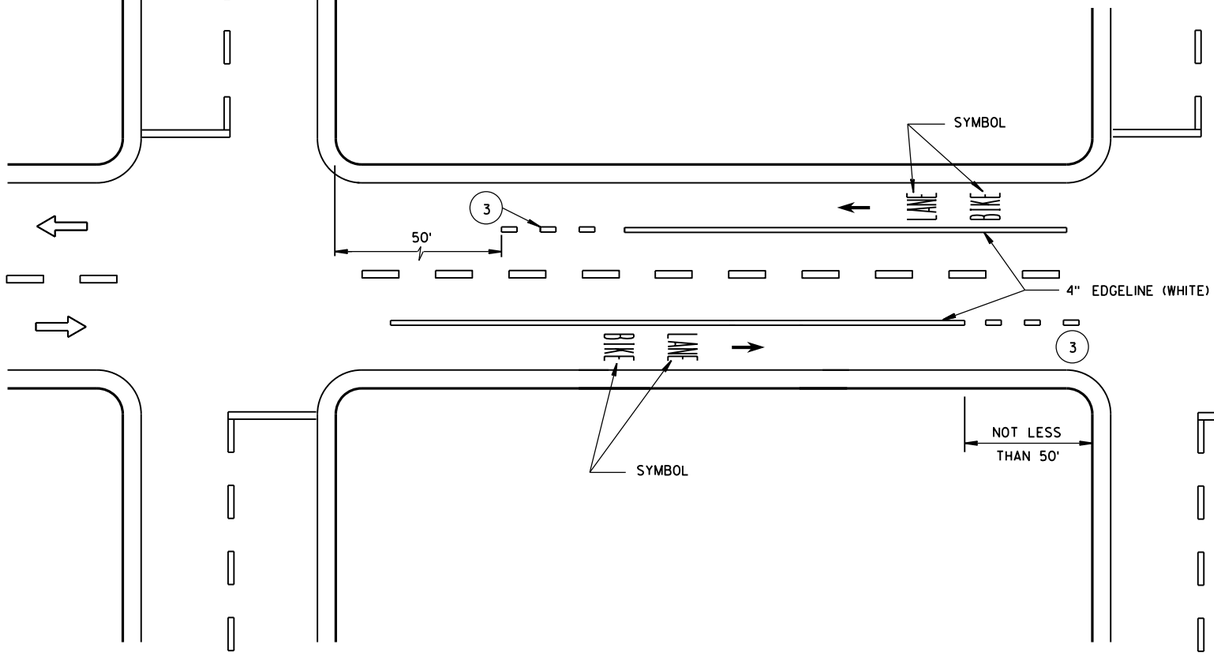
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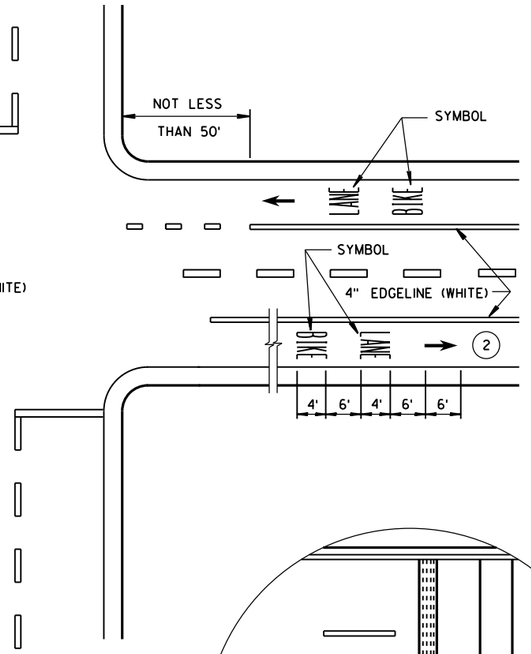
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S.D.D. 15 C 26-3

6

S.D.D. 15 C 26-3



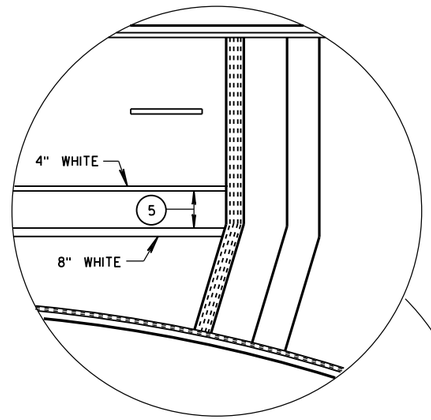


DESIGNATED BICYCLE LANE
NO PARKING

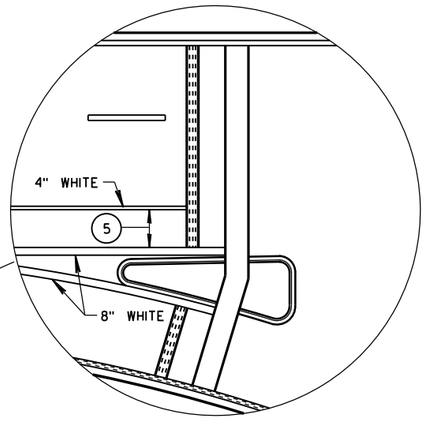
GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3'LINE, 9'GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMODATION FOR CONCRETE PAVEMENT IS 5 FEET WIDE. BIKE ACCOMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4 FEET. USE 5 FEET AT ≥45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FEET WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

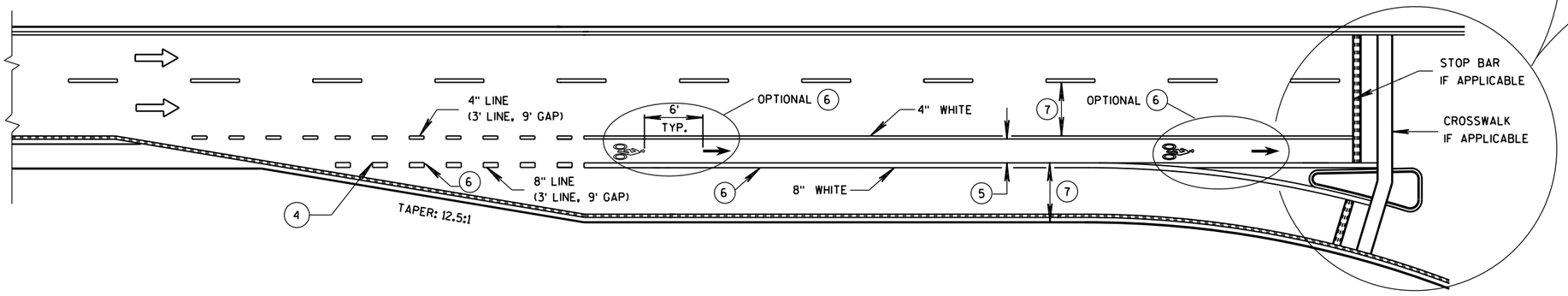
⇨ DIRECTION OF TRAVEL



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND



BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS
(4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

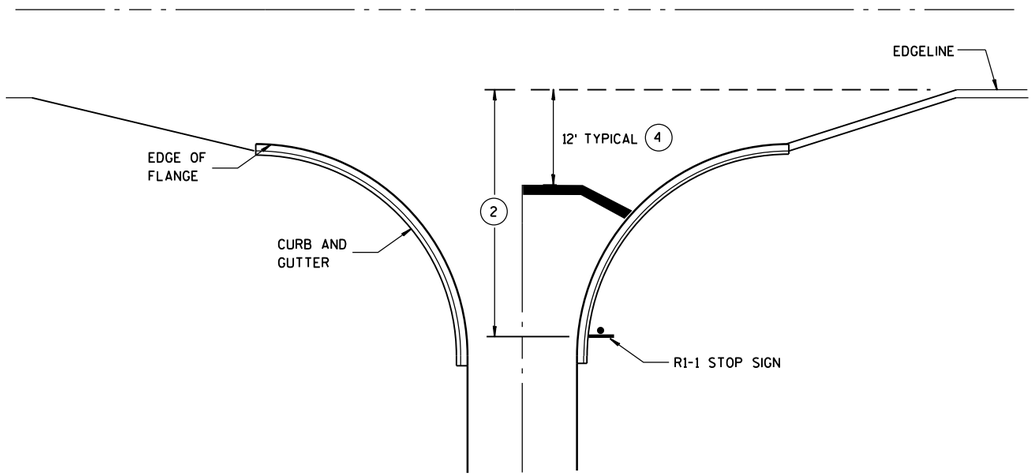
BICYCLE LANE MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12-2016 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MARKING ENGINEER
FHWA	

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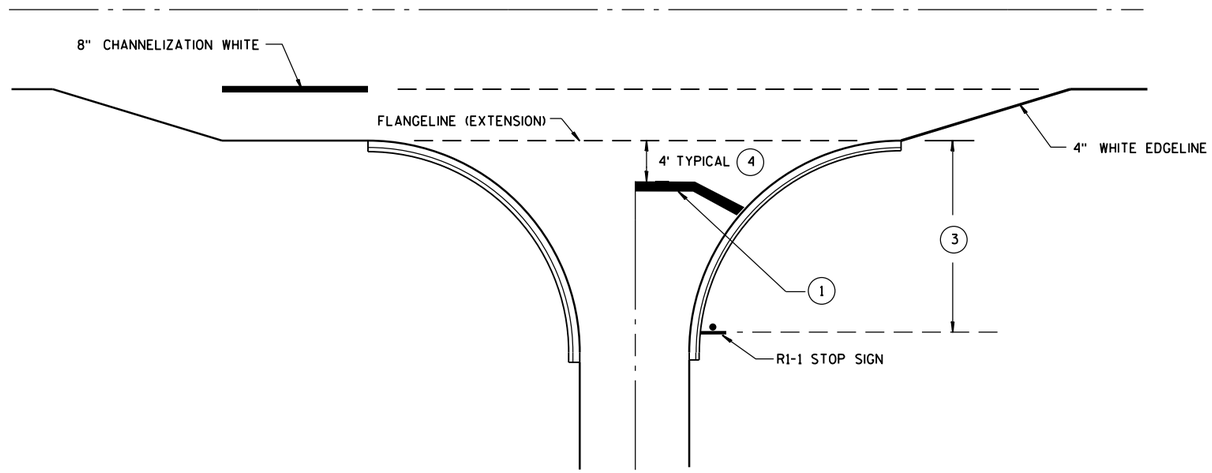
S.D.D. 15 C 29-5a

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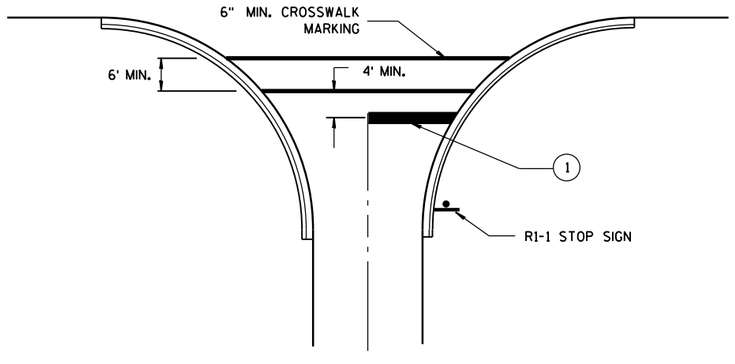
S.D.D. 15 C 29-5a



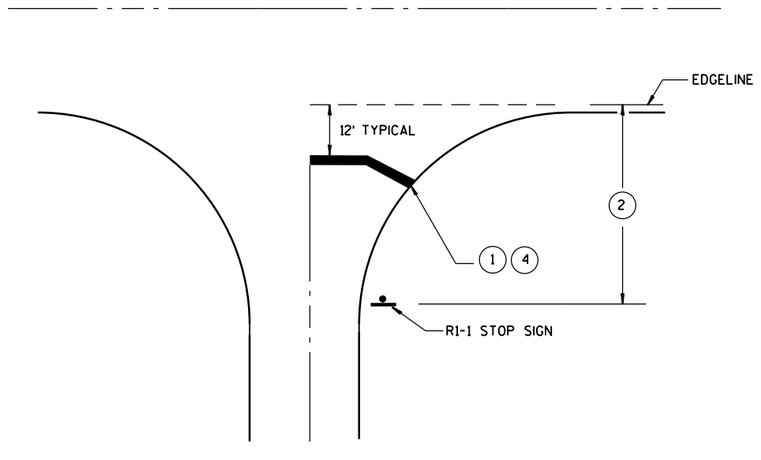
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

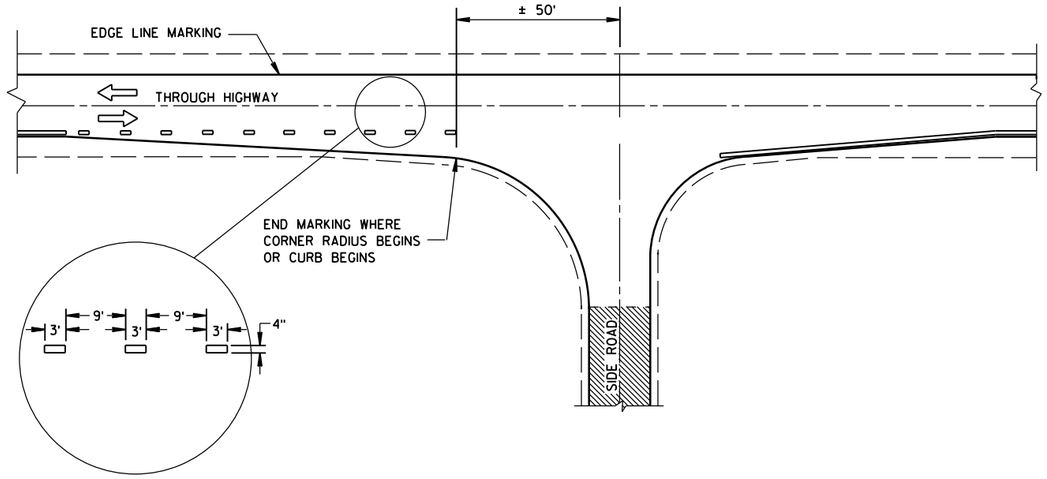
4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 677 NEER

FHWA

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S.D.D. 15 C 33-2



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

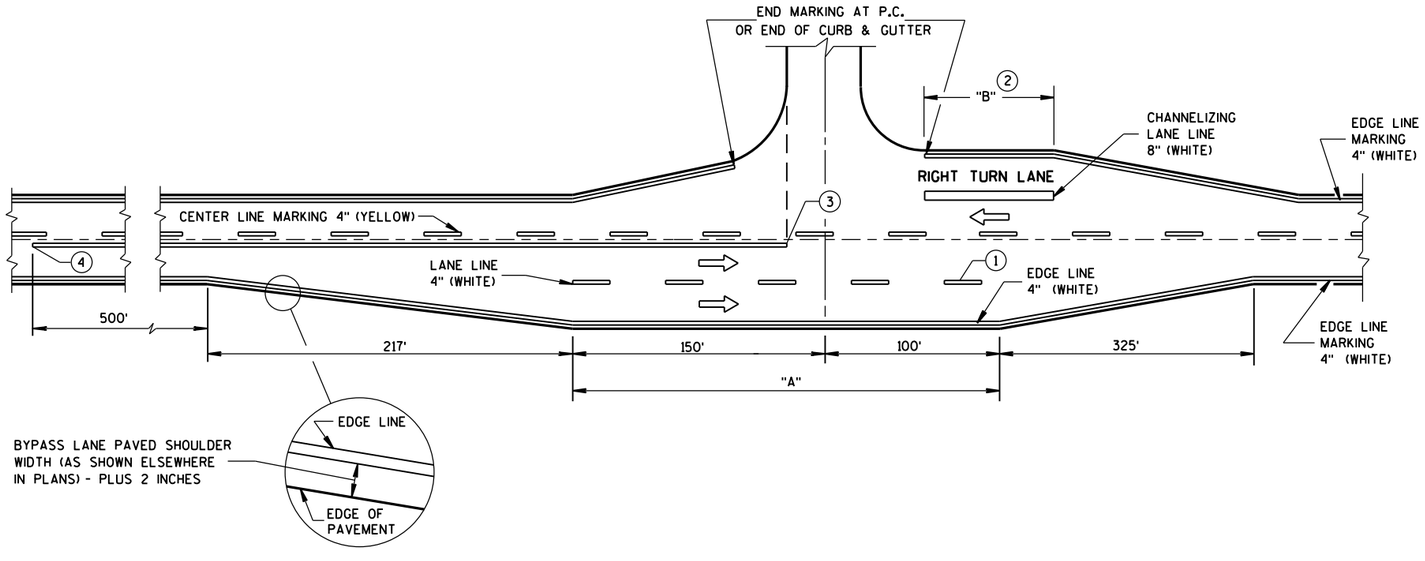
(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(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.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 C 35-1a

GENERAL NOTES

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

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

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

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

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

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

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

TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

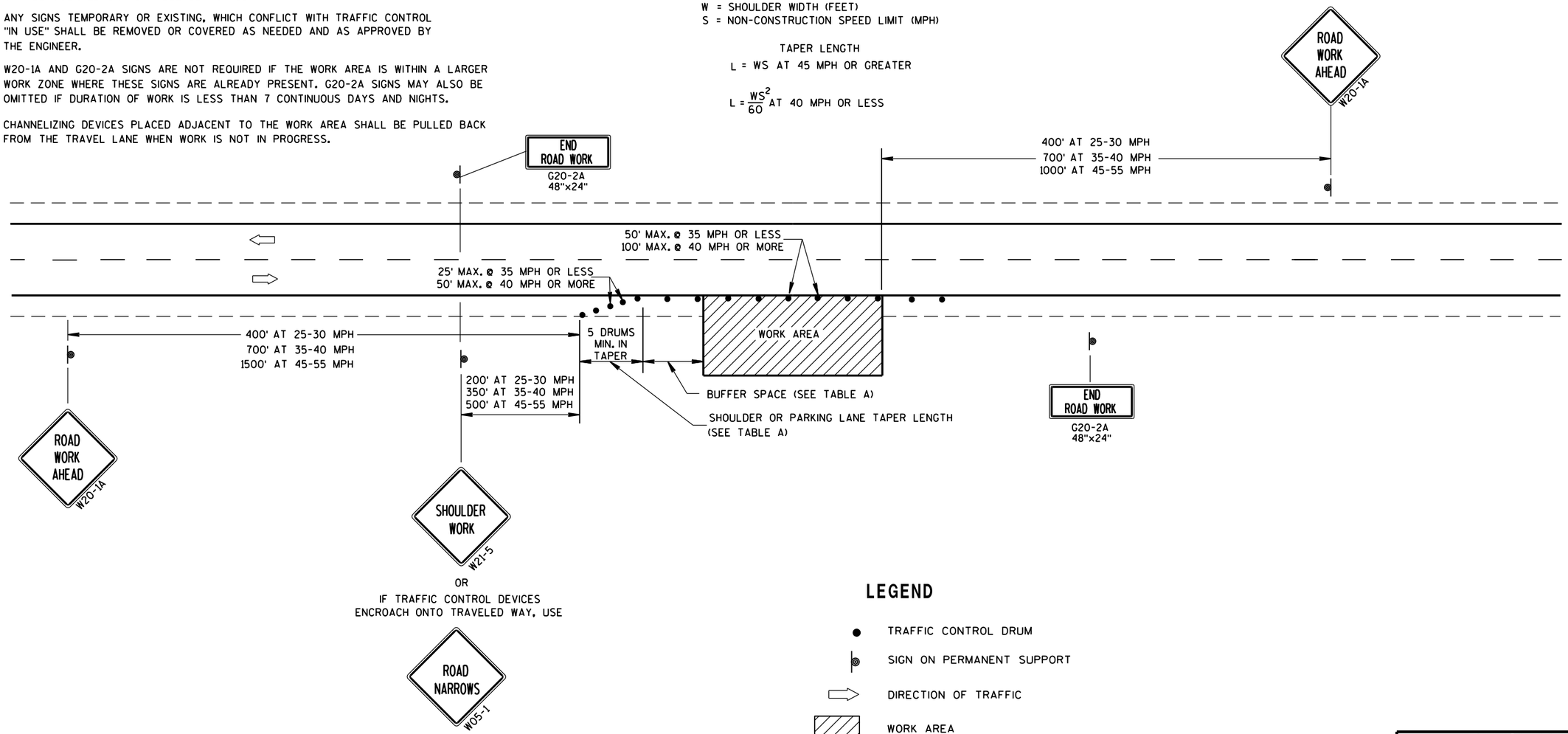
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

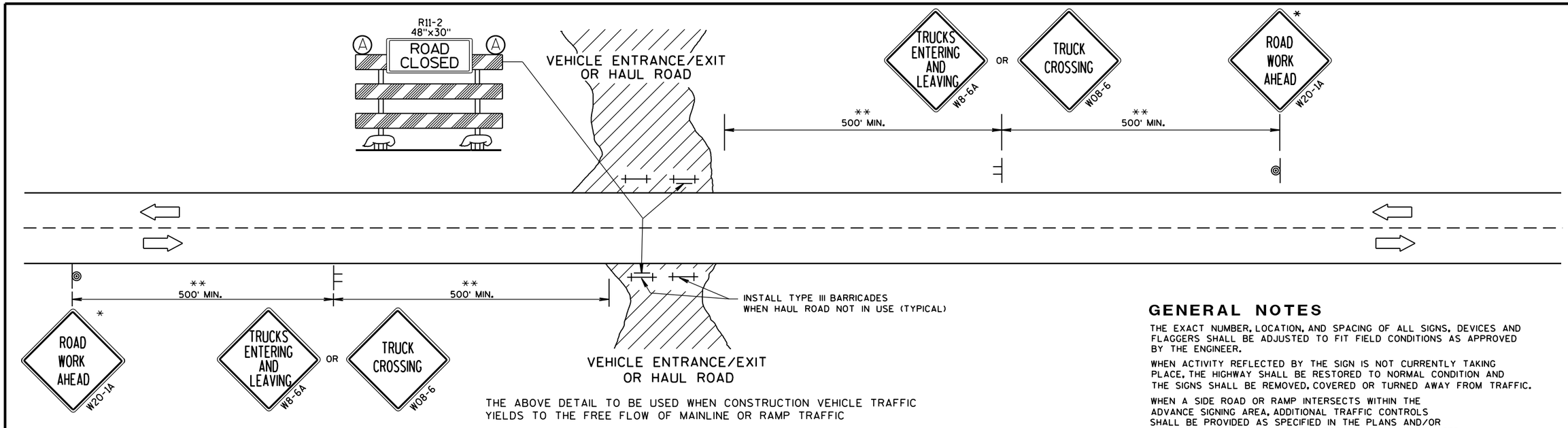
July 14, 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGII[illegible] FIC

FHWA

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S.D.D. 15 D 28-3



THE ABOVE DETAIL TO BE USED WHEN CONSTRUCTION VEHICLE TRAFFIC YIELDS TO THE FREE FLOW OF MAINLINE OR RAMP TRAFFIC

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

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

WHEN ACTIVITY REFLECTED BY THE SIGN IS NOT CURRENTLY TAKING PLACE, THE HIGHWAY SHALL BE RESTORED TO NORMAL CONDITION AND THE SIGNS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC.

WHEN A SIDE ROAD OR RAMP INTERSECTS WITHIN THE ADVANCE SIGNING AREA, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

* THESE SIGNS ARE TO BE USED ONLY WHEN VEHICLE **ENTRANCE/EXIT CONDITIONS ARE SEPARATED BY MORE THAN 2 MILES** FROM PREVIOUS WORK AREA OR SIGNING OR AS DIRECTED BY THE ENGINEER.

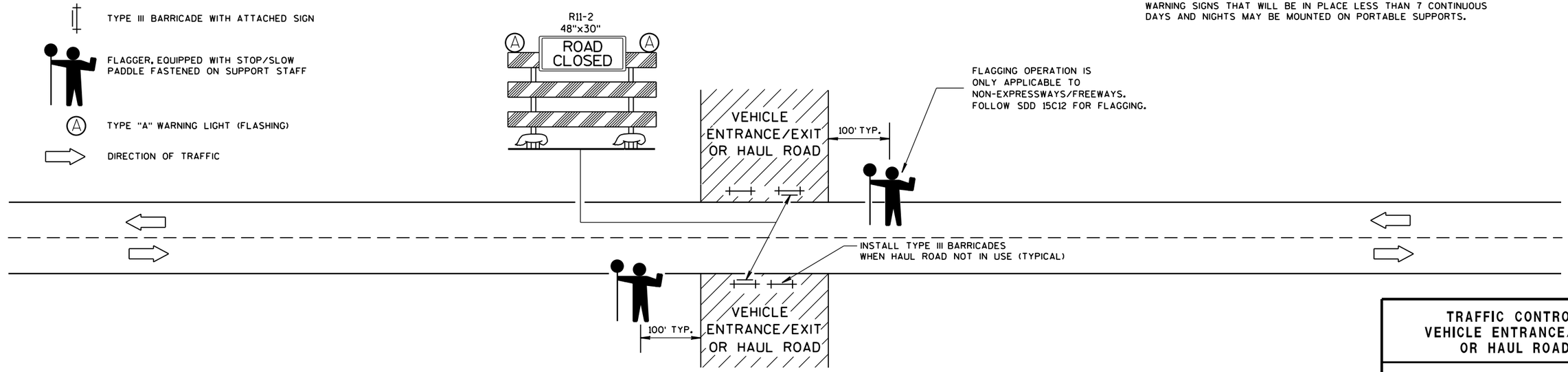
** 500 FEET SHOWN IS FOR ROADWAYS WITH A NON-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FEET. FOR 25-30 MPH, USE 200 FEET. USE 1000 FEET/1500 FEET FOR EXPRESSWAY/FREEWAY.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

PLACE SIGNS ON BOTH SIDES IF USED ON DIVIDED HIGHWAY.

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



THIS DETAIL TO BE USED WHEN CONSTRUCTION WORK INCLUDING TRUCKING ACTIVITY REQUIRES MAINLINE TRAFFIC TO BE TEMPORARILY STOPPED IN ONE OR BOTH DIRECTIONS. DELAY TO HIGHWAY TRAFFIC SHALL BE MINIMIZED.

TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENGI
FHWA

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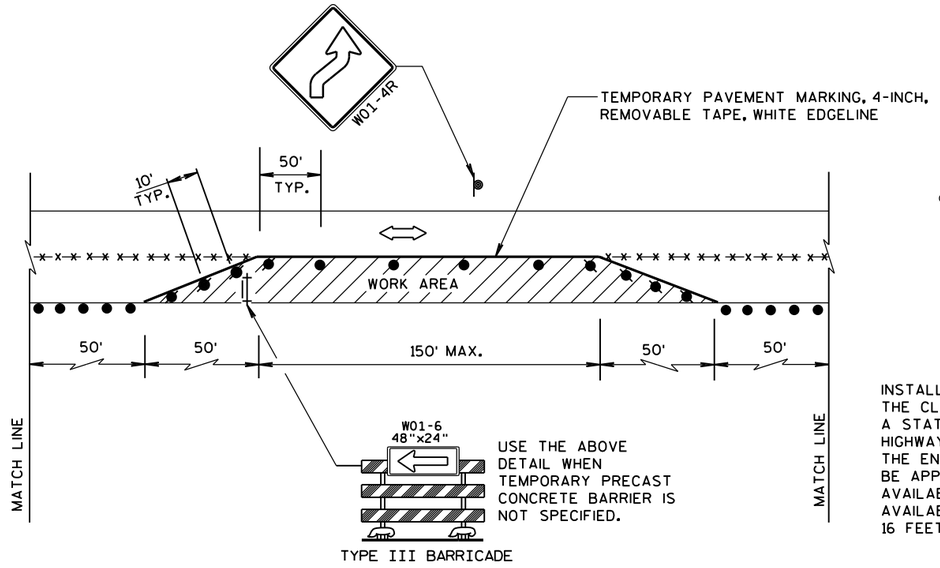
S.D.D. 15 D 29-5

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S.D.D. 15 D 29-5

LEGEND

- SIGN ON PERMANENT SUPPORT
- REMOVING PAVEMENT MARKING
- TYPE III BARRICADE WITH ATTACHED SIGN
- CONCRETE BARRIER TEMPORARY PRECAST
- FLAGS, 16" x 16" MIN., (ORANGE)
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- ASPHALTIC PAVEMENT WIDENING
- DIRECTION OF TRAFFIC



TYPE III BARRICADE



W057-52
36"x24"

INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1-FOOT LESS THAN AVAILABLE WIDTH. (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET.)

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"x48" UNLESS OTHERWISE NOTED.

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

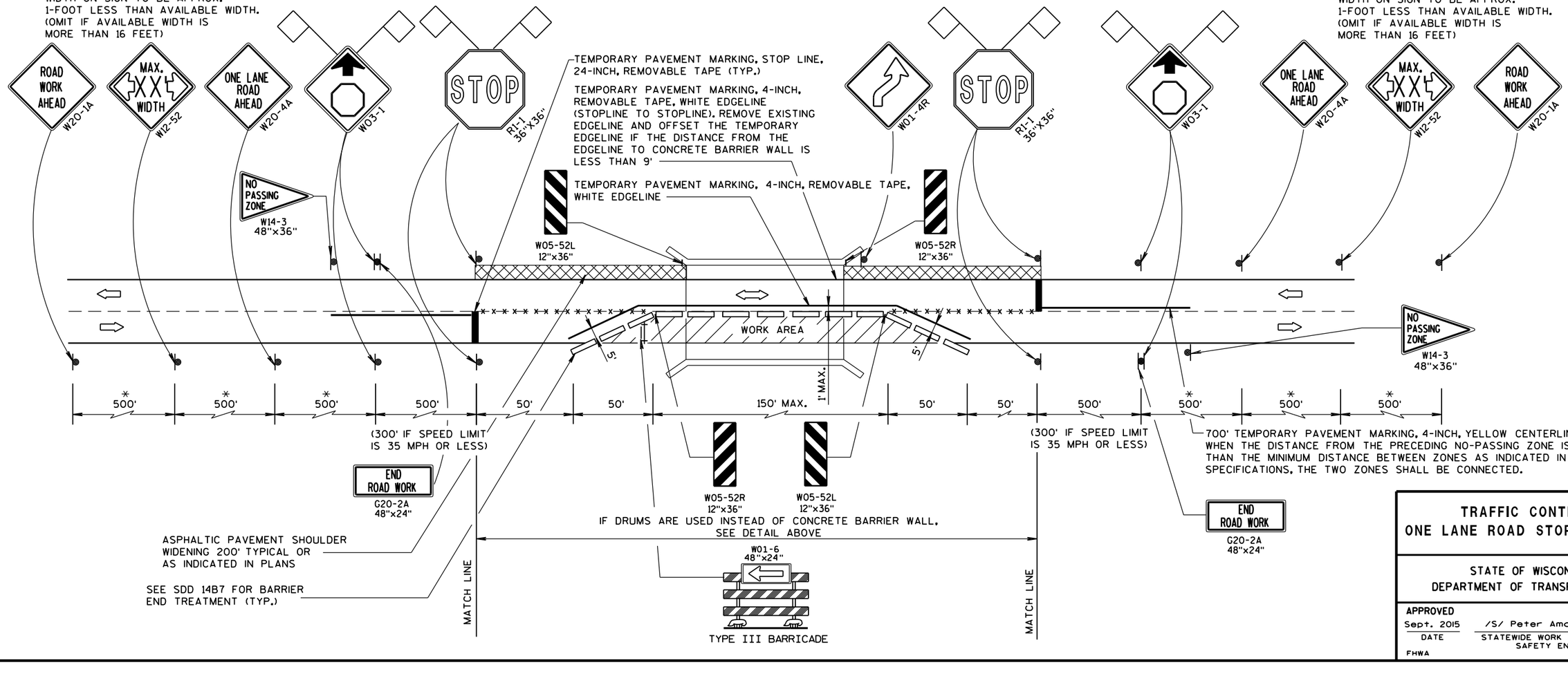
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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

PLACE TEMPORARY PAVEMENT MARKING EDGELINE AND CENTERLINE, AND REMOVE EXISTING PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.

* 500-FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350-FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200-FOOT TYPICAL SPACING.

WIDTH ON SIGN TO BE APPROX. 1-FOOT LESS THAN AVAILABLE WIDTH. (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET)



TYPE III BARRICADE

TRAFFIC CONTROL, ONE LANE ROAD STOP CONDITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

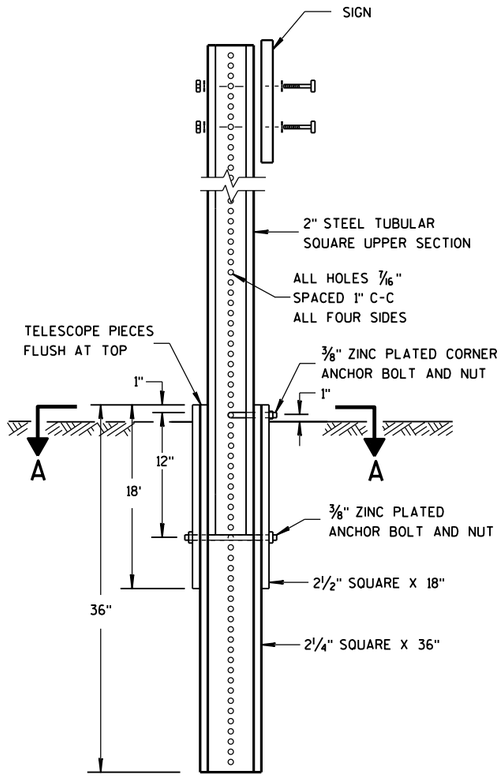
APPROVED
Sept. 2015
DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

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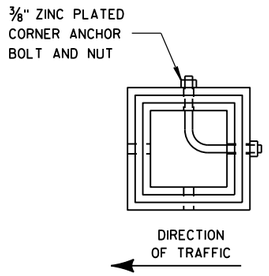
S.D.D. 15 D 32-4

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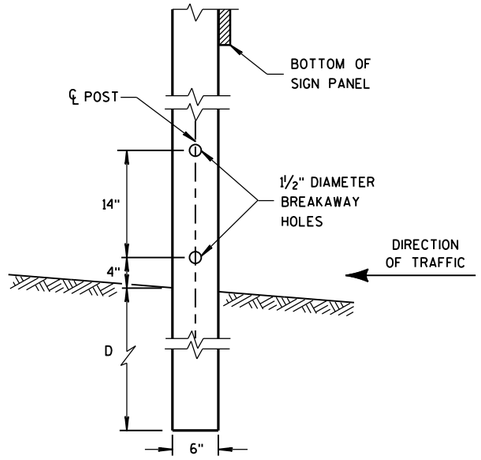
S.D.D. 15 D 32-4



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



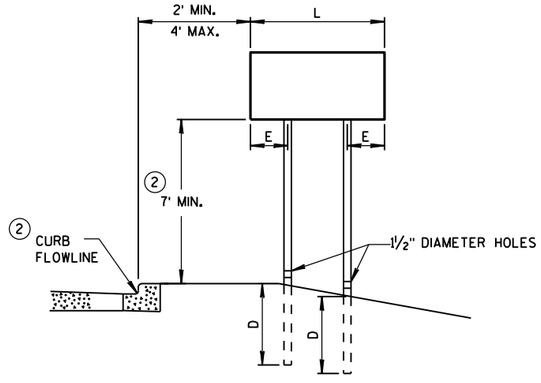
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

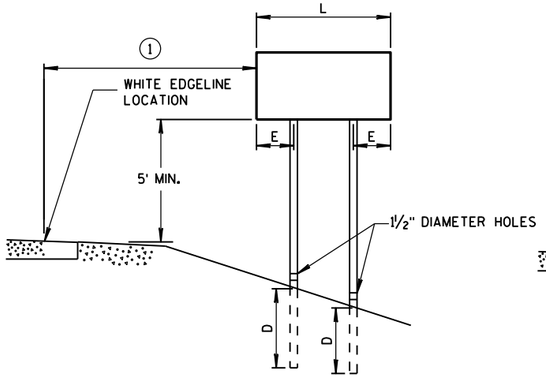
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

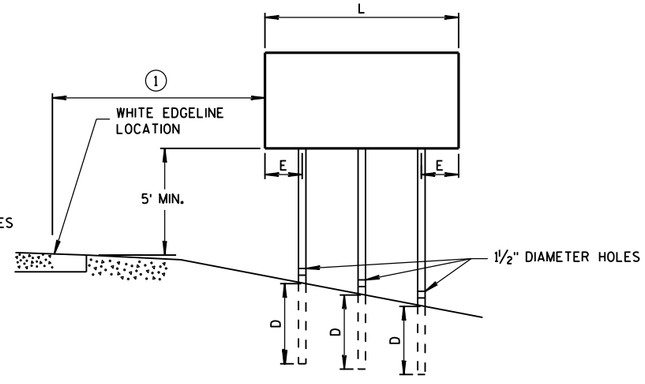
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

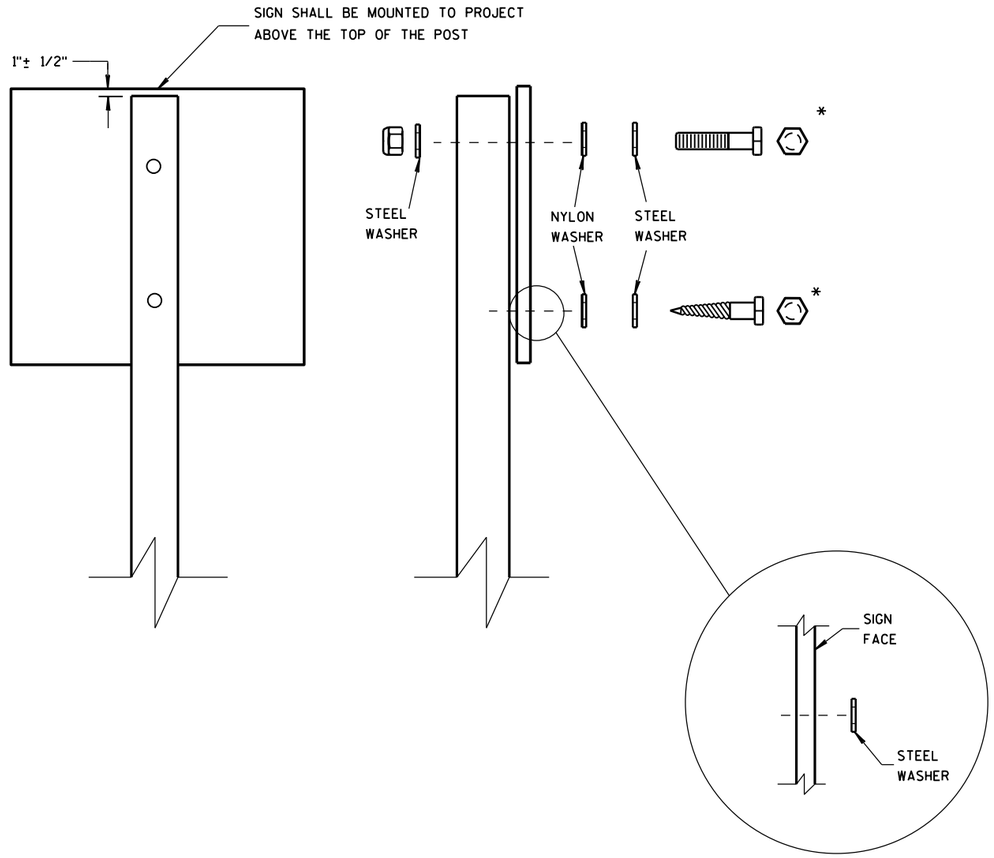
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

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 FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

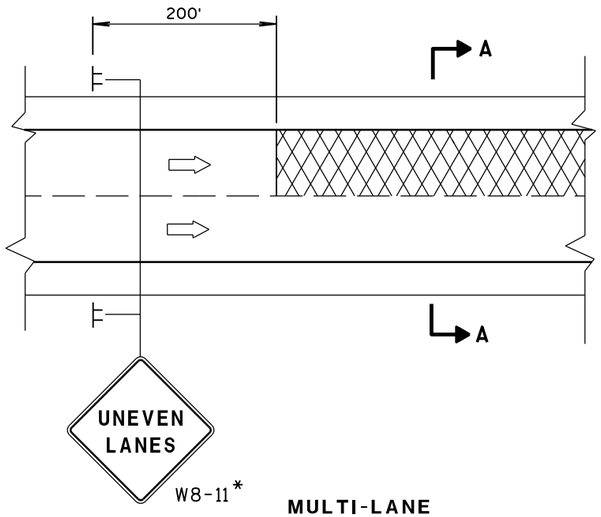
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

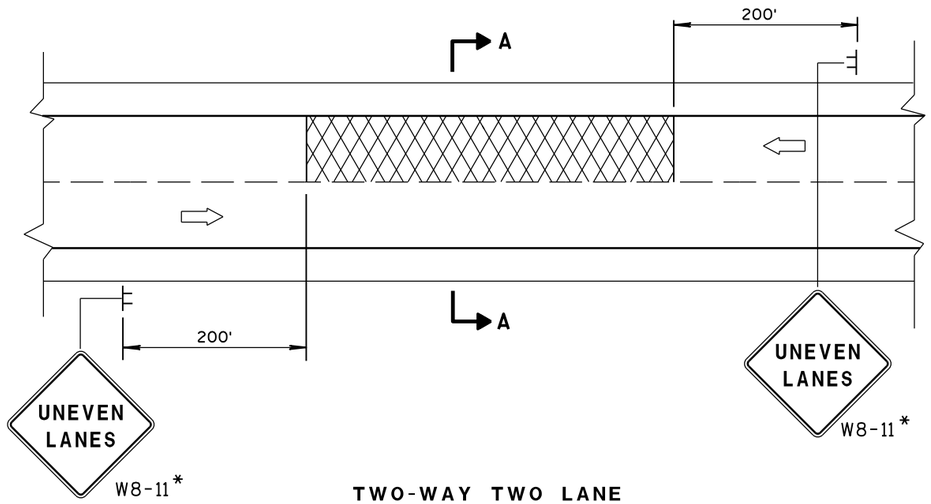
June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

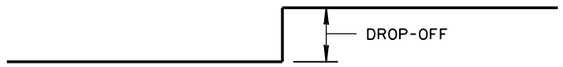
FHWA



MULTI-LANE

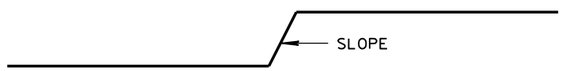


TWO-WAY TWO LANE

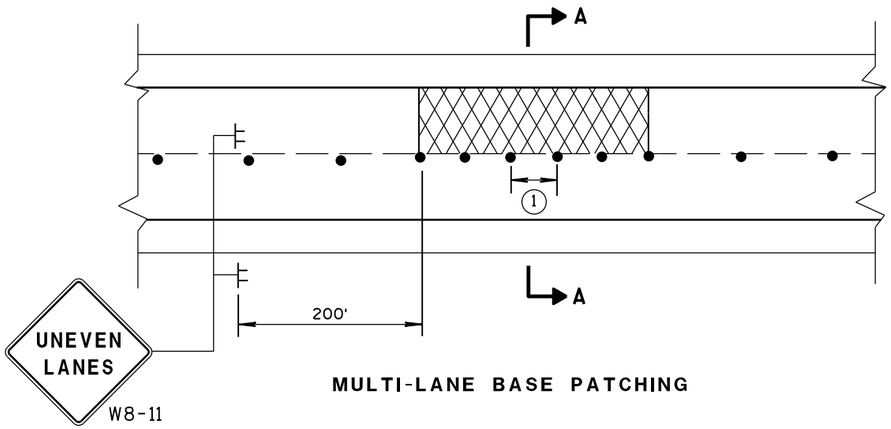


SECTION A-A

OR

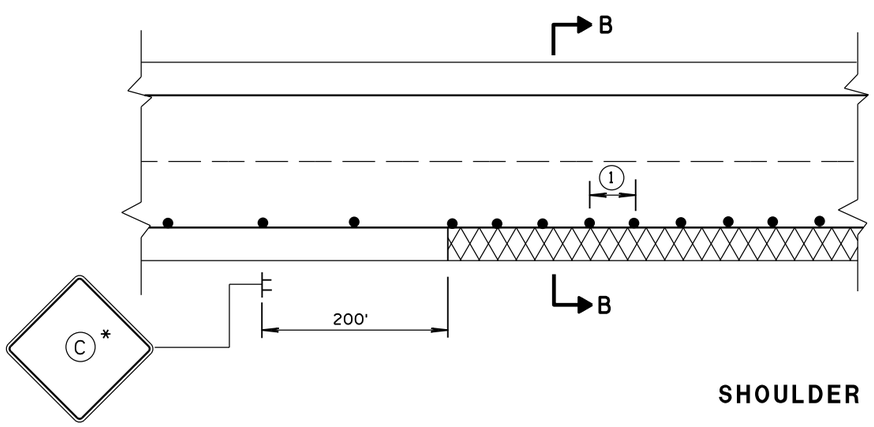


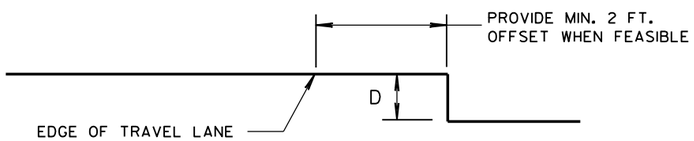
SECTION A-A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS





SECTION B-B

SHOULDER DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY ½ MILE.

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

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER W08-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP-OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

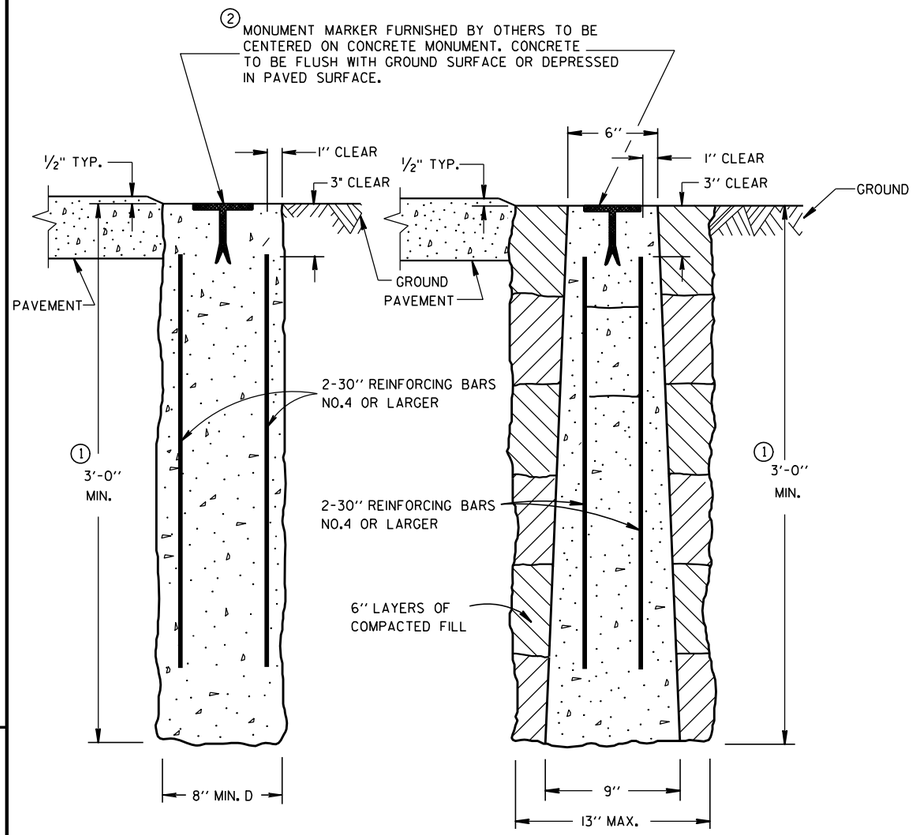
TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENGI
FHWA

6

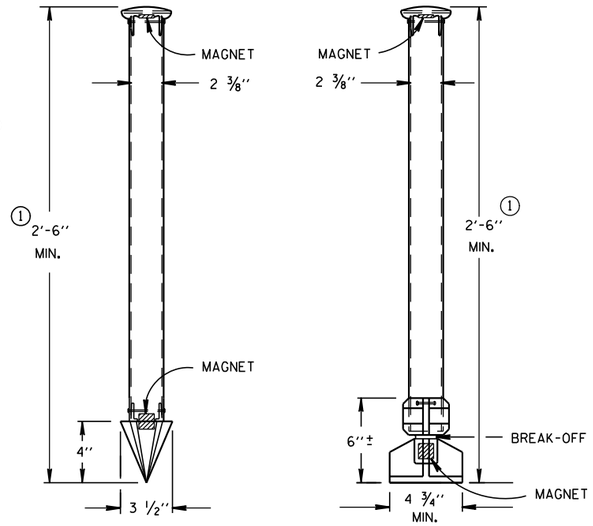
S.D.D. 15 D 39-1



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A

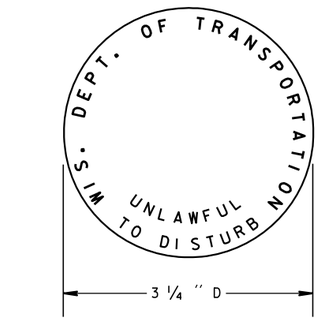


TYPE C DRIVE-IN MONUMENT

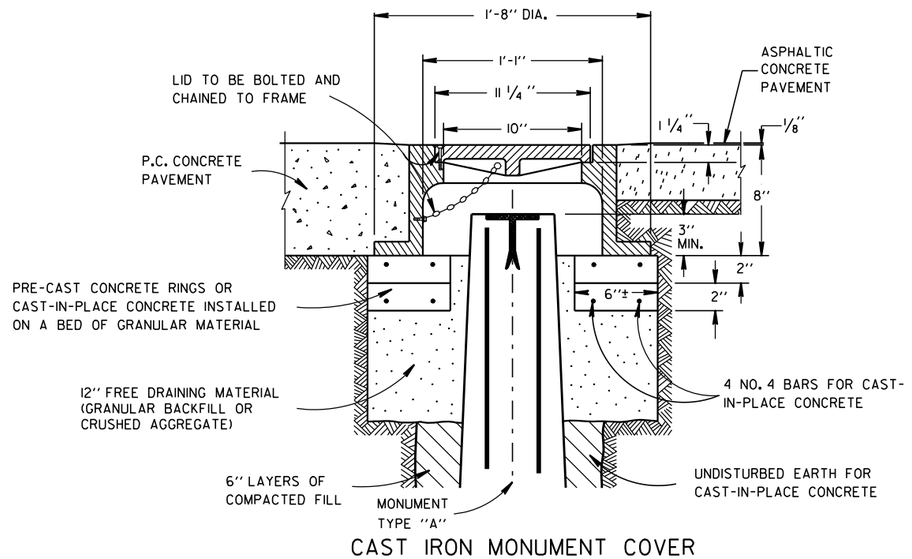
TYPE D BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)



② WIS DOT MONUMENT MARKER LOGO FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)

GENERAL NOTES

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

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

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

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

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

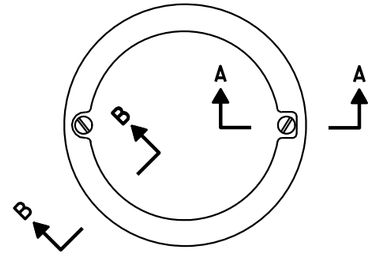
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

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

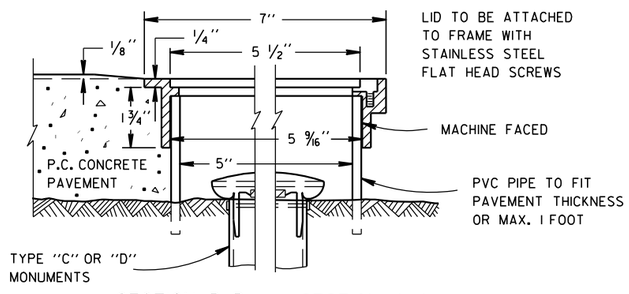
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

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

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



TOP VIEW



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MOUNMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

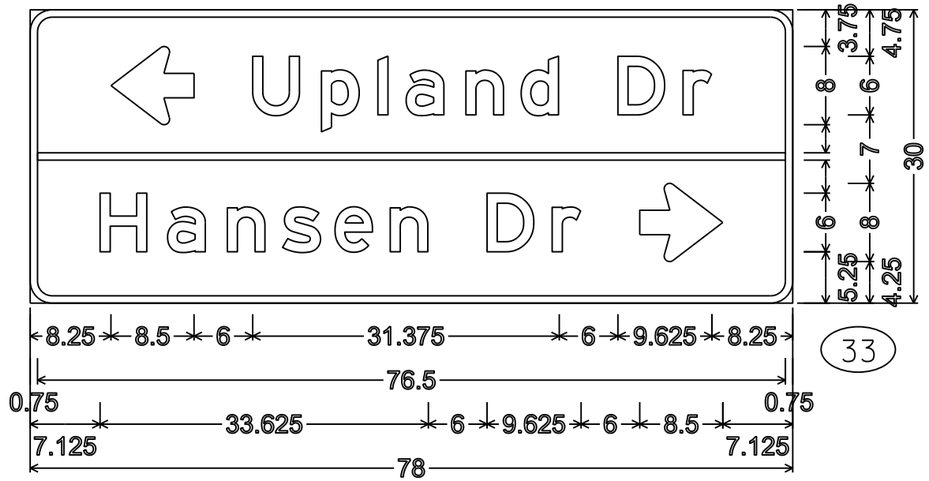
9/22/1999 DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

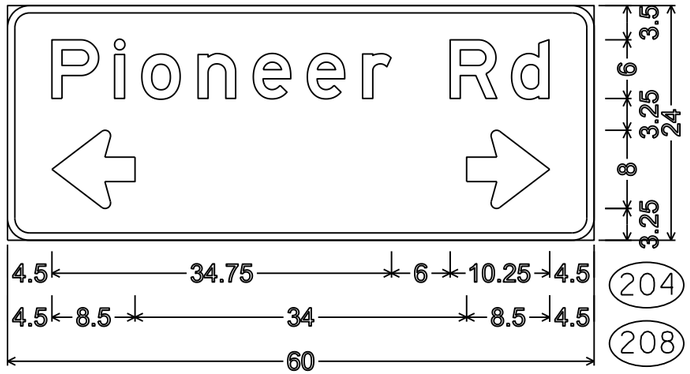
FHWA

6

S.D.D. 16 A 1-6



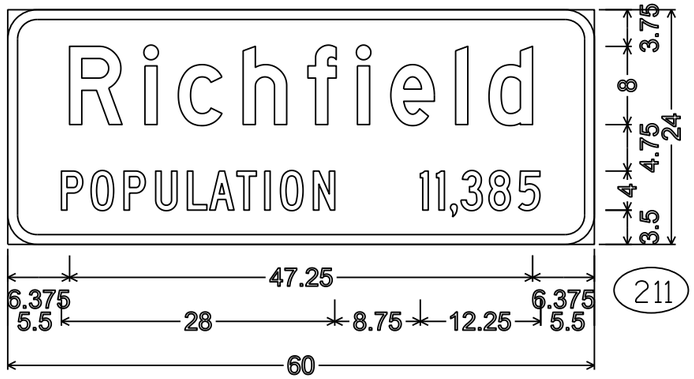
D1-2; 2.250" Radius, 0.750" Border



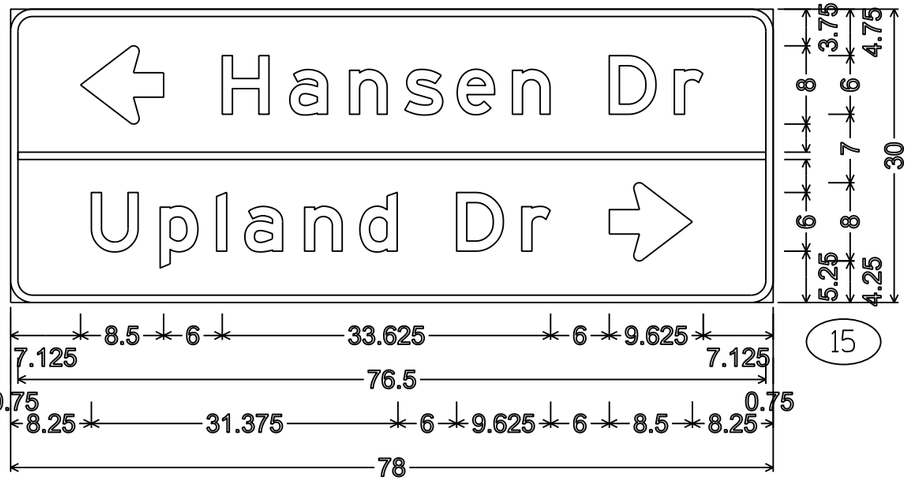
D1-61;
2.250" Radius, 0.750" Border

NOTES

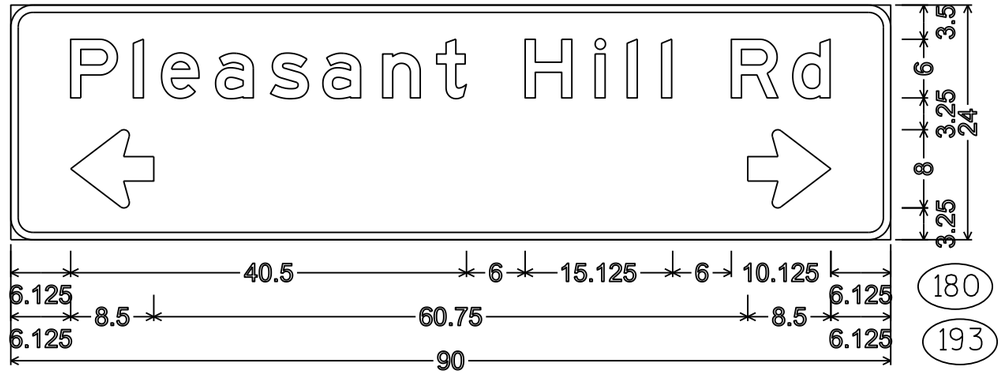
1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted



I2-3;
3.000" Radius, 1.000" Border,
"Richfield" D; "POPULATION" C; "11,300" C



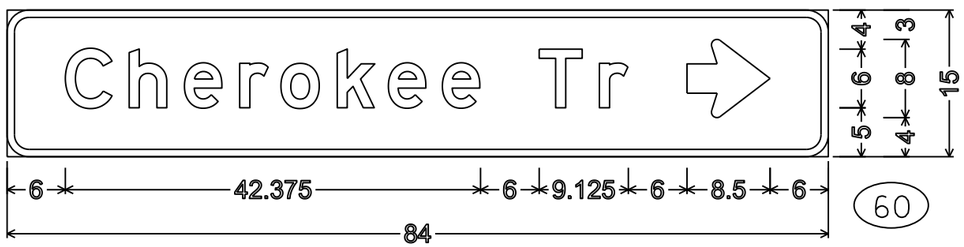
D1-2; 2.250" Radius, 0.750" Border



D1-61; 2.250" Radius, 0.750" Border



D1-1; 2.250" Radius, 0.750" Border

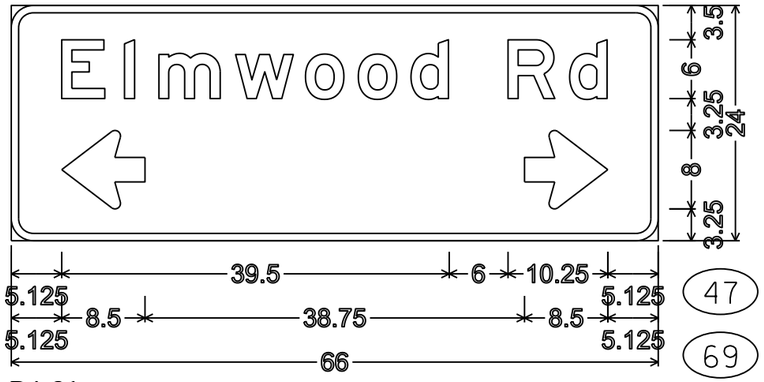


D1-1; 2.250" Radius, 0.750" Border

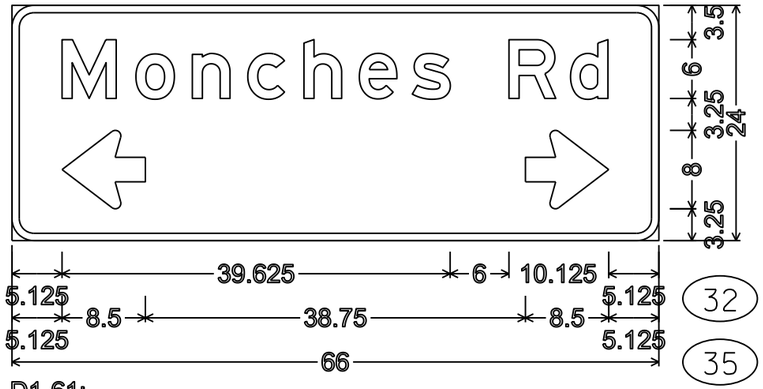
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET NO: 686	E

NOTES

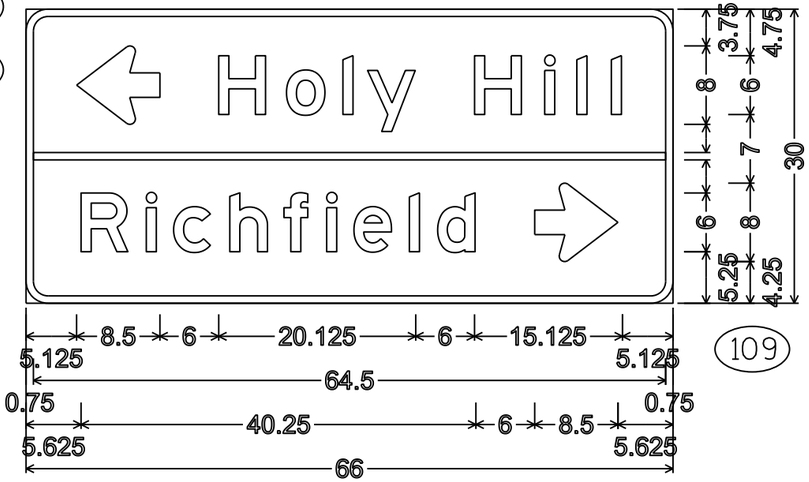
1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted



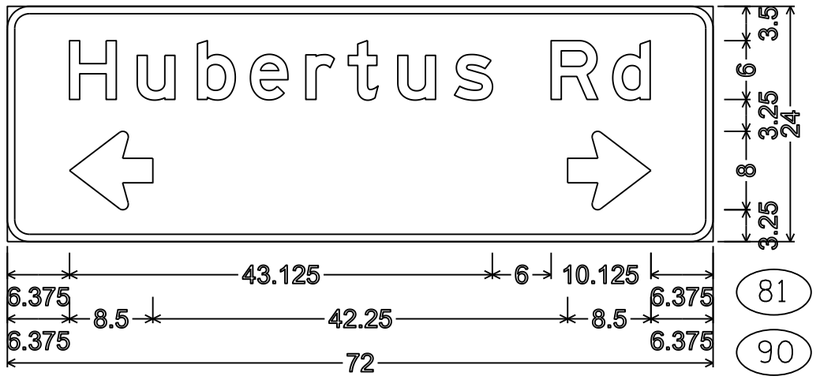
D1-61;
2.250" Radius, 0.750" Border



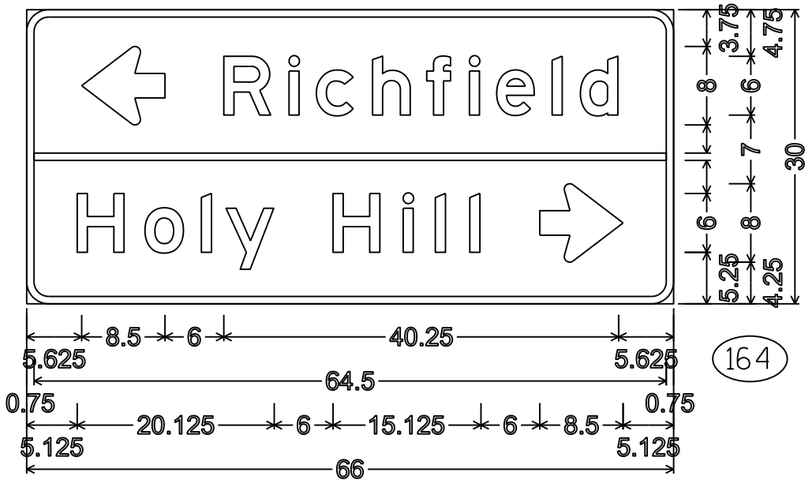
D1-61;
2.250" Radius, 0.750" Border



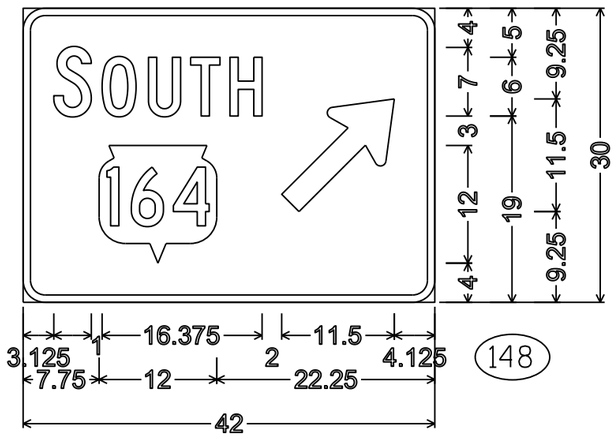
D1-2; 2.250" Radius, 0.750" Border



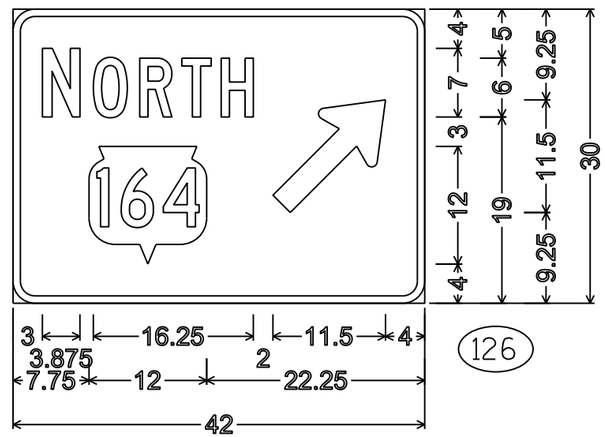
D1-61; 2.250" Radius, 0.750" Border



D1-2; 2.250" Radius, 0.750" Border



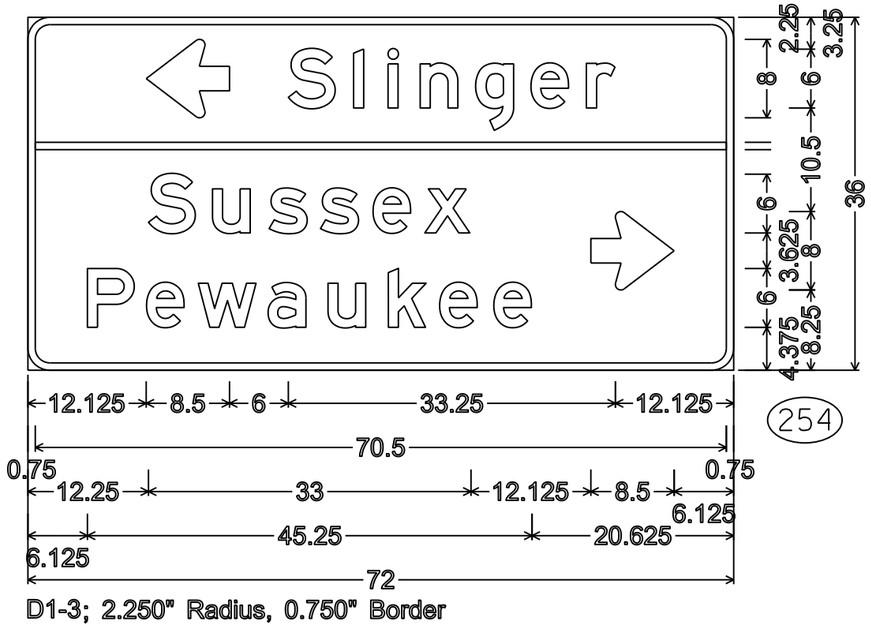
D1-1; 2.250" Radius, 0.750" Border,
"SOUTH" C



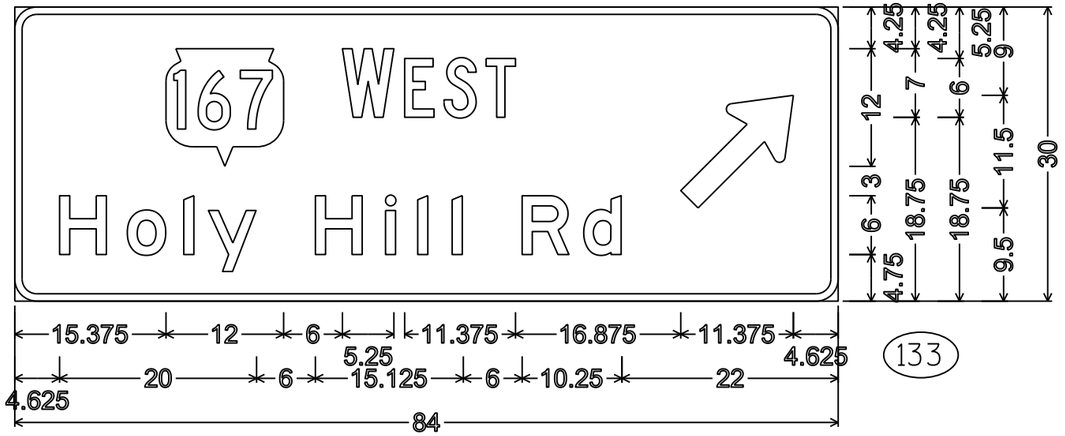
D1-1; 2.250" Radius, 0.750" Border,
"NORTH" C

NOTES

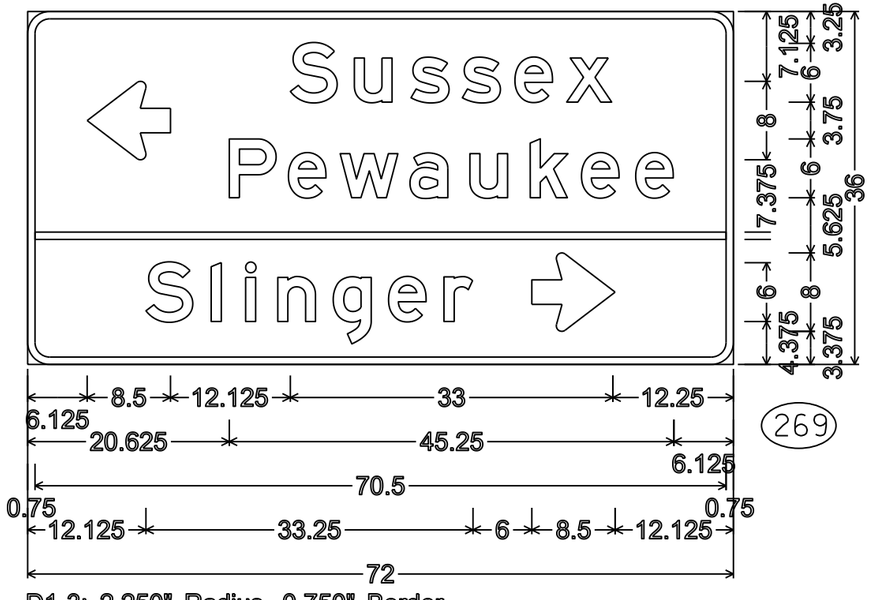
1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted



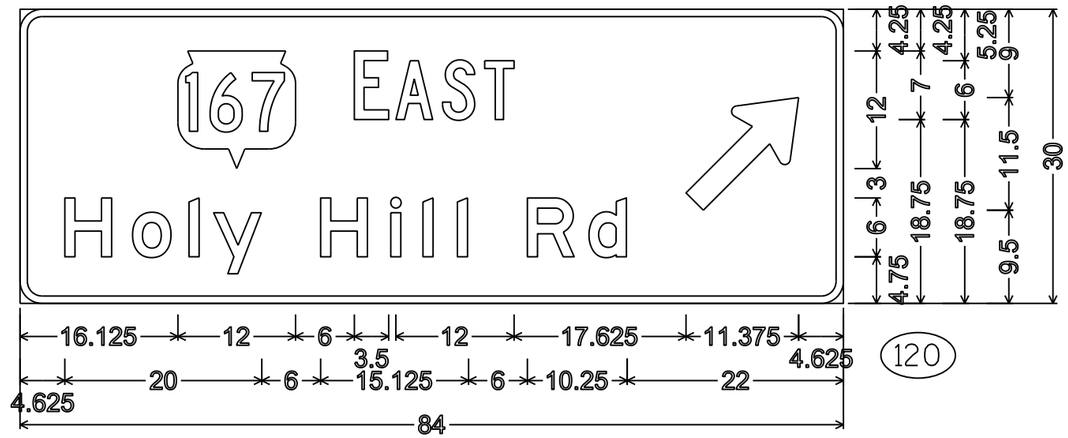
D1-3; 2.250" Radius, 0.750" Border



D1-2; 2.250" Radius, 0.750" Border
"WEST" C



D1-3; 2.250" Radius, 0.750" Border

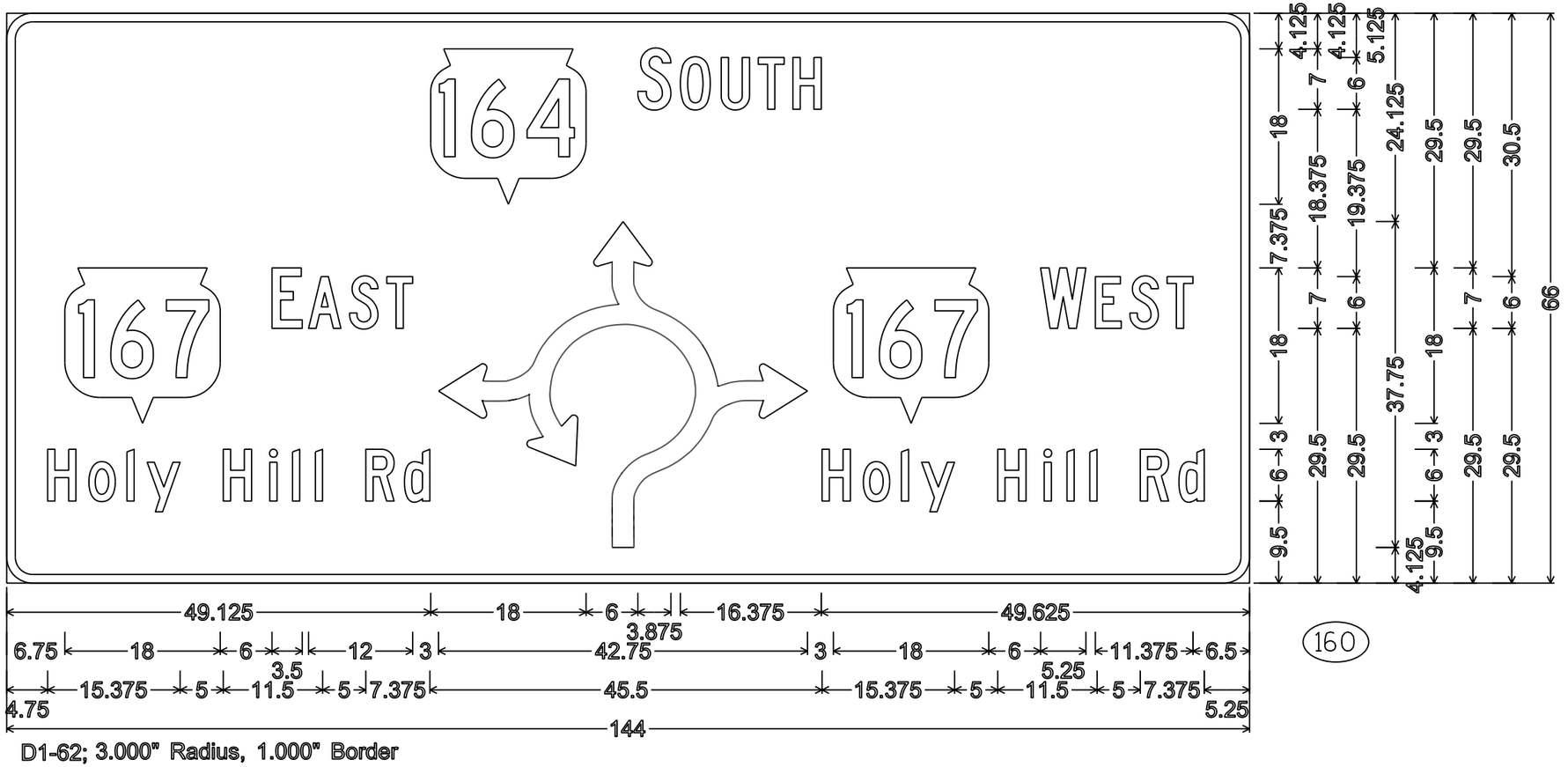


D1-2; 2.250" Radius, 0.750" Border
"EAST" C

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET NO: 688	E

NOTES

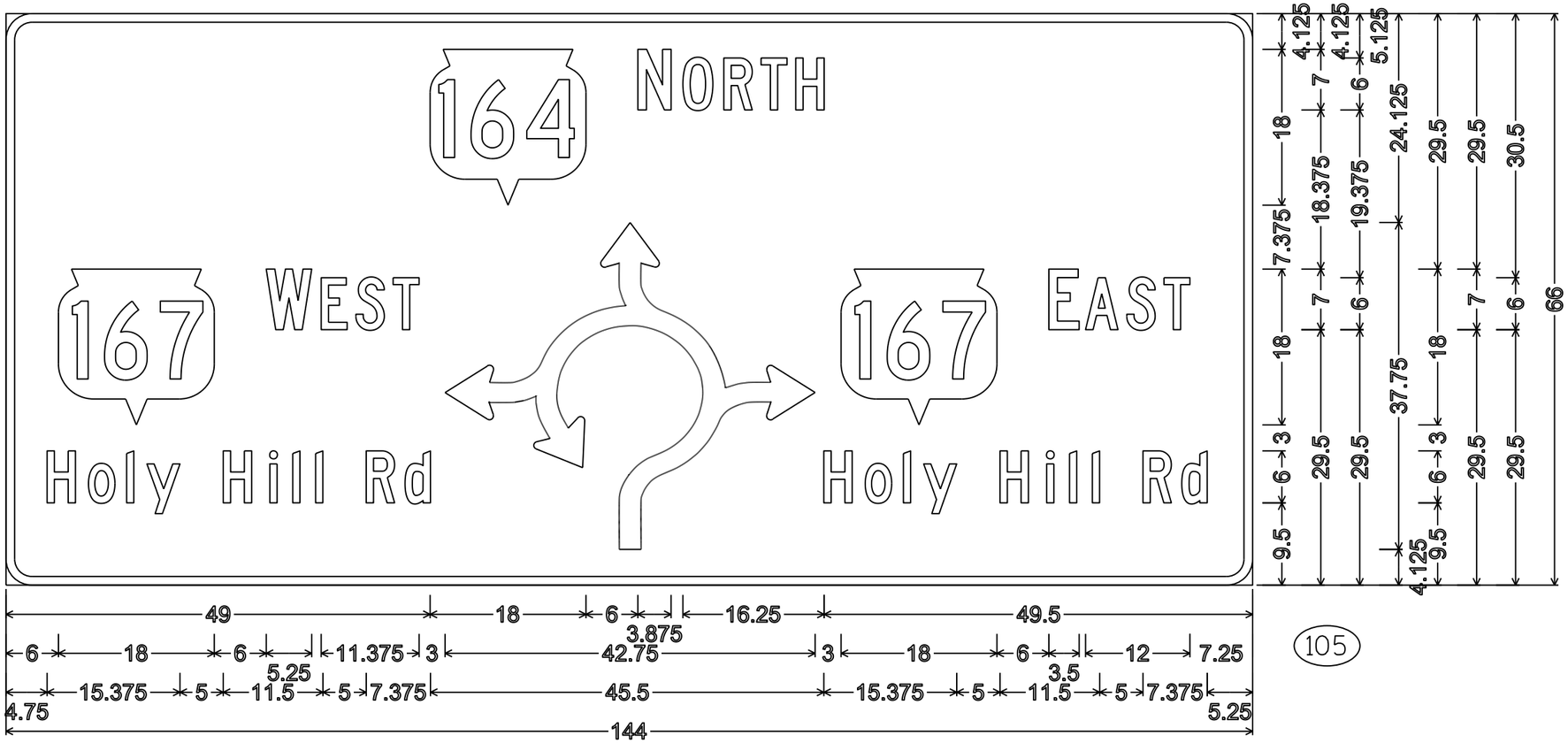
1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - C



D1-62; 3.000" Radius, 1.000" Border

NOTES

1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - C



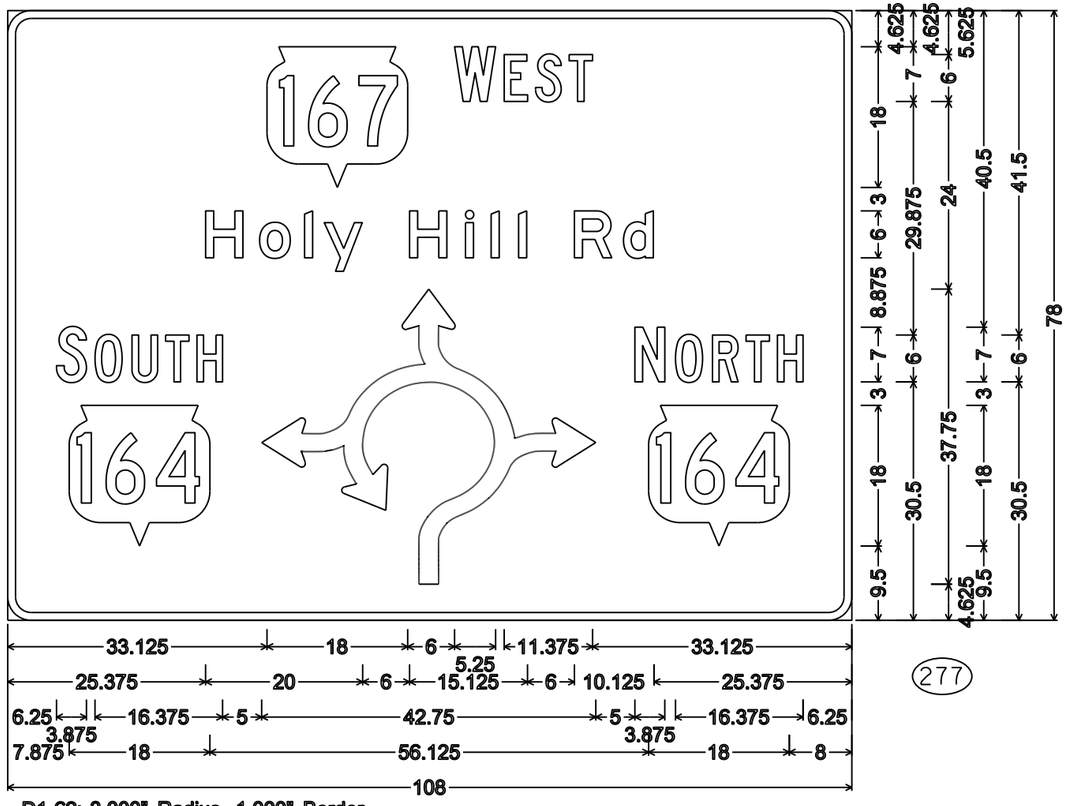
D1-62; 3.000" Radius, 1.000" Border

7

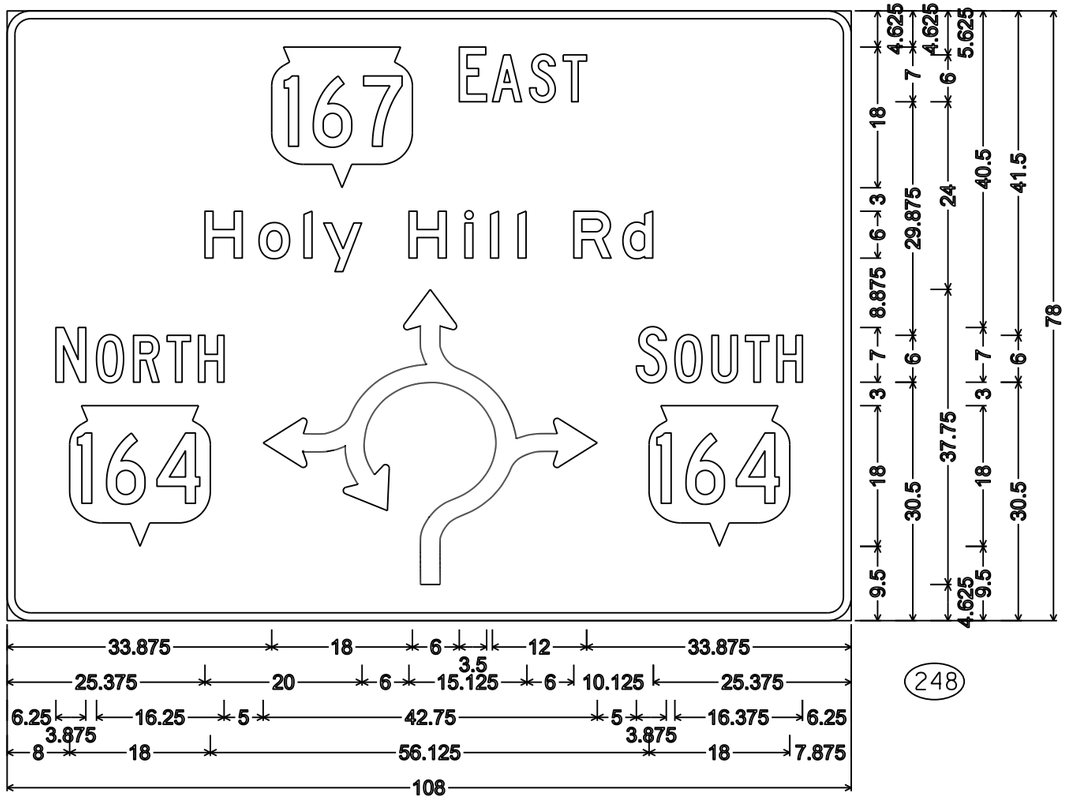
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NOTES

1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted

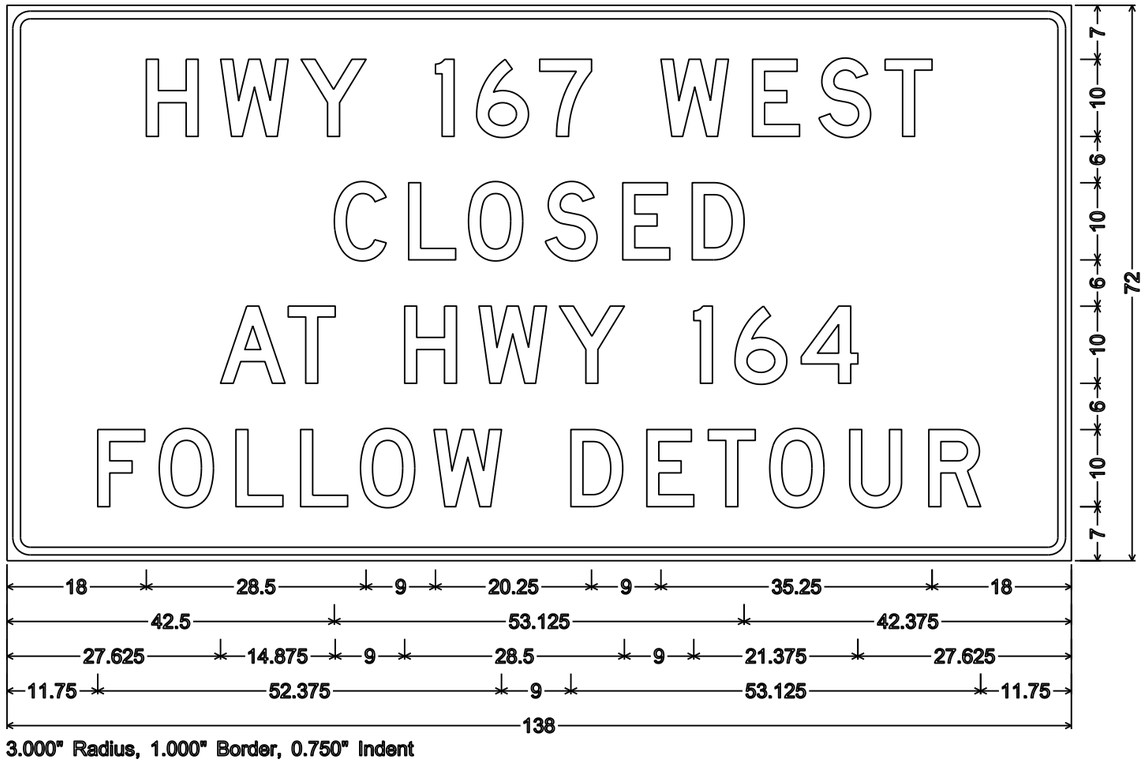


D1-62; 3.000" Radius, 1.000" Border,
"WEST" C; "SOUTH" C; "NORTH" C



D1-62; 3.000" Radius, 1.000" Border,
"EAST" C; "NORTH" C; "SOUTH" C

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET NO: 691	E

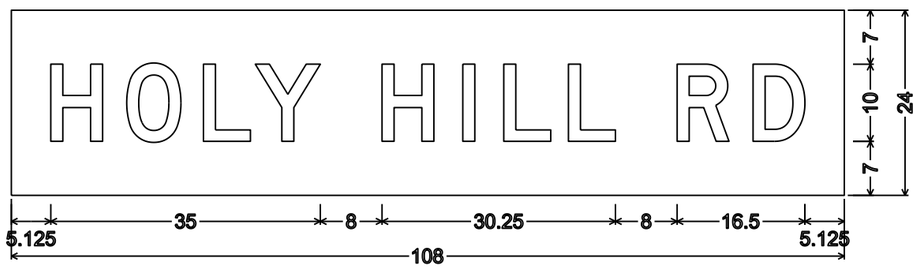


3.000" Radius, 1.000" Border, 0.750" Indent

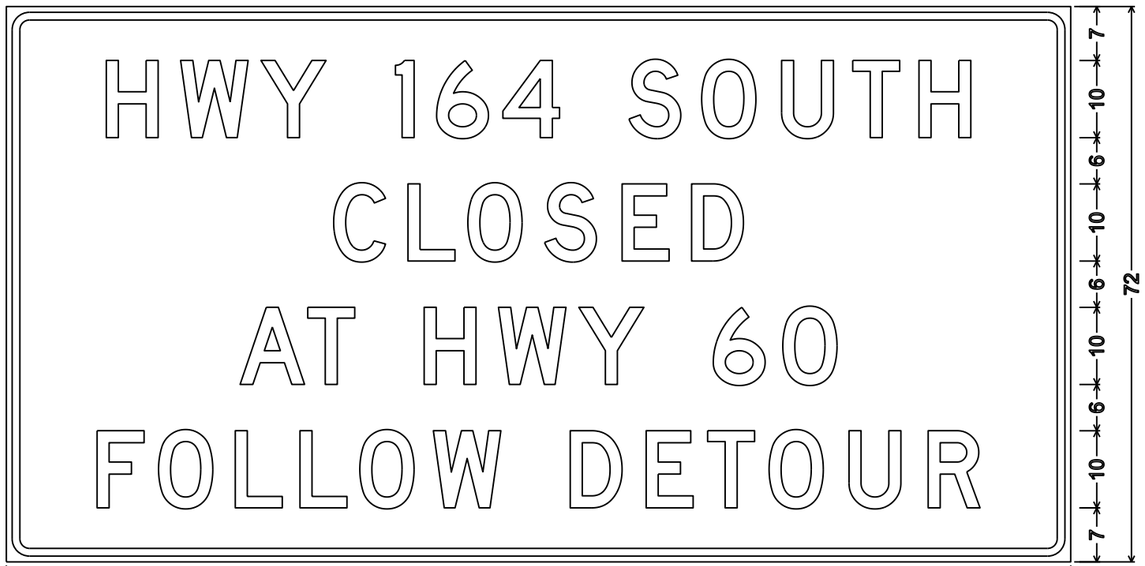
NOTES

1. Fixed Message Type II Signs - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D

Base Material is .040" aluminum



No border



3.000" Radius, 1.000" Border, 0.750" Indent

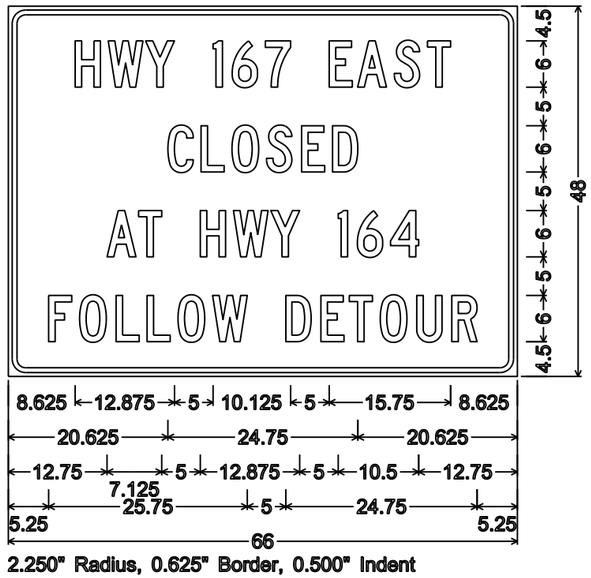
7

7

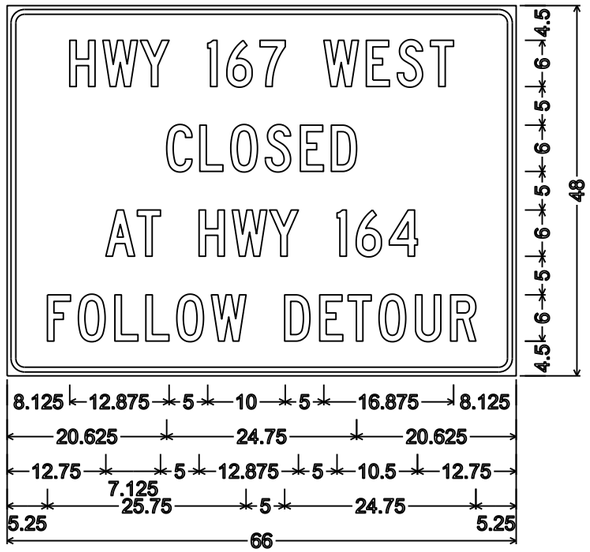
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TEMPORARY SIGNING	SHEET NO: 692	E

NOTES

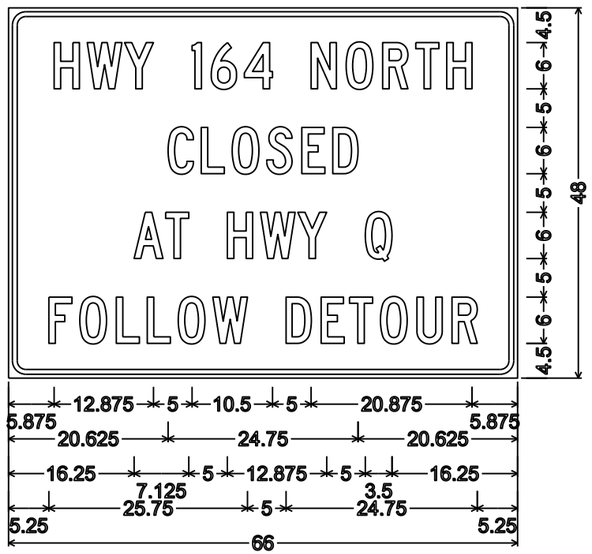
1. Fixed Message Type II Signs - Type F Reflective
2. Color:
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   Message - Black
3. Message Series - C



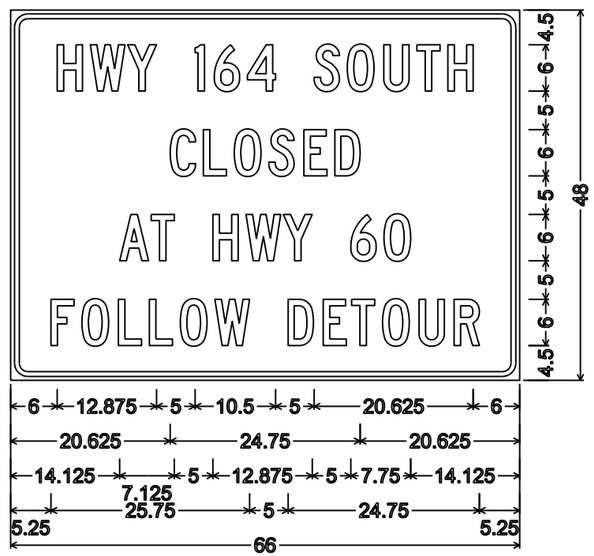
2.250" Radius, 0.625" Border, 0.500" Indent



2.250" Radius, 0.625" Border, 0.500" Indent



2.250" Radius, 0.625" Border, 0.500" Indent



2.250" Radius, 0.625" Border, 0.500" Indent

7

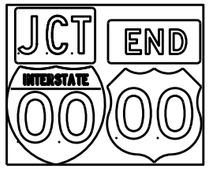
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	TEMPORARY SIGNING	SHEET NO: 693	E

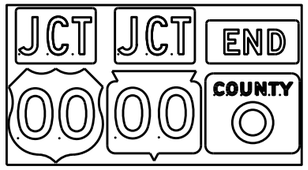
TYPICAL ASSEMBLIES



J1-1



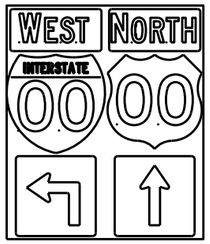
J1-2



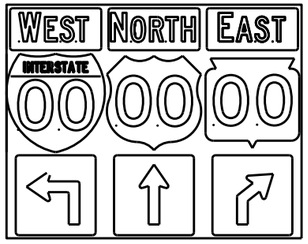
J1-3



J2-1



J2-2

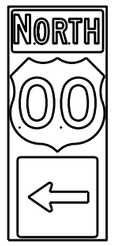


J2-3

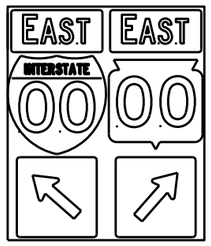


JV

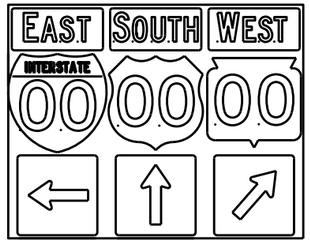
(Typical Vertical J-Assembly
See Note 10 and 11)



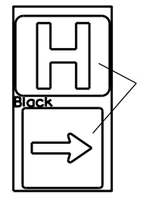
J3-1



J3-2



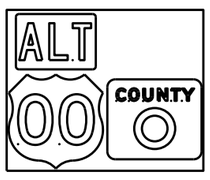
J3-3



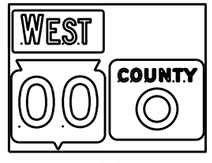
JH-1



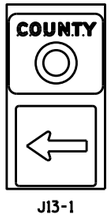
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

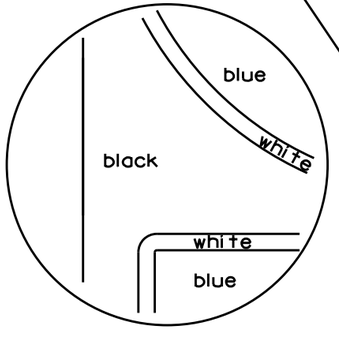


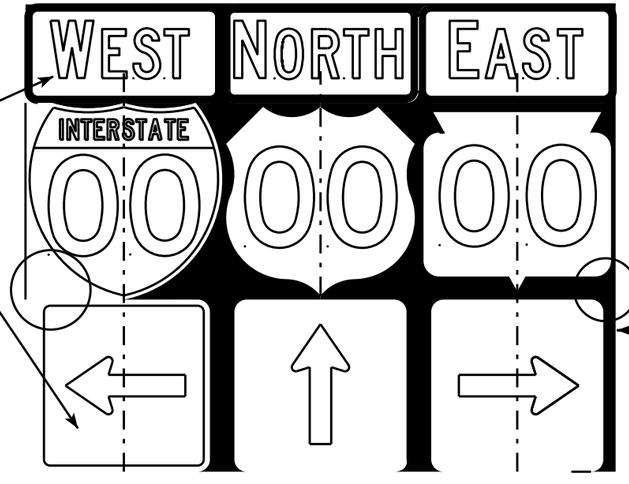
J23-1

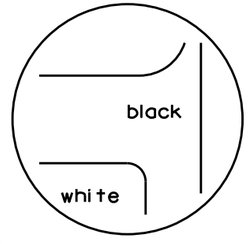


J22-1

blue background
with interstate







black background

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

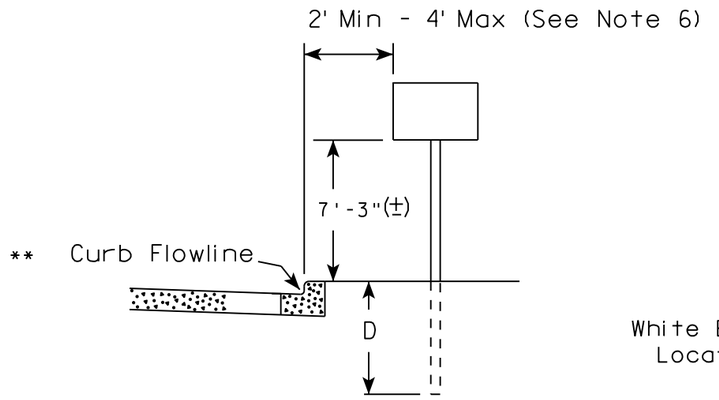
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

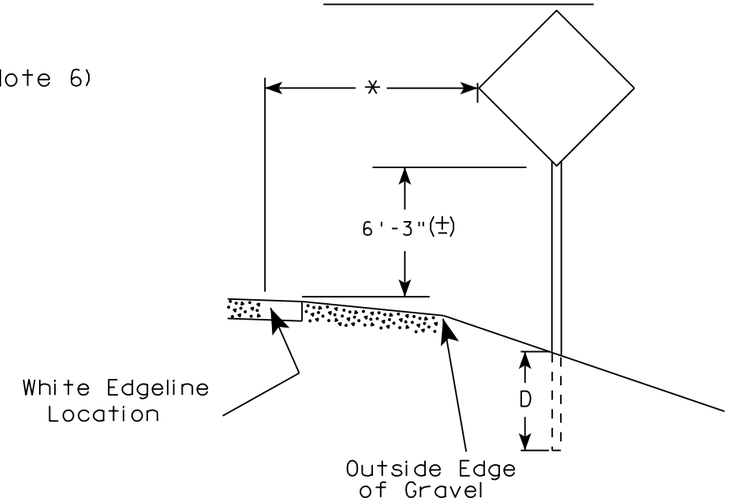
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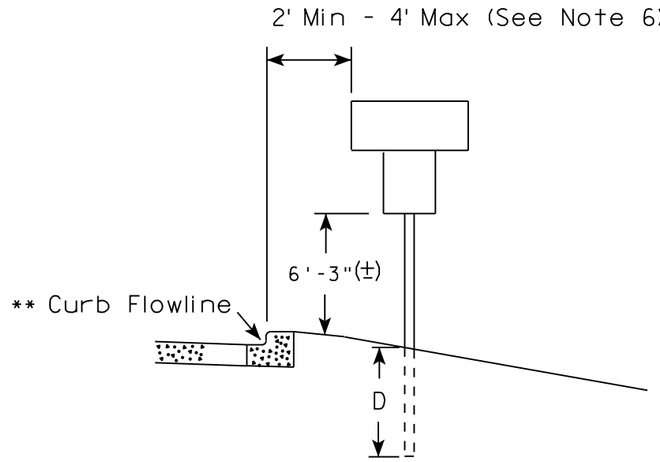
WISDOT/CADDS SHEET 42

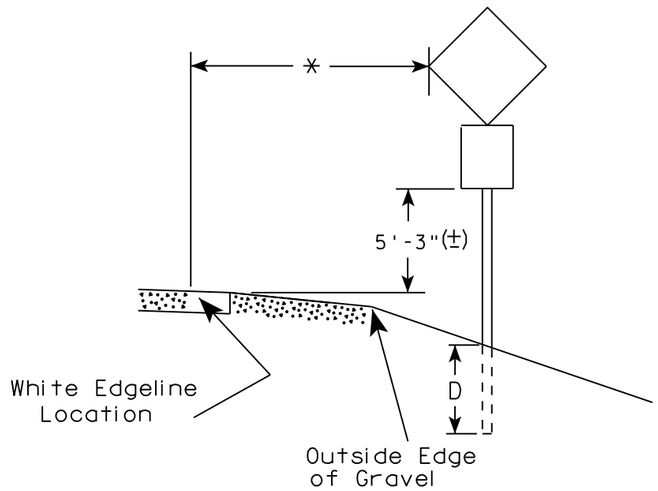
URBAN AREA



RURAL AREA (See Note 2)







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

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), 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" (±).

POST EMBEDMENT DEPTH

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

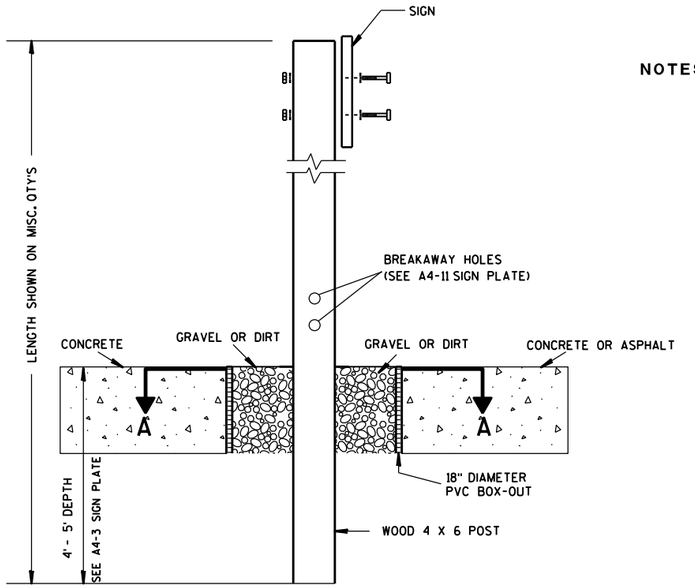
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

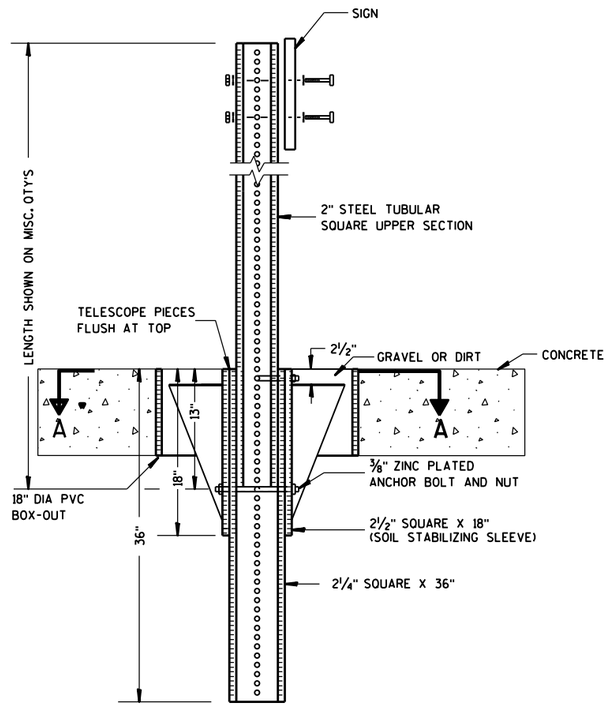
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 695	E



ELEVATION VIEW

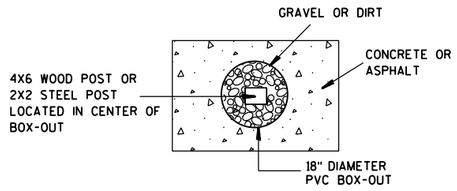
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

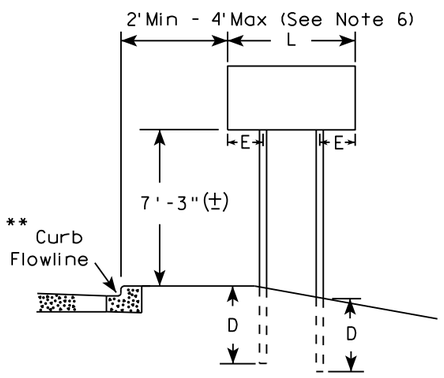
APPROVED Matthew R Rauch
for State Traffic Engineer

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

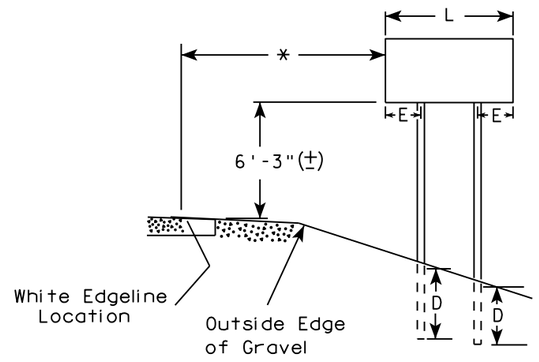
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

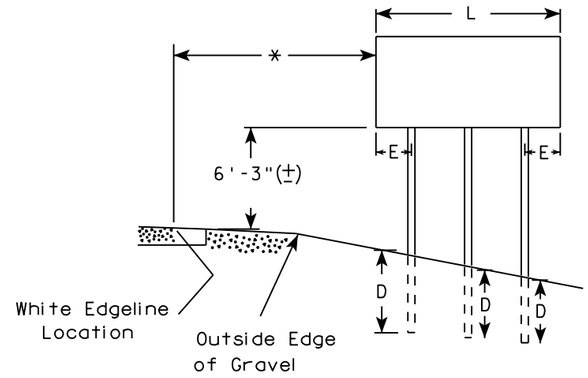
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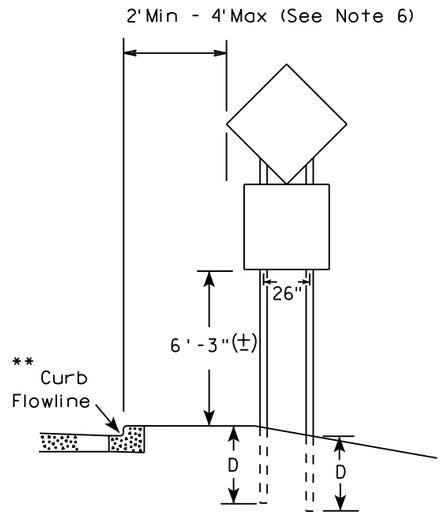
URBAN AREA



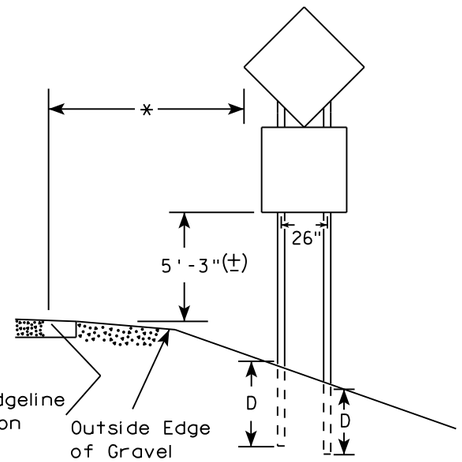
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

***

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

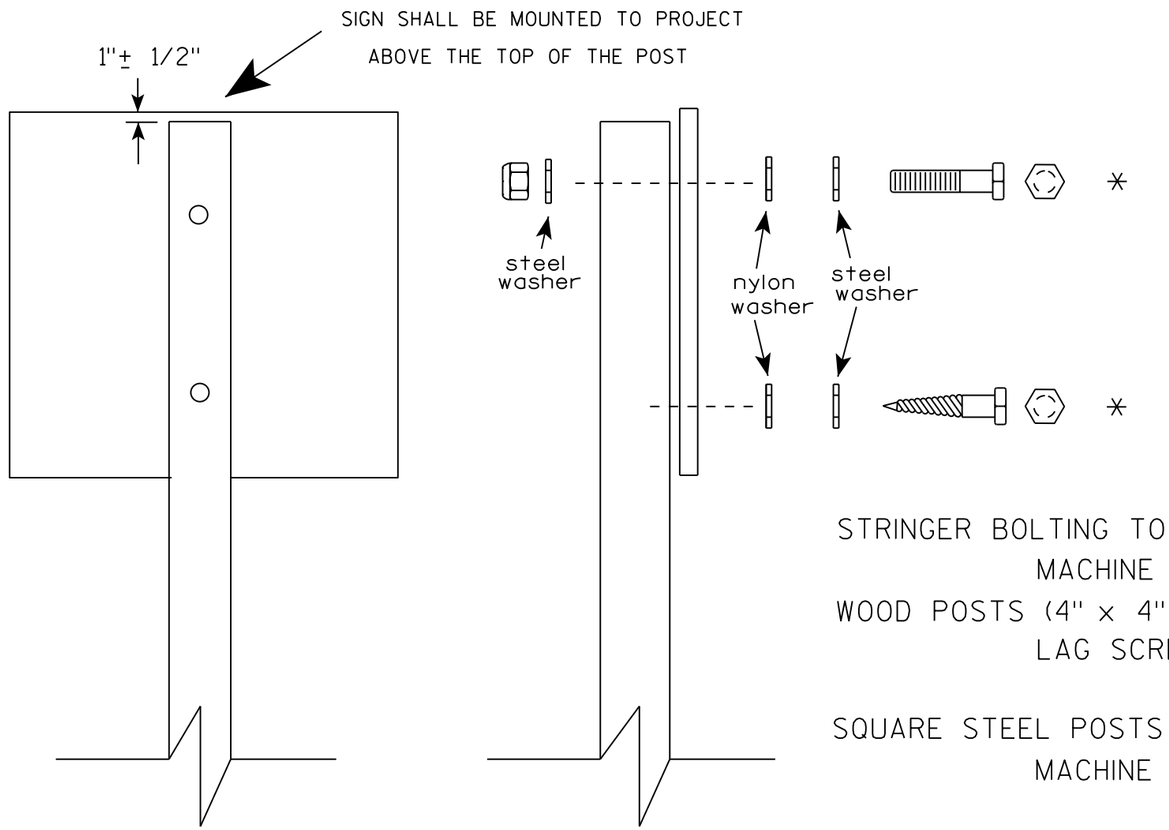
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 697	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 4" or 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 8/11/16 PLATE NO. A4-8.8

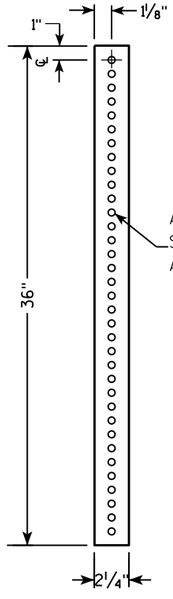
PROJECT NO:

SHEET NO: E

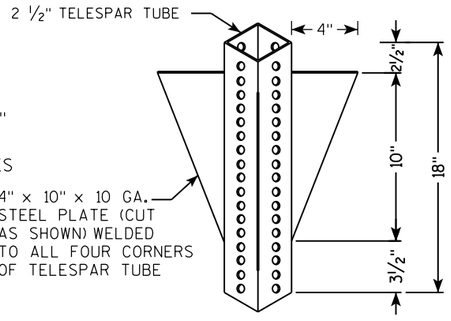
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TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

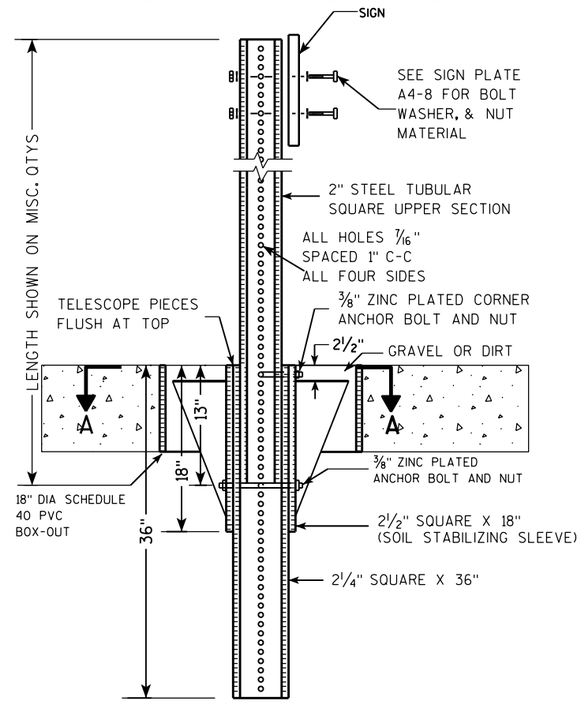
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



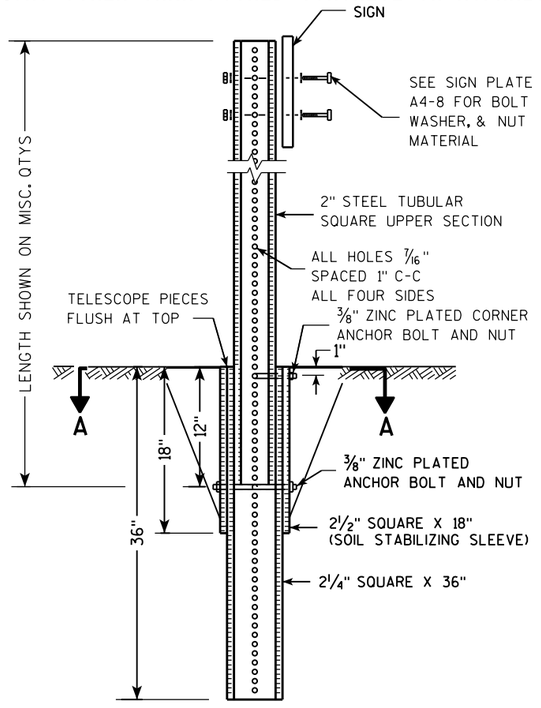
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

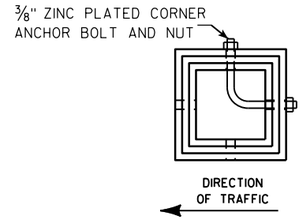


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

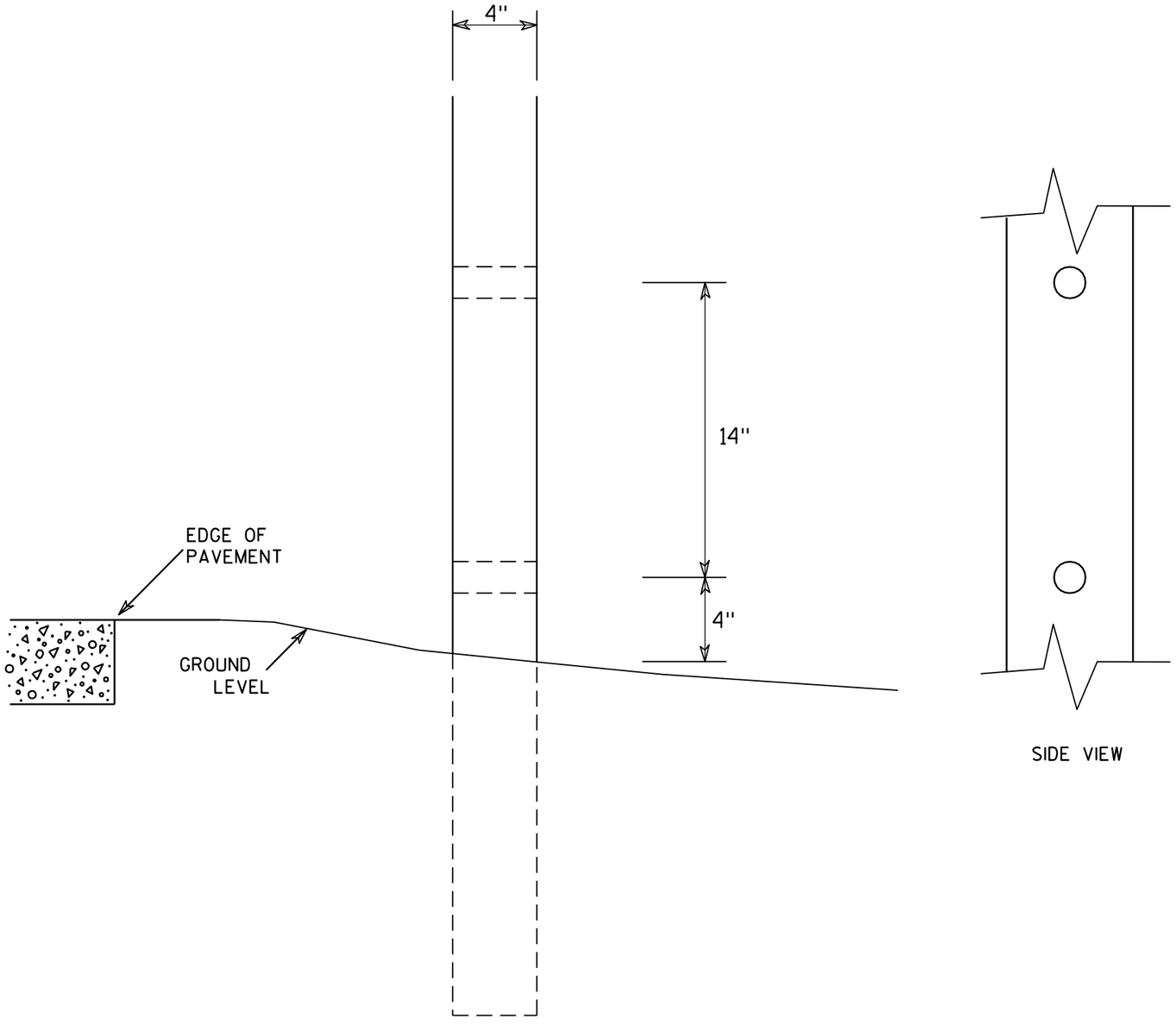
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 699 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

7

7

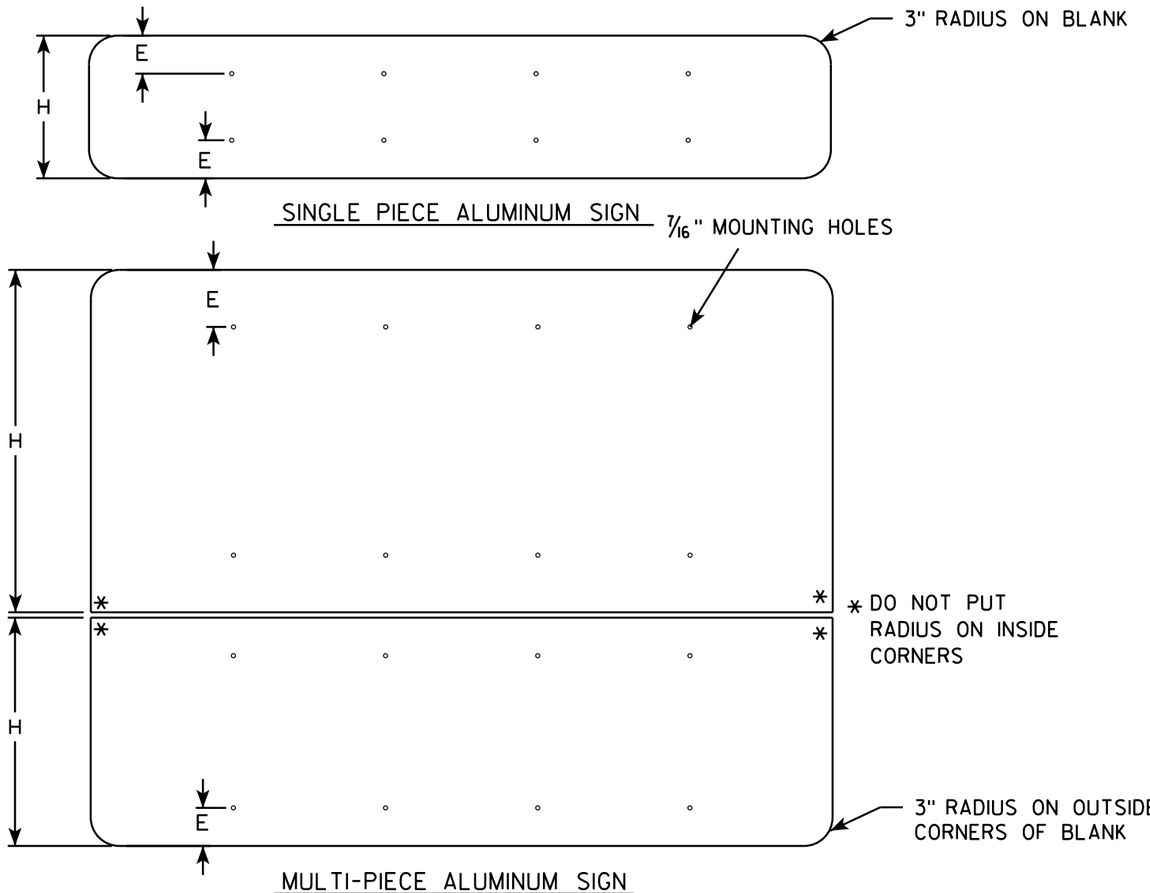
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

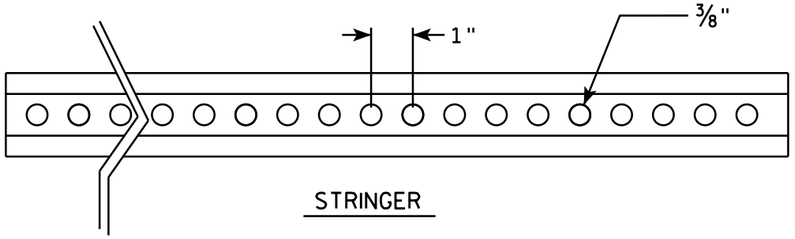
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 700	E



GENERAL NOTES

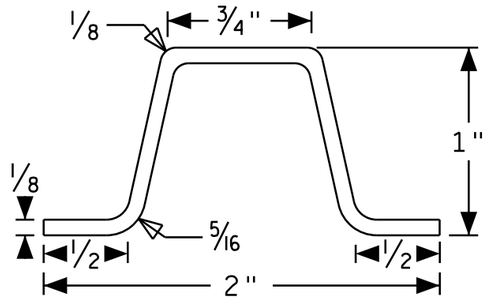
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER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

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

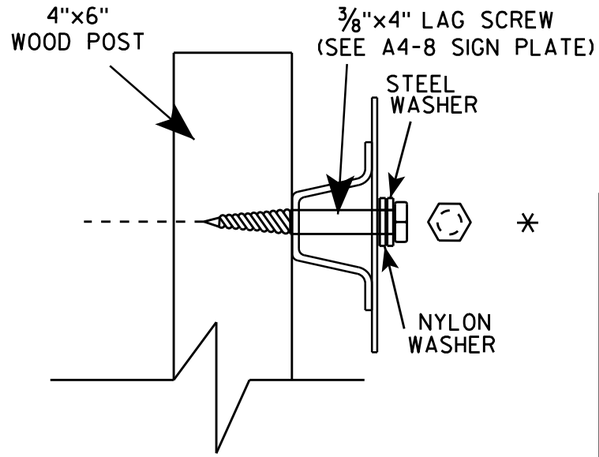


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

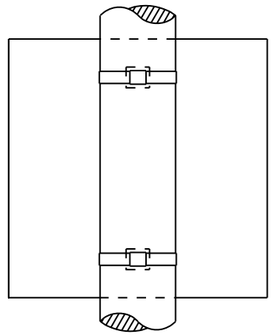
DATE 4/26/16 PLATE NO A4-18.1

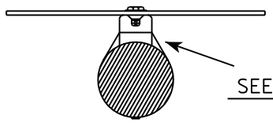
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

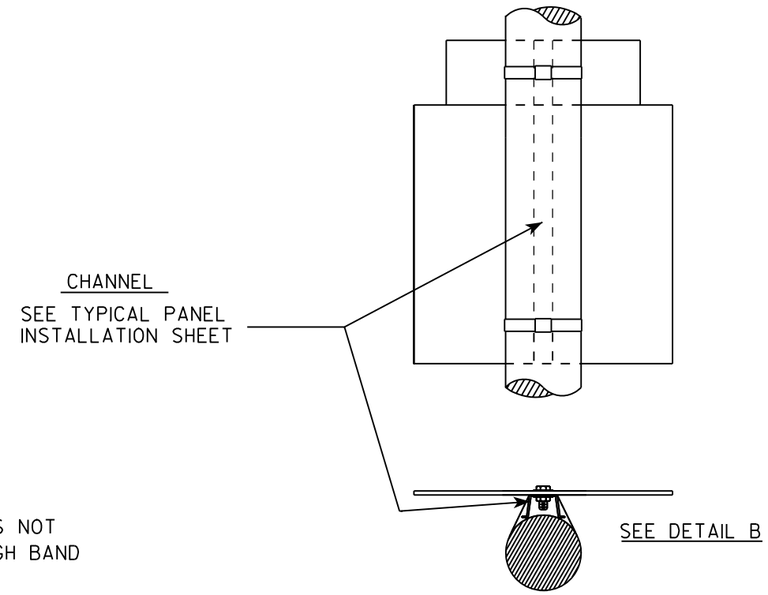
BANDING

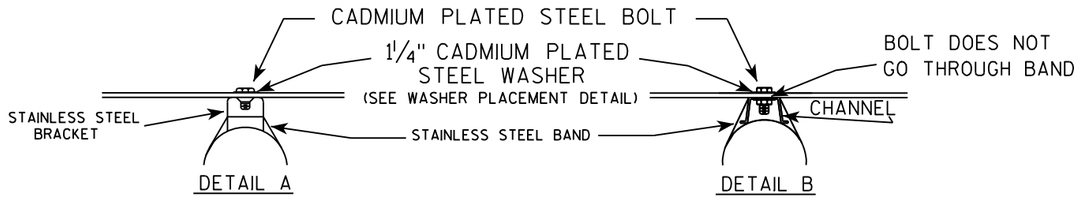
SINGLE SIGN



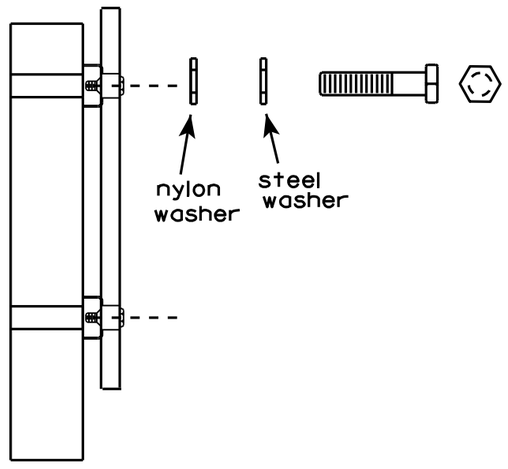


"J" ASSEMBLY





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.

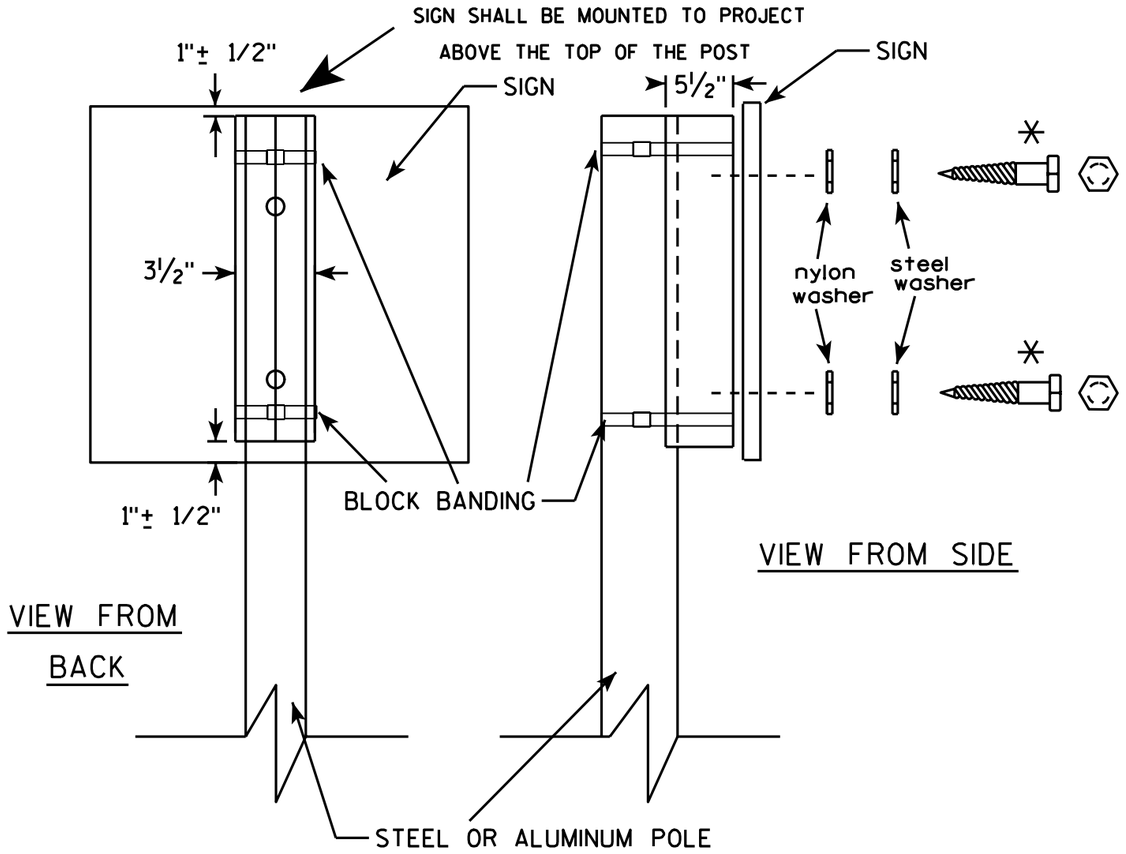
STANDARD SIGN
SIGN BANDING DETAILS

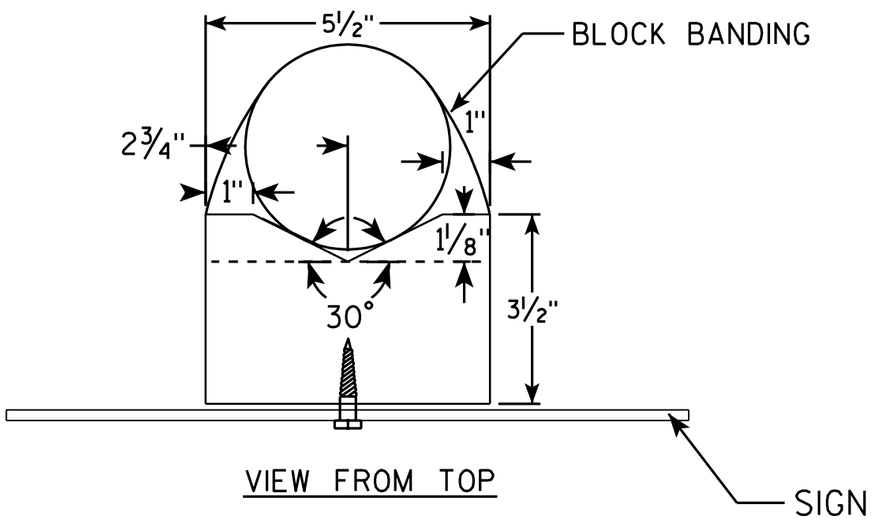
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 702	E





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, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. 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"

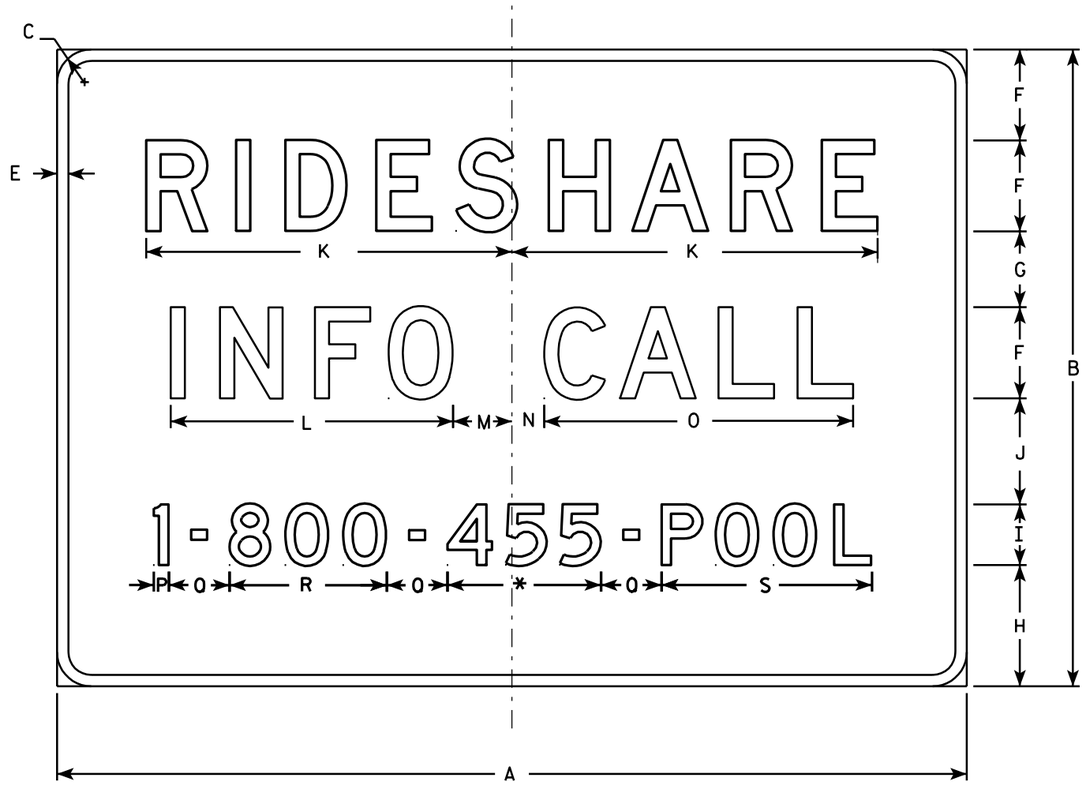
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO: | SHEET NO: 703 | E



D12-2A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as required to achieve proper balance.

Metric equivalent for this sign is:

SIZE	
1	1200 mm X 525 mm
2	1500 mm X 1050 mm
3	
4	1500 mm X 1050 mm
5	1950 mm X 1350 mm

* Variable (See note 5)

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	48	21	1 1/2		1/2	3	2 3/4	3 1/2	3	2 3/4	12 1/8	9 3/8	2	1 1/8	10 1/4	3/4	3	7 3/4	10 5/8								7.0	0.63
2	60	42	2 1/4		3/4	6	5	8	4	7	24 1/8	18 5/8	3 1/8	2 1/8	20 1/8	1	4	10 3/8	13 7/8								17.5	1.58
3																												
4	60	42	2 1/4		3/4	6	5	8	4	7	24 1/8	18 5/8	3 1/8	2 1/8	20 1/8	1	4	10 3/8	13 7/8								17.5	1.58
5	78	54	3		1	8	6	10	6	8	30 1/8	23 5/8	4 1/8	2 1/8	26 3/8	1 1/2	5	15 1/2	21 1/4								29.25	2.63

STANDARD SIGN
D12-2A

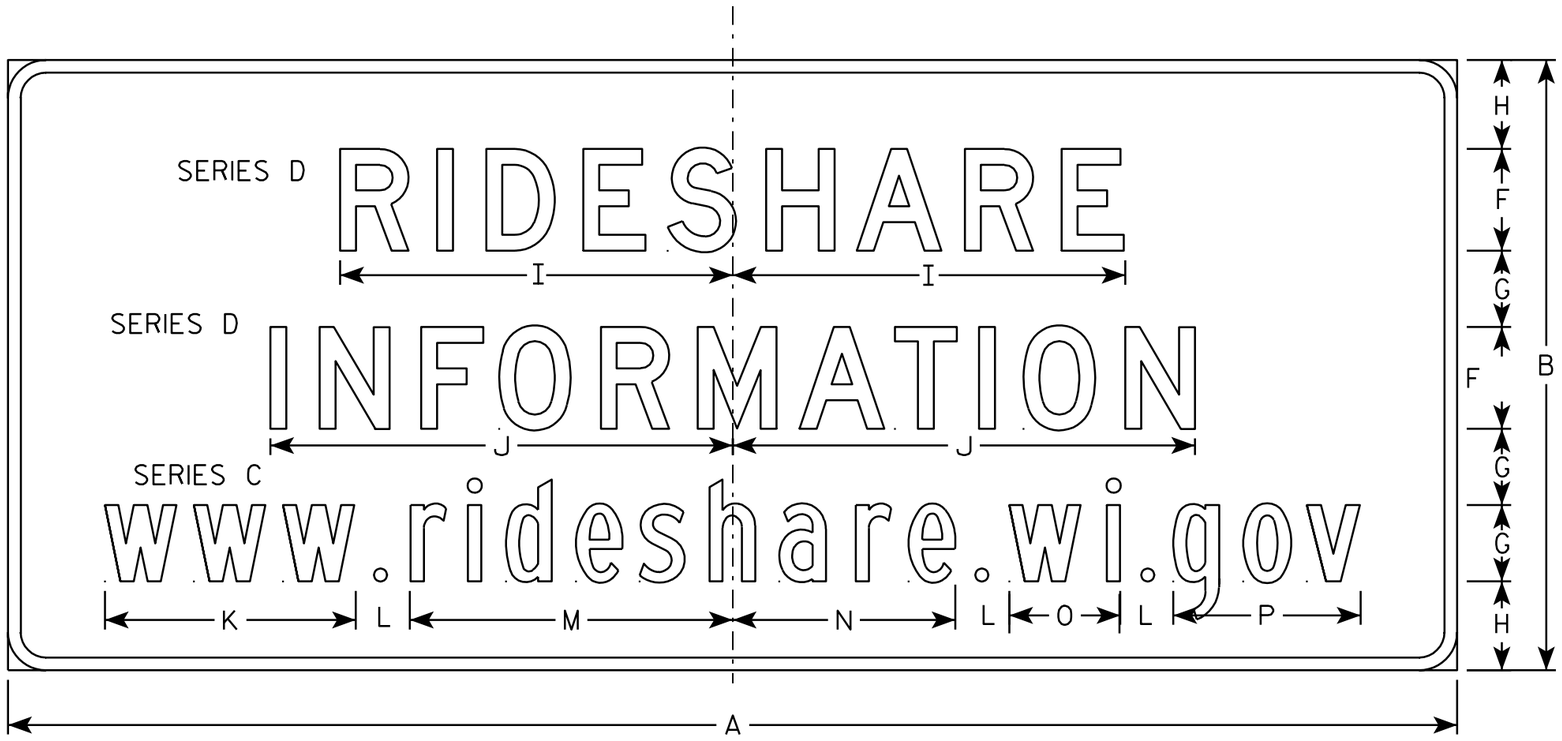
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spay for State Traffic Engineer

DATE 1/16/02 PLATE NO. D12-2A.3

PROJECT NO:

SHEET NO: 704 E



D12-2B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White
3. Message Series - Lines 1 & 2 are Series D and Line 3 is Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	
2	2100 mm X 900 mm
3	
4	2850 mm X 1200 mm
5	2850 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	84	36	2 1/4		3/4	6	4 1/2	5 1/4	24 1/4	28 5/8	14 3/4	3	19	13 1/8	6 1/2	11											21.0	1.90
3																												
4	114	48	3		1	8	6	7	30 7/8	36 3/8	19 3/4	4 1/4	25 3/8	17 1/2	8 3/4	14 3/4											38.0	3.42
5	114	48	3		1	8	6	7	30 7/8	36 3/8	19 3/4	4 1/4	25 3/8	17 1/2	8 3/4	14 3/4											38.0	3.42

STANDARD SIGN
D12-2B

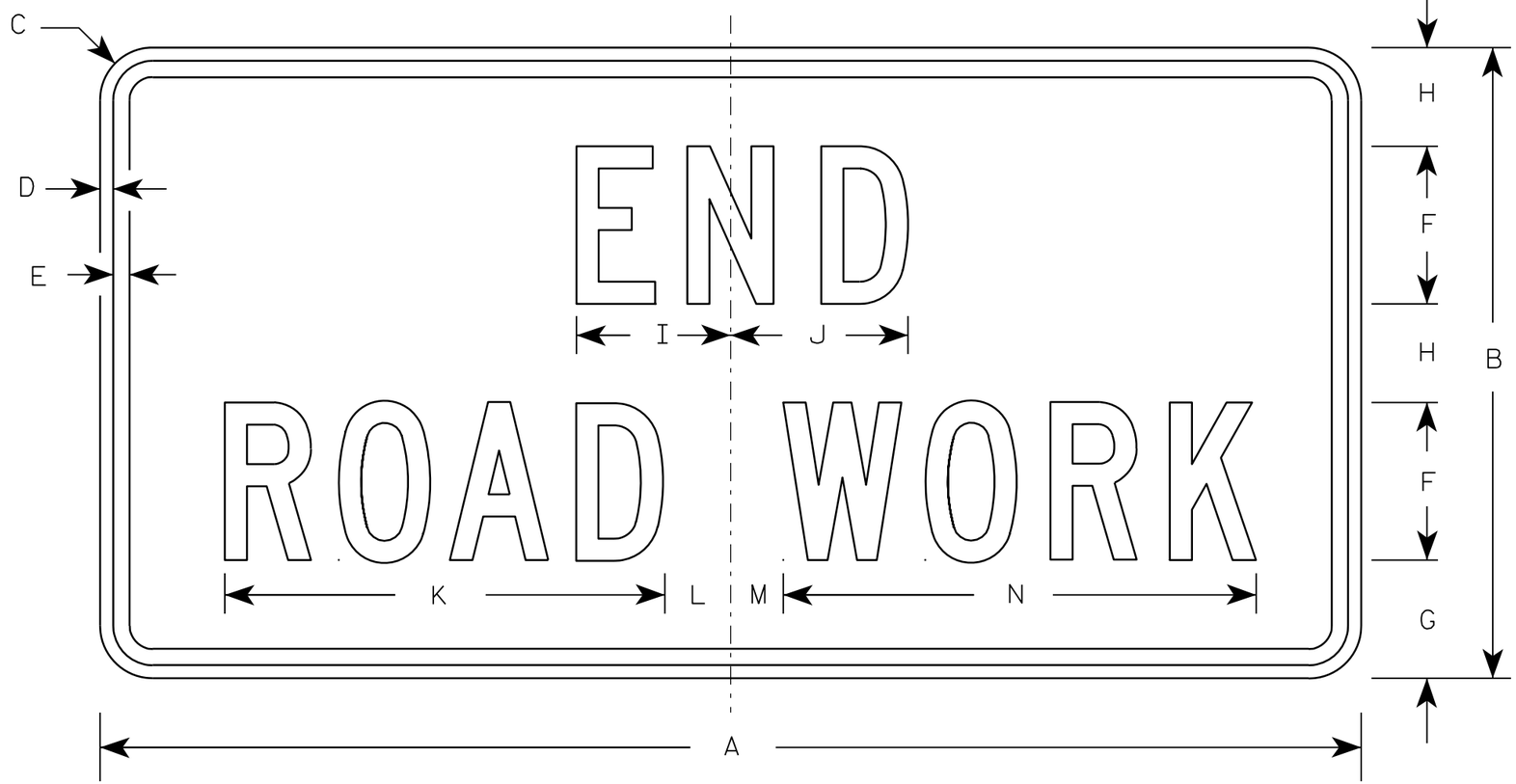
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/04/08 PLATE NO D12-2B.2

PROJECT NO:

SHEET NO: 705 E



G20-2A

NOTES

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

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

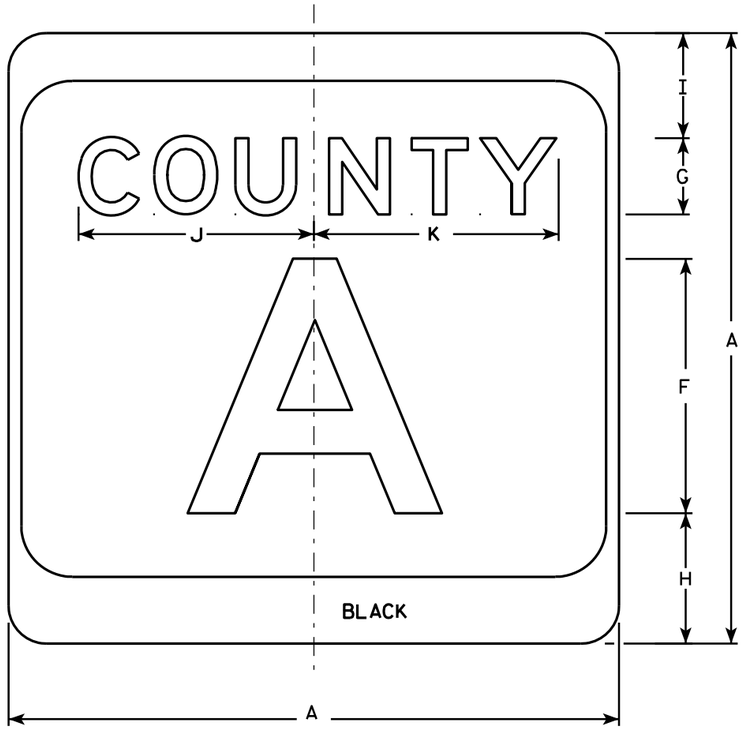
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

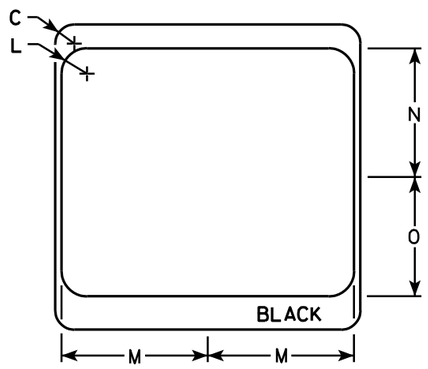
APPROVED Matthew R Rauch
for State Traffic Engineer

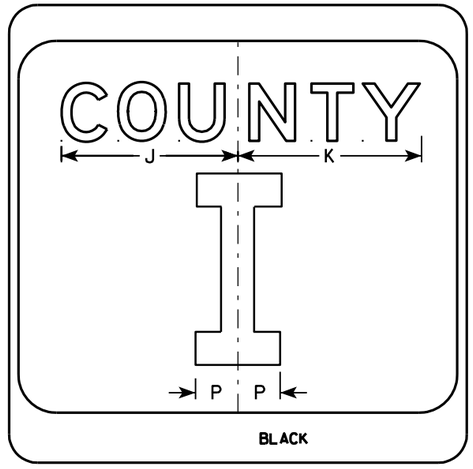
DATE 9/30/09 PLATE NO. G20-2A.8

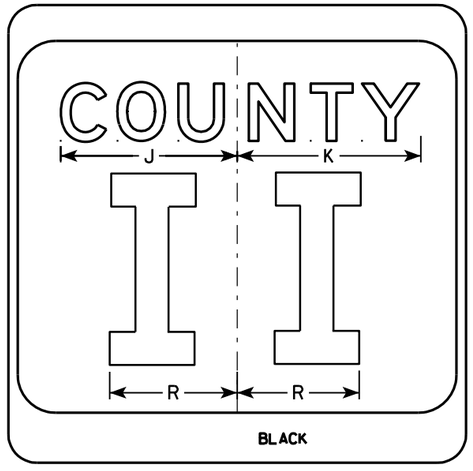
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 706	E



M1-5A







NOTES

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

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

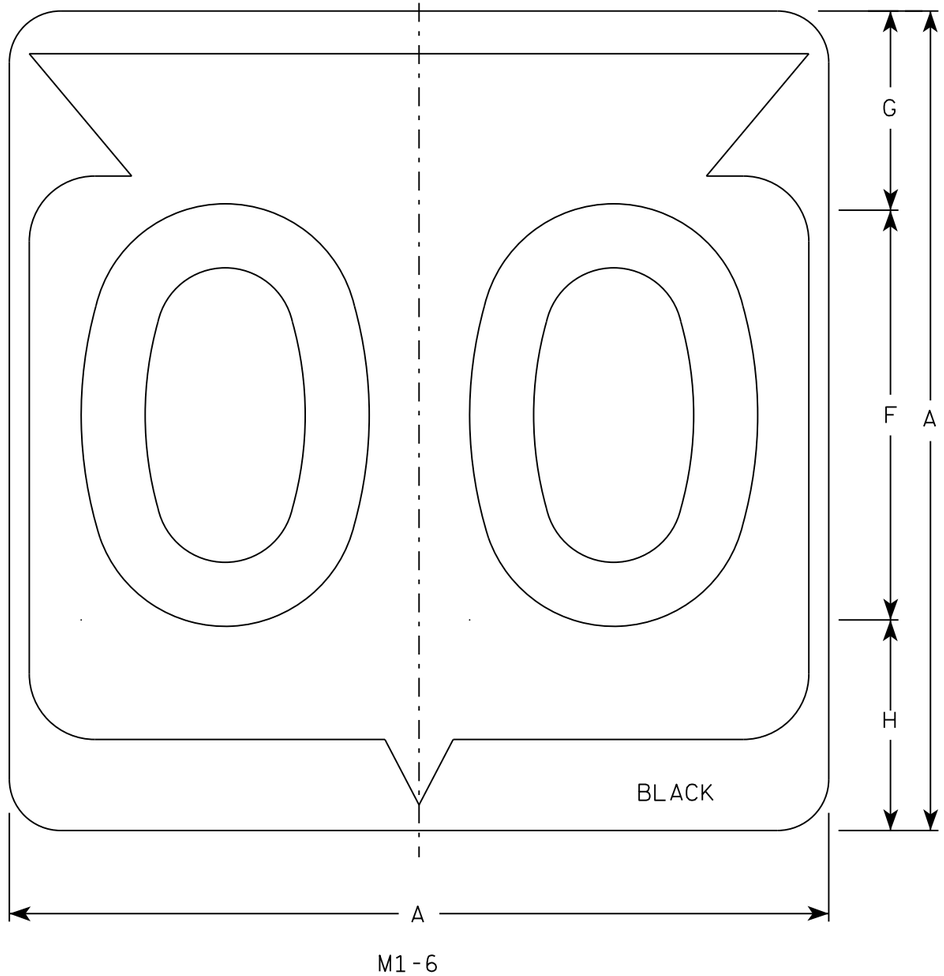
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

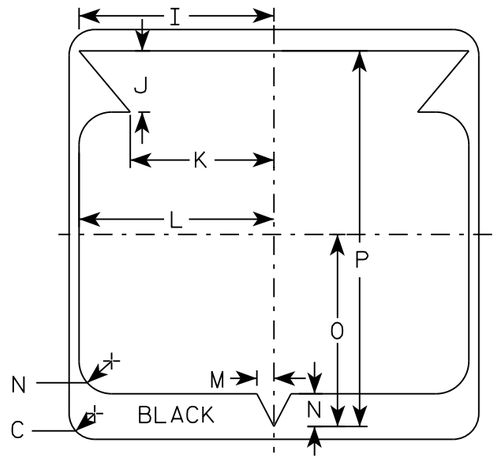
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 707	E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

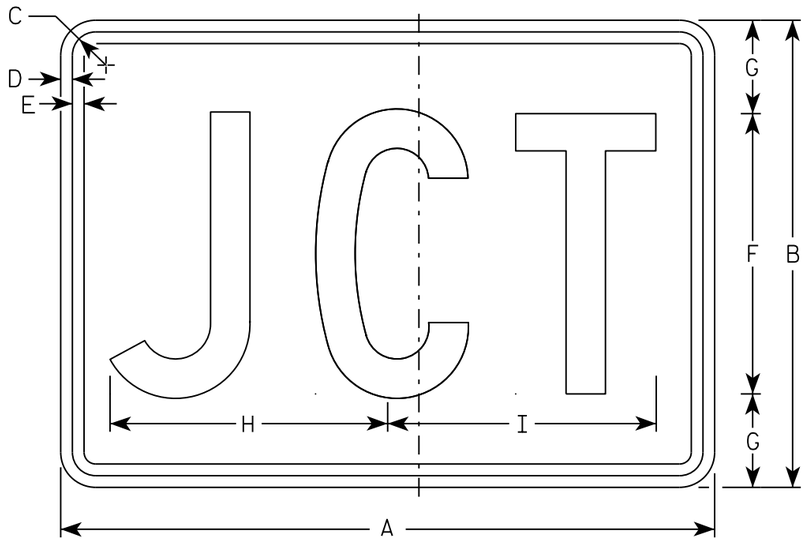
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

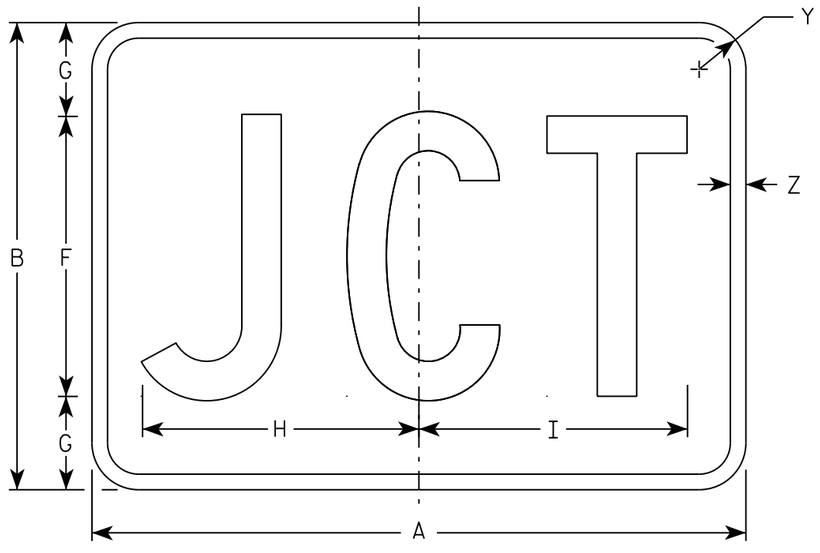
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 708	E



M2-1
MM2-1
MP2-1



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

NOTES

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

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

STANDARD SIGN
M2-1

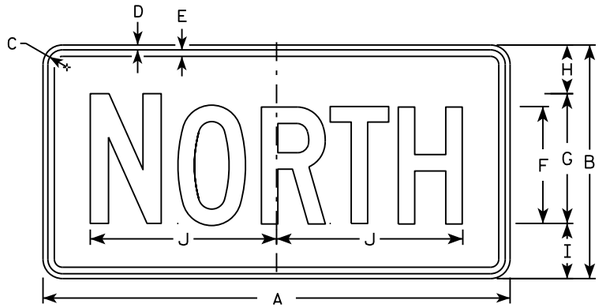
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

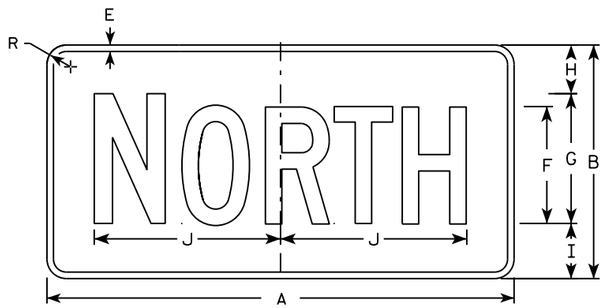
DATE 10/15/15 PLATE 709 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M3-1
MM3-1
MP3-1



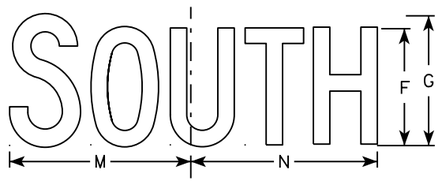
MB3-1
MK3-1
MN3-1



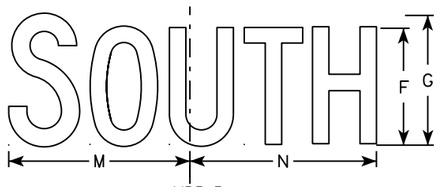
M3-2
MM3-2
MP3-2



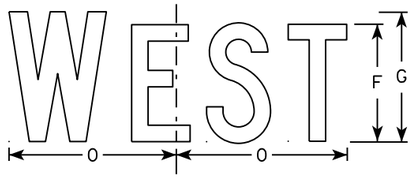
MB3-2
MK3-2
MN3-2



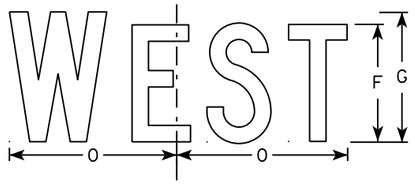
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

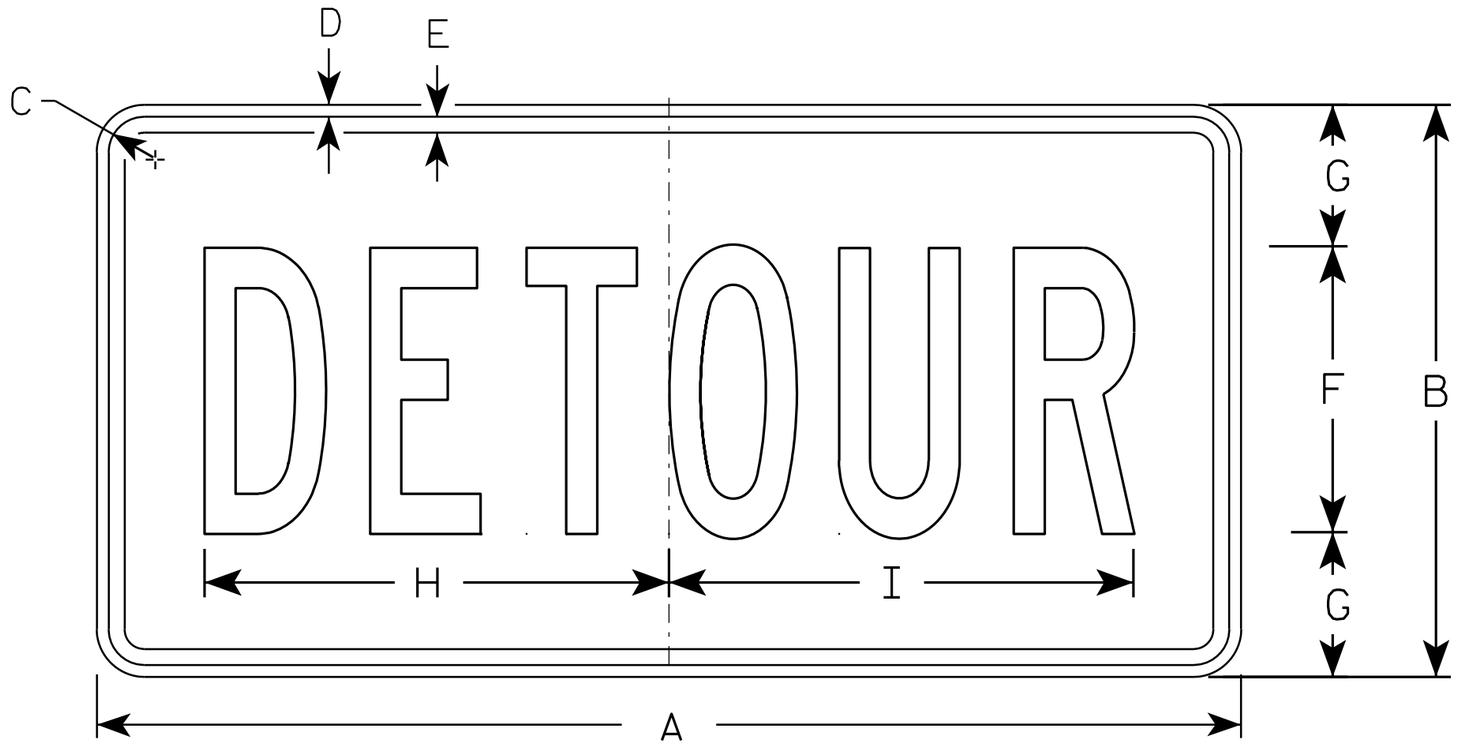
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

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

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



M4-8

NOTES

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

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

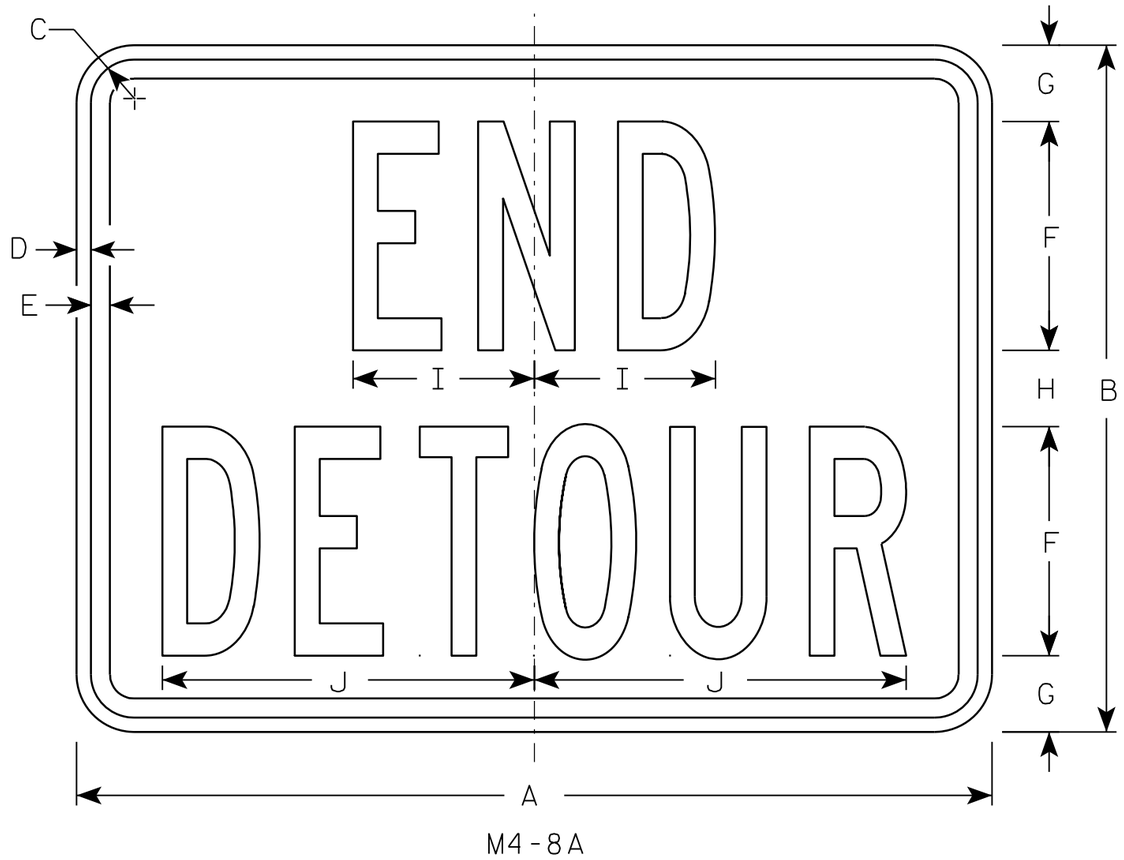
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 711	E



M4-8A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

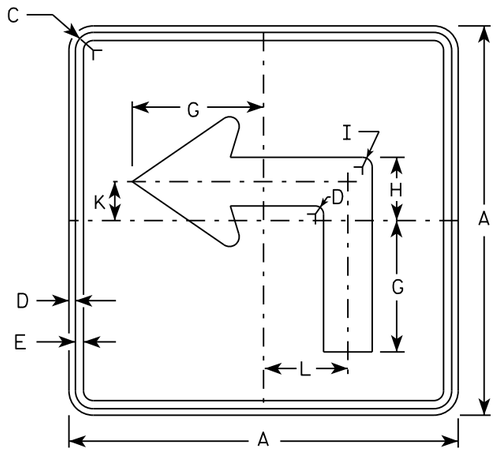
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

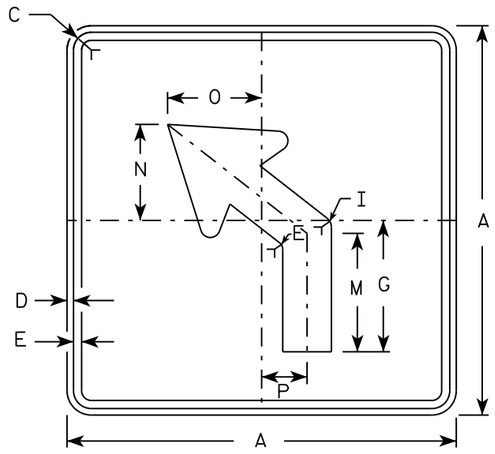
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

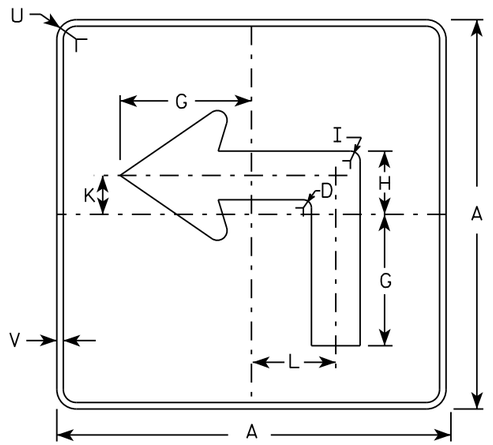
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 712	E



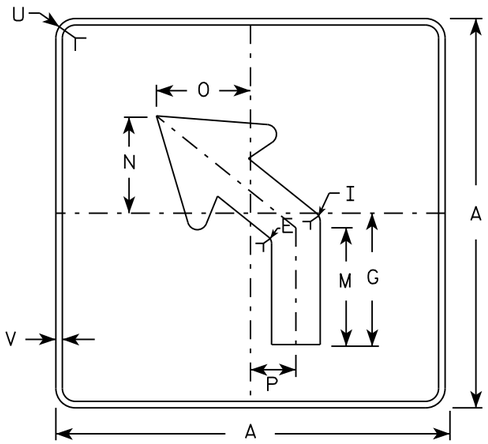
M5-1L
MM5-1L
MO5-1L
MP5-1L



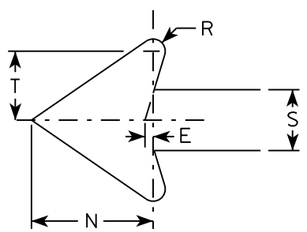
M5-2L
MM5-2L
MO5-2L
MP5-2L



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



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



NOTES

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

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

STANDARD SIGN
M5-1 & M5-2

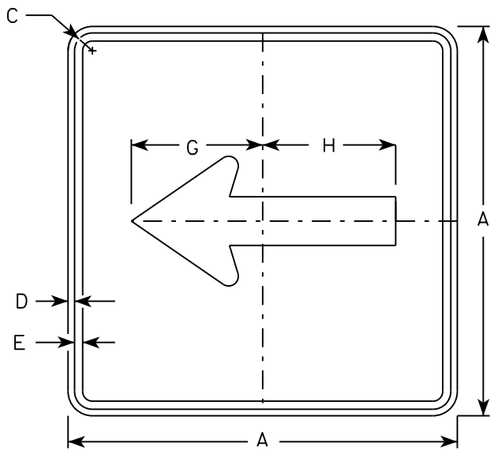
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

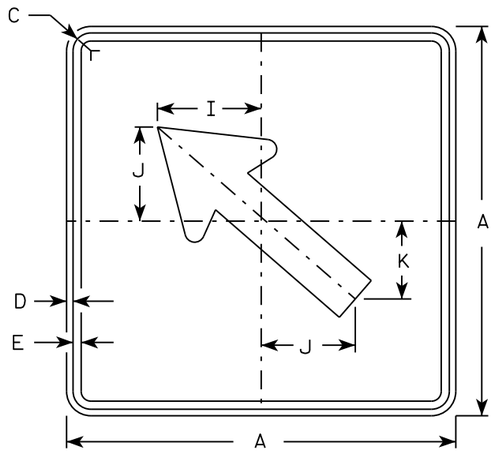
DATE 10/15/15 PLATE NO. M5-1.13

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

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



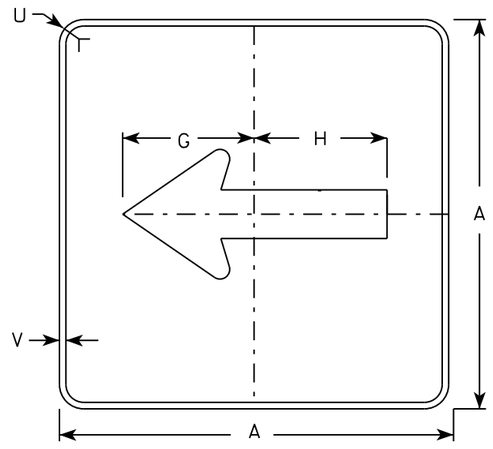
M6-1
MM6-1
MO6-1
MP6-1



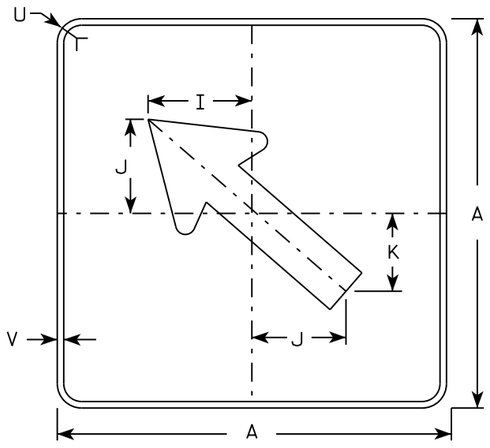
M6-2
MM6-2
MO6-2
MP6-2

NOTES

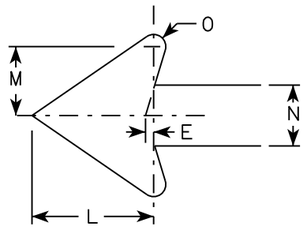
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



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

STANDARD SIGN
M6-1 & M6-2
SERIES

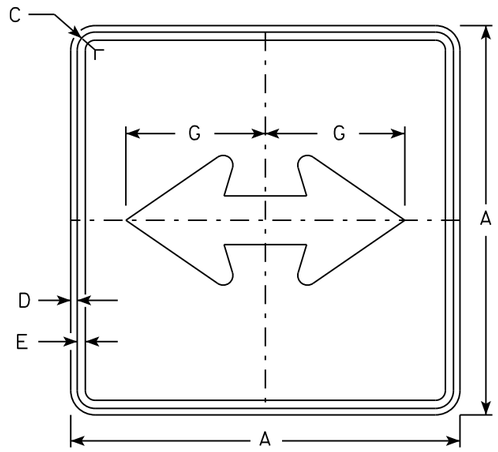
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

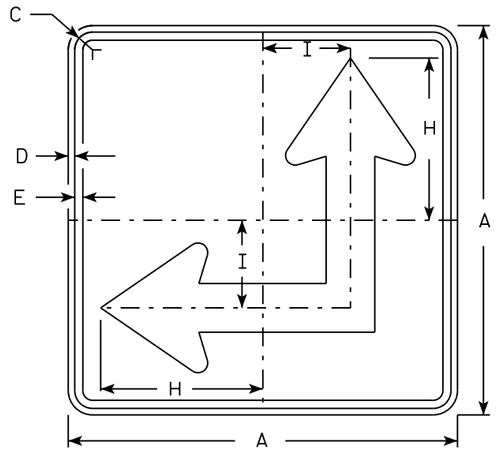
DATE 10/15/15 PLATE 714 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



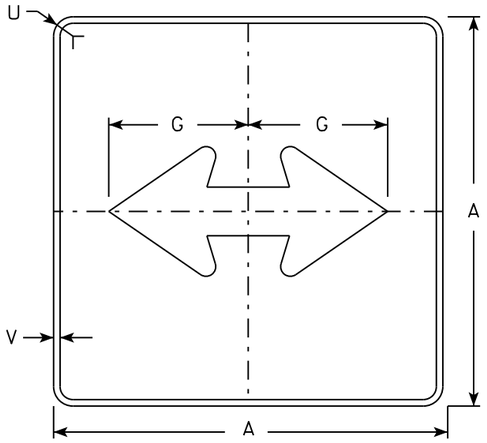
M6-4
MM6-4
MO6-4
MP6-4



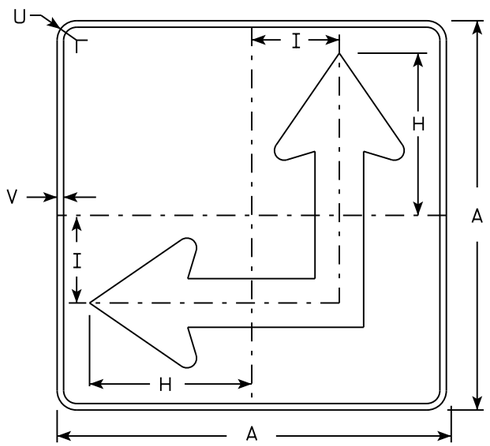
M6-6
MM6-6
MO6-6
MP6-6

NOTES

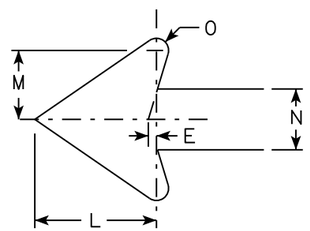
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-4 & M6-6
SERIES

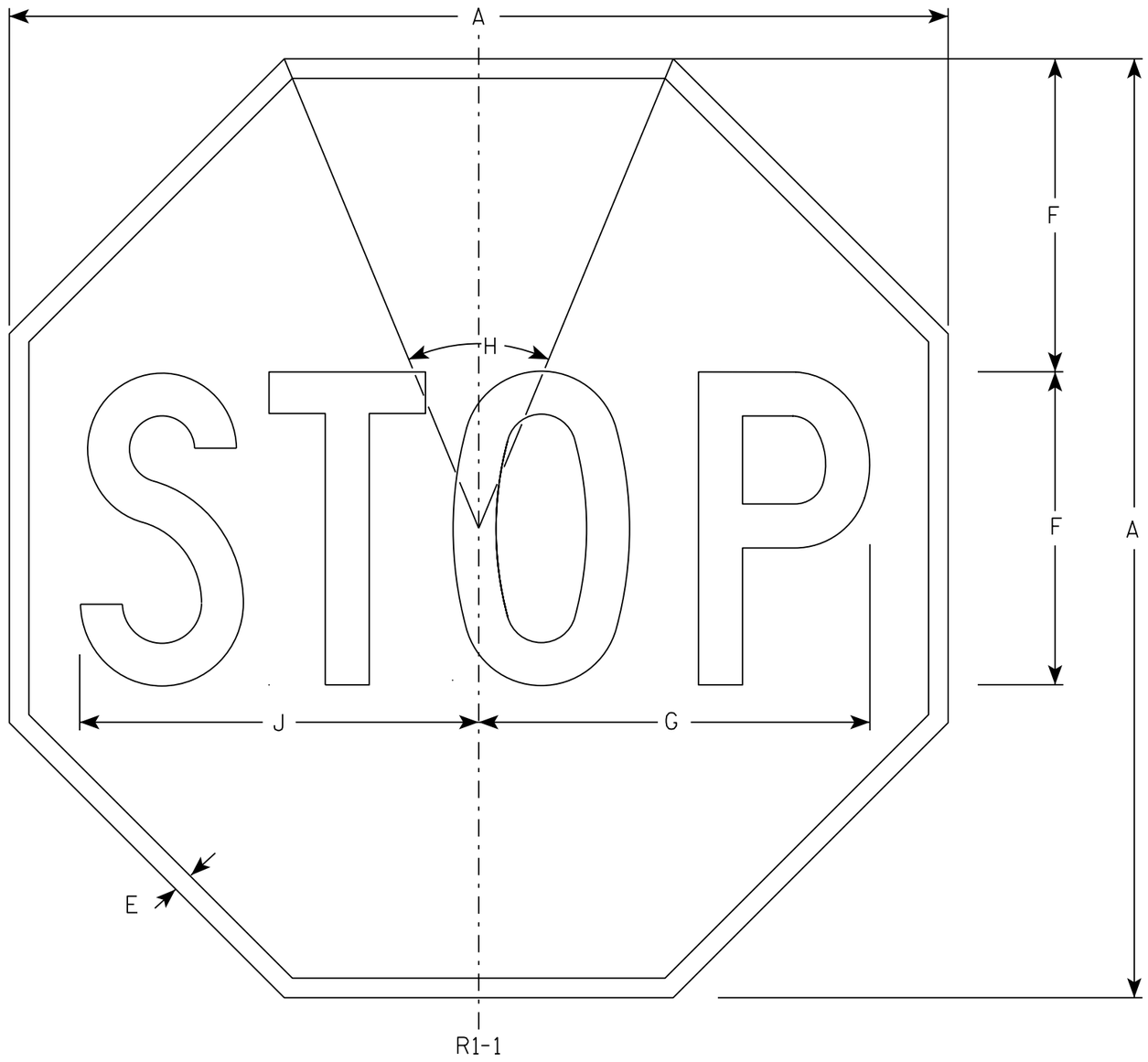
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 715 M6-4.10

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

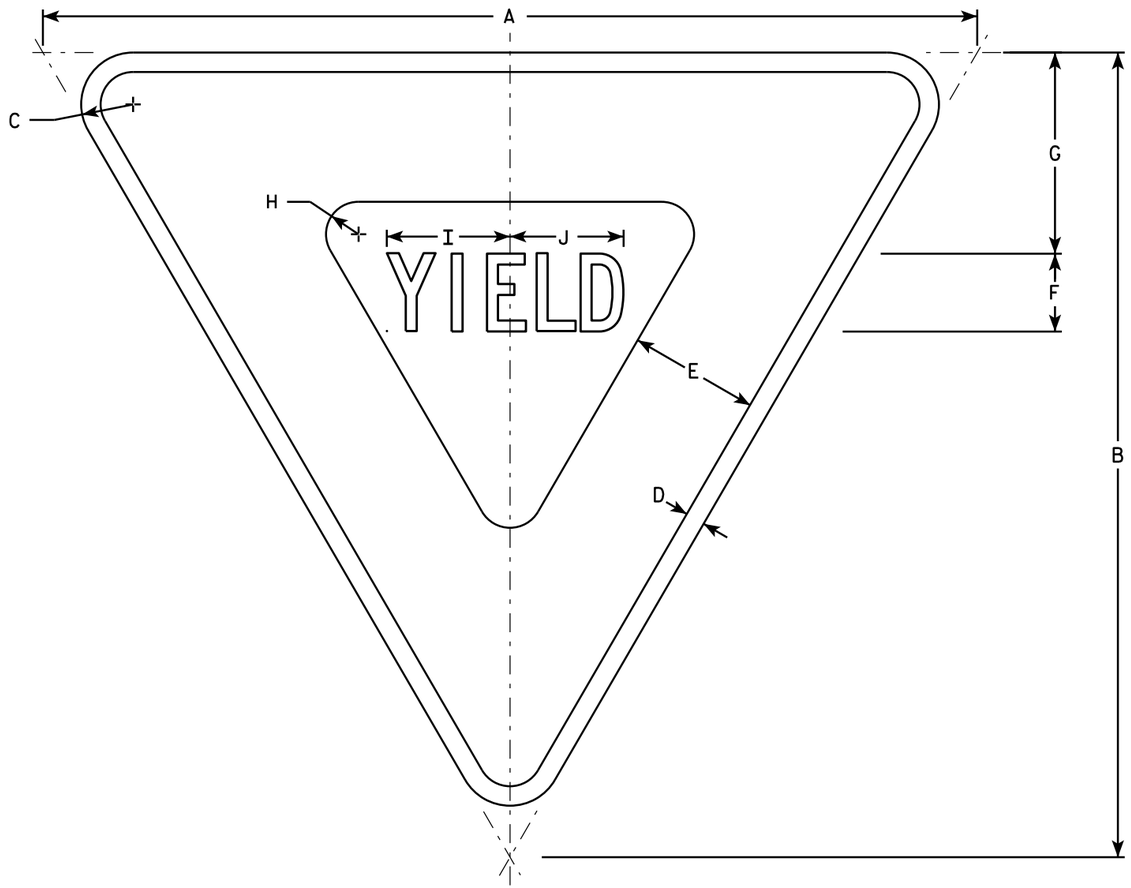
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 716	E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

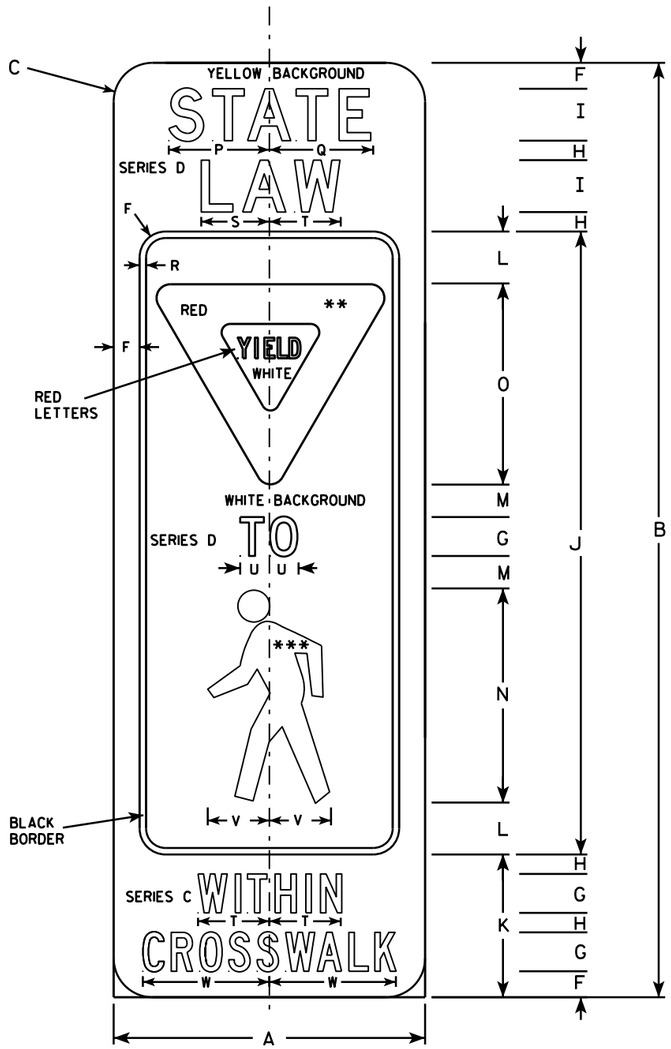
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE P1-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R1-6

** INSERT R1-2 AND SIZE TO FIT

*** INSERT W11-2 AND SIZE TO FIT

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - YELLOW
   Message - BLACK
   YIELD SYMBOL - RED ON WHITE
   PED SYMBOL - BLACK ON WHITE
3. Message Series - AS SHOWN AND IN TABLE
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36	1 ½			1	1 ½C	¾	2 D	24	5 ½	2	1 ¼	8 ¼	7 ¾	3 ⅞	4	¼	2 ⅝	2 ¾	1 ⅛	2 ⅜	4 ⅞				3.0
2M	12	36	1 ½			1	1 ½C	¾	2 D	24	5 ½	2	1 ¼	8 ¼	7 ¾	3 ⅞	4	¼	2 ⅝	2 ¾	1 ⅛	2 ⅜	4 ⅞				3.0
3																											
4																											
5																											

STANDARD SIGN
R1-6

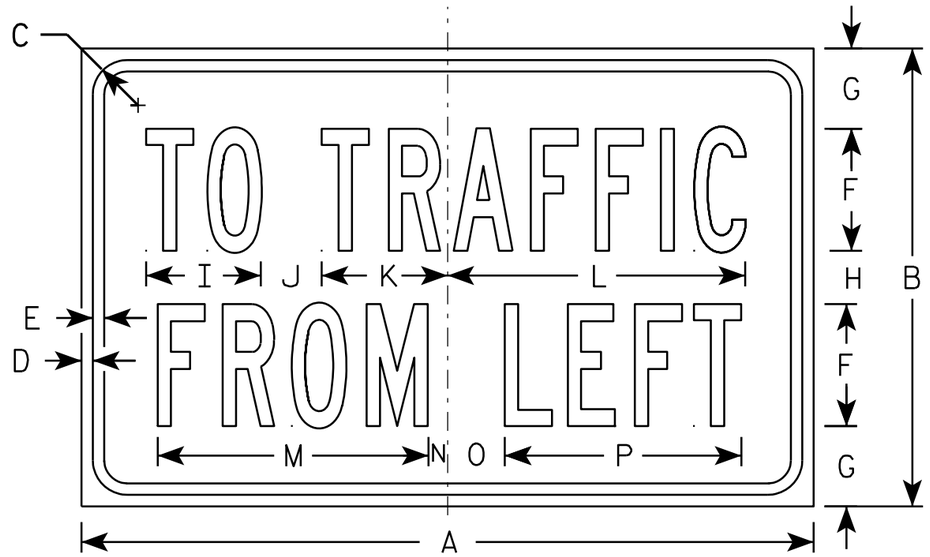
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/29/14 PLATE NO. R1-6.3

PROJECT NO:

SHEET NO: E



R1-54

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
2M	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
3																											
4																											
5																											

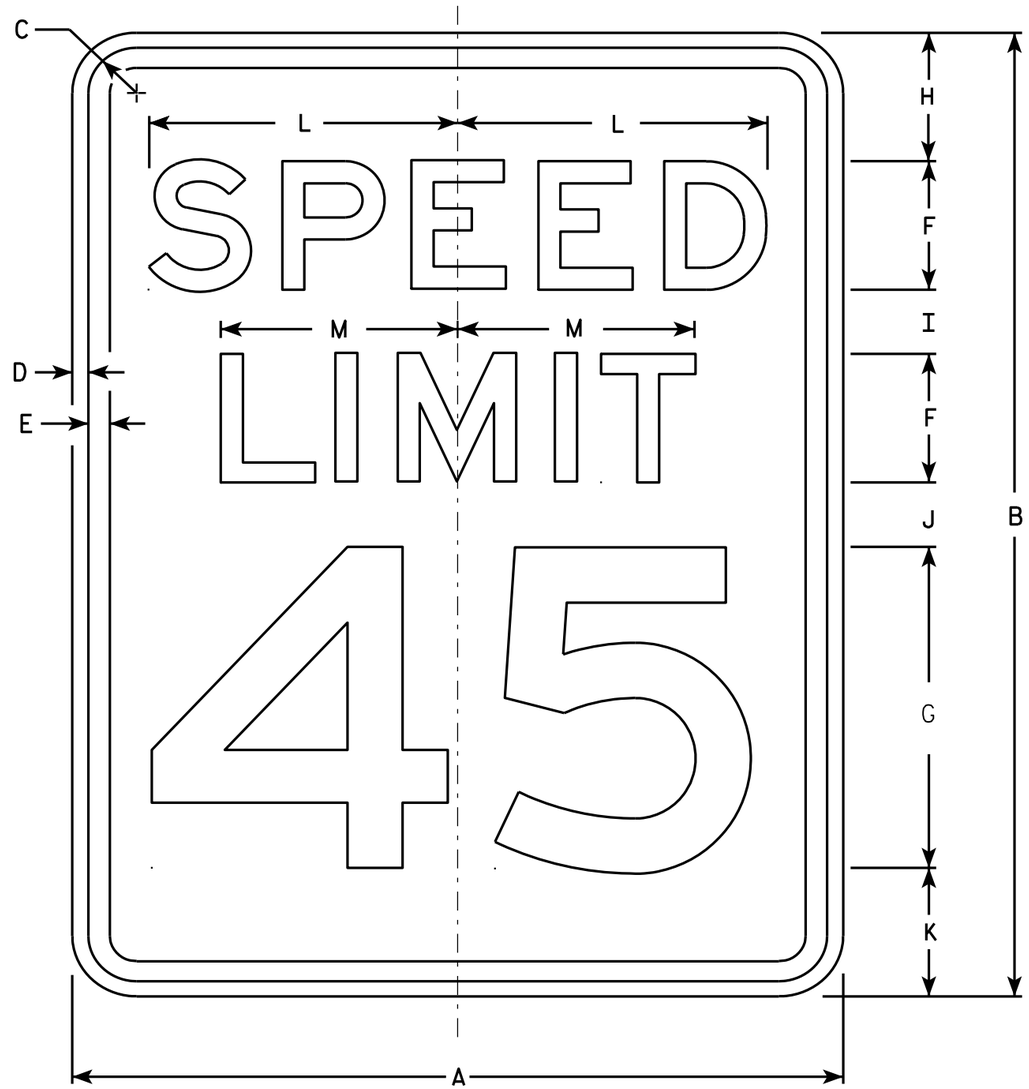
STANDARD SIGN
R1-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-54.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 719	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

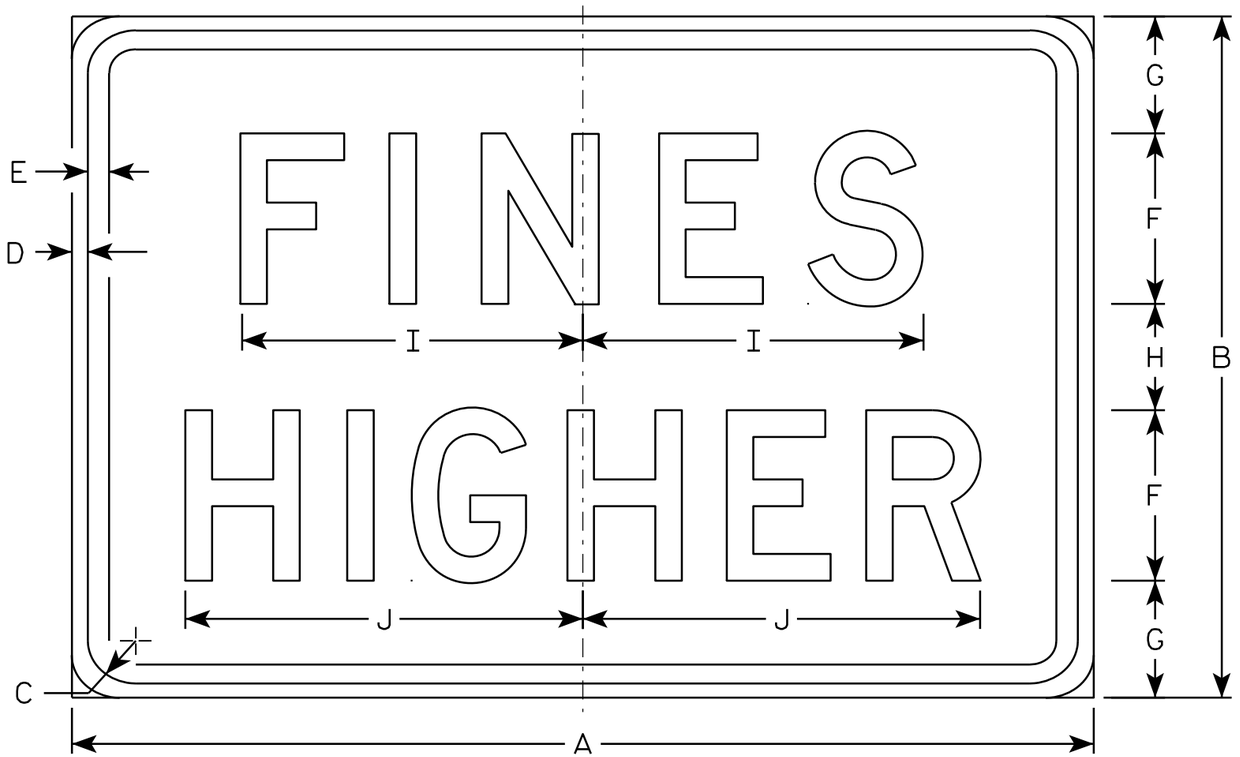
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 720	E



R2-6P

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

STANDARD SIGN
R2-6P

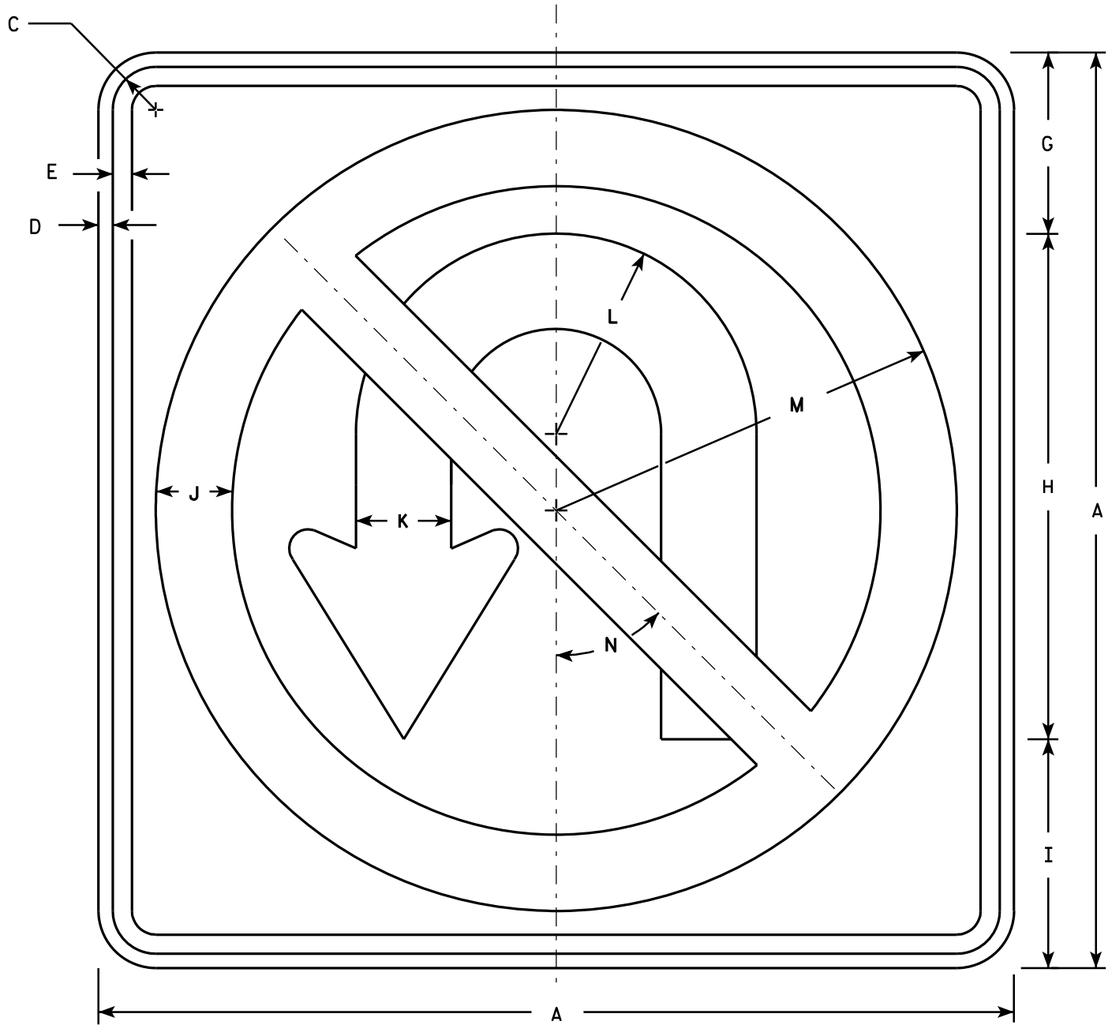
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 721 | E

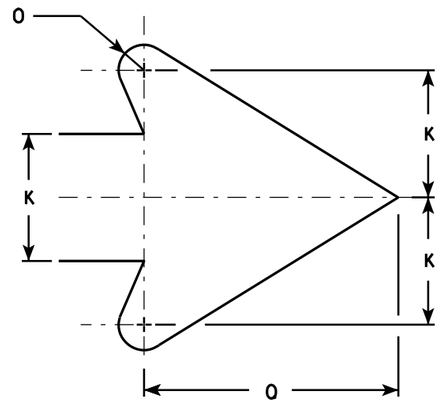
7



R3-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		4 3/4	13 1/4	6	2	2 1/2	5 1/4	10 1/2	45°	1/2		5										4.0
2M	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
3	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
4	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
5	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0

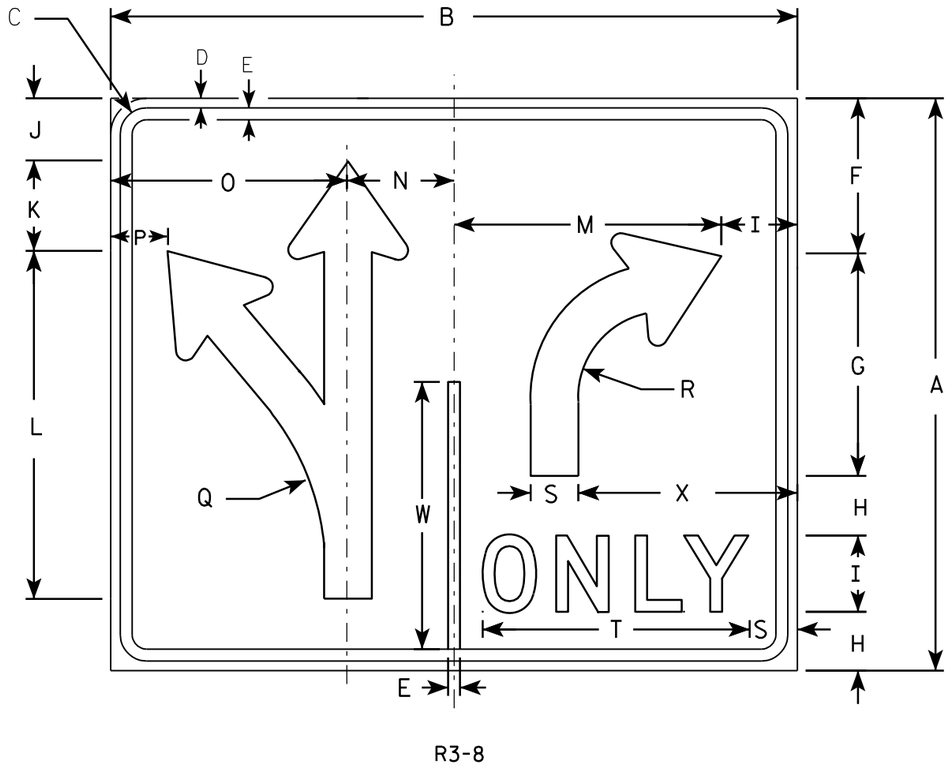
STANDARD SIGN
R3-4

WISCONSIN DEPT OF TRANSPORTATION

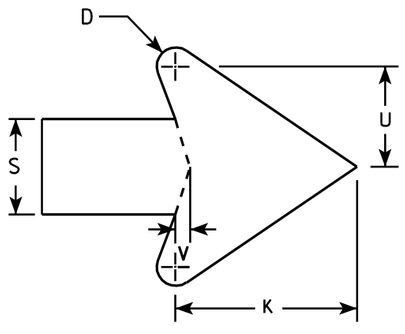
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 722	E



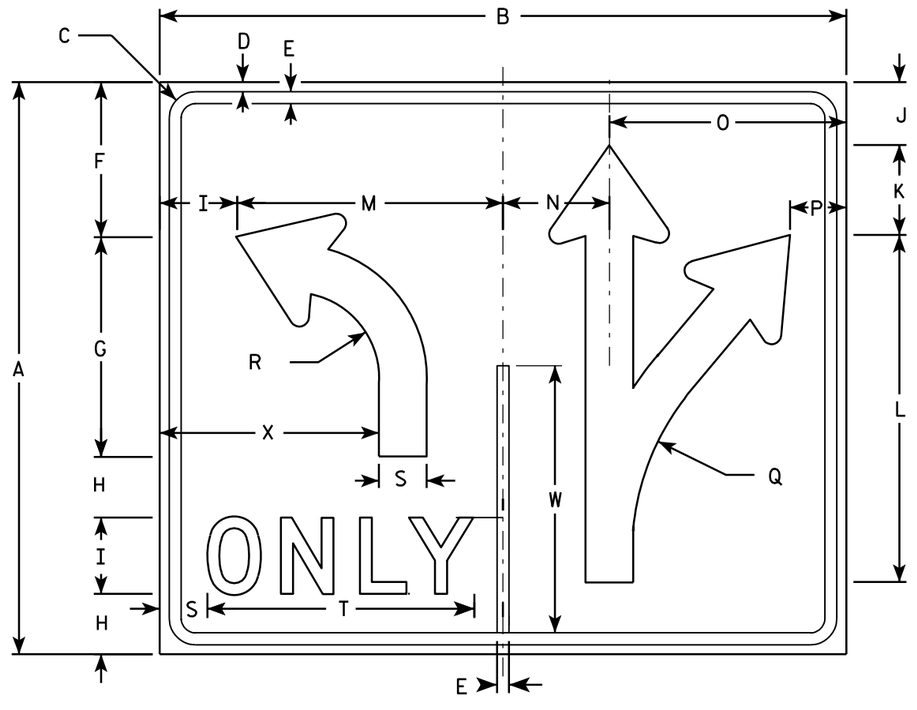
R3-8



ARROW DETAIL

NOTES

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



R3-8A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0

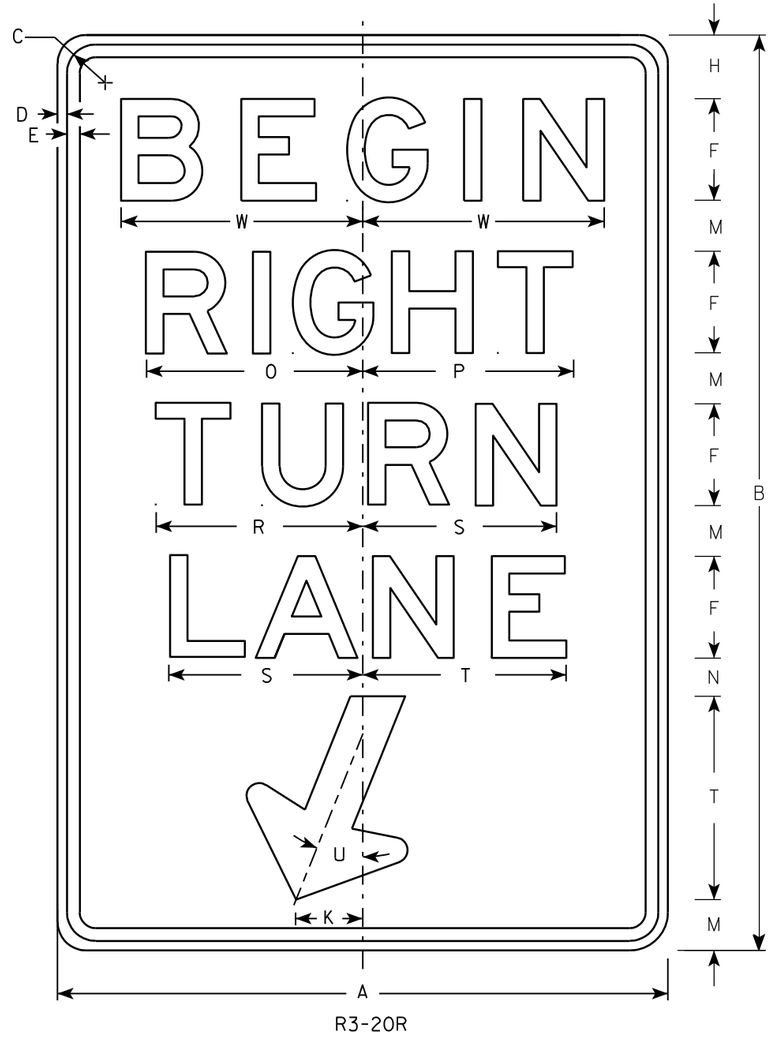
STANDARD SIGN
R3-8 & R3-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8.5

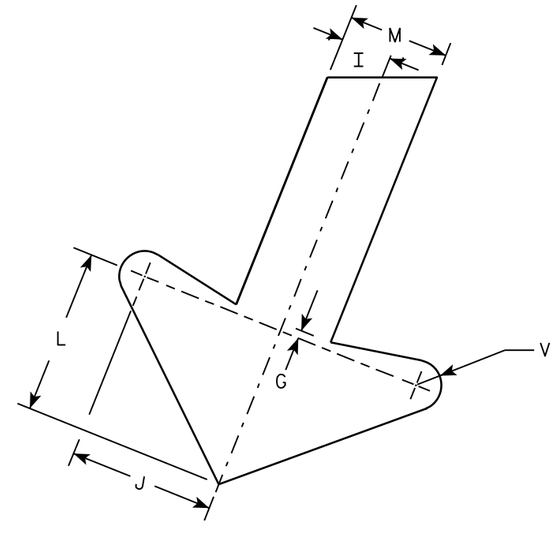
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 723	E



R3-20R

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

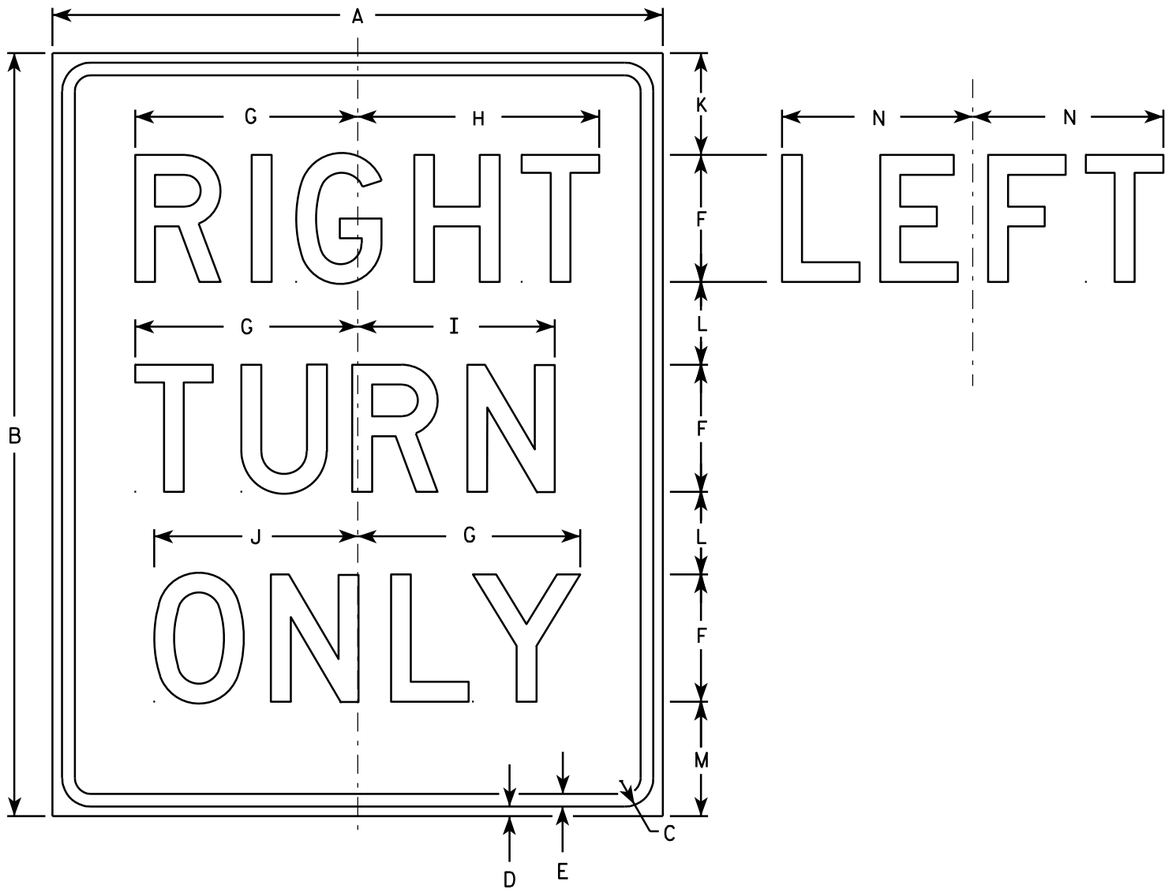
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 724 | E



R3-53R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R3-53L same as R3-53R except LEFT is substituted for RIGHT.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
2M	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
3	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
4																											
5																											

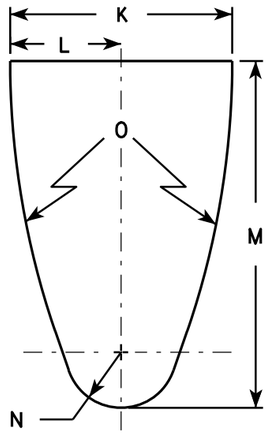
STANDARD SIGN
R3-53

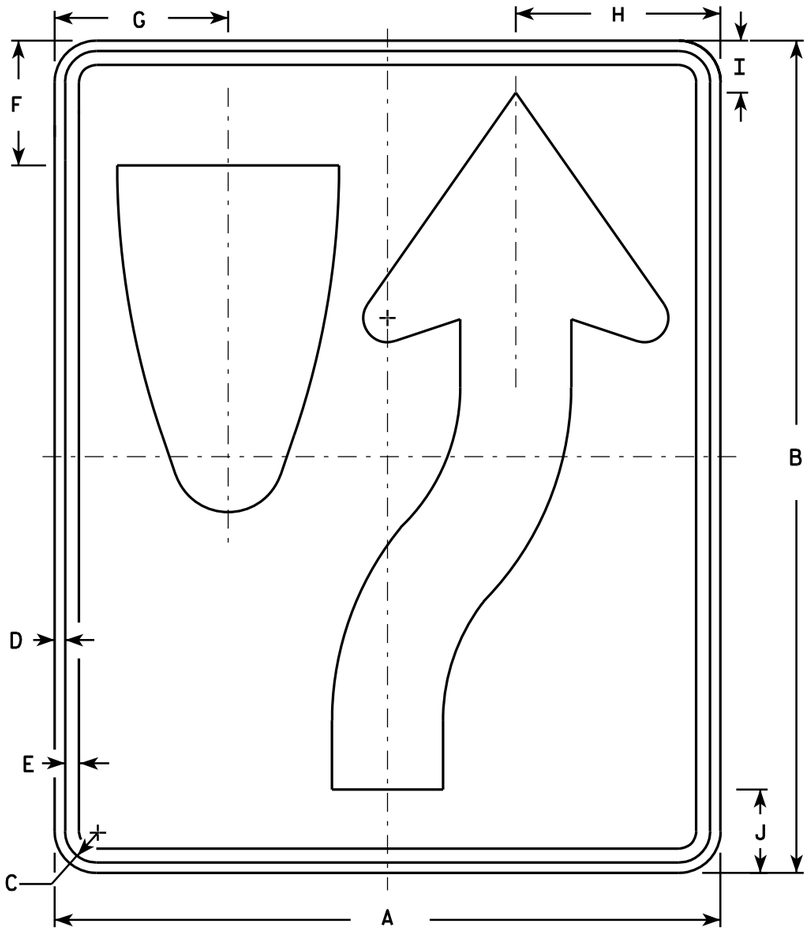
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-53.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 725	E

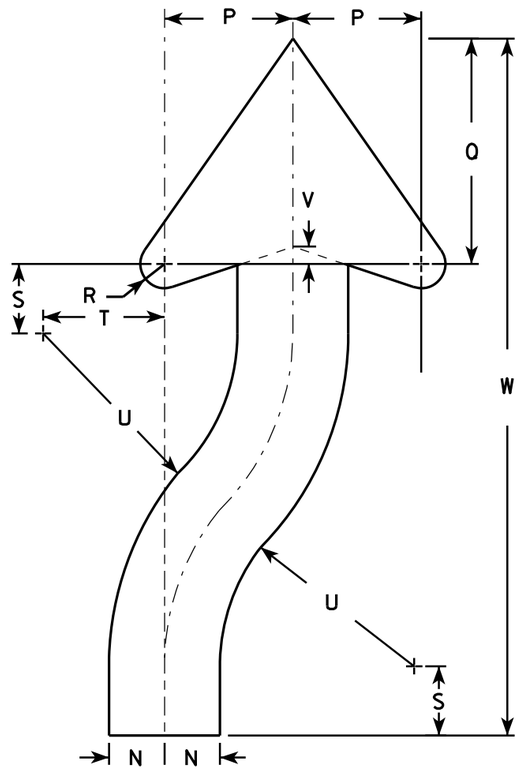




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

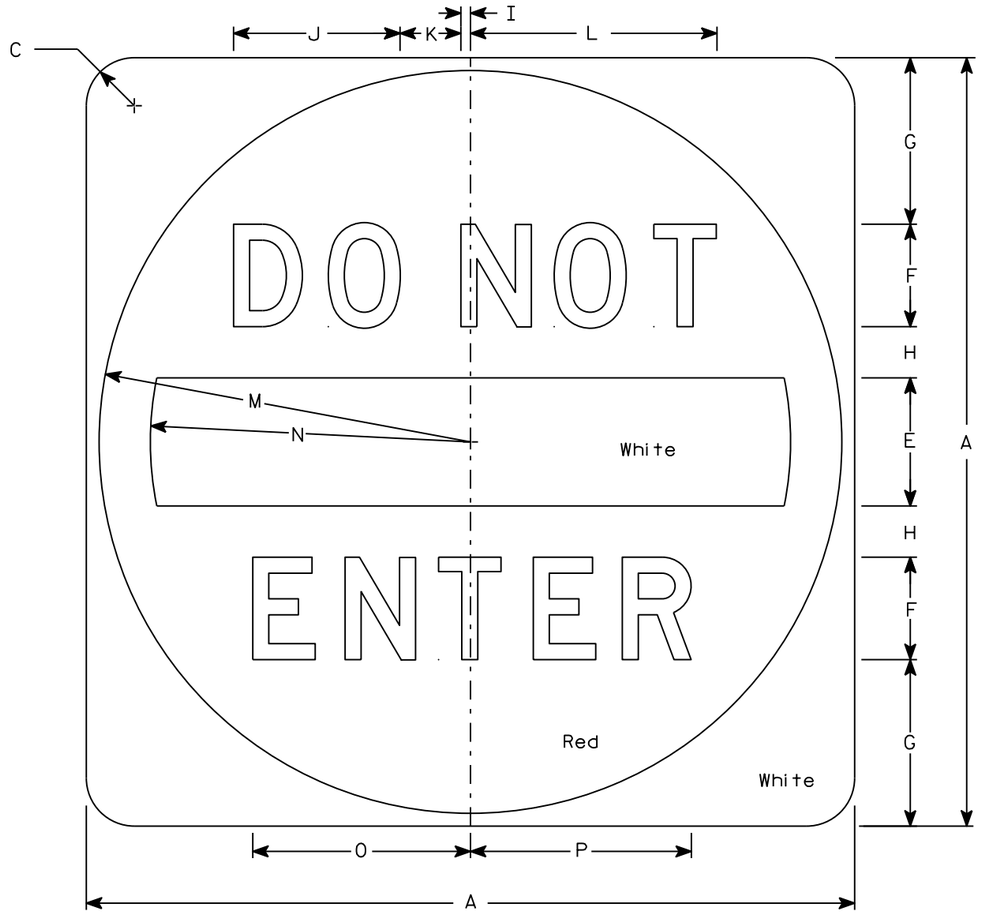
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 726	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

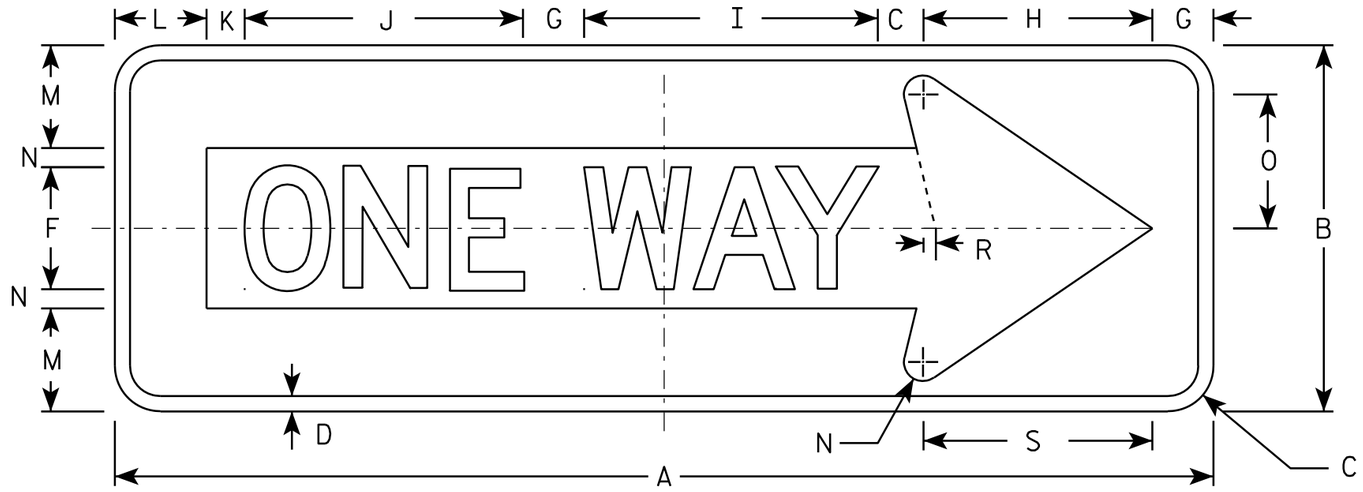
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

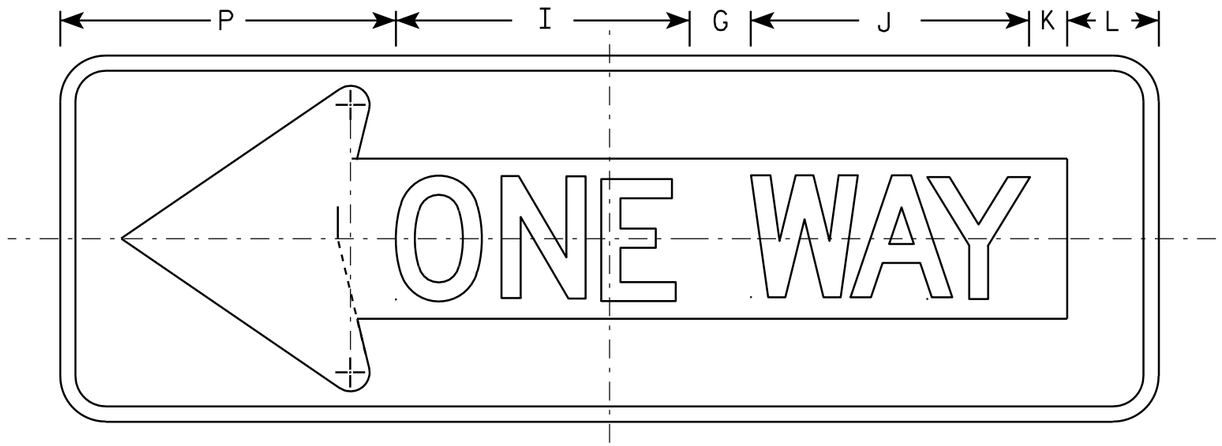
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 727 | E



R6-1R

NOTES

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



R6-1L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 ½	½		4	2	7 ½	9 ⅝	9 ⅛	1 ¼	3	3 ⅜	⅝	4 ⅜	11		⅜	7 ½								3.0
2M	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
3	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
4	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
5																											

STANDARD SIGN
R6-1 L & R

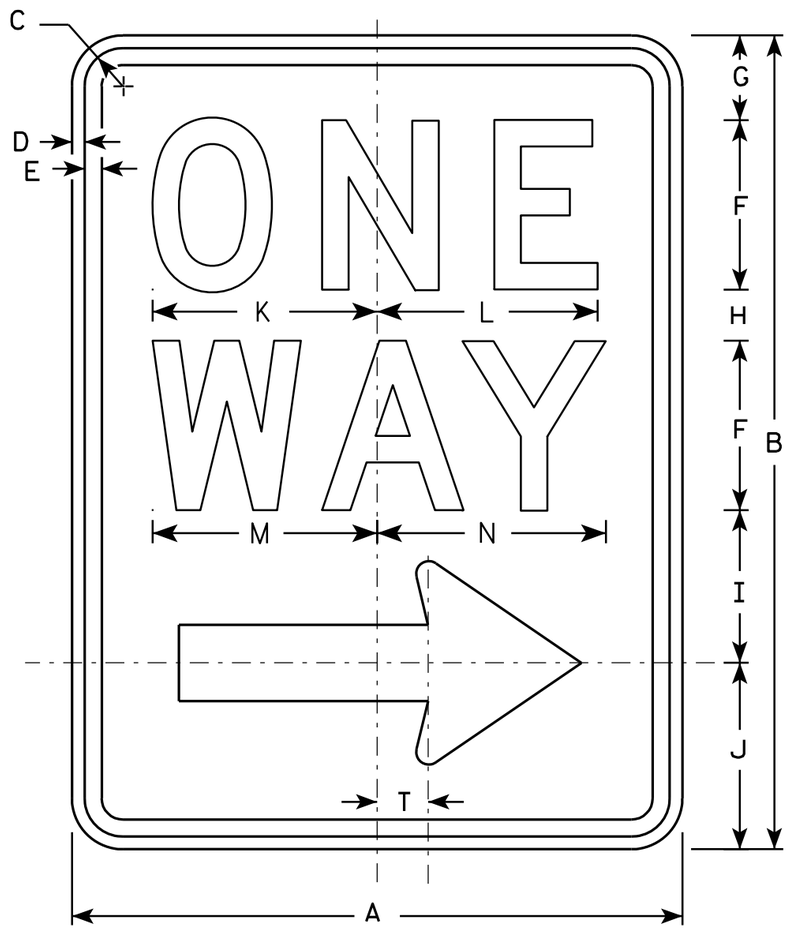
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R6-1.2

PROJECT NO:

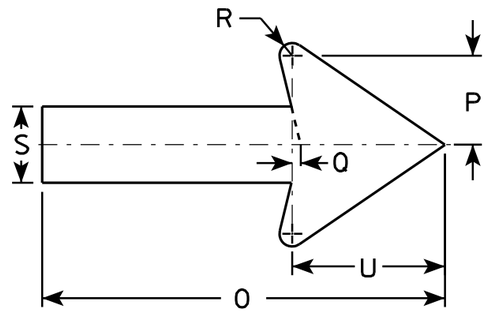
SHEET NO: 728 E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

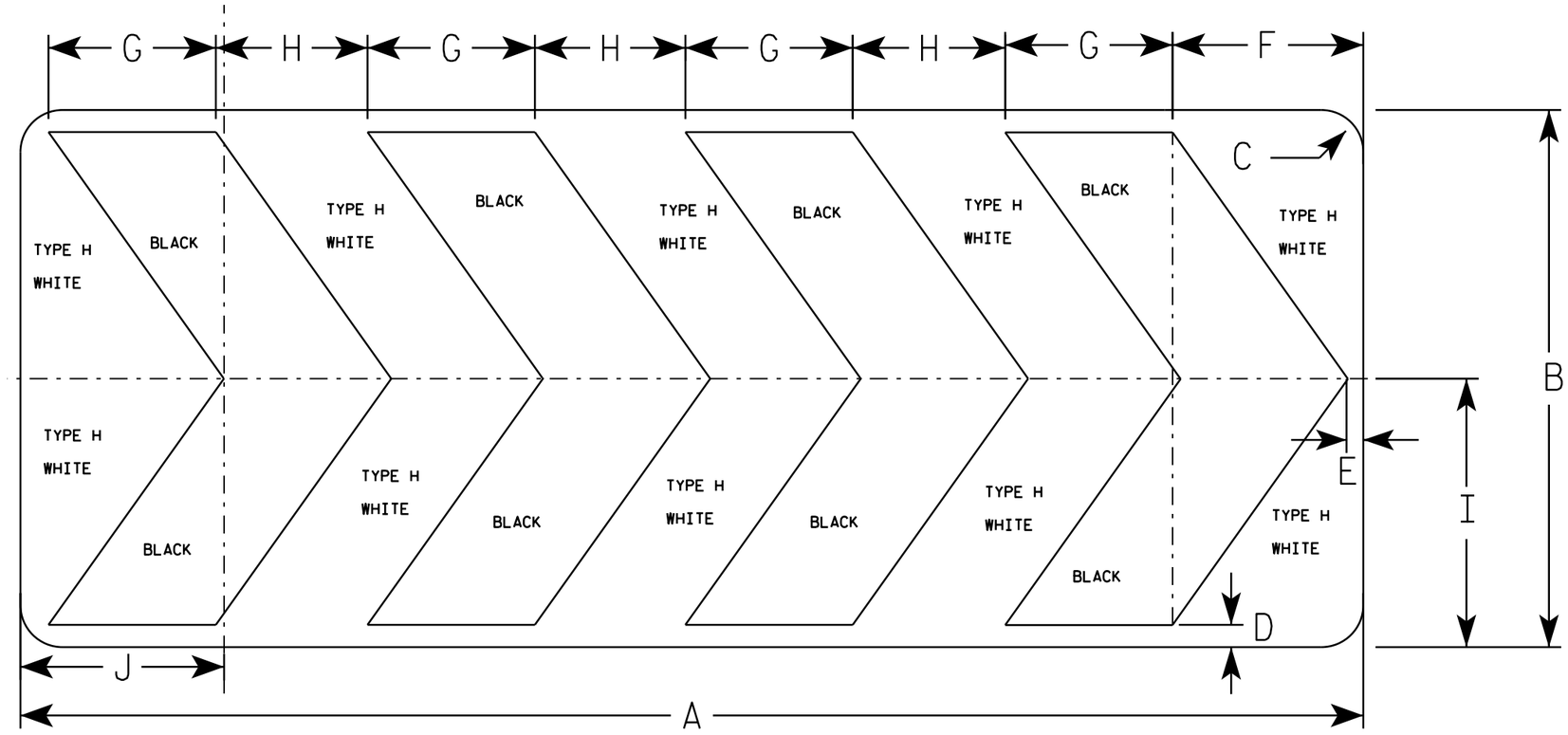
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 729	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - BLACK
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-4B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

STANDARD SIGN
R6-4B

WISCONSIN DEPT OF TRANSPORTATION

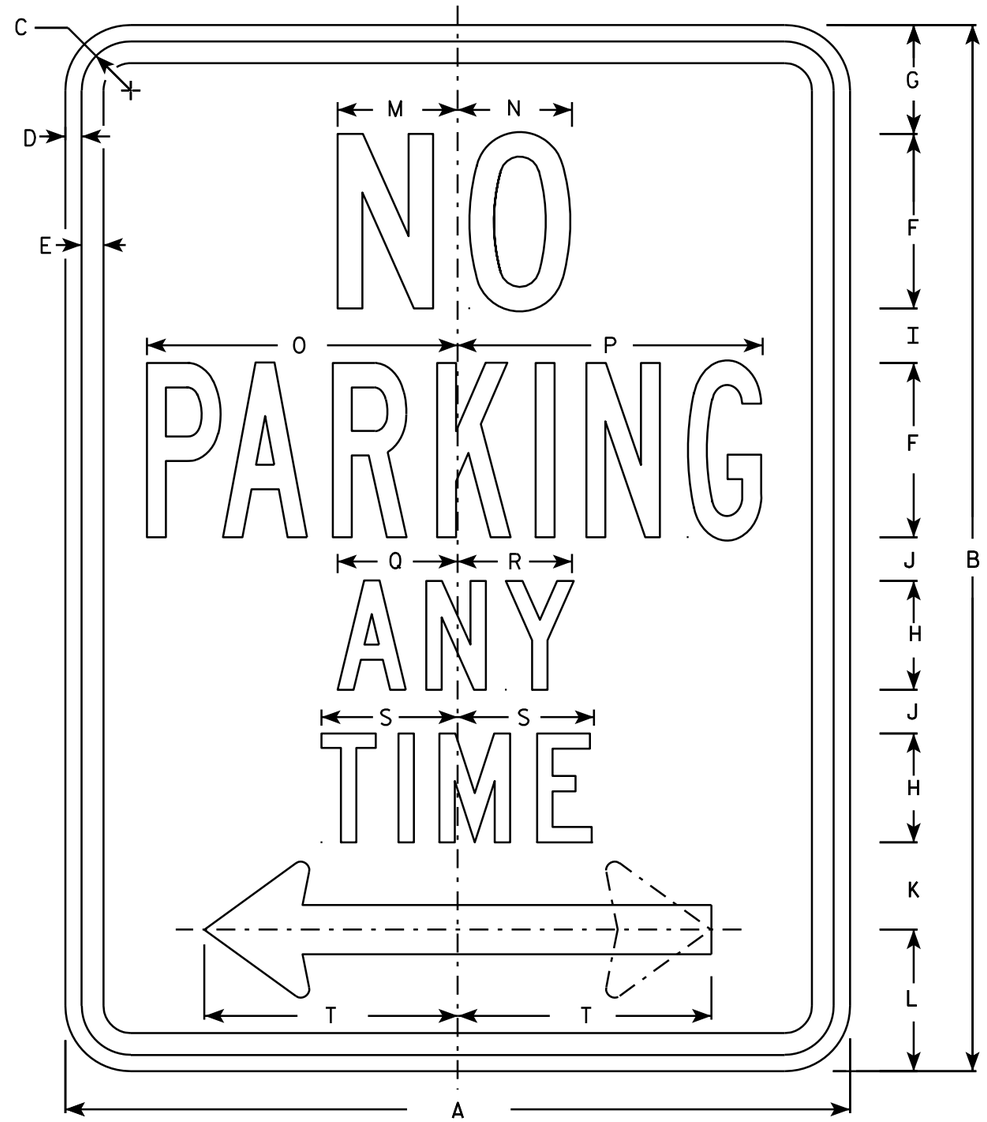
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/14 PLATE NO. R6-4.3

PROJECT NO: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R64B.DGN PLOT DATE : 21-AUG-2014 15:01 PLOT BY : mscsja

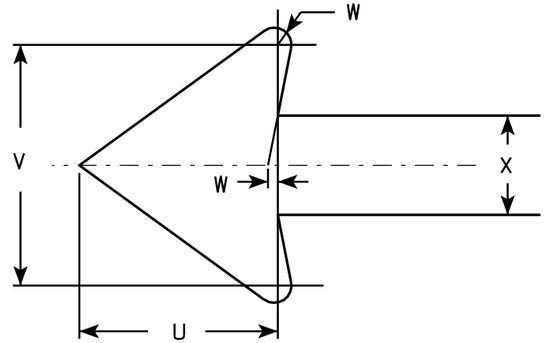
WISDOT/CADDS SHEET 42



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

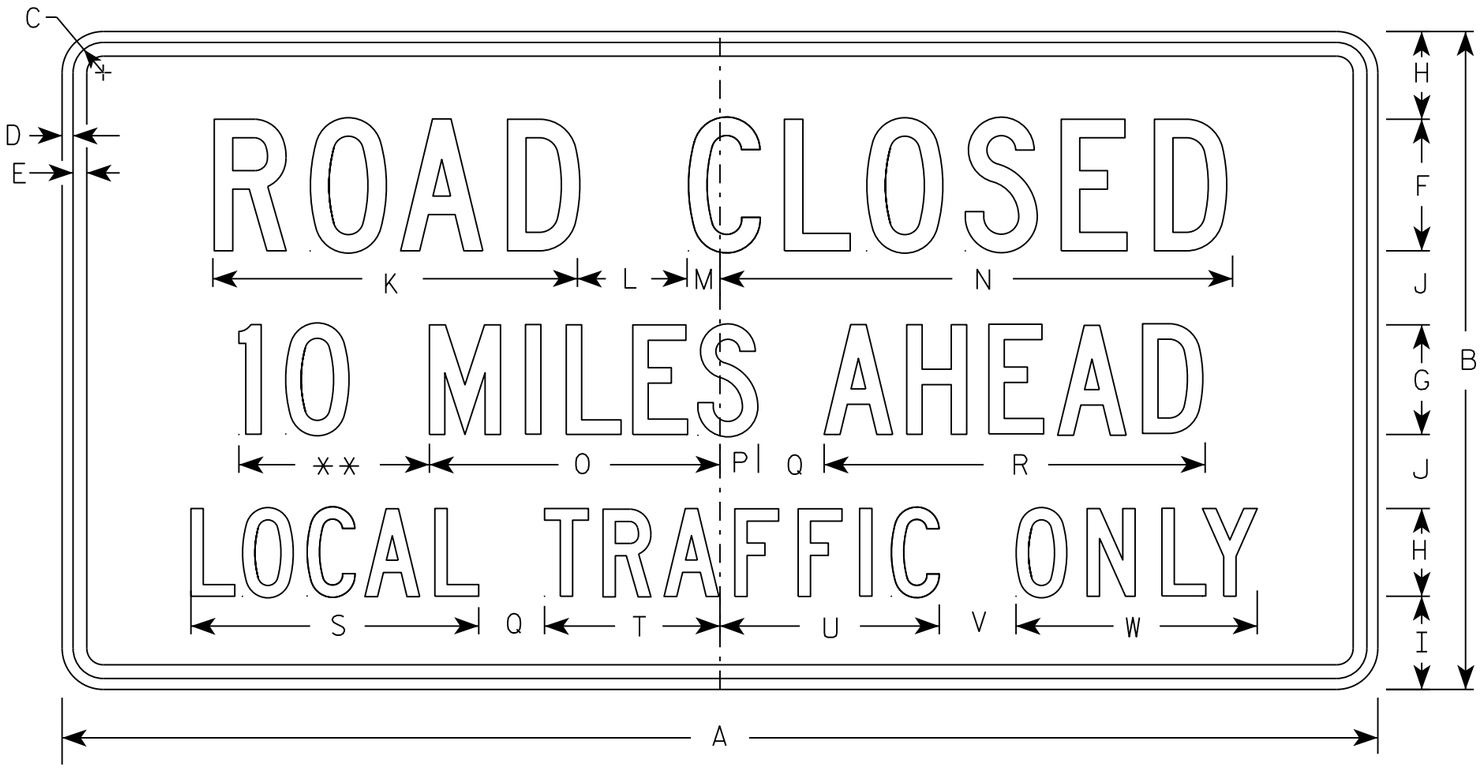
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 731	E

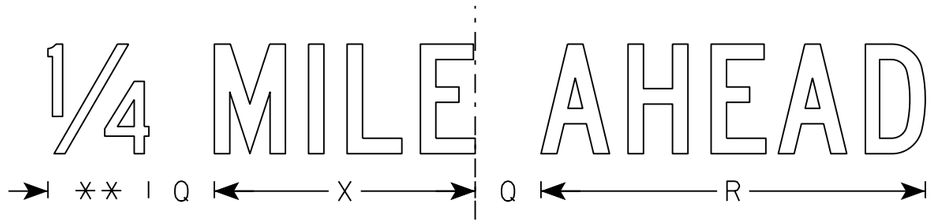
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4	7 1/8			4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
3																											
4																											
5																											

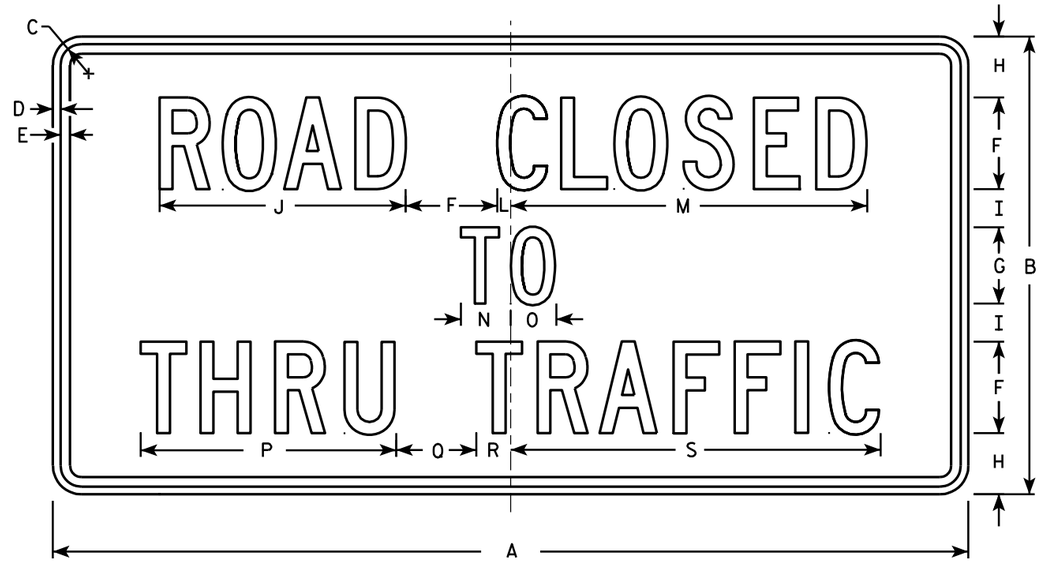
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/17 PLATE NO. R11-3.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 732	E



R11-4

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

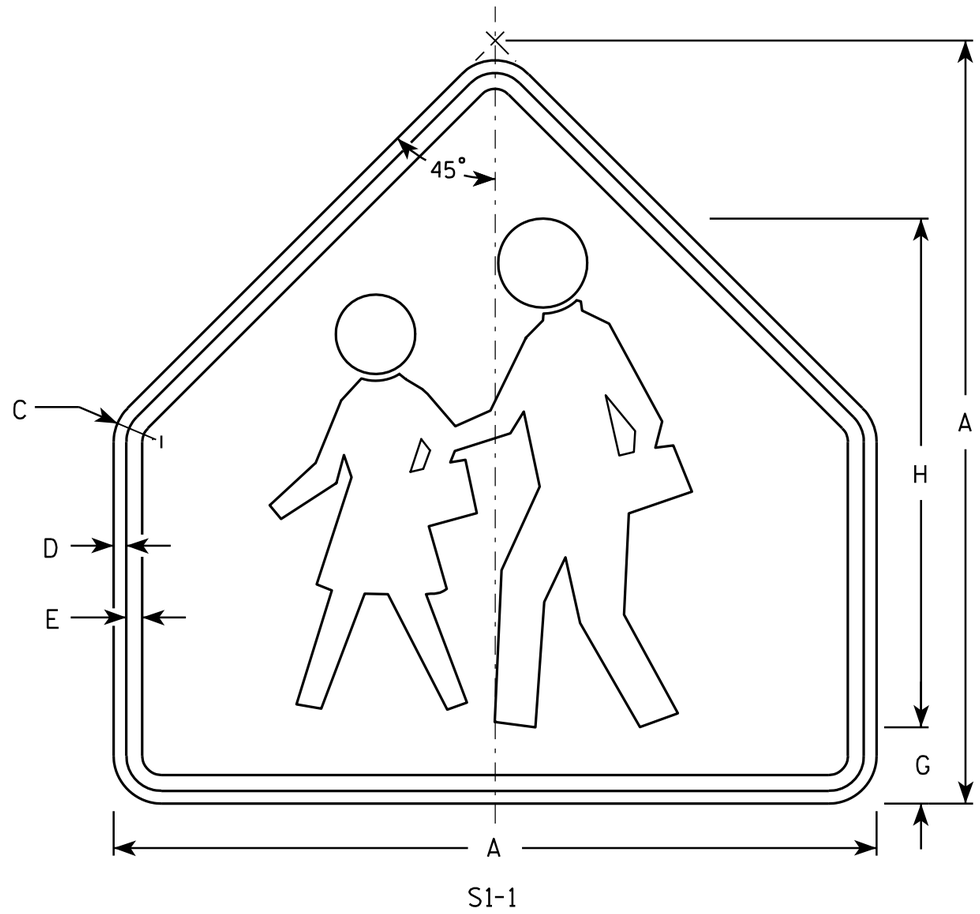
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 733	E



S1-1

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

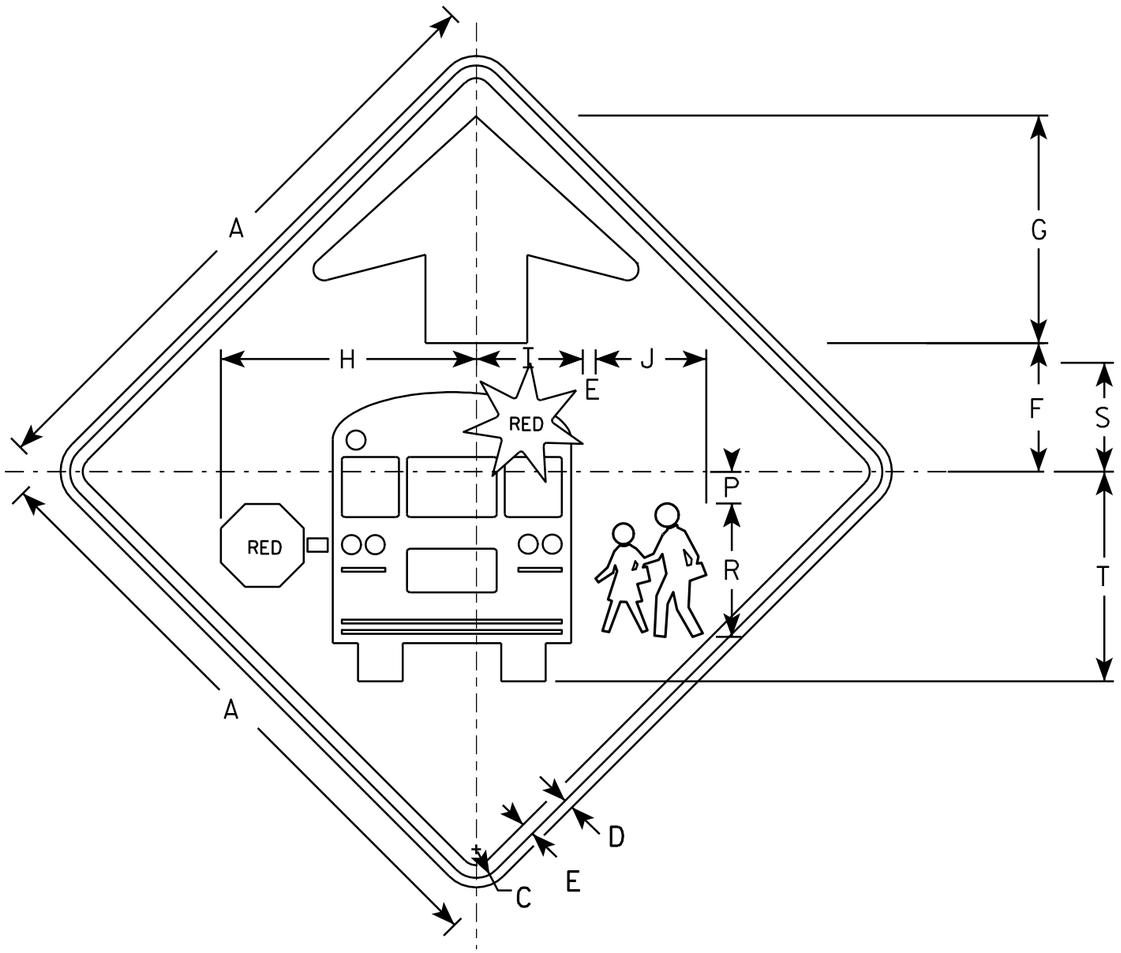
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/05 PLATE NO. S1-1.8

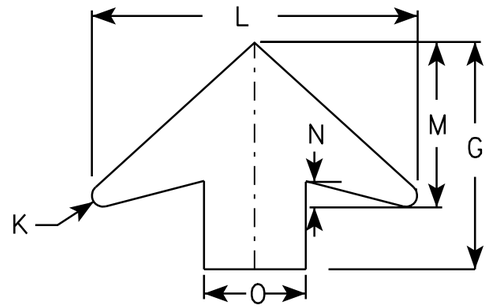
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 734	E



S3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW-GREEN
   Message - BLACK except as noted
   Circles except PEDS- RED BACKGROUND
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	12 1/2	5 1/4	5 1/2	1/2	16	8	1 1/4	5	1 1/2		6 5/8	5 3/8	10 3/8							6.25
2	36		1 5/8	5/8	3/4	7 1/2	13 1/2	15 1/8	6 1/4	6 1/2	5/8	19 1/4	9 3/4	1 5/8	6	1 7/8		7 7/8	6 3/8	12 3/8							9.0
3	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
4	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
5																											

STANDARD SIGN
S3-1

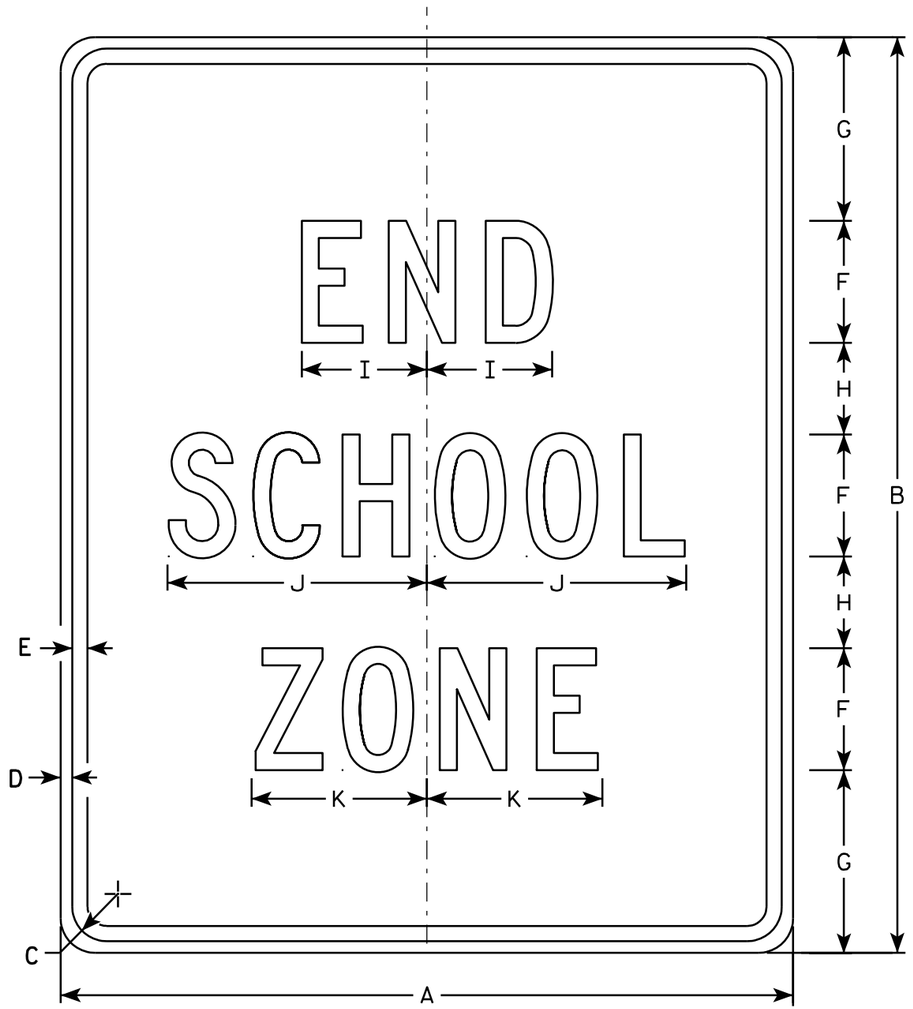
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/8/10 PLATE NO. S3-1.6

PROJECT NO:

SHEET NO: 735 E



S5-2

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	30	1 1/8	3/8	1/2	4	6	3	4 1/8	8 1/2	5 3/4																5.0
3	36	42	1 5/8	5/8	3/4	6	7	5	6 1/8	12 5/8	8 5/8																10.5
4																											
5																											

STANDARD SIGN
S5-2

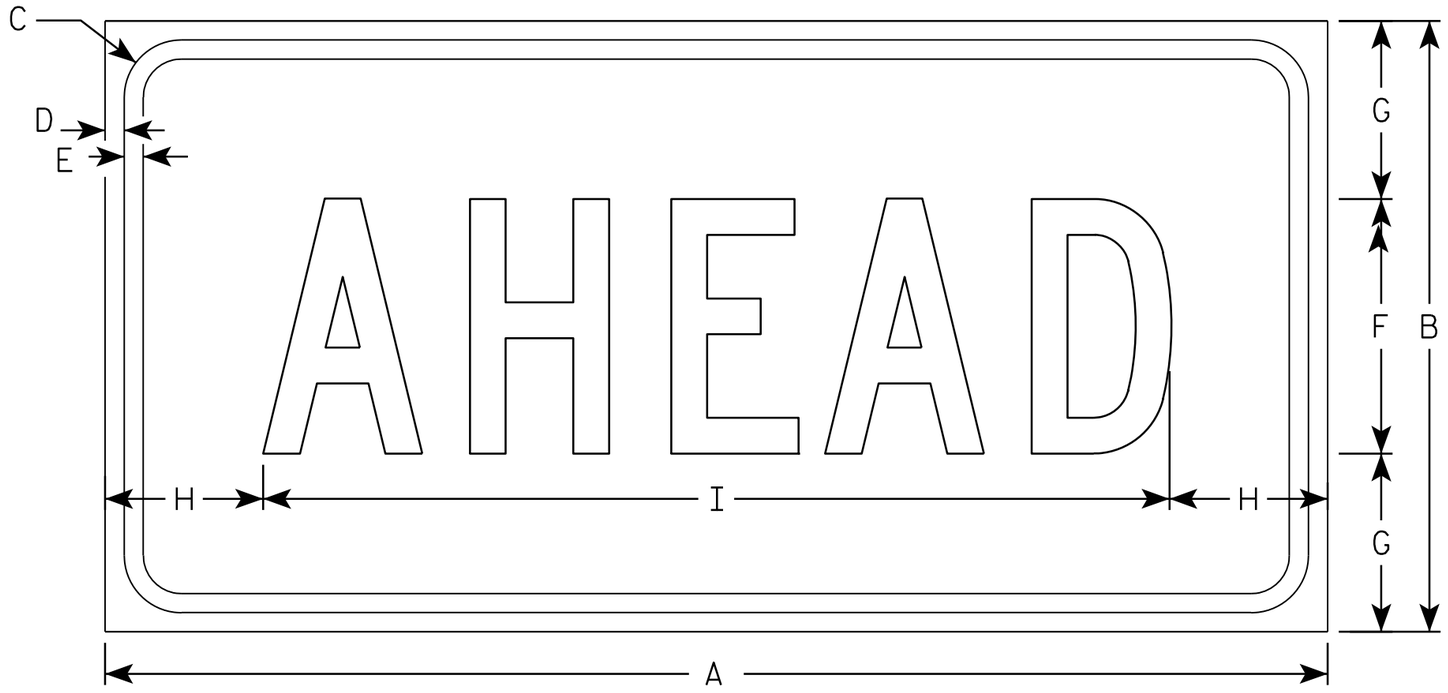
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/8/11 PLATE NO. S5-2.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 736 | E

7



S16-9P

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
S16-9P

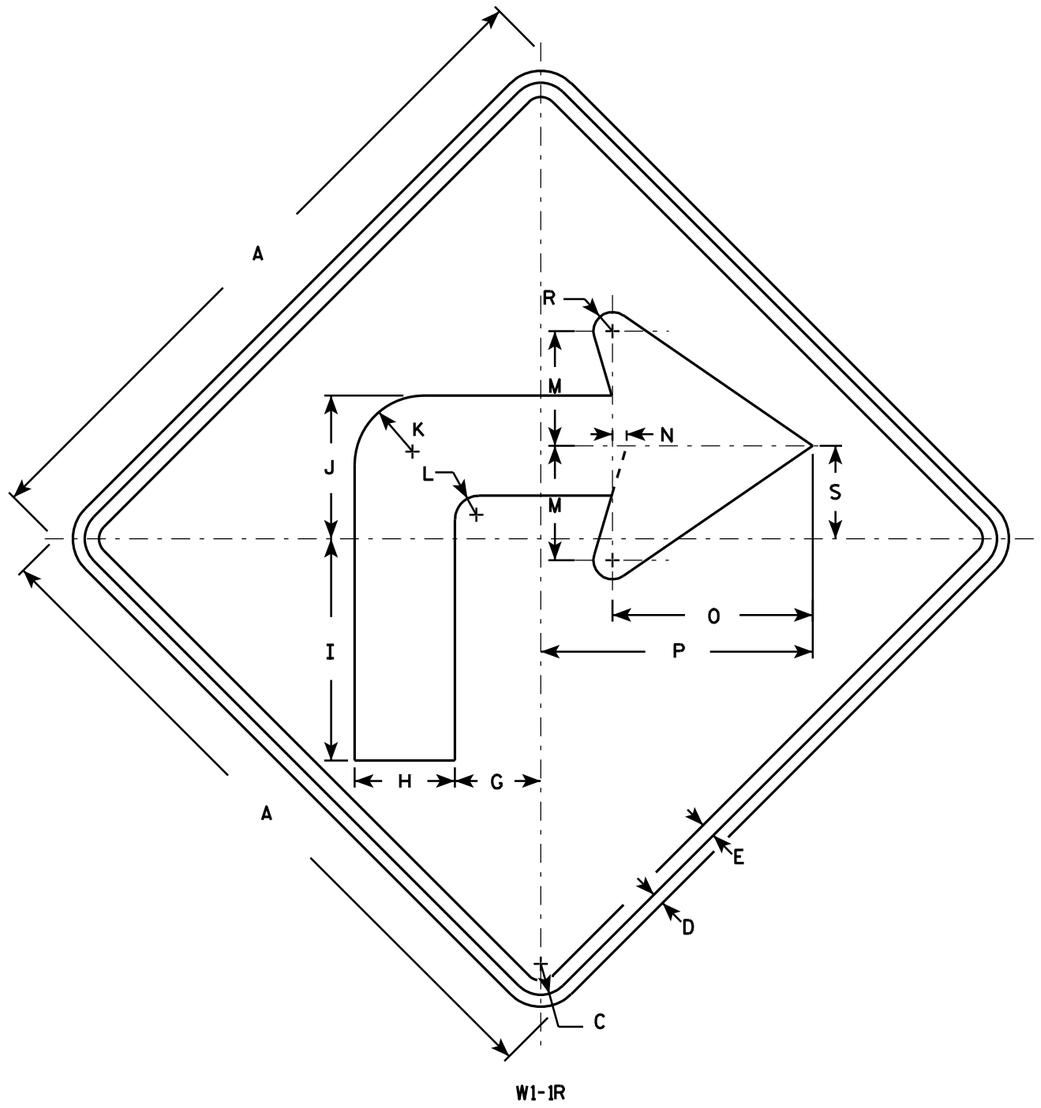
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 737 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\S169P.dgn PLOT DATE : 22-JUL-2013 10:32 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 2.977140:1.000000



W1-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-1L is the same as W1-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		3	3 1/2	7 3/4	5	2 1/2	7/8	4	1/2	7	9 1/2		5/8	3 1/4								4.0
2S	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
2M	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
3	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
4	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0
5	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0

STANDARD SIGN
W1-1

WISCONSIN DEPT OF TRANSPORTATION

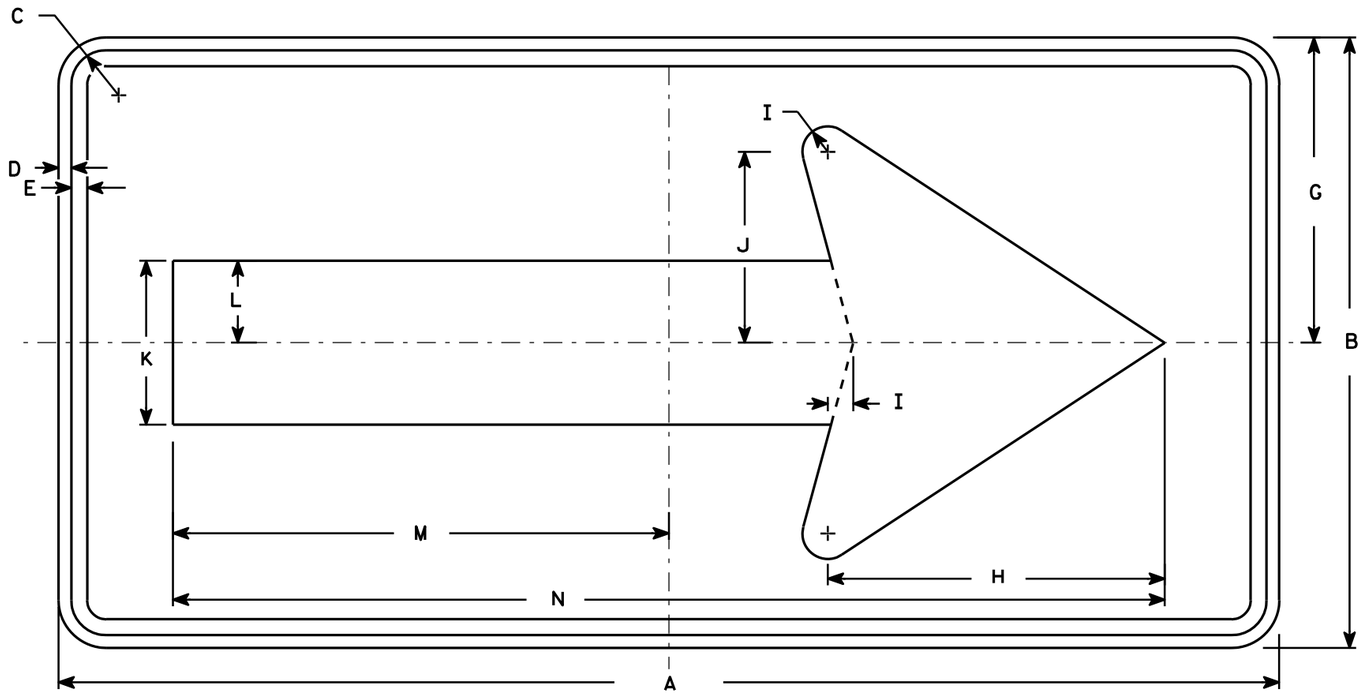
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-1.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 738 | E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W11.DGN PLOT DATE : 15-MAY-2012 13:47 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 7.939035:1.000000
WISDOT/CADDS SHEET 42



W1-6

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

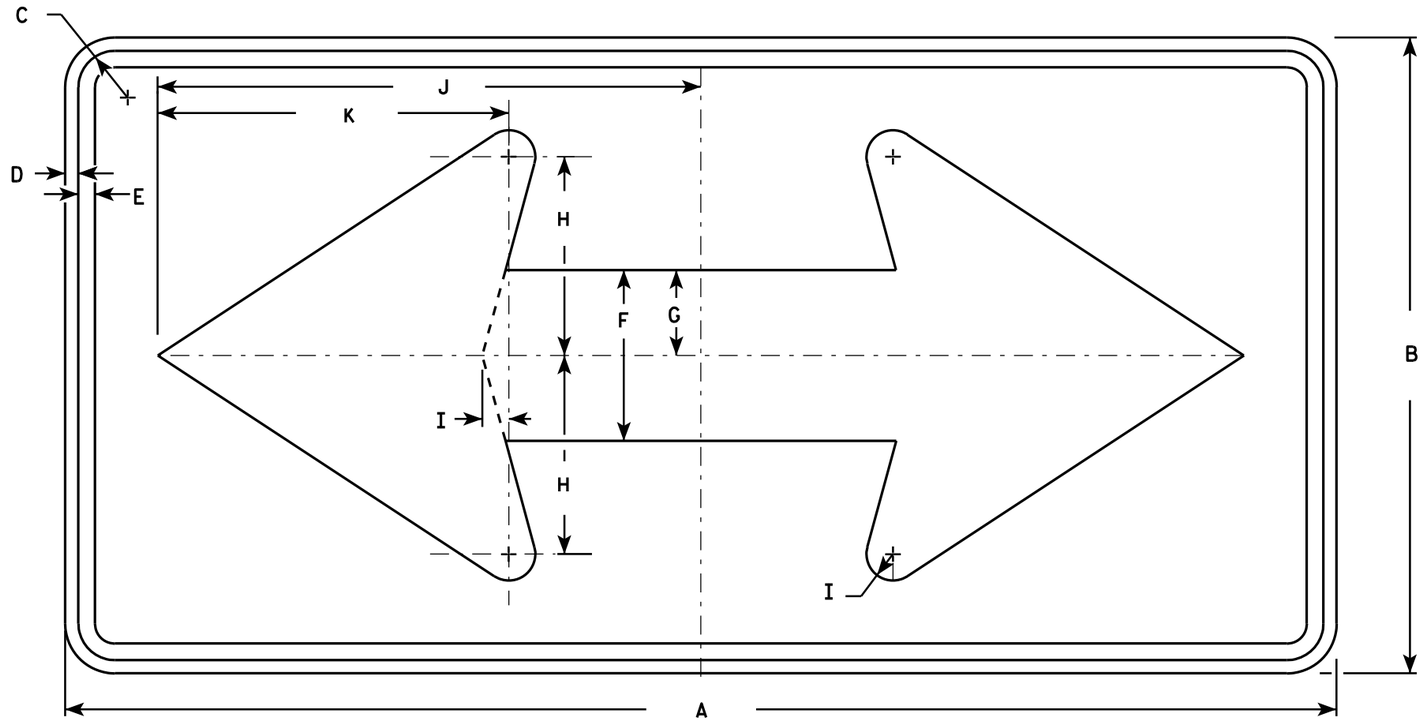
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 739



W1-7

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

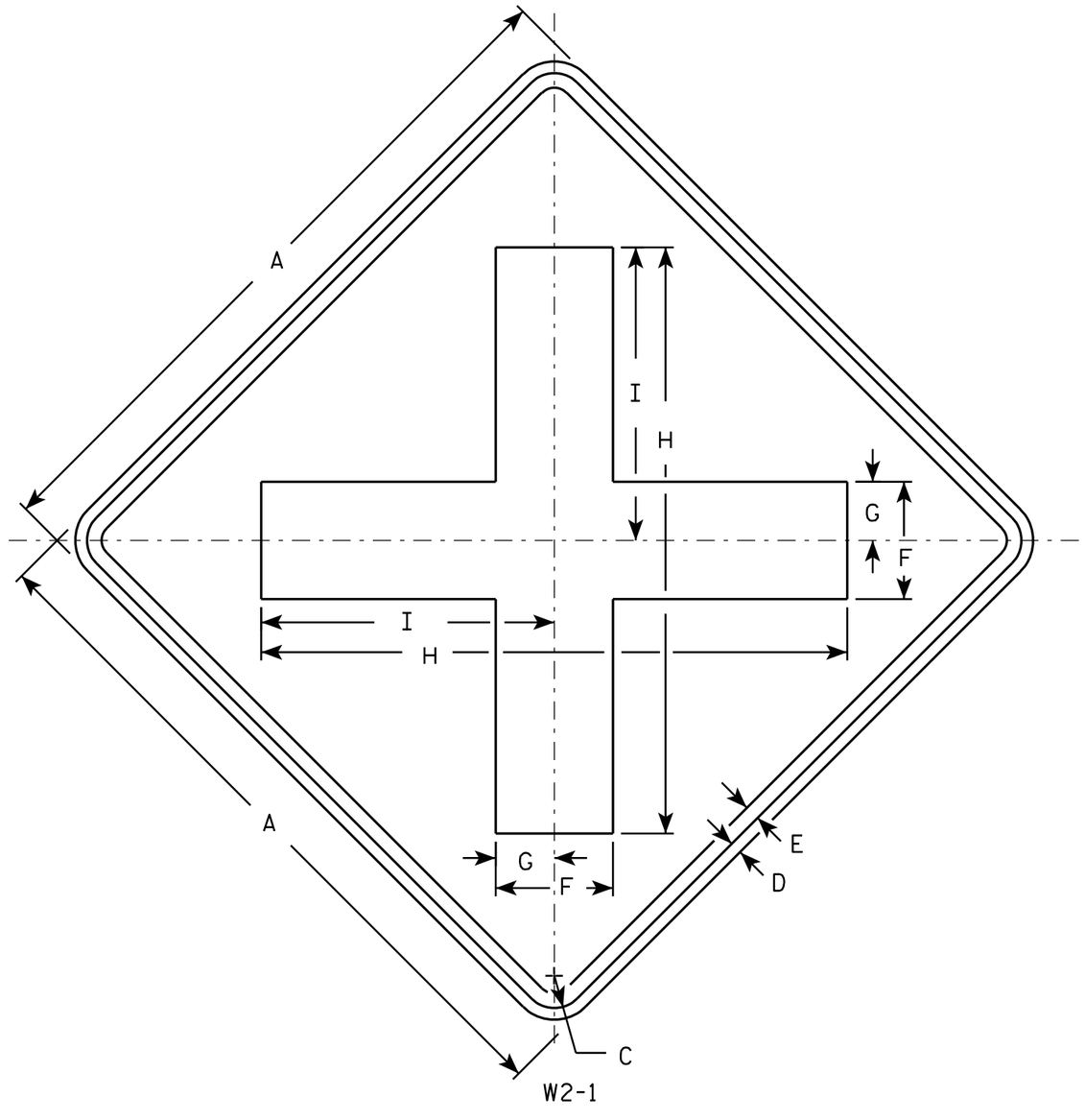
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 740 | E



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4	2	20	10																		4.0
2S	30		1 3/8	1/2	5/8	5	2 1/2	25	12 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	2 1/2	25	12 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3	30	15																		9.0
4	48		2 1/4	3/4	1	8	4	40	20																		16.0
5																											

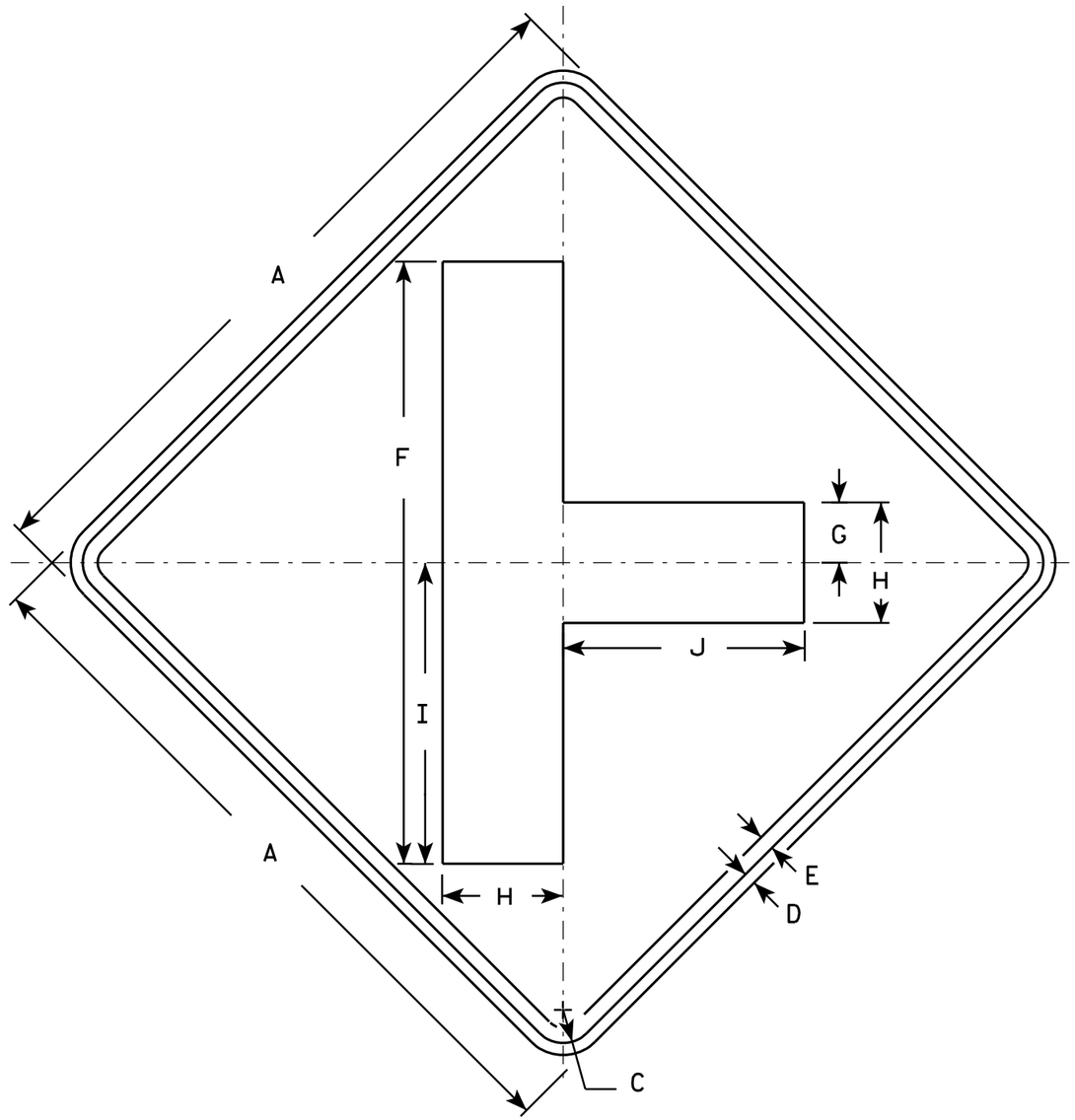
STANDARD SIGN
W2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 741	E



W2-2

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	20	2	4	10	8																	4.0
2S	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
2M	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
3	36		1 5/8	5/8	3/4	30	3	6	15	12																	9.0
4	48		2 1/4	3/4	1	40	4	8	20	16																	16.0
5																											

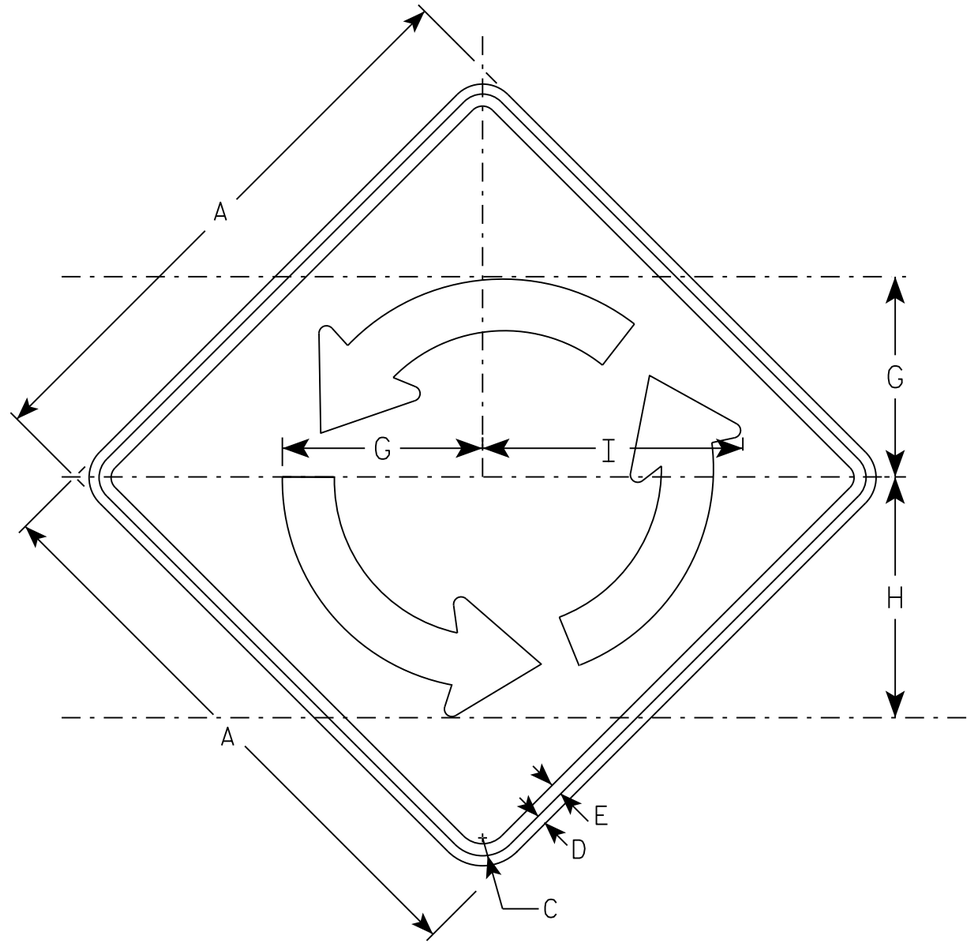
STANDARD SIGN
W2-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-2.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 742	E



W2-6

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - YELLOW
   Message - BLACK

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Area sq. ft.
1																									
2S	30		1 3/8	1/2	5/8		10 3/8	12 1/2	13 1/2																6.25
2M	30		1 3/8	1/2	5/8		10 3/8	12 1/2	13 1/2																6.25
3	36		1 5/8	5/8	3/4		12 1/2	15	16 1/4																9.00
4	48		2 1/4	3/4	1		16 5/8	20	16 1/4																16.0
5																									

STANDARD SIGN
W2-6

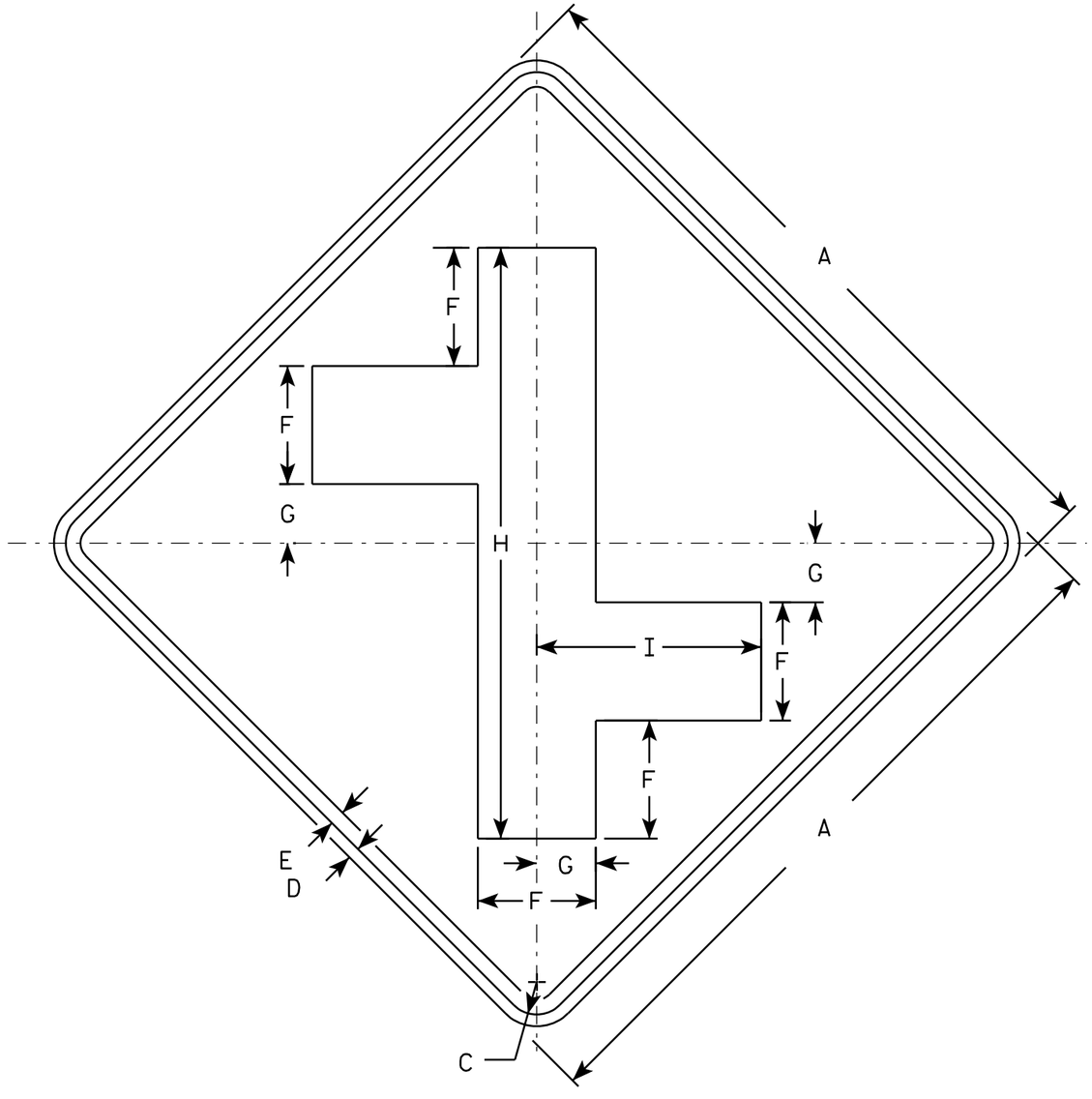
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. W2-6.6

PROJECT NO:

SHEET NO: 743 E



W2-7R

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 3/8	1/2	5/8	5	2 1/2	25	9 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	2 1/2	25	9 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3	30	11 3/8																		9.0
4	48		2 1/4	3/4	1	8	4	40	15 1/4																		16.0
5																											

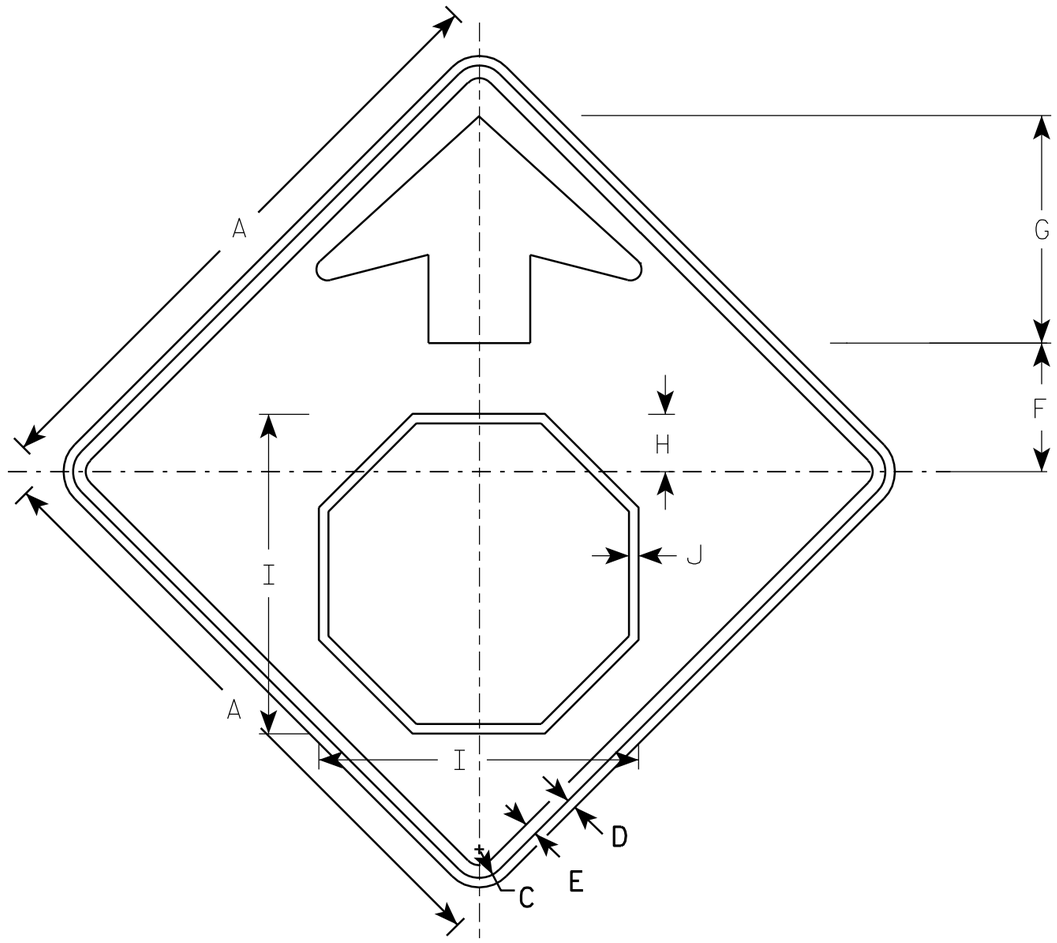
STANDARD SIGN
W2-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-7R.2

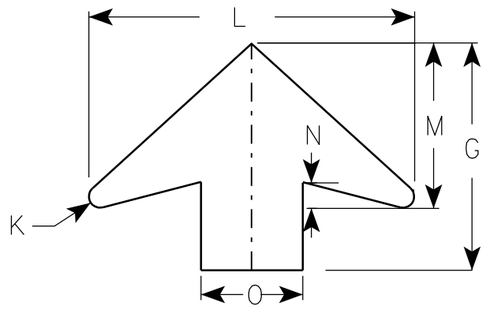
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 744	E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

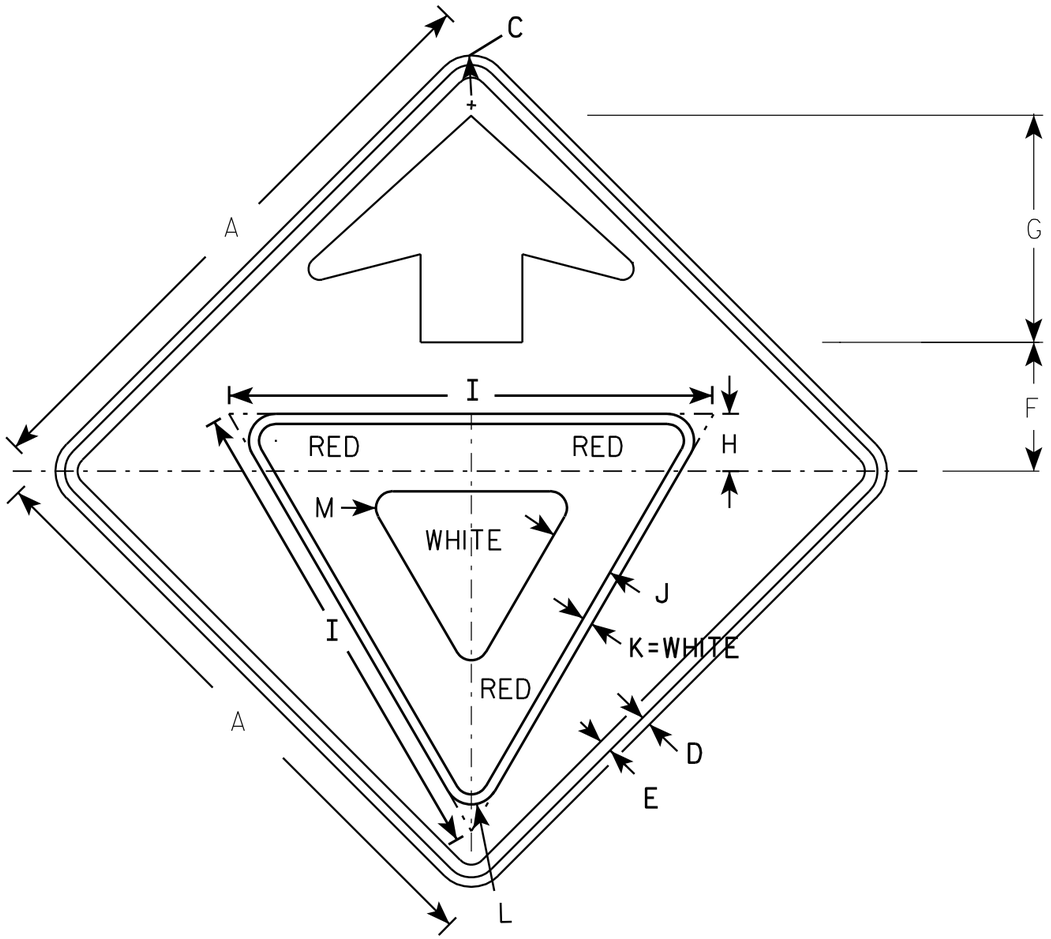
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

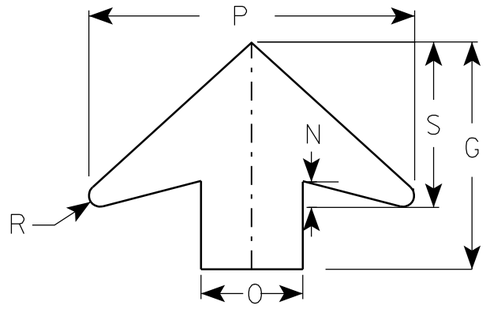
SHEET NO: 745 E



W3-2

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Yield Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	3	25	3 3/8	1/2	1 3/8	7/8	1 1/4	5	16		1/2	8								6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0

STANDARD SIGN
W3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-2..9

PROJECT NO:

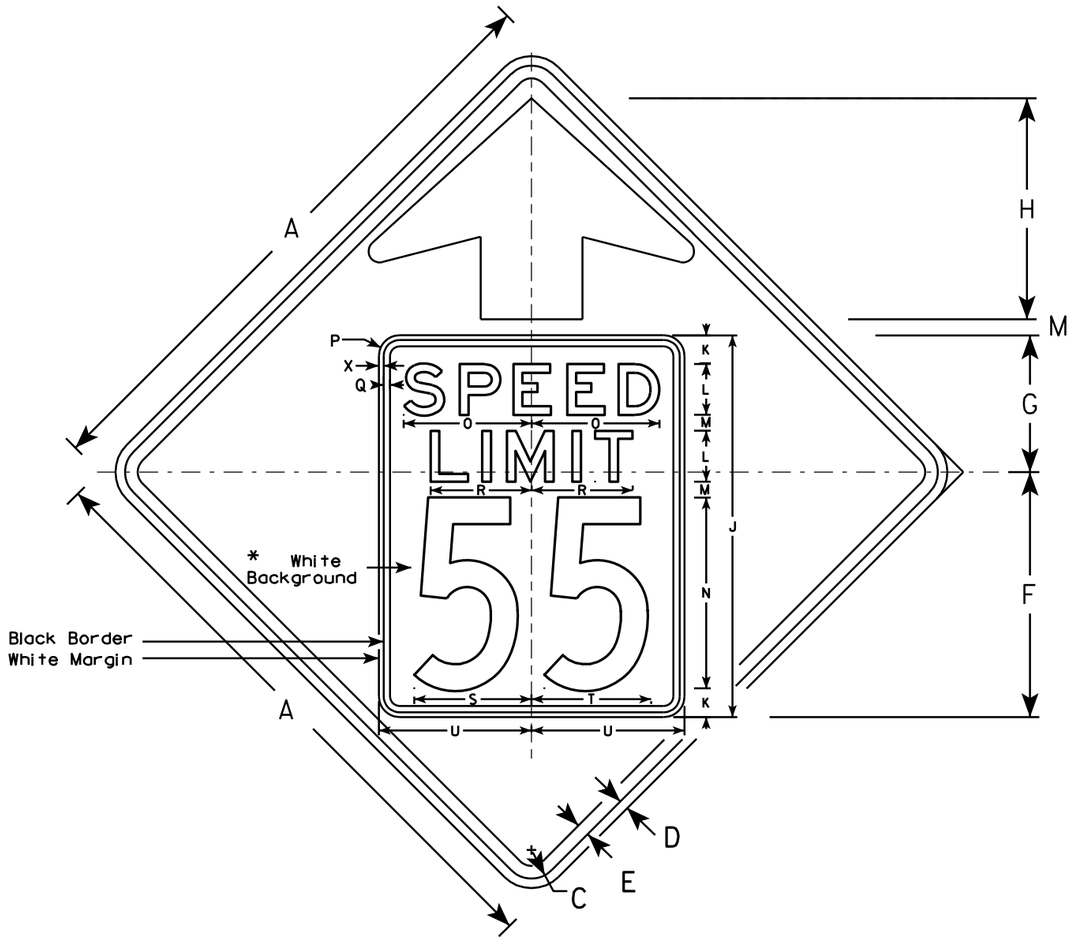
SHEET NO: 746 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W32.DGN PLOT DATE : 07-JUN-2010 13:03 PLOT BY : ditjph

WISDOT/CADDS SHEET 42

7

7

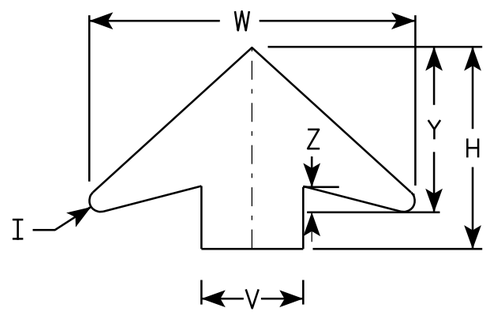


W3-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - YELLOW*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W3-5

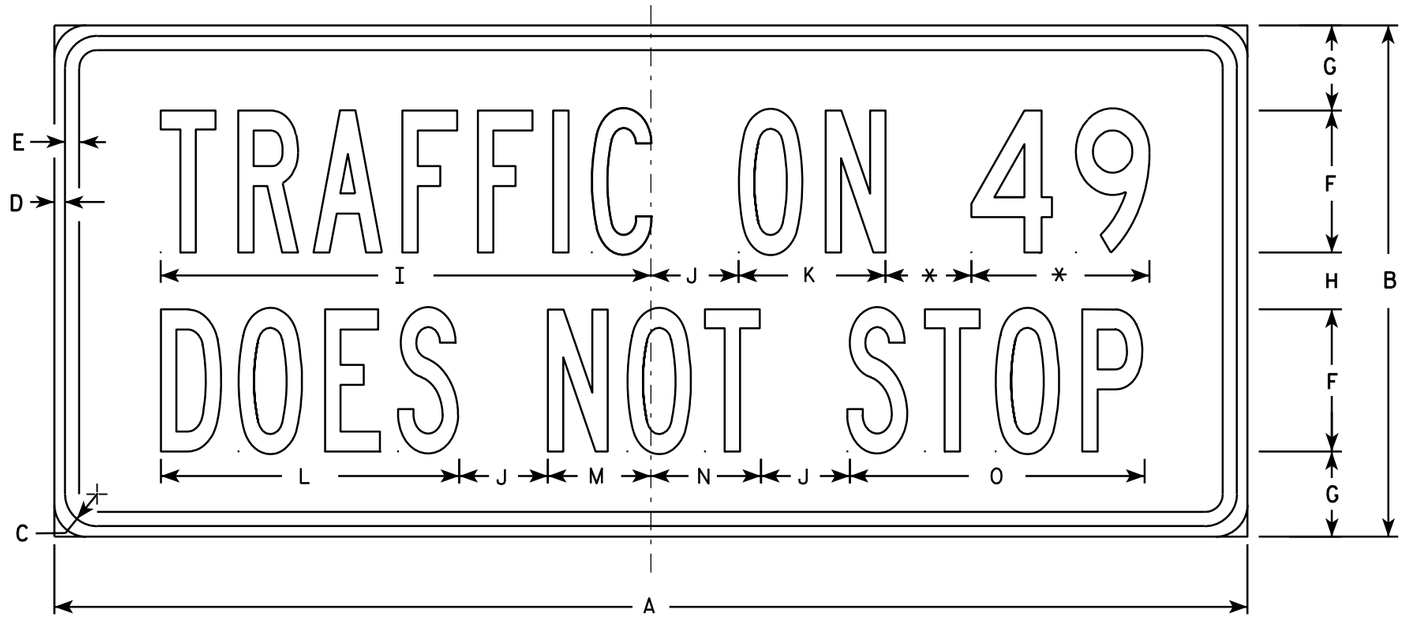
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 747 E



W4-4C

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - B (See note 5)
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Highway Number usually Series D. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

* VARIES

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	3	2 1/4	1 1/2	10 3/8	1 1/2	3 1/8	6 1/4	2 1/4	2 1/4	6 1/4												2.0
2M	24	12	1 1/8	3/8	3/8	3	2 1/4	1 1/2	10 3/8	1 1/2	3 1/8	6 1/4	2 1/4	2 1/4	6 1/4												2.0
3	36	15	1 1/8	3/8	1/2	4	2 5/8	1 3/4	13 7/8	2 3/8	4 1/4	8 3/8	3 1/8	3 1/8	8 3/8												3.75
4	42	18	1 1/8	3/8	1/2	5	3	2	17 1/4	3 1/8	5 1/8	10 1/2	3 7/8	3 7/8	10 3/8												5.25
5																											

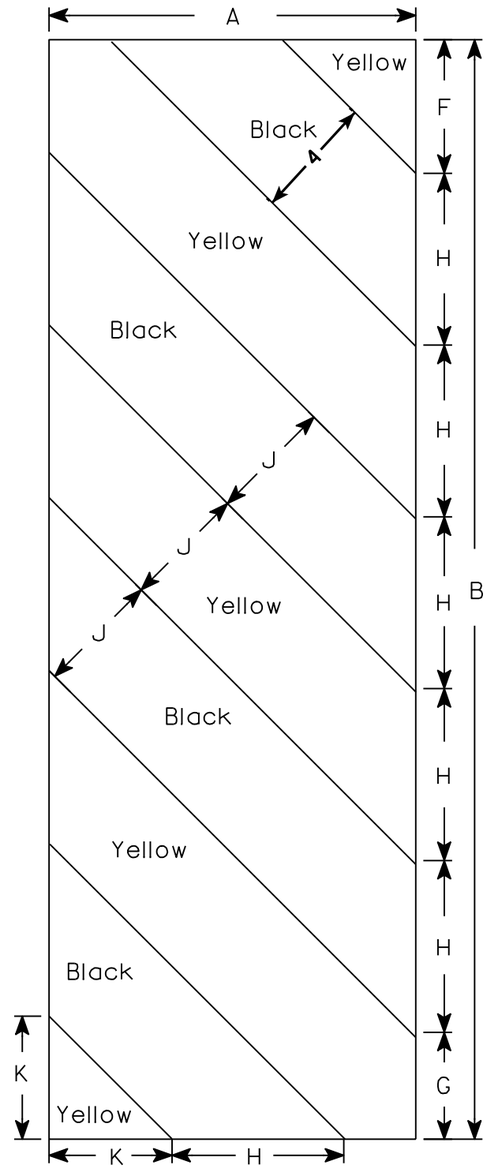
STANDARD SIGN
W4-4C

WISCONSIN DEPT OF TRANSPORTATION

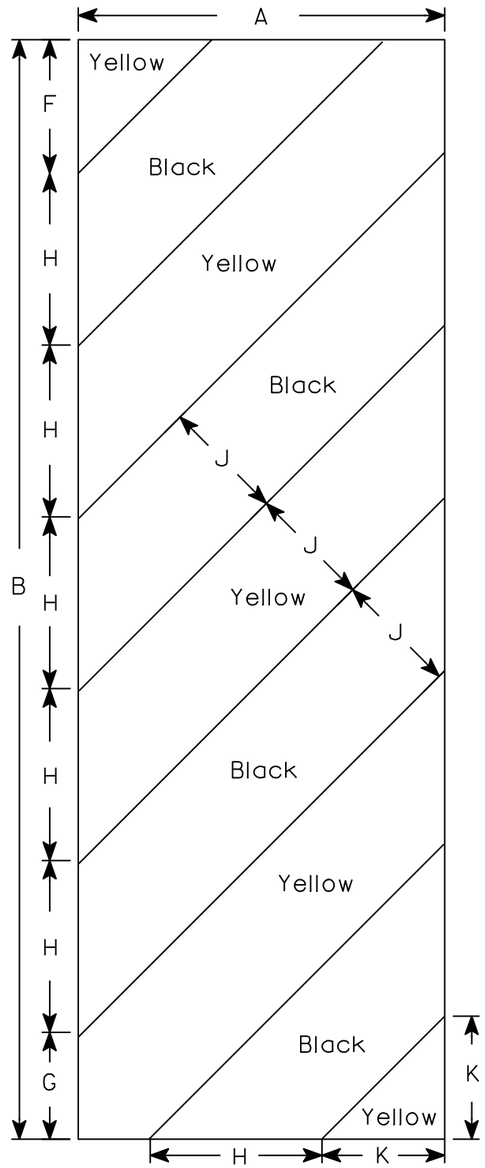
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-4.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 748	E



W5-52L



W5-52R

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

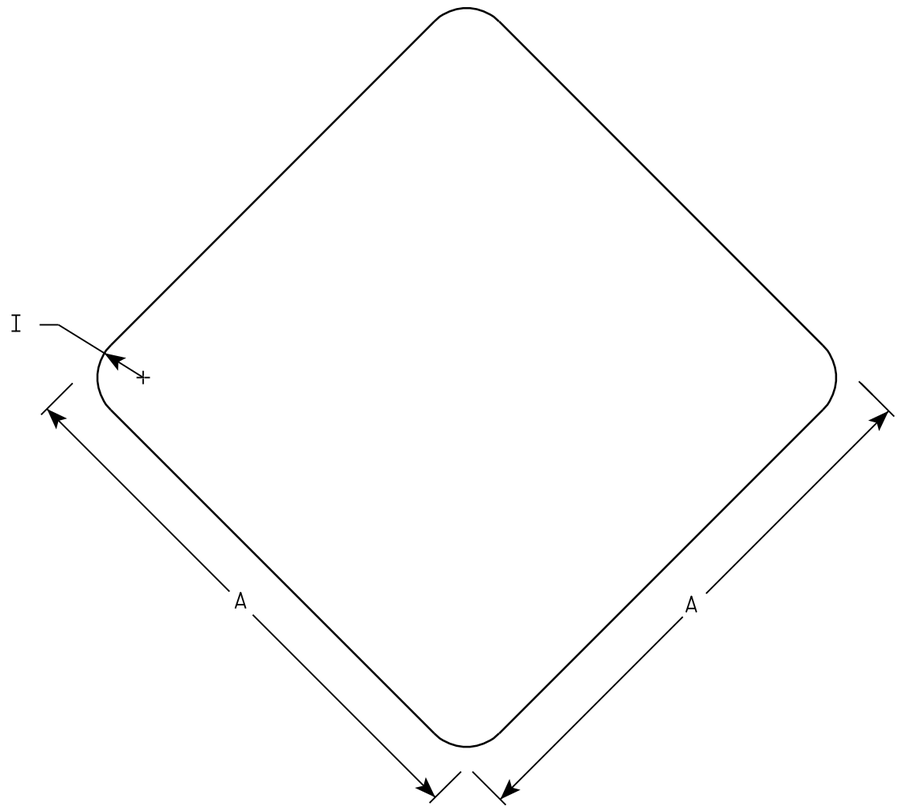
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 749	E



W5-54

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

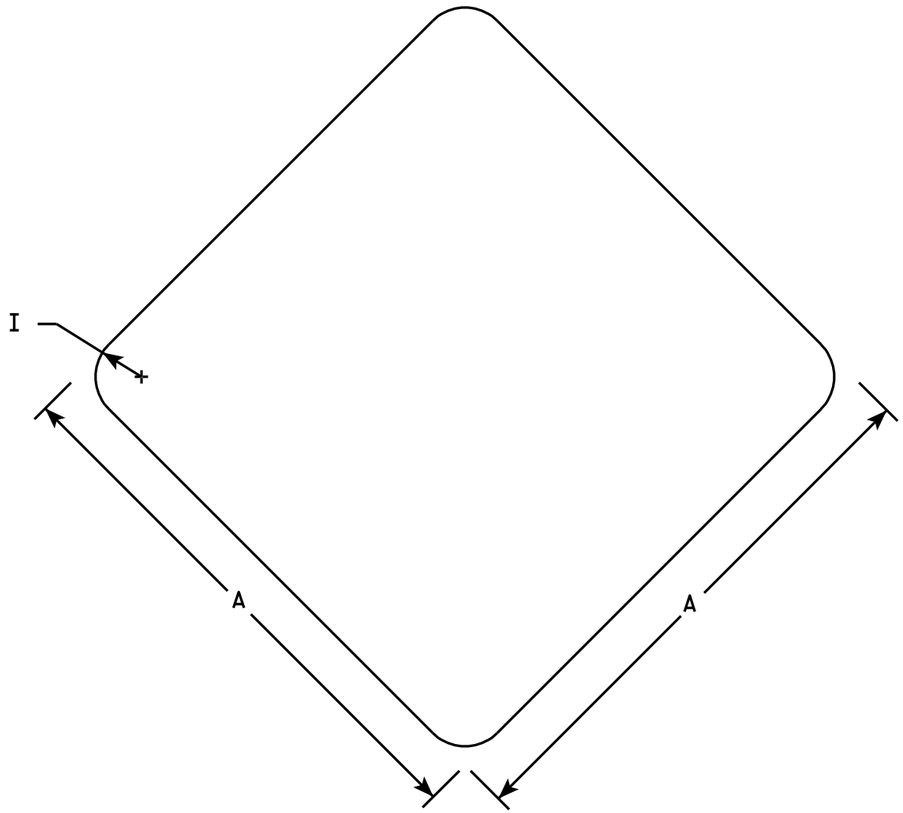
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 750 | E



W5-56

NOTES

1. Sign is Type II - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

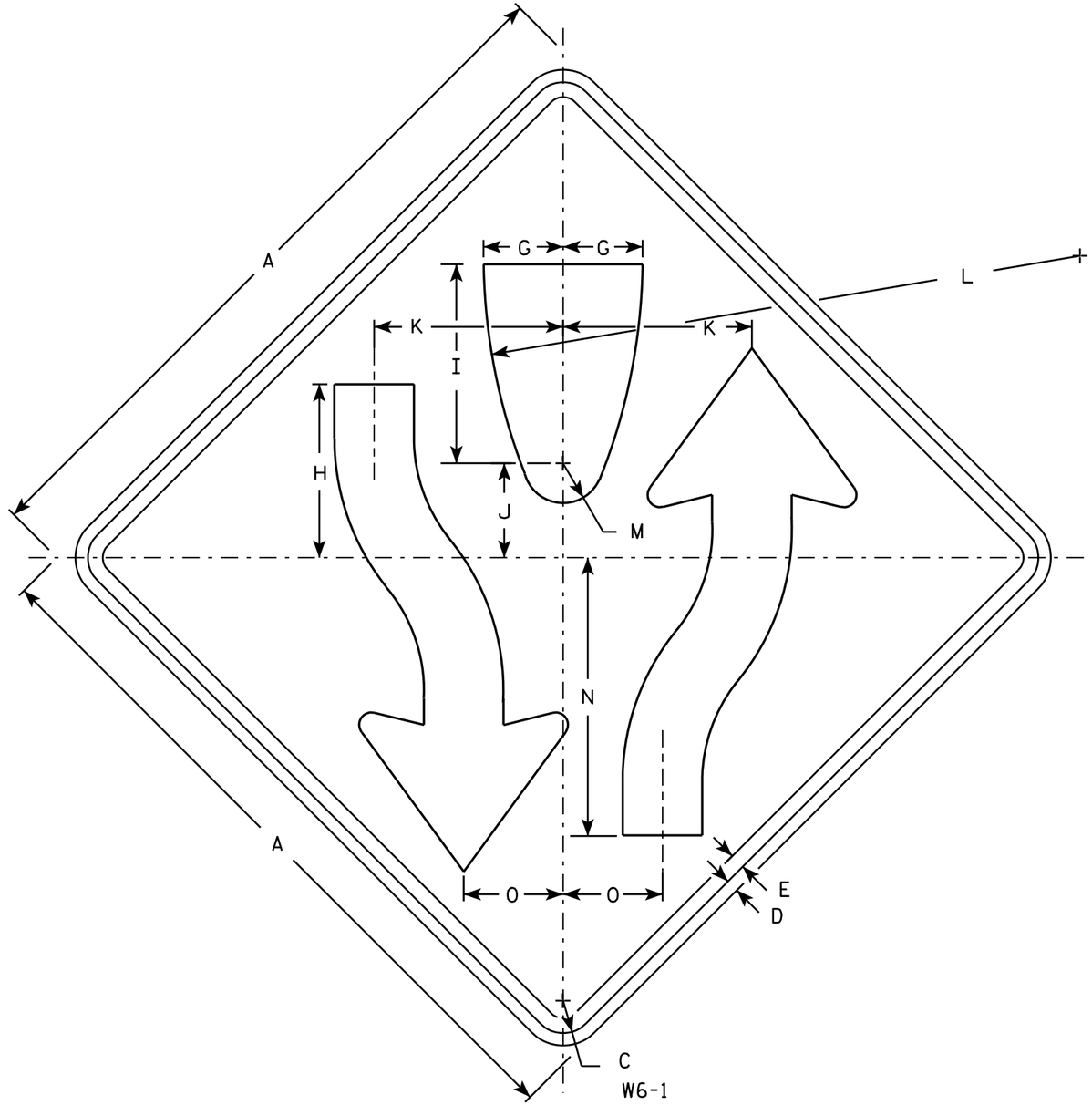
STANDARD SIGN
W5-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

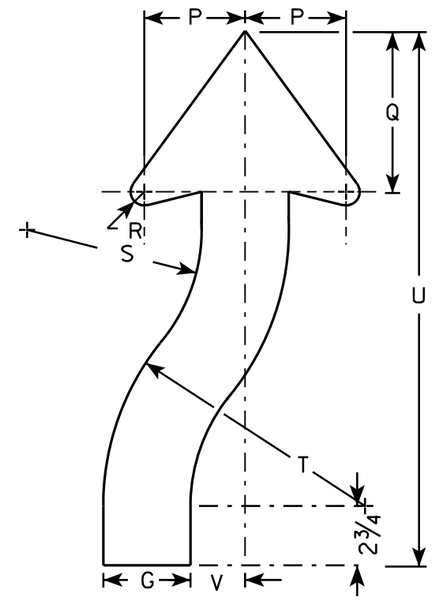
DATE 11/2/10 PLATE NO. W5-56.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 751	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3																											
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

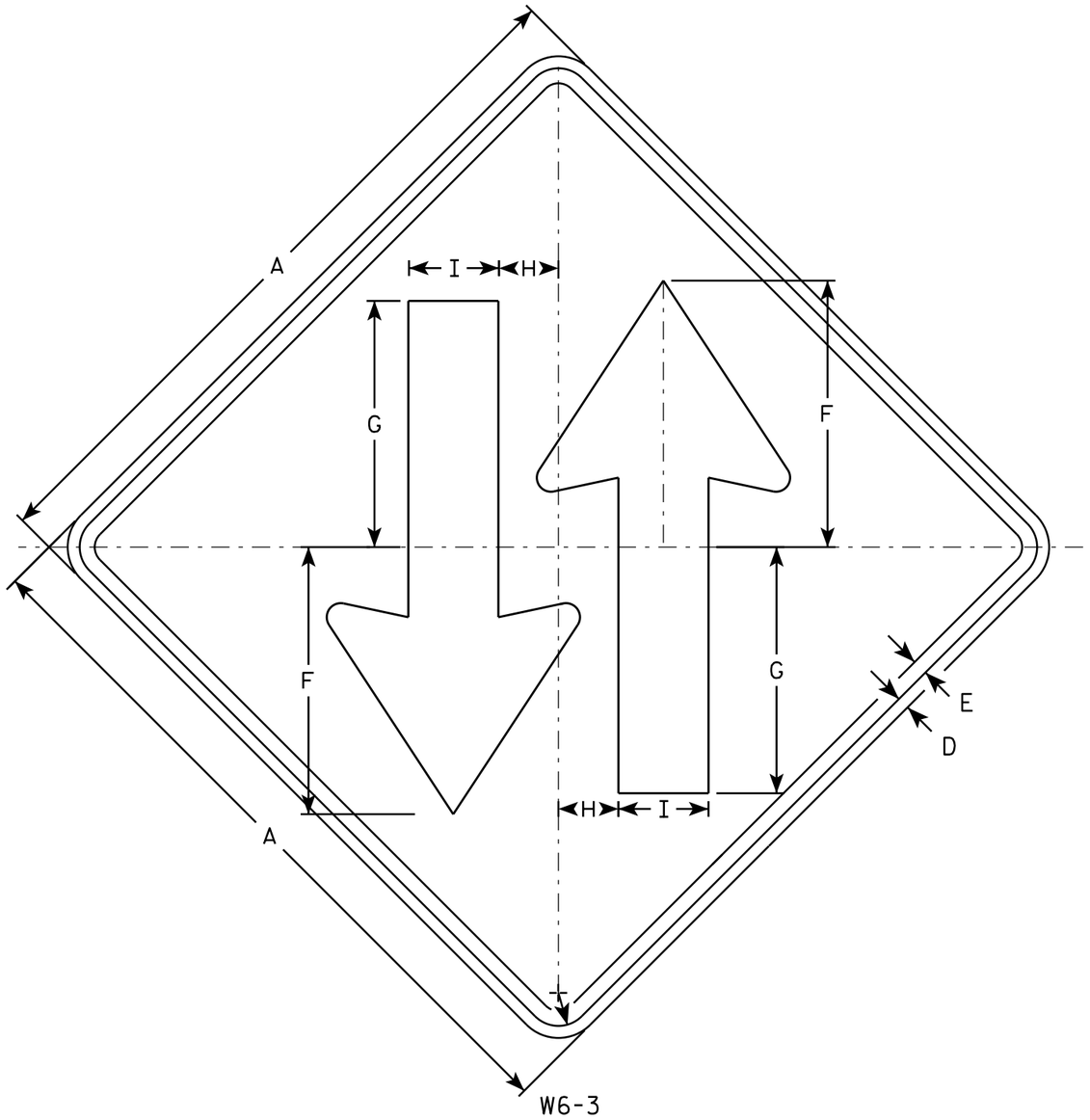
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 752	E

7

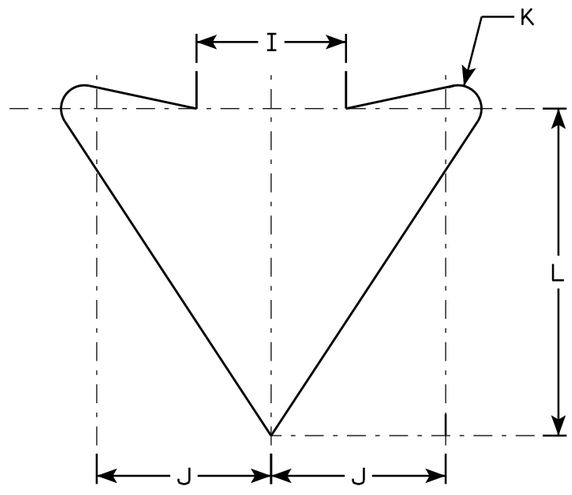
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42



W6-3

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	11 1/8	10 1/4	2 1/2	3 3/4	4 3/8	5/8	8 1/4															6.25
2S	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
2M	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
3																											
4	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0
5	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0

STANDARD SIGN
W6-3

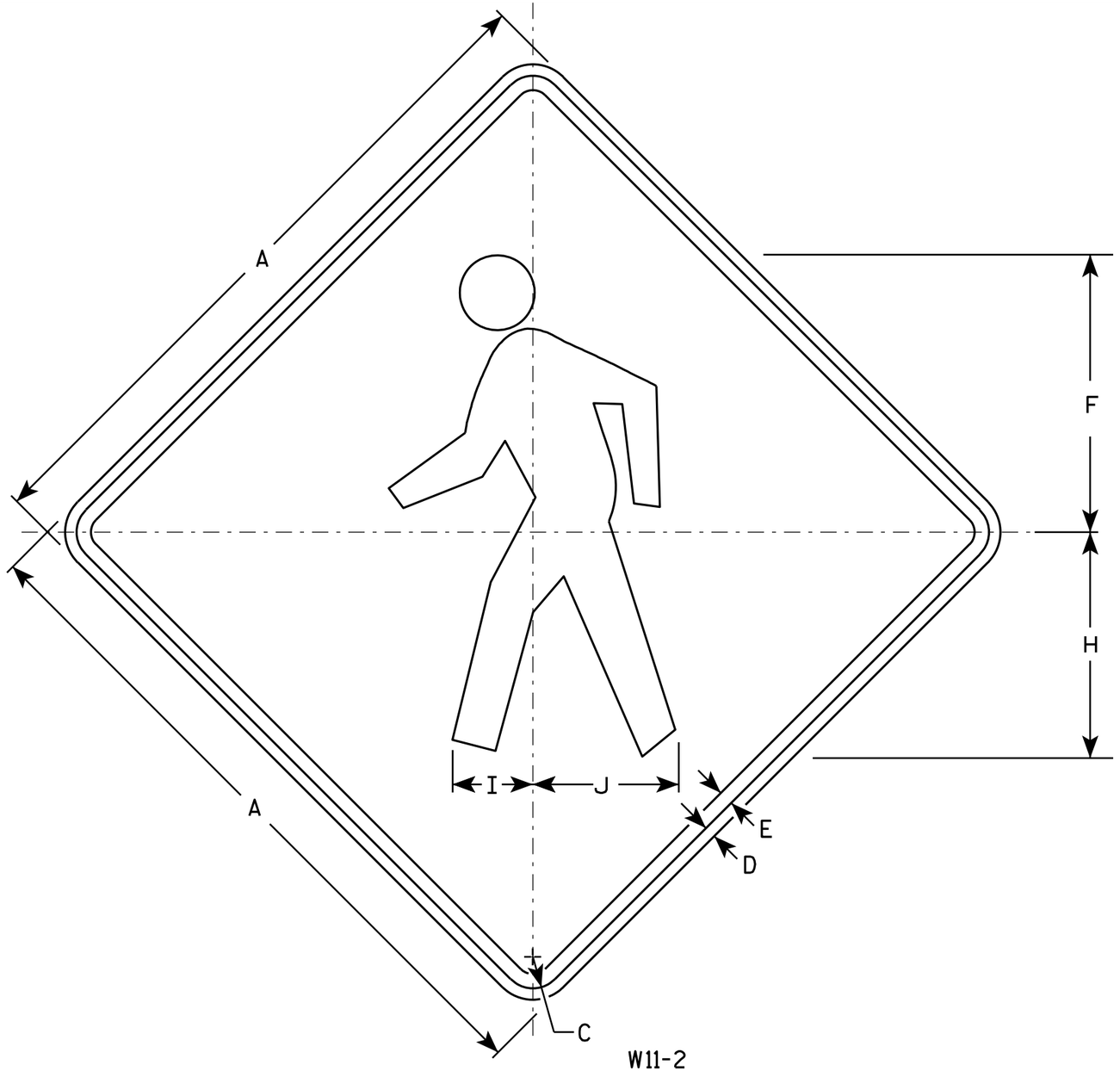
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/16 PLATE W6-3.11

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W63.DGN PLOT DATE : 10-MAR-2016 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000
WISDOT/CADDS SHEET 42



W11-2

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

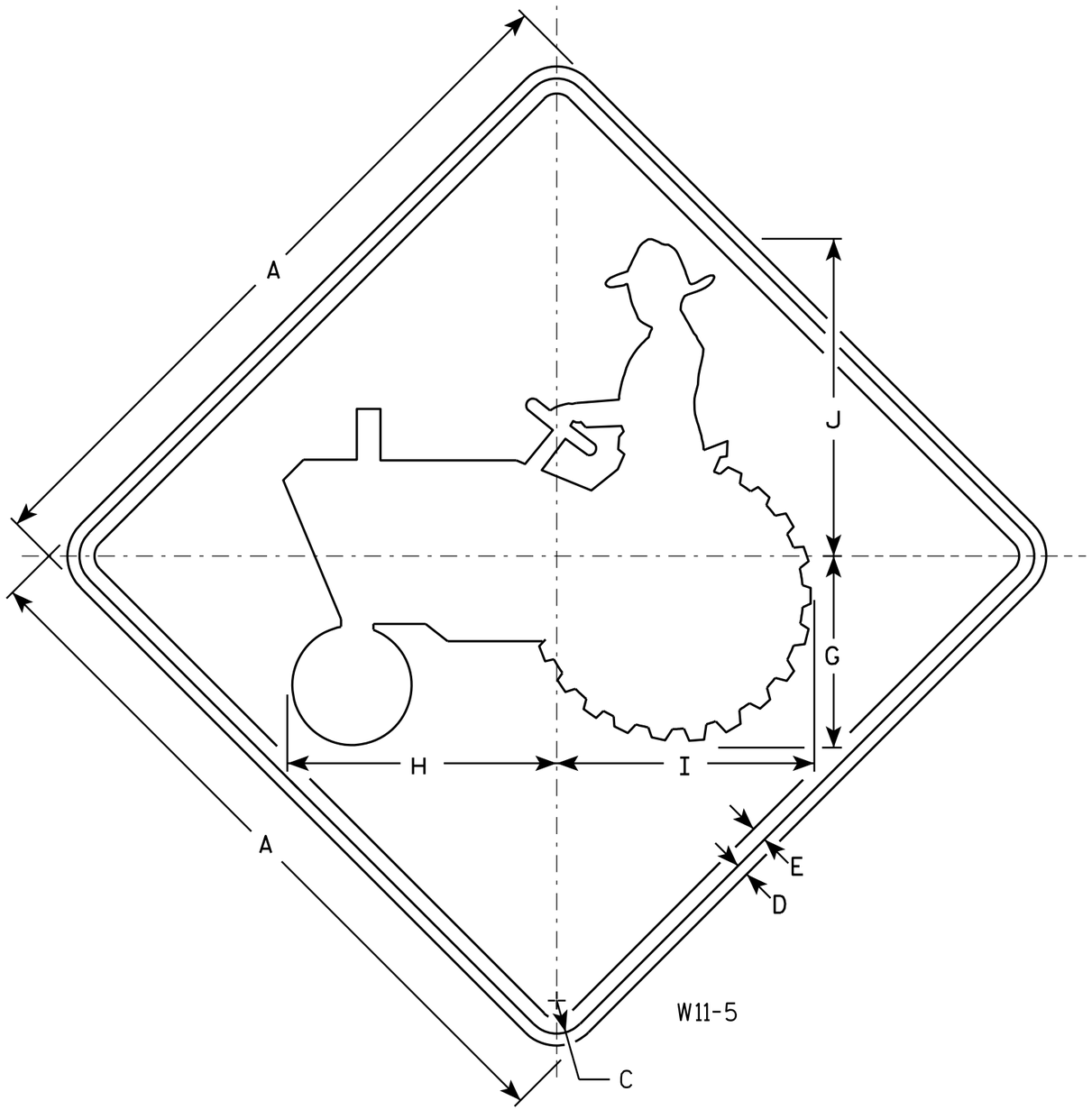
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 754	E



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		6 3/8	9	8 5/8	10 5/8																	4.0
2S	30		1 3/8	1/2	5/8		8	11 1/4	10 3/4	13 1/4																	6.25
2M	30		1 3/8	1/2	5/8		8	11 1/4	10 3/4	13 1/4																	6.25
3																											
4	36		1 5/8	5/8	3/4		9 5/8	13 1/2	12 7/8	16																	9.0
5	48		2 1/4	3/4	1		12 3/4	18	17 1/4	21 1/8																	16.0

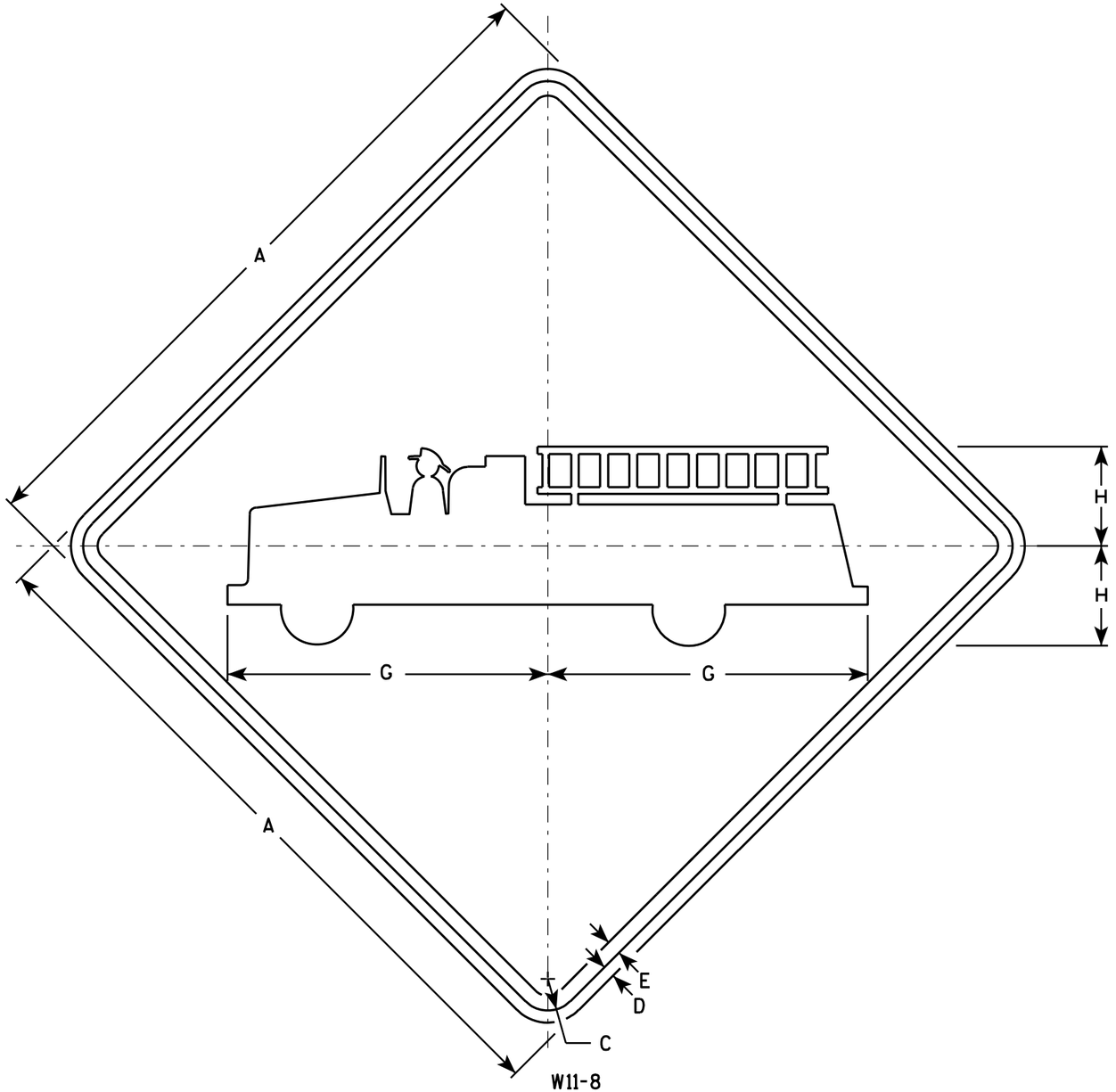
STANDARD SIGN
W11-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/13/15 PLATE NO. W11-5.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 755	E



W11-8

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		11	3 3/8																			4.0
2S	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
2M	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
3	36		1 5/8	5/8	3/4		16 1/2	5 1/4																			9.0
4	48		2 1/4	3/4	1		22	7																			16.0
5																											

STANDARD SIGN
W11-8

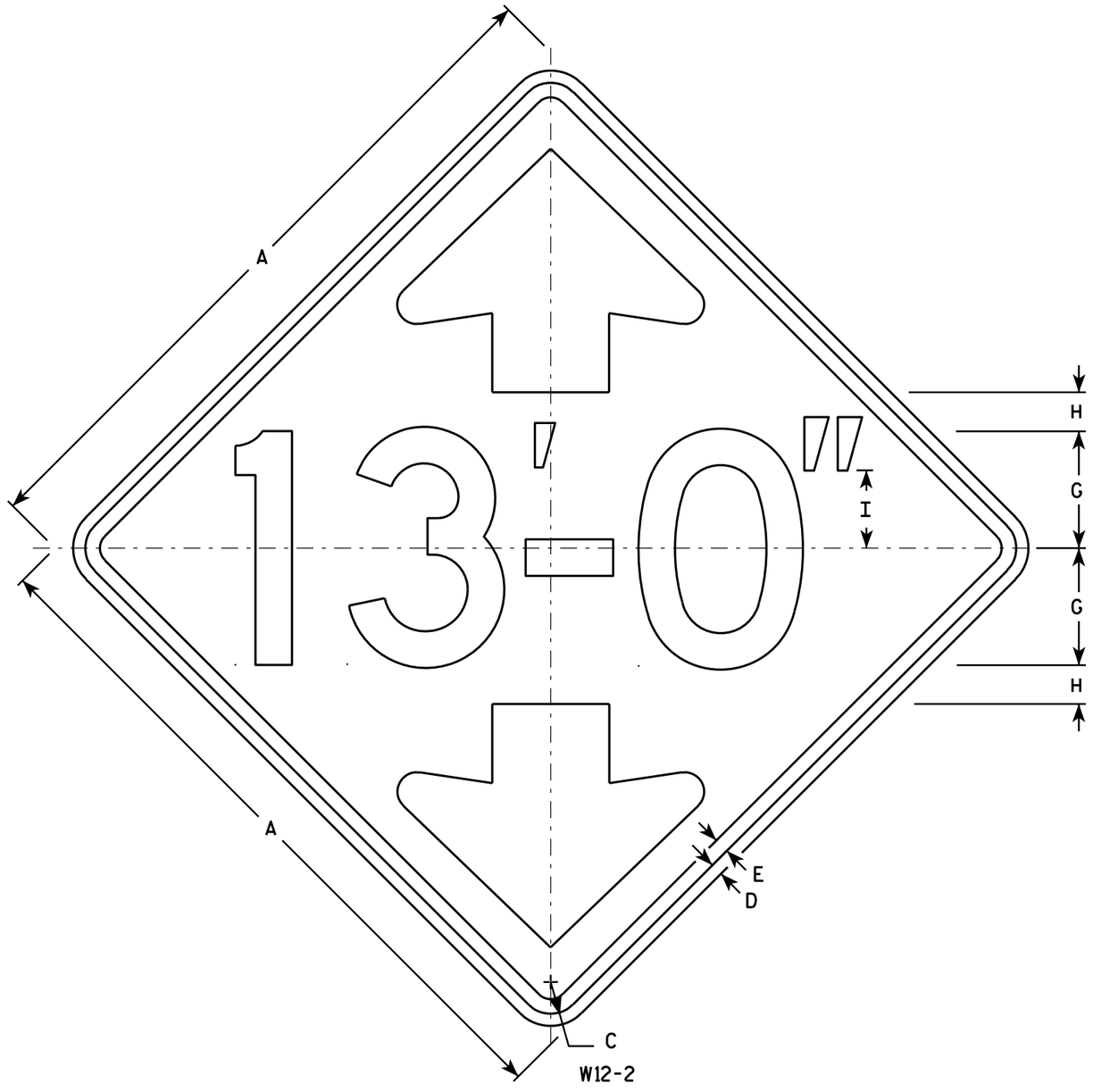
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W11-8.7

PROJECT NO:

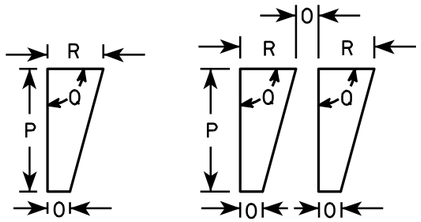
SHEET NO: 756 E



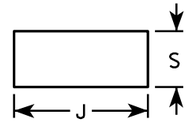
NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing of numerals, hyphen, foot & inch marks to achieve proper balance.

Arrow Detail



Foot Mark & Inch Mark Detail



Hyphen Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		5	1 5/8	3 3/8	3 3/4	6 5/8	5 3/4	3/4	2 1/2	1/2	2 1/4	90°	1	1 5/8								6.25
2S	36		1 5/8	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.00
2M	36		1 5/8	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.00
3	36		1 5/8	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.00
4	36		1 5/8	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.00
5	48		2 1/4	3/4	1		8	2 5/8	5 1/2	5 7/8	10 5/8	9 1/4	1 3/8	4	5/8	3 5/8	90°	1 5/8	2 1/2								16.00

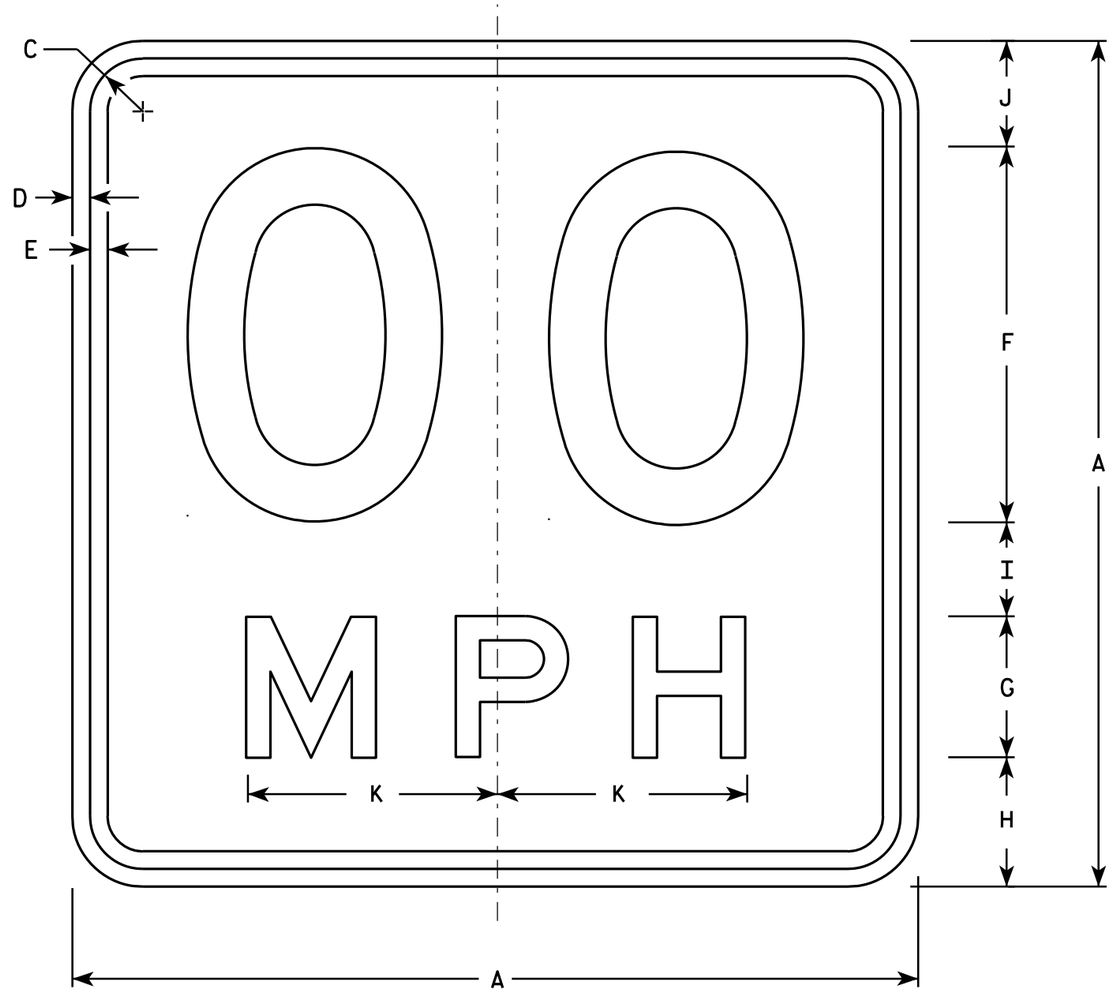
STANDARD SIGN
W12-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-2.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 757	E



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

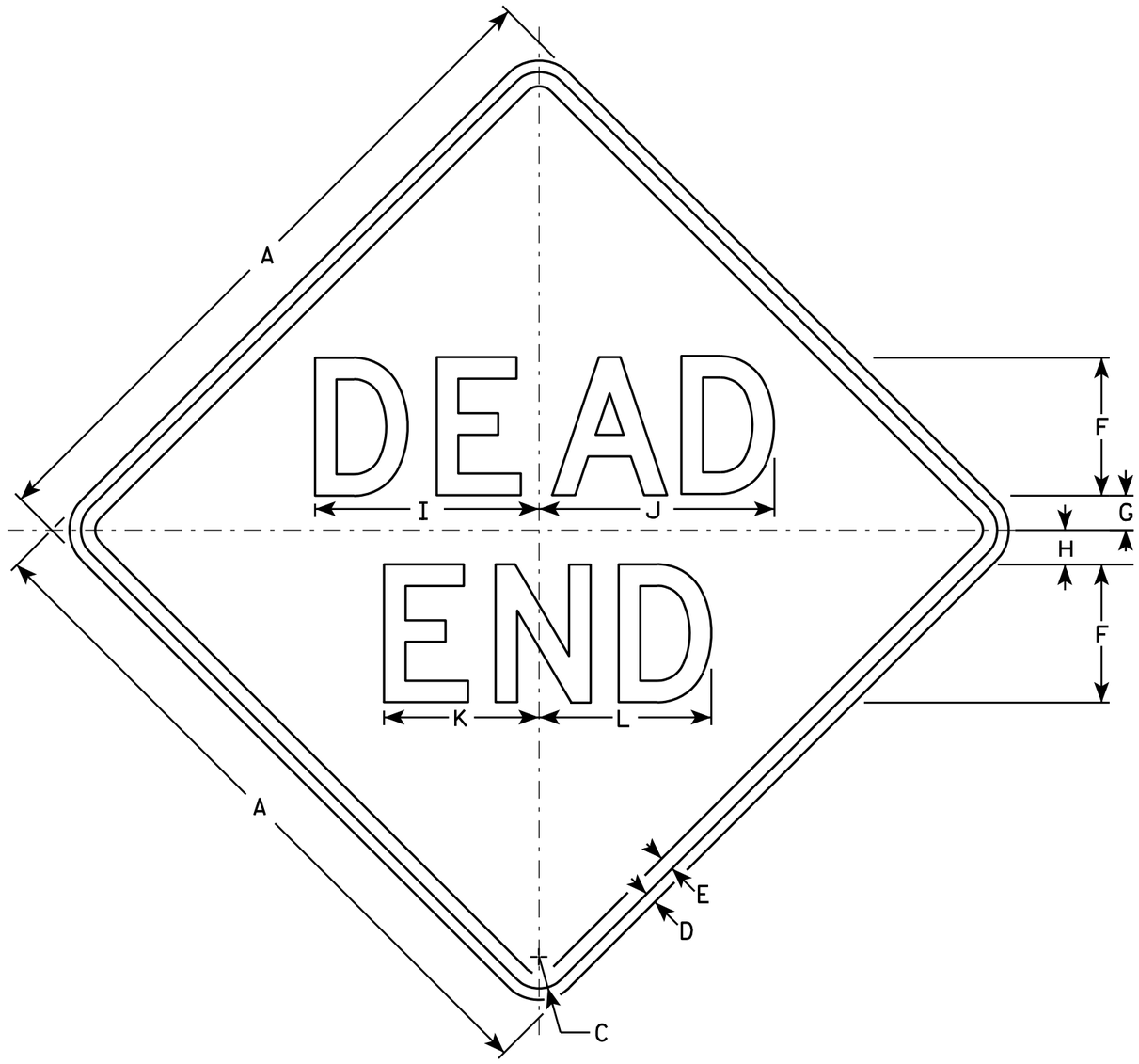
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 758 | E



W14-1

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	5	1	2	8 1/4	8 5/8	5 5/8	6 1/4															4.0
2S	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
2M	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
3	36		1 5/8	5/8	3/4	7	2	3	11 3/8	12	7 7/8	8 3/4															9.0
4																											
5																											

STANDARD SIGN
W14-1

WISCONSIN DEPT OF TRANSPORTATION

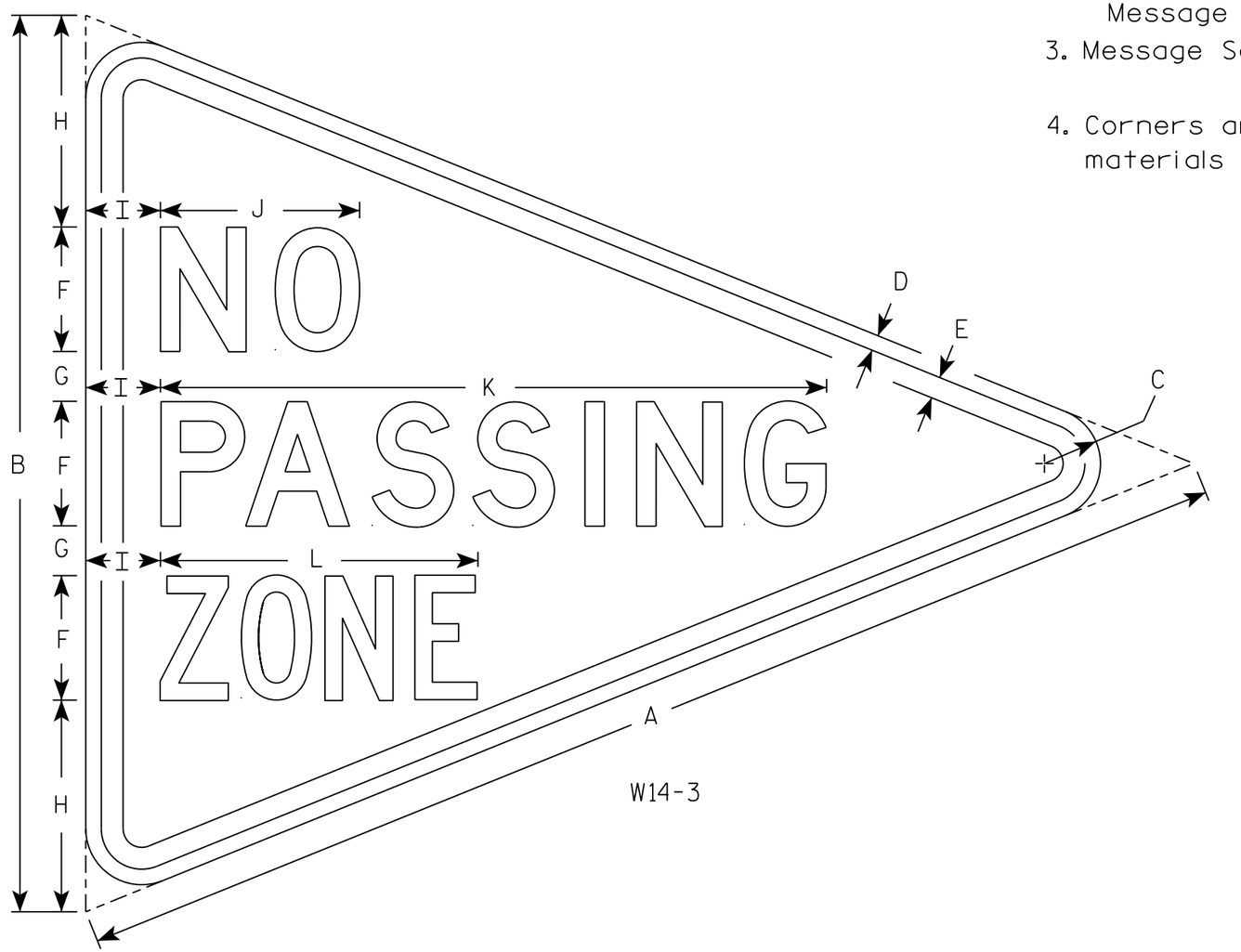
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W14-1.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 759	E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

STANDARD SIGN
W14-3

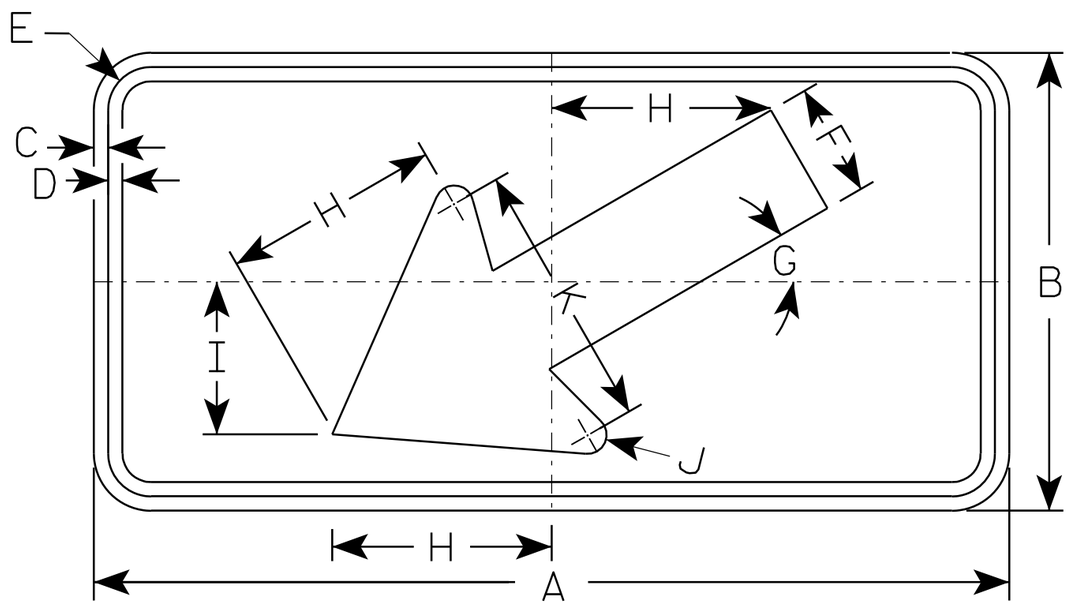
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 760 | E

7



W16-7L

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W16-7R is the same as W16-L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4																											8
5																											8

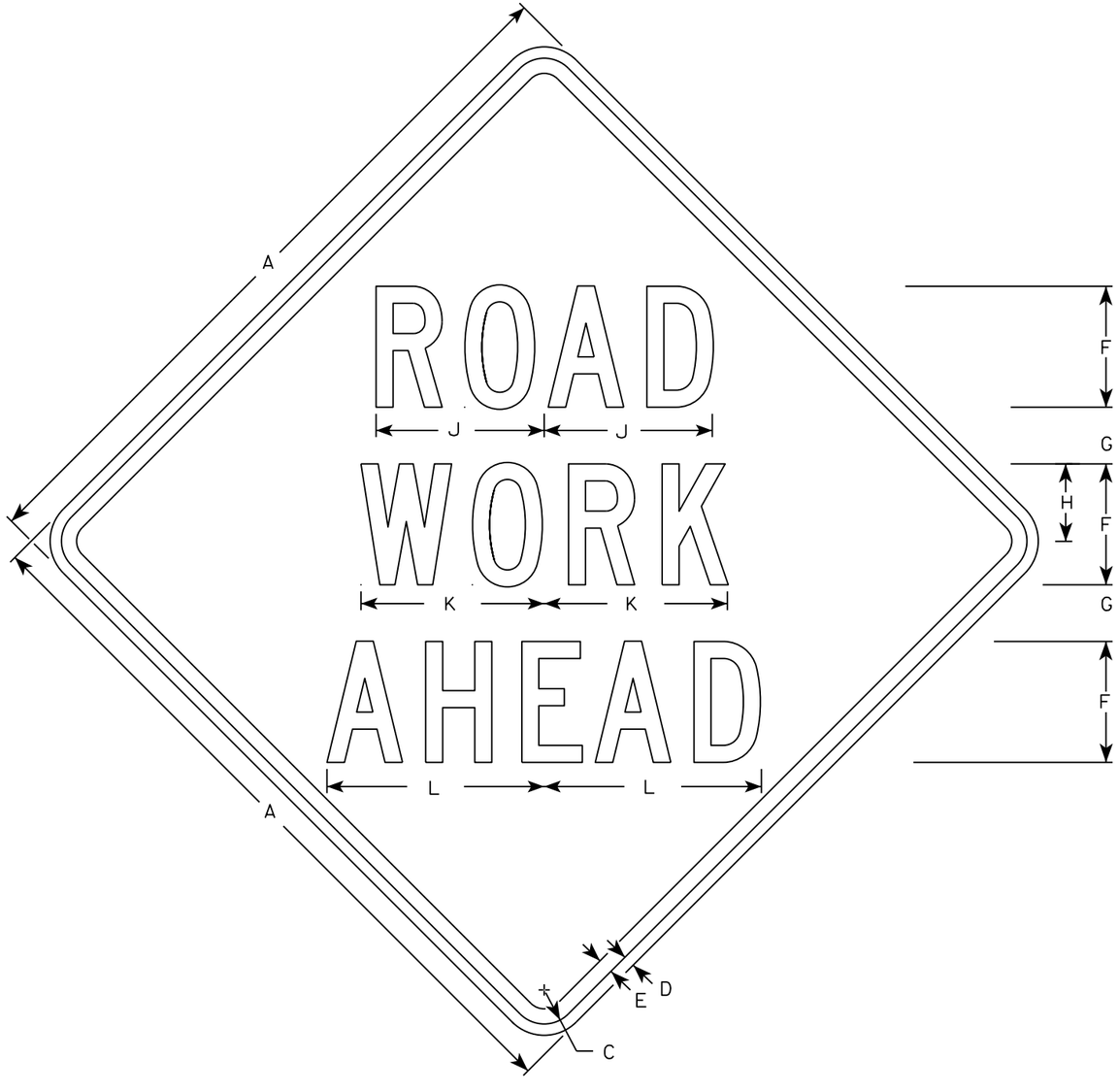
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

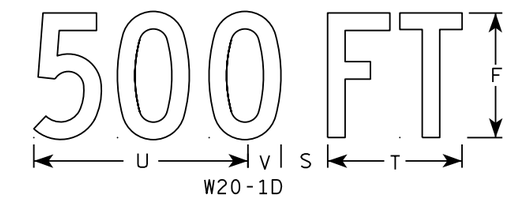
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. W16-7.5

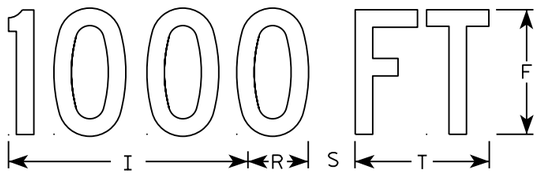
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 761	E



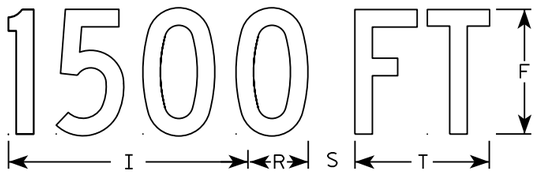
W20-1A



W20-1D



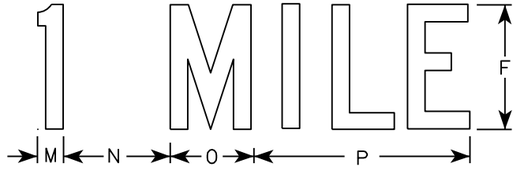
W20-1C



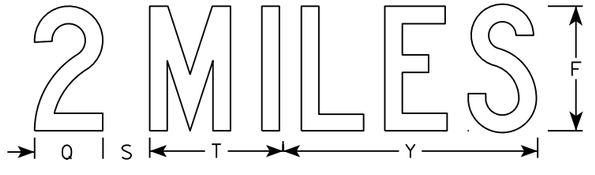
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

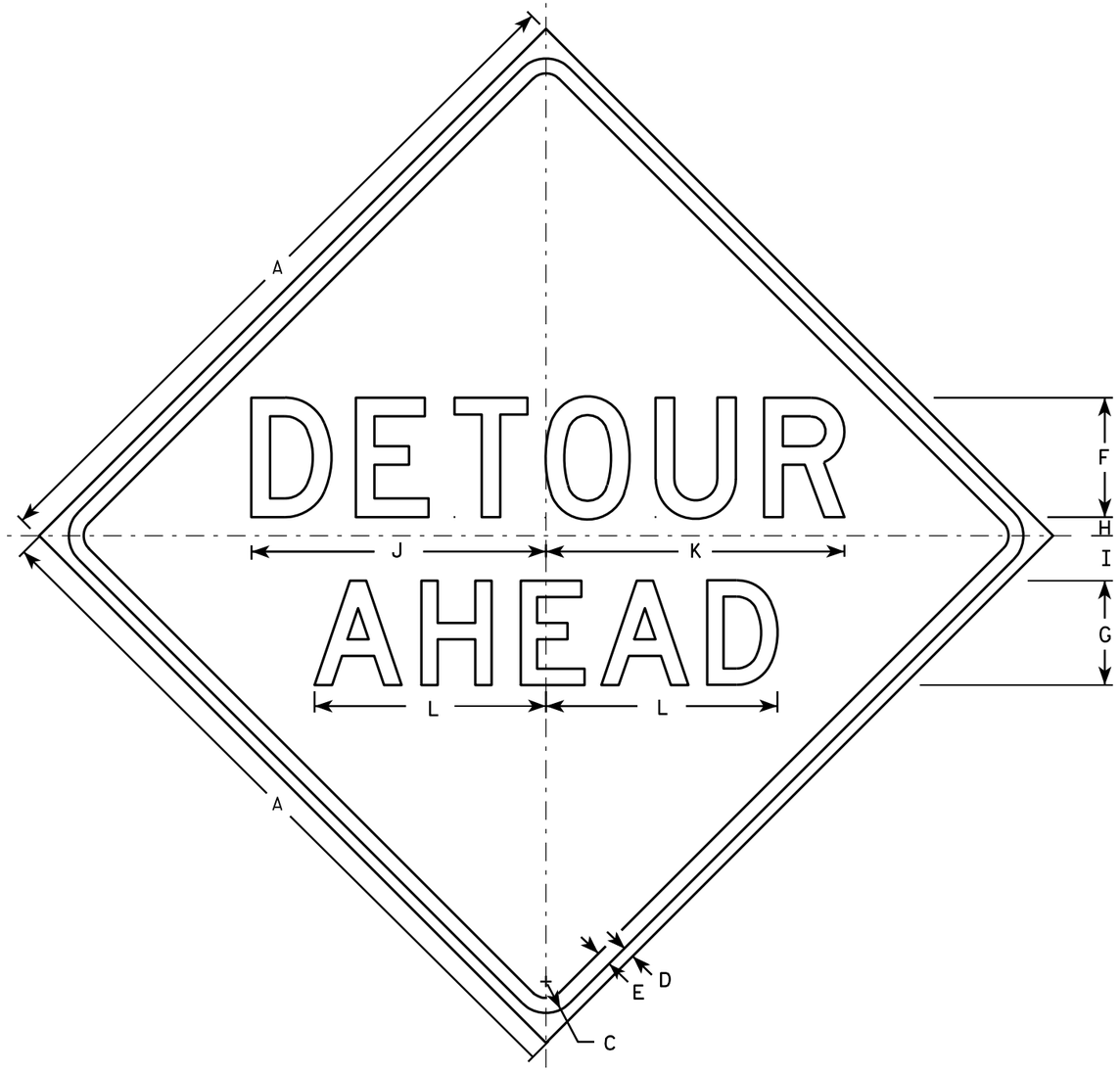
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

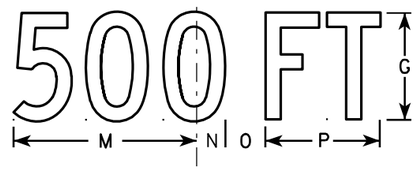
PROJECT NO:

SHEET NO: E

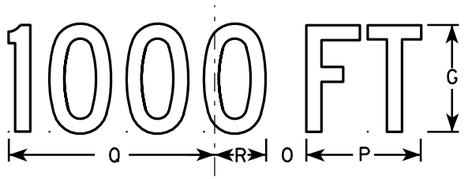
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



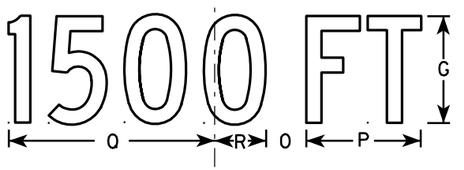
W20-2A



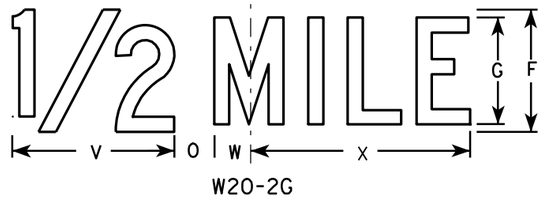
W20-2D



W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

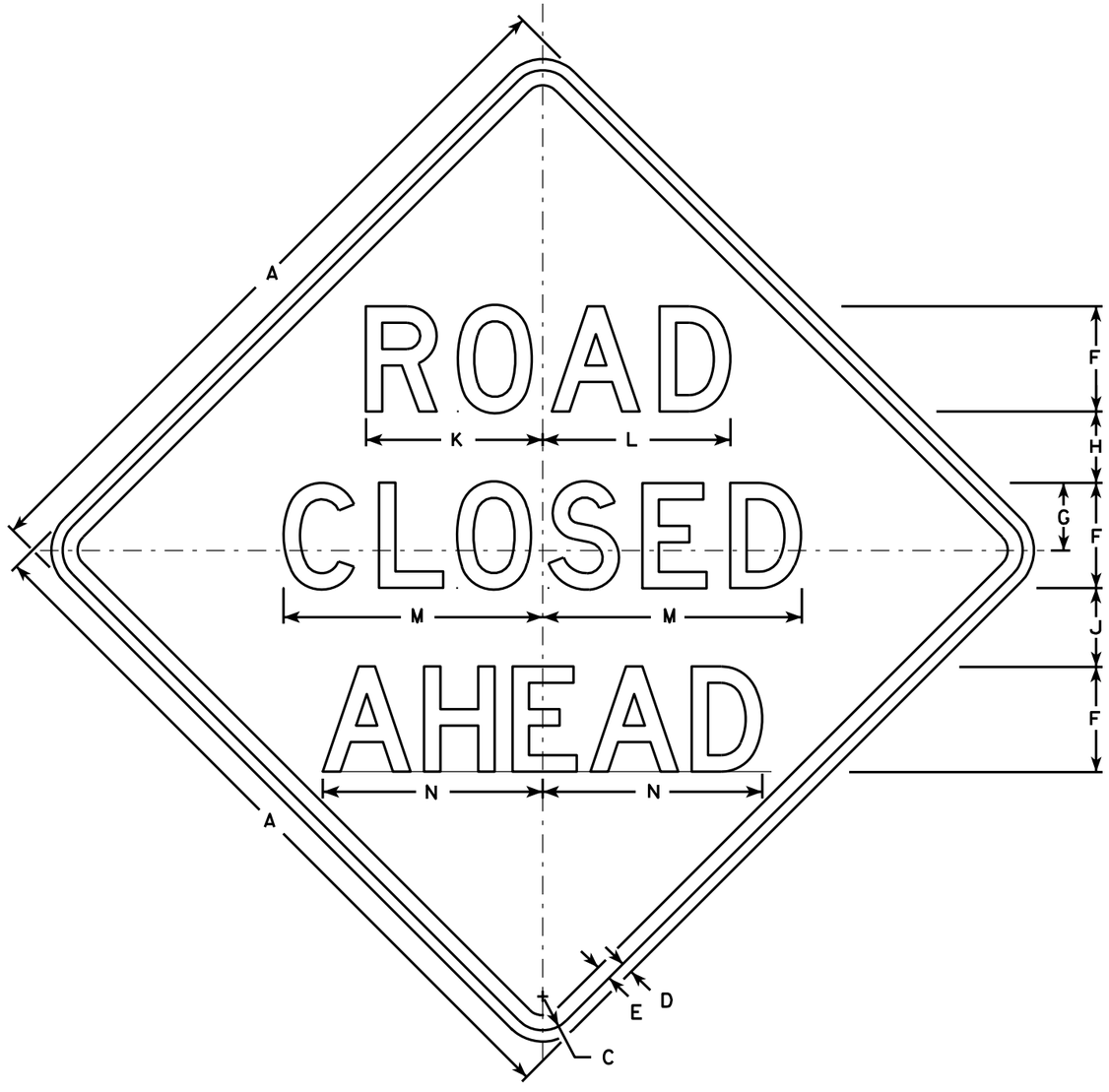
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

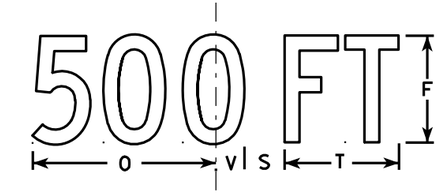
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

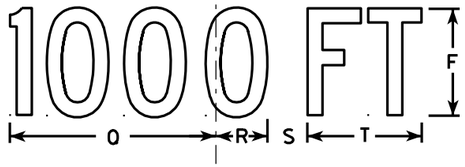
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 763	E



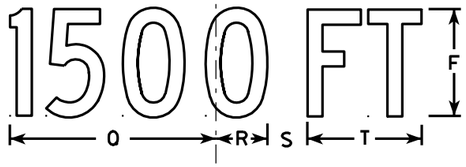
W20-3A



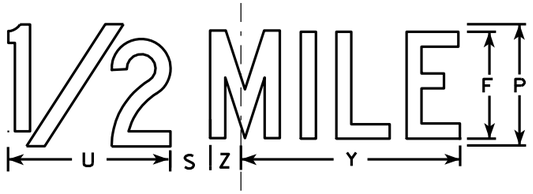
W20-3D



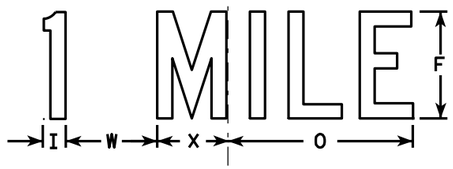
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

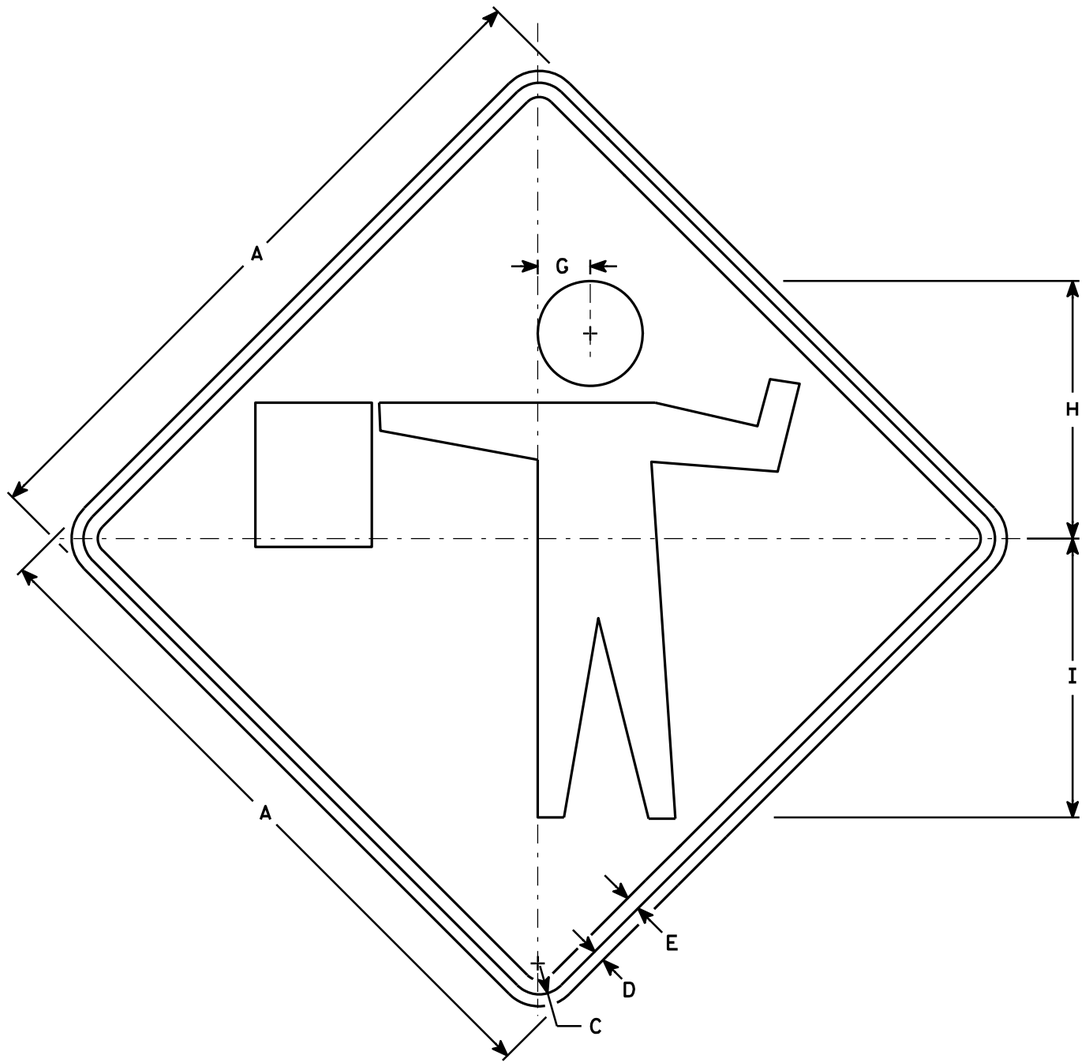
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 764 | E



W20-7A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		2 3/4	13 1/2	14 5/8																		9.00
2S	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
2M	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
3	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
4	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
5	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00

STANDARD SIGN
W20-7A

WISCONSIN DEPT OF TRANSPORTATION

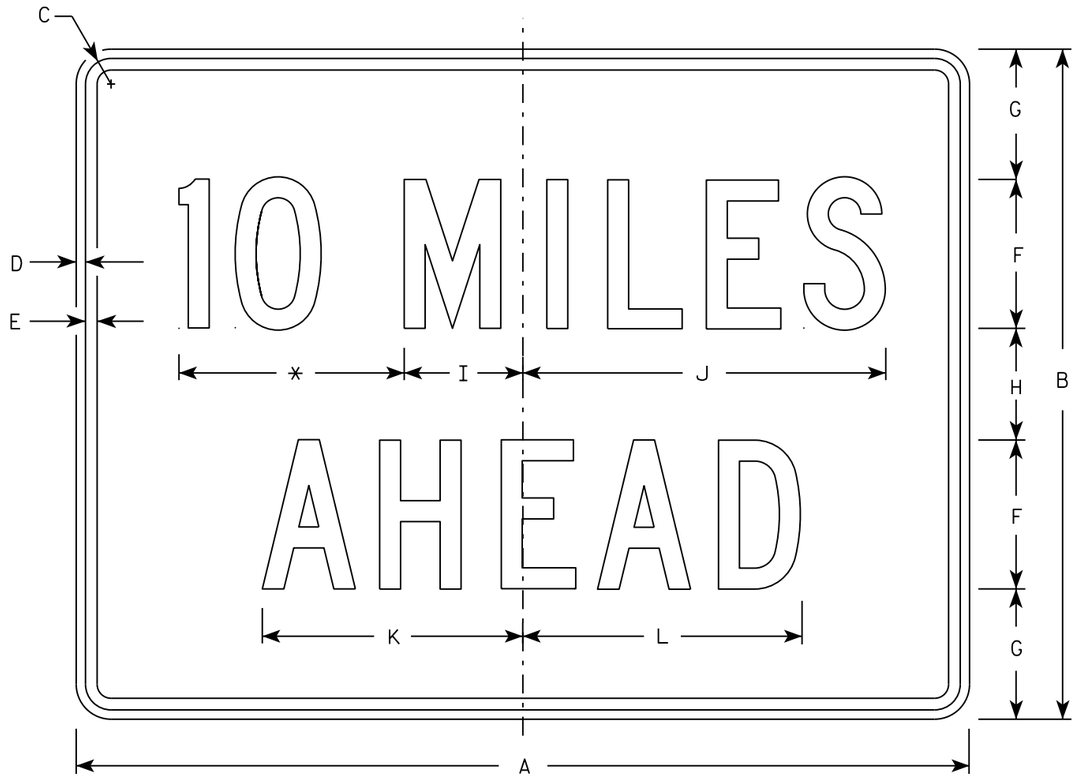
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-7A.5

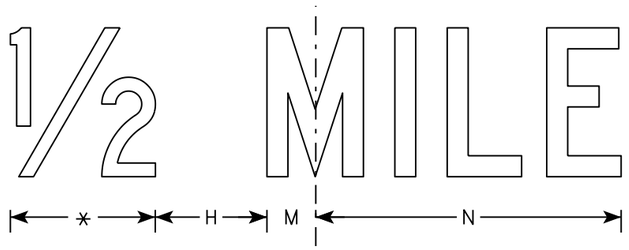
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 765 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W207A.DGN PLOT DATE : 18-MAR-2011 13:14 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 7.945391:1.000000 WISDOT/CADDS SHEET 42



W057-52



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

STANDARD SIGN
W057-52

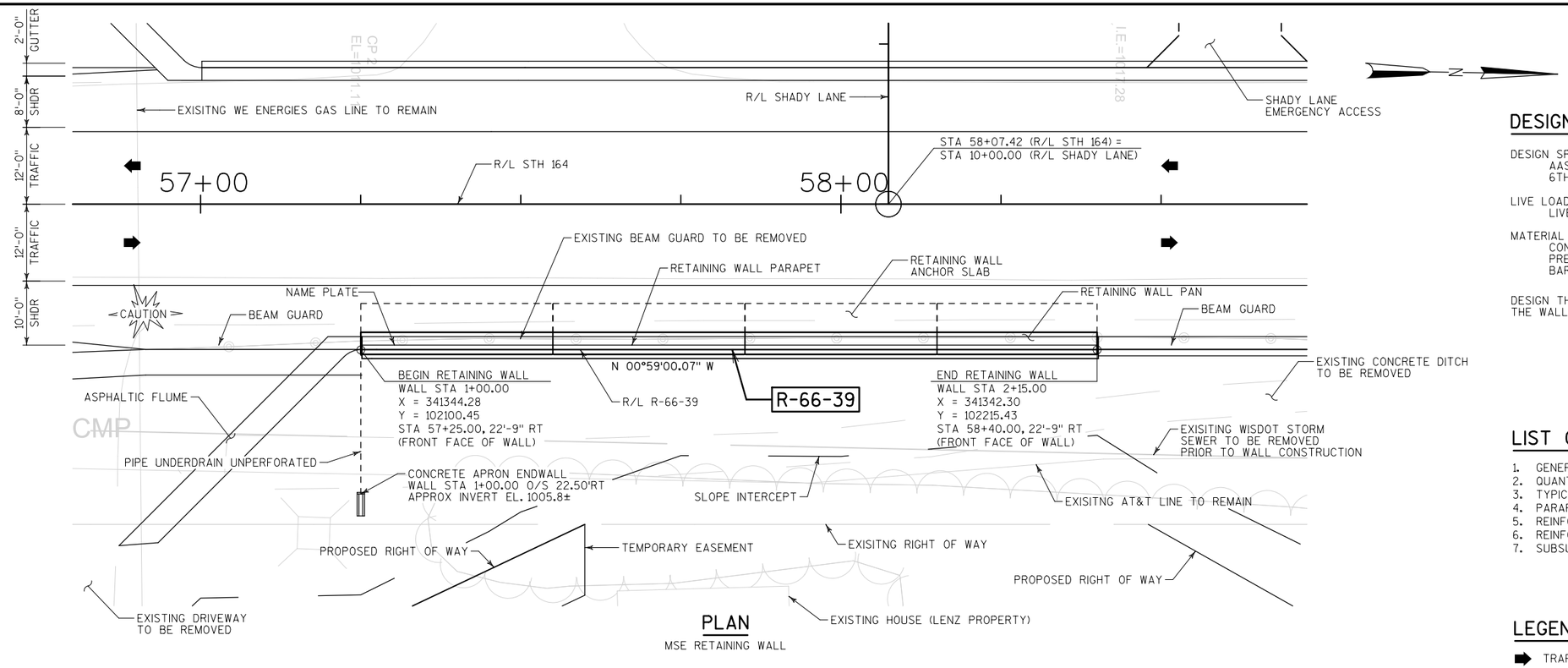
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W057-52.2

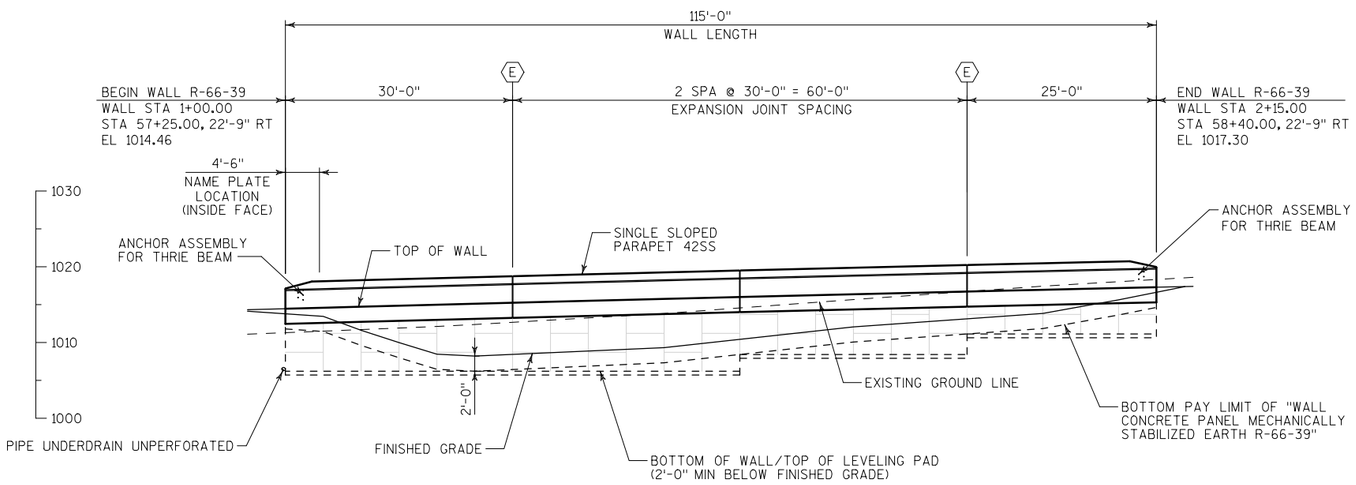
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 766	E

STATE PROJECT NUMBER
2709-03-70



PLAN

MSE RETAINING WALL



ELEVATION

(LOOKING WEST AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE WALL R/L)

BENCH MARK

NO.	STATION	OFFSET	DESCRIPTION	EL.
CP1	46+83	83' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	998.61
CP2	57+26	33' RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1011.11

DESIGN DATA

DESIGN SPECIFICATIONS:
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS,
6TH EDITION, 2012

LIVE LOAD:
LIVE LOAD SURCHARGE (ROADWAY) _____ 240 PSF

MATERIAL PROPERTIES:
CONCRETE MASONRY RETAINING WALL ___ f'c = 4,000 PSI
PRECAST CONCRETE WALL PANELS _____ f'c = 4,000 PSI
BAR STEEL REINFORCEMENT _____ Fy = 60,000 PSI

DESIGN THE MSE WALL FOR A HORIZONTAL BACKSLOPE BEHIND
THE WALL AND A LIVE LOAD VERTICAL SURCHARGE OF 240 PSF.

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. QUANTITIES, NOTES & PROFILE GRADE LINE
3. TYPICAL WALL SECTION
4. PARAPET, COPING & ANCHOR SLAB DETAILS
5. REINFORCEMENT LAYOUT DETAILS
6. REINFORCEMENT SCHEDULE
7. SUBSURFACE EXPLORATION

LEGEND

TRAFFIC DIRECTION

(E) EXPANSION JOINT IN ANCHOR SLAB, COPING & PARAPET

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
ED MCCRIGHT (414) 272-2426

NO.	DATE	REVISION	BY

ch2m:

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 03/05/18
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-66-39

EAST RETAINING WALL ALONG STH 164

COUNTY	~~TOWN/CITY~~/VILLAGE
WASHINGTON	RICHFIELD

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
EKM	KES	EKM	KES

GENERAL PLAN & ELEVATION

SHEET 1 OF 7

WISCONSIN
EDWARD K. McCRIGHT
E-32472
MILWAUKEE
WI
11/1/17
PROFESSIONAL ENGINEER

FILE NAME : R39_080101_gp.dgn PLOT DATE : 24-OCT-2017 PLOT BY : pwsvc R39_080101_gp PLOT SCALE : 20:1

STATE PROJECT NUMBER
2709-03-70

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEM	UNITS	TOTAL
502.3200	PROTECTIVE SURFACE TREATMENT	SY	83
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	67
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	11,325
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	23
612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	25
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	115
612.0806	APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH	EACH	1
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2
SPV.0165.04	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH R-66-39	SF	755
	NON-BID ITEM		
	NAME PLATE	EACH	1
	NON-BITUMINOUS JOINT SEALER	SIZE	1"
	CORK FILLER	SIZE	1"

ALL ITEMS ARE CATEGORY 0050

SOIL PARAMETERS

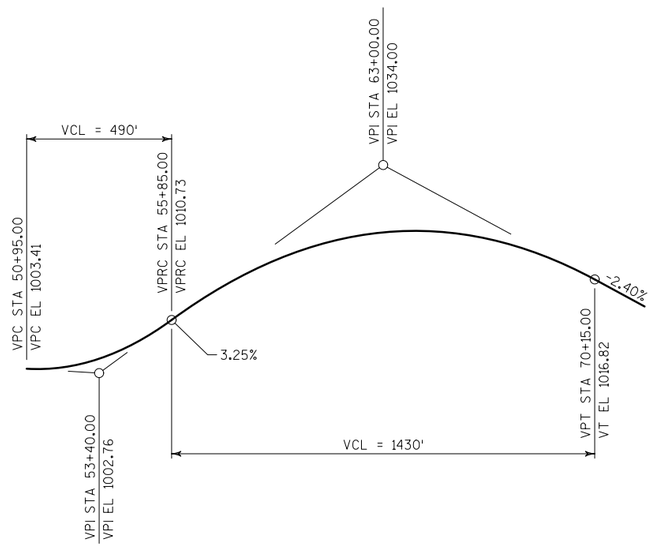
SOIL DESCRIPTION	UNIT WEIGHT (PCF)	EFFECTIVE COHESION (PSF)	EFFECTIVE FRICTION ANGLE (DEGREES)
WALL FILL ⚹⚹	120	0	30
SAND AND GRAVEL EXISTING FILL	135	0	35
SILTY CLAY	125	0	26

⚹⚹ DESIGN WALL FOR THESE VALUES

WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS	
WALL HEIGHT (FEET)	8.5
EXPOSED WALL HEIGHT (FEET)	7.0
MINIMUM LENGTH OF REINFORCEMENT (FEET) ⚹	8.0
R/L STH 164 STATION	57+50
BORINGS USED	1 AND 2
CAPACITY TO DEMAND RATIO (CDR)	
SLIDING (CDR > 1.0)	2.06
ECCENTRICITY (CDR > 1.0)	4.38
BEARING RESISTANCE (CDR > 1.0)	6.7
GLOBAL STABILITY (CDR > 1.0)	1.2
FACTORED BASE PRESSURE	2,100 PSF

⚹ THE LENGTHS PROVIDED IN THE TABLE ARE THE MINIMUM REQUIRED REINFORCEMENT LENGTHS BASED UPON THE MINIMUM DESCRIBED IN THE WALL SYSTEM SPECIAL PROVISIONS OR EXTERNAL AND GLOBAL STABILITY AT THE DESIGNATED LOCATIONS. THESE DESIGNATED LOCATIONS REPRESENT TYPICAL AND CRITICAL WALL LOCATIONS, BUT SHALL NOT BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR DESIGNED LENGTHS SHALL MEET OR EXCEED THE MINIMUM VALUES REPRESENTED IN THE TABLE AT THESE DESIGNATED LOCATIONS.



PROFILE GRADE LINE - R/L STH 164

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WASHINGTON COUNTY ZONE, NAD 83 (2007). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 NAVD 88 (2007).

ALL STATIONS AND DIMENSIONS ARE ALONG THE FRONT FACE OF WALL, UNLESS SHOWN OTHERWISE.

THESE PLANS ARE FOR A PRECAST CONCRETE PANEL MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALL.

THE QUANTITIES AND REINFORCEMENT DETAILS ARE BASED ON AN ASSUMED CONCRETE WALL PANEL THICKNESS OF 5½" INCHES. FOR PANEL THICKNESSES DIFFERENT THAN 5½" INCHES, THE CONTRACTOR SHALL VERIFY REINFORCEMENT BAR DETAILS AND QUANTITIES AND WILL BE RESPONSIBLE FOR ANY QUANTITY VARIATIONS.

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, AND SHOP DRAWINGS FOR THE RETAINING WALL, IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS IS INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EAREARTH
THE COST OF ALL EXCAVATION REQUIRED TO INSTALL THE MSE RETAINING WALL IS INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH."

THE COST OF FURNISHING AND PLACING THE UNREINFORCED CONCRETE LEVELING PAD UNDER THE MSE PRECAST WALL PANELS IS INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH".

THE COST OF FURNISHING AND PLACING MSE BACKFILL WITHIN THE REINFORCED SOIL ZONE IS TO BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH".

THE PLAN QUANTITY FOR THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE LEVELING PAD TO THE TOP OF WALL AS SHOWN IN THE PLANS.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER, UNLESS SHOWN OTHERWISE.

NAME PLATE SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY RETAINING WALLS". REFER TO S.D.D. "NAME PLATE (STRUCTURES)" FOR NAME PLATE DETAILS.

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. UTILITIES LABELED AS PROPOSED MAY BE INSTALLED BY OTHERS PRIOR TO THIS CONTRACT.

THE PLAN QUANTITY FOR THE ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE LEVELING PAD TO THE TOP OF WALL AS SHOWN IN THE PLANS. THE TOP OF THE LEVELING PAD IS ASSUMED TO BE 2'-0" BELOW FINISHED GRADE.

ALL BAR STEEL REINFORCEMENT WITHIN CAST-IN-PLACE CONCRETE SHALL BE EPOXY COATED.

THE QUANTITIES OF CONCRETE MASONRY AND BAR STEEL REINFORCEMENT FOR THE CAST-IN-PLACE ANCHOR SLAB, COPING AND PARAPET ARE PAID FOR UNDER THE ITEMS "CONCRETE MASONRY RETAINING WALLS" AND "BAR STEEL REINFORCEMENT HS COATED STRUCTURES", RESPECTIVELY.

REFER TO S.D.D. "REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN" FOR APRON ENDWALL AND RODENT SHIELD DETAILS.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-66-39

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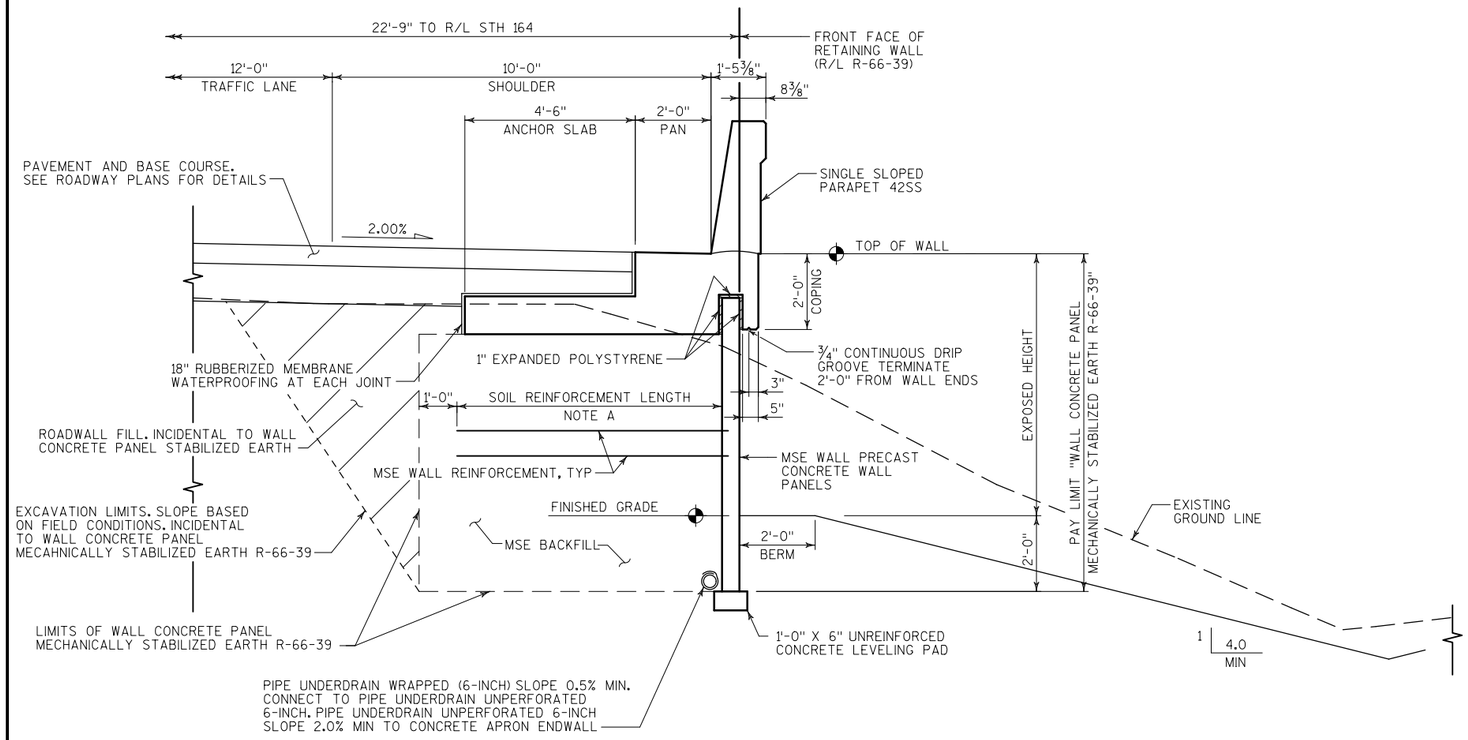
QUANTITIES, NOTES & PROFILE GRADE LINE

SHEET 2 OF 7

768

FILE NAME : R39_080102_gn.dgn PLOT DATE : 24-OCT-2017 PLOT BY : pwsvc R39_080102_gn PLOT SCALE : 4:1

STATE PROJECT NUMBER
2709-03-70



TYPICAL WALL SECTION

LOOKING NORTH STA 57+25.00 TO STA 58+40.00
WALL STA 1+00.00 TO STA 2+15.00

WALL ELEVATIONS ◥

WALL STATION	TOP OF WALL EL	FINISHED GRADE EL	EXISTING GROUND EL
1+00.00	1014.46	1013.79	1011.30
1+05.00	1014.59	1013.45	1011.50
1+10.00	1014.73	1011.61	1011.71
1+15.00	1014.86	1009.99	1011.91
1+20.00	1014.99	1008.46	1012.12
1+25.00	1015.12	1008.21	1012.38
1+30.00	1015.25	1008.43	1012.67
1+35.00	1015.38	1008.65	1012.96
1+40.00	1015.51	1008.88	1013.25
1+45.00	1015.63	1009.10	1013.54
1+50.00	1015.76	1009.32	1013.83
1+55.00	1015.88	1009.87	1014.20
1+60.00	1016.01	1010.42	1014.57
1+65.00	1016.13	1010.97	1014.93
1+70.00	1016.25	1011.52	1015.30
1+75.00	1016.37	1012.06	1015.67
1+80.00	1016.49	1012.42	1016.02
1+85.00	1016.61	1012.77	1016.38
1+90.00	1016.73	1013.13	1016.73
1+95.00	1016.85	1013.48	1017.09
2+00.00	1016.96	1013.84	1017.44
2+05.00	1017.08	1014.74	1017.74
2+10.00	1017.19	1015.63	1018.03
2+15.00	1017.30	1016.63	1018.32

NOTES

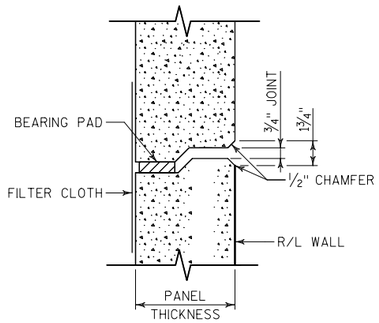
NOTE A:

SEE WALL EXTERNAL STABILITY EVALUATION TABLE ON SHEET 2 FOR MINIMUM LENGTH OF MSE WALL REINFORCING STRIPS.

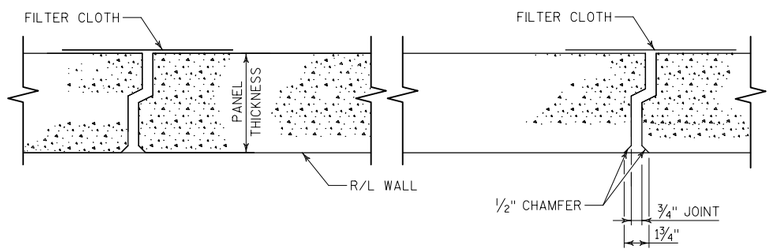
SOIL REINFORCEMENT MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS.

LEGEND

◥ LINEARLY INTERPOLATE WALL ELEVATIONS BETWEEN STATIONS.



ELEVATION SECTION THROUGH PANELS



PLAN SECTION THROUGH PANELS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-66-39

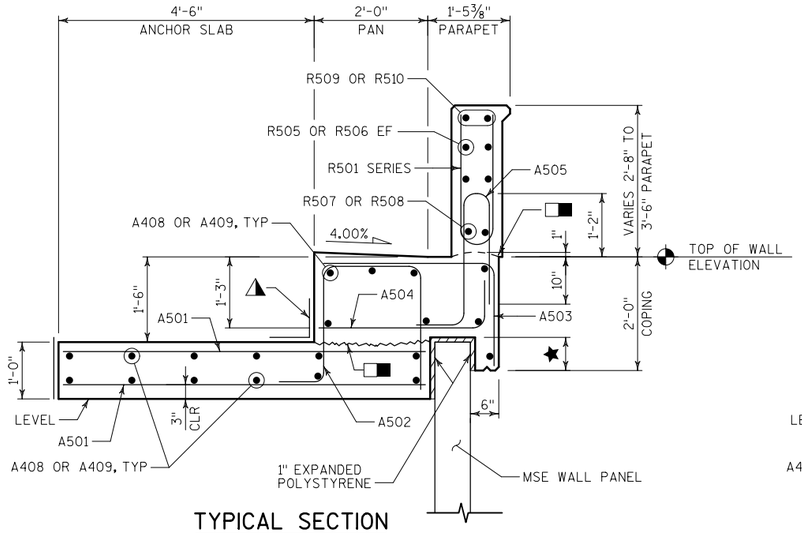
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TYPICAL WALL SECTION

SHEET 3 OF 7

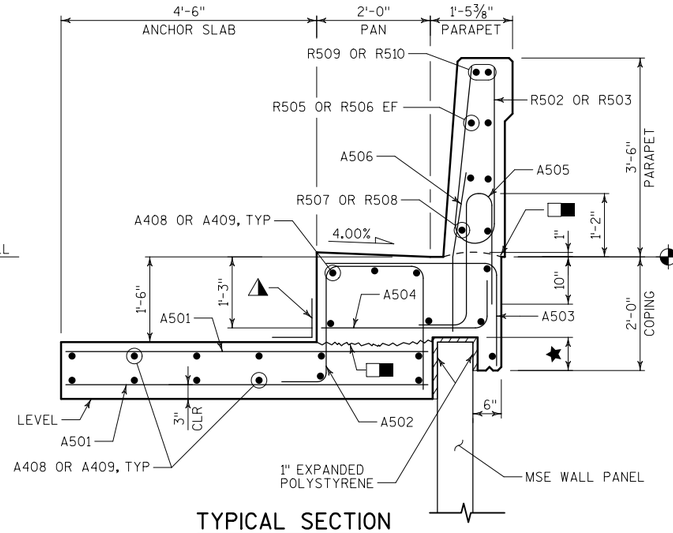
STATE PROJECT NUMBER

2709-03-70



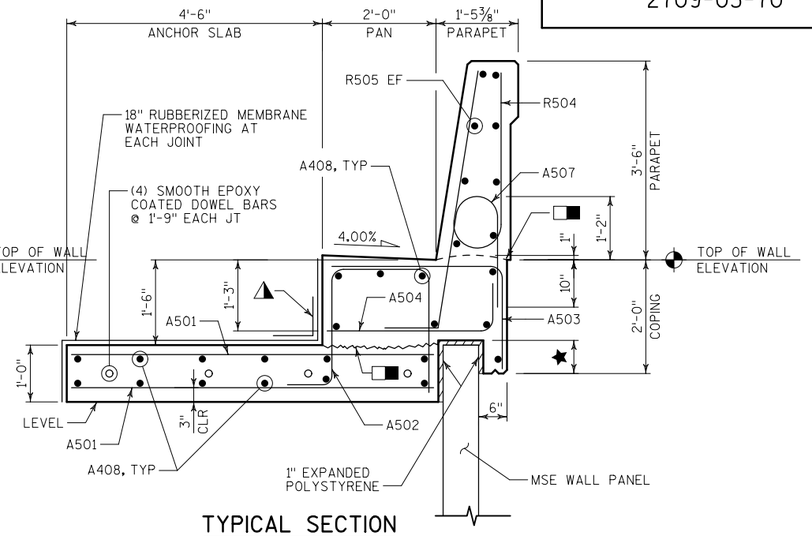
TYPICAL SECTION

SECTION A
(STA 1+00.00 TO 1+02.50 AND STA 2+12.50 TO STA 2+15.00)



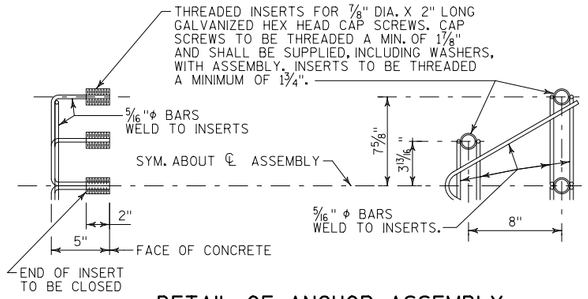
TYPICAL SECTION

SECTION B
(STA 1+02.50 TO STA 1+09.00 AND STA 2+06.00 TO STA 2+12.50)



TYPICAL SECTION

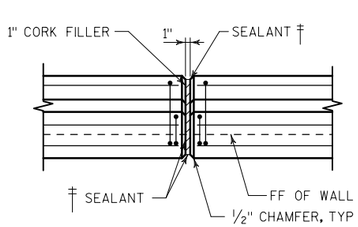
SECTION C
(STA 1+09.00 TO STA 2+06.00)



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.



PARAPET EXPANSION JOINT

ANCHOR SLAB EXPANSION JOINT

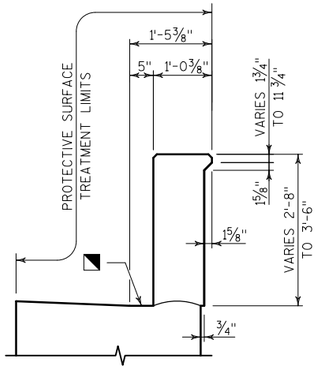
LOCATE EXPANSION JOINTS OVER WALL JOINTS.
DO NOT RUN BAR STEEL THRU JOINT, EXCEPT FOR DOWEL BARS AS SHOWN.

LEGEND

- CONSTRUCTION JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH
- † SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER HOLD ⅛" BELOW SURFACE OF CONCRETE)
- ★ 3" MIN, 6" MAX
- ◭ 18" RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZONTAL CONSTRUCTION JOINT
- LEVEL

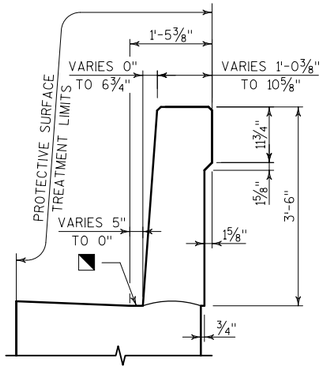
NOTE

SEE GENERAL PLAN & ELEVATION SHEET FOR LOCATION OF EXPANSION JOINTS



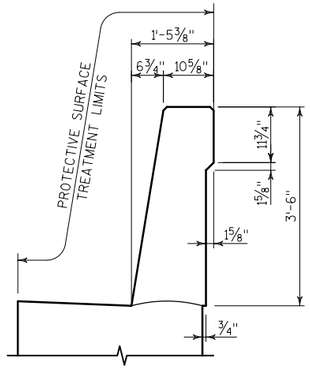
SINGLE SLOPED PARAPET 42SS DIMENSIONS

SECTION A



SINGLE SLOPED PARAPET 42SS DIMENSIONS

SECTION B



SINGLE SLOPED PARAPET 42SS DIMENSIONS

SECTION C

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STATE OF WISCONSIN
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STRUCTURE R-66-39

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PARAPET, COPING, & ANCHOR SLAB DETAILS

SHEET 4 OF 7

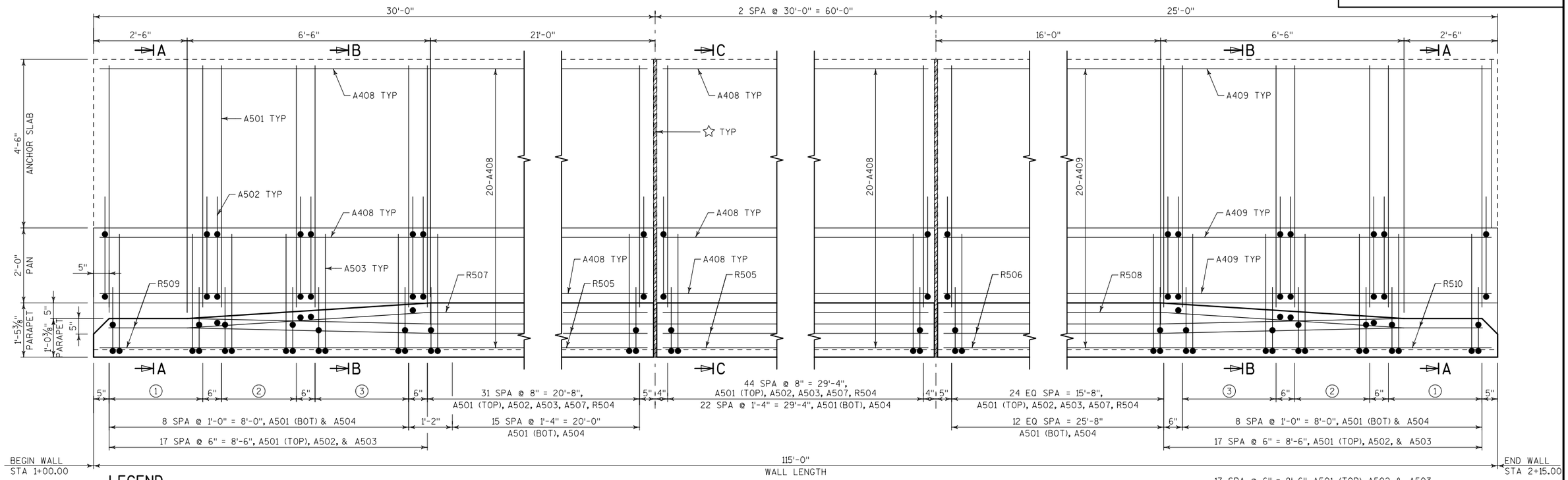
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8

FILE NAME : R39_080301_de.dgn
PLOT DATE : 24-OCT-2017
PLOT BY : pwsvc
R39_080301_de
PLOT SCALE : 2.666664:1

STATE PROJECT NUMBER
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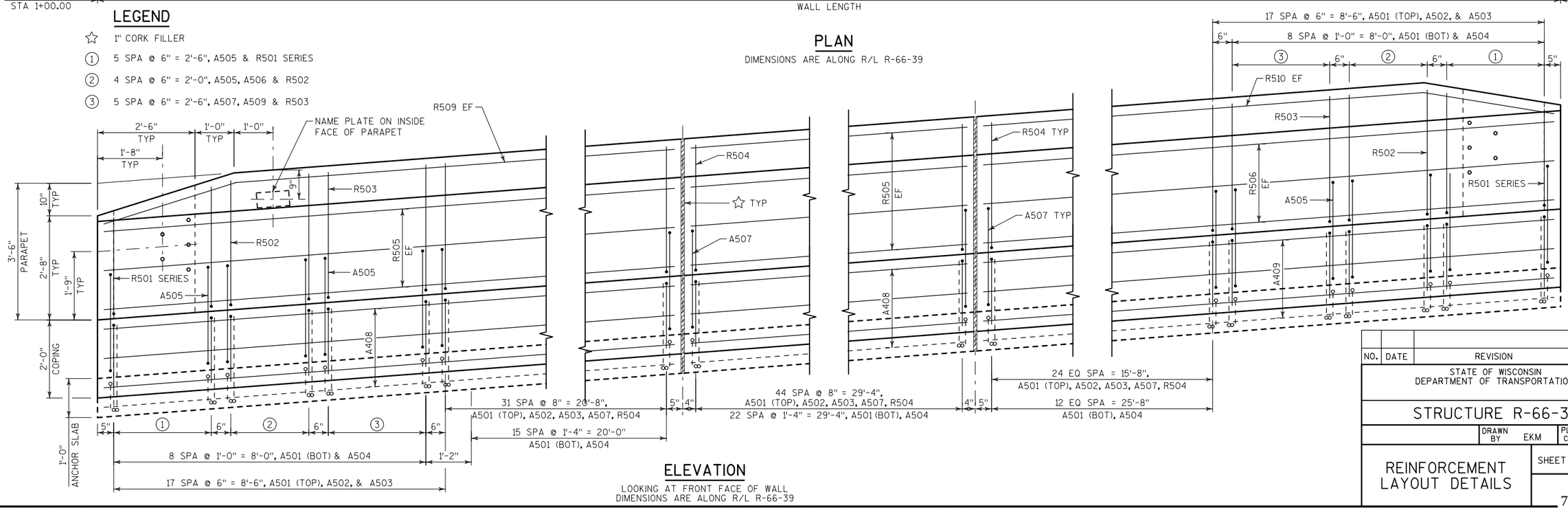


LEGEND

- ☆ 1" CORK FILLER
- ① 5 SPA @ 6" = 2'-6", A505 & R501 SERIES
- ② 4 SPA @ 6" = 2'-0", A505, A506 & R502
- ③ 5 SPA @ 6" = 2'-6", A507, A509 & R503

PLAN

DIMENSIONS ARE ALONG R/L R-66-39



ELEVATION

LOOKING AT FRONT FACE OF WALL
DIMENSIONS ARE ALONG R/L R-66-39

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE R-66-39

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REINFORCEMENT LAYOUT DETAILS

SHEET 5 OF 7

FILE NAME : R39_080302_de.dgn
PLOT DATE : 24-OCT-2017
PLOT BY : pwsvc
R39_080302_de
PLOT SCALE : 2.666667:1

STATE PROJECT NUMBER
2709-03-70

BILL OF BARS - ANCHOR SLAB & COPING

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	SERIES	LOCATION
A501	X	343	6'-3"			ANCHOR SLAB HORIZONTAL TOP & BOTTOM
A502	X	227	6'-4"	X		COPING - VERTICAL TIE
A503	X	227	4'-6"	X		COPING - HORIZONTAL TIE
A504	X	116	3'-8"	X		COPING - HORIZONTAL TIE
A505	X	34	5'-5"	X		COPING - VERTICAL DOWEL
A506	X	22	2'-9"	X		COPING - VERTICAL DOWEL - TRANSITION
A507	X	192	5'-9"	X		COPING - VERTICAL DOWEL
A408	X	80	29'-7"			ANCHOR SLAB AND COPING - LONGITUDINAL
A409	X	20	24'-7"			ANCHOR SLAB AND COPING - LONGITUDINAL

BILL OF BARS - PARAPET

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	SERIES	LOCATION
R501	X	12	5'-6"	X	⚠	PARAPET - VERTICAL TIE - TRANSITION
R502	X	10	6'-6"	X		PARAPET - VERTICAL TIE - TRANSITION
R503	X	12	6'-8"	X		PARAPET - VERTICAL TIE - TRANSITION
R504	X	192	6'-9"	X		PARAPET - VERTICAL TIE
R505	X	29	29'-7"			PARAPET - LONGITUDINAL
R506	X	5	24'-7"	X		PARAPET - LONGITUDINAL
R507	X	1	29'-9"	X		PARAPET - LONGITUDINAL TRANSITION - BOTTOM
R508	X	1	24'-9"	X		PARAPET - LONGITUDINAL TRANSITION - BOTTOM
R509	X	2	29'-7"	X		PARAPET - LONGITUDINAL - TRANSITION - TOP
R510	X	2	24'-7"	X		PARAPET - LONGITUDINAL - TRANSITION - TOP

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR.
THE FIRST DIGIT OF A BAR MARK SIGNIFIES BAR SIZE.

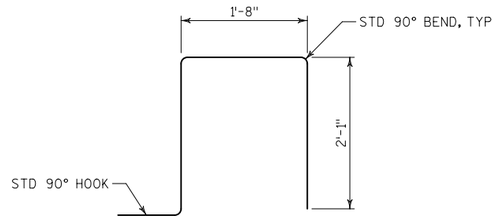
LEGEND

⚠ LENGTH USED FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

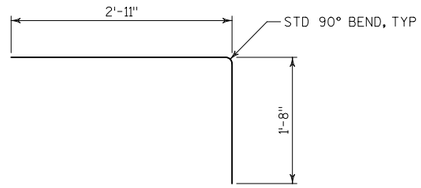
BAR SERIES TABLE

BAR MARK	NO REQ'D.	LENGTH
R501	2 SERIES OF 6	4'-10" TO 6'-2"

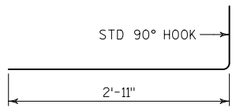
BUNDLE AND TAG EACH SERIES SEPARATELY



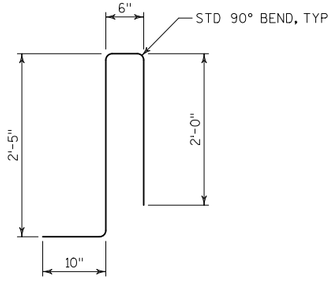
A502



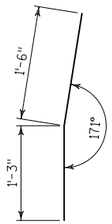
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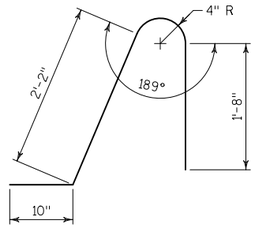
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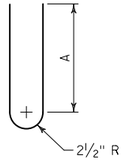
A505



A506

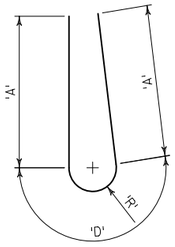


A507



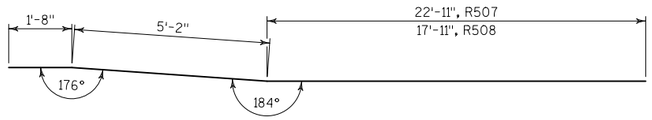
R501 & R502

BAR MARK	DIMENSION 'A'
R501	VARIES 2'-0" TO 2'-8"
R502	2'-10"

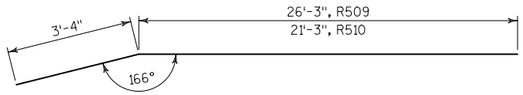


R503 & R504

BAR MARK	DIMENSION 'A'	ANGLE 'D'	RADIUS 'R'
R503	2'-9"	186°	3½"
R504	2'-8"	189°	4½"



R507 & R508



R509 & R510

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-66-39

DRAWN BY EKM | PLANS CK'D. KES

REINFORCEMENT SCHEDULE

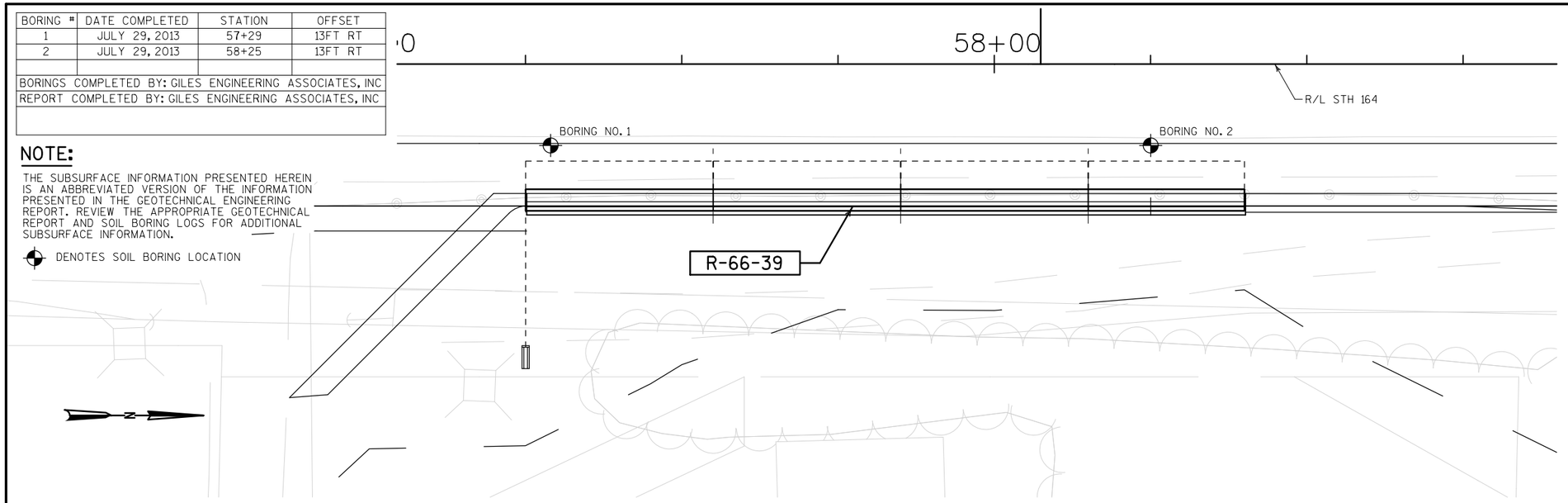
SHEET 6 OF 7

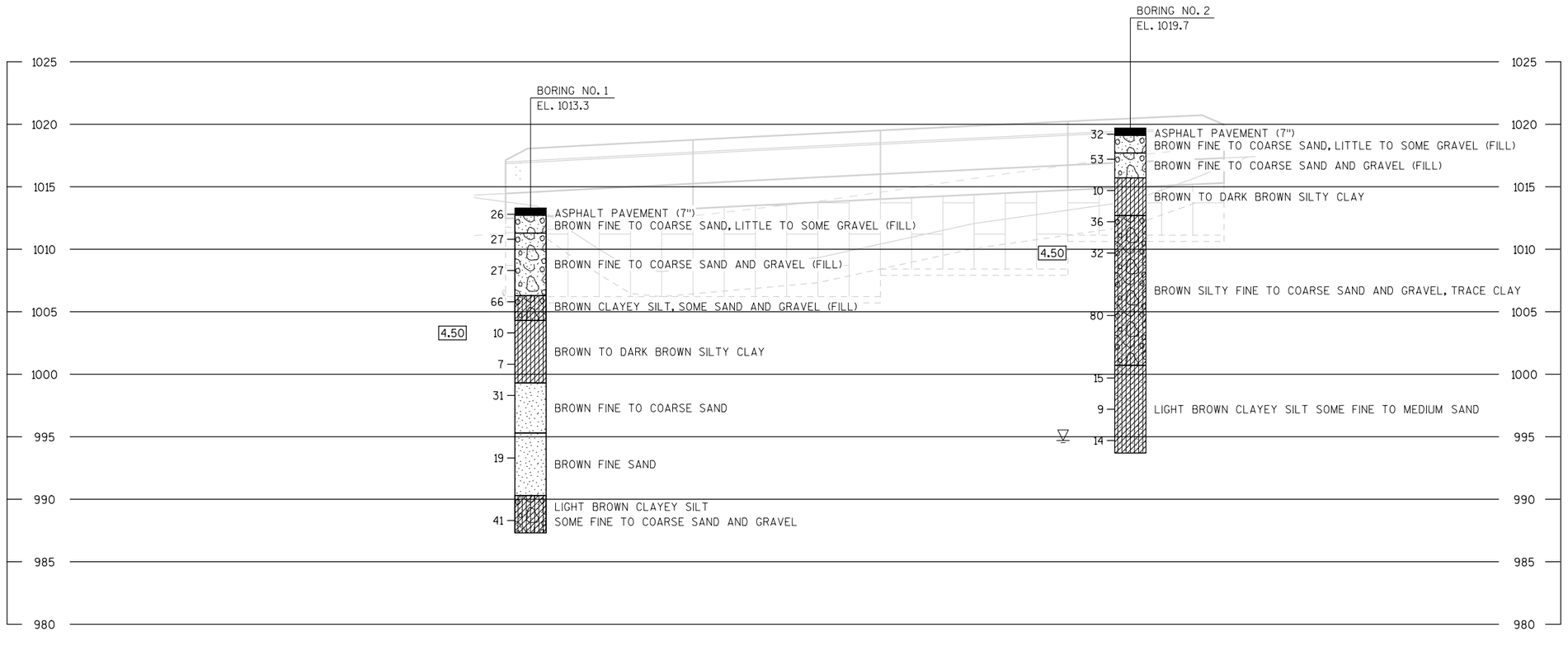
BORING #	DATE COMPLETED	STATION	OFFSET
1	JULY 29, 2013	57+29	13FT RT
2	JULY 29, 2013	58+25	13FT RT
BORINGS COMPLETED BY: GILES ENGINEERING ASSOCIATES, INC			
REPORT COMPLETED BY: GILES ENGINEERING ASSOCIATES, INC			

NOTE:

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DENOTES SOIL BORING LOCATION





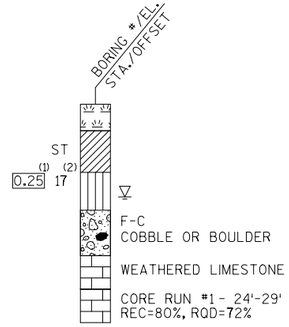
STATE PROJECT NUMBER

2709-03-70

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-66-39

DRAWN BY EKM | PLANS CK'D. KES

SUBSURFACE EXPLORATION

SHEET 7 OF 7

773

8

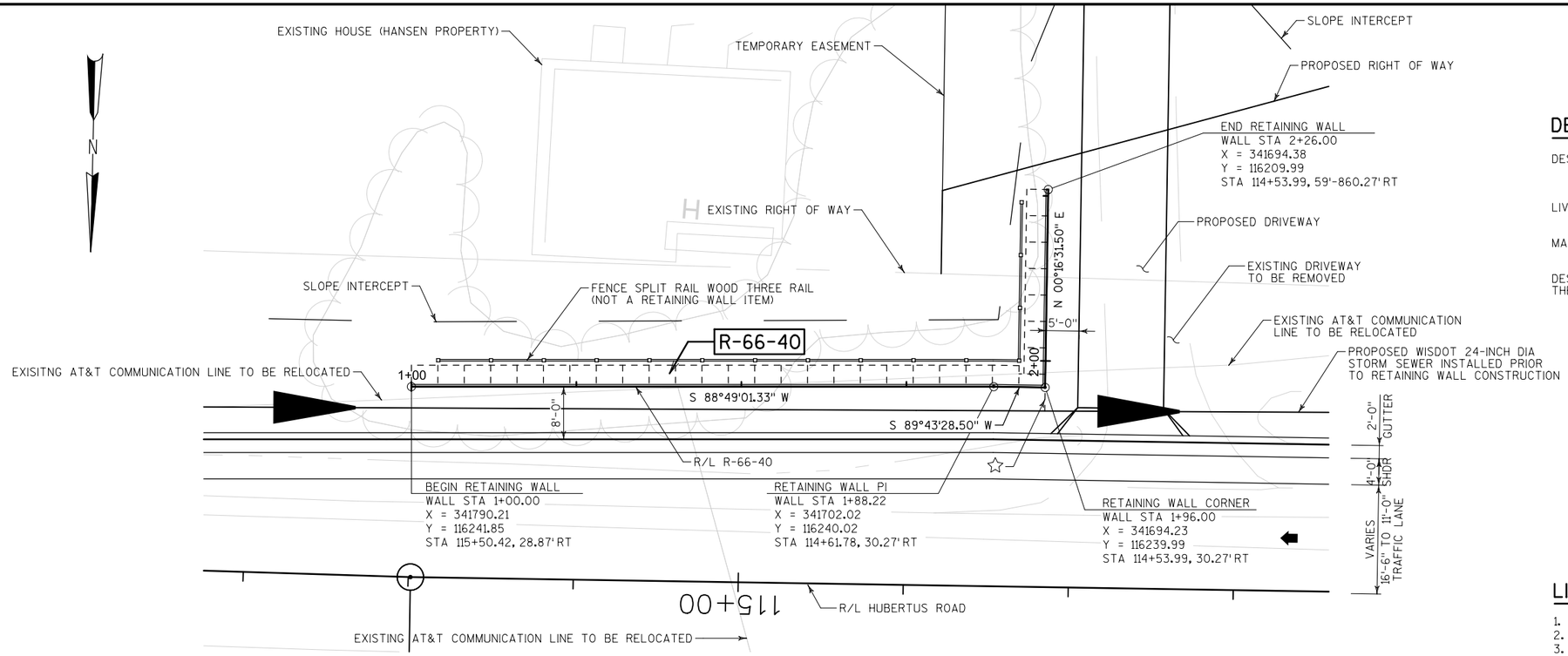
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FILE NAME : R39_080401_se.dgn

R39_080401_se

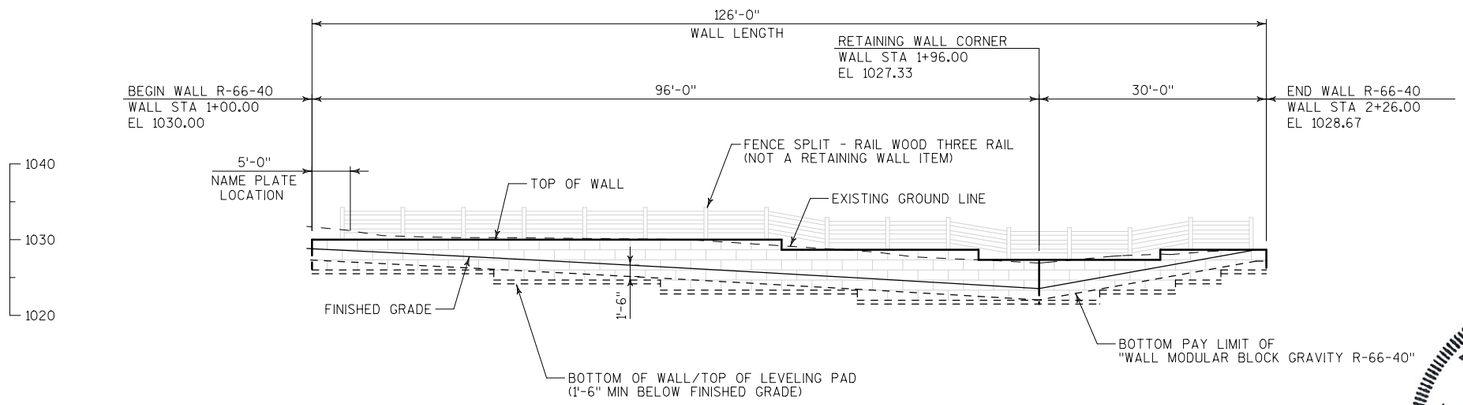
PLOT SCALE : 20:1

STATE PROJECT NUMBER
2709-03-70



PLAN

MODULAR BLOCK GRAVITY RETAINING WALL



ELEVATION

(LOOKING AT FRONT FACE OF WALL)
(DISTANCES AND STATIONS ARE GIVEN ALONG THE WALL R/L)

BENCH MARK

NO.	STATION	OFFSET	DESCRIPTION	EL.
CP11	111+82	221'RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1136.12
CP34	119+15	70'RT	24" FENO SPIKES W/PLASTIC CAPS (BERNSTEN)	1142.73
CP40	110+00	0'RT	CONCRETE MONUMENT W/ALUMINUM CAP	1102.49

DESIGN DATA

DESIGN SPECIFICATIONS:
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS,
6TH EDITION, 2012

LIVE LOAD:
LIVE LOAD SURCHARGE (CONSTRUCTION) ___ 100 PSF

MATERIAL PROPERTIES:
WETCAST CONCRETE MODULAR BLOCKS ___ f'c = 4,000 PSI

DESIGN THE MSE WALL FOR A HORIZONTAL BACKSLOPE BEHIND THE WALL AND A LIVE LOAD VERTICAL SURCHARGE OF 100 PSF.

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. QUANTITIES, NOTES & PROFILE GRADE LINE
3. TYPICAL WALL SECTION
4. SUBSURFACE EXPLORATION

LEGEND

TRAFFIC DIRECTION

PIPE UNDERDRAIN NONPERFORATED 6-INCH.
CONNECT TO STORM SEWER PIPE AT LOCATION SHOWN.

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
ED MCCRIGHT (414) 272-2426

NO.	DATE	REVISION	BY

WISCONSIN
EDWARD K. McCRIGHT
E-32422
MILWAUKEE
WI
11/1/17
PROFESSIONAL ENGINEER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 03/05/18
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-66-40

SOUTH RETAINING WALL ALONG HUBERTUS ROAD

COUNTY	~~TOWN/CITY/~~VILLAGE
WASHINGTON	RICHFIELD

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
EKM	KES	EKM	KES

GENERAL PLAN & ELEVATION

SHEET 1 OF 4

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STATE PROJECT NUMBER
2709-03-70

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEM	UNITS	TOTAL
612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	10
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	130
SPV.0165.05	WALL MODULAR BLOCK GRAVITY R-66-40	SF	545
	NON-BID ITEM		
	NAME PLATE	EACH	1

ALL ITEMS ARE CATEGORY 0060

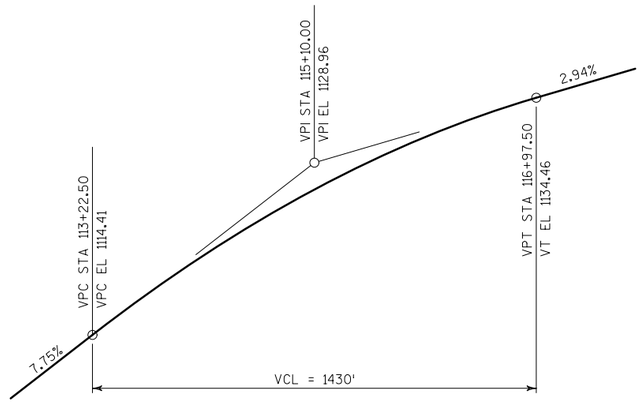
SOIL PARAMETERS

SOIL DESCRIPTION	UNIT WEIGHT (PCF)	EFFECTIVE COHESION (PSF)	EFFECTIVE FRICTION ANGLE (DEGREES)
STRUCTURE BACKFILL ⚹⚹	120	0	30
CLAYEY SILT AND SILTY CLAY / EXISTING FILL	125	0	26
CLAYEY SILT	125	0	26

⚹⚹ DESIGN WALL FOR THESE VALUES

WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS	
WALL HEIGHT (FEET)	5.5
EXPOSED WALL HEIGHT (FEET)	4
MINIMUM MODULAR BLOCK BOTTOM COURSE WIDTH (FEET)	3.3
R/L HUBERTUS ROAD STATION	114+75
BORINGS USED	3 AND 4
CAPACITY TO DEMAND RATIO (CDR)	
SLIDING (CDR > 1.0)	1.11
ECCENTRICITY (CDR > 1.0)	1.74
BEARING RESISTANCE (CDR > 1.0)	2.21
GLOBAL STABILITY (CDR > 1.0)	1.63
FACTORED BASE PRESSURE	1,200 PSF



PROFILE GRADE LINE - R/L HUBERTUS ROAD

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WASHINGTON COUNTY ZONE, NAD 83 (2007). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 NAVD 88 (2007).

ALL STATIONS AND DIMENSIONS ARE ALONG THE WALL R/L, UNLESS SHOWN OTHERWISE. THE WALL R/L IS GIVEN AS VERTICAL PROJECTION OF THE FRONT FACE OF WALL AT EL 1122.00.

EITHER WET CAST BLOCKS OR DRY CAST STACKED BLOCKS MAY BE USED FOR THIS PROJECT.

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, AND SHOP DRAWINGS FOR THE RETAINING WALL, IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS IS INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK GRAVITY R-66-40".

THE COST OF ALL EXCAVATION REQUIRED TO INSTALL THE MODULAR BLOCK RETAINING WALL AND THE COST OF FURNISHING AND PLACING GRANULAR BACKFILL AND GEOTEXTILE FABRIC DF SCHEDULE B ARE INCIDENTAL TO THE BID ITEM "WALL MODULAR BLOCK GRAVITY R-66-40".

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

NAME PLATE SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "WALL MODULAR BLOCK GRAVITY R-66-40". REFER TO S.D.D. "NAME PLATE (STRUCTURES)" FOR NAME PLATE DETAILS.

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. UTILITIES LABELED AS PROPOSED MAY BE INSTALLED BY OTHERS PRIOR TO THIS CONTRACT.

THE PLAN QUANTITY FOR THE ITEM "WALL MODULAR BLOCK GRAVITY R-66-40" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE LEVELING PAD TO THE TOP OF WALL AS SHOWN IN THE PLANS. THE TOP OF THE LEVELING PAD IS ASSUMED TO BE 1'-6" BELOW FINISHED GRADE.

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

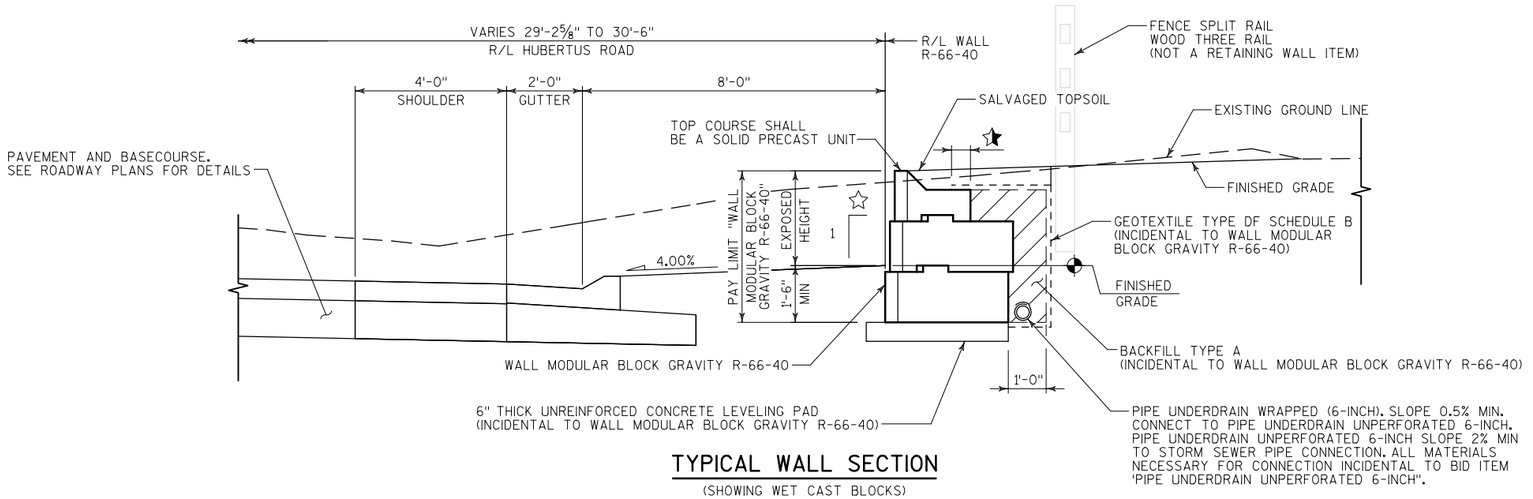
STRUCTURE R-66-40

DRAWN BY EKM | PLANS CK'D. KES

QUANTITIES, NOTES & PROFILE GRADE LINE

SHEET 2 OF 4

FILE NAME : R40_080102_gn.dgn PLOT DATE : 24-OCT-2017 PLOT BY : pwsvc R40_080102_gn PLOT SCALE : 4:1



TYPICAL WALL SECTION

(SHOWING WET CAST BLOCKS)

MODULAR BLOCK SURFACE TREATMENT NOTES

SUPPLY TO THE ENGINEER A MINIMUM OF TWO NON-PRODUCTION MODULAR BLOCKS WITH THE DETAILS AS SHOWN IN THE PLANS. SAMPLE MODULAR BLOCKS SHALL BE NOMINALLY 1 FOOT BY 2 FOOT OR LARGER IN SIZE TO SUFFICIENTLY DEMONSTRATE THE FINISHED APPEARANCE OF THE MODULAR BLOCK WALL. THE SUBMITTED TEST MODULAR BLOCKS SHALL FIT TOGETHER TO DEMONSTATE THE CONTINUATION OF THE TEXTURED SURFACE FINISH. OBTAIN THE ENGINEER'S ACCEPTANCE OF TEST MODULAR BLOCKS PRIOR TO CASTING ANY PRODUCTION MODULAR BLOCKS IN THIS CONTRACT. TEST MODULAR BLOCKS REQUIRED FOR APPROVAL ARE INCIDENTAL TO THE BID ITEM "WALL MODULAR BLOCK GRAVITY R-66-40".

THE FRONT FACE OF THE MODULAR BLOCKS SHALL HAVE A WEATHERED NATURAL STONE TEXTURED FINISH.

THE COLOR OF THE MODULAR BLOCKS SHALL BE THAT OF NORMAL CONCRETE.

WALL ELEVATIONS ◣

WALL STATION	TOP OF WALL EL	FINISHED GRADE EL	EXISTING GROUND EL
1+00.00	1130.00	1128.84	1131.75
1+02.00	1130.00	1128.74	1131.56
1+06.00	1130.00	1128.54	1131.13
1+10.00	1130.00	1128.34	1130.54
1+14.00	1130.00	1128.14	1130.42
1+18.00	1130.00	1127.94	1130.31
1+22.00	1130.00	1127.74	1130.27
1+26.00	1130.00	1127.53	1130.27
1+30.00	1130.00	1127.32	1130.23
1+34.00	1130.00	1127.10	1130.19
1+38.00	1130.00	1126.89	1130.15
1+42.00	1130.00	1126.68	1130.11
1+46.00	1130.00	1126.46	1130.07
1+50.00	1130.00	1126.25	1130.03
1+54.00	1130.00	1126.03	1129.78
1+58.00	1130.00	1125.80	1129.51
1+62.00	1130.00	1125.57	1129.25
1+62.00	1128.67	1125.57	1129.25
1+64.00	1128.67	1125.46	1129.12
1+68.00	1128.67	1125.23	1128.86
1+72.00	1128.67	1125.01	1128.60
1+76.00	1128.67	1124.78	1128.28
1+80.00	1128.67	1124.55	1127.77
1+84.00	1128.67	1124.31	1127.56
1+88.00	1128.67	1123.90	1127.25
1+88.00	1127.33	1123.90	1127.25
1+90.00	1127.33	1123.94	1127.29
1+94.00	1127.33	1123.70	1127.06
1+96.00	1127.33	1123.58	1126.95
1+98.00	1127.33	1123.85	1127.08
2+02.00	1127.33	1124.39	1127.32
2+06.00	1127.33	1124.93	1127.57
2+10.00	1127.33	1125.46	1127.81
2+12.00	1127.33	1125.73	1127.94
2+12.00	1128.67	1125.73	1127.94
2+16.00	1128.67	1126.27	1128.18
2+20.00	1128.67	1126.80	1128.43
2+24.00	1128.67	1127.34	1128.68
2+26.00	1128.67	1127.61	1128.80

LEGEND

◣ LINEARLY INTERPOLATE WALL ELEVATIONS BETWEEN STATIONS.

☆ WALL BATTER VARIES BY MANUFACTURER.

★ EXTEND GEOTEXTILE FABRIC 6" MIN FROM BACK OF MODULAR BLOCK

STATE PROJECT NUMBER

2709-03-70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-66-40

DRAWN BY EKM | PLANS CK'D. KES

TYPICAL WALL SECTION

SHEET 3 OF 4

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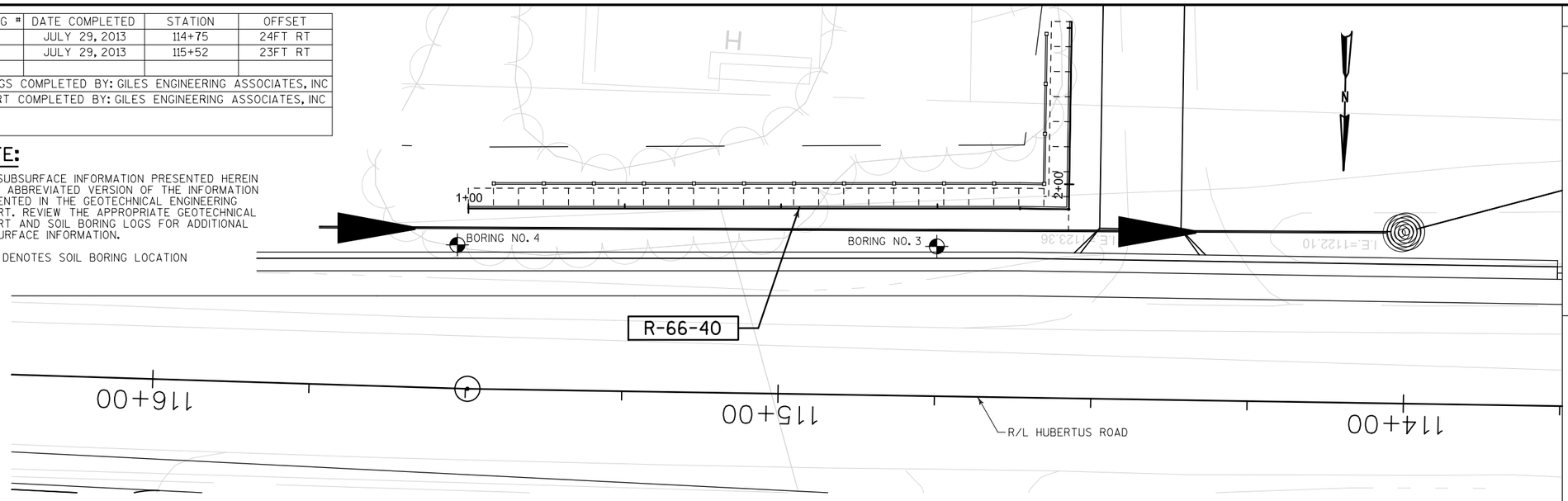
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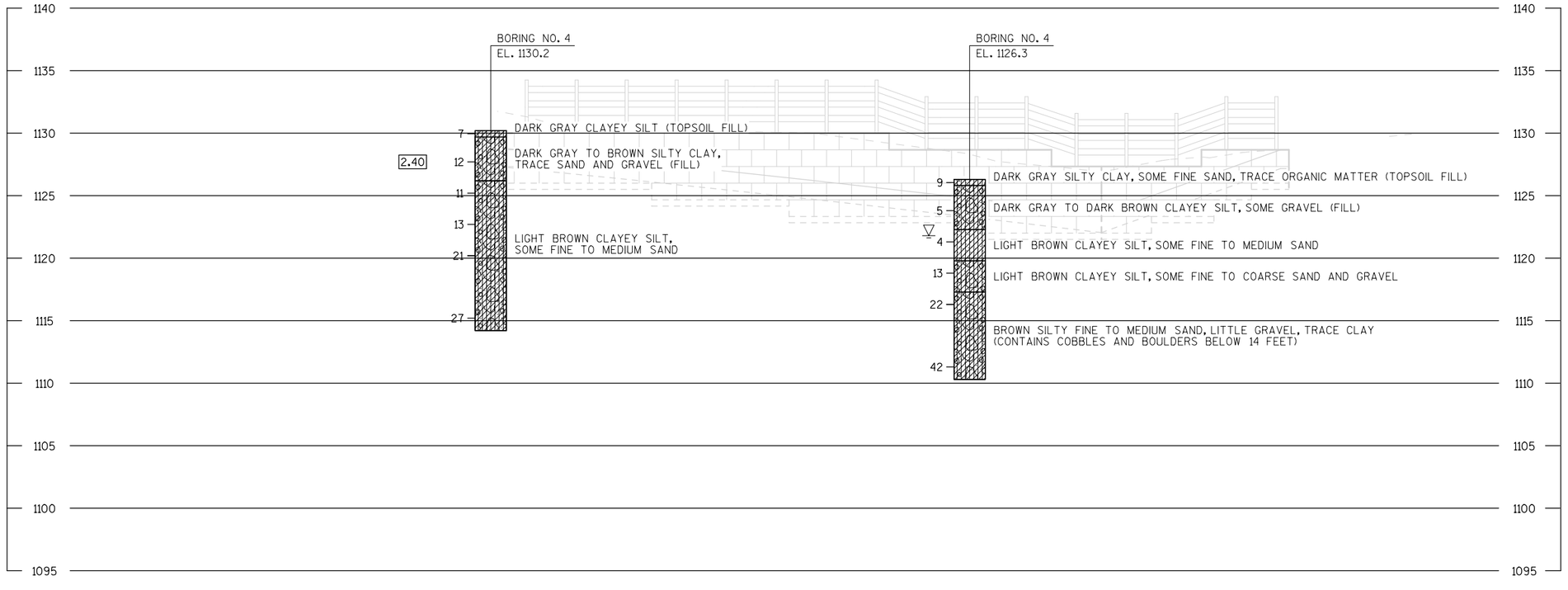
BORING #	DATE COMPLETED	STATION	OFFSET
3	JULY 29, 2013	114+75	24FT RT
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BORINGS COMPLETED BY: GILES ENGINEERING ASSOCIATES, INC			
REPORT COMPLETED BY: GILES ENGINEERING ASSOCIATES, INC			

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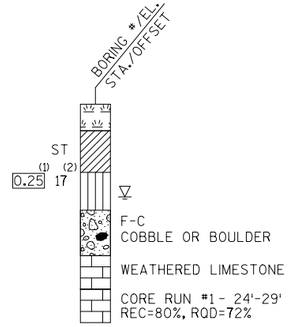
STATE PROJECT NUMBER

2709-03-70

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-66-40

DRAWN BY EKM | PLANS CK'D. KES

SUBSURFACE EXPLORATION

SHEET 4 OF 4

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STH 164 - Stage 1 Deep Marsh Excavation

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Fill	Marsh Excavation	Marsh Backfill	Cut	Fill	Marsh Excavation	Marsh Backfill	Cut 1.00	Expanded Fill 1.20	Marsh Excavation 1.00	Expanded Marsh Backfill 1.40	
369+50	36950	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0
370+00	37000	50.00	0.00	27.09	199.59	247.55	0	50	370	458	0	60	370	517	-60
371+00	37100	100.00	0.00	20.08	213.28	265.71	0	74	790	984	0	149	1,160	1,623	-149
372+00	37200	100.00	0.00	14.89	191.13	233.33	0	55	708	864	0	216	1,867	2,614	-216
373+00	37300	100.00	0.00	18.81	194.43	230.53	0	70	720	854	0	299	2,587	3,622	-299
374+00	37400	100.00	0.00	20.31	205.77	258.96	0	75	762	959	0	389	3,350	4,689	-389
375+00	37500	100.00	0.00	30.03	179.31	225.37	0	111	664	835	0	523	4,014	5,619	-523
376+00 BK	37600	100.00	0.00	0.00	0.00	0.00	0	0	0	0	0	523	4,014	5,619	-523
409+50 AH	40950	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	523	4,014	5,619	-523
410+00	41000	50.00	0.00	2.07	106.19	124.92	0	2	98	116	0	525	4,112	5,757	-525
410+50	41050	50.00	0.00	0.00	0.00	0.00	0	2	98	116	0	527	4,210	5,894	-527
		Totals					0	440	4,210	5,186					

9

9

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EARTHWORK DATA	SHEET NO: 778	E

STH 164 - 50+95 to 237+00 - Stage 1/2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
50+95	0.00	84.21	1.40	0	0	0	0	0
51+00	5.00	85.87	1.39	16	0	16	0	15
52+00	100.00	70.76	13.19	290	27	306	33	273
53+00	100.00	24.88	89.75	177	191	483	261	221
54+00	100.00	23.87	180.61	90	501	573	862	-289
55+00	100.00	21.81	266.79	85	829	658	1,856	-1,199
55+21	21.00	14.41	308.83	14	224	672	2,125	-1,453
56+00	79.00	10.14	776.40	36	1,588	708	4,030	-3,323
56+41	41.00	6.92	491.78	13	963	721	5,186	-4,465
56+66	25.00	51.25	323.57	27	377	748	5,639	-4,891
56+91	25.00	84.11	219.24	63	251	810	5,940	-5,130
57+00	9.00	14.87	240.28	16	77	827	6,032	-5,205
58+00	100.00	133.06	0.00	274	445	1,101	6,566	-5,465
59+00	100.00	692.73	0.00	1,529	0	2,630	6,566	-3,936
59+50	50.00	2369.73	0.00	2,836	0	5,466	6,566	-1,101
60+00	50.00	2365.97	0.14	4,385	0	9,851	6,566	3,284
61+00	100.00	3591.48	0.00	11,032	0	20,883	6,567	14,316
62+00	100.00	3631.75	0.00	13,376	0	34,259	6,567	27,693
63+00	100.00	2857.98	0.00	12,018	0	46,277	6,567	39,711
64+00	100.00	2001.60	0.00	8,999	0	55,276	6,567	48,710
65+00	100.00	1329.75	0.00	6,169	0	61,446	6,567	54,879
66+00	100.00	1117.76	0.00	4,532	0	65,978	6,567	59,411
67+00	100.00	1185.28	0.00	4,265	0	70,243	6,567	63,676
68+00	100.00	197.36	68.78	2,560	127	72,803	6,719	66,084
69+00	100.00	78.02	67.96	510	253	73,313	7,023	66,290
70+00	100.00	113.36	83.73	354	281	73,668	7,360	66,307
71+00	100.00	17.89	67.60	243	280	73,911	7,697	66,214
71+65	64.75	112.70	0.00	157	81	74,067	7,794	66,273
72+00	35.25	74.15	66.60	122	43	74,189	7,846	66,343
73+00	100.00	127.27	0.02	373	123	74,562	7,994	66,568
74+00	100.00	169.84	0.00	550	0	75,113	7,994	67,118
74+50	50.00	83.21	2.13	234	2	75,347	7,997	67,350
75+00	50.00	72.91	16.60	145	17	75,491	8,017	67,474
76+00	100.00	48.96	13.97	226	57	75,717	8,085	67,632
77+00	100.00	28.91	15.95	144	55	75,861	8,152	67,709
78+00	100.00	20.53	15.90	92	59	75,953	8,223	67,730
79+00	100.00	27.07	18.85	88	64	76,041	8,300	67,741
80+00	100.00	28.66	23.34	103	78	76,144	8,394	67,751
81+00	100.00	26.58	33.62	102	105	76,247	8,520	67,726
82+00	100.00	22.91	33.34	92	124	76,338	8,669	67,669
83+00	100.00	23.20	30.15	85	118	76,424	8,810	67,614
84+00	100.00	15.05	36.71	71	124	76,494	8,959	67,536
85+00	100.00	14.52	27.08	55	118	76,549	9,100	67,449
86+00	100.00	9.72	28.18	45	102	76,594	9,223	67,371
87+00	100.00	16.40	30.50	48	109	76,642	9,354	67,289
88+00	100.00	19.77	34.32	67	120	76,709	9,498	67,212
89+00	100.00	22.04	40.07	77	138	76,787	9,663	67,124

STH 164 - 50+95 to 237+00 - Stage 1/2

STATION	Distance	AREA (SF)		Incremental Vol		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
90+00	100.00	21.30	34.51	80	138	76,867	9,829	67,038
91+00	100.00	30.87	30.31	97	120	76,964	9,973	66,991
92+00	100.00	57.40	35.86	163	123	77,127	10,120	67,007
92+74	74.00	124.74	0.00	250	49	77,377	10,179	67,198
93+00	26.00	126.99	0.00	121	0	77,498	10,179	67,319
94+00	100.00	34.11	19.17	298	36	77,796	10,221	67,575
95+00	100.00	10.91	60.70	83	148	77,880	10,399	67,481
96+00	100.00	11.49	89.56	41	278	77,921	10,733	67,188
97+00	100.00	13.55	120.53	46	389	77,967	11,200	66,768
98+00	100.00	47.88	136.40	114	476	78,081	11,771	66,311
99+00	100.00	38.75	202.36	160	627	78,242	12,523	65,718
100+00	100.00	17.34	276.22	104	886	78,346	13,587	64,759
101+00	100.00	18.86	338.91	67	1,139	78,413	14,954	63,459
102+00	100.00	17.93	370.48	68	1,314	78,481	16,530	61,950
103+00	100.00	235.94	236.69	470	1,124	78,951	17,880	61,071
104+00	100.00	87.31	179.65	599	771	79,549	18,805	60,745
105+00	100.00	232.57	3.12	592	338	80,142	19,211	60,931
106+00	100.00	1746.73	0.00	3,665	6	83,807	19,218	64,589
107+00	100.00	2637.73	0.00	8,119	0	91,927	19,218	72,709
108+00	100.00	3220.50	0.00	10,849	0	102,775	19,218	83,557
109+00	100.00	4403.45	0.00	14,118	0	116,894	19,218	97,676
110+00	100.00	5314.29	0.00	17,996	0	134,889	19,218	115,672
111+00	100.00	5575.29	0.00	20,166	0	155,055	19,218	135,837
112+00	100.00	5726.99	0.00	20,930	0	175,985	19,218	156,768
113+00	100.00	5155.79	0.00	20,153	0	196,139	19,218	176,921
114+00	100.00	4599.59	0.00	18,066	0	214,204	19,218	194,986
115+00	100.00	3991.29	0.00	15,909	0	230,113	19,218	210,895
116+00	100.00	4242.82	0.00	15,248	0	245,362	19,218	226,144
117+00	100.00	3753.92	0.00	14,809	0	260,170	19,218	240,953
118+00	100.00	3055.84	0.00	12,611	0	272,781	19,218	253,563
119+00	100.00	5520.37	0.00	15,882	0	288,663	19,218	269,445
120+00	100.00	1659.18	0.00	13,295	0	301,958	19,218	282,741
121+00	100.00	1378.11	0.00	5,625	0	307,583	19,218	288,365
122+00	100.00	1029.13	0.00	4,458	0	312,041	19,218	292,823
123+00	100.00	676.10	0.00	3,158	0	315,199	19,218	295,981
124+00	100.00	581.66	0.00	2,329	0	317,528	19,218	298,310
125+00	100.00	395.79	0.00	1,810	0	319,338	19,218	300,120
126+00	100.00	283.42	0.00	1,258	0	320,596	19,218	301,378
127+00	100.00	171.91	0.00	843	0	321,439	19,218	302,221
128+00	100.00	116.21	0.00	534	0	321,973	19,218	302,755
129+00	100.00	96.08	0.54	393	1	322,366	19,219	303,147
130+00	100.00	67.78	18.85	303	36	322,669	19,262	303,407
131+00	100.00	24.24	48.09	170	124	322,840	19,411	303,429
132+00	100.00	36.32	54.79	112	191	322,952	19,639	303,312
133+00	100.00	66.04	18.91	190	136	323,141	19,803	303,338
133+01	1.00	65.70	18.98	2	1	323,144	19,804	303,340
134+00	99.00	71.70	58.95	252	143	323,396	19,976	303,420
135+00	100.00	99.23	41.28	317	186	323,712	20,198	303,514

STH 164 - 50+95 to 237+00 - Stage 1/2

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol Cut	Incremental Vol Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
136+00	100.00	56.82	55.17	289	179	324,001	20,413	303,588
137+00	100.00	64.77	39.46	225	175	324,226	20,623	303,603
138+00	100.00	51.15	32.69	215	134	324,441	20,783	303,658
139+00	100.00	41.02	27.02	171	111	324,612	20,916	303,696
140+00	100.00	80.00	20.09	224	87	324,836	21,021	303,815
141+00	100.00	95.92	22.93	326	80	325,161	21,116	304,045
142+00	100.00	65.50	38.17	299	113	325,460	21,252	304,208
143+00	100.00	56.20	45.21	225	154	325,686	21,437	304,249
144+00	100.00	68.99	41.09	232	160	325,918	21,629	304,289
145+00	100.00	64.00	41.03	246	152	326,164	21,812	304,352
145+88.048	88.05	120.25	0.00	300	67	326,464	21,892	304,573
146+00	11.95	115.30	0.00	52	0	326,516	21,892	304,625
147+00	100.00	68.58	15.62	341	29	326,857	21,927	304,930
148+00	100.00	52.08	19.76	223	66	327,080	22,005	305,075
149+00	100.00	61.02	17.16	209	68	327,290	22,087	305,203
150+00	100.00	84.38	19.94	269	69	327,559	22,170	305,389
151+00	100.00	85.78	6.29	315	49	327,874	22,228	305,646
152+00	100.00	86.23	1.19	319	14	328,193	22,245	305,948
153+00	100.00	60.50	1.04	272	4	328,464	22,249	306,215
154+00	100.00	59.88	2.92	223	7	328,687	22,258	306,429
155+00	100.00	122.30	0.44	337	6	329,025	22,266	306,759
156+00	100.00	101.72	1.97	415	4	329,440	22,271	307,169
157+00	100.00	101.78	15.77	377	33	329,816	22,311	307,506
158+00	100.00	46.67	50.58	275	123	330,091	22,458	307,633
159+00	100.00	49.81	46.80	179	180	330,270	22,674	307,596
160+00	100.00	45.33	62.14	176	202	330,446	22,916	307,530
161+00	100.00	49.01	30.78	175	172	330,621	23,123	307,498
162+00	100.00	40.30	34.78	165	121	330,786	23,269	307,518
163+00	100.00	30.76	28.64	132	117	330,918	23,410	307,508
164+00	100.00	62.32	2.53	172	58	331,090	23,479	307,611
165+00	100.00	163.18	1.47	418	7	331,508	23,488	308,020
166+00	100.00	38.47	12.20	373	25	331,881	23,518	308,363
167+00	100.00	30.52	26.28	128	71	332,009	23,604	308,405
168+00	100.00	50.67	2.79	150	54	332,159	23,668	308,491
169+00	100.00	208.56	4.94	480	14	332,639	23,685	308,954
170+00	100.00	61.39	8.85	500	26	333,139	23,716	309,423
171+00	100.00	46.23	9.21	199	33	333,339	23,756	309,583
172+00	100.00	94.67	0.82	261	19	333,600	23,778	309,821
173+00	100.00	134.41	0.55	424	3	334,024	23,782	310,242
174+00	100.00	117.39	1.96	466	5	334,490	23,787	310,703
175+00	100.00	138.07	2.40	473	8	334,963	23,797	311,166
176+00	100.00	137.06	3.30	510	11	335,473	23,809	311,663
177+00	100.00	115.20	4.93	467	15	335,940	23,828	312,112
178+00	100.00	98.83	12.42	396	32	336,336	23,866	312,470
179+00	100.00	58.88	4.68	292	32	336,628	23,904	312,724
180+00	100.00	19.10	36.61	144	76	336,773	23,996	312,777
181+00	100.00	25.43	106.28	82	265	336,855	24,314	312,542
182+00	100.00	33.87	108.24	110	397	336,965	24,790	312,175

STH 164 - 50+95 to 237+00 - Stage 1/2

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol Cut	Incremental Vol Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Expanded Fill 1.20	Mass Ordinate
183+00	100.00	95.32	67.51	239	325	337,204	25,181	312,023
184+00	100.00	181.03	45.96	512	210	337,716	25,433	312,283
185+00	100.00	215.06	31.23	734	143	338,449	25,605	312,845
186+00	100.00	194.33	40.02	758	132	339,208	25,763	313,445
187+00	100.00	281.61	9.38	881	91	340,089	25,873	314,216
188+00	100.00	525.73	0.00	1,495	17	341,584	25,893	315,691
189+00	100.00	867.78	0.00	2,581	0	344,165	25,893	318,271
190+00	100.00	1144.07	0.00	3,726	0	347,890	25,893	321,997
191+00	100.00	1483.11	0.00	4,865	0	352,755	25,893	326,862
192+00	100.00	1782.71	0.00	6,048	0	358,803	25,893	332,910
193+00	100.00	1970.44	0.00	6,950	0	365,753	25,893	339,860
194+00	100.00	2417.88	0.00	8,127	0	373,880	25,893	347,987
195+00	100.00	2993.28	0.00	10,021	0	383,901	25,893	358,007
196+00	100.00	2953.79	0.00	11,013	0	394,914	25,893	369,020
197+00	100.00	2029.05	0.00	9,227	0	404,141	25,893	378,248
198+00	100.00	701.97	0.00	5,057	0	409,199	25,893	383,305
199+00	100.00	350.20	0.00	1,948	0	411,147	25,893	385,254
200+00	100.00	88.96	344.63	813	638	411,960	26,659	385,301
201+00	100.00	23.54	567.77	208	1,690	412,169	28,687	383,482
202+00	100.00	25.00	593.36	90	2,150	412,259	31,267	380,991
203+00	100.00	101.91	475.29	235	1,979	412,494	33,642	378,852
204+00	100.00	51.90	118.10	285	1,099	412,778	34,961	377,818
205+00	100.00	301.90	10.95	655	239	413,434	35,247	378,186
206+00	100.00	491.79	12.07	1,470	43	414,903	35,299	379,605
207+00	100.00	391.42	6.23	1,636	34	416,539	35,339	381,200
208+00	100.00	268.63	12.11	1,222	34	417,761	35,380	382,381
209+00	100.00	306.09	6.61	1,064	35	418,826	35,422	383,404
210+00	100.00	80.63	68.58	716	139	419,542	35,589	383,953
211+00	100.00	21.15	189.57	188	478	419,730	36,162	383,568
212+00	100.00	27.42	197.54	90	717	419,820	37,023	382,798
213+00	100.00	101.04	188.25	238	714	420,058	37,880	382,178
214+00	100.00	59.48	99.18	297	532	420,355	38,519	381,837
215+00	100.00	42.55	14.43	189	210	420,544	38,771	381,773
216+00	100.00	37.17	22.39	148	68	420,692	38,853	381,839
217+00	100.00	46.66	14.27	155	68	420,847	38,934	381,913
218+00	100.00	35.86	56.49	153	131	421,000	39,092	381,908
219+00	100.00	98.65	29.46	249	159	421,249	39,283	381,966
220+00	100.00	49.82	22.57	275	96	421,524	39,398	382,126
221+00	100.00	29.46	120.62	147	265	421,671	39,716	381,954
222+00	100.00	26.66	154.34	104	509	421,775	40,327	381,447
223+00	100.00	54.30	46.10	150	371	421,925	40,773	381,152
224+00	100.00	18.47	40.67	135	161	422,059	40,966	381,094
225+00	100.00	37.01	22.97	103	118	422,162	41,107	381,055
226+00	100.00	12.86	27.51	92	93	422,255	41,219	381,035
227+00	100.00	16.76	21.68	55	91	422,309	41,329	380,981
228+00	100.00	23.63	27.57	75	91	422,384	41,438	380,946
229+00	100.00	25.76	26.76	91	101	422,476	41,559	380,917
230+00	100.00	26.00	62.77	96	166	422,572	41,758	380,814

STH 164 - 50+95 to 237+00 - Stage 1/2								
STATION	Distance	AREA (SF)		Incremental Vol		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
231+00	100.00	37.82	9.44	118	134	422,690	41,918	380,772
232+00	100.00	152.72	5.34	353	27	423,043	41,951	381,092
233+00	100.00	29.89	3.93	338	17	423,381	41,972	381,409
234+00	100.00	77.44	5.01	199	17	423,579	41,992	381,588
235+00	100.00	14.59	32.96	170	70	423,750	42,076	381,674
236+00	100.00	13.13	42.58	51	140	423,801	42,244	381,557
237+00	100.00	53.38	62.78	123	195	423,924	42,478	381,447
		Totals		423,924	35,398			

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	EARTHWORK DATA	SHEET NO: 781	E

STH 164 'NA' LINE - STAGE 2								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
237+00	0.00	123.31	62.78	0	0	0	0	0
237+50	50.00	122.88	106.38	228	157	228	188	40
238+00	50.00	139.67	93.37	243	185	471	410	61
238+50	50.00	169.96	79.65	287	160	758	602	156
239+00	50.00	248.44	35.99	387	107	1,145	731	415
239+50	50.00	322.36	16.60	529	49	1,674	789	885
240+00	50.00	399.05	2.68	668	18	2,342	810	1,531
240+50	50.00	526.45	0.00	857	2	3,199	813	2,385
241+00	50.00	701.57	0.00	1,137	0	4,336	813	3,522
241+50	50.00	912.52	0.00	1,495	0	5,830	813	5,017
242+00	50.00	1275.50	0.00	2,026	0	7,856	813	7,043
242+23	23.00	1419.33	0.00	1,148	0	9,004	813	8,190
242+50	27.00	1455.27	0.00	1,437	0	10,441	813	9,628
243+00	50.00	1387.24	0.00	2,632	0	13,073	813	12,260
243+34	34.00	1285.64	0.00	1,683	0	14,756	813	13,943
243+50	16.00	718.22	0.00	594	0	15,350	813	14,536
244+00	50.00	717.53	0.00	1,329	0	16,679	813	15,866
244+50	50.00	764.66	0.00	1,372	0	18,052	813	17,238
245+00	50.00	834.54	0.00	1,481	0	19,532	813	18,719
245+50	50.00	926.60	0.00	1,631	0	21,163	813	20,350
246+00	50.00	1043.98	0.00	1,825	0	22,988	813	22,174
246+50	50.00	1188.61	0.00	2,067	0	25,055	813	24,241
247+00	50.00	1257.32	0.00	2,265	0	27,320	813	26,506
247+50	50.00	1268.99	0.00	2,339	0	29,659	813	28,845
248+00	50.00	1257.51	0.00	2,339	0	31,998	813	31,185
248+50	50.00	1094.82	0.00	2,178	0	34,176	813	33,363
249+00	50.00	893.22	0.00	1,841	0	36,017	813	35,204
249+50	50.00	581.74	0.00	1,366	0	37,383	813	36,569
250+00	50.00	372.81	0.00	884	0	38,267	813	37,453
250+50	50.00	202.18	2.02	532	2	38,799	816	37,983
251+00	50.00	155.55	0.00	331	2	39,130	818	38,312
251+25	25.00	120.49	1.66	128	1	39,258	819	38,439
		Totals		39,258	682			

STH 164 'SA' LINE - STAGE 2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
243+50	0.00	606.70	0.00	0	0	0	0	0
244+00	50.00	681.95	0.00	1,193	0	1,193	0	1,193
244+50	50.00	796.36	0.00	1,369	0	2,562	0	2,562
245+00	50.00	815.50	0.00	1,492	0	4,054	0	4,054
245+50	50.00	846.20	0.00	1,539	0	5,593	0	5,593
246+00	50.00	884.76	0.00	1,603	0	7,196	0	7,196
246+50	50.00	902.76	0.00	1,655	0	8,851	0	8,851
247+00	50.00	1008.29	0.00	1,769	0	10,620	0	10,620
247+50	50.00	1036.53	0.00	1,893	0	12,514	0	12,514
248+00	50.00	1055.89	0.00	1,937	0	14,451	0	14,451
248+50	50.00	1031.95	0.00	1,933	0	16,384	0	16,384
249+00	50.00	895.81	0.00	1,785	0	18,169	0	18,169
249+50	50.00	725.90	0.00	1,502	0	19,671	0	19,671
250+00	50.00	307.62	0.00	957	0	20,628	0	20,628
250+50	50.00	193.84	0.00	464	0	21,092	0	21,092
251+00	50.00	202.03	0.00	367	0	21,459	0	21,459
251+25	25.00	166.46	0.00	171	0	21,629	0	21,629
		Totals		21,629	0			

Shady Lane Cul-de-Sac - Stage 2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
11+00	0.00	741.17	53.25	0	0	0	0	0
12+00	100.00	576.33	5.53	2,440	109	2,440	131	2,309
12+39.097	39.10	131.07	71.51	512	56	2,952	198	2,754
		Totals		2,952	165			

Shady Lane North - Stage 2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
17+82	0.00	49.52	33.46	0	0	0	0	0
18+00	18.00	55.04	30.11	35	21	35	25	9
19+00	100.00	129.54	14.05	342	82	377	124	253
20+00	100.00	242.26	4.52	689	34	1,065	165	900
21+00	100.00	5.11	240.03	458	453	1,523	708	815
22+00	100.00	0.00	401.23	9	1,188	1,533	2,133	-601
23+00	100.00	0.00	126.75	0	978	1,533	3,307	-1,774
24+00	100.00	315.63	0.02	585	235	2,117	3,588	-1,471
25+00	100.00	717.03	0.00	1,912	0	4,030	3,588	441
25+84	84.00	0.00	0.00	1,115	0	5,145	3,588	1,557
		Totals		5,145	2,990			

Hansen Drive - Stage 2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
28+00	0.00	368.13	0.00	0	0	0	0	0
28+54	54.00	89.11	0.00	457	0	457	0	457
29+00	46.00	81.51	0.03	145	0	603	0	603
29+25	25.00	96.85	1.08	83	1	685	1	685
		Totals		685	1			

Upland Drive - Stage 2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
30+75	0.00	34.43	37.07	0	0	0	0	0
31+00	25.00	68.02	0.00	47	17	47	21	27
31+47.055	47.05	87.38	0.00	135	0	183	21	162
		Totals		183	17			

Monches Road - Stage 2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
38+30	0.00	69.84	0.00	0	0	0	0	0
39+00	70.00	83.65	1.55	199	2	199	2	197
39+50 BK	50.00	207.04	40.98	269	39	468	50	418
40+50 AH	0.00	184.53	15.37	0	0	468	50	418
41+00	50.00	88.64	1.79	253	16	721	69	652
41+68	68.00	44.23	1.82	167	5	888	74	814
		Totals		888	62			

Wooded Hills Driveway - Stage 2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
48+56	0.00	71.66	9.24	0	0	0	0	0
49+00	44.00	62.23	8.89	109	15	109	18	91
49+25	25.00	71.05	36.96	62	21	171	43	128
		Totals		171	36			

Elmwood Road - Stage 2								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
58+31.490	0.00	51.38	2.64	0	0	0	0	0
59+00	69.00	73.24	2.64	159	7	159	8	151
59+50 BK	50.00	229.79	40.69	281	40	440	56	384
60+50 AH	0.00	296.18	50.25	0	0	440	56	384
61+00	50.00	137.92	1.19	402	48	842	113	728
61+68.784	69.00	52.70	0.00	244	2	1,085	115	970
		Totals		1,085	96			

Tuckaway Lane - Stage 2								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
68+42	0.00	97.73	0.00	0	0	0	0	0
69+00	58.00	86.34	0.00	198	0	198	0	198
69+25	25.00	85.92	4.18	80	2	277	2	275
		Totals		277	2			

Cherokee Trail - Stage 2								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
80+75	0.00	156.39	16.45	0	0	0	0	0
81+00	25.00	166.19	0.00	149	8	149	9	140
81+50	50.00	63.42	0.00	213	0	362	9	353
81+54	4.00	62.90	0.00	9	0	371	9	362
		Totals		371	8			

St Gabriel Lane - Stage 2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
90+75	0.00	122.55	0.00	0	0	0	0	0
91+00	25.00	97.92	0.00	102	0	102	0	102
91+50	50.00	105.22	0.00	188	0	290	0	290
92+00	50.00	120.07	0.00	209	0	499	0	499
92+50	50.00	104.84	0.00	208	0	707	0	707
93+00	50.00	49.70	1.56	143	1	850	2	848
		Totals		850	1			

Hubertus Road - Stage 2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
103+28	0.00	50.37	12.51	0	0	0	0	0
104+00	72.00	49.09	13.45	133	35	133	42	91
105+00	100.00	44.99	236.01	174	462	307	596	-289
106+00	100.00	61.92	388.67	198	1,157	505	1,984	-1,479
107+00	100.00	53.98	569.12	215	1,774	719	4,112	-3,393
108+00	100.00	58.86	547.50	209	2,068	928	6,594	-5,665
109+00	100.00	95.97	393.77	287	1,743	1,215	8,686	-7,470
109+50 BK	50.00	332.21	316.45	396	658	1,612	9,475	-7,863
110+50 AH	0.00	536.78	14.57	0	0	1,612	9,475	-7,863
111+00	50.00	551.81	0.00	1,008	13	2,620	9,491	-6,871
112+00	100.00	1000.80	5.71	2,875	11	5,495	9,504	-4,009
113+00	100.00	968.68	9.26	3,647	28	9,142	9,537	-395
114+00	100.00	358.80	0.00	2,458	17	11,600	9,557	2,043
115+00	100.00	200.05	0.00	1,035	0	12,635	9,557	3,078
116+00	100.00	134.57	0.00	620	0	13,255	9,557	3,697
117+00	100.00	212.62	0.00	643	0	13,898	9,557	4,340
118+00	100.00	167.58	0.00	704	0	14,602	9,557	5,044
		Totals		14,602	7,965			

Golden Drive - Stage 2								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
130+75	0.00	247.43	0.00	0	0	0	0	0
131+00	25.00	332.21	0.00	268	0	268	0	268
131+50	50.00	209.44	0.00	502	0	770	0	770
132+00	50.00	140.30	0.00	324	0	1,094	0	1,094
132+50	50.00	90.99	2.62	214	2	1,308	3	1,305
133+00	50.00	48.15	17.95	129	19	1,437	26	1,411
		Totals		1,437	21			

Lochview Drive - Stage 2								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
138+52	0.00	54.35	0.00	0	0	0	0	0
139+00	48.00	73.00	0.00	113	0	113	0	113
139+25	25.00	74.68	3.04	68	1	182	2	180
		Totals		182	1			

Adahi Court - Stage 2								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
147+55	0.00	94.96	0.00	0	0	0	0	0
148+00	45.00	125.80	0.00	184	0	184	0	184
148+50	50.00	173.99	0.00	278	0	462	0	462
149+00	50.00	369.47	0.00	503	0	965	0	965
149+25	25.00	555.82	0.00	428	0	1,393	0	1,393
		Totals		1,393	0			

STH 164 'NB' LINE - Stage 3

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
253+00	0.00	104.39	224.88	0	0	0	0	0
253+50	50.00	71.50	207.91	163	401	163	481	-318
254+00	50.00	54.09	203.45	116	381	279	938	-659
254+50	50.00	34.16	58.17	82	242	361	1,229	-868
255+00	50.00	33.22	48.23	62	99	423	1,347	-924
255+50	50.00	45.79	54.93	73	96	496	1,461	-965
256+00	50.00	66.51	63.91	104	110	600	1,594	-993
256+50	50.00	64.19	67.01	121	121	721	1,739	-1,018
257+00	50.00	141.95	68.84	191	126	912	1,890	-978
257+50	50.00	58.14	74.89	185	133	1,098	2,050	-952
258+00	50.00	118.83	0.00	164	69	1,261	2,133	-871
258+30	30.00	54.41	0.00	96	0	1,358	2,133	-775
258+50	20.00	13.68	44.26	25	16	1,383	2,153	-770
259+00	50.00	110.56	40.77	115	79	1,498	2,247	-749
259+50	50.00	186.11	32.00	275	67	1,773	2,328	-555
260+00	50.00	227.96	22.29	383	50	2,156	2,388	-232
260+50	50.00	258.12	21.08	450	40	2,606	2,436	170
260+94	44.00	287.79	30.19	445	42	3,051	2,486	564
		Totals		3,051	2,072			

STH 164 'SB' LINE - Stage 3

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	EBS	Cut	Fill	EBS	Cut 1.00	Expanded Fill 1.20	EBS Excavation 1.00	
253+00	0.00	6.36	343.62	0.00	0	0	0	0	0	0	0
253+50	50.00	1.30	372.40	0.00	7	663	0	7	796	0	-788
254+00	50.00	8.12	453.95	0.00	9	765	0	16	1,714	0	-1,698
254+50	50.00	14.58	481.65	0.00	21	866	0	37	2,753	0	-2,716
255+00	50.00	12.52	487.77	0.00	25	898	0	62	3,830	0	-3,768
255+50	50.00	11.89	469.43	0.00	23	886	0	85	4,894	0	-4,809
256+00	50.00	15.30	400.67	0.00	25	806	0	110	5,861	0	-5,751
256+50	50.00	17.61	372.69	0.00	30	716	0	140	6,720	0	-6,580
257+00	50.00	17.55	430.90	0.00	33	744	0	173	7,613	0	-7,440
257+50	50.00	37.07	200.32	0.00	51	584	0	223	8,314	0	-8,091
258+00	50.00	39.81	64.60	0.00	71	245	0	295	8,609	0	-8,314
258+28	28.00	43.19	60.52	0.00	43	65	0	338	8,686	0	-8,349
		Totals			338	7,239	0				

STH 164 - 261+00 to 290+12 - Stage 3

STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
		Cut	Fill	Marsh Exc	Marsh Backfill	Cut	Fill	Marsh Exc	Marsh Backfill	Cut 1.00	Expanded Fill 1.20	Marsh Excavation 1.00	Expanded Marsh Backfill 1.40	
261+00	0.00	297.10	30.76	0.00	0.00	0	0	0	0	0	0	0	0	0
262+00	100.00	375.16	54.48	0.00	0.00	1,245	158	0	0	1,245	189	0	0	1,056
263+00	100.00	109.60	41.67	0.00	0.00	898	178	0	0	2,143	403	0	0	1,740
264+00	100.00	24.51	175.68	0.00	0.00	248	403	0	0	2,391	886	0	0	1,505
265+00	100.00	94.31	11.37	0.00	0.00	220	346	0	0	2,611	1,302	0	0	1,309
265+70	70.00	7.84	299.17	0.00	0.00	132	403	0	0	2,743	1,785	0	0	959
265+95	25.00	6.14	266.73	0.00	0.00	6	262	0	0	2,750	2,099	0	0	651
266+00	5.00	5.78	238.42	0.00	0.00	1	47	0	0	2,751	2,155	0	0	596
266+20	20.00	6.41	201.69	0.00	0.00	5	163	0	0	2,756	2,351	0	0	405
266+93	73.00	8.70	169.77	0.00	0.00	20	502	0	0	2,776	2,954	0	0	-178
267+00	7.00	8.68	159.78	0.00	0.00	2	43	0	0	2,778	3,005	0	0	-227
267+18	18.00	6.92	167.84	0.00	0.00	5	109	0	0	2,783	3,136	0	0	-352
267+42	24.00	5.87	127.59	0.00	0.00	6	131	0	0	2,789	3,293	0	0	-504
268+00	58.00	7.09	252.53	370.37	305.55	14	408	398	328	2,803	3,783	398	459	-980
268+38	38.00	7.06	124.21	318.80	285.02	10	265	485	416	2,813	4,101	883	1,041	-1,288
268+63	25.00	8.66	115.50	344.79	319.86	7	111	307	280	2,820	4,235	1,190	1,433	-1,414
268+88	25.00	7.92	109.88	368.49	360.43	8	104	330	315	2,828	4,360	1,520	1,874	-1,532
269+00	12.00	7.60	113.59	428.15	413.92	3	50	177	172	2,831	4,419	1,697	2,115	-1,588
269+61	61.00	6.84	52.72	158.97	181.91	16	188	663	673	2,848	4,645	2,360	3,057	-1,797
269+86	25.00	7.81	20.90	106.08	137.42	7	34	123	148	2,854	4,686	2,483	3,264	-1,831
270+00	14.00	7.20	11.66	59.35	74.52	4	8	43	55	2,858	4,696	2,526	3,341	-1,838
270+08	8.00	7.23	41.55	0.00	0.00	2	8	9	11	2,860	4,705	2,535	3,357	-1,845
270+11	3.00	7.33	43.56	0.00	0.00	1	5	0	0	2,861	4,711	2,535	3,357	-1,850
271+00	89.00	37.95	21.20	0.00	0.00	75	107	0	0	2,936	4,839	2,535	3,357	-1,903
271+31	31.00	40.90	12.70	0.00	0.00	45	19	0	0	2,981	4,862	2,535	3,357	-1,881
272+00	69.00	53.23	8.49	0.00	0.00	120	27	0	0	3,101	4,895	2,535	3,357	-1,793
273+00	100.00	42.24	10.44	0.00	0.00	177	35	0	0	3,278	4,937	2,535	3,357	-1,659
274+00	100.00	130.19	4.26	0.00	0.00	319	27	0	0	3,598	4,970	2,535	3,357	-1,372
275+00	100.00	202.13	4.69	0.00	0.00	615	17	0	0	4,213	4,990	2,535	3,357	-777
276+00	100.00	143.88	10.46	0.00	0.00	641	28	0	0	4,854	5,023	2,535	3,357	-169
277+00	100.00	82.48	0.00	0.00	0.00	419	19	0	0	5,273	5,046	2,535	3,357	226
278+00	100.00	169.55	0.02	0.00	0.00	467	0	0	0	5,740	5,047	2,535	3,357	693
279+00	100.00	201.70	2.56	0.00	0.00	688	5	0	0	6,427	5,052	2,535	3,357	1,375
280+00	100.00	265.16	0.11	0.00	0.00	865	5	0	0	7,292	5,058	2,535	3,357	2,234
281+00	100.00	243.80	0.70	0.00	0.00	943	2	0	0	8,234	5,060	2,535	3,357	3,174
281+76	76.00	128.79	0.43	0.00	0.00	524	2	0	0	8,759	5,062	2,535	3,357	3,697
282+00	24.00	102.69	1.05	0.00	0.00	103	1	0	0	8,861	5,063	2,535	3,357	3,799
283+00	100.00	90.76	7.70	0.00	0.00	358	16	0	0	9,220	5,082	2,535	3,357	4,138
284+00	100.00	61.85	9.01	0.00	0.00	283	31	0	0	9,502	5,119	2,535	3,357	4,383
285+00	100.00	48.96	6.87	0.00	0.00	205	29	0	0	9,708	5,155	2,535	3,357	4,553
286+00	100.00	51.57	5.48	0.00	0.00	186	23	0	0	9,894	5,182	2,535	3,357	4,712
287+00	100.00	25.10	9.50	0.00	0.00	142	28	0	0	10,036	5,215	2,535	3,357	4,820
288+00	100.00	8.95	27.12	0.00	0.00	63	68	0	0	10,099	5,297	2,535	3,357	4,802
289+00	100.00	7.90	51.08	0.00	0.00	31	145	0	0	10,130	5,470	2,535	3,357	4,660
290+00	100.00	15.28	44.00	0.00	0.00	43	176	0	0	10,173	5,682	2,535	3,357	4,491
290+12	12.00	72.61	0.35	0.00	0.00	20	10	0	0	10,192	5,694	2,535	3,357	4,499
	Totals					10,192	4,745	2,535	2,398					

STH 164 C/L -Stage 3								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
1290+12	0.00	122.31	15.75	0	0	0	0	0
1291+00	88.00	173.36	11.16	482	44	482	53	429
1292+00	100.00	139.06	24.68	579	66	1,060	132	928
1293+00	100.00	82.22	81.49	410	197	1,470	368	1,102
1294+00	100.00	60.70	149.32	265	427	1,735	881	854
1295+00	100.00	40.63	100.15	188	462	1,923	1,435	487
1296+00	100.00	28.58	109.37	128	388	2,051	1,901	150
1297+00	100.00	134.32	56.12	302	306	2,352	2,269	84
1298+00	100.00	166.26	58.37	557	212	2,909	2,523	386
1299+00	100.00	67.73	134.57	433	357	3,342	2,952	390
1300+00	100.00	36.97	286.83	194	780	3,536	3,888	-352
1301+00	100.00	4.61	391.55	77	1,256	3,613	5,396	-1,783
1302+00	100.00	11.74	386.66	30	1,441	3,643	7,125	-3,482
1303+00	100.00	216.30	33.56	422	778	4,066	8,059	-3,993
1304+00	100.00	403.32	11.82	1,147	84	5,213	8,160	-2,947
1304+57	57.00	497.36	0.00	951	12	6,164	8,175	-2,011
1305+00	43.00	410.46	1.71	723	1	6,887	8,176	-1,290
1306+00	100.00	349.36	11.50	1,407	24	8,294	8,206	88
1307+00	100.00	202.61	0.00	1,022	21	9,316	8,231	1,085
1308+00	100.00	138.64	2.70	632	5	9,948	8,237	1,711
1309+00	100.00	105.32	12.48	452	28	10,400	8,271	2,129
1310+00	100.00	106.86	17.04	393	55	10,793	8,337	2,456
1311+00	100.00	104.30	14.96	391	59	11,184	8,408	2,776
1312+00	100.00	114.50	9.58	405	45	11,589	8,462	3,127
1313+00	100.00	121.57	2.72	437	23	12,026	8,490	3,537
1314+00	100.00	108.93	6.68	427	17	12,453	8,510	3,943
1315+00	100.00	98.56	9.72	384	30	12,837	8,547	4,290
1316+00	100.00	112.50	8.66	391	34	13,228	8,588	4,640
1317+00	100.00	149.82	3.02	486	22	13,714	8,614	5,100
1317+78	78.00	267.51	9.73	603	18	14,317	8,636	5,681
1318+00	22.00	272.71	8.59	220	7	14,537	8,645	5,892
1318+02	2.00	245.47	8.39	19	1	14,556	8,645	5,910
		Totals		14,556	7,205			

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PROJECT NO: 2709-03-70 | HWY: STH 164 | COUNTY: WASHINGTON | EARTHWORK DATA | SHEET NO: 790 | E

STH 164 - 318+01 to 446+61 - Stage 3

STATION	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
		Cut	Fill	Marsh Excavation	Marsh Backfill	Cut	Fill	Marsh Excavation	Marsh Backfill	Cut 1.00	Expanded Fill 1.20	Marsh Excavation 1.00	Expanded Marsh Backfill 1.40	
318+01	0.00	112.76	8.95	0.00	0.00	0	0	0	0	0	0	0	0	0
319+00	99.00	90.70	0.00	0.00	0.00	373	16	0	0	373	20	0	0	353
320+00	100.00	120.77	0.05	0.00	0.00	392	0	0	0	765	20	0	0	745
321+00	100.00	105.79	6.49	0.00	0.00	420	12	0	0	1,184	34	0	0	1,150
322+00	100.00	133.45	7.36	0.00	0.00	443	26	0	0	1,627	65	0	0	1,562
323+00	100.00	173.13	4.32	0.00	0.00	568	22	0	0	2,195	91	0	0	2,104
324+00	100.00	137.04	14.26	0.00	0.00	574	34	0	0	2,769	132	0	0	2,637
325+00	100.00	175.48	10.72	0.00	0.00	579	46	0	0	3,348	188	0	0	3,160
326+00	100.00	147.18	41.09	0.00	0.00	598	96	0	0	3,946	303	0	0	3,643
327+00	100.00	258.41	2.86	0.00	0.00	751	81	0	0	4,697	401	0	0	4,296
328+00	100.00	116.46	21.89	0.00	0.00	694	46	0	0	5,391	456	0	0	4,935
329+00	100.00	50.35	34.14	0.00	0.00	309	104	0	0	5,700	580	0	0	5,120
330+00	100.00	53.44	22.34	0.00	0.00	192	105	0	0	5,892	706	0	0	5,186
331+00	100.00	36.31	17.72	0.00	0.00	166	74	0	0	6,058	795	0	0	5,264
332+00	100.00	36.32	20.67	0.00	0.00	135	71	0	0	6,193	880	0	0	5,313
333+00	100.00	22.36	53.88	0.00	0.00	109	138	0	0	6,301	1,046	0	0	5,256
334+00	100.00	40.61	24.29	45.20	62.91	117	145	84	116	6,418	1,219	84	117	5,199
335+00	100.00	34.56	20.72	22.90	34.64	139	83	126	181	6,557	1,319	210	294	5,238
336+00	100.00	34.37	18.59	27.98	39.73	128	73	94	138	6,685	1,407	304	426	5,278
337+00	100.00	35.14	23.87	33.61	44.66	129	79	114	156	6,814	1,501	418	585	5,312
338+00	100.00	43.36	48.58	0.00	0.00	145	134	62	83	6,959	1,662	480	672	5,297
339+00	100.00	47.44	58.94	0.00	0.00	168	199	0	0	7,127	1,901	480	672	5,226
340+00	100.00	46.59	67.69	0.00	0.00	174	235	0	0	7,301	2,182	480	672	5,119
341+00	100.00	17.74	74.78	0.00	0.00	119	264	0	0	7,420	2,499	480	672	4,921
342+00	100.00	48.74	40.37	0.00	0.00	123	213	0	0	7,543	2,755	480	672	4,789
343+00	100.00	39.08	30.77	0.00	0.00	163	132	0	0	7,706	2,913	480	672	4,793
344+00	100.00	45.94	25.88	0.00	0.00	157	105	0	0	7,864	3,039	480	672	4,825
345+00	100.00	50.97	21.82	0.00	0.00	179	88	0	0	8,043	3,145	480	672	4,898
346+00	100.00	59.60	18.46	0.00	0.00	205	75	0	0	8,248	3,234	480	672	5,013
347+00	100.00	43.80	26.67	0.00	0.00	191	84	0	0	8,439	3,335	480	672	5,105
348+00	100.00	52.15	24.63	0.00	0.00	178	95	0	0	8,617	3,449	480	672	5,168
349+00	100.00	79.25	7.98	0.00	0.00	243	60	0	0	8,860	3,521	480	672	5,339
350+00	100.00	113.89	6.29	0.00	0.00	358	26	0	0	9,218	3,553	480	672	5,665
351+00	100.00	85.06	4.57	0.00	0.00	368	20	0	0	9,586	3,577	480	672	6,009
352+00	100.00	65.09	6.26	0.00	0.00	278	20	0	0	9,864	3,601	480	672	6,263
353+00	100.00	49.91	10.21	0.00	0.00	213	31	0	0	10,077	3,638	480	672	6,440
354+00	100.00	27.45	11.26	0.00	0.00	143	40	0	0	10,221	3,685	480	672	6,535
355+00	100.00	35.79	10.37	0.00	0.00	117	40	0	0	10,338	3,733	480	672	6,604
356+00	100.00	51.50	13.75	0.00	0.00	162	45	0	0	10,499	3,787	480	672	6,712
357+00	100.00	57.12	15.49	0.00	0.00	201	54	0	0	10,701	3,852	480	672	6,849
358+00	100.00	50.06	15.75	0.00	0.00	198	58	0	0	10,899	3,921	480	672	6,978
359+00	100.00	77.57	4.45	0.00	0.00	236	37	0	0	11,135	3,966	480	672	7,169
360+00	100.00	82.17	22.65	0.00	0.00	296	50	0	0	11,431	4,027	480	672	7,405
360+42	42.00	180.22	0.00	0.00	0.00	204	18	0	0	11,635	4,048	480	672	7,588
361+00	58.00	137.98	36.38	0.00	0.00	342	39	0	0	11,977	4,095	480	672	7,882
362+00	100.00	114.84	3.70	0.00	0.00	468	74	0	0	12,445	4,184	480	672	8,262
363+00	100.00	101.11	13.15	0.00	0.00	400	31	0	0	12,845	4,221	480	672	8,624

STH 164 - 318+01 to 446+61 - Stage 3														
STATION	Distance	AREA (SF)				Incremental Vol (CY)				Cumulative Vol (CY)				Mass Ordinate
		Cut	Fill	Marsh Excavation	Marsh Backfill	Cut	Fill	Marsh Excavation	Marsh Backfill	Cut 1.00	Expanded Fill 1.20	Marsh Excavation 1.00	Expanded Marsh Backfill 1.40	
364+00	100.00	110.72	17.34	0.00	0.00	392	56	0	0	13,237	4,289	480	672	8,949
365+00	100.00	125.68	9.20	0.00	0.00	438	49	0	0	13,675	4,348	480	672	9,327
366+00	100.00	112.28	8.08	0.00	0.00	441	32	0	0	14,116	4,386	480	672	9,730
367+00	100.00	89.22	11.35	0.00	0.00	373	36	0	0	14,489	4,429	480	672	10,060
368+00	100.00	60.67	21.49	0.00	0.00	278	61	0	0	14,767	4,502	480	672	10,264
369+00	100.00	9.59	24.27	179.81	192.71	130	85	333	357	14,897	4,604	813	1,139	10,293
370+00	100.00	15.32	20.11	0.00	0.00	46	82	333	357	14,943	4,703	1,146	1,605	10,240
371+00	100.00	13.56	19.94	0.00	0.00	53	74	0	0	14,996	4,792	1,146	1,605	10,205
372+00	100.00	13.57	15.68	0.00	0.00	50	66	0	0	15,046	4,871	1,146	1,605	10,176
373+00	100.00	29.86	14.39	0.00	0.00	80	56	0	0	15,127	4,938	1,146	1,605	10,189
374+00	100.00	12.28	18.89	0.00	0.00	78	62	0	0	15,205	5,012	1,146	1,605	10,193
375+00	100.00	14.96	19.16	0.00	0.00	50	70	0	0	15,255	5,096	1,146	1,605	10,159
376+00	100.00	58.23	7.76	85.65	95.44	136	50	159	177	15,391	5,156	1,305	1,827	10,235
377+00	100.00	37.32	30.44	0.00	0.00	177	71	159	177	15,568	5,241	1,463	2,049	10,327
378+00	100.00	52.83	44.80	52.56	63.15	167	139	97	117	15,735	5,408	1,561	2,185	10,327
379+00	100.00	28.33	29.90	38.13	53.28	150	138	168	216	15,885	5,574	1,729	2,420	10,311
380+00	100.00	48.34	0.00	0.00	0.00	142	55	71	99	16,027	5,640	1,799	2,519	10,387
381+00	100.00	61.38	12.03	0.00	0.00	203	22	0	0	16,230	5,667	1,799	2,519	10,563
382+00	100.00	70.19	3.08	0.00	0.00	244	28	0	0	16,474	5,701	1,799	2,519	10,773
383+00	100.00	42.91	7.46	0.00	0.00	209	20	0	0	16,683	5,724	1,799	2,519	10,959
384+00	100.00	28.80	9.32	0.00	0.00	133	31	0	0	16,816	5,762	1,799	2,519	11,055
385+00	100.00	37.46	9.80	0.00	0.00	123	35	0	0	16,939	5,804	1,799	2,519	11,135
386+00	100.00	58.77	7.94	0.00	0.00	178	33	0	0	17,117	5,843	1,799	2,519	11,274
387+00	100.00	37.42	11.61	0.00	0.00	178	36	0	0	17,295	5,887	1,799	2,519	11,408
388+00	100.00	45.55	12.23	0.00	0.00	154	44	0	0	17,449	5,940	1,799	2,519	11,509
389+00	100.00	49.45	10.18	0.00	0.00	176	42	0	0	17,625	5,990	1,799	2,519	11,635
390+00	100.00	84.24	12.13	0.00	0.00	248	41	0	0	17,872	6,039	1,799	2,519	11,833
391+00	100.00	65.87	7.51	0.00	0.00	278	36	0	0	18,150	6,083	1,799	2,519	12,067
392+00	100.00	98.83	16.93	0.00	0.00	305	45	0	0	18,455	6,137	1,799	2,519	12,318
392+27	27.00	92.15	20.25	0.00	0.00	95	19	0	0	18,551	6,159	1,799	2,519	12,391
393+00	73.00	84.19	32.16	0.00	0.00	238	71	0	0	18,789	6,244	1,799	2,519	12,545
393+46	46.00	75.14	41.09	0.00	0.00	136	62	0	0	18,925	6,319	1,799	2,519	12,606
393+71	25.00	53.17	63.37	0.00	0.00	59	48	0	0	18,984	6,377	1,799	2,519	12,607
393+96	25.00	40.92	87.58	0.00	0.00	44	70	0	0	19,028	6,461	1,799	2,519	12,567
394+00	4.00	43.39	82.46	0.00	0.00	6	13	0	0	19,034	6,476	1,799	2,519	12,558
395+00	100.00	57.82	34.84	0.00	0.00	187	217	0	0	19,222	6,737	1,799	2,519	12,484
396+00	100.00	8.12	65.08	0.00	0.00	122	185	0	0	19,344	6,959	1,799	2,519	12,385
396+56	56.00	8.20	66.67	0.00	0.00	17	137	0	0	19,361	7,123	1,799	2,519	12,238
396+81	25.00	8.64	99.52	0.00	0.00	8	77	0	0	19,368	7,215	1,799	2,519	12,153
397+00	19.00	8.78	135.64	0.00	0.00	6	83	0	0	19,375	7,315	1,799	2,519	12,060
397+06	6.00	8.79	128.53	0.00	0.00	2	29	0	0	19,376	7,350	1,799	2,519	12,027
397+33	27.00	9.18	132.76	0.00	0.00	9	131	0	0	19,385	7,507	1,799	2,519	11,879
397+58	25.00	8.85	168.61	0.00	0.00	8	140	0	0	19,394	7,674	1,799	2,519	11,720
397+83	25.00	8.60	160.36	0.00	0.00	8	152	0	0	19,402	7,857	1,799	2,519	11,545
398+00	17.00	8.18	153.33	0.00	0.00	5	99	0	0	19,407	7,975	1,799	2,519	11,432
398+11	11.00	7.59	166.20	0.00	0.00	3	65	0	0	19,410	8,053	1,799	2,519	11,357

STH 164 - 318+01 to 446+61 - Stage 3														
STATION	Distance	AREA (SF)				Incremental Vol (CY)				Cumulative Vol (CY)				Mass Ordinate
		Cut	Fill	Marsh Excavation	Marsh Backfill	Cut	Fill	Marsh Excavation	Marsh Backfill	Cut 1.00	Expanded Fill 1.20	Marsh Excavation 1.00	Expanded Marsh Backfill 1.40	
399+00	89.00	7.93	84.95	0.00	0.00	26	414	0	0	19,436	8,550	1,799	2,519	10,886
399+03	3.00	8.93	81.83	0.00	0.00	1	9	0	0	19,437	8,561	1,799	2,519	10,876
400+00	97.00	97.52	17.10	0.00	0.00	191	178	0	0	19,628	8,775	1,799	2,519	10,854
401+00	100.00	106.05	8.17	0.00	0.00	377	47	0	0	20,005	8,831	1,799	2,519	11,174
402+00	100.00	195.86	5.32	0.00	0.00	559	25	0	0	20,564	8,861	1,799	2,519	11,703
403+00	100.00	179.24	9.08	0.00	0.00	695	27	0	0	21,259	8,893	1,799	2,519	12,366
404+00	100.00	60.61	5.29	0.00	0.00	444	27	0	0	21,703	8,925	1,799	2,519	12,778
405+00	100.00	24.55	55.03	0.00	0.00	158	112	0	0	21,861	9,059	1,799	2,519	12,802
406+00	100.00	61.94	18.51	101.38	125.29	160	136	188	232	22,021	9,222	1,987	2,782	12,799
407+00	100.00	34.28	7.03	201.98	224.41	178	47	562	648	22,199	9,279	2,549	3,568	12,920
408+00	100.00	36.27	23.22	0.00	0.00	131	56	374	416	22,330	9,346	2,923	4,092	12,984
409+00	100.00	34.41	17.88	0.00	0.00	131	76	0	0	22,461	9,437	2,923	4,092	13,023
410+00	100.00	44.51	7.43	295.41	295.41	146	47	547	547	22,607	9,494	3,470	4,858	13,113
411+00	100.00	85.54	10.10	0.00	0.00	241	32	547	547	22,848	9,533	4,017	5,624	13,315
412+00	100.00	71.29	24.15	98.93	98.75	290	63	183	183	23,138	9,609	4,200	5,880	13,529
413+00	100.00	130.62	12.35	0.00	0.00	374	68	183	183	23,512	9,690	4,383	6,137	13,822
413+13	13.00	140.55	13.31	0.00	0.00	65	6	0	0	23,577	9,697	4,383	6,137	13,880
414+00	87.00	53.64	55.88	0.00	0.00	313	111	0	0	23,890	9,831	4,383	6,137	14,059
415+00	100.00	106.15	186.02	0.00	0.00	296	448	0	0	24,186	10,368	4,383	6,137	13,817
416+00	100.00	315.16	17.45	0.00	0.00	780	377	0	0	24,966	10,821	4,383	6,137	14,145
417+00	100.00	411.74	2.17	0.00	0.00	1,346	36	0	0	26,312	10,864	4,383	6,137	15,448
418+00	100.00	252.17	14.56	0.00	0.00	1,229	31	0	0	27,542	10,901	4,383	6,137	16,640
418+34	34.00	171.66	0.00	0.00	0.00	267	9	0	0	27,809	10,912	4,383	6,137	16,896
419+00	66.00	154.76	12.37	0.00	0.00	399	15	0	0	28,208	10,931	4,383	6,137	17,277
420+00	100.00	58.89	6.70	0.00	0.00	396	35	0	0	28,603	10,973	4,383	6,137	17,630
421+00	100.00	44.02	52.25	0.00	0.00	191	109	0	0	28,794	11,104	4,383	6,137	17,690
422+00	100.00	84.64	19.74	0.00	0.00	238	133	0	0	29,032	11,264	4,383	6,137	17,768
423+00	100.00	245.15	17.43	0.00	0.00	611	69	0	0	29,643	11,347	4,383	6,137	18,296
424+00	100.00	53.43	243.06	0.00	0.00	553	482	0	0	30,196	11,925	4,383	6,137	18,270
425+00	100.00	11.63	696.49	0.00	0.00	120	1,740	0	0	30,316	14,013	4,383	6,137	16,303
426+00	100.00	166.49	0.98	0.00	0.00	330	1,292	0	0	30,646	15,563	4,383	6,137	15,083
427+00	100.00	54.47	3.21	0.00	0.00	409	8	0	0	31,055	15,573	4,383	6,137	15,483
428+00	100.00	41.10	3.06	0.00	0.00	177	12	0	0	31,232	15,586	4,383	6,137	15,646
429+00	100.00	15.58	22.07	0.00	0.00	105	47	0	0	31,337	15,642	4,383	6,137	15,695
430+00	100.00	6.81	56.00	0.00	0.00	41	145	0	0	31,379	15,816	4,383	6,137	15,563
431+00	100.00	7.23	77.36	0.00	0.00	26	247	0	0	31,405	16,112	4,383	6,137	15,292
432+00	100.00	43.47	1.08	0.00	0.00	94	145	0	0	31,498	16,286	4,383	6,137	15,212
433+00	100.00	163.29	28.37	0.00	0.00	383	55	0	0	31,881	16,352	4,383	6,137	15,529
434+00	100.00	85.55	4.78	0.00	0.00	461	61	0	0	32,342	16,426	4,383	6,137	15,917
435+00	100.00	76.44	3.04	0.00	0.00	300	14	0	0	32,642	16,443	4,383	6,137	16,199
436+00	100.00	121.59	52.61	0.00	0.00	367	103	0	0	33,009	16,567	4,383	6,137	16,442
437+00	100.00	126.73	31.80	0.00	0.00	460	156	0	0	33,469	16,754	4,383	6,137	16,715
438+00	100.00	223.49	3.61	0.00	0.00	649	66	0	0	34,117	16,833	4,383	6,137	17,284
439+00	100.00	259.59	3.68	0.00	0.00	895	14	0	0	35,012	16,849	4,383	6,137	18,163

STH 164 - 318+01 to 446+61 - Stage 3

STATION	Distance	AREA (SF)				Incremental Vol (CY)				Cumulative Vol (CY)				Mass Ordinate
		Cut	Fill	Marsh Excavation	Marsh Backfill	Cut	Fill	Marsh Excavation	Marsh Backfill	Cut 1.00	Expanded Fill 1.20	Marsh Excavation 1.00	Expanded Marsh Backfill 1.40	
440+00	100.00	212.41	8.14	0.00	0.00	874	22	0	0	35,886	16,875	4,383	6,137	19,011
441+00	100.00	218.92	5.22	0.00	0.00	799	25	0	0	36,685	16,905	4,383	6,137	19,780
442+00	100.00	85.36	20.44	0.00	0.00	563	48	0	0	37,248	16,962	4,383	6,137	20,286
443+00	100.00	8.44	57.99	0.00	0.00	174	145	0	0	37,422	17,136	4,383	6,137	20,286
444+00	100.00	33.58	7.72	0.00	0.00	78	122	0	0	37,500	17,282	4,383	6,137	20,217
445+00	100.00	81.92	0.05	0.00	0.00	214	14	0	0	37,714	17,300	4,383	6,137	20,414
446+00	100.00	79.13	4.63	0.00	0.00	298	9	0	0	38,012	17,310	4,383	6,137	20,702
446+61	61.00	106.29	0.85	0.00	0.00	209	6	0	0	38,221	17,317	4,383	6,137	20,904
		Totals				38,221	14,431	4,383	4,927					

STH 167 'EA' Line - Stage 3

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
158+75	0.00	116.11	3.44	0	0	0	0	0
159+00	25.00	139.09	0.61	118	2	118	2	116
159+50	50.00	186.01	0.00	301	1	419	3	416
160+00	50.00	242.59	0.00	397	0	816	3	813
160+50	50.00	286.41	0.00	490	0	1,306	3	1,303
161+00	50.00	311.14	0.00	553	0	1,859	3	1,856
161+50	50.00	392.69	0.00	652	0	2,511	3	2,508
162+00	50.00	528.51	0.00	853	0	3,364	3	3,361
162+50	50.00	702.72	0.00	1,140	0	4,504	3	4,501
163+00	50.00	836.89	0.00	1,426	0	5,929	3	5,926
163+50	50.00	893.21	0.00	1,602	0	7,531	3	7,528
164+00	50.00	839.81	0.00	1,605	0	9,136	3	9,133
164+50	50.00	732.42	0.00	1,456	0	10,592	3	10,589
165+00	50.00	549.52	0.00	1,187	0	11,779	3	11,776
165+50	50.00	365.42	0.41	847	0	12,626	3	12,622
166+00	50.00	230.71	0.00	552	0	13,178	4	13,174
166+50	50.00	194.38	0.00	394	0	13,571	4	13,568
167+00	50.00	179.79	35.56	346	33	13,918	43	13,875
167+50	50.00	173.93	46.98	328	76	14,245	135	14,110
168+00	50.00	177.90	56.33	326	96	14,571	250	14,321
168+50	50.00	156.12	36.95	309	86	14,880	353	14,527
169+00	50.00	154.89	55.65	288	86	15,168	456	14,712
		Totals		15,168	380			

STH 167 'WA' Line- Stage 3								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
166+00	0.00	61.05	7.10	0	0	0	0	0
166+50	50.00	29.80	21.86	84	27	84	32	52
167+00	50.00	7.03	72.45	34	87	118	137	-19
167+50	50.00	0.15	133.63	7	191	125	366	-241
168+00	50.00	0.00	227.50	0	334	125	767	-642
168+50	50.00	0.00	298.54	0	487	125	1,352	-1,227
169+00	50.00	0.00	415.26	0	661	125	2,145	-2,020
		Totals		125	1,787			

STH 167 'EB' Line - Stage 3								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
170+75	0.00	202.03	0.00	0	0	0	0	0
171+00	25.00	348.60	0.00	255	0	255	0	255
171+50	50.00	173.28	0.00	483	0	738	0	738
172+00	50.00	145.64	58.05	295	54	1,033	65	969
172+50	50.00	145.67	57.40	270	107	1,303	193	1,110
173+00	50.00	145.94	61.30	270	110	1,573	325	1,249
173+50	50.00	158.82	56.63	282	109	1,855	456	1,400
174+00	50.00	281.29	51.06	408	100	2,263	575	1,688
		Totals		2,263	479			

STH 167 'WB' Line - Stage 3								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
170+75	0.00	92.06	167.95	0	0	0	0	0
171+00	25.00	69.43	158.27	75	151	75	181	-106
171+50	50.00	19.33	190.65	82	323	157	569	-412
172+00	50.00	4.65	130.91	22	298	179	926	-747
172+50	50.00	10.01	82.40	14	198	193	1,163	-971
173+00	50.00	18.35	68.38	26	140	219	1,331	-1,112
173+50	50.00	34.57	72.40	49	130	268	1,487	-1,219
174+00	50.00	21.48	83.71	52	145	320	1,661	-1,341
174+50	50.00	726.19	47.76	692	122	1,012	1,807	-795
175+00	50.00	331.55	62.94	979	102	1,992	1,930	62
175+50	50.00	327.45	46.93	610	102	2,602	2,052	550
176+00	50.00	369.74	42.01	646	82	3,247	2,151	1,097
176+50	50.00	399.04	0.00	712	39	3,959	2,197	1,762
177+00	50.00	296.71	23.48	644	22	4,603	2,223	2,380
177+50	50.00	291.34	32.94	544	52	5,148	2,286	2,862
178+00	50.00	238.99	48.62	491	76	5,639	2,377	3,262
178+50	50.00	179.76	49.93	388	91	6,027	2,486	3,540
179+00	50.00	144.81	57.45	301	99	6,327	2,605	3,722
179+50	50.00	110.11	55.80	236	105	6,563	2,731	3,832
180+00	50.00	116.34	26.57	210	76	6,773	2,823	3,950
180+50	50.00	160.84	6.44	257	31	7,029	2,859	4,170
181+00	50.00	219.43	1.86	352	8	7,382	2,869	4,513
181+25	25.00	183.02	0.70	186	1	7,568	2,870	4,698
		Totals		7,568	2,392			

STH 164/STH 167 CIRCULATORY ROADWAY - Stage 3								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
10+00	0.00	316.41	61.09	0	0	0	0	0
10+25	25.00	241.52	53.09	258	53	258	63	195
10+50	25.00	230.83	157.86	219	98	477	181	296
10+75	25.00	144.58	315.70	174	219	651	444	207
11+00	25.00	286.81	40.00	200	165	851	641	209
11+25	25.00	105.04	107.14	181	68	1,032	723	309
11+50	25.00	13.67	489.98	55	276	1,087	1,055	32
11+75	25.00	19.44	208.31	15	323	1,102	1,443	-341
12+00	25.00	174.15	51.58	90	120	1,192	1,587	-395
12+25	25.00	265.40	57.66	203	51	1,395	1,648	-252
12+50	25.00	246.68	65.62	237	57	1,632	1,716	-84
12+75	25.00	138.70	72.53	178	64	1,811	1,793	18
13+00	25.00	238.88	70.82	175	66	1,986	1,873	113
13+25	25.00	186.59	62.90	197	62	2,183	1,947	236
13+30	5.00	316.41	61.09	47	11	2,229	1,961	268
		Totals		2,229	1,634			

Greystone Drive - Stage 3								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
188+52	0.00	74.74	0.00	0	0	0	0	0
189+00	48.00	82.04	0.00	139	0	139	0	139
189+40	40.00	281.28	18.87	269	14	408	17	392
		Totals		408	14			

Pleasant Hill Road - Stage 3								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
197+04.176	0.00	104.98	4.84	0	0	0	0	0
198+00	95.82	134.48	0.00	425	9	425	10	415
199+00	100.00	318.53	0.00	839	0	1,264	10	1,254
		Totals		1,264	9			

Majestic Drive - Stage 3

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
208+52	0.00	78.34	0.00	0	0	0	0	0
209+00	48.00	81.22	0.00	142	0	142	0	142
209+25	25.00	59.26	0.03	65	0	207	0	207
		Totals		207	0			

Pioneer Road - Stage 3

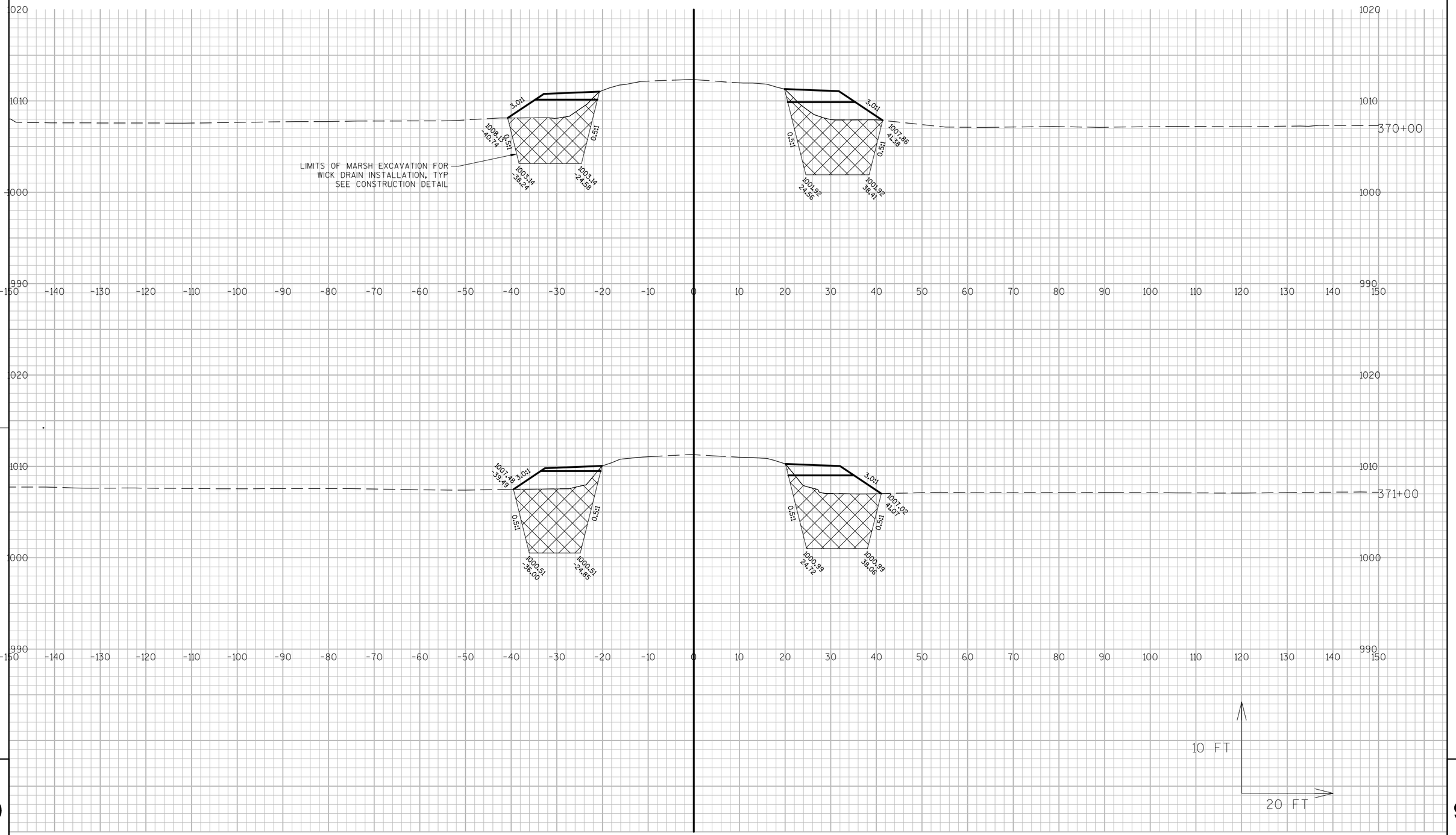
STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
			Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
218+36	21836	0.00	60.19	0.00	0	0	0	0	0
219+00	21900	64.00	145.97	0.01	244	0	244	0	244
219+25 BK	21925	25.00	235.53	8.78	177	4	421	5	416
220+75 AH	22075	0.00	87.15	6.69	0	0	421	5	416
221+00	22100	25.00	68.80	0.00	72	3	493	9	485
221+64	22164	64.00	41.21	0.10	130	0	624	9	615
			Totals		624	7			

CTH E - Stage 3

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
224+95	0.00	238.71	2.17	0	0	0	0	0
225+00	5.00	238.50	2.10	44	0	44	0	44
226+00	100.00	140.21	30.99	701	61	746	74	671
227+00	100.00	103.52	38.90	451	129	1,197	229	968
228+00	100.00	405.50	0.02	943	72	2,139	316	1,824
229+00	100.00	208.09	8.26	1,136	15	3,276	334	2,942
229+12	12.00	203.65	21.84	91	7	3,367	342	3,025
		Totals		3,367	285			

Club Lane - Stage 3

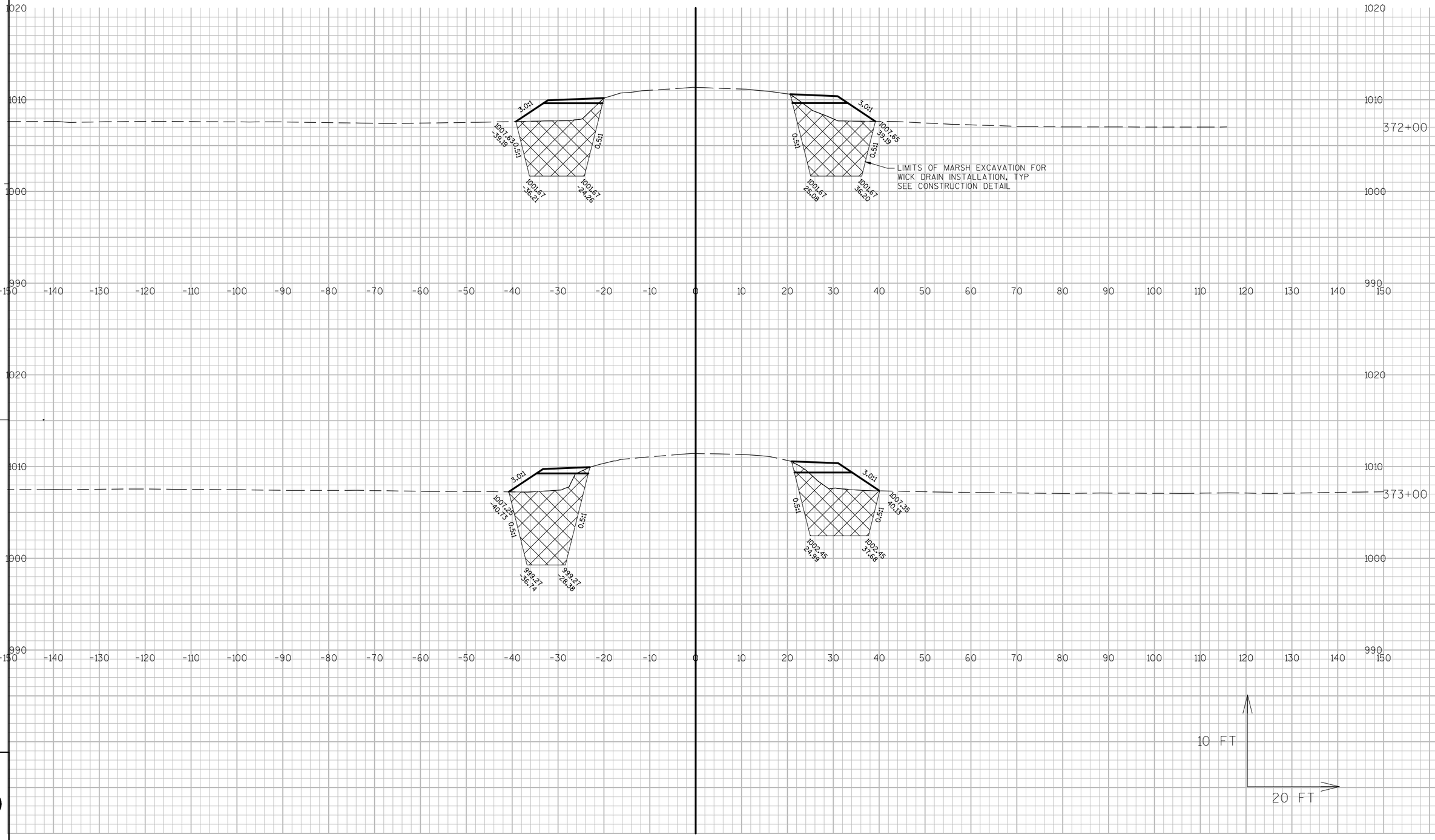
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
240+75	0.00	296.91	1.70	0	0	0	0	0
241+00	25.00	218.03	3.05	238	2	238	3	236
241+44	44.00	145.43	2.74	296	5	535	8	526
		Totals		535	7			



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164 - STAGE 1	SHEET 799	E

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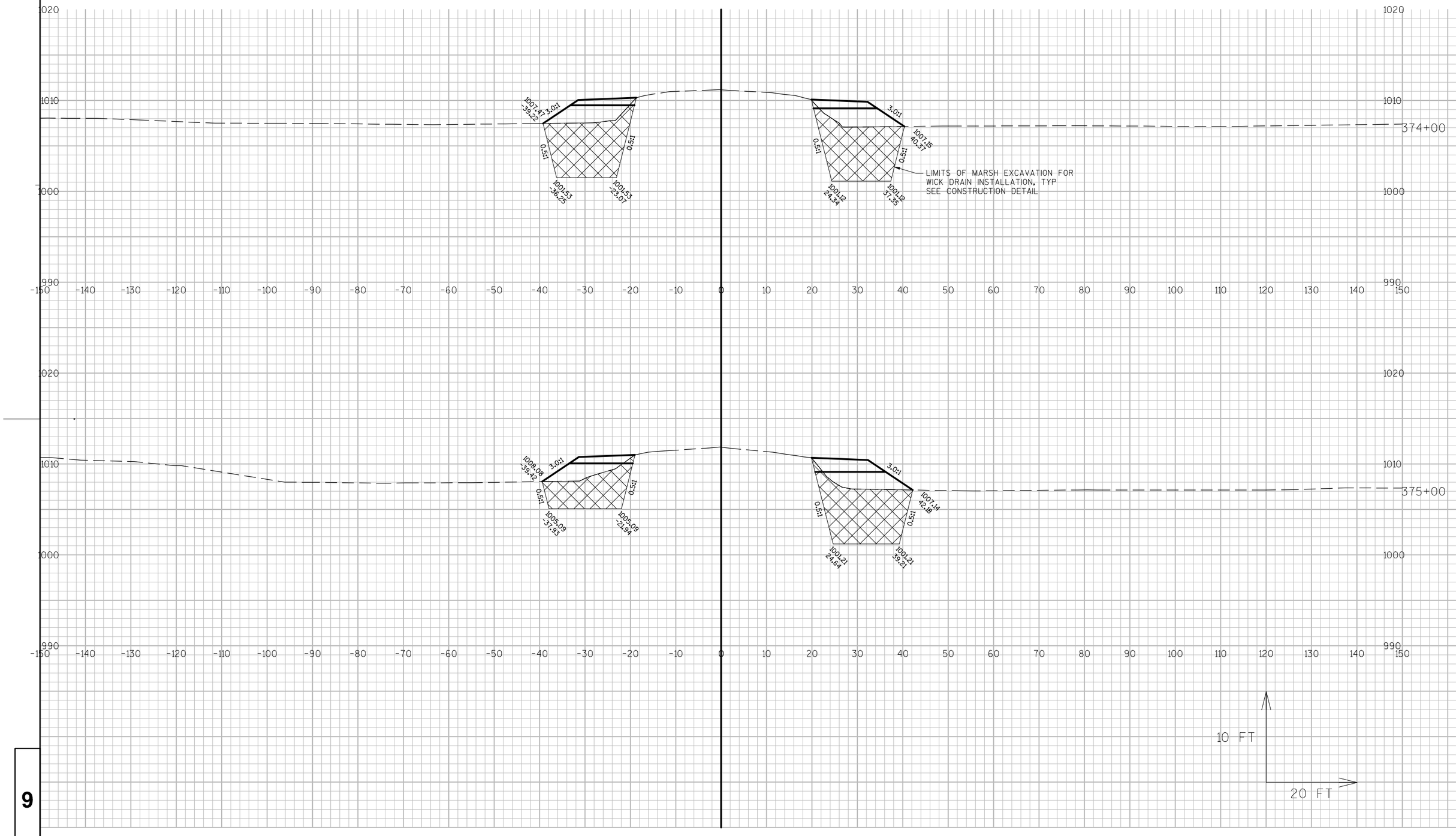
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164 - STAGE 1	SHEET 800	E

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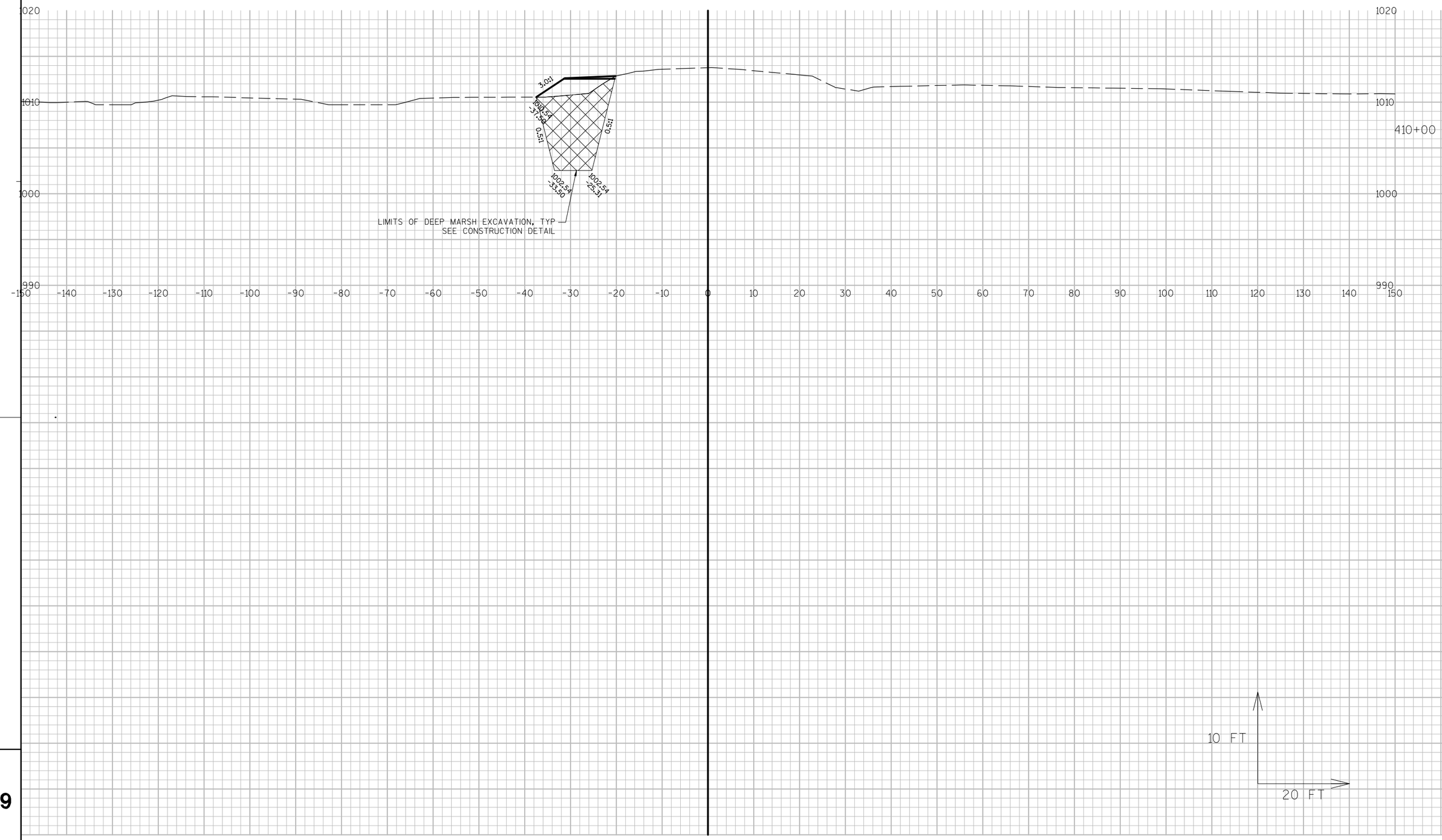


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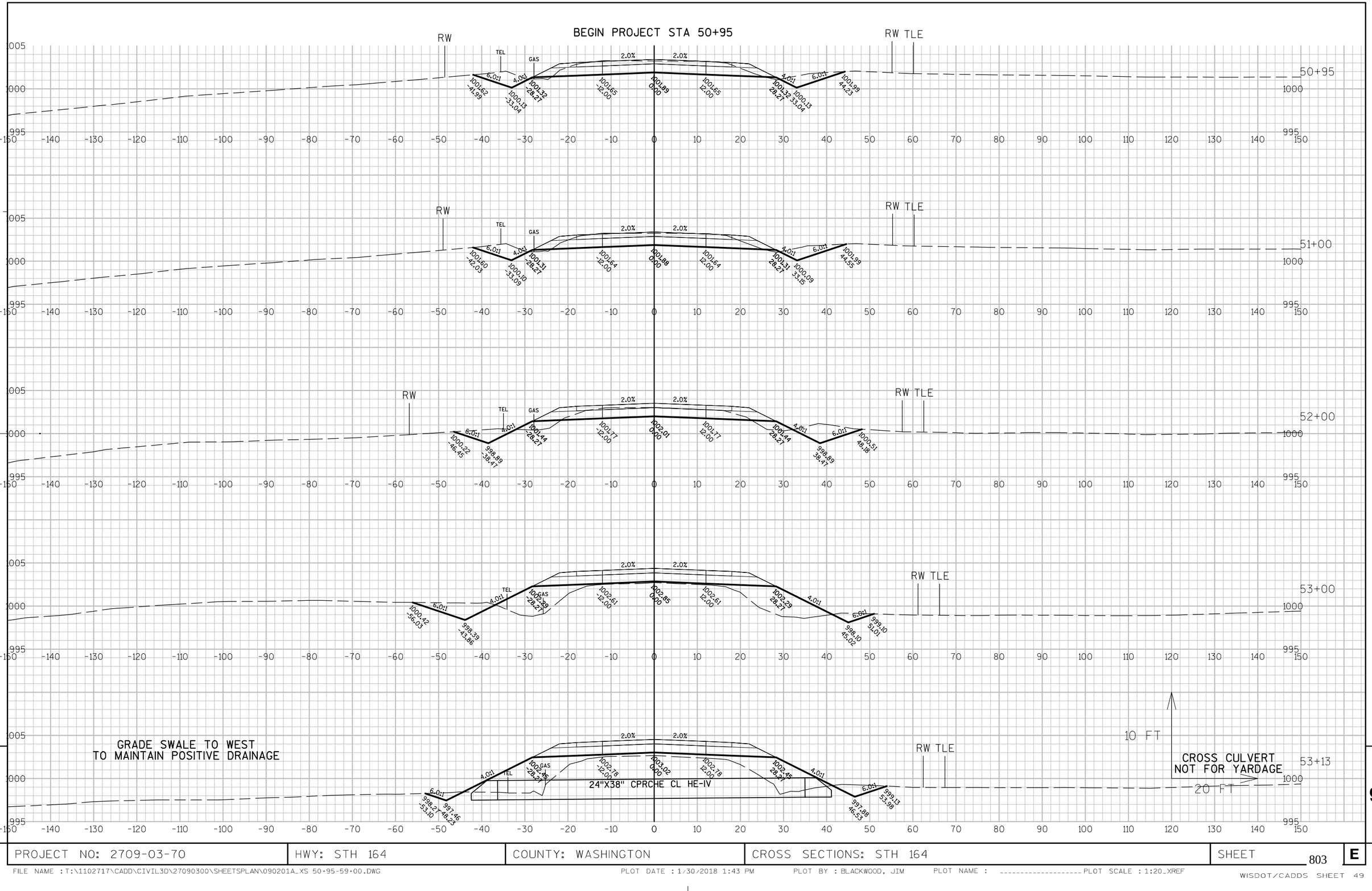


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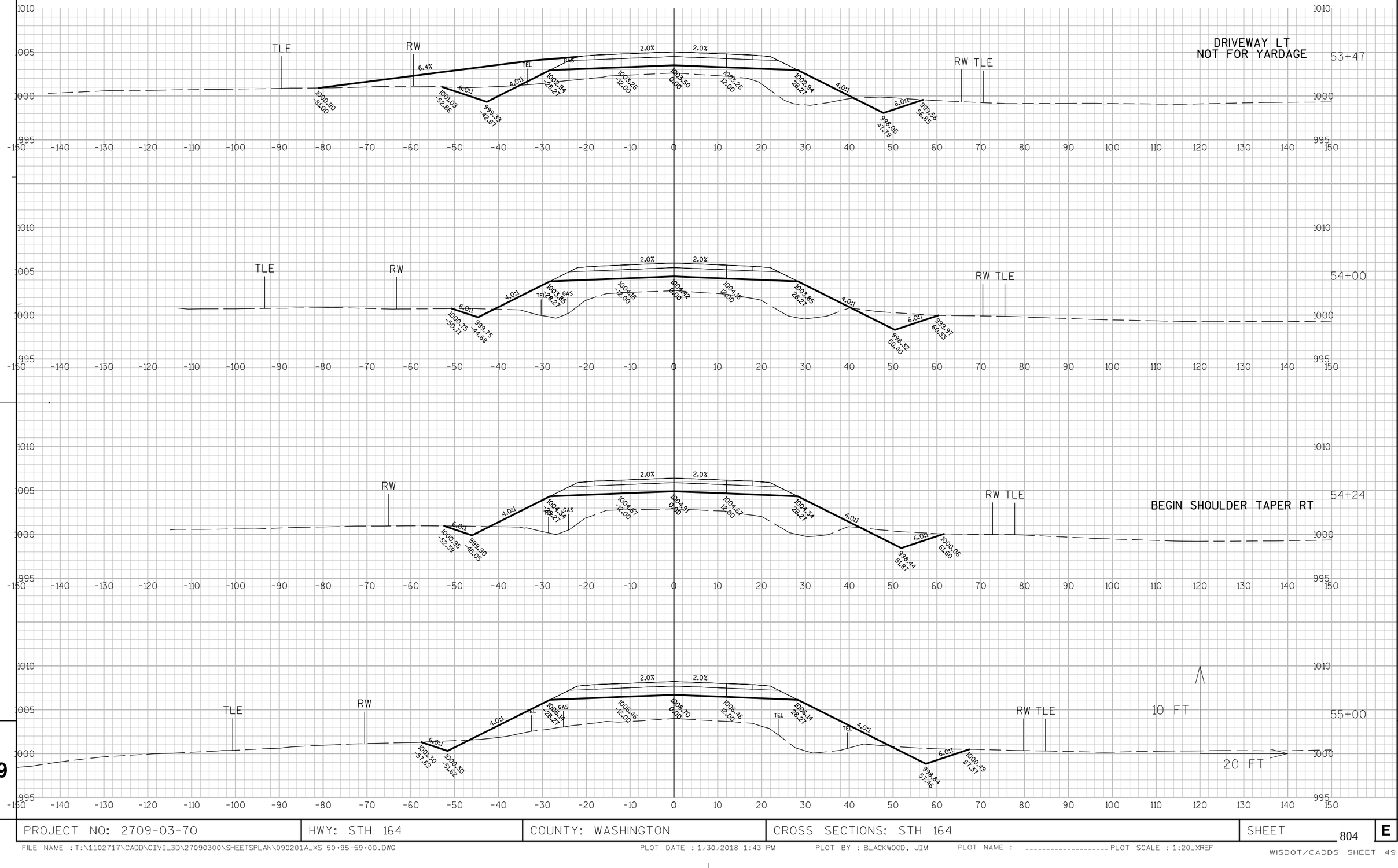
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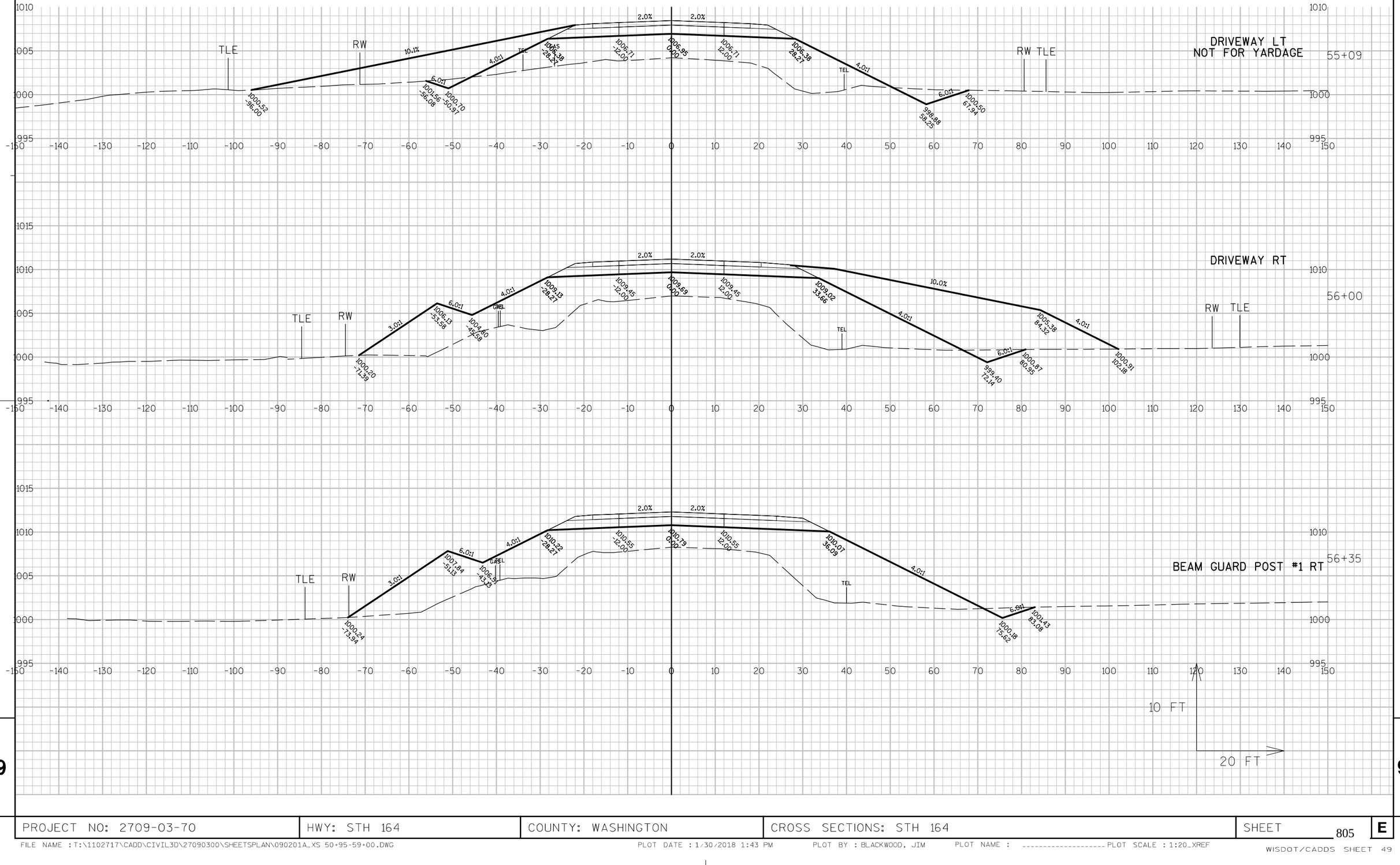


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 803	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 804	E

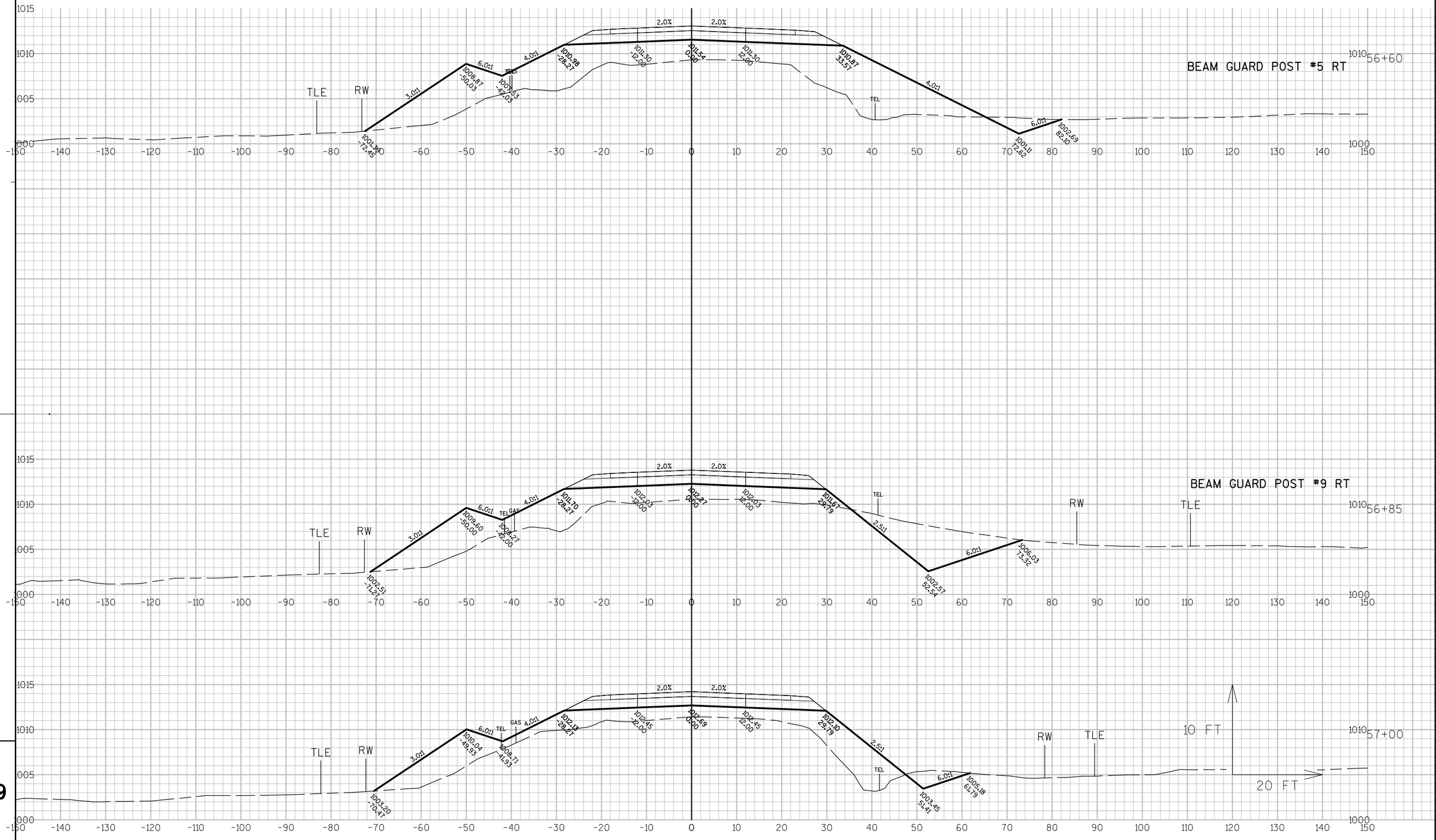
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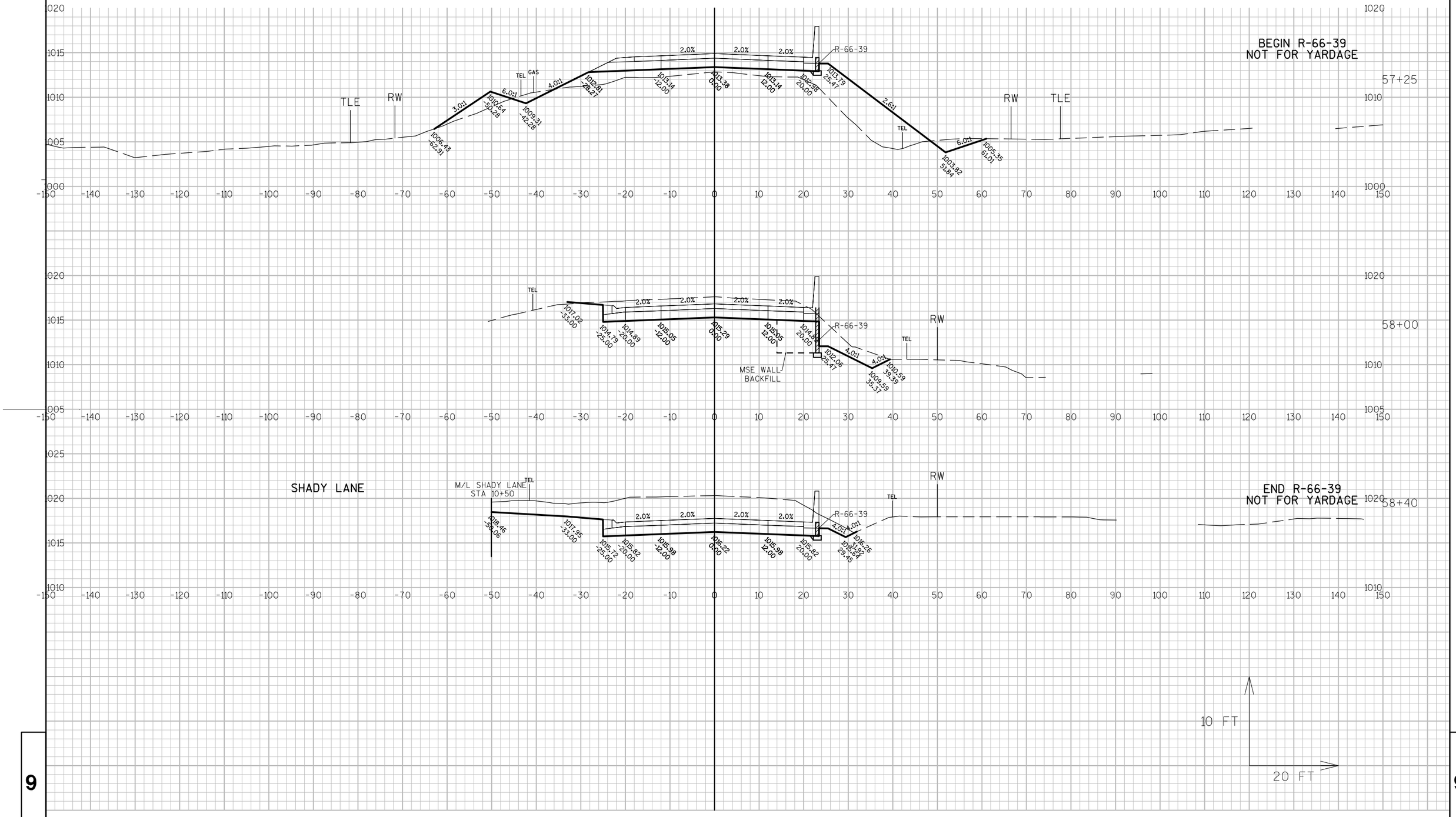
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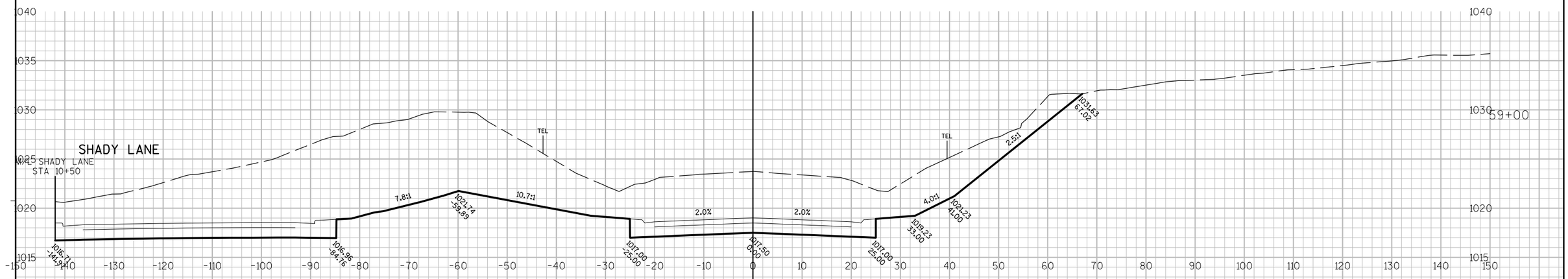
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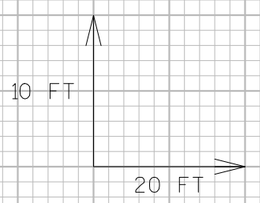
WISDOT/CADDS SHEET 49



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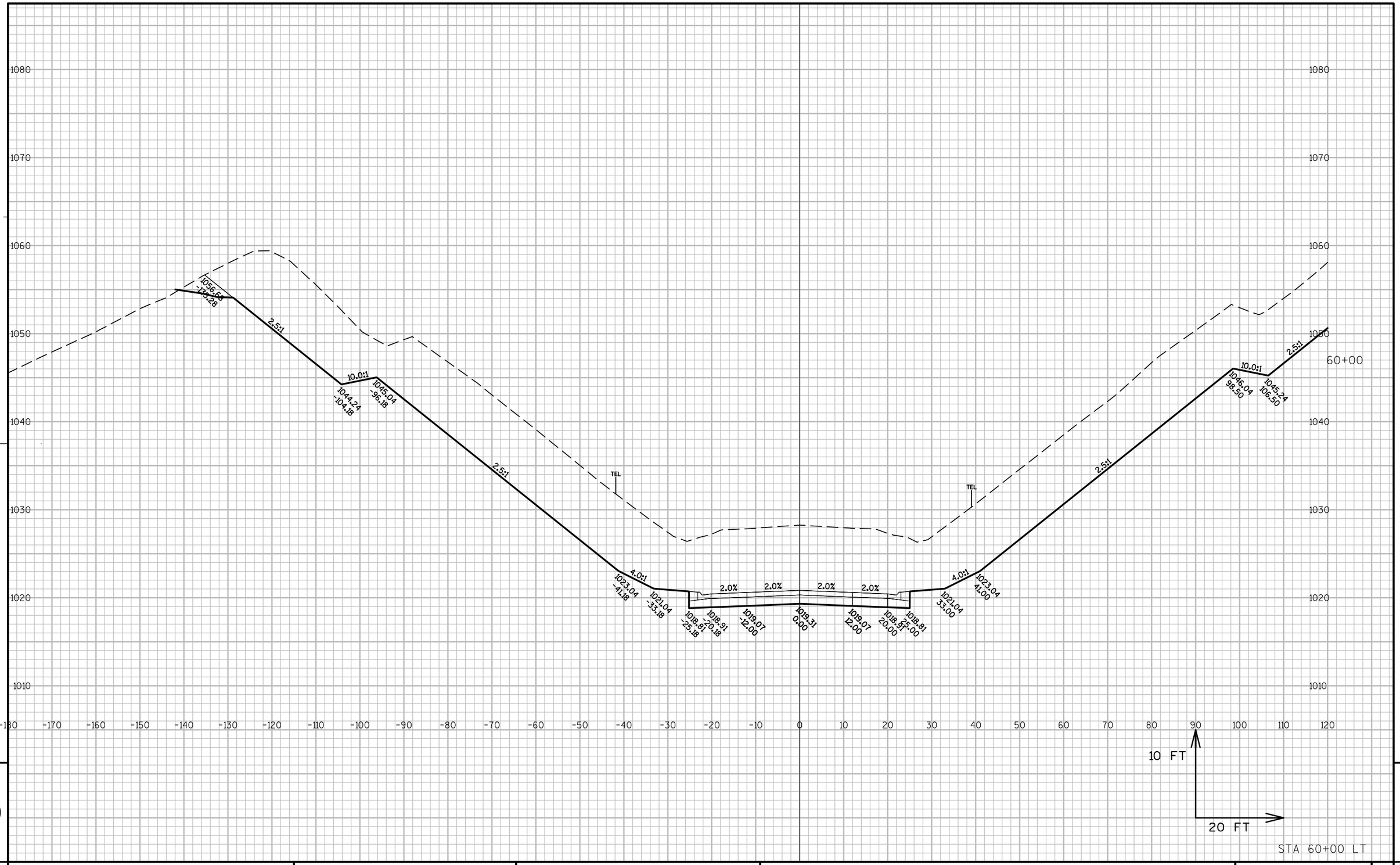


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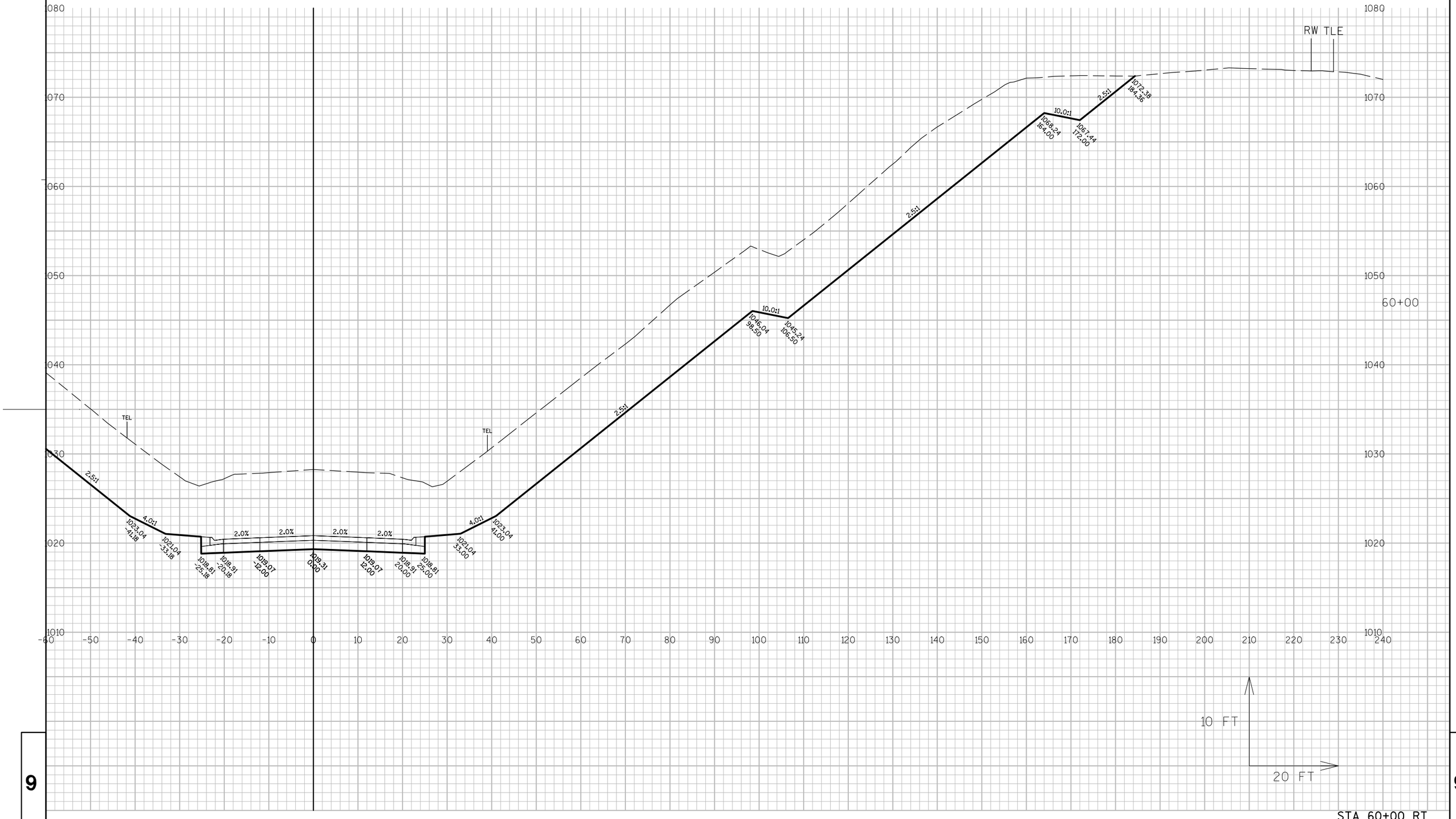
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PLOT NAME : ---------- PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



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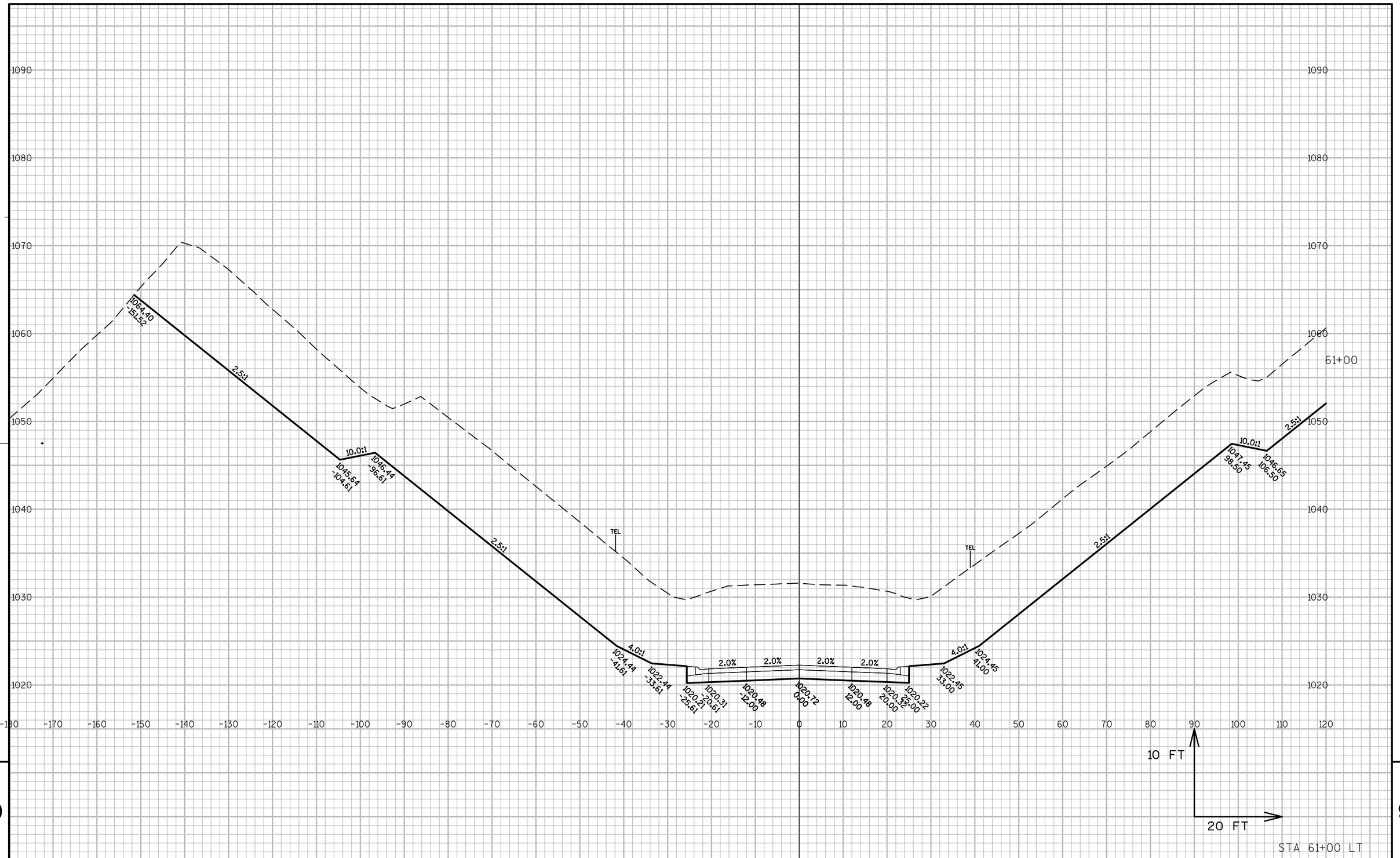
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 810	E

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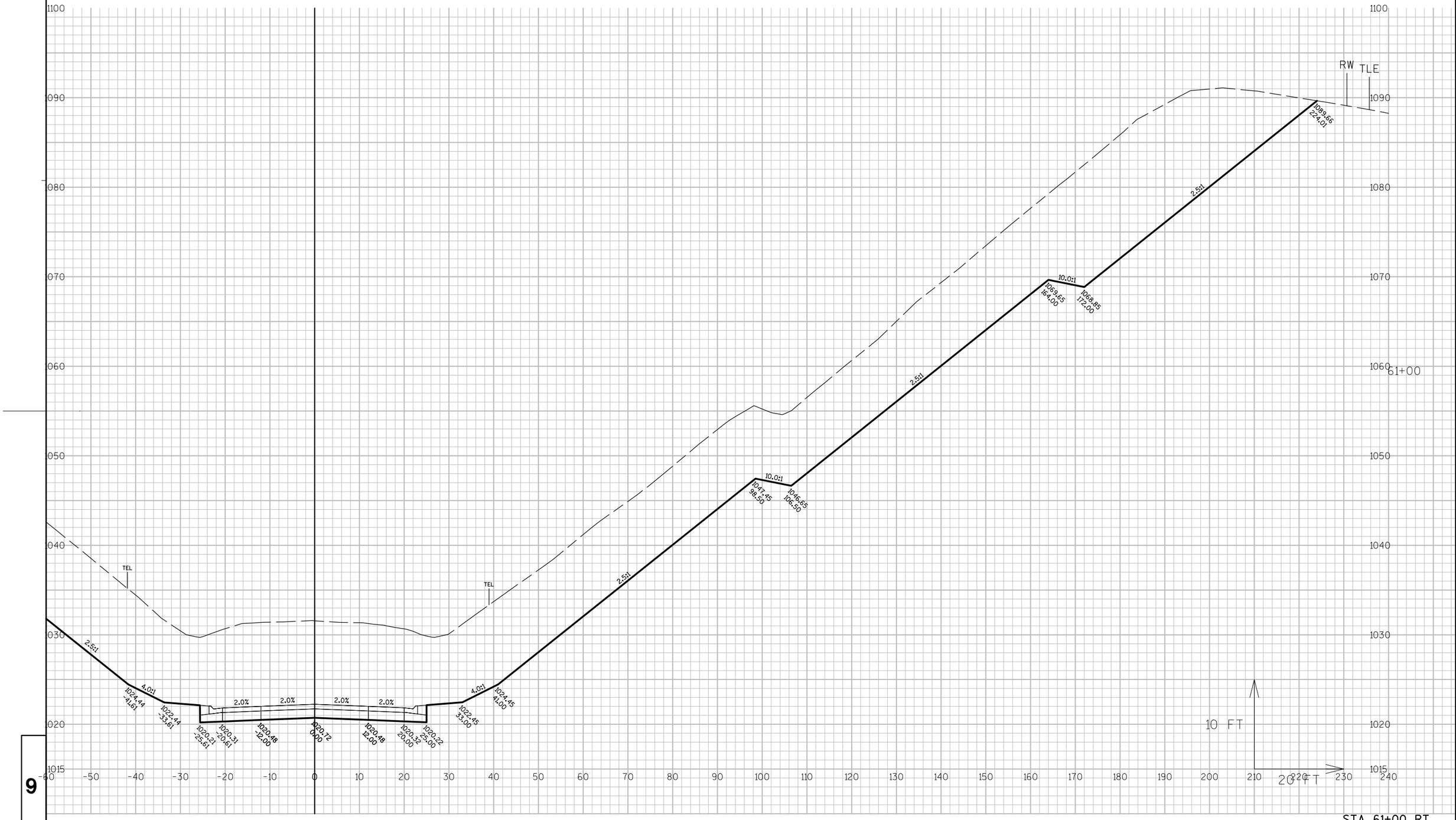
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 811	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090201B_XS 60+00-67+00 LT.DWG PLOT DATE : 1/30/2018 1:53 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

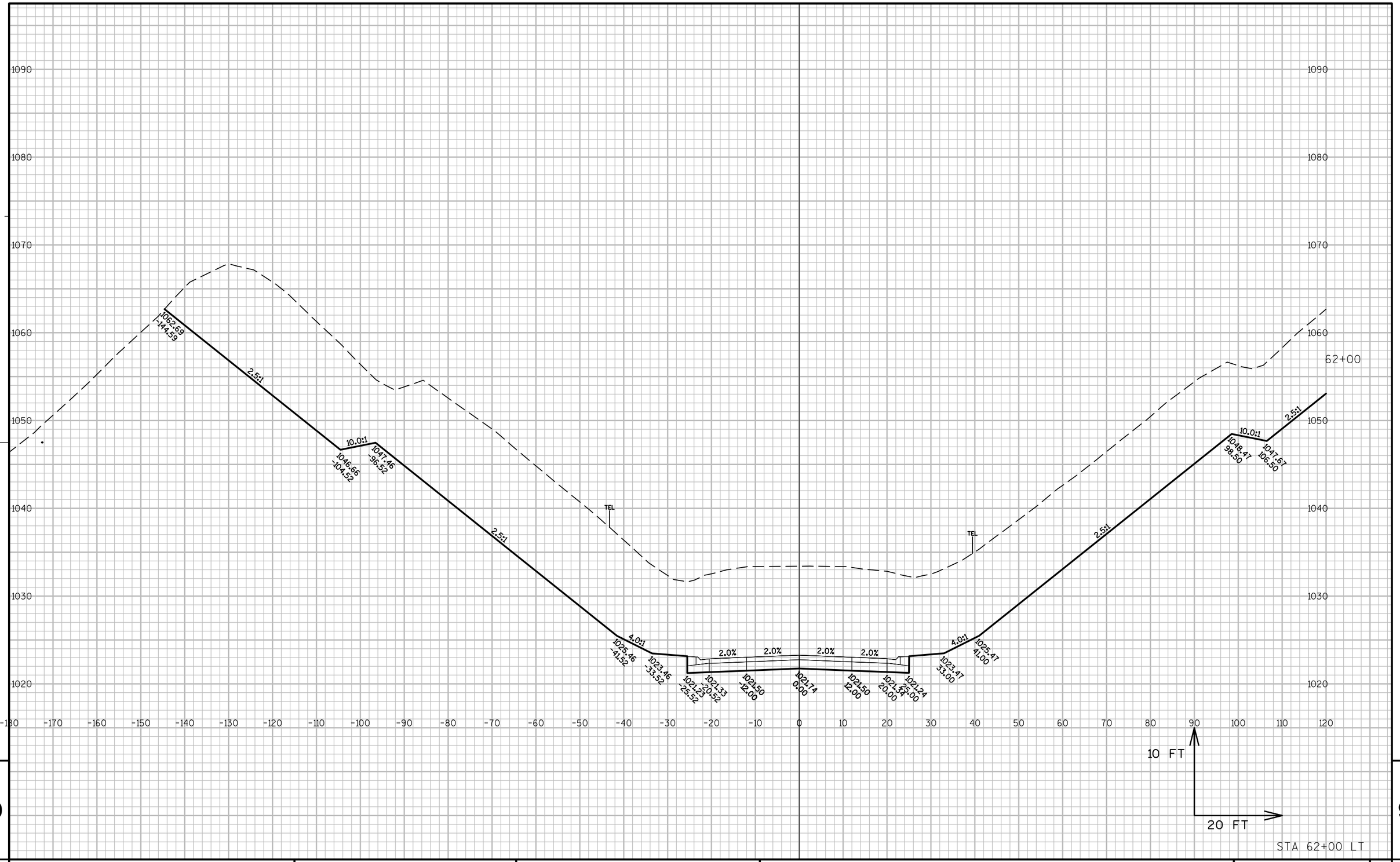
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 812	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090201C_XS 60+00-67+00 RT.DWG PLOT DATE : 1/30/2018 2:02 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



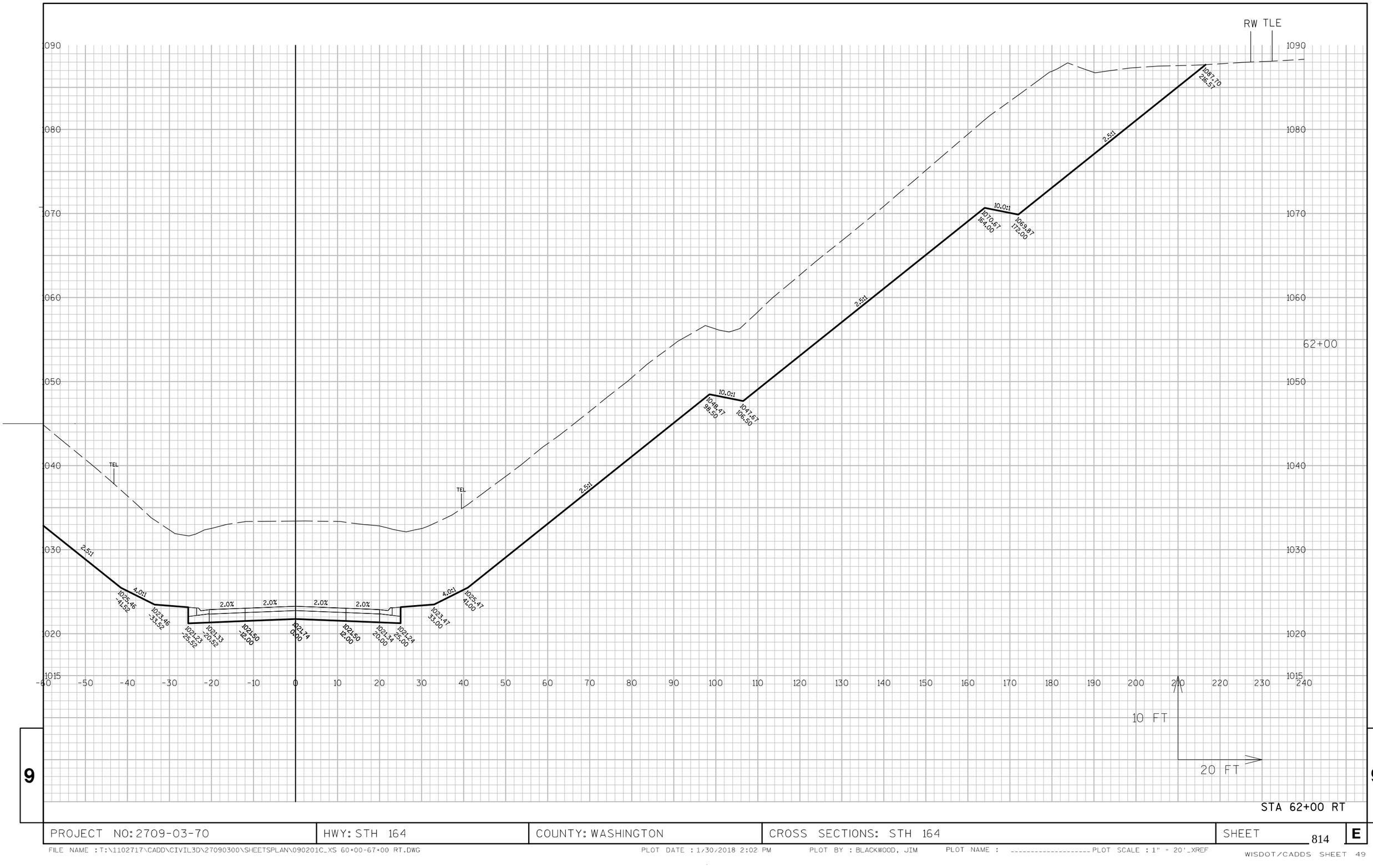
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 813	E

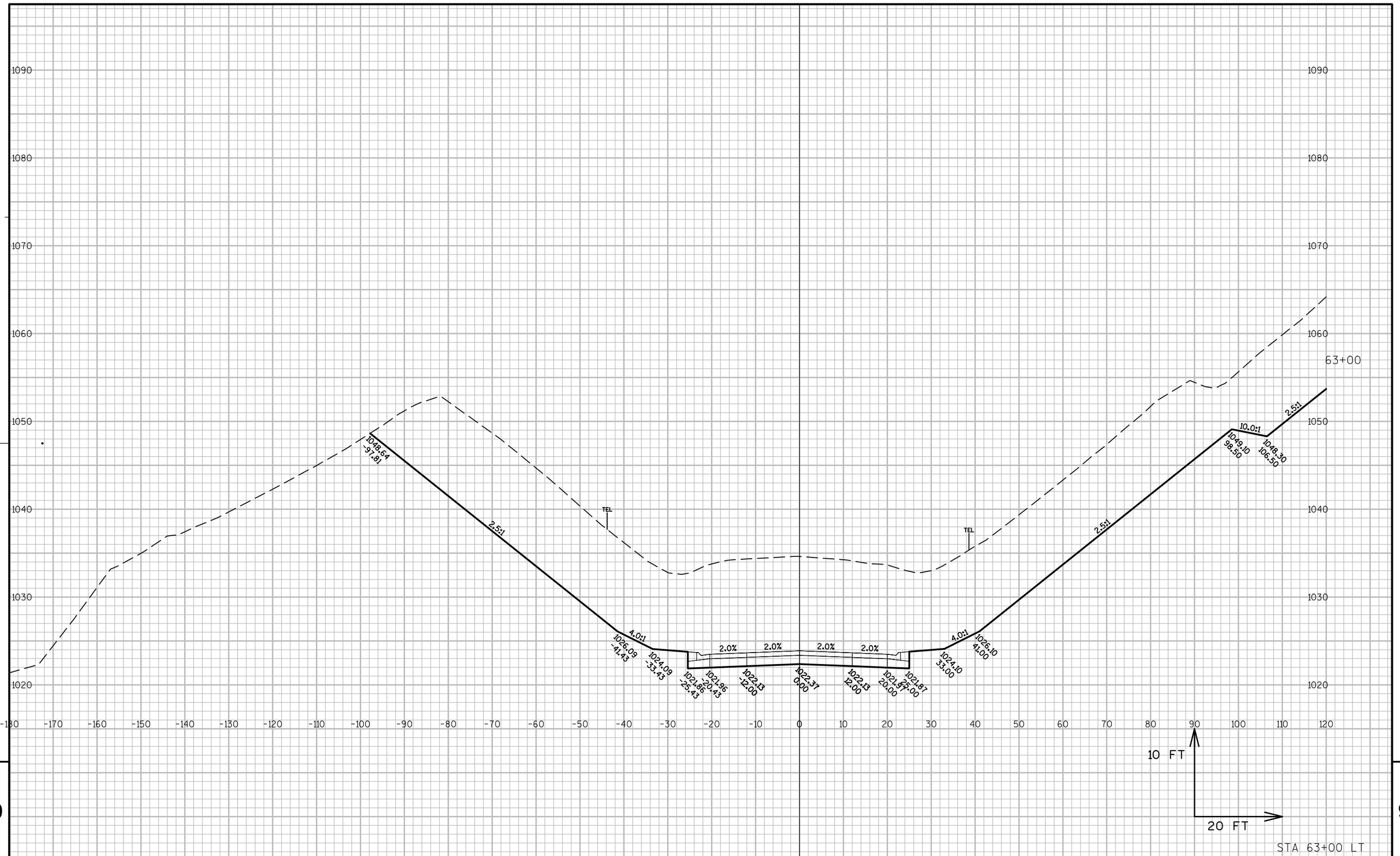
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WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 814	E

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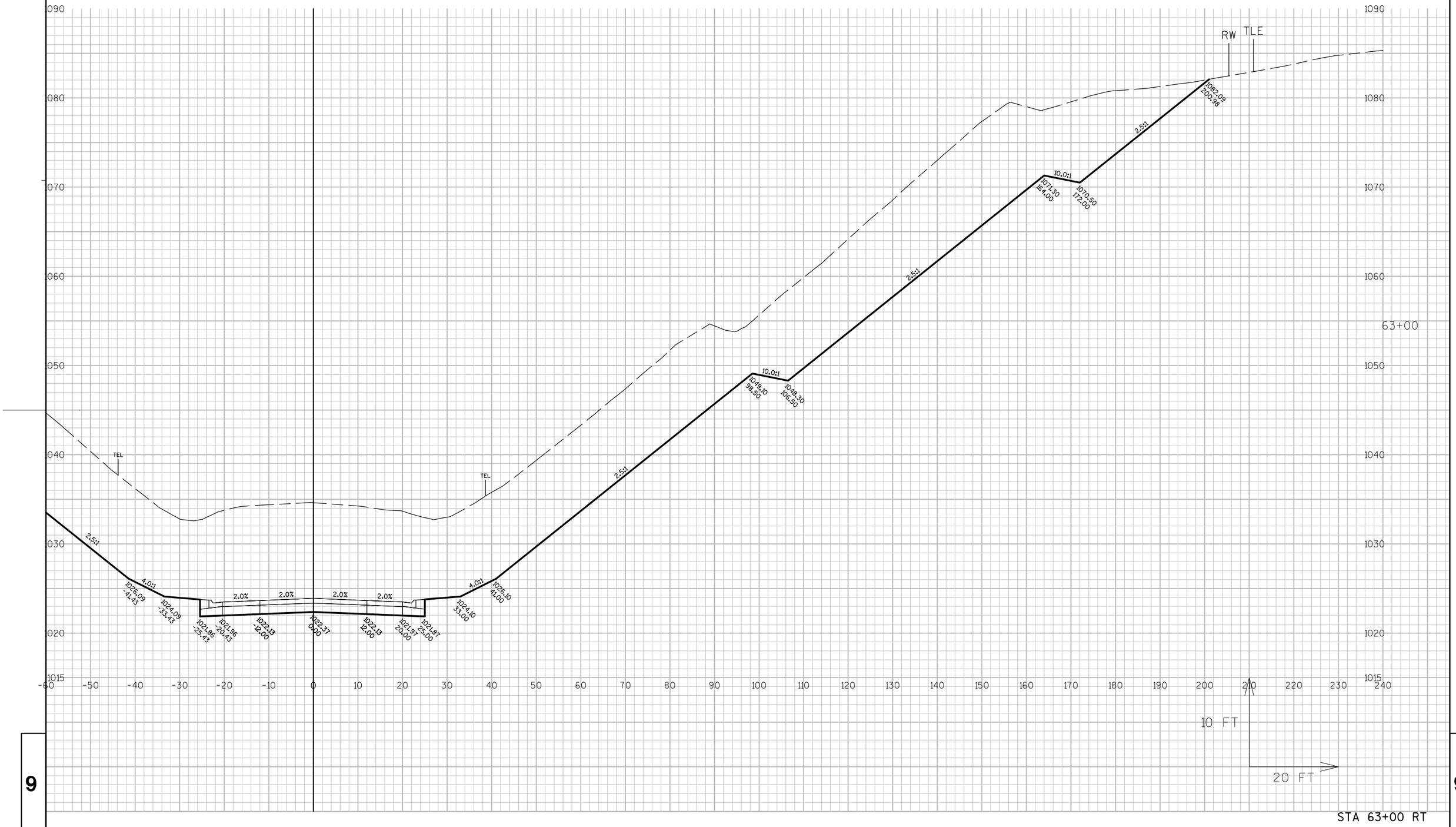
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 815	E

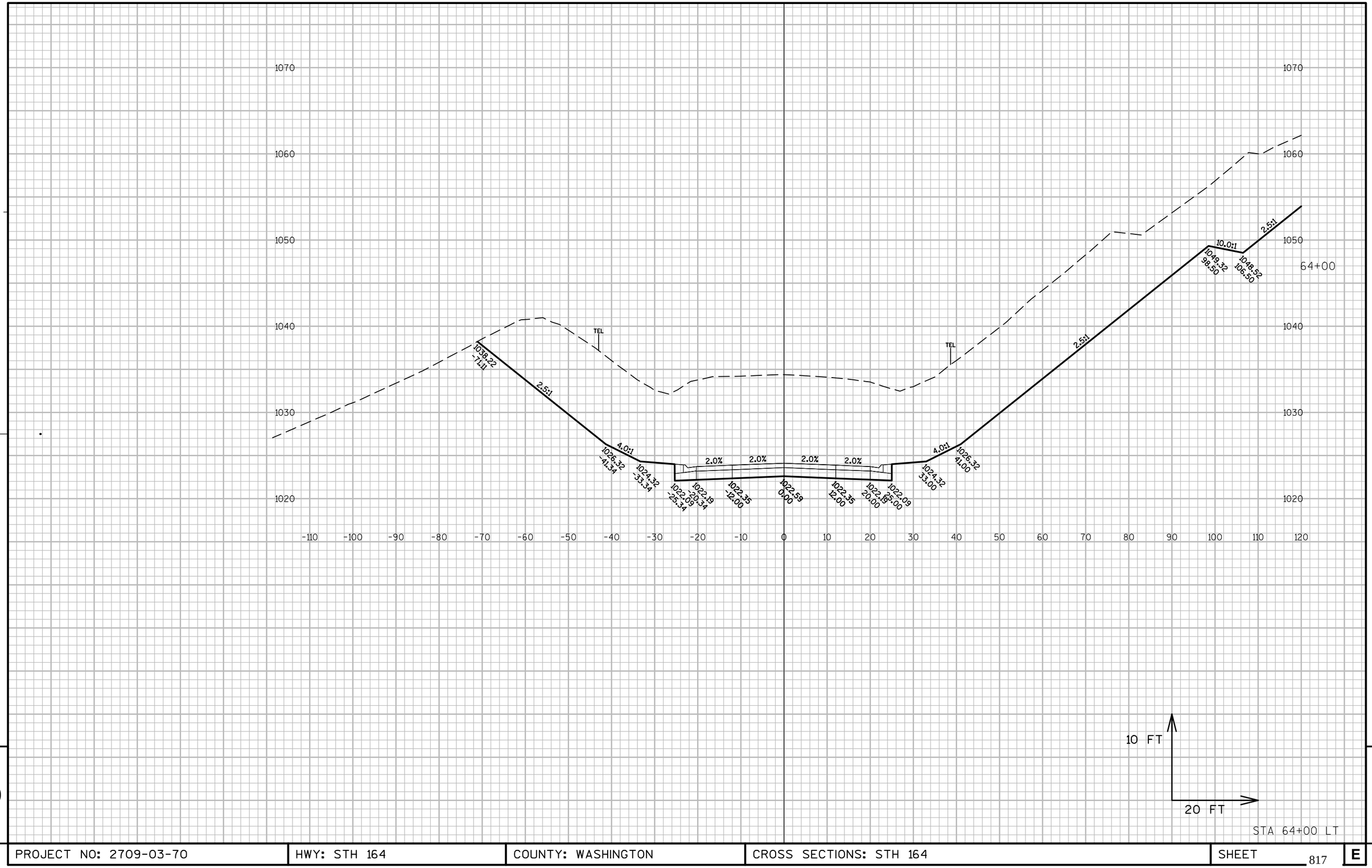
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WISDOT/CADDS SHEET 49



STA 63+00 RT

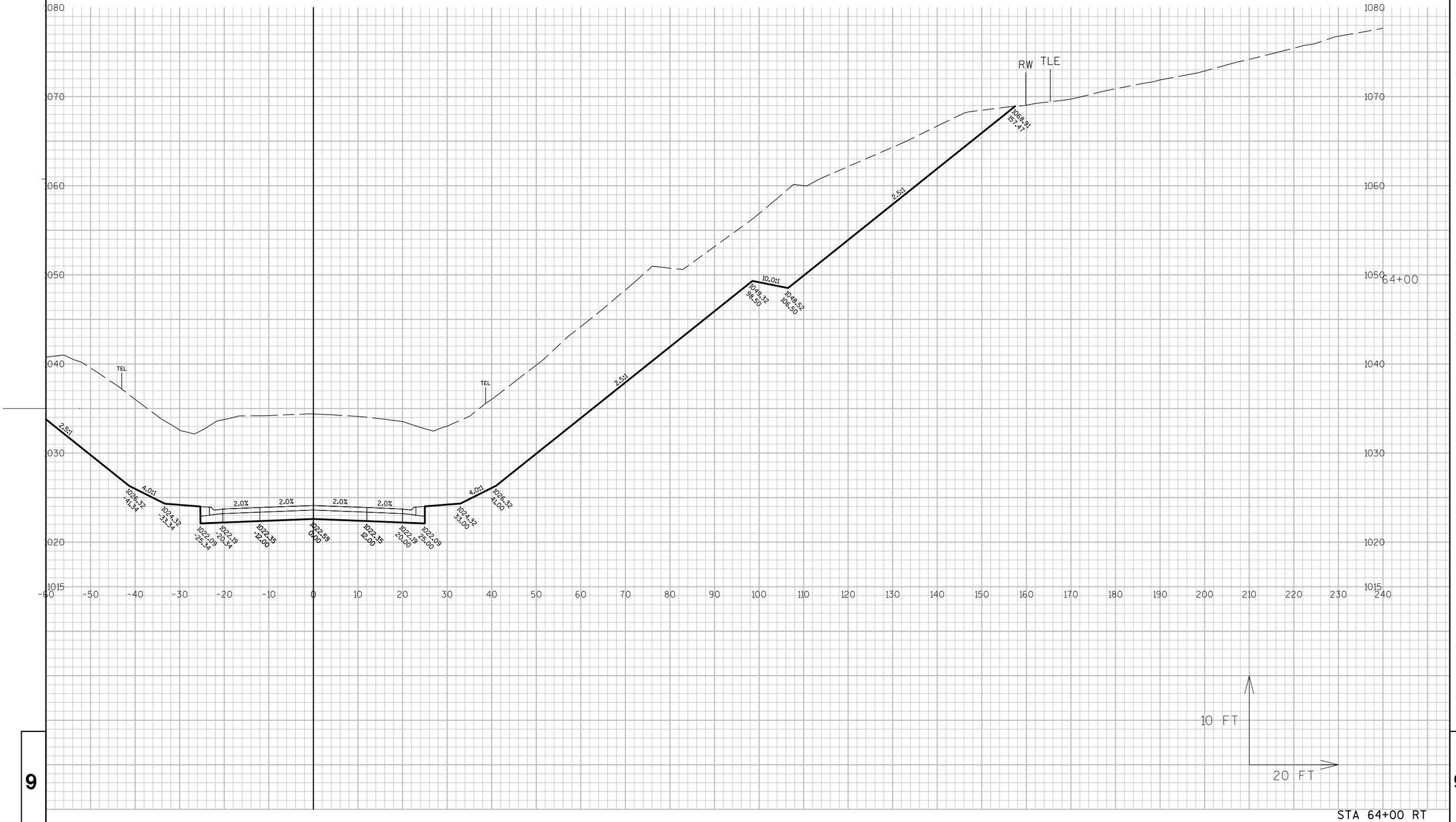
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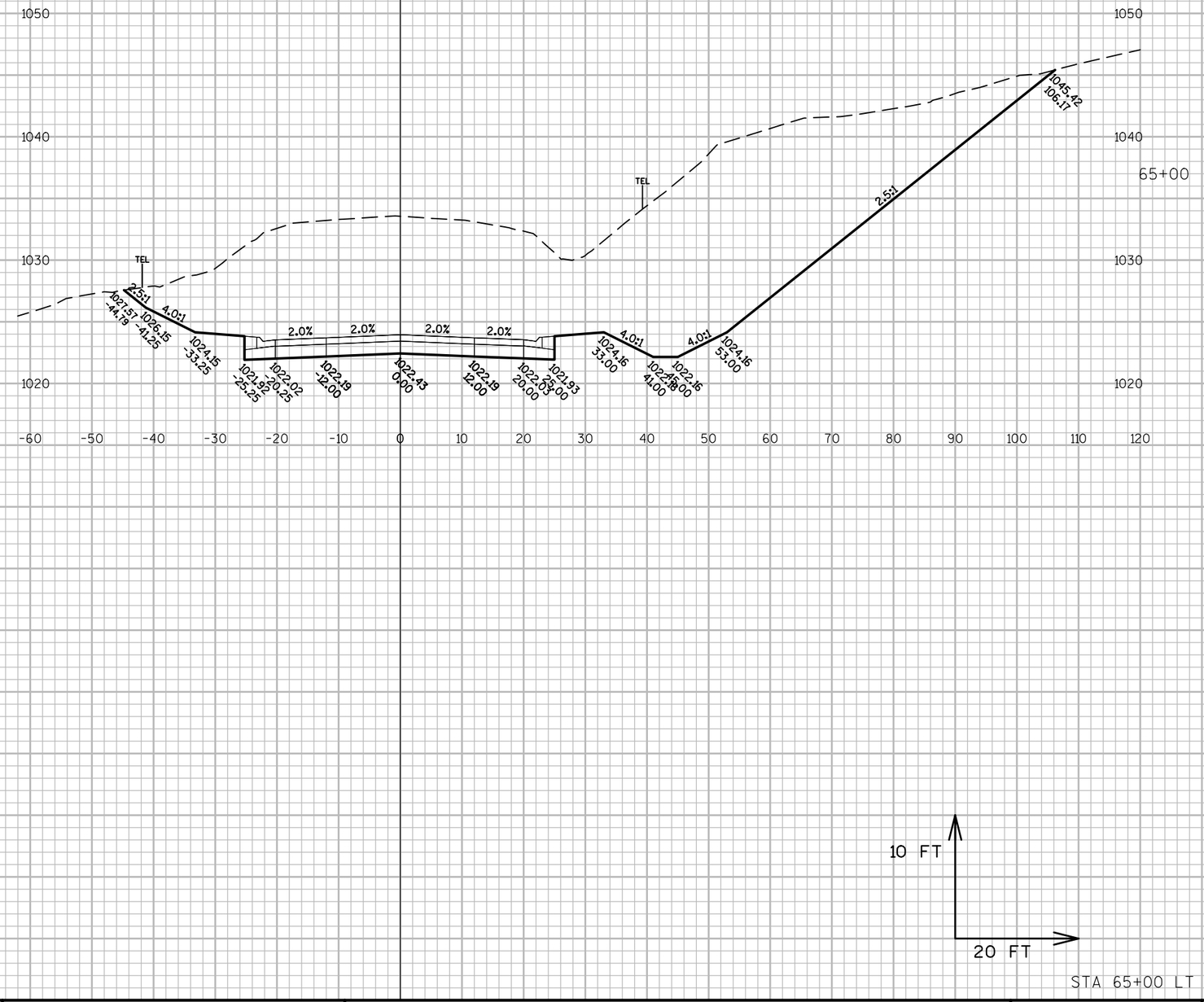
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 817	E



STA 64+00 RT

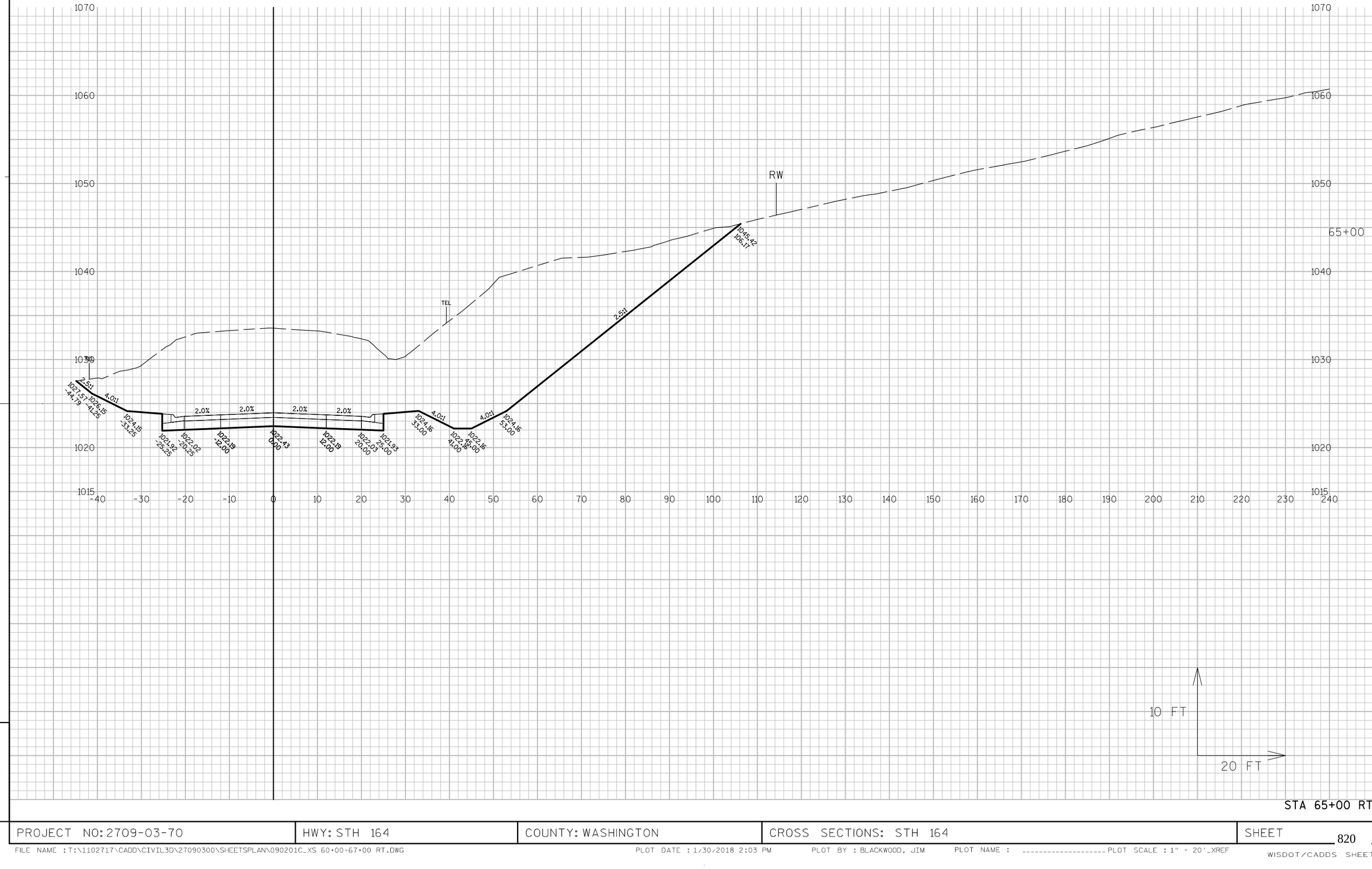
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 818	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 819	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090201B_XS 60+00-67+00 LT.DWG PLOT DATE : 1/30/2018 1:53 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

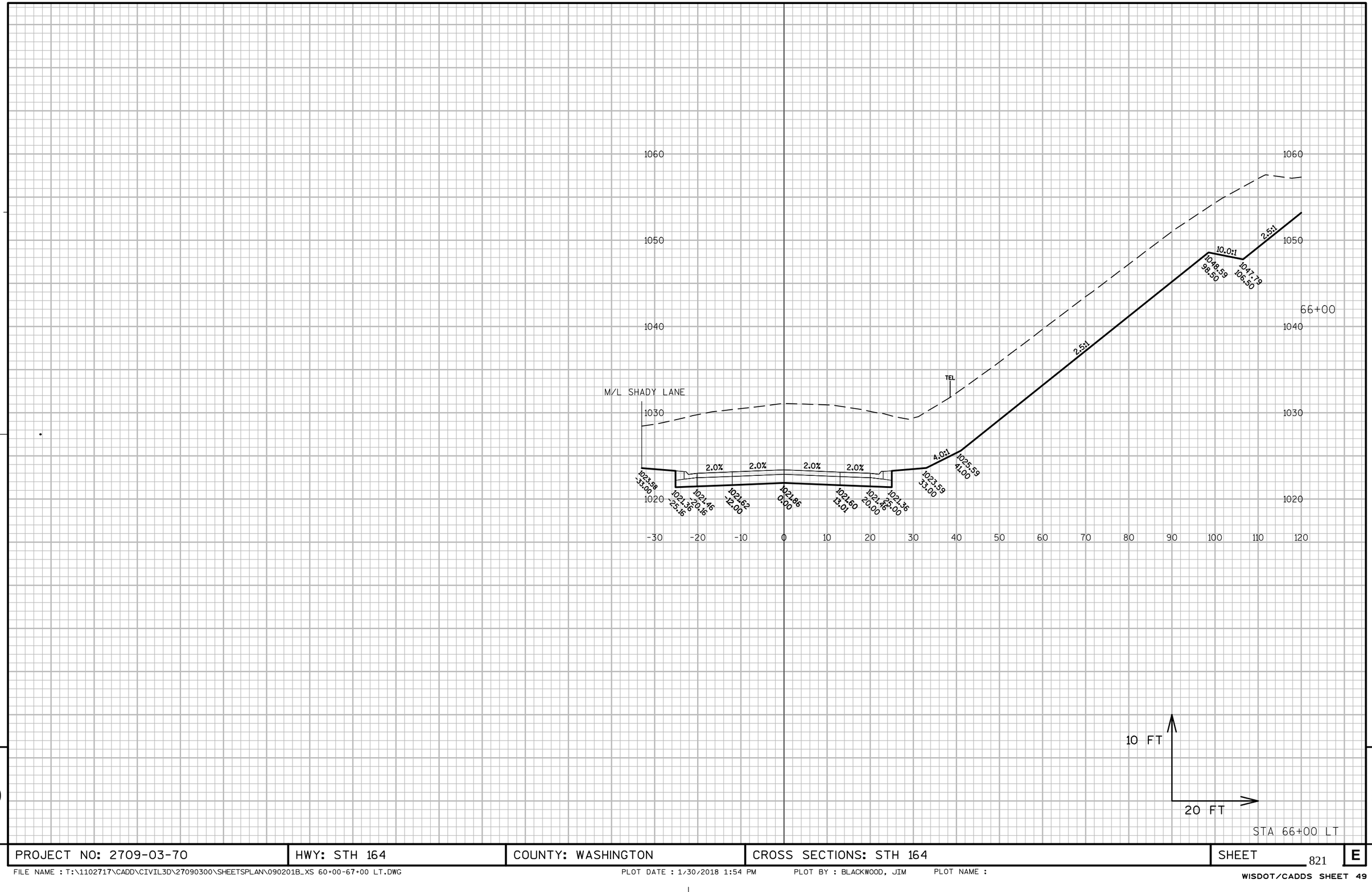
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 820	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090201C_XS 60+00-67+00 RT.DWG PLOT DATE : 1/30/2018 2:03 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF

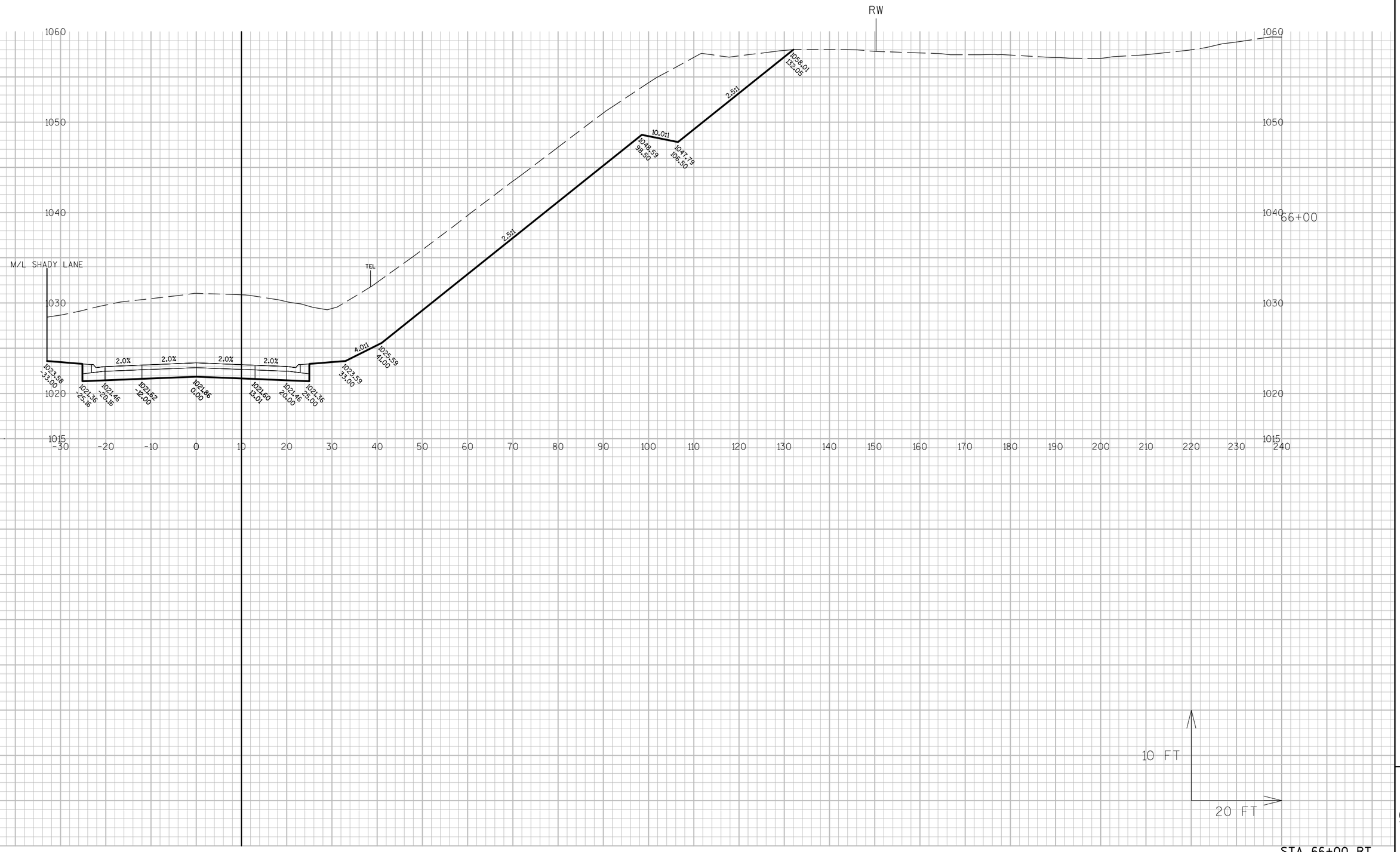
WISDOT/CADDS SHEET 49



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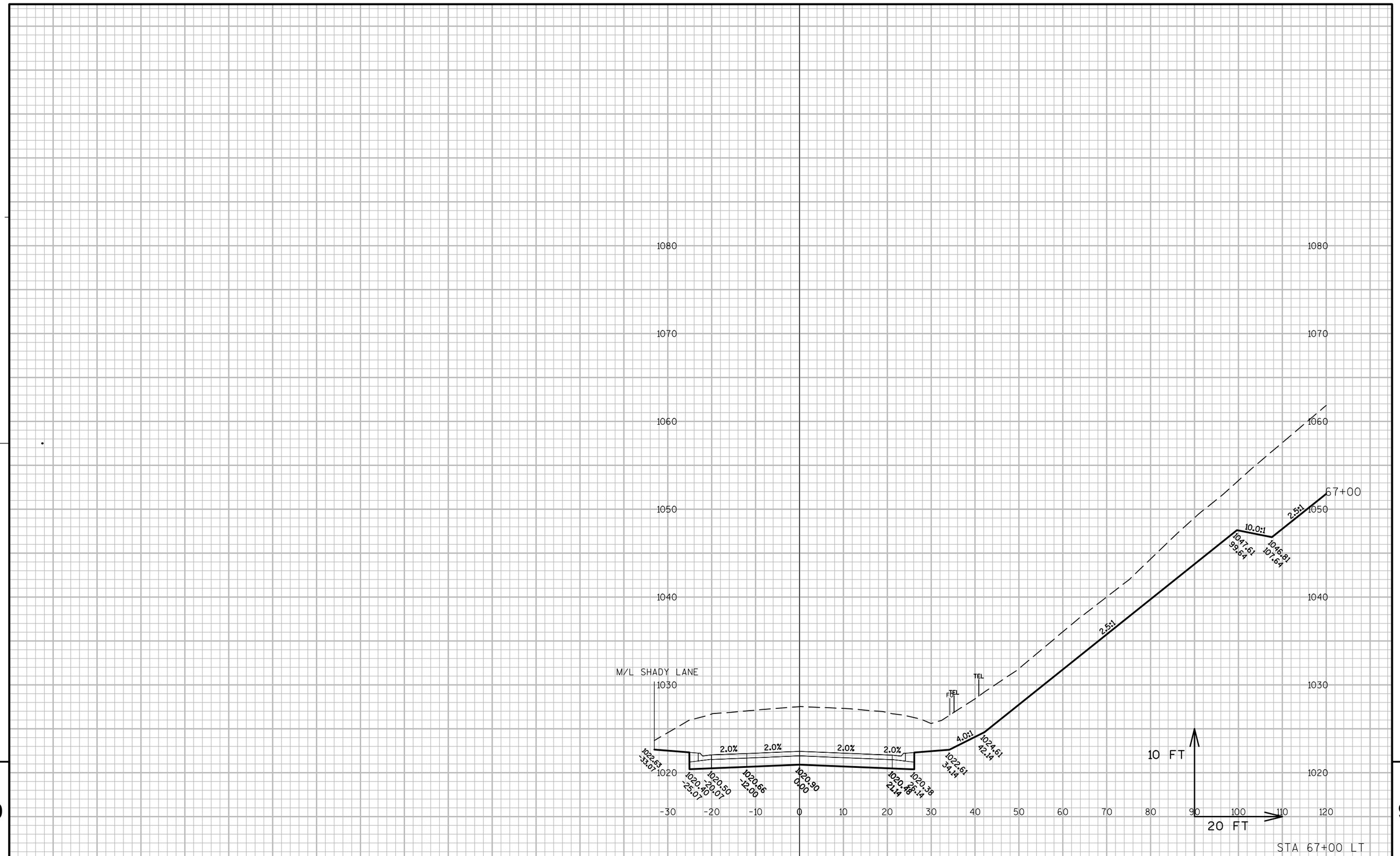
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 821	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 822	E

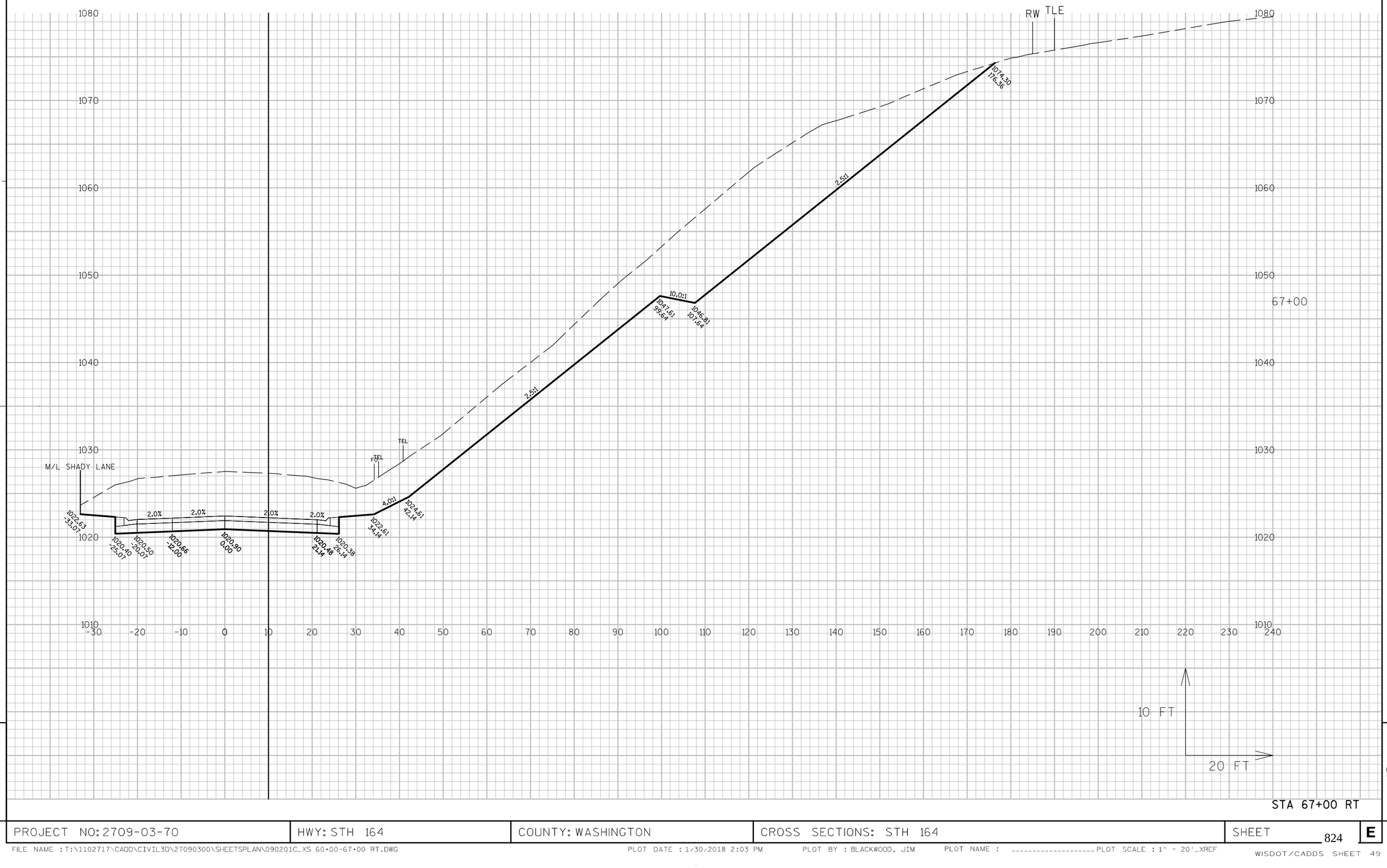
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WISDOT/CADDS SHEET 49



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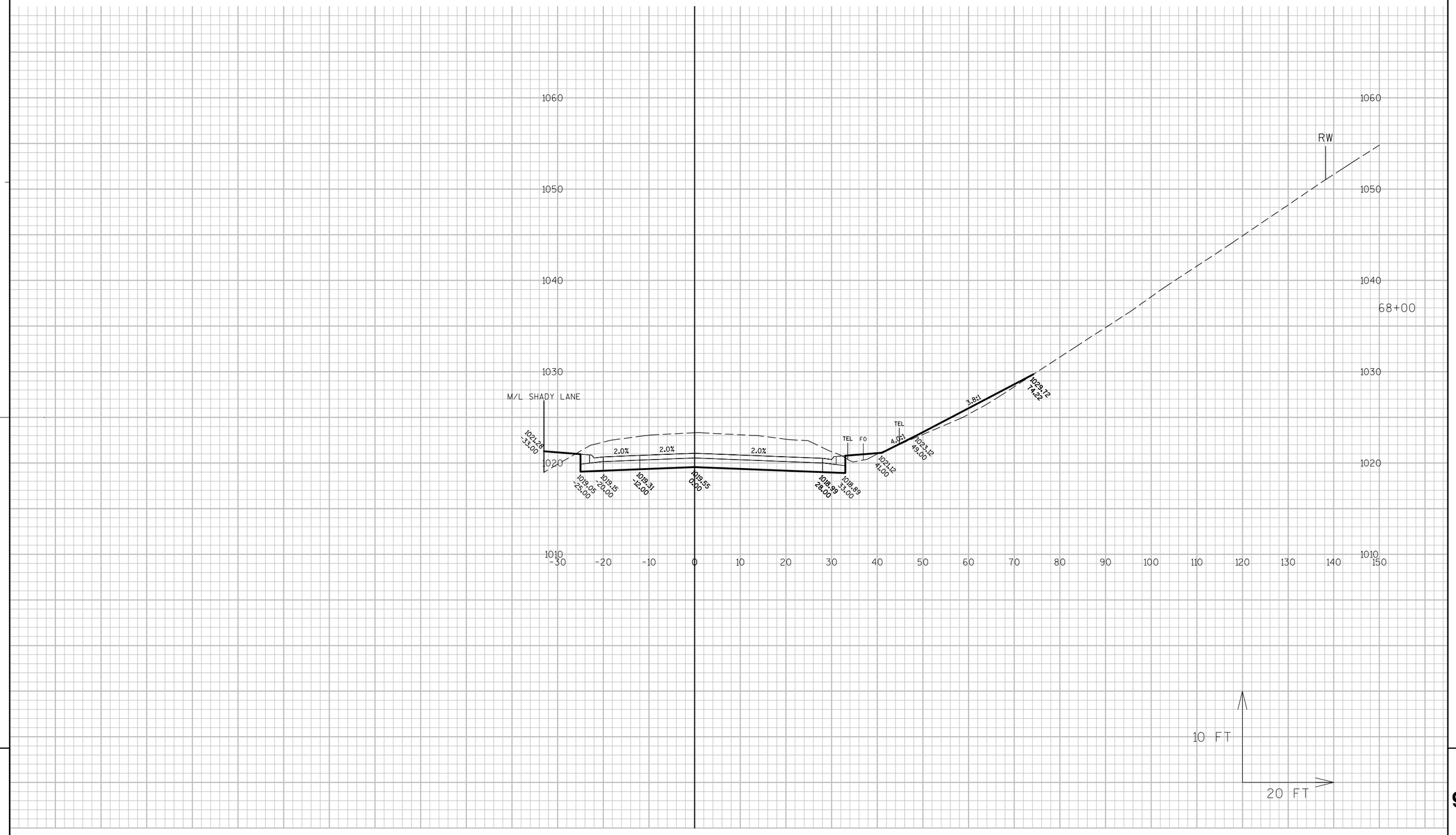
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 823	E



STA 67+00 RT

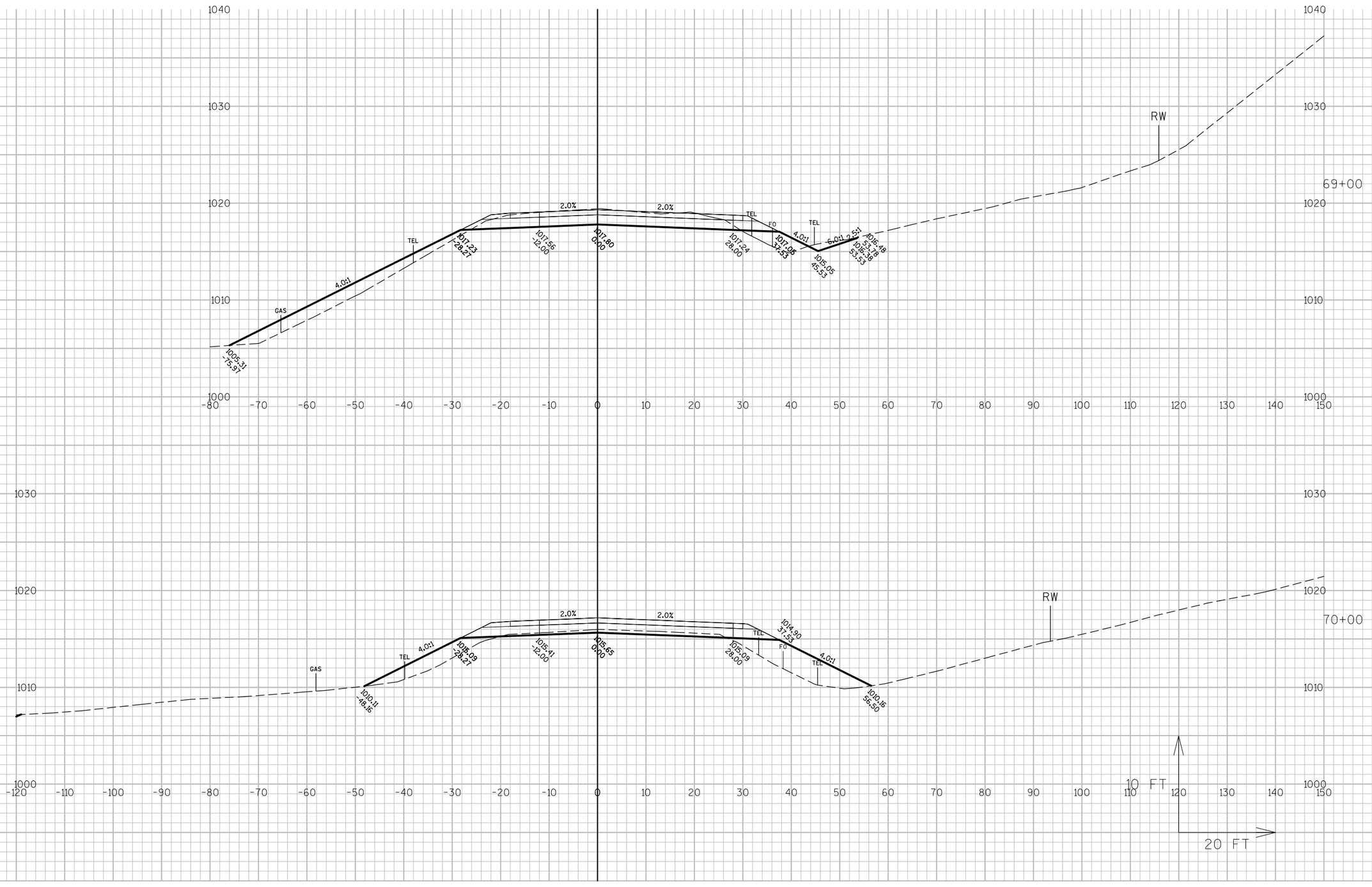
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 824	E



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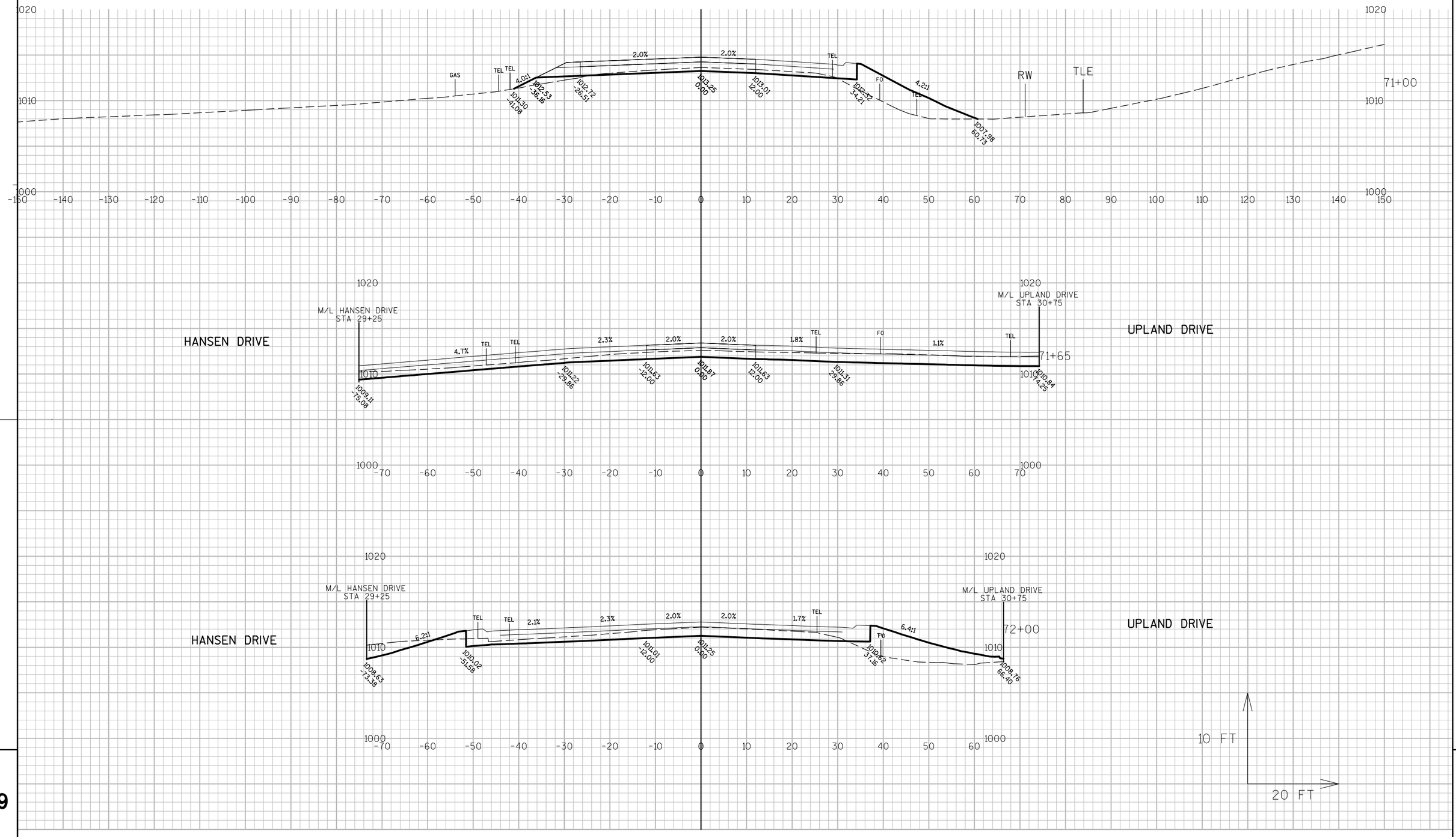
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 825	E



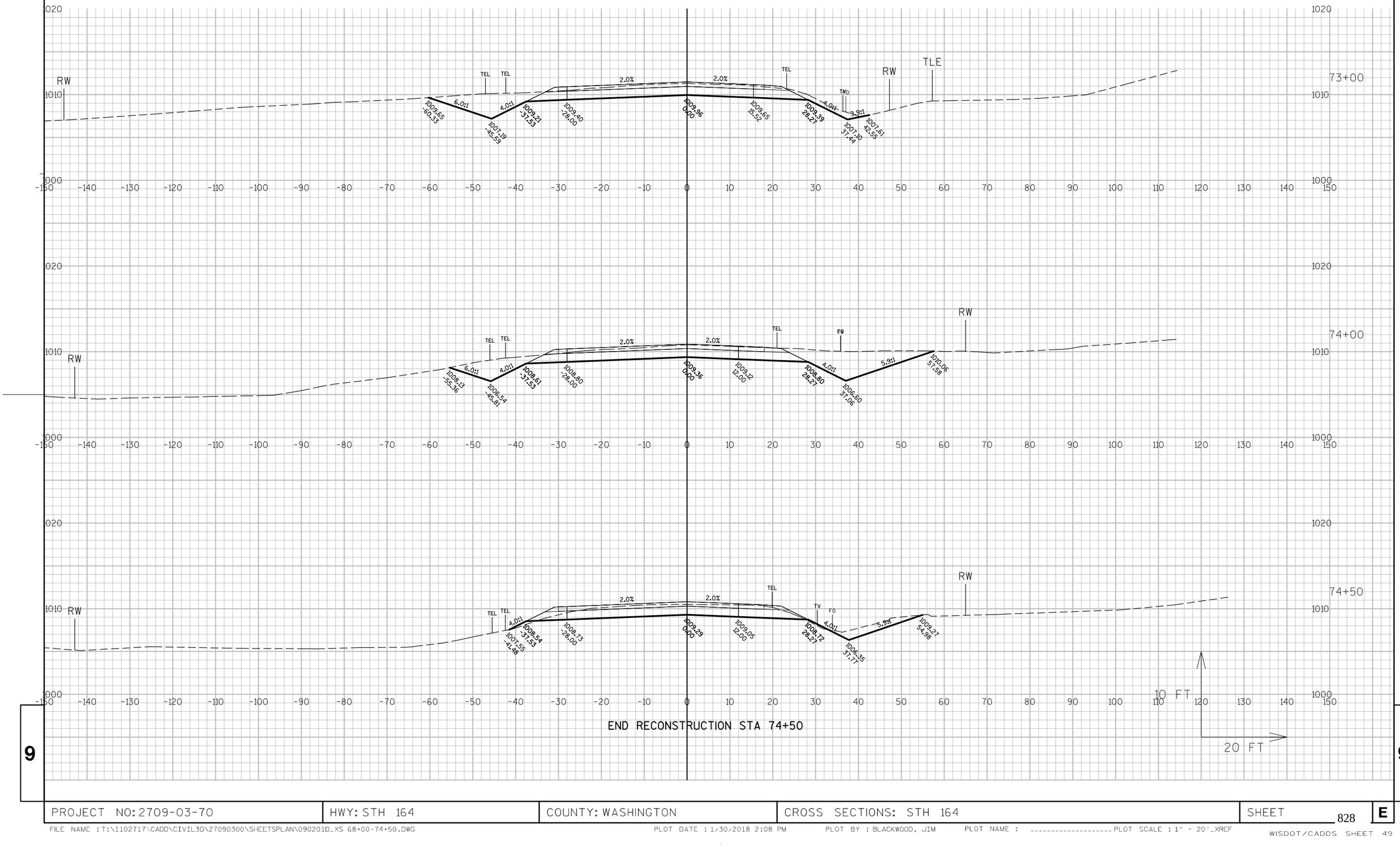
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 826	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090201D_XS 68+00-74+50.DWG PLOT DATE : 1/30/2018 2:08 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 827	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090201D_XS 68+00-74+50.DWG PLOT DATE : 1/30/2018 2:08 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF

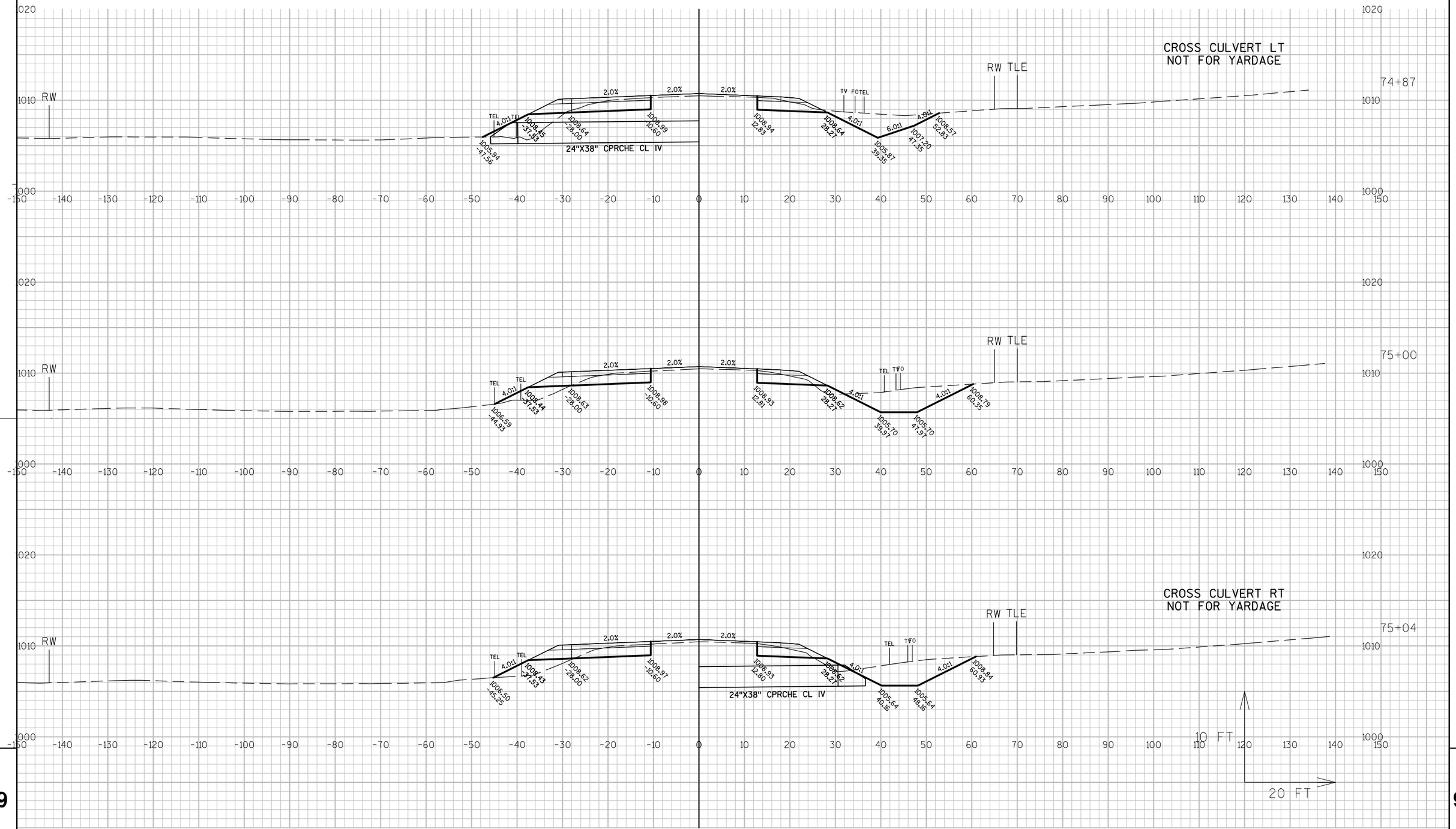


END RECONSTRUCTION STA 74+50

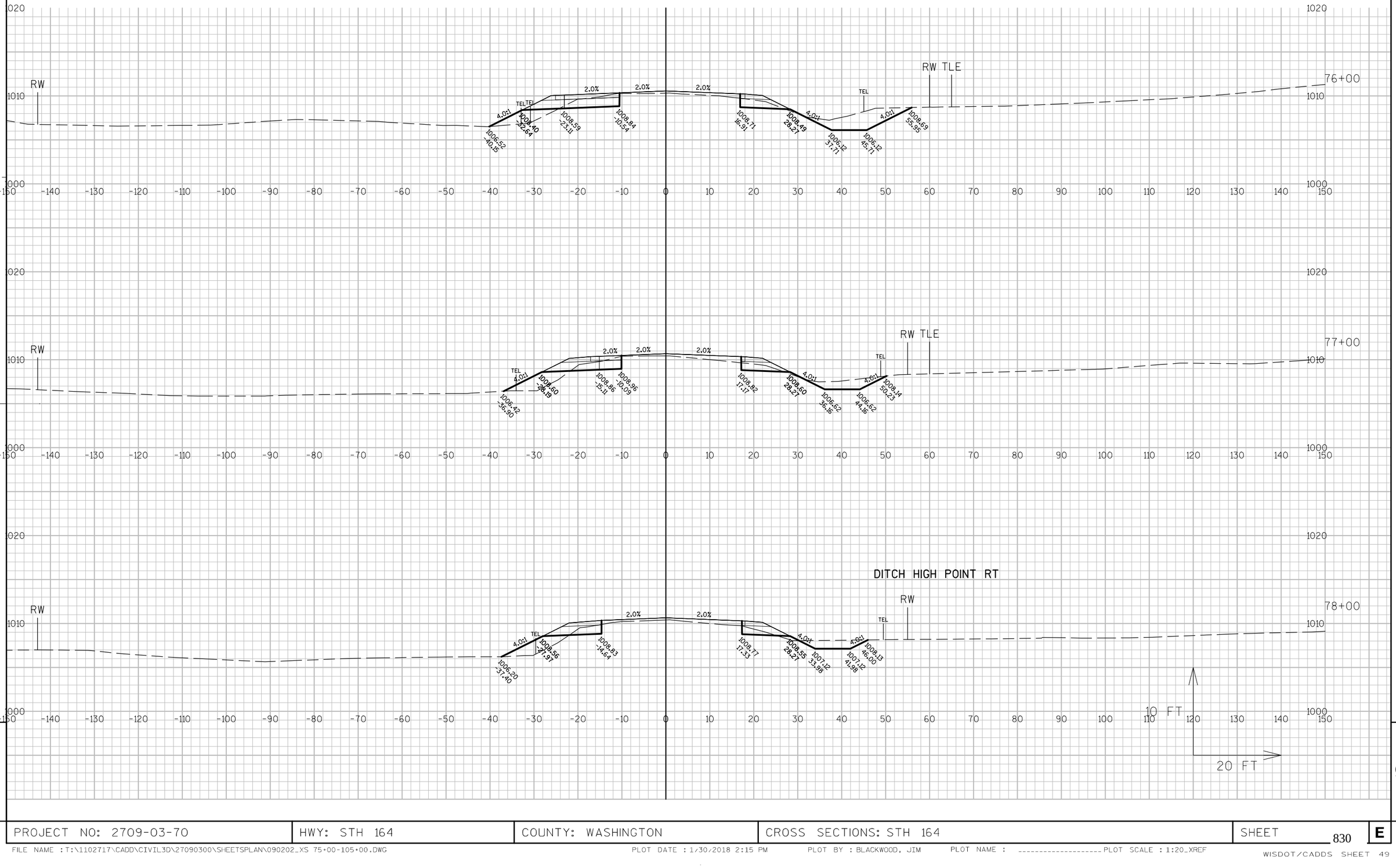
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 828	E



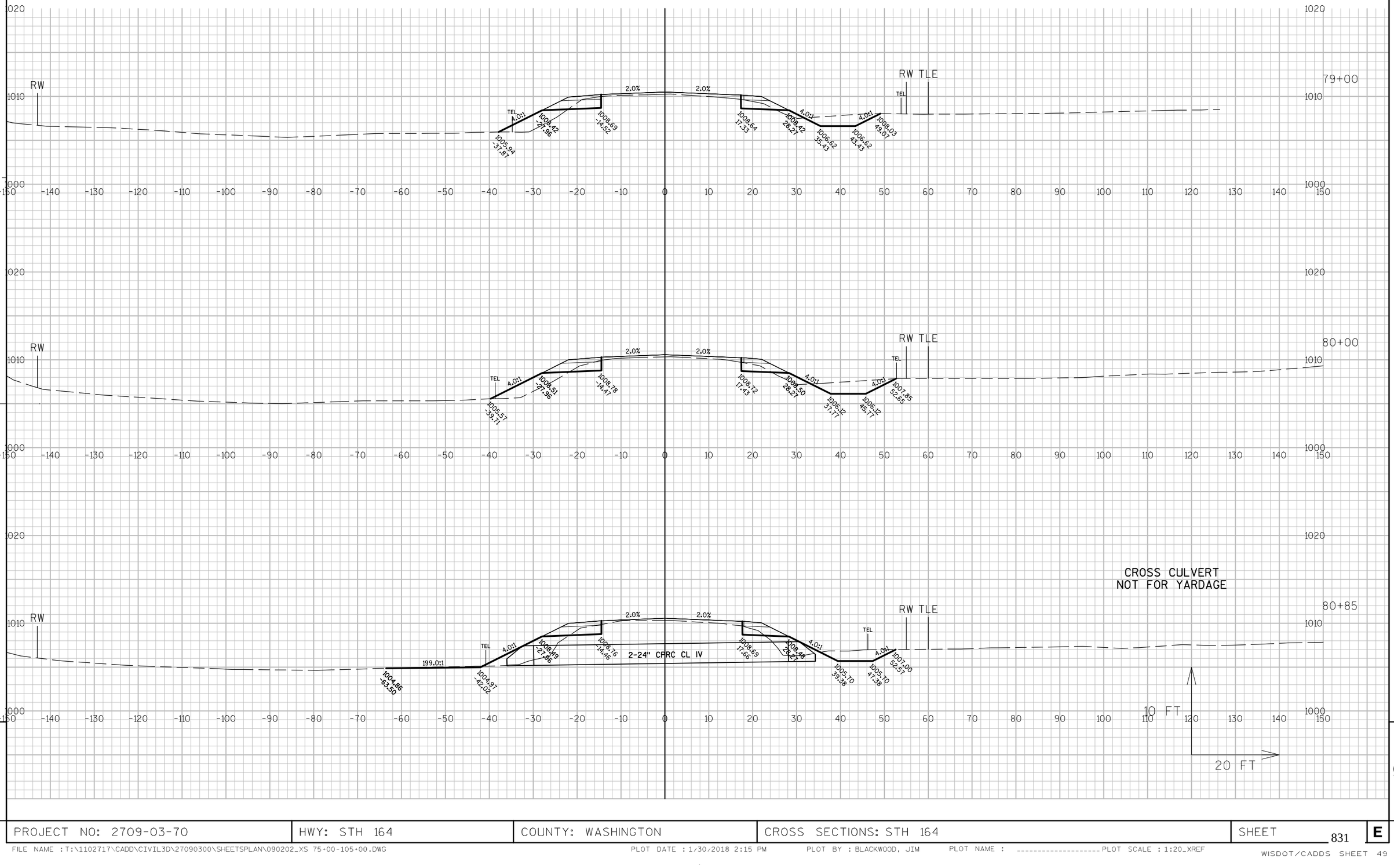
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 829	E



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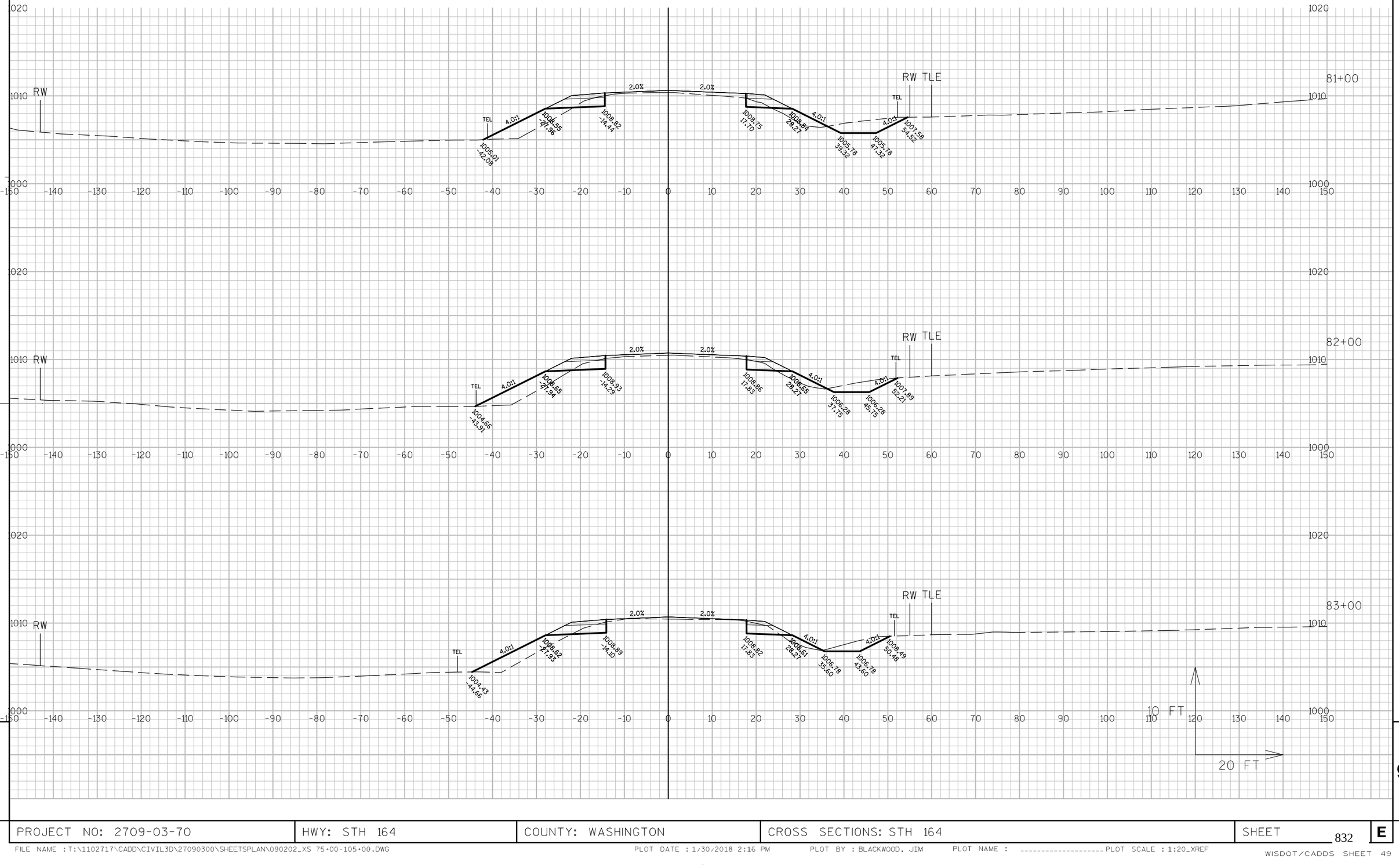
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 830	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 831	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090202_XS 75+00-105+00.DWG PLOT DATE : 1/30/2018 2:15 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

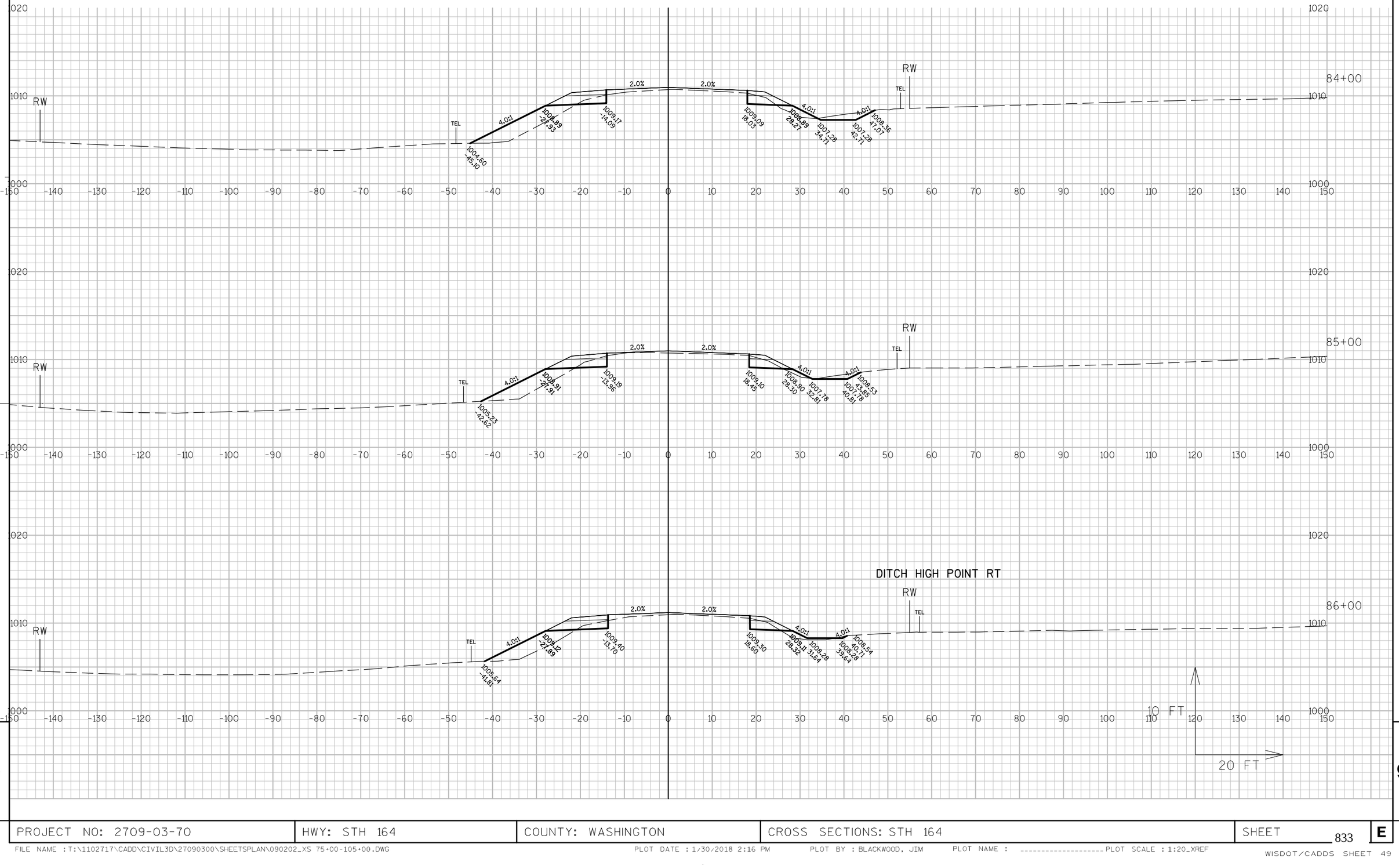


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 832	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090202_XS 75+00-105+00.DWG PLOT DATE : 1/30/2018 2:16 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

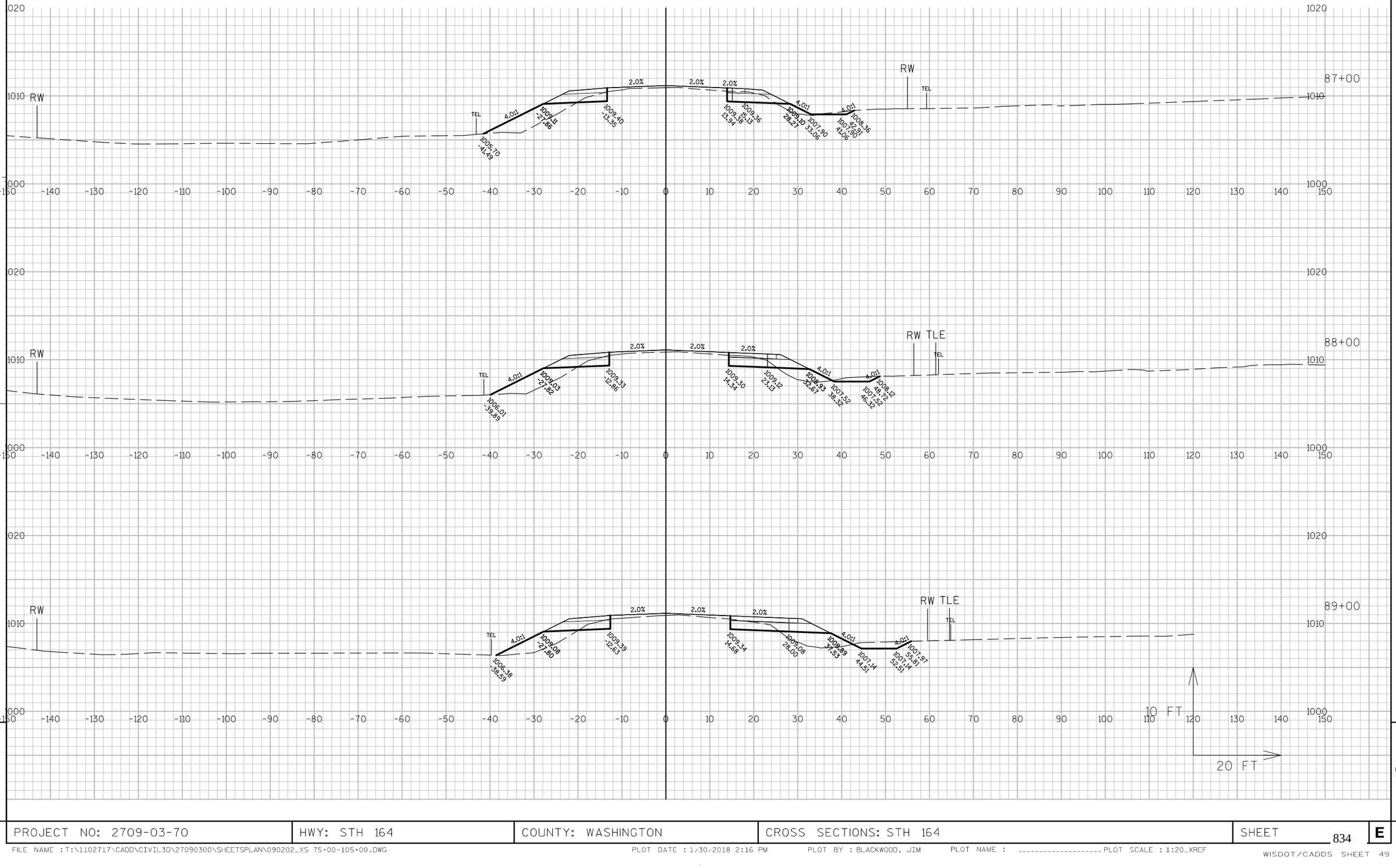


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 833	E

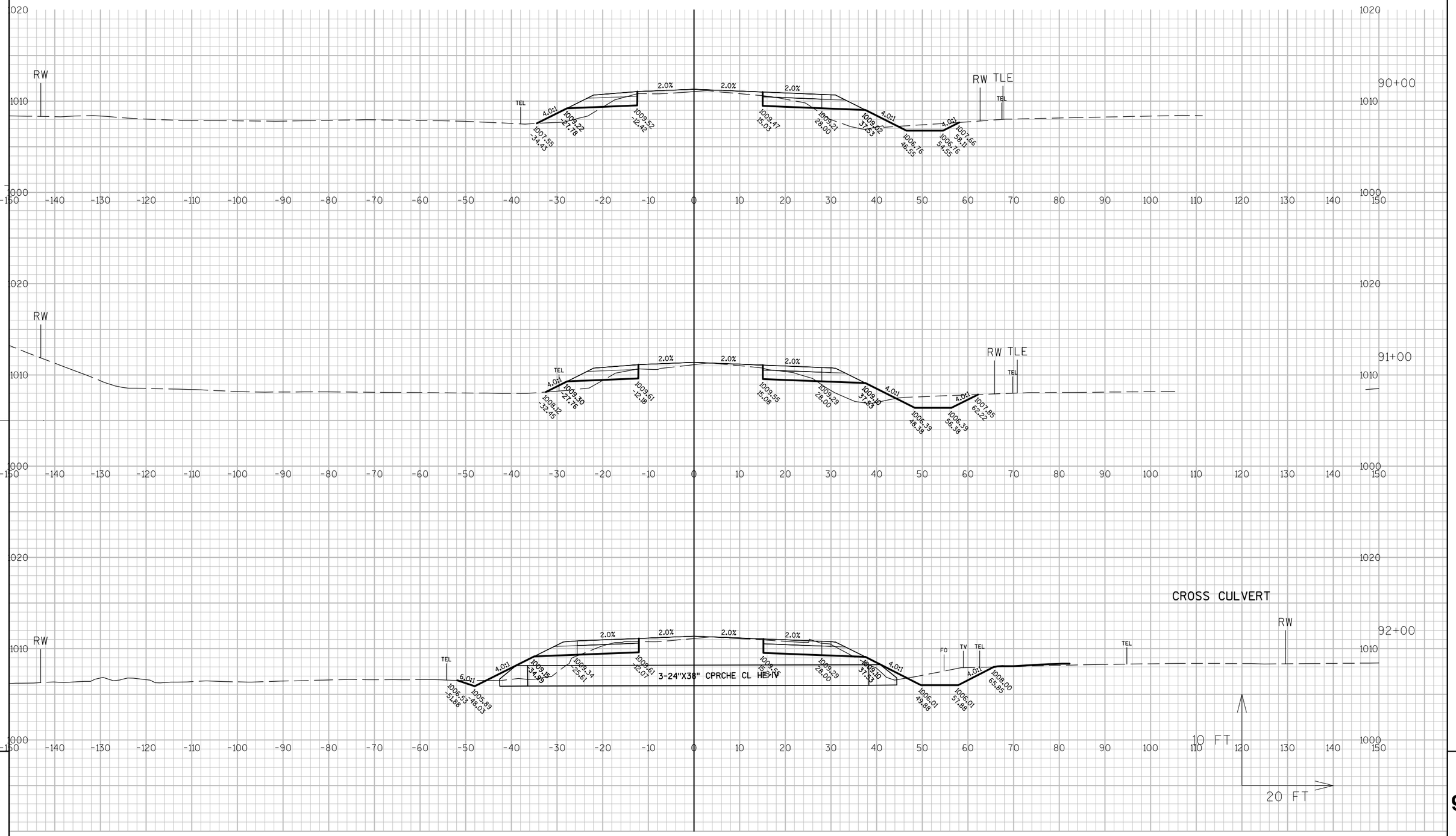
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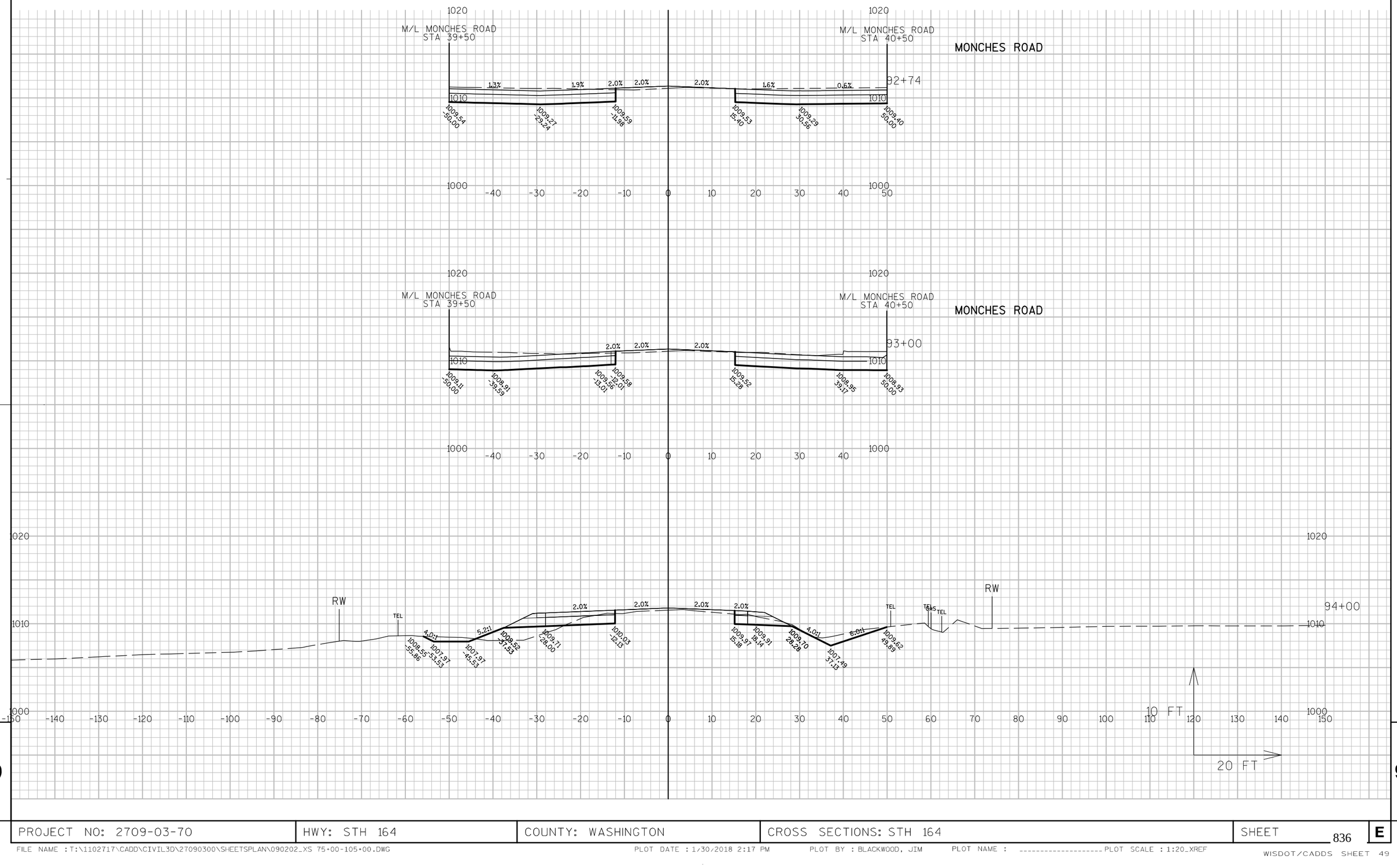
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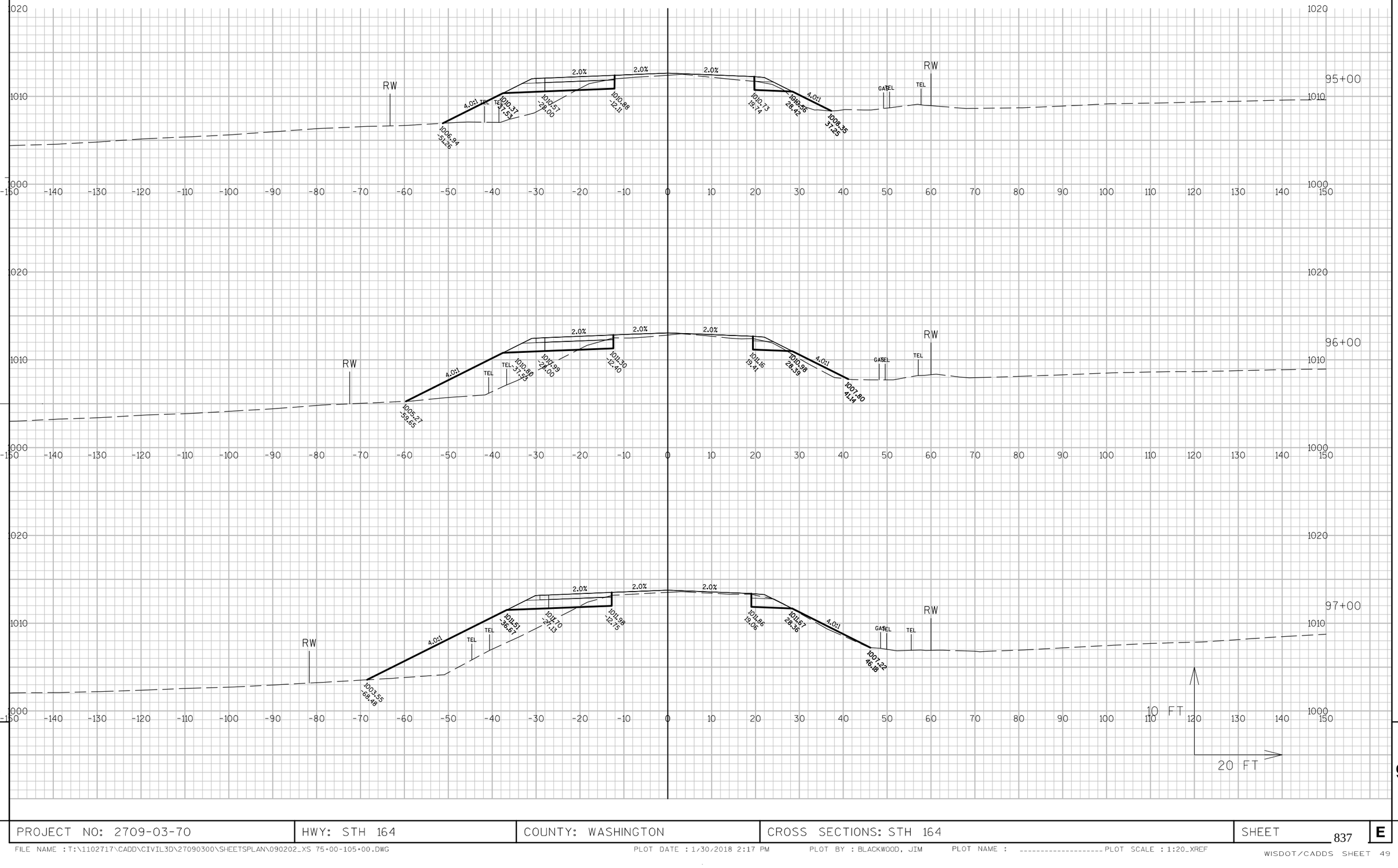
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 835	E



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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 836	E

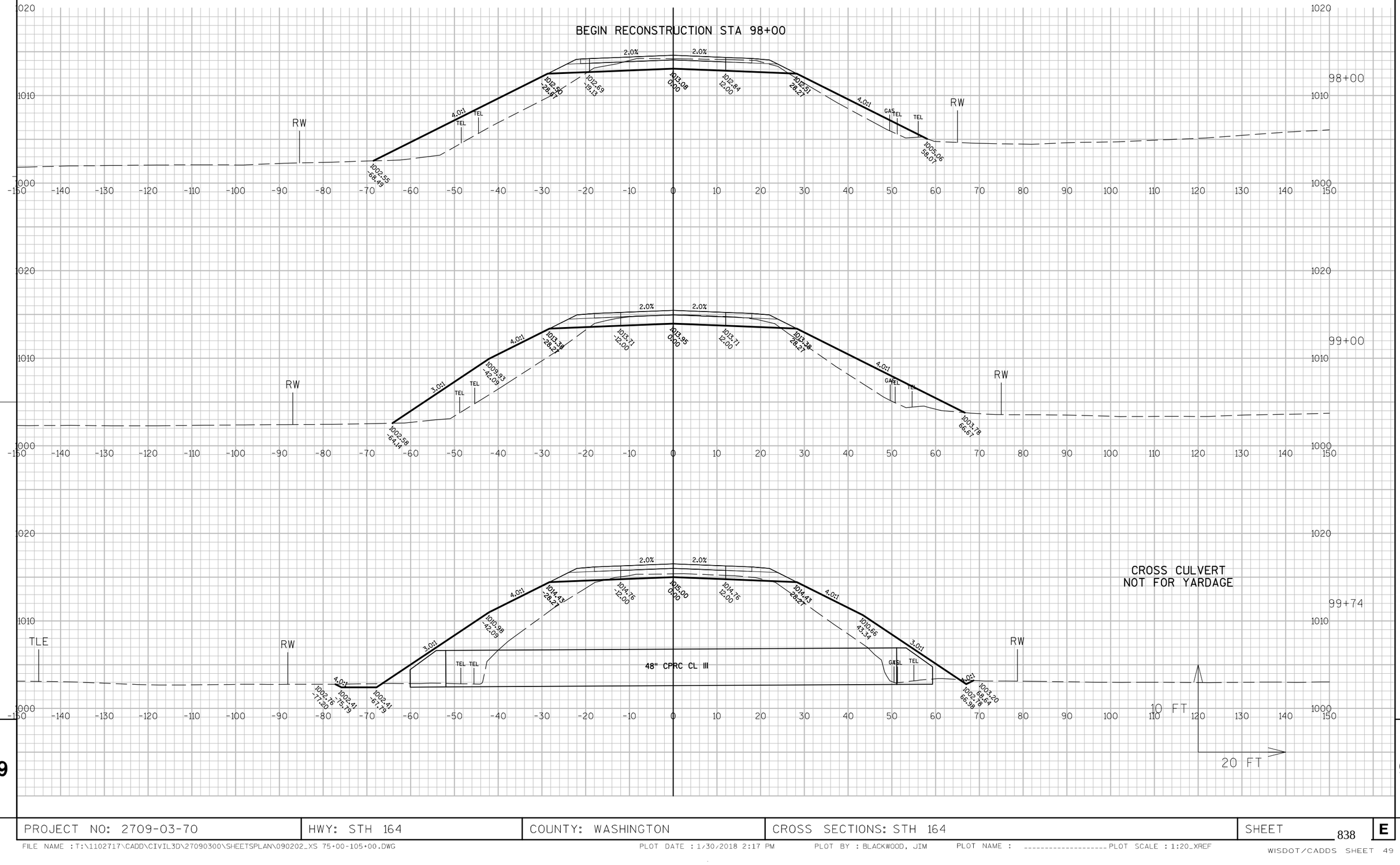


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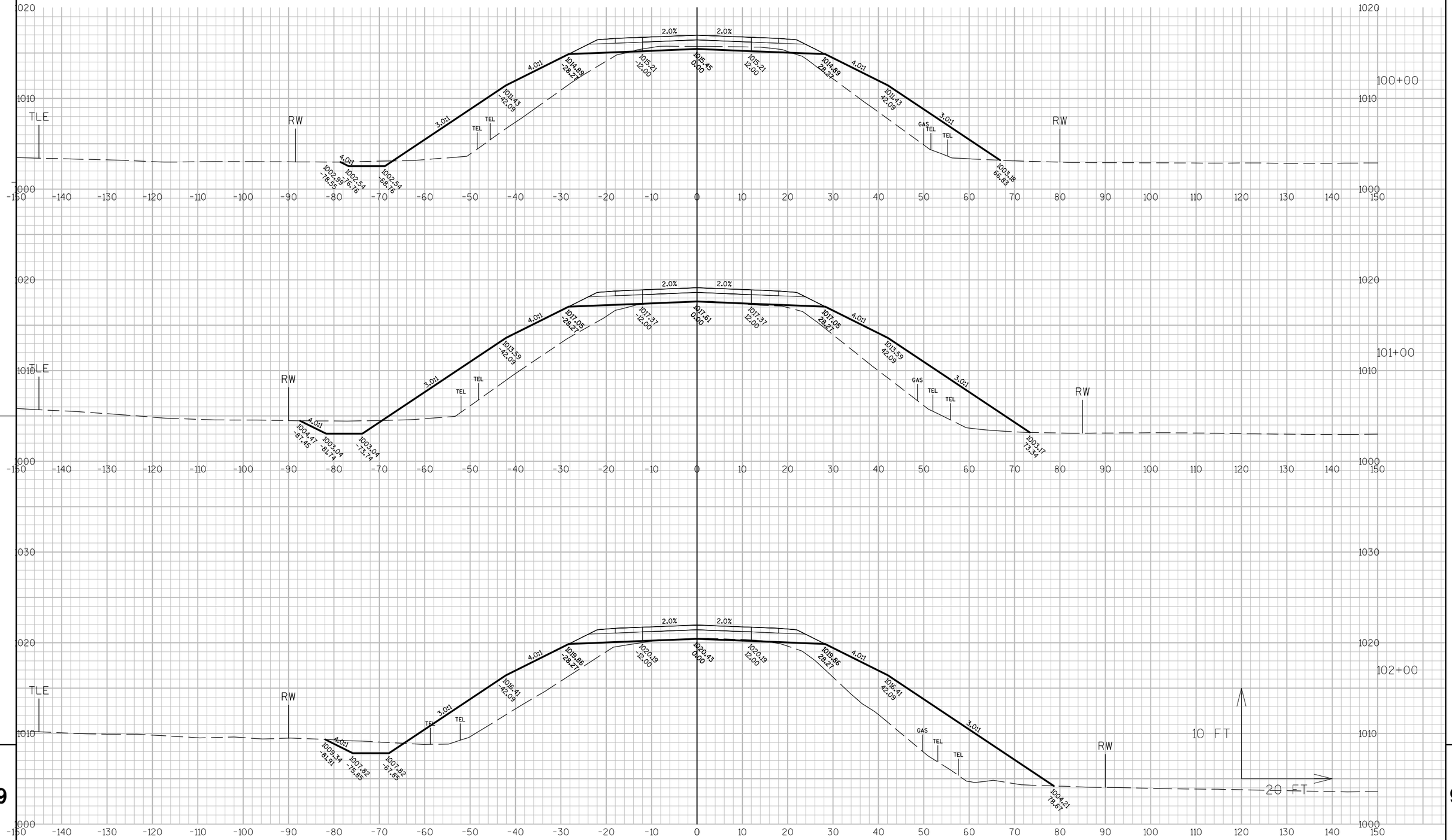
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 837	E

BEGIN RECONSTRUCTION STA 98+00



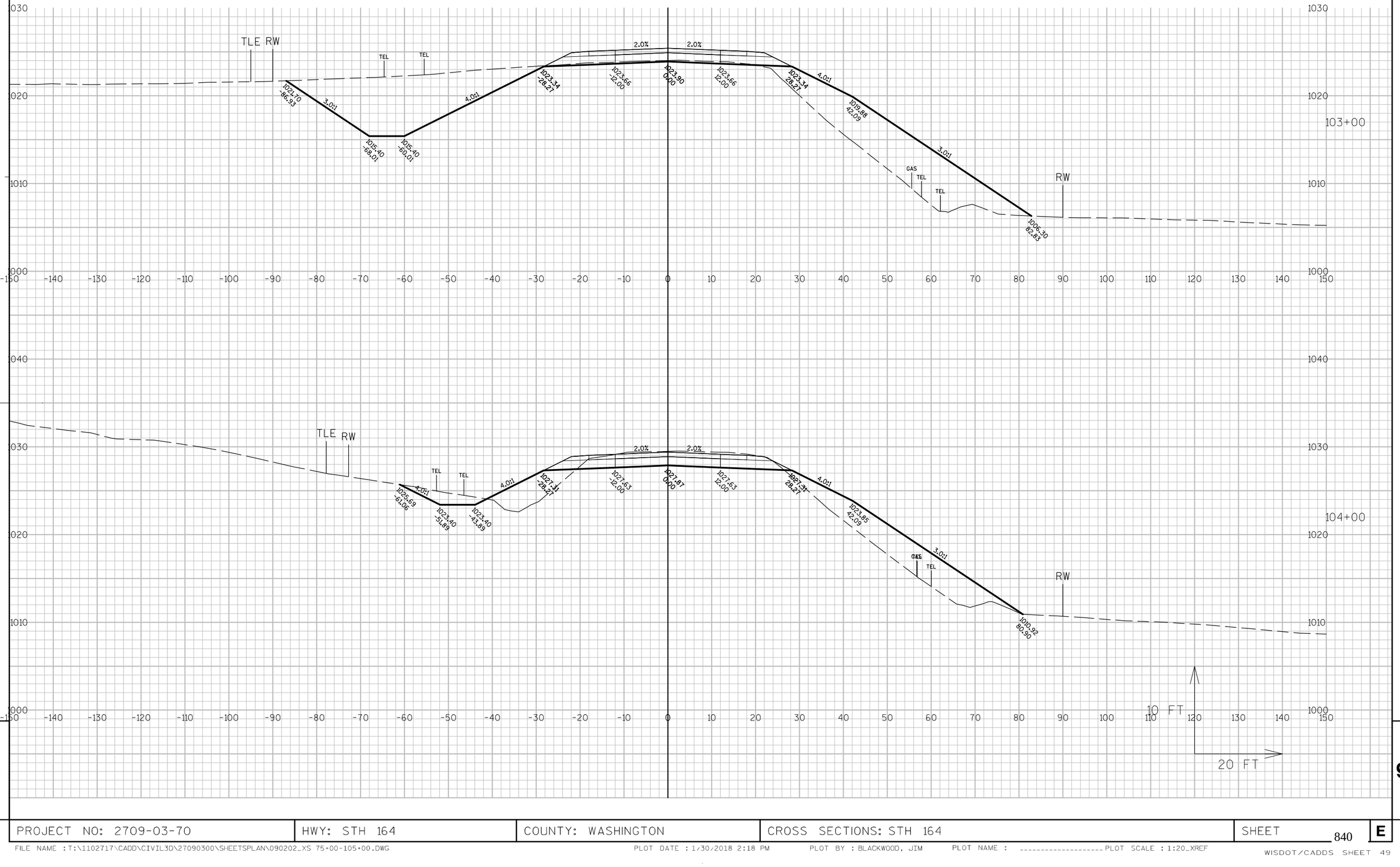
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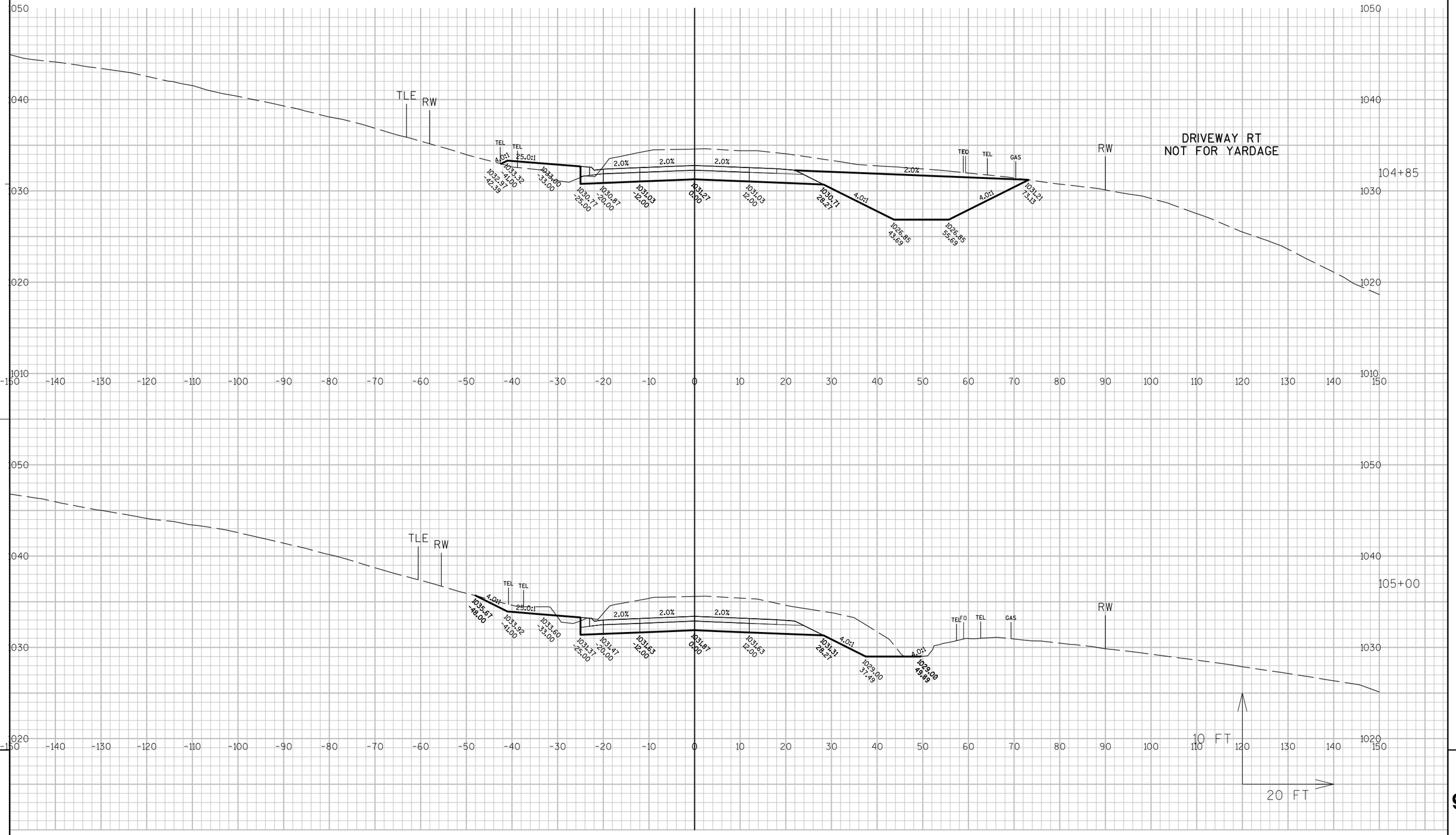
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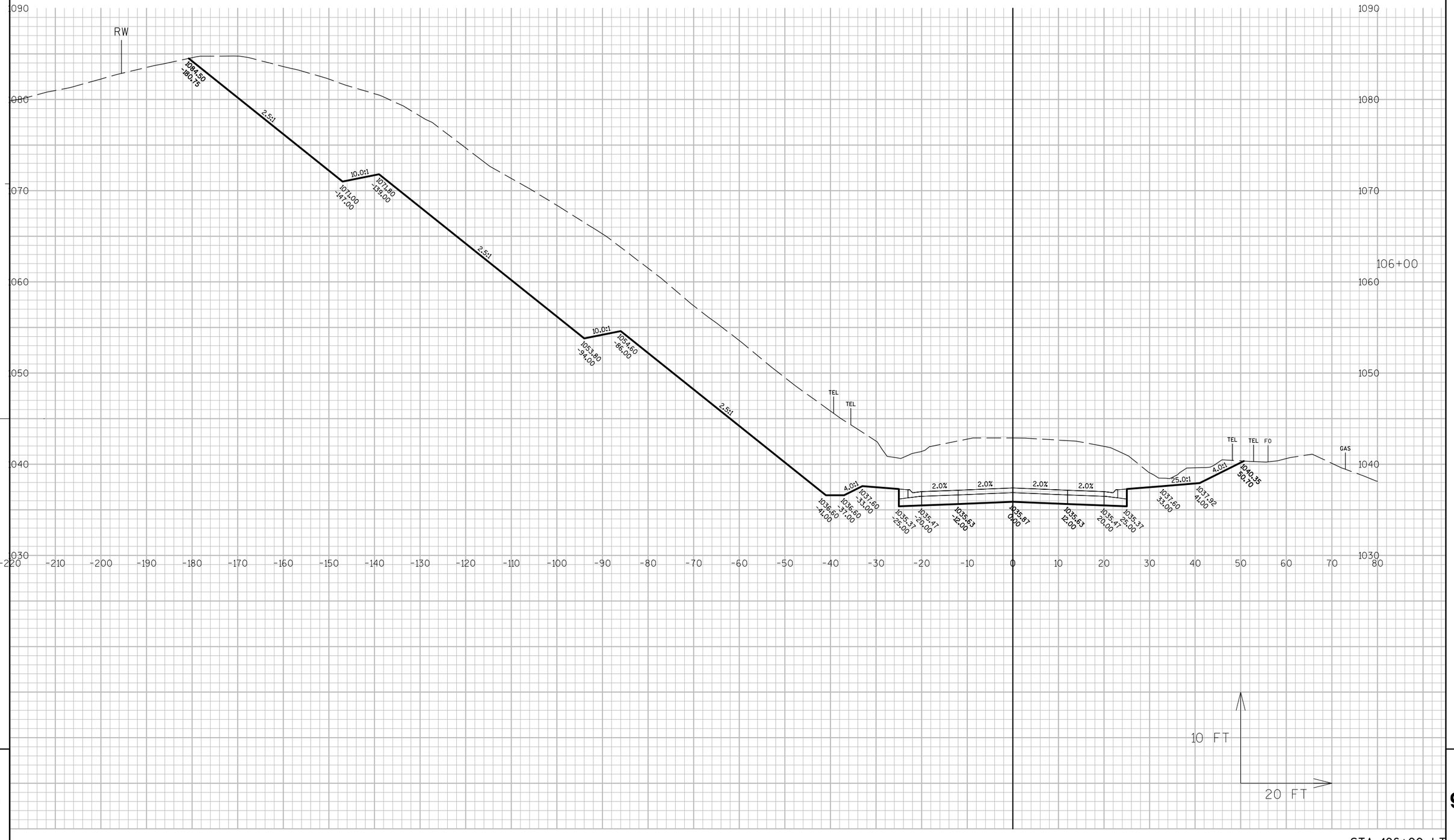
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 840	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090202_XS 75+00-105+00.DWG PLOT DATE : 1/30/2018 2:18 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

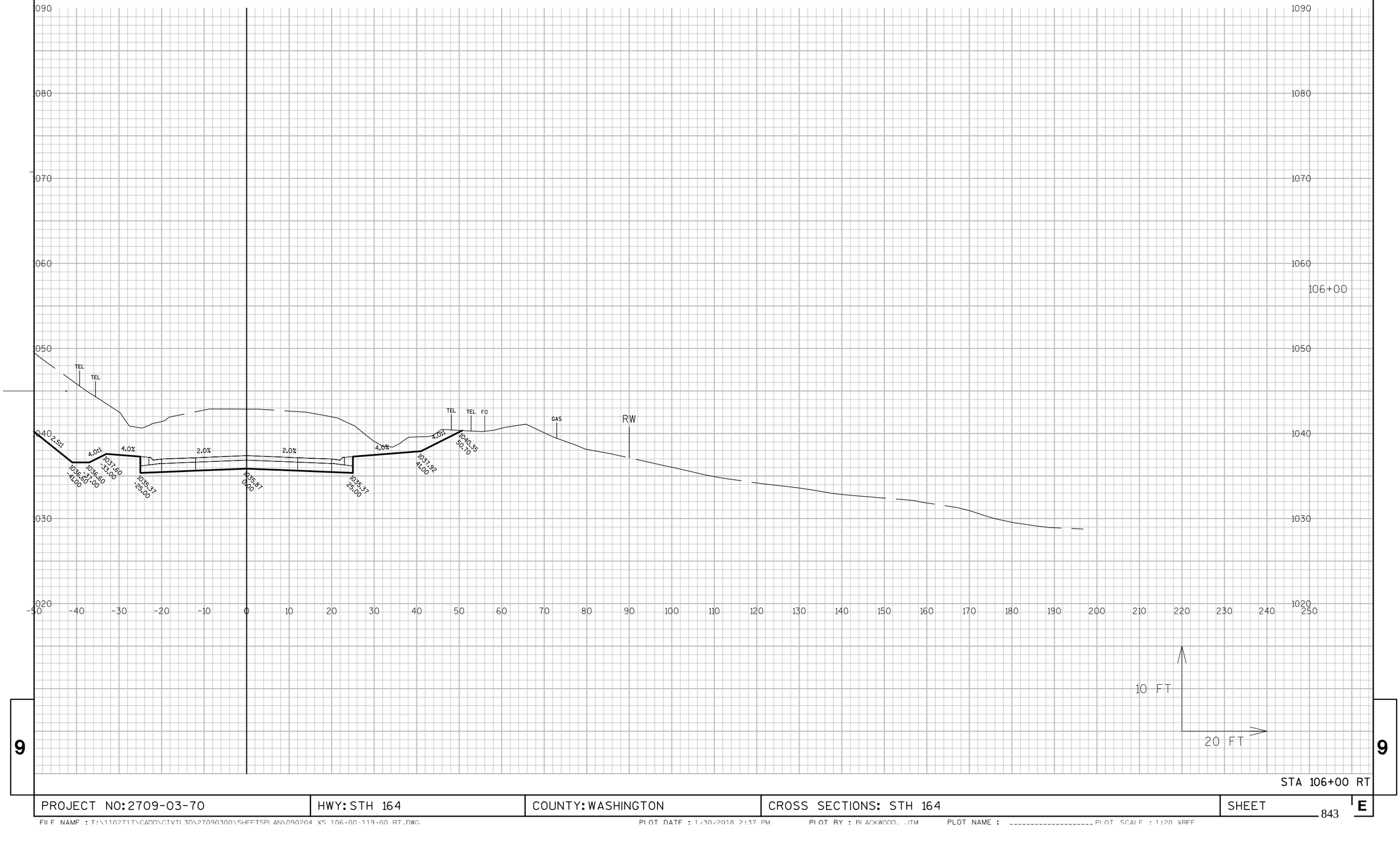


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 841	E



STA 106+00 LT

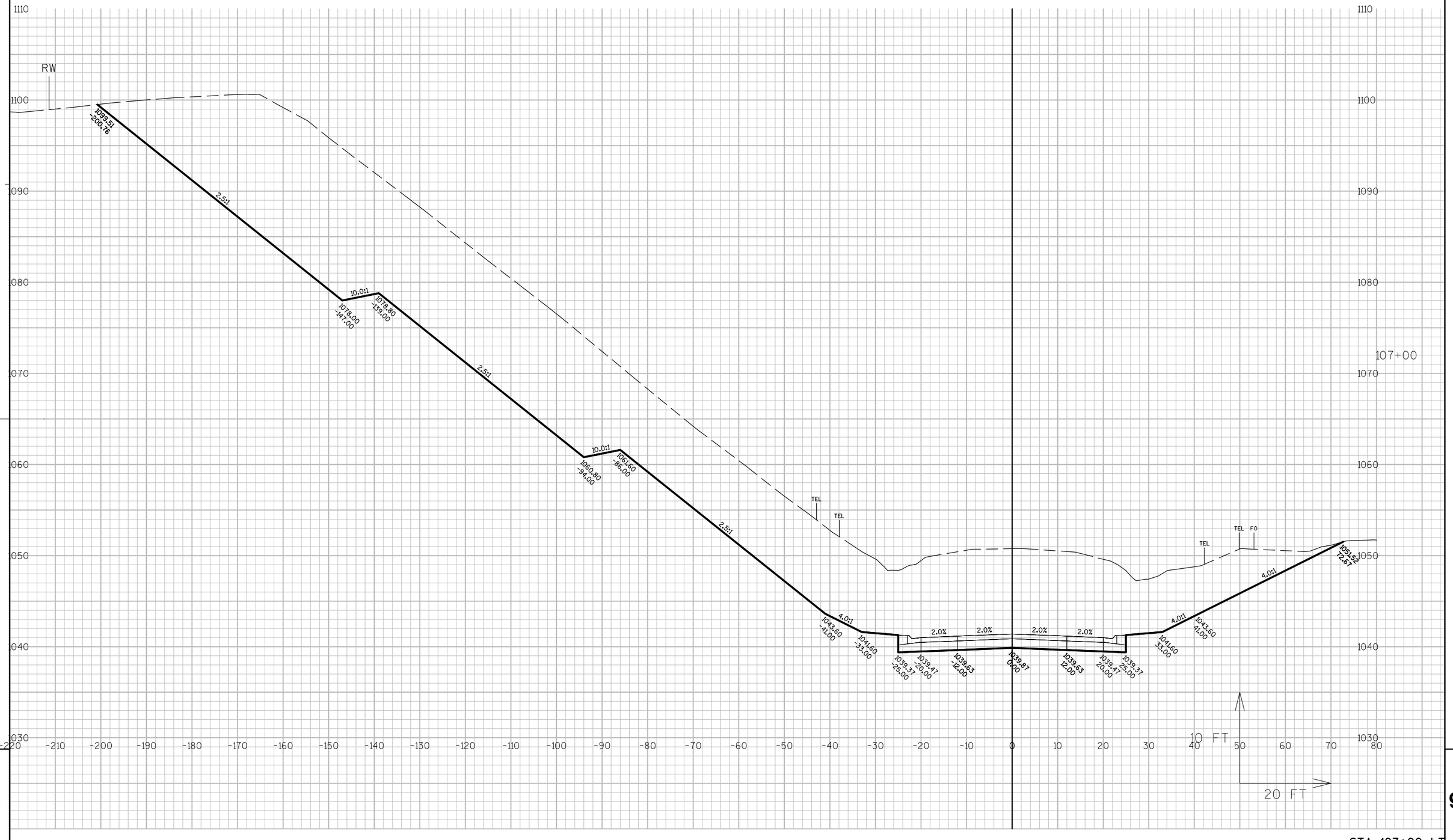
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 842	E



STA 106+00 RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 843 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090204_XS_106+00-119+00_RT.DWG PLOT DATE : 1/30/2018 2:37 PM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1:20 XREF



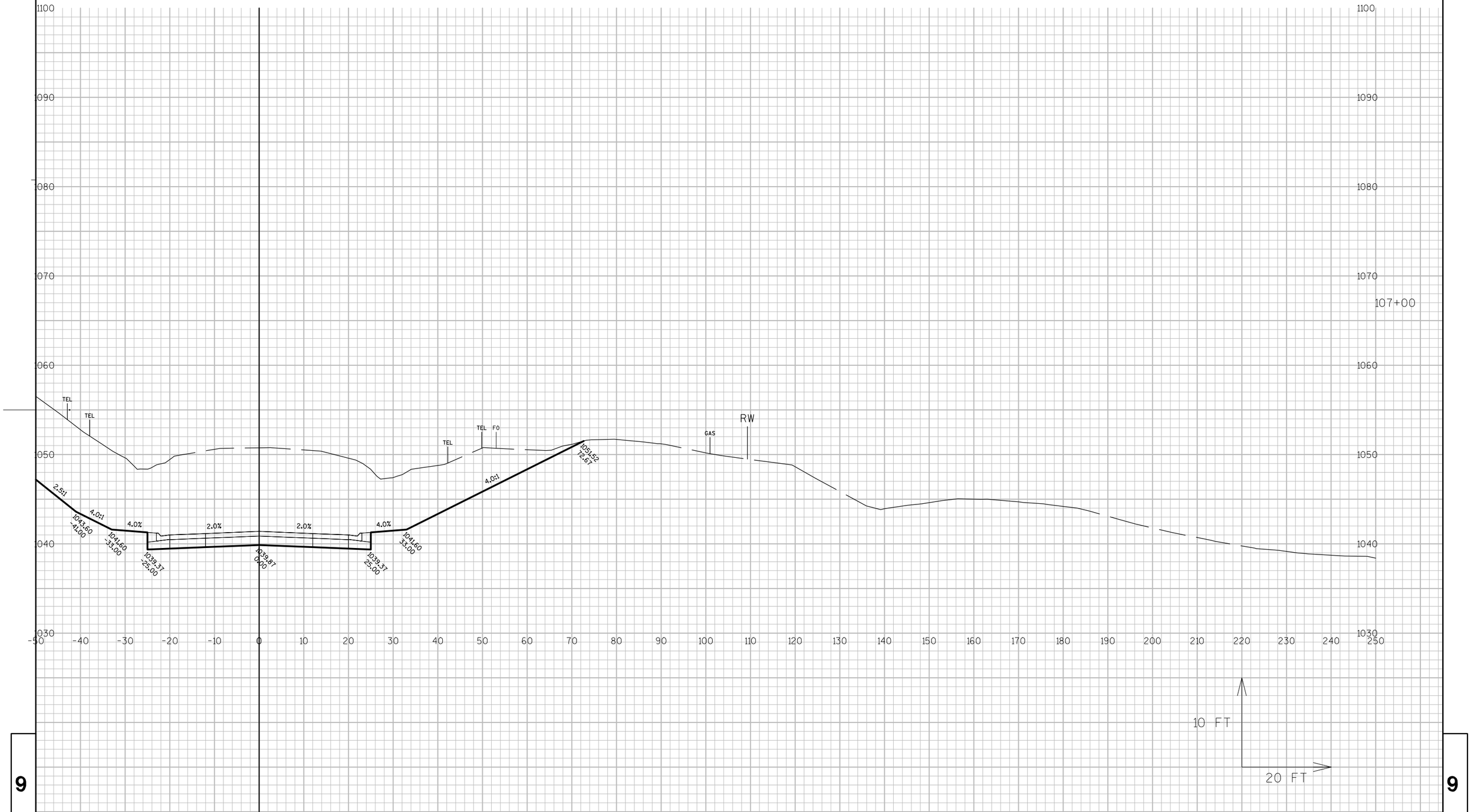
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STA 107+00 LT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 844	E

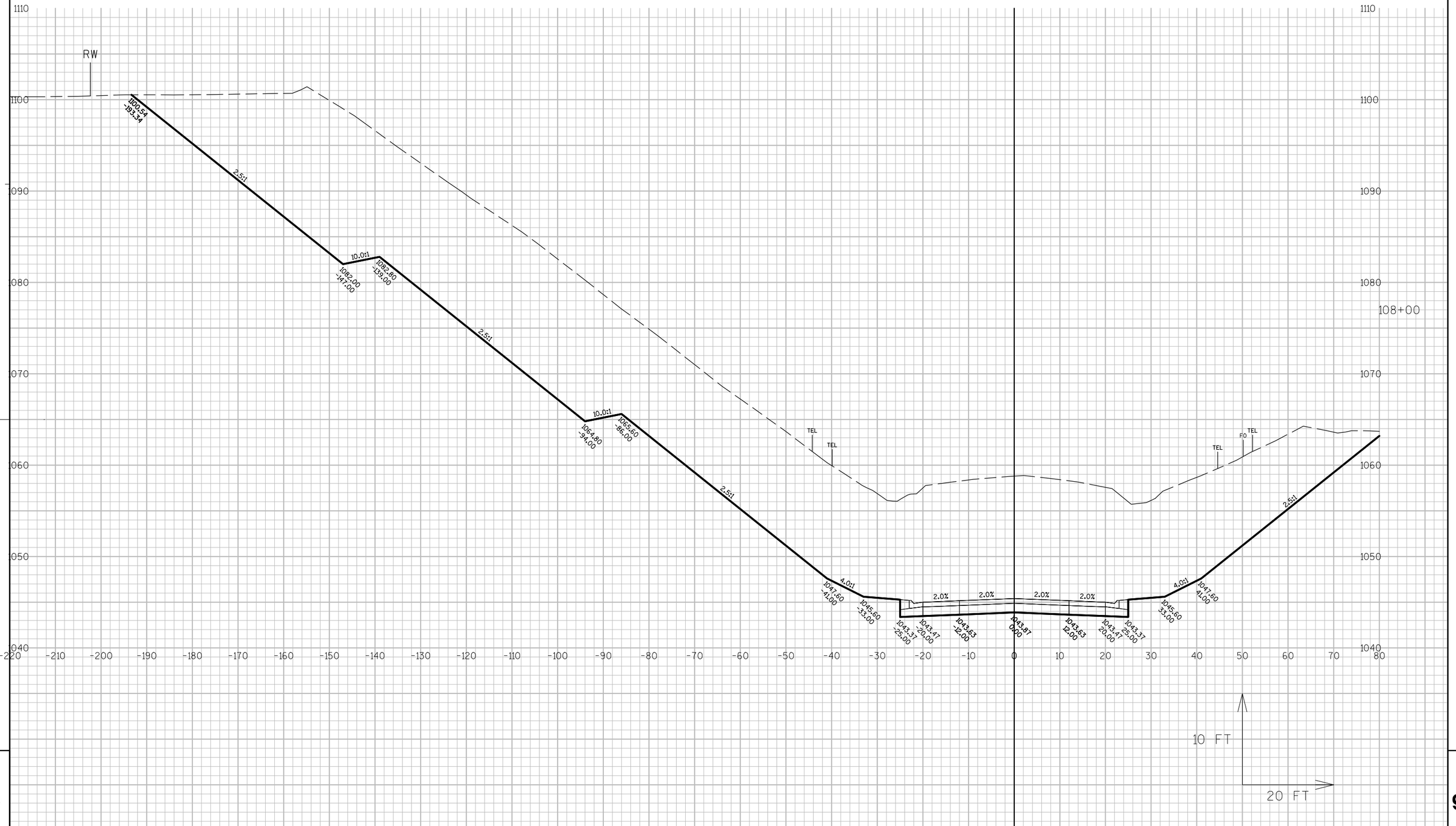
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STA 107+00 RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 845 E

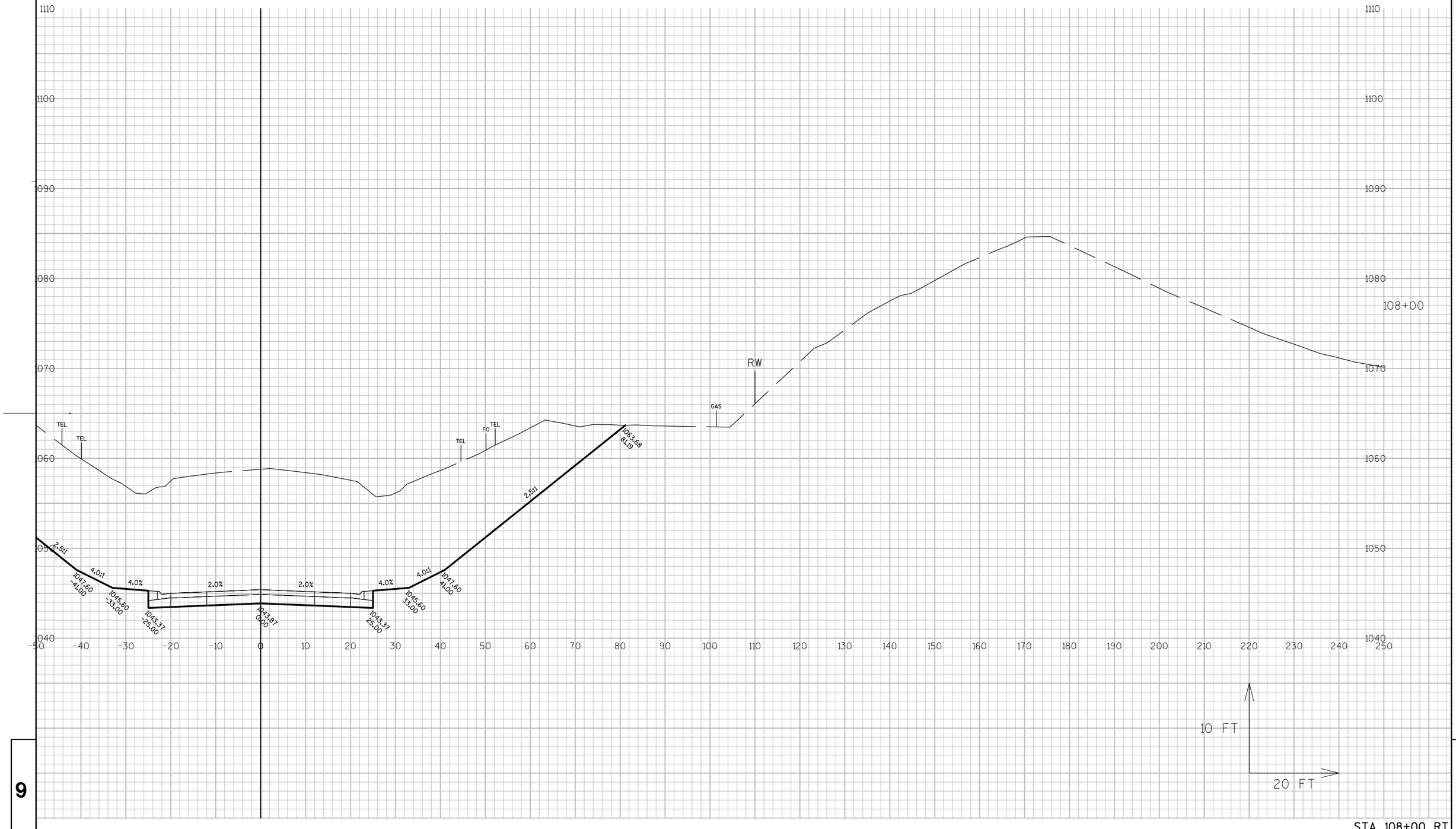
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STA 108+00 LT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 846	E

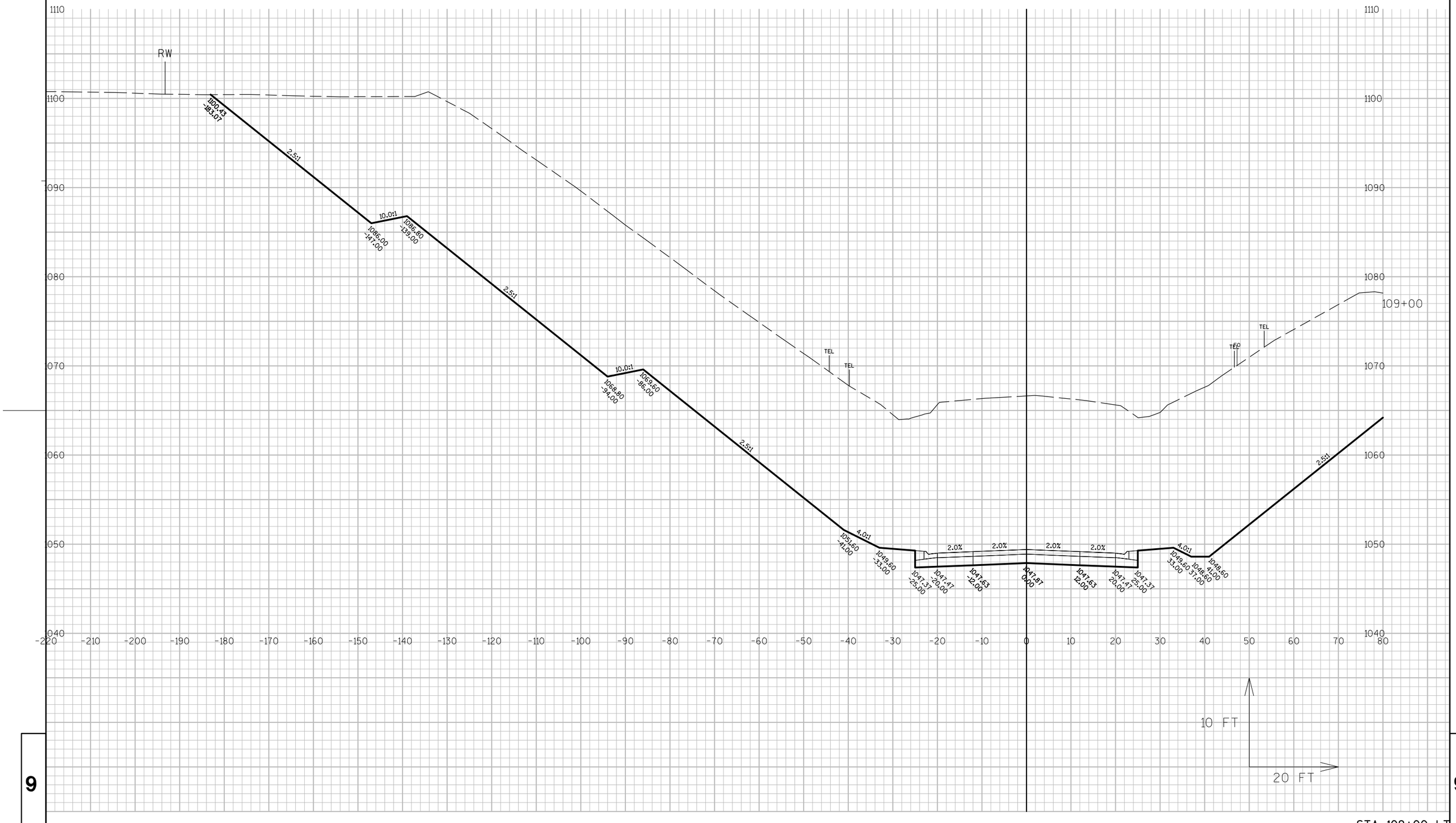
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STA 108+00 RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 847 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090204_XS_106+00-119+00_RT.DWG PLOT DATE : 1/30/2018 2:37 PM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1:20 XREF



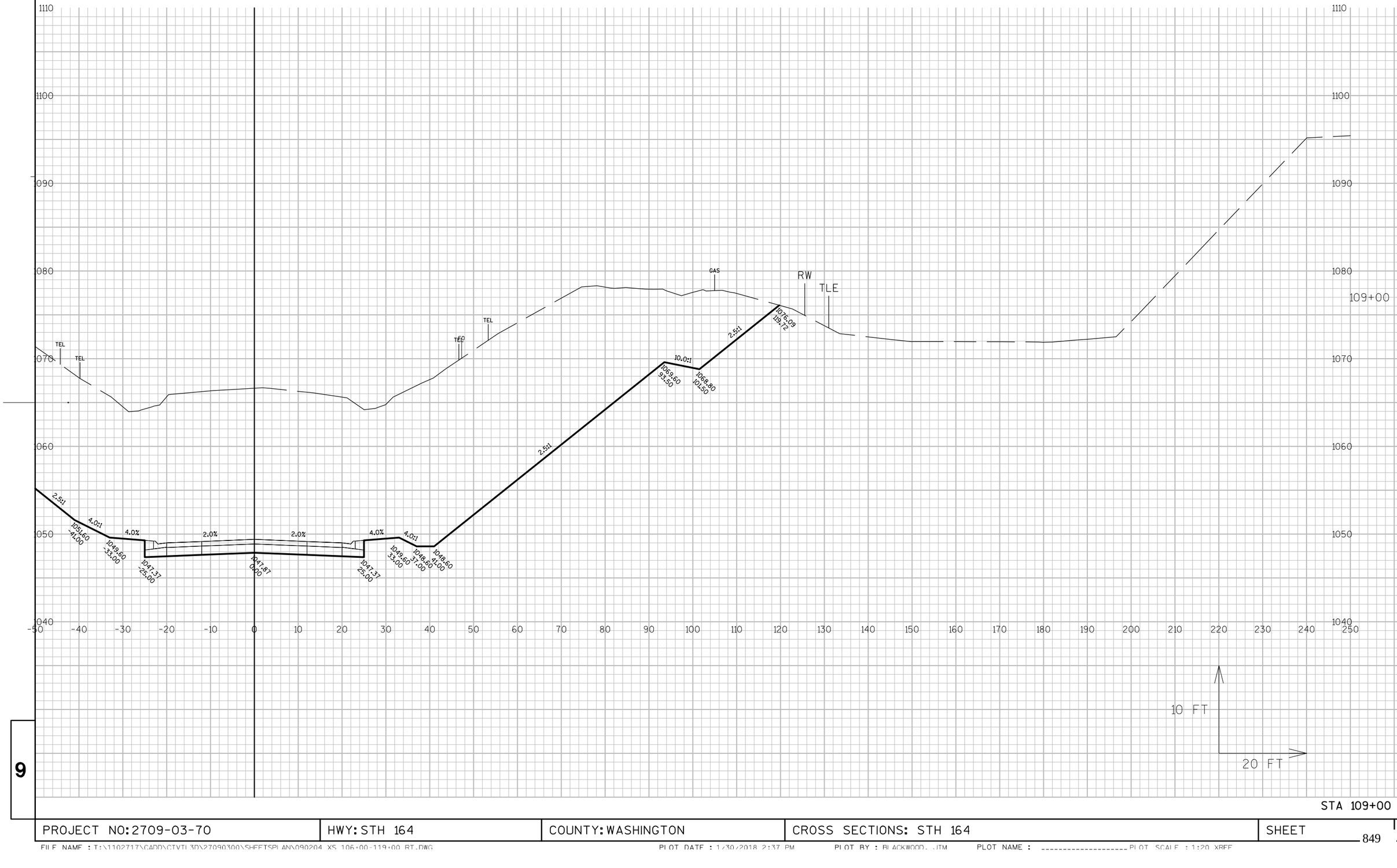
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STA 109+00 LT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 848	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090203_XS 106+00-119+00 LT.DWG PLOT DATE : 1/30/2018 2:25 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

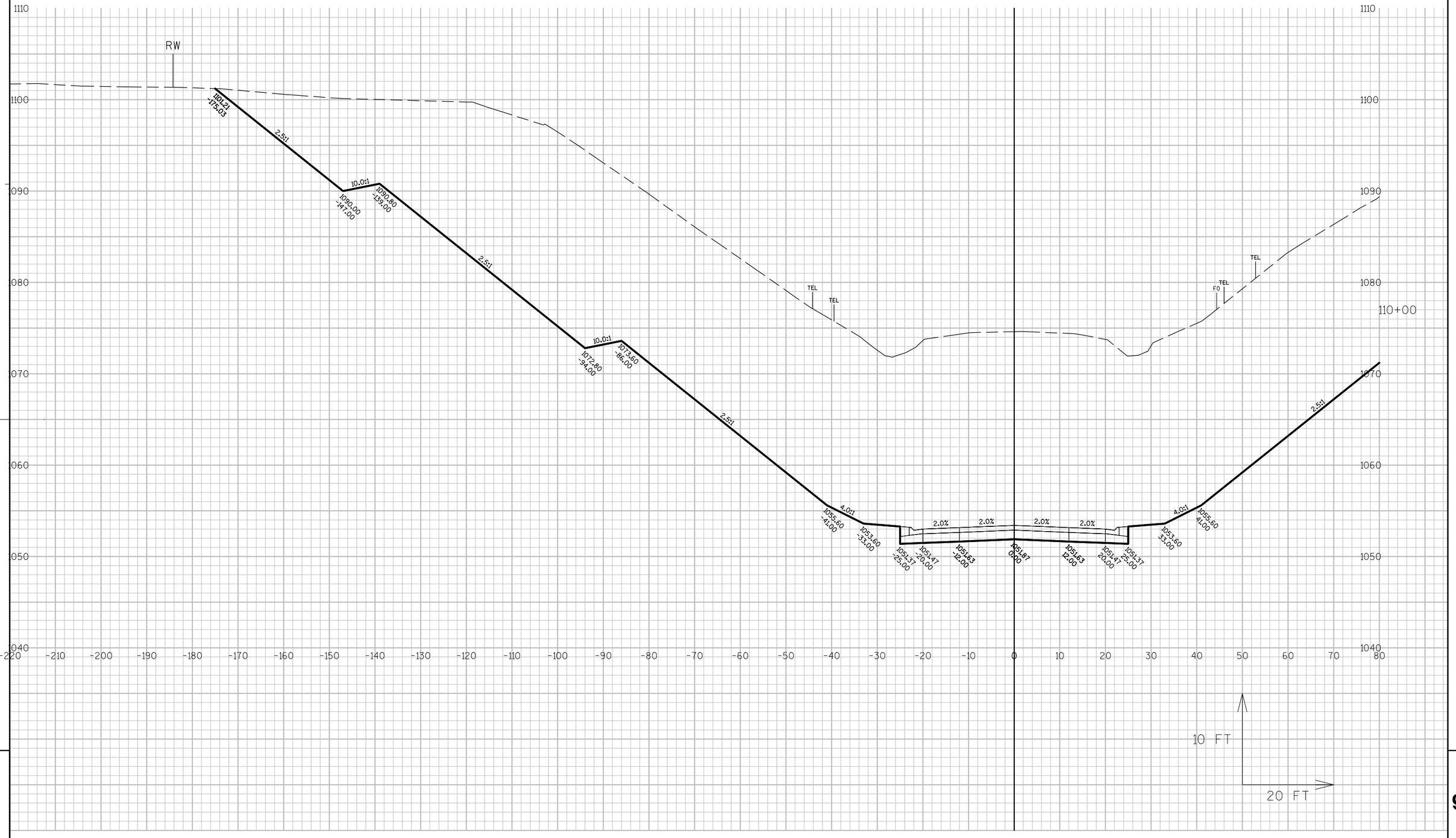


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 849 E

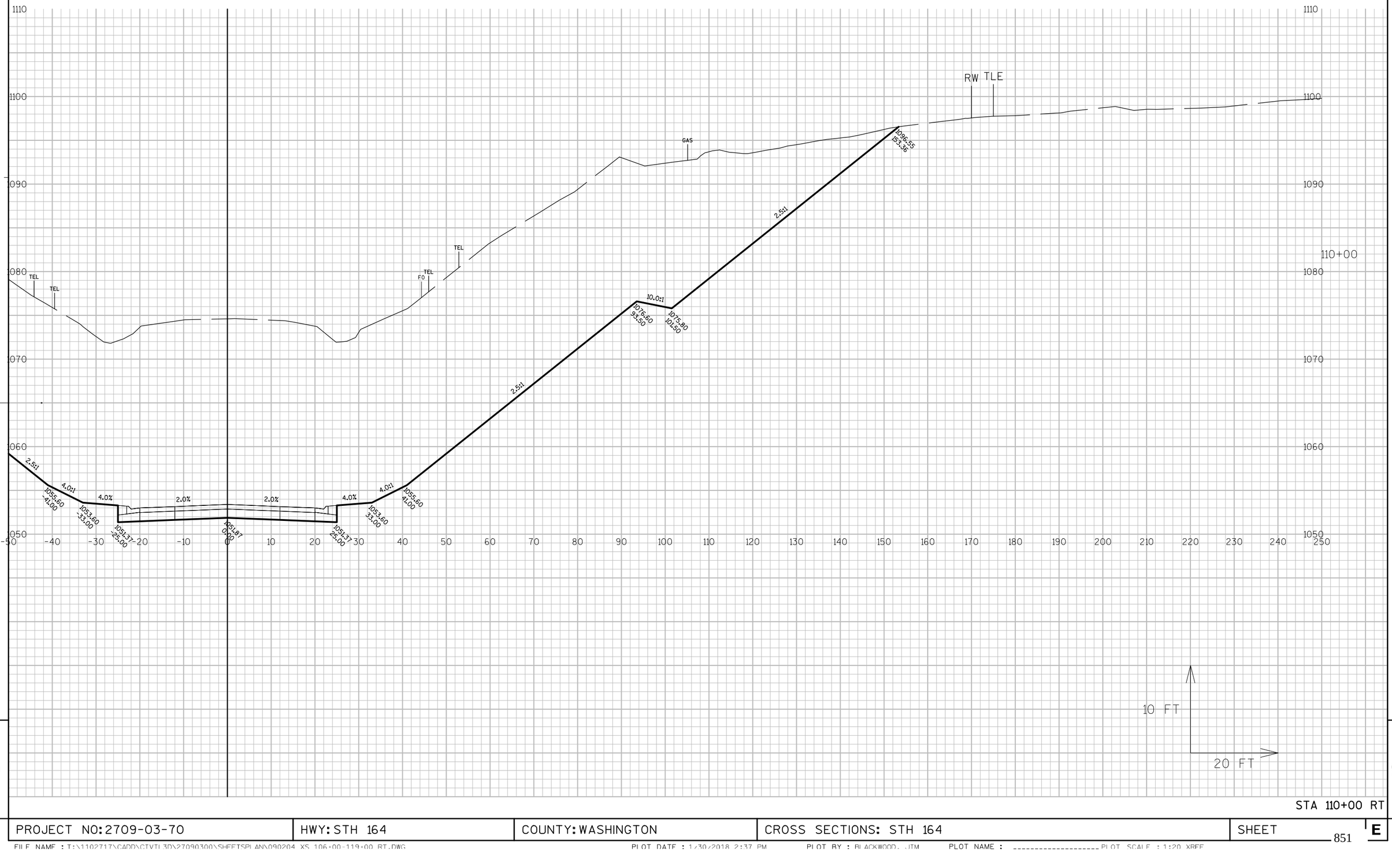
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STA 110+00 LT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 850	E

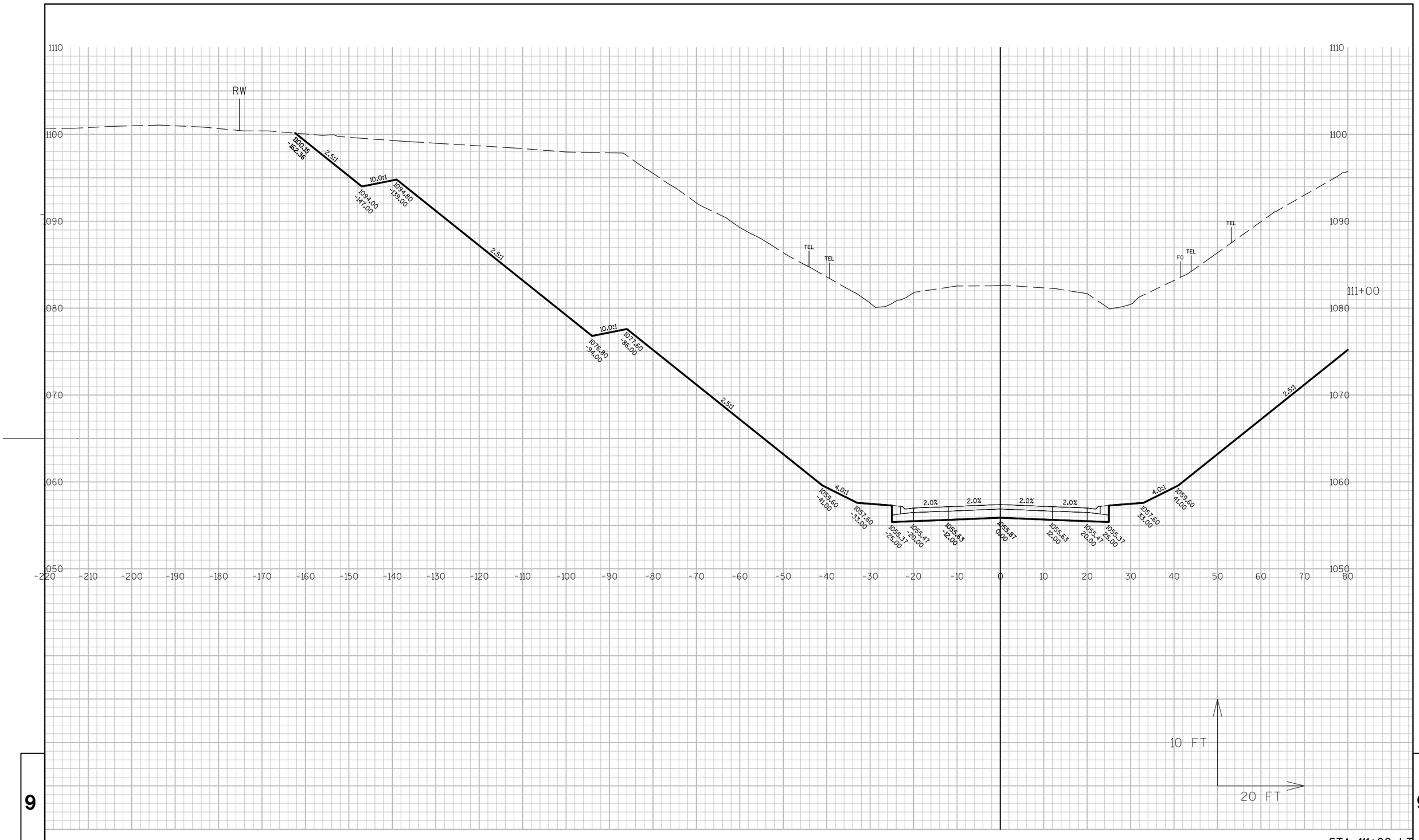
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STA 110+00 RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 851 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090204_XS_106+00-119+00_RT.DWG PLOT DATE : 1/30/2018 2:37 PM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1:20 XREF



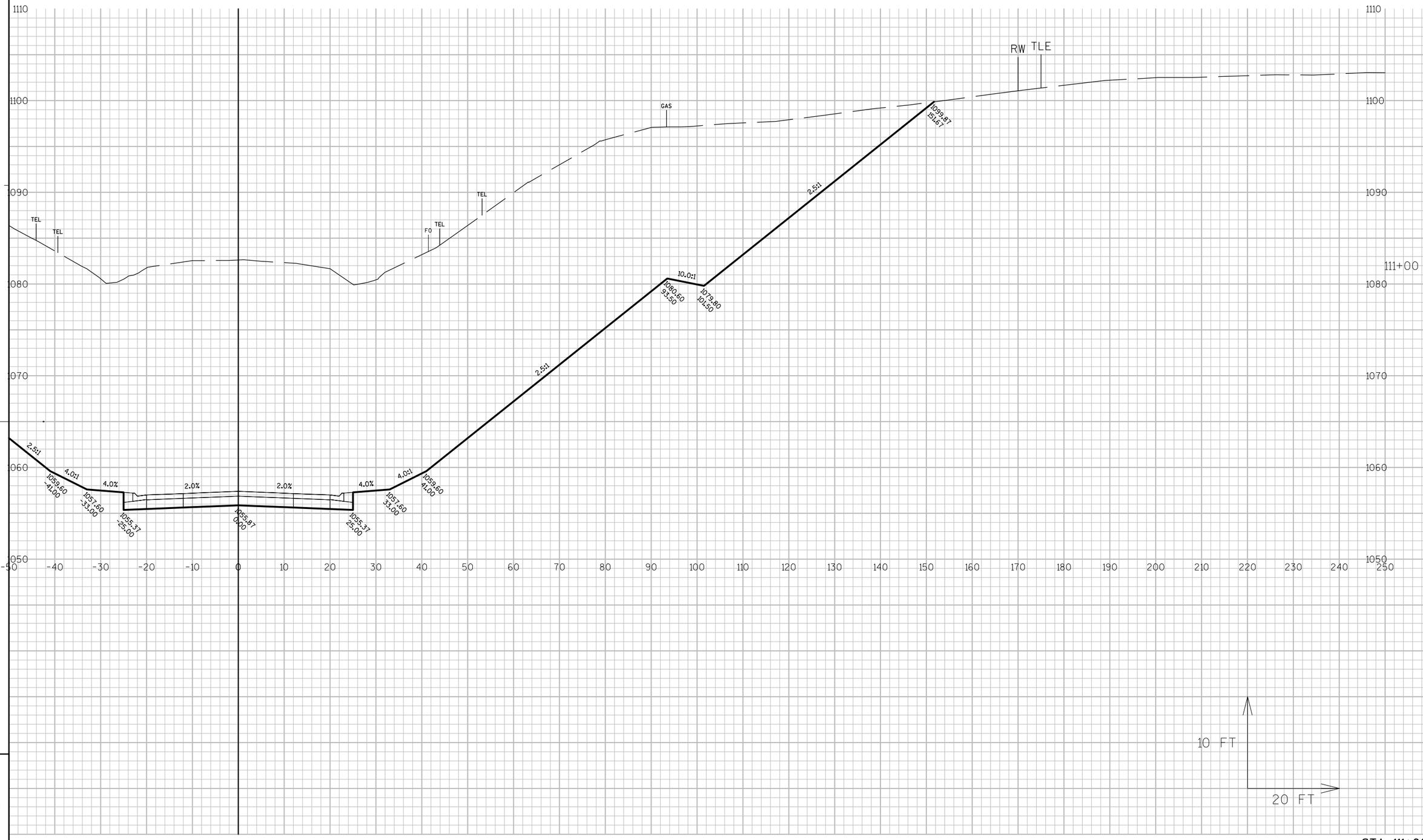
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STA 111+00 LT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 852	E

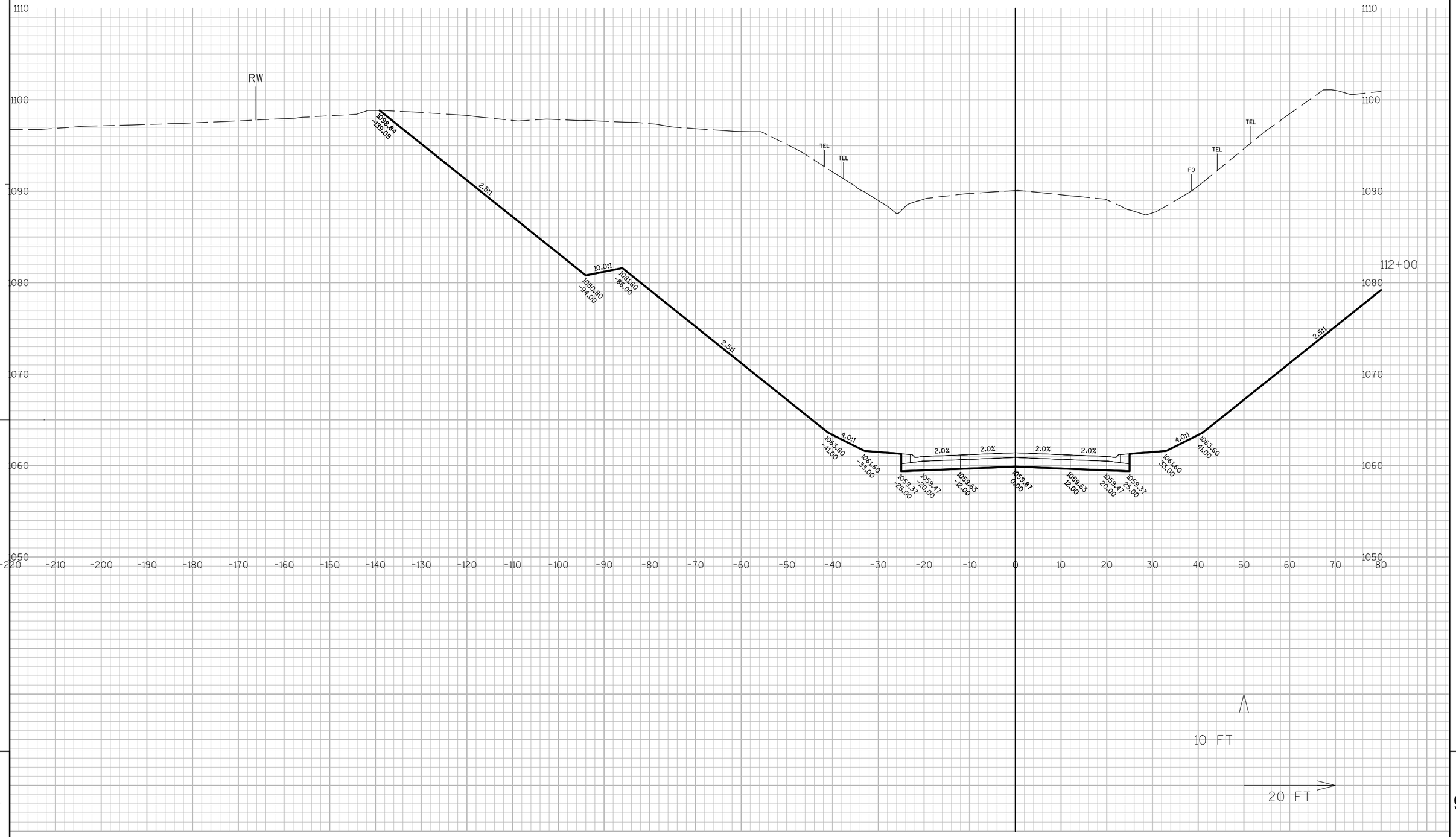
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STA 111+00 RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 853 E

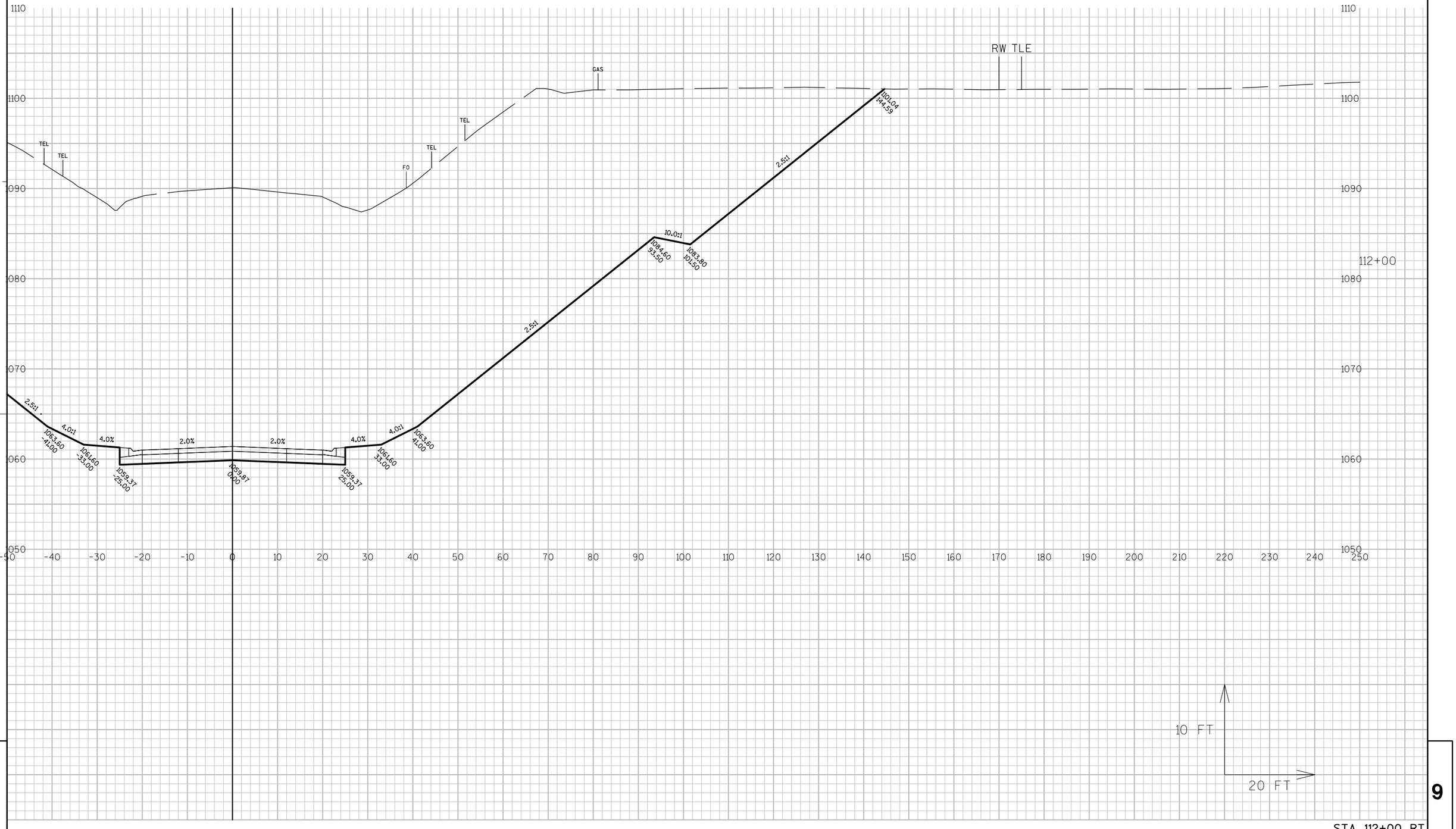
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090204_XS_106+00-119+00_RT.DWG PLOT DATE : 1/30/2018 2:37 PM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1:20 XREF



STA 112+00 LT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 854	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090203_XS 106+00-119+00 LT.DWG PLOT DATE : 1/30/2018 2:25 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 855 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090204_XS_106+00-119+00_RT.DWG PLOT DATE : 1/30/2018 2:37 PM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1:20 XREF

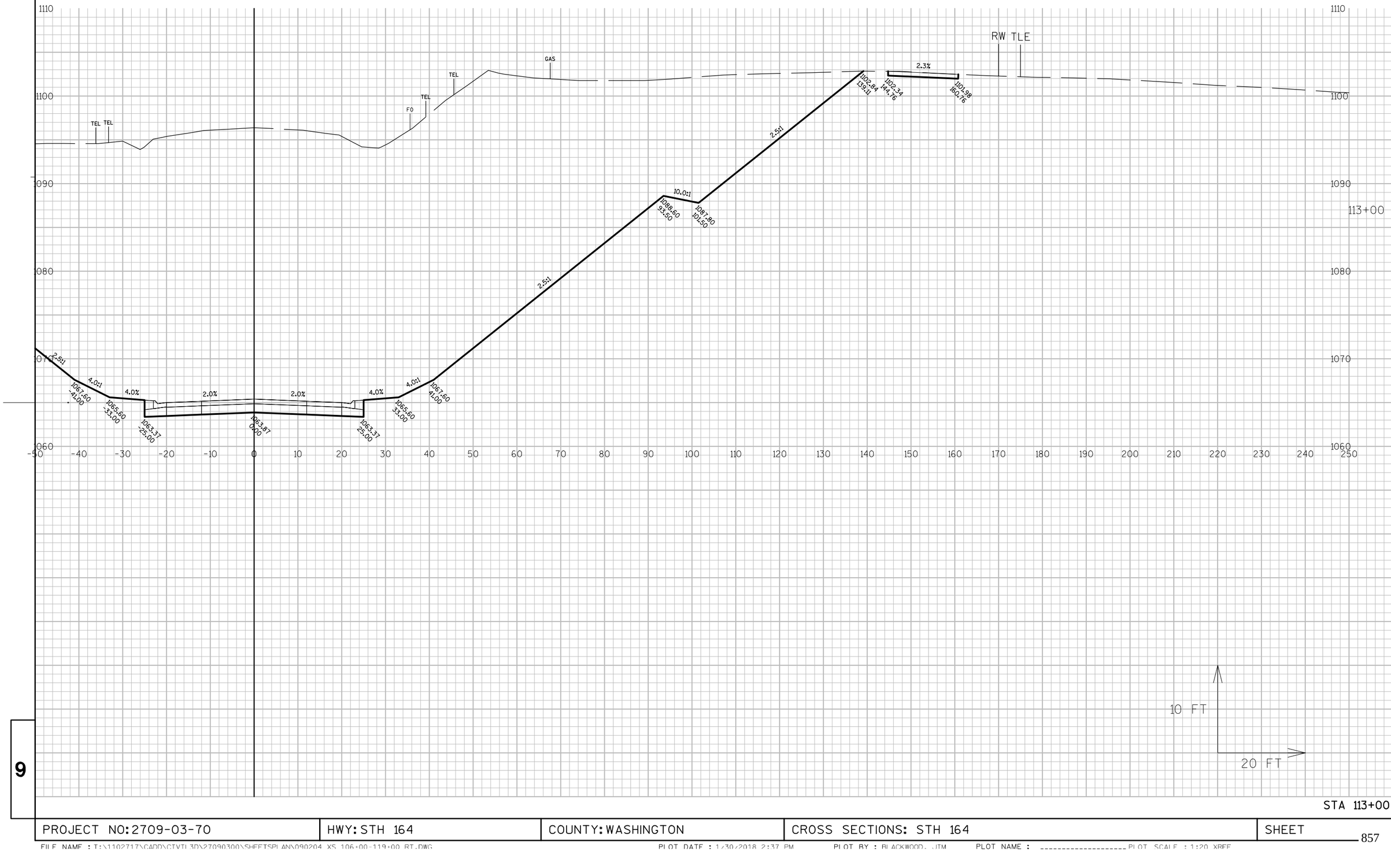
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STA 113+00 LT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 856	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090203_XS 106+00-119+00 LT.DWG PLOT DATE : 1/30/2018 2:26 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF



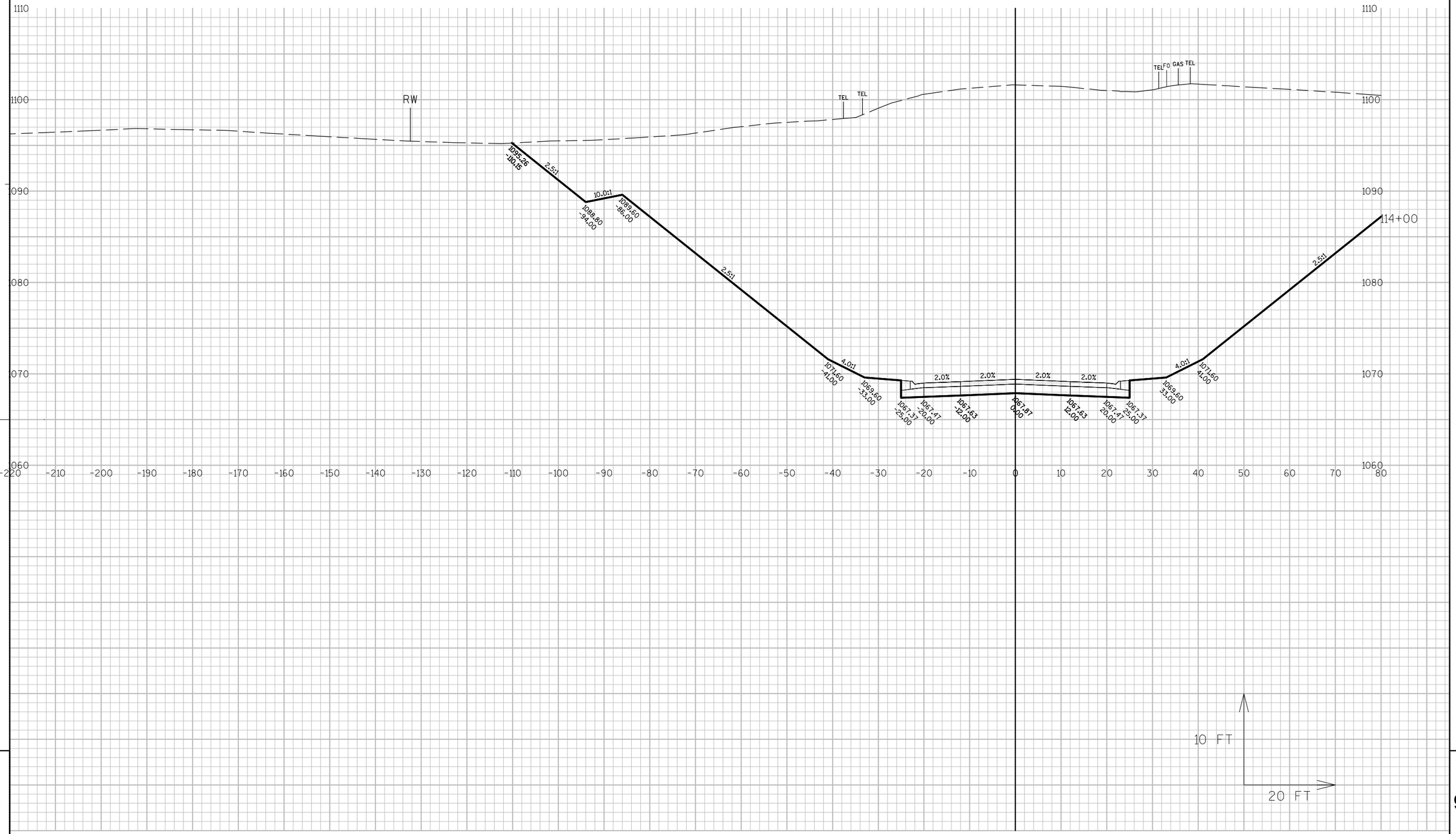
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STA 113+00 RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 857 E

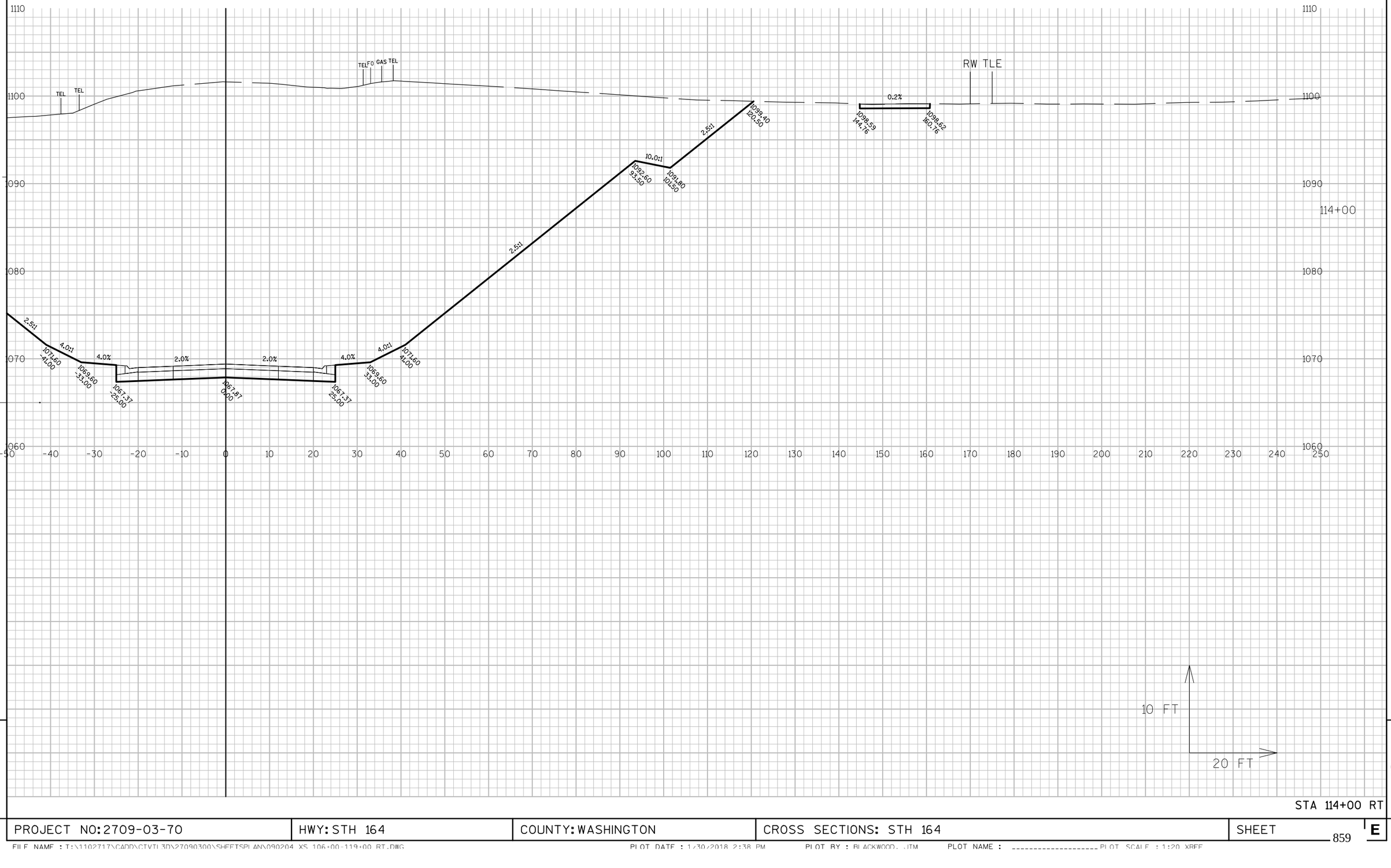
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090204_XS_106+00-119+00_RT.DWG PLOT DATE : 1/30/2018 2:37 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : _____ PLOT SCALE : 1:20 XREF



STA 114+00 LT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 858	E

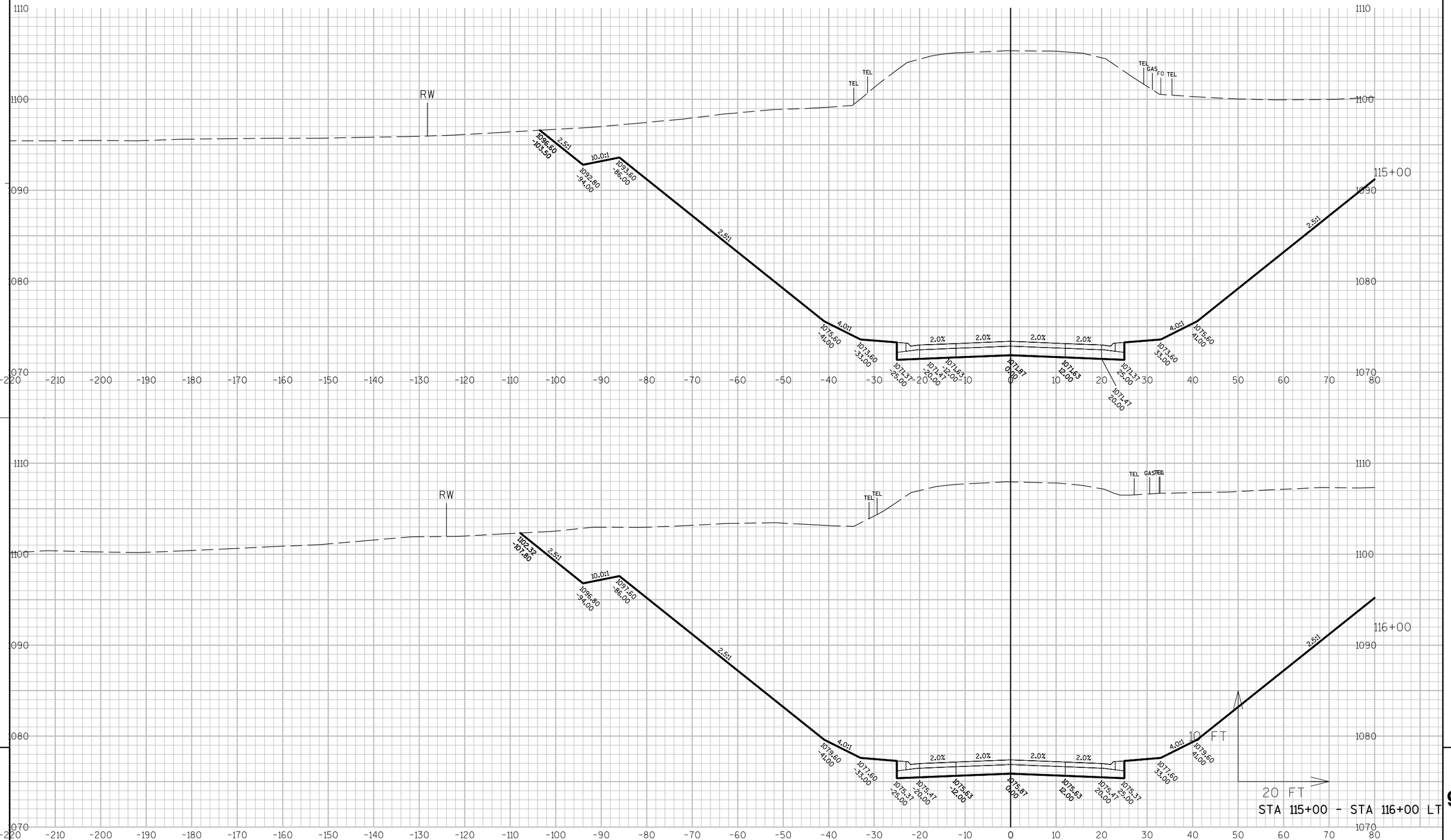
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STA 114+00 RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 859 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090204_XS_106+00-119+00_RT.DWG PLOT DATE : 1/30/2018 2:38 PM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1:20 XREF

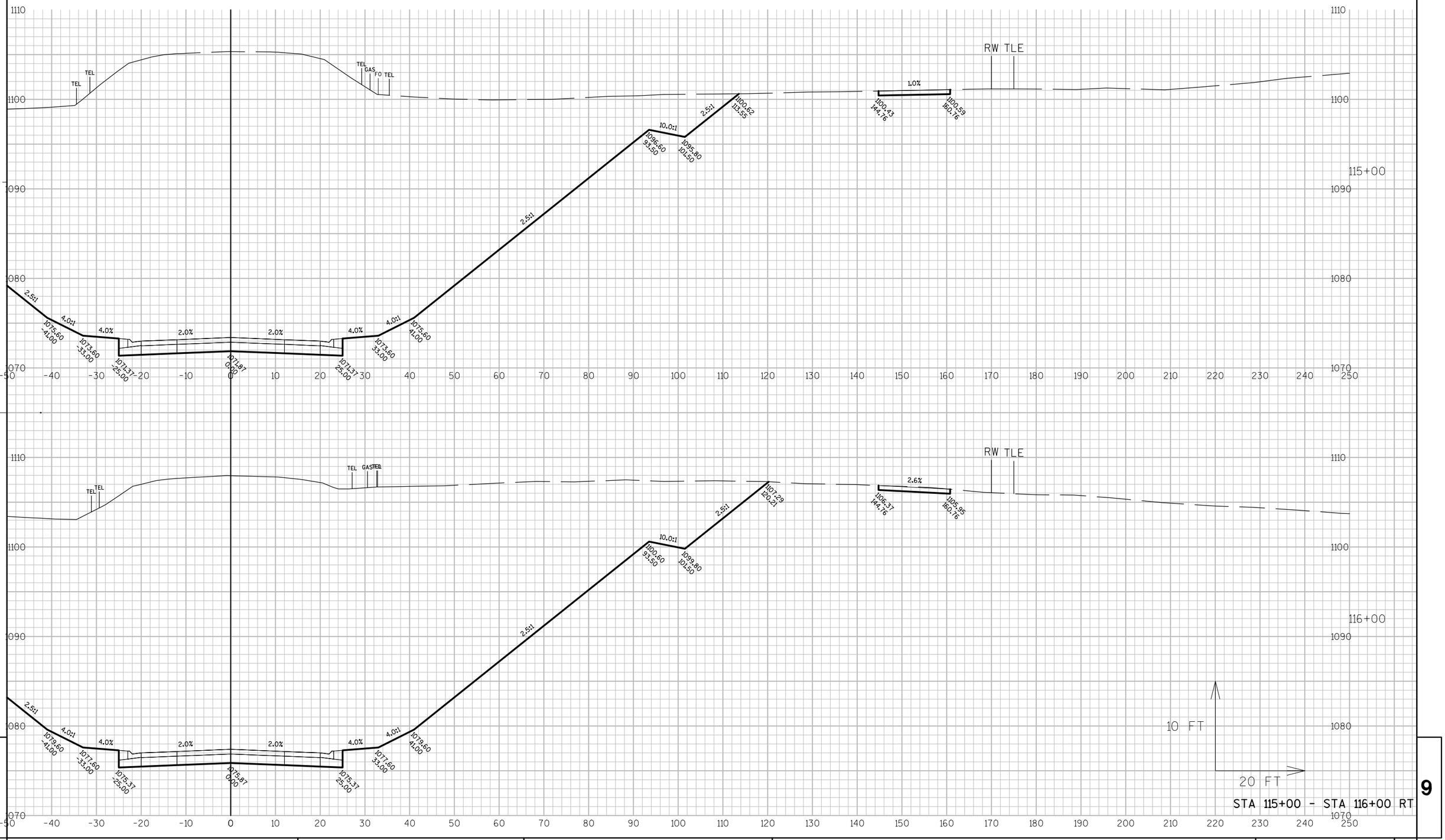


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 860	E

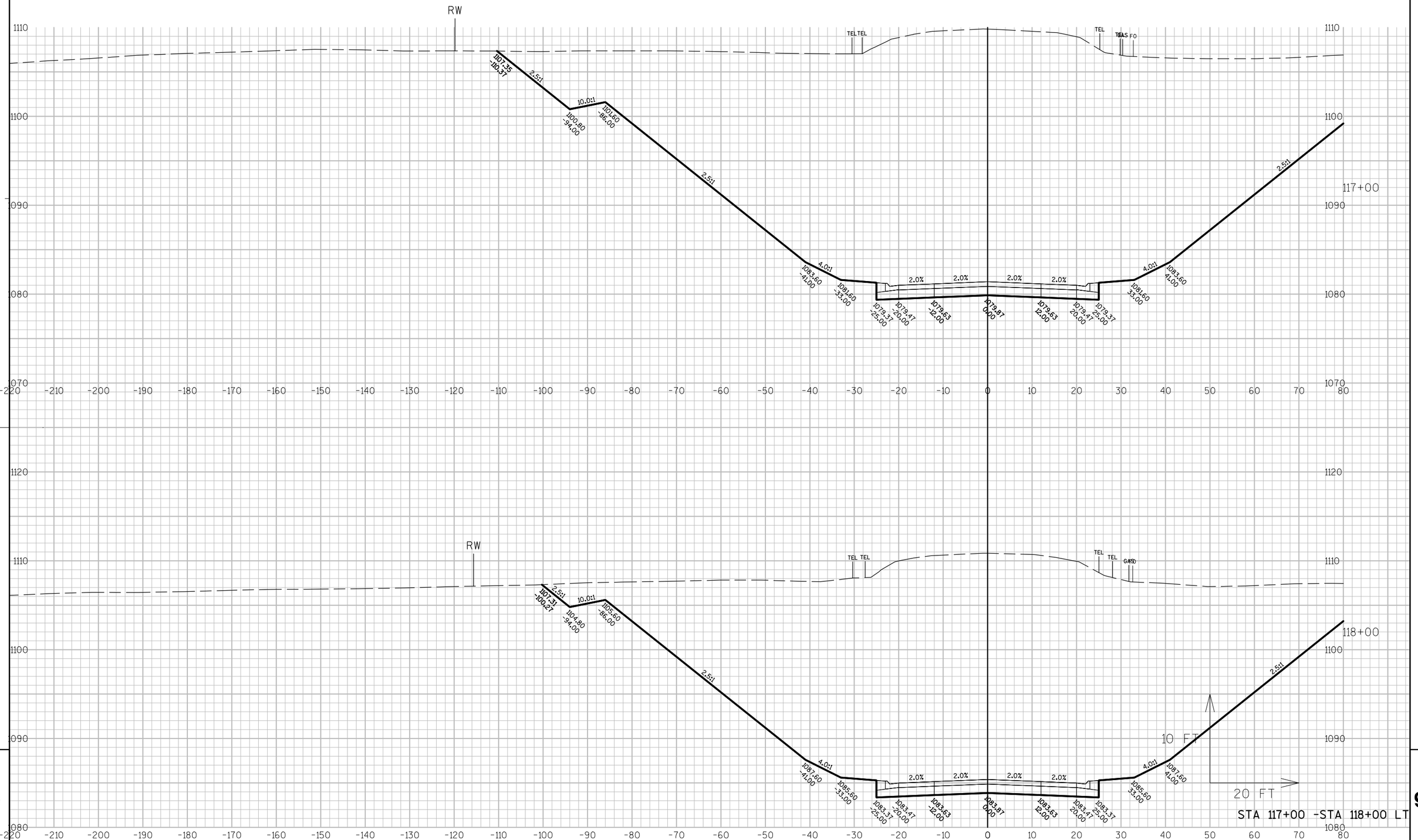
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STA 115+00 - STA 116+00 RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET E

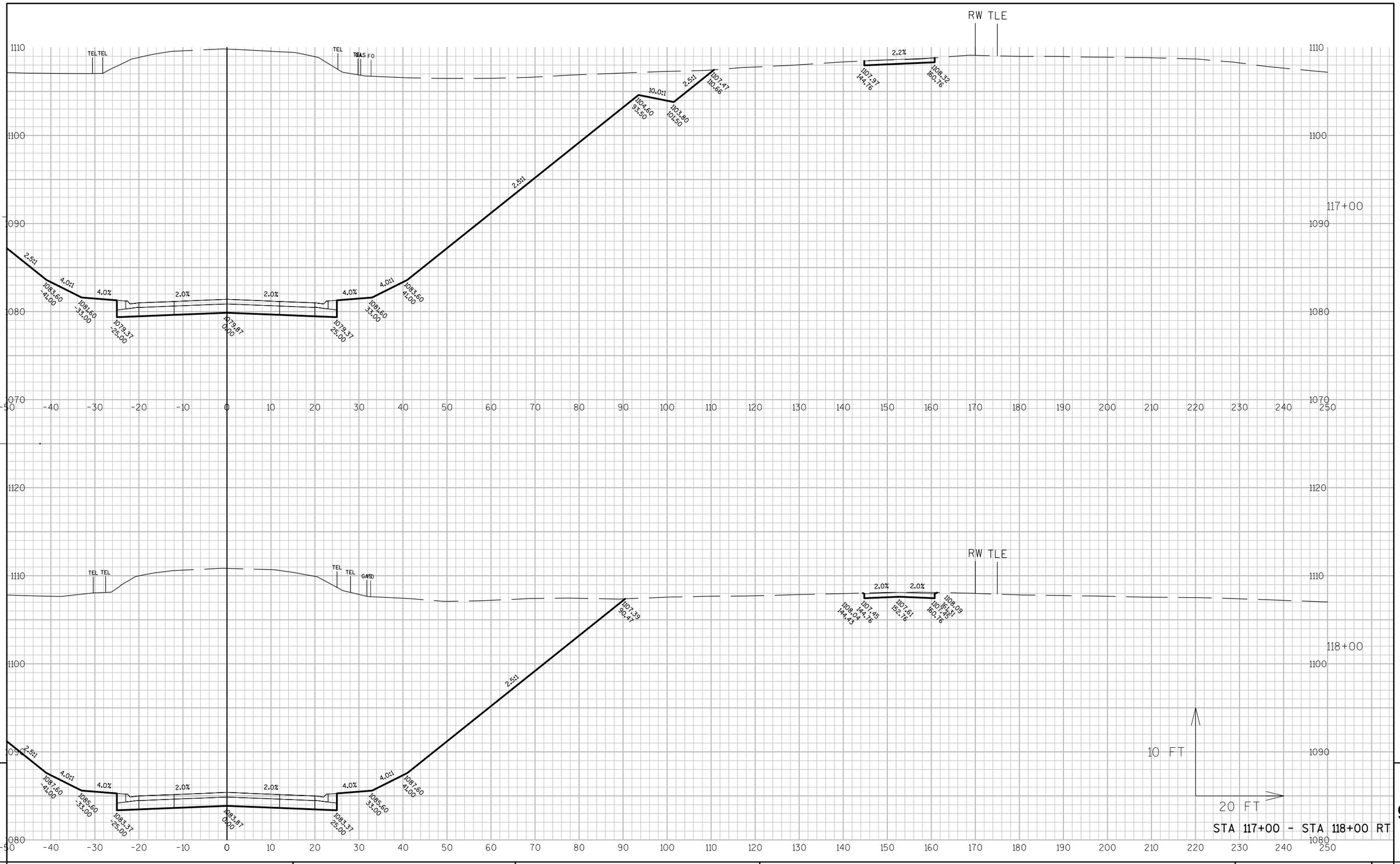
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 862	E

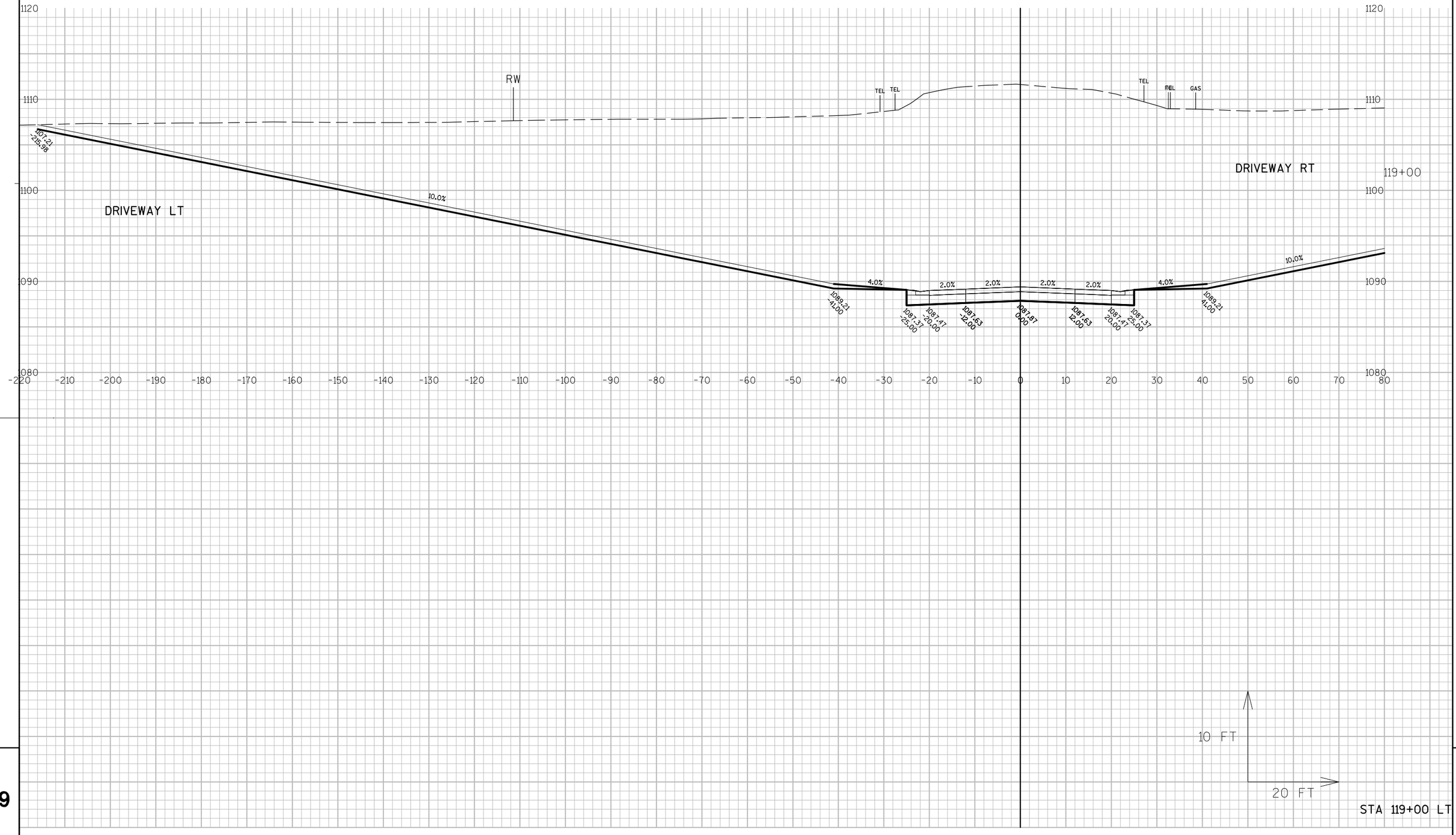
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STA 117+00 - STA 118+00 RT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 863 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090204_XS_106+00-119+00_RT.DWG PLOT DATE : 1/30/2018 2:38 PM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1:20 XREF

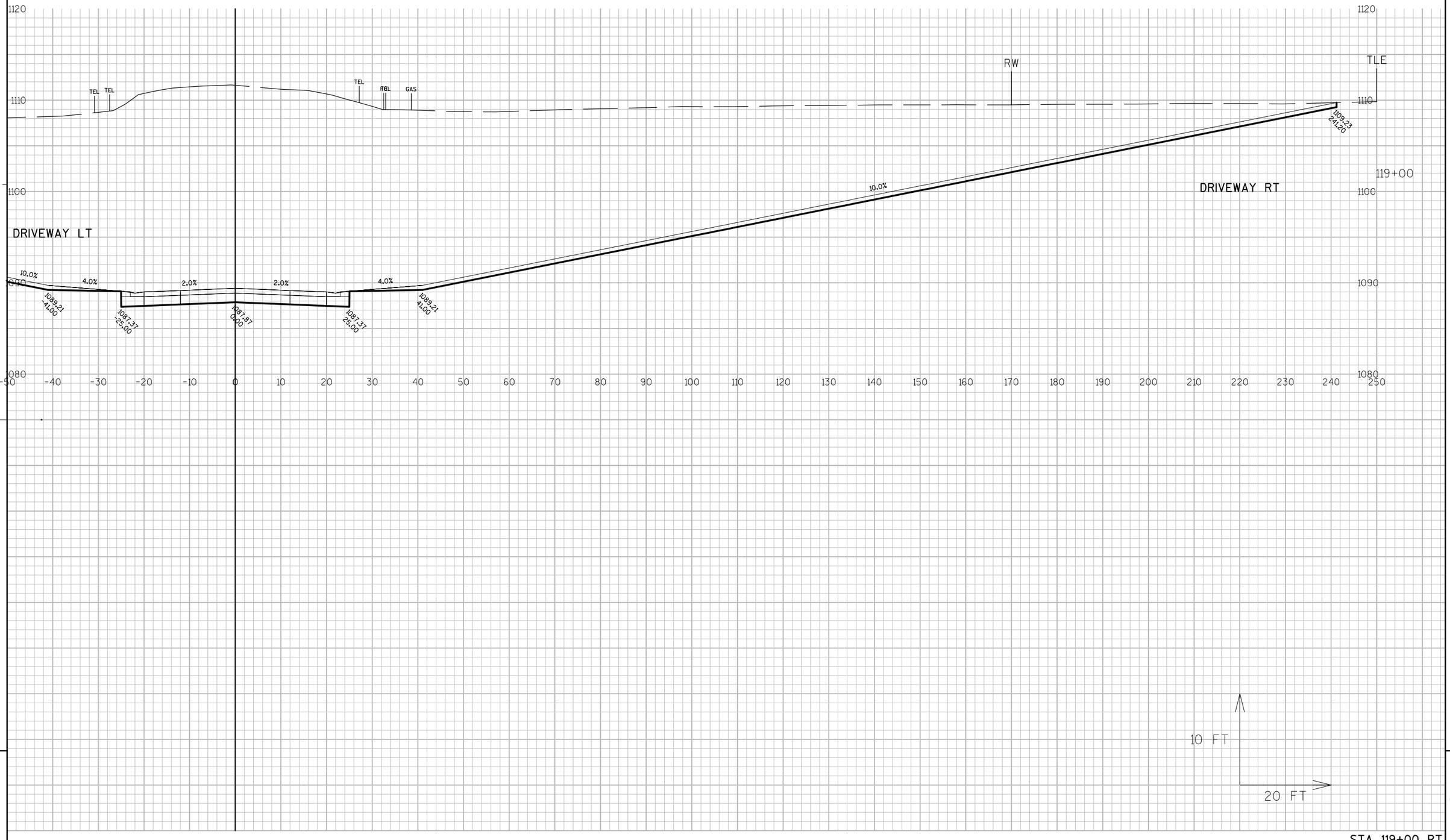


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 864	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090203_XS 106+00-119+00 LT.DWG PLOT DATE : 1/30/2018 2:27 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

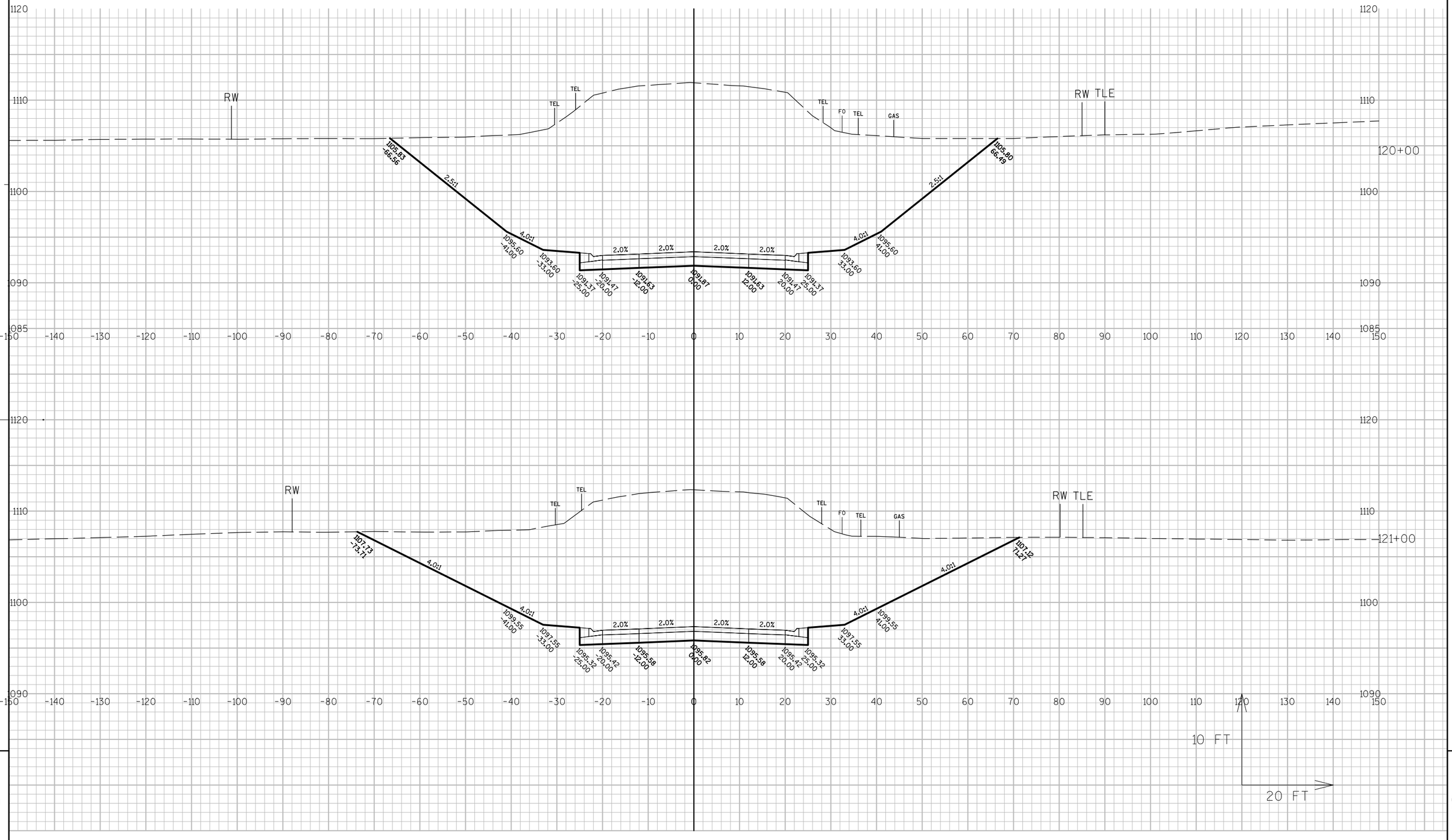
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STA 119+00 RT

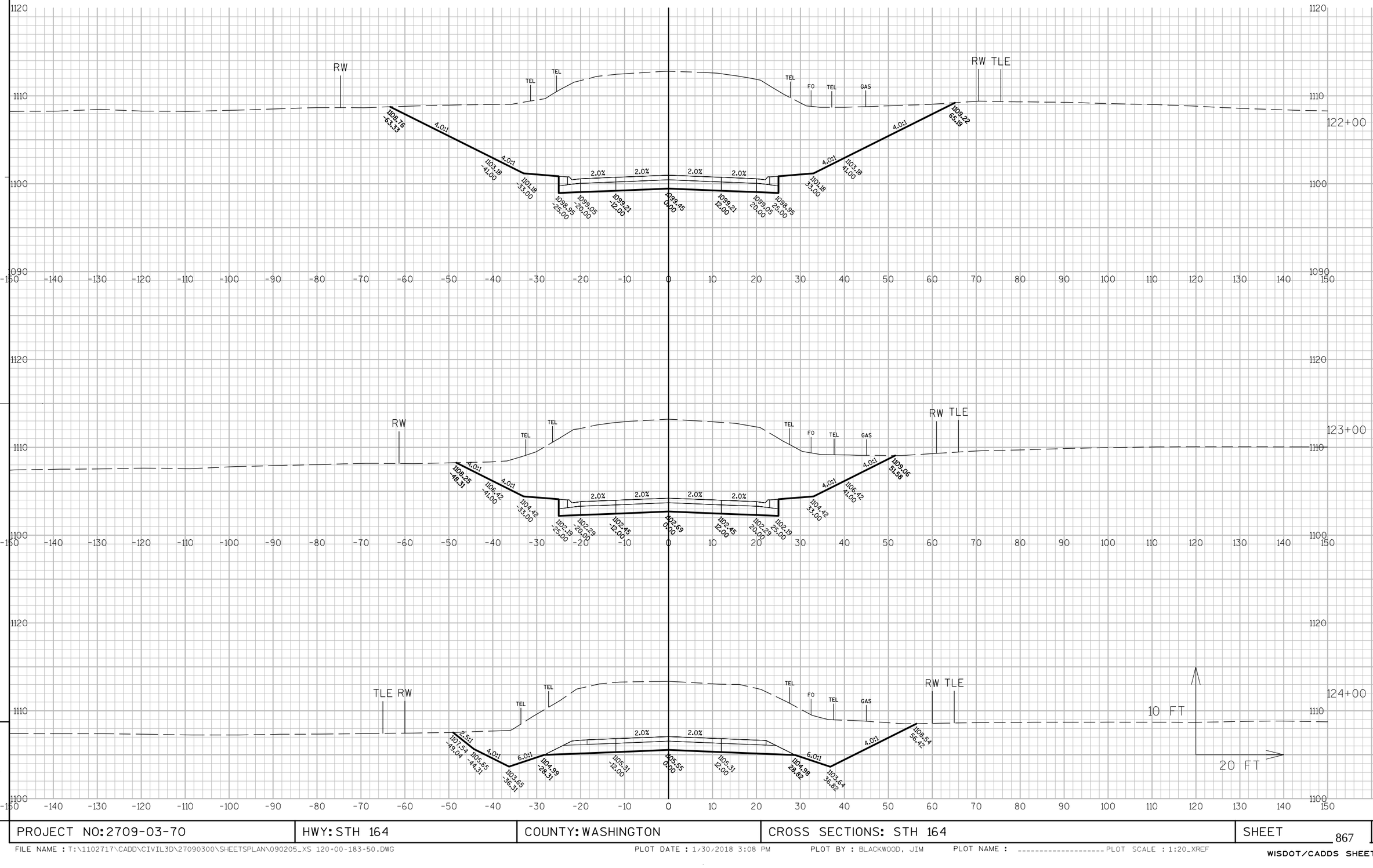
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 865 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090204_XS_106+00-119+00_RT.DWG PLOT DATE : 1/30/2018 2:38 PM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1:20 XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090205_XS_120+00-183+50.DWG PLOT DATE : 1/30/2018 3:07 PM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1:20 XREF

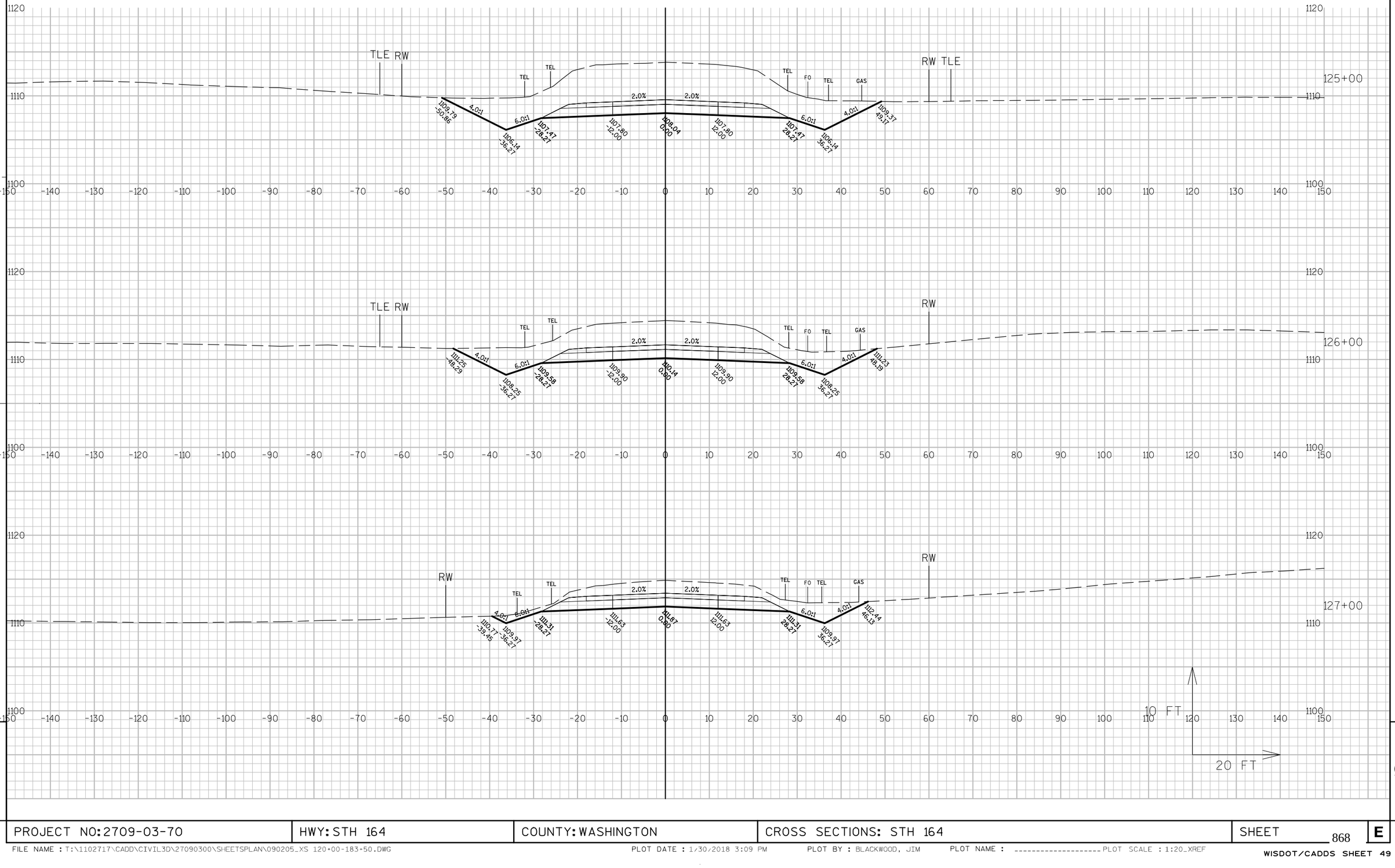


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 867	E

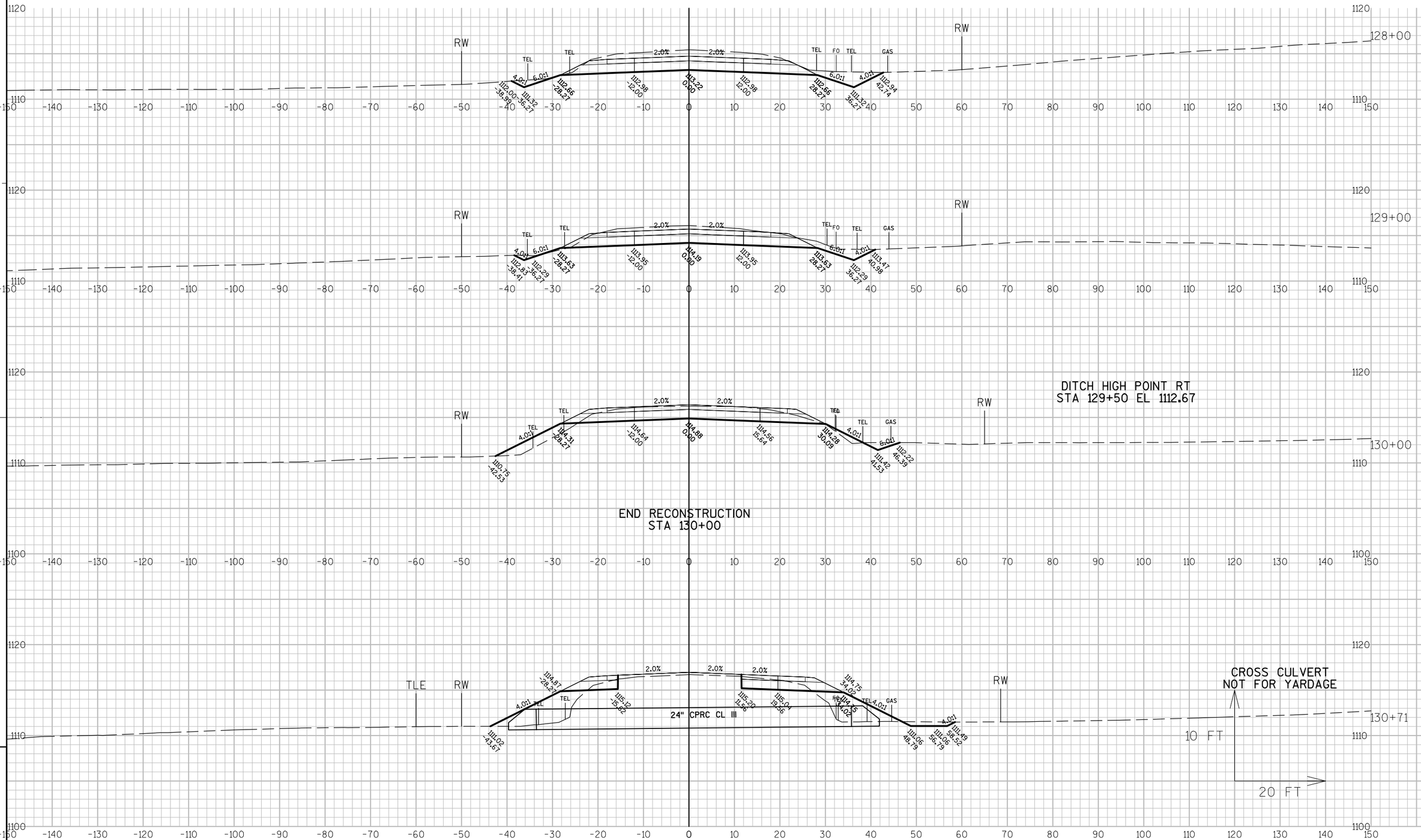
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090205_XS 120+00-183+50.DWG PLOT DATE : 1/30/2018 3:08 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 868	E

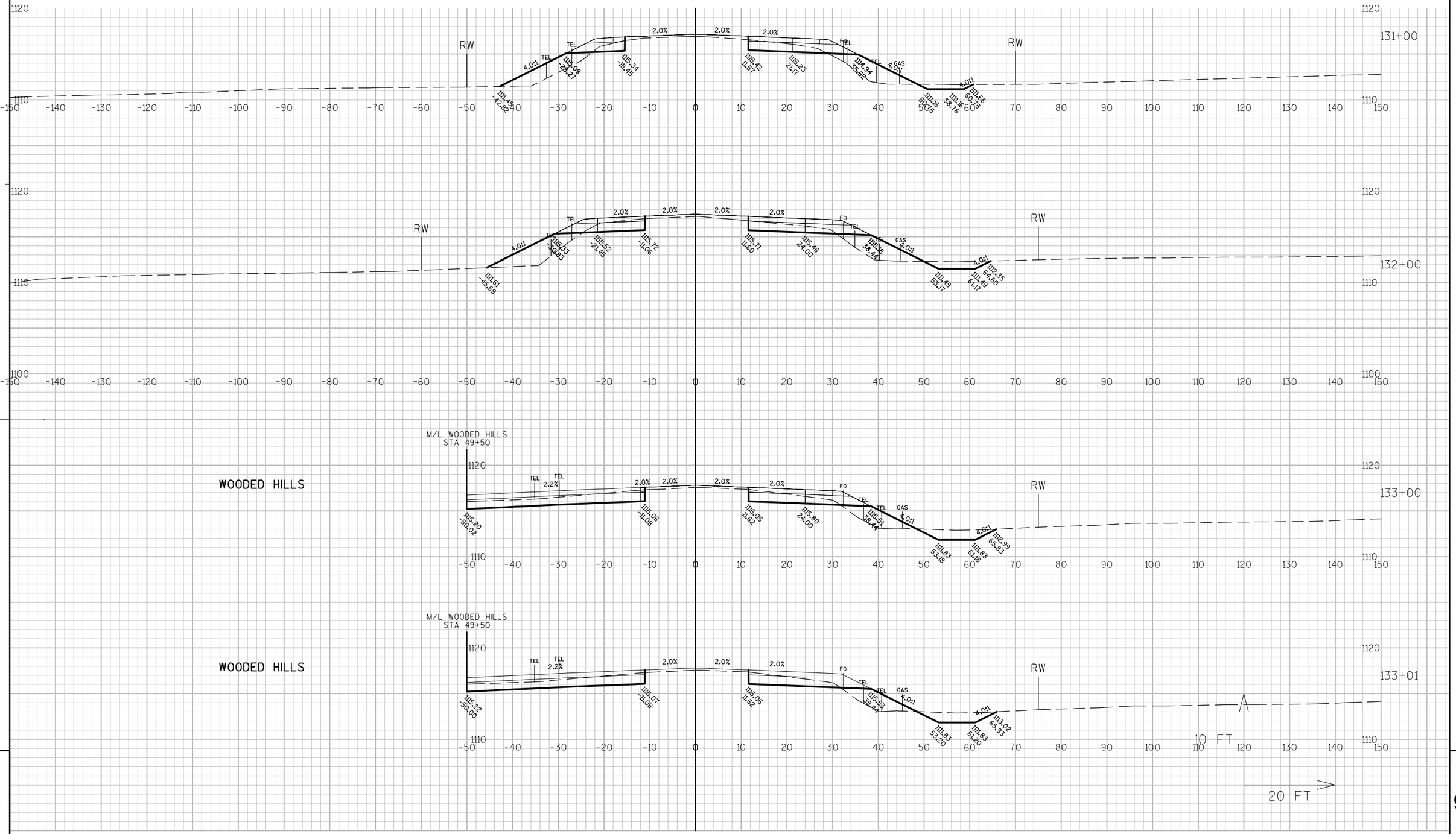
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090205_XS 120+00-183+50.DWG PLOT DATE : 1/30/2018 3:09 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

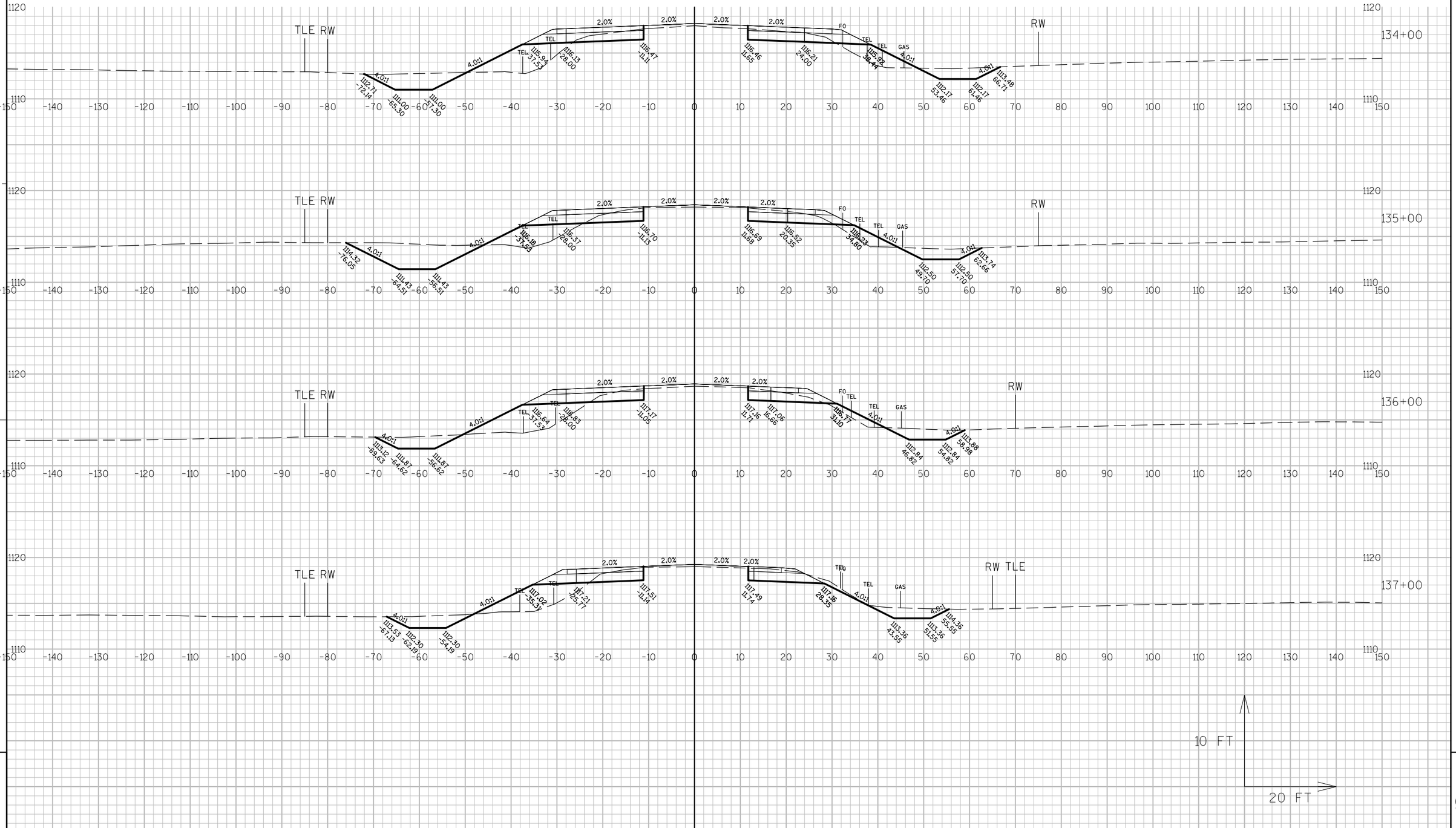


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 869	E



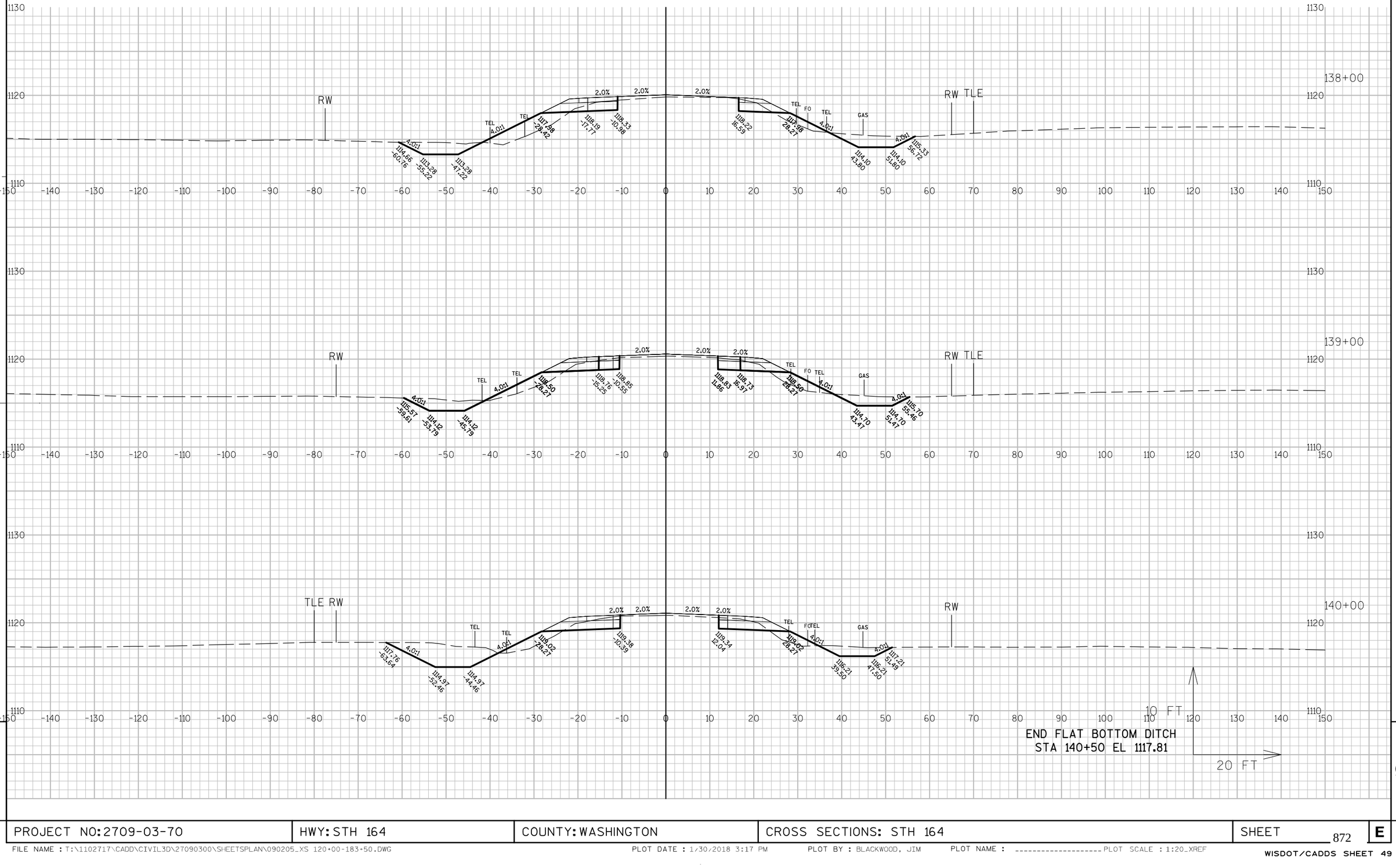
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 870	E



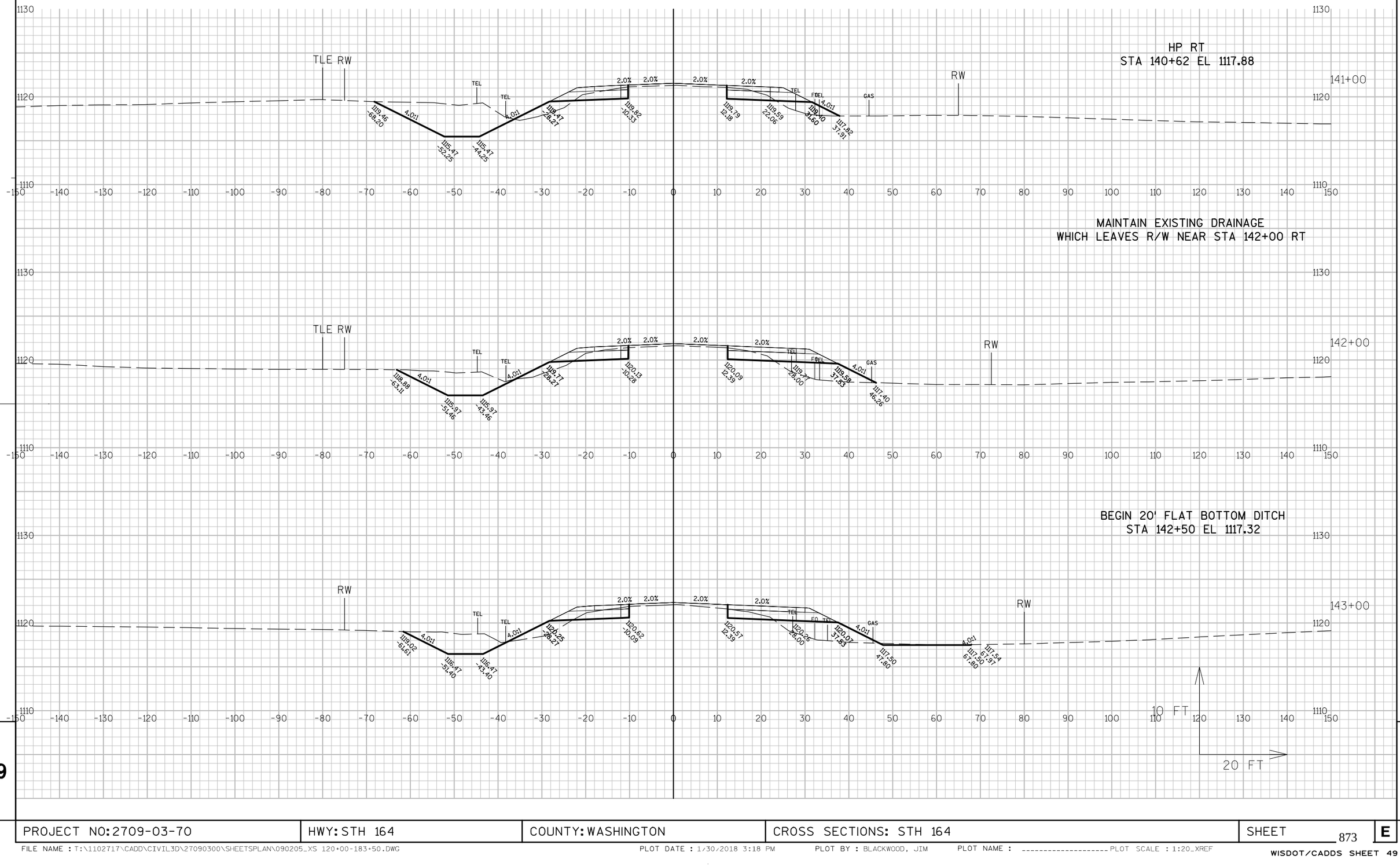
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 871	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090205_XS 120+00-183+50.DWG PLOT DATE : 1/30/2018 3:15 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



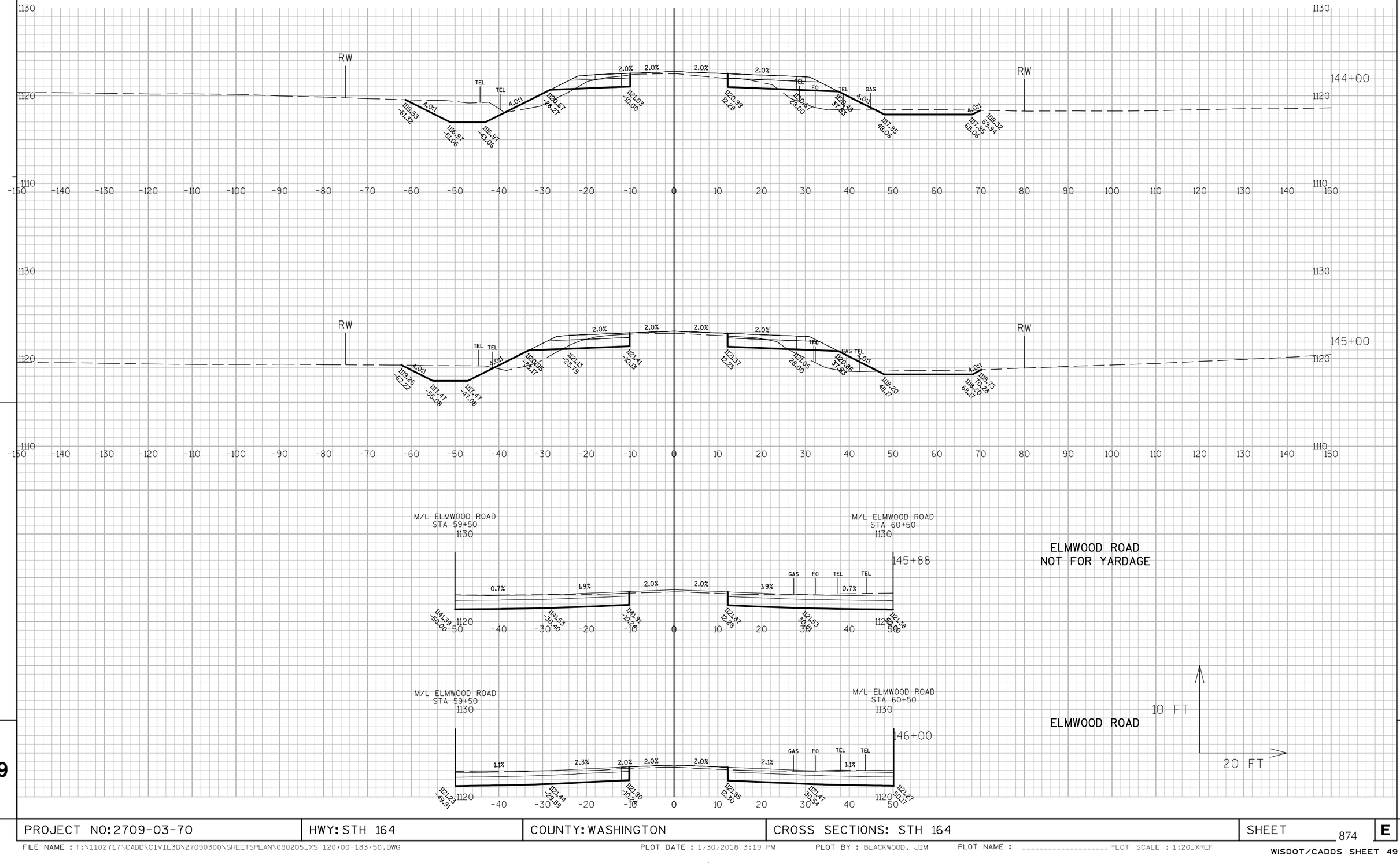
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 872	E



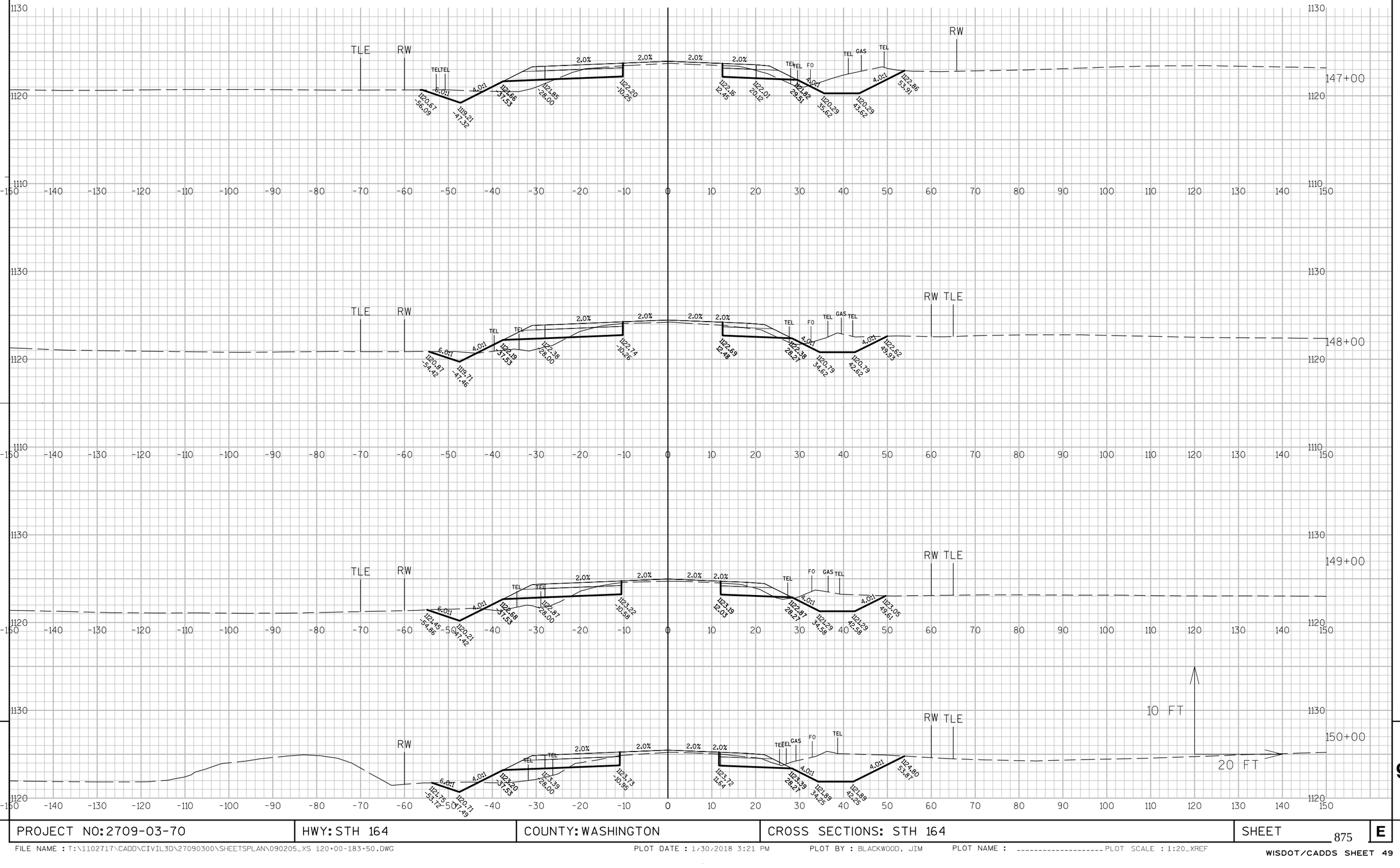
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 873	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090205_XS 120+00-183+50.DWG PLOT DATE : 1/30/2018 3:18 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

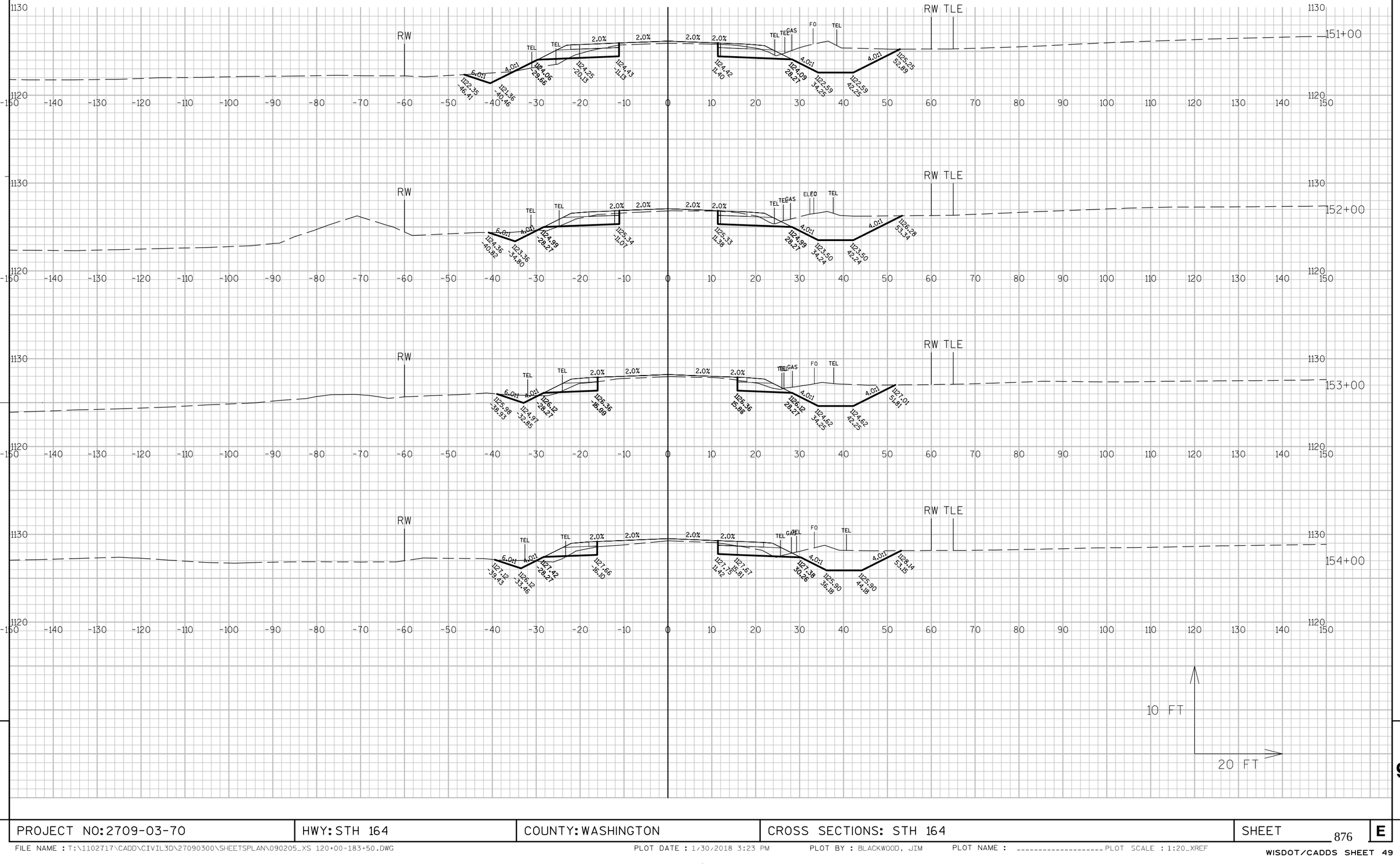


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 874	E

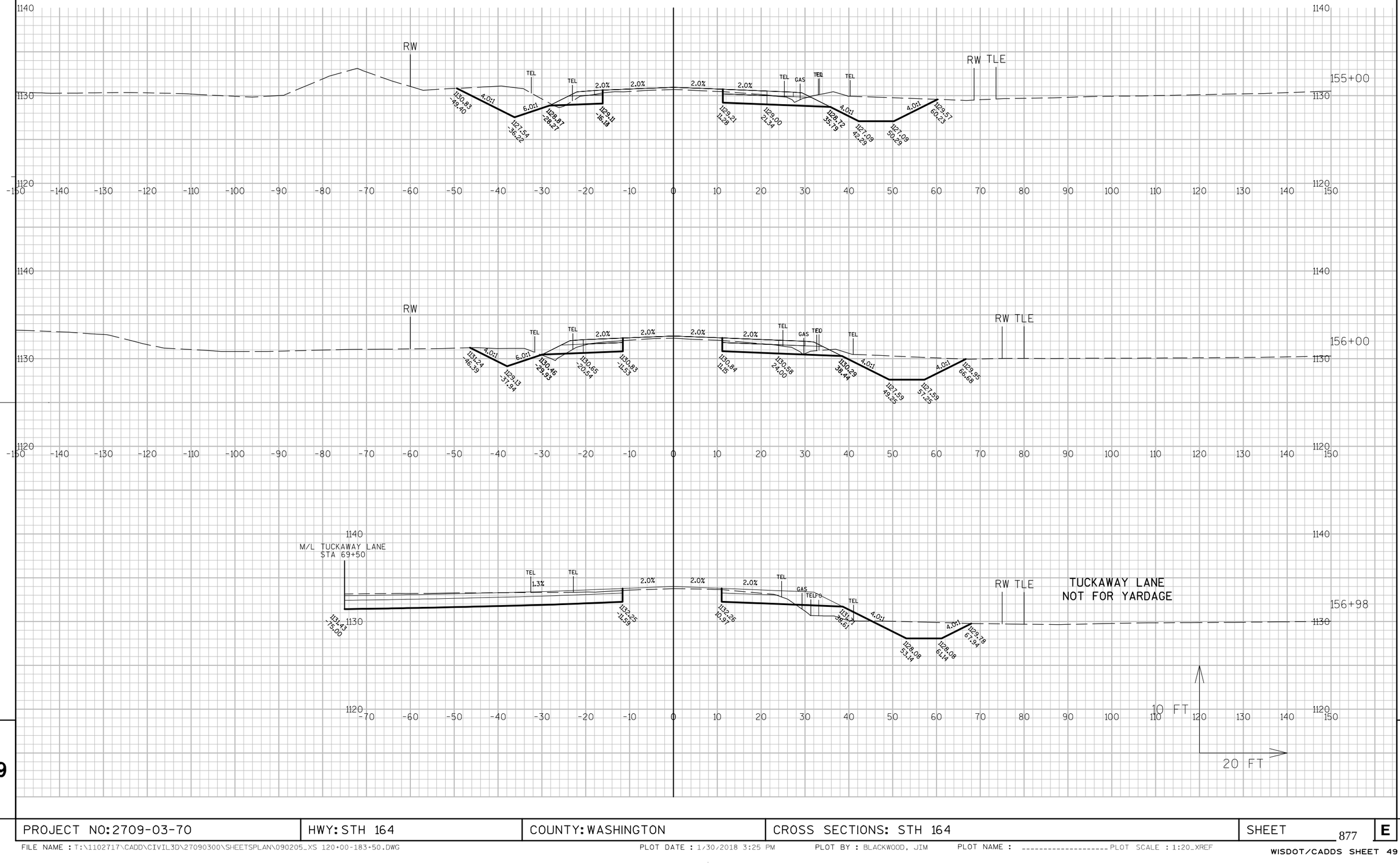


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 875	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090205_XS 120+00-183+50.DWG PLOT DATE : 1/30/2018 3:21 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF



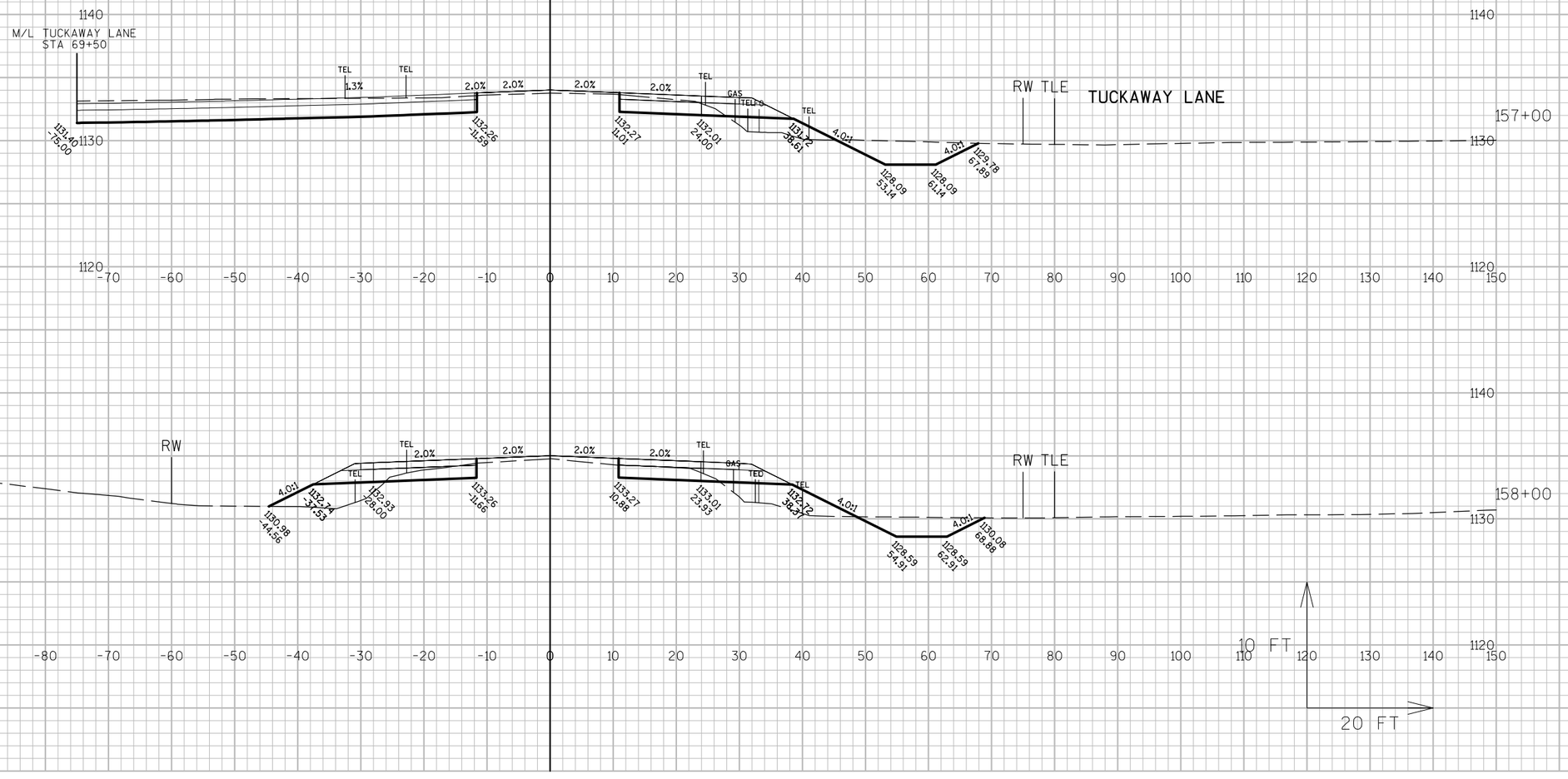
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 876	E



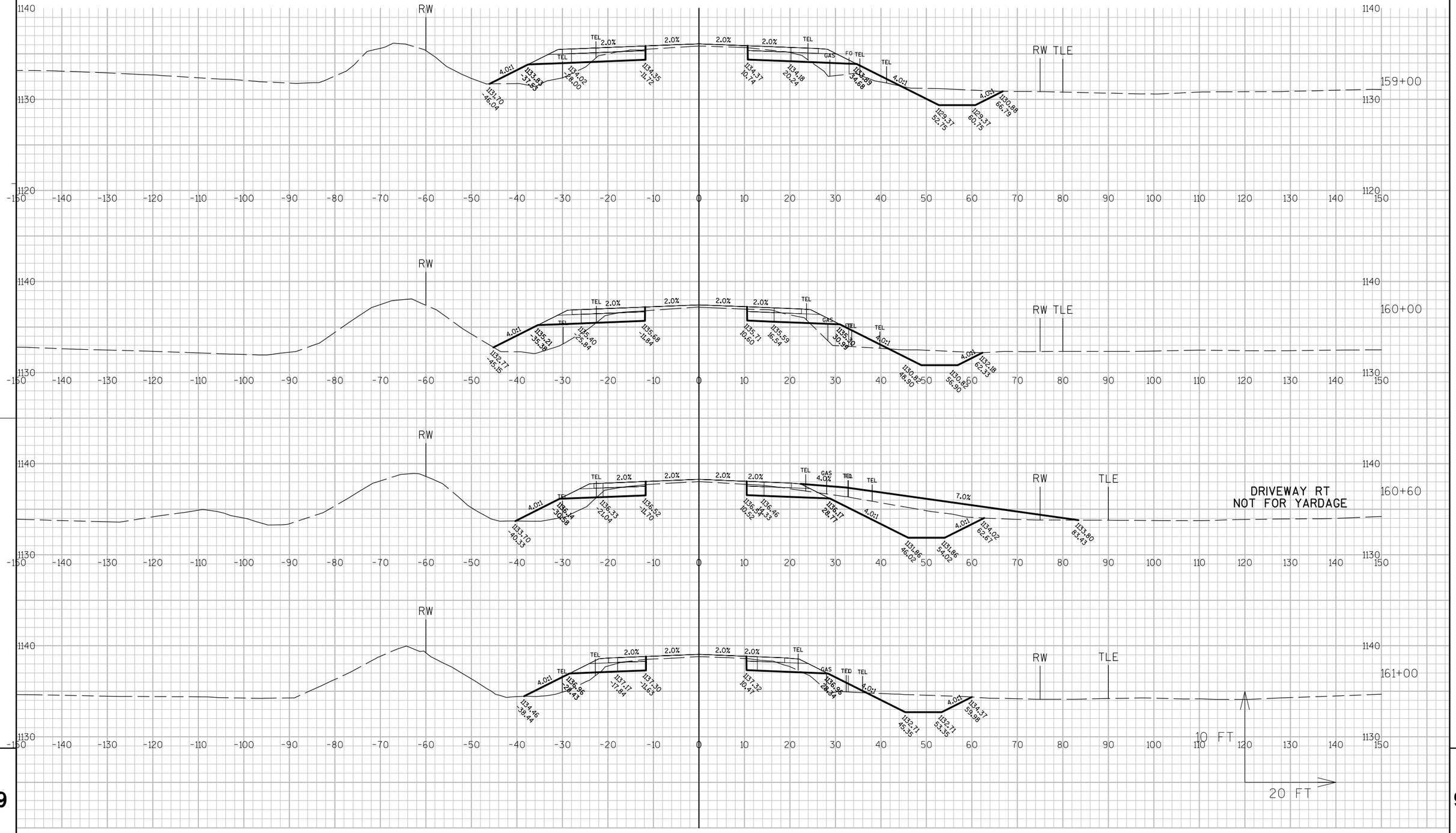
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WISDOT/CADDS SHEET 49



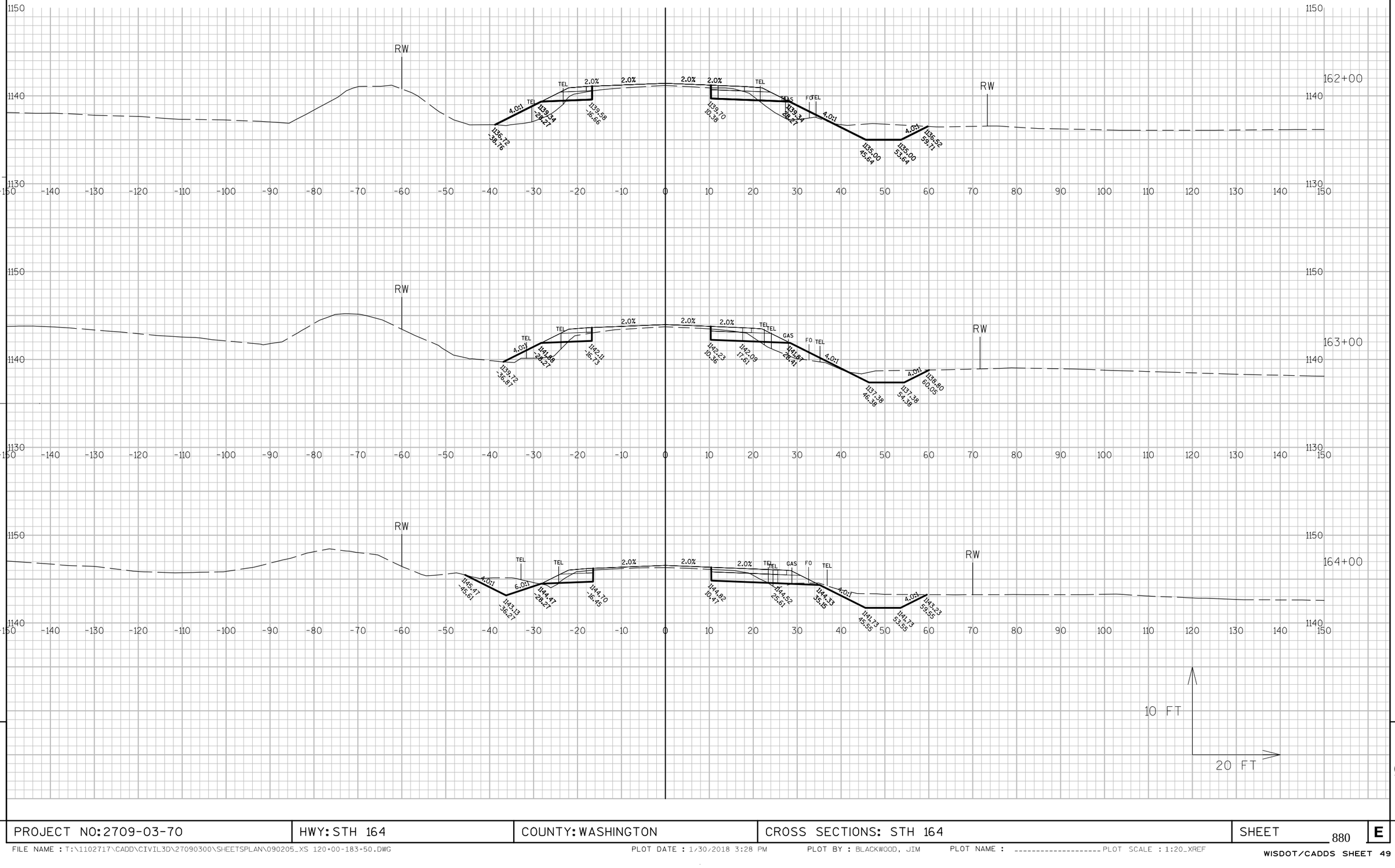
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 879	E



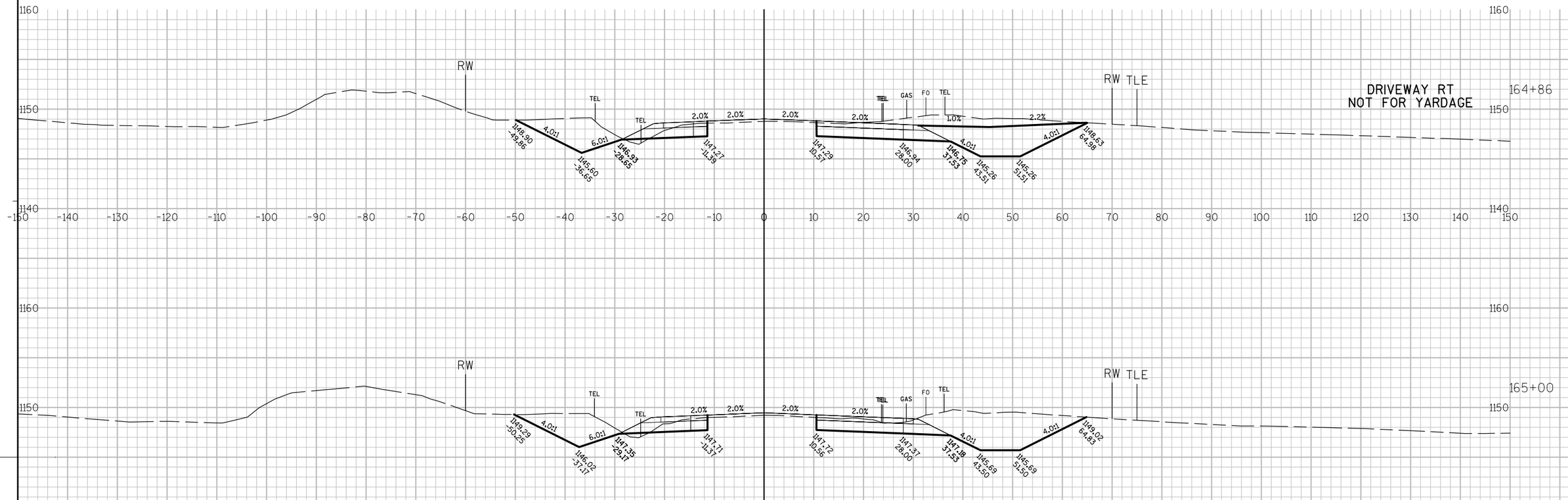
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 880	E

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WISDOT/CADDS SHEET 49

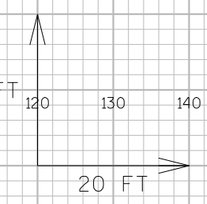
DRIVEWAY RT
NOT FOR YARDAGE

164+86



165+00

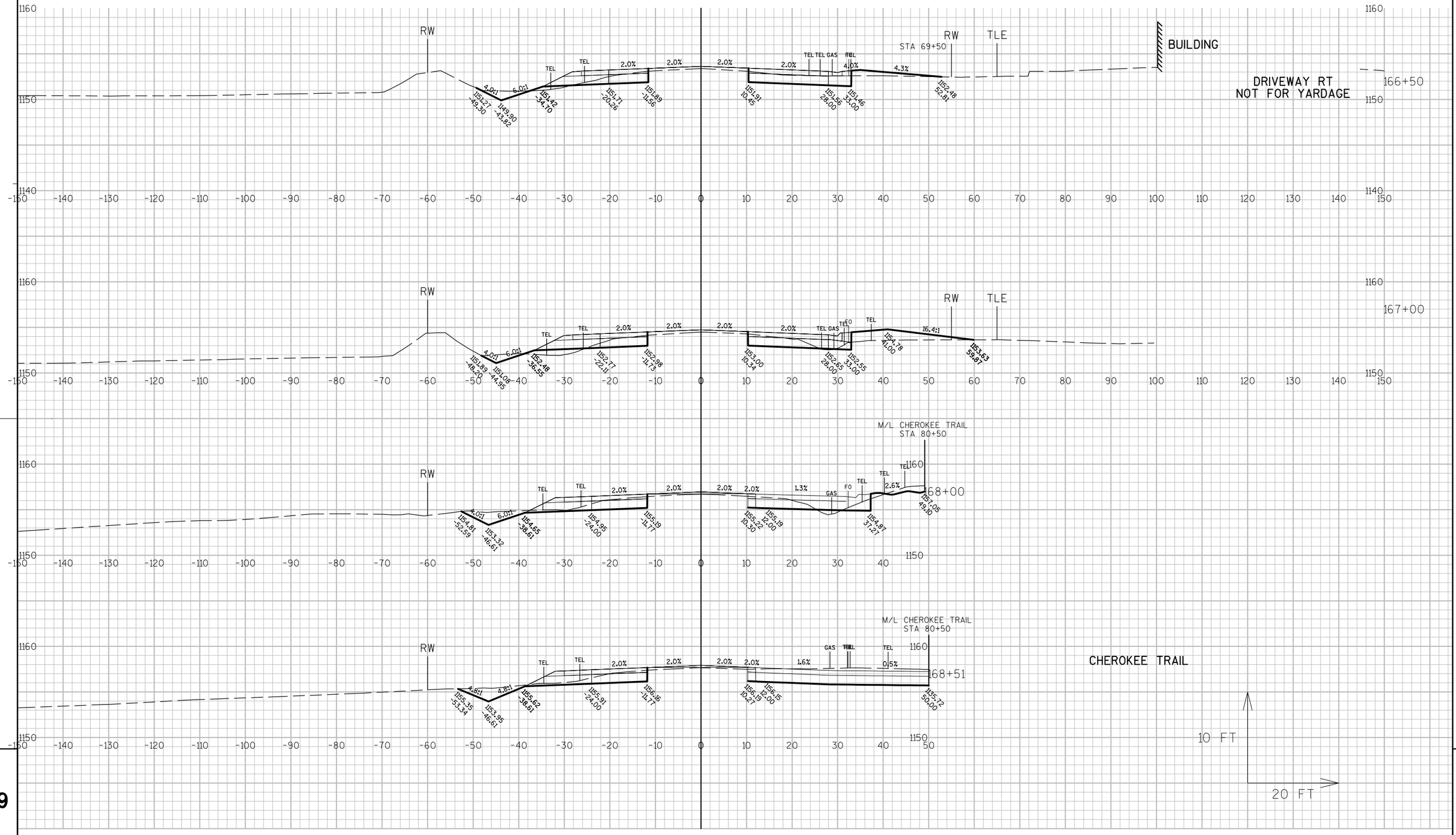
166+00



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 881	E

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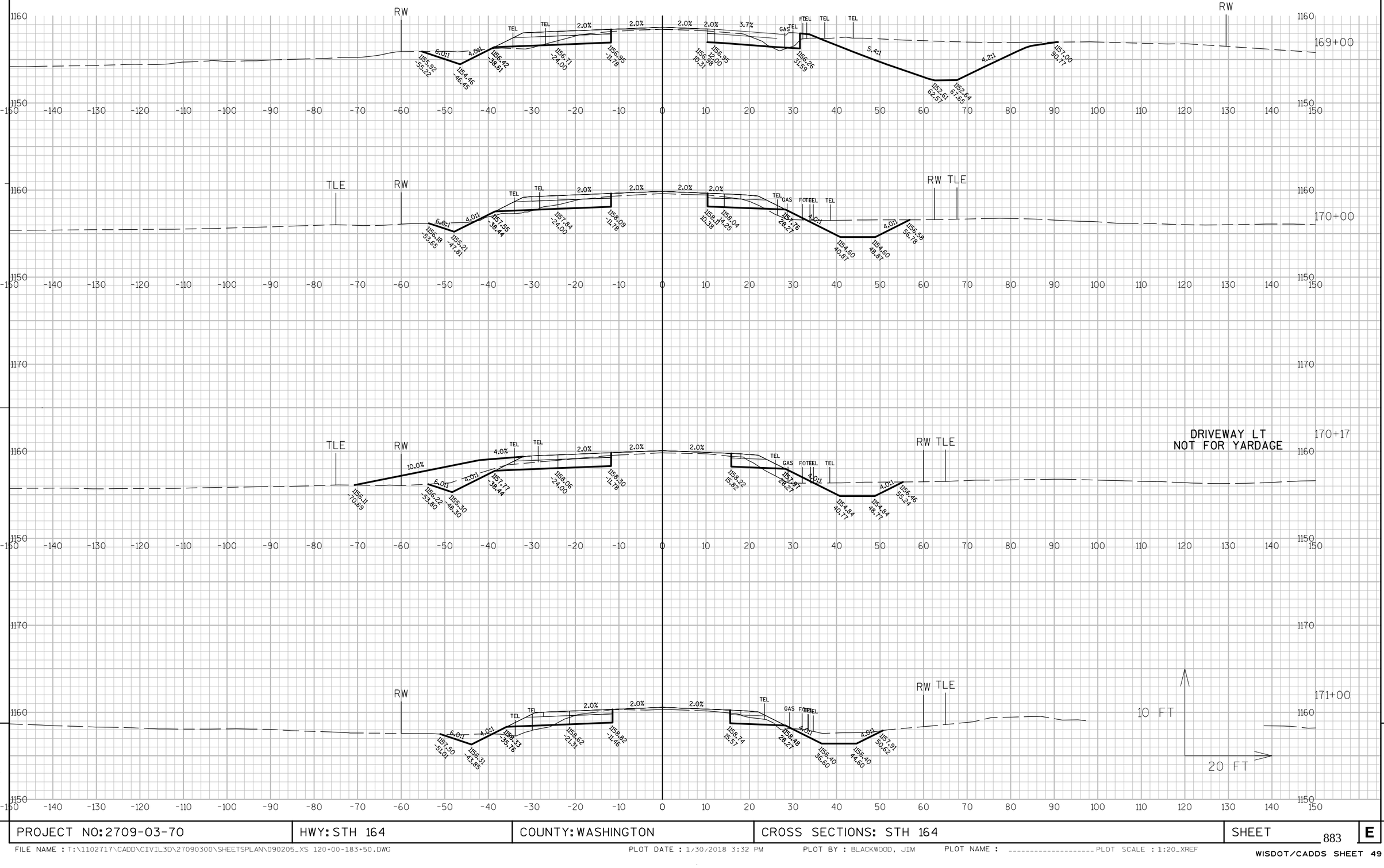
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 882	E

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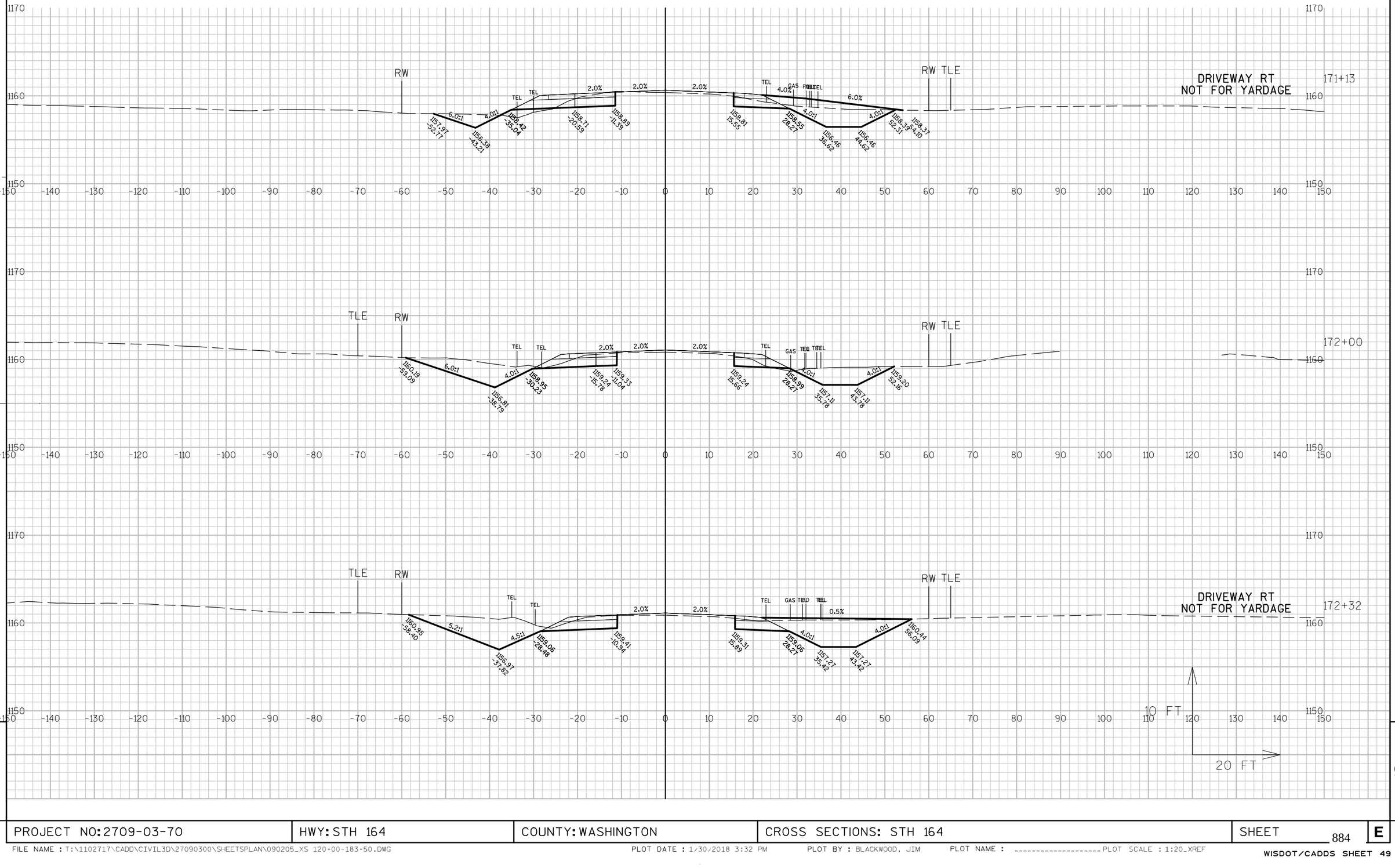
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 883	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090205_XS 120+00-183+50.DWG PLOT DATE : 1/30/2018 3:32 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



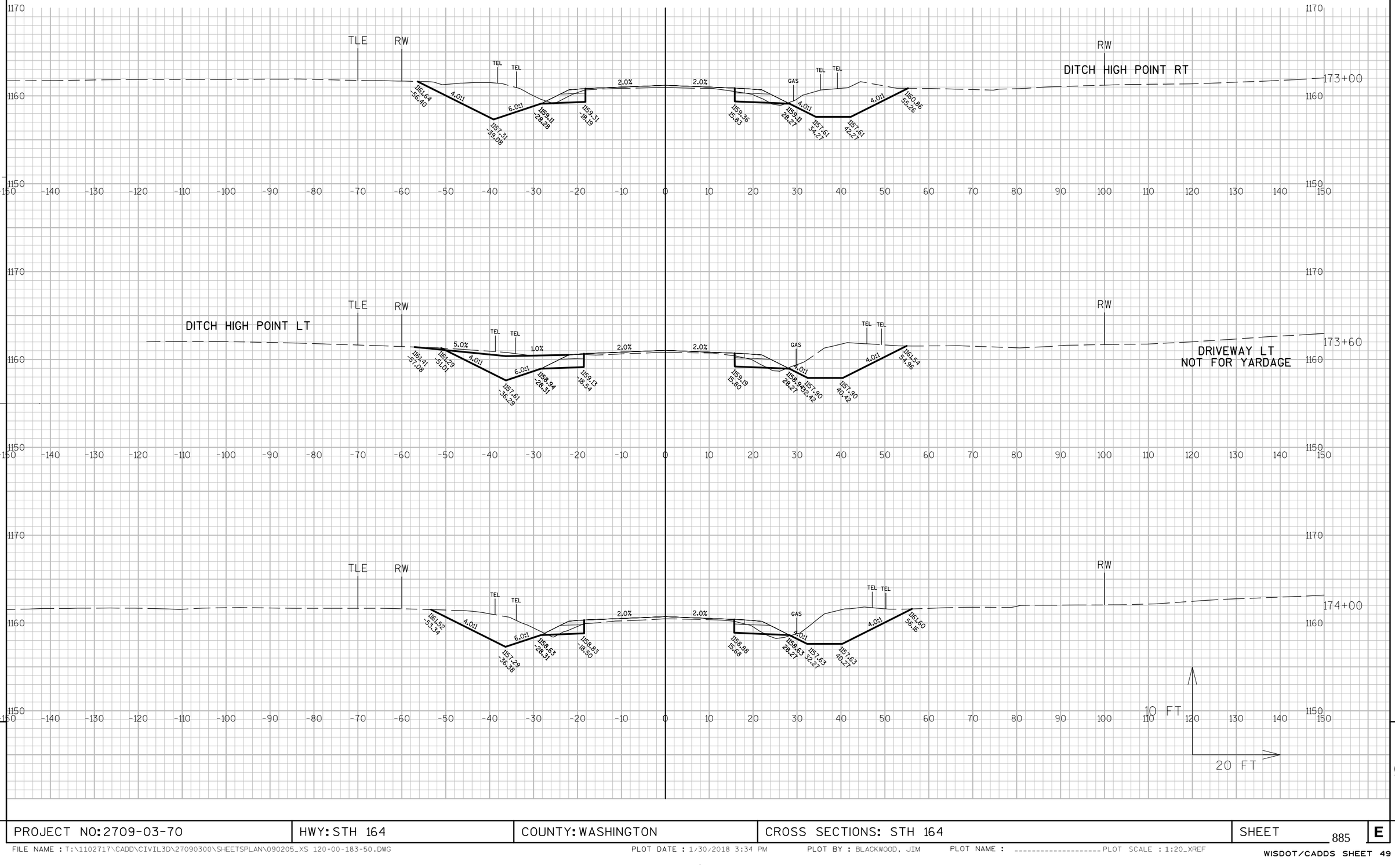
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 884	E

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WISDOT/CADDS SHEET 49

9



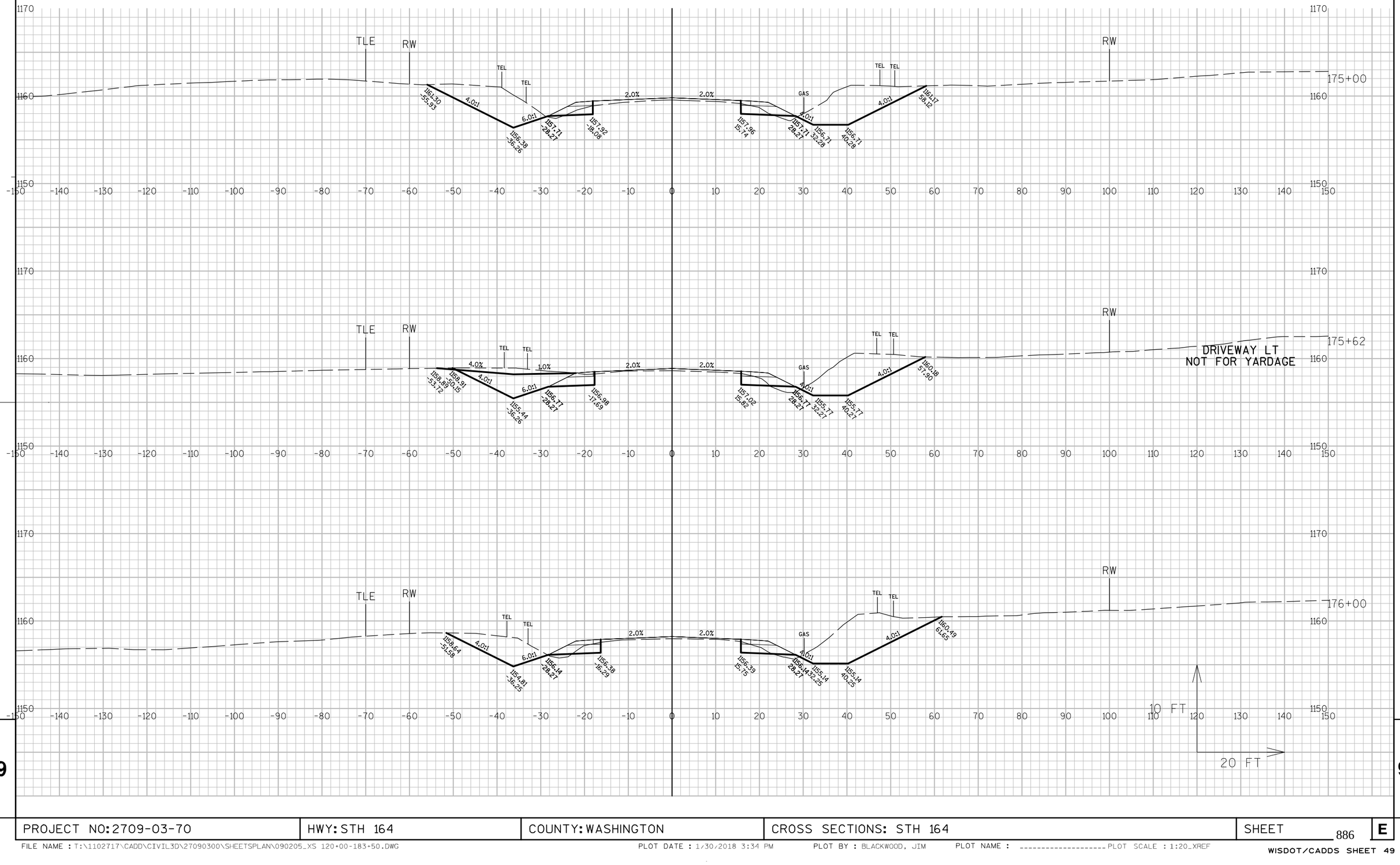
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 885	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090205_XS 120+00-183+50.DWG PLOT DATE : 1/30/2018 3:34 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

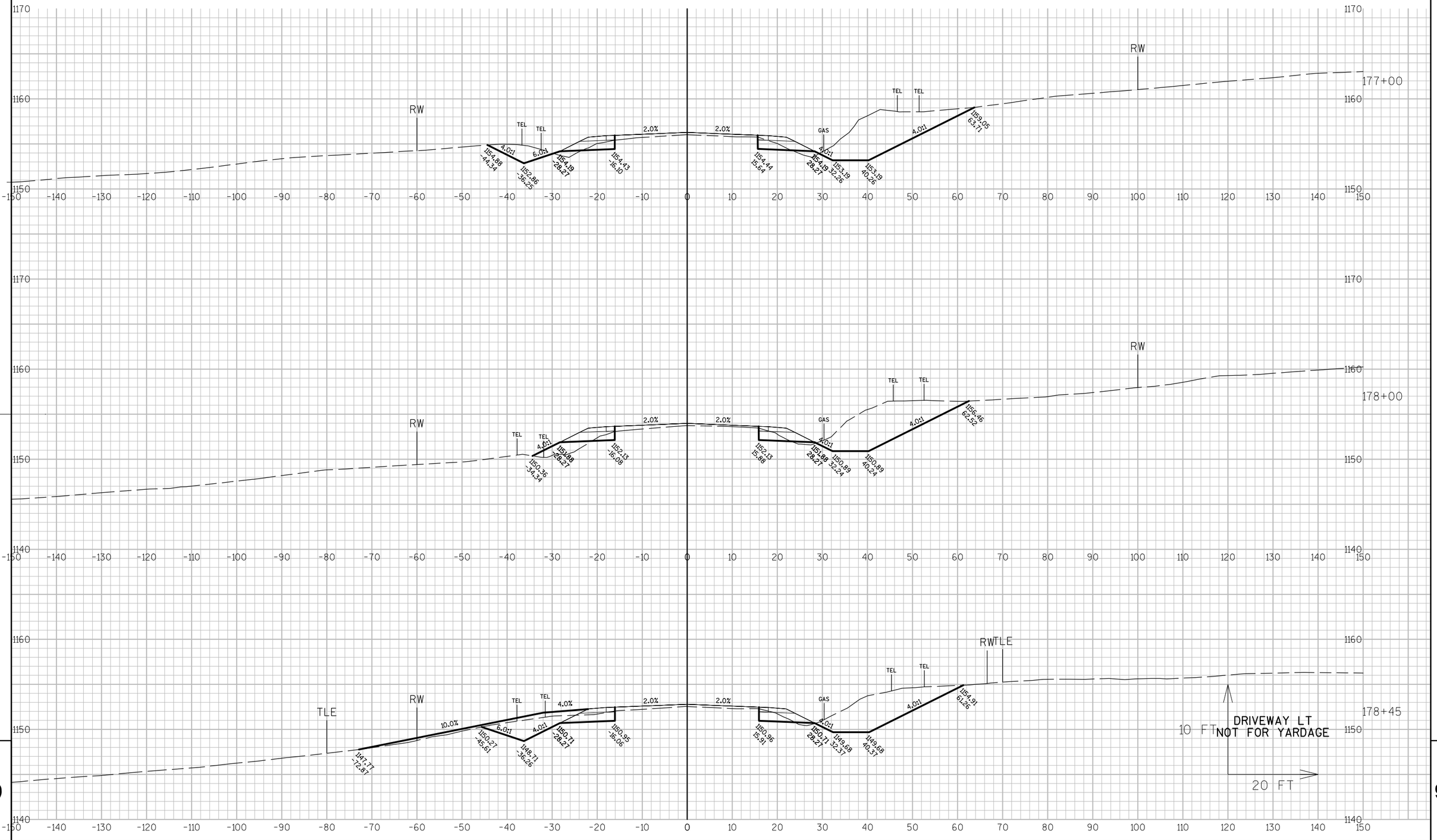
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 886	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090205_XS 120+00-183+50.DWG PLOT DATE : 1/30/2018 3:34 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

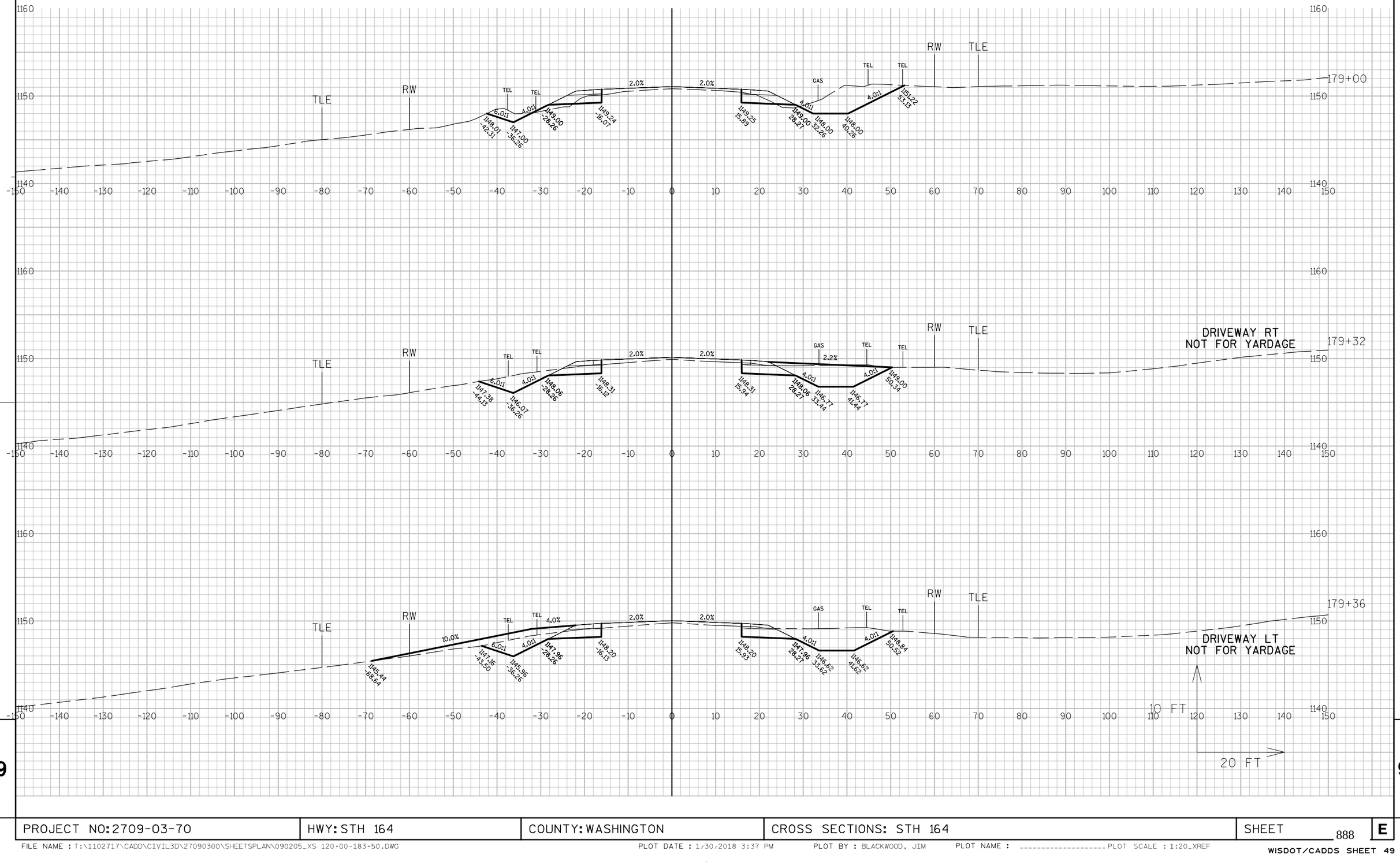


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 887	E

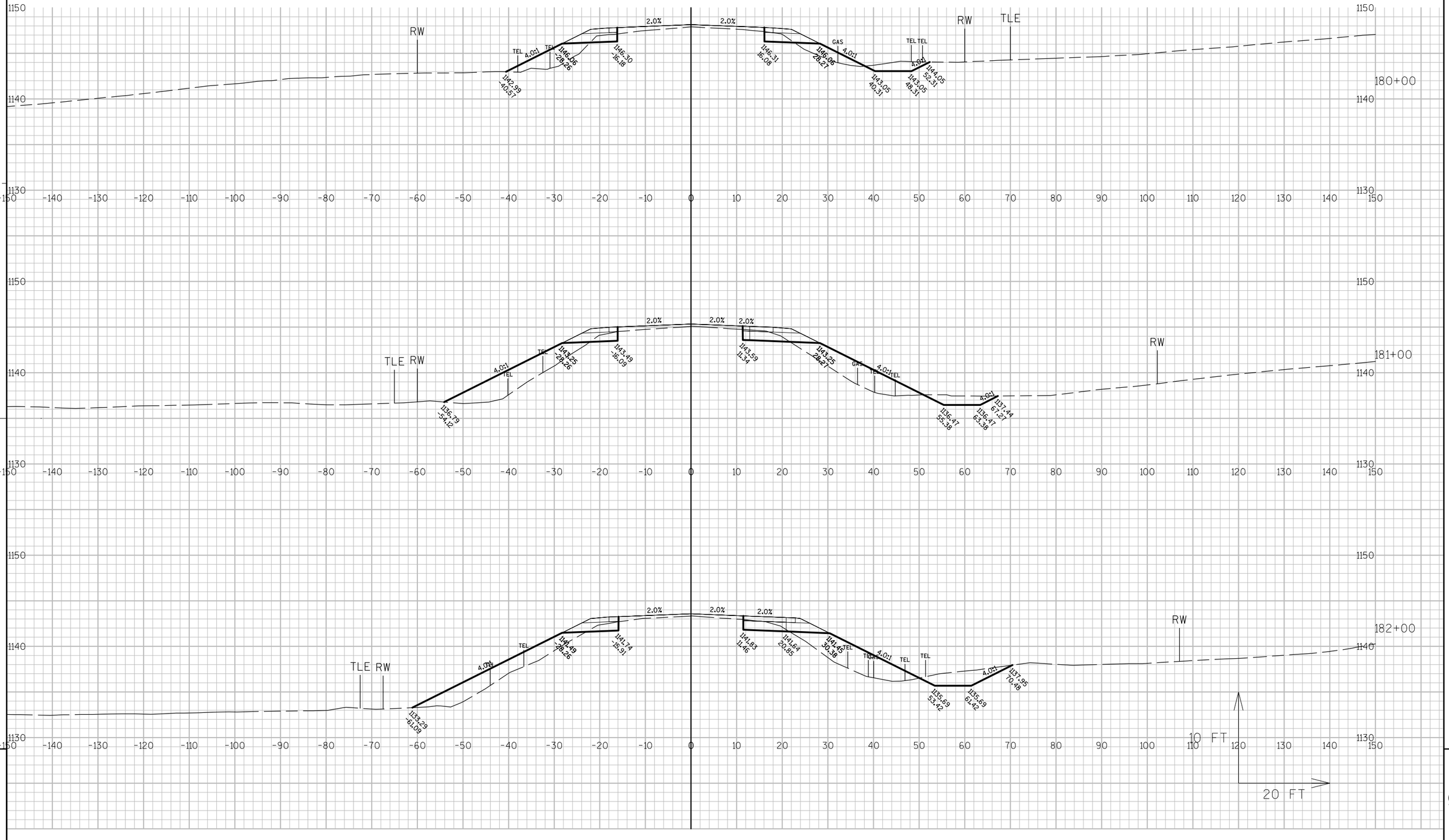
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 888	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090205_XS 120+00-183+50.DWG PLOT DATE : 1/30/2018 3:37 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

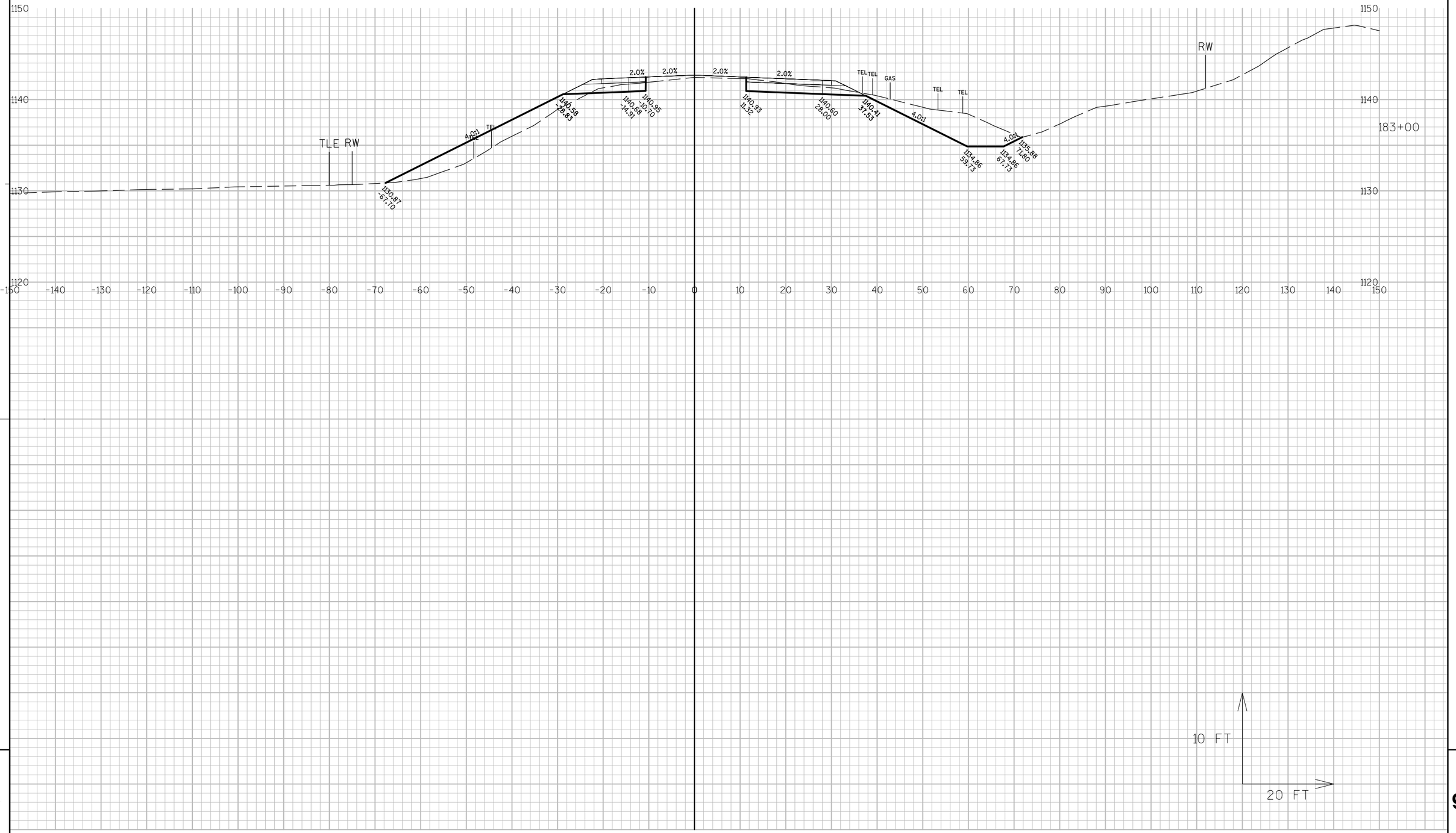
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 889	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090205_XS 120+00-183+50.DWG PLOT DATE : 1/30/2018 3:38 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

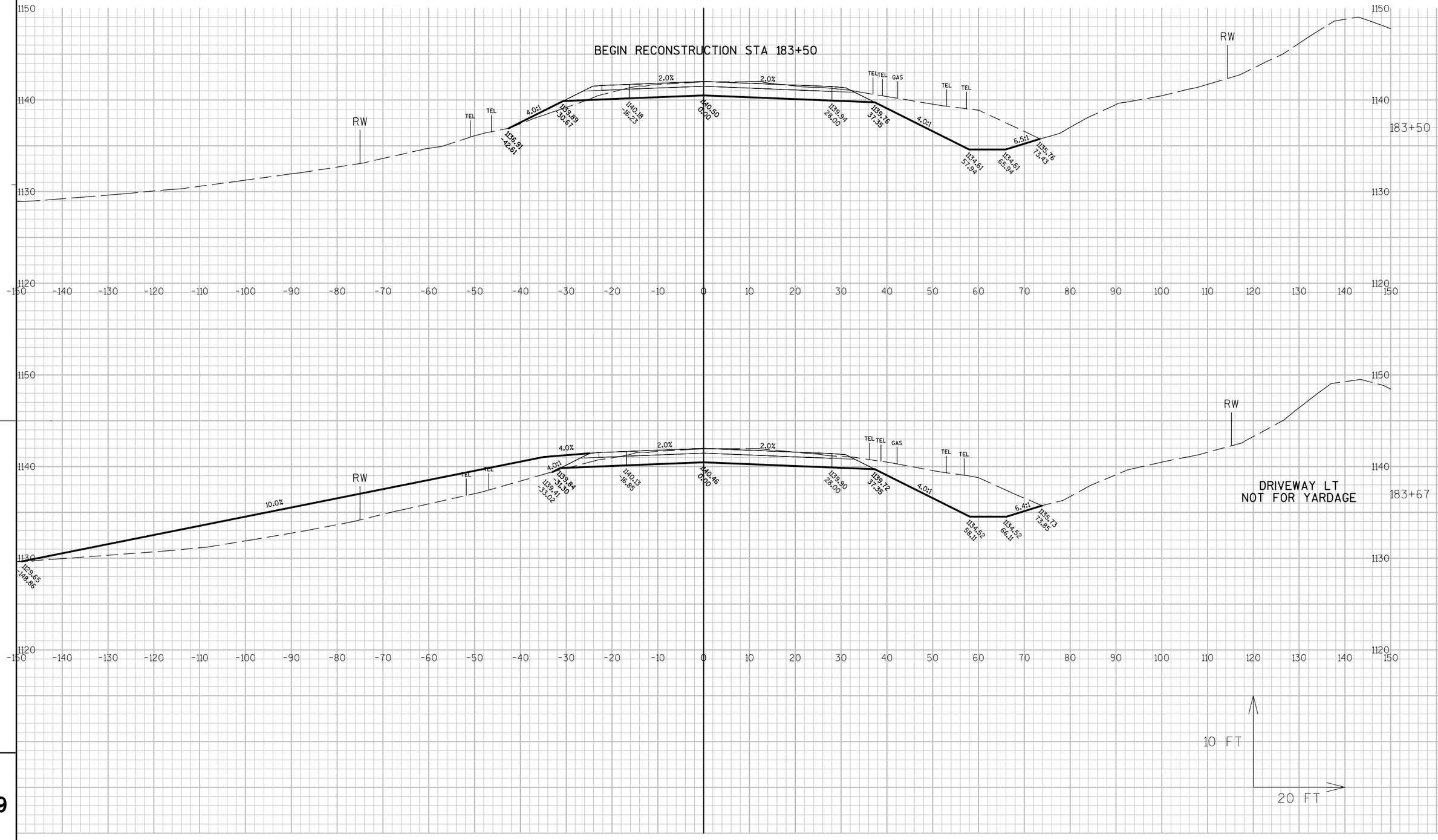


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 890	E

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WISDOT/CADDS SHEET 49

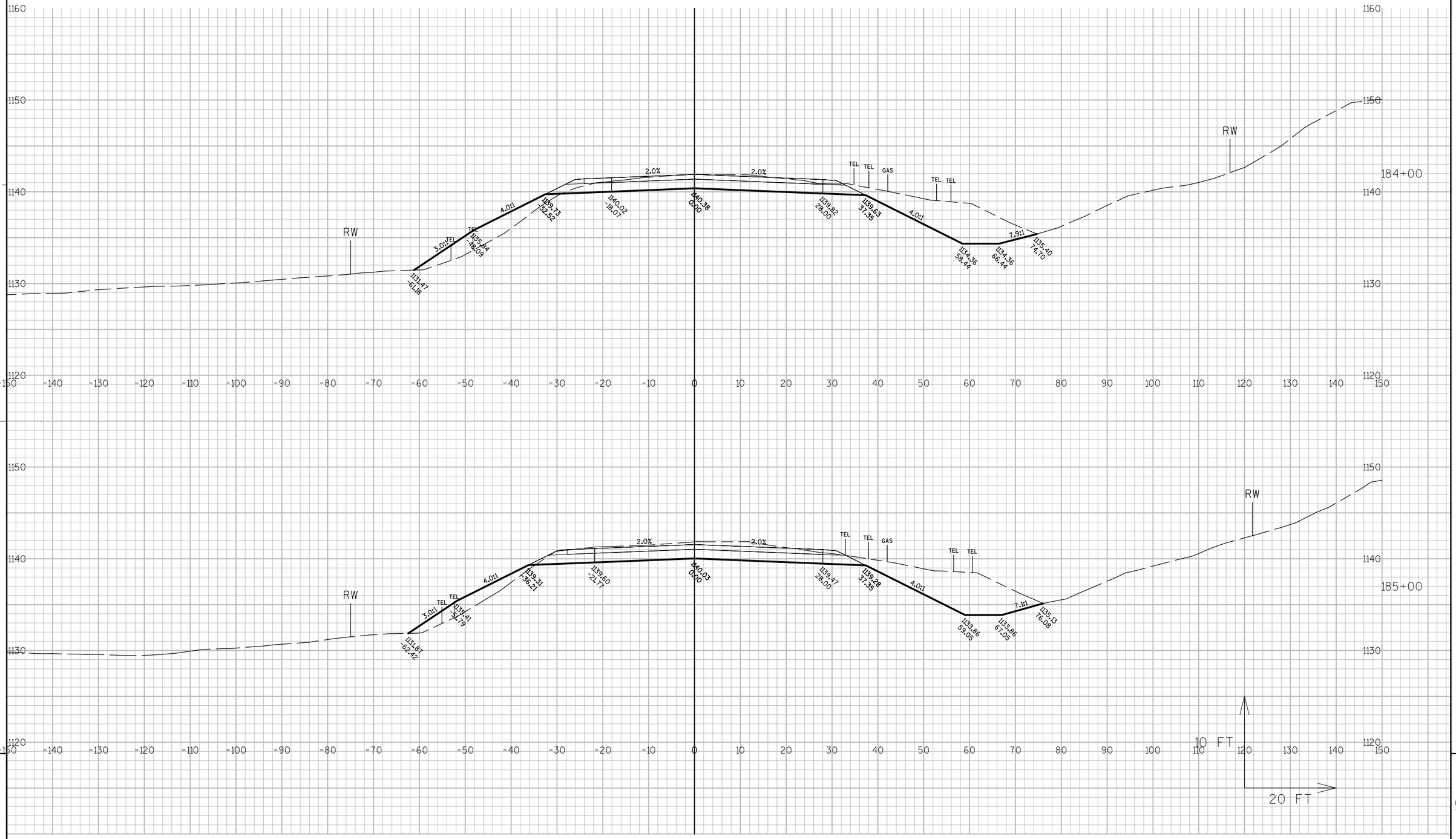
BEGIN RECONSTRUCTION STA 183+50



9

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 891	E



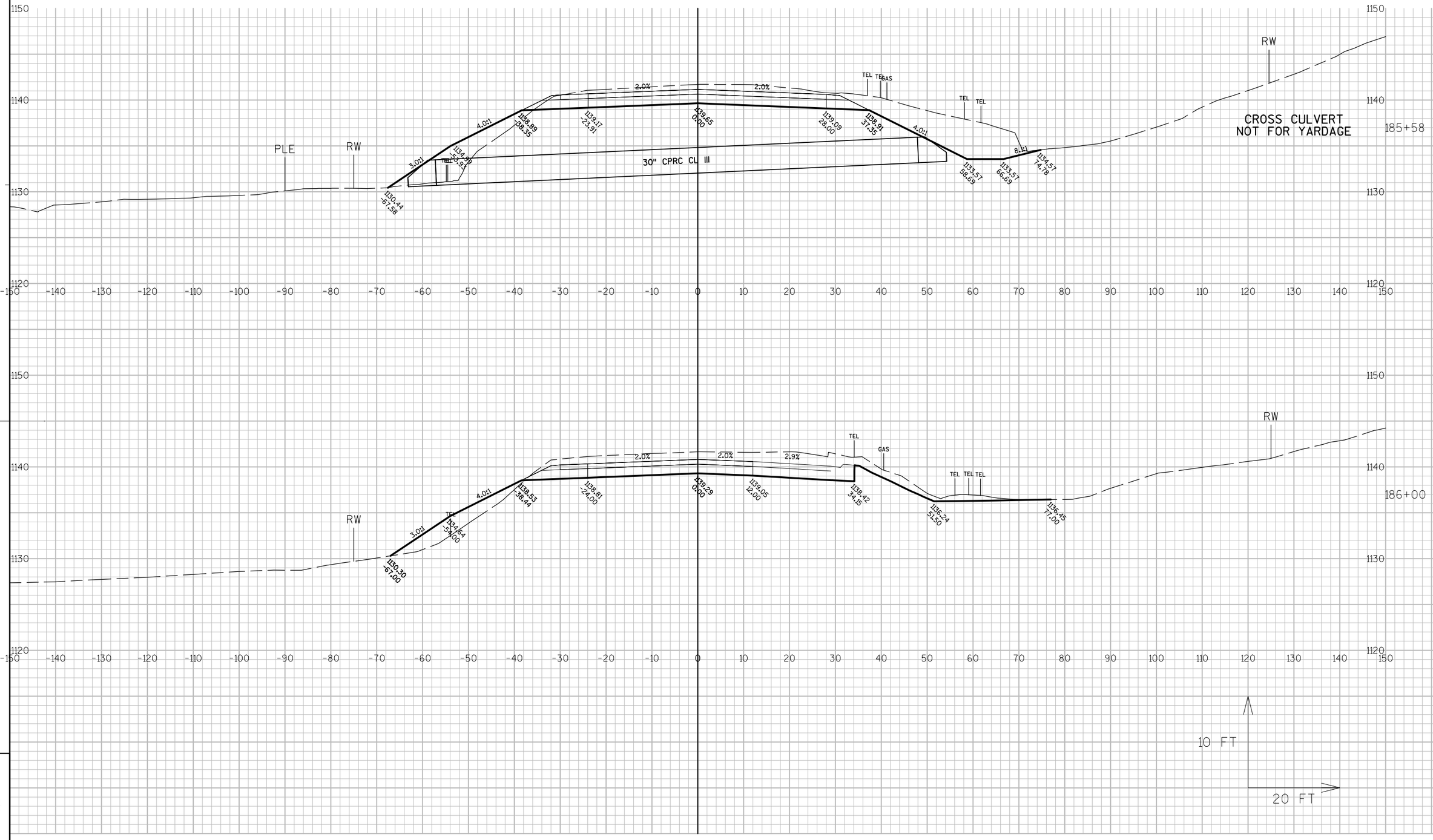
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 892	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:20 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

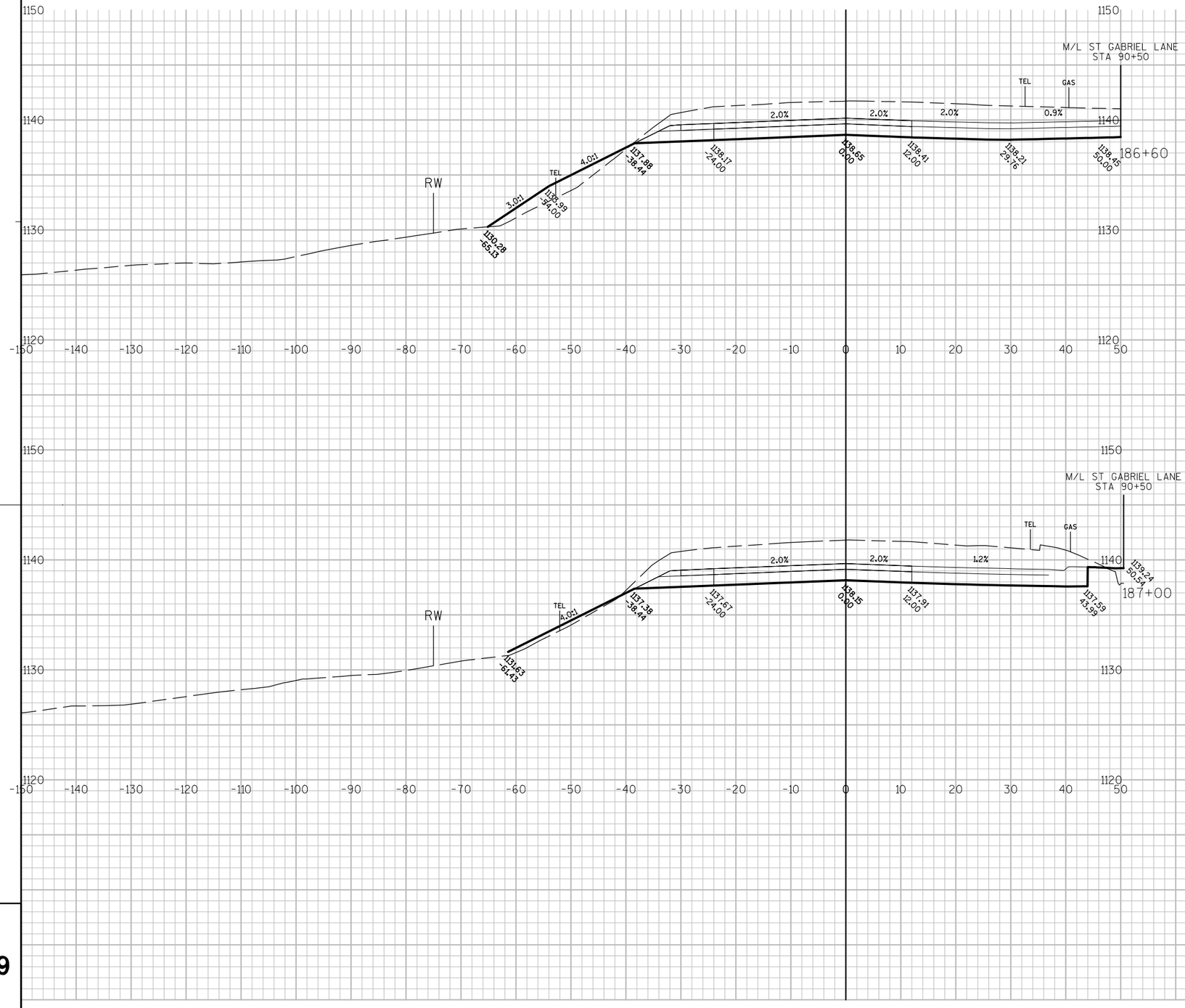
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 893	E



ST GABRIEL LANE
NOT FOR YARDAGE

ST GABRIEL LANE

10 FT

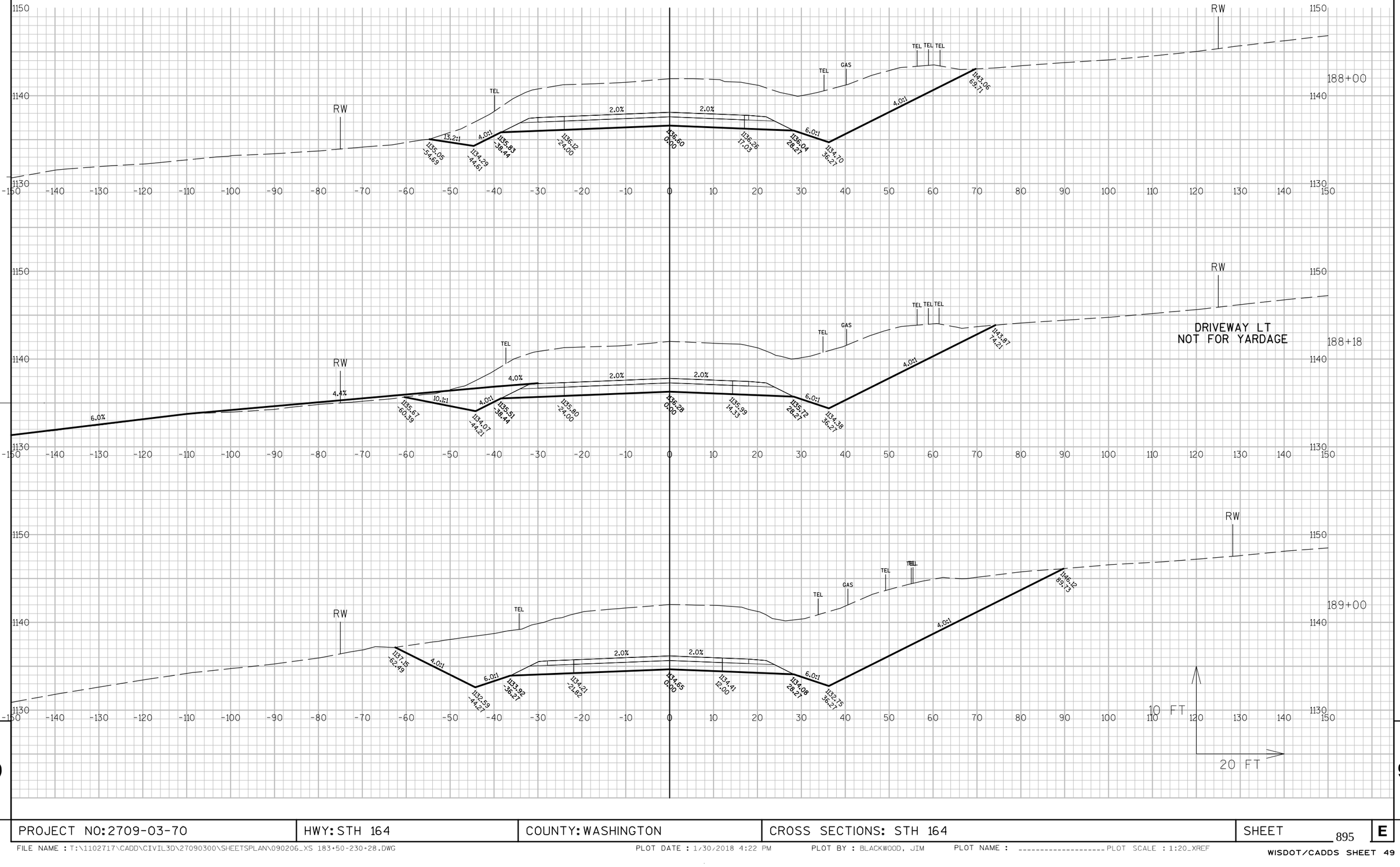
20 FT

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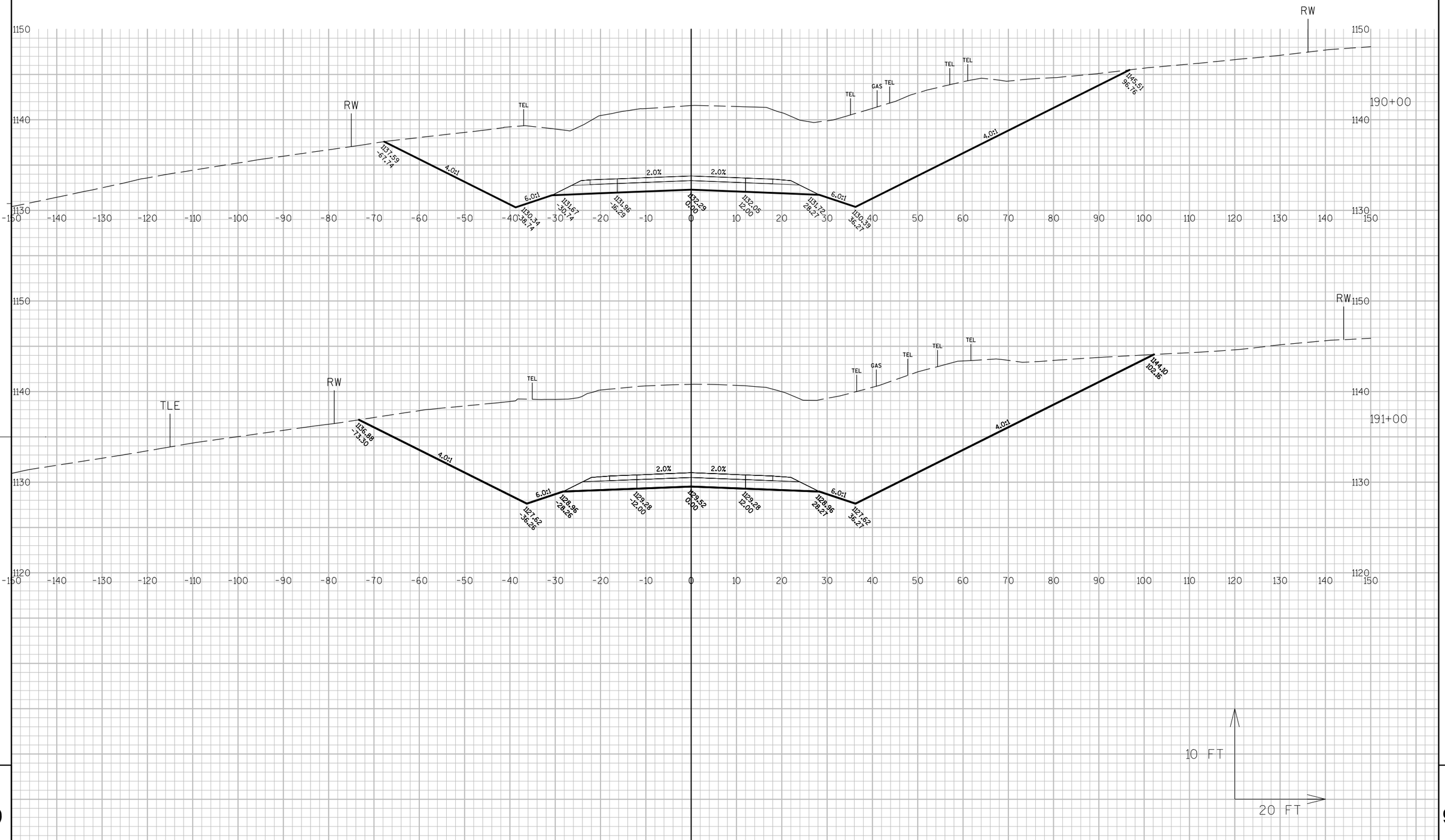
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 895	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 896	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:23 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

DRIVEWAY LT
NOT FOR YARDAGE

191+25

TLE
RW
TEL
GAS
1135.31
-107.37
1137.31
-78.01
8.0%
4.0:1
1.0%
6.0:1
1128.20
-28.26
1126.87
-36.26
1128.53
-12.00
2.0%
1128.77
0.00
1128.53
12.00
1128.20
28.27
1126.87
36.27
1143.95
104.63

192+00

1134.37
-75.92
1125.79
-28.26
1124.45
-36.25
1126.11
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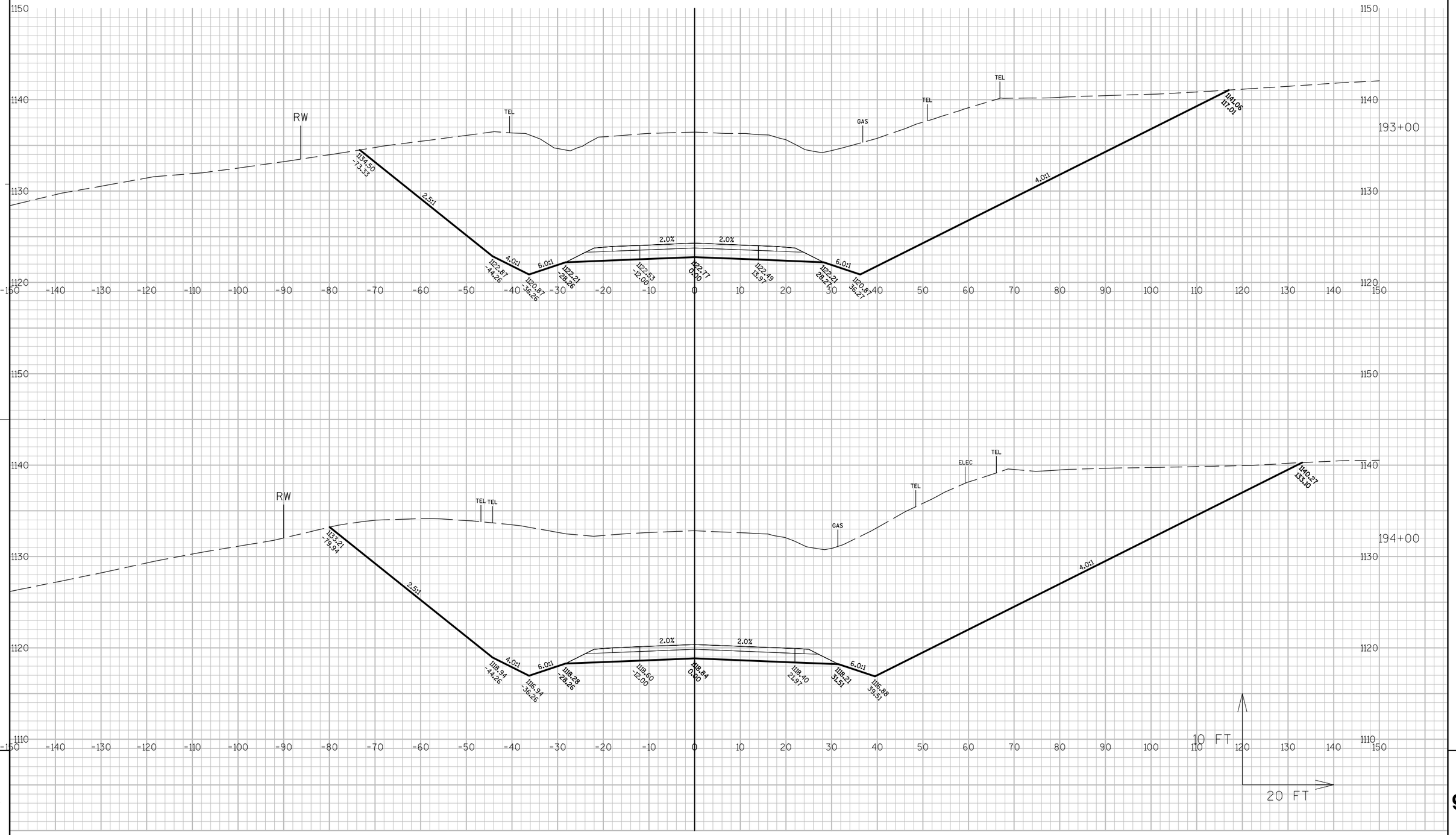
10 FT
20 FT

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 897	E

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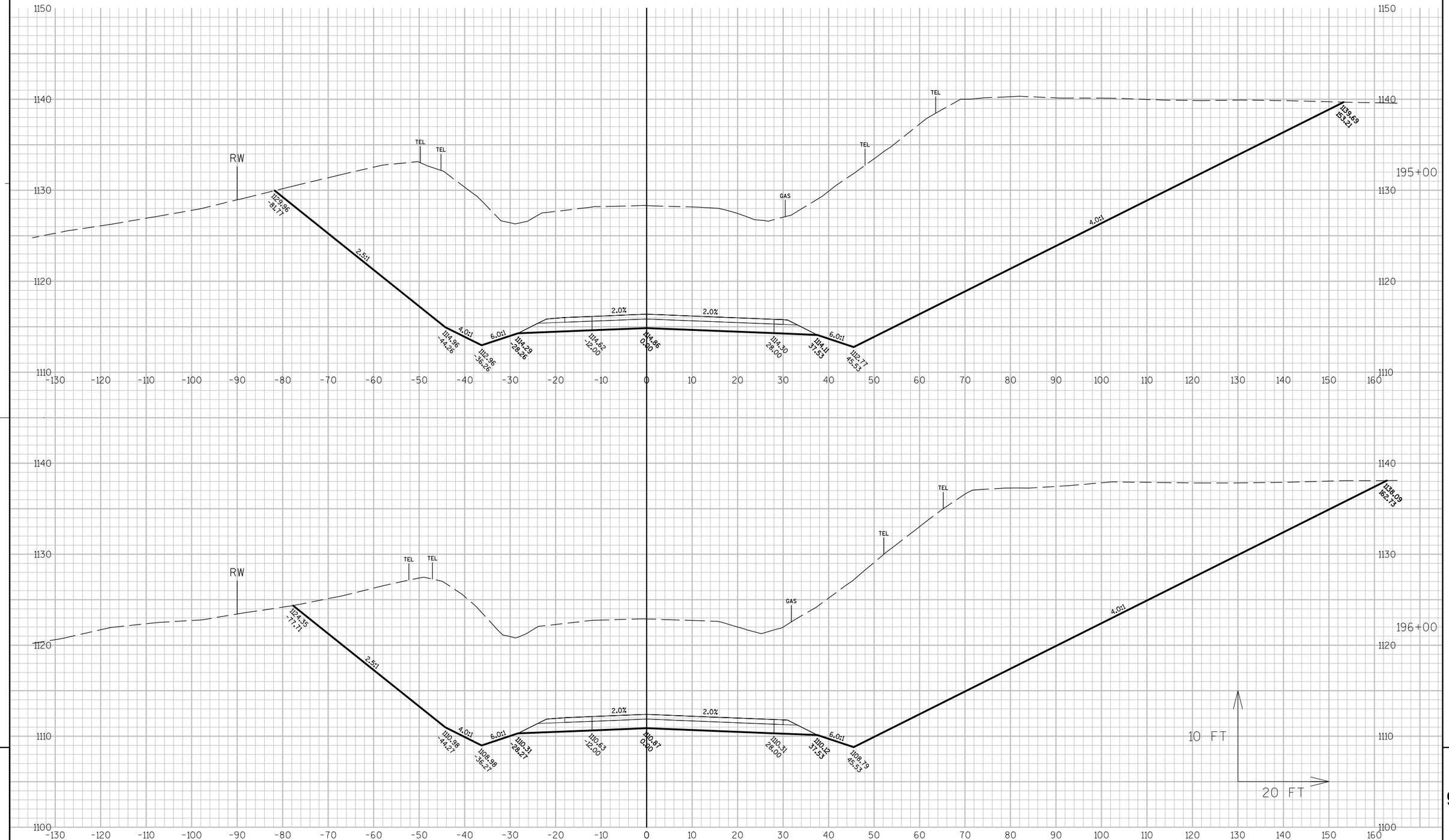
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 898	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:24 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

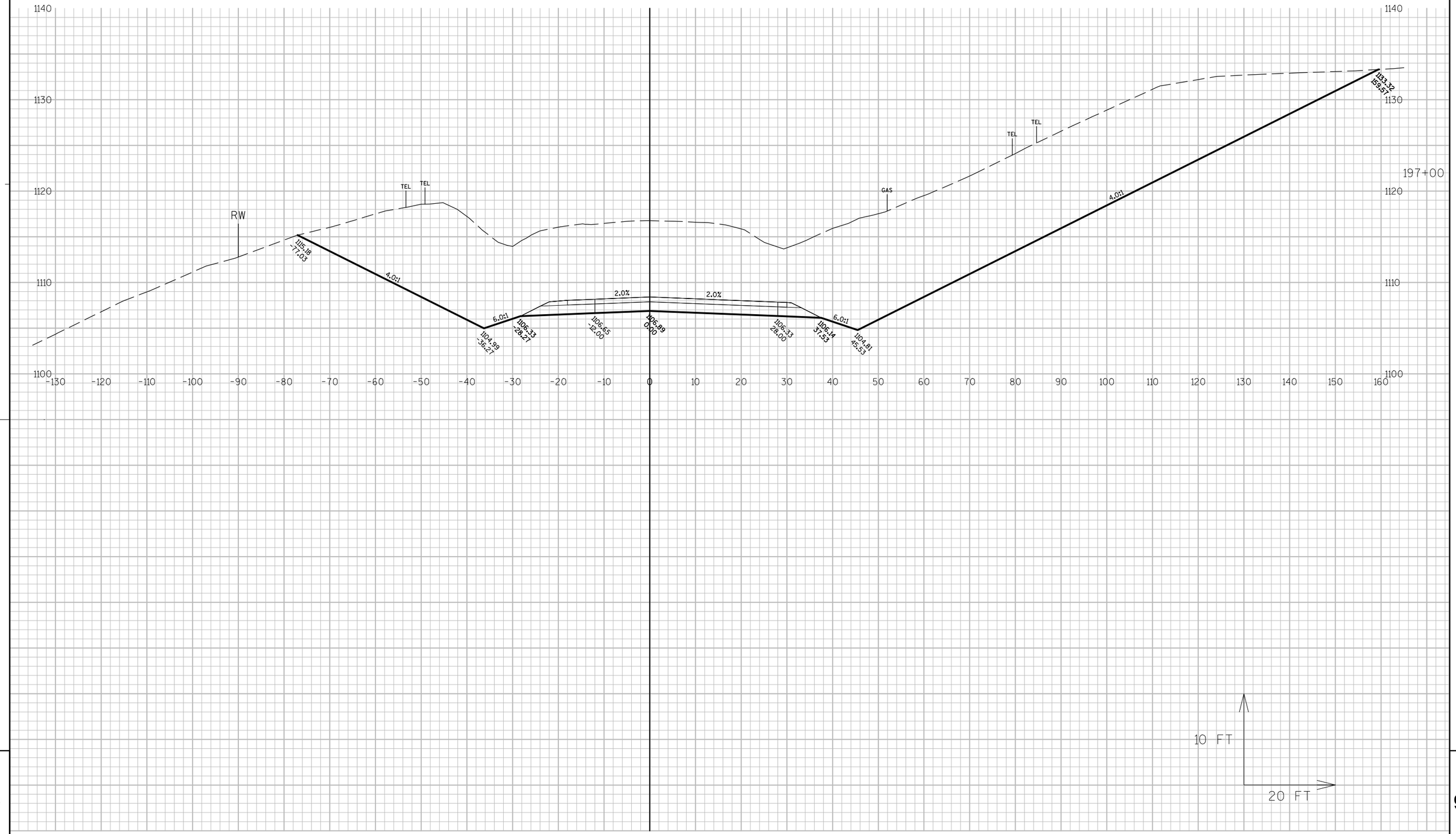


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 899	E

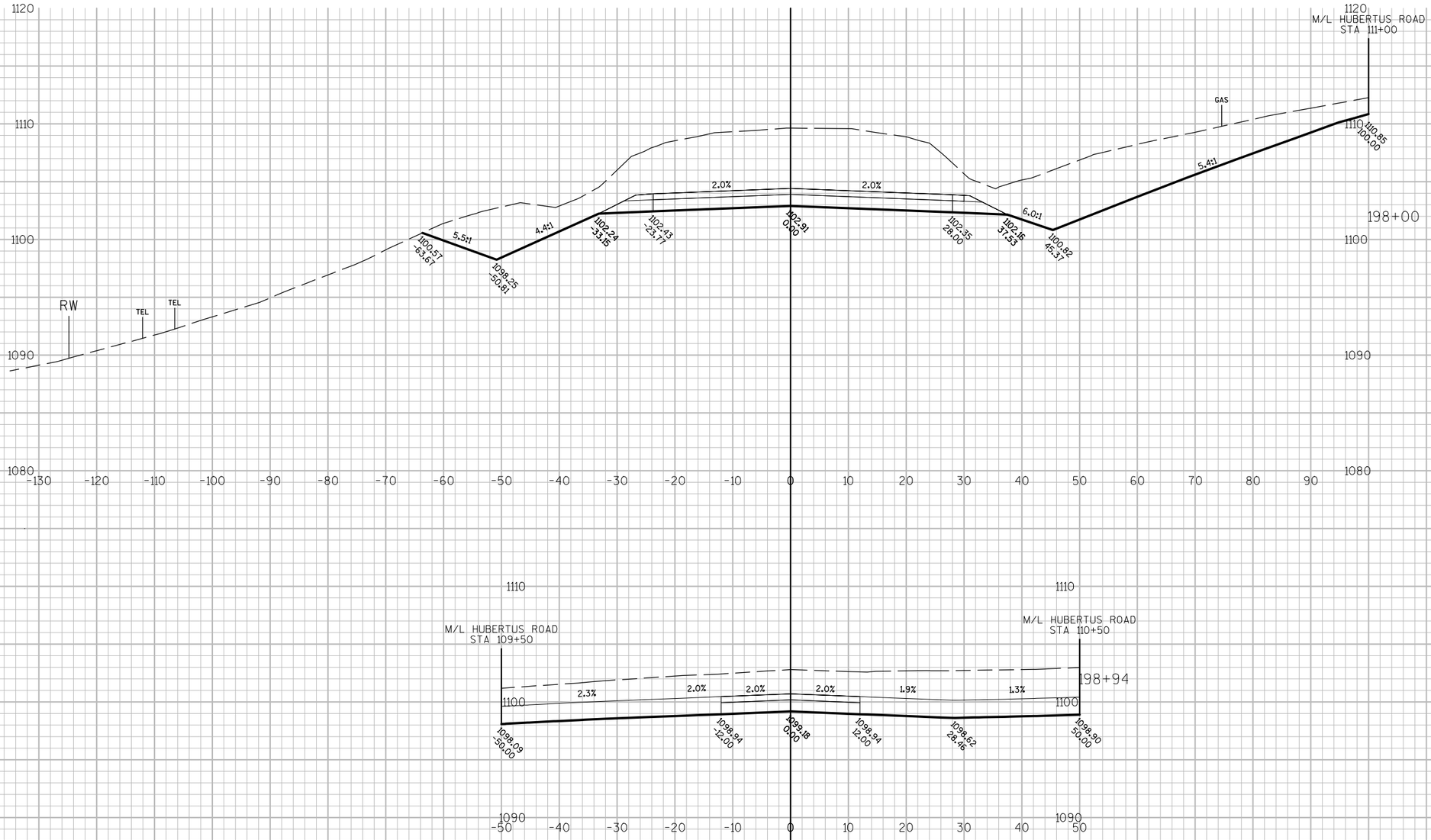
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 900	E

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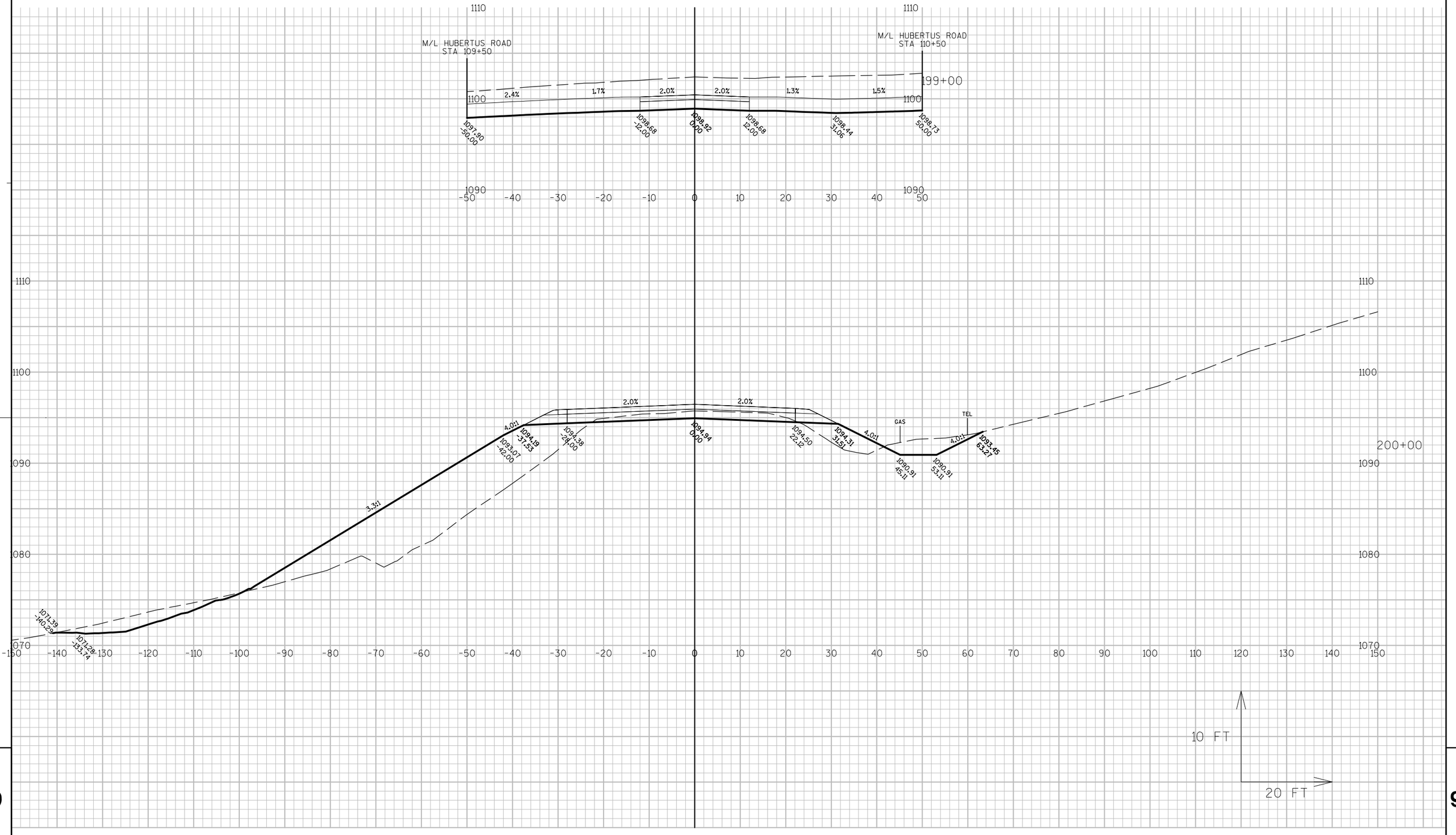
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 901	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:26 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

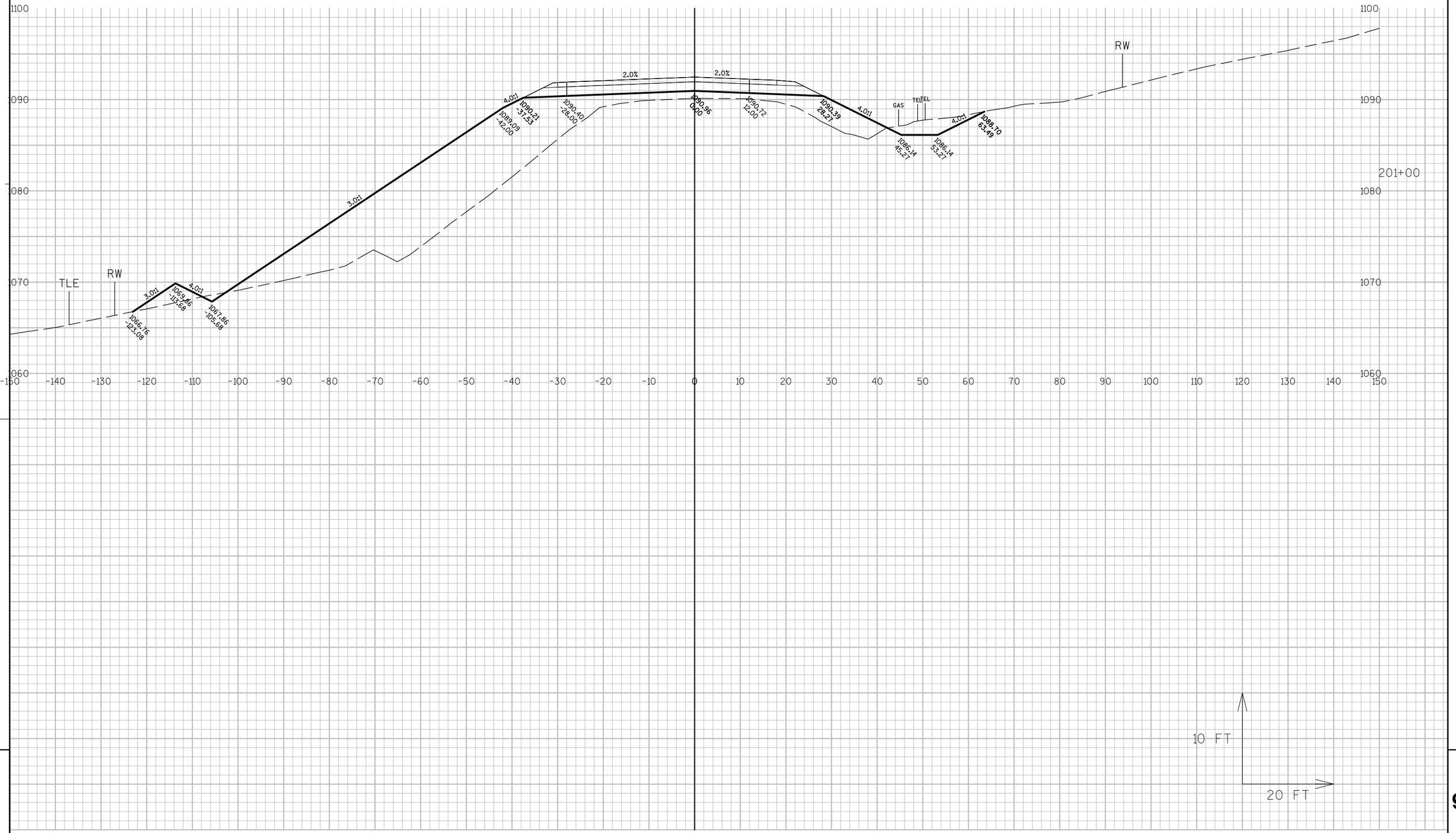
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 902	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:26 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



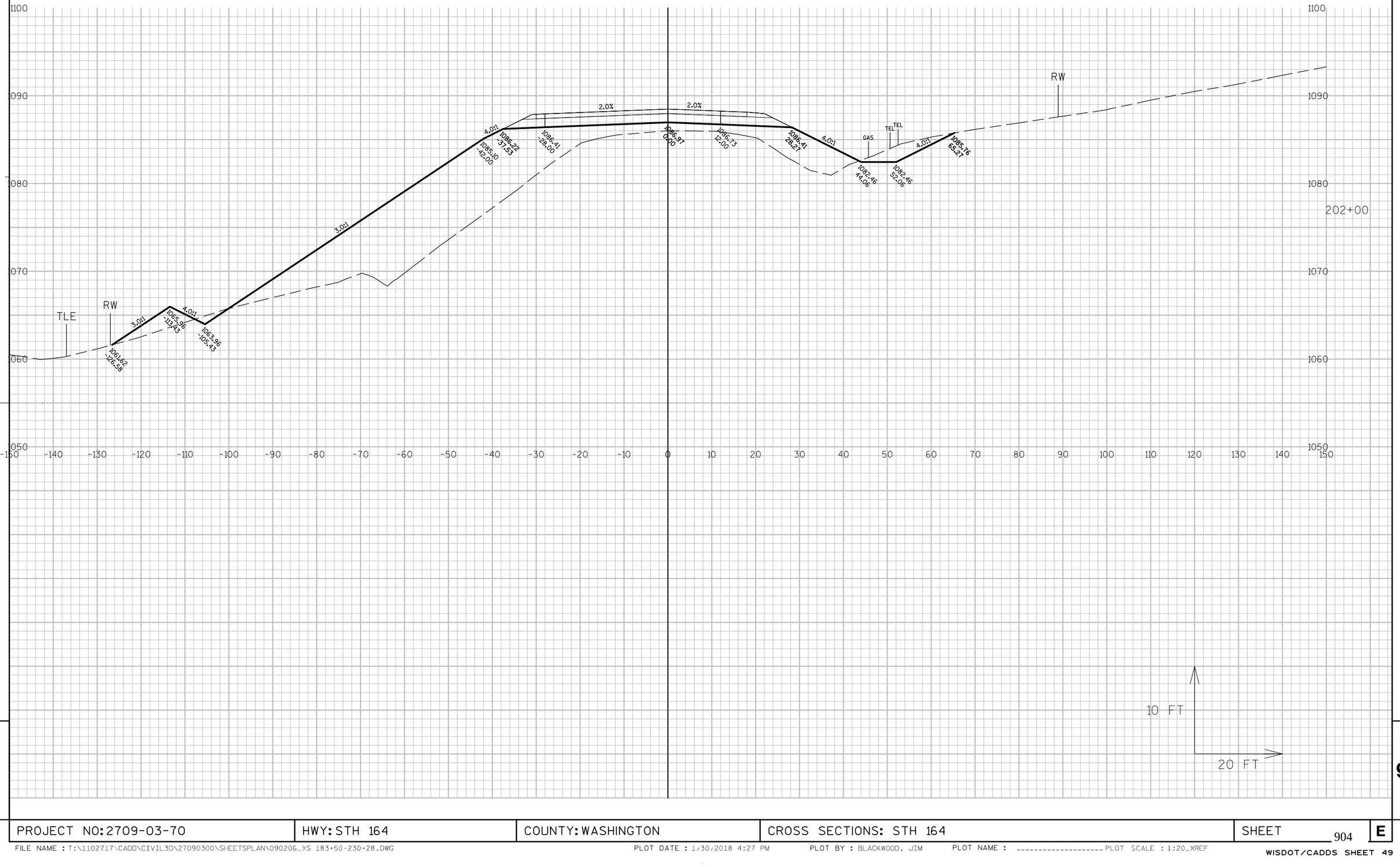
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 903	E

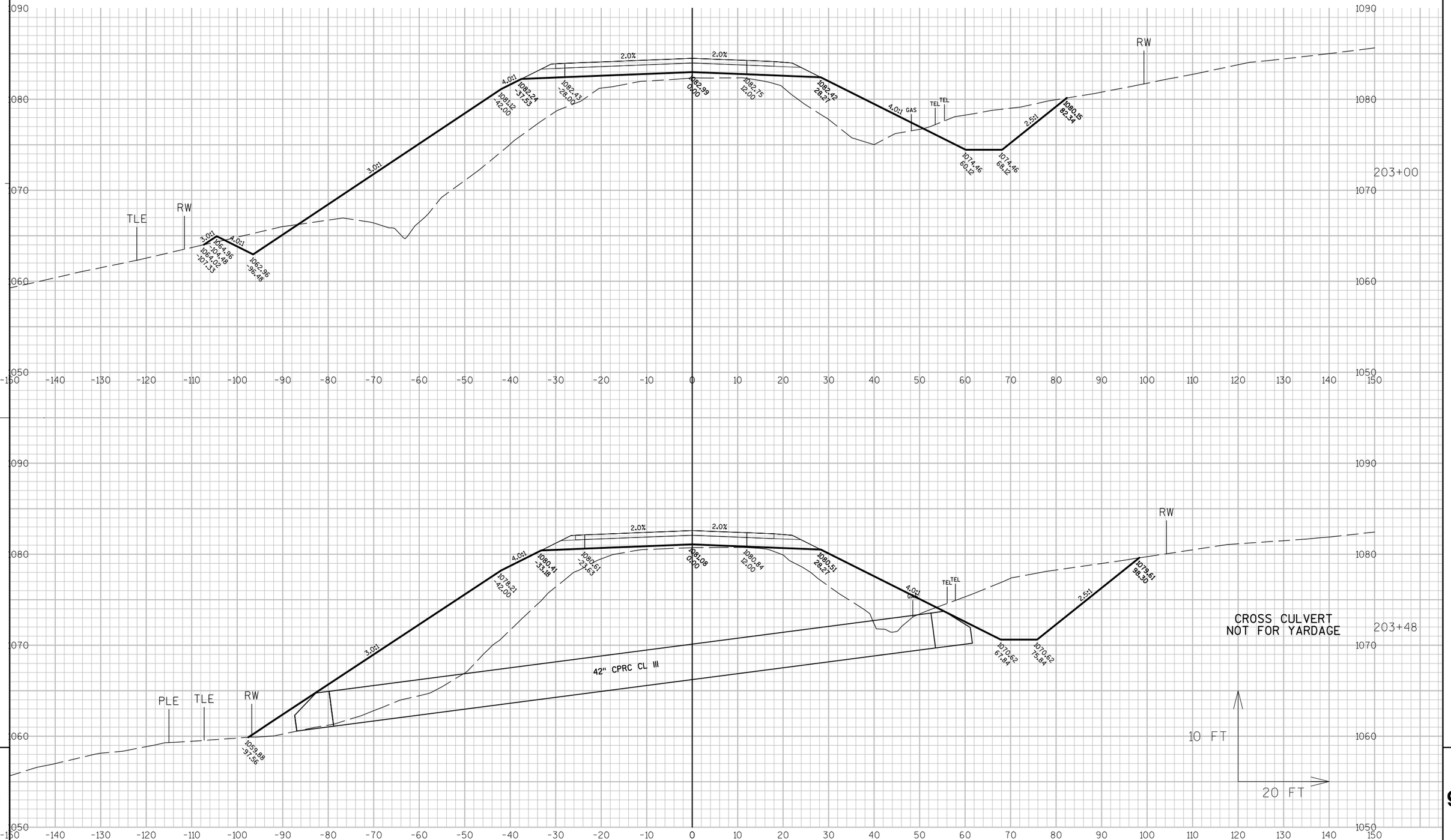
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WISDOT/CADDS SHEET 49

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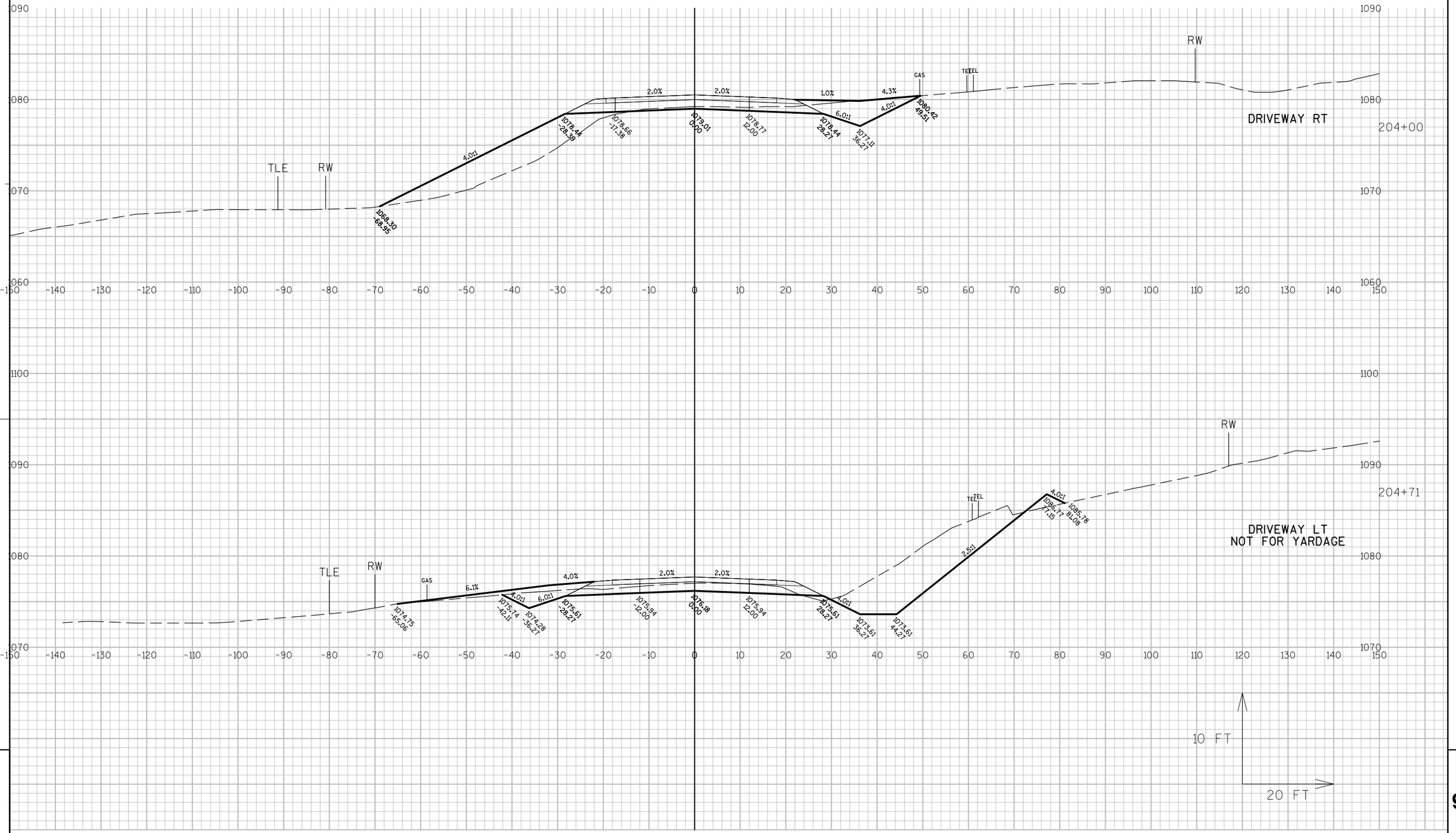
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 905	E

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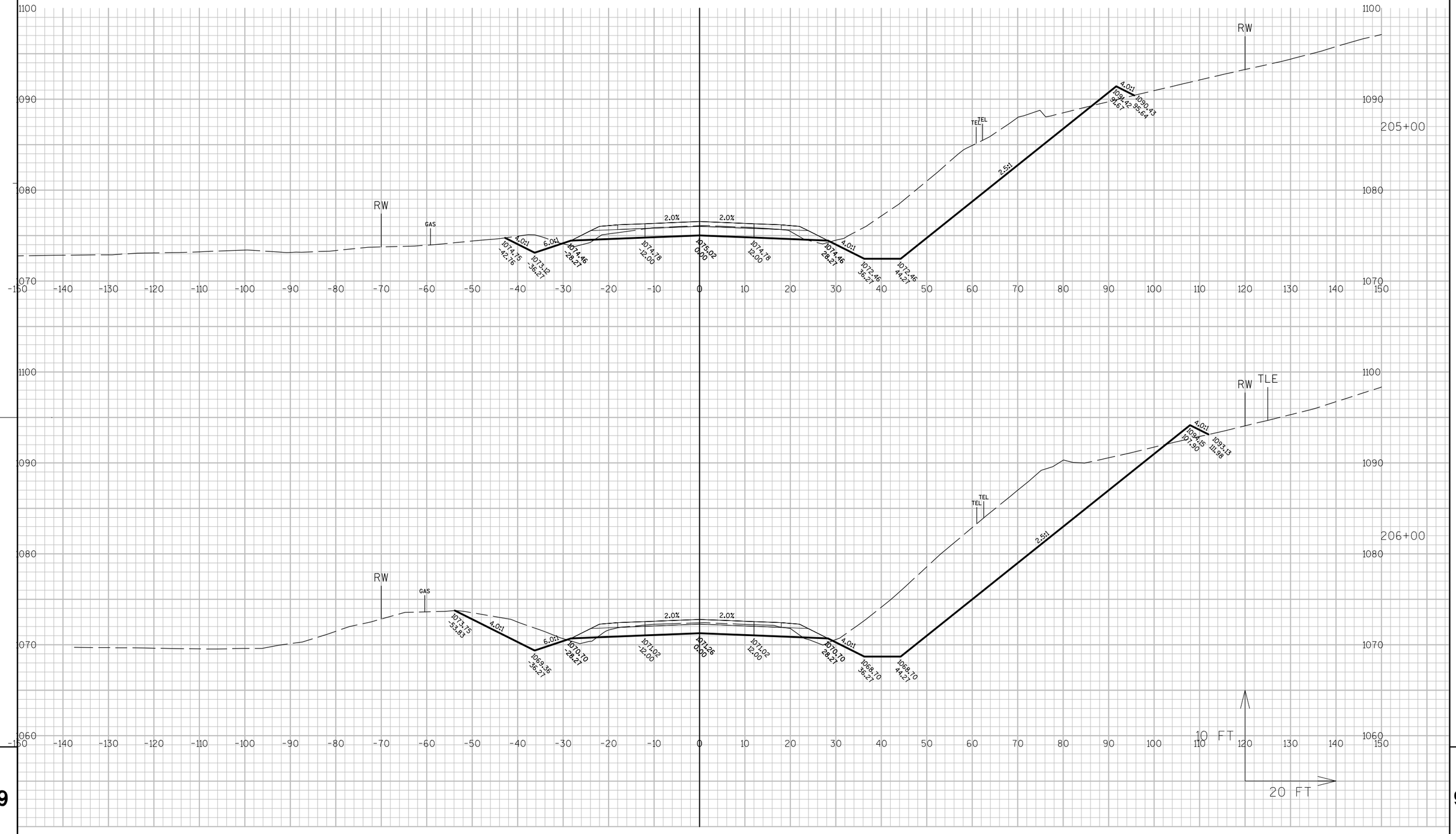
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 906	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:29 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

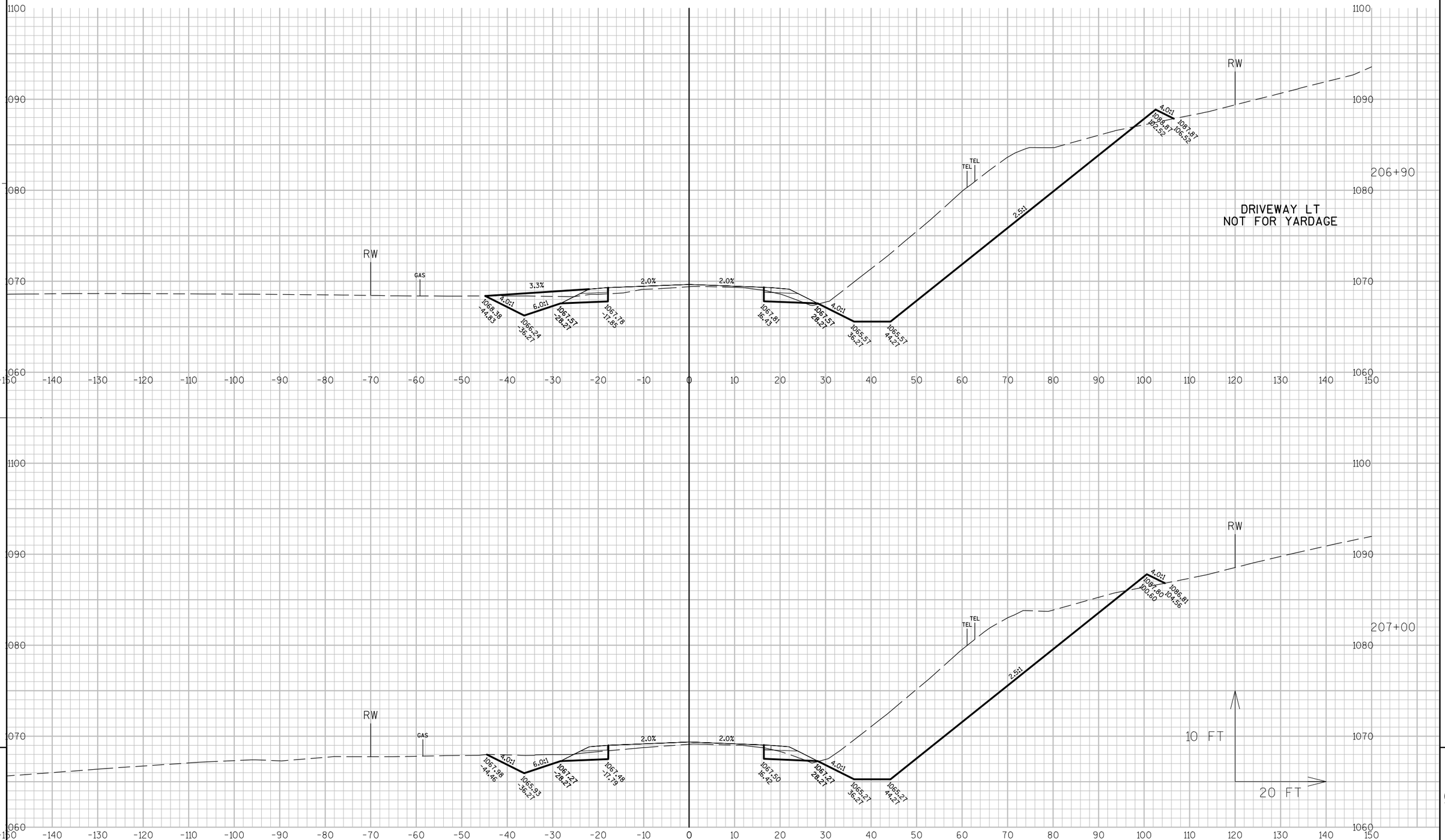
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 907	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:30 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

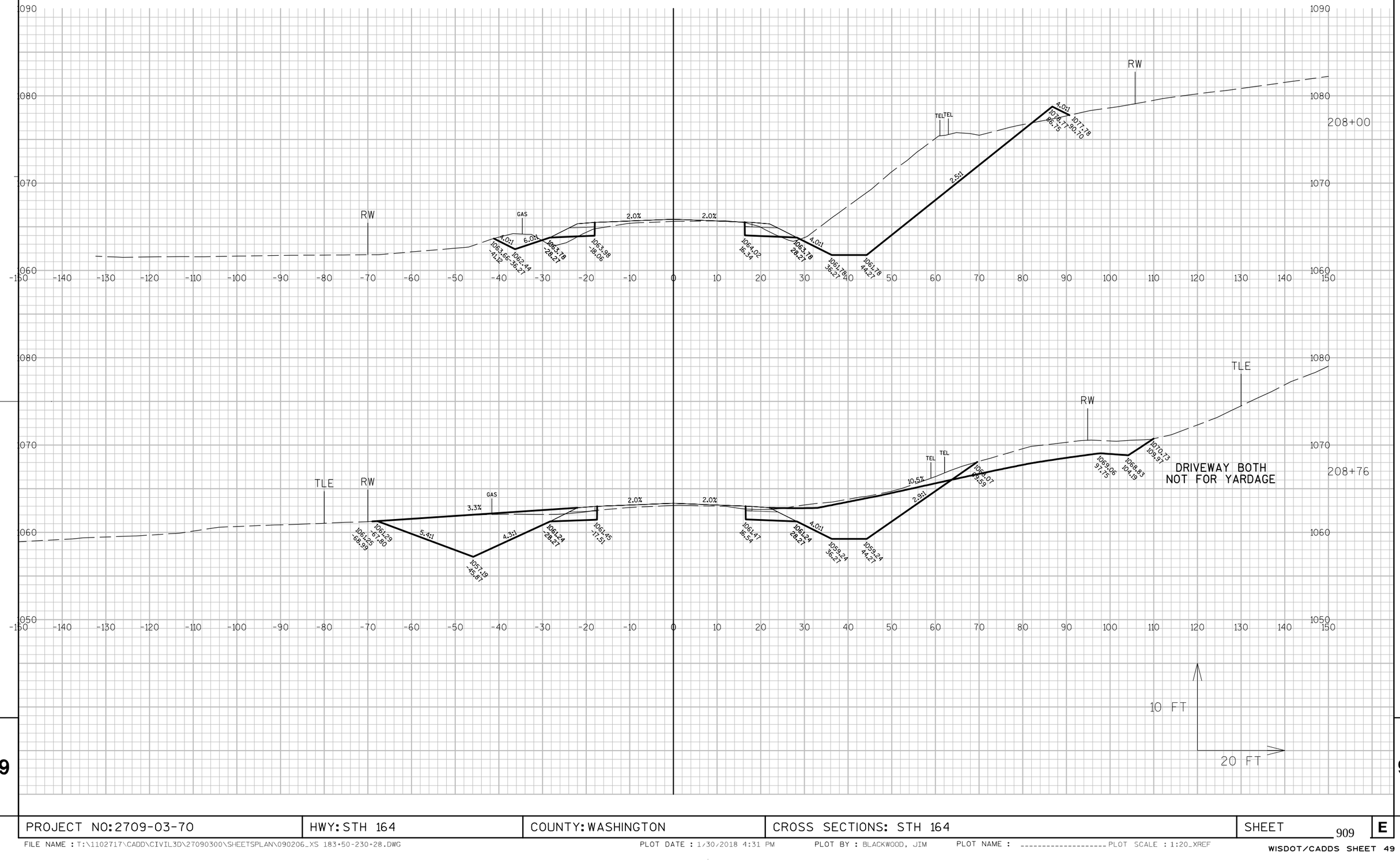
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 908	E

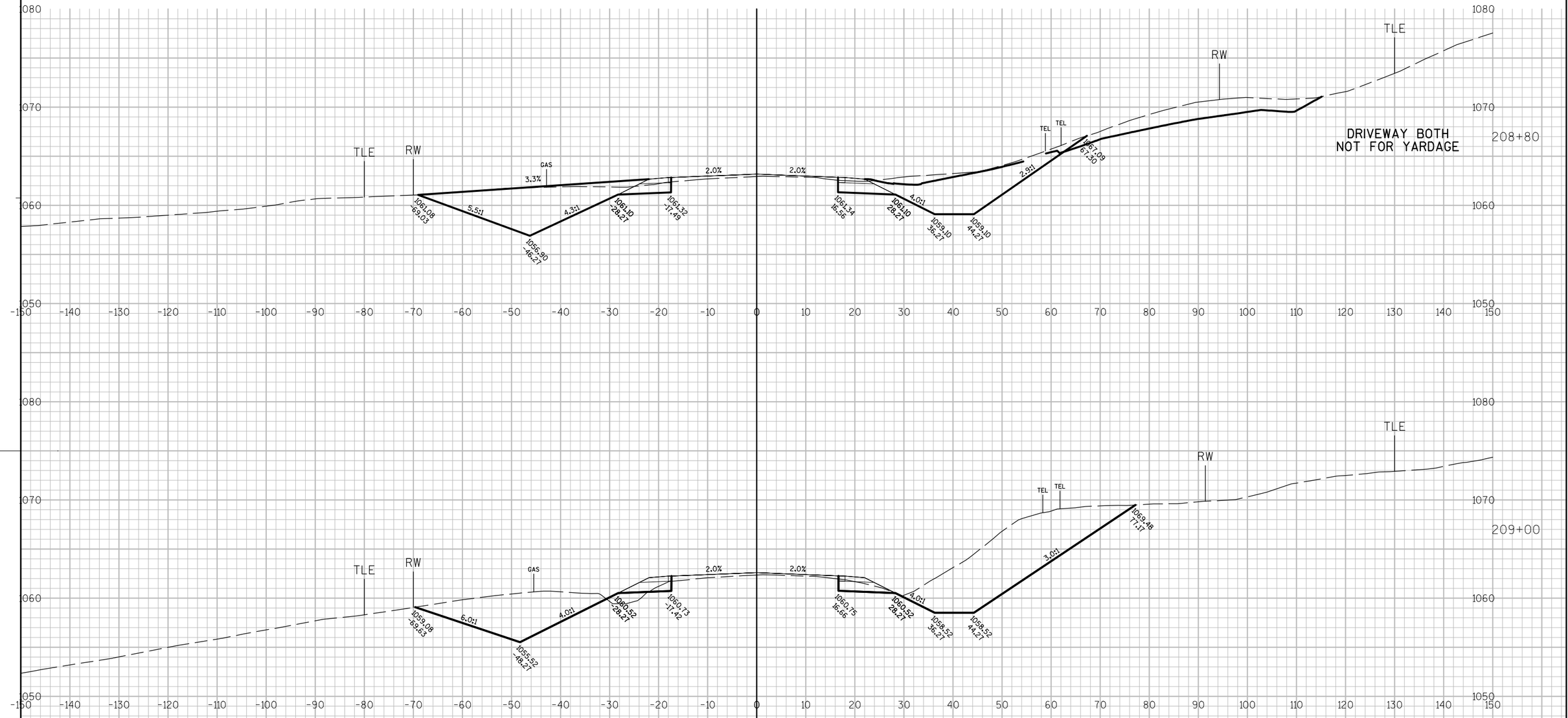
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:31 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



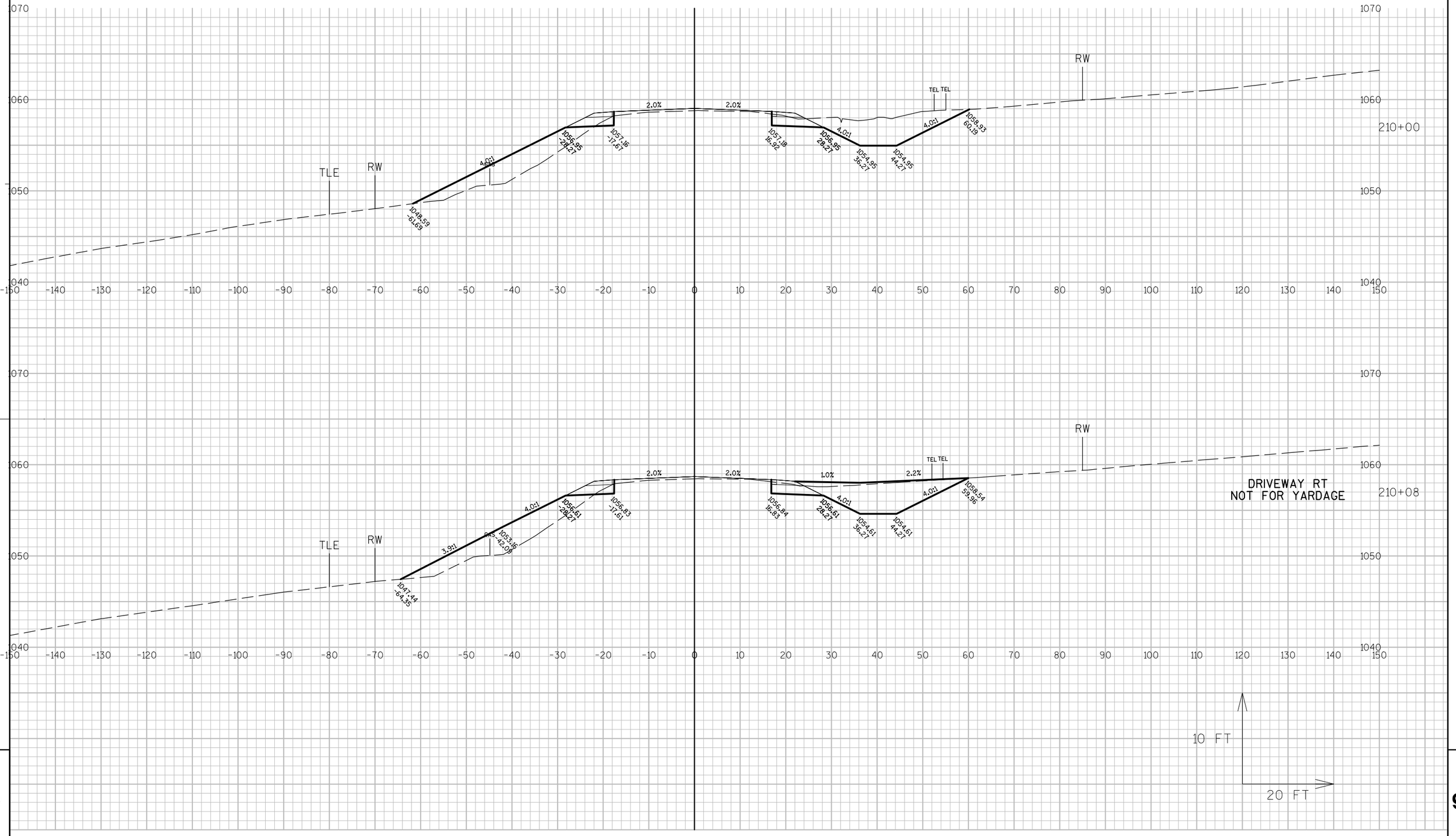
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 909	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:31 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 910	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:32 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF



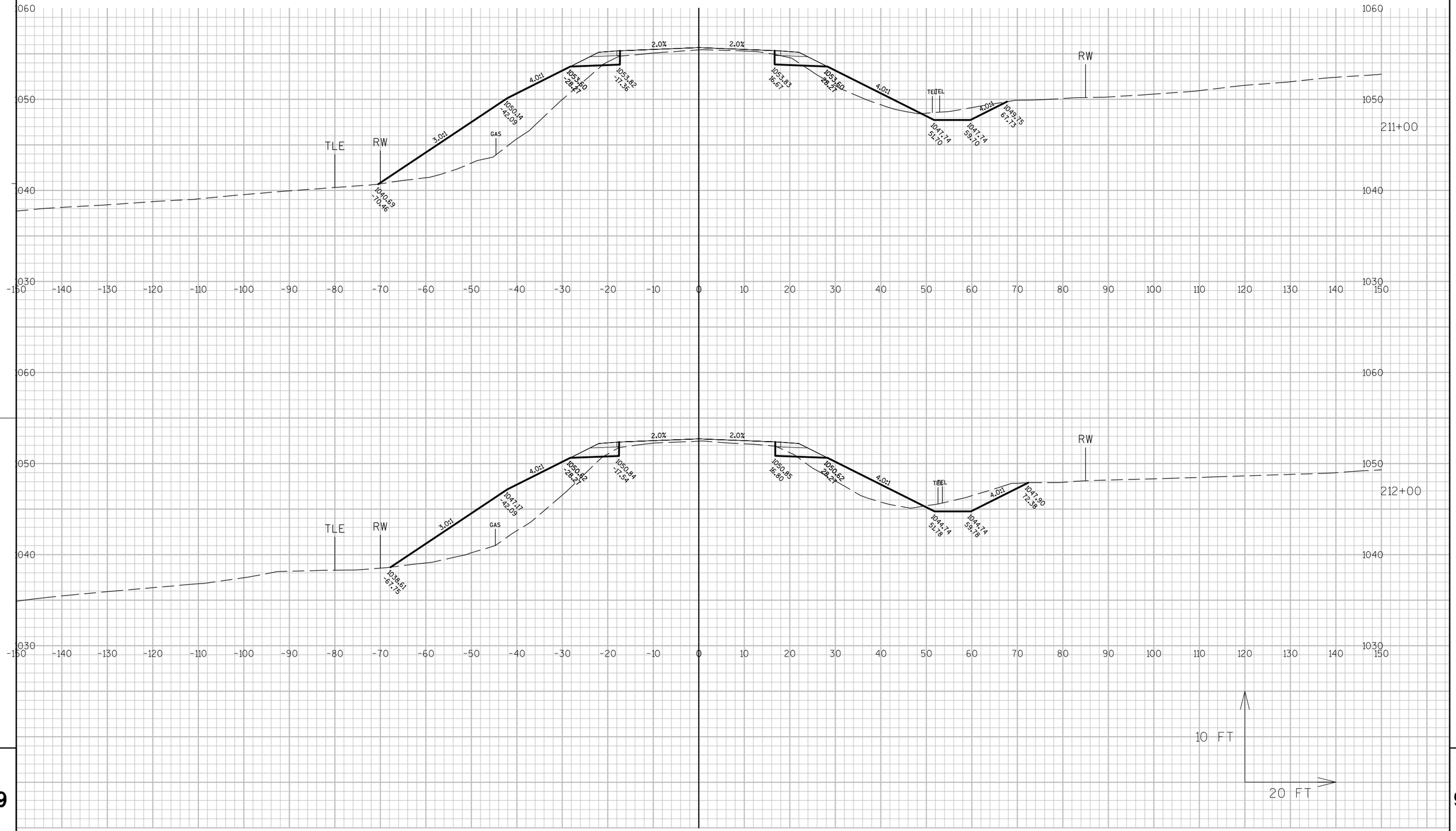
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 911	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:33 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

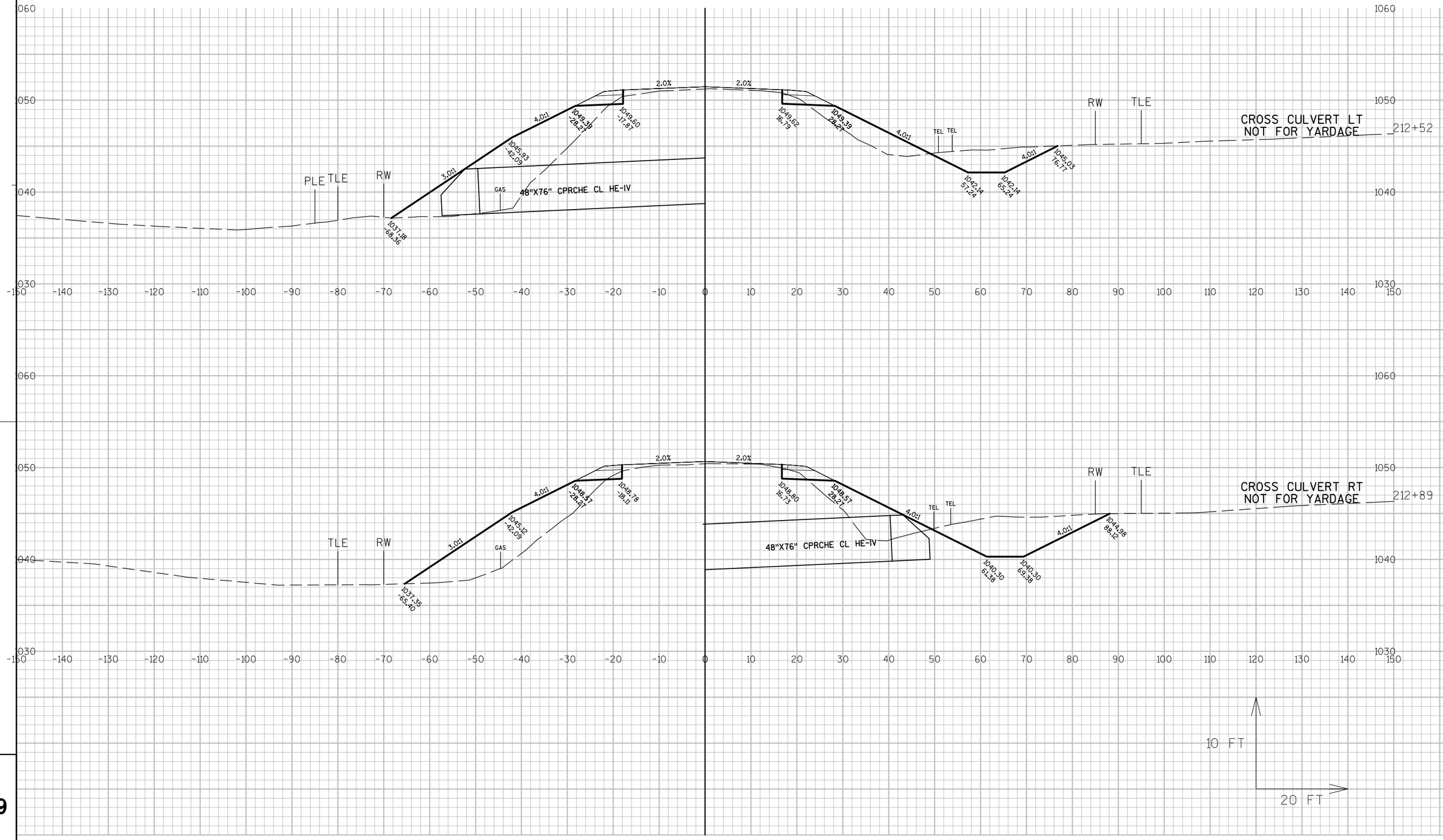
WISDOT/CADDS SHEET 49



9

9

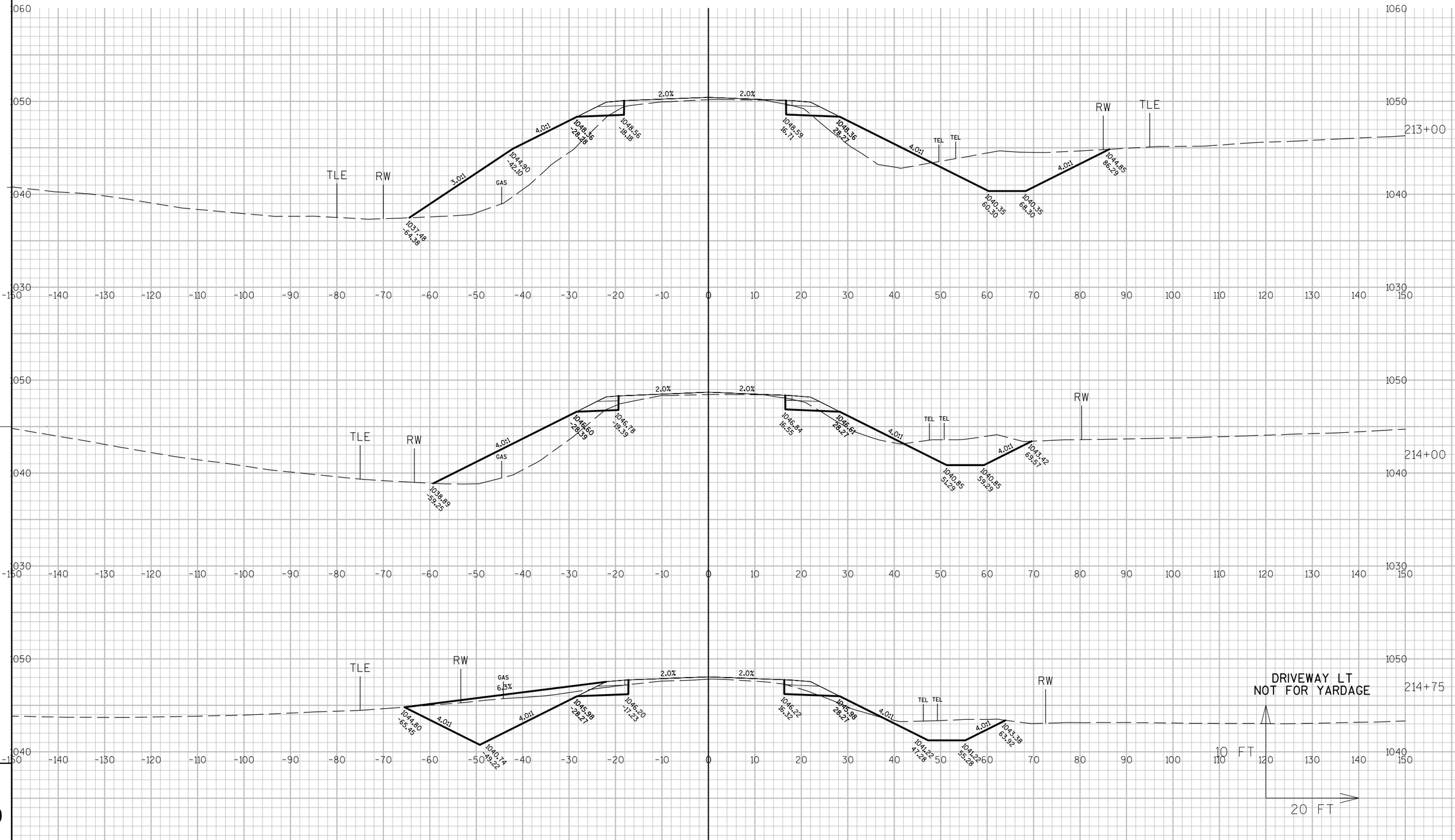
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 912	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 913	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:34 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

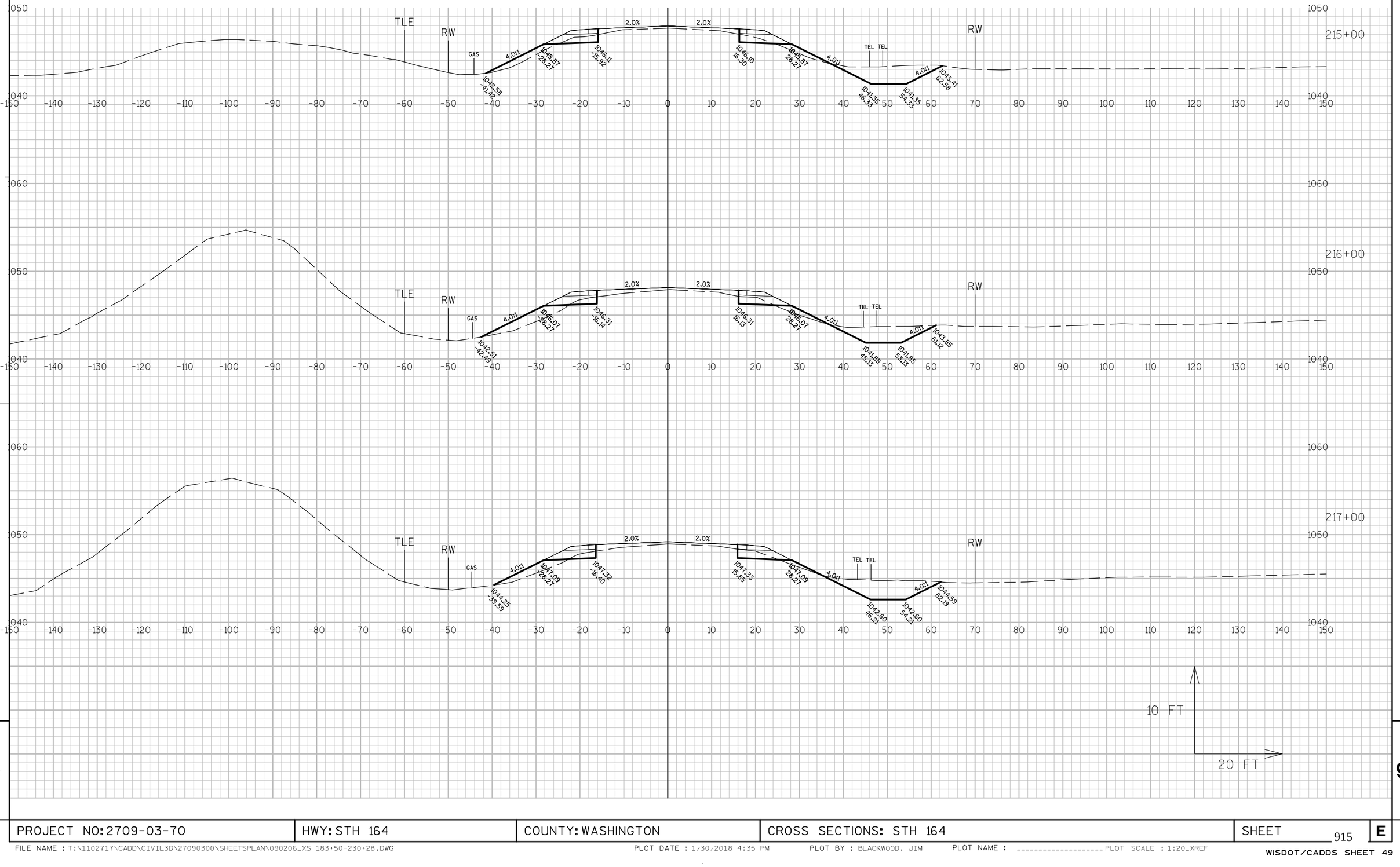
WISDOT/CADDS SHEET 49



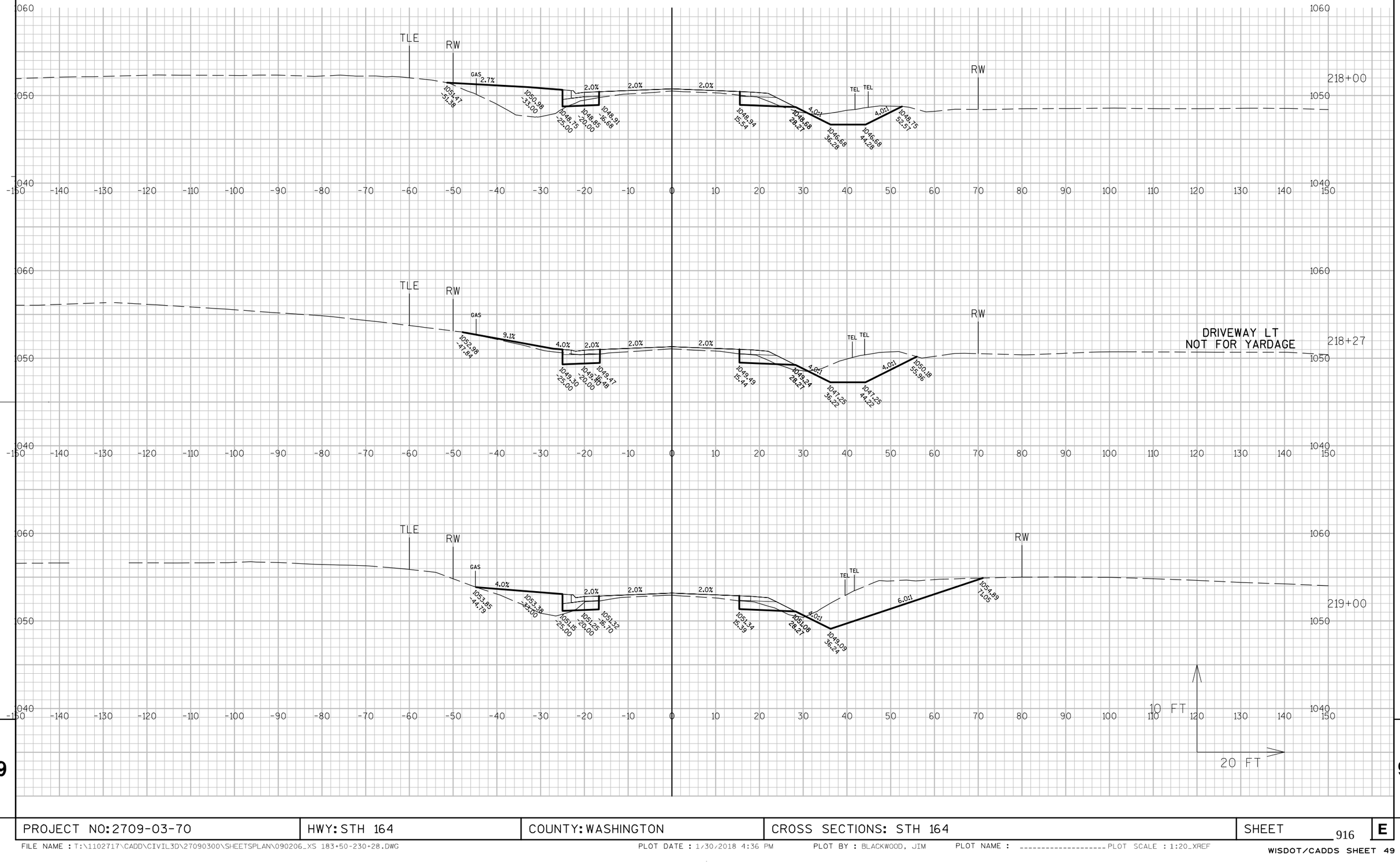
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 914	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:35 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



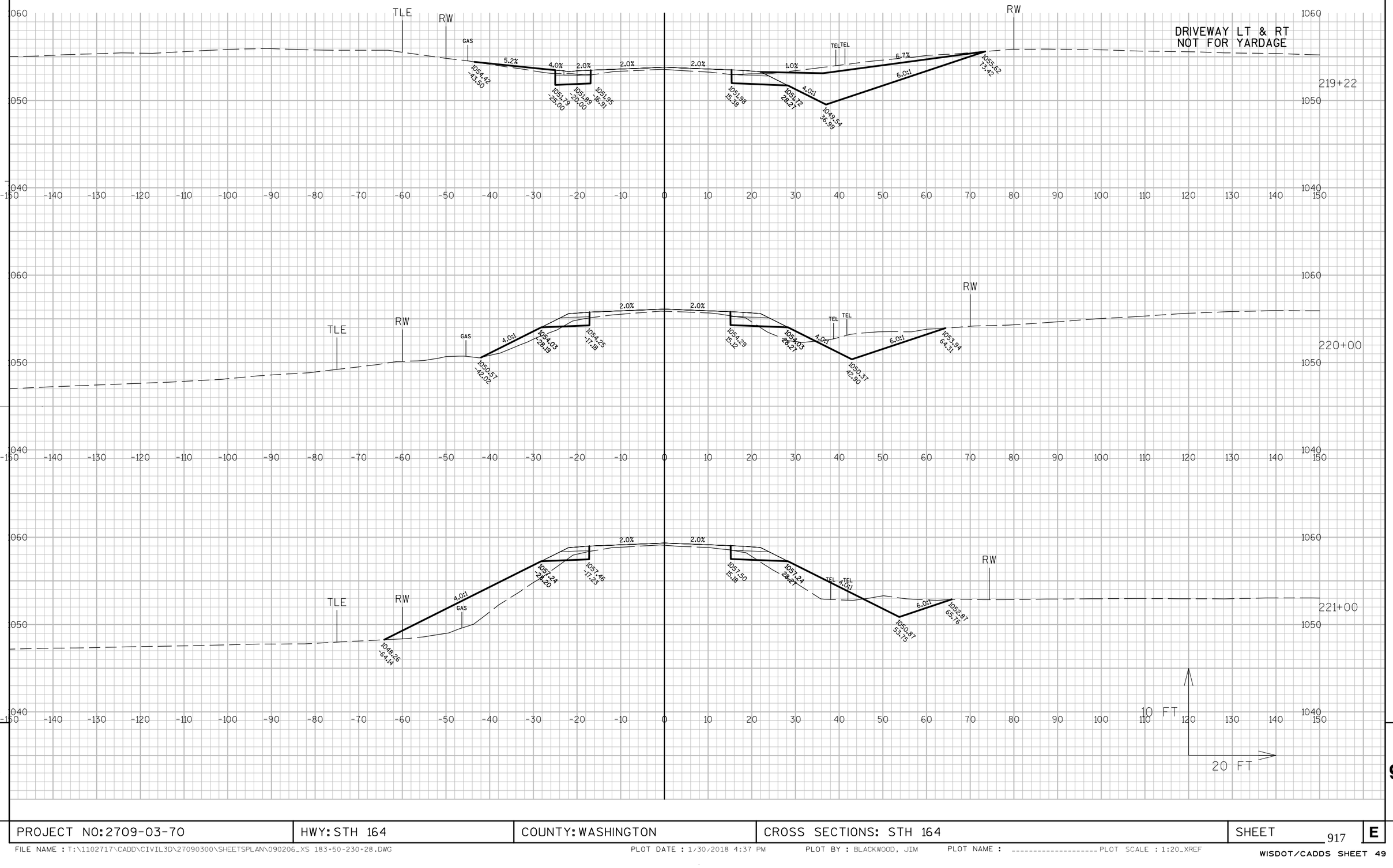
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 915	E



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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 916	E

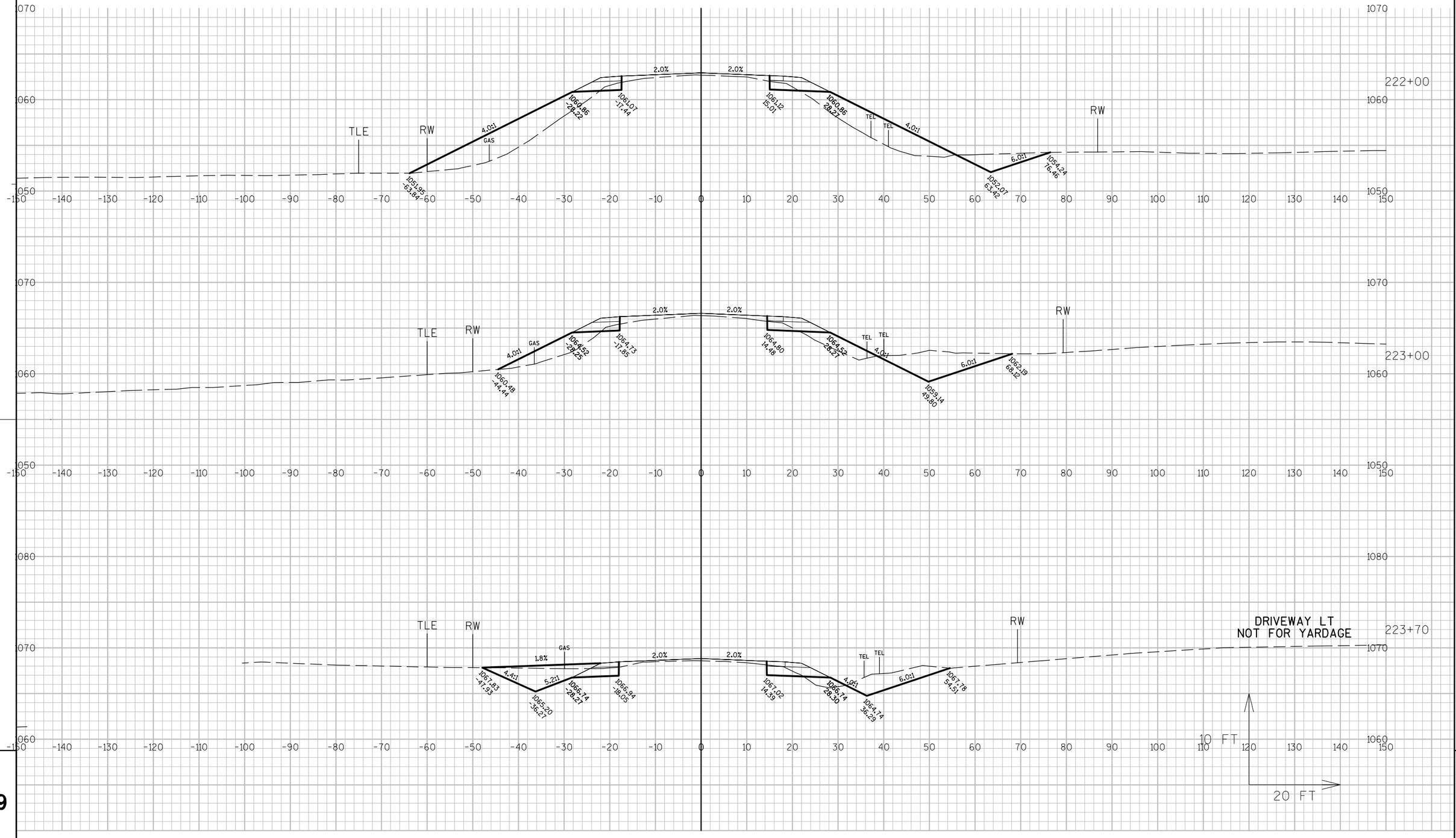
DRIVEWAY LT & RT
NOT FOR YARDAGE



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 917	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:37 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

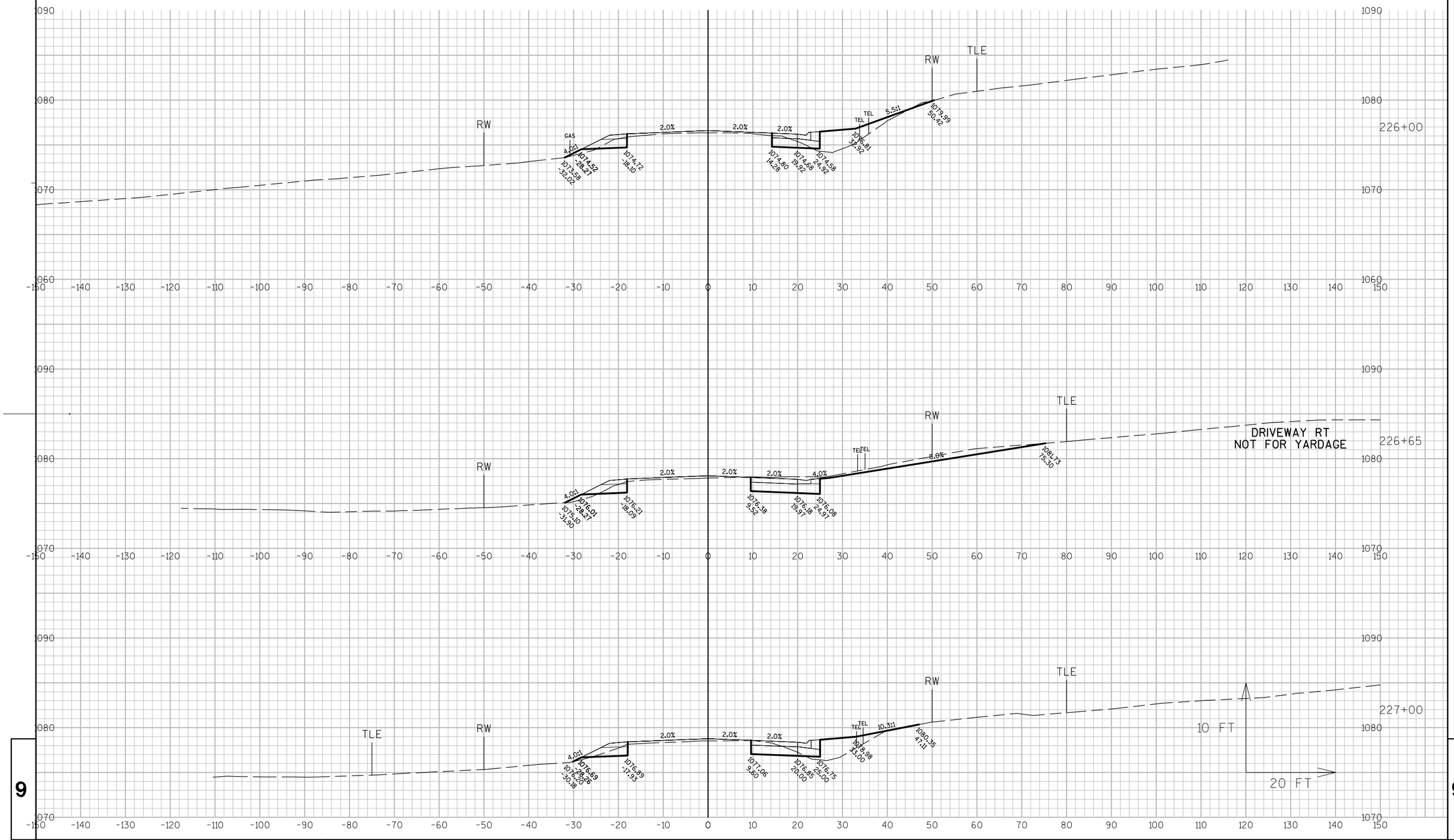
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 918	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:37 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 919 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS_183+50-230+28.DWG PLOT DATE : 1/30/2018 4:38 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : _____ PLOT SCALE : 1:20 XREF

DRIVEWAY LT
NOT FOR YARDAGE

227+25

TLE
RW
TLE
TEL
TEL
20.0:1
8.0%
4.0%
6.0:1
4.0:1
2.0%
2.0%
2.0%
1075.96
-52.36
1076.45
-43.61
1075.23
-36.25
1077.23
-28.25
1077.43
-17.81
1077.60
9.65
1077.53
22.99
1077.23
27.99
1079.45
35.99
1079.80
42.76

228+00

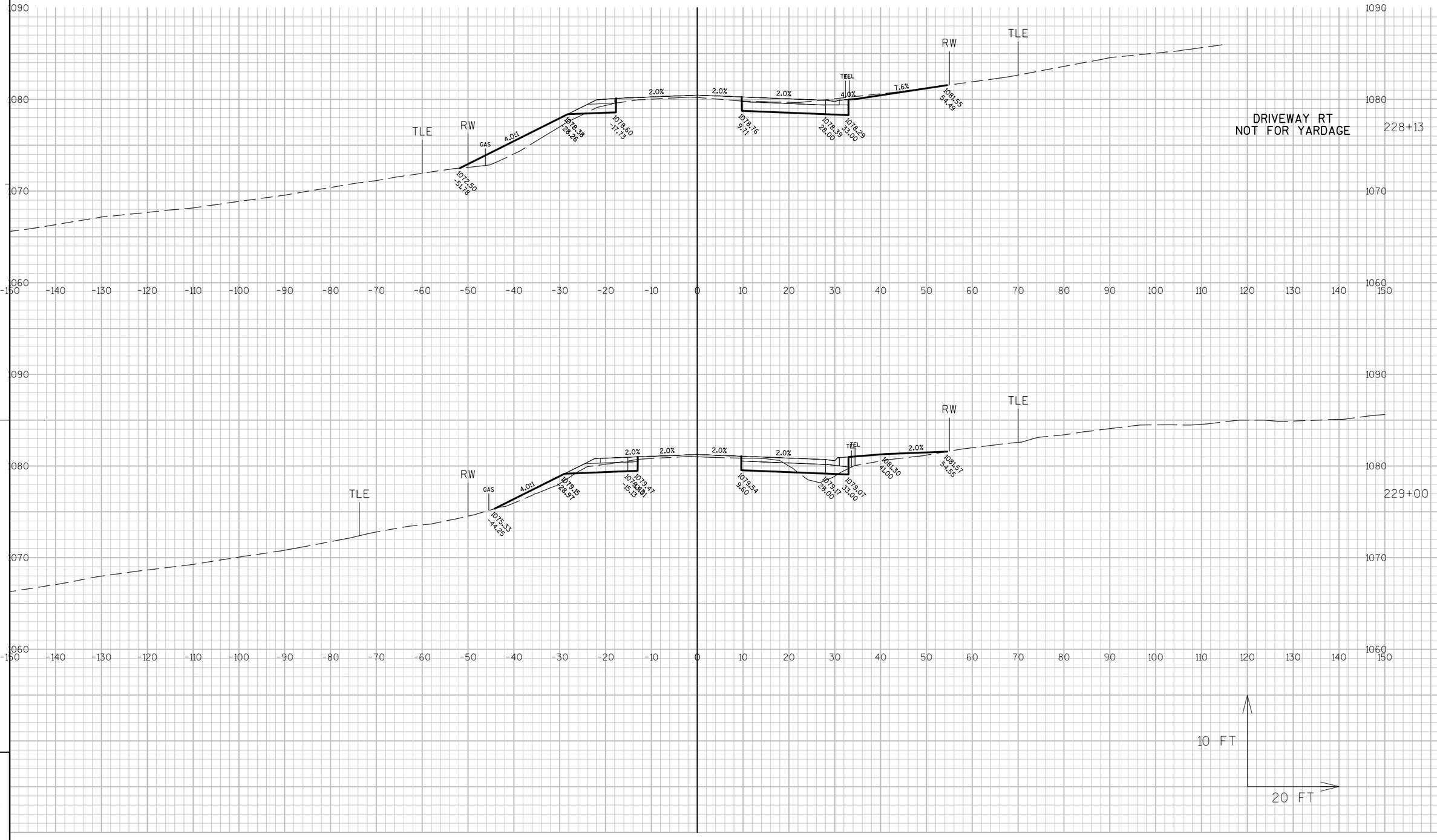
TLE
RW
GAS
TLE
TEL
TEL
5.2%
4.0:1
2.0%
2.0%
2.0%
1072.44
-51.35
1078.21
-28.26
1078.42
-17.69
1078.58
9.72
1078.22
28.00
1078.12
35.00
1080.35
41.00
1080.94
52.39

10 FT
20 FT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 920	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:43 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

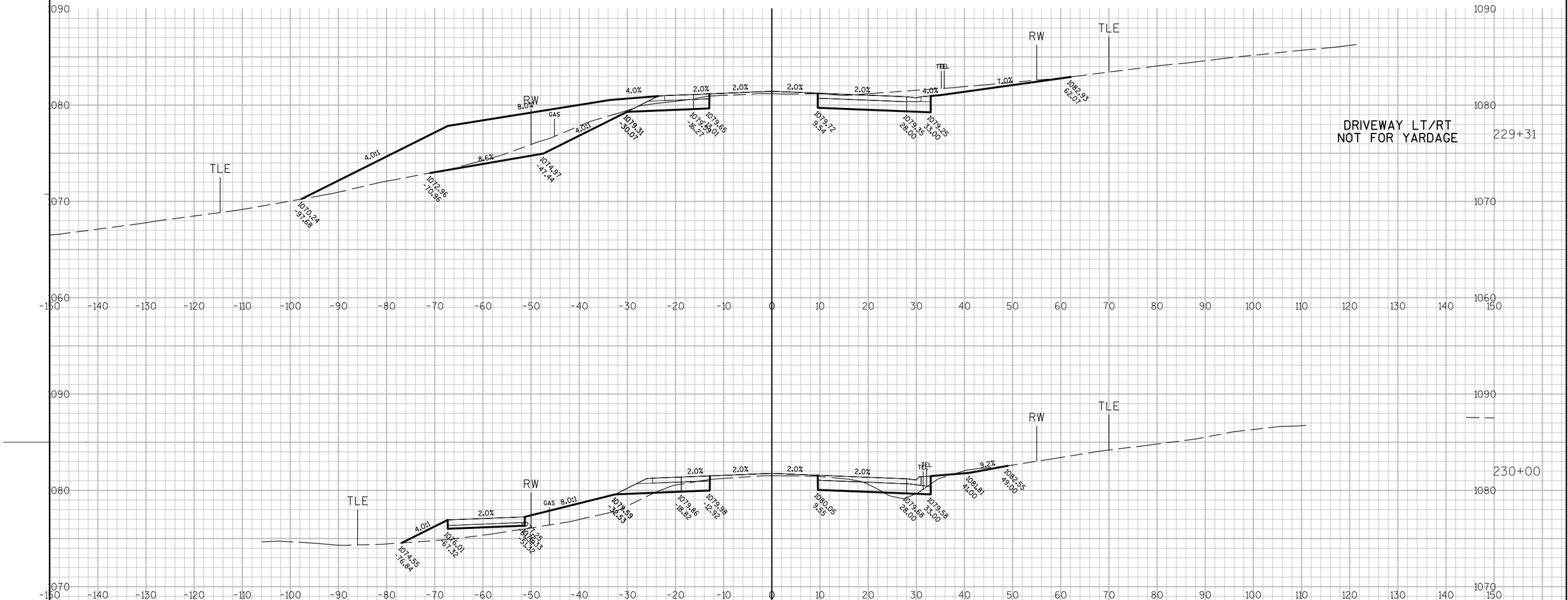
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 921	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:44 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

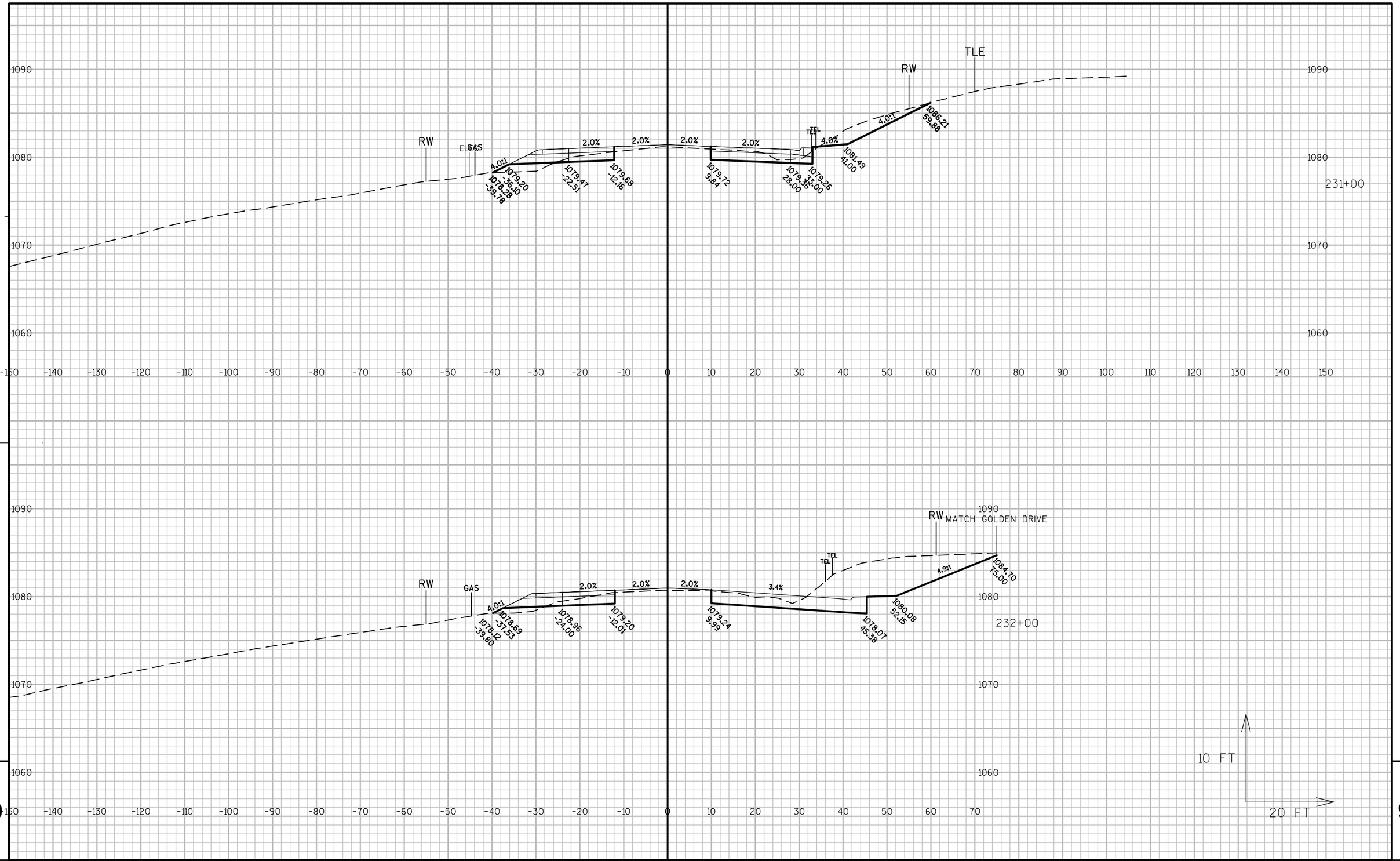
WISDOT/CADDS SHEET 49



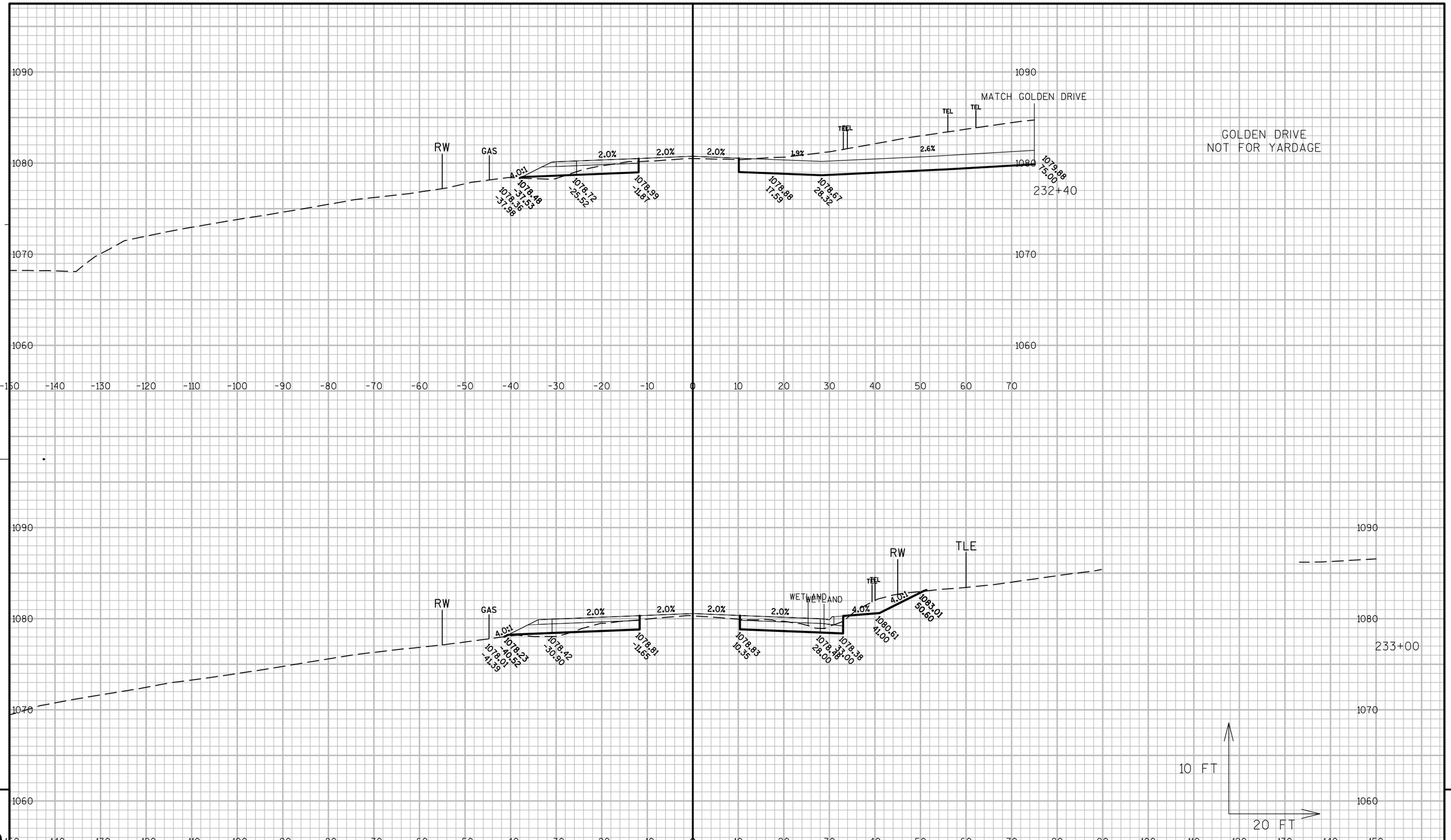
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 922	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206_XS 183+50-230+28.DWG PLOT DATE : 1/30/2018 4:44 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 923	E



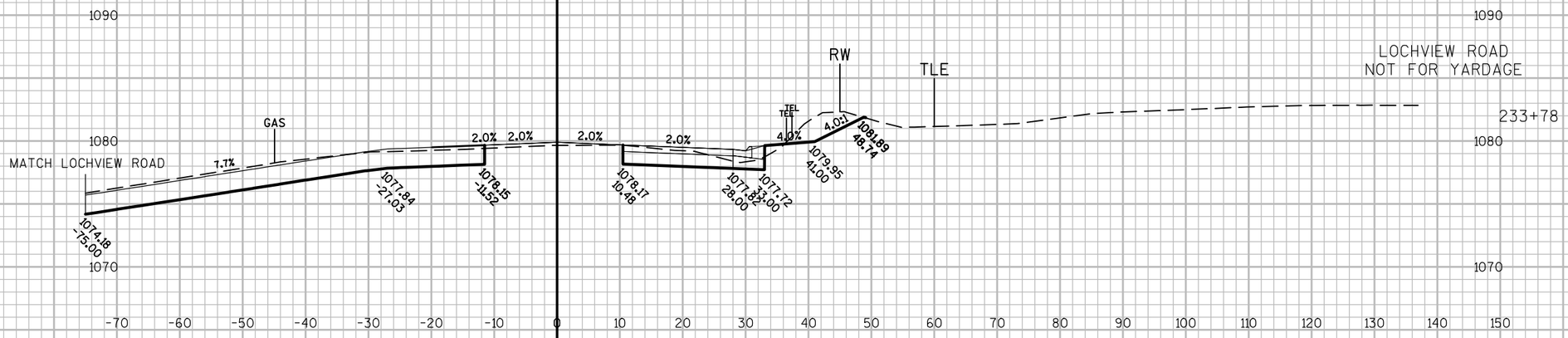
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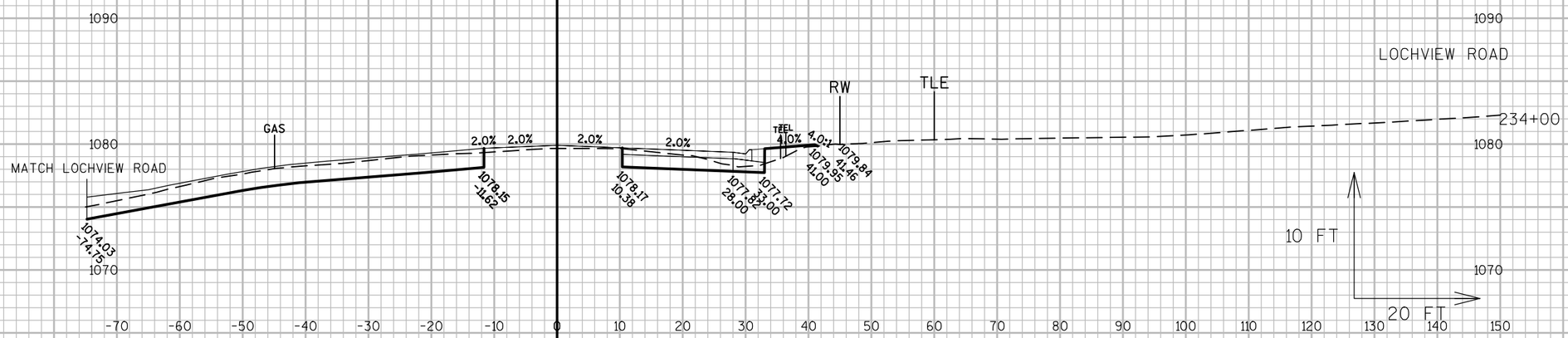
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 924	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090206A_HUBERTUS-LOCHVIEW.DWG PLOT DATE : 1/30/2018 4:47 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

WISDOT/CADDS SHEET 49

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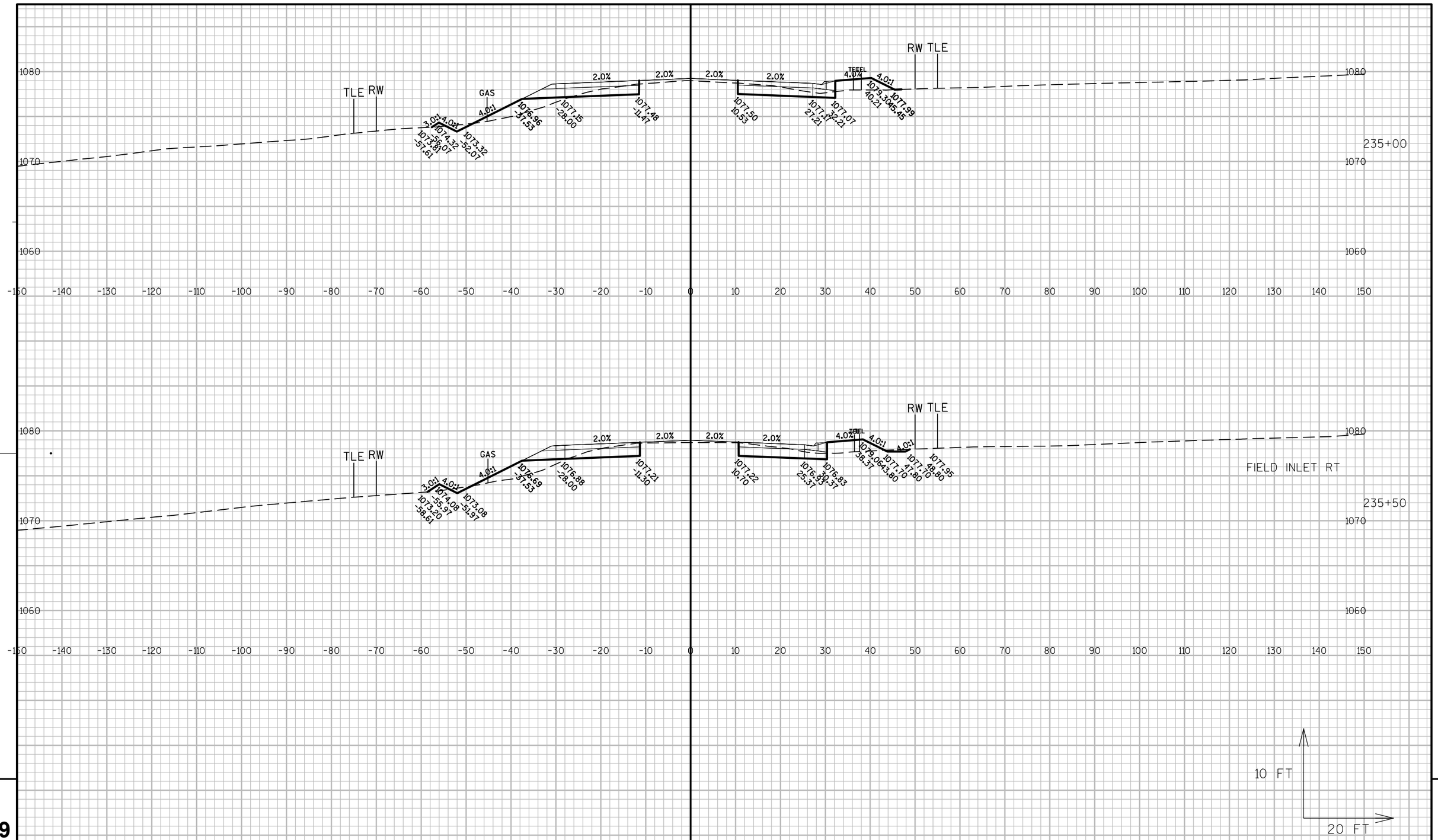




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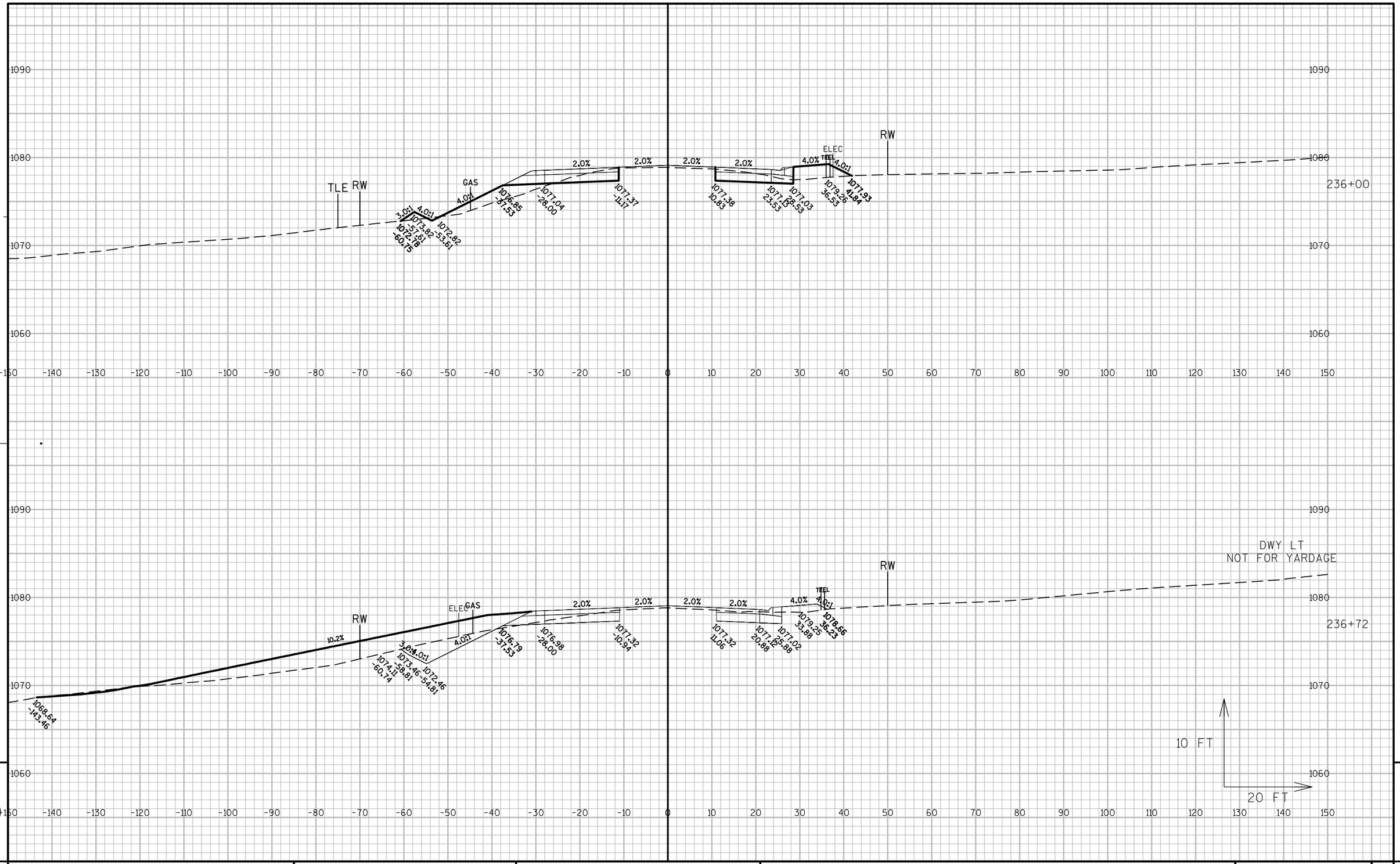
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 925	E



9

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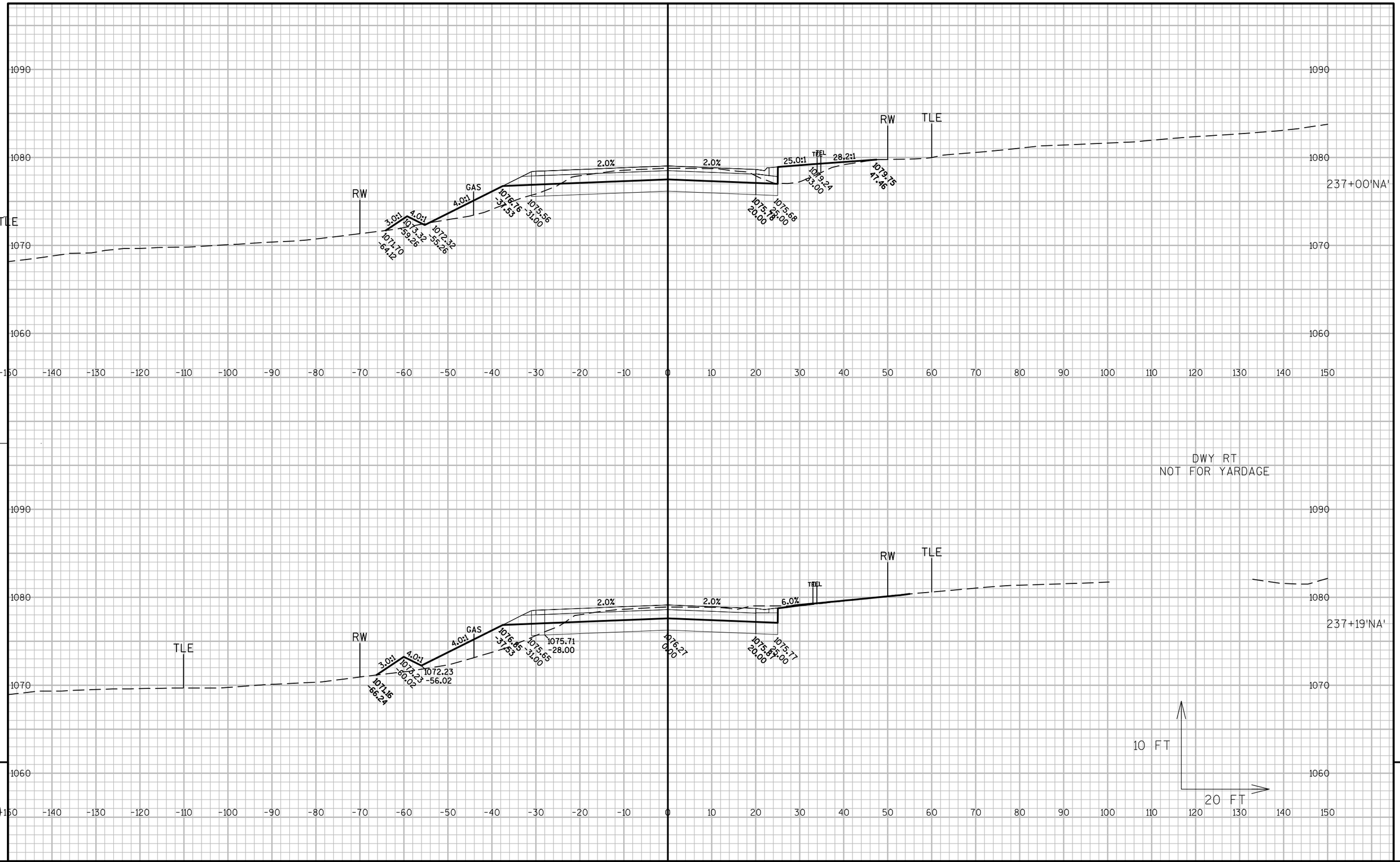
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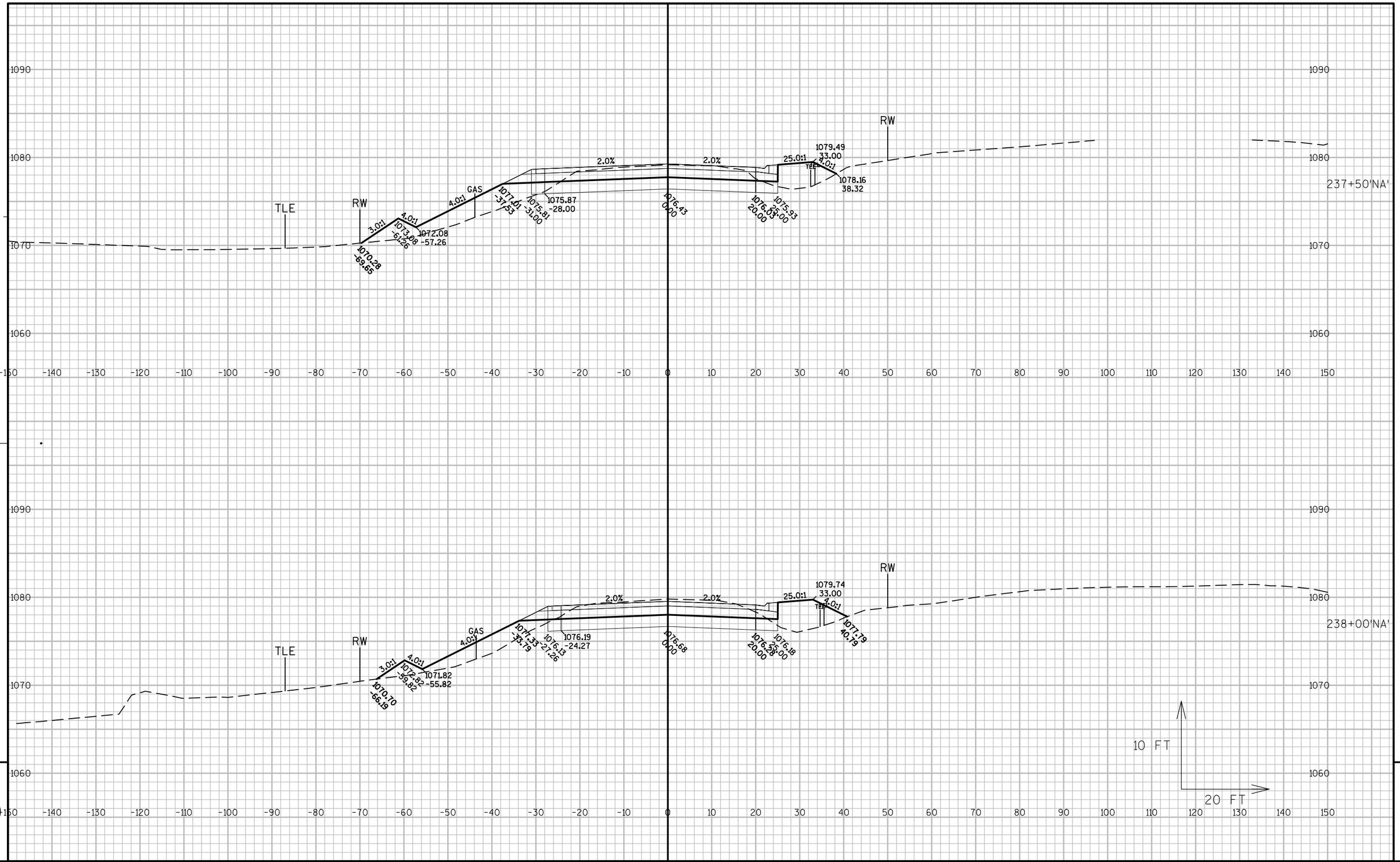
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 927	E

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WISDOT/CADDS SHEET 49

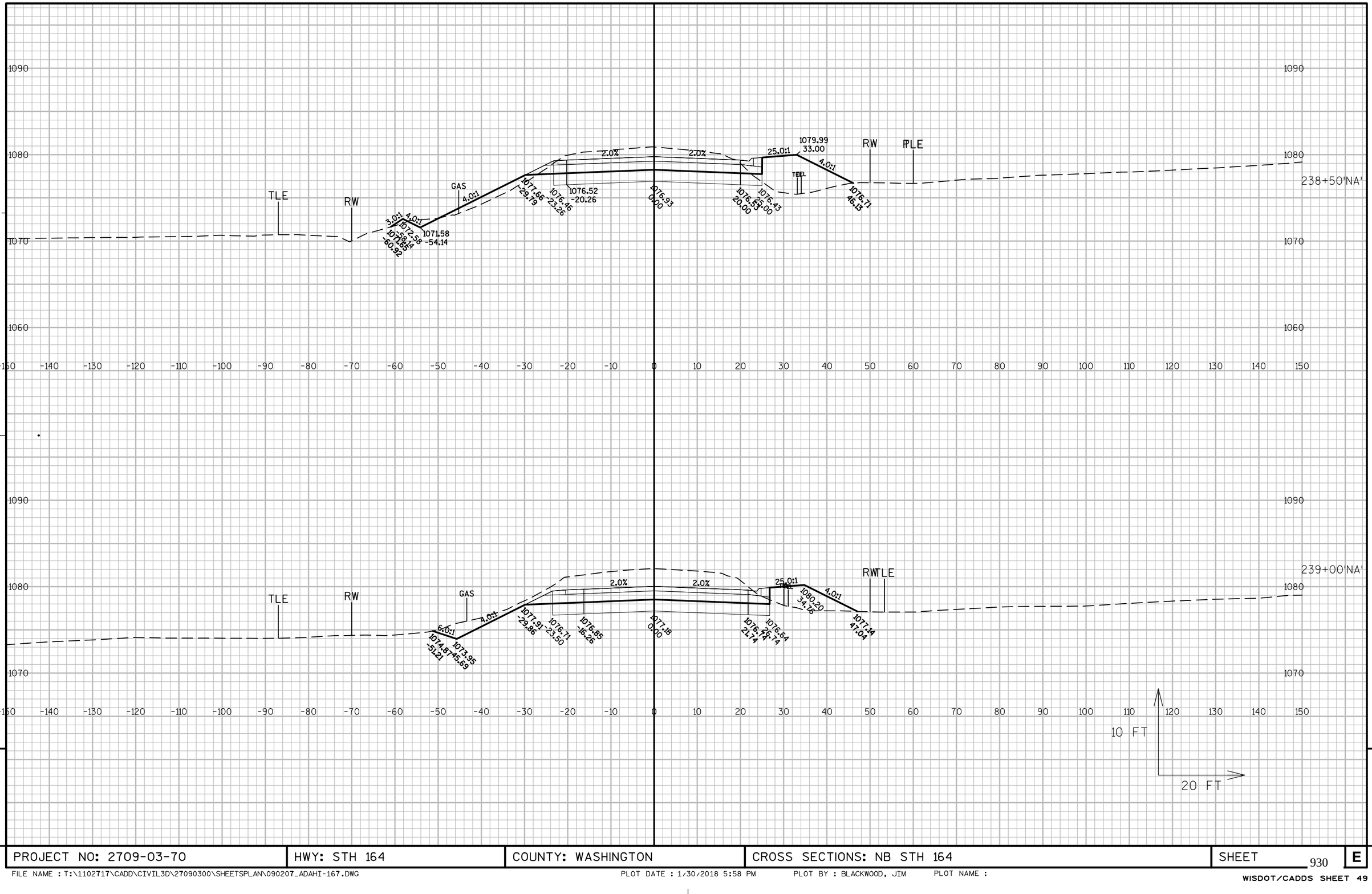


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 928	E



9 9

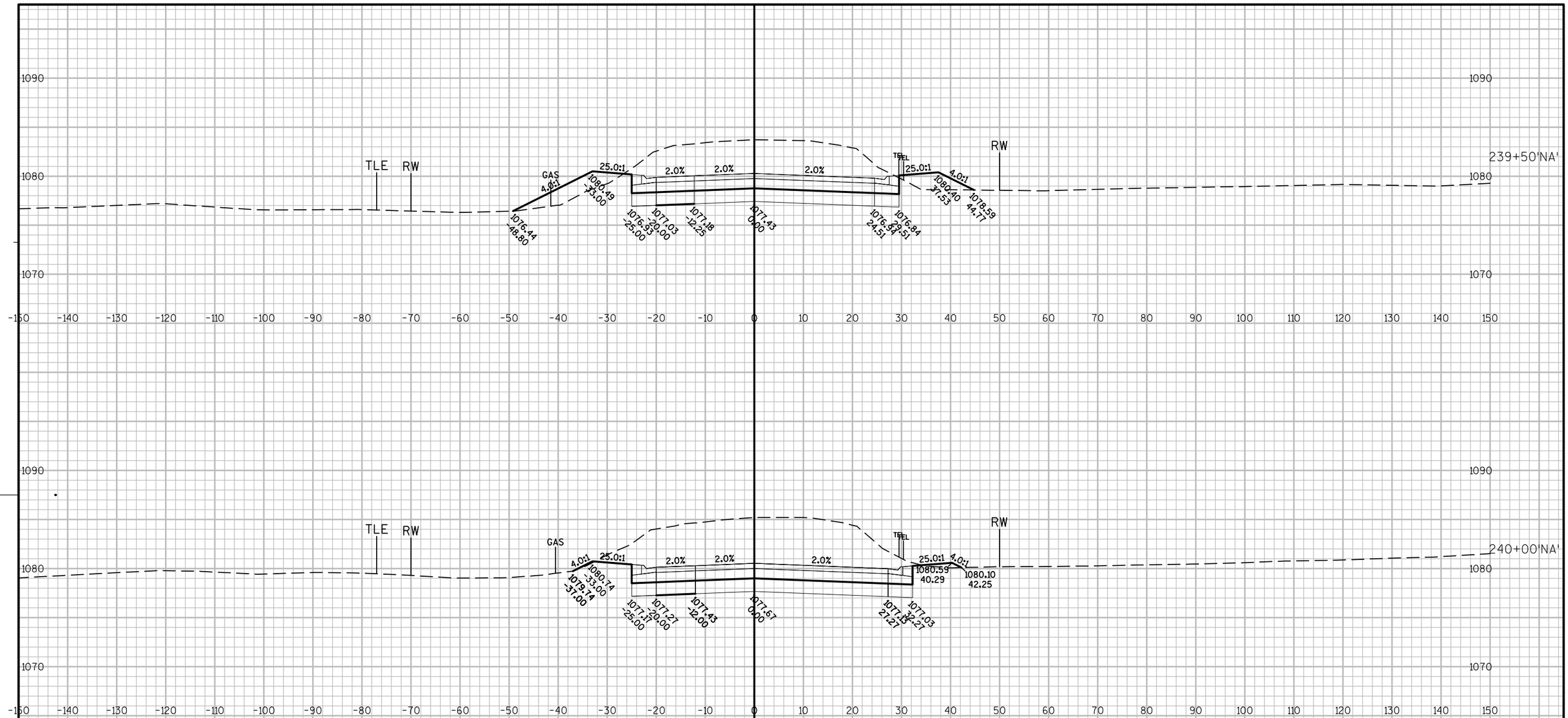
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 929	E



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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 930	E



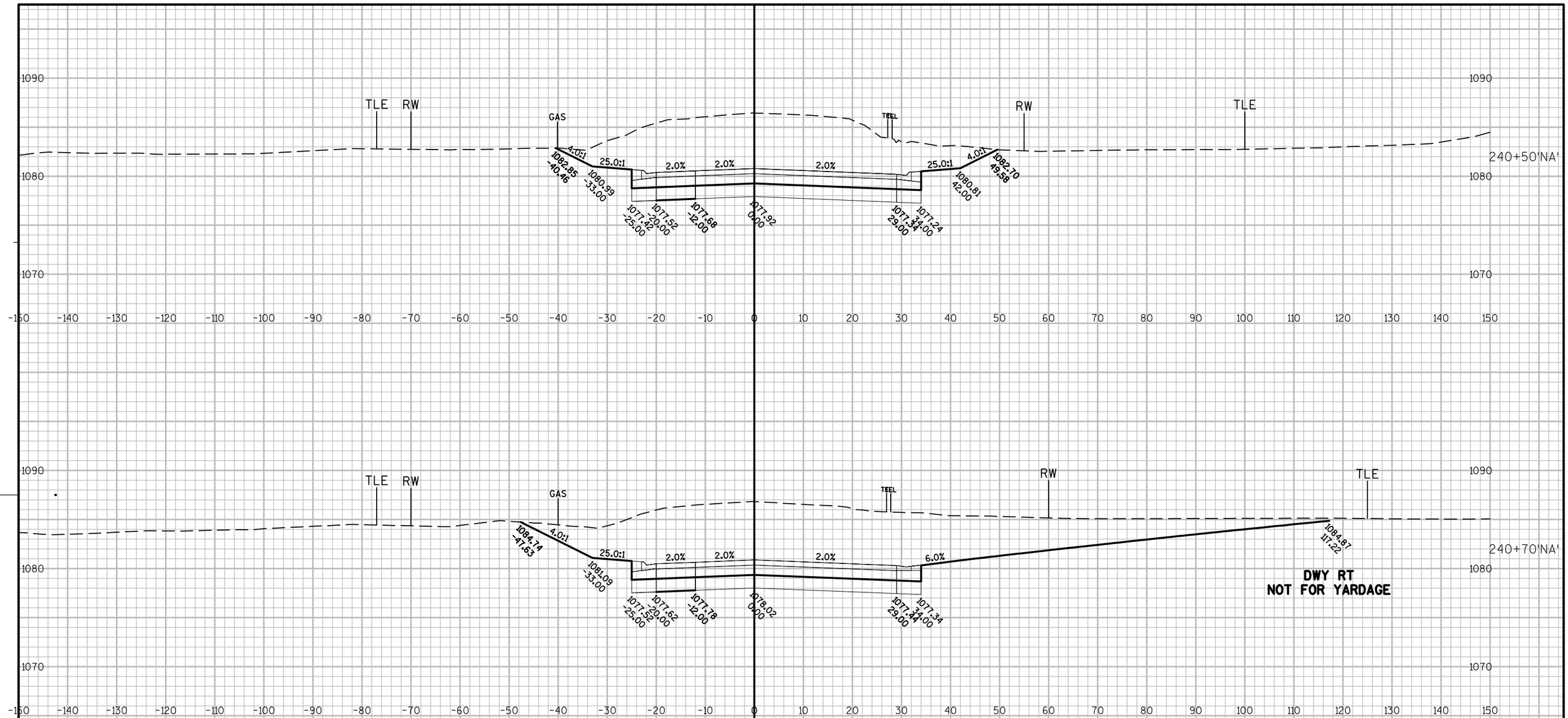
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 931	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 5:58 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

WISDOT/CADDS SHEET 49



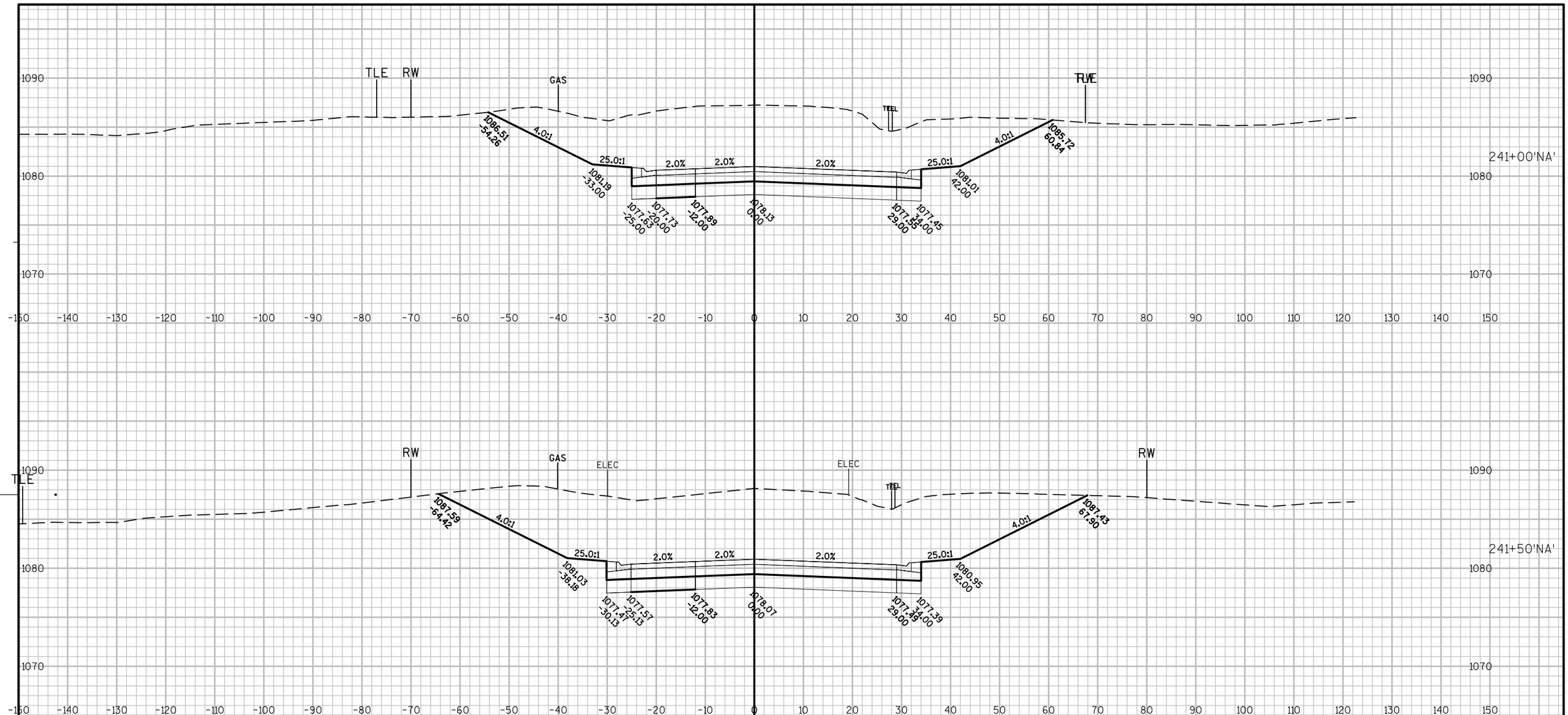
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 932	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 5:58 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

WISDOT/CADDS SHEET 49



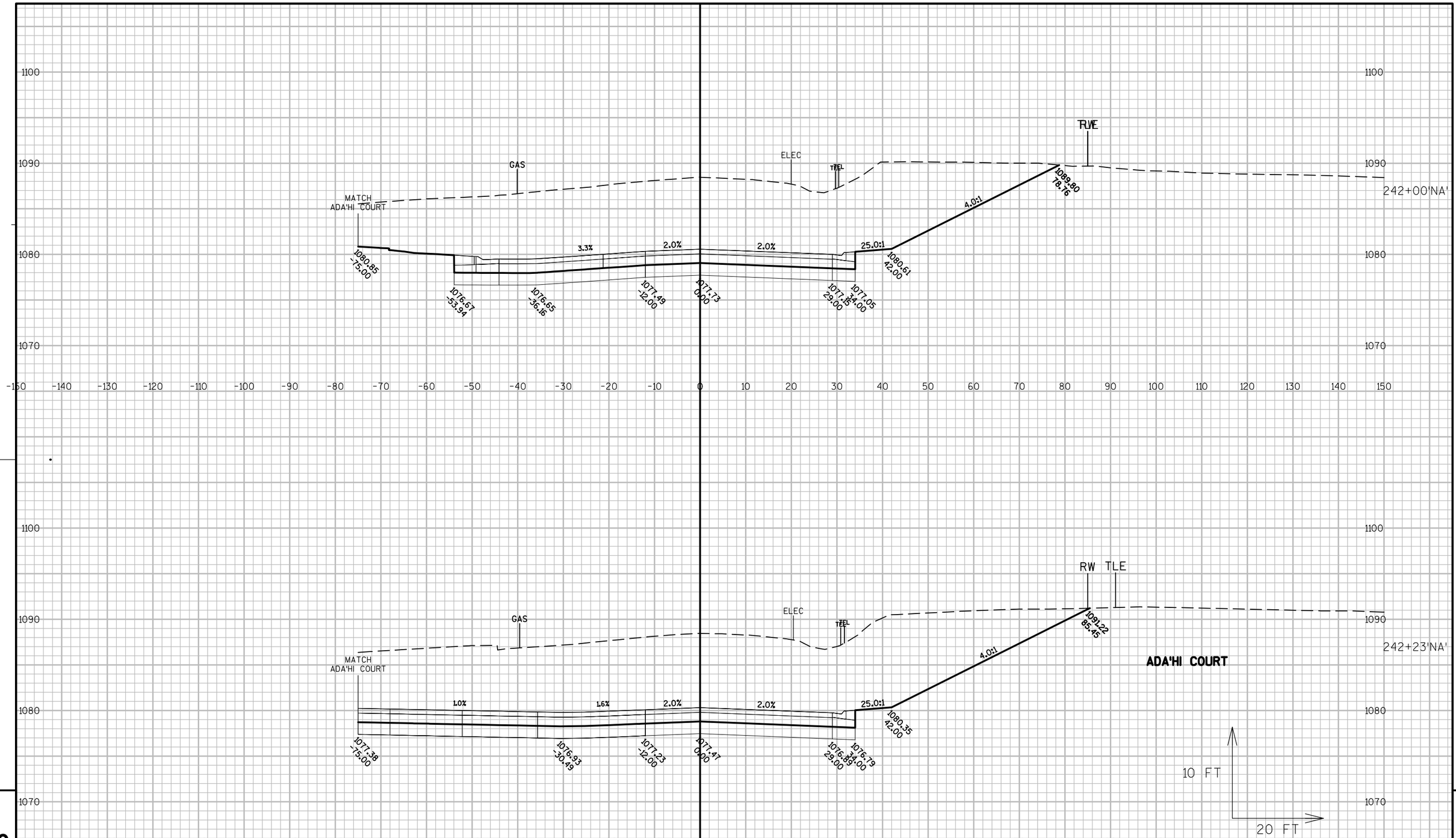
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 933	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 5:58 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

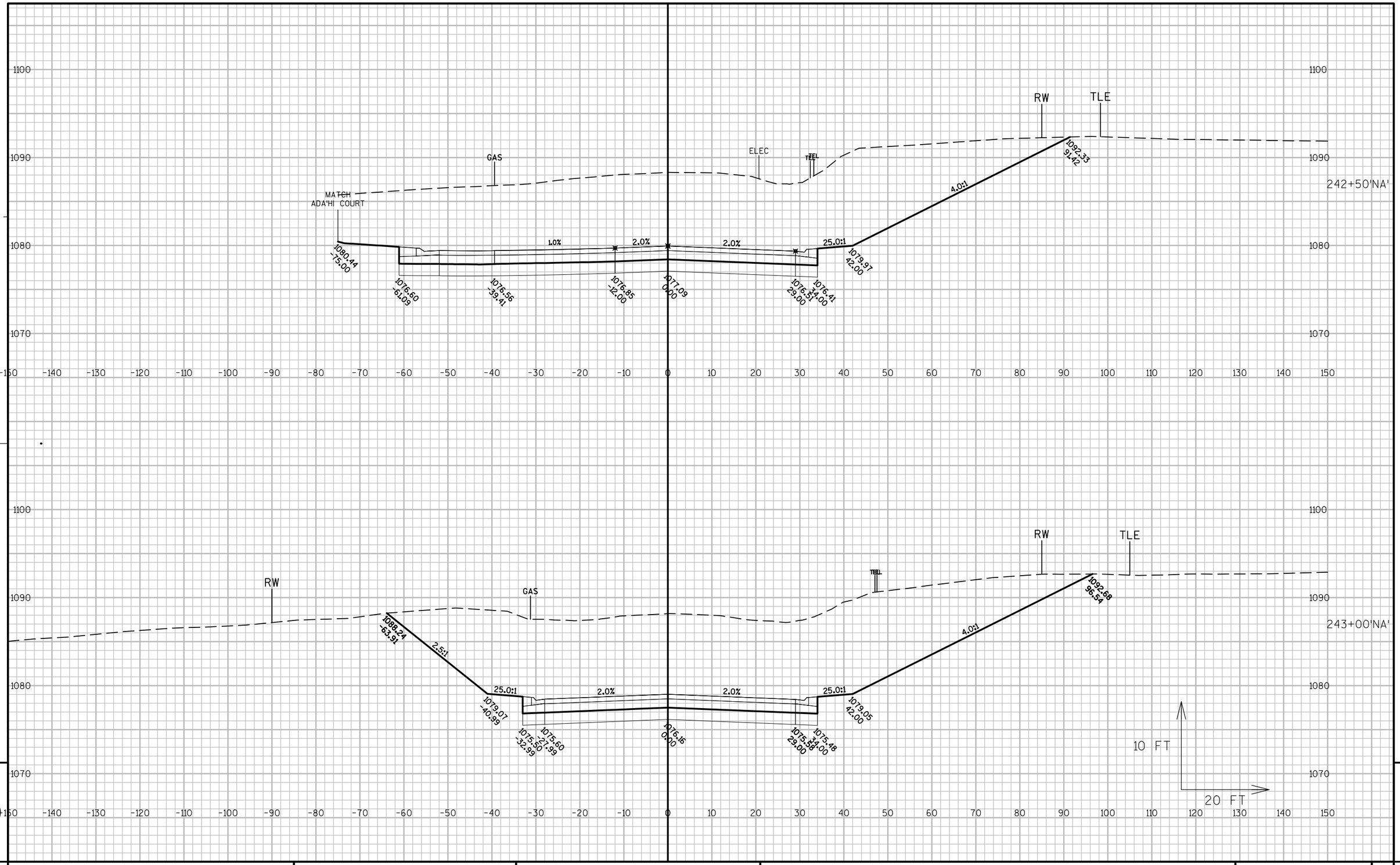
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 934	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 5:58 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

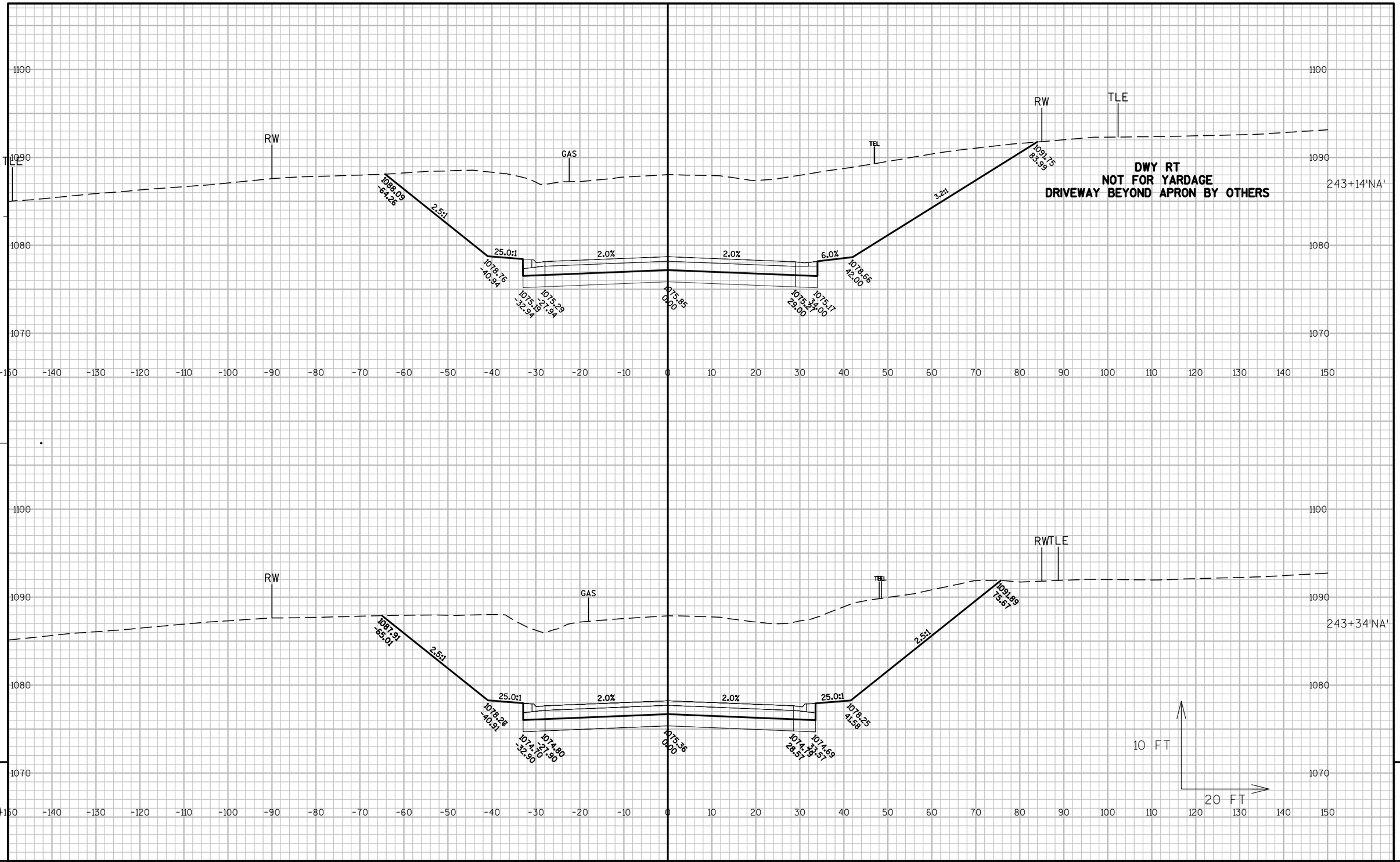
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 935	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 5:58 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

WISDOT/CADDS SHEET 49

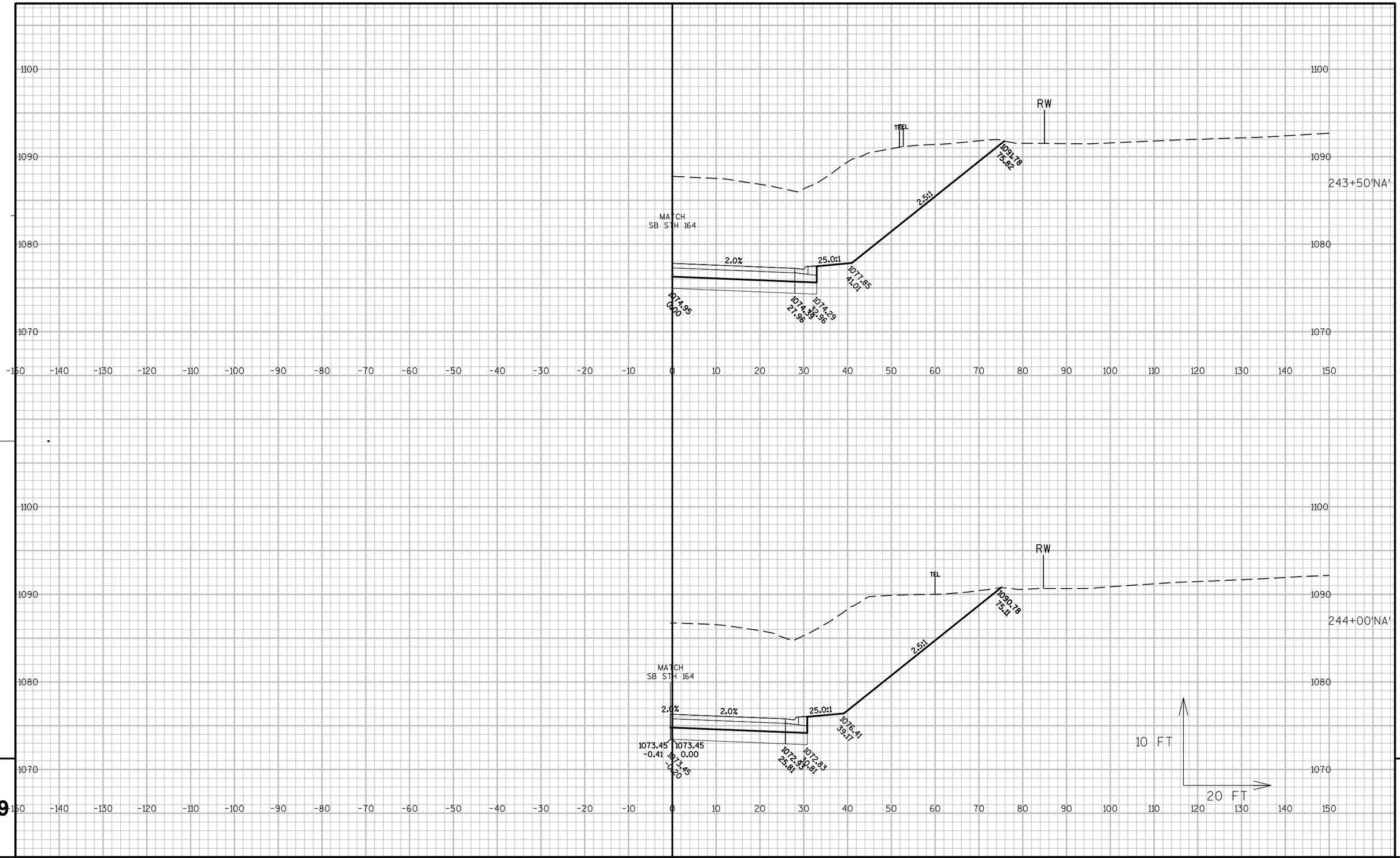


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 936	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 5:58 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

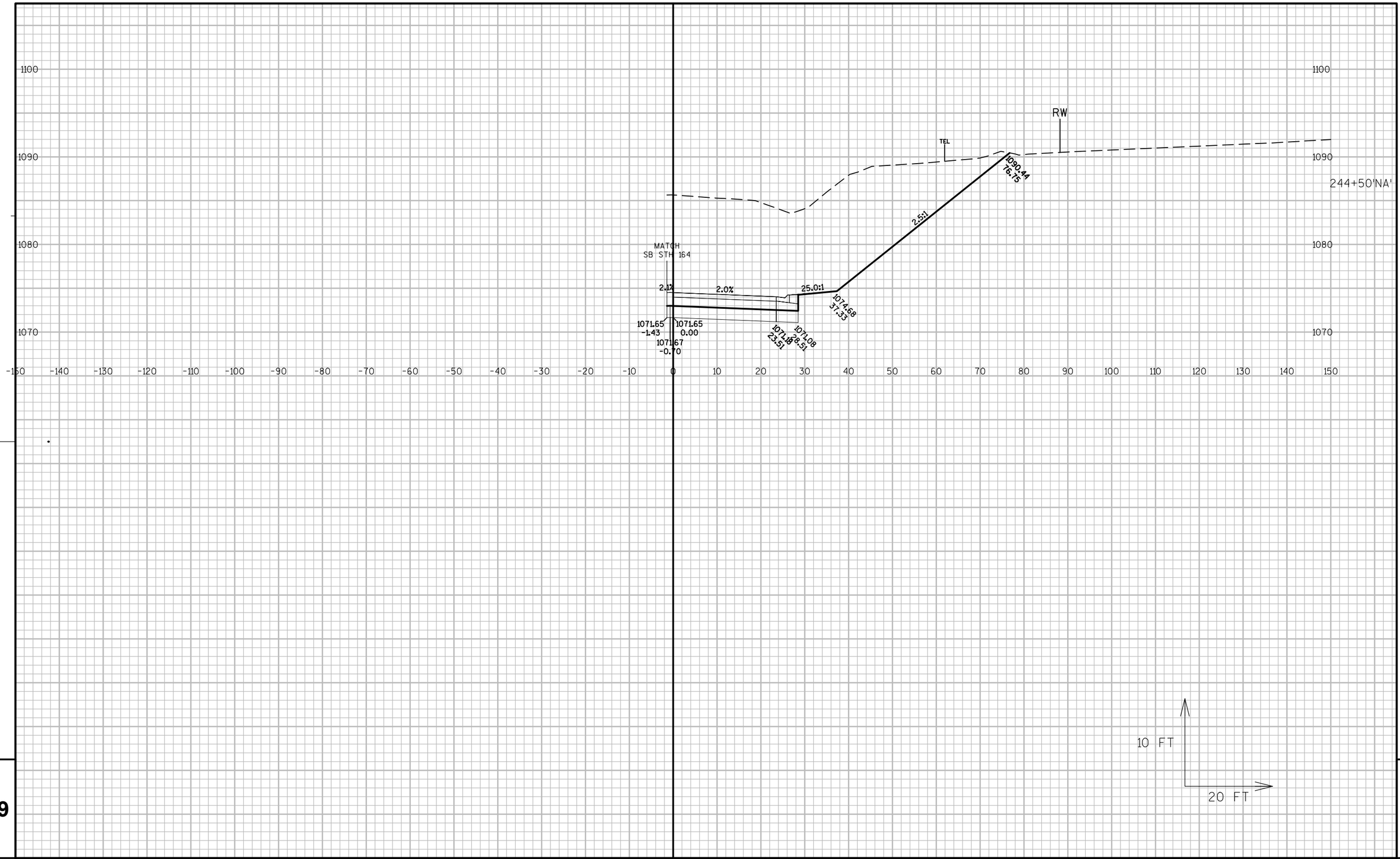
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 937	E

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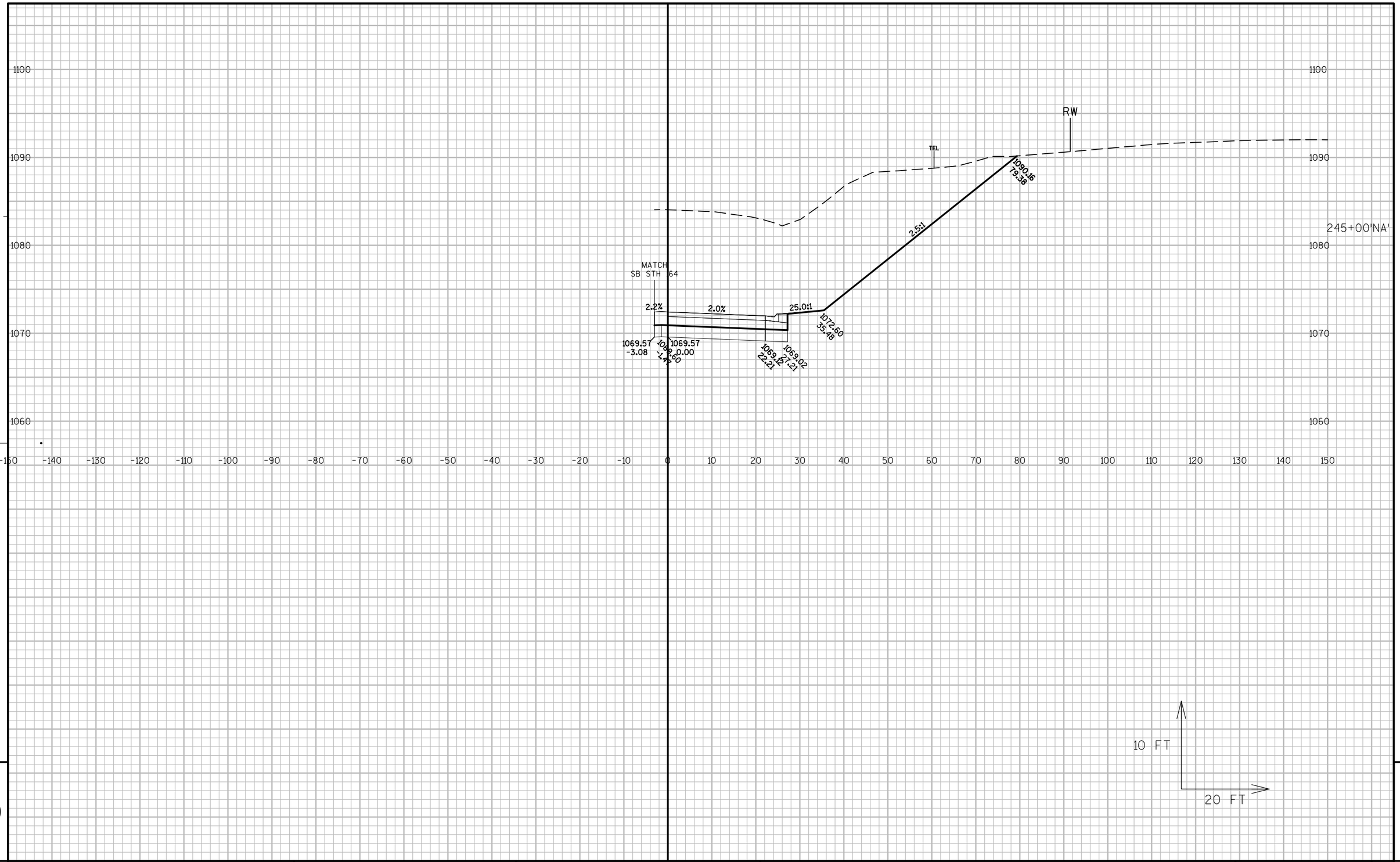
WISDOT/CADDS SHEET 49



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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 938	E

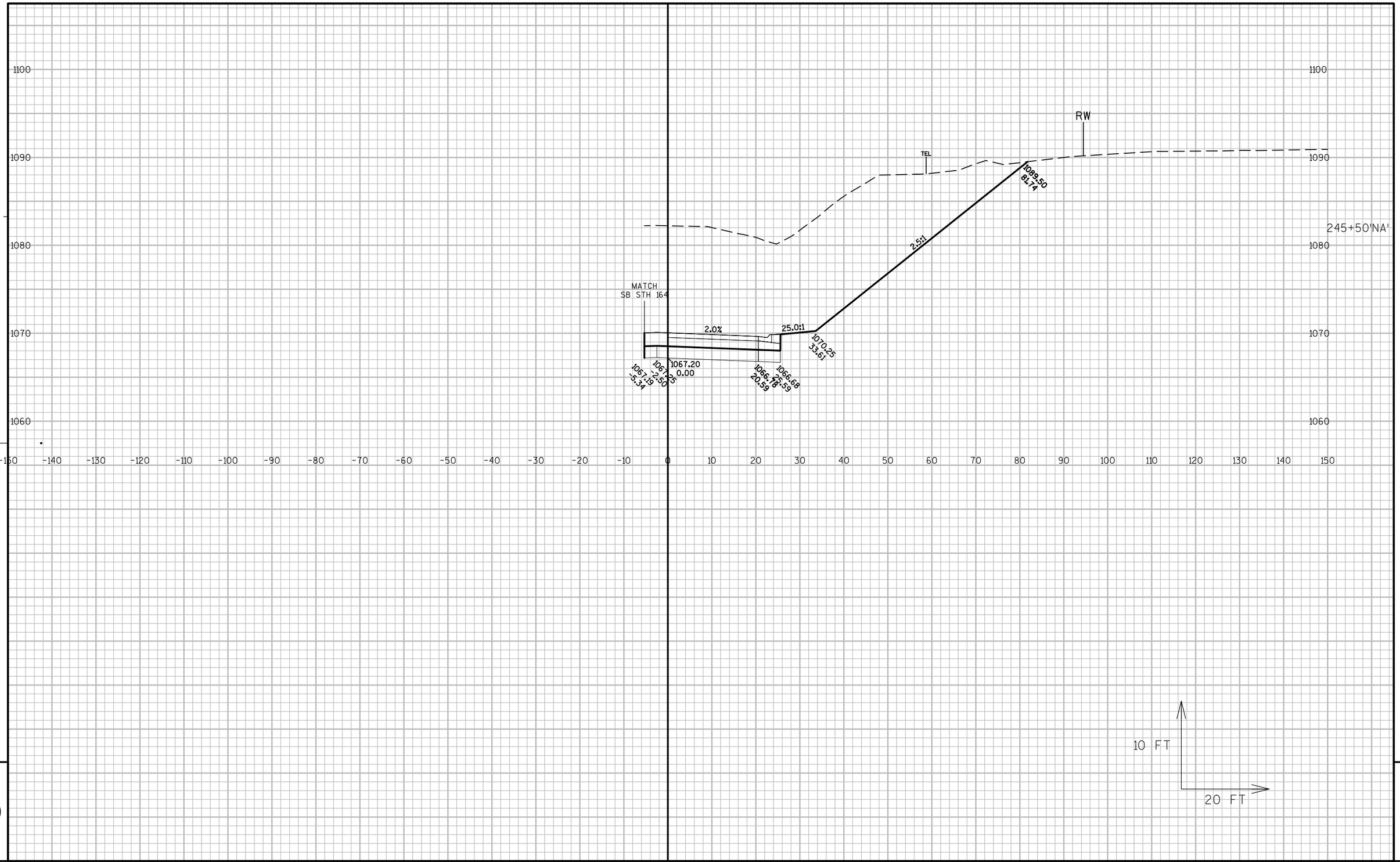
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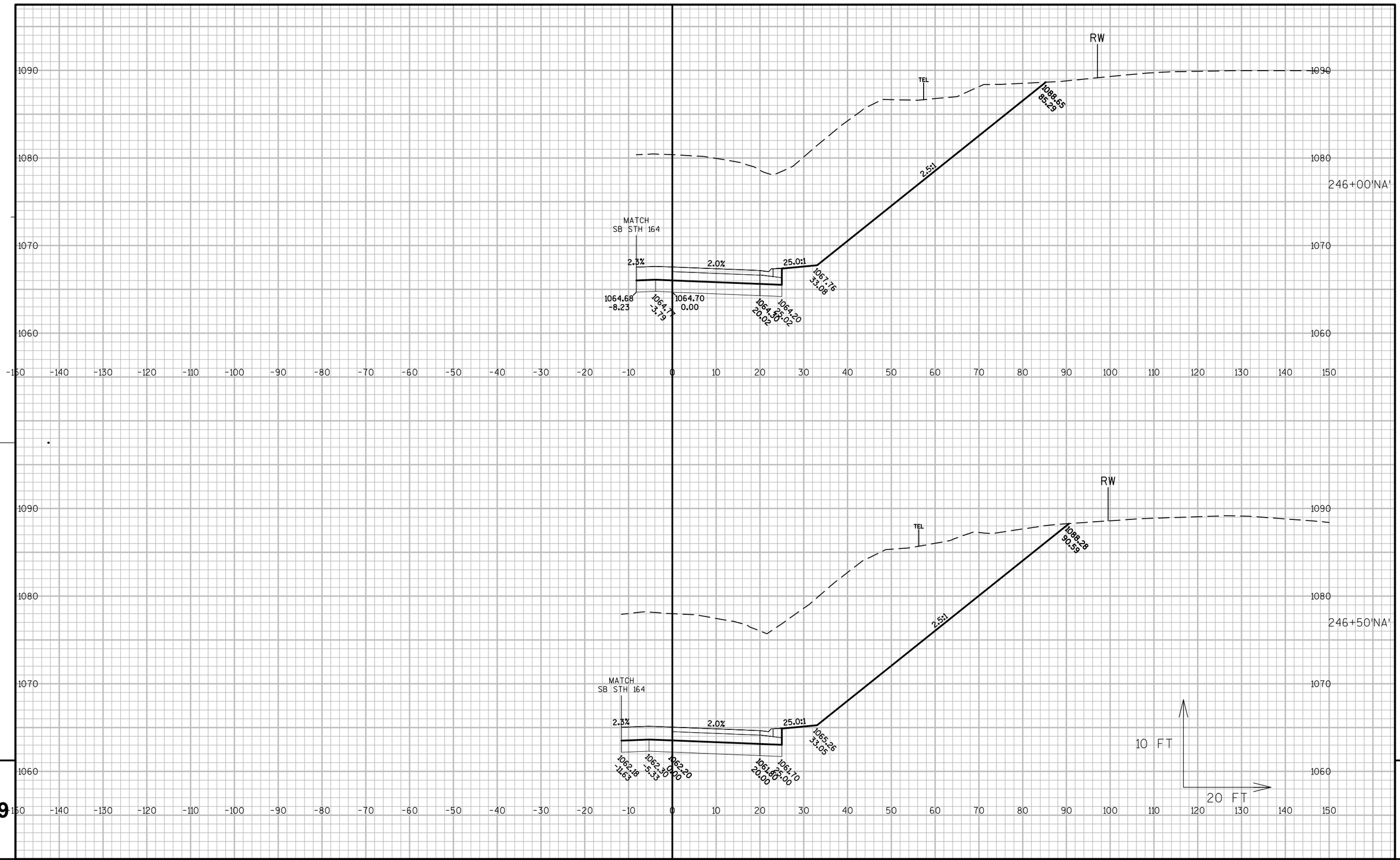


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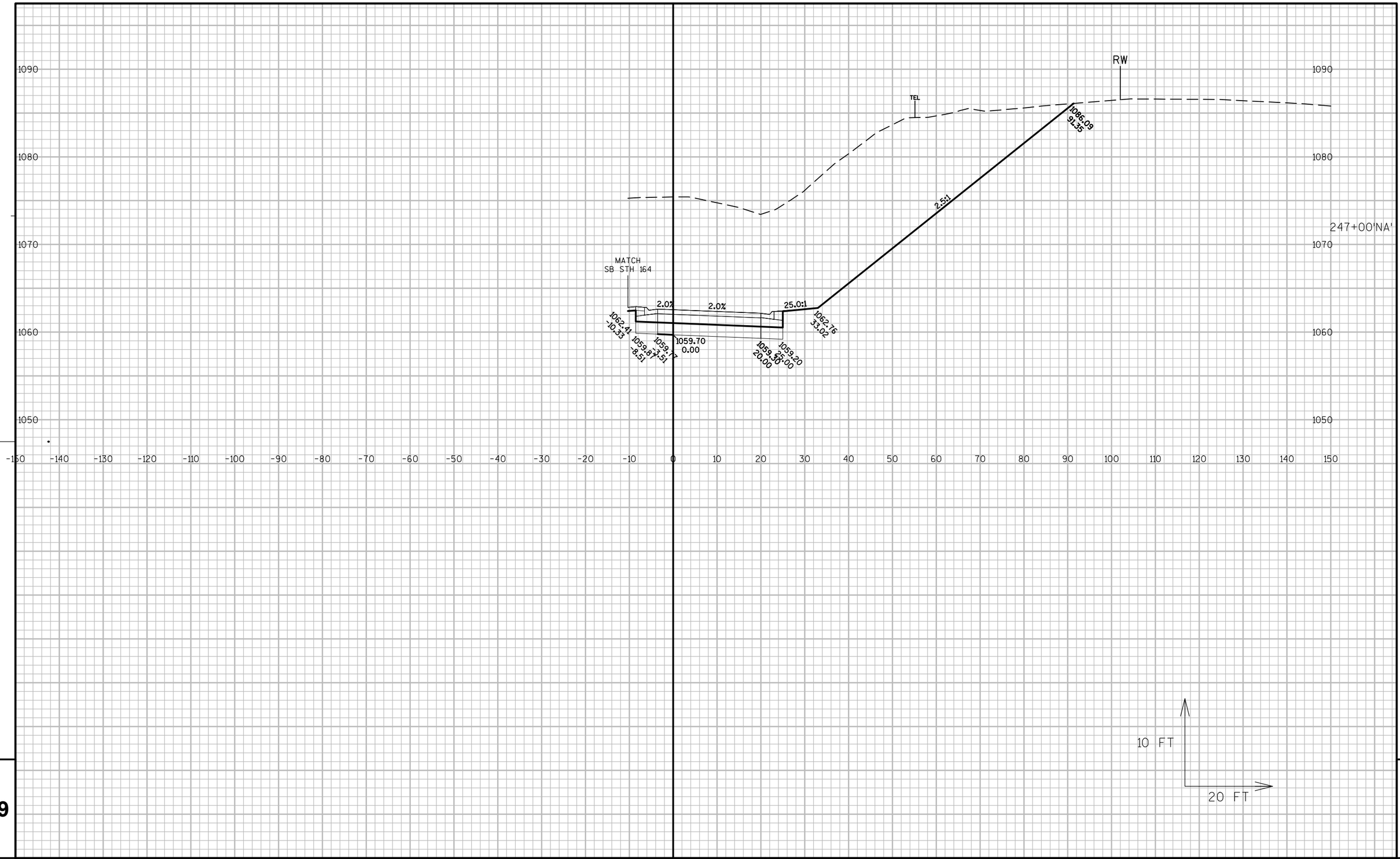
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 941	E

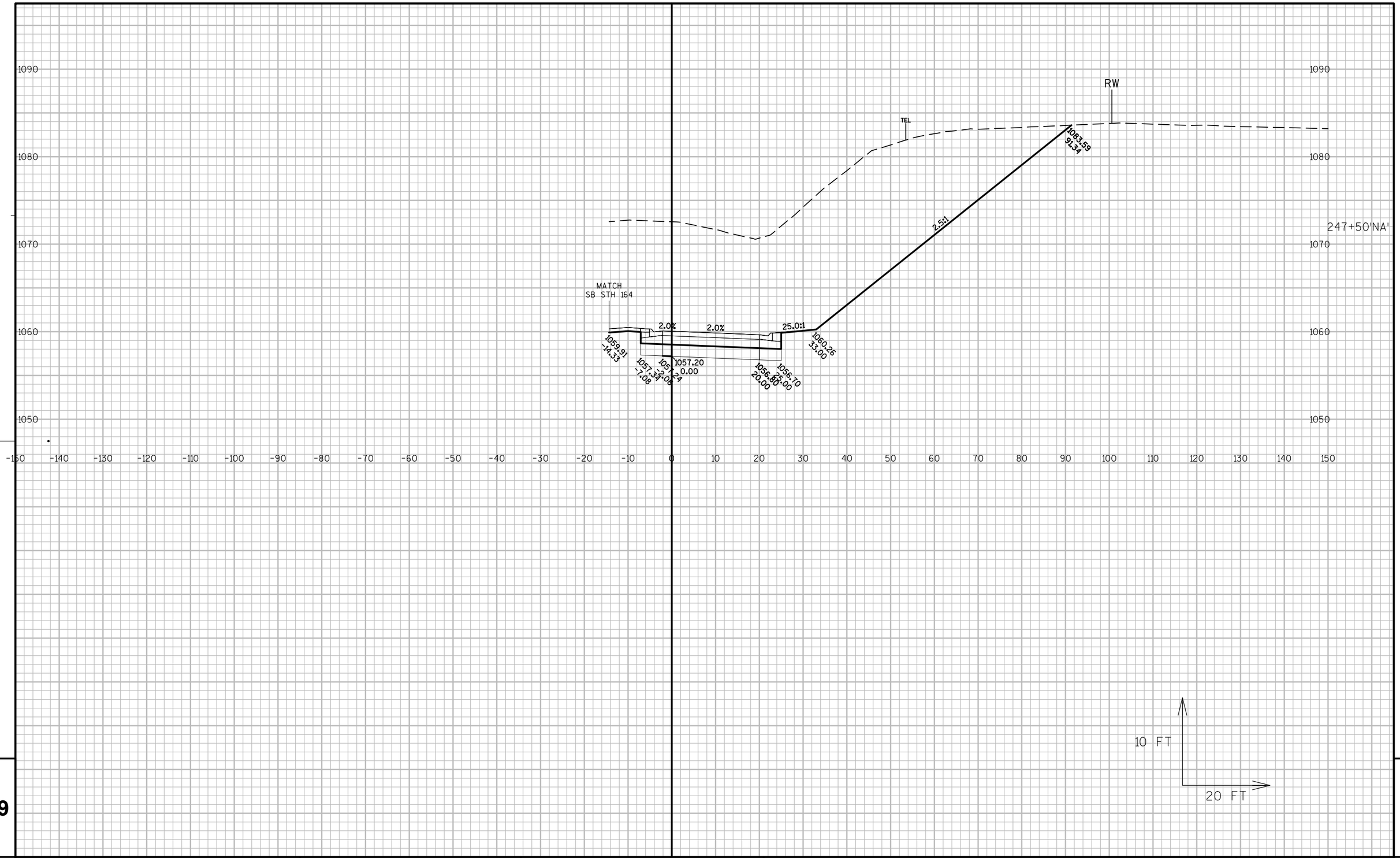


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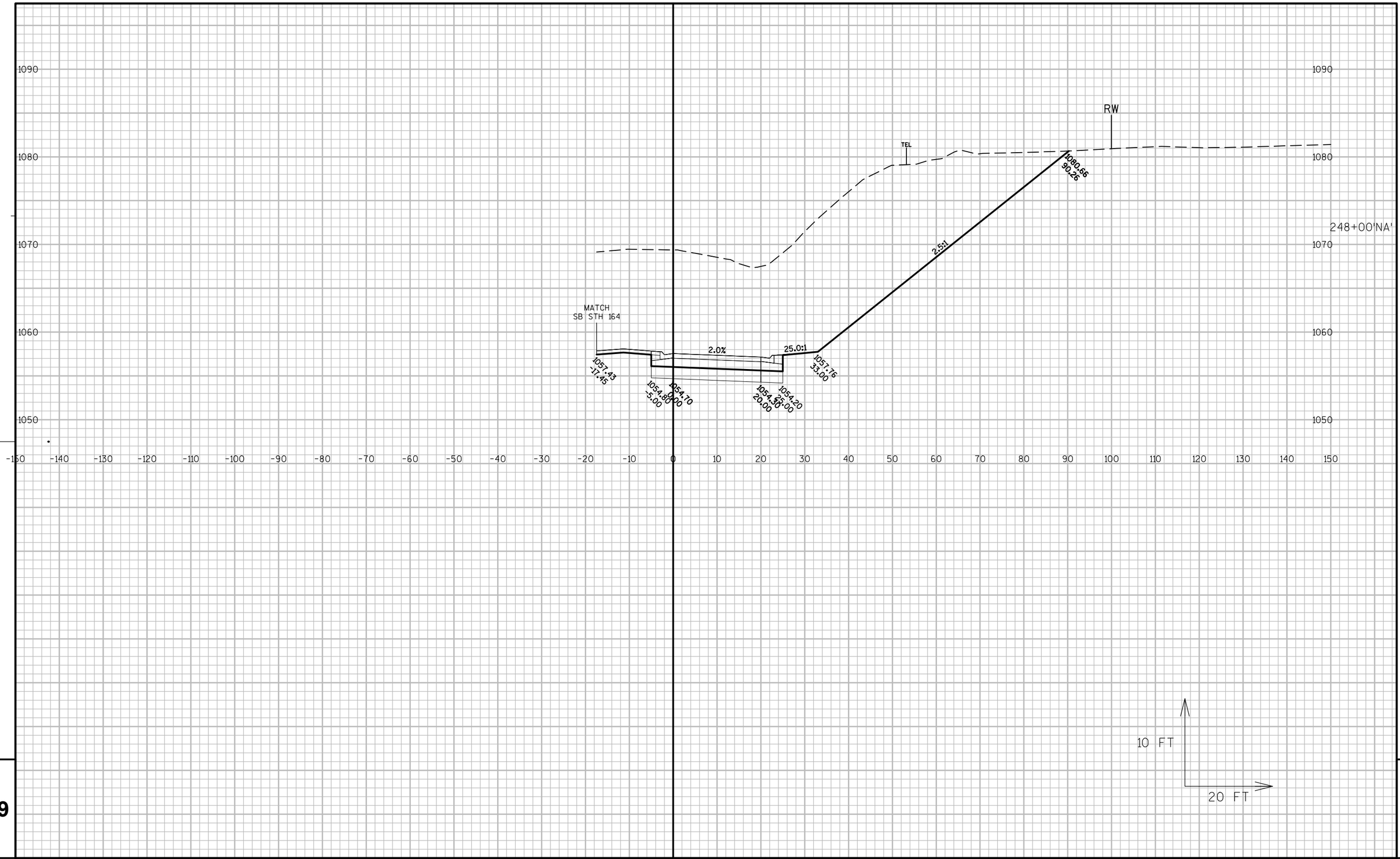
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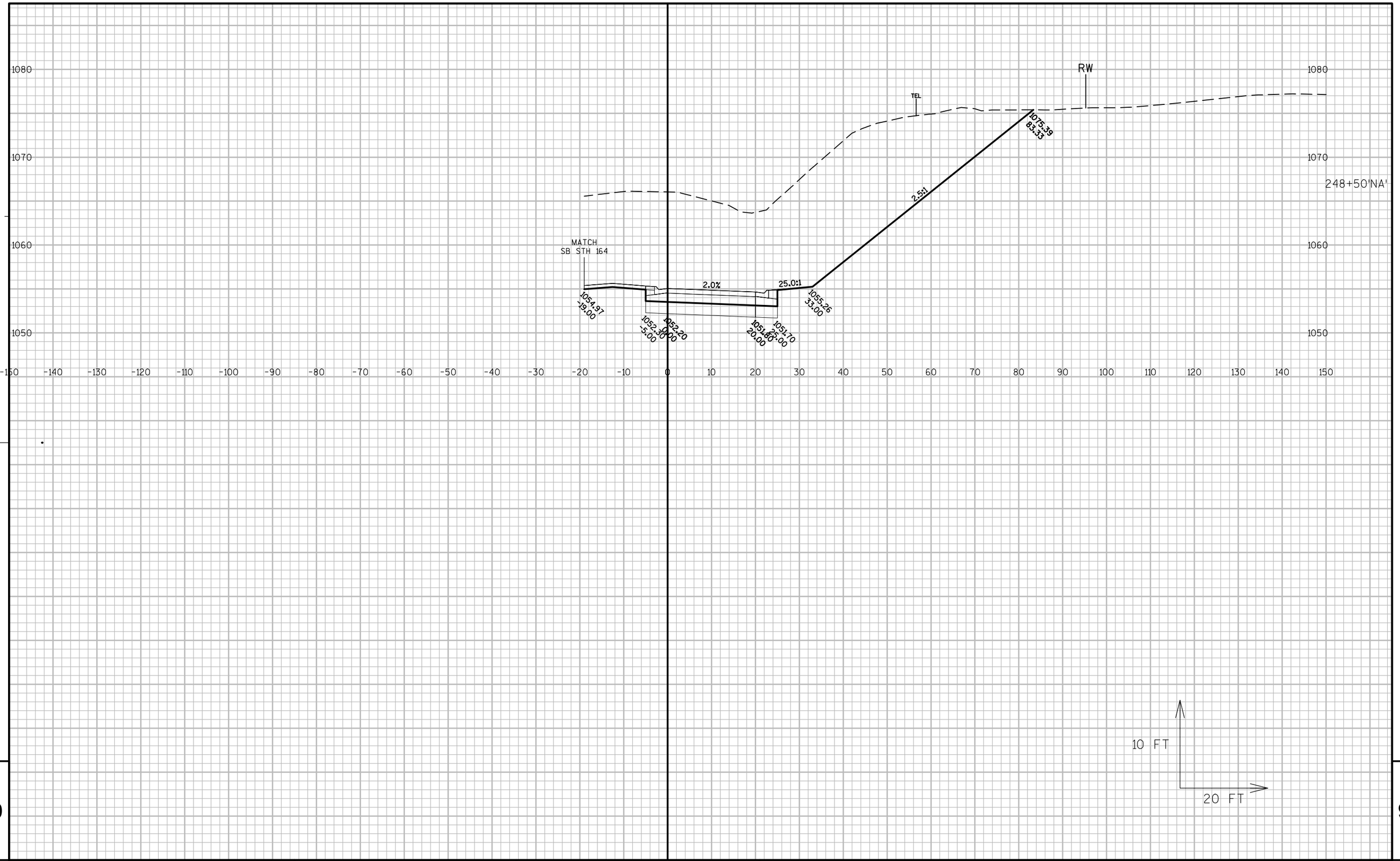
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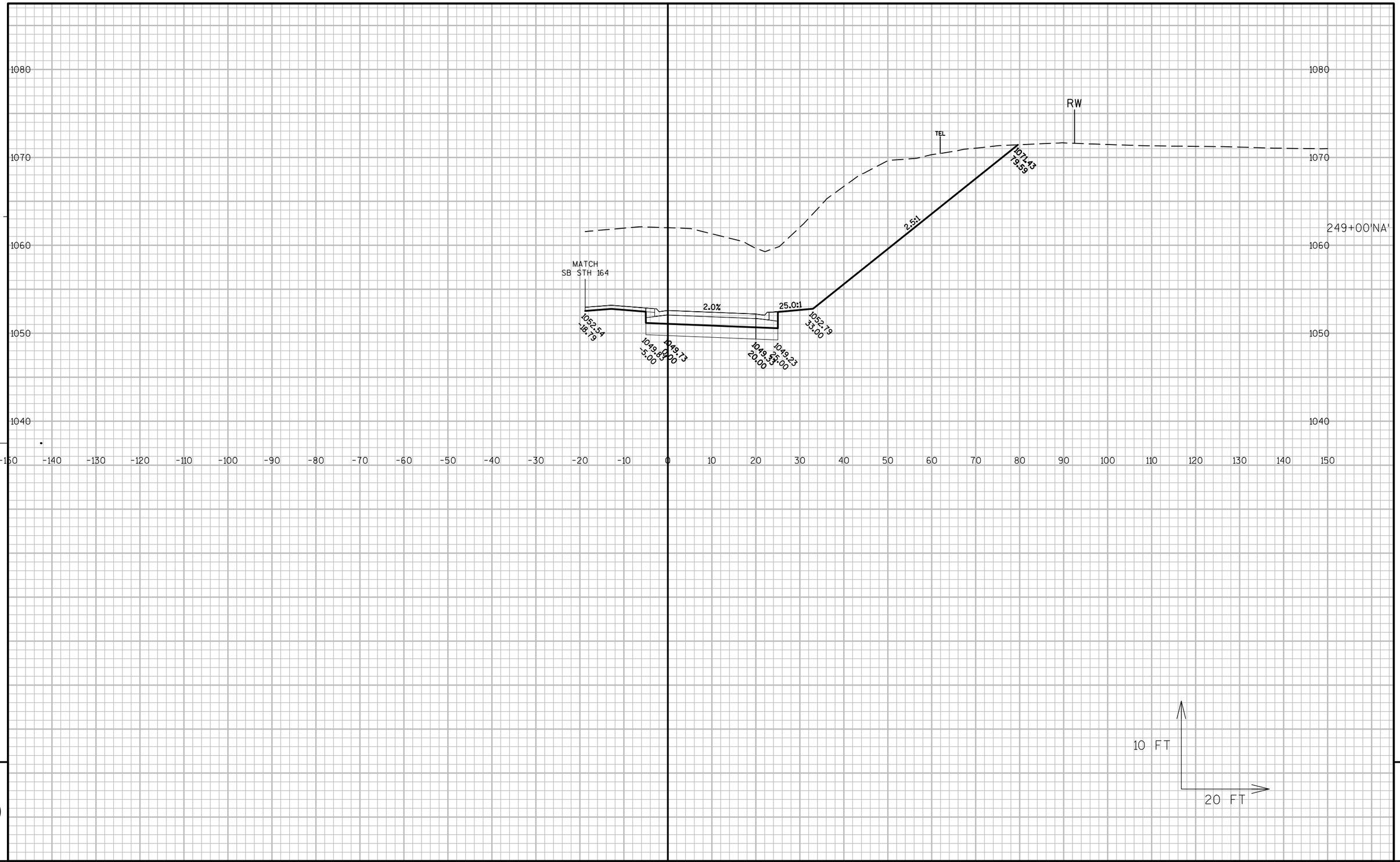
WISDOT/CADDS SHEET 49



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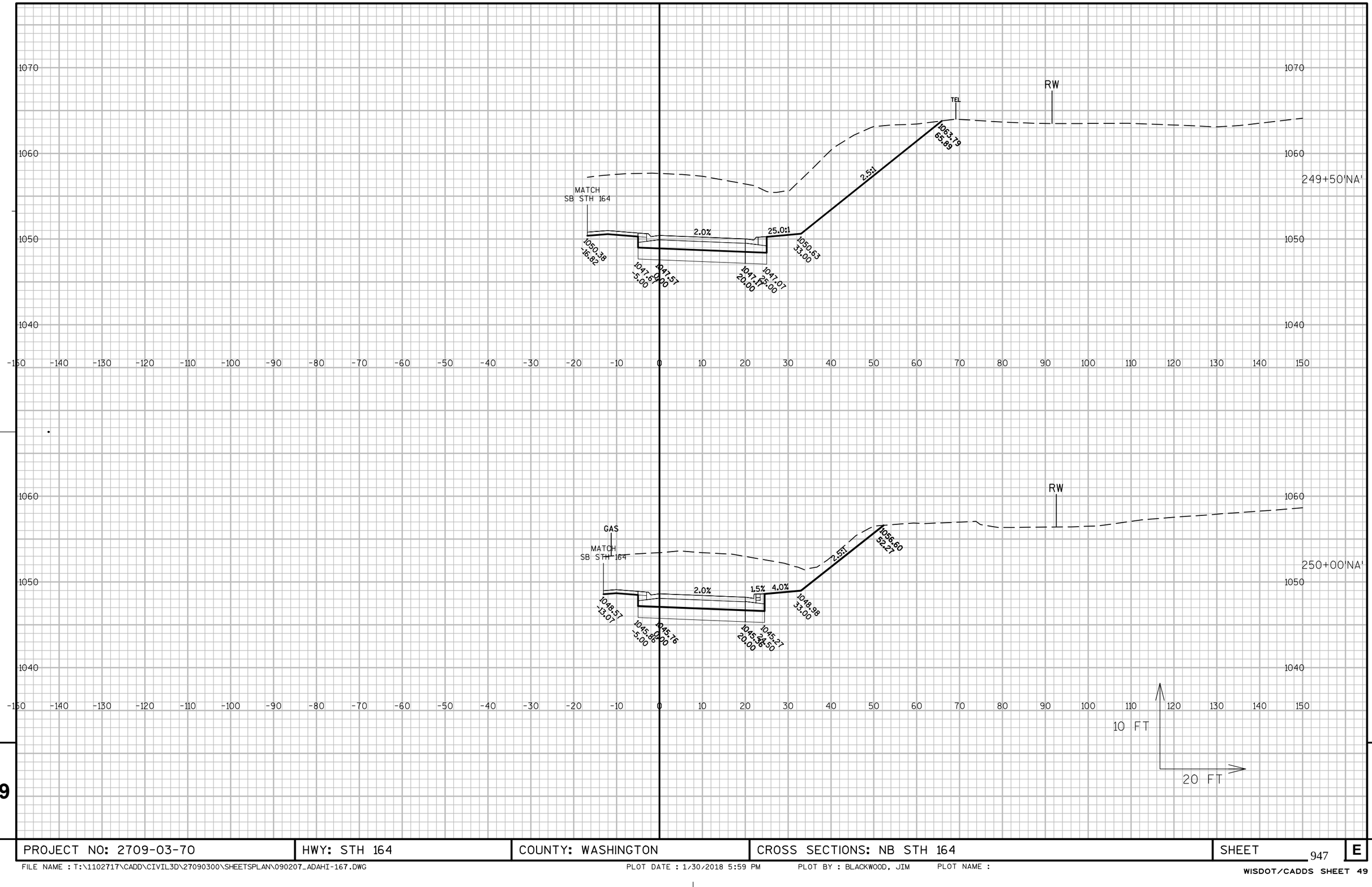
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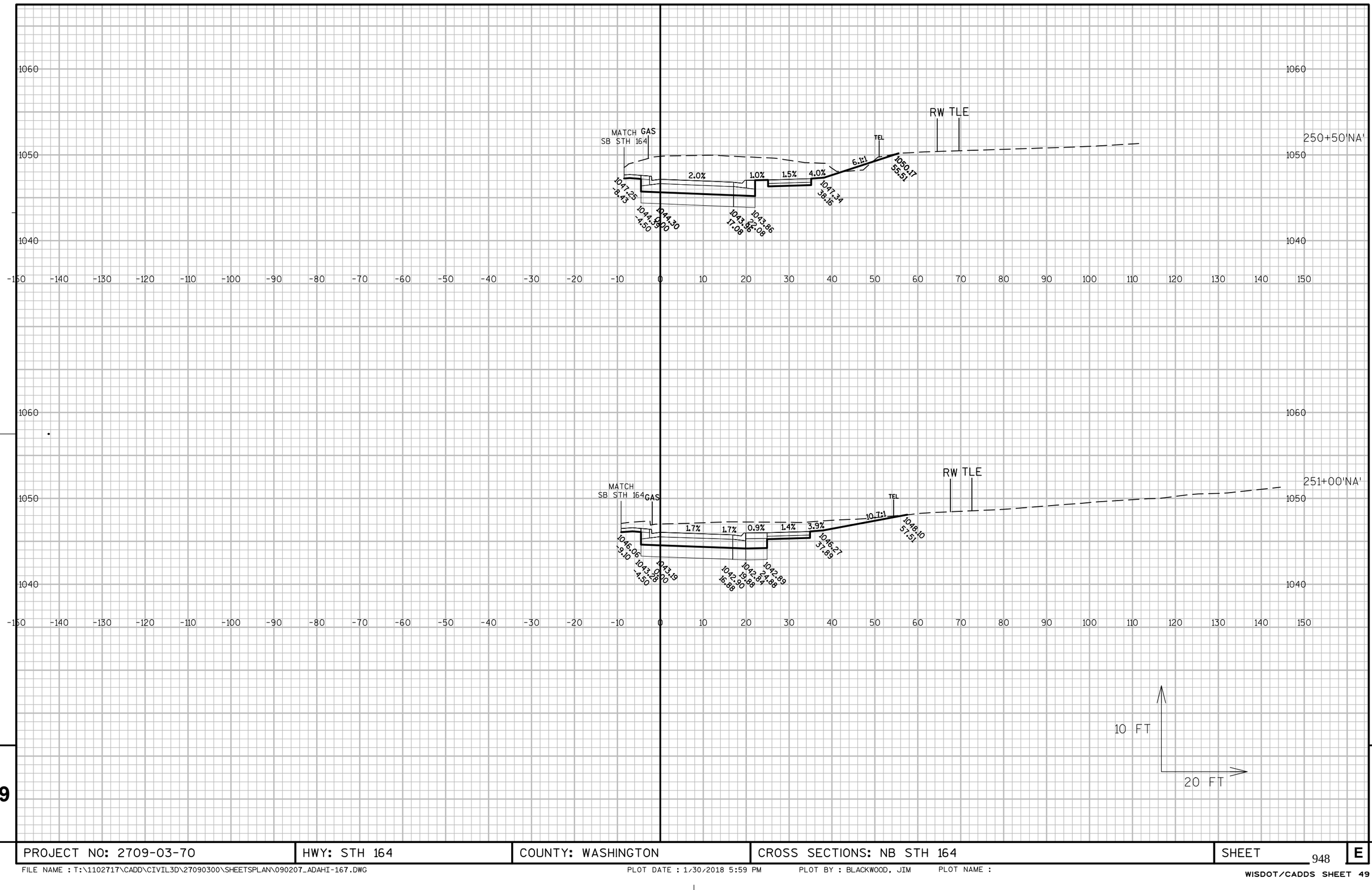
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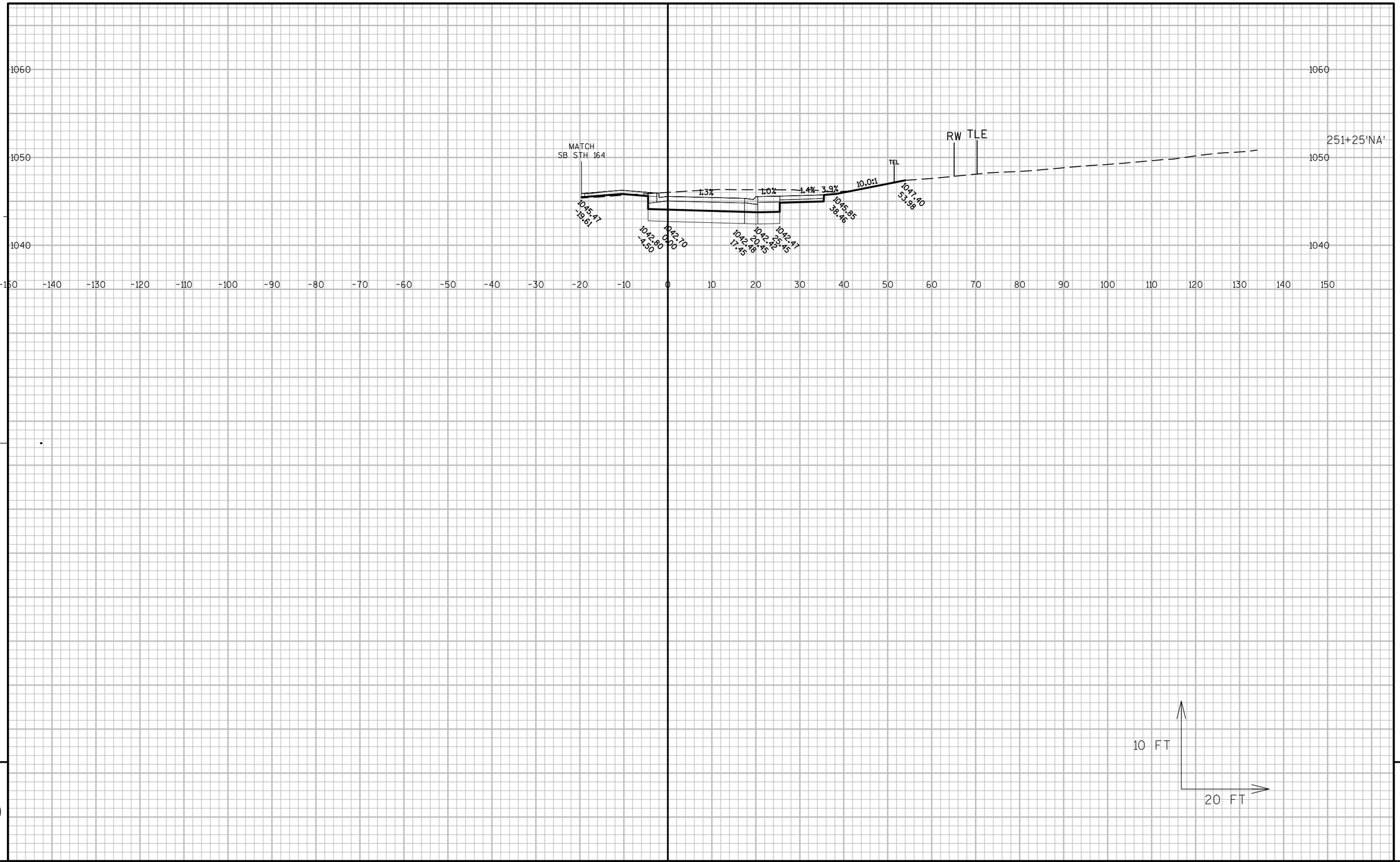


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 948	E

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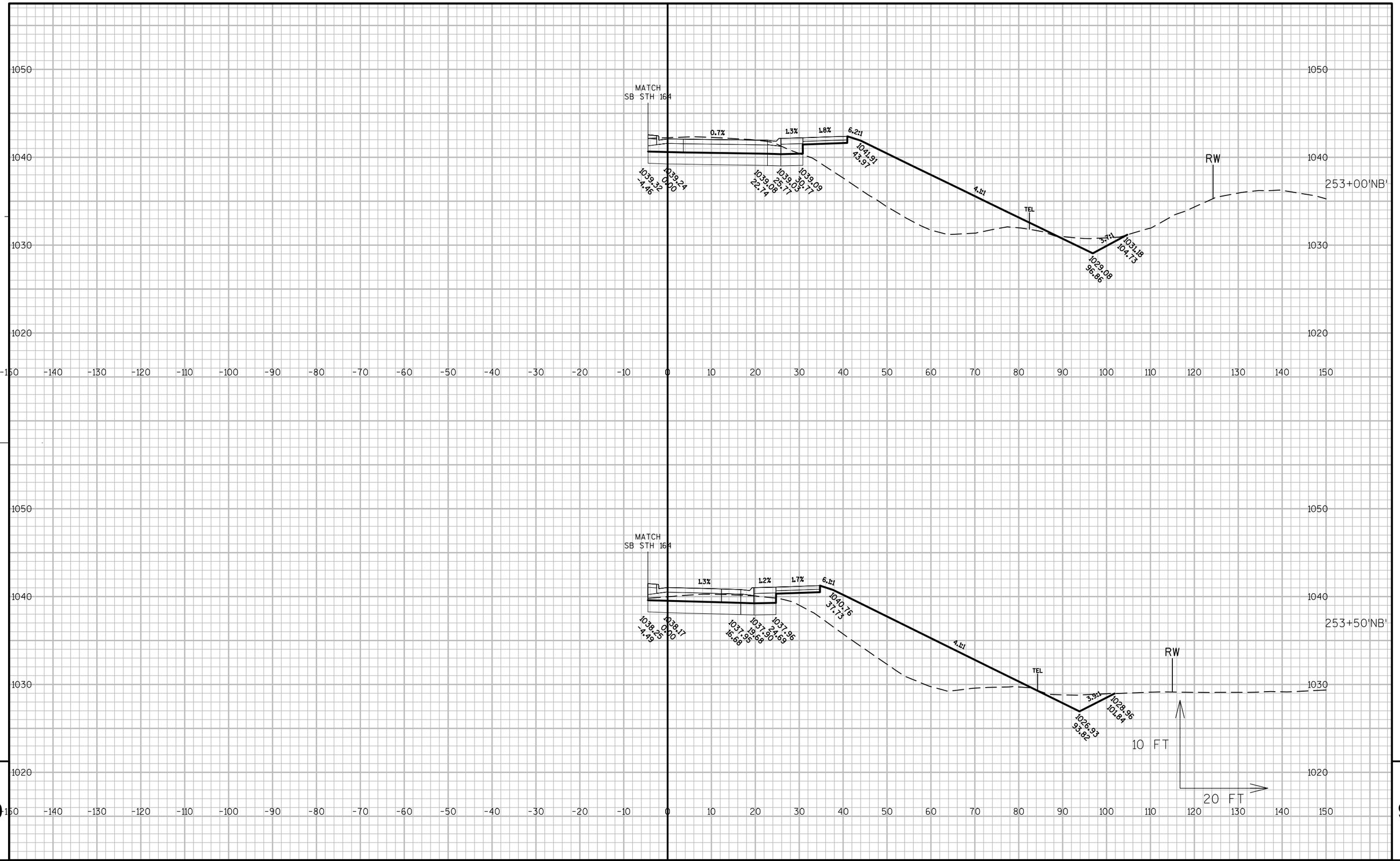


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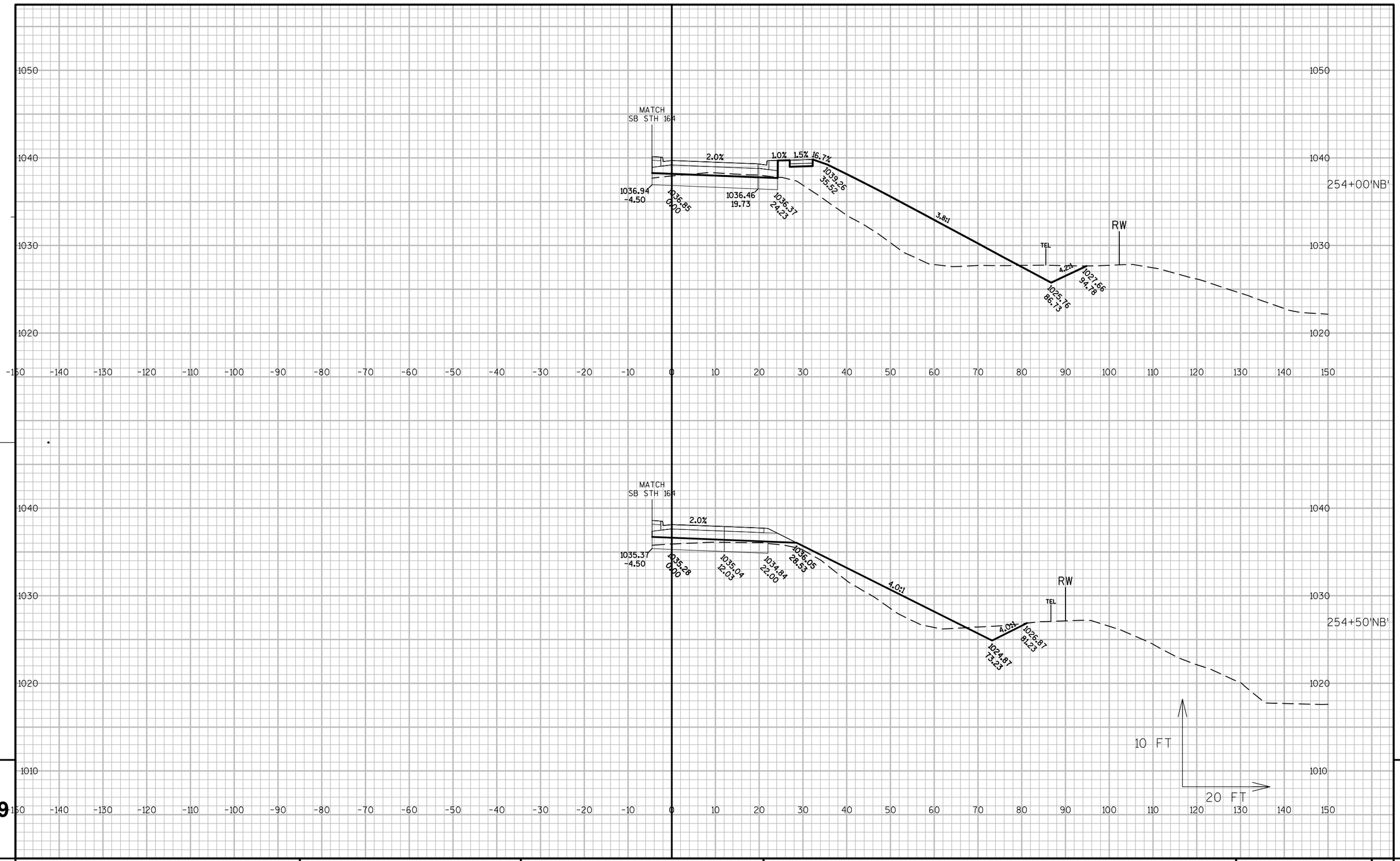
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 950	E

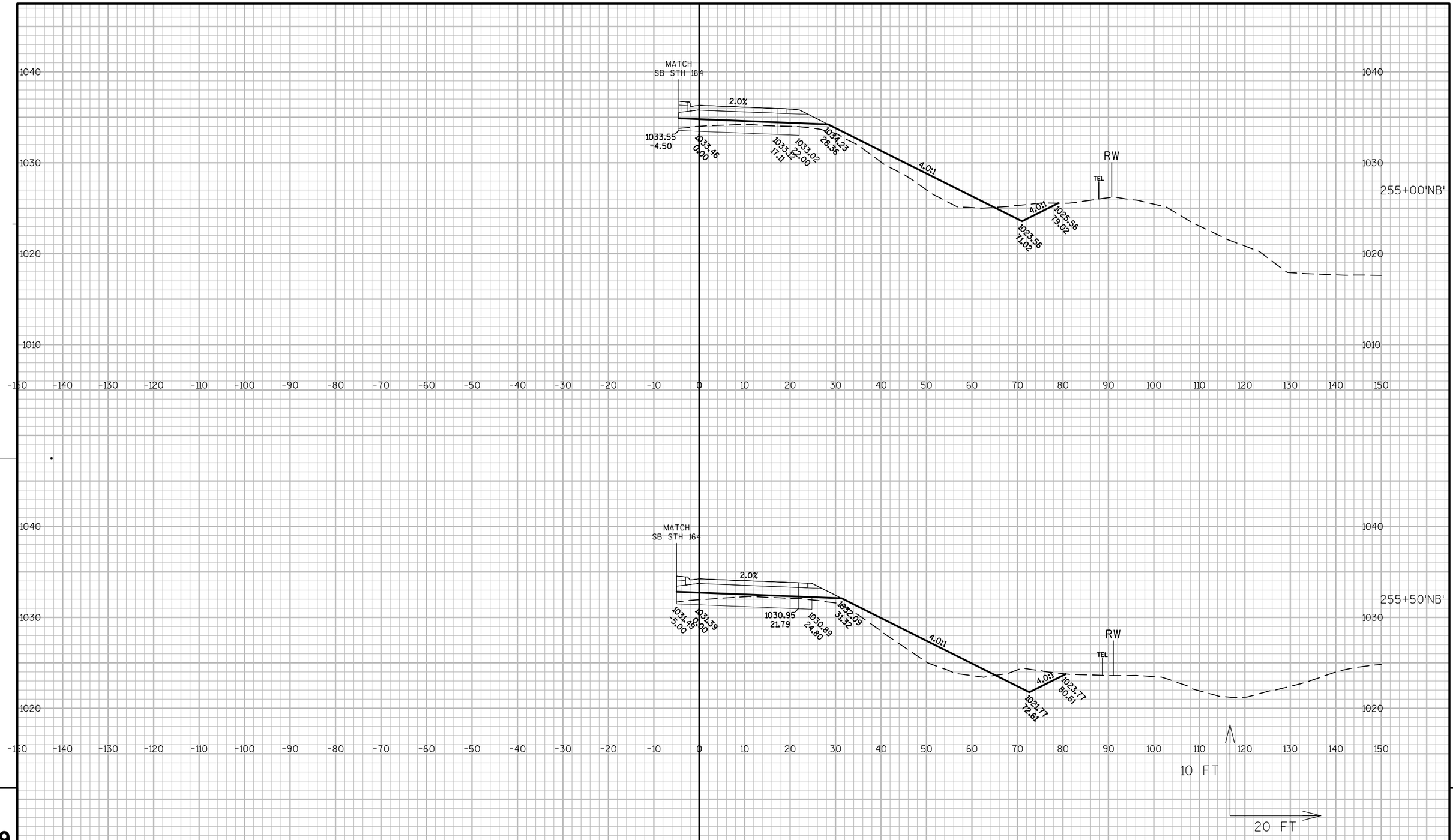
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 951	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 6:13 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

WISDOT/CADDS SHEET 49

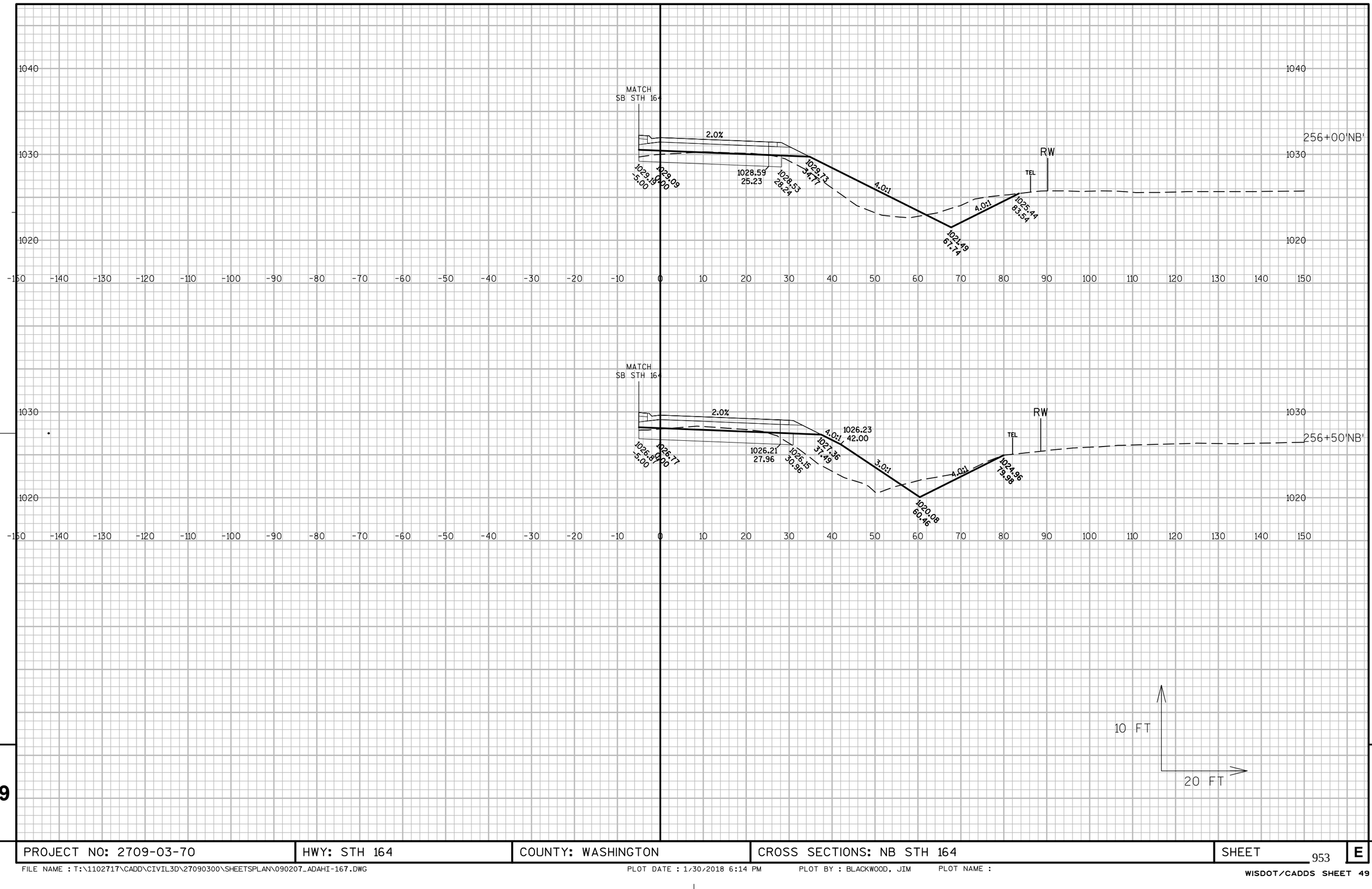


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 952	E

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WISDOT/CADDS SHEET 49

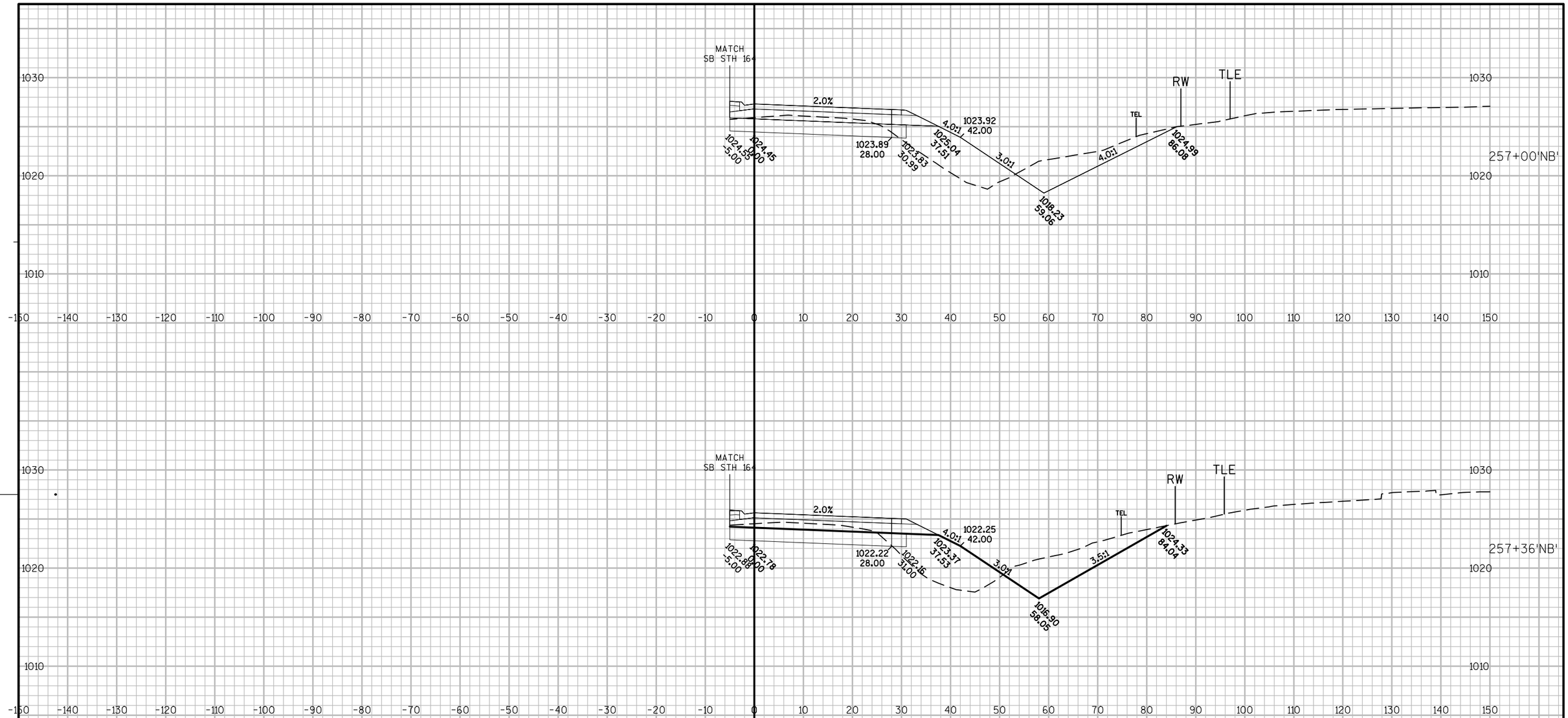


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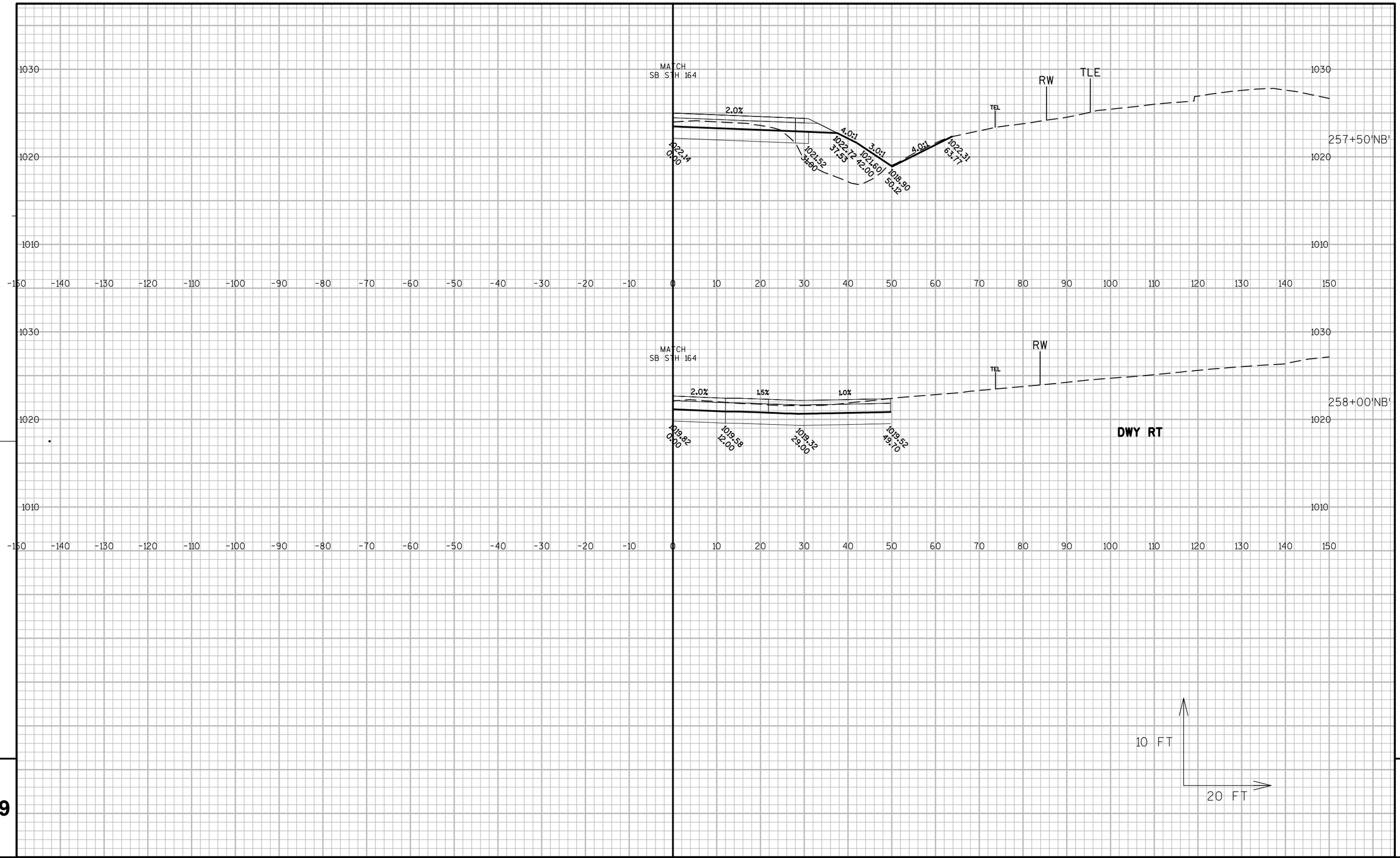
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 954	E

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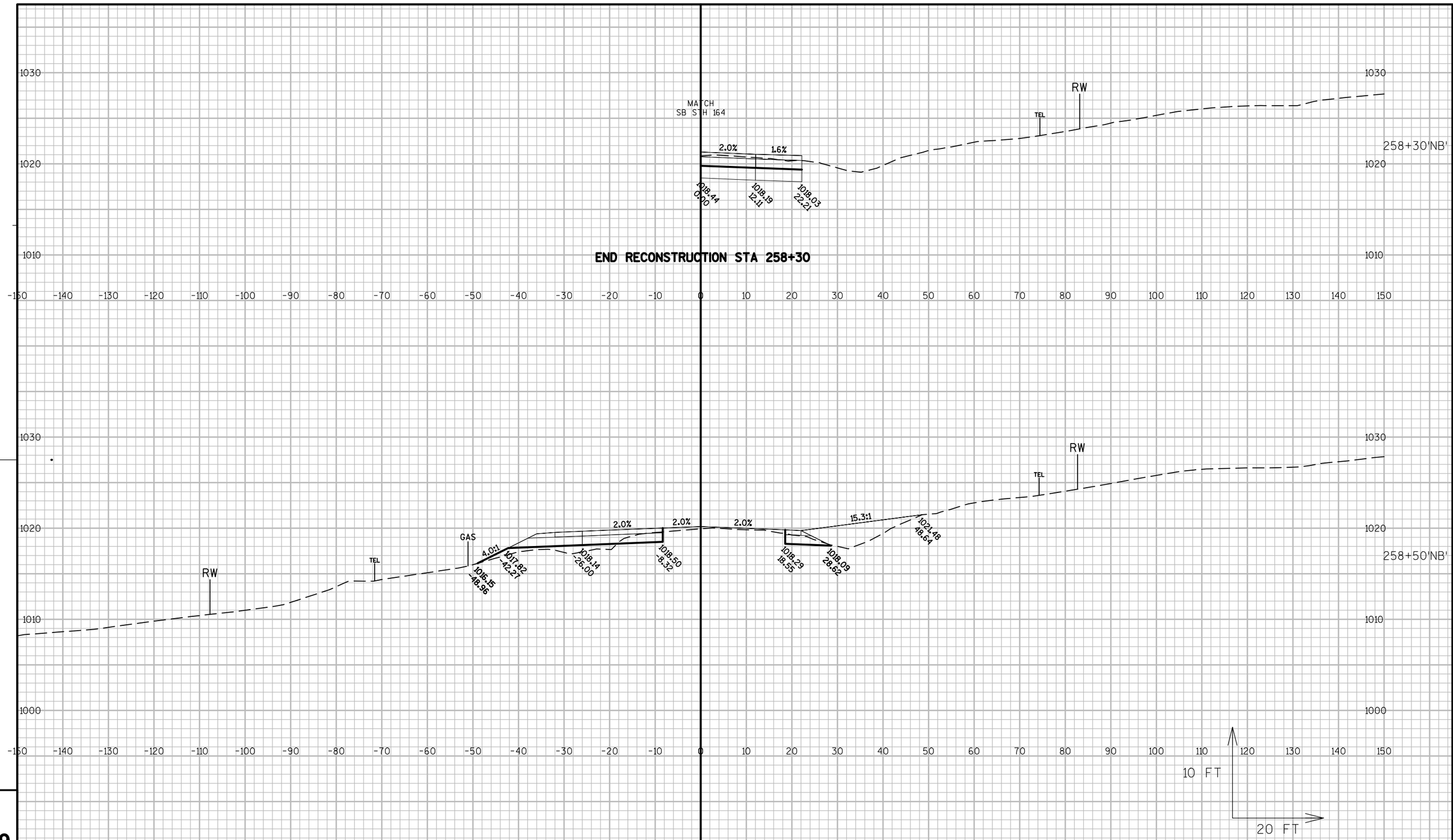
WISDOT/CADDS SHEET 49



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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 955	E

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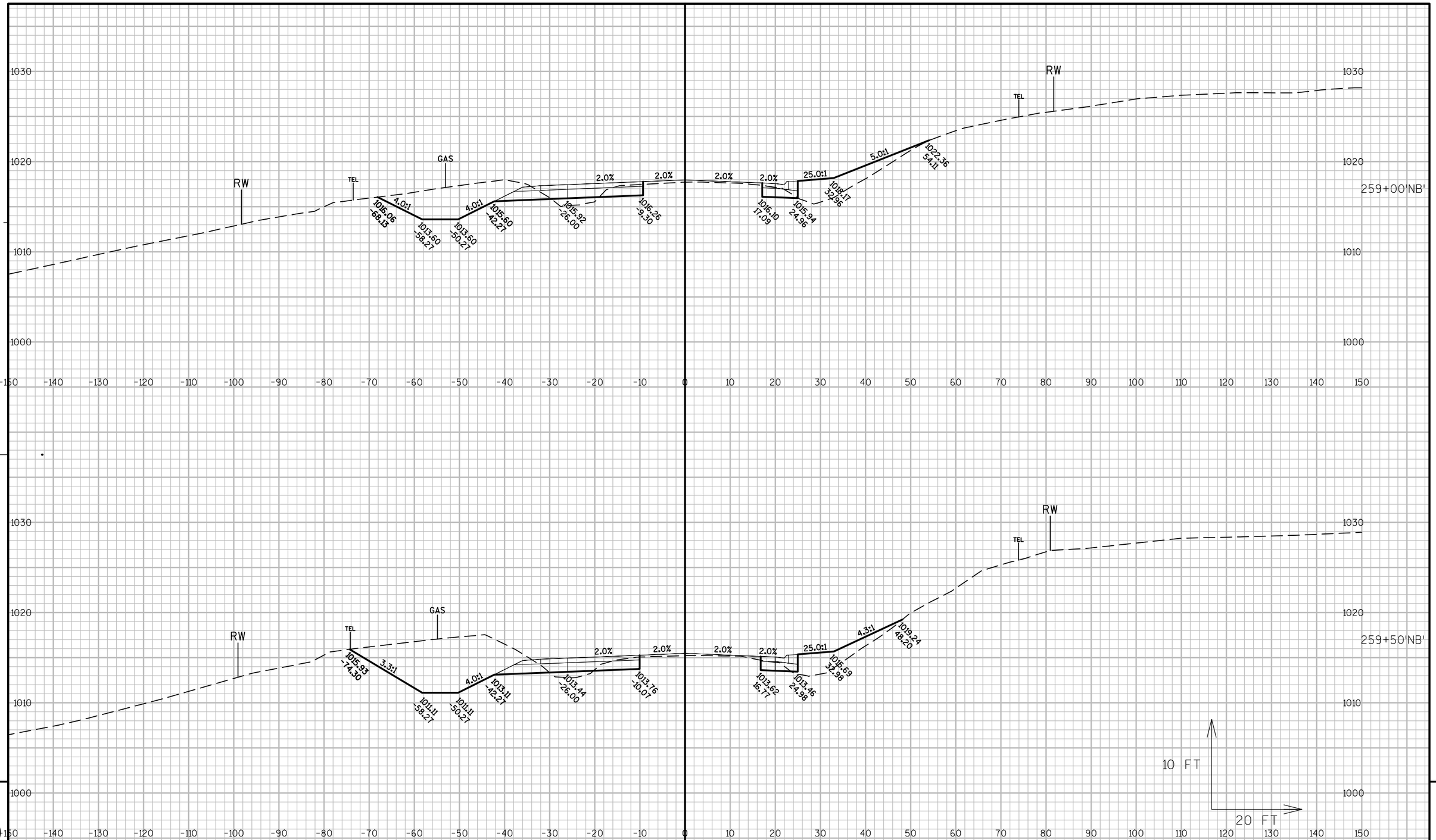
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 956	E

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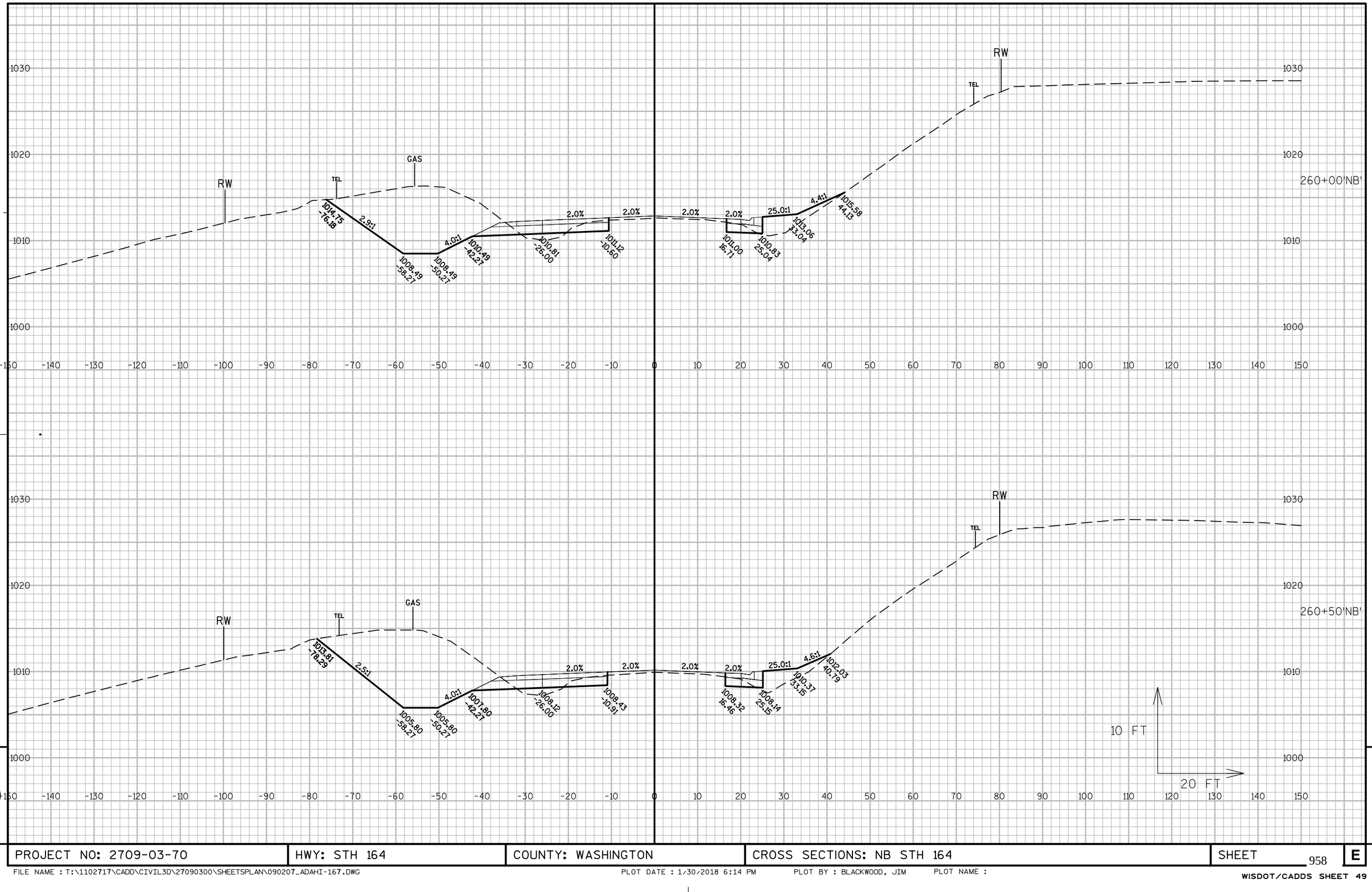
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 957	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 6:14 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

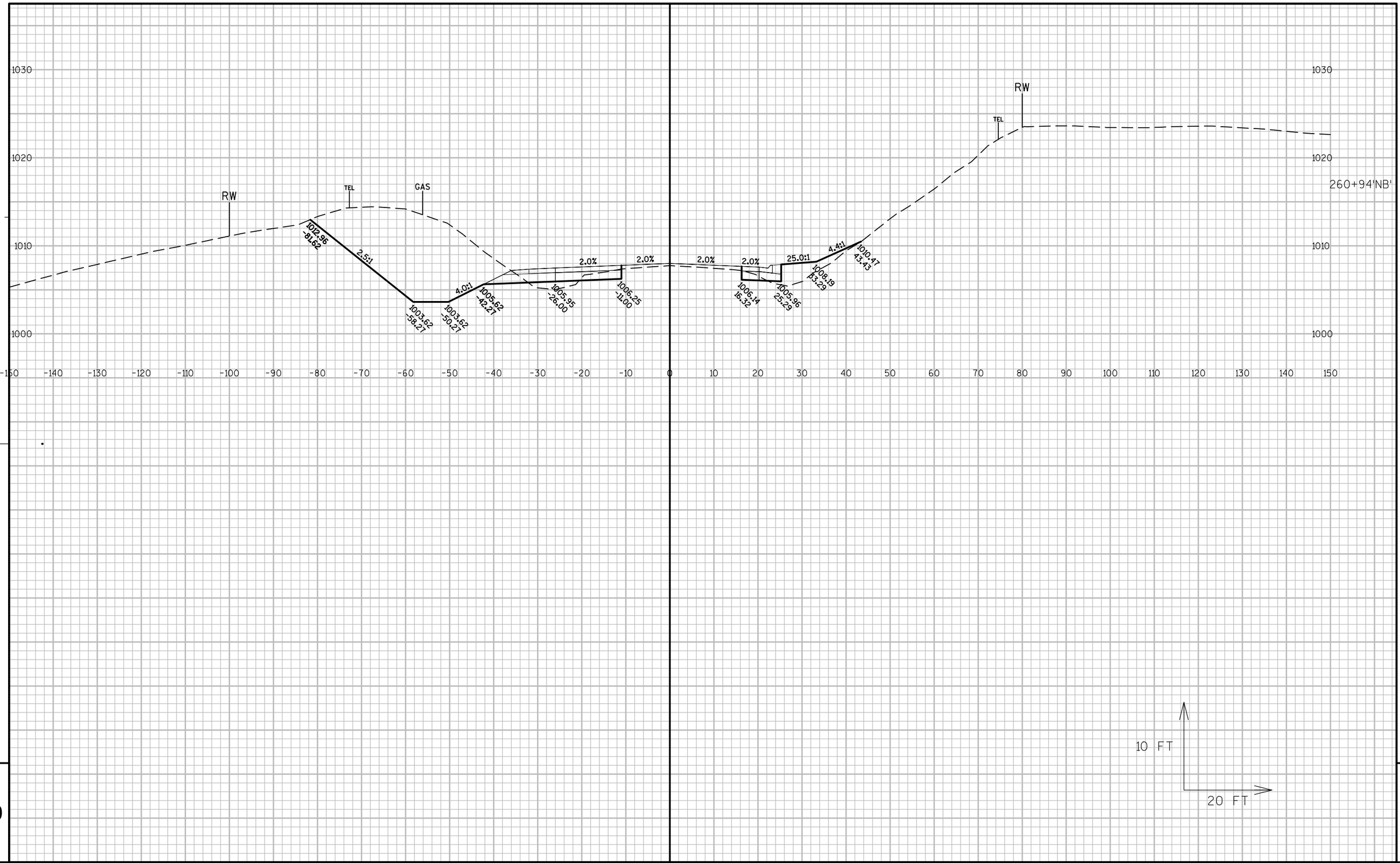
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: NB STH 164	SHEET 958	E

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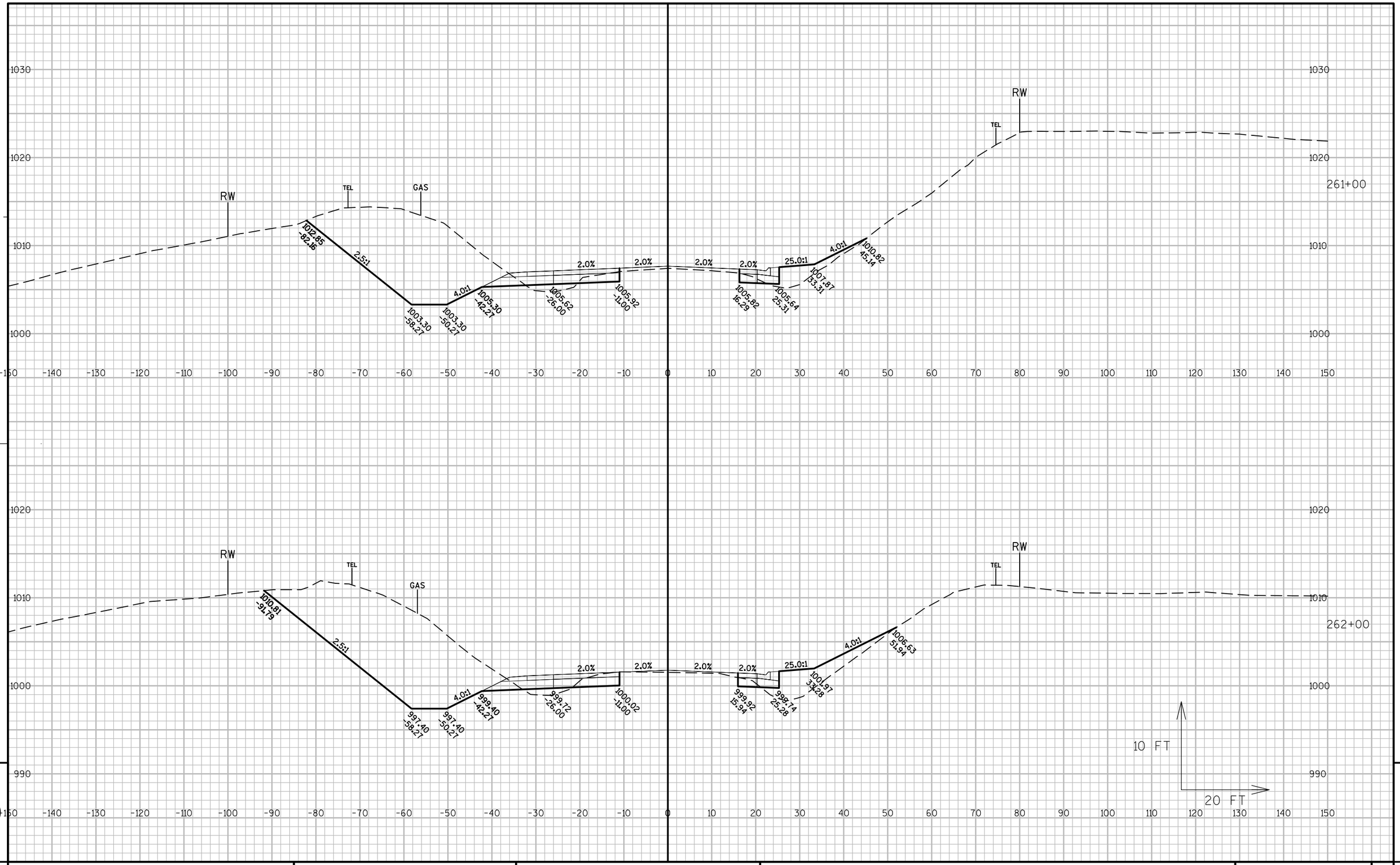
WISDOT/CADDS SHEET 49



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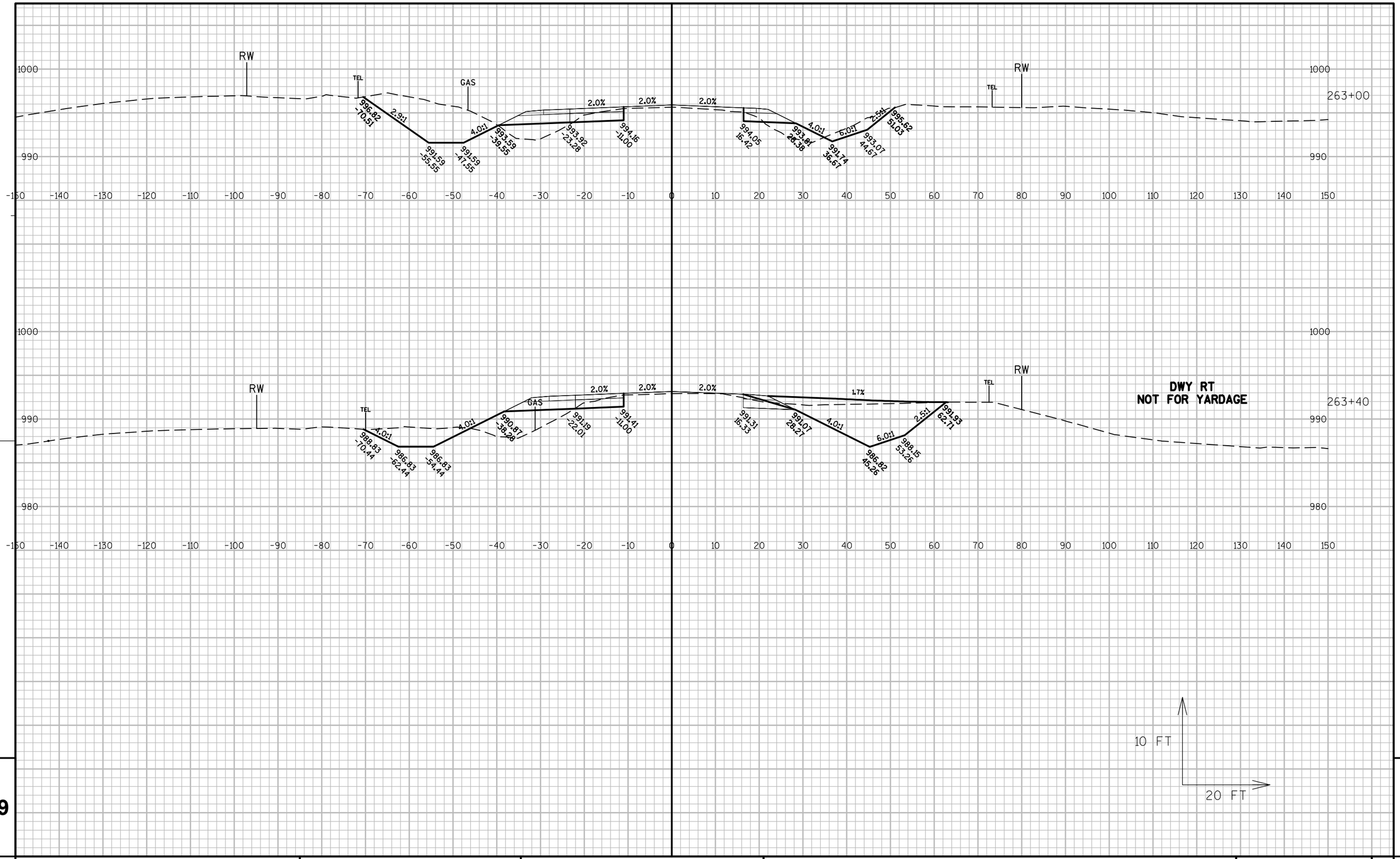
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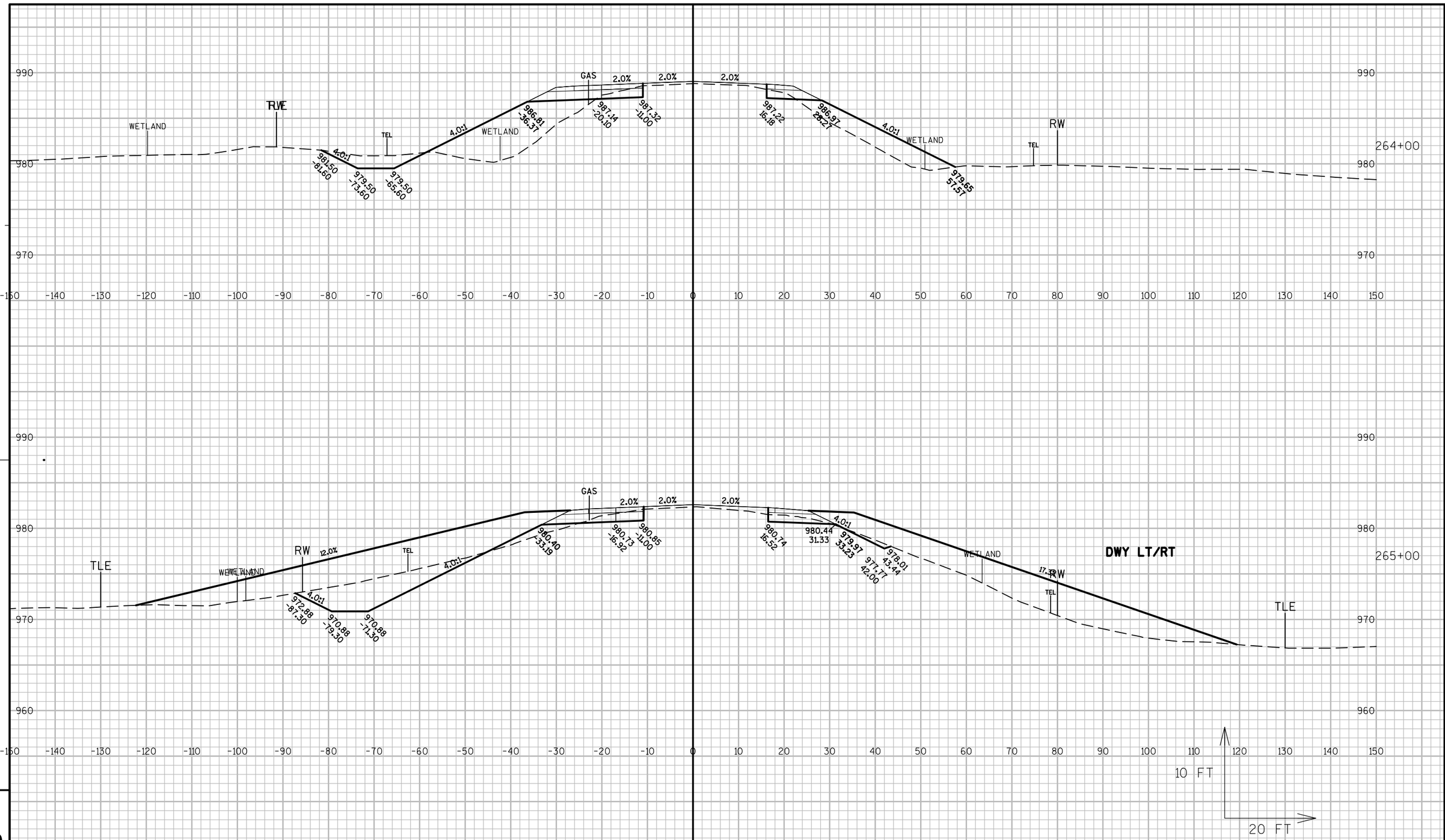


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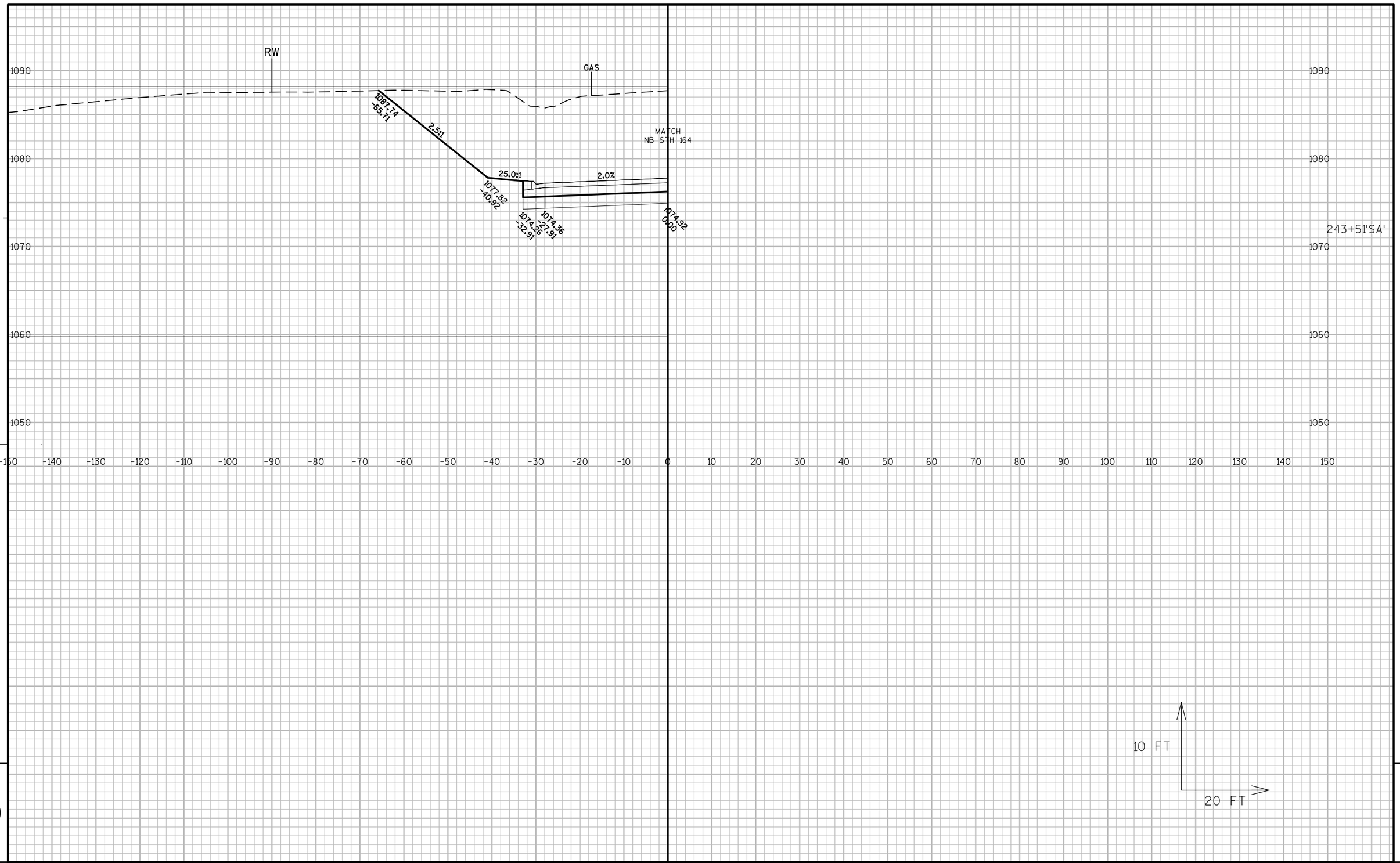
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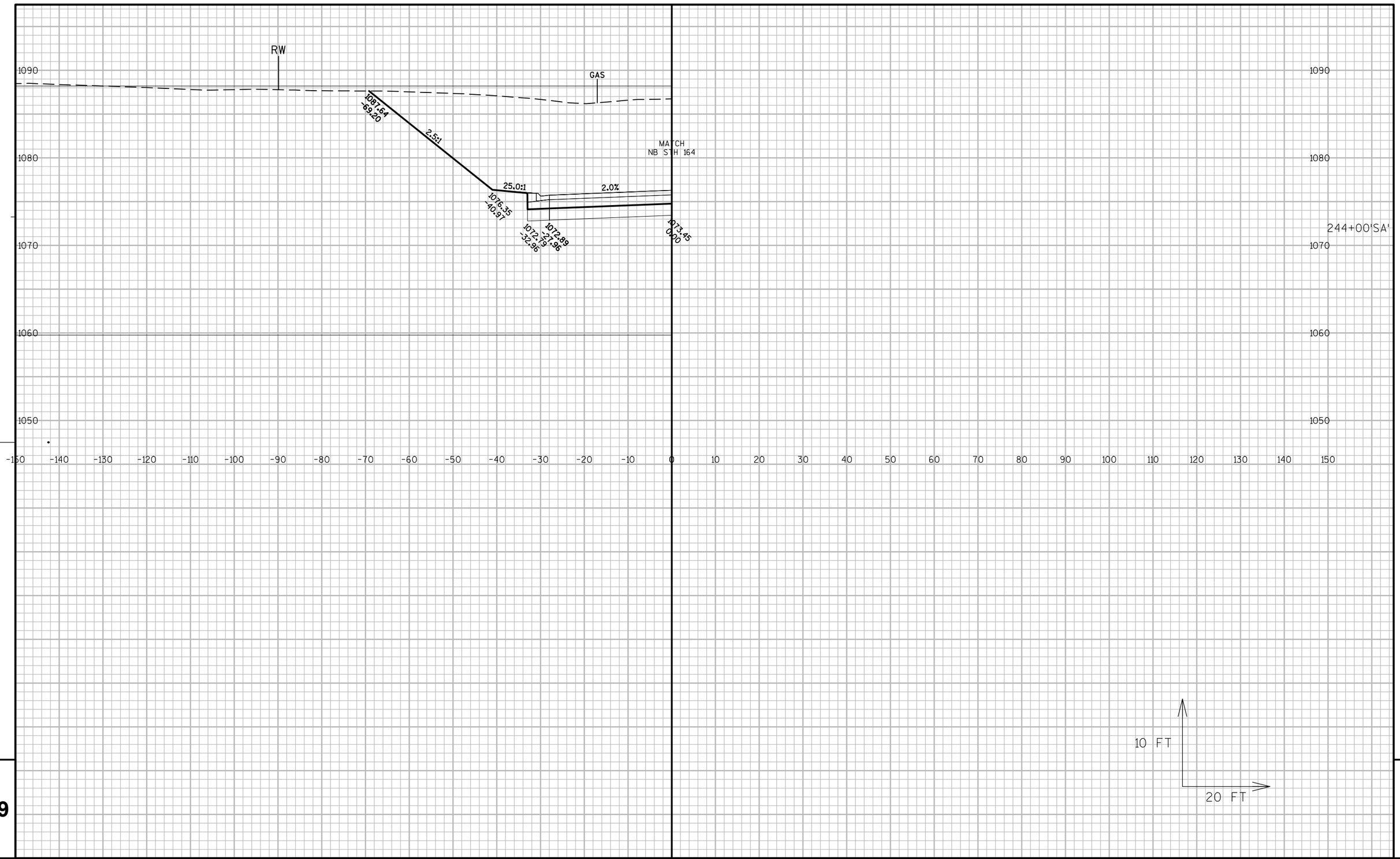
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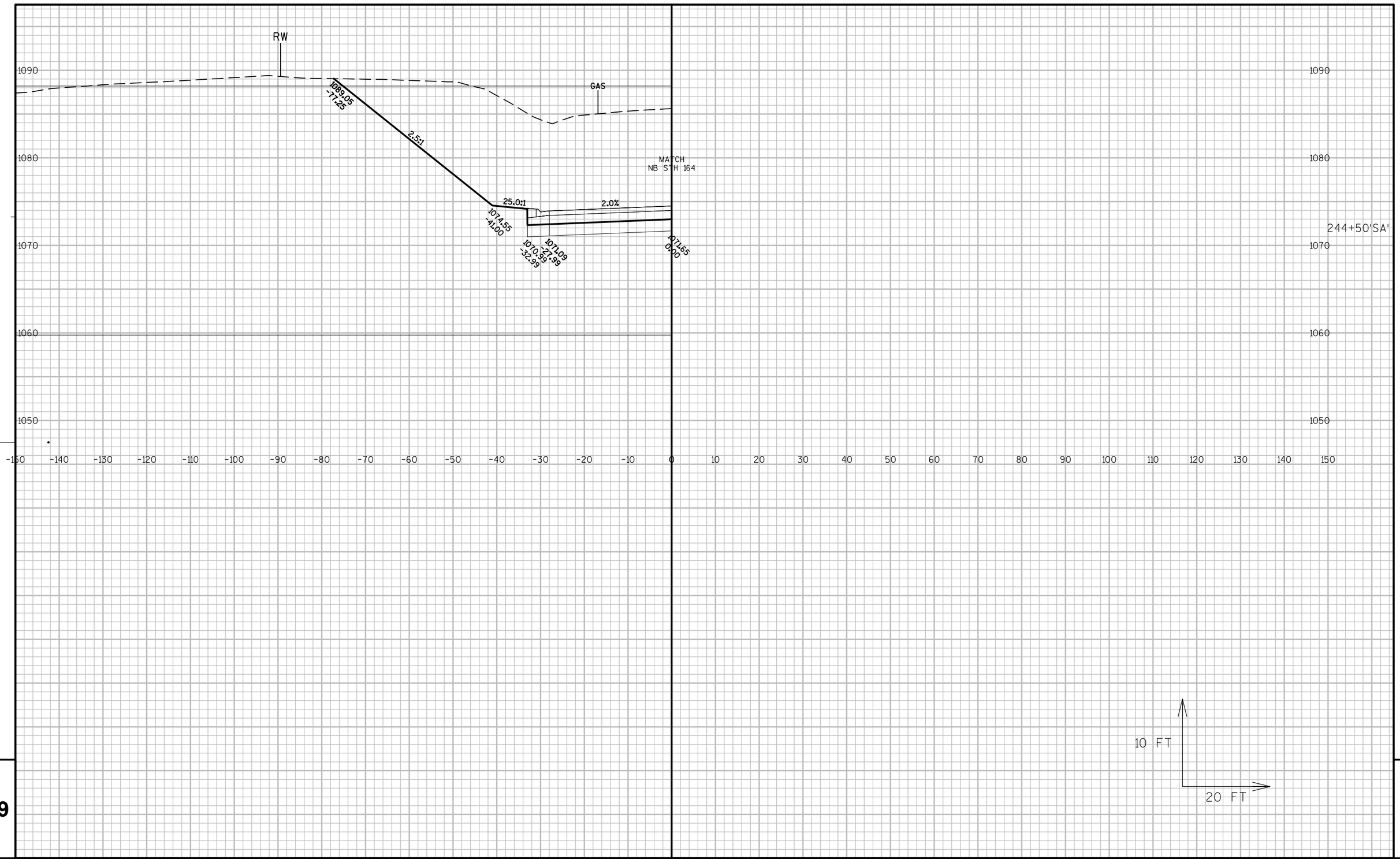
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 964	E

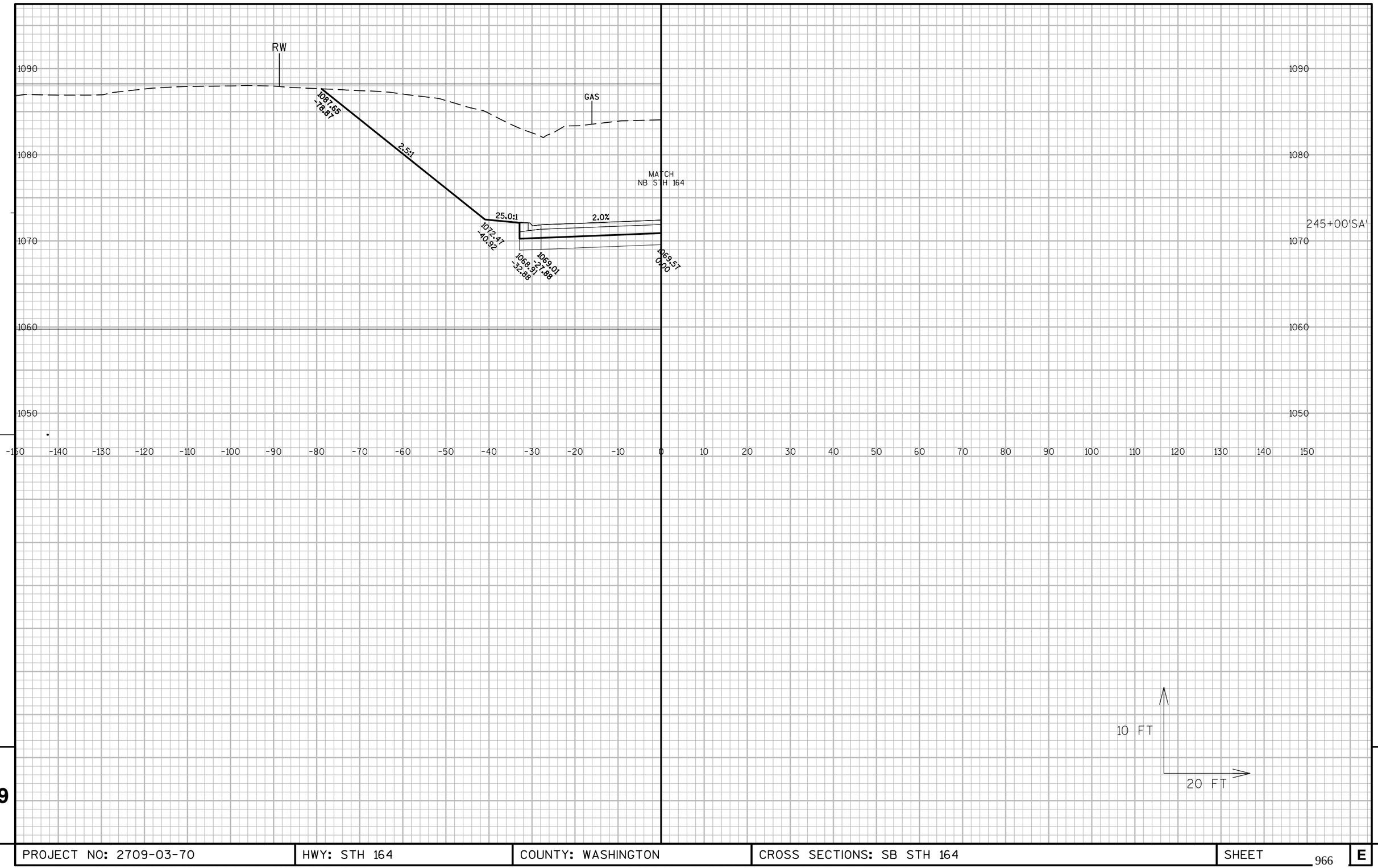
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 965	E



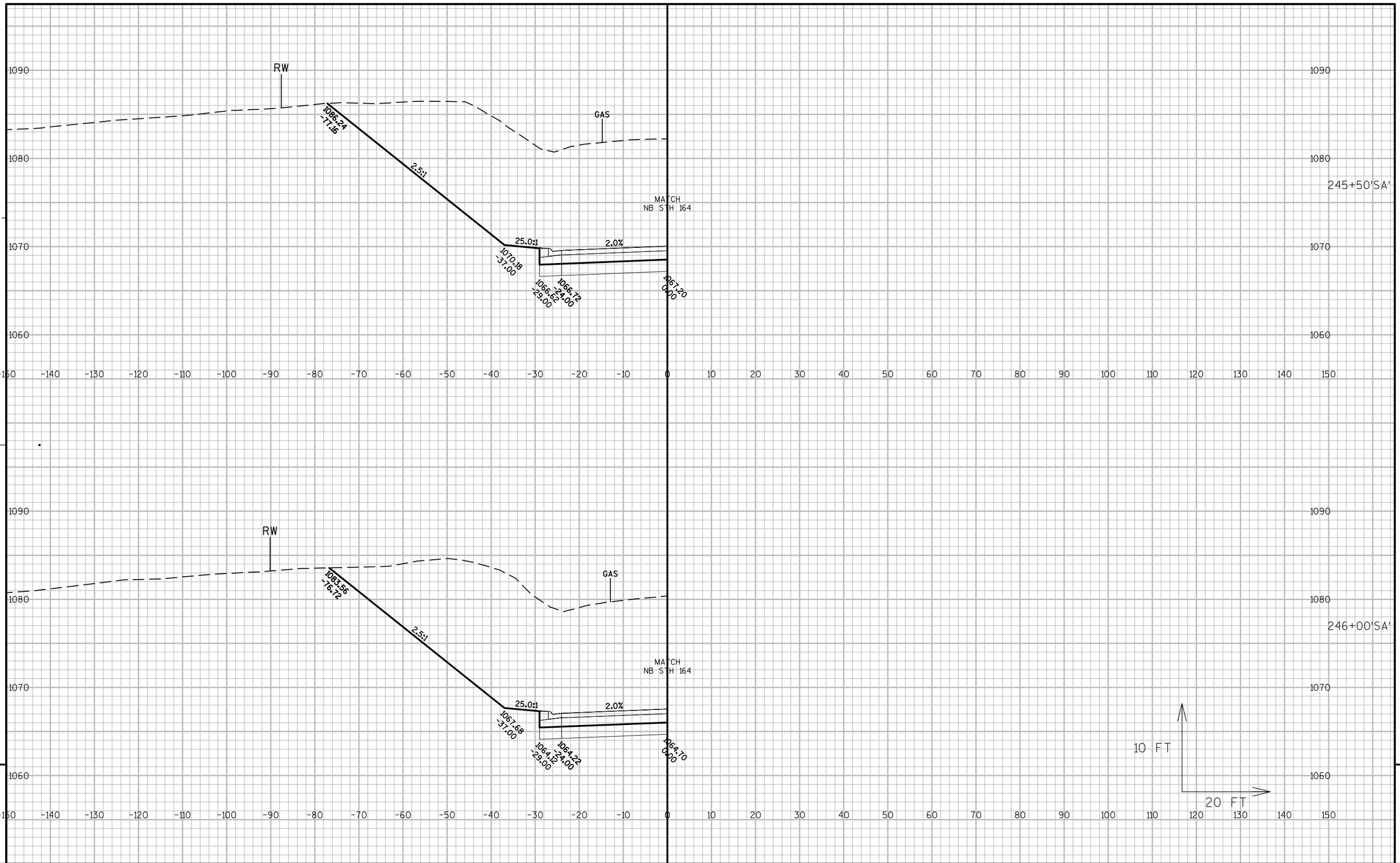
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 966	E

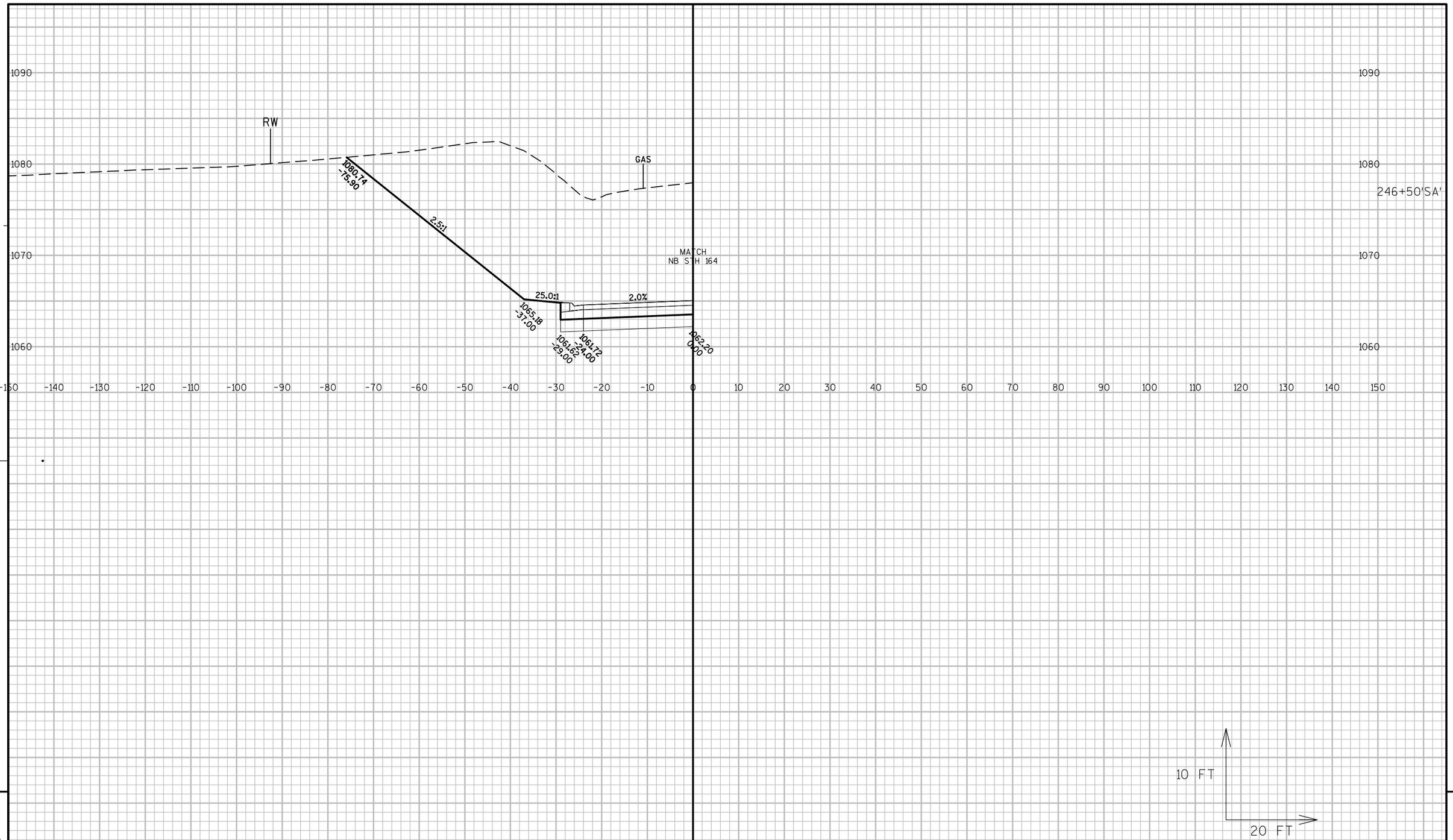
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WISDOT/CADDS SHEET 49



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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 967	E



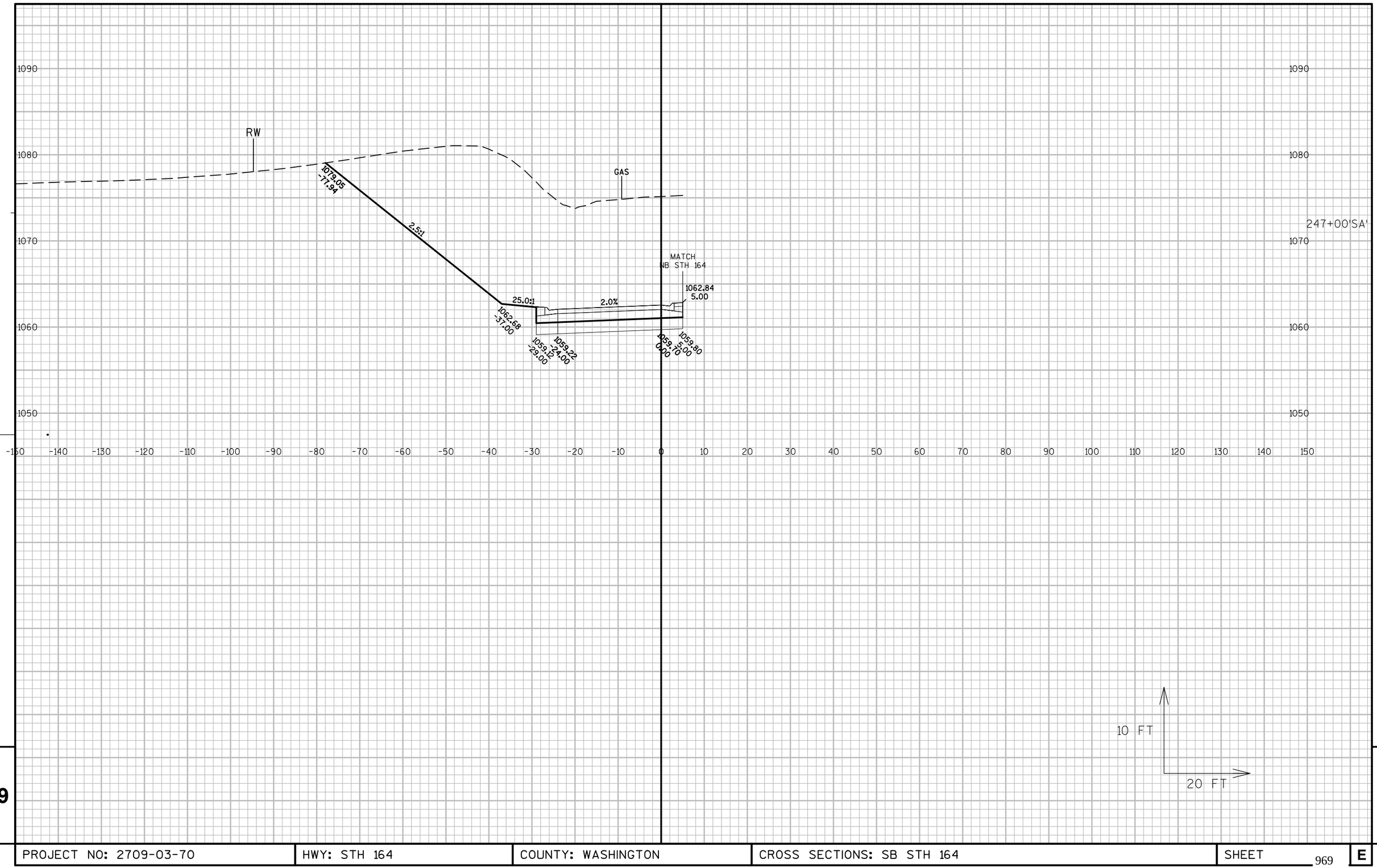
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 968	E

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WISDOT/CADDS SHEET 49

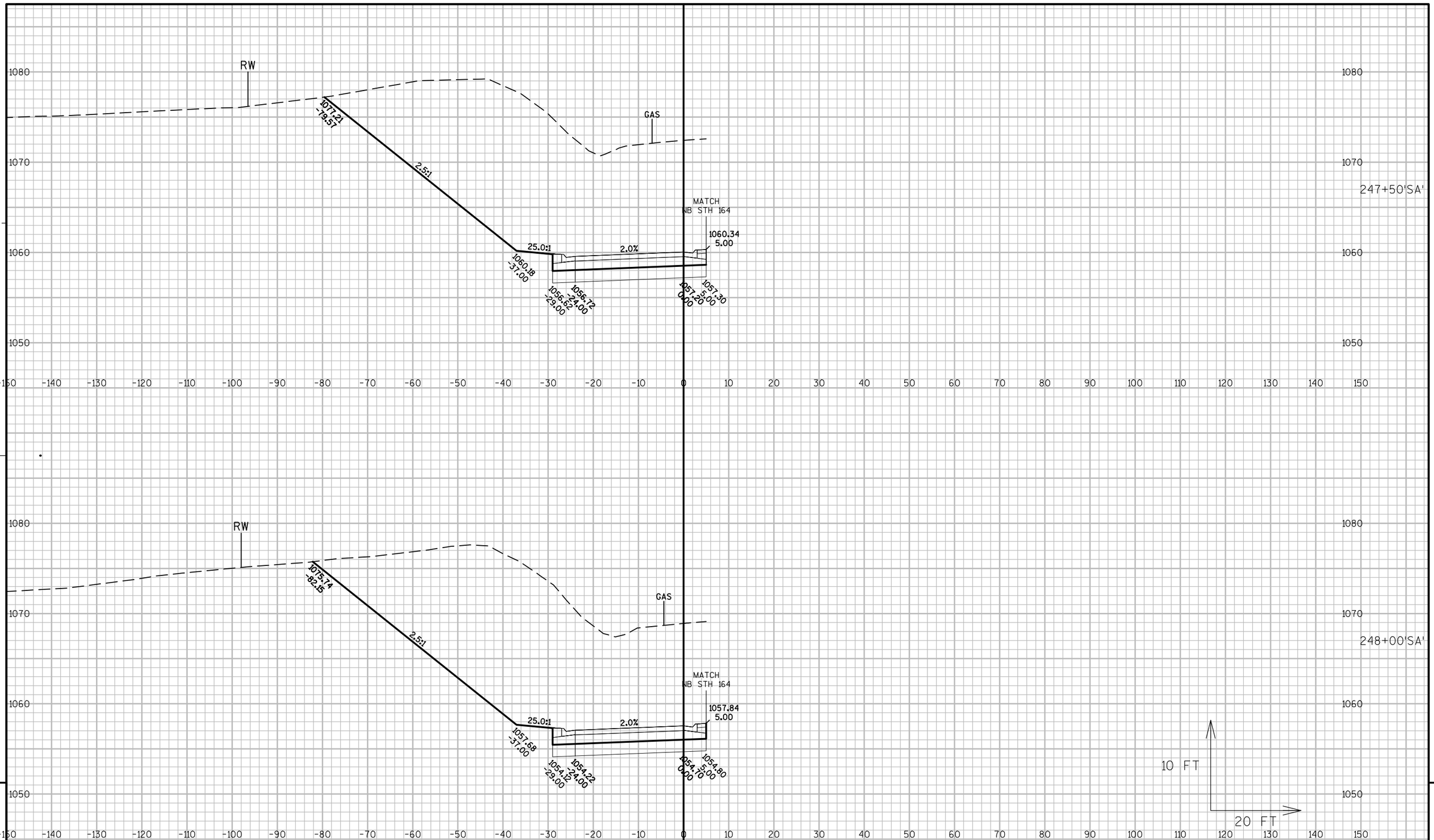


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 969	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 6:17 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

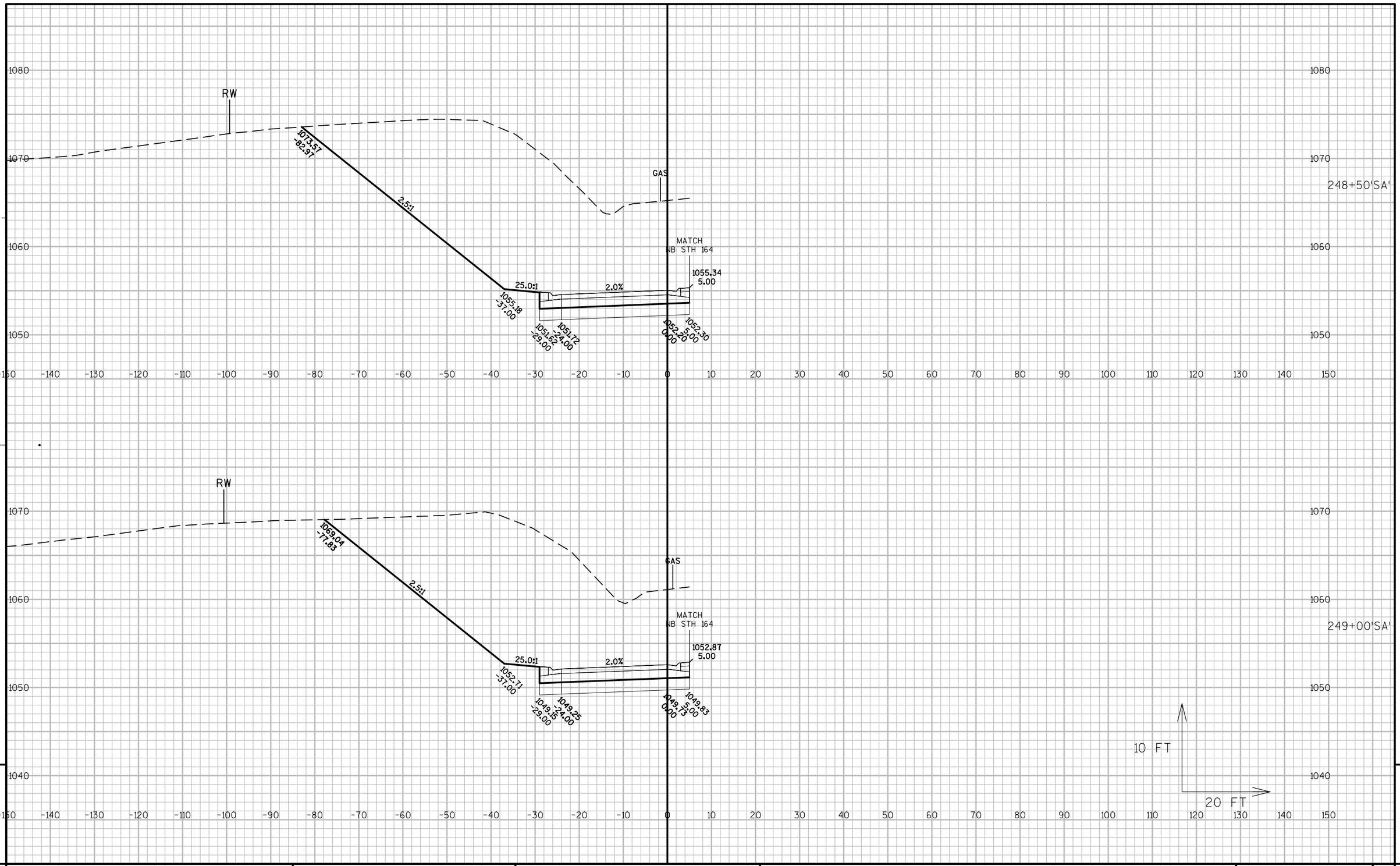
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 970	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 6:17 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

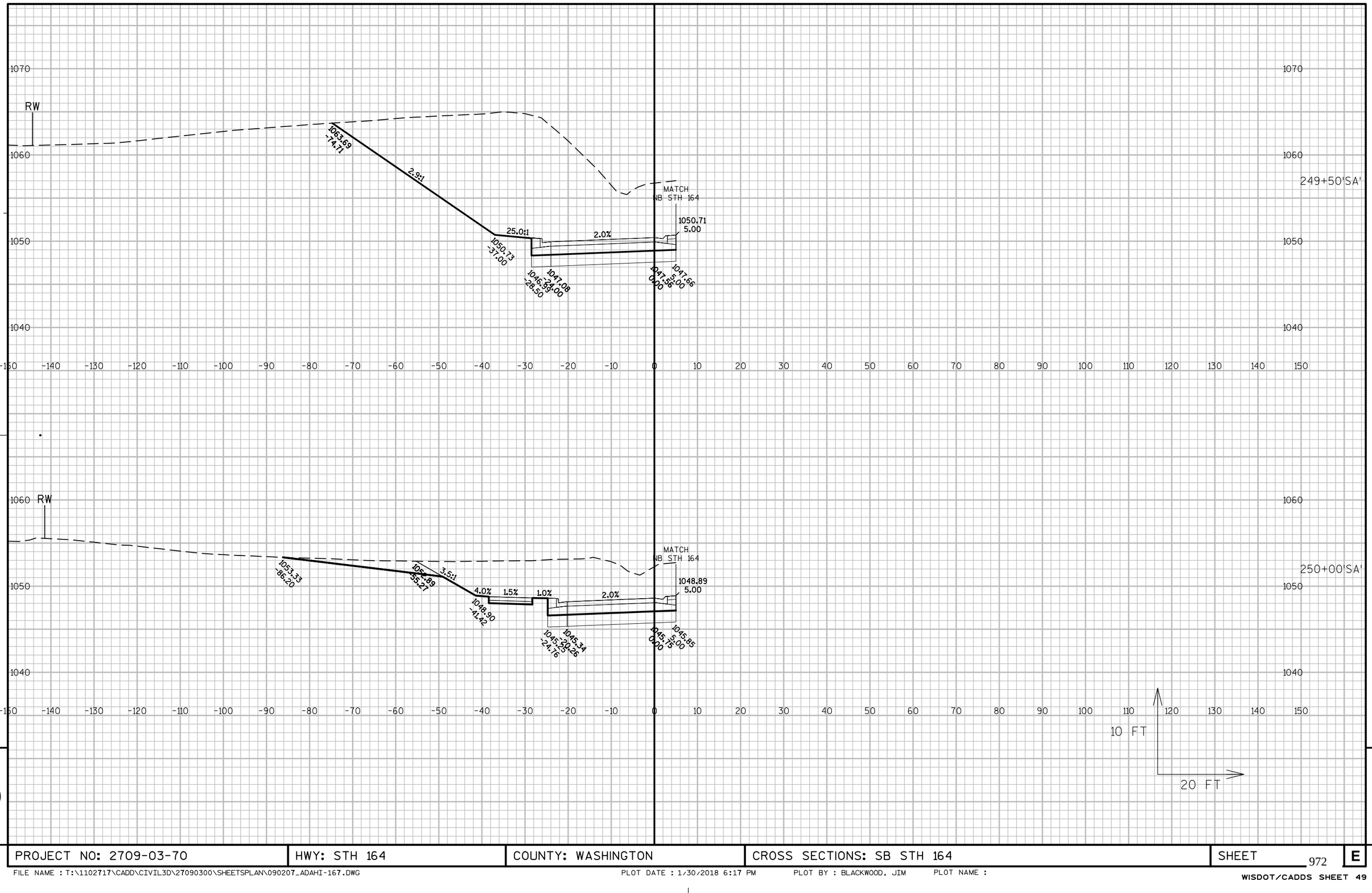
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 971	E

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WISDOT/CADDS SHEET 49



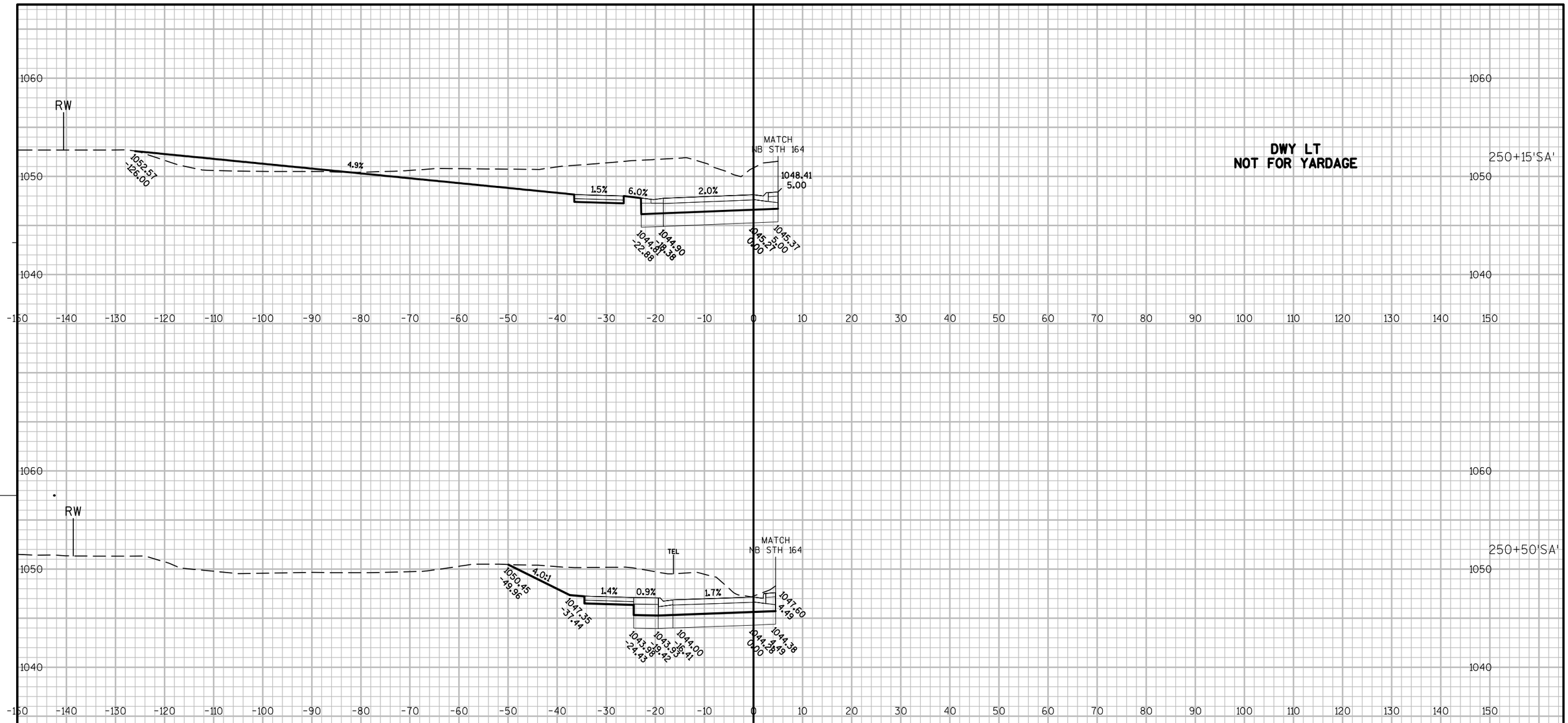
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 972	E

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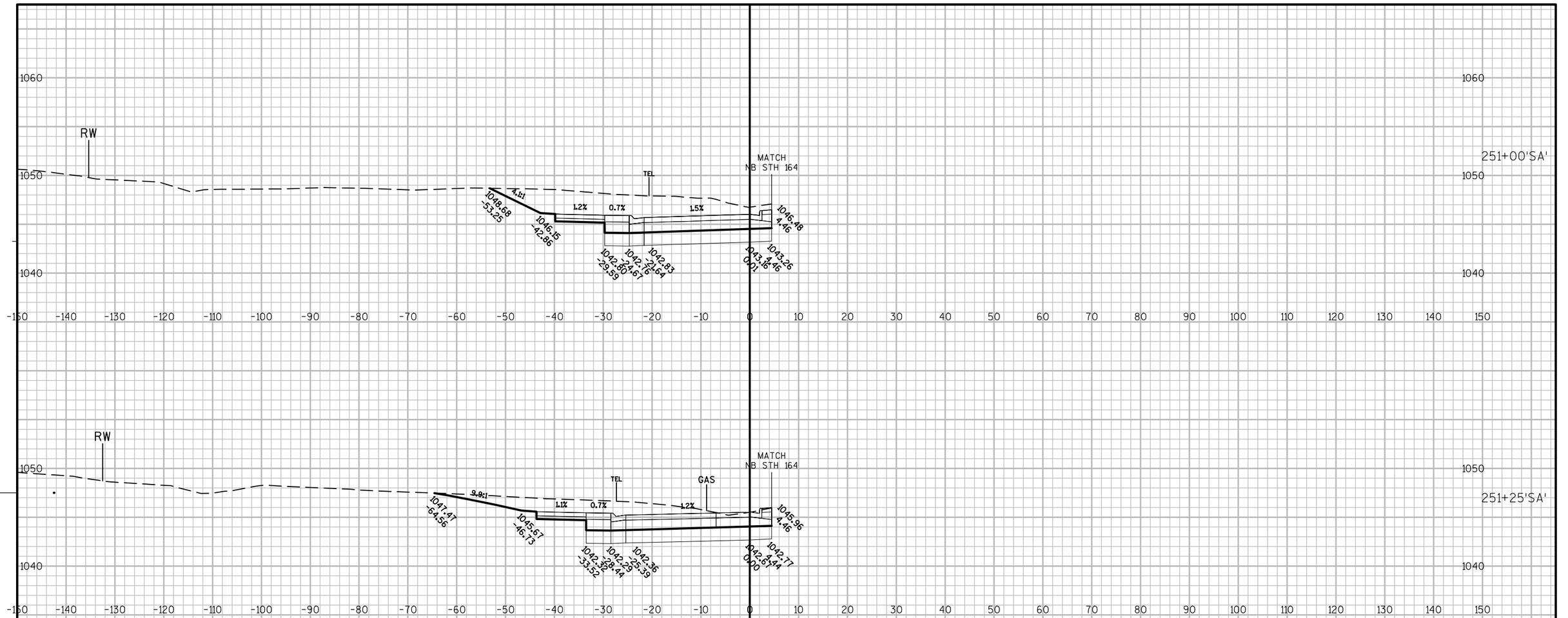
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 973	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 6:17 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

WISDOT/CADDS SHEET 49

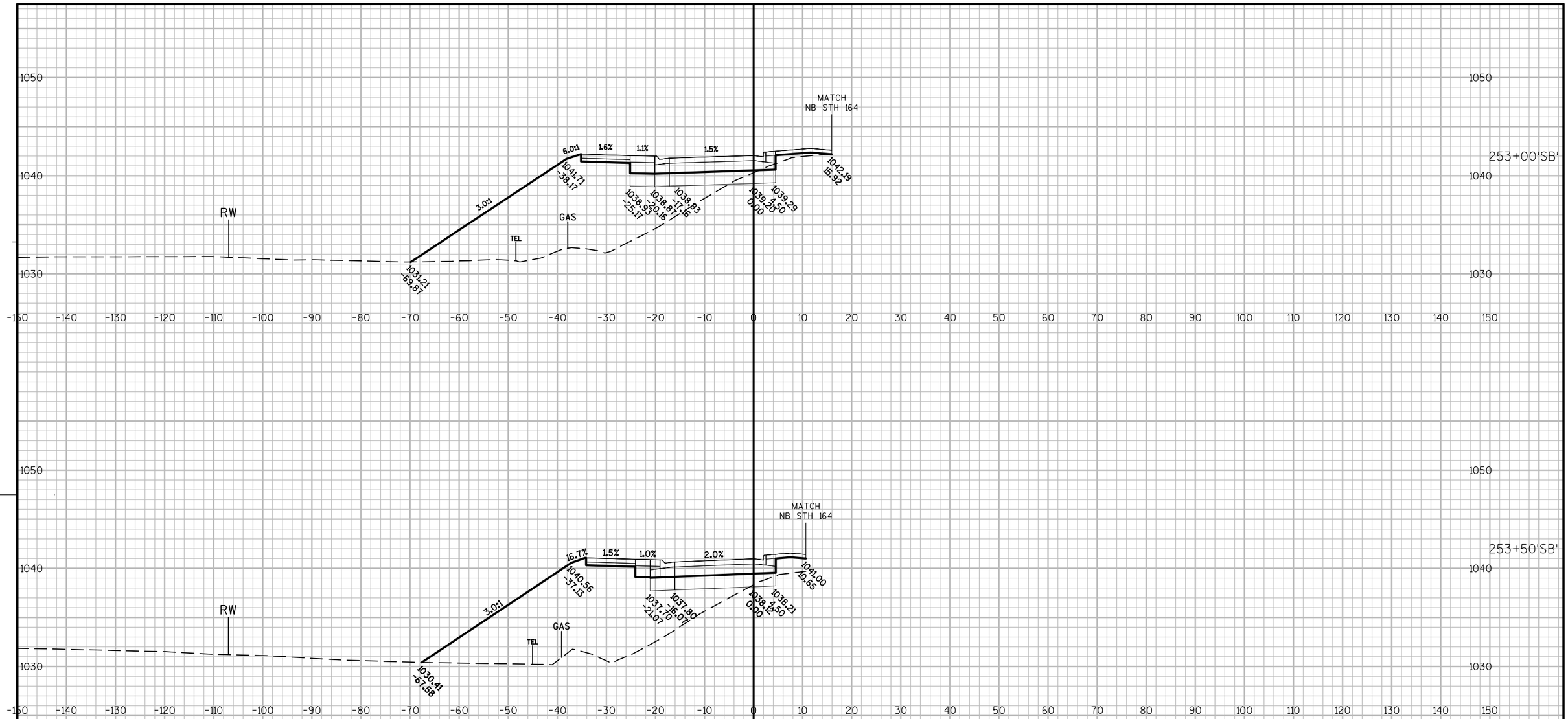


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 974	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 6:17 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

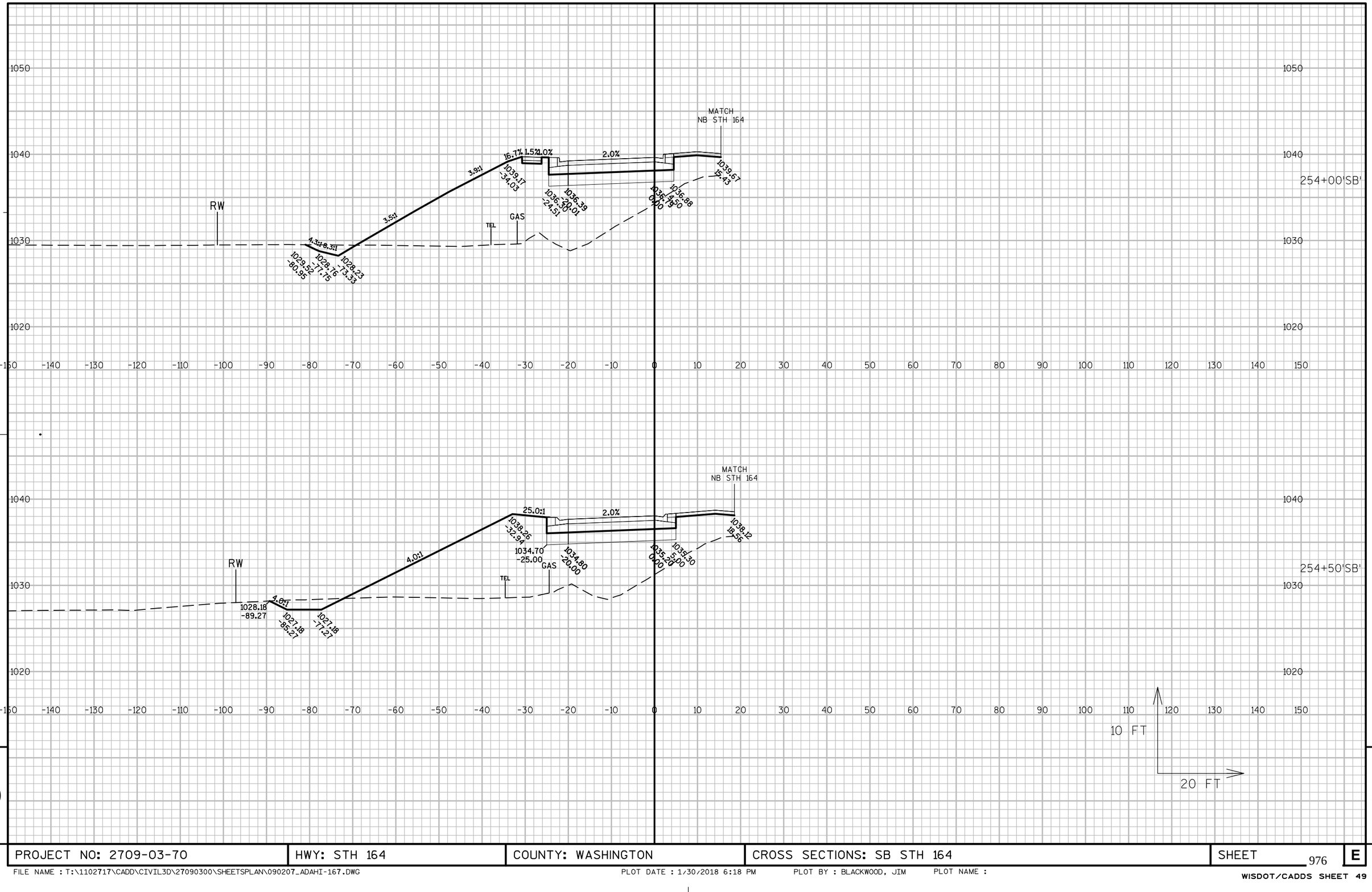


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 975	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 6:18 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :
WISDOT/CADDS SHEET 49

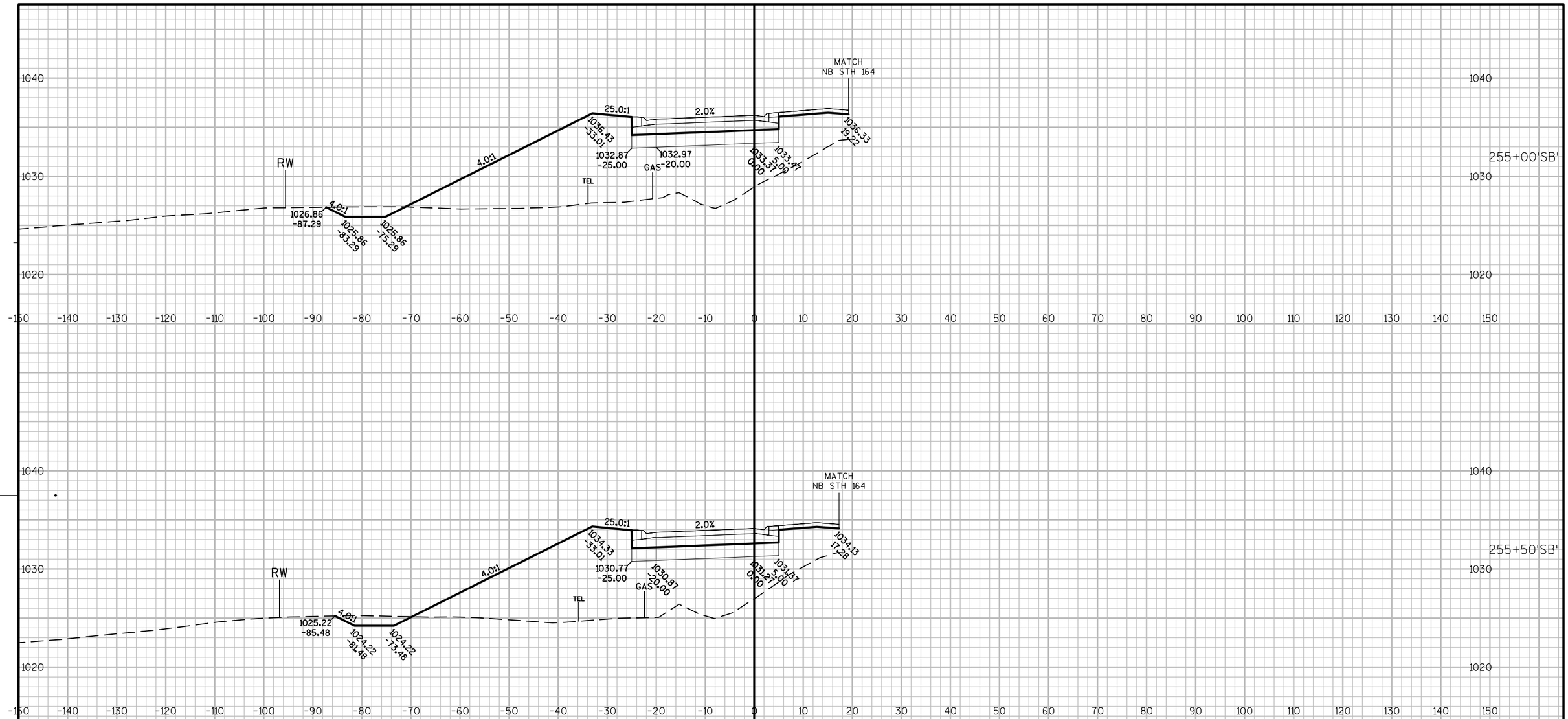


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 976	E

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WISDOT/CADDS SHEET 49



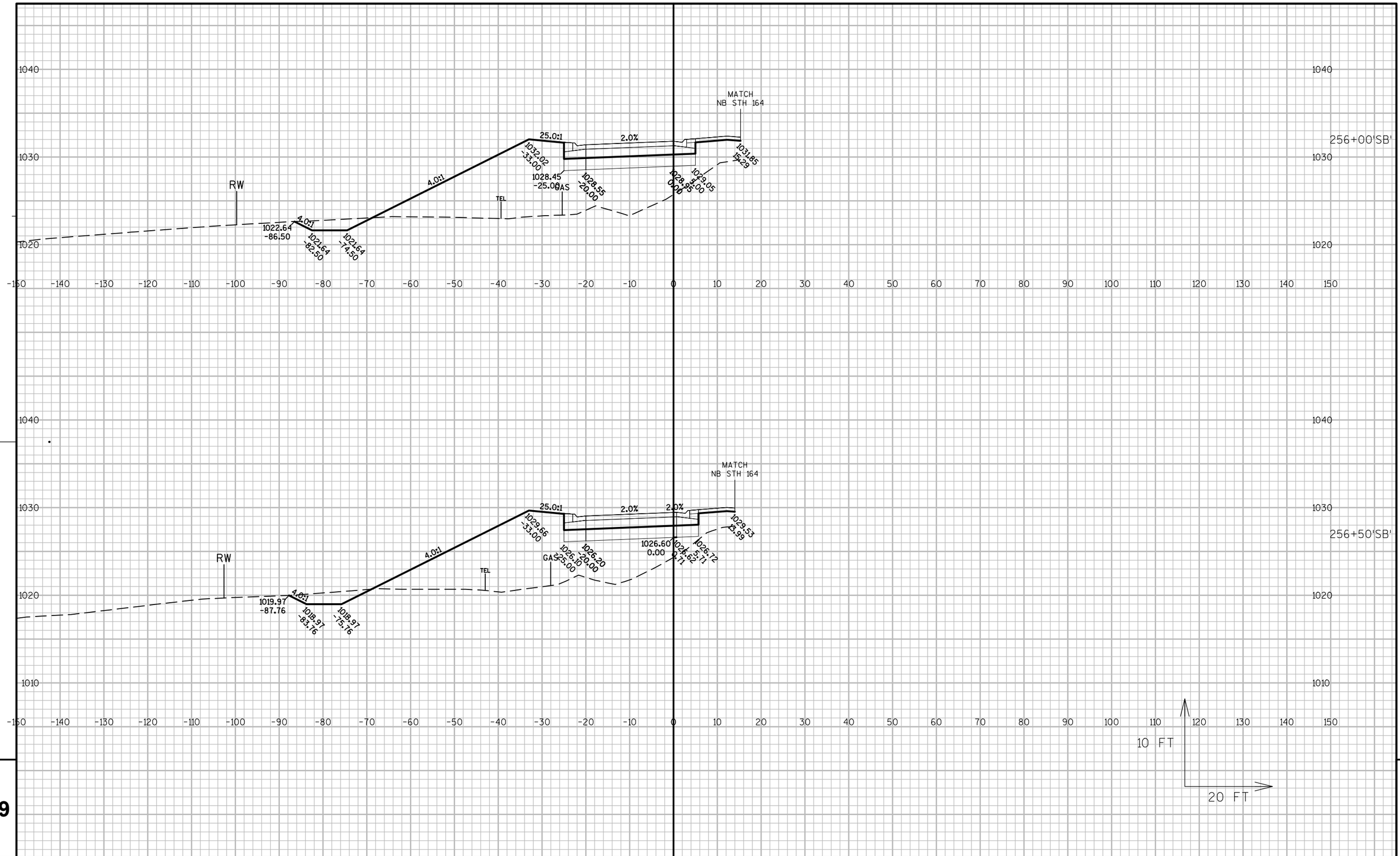
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 977	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 6:19 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

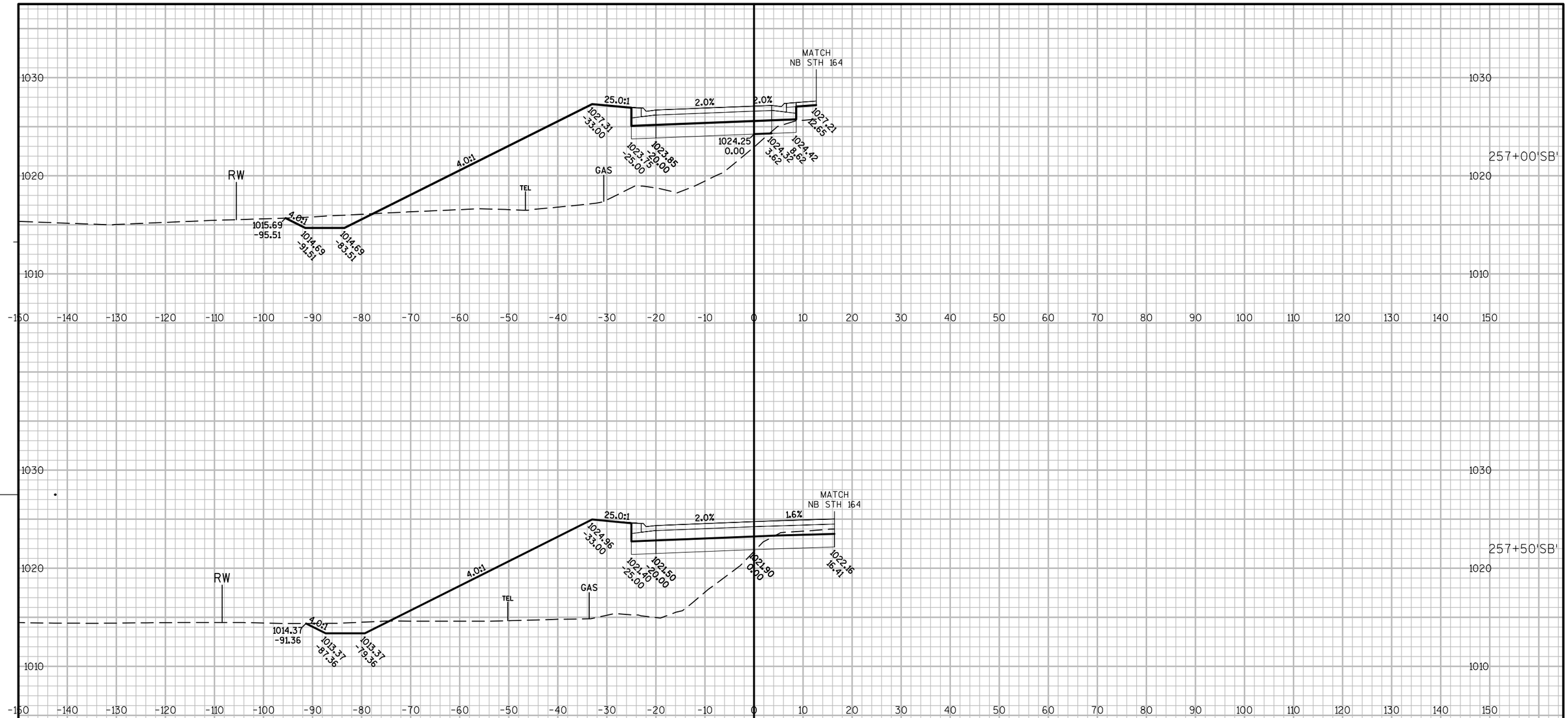
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 978	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090207_ADAHI-167.DWG PLOT DATE : 1/30/2018 6:19 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

WISDOT/CADDS SHEET 49

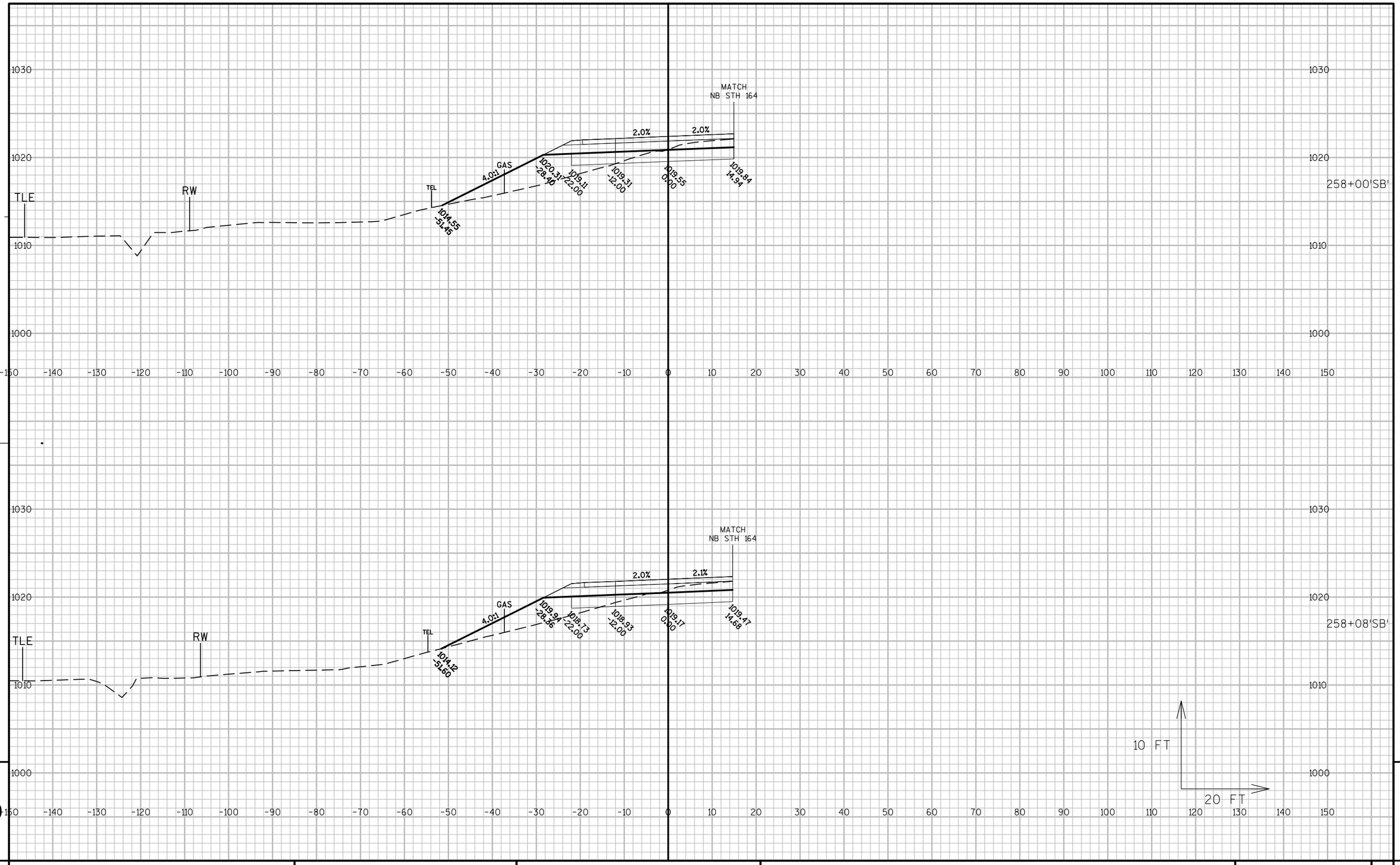


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 979	E

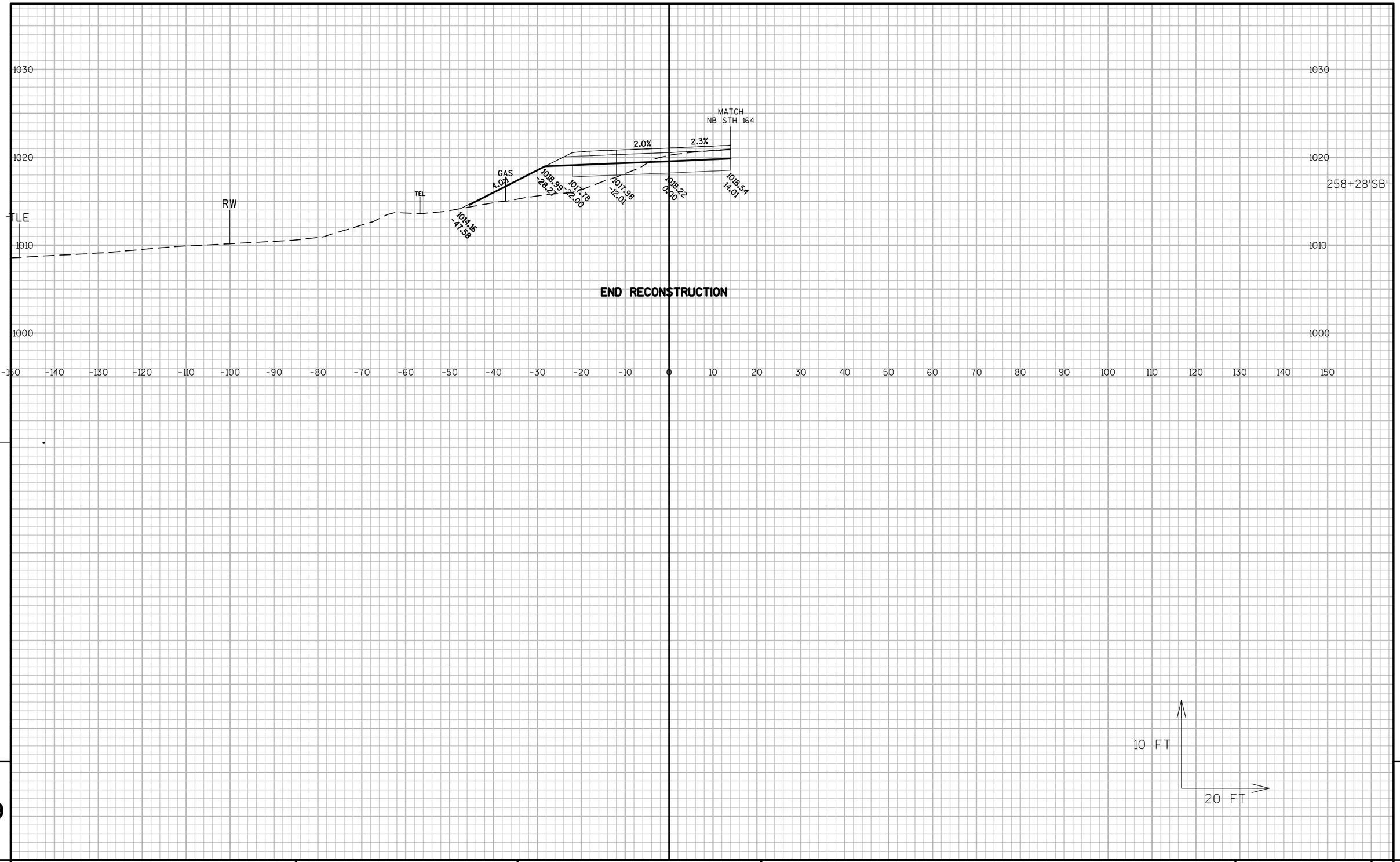
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 980	E

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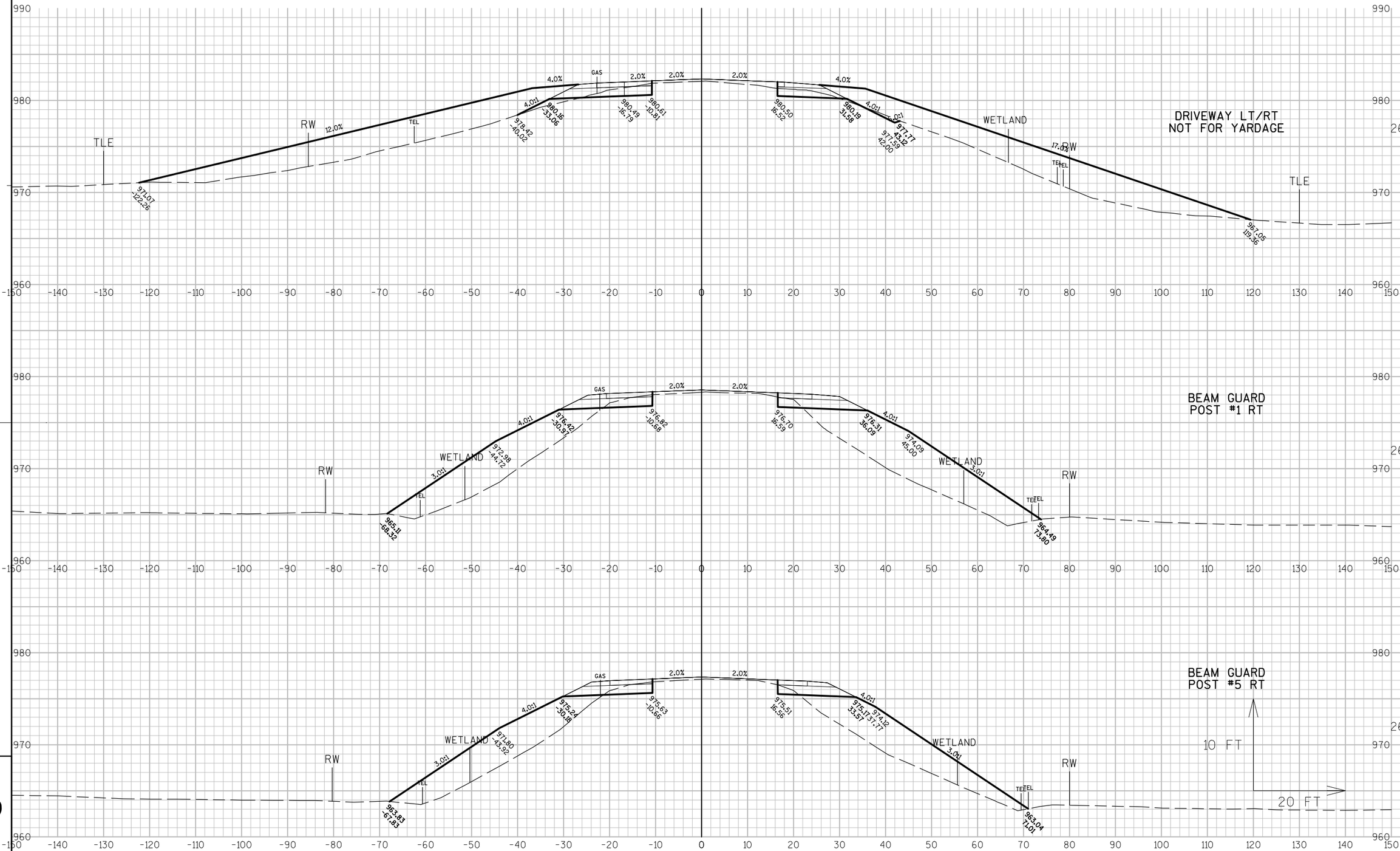
WISDOT/CADDS SHEET 49



9

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SB STH 164	SHEET 981	E



9

9

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 982	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090208_XS 265+00-290+00.DWG PLOT DATE : 1/30/2018 6:34 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

265+99

BEGIN BEAM
GUARD SHOULDER TAPER LT

RW
WETLAND
3.0:1
TEL
963.63
-67.72
971.61
-43.78
4.0:1
975.04
-30.04
GAS
2.0%
975.43
-10.66
2.0%
975.31
16.56
974.98
33.33
4.0:1
974.18
36.50
WETLAND
3.0:1
TEL
TEL
962.94
70.22
RW

266+20

BEAM GUARD
POST #9 RT

RW
WETLAND
3.0:1
TEL
962.92
-67.38
971.00
-43.12
4.0:1
975.98
-31.23
GAS
2.0%
974.39
-10.64
2.0%
974.27
16.53
973.99
30.54
WETLAND
3.0:1
TEL
TEL
963.17
63.01
RW

266+92

BEAM GUARD
POST #1 LT

RW
WETLAND
3.0:1
TEL
960.90
-67.74
968.48
-45.00
4.0:1
970.71
-36.09
GAS
2.0%
971.42
-15.65
2.0%
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47.15
RW
10 FT
20 FT

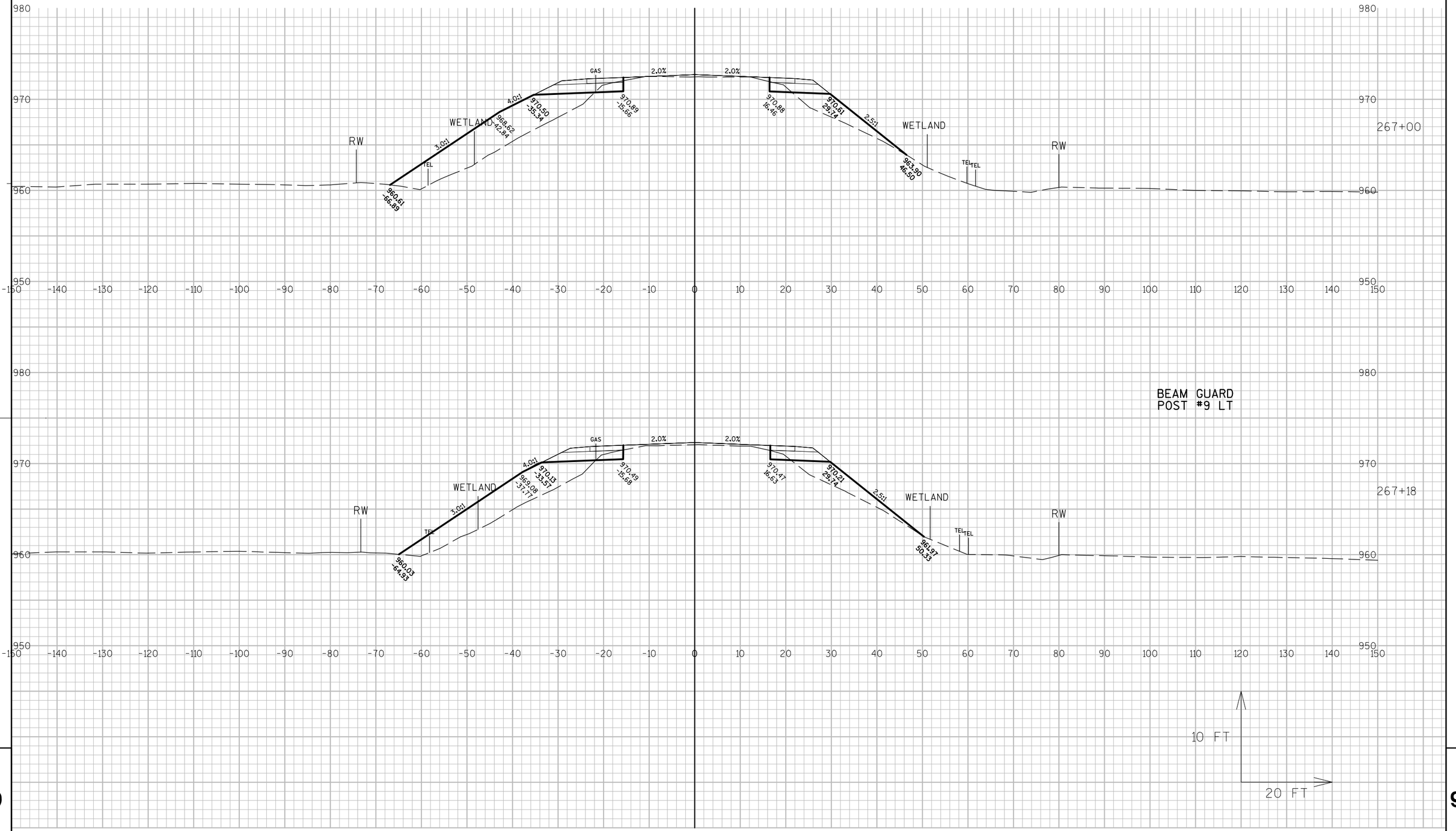
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 983	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090208_XS 265+00-290+00.DWG PLOT DATE : 1/30/2018 6:34 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

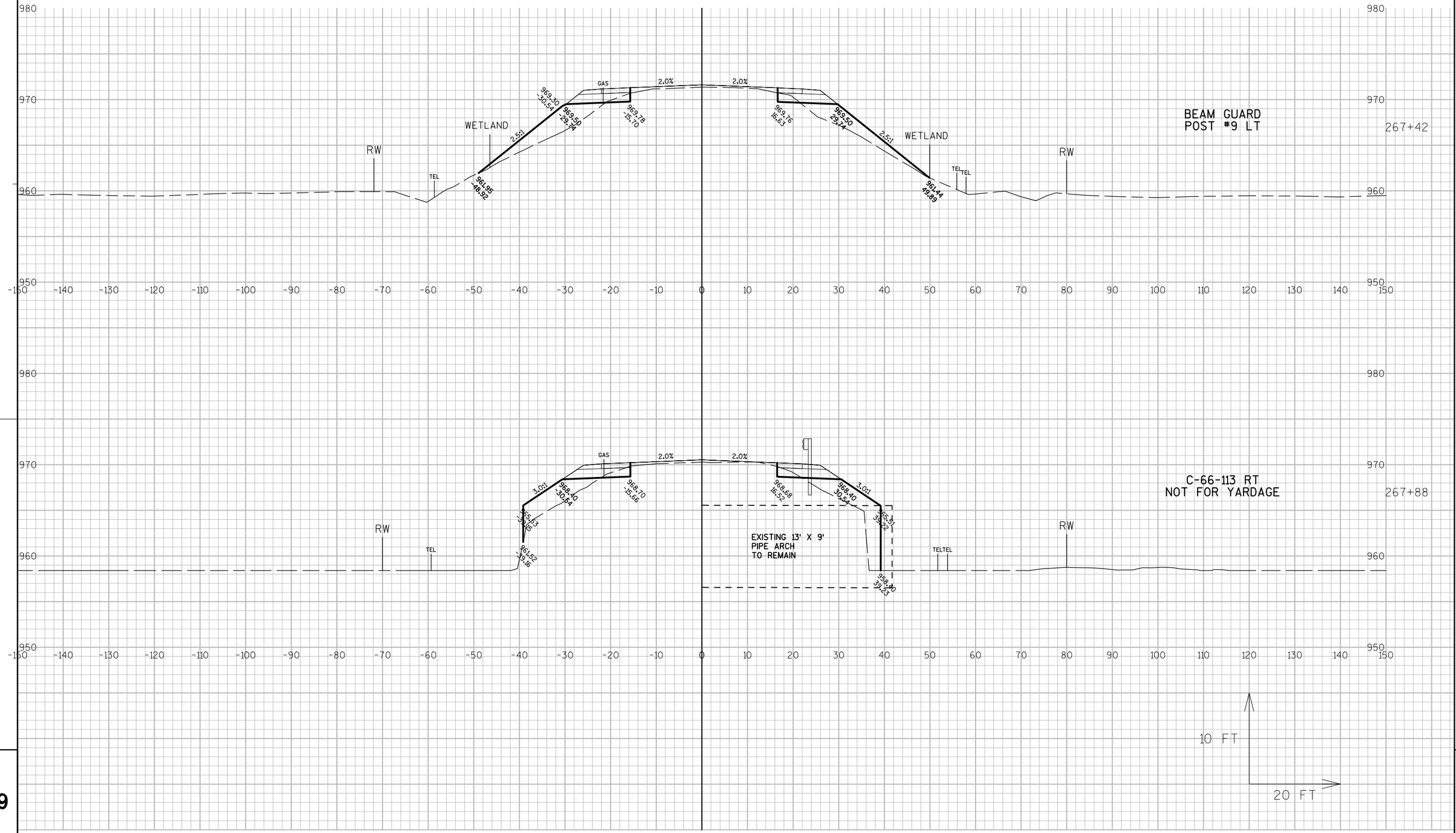


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 984	E

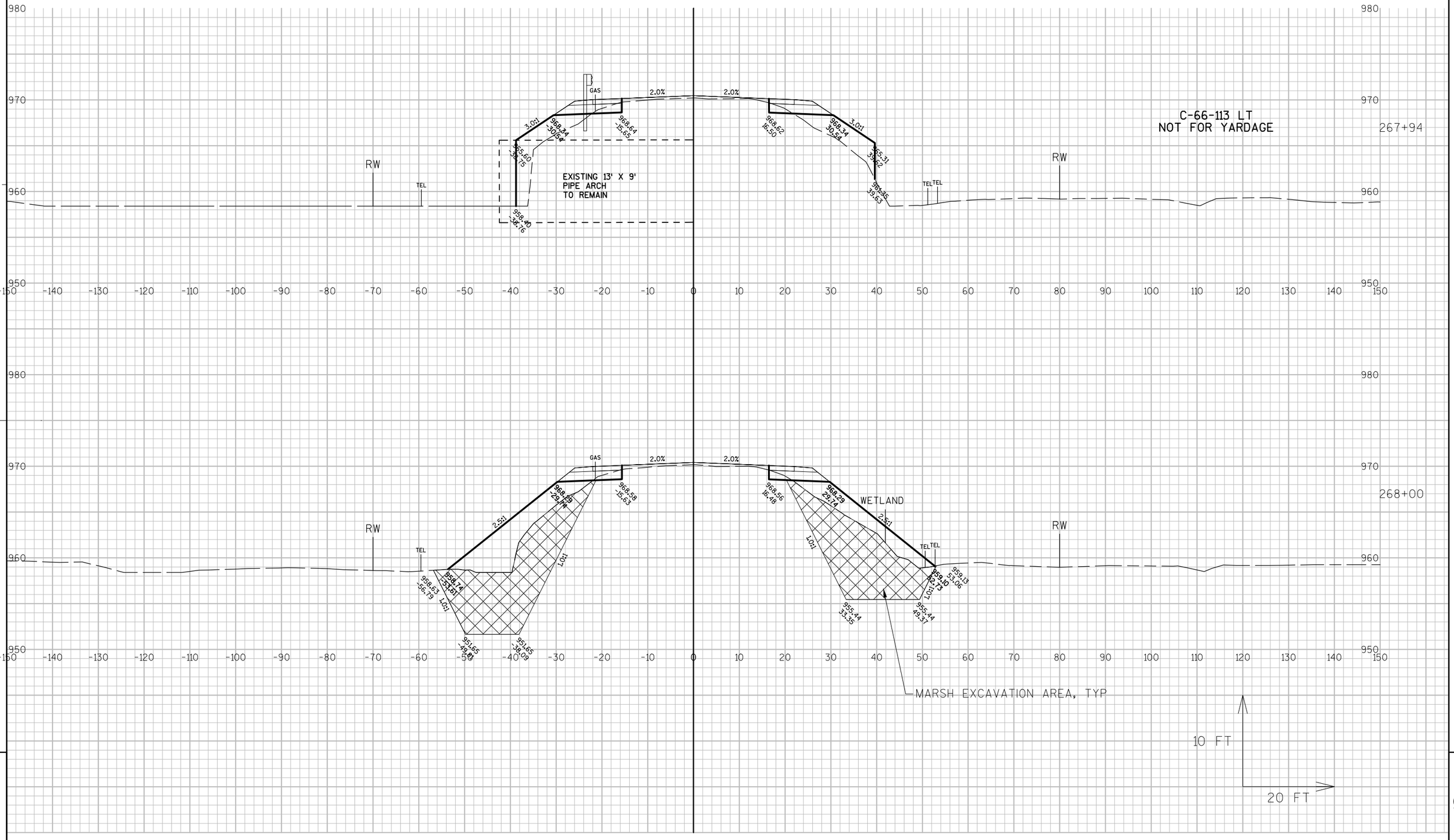
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090208_XS 265+00-290+00.DWG PLOT DATE : 1/30/2018 6:35 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 985	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090208_XS 265+00-290+00.DWG PLOT DATE : 1/30/2018 6:35 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

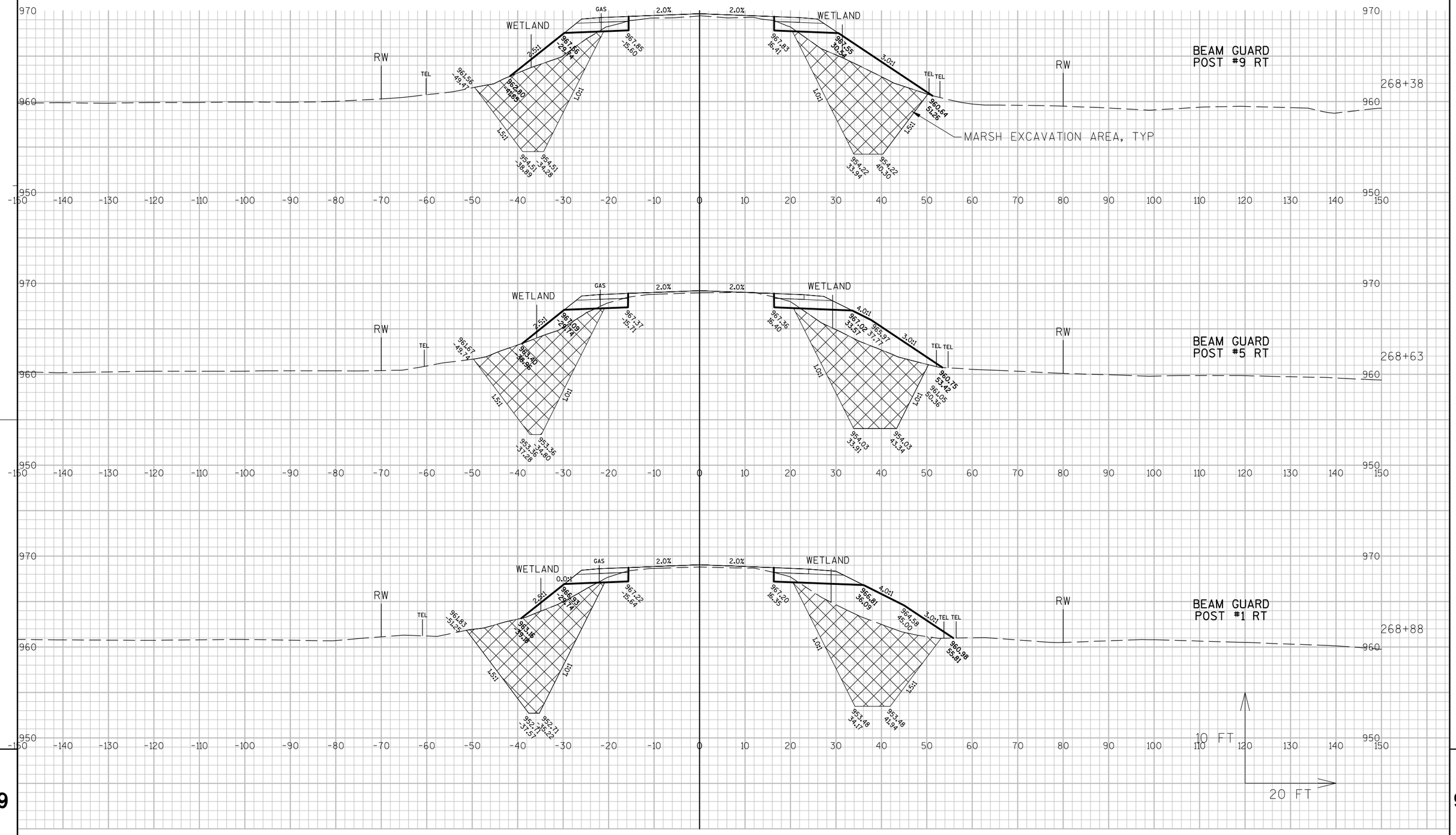
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 986	E

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WISDOT/CADDS SHEET 49

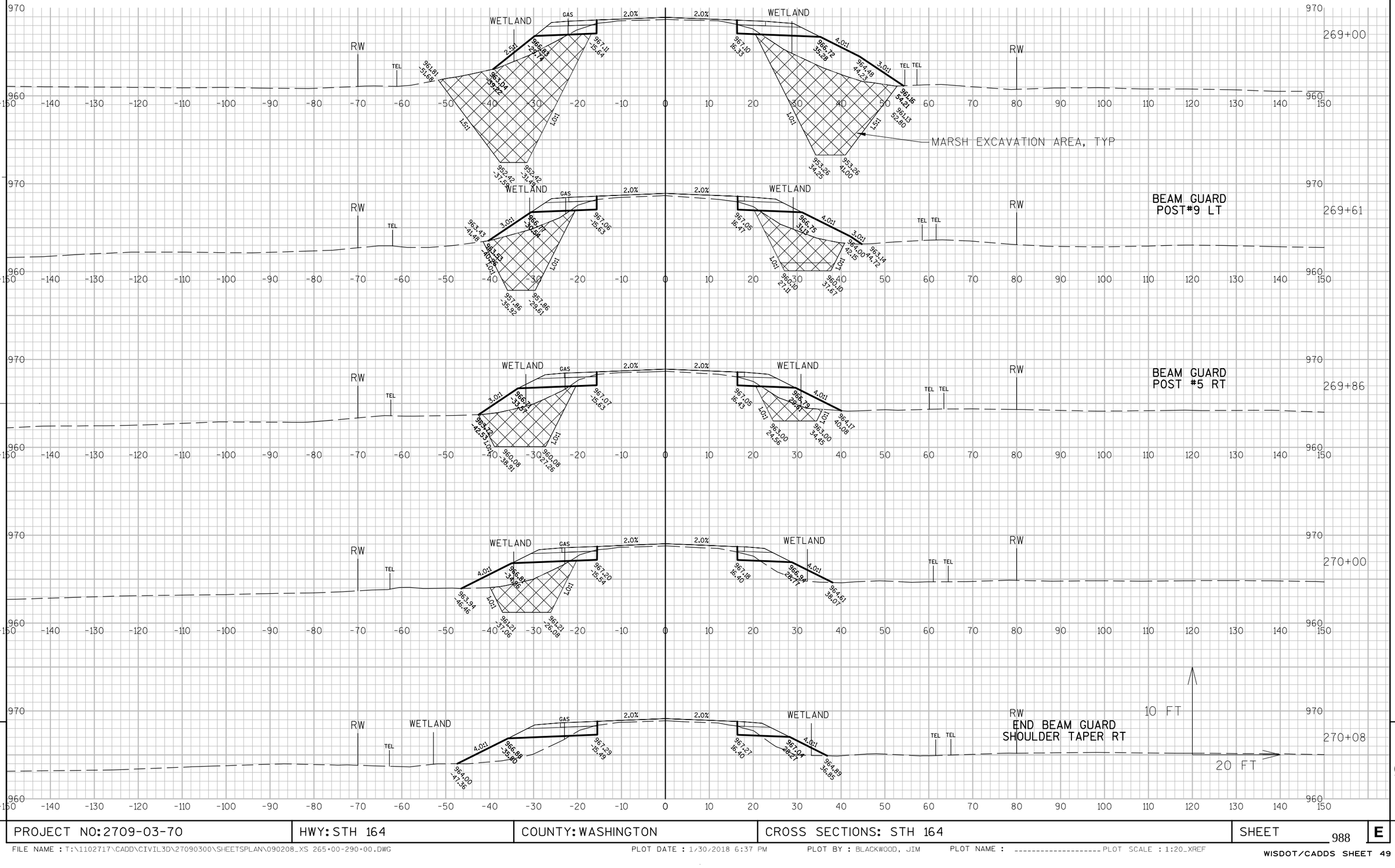


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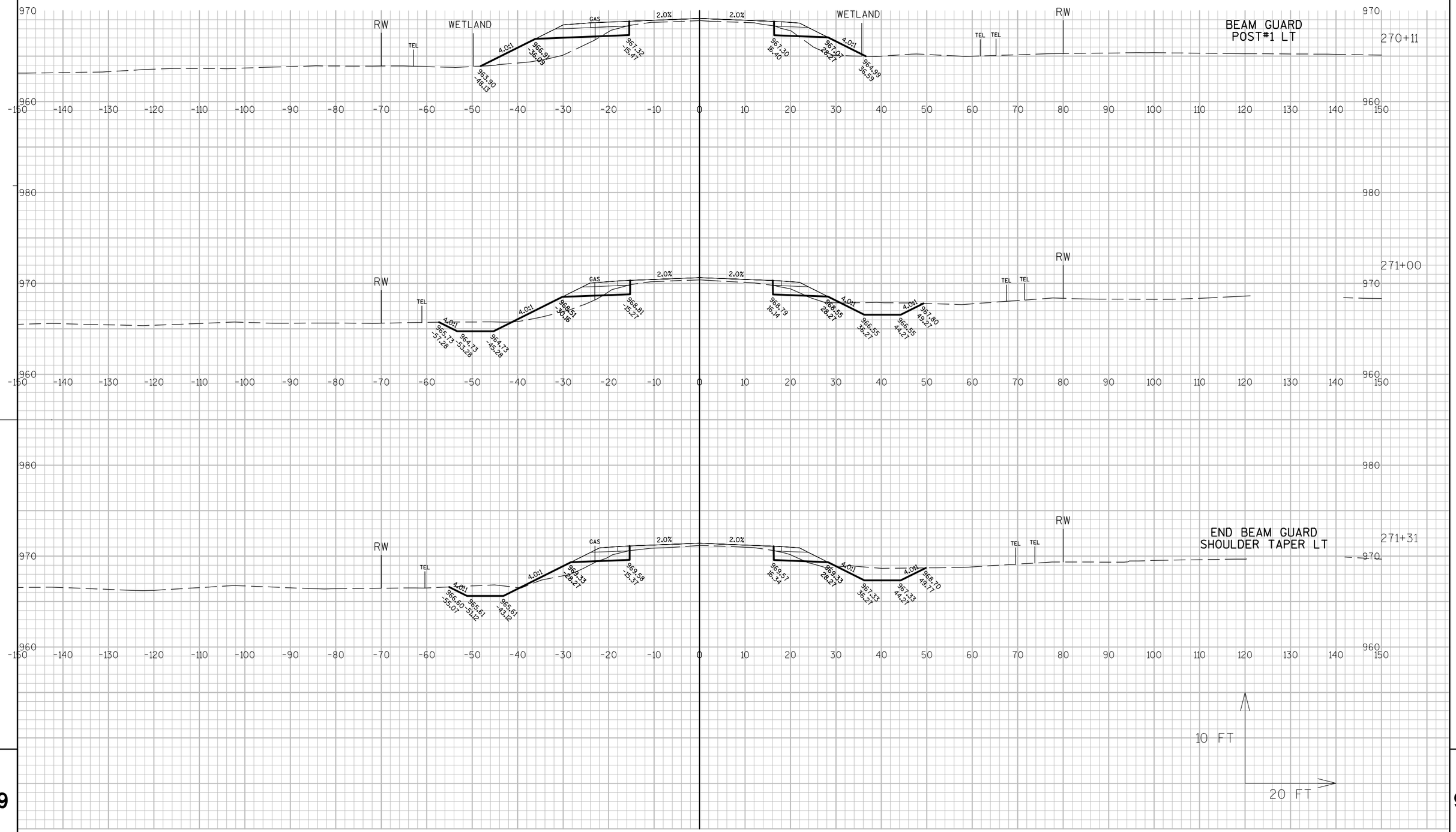
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 987	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090208_XS 265+00-290+00.DWG PLOT DATE : 1/30/2018 6:36 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

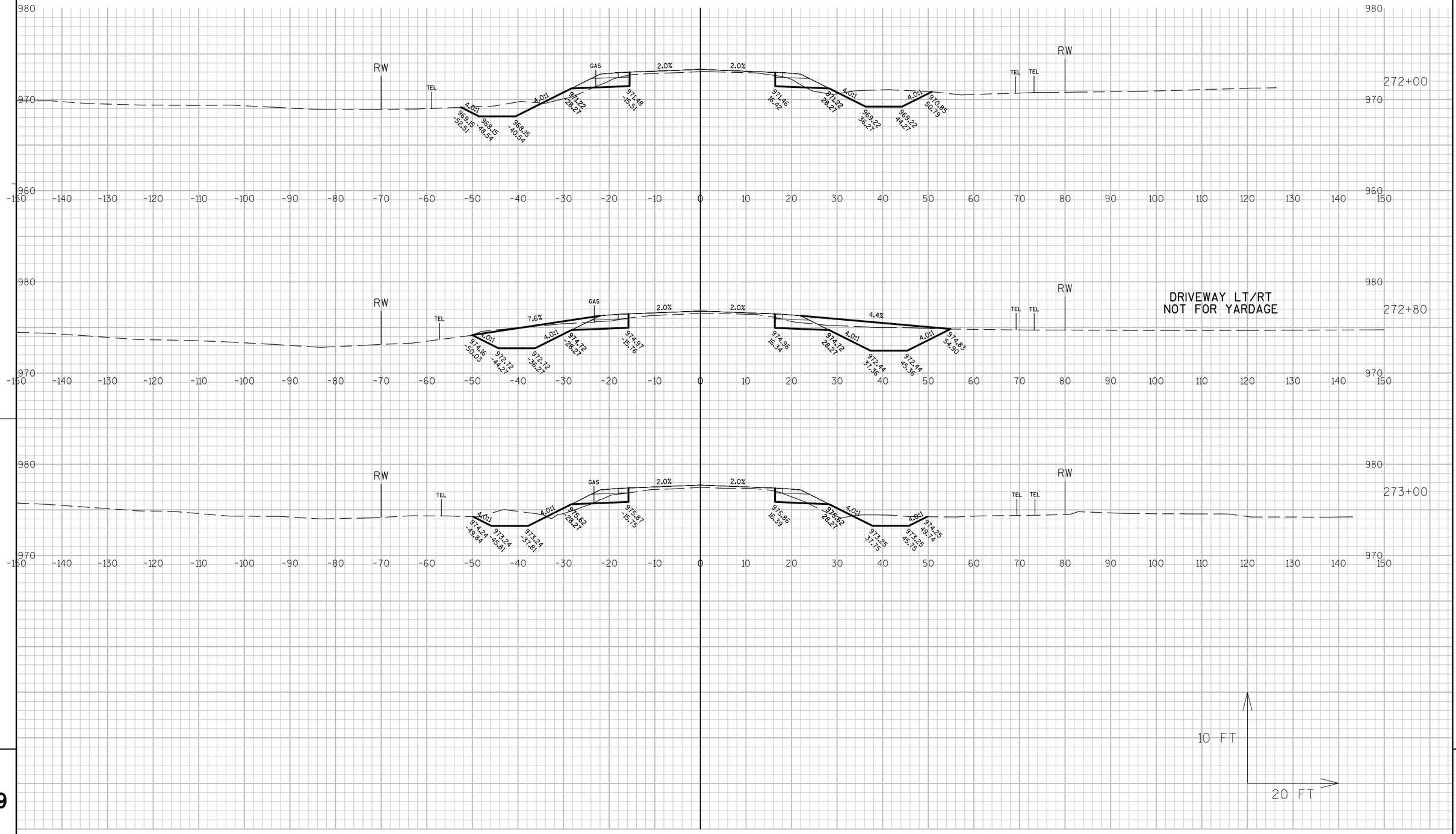


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 988	E

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 989	E

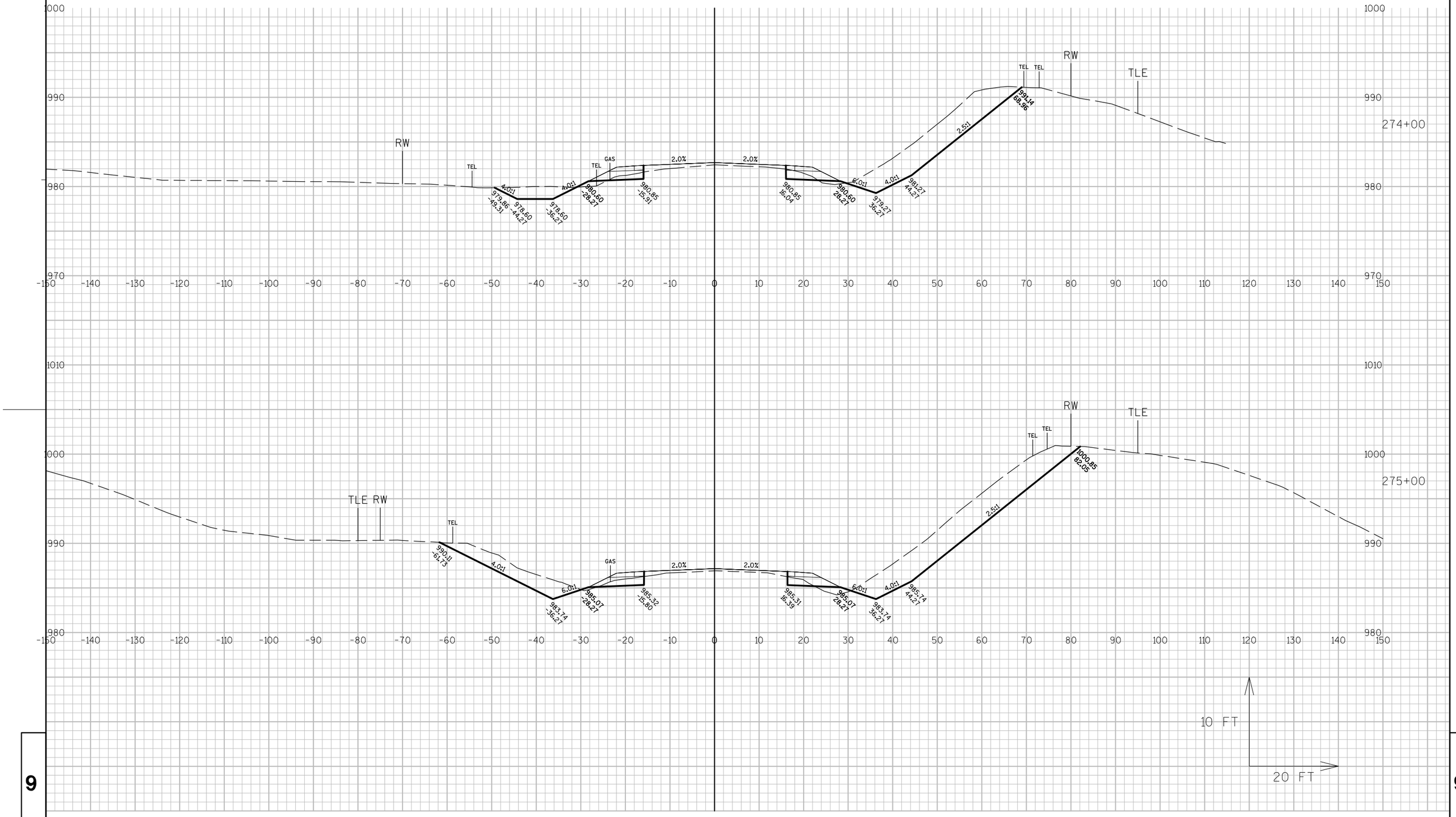


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 990	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090208_XS 265+00-290+00.DWG PLOT DATE : 1/30/2018 6:39 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF



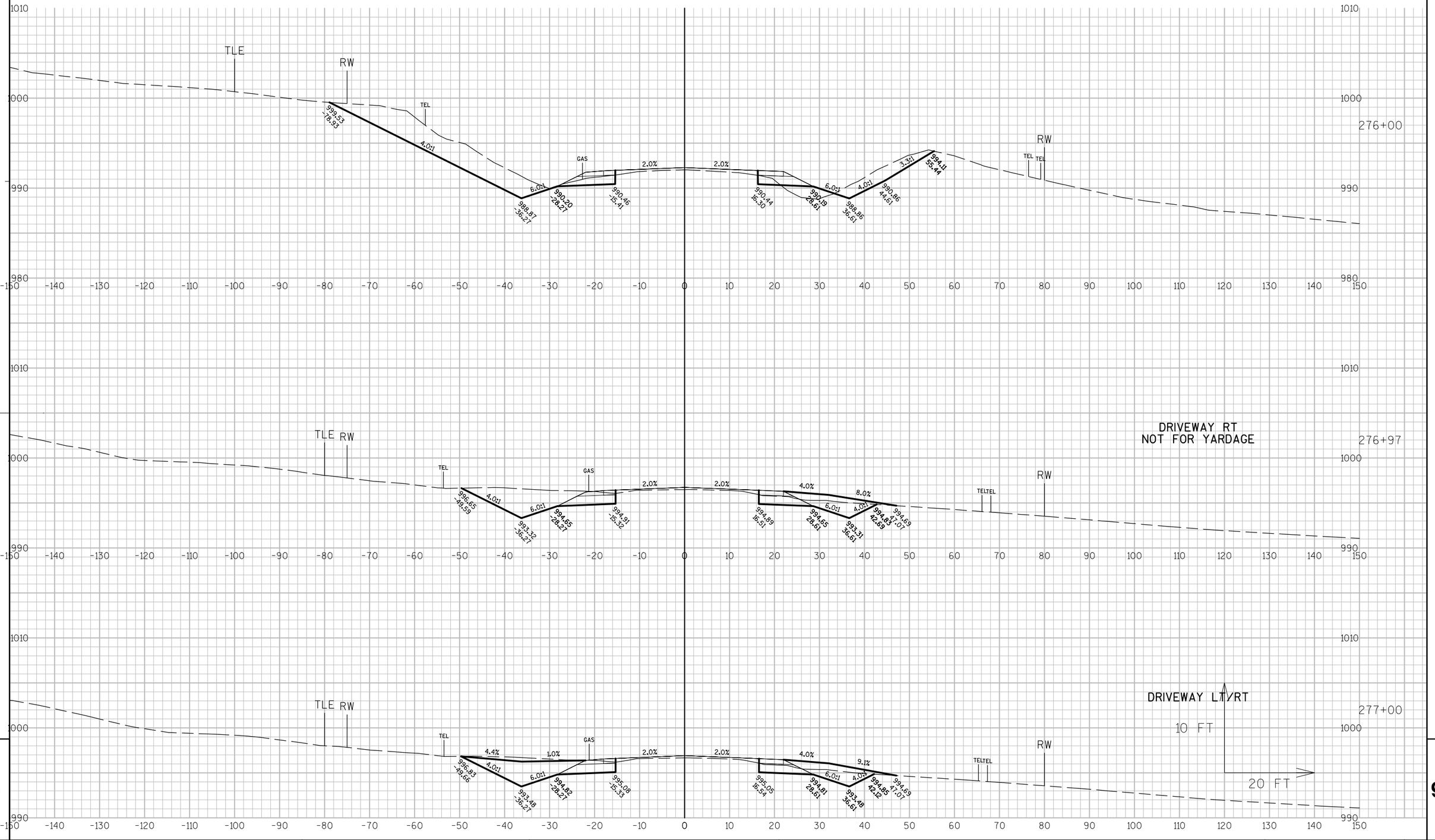
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 991	E

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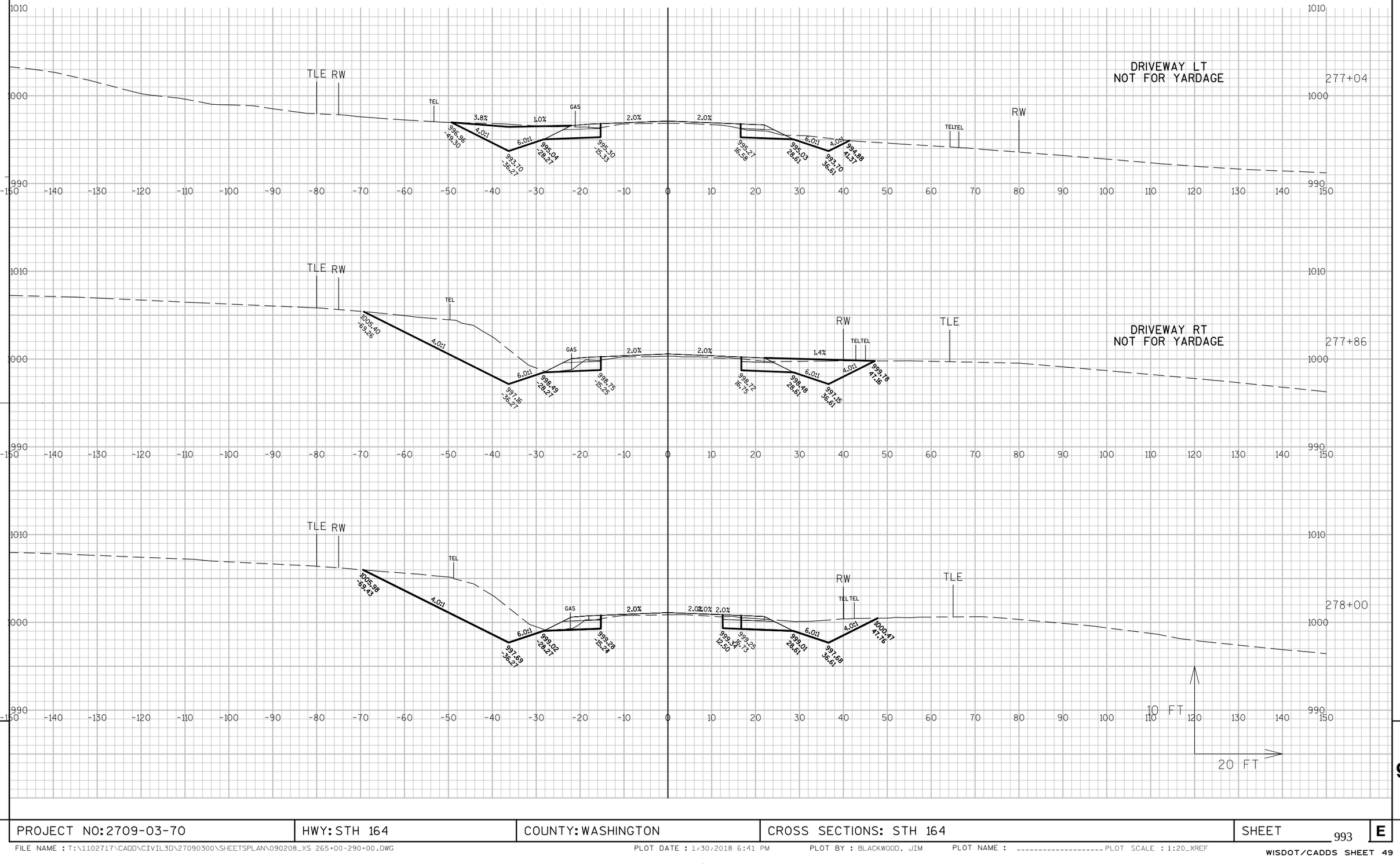
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 992	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090208_XS 265+00-290+00.DWG PLOT DATE : 1/30/2018 6:40 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

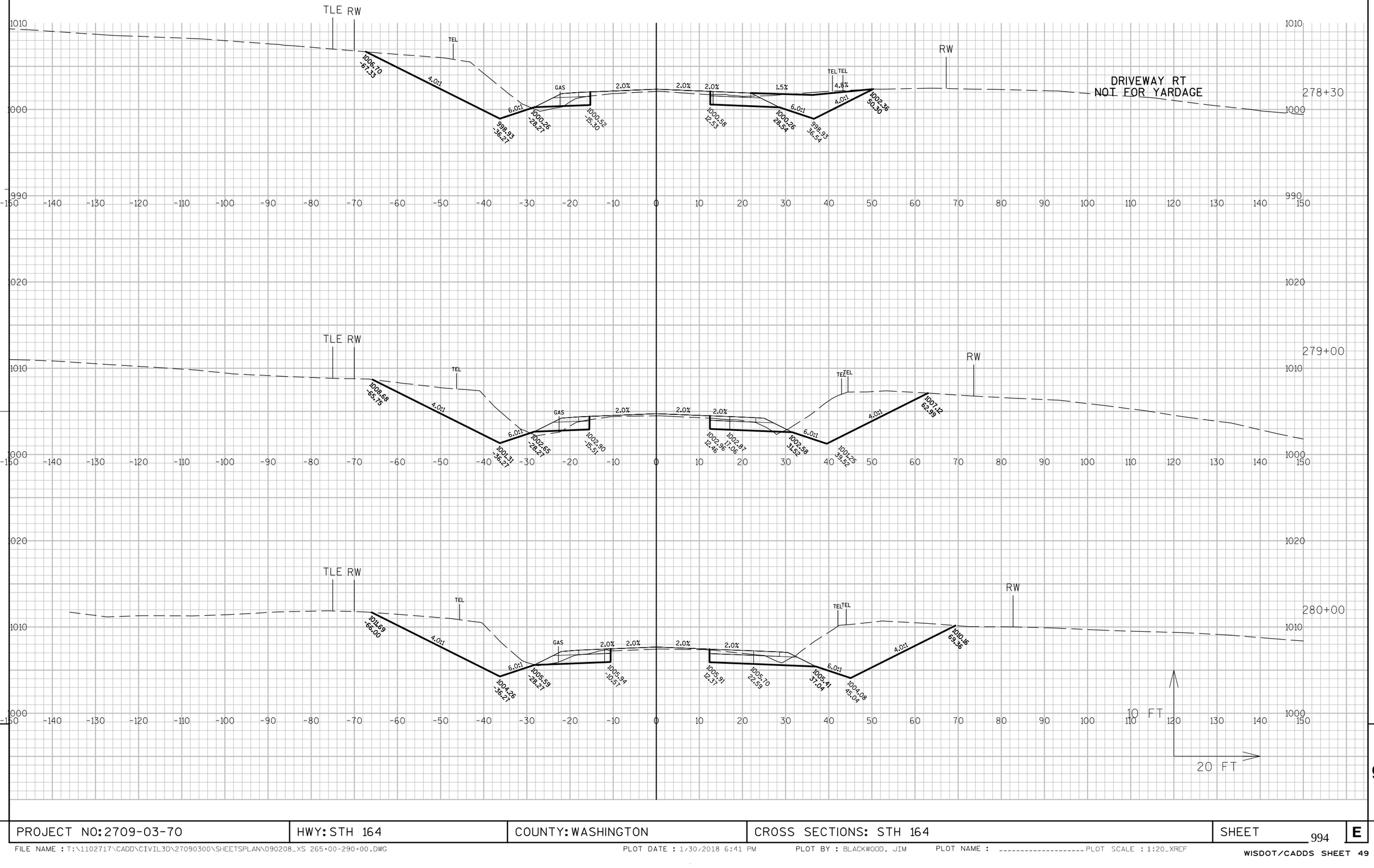


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 993	E

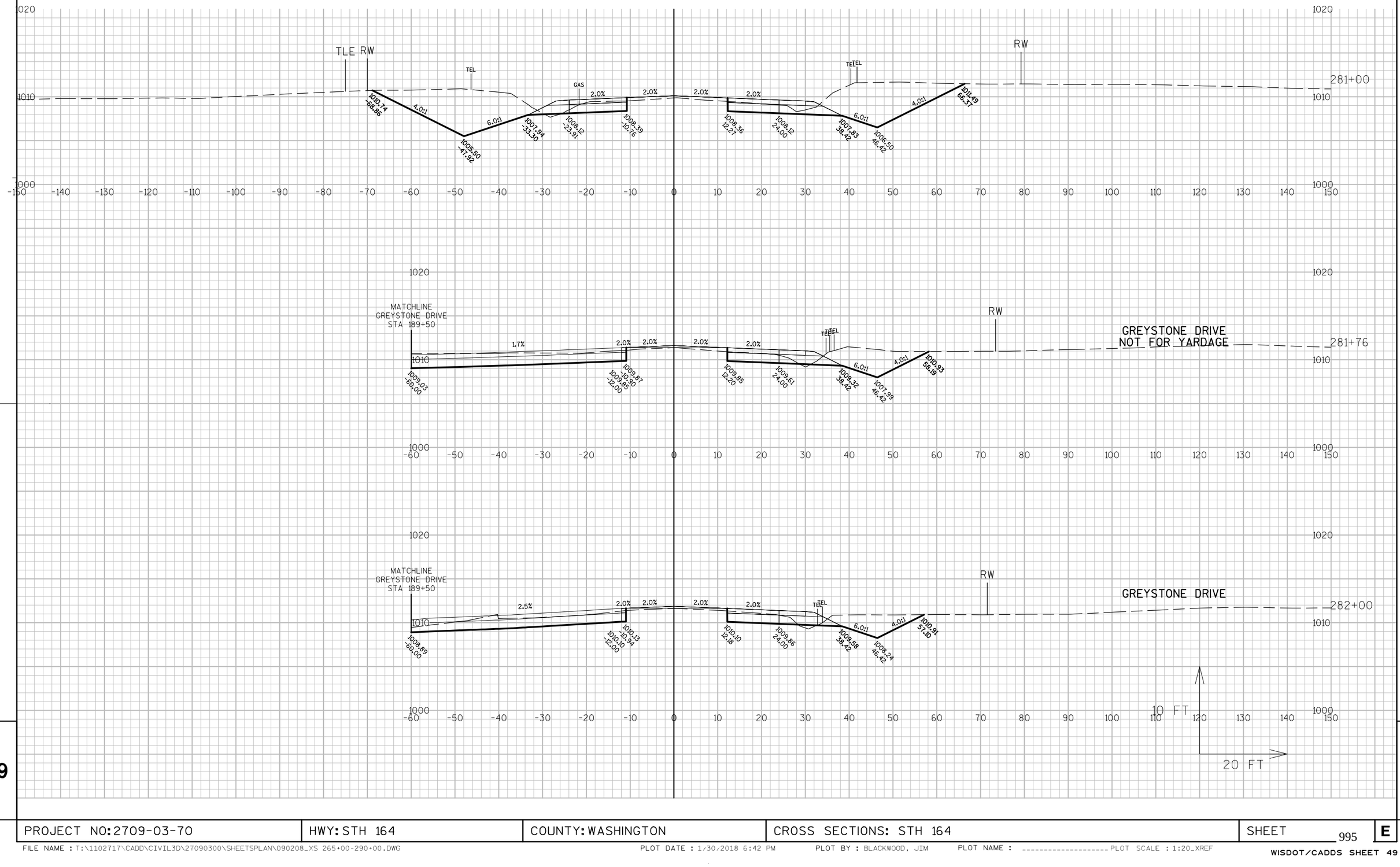
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PLOT DATE : 1/30/2018 6:41 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME : ---------- PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 994	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090208_XS 265+00-290+00.DWG PLOT DATE : 1/30/2018 6:41 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 995	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090208_XS 265+00-290+00.DWG PLOT DATE : 1/30/2018 6:42 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

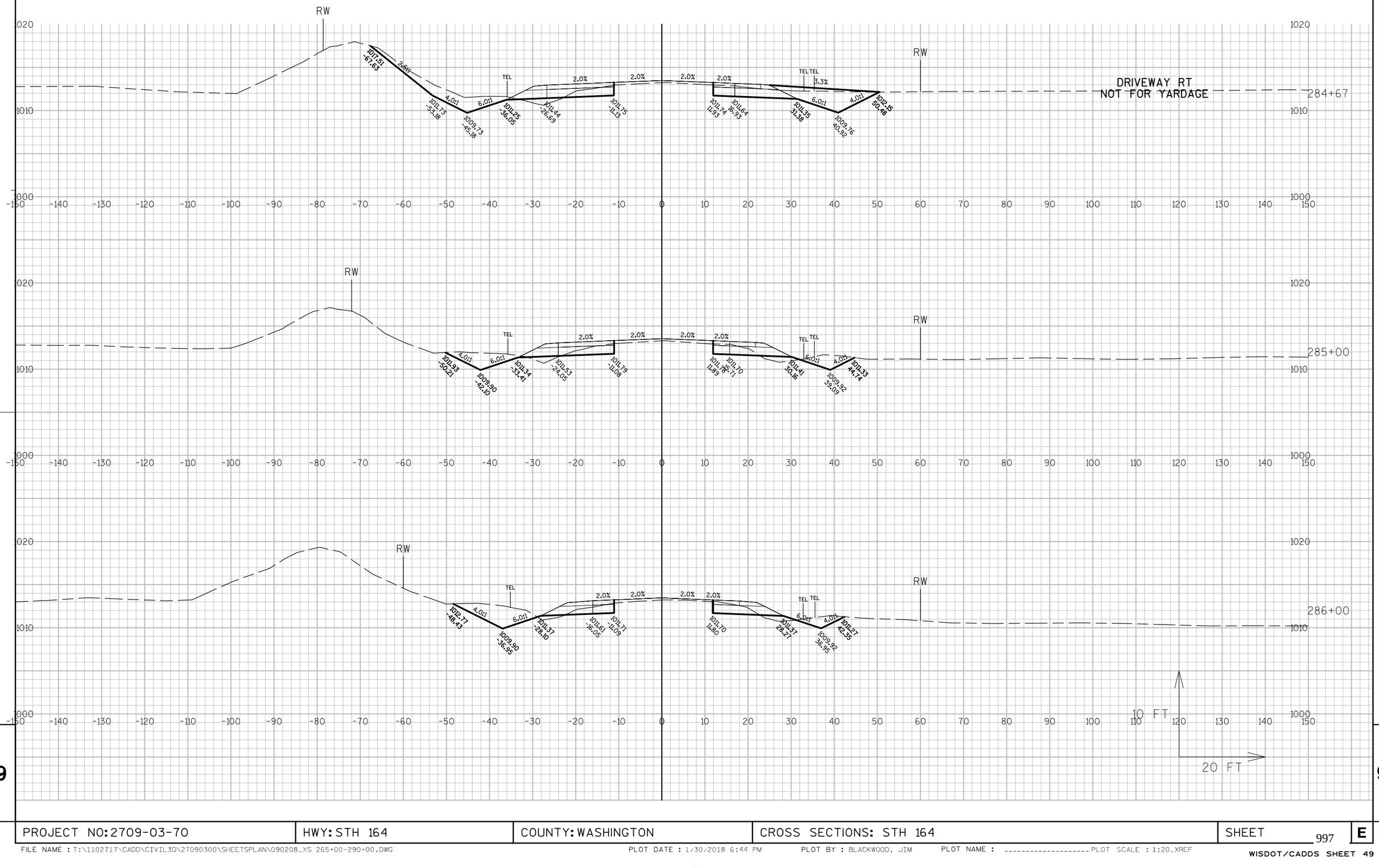
WISDOT/CADDS SHEET 49

9

9

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 996	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090208_XS 265+00-290+00.DWG PLOT DATE : 1/30/2018 6:44 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

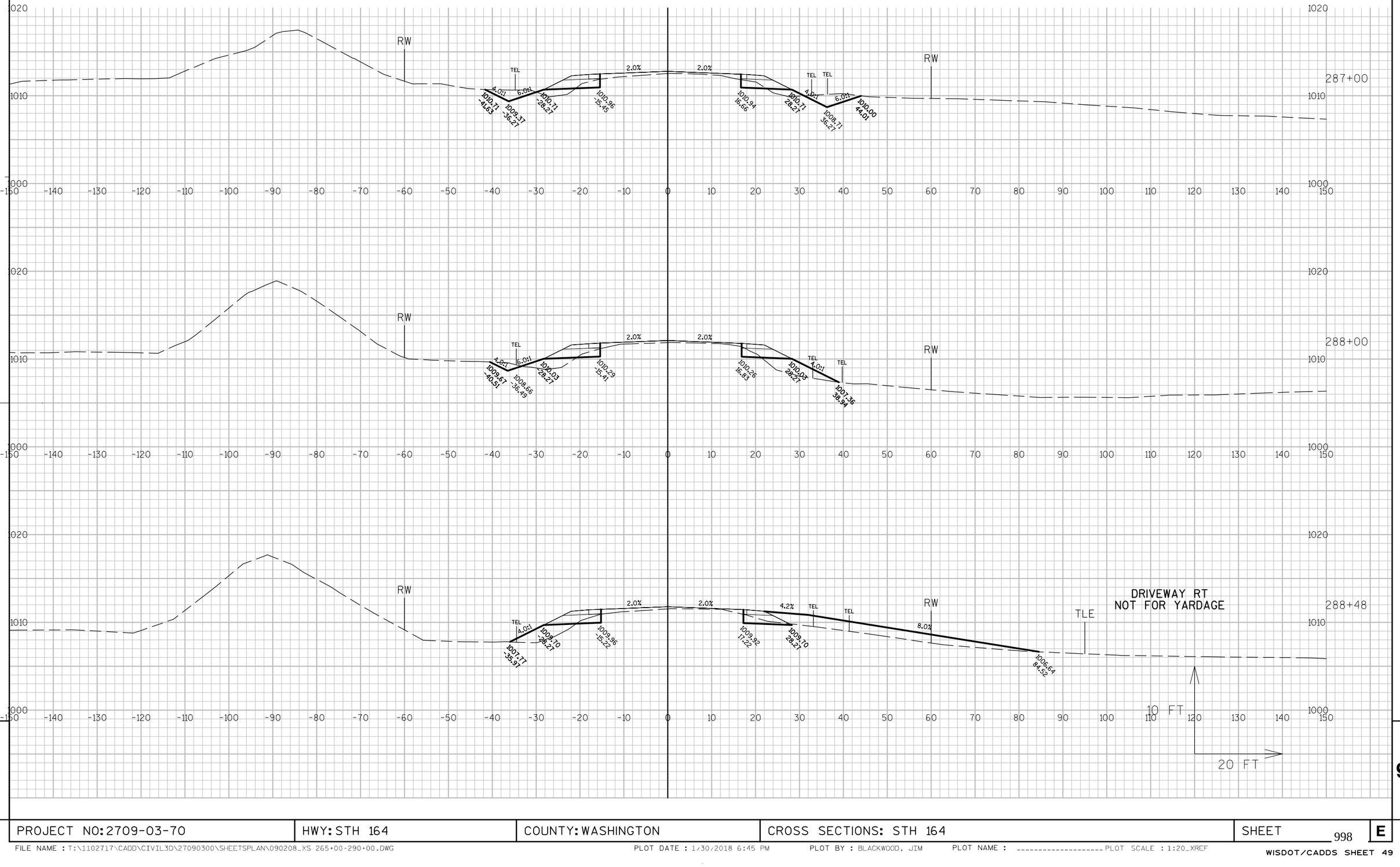


9

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 997	E

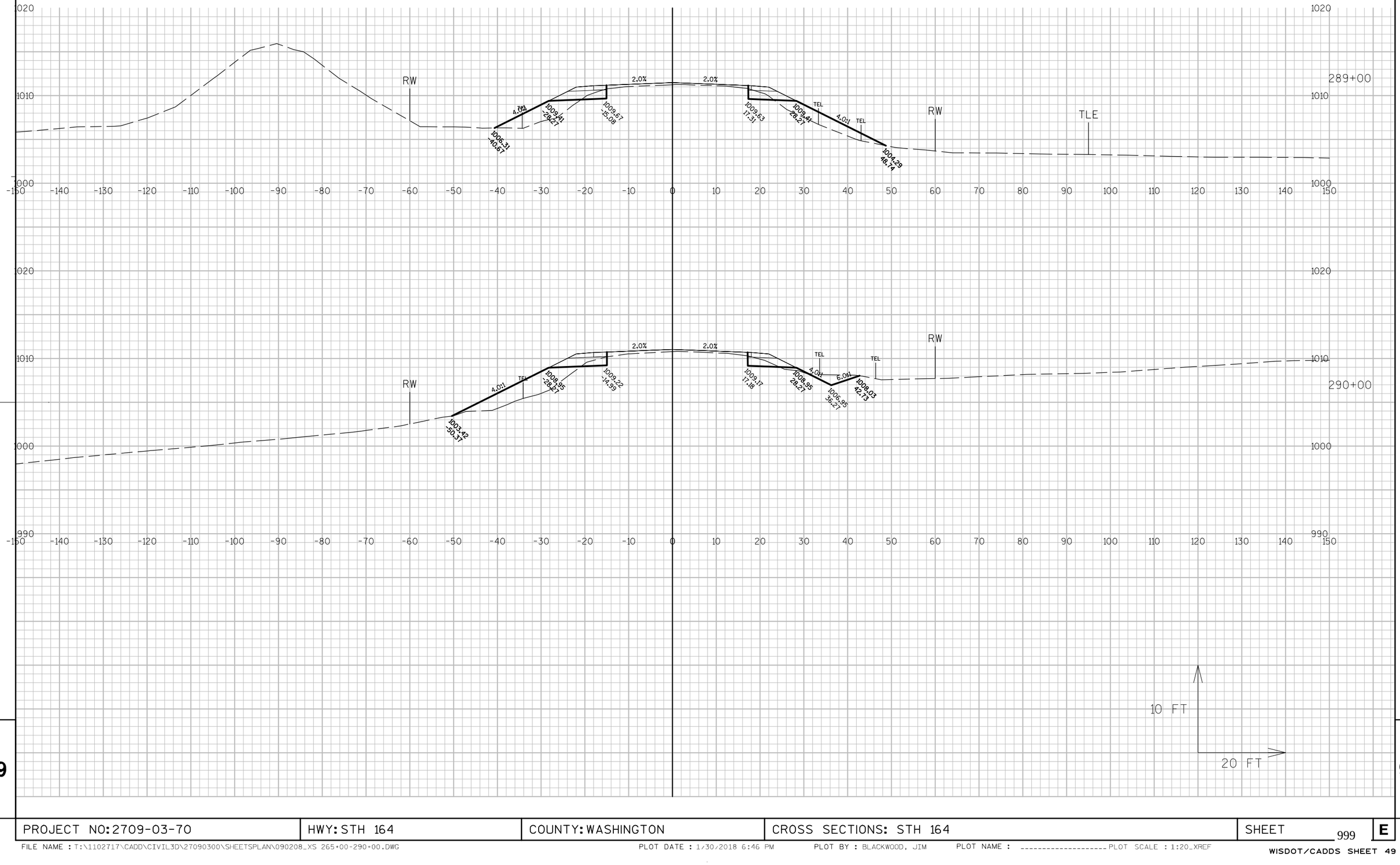
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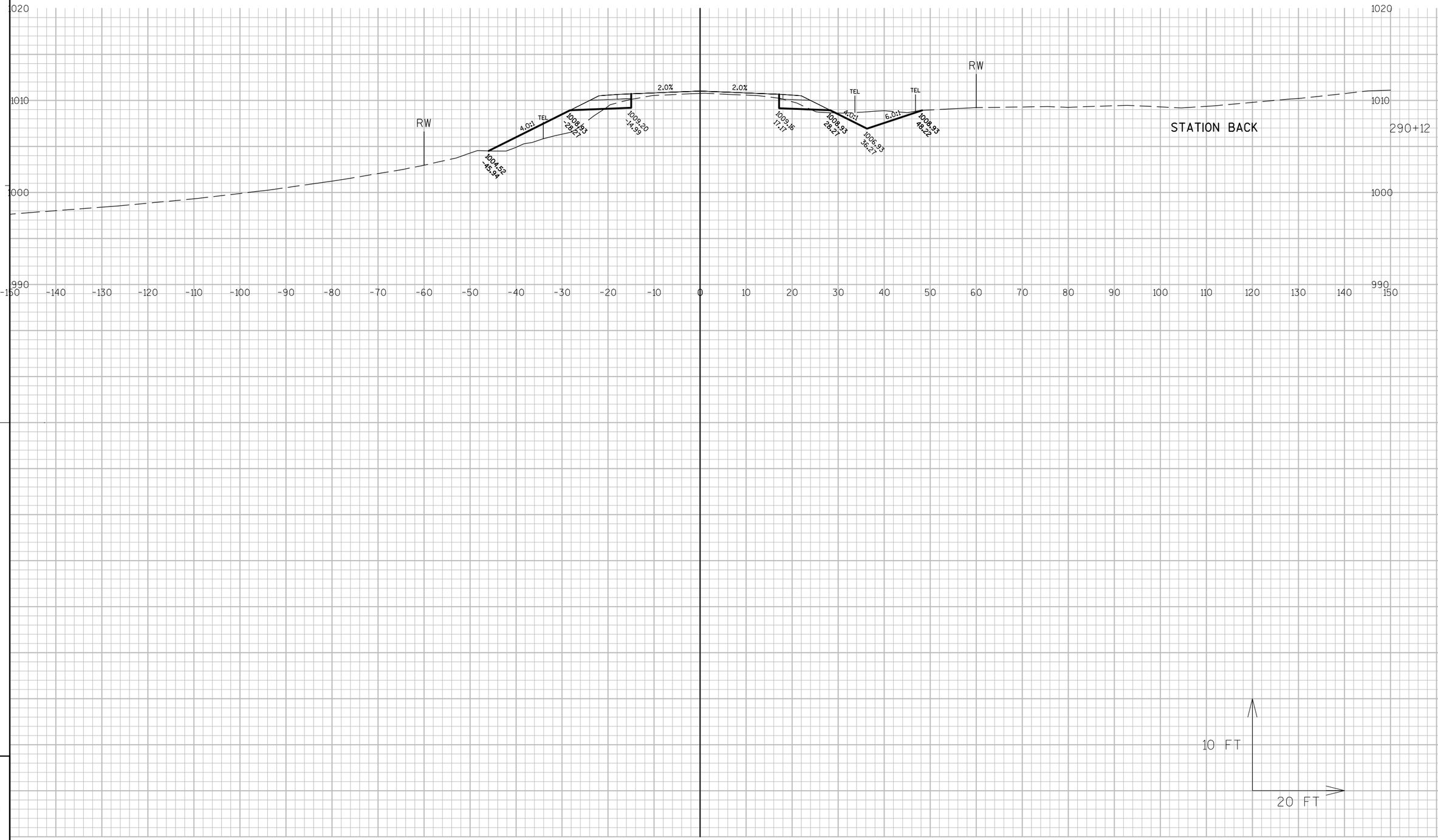
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 998	E

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WISDOT/CADDS SHEET 49



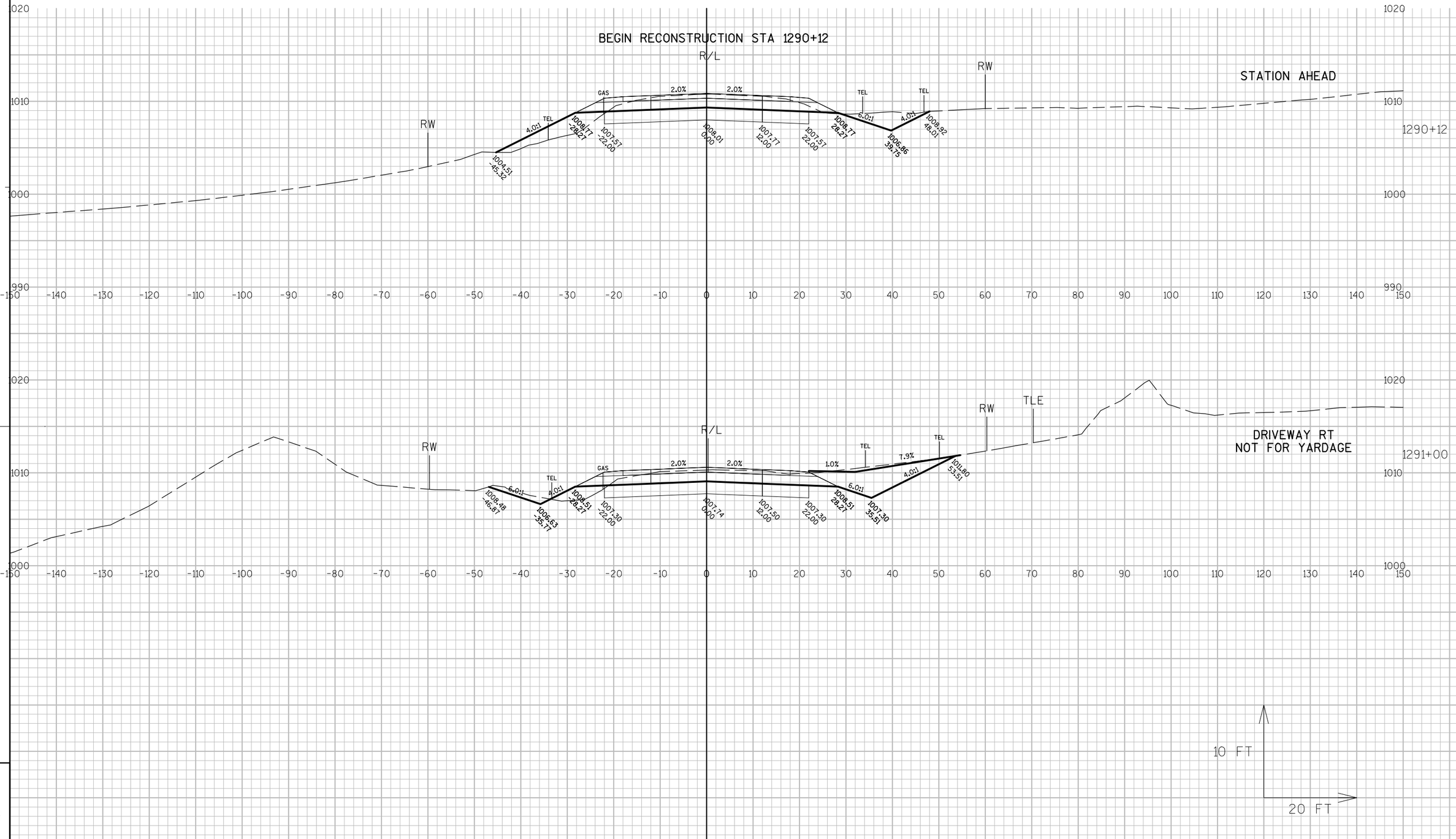
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1000	E

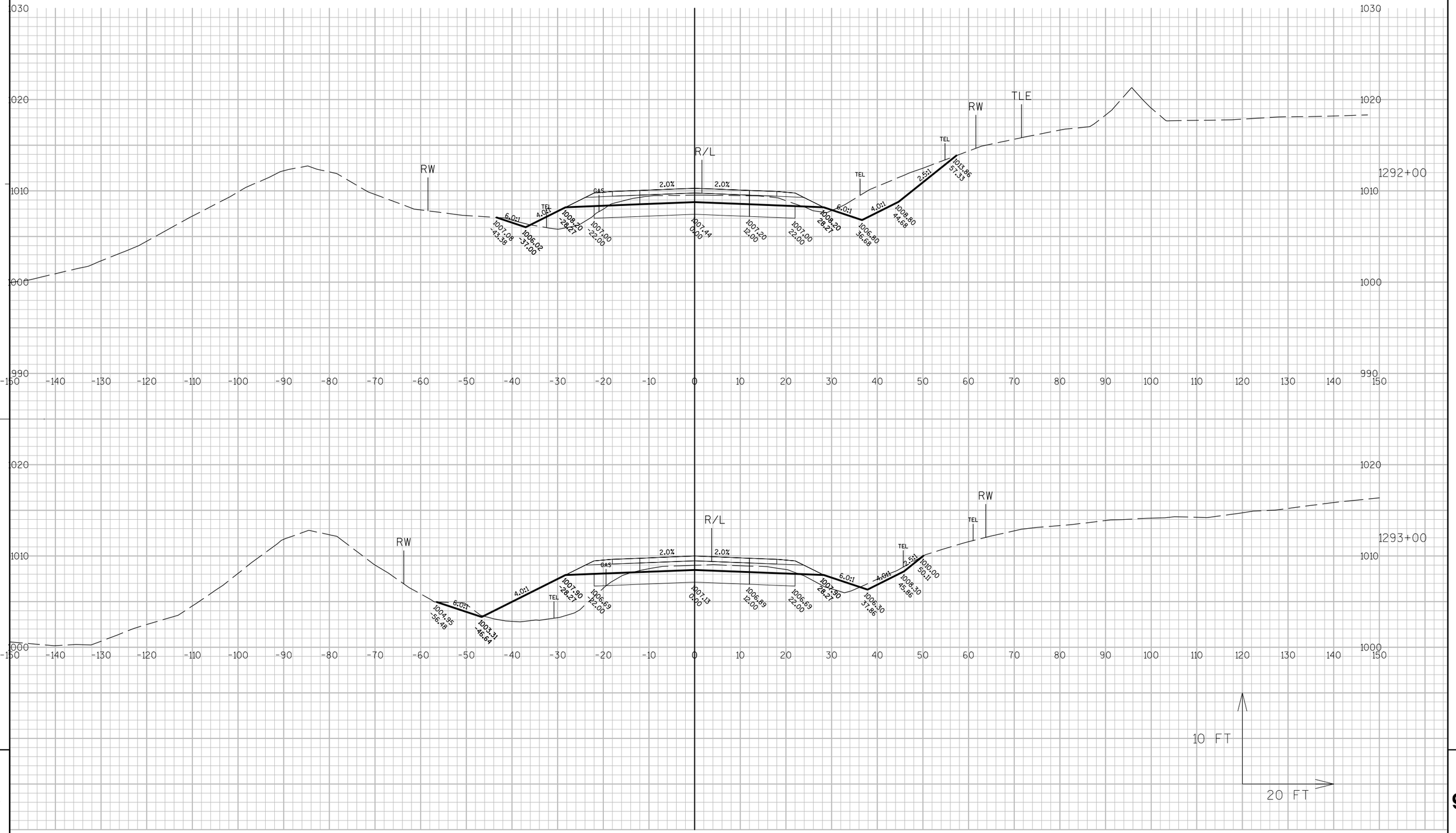
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WISDOT/CADDS SHEET 49



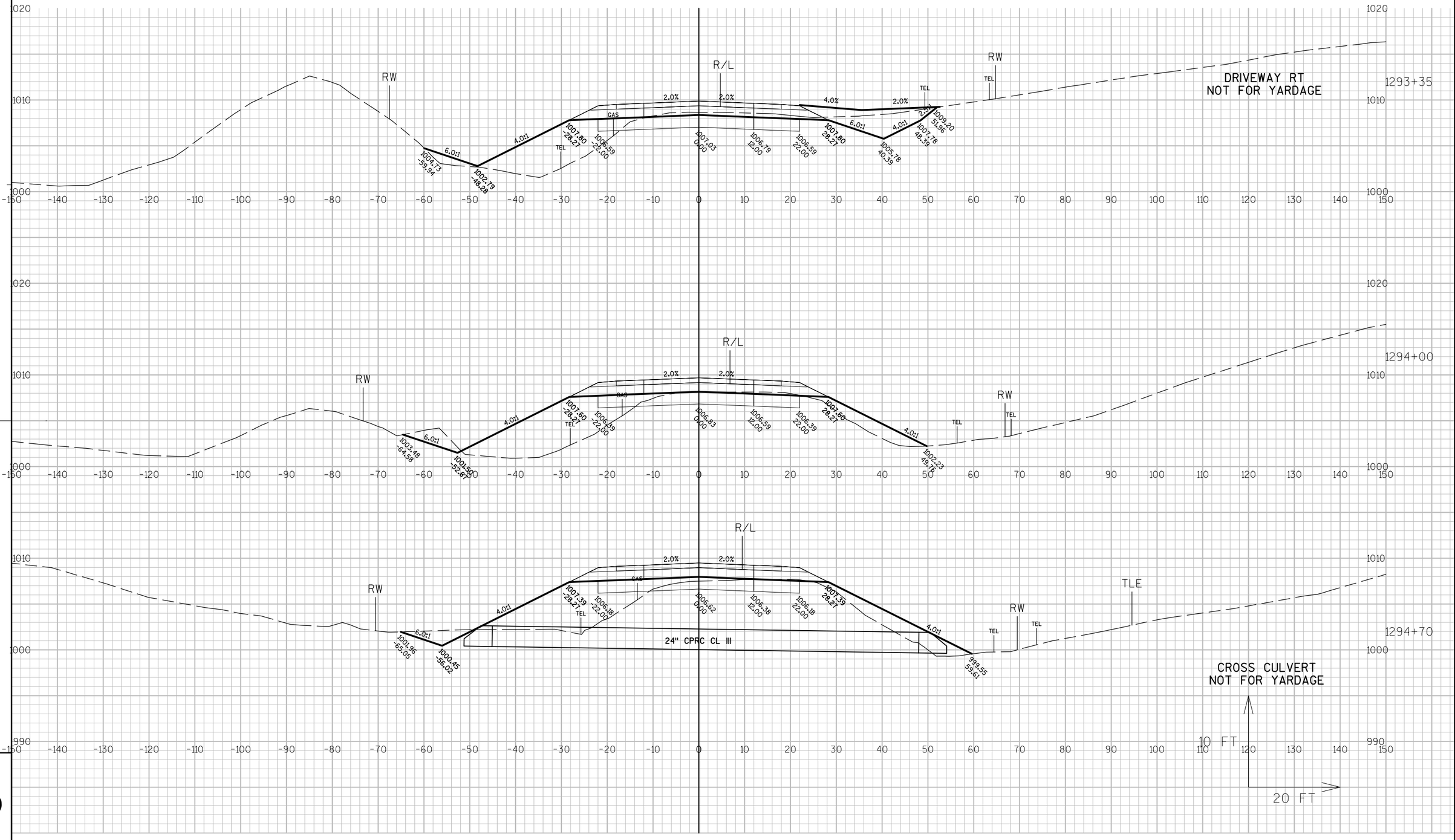
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1001	E

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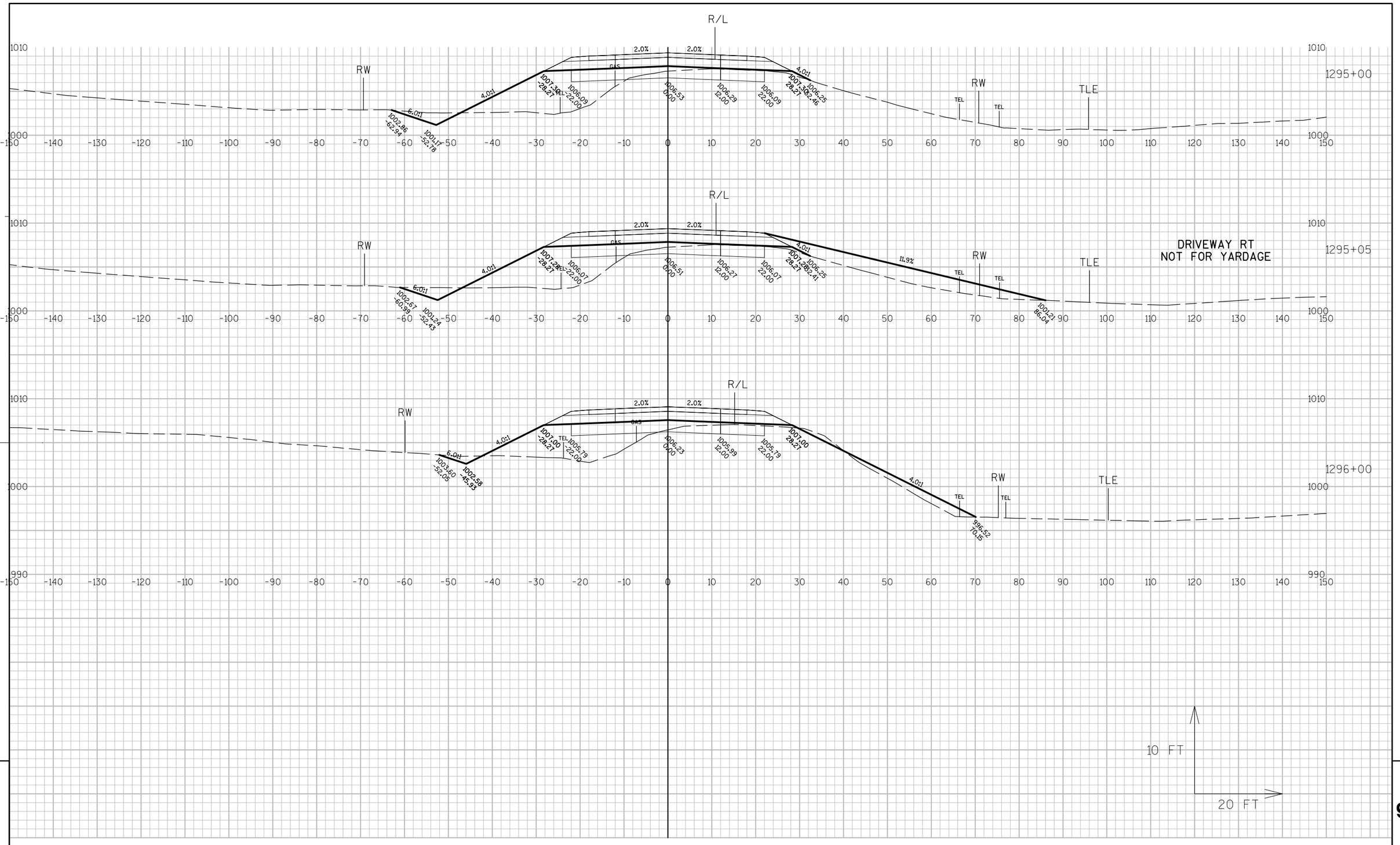


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1002	E

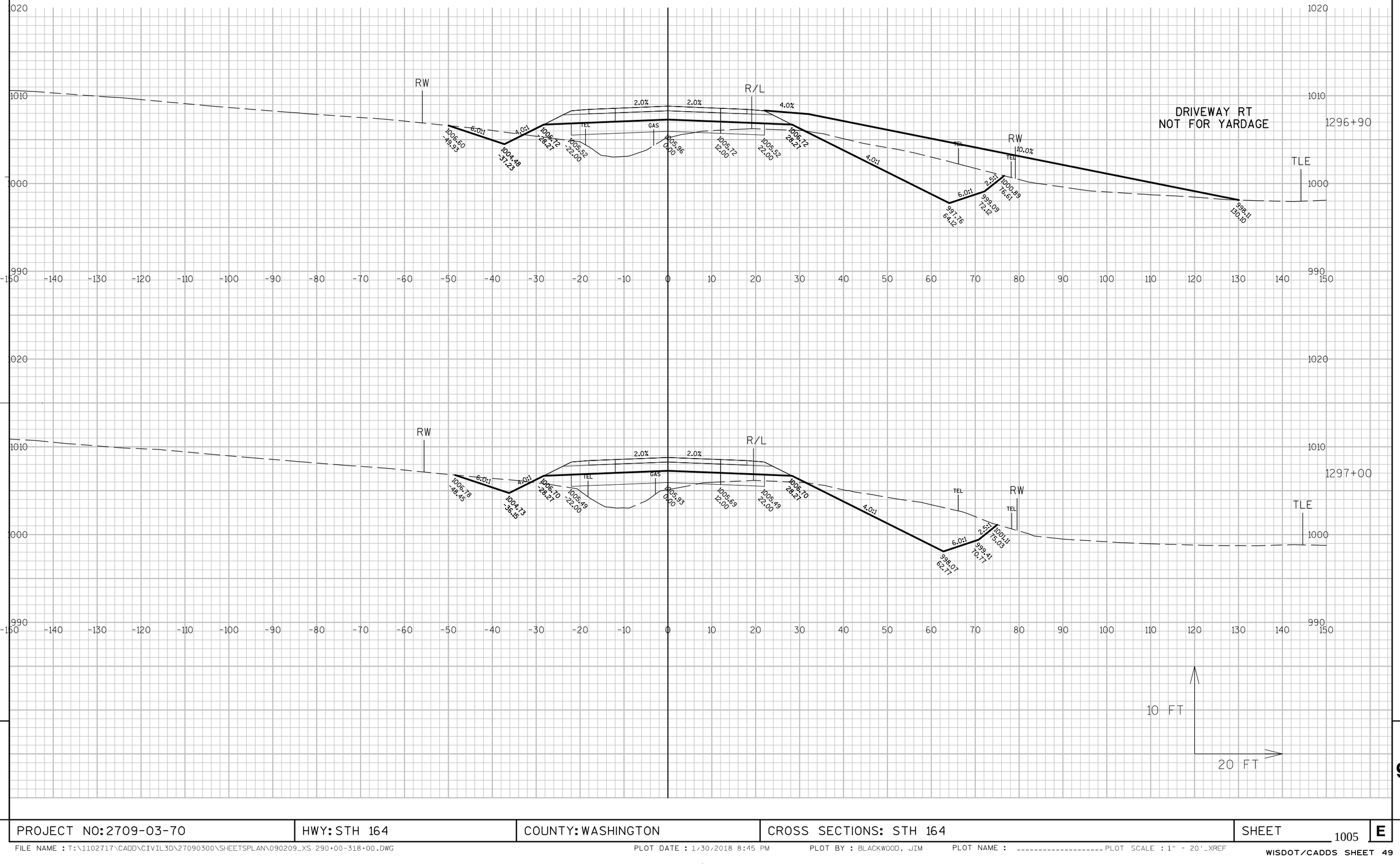
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1003	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1004	E



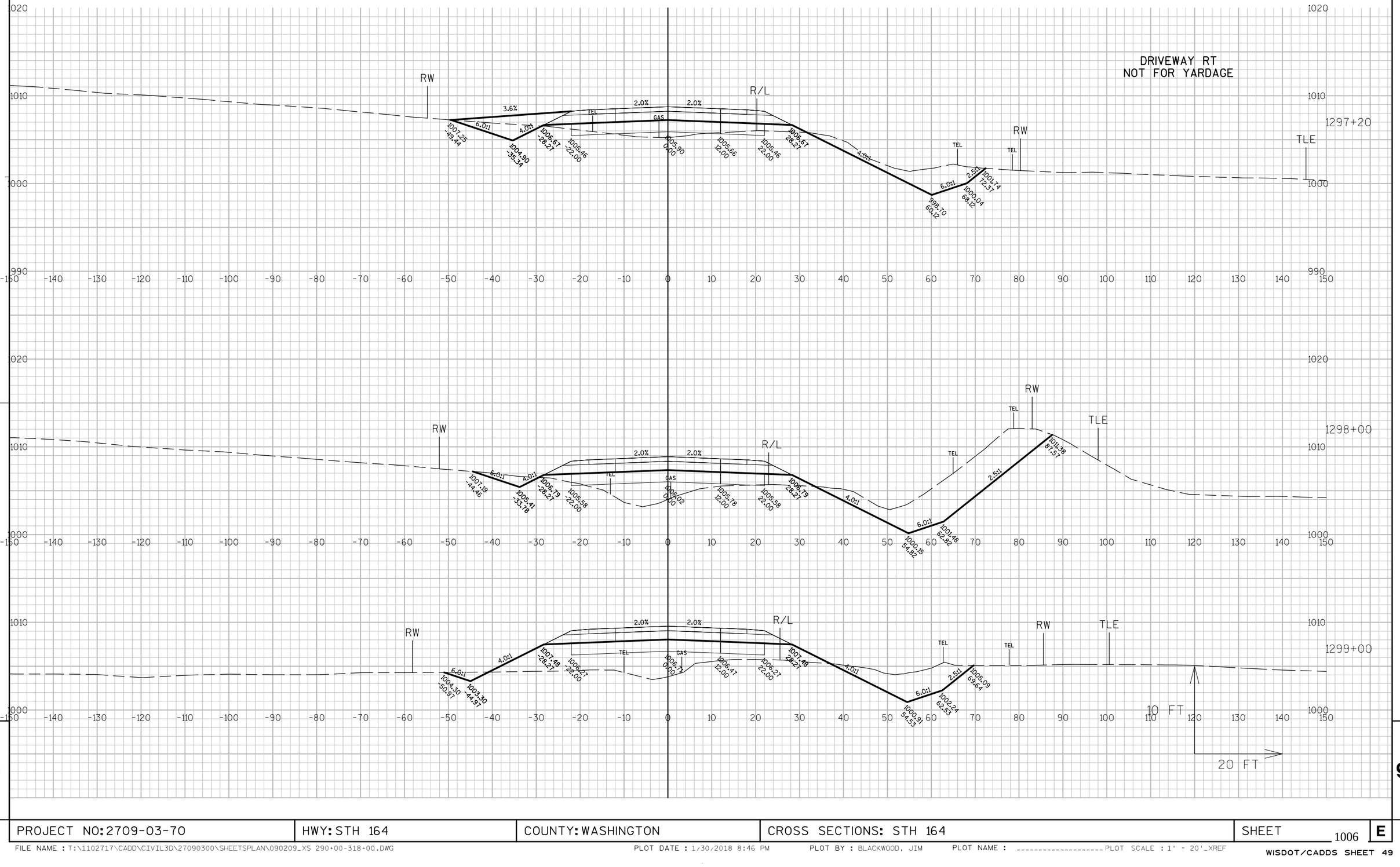
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1005	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090209_XS 290+00-318+00.DWG PLOT DATE : 1/30/2018 8:45 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF

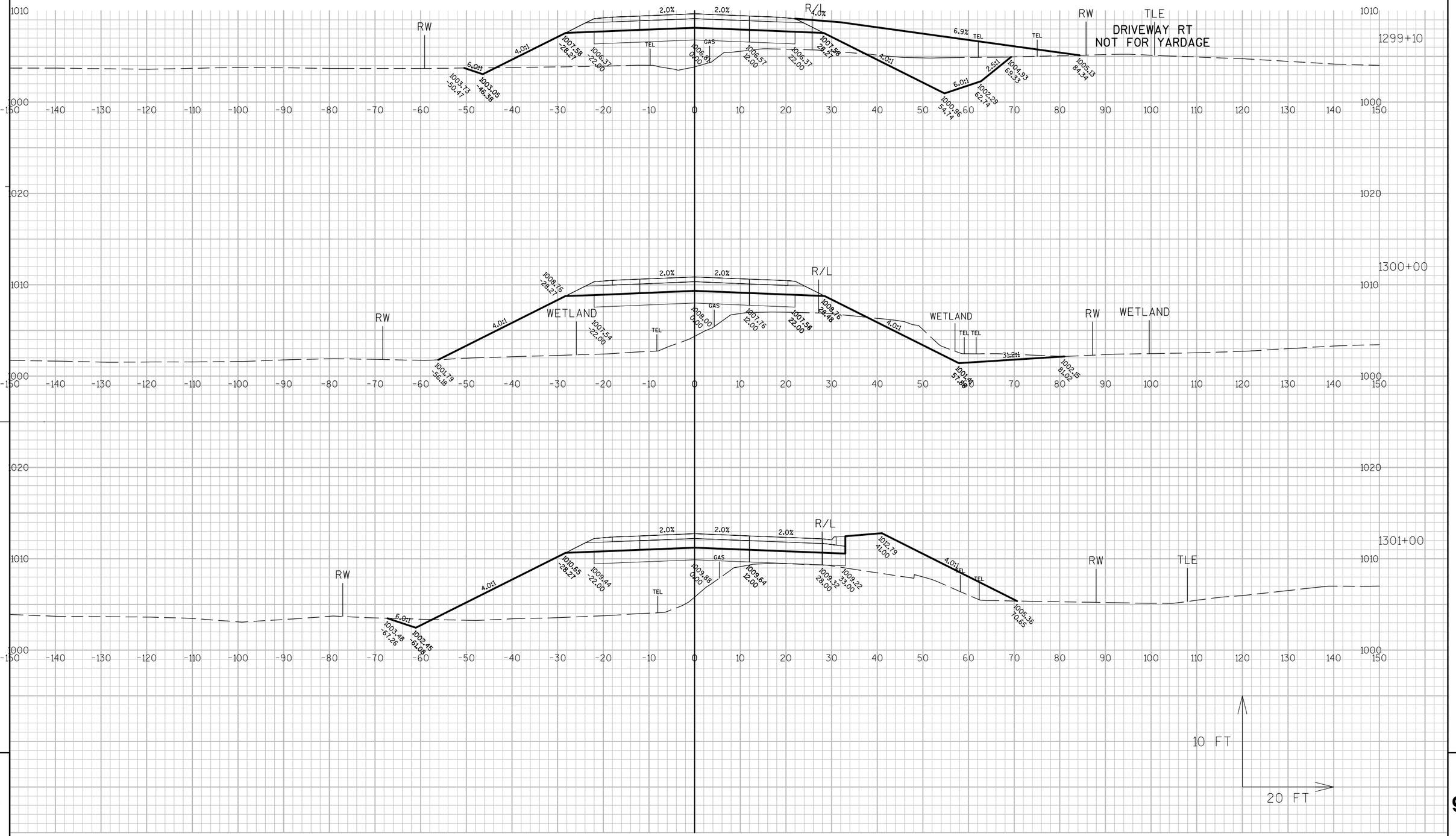
DRIVEWAY RT
NOT FOR YARDAGE



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1006	E

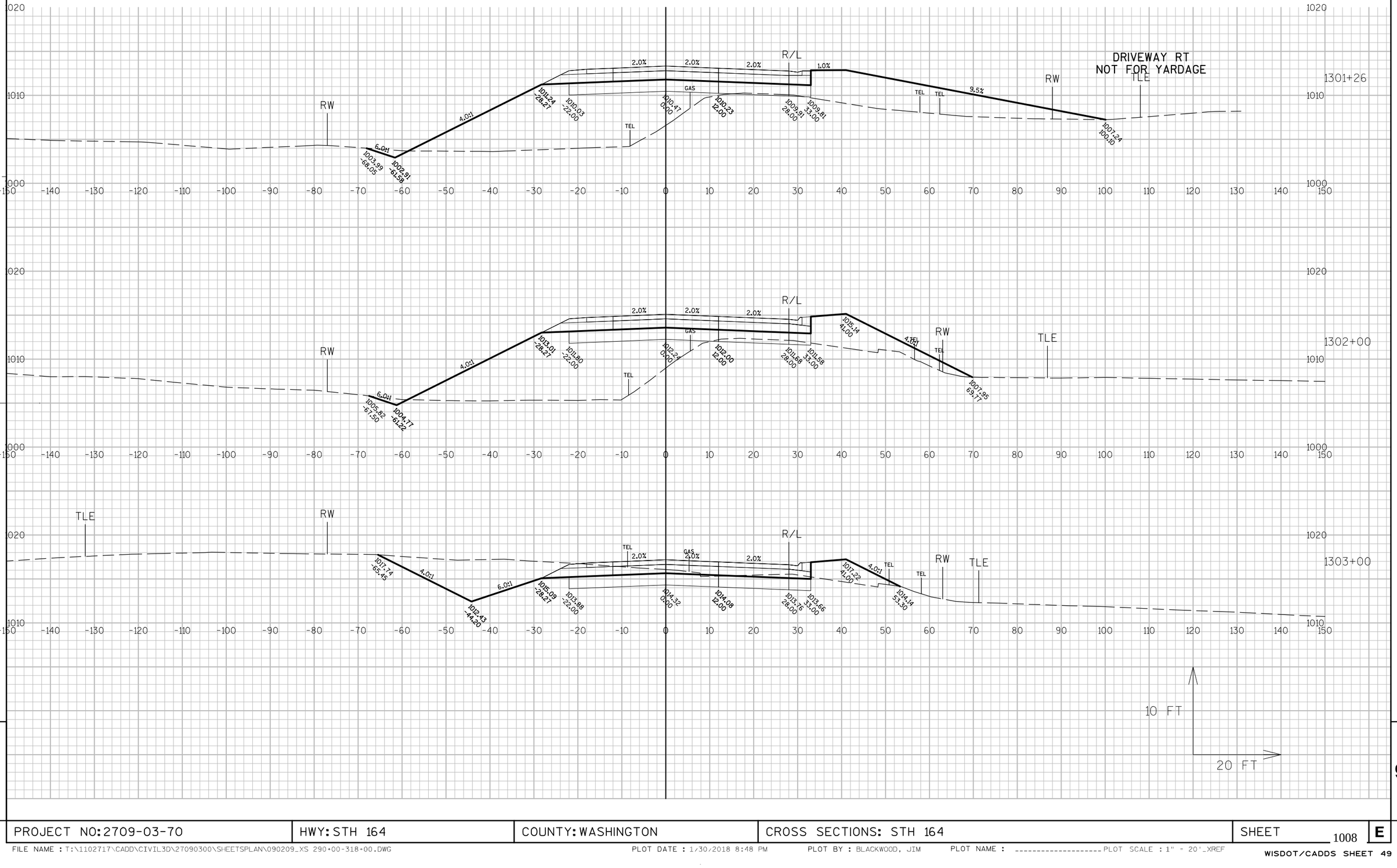
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WISDOT/CADDS SHEET 49

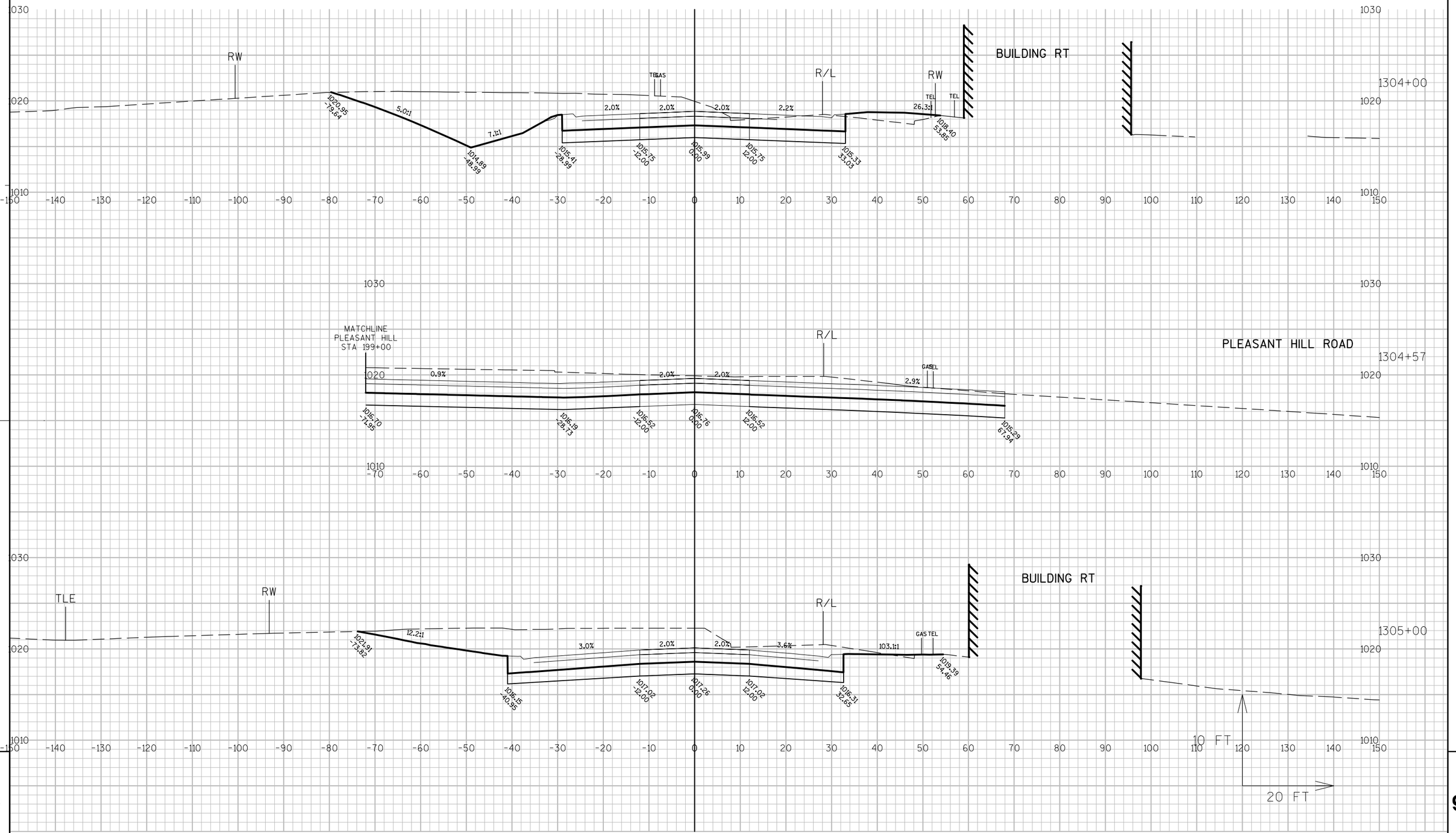


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1007	E

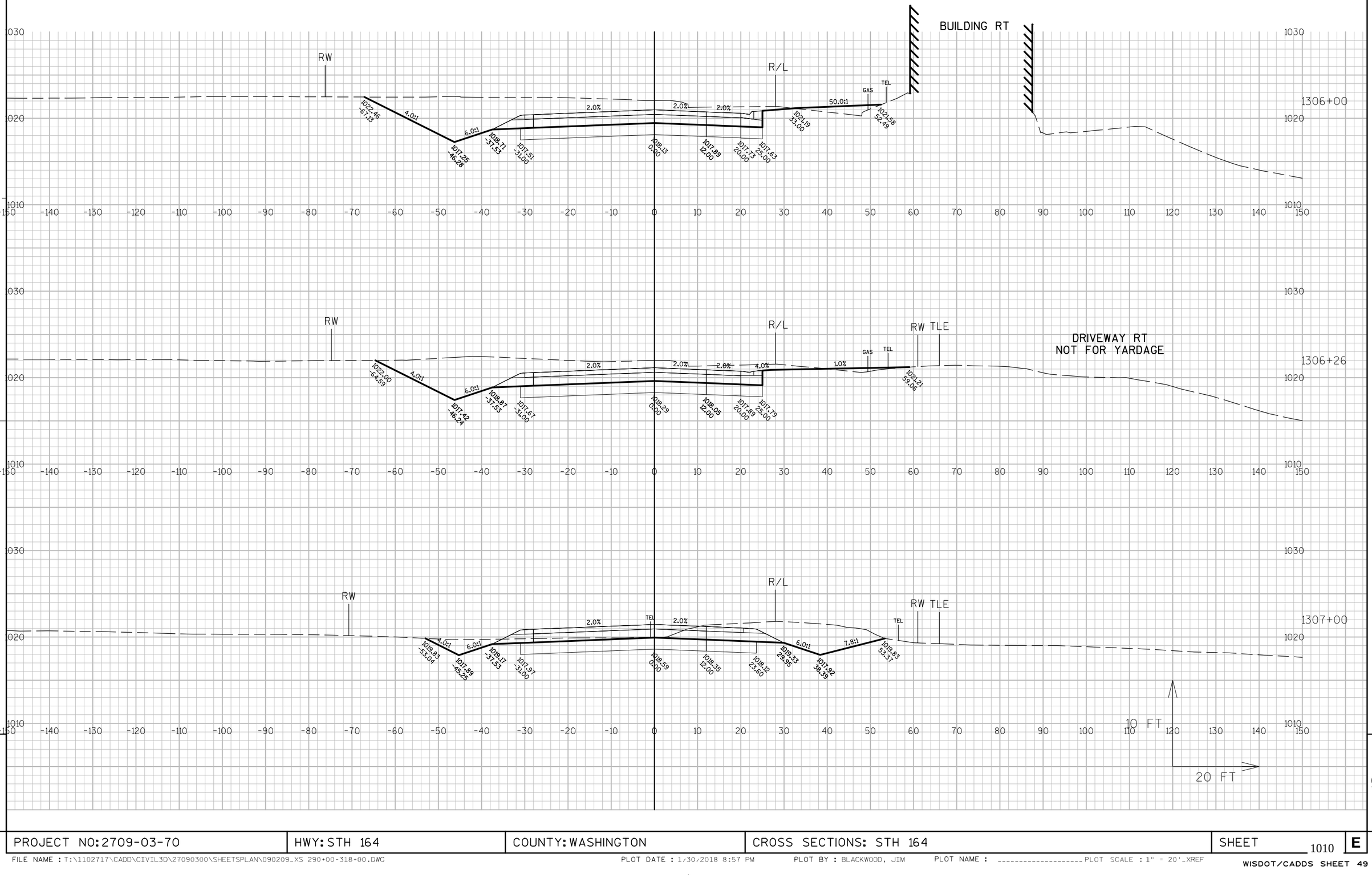
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090209_XS 290+00-318+00.DWG PLOT DATE : 1/30/2018 8:46 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1008	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1009	E

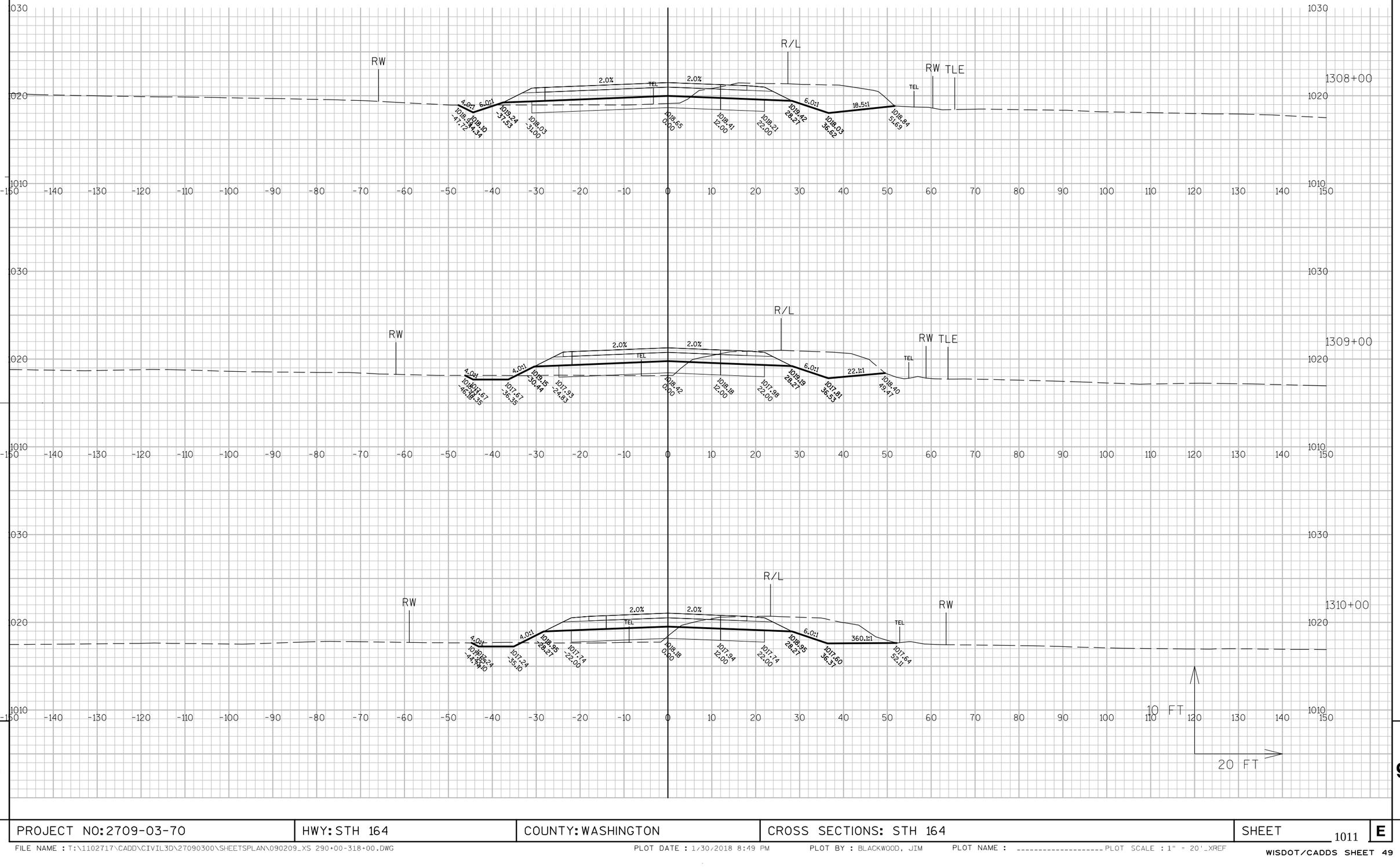


9

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1010	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090209_XS 290+00-318+00.DWG
PLOT DATE : 1/30/2018 8:57 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF
WISDOT/CADDS SHEET 49

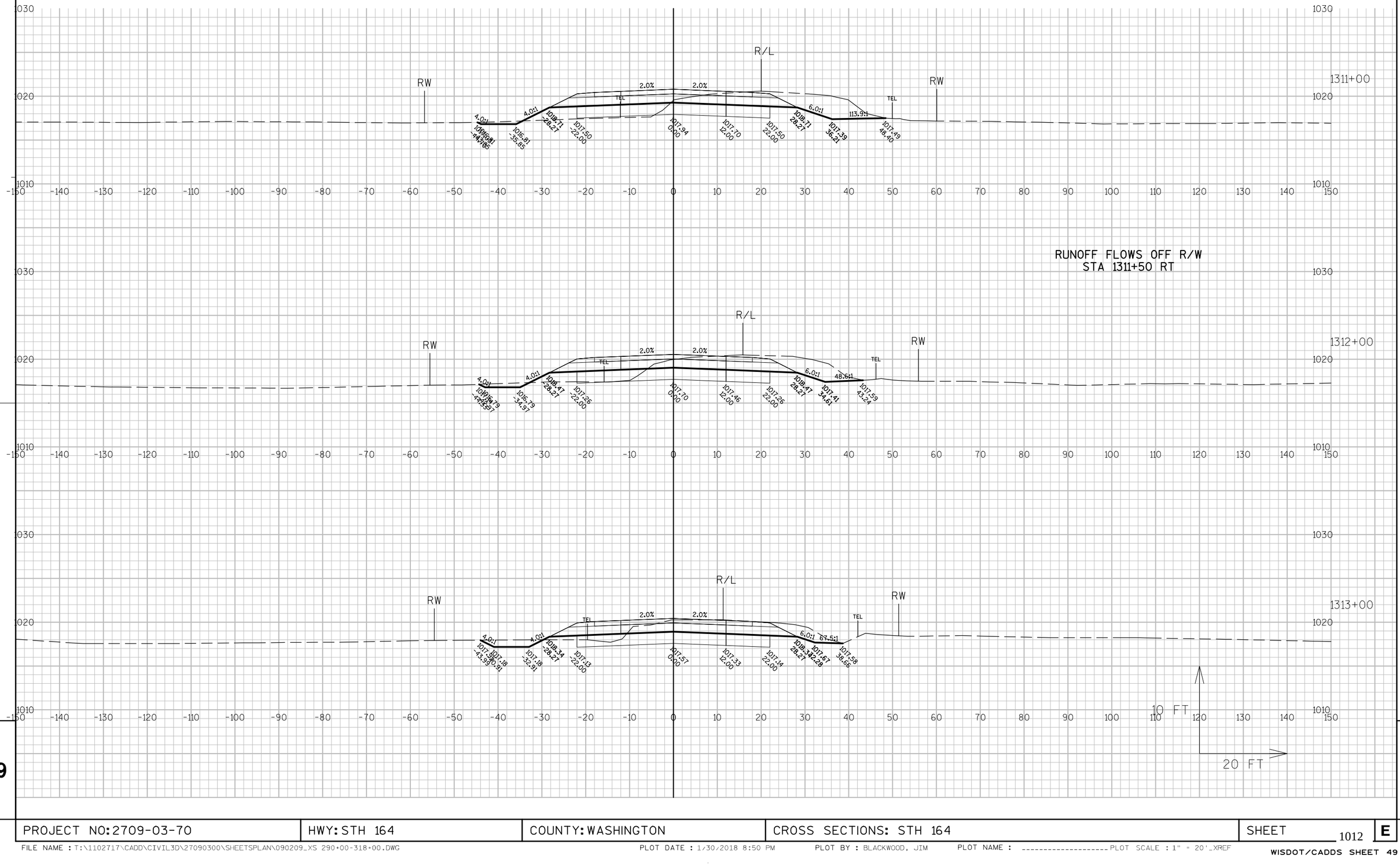


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1011	E

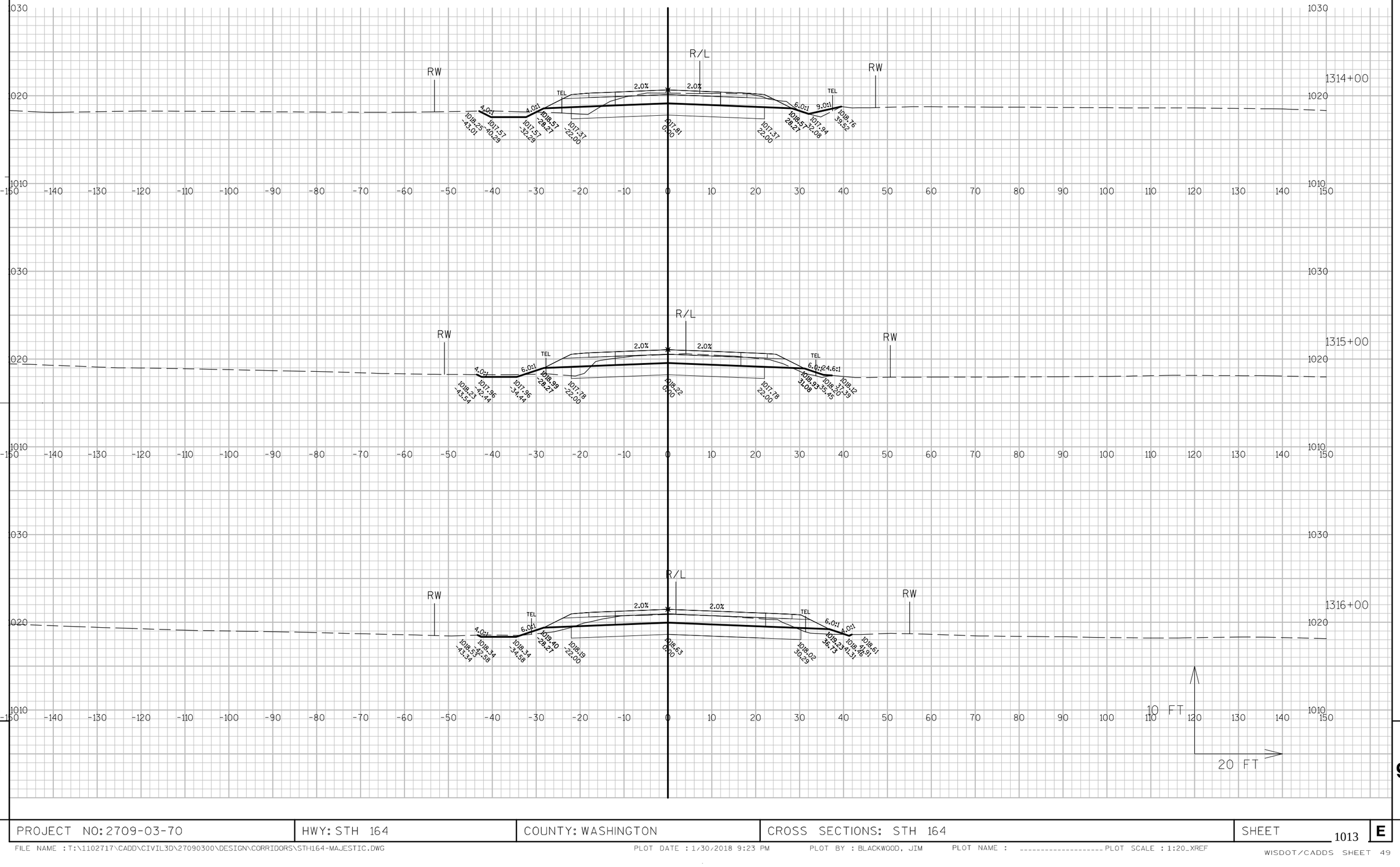
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1012	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090209_XS 290+00-318+00.DWG PLOT DATE : 1/30/2018 8:50 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF

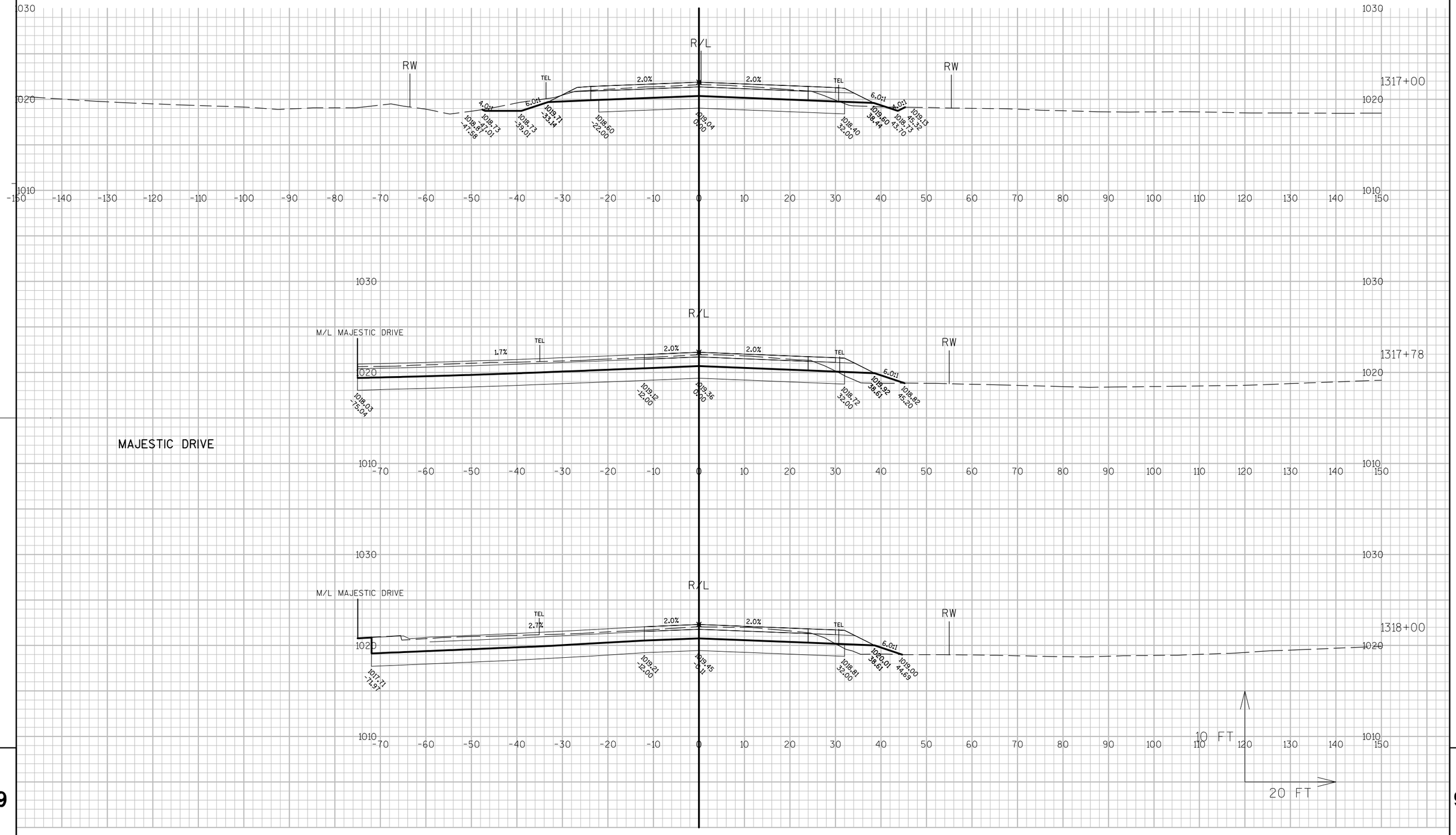
WISDOT/CADDS SHEET 49



9

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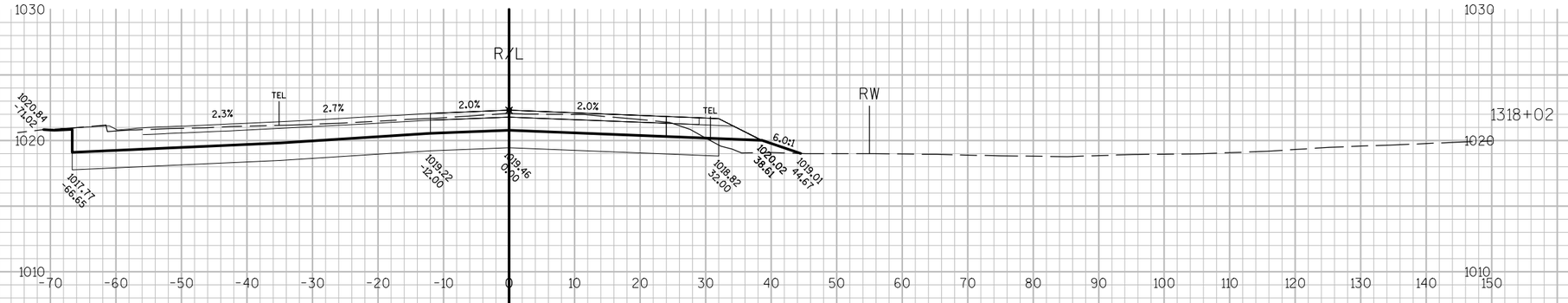
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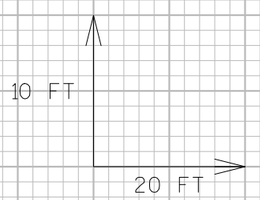
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1014	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\DESIGN\CORRIDORS\STH164-MAJESTIC.DWG PLOT DATE : 1/30/2018 9:24 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



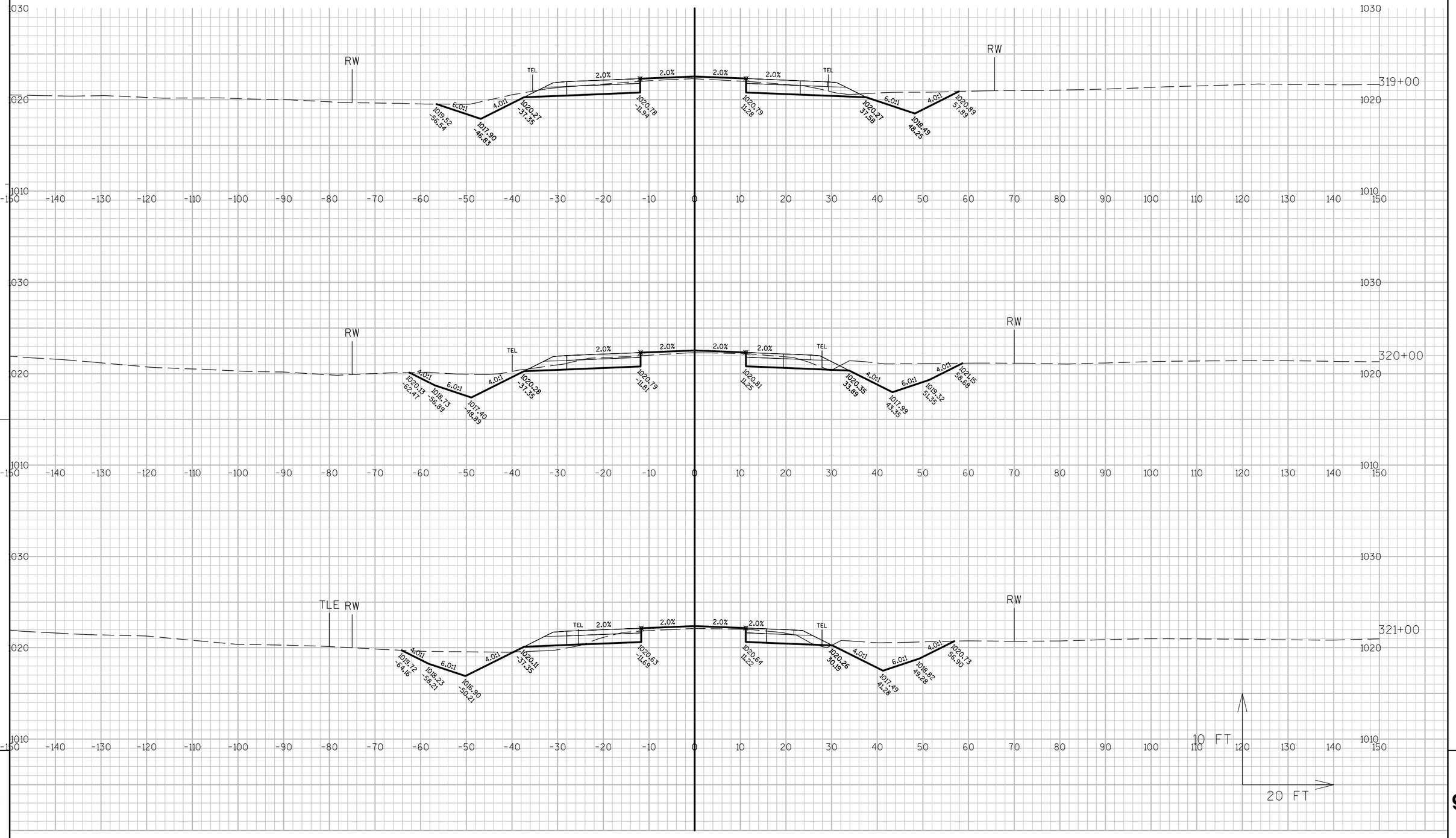
END RECONSTRUCTION



9

9

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1015	E

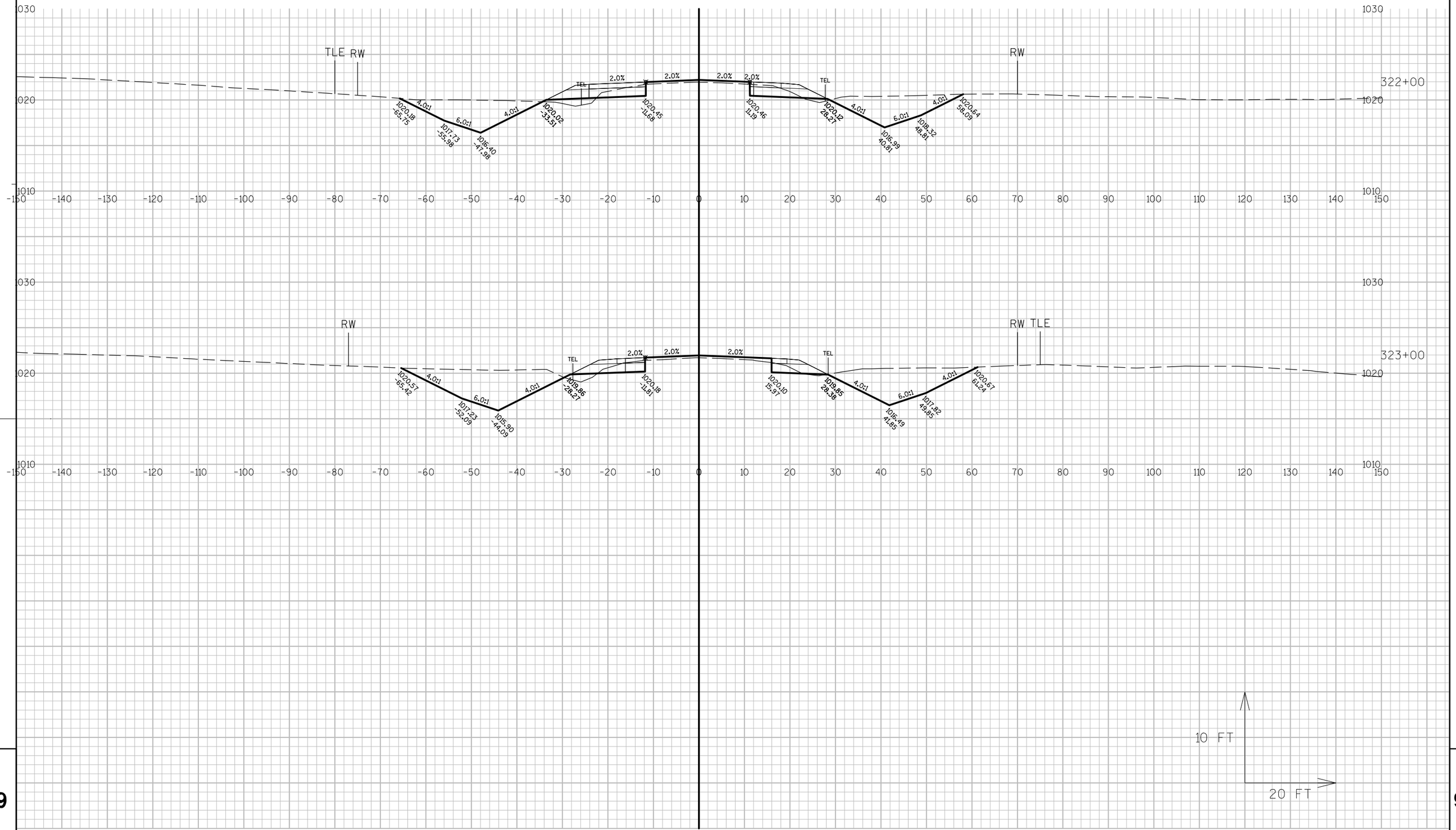


9

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1016	E

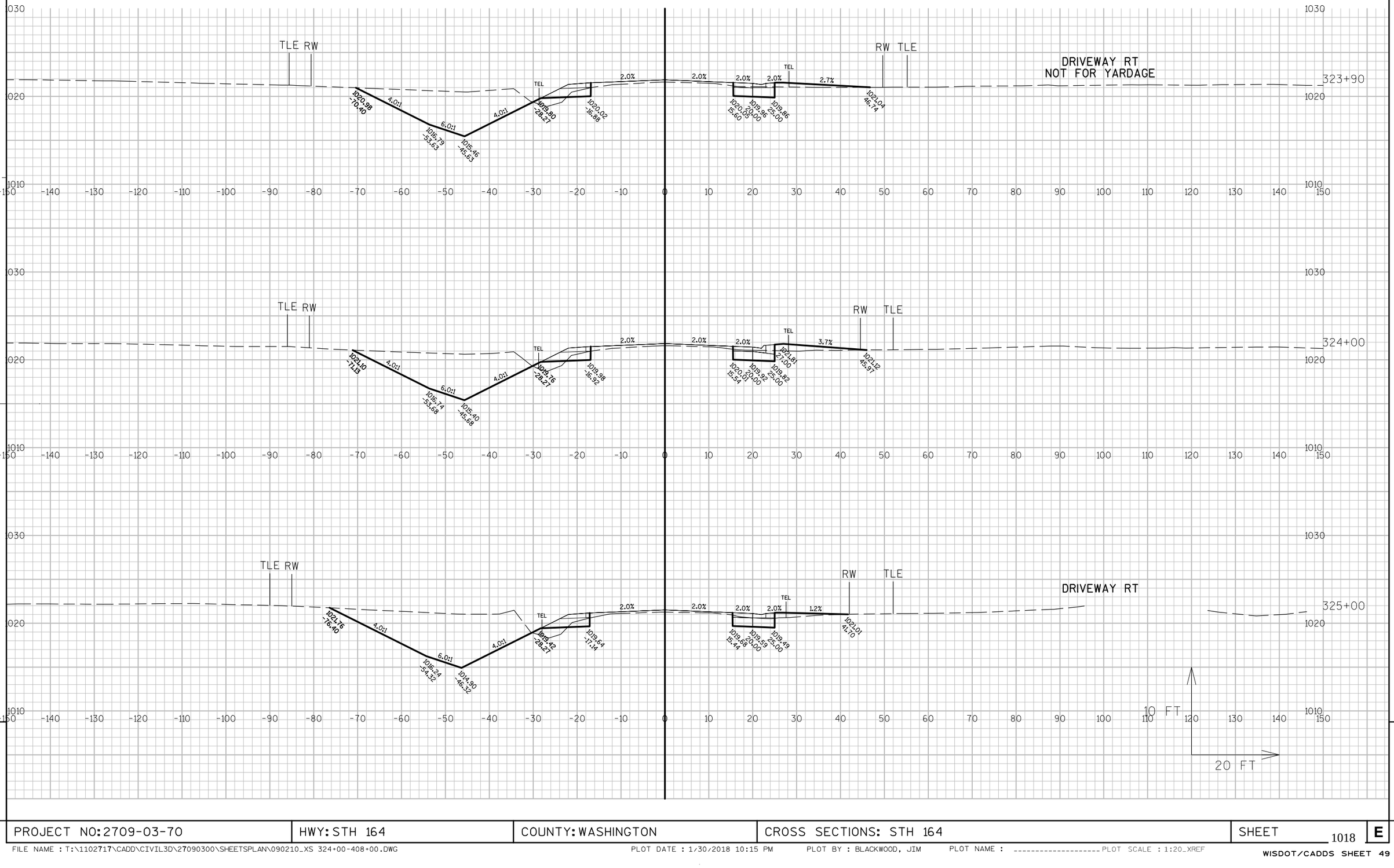
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\DESIGN\CORRIDORS\STH164-MAJESTIC.DWG PLOT DATE : 1/30/2018 9:24 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF



9

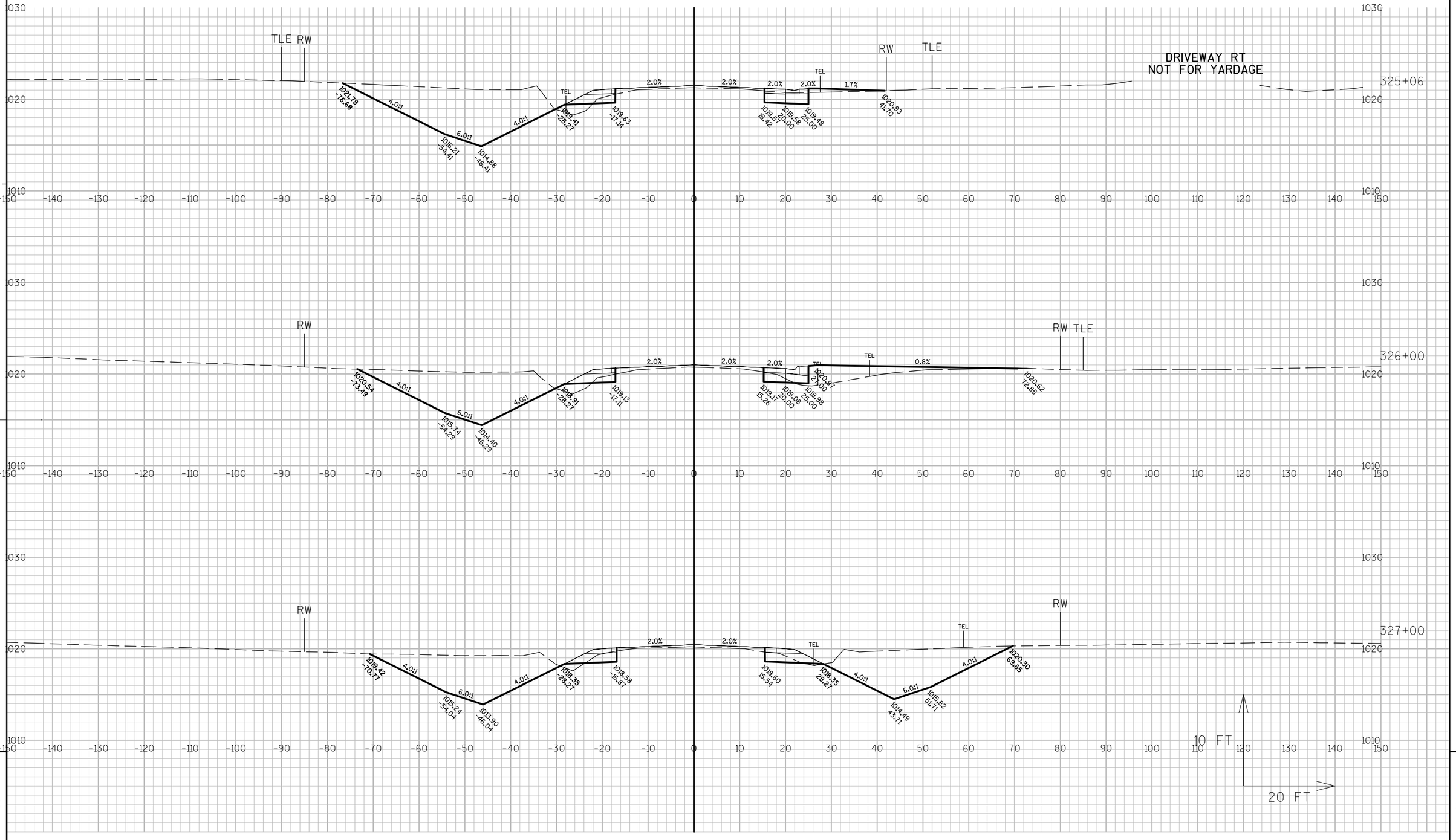
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1017	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\DESIGN\CORRIDORS\STH164-MAJESTIC.DWG PLOT DATE : 1/30/2018 9:25 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1018	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG PLOT DATE : 1/30/2018 10:15 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

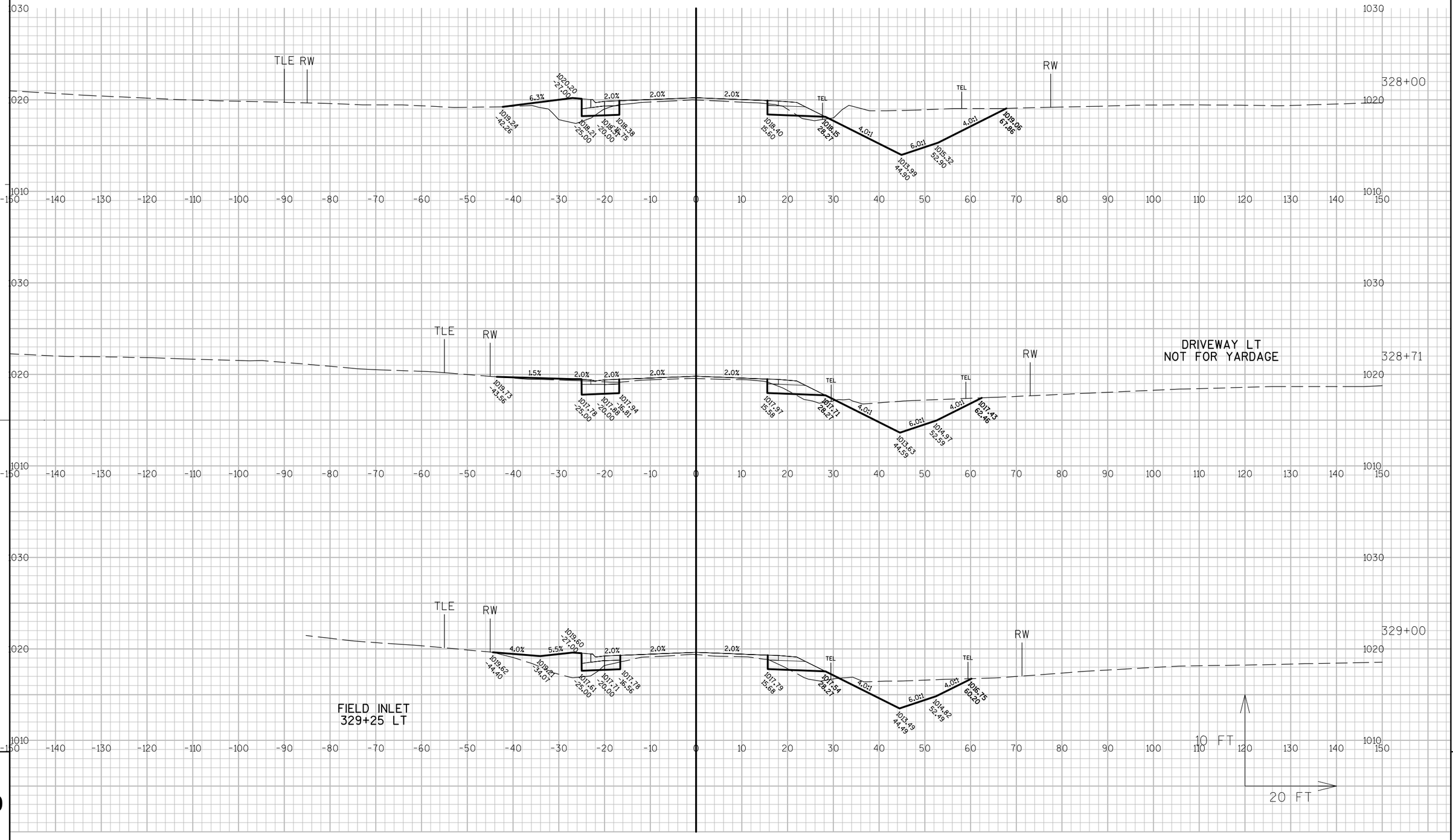


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1019	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG PLOT DATE : 1/30/2018 10:15 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF



9

9

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1020	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG PLOT DATE : 1/30/2018 10:16 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

DRIVEWAY LT
NOT FOR YARDAGE

329+62

TLE RW 0.7% 1.0% 2.0% 2.0% 2.0% RW TEL TEL 4.0:1 6.0:1 4.0:1
1018.81 -40.73
1017.05 -25.00
1017.15 -20.00
1017.22 -16.42
1017.24 15.65
1016.98 29.27
1013.18 43.49
1014.51 51.19
1016.30 58.67

330+00

TLE RW 0.6% 2.0% 2.0% 2.0% RW TEL TEL 4.0:1 6.0:1 4.0:1
1018.80 -27.00
1018.67 -38.20
1016.62 -25.00
1016.72 -20.00
1016.79 -16.28
1016.80 15.71
1016.55 29.27
1012.99 42.52
1014.32 50.52
1015.07 57.52

331+00

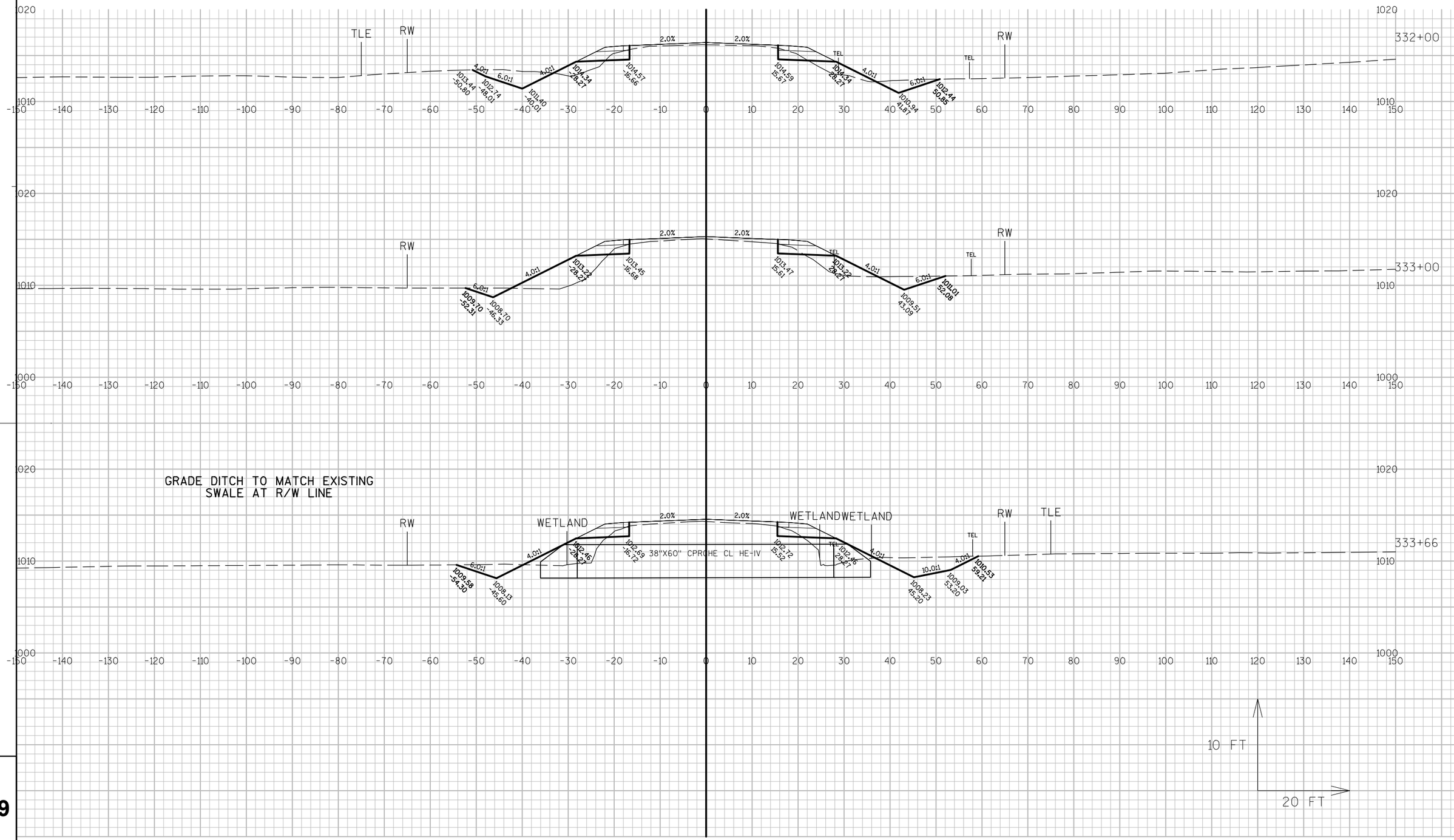
TLE RW 6.3% 2.0% 2.0% 2.0% RW TEL TEL 4.0:1 6.0:1
1017.71 -21.00
1018.35 -31.31
1015.73 -25.00
1015.82 -20.00
1015.89 -16.17
1015.90 15.81
1015.65 29.27
1012.49 40.92
1014.79 54.76

10 FT
20 FT

9

9

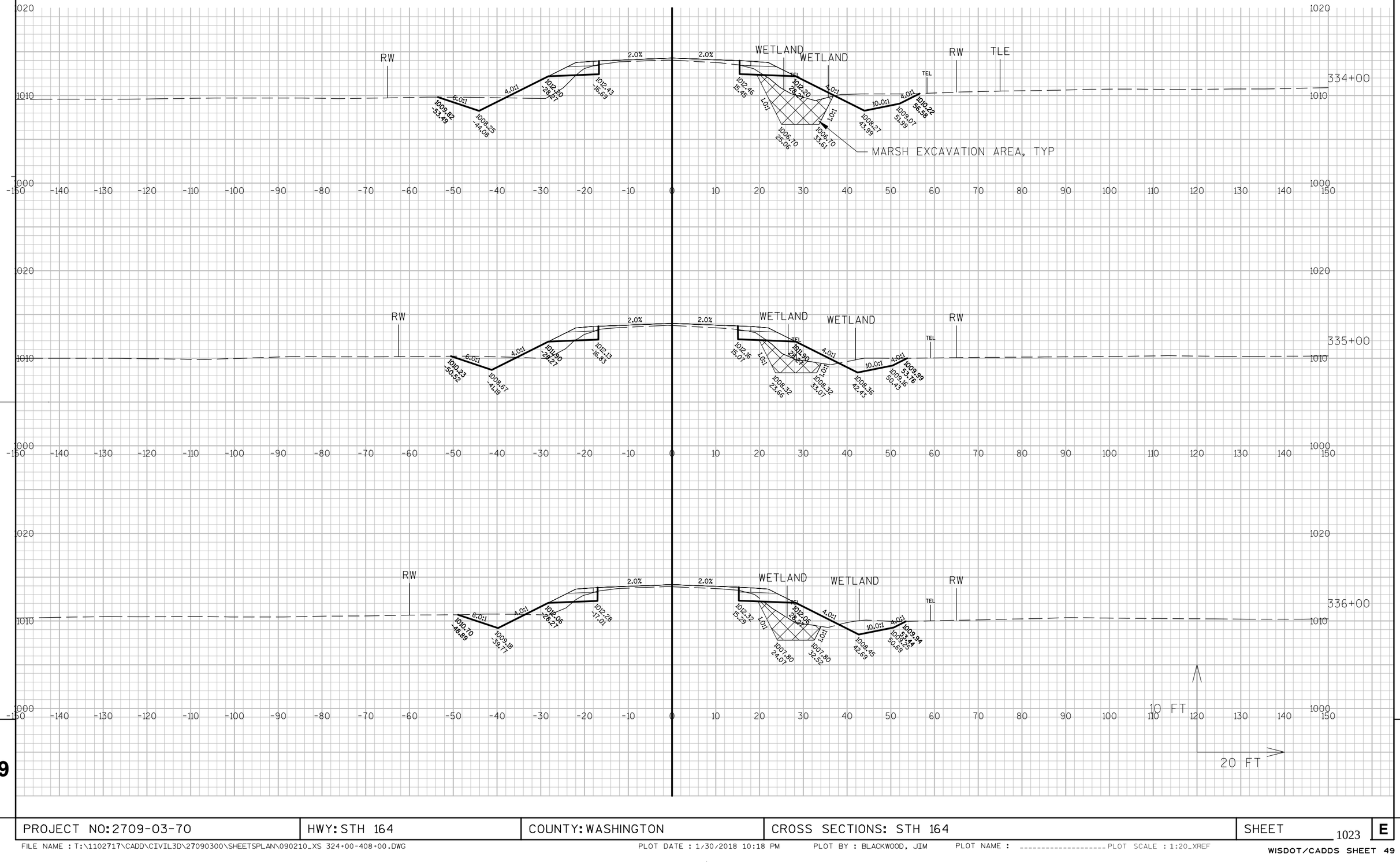
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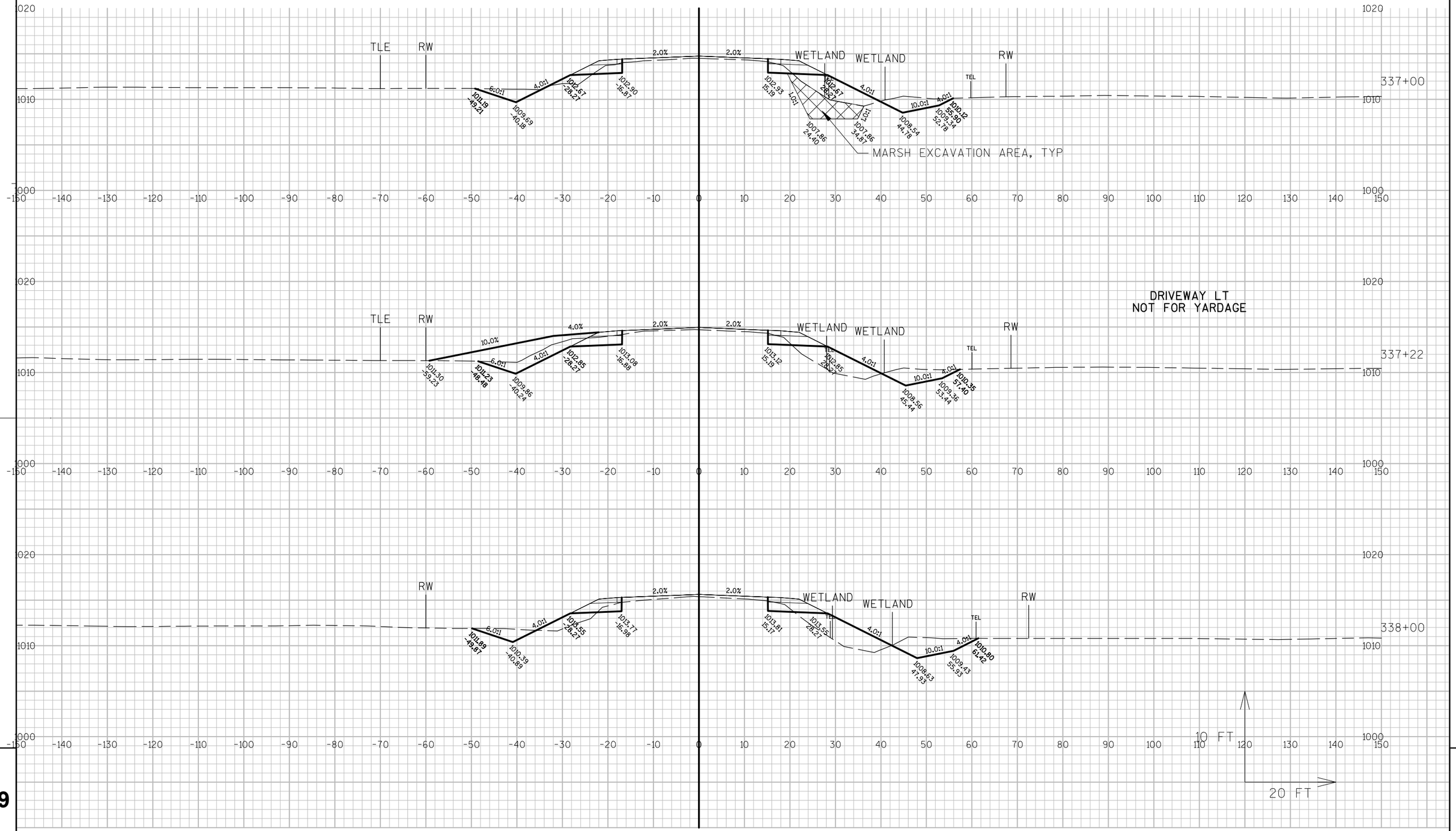
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1022	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG PLOT DATE : 1/30/2018 10:18 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

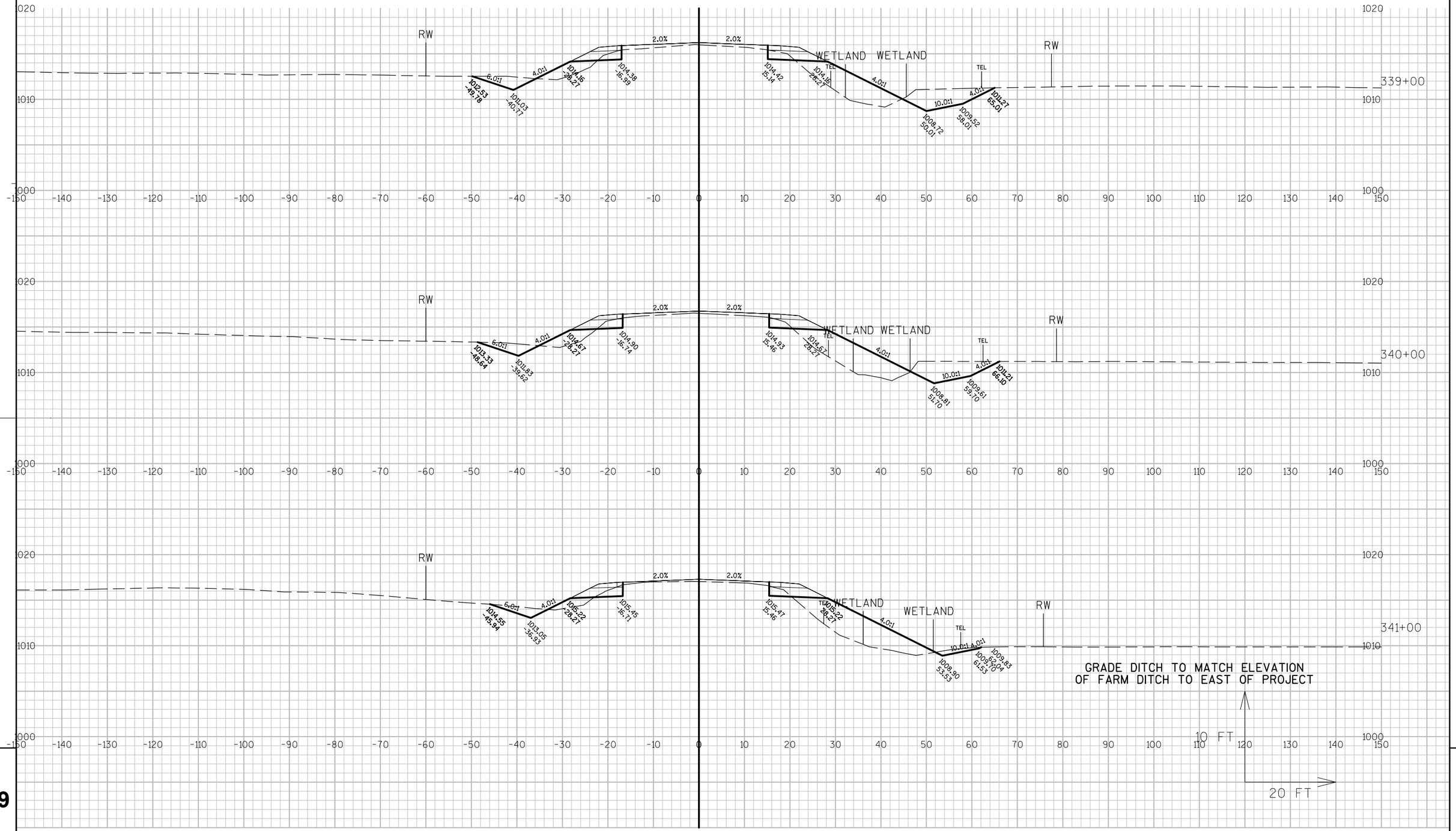
WISDOT/CADDS SHEET 49



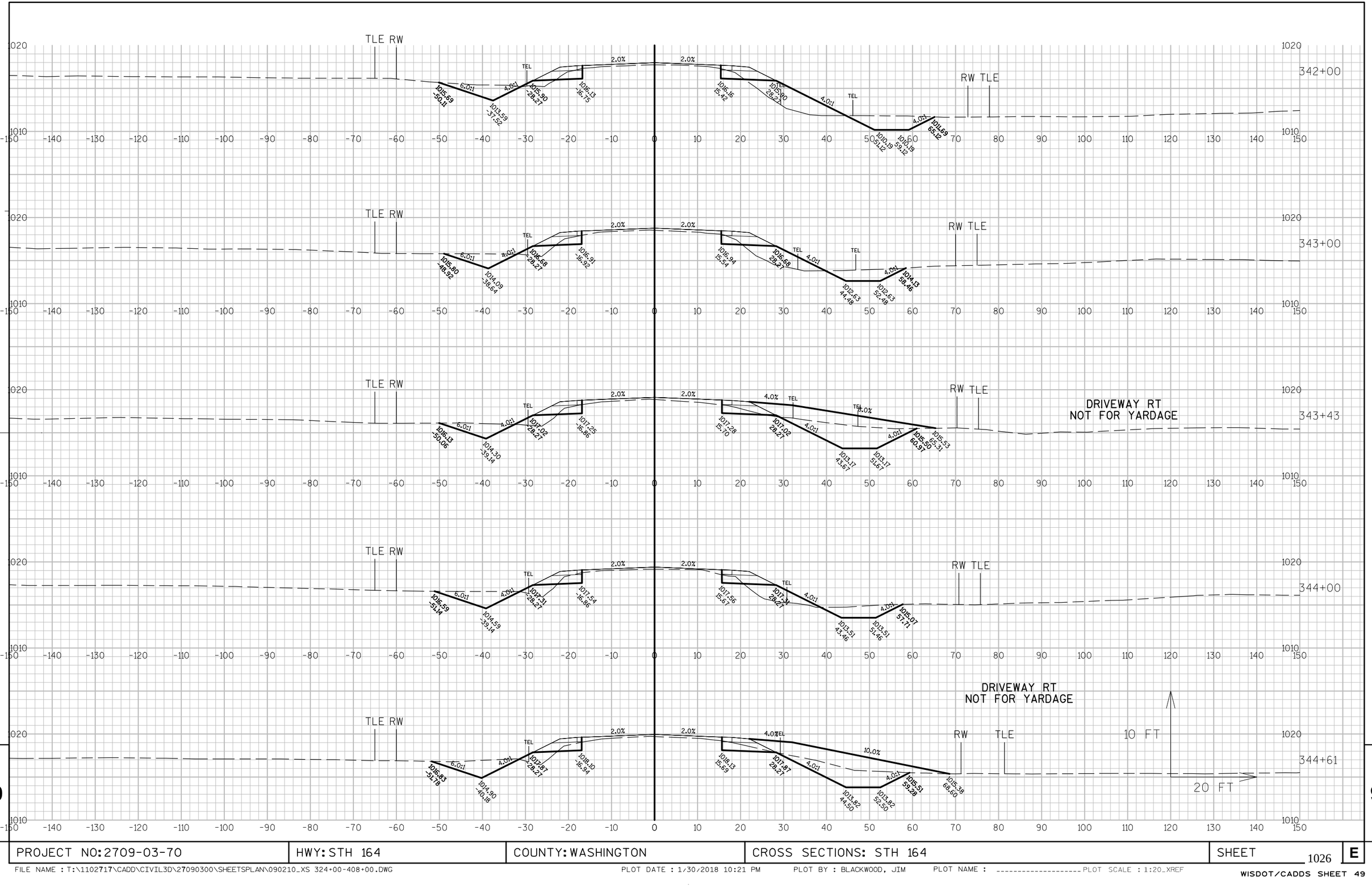
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1023	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1024	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1025	E



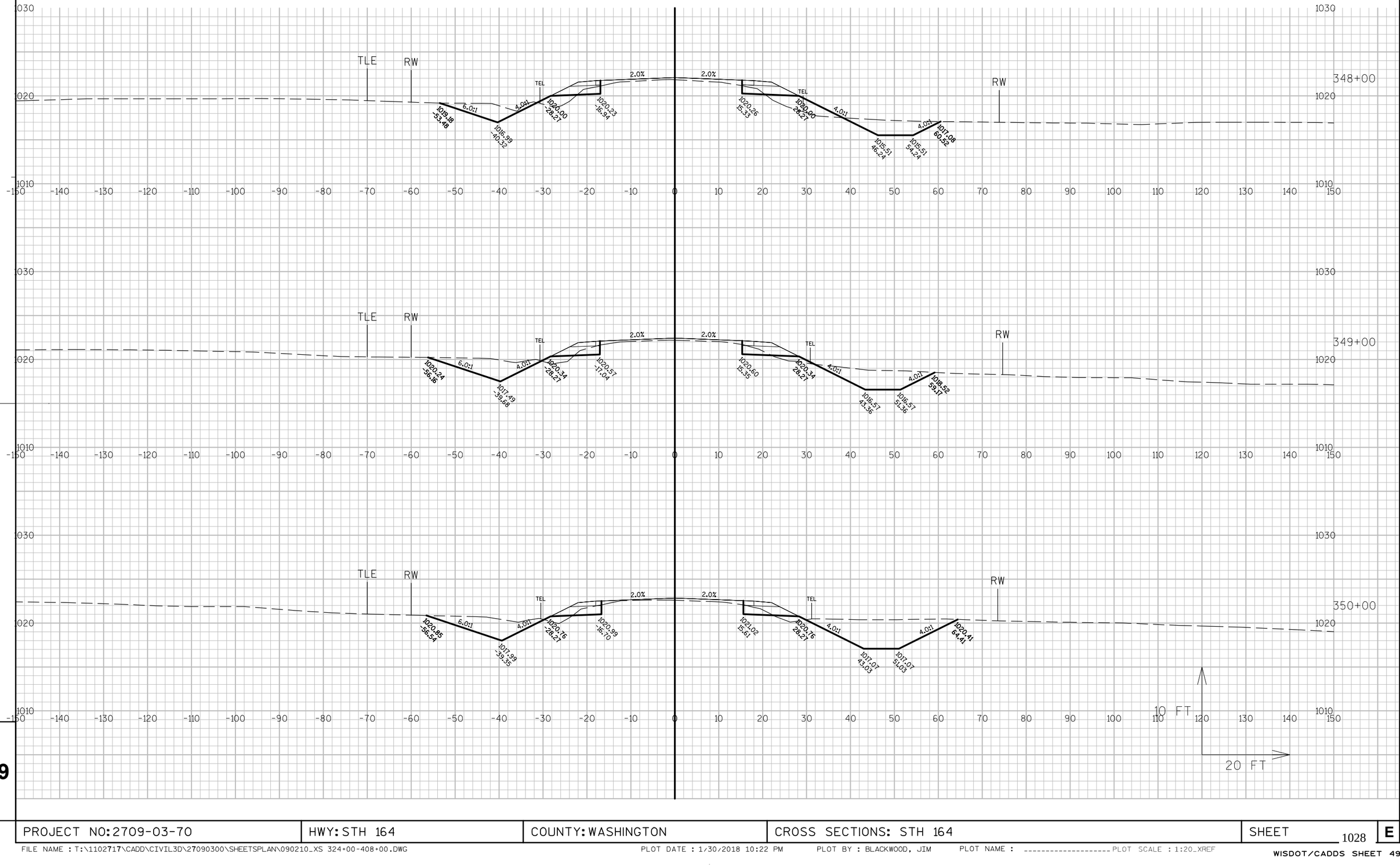
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1026	E

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1027	E

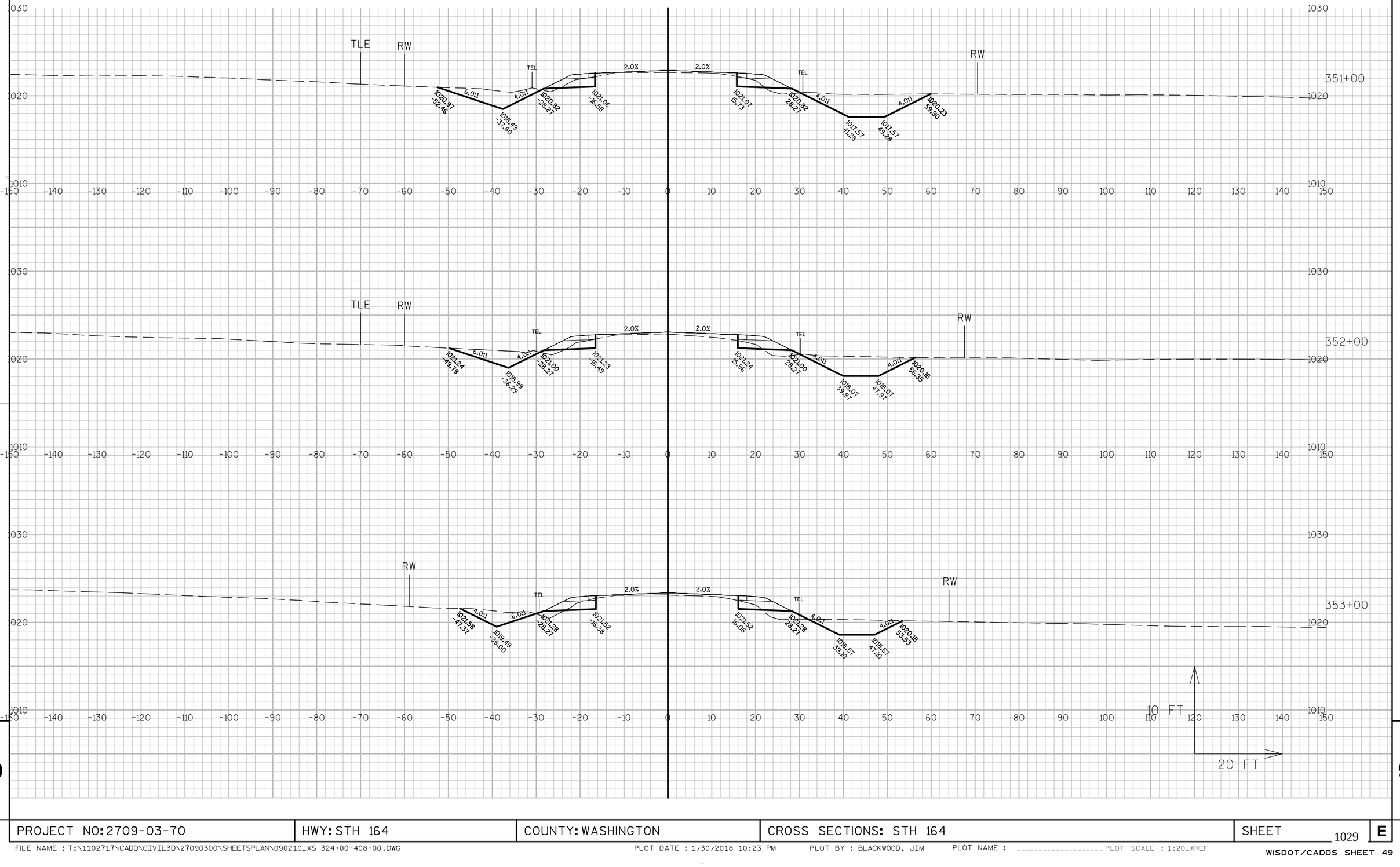
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1028	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1029	E

DITCH HP LT

RW

TEL

4.0:1

6.0:1

2.0%

1021.60
-42.67

1018.99
-36.25

1021.32
-28.27

1021.55
-16.74

DITCH HP RT

RW

TEL

4.0:1

6.0:1

2.0%

1021.66
11.12

1021.32
28.27

1018.07
37.27

1020.07
43.25

354+00

1030
1020
1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

RW

TEL

4.0:1

6.0:1

2.0%

1021.62
-46.81

1018.49
-38.30

1021.16
-28.27

1021.39
-17.14

RW

TEL

4.0:1

6.0:1

2.0%

1021.51
10.73

1021.37
17.14

1021.16
28.42

1018.64
38.18

1019.65
44.54

355+00

1030
1020
1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

RW

TEL

4.0:1

6.0:1

2.0%

1021.57
-50.29

1018.59
-39.38

1020.88
-28.27

1021.10
-17.20

RW

TEL

4.0:1

6.0:1

2.0%

1021.23
10.51

1020.93
25.59

1020.74
35.13

1018.22
45.21

1019.54
53.15

356+00

1030
1020
1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

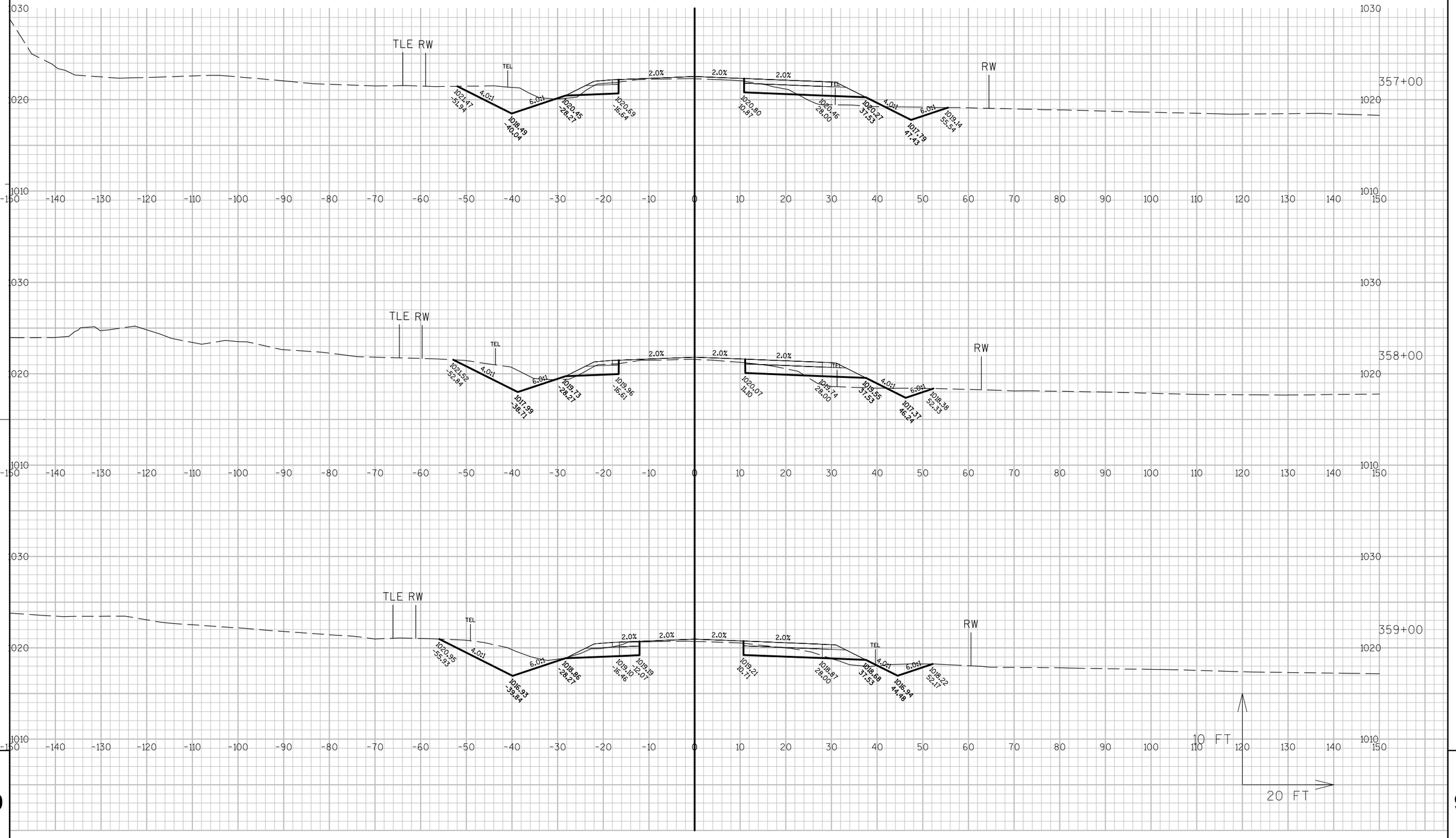
10 FT

20 FT

9

9

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1030	E

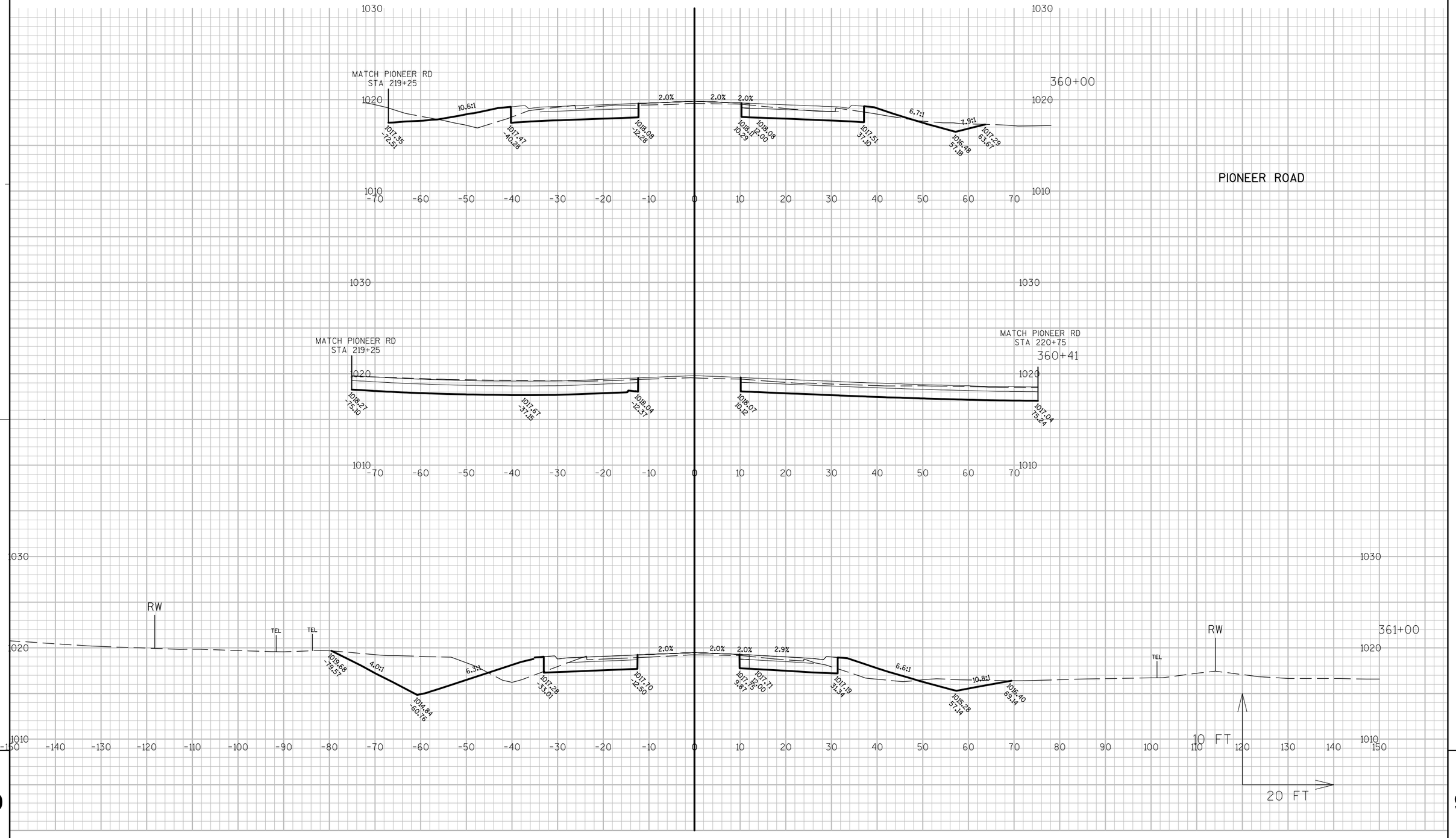


9

9

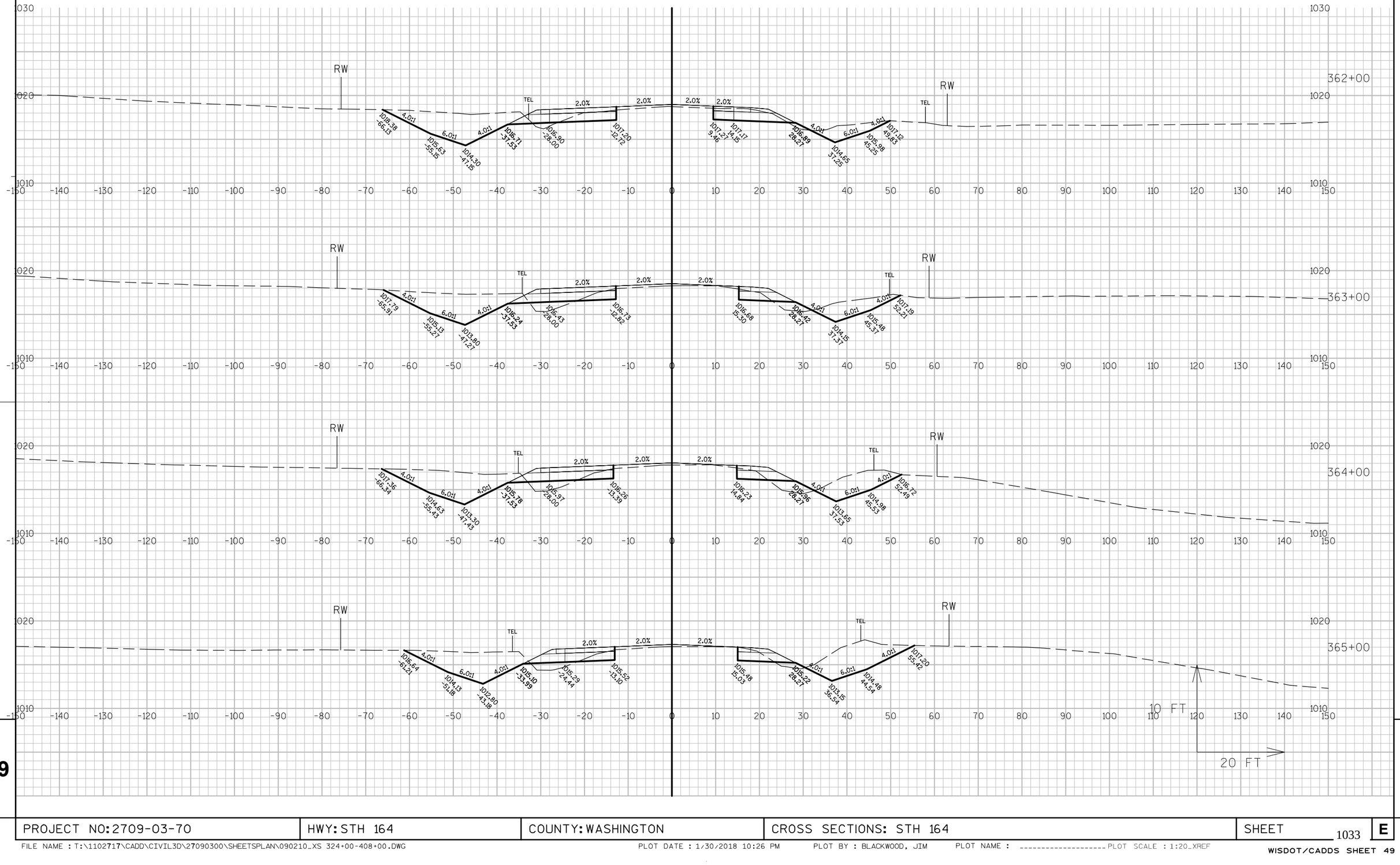
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1031	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG PLOT DATE : 1/30/2018 10:24 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

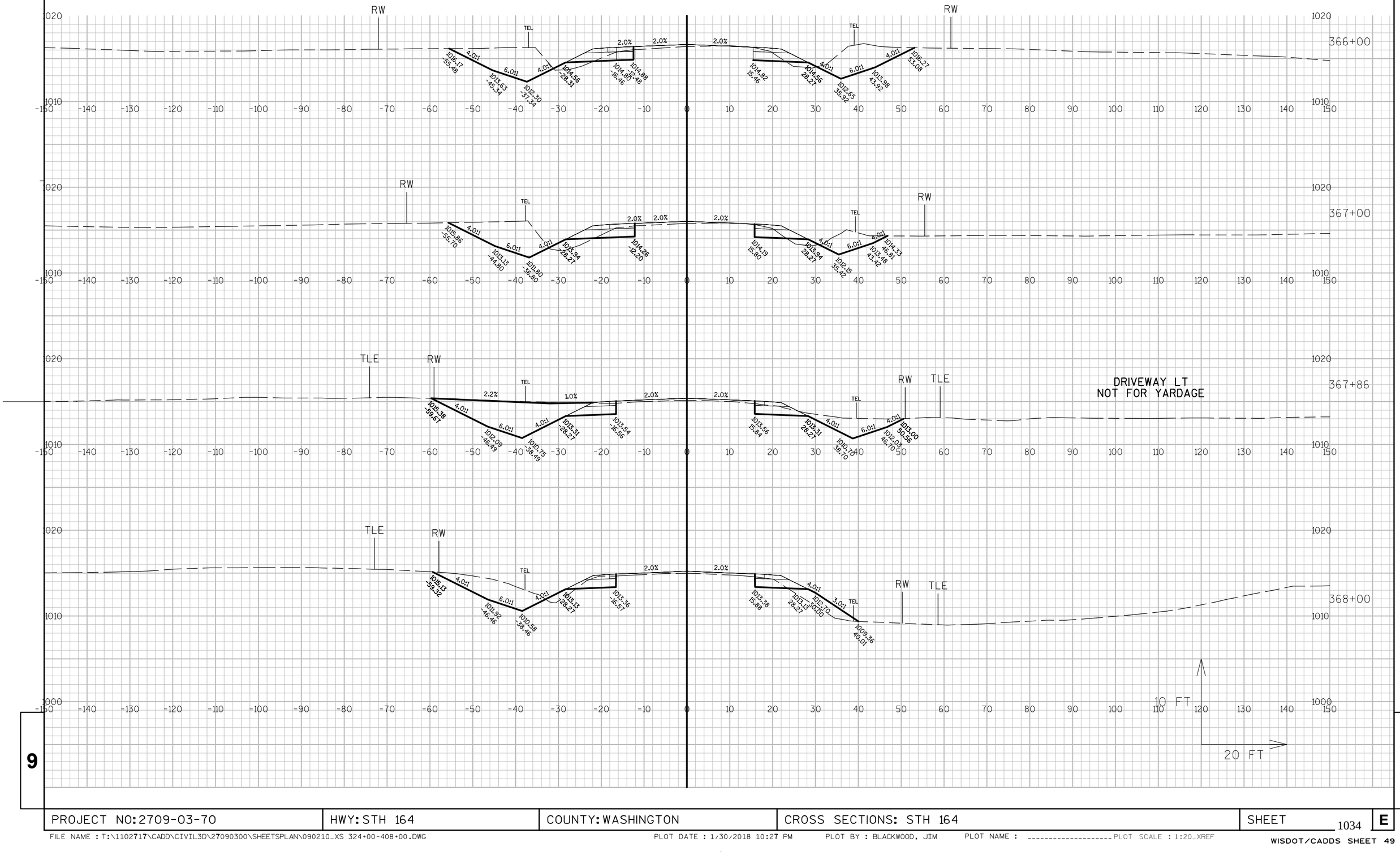


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1032	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG PLOT DATE : 1/30/2018 10:25 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF



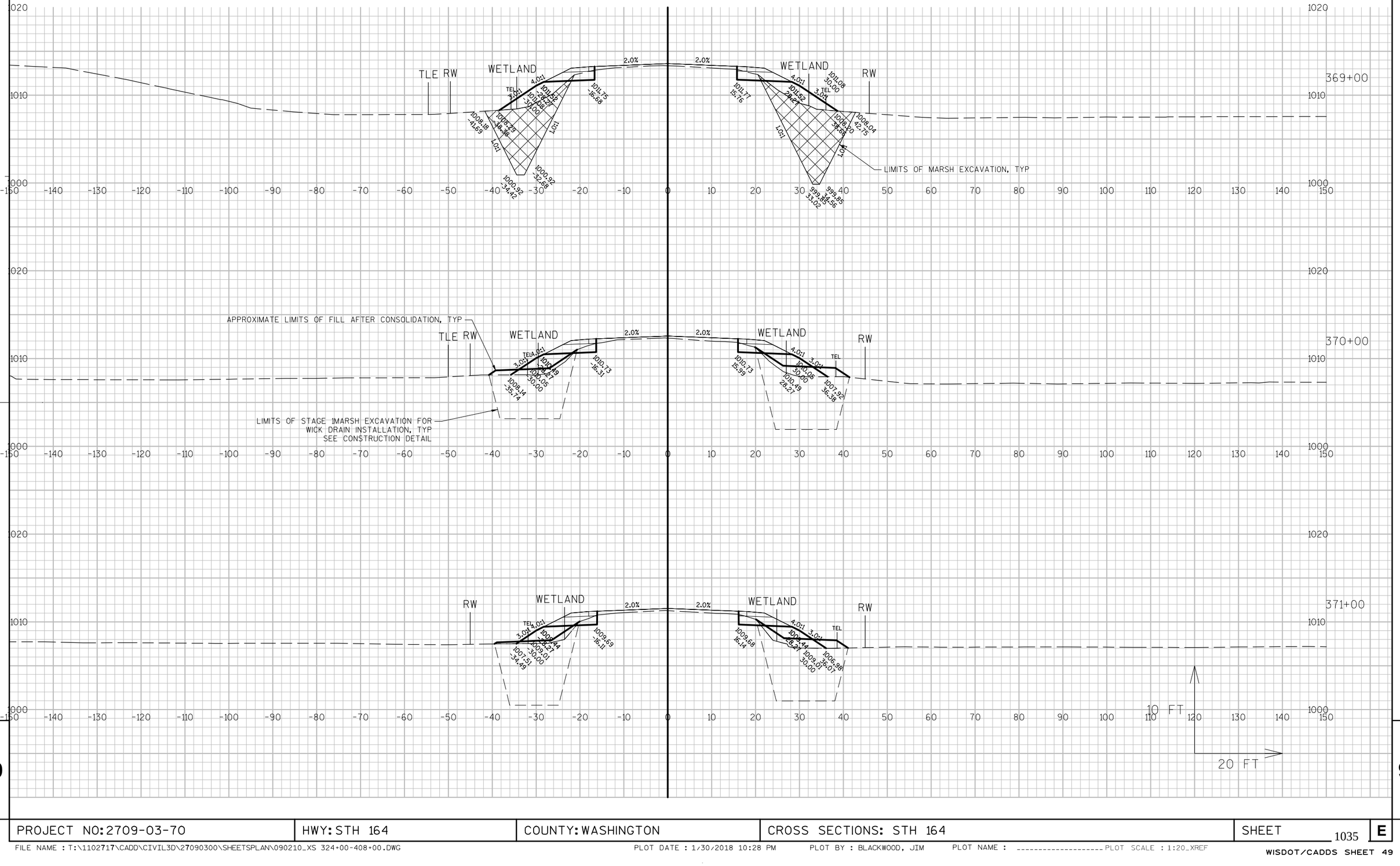
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1033	E



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9

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1034	E



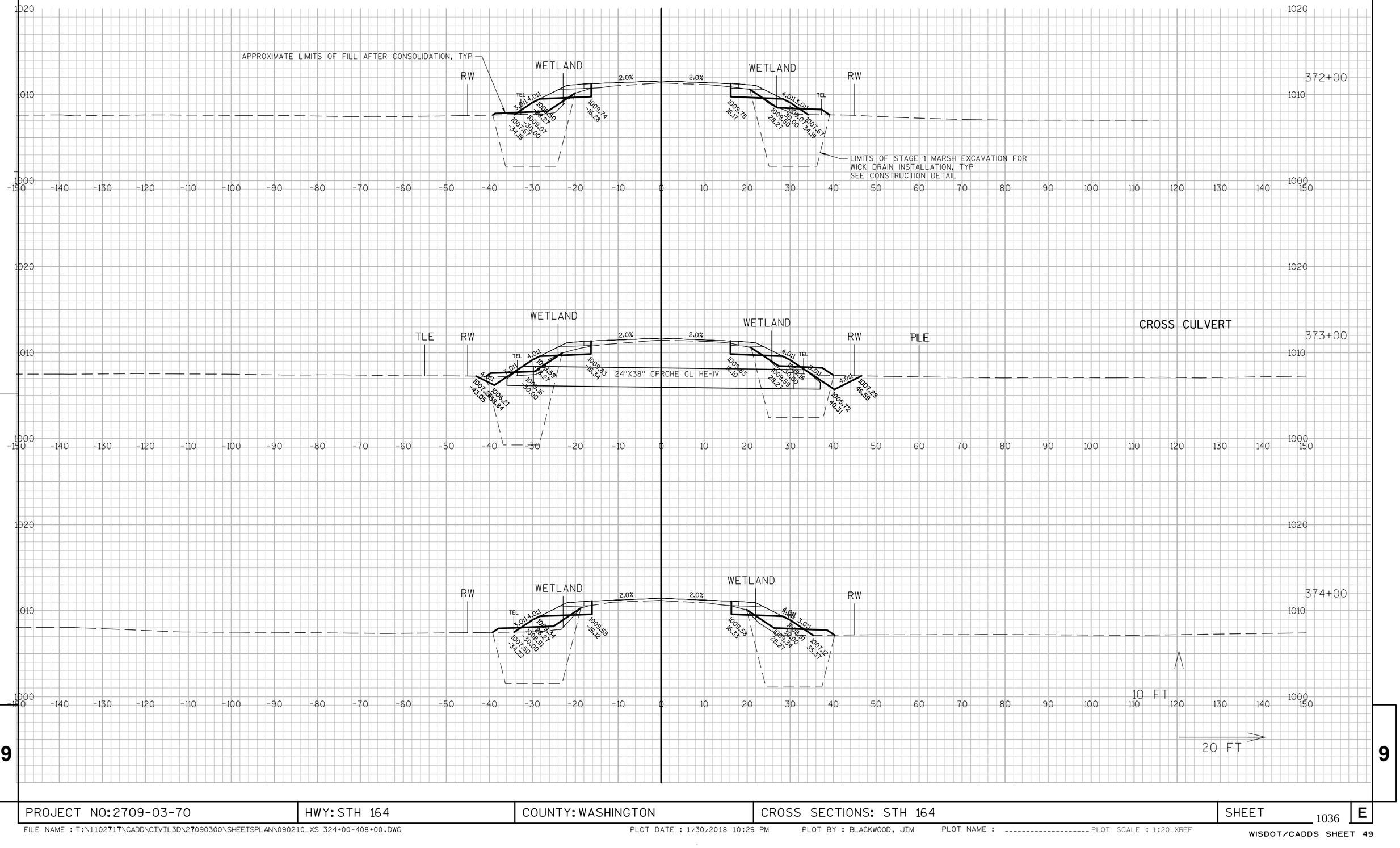
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1035	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG PLOT DATE : 1/30/2018 10:28 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

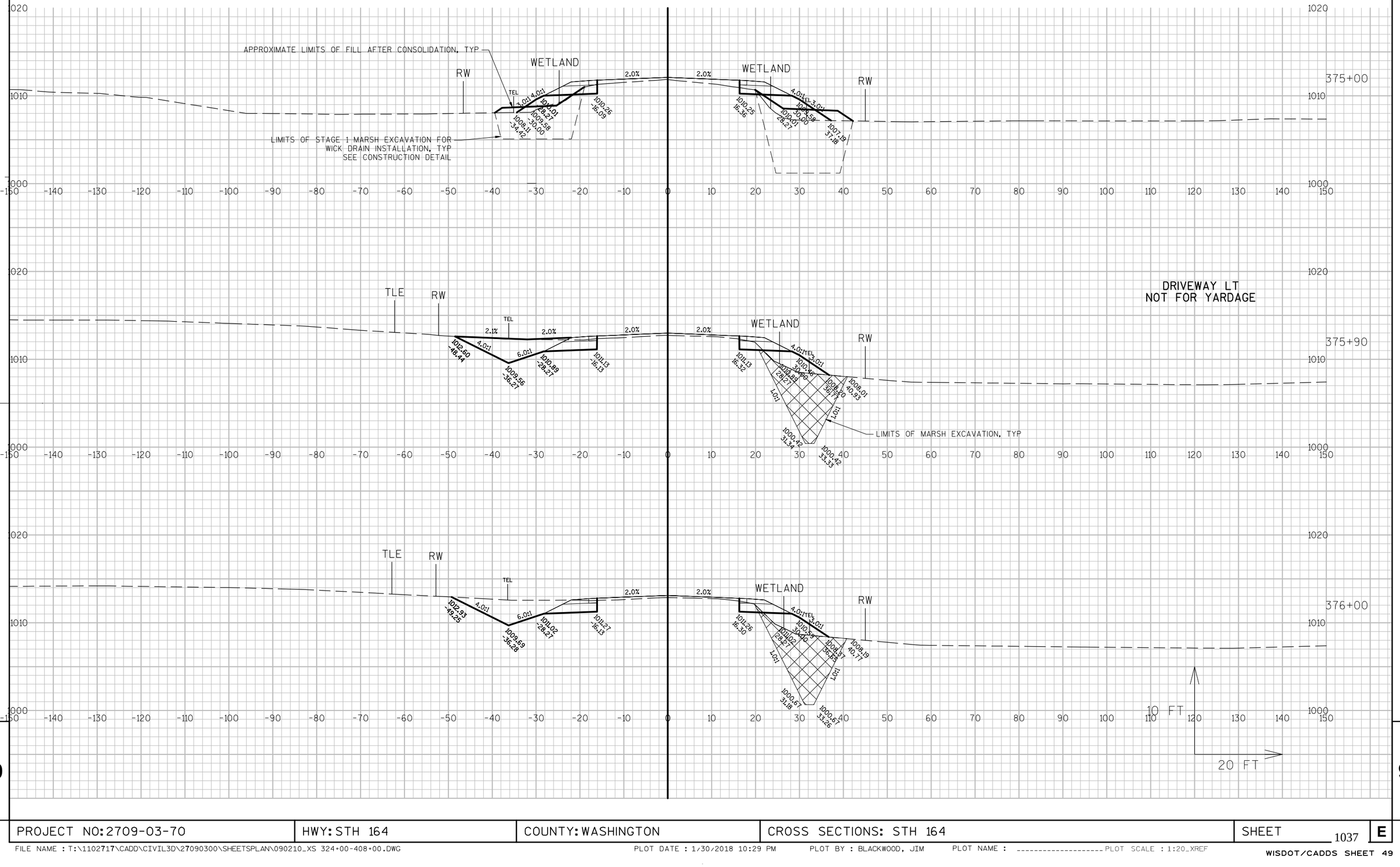


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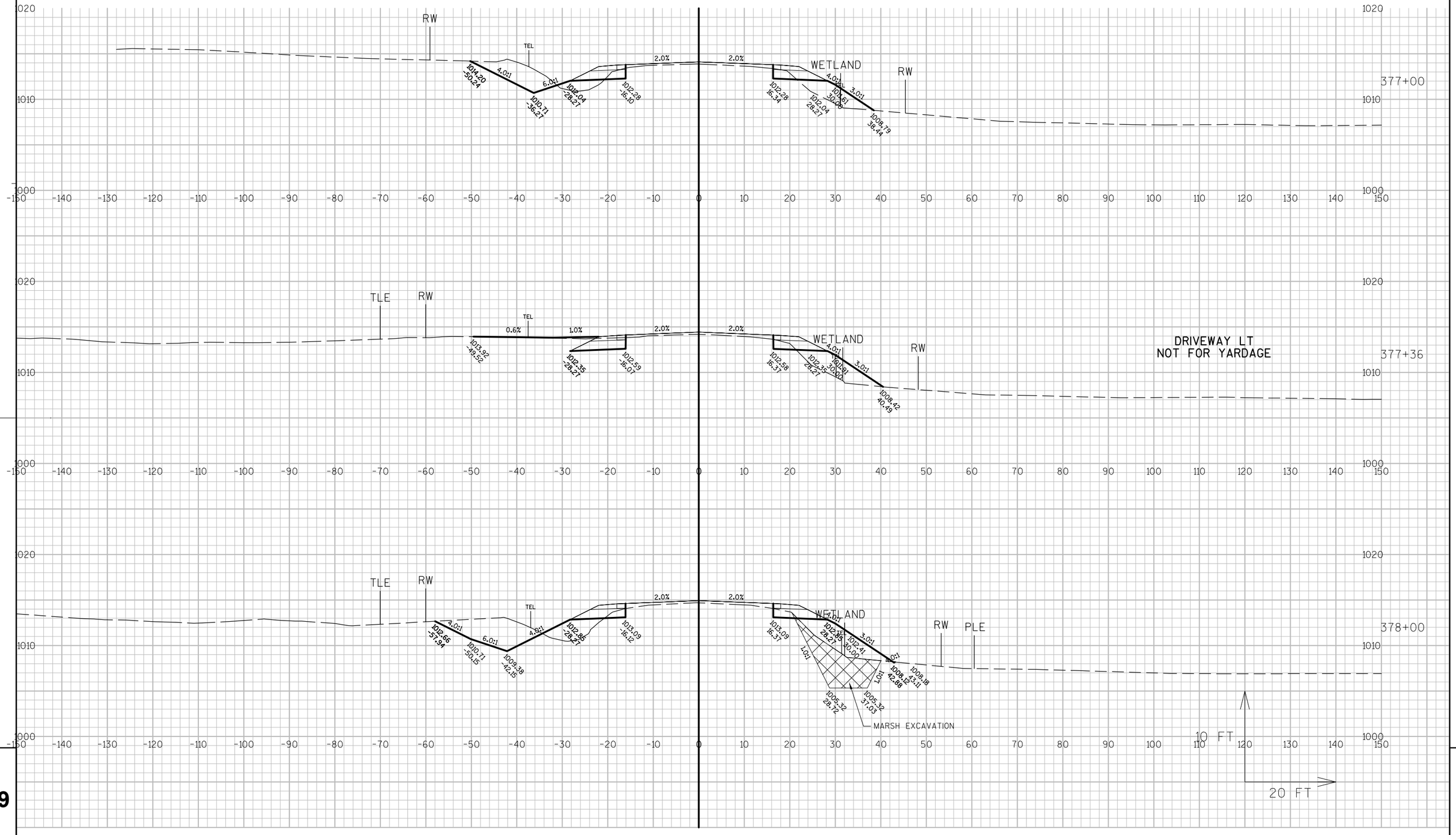
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1036	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG
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WISDOT/CADDS SHEET 49

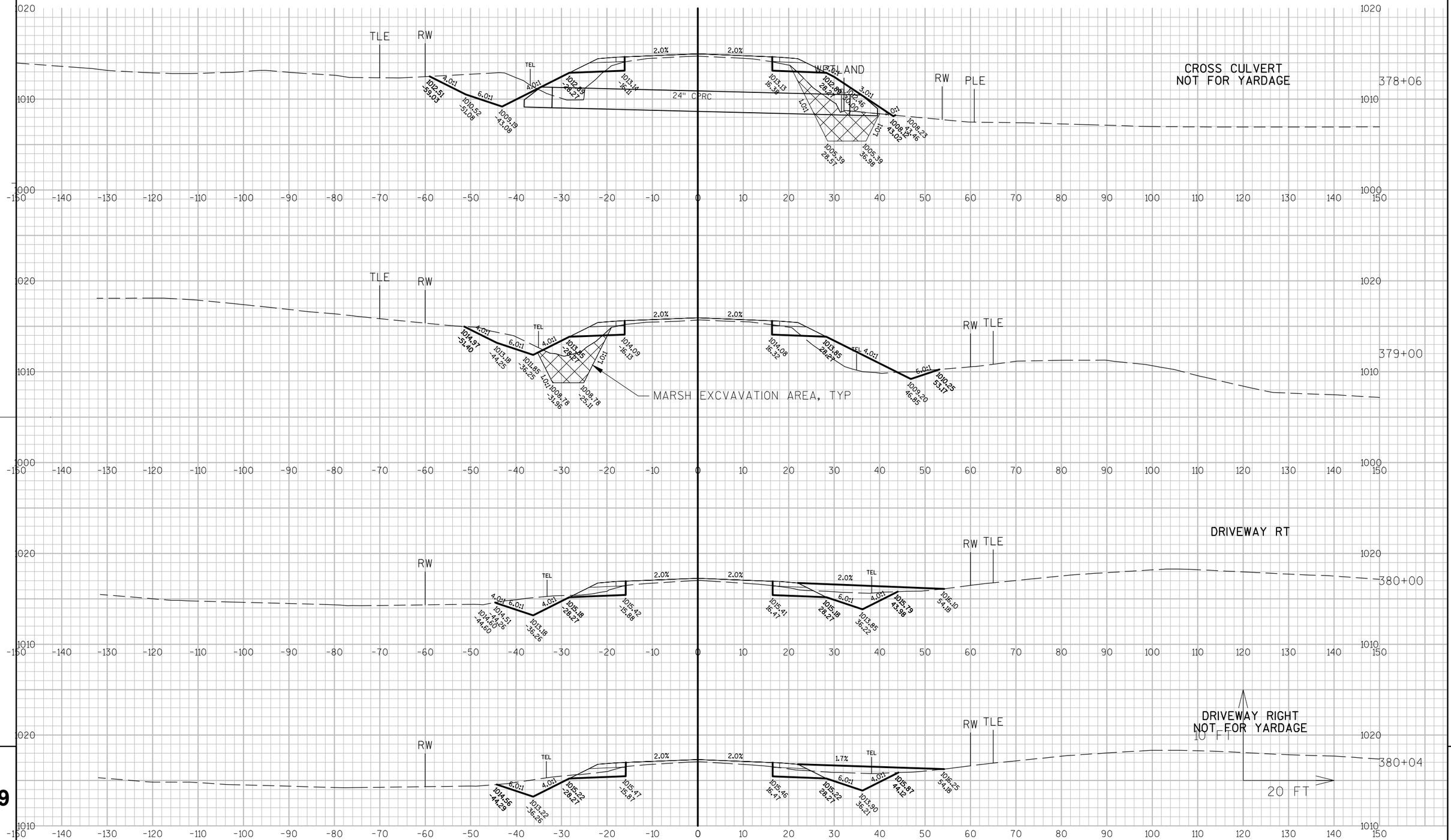


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1037	E

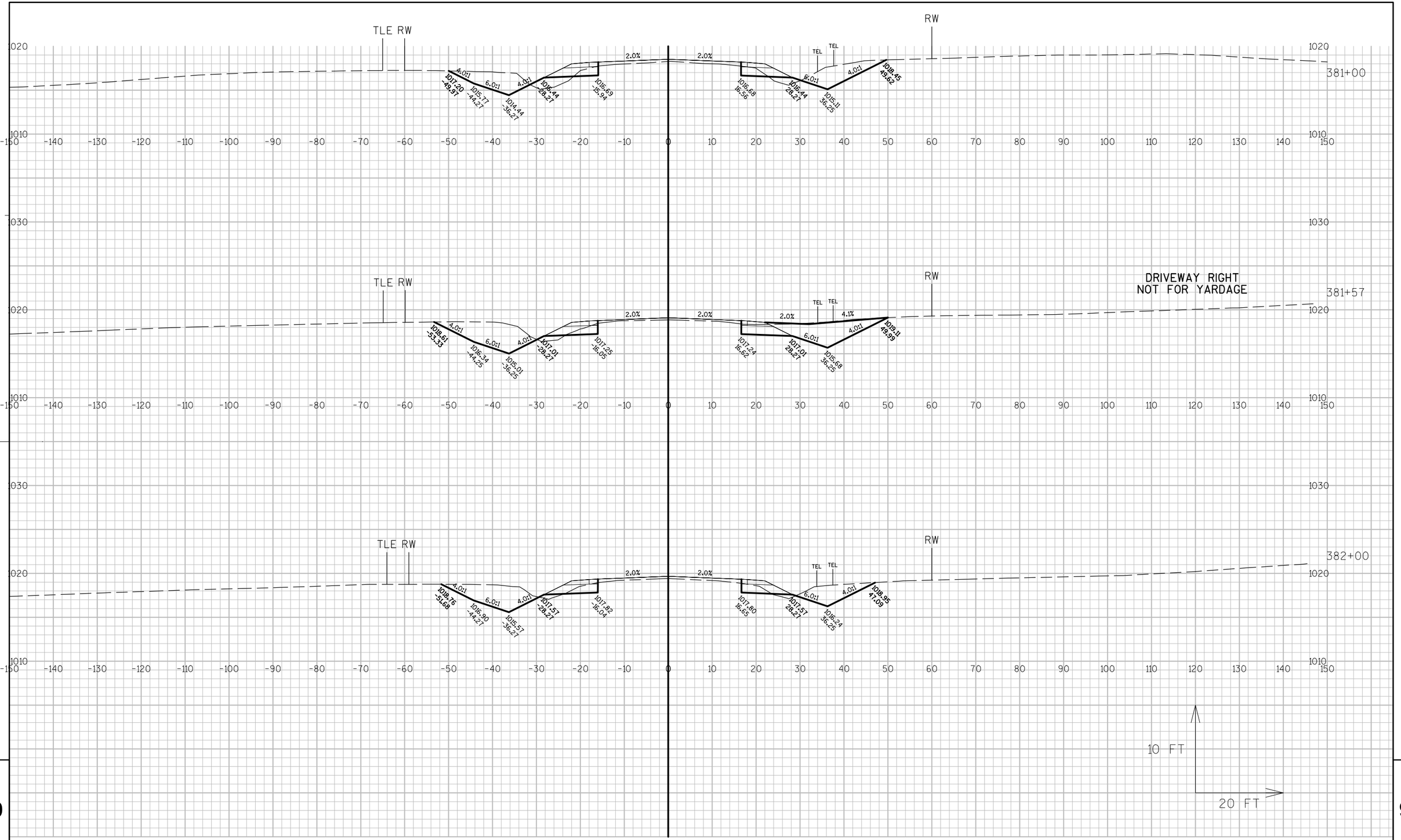
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1038	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1039	E

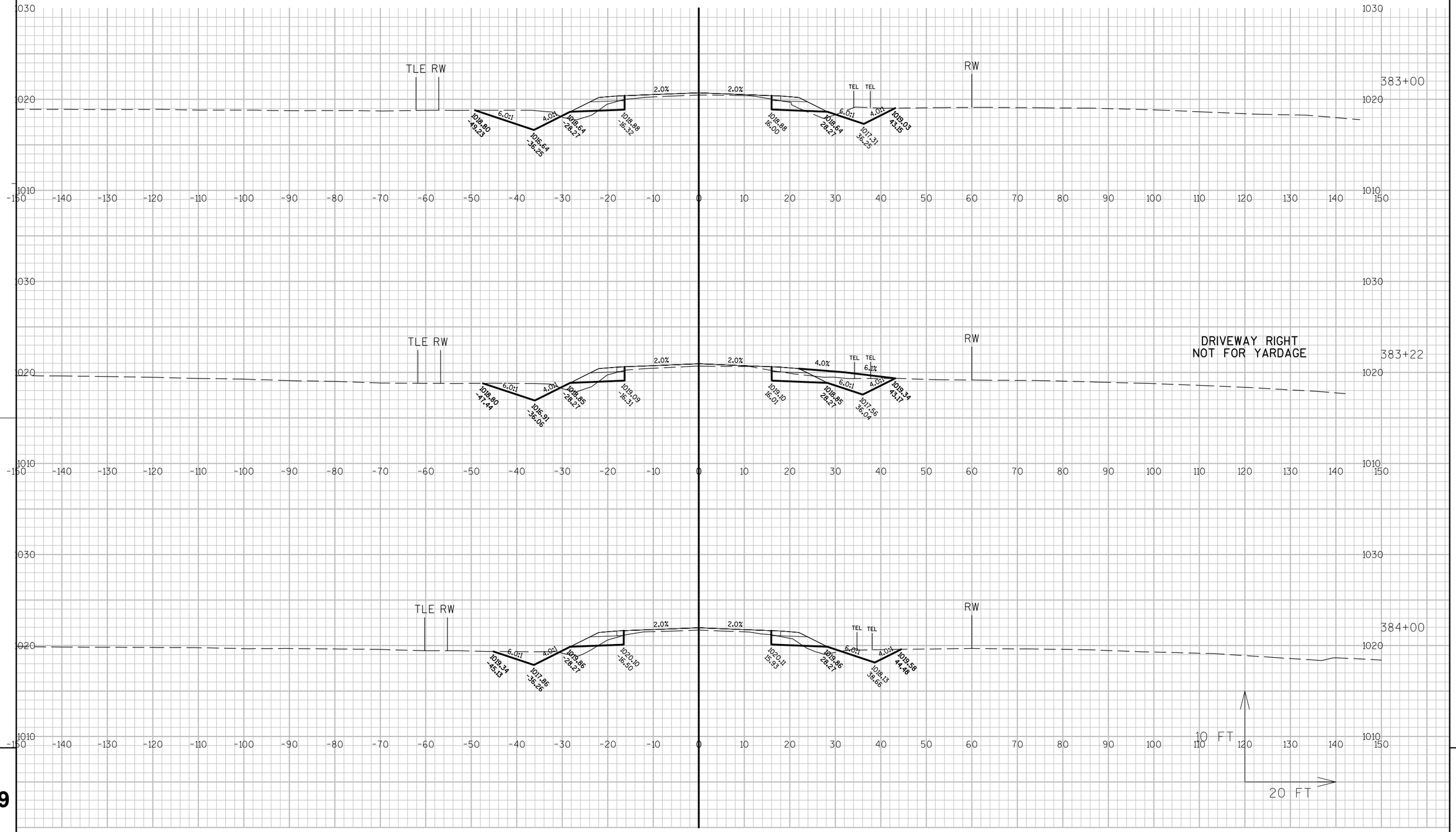


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1040	E

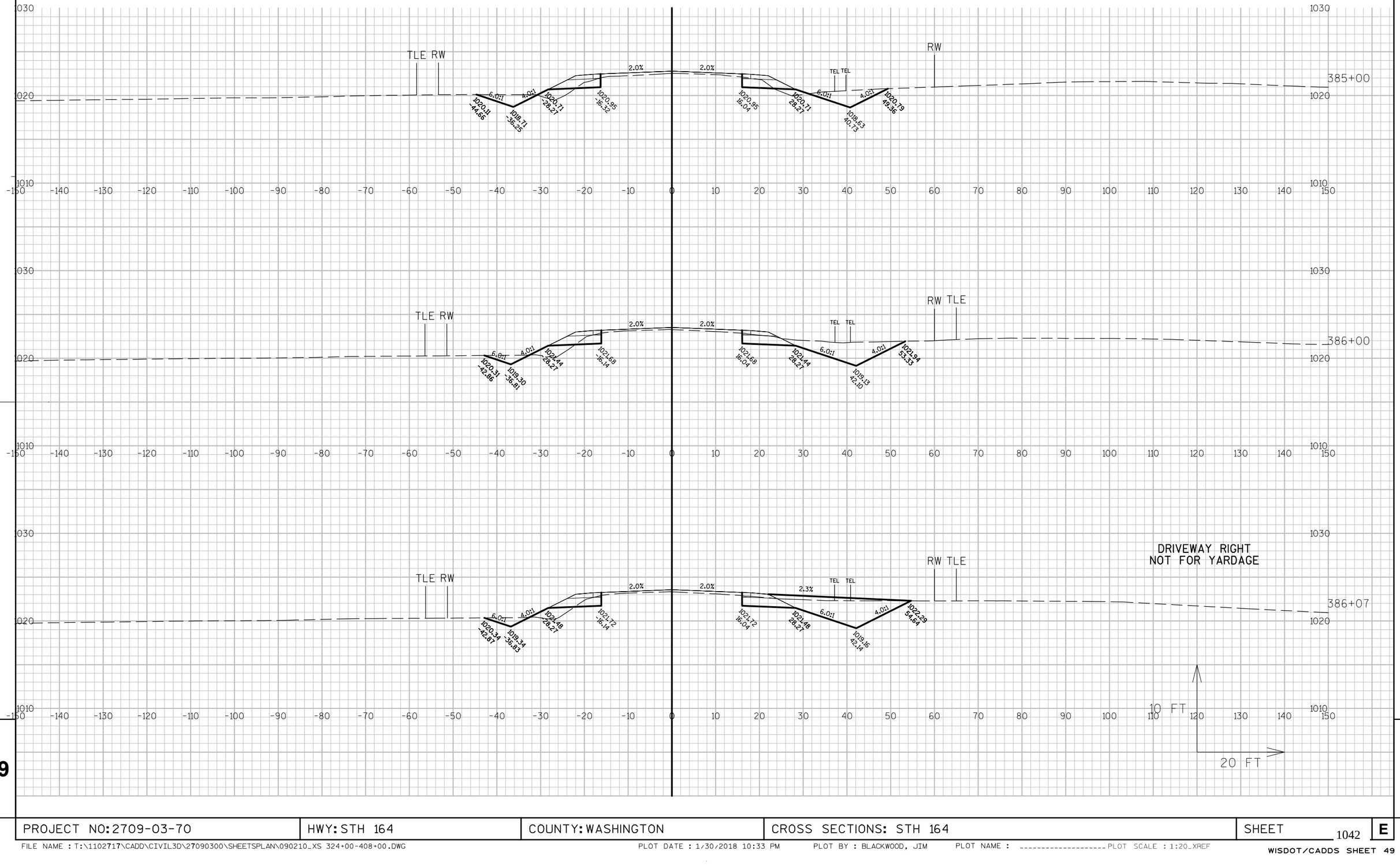
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG PLOT DATE : 1/30/2018 10:31 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1041	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG PLOT DATE : 1/30/2018 10:32 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

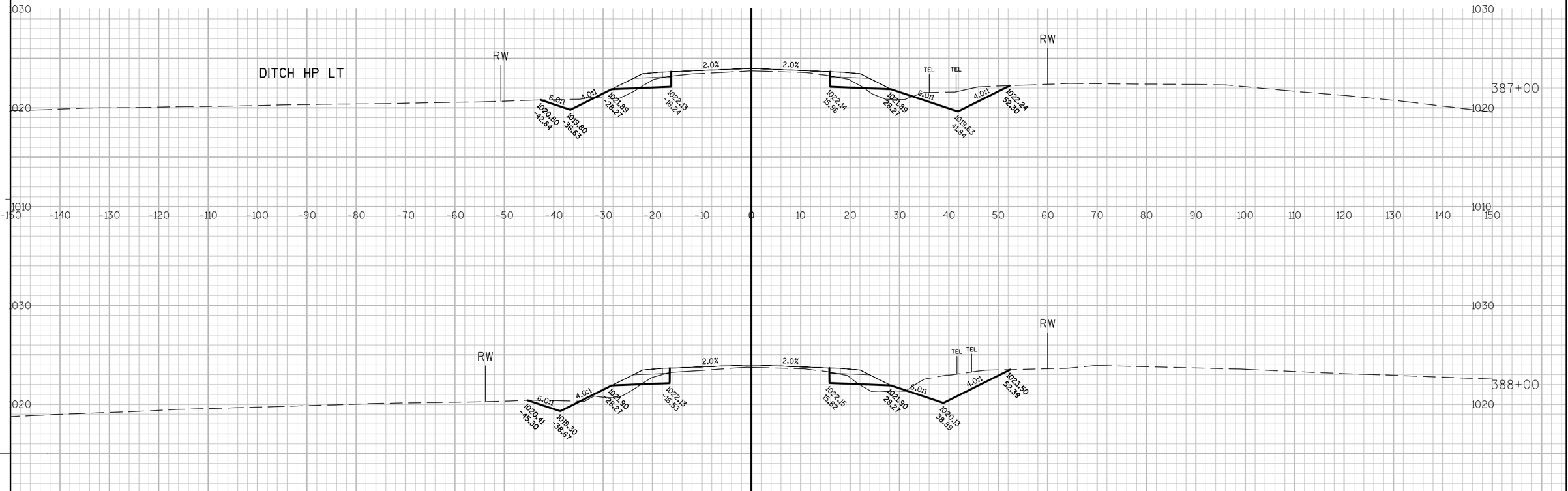
WISDOT/CADDS SHEET 49

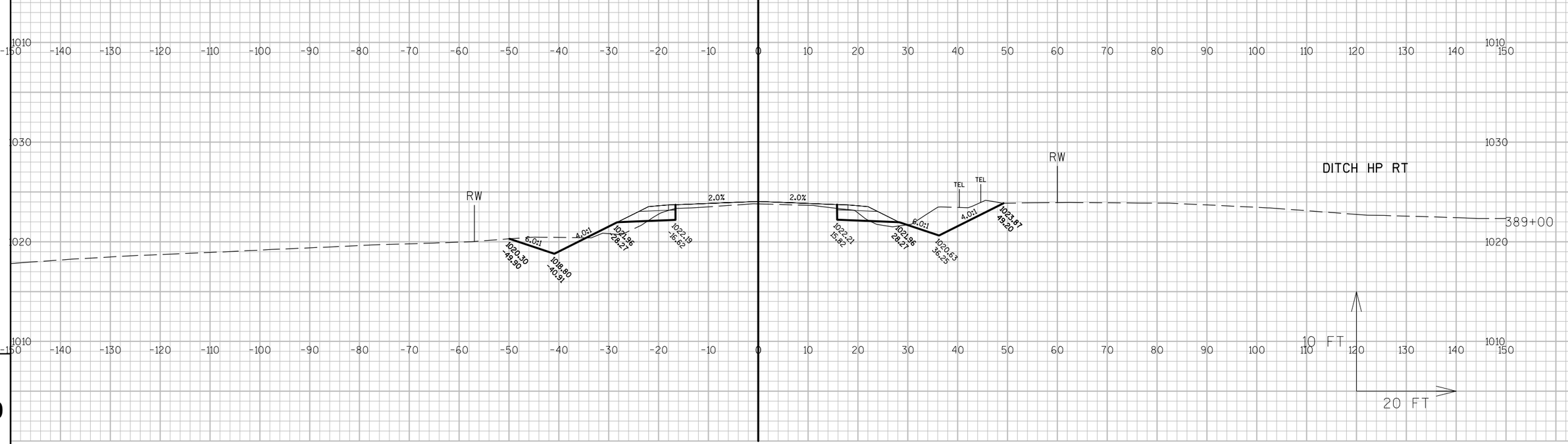


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1042	E

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DITCH HP LT



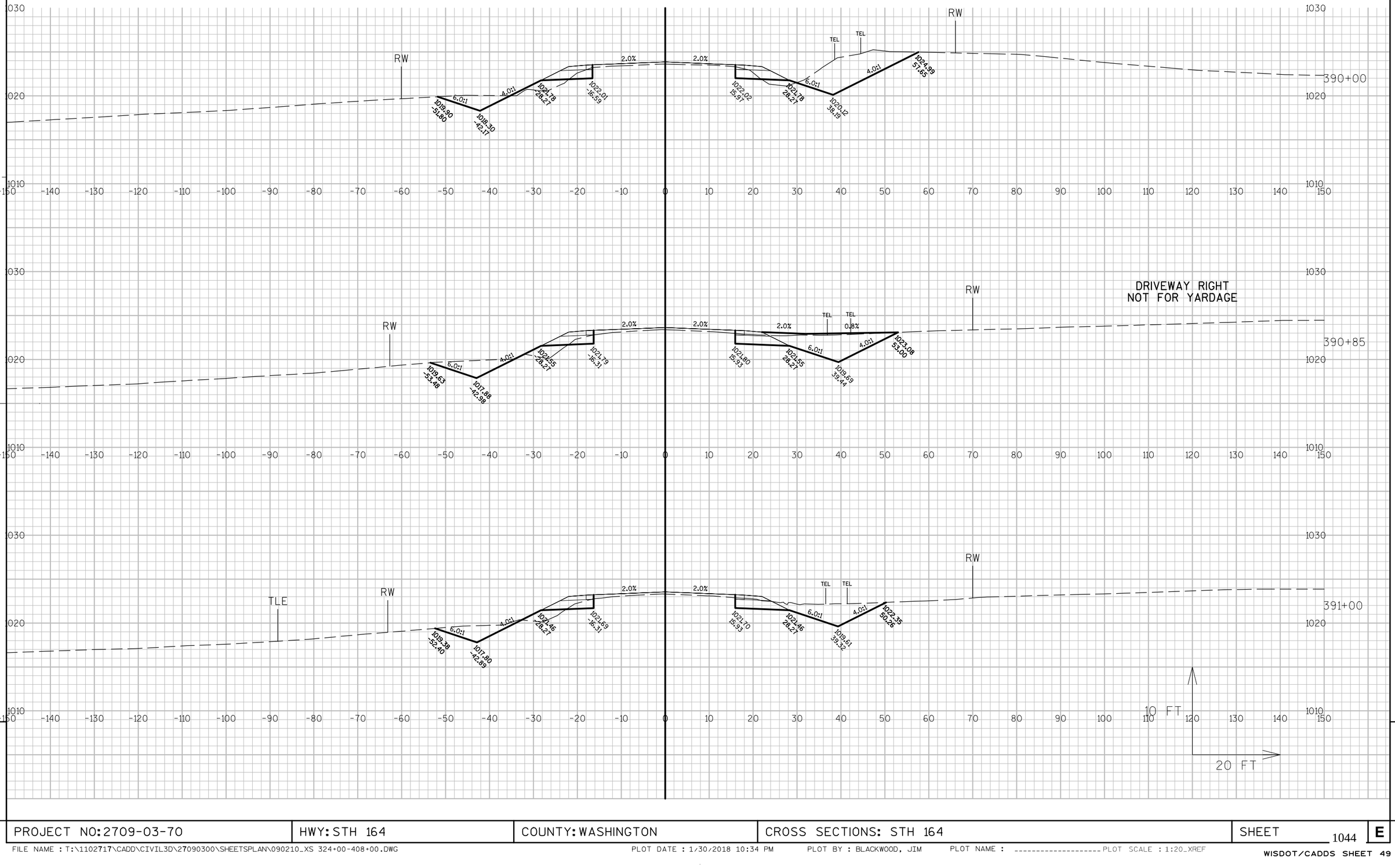


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1043	E

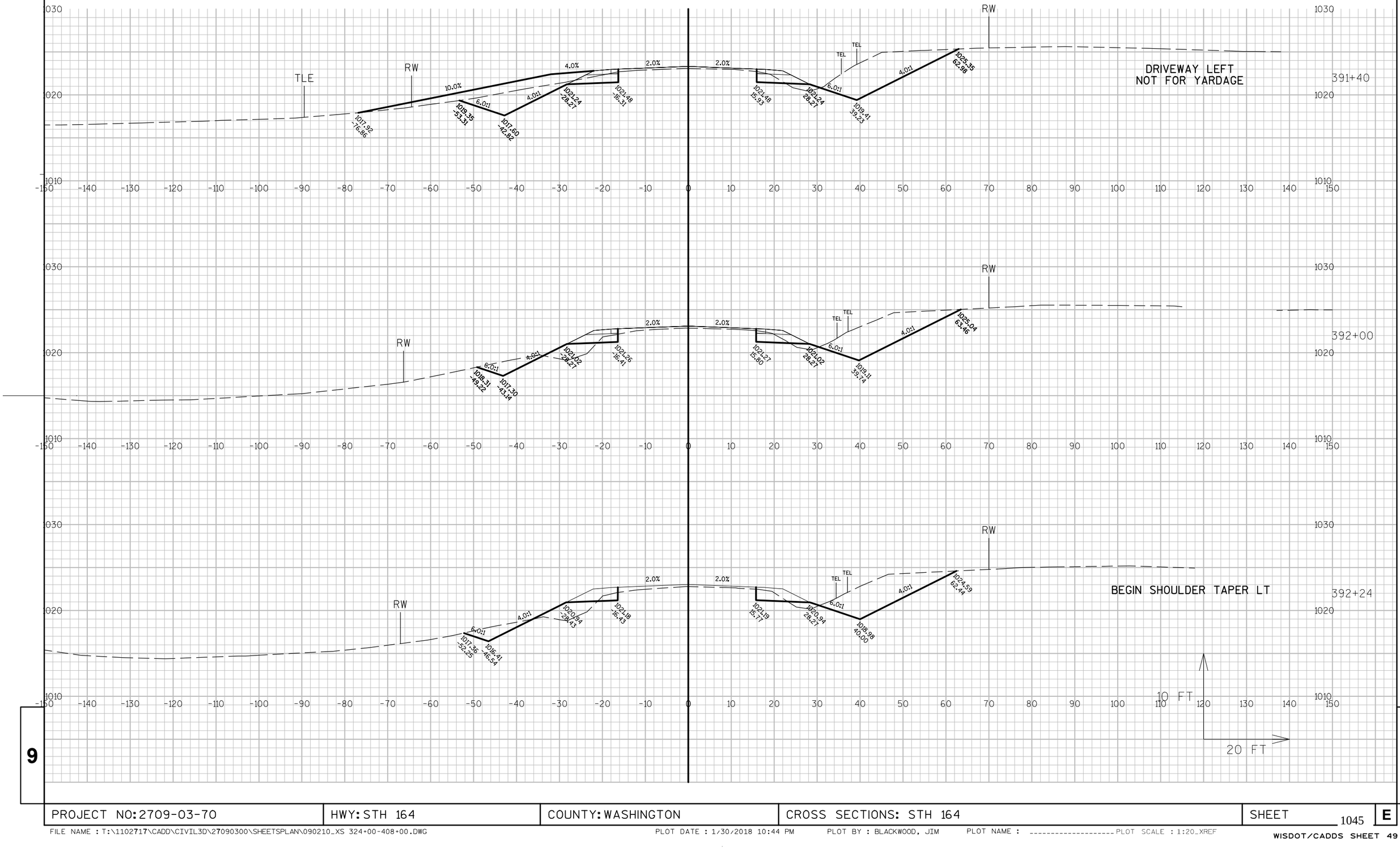
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG
PLOT DATE : 1/30/2018 10:34 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF



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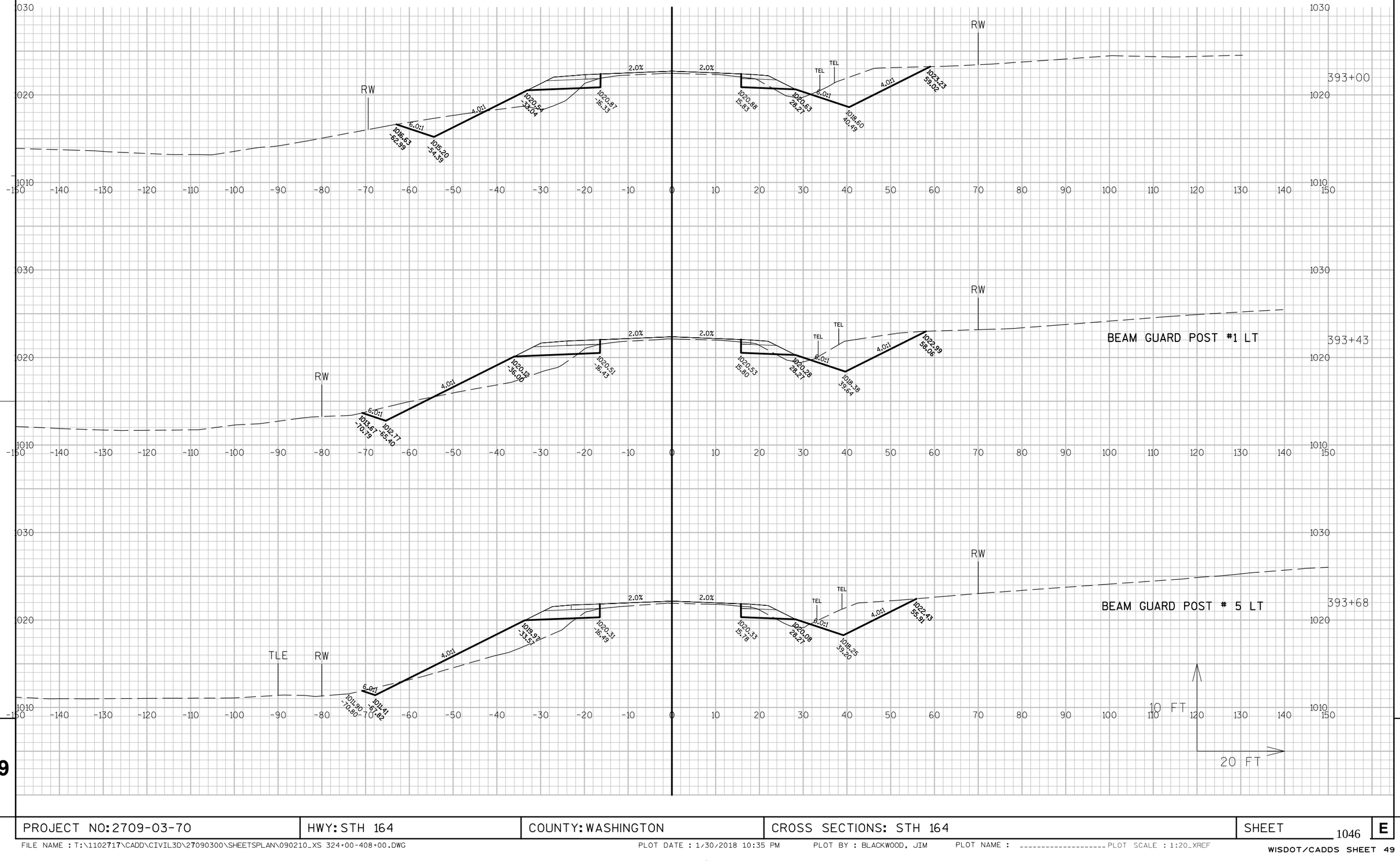
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1044	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1045	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG PLOT DATE : 1/30/2018 10:44 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



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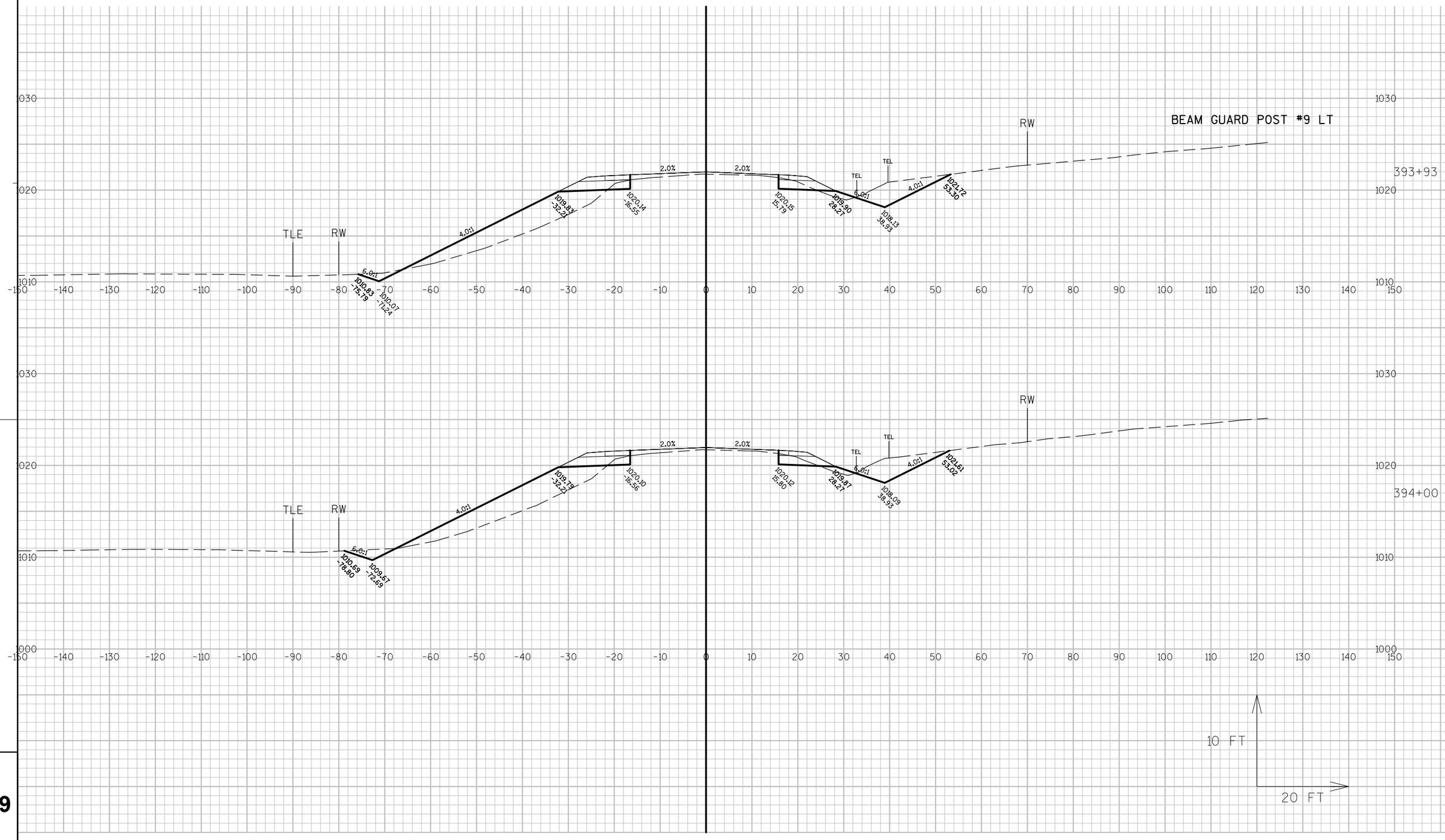
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1046	E

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BEAM GUARD POST #9 LT

393+93



394+00

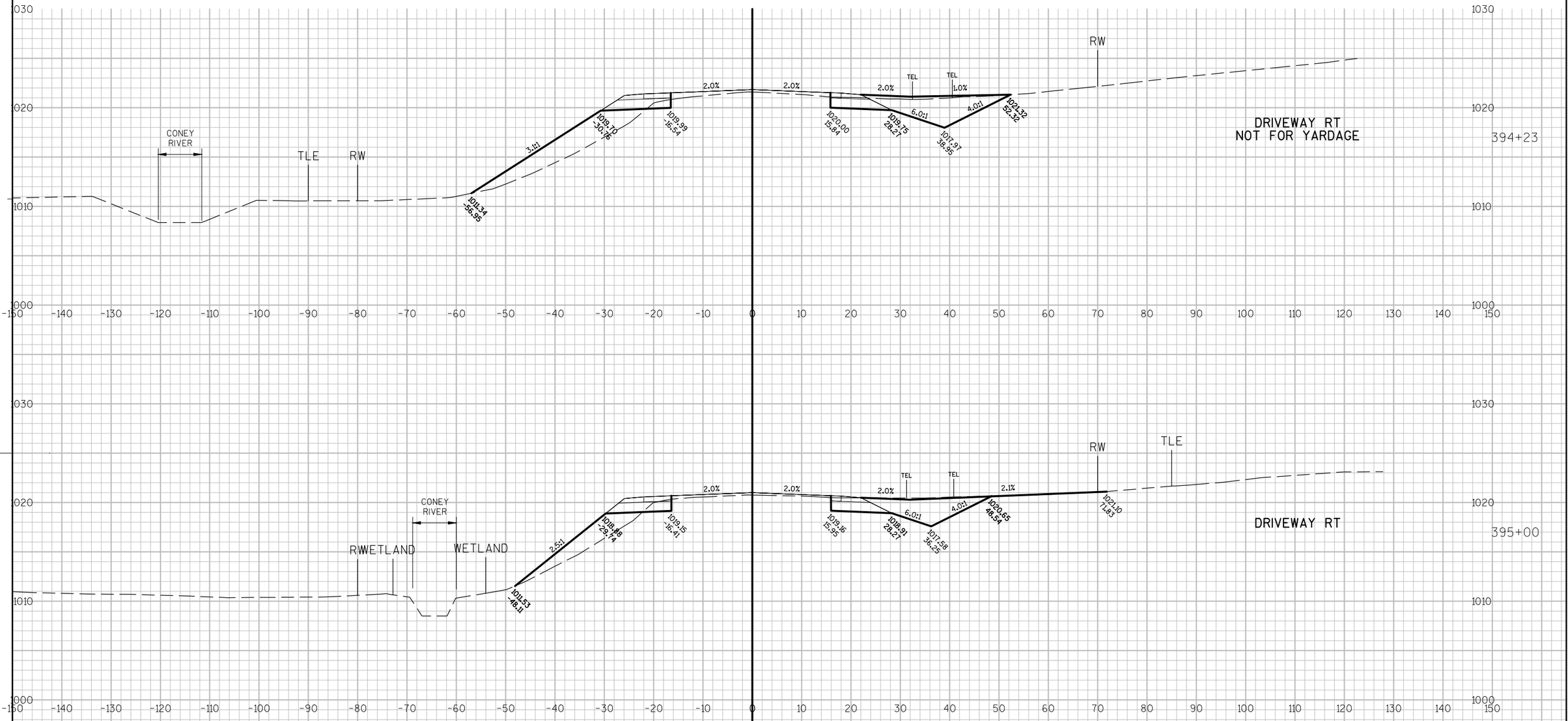
10 FT

20 FT

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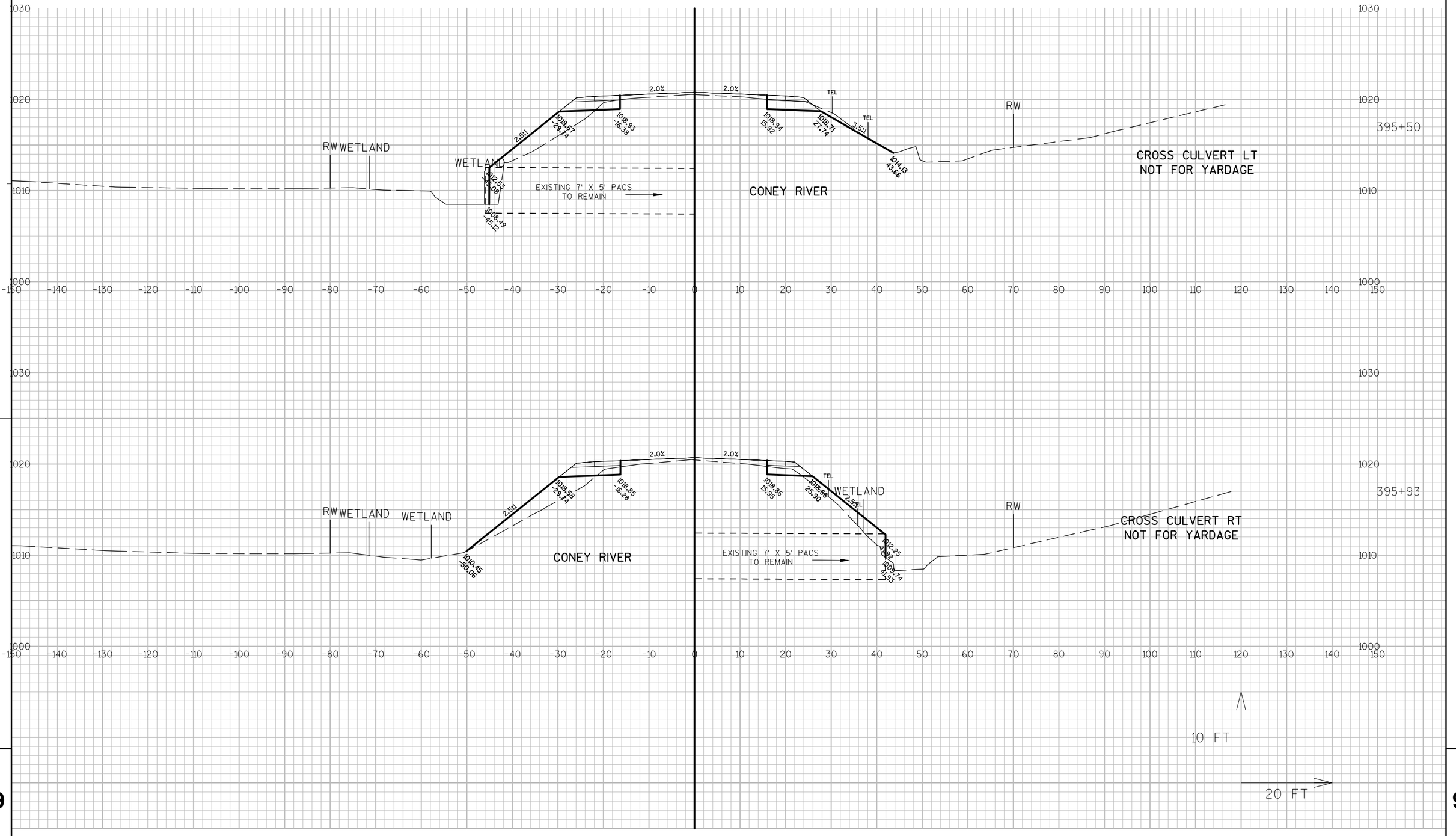
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1047	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1048	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG PLOT DATE : 1/30/2018 10:37 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

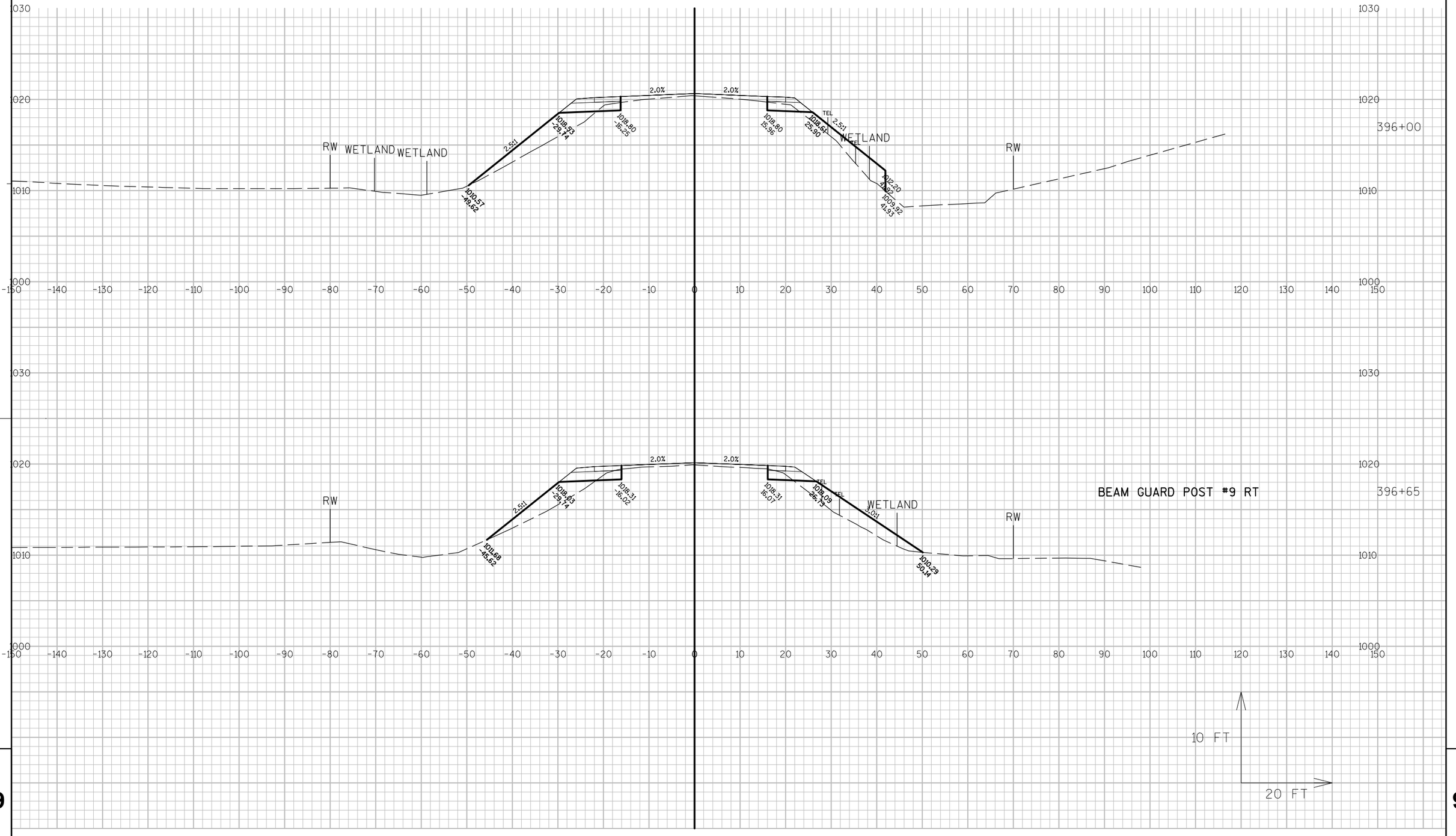


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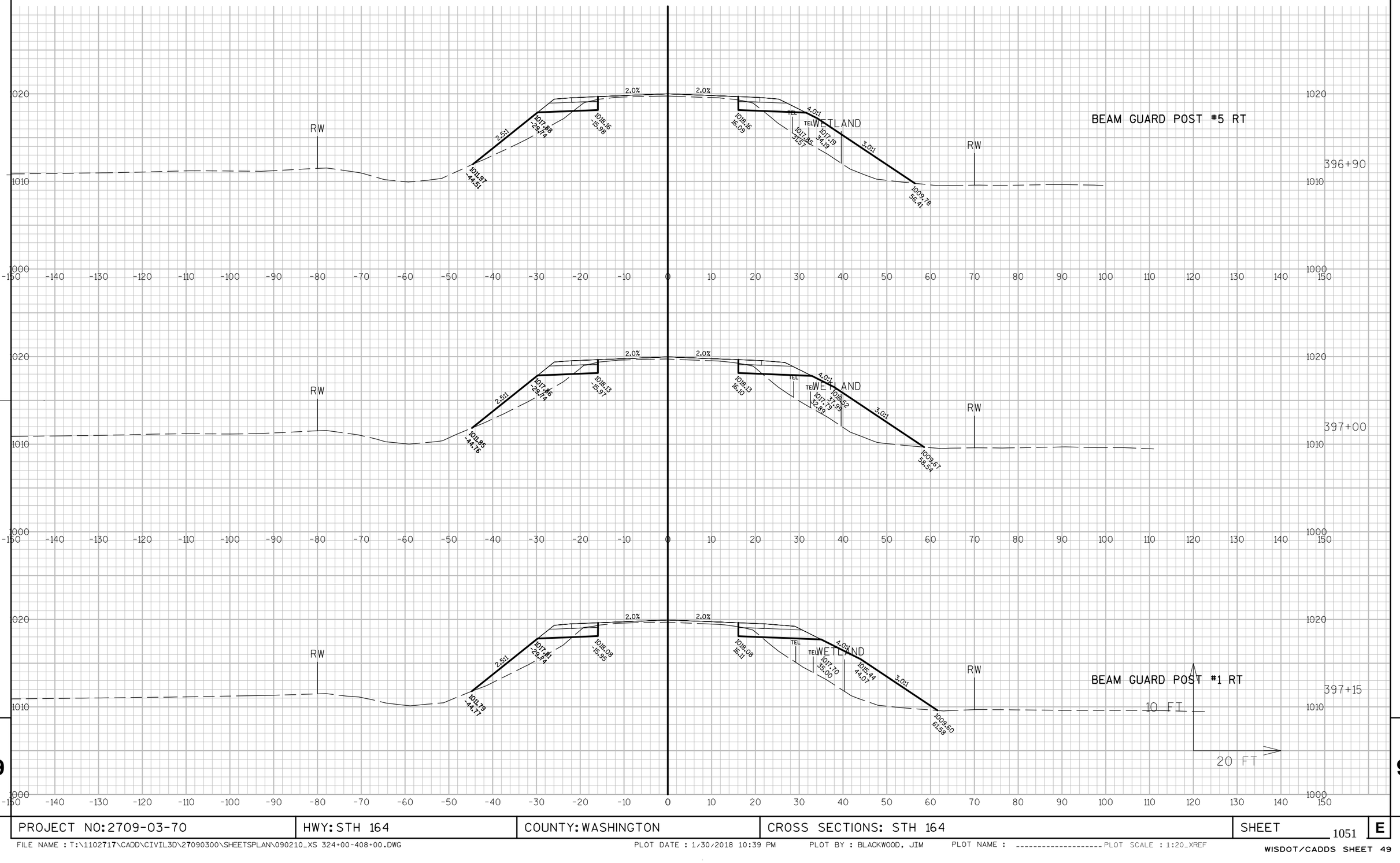
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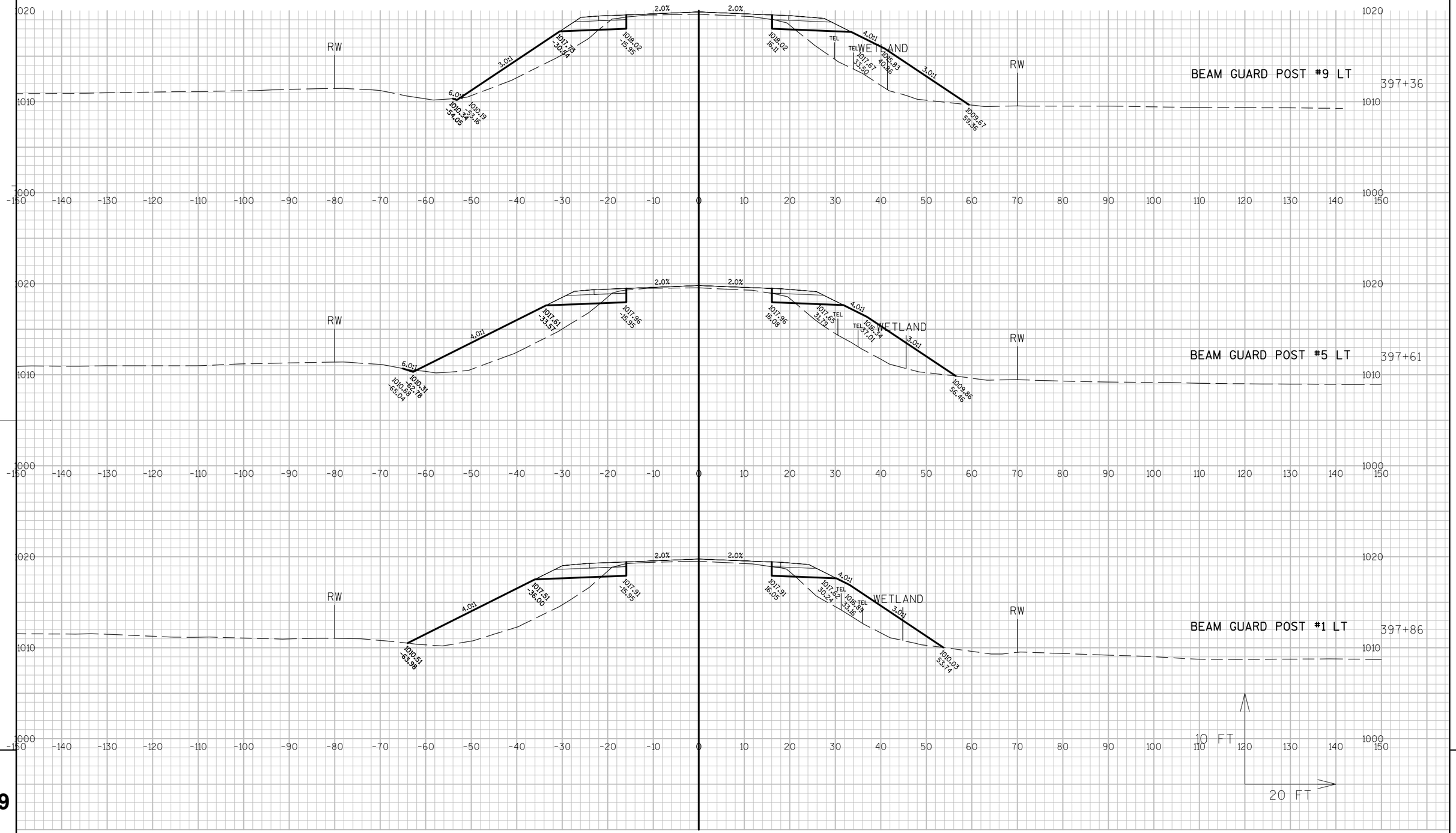


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1050	E

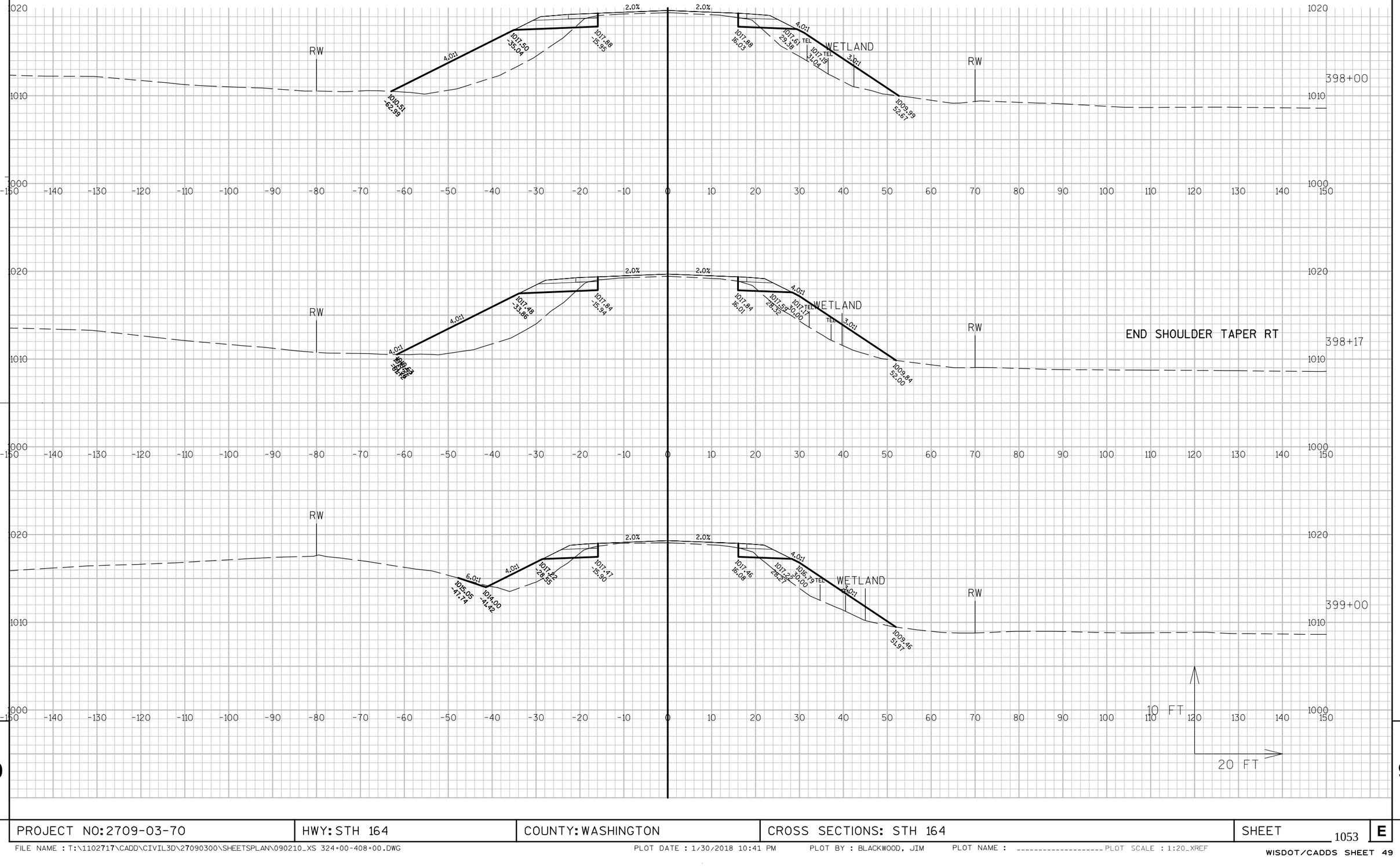
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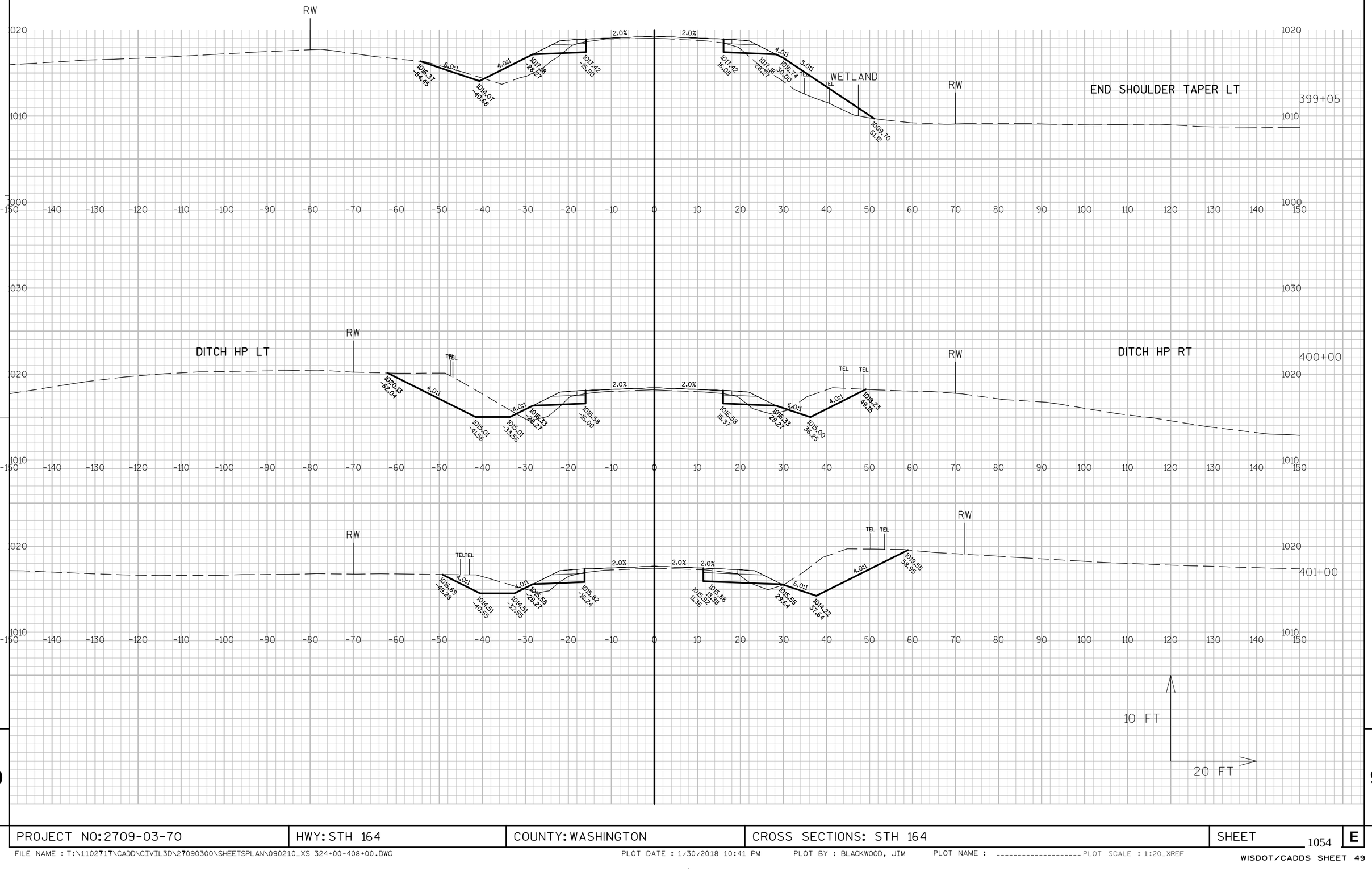
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1051	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1052	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1053	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1054	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG PLOT DATE : 1/30/2018 10:41 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

DRIVEWAY LEFT
NOT FOR YARDAGE

401+73

RW
TEL TEL
6.2%
4.0:1
2.0%
1017.89
-55.59
1014.06
-40.28
1014.06
-32.28
1015.07
-28.27
1015.30
-16.48
1015.41
-11.41
1015.34
-14.59
1015.02
30.86
1013.68
39.87
6.0:1
4.0:1
1020.80
67.75

402+00

RW
TLE
TEL TEL
1019.22
-61.44
1013.93
-40.30
1013.93
-32.30
1014.94
-28.27
1015.17
-16.73
1015.28
-11.35
1015.20
15.04
1014.88
31.31
1013.54
39.31
1021.07
69.41

403+00

RW
TLE
TEL TEL
TEL
1017.25
-56.01
1013.31
-40.26
1013.31
-32.26
1014.31
-28.27
1014.54
-16.64
1014.65
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32.98
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40.98
1020.54
71.60

10 FT
20 FT

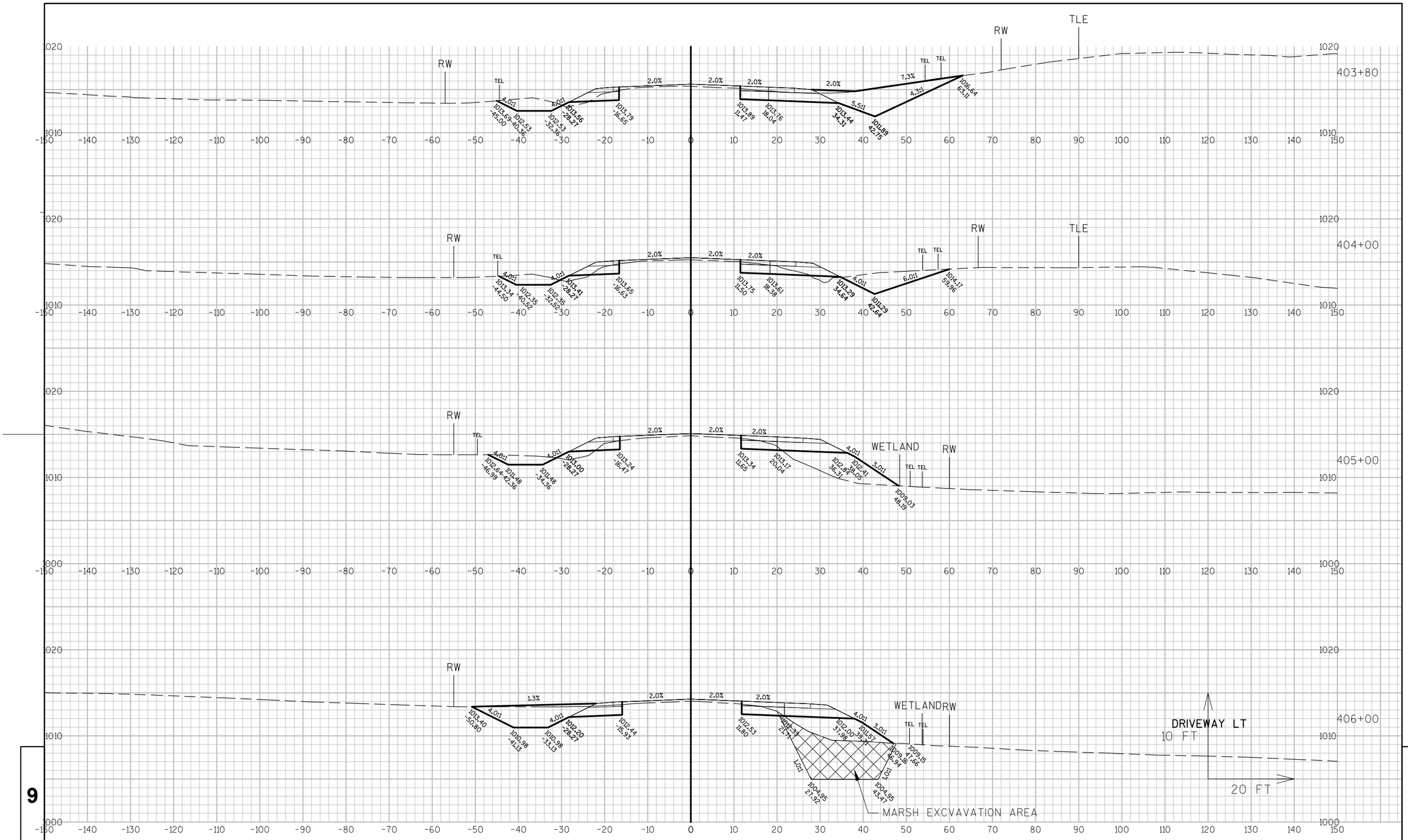
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1055	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090210_XS 324+00-408+00.DWG PLOT DATE : 1/30/2018 10:42 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

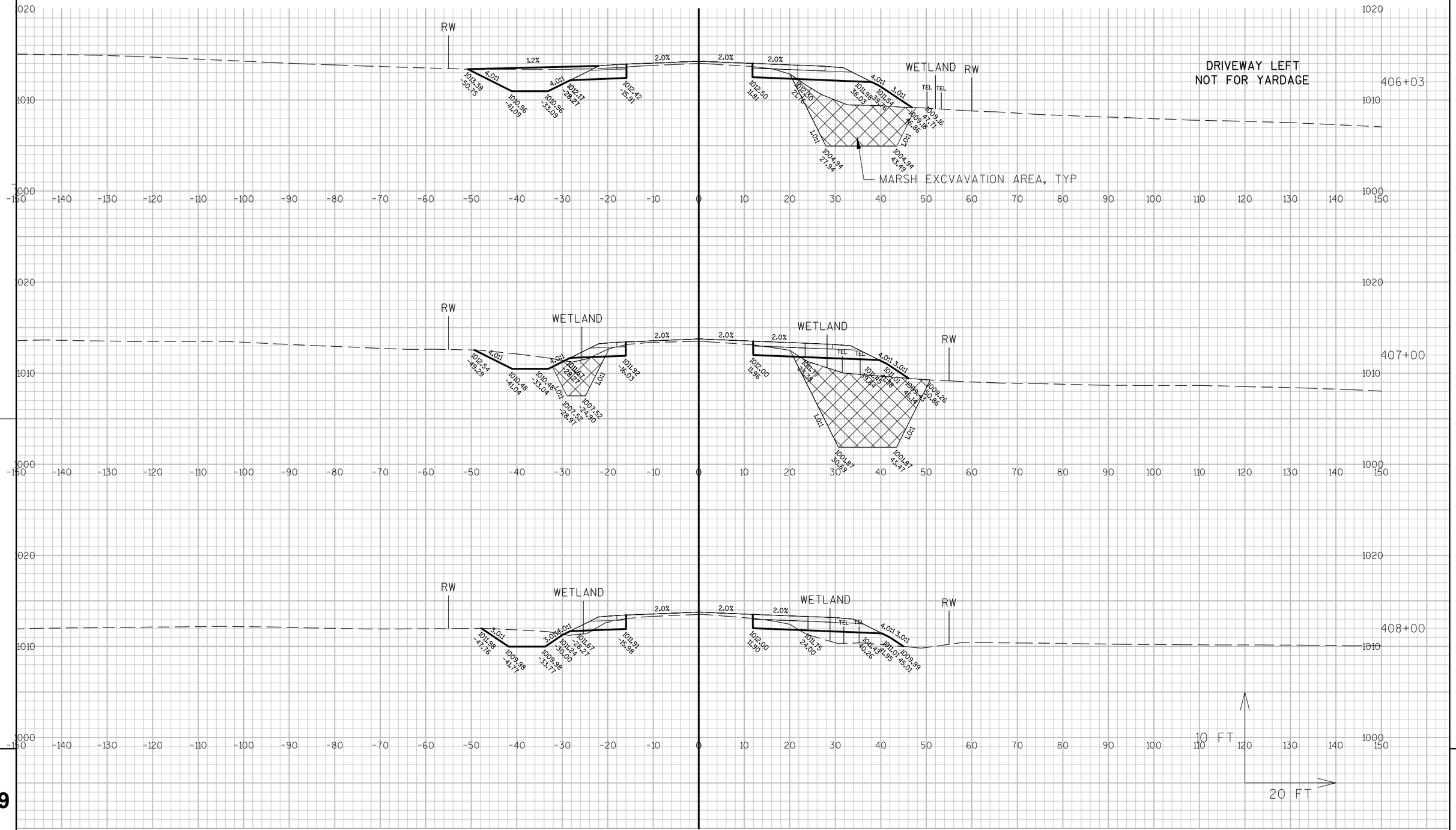


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1056	E

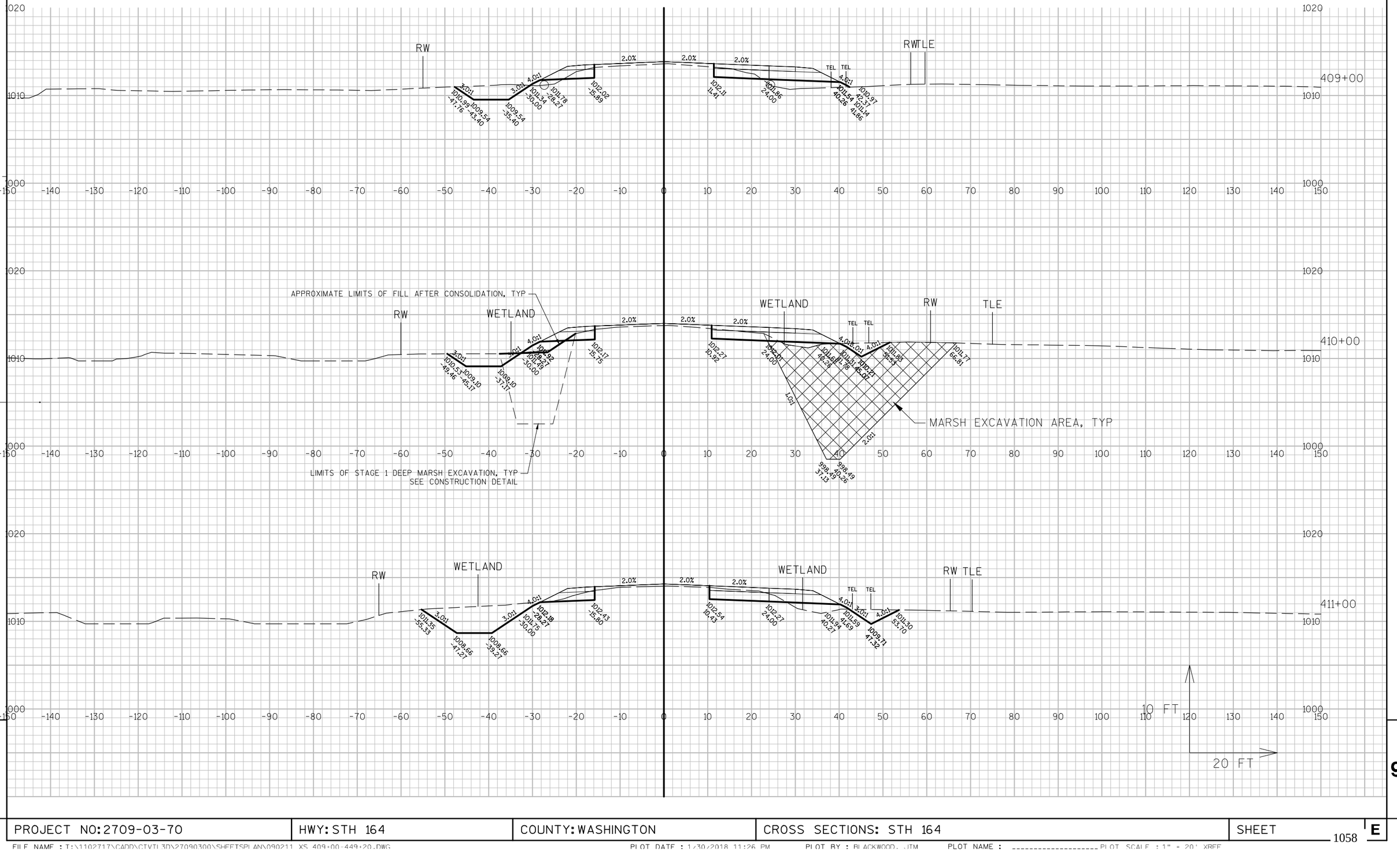
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1057	E

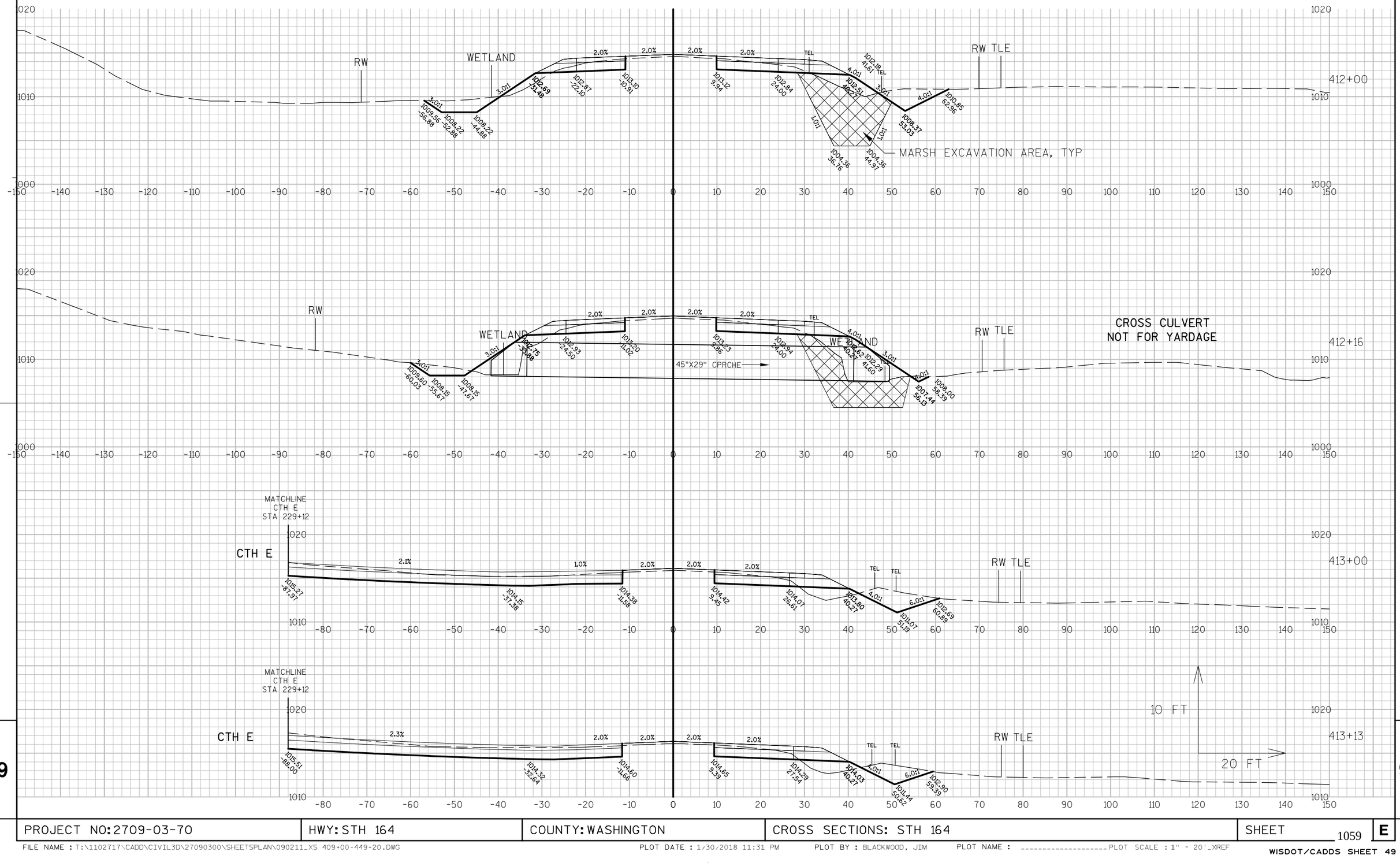
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WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1058 E

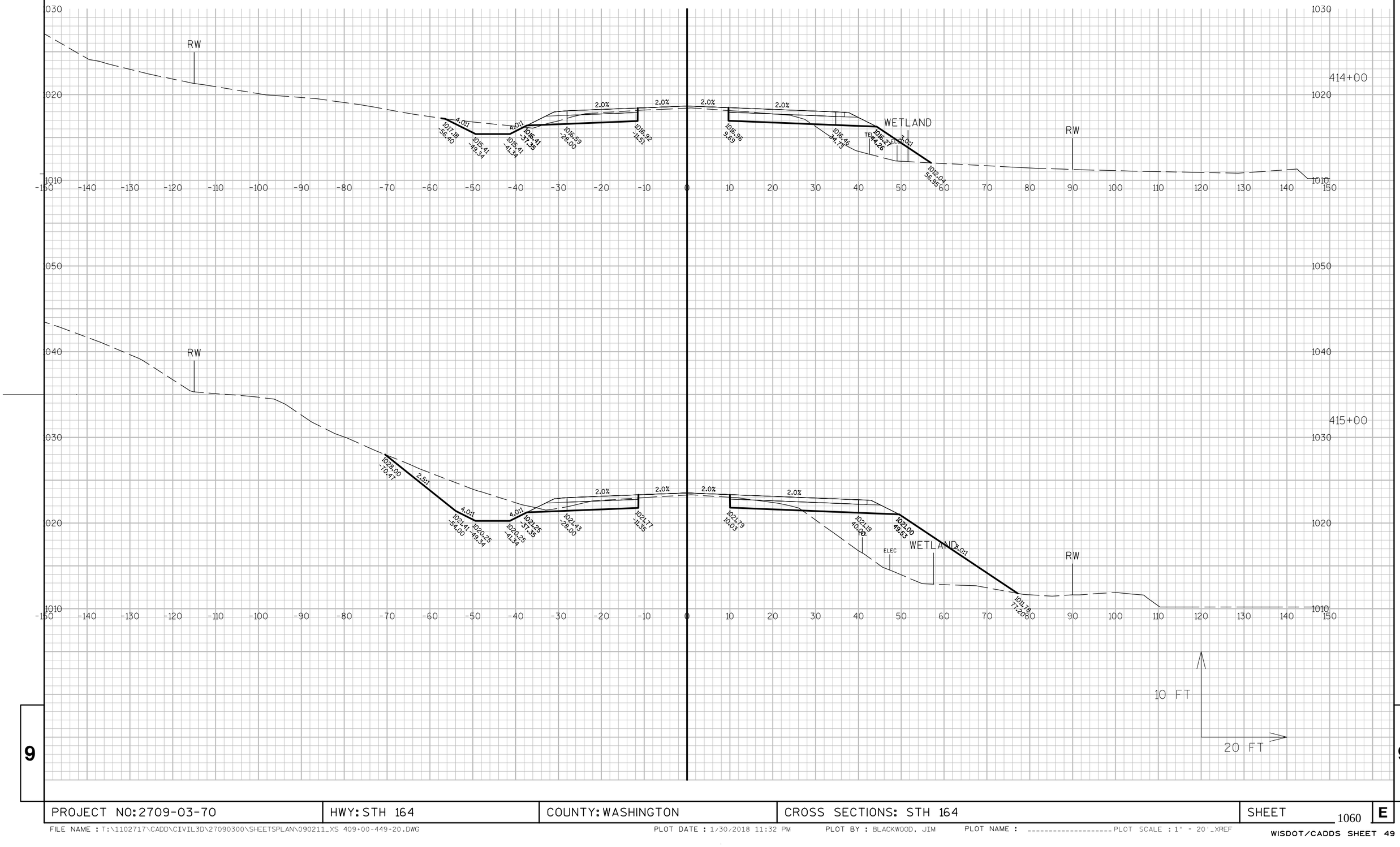
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1059	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090211_XS 409+00-449+20.DWG PLOT DATE : 1/30/2018 11:31 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF

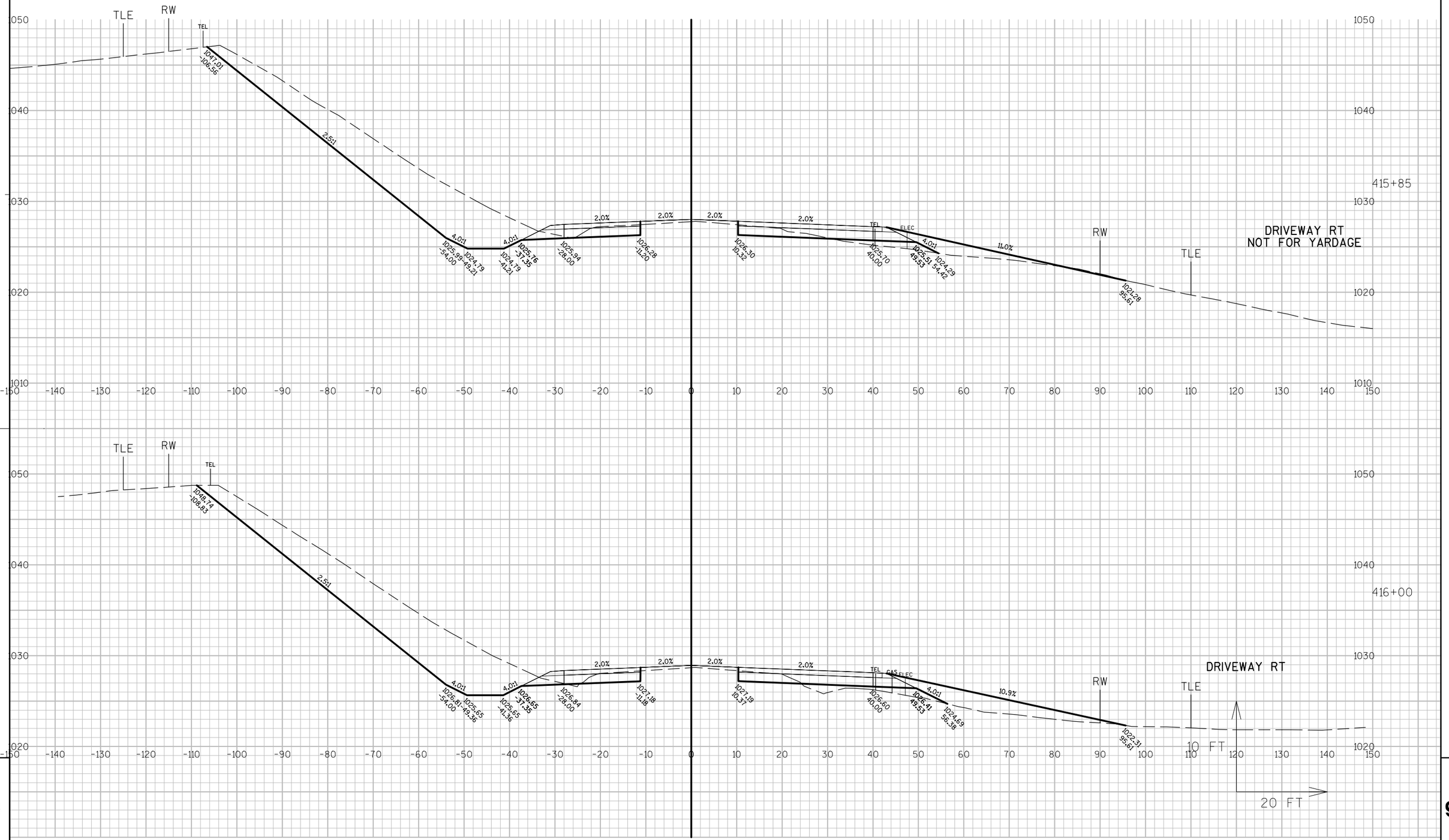
WISDOT/CADDS SHEET 49



9

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1060	E

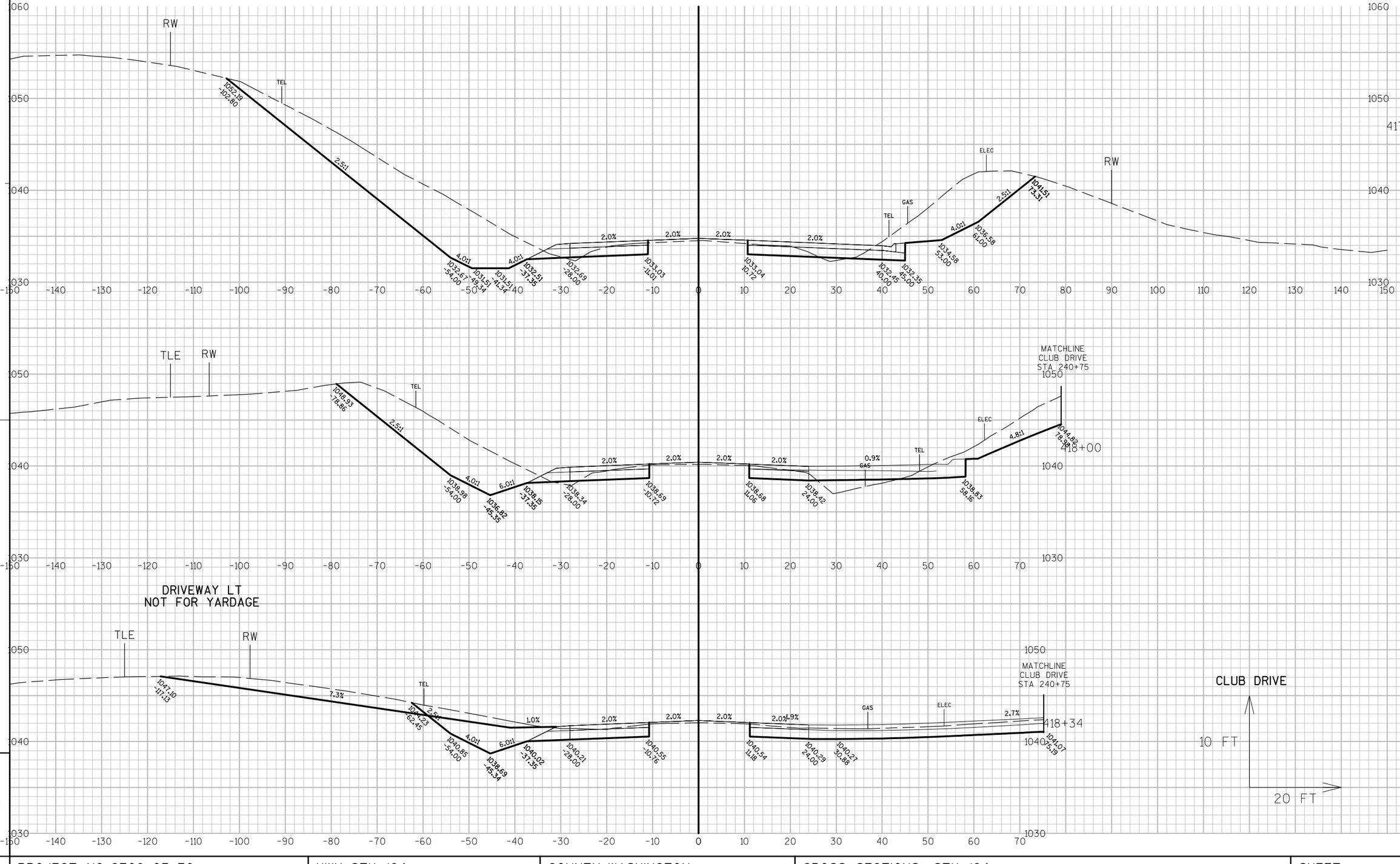


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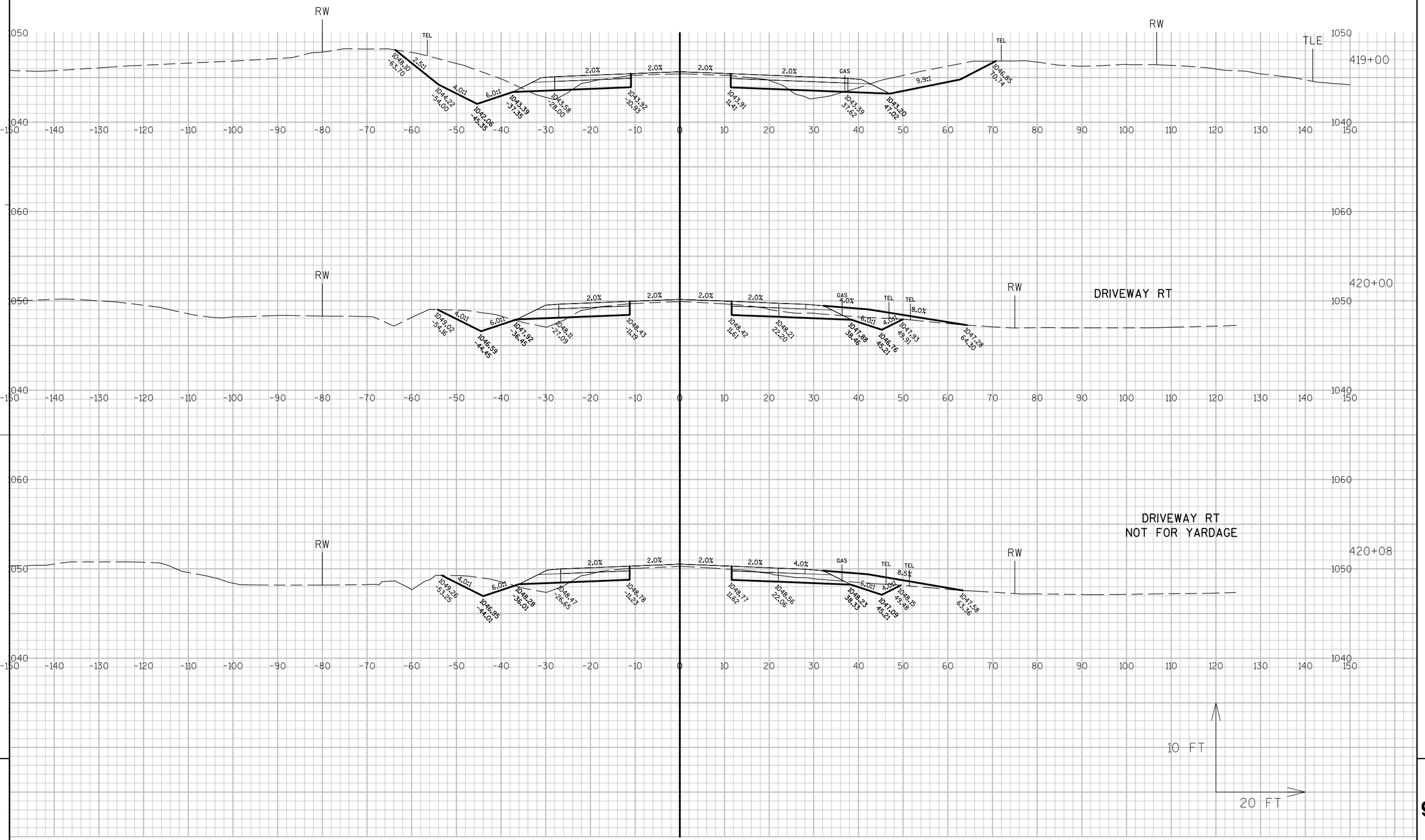
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1061	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090211_XS 409+00-449+20.DWG PLOT DATE : 1/30/2018 11:32 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1062	E

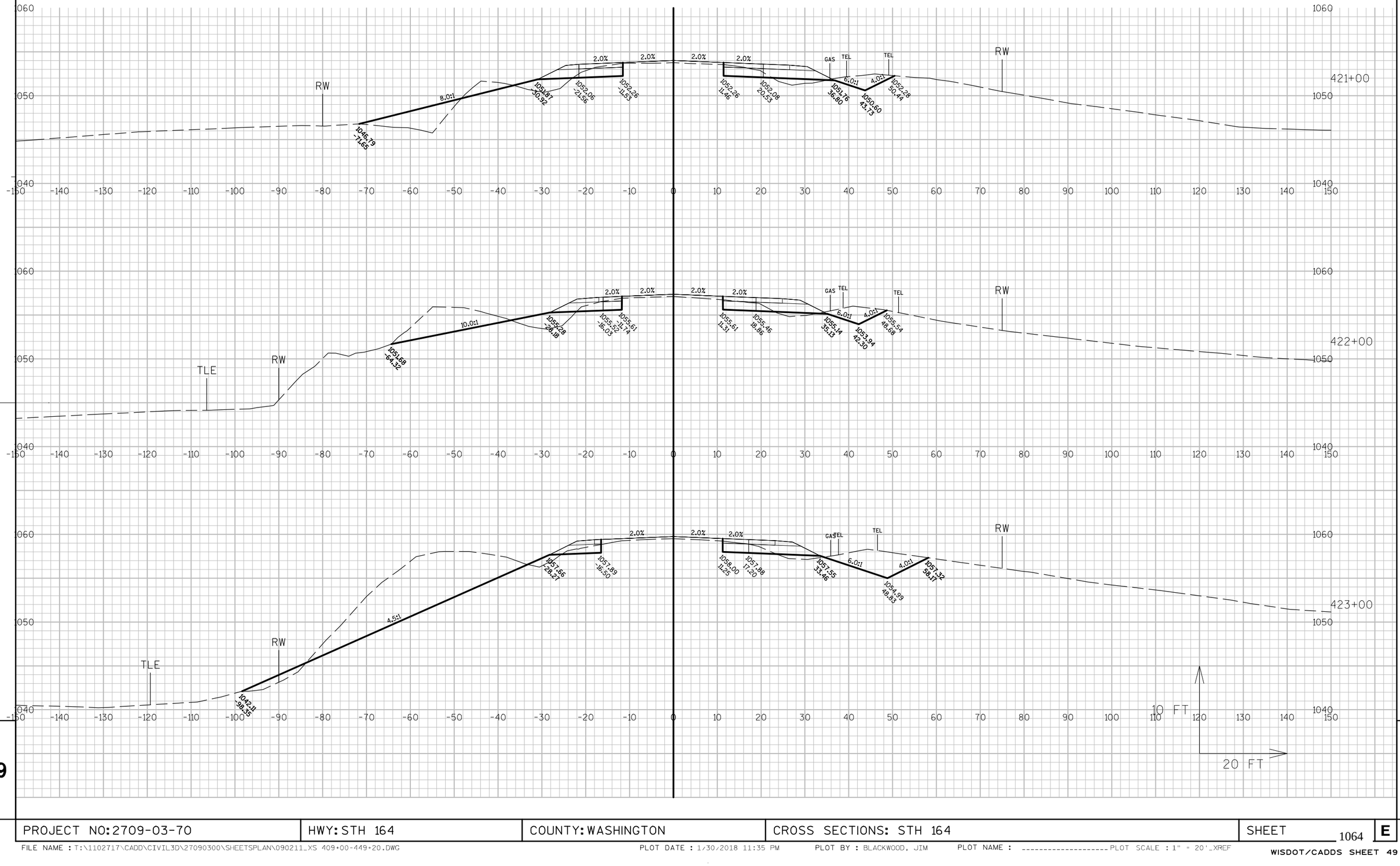


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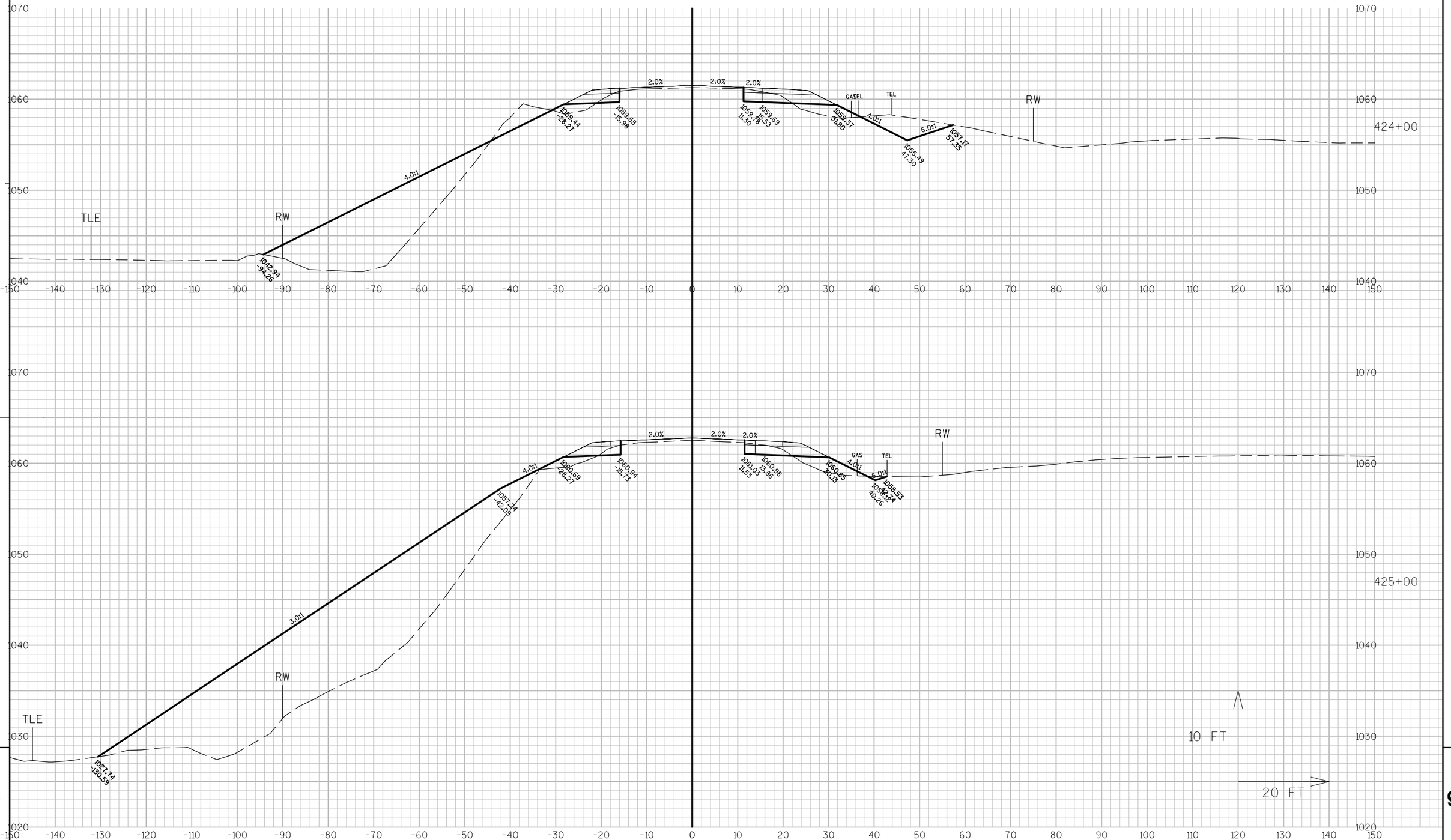
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1063	E

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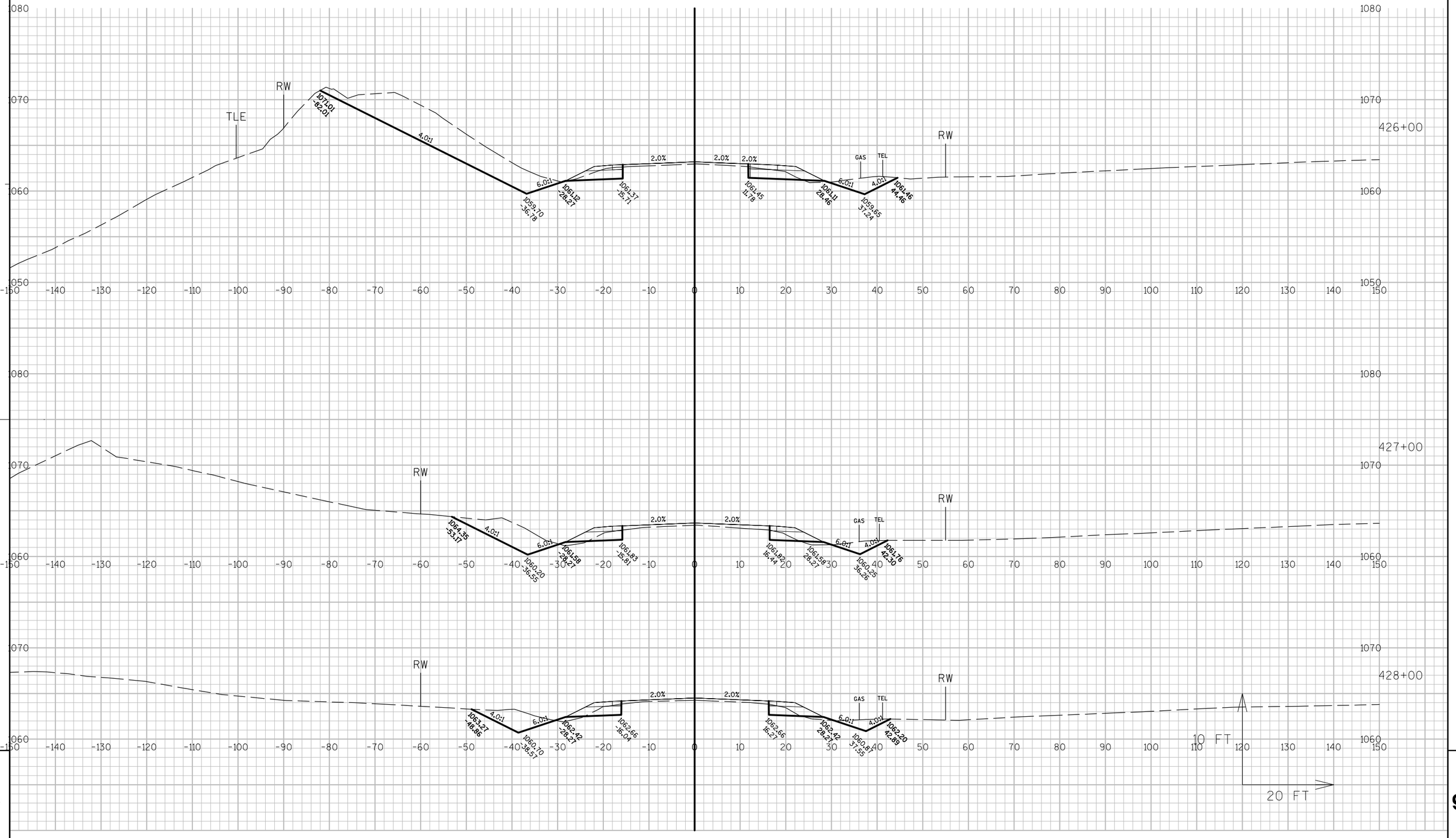


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1064	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1065	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090211_XS 409+00-449+20.DWG PLOT DATE : 1/30/2018 11:36 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1066	E

DRIVEWAY LT
NOT FOR YARDAGE

LOCAL LOW
AREA

428+39

429+00

430+00

431+00

RW

2.8%

2.0%

4.0:1

6.0:1

GAS

TEL

TELGAS

1063.47 -19.24

1060.90 -38.94

1062.67 28.27

1062.92 -16.08

1062.91 16.30

1062.67 28.27

1061.07 37.92

1062.49 45.61

1061.20 -36.94

1063.37 28.27

1063.61 -16.10

1063.61 16.39

1063.37 28.27

1061.37 36.26

1062.75 44.54

1060.80 -44.98

1065.08 28.27

1065.32 -16.10

1065.31 16.45

1065.08 28.27

1063.26 35.54

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1068.04 28.27

1068.28 -16.09

1068.28 16.34

1068.04 28.27

1065.70 37.64

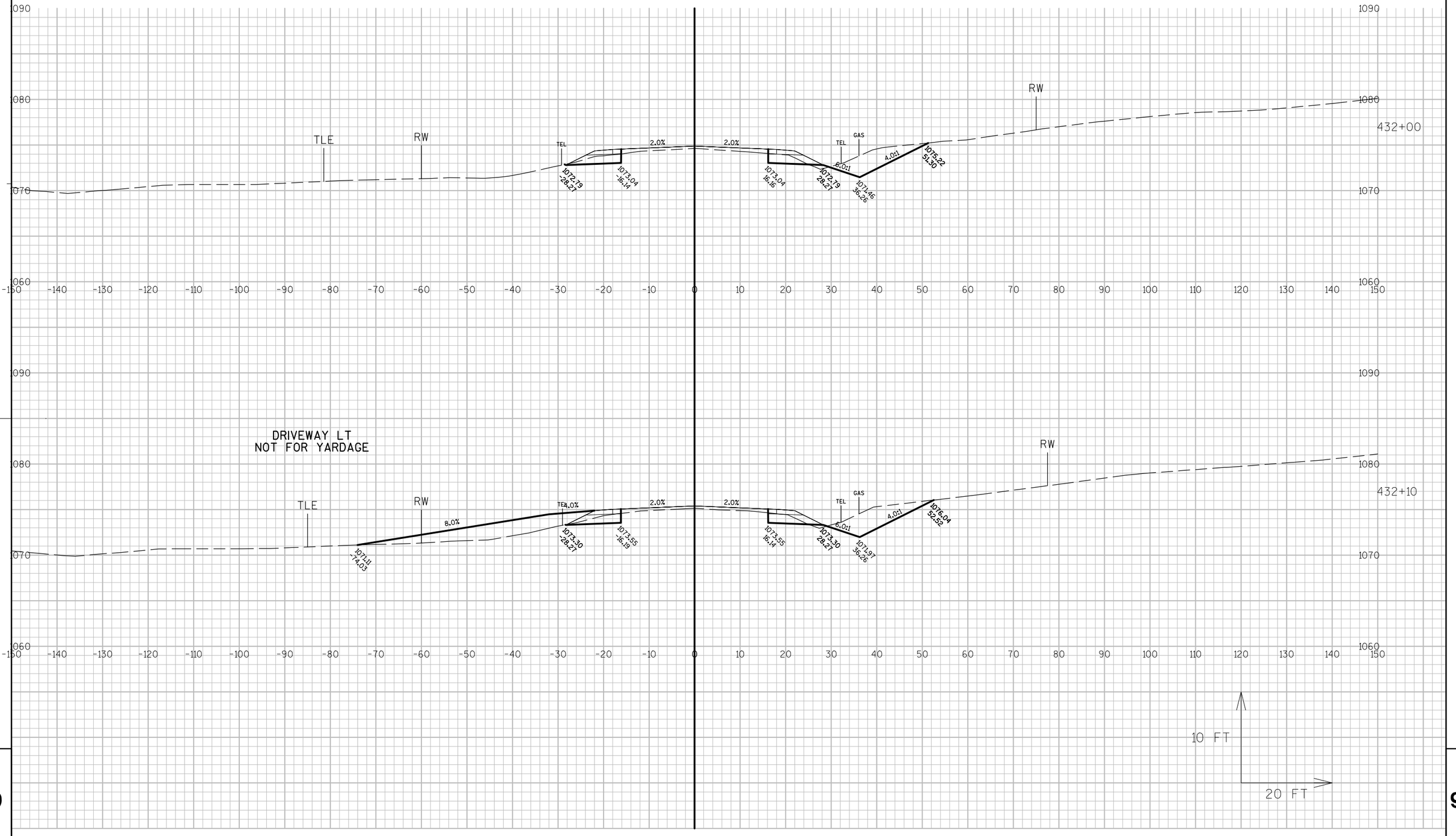
10 FT

20 FT

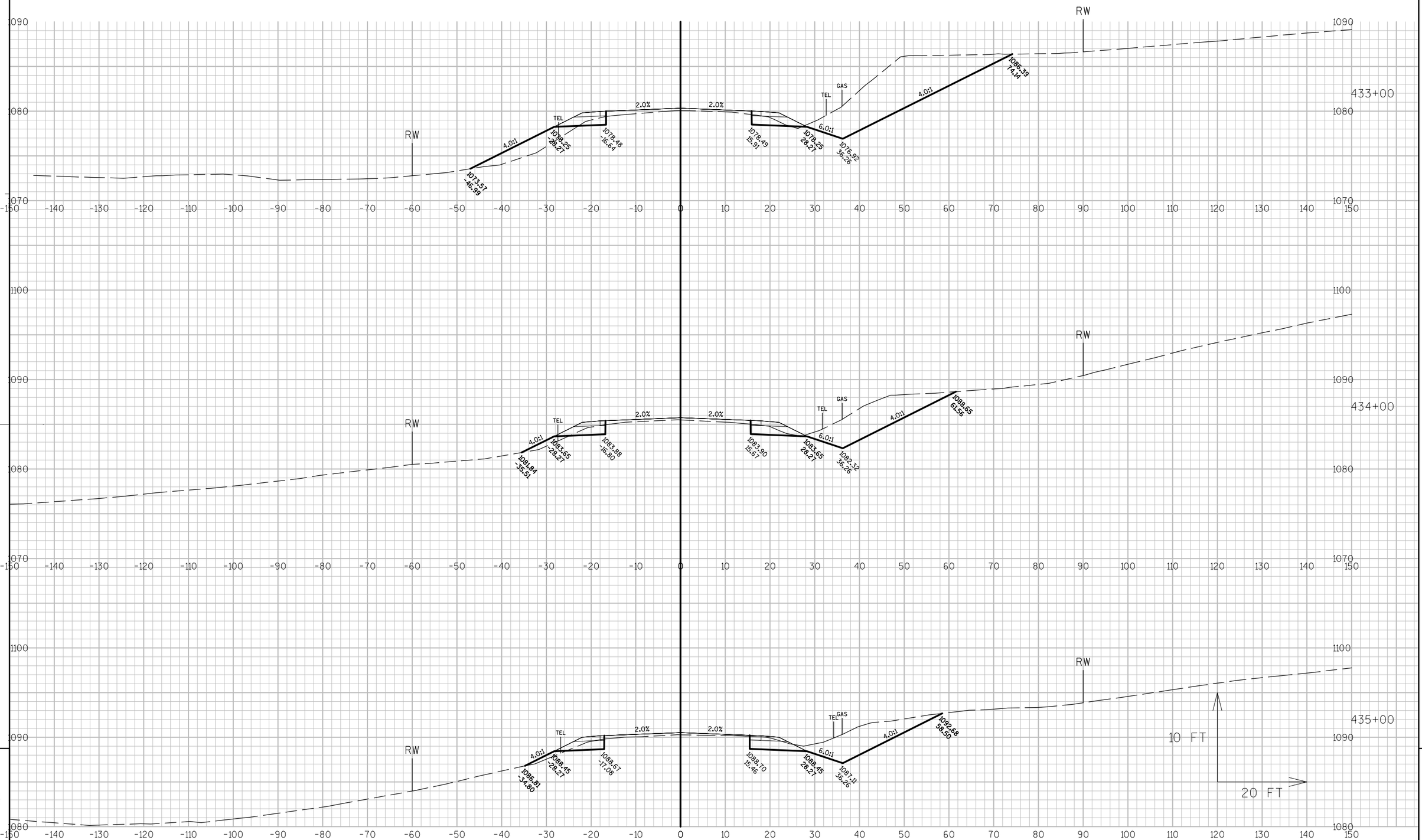
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1067	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1068	E

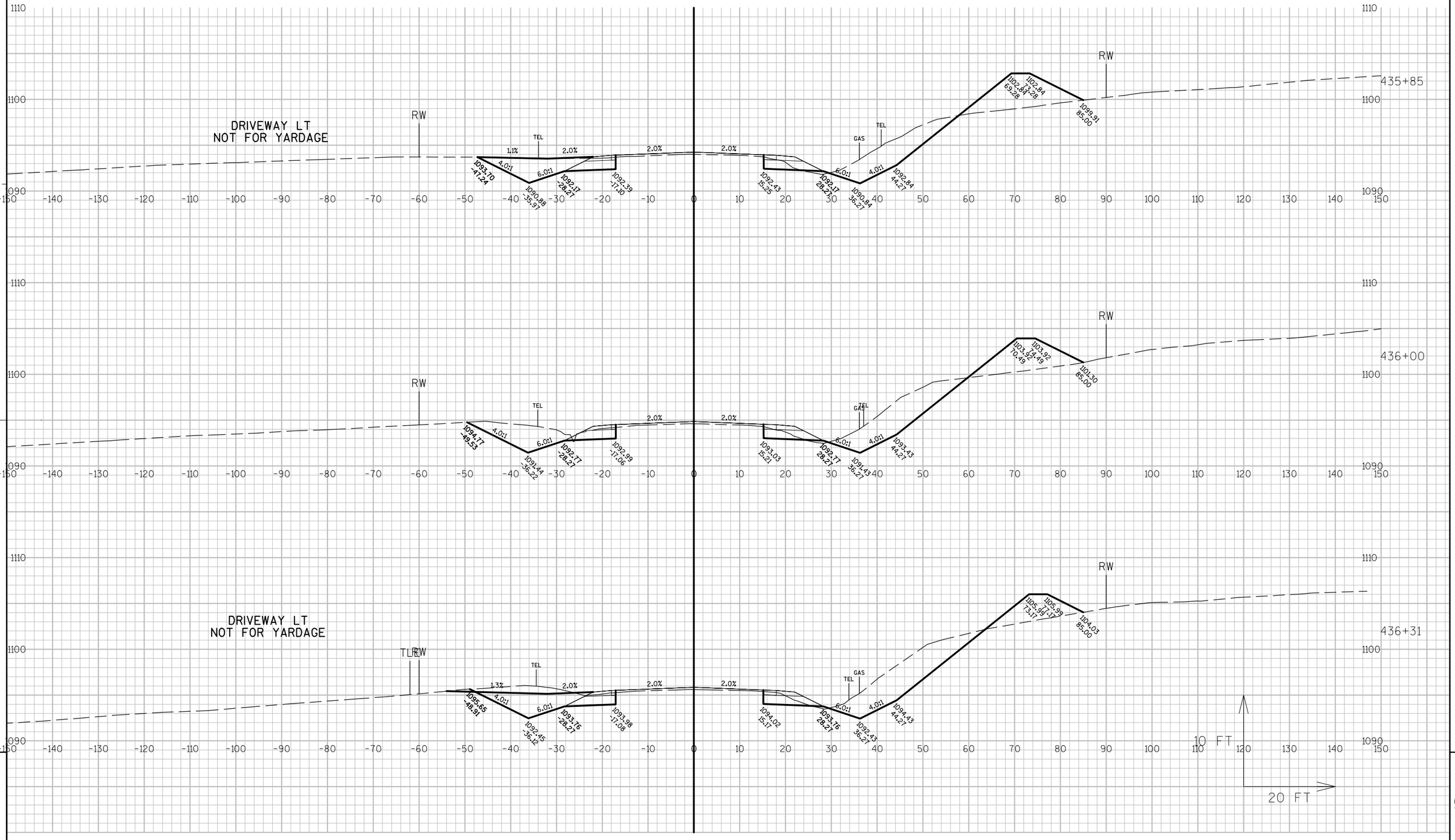


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1069	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090211_XS 409+00-449+20.DWG PLOT DATE : 1/30/2018 11:39 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : _____ PLOT SCALE : 1" = 20'_XREF

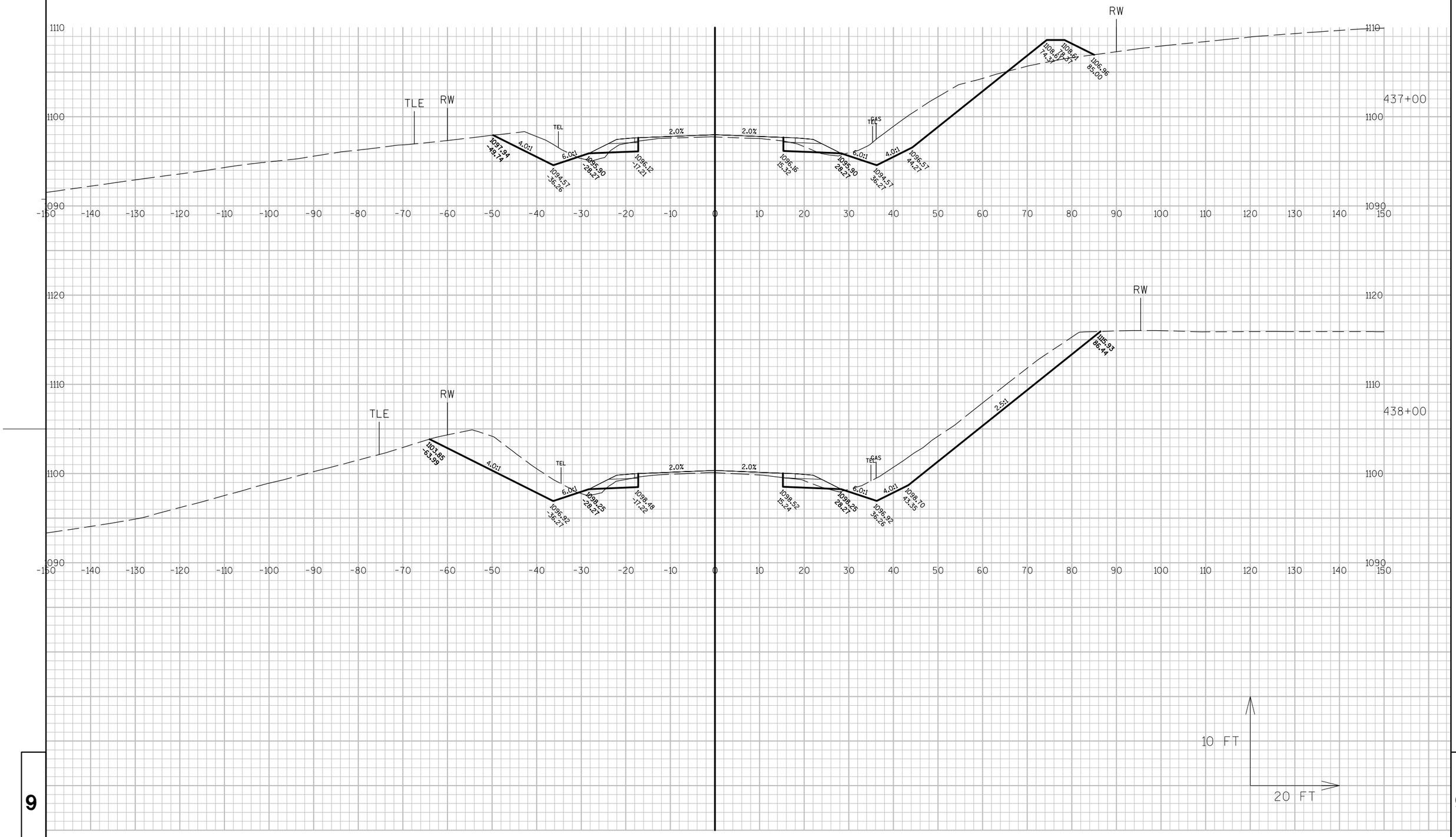


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1070	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090211_XS 409+00-449+20.DWG
PLOT DATE : 1/30/2018 11:40 PM
PLOT BY : BLACKWOOD, JIM
PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF
WISDOT/CADDS SHEET 49

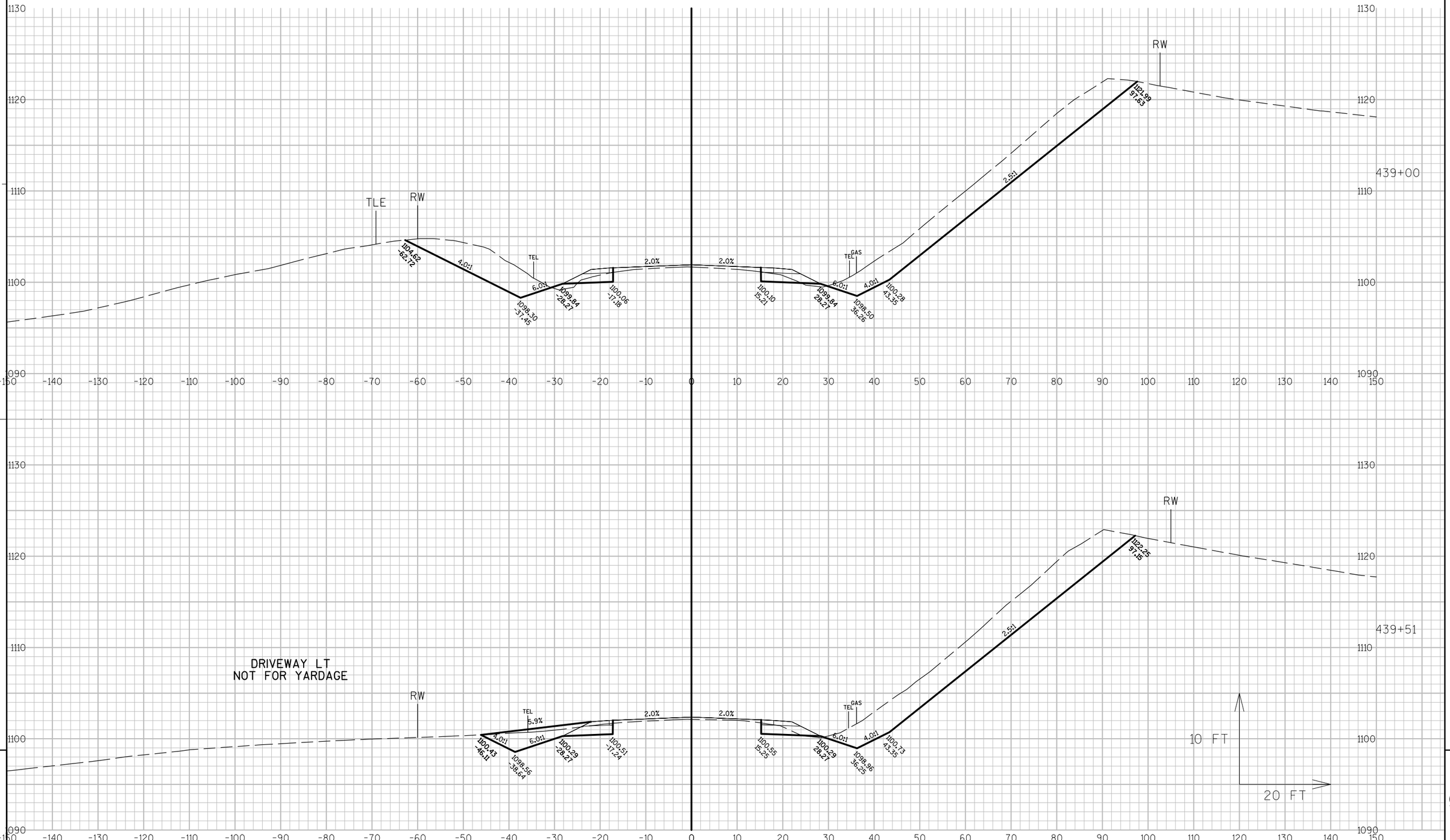


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1071	E

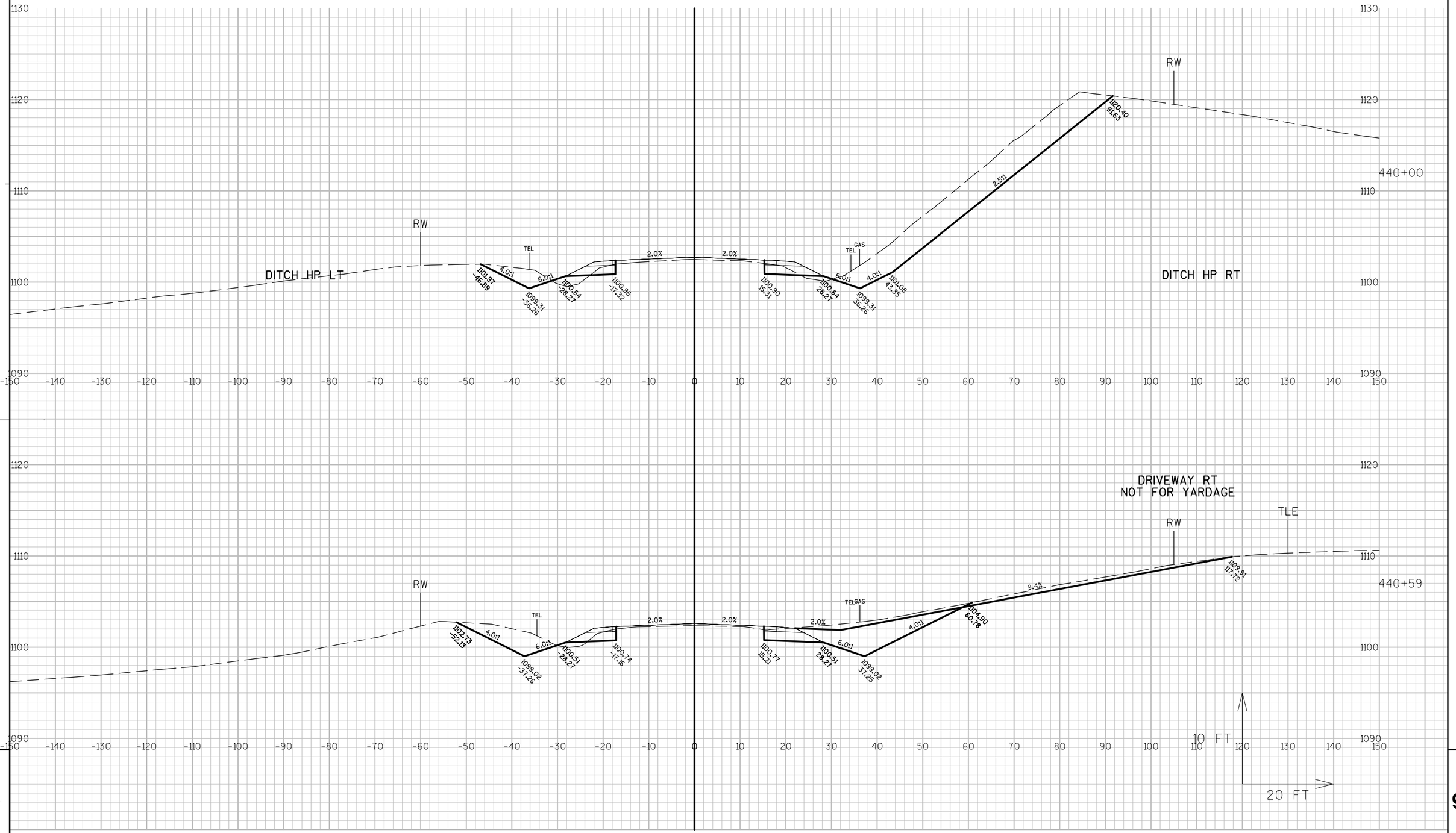
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090211_XS 409+00-449+20.DWG PLOT DATE : 1/30/2018 11:40 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1072	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090211_XS 409+00-449+20.DWG PLOT DATE : 1/30/2018 11:42 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF

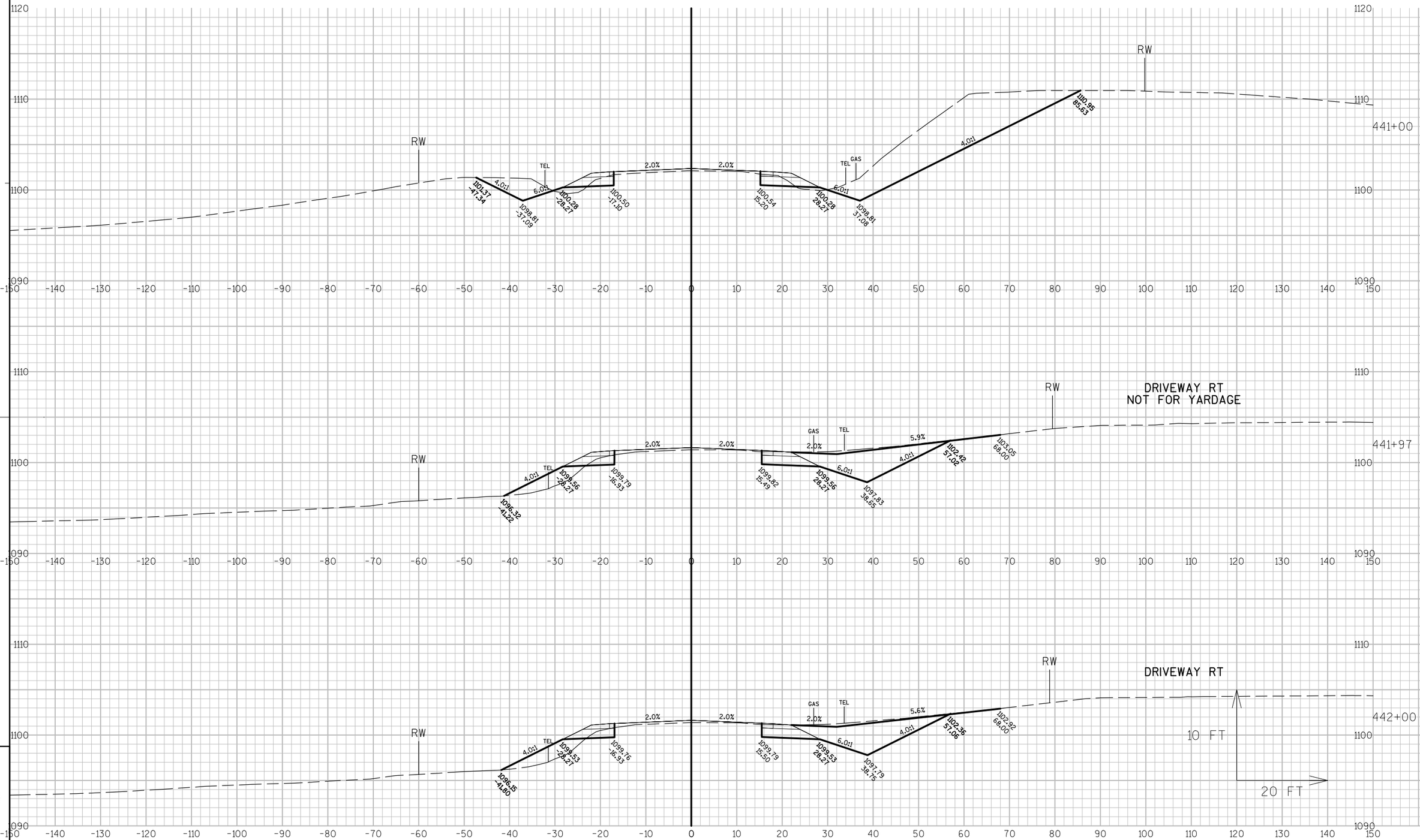
WISDOT/CADDS SHEET 49



9

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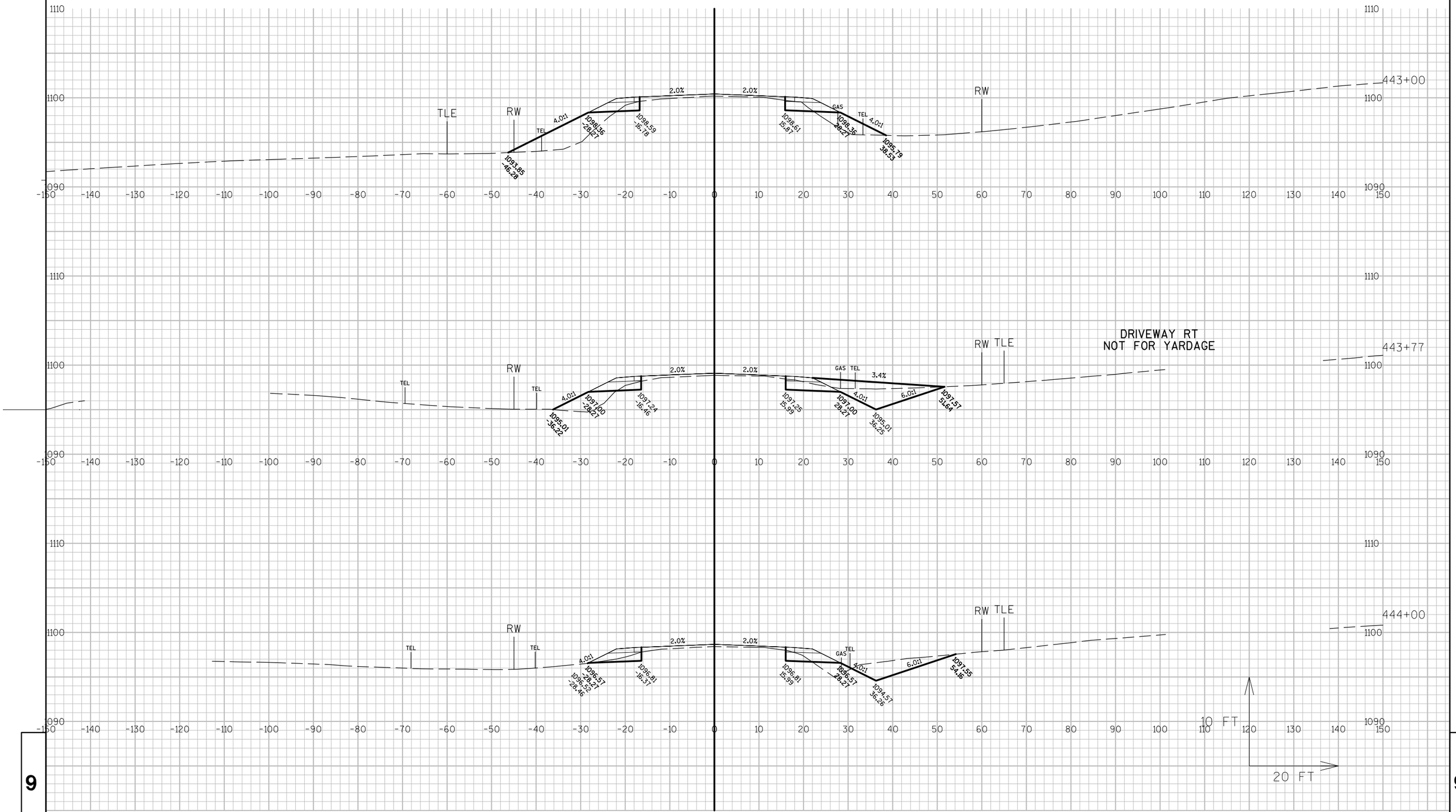
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1073	E



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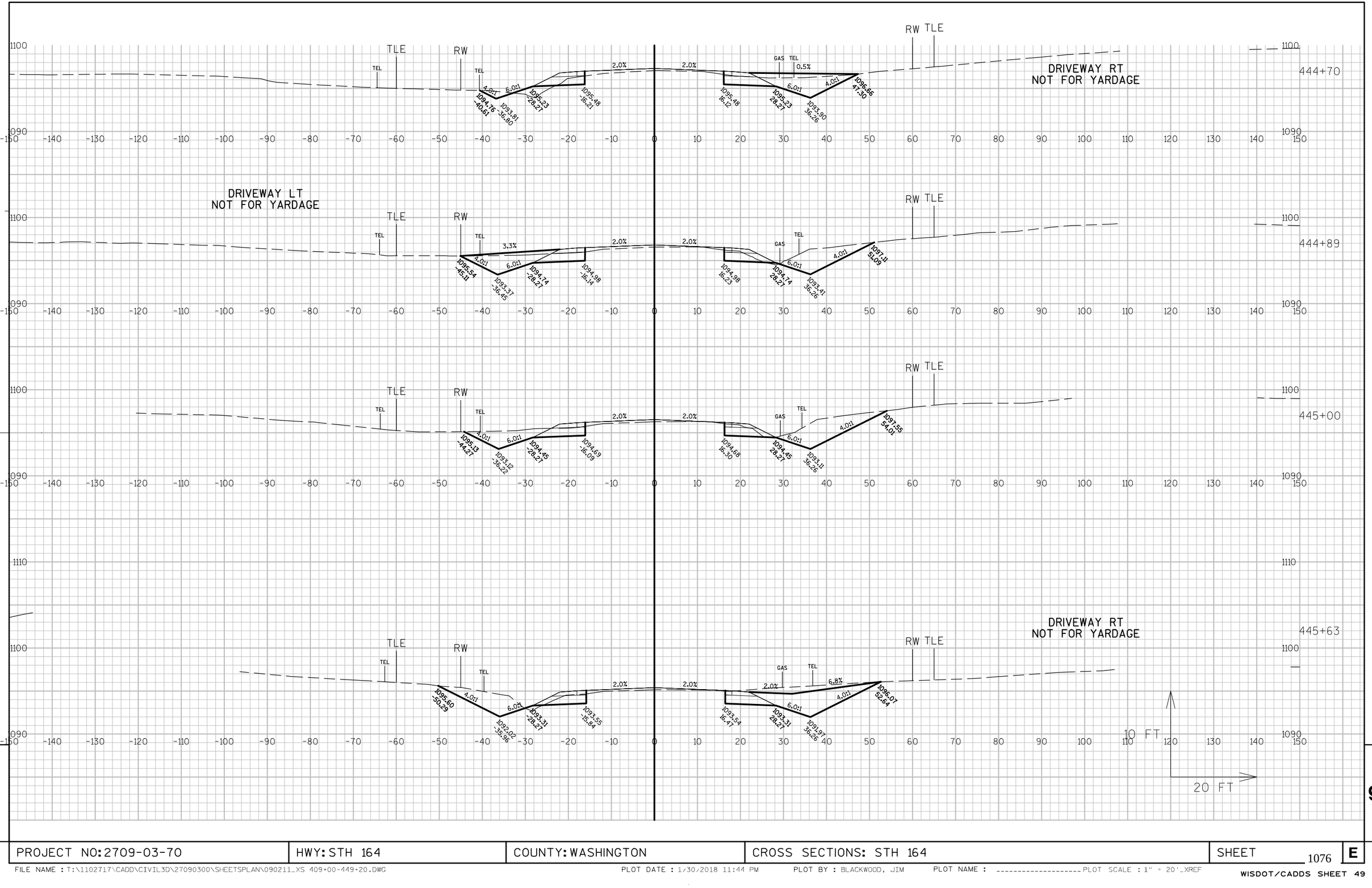
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1074	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1075	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090211_XS 409+00-449+20.DWG PLOT DATE : 1/30/2018 11:43 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1076	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090211_XS 409+00-449+20.DWG PLOT DATE : 1/30/2018 11:44 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ----------PLOT SCALE : 1" = 20'_XREF

DRIVEWAY LT
NOT FOR YARDAGE

445+79

446+00

DRIVEWAY RT
NOT FOR YARDAGE

446+61

END PROJECT STA 446+61.26
MATCH EXISTING

447+00

10 FT

20 FT

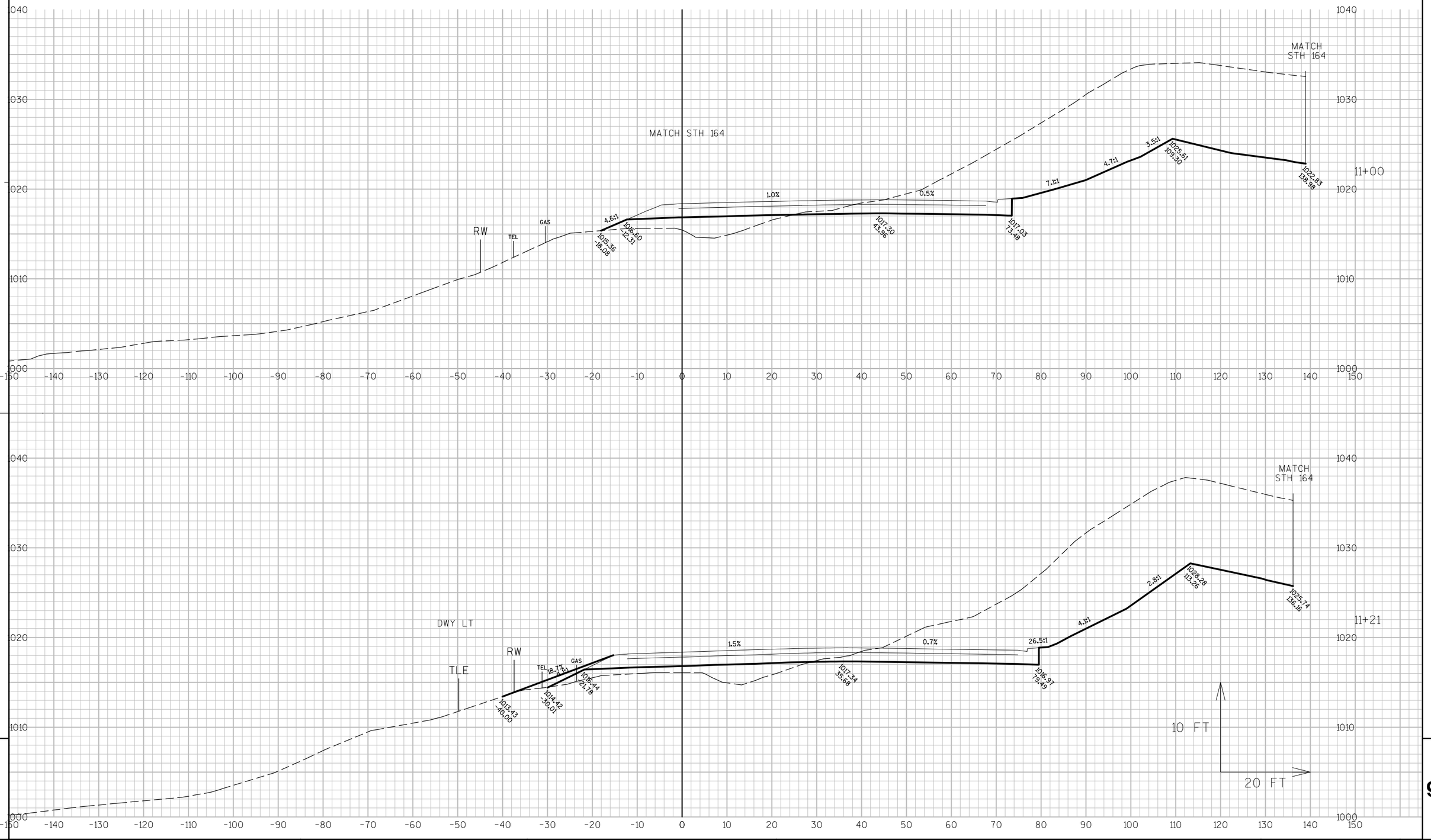
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 164	SHEET 1077	E

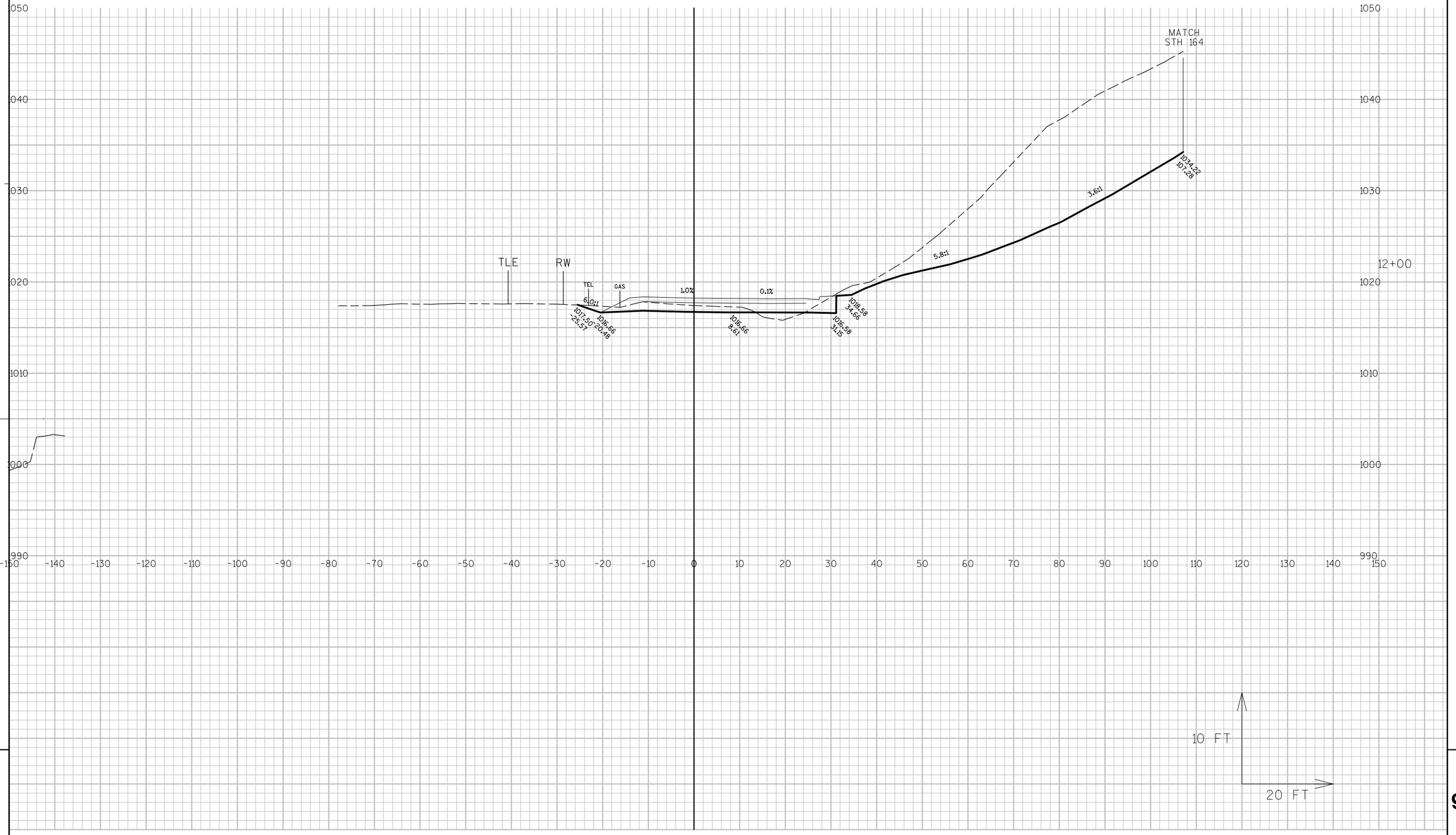
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090211_XS 409+00-449+20.DWG PLOT DATE : 1/30/2018 11:45 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : _____ PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



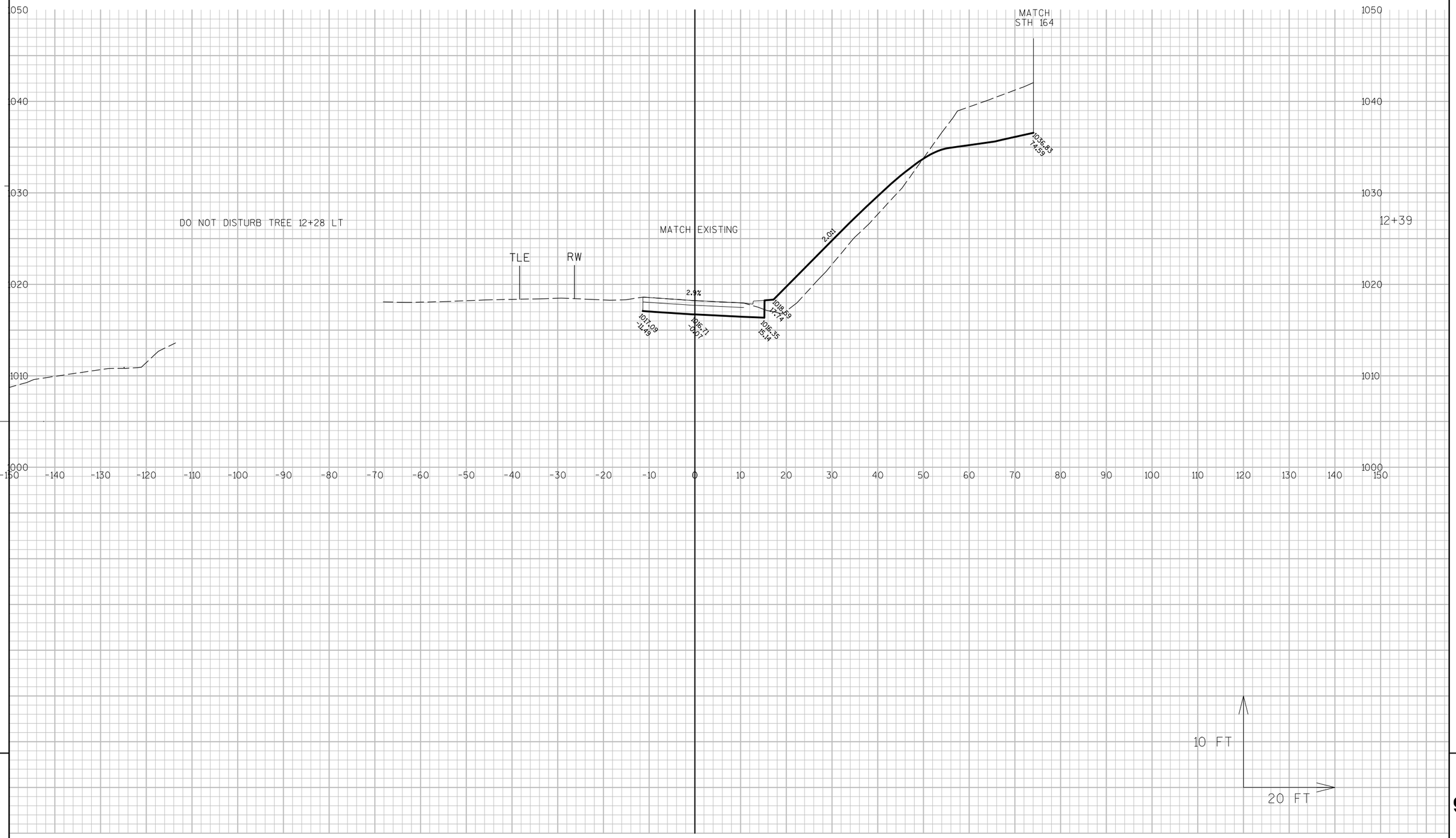
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SHADY LANE	SHEET 1078	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090212A_XS SHADY SOUTH.DWG PLOT DATE : 1/31/2018 2:22 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF



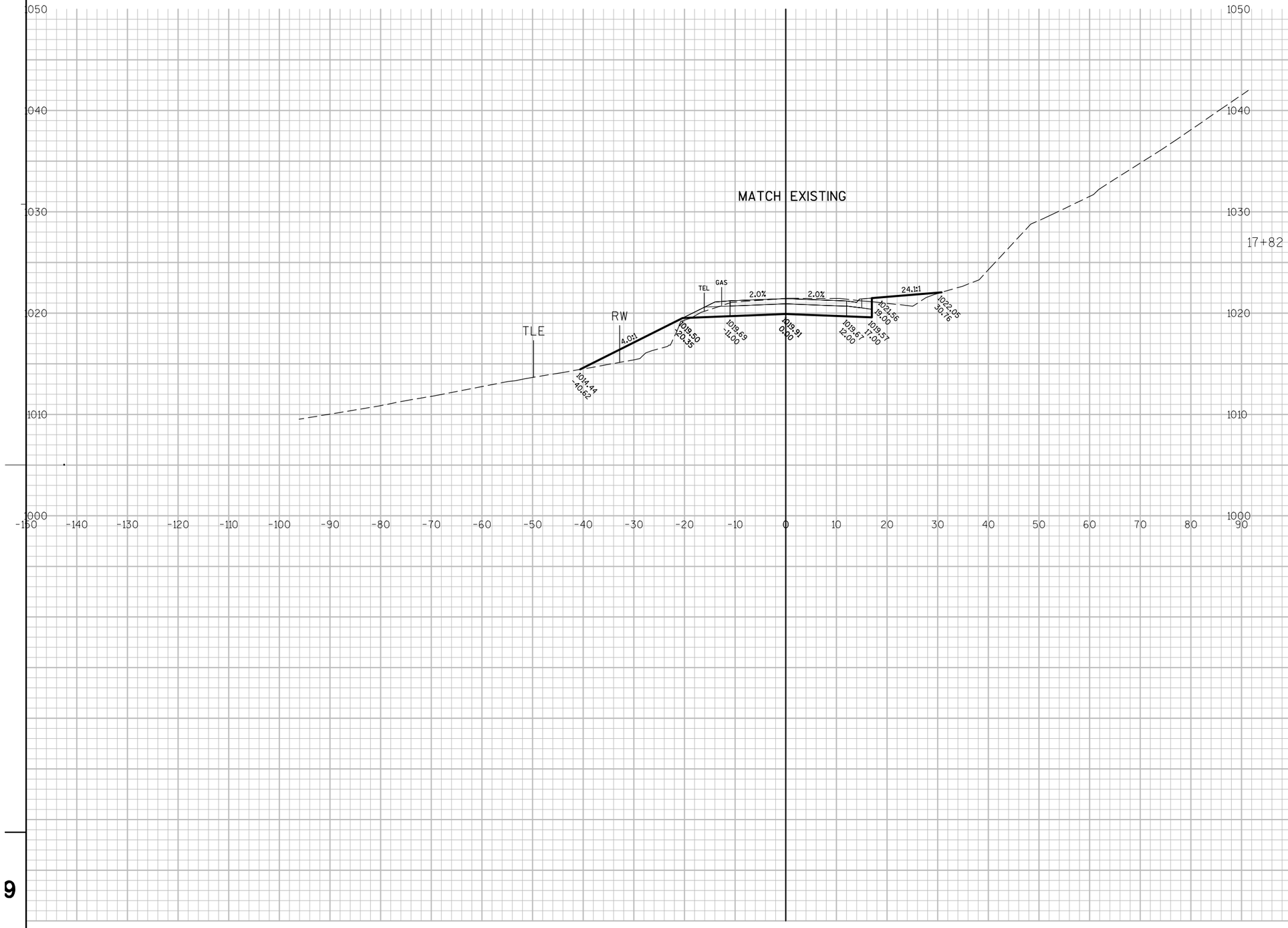
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SHADY LANE	SHEET 1079	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090212A_XS SHADY SOUTH.DWG PLOT DATE : 1/31/2018 2:22 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF



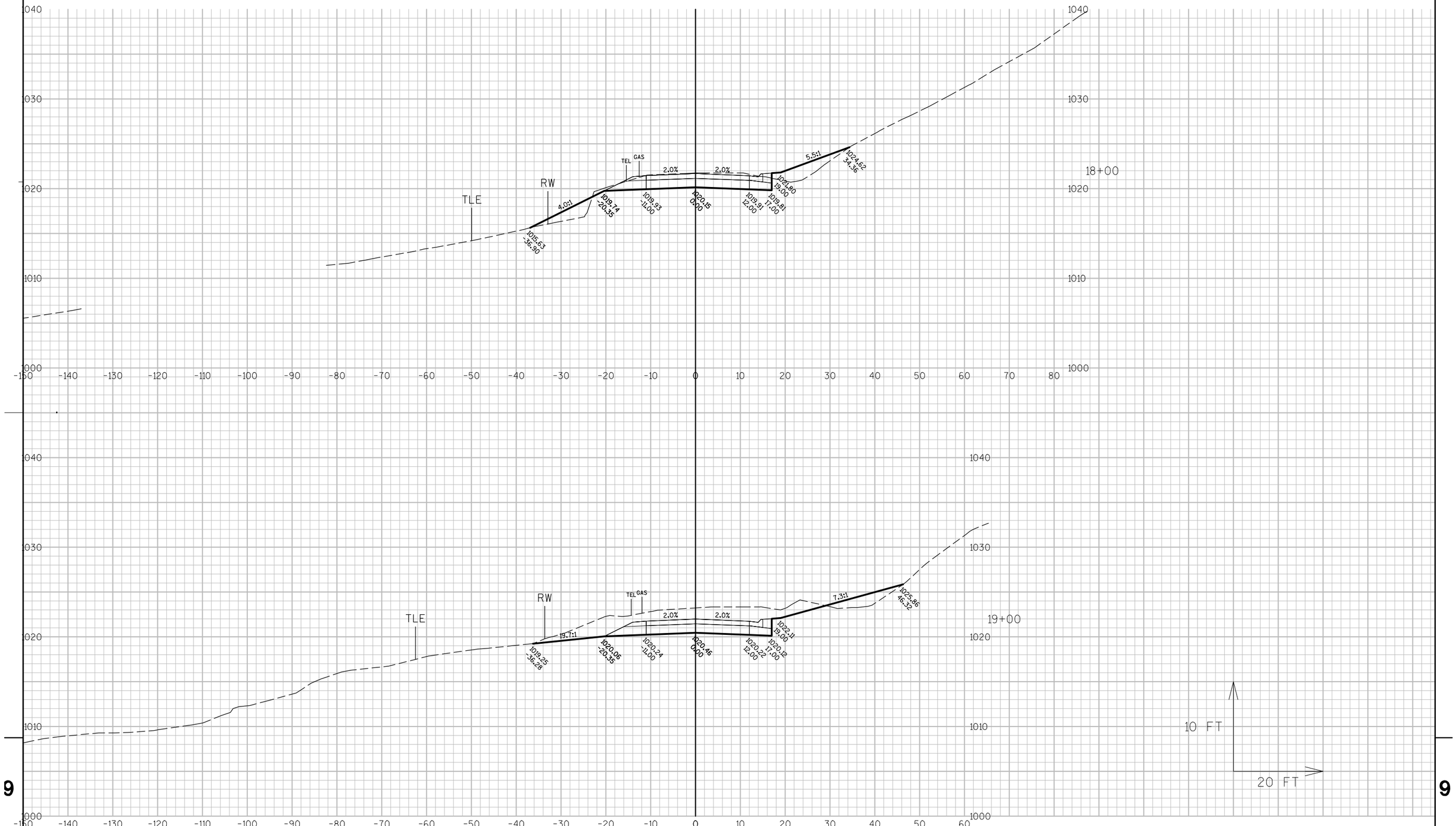
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SHADY LANE	SHEET 1080	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090212A_XS SHADY SOUTH.DWG PLOT DATE : 1/31/2018 2:22 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF



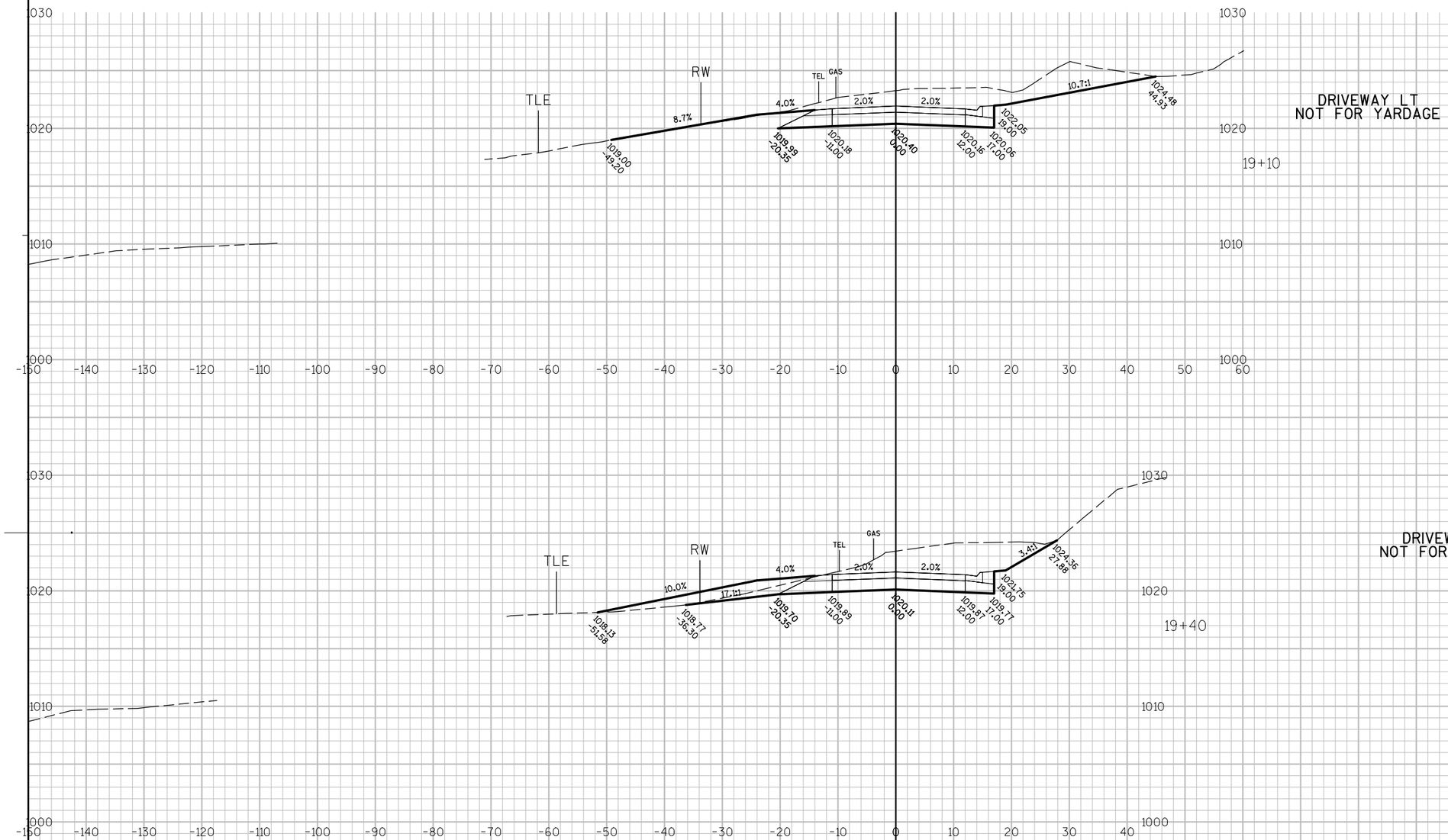
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SHADY LANE	SHEET 1081	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090212B_XS SHADYNORTH.DWG PLOT DATE : 1/31/2018 2:25 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF



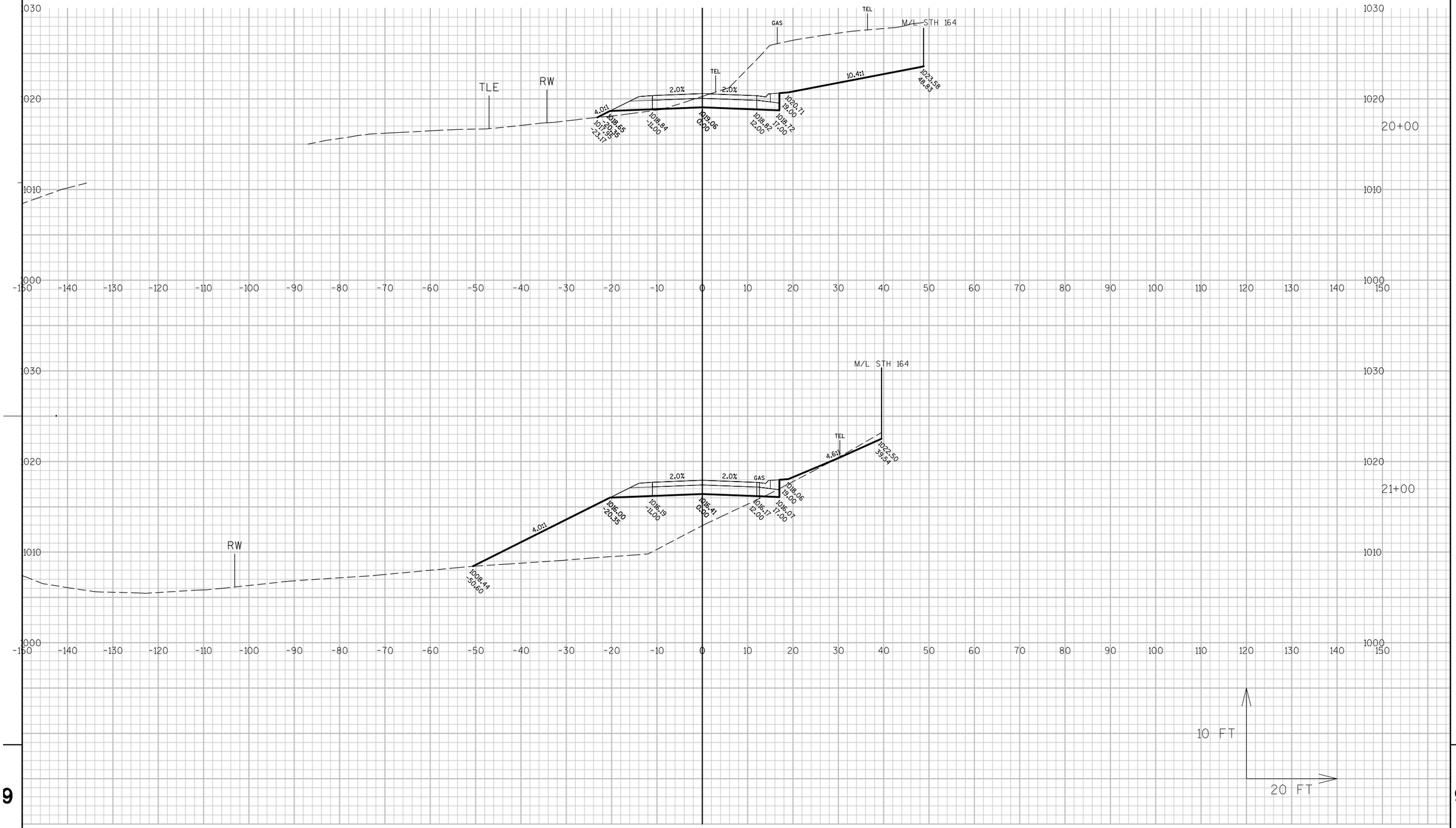
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SHADY LANE	SHEET 1082	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090212B_XS SHADYNORTH.DWG PLOT DATE : 1/31/2018 2:25 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF



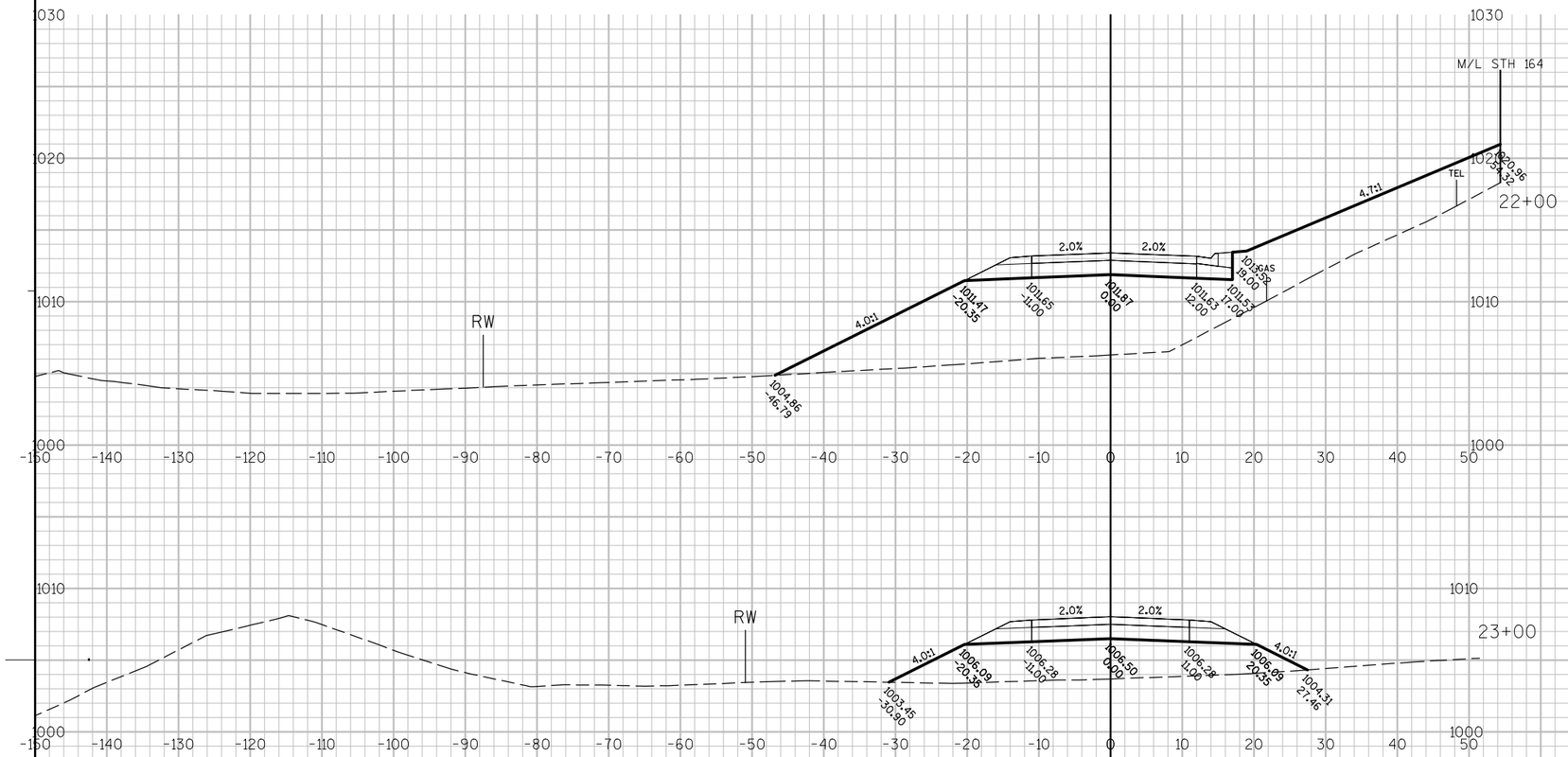
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SHADY LANE	SHEET 1083	E

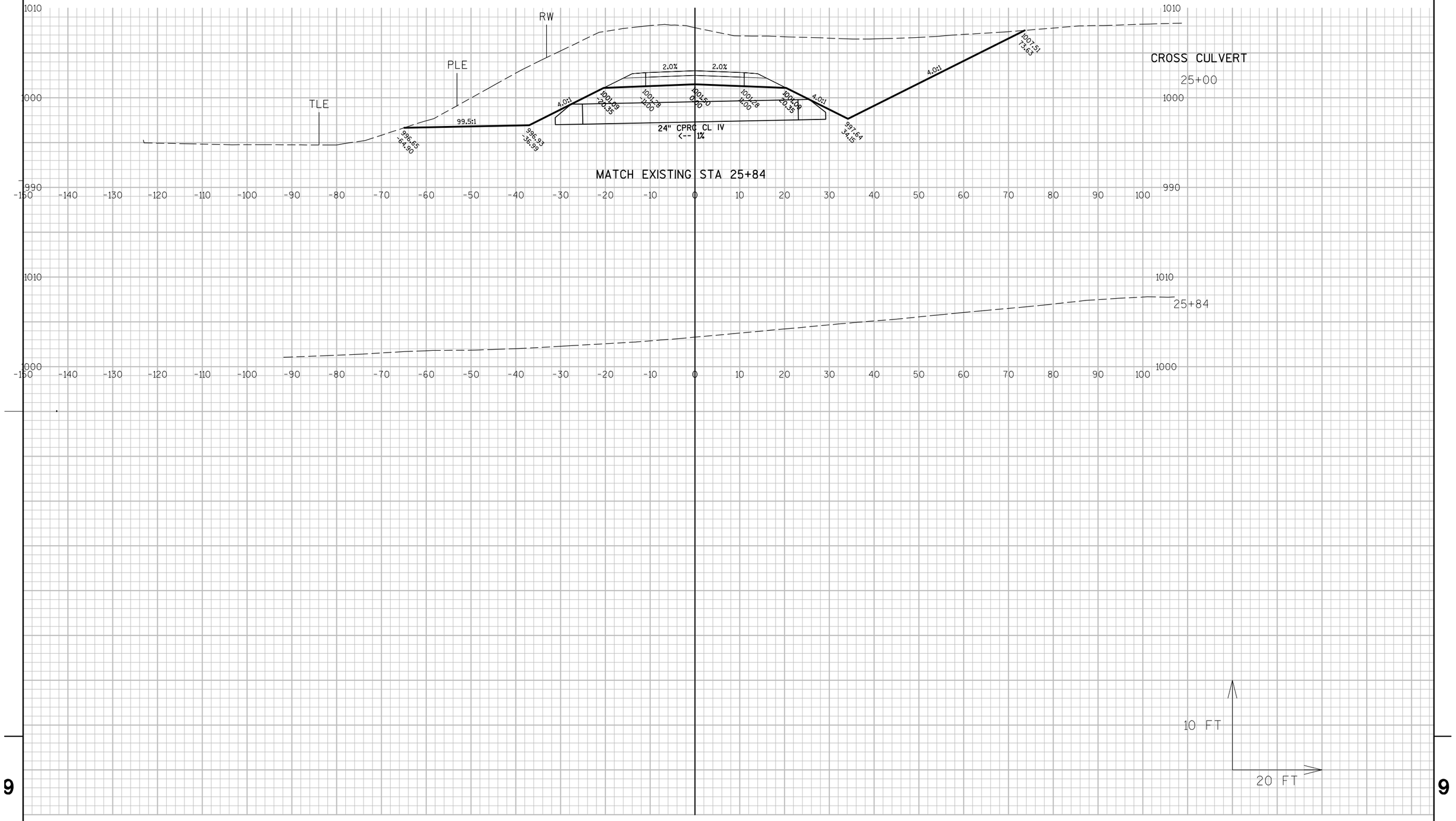


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SHADY LANE	SHEET 1084	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090212B_XS SHADYNORTH.DWG PLOT DATE : 1/31/2018 2:26 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF

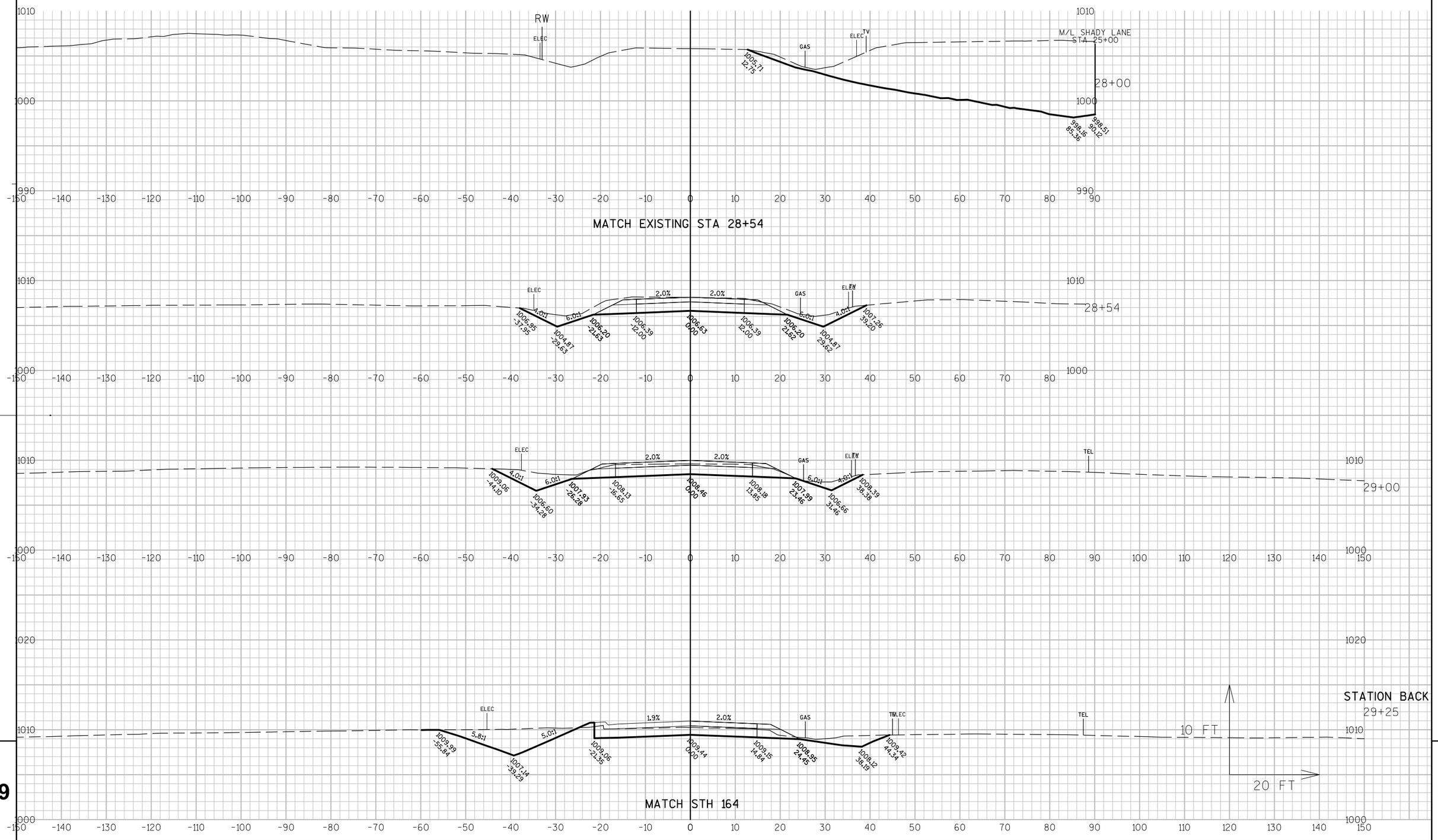


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SHADY LANE	SHEET 1085	E



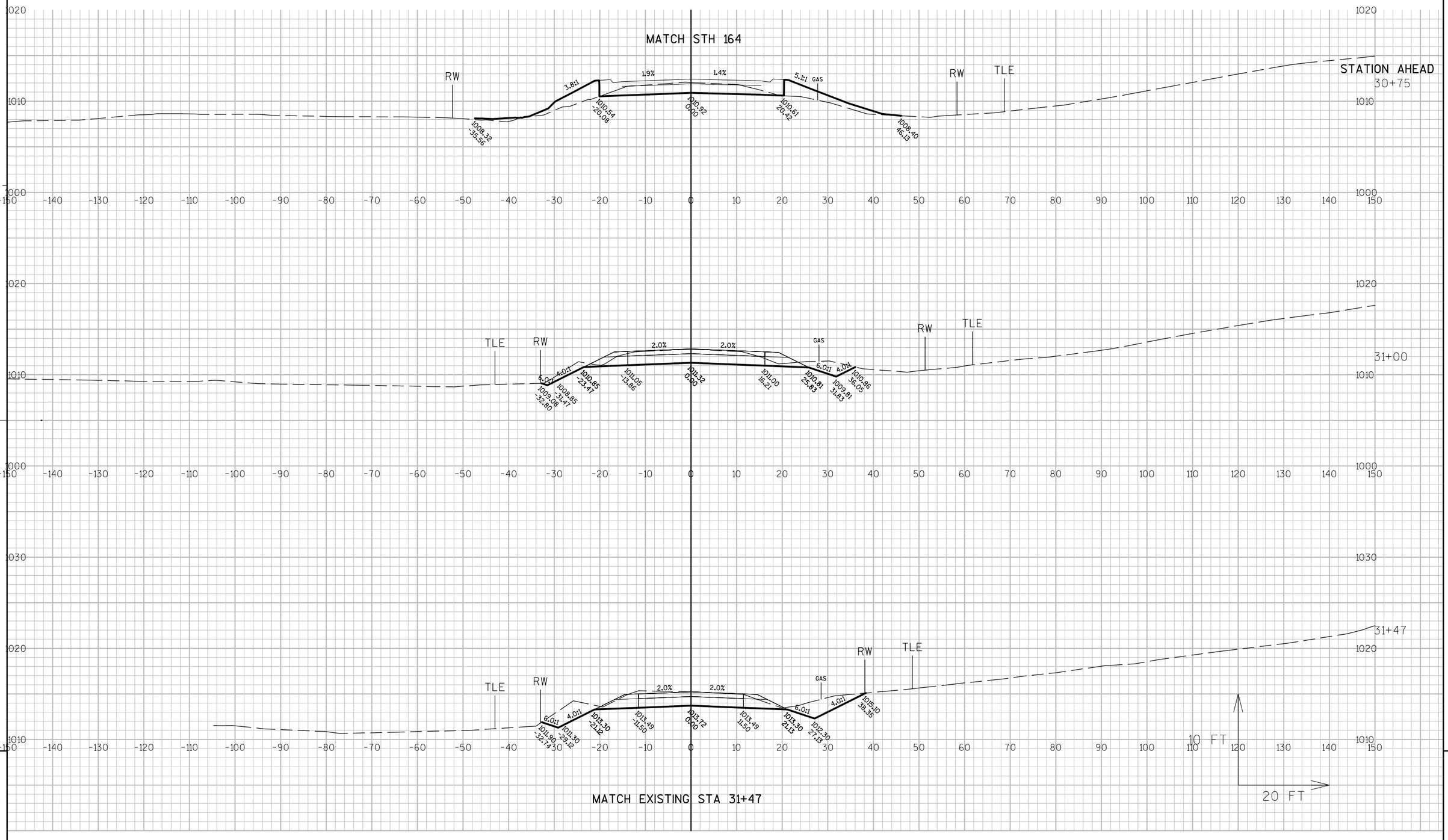
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: SHADY LANE	SHEET 1086	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090212B_XS SHADYNORTH.DWG PLOT DATE : 1/31/2018 2:27 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1" = 20'_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: UPLAND DRIVE/HANSEN DRIVE	SHEET 1087 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090213_XS_UPLAND-HANSEN.DWG PLOT DATE : 1/31/2018 7:33 AM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1:20 XREF



9

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: UPLAND DRIVE/HANSEN DRIVE	SHEET E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090213_XS_UPLAND-HANSEN.DWG PLOT DATE : 1/31/2018 7:33 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : _____ PLOT SCALE : 1:20 XREF

1050
1040
1030
1020
1010

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

1050
1040
1030
1020
1010

32+00

GAS

10 FT

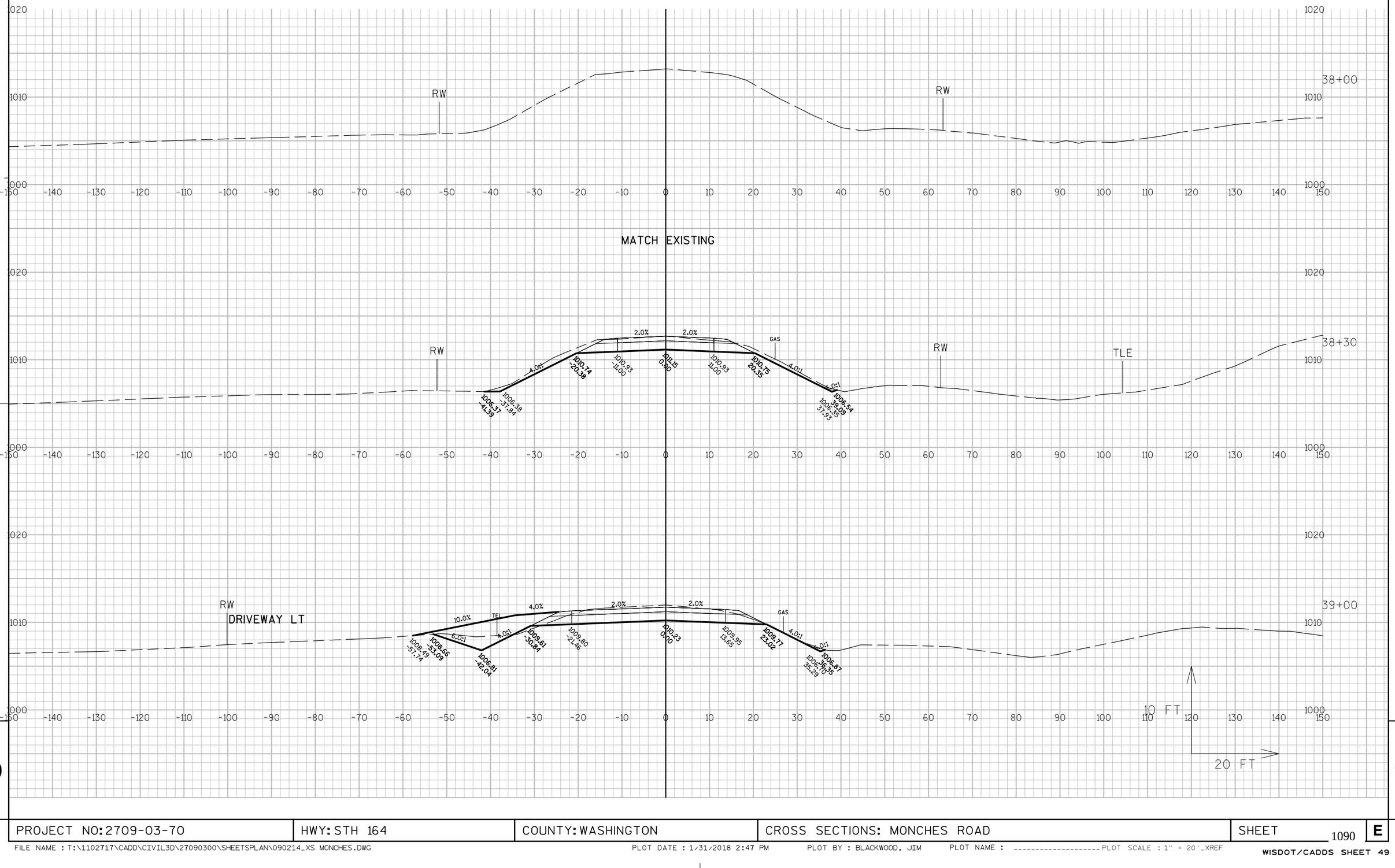
20 FT

9

9

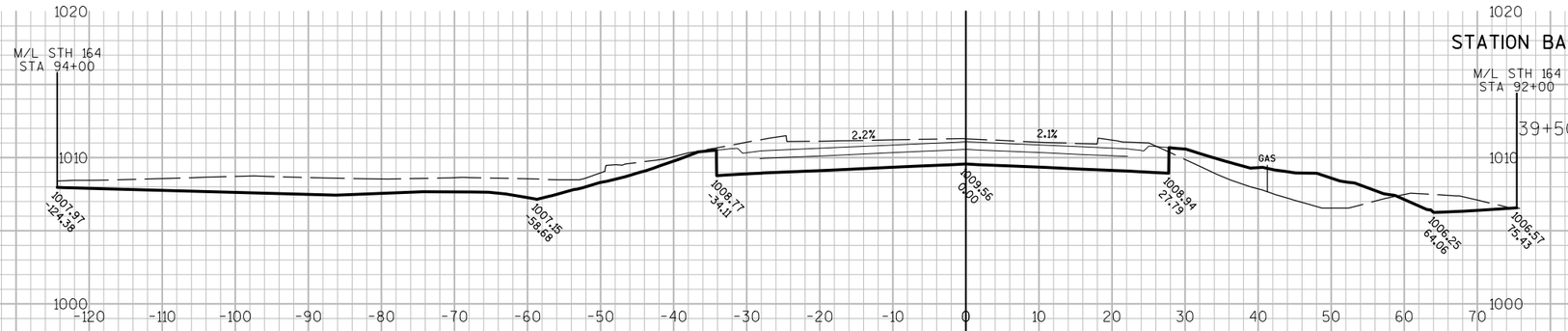
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FILE NAME : T:\1102717\CADD\CIVIL3D\2709030O\SHEETSPLAN\090213_XS_UPLAND-HANSEN.DWG PLOT DATE : 1/31/2018 7:33 AM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1:20 XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: MONCHES ROAD	SHEET 1090	E

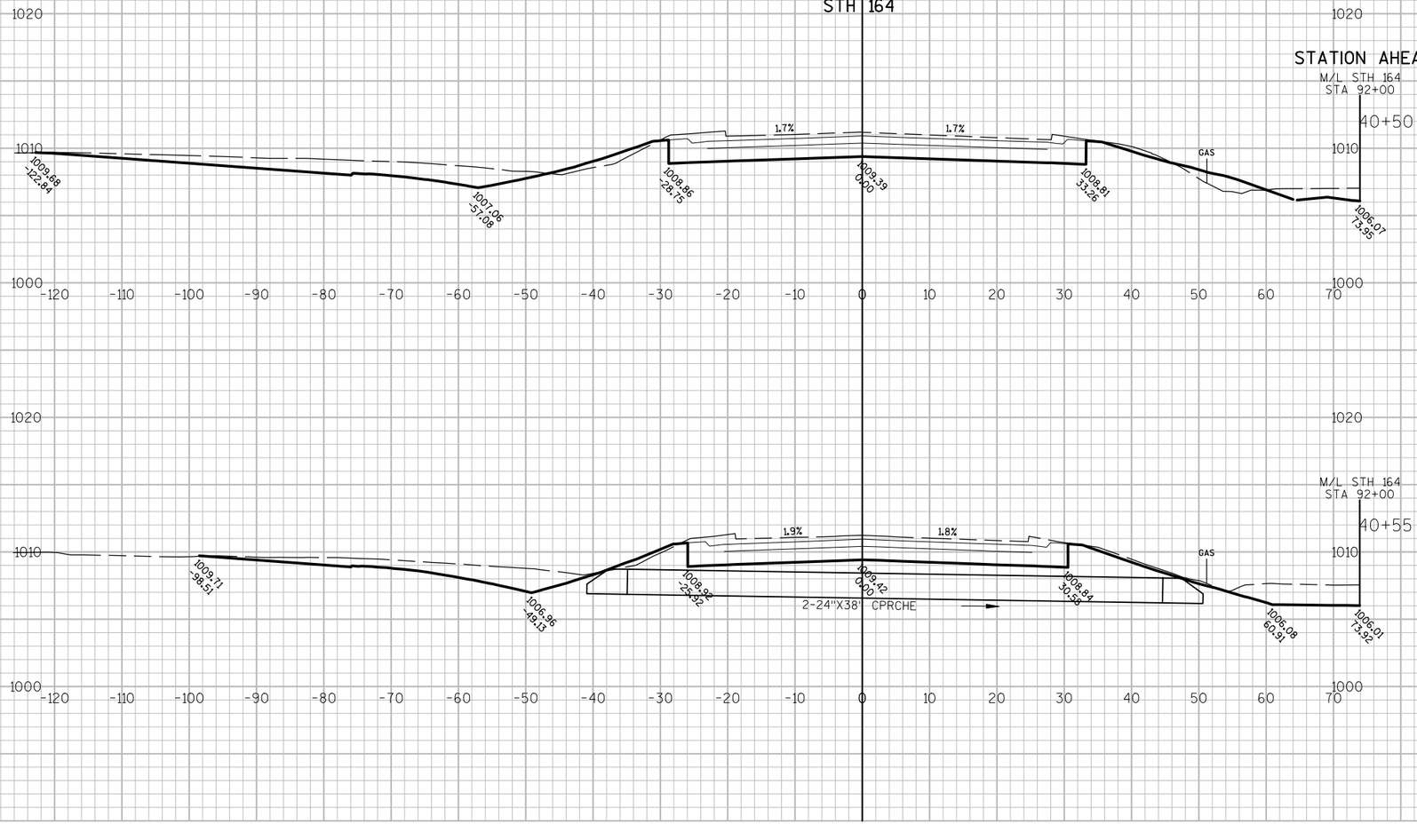
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090214_XS MONCHES.DWG PLOT DATE : 1/31/2018 2:47 PM PLOT BY : BLACKWOOD, JIM PLOT NAME : _____ PLOT SCALE : 1" = 20'_XREF



STATION BACK

M/L STH 164
STA 92+00
39+50

STH 164

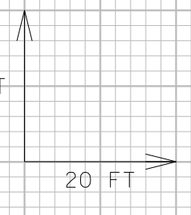


STATION AHEAD

M/L STH 164
STA 92+00
40+50

M/L STH 164
STA 92+00
40+55

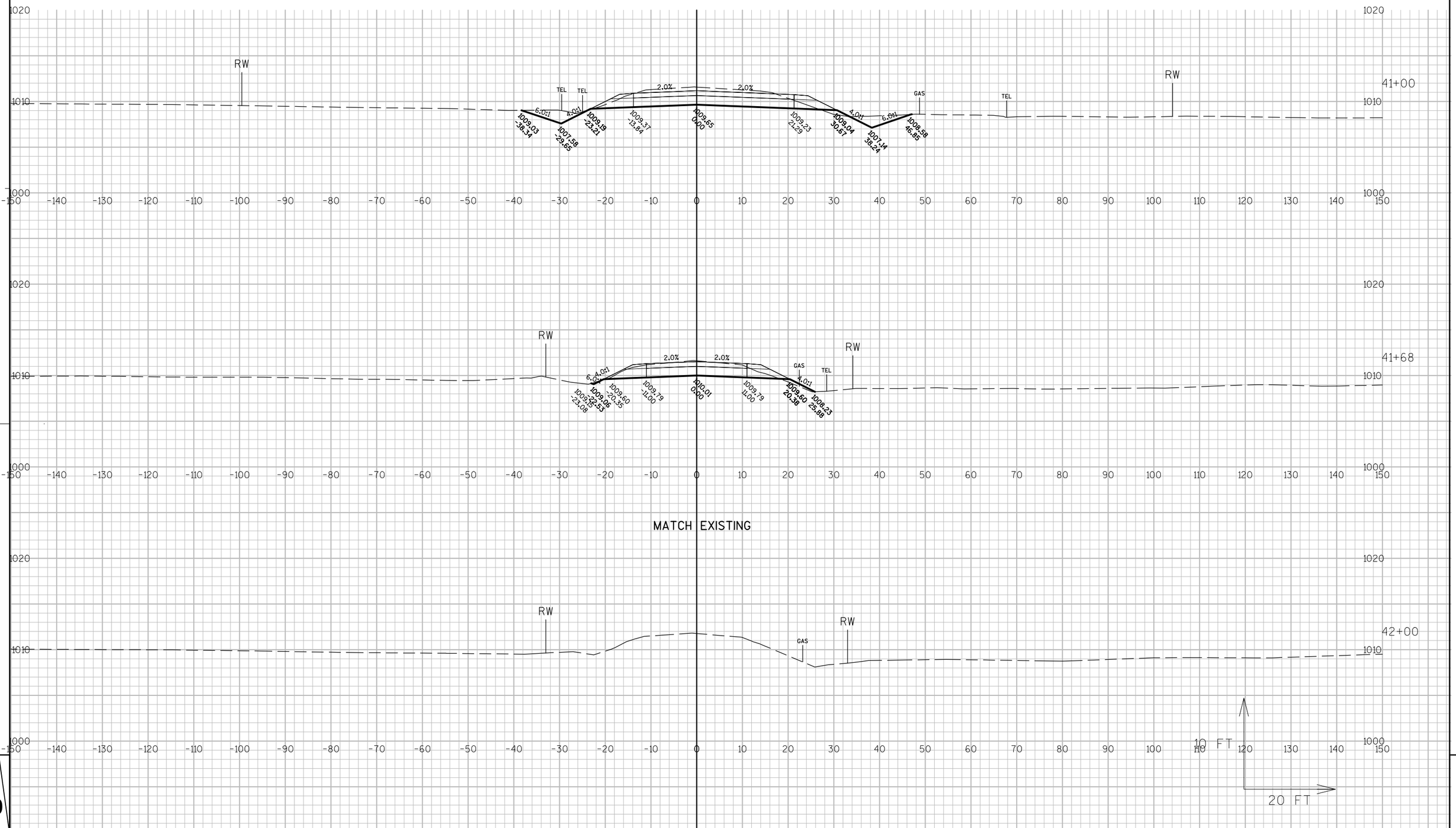
CROSS CULVERT
NOT FOR YARDAGE



9

9

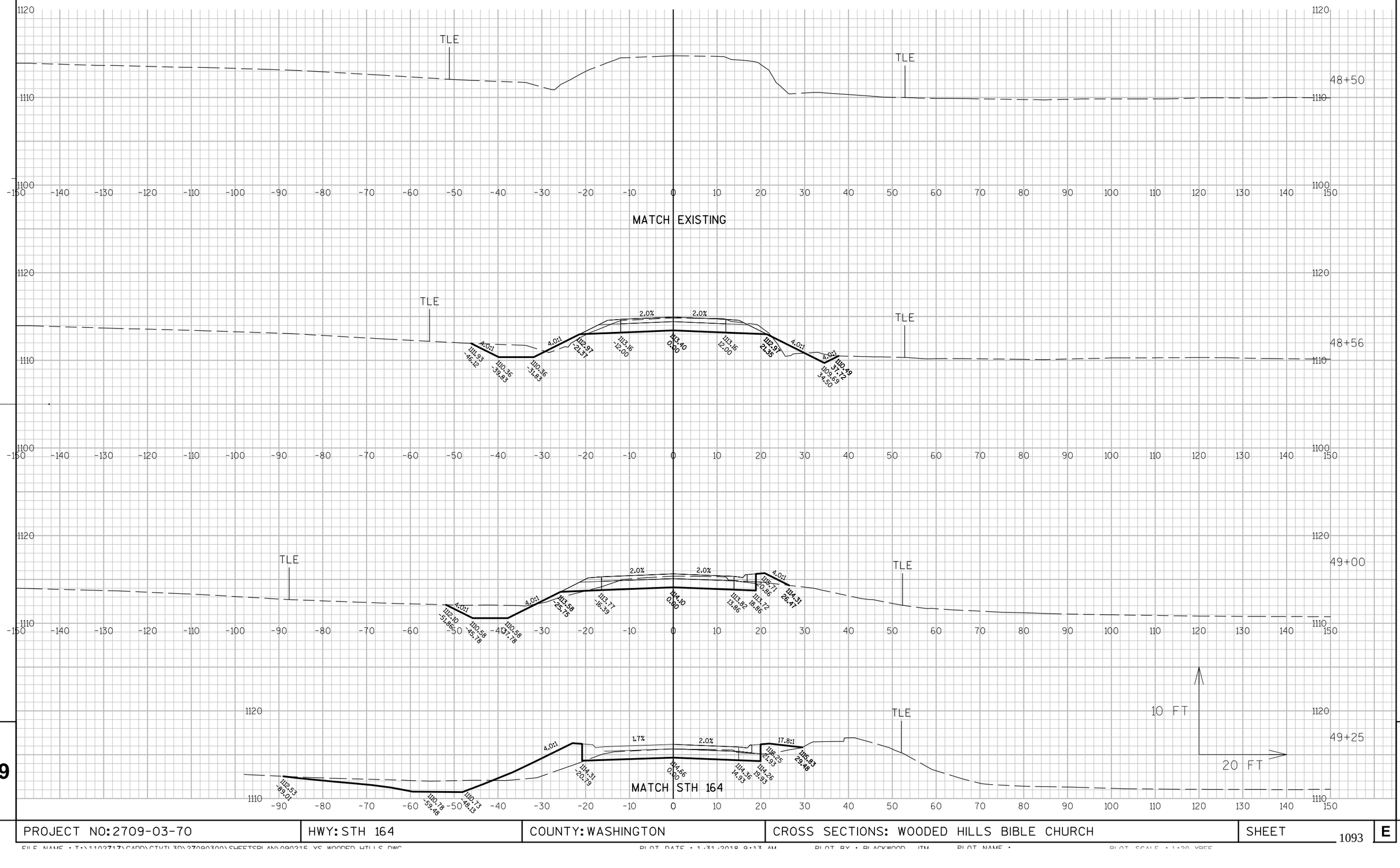
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: MONCHES ROAD	SHEET 1091	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: MONCHES ROAD	SHEET 1092	E

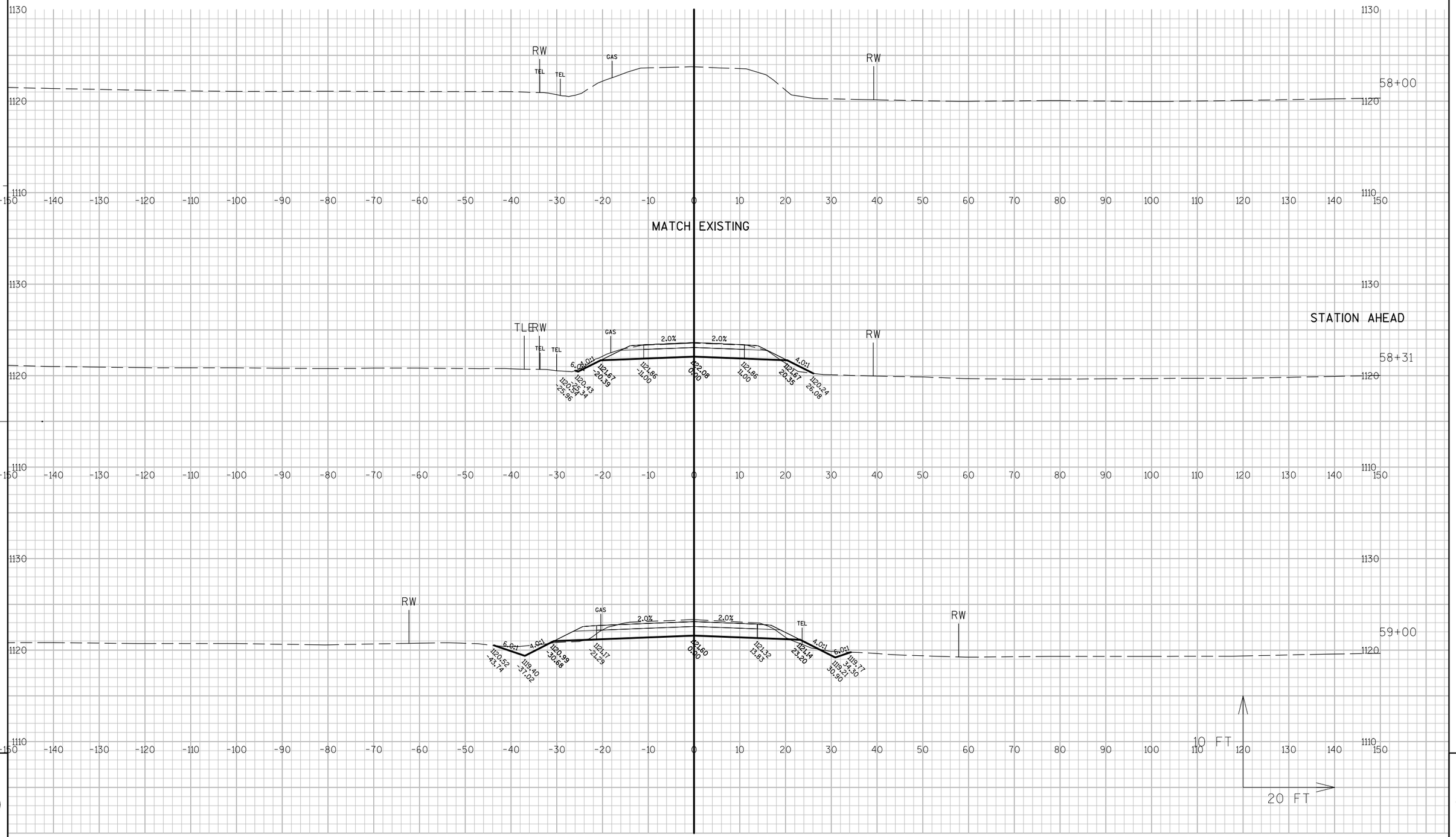
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090214_XS MONCHES.DWG PLOT DATE : 1/31/2018 9:02 AM PLOT BY : BLACKWOOD, JIM PLOT NAME : ---------- PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



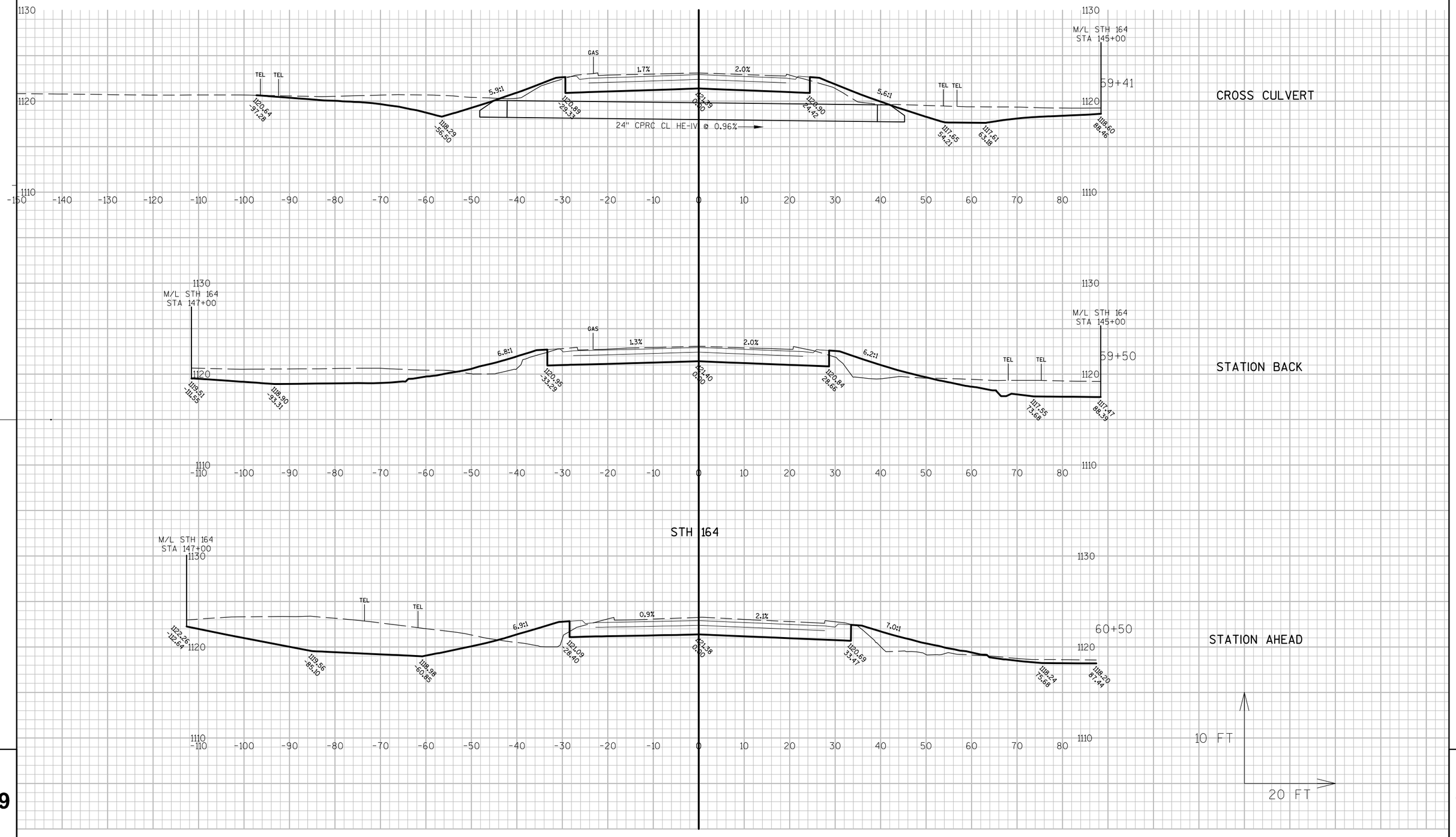
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: WOODED HILLS BIBLE CHURCH	SHEET 1093 E

FILE NAME = T:\1102717\CADD\CIVIL3D\270903001\SHEETSPLAN\090215_XS_WOODED_HILLS.DWG PLOT DATE = 1/31/2018 8:13 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1:20 XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: ELMWOOD ROAD	SHEET 1094	E

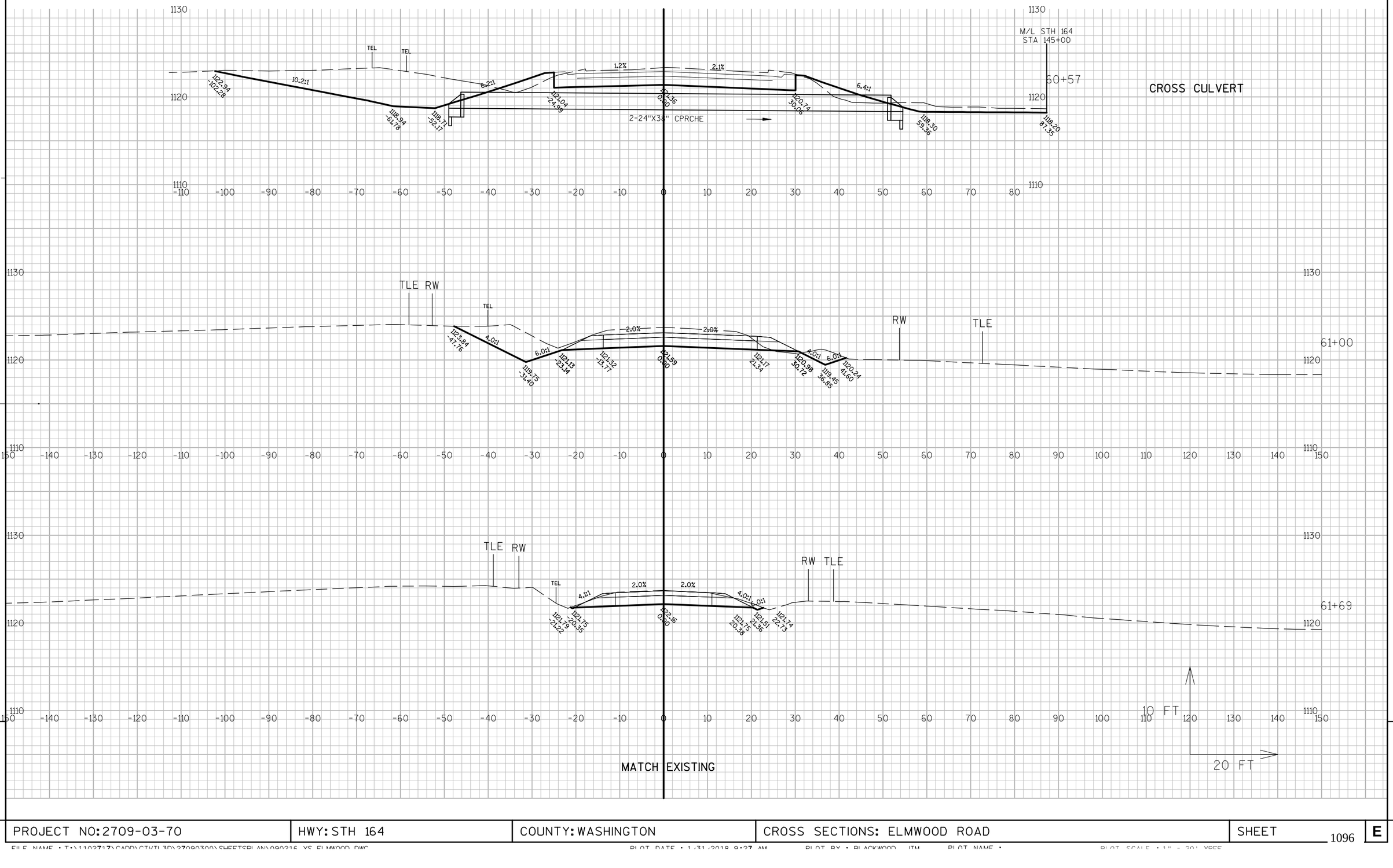
FILE NAME: T:\1102717\CADD\CIVIL 3D\2709030\SHEETSPLAN\090216_XS_ELMWOOD.DWG PLOT DATE: 1/31/2018 8:24 AM PLOT BY: BLACKWOOD, JIM PLOT NAME: PLOT SCALE: 1" = 20' XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: ELMWOOD ROAD	SHEET 1095	E

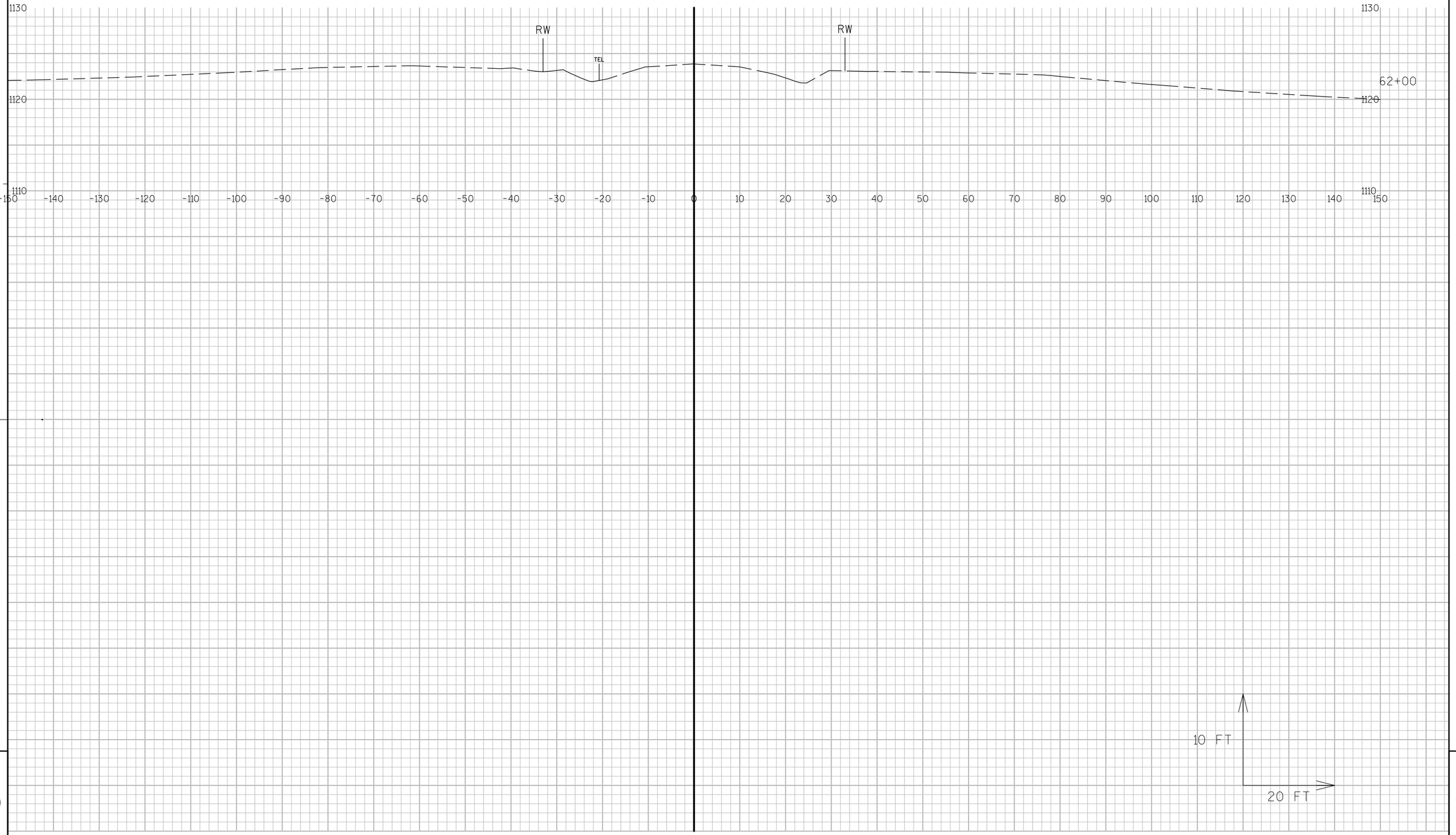
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FILE NAME = T:\1102717\CADD\CIVIL 3D\27080300\SHEETSPLAN\080216_XS_ELMWOOD.DWG PLOT DATE = 1/31/2018 8:24 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1.0000 '/ IN LAYER



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: ELMWOOD ROAD	SHEET 1096	E

FILE NAME = T:\1102717\CADD\CIVIL 3D\270903001\SHEETSPLAN\090216_XS_ELMWOOD.DWG PLOT DATE = 1/31/2018 8:37 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1" = 20' XREF



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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: ELMWOOD ROAD	SHEET 1097	E

68+00

RW GAS RW

MATCH EXISTING

68+42

TLE RW GAS RW TLE

DRIVEWAY LT

4.0:1 10.0:1 2.0% 2.0% 0.1%

1132.14 -33.59 | 1130.40 -26.64 | 1130.58 -24.79 | 1130.85 -11.42 | 1131.08 0.00 | 1130.85 11.50 | 1130.58 24.87 | 1132.30 35.20

DRIVEWAY RT

69+00

TLE RW GAS RW

10.0:1 4.0:1 2.0% 2.0% 10.0:1 4.0:1

1130.92 -32.58 | 1130.71 -31.34 | 1130.71 -29.29 | 1130.98 -16.90 | 1131.32 0.00 | 1131.05 13.60 | 1130.78 26.97 | 1130.79 30.86 | 1131.01 33.33

69+25

RW GAS RW

7.0:1 1.4% 2.0% 8.9:1 4.7:1

1131.03 -36.89 | 1131.42 -21.57 | 1131.43 0.00 | 1131.14 14.57 | 1130.87 21.94 | 1130.20 35.46 | 1130.97 38.76

MATCH STH 164

10 FT

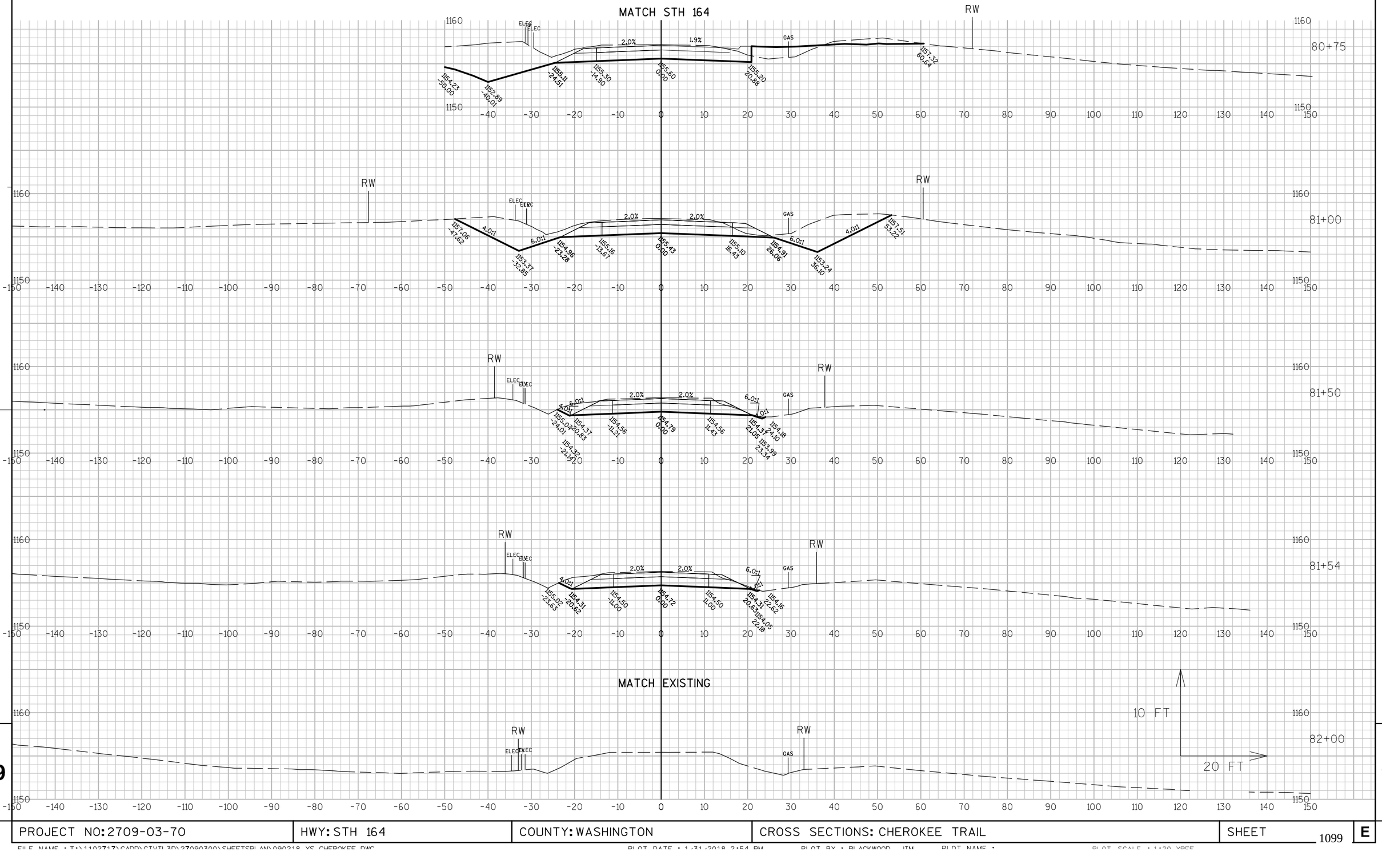
20 FT

9

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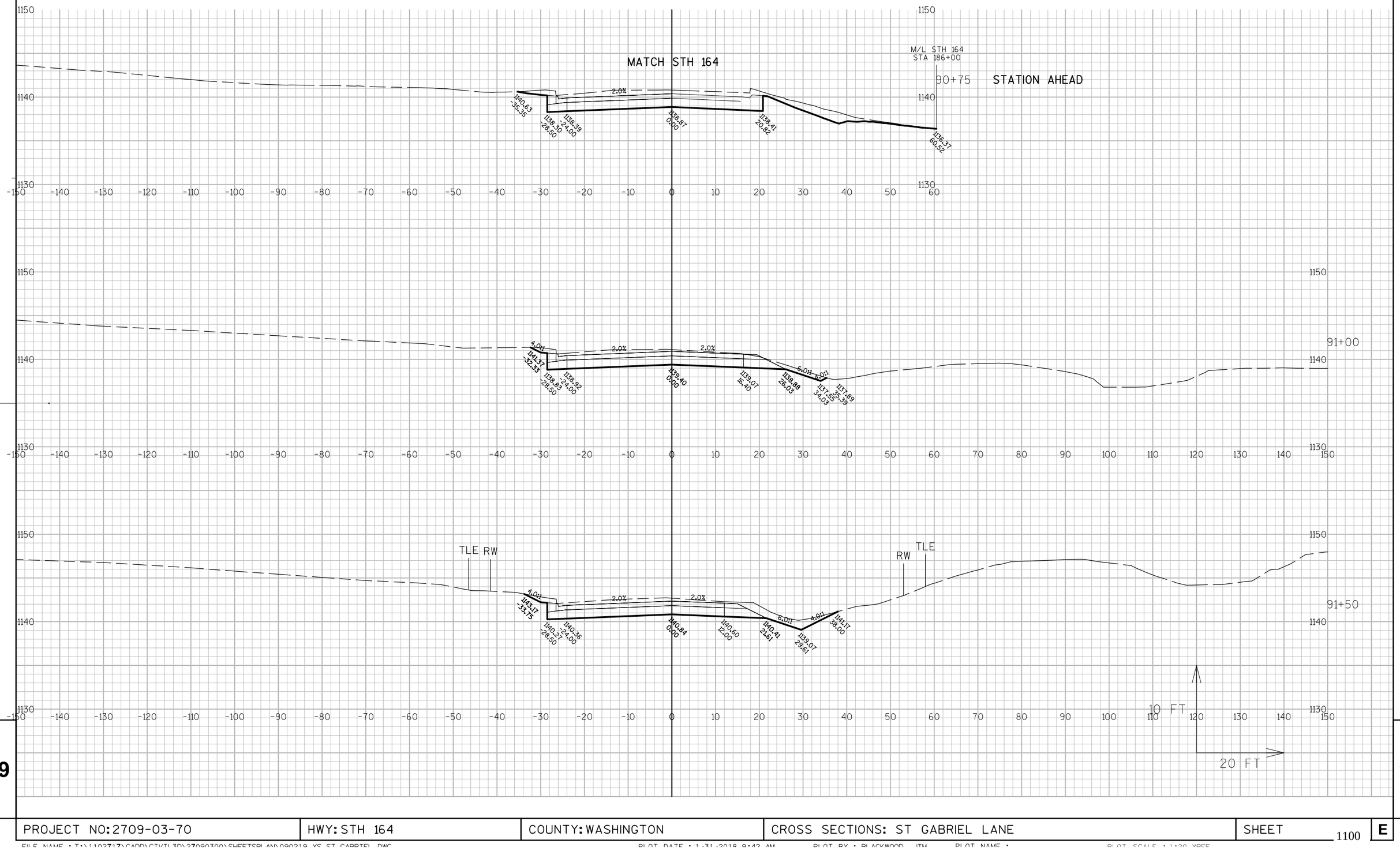
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: TUCKAWAY LANE	SHEET 1098	E

MATCH STH 164



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: CHEROKEE TRAIL	SHEET 1099	E

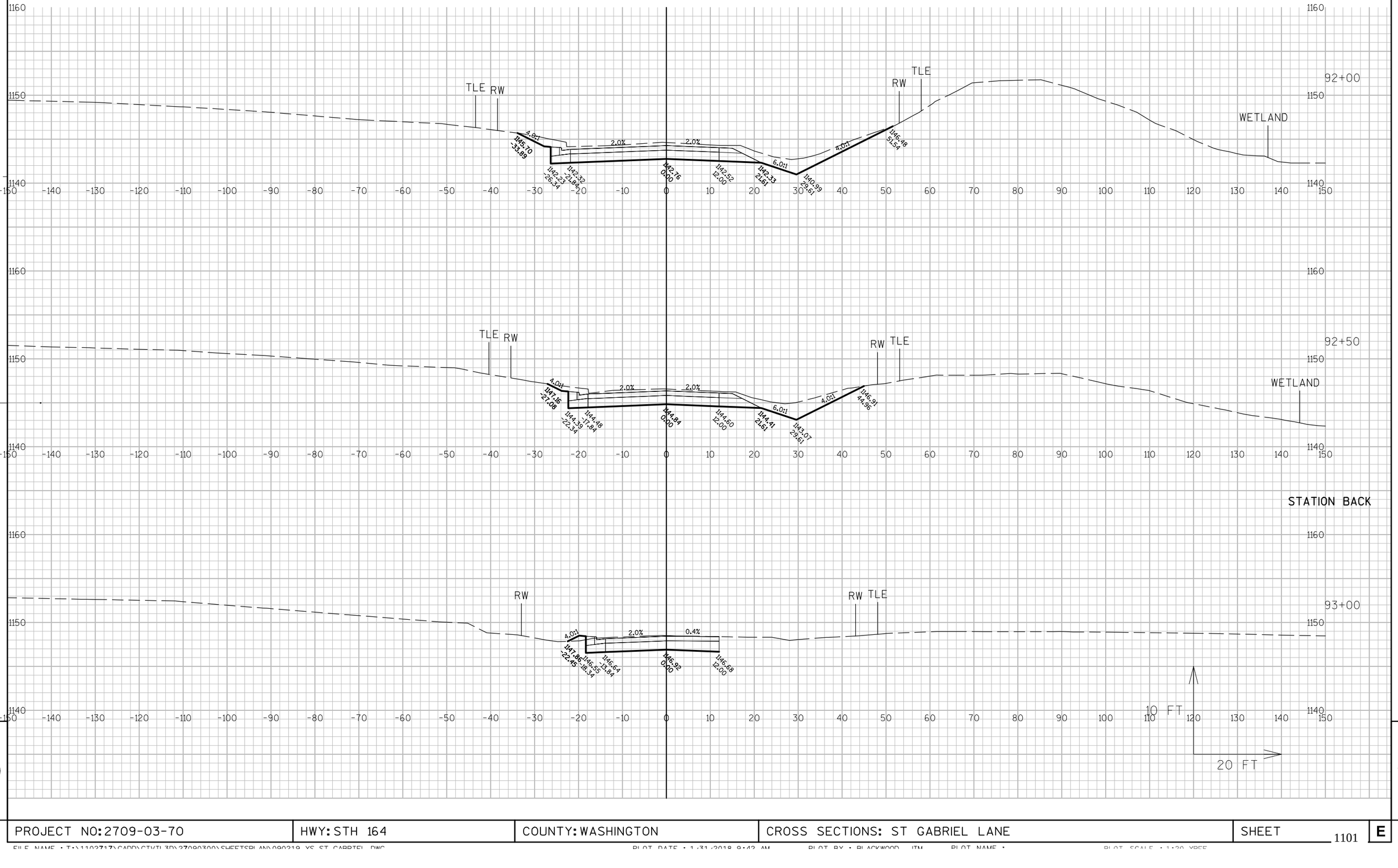
FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090218_XS_CHEROKEE.DWG PLOT DATE = 1/31/2018 2:54 PM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1:20 XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: ST GABRIEL LANE	SHEET 1100 E

FILE NAME: T:\1102717\CADD\CIVIL 3D\27090300\SHEETSPLAN\090219_XS_ST_GABRIEL.DWG PLOT DATE: 1/31/2018 8:42 AM PLOT BY: BLACKWOOD, JIM PLOT NAME: PLOT SCALE: 1:20 XREF

9 9

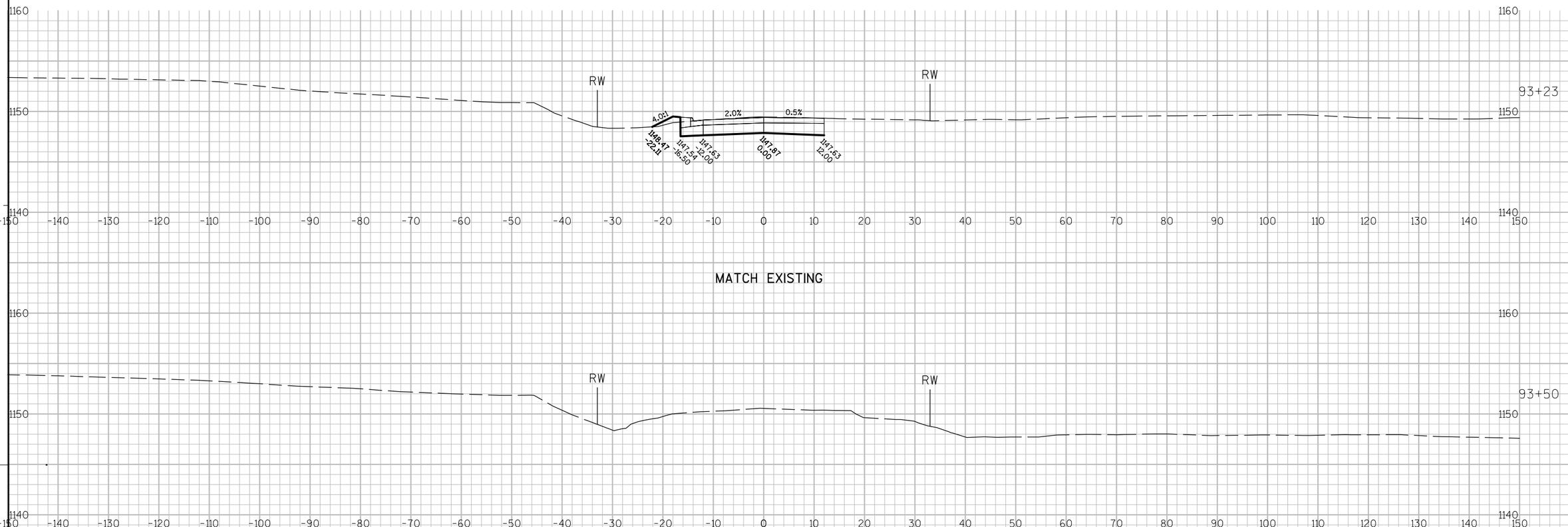


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: ST GABRIEL LANE	SHEET 1101	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090219_XS_ST_GABRIEL.DWG PLOT DATE = 1/31/2019 8:43 AM PLOT BY = BLACKWOOD, JTM PLOT NAME = PLOT SCALE = 1:20 XREF

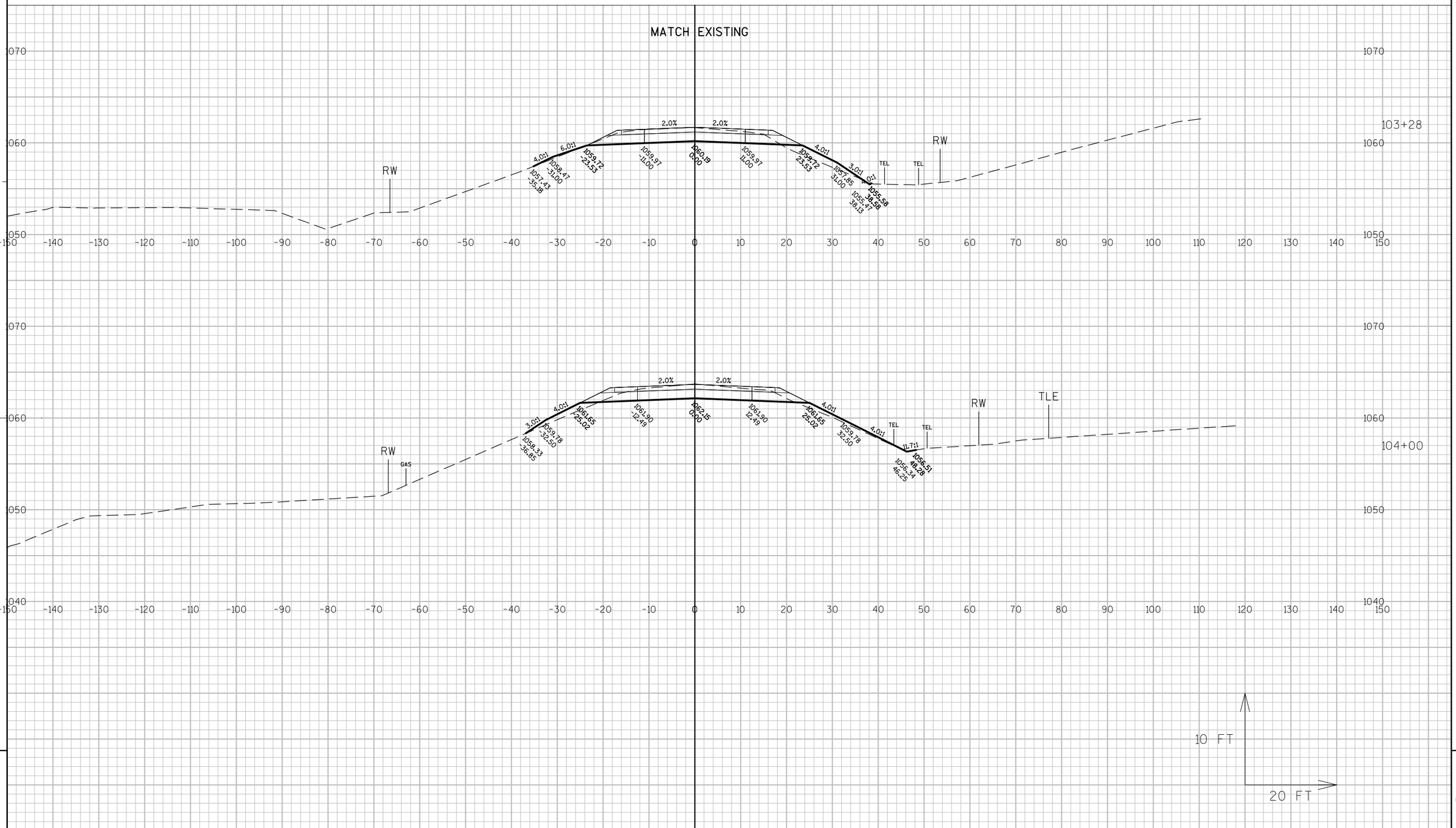


9

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: ST GABRIEL LANE	SHEET 1102	E

FILE NAME = T:\1102717\CADD\CIVIL 3D\27090300\SHEETSPLAN\090219_XS_ST_GABRIEL.DWG PLOT DATE = 1/31/2018 8:43 AM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1:20 XREF



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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: HUBERTUS ROAD	SHEET 1103 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090-00\SHEETSPLAN\09022_XS_HUBERTUS.DWG PLOT DATE : 1/31/201 10:18 AM PLOT BY : BLACKWOOD, JTM PLOT NAME : ---------- PLOT SCALE : 1" = 20' XREF

DRIVEWAY RT
NOT FOR YARDAGE

104+37

105+00

10 FT

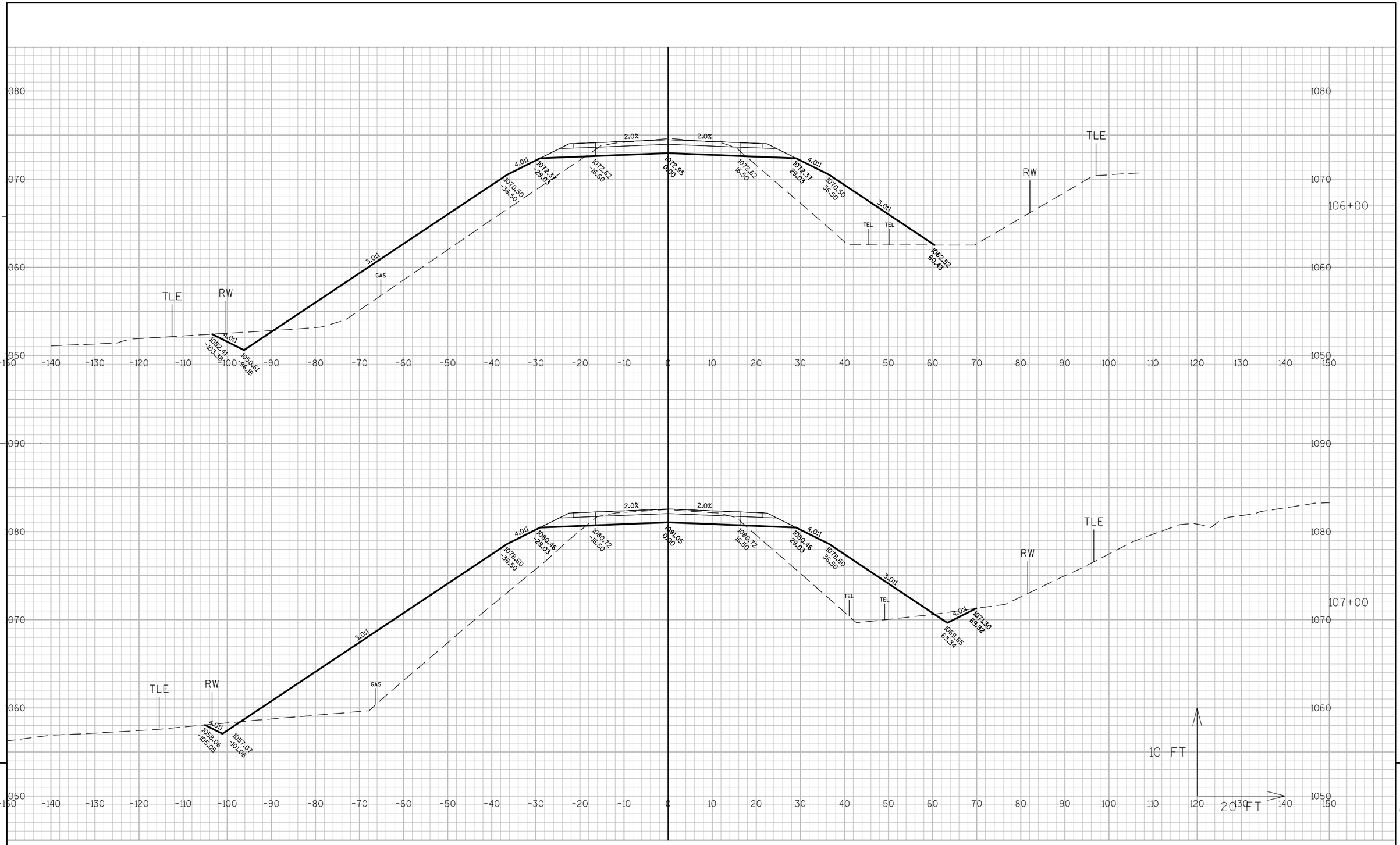
20 FT

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: HUBERTUS ROAD	SHEET 1104 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090_00\SHEETSPLAN\09022_XS_HUBERTUS.DWG PLOT DATE : 1/31/201 10:20 AM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1" = 20' XREF

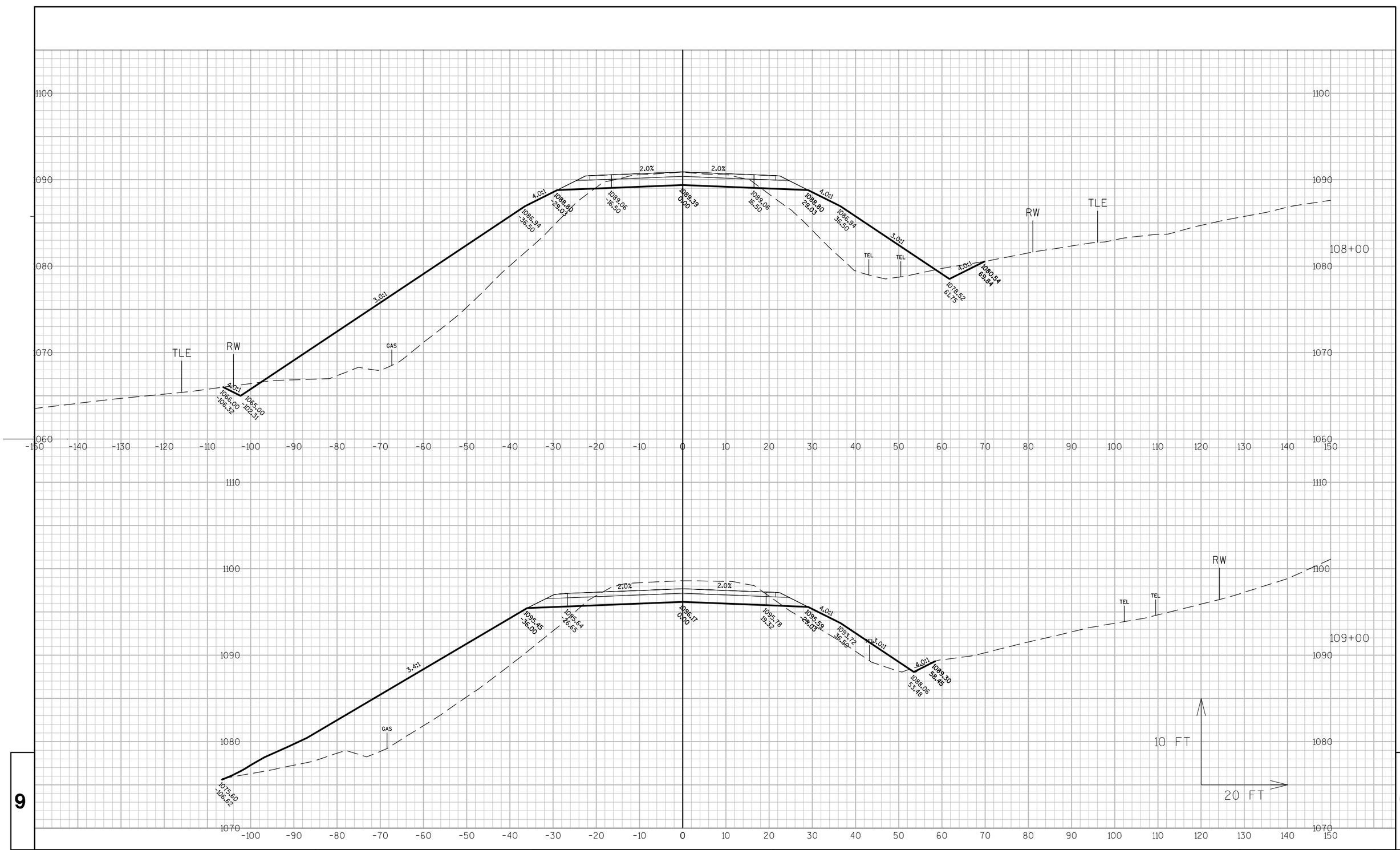
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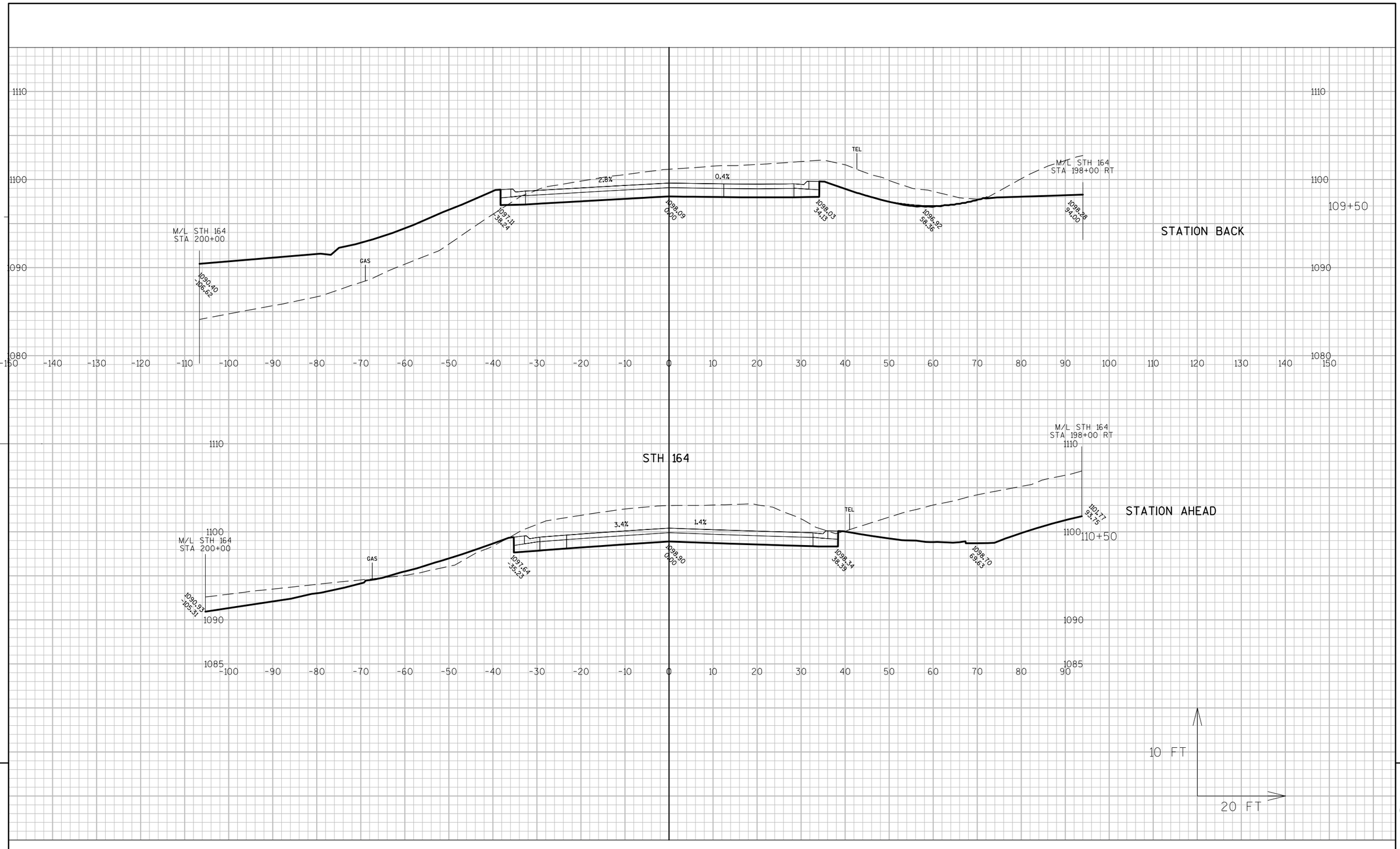
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: HUBERTUS ROAD	SHEET 1105 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090_00\SHEETSPLAN\09022_XS_HUBERTUS.DWG PLOT DATE : 1/31/201 10:20 AM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1" = 20' XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: HUBERTUS ROAD	SHEET 1106 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090_00\SHEETSPLAN\09022_XS_HUBERTUS.DWG PLOT DATE : 1/31/201 10:20 AM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1" = 20' XREF

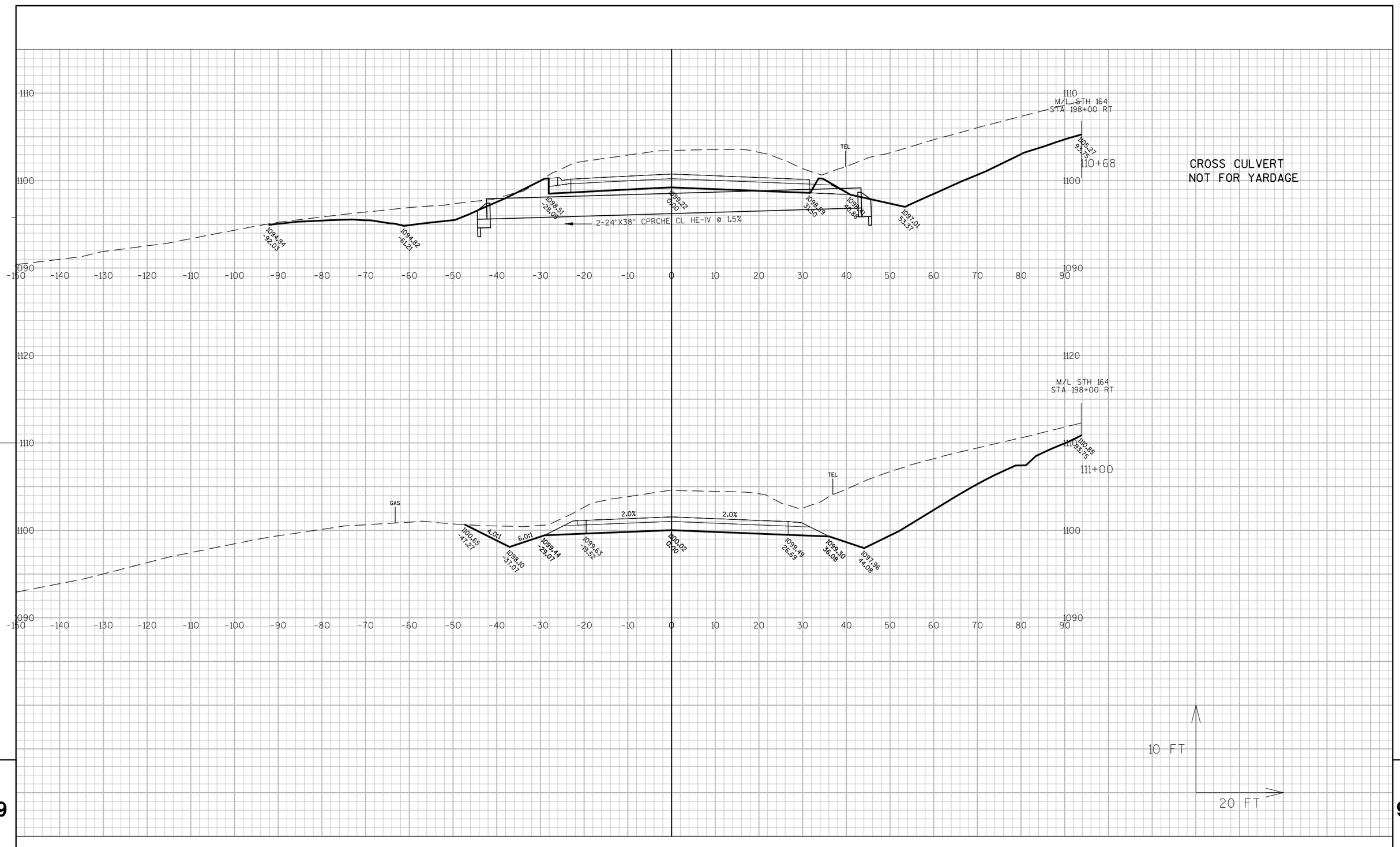


9

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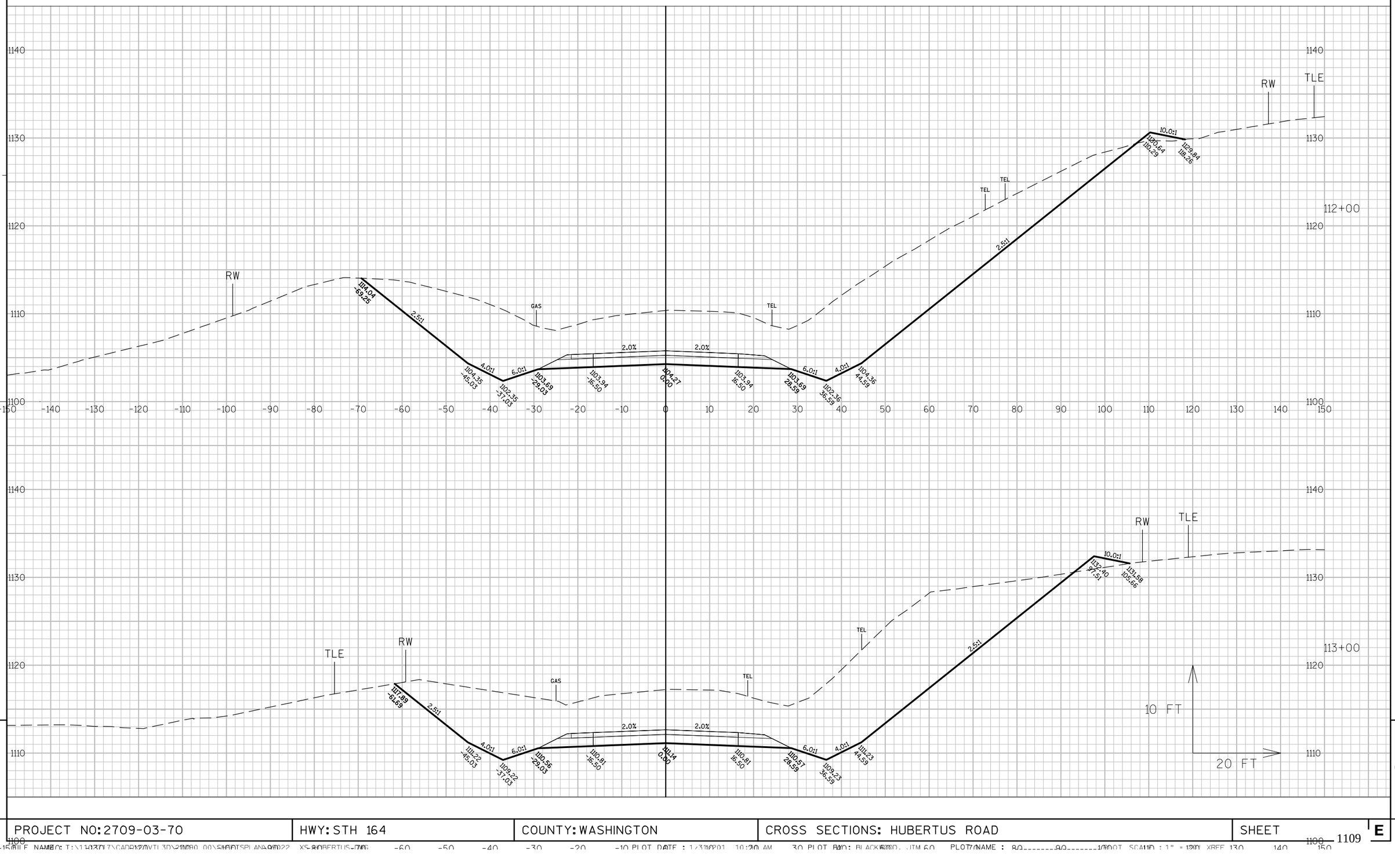
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: HUBERTUS ROAD	SHEET 1107 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090-00\SHEETSPLAN\09022_XS_HUBERTUS.DWG PLOT DATE : 1/31/201 10:26 AM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1" = 20' XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: HUBERTUS ROAD	SHEET 1108 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090_00\SHEETSPLAN\09022_XS_HUBERTUS.DWG PLOT DATE : 1/31/201 10:29 AM PLOT BY : BLACKWOOD, JTM PLOT NAME : ---------- PLOT SCALE : 1" = 20' XREF

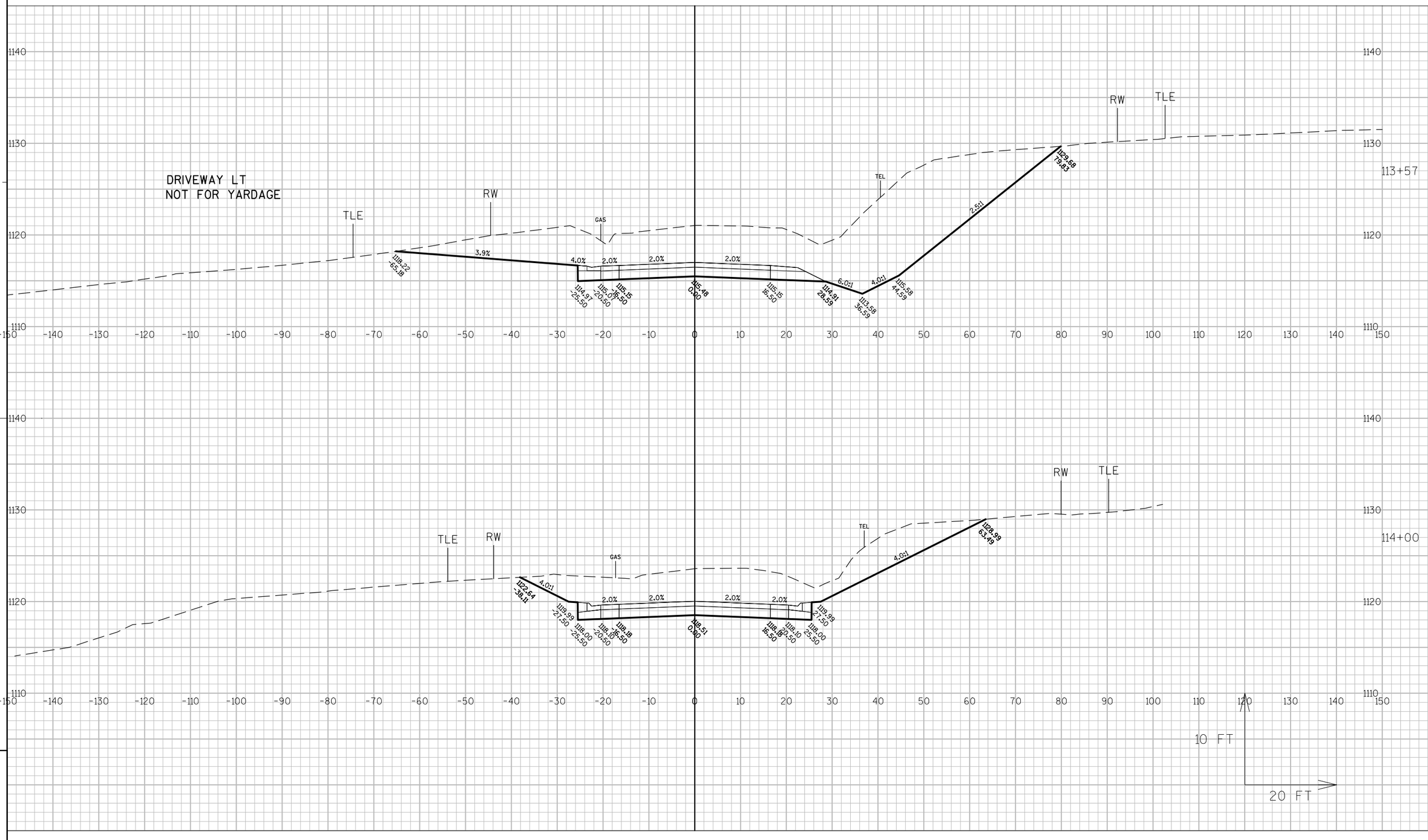


PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: HUBERTUS ROAD	SHEET 1109 E

FILE NAME: T:\1137\CADD\CIVIL3D\2709-03-70\SHEETS\PLAN\XS-HUBERTUS-TMP.dwg PLOT DATE: 1/31/2021 10:20 AM PLOT BY: BLACKWOOD, JTM 60 PLOT NAME: PLOT SCALE: 1" = 120' XREF

9 9

DRIVEWAY LT
NOT FOR YARDAGE



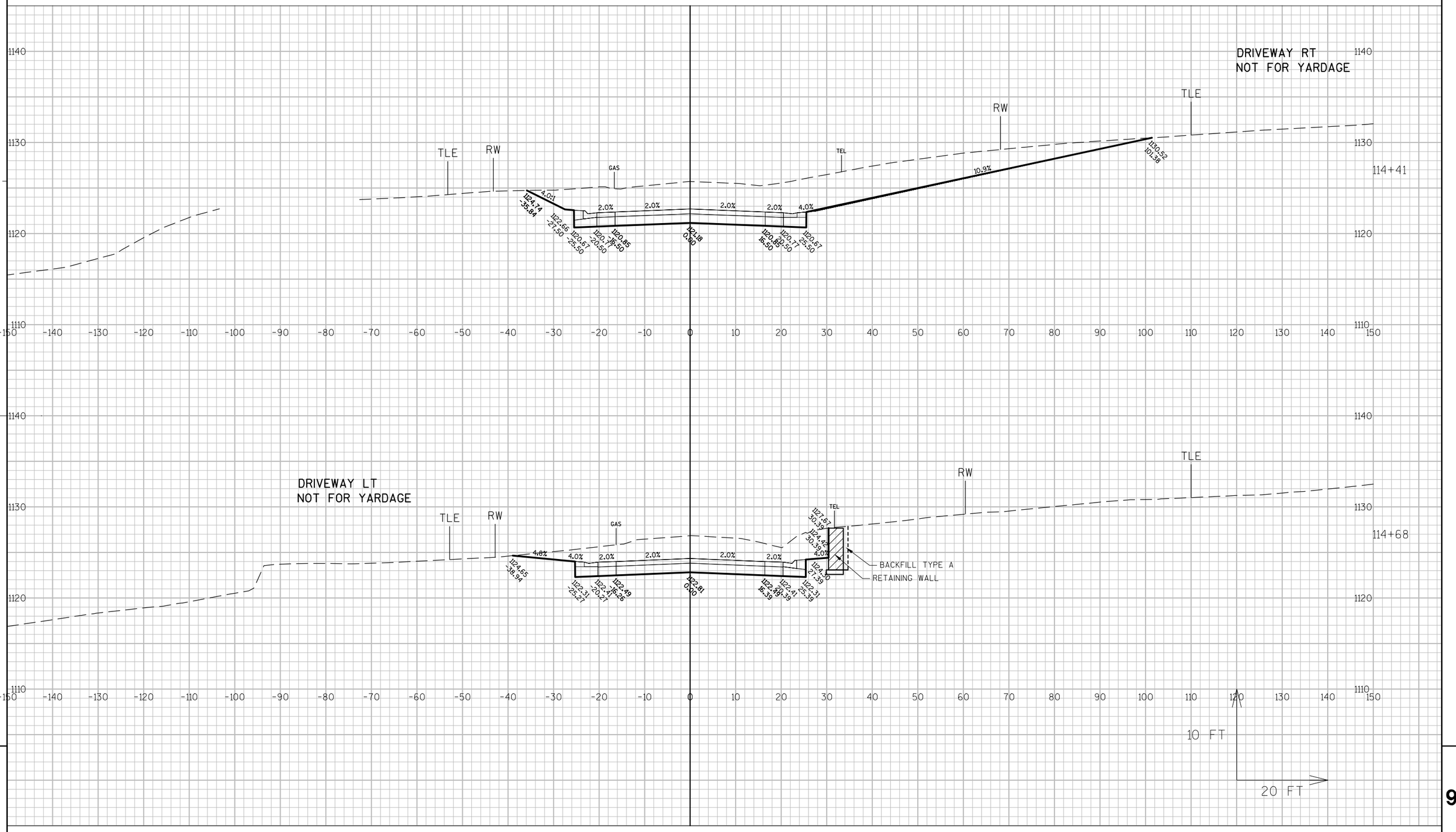
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: HUBERTUS ROAD	SHEET 1110 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090_00\SHEETSPLAN\09022_XS_HUBERTUS.DWG PLOT DATE : 1/31/201 10:30 AM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1" = 20' XREF

DRIVEWAY RT
NOT FOR YARDAGE



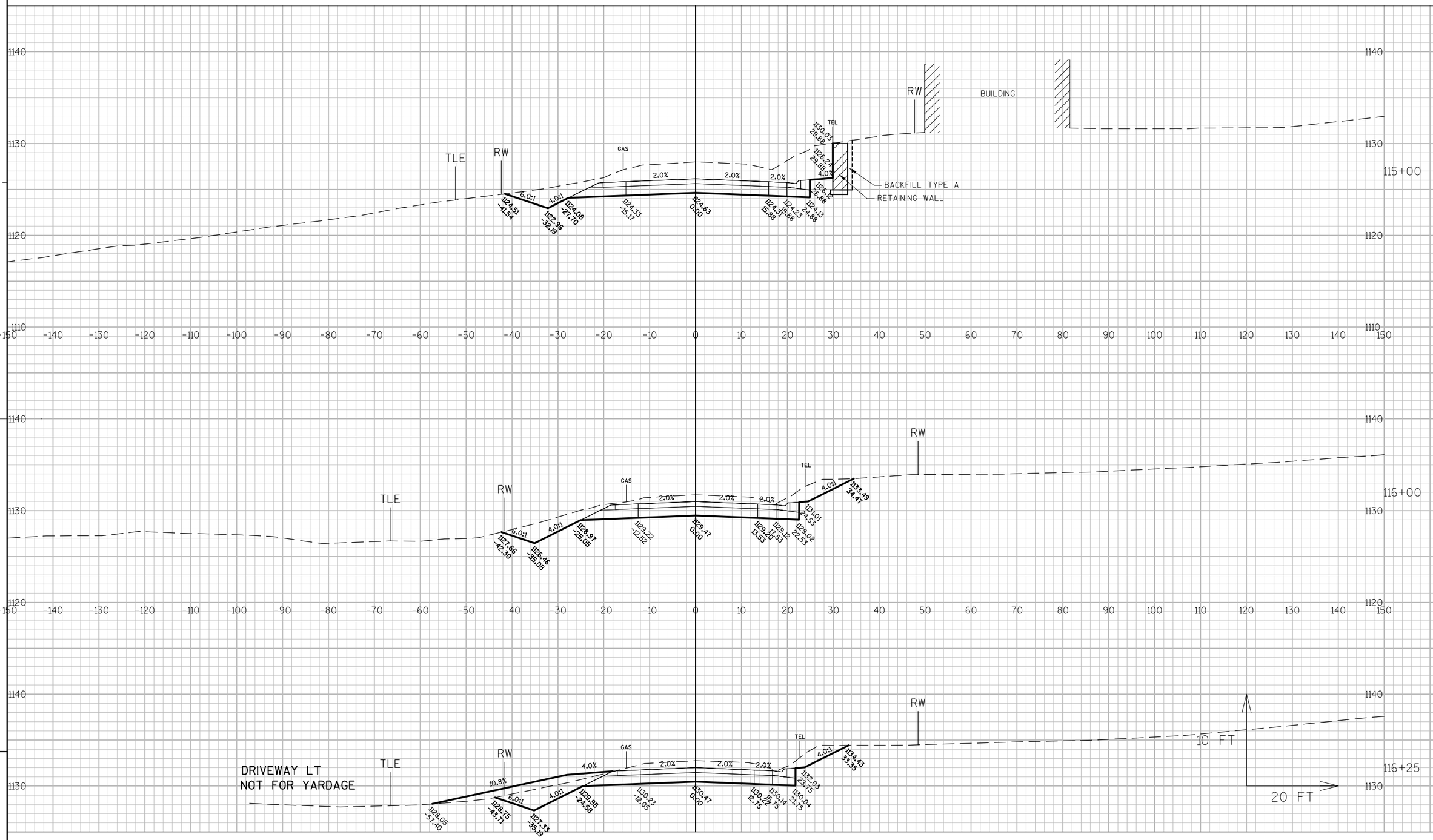
DRIVEWAY LT
NOT FOR YARDAGE

9

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: HUBERTUS ROAD	SHEET 1111 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090_00\SHEETSPLAN\09022_XS_HUBERTUS.DWG PLOT DATE : 1/31/201 10:31 AM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1" = 20' XREF

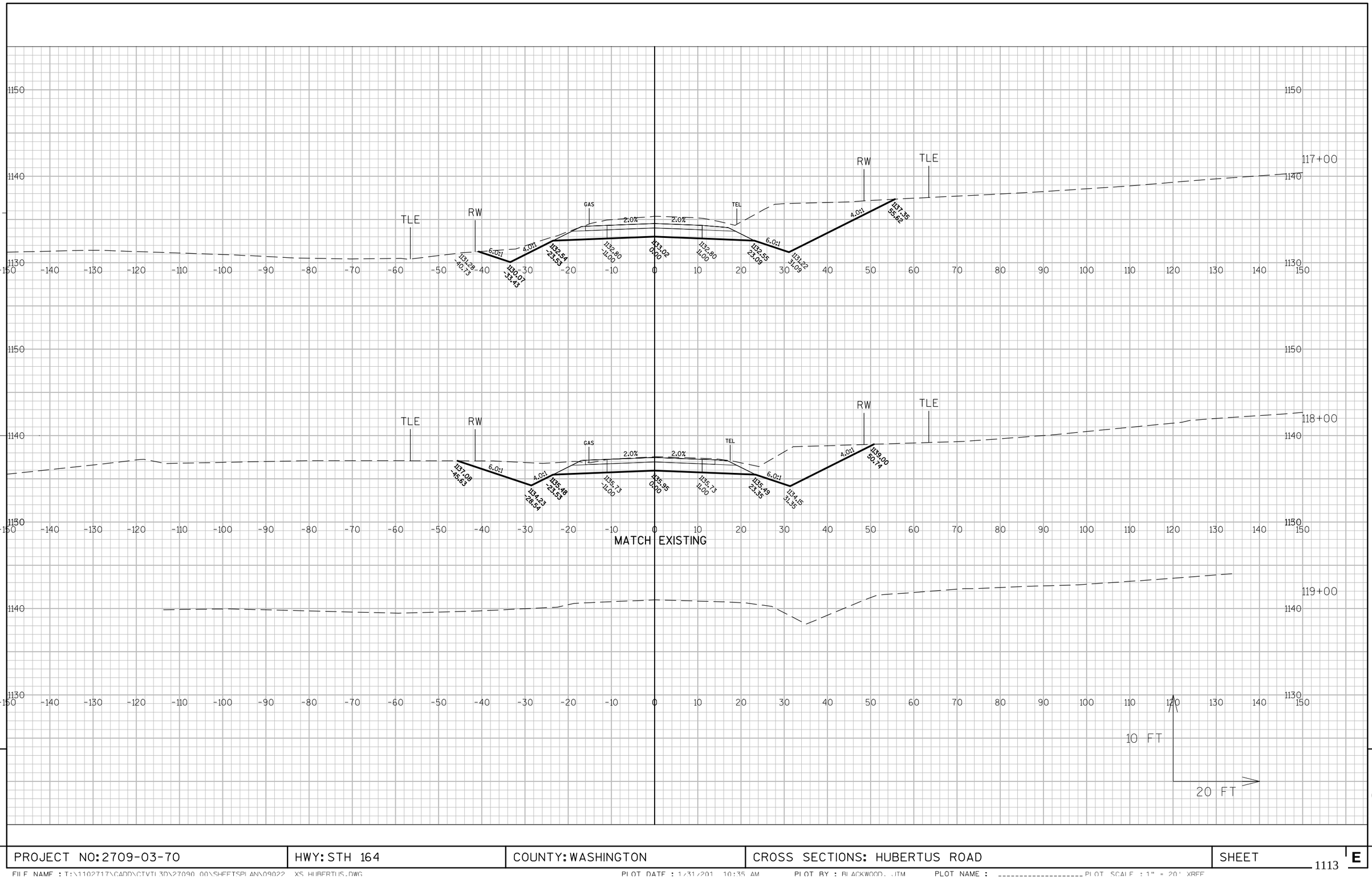


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: HUBERTUS ROAD	SHEET 1112 E

FILE NAME: I:\1130\17\CADD\20VTL3D\2709000\SHEETS\PLAN\09022_XS_HUBERTUS_TAG.DGN PLOT DATE: 1/3/2020 10:30 AM PLOT BY: BLACKWOOD, JUTM60 PLOT NAME: 80--------90--------100 PLOT SCALE: 1" = 120' XREF



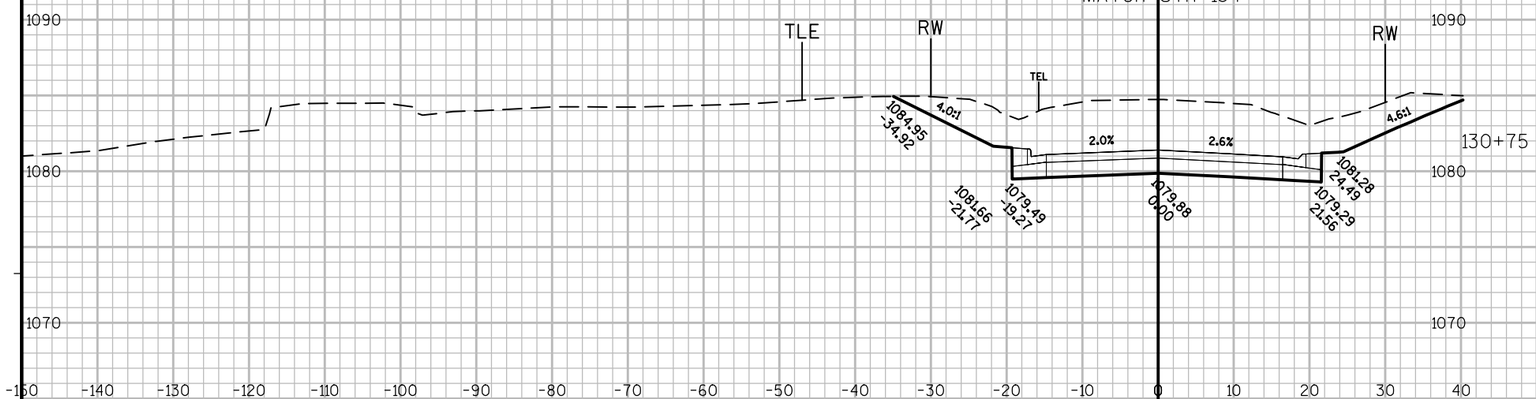
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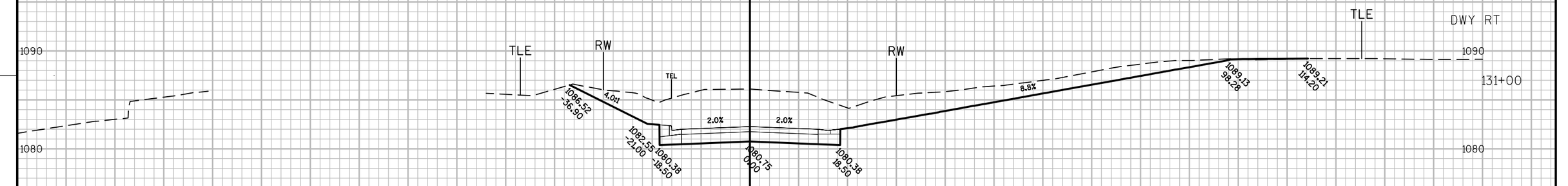
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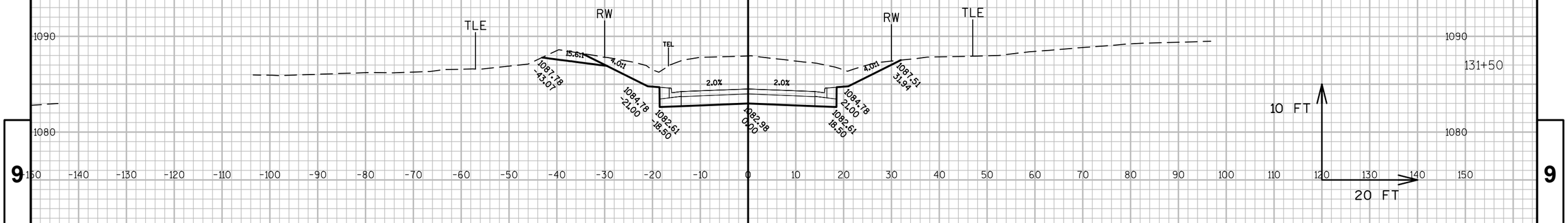
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: HUBERTUS ROAD	SHEET 1113 E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090_00\SHEETSPLAN\09022_XS_HUBERTUS.DWG PLOT DATE : 1/31/201 10:35 AM PLOT BY : BLACKWOOD, JTM PLOT NAME : _____ PLOT SCALE : 1" = 20' XREF

MATCH STH 164







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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: GOLDEN DRIVE	SHEET 1114	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090221_XS GOLDEN.DWG PLOT DATE : 1/31/2018 10:39 AM PLOT BY : BLACKWOOD, JIM PLOT NAME :

WISDOT/CADDS SHEET 49

DWY LT
NOT FOR YARDAGE

131+65

TLE RW TEL RW TLE

6.5% 2.0% 2.0% 4.0%

1087.11 -50.00 | 1083.40 -16.50 | 1083.77 0.00 | 1083.40 18.50 | 1085.57 21.00 | 1088.12 31.20

1090 1080 1100

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

132+00

TLE RW TEL RW TLE

4.0:1 2.0% 2.0% 4.0:1

1088.86 -23.85 | 1087.65 -21.00 | 1085.48 -16.50 | 1085.85 0.00 | 1085.48 16.50 | 1087.65 21.00 | 1088.42 24.11

1090 1080

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

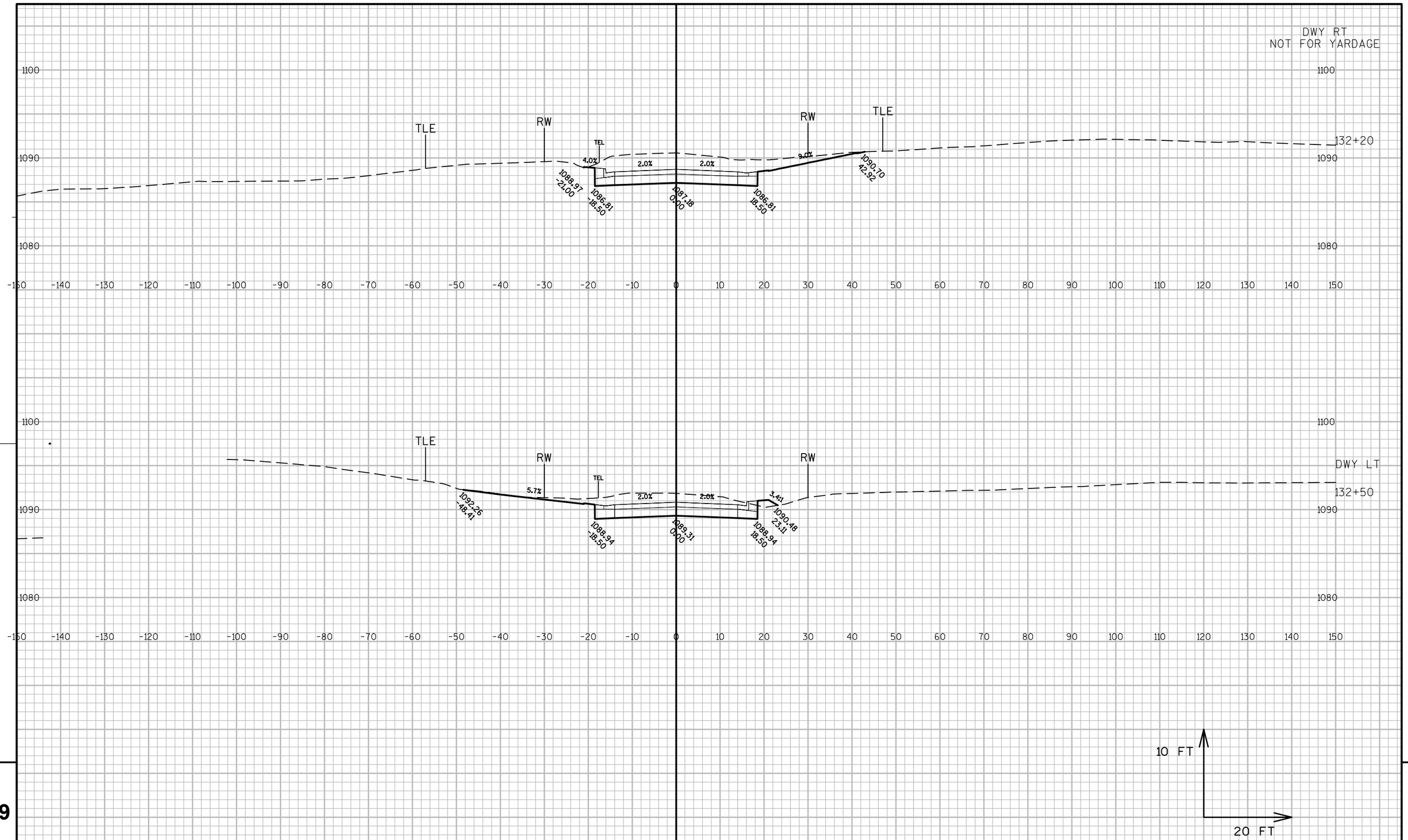
10 FT

20 FT

9 9

PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: GOLDEN DRIVE	SHEET 1115	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090221_XS GOLDEN.DWG PLOT DATE : 1/31/2018 10:39 AM PLOT BY : BLACKWOOD, JIM PLOT NAME :

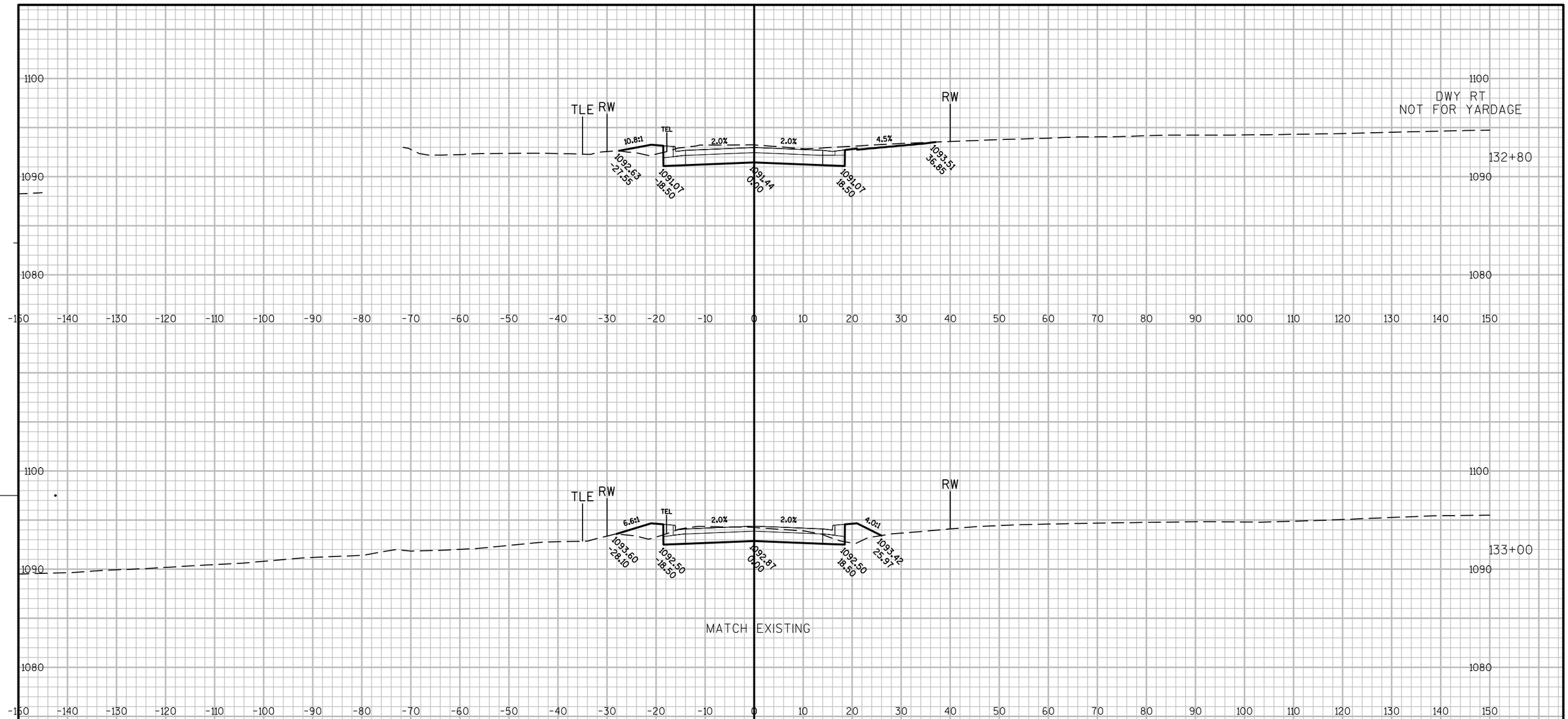


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: GOLDEN DRIVE	SHEET 1116	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090221_XS GOLDEN.DWG PLOT DATE : 1/31/2018 10:39 AM PLOT BY : BLACKWOOD, JIM PLOT NAME :



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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: GOLDEN DRIVE	SHEET 1117	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090221_XS GOLDEN.DWG PLOT DATE : 1/31/2018 10:39 AM PLOT BY : BLACKWOOD, JIM PLOT NAME :

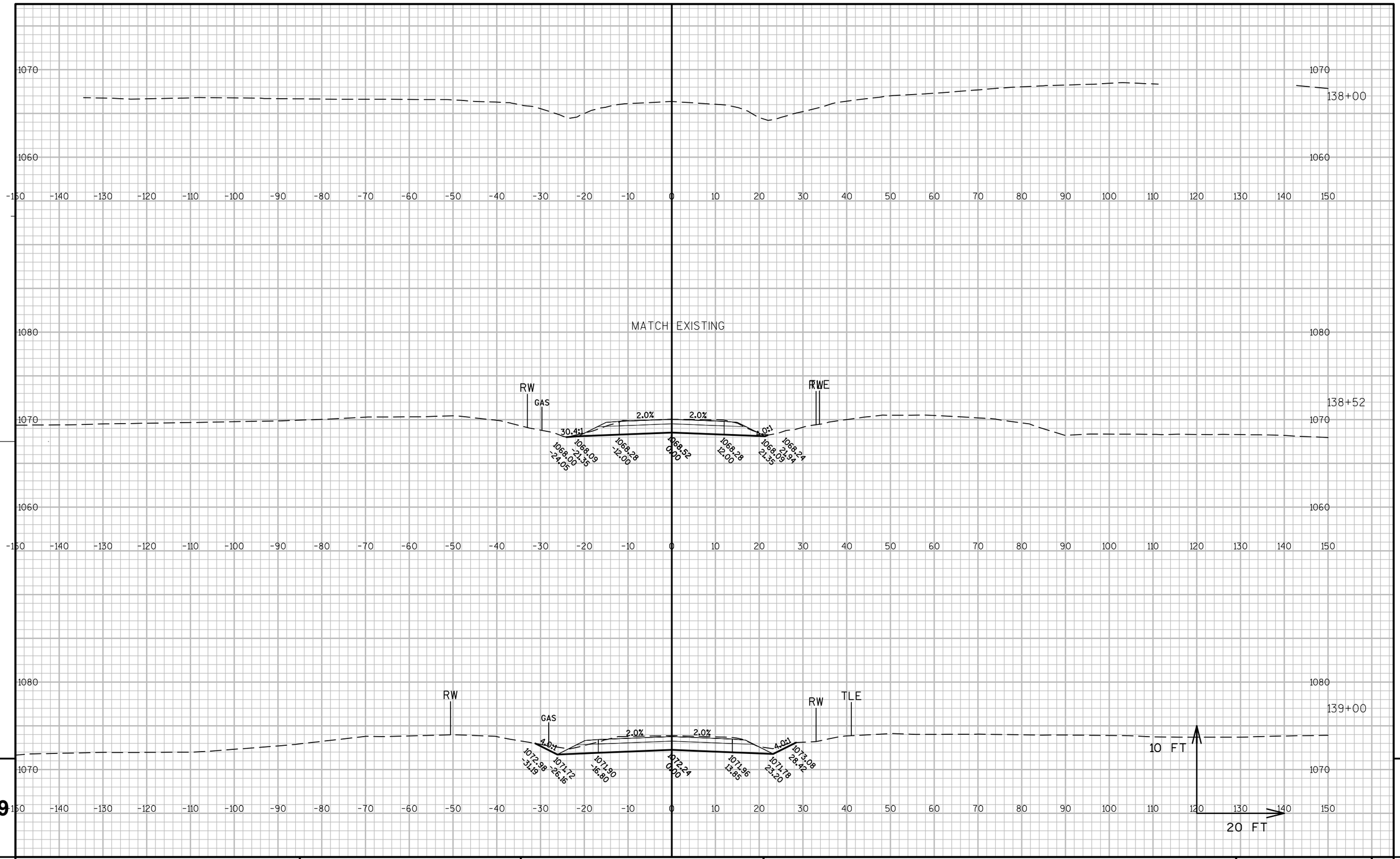
WISDOT/CADDS SHEET 49



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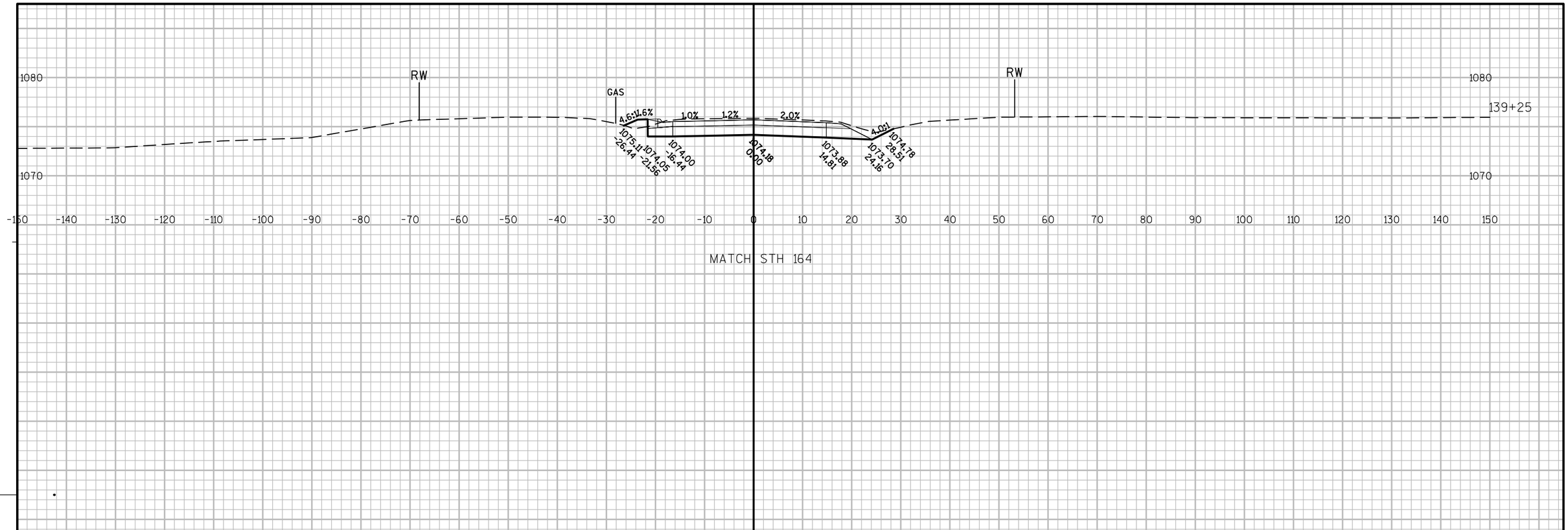
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: GOLDEN DRIVE	SHEET 1118	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: LOCHVIEW ROAD	SHEET 1119	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090222_XS LOCHVIEW.DWG PLOT DATE : 1/31/2018 10:45 AM PLOT BY : BLACKWOOD, JIM PLOT NAME :

WISDOT/CADDS SHEET 49



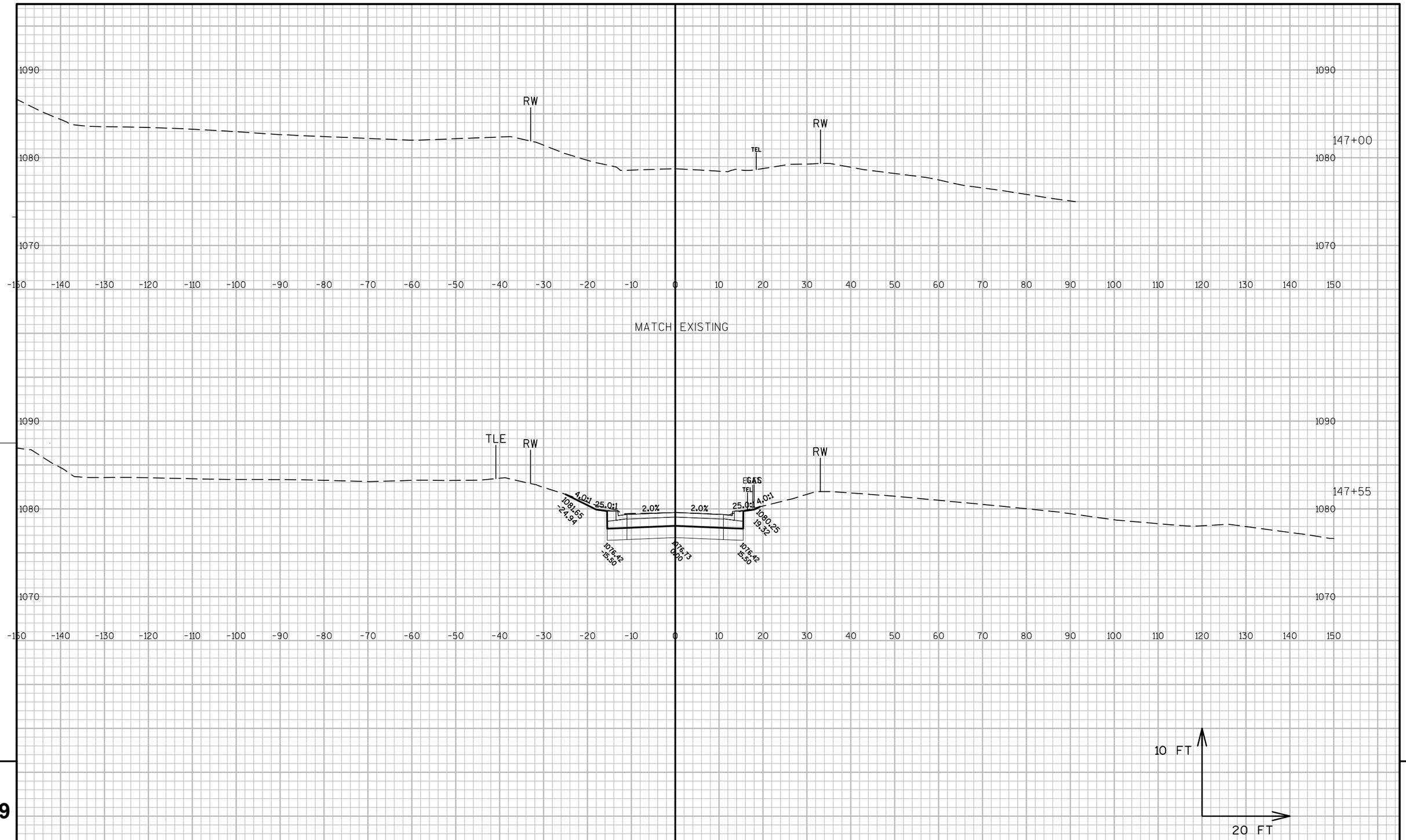
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: LOCHVIEW ROAD	SHEET 1120	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090222_XS LOCHVIEW.DWG PLOT DATE : 1/31/2018 10:45 AM PLOT BY : BLACKWOOD, JIM PLOT NAME :

WISDOT/CADDS SHEET 49

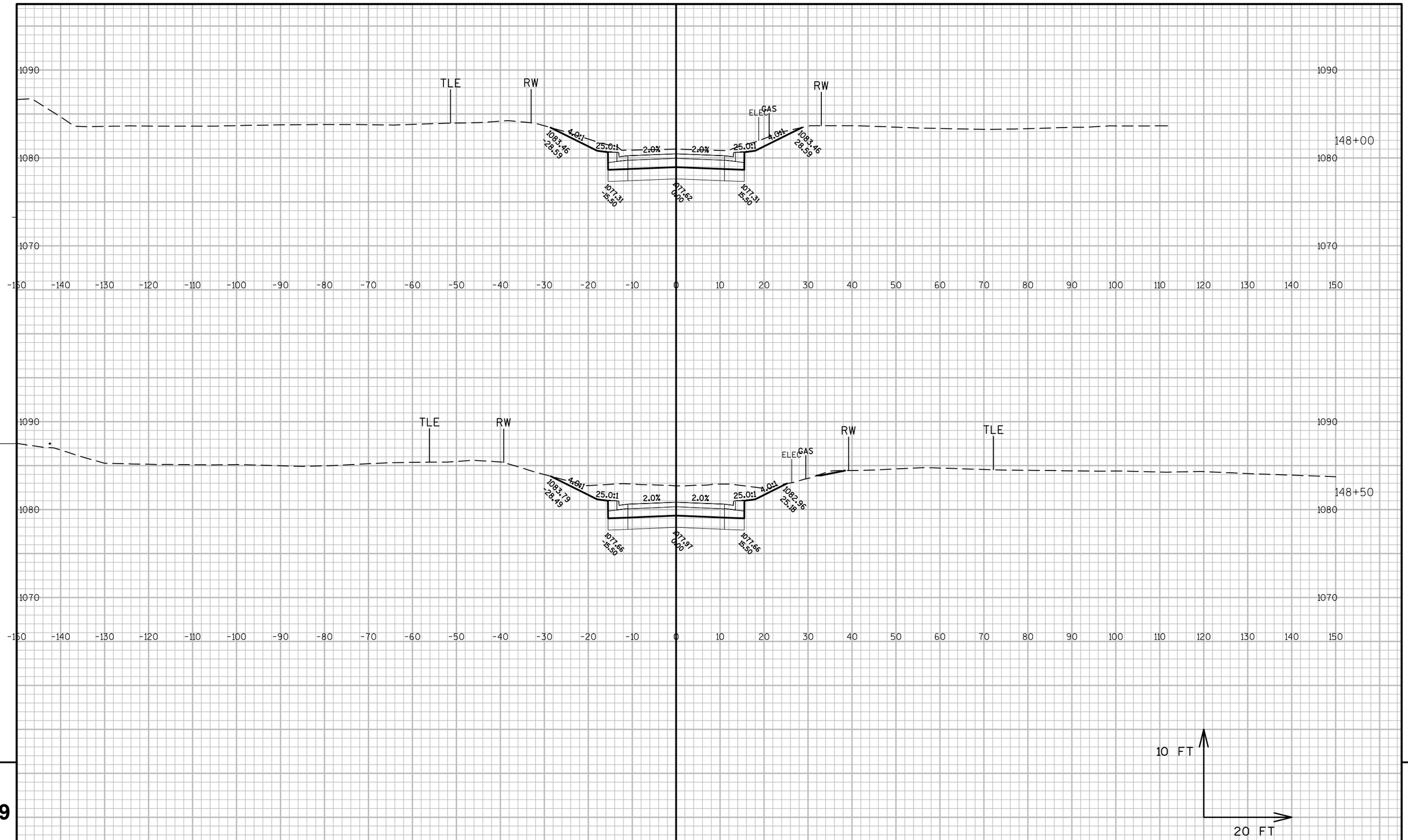


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: ADAHI COURT	SHEET 1121	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090223_XS ADAHI.DWG PLOT DATE : 1/31/2018 10:53 AM PLOT BY : BLACKWOOD, JIM PLOT NAME :



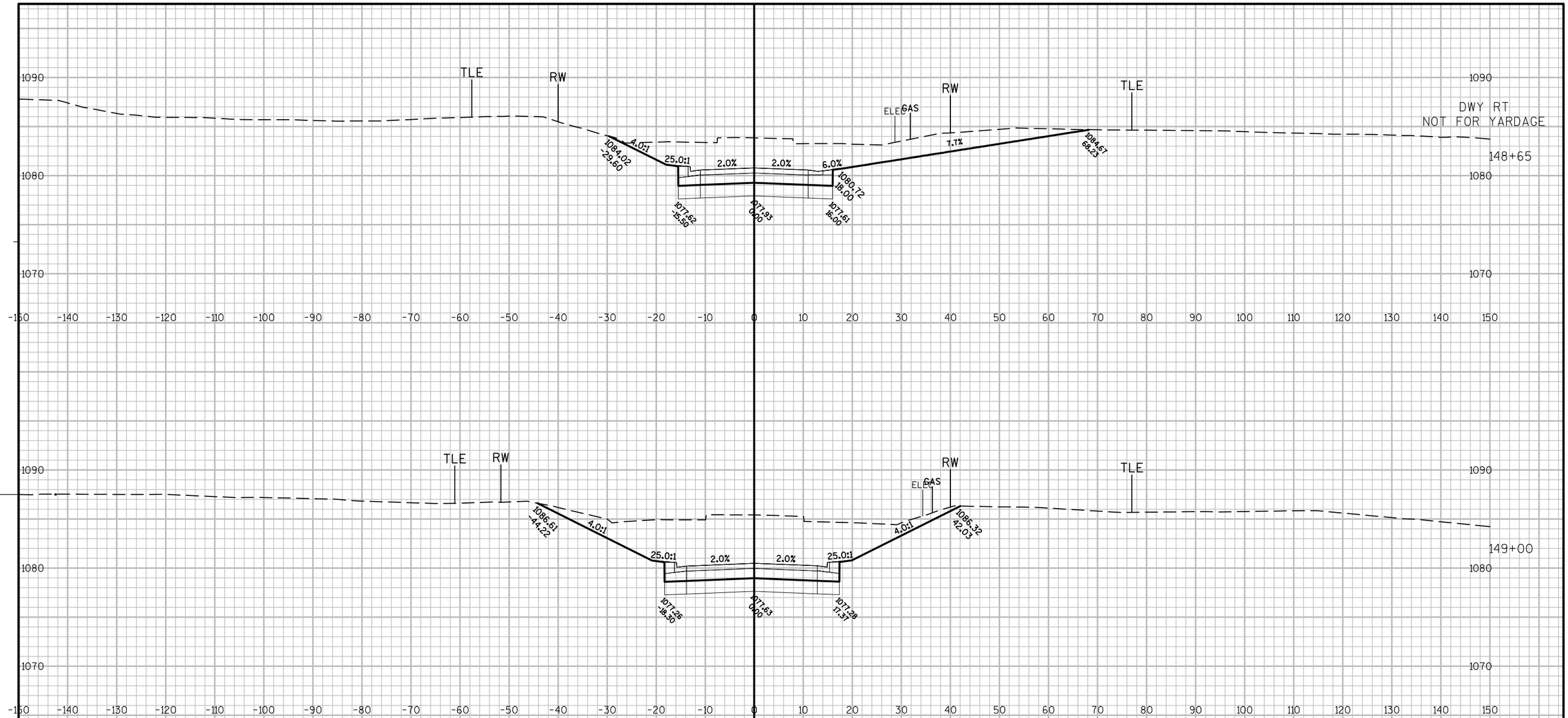
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: ADAHI COURT	SHEET 1122	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090223_XS ADAHI.DWG PLOT DATE : 1/31/2018 10:54 AM PLOT BY : BLACKWOOD, JIM PLOT NAME :

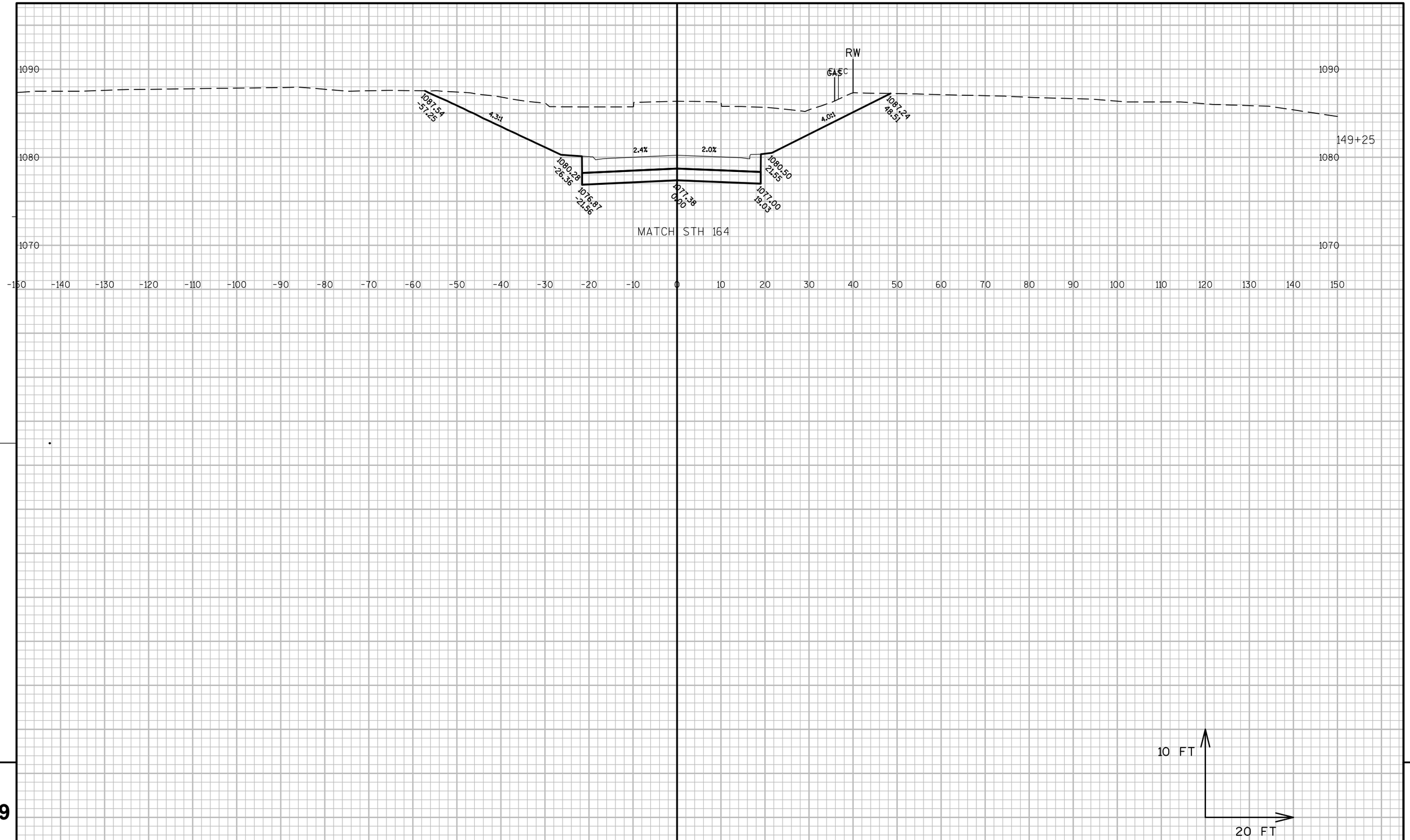
WISDOT/CADDS SHEET 49



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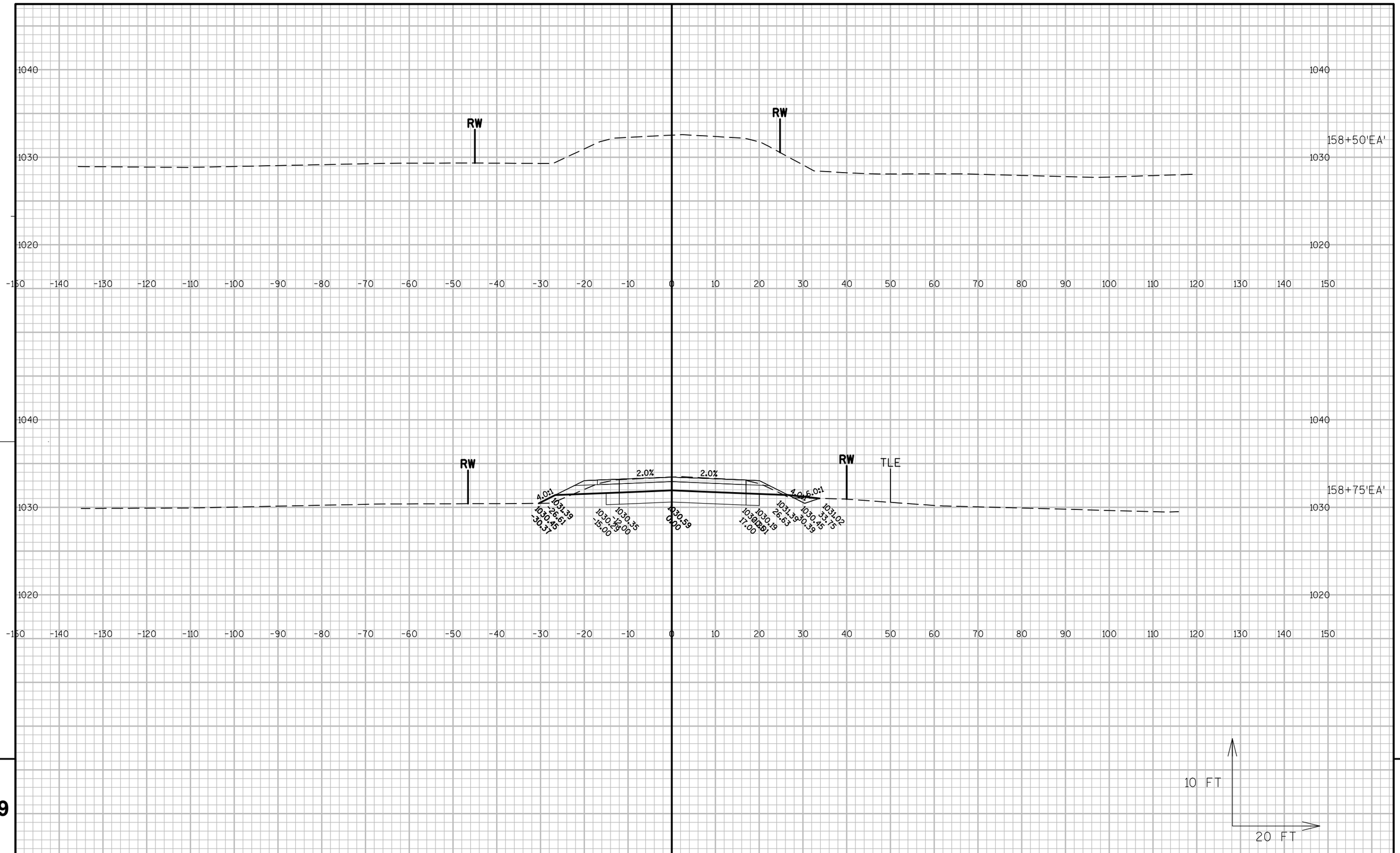
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: ADAHI COURT	SHEET 1123	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: ADAHI COURT	SHEET 1124	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090223_XS ADAHI.DWG PLOT DATE : 1/31/2018 10:54 AM PLOT BY : BLACKWOOD, JIM PLOT NAME :

WISDOT/CADDS SHEET 49

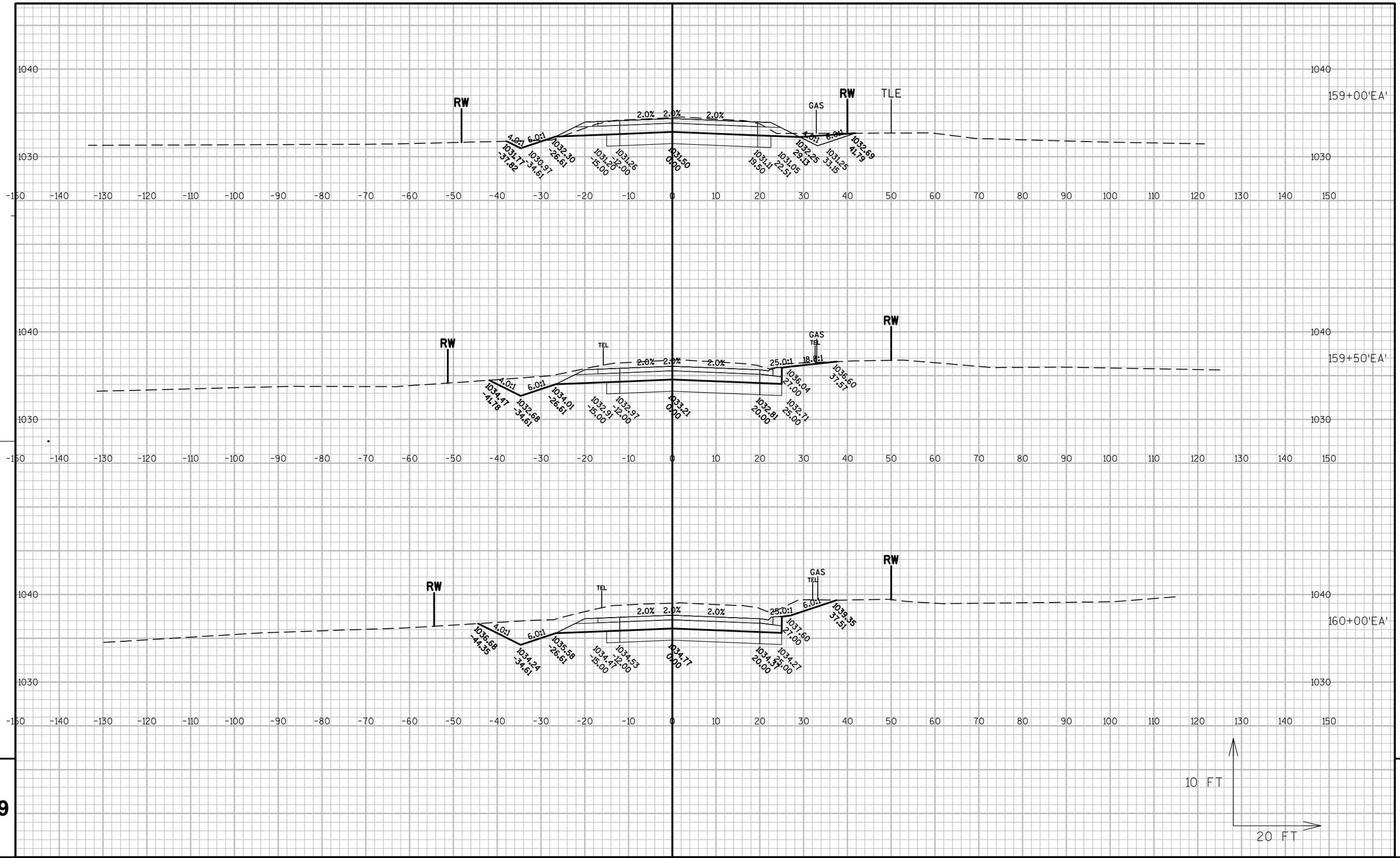


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167 EB	SHEET 1125	E

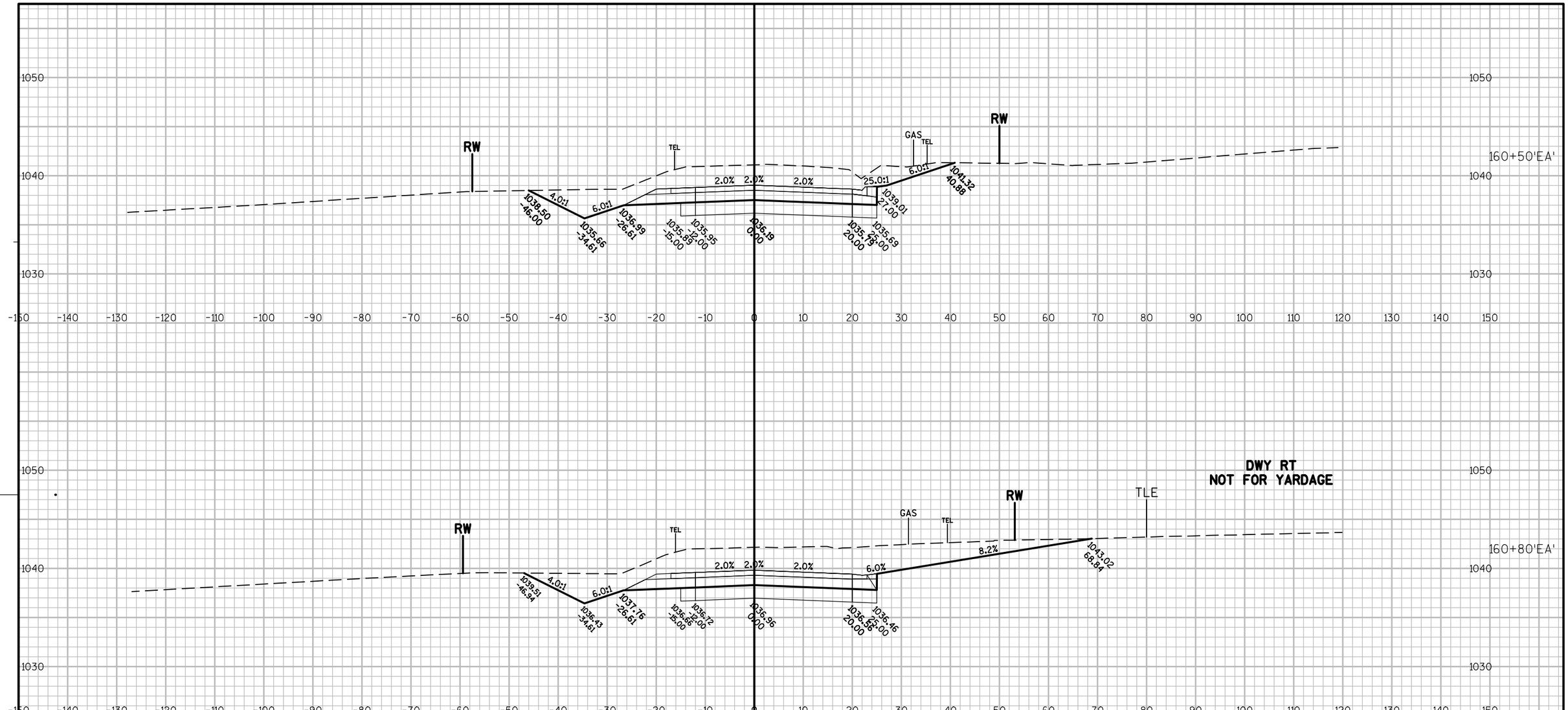
FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090224_STH167.DWG PLOT DATE : 1/31/2018 12:28 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

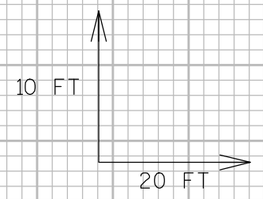


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167 EB	SHEET 1126 E





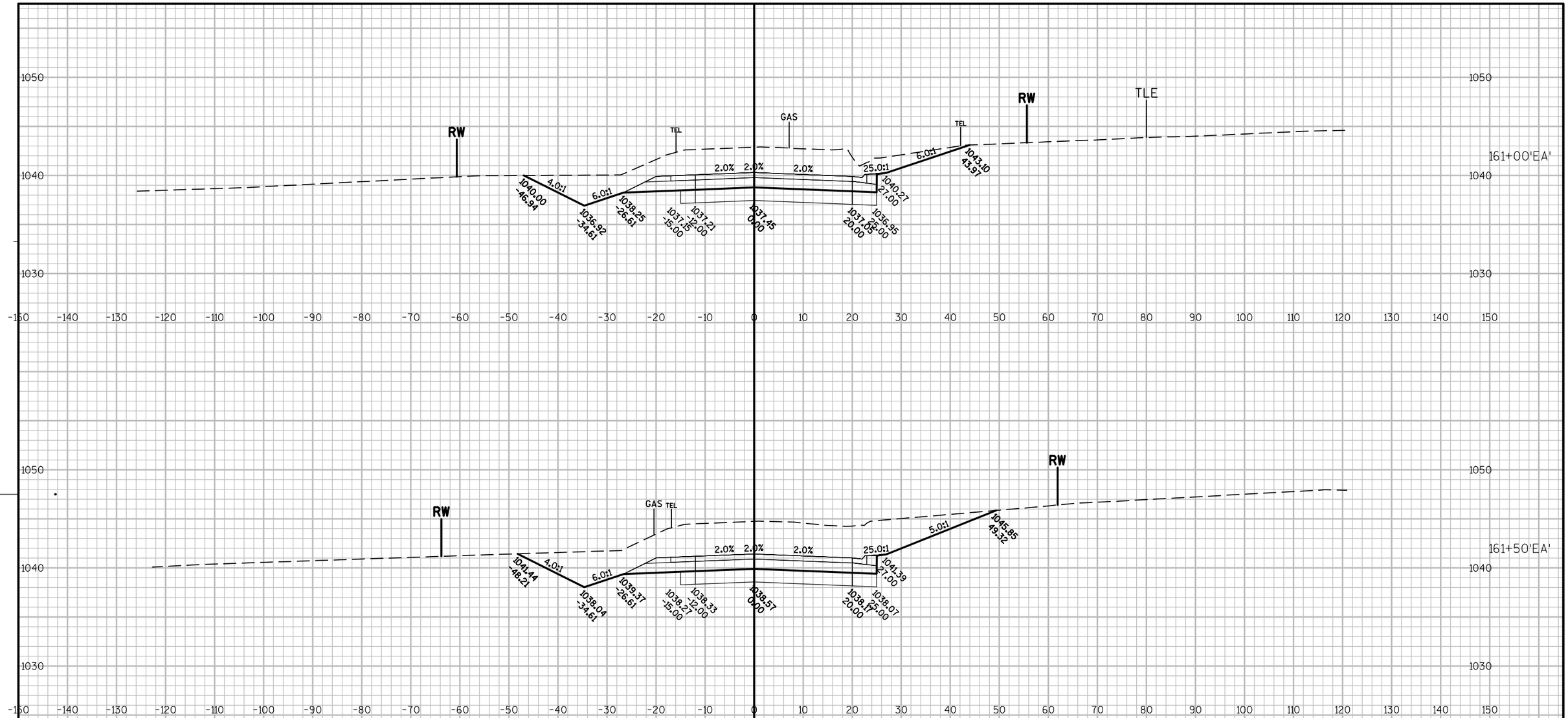
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167 EB	SHEET 1127	E

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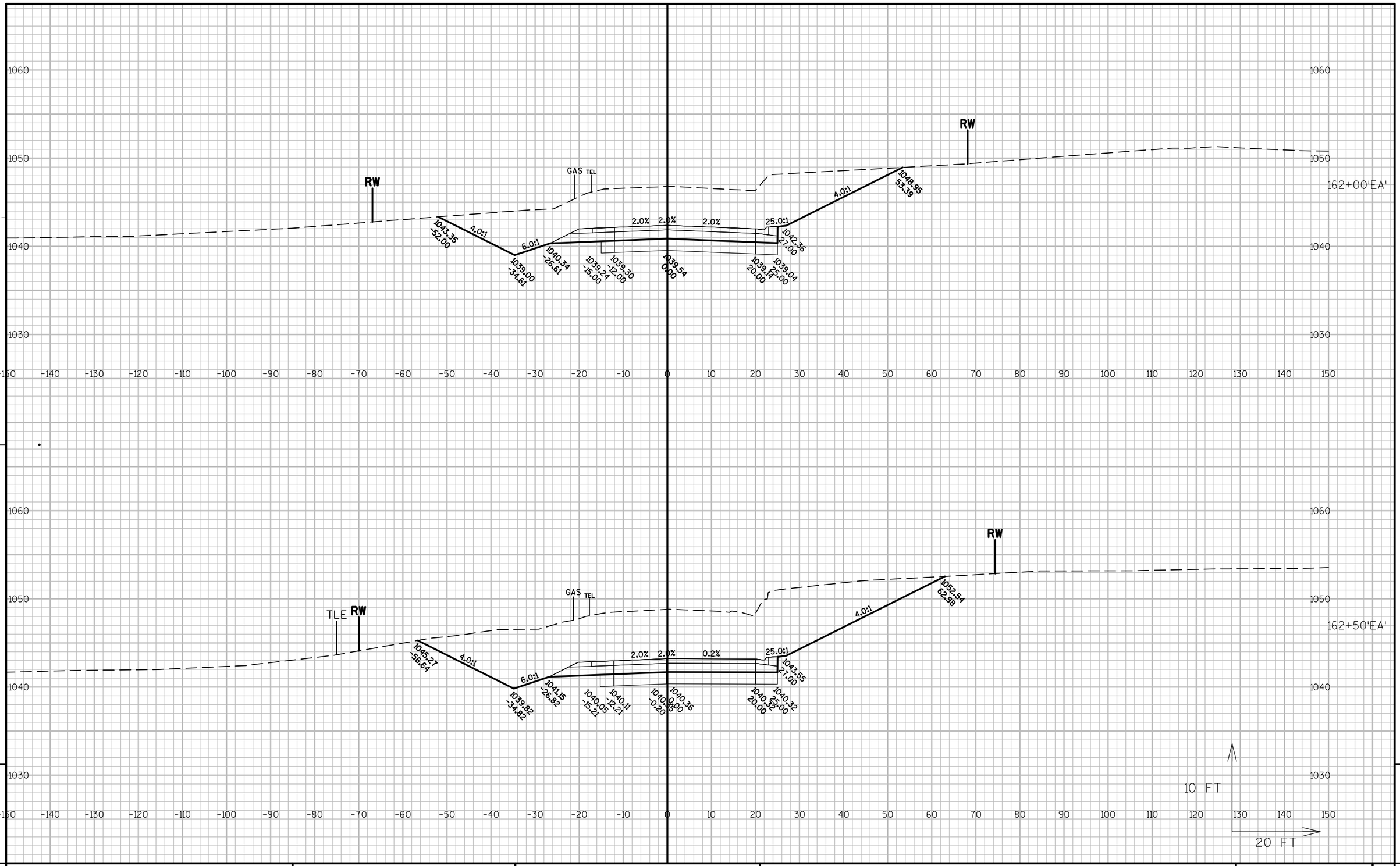
WISDOT/CADDS SHEET 49



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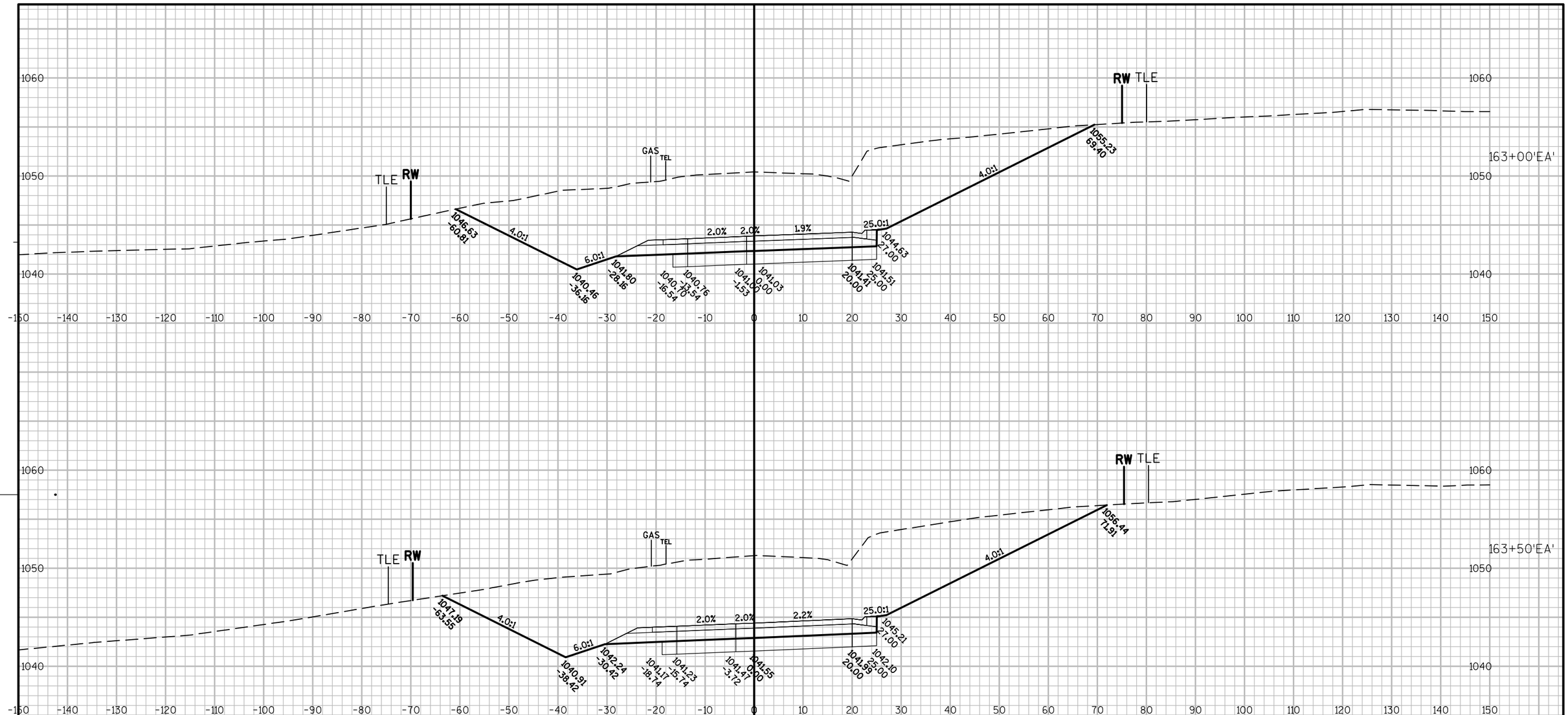
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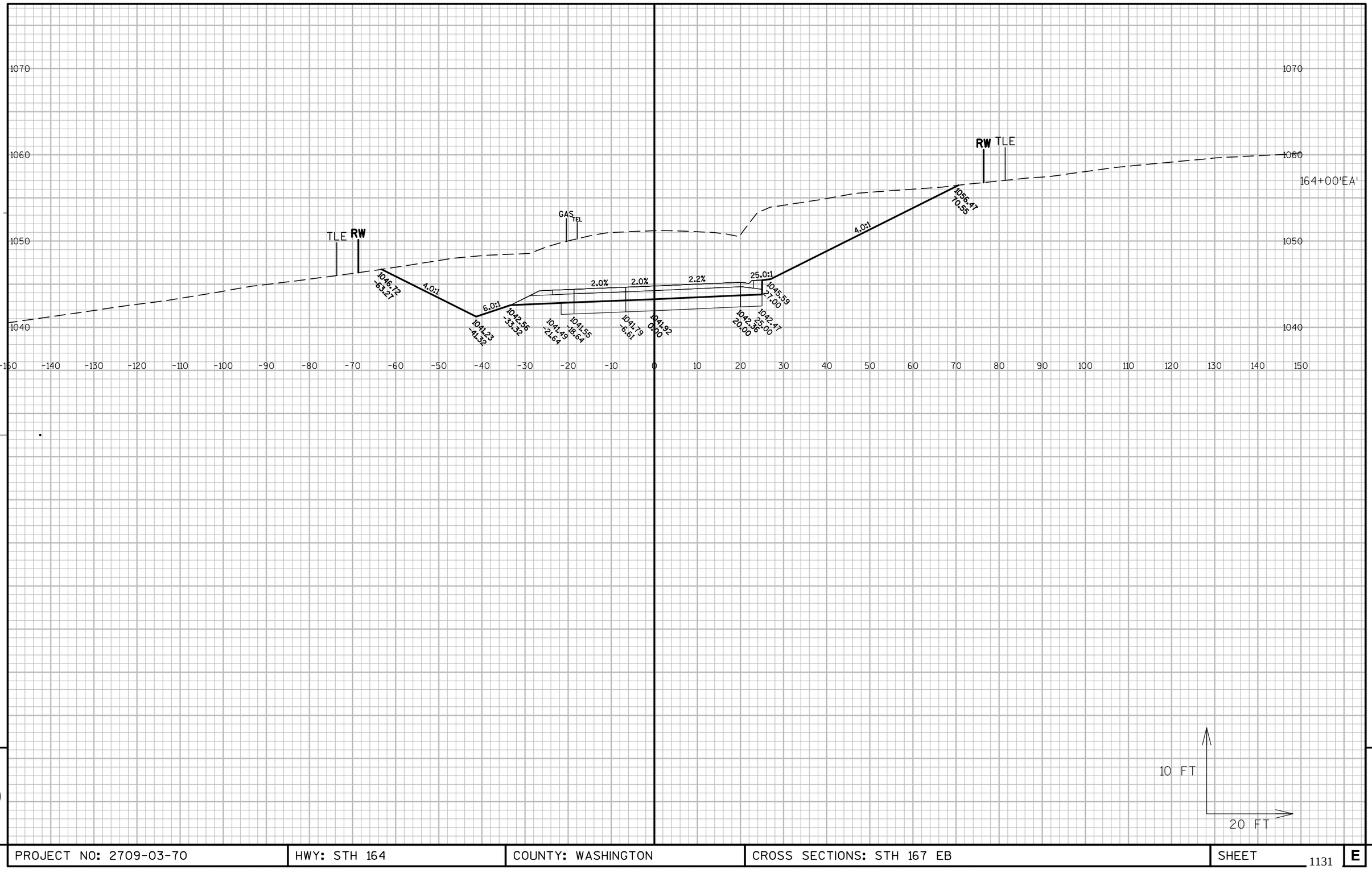


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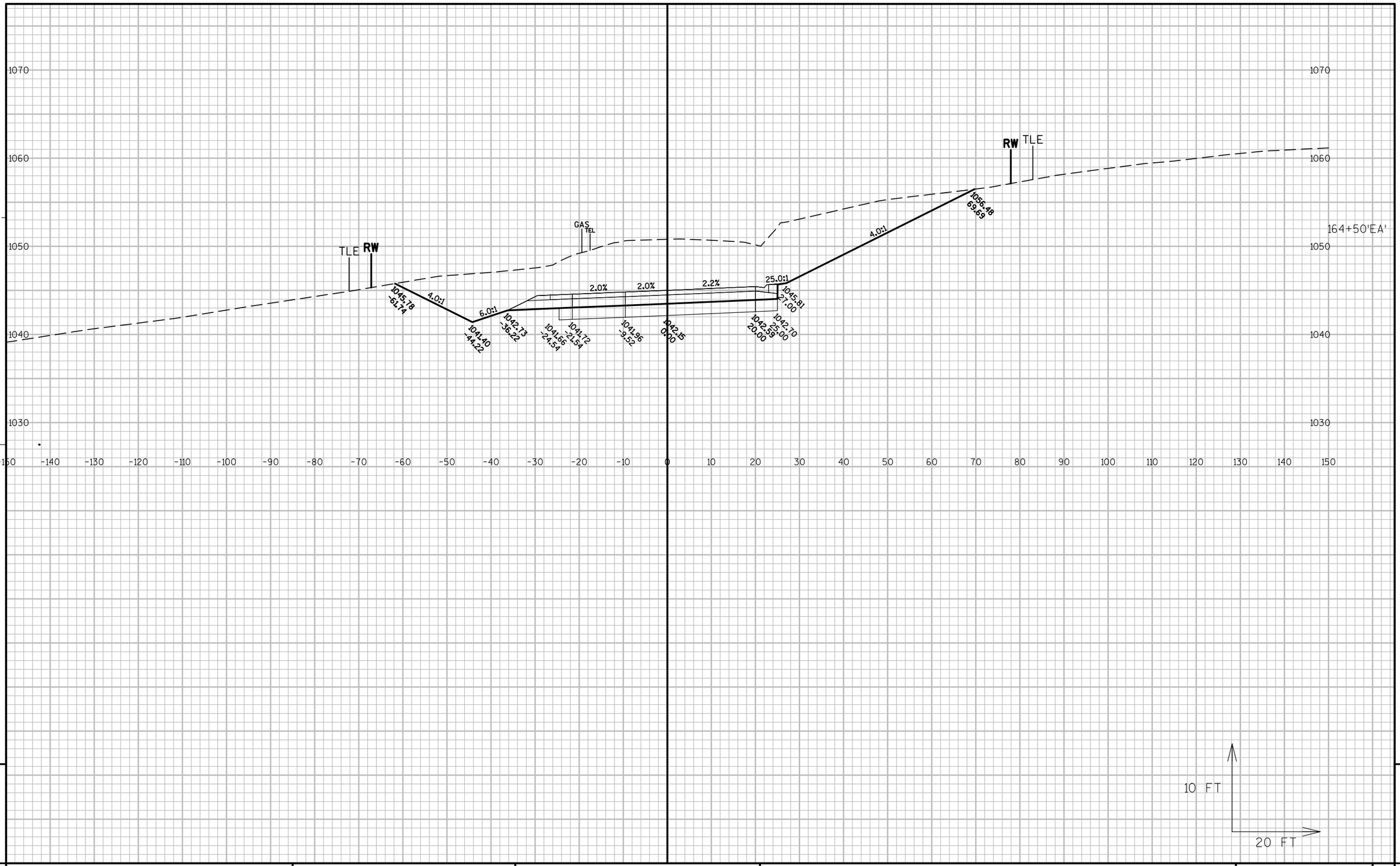


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167 EB	SHEET 1131	E

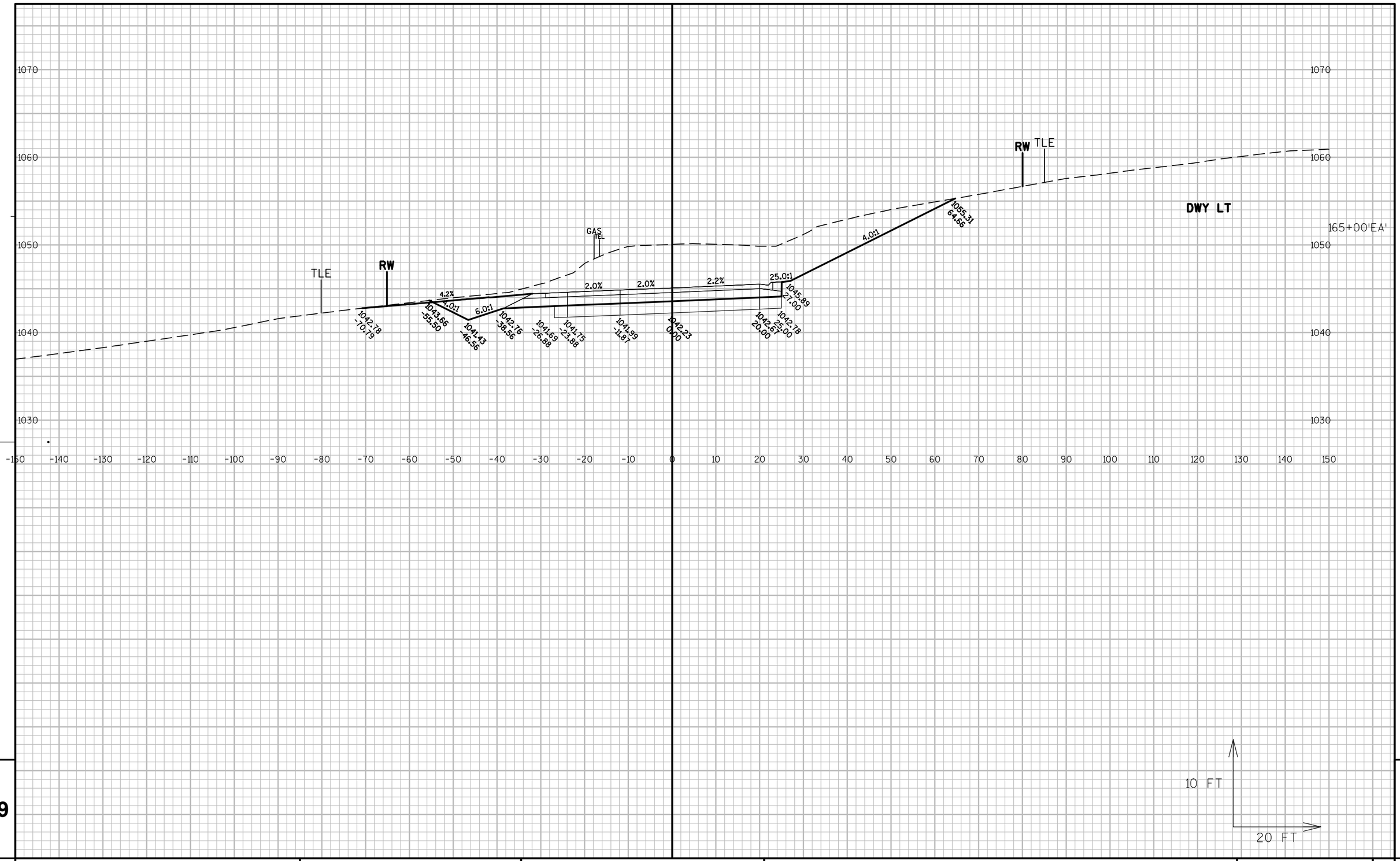
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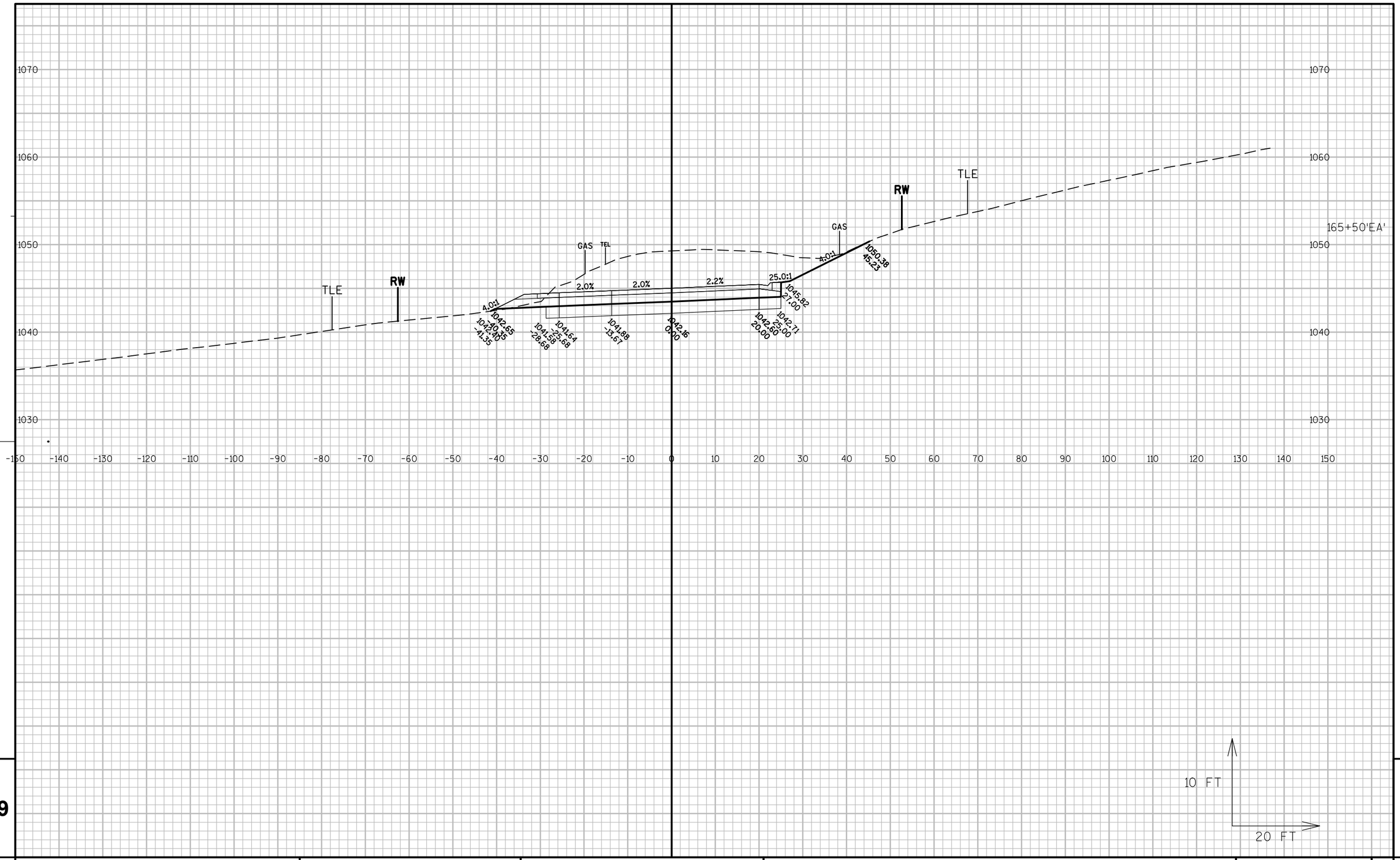
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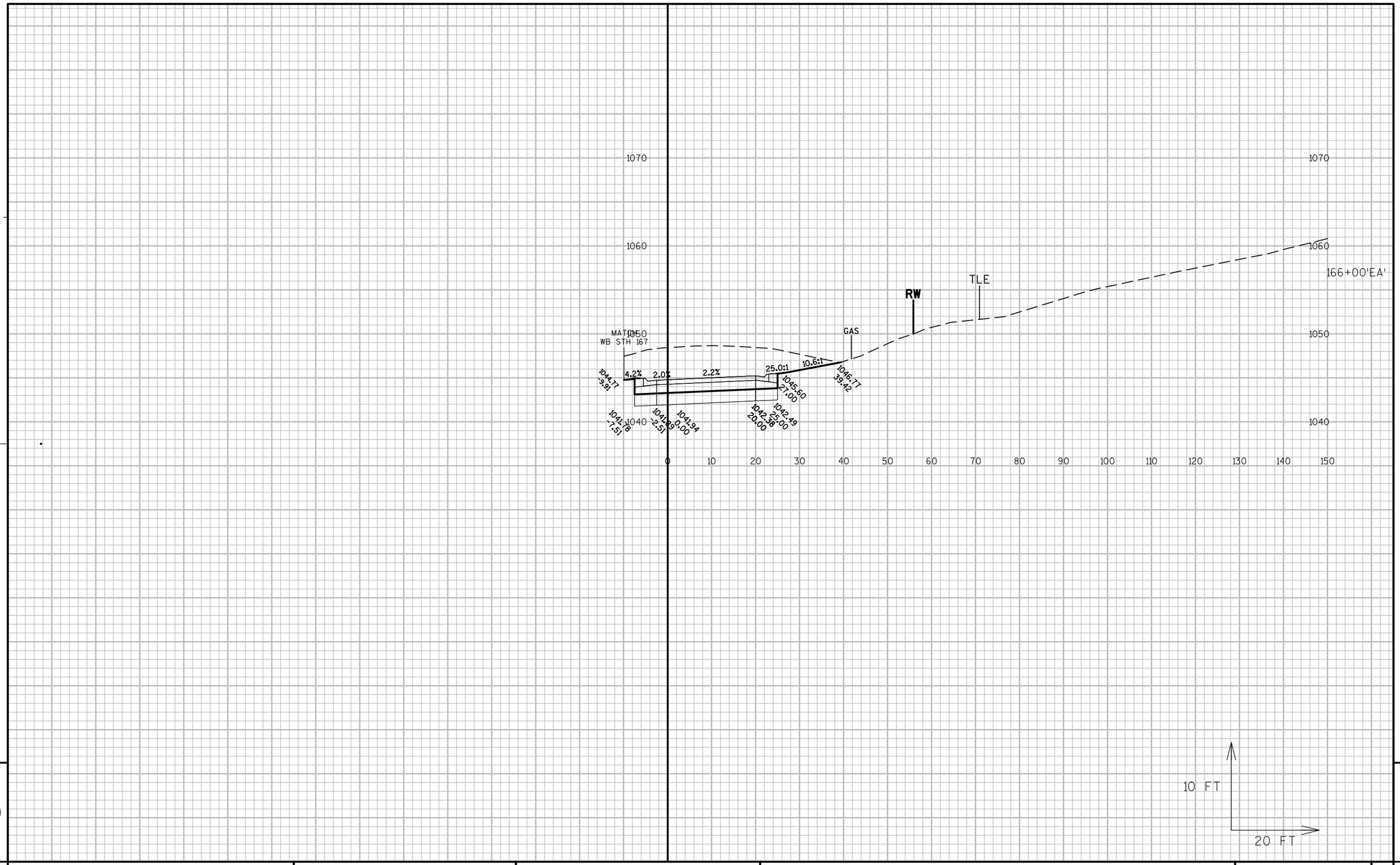


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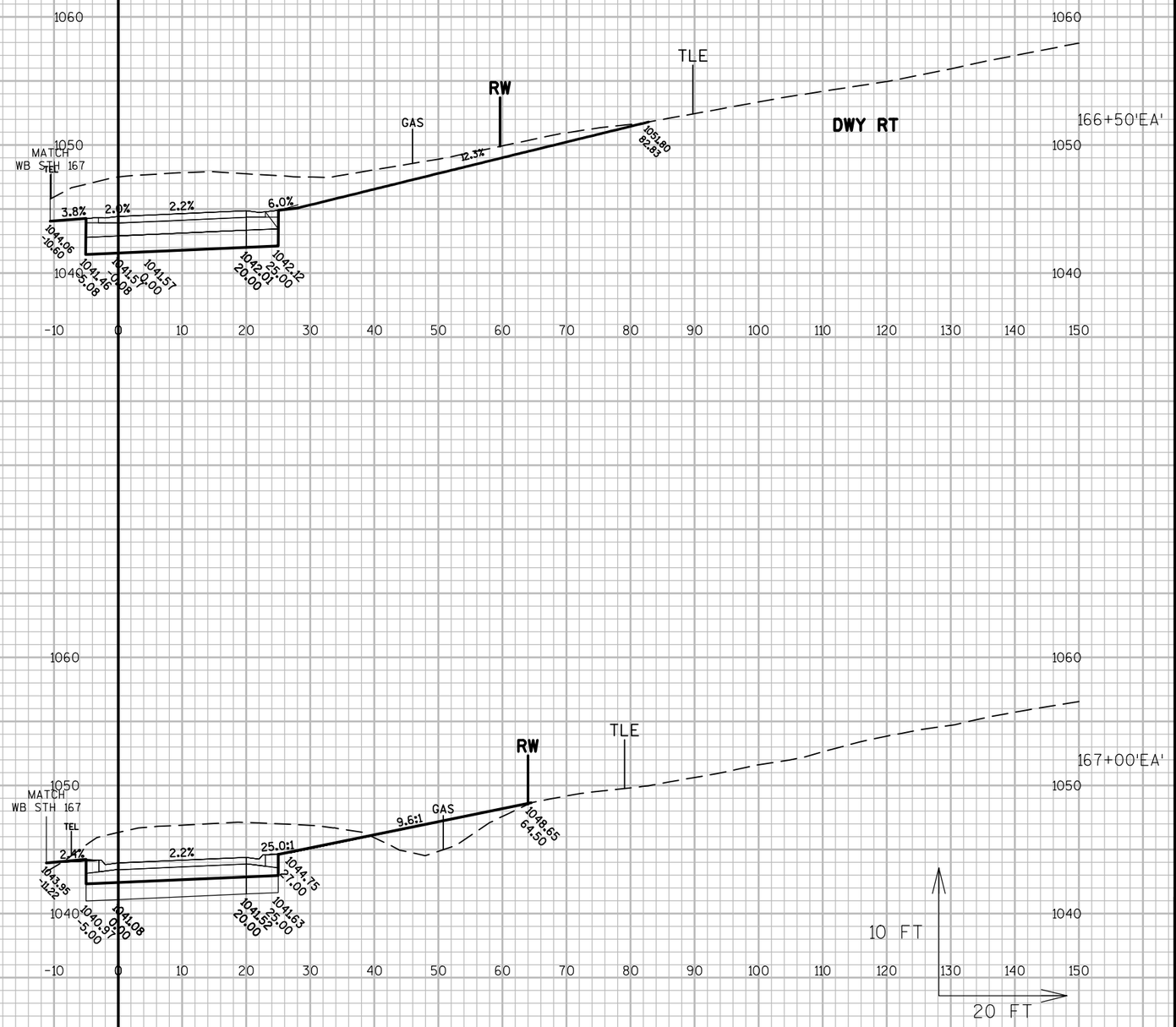


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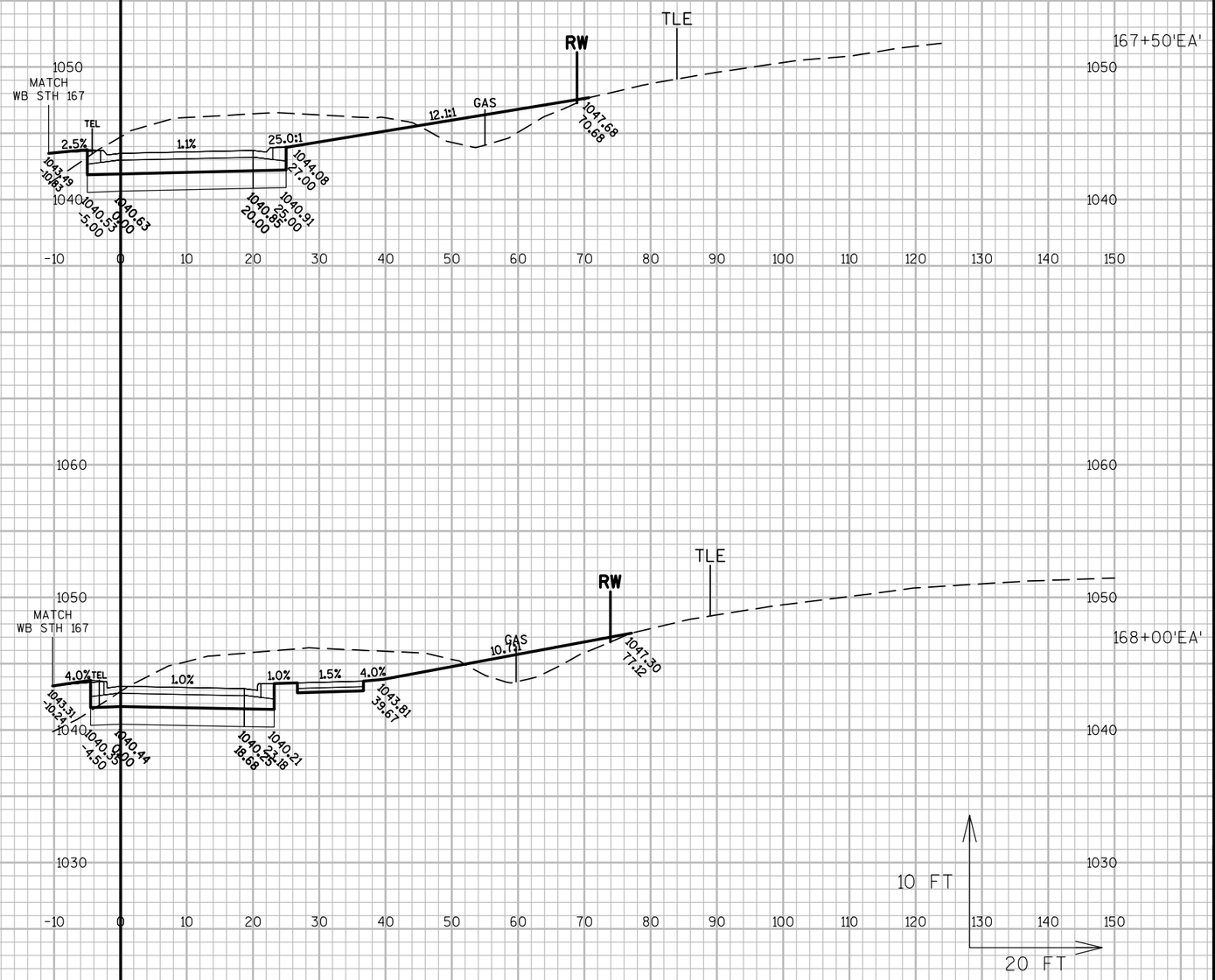
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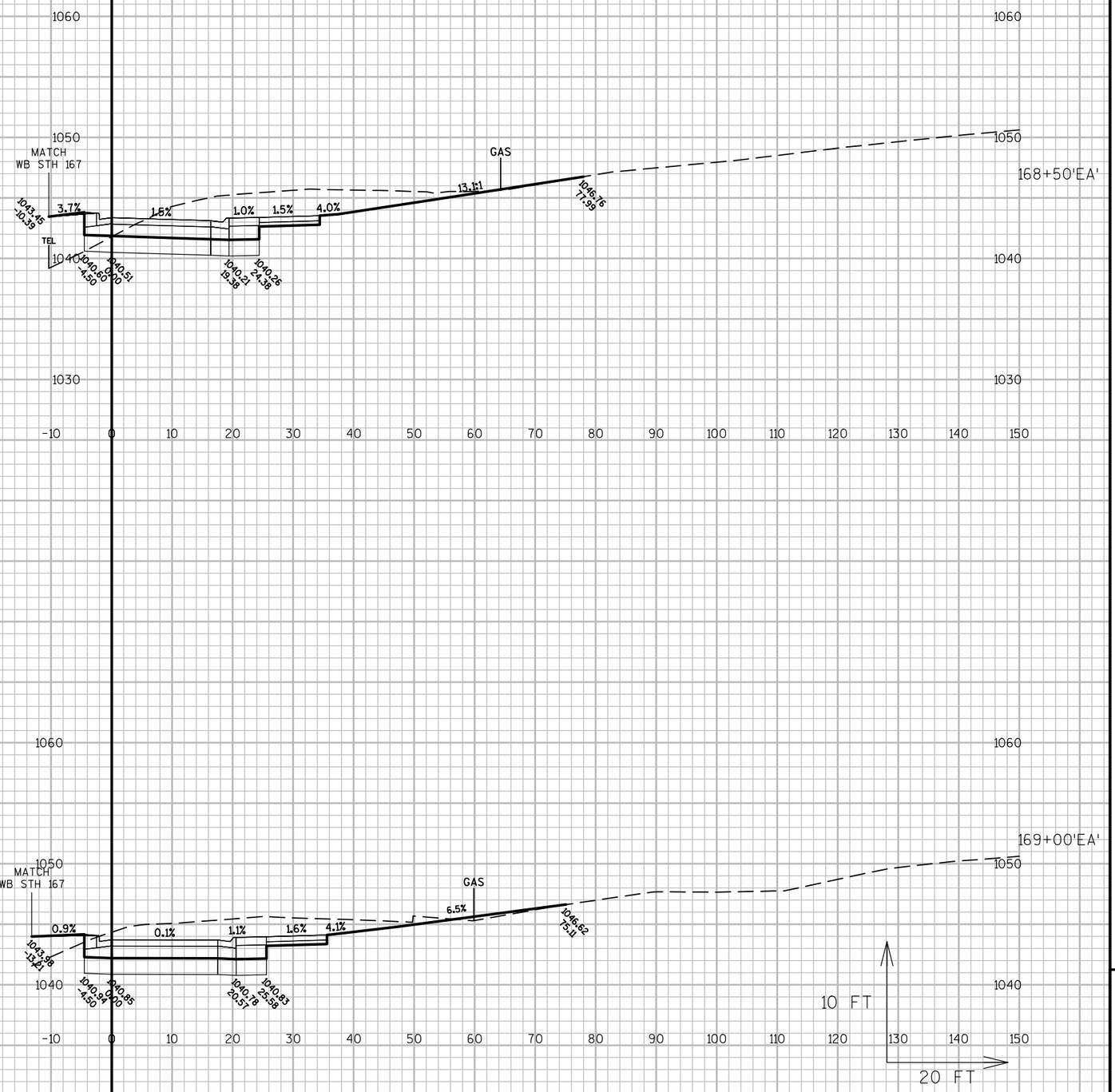
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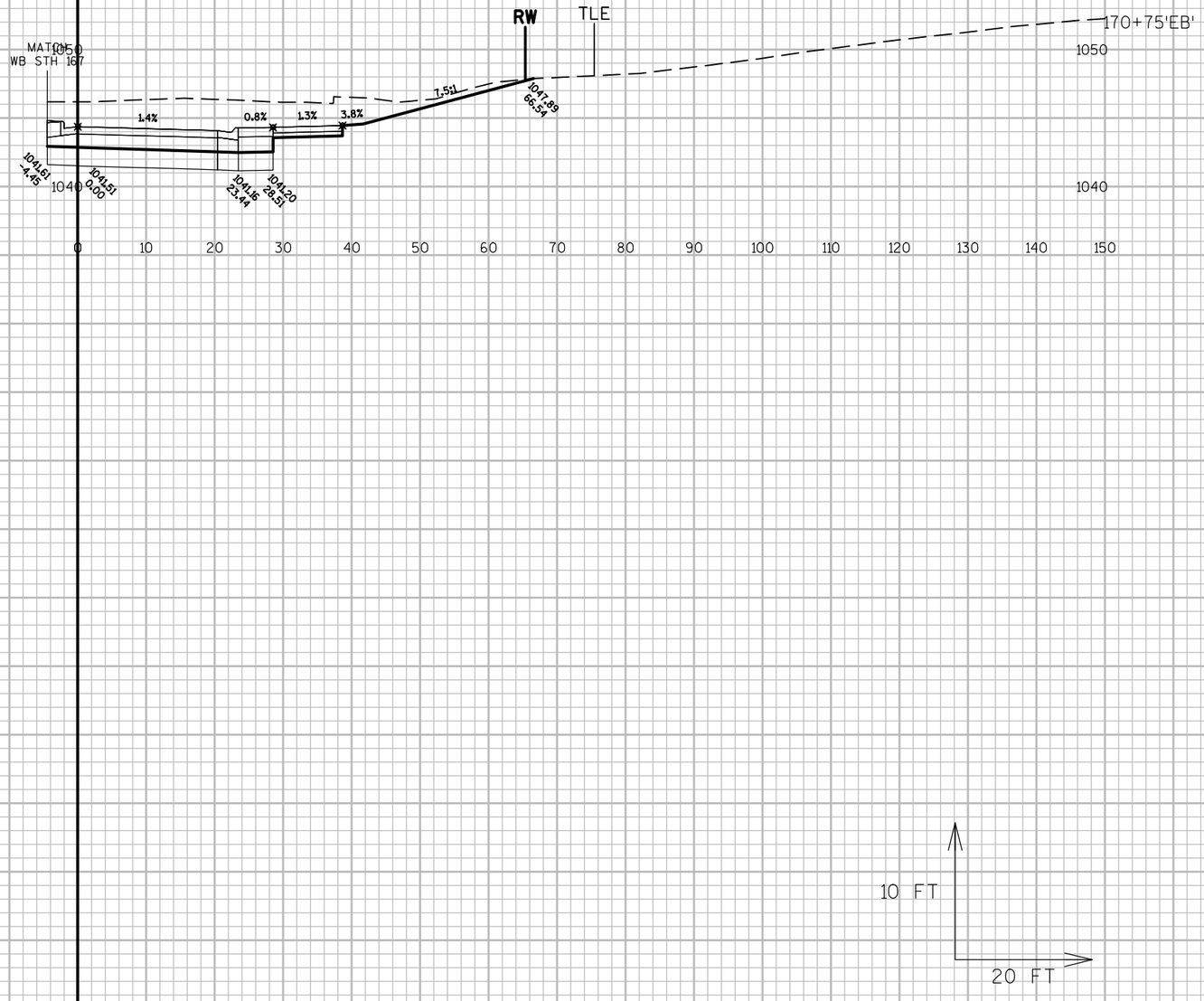
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167 EB	SHEET 1137	E



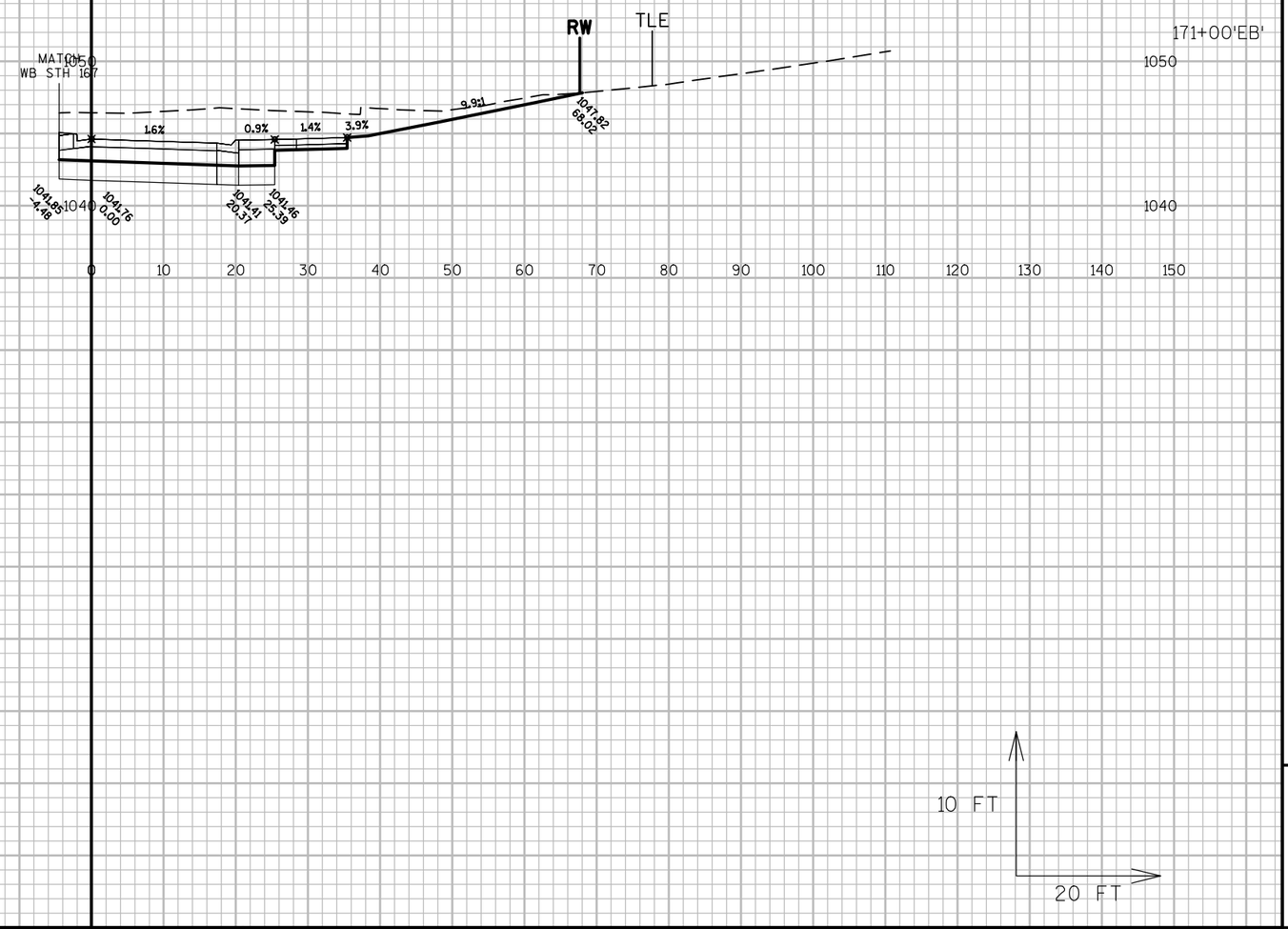
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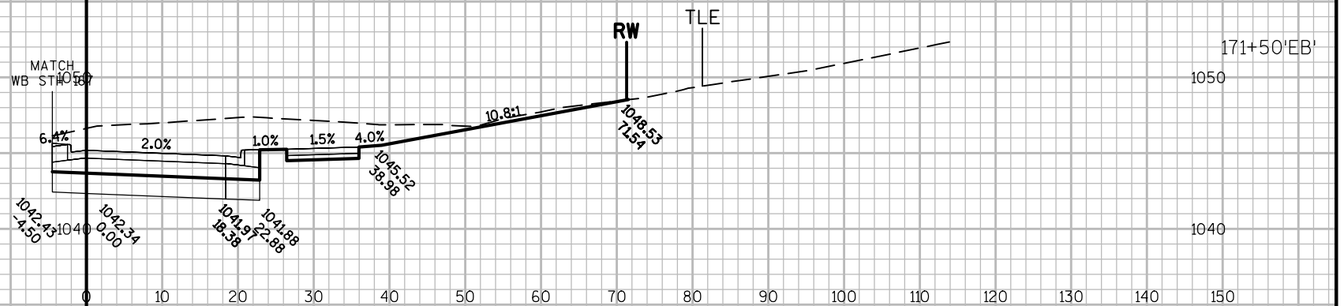
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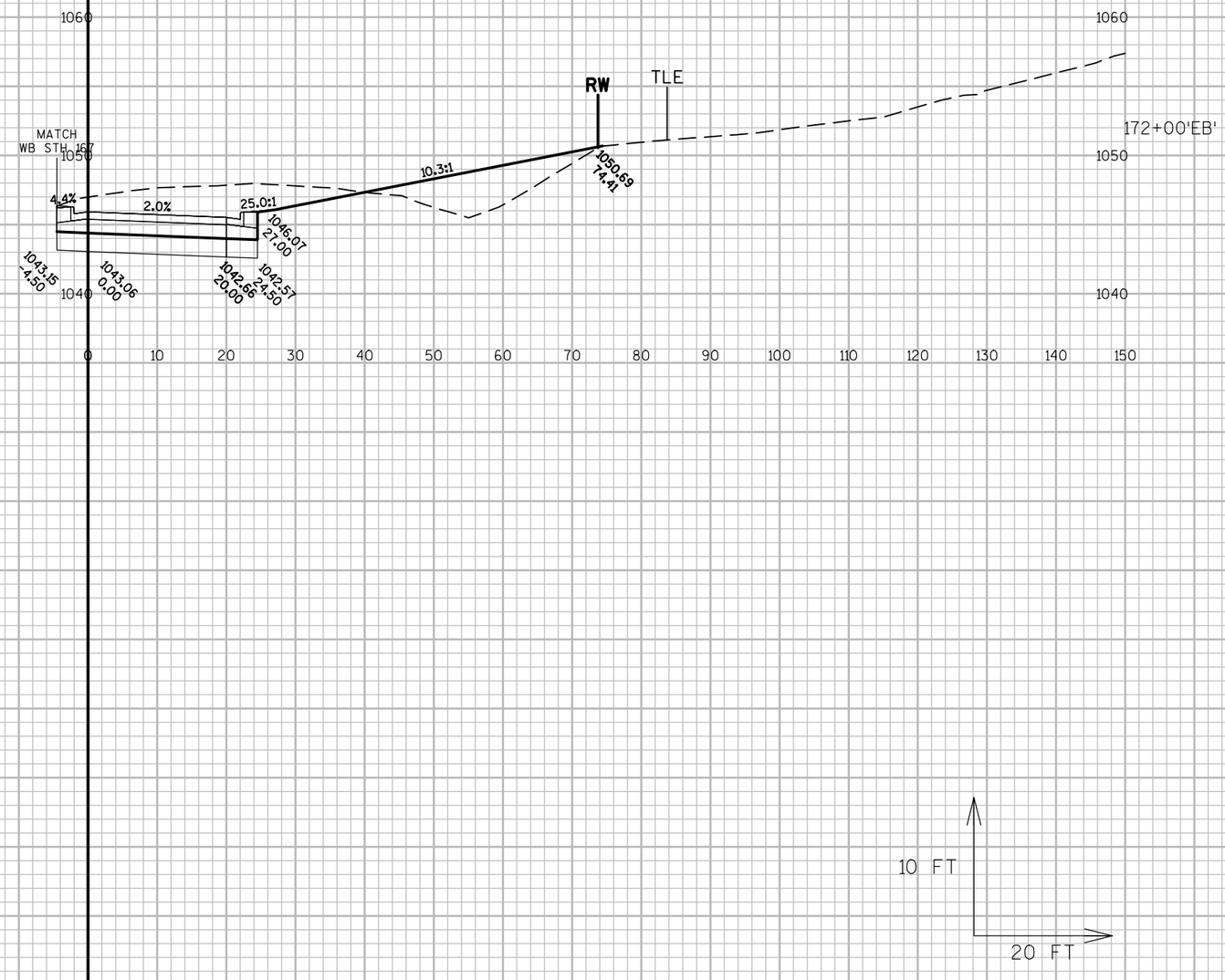
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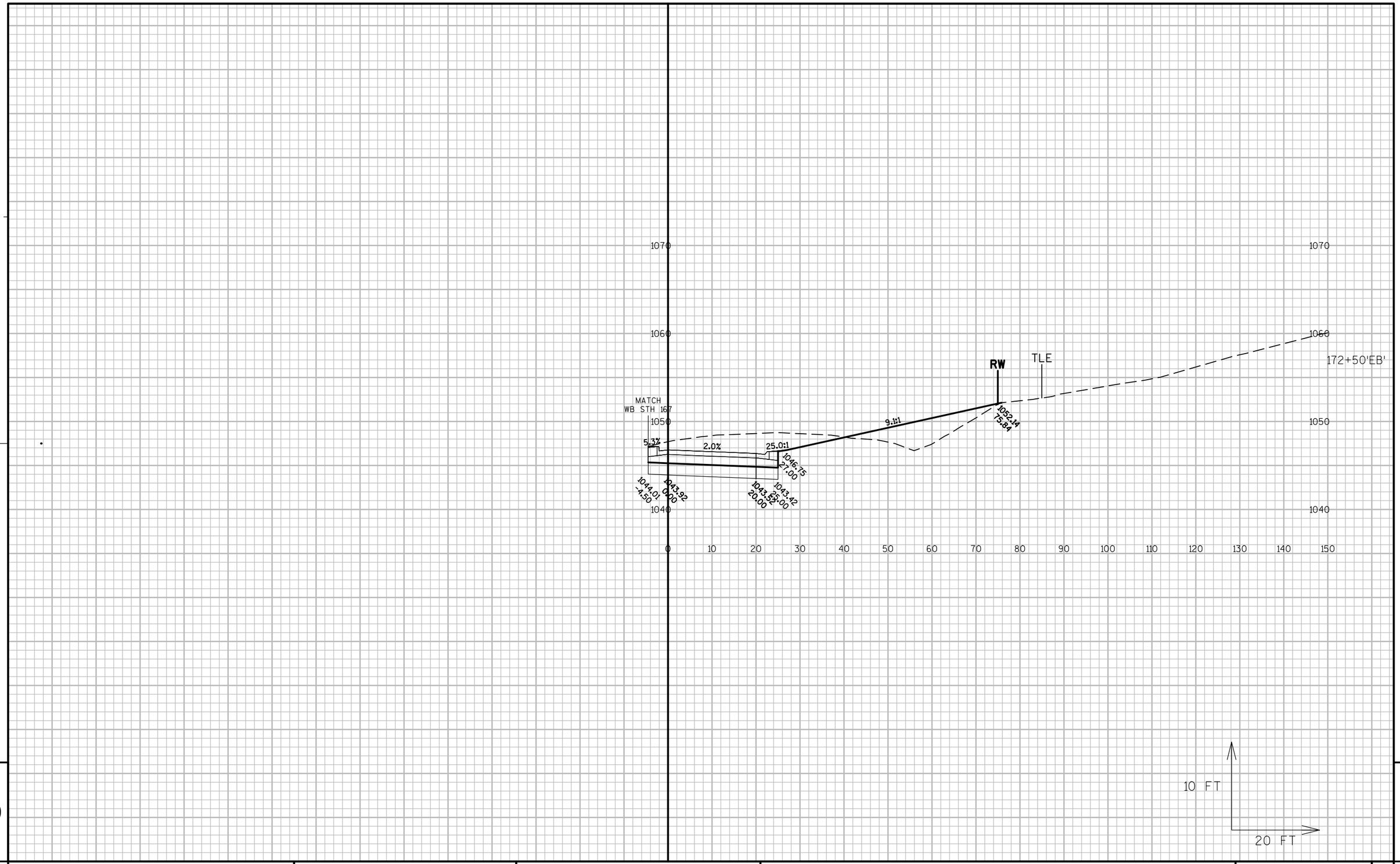
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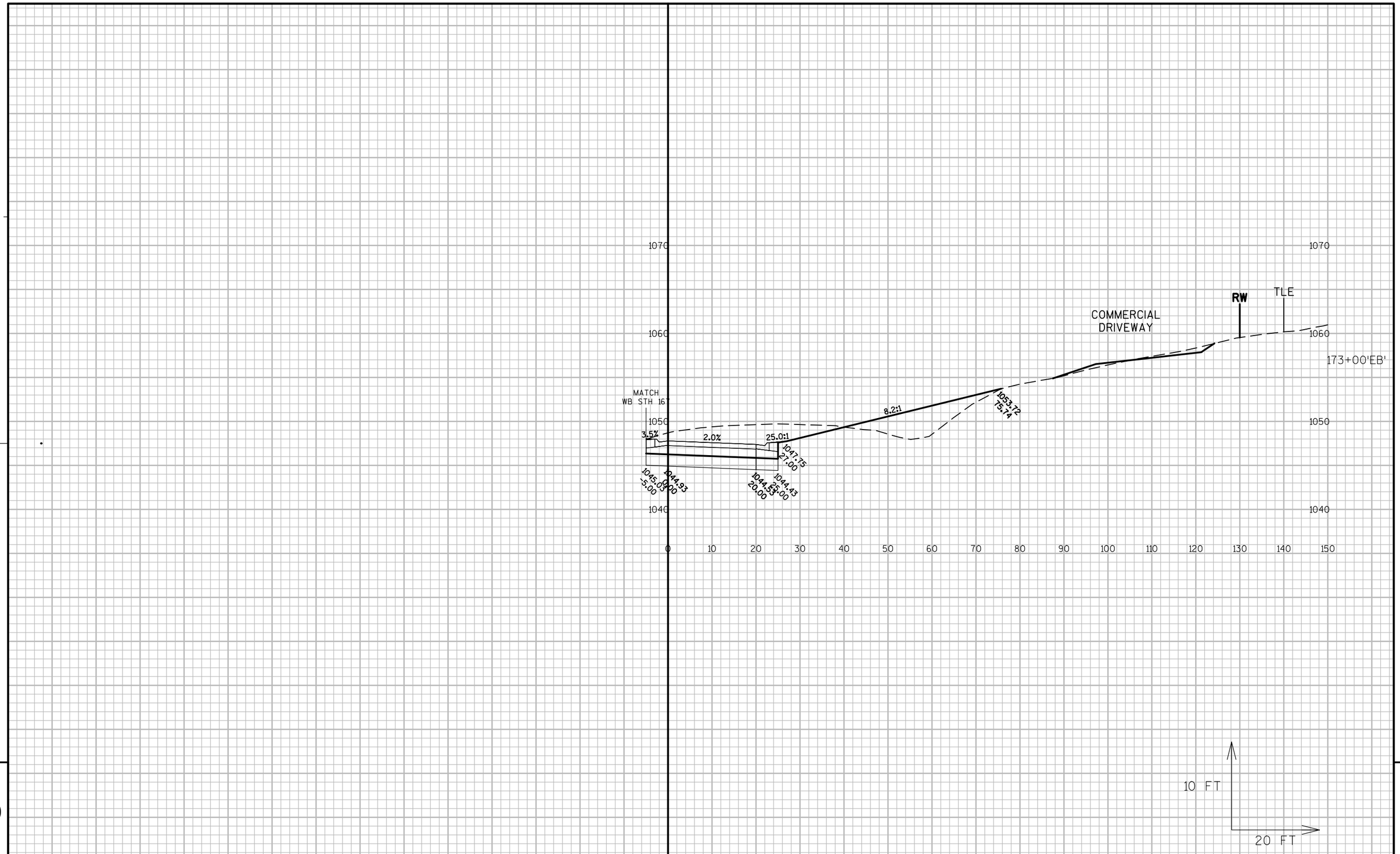
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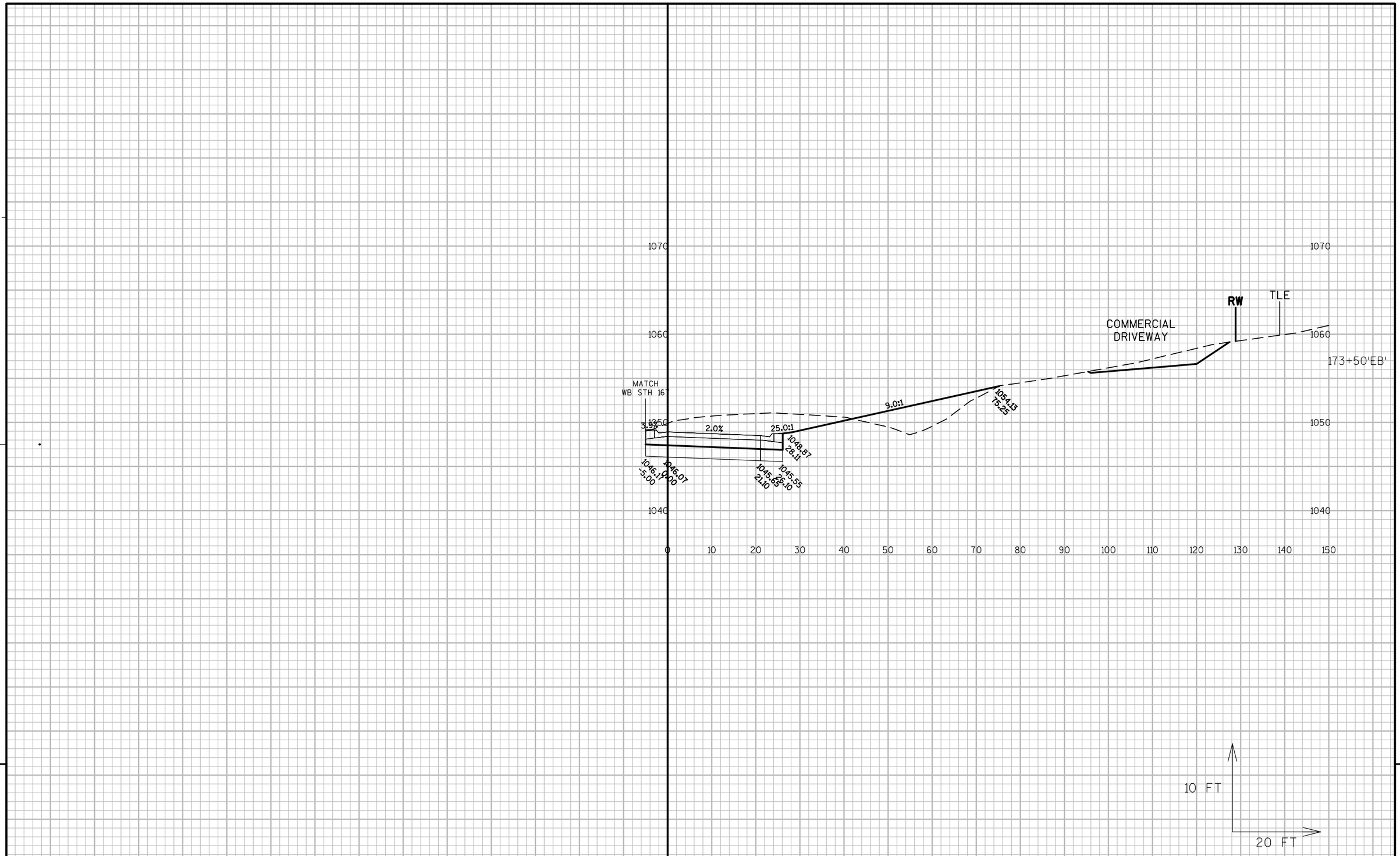
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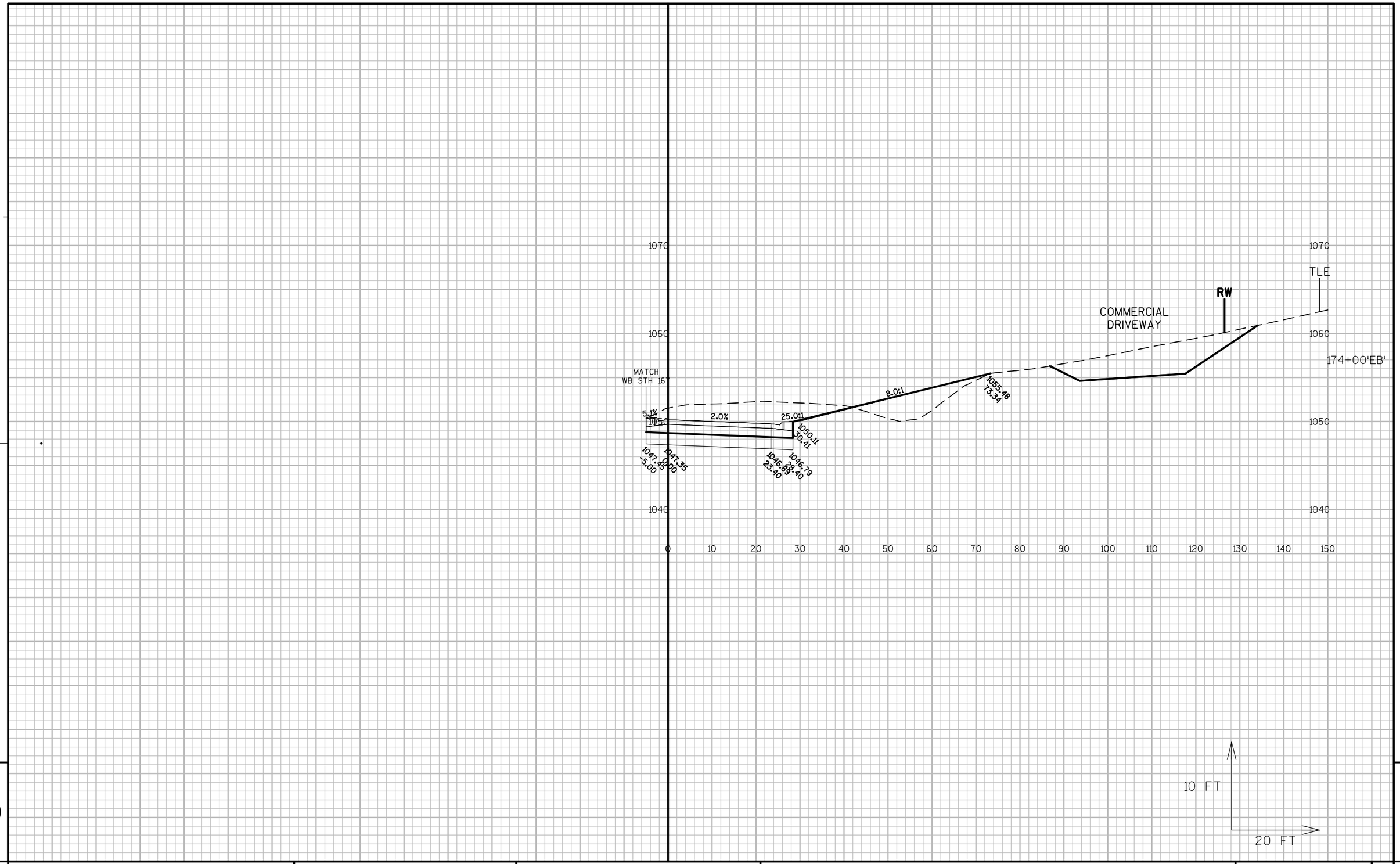
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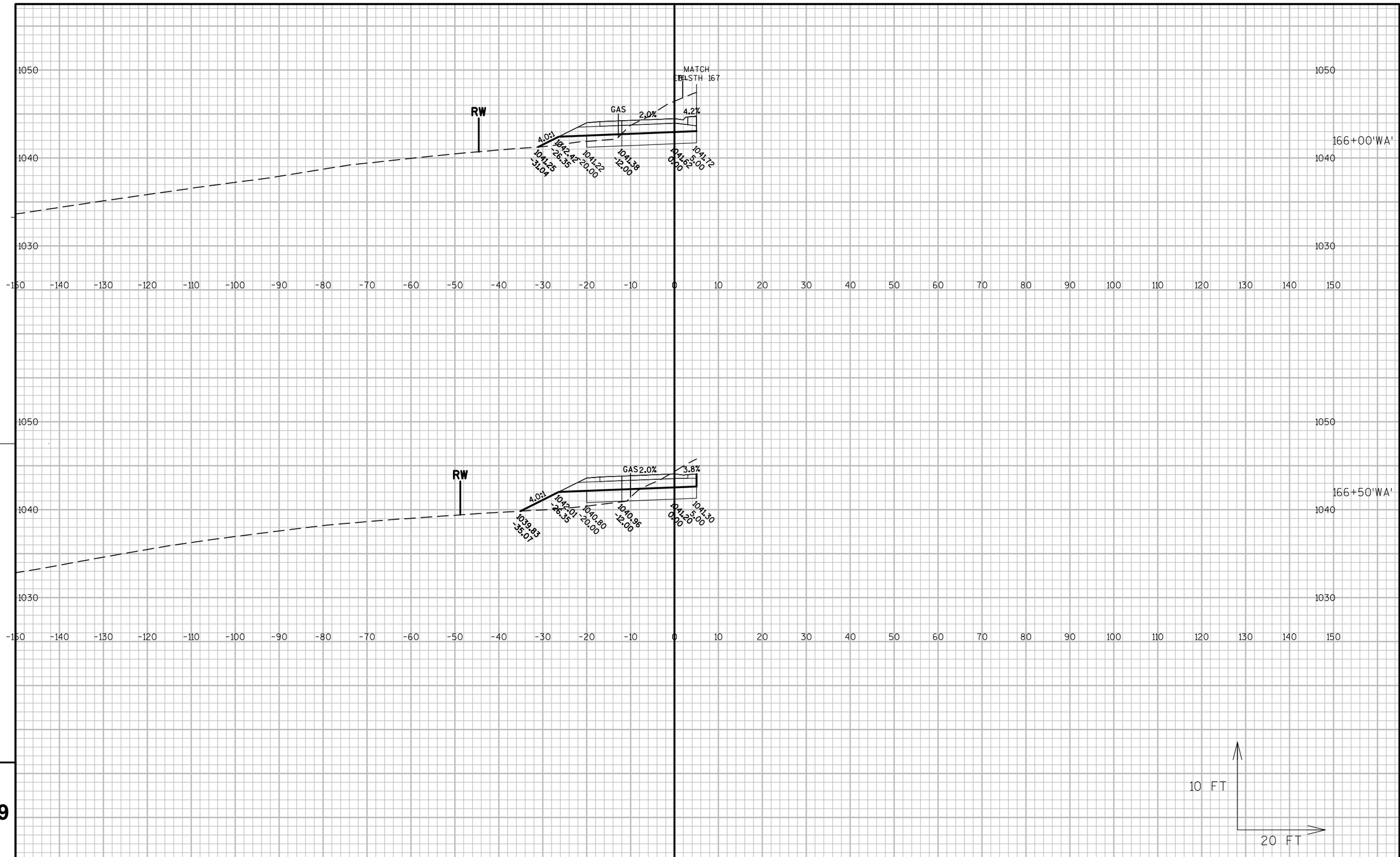
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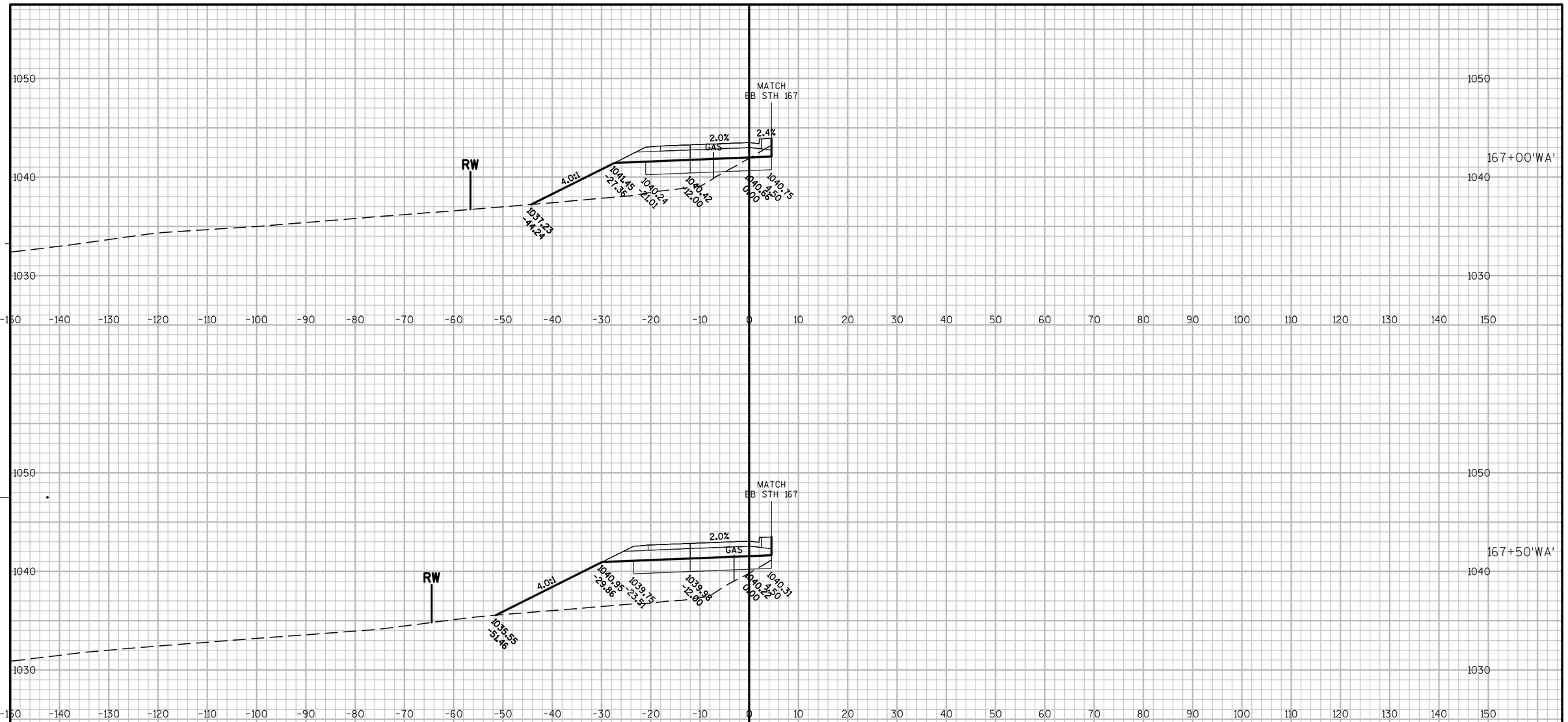
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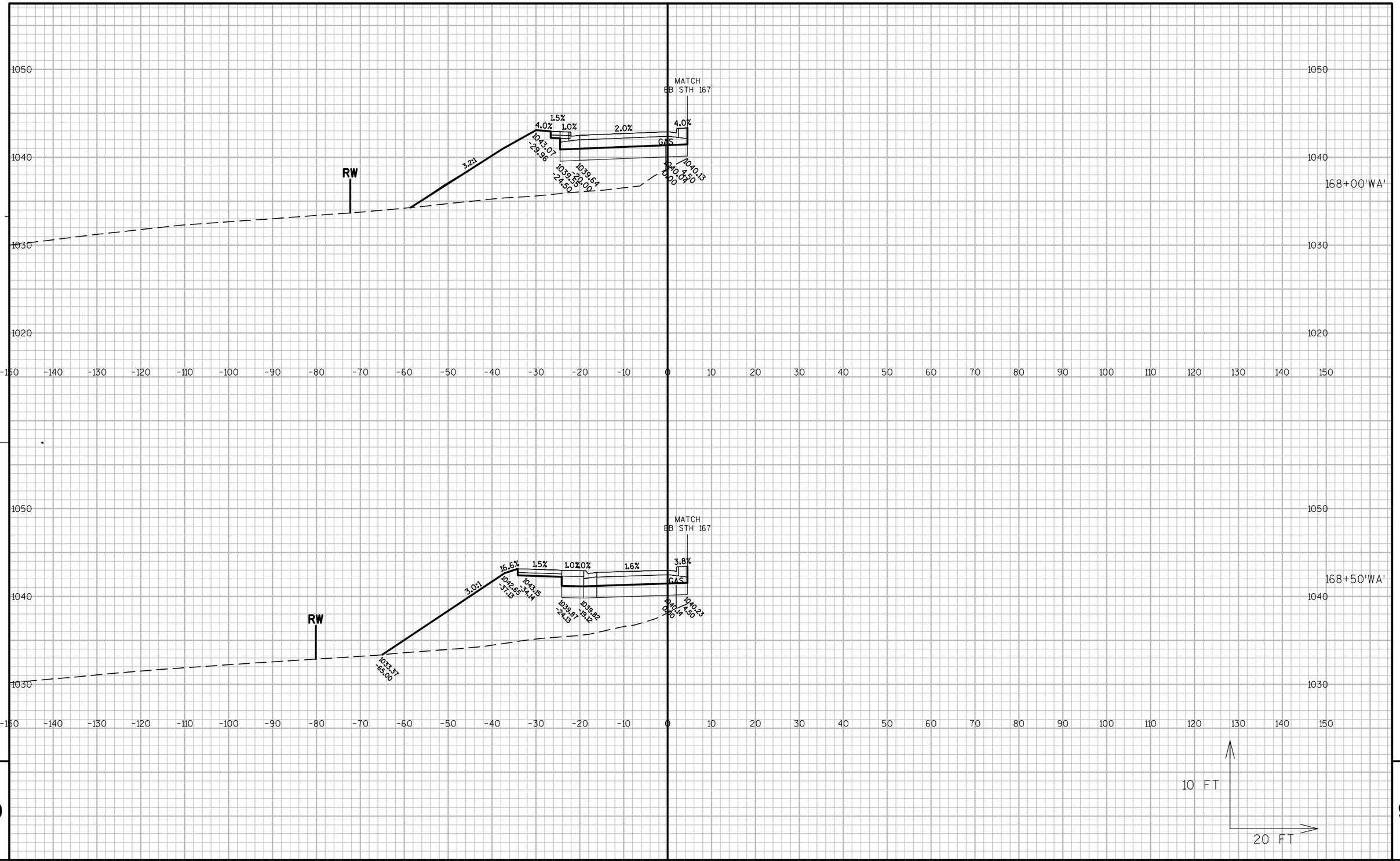
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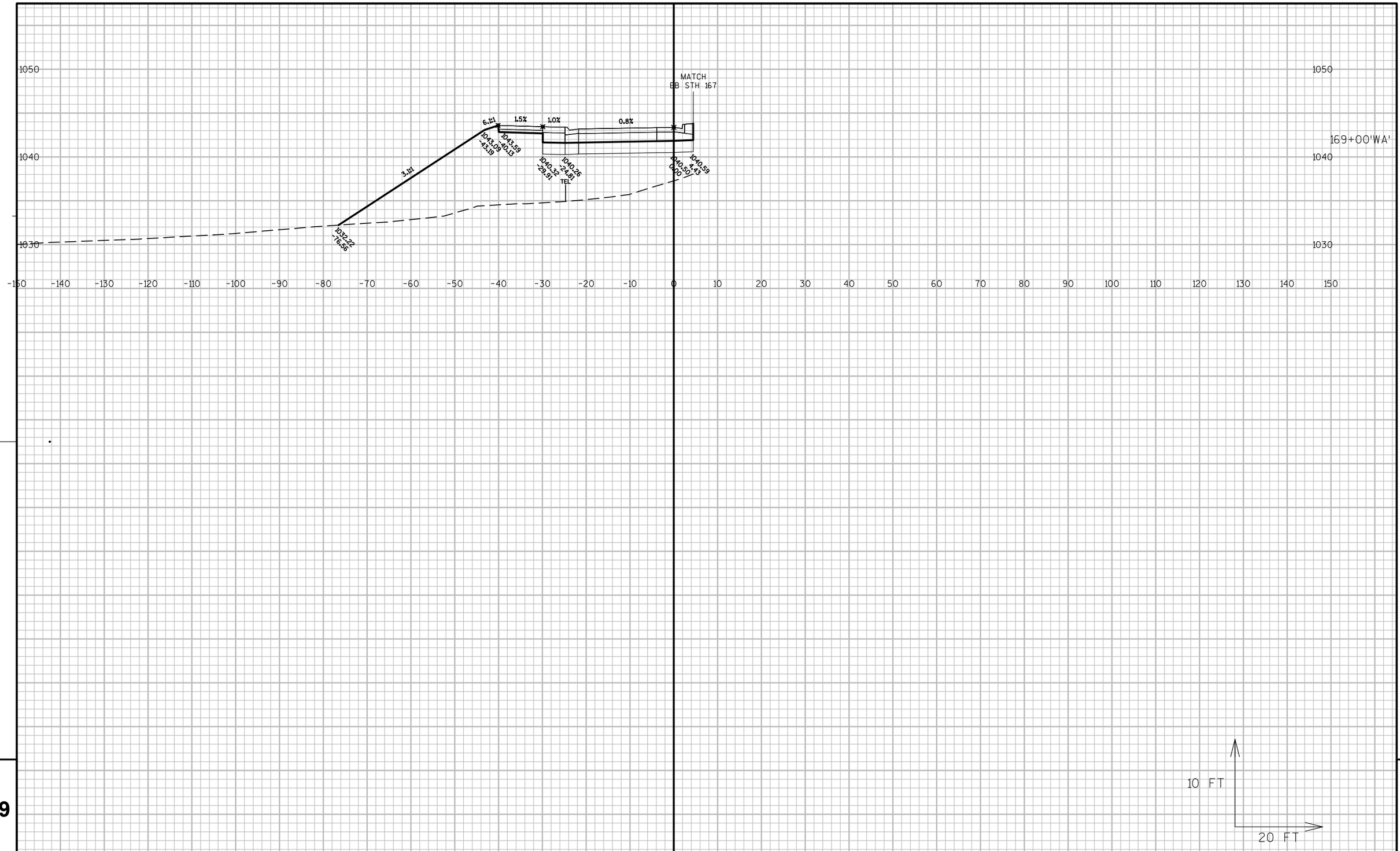
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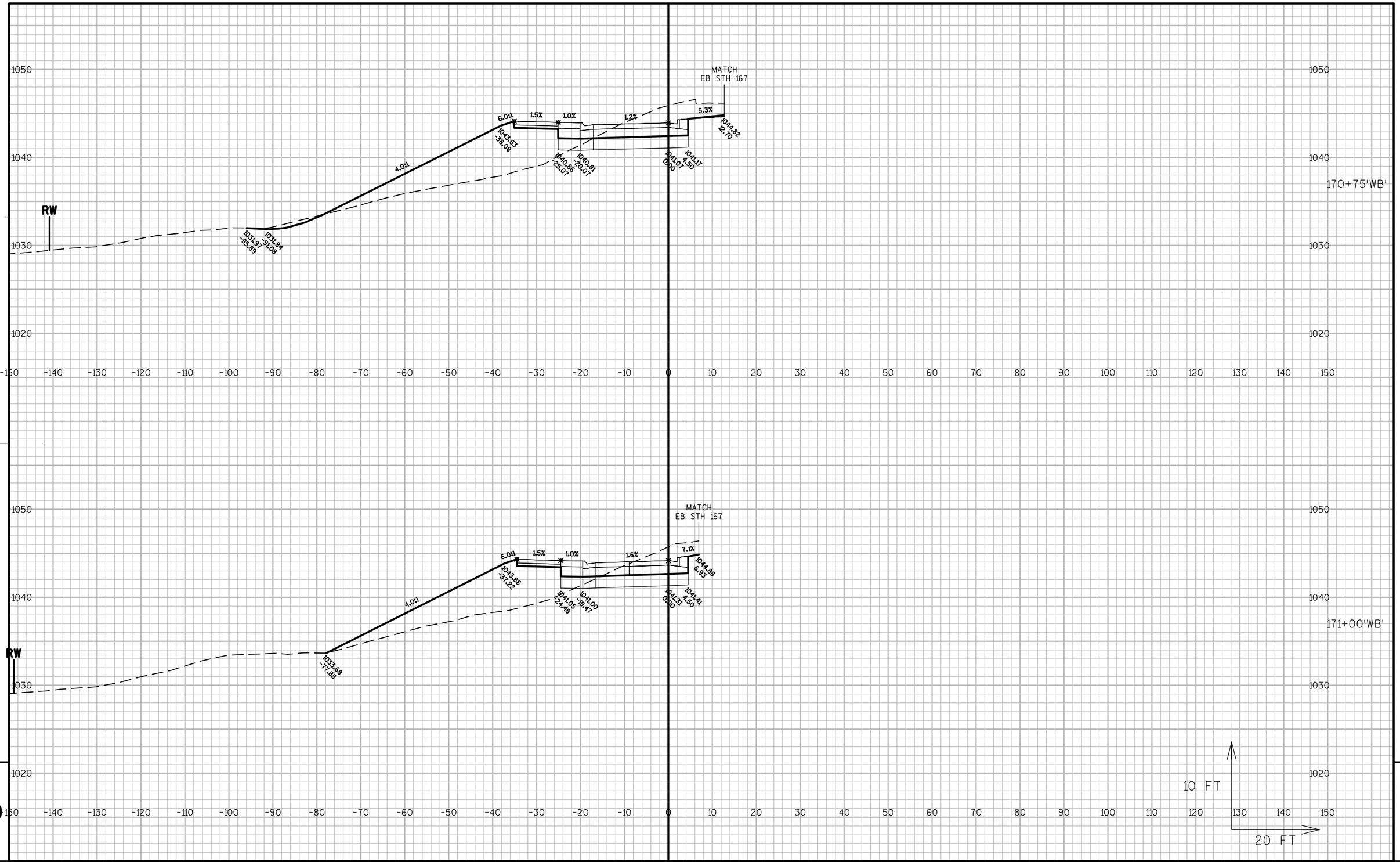
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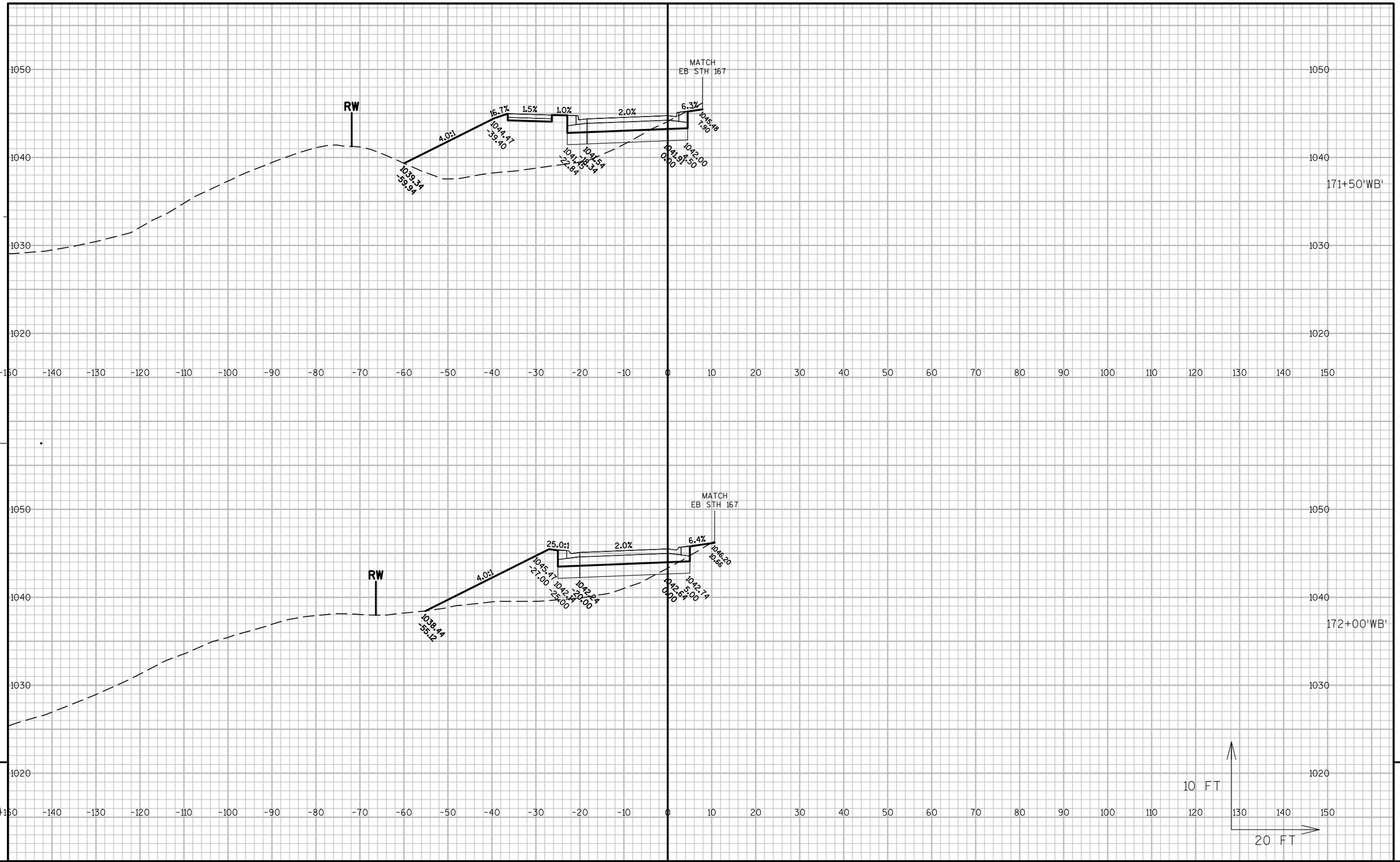
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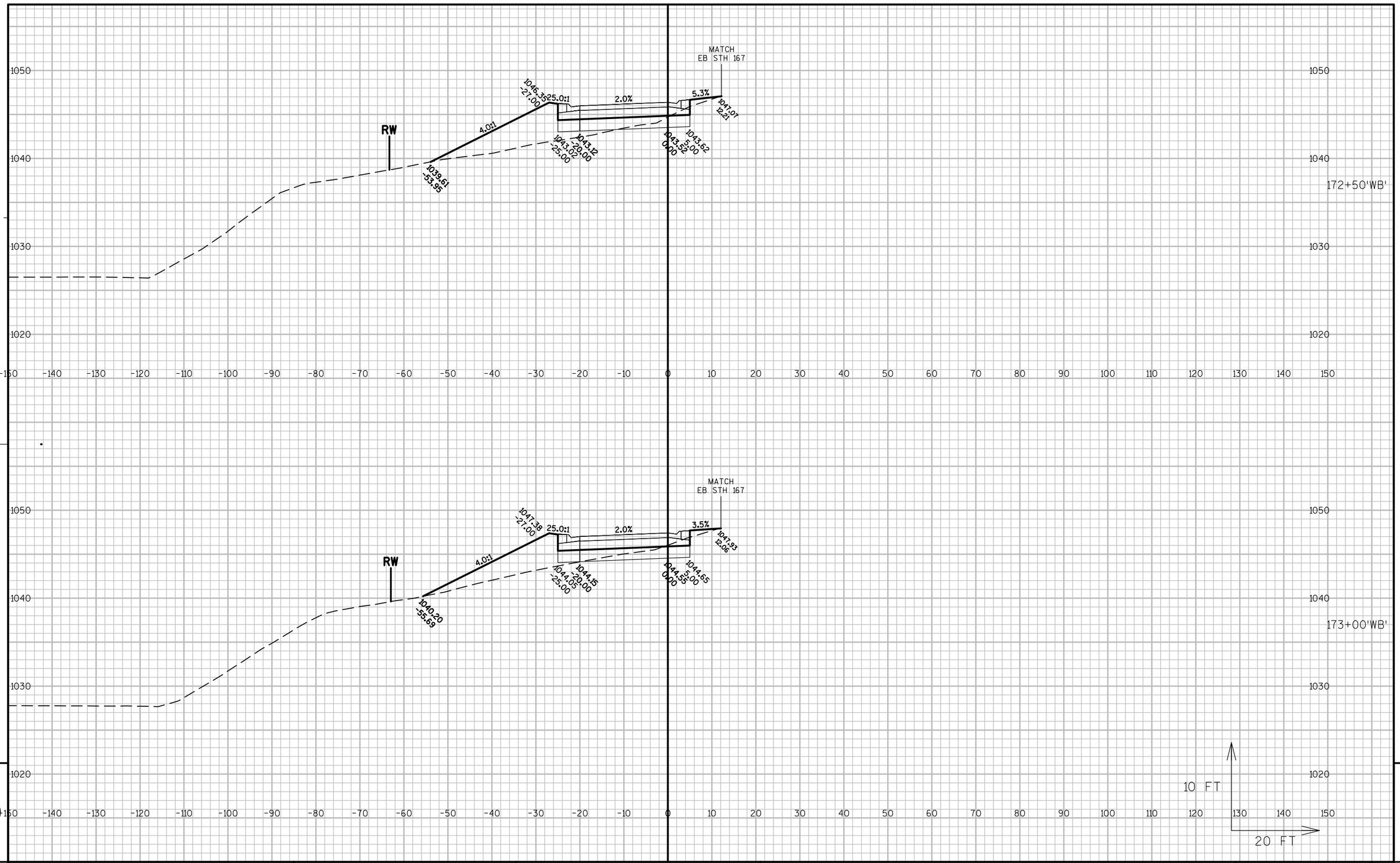
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WISDOT/CADDS SHEET 49



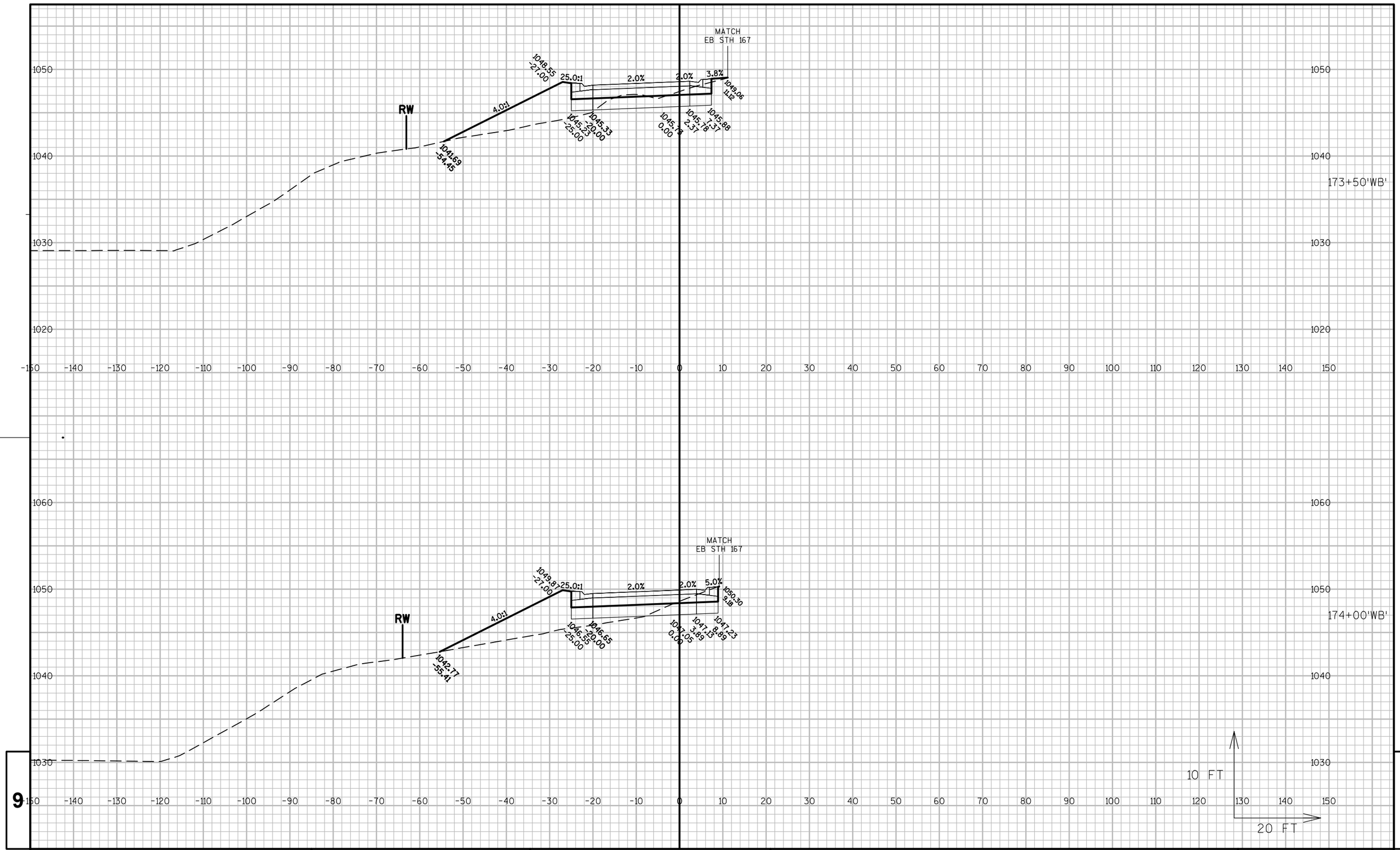
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167 WB	SHEET 1153	E

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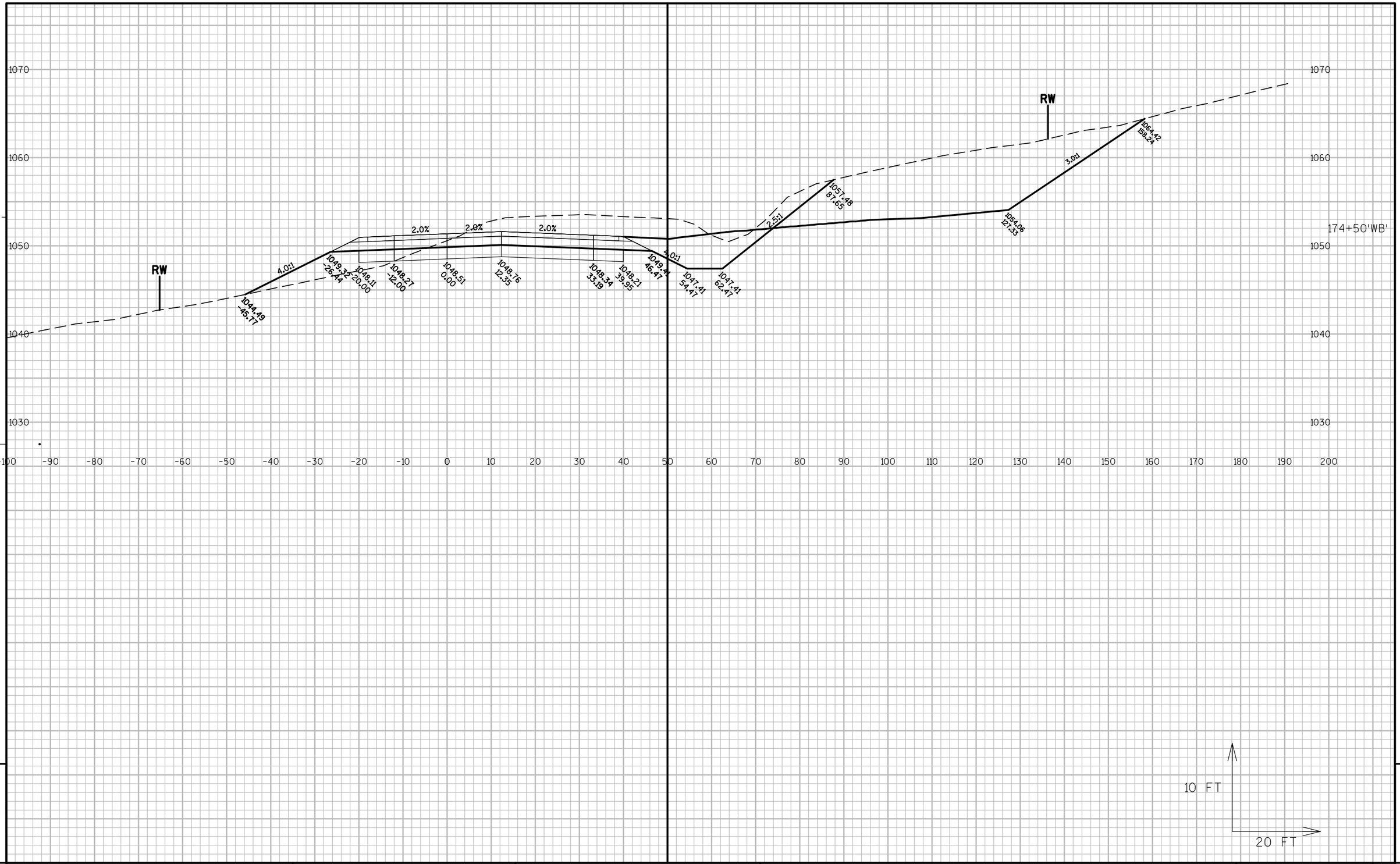


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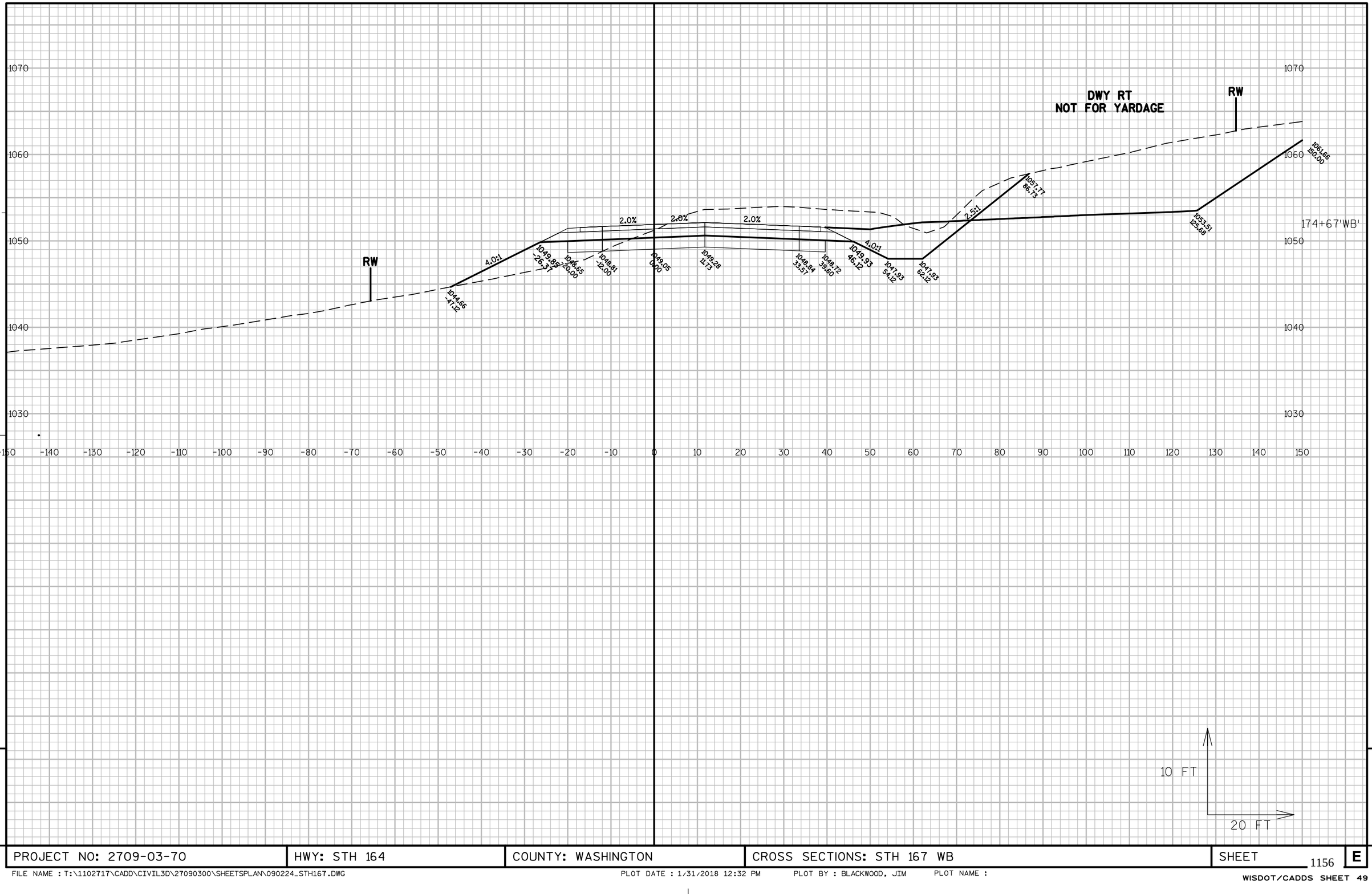
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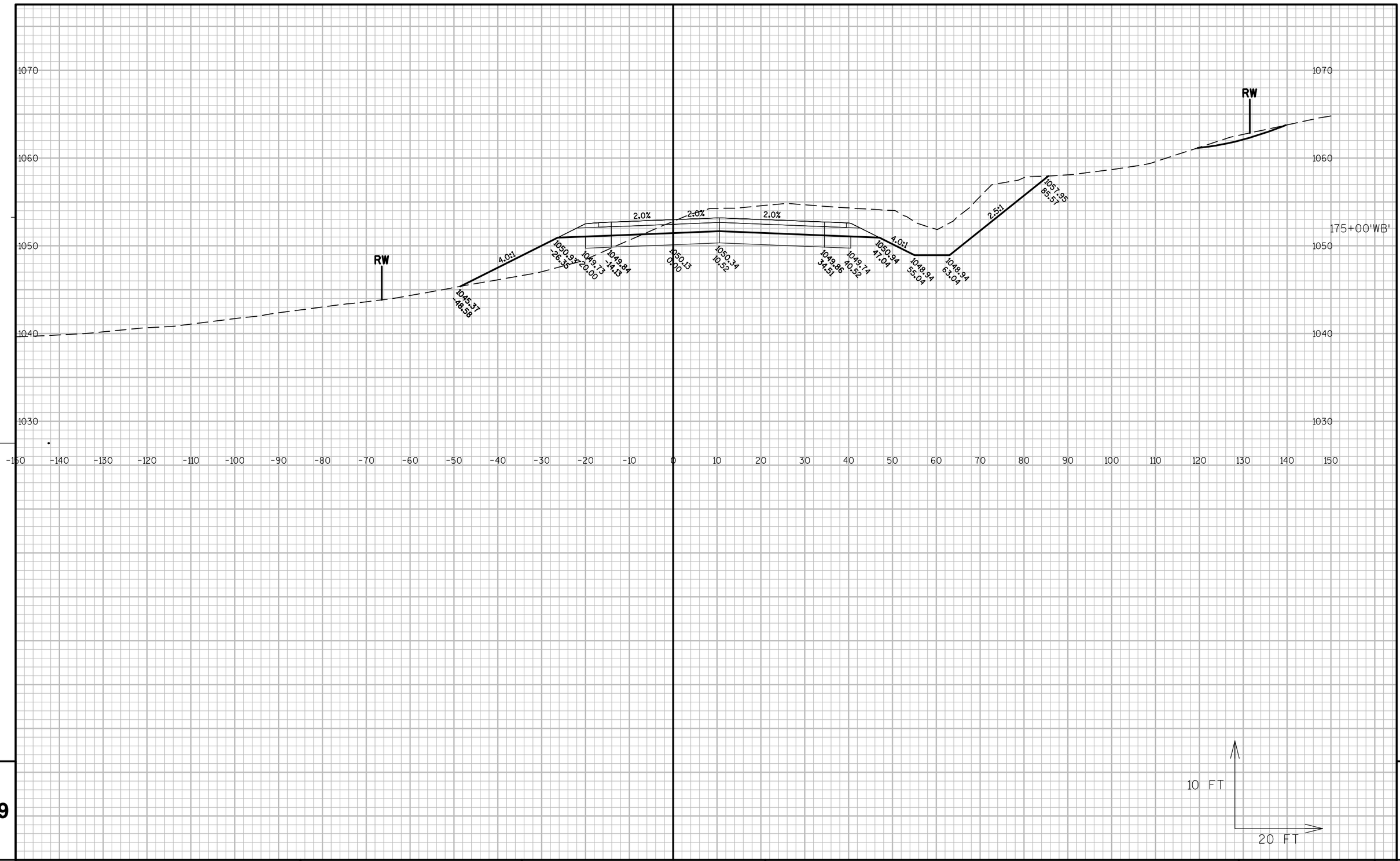
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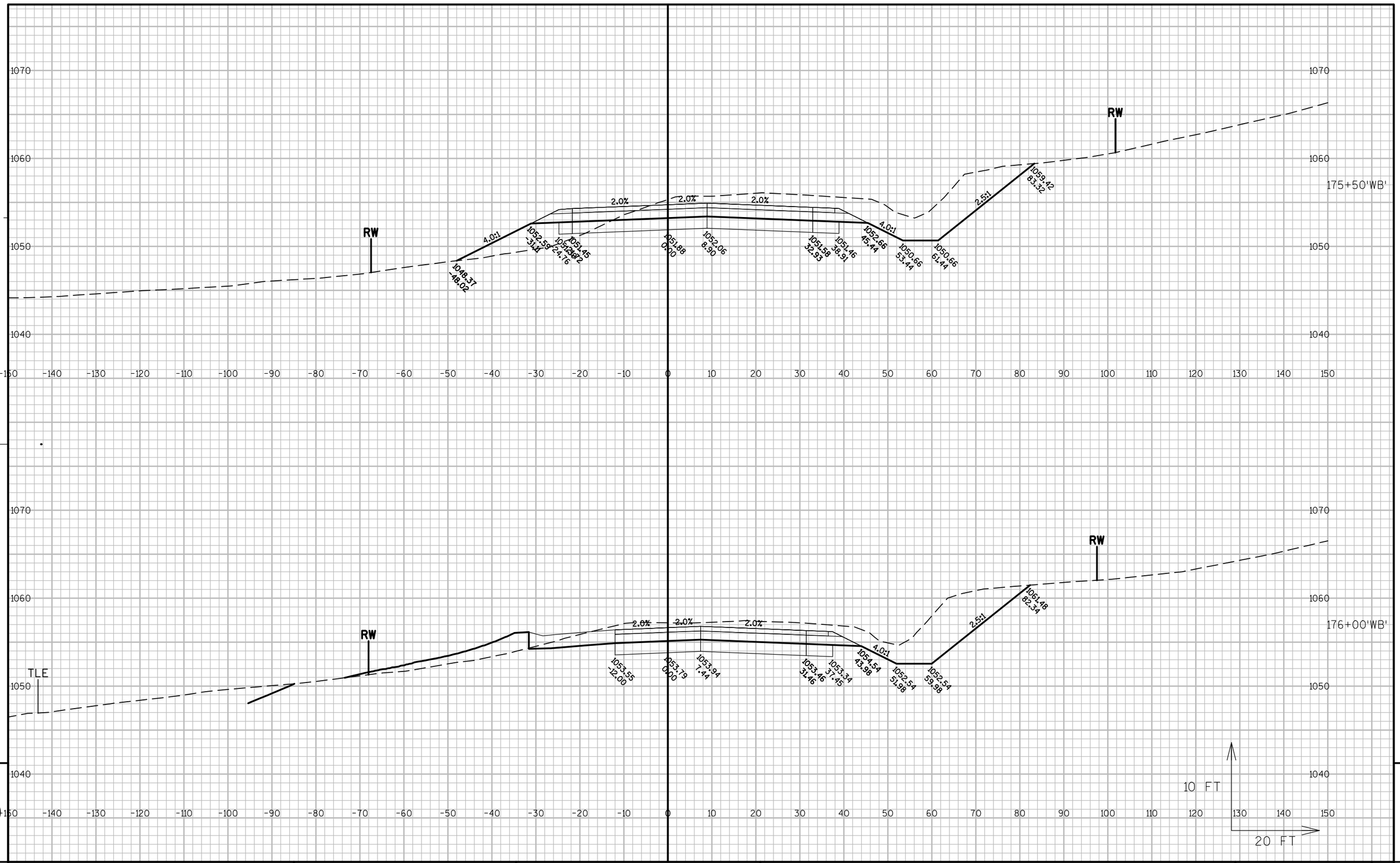


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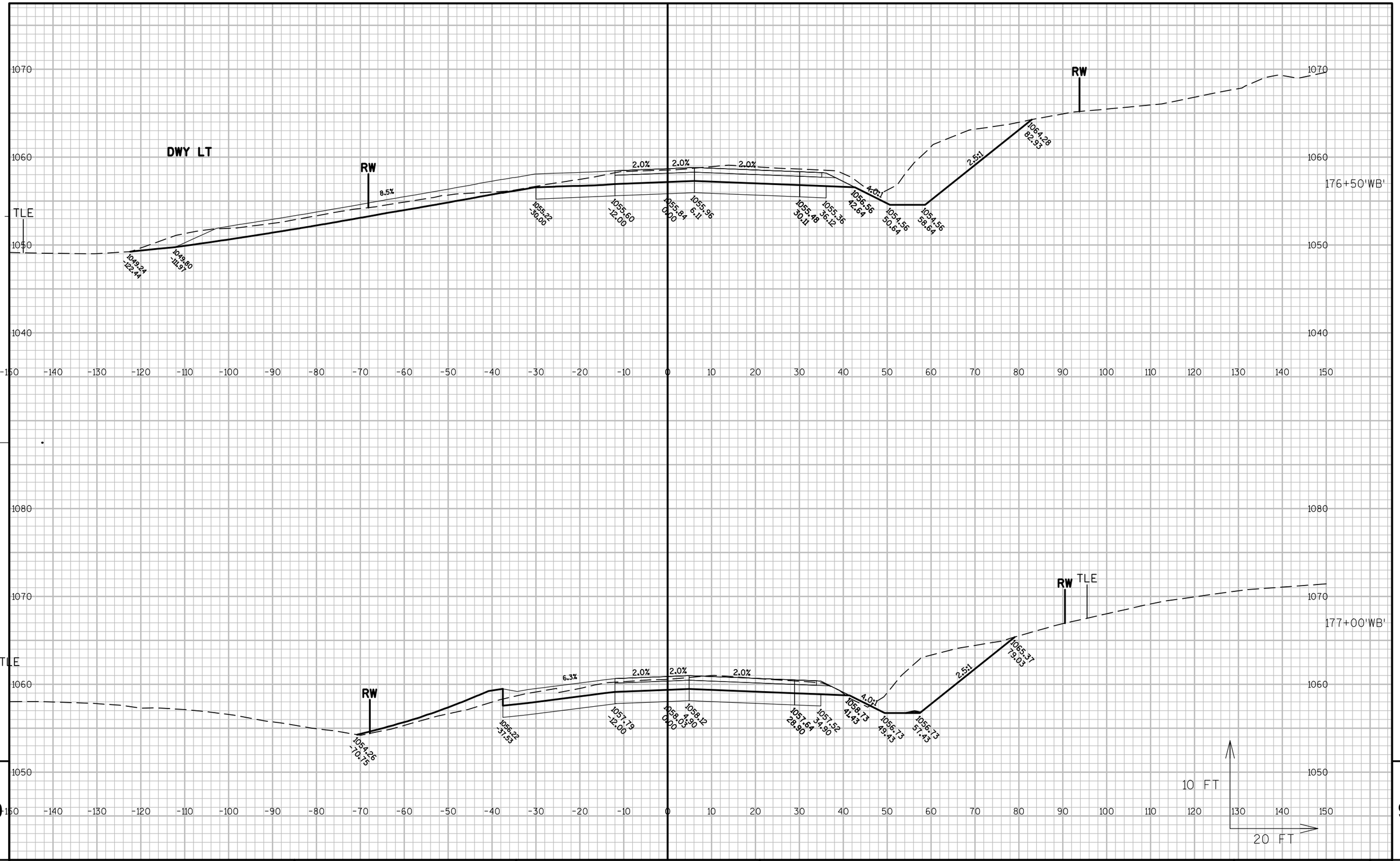
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167 WB	SHEET 1158 E

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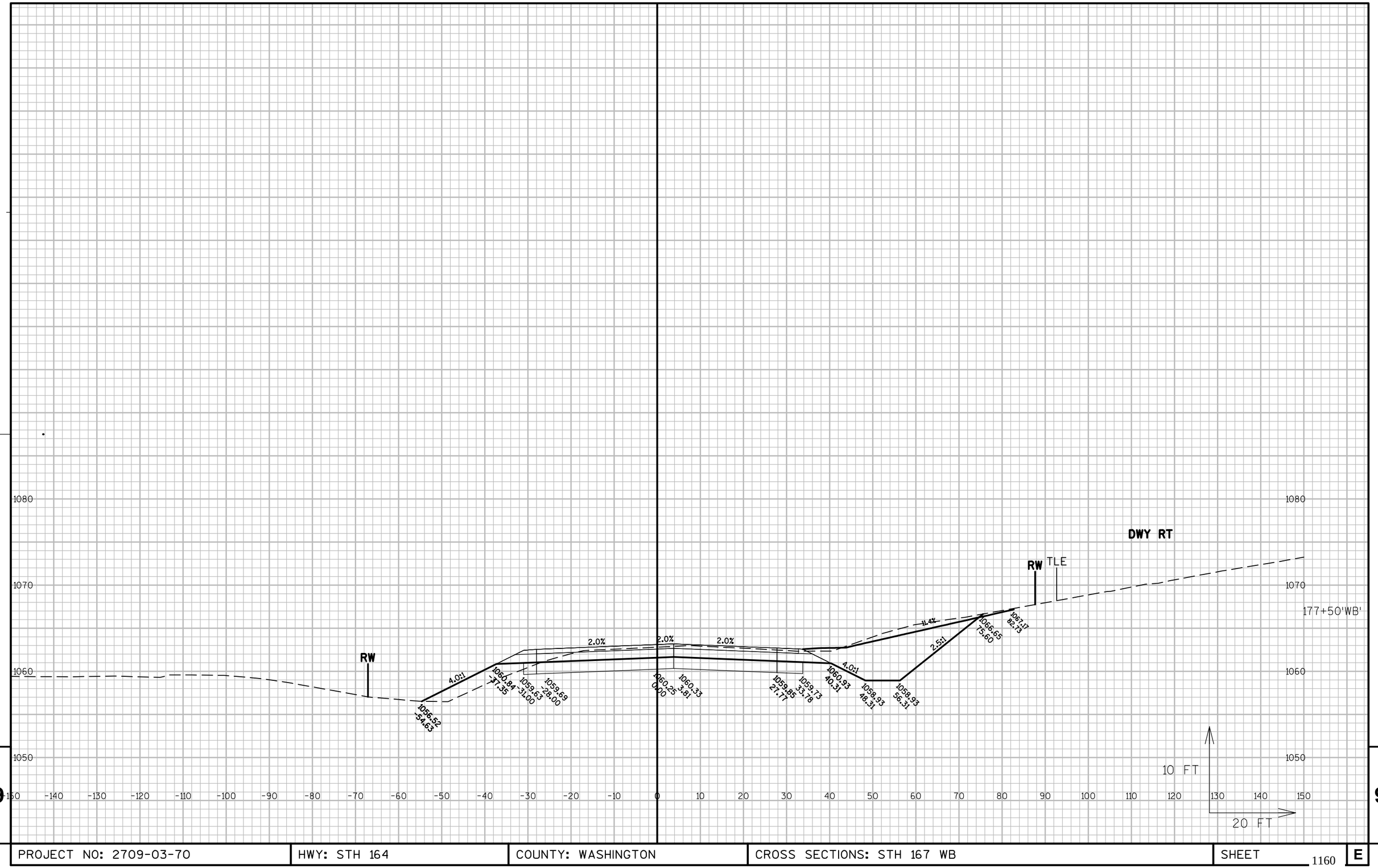
WISDOT/CADDS SHEET 49



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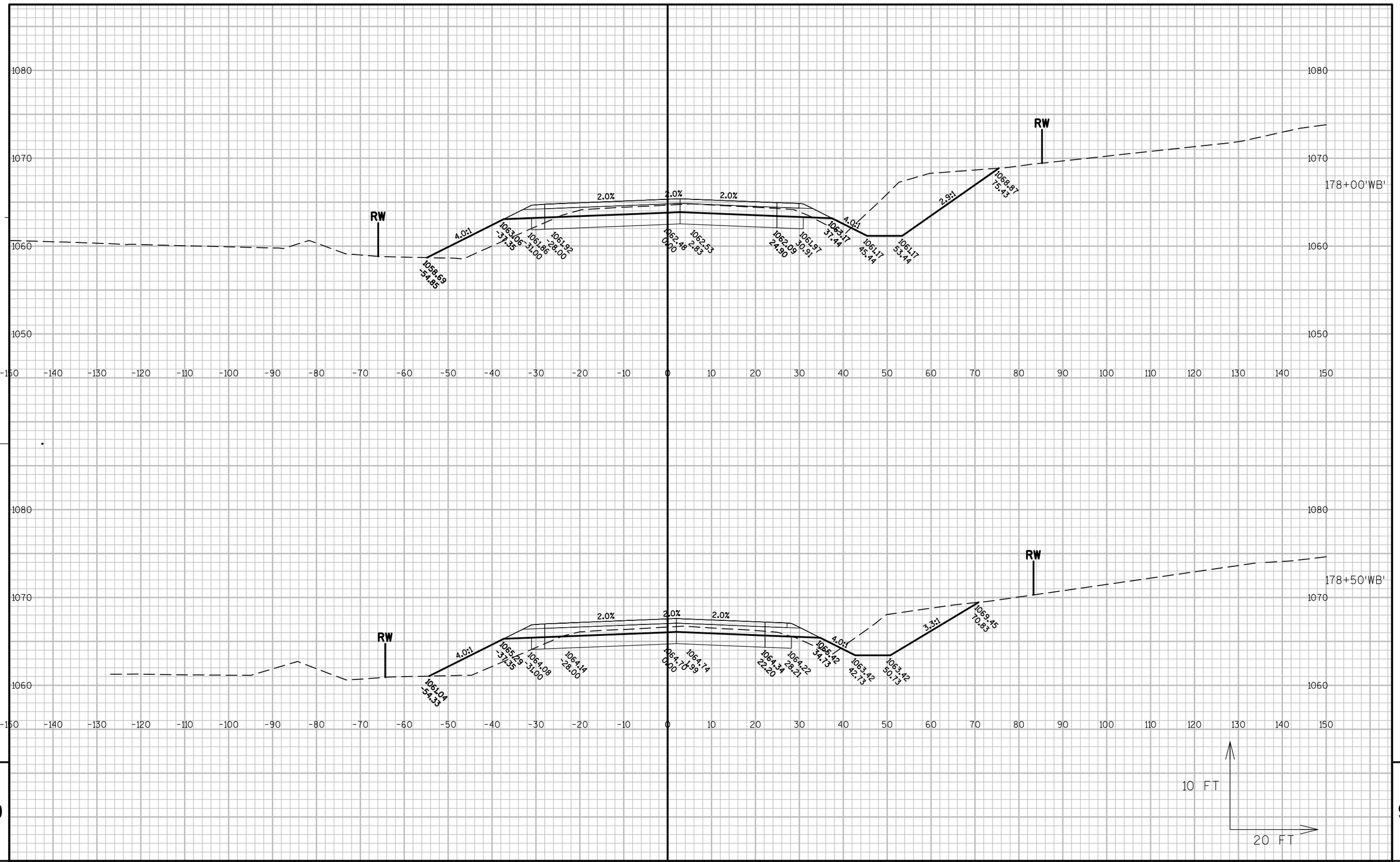
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WISDOT/CADDS SHEET 49



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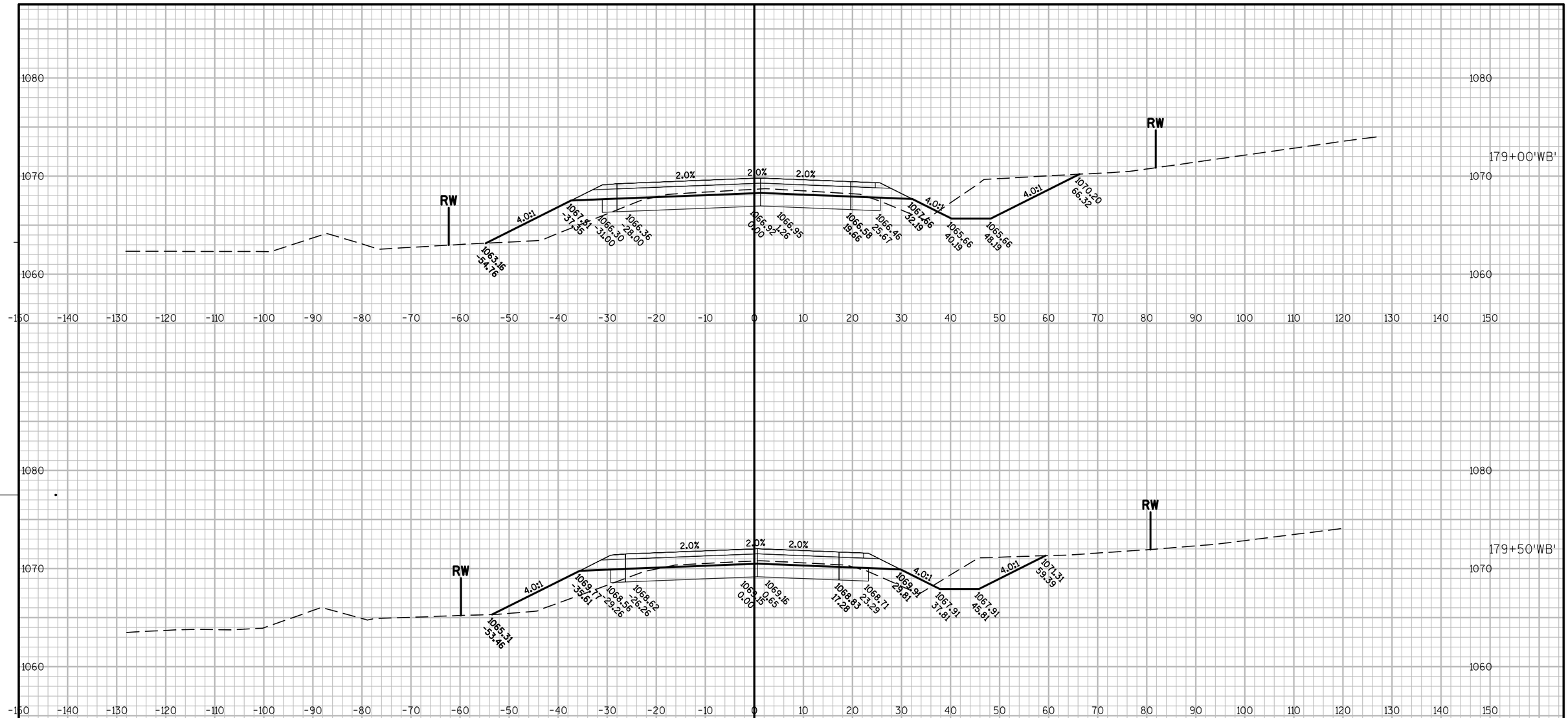
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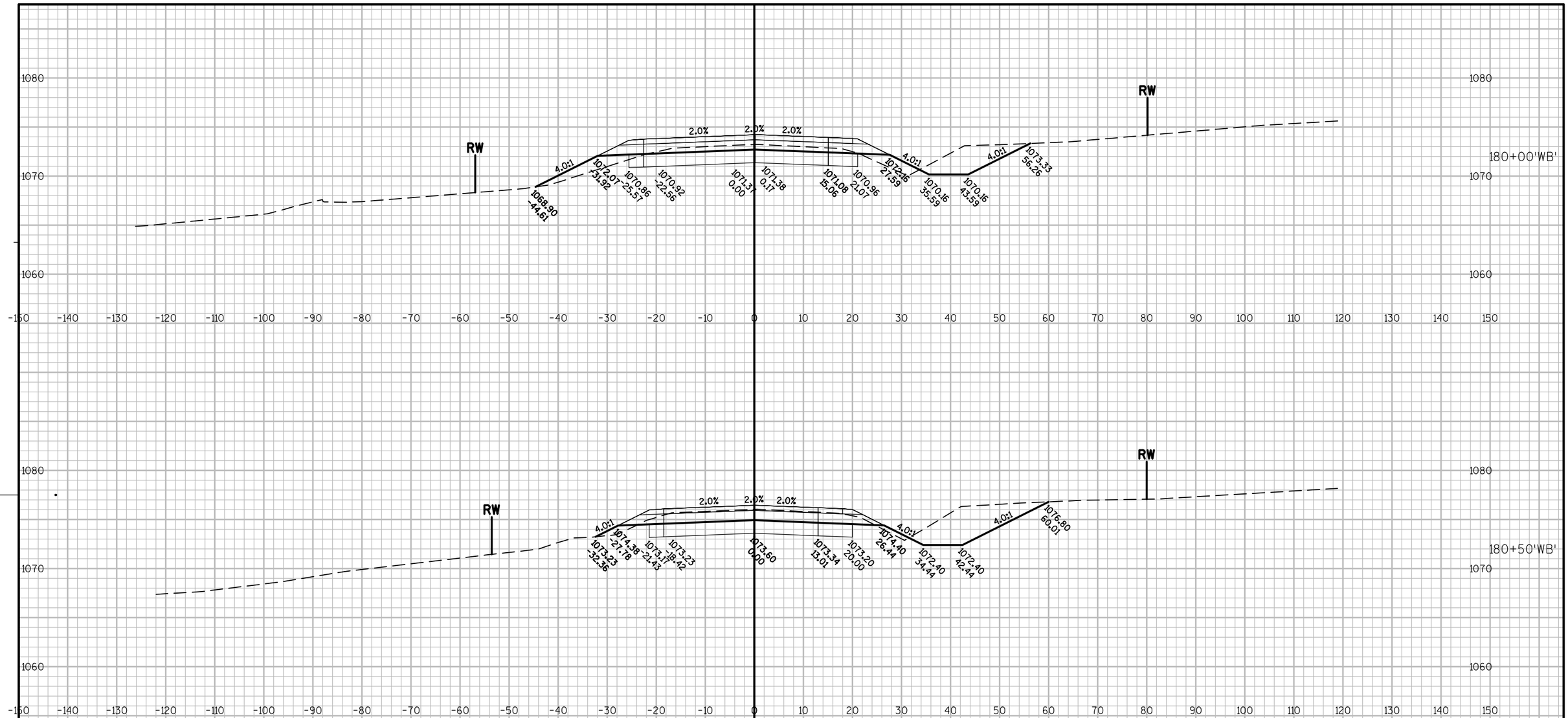


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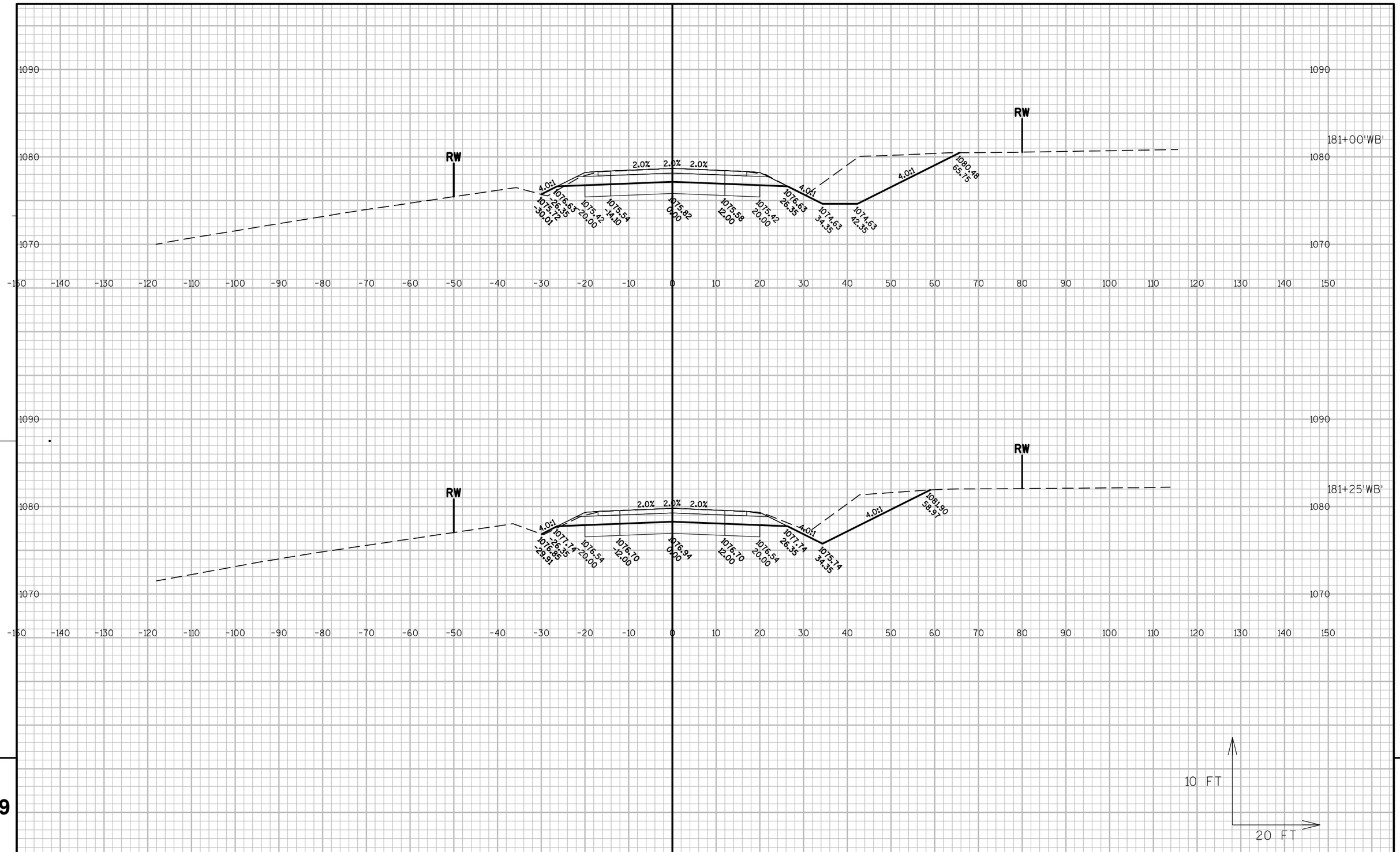


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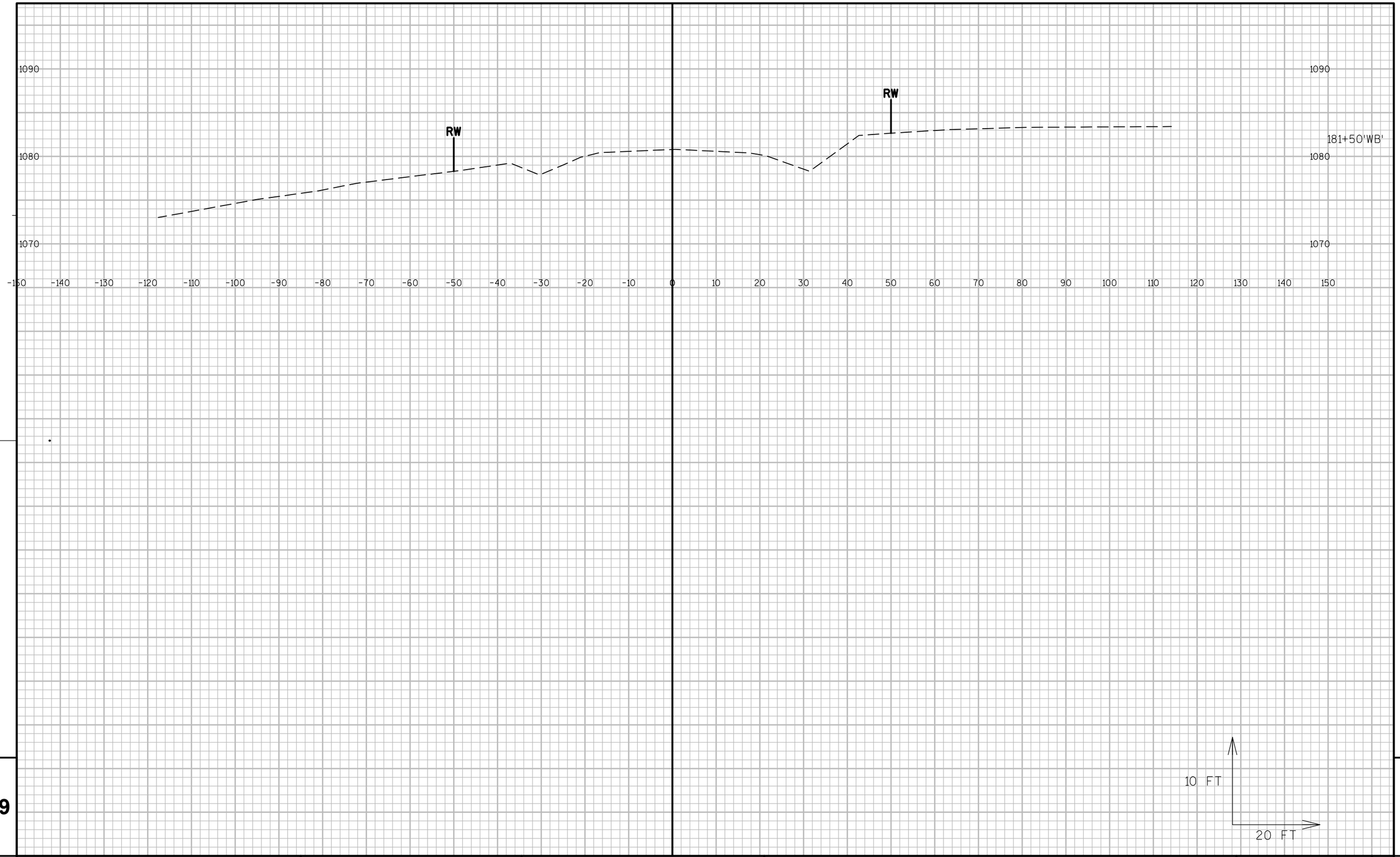


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167 WB	SHEET 1164	E

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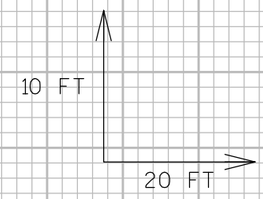
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167 WB	SHEET 1165	E







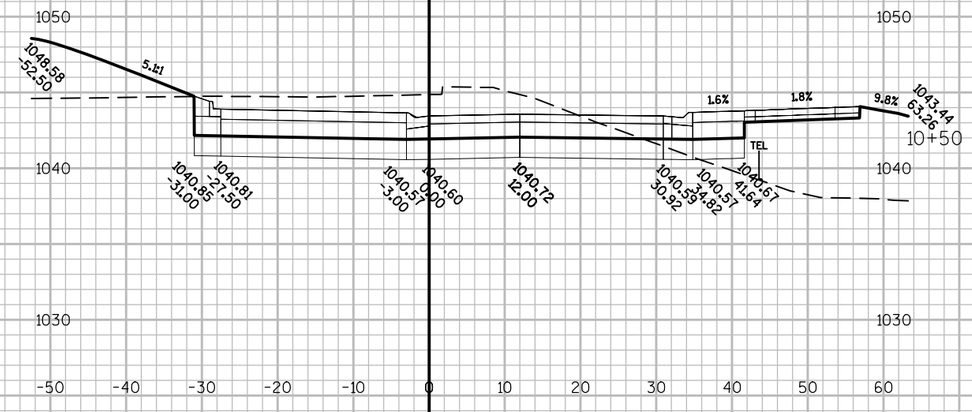
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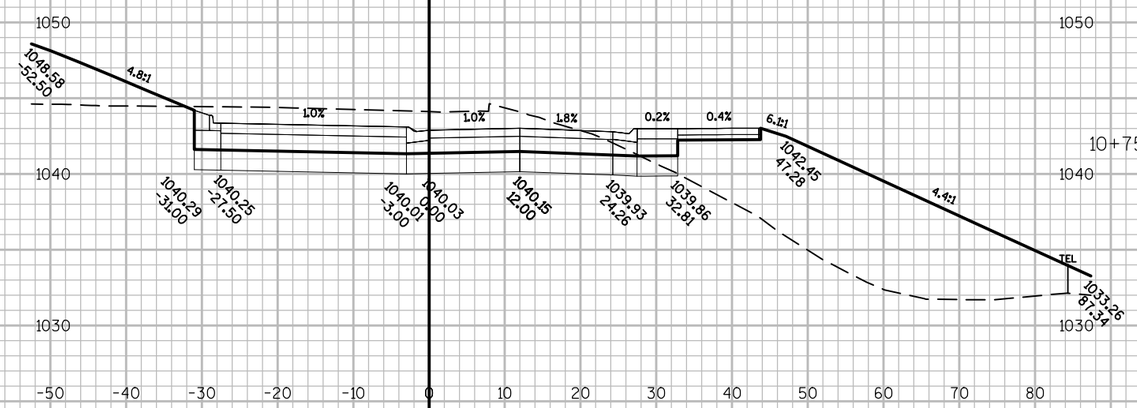
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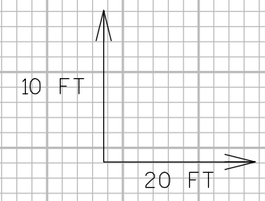
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: CIRCULATORY ROADWAY	SHEET 1166	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090224A_CIRCLE.DWG PLOT DATE : 1/31/2018 1:11 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :

WISDOT/CADDS SHEET 49





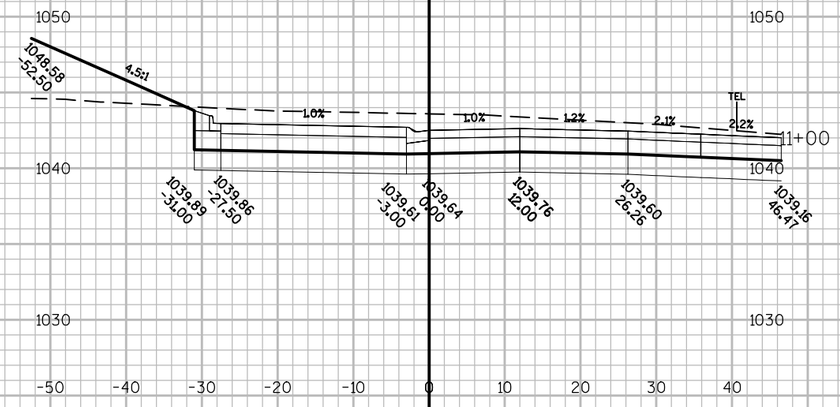


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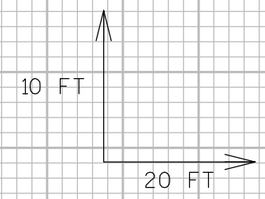
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: CIRCULATORY ROADWAY	SHEET 1167	E

FILE NAME : T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090224A_CIRCLE.DWG PLOT DATE : 1/31/2018 1:11 PM PLOT BY : BLACKWOOD, JIM PLOT NAME :



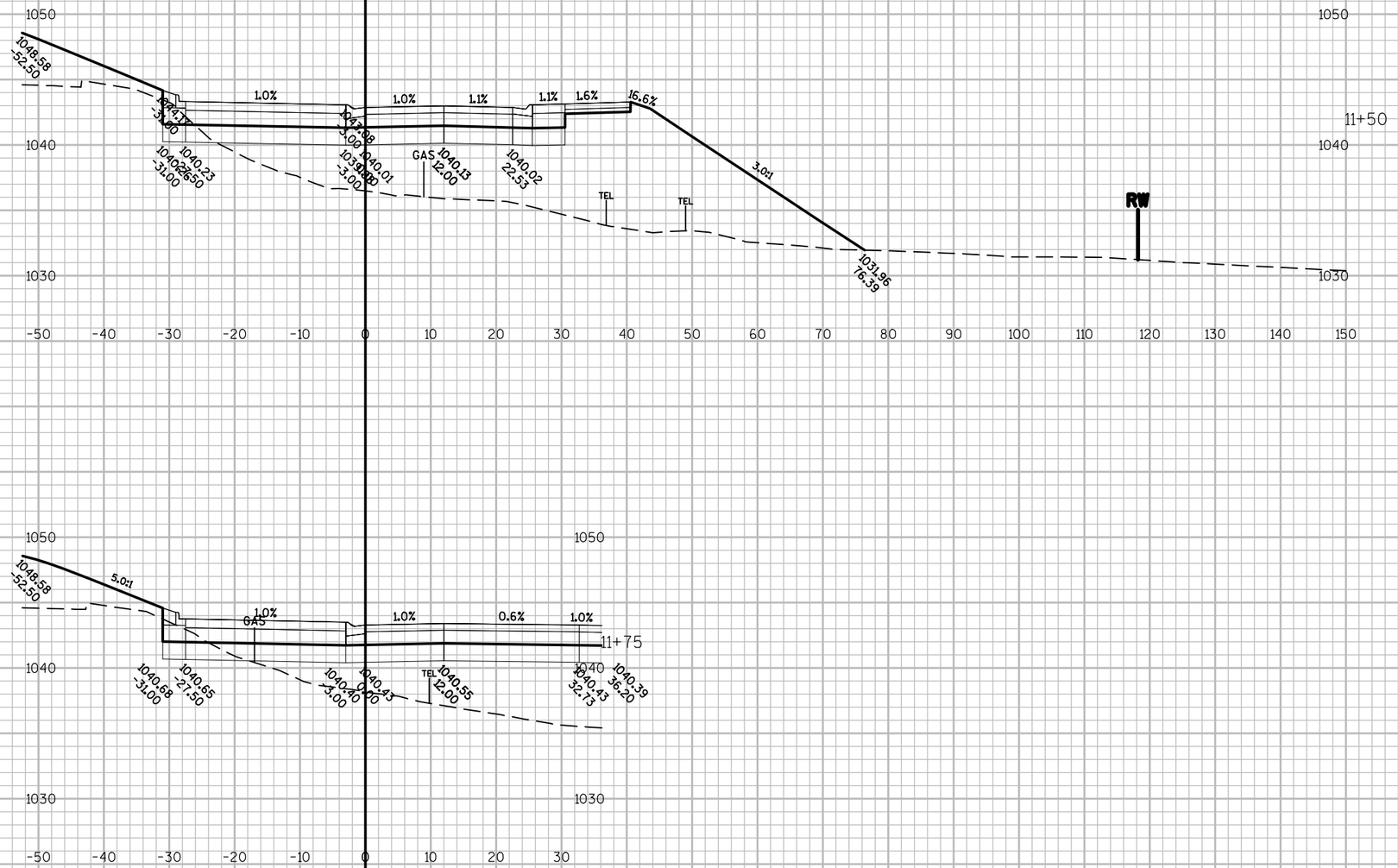




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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: CIRCULATORY ROADWAY	SHEET 1168	E



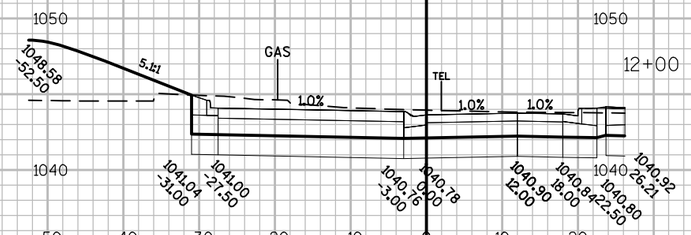
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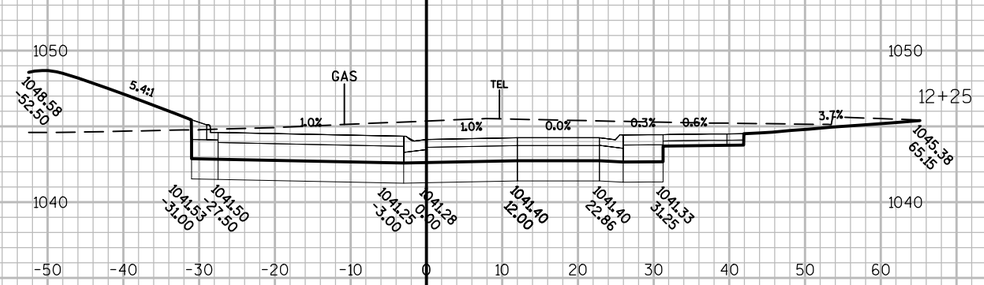
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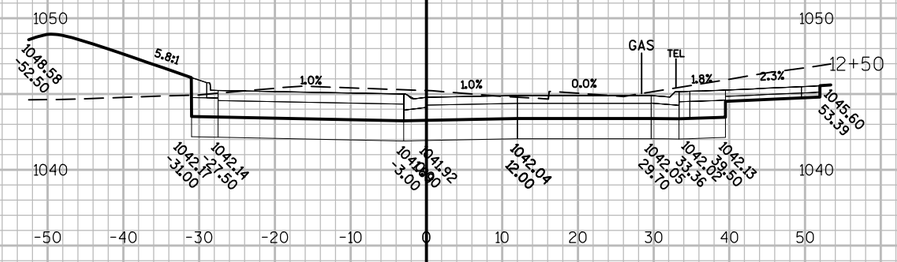
WISDOT/CADDS SHEET 49

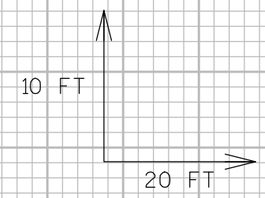
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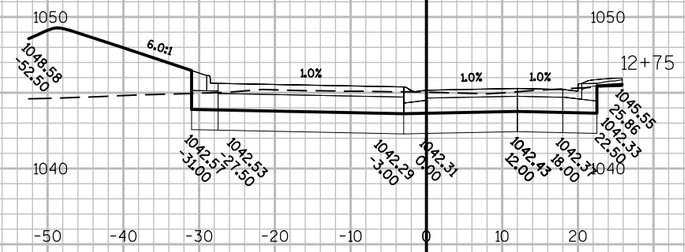


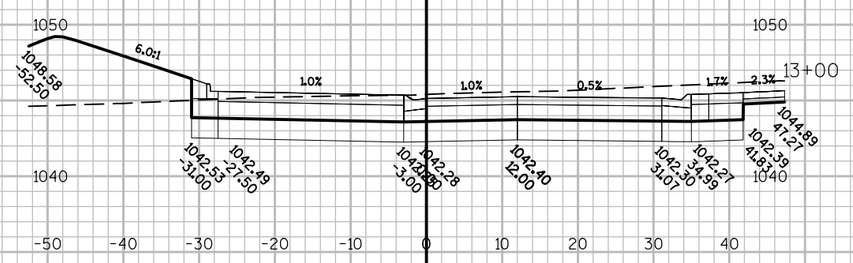
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: CIRCULATORY ROADWAY	SHEET 1170	E

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10 FT

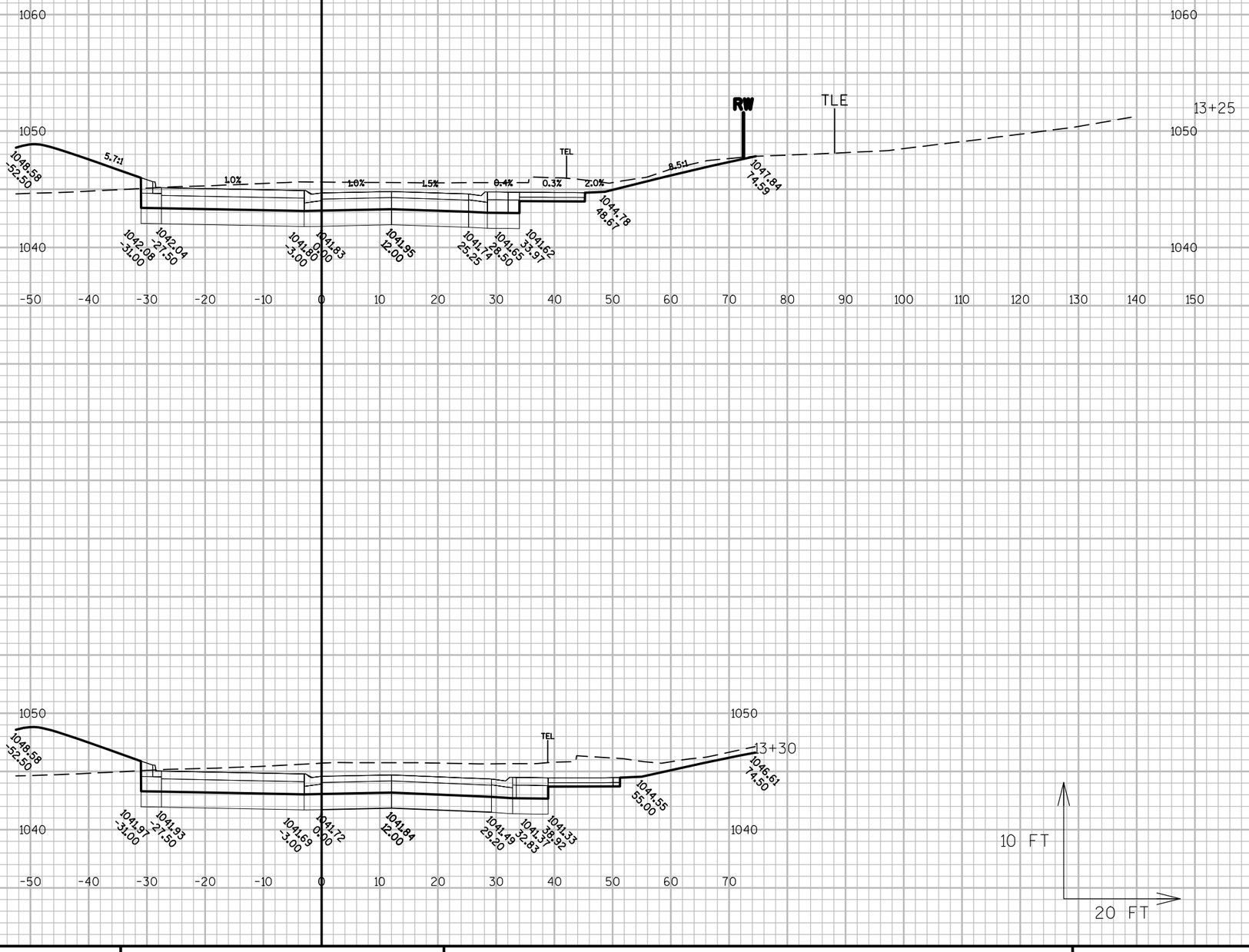
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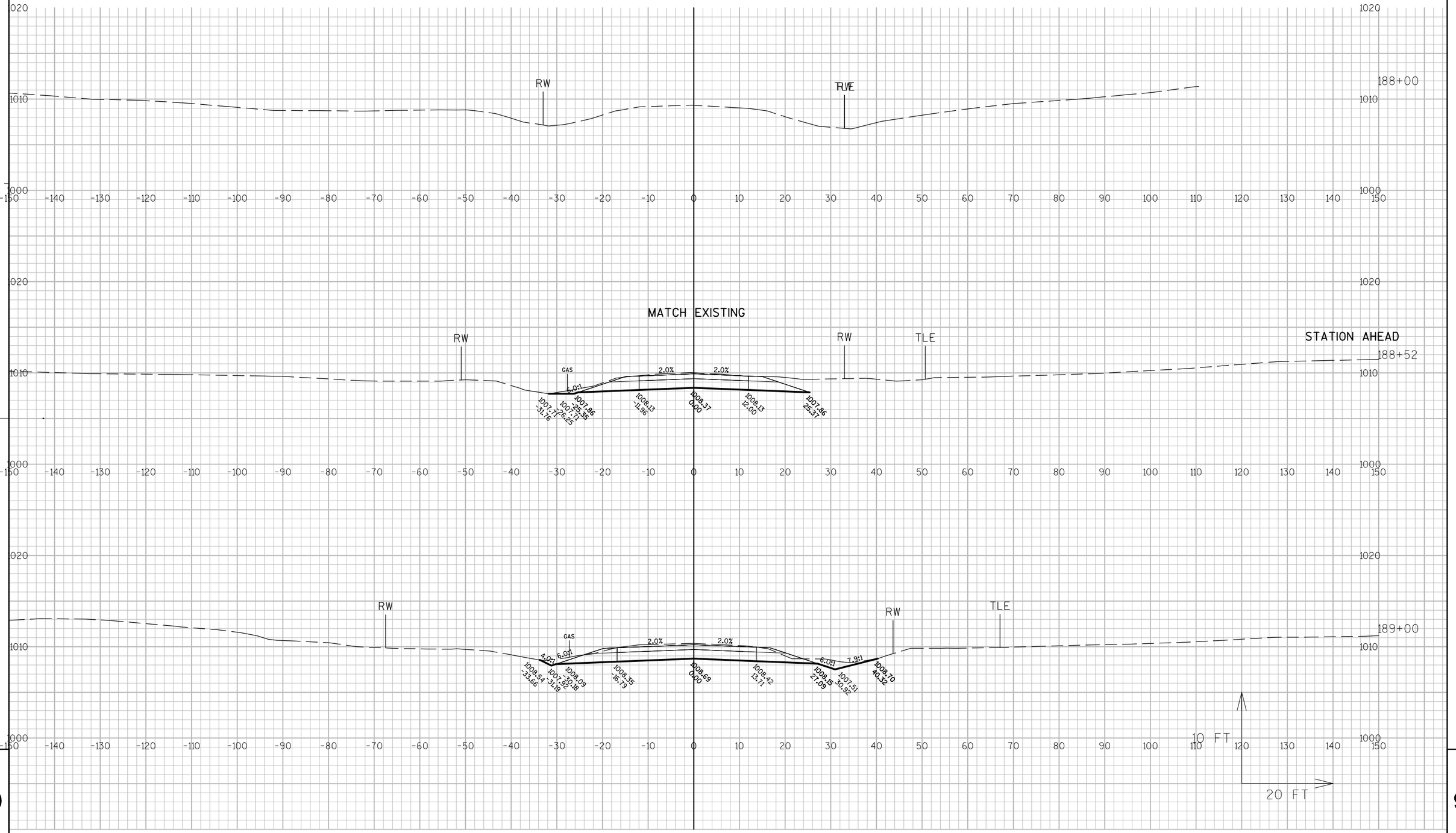
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: CIRCULATORY ROADWAY	SHEET 1171	E

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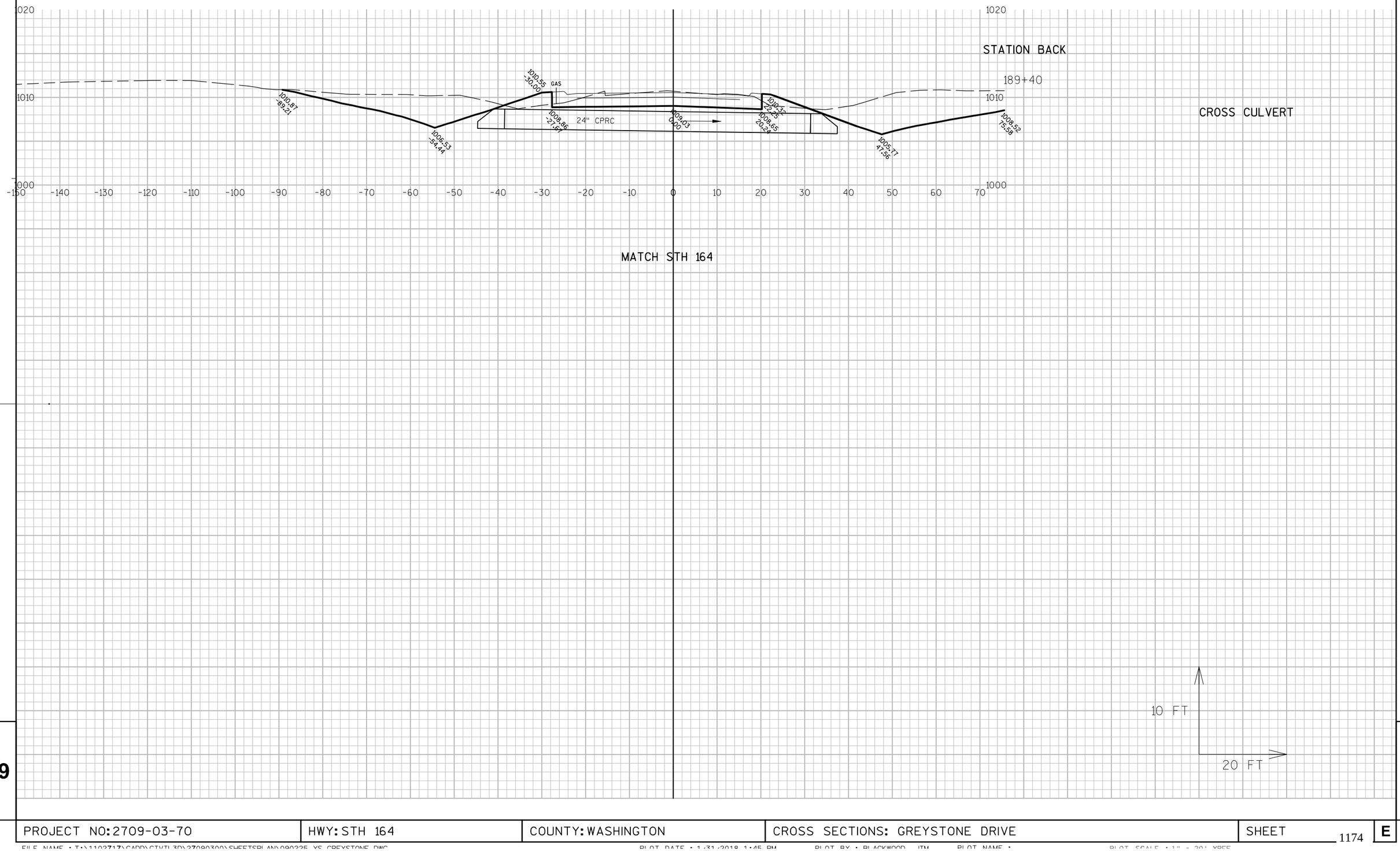
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: CIRCULATORY ROADWAY	SHEET 1172	E



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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: GREYSTONE DRIVE	SHEET 1173	E



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: GREYSTONE DRIVE	SHEET 1174	E

FILE NAME: T:\1102717\CADD\CIVIL 3D\2709030\SHEETSPLAN\090225_XS_GREYSTONE.DWG PLOT DATE: 1/31/2018 1:45 PM PLOT BY: BLACKWOOD, JIM PLOT NAME: PLOT SCALE: 1" = 20' XREF

197+00

RW RW TLE GAS TEL

MATCH EXISTING

RW 1022.22 -21.00 11.0:1 2.0% 2.0% GAS TEL RW TLE 6.0:1 4.0:1

1021.72 -26.53 1018.90 -19.00 1019.28 0.00 1019.00 14.00 1020.20 20.61 1018.87 28.61 1020.59 35.51

STATION AHEAD
197+04

198+00

DRIVEWAY LT

TLE RW 2.9% 4.0% 2.0% 2.0% GAS TEL RW TLE 6.0:1 4.0:1

1021.31 -36.72 1017.67 -19.00 1018.05 0.00 1017.77 14.00 1018.97 20.61 1017.64 28.61 1019.05 34.24

10 FT

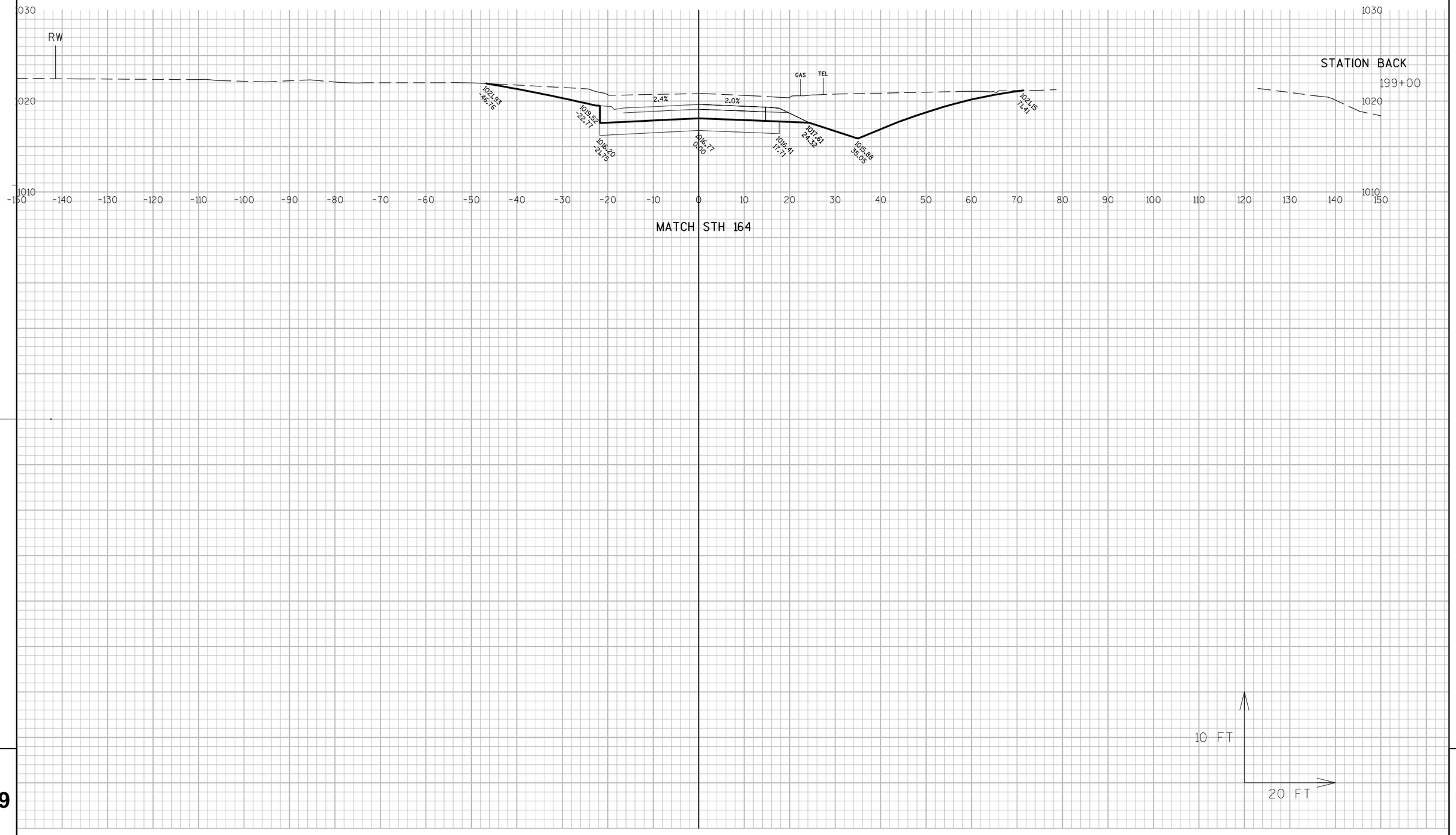
20 FT

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: PLEASANT HILL ROAD	SHEET 1175	E

FILE NAME: T:\1102717\CADD\CIVIL 3D\270903001\SHEETSPLAN\090226_XS_PLEASANT HILL.DWG PLOT DATE: 1/31/2018 1:20 PM PLOT BY: BLACKWOOD, JIM PLOT NAME: PLOT SCALE: 1" = 20' XREF

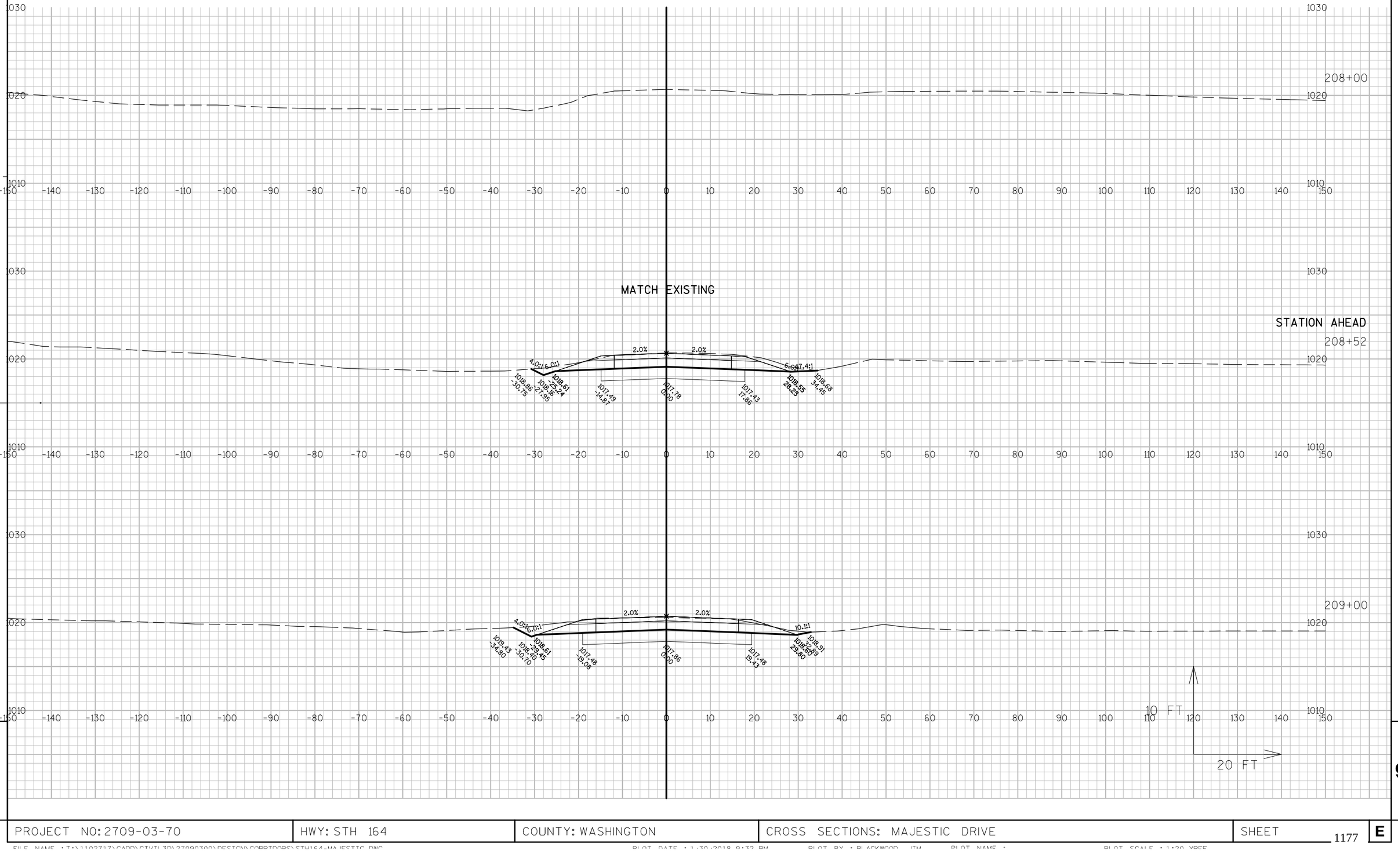


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: PLEASANT HILL ROAD	SHEET 1176	E

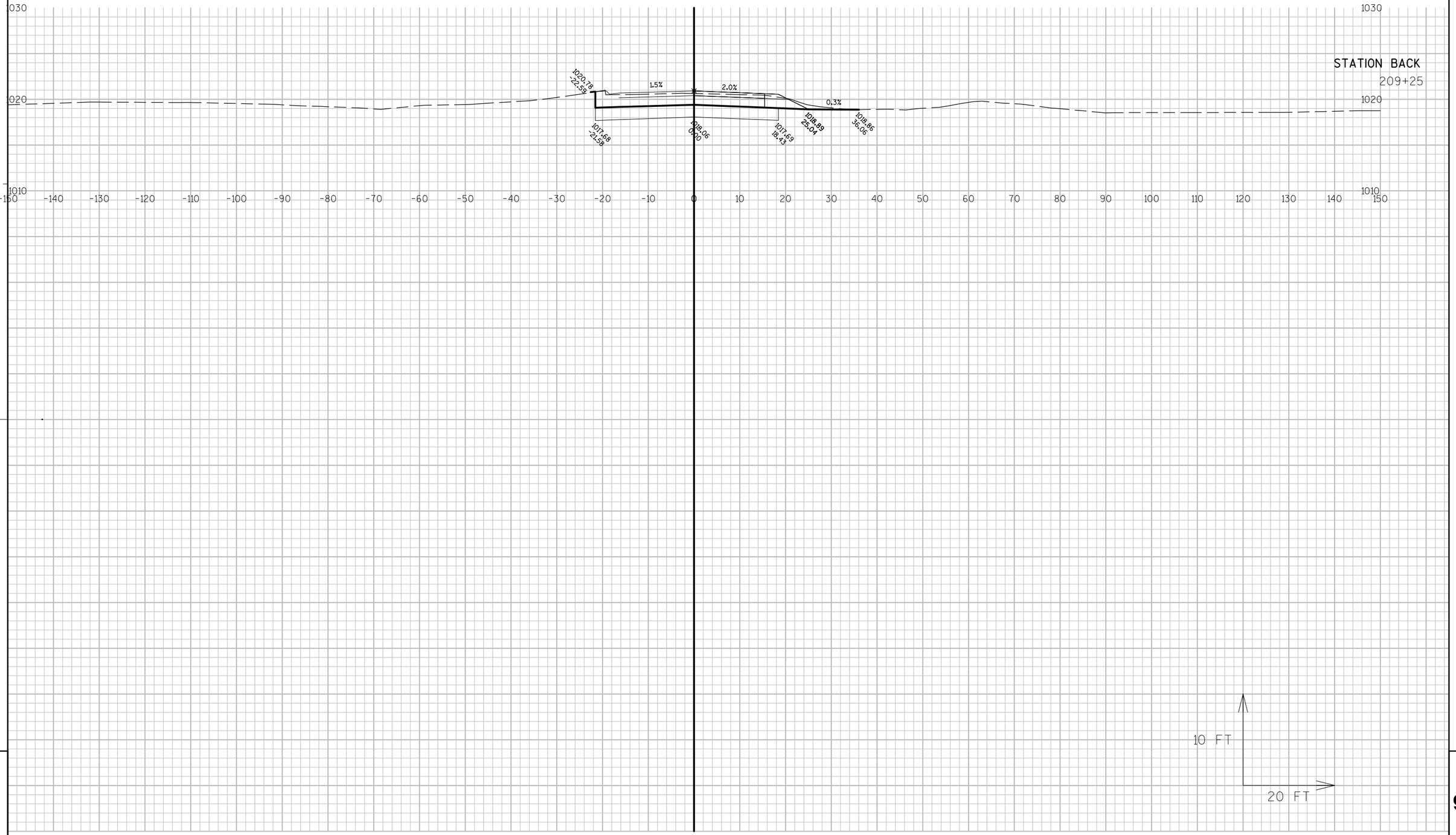
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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: MAJESTIC DRIVE	SHEET 1177 E

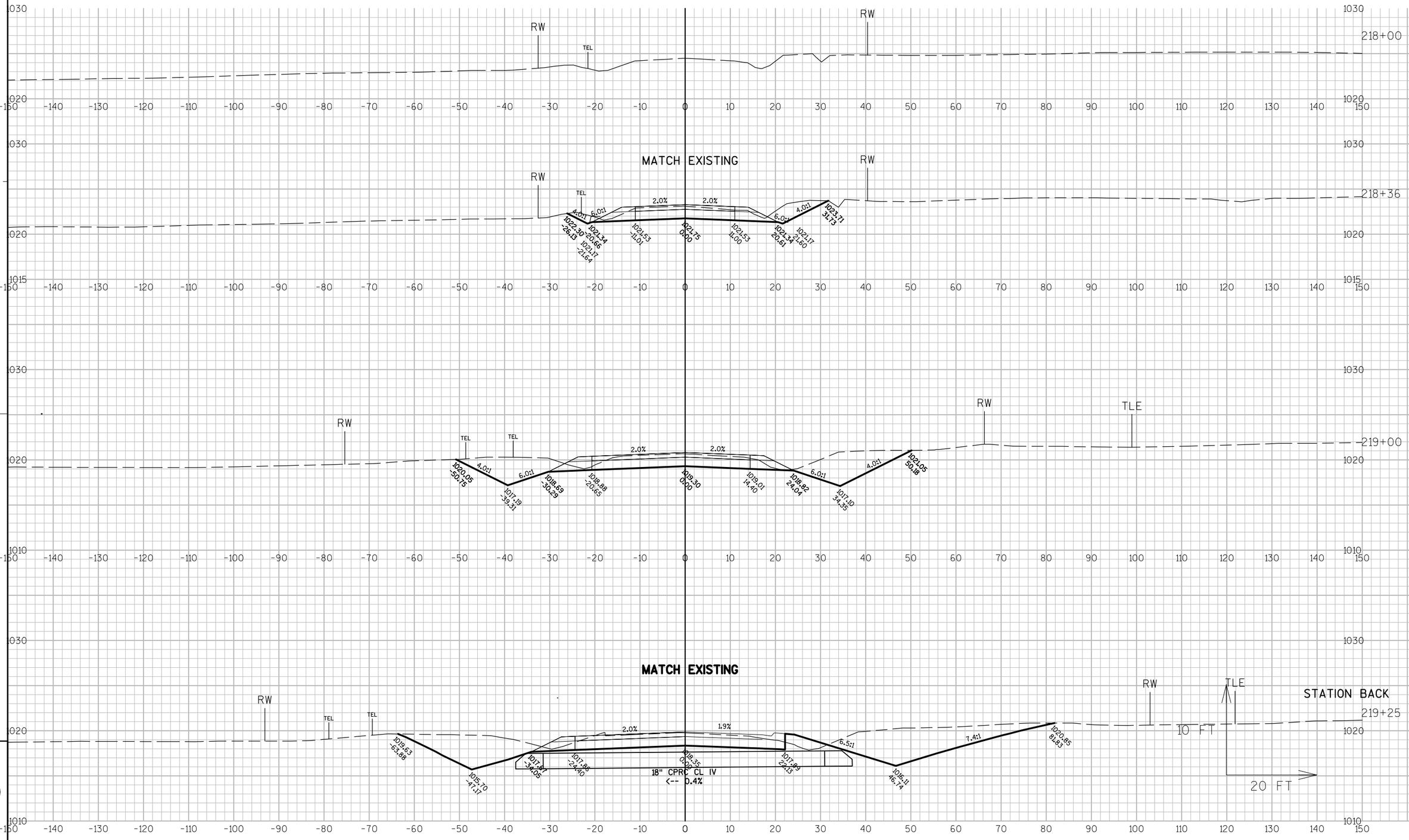
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FILE NAME: T:\1102717\CADD\CIVIL3D\2709030\DESIGN\CORRIDORS\STH164-MAJESTIC.DWG PLOT DATE: 1/30/2018 8:32 PM PLOT BY: BLACKWOOD, JIM PLOT NAME: PLOT SCALE: 1:20 XREF



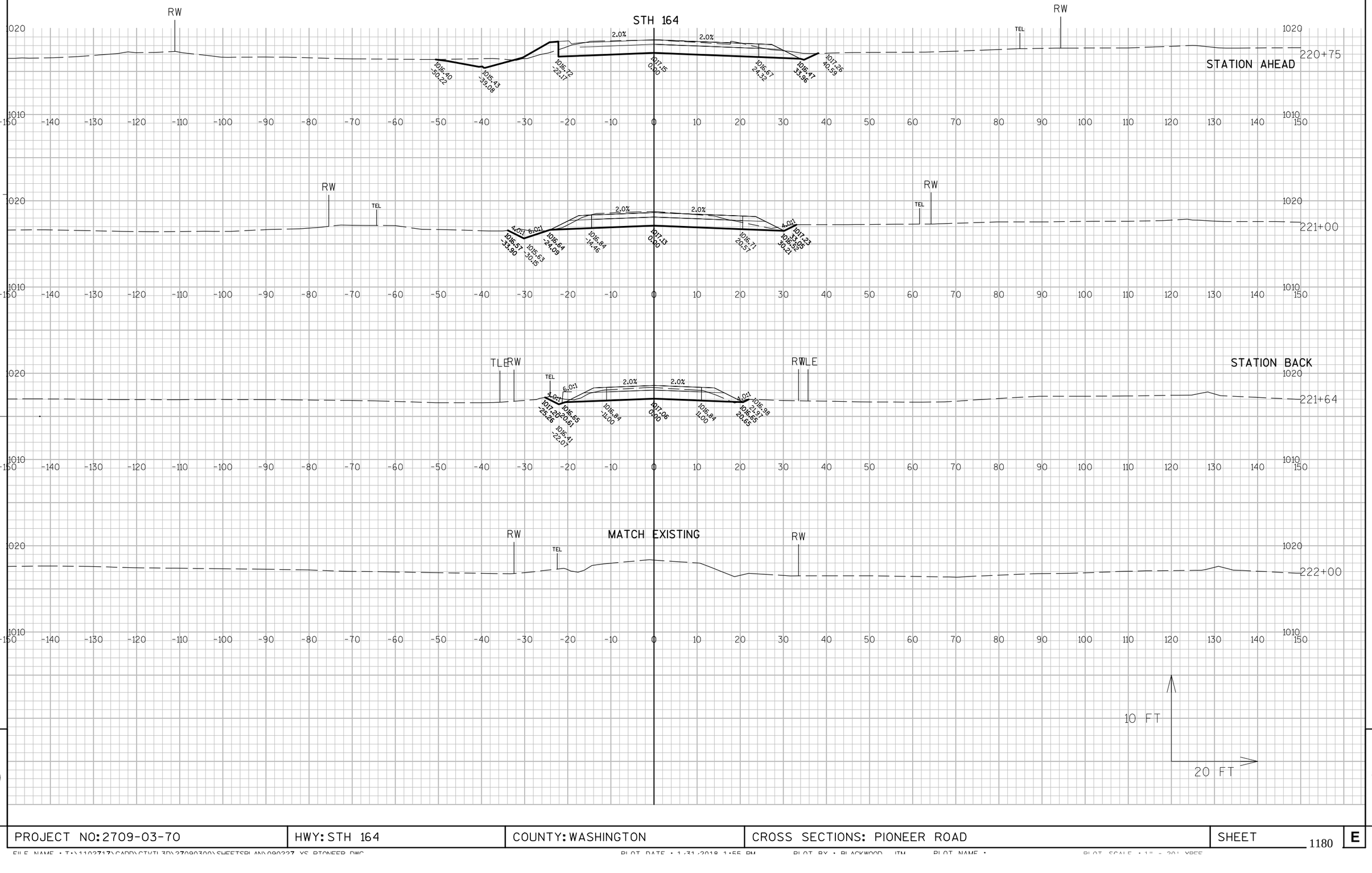
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: MAJESTIC DRIVE	SHEET 1178	E

FILE NAME: T:\1102717\CADD\CIVIL 3D\2709300\DESIGN\CORRIDORS\STH164-MAJESTIC.DWG PLOT DATE: 1/30/2018 8:32 PM PLOT BY: BLACKWOOD, JIM PLOT NAME: PLOT SCALE: 1:20 XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: PIONEER ROAD	SHEET 1179	E

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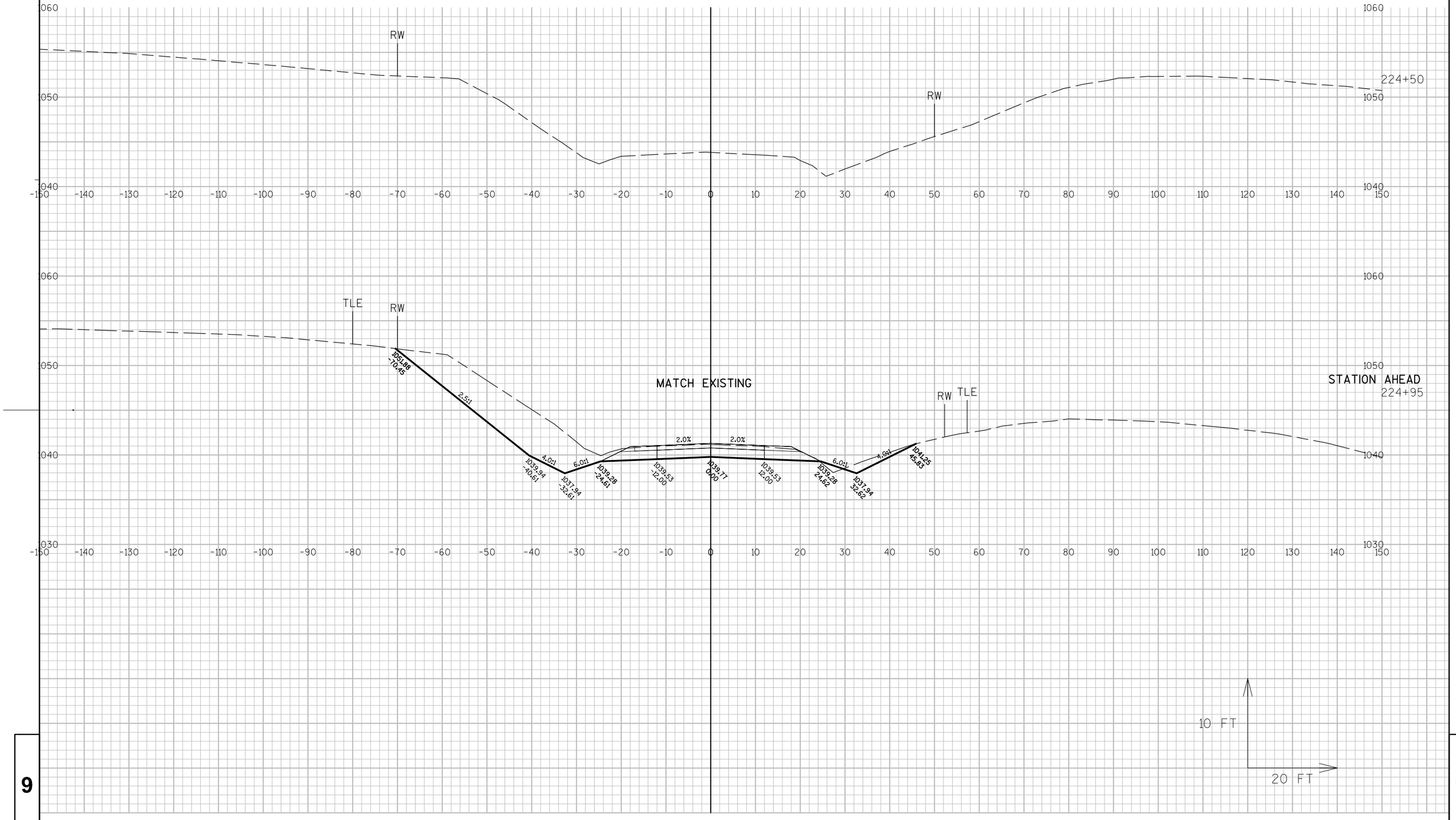


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: PIONEER ROAD	SHEET 1180	E

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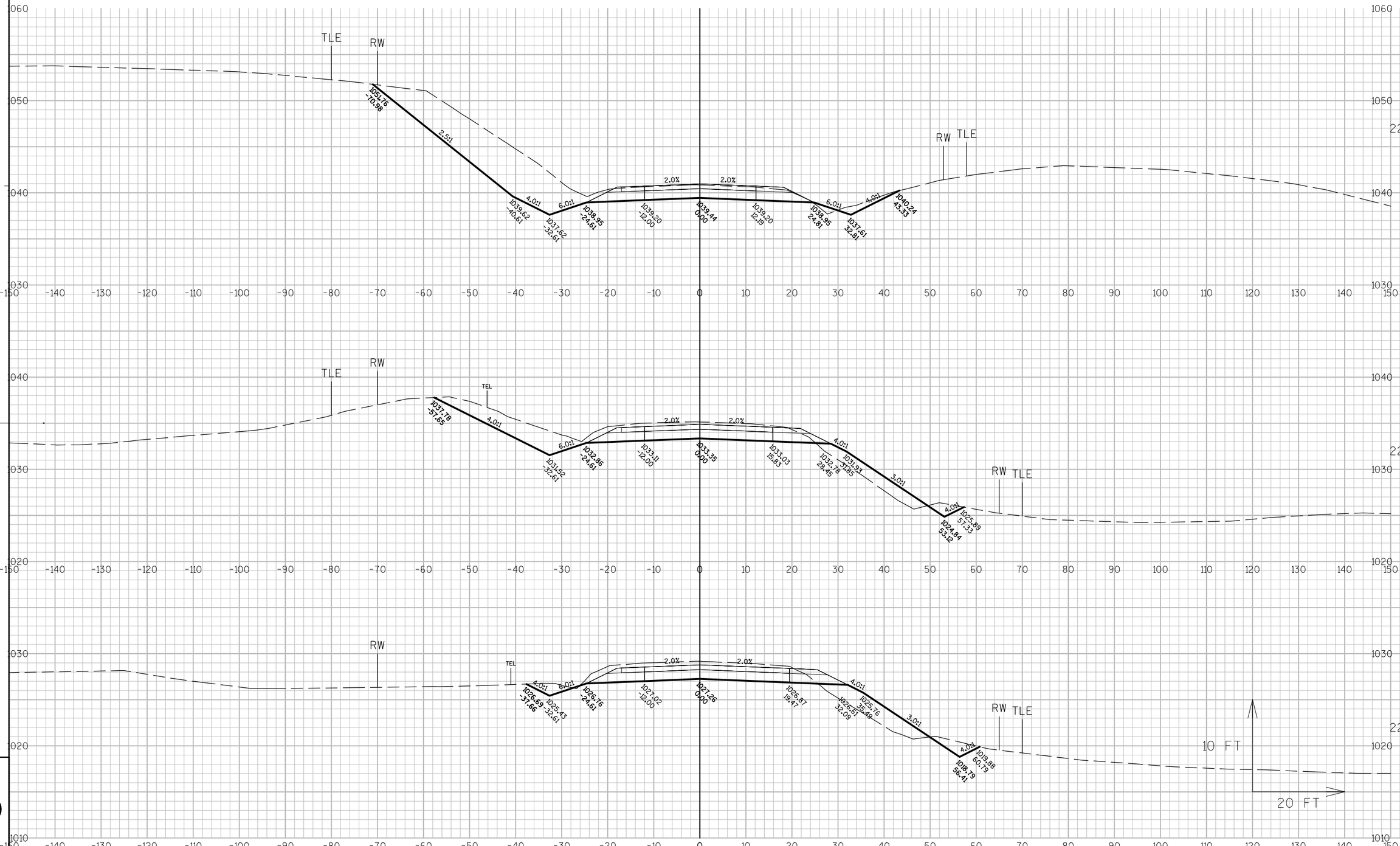


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: CTH E	SHEET 1181	E

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9

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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: CTH E	SHEET 1182 E

FILE NAME: T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN090238_XS_CTH_E.DWG PLOT DATE: 1/31/2018 1:59 PM PLOT BY: BLACKWOOD, JIM PLOT NAME: PLOT SCALE: 1:20 XREF

DRIVEWAY LT
NOT FOR YARDAGE

227+22

RW TLE

TEL

1.1% 4.0:1 6.0:1 2.0% 2.0% 4.0:1 4.0:1 3.0:1 4.0:1

1026.78 -43.36 | 1024.09 -32.61 | 1025.42 -24.61 | 1025.67 -12.00 | 1025.91 0.00 | 1025.51 20.27 | 1025.26 32.89 | 1024.41 36.29 | 1019.41 58.79 | 1018.34 54.50

1030 1020 1010 1050 1040

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

TLE RW

1040.47 -88.44

2.5:1

TEL

228+00

DRIVEWAY RT

RW TLE

4.0:1 6.0:1 2.0% 2.0% 4.0% 4.0:1 6.0:1 9.7%

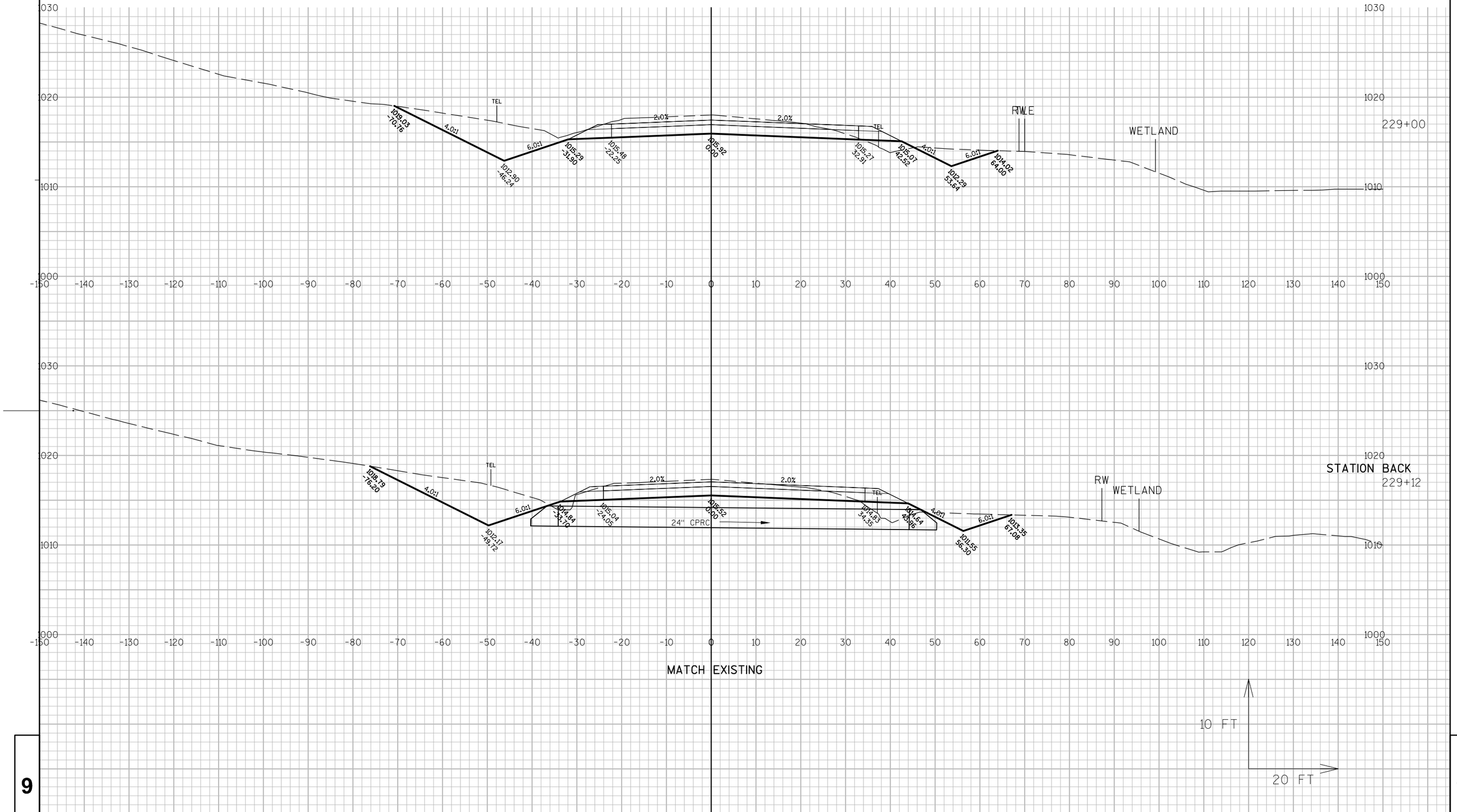
1021.34 -40.61 | 1019.34 -32.61 | 1020.67 -24.61 | 1020.92 -12.00 | 1021.16 0.00 | 1020.70 23.11 | 1020.45 35.73 | 1018.45 45.73 | 1019.21 48.32 | 1018.10 76.33

10 FT

20 FT

9 9

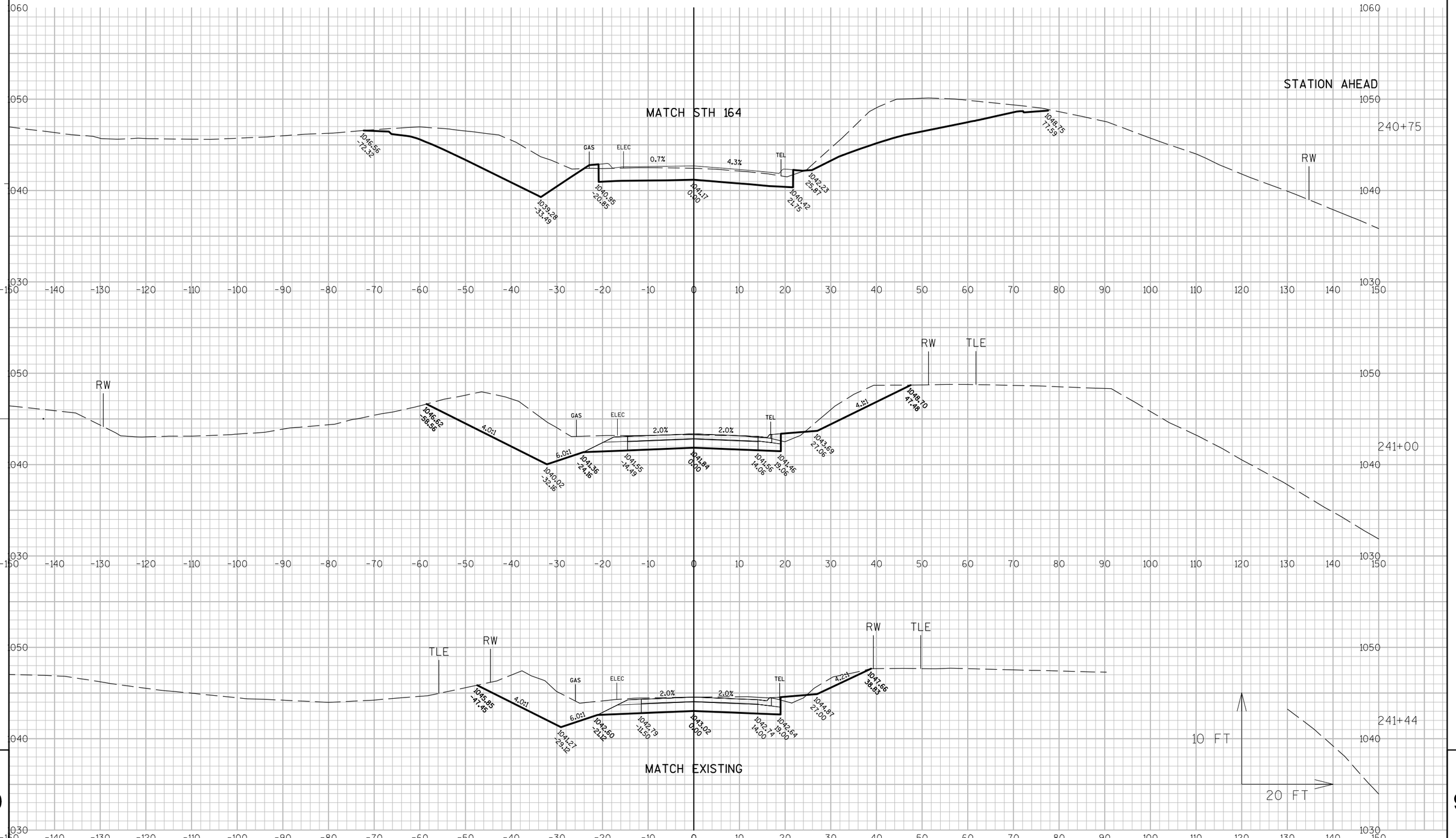
PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: CTH E	SHEET 1183 E



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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: CTH E	SHEET 1184	E

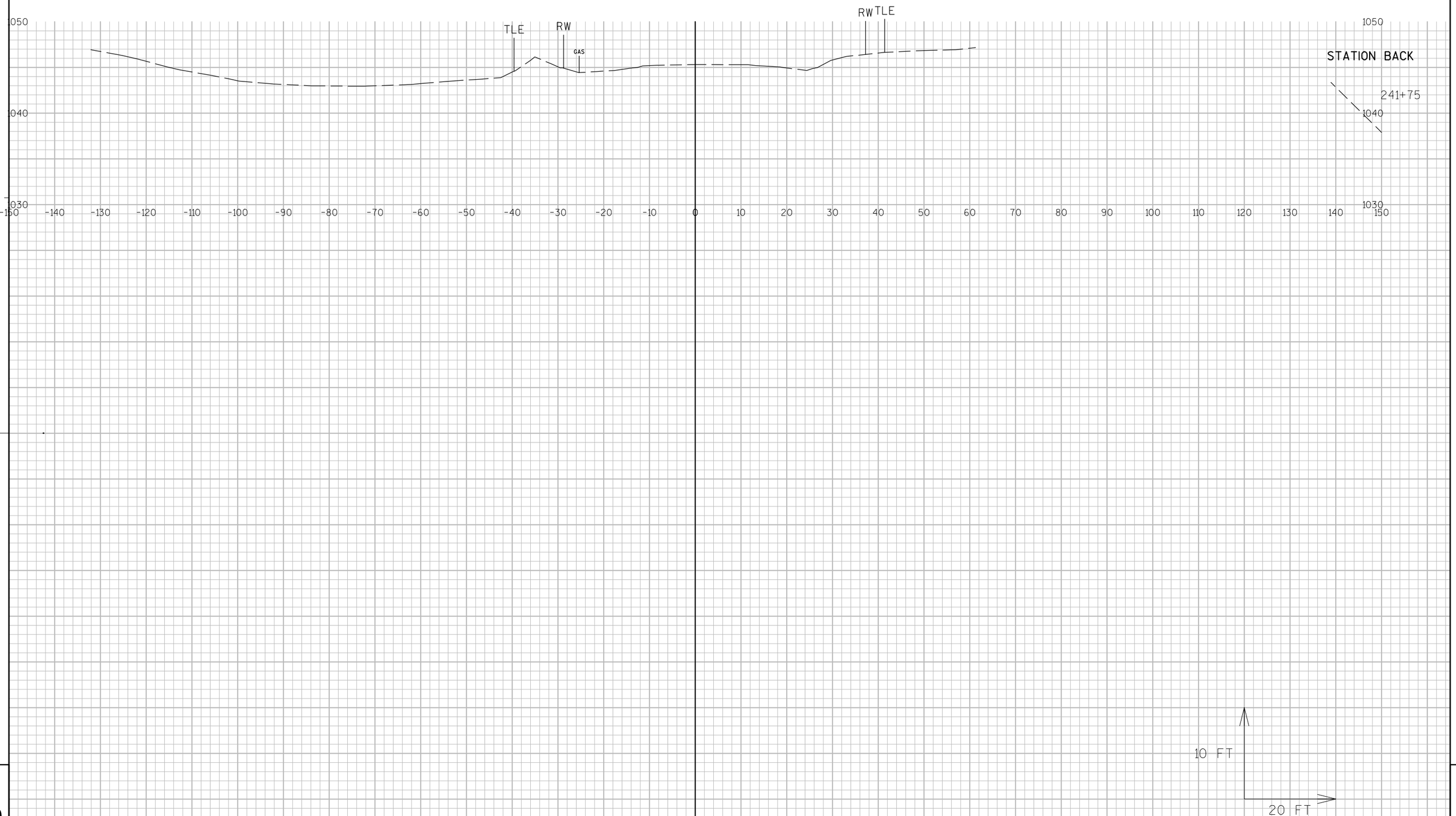


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PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: CLUB LANE	SHEET 1185	E

FILE NAME = T:\1102717\CADD\CIVIL3D\27090300\SHEETSPLAN\090239_XS_CLUB.DWG PLOT DATE = 1/31/2018 2:03 PM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1:20 XREF



PROJECT NO: 2709-03-70	HWY: STH 164	COUNTY: WASHINGTON	CROSS SECTIONS: CLUB LANE	SHEET 1186	E

FILE NAME = T:\1102717\CADD\CIVIL 3D\27090300\SHEETSPLAN\090239_XS_CLUB.DWG PLOT DATE = 1/31/2018 2:03 PM PLOT BY = BLACKWOOD, JIM PLOT NAME = PLOT SCALE = 1:20 XREF

Notes

Wisconsin Department of Transportation

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through innovation and exceptional service.

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