

GRE

MAY 2017

PROJECT ID: 1590-16-71
WITH: N/A

COUNTY: MARINETTE

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 = 402



DESIGN DESIGNATION

A.A.D.T. (2017)	2,100
A.A.D.T. (2037)	2,500
D.H.V.	320
D.D.	61/39
T.	13.1%
DESIGN SPEED	30-55 MPH
ESALS	766,500

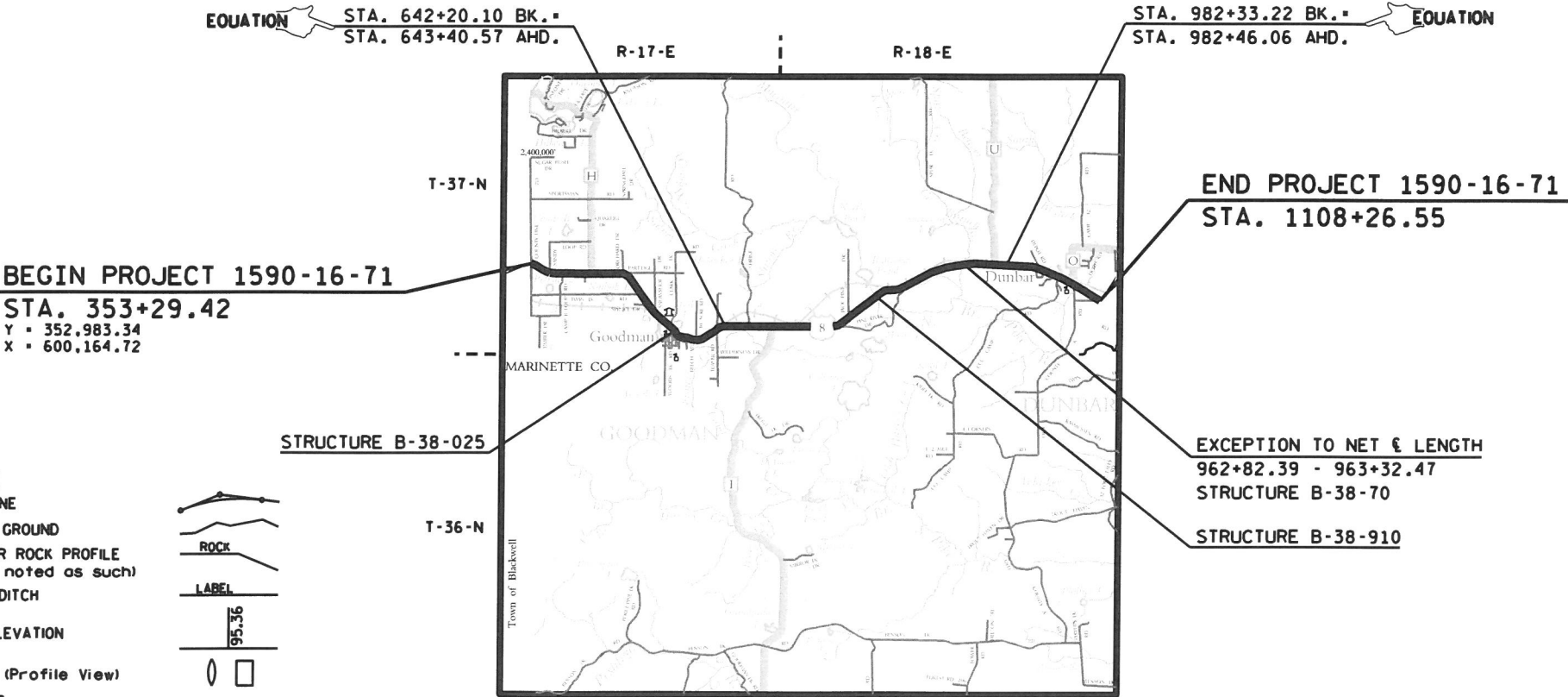
CONVENTIONAL SYMBOLS

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

PROFILE	
GRADE LINE	—
ORIGINAL GROUND	—
MARSH OR ROCK PROFILE (To be noted as such)	—
SPECIAL DITCH	—
GRADE ELEVATION	95.36
CULVERT (Profile View)	—
UTILITIES	
ELECTRIC	— E —
FIBER OPTIC	— FO —
GAS	— G —
SANITARY SEWER	— SAN —
STORM SEWER	— SS —
TELEPHONE	— T —
WATER	— W —
UTILITY PEDESTAL	—
POWER POLE	—
TELEPHONE POLE	—

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
WCL - USH 141
WCL - CTH 0
USH 8
MARINETTE COUNTY

STATE PROJECT NUMBER
1590-16-71



LAYOUT
SCALE 0 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 14.26 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MARINETTE COUNTY, NAD 83 (1991).
ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE VERTICAL DATUM OF 1988, NAVD 88 (1991).

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1590-16-71	WISC 2017273	1

WISCONSIN PROFESSIONAL ENGINEER

ANDREW W. BLOCK
E-41224-6
APPLETON
WI.

1/31/2017 (Date)
Andrew W. Block (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	COLEMAN ENGINEERING
Designer	JT Engineering, Inc.
Project Manager	P. ZOELLNER
Regional Examiner	D. SEGERSTROM
Regional Supervisor	
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 1/31/17 (Signature)

E

GENERAL NOTES

CONTACT THE UTILITES AND DIGGERS HOTLINE TO LOCATE AND FIELD VERIFY UTILITIES PRIOR TO THE START OF WORK. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. ANY LOCAL, MUNICIPAL, OR OTHER UTILITY THAT IS NOT A MEMBER OF DIGGERS HOTLINE SHALL BE CONTACTED SEPARATELY.

CROSS SECTIONS SHOWN INCLUDE THE THICKNESS OF TOPSOIL WHERE REQUIRED. TOPSOIL SHALL BE REPLACED WITH SPECIFIED THICKNESS AS OUTLINED IN THE STANDARD SPECIFICATIONS.

FILL AND COMPACT ALL HOLES OR OPENINGS BELOW SUBGRADE RESULTING FROM ABANDONMENT OR REMOVAL OF EXISTING STRUCTURES WITH GRANULAR BACKFILL. BACKFILLING IS INCIDENTAL TO CORRESPONDING ABANDONMENT OR REMOVAL ITEM.

A SAWED JOINT IS REQUIRED WHERE NEW HMA PAVEMENT MEETS EXISTING HMA PAVEMENT.


CURB AND GUTTER GRADES ARE GIVEN TO THE FLANGE. CURB AND GUTTER RADII ARE ALSO MEASURED TO THE FLANGE. GRADES ARE PROVIDED AT THE BACK OF CURB AT CURB RAMP LOCATIONS ADJACENT TO TRAVELED LANES, AND AT THE FACE OF PEDESTRIAN CURB.

REFER TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PART 6 FOR APPROPRIATE MEASURES NECESSARY FOR WORK IN THE VICINITY OF A RAILROAD GRADE CROSSING AND FOR VEHICLE QUEUES NEAR THE CROSSING.

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAIL
EROSION CONTROL PLAN
STORM SEWER PLAN
PERMANENT SIGNING



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

UTILITY CONTACTS

ANR PIPELINE – GAS /PETROLEUM

MR. JOHN BENOIT
W1568 US HWY 8
GOODMAN, WI 54125
PHONE: (715) 336-2608
MOBILE: (715) 853-9840
JOHN_BENOIT@TRANSCANADA.COM

CENTURYLINK – COMMUNICATION LINE

MR. PETER JOHNSON, SR.
2425 MARY STREET
MARINETTE, WI 54143
PHONE: (715) 735-0059
MOBILE: (715) 938-1480
PETER.S.JOHNSON@CENTURYLINK.COM

PACKERLAND BROADBAND – COMMUNICATION LINE

MR. RANDY SIMMS
105 KENT STREET
IRON MOUNTAIN, MI 49801
PHONE: (800) 338-9299
MOBILE: (906) 282-3802
RANDY.SIMMS@CCISYSTEMS.COM

NIAGRA TELEPHONE/NSIGHT TELSERVICES – COMMUNICATION LINE

MR. DENNIS LAFAVE
1700 INDUSTRIAL DRIVE
GREEN BAY, WI 54302
PHONE: (920) 619-9774
DLAFAVE@MI-TECH.US

GOODMAN SANITARY DISTRICT #1 – SEWER

MS. NICOLE MILLAN
P.O. BOX 356
GOODMAN, WI 54125-0356
PHONE: (715) 336-2608
MOBILE: (906) 221-0567
GOODMANSANITARY@YAHOO.COM

TOWN OF GOODMAN - WATER

MS. NICOLE MILLAN
P.O. BOX 356
GOODMAN, WI 54125-0356
PHONE: (715) 336-2608
MOBILE: (906) 221-0567
GOODMANSANITARY@YAHOO.COM

WISCONSIN PUBLIC SERVICE – GAS//PETROLEUM

MR. RORY TAMMINGA
1717 10TH AVENUE
MENOMINEE, MI 49858
PHONE: (906) 863-4328
MOBILE: (262) 909-0645
RETAMMINGA@WISCONSINPUBLICSERVICE.COM

WISCONSIN PUBLIC SERVICE - ELECTRIC

JON JOANIS
1717 10TH AVENUE
MENOMINEE, MICHIGAME 49858
PHONE: (920) 617-5064
MOBILE: (715) 923-5533
JWJOANIS@WISCONSINPUBLICSERVICE.COM

ABBREVIATIONS

AEW	APRON END WALL	PE	PRIVATE ENTRANCE
AGG	AGGREGATE	PI	POINT OF INTERSECTION
BAD	BASE AGGREGATE DENSE	PLE	PERMANENT LIMITED EASMENT
BM	BENCH MARK	PT	POINT OF TANGENT
C&G	CURB AND GUTTER	R	RADIUS OF CURVE
C/L	CENTER OR CONSTRUCTION LINE	R/L	REFERENCE LINE
CMCP	CULVERT PIPE CORRUGATED METAL	R/W	RIGHT OF WAY
CONC	CONCRETE	RC	REVERSE CROWN
CP	CULVERT PIPE	RCAEW	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE
CPRC	CULVERT PIPE REINFORCED CONCRETE	REQD	REQUIRED
CSD	CONCRETE SURFACE DRAIN	RHF	RIGHT HAND FORWARD
CY	CUBIC-YARD	RO	RUN OFF LENGTH
D	DEGREE OF CURVE	RRSP	RAILROAD SPIKE
Δ	DELTA	RT	RIGHT
DISCH	DISCHARGE	SALV	SALVAGED
EAT	ENERGY ABSORBING TERMINAL	SAPBC	SALVAGED ASPHALTIC PAVEMENT BASE COARSE
FE	FIELD ENTRANCE	SB	SOUTHBOUND
HMA	HOT MIX ASPHALT	SDD	STANDARD DETAIL DRAWINGS
INV	INVERT	SE	SUPER ELEVATION
L	LENGTH OF CURVE	SF	SQUARE FOOT
LHF	LEFT HAND FORWARD	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
LT	LEFT	STA	STATION
MIN	MINIMUM	SY	SQUARE YARD
M/L	MATCHLINE	T	TANGENT LENGTH
NB	NORTHBOUND	TLE	TEMPORARY LIMITED EASEMENT
NC	NORMAL CROWN	VCL	VERTICAL CURVE LENGTH
PAVT	PAVEMENT	VPC	POINT OF VERTICAL CURVE
PC	POINT OF CURVE	VPI	POINT OF VERTICAL INTERSECTION
PCC	POINT OF COMPOUND CURVE	VPT	POINT OF VERTICAL TANGENT

CANADIAN NATIONAL (WISCONSIN CENTRAL LTD) CONTACTS

RAILROAD FLAGGING CONTACT
MS. MARY ELLEN CARMODY
AUDIT OFFICER
2800 LIVERNOIS ROAD, SUITE 330
TROY, MI 48083
OFFICE: (248) 740-6227
FAX: (248) 740-6036
MARYELLEN.CARMODY@CN.CA

MAIN RAILROAD CONTACT
MS. JACKIE MACEWICZ
MANAGER PUBLIC WORKS
1625 DEPOT STREET
STEVENS POINT, WI 54481
OFFICE: (715) 345-2503
FAX: (715) 345-2534
JACKIE.MACEWICZ@CN.CA

24 HOUR EMERGENCY RAILROAD SIGNAL

1-800-616-3432

CALL BEFORE YOU DIG

CANADIAN NATIONAL (WISCONSIN CENTRAL LTD) IS NOT PART
OF DIGGERS HOTLINE
CALL CHRISTINE GRZESIAK, (715) 345-2506, WHEN DIGGING
ON RAILROAD R/W

DESIGNER

ANDREW BLOCK
JT ENGINEERING, INC.
1077 CENTENNIAL CENTRE BLVD.
HOBART, WI 54155
(920) 468-4771
ANDYBLOCK@JT-ENGINEERING.COM

NORTHEAST REGIONAL SURVEY
COORDINATOR

MR. CORMAC MCINNIS
944 VANDERPERREN WAY
GREEN BAY, WI 54304-5344
PHONE: (920) 492-5338
CORMAC.MCINNIS@DOT.WI.GOV

DNR AREA LIAISON

MR. JAMES DOPERALSKI JR.
DEPARTMENT OF NATURAL RESOURCES
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
(920) 662-5472
JAMES.DOPERALSKI@WISCONSIN.GOV

US ARMY CORP OF ENGINEERS

MR. RYAN HUBER
OLD FORT SQUARE
211 N. BROADWAY, STE 221
GREEN BAY, WI 54303
(651) 290-5859

MARINETTE COUNTY
HIGHWAY COMMISSIONER

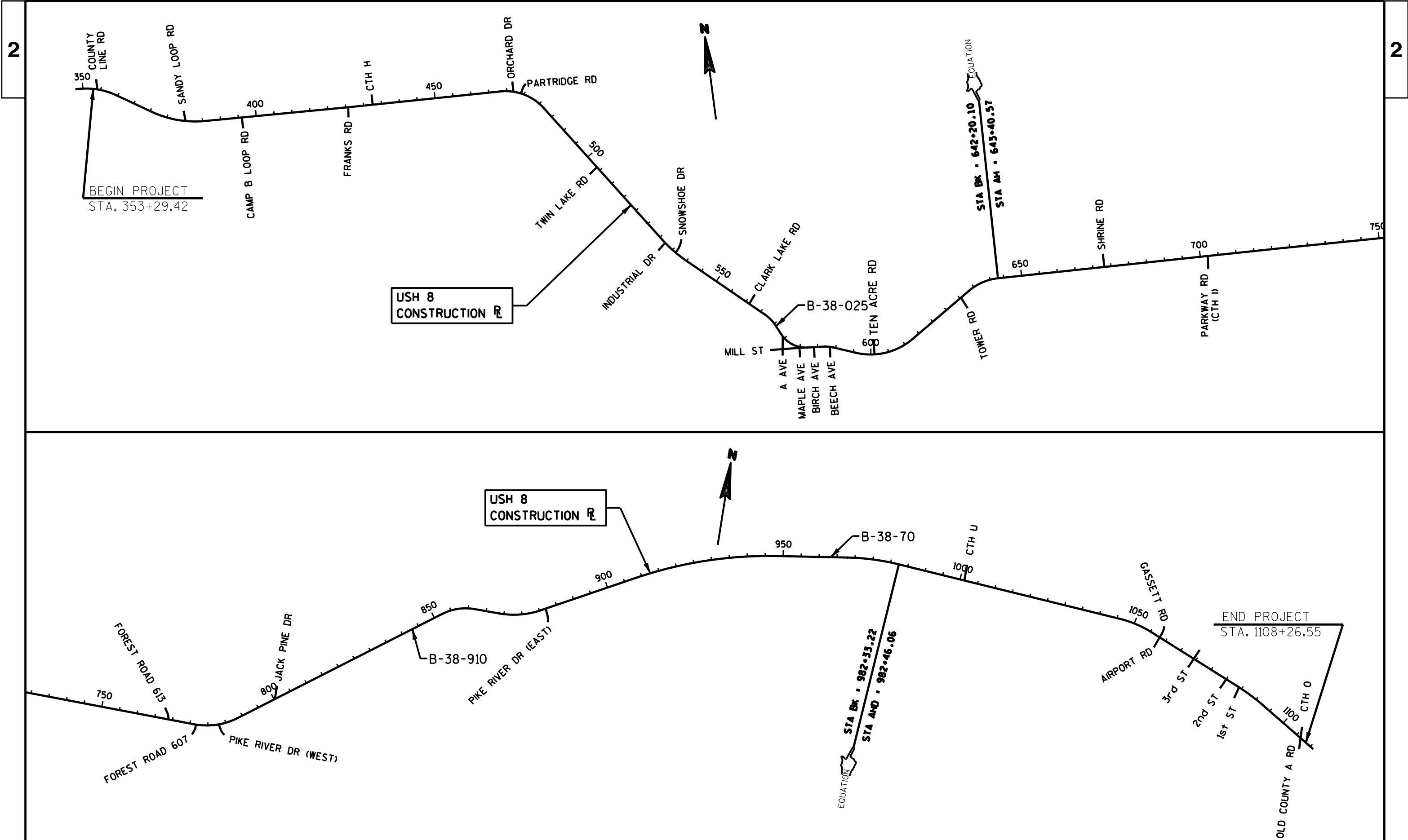
MR. RAYMOND PALONEN
501 PINE STREET
PESHTIGO, WI 54157
PHONE: (715) 582-3771

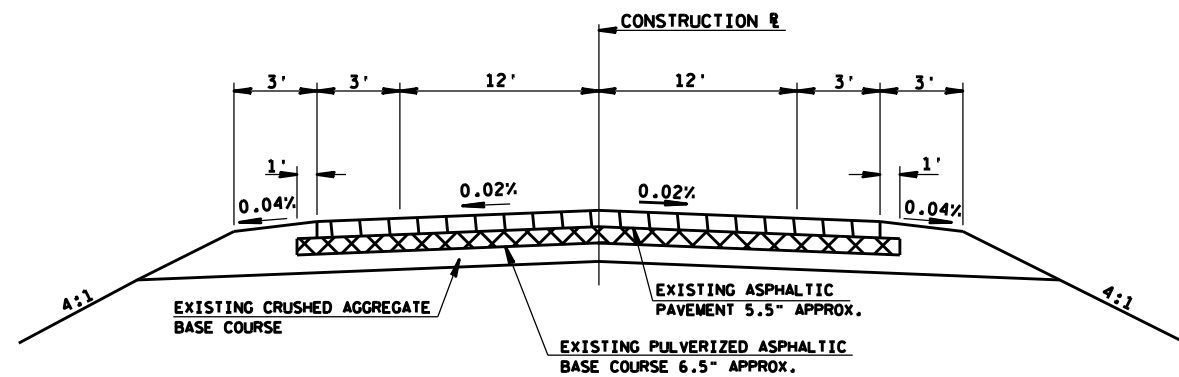
TOWN OF GOODMAN
CHAIRPERSON

MR. BILL STANKEVICH
506 MILL STREET
GOODMAN, WI 54125
PHONE: (715) 336-2806

TOWN OF DUNBAR
CHAIRPERSON

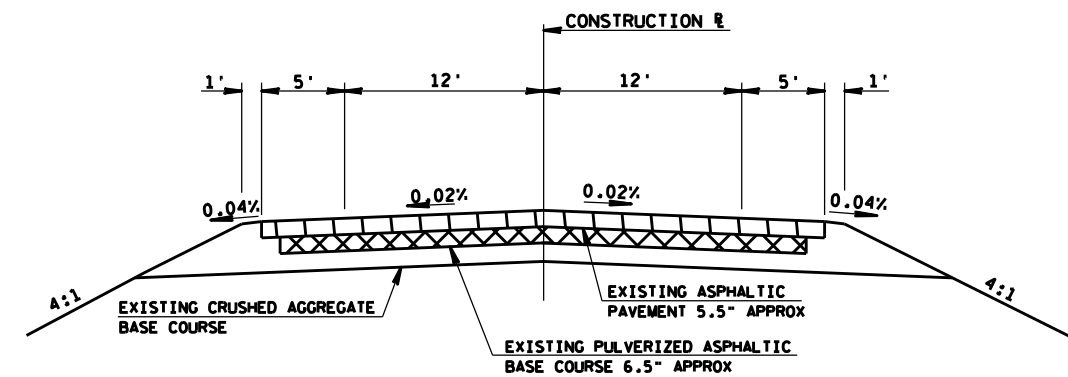
MR. HARRY SOKEL
N18956 CC CAMP ROAD
DUNBAR, WI 54119
PHONE: (715) 324-6132





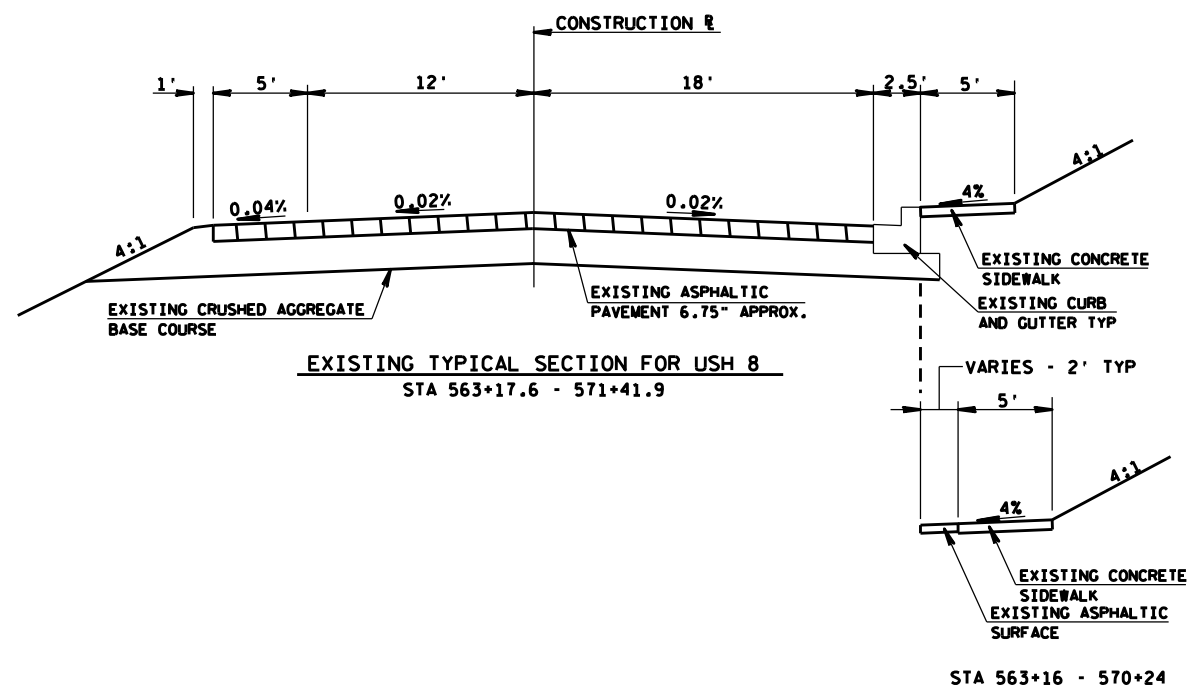
EXISTING TYPICAL SECTION FOR USH 8

STA 353+29.42 - 432+56
STA 702+18 - 1067+09
STA 1084+32 - 1108+26.6



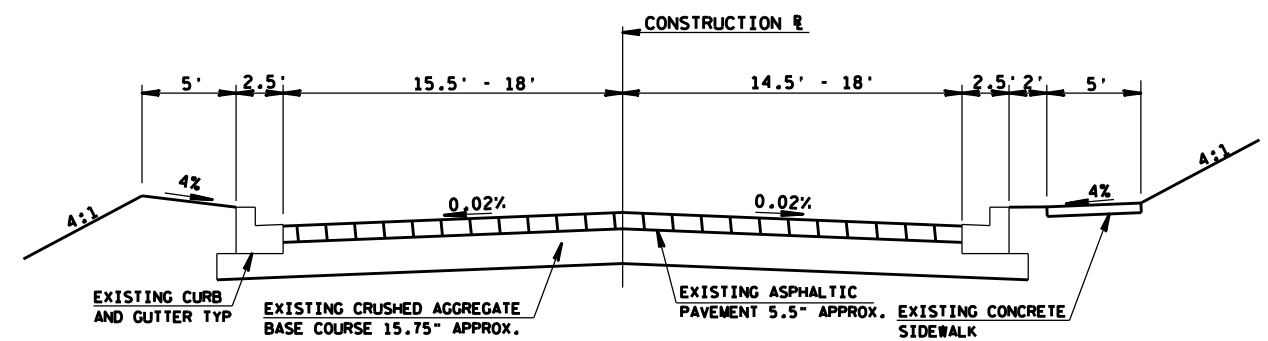
EXISTING TYPICAL SECTION FOR USH 8

STA 432+56 - 563+17.6
STA 590+71.4 - 645+14 LT
STA 593+03.4 - 645+14 RT
STA 645+14 - 702+18



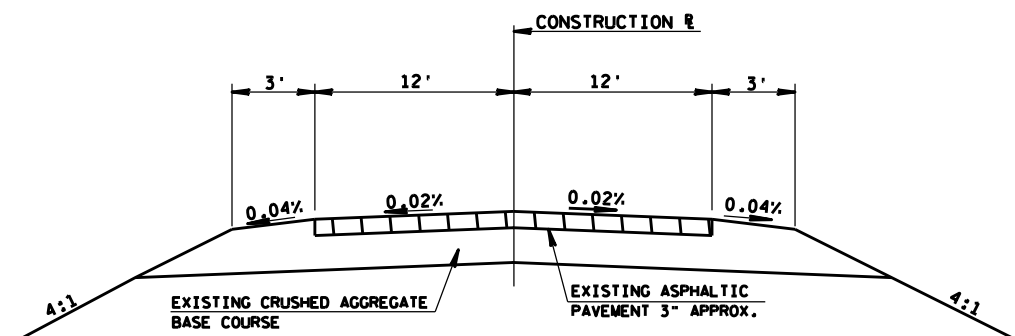
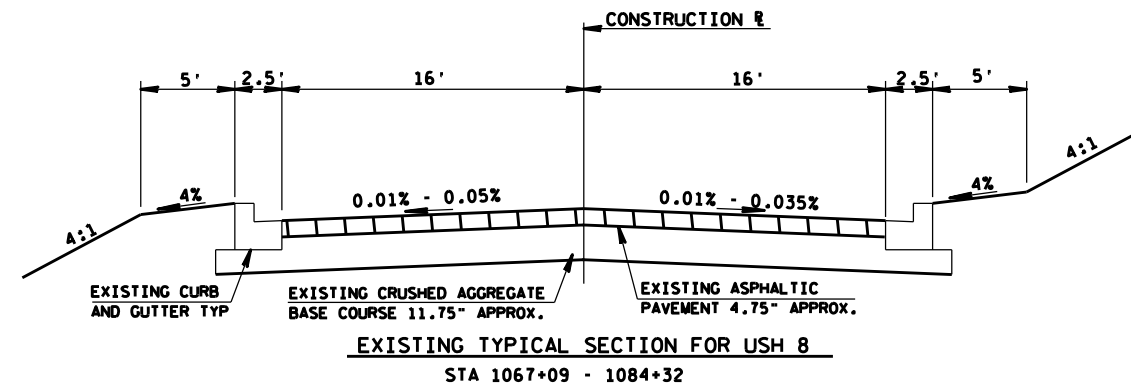
EXISTING TYPICAL SECTION FOR USH 8

STA 563+17.6 - 571+41.9



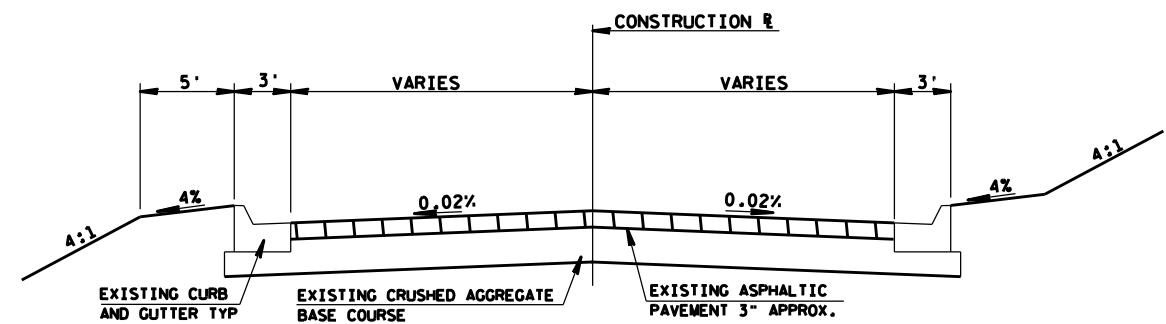
EXISTING TYPICAL SECTION FOR USH 8

STA 571+41.9 - 593+03.1 RT
STA 571+41.9 - 590+71.4 LT



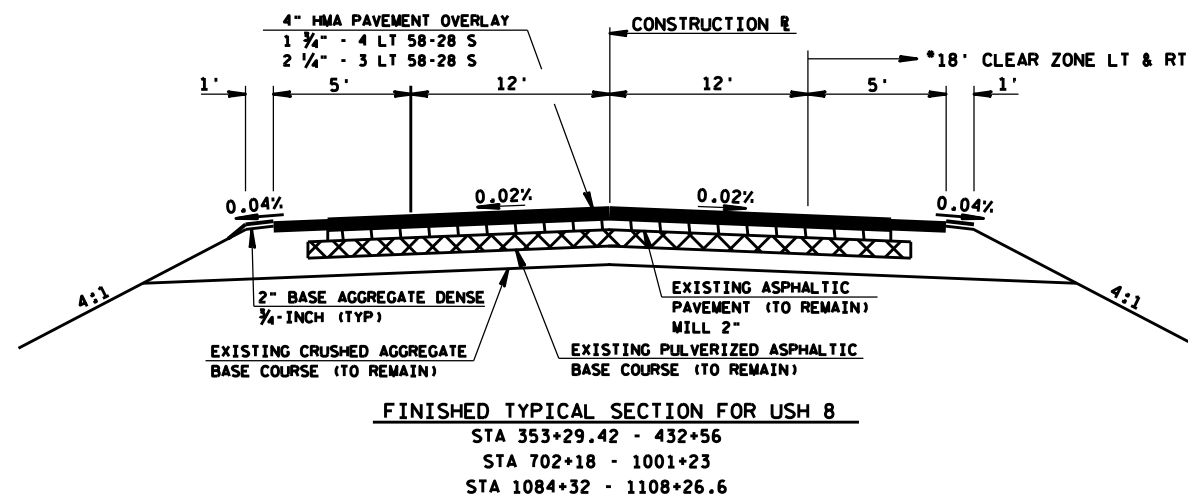
EXISTING TYPICAL SECTION SIDEROADS

SANDY LOOP ROAD	FOREST ROAD 607
CAMP B LOOP ROAD	PIKE RIVER DRIVE (WEST)
FRANKS ROAD	PIKE RIVER DRIVE (EAST)
ORCHARD DRIVE	JACK PINE ROAD
PARTRIDGE ROAD	AIRPORT ROAD
INDUSTRIAL DR	GASSET ROAD
TOWER ROAD	3RD STREET (NORTH)
FOREST ROAD 613	



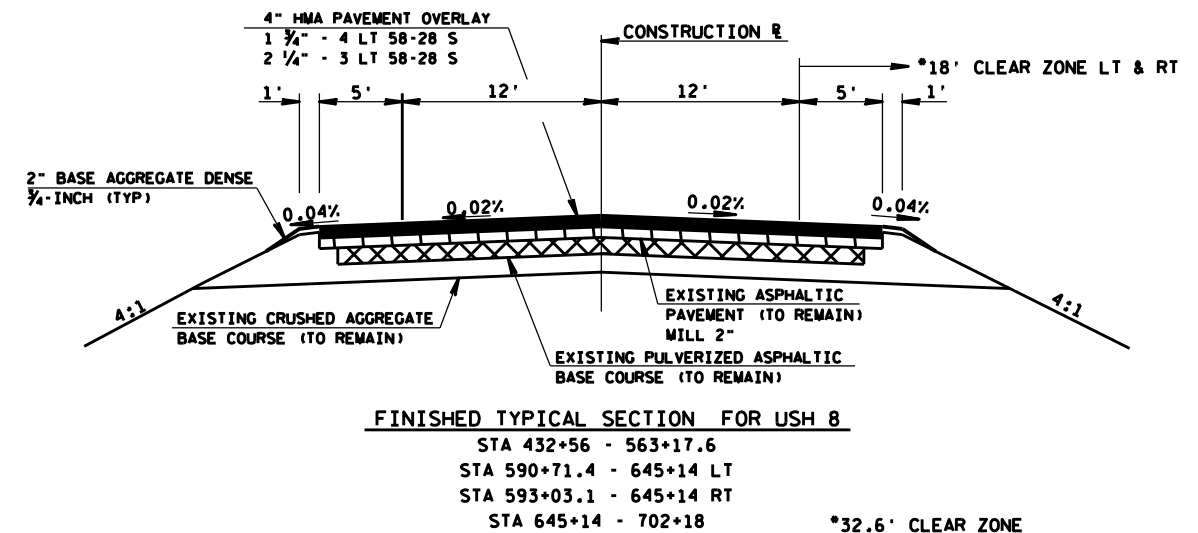
EXISTING TYPICAL SECTION SIDEROADS

COUNTY LINE ROAD	TEN ACRE ROAD
CTH H	SHRINE ROAD
TWIN LAKE ROAD	PARKWAY ROAD (CTH I)
SNOWSHOE DRIVE	CTH U
CLARK LAKE ROAD	3RD STREET (SOUTH)
A AVENUE	2ND STREET
MILL STREET	1ST STREET
MAPLE AVENUE	CTH O
BIRCH AVENUE	OLD COUNTY A ROAD
BEECH AVENUE	



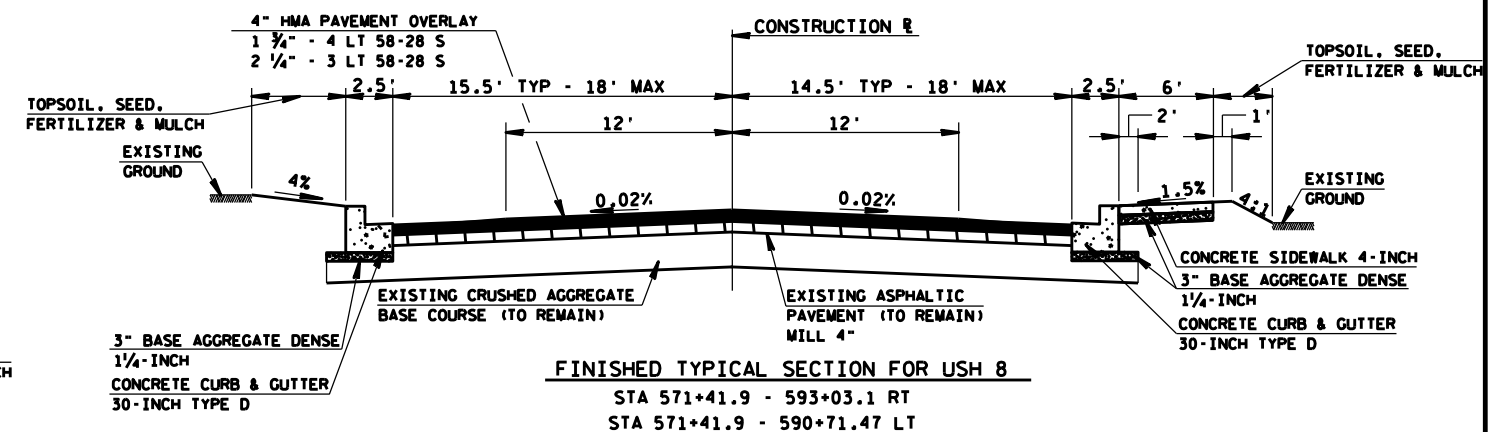
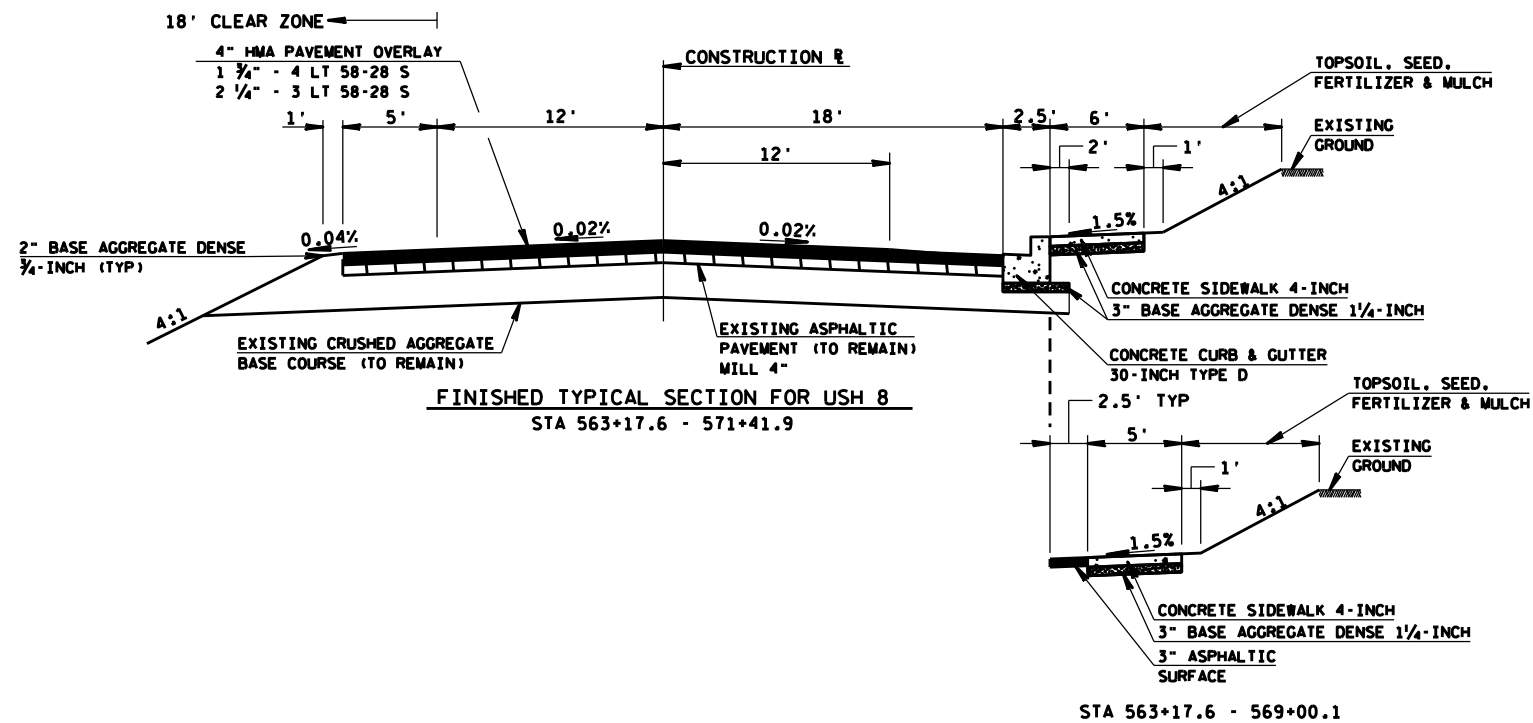
NOTE: PREPARE FOUNDATION FOR ASPHALTIC PAVING LIMITS
EXTEND TO THE OUTSIDE OF PROPOSED PAVED SHOULDER

*32.6' CLEAR ZONE
STA 749+35 - 774+25
STA 903+00 - 1001+23



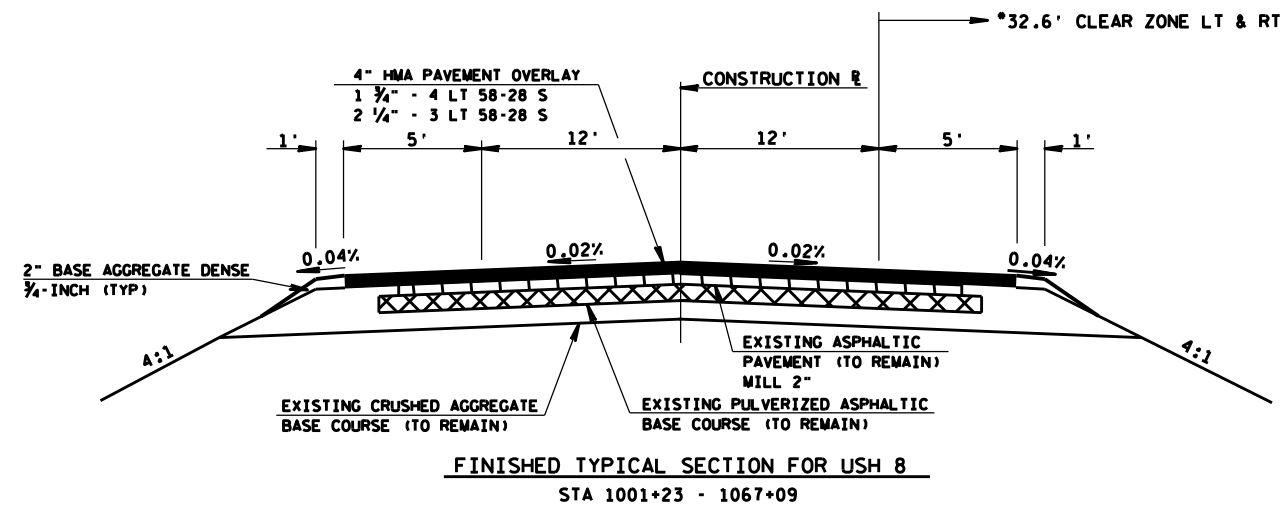
NOTE: TRANSITION REMOVING ASPHALTIC SURFACE MILLING
DEPTH FROM 2" AT STA 562+17.6 TO 4" AT STA 563+17.6
AND FROM 4" AT STA 593+03.1 TO 2" AT STA 594+03.1

*32.6' CLEAR ZONE
STA 508+50 - 545+90
STA 590+71.4 - 645+15 LT
STA 593+03 - 645+15 RT

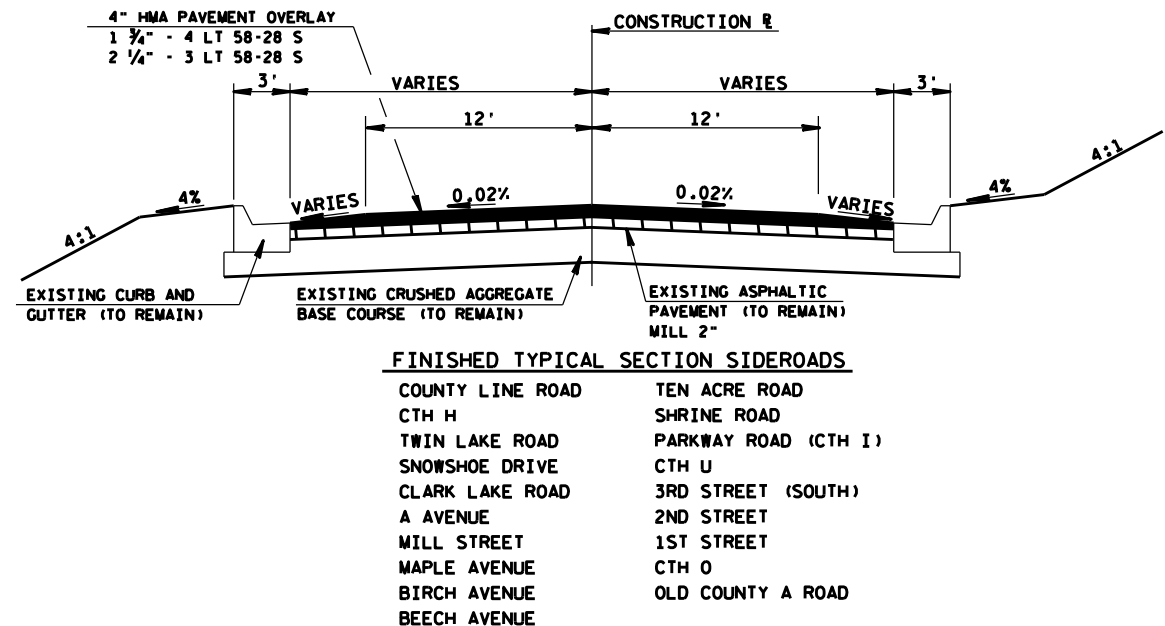
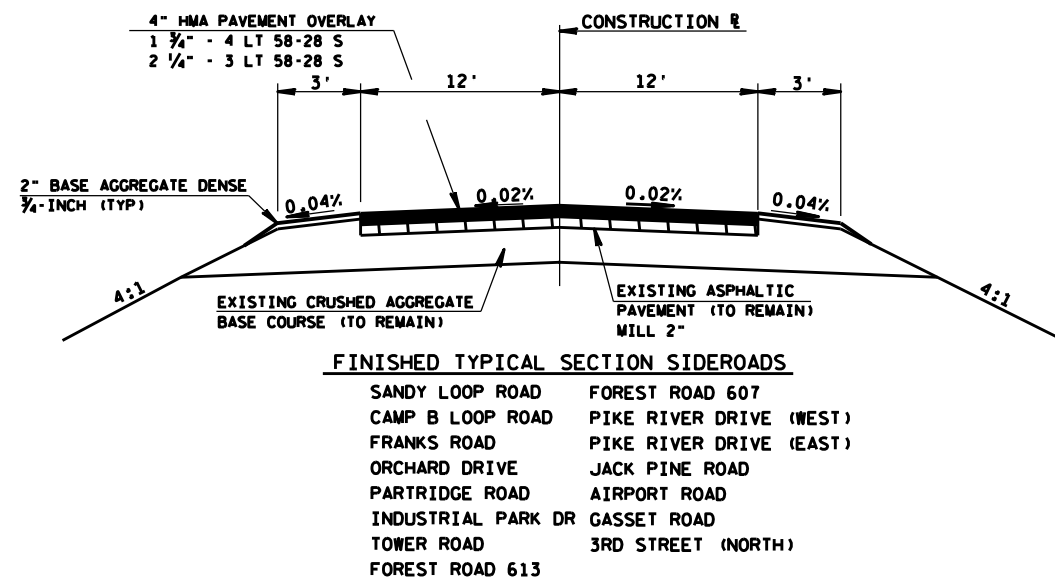
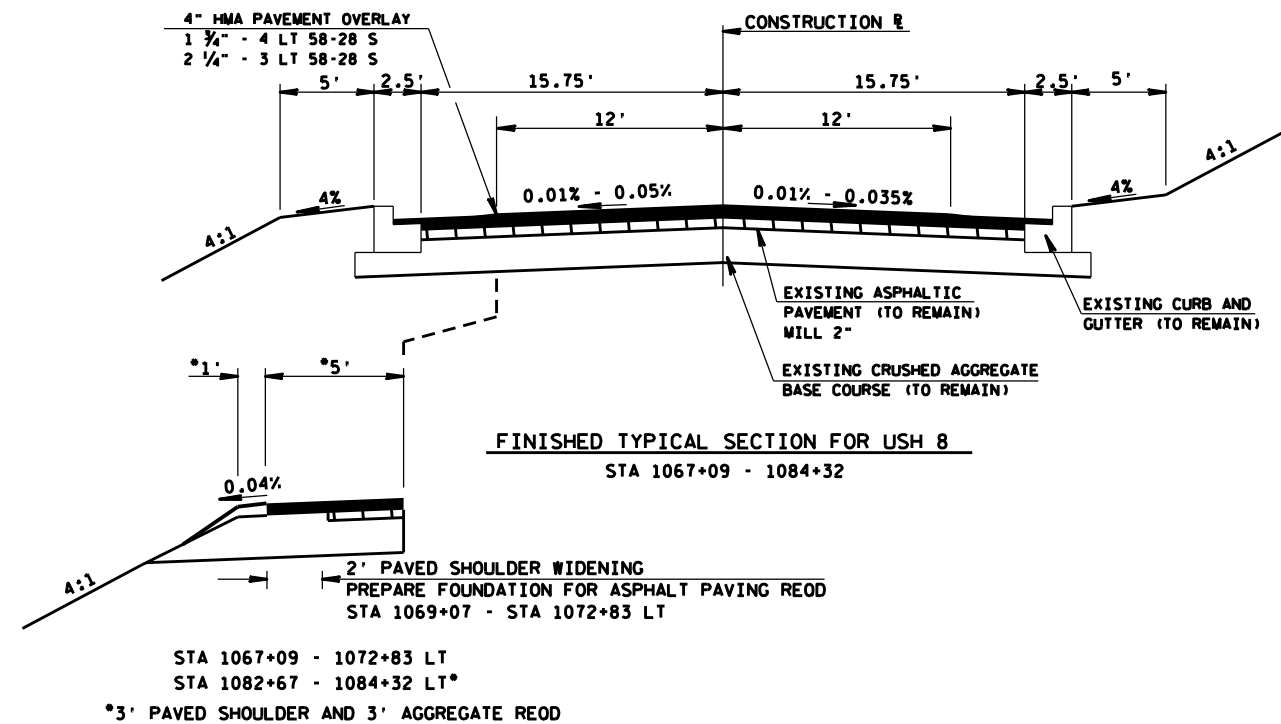


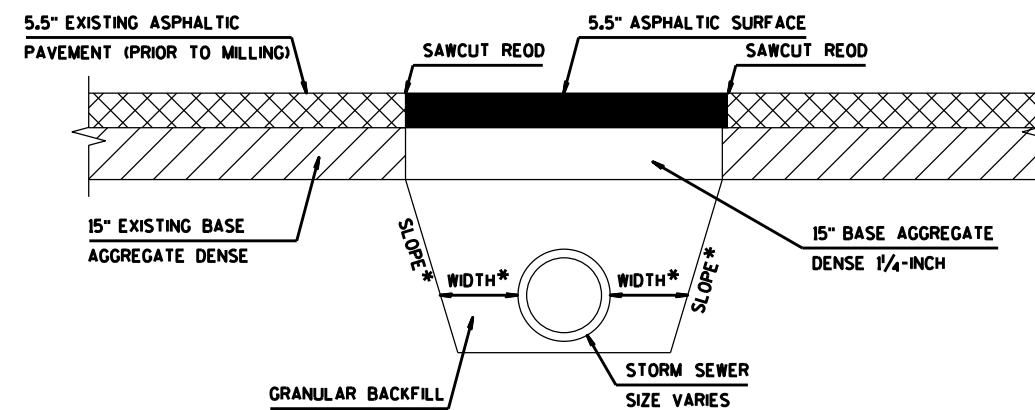
NOTE: CONCRETE SIDEWALK REOD STA 578+76.7 TO 582+23.6, LT

STA 563+17.6 - 569+00.1



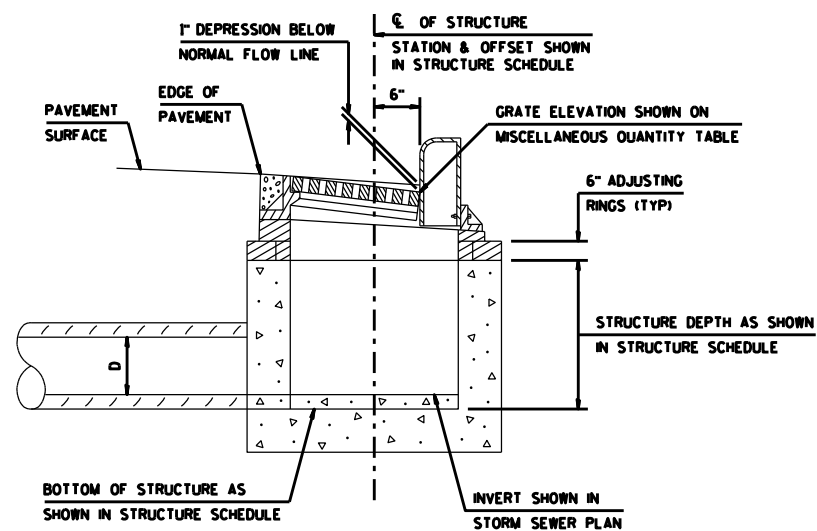
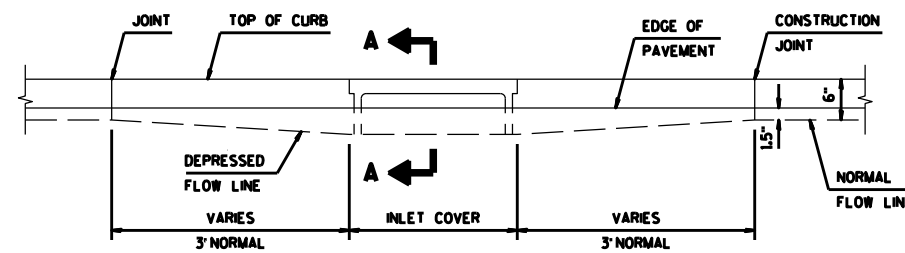
NOTE: PREPARE FOUNDATION FOR ASPHALTIC PAVING LIMITS
EXTEND TO THE OUTSIDE OF PROPOSED PAVED SHOULDER





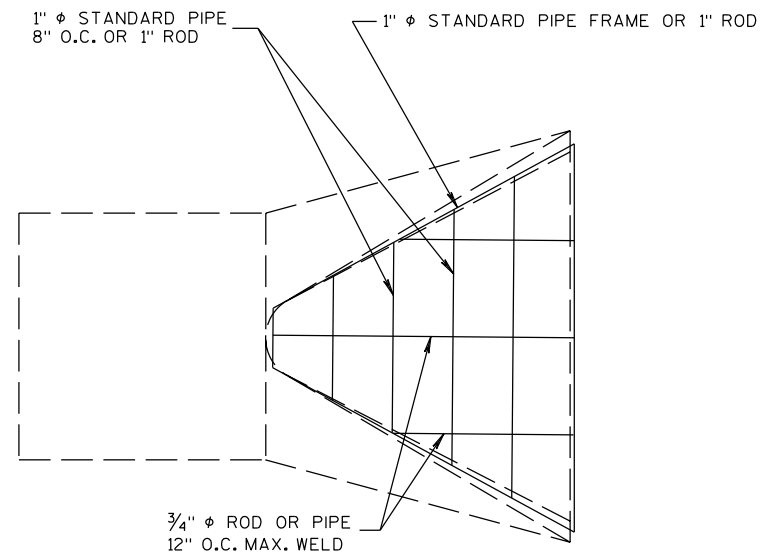
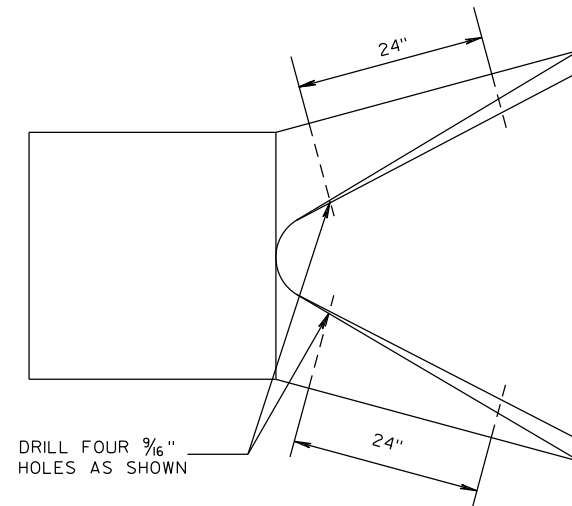
STORM SEWER REMOVAL AND/OR REPLACEMENT

*SEE STANDARD SPECIFICATIONS

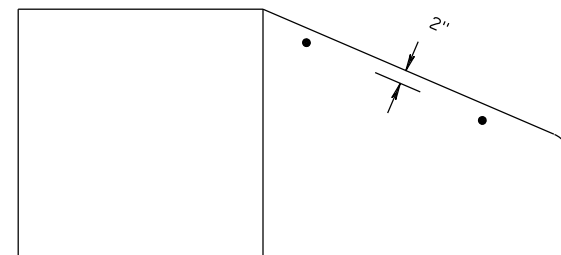


SECTION A-A

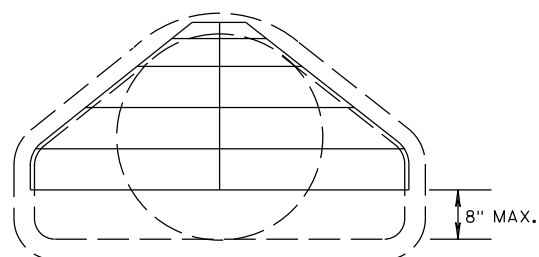
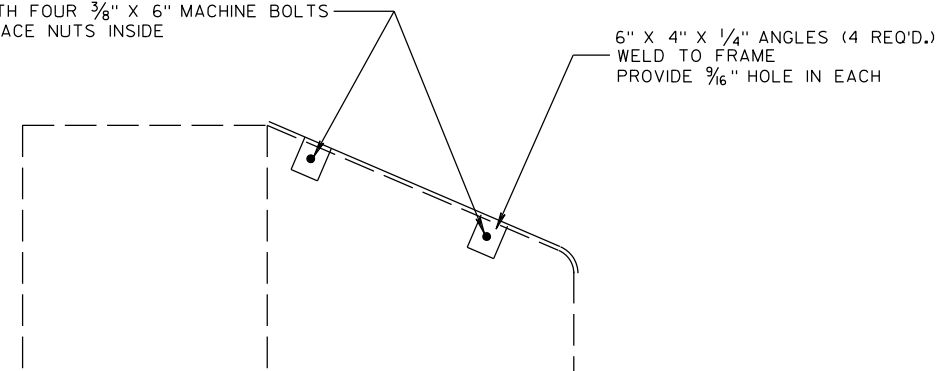
DETAIL OF CURB AND GUTTER AT INLETS



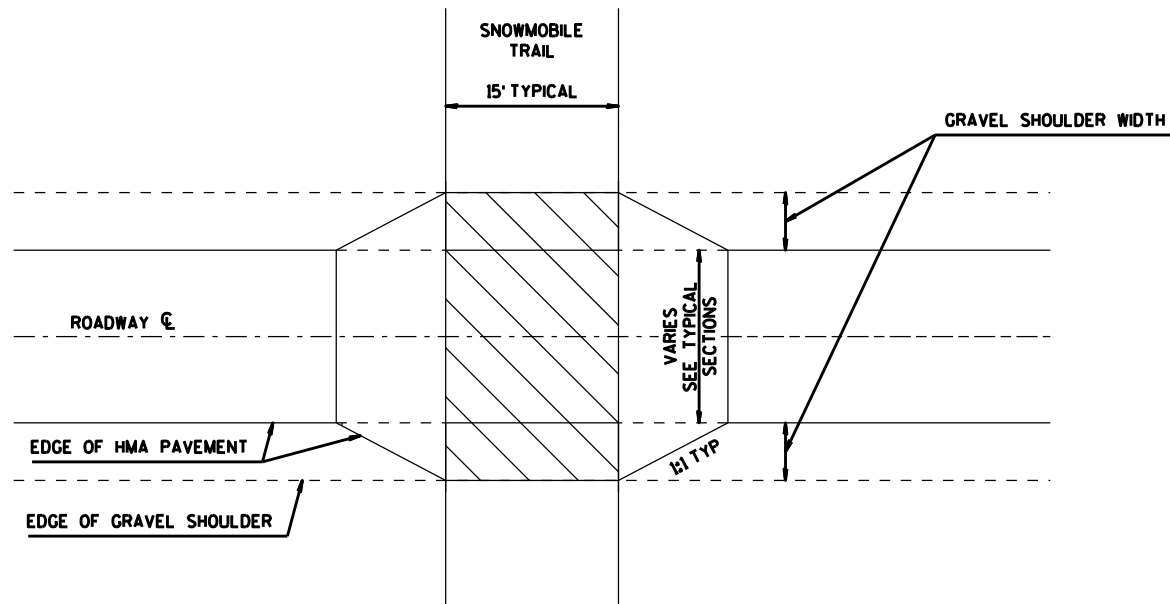
AT EACH PIPE



BOLT GRATE TO CONCRETE ENDWALL
WITH FOUR $\frac{3}{8}$ " X 6" MACHINE BOLTS
PLACE NUTS INSIDE



PIPE GRATES

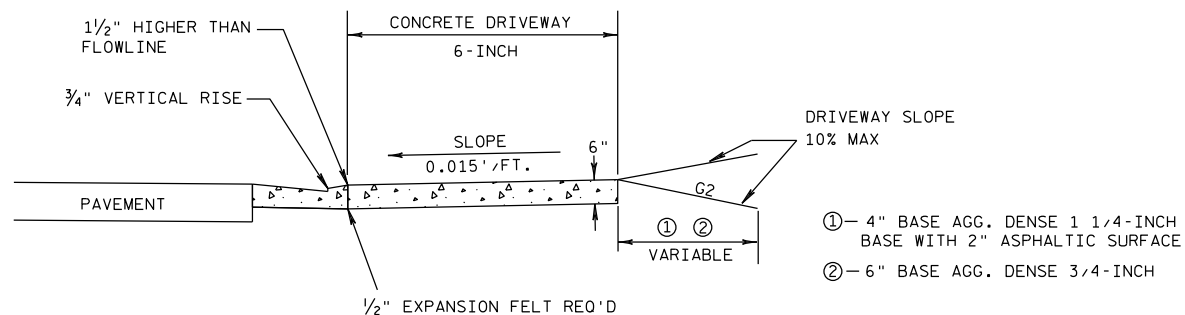


PROTECTIVE THERMOPLASTIC CROSSING
AT SNOWMOBILE TRAIL CROSSING
AT STA. 1057+45
(SEE SPECIAL PROVISIONS)

SNOWMOBILE TRAIL CROSSING DETAIL

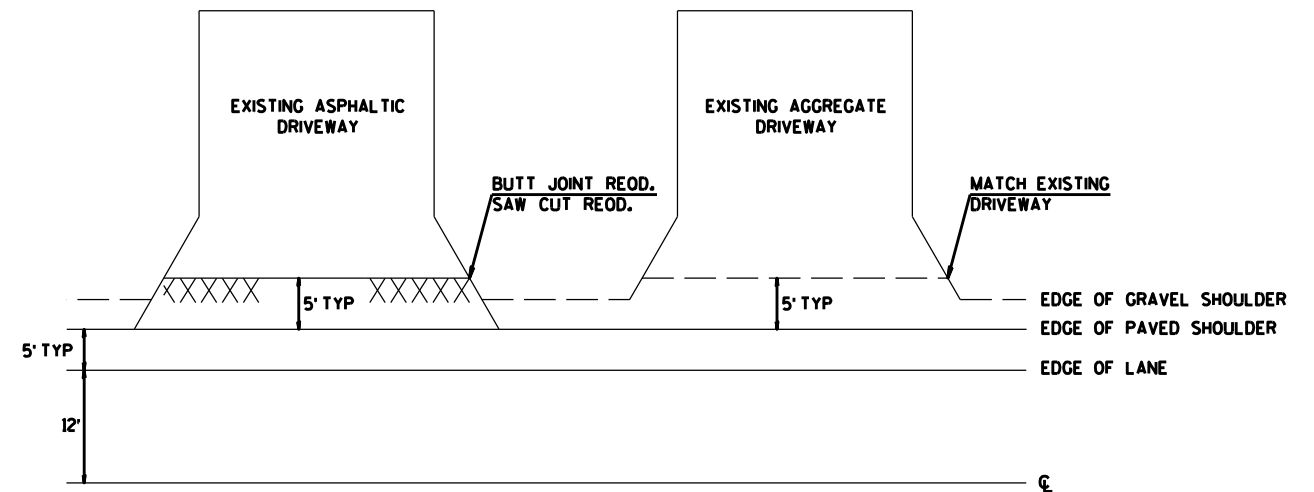
REQUIRED AT:
USH 8 (STA 395+60)
USH 8 (STA 824+80)
USH 8 (STA 1057+45)

NOTE: THE ENGINEER IN THE FIELD SHALL
VERIFY THE EXACT LOCATION OF THE
EXISTING SNOWMOBILE CROSSING



TYPICAL DRIVEWAY SECTION IN GOODMAN

NOTE:
SEE SDD DRIVEWAY AND SIDEWALK RAMPS
TYPE X & Y FOR ADDITIONAL DETAILS

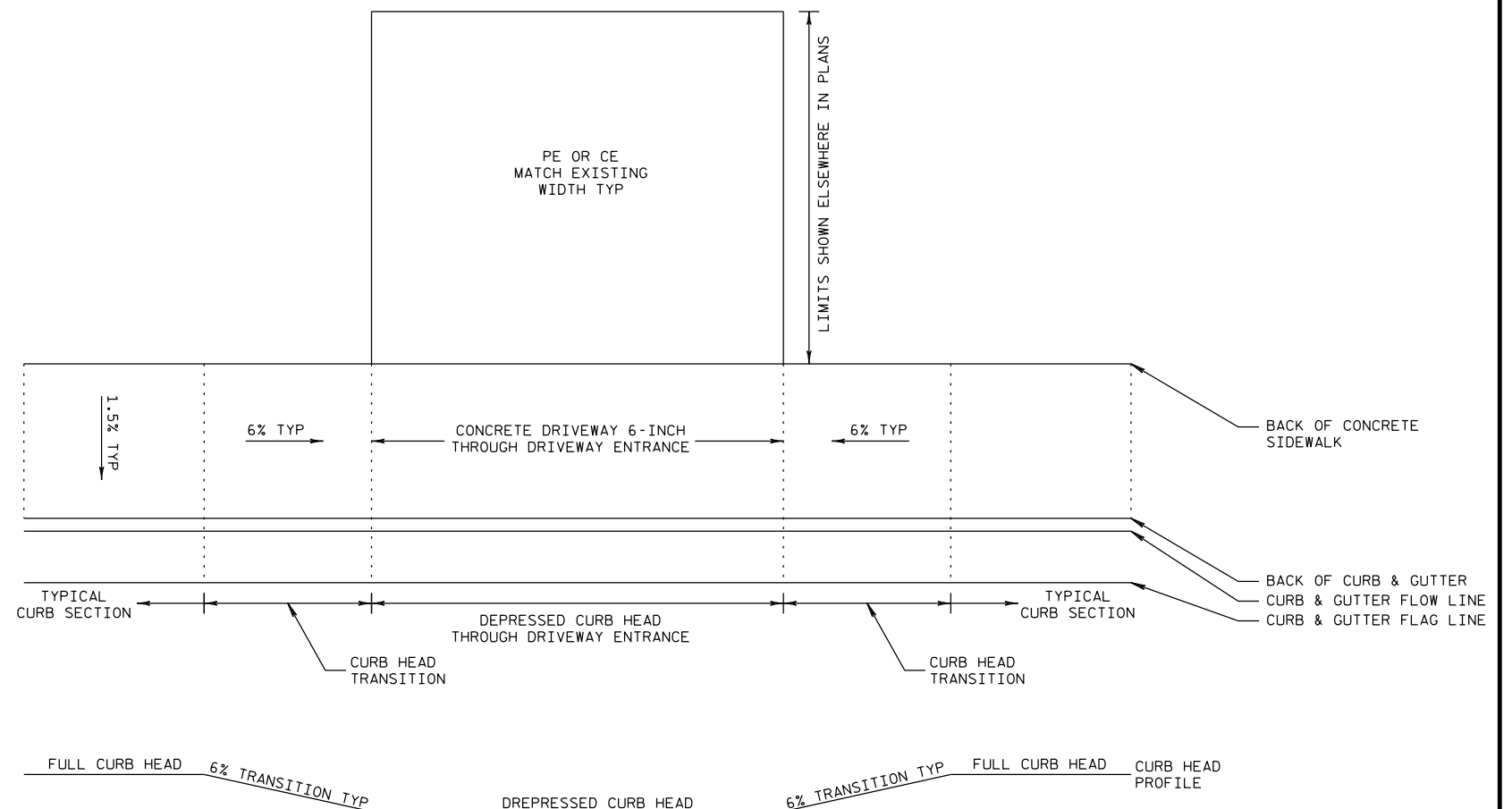


RURAL DRIVEWAY

NOTE:
LIMITS OF DRIVEWAY MAY BE
ADJUSTED BY THE ENGINEER
IN THE FIELD.

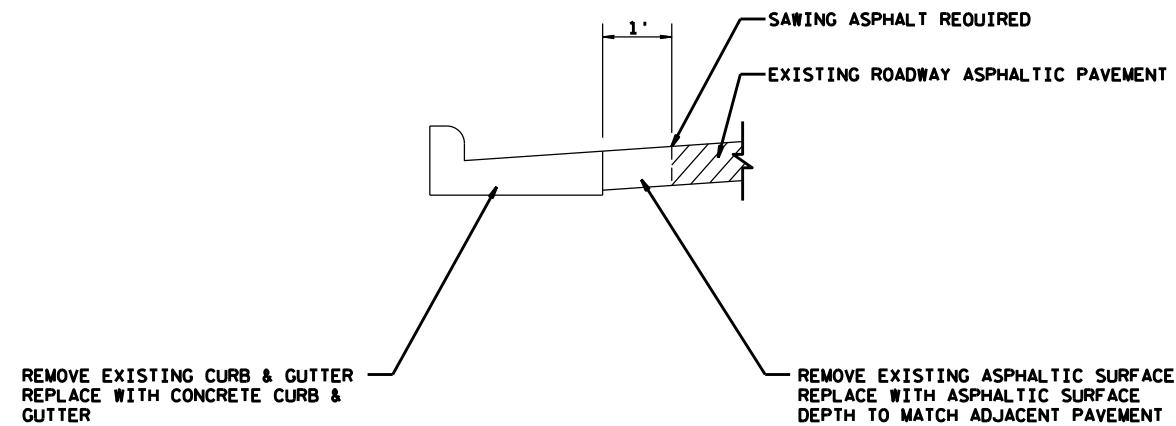
PAVED DRIVEWAYS SHALL BE
PAID AS ASPHALTIC SURFACE
DRIVEWAYS & FIELD ENTRANCES

AGGREGATE DRIVEWAYS SHALL
BE PAID AS BASE AGGREGATE
DENSE 3/4-INCH

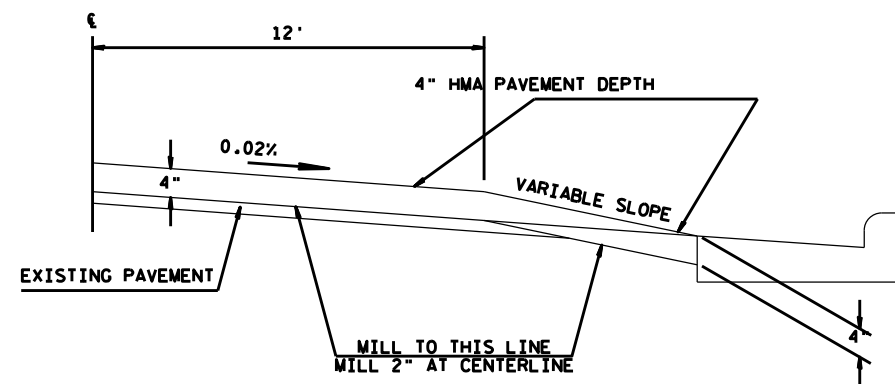


CURB & GUTTER TRANSITION IN GOODMAN

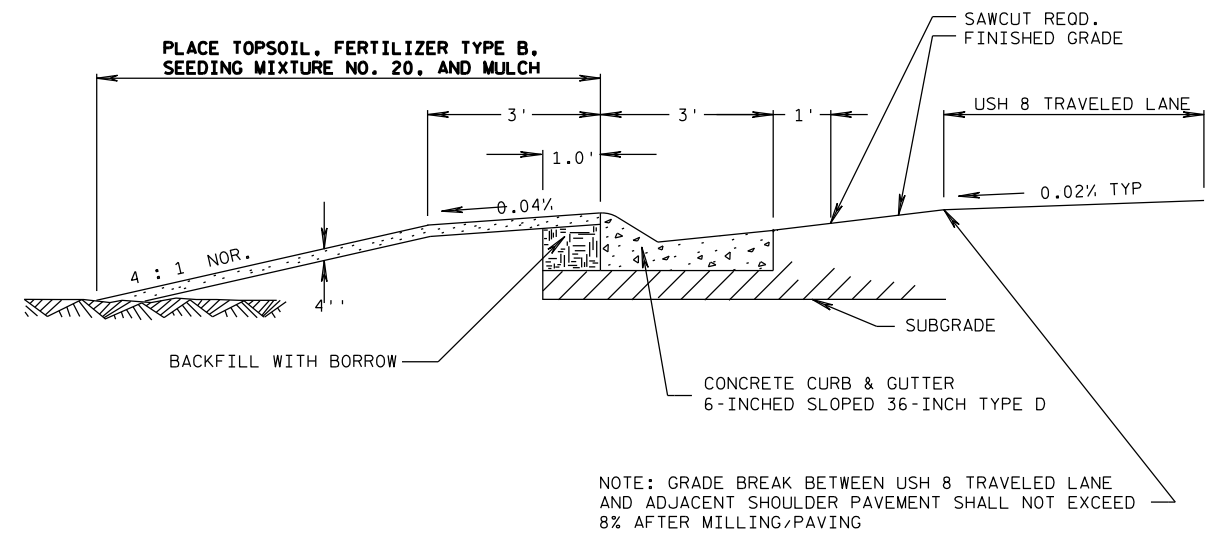
NOTE:
SEE SDD DRIVEWAY AND SIDEWALK RAMPS
TYPE X & Y FOR ADDITIONAL DETAILS



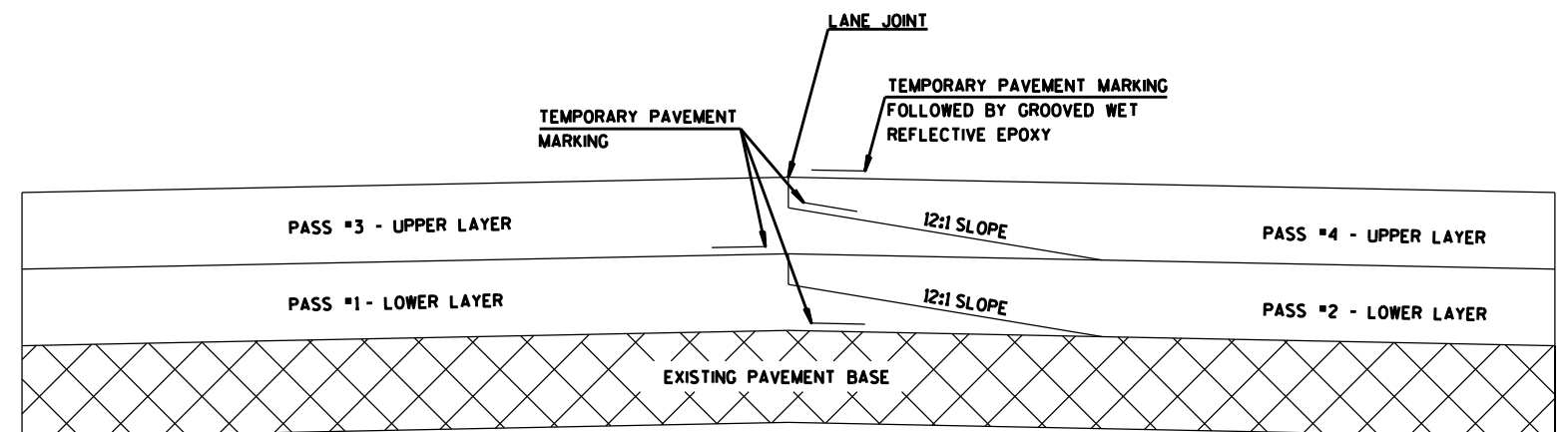
DETAIL FOR REMOVING AND REPLACING CURB & GUTTER



PAVING DETAIL AT RURAL SIDE ROADS WITH CURB & GUTTER

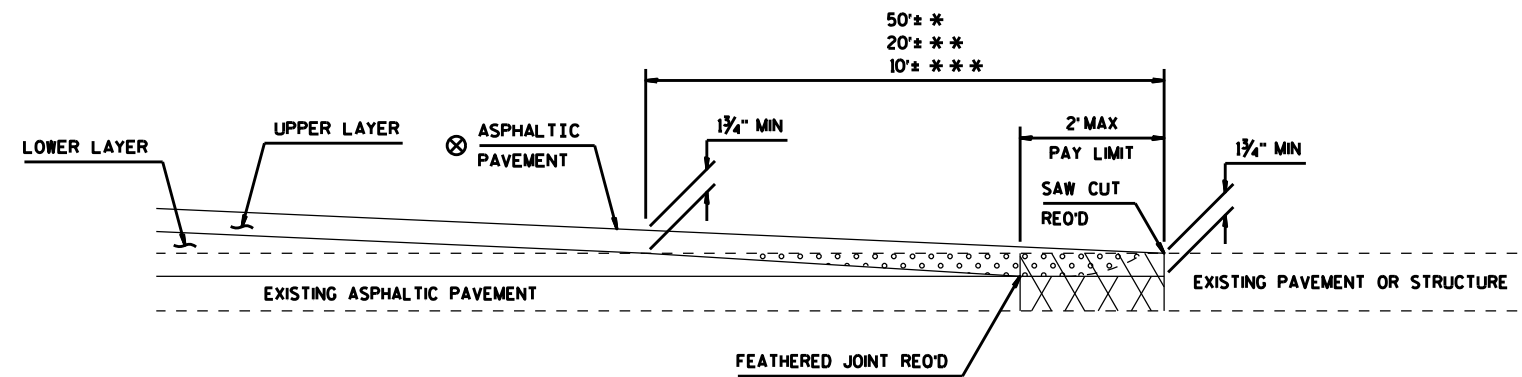


DETAIL FOR RURAL CURB & GUTTER REPLACEMENT



LOWER AND UPPER LAYERS

PAVEMENT MARKING DETAIL FOR TAPERED OVERLAPPING JOINTS IN ASPHALTIC PAVEMENTS



⊗ SEE TYPICAL CROSS SECTION FOR
PAVEMENT TYPE AND THICKNESS
OF INDIVIDUAL LAYERS



REMOVING ASPHALTIC SURFACE, MILLING



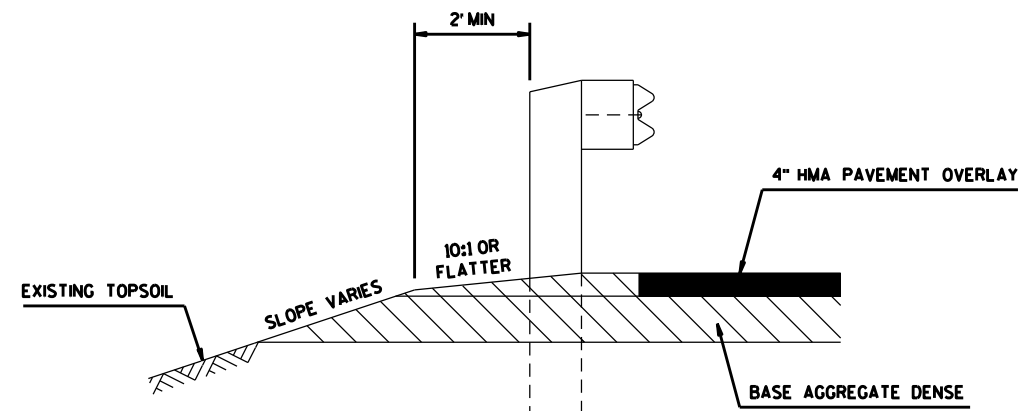
REMOVING ASPHALTIC SURFACE, BUTT JOINTS (FULL DEPTH REMOVAL OPTIONAL)



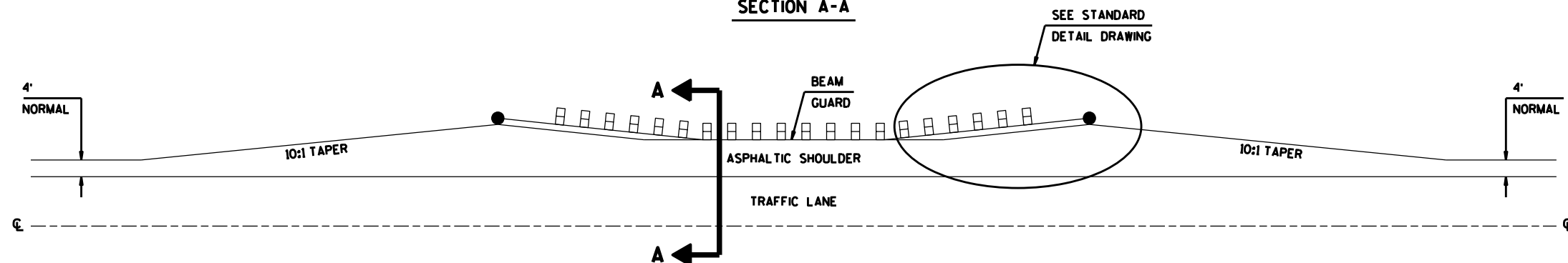
ASPHALTIC WEDGING (FULL DEPTH REMOVAL OPTION)

BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS

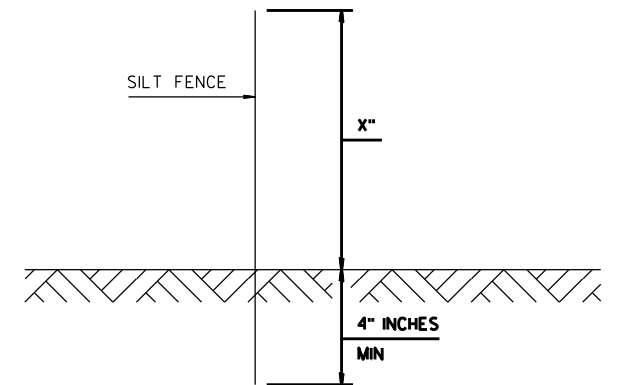
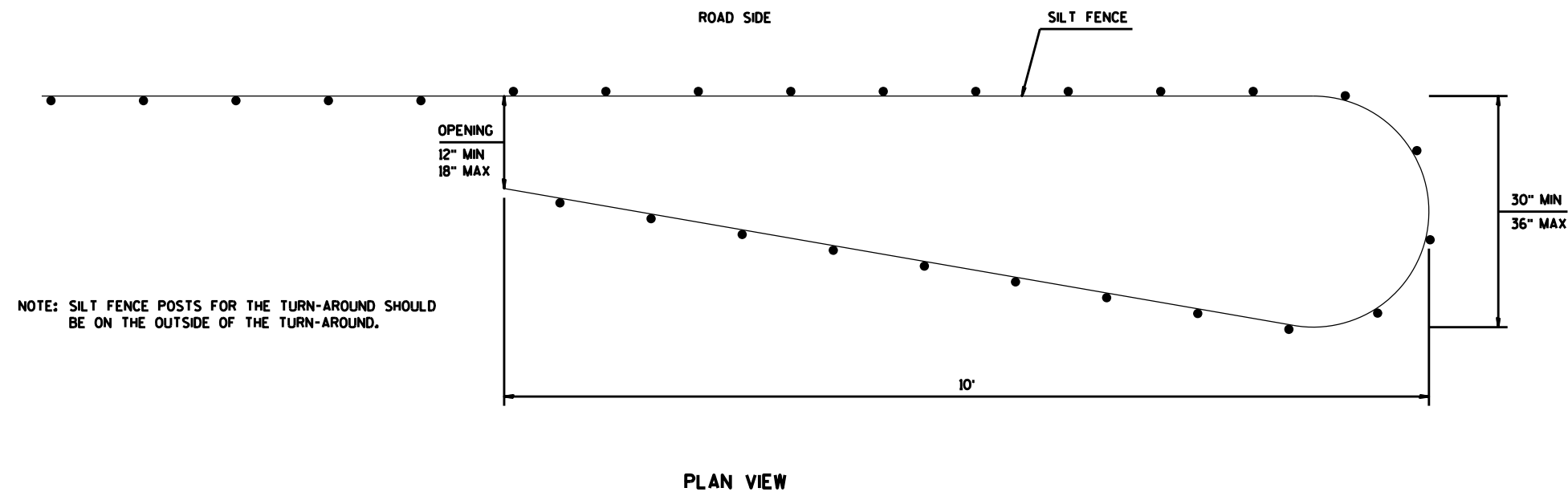
* MAINLINE
** SIDEROADS
*** PRIVATE ENTRANCES



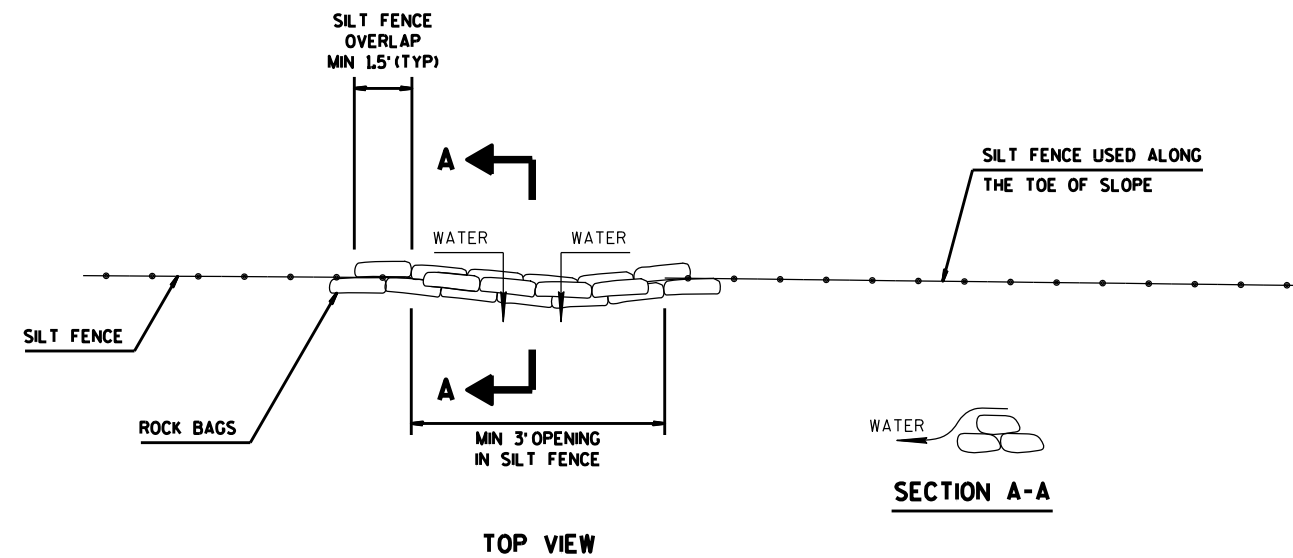
SECTION A-A



DETAIL FOR ASPHALTIC SHOULDER AT GUARDRAIL

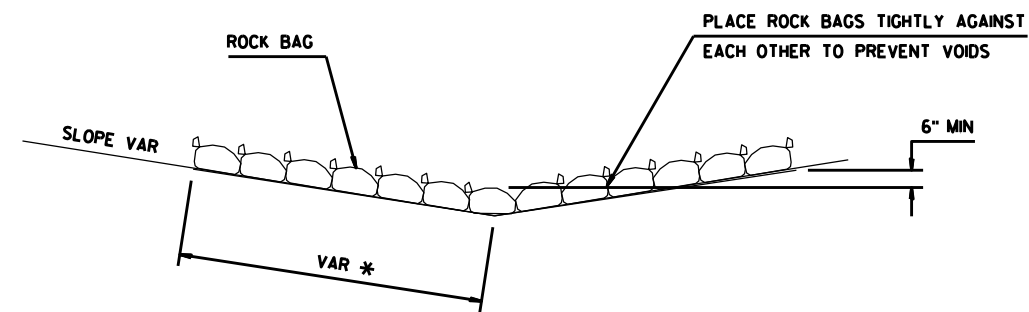


SILT FENCE TURN-AROUND DETAIL

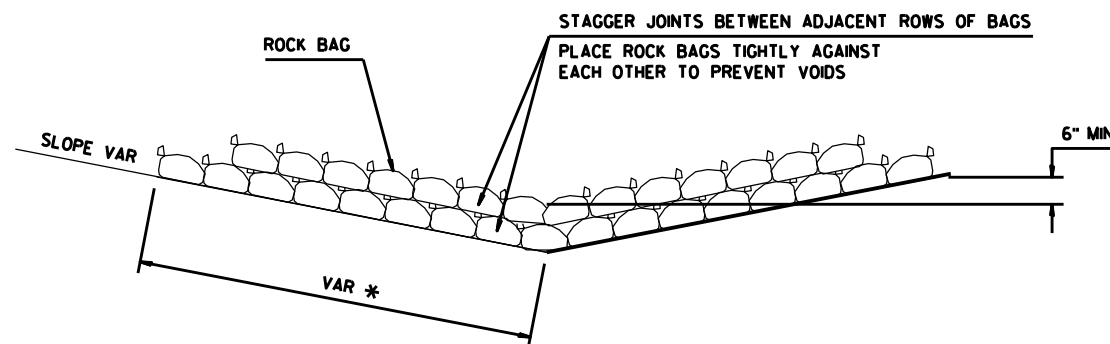


ROCK BAGS USED FOR SILT FENCE RELIEF DETAIL

PAID AS ROCK BAGS



SIDE VIEW (SINGLE LAYER)

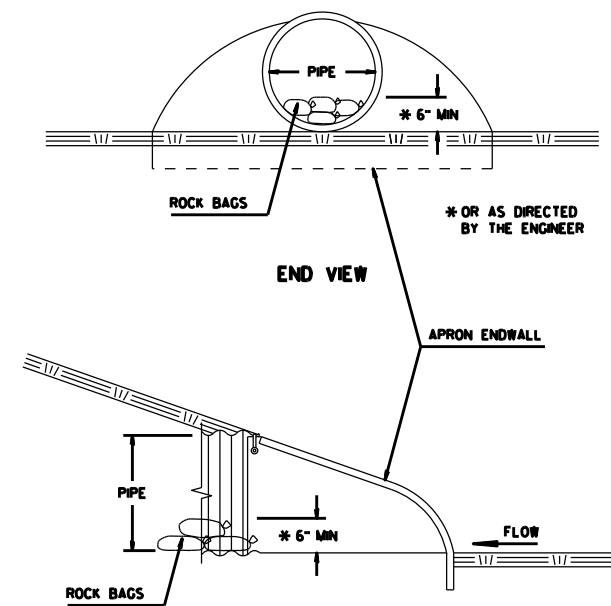


* LENGTH AND NUMBER OF BAGS MAY VARY
DEPENDING ON DESIRED DEPTH OF WATER POOL

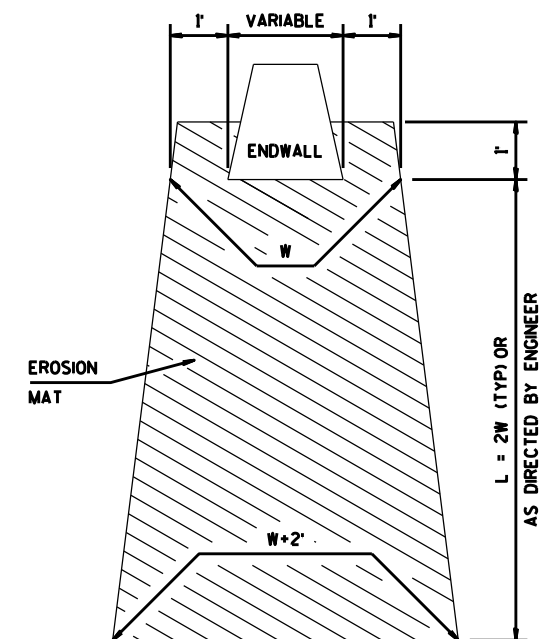
SIDE VIEW (MULTIPLE LAYER)

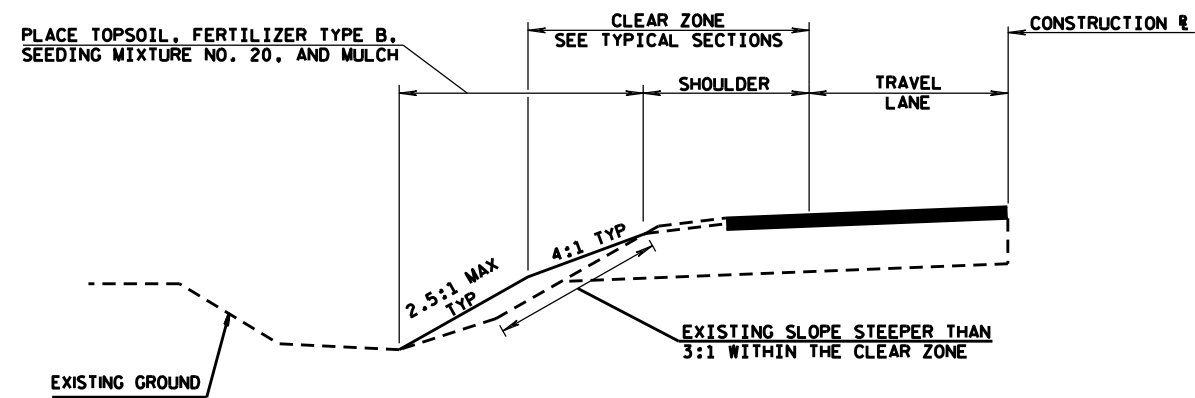
ROCK BAGS DITCH CHECK

PAID AS DITCH CHECKS



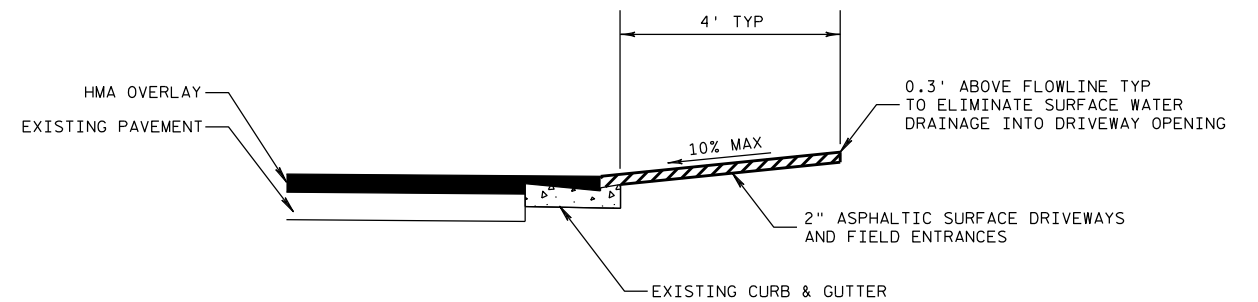
SIDE VIEW

CULVERT PIPE CHECKS**EROSION MAT TREATMENT AT CULVERTS**

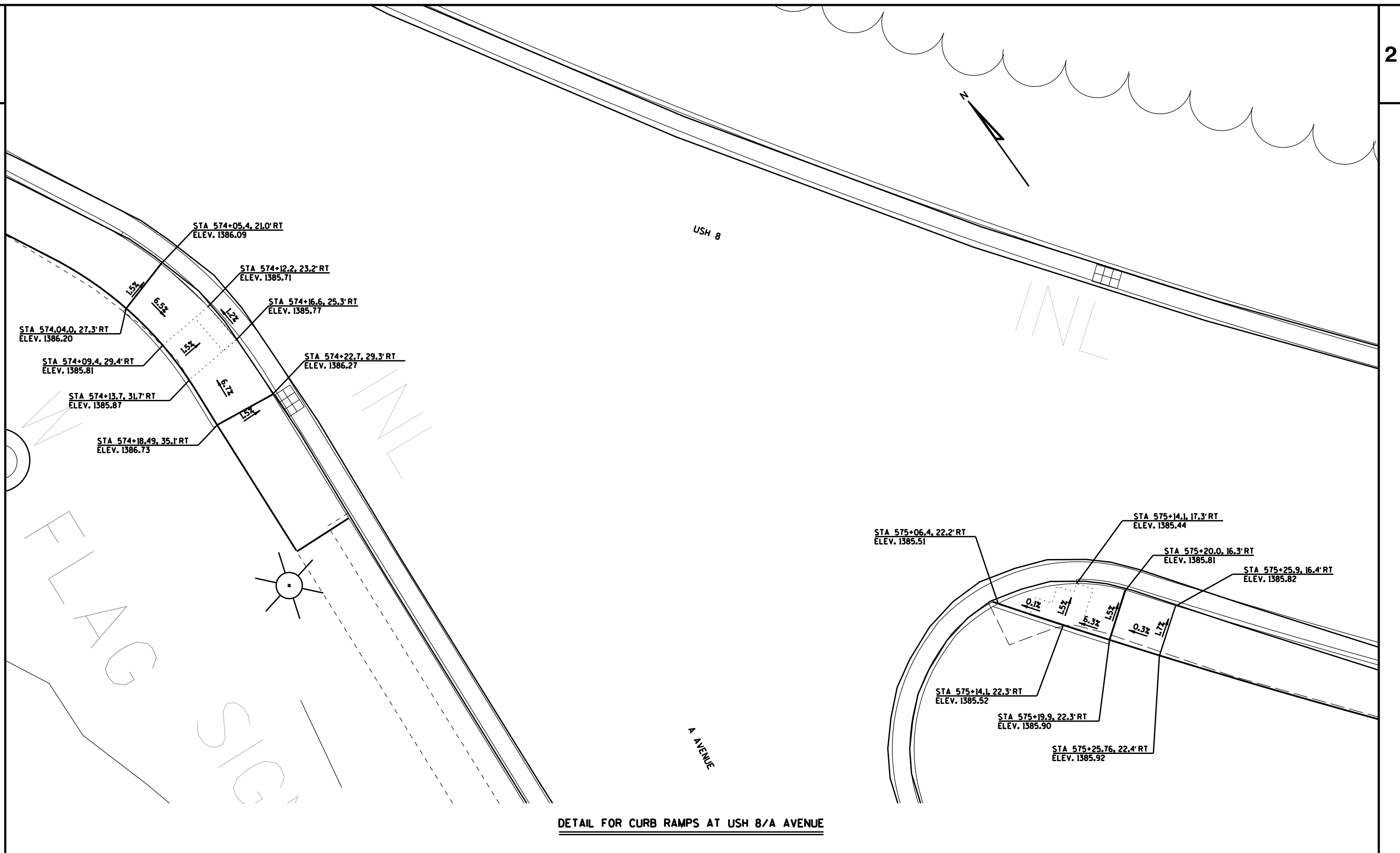


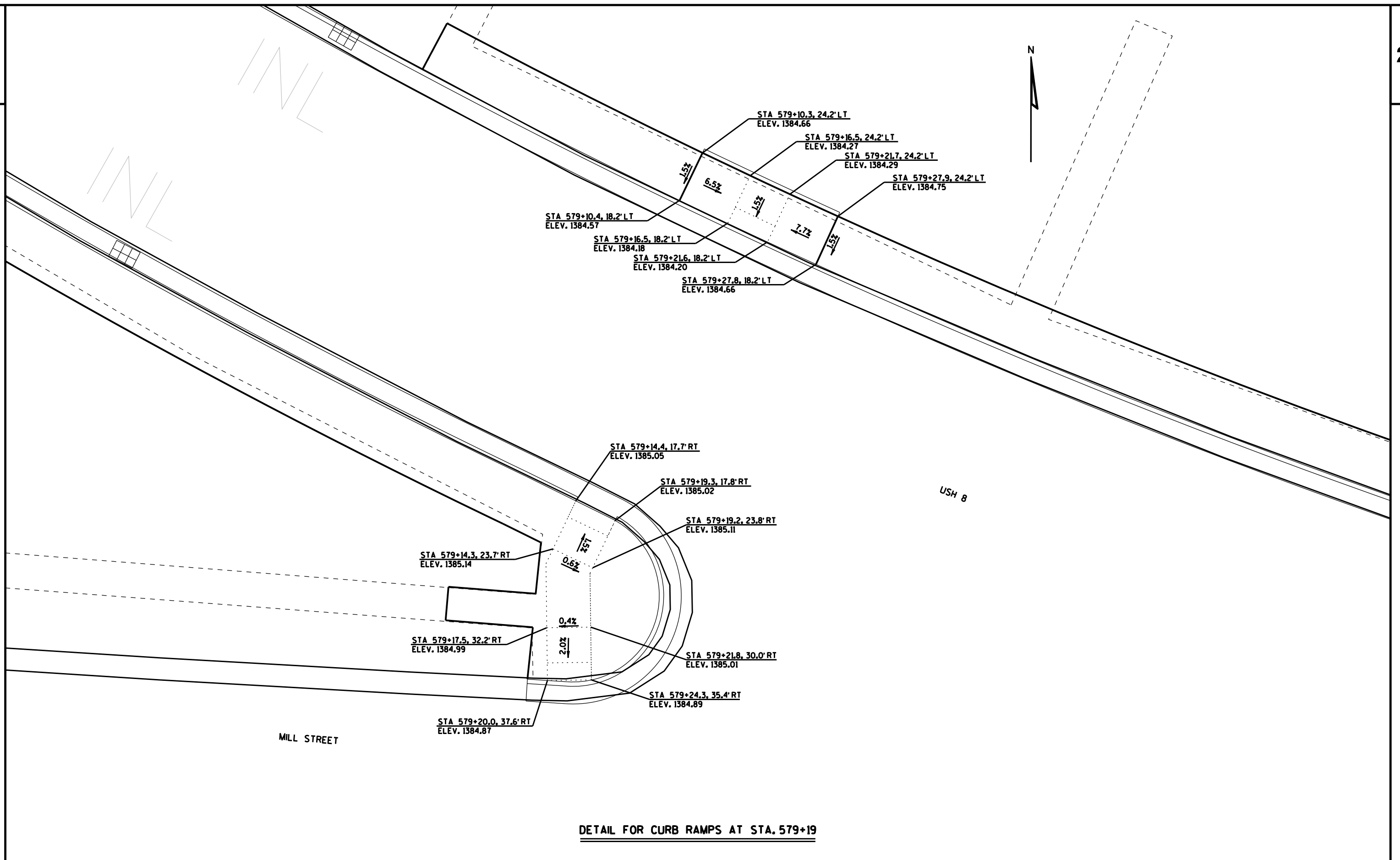
TYPICAL HALF SECTION OF STEEP SLOPES

DETAIL FOR SLOPE FLATTENING
SEE CROSS SECTIONS FOR ADDITIONAL DETAILS



DRIVEWAY APRON FOR EXISTING AGGREGATE DRIVEWAYS USH 8, LT IN DUNBAR





2

2

SEE PREVIOUS PAGE
FOR DETAILS

USH 8

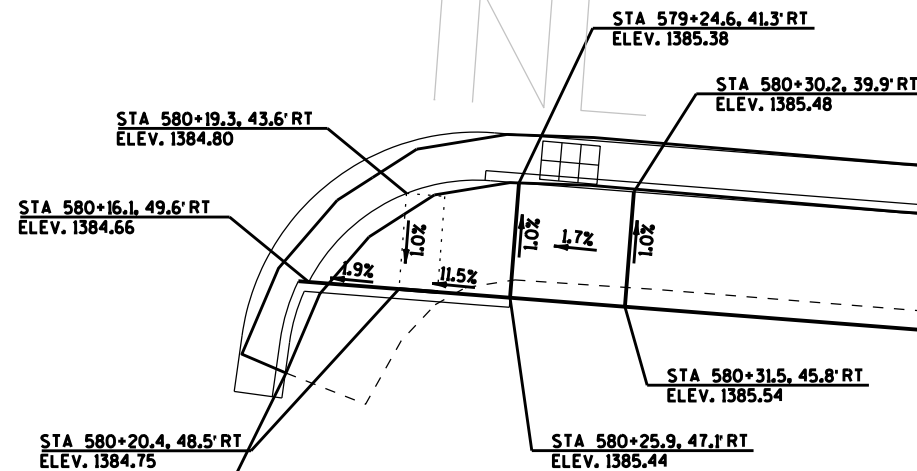


MILL STREET

REMOVE AND REPLACE 2.5' WIDTH OF EXISTING
CURB RAMP AND PLACE CURBRAMP DETECTABLE
WARNING FIELD. MATCH EXISTING ELEVATIONS.

REMOVE AND REPLACE 2.5' WIDTH OF EXISTING
CURB RAMP AND PLACE CURBRAMP DETECTABLE
WARNING FIELD. MATCH EXISTING ELEVATIONS.

MAPLE STREET



DETAIL FOR CURB RAMP AT USH 8/MILL STREET/MAPLE STREET

PROJECT NO: 1590-16-71

HWY: USH 8

COUNTY: MARINETTE

CONSTRUCTION DETAILS

SHEET

E

FILE NAME : \$\$....designfile....\$\$

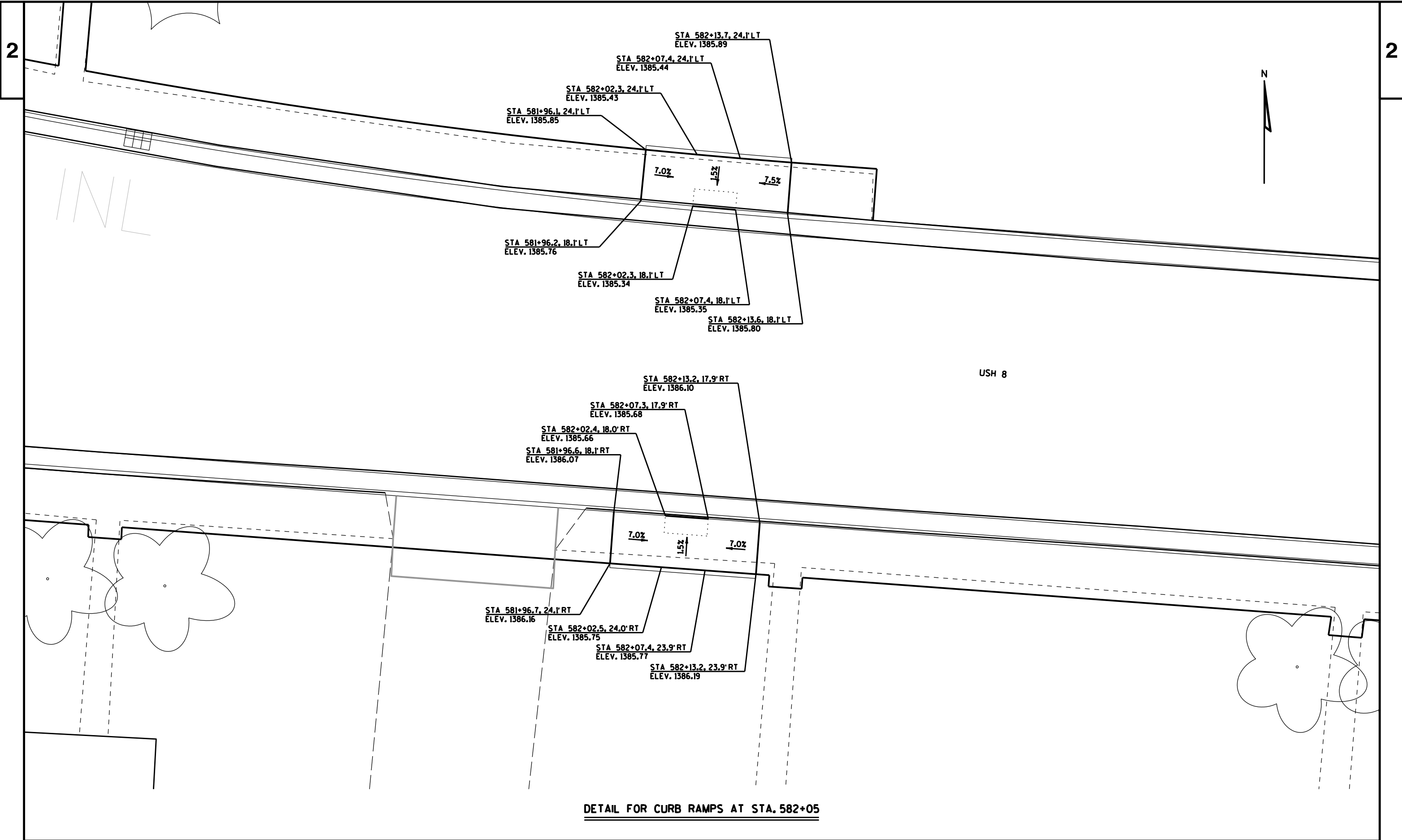
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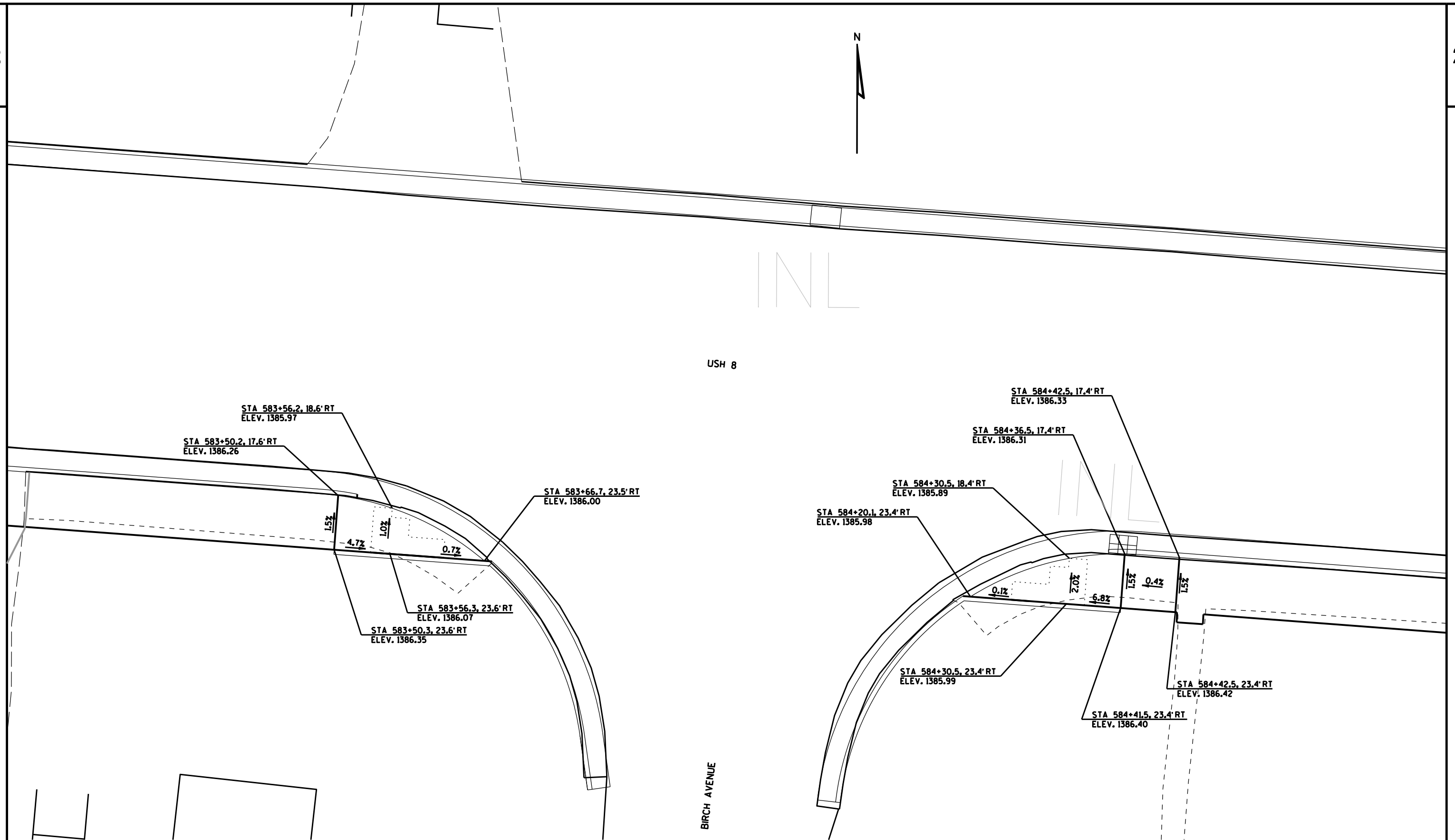
PLOT BY : \$\$...plotuser...\$\$

PLOT NAME : 021005_cd

PLOT SCALE : \$\$.....plotscale.....\$\$

WISDOT/CADDs SHEET 42



DETAIL FOR CURB RAMPS AT USH 8/BIRCH AVENUE

PROJECT NO: 1590-16-71

HWY: USH 8

COUNTY: MARINETTE

CONSTRUCTION DETAILS

SHEET

E

FILE NAME : \$\$....designfile....\$\$

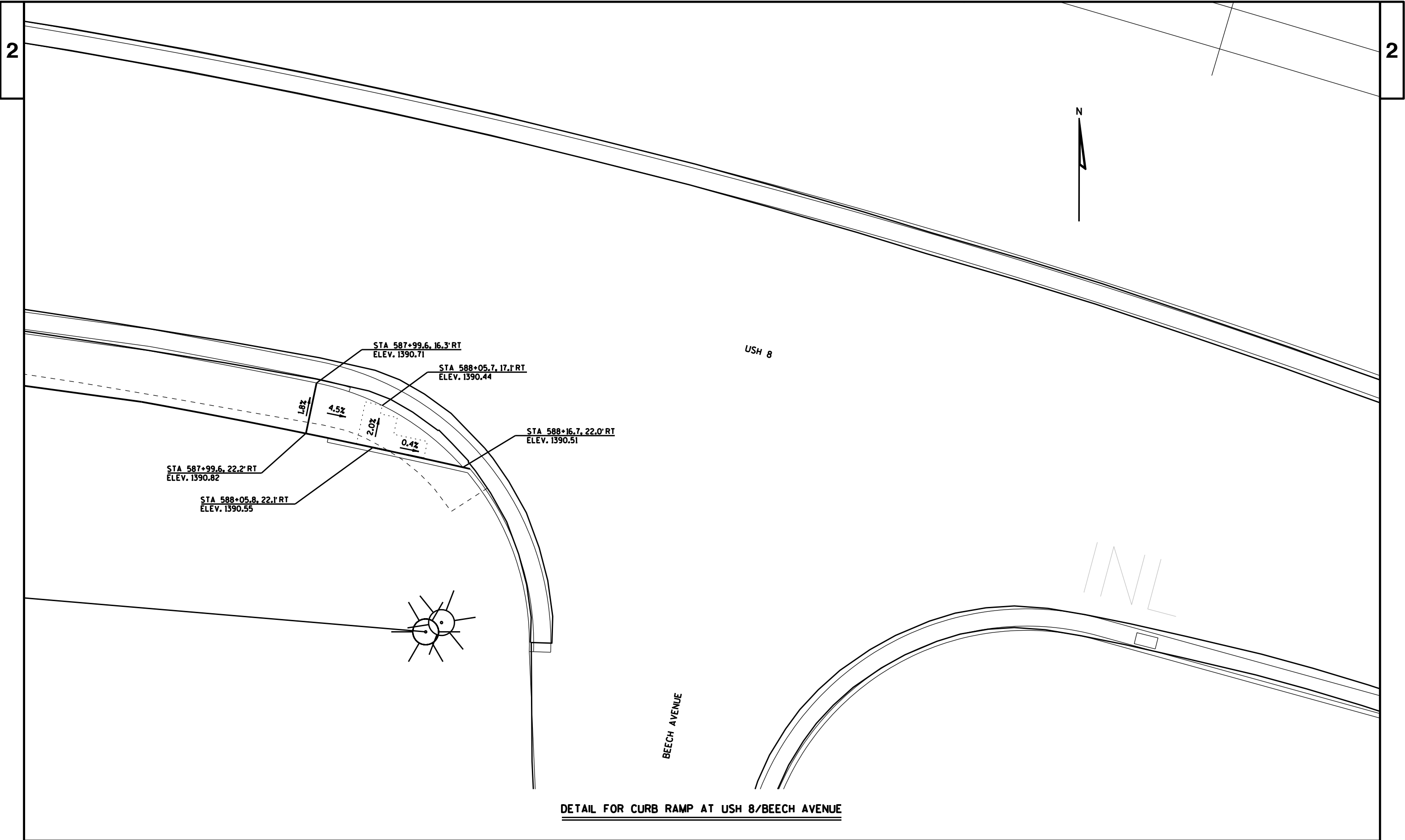
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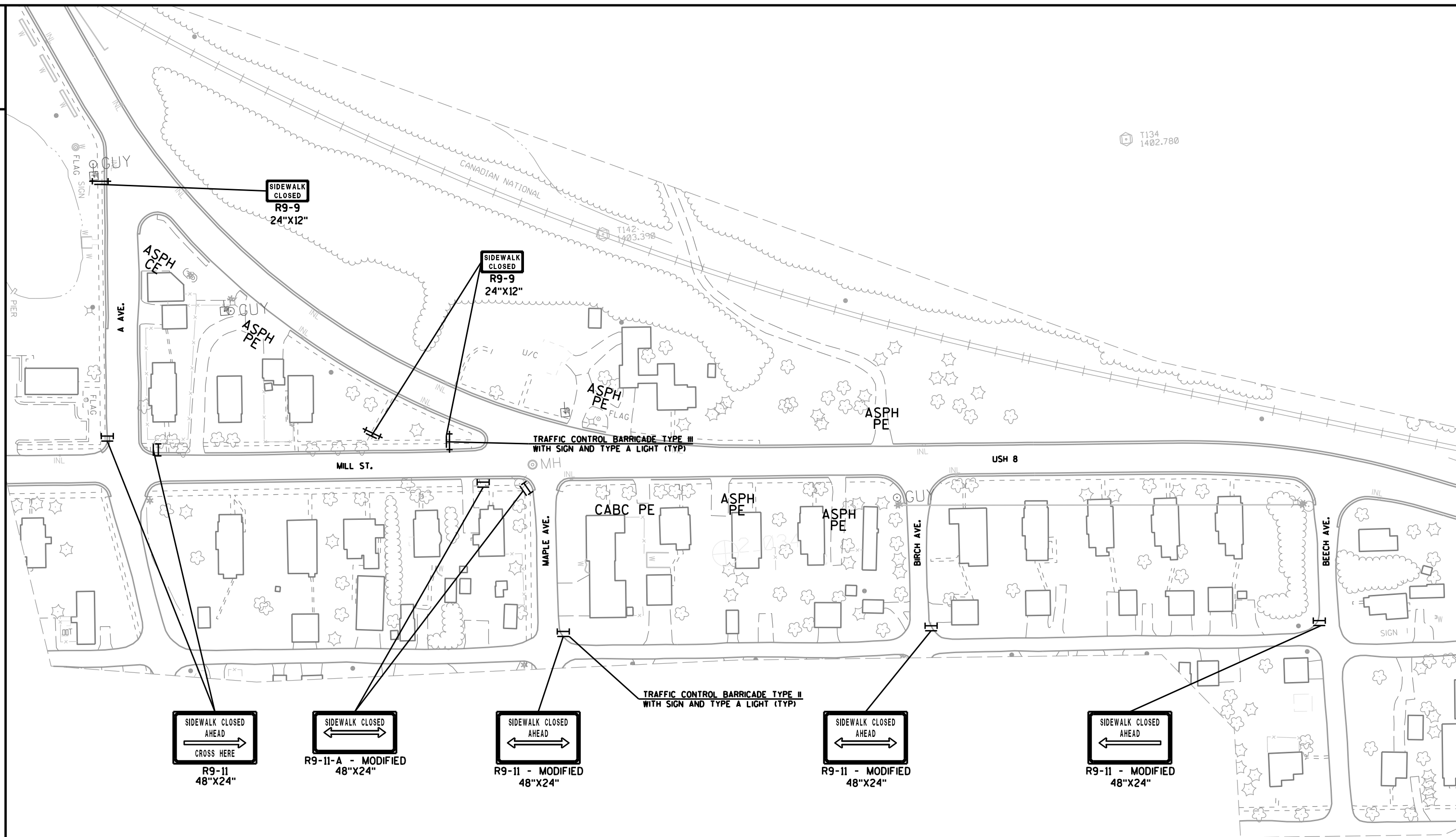
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WISDOT/CADDs SHEET 42



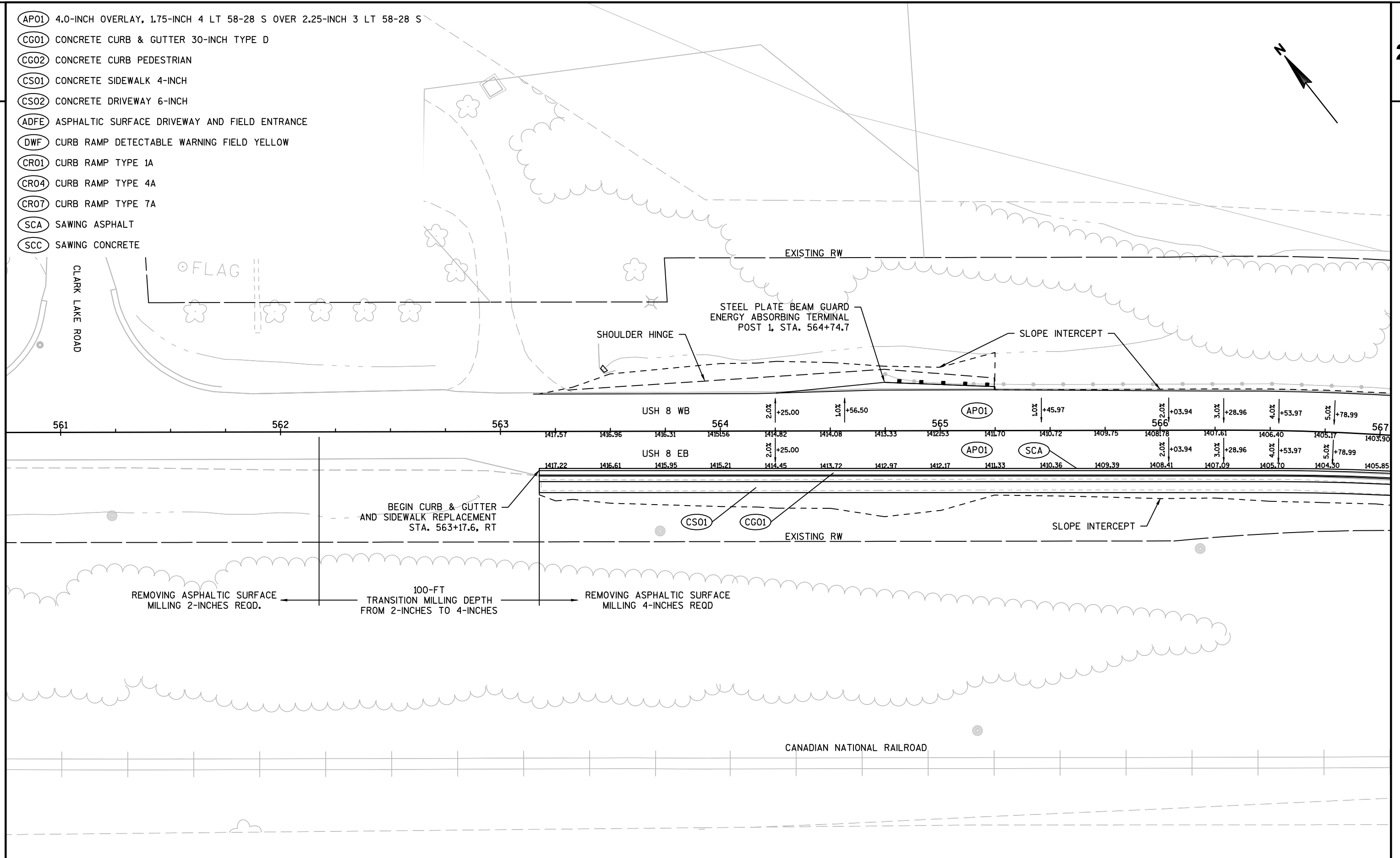


PEDESTRIAN DETOUR

2

- (AP01) 4.0-INCH OVERLAY, 1.75-INCH 4 LT 58-28 S OVER 2.25-INCH 3 LT 58-28 S
- (CG01) CONCRETE CURB & GUTTER 30-INCH TYPE D
- (CG02) CONCRETE CURB PEDESTRIAN
- (CS01) CONCRETE SIDEWALK 4-INCH
- (CS02) CONCRETE DRIVEWAY 6-INCH
- (ADFE) ASPHALTIC SURFACE DRIVEWAY AND FIELD ENTRANCE
- (DWF) CURB RAMP DETECTABLE WARNING FIELD YELLOW
- (CR01) CURB RAMP TYPE 1A
- (CR04) CURB RAMP TYPE 4A
- (CR07) CURB RAMP TYPE 7A
- (SCA) SAWING ASPHALT
- (SCC) SAWING CONCRETE

2



PROJECT NO:1590-16-71

HWY: USH 8

COUNTY: MARINETTE

PLAN DETAIL

SHEET

E

FILE NAME : X:\PROJECTS\MARINETTE\1590-16-00 USH 8\DESIGN\C3D\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021201-PD

PLOT DATE : 2/1/2017 8:57 AM

PLOT BY : CHAD KWIATKOWSKI

PLOT NAME :

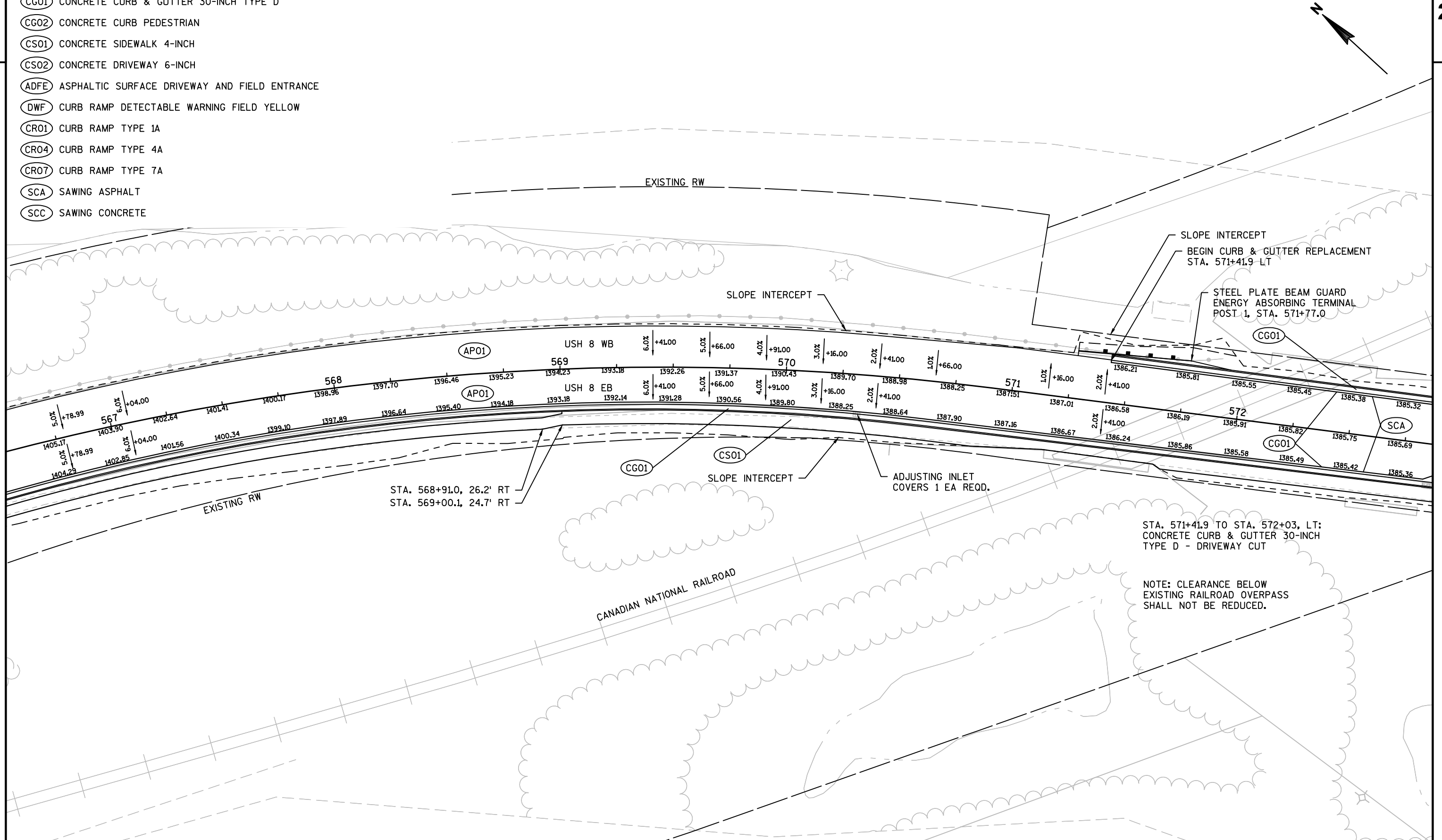
PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

- AP01 4.0-INCH OVERLAY, 1.75-INCH 4 LT 58-28 S OVER 2.25-INCH 3 LT 58-28 S
- CG01 CONCRETE CURB & GUTTER 30-INCH TYPE D
- CG02 CONCRETE CURB PEDESTRIAN
- CS01 CONCRETE SIDEWALK 4-INCH
- CS02 CONCRETE DRIVEWAY 6-INCH
- ADFE ASPHALTIC SURFACE DRIVEWAY AND FIELD ENTRANCE
- DWF CURB RAMP DETECTABLE WARNING FIELD YELLOW
- CR01 CURB RAMP TYPE 1A
- CR04 CURB RAMP TYPE 4A
- CR07 CURB RAMP TYPE 7A
- SCA SAWING ASPHALT
- SCC SAWING CONCRETE

2 |



PROJECT NO:1590-16-71

HWY: USH 8

COUNTY: MARINETTE

PLAN DETAIL

SHEET

11

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LAYOUT NAME - 021202-PD

PLOT DATE : 2/1/2017 9:01 AM

PLOT BY : CHAD KWIATKOWSKI

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

AP01 4.0-INCH OVERLAY, 1.75-INCH 4 LT 58-28 S OVER 2.25-INCH 3 LT 58-28 S

CG01 CONCRETE CURB & GUTTER 30-INCH TYPE D

CG02 CONCRETE CURB PEDESTRIAN

CS01 CONCRETE SIDEWALK 4-INCH

CS02 CONCRETE DRIVEWAY 6-INCH

ADFE ASPHALTIC SURFACE DRIVEWAY AND FIELD ENTRANCE

DWF CURB RAMP DETECTABLE WARNING FIELD YELLOW

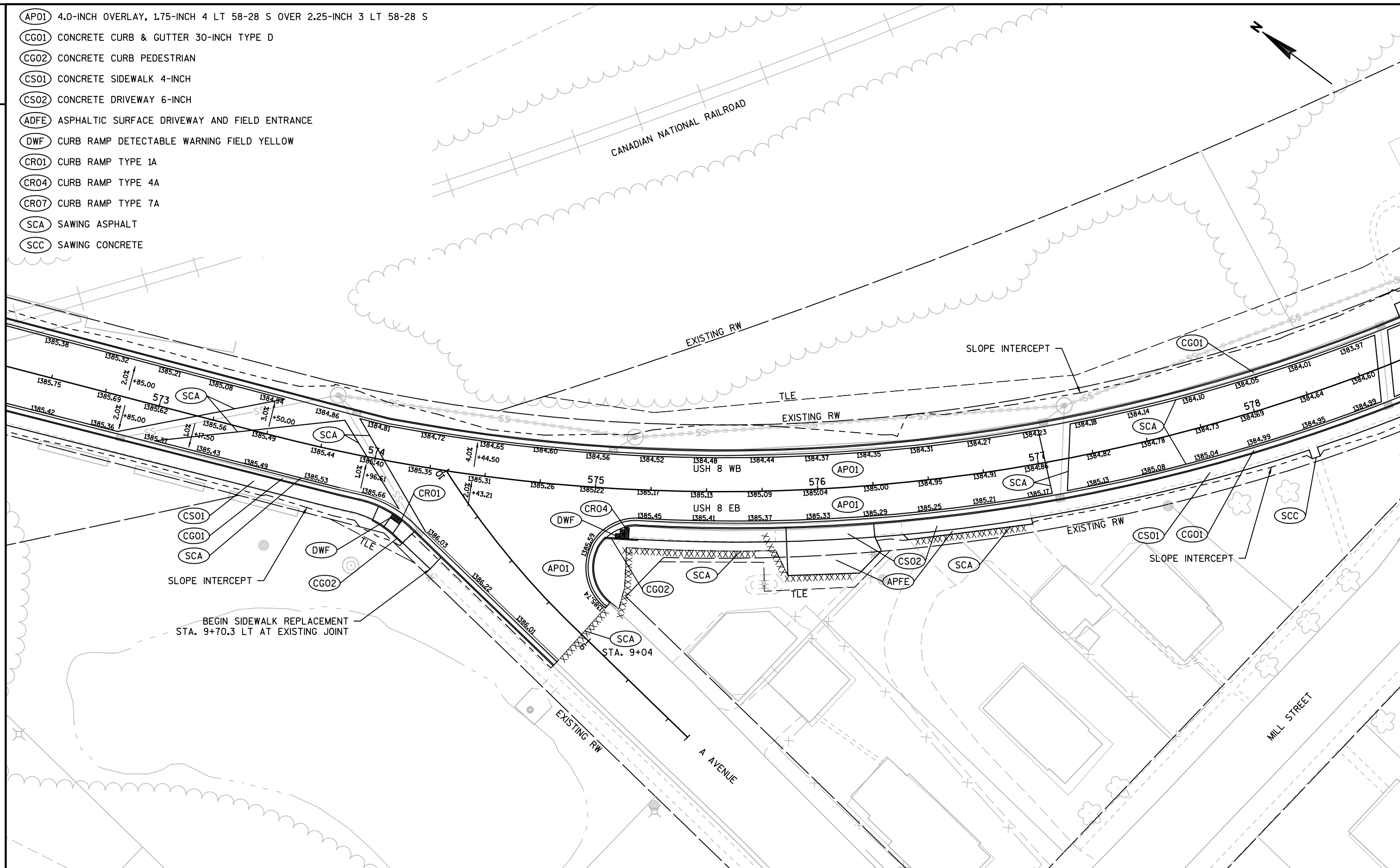
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CR04 CURB RAMP TYPE 4A

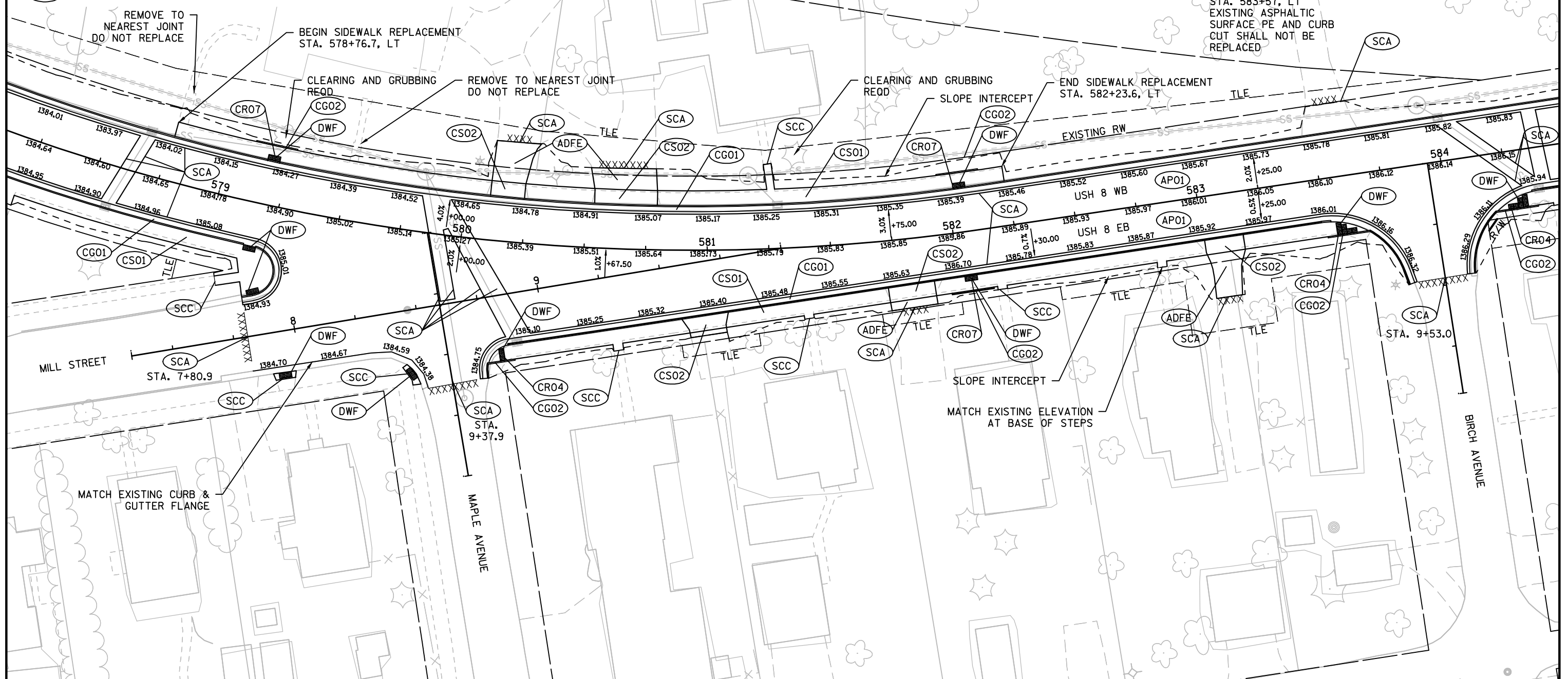
CR07 CURB RAMP TYPE 7A

SCA SAWING ASPHALT

SCC SAWING CONCRETE



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(CGO1) CONCRETE CURB & GUTTER 30-INCH TYPE D
(CGO2) CONCRETE CURB PEDESTRIAN
(CSO1) CONCRETE SIDEWALK 4-INCH
(CSO2) CONCRETE DRIVEWAY 6-INCH
(ADFE) ASPHALTIC SURFACE DRIVEWAY AND FIELD ENTRANCE
(DWF) CURB RAMP DETECTABLE WARNING FIELD YELLOW
(CRO1) CURB RAMP TYPE 1A
(CRO4) CURB RAMP TYPE 4A
(CRO7) CURB RAMP TYPE 7A
(SCA) SAWING ASPHALT
(SCC) SAWING CONCRETE



PROJECT NO:1590-16-71

HWY:USH 8

COUNTY:MARINETTE

PLAN DETAIL

SHEET

E

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LAYOUT NAME - 021204-PD

PLOT DATE : 2/1/2017 9:02 AM

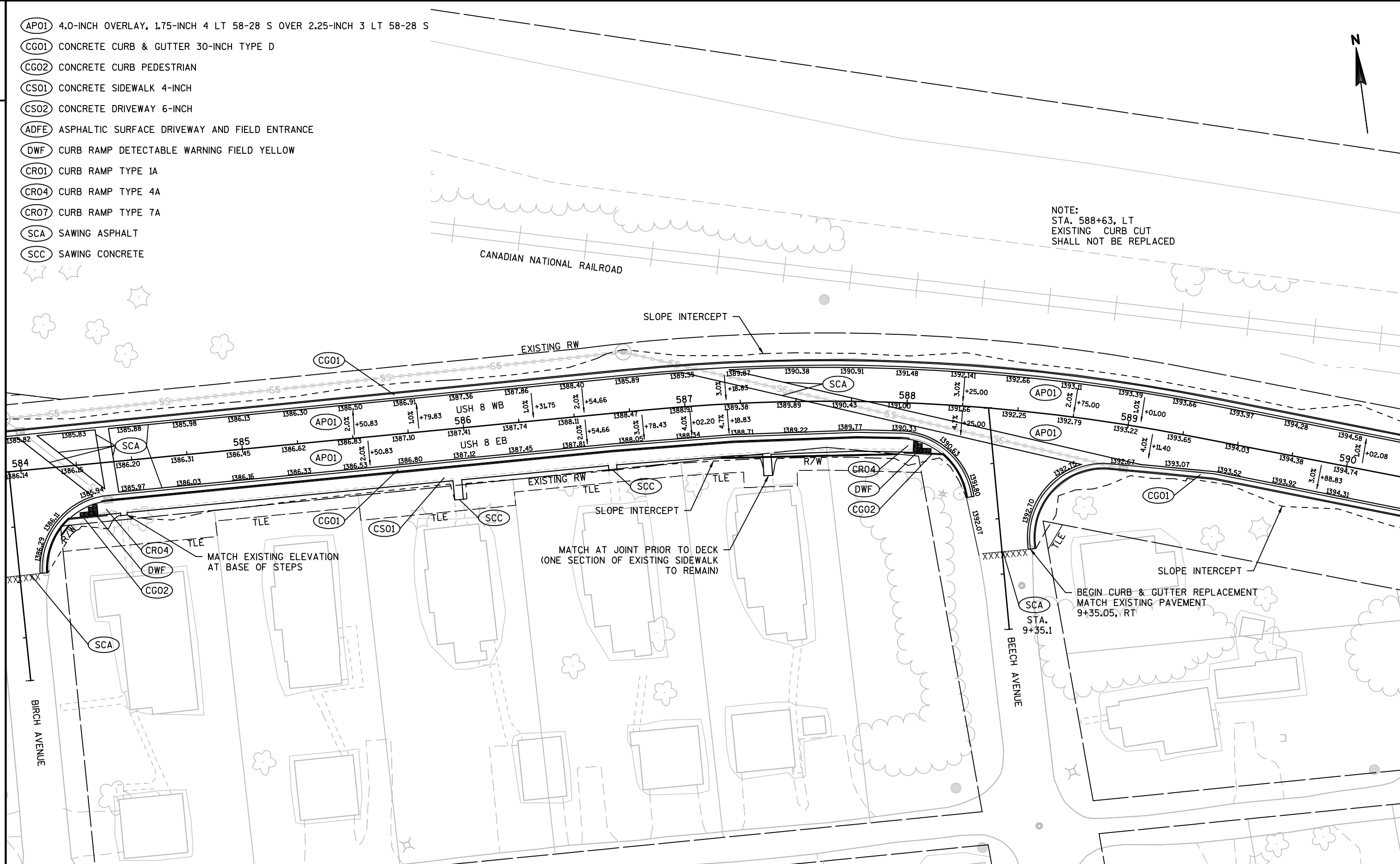
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PLOT NAME :

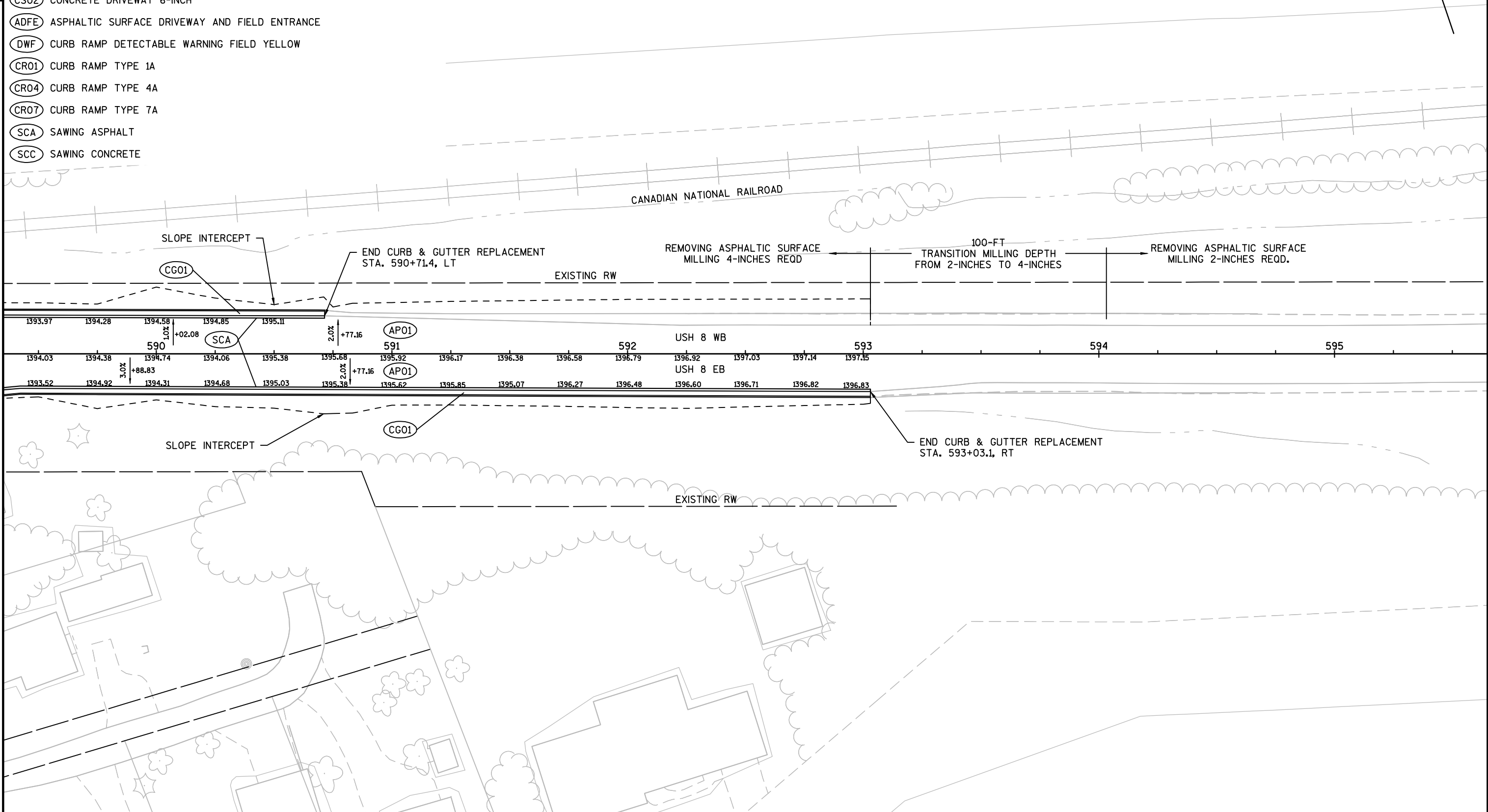
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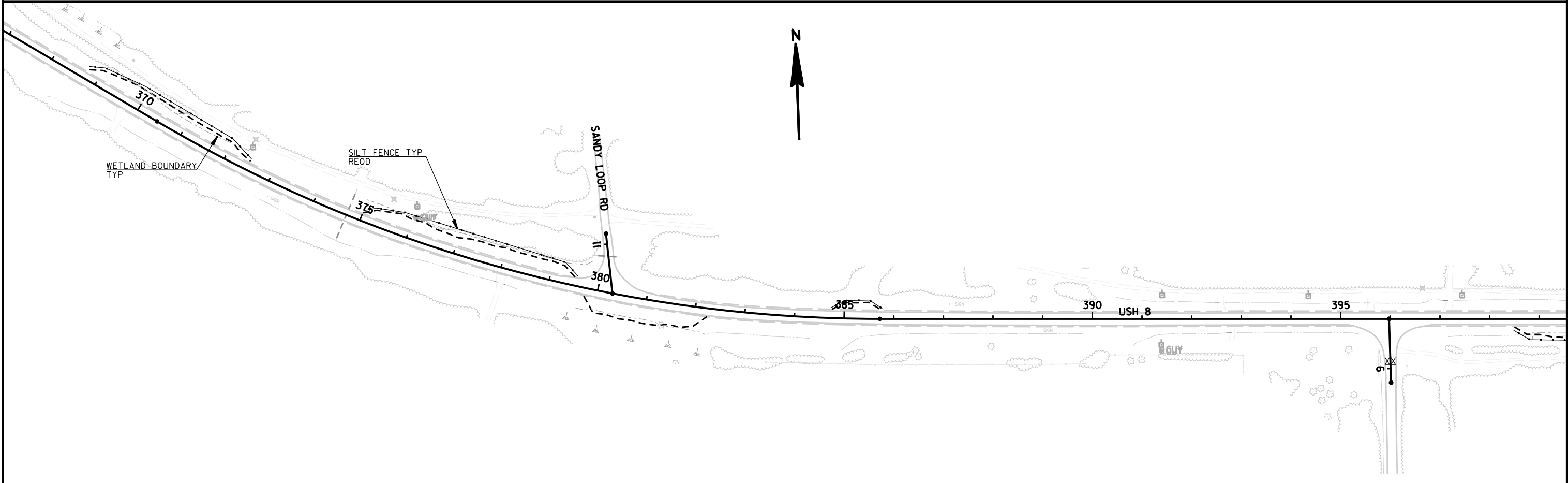
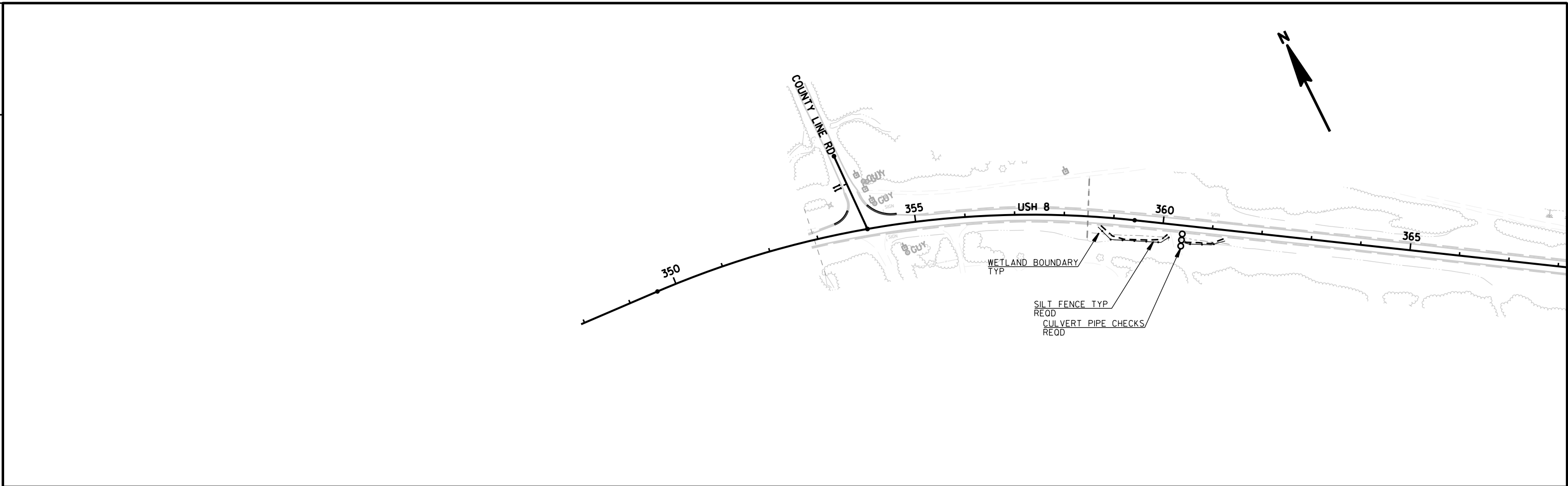
WISDOT/CADDs SHEET 42

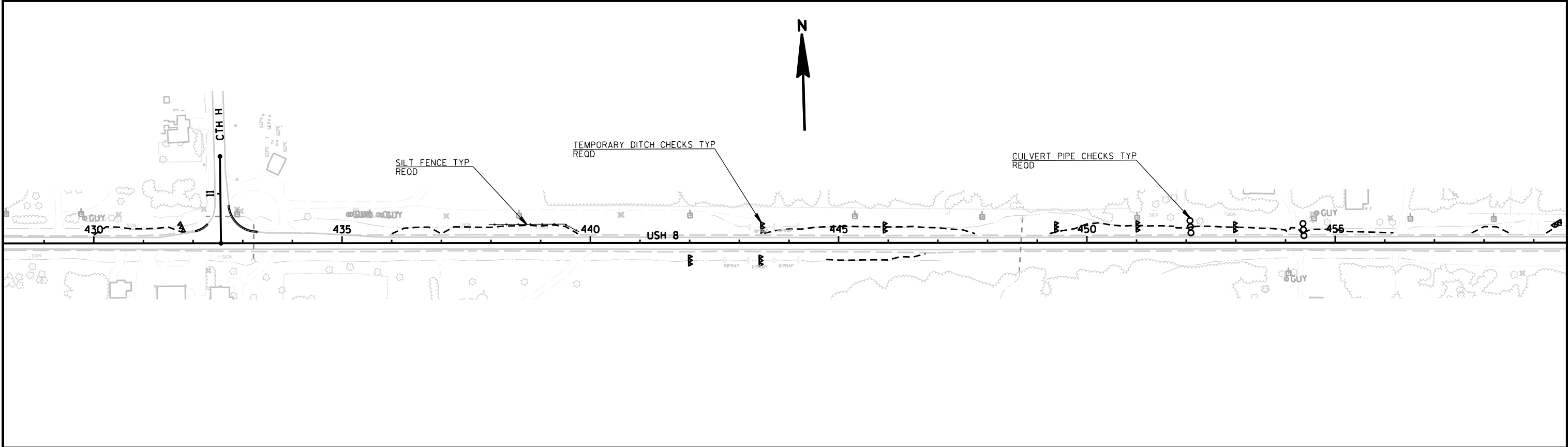
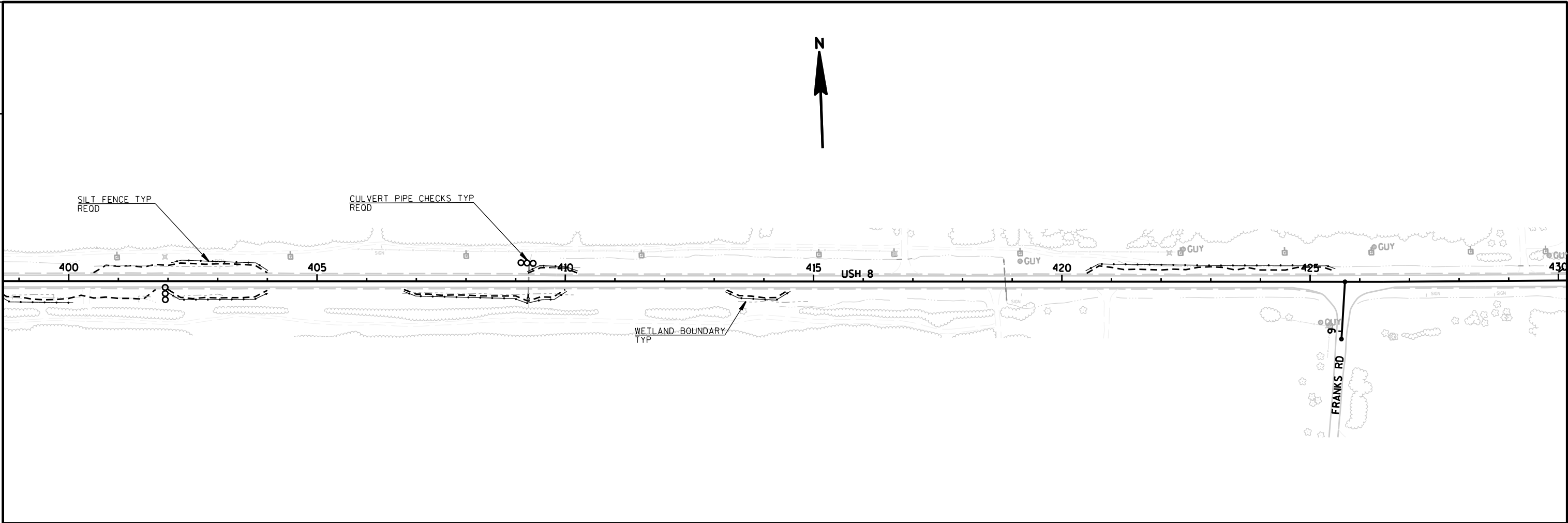
- AP01 4.0-INCH OVERLAY, 1.75-INCH 4 LT 58-28 S OVER 2.25-INCH 3 LT 58-28 S
CG01 CONCRETE CURB & GUTTER 30-INCH TYPE D
CG02 CONCRETE CURB PEDESTRIAN
CS01 CONCRETE SIDEWALK 4-INCH
CS02 CONCRETE DRIVEWAY 6-INCH
ADFE ASPHALTIC SURFACE DRIVEWAY AND FIELD ENTRANCE
DWF CURB RAMP DETECTABLE WARNING FIELD YELLOW
CR01 CURB RAMP TYPE 1A
CR04 CURB RAMP TYPE 4A
CR07 CURB RAMP TYPE 7A
SCA SAWING ASPHALT
SCC SAWING CONCRETE



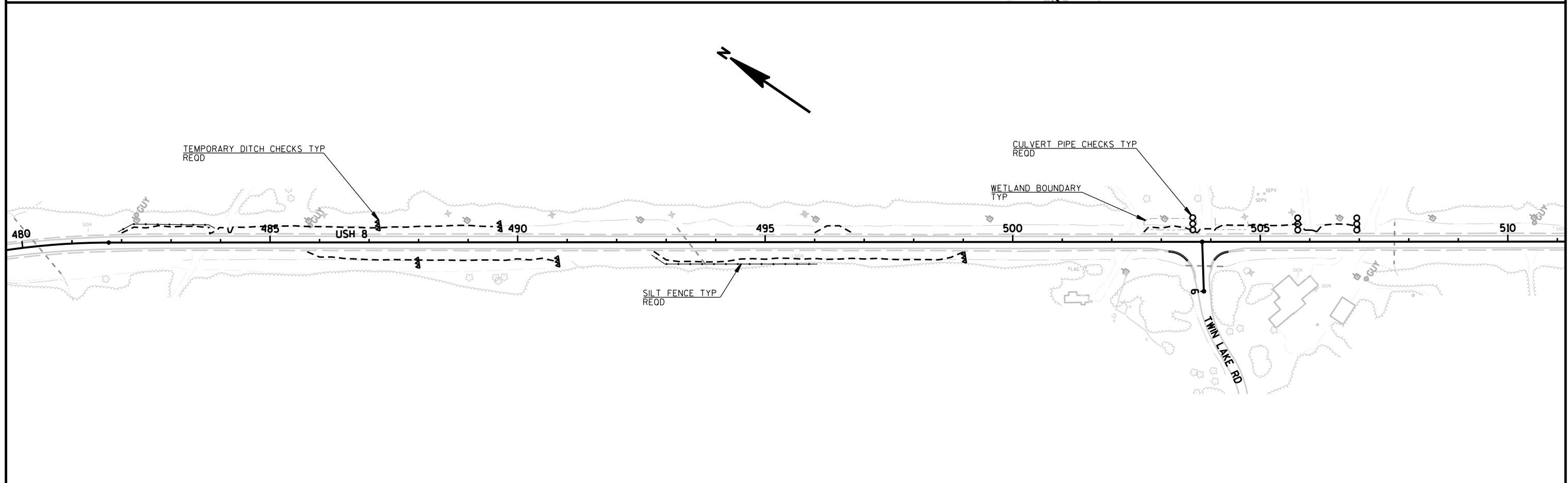
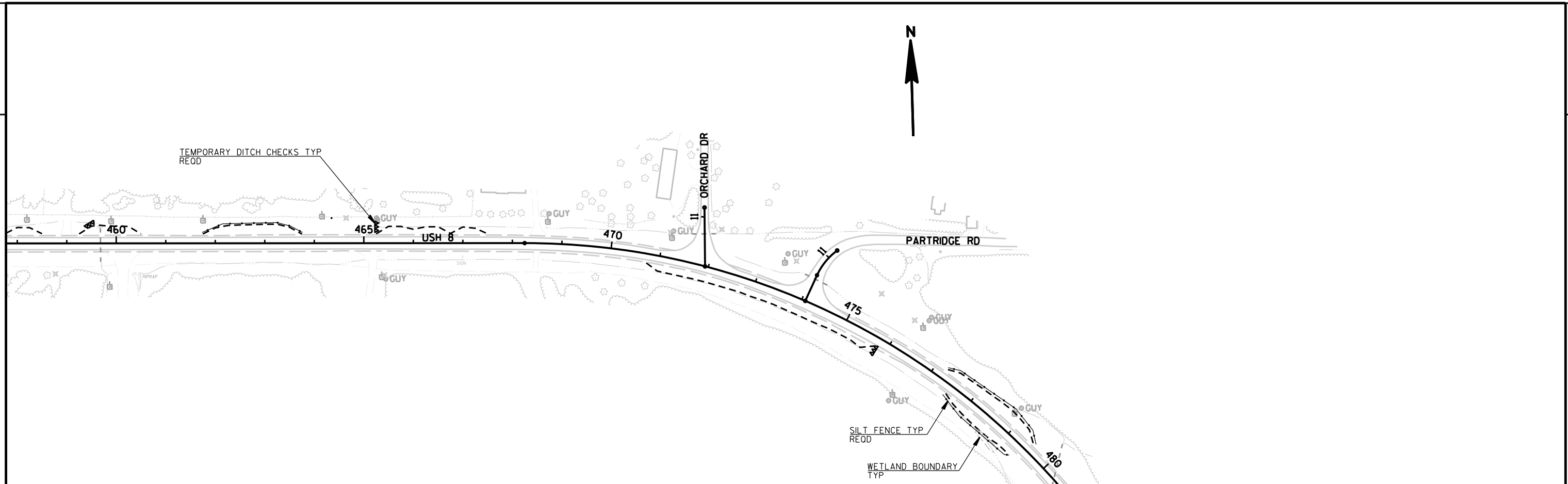
- AP01 4.0-INCH OVERLAY, 1.75-INCH 4 LT 58-28 S OVER 2.25-INCH 3 LT 58-28 S
- CG01 CONCRETE CURB & GUTTER 30-INCH TYPE D
- CG02 CONCRETE CURB PEDESTRIAN
- CS01 CONCRETE SIDEWALK 4-INCH
- CS02 CONCRETE DRIVEWAY 6-INCH
- ADFE ASPHALTIC SURFACE DRIVEWAY AND FIELD ENTRANCE
- DWF CURB RAMP DETECTABLE WARNING FIELD YELLOW
- CR01 CURB RAMP TYPE 1A
- CR04 CURB RAMP TYPE 4A
- CR07 CURB RAMP TYPE 7A
- SCA SAWING ASPHALT
- SCC SAWING CONCRETE



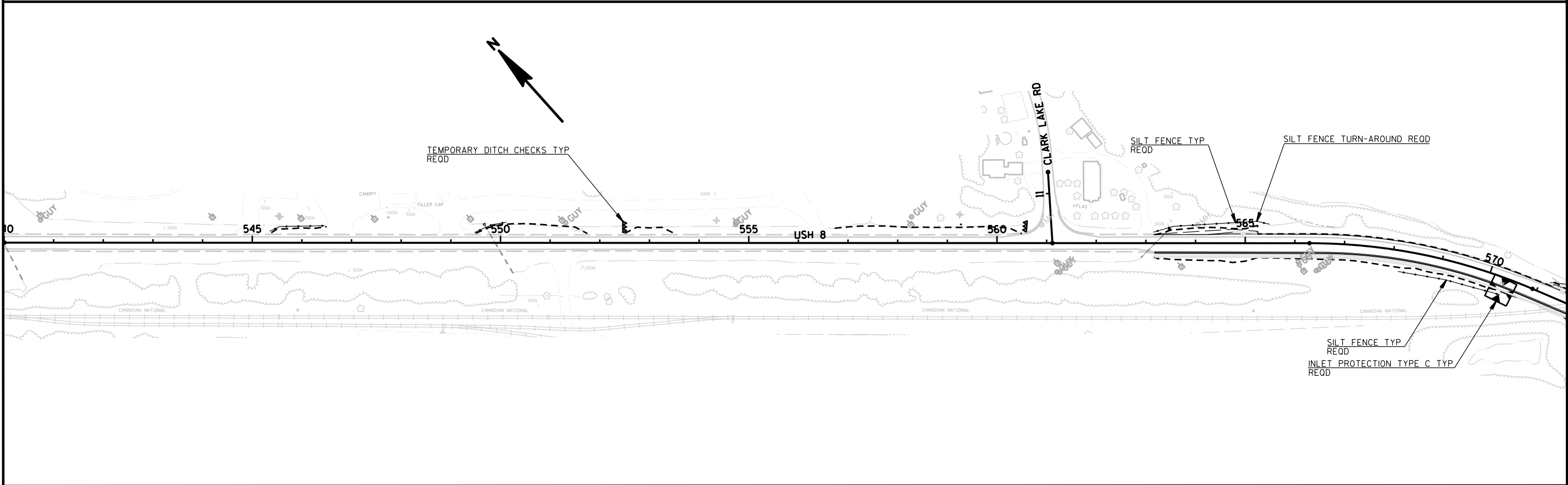
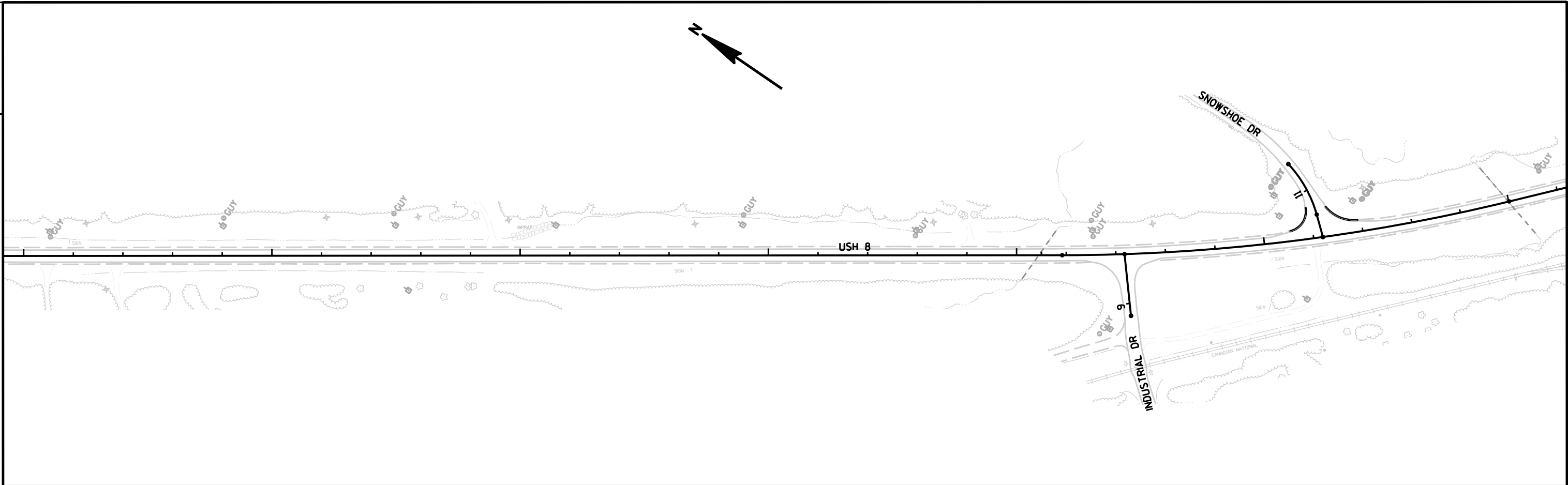


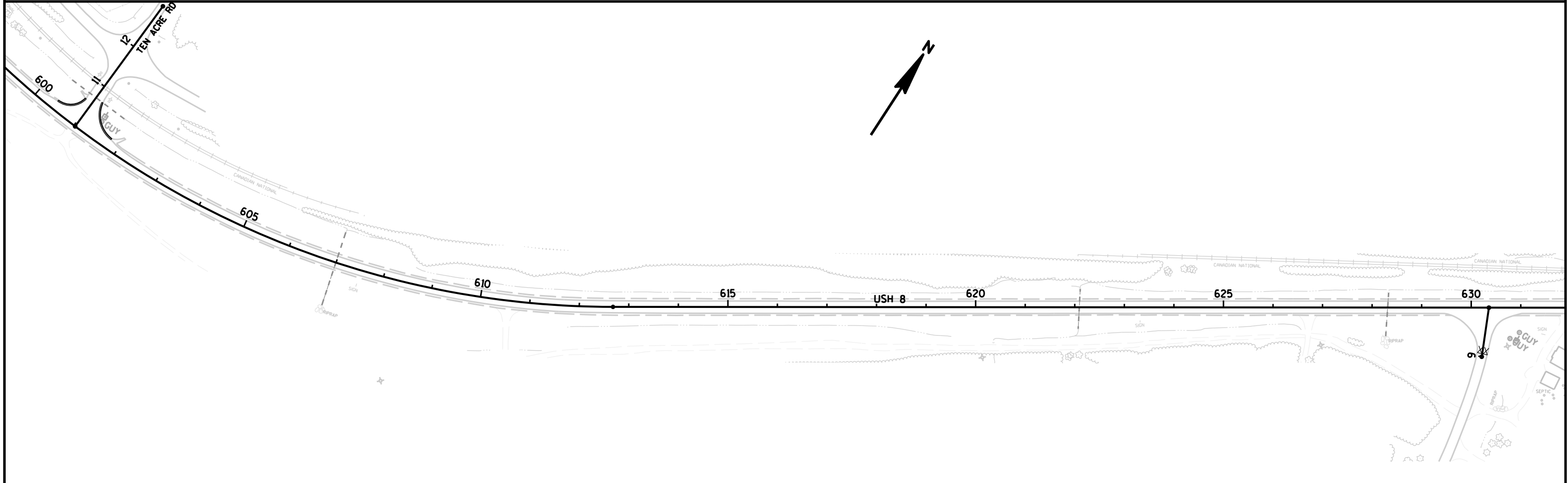
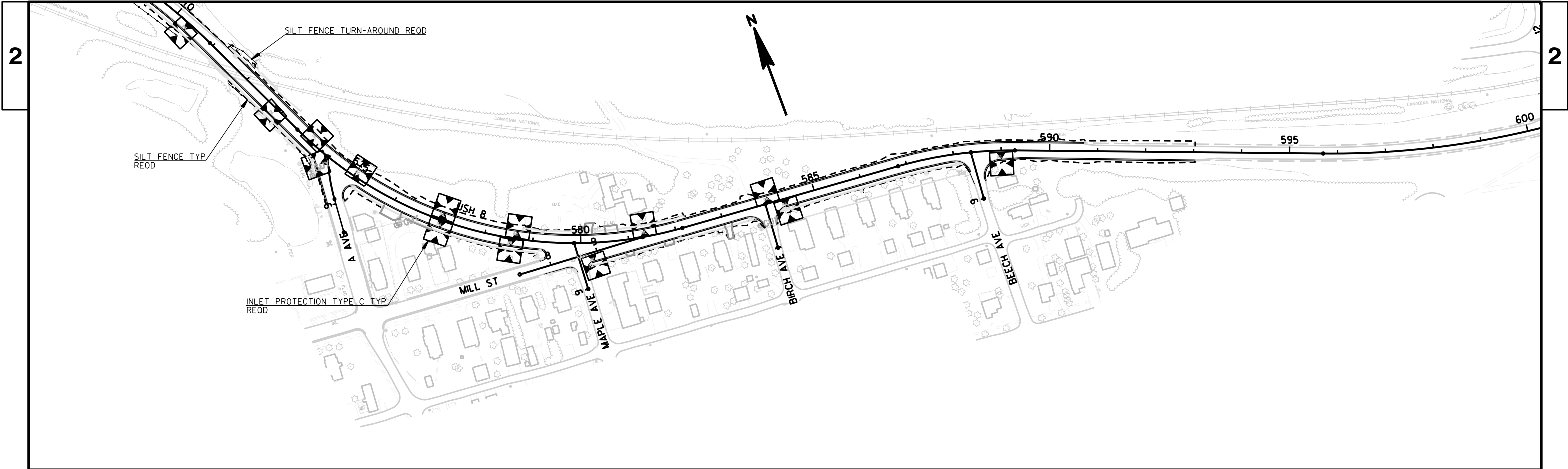


PROJECT NO: 1590-16-71	HWY: USH 8	COUNTY: MARINETTE	EROSION CONTROL PLAN	SHEET	E
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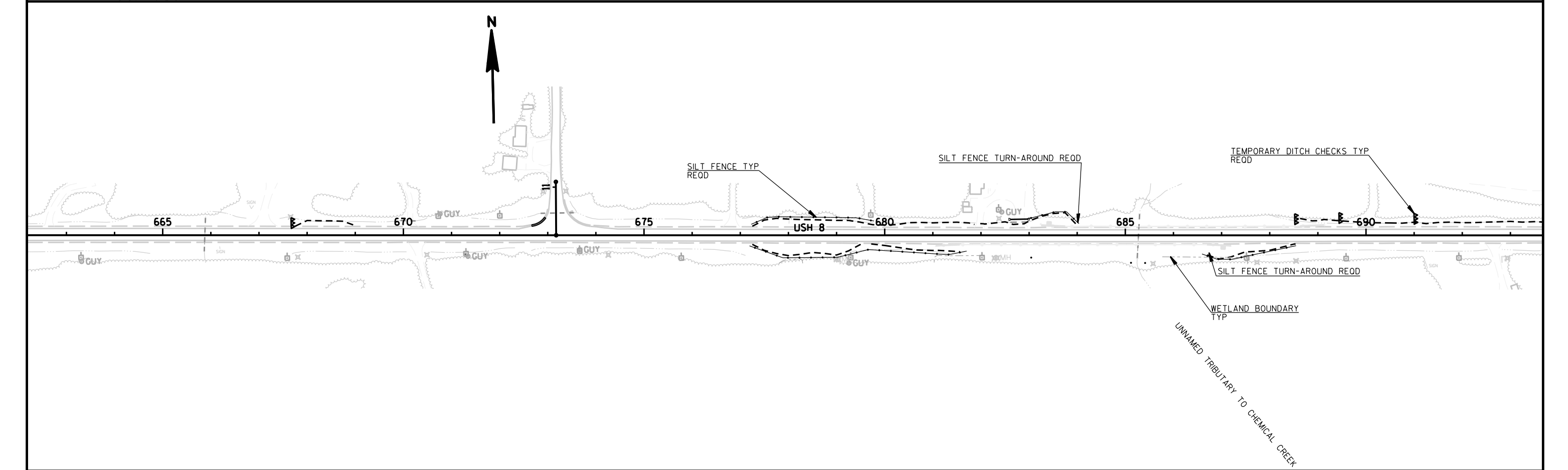


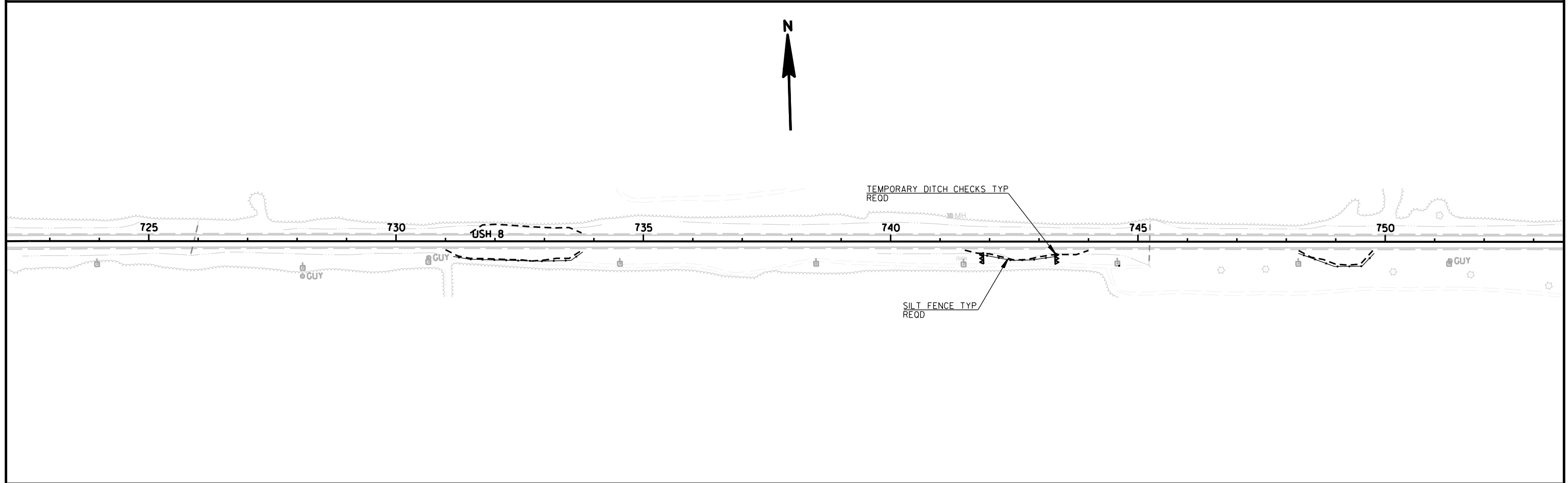
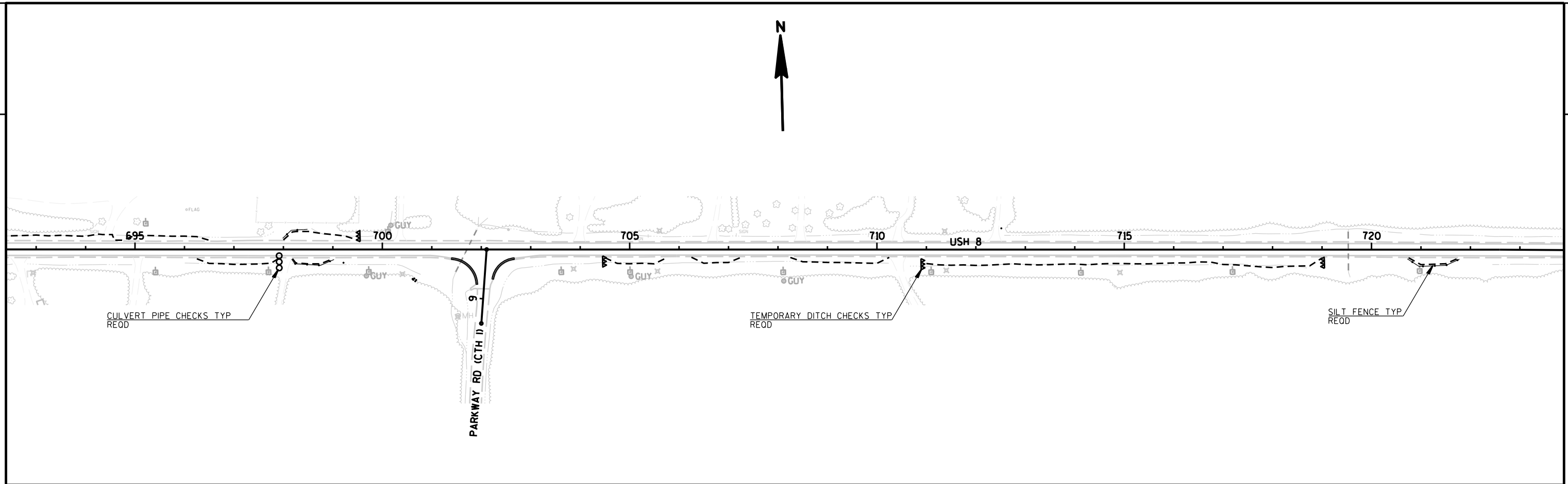
PROJECT NO: 1590-16-71	HWY: USH 8	COUNTY: MARINETTE	EROSION CONTROL PLAN	SHEET	E
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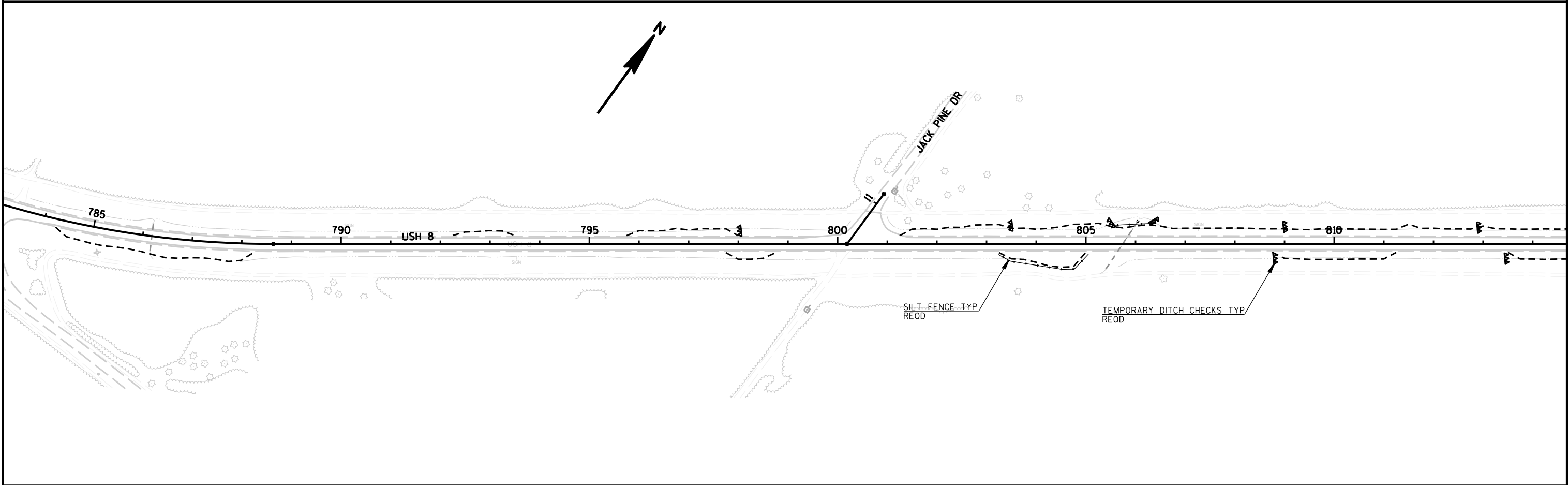
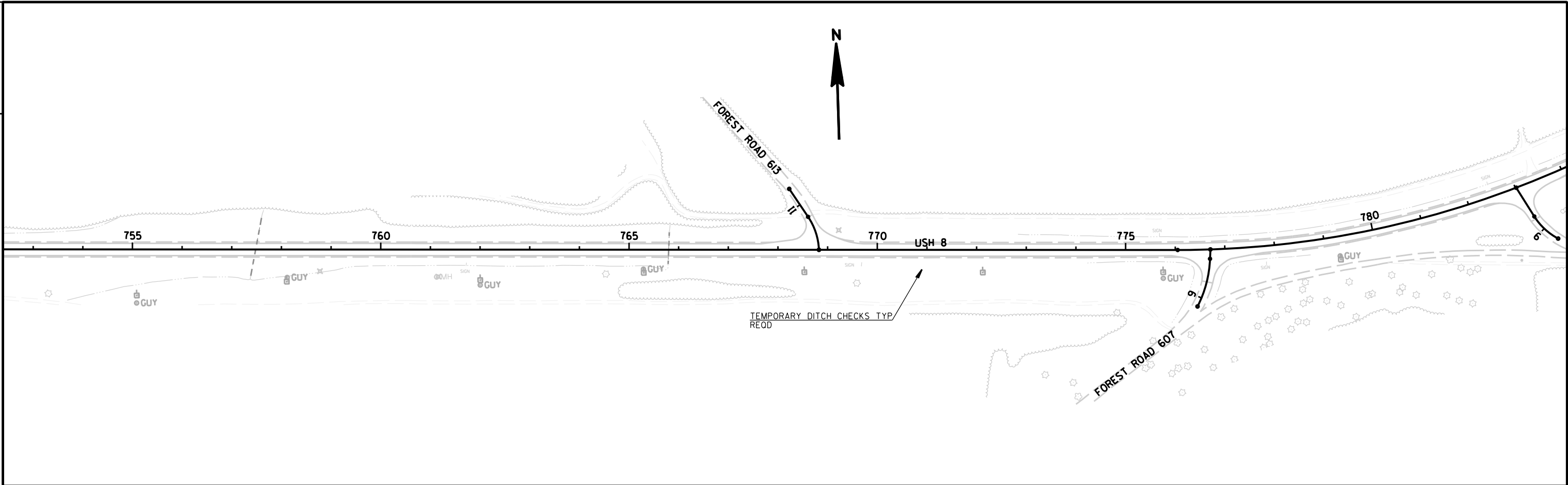


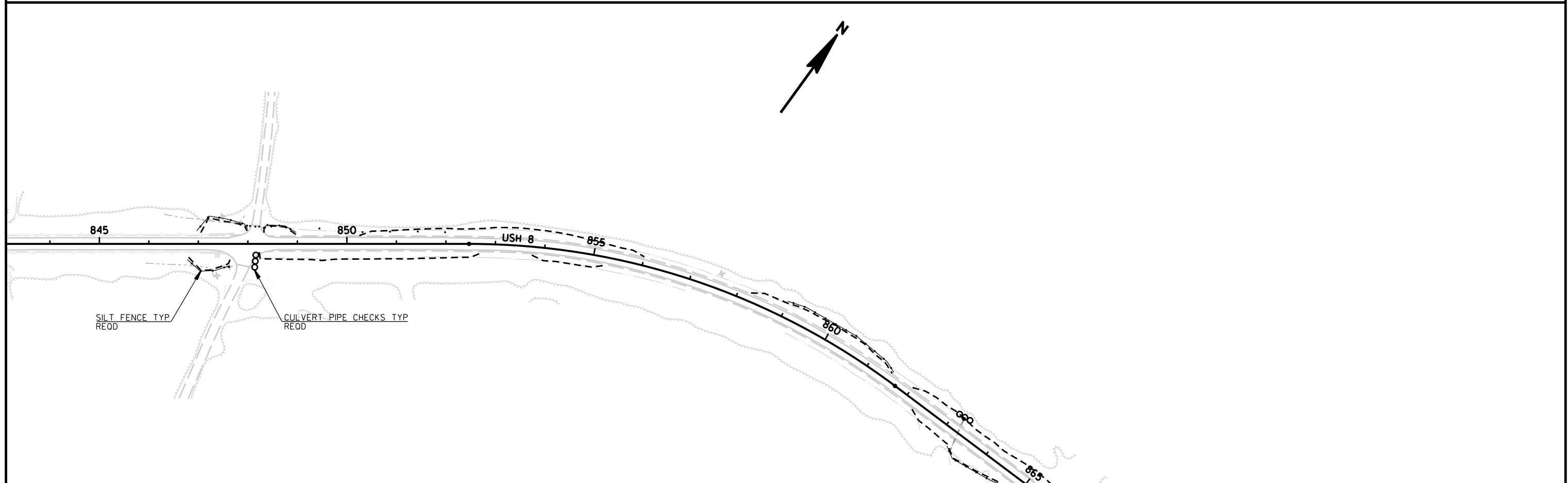
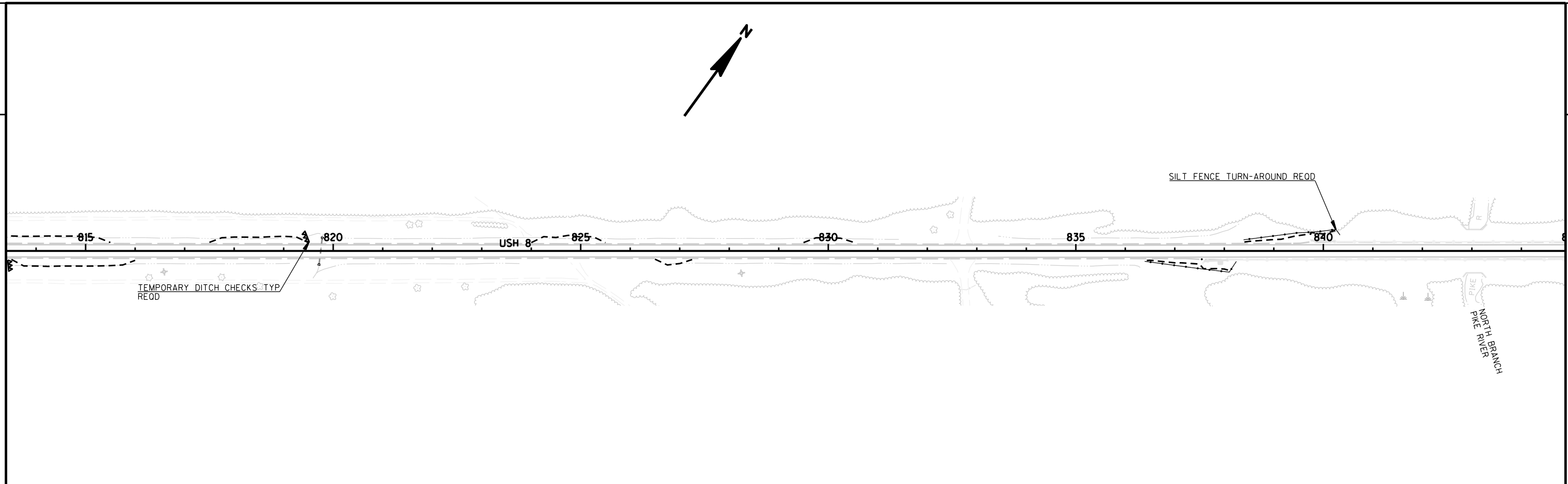
PROJECT NO: 1590-16-71	HWY: USH 8	COUNTY: MARINETTE	EROSION CONTROL PLAN	SHEET	E
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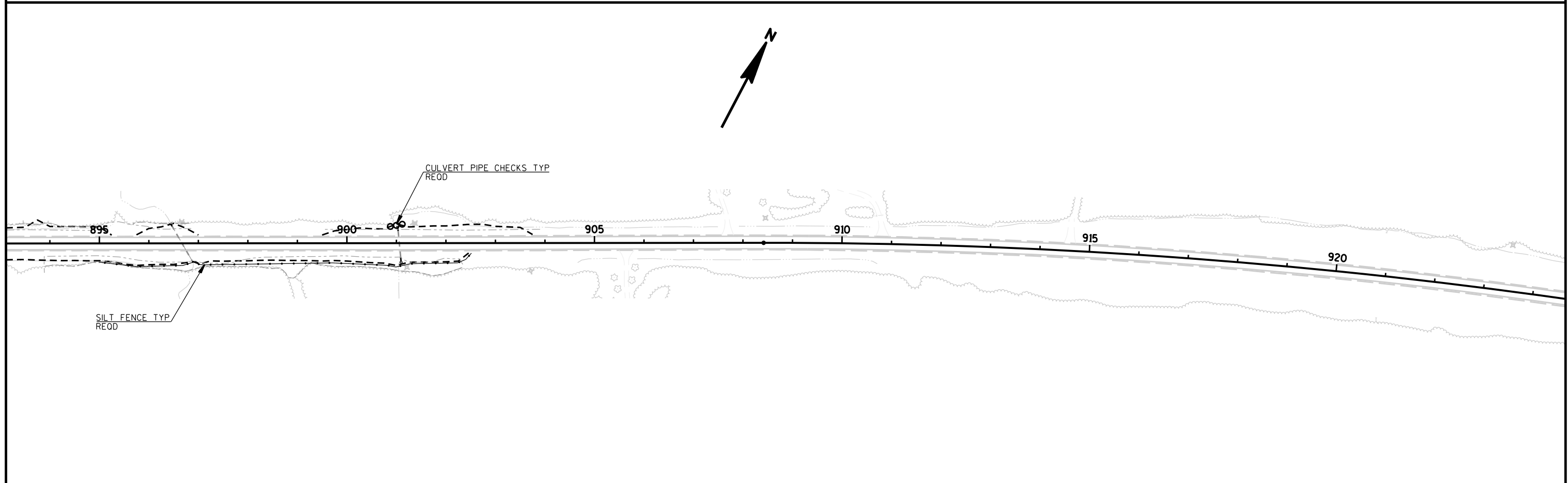
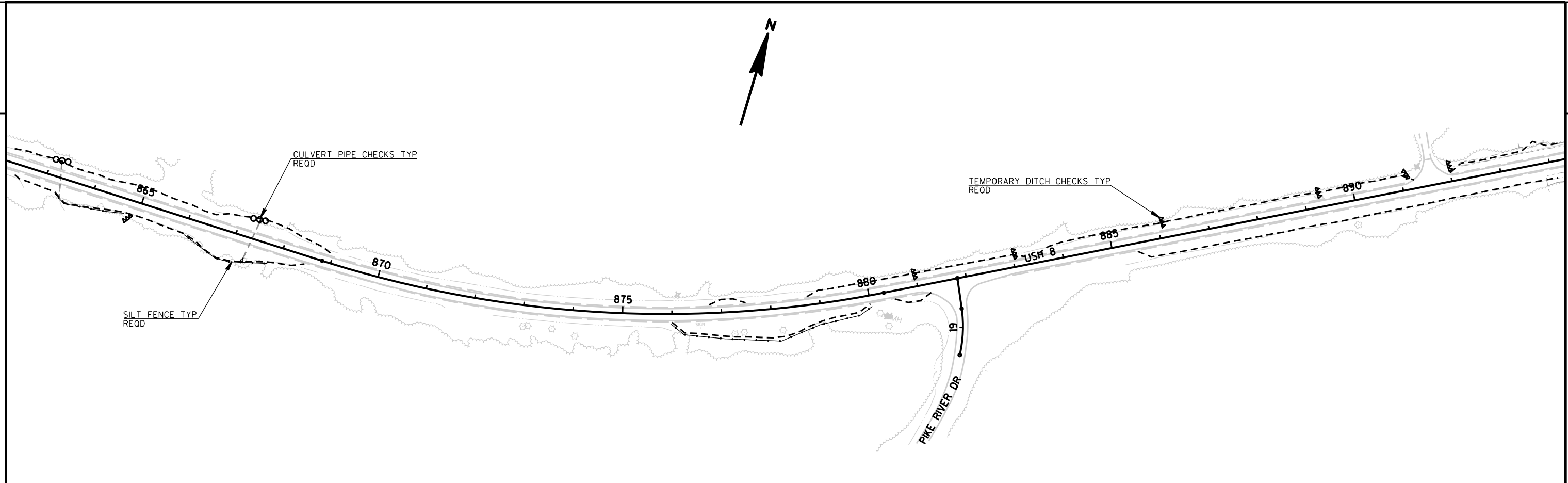


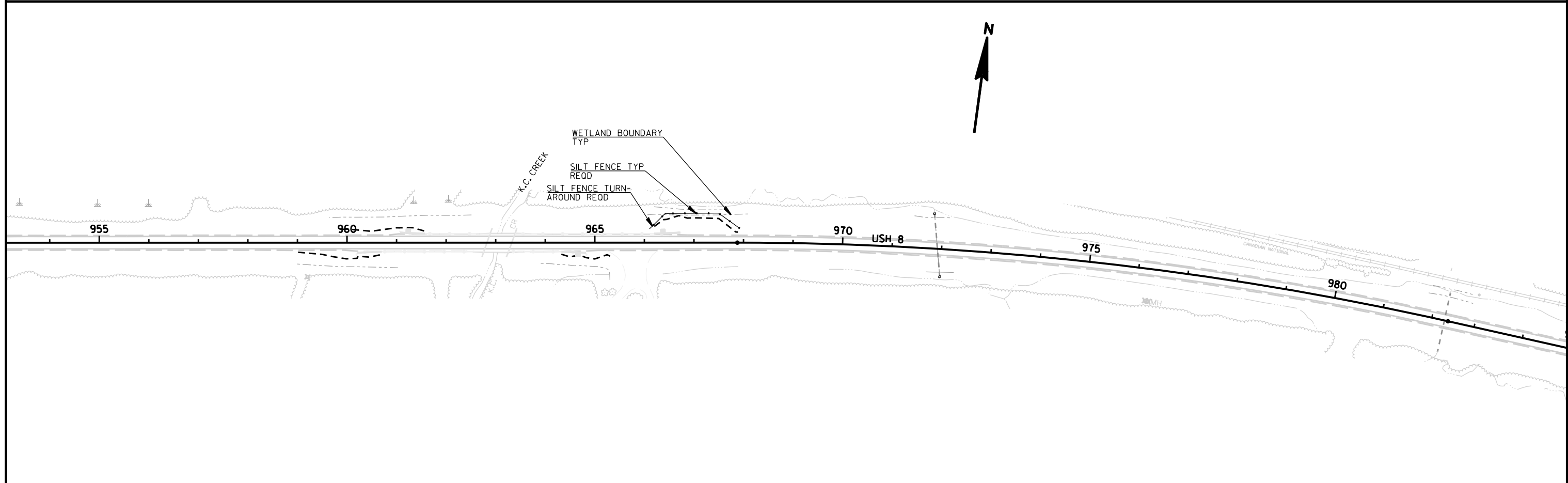
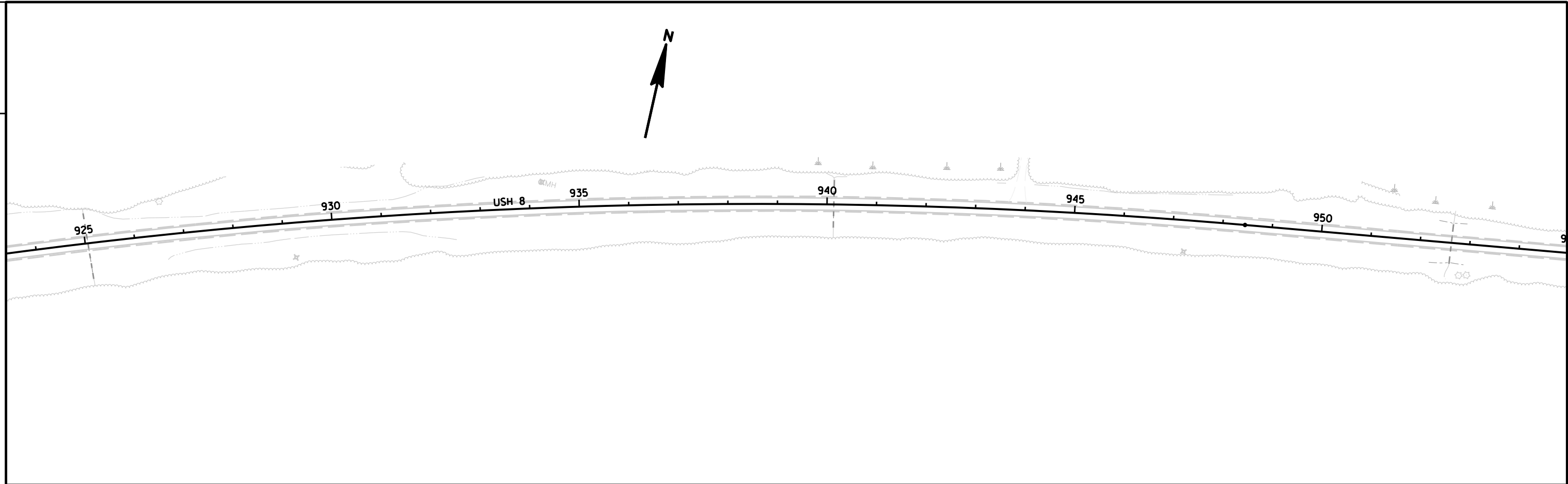


PROJECT NO: 1590-16-71	HWY: USH 8	COUNTY: MARINETTE	EROSION CONTROL PLAN	SHEET	E
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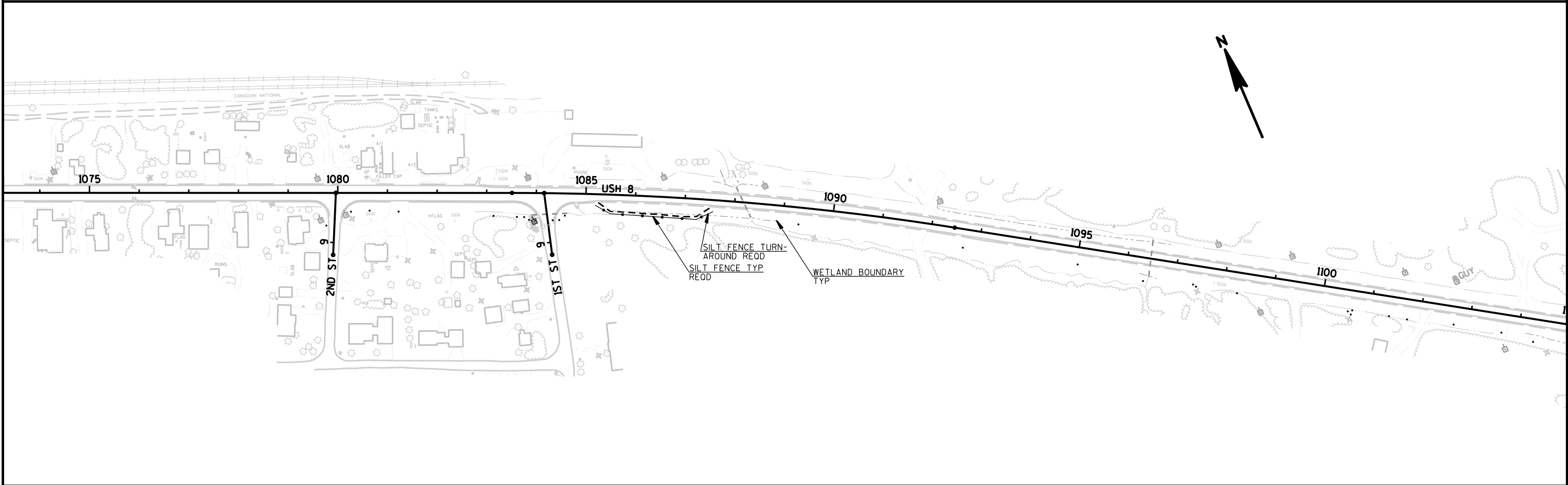
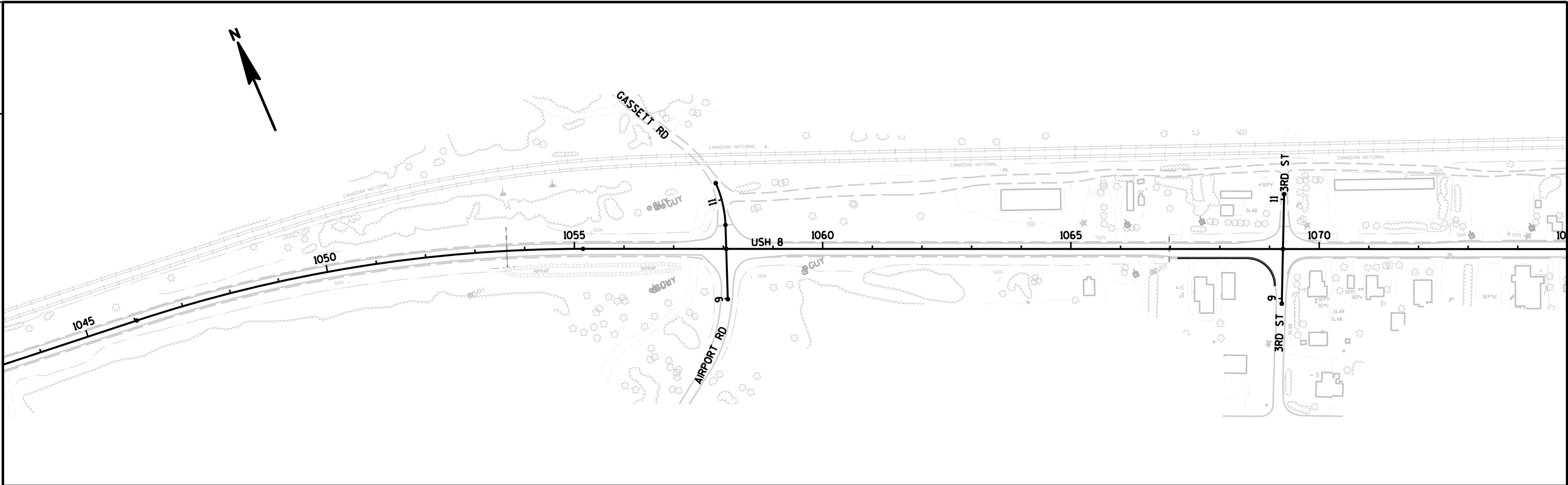


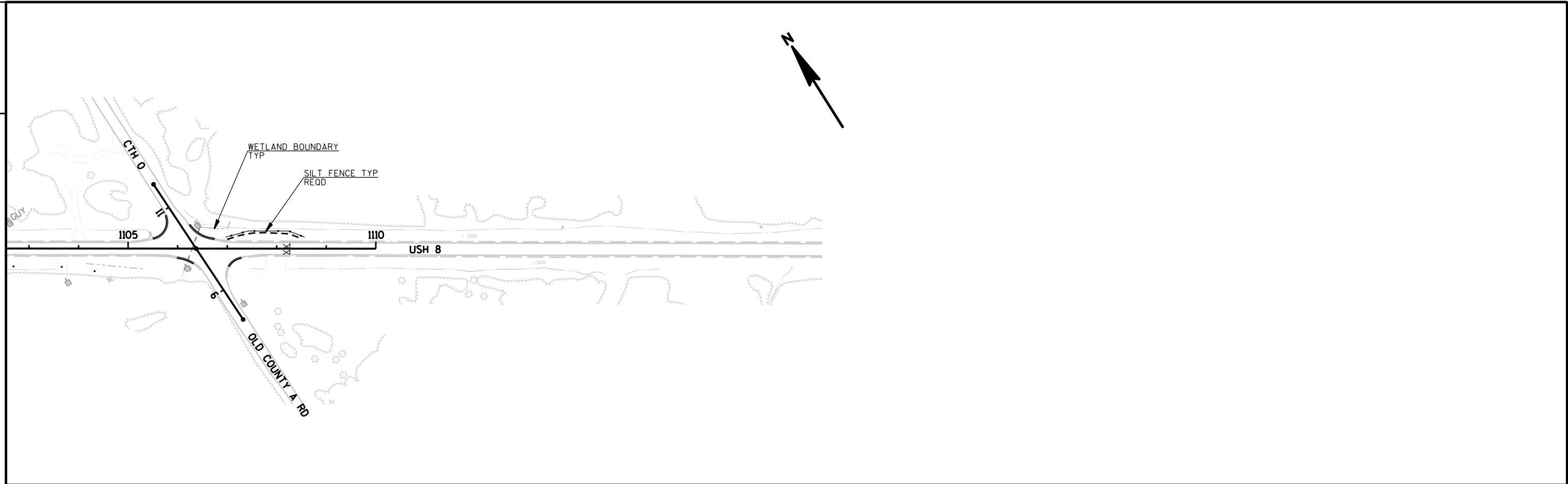


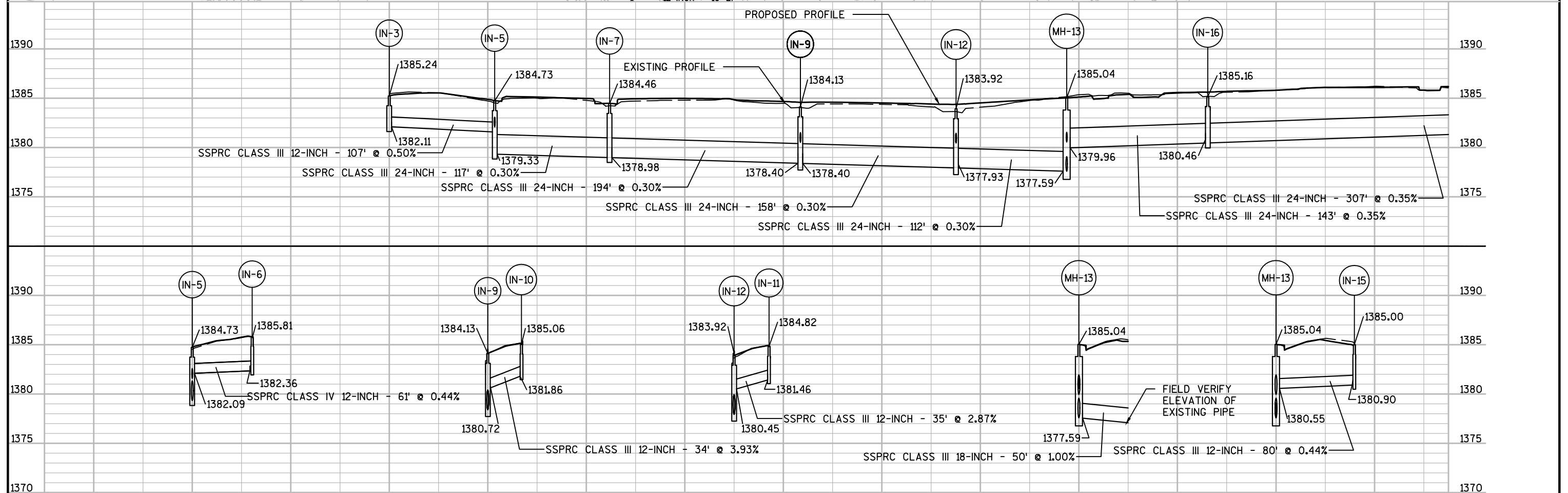
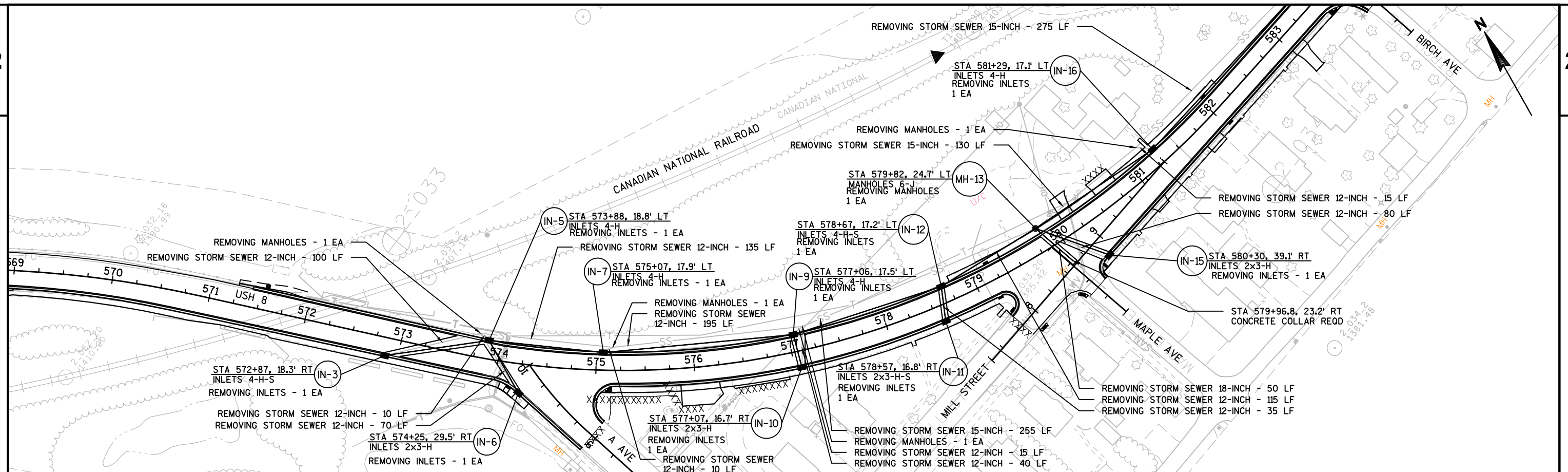


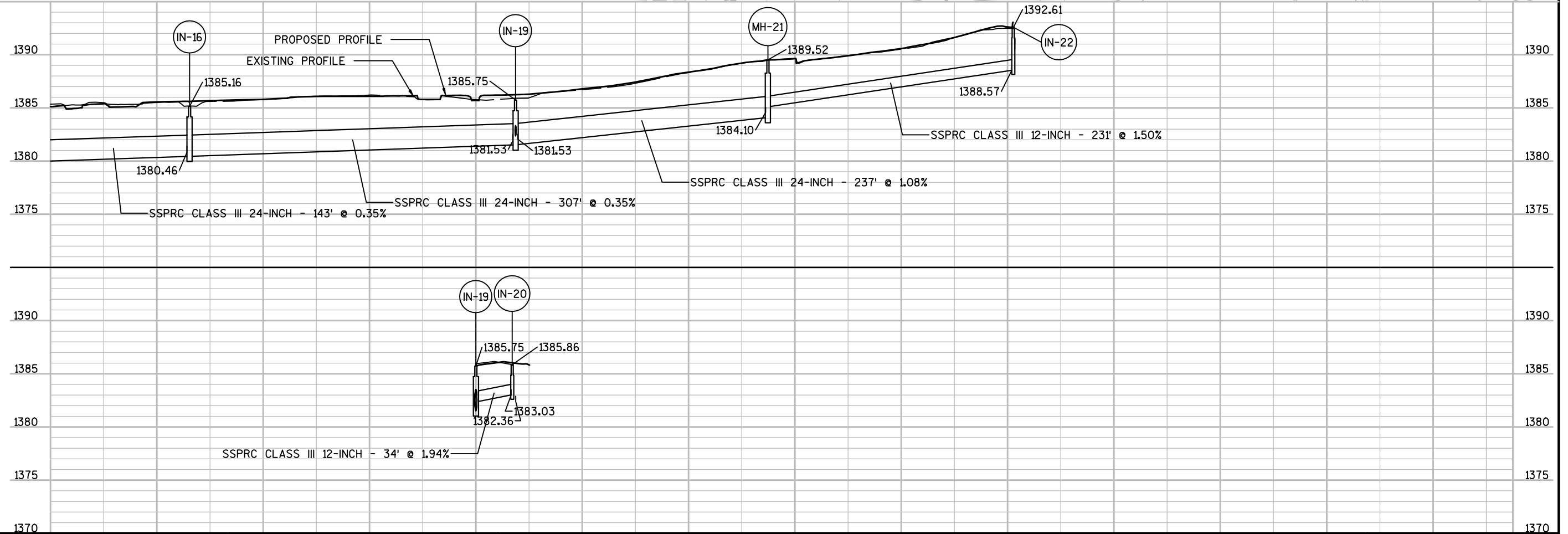
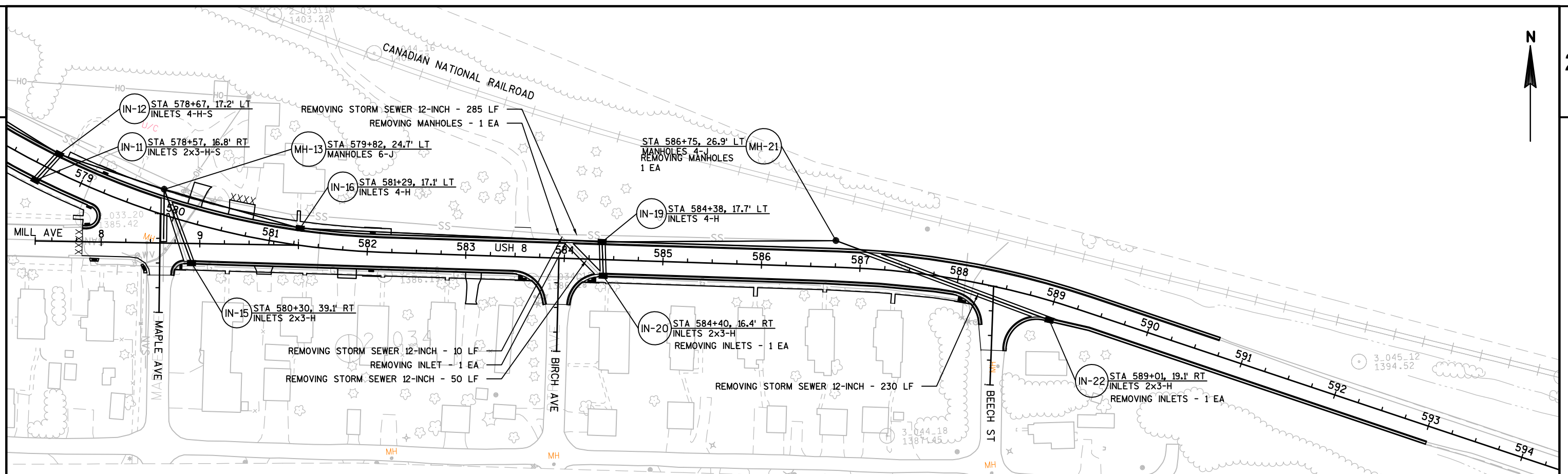


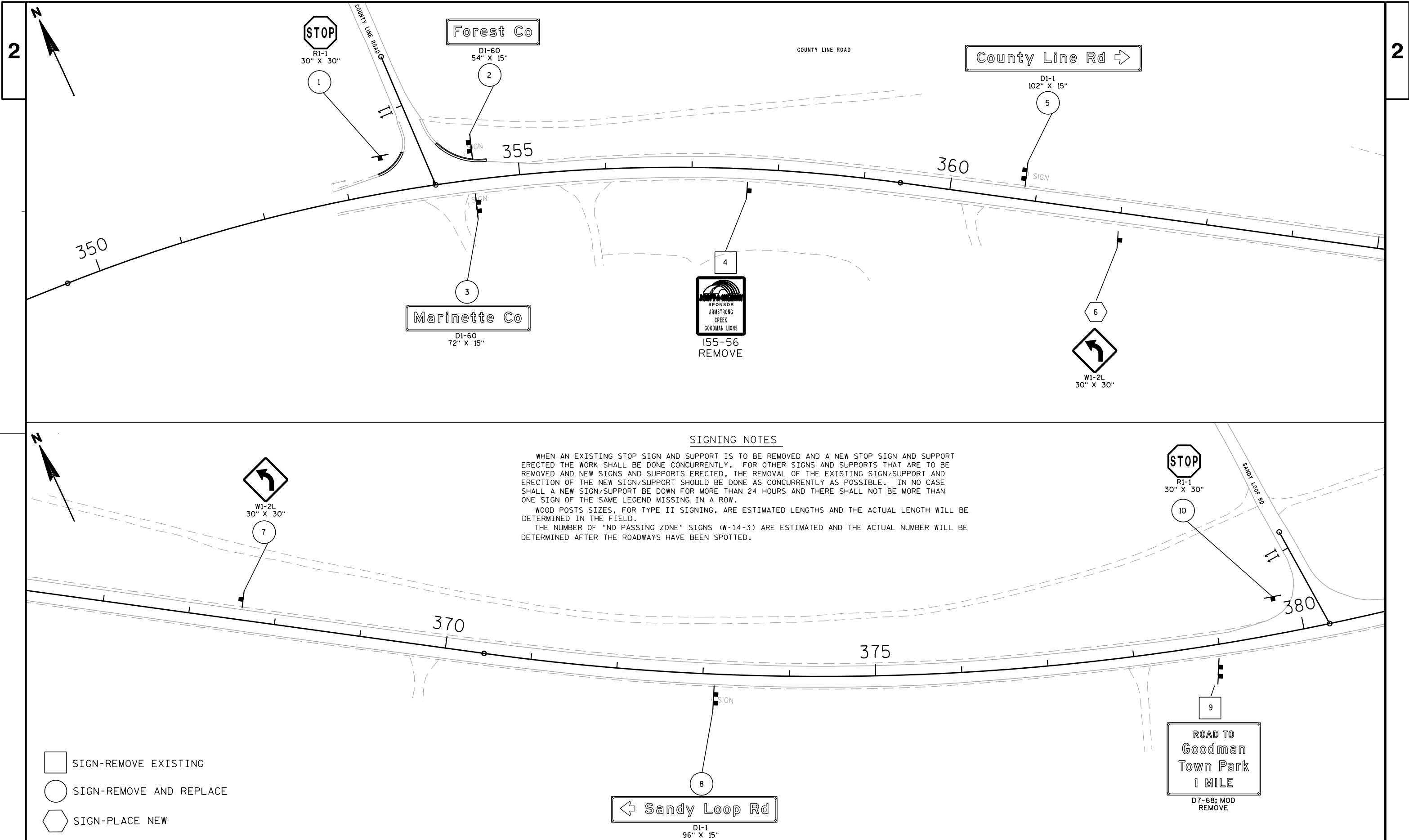
PROJECT NO: 1590-16-71	HWY: USH 8	COUNTY: MARINETTE	EROSION CONTROL PLAN	SHEET	E
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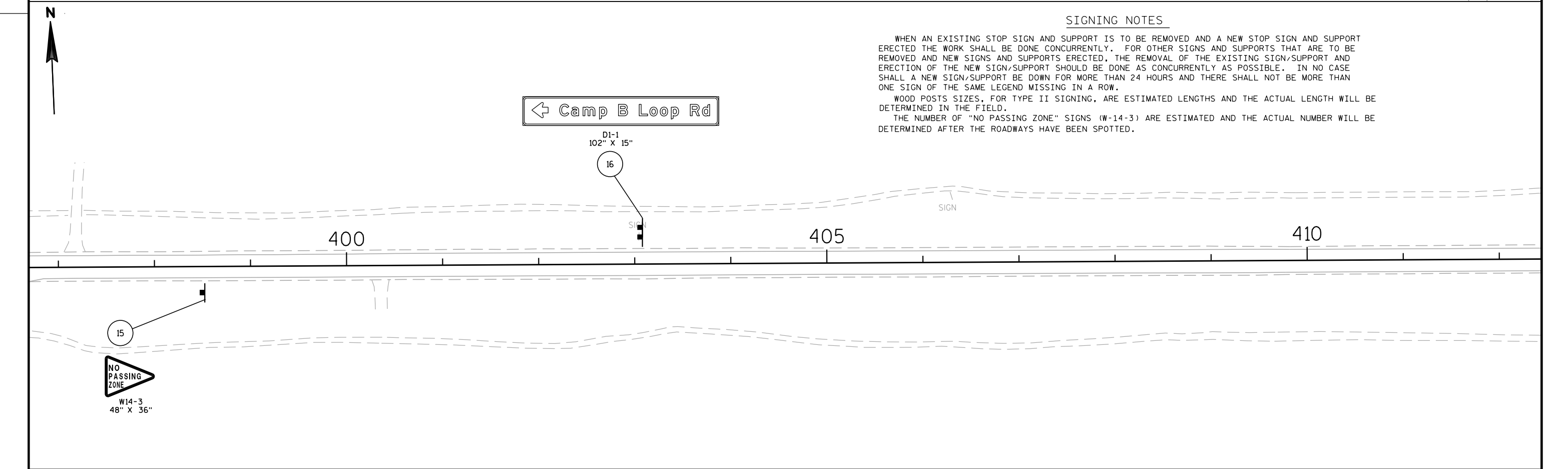
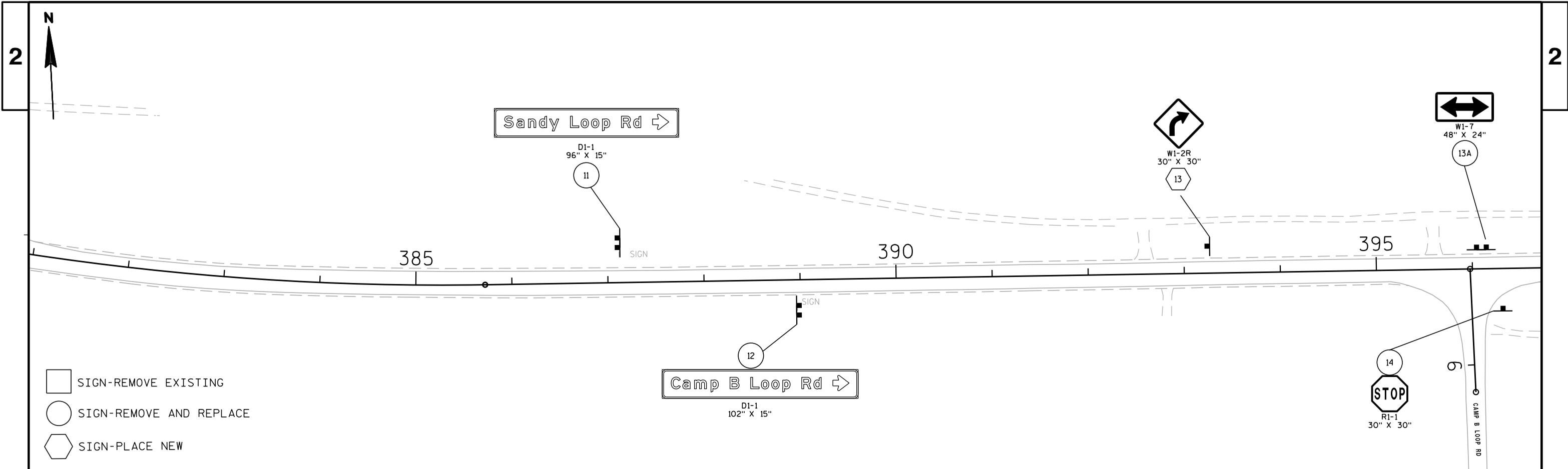
SIGNING NOTES

WHEN AN EXISTING STOP SIGN AND 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 SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

- ☐ SIGN-REMOVE EXISTING
- ☐ SIGN-REMOVE AND REPLACE
- ☐ SIGN-PLACE NEW

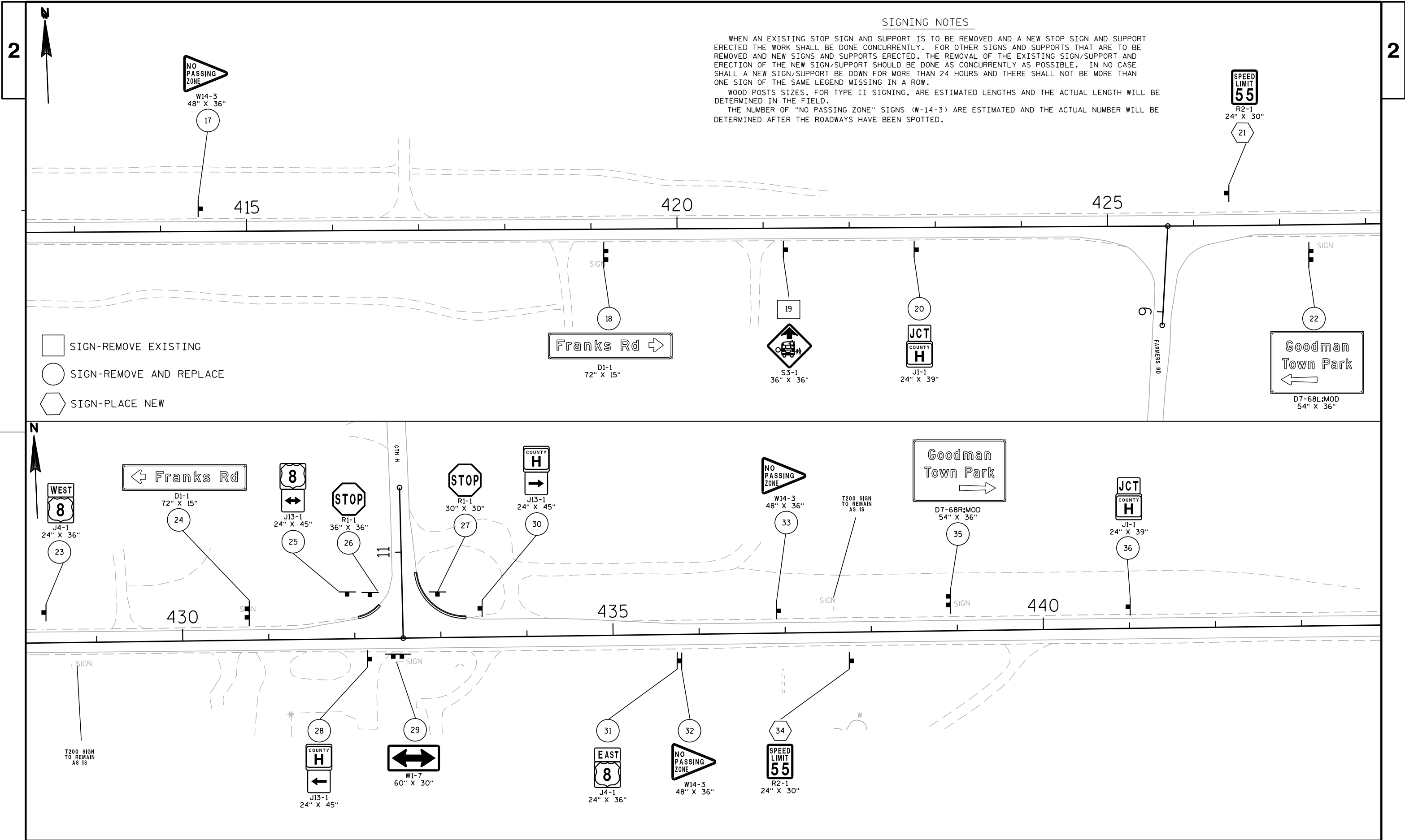


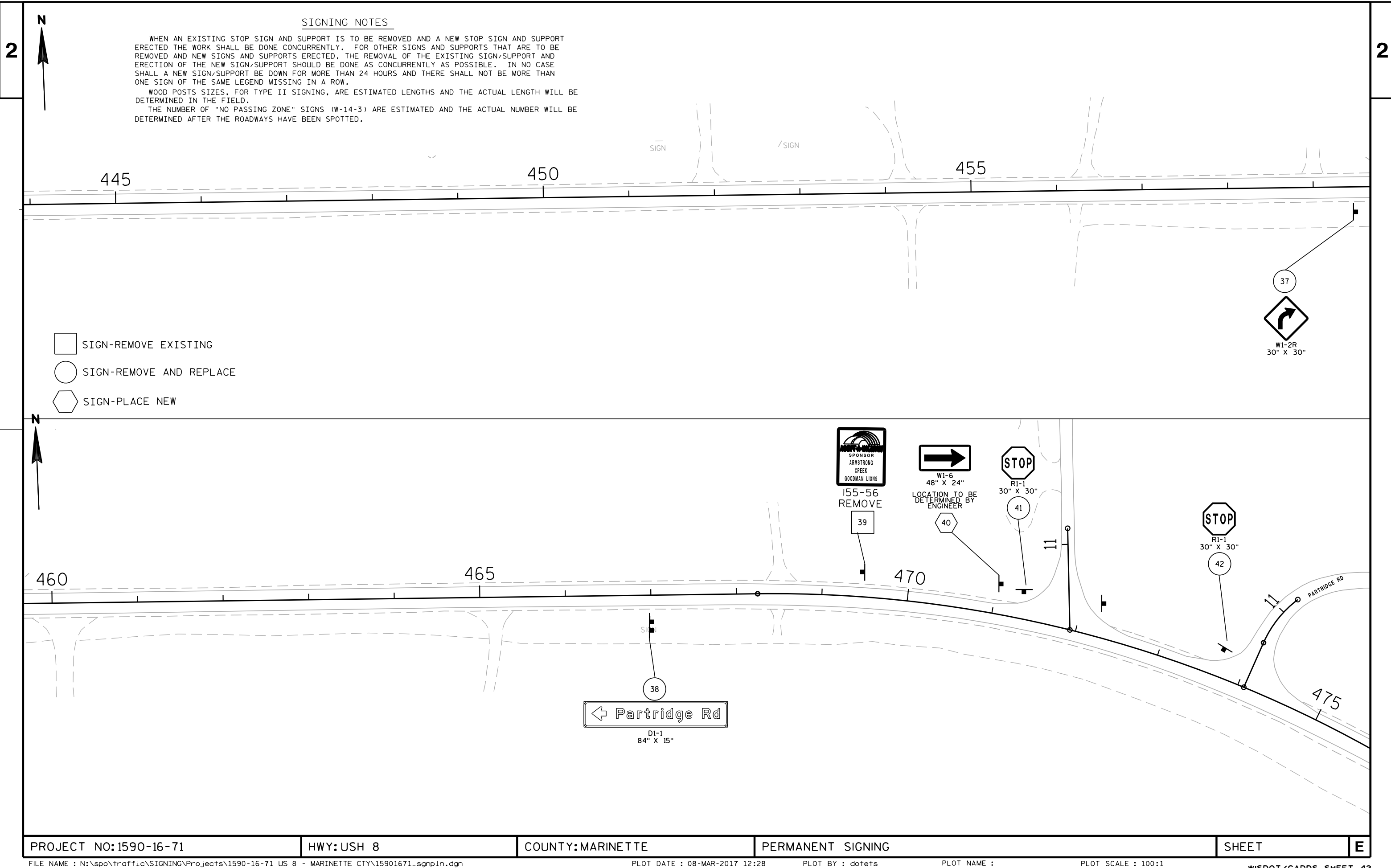
SIGNING NOTES

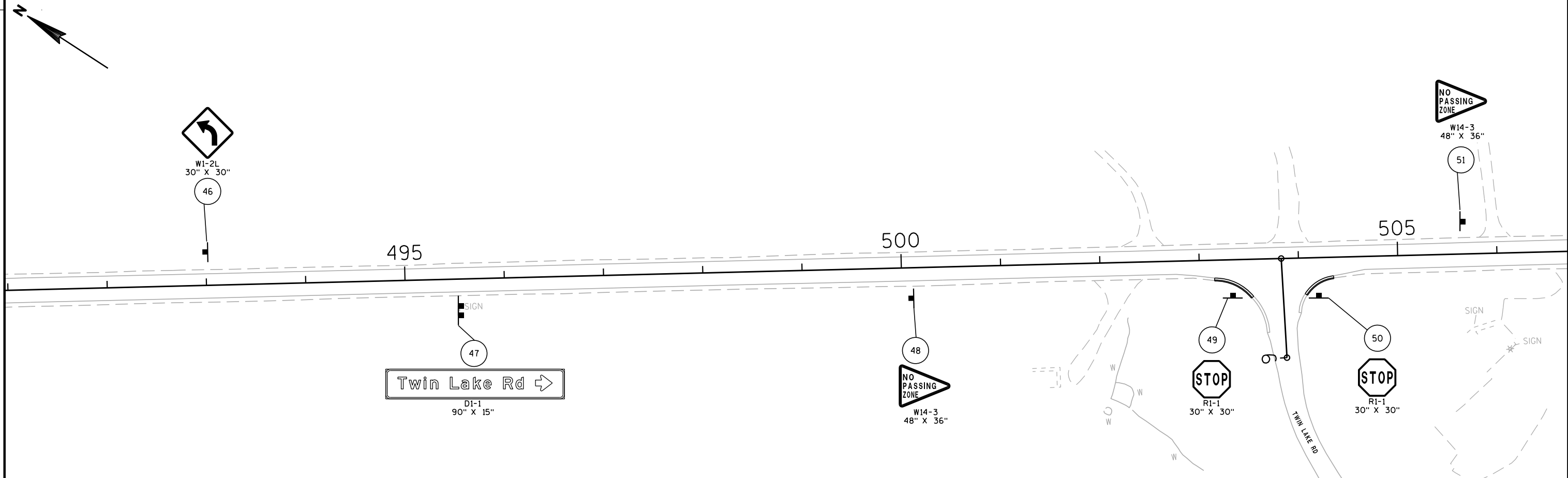
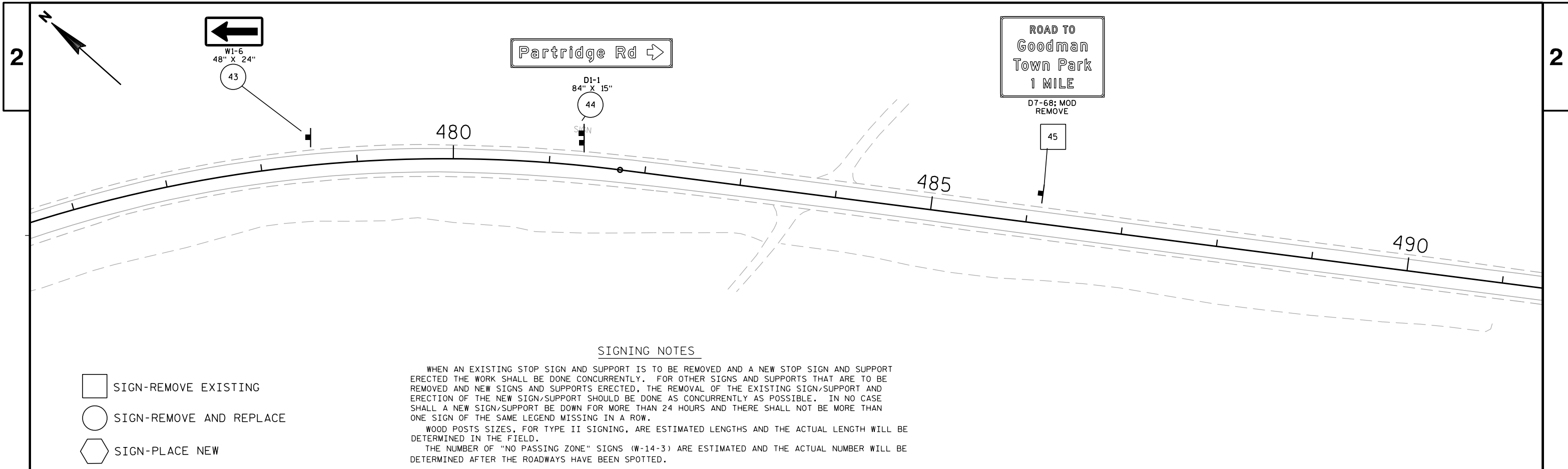
WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD 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 SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.










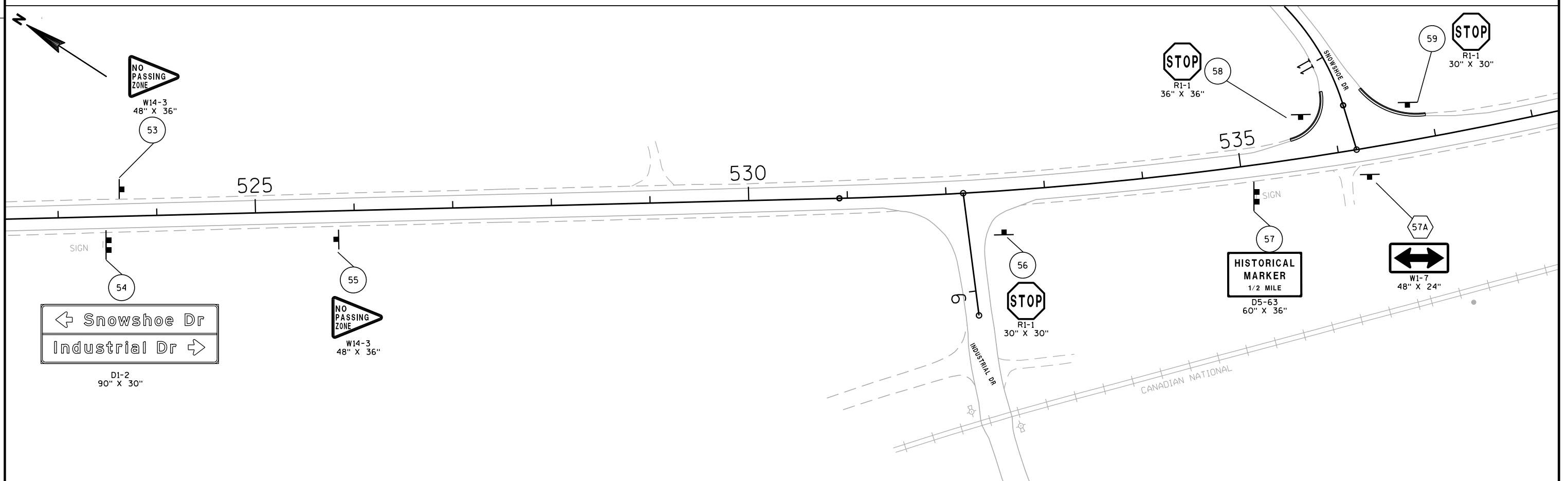
SIGNING NOTES

WHEN AN EXISTING STOP SIGN AND 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 SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

-  SIGN-REMOVE EXISTING
-  SIGN-REMOVE AND REPLACE
-  SIGN-PLACE NEW



SIGNING NOTES

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Industrial Dr

Snowshoe Dr

D1-2
90" X 30"

61

SPEED
LIMIT
55R2-1
24" X 30"

63

ARMSTRONG CREEK 5
LAONA 22
CRANDON 34D2-3
REMOVECrandon 43
Rhinelander 69D2-2
90" X 24"

64

540

545

550

60

W3-5
36" X 36"

LOCATE 500' WEST OF R2-1

SIGN-REMOVE EXISTING

SIGN-REMOVE AND REPLACE

SIGN-PLACE NEW

62

SPEED
LIMIT
45R2-1
24" X 30"

63A

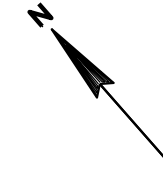
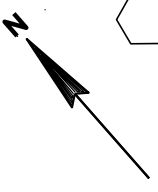
W12-2
36" X 36"

HEIGHT TO BE FIELD VERIFIED

AHEAD
W16-9P
24" X 12"

63B

65

GOODMAN
UNINCORPORATEDI2-3
60" X 24"SPEED
LIMIT
45R2-1
24" X 30"

66

NO
PASSING
ZONEW14-3
48" X 36"

71

WEST
8J4-1
24" X 36"

73

STOP

R1-1
30" X 30"

74

560

HISTORICAL
MARKERD5-64R
60" X 36"

77

SPEED
LIMIT
45R2-1
24" X 30"

78

Clark Lake Rd

D1-1
96" X 15"

80

565

67

Clark Lake Rd

D1-1
96" X 15"

68

W1-4R
30" X 30"

69

W1-4R
30" X 30"

70

NO
PASSING
ZONEW14-3
48" X 36"

72

W3-5
36" X 36"NO
ENGINE
BRAKING
EXCEPT IN
EMERGENCYR10-64B
SIGN TO REMAIN
AS IS

75

W12-2
REMOVE

76

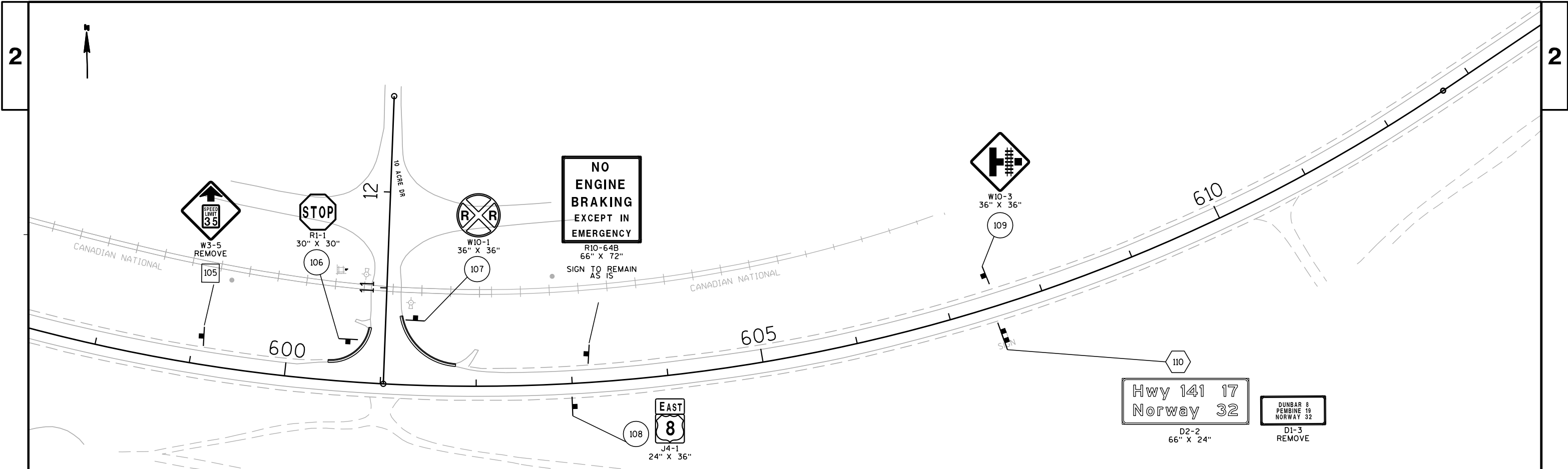
HISTORICAL
MARKERD5-64L
60" X 36"

79

SPEED
LIMIT
30R2-1
24" X 30"

81

EAST
8J2-1
24" X 57"



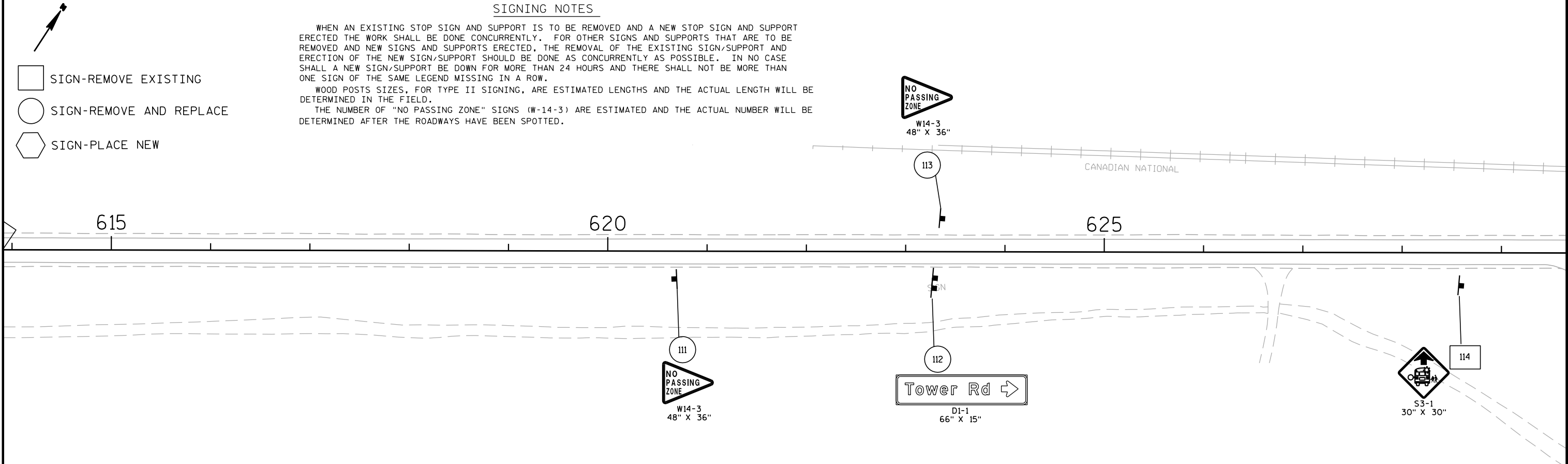
SIGNING NOTES

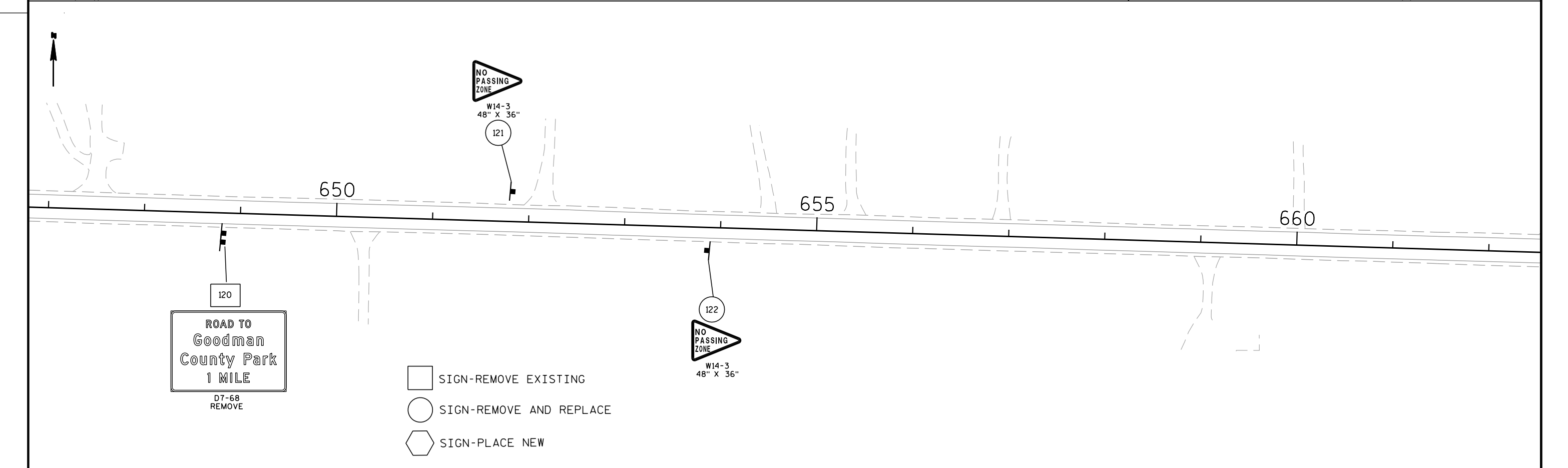
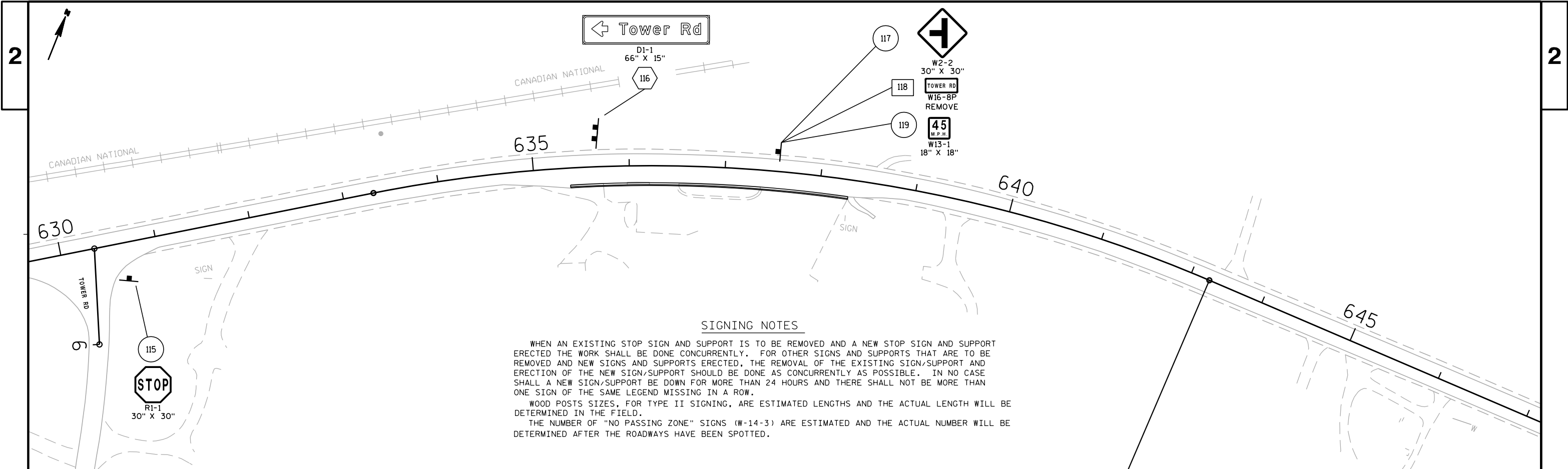
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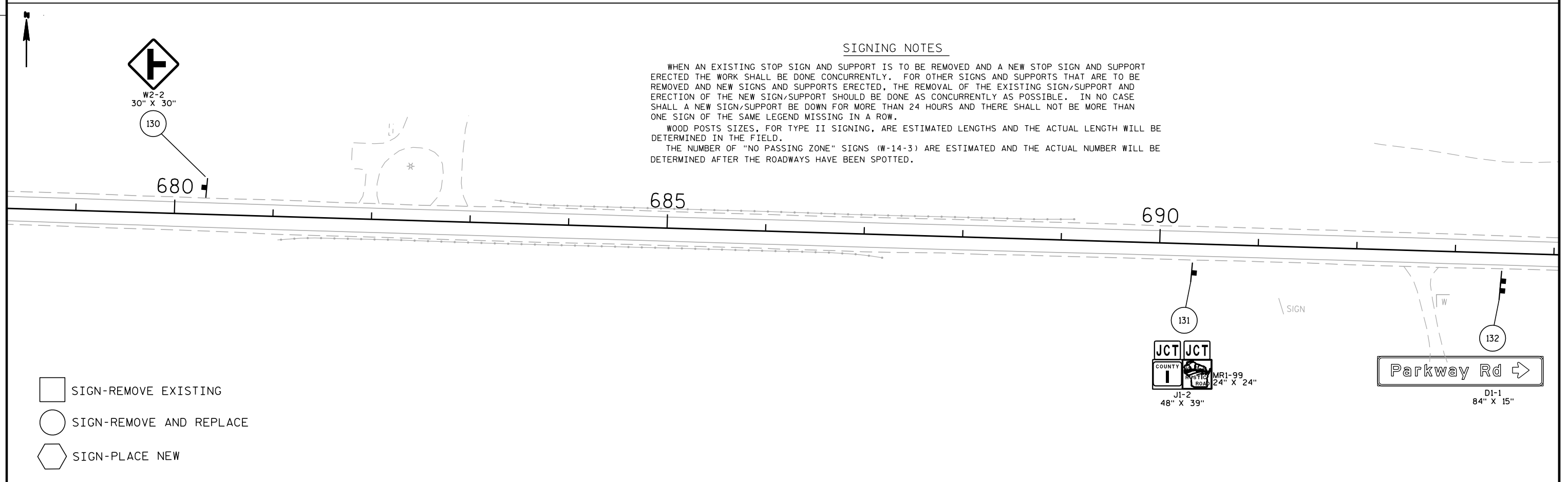
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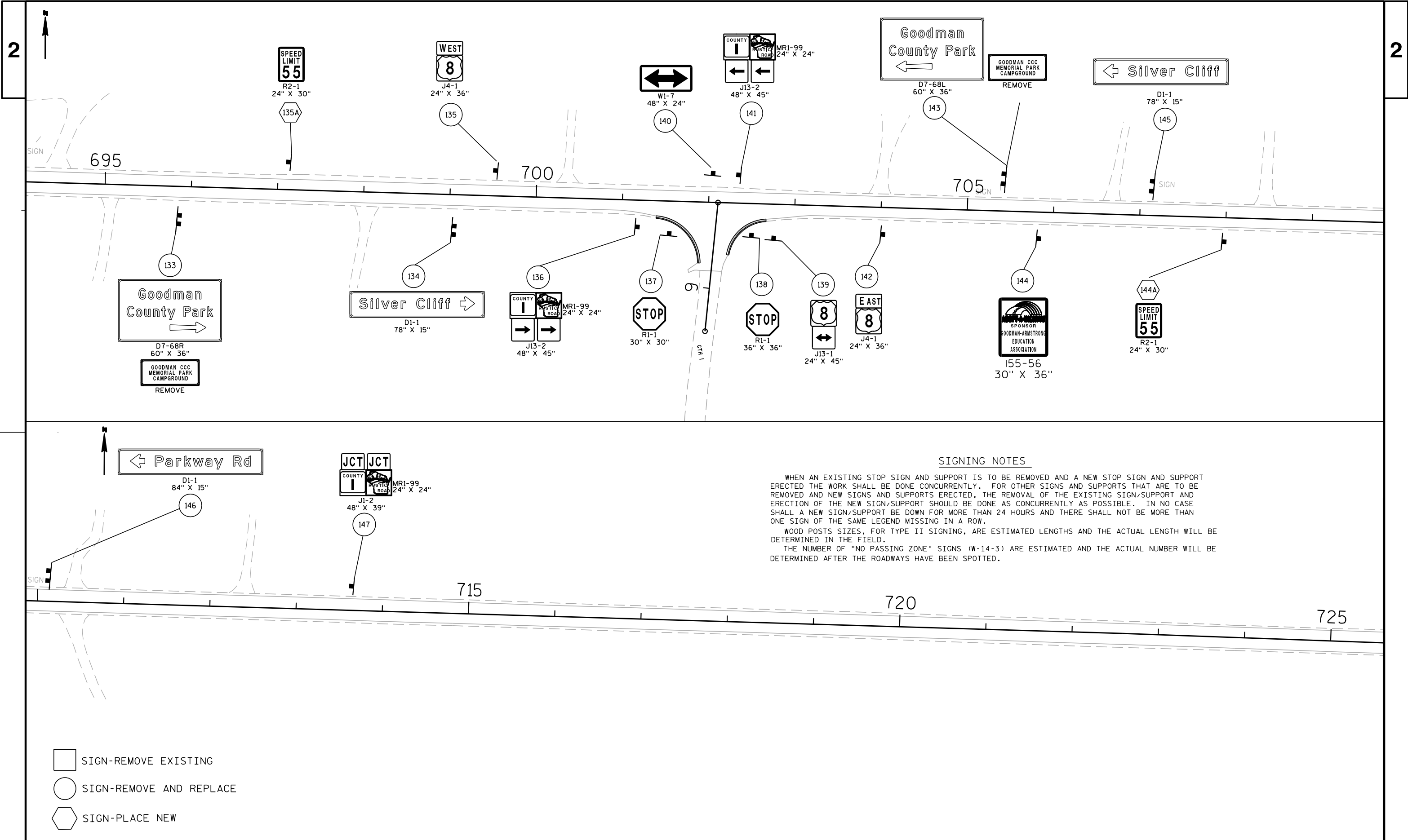
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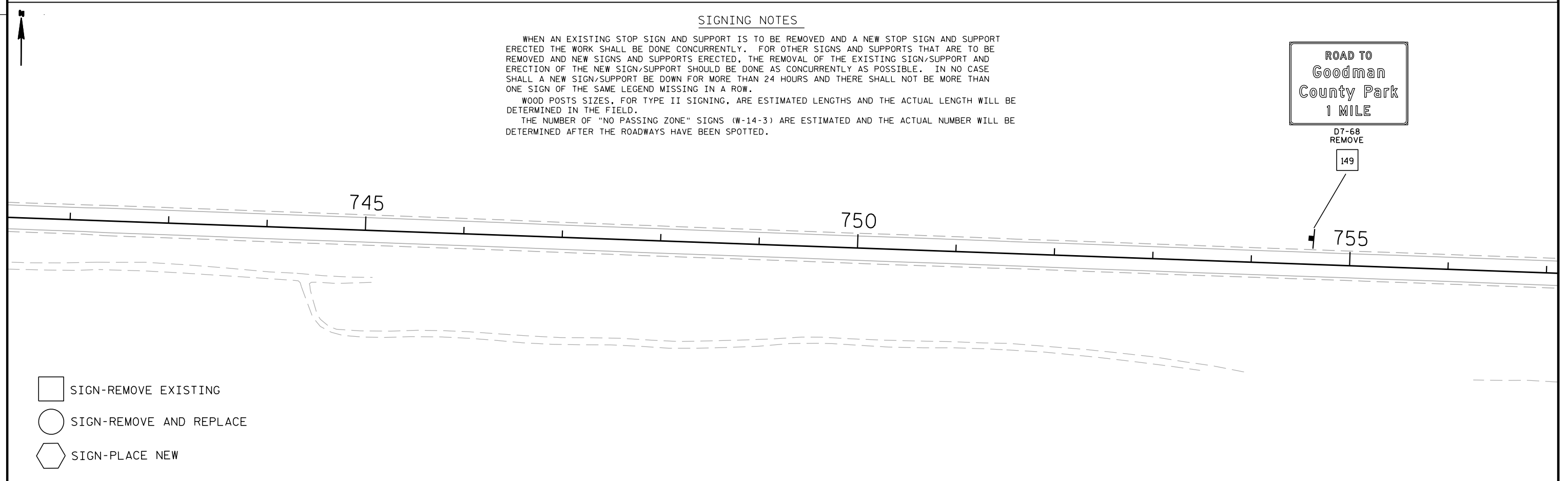
- SIGN-REMOVE EXISTING
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- SIGN-PLACE NEW











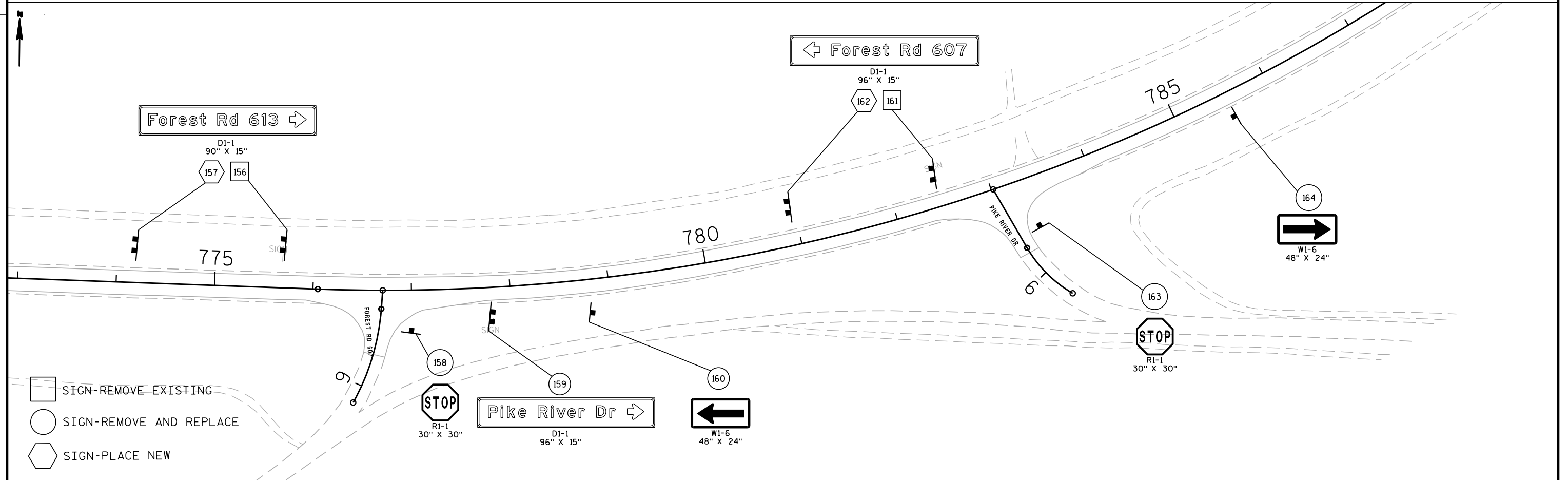
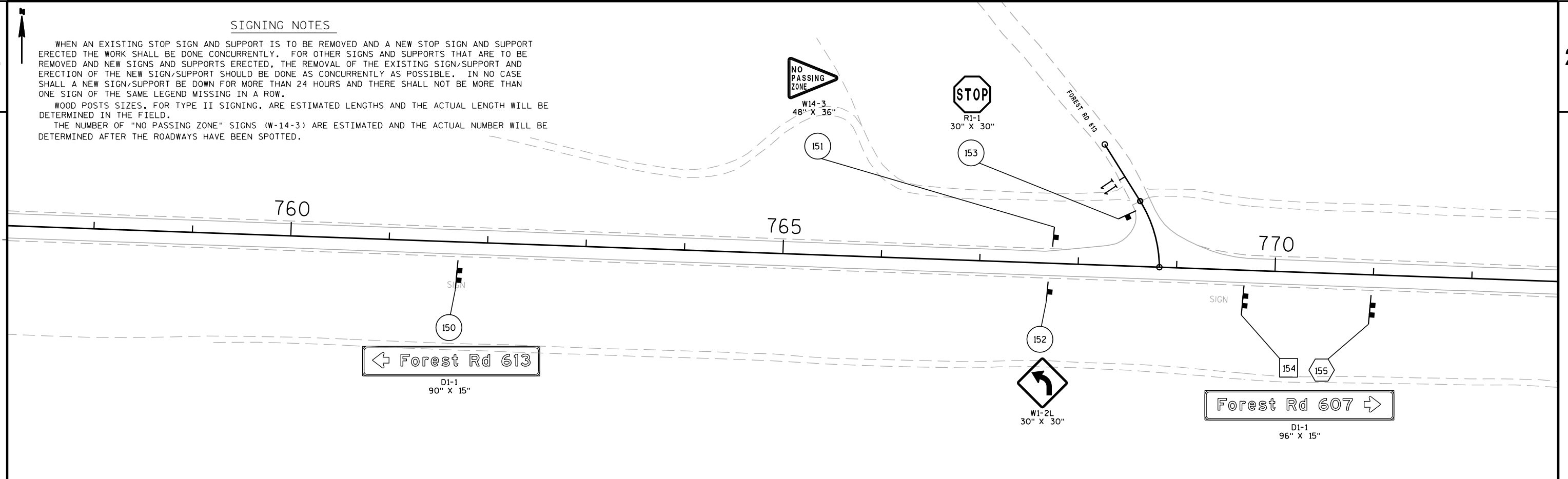
11

SIGNING NOTES

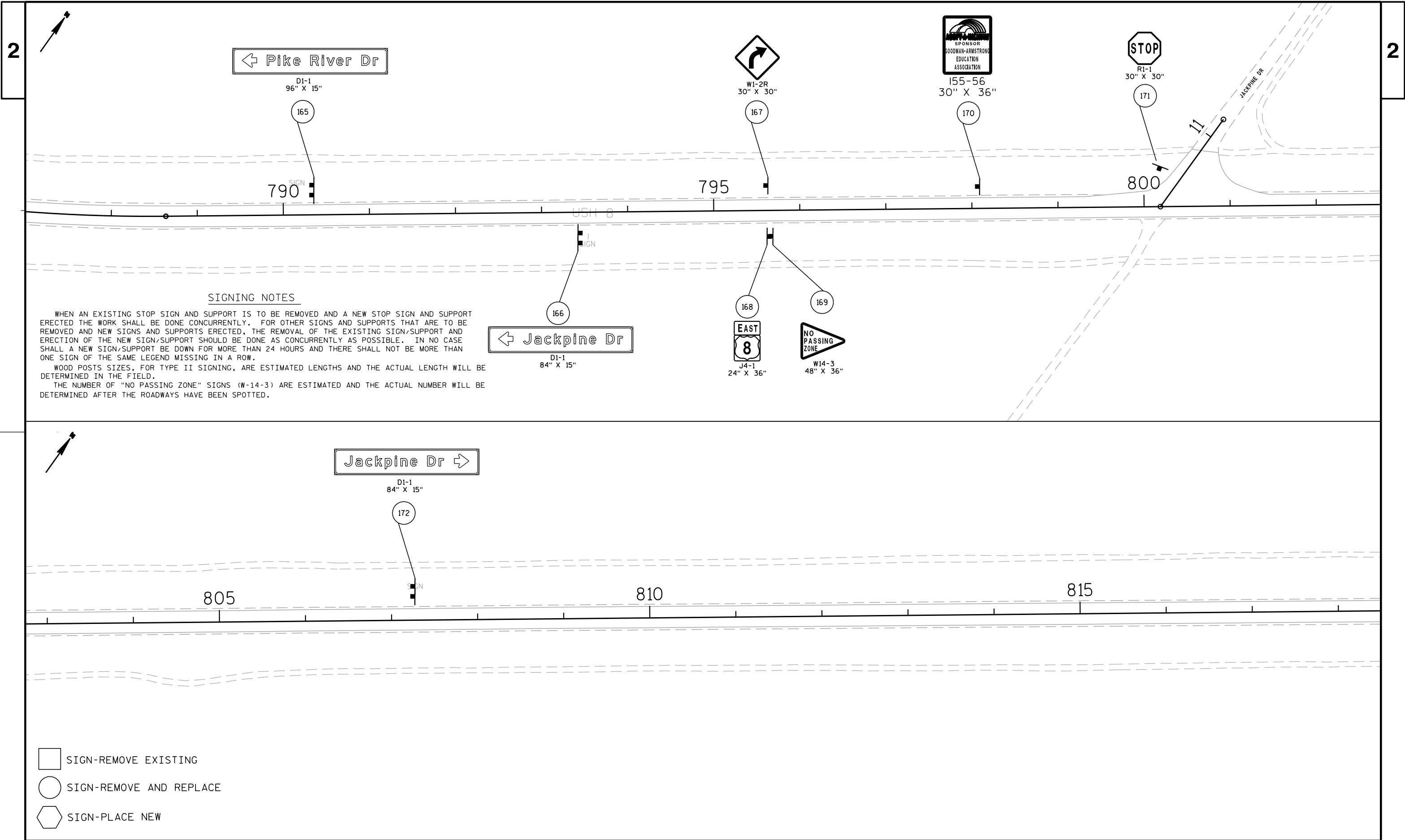
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- SIGN-REMOVE EXISTING
- SIGN-REMOVE AND REPLACE
- SIGN-PLACE NEW






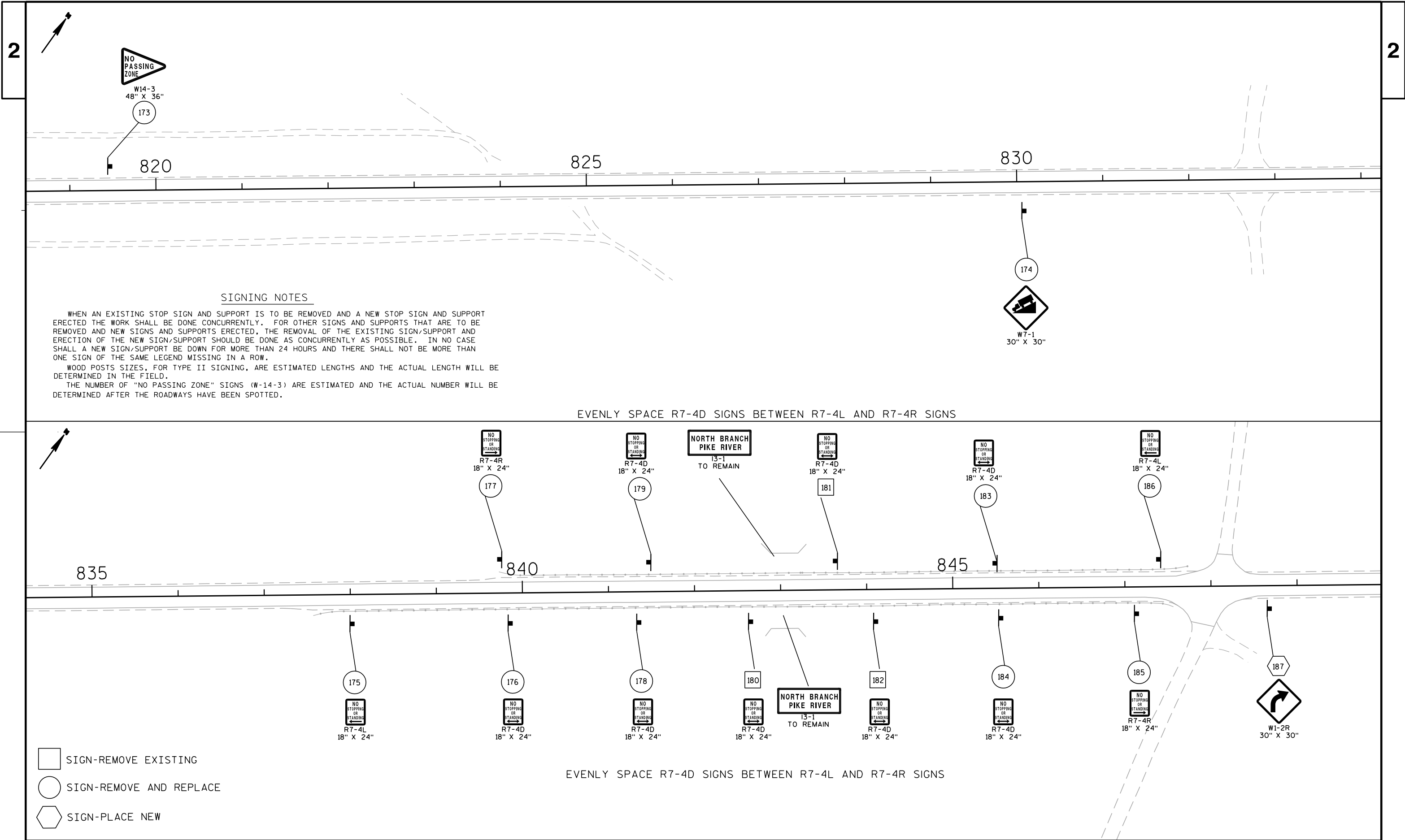
SIGNING NOTES

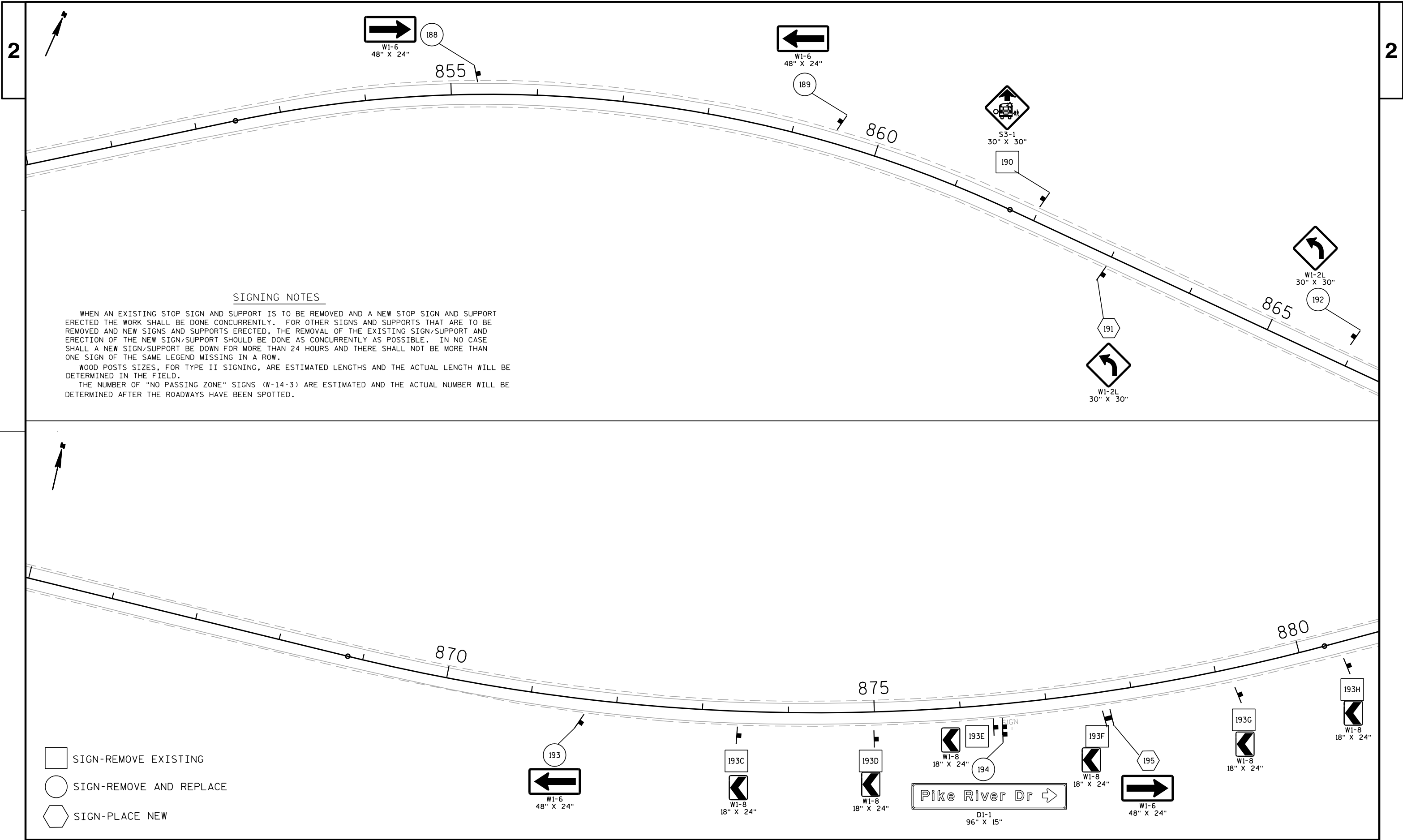
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PROJECT NO:1590-16-71

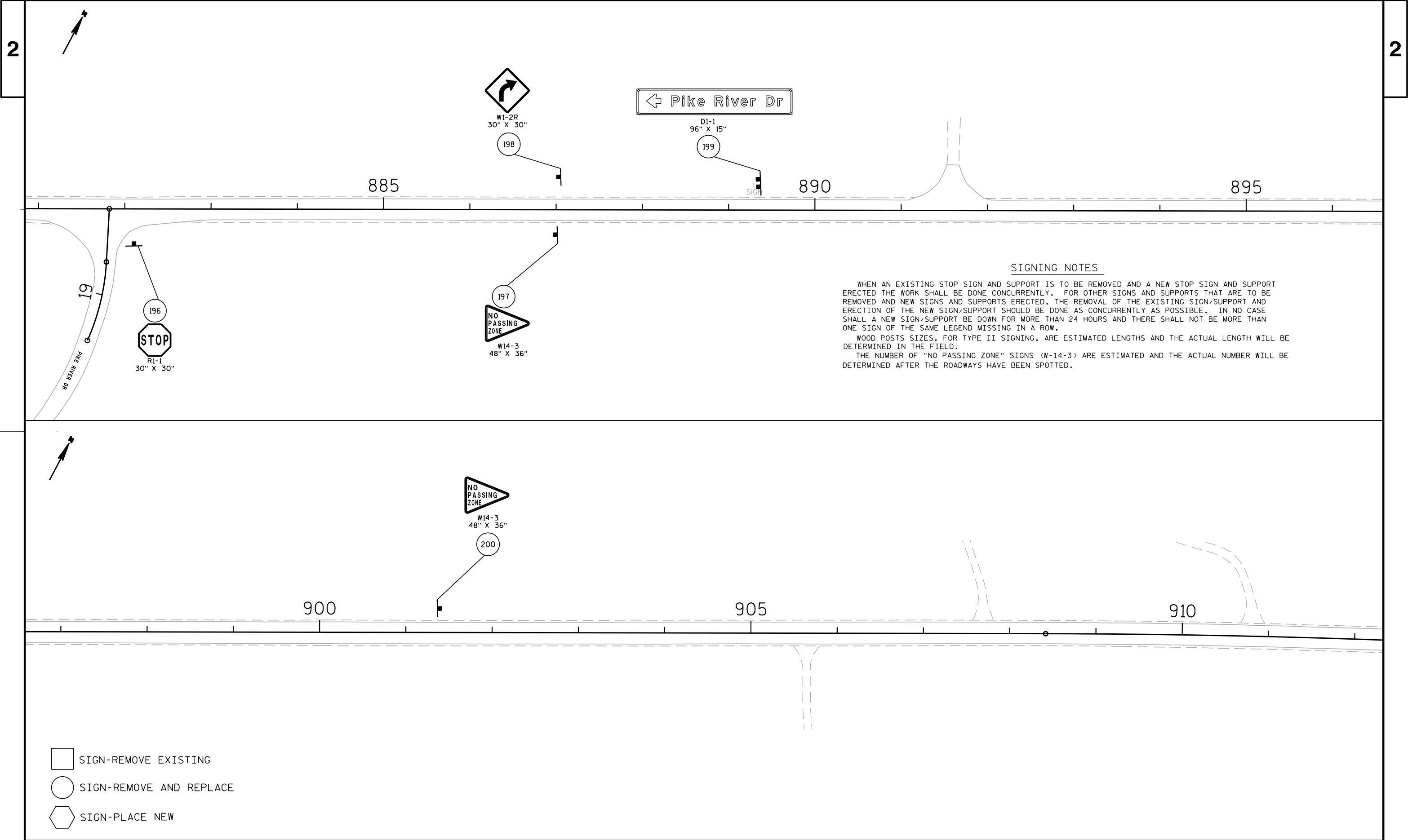
HWY:USH 8

COUNTY:MARINETTE

PERMANENT SIGNING

SHEET

E





915

920

925

SIGNING NOTES

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
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930

935

940

-  SIGN-REMOVE EXISTING
-  SIGN-REMOVE AND REPLACE
-  SIGN-PLACE NEW

945

950

955

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W14-3
48" X 36"

202



W5-52L
12" X 36"

203

KC CREEK

13-1
54" X 15"

204



W5-52R
12" X 36"

205

960

965

970

975



SIGN-REMOVE EXISTING



SIGN-REMOVE AND REPLACE



SIGN-PLACE NEW

206



W5-52R
12" X 36"

207

KC CREEK

13-1
54" X 15"

208



W5-52L
12" X 36"

CANADIAN NATIONAL

980

985

990

SIGNING NOTES

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209
NO
PASSING
ZONE
W14-3
48" X 36"

210
JCT
COUNTY
U
J1-1
24" X 39"

211
W10-3
36" X 36"

SPEED
LIMIT
55
R2-1
24" X 30"

WEST
8
J4-1
24" X 36"

STOP
R1-1
36" X 36"

COUNTY
U
J13-1
24" X 45"

995

1000

1005

212A

212

214

216

SIGN-REMOVE EXISTING

SIGN-REMOVE AND REPLACE

SIGN-PLACE NEW

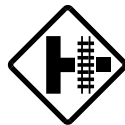
213
COUNTY
U
J13-1
24" X 45"

215
W1-7
48" X 24"

217
EAST
8
J4-1
24" X 36"

217A
SPEED
LIMIT
55
R2-1
24" X 30"

EAST
8
J4-1
REMOVE



W10-3
36" X 36"

218



J1-1
24" X 39"

219

CANADIAN NATIONAL

1010

1015

1020

SIGNING NOTES

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CANADIAN NATIONAL

1025

1030



W14-3
48" X 36"

220

1035

CANADIAN NATIONAL



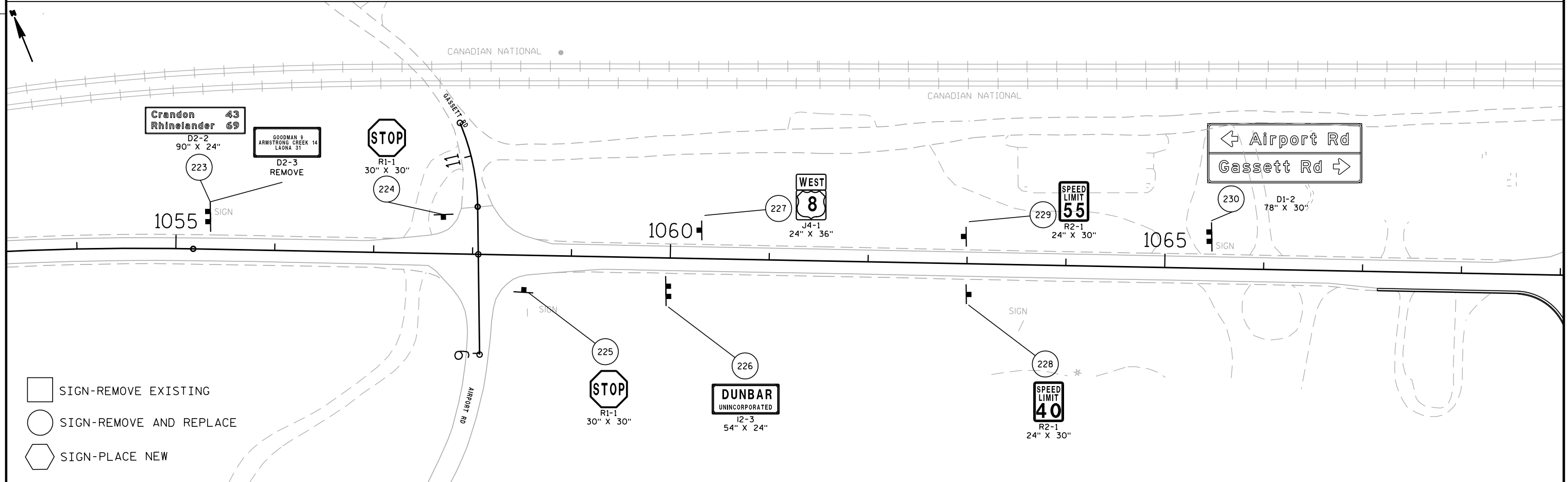
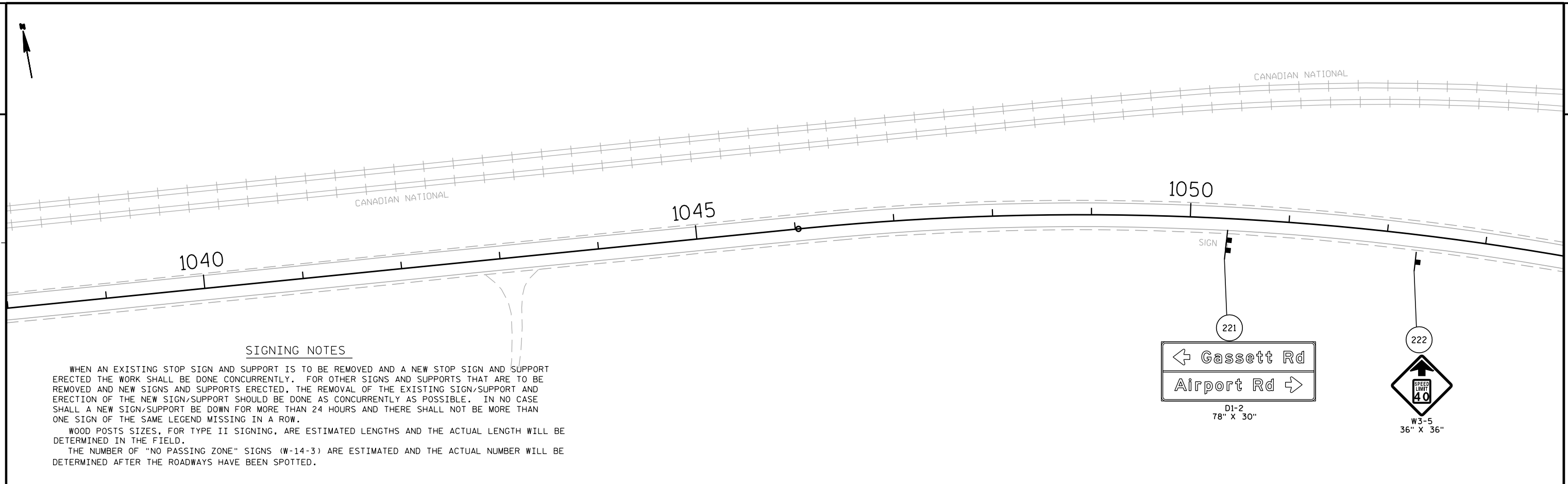
SIGN-REMOVE EXISTING



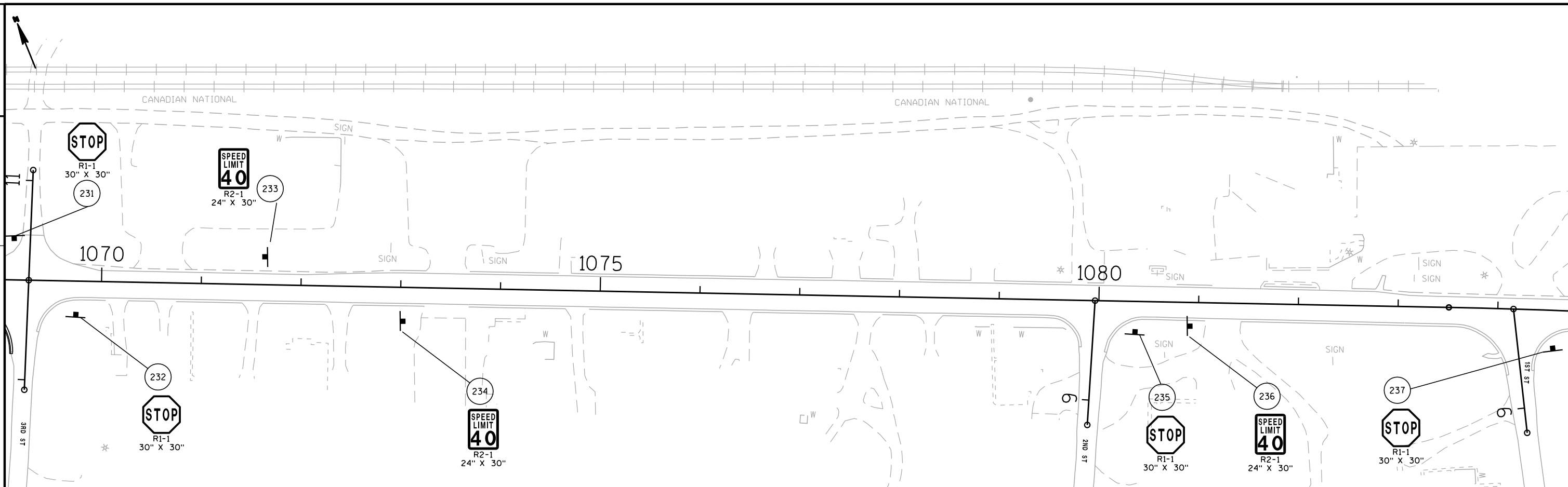
SIGN-REMOVE AND REPLACE



SIGN-PLACE NEW



- SIGN-REMOVE EXISTING
- SIGN-REMOVE AND REPLACE
- SIGN-PLACE NEW

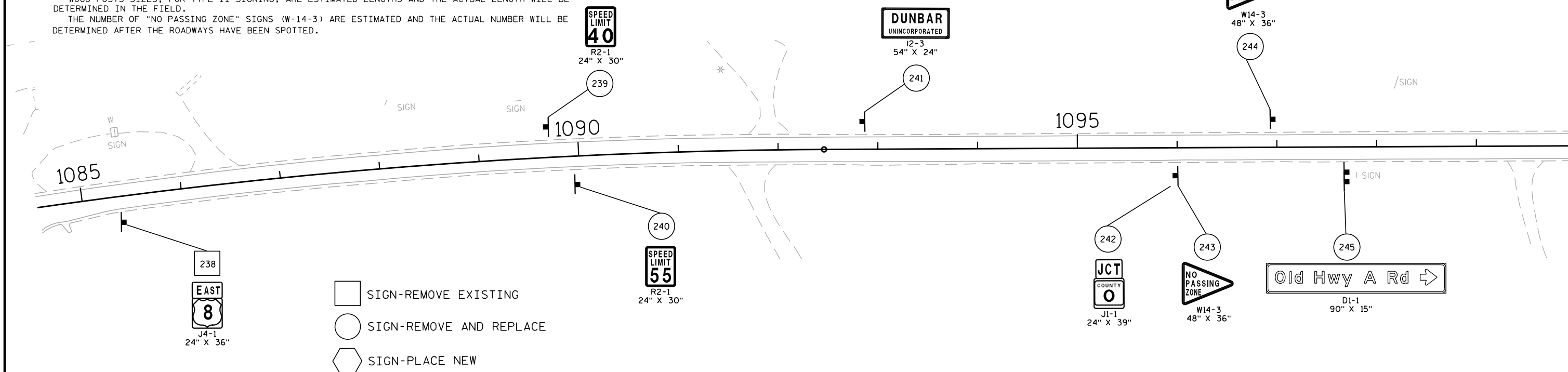


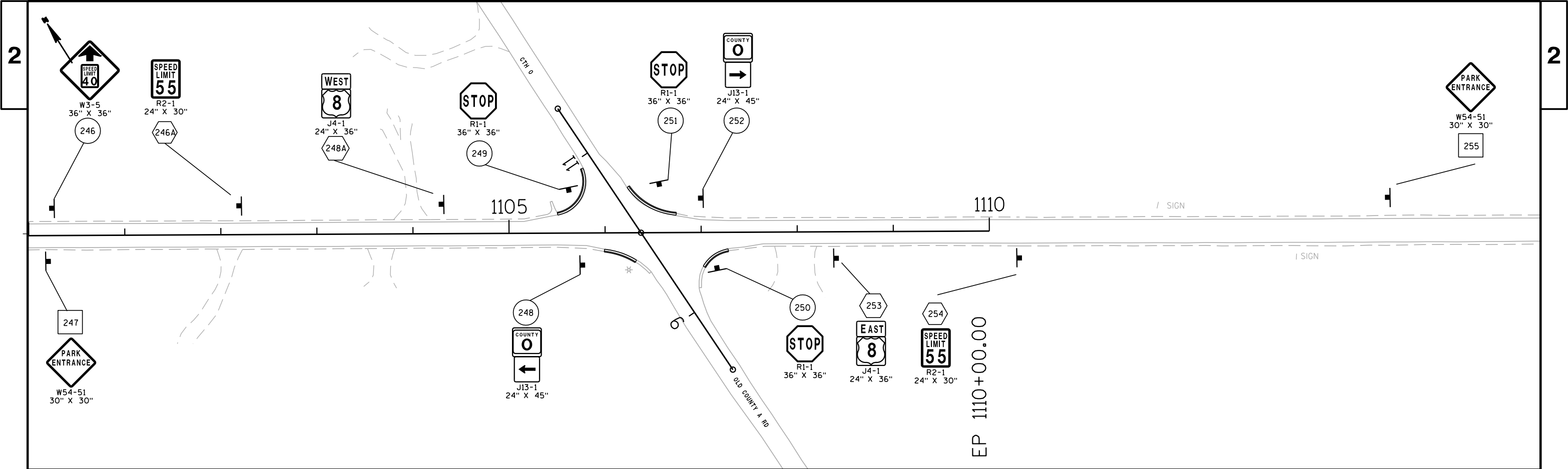
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- ☐ SIGN-REMOVE AND REPLACE
- ☐ SIGN-PLACE NEW

Estimate Of Quantities

1590-16-71

Line	Item	Item Description	Unit	Total	Qty
0010	201.0105	Clearing	STA	7.000	7.000
0020	201.0120	Clearing	ID	40.000	40.000
0030	201.0205	Grubbing	STA	7.000	7.000
0040	201.0220	Grubbing	ID	40.000	40.000
0050	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0060	204.0110	Removing Asphaltic Surface	SY	270.000	270.000
0070	204.0115	Removing Asphaltic Surface Butt Joints	SY	415.000	415.000
0080	204.0125	Removing Asphaltic Surface Milling	TON	31,300.000	31,300.000
0090	204.0150	Removing Curb & Gutter	LF	6,485.000	6,485.000
0100	204.0155	Removing Concrete Sidewalk	SY	1,555.000	1,555.000
0110	204.0165	Removing Guardrail	LF	727.000	727.000
0120	204.0185	Removing Masonry	CY	42.000	42.000
0130	204.0210	Removing Manholes	EACH	7.000	7.000
0140	204.0220	Removing Inlets	EACH	13.000	13.000
0150	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	1,395.000	1,395.000
0160	204.0245	Removing Storm Sewer (size) 02. 15-Inch	LF	660.000	660.000
0170	204.0245	Removing Storm Sewer (size) 03. 18-inch	LF	50.000	50.000
0180	205.0100	Excavation Common	CY	1,460.000	1,460.000
0190	208.0100	Borrow	CY	8,919.000	8,919.000
0200	209.2100	Backfill Granular Grade 2	CY	550.000	550.000
0210	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. Project 1590-16-71	LS	1.000	1.000
0220	213.0100	Finishing Roadway (project) 01. Project 1590-16-71	EACH	1.000	1.000
0230	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,315.000	2,315.000
0240	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	1,395.000	1,395.000
0250	416.0160	Concrete Driveway 6-Inch	SY	125.000	125.000
0260	440.4410	Incentive IRI Ride	DOL	114,110.000	114,110.000
0270	455.0605	Tack Coat	GAL	34,060.000	34,060.000
0280	460.2005	Incentive Density PWL HMA Pavement	DOL	44,210.000	44,210.000
0290	460.2010	Incentive Air Voids HMA Pavement	DOL	64,690.000	64,690.000
0300	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	150,628.000	150,628.000
0310	460.5223	HMA Pavement 3 LT 58-28 S	TON	36,370.000	36,370.000
0320	460.5224	HMA Pavement 4 LT 58-28 S	TON	28,315.000	28,315.000
0330	465.0105	Asphaltic Surface	TON	365.000	365.000
0340	465.0110	Asphaltic Surface Patching	TON	40.000	40.000
0350	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	80.000	80.000
0360	465.0315	Asphaltic Flumes	SY	10.000	10.000
0370	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	115,642.000	115,642.000
0380	465.0475	Asphalt Center Line Rumble Strips 2-Lane Rural	LF	59,957.000	59,957.000
0390	520.1015	Apron Endwalls for Culvert Pipe 15-Inch	EACH	2.000	2.000

Estimate Of Quantities

1590-16-71

Line	Item	Item Description	Unit	Total	Qty
0400	520.3315	Culvert Pipe Class III-A 15-Inch	LF	36.000	36.000
0410	520.8000	Concrete Collars for Pipe	EACH	8.000	8.000
0420	521.0124	Culvert Pipe Corrugated Steel 24-Inch	LF	16.000	16.000
0430	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	7.000	7.000
0440	521.1030	Apron Endwalls for Culvert Pipe Steel 30-Inch	EACH	1.000	1.000
0450	522.0130	Culvert Pipe Reinforced Concrete Class III 30-Inch	LF	18.000	18.000
0460	522.0142	Culvert Pipe Reinforced Concrete Class III 42-Inch	LF	4.000	4.000
0470	524.0630	Apron Endwalls for Culvert Pipe Salvaged 30-Inch	EACH	3.000	3.000
0480	524.0636	Apron Endwalls for Culvert Pipe Salvaged 36-Inch	EACH	2.000	2.000
0490	524.0642	Apron Endwalls for Culvert Pipe Salvaged 42-Inch	EACH	1.000	1.000
0500	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	5,110.000	5,110.000
0510	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	1,375.000	1,375.000
0520	601.0600	Concrete Curb Pedestrian	LF	145.000	145.000
0530	602.0405	Concrete Sidewalk 4-Inch	SF	14,245.000	14,245.000
0540	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	190.000	190.000
0550	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	521.000	521.000
0560	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	50.000	50.000
0570	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	1,268.000	1,268.000
0580	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	61.000	61.000
0590	611.0530	Manhole Covers Type J	EACH	2.000	2.000
0600	611.0624	Inlet Covers Type H	EACH	10.000	10.000
0610	611.0639	Inlet Covers Type H-S	EACH	3.000	3.000
0620	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0630	611.2006	Manholes 6-FT Diameter	EACH	1.000	1.000
0640	611.3004	Inlets 4-FT Diameter	EACH	7.000	7.000
0650	611.3230	Inlets 2x3-FT	EACH	6.000	6.000
0660	611.8115	Adjusting Inlet Covers	EACH	1.000	1.000
0670	611.9800.S	Pipe Grates	EACH	1.000	1.000
0680	614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EACH	14.000	14.000
0690	614.0397	Guardrail Mow Strip Emulsified Asphalt	SY	390.000	390.000
0700	614.0400	Adjusting Steel Plate Beam Guard	LF	2,275.000	2,275.000
0710	614.0950	Replacing Guardrail Posts and Blocks	EACH	45.000	45.000
0720	618.0100	Maintenance And Repair of Haul Roads (project) 01. Project 1590-16-71	EACH	1.000	1.000
0730	619.1000	Mobilization	EACH	1.000	1.000
0740	624.0100	Water	MGAL	20.000	20.000
0750	625.0100	Topsoil	SY	48,430.000	48,430.000

Estimate Of Quantities

1590-16-71

Line	Item	Item Description	Unit	Total	Qty
0760	627.0200	Mulching	SY	28,080.000	28,080.000
0770	628.1504	Silt Fence	LF	11,550.000	11,550.000
0780	628.1520	Silt Fence Maintenance	LF	11,550.000	11,550.000
0790	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0800	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0810	628.2004	Erosion Mat Class I Type B	SY	20,350.000	20,350.000
0820	628.7015	Inlet Protection Type C	EACH	26.000	26.000
0830	628.7504	Temporary Ditch Checks	LF	705.000	705.000
0840	628.7555	Culvert Pipe Checks	EACH	45.000	45.000
0850	628.7570	Rock Bags	EACH	200.000	200.000
0860	629.0210	Fertilizer Type B	CWT	30.000	30.000
0870	630.0120	Seeding Mixture No. 20	LB	1,210.000	1,210.000
0880	630.0140	Seeding Mixture No. 40	LB	62.000	62.000
0890	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	179.000	179.000
0900	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	111.000	111.000
0910	637.2210	Signs Type II Reflective H	SF	1,219.720	1,219.720
0920	637.2230	Signs Type II Reflective F	SF	528.570	528.570
0930	638.2602	Removing Signs Type II	EACH	252.000	252.000
0940	638.3000	Removing Small Sign Supports	EACH	297.000	297.000
0950	642.5401	Field Office Type D	EACH	1.000	1.000
0960	643.0100	Traffic Control (project) 01. Project 1590-16-71	EACH	1.000	1.000
0970	643.0300	Traffic Control Drums	DAY	4,250.000	4,250.000
0980	643.0310.S	Temporary Portable Rumble Strips	LS	1.000	1.000
0990	643.0410	Traffic Control Barricades Type II	DAY	175.000	175.000
1000	643.0420	Traffic Control Barricades Type III	DAY	75.000	75.000
1010	643.0705	Traffic Control Warning Lights Type A	DAY	3,300.000	3,300.000
1020	643.0715	Traffic Control Warning Lights Type C	DAY	250.000	250.000
1030	643.0900	Traffic Control Signs	DAY	6,560.000	6,560.000
1040	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
1050	646.0106	Pavement Marking Epoxy 4-Inch	LF	97,194.000	97,194.000
1060	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	96,894.000	96,894.000
1070	646.2304.S	Pavement Marking Grooved Wet Reflective Epoxy 4-Inch	LF	140,422.000	140,422.000
1080	646.2308.S	Pavement Marking Grooved Wet Reflective Epoxy 8-Inch	LF	175.000	175.000
1090	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	177,946.000	177,946.000
1100	650.4000	Construction Staking Storm Sewer	EACH	15.000	15.000
1110	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	4,885.000	4,885.000
1120	650.8000	Construction Staking Resurfacing Reference	LF	75,314.000	75,314.000
1130	650.9910	Construction Staking Supplemental Control (project) 01.	LS	1.000	1.000

Estimate Of Quantities

1590-16-71					
Line	Item	Item Description	Unit	Total	Qty
		Project 1590-16-71			
1140	650.9920	Construction Staking Slope Stakes	LF	33,730.000	33,730.000
1150	690.0150	Sawing Asphalt	LF	10,075.000	10,075.000
1160	690.0250	Sawing Concrete	LF	95.000	95.000
1170	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	2,400.000	2,400.000
1180	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	3,040.000	3,040.000
1190	SPV.0060	Special 01. HMA Percent Within Limits (PWL) Test Strip	EACH	2.000	2.000
1200	SPV.0180	Special 01. Protective Thermoplastic Coating at Snowmobile Crossing	SY	60.000	60.000

<u>CLEARING AND GRUBBING</u>								
201.0105 201.0120 201.0205 201.0220								
CATEGORY	STATION TO STATION			LOCATION	STA	ID	STA	ID
0010	579+22			LT		22		22
0010	581+39			LT		18		18
0010	683+00	-	684+00	LT	1		1	
0010	863+00	-	865+00	LT	2		2	
0010	866+00	-	868+00	RT	2		2	
0010	867+00	-	868+00	LT	1		1	
0010	893+00	-	894+00	LT	1		1	
TOTALS					7	40	7	40

REMOVING SMALL PIPE CULVERTS				
203.0100				
CATEGORY	STATION	LOCATION	EACH	REMARKS
0010	682+81	USH 8, LT	1	12" CMCP - 38 LF
TOTAL			1	

REMOVAL SUMMARY							
					204.0110	204.0150	204.0155
					REMOVING ASPHALTIC SURFACE	REMOVING CURB & GUTTER	REMOVING CONCRETE SIDEWALK
CATEGORY	STATION	TO	STATION	LOCATION	SY	LF	SY
0010	563+18	-	574+88	RT		1190	610
0010	571+42	-	590+71	LT		1915	215
0010	575+09	-	579+28	RT		490	280
0010	580+16	-	583+80	RT		390	215
0010	584+05	-	588+30	RT		435	235
0010	588+65	-	593+03	RT		465	
0010	635+38	-	638+30	RT	60	290	
0010	1067+15	-	1069+10	RT	25	225	
0010	COUNTY LINE ROAD			LT & RT	10	105	
0010	CTH H			LT & RT	15	120	
0010	TWIN LAKE ROAD			LT & RT	15	80	
0010	SNOWSHOE DRIVE			LT & RT	65	140	
0010	TEN ACRE ROAD			LT & RT	5	150	
0010	SHRINE ROAD			LT	15	35	
0010	PARKWAY ROAD			LT & RT	15	145	
0010	CTH U			LT & RT	25	125	
0010	CTH O			LT & RT	20	185	
TOTALS					270	6485	1555

REMOVING ASPHALTIC SURFACE BUTT JOINTS			
204.0115			
CATEGORY	LOCATION	SY	REMARKS
0010	353+29, USH 8	7	
0010	962+82, USH 8	8	
0010	963+32, USH 8	8	
	1108+26, USH 8	7	
0010	COUNTY LINE ROAD	5	
0010	SANDY LOOP ROAD	4	
0010	CAMP B LOOP ROAD	5	
0010	FRANKS ROAD	5	
0010	CTH H	6	
0010	ORCHARD ROAD	4	
0010	PARTRIDGE ROAD	6	
0010	TWIN LAKE ROAD	6	
0010	INDUSTRIAL DRIVE	7	
0010	SNOWSHOE ROAD	6	
0010	CLARK LAKE ROAD	6	
0010	A AVENUE	7	
0010	MILL STREET	6	
0010	MAPLE AVENUE	6	
0010	BIRCH AVENUE	6	
0010	BEECH AVENUE	5	
0010	TEN ACRE ROAD	7	
0010	TOWER RD	5	
0010	SHRINE RD	6	
0010	PIKE RIVER DR (EAST)	5	
0010	CTH U	8	
0010	AIRPORT ROAD	5	
0010	3RD ST (EAST)	5	
0010	2ND ST	5	
0010	1ST ST	6	
0010	CTH O	5	
0010	OLD COUNTY A RD	8	
0010	DRIVEWAYS	230	
TOTAL		415	

REMOVING ASPHALTIC SURFACE MILLING						
204.0125						
CATEGORY	STATION	TO	STATION	LOCATION	TON	REMARKS
0010	353+29	-	380+30	USH 8	990	
0010	380+30	-	395+98	USH 8	575	
0010	395+98	-	425+70	USH 8	1,090	
0010	425+70	-	432+56	USH 8	250	
0010	432+56	-	471+93	USH 8	1,645	
0010	471+93	-	503+83	USH 8	1,325	
0010	503+83	-	536+18	USH 8	1,345	
0010	536+18	-	562+18	USH 8	1,080	
0010	562+18	-	563+18	USH 8	60	
0010	563+18	-	593+03	USH 8	2,345	
0010	593+03	-	594+03	USH 8	60	
0010	594+03	-	601+03	USH 8	290	
0010	593+03	-	630+36	USH 8	1,220	
0010	630+36	-	642+20	USH 8	490	
0010	643+41	-	673+17	USH 8	1,235	
0010	673+17	-	702+11	USH 8	1,205	
0010	702+11	-	768+83	USH 8	2,445	
0010	768+83	-	800+19	USH 8	1,150	
0010	800+19	-	881+82	USH 8	2,995	
0010	881+82	-	962+82	USH 8	2,970	
0010	963+32	-	982+33	USH 8	700	
0010	982+46	-	1001+23	USH 8	690	
0010	1001+23	-	1058+06	USH 8	2,095	
0010	1058+06	-	1066+64	USH 8	315	
0010	1066+64	-	1085+00	USH 8	685	
0010	1085+00	-	1108+27	USH 8	855	
0010	COUNTY LINE ROAD				44	
0010	SANDY LOOP ROAD				40	
0010	CAMP B LOOP ROAD				42	
0010	FRANKS ROAD				43	
0010	CTH H				45	
SUBTOTAL					30,319	

REMOVING ASPHALTIC SURFACE MILLING CONT.			
204.0125			
CATEGORY	STATION	TO	STATION
0010	ORCHARD DRIVE		36
0010	PARTRIDGE ROAD		24
0010	TWIN LAKE ROAD		36
0010	INDUSTRIAL DRIVE		28
0010	SNOWSHOE DRIVE		47
0010	CLARK LAKE ROAD		36
0010	A AVENUE		40
0010	MILL STREET		23
0010	MAPLE AVENUE		14
0010	BIRCH AVENUE		14
0010	BEECH AVENUE		18
0010	TEN ACRE ROAD		37
0010	TOWER ROAD		43
0010	SHRINE ROAD		37
0010	PARKWAY ROAD (CTH I)		35
0010	FOREST ROAD 613		31
0010	FOREST ROAD 607		28
0010	PIKE RIVER DR (WEST)		28
0010	JACK PINE DRIVE		41
0010	PIKE RIVER DR (EAST)		32
0010	CTH U		40
0010	AIRPORT ROAD		34
0010	GASSETT ROAD		19
0010	3RD STREET EAST		32
0010	3RD STREET WEST		19
0010	2ND STREET		20
0010	1ST STREET		27
0010	OLD COUNTY A ROAD		42
0010	CTH O		55
0010	DRIVEWAYS		65
SUBTOTAL		981	
TOTAL		31,300	

REMOVING GUARDRAIL					
204.0165					
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	564+74	-	565+25	LT	51
0010	571+27	-	571+91	LT	64
0010	681+05	-	681+56	RT	51
0010	683+24	-	683+75	LT	51
0010	686+70	-	687+21	RT	51
0010	688+63	-	689+14	LT	51
0010	837+56	-	838+08	RT	51
0010	839+73	-	840+24	LT	51
0010	847+04	-	847+56	RT	51
0010	847+21	-	847+73	LT	51
0010	960+19	-	960+70	RT	51
0010	961+06	-	961+57	LT	51
0010	964+32	-	964+84	RT	51
0010	966+20	-	966+71	LT	51
TOTALS					727

REMOVING MASONRY				
204.0185				
CATEGORY	STATION	LOCATION	CY	REMARKS
0010	442+70	RT	10	DITCH CHECK
0010	443+17	RT	10	DITCH CHECK
0010	443+70	RT	10	DITCH CHECK
0010	444+20	RT	10	DITCH CHECK
0010	563+19	LT	1	ENDWALL
0010	581+27	LT	1	CONCRETE COLLAR AT INLET
TOTALS			42	

REMOVING STORM SEWER STRUCTURES				
204.0210 204.0220				
MANHOLES INLETS				
CATEGORY	STATION	LOCATION	EACH	EACH
0010	572+87	RT		1
0010	573+78	LT	1	
0010	573+88	LT		1
0010	574+25	RT		1
0010	575+07	LT		1
0010	575+17	LT	1	
0010	577+06	LT		1
0010	577+07	RT		1
0010	577+17	LT	1	
0010	578+57	RT		1
0010	578+67	LT		1
0010	579+82	LT	1	
0010	580+30	RT		1
0010	581+18	LT	1	
0010	581+29	LT		1
0010	583+94	LT	1	
0010	584+38	LT		1
0010	584+02	RT		1
0010	586+75	LT	1	
0010	589+01	RT		1
TOTALS			7	13

REMOVING STORM SEWER							
204.0245.0 204.0245.02 204.0245.03							
12-INCH 15-INCH 18-INCH							
CATEGORY	STATION	LOCATION	TO	STATION	LOCATION	LF	LF
0010	572+87	RT	-	573+78	LT	100	
0010	574+25	RT	-	573+88	LT	70	
0010	573+88	LT	-	573+78	LT	10	
0010	573+78	LT	-	575+17	LT	135	
0010	575+07	LT	-	575+17	LT	10	
0010	575+17	LT	-	577+17	LT	195	
0010	577+07	RT	-	577+06	LT	40	
0010	577+06	LT	-	577+17	LT	15	
0010	577+17	LT	-	579+82	LT		255
0010	578+57	RT	-	578+67	LT	35	
0010	578+67	LT	-	579+82	LT	115	
0010	579+82	LT	-	579+97	RT		50
0010	580+30	RT	-	579+82	LT	80	
0010	581+18	LT	-	579+82	LT		130
0010	581+29	LT	-	581+18	LT	15	
0010	583+94	LT	-	581+18	LT		275
0010	584+40	RT	-	584+02	LT	50	
0010	584+02	LT	-	583+94	LT	10	
0010	586+75	LT	-	583+94	LT	285	
0010	589+01	RT	-	586+75	LT	230	
TOTALS						1395	660 50

EARTHWORK SUMMARY

DIVISION	Location	Excavation Common (1) Item # 205.0100		Salvaged/ Unusable Material	Available Material (4)	Unexpanded Fill	Expanded Fill (5)	Mass Ordinate +/- (6)	Borrow Item # 208.0100	Comment:
		Cut (2)	EBS Excava tion (3)				Factor 1.20		Factor 1.20	
1	SLOPE FLATTENING BEGIN PROJECT - STA. 415+00	62	0	0	62	838	1,006	-944		
	SLOPE FLATTENING STA. 415+00 - STA. 500+00	190	0	0	190	680	816	-626		
	SLOPE FLATTENING STA. 500+00 - 700+00	115	0	0	115	486	583	-468		
	SLOPE FLATTENING STA. 700+00 - 830+00	60	0	0	60	1,572	1,886	-1,826		
	SLOPE FLATTENING STA. 830+00 - END PROJECT	25	0	0	25	3,515	4,218	-4,193		
	GUARDRAIL STA. 679+72 - STA. 690+47	1	0	0	1	235	282	-281		
	GUARDRAIL STA. 836+39 - STA. 848+00	2	0	0	2	322	386	-384		
	GUARDRAIL STA. 959+01 - 967+89	9	0	0	9	69	83	-74		
	TOWN OF GOODMAN	996	0	996	0	102	122	-122		
Total		1,460	0	996	464		9,383	-8,919	8,919	
Total Common Ex 1,460										

- 1) Excavation Common is the sum of the Cut and EBS Excavation columns. Item number 205.0100
- 2) Salvaged/Unsuable Material is included in Cut. Volume of concrete pavement to be removed is included in salvaged/unusable material.
- 4) Available Material = Cut - Salvaged/Unusuable Material
- 5) Expanded Fill Factor = 1.20 Expanded Fill = Unexpanded Fill * Fill Factor. No Rock, Marsh, or EBS will be used in fill on this project.
- 6) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

BACKFILL GRANULAR GRADE 2			209.2100
CATEGORY	LOCATION		CY
0010	GOODMAN STORM SEWER		550
TOTAL			550

PREPARE FOUNDATION FOR ASPHALTIC PAVING						211.0100
CATEGORY	STATION	TO	STATION	LOCATION	LS	
0010	353+29.42	-	962+72.39	USH 8	1	
0010	963+32.47	-	1108+26.55	USH 8		
TOTAL						1

BASE AGGREGATE DENSE							
					305.0110	305.0120	
					3/4-INCH	1-1/4-INCH	
CATEGORY	STATION	TO	STATION	LOCATION	TON	TON	REMARKS
0010	353+29	-	432+56	USH 8	205		
0010	432+56	-	571+42	USH 8	360		
0010	563+17	-	593+03	USH 8		1210	
0010	591+87	-	702+18	USH 8	360		
0010	702+18	-	1001+23	USH 8	950		
0010	1001+23	-	1067+09	USH 8	170		
0010	1067+09	-	1072+83	USH 8	5		
0010	1082+67	-	1084+32	USH 8	5		
0010	1084+32	-	1108+27	USH 8	65		
0010	CURB & GUTTER REPLACEMENTS					185	
0010	SIDEROADS				95		
0010	DRIVEWAYS				100		
TOTALS					2315	1395	

HMA PAVEMENT SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	455.0605	HMA PAVEMENT 3 LT 58-28 S			HMA PAVEMENT 4 LT 58-28 S			460.4110.S	REMARKS
					TACK COAT GAL	460.5223 TON	PWL DENSITY INCENTIVE TON*	PWL AIR VOIDS TON**	460.5224 TON	PWL DENSITY INCENTIVE TON*	PWL AIR VOIDS TON**	REHEATING HMA PAVEMENT LONGITUDINAL JOINTS LF	
0010	353+29	-	380+30	USH 8	1155	1260	890	370	985	695	290	5403	
0010	380+30	-	395+98	USH 8	670	735	520	215	575	405	170	3135	
0010	395+98	-	425+70	USH 8	1270	1390	980	410	1085	765	320	5944	
0010	425+70	-	432+56	USH 8	295	325	230	95	250	175	75	1372	
0010	432+56	-	471+93	USH 8	1795	1850	1300	550	1435	1010	425	7874	
0010	471+93	-	503+83	USH 8	1450	1495	1055	440	1160	820	340	6380	
0010	503+83	-	536+18	USH 8	1470	1515	1070	445	1175	830	345	6470	
0010	536+18	-	562+18	USH 8	1180	1220	860	360	945	665	280	5200	
0010	562+18	-	563+18	USH 8	45	50	35	15	35	25	10	200	
0010	563+18	-	593+03	USH 8	1265	1280	985	295	970	765	205	5970	ADDITIONAL 30 TONS FOR WEDGING 569+50 TO 570+75, USH 8 RT
0010	593+03	-	594+03	USH 8	45	50	35	15	35	25	10	200	
0010	594+03	-	601+03	USH 8	320	325	230	95	255	180	75	1400	
0010	601+03	-	630+36	USH 8	1330	1375	970	405	1070	755	315	5866	
0010	630+36	-	642+20	USH 8	540	555	390	165	430	305	125	2368	
0010	643+41	-	673+17	USH 8	1350	1390	980	410	1085	765	320	5953	
0010	673+17	-	702+11	USH 8	1320	1365	955	410	1065	745	320	5788	
0010	702+11	-	768+83	USH 8	2850	3115	2200	915	2430	1715	715	13344	
0010	768+83	-	800+19	USH 8	1340	1465	1035	430	1140	805	335	6272	
0010	800+19	-	881+82	USH 8	3490	3830	2695	1135	2980	2095	885	16326	
0010	881+82	-	962+82	USH 8	3460	3795	2675	1120	2950	2080	870	16201	
0010	963+32	-	982+33	USH 8	815	895	625	270	700	490	210	3802	
0010	982+46	-	1001+23	USH 8	800	880	620	260	680	480	200	3754	
0010	1001+23	-	1058+06	USH 8	2440	2670	1875	795	2075	1460	615	11366	
0010	1058+06	-	1066+64	USH 8	370	405	285	120	310	220	90	1716	
0010	1066+64	-	1085+00	USH 8	770	815	605	210	690	470	220	3672	
0010	1085+00	-	1108+27	USH 8	500	1090	770	320	845	595	250	4653	
0010	COUNTY LINE ROAD				550	44		44	35		35		
0010	SANDY LOOP ROAD				45	40		40	31		31		
0010	CAMP B LOOP ROAD				40	44		44	34		34		
0010	FRANKS ROAD				45	44		44	34		34		
0010	CTH H				45	47		47	36		36		

SUBTOTALS 33060 35359 24870 10489 27525 19340 8185 150628

*TONNAGE IS ELIGIBLE FOR INCENTIVE DENSITY PWL 460.2005 AND INCENTIVE AIR VOIDS 460.2010.
**TONNAGE IS ELIGIBLE FOR INCENTIVE AIR VOIDS 460.2010 AND DENSITY IS TESTED FOR ACCEPTANCE IN THOSE AREAS.

HMA PAVEMENT SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	455.0605	HMA PAVEMENT 3 LT 58-28 S			HMA PAVEMENT 4 LT 58-28 S			460.4110.S	REMARKS
					TACK COAT GAL	460.5223 TON	PWL DENSITY INCENTIVE TON**	PWL AIR VOIDS TON*	460.5224 TON	PWL DENSITY INCENTIVE TON*	PWL AIR VOIDS TON**	REHEATING HMA PAVEMENT LONGITUDINAL JOINTS LF	
0010				ORCHARD DRIVE	40	41		41	31		31		
0010				PARTRIDGE ROAD	25	27		27	21		21		
0010				TWIN LAKE ROAD	40	42		42	32		32		
0010				INDUSTRIAL DRIVE	30	31		31	25		25		
0010				SNOWSHOE DRIVE	55	54		54	43		43		
0010				CLARK LAKE ROAD	40	40		40	33		33		
0010				A AVENUE	50	50		50	39		39		
0010				MILL STREET	30	27		27	22		22		
0010				MAPLE AVENUE	15	13		13	10		10		
0010				BIRCH AVENUE	15	17		17	13		13		
0010				BEECH AVENUE	25	26		26	20		20		
0010				TEN ACRE ROAD	40	43		43	33		33		
0010				TOWER ROAD	45	48		48	37		37		
0010				SHRINE ROAD	45	42		42	33		33		
0010				PARKWAY ROAD (CTH I)	40	42		42	32		32		
0010				FOREST ROAD 613	30	30		30	24		24		
0010				FOREST ROAD 607	30	28		28	22		22		
0010				PIKE RIVER DRIVE (WEST)	30	28		28	22		22		
0010				JACK PINE DRIVE	40	42		42	33		33		
0010				PIKE RIVER DRIVE (EAST)	30	32		32	25		25		
0010				CTH U	40	42		42	32		32		
0010				AIRPORT ROAD	35	35		35	27		27		
0010				GASSETT ROAD	25	24		24	19		19		
0010				3RD STREET EAST	35	35		35	27		27		
0010				3RD STREET WEST	15	16		16	13		13		
0010				2ND STREET	20	21		21	17		17		
0010				1ST STREET	30	31		31	24		24		
0010				OLD COUNTY A ROAD	45	45		45	35		35		
0010				CTH O	60	59		59	46		46		

SUBTOTALS	1000	1011	0	1011	790	0	790	0	
TOTALS	34060	36370	24870	11500	28315	19340	8975	150628	

*TONNAGE IS ELIGIBLE FOR INCENTIVE DENSITY PWL 460.2005 AND INCENTIVE AIR VOIDS 460.2010.
**TONNAGE IS ELIGIBLE FOR INCENTIVE AIR VOIDS 460.2010 AND DENSITY IS TESTED FOR ACCEPTANCE IN THOSE AREAS.

ASPHALTIC SURFACE SUMMARY					
		465.0105	465.0110	465.0120	
		ASPHALTIC	ASPHALTIC	ASPHALTIC	
		SURFACE	SURFACE	SURFACE	
			PATCHING	DRIVEWAYS &	
				FIELD ENTRANCES	
CATEGORY	LOCATION	TON	TON	TON	REMARKS
0010	CURB & GUTTER REMOVAL/REPLACEMENT	230			
0010	STORM SEWER REMOVAL/REPLACEMENT	135			
0010	TEN ACRE ROAD RAILROAD CROSSING				
0010	CTH U RAILROAD CROSSING				
0010	DRIVEWAYS			80	
0010	UNDISTRIBUTED		40		
TOTALS		365	40	80	

ASPHALTIC FLUMES			
		465.0315	
CATEGORY	LOCATION	SY	REMARKS
0010	CTH U, LT & RT	10	
TOTALS		10	

ASPHALTIC CENTER LINE RUMBLE STRIPS 2-LANE RURAL				
		465.0475		
CATEGORY	STATION	TO	STATION	LF
0010	356+02	-	378+30	2229
0010	382+30	-	393+98	1168
0010	392+98	-	423+70	3072
0010	427+70	-	430+56	286
0010	434+56	-	459+10	2454
0010	461+10	-	469+93	883
0010	476+08	-	501+83	2575
0010	505+83	-	530+18	2435
0010	538+19	-	545+75	756
0010	550+00	-	559+12	913
0010	591+75	-	599+03	728
0010	603+03	-	628+36	2533
0010	632+36	-	634+50	214
0010	639+00	-	671+17	3097
0010	675+17	-	700+11	2494
0010	704+11	-	766+83	6272
0010	770+83	-	774+71	389
0010	778+71	-	781+02	231
0010	785+02	-	798+19	1317
0010	802+19	-	879+82	7763
0010	883+82	-	962+57	7875
0010	963+57	-	999+23	3553
0010	1003+23	-	1056+06	5283
0010	1090+00	-	1104+37	1437
TOTAL				59957

ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL (TYPE 1)				
USH 8 LEFT				
465.0425				
CATEGORY	STATION	TO	STATION	LF
0010	355+20	-	378+65	2345
0010	381+50	-	396+80	1530
0010	397+50	-	416+30	1880
0010	417+40	-	428+95	1155
0010	429+75	-	430+85	110
0010	435+85	-	451+50	1565
0010	452+40	-	453+75	135
0010	454+60	-	455+95	135
0010	456+80	-	468+10	1130
0010	468+95	-	470+50	155
0010	475+50	-	483+50	800
0010	484+45	-	502+00	1755
0010	502+90	-	503+45	55
0010	504+35	-	505+60	125
0010	507+60	-	518+90	1130
0010	520+00	-	528+55	855
0010	529+50	-	534+90	540
0010	537+55	-	544+35	680
0010	591+75	-	599+60	785
0010	602+30	-	642+05	3855
0010	644+00	-	647+00	300
0010	647+95	-	655+00	705
0010	655+75	-	656+60	85
0010	657+25	-	659+70	245
0010	660+35	-	662+25	190
0010	663+00	-	666+75	375
0010	667+60	-	669+75	215
0010	670+60	-	671+90	130
0010	674+45	-	676+90	245
0010	677+25	-	681+60	435
0010	683+25	-	685+25	200
0010	690+40	-	694+00	360
0010	694+85	-	700+00	515
0010	700+75	-	703+60	285
0010	704+35	-	706+30	195
0010	707+00	-	708+05	105
0010	708+85	-	710+05	120
0010	710+85	-	711+95	110
0010	712+75	-	724+75	1200
0010	733+20	-	767+15	3395
0010	769+75	-	798+80	2905
0010	801+45	-	823+80	2235
0010	824+05	-	832+25	820
0010	833+20	-	833+75	55
0010	841+20	-	845+50	430
0010	854+30	-	870+50	1620
0010	877+10	-	890+85	1375
0010	892+30	-	907+30	1500
0010	908+05	-	910+40	235
0010	911+20	-	943+40	3220
0010	944+25	-	962+60	1835
0010	963+60	-	999+60	3587
0010	1003+90	-	1057+25	5335
0010	1058+80	-	1063+00	420
0010	1089+75	-	1091+45	170
0010	1092+40	-	1103+55	1115
SUBTOTAL				56987

USH 8 RIGHT				
465.0425				
CATEGORY	STATION	TO	STATION	LF
0010	35329	-	35545	216
0010	35615	-	35995	380
0010	36060	-	37770	1710
0010	37840	-	39515	1675
0010	39710	-	41830	2120
0010	41900	-	42055	155
0010	42130	-	42465	335
0010	42695	-	43010	315
0010	433+95	-	439+30	535
0010	440+45	-	453+85	1340
0010	454+70	-	458+75	405
0010	461+05	-	464+60	355
0010	465+65	-	501+70	3605
0010	505+15	-	506+30	115
0010	507+40	-	510+00	260
0010	512+40	-	531+35	1895
0010	533+40	-	545+50	1210
0010	593+03	-	629+50	3647
0010	632+40	-	634+00	160
0010	639+85	-	644+30	325
0010	646+45	-	649+90	345
0010	650+70	-	658+70	800
0010	659+45	-	669+85	1040
0010	670+70	-	685+25	1455
0010	690+40	-	692+25	185
0010	693+10	-	694+70	160
0010	695+40	-	697+65	225
0010	698+45	-	701+00	255
0010	703+70	-	724+75	2105
0010	733+20	-	775+90	4270
0010	778+25	-	782+35	410
0010	784+70	-	832+20	4750
0010	833+25	-	833+75	50
0010	841+20	-	845+50	430
0010	854+30	-	870+50	1620
0010	877+10	-	881+05	395
0010	883+15	-	905+25	2210
0010	906+05	-	962+50	5645
0010	963+50	-	964+25	75
0010	966+75	-	1042+60	7572
0010	1043+60	-	1057+25	1365
0010	1050+80	-	1063+00	1220
0010	1090+00	-	1091+25	125
0010	1092+20	-	1099+05	685
0010	1099+95	-	1101+70	175
0010	1102+50	-	1105+80	330
SUBTOTAL				58655

TOTAL : 115642

CULVERT PIPE SUMMARY																
		520.1015	520.3315	521.0124	521.1024	521.1030	522.0130	522.0142	524.0630	524.0636	524.0642	520.8000	611.9800.S			
		APRON	CULVERT	CULVERT	APRON	APRON	CULVERT PIPE	CULVERT PIPE	APRON	APRON	APRON	CONCRETE				
		ENDWALLS	PIPE	PIPE	ENDWALLS	ENDWALLS	REINFORCED	REINFORCED	ENDWALLS FOR	ENDWALLS FOR	ENDWALLS FOR	CONCRETE				
		FOR CULVERT	CLASS III-A	CORRUGATED	FOR CULVERT	FOR CULVERT	CONCRETE	CONCRETE	CULVERT PIPE	CULVERT PIPE	CULVERT PIPE	COLLARS		PIPE	JOINT THICKNESS	
		PIPE	15-INCH	STEEL	PIPE	STEEL	CLASS III	CLASS III	SALVAGED	SALVAGED	SALVAGED	FOR		GRATES	TIES	MINIMUM
CAT.	STATION	LOCATION	15-INCH	15-INCH	24-INCH	24-INCH	30-INCH	30-INCH	42-INCH	30-INCH	36-INCH	42-INCH	PIPE	PIPE	THICKNESS	INCHES
			EACH	LF	LF	EACH	EACH	LF	LF	EACH	EACH	EACH	EACH	EACH	EACH	STEEL
0010	409+26	USH 8, LT						4		1			1		2	
0010	549+89	USH 8, LT				1										
0010	563+19	USH 8, LT				1										
0010	682+81	USH 8, LT	2	36												0.064
0010	805+76	USH 8, LT					1									
0010	819+75	USH 8, LT & RT				2										
0010	863+28	USH 8, LT			4	1							1			0.064
0010	867+33	USH 8, LT & RT			12	2							2			0.064
0010	896+67	USH 8, LT						4				1	1		2	
0010	901+06	USH 8, LT & RT						14		2			2		4	
0010	971+92	USH 8, LT & RT									2				4	
0010	1088+18	USH 8, LT												1		
TOTAL			2	36	16	7	1	18	4	3	2	1	7	1		

ANCILLARY CONCRETE											
					601.0411	601.0557	601.0600	602.0405	416.0160	602.0505	
					CONCRETE	CONCRETE				CURB	
					CONCRETE	RB & GUTTER				RAMP	
					CURB & GUTTER	INCH SLOP	CONCRETE	CONCRETE	CONCRETE	DETECTABLE	
					30-INCH	36-INCH	CURB	SIDEWALK	DRIVEWAY	WARNING FIELD	
					TYPE D	TYPE D	PEDESTRIAN	4-INCH	6-INCH	YELLOW	
CATEGORY	STATION	TO	STATION	LOCATION	LF	LF	LF	SF	SY	SF	
0010	563+18	-	574+88	RT	1190		17	6010		10	
0010	571+42	-	590+71	LT	1915		34	1875	26	20	
0010	575+09	-	579+28	RT	490		14	2175	65	42	
0010	580+16	-	583+80	RT	390		45	1810	34	66	
0010	584+05	-	588+30	RT	435		35	2375		52	
0010	588+65	-	593+03	RT	465						
0010	635+38	-	638+30	RT		290					
0010	1067+15	-	1069+10	RT	225						
0010	COUNTY LINE ROAD			LT & RT		105					
0010	CTH H			LT & RT		120					
0010	TWIN LAKE ROAD			LT & RT		80					
0010	SNOWSHOE DRIVE			LT & RT		140					
0010	TEN ACRE ROAD			LT & RT		150					
0010	SHRINE ROAD			LT		35					
0010	PARKWAY ROAD			LT & RT		145					
0010	CTH U			LT & RT		125					
0010	CTH O			LT & RT		185					
TOTALS					5110	1375	145	14245	125	190	

STORM SEWER PIPE SUMMARY										
			608.0312	608.0318	608.0324	608.0412				
			STORM SEWER	STORM SEWER	STORM SEWER	STORM SEWER				
			PIPE REINFORCED	PIPE REINFORCED	PIPE REINFORCED	PIPE REINFORCED				
			CONCRETE CLASS III	CONCRETE CLASS III	CONCRETE CLASS III	CONCRETE CLASS IV				
CATEGORY	FROM STRUCTURE	TO STRUCTURE	12-INCH LF	18-INCH LF	24-INCH LF	12-INCH LF	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE %	REMARKS
0010	IN 3	IN 5	107				1382.11	1381.58	0.50	
0010	IN 6	IN 5				61	1382.36	1382.09	0.44	
0010	IN 5	IN 7			117		1379.33	1378.98	0.30	
0010	IN 7	IN 9			194		1378.98	1378.40	0.30	
0010	IN 9	IN 12			158		1378.40	1377.93	0.30	
0010	IN 12	MH 13			112		1377.93	1377.59	0.30	
0010	IN 10	IN 9	34				1381.86	1380.72	3.93	
0010	IN 11	IN 12	35				1381.46	1380.45	2.87	
0010	IN 15	MH 13	80				1380.90	1380.55	0.44	
0010	MH 13	EXIST		50			1377.59	1377.09	1.00	FIELD VERIFY EXISTING ELEVATION AT CONNECTION
0010	IN 22	MH 21	231				1388.57	1385.11	1.50	
0010	MH 21	IN 19			237		1384.10	1381.53	1.08	
0010	IN 19	IN 16			307		1381.53	1380.46	0.35	
0010	IN 16	NH 13			143		1380.46	1379.96	0.35	
0010	IN 20	IN 19	34				1383.03	1382.36	1.94	
TOTAL			521	50	1268	61				

STORM SEWER STRUCTURE SUMMARY																				
				611.0530	611.0624	611.0639	611.2004	611.2006	611.3004	611.3230	611.8115	520.8000	628.7015	650.4000						
				CONCRETE																
				MANHOLE	INLET	INLET	MANHOLES	MANHOLES	INLETS	ADJUSTING		COLLARS	INLET	CONSTRUCTION						
				COVERS	COVERS	COVERS	4-FT	6-FT	4-FT	INLETS	INLET	FOR	PROTECTION	STAKING						
				TYPE J	TYPE H	TYPE H-S	DIAMETER	DIAMETER	DIAMETER	2X3-FT	COVERS	PIPE	TYPE C	STORM SEWER	RIM	STRUCTURE	FLOWLINE	DEPTH	REMARKS	
STRUCTURE	NO.	STATION	OFFSET	LOCATION	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	ELEVATION	ELEVATION	ELEVATION		
0010	---	571+32	17.8	USH 8, RT							1									
0010	IN 3	572+87	18.3	USH 8, RT			1			1			2	1	1385.24	1384.24	1382.11	2.13		
0010	IN 5	573+88	18.8	USH 8, LT		1				1			2	1	1385.01	1384.01	1379.33	4.68		
0010	IN 6	574+29	29.5	USH 8, RT		1					1		2	1	1385.81	1384.81	1382.36	2.45		
0010	IN 7	575+07	17.9	USH 8, LT		1				1			2	1	1384.46	1383.46	1378.98	4.48		
0010	IN 9	577+06	17.5	USH 8, LT		1				1			2	1	1384.13	1383.13	1378.40	4.73		
0010	IN 10	577+07	16.7	USH 8, RT		1					1		2	1	1385.06	1384.06	1381.86	2.20		
0010	IN 11	578+57	16.8	USH 8, RT			1				1		2	1	1384.82	1383.82	1381.46	2.36		
0010	IN 12	578+67	17.2	USH 8, LT			1			1			2	1	1383.92	1382.92	1377.93	4.99		
0010	MH 13	578+82	24.7	USH 8, LT	1				1			1		1	1385.04	1383.79	1377.59	6.20		
0010	IN 15	580+30	39.1	USH 8, RT		1					1		2	1	1385.00	1384.00	1380.90	3.10		
0010	IN 16	581+29	17.1	USH 8, LT		1				1			2	1	1385.16	1384.16	1380.46	3.70		
0010	IN 19	584+38	17.7	USH 8, LT		1				1			2	1	1385.75	1384.75	1381.53	3.22		
0010	IN 20	584+40	16.4	USH 8, RT		1					1		2	1	1385.86	1384.86	1383.03	1.83		
0010	MH 21	586+75	26.9	USH 8, LT	1			1						1	1389.52	1388.27	1384.10	4.17		
0010	IN 22	589+01	19.1	USH 8, RT		1					1		2	1	1392.61	1391.61	1388.57	3.04		
				TOTAL	2	10	3	1	1	7	6	1	1	26	15					

GUARDRAIL SUMMARY									
614.0370 614.0397 614.0400 614.0950 STEEL PLATE GUARDRAIL ADJUSTING REPLACING BEAM GUARD MOW STRIP STEEL GUARDRAIL ENERGY ABSORBING EMULSIFIED PLATE BEAM POSTS & TERMINAL ASPHALT GUARD BLOCKS									
CATEGORY	STATION	TO	STATION	LOCATION	EACH	SY	LF	EACH	REMARKS
0010	564+75	-	571+77	USH 8, LT	2	30		5	
	681+05	-	686+70	USH 8, RT	2	60		10	
	683+24	-	688+63	USH 8, LT	2	60		5	
	837+56	-	847+04	USH 8, RT	2	60	870	10	
	839+73	-	847+21	USH 8, LT	2	60	675	10	
	960+19	-	964+32	USH 8, RT	2	60	315	5	
	961+06	-	966+20	USH 8, LT	2	60	415		
TOTALS					14	390	2275	45	

WATER				
624.0100 WATER				
CATEGORY	LOCATION	MGAL	REMARKS	
0010	USH 8	20	UNDISTRIBUTED - FOR AGGREGATE COMPACTION	
TOTALS		20		

FINISHING										
		625.0100		627.0200		628.2004		629.0210	630.0120	630.0140
						EROSION MAT			SEEDING	SEEDING
						CLASS I		FERTILIZER	MIXTURE	MIXTURE
						TYPE B		TYPE B	NO. 20	NO. 40
CATEGORY	STATION	TO	STATION	LOCATION	TOPSOIL SY	MULCHING SY	SY	CWT	LB	LB
0010	358+75	-	361+25	RT	370	370		0.23	10.0	
0010	368+75	-	372+50	LT	760		760	0.48	20.4	
0010	375+00	-	379+50	LT	940		940	0.59	25.3	
0010	379+75	-	382+25	RT	730		730	0.46	19.6	
0010	384+75	-	385+75	LT	125	125		0.08	3.4	
0010	398+50	-	404+00	RT	885	885		0.56	23.8	
0010	400+50	-	404+00	LT	580	580		0.37	15.7	
0010	406+75	-	410+00	RT	435	335	100	0.27	11.8	
0010	409+25	-	410+25	LT	90	90		0.06	2.4	
0010	413+25	-	415+50	RT	155	155		0.1	4.1	
0010	420+50	-	425+50	LT	400	400		0.25	10.9	
0010	430+00	-	431+75	LT	250	250		0.16	6.8	
0010	436+00	-	439+75	LT	525	525		0.33	14.2	
0010	443+50	-	448+00	LT	515		515	0.32	13.9	
0010	442+50	-	446+75	RT	580		580	0.37	15.7	
0010	449+25	-	456+25	LT	775		775	0.49	20.9	
0010	457+75	-	458+50	LT	70	70		0.04	1.9	
0010	459+25	-	460+50	LT	175		175	0.11	4.8	
0010	461+75	-	463+75	LT	335	335		0.21	9	
0010	465+25	-	467+50	LT	260	260		0.16	7	
0010	470+75	-	475+75	RT	675	675		0.42	18.2	
0010	477+25	-	479+50	LT	350		350	0.22	9.5	
0010	477+50	-	479+25	RT	240		240	0.15	6.4	
0010	482+00	-	489+50	LT	940	940		0.59	25.4	
0010	485+75	-	490+75	RT	860	860		0.54	23.3	
0010	492+75	-	499+00	RT	1050		1050	0.66	28.3	
0010	496+00	-	496+75	LT	75	75		0.04	1.9	
0010	502+50	-	507+00	LT	730	730		0.46	19.7	
0010	545+25	-	546+50	LT	105	105		0.07	2.8	
0010	549+50	-	551+75	LT	365	365		0.23	9.9	
0010	552+50	-	553+50	LT	105	105		0.06	2.8	
0010	556+50	-	560+50	LT	540	540		0.34	14.6	
0010	563+10	-	593+00	LT & RT	3100	3100		1.95		56
0010	649+50	-	652+00	LT	285	285		0.18	7.6	
0010	667+75	-	668+00	LT	120	120		0.07	3.2	
0010	677+25	-	684+00	LT	625		625	0.39	16.8	
0010	677+25	-	681+60	RT	315		315	0.39	16.6	
0010	685+70	-	688+50	RT	365		365	0.23	9.9	
0010	688+60	-	696+50	LT	660		660	0.42	17.9	
0010	696+25	-	699+00	RT	240		240	0	0	
0010	698+00	-	699+50	LT	190	190		0	0	
0010	704+50	-	710+25	RT	425	425		0	0	
SUBTOTALS:					21315	12895	8420	13.05	476.4	56

FINISHING CONT.										
					625.0100	627.0200	628.2004	629.0210	630.0120	630.0140
							EROSION MAT		SEEDING	SEEDING
					TOPSOIL	MULCHING	CLASS I	FERTILIZER	MIXTURE	MIXTURE
					SY	SY	TYPE B	TYPE B	NO. 20	NO. 40
CATEGORY	STATION	TO	STATION	LOCATION	SY	SY	SY	CWT	LB	LB
0010	711+00	-	719+00	RT	1160	1160		0.73	31.2	
0010	720+75	-	721+75	RT	105	105		0.07	2.8	
0010	731+00	-	733+75	RT	490		490	0.31	13.2	
0010	731+50	-	733+75	LT	310		310	0.19	8.3	
0010	741+50	-	744+00	RT	290	290		0.18	7.8	
0010	748+25	-	749+75	RT	320		320	0.2	8.7	
0010	784+25	-	788+25	RT	745		745	0.47	20.1	
0010	792+25	-	793+50	LT	95	95		0.06	2.5	
0010	795+75	-	798+00	LT	270	270		0.17	7.3	
0010	797+75	-	798+75	RT	105		105	0.07	2.9	
0010	801+25	-	815+00	LT	2385	2385		1.5	64.5	
0010	803+25	-	805+00	RT	370		370	0.23	10	
0010	808+75	-	811+25	RT	340	340		0.21	9.3	
0010	813+50	-	816+00	RT	300	300		0.19	8.3	
0010	817+50	-	819+50	LT	215	215		0.13	5.9	
0010	824+00	-	825+50	LT	170	170		0.1	4.6	
0010	826+50	-	827+25	RT	55		55	0.03	1.6	
0010	829+50	-	830+50	LT	75	75		0.05	2	
0010	836+50	-	838+08	RT	135	40	95	0.09	3.6	
0010	838+50	-	840+20	LT	180	90	90	0.11	4.9	
0010	846+50	-	847+50	RT	130		130	0.08	3.5	
0010	847+00	-	848+00	LT	140		140	0.09	3.8	
0010	848+25	-	852+75	RT	655		655	0.41	17.7	
0010	848+25	-	849+00	LT	105	105		0.06	2.7	
0010	850+25	-	856+00	LT	840	840		0.52	22.6	
0010	853+75	-	855+25	RT	120	120		0.08	3.3	
0010	858+25	-	860+50	LT	510	510		0.32	13.8	
0010	862+00	-	869+00	LT	1055	1055		0.66	28.5	
0010	862+25	-	868+50	RT	1320		1320	0.82	35.7	
0010	876+00	-	881+25	RT	1165		1165	0.73	31.5	
0010	876+75	-	877+50	LT	55	55		0.03	1.6	
0010	878+75	-	891+25	LT	1710	1710		1.08	46.1	
0010	885+50	-	902+50	RT	3585		3585	2.25	96.8	
0010	892+75	-	897+00	LT	770	680	90	0.48	20.7	
0010	899+50	-	903+75	LT	725	725		0.45	19.5	
0010	959+00	-	960+70	RT	140	140		0.09	3.7	
0010	960+00	-	961+60	LT	70	70		0.04	1.9	
0010	964+30	-	965+25	RT	55	55		0.03	1.4	
0010	966+20	-	968+00	LT	435	435		0.27	11.8	
0010	1085+20	-	1087+50	RT	415		415	0.26	11.2	
0010	1107+00	-	1108+50	LT	160	160		0.12	4.4	
0010	RURAL INTERSECTIONS				440	440		0.28	11.9	
0010	UNDISTRIBUTED AT 10%				4400	2550	1850	2.71	120	6
SUBTOTALS:					27115	15185	11930	16.95	733.6	6
TOTALS:					48430	28080	20350	30	1210	62

EROSION CONTROL SUMMARY									
					628.1504	628.1520	628.7504	628.7555	628.7570
					SILT FENCE	SILT FENCE MAINTENANCE	TEMPORARY DITCH CHECKS	CULVERT PIPE CHECKS	ROCK BAGS
CATEGORY	STATION	TO	STATION	LOCATION	LF	LF	LF	EA	EA
0010	358+75	-	361+25	RT	250	250		1	
0010	368+75	-	372+50	LT	350	350			
0010	375+00	-	379+50	LT	450	450			
0010	379+75	-	382+25	RT	250	250			
0010	384+75	-	385+75	LT	100	100			
0010	398+50	-	404+00	RT	300	300		2	
0010	400+50	-	404+00	LT	250	250			
0010	406+75	-	410+00	RT	400	400			20
0010	409+25	-	410+25	LT	125	125		5	
0010	413+25	-	415+50	RT	125	125			
0010	420+50	-	425+50	LT	525	525			
0010	430+00	-	431+75	LT			15		
0010	436+00	-	439+75	LT	175	175			10
0010	443+50	-	448+00	LT			50		
0010	442+50	-	446+75	RT			50		
0010	449+25	-	456+25	LT			75	1	
0010	459+25	-	460+50	LT			15		
0010	461+75	-	463+75	LT	200	200			
0010	465+25	-	467+50	LT			15		
0010	470+75	-	475+75	RT			10		
0010	477+25	-	479+50	LT	225	225			
0010	477+50	-	479+25	RT	175	175			
0010	482+00	-	489+50	LT	200	200	30	1	
0010	485+75	-	490+75	RT			30		
0010	492+75	-	499+00	RT	350	350	15		
0010	502+50	-	507+00	LT				3	
0010	545+25	-	546+50	LT	125	125			
0010	549+50	-	551+75	LT	75	75			10
0010	552+50	-	553+50	LT			15		
0010	556+50	-	560+50	LT			20		
0010	563+10	-	593+00	LT & RT	805	805			
0010	649+50	-	652+00	LT	250	250			
0010	667+75	-	668+00	LT			10		
0010	677+25	-	684+00	LT	350	350		4	20
0010	677+25	-	681+60	RT	450	450			20
0010	685+70	-	688+50	RT	250	250			20
0010	688+60	-	696+50	LT			30		
0010	696+25	-	699+00	RT	100	100	10	2	
0010	698+00	-	699+50	LT	75	75	10		
0010	704+50	-	710+25	RT			15		
SUBTOTALS:					6930	6930	415	19	100

EROSION CONTROL SUMMARY CONT.									
					628.1504	628.1520	628.7504	628.7555	628.7570
					SILT	SILT	TEMPORARY	CULVERT	
					FENCE	FENCE	DITCH	PIPE	ROCK
CATEGORY	STATION	TO	STATION	LOCATION	LF	LF	LF	EA	BAGS
0010	711+00	-	719+00	RT			30		
0010	720+75	-	721+75	RT	100	100			
0010	731+00	-	733+75	RT	275	275			
0010	731+50	-	733+75	LT			15		
0010	741+50	-	744+00	RT	150	150	10		
0010	748+25	-	749+75	RT	200	200			
0010	795+75	-	798+00	LT			15		
0010	801+25	-	815+00	LT	50	50	30		30
0010	803+25	-	805+00	RT	150	150			
0010	808+75	-	811+25	RT			10		
0010	813+50	-	816+00	RT			10		
0010	817+50	-	819+50	LT			15		
0010	836+50	-	838+00	RT	175	175			
0010	838+50	-	840+20	LT	180	180			
0010	846+50	-	847+50	RT	100	100			20
0010	847+00	-	848+00	LT	110	110			20
0010	548+25	-	852+75	RT				3	
0010	848+25	-	849+00	LT				3	
0010	850+25	-	856+00	LT			30		
0010	858+25	-	860+50	LT	250	250			
0010	862+00	-	869+00	LT				3	
0010	862+25	-	868+50	RT	450	450	10		10
0010	876+00	-	881+25	RT	425	425			
0010	878+75	-	891+25	LT			50		
0010	885+50	-	902+50	RT	775	775			
0010	892+75	-	897+00	LT				8	
0010	899+50	-	903+75	LT				5	
0010	966+20	-	968+00	LT	175	175			
0010	UNDISTRIBUTED AT 10%				1055	1055	65	4	20
SUBTOTALS:					4620	4620	290	26	100
TOTALS:					11550	11550	705	45	200

EROSION CONTROL MOBILIZATIONS			
		628.1905	628.1910
		MOBILIZATIONS	MOBILIZATIONS
		EROSION	EMERGENCY
		CONTROL	EROSION
		EA	CONTROL
CATEGORY	LOCATION	EA	EA
0010	PROJECTWIDE	4	3
TOTAL:		4	3

ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS											
SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1	COUNTY LINE RD	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
2	USH 8 E. OF COUNTY LINE RD	D1-60	54" X 15"	5.63	---	---	2	---	2	2	FOREST CO, SEE SIGN DETAIL
3	"	D1-60	72" X 15"	7.50	---	---	2	---	2	2	MARINETTE CO, SEE SIGN DETAIL
4	"	I55-56	---	---	---	---	---	---	1	1	
5	"	D1-1	102" X 15"	10.63	---	---	2	---	2	2	COUNTY LINE RD, SEE SIGN DETAIL
6	"	w1-2L	30" X 30"	---	6.25	---	---	1	---	---	
7	"	w1-2L	30" X 30"	---	6.25	---	---	1	1	1	
8	"	D1-1	96" X 15"	10.00	---	---	2	---	2	2	SANDY LOOP RD, SEE SIGN DETAIL
9	"	D7-68;MOD	---	---	---	---	---	---	1	1	SEE SIGN DETAIL
10	SANDY LOOP RD	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
11	USH 8 E. OF SANDY LOOP RD	D1-1	96" X 15"	10.00	---	---	2	---	2	2	SANDY LOOP RD, SEE SIGN DETAIL
12	"	D1-1	102" X 15"	10.63	---	---	2	---	2	2	CAMP B LOOP RD, SEE SIGN DETAIL
13	"	w1-2R	30" X 30"	---	6.25	---	---	1	---	---	
13A		w1-7	48" X 24"	---	8.00	---	1	---	1	1	
14	CAMP B LOOP RD	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
15	USH 8 E. OF CAMP B LOOP RD	w14-3	48" X 36"	---	6.00	---	---	1	1	1	
16	"	D1-1	102" X 15"	10.63	---	---	2	---	2	2	CAMP B LOOP RD, SEE SIGN DETAIL
17	"	w14-3	48" X 36"	---	6.00	---	---	1	1	1	
18	"	D1-1	72" X 15"	7.50	---	---	2	---	2	2	FRANKS RD, SEE SIGN DETAIL
19	"	S3-1	---	---	---	---	---	---	1	1	
20	"	J1-1	24" X 39"	6.50	---	---	---	1	1	1	JCT CTH H
21	"	R2-1	24" X 30"	5.00	---	---	1	---	---	---	SPEED LIMIT 55
22	"	D7-68L;MOD	54" X 36"	13.50	---	---	---	2	1	2	SEE SIGN DETAIL
23	"	J4-1	24" X 36"	6.00	---	---	---	1	1	1	WEST USH 8
24	"	D1-1	54" X 24"	9.00	---	---	2	---	1	2	FRANKS RD, SEE SIGN DETAIL
25	CTH H	J13-1	24" X 45"	7.50	---	---	---	1	1	1	USH 8, LEFT AND RIGHT
26	"	R1-1	36" X 36"	5.18	---	---	---	1	1	1	
27	"	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
28	USH 8 E. OF CTH H	J13-1	24" X 45"	7.50	---	---	---	1	1	1	CTH H, LEFT
29	"	w1-7	60" X 30"	---	12.50	---	---	2	1	2	
30	"	J13-1	24" X 45"	7.50	---	---	---	1	1	1	CTH H, RIGHT
31	"	J4-1	24" X 36"	6.00	---	---	---	1	1	1	EAST USH 8
32	"	w14-3	48" X 36"	---	6.00	---	---	---	---	---	MOUNT TO BACK OF SIGN 31, PART OF SIGN 31 REMOVAL
33	"	w14-3	48" X 36"	---	6.00	---	---	1	1	1	
34	"	R2-1	24" X 30"	5.00	---	---	1	---	---	---	SPEED LIMIT 55
35	"	D7-68R;MOD	54" X 36"	13.50	---	---	---	2	1	2	SEE SIGN DETAIL
36	"	J1-1	24" X 39"	6.50	---	---	---	1	1	1	JCT CTH H
37	"	w1-2R	30" X 30"	---	6.25	---	---	1	1	1	
38	"	D1-1	84" X 15"	8.75	---	---	2	---	1	2	PARTRIDGE RD, SEE SIGN DETAIL
39	"	I55-56	---	---	---	---	---	---	1	1	
40	"	w1-6	48" X 24"	---	8.00	---	2	---	1	2	
41	OAKRIDGE LN	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
42	PARTRIDGE RD	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
43	USH 8, E. OF PARTRIDGE RD	w1-6	48" X 24"	---	8.00	---	1	---	1	2	
44	"	D1-1	84" X 15"	8.75	---	---	2	---	2	2	PARTRIDGE RD, SEE SIGN DETAIL
45	"	D7-68;MOD	---	---	---	---	---	---	1	1	SEE SIGN DETAIL
46	"	w1-2L	30" X 30"	---	6.25	---	---	1	1	1	
47	"	D1-1	90" X 15"	9.38	---	---	2	---	2	2	TWIN LAKE RD, SEE SIGN DETAIL
48	"	w14-3	48" X 36"	---	6.00	---	---	1	1	1	
49	TWIN LAKE RD	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
50	"	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
51	USH 8, E. OF TWIN LAKE RD	w14-3	48" X 36"	---	6.00	---	---	1	1	1	
52	"	D1-1	90" X 15"	9.38	---	---	2	---	2	2	TWIN LAKE RD, SEE SIGN DETAIL
53	"	w14-3	48" X 36"	---	6.00	---	---	1	1	1	
54	"	D1-2	90" X 30"	18.75	---	---	2	---	2	2	SNOWSHOE DR, INDUSTRIAL DR, SEE SIGN DETAIL
55	"	w14-3	48" X 36"	---	6.00	---	---	1	1	1	
56	INDUSTRIAL DR	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
57	USH 8, E. OF INDUSTRIAL DR	D5-63	60" X 36"	15.00	---	---	---	2	1	2	
57A	"	w1-7	48" X 24"	---	8.00	---	1	---	---	---	
58	SNOWSHOE DR	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
59	"	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
PAGE SUBTOTAL				300.44	123.75	0	46	28	67	75	
PROJECT NO: 1590-16-71		HWY: USH 8		COUNTY: MARINETTE			MISCELLANEOUS QUANTITIES				SHEET:

ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
60	USH 8, E. OF SNOWSHOE DR	W3-5	36" X 36"	---	9.00	---	---	1	1	1	45 MPH
61	"	D1-2	54" X 24"	9.00	---	---	2	---	2	2	SNOWSHOE DR, INDUSTRIAL DR, SEE SIGN DETAIL
62	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	45 MPH
63	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	55 MPH
63A	"	W12-2	36" X 36"	---	9.00	---	---	1	---	---	
63B	"	W16-9P	24" X 12"	---	2.00	---	---	---	---	---	MOUNT BELOW SIGN 63A
64	"	D2-2	90" X 24"	15.00	---	---	---	2	1	2	SEE SIGN DETAIL
65	"	I2-3	60" X 24"	10.00	---	---	1	---	1	2	SEE SIGN DETAIL
66	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	45 MPH
67	"	D1-1	96" X 15"	10.00	---	---	2	---	---	---	CLARK LAKE RD, SEE SIGN DETAIL
68	"	W1-4R	---	0.00	---	---	---	---	---	---	
69	"	W1-4R	30" X 30"	---	6.25	---	---	1	---	---	
70	"	W14-3	48" X 36"	---	6.00	---	---	---	1	1	
71	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
72	"	W3-5	36" X 36"	---	9.00	---	---	1	1	1	30 MPH
73	"	J4-1	24" X 36"	6.00	---	---	---	1	1	1	WEST USH 8
74	CLARK LAKE RD	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
75	USH 8, E. OF CLARK LAKE RD	W12-2	---	0.00	---	---	---	---	1	1	
76	"	D5-64L	60" X 36"	15.00	---	---	---	2	---	---	
77	"	D5-64R	60" X 36"	15.00	---	---	---	2	1	2	
78	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	45 MPH
79	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	30 MPH
80	"	D1-1	96" X 15"	10.00	---	---	2	---	1	2	CLARK LAKE RD, SEE SIGN DETAIL
81	"	J2-1	24" X 57"	9.50	---	---	---	---	---	---	EAST USH 8, AHEAD TILT LEFT
82	"	W12-2	36" X 36"	---	9.00	---	---	1	1	1	
83	"	D1-56SR	66" X 24"	11.00	---	---	2	---	1	2	SEE SIGN DETAIL
84	"	W12-2	36" X 36"	---	9.00	---	---	1	1	1	
85	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	30 MPH
86	A AVE	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
87	USH 8, E. OF A AVE	R2-1	24" X 30"	5.00	---	---	1	---	1	1	30 MPH
88	"	W12-2	---	---	---	---	---	---	1	1	
89	MILL ST	W1-6	48" X 24"	---	8.00	---	2	---	1	2	
90	"	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
91	MAPLE AVE	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
92	USH 8, E. OF MILL ST	J2-1	24" X 57"	9.50	---	---	---	1	1	1	WEST USH 8, AHEAD TILT RIGHT
93	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	30 MPH
94	"	D1-56S;MOD	66" X 24"	11.00	---	---	2	---	1	2	SEE SIGN DETAIL
95	BIRCH AVE	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
96	USH 8, E. OF BIRCH AVE	R2-1	24" X 30"	5.00	---	---	1	---	1	1	
97	"	S3-1	---	---	---	---	---	---	1	1	
97A	"	W12-2	36" X 36"	---	9.00	---	---	1	---	---	
97B	"	W16-9P	24" X 12"	---	2.00	---	---	---	---	---	MOUNT BELOW SIGN 97A
98	BEECH AVE	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
99	USH 8, E. OF BEECH AVE	D5-63	60" X 36"	15.00	---	---	---	2	1	2	
100	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	30 MPH
101	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	50 MPH
102	"	W10-3	36" X 36"	---	9.00	---	---	1	1	1	
103	"	I2-3	60" X 24"	10.00	---	---	1	---	1	2	SEE SIGN DETAIL
104	"	W3-5	36" X 36"	---	9.00	---	---	1	---	---	30 MPH
105	"	W3-5	---	---	---	---	---	---	1	1	
106	10 ACRE DR	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
107	"	W10-1	36" X 36"	---	7.07	---	---	1	1	1	
108	USH 8, E. OF 10 ACRE DR	J4-1	24" X 36"	6.00	---	---	1	---	1	1	EAST USH 8
109	"	W10-3	36" X 36"	---	9.00	---	---	1	1	1	
110	"	D2-2	66" X 24"	11.00	---	---	---	2	1	2	SEE SIGN DETAIL
111	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
112	"	D1-1	54" X 24"	9.00	---	---	2	---	1	2	TOWER RD, SEE SIGN DETAIL
113	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
114	"	S3-1	---	---	---	---	---	---	1	1	
115	TOWERD RD	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
116	USH 8, E. OF TOWER RD	D1-1	54" X 24"	9.00	---	---	2	---	---	---	TOWER RD, SEE SIGN DETAIL
117	"	W2-2	30" X 30"	---	6.25	---	---	1	1	1	
118	"	W16-8P	---	---	---	---	---	---	---	---	TOWERD RD, REMOVAL PART OF SIGN 117
119	"	W13-1	18" X 18"	---	2.25	---	---	---	---	---	45 MPH, MOUNT BELOW SIGN 117, PART OF SIGN 117 REMOVAL

PAGE SUBTOTAL

287.44

138.82

0

38

27

52

63

ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
120	USH 8, E. OF TOWER RD	D7-68	---	---	---	---	---	---	1	2	SEE SIGN DETAIL
121	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
122	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
123	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
124	"	D1-1	72" X 15"	7.50	---	---	2	---	1	2	SHRINE RD, SEE SIGN DETAIL
125	"	S3-1	---	---	---	---	---	---	1	1	
126	"	W14-3	48" X 36"	---	6.00	---	---	1	---	---	PART OF SIGN 125 REMOVAL
127	SHRINE RD	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
128	USH 8, E. OF SHRINE RD	W1-7	48" X 24"	---	8.00	---	1	---	1	1	
129	"	D1-1	72" X 15"	7.50	---	---	2	---	1	2	SHRINE RD, SEE SIGN DETAIL
130	"	W2-2	30" X 30"	---	6.25	---	---	1	1	1	
131	"	J1-2	48" X 39"	13.00	---	---	---	1	1	1	JCT CHT I, JCT RUSTIC RD
132	"	D1-1	84" X 15"	8.75	---	---	2	---	1	2	PARKWAY RD, SEE SIGN DETAIL
133	"	D7-68R	60" X 36"	15.00	---	---	---	2	1	2	SEE SIGN DETAIL
134	"	D1-1	78" X 15"	8.13	---	---	2	---	1	2	SEE SIGN DETAIL
135	"	J4-1	24" X 36"	6.00	---	---	1	---	1	1	WEST USH 8
135A	"	R2-1	24" X 30"	5.00	---	---	1	---	---	---	55 MPH
136	"	J13-2	48" X 45"	15.00	---	---	---	1	1	1	CTH I, RUSTIC RD
137	CTH I	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
138	"	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
139	"	J13-1	24" X 45"	7.50	---	---	---	1	1	1	USH 8 LEFT AND RIGHT
140	USH 8, E. OF CTH I	W1-7	48" X 24"	---	8.00	---	1	---	1	1	
141	"	J13-2	48" X 45"	15.00	---	---	---	1	1	1	CTH I, RUSTIC RD
142	"	J4-1	24" X 36"	6.00	---	---	1	---	1	1	EAST USH 8
143	"	D7-68L	60" X 36"	15.00	---	---	---	2	1	2	SEE SIGN DETAIL
144	"	I55-56	36" X 36"	9.00	---	---	---	1	1	1	GOODMAN-ARMSTRONG EDUCATION ASSOCIATION, SEE PLAN SHEET
144A	"	R2-1	24" X 30"	5.00	---	---	1	---	---	---	55 MPH
145	"	D1-1	78" X 15"	8.13	---	---	2	---	1	2	SEE SIGN DETAIL
146	"	D1-1	84" X 15"	8.75	---	---	2	---	1	2	PARKWAY RD, SEE SIGN DETAIL
147	"	J1-2	48" X 39"	13.00	---	---	---	1	1	1	JCT CHT I, JCT RUSTIC RD
148	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
149	"	D7-68	---	---	---	---	---	---	1	2	SEE SIGN DETAIL
150	"	D1-1	90" X 15"	9.38	---	---	2	---	1	2	FOREST RD 613, SEE SIGN DETAIL
151	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
152	"	W1-2L	30" X 30"	---	6.25	---	---	1	1	1	
153	FOREST RD 613	R1-1	30" X 30"	6.25	---	---	1	---	1	1	
154	USH 8, E. OF FOREST RD 613	D1-1	---	---	---	---	---	---	1	2	
155	"	D1-1	96" X 15"	10.00	---	---	2	---	---	---	FOREST RD 607, SEE SIGN DETAIL
156	"	D1-1	---	---	---	---	---	---	1	2	
157	"	D1-1	90" X 15"	9.38	---	---	2	---	---	---	FOREST RD 613, SEE SIGN DETAIL
158	FOREST RD 607	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
159	USH 8, E. OF FOREST RD 607	D1-1	96" X 15"	10.00	---	---	2	---	1	2	PIKE RIVER DR, SEE SIGN DETAIL
160	"	W1-6	48" X 24"	---	8.00	---	1	---	1	1	
161	"	D1-1	---	---	---	---	---	---	1	2	
162	"	D1-1	96" X 15"	10.00	---	---	2	---	---	---	FOREST RD 607, SEE SIGN DETAIL
163	PINE RIVER DR	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
164	USH 8, E. OF PINE RIVER DR	W1-6	48" X 24"	---	8.00	---	1	---	1	1	
165	"	D1-1	96" X 15"	10.00	---	---	2	---	1	2	PIKE RIVER DR, SEE SIGN DETAIL
166	"	D1-1	84" X 15"	8.75	---	---	2	---	1	2	JACKPINE DR, SEE SIGN DETAIL
167	"	W1-2R	30" X 30"	---	6.25	---	---	1	1	1	
168	"	J4-1	24" X 36"	---	---	---	---	---	---	---	
169	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	MOUNT TO BACK OF SIGN 168, PART OF SIGN 168 REMOVAL
170	"	I55-56	36" X 36"	9.00	---	---	---	1	1	1	GOODMAN-ARMSTRONG EDUCATION ASSOCIATION, SEE PLAN SHEET
171	JACKPINE DR	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
172	USH 8, E. OF JACKPINE DR	D1-1	84" X 15"	8.75	---	---	2	---	1	2	JACKPINE DR, SEE SIGN DETAIL
173	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
174	"	W7-1	30" X 30"	---	6.25	---	---	1	1	1	
175	"	R7-4L	18" X 24"	3.00	---	---	1	---	1	1	
176	"	R7-4D	18" X 24"	3.00	---	---	1	---	1	1	
177	"	R7-4R	18" X 24"	3.00	---	---	1	---	1	1	
178	"	R7-4D	18" X 24"	3.00	---	---	1	---	1	1	
179	"	R7-4D	18" X 24"	3.00	---	---	1	---	1	1	

PAGE SUBTOTAL

313.11

105.00

0

48

23

55

73

PROJECT NO: 1590-16-71

HWY: USH 8

COUNTY: MARINETTE

MISCELLANEOUS QUANTITIES

SHEET:

E

FILE NAME : _____

PLOT DATE : _____

PLOT BY : _____

PLOT NAME : _____

PLOT SCALE : 1:1

ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS											
SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
180	USH 8, E. OF JACKPINE DR	R7-4D	18" X 24"	---	---	---	---	---	1	1	
181	"	R7-4D	18" X 24"	---	---	---	---	---	1	1	
182	"	R7-4D	18" X 24"	---	---	---	---	---	1	1	
183	"	R7-4D	18" X 24"	3.00	---	---	1	---	1	1	
184	"	R7-4D	18" X 24"	3.00	---	---	1	---	1	1	
185	"	R7-4R	18" X 24"	3.00	---	---	1	---	1	1	
186	"	R7-4L	18" X 24"	3.00	---	---	1	---	1	1	
187	"	W1-2R	30" X 30"	---	6.25	---	---	1	1	1	
188	"	W1-6	48" X 24"	---	8.00	---	1	---	1	1	
189	"	W1-6	48" X 24"	---	8.00	---	1	---	1	1	
190	"	S3-1	---	---	---	---	---	---	1	1	
191	"	W1-2L	30" X 30"	---	6.25	---	---	1	1	1	
192	"	W1-2L	30" X 30"	---	6.25	---	---	1	1	1	
193	"	W1-6	48" X 24"	---	8.00	---	1	---	1	1	
193A	VACANT	---	---	---	---	---	---	---	---	---	
193B	VACANT	---	---	---	---	---	---	---	---	---	
193C	USH 8, E. OF JACKPINE DR	W1-8	---	---	---	---	---	---	1	1	
193D	"	W1-8	---	---	---	---	---	---	1	1	
193E	"	W1-8	---	---	---	---	---	---	1	1	
193F	"	W1-8	---	---	---	---	---	---	1	1	
193G	"	W1-8	---	---	---	---	---	---	1	1	
193H	"	W1-8	---	---	---	---	---	---	1	1	
194	"	D1-1	96" X 15"	10.00	---	---	2	---	1	2	PIKE RIVER DR, SEE SIGN DETAIL
195	"	W1-6	48" X 24"	---	8.00	---	1	---	---	---	
196	PIKE RIVER DR	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
197	USH 8, E. OF PIKE RIVER DR	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
198	"	W1-2R	30" X 30"	---	6.25	---	---	1	1	1	
199	"	D1-1	96" X 15"	10.00	---	---	2	---	1	2	PIKE RIVER DR, SEE SIGN DETAIL
200	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
201	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
202	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
203	"	W5-52L	12" X 36"		3.00	---	1	---	1	1	
204	"	I3-1	54" X 15"	5.63	---	---	1	---	1	1	KC CREEK
205	"	W5-52R	12" X 36"	---	3.00	---	1	---	1	1	
206	"	W5-52R	12" X 36"	---	3.00	---	1	---	1	1	
207	"	I3-1	54" X 15"	5.63	---	---	1	---	1	1	KC CREEK
208	"	W5-52L	12" X 36"		3.00	---	1	---	1	1	
209	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
210	"	J1-1	24" X 39"	6.50	---	---	---	1	1	1	JCT CTH U
211	"	W10-3	36" X 36"	---	9.00	---	---	1	1	1	
212	"	J4-1	24" X 36"	6.00	---	---	---	1	1	1	WEST USH 8
212A	"	R2-1	24" X 30"	5.00	---	---	1	---	---	---	55 MPH
213	"	J13-1	24" X 45"	7.50	---	---	---	1	1	1	CTH U LEFT
214	CTH U	R1-1	36" X 36"	7.46	---	---	---	1	1	1	
215	USH 8, E. OF CTH U	W1-7	48" X 24"	---	8.00	---	1	---	1	1	
216	"	J13-1	24" X 45"	7.50	---	---	---	1	1	1	CTH U RIGHT
217	"	J4-1	24" X 36"	6.00	---	---	---	1	---	---	EAST USH 8
217A	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	55 MPH, REMOVE J4-1
218	"	W10-3	36" X 36"	---	9.00	---	---	1	1	1	
219	"	J1-1	24" X 39"	6.50	---	---	---	1	1	1	JCT CTH U
220	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
221	"	D1-2	78" X 30"	16.25	---	---	2	---	1	2	GASSETT RD, AIRPORT RD, SEE SIGN DETAIL
222	"	W3-5	36" X 36"	---	9.00	---	---	1	1	1	40 MPH
223	"	D2-2	90" X 24"	15.00	---	---	---	2	1	2	SEE SIGN DETAIL
224	GASSETT RD	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
225	AIRPORT RD	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
226	USH 8, E. OF AIRPORT RD	I2-3	54" X 24"	9.00	---	---	2	---	1	2	DUNBAR UNINCORPORATED, SEE SIGN DETAIL
227	"	J4-1	24" X 36"	6.00	---	---	---	1	1	1	WEST USH 8
228	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	40 MPH
229	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	55 MPH
230	"	D1-2	78" X 30"	16.25	---	---	2	---	1	2	GASSETT RD, AIRPORT RD, SEE SIGN DETAIL
231	3RD ST	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
PAGE SUBTOTAL				193.93	140.00	0	33	23	57	63	

ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
232	3RD ST	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
233	USH 8, E. OF 3RD ST	R2-1	24" X 30"	5.00	---	---	1	---	1	1	40 MPH
234	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	40 MPH
235	2ND ST	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
236	USH 8, E. OF 2ND ST	R2-1	24" X 30"	5.00	---	---	1	---	1	1	40 MPH
237	1ST ST	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
238	USH 8, E. OF 1ST ST	J4-1	---	---	---	---	---	---	1	1	
239	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	40 MPH
240	"	R2-1	24" X 30"	5.00	---	---	1	---	1	1	55 MPH
241	"	I2-3	54" X 24"	9.00	---	---	2	---	1	2	DUNBAR UNINCORPORATED, SEE SIGN DETAIL
242	"	J1-1	24" X 39"	6.50	---	---	---	1	1	1	JCT CTH O
243	"	W14-3	48" X 36"	---	6.00	---	---	---	---	---	MOUNT TO BACK OF SIGN 242, PART OF SIGN 242 REMOVAL
244	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
245	"	D1-1	90" X 15"	9.38	---	---	2	---	1	2	OLD CTH A RD, SEE SIGN DETAIL
246	"	W3-5	36" X 36"	---	9.00	---	---	1	1	1	40 MPH
246A	"	R2-1	24" X 30"	5.00	---	---	1	---	---	---	55 MPH
247	"	W54-51	---	---	---	---	---	---	1	1	
248	"	J13-1	24" X 45"	7.50	---	---	---	1	1	1	CTH O LEFT
248A	"	J4-1	24" X 36"	6.00	---	---	---	1	---	---	WEST USH 8
249	CTH O	R1-1	36" X 36"	7.46	---	---	---	1	1	1	
250	OLD CTY A RD	R1-1	36" X 36"	7.46	---	---	---	1	1	1	
251	CTH O	R1-1	36" X 36"	7.46	---	---	---	1	1	1	
252	USH 8, E. OF CTH O	J13-1	24" X 45"	7.50	---	---	---	1	1	1	CTH O RIGHT
253	"	J4-1	24" X 36"	6.00	---	---	---	1	---	---	EAST USH 8
254	"	R2-1	24" X 30"	5.00	---	---	1	---	---	---	55 MPH
255	"	W54-51	---	---	---	---	---	---	1	1	

PAGE SUBTOTAL	124.80	21.00	0	14	10	21	23
PROJECT TOTAL	1219.72	528.57	0.00	179	111	252	297

TRAFFIC CONTROL DRUMS

CATEGORY	LOCATION	DRUMS	PROJECT DURATION	643.0300 DAYS	REMARKS
0010	GOODMAN	65	50	3250	SHOULDER CLOSURE
0010	GOODMAN	20	50	1000	SIDEWALK CLOSURE
TOTAL				4250	

TRAFFIC CONTROL BARRICADES TYPE II

CATEGORY	LOCATION	BARRICADES	PROJECT DURATION	643.0410 DAYS	REMARKS
0010	GOODMAN SIDEWALKS	7	25	175	PEDESTRIAN ROUTING GOODMAN
TOTAL				175	

TRAFFIC CONTROL BARRICADES TYPE III

CATEGORY	LOCATION	BARRICADES	PROJECT DURATION	643.0420 DAYS	REMARKS
0010	GOODMAN TOWN ROADS	3	25	75	SIDEWALK CLOSURE
TOTAL				75	

TRAFFIC CONTROL WARNING LIGHTS TYPE A

CATEGORY	LOCATION	TYPE A LIGHTS	PROJECT DURATION	643.0705 DAYS	REMARKS
0010	GOODMAN	60	50	3000	SHOULDER CLOSURE
0010	GOODMAN TOWN ROADS	12	25	300	ON BARRICADES
TOTAL				3300	

TRAFFIC CONTROL WARNING LIGHTS TYPE C

CATEGORY	LOCATION	TYPE A LIGHTS	PROJECT DURATION	643.0715 DAYS	REMARKS
0010	GOODMAN	5	50	250	SHOULDER CLOSURE
TOTAL				250	

TRAFFIC CONTROL SIGNS PCMS

643.1050				
CATEGORY	LOCATION	SIGNS PCMS	DAY	REMARKS
0010	USH 8, WEST PROJECT LIMITS	1	7	NOTIFICATION FOR BEGINNING OF PROJECT
0010	USH 8, EAST PROJECT LIMITS	1	7	NOTIFICATION FOR BEGINNING OF PROJECT
TOTAL			14	

TRAFFIC CONTROL SIGNS

CATEGORY	LOCATION	SIGNS	PROJECT DURATION	643.0900 DAYS	REMARKS
0010	EAST PROJECT END	5	140	700	ADVANCED WARNING SIGNS
0010	WEST PROJECT END	5	140	700	ADVANCED WARNING SIGNS
0010	GOODMAN	2	50	100	SHLD CLOSURE
0010	COUNTY LINE ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	SANDY LOOP ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	CAMP B LOOP ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	FRANKS ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	CTH H	1	140	140	ADVANCED WARNING SIGNS
0010	ORCHARD ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	PARTRIDGE ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	TWIN LAKES ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	INDUSTRIAL DRIVE	1	140	140	ADVANCED WARNING SIGNS
0010	SNOWSHOE DRIVE	1	140	140	ADVANCED WARNING SIGNS
0010	CLARK LAKE ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	A AVE	1	140	140	ADVANCED WARNING SIGNS
0010	MILL STREET	1	140	140	ADVANCED WARNING SIGNS
0010	MAPLE AVE	1	140	140	ADVANCED WARNING SIGNS
0010	BIRCH AVE	1	140	140	ADVANCED WARNING SIGNS
0010	BEECH AVE	1	140	140	ADVANCED WARNING SIGNS
0010	TEN ACRE ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	TOWER ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	SHRINE ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	PARKWAY ROAD (CTH I)	1	140	140	ADVANCED WARNING SIGNS
0010	FOREST ROAD 613	1	140	140	ADVANCED WARNING SIGNS
0010	FOREST ROAD 607	1	140	140	ADVANCED WARNING SIGNS
0010	PINE RIVER ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	JACK PINE ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	PIKE RIVER DRIVE	1	140	140	ADVANCED WARNING SIGNS
0010	CTH U	1	140	140	ADVANCED WARNING SIGNS
0010	GASSETT ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	AIRPORT ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	3RD STREET (NORTH)	1	140	140	ADVANCED WARNING SIGNS
0010	3RD STREET (SOUTH)	1	140	140	ADVANCED WARNING SIGNS
0010	2ND STREET	1	140	140	ADVANCED WARNING SIGNS
0010	1ST STREET	1	140	140	ADVANCED WARNING SIGNS
0010	CTH O	1	140	140	ADVANCED WARNING SIGNS
0010	OLD COUNTY A ROAD	1	140	140	ADVANCED WARNING SIGNS
0010	GOODMAN TOWN ROADS	12	25	300	PEDESTRIAN ROUTING AND SIDEWALK CLOSURE
TOTAL				6560	

PAVEMENT MARKING EPOXY 4-INCH

646.0106 YELLOW						
CATEGORY	STATION	TO	STATION	LOCATION	LF	REMARKS
0010	0352+90	-	0387+00	USH 8	6820	Double centerline
0010	0387+00	-	0398+00	USH 8	1375	EB skips / WB solid centerline
0010	0398+00	-	0414+75	USH 8	419	Centerline skips
0010	0414+75	-	0425+00	USH 8	1281	WB skips / EB solid centerline
0010	0425+00	-	0426+00	USH 8	25	Centerline skips
0010	0426+00	-	0435+75	USH 8	1219	EB skips / WB solid centerline
0010	0435+75	-	0436+75	USH 8	25	Centerline skips
0010	0436+75	-	0446+75	USH 8	1250	WB skips / EB solid centerline
0010	0446+75	-	0486+80	USH 8	8010	Double centerline
0010	0486+80	-	0497+75	USH 8	1369	EB skips / WB solid centerline
0010	0497+75	-	0505+50	USH 8	194	Centerline skips
0010	0505+50	-	0514+40	USH 8	1113	WB skips / EB solid centerline
0010	0514+40	-	0516+70	USH 8	58	Centerline skips
0010	0516+70	-	0523+86	USH 8	895	EB skips / WB solid centerline
0010	0523+86	-	0525+44	USH 8	316	Double centerline
0010	0525+44	-	0535+50	USH 8	1258	WB skips / EB solid centerline
0010	0535+50	-	0547+80	USH 8	2460	Double centerline
0010	0547+80	-	0557+10	USH 8	1163	EB skips / WB solid centerline
0010	0557+10	-	0564+31	USH 8	901	WB skips / EB solid centerline
0010	0564+31	-	0609+20	USH 8	8978	Double centerline
0010	0609+20	-	0620+41	USH 8	1401	EB skips / WB solid centerline
0010	0620+41	-	0624+05	USH 8	91	Double centerline
0010	0624+05	-	0635+60	USH 8	1444	WB skips / EB solid centerline
0010	0635+60	-	0642+20	USH 8	1320	Double centerline (Station Equation)
0010	0643+40	-	0644+45	USH 8	210	Double centerline (Station Equation)
0010	0644+45	-	0651+78	USH 8	916	EB skips / WB solid centerline
0010	0651+78	-	0655+17	USH 8	678	Double centerline
0010	0655+17	-	0658+08	USH 8	364	WB skips / EB solid centerline
0010	0658+08	-	0663+59	USH 8	138	Centerline skips
0010	0663+59	-	0665+62	USH 8	254	EB skips / WB solid centerline
0010	0665+62	-	0668+86	USH 8	648	Double centerline
0010	0668+86	-	0676+50	USH 8	955	WB skips / EB solid centerline
0010	0676+50	-	0725+00	USH 8	9700	Double centerline
0010	0725+00	-	0736+36	USH 8	1420	EB skips / WB solid centerline
0010	0736+36	-	0767+75	USH 8	785	Centerline skips
0010	0767+75	-	0778+90	USH 8	1394	WB skips / EB solid centerline
0010	0778+90	-	0785+55	USH 8	1330	Double centerline
0010	0785+55	-	0795+78	USH 8	1279	EB skips / WB solid centerline
0010	0795+78	-	0820+18	USH 8	610	Centerline skips
0010	0820+18	-	0833+03	USH 8	1606	WB skips / EB solid centerline
0010	0833+03	-	0877+07	USH 8	8808	Double centerline
0010	0877+07	-	0887+48	USH 8	1301	EB skips / WB solid centerline
0010	0887+48	-	0902+20	USH 8	368	Centerline skips
0010	0902+20	-	0913+00	USH 8	1350	WB skips / EB solid centerline
0010	0913+00	-	0916+57	USH 8	714	Double centerline
0010	0916+57	-	0927+63	USH 8	1383	EB skips / WB solid centerline
0010	0927+63	-	0961+47	USH 8	846	Centerline skips
0010	0961+47	-	0972+68	USH 8	1401	WB skips / EB solid centerline
0010	0972+68	-	0977+53	USH 8	970	Double centerline
0010	0977+53	-	0988+43	USH 8	1363	EB skips / WB solid centerline
0010	0988+43	-	1038+20	USH 8	1244	Centerline skips
0010	1038+20	-	1049+61	USH 8	1426	WB skips / EB solid centerline
0010	1049+61	-	1085+15	USH 8	7108	Double centerline
0010	1085+15	-	1095+65	USH 8	1313	EB skips / WB solid centerline
0010	1095+65	-	1097+32	USH 8	42	Centerline skips
0010	1097+32	-	1108+03	USH 8	1339	WB skips / EB solid centerline
0010	1108+03	-	1110+00	USH 8	246	EB skips / WB solid centerline
0010	-	-	-	CTH H	50	Double centerline of sideroad
0010	-	-	-	CTH U	50	Double centerline of sideroad
0010	-	-	-	CTH O	200	Double centerline of sideroad
TOTAL					97194	

PAVEMENT MARKING SAME DAY EPOXY 4-INCH

					646.0406 YELLOW	
CATEGORY	STATION	TO	STATION	LOCATION	LF	REMARKS
0010	0352+90	-	0387+00	USH 8	6820	Double centerline
0010	0387+00	-	0398+00	USH 8	1375	EB skips / WB solid centerline
0010	0398+00	-	0414+75	USH 8	419	Centerline skips
0010	0414+75	-	0425+00	USH 8	1281	WB skips / EB solid centerline
0010	0425+00	-	0426+00	USH 8	25	Centerline skips
0010	0426+00	-	0435+75	USH 8	1219	EB skips / WB solid centerline
0010	0435+75	-	0436+75	USH 8	25	Centerline skips
0010	0436+75	-	0446+75	USH 8	1250	WB skips / EB solid centerline
0010	0446+75	-	0486+80	USH 8	8010	Double centerline
0010	0486+80	-	0497+75	USH 8	1369	EB skips / WB solid centerline
0010	0497+75	-	0505+50	USH 8	194	Centerline skips
0010	0505+50	-	0514+40	USH 8	1113	WB skips / EB solid centerline
0010	0514+40	-	0516+70	USH 8	58	Centerline skips
0010	0516+70	-	0523+86	USH 8	895	EB skips / WB solid centerline
0010	0523+86	-	0525+44	USH 8	316	Double centerline
0010	0525+44	-	0535+50	USH 8	1258	WB skips / EB solid centerline
0010	0535+50	-	0547+80	USH 8	2460	Double centerline
0010	0547+80	-	0557+10	USH 8	1163	EB skips / WB solid centerline
0010	0557+10	-	0564+31	USH 8	901	WB skips / EB solid centerline
0010	0564+31	-	0609+20	USH 8	8978	Double centerline
0010	0609+20	-	0620+41	USH 8	1401	EB skips / WB solid centerline
0010	0620+41	-	0624+05	USH 8	91	Double centerline
0010	0624+05	-	0635+60	USH 8	1444	WB skips / EB solid centerline
0010	0635+60	-	0642+20	USH 8	1320	Double centerline (Station Equation)
0010	0643+40	-	0644+45	USH 8	210	Double centerline (Station Equation)
0010	0644+45	-	0651+78	USH 8	916	EB skips / WB solid centerline
0010	0651+78	-	0655+17	USH 8	678	Double centerline
0010	0655+17	-	0658+08	USH 8	364	WB skips / EB solid centerline
0010	0658+08	-	0663+59	USH 8	138	Centerline skips
0010	0663+59	-	0665+62	USH 8	254	EB skips / WB solid centerline
0010	0665+62	-	0668+86	USH 8	648	Double centerline
0010	0668+86	-	0676+50	USH 8	955	WB skips / EB solid centerline
0010	0676+50	-	0725+00	USH 8	9700	Double centerline
0010	0725+00	-	0736+36	USH 8	1420	EB skips / WB solid centerline
0010	0736+36	-	0767+75	USH 8	785	Centerline skips
0010	0767+75	-	0778+90	USH 8	1394	WB skips / EB solid centerline
0010	0778+90	-	0785+55	USH 8	1330	Double centerline
0010	0785+55	-	0795+78	USH 8	1279	EB skips / WB solid centerline
0010	0795+78	-	0820+18	USH 8	610	Centerline skips
0010	0820+18	-	0833+03	USH 8	1606	WB skips / EB solid centerline
0010	0833+03	-	0877+07	USH 8	8808	Double centerline
0010	0877+07	-	0887+48	USH 8	1301	EB skips / WB solid centerline
0010	0887+48	-	0902+20	USH 8	368	Centerline skips
0010	0902+20	-	0913+00	USH 8	1350	WB skips / EB solid centerline
0010	0913+00	-	0916+57	USH 8	714	Double centerline
0010	0916+57	-	0927+63	USH 8	1383	EB skips / WB solid centerline
0010	0927+63	-	0961+47	USH 8	846	Centerline skips
0010	0961+47	-	0972+68	USH 8	1401	WB skips / EB solid centerline
0010	0972+68	-	0977+53	USH 8	970	Double centerline
0010	0977+53	-	0988+43	USH 8	1363	EB skips / WB solid centerline
0010	0988+43	-	1038+20	USH 8	1244	Centerline skips
0010	1038+20	-	1049+61	USH 8	1426	WB skips / EB solid centerline
0010	1049+61	-	1085+15	USH 8	7108	Double centerline
0010	1085+15	-	1095+65	USH 8	1313	EB skips / WB solid centerline
0010	1095+65	-	1097+32	USH 8	42	Centerline skips
0010	1097+32	-	1108+03	USH 8	1339	WB skips / EB solid centerline
0010	1108+03	-	1110+00	USH 8	246	EB skips / WB solid centerline
TOTAL					96894	

PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH

646.2304.S					
WHITE					
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	0353+29	-	0571+41	USH 8	21812
					Left edge line
0010	-	-	-	County Line Road	-120
0010	-	-	-	Sandy Loop Road	-120
0010	-	-	-	CTH H	-150
0010	-	-	-	Orchard Drive	-120
0010	-	-	-	Partridge Road	-120
0010	-	-	-	Snowshoe Drive	-140
0010	-	-	-	Clark Lake Road	-120
0010	0353+29	-	0563+18	USH 8	20989
					Right edge line
0010	-	-	-	Camp B Loop Road	-100
0010	-	-	-	Franks Road	-100
0010	-	-	-	Twin Lake Road	-120
0010	-	-	-	Industrial Drive	-110
0010	0590+71	-	1073+00	USH 8	48229
					Left edge line
0010	-	-	-	Ten Acre Road	-140
0010	-	-	-	Shrine Road	-120
0010	-	-	-	Forest Road 613	-115
0010	-	-	-	Jack Pine Drive	-120
0010	-	-	-	PE 848+00 LT	-60
0010	-	-	-	PE 891+50 LT	-80
0010	-	-	-	CTH U	-125
0010	-	-	-	Gasset Road	-100
0010	-	-	-	3rd Street	-85
0010	0593+03	-	1067+15	USH 8	47412
					Right edge line
0010	-	-	-	Tower Road	-130
0010	-	-	-	Parkway Road (CTH I)	-130
0010	-	-	-	Forest Road 607	-100
0010	-	-	-	Pike River Drive	-100
0010	-	-	-	PE 848+00 RT	-80
0010	-	-	-	Pike River Drive	-100
0010	-	-	-	Airport Road	-100
0010	1082+80	-	1110+00	USH 8	2720
					Left edge line
0010	-	-	-	CTH O	-120
0010	1084+90		1110+00	USH 8	2510
					Right edge line
0010	-	-	-	Old County A Road	-125
				TOTAL	140422

PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 8-INCH

						646.2308.S	
CATEGORY	STATION	TO	STATION	LOCATION	LF	WHITE	REMARKS
0010	0433+30	-	0434+30	USH 141 (Left)	100		CTH H turn lane
0010	1001+90	-	1002+65	USH 141 (Left)	75		CTH U turn lane
				TOTAL	175		

TEMPORARY PAVEMENT MARKING PAINT 4-INCH

					649.0402 YELLOW	
CATEGORY	STATION	TO	STATION	LOCATION	LF	REMARKS
0010	0352+90	-	0387+00	USH 8	6820	Double centerline
0010	0387+00	-	0398+00	USH 8	1188	EB skips / WB solid centerline
0010	0398+00	-	0414+75	USH 8	134	Centerline skips
0010	0414+75	-	0425+00	USH 8	1107	WB skips / EB solid centerline
0010	0425+00	-	0426+00	USH 8	8	Centerline skips
0010	0426+00	-	0435+75	USH 8	1053	EB skips / WB solid centerline
0010	0435+75	-	0436+75	USH 8	8	Centerline skips
0010	0436+75	-	0446+75	USH 8	1080	WB skips / EB solid centerline
0010	0446+75	-	0486+80	USH 8	8010	Double centerline
0010	0486+80	-	0497+75	USH 8	1183	EB skips / WB solid centerline
0010	0497+75	-	0505+50	USH 8	62	Centerline skips
0010	0505+50	-	0514+40	USH 8	961	WB skips / EB solid centerline
0010	0514+40	-	0516+70	USH 8	18	Centerline skips
0010	0516+70	-	0523+86	USH 8	773	EB skips / WB solid centerline
0010	0523+86	-	0525+44	USH 8	316	Double centerline
0010	0525+44	-	0535+50	USH 8	1086	WB skips / EB solid centerline
0010	0535+50	-	0547+80	USH 8	2460	Double centerline
0010	0547+80	-	0557+10	USH 8	1004	EB skips / WB solid centerline
0010	0557+10	-	0564+31	USH 8	779	WB skips / EB solid centerline
0010	0564+31	-	0609+20	USH 8	8978	Double centerline
0010	0609+20	-	0620+41	USH 8	1211	EB skips / WB solid centerline
0010	0620+41	-	0624+05	USH 8	29	Double centerline
0010	0624+05	-	0635+60	USH 8	1247	WB skips / EB solid centerline
0010	0635+60	-	0642+20	USH 8	1320	Double centerline (Station Equation)
0010	0643+40	-	0644+45	USH 8	210	Double centerline (Station Equation)
0010	0644+45	-	0651+78	USH 8	792	EB skips / WB solid centerline
0010	0651+78	-	0655+17	USH 8	678	Double centerline
0010	0655+17	-	0658+08	USH 8	314	WB skips / EB solid centerline
0010	0658+08	-	0663+59	USH 8	44	Centerline skips
0010	0663+59	-	0665+62	USH 8	219	EB skips / WB solid centerline
0010	0665+62	-	0668+86	USH 8	648	Double centerline
0010	0668+86	-	0676+50	USH 8	825	WB skips / EB solid centerline
0010	0676+50	-	0725+00	USH 8	9700	Double centerline
0010	0725+00	-	0736+36	USH 8	1227	EB skips / WB solid centerline
0010	0736+36	-	0767+75	USH 8	251	Centerline skips
0010	0767+75	-	0778+90	USH 8	1204	WB skips / EB solid centerline
0010	0778+90	-	0785+55	USH 8	1330	Double centerline
0010	0785+55	-	0795+78	USH 8	1105	EB skips / WB solid centerline
0010	0795+78	-	0820+18	USH 8	195	Centerline skips
0010	0820+18	-	0833+03	USH 8	1388	WB skips / EB solid centerline
0010	0833+03	-	0877+07	USH 8	8808	Double centerline
0010	0877+07	-	0887+48	USH 8	1124	EB skips / WB solid centerline
0010	0887+48	-	0902+20	USH 8	118	Centerline skips
0010	0902+20	-	0913+00	USH 8	1166	WB skips / EB solid centerline
0010	0913+00	-	0916+57	USH 8	714	Double centerline
0010	0916+57	-	0927+63	USH 8	1194	EB skips / WB solid centerline
0010	0927+63	-	0961+47	USH 8	271	Centerline skips
0010	0961+47	-	0972+68	USH 8	1211	WB skips / EB solid centerline
0010	0972+68	-	0977+53	USH 8	970	Double centerline
0010	0977+53	-	0988+43	USH 8	1177	EB skips / WB solid centerline
0010	0988+43	-	1038+20	USH 8	398	Centerline skips
0010	1038+20	-	1049+61	USH 8	1232	WB skips / EB solid centerline
0010	1049+61	-	1085+15	USH 8	7108	Double centerline
0010	1085+15	-	1095+65	USH 8	1134	EB skips / WB solid centerline
0010	1095+65	-	1097+32	USH 8	13	Centerline skips
0010	1097+32	-	1108+03	USH 8	1157	WB skips / EB solid centerline
0010	1108+03	-	1110+00	USH 8	213	EB skips / WB solid centerline
Subtotal (one application):					88973	
TOTAL (2 applications- milled surface and binder layer):					177946	

CONSTRUCTION STAKING SUMMARY						
		650.5500	650.8000	650.9910	650.9920	
		CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	
		STAKING	STAKING	STAKING	STAKING	
		CURB GUTTER AND	RESURFACING	SUPPLEMENTAL	SLOPE	
		CURB AND GUTTER	REFERENCE	CONTROL	STAKES	
CATEGORY	LOCATION	LF	LF	LS	LF	REMARKS
0010	STA. 563+18 - STA. 593+03	4880			5970	
0010	PROJECTWIDE		75314	1	27760	
TOTALS:		4880	75314	1	33730	
NOTE: ADDITIONAL CONSTRUCTION STAKING ITEMS SHOWN ELSEWHERE						

SAWING SUMMARY				
		690.0150	690.0250	
		ASPHALT	CONCRETE	
CATEGORY	LOCATION	LF	LF	REMARKS
0010	ROADWAY BUTT JOINT LOCATIONS	845		
0010	CURB & GUTTER REMOVALS	6815	35	
0010	STORM SEWER REMOVALS	1100		
0010	GOODMAN DRIVEWAYS AND WALKWAYS	295	60	
0010	RURAL DRIVEWAYS	1020		
TOTALS:		10075	95	

PROTECTIVE THERMOPLASTIC COATING AT SNOWMOBILE CROSSING			
		SPV.0180.01	
CATEGORY	LOCATION	SY	REMARKS
0010	STA. 1057+45	60	
TOTALS:		60	

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

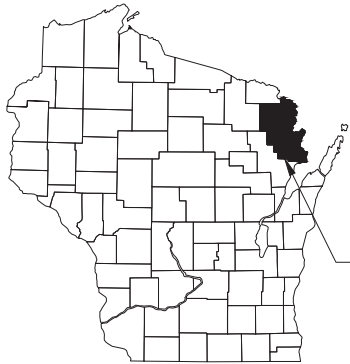
1590-16-21

WCL - USH 141

WCL - CTH O

USH 8

MARINETTE COUNTY



MARINETTE COUNTY

THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1590-16-21

NOTES:

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

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPE), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

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

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

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A HIGHWAY EASEMENT (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

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

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
PLAT OF GOODMAN, R/W PROJECT 1590-02-21, AND EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENT.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1590-16-21 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

CONVENTIONAL SYMBOLS

SECTION LINE	----	SECTION CORNER		R/W MONUMENT	●
QUARTER LINE	----			NON-MONUMENTED R/W POINT	○
SIXTEENTH LINE	----	NOTATION FOR COMBUSTABLE FLUIDS		FOUND IRON PIN	IP
NEW REFERENCE LINE	----			VALVE (GAS, WATER, ETC.)	⊙ (TYPE)
NEW R/W LINE	----	NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES		SIGN	
EXISTING R/W LINE	----			OFF-PREMISE SIGN	
PROPERTY LINE	----				
LOT, TIE & OTHER MINOR LINES	----				
CORPORATE LIMITS	////				
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)	----	ELECTRIC POLE		COMPENSABLE	
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)	----	TELEPHONE POLE		NON-COMPENSABLE	
TEMPORARY LIMITED EASEMENT AREA	----	PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)			
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)	----				
TRANSMISSION STRUCTURES	----	ACCESS CONTROLLED BY ACQUISITION			
BUILDING	----	NO ACCESS (BY STATUTORY AUTHORITY)			
NATIONAL GEODETIC SURVEY MONUMENT	⊙	ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)			
SIXTEENTH CORNER MONUMENT	⊙				

CONVENTIONAL ABBREVIATIONS

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

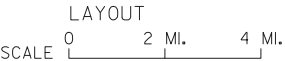
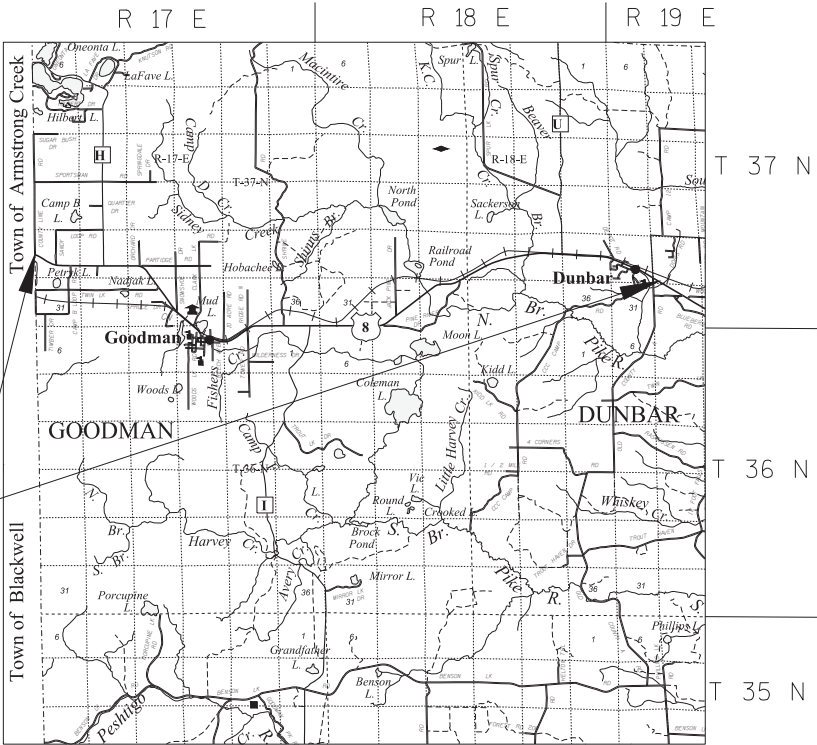
CURVE DATA

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

CONVENTIONAL UTILITY SYMBOLS

WATER	----
GAS	----
TELEPHONE	----
OVERHEAD	----
TRANSMISSION LINES	----
ELECTRIC	----
CABLE TELEVISION	----
FIBER OPTIC	----
SANITARY SEWER	----
STORM SEWER	----

PROJECT LOCATION



Document Number
AFFIDAVIT OF CORRECTION
TRANSPORTATION PROJECT PLAT

Wisconsin Department of Transportation
DT1590 7/2016 s. 84.095(3)(b) Wis. Stats.
Exempt from filing transfer return form [s. 77.21(1), 77.22(1), Wis. Stats.]

This Affidavit of Correction applies to Transportation Project Plat 1590-16-21-4.01, recorded in Document Number 804953 on July 13, 2016, in the Office of the Register of Deeds for Marinette County.

AFFIANT makes this Affidavit for the purpose of correcting the document above as follows:

 CENTURYTEL OF THE MIDWEST-WISCONSIN, LLC
NO EASEMENT OF RECORD- PARCEL 1

The note above is incorrect. It should read

 CENTURYTEL OF THE MIDWEST-WISCONSIN, LLC
NO EASEMENT OF RECORD- PARCEL 1 AND 21

I certify that I represent the entity, which prepared or submitted the original plat.
This Affidavit of Correction has been approved by the Wisconsin Department of Transportation.



(Signature)
Carolyn Sampson
(Print Name)

Right of Way Plat Coordinator
(Title)

Subscribed and sworn to before me this date.

8/19/2016
(Date)

State of Wisconsin)
Brown) ss.
County)


(Signature, Notary Public, State of Wisconsin)
Kristin M. Schrader
(Print or Type Name, Notary Public, State of Wisconsin)
10/7/2017
(Date Commission Expires)

Seal(s)

Project ID 1590-16-21

This instrument was drafted by WisDOT

Parcel No. Utility

DOC. #: 806180
RENEE MILLER
MARINETTE COUNTY
REGISTER OF DEEDS
Aug 22, 2016 3:14 PM
Fee Amount: 30.00
Transfer Fee: 0.00
Fee Exempt:

The above recording information verifies that this document has been electronically recorded and returned to WisDOT - NE Region - Green Bay

This space is reserved for recording data
Return to

Wisconsin Department of Transportation
944 Vanderperren Way
Green Bay, WI 54304

Attn: Real Estate

Parcel Identification Number/Tax Key Number
Utility



Document Number
**AFFIDAVIT OF CORRECTION
TRANSPORTATION PROJECT PLAT**

Wisconsin Department of Transportation
DT1590 7/2016 s. 84.095(3)(b) Wis. Stats.
Exempt from filing transfer return form [s. 77.21(1), 77.22(1), Wis. Stats.]

This Affidavit of Correction applies to Transportation Project Plat
1590-16-21-4.02, recorded in Document Number 805456 on July 27,
2016, in the Office of the Register of Deeds for Marinette County.


AFFIANT makes this Affidavit for the purpose of correcting the
document above as follows:

 CENTURYTEL OF THE MIDWEST-WISCONSIN, LLC
NO EASEMENT OF RECORD- PARCEL 3 AND 4

The note above is incorrect. It should read

 CENTURYTEL OF THE MIDWEST-WISCONSIN, LLC
NO EASEMENT OF RECORD- PARCEL 4 AND 21

I certify that I represent the entity, which prepared or submitted the original plat.
This Affidavit of Correction has been approved by the Wisconsin Department of Transportation.



(Signature)
Carolyn Sampson
(Print Name)

Right of Way Plat Coordinator
(Title)

Subscribed and sworn to before me this date.

8/19/2016
(Date)

State of Wisconsin)
Brown) ss.
County)


(Signature, Notary Public, State of Wisconsin)
Kristin M. Schrader
(Print or Type Name, Notary Public, State of Wisconsin)
10/7/2017
(Date Commission Expires)

Seal(s)

Project ID 1590-16-21

This instrument was drafted by WisDOT

Parcel No. Utility

DOC. #: 806182
RENEE MILLER
MARINETTE COUNTY
REGISTER OF DEEDS
Aug 22, 2016 3:14 PM
Fee Amount: 30.00
Transfer Fee: 0.00
Fee Exempt:

**The above recording information verifies that this
document has been electronically recorded and
returned to WisDOT - NE Region - Green Bay**

This space is reserved for recording data
Return to

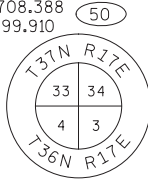
Wisconsin Department of Transportation
944 Vanderperren Way
Green Bay, WI 54304

Attn: Real Estate

Parcel Identification Number/Tax Key Number
Utility



4 INCH IRON POST
W/ BRASS CAP
Y=344,708.388
X=615,699.910



SCHEDULE OF UTILITY INTEREST		
UTILITY NUMBER	OWNER	INTEREST REQUIRED
100	CENTURYTEL OF THE MIDWEST-WISCONSIN, LLC	RELEASE OF RIGHTS
101	WISCONSIN PUBLIC SERVICE CORPORATION	RELEASE OF RIGHTS

(100) CENTURYTEL OF THE MIDWEST-WISCONSIN, LLC
NO EASEMENT OF RECORD- PARCEL 3 AND 4
(101) WISCONSIN PUBLIC SERVICE CORPORATION
DOC. 201629 - PARCEL 21

TRANSPORTATION PROJECT PLAT NO: 1590-16-21 - 4.02

THAT PART OF LOTS 1, 2, 3 AND 4 BLOCK 1, PART OF LOT 1 BLOCK 2, PART OF LOTS 1, 2, 3, 4, AND 5 BLOCK 8, AND PART OF LOT 6 BLOCK 9;
PLAT OF GOODMAN, LOCATED IN SECTION 3, T36N, R1E, TOWN OF GOODMAN, MARINETTE COUNTY, WISCONSIN.

RELOCATION ORDER USH 8 WEST COUNTY LINE - USH 141
(WEST COUNTY LINE TO CTH O)

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30 WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION
HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAY 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 (3), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	FEE R/W	NEW	EXISTING	TOTAL
3	ALPHONSE J., SR. AND LOIS L. MARCIULONIS	TLE	---	---	---	77
4	MATTHEW A. MILAN	TLE	---	---	---	3,306
6	ROGER D. LOTTO	TLE	---	---	---	1,721
7	MICHAEL AND STACEY BOUSLEY	TLE	---	---	---	46
8	DAVID AND DIANNE E. SMAIL	TLE	---	---	---	112
9	TONY A. AND DOROTHY A. KREMM	TLE	---	---	---	163
11	MARY L. WEDEN	TLE	---	---	---	830
12	DAVID AND DIANNE K. SMAIL	TLE	---	---	---	817
13	WILLIAM C. AND THERESA EBERT	FEE, TLE	8	---	---	802
21	TOWN OF GOODMAN	TLE	---	---	---	383
22	TOWN OF GOODMAN	TLE	---	---	---	1,999

NOTE: OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES AND ARE SUBJECT TO
CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE WISCONSIN DEPARTMENT OF
TRANSPORTATION

SIXTEENTH LINE

SCALE, FEET 0 25 50

ACCEPTED FOR RECORDING AND FILING IN
THE OFFICE OF THE REGISTER OF DEEDS
IN Marinette COUNTY, WISCONSIN AT
3:15 P.M. ON July 27, 2016
AS DOCUMENTED 808456 AND
FILED IN TPP 3 PG 19

Bence Miller
SIGNATURE OF REGISTER OF DEEDS

TPP 3 PG 19

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1590-16-21-4.02
SHEET 1 OF 2
AMENDMENT NO:---



4

4

SECTION LINE BEARING S03°27'20"W, 2,596.02'

MILL STREET

MAPLE AVENUE

BIRCH AVENUE

USH 8

CURVE DATA-C1
USH 8 R/L
P.L.=578+26.96
Y=343,282.550
X=618,401.722
DELTA=60°38'51"
DEGREE=07°00'00"
R = 818.51'
L = 866.39'
T = 478.75'
P.C.=573+48.20
Y=343,716.508
X=618,199.520
P.T.=582+14.59
Y=343,246.076
X=618,879.084

PI-M1
MILL STREET R/L
P.L.=7+33.08
Y=343,272.689
X=618,528.682
PI-MA1
MAPLE AVENUE R/L
P.L.=9+00.00
Y=343,194.980
X=618,561.042
PI-BA1
BIRCH AVENUE R/L
P.L.=9+08.59
Y=343,138.182
X=619,051.988

PI-M2
MILL STREET R/L
P.L.=10+00.00
Y=343,256.879
X=618,795.134
PI-MA2
MAPLE AVENUE R/L
P.L.=10+00.00
Y=343,294.820
X=618,656.705
PI-BA2
BIRCH AVENUE R/L
P.L.=10+00.00
Y=343,232.366
X=619,058.508

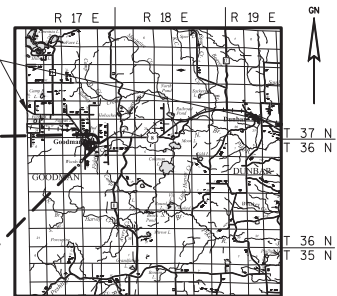
R/W COURSE TABLE			
POINT-POINT	BEARING	DISTANCE	
50-200	S 03°27'20" W	1,268.02'	
200-201	S 86°32'40" E	3,261.53'	
201-202	S 85°37'37" E	204.55'	
202-203	S 04°22'10" W	26.54'	
203-204	S 47°25'20" W	5.64'	
204-205	N 04°06'54" E	4.10'	
205-203	S 85°58'06" E	3.87'	

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MARINETTE COUNTY, NAD 83 (1993)
IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID
DISTANCES MAY BE USED AS GROUND DISTANCES.

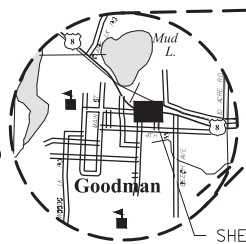
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 8 AND SIDE ROADS: ESTABLISHED FROM PLAT OF GOODMAN,
AND R/W PROJECT 1590-02-21, AND EXISTING HIGHWAY RIGHT-OF-WAY FROM ESTABLISHED CENTERLINE OF
EXISTING PAVEMENT.

R/W POINT AND OFFSETS			
POINT	STATION	OFFSET	
201	582+14.59	---	343,246.09 618,879.08
202	584+19.14	---	343,230.49 619,083.04
203	584+19.14	26.44'	343,204.02 619,081.02
204	584+15.29	30.66'	343,200.21 619,076.86
205	584+15.28	26.57'	343,204.29 619,077.16

PROJECT LOCATION



PROJECT LOCATION
(NOT TO SCALE)



SHEET LOCATION

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, AS
DOCUMENT NO. 804953 FOR ADDITIONAL INFORMATION.

ENGINEERING, INC.
Consultant Services

I, MICHAEL D. VANDE HEI, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN
FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN
STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I
HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY
REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Michael D. VanDeHei DATE: 07/15/2016
PRINT NAME: MICHAEL D. VANDE HEI

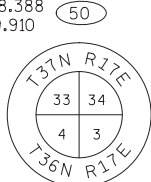
REGISTRATION NUMBER: S-2241

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR
FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
NE REGION OFFICE

SIGNATURE: Curt Van Erem DATE: 07/15/2016
PRINT NAME: CURT VAN EREM



4 INCH IRON POST
W/ BRASS CAP
Y=344,708.388
X=615,699.910



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	FEE R/W 50 FT. REQUIRED			T.L.E. SO FT
			NEW	EXISTING	TOTAL	
14	JAMES K. AND CHARLOTTE Y. HAWLEY	TLE	---	---	---	327
16	JEFFREY AND CARL HETFIELD	TLE	---	---	---	800
17	VERNON M. AND BARBARA D. ANDERSON	TLE	---	---	---	446
18	RUSSELL AND ANNE LOETHER	FEE, TLE	151	---	151	897
19	TERESA M. LOCKWOOD TRUST	TLE	---	---	---	53

NOTE: OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MARINETTE COUNTY, NAD 83 (1993) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 8 AND SIDE ROADS: ESTABLISHED FROM PLAT OF GOODMAN, AND R/W PROJECT 1590-02-21, AND EXISTING HIGHWAY RIGHT-OF-WAY FROM ESTABLISHED CENTERLINE OF EXISTING PAVEMENT.

TRANSPORTATION PROJECT PLAT NO: 1590-16-21 - 4.03

THAT PART OF LOTS 1, 2, 3, 4 AND 5 BLOCK 9, AND PART OF LOT 1 BLOCK 10; PLAT OF GOODMAN, LOCATED IN SECTION 3, T36N, R17E, TOWN OF GOODMAN, MARINETTE COUNTY, WISCONSIN.

RELOCATION ORDER USH 8 WEST COUNTY LINE - USH 141 (WEST COUNTY LINE TO CTH 0)

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1), WISCONSIN STATUTES.

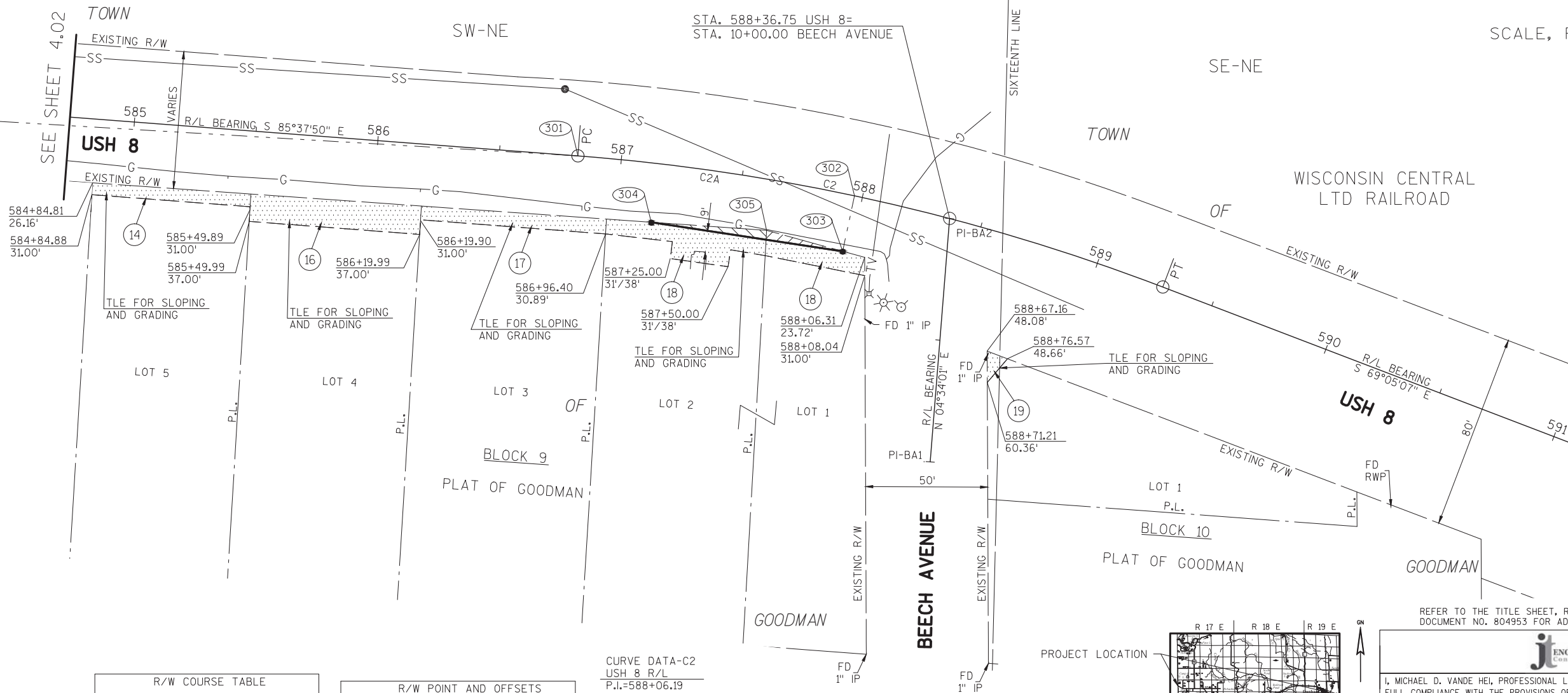
ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Marinette COUNTY, WISCONSIN AT 2:15 P M ON July 27, 2016 AS DOCUMENTED IN 889457 AND FILED IN TPP 3 PG 20

Bence Miller
SIGNATURE OF REGISTER OF DEEDS
TPP 3 PG 20

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1590-16-21-4.03
SHEET 1 OF 2
AMENDMENT NO:...

GN

SCALE, FEET 0 25 50



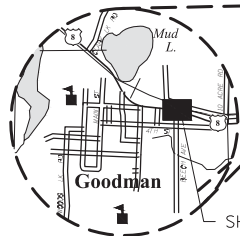
R/W COURSE TABLE		
POINT-POINT	BEARING	DISTANCE
50-300	S 03°27'20" W	1,275.49'
300-301	S 86°32'40" E	3729.04'
301-302	SEE CURVE TABLE	---
302-303	S 12°03'43" W	23.23'
303-304	N 81°22'09" W	79.32'
304-305	S 85°58'06" E	47.41'
305-303	S 74°36'30" E	32.29'

R/W POINT AND OFFSETS				
POINT	STATION	OFFSET	Y	X
301	586+82.16	---	343,210.45	619,345.29
302	587+96.69	---	343,194.10	619,458.56
303	587+96.69	23.23'	343,171.38	619,453.70
304	587+15.08	24.19'	343,183.28	619,375.28
305	587+63.64	20.73'	343,179.95	619,422.57

CURVE DATA-C2
USH 8 R/L
P.I.=588+06.19
Y=343,201.004
X=619,468.961
DELTA=16°32'43"
DEGREE=06°43'00"
R = 853.02'
L = 246.33'
T = 124.03'
P.C.=586+82.16
Y=343,210.453
X=619,345.294
P.T.=589+28.49
Y=343,156.729
X=619,584.815

PI-BA1
BEECH AVENUE R/L
P.I.=9+00.00
Y=343,085.128
X=619,489.567
PI-BA2
BEECH AVENUE R/L
P.I.=10+00.00
Y=343,184.810
X=619,497.529

PROJECT LOCATION



PROJECT LOCATION
(NOT TO SCALE)

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, AS DOCUMENT NO. 804953 FOR ADDITIONAL INFORMATION.



I, MICHAEL D. VANDE HEI, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Michael D. VanDe Hei DATE: 07/15/2016
PRINT NAME: MICHAEL D. VANDE HEI
REGISTRATION NUMBER: S-2241
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
NE REGION OFFICE
SIGNATURE: Curt Van Erem DATE: 07/15/2016
PRINT NAME: CURT VAN EREM

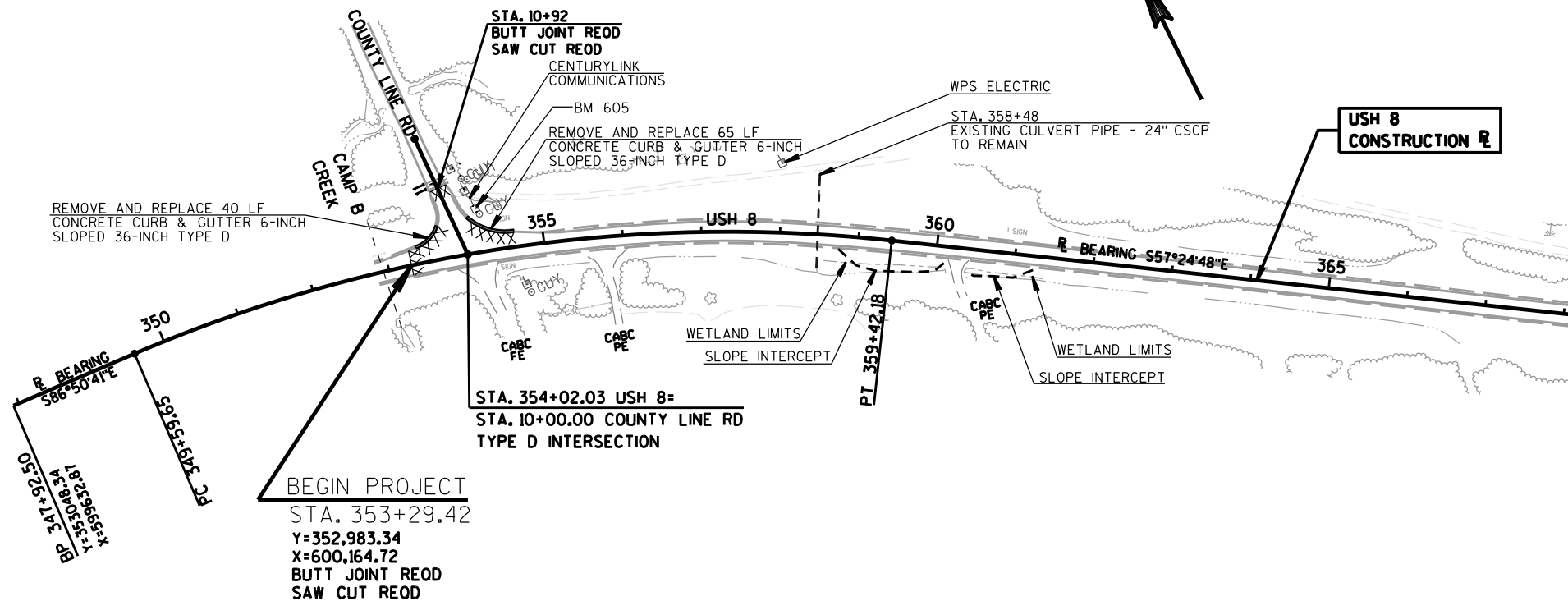


USH 8 CURVE NOTES

P.I. = 354+57.21
Y = 353011.49
X = 600301.36
Δ = 29°25'52"
D = 2°59'44"
T = 502.36'
L = 982.53'
R = 1912.75'
P.C. = 349+59.65
P.T. = 359+42.18
R.O. = 180'
S.E. = 5.0%

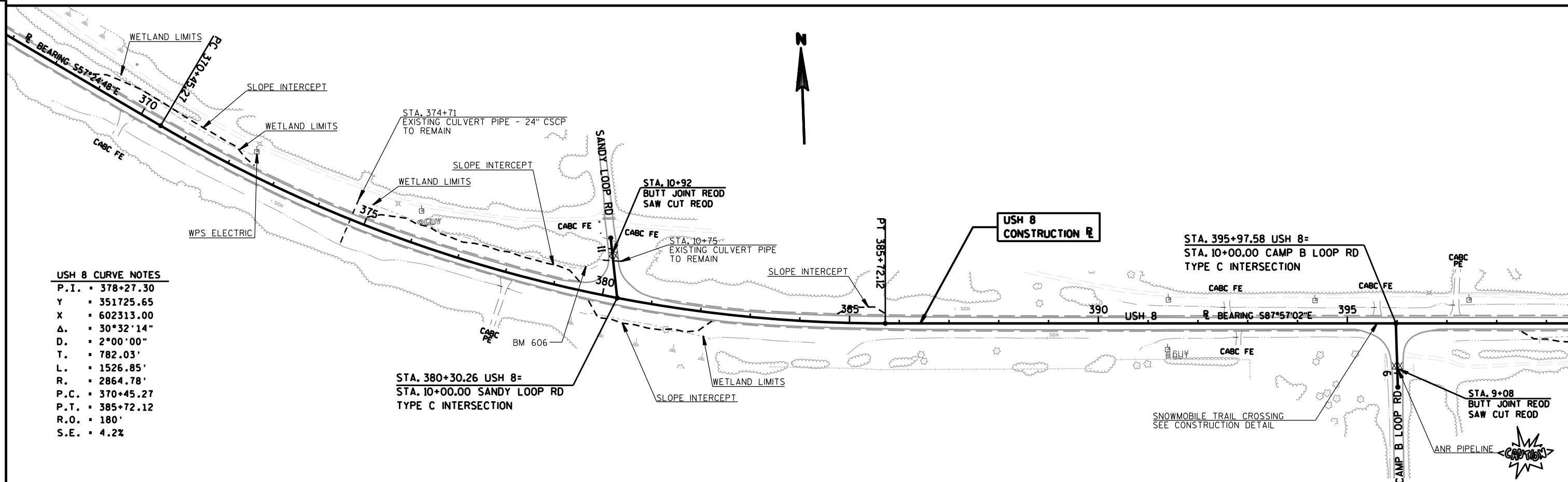
BENCH MARKS

NO.	DESCRIPTION	ELEV.
605	PK NAIL IN PPOL 371730L1	1437.41
606	RR SPIKE IN 10" EVERGREEN	1437.75



USH 8 CURVE NOTES

P.I. = 378+27.30
Y = 351725.65
X = 602313.00
Δ = 30°32'14"
D = 2°00'00"
T = 782.03'
L = 1526.85'
R = 2864.78'
P.C. = 370+45.27
P.T. = 385+72.12
R.O. = 180'
S.E. = 4.2%



PROJECT NO: 1590-16-71

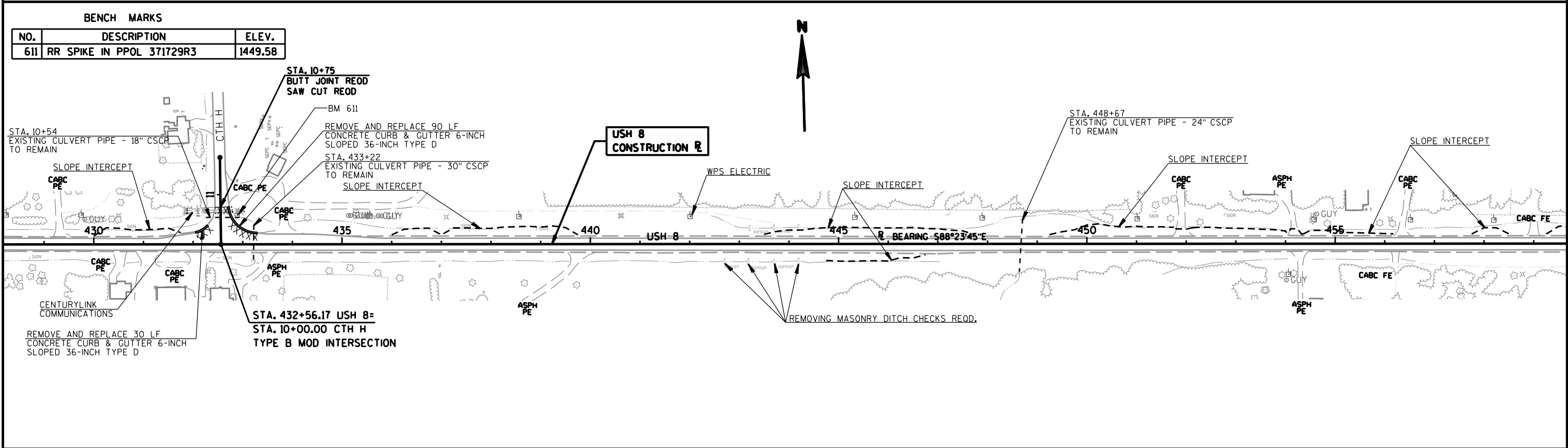
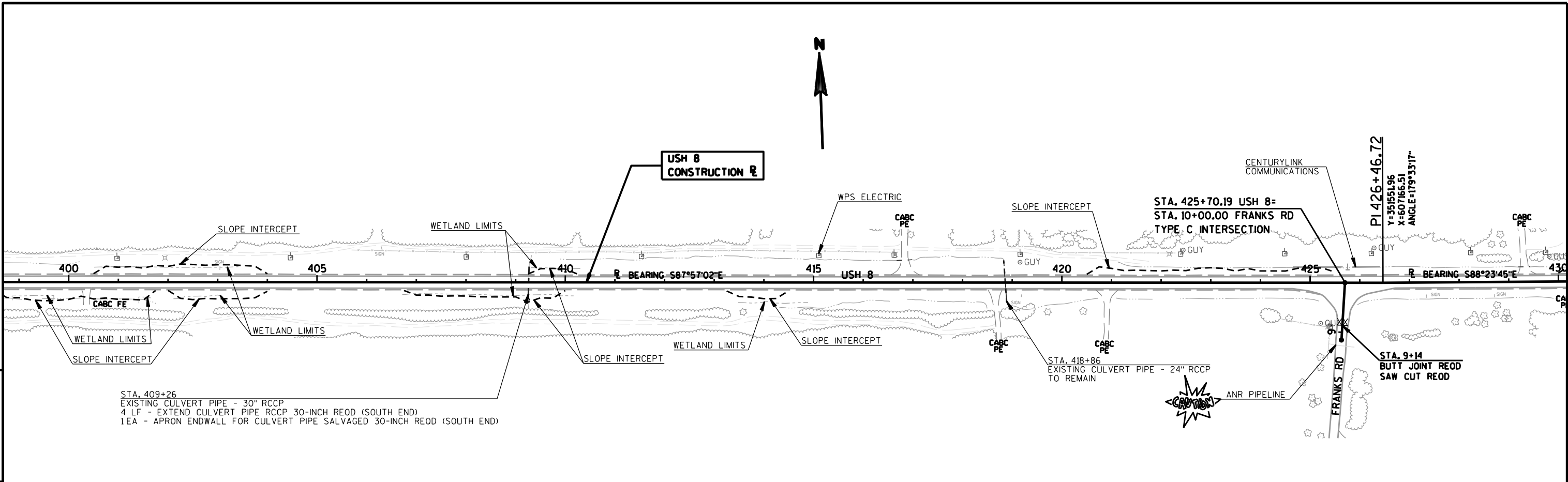
HWY: USH 8

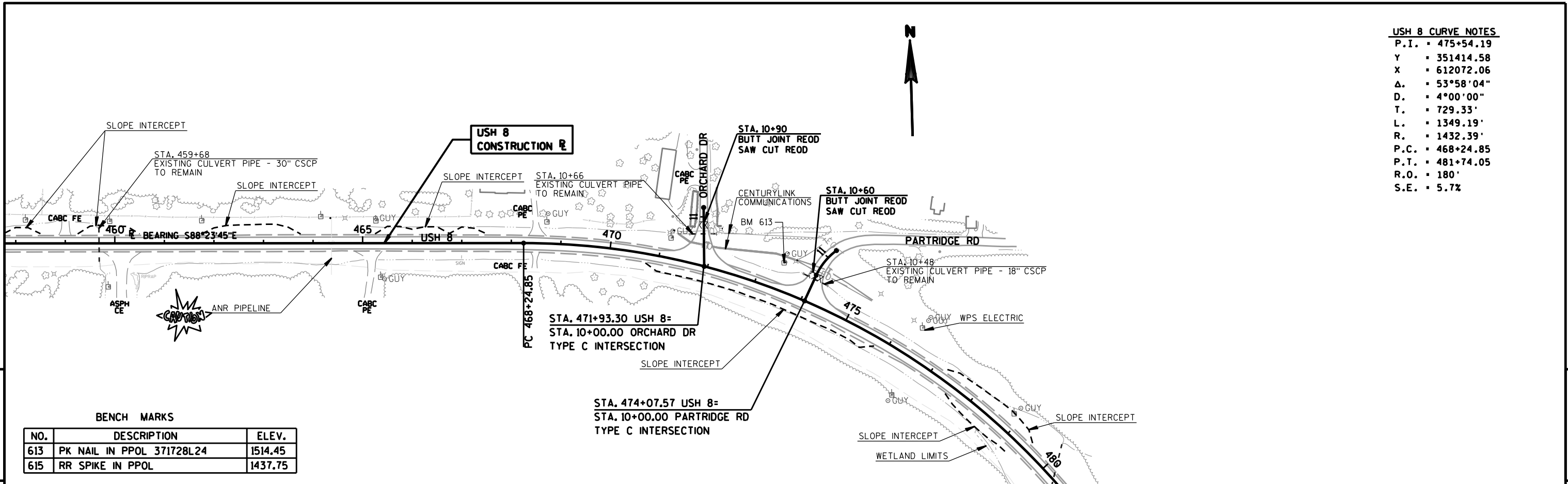
COUNTY: MARINETTE

LINE DIAGRAM

SHEET

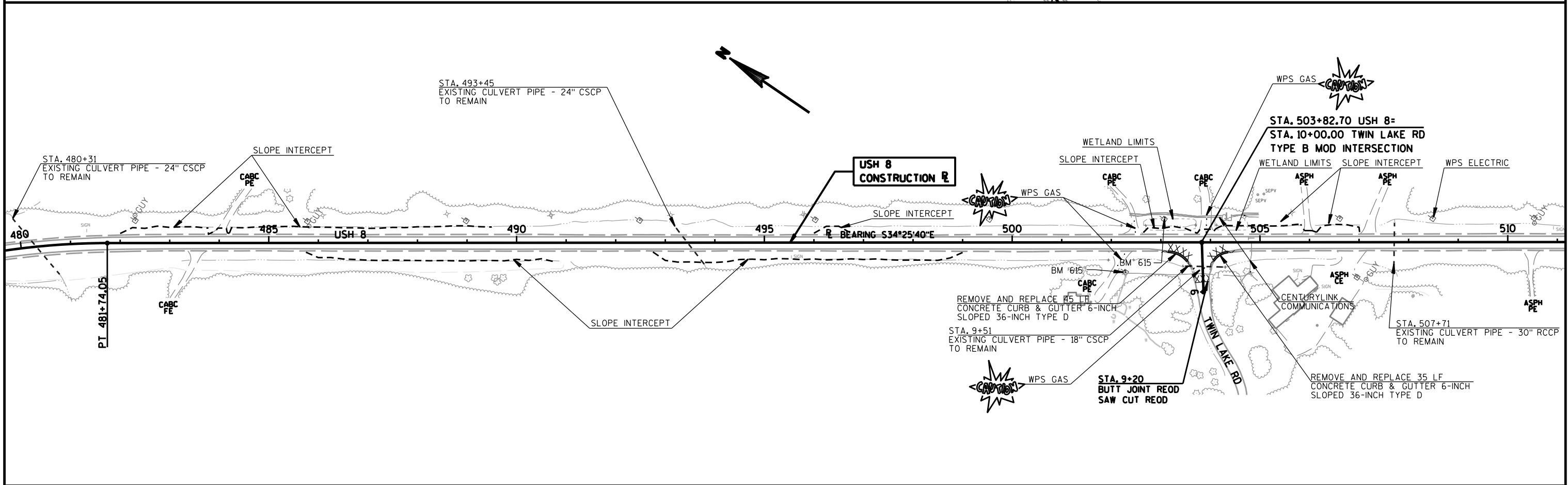
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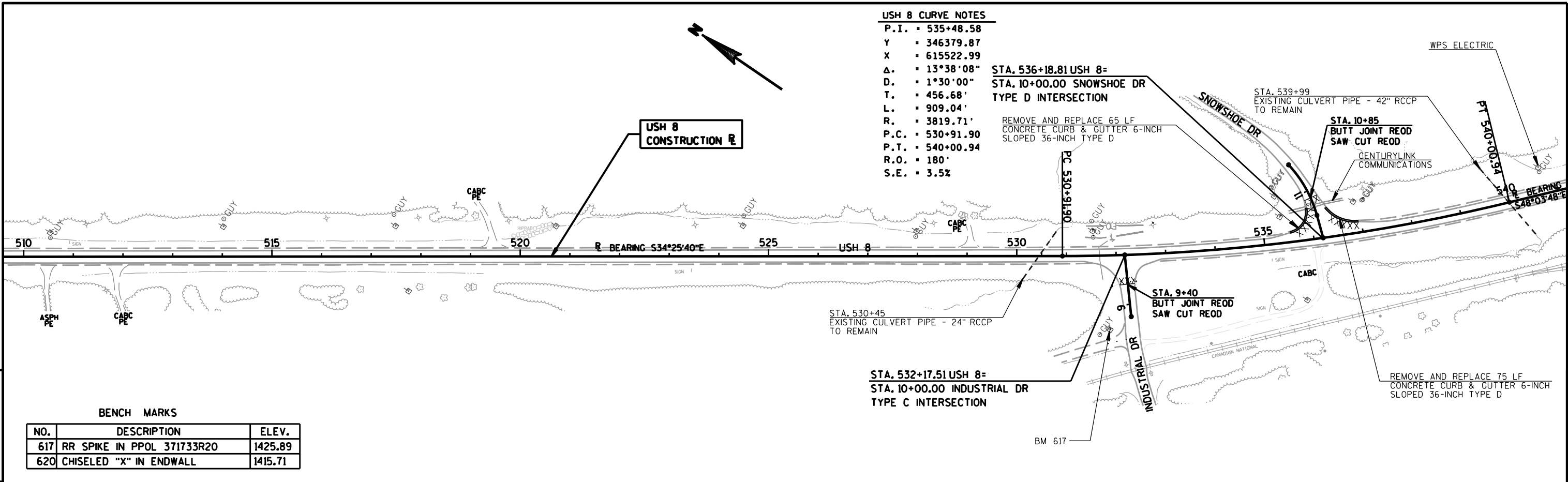




USH 8 CURVE NOTES

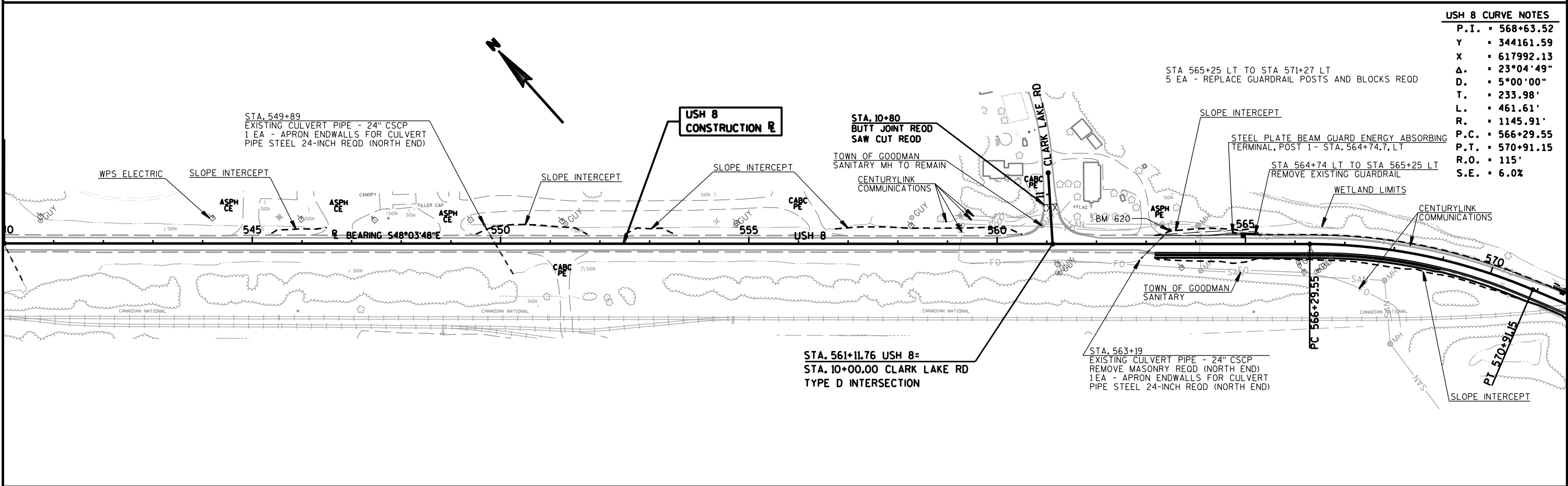
P.I. = 475+54.19
Y = 351414.58
X = 612072.06
Δ = 53°58'04"
D = 4°00'00"
T = 729.33'
L = 1349.19'
R = 1432.39'
P.C. = 468+24.85
P.T. = 481+74.05
R.O. = 180'
S.E. = 5.7%





BENCH MARKS

NO.	DESCRIPTION	ELEV.
617	RR SPIKE IN PPOL 371733R20	1425.89
620	CHISELED "X" IN ENDWALL	1415.71



PROJECT NO: 1590-16-71

HWY: USH 8

COUNTY: MARINETTE

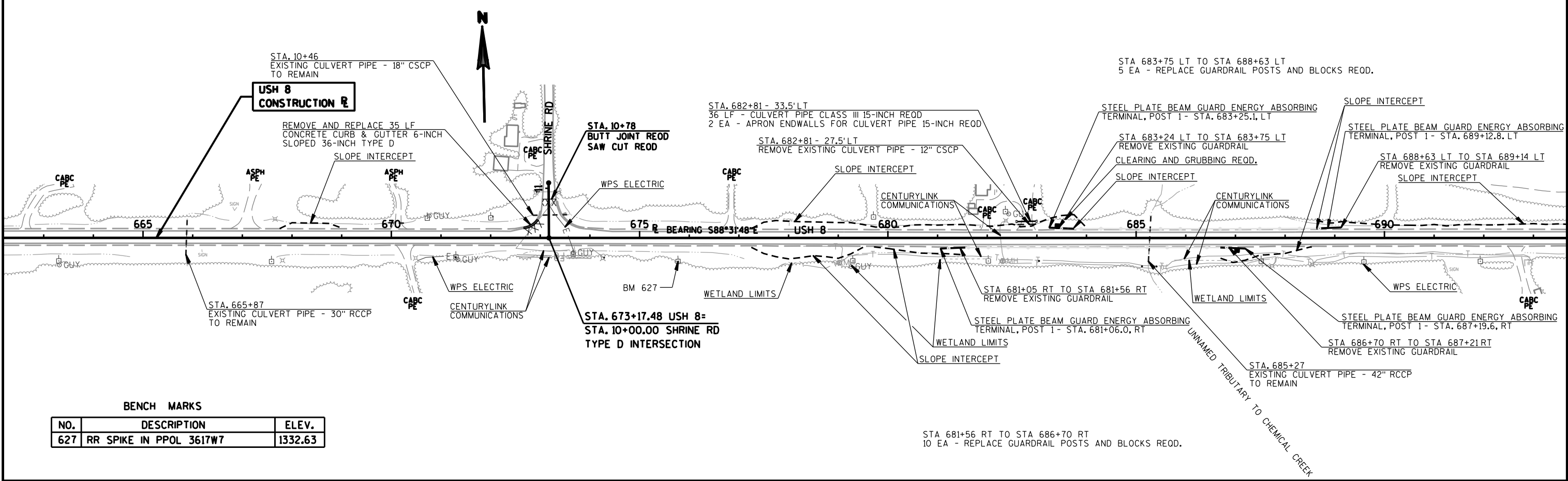
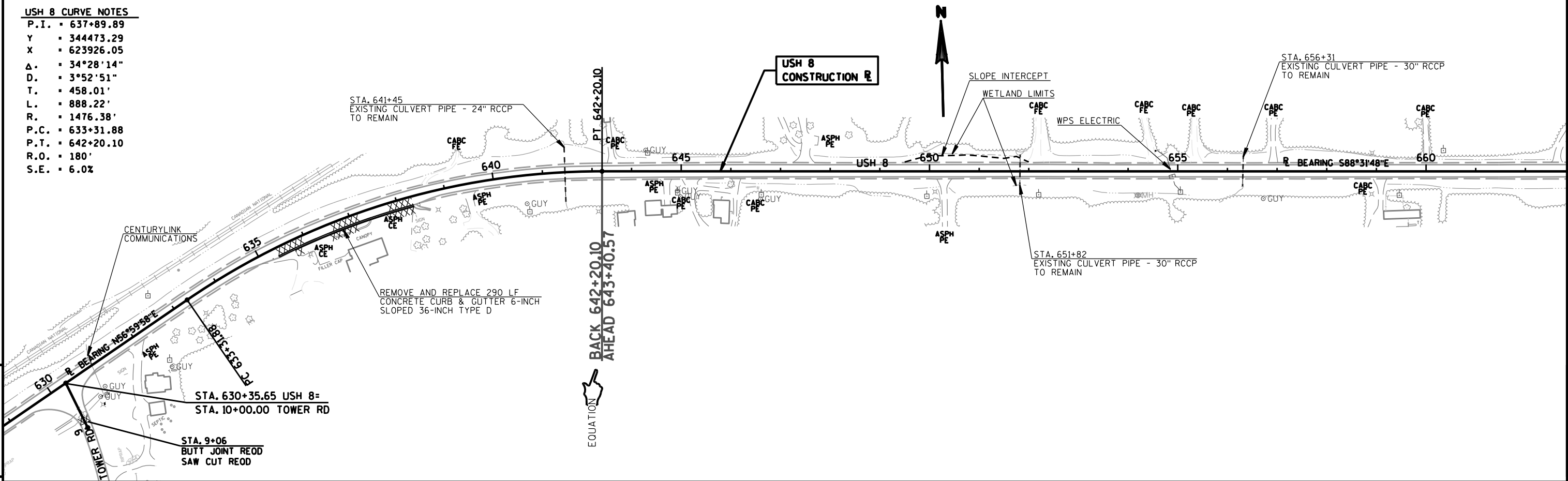
LINE DIAGRAM

SHEET

E

USH 8 CURVE NOTES

P.I. = 637+89.89
Y = 344473.29
X = 623926.05
Δ = 34°28'14"
D = 3°52'51"
T = 458.01'
L = 888.22'
R = 1476.38'
P.C. = 633+31.88
P.T. = 642+20.10
R.O. = 180'
S.E. = 6.0%



BENCH MARKS

NO.	DESCRIPTION	ELEV.
627	RR SPIKE IN PPOL 3617W7	1332.63

PROJECT NO: 1590-16-71

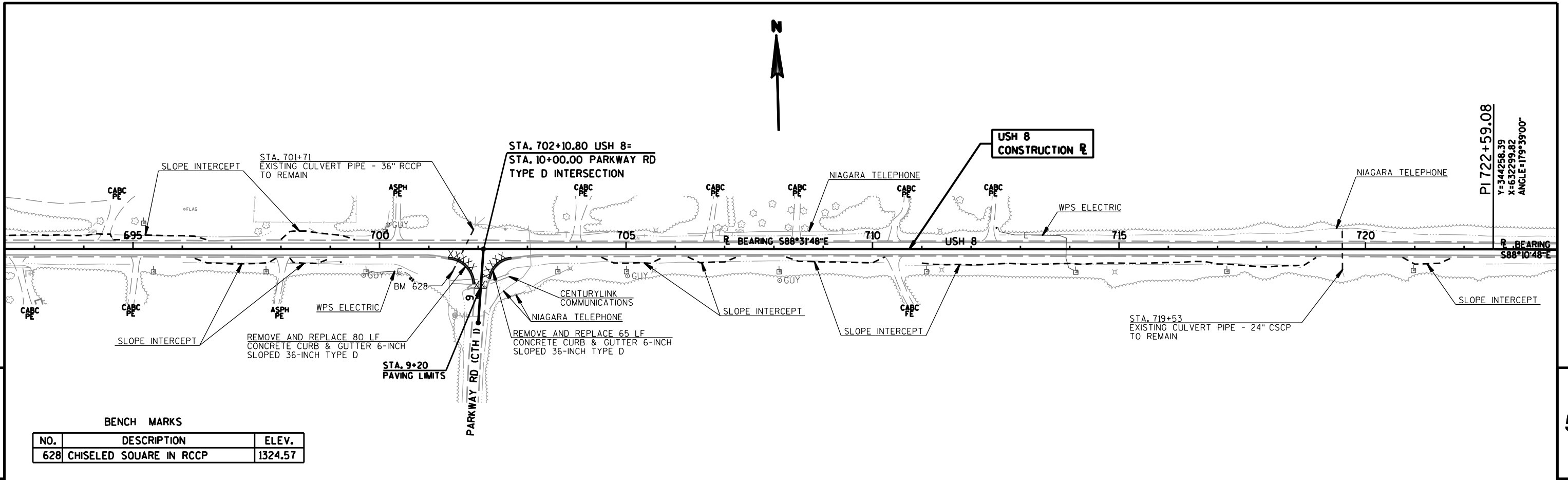
HWY: USH 8

COUNTY: MARINETTE

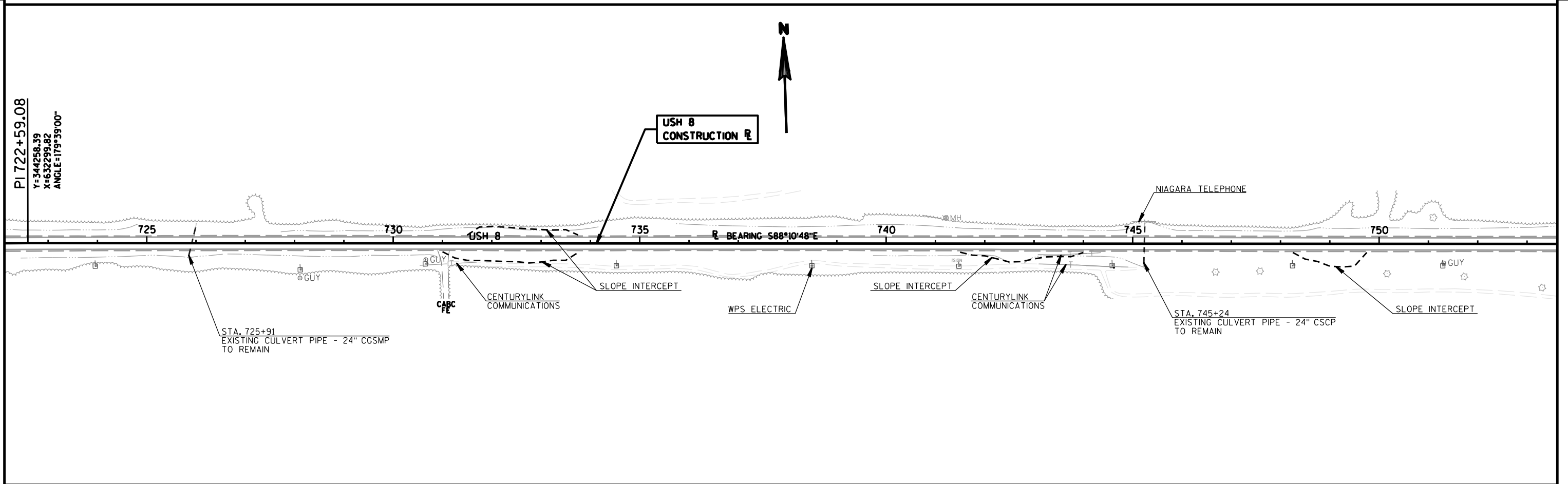
LINE DIAGRAM

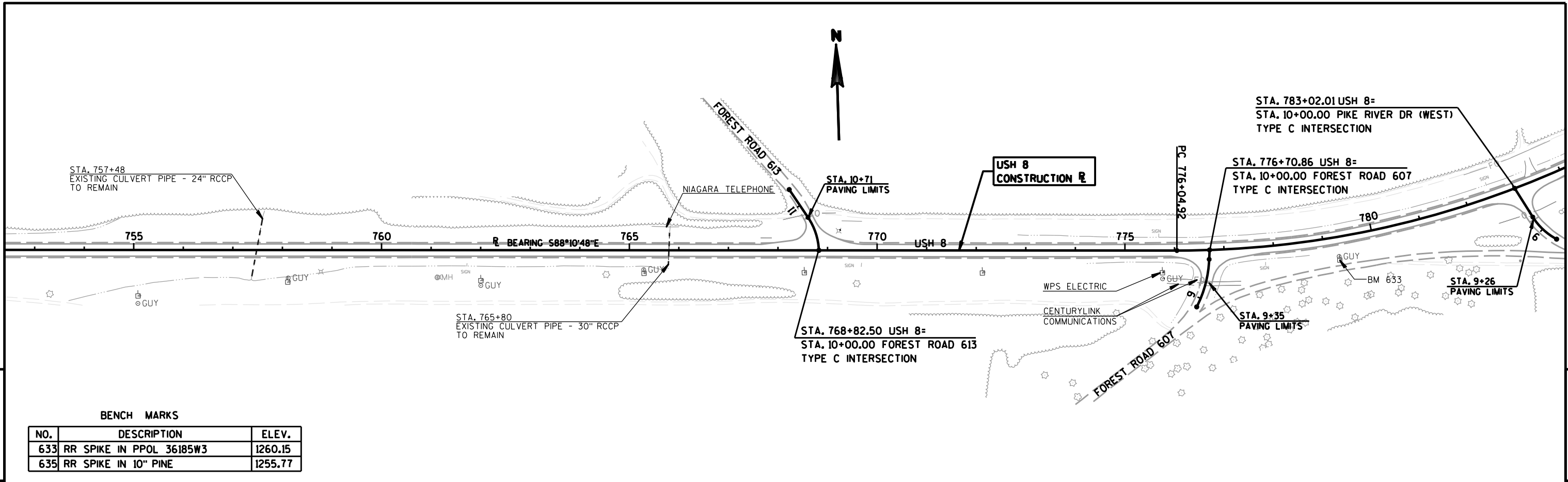
SHEET

E



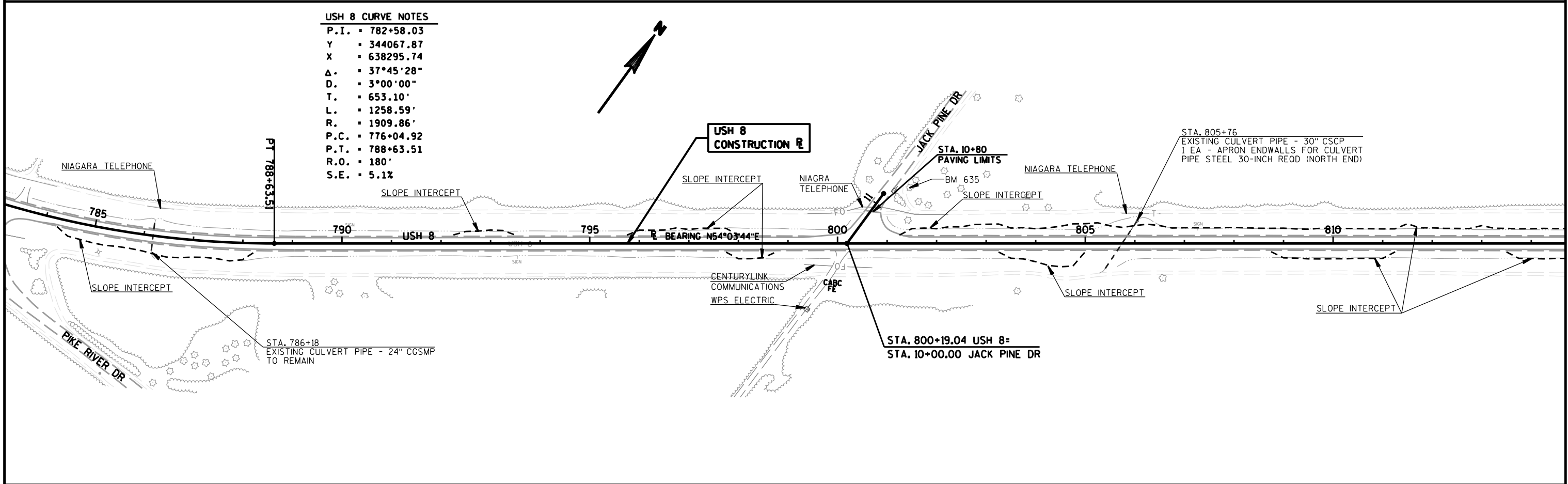
BENCH MARKS		
NO.	DESCRIPTION	ELEV.
628	CHISELED SQUARE IN RCCP	1324.57





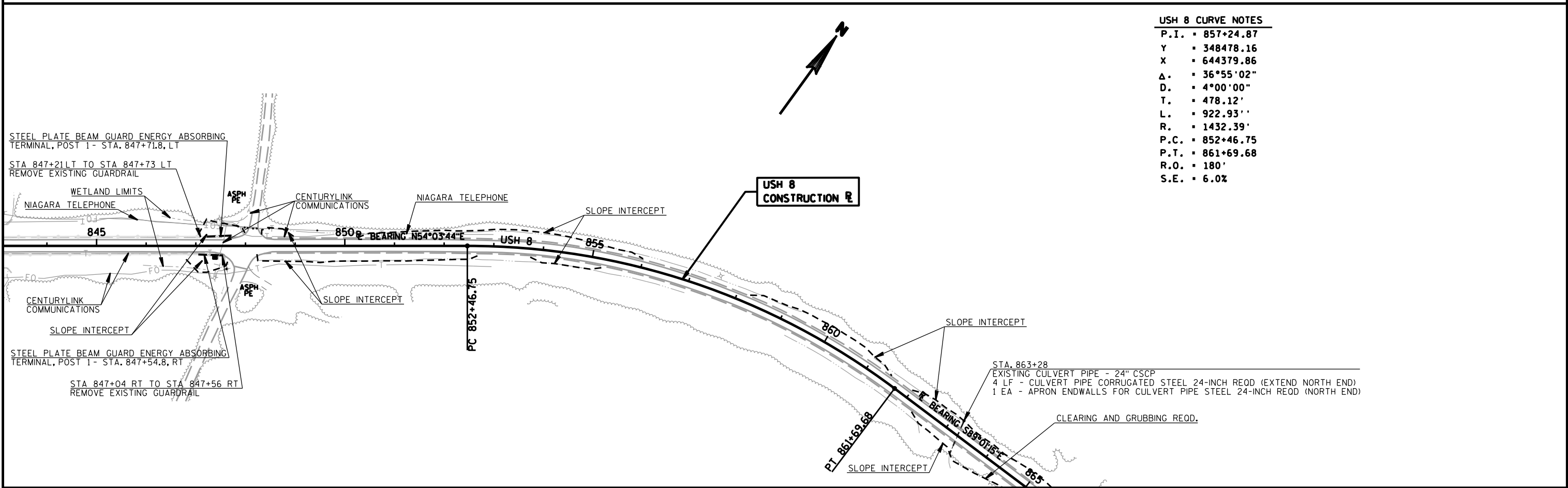
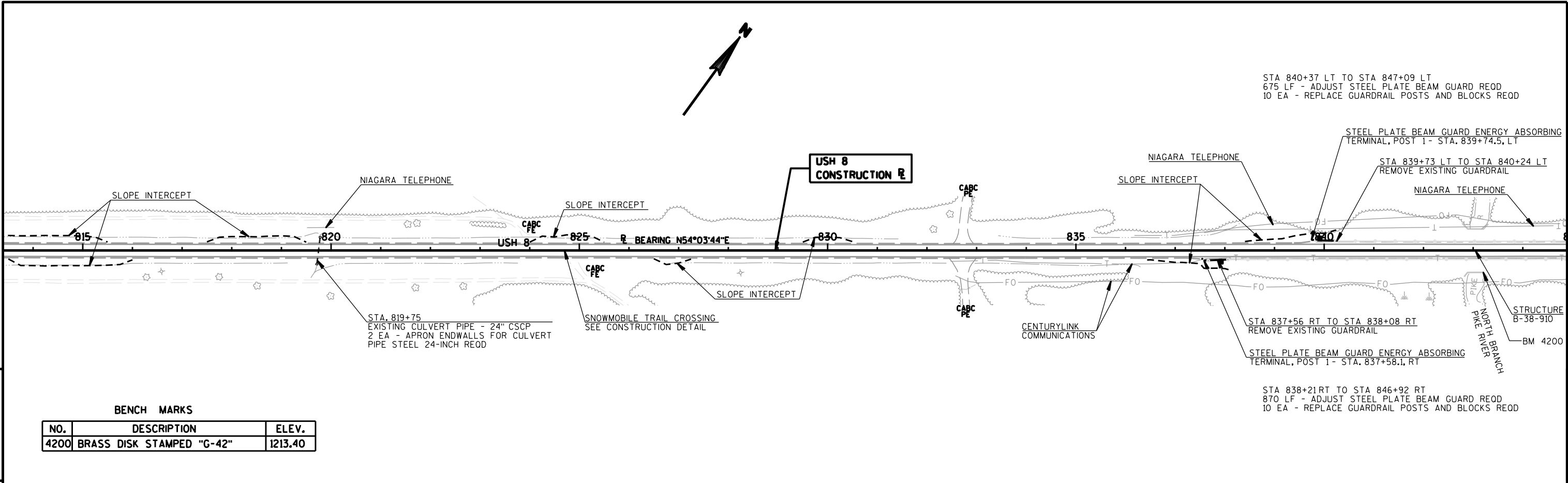
BENCH MARKS

NO.	DESCRIPTION	ELEV.
633	RR SPIKE IN PPOL 36185W3	1260.15
635	RR SPIKE IN 10" PINE	1255.77

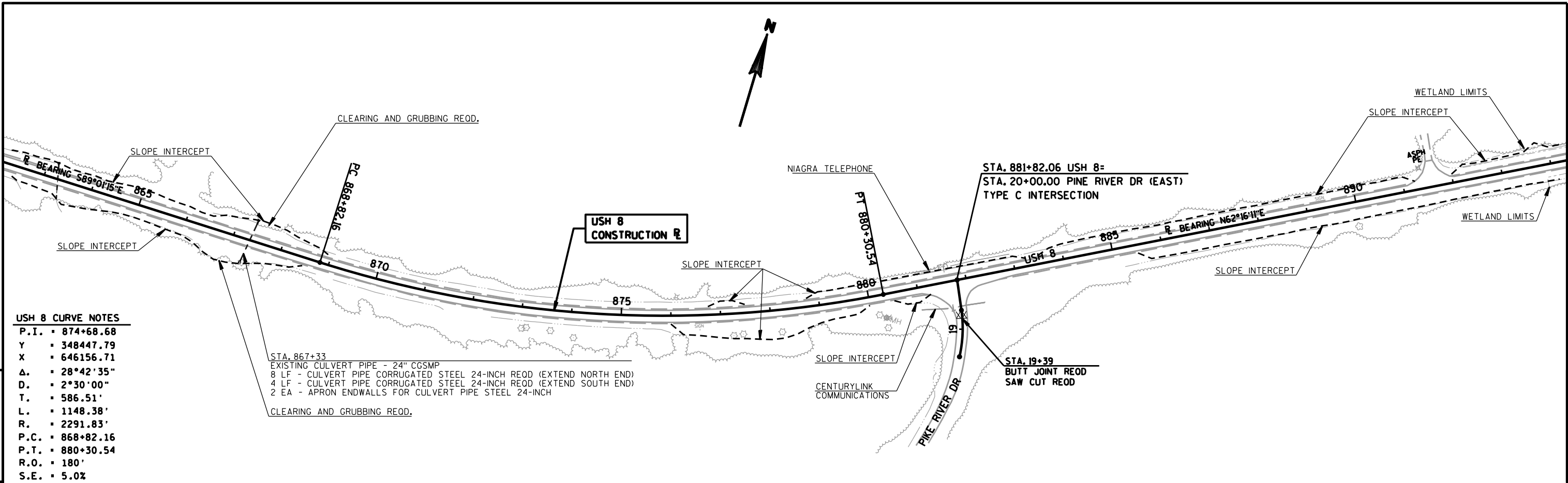


USH 8 CURVE NOTES

P.I. = 782+58.03
 Y = 344067.87
 X = 638295.74
 Δ = 37°45'28"
 D = 3°00'00"
 T = 653.10'
 L = 1258.59'
 R = 1909.86'
 P.C. = 776+04.92
 P.T. = 788+63.51
 R.O. = 180'
 S.E. = 5.1%



USH 8 CURVE NOTES	
P.I.	857+24.87
Y	348478.16
X	644379.86
Δ	36°55'02"
D	4°00'00"
T	478.12'
L	922.93'
R	1432.39'
P.C.	852+46.75
P.T.	861+69.68
R.O.	180'
S.E.	6.0%



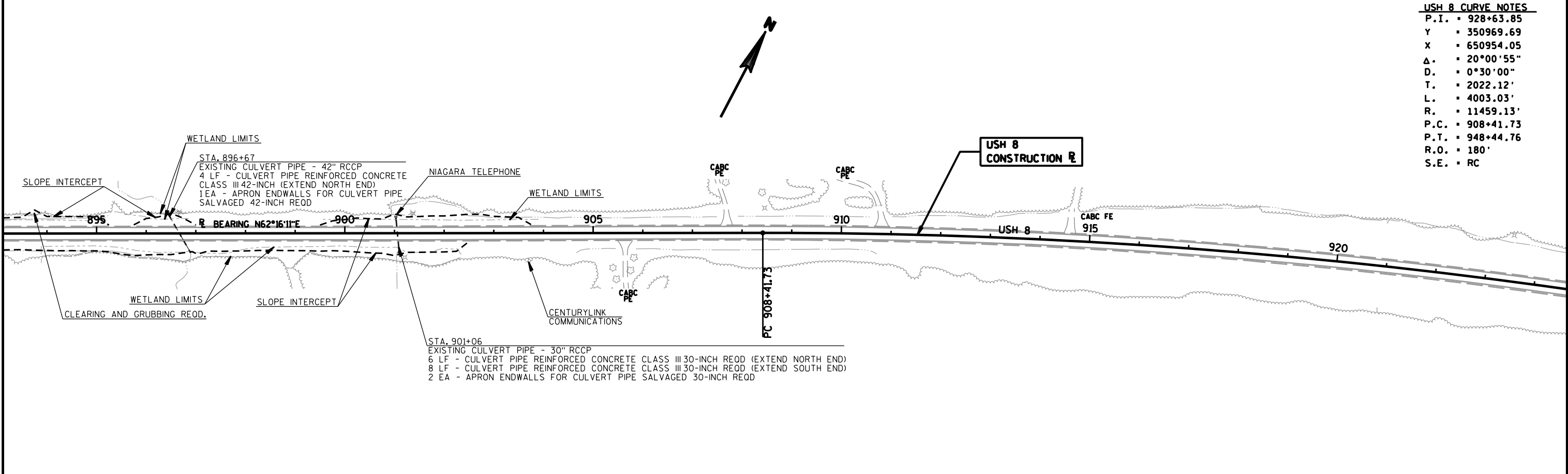
USH 8 CURVE NOTES

P.I. = 874+68.68
Y = 348447.79
X = 646156.71
Δ = 28°42'35"
D = 2°30'00"
T = 586.51'
L = 1148.38'
R = 2291.83'
P.C. = 868+82.16
P.T. = 880+30.54
R.O. = 180'
S.E. = 5.0%

STA. 867+33
EXISTING CULVERT PIPE - 24" CGSMP
8 LF - CULVERT PIPE CORRUGATED STEEL 24-INCH REOD (EXTEND NORTH END)
4 LF - CULVERT PIPE CORRUGATED STEEL 24-INCH REOD (EXTEND SOUTH END)
2 EA - APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH

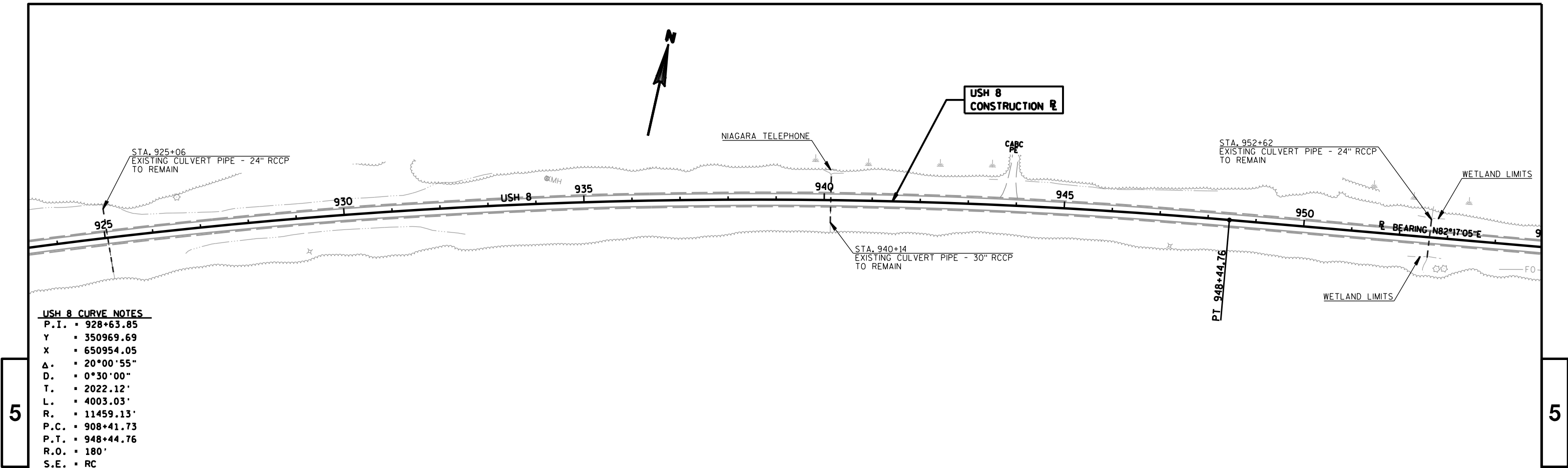
USH 8 CURVE NOTES

P.I. = 928+63.85
Y = 350969.69
X = 650954.05
Δ = 20°00'55"
D = 0°30'00"
T = 2022.12'
L = 4003.03'
R = 11459.13'
P.C. = 908+41.73
P.T. = 948+44.76
R.O. = 180'
S.E. = RC



STA. 896+67
EXISTING CULVERT PIPE - 42" RCCP
4 LF - CULVERT PIPE REINFORCED CONCRETE CLASS III 42-INCH (EXTEND NORTH END)
1EA - APRON ENDWALLS FOR CULVERT PIPE SALVAGED 42-INCH REOD

STA. 901+06
EXISTING CULVERT PIPE - 30" RCCP
6 LF - CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH REOD (EXTEND NORTH END)
8 LF - CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH REOD (EXTEND SOUTH END)
2 EA - APRON ENDWALLS FOR CULVERT PIPE SALVAGED 30-INCH REOD

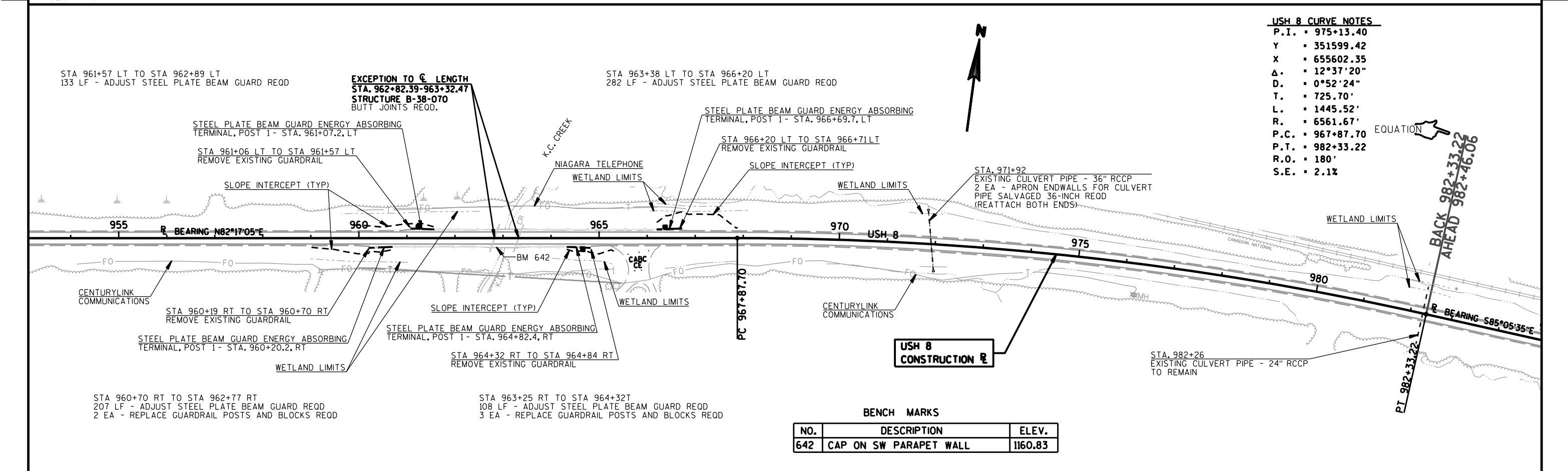


USH 8 CURVE NOTES

P.I. = 928+63.85
Y = 350969.69
X = 650954.05
Δ = 20°00'55"
D. = 0°30'00"
T. = 2022.12'
L. = 4003.03'
R. = 11459.13'
P.C. = 908+41.73
P.T. = 948+44.76
R.O. = 180'
S.E. = RC

5

5



USH 8 CURVE NOTES

P.I. = 975+13.40
Y = 351599.42
X = 655602.35
Δ = 12°37'20"
D. = 0°52'24"
T. = 725.70'
L. = 1445.52'
R. = 6561.67'
P.C. = 967+87.70
P.T. = 982+33.22
R.O. = 180'
S.E. = 2.1%

BENCH MARKS

NO.	DESCRIPTION	ELEV.
642	CAP ON SW PARAPET WALL	1160.83

PROJECT NO: 1590-16-71

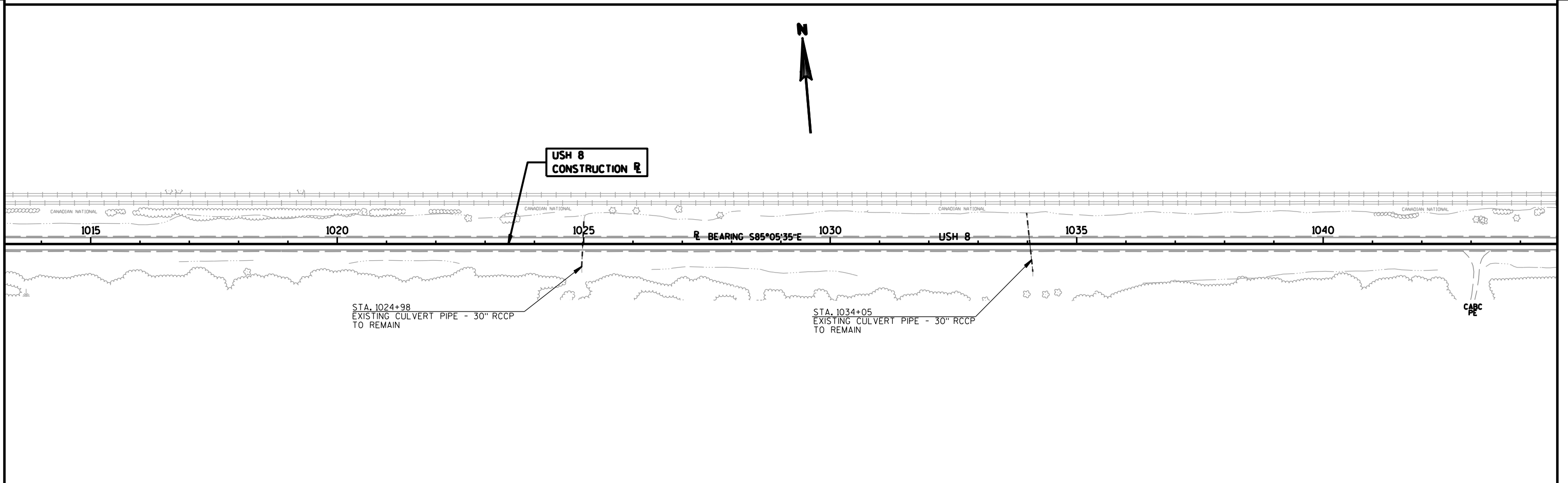
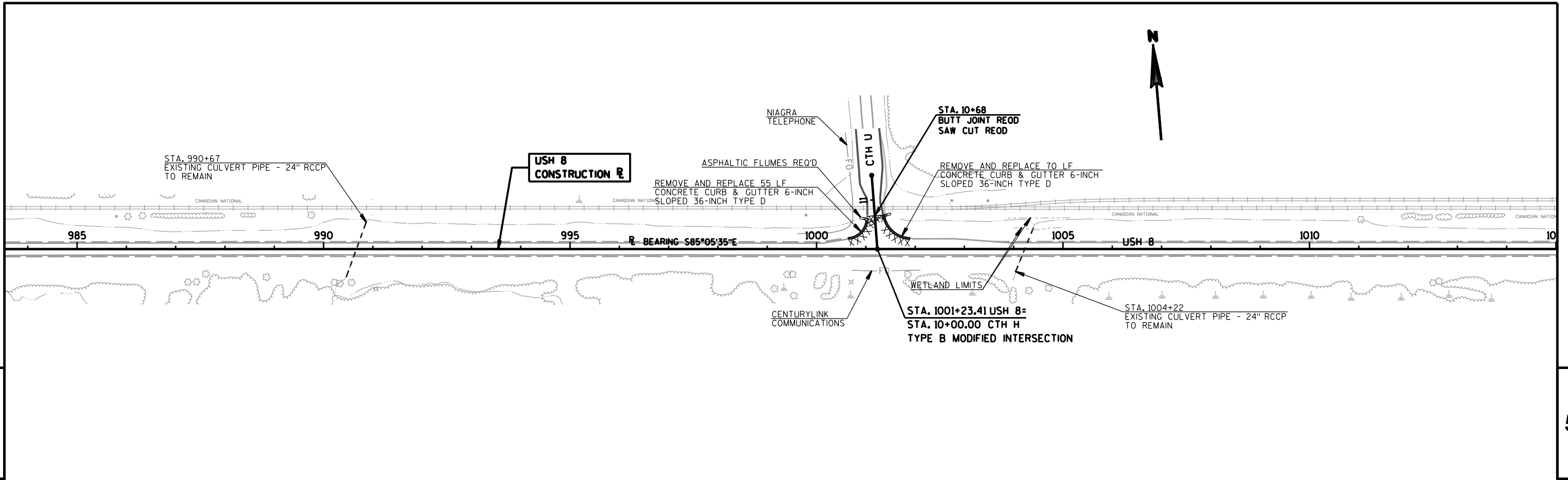
HWY: USH 8

COUNTY: MARINETTE

LINE DIAGRAM

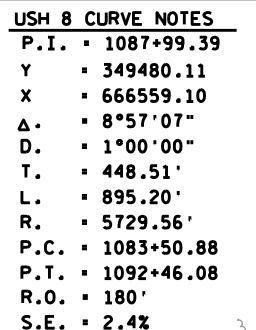
SHEET

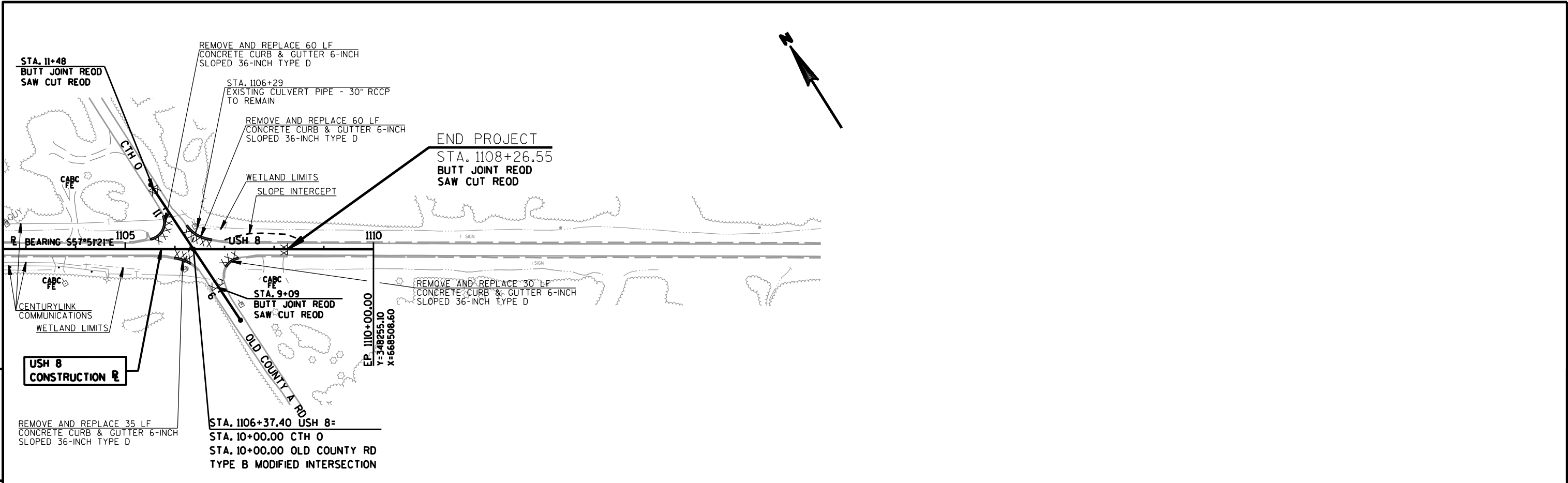
E



PROJECT NO: 1590-16-71	HWY: USH 8	COUNTY: MARINETTE	LINE DIAGRAM	SHEET	E
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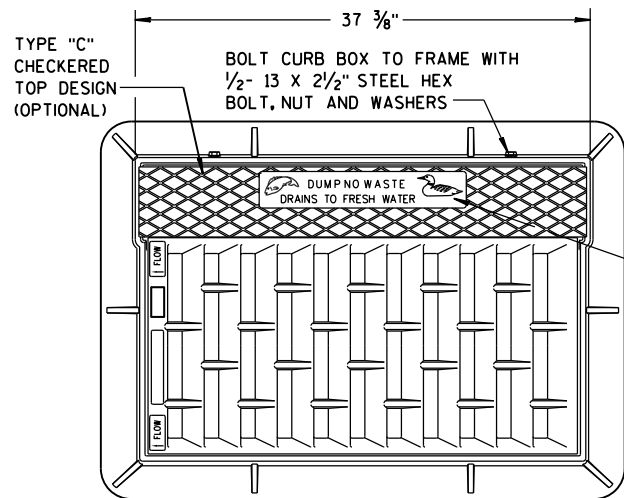
P.I.	=	1050+64.33
Y	=	350954.13
X	=	663118.67
Δ.	=	18°17'07"
D.	=	2°00'00"
T.	=	461.05'
L.	=	914.26'
R.	=	2864.78'
P.C.	=	1046+03.28
P.T.	=	1055+17.54
R.O.	=	180'
S.E.	=	4.4%





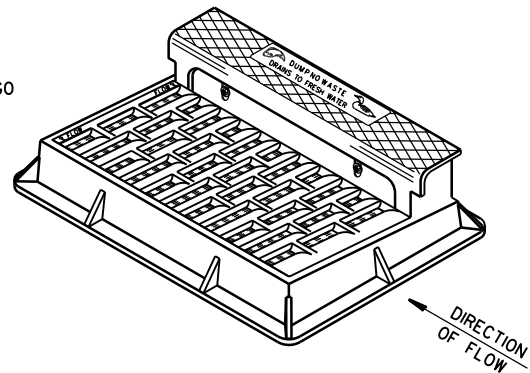
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-19	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-18A	CURB RAMPS TYPES 1 AND 1-A
08D05-18B	CURB RAMPS TYPES 2 AND 3
08D05-18C	CURB RAMPS TYPES 4A AND 4A1
08D05-18D	CURB RAMPS TYPE 4B AND 4B1
08D05-18E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D18-01	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
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"
13A10-01A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01C	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
14B15-09A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-09B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-09C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B24-08A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-08B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-08C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B28-03	GUARDRAIL MOW STRIP
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15C08-17B	PAVEMENT MARKING (TURN LANES)
15C12-05	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-04A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-01A	PAVEMENT MARKING (INTERSECTIONS)
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

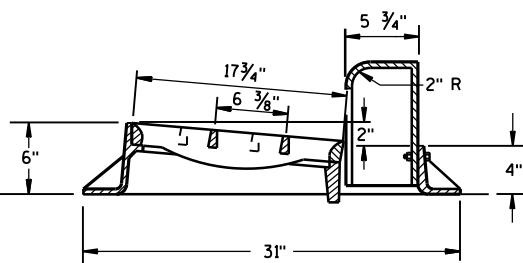
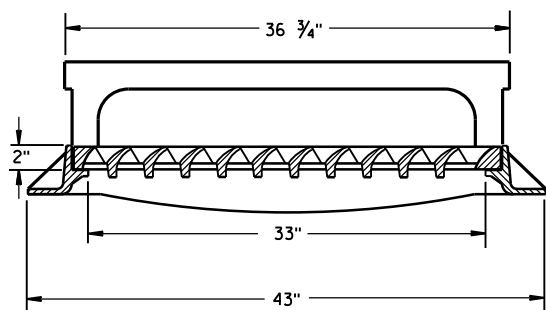
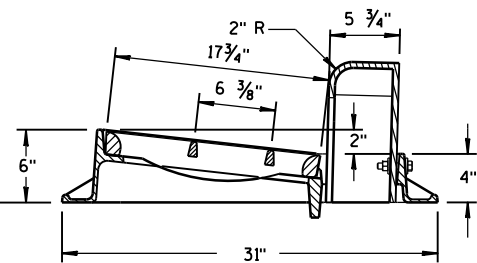
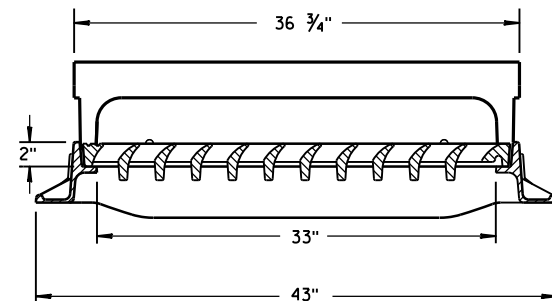
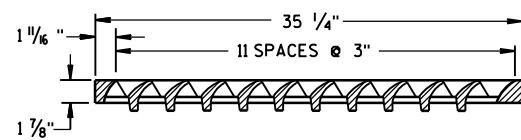


SEE LOGO
DETAIL

NOTE:
GRATE IS REVERSIBLE.

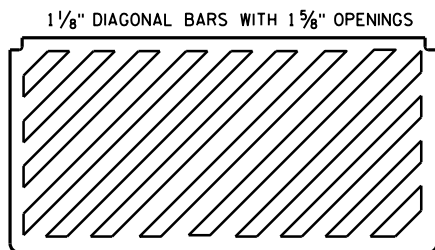


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"



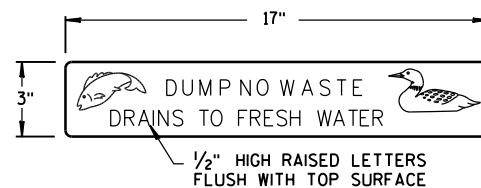
TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

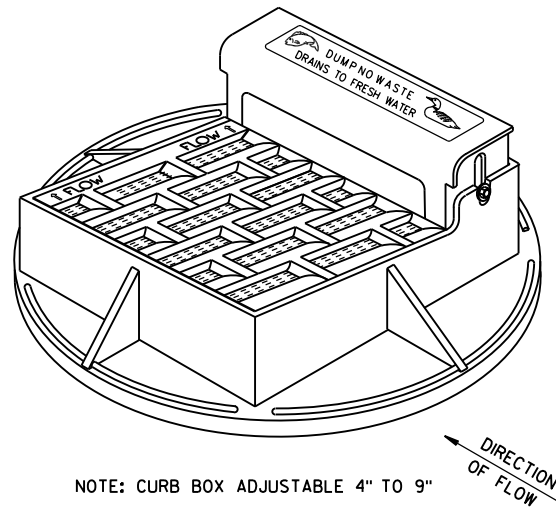


**SPECIAL GRATE FOR
TYPE "H" COVER**

(MEASURES 35 1/4" X 17 3/4" X 2")
(NOTED AS TYPE H-S ON DRAINAGE TABLE)

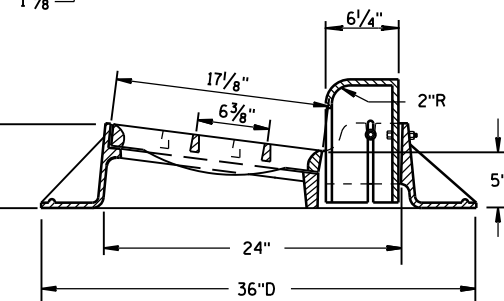
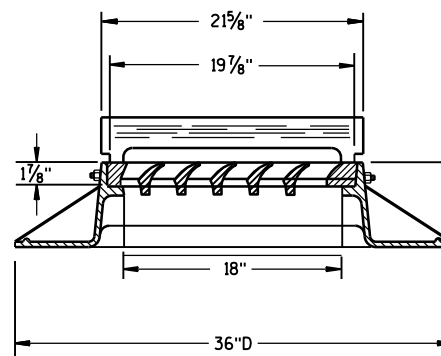
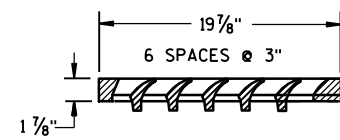
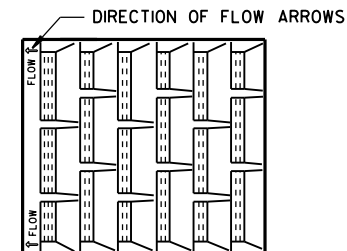


LOGO DETAIL

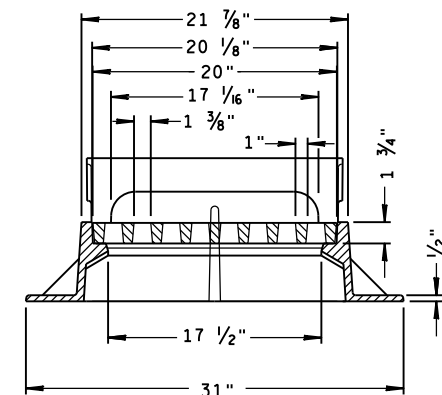
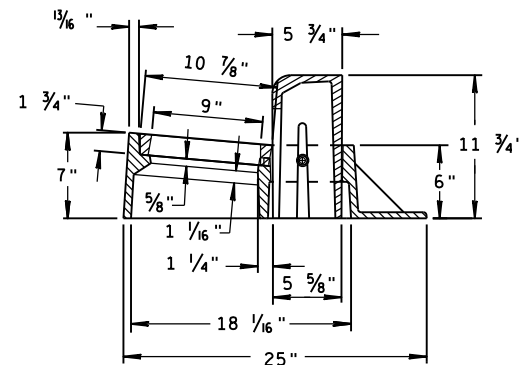


NOTE: CURB BOX ADJUSTABLE 4" TO 9"

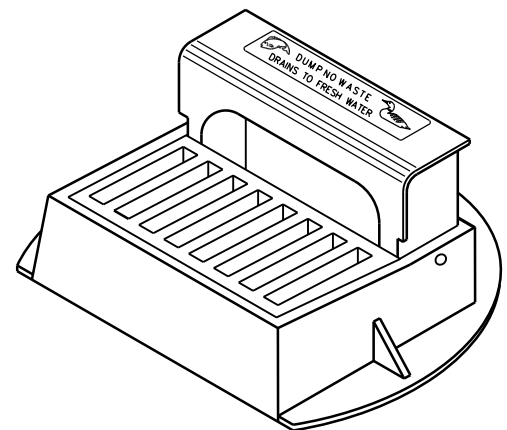
NOTE:
GRATE IS REVERSIBLE.



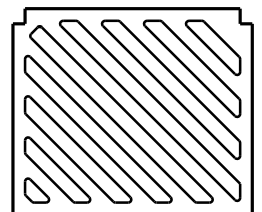
TYPE "A"



TYPE "Z"



1" DIAGONAL BARS
WITH 1 1/2" OPENINGS



**SPECIAL GRATE FOR
TYPE "A" COVER**

(MEASURES 19 3/4" X 17" X 1 1/8")
(NOTED AS TYPE A-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 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.

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

**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION**

APPROVED

11-27-13

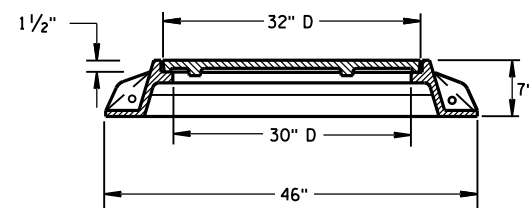
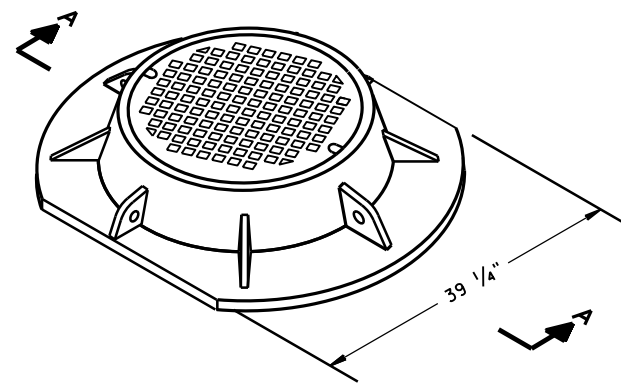
DATE

FHWA

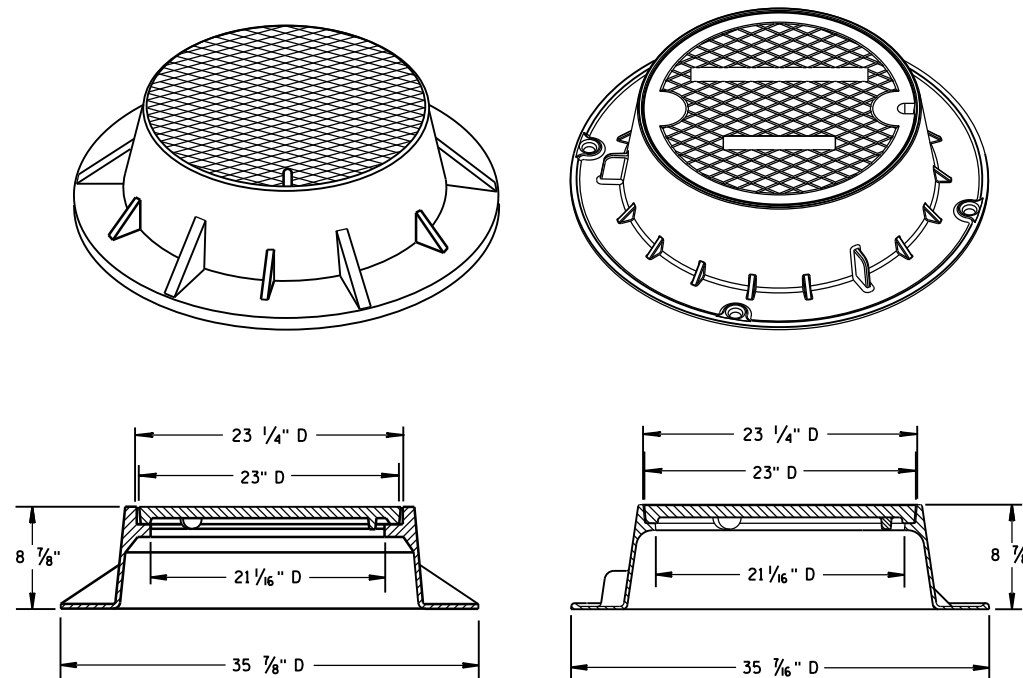
/S/ Jerry H. Zogg

ROADWAY STANDARDS DEVELOPMENT

ENGINEER

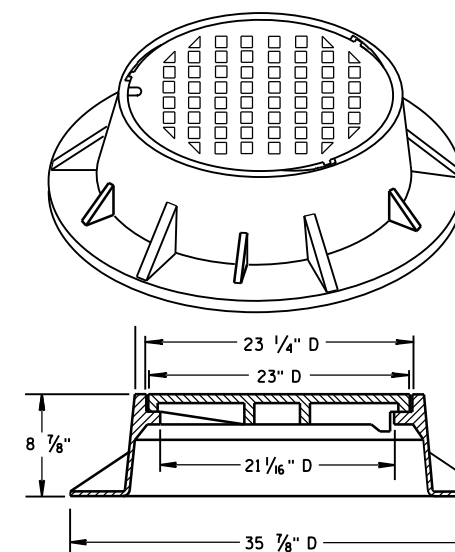
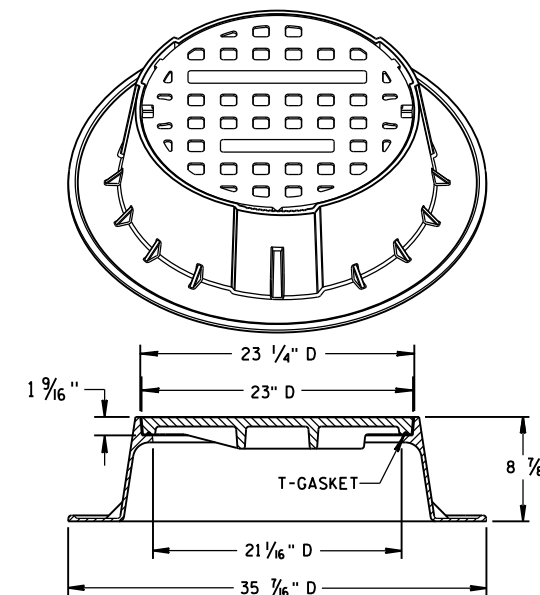


SECTION A-A
TYPE "K"



TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

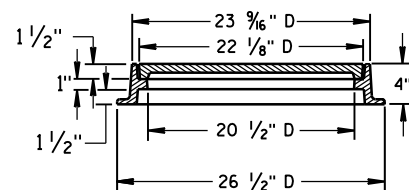
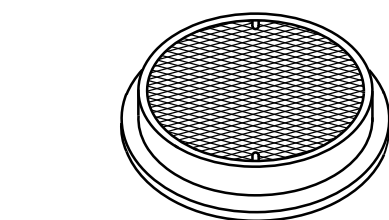


TYPE "J" SPECIAL

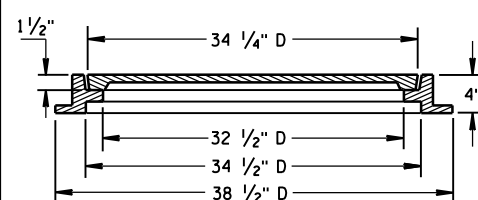
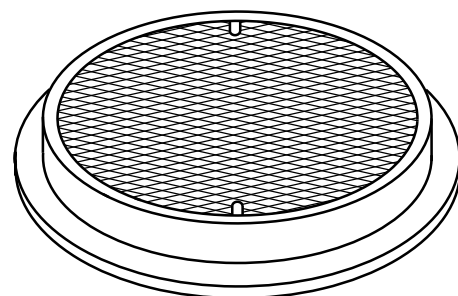
TYPE "B" NON-ROCKING SELF-SEAL LID

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

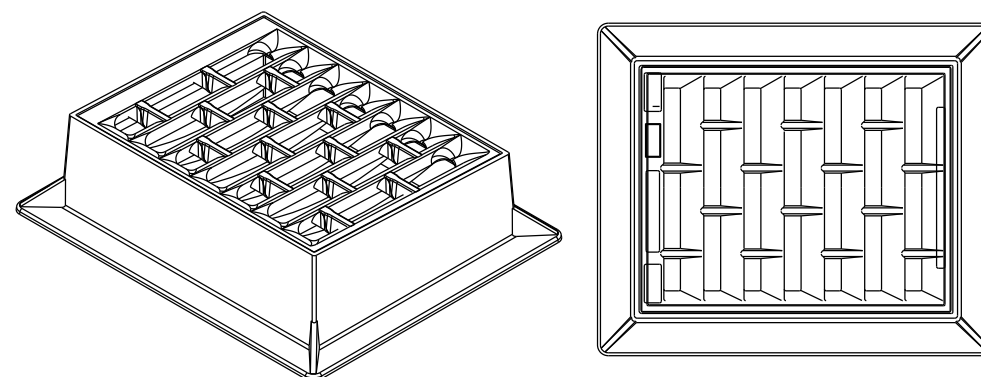
NOTE: EITHER CASTING IS ACCEPTABLE



TYPE "L"



TYPE "M"



INLET COVER TYPE "BW"

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.

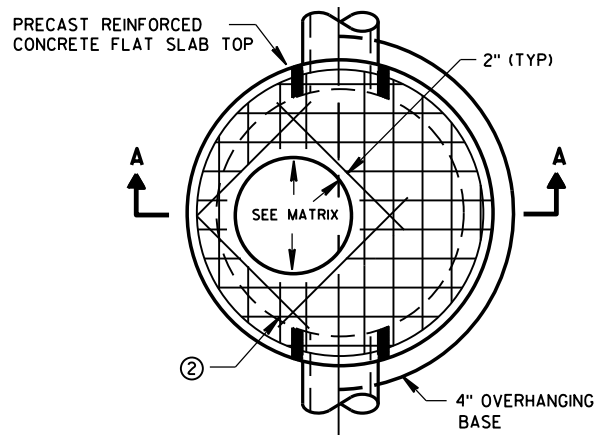
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K,
J, J-S, L & M

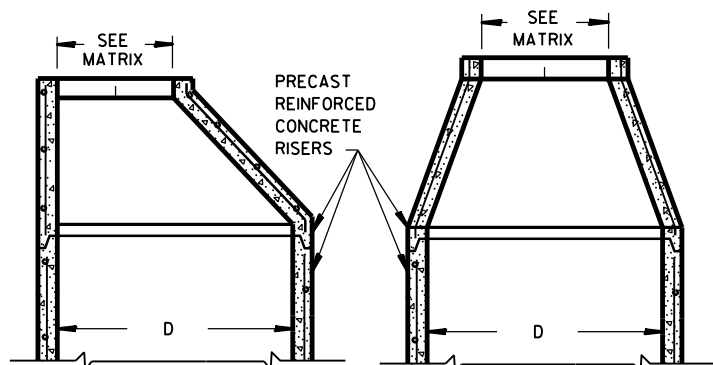
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

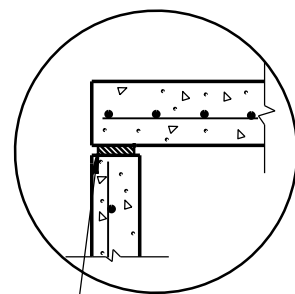


PLAN VIEW CIRCULAR OPENING

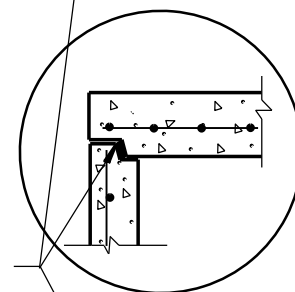


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

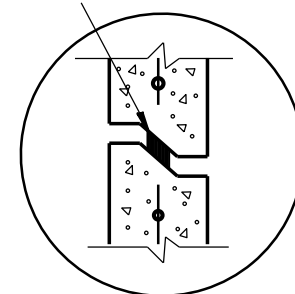
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



TOP WITH PLAIN END JOINT

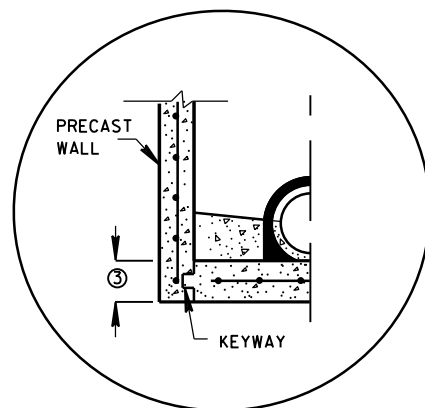


TOP WITH TONGUE AND GROOVE JOINT

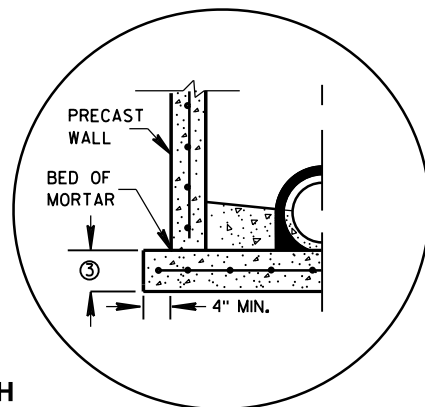


DETAIL "B"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

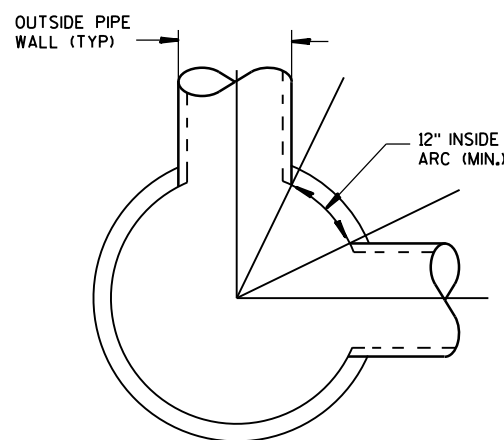


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

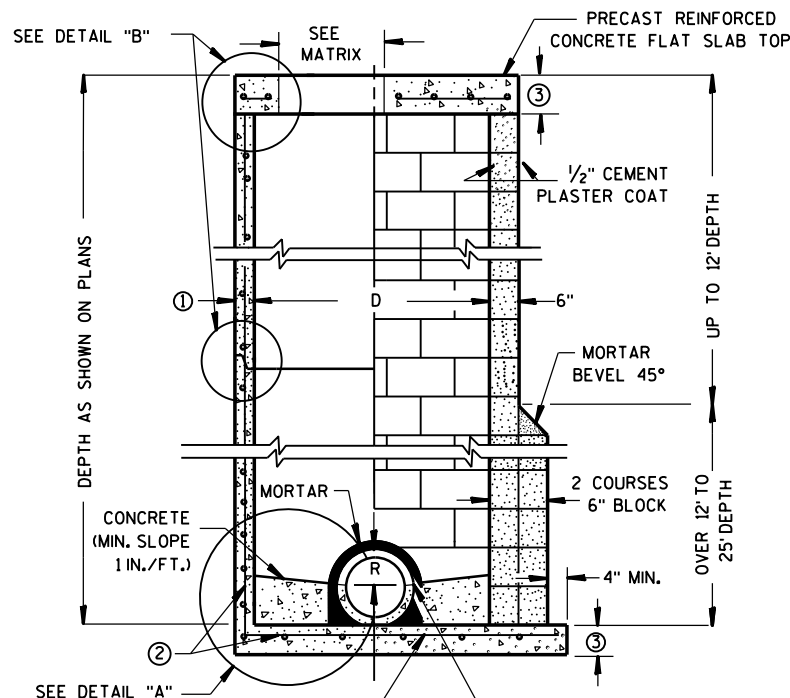


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"



CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

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

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

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 1/2" 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 PERMITTED 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

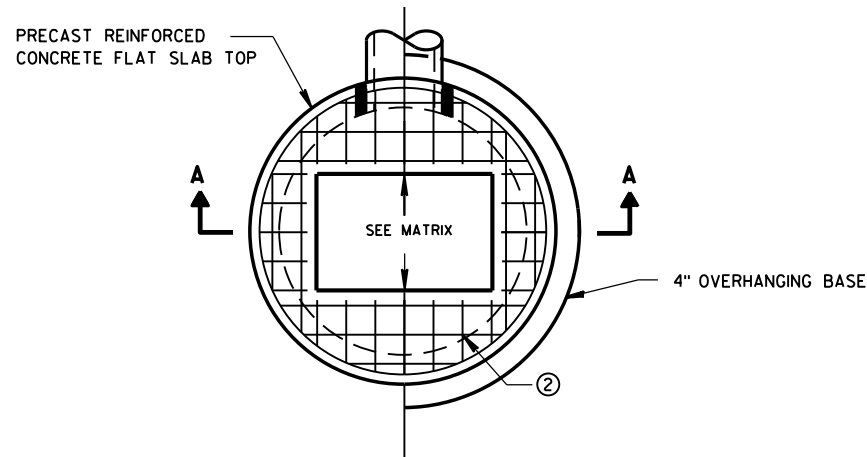
PIPE MATRIX

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

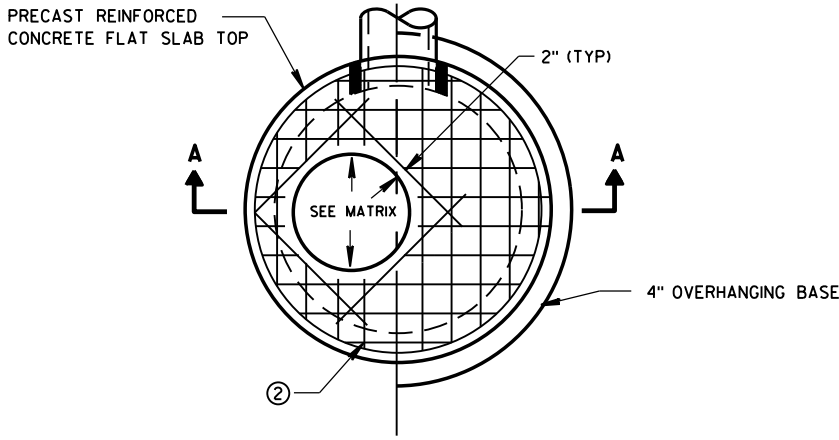
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

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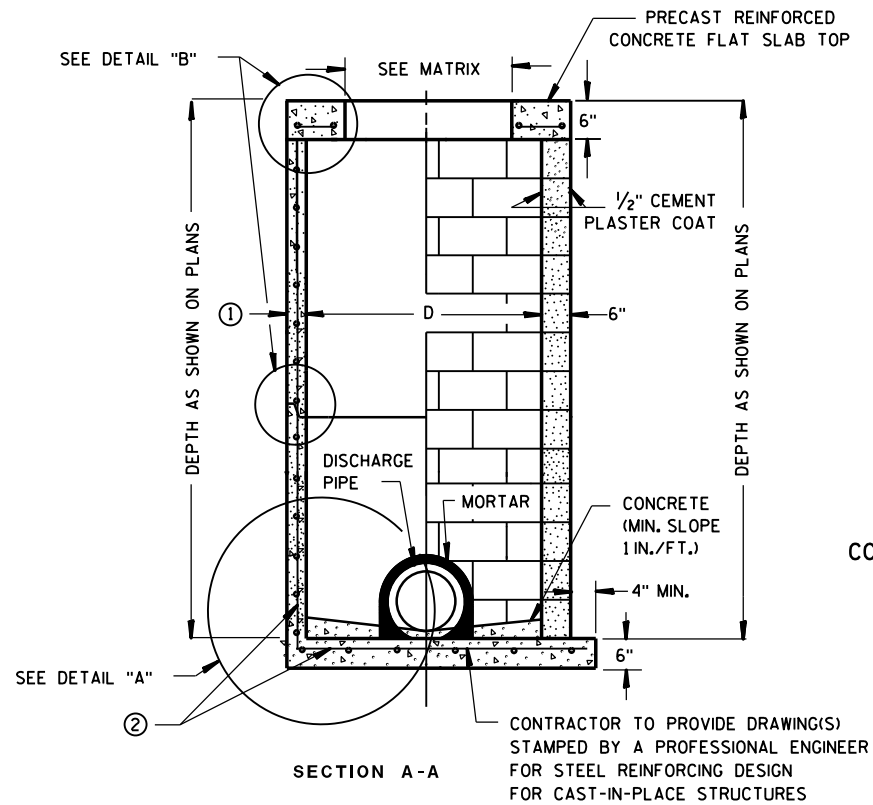
APPROVED
DATE: Sept., 2016
FHWA
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR



PLAN VIEW RECTANGULAR OPENING

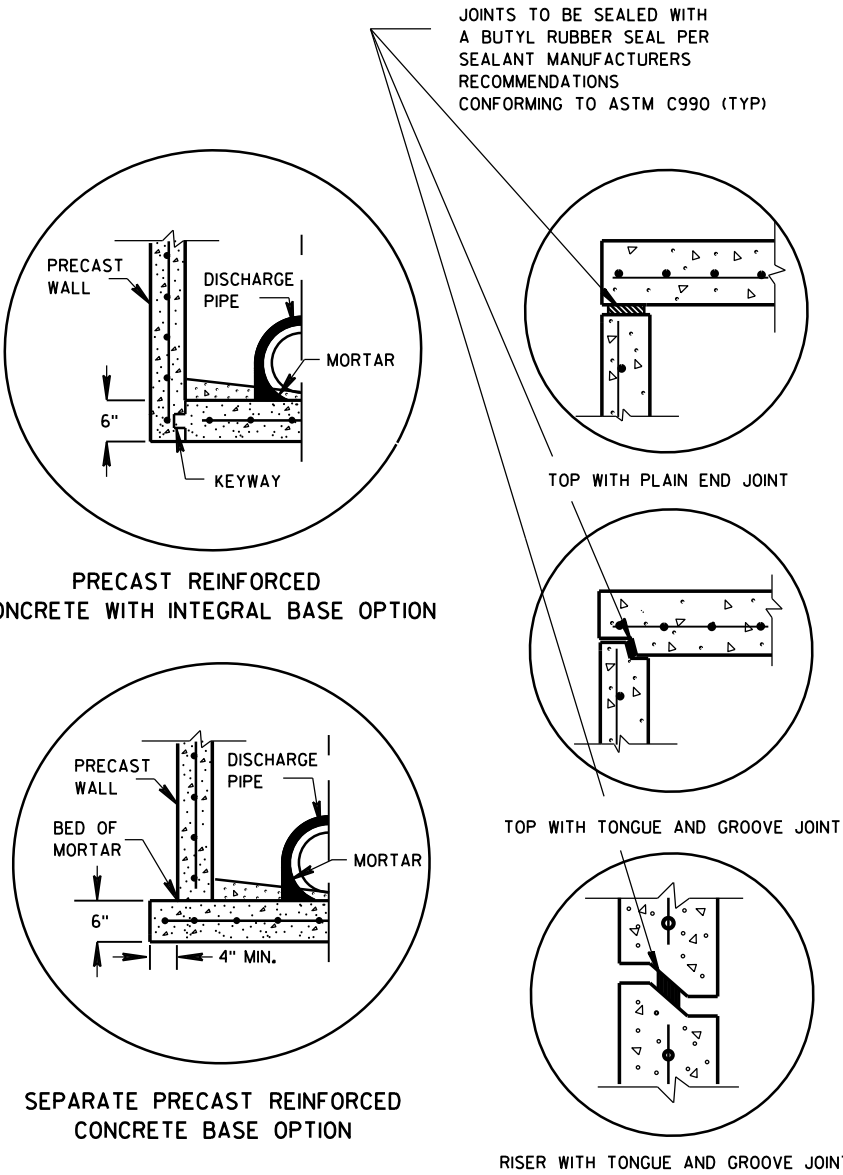


PLAN VIEW CIRCULAR OPENING



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

CIRCULAR INLETS W/ FLAT TOP



DETAIL "A"

DETAIL "B"

INLETS 3-FT AND 4-FT DIAMETER

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.

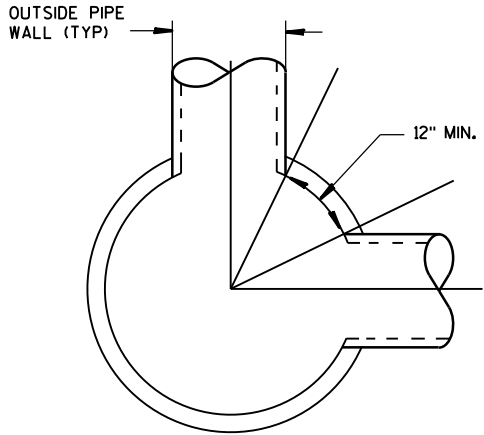
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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"

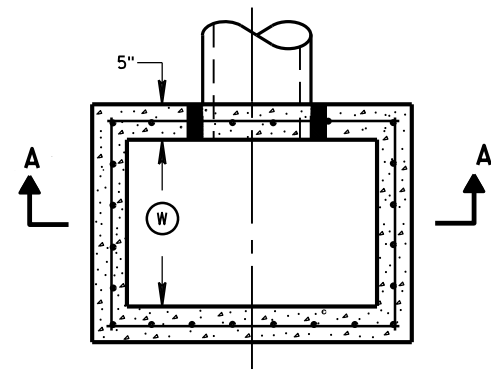
PIPE MATRIX

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

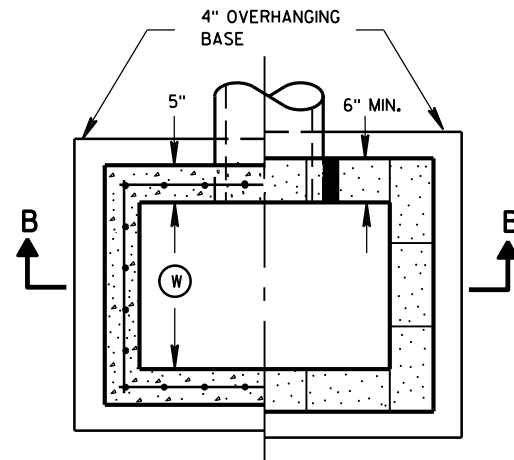
INLETS 3-FT AND 4-FT DIAMETER

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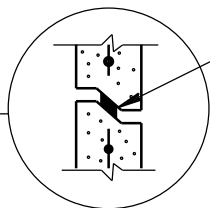
APPROVED
Sept., 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



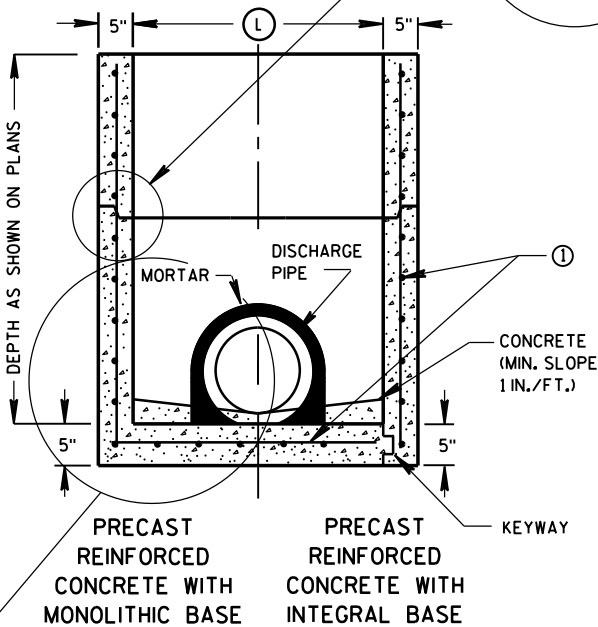
PLAN VIEW



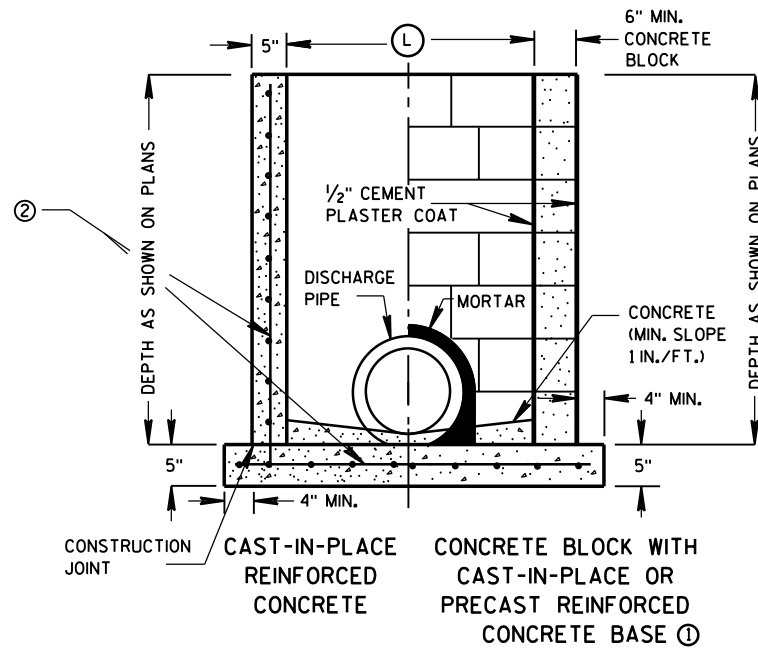
PLAN VIEW



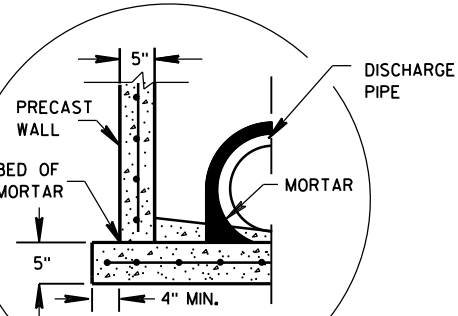
RISER JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

GENERAL NOTES

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

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

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

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

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

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

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

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

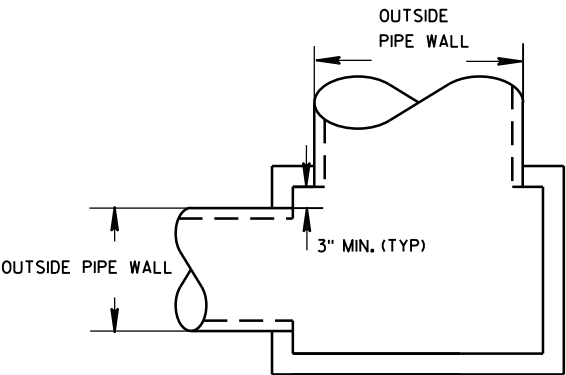
- ① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH ① (FT)	LENGTH ② (FT)								
2X2-FT	2	2	X	X			X		X	
2X2.5-FT	2	2.5			X		X	X	X	X
2X3-FT	2	3				X				
2.5X3-FT	2.5	3			X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24

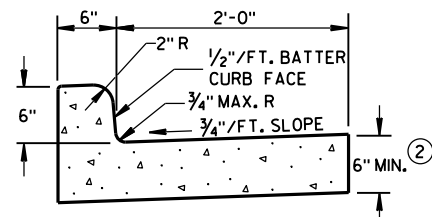


DETAIL "A"

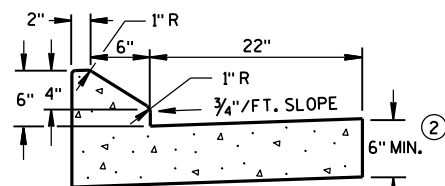
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

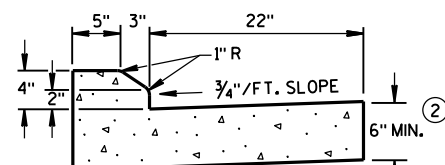
APPROVED
Sept., 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



TYPES A & D ①

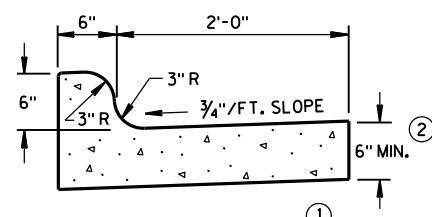


6" SLOPED CURB TYPES G & J ①



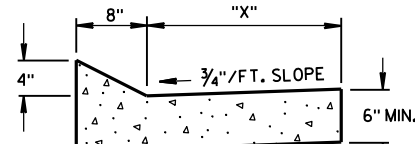
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"



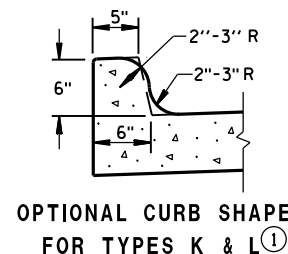
TYPES K & L ①

CONCRETE CURB & GUTTER 30"

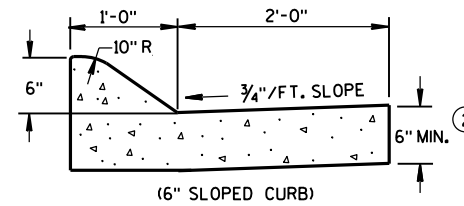


TYPES TBT & TBTT ①
CONCRETE CURB & GUTTER

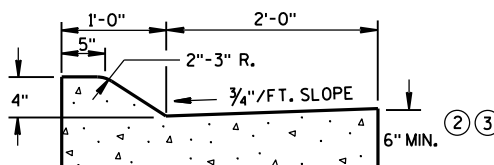
TBT & TBTT	"X"
30"	22"
36"	28"



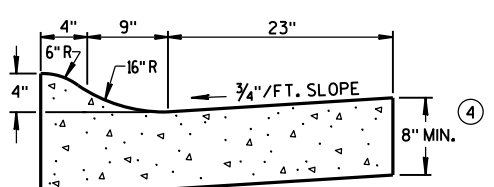
OPTIONAL CURB SHAPE
FOR TYPES K & L ①



(6" SLOPED CURB)



(4" SLOPED CURB)
TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ⑤
CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

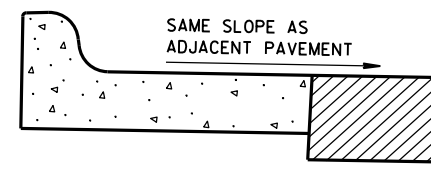
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

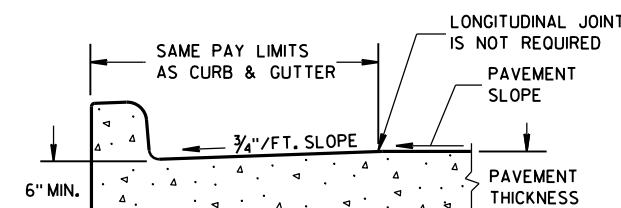
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

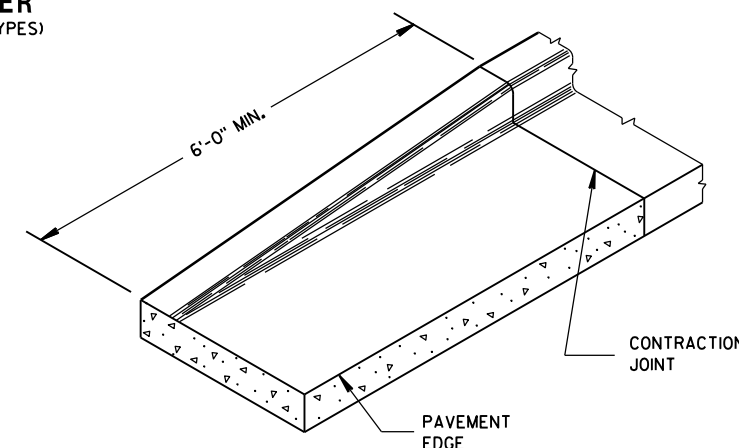
- TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.
- THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- 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.
- THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



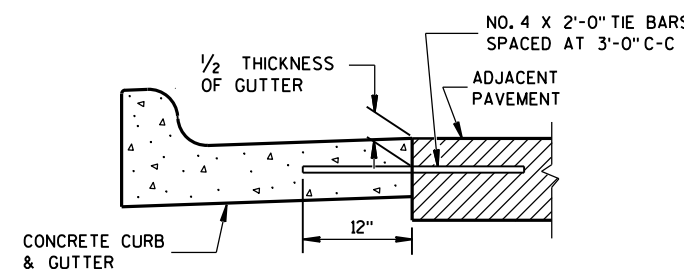
REVERSE SLOPE GUTTER
(TYPICAL FOR ALL CURB & GUTTER TYPES)



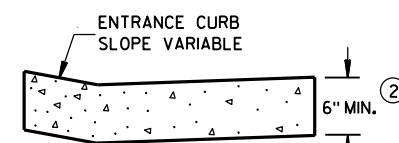
PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



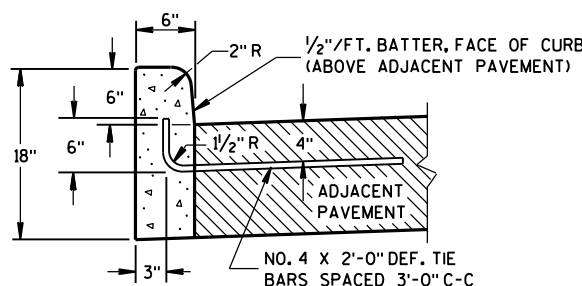
END SECTION CURB & GUTTER



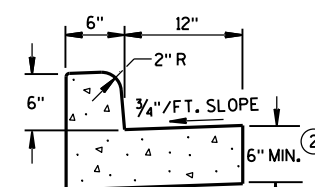
TYPICAL TIE BAR LOCATION ①



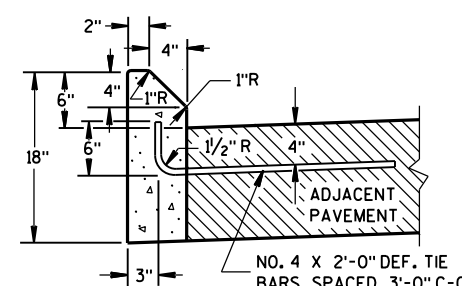
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



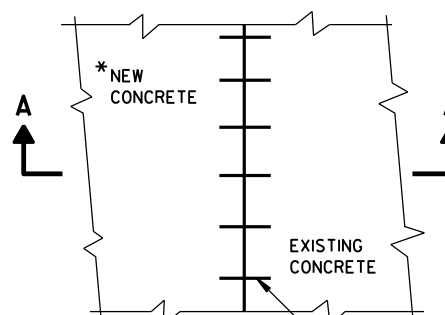
TYPES A & D ①
CONCRETE CURB



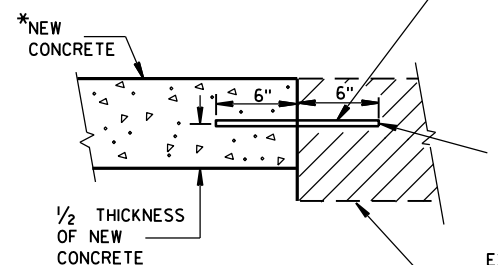
TYPES A & D
CONCRETE CURB & GUTTER 18"



TYPES G & J ①



PLAN VIEW



SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

* NEW CURB & GUTTER,
SURFACE DRAINS,
CONCRETE PAVEMENT
OR OTHER NEW CONCRETE.

NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.

MAXIMUM DRILL HOLE
SIZE IS 1/8" GREATER
THAN TIE BAR DIAMETER

EXISTING CONCRETE

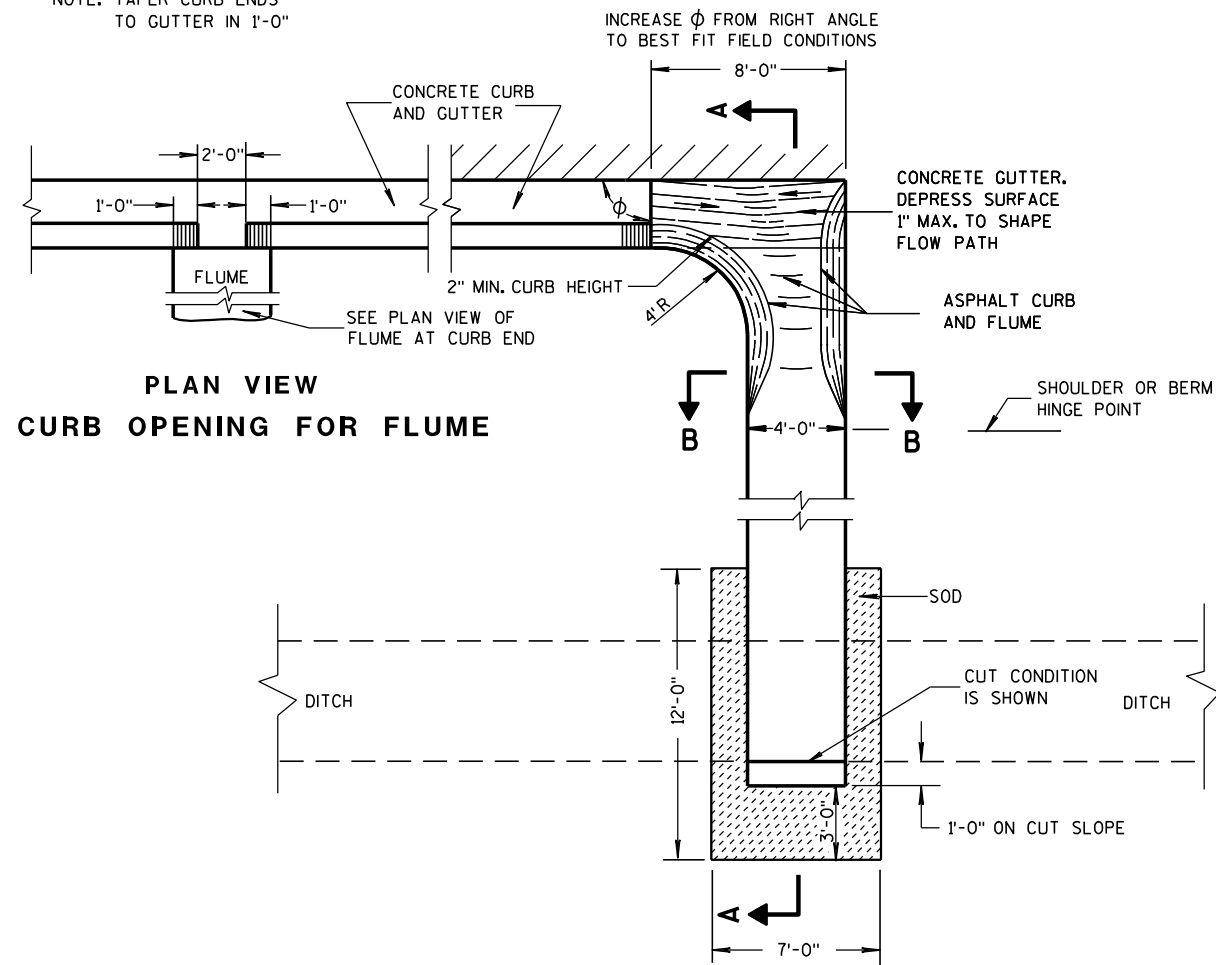
CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2016 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

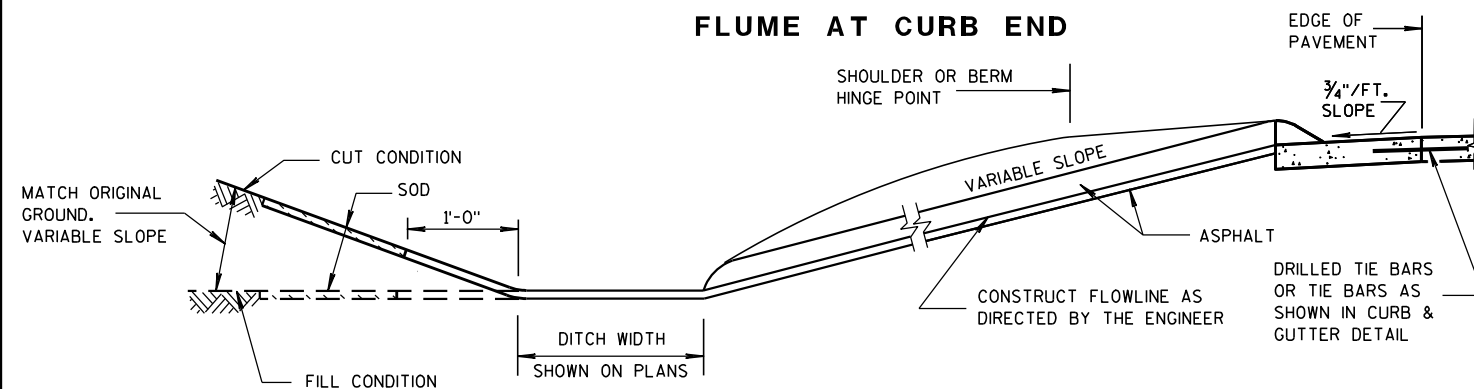
ASPHALTIC FLUME

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

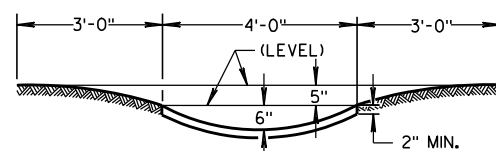


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

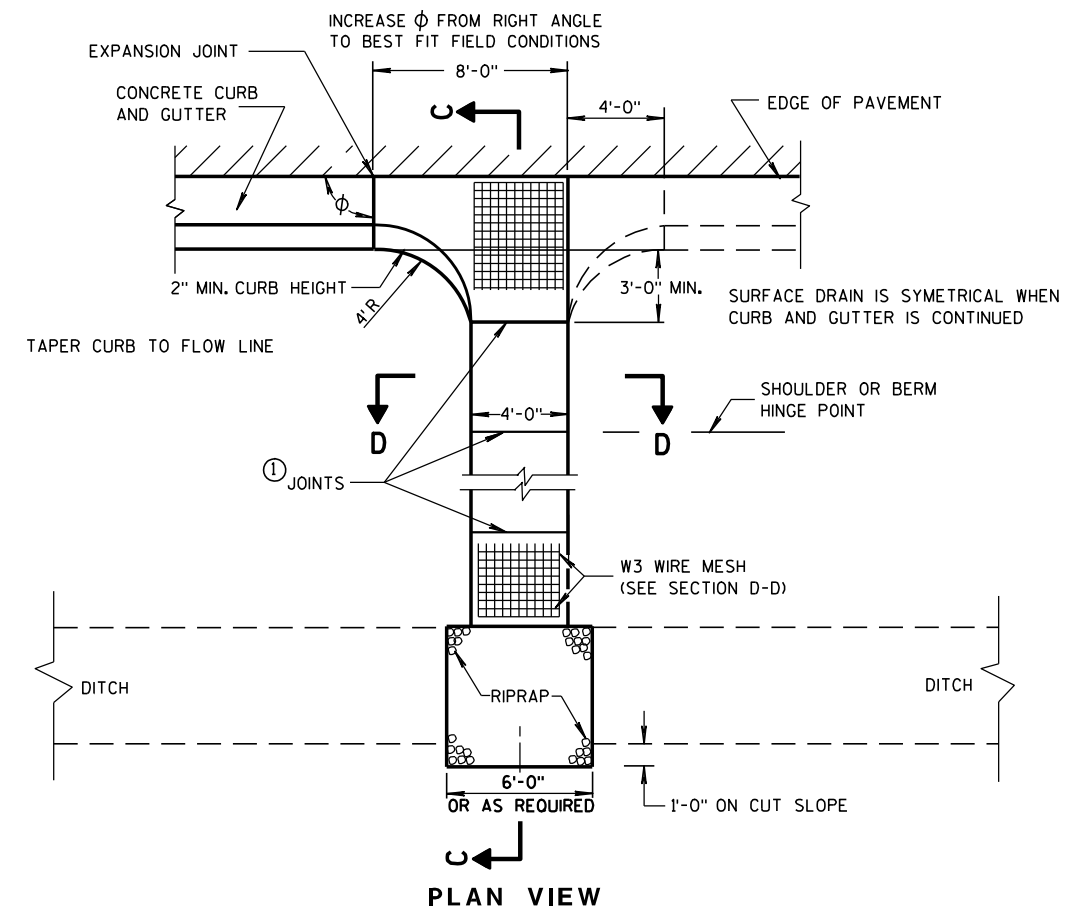
GENERAL NOTES

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

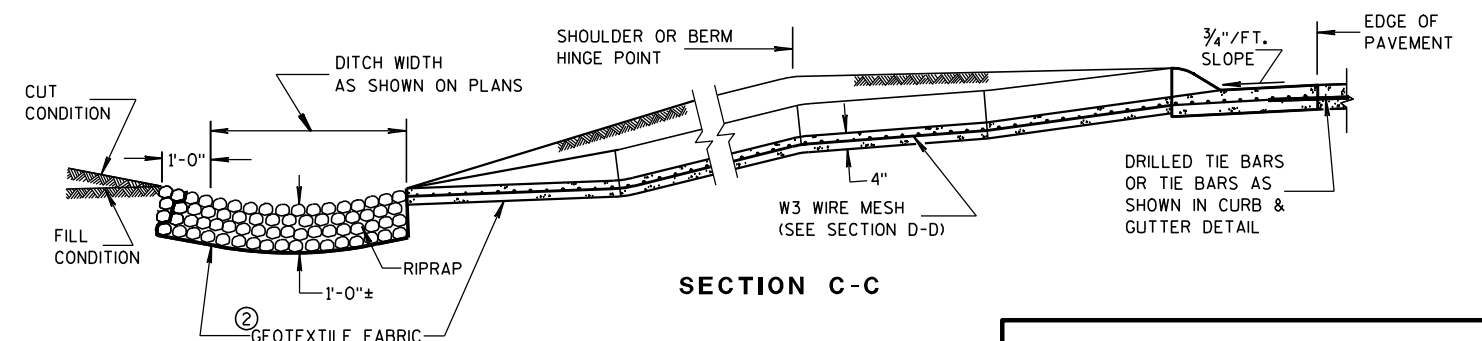
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

- ① JOINTS SHALL BE 1/8" TO 1/4" INCH WIDE BY 1 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

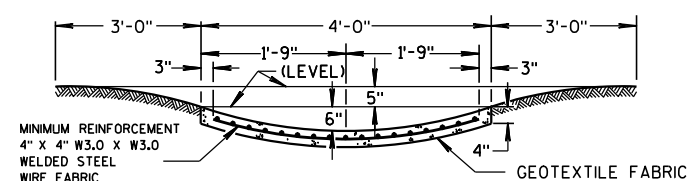
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

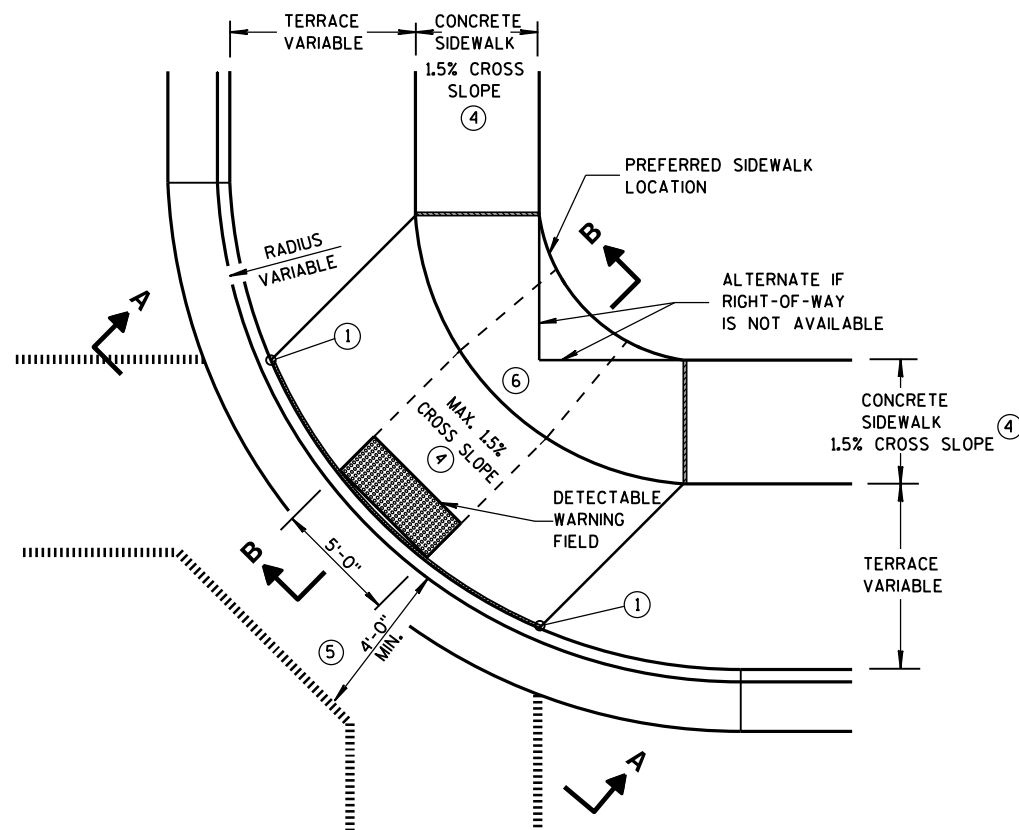
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

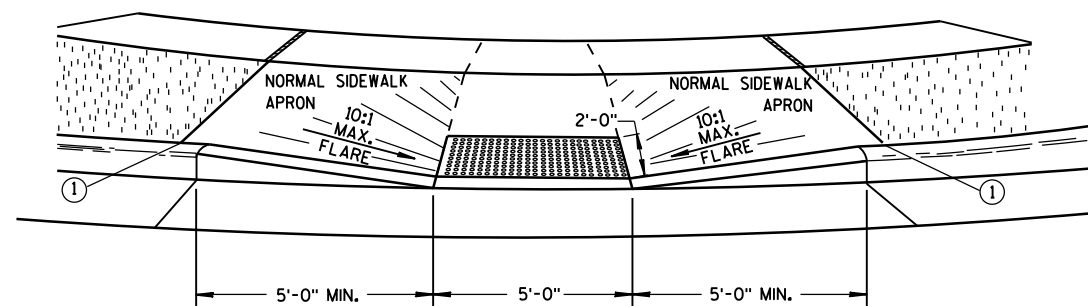
9-4-08
DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

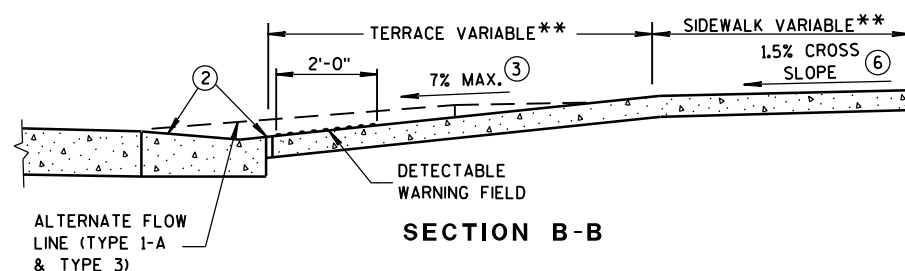


PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)

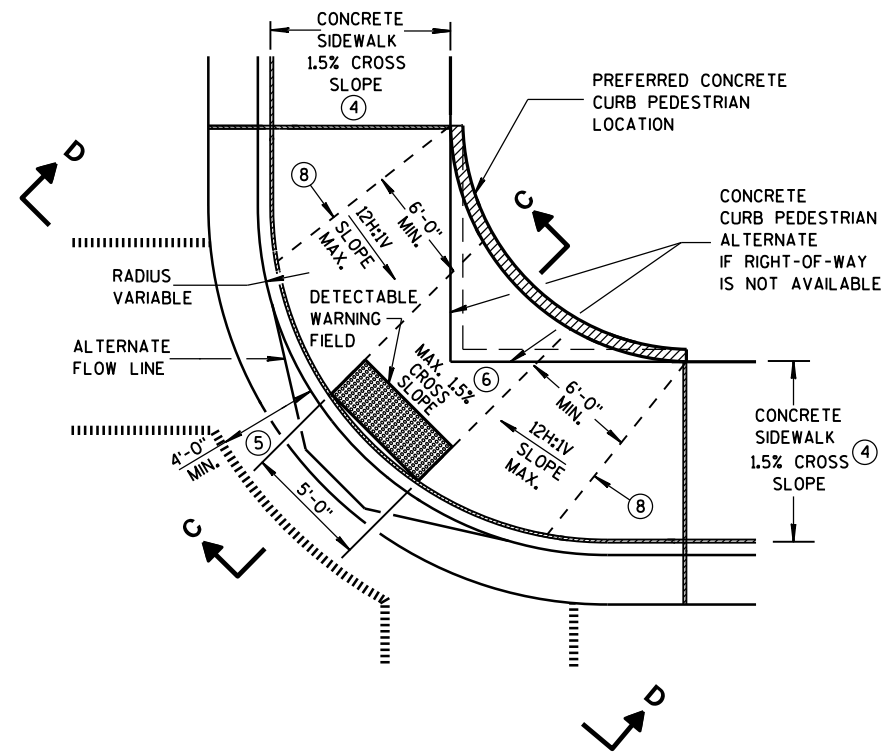


VIEW A-A

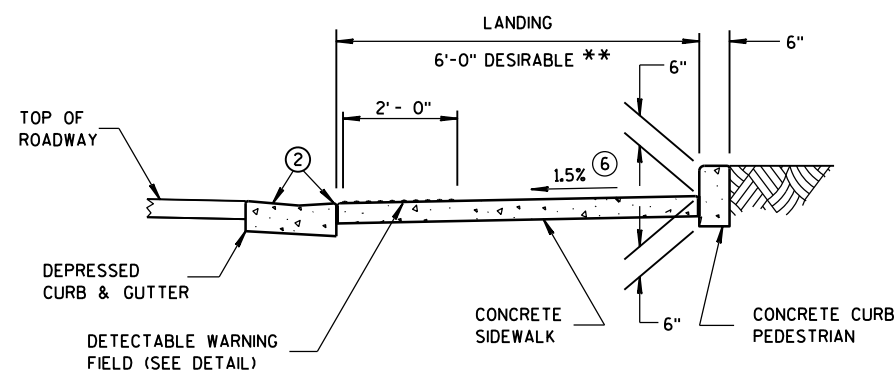
** WIDTH SHOWN ELSEWHERE
IN THE PLANS



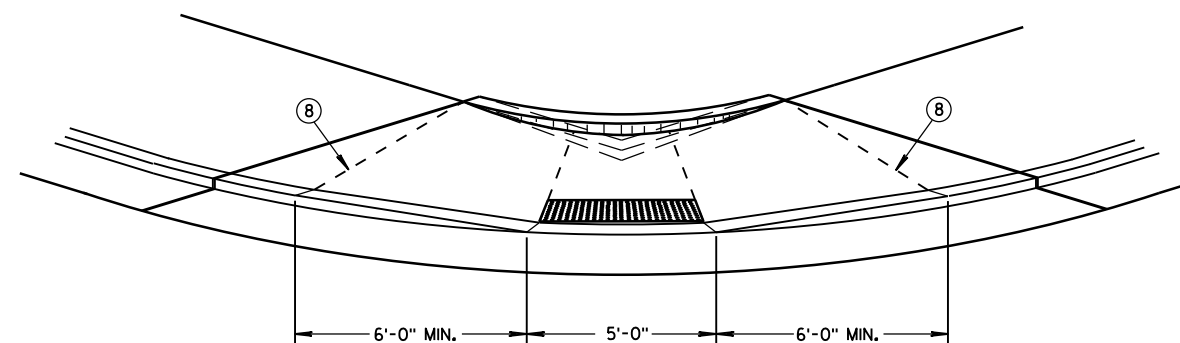
SECTION B-B



PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)



SECTION C-C



VIEW D-D

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.

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.

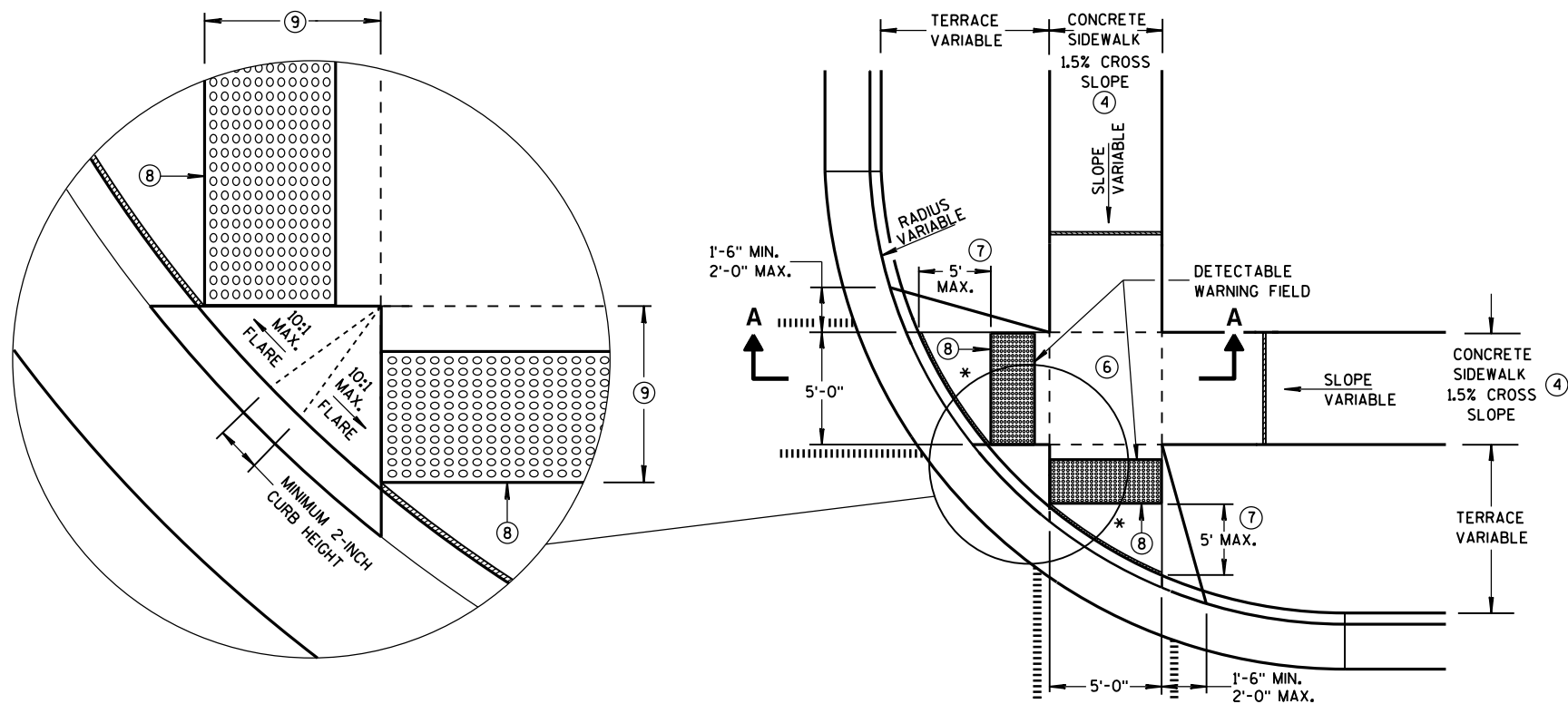
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. 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 NOT EXCEED 7%.
- 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 $\pm 0.5\%$ 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.
- ⑦ 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

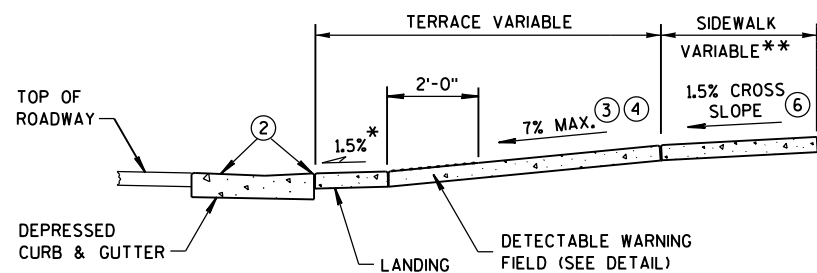
CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



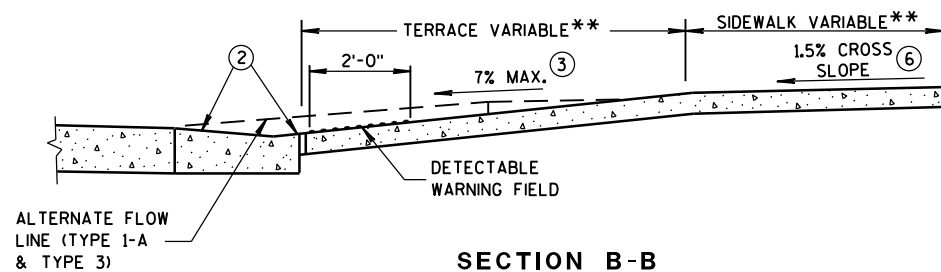
**PLAN VIEW
TYPE 2 RAMP**
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE
IN ALL DIRECTIONS IN
FRONT OF GRADE BREAK



SECTION A-A

** WIDTH SHOWN ELSEWHERE
IN THE PLANS



SECTION B-B

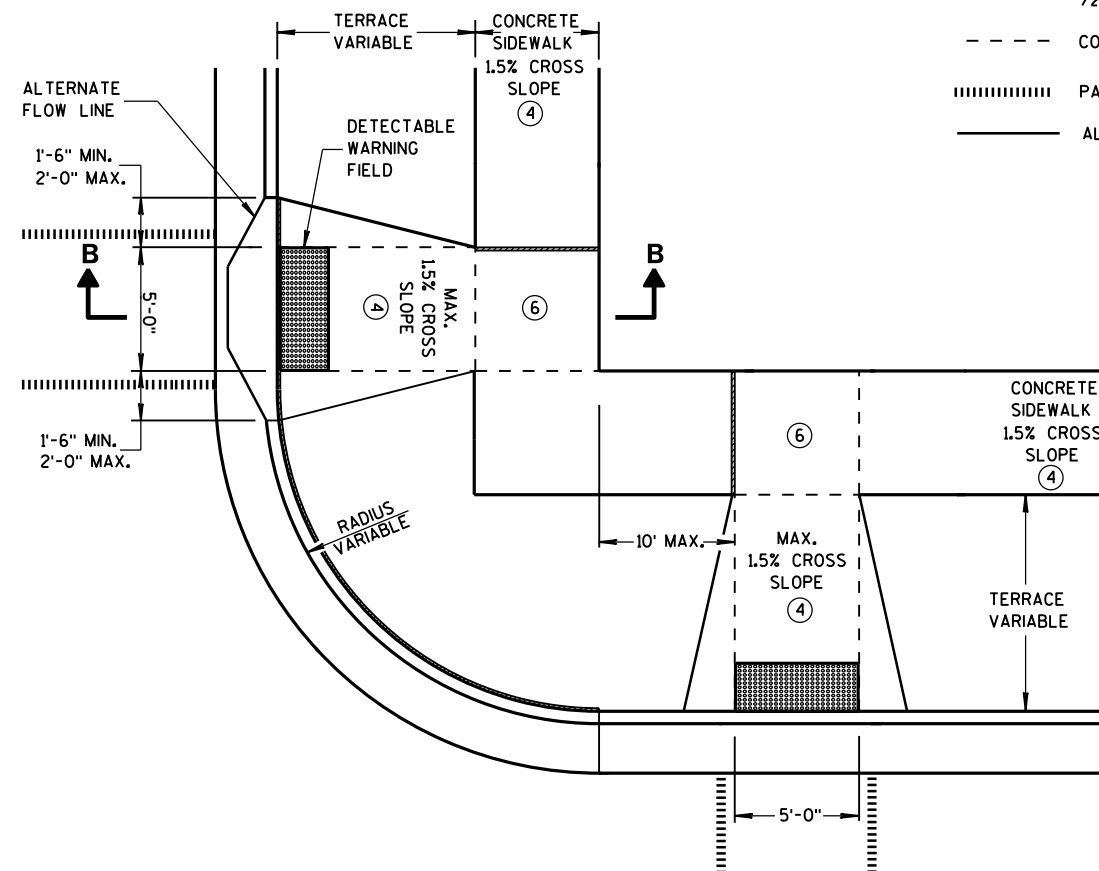
GENERAL NOTES

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 NOT EXCEED 7%.
- 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 $\pm 0.5\%$ 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 DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.
- 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

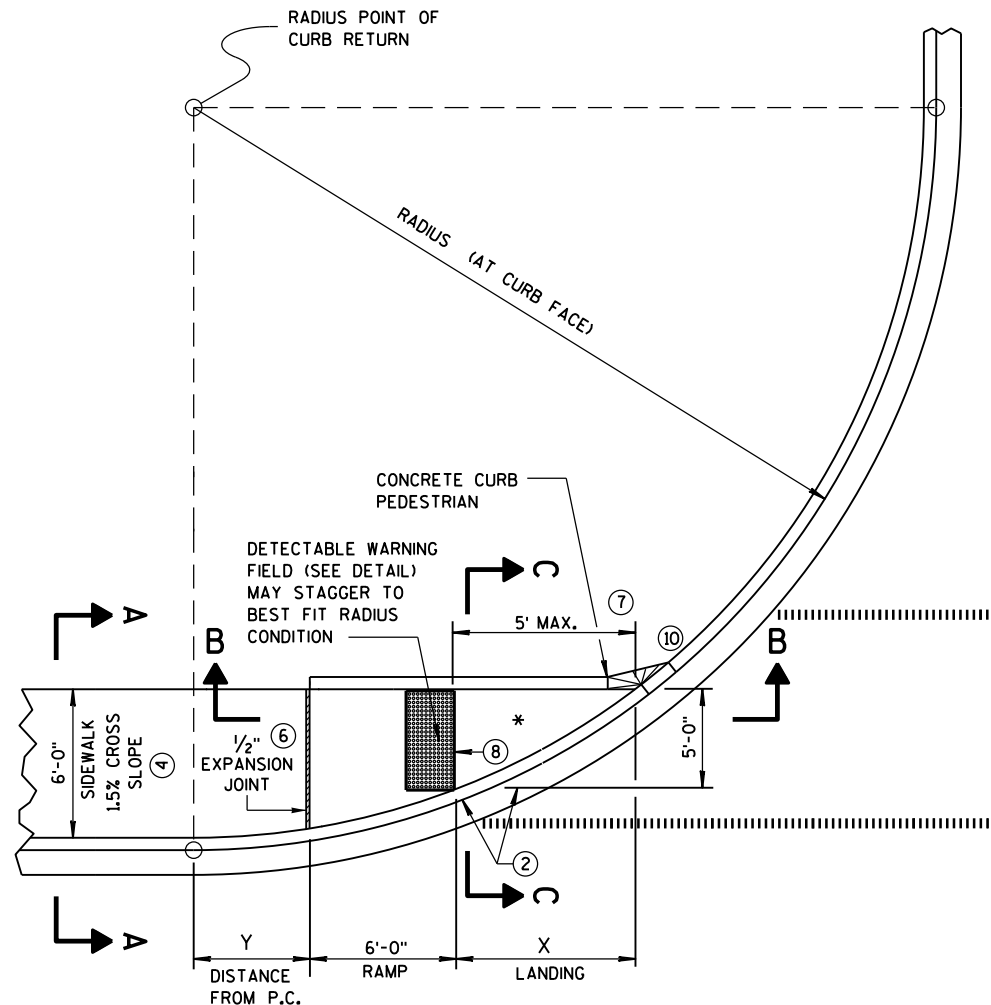
- 1/2" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



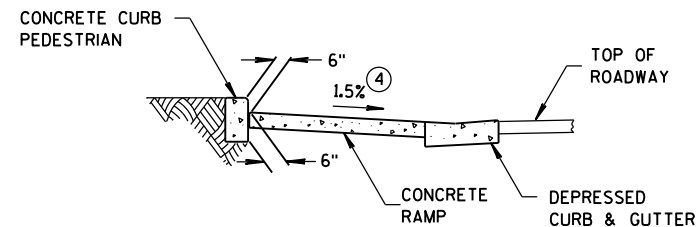
**PLAN VIEW
TYPE 3 RAMP**
(OUTSIDE OF CROSSWALK AREA)

**CURB RAMPS
TYPES 2 AND 3**

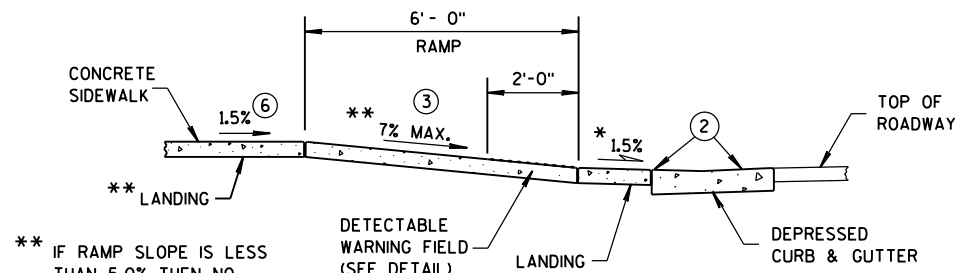
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 4A
PLAN VIEW



SECTION C-C FOR TYPE 4A

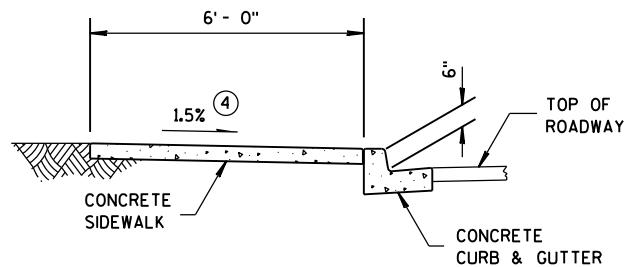


SECTION B-B FOR TYPE 4A

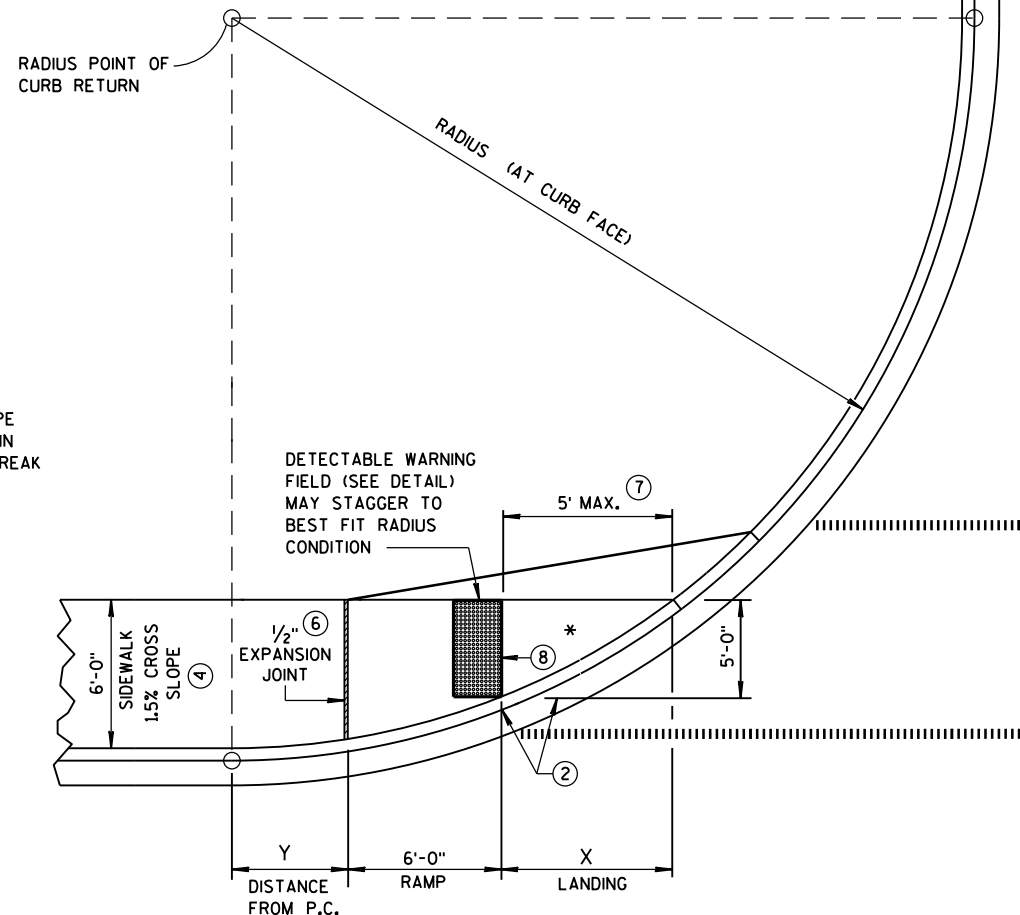
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

RADIUS (AT CURB FACE)	X	Y
20 FEET	7'-11"	0'-2"
30 FEET	10'-2 3/4"	1'-7 1/2"
40 FEET	12'-1 1/4"	2'-10"
50 FEET	13'-8 3/4"	3'-10 3/4"
60 FEET	15'-2"	4'-10 1/4"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A



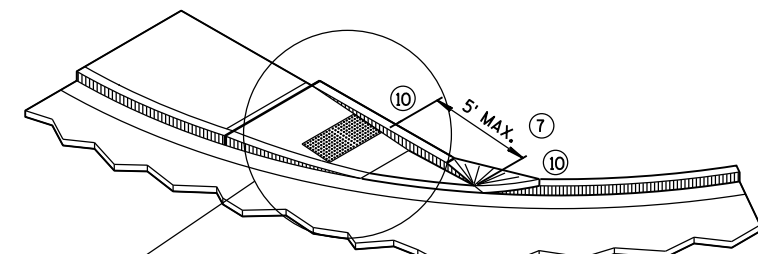
CURB RAMP TYPE 4A1
PLAN VIEW

GENERAL NOTES

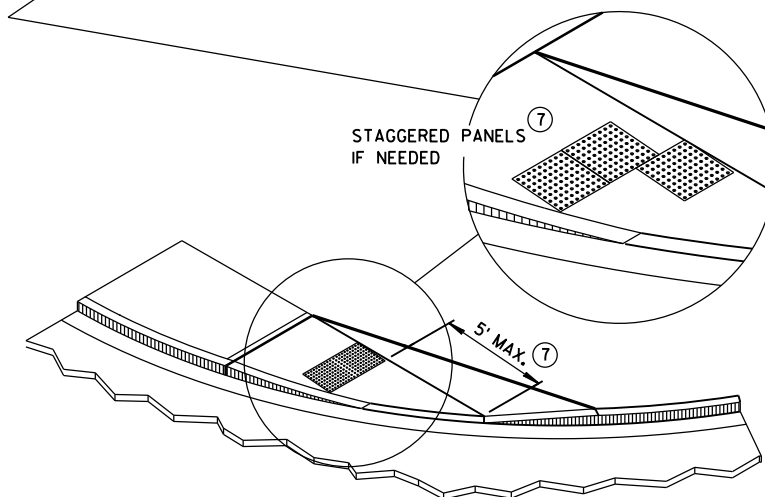
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- 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 NOT EXCEED 7%.
- ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4A



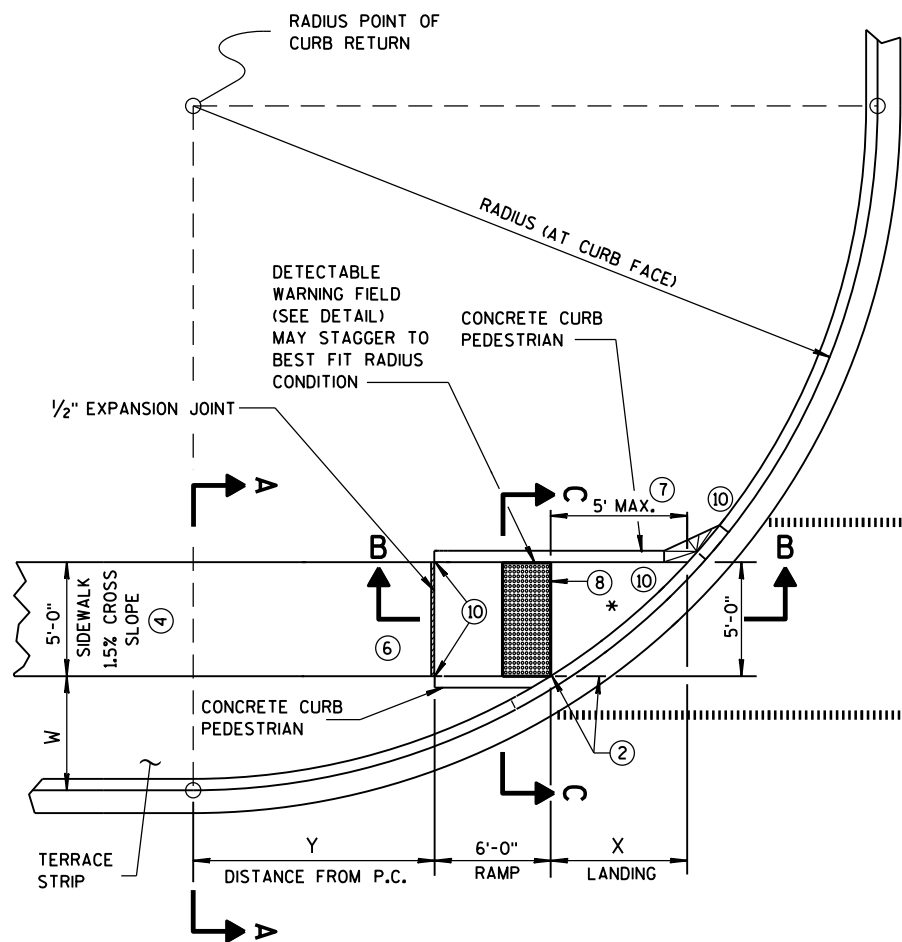
ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

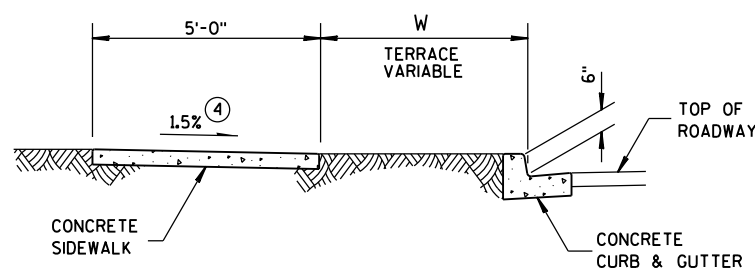
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

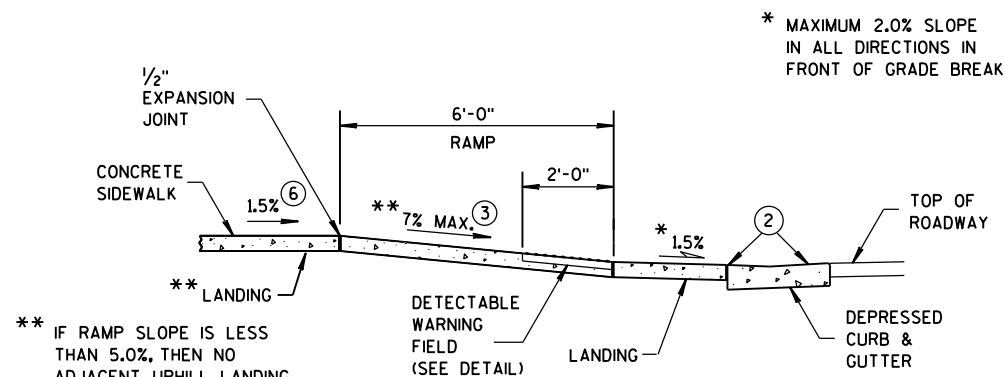
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**CURB RAMP TYPE 4B
PLAN VIEW**

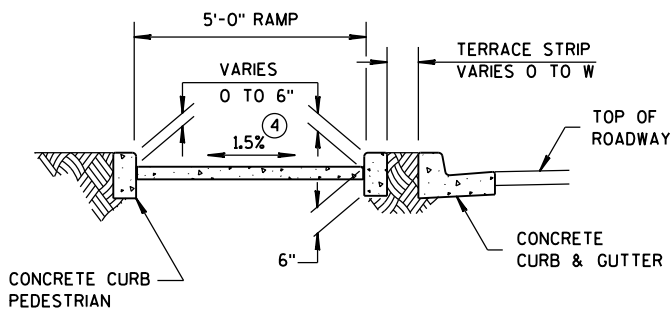


SECTION A-A FOR TYPE 4B

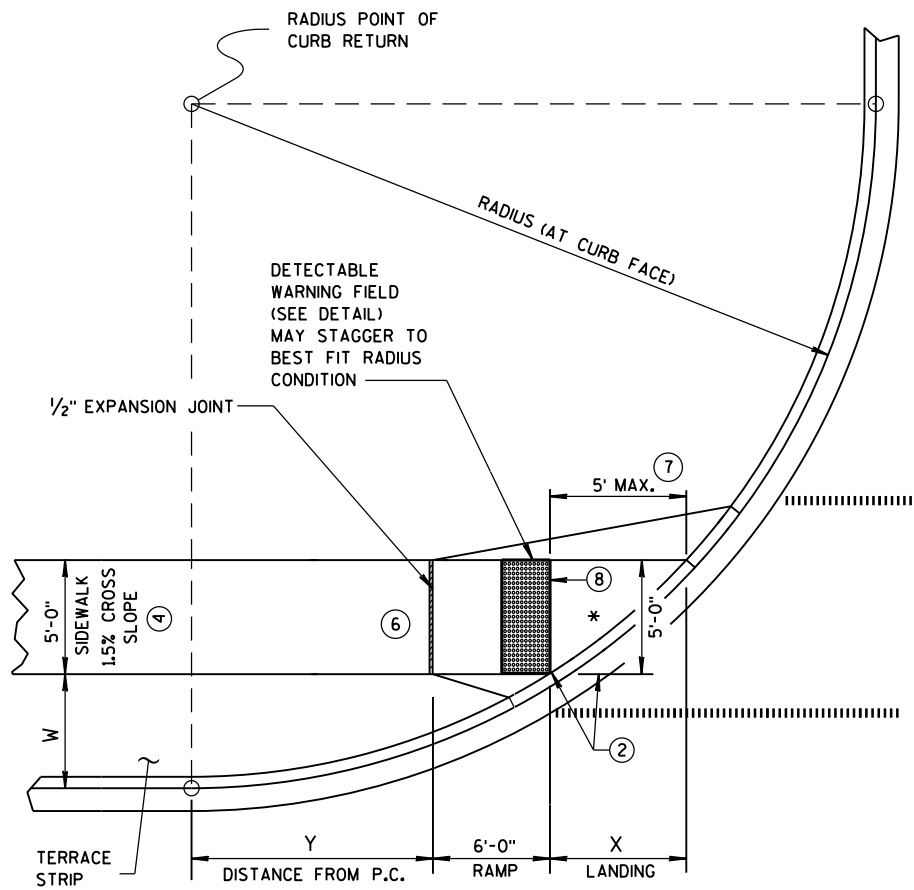


SECTION B-B FOR TYPE 4B

- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
 - CONTRACTION JOINT FIELD LOCATED
 - PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B



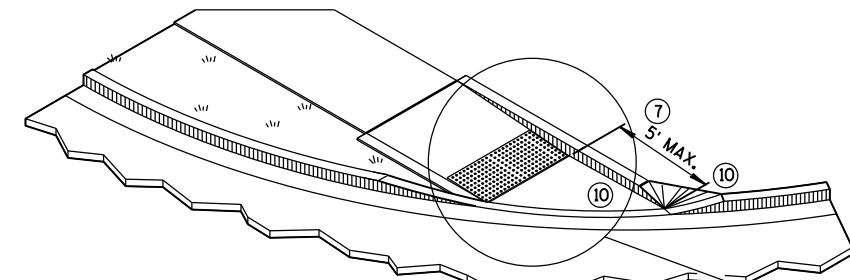
**CURB RAMP TYPE 4B1
PLAN VIEW**

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-9 3/4"	3'-6 1/2"	4'-11 1/2"	5'-1 3/4"	4'-3 3/4"	6'-5 1/2"	3'-8 3/4"	7'-6 3/4"	3'-3"	8'-6 1/4"
30 FEET	7'-9 1/4"	5'-10 1/2"	6'-9 1/2"	7'-11 1/4"	6'-0 1/4"	9'-8"	5'-5"	11'-1 3/4"	4'-10 3/4"	12'-5 3/4"
40 FEET	9'-4"	7'-10"	8'-2 3/4"	10'-3"	7'-4 3/4"	12'-3 3/4"	6'-8 1/2"	14'-1 1/4"	6'-1 3/4"	15'-8 1/2"
50 FEET	10'-8"	9'-6 1/2"	9'-5 1/2"	12'-3 1/4"	8'-6 1/2"	14'-7 1/2"	7'-9 3/4"	16'-8 1/4"	7'-2 1/2"	18'-6 1/4"
60 FEET	11'-10 1/4"	11'-0 3/4"	10'-6 1/2"	14'-1 1/4"	9'-6 1/2"	16'-8 1/2"	8'-9 1/4"	18'-11 3/4"	8'-1 1/2"	21'-0 1/2"

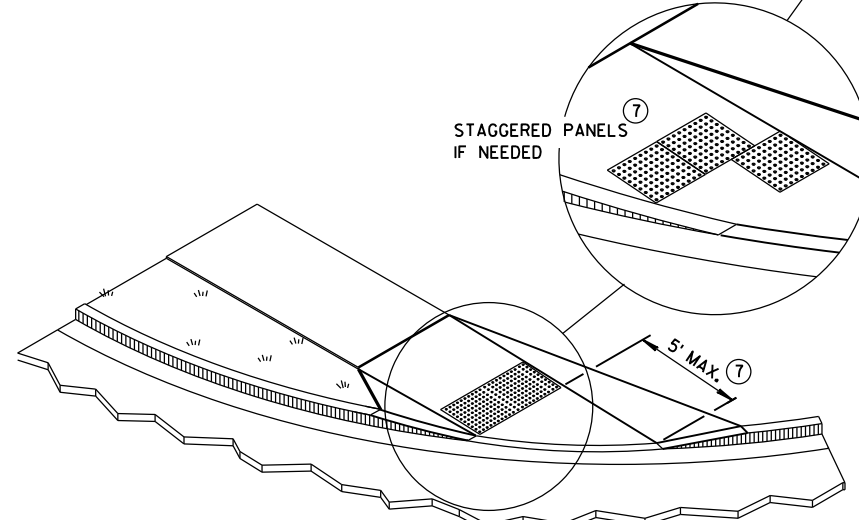
GENERAL NOTES

INTERMEDIATE RADII CAN BE INTERPOLATED

- 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.
- 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 NOT EXCEED 7%.
 - ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
 - ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
 - PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
 - WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.
 - PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
 - INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



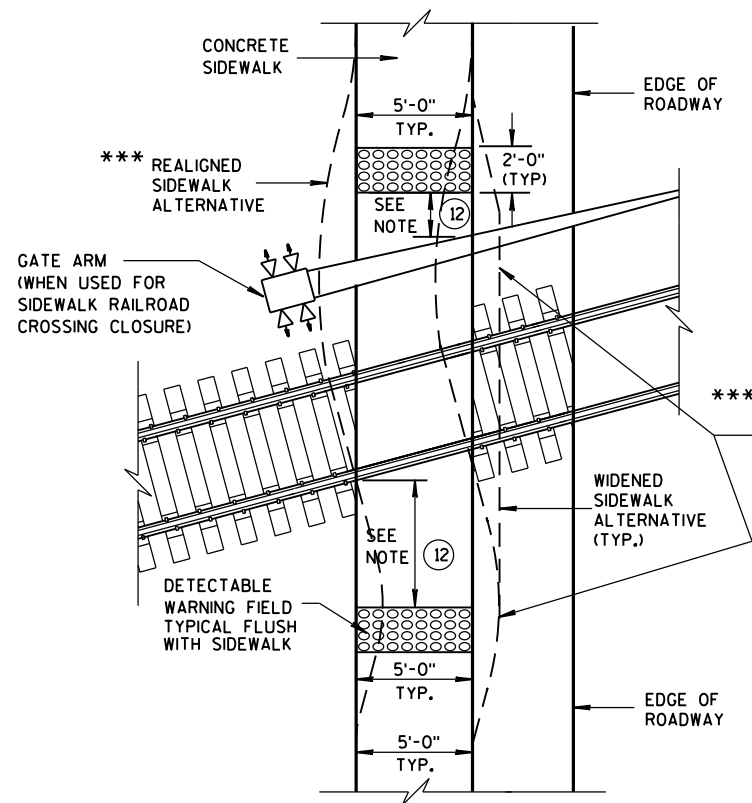
ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

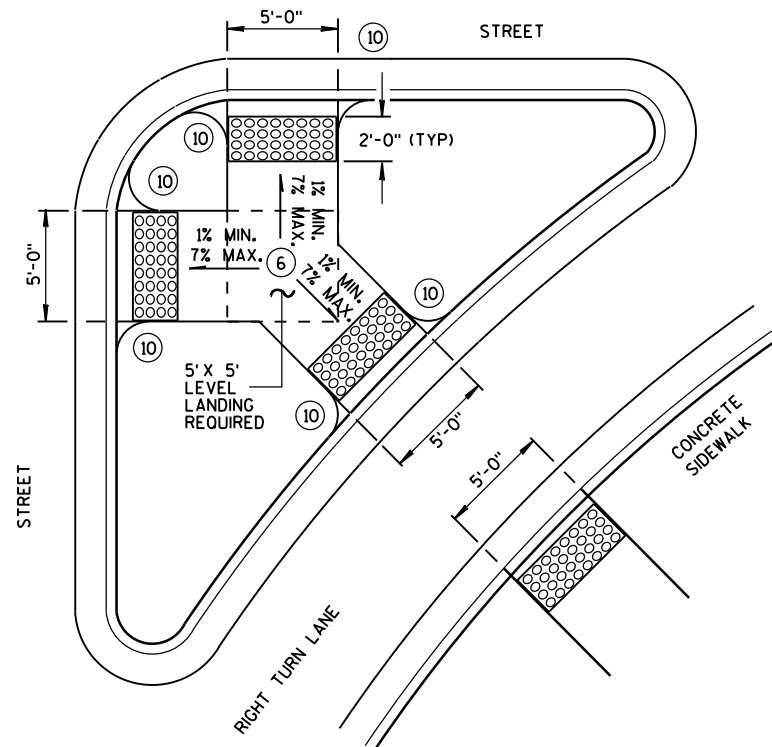
**CURB RAMPS
TYPE 4B AND 4B1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

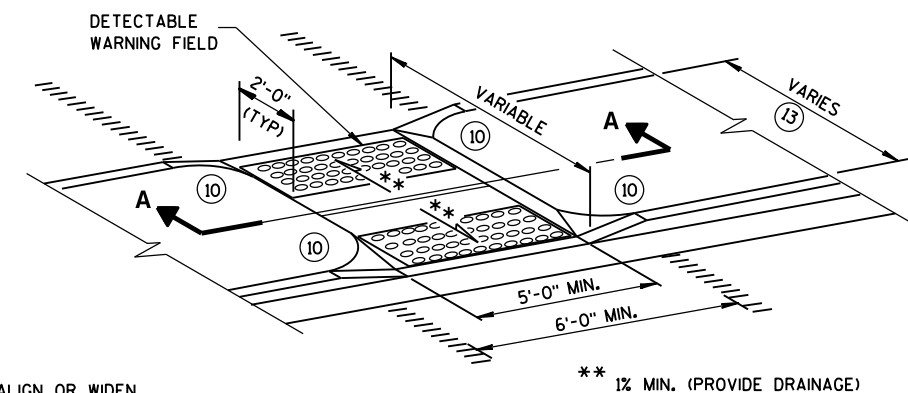


TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING

REFER TO GENERAL NOTES ② AND ③
FOR ALL ISLAND CURB RAMPS

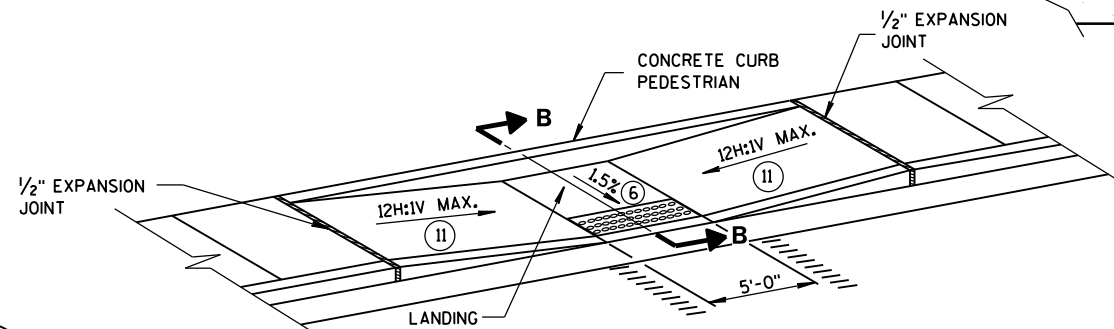


TYPE 6
DETECTABLE WARNING AT ISLANDS

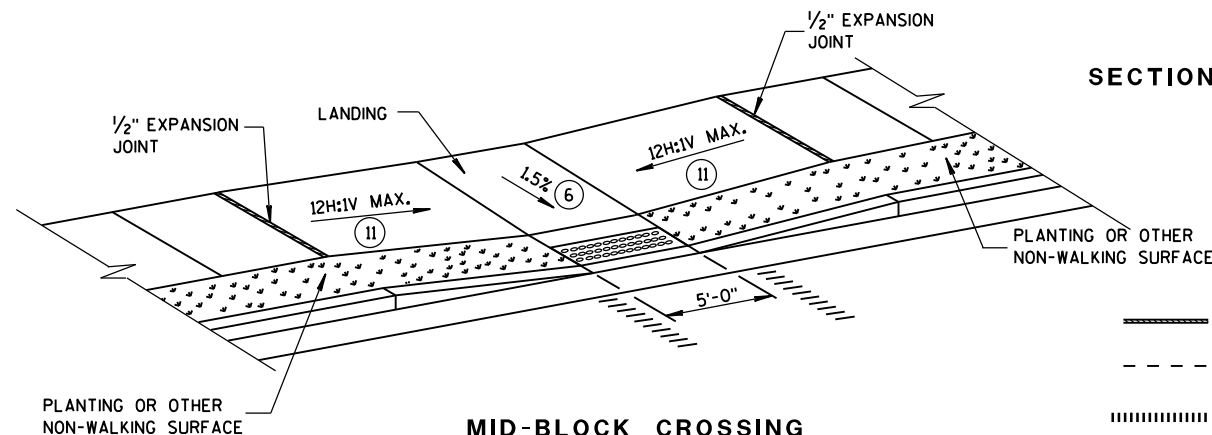


MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

*** DETAILS TO BE DETERMINED
BY DESIGNER



MID-BLOCK CROSSING
TYPE 7A

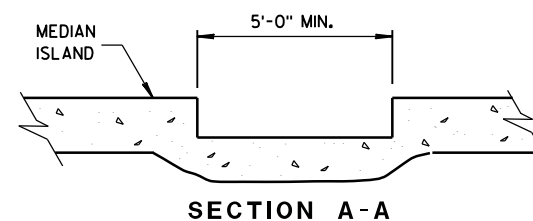


MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS
MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

GENERAL NOTES

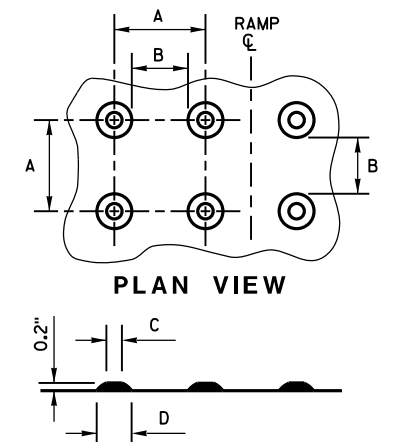
- SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE 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 NOT EXCEED 7%.
- 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 IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



SECTION A-A

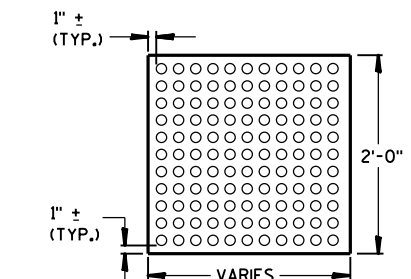
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO
65% OF THE D DIMENSION.



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
 - CONTRACTION JOINT FIELD LOCATED
 - PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

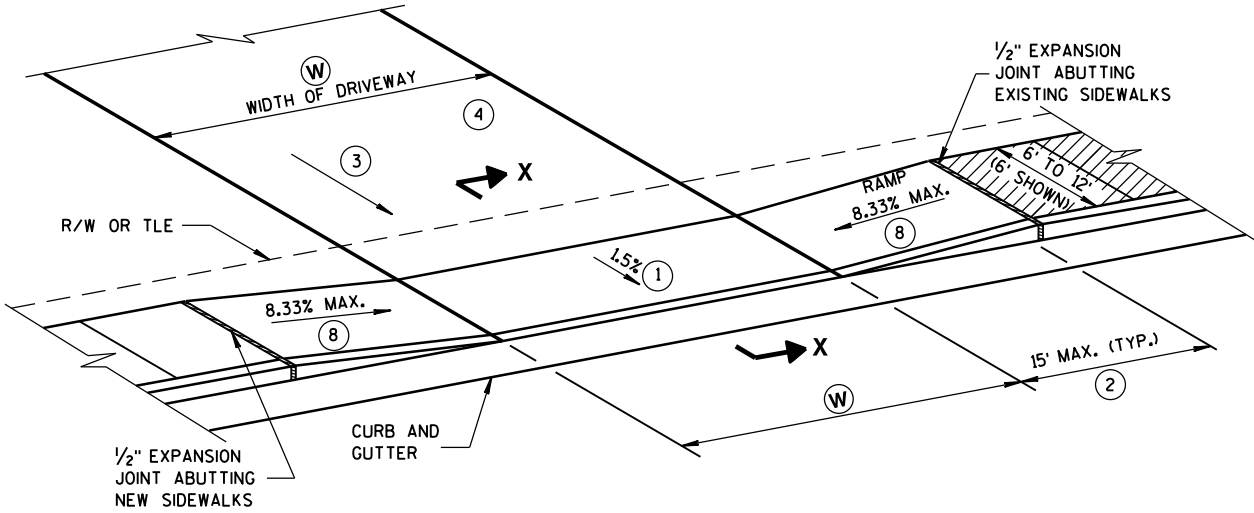
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

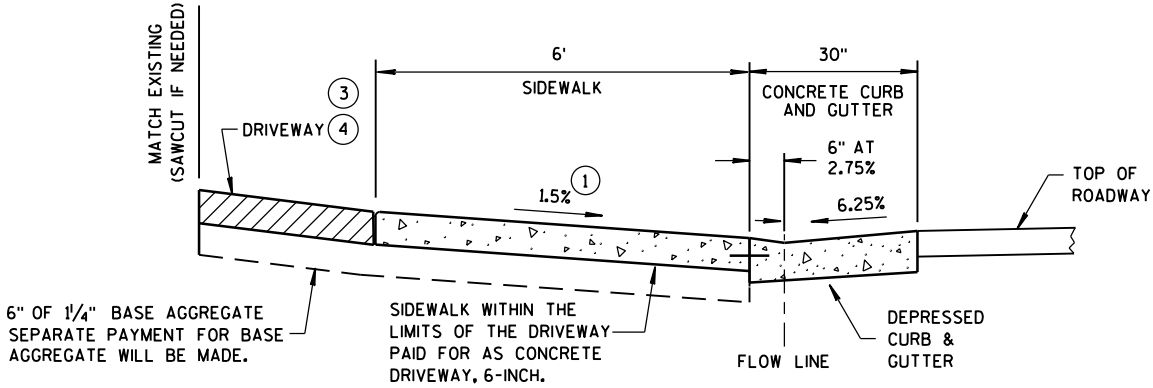
GENERAL NOTES

- 1 CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- 2 THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.
- 3 DRIVEWAY SLOPES: DESIRABLE MAXIMUM
10.5% UP AWAY FROM SIDEWALK (SAG)
8.5% DOWN AWAY FROM SIDEWALK (CREST)
ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG
- 4 DRIVEWAY TYPES
 - 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
 - 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
 - 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)
- 5 PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.
- 6 (W) IS SHOWN ON PLAN AND PROFILE SHEETS.
- 7 OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.
- 8 SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

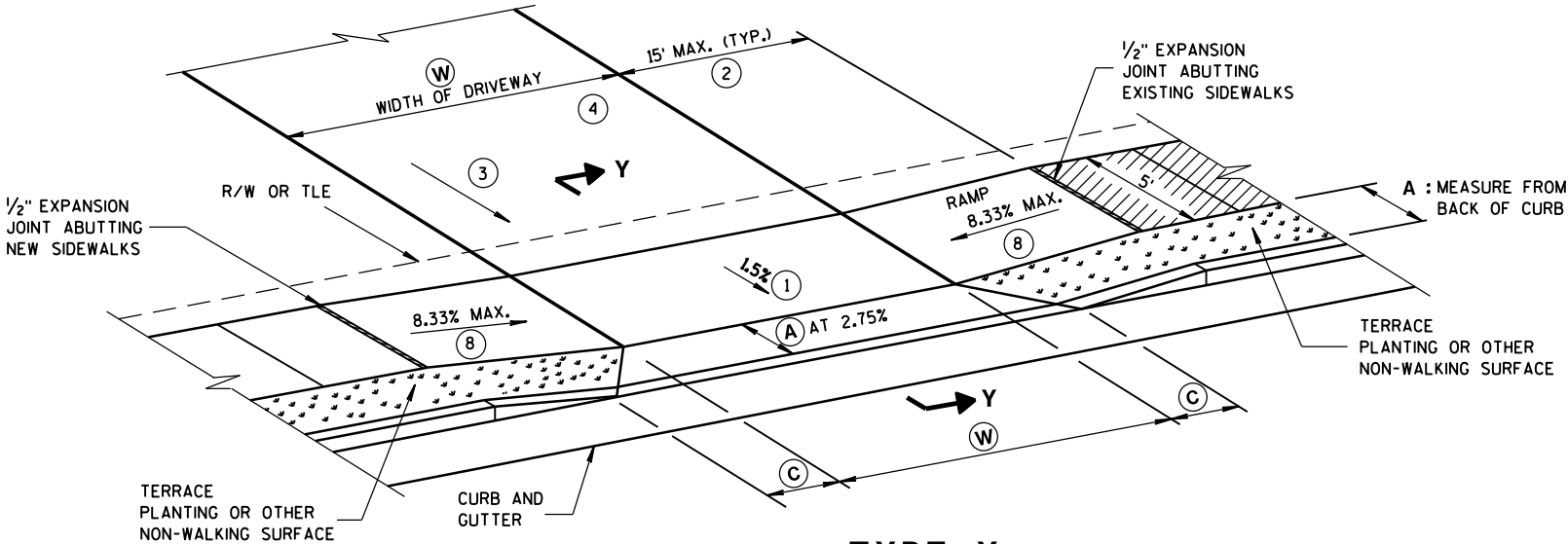
(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)
16' MIN. - 35' MAX. COMMERCIAL (CE)



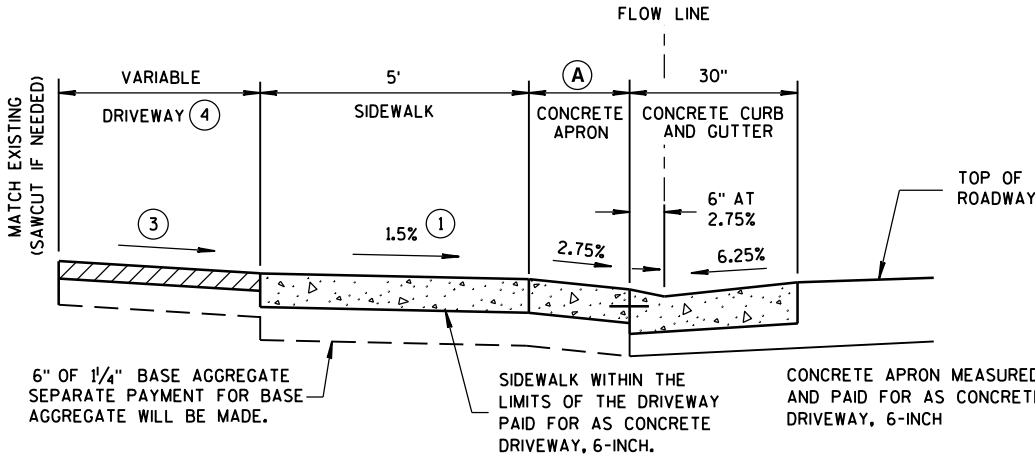
TYPE X
SIDEWALK ABUTS CURB & GUTTER
TERRACE VARIES 0 TO 3 FEET



SECTION X-X



TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET



NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y-Y
DRIVEWAY DETAIL
WITH CONCRETE CURB & GUTTER
(URBAN AND SUBURBAN)

TABLE Y

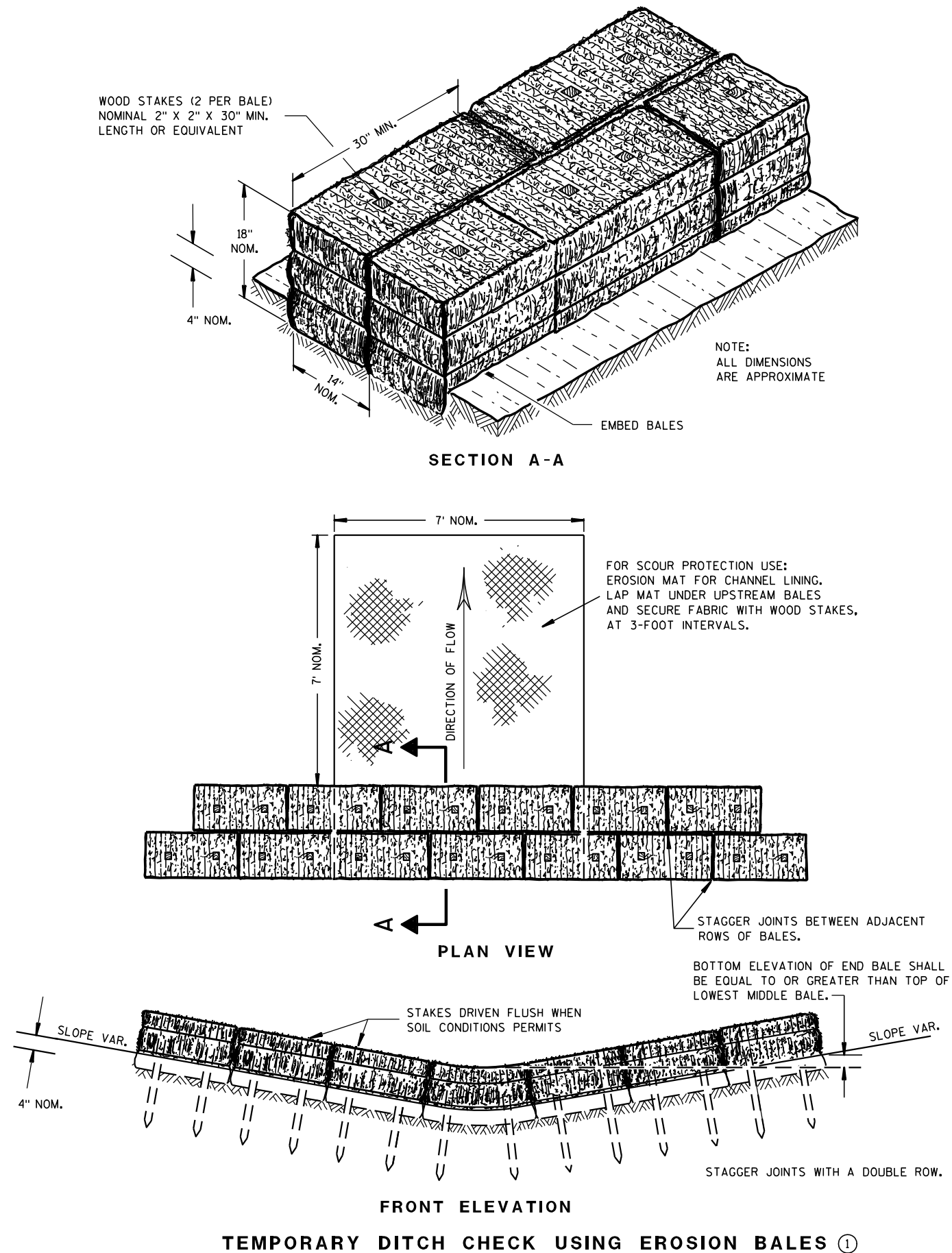
(A) FEET	(C) FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'

NOT TO SCALE

DRIVEWAY AND SIDEWALK
RAMPS
TYPES X & Y

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

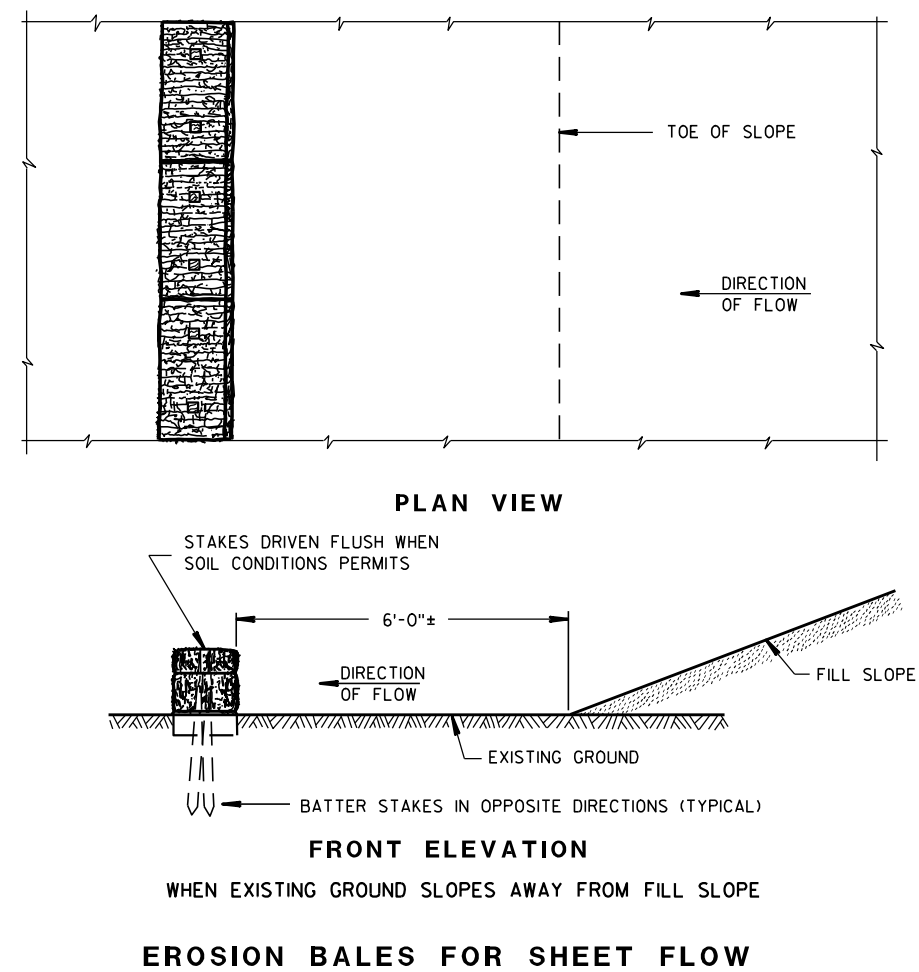
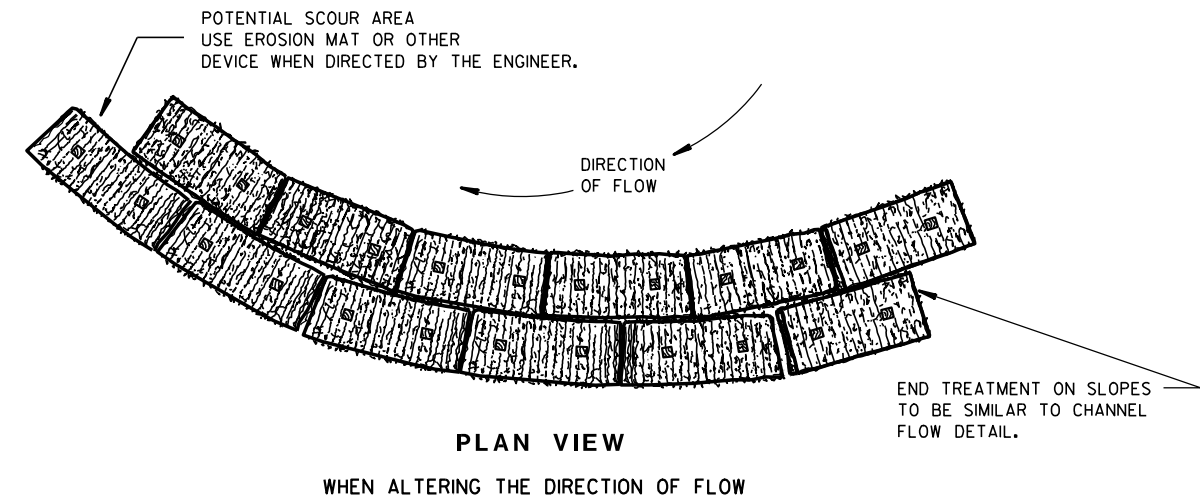
APPROVED
December, 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



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.

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

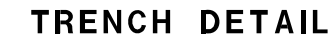
6/04/02
DATE

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



- 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 1½" X 1½" 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.



SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED <u>4-29-05</u> DATE	<u>/S/ Beth Cannestra</u> CHIEF ROADWAY DEVELOPMENT ENGINEER



INLET PROTECTION, TYPE A

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.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

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 D

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

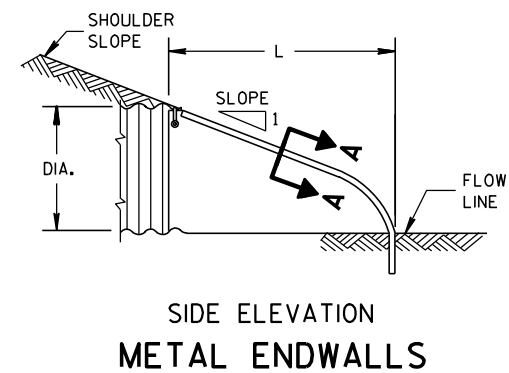
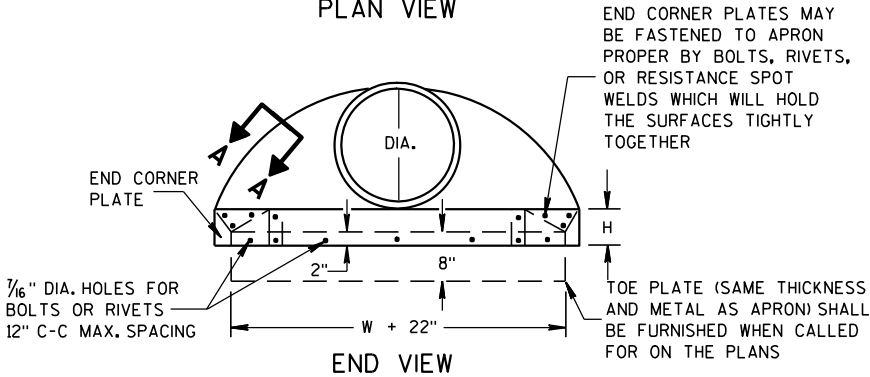
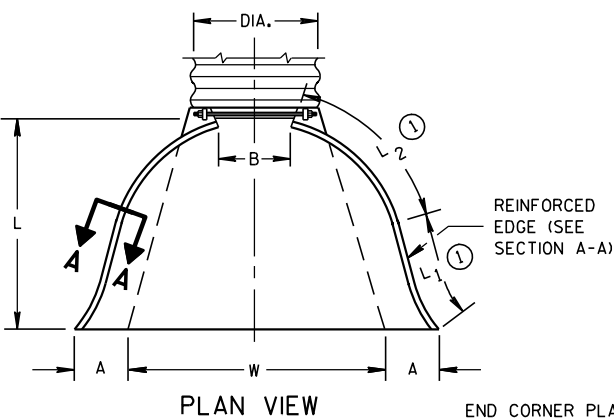
**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Cannestra
DATE
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
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	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

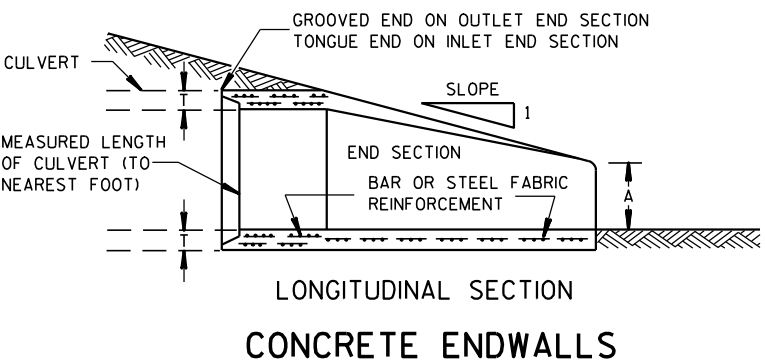
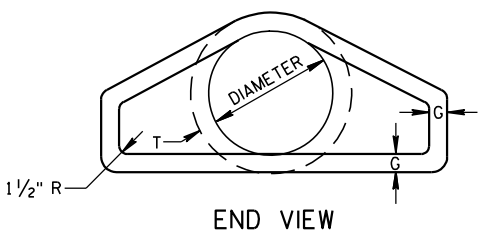
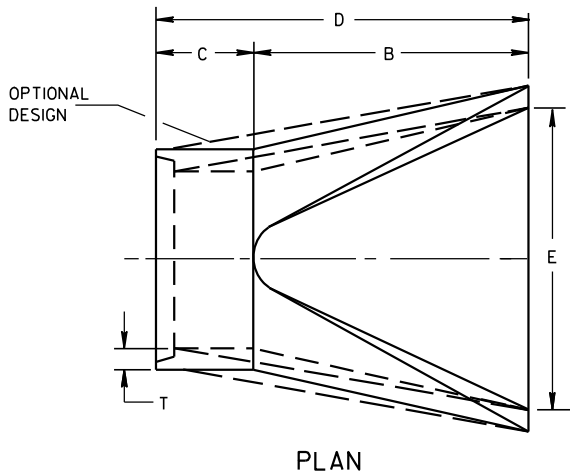
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



METAL ENDWALLS

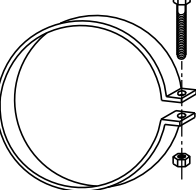
REINFORCED CONCRETE APRON ENDWALLS											
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE			
	T	A	B	C	D	E	G				
12	2	4	24	48 1/8	72 1/8	24	2	3 to 1			
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1			
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1			
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1			
24	3	9 1/2	43 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 1/2 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

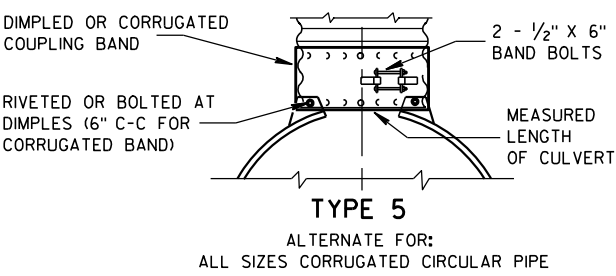
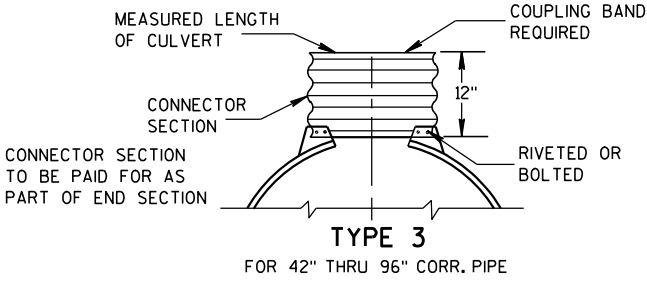
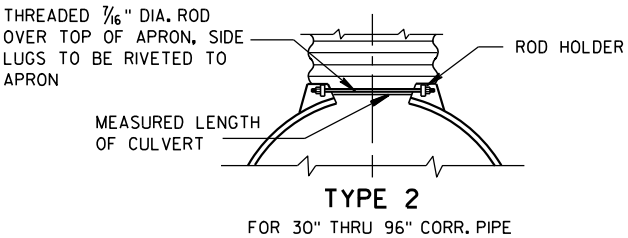
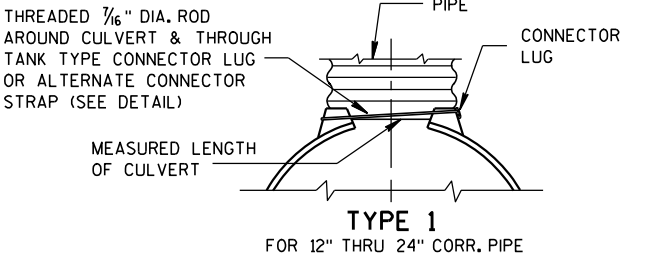


CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



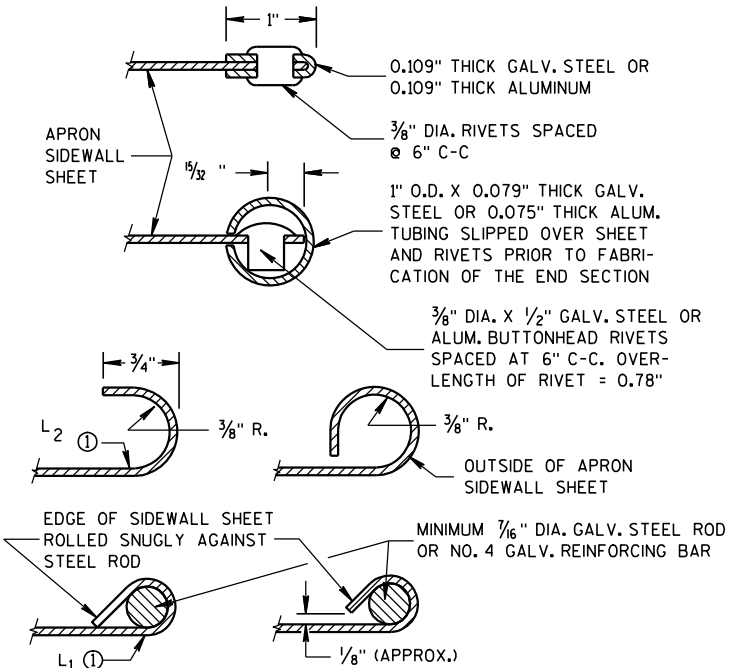
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

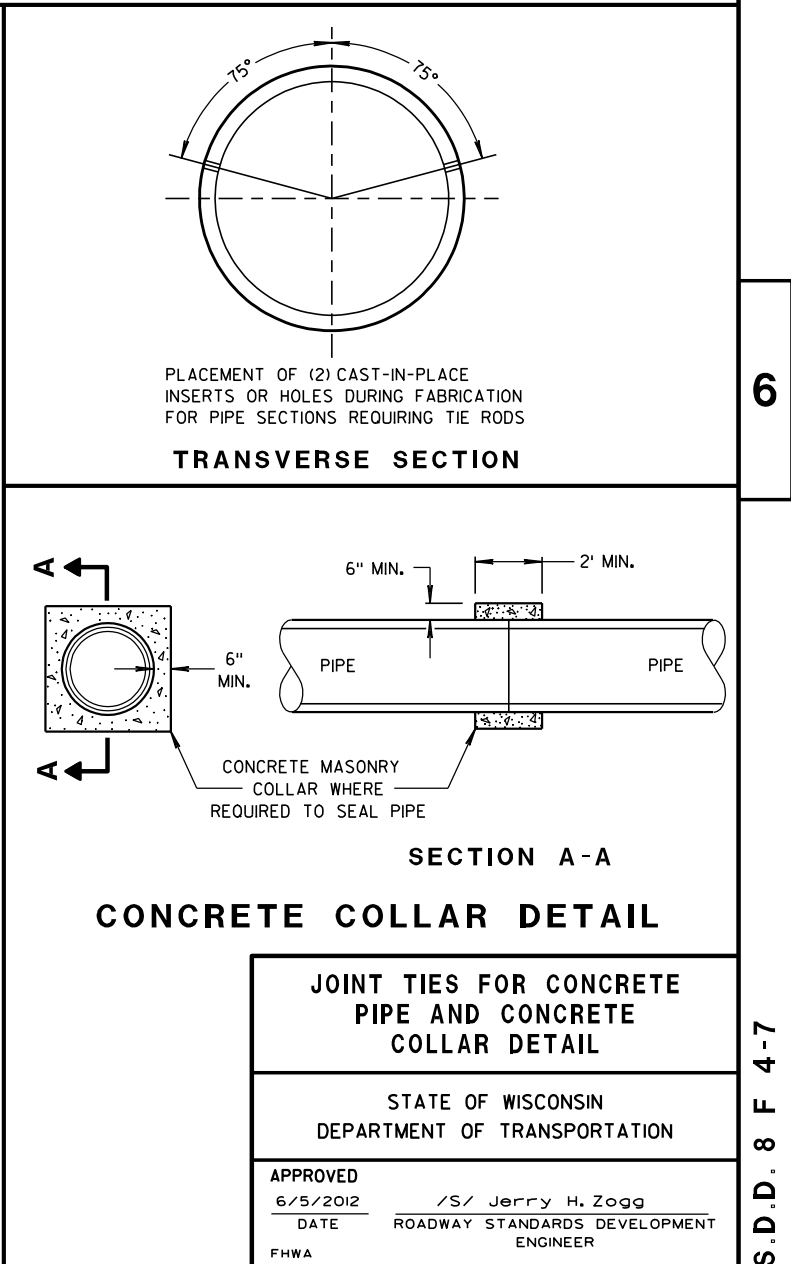
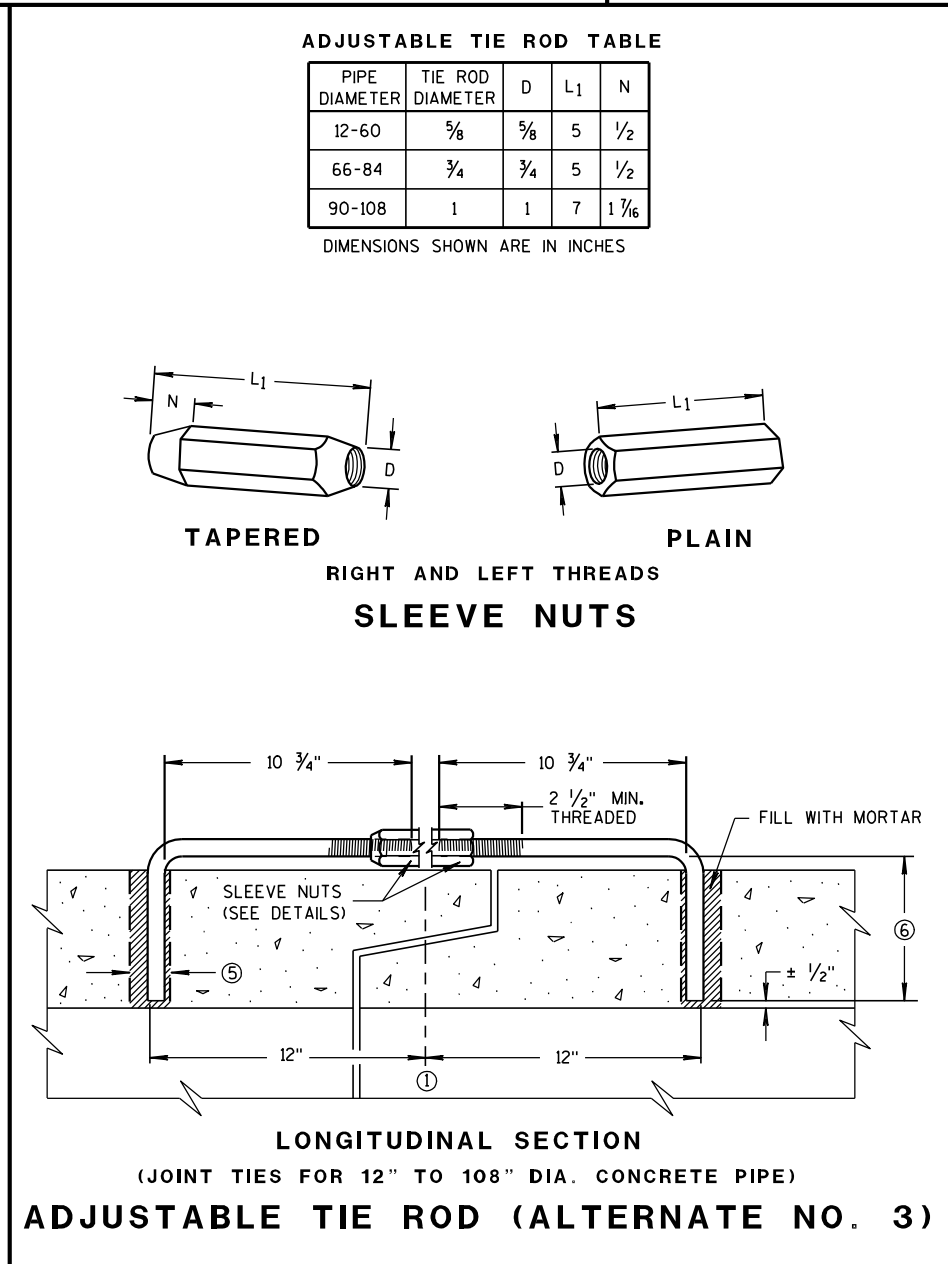
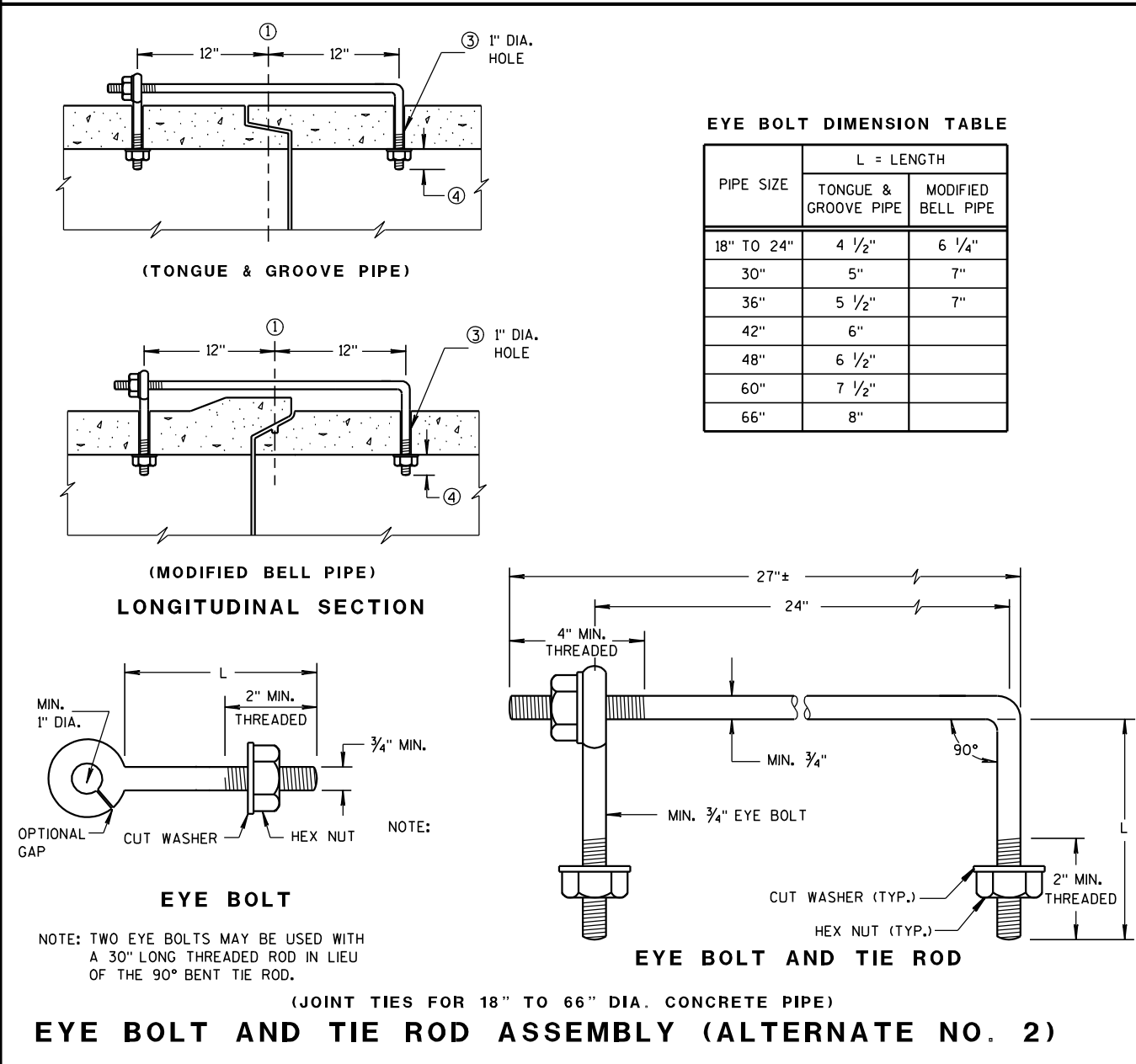
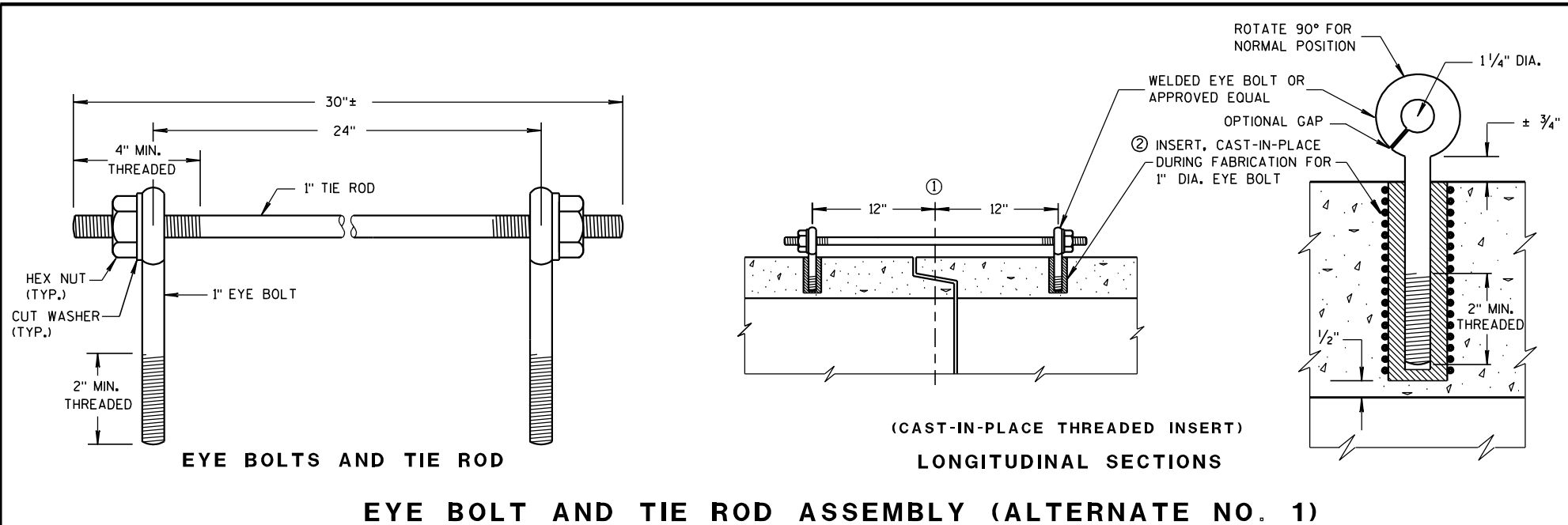
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

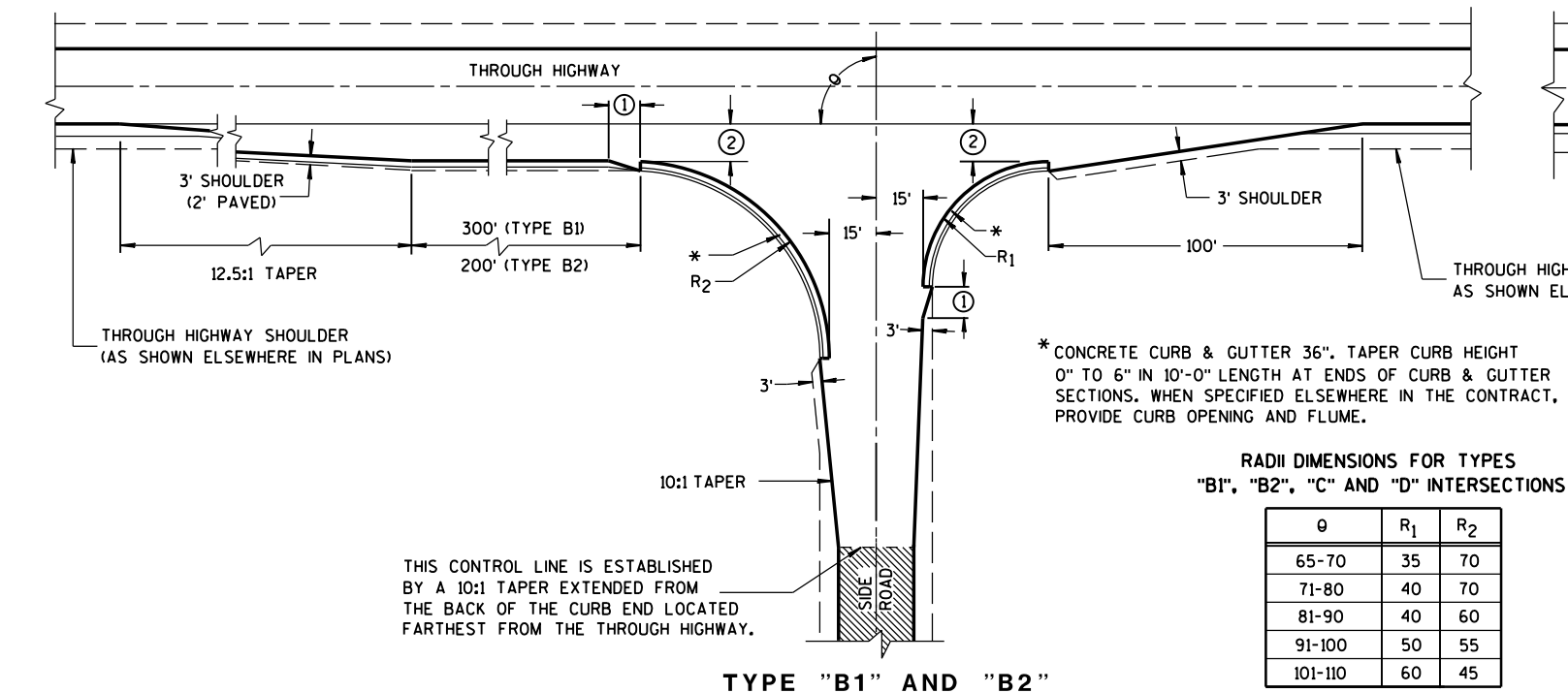
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR
CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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





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

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.

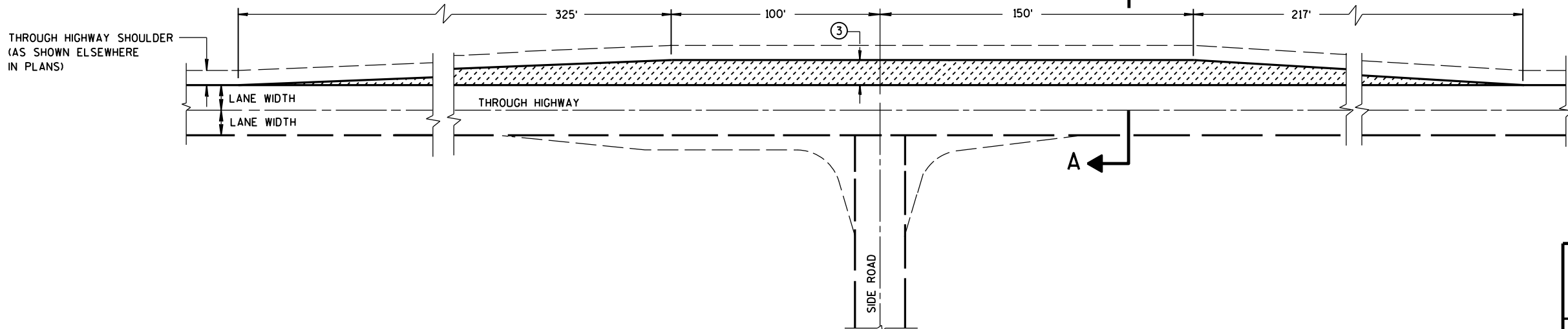
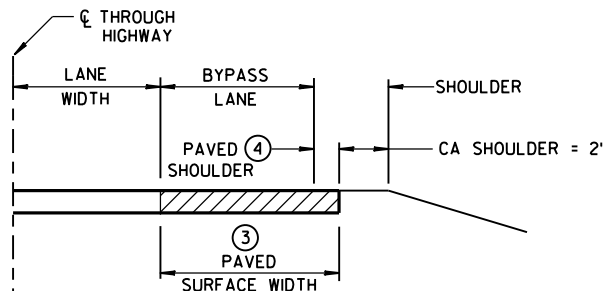
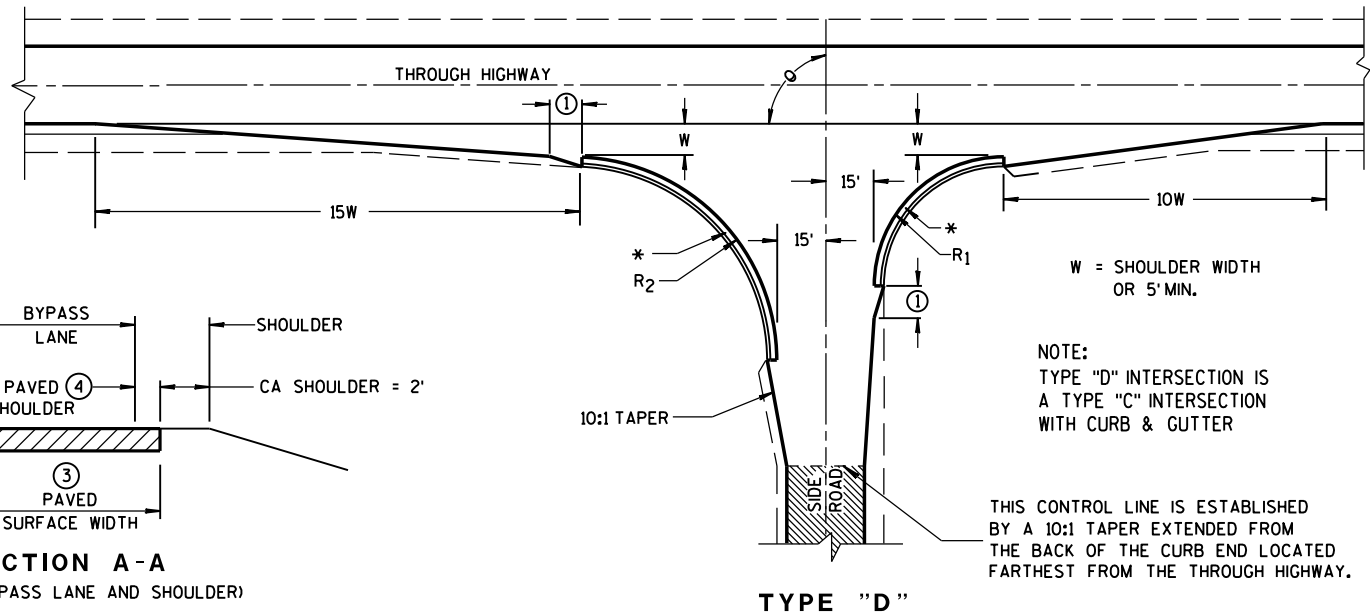
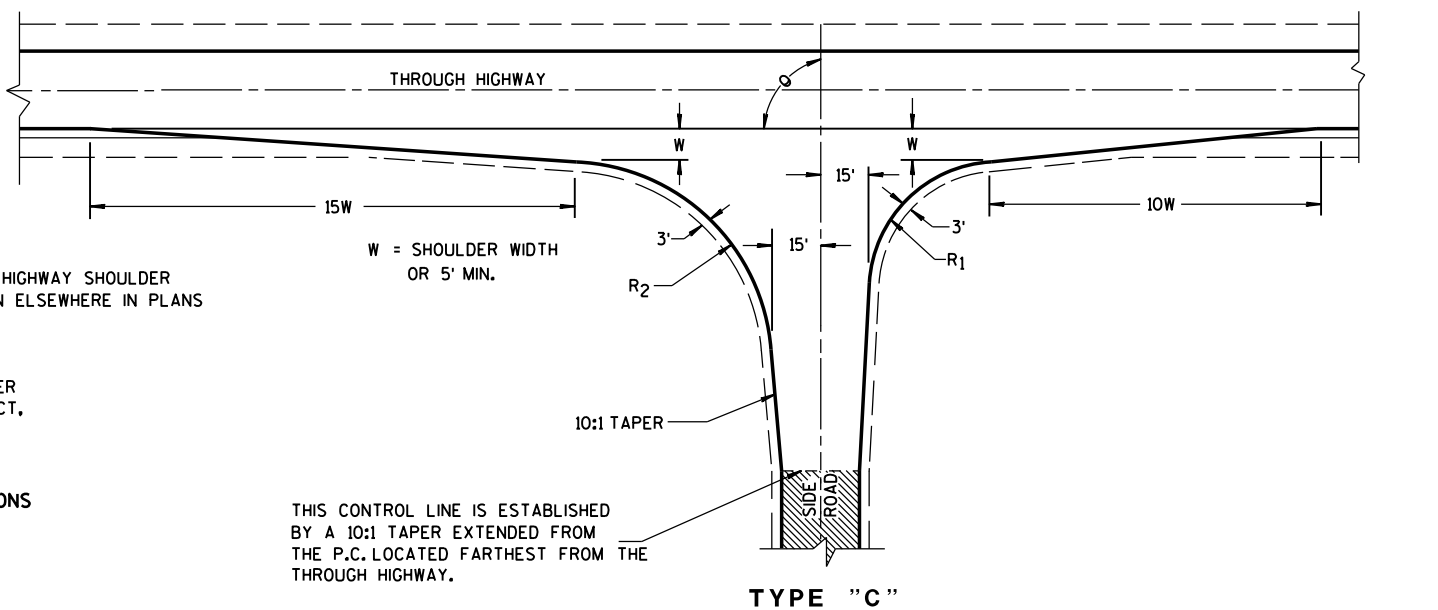
WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

- 10-FT TYPICAL.
- 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

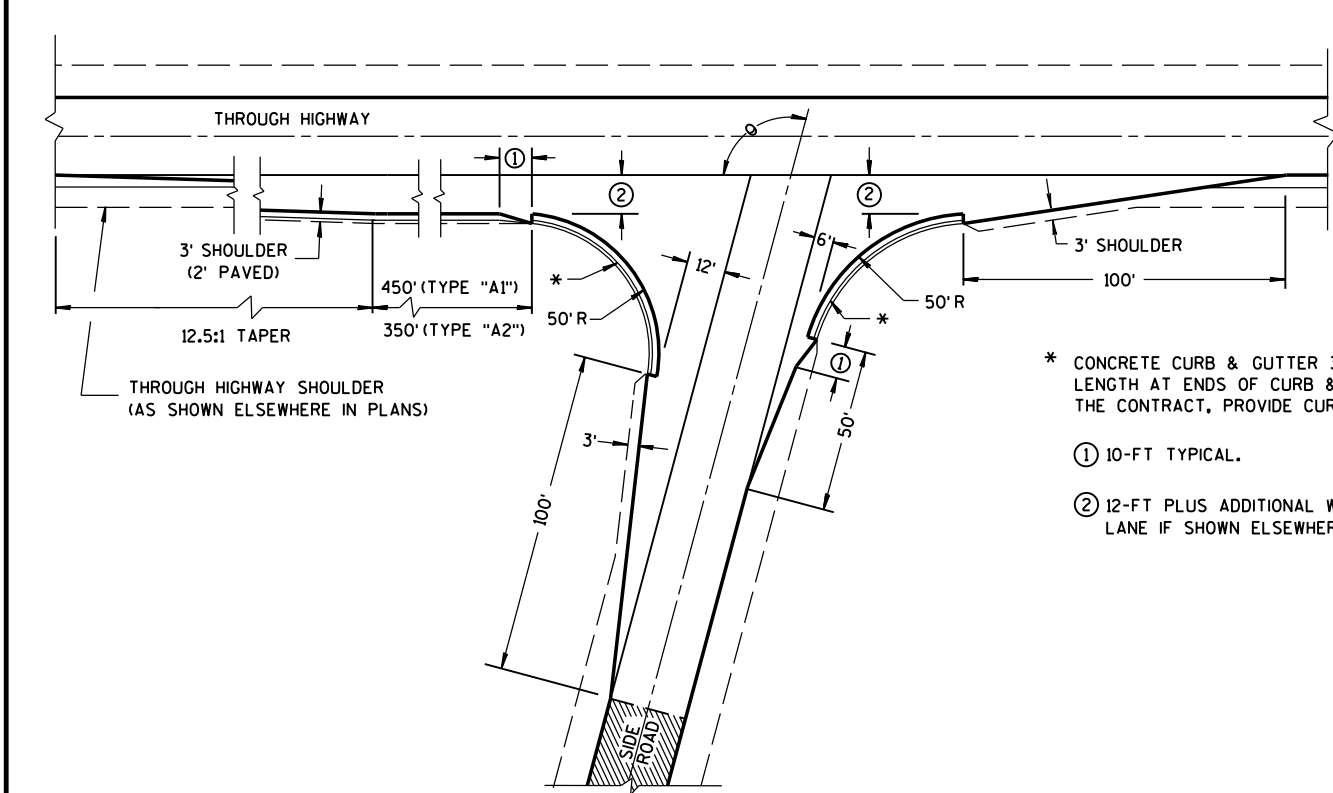
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.
- BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.
- BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



TEE INTERSECTION BYPASS LANE DETAIL

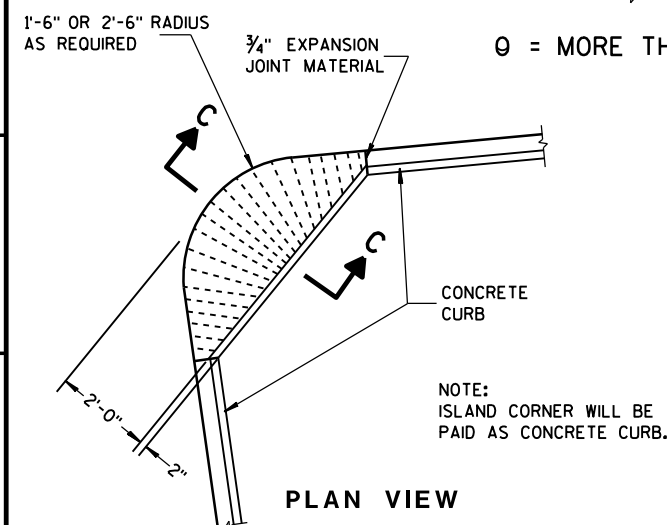
AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

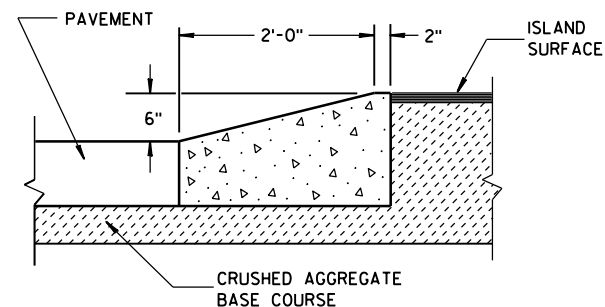


* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

- ① 10-FT TYPICAL.
- ② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.



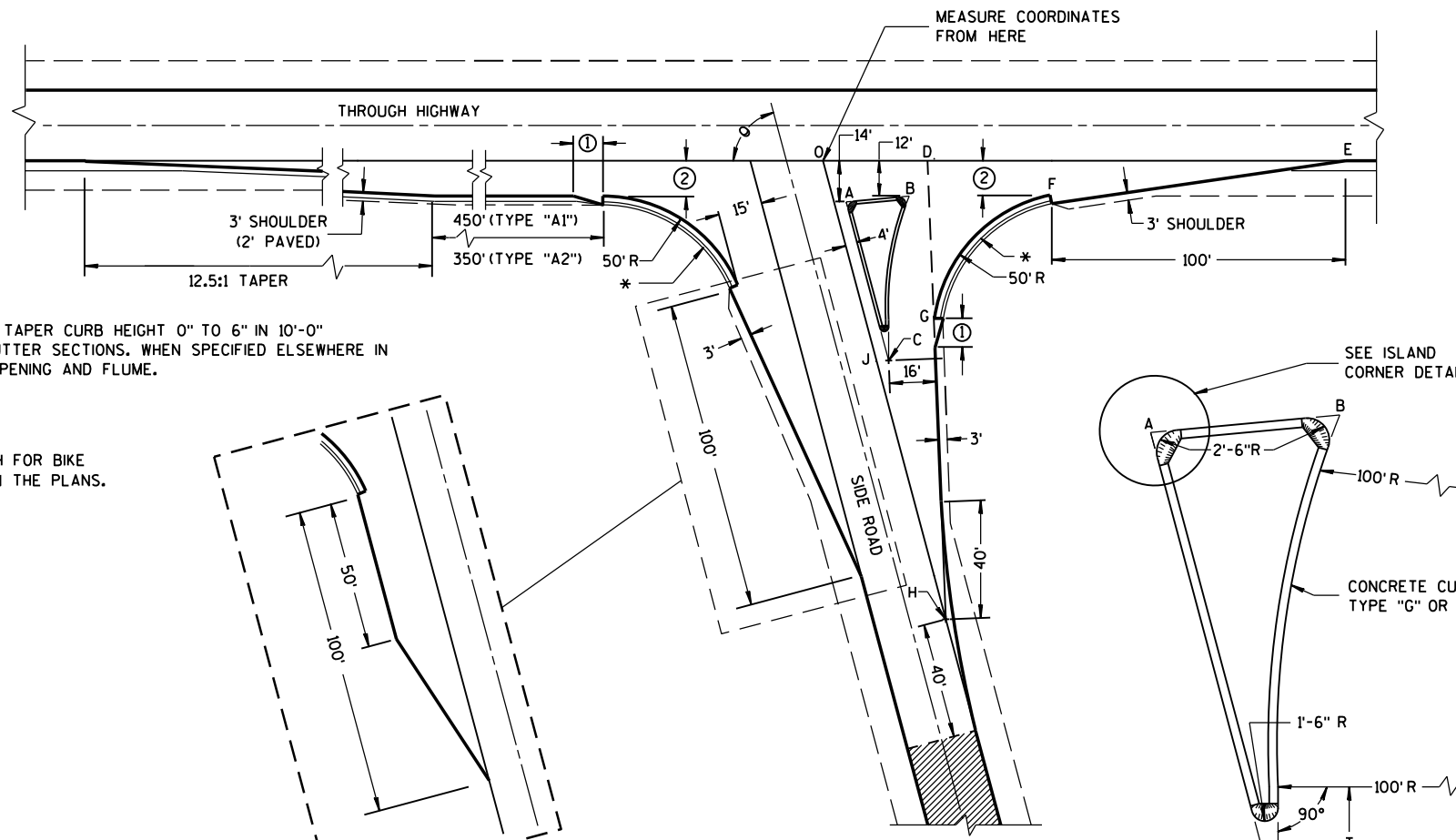
PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)



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)

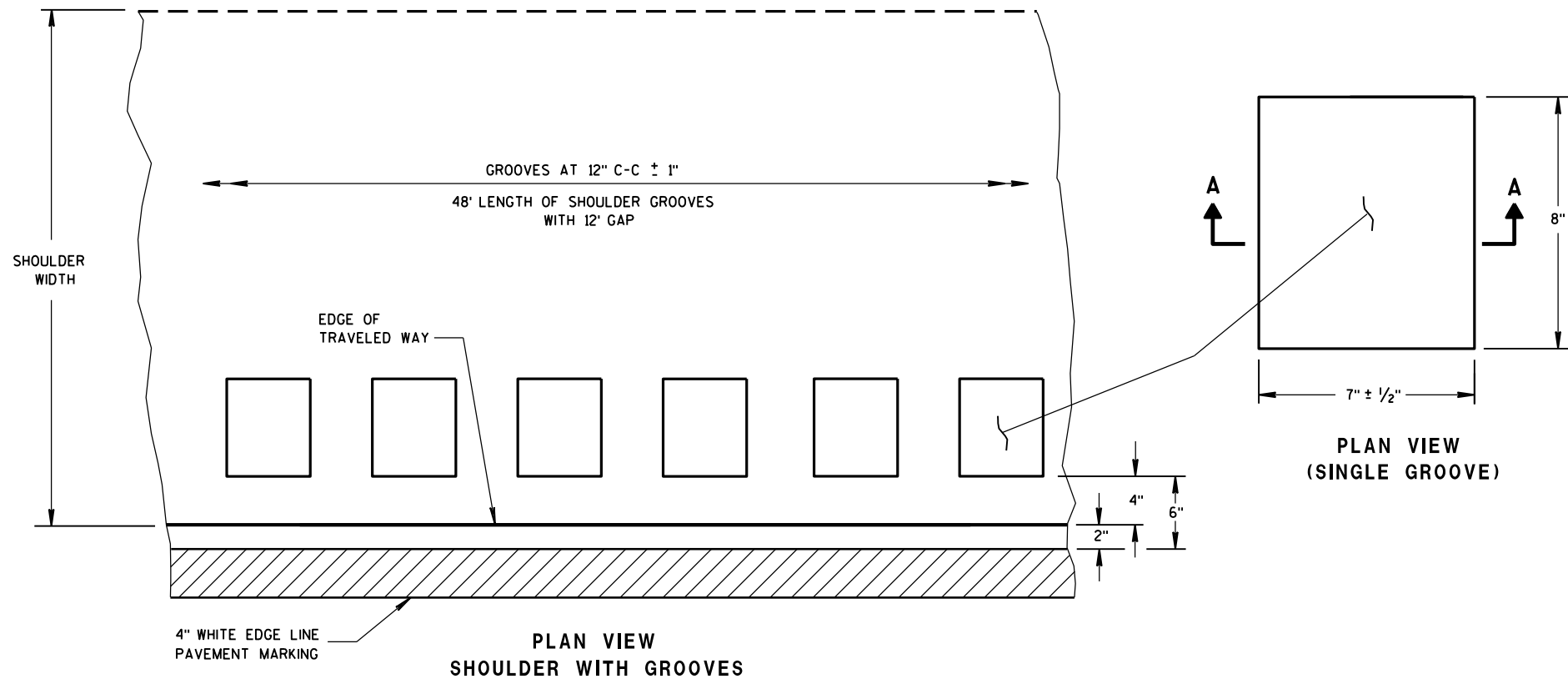
ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O")								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 -14.0	44.9 -12.0	46.4 -72.4	41.9 0.0	205.0 0.0	104.6 -12.0	64.0 -75.5	85.0 -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 -14.0	39.0 -12.0	37.8 -71.6	39.4 0.0	196.1 0.0	95.7 -12.0	54.1 -71.5	70.5 -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 -14.0	33.9 -12.0	29.8 -70.1	37.4 0.0	188.3 0.0	87.8 -12.0	45.6 -67.5	56.1 -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 -14.0	29.3 -12.0	22.3 -67.9	35.7 0.0	181.2 0.0	80.7 -12.0	38.2 -63.4	41.8 -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 -14.0	25.4 -12.0	15.6 -65.2	34.4 0.0	174.8 0.0	74.4 -12.0	31.8 -59.3	27.6 -156.5	18.9	52.0	15.6	66.9	158.9

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

AT-GRADE SIDE ROAD
INTERSECTION, TYPE "A1" & "A2"

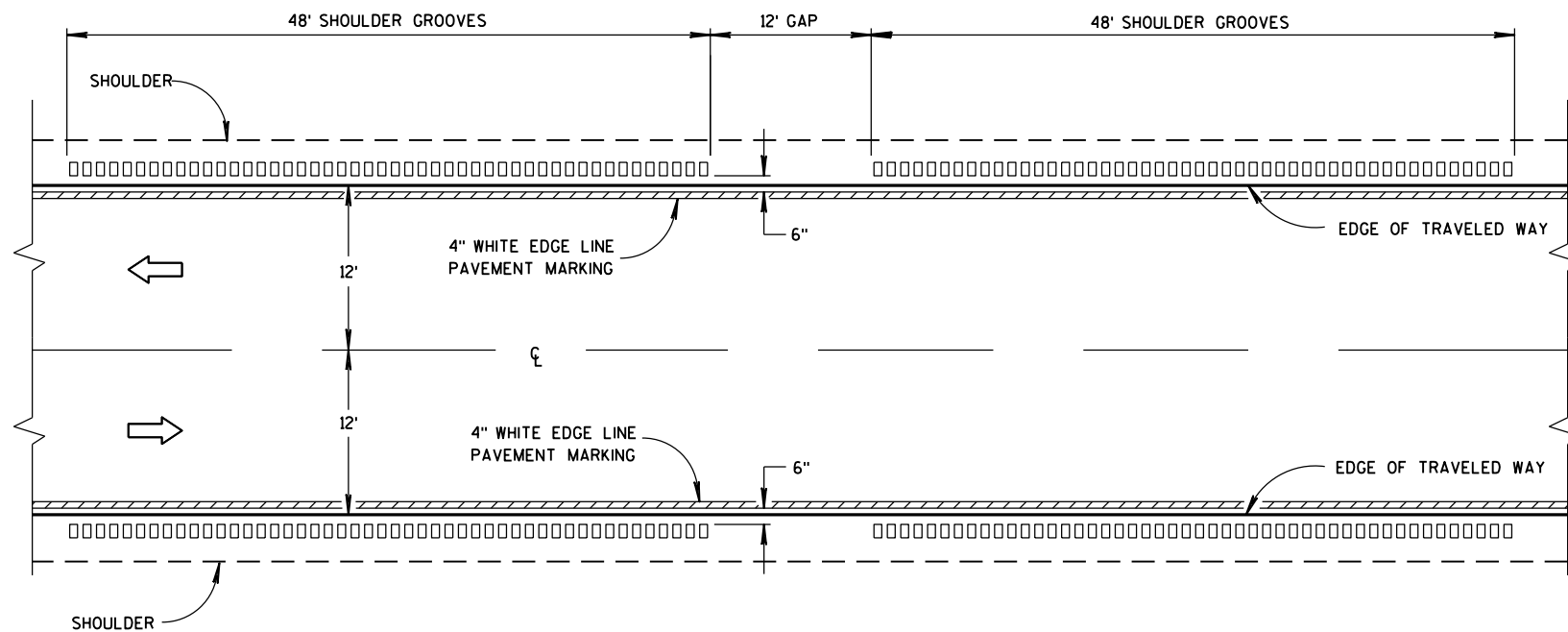
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/18/12 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



6

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



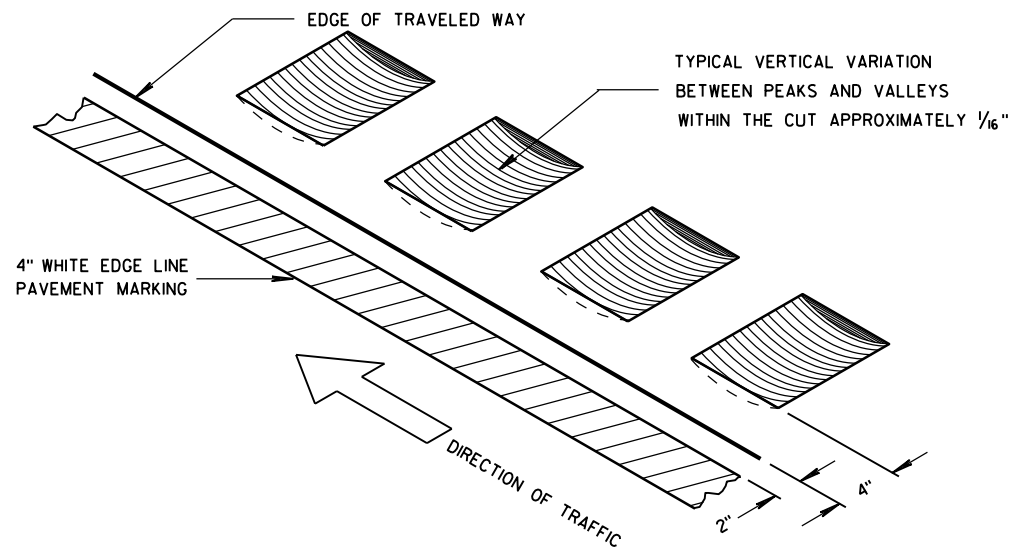
TYPE 1
2-LANE SHOULDER RUMBLE STRIP

GENERAL NOTES

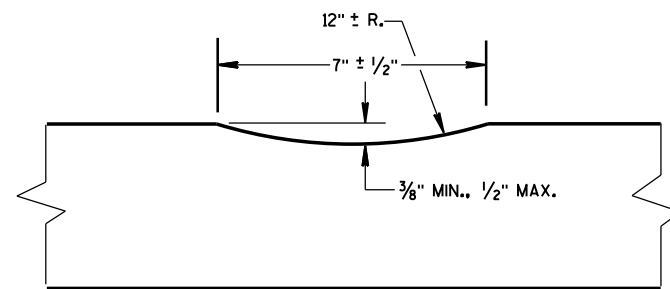
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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.



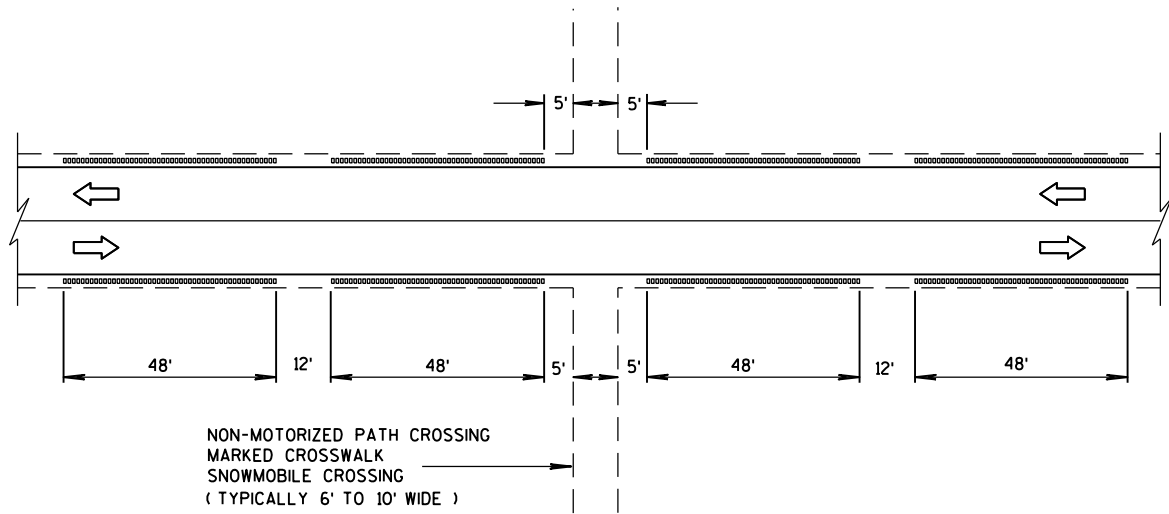
ISOMETRIC



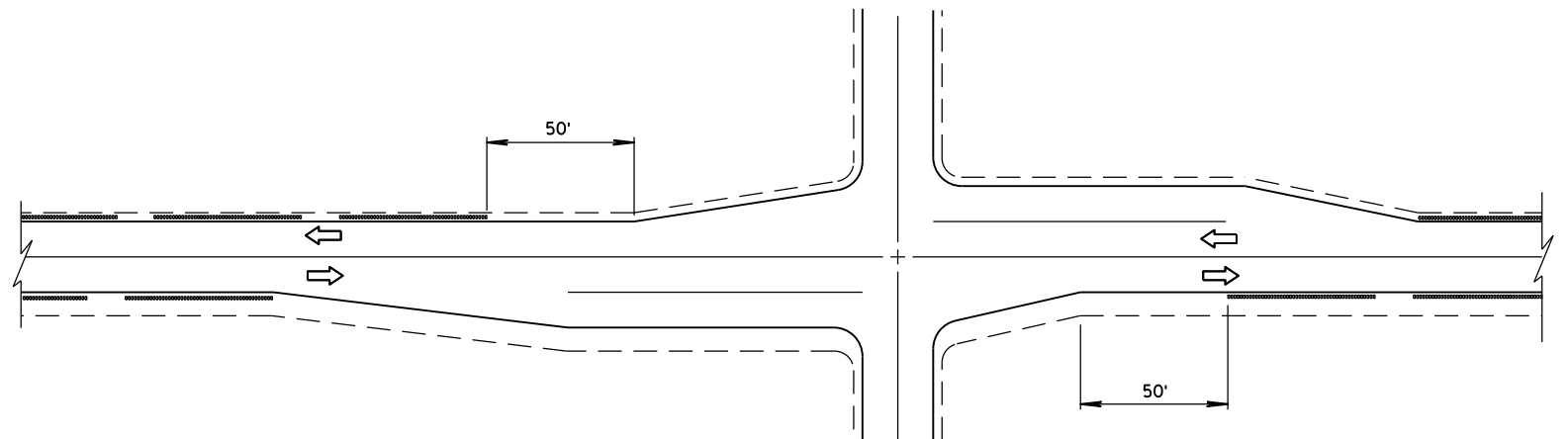
SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

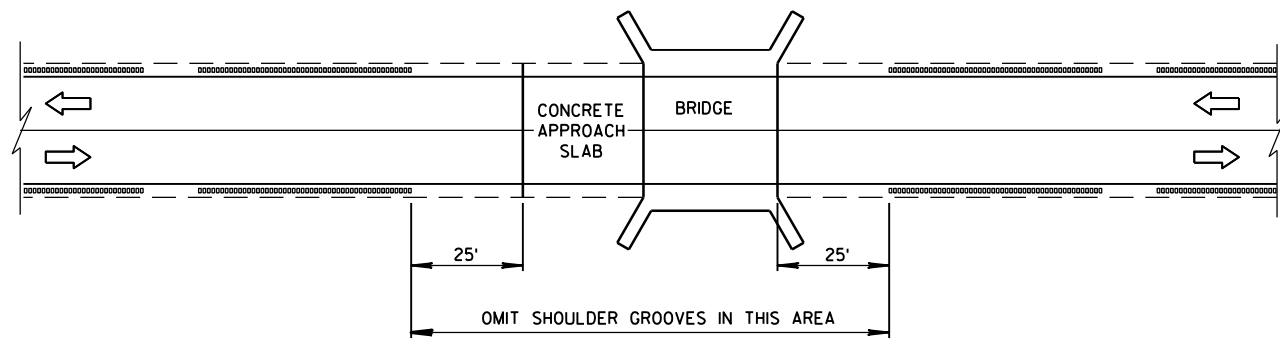
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



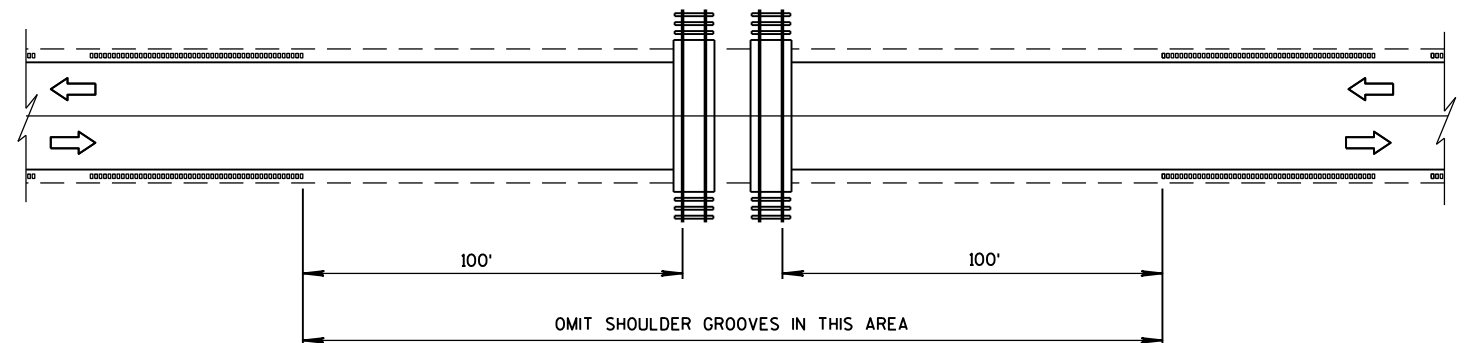
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



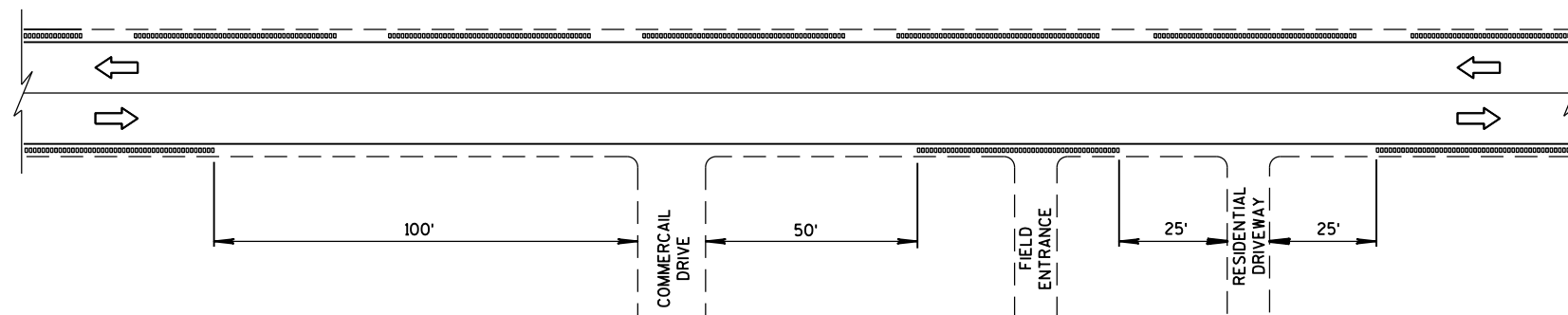
SHOULDER GROOVES AT INTERSECTIONS



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 TRANSPORTATION

GENERAL NOTES

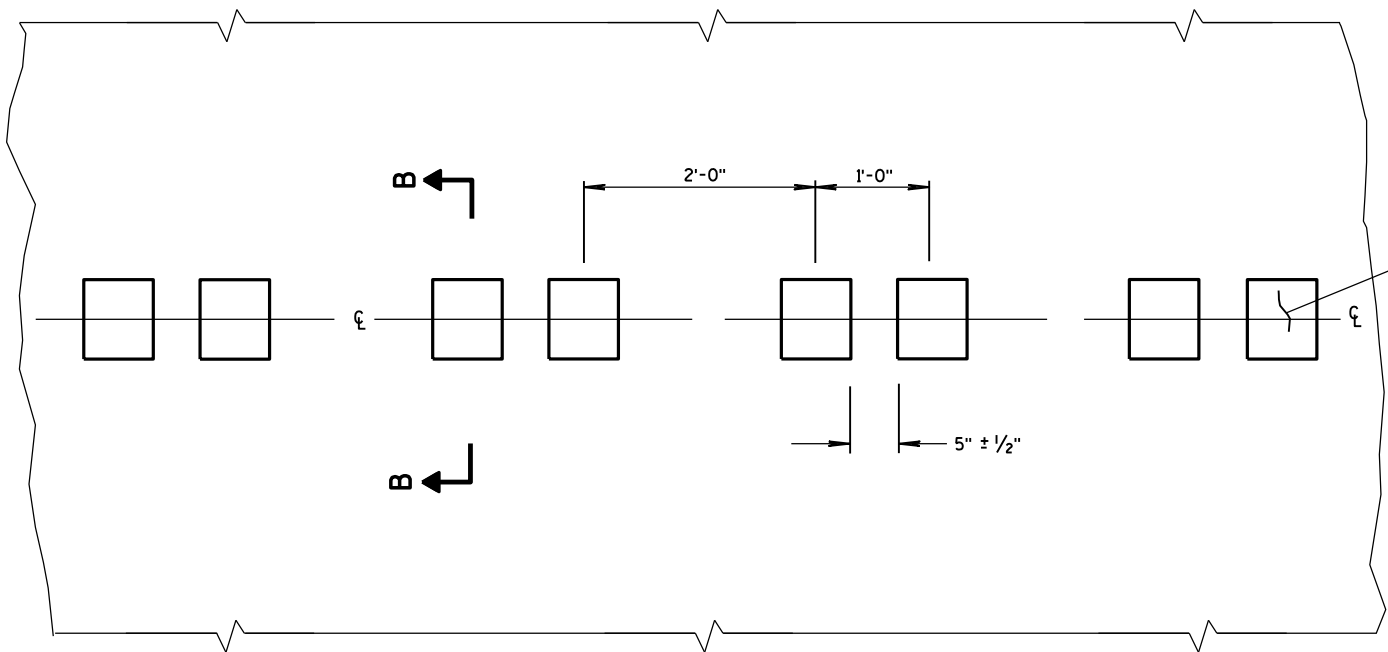
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

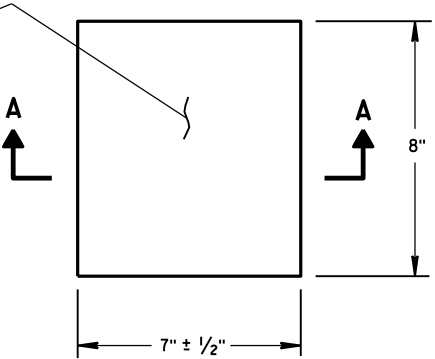
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

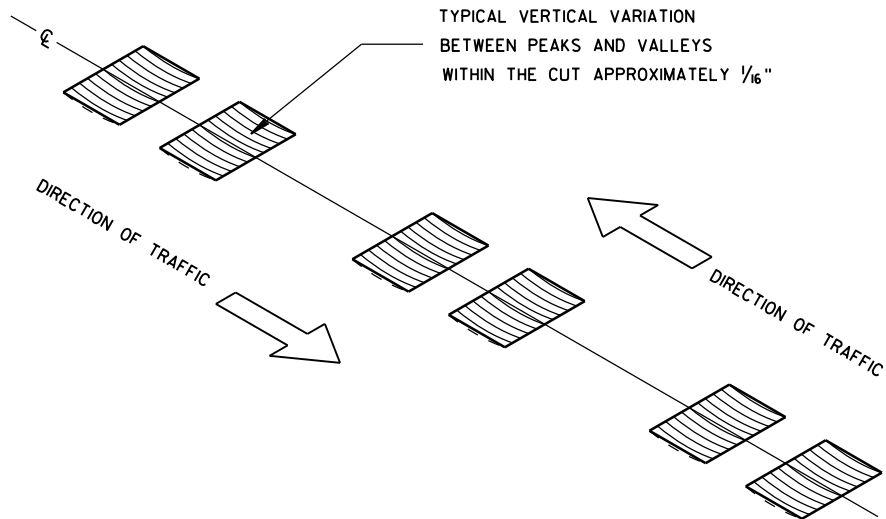
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



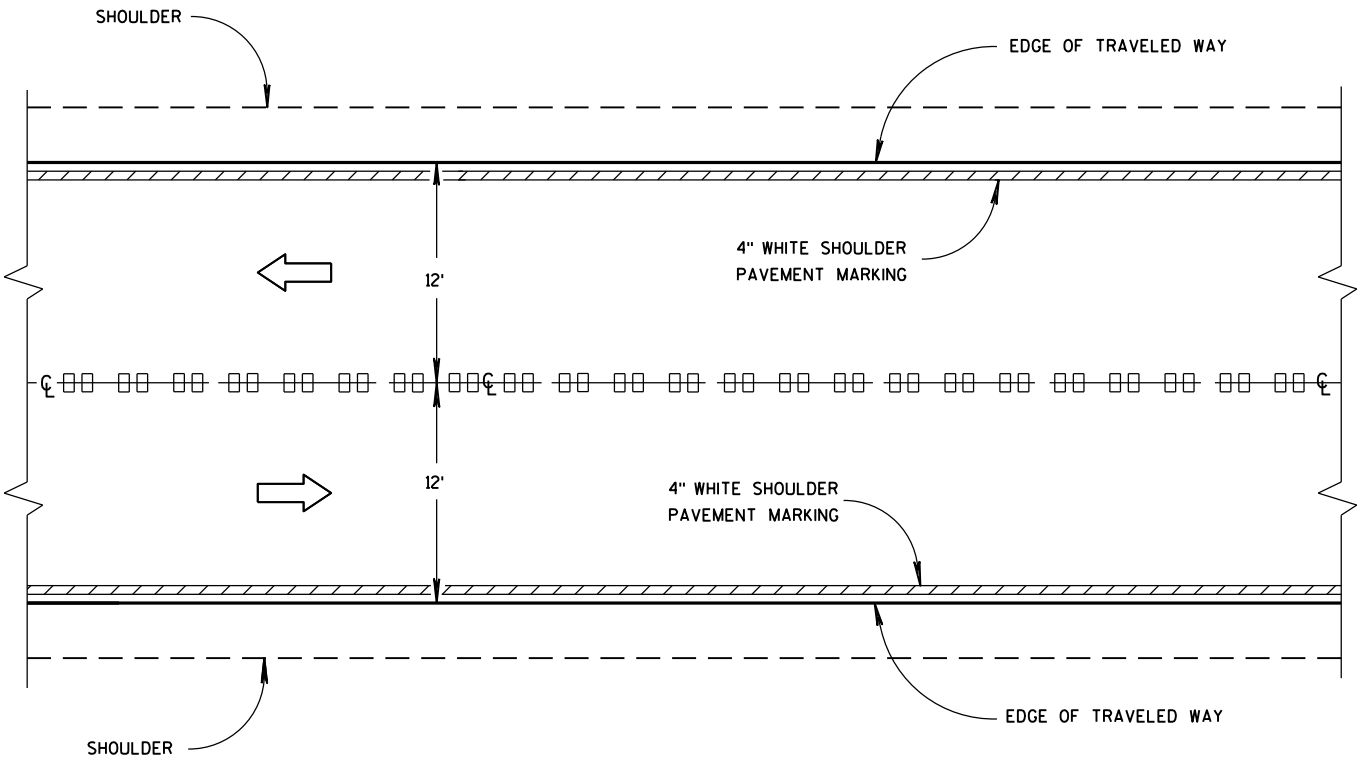
PLAN VIEW
CENTER LINE WITH GROOVES



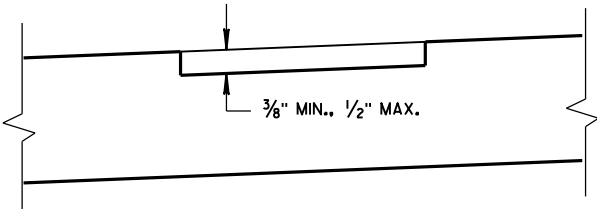
PLAN VIEW
(SINGLE GROOVE)



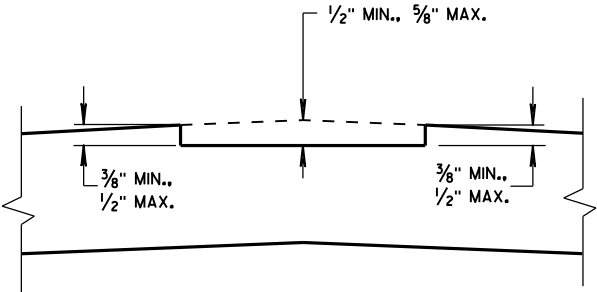
ISOMETRIC



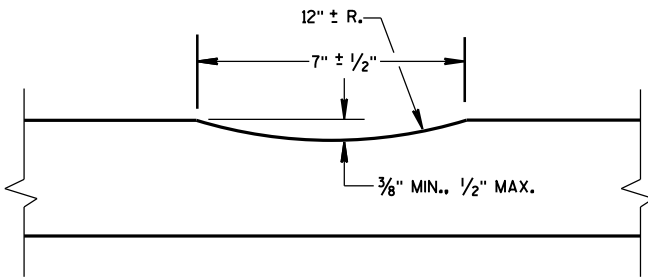
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



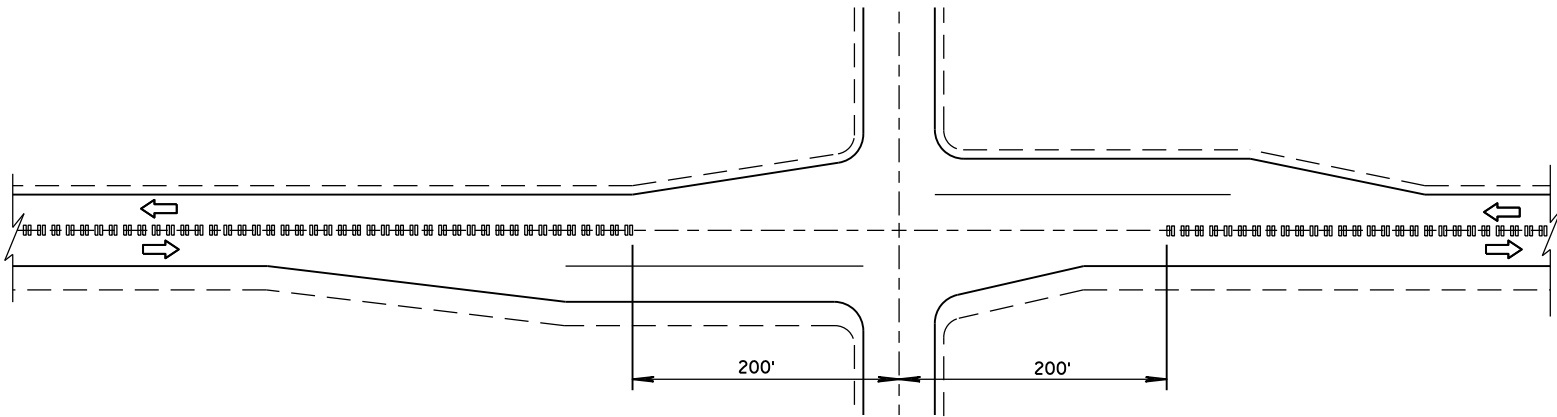
SECTION B-B
CROWNED ROADWAY



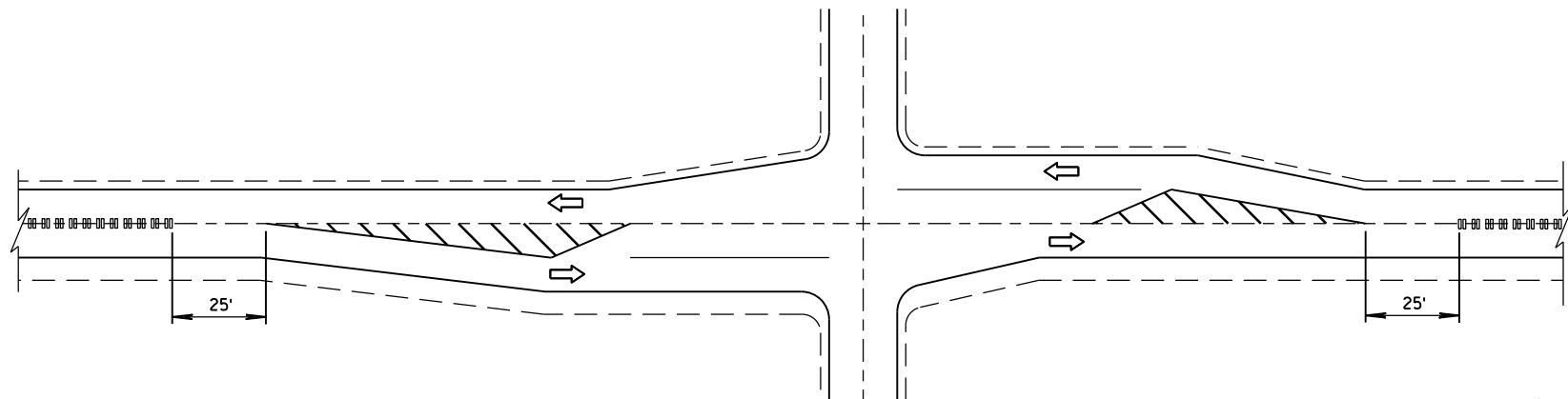
SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

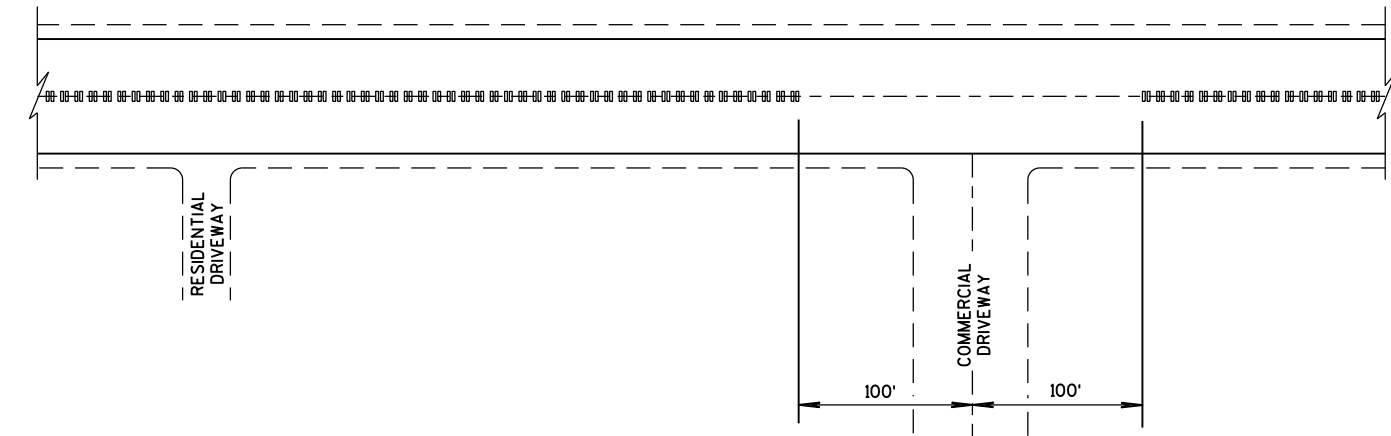
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

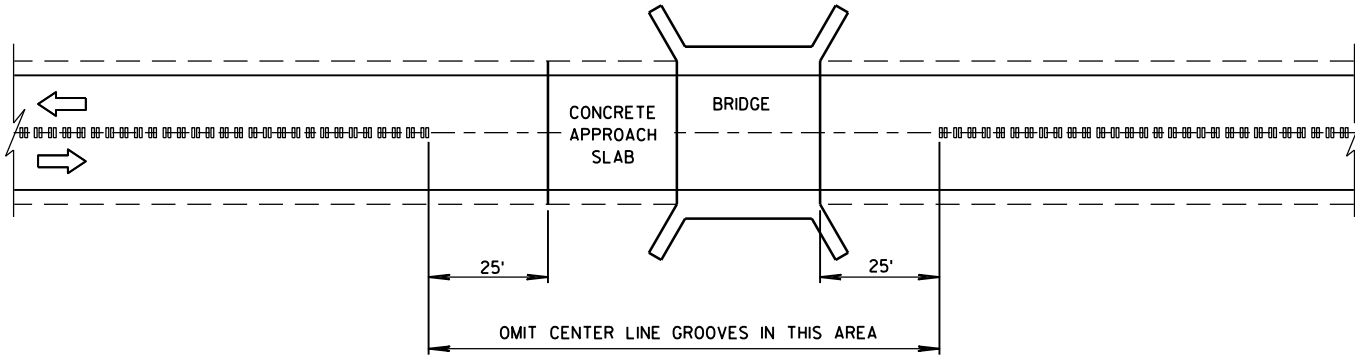


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

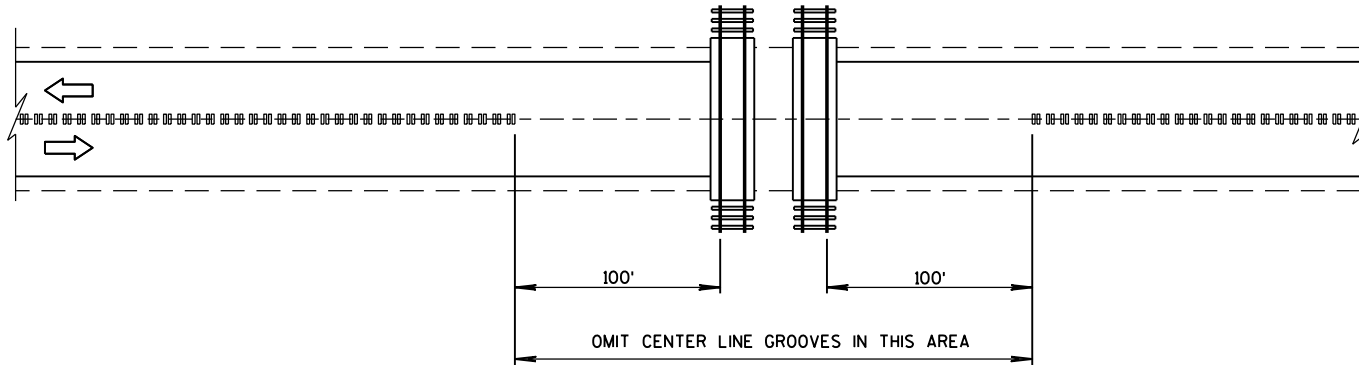


CENTER LINE GROOVES AT DRIVEWAYS^①

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

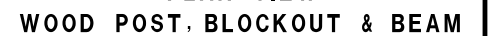
2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/15/2013 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

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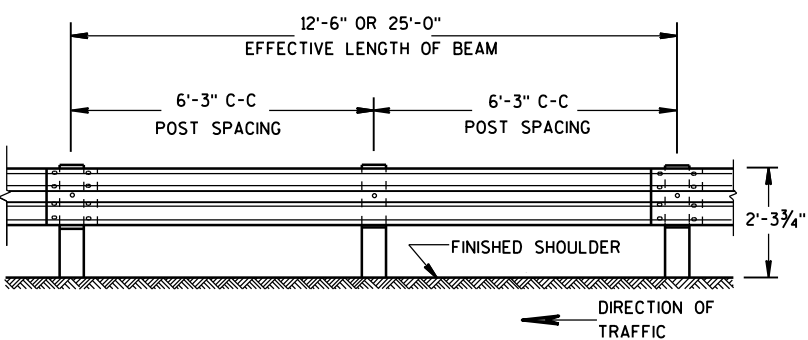
- S.D.D. 14 B 15-9a



TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD



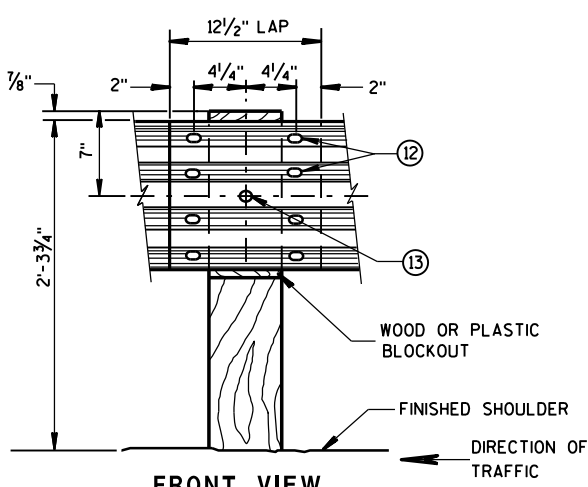
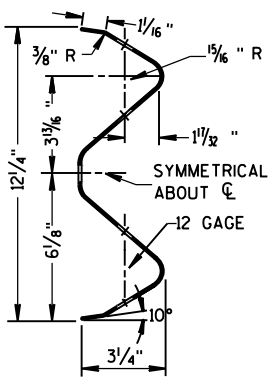
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



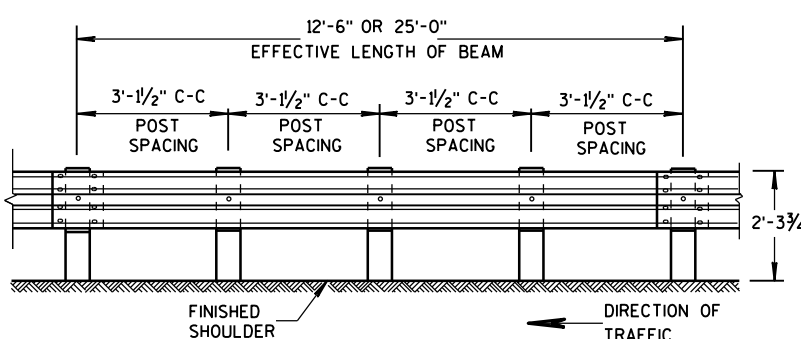
FRONT VIEW

POST SPACING STANDARD INSTALLATION

SECTION THRU W BEAM

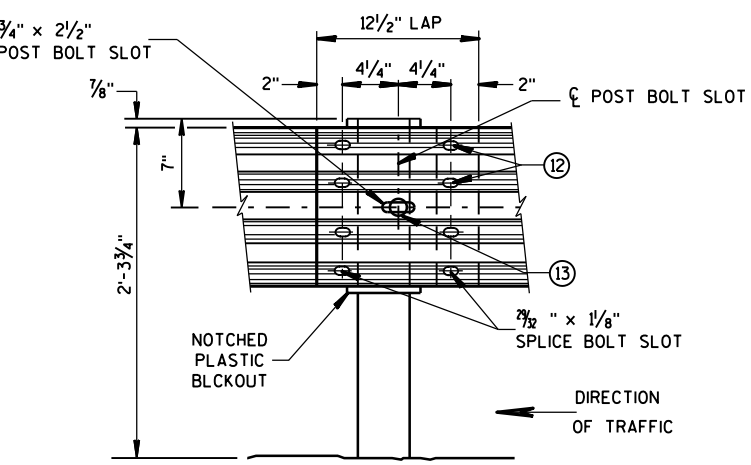


FRONT VIEW
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL



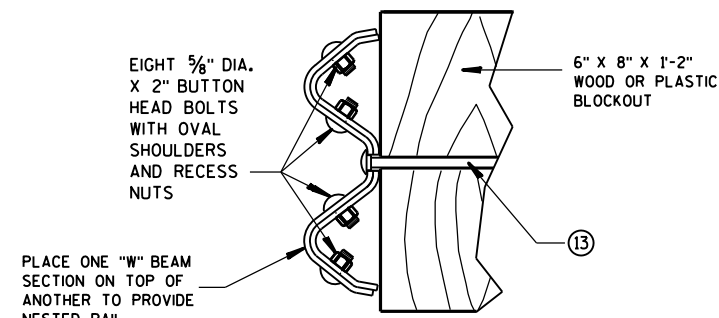
FRONT VIEW

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



FRONT VIEW
BEAM SPLICE AT STEEL POST

TYPICAL SPLICING DETAILS
OF STEEL PLATE BEAM GUARD

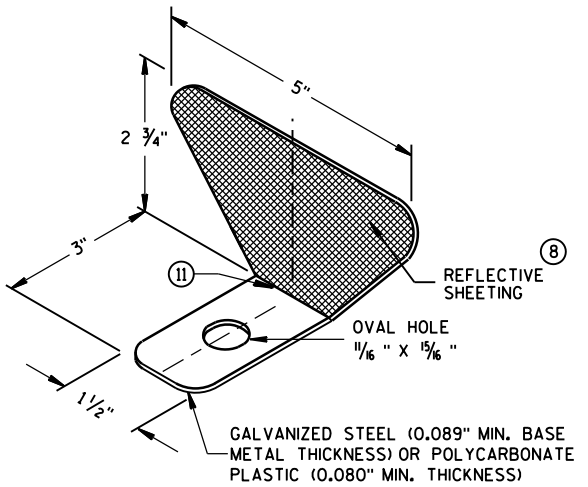
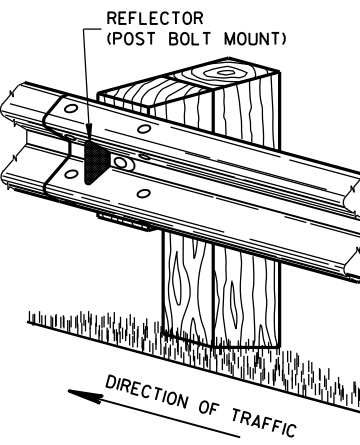


NESTED W BEAM (NW)

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

REFLECTOR SPACING^⑨

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 ^⑩	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 ^⑪	3
	> 200'	100' C-C	2	



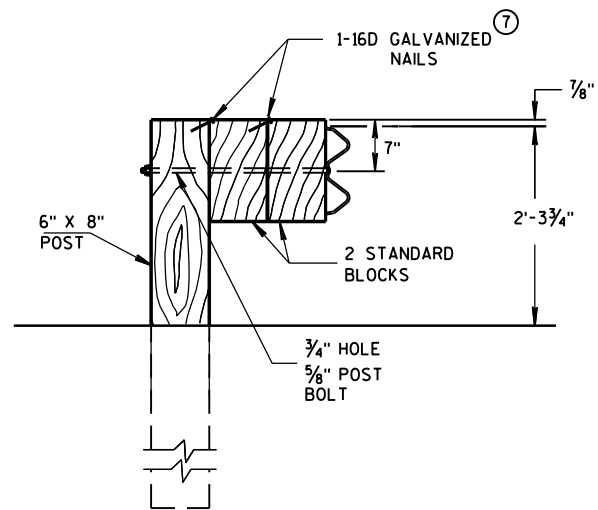
ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

- ⑧ PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.
- ⑨ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- ⑩ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- ⑪ PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
- ⑫ 8 - 5/8" φ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
- ⑬ 5/8" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH 5/8" DIA. F844 FLAT WASHER UNDER NUT.

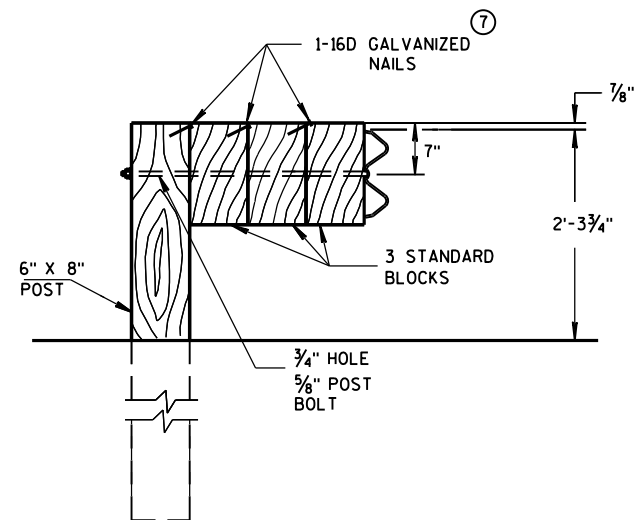
STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL FOR DOUBLE BLOCKS

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

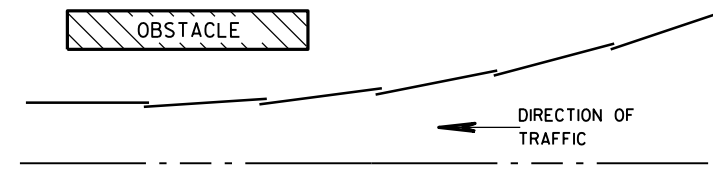


DETAIL FOR TRIPLE BLOCKS

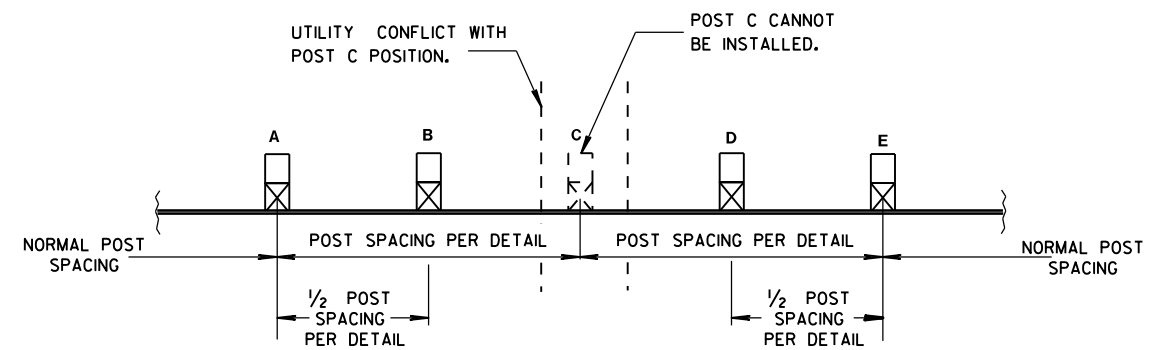
TRIPLE BLOCK DETAIL IS LIMITED TO ONE
LOCATION WITHIN A BEAM GUARD RUN.

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

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



PLAN VIEW BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016
DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

BILL OF MATERIALS

NOTE NO.	QTY.	DESCRIPTION
①	4	WOOD BREAKAWAY TERMINAL POST: 5 1/2" X 7 1/2" X 3'-9"
②	**	STEEL TUBE: OPTION 1 - QUANTITY OF 4 TS 8" X 6" X 0.188", 4'-6" LONG OR OPTION 2 - QUANTITY OF 2 TS 8" X 6" X 0.188", 6'-0" AND 2 TS 8" X 6" X 0.188", 4'-6" LONG
③	2	SOIL PLATE: 2'-0" X 1'-6" X 1/4" **
④	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	6	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	1	PIPE SLEEVE: 2" X 5 1/2" STANDARD PIPE
⑦	1	BEARING PLATE
⑧	1	BCT CABLE ASSEMBLY
⑨	1	CABLE ANCHOR BOX
⑩	1	STRUT & YOKE
⑪	1	STEEL PLATE BEAM, END PANEL 12 GA. 13'-6 1/2" LONG FOR SKT-350, ET-2000 AND ET-2000 PLUS
⑫	3	STEEL PLATE BEAM: 12 GA. 13'-6 1/2"
⑬	1	ET-2000/ET-2000 PLUS GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
⑭	1	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
⑮	1	E.A.T. MARKER POST

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS, IF NONE ARE AVAILABLE, INSTALL 3/8" ϕ X 1'-6" BUTTON HEAD BOLTS AT ALL POSTS EXCEPT FOR POST 1.

(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) THE 13 SLOT FIRST RAIL PANEL MAY BE USED IN LIEU OF THE 3 SLOT RAIL PANEL ON SKT-350 ONLY.

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 THROUGH 4 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(E) THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST 5 THROUGH 8 SHALL BE 3/4" ABOVE THE FINISHED GROUND LINE.

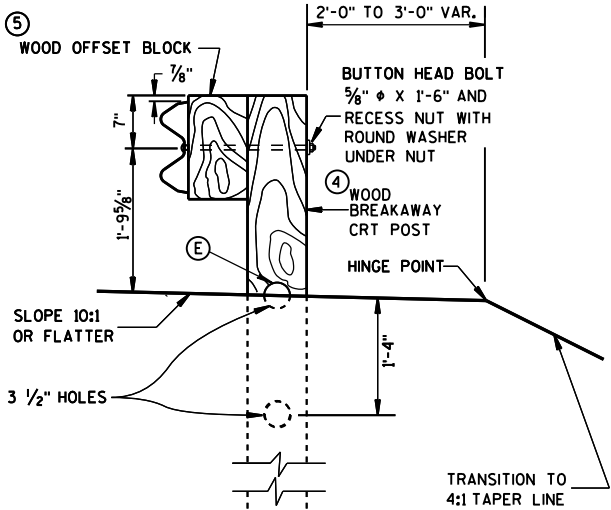
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS, ONE SCREW PER CORNER.

STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

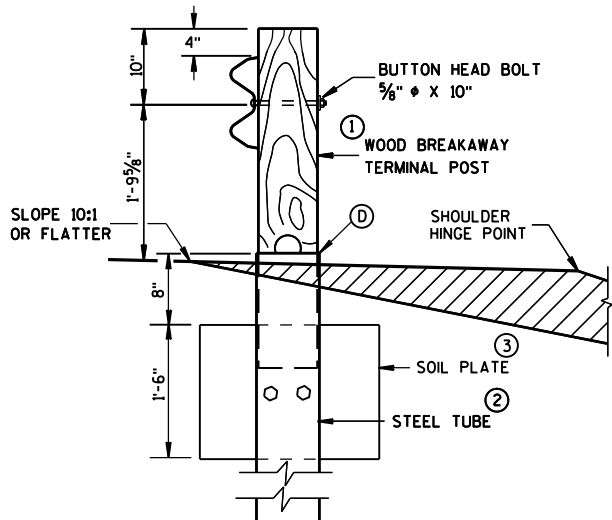
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

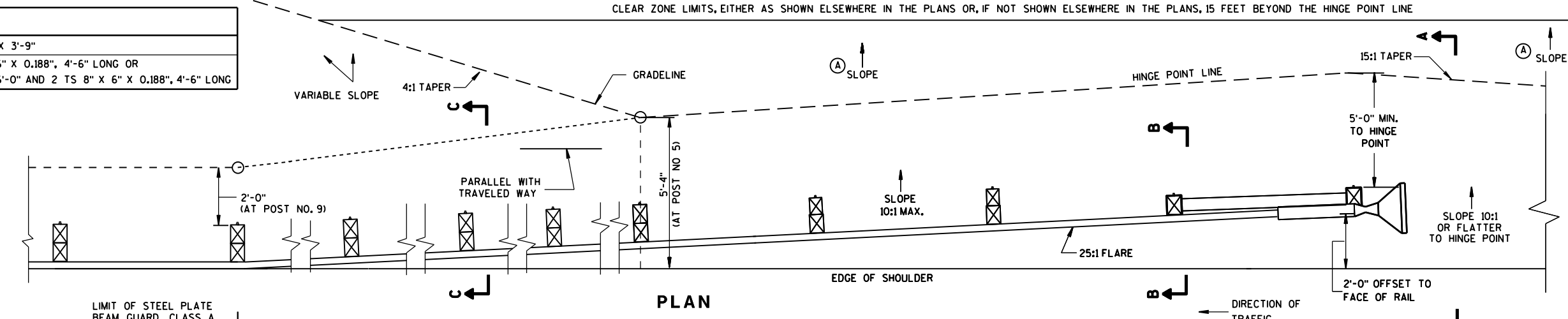
** SDD SHOWS 4 - 54 INCH STEEL TUBES WITH SOIL PLATES INSTALLED ON POST 1 AND POST 2. POST 3 AND 4 DO NOT NEED SOIL PLATES. AN ALTERNATIVE INSTALLATION WOULD CONSIST OF 2 - 72 INCH STEEL TUBES ON POST 1 AND POST 2 AND 54 INCH SOIL TUBES ON POSTS 3 AND 4. THE ALTERNATIVE INSTALLATION DOES NOT REQUIRE SOIL PLATES.



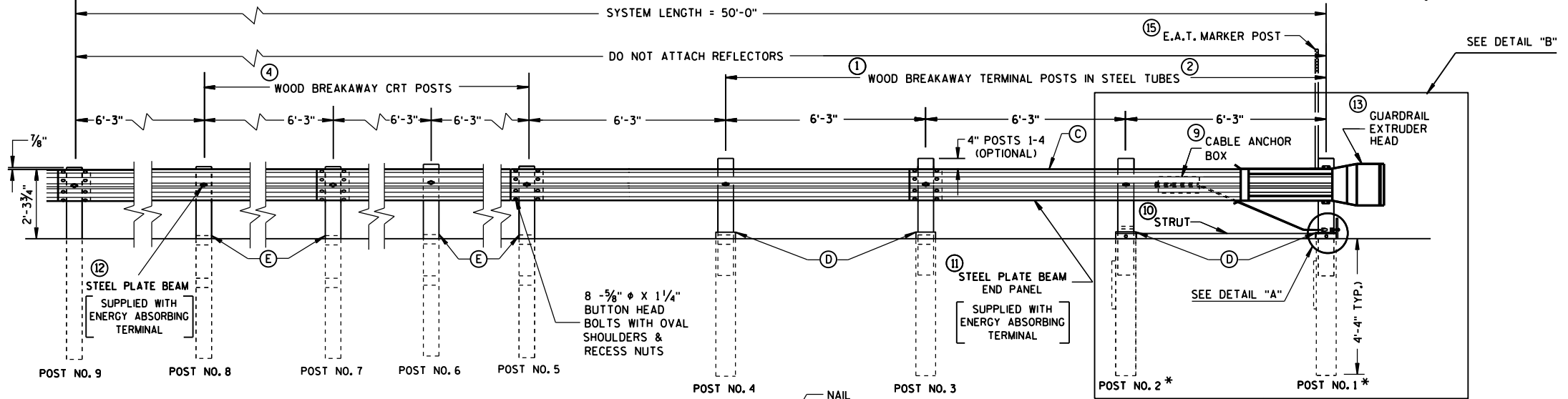
SECTION C-C
TYPICAL AT POST NOS. 6, 8



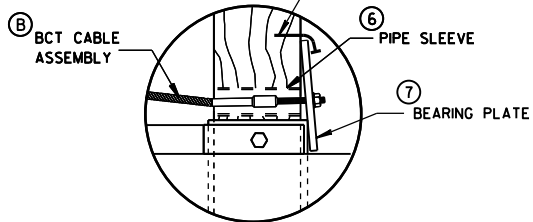
SECTION B-B
TYPICAL AT POST NO. 2 *



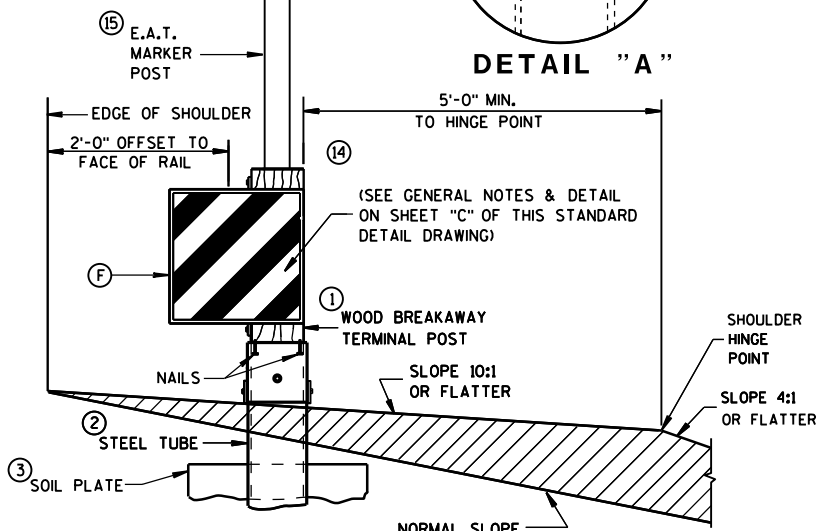
PLAN



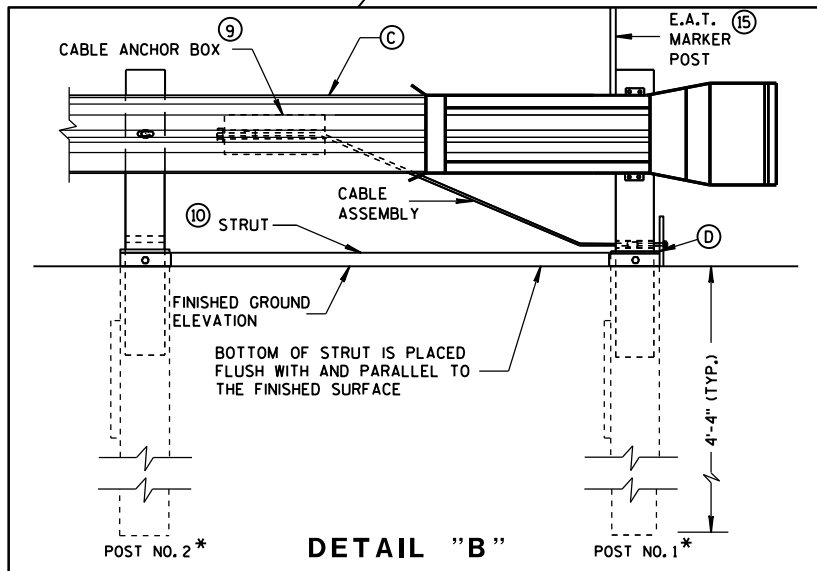
ELEVATION



DETAIL "A"



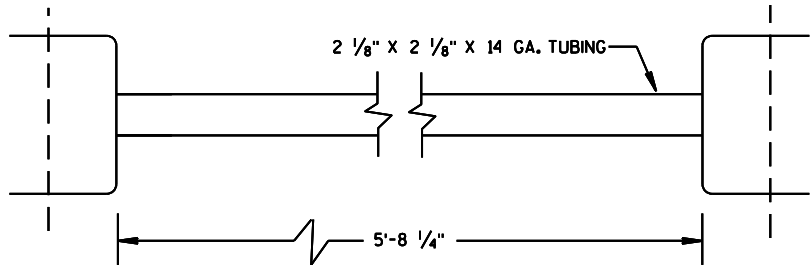
SECTION A-A
TYPICAL AT POST NO. 1 *



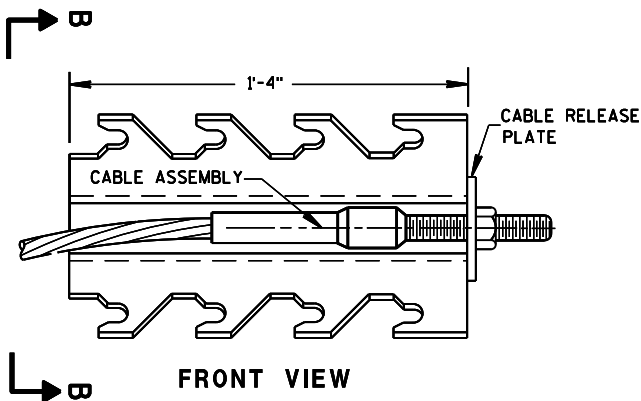
DETAIL "B"

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

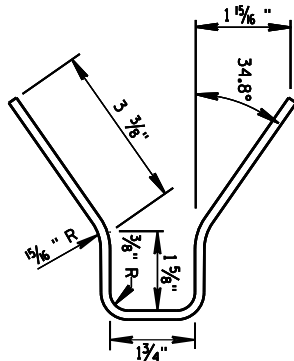
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



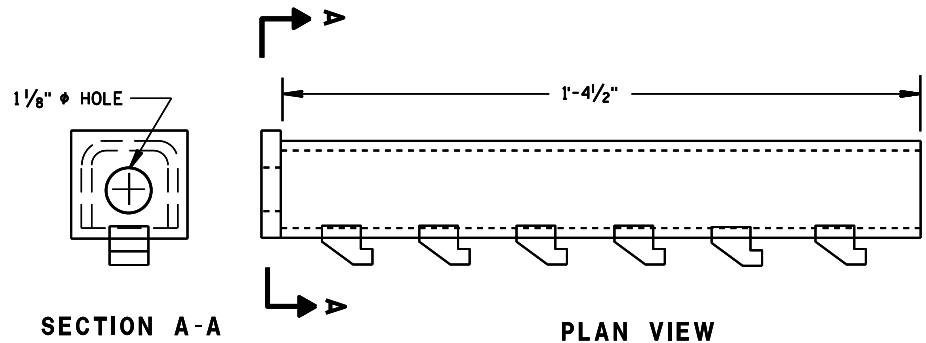
⑩ STRUT DETAIL (SKT-350)



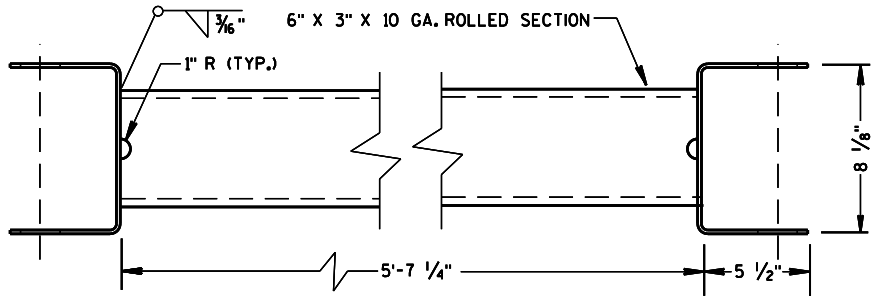
⑨ CABLE ANCHOR BOX (SKT-350)
(SKT-350)



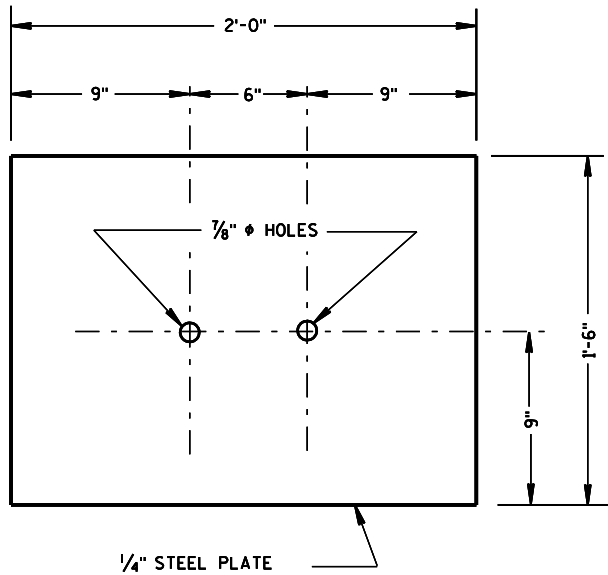
SECTION B-B



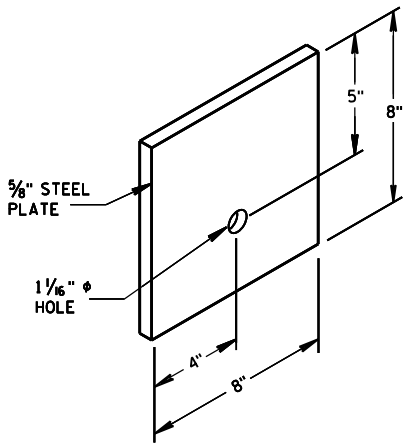
⑨ CABLE ANCHOR BOX (ET-2000/ET-2000 PLUS)



⑩ STRUT DETAIL (ET-2000/ET-2000 PLUS)
(ET-2000/ET-2000 PLUS)



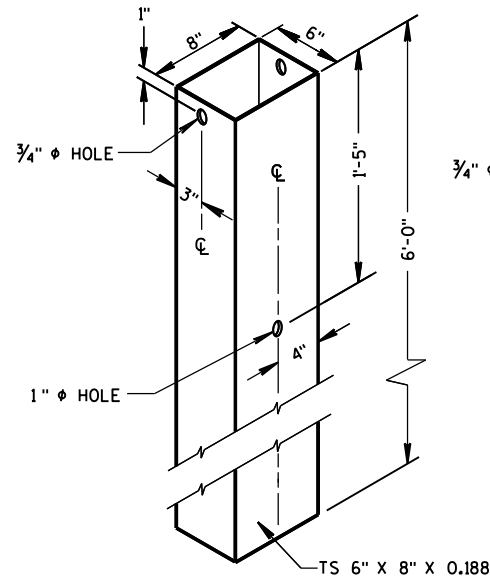
③ SOIL PLATE
(SKT-350, ET-2000/ET-2000 PLUS)



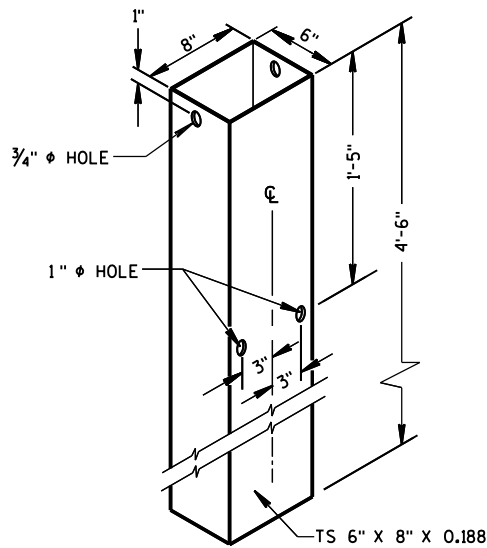
⑦ STEEL BEARING PLATE
(SKT-350, ET-2000/ET-2000 PLUS)

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

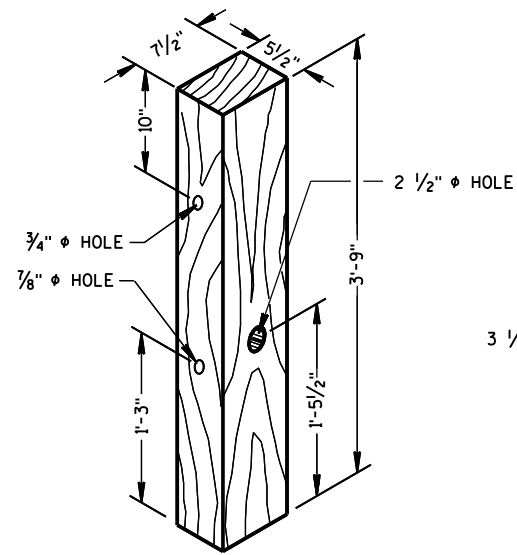
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



② **72" STEEL TUBE**
(POSTS NO. 1-4)

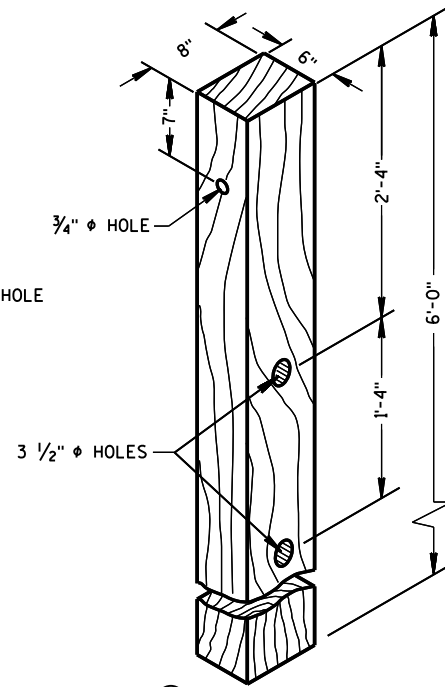


② **54" STEEL TUBE**
(POSTS NO. 1-4)



① **TERMINAL POST**
(POSTS NO. 1-4)

WOOD BREAKAWAY POSTS



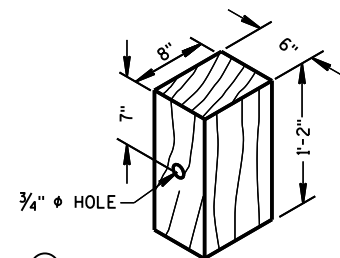
④ **CRT POST**
(POSTS NO'S 5-8)

GENERAL NOTES

WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.

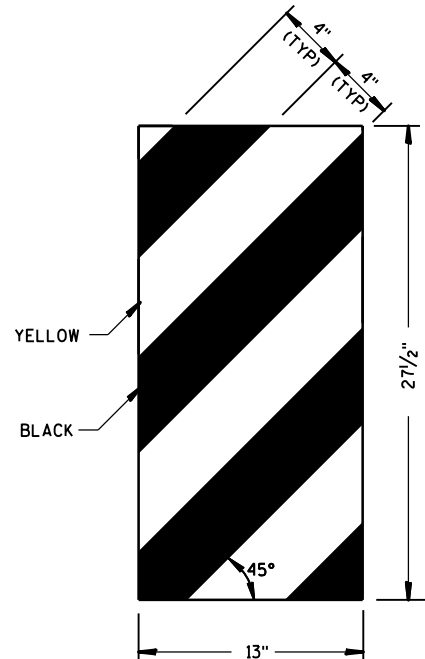
SEE APPROVED PRODUCTS LIST FOR ACCEPTABLE E. A. T. MARKER POST.

ⓐ 1/2" DIA. X 3" LAG BOLT WITH WASHER.

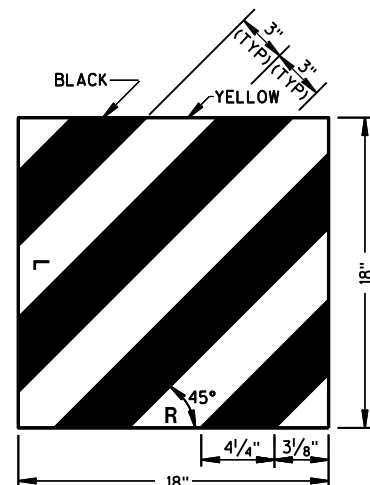


⑤ **WOOD OFFSET BLOCK**
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2

TYPE H
YELLOW REFLECTIVE
SHEETING 3" X 9"
SEE STANDARD
SPECIFICATION 637

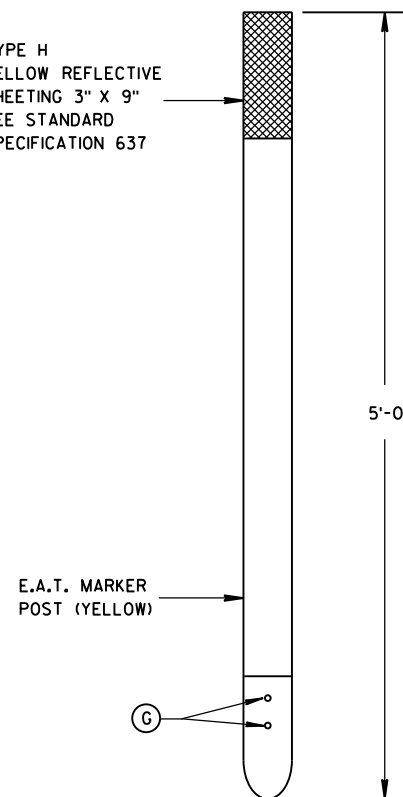


ET-2000 PLUS ONLY

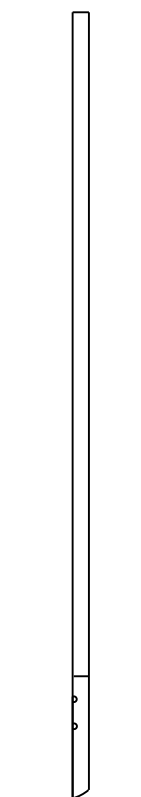


ET-2000 AND SKT-350

⑭ **REFLECTIVE SHEETING DETAILS**

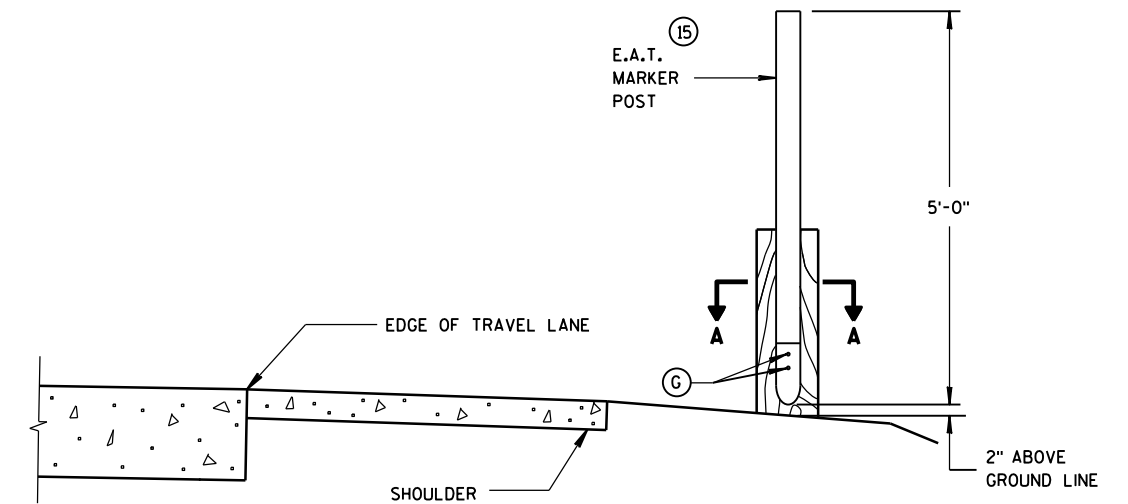


FRONT VIEW

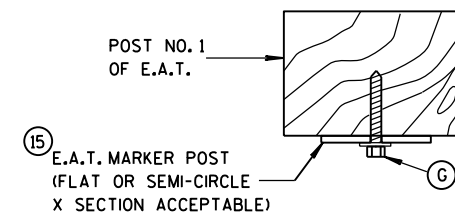


SIDE VIEW

⑮ **E.A.T. MARKER POST**



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1
(E.A.T. AND RAIL REMOVED FOR CLARITY)



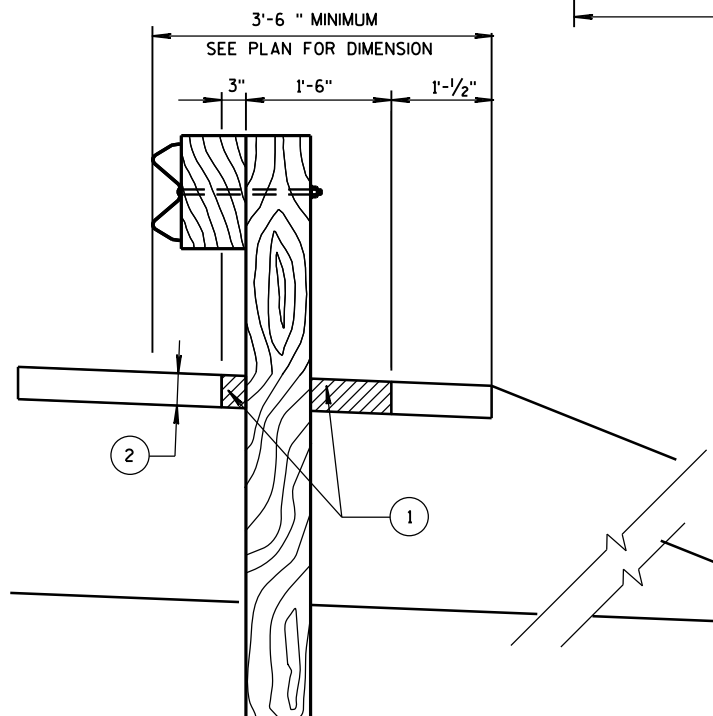
SECTION A-A

**STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL**

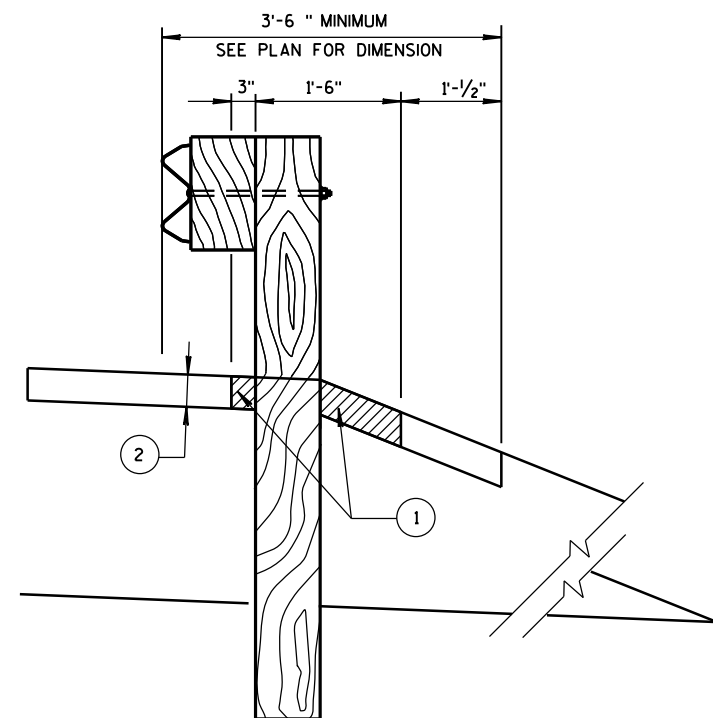
**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION**

APPROVED
June 2014
DATE
FHWA

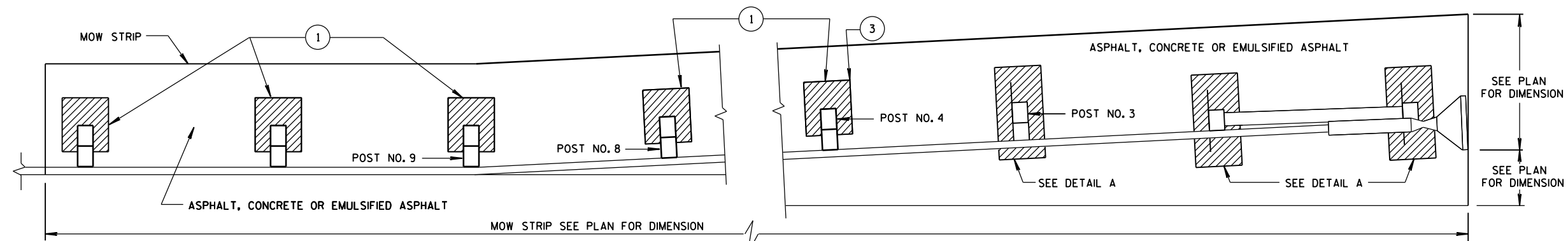
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



SECTION A-A

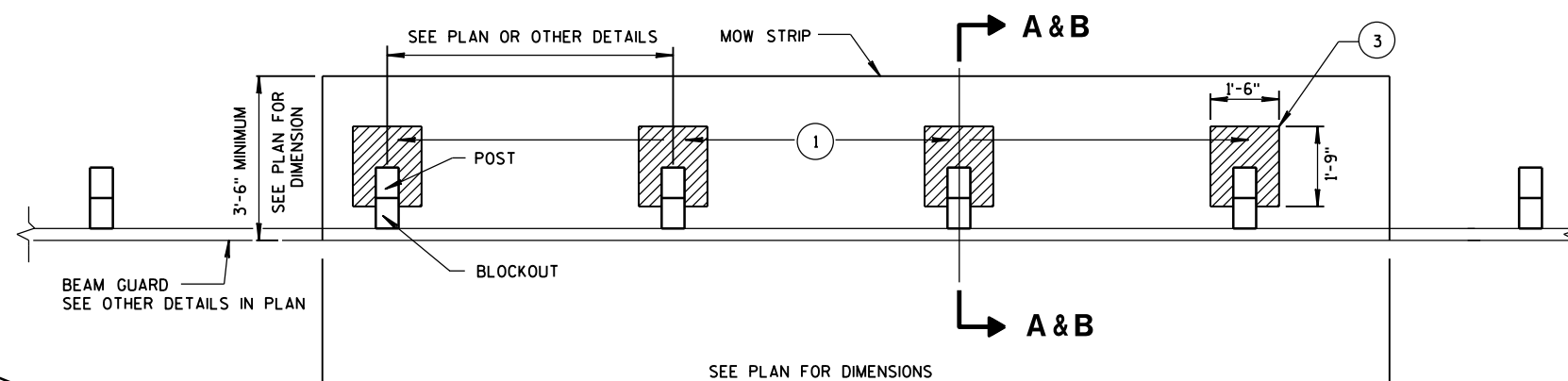


SECTION B-B



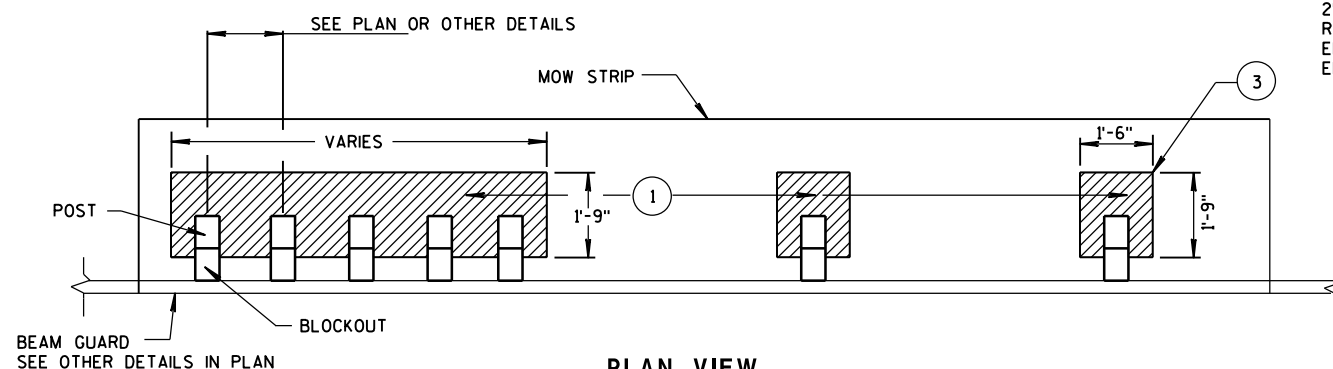
PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABORING TERMINAL



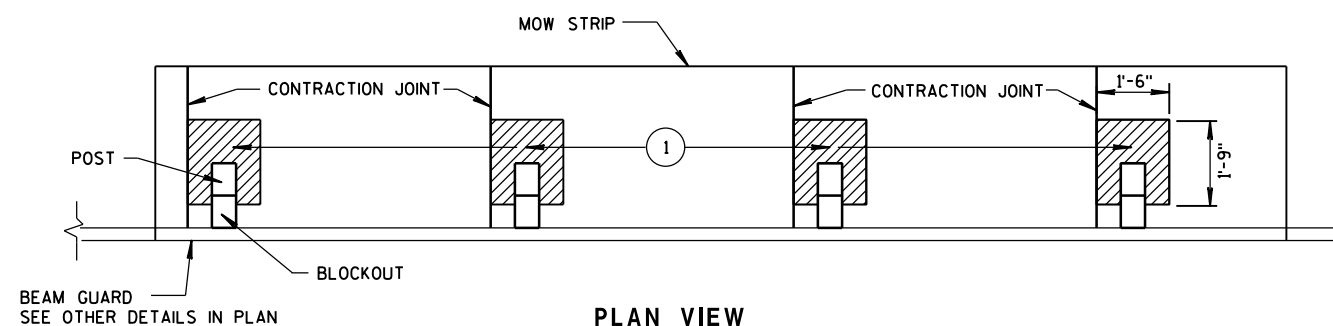
PLAN VIEW

MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT



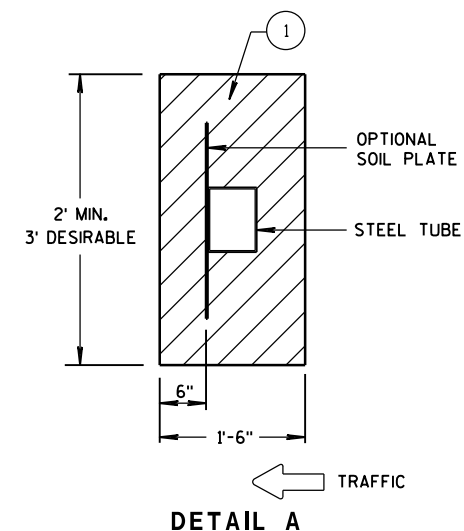
PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT

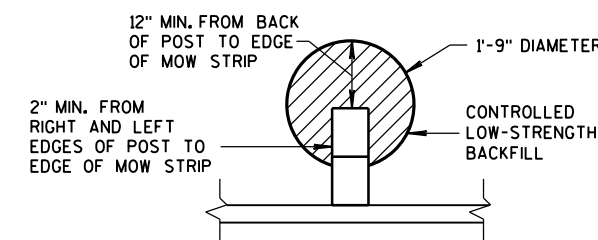


PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP



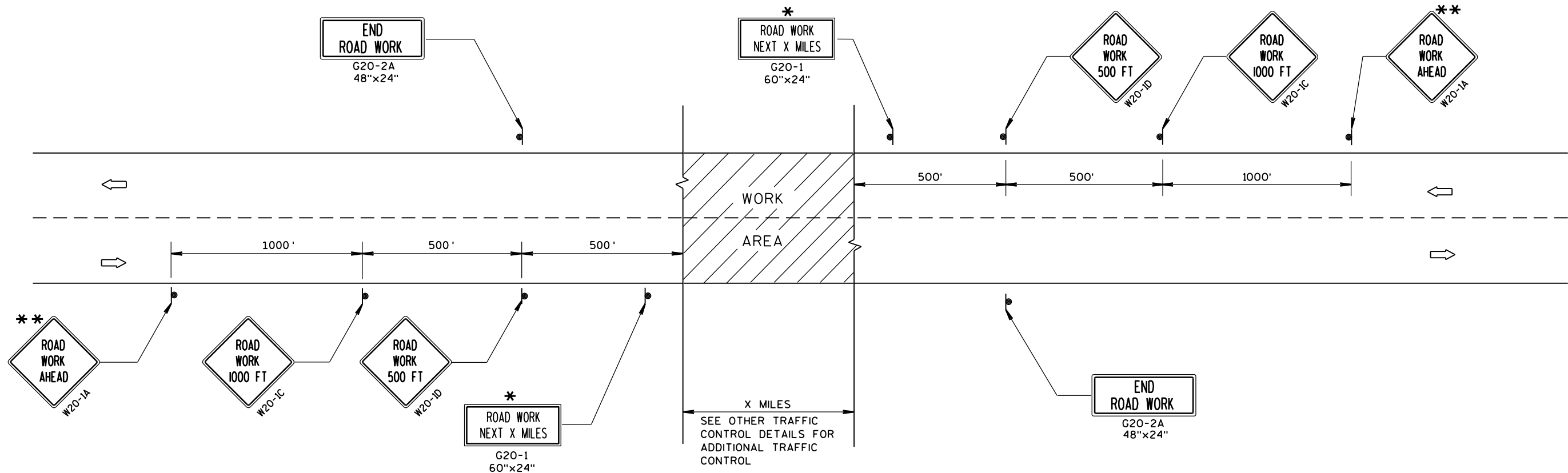
DETAIL A

ALTERNATIVE HMA
MOW STRIP DESIGN

- ① CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.
- ② DEPTH OF MOW STRIP:
ASPHALT - 4"
CONCRETE - 4"
EMULSIFIED ASPHALT - 1" OR LESS
- ③ FOR EMULSIFIED ASPHALT MOW STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS.)

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATIONAPPROVED
June 2014
DATE
FHWA/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



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.

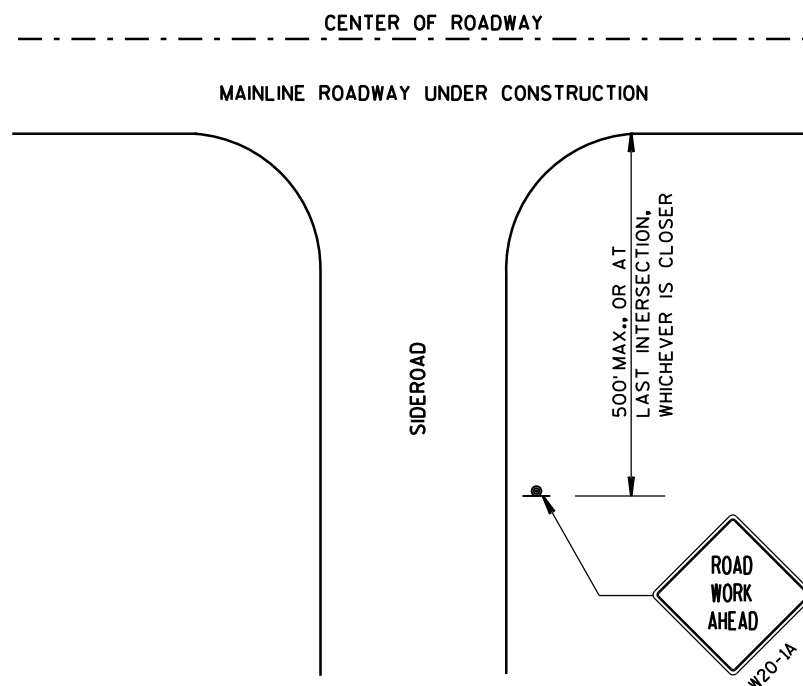
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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.



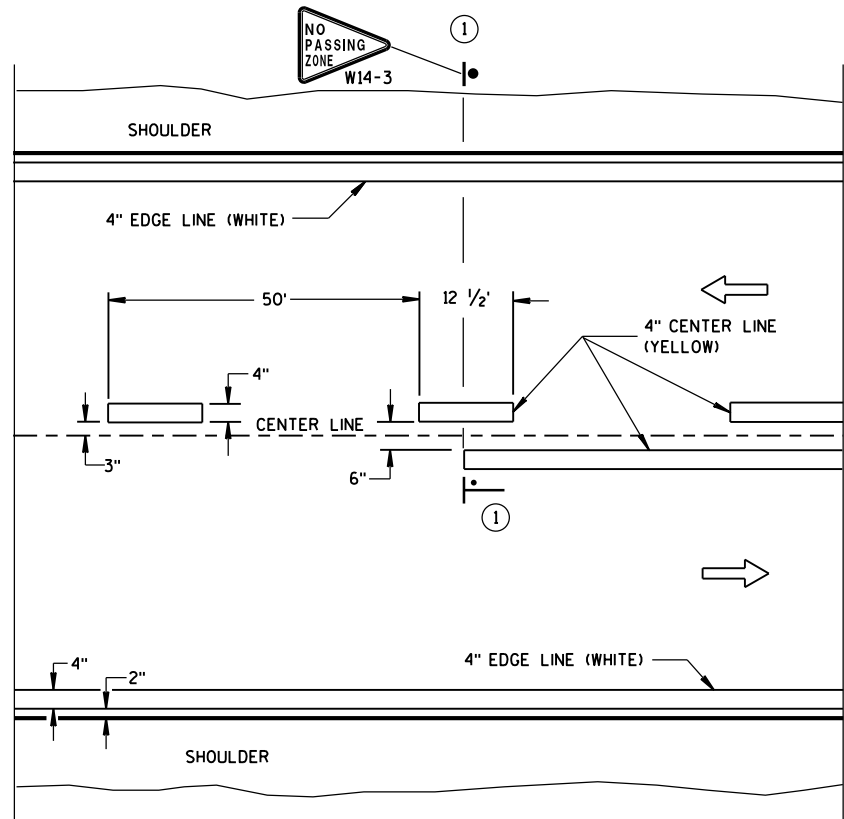
LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

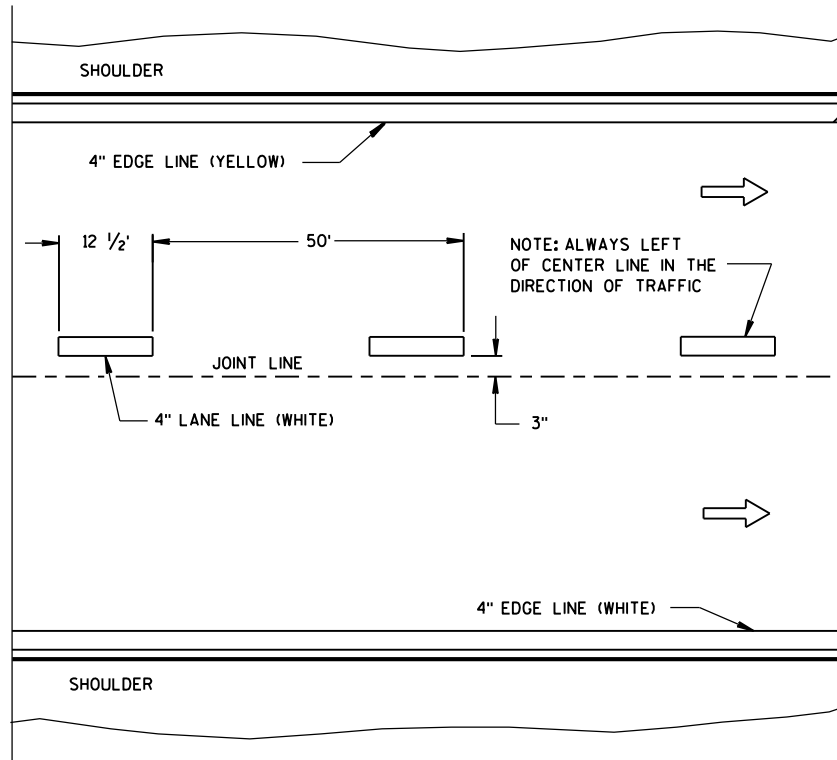
TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 /S/ Peter Amokobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER

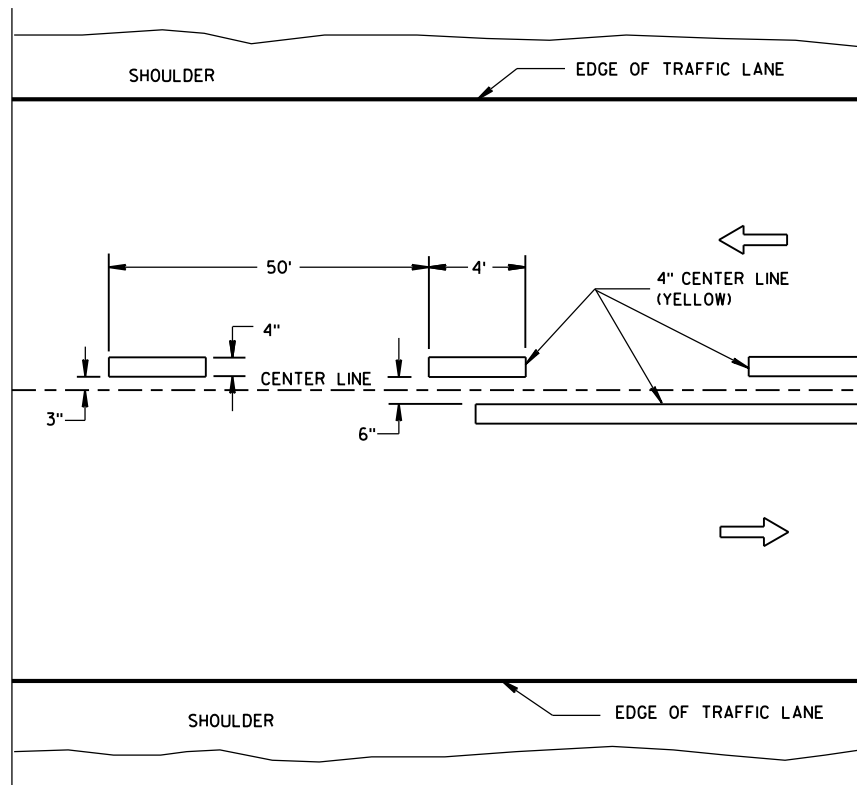


TWO WAY TRAFFIC

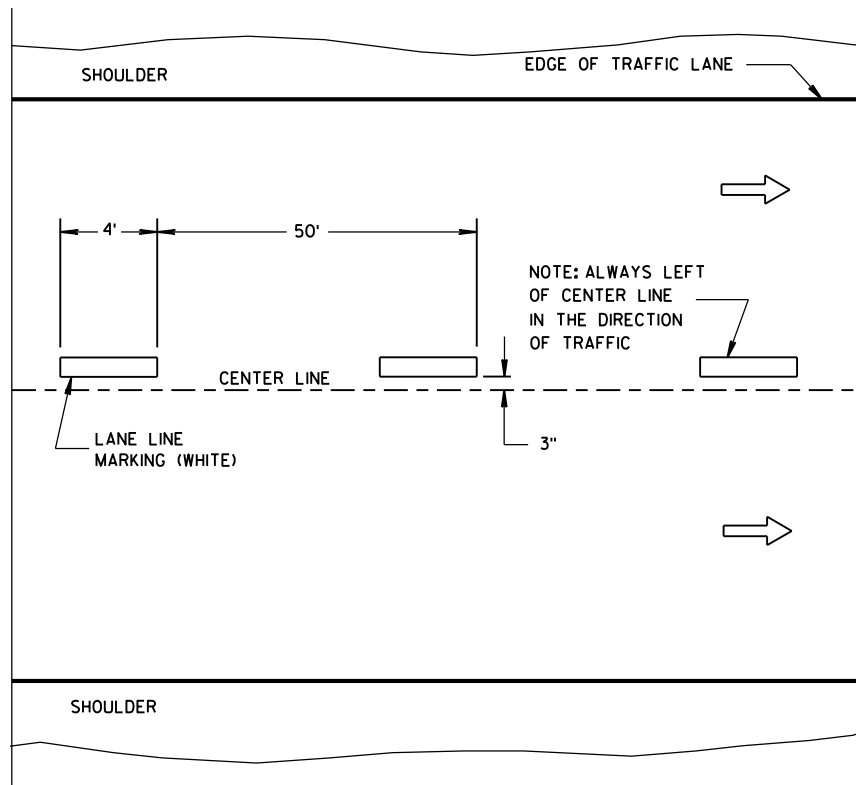


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

① NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED WITHIN 50 FEET OF THE "T" MARKING.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

LEGEND

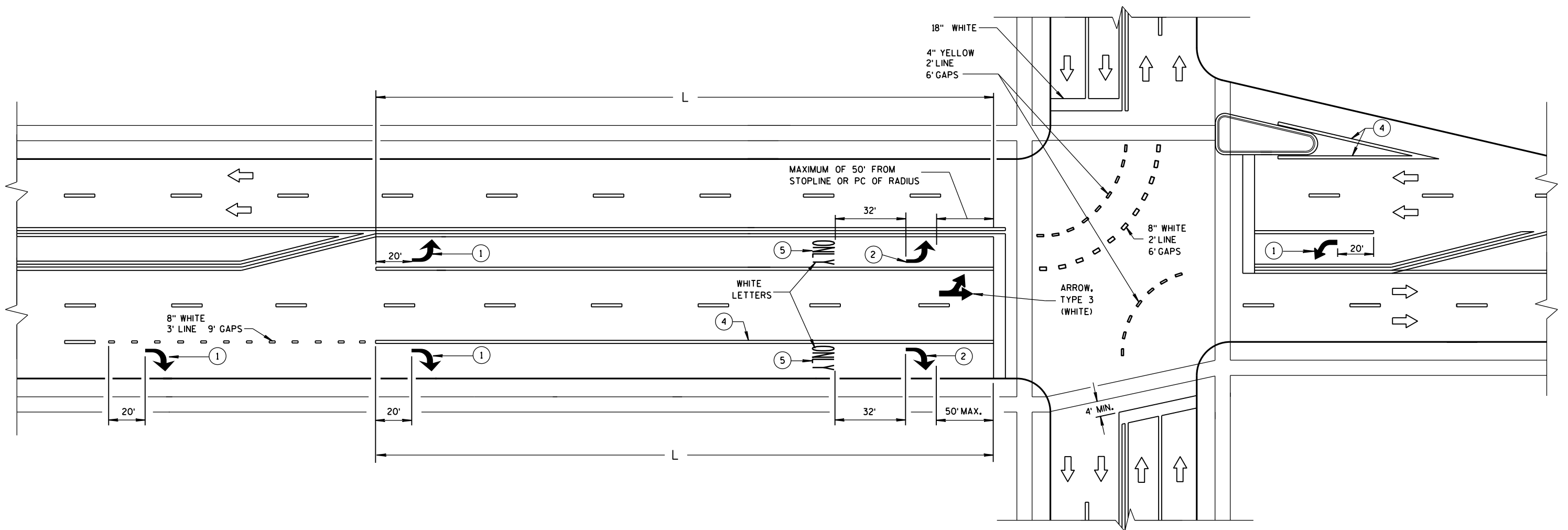
—●— "T" MARKING

● POST MOUNTED SIGN

LONGITUDINAL MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA



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.

TWO WAY LEFT TURN LANE

NOTE:
ARROW SYMBOL (→)
SHOWS DIRECTION OF TRAVEL

L = LENGTH OF TURN BAY

PAVEMENT MARKING
(TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

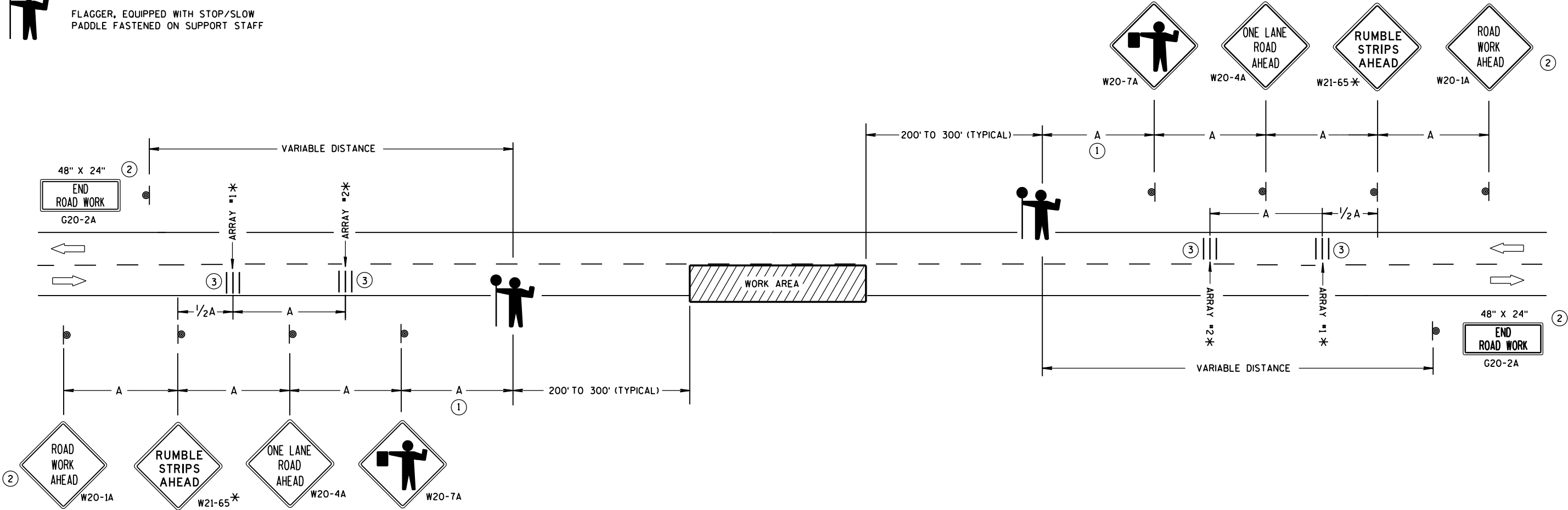
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING A
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



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

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.

"W0" 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.

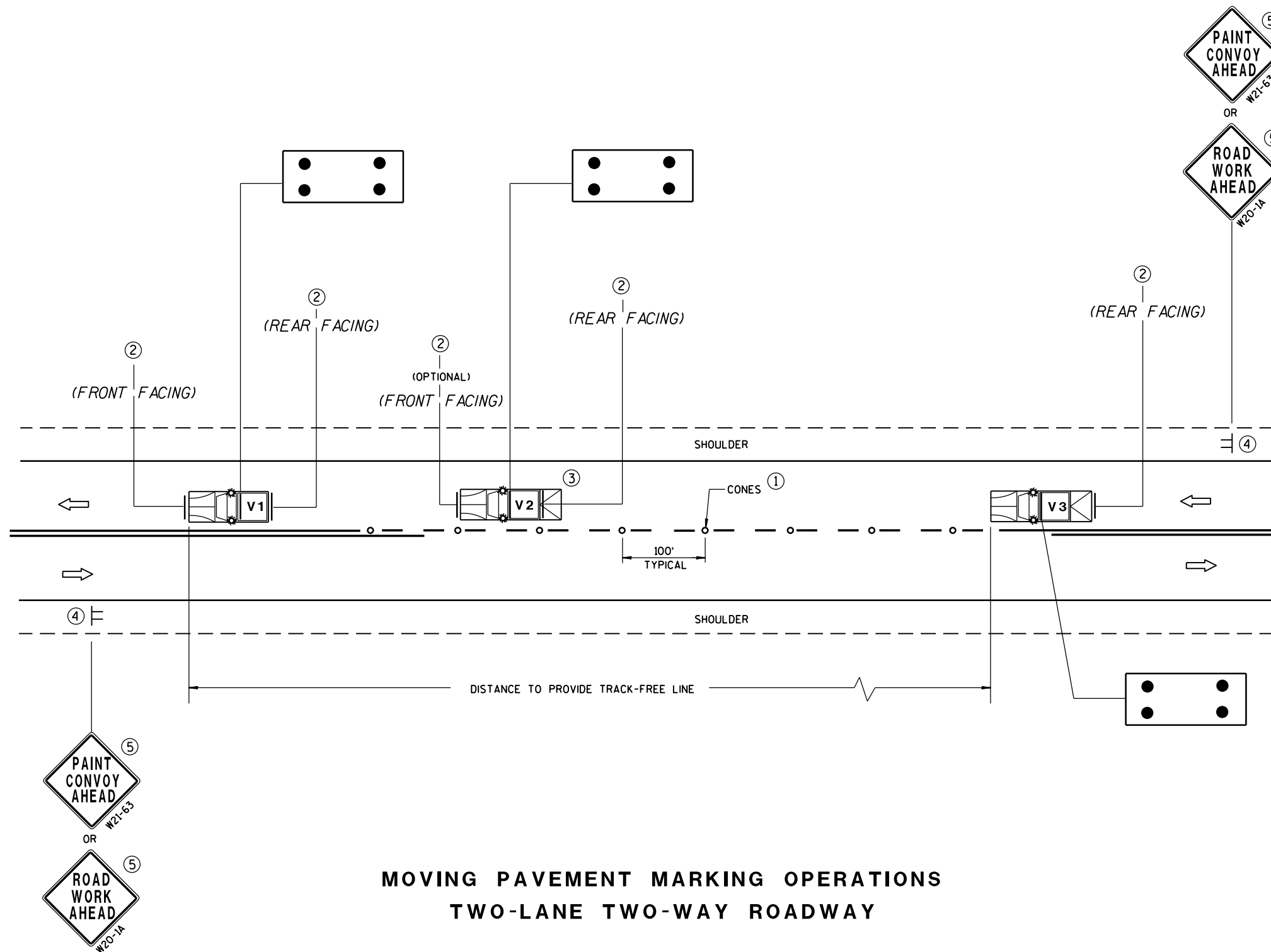
* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

- 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.
- SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- 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
December, 2016 /S/ Andrew Heldtke
DATE WORK ZONE ENGINEER
FHWA



MOVING PAVEMENT MARKING OPERATIONS TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

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

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

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

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

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

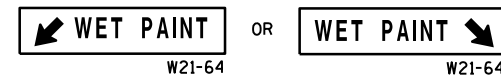
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.



③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1 LEAD VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE WITH TMA

TMA TRUCK-MOUNTED ATTENUATOR

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

CONES

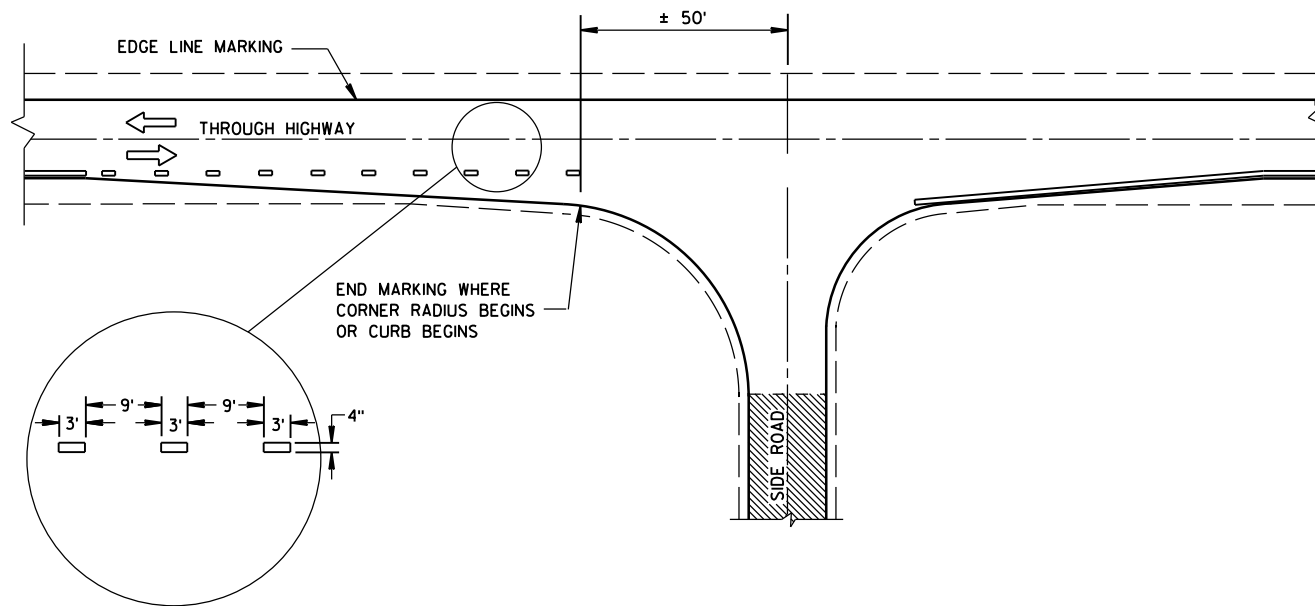
FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016
DATE
FHWA

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER




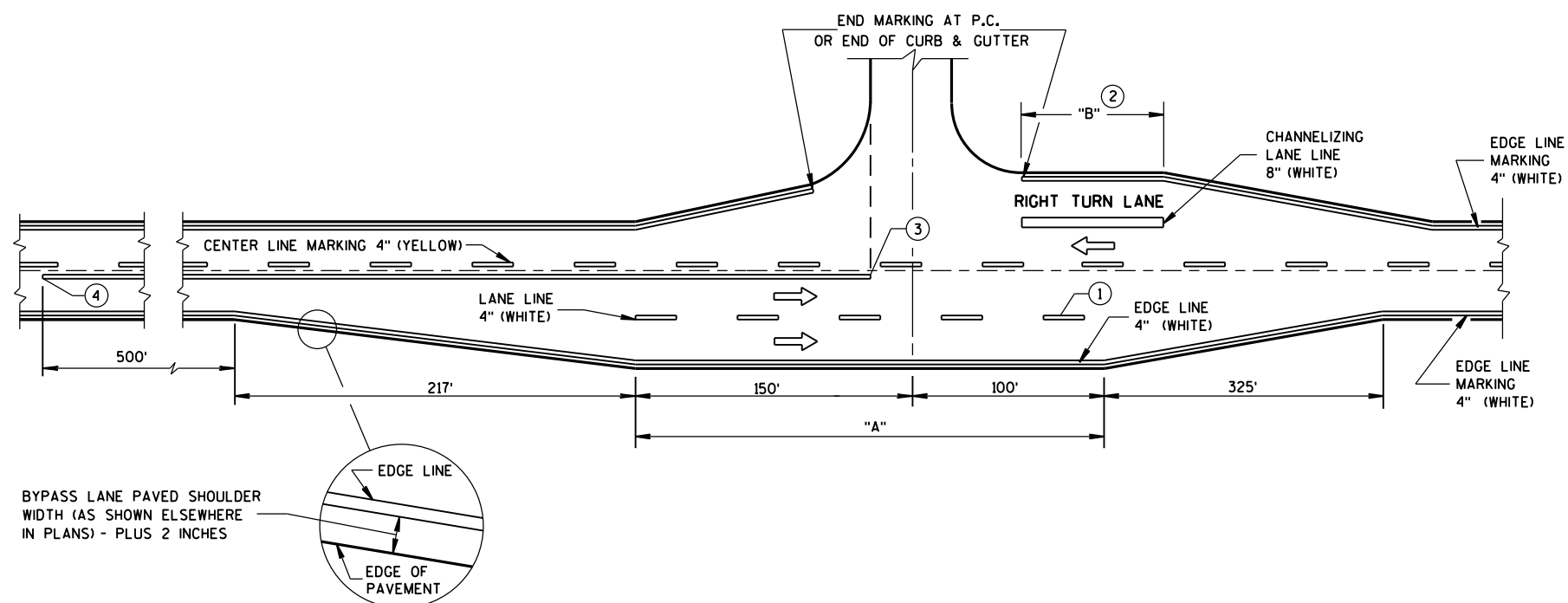
MINOR INTERSECTION WITHOUT CURBS

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 TRANSPORTATION

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

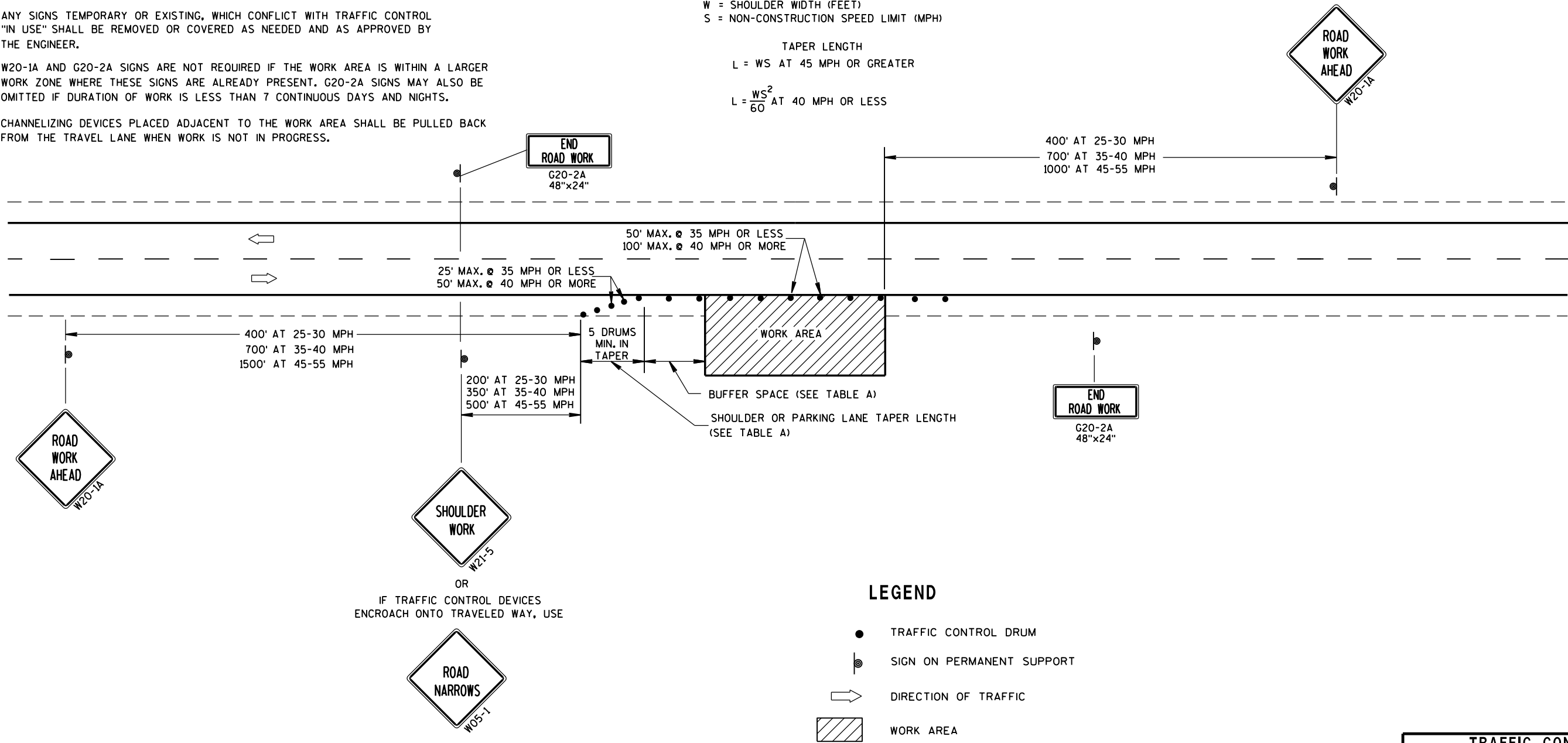
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

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

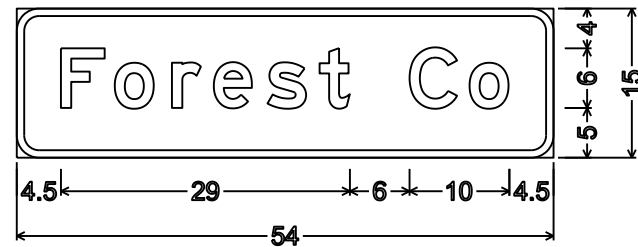
SHOULDER TAPER LENGTH = $\frac{1}{3}L$



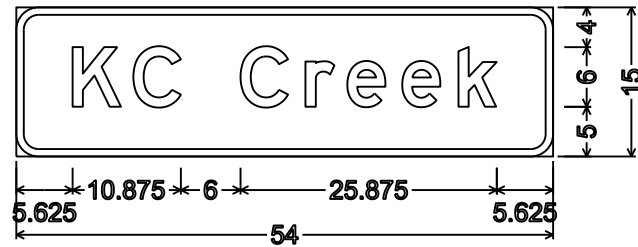
LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

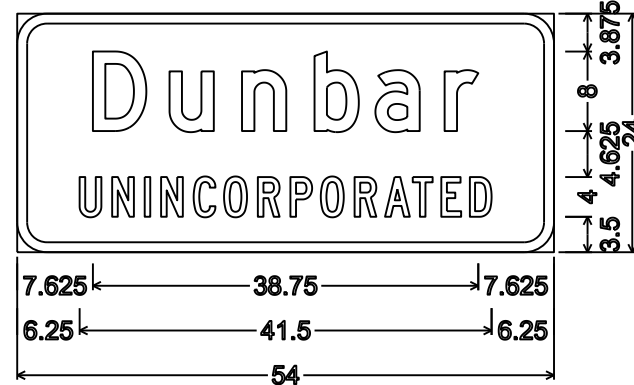
TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 14, 2015 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



I2-2;
2.250" Radius, 0.750" Border



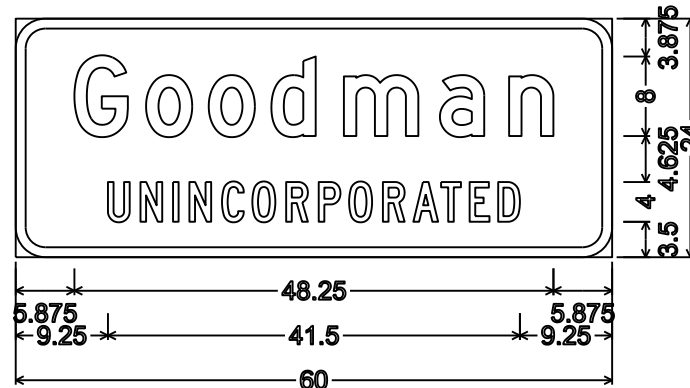
I3-1;
2.250" Radius, 0.750" Border



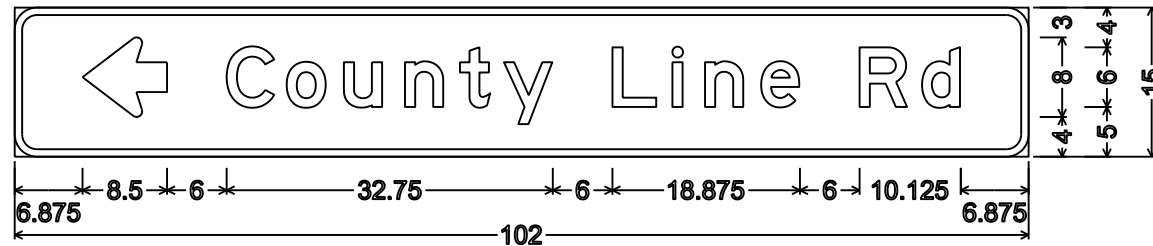
I2-3;
3.000" Radius, 1.000" Border,
"Dunbar" D; "UNINCORPORATED" C



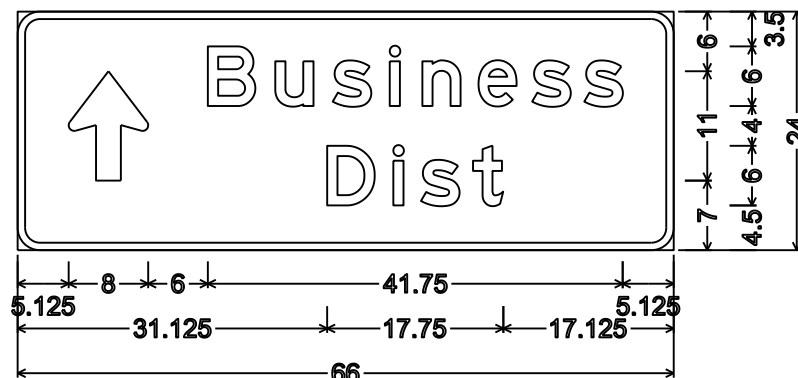
I2-2; 2.250" Radius, 0.750" Border



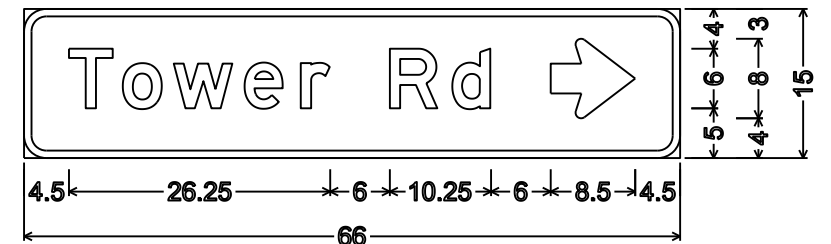
I2-3;
3.000" Radius, 1.000" Border,
"Goodman" D; "UNINCORPORATED" C



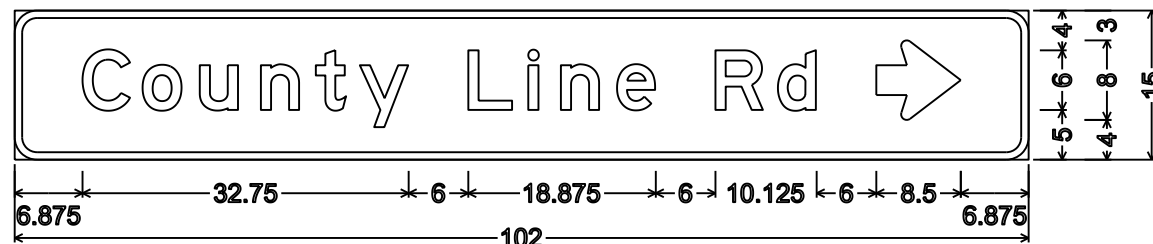
D1-1; 2.250" Radius, 0.750" Border



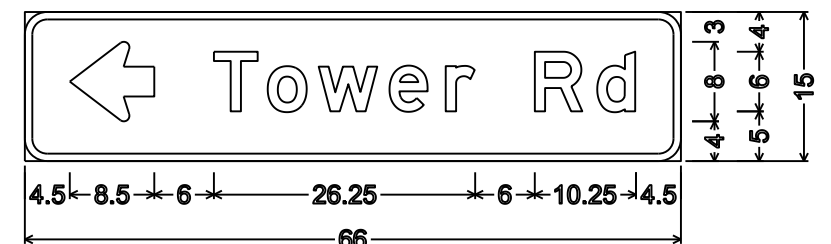
D1-2; 2.250" Radius, 0.750" Border



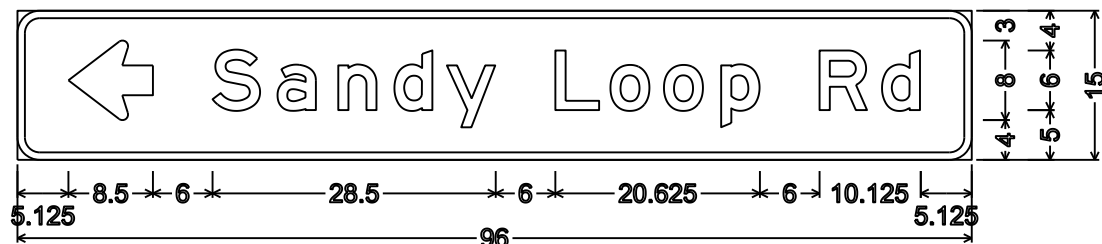
D1-1; 2.250" Radius, 0.750" Border



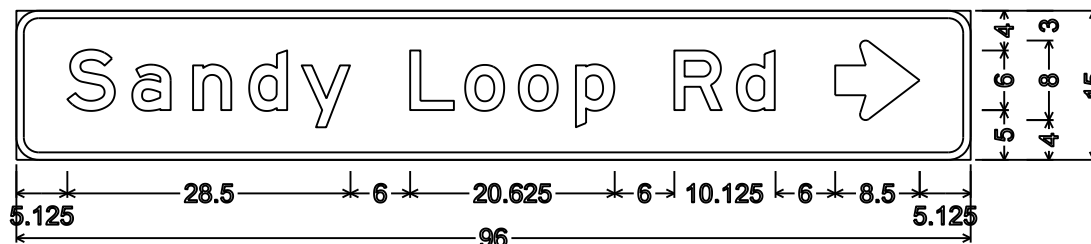
D1-1; 2.250" Radius, 0.750" Border



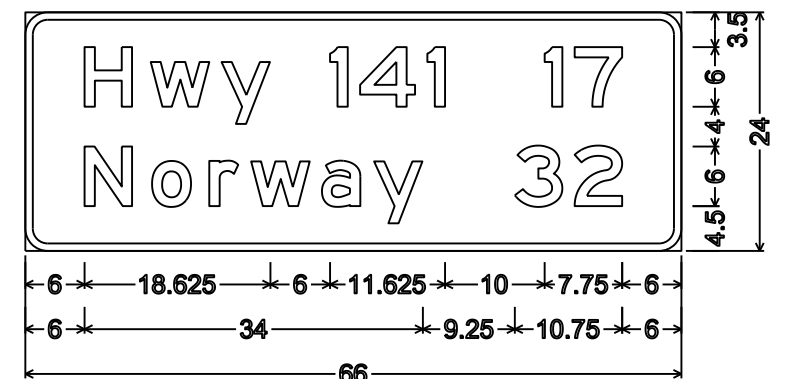
D1-1; 2.250" Radius, 0.750" Border



D1-1; 2.250" Radius, 0.750" Border



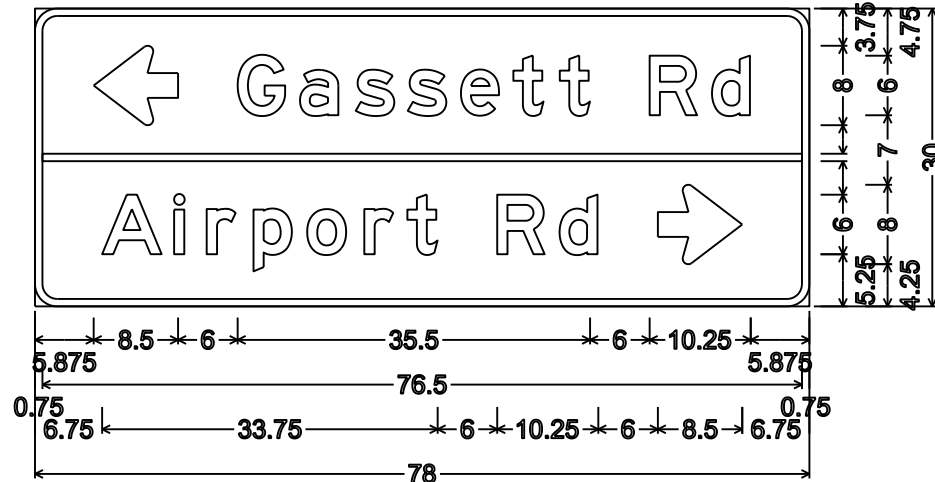
D1-1; 2.250" Radius, 0.750" Border



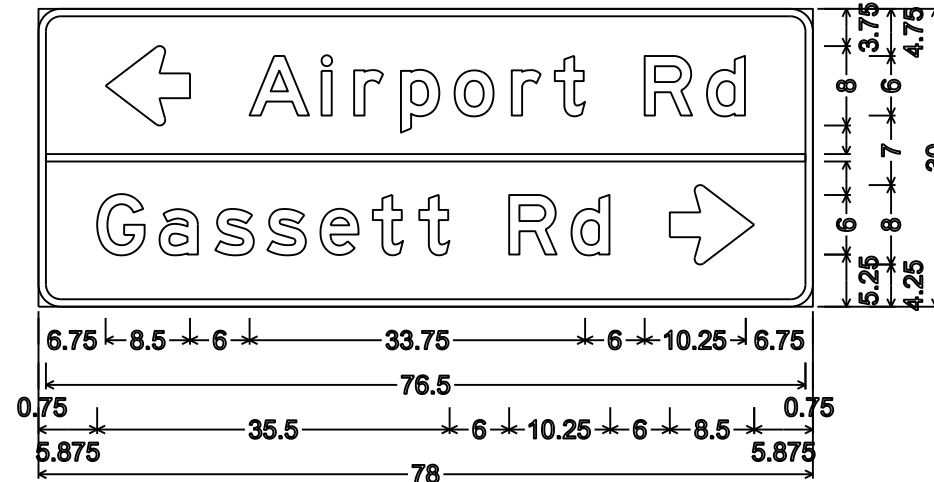
D2-2; 2.250" Radius, 0.750" Border

NOTES

1. Signs are Type II- Type H Reflective
2. Color:
Background - Green except as noted
Message - White
3. Message Series - E except as noted



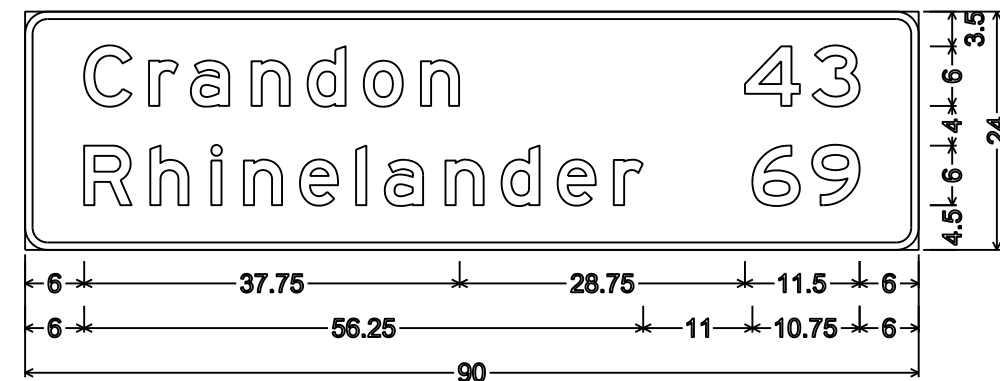
D1-2; 2.250" Radius, 0.750" Border



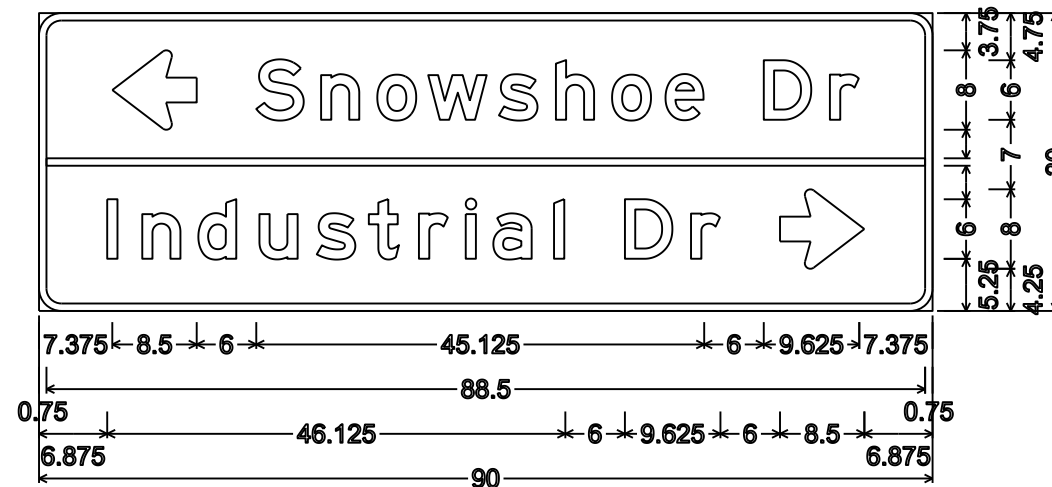
D1-2; 2.250" Radius, 0.750" Border

NOTES

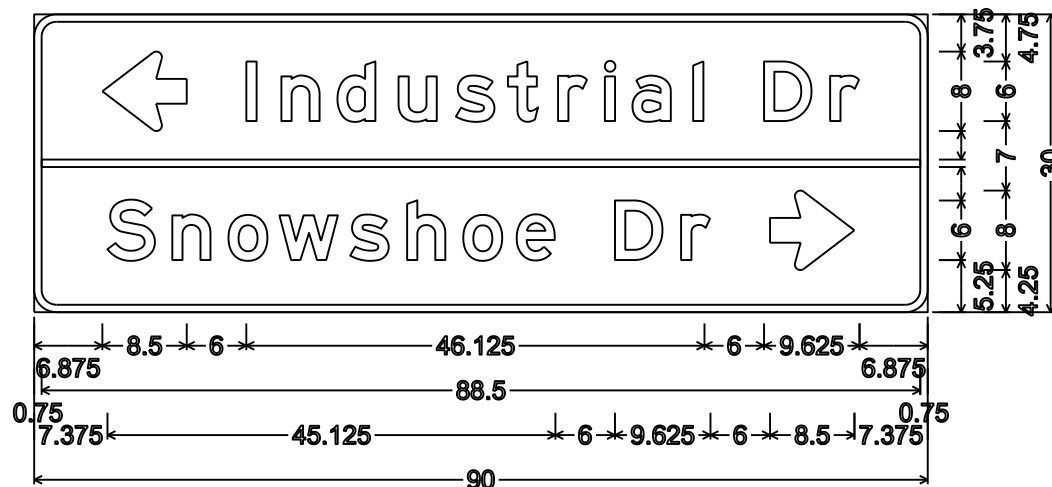
1. Signs are Type II- Type H Reflective
2. Color:
Background - Green except as noted
Message - White
3. Message Series - E except as noted



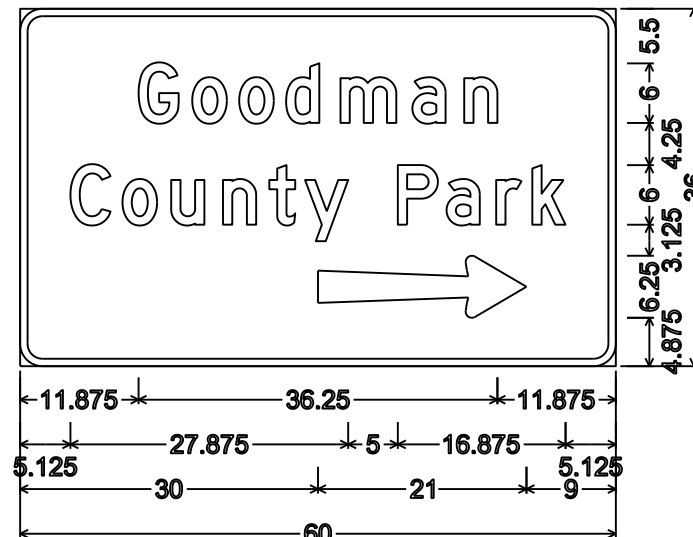
D2-2; 2.250" Radius, 0.750" Border



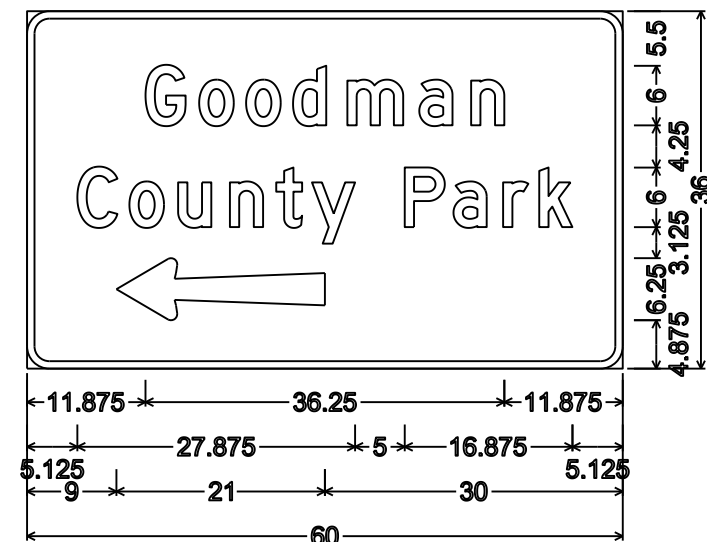
D1-2; 2.250" Radius, 0.750" Border



D1-2; 2.250" Radius, 0.750" Border,



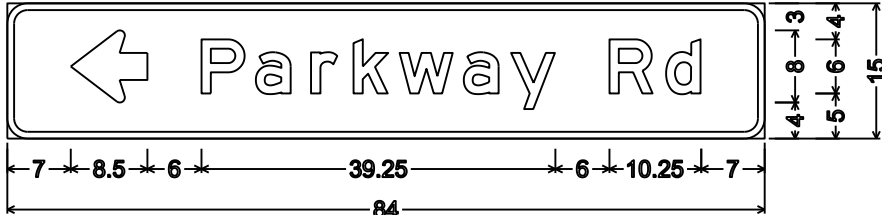
2.250" Radius, 0.750" Border, White on Brown;
"Goodman" D; "County" D; "Park" D



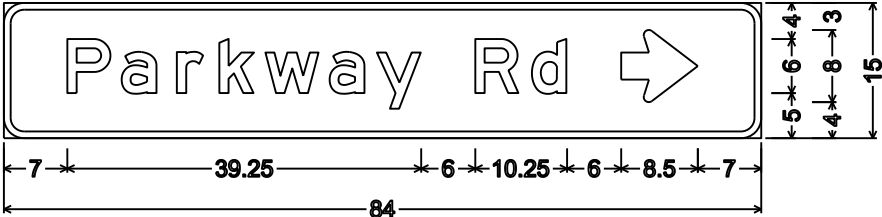
2.250" Radius, 0.750" Border, White on Brown;
"Goodman" D; "County" D; "Park" D

7

7



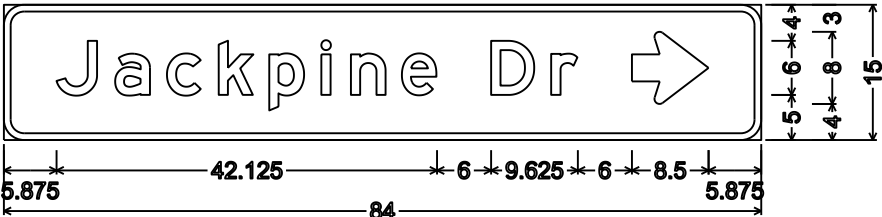
D1-1; 2.250" Radius, 0.750" Border



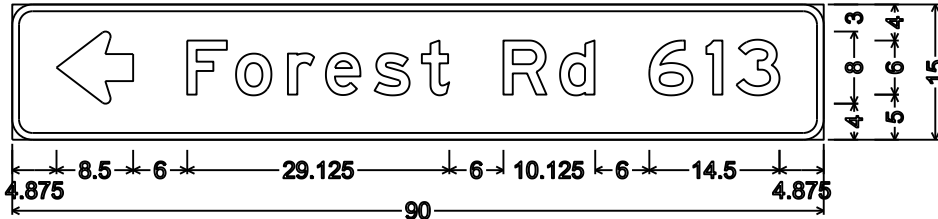
D1-1; 2.250" Radius, 0.750" Border



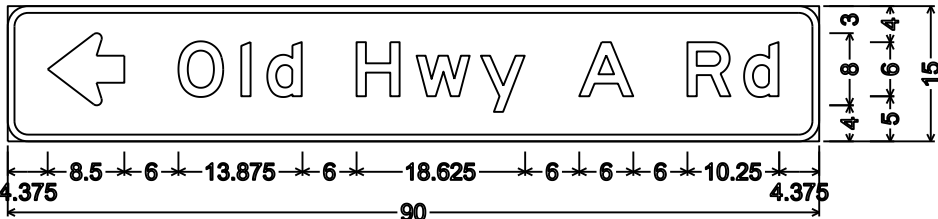
D1-1; 2.250" Radius, 0.750" Border



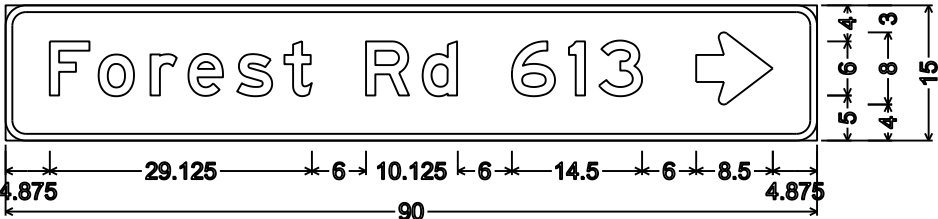
D1-1; 2.250" Radius, 0.750" Border



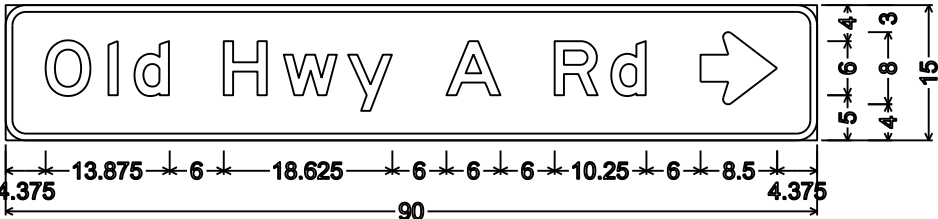
D1-1; 2.250" Radius, 0.750" Border



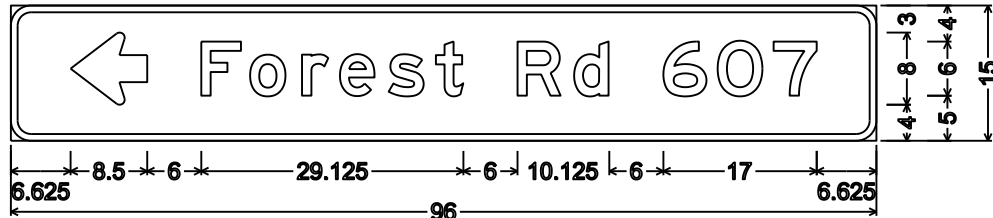
D1-1; 2.250" Radius, 0.750" Border



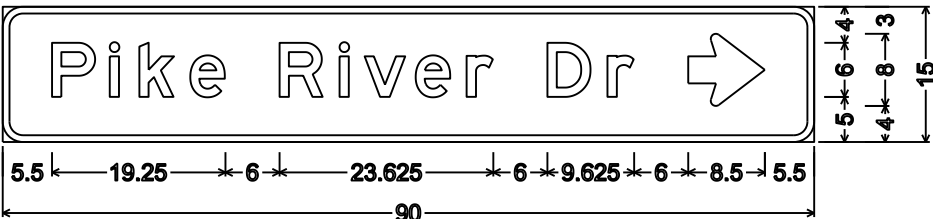
D1-1; 2.250" Radius, 0.750" Border



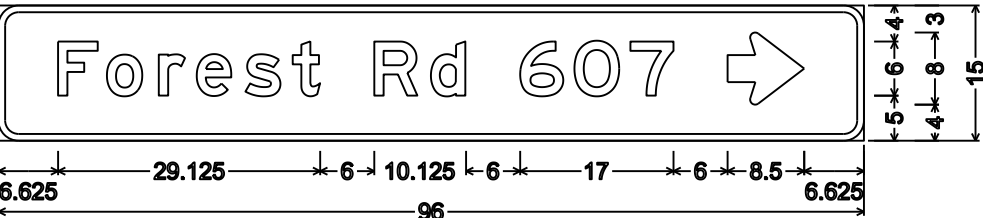
D1-1; 2.250" Radius, 0.750" Border



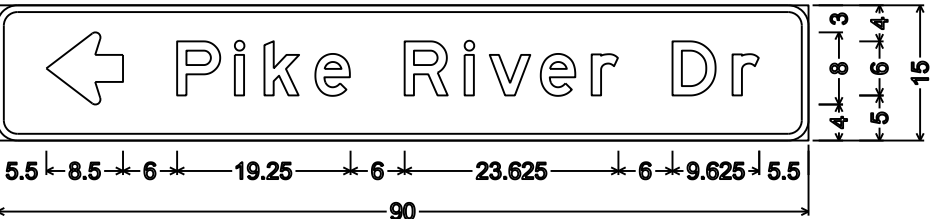
D1-1; 2.250" Radius, 0.750" Border



D1-1; 2.250" Radius, 0.750" Border



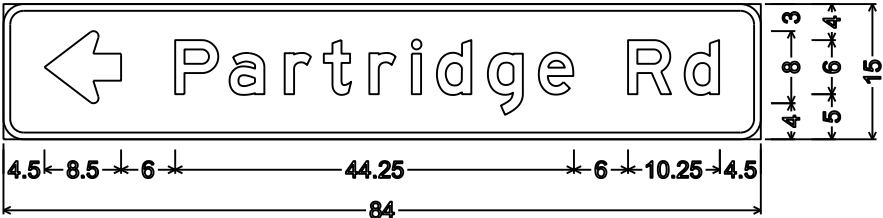
D1-1; 2.250" Radius, 0.750" Border



D1-1; 2.250" Radius, 0.750" Border

NOTES

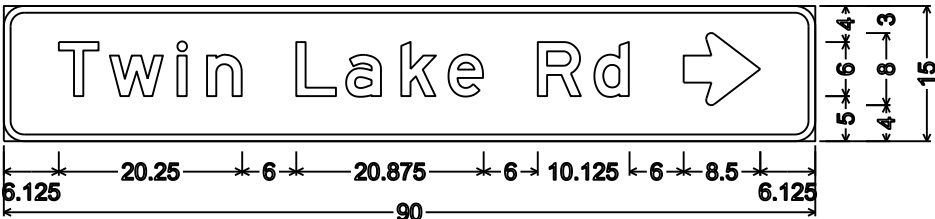
- 1. Signs are Type II- Type H Reflective
- 2. Color:
Background - Green except as noted
Message - White
- 3. Message Series - E except as noted



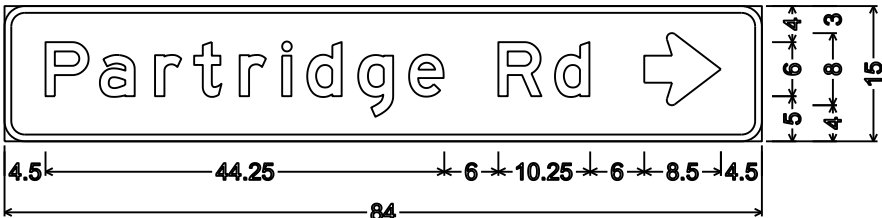
D1-1; 2.250" Radius, 0.750" Border



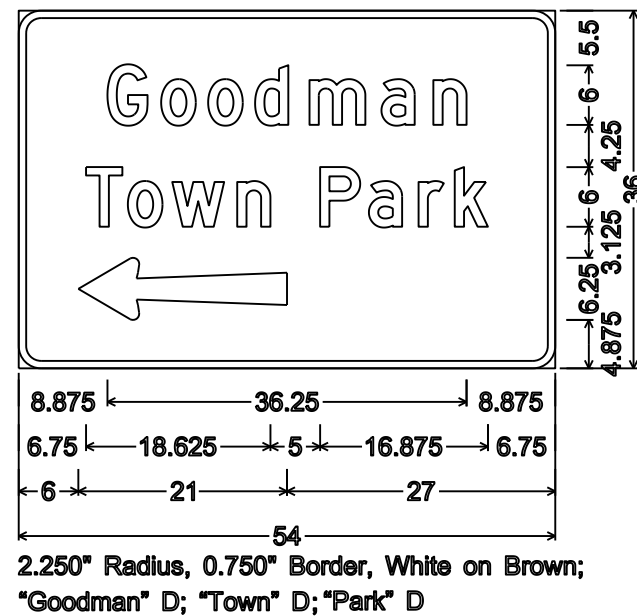
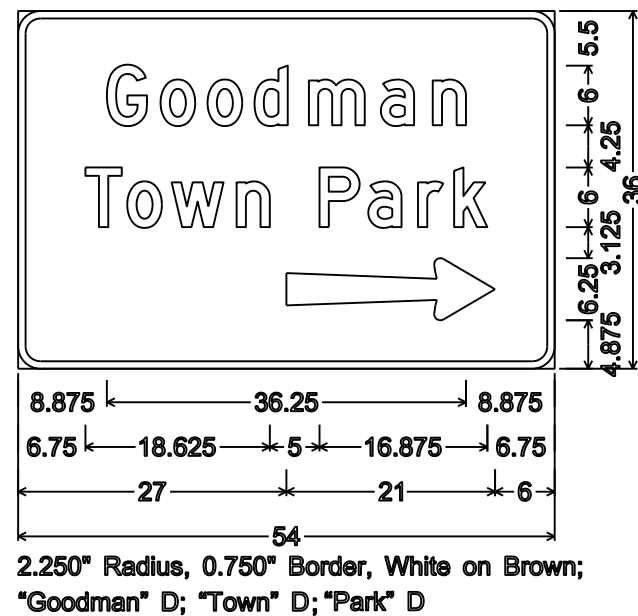
D1-1; 2.250" Radius, 0.750" Border



D1-1; 2.250" Radius, 0.750" Border

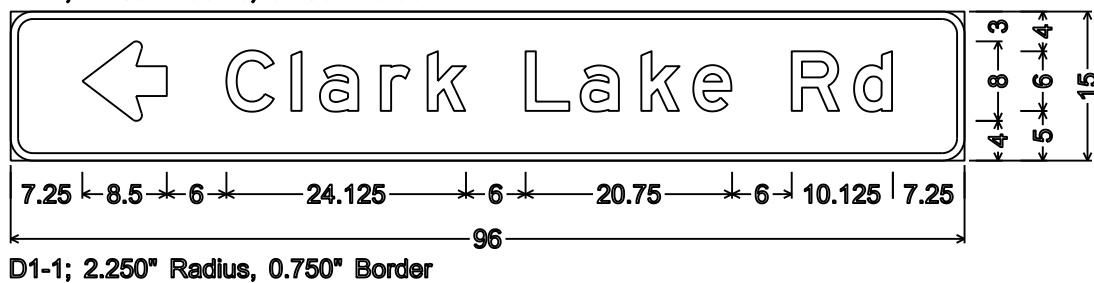
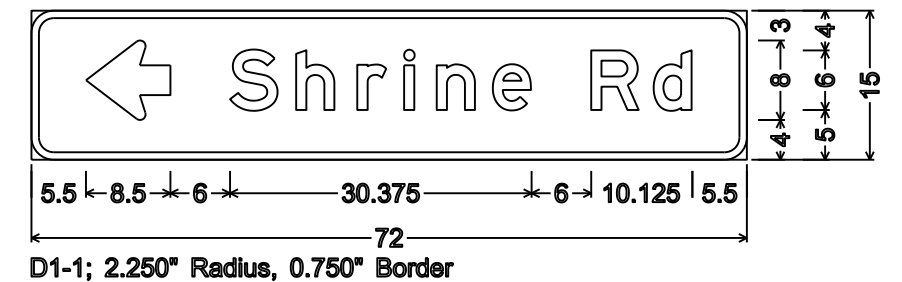
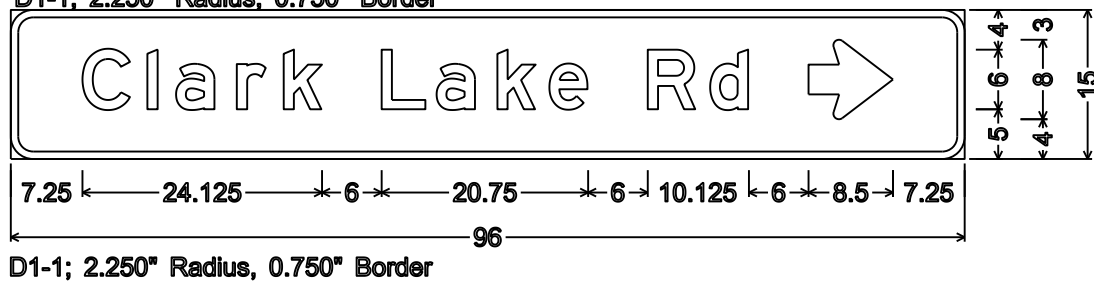
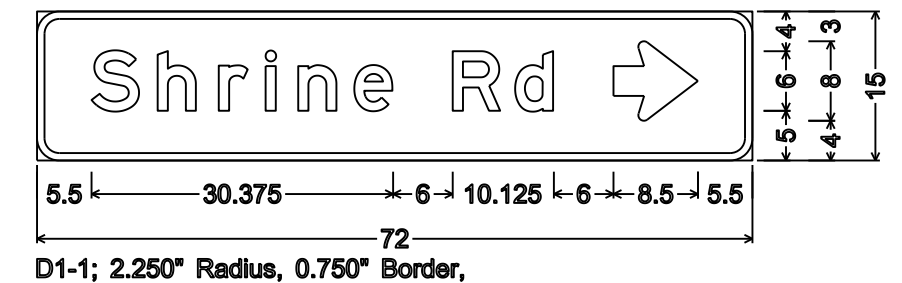
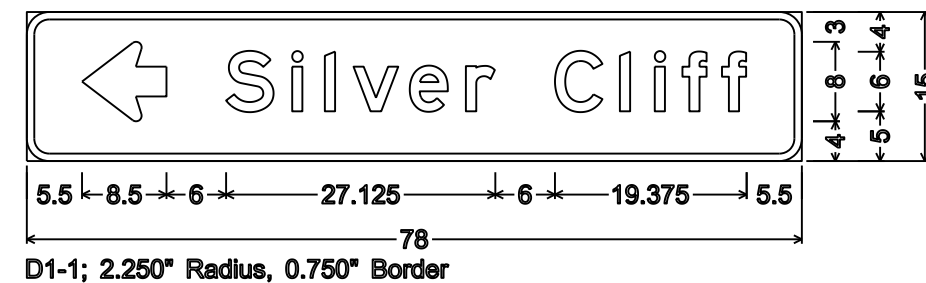
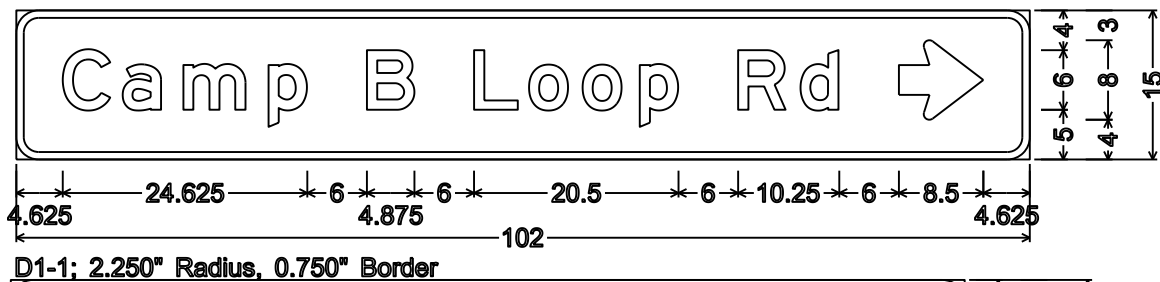
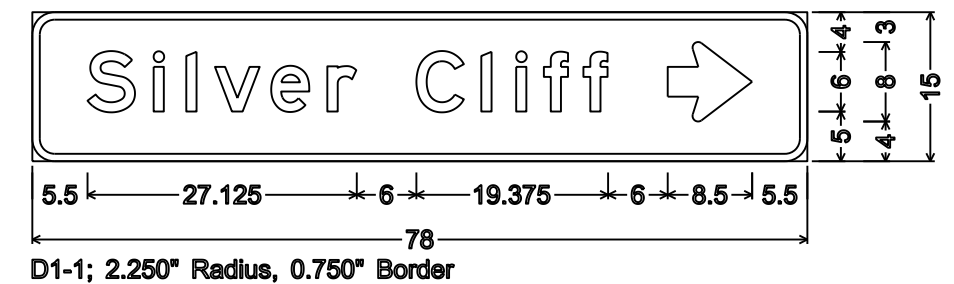
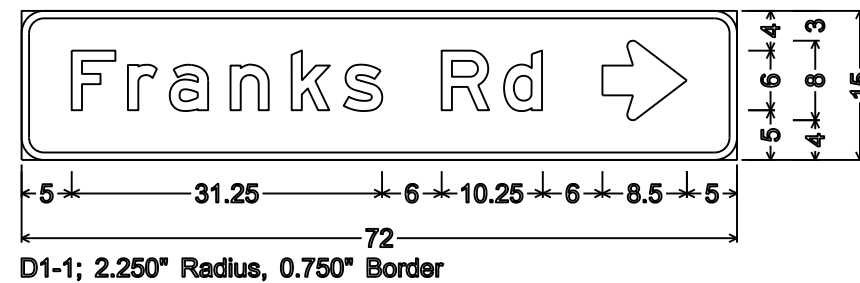
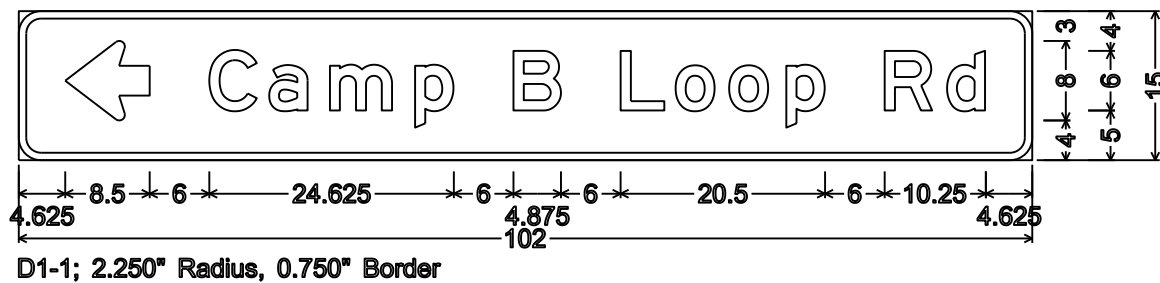
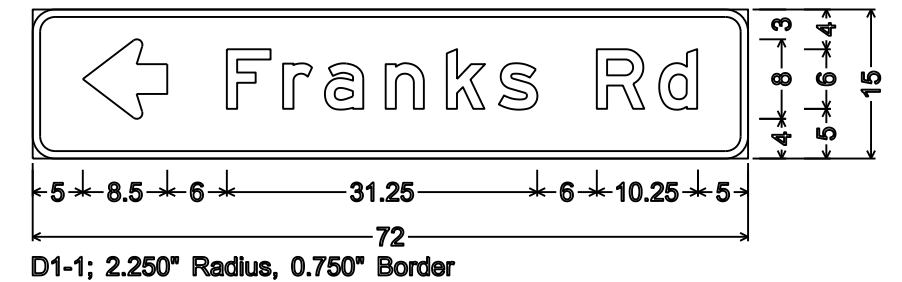


D1-1; 2.250" Radius, 0.750" Border

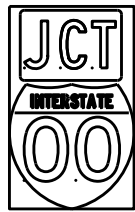


NOTES

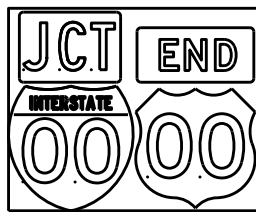
1. Signs are Type II- Type H Reflective
2. Color:
 - Background - Green except as noted
 - Message - White
3. Message Series - E except as noted



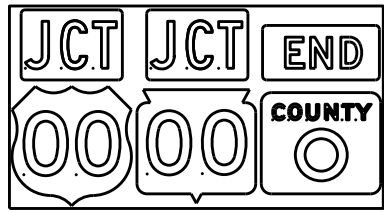
TYPICAL ASSEMBLIES



J1-1



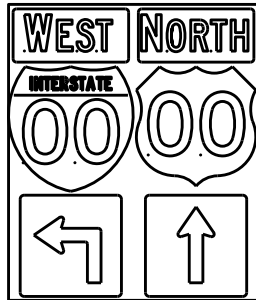
J1-2



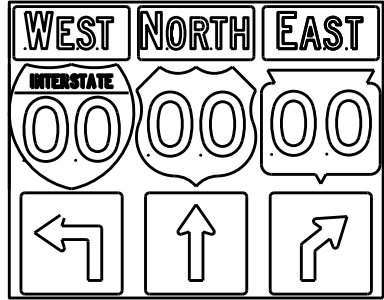
J1-3



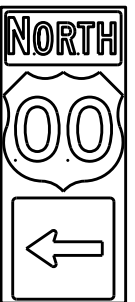
J2-1



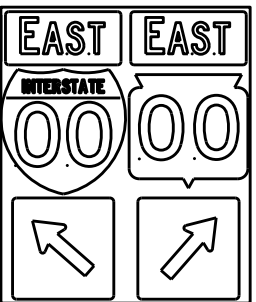
J2-2



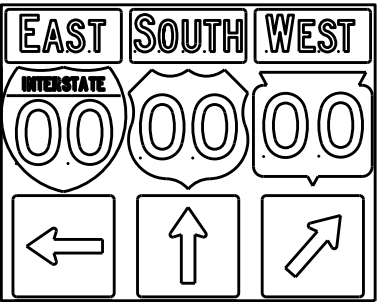
J2-3



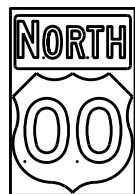
J3-1



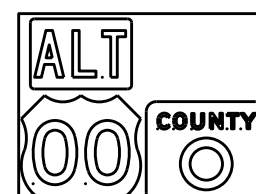
J3-2



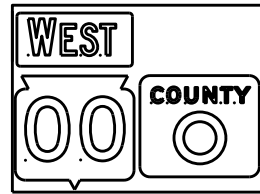
J3-3



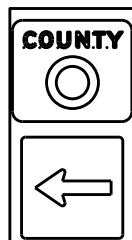
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

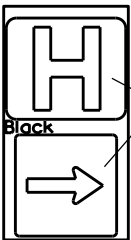


J22-1



JV

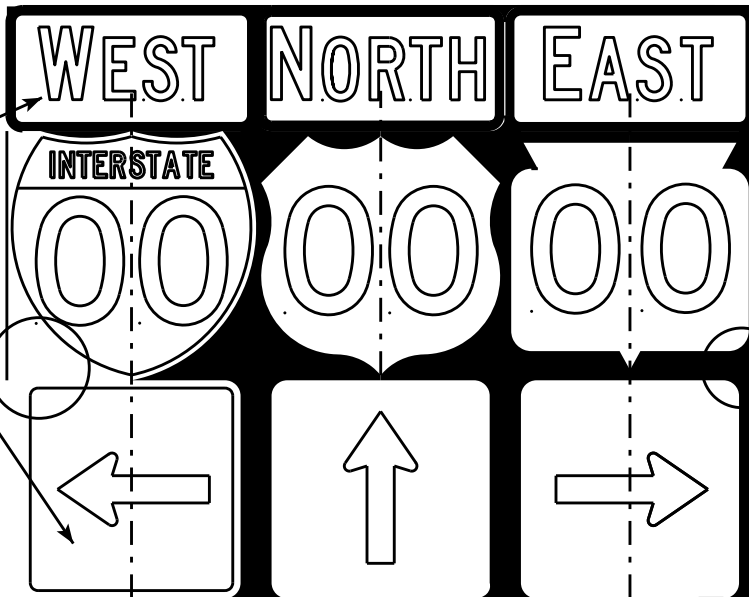
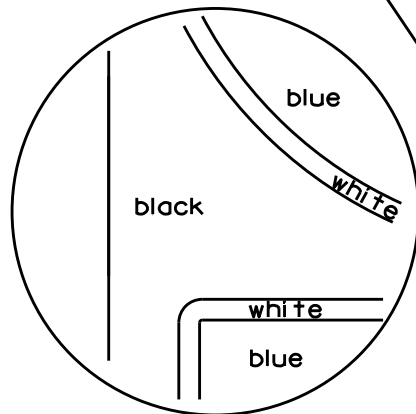
(Typical Vertical J-Assembly
See Note 10 and 11)



JH-1

Blue Background

[blue background
with interstate]



[black background]

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

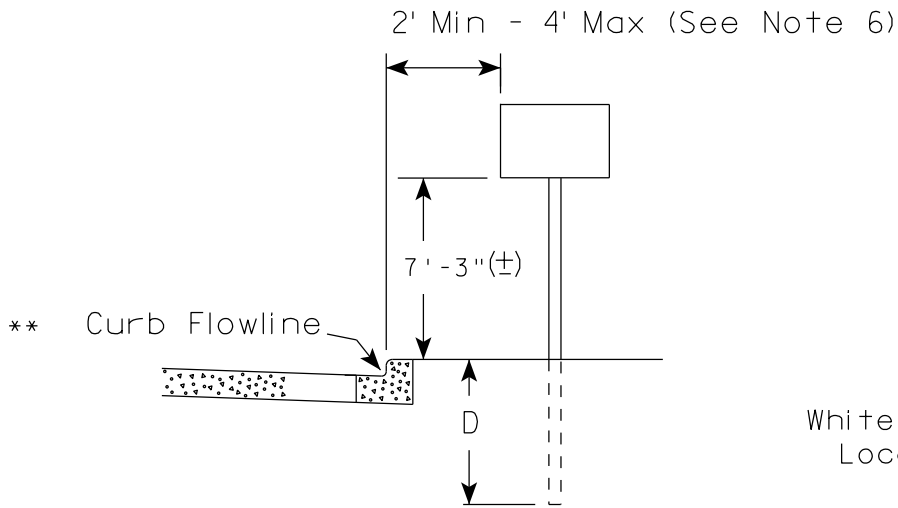
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/06/14 PLATE NO. A2-1S.8

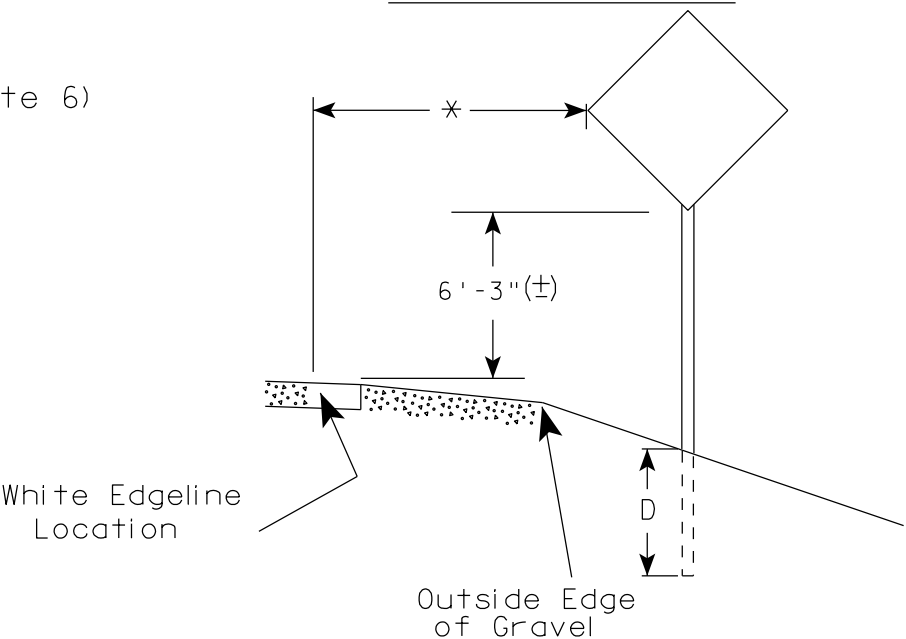
NOTES

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 inches (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.

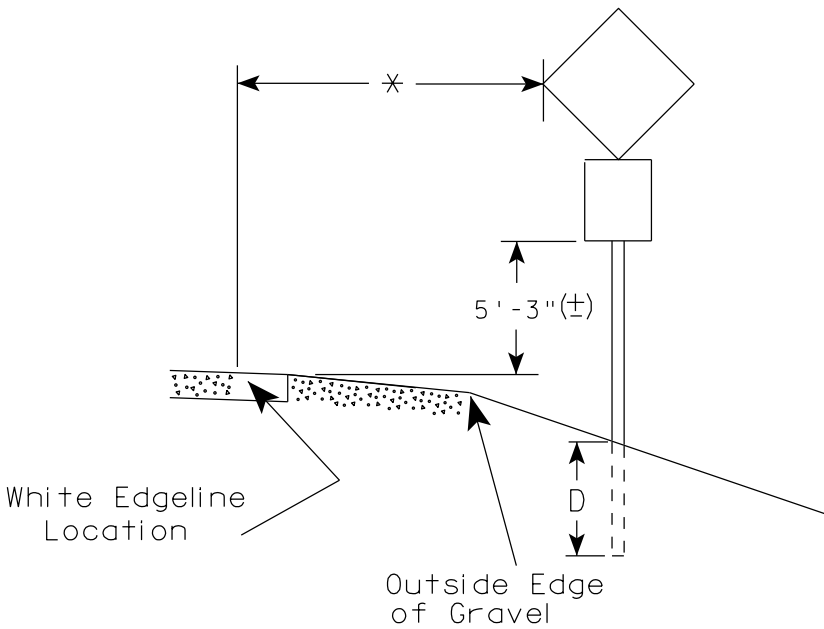
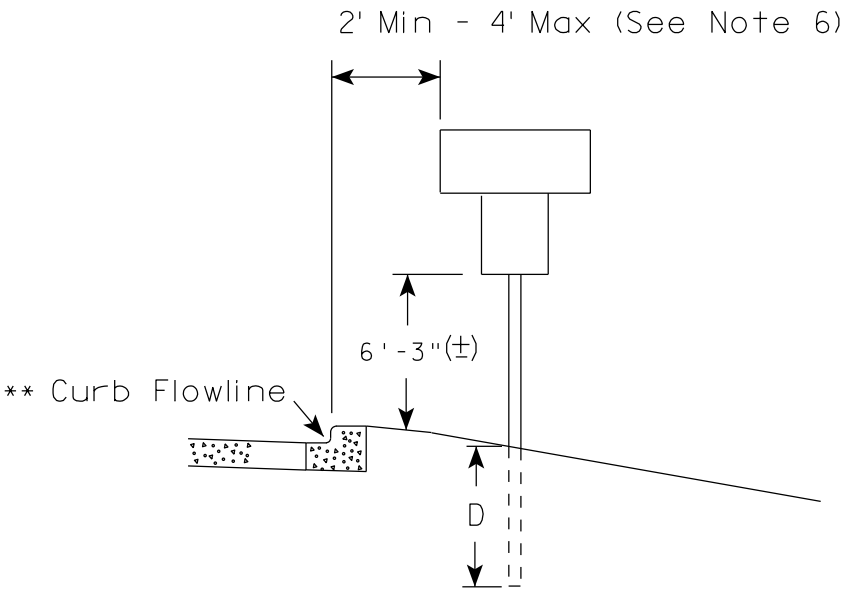
URBAN AREA



RURAL AREA (See Note 2)



- 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. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 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 directed 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'

* * 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.

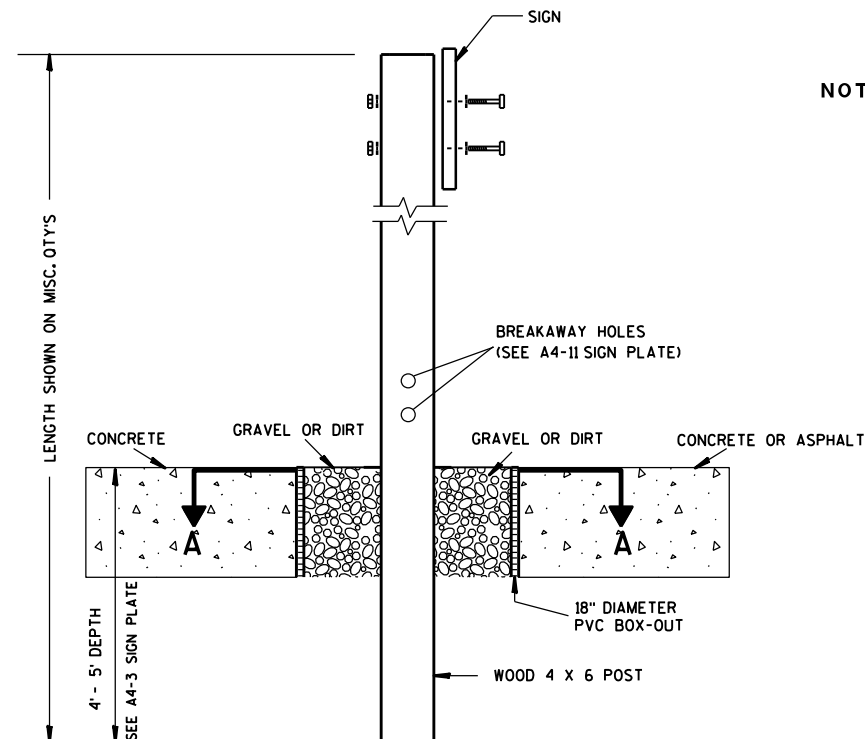
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

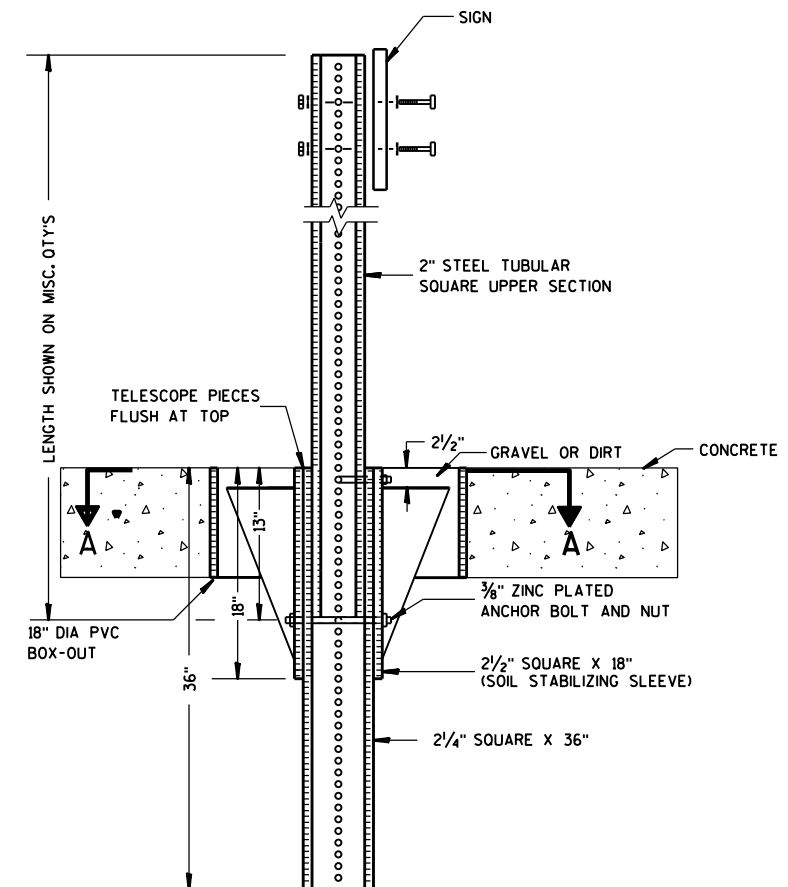
DATE 7/23/15 PLATE NO. A4-3.20



ELEVATION VIEW

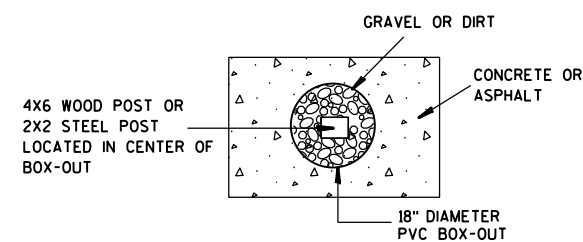
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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

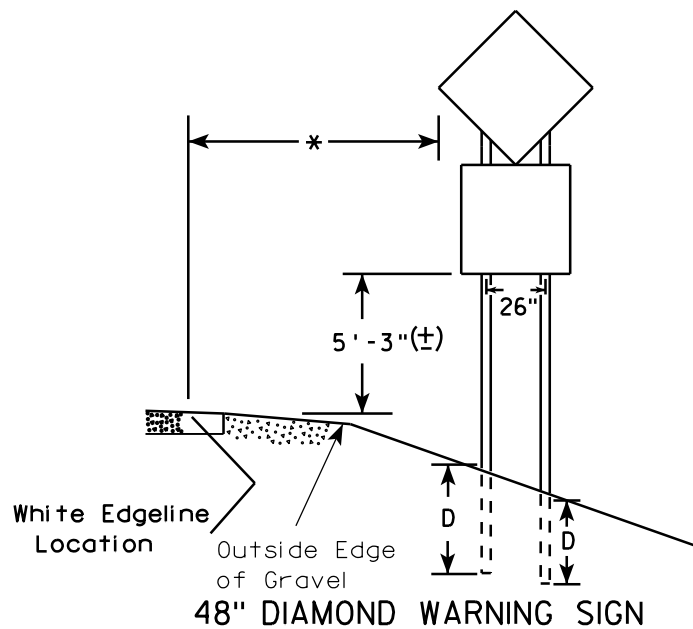
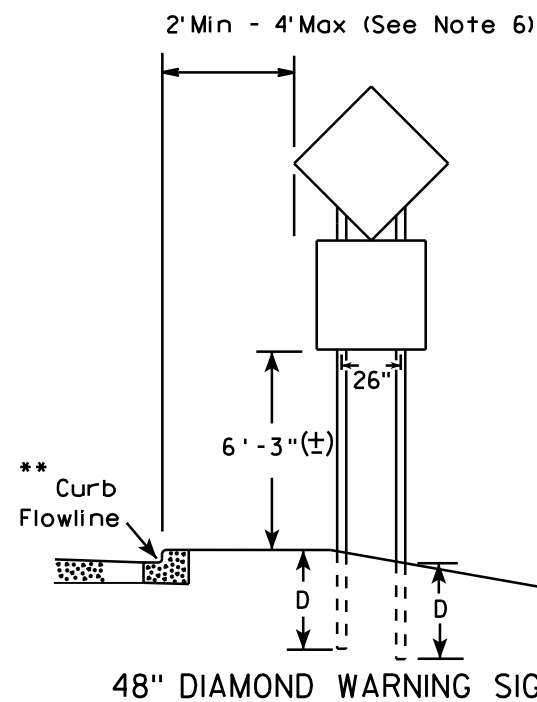
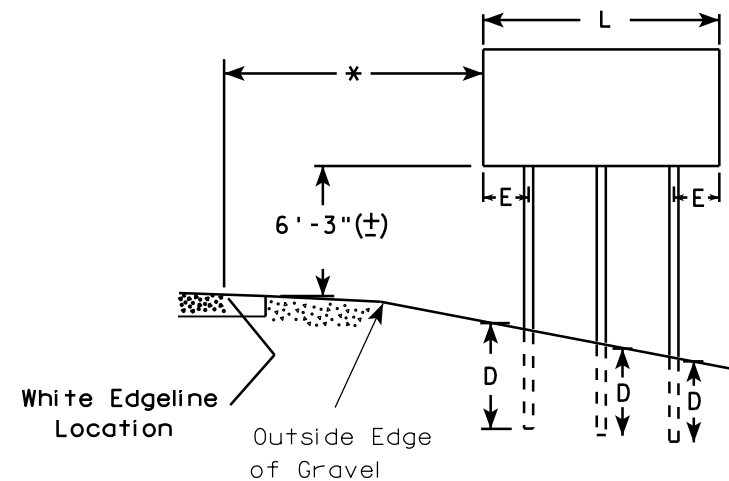
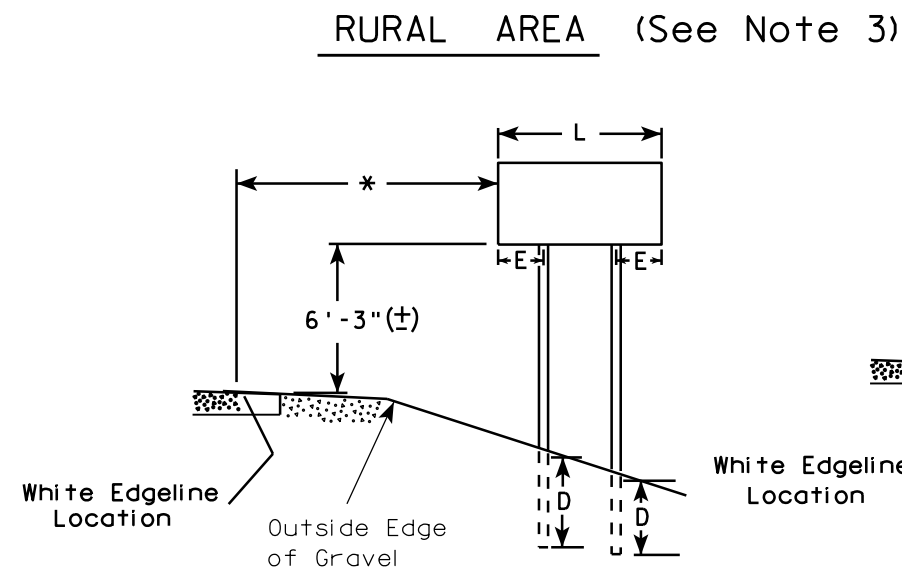
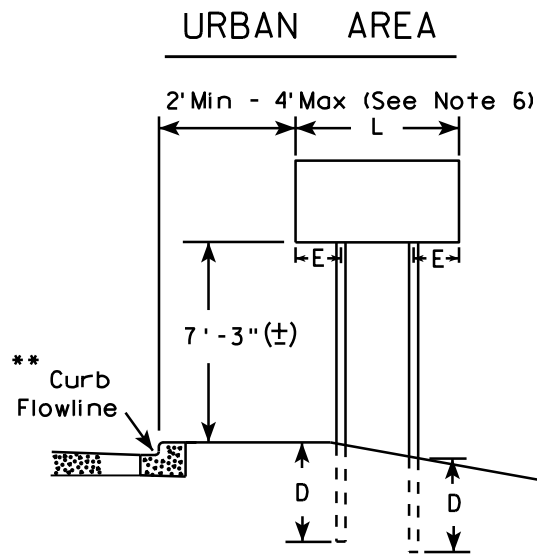
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



- 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. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 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.

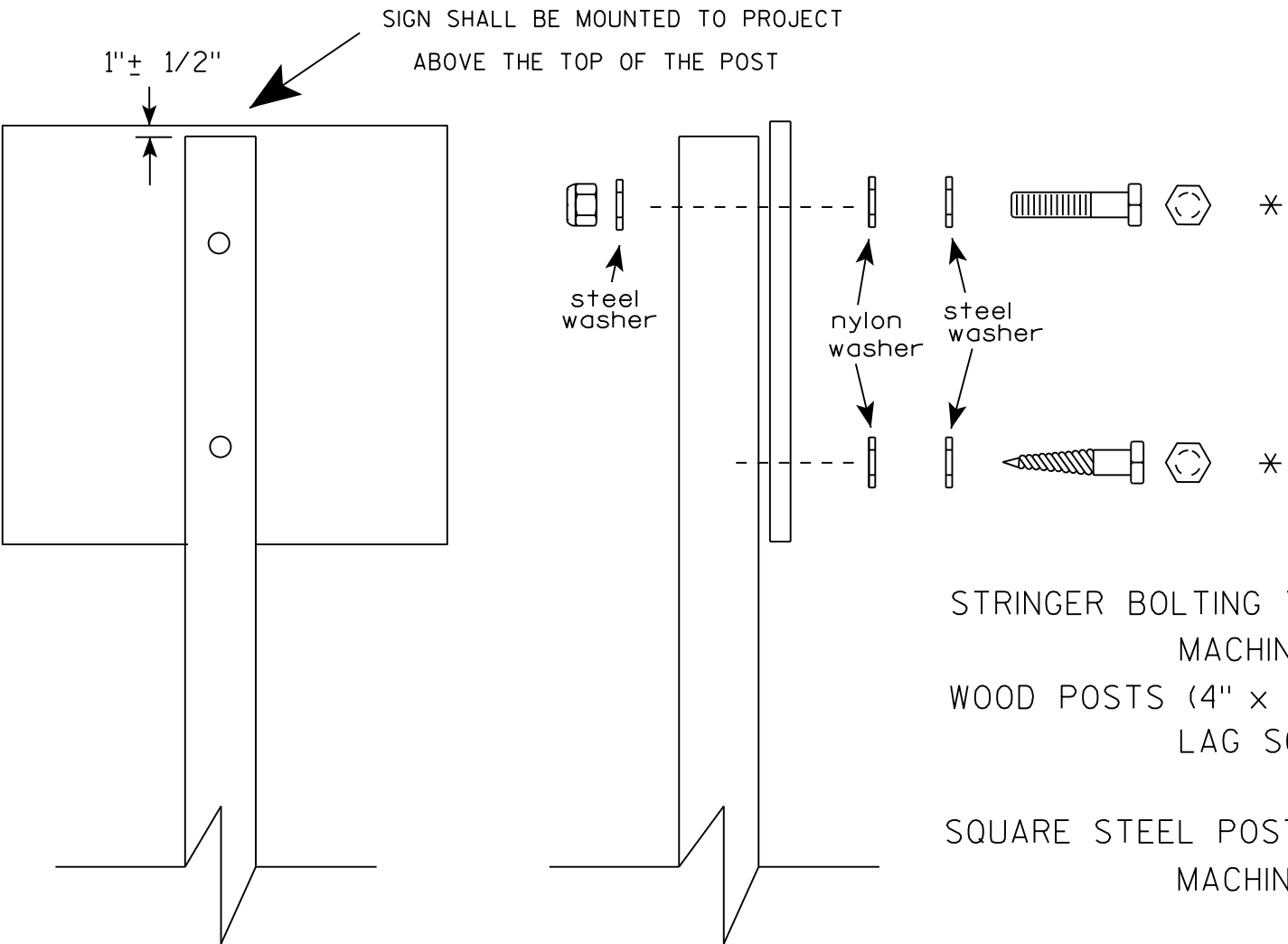
SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

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	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 7/23/15	PLATE NO. A4-4.14



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.

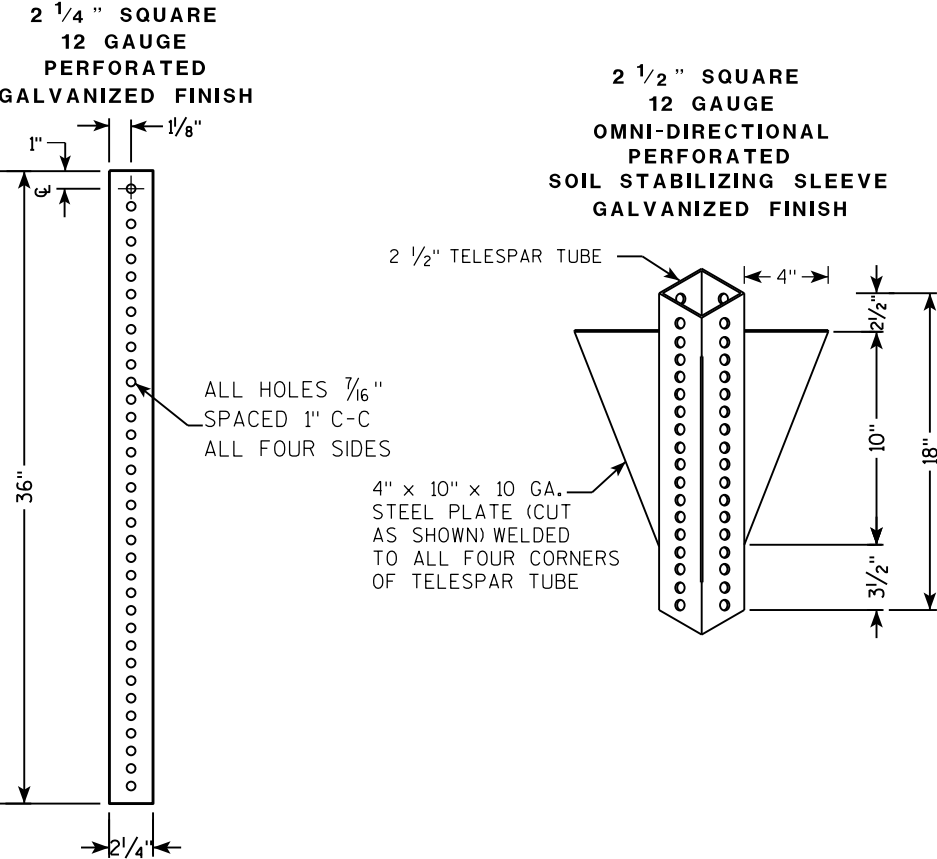
ATTACHMENT OF SIGNS
TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

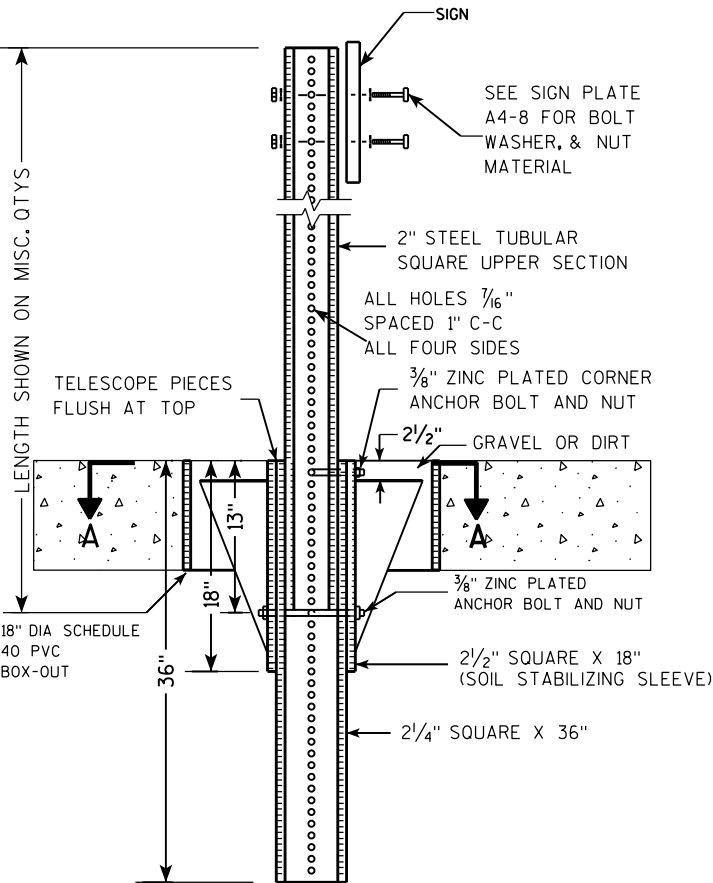
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

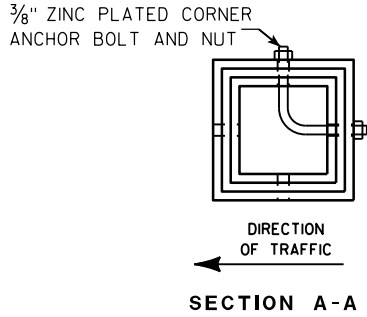
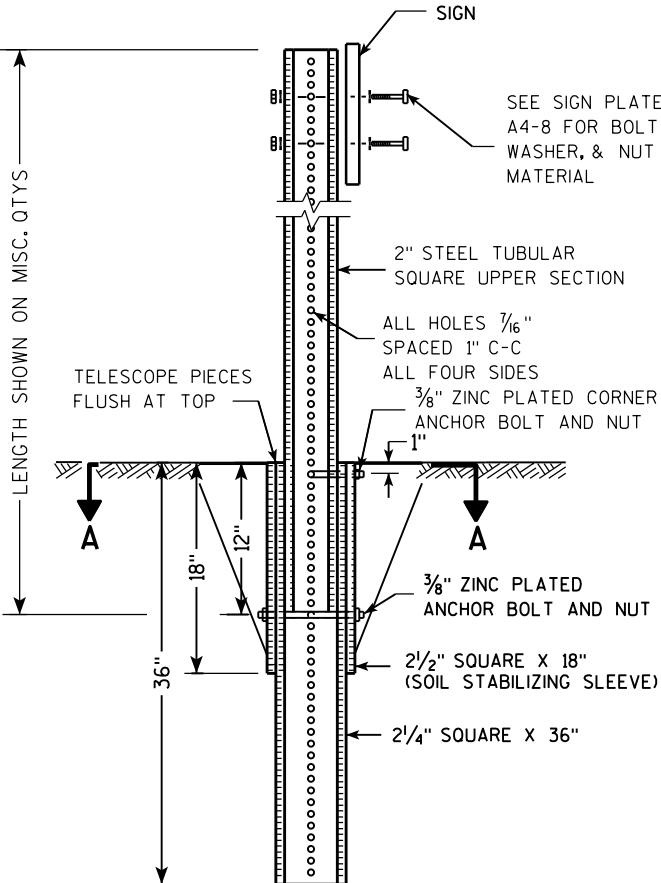
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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)



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

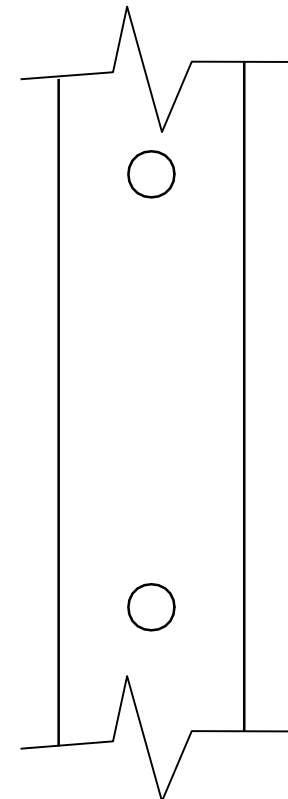
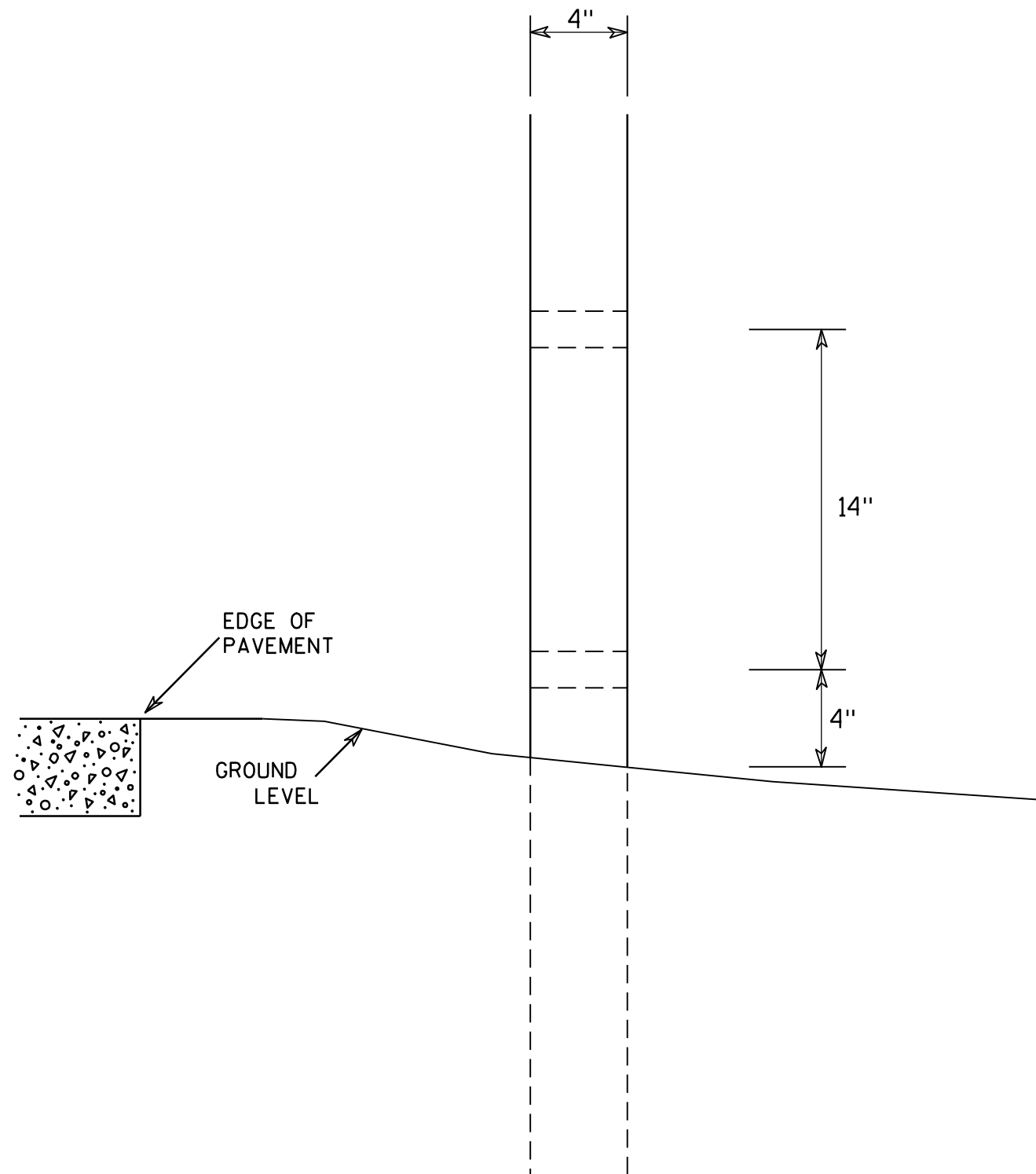
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1 1/2" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

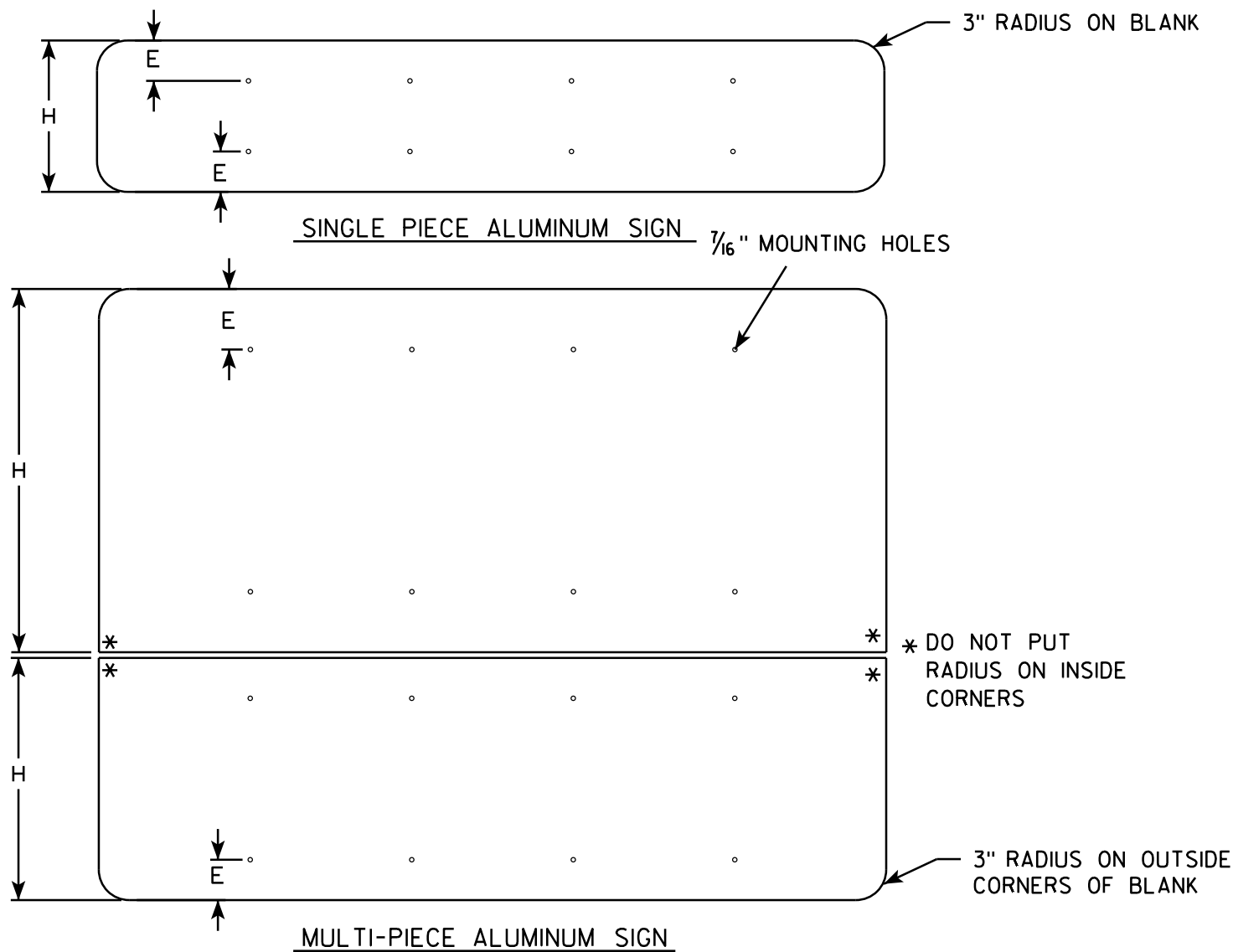
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

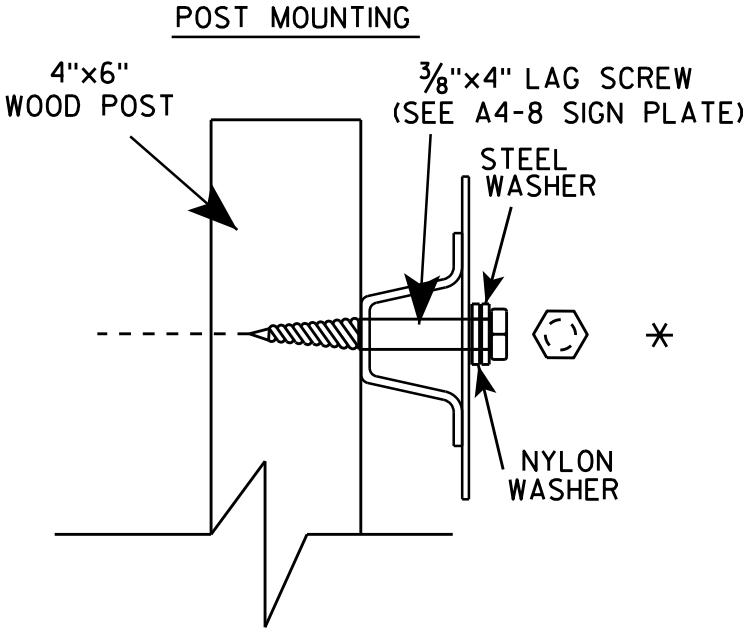
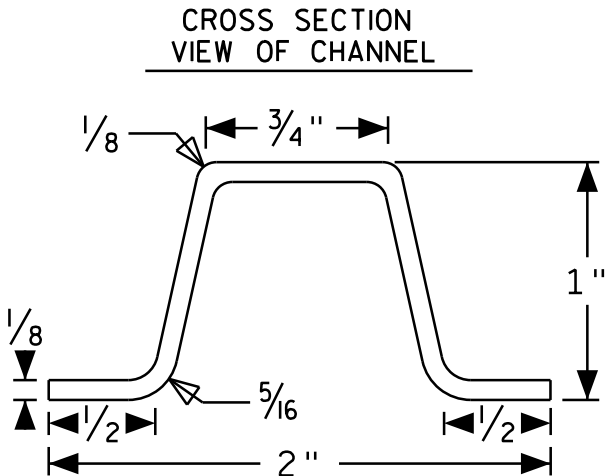
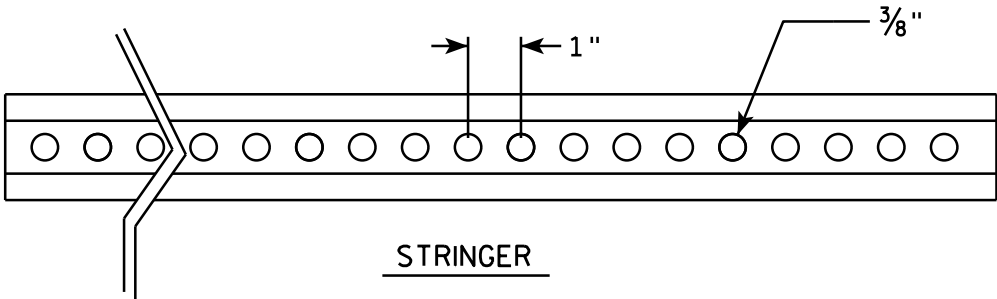
E



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"	16 1/2"	33 1/2"	50 1/2"	67 1/2"
90"	72"	2	18"	18"	36"	54"	72"
96"	90"	2	19"	19 1/2"	38 1/2"	57 1/2"	76 1/2"
102"	90"	2	20"	21"	41"	61"	81"
108"	90"	2	21"	22 1/2"	43 1/2"	64 1/2"	85 1/2"
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"



SIGN STRINGER
MOUNTING REQUIREMENTS

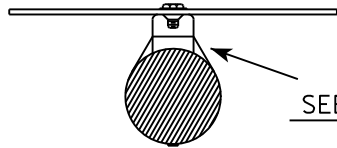
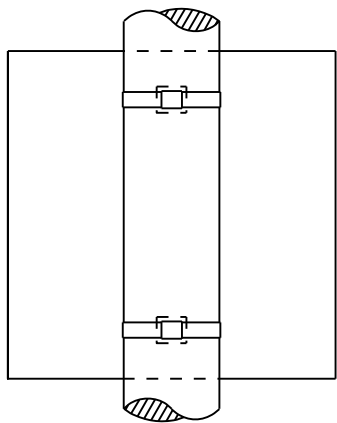
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/26/16 PLATE NO. A4-18.1

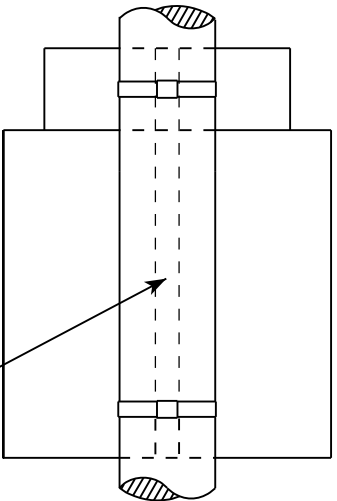
BANDING

SINGLE SIGN

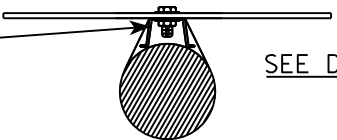


SEE DETAIL A

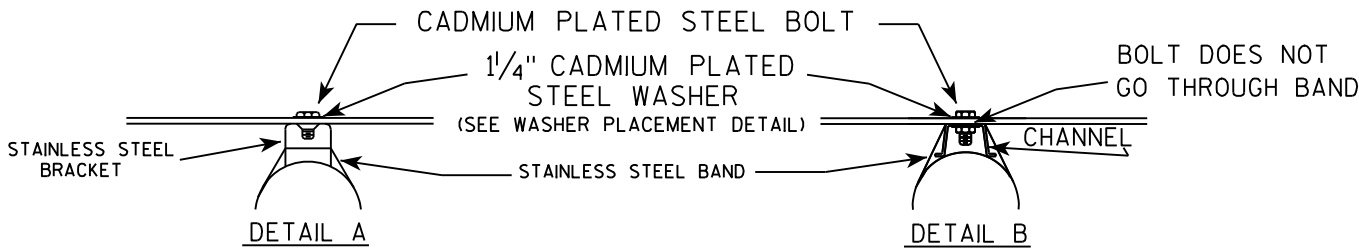
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



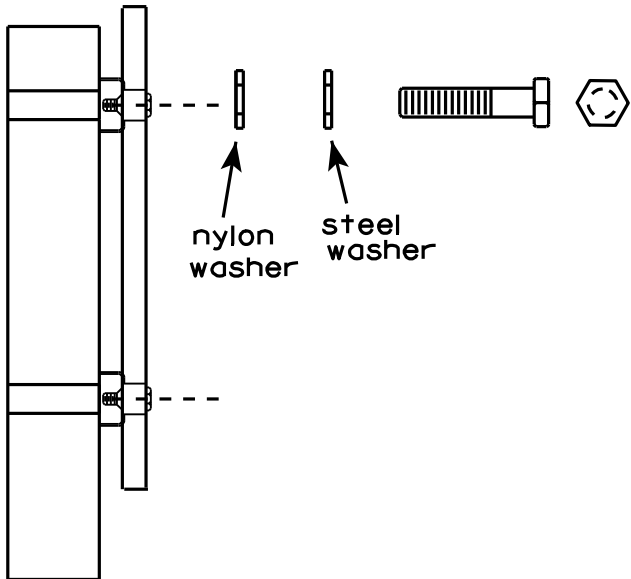
SEE DETAIL B



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 $\frac{3}{4}$ " in width and 0.025" thickness.

WASHER PLACEMENT



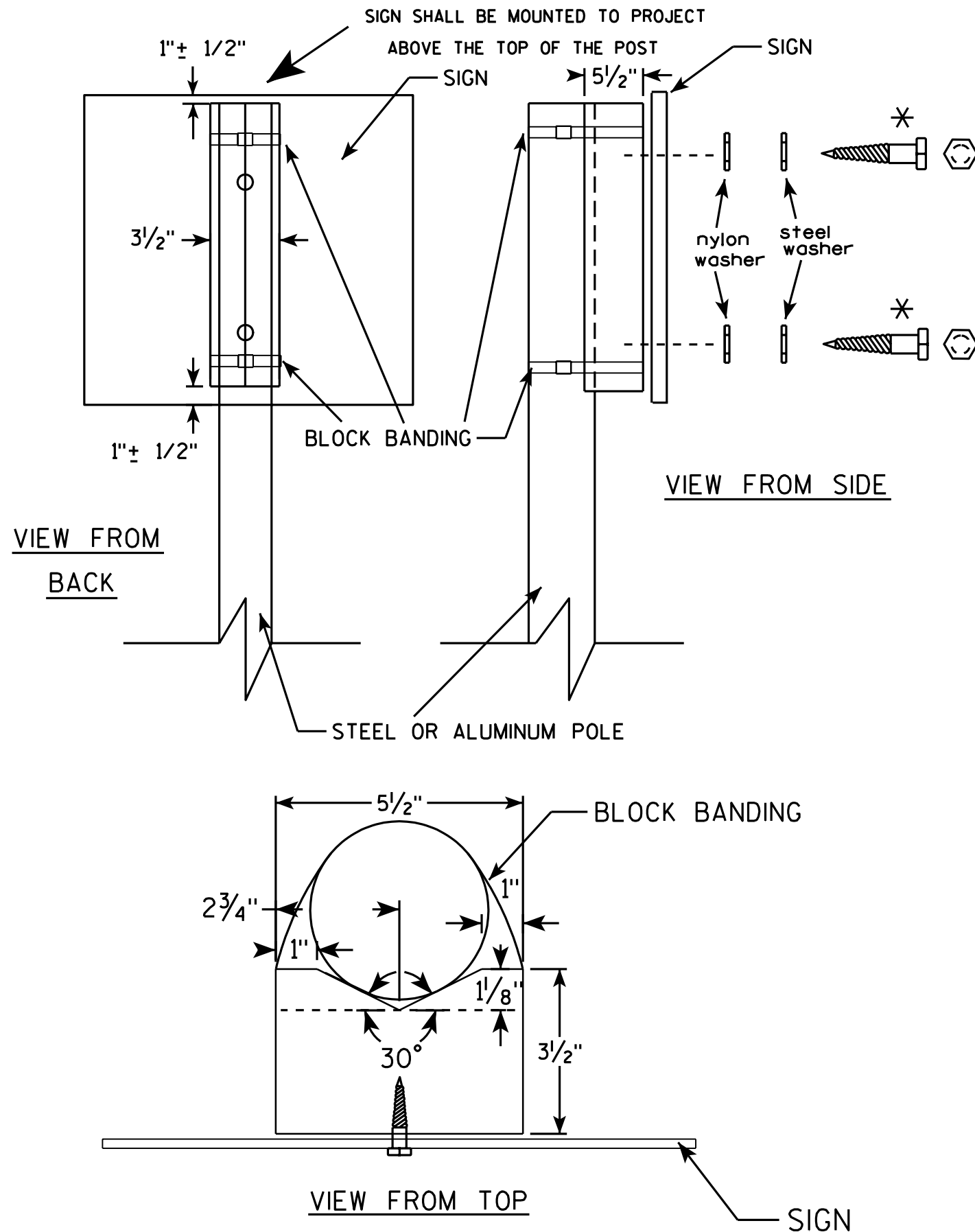
WASHERS (ALL POSTS) -
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3



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, $\frac{3}{4}$ " 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 NORMALLY 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 $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

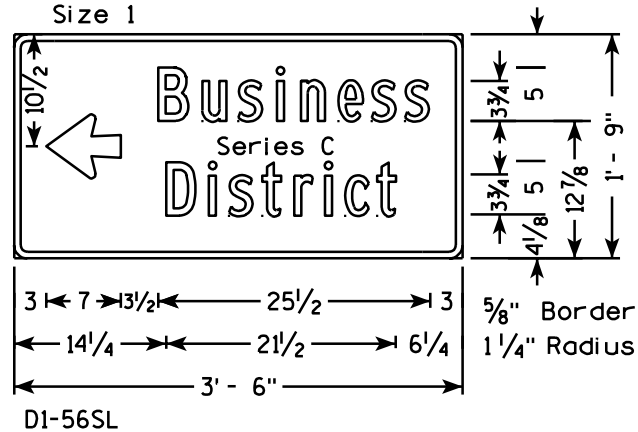
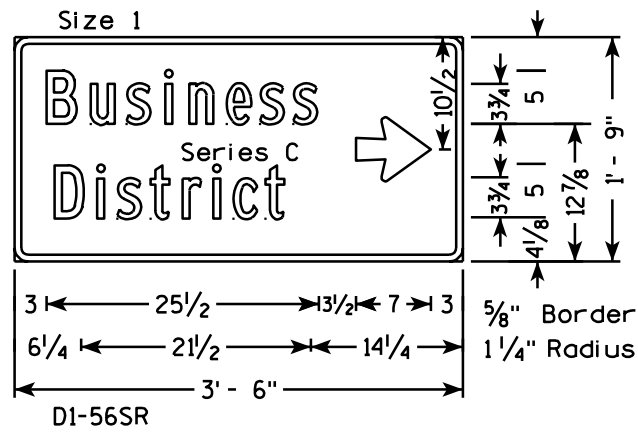
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

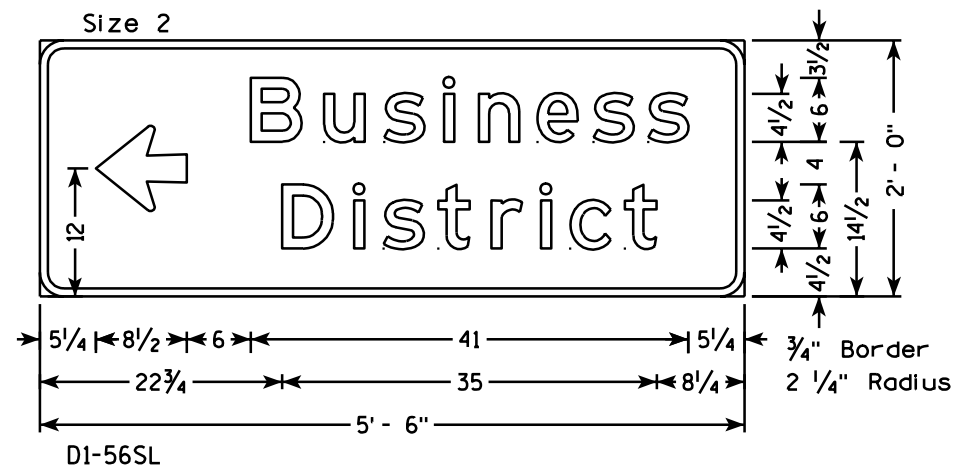
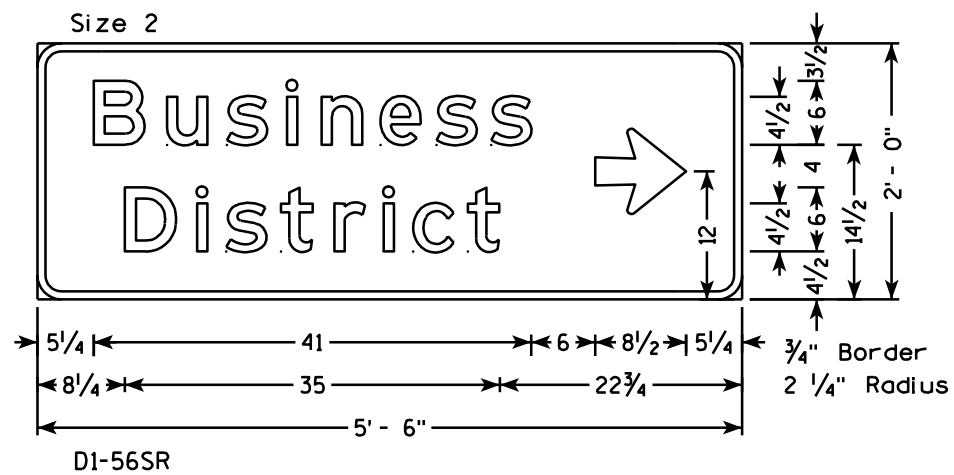
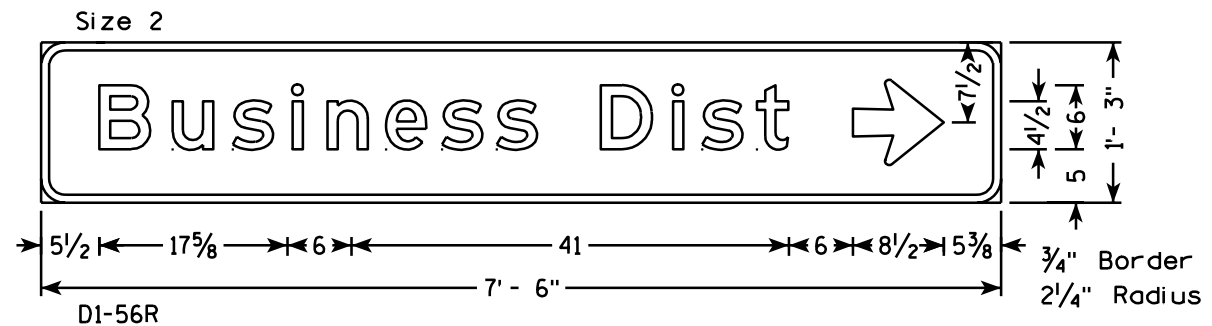
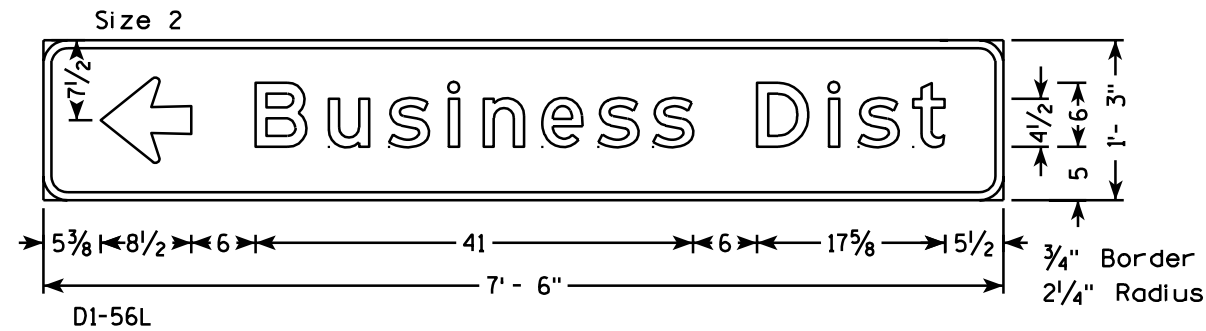
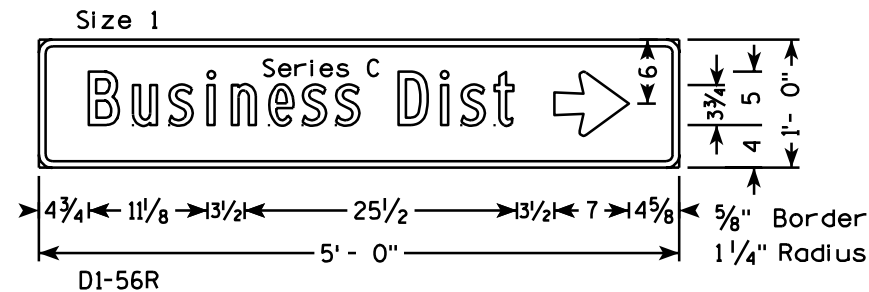
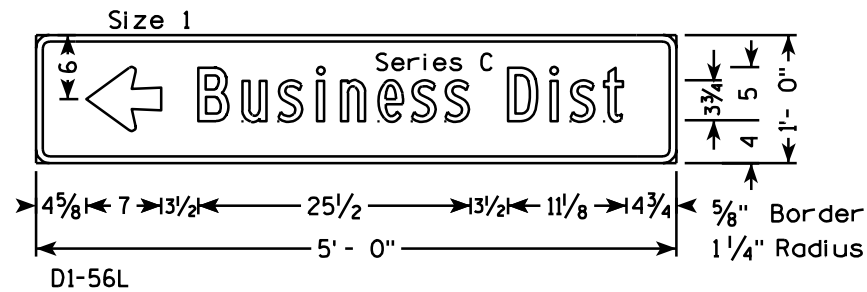
SHEET NO:

E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White
3. Message Series - E except as noted
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.



TYPICAL STANDARD
D1-56L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/19/08 PLATE NO. D1-56.1

PROJECT NO:

HWY:

COUNTY:

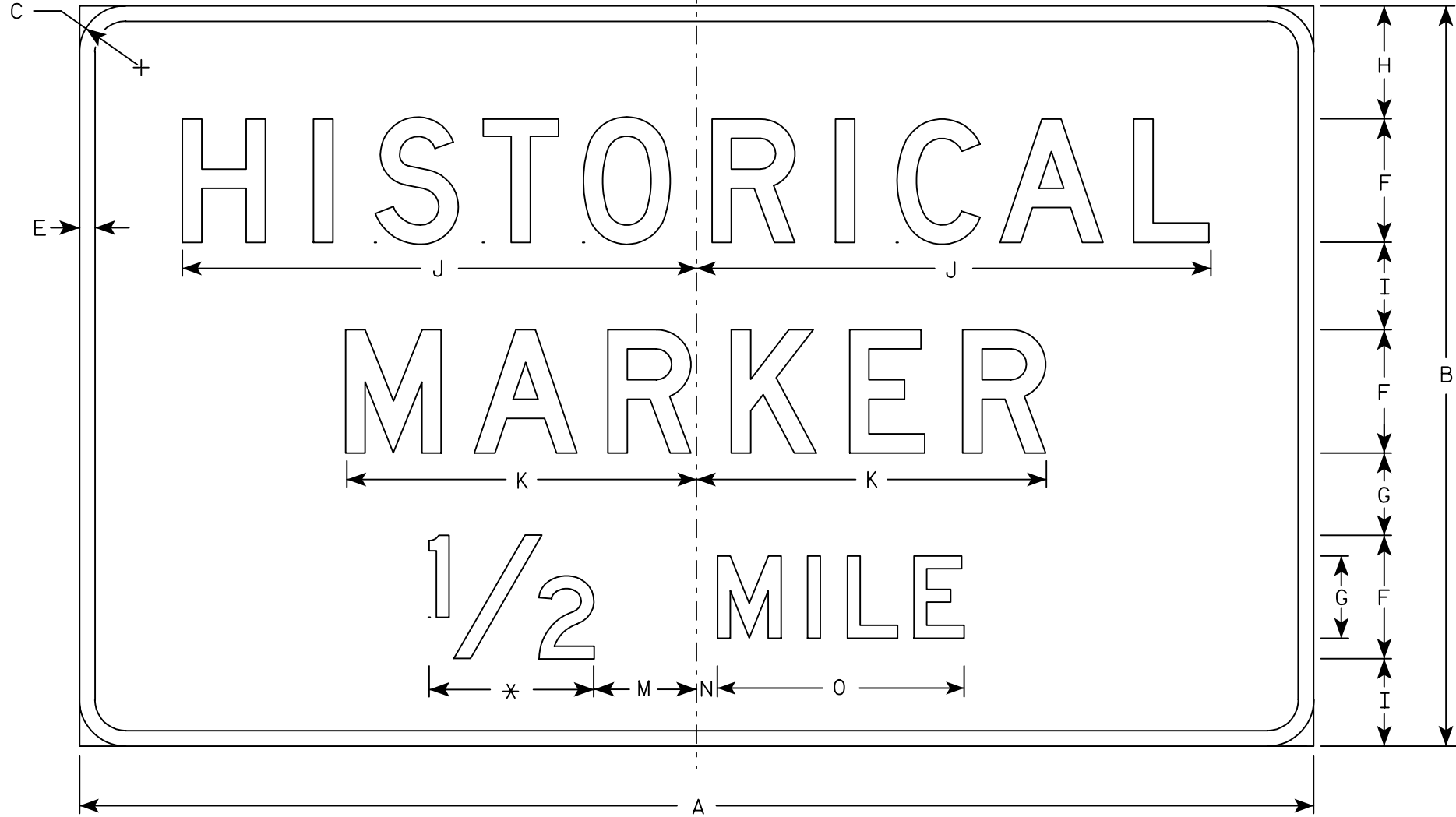
SHEET NO:

E

50, 59, 60, 61, 62, 63

7

LEVELS ON - 2, 3, 5, 6



D5-63 * See Note 5

Metric equivalent
for this sign is:

SIZE	
1	
2	1500 mm X 900 mm
3	
4	
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																												
2	60	36	2 1/4		3/4	6	4	5 1/2	4 1/4	25	17		5	1	12												15.0	1.35
3																												
4																												
5																												

STATE PROJECT NUMBER:

SHEET NO:

E

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:

Background - Brown

Message - White
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 to achieve proper balance.

STANDARD SIGN
D5-63

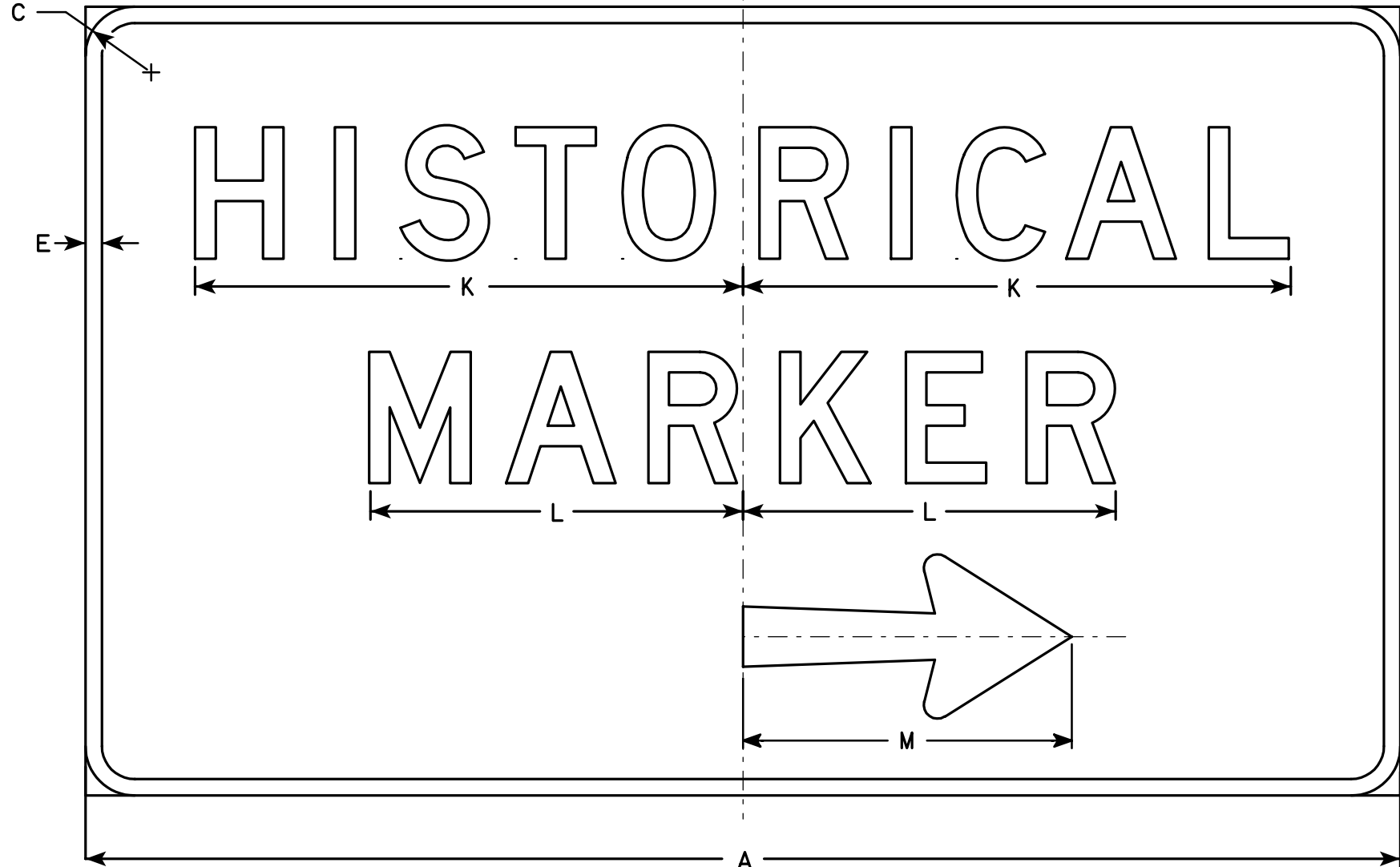
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Christa J. Spang
for State Traffic Engineer
DATE 3/23/99 PLATE NO. D5-63.9

58, 59, 60, 61, 62, 63

7

LEVELS ON - 2, 3, 5, 6, 10.



D5-64R

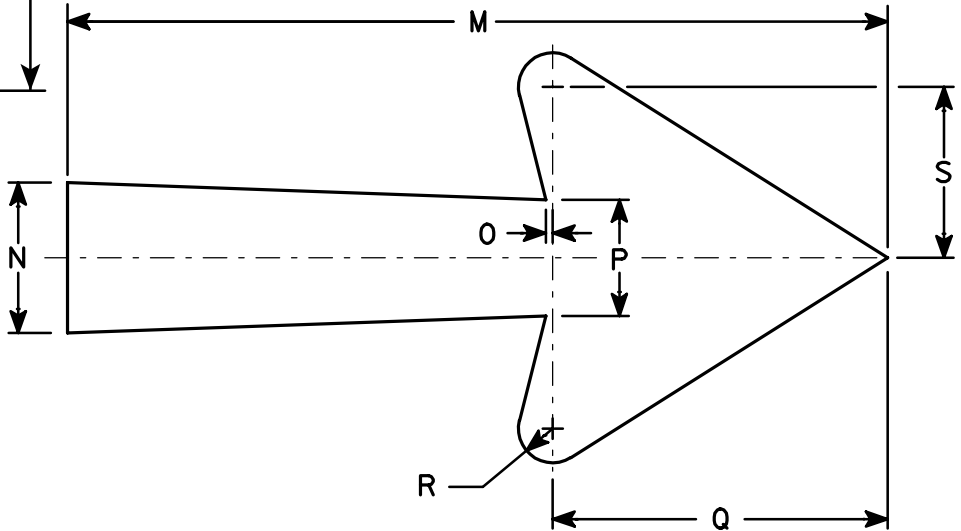
Metric equivalent
for this sign is:

SIZE	
1	
2	1500 mm X 900 mm
3	
4	
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 m ²
1																												
2	60	36	2 1/4		3/4	6	5 1/2	4 1/4	7	7 1/4	25	17	15	2 3/4	1/8	2 1/8	6 1/8	5/8	3 1/8								15.0	1.35
3																												
4																												
5																												

NOTES

1. Sign Is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Brown
Message - White
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. D5-64L is the same as D5-64R except the arrow is reversed.



Arrow Detail

STANDARD SIGN
D5-64

WISCONSIN DEPT OF TRANSPORTATION
APPROVED
Charles J. Sperry
for State Traffic Engineer
DATE 1/09/02 PLATE NO. D5-64.5

STATE PROJECT NUMBER:

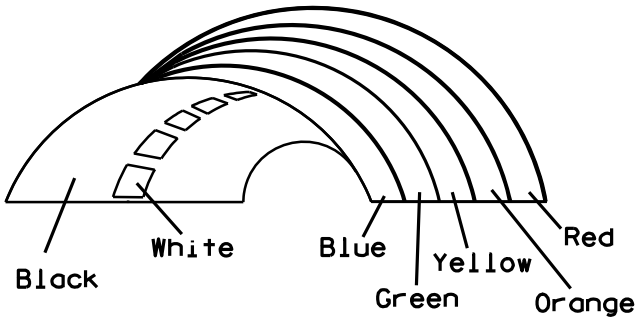
SHEET NO:

E



* VARIES

Background Colors of Symbol*



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

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - (See Note 5)
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. Border - Blue
Line 1 - Red
Line 2 - Black
Line 3-5 - Blue
6. Line 1 - Dutch 8011L
Line 2 - Series E
Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

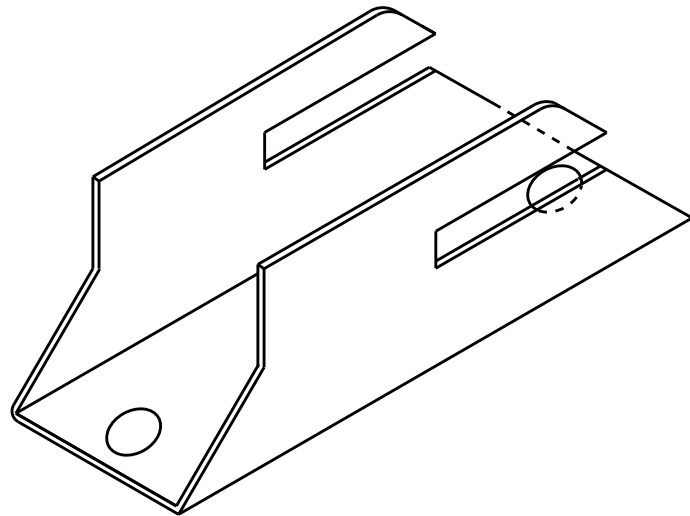
STANDARD SIGN
I55-56

WISCONSIN DEPT OF TRANSPORTATION

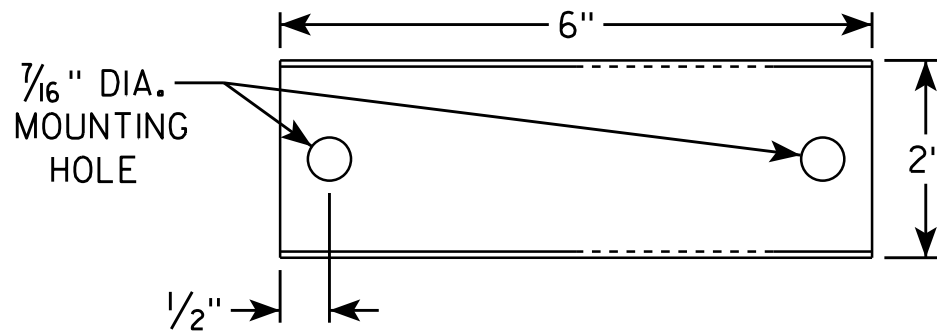
APPROVED
Matthew R. Rauch
For State Traffic Engineer

DATE 4/27/11 PLATE NO. I55-56.3

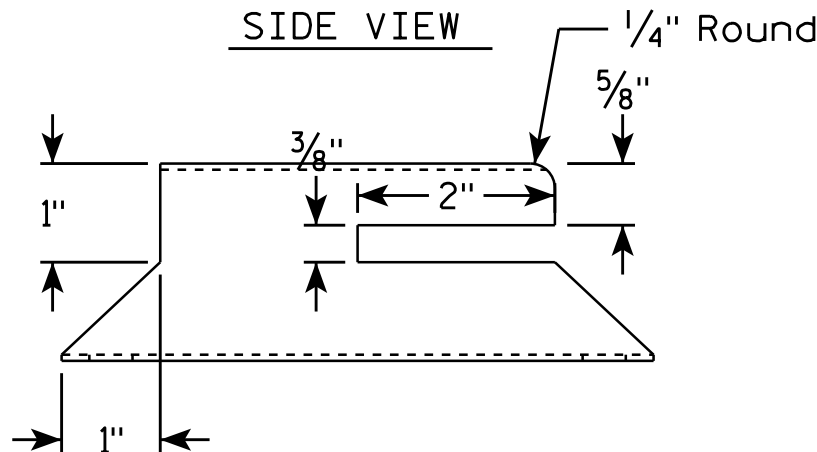
ISOMETRIC VIEW



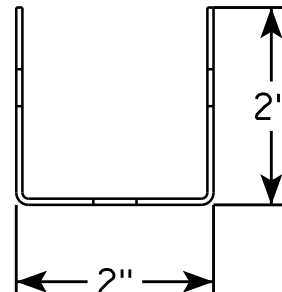
TOP VIEW



SIDE VIEW



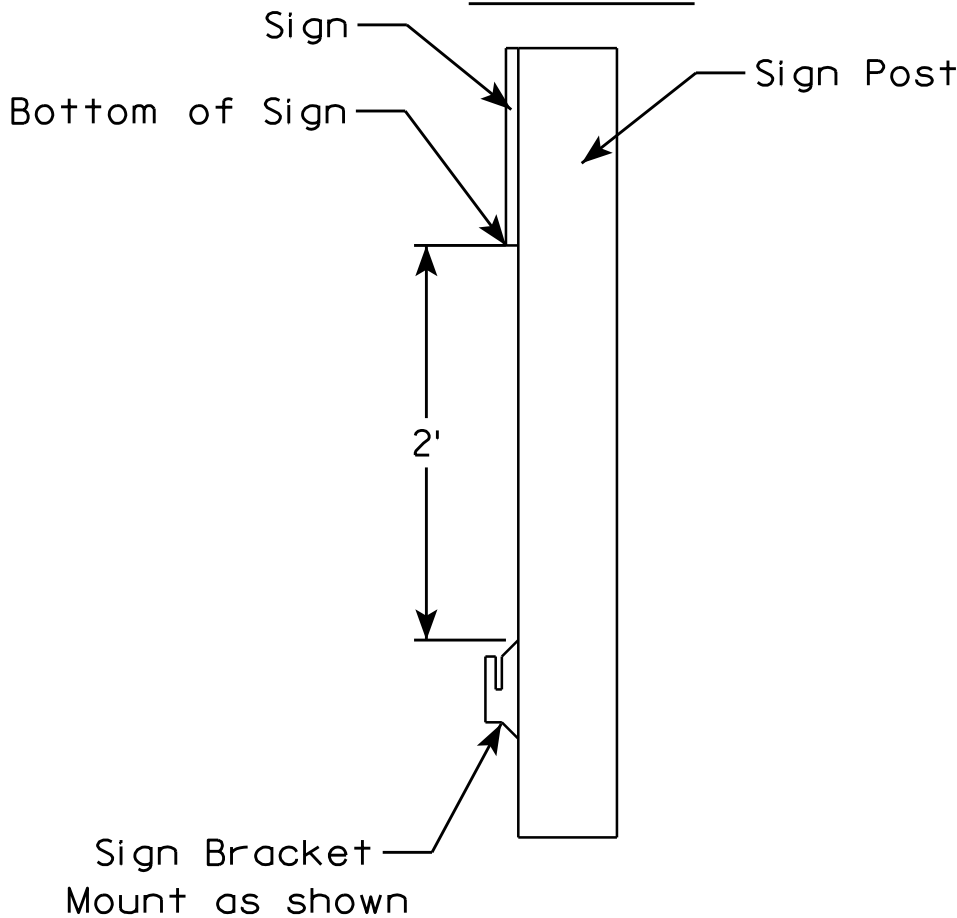
END VIEW



NOTES

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

SIDE VIEW



ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/26/16 PLATE NO. I55-56B.2

PROJECT NO:

HWY:

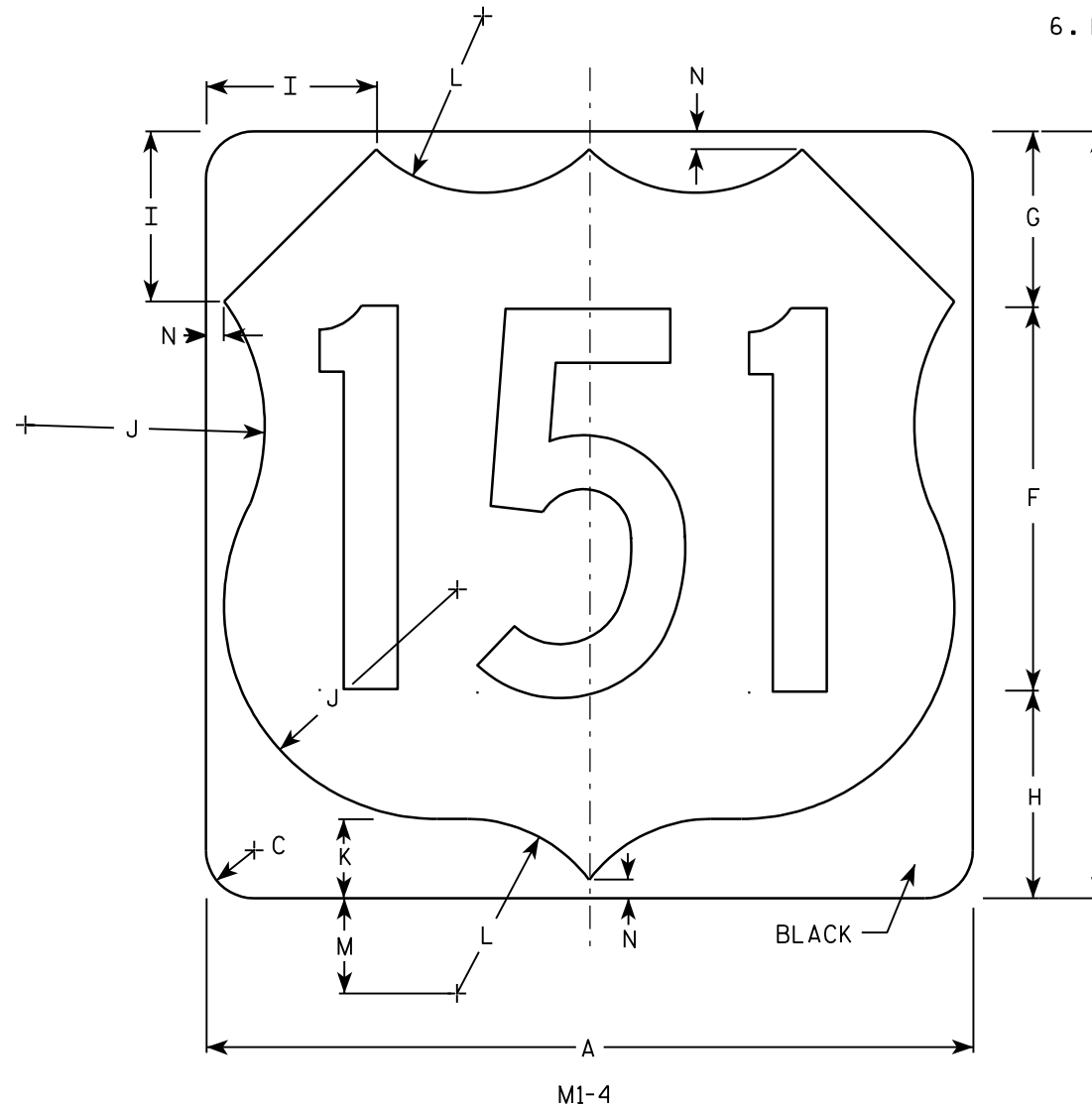
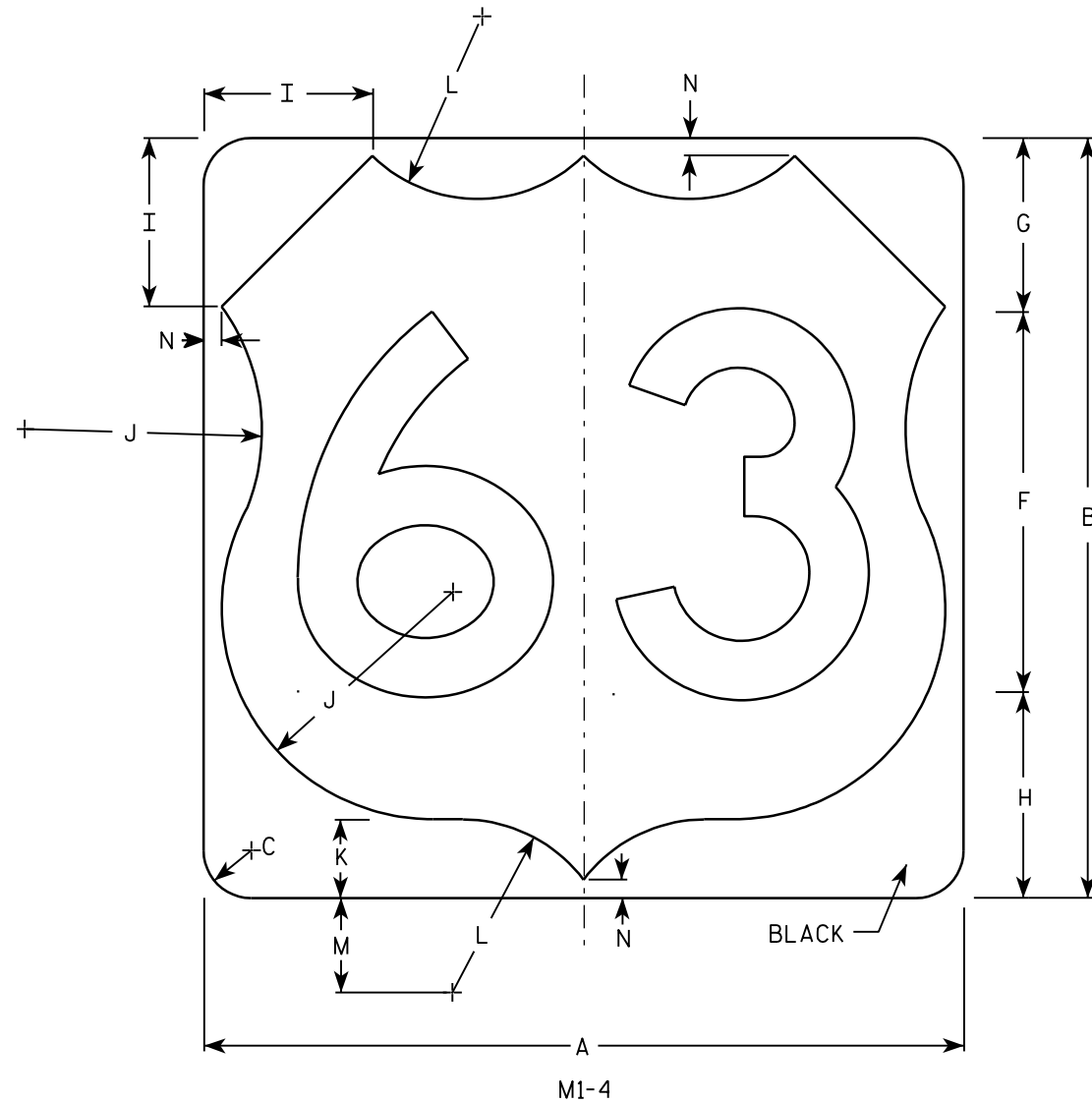
COUNTY:

SHEET NO:

E

NOTES

1. Sign is Type II - See Note 6 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
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. Substitute appropriate numerals and adjust
spacing as per Plate A10-1.
6. Permanent Signs
Background - Type H Reflective
Detour or other temporary signs
Background - Reflective



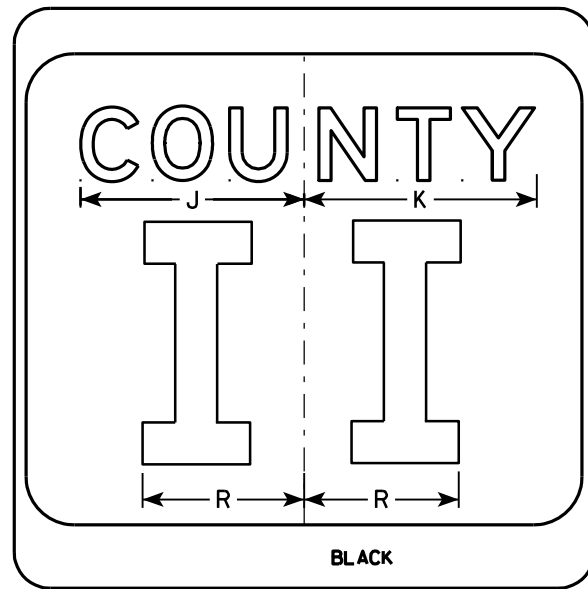
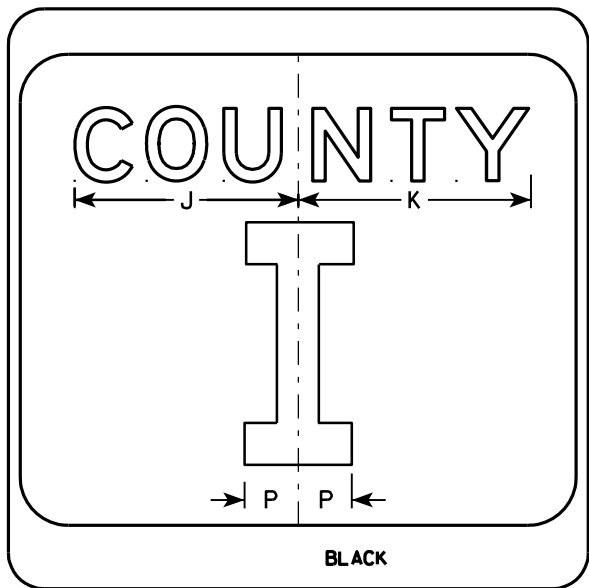
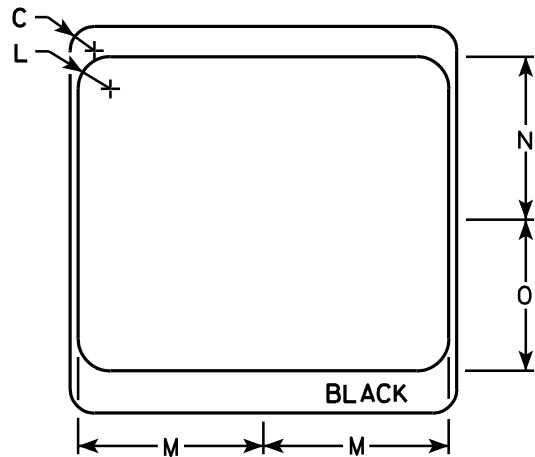
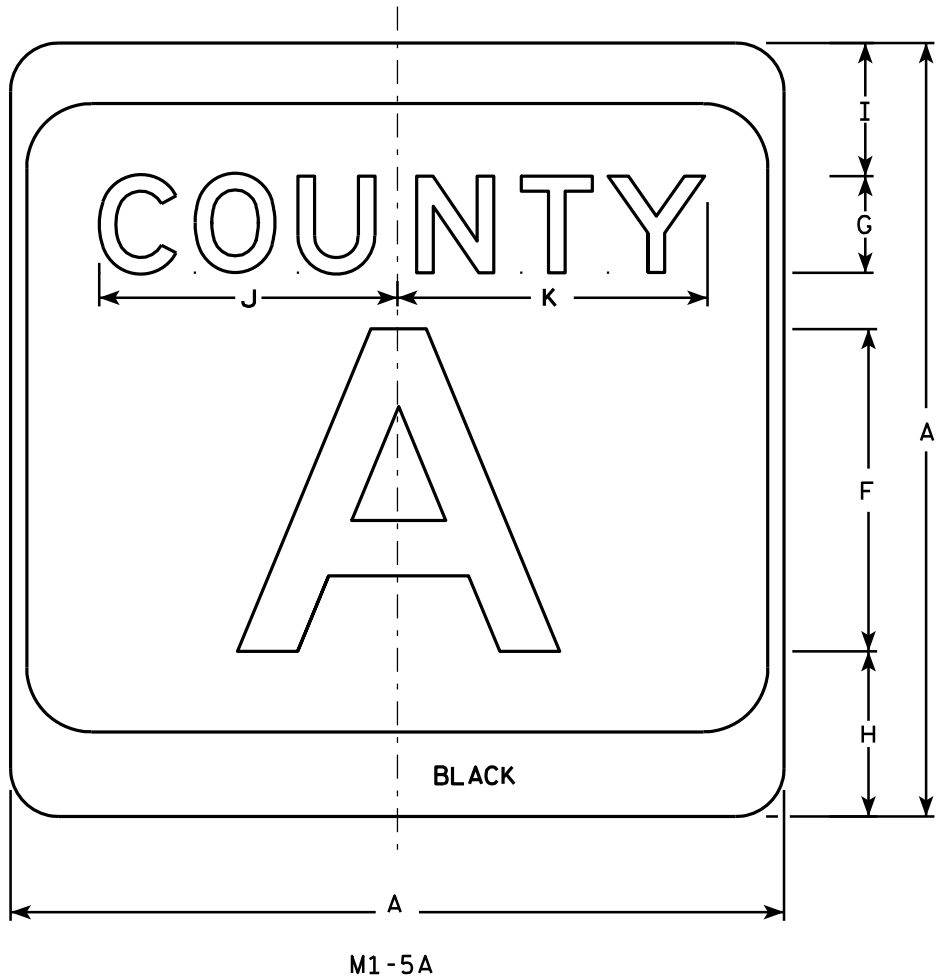
Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 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	Areq sq. ft.	Areq m ²
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E
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7



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

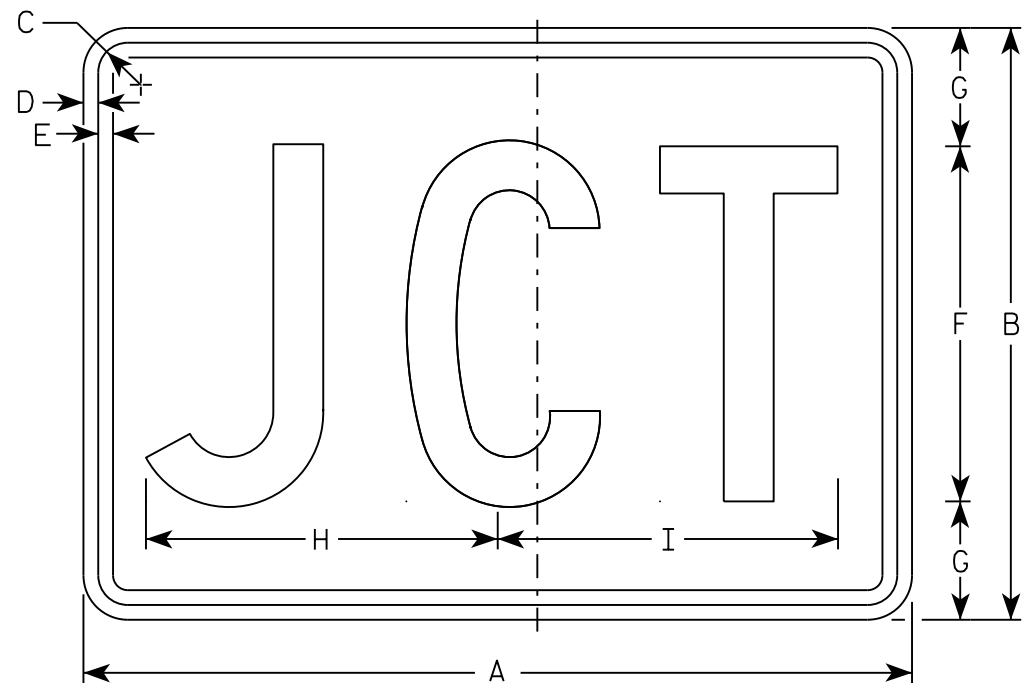
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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CTH MARKER
M1-5A FOR ASSEMBLIES

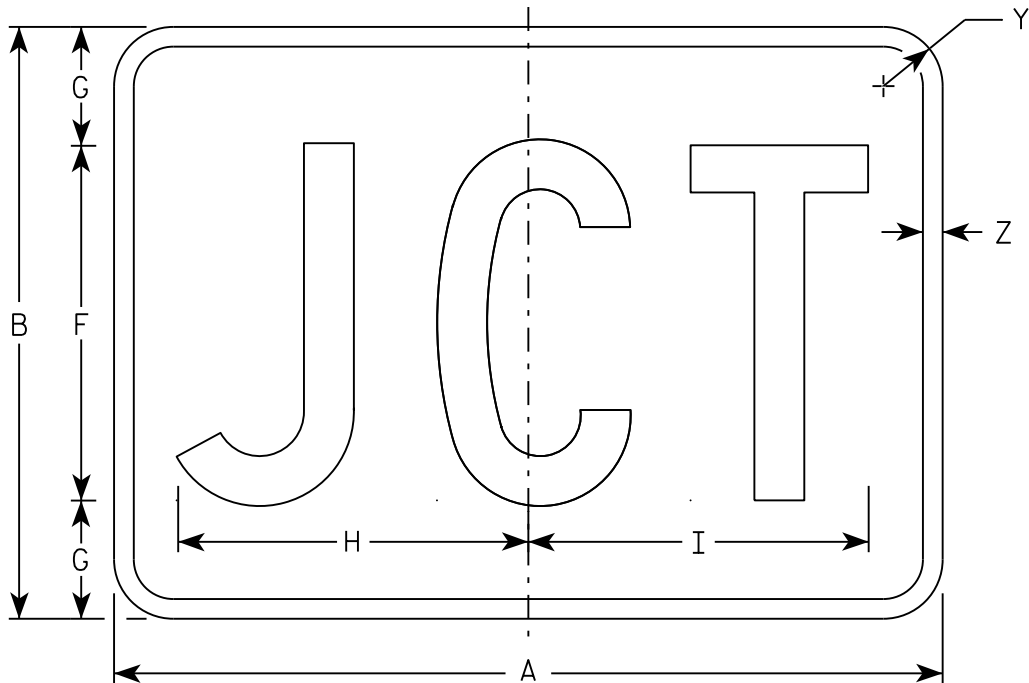
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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



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

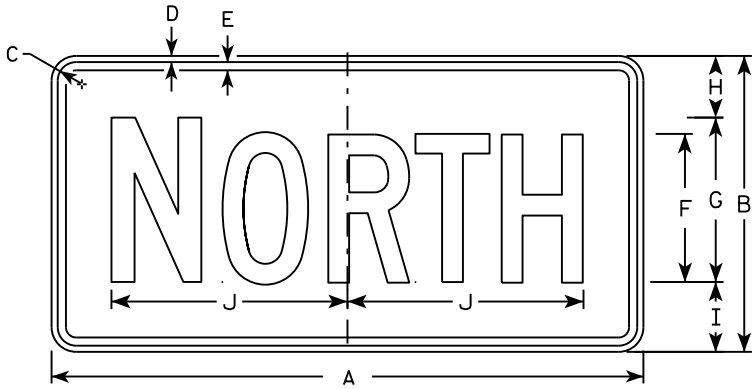
APPROVED

Matthew R. Rauch

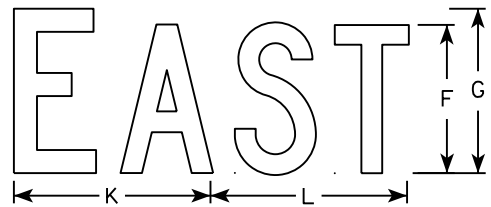
For State Traffic Engineer

DATE 10/15/15

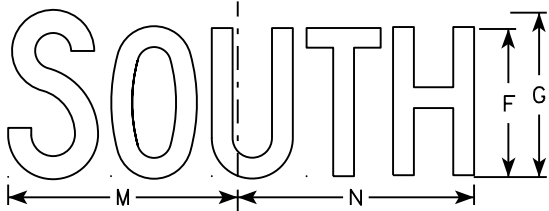
PLATE NO. M2-1.12



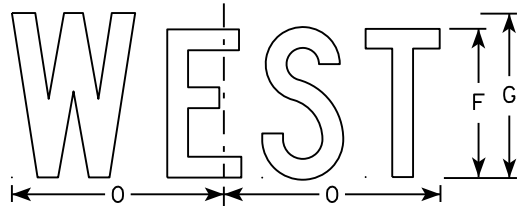
M3-1
MM3-1
MP3-1



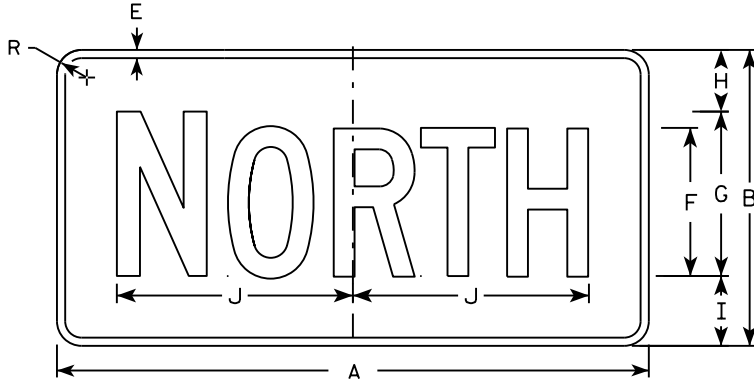
M3-2
MM3-2
MP3-2



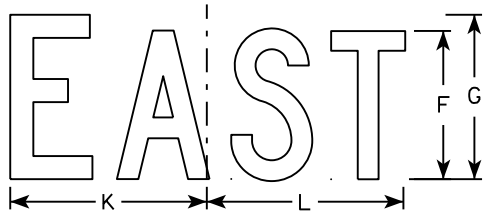
M3-3
MM3-3
MP3-3



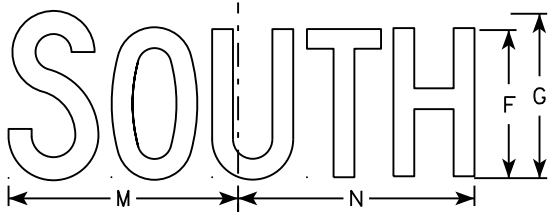
M3-4
MM3-4
MP3-4



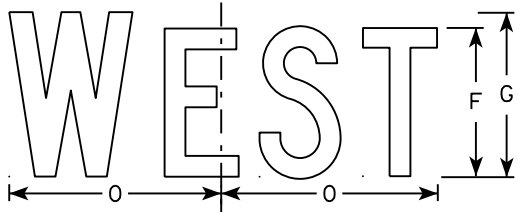
MB3-1
MK3-1
MN3-1



MB3-2
MK3-2
MN3-2



MB3-3
MK3-3
MN3-3



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.

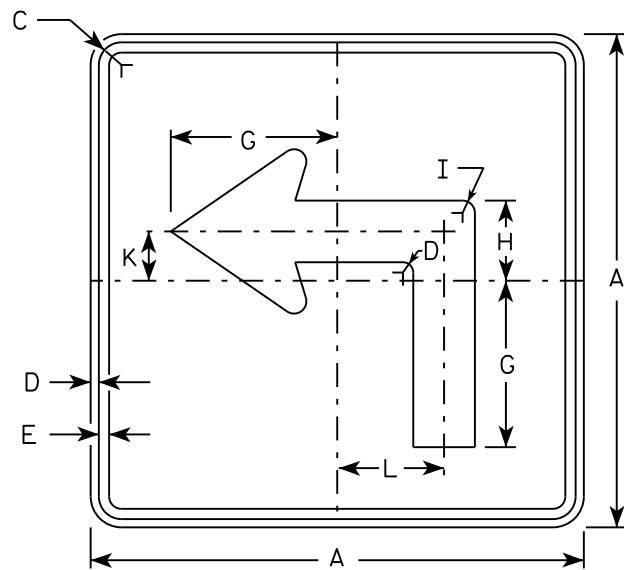
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	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 thru M3-4
SERIES

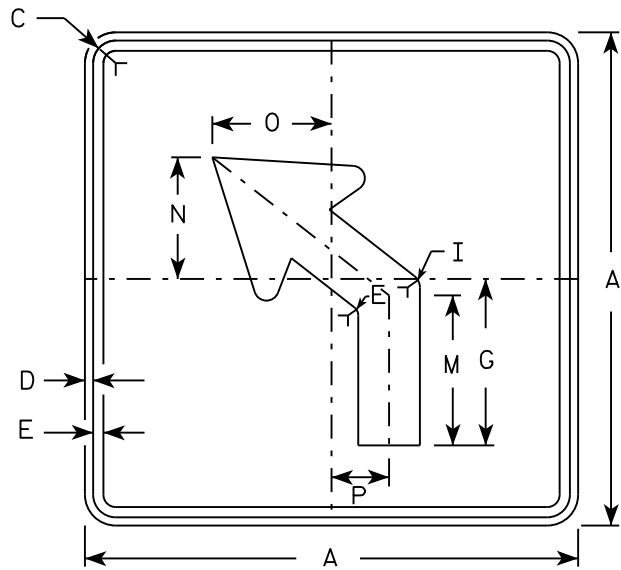
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

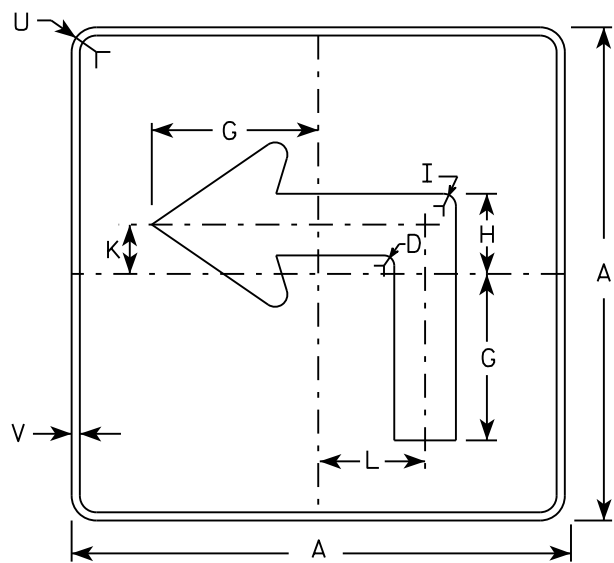
DATE 10/15/15 PLATE NO. M3-1.14



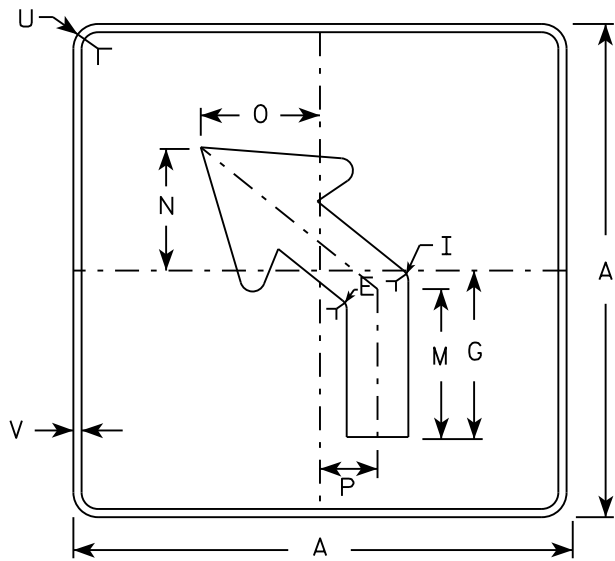
M5-1L
MM5-1L
M05-1L
MP5-1L



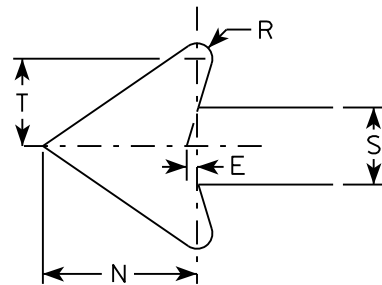
M5-2L
MM5-2L
M05-2L
MP5-2L



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



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



NOTES

- Signs are Type II - Type H reflective except as shown
- Color:
Background - See note 4
Message - See note 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.
- | | |
|-----------------|---|
| 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 |
| M05-1 and M05-2 | 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 |
- M5-1R same as M5-1L except arrow points right.
- 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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

STANDARD SIGN

M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

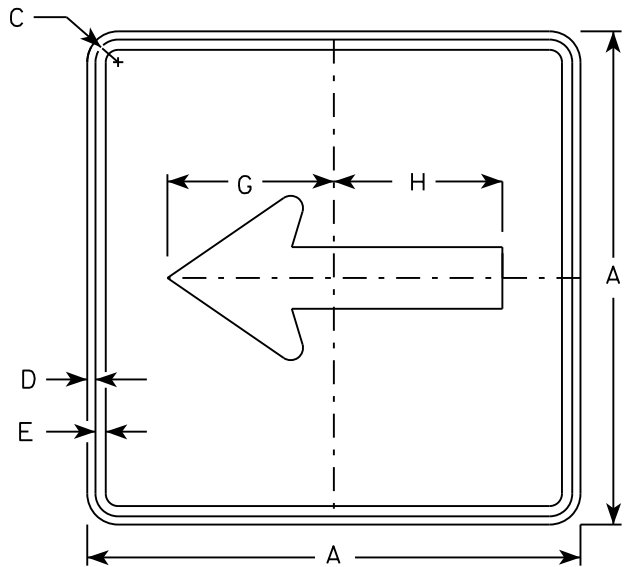
APPROVED

Matthew R. Rauch

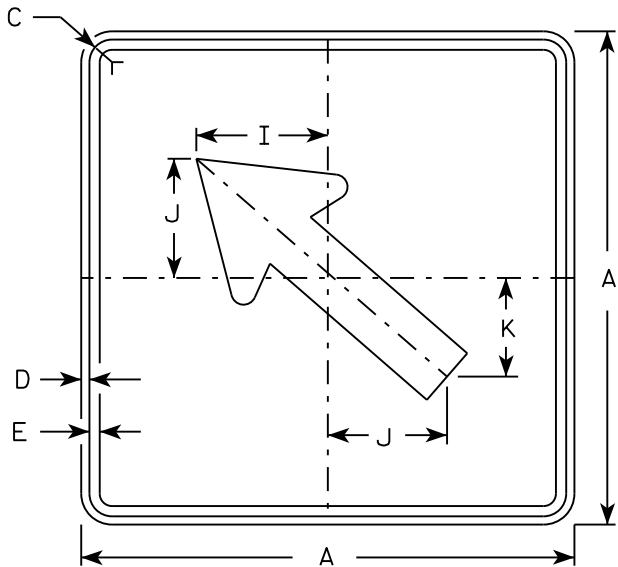
for State Traffic Engineer

DATE 10/15/15

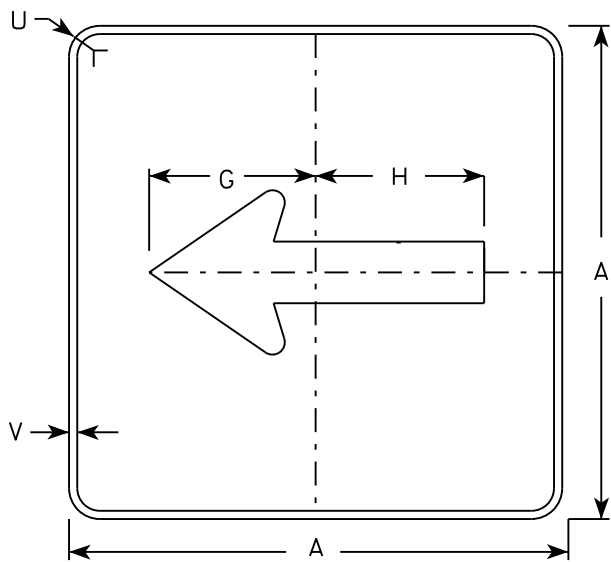
PLATE NO. M5-1.13



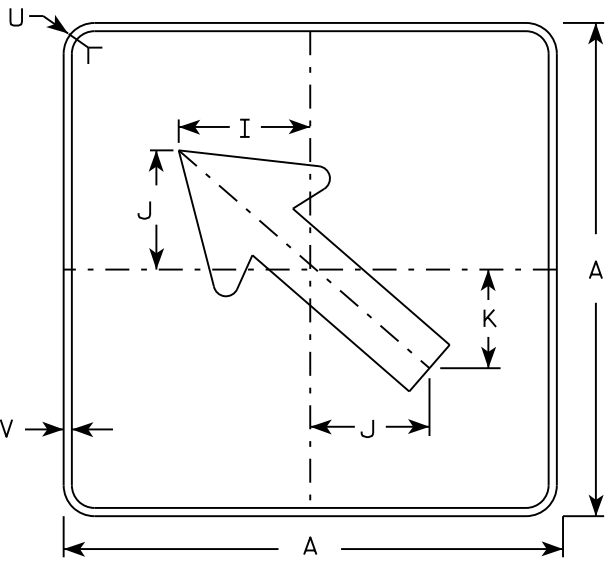
M6 - 1
MM6 - 1
M06 - 1
MP6 - 1



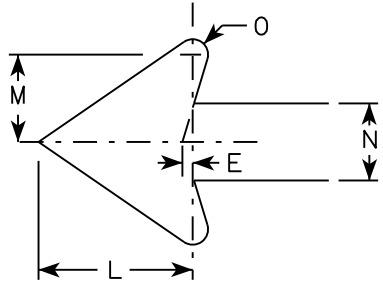
M6 - 2
MM6 - 2
M06 - 2
MP6 - 2



MB6 - 1
MK6 - 1
MN6 - 1
MR6 - 1



MB6 - 2
MK6 - 2
MN6 - 2
MR6 - 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
M06-1 and M06-2 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

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

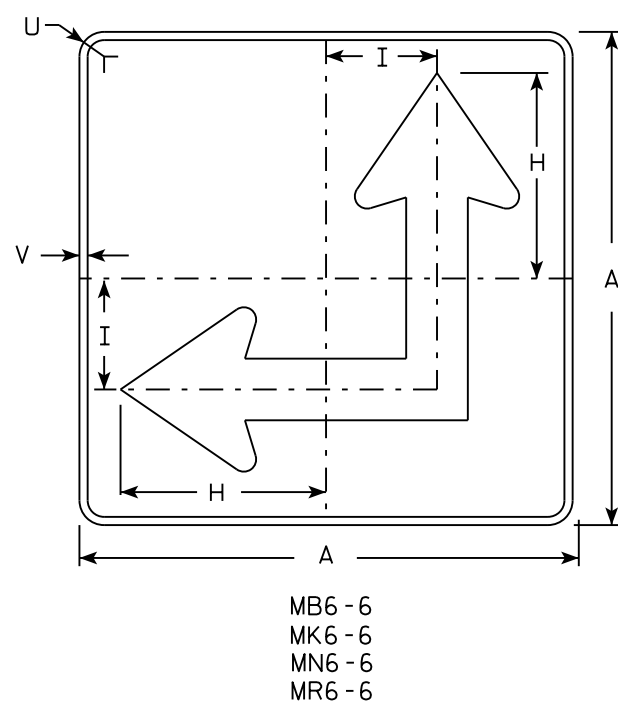
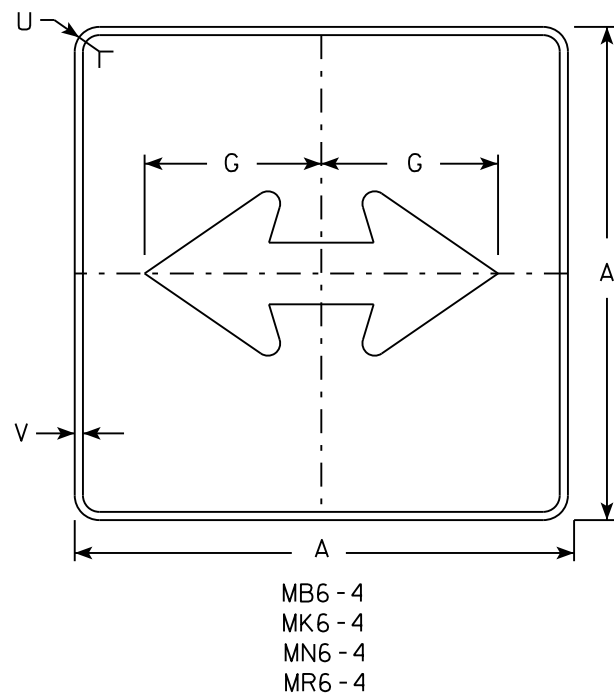
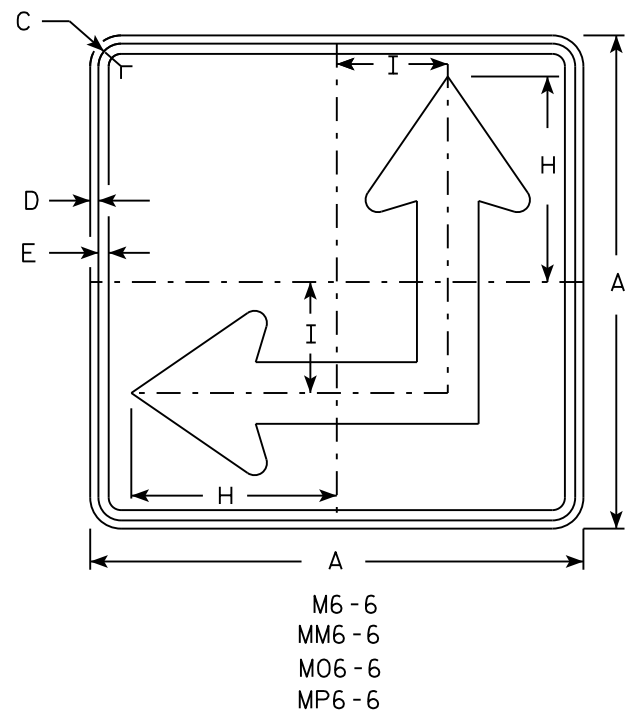
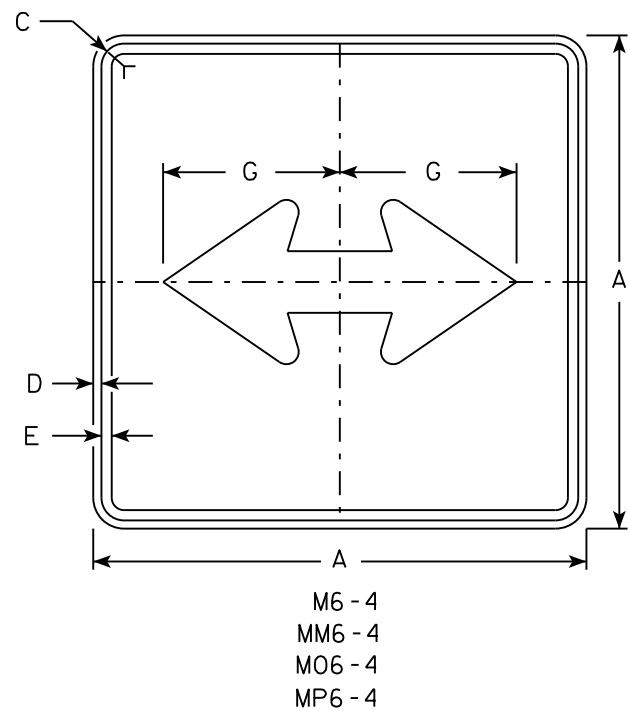
E

STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

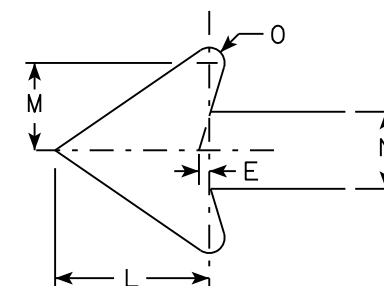
APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15



NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See Note 4
Message - See Note 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.
- 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
M06-4 and M06-6 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
- M6-6R same as M6-6L except arrow points ahead and 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 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

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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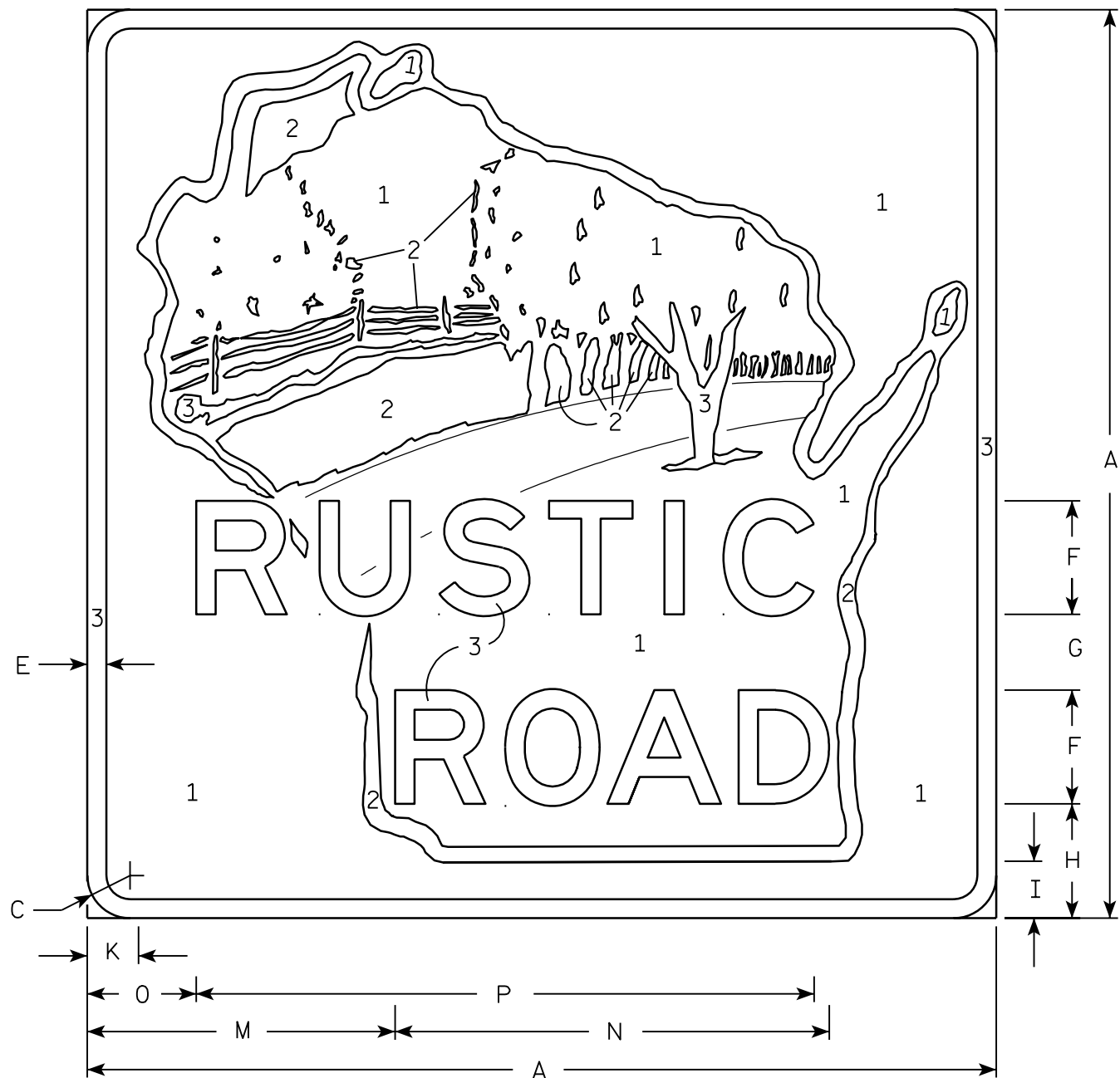
STANDARD SIGN
M6 - 4 & M6 - 6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-4.10

7



Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	
4	
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 m ²
1																												
2	24		1 ⅛		½	3	2	3	1 ½		1 ⅜		8 ⅛	11 ¼	2 ⅞	16 ¼											4.0	0.36
3																												
4																												
5																												

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5.
3. Message Series - Modified 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. The sign will be color coded by numerical designation Numeral *1 Brown
2 Type H Reflective White
3 Reflective Yellow

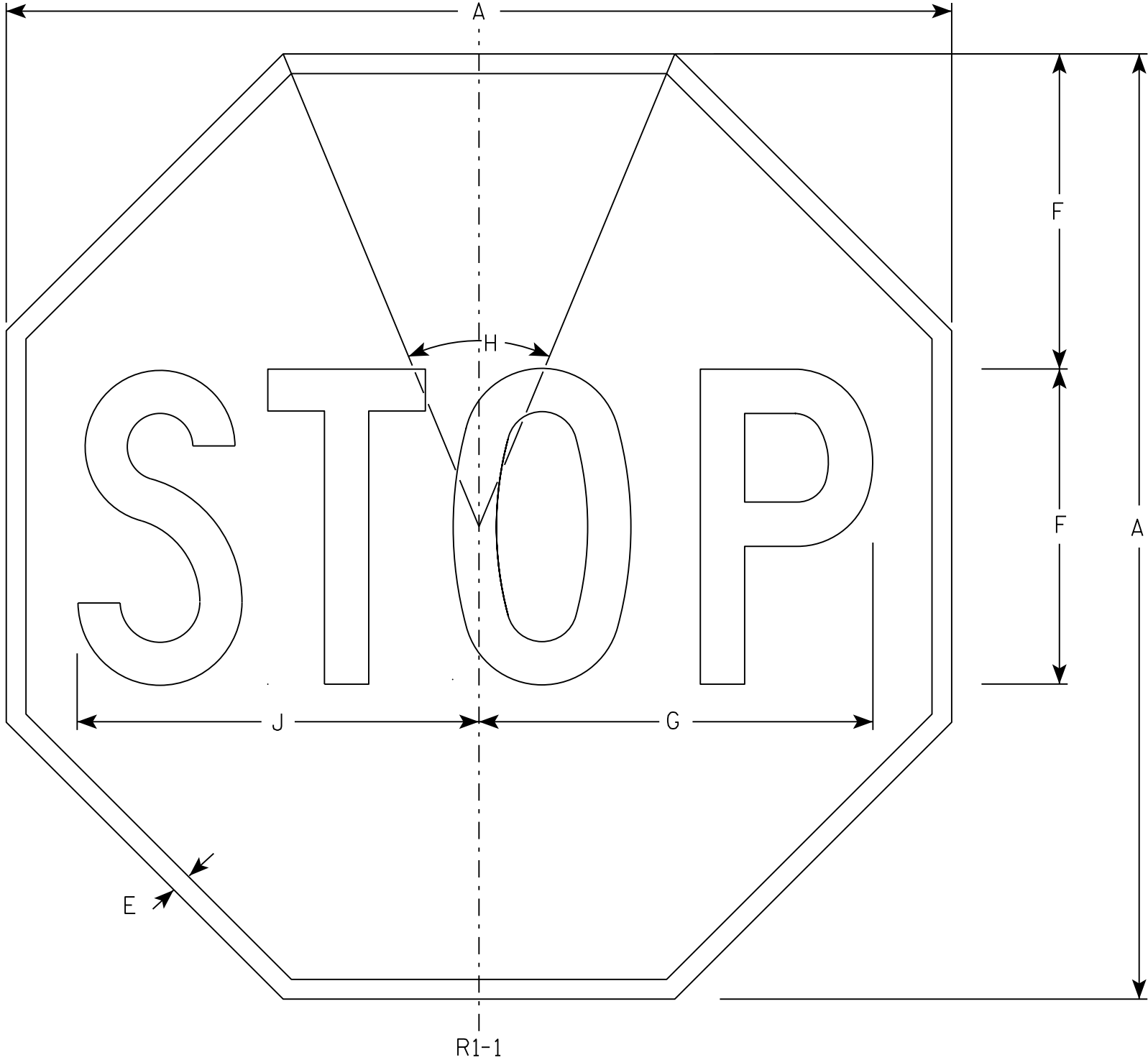
Exact color descriptions will be furnished upon request.

7

STANDARD SIGN
MR1-99

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 10/18/05 PLATE NO. MR1-99.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E
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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

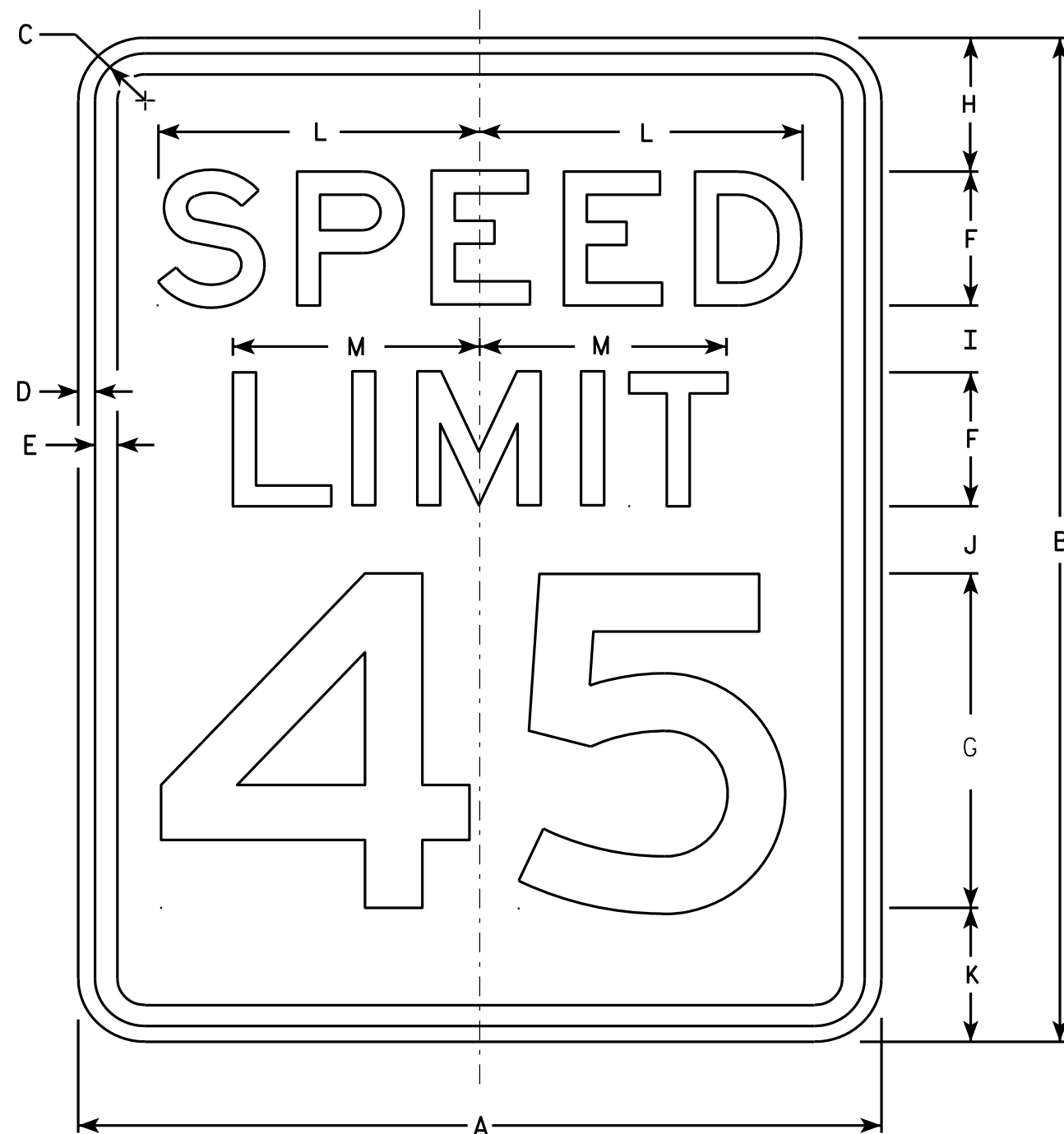
STANDARD SIGN

R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13



R2-1

NOTES

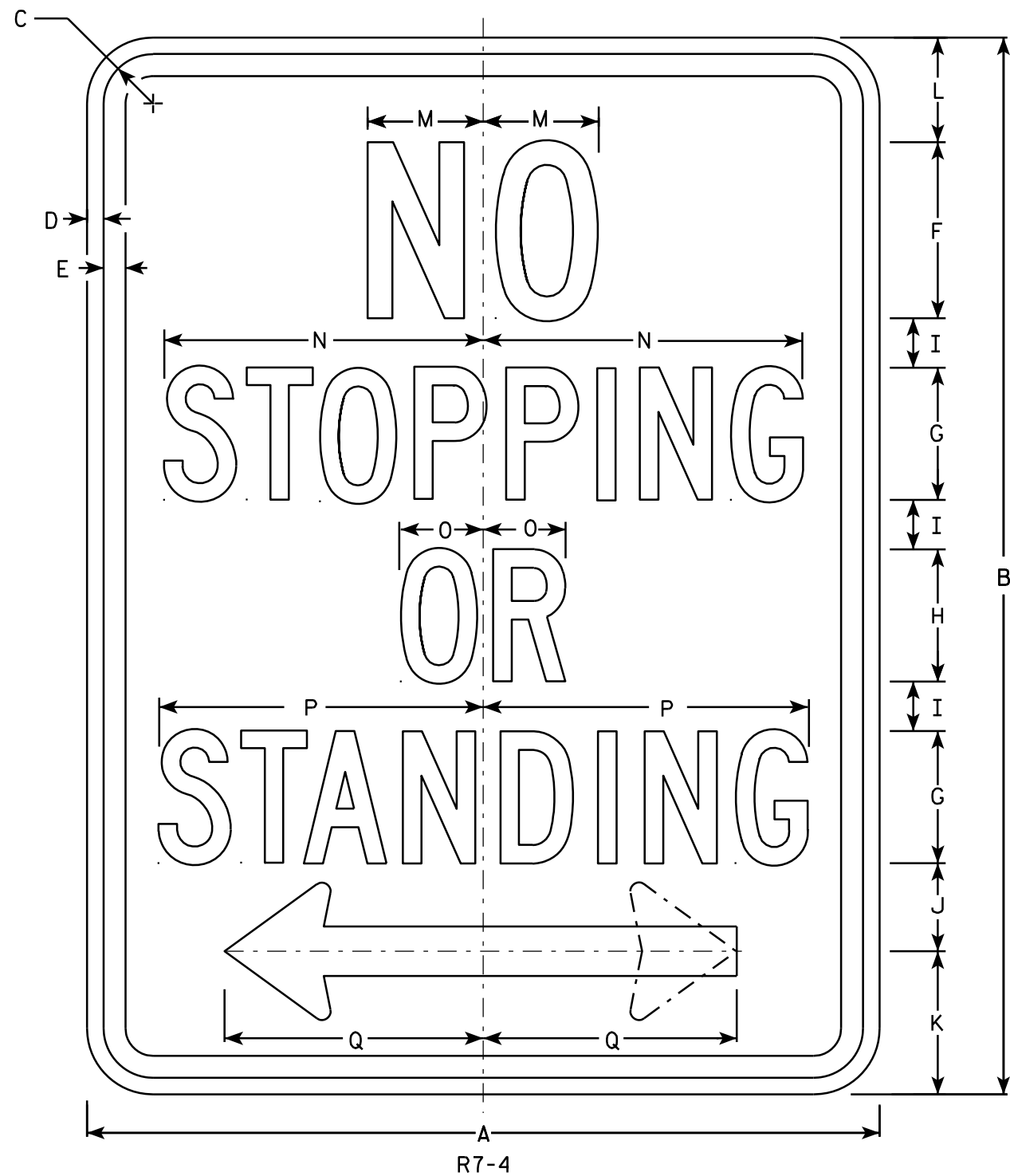
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as 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

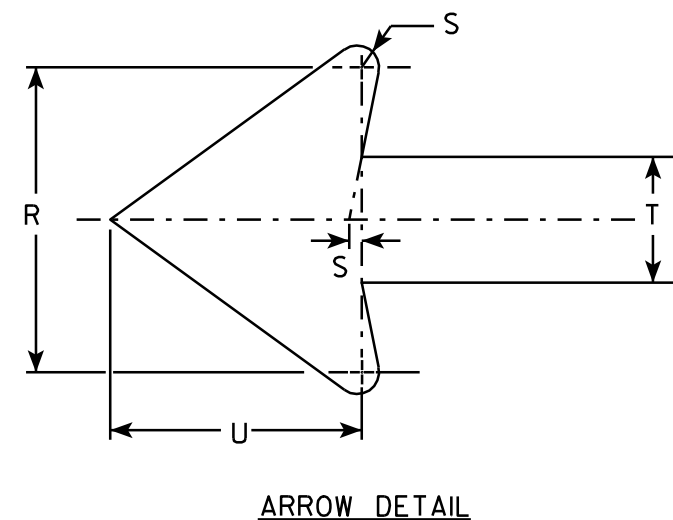
WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Red
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. R7-4L (left arrow)
R7-4R (right arrow)
R7-4D (double 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	2	2	1	1 1/2	2 1/2	2	2	4 7/8	1 1/4	4 7/8	3 7/8	1 3/4	1/8	3/4	1 1/2						1.5
2S	18	24	1 1/8	3/8	1/2	4	3	3	1 1/8	2	3 1/4	2 3/8	2 5/8	7 1/4	1 7/8	7 3/8	5 7/8	2 5/8	1/4	1 1/8	2 1/4						3.0
2M	24	30	1 1/8	3/8	1/2	5	4	3	1 1/2	3	4	2 1/2	3 3/8	10	2 1/2	10 1/4	7 3/4	3 1/2	1/4	1 1/2	3						5.0
3	24	30	1 1/8	3/8	1/2	5	4	3	1 1/2	3	4	2 1/2	3 3/8	10	2 1/2	10 1/4	7 3/4	3 1/2	1/4	1 1/2	3						5.0
4																											
5																											

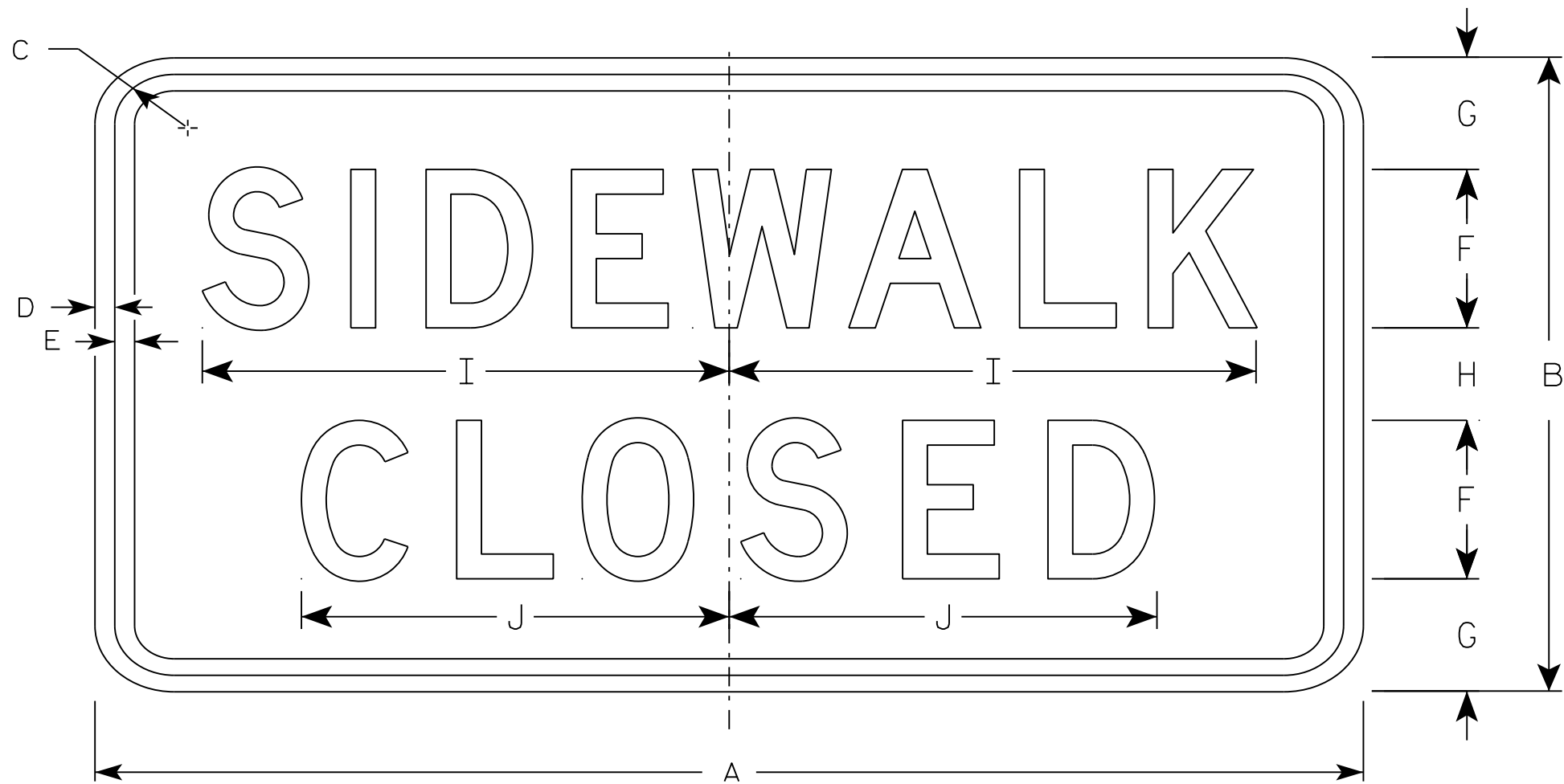
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E
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STANDARD SIGN
R7-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-4.8



R9-9

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 ¾	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
2M	24	12	1 ¾	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
3	30	18	1 ¾	½	½	4	3 ½	3	12 ½	10 ¼																	3.75
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

STANDARD SIGN
R9-9

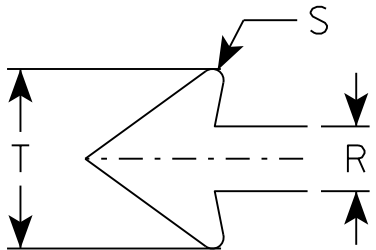
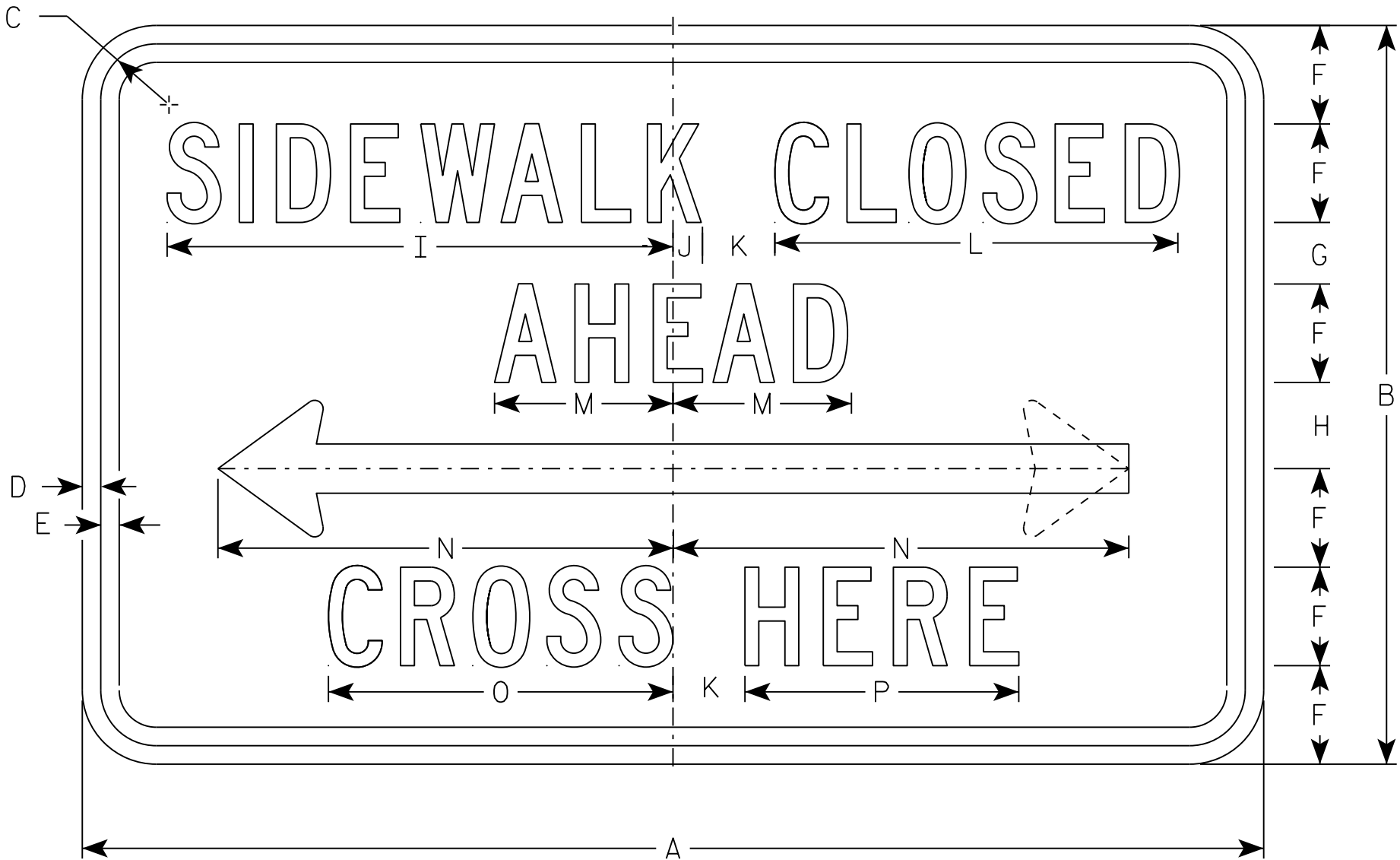
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/11/16 PLATE NO. R9-9.6

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - C except Size 1 is 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. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.



R9-11

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	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
2M	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
3	30	15	1 1/8	3/8	1/2	2	1 1/2	1 1/2	13	3/4	2	10 1/4	4 5/8	12 3/8	8 7/8	6 7/8		1 1/4	1/4	3 5/8							3.125
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

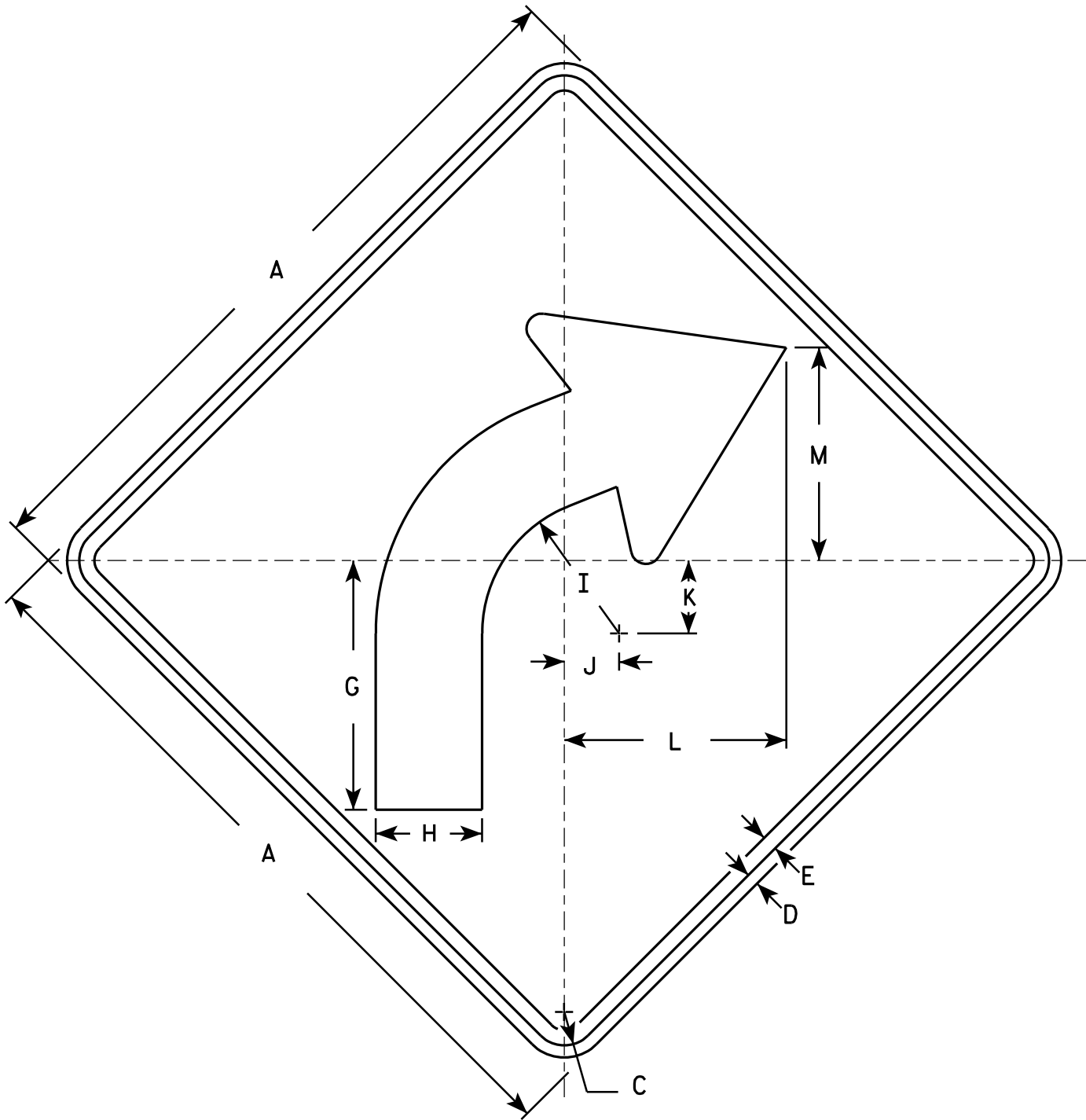
STANDARD SIGN
R9-11

WISCONSIN DEPT OF TRANSPORTATION

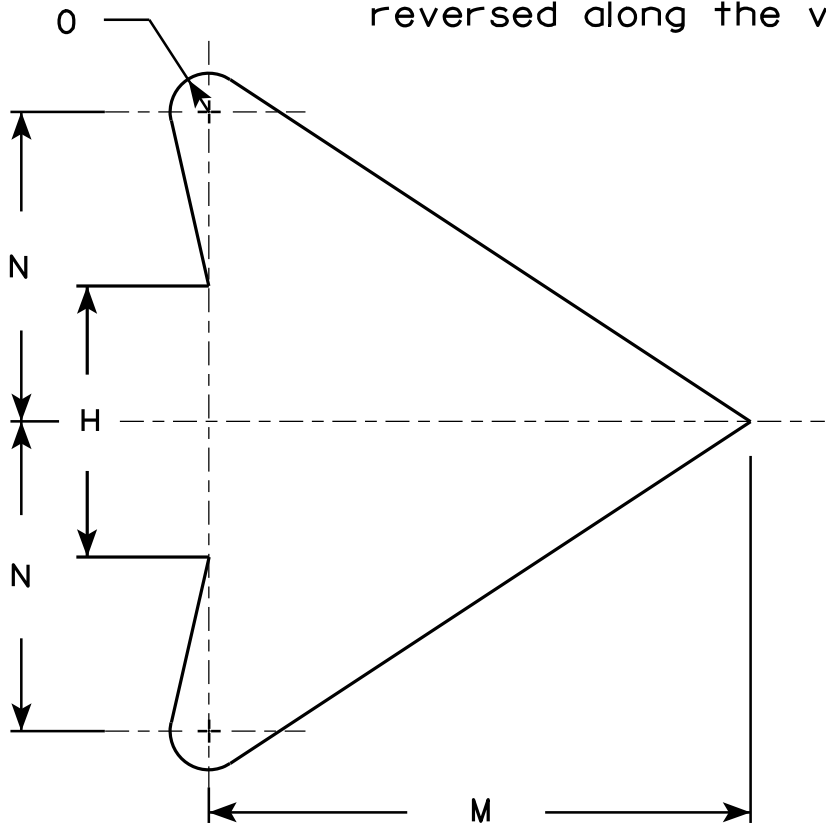
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 11/29/16 PLATE NO. R9-11.3

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.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

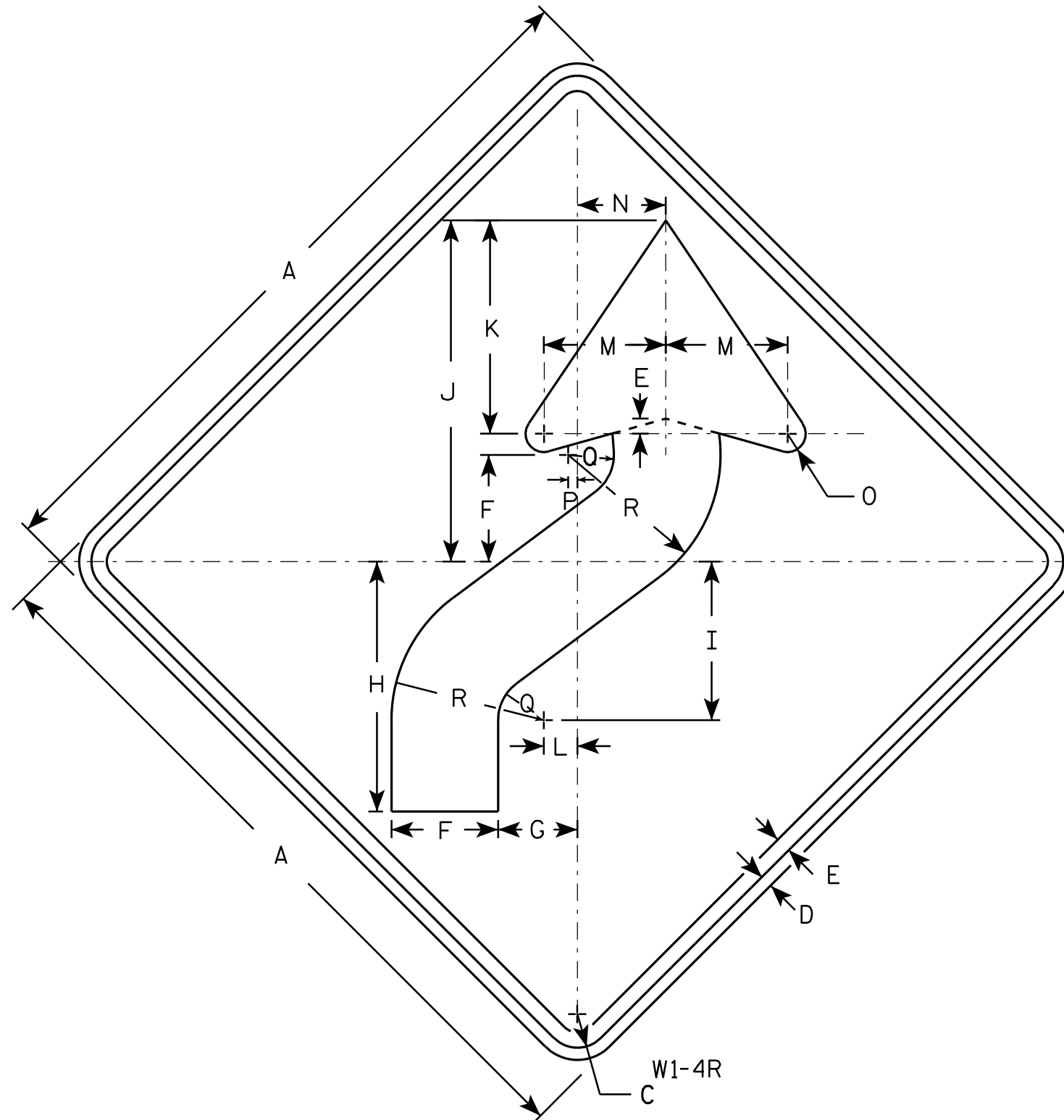
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10



NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Yellow
Message - Black
- 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.
- W1-4L is the same as W1-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	3 1/2	2 5/8	8 1/4	5 1/4	11 1/4	7	1 1/8	4	3	5/8	1/4	1 1/2	5									4.0
2S	30		1 3/8	1/2	5/8	4 3/8	3 1/4	10 1/4	6 1/2	14	8 3/4	1 3/8	5	3 5/8	3/4	3/8	1 7/8	6 1/4									6.25
2M	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
3	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
4	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN W1 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-4.11

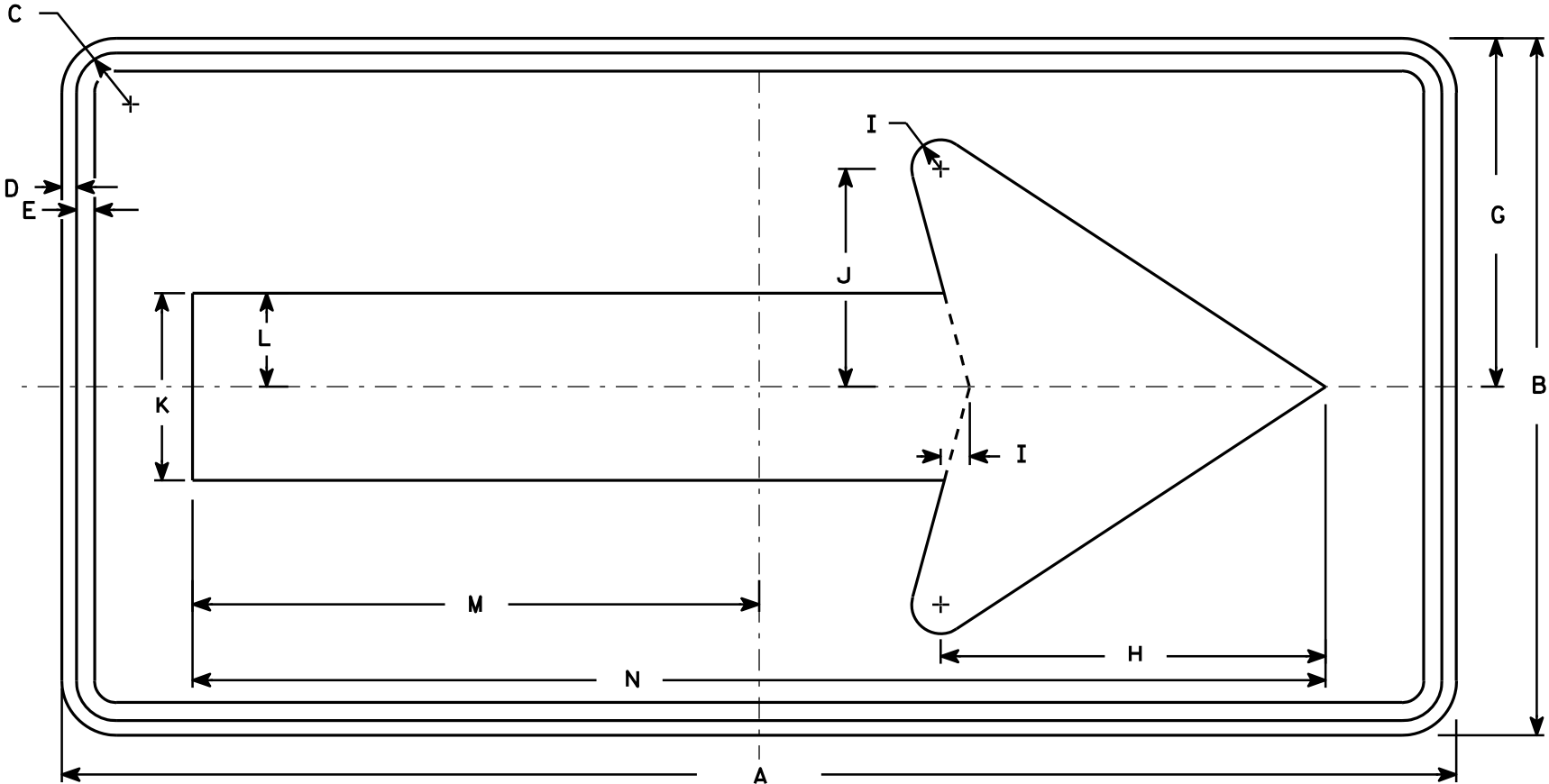
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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NOTES

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.



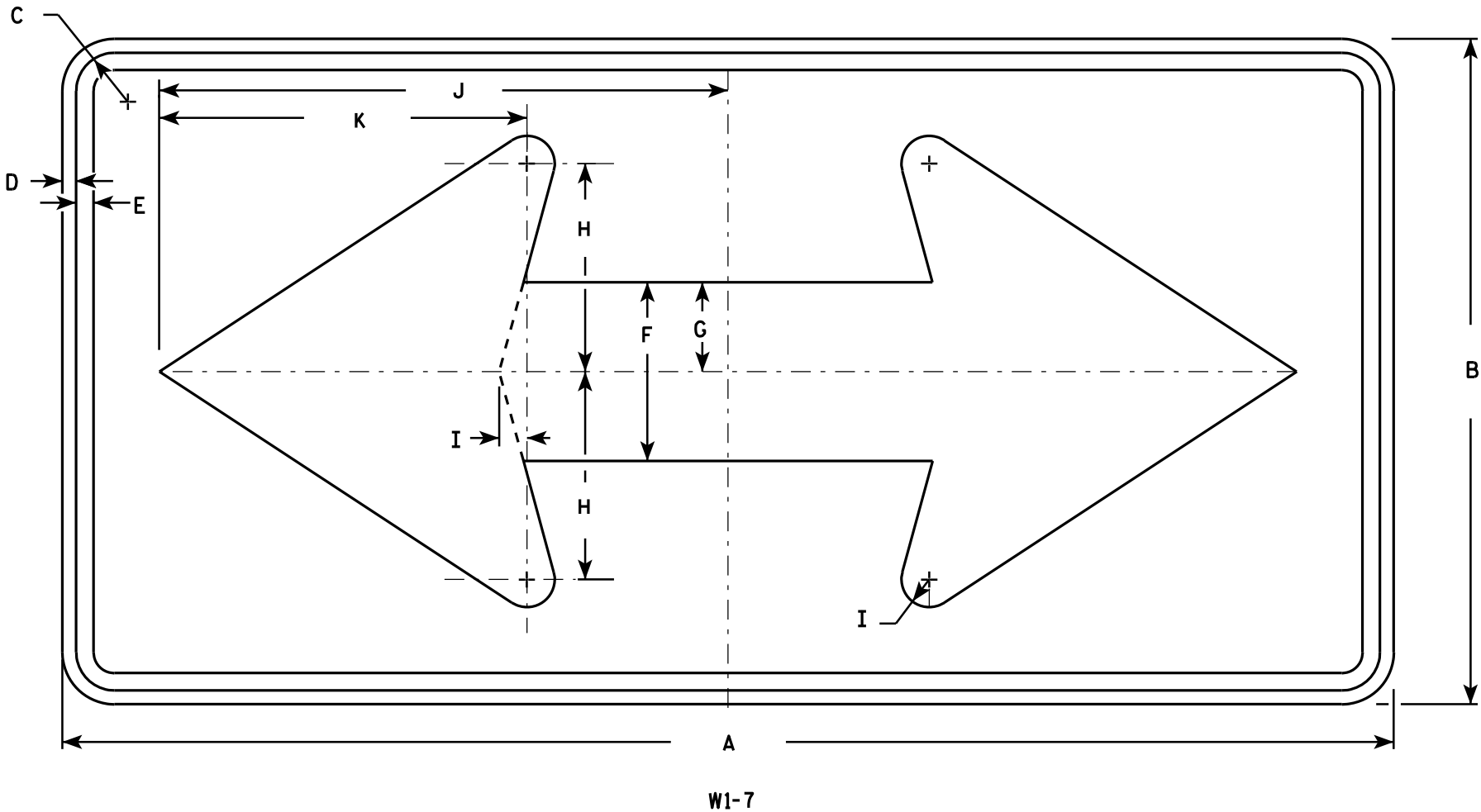
W1-6

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	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



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.

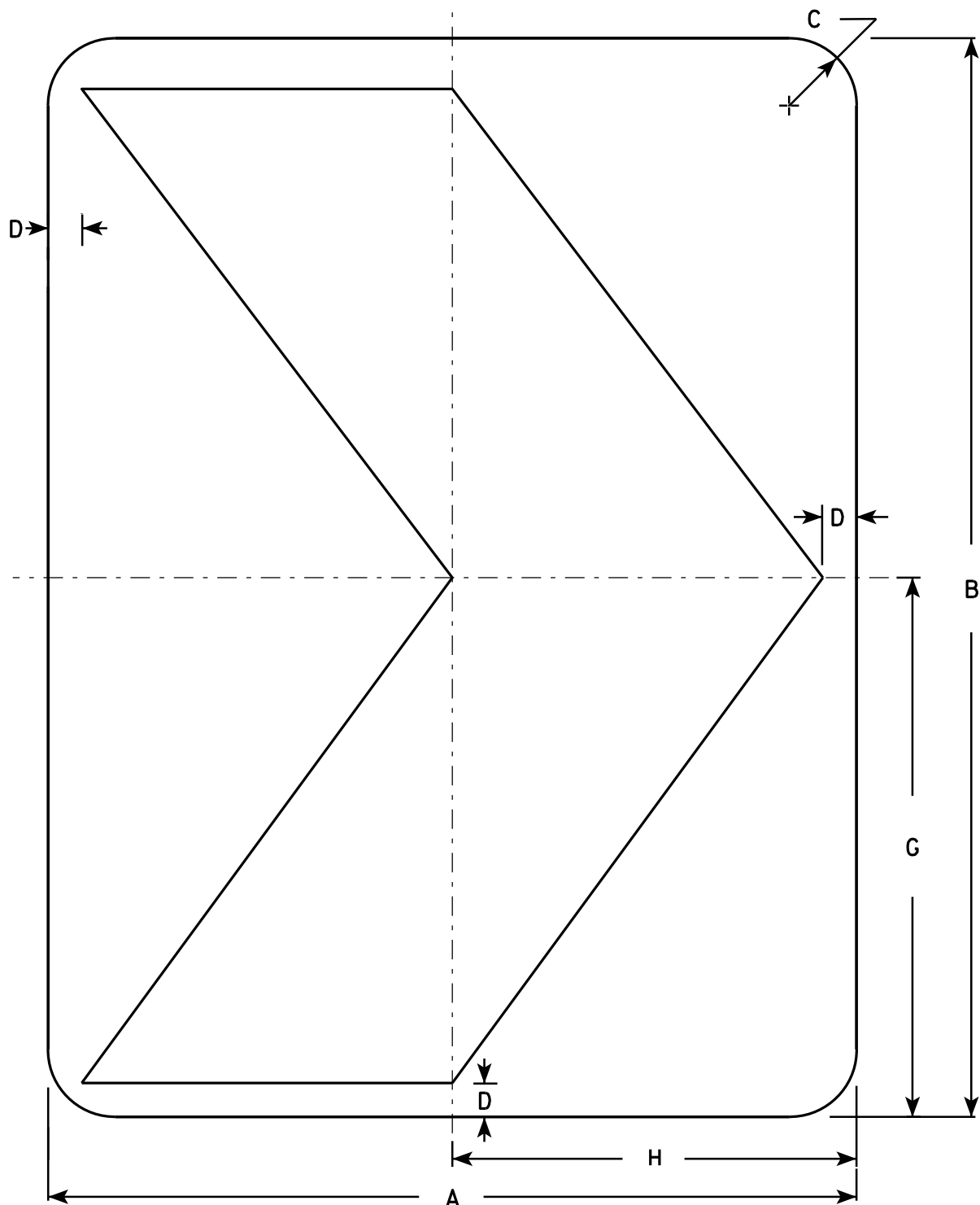
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	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



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.

W1-8

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 1/2	1/2			9	6																			1.5
2S	18	24	1 1/2	3/4			12	9																			3.0
2M	18	24	1 1/2	3/4			12	9																			3.0
3	24	30	1 1/2	1			15	12																			5.0
4	30	36	1 7/8	1 1/4			18	15																			7.5
5	36	48	2 1/4	1 1/2			24	18																			12.0

STANDARD SIGN

W1-8

WISCONSIN DEPT OF TRANSPORTATION

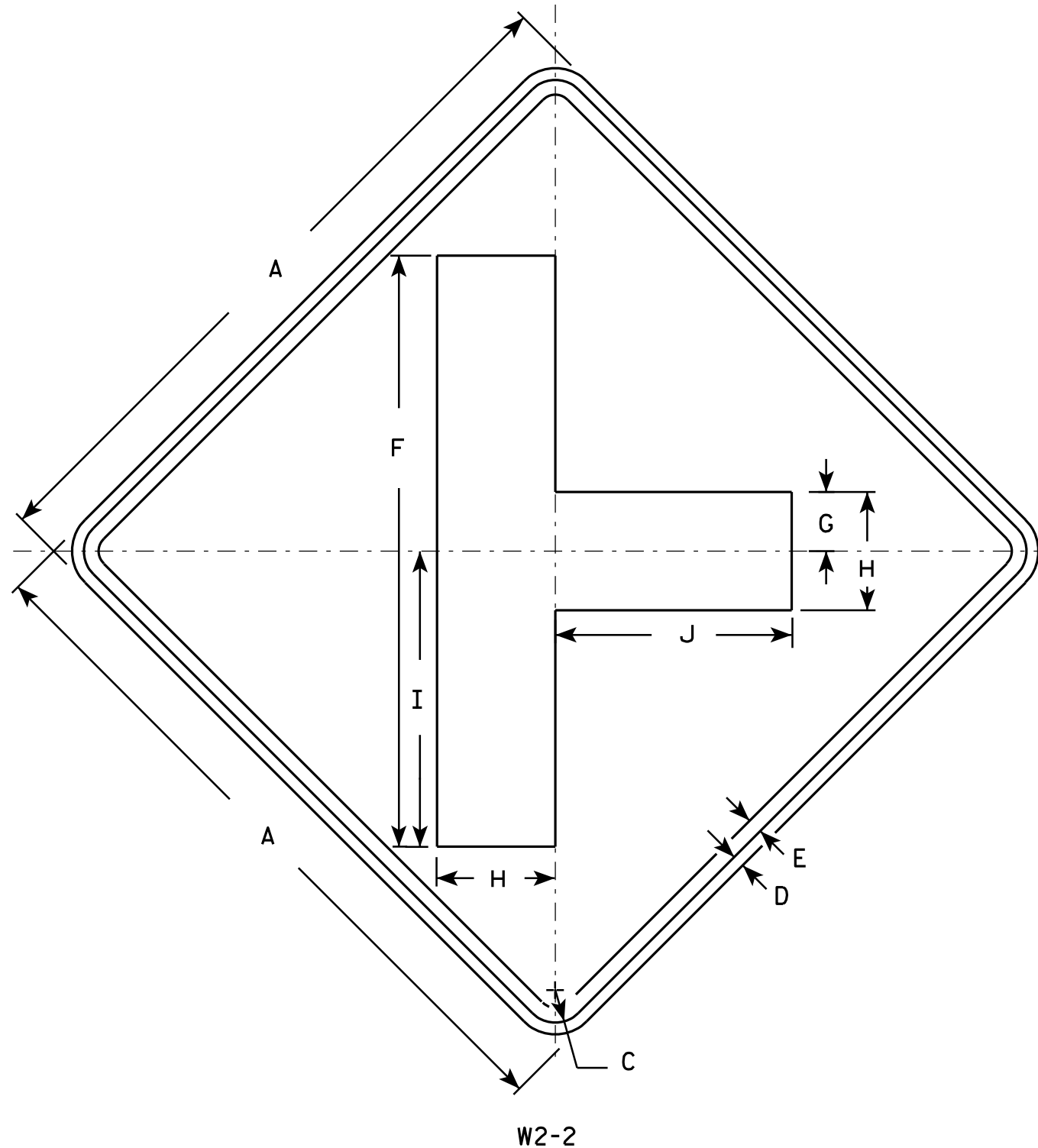
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-8.6

PROJECT NO:

SHEET NO:

E



NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Yellow
Message - Black
- 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.

W2-2

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	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																											

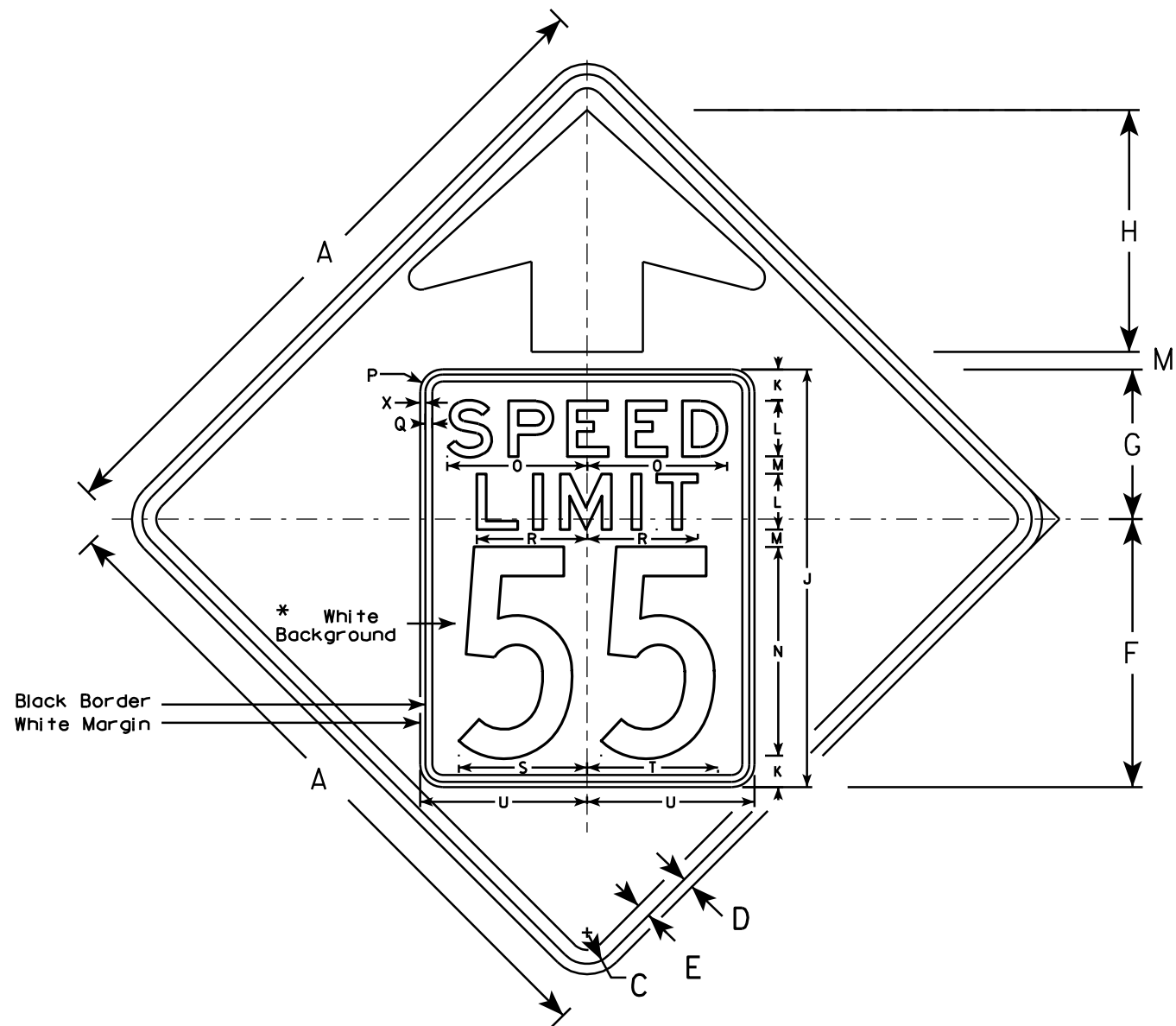
STANDARD SIGN W2-2

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: E

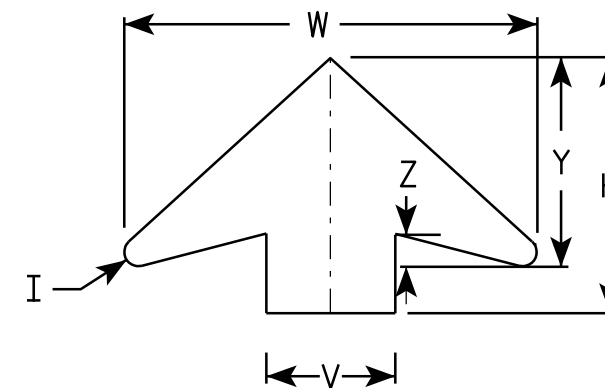


W3-5

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

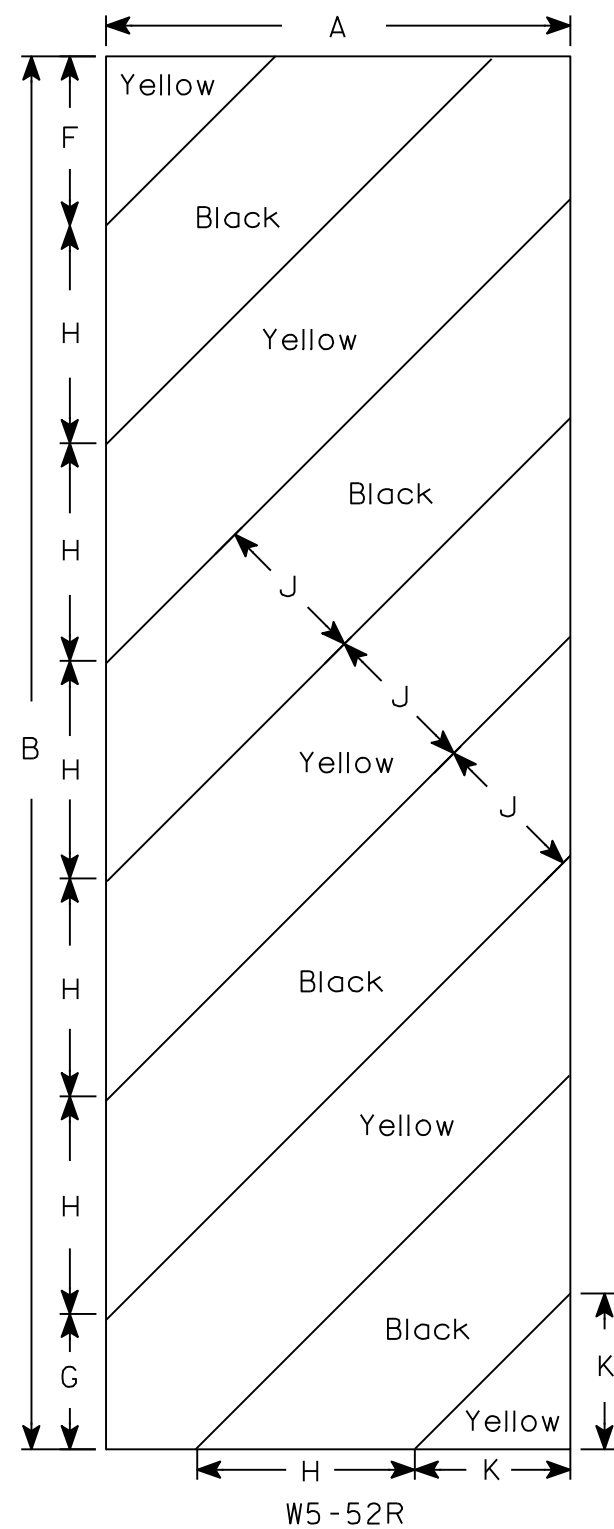
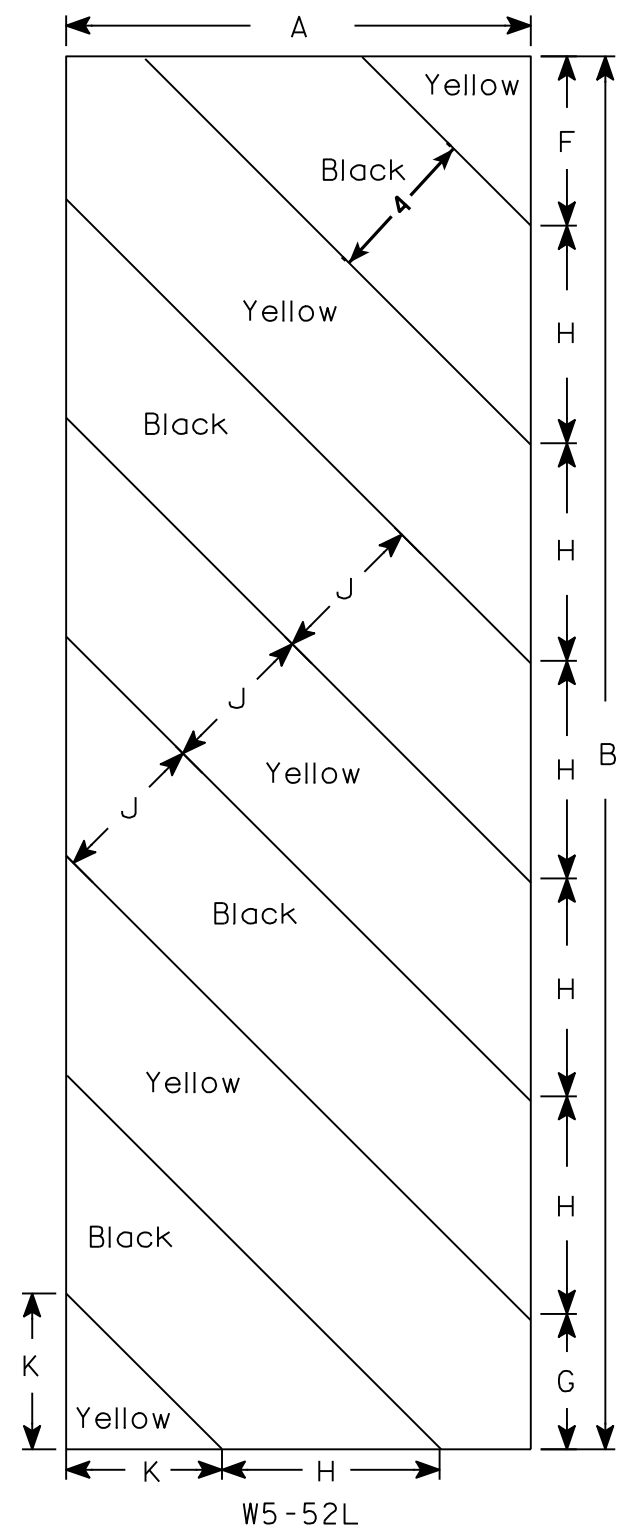
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO:

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. Alternate colors of stripes as shown.

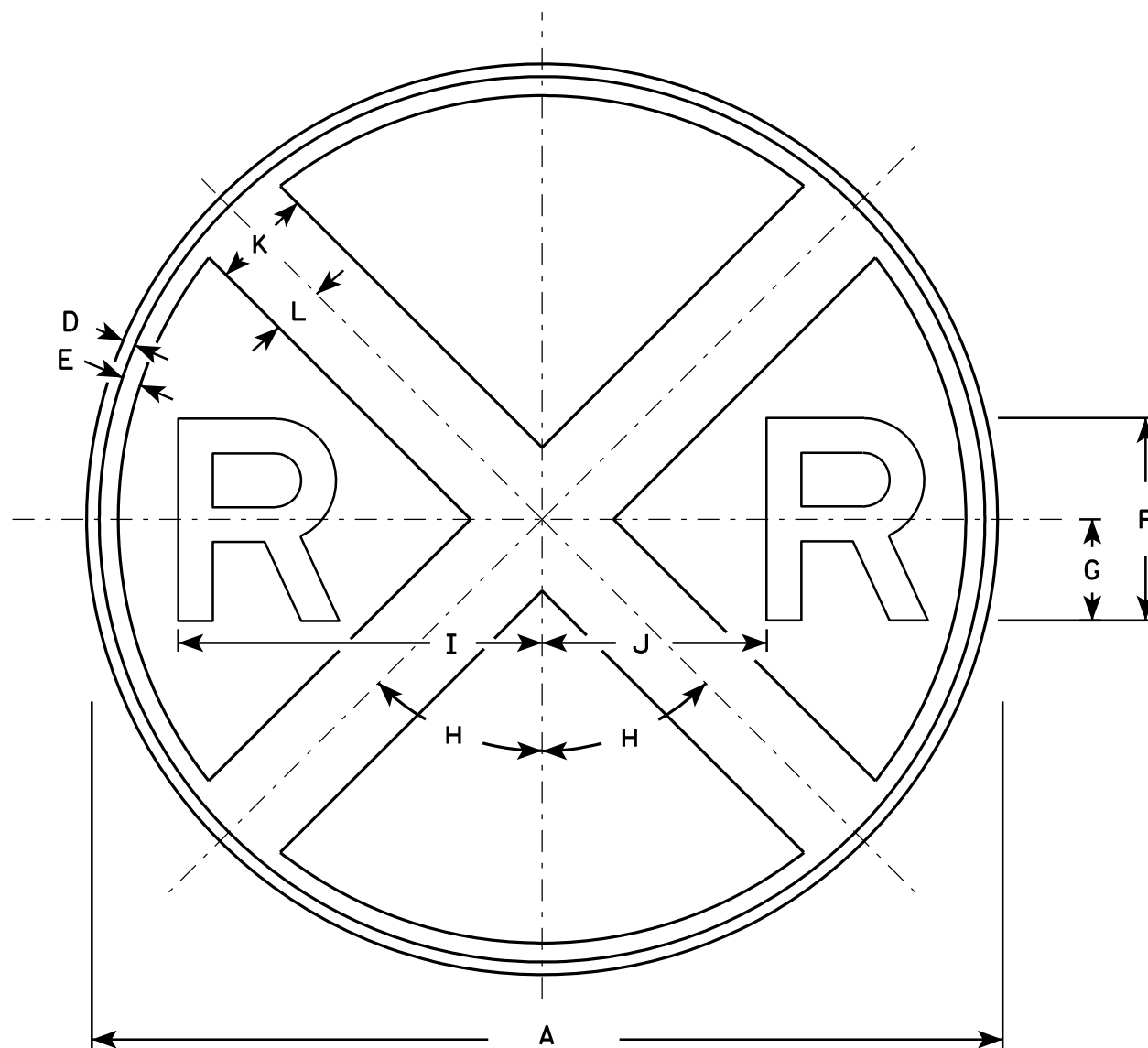
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3⁄8	3 1⁄2	5 5⁄8	45°	4	4																3.0
2M	12	36				4 3⁄8	3 1⁄2	5 5⁄8	45°	4	4																3.0
3	18	54				6	5 1⁄2	8 1⁄2	45°	6	6 9⁄16																6.75
4																											
5																											

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



W10-1

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 - E

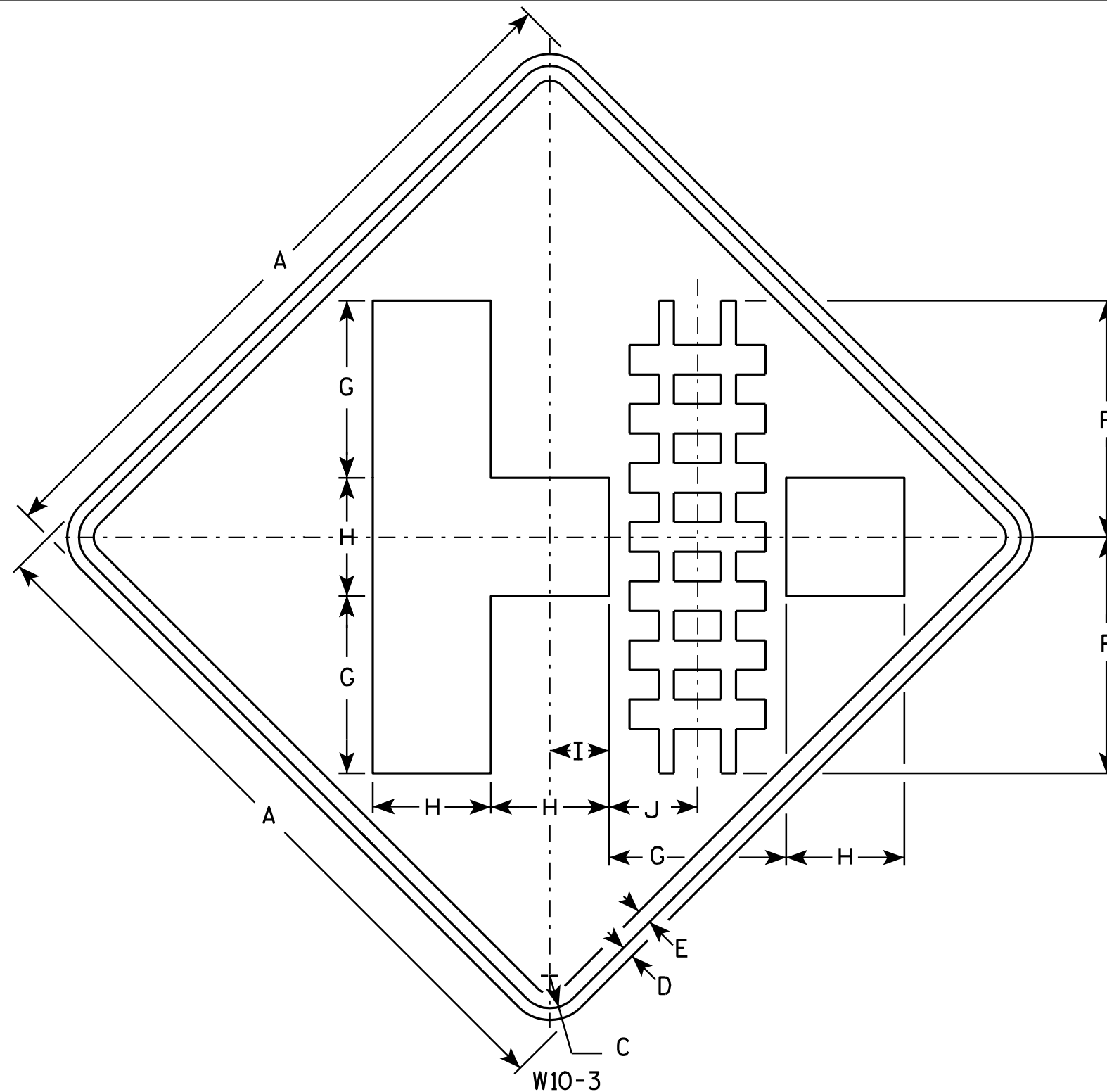
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30			$\frac{3}{8}$	$\frac{5}{8}$	7	$3\frac{1}{2}$	45°	$12\frac{3}{8}$	$7\frac{1}{8}$	3	$1\frac{1}{2}$															4.91
2S	36			$\frac{5}{8}$	$\frac{3}{4}$	8	4	45°	$14\frac{3}{8}$	$8\frac{5}{8}$	4	2															7.07
2M	36			$\frac{5}{8}$	$\frac{3}{4}$	8	4	45°	$14\frac{3}{8}$	$8\frac{5}{8}$	4	2															7.07
3																											
4	48			$\frac{3}{4}$	$1\frac{1}{4}$	10	5	45°	$18\frac{3}{8}$	$11\frac{5}{8}$	5	$2\frac{1}{2}$															12.57
5																											

STANDARD SIGN
W10-1

WISCONSIN DEPT OF TRANSPORTATION

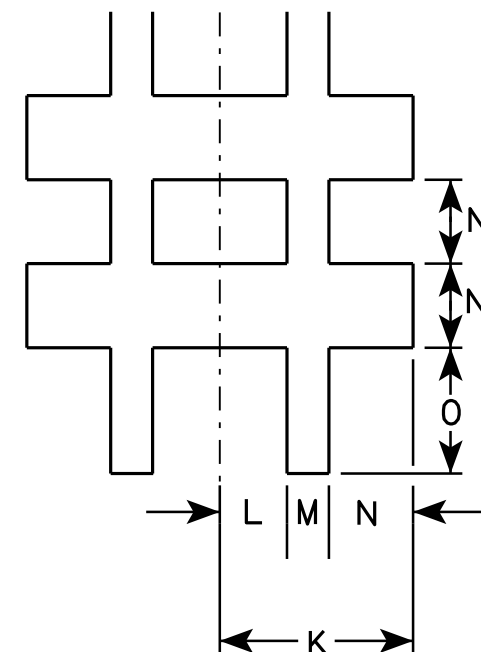
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 3/13/13 PLATE NO. W10-1.8

PROJECT NO: HWY: COUNTY: SHEET NO: 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	30		1 3/8	1/2	5/8	10	7 1/2	5	2 1/2	3 3/4	2 7/8	1	5/8	1 1/4	1 7/8												6.25
2S	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
2M	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
3	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
4	48		2 1/4	3/4	1	16	12	8	4	6	4 1/2	1 1/2	1	2	3												16.0
5																											

STANDARD SIGN W10-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/13/13 PLATE NO. W10-3.8

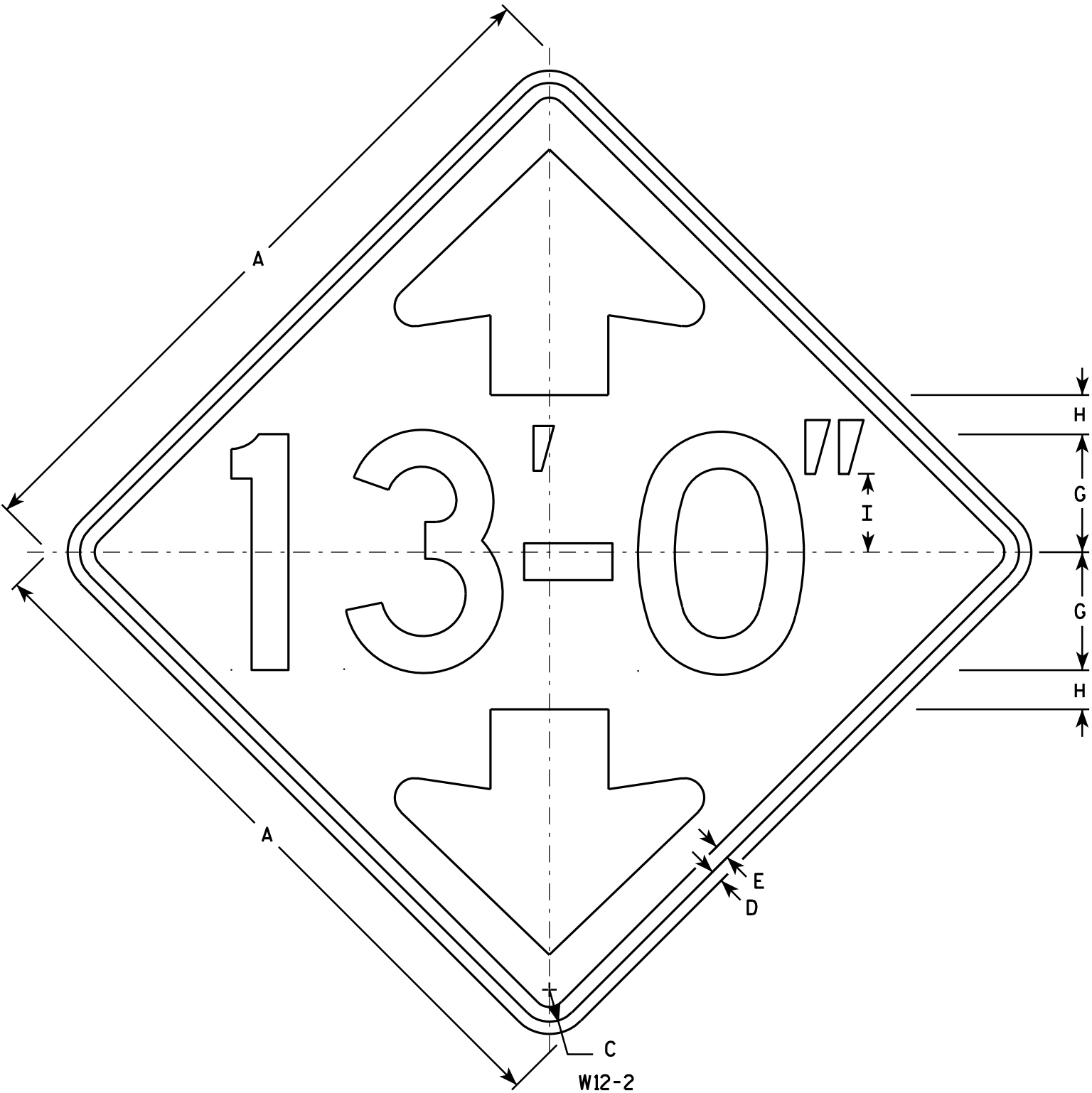
PROJECT NO:

HWY:

COUNTY:

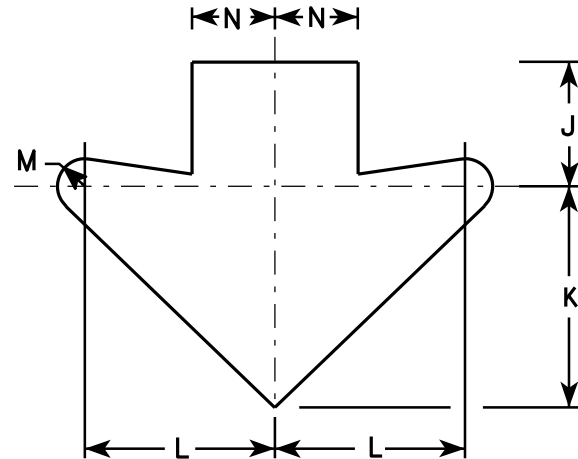
SHEET NO:

E

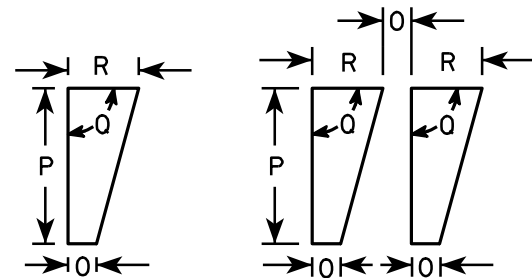


NOTES

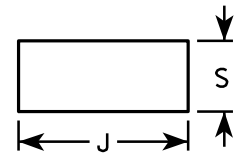
1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as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

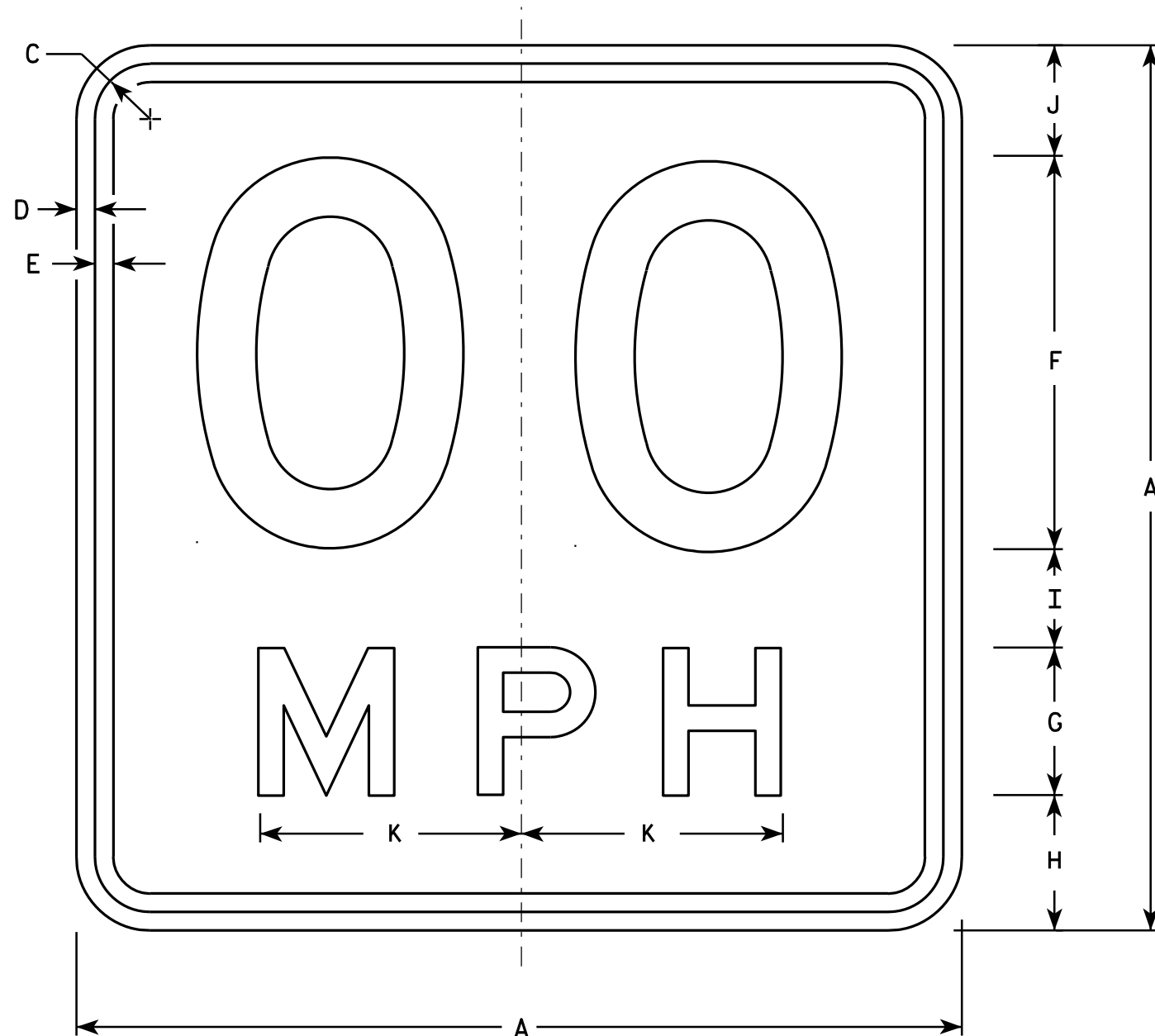
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN
W12-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-2.9



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

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.

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:

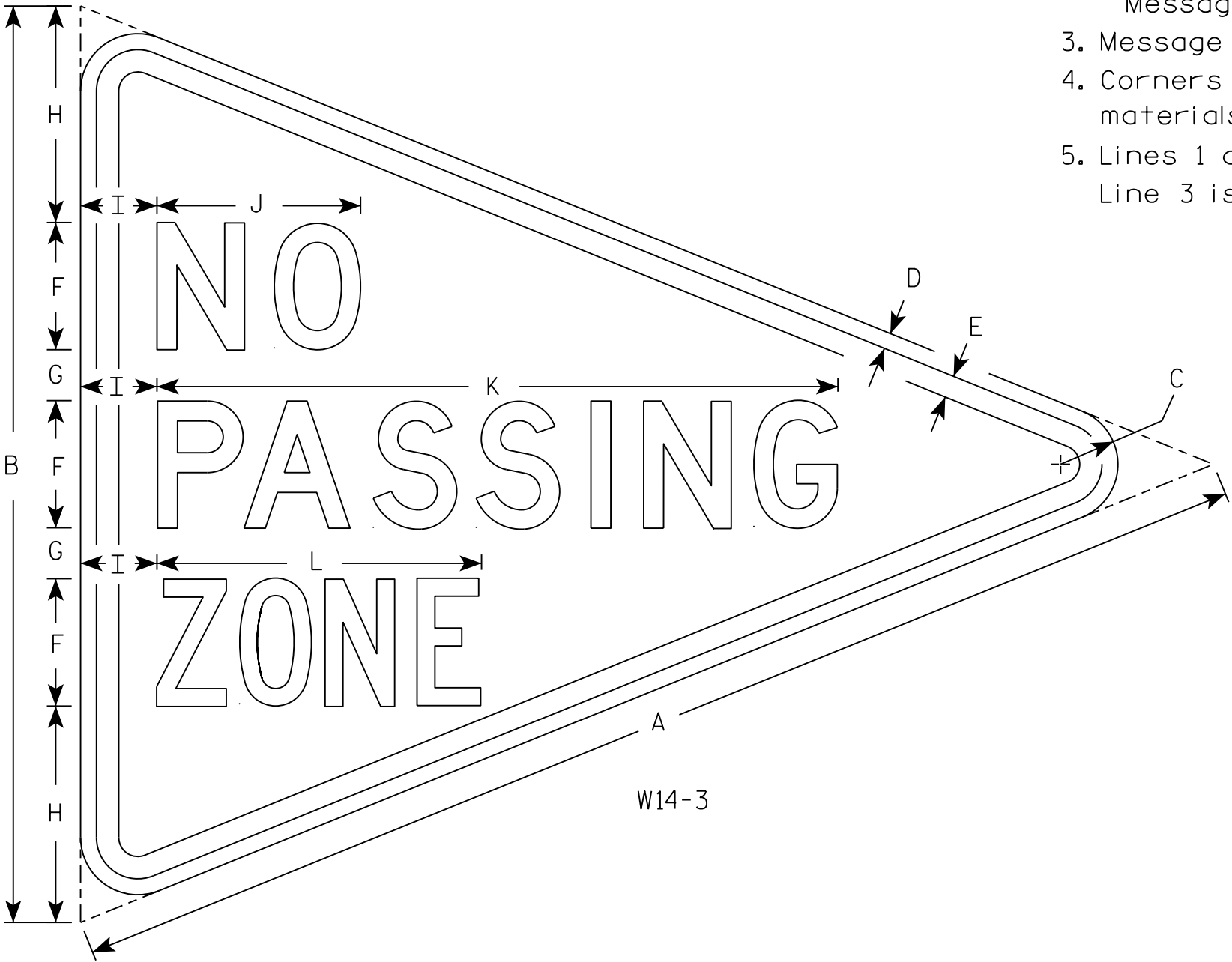
COUNTY:

SHEET NO:

E

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - See note 5
- 4. Corners and borders shall be rounded on all base materials for this sign.
- 5. Lines 1 and 2 are Series D.
Line 3 is series C.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	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

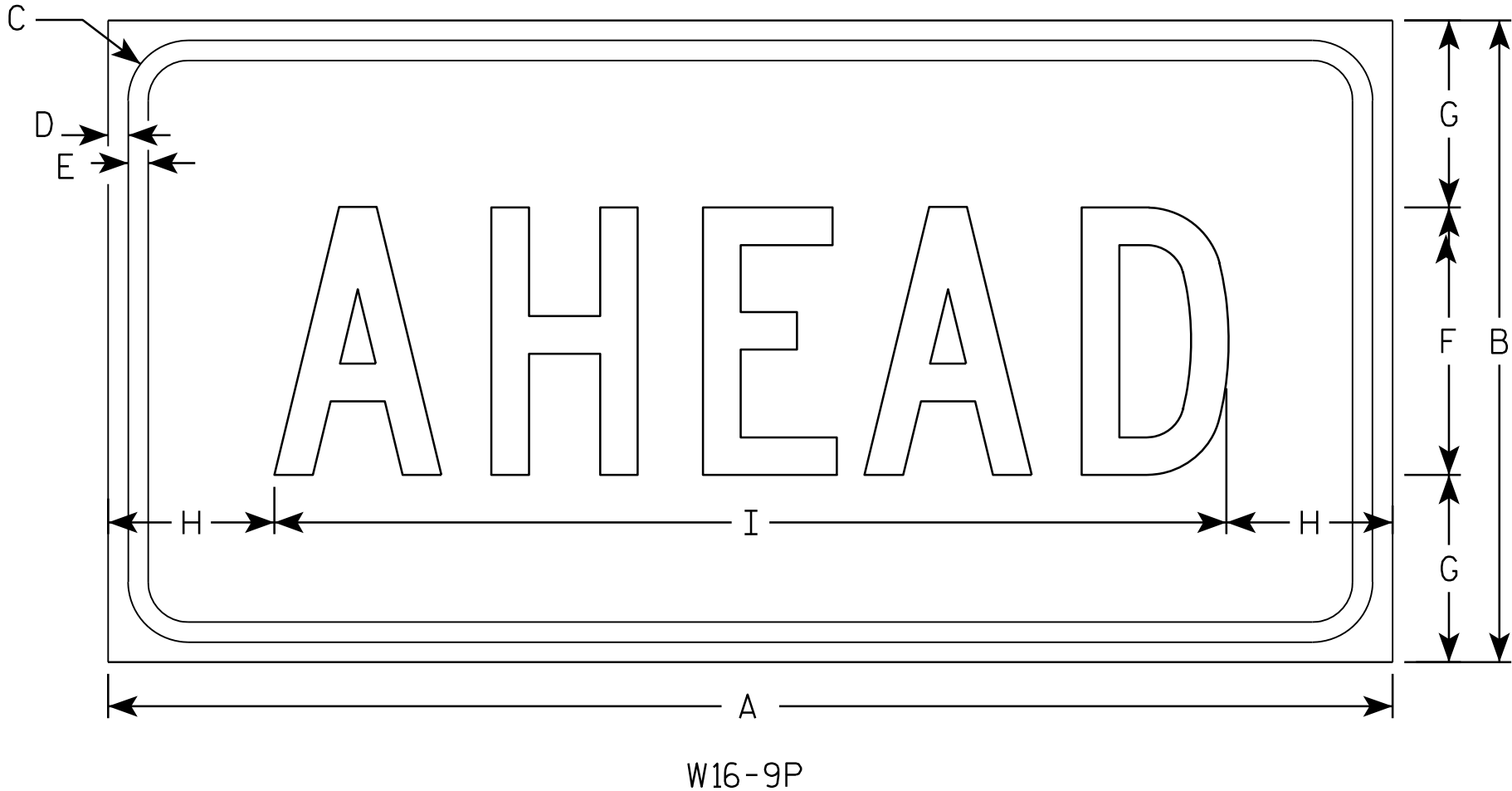
DATE 2/23/17 PLATE NO. W14-3.10

7

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. 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	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
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																											

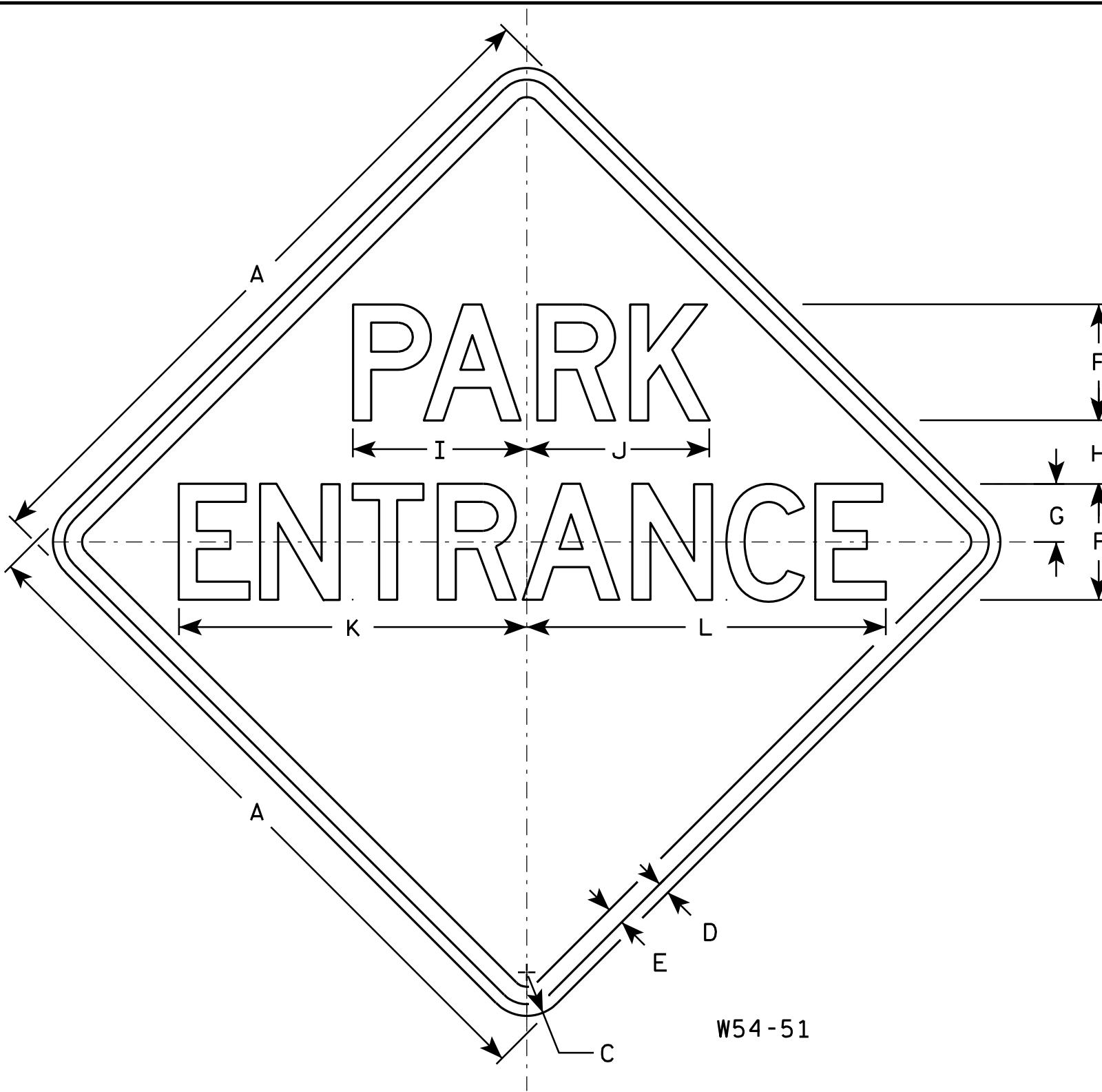
STANDARD SIGN

W16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/28/10 PLATE NO. W16-9P.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. 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.

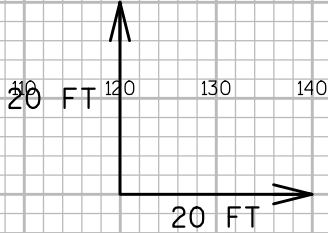
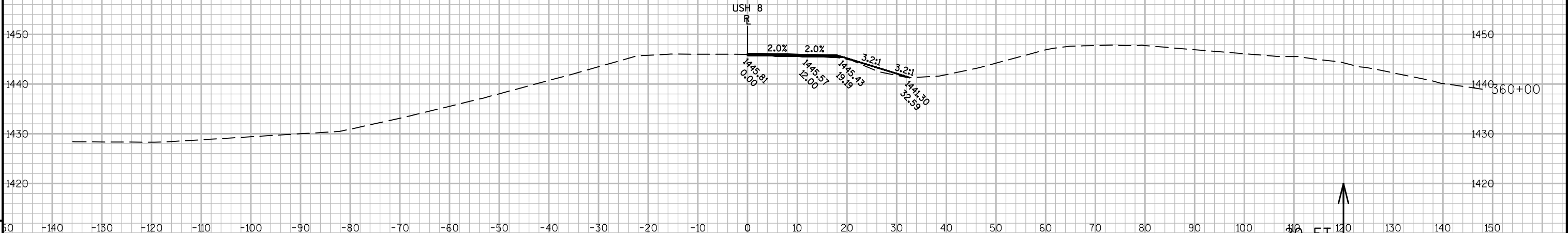
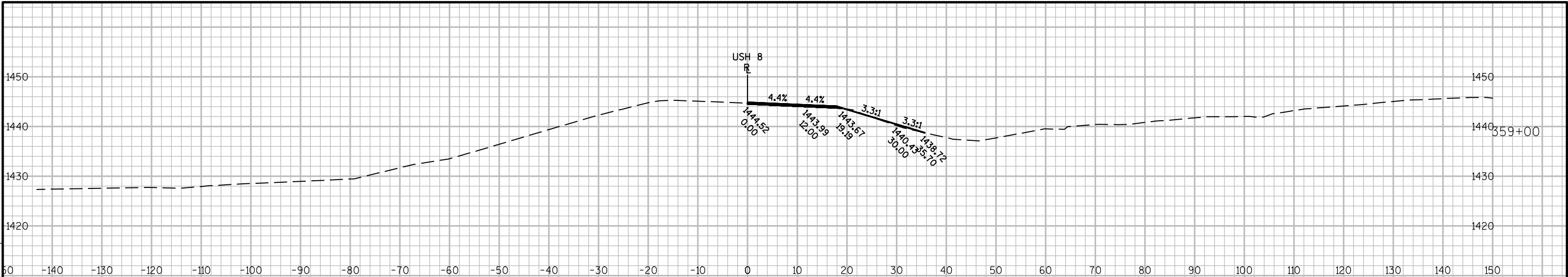
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 3⁄8	1⁄2	5⁄8	5	2 1⁄2	2 3⁄4	7 1⁄2	7 7⁄8	15 1⁄4	15 1⁄2														6.25	
2M	36		1 5⁄8	5⁄8	3⁄4	6	3	3 1⁄4	9	9 3⁄8	18 3⁄8	18 5⁄8														9.00	
3	36		1 5⁄8	5⁄8	3⁄4	6	3	3 1⁄4	9	9 3⁄8	18 3⁄8	18 5⁄8														9.00	
4																											
5																											

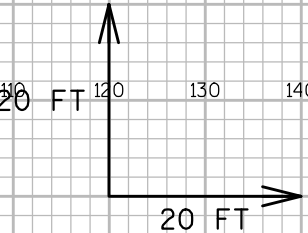
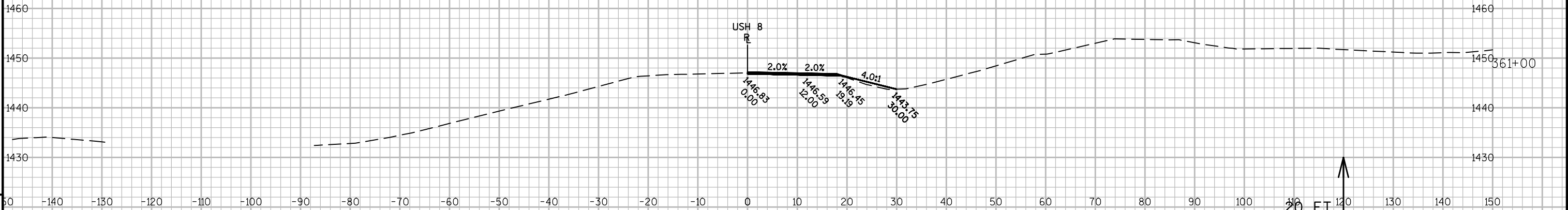
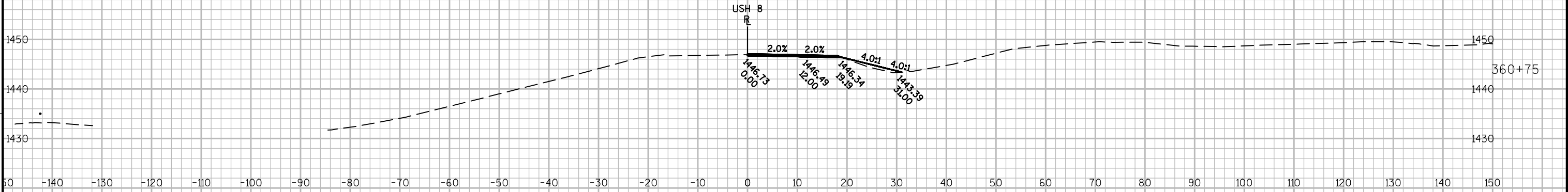
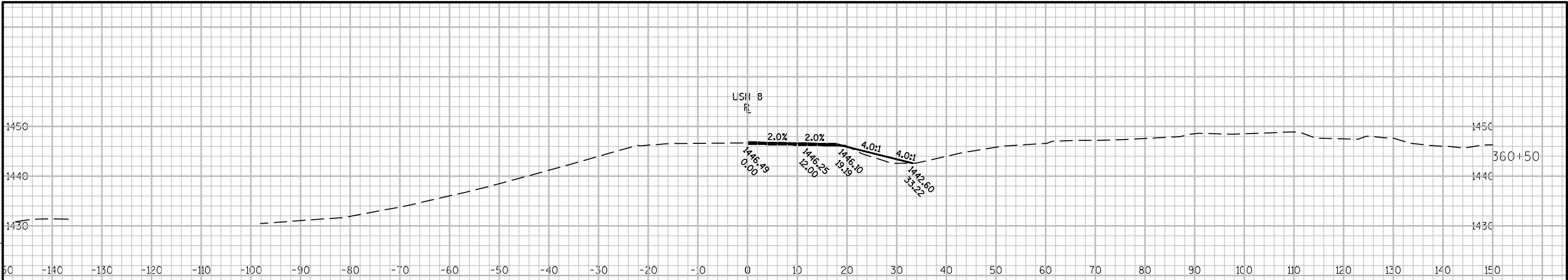
STANDARD SIGN
W54-51

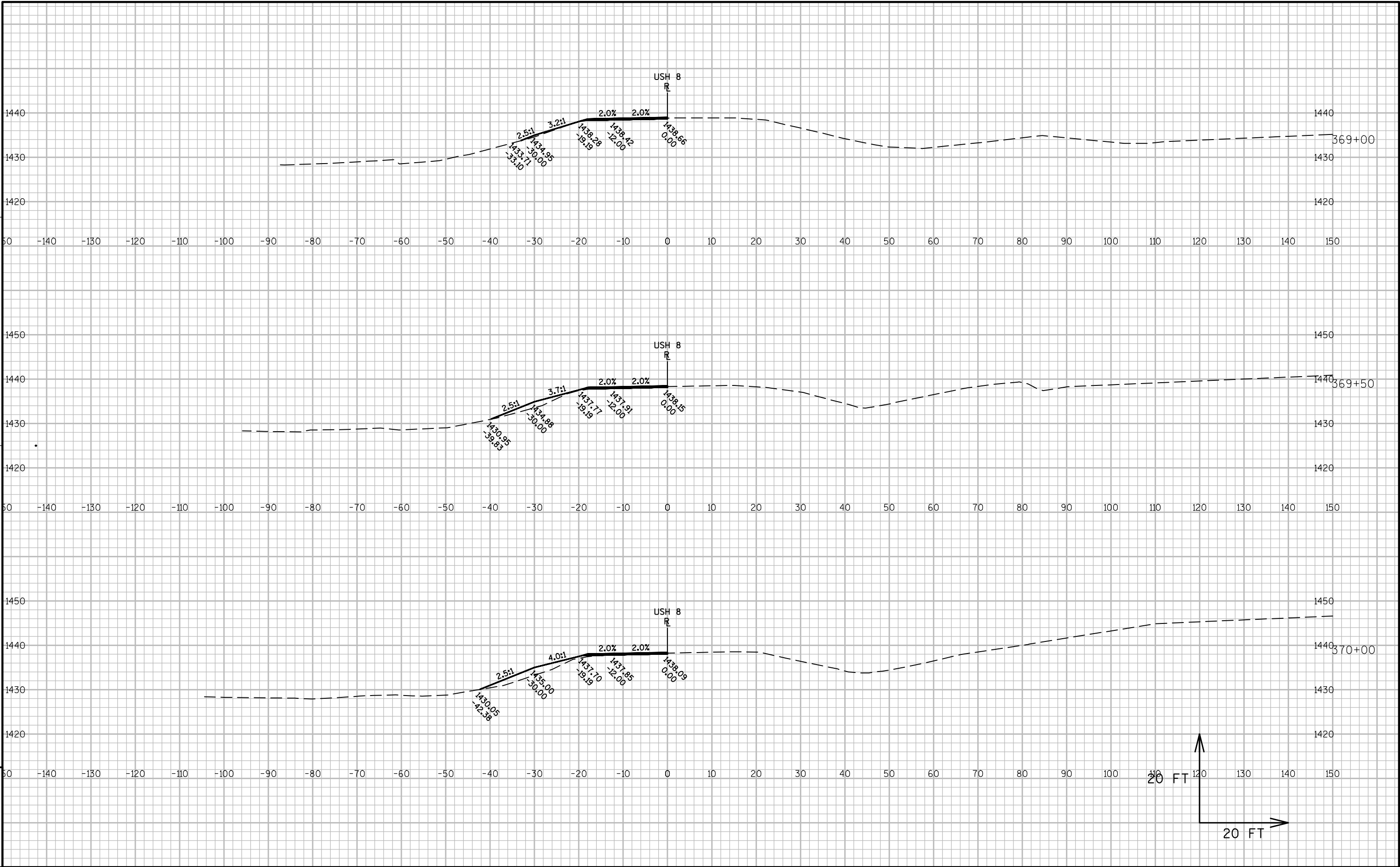
WISCONSIN DEPT OF TRANSPORTATION

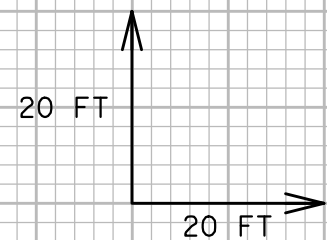
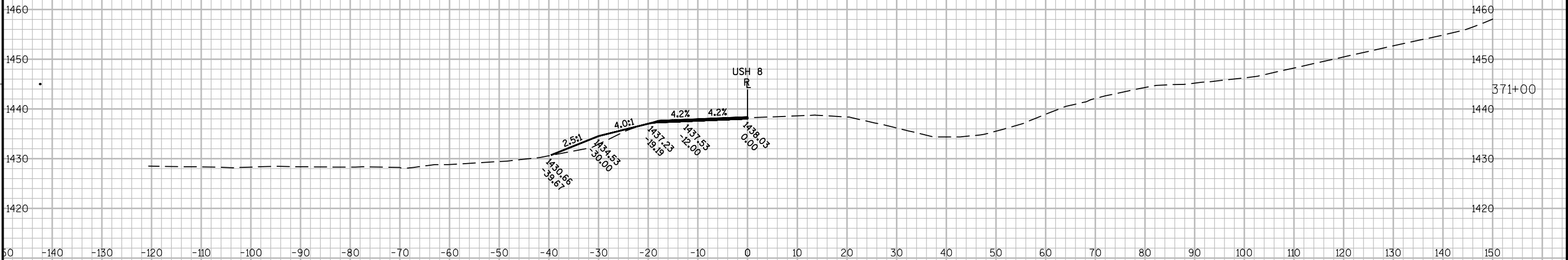
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/13/13 PLATE NO. W54-51.7



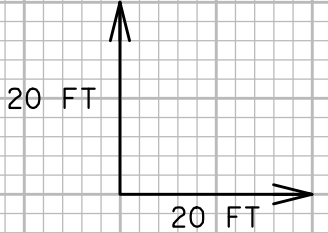
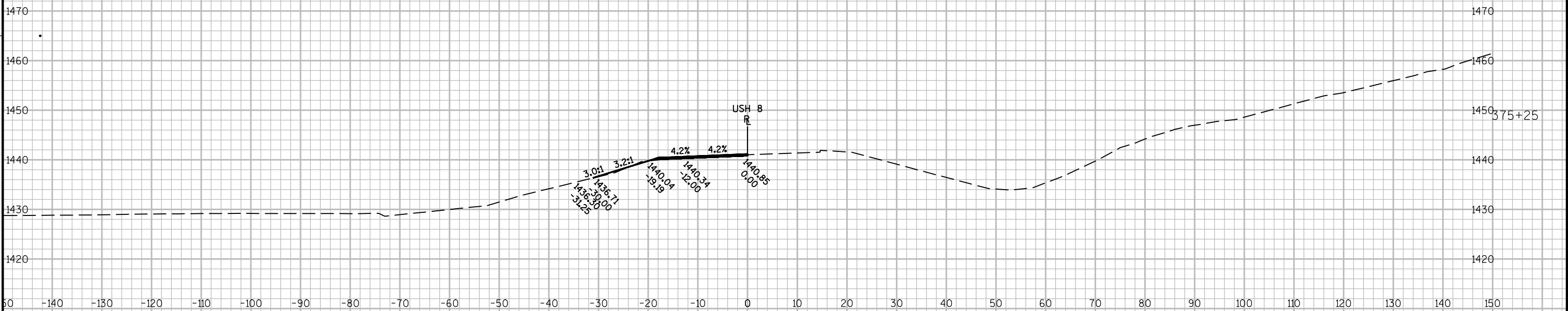






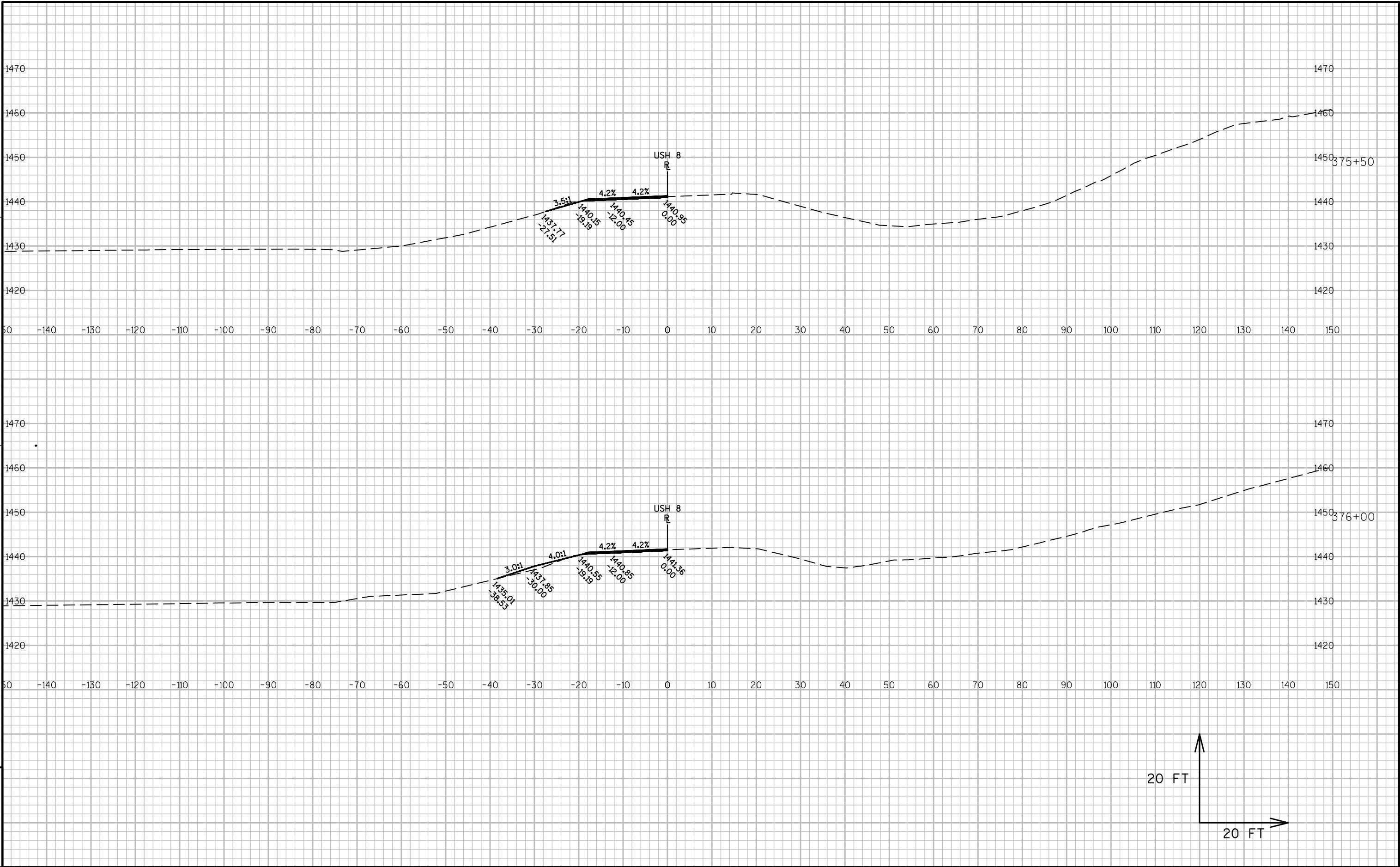
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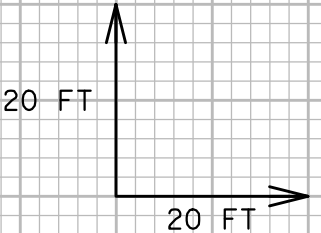
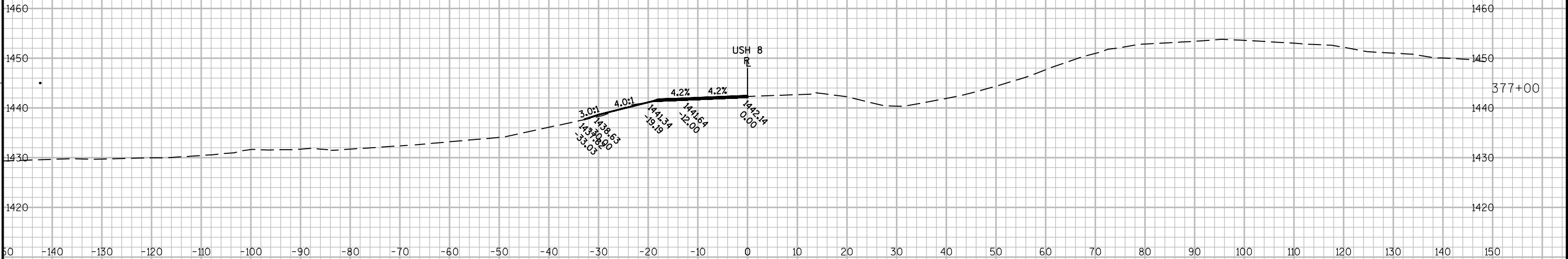
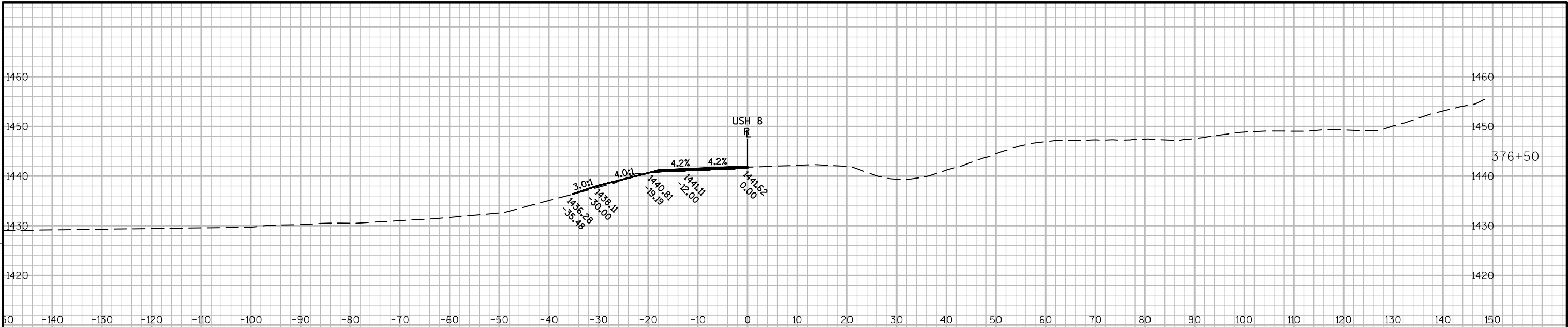
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PROJECT NO:1590-16-71

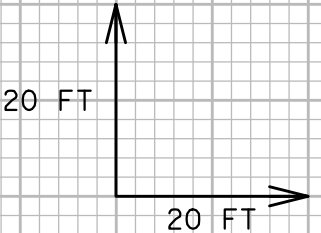
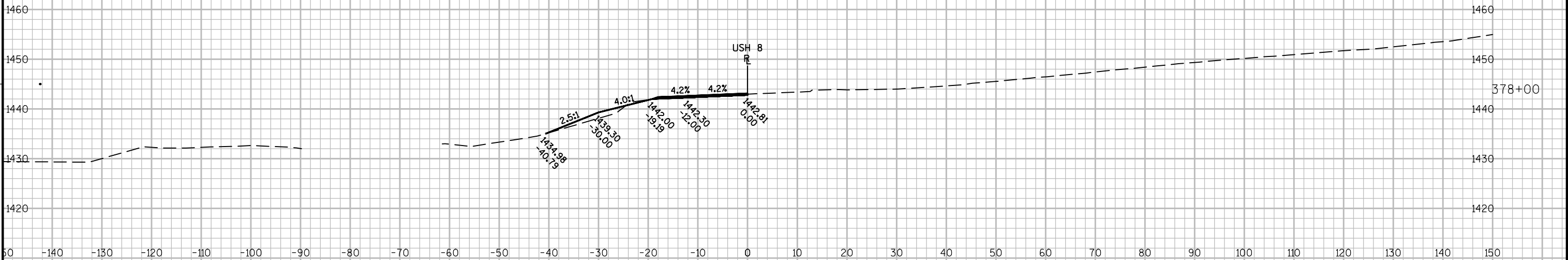
HWY: USH 8

COUNTY: MARINETTE

CROSS SECTIONS: USH 8

SHEET

E



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PROJECT NO:1590-16-71

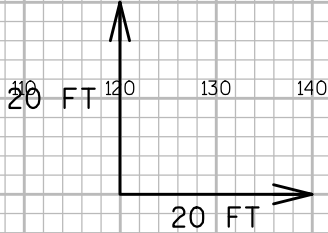
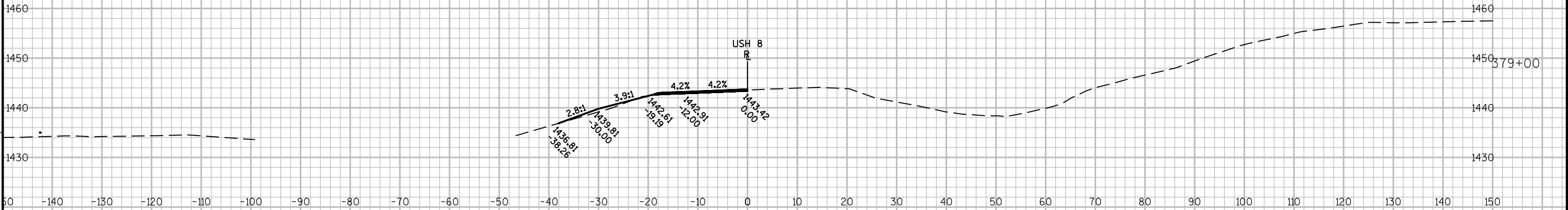
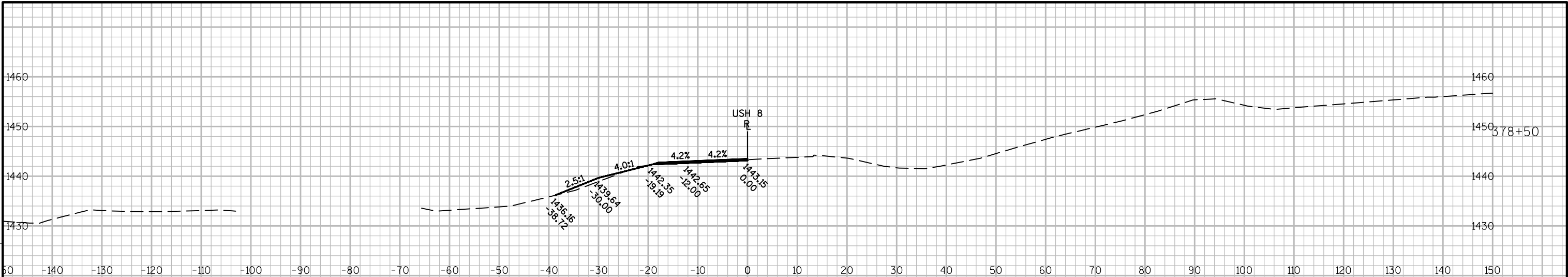
HWY: USH 8

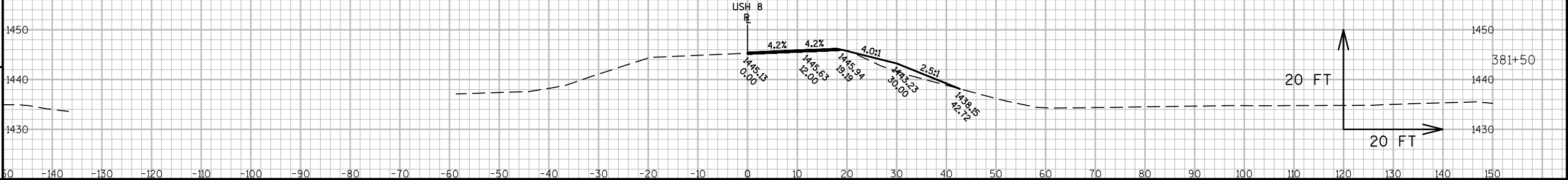
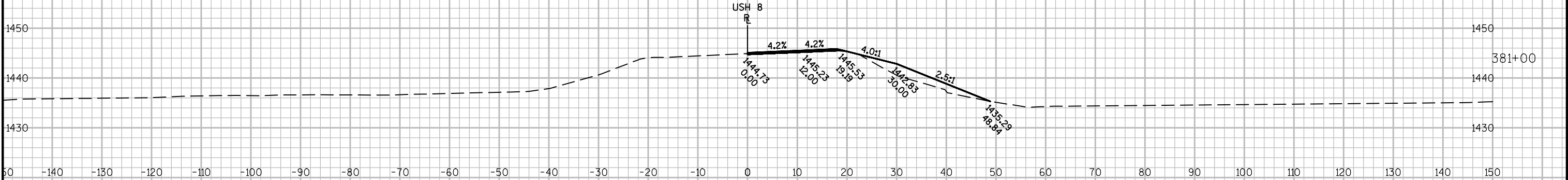
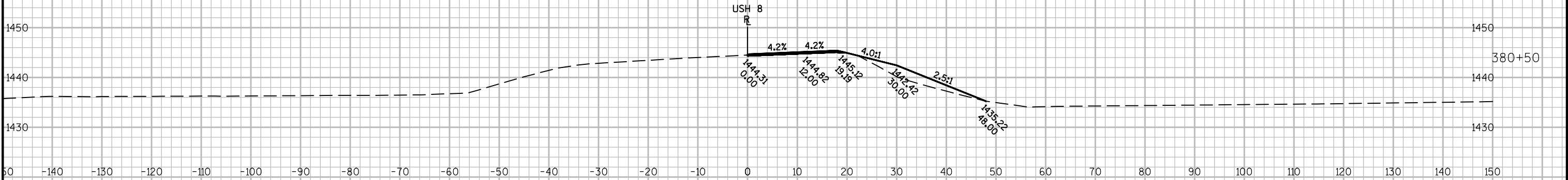
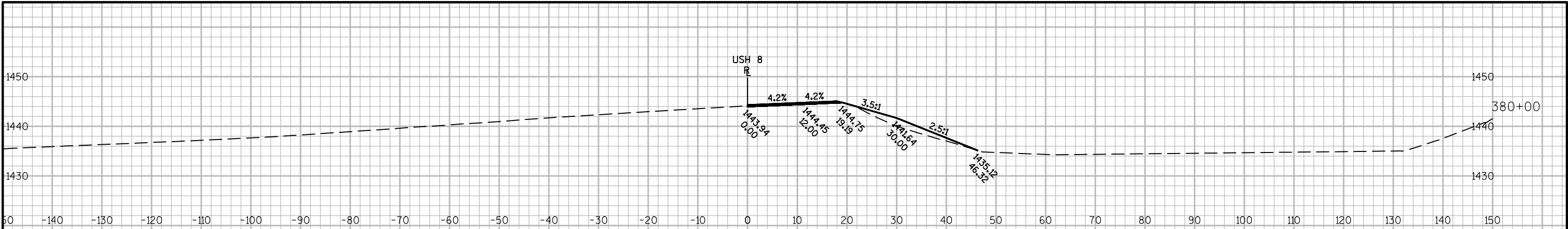
COUNTY: MARINETTE

CROSS SECTIONS: USH 8

SHEET

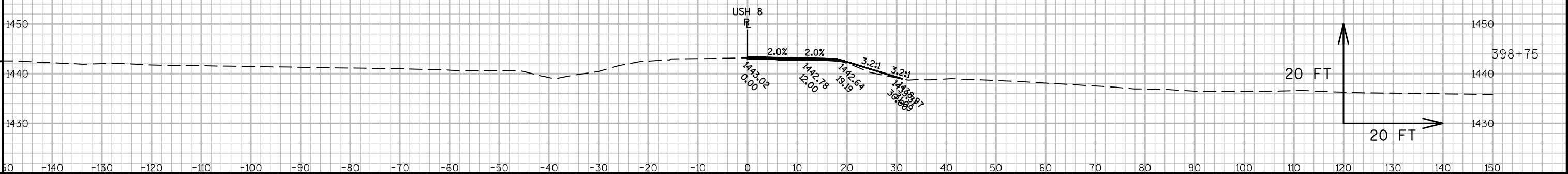
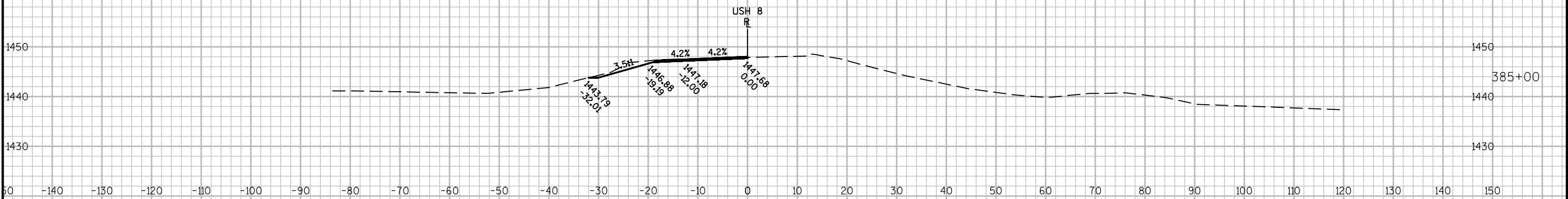
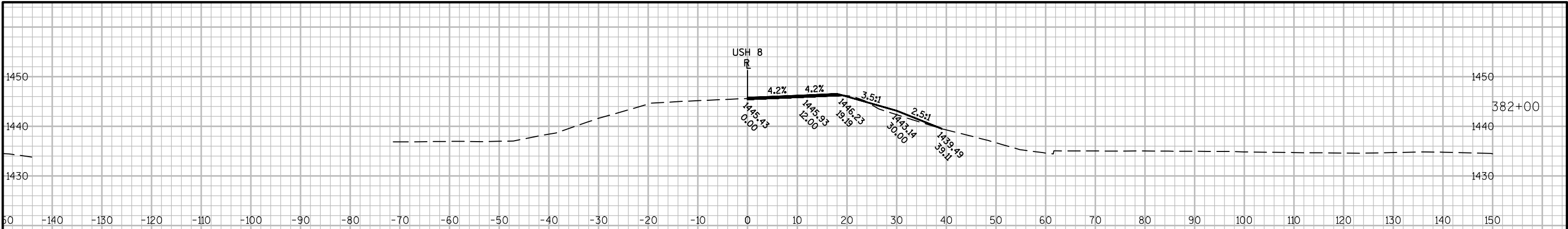
E

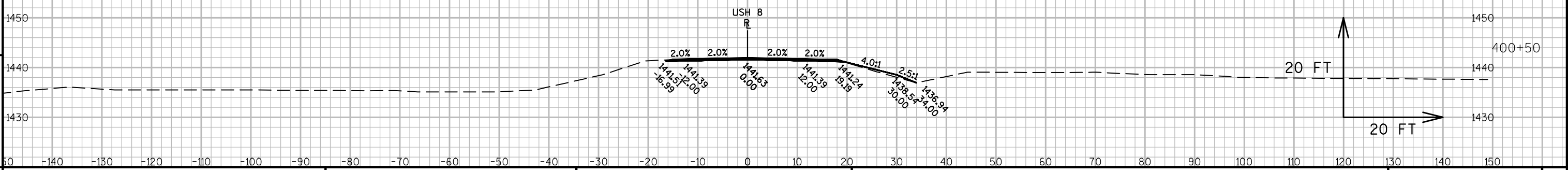
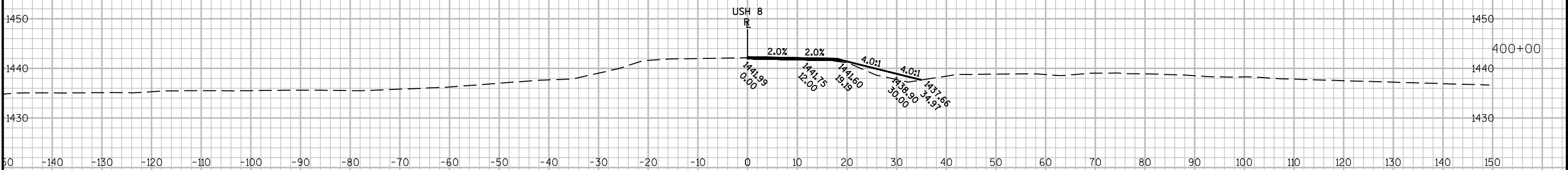
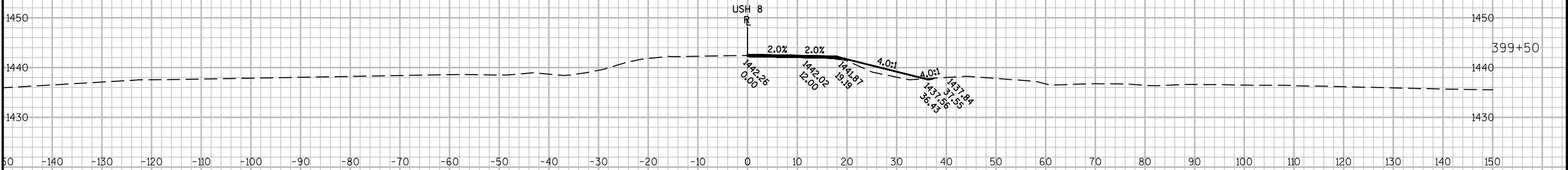
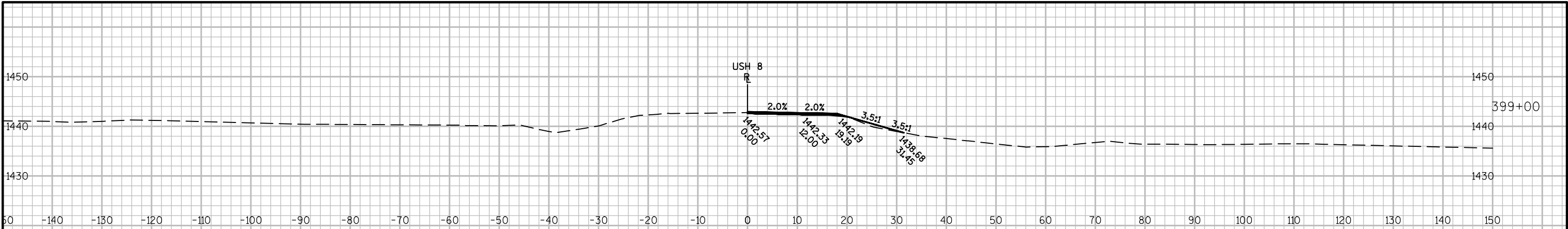


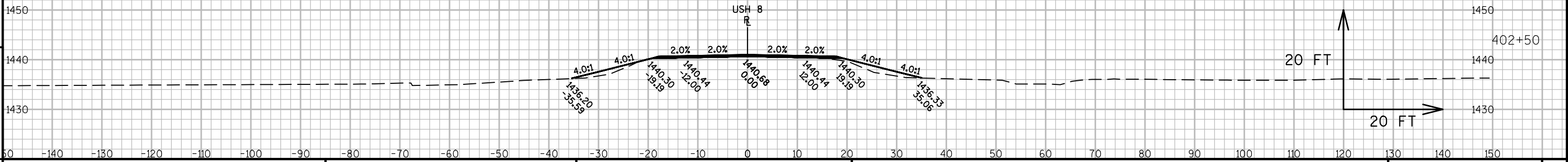
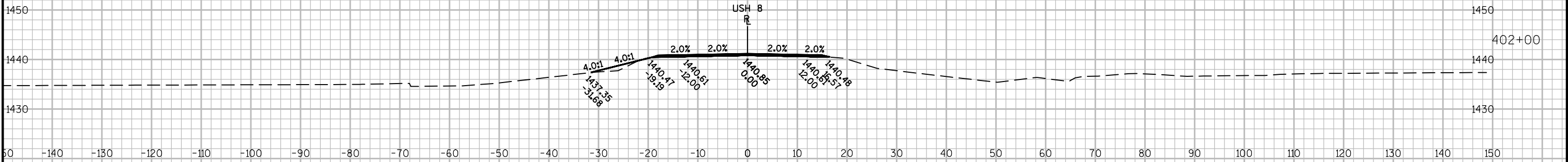
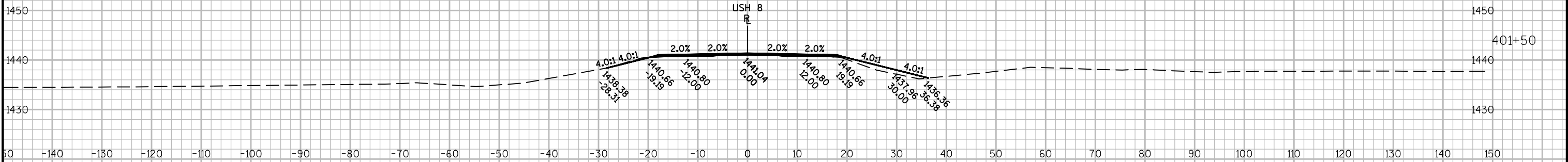
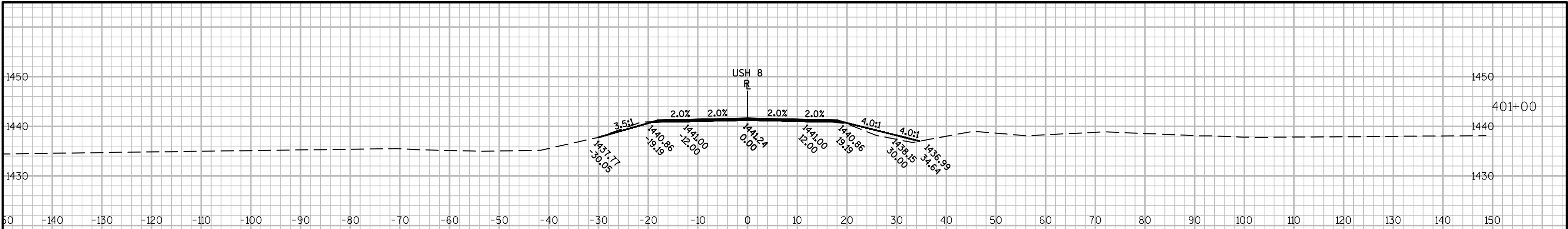


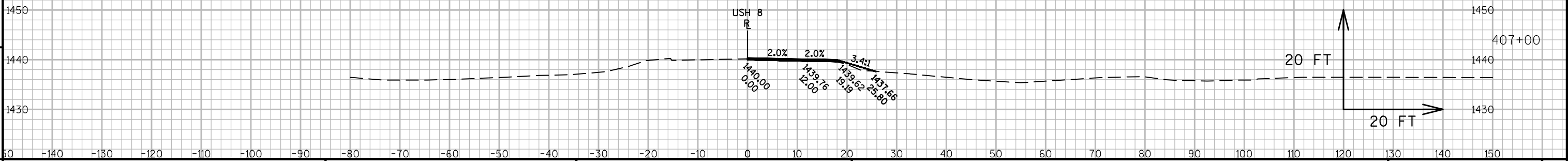
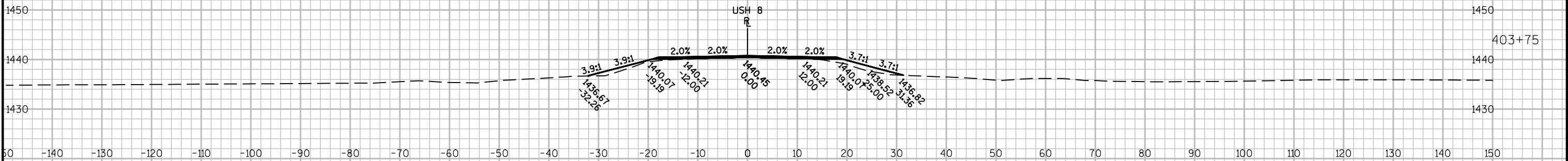
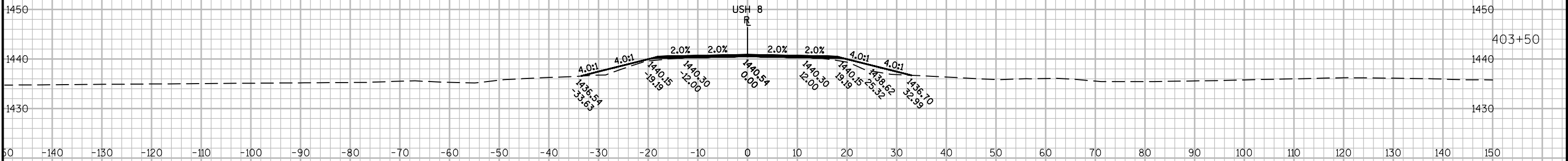
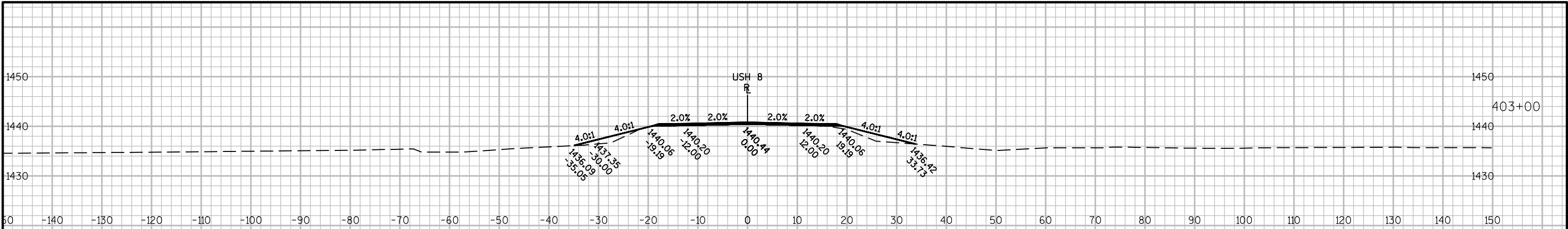
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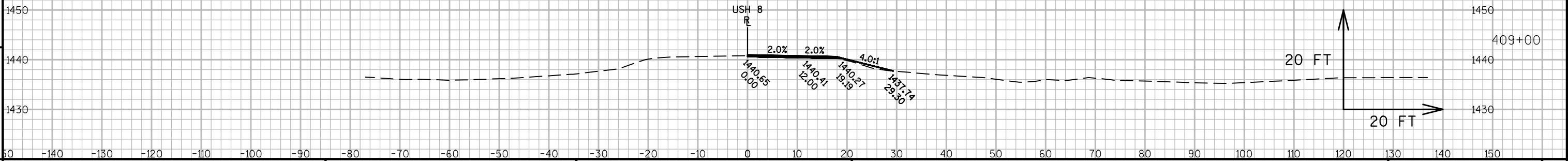
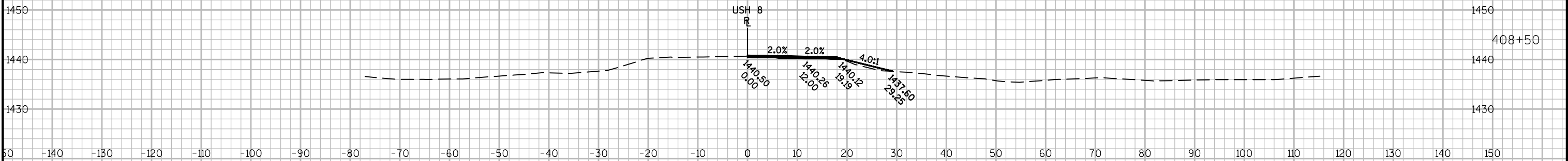
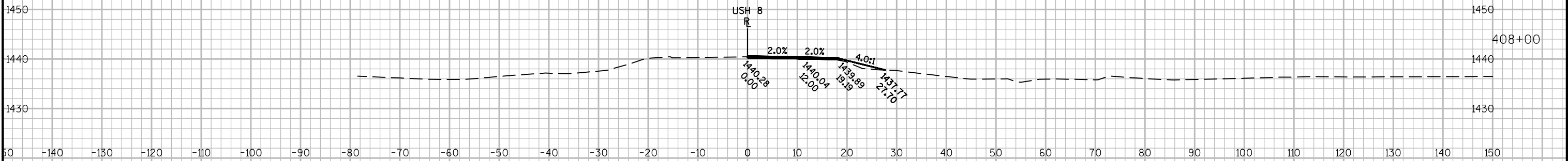
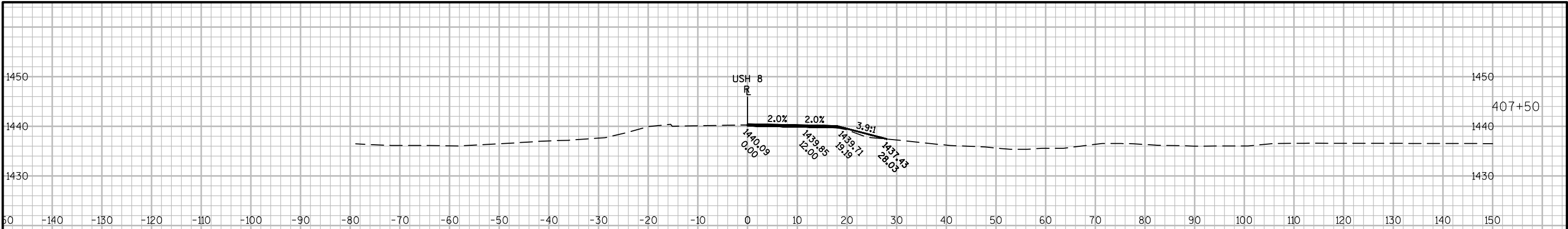






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PROJECT NO:1590-16-71

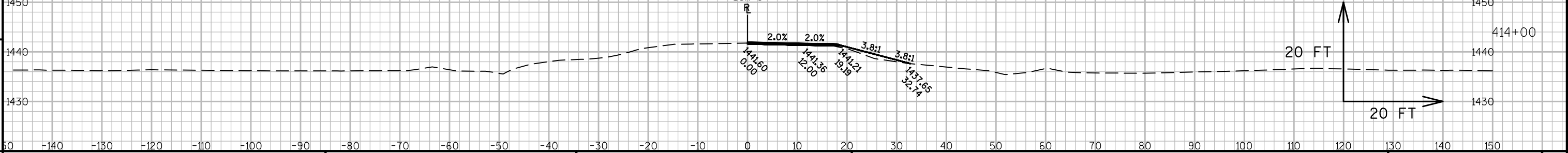
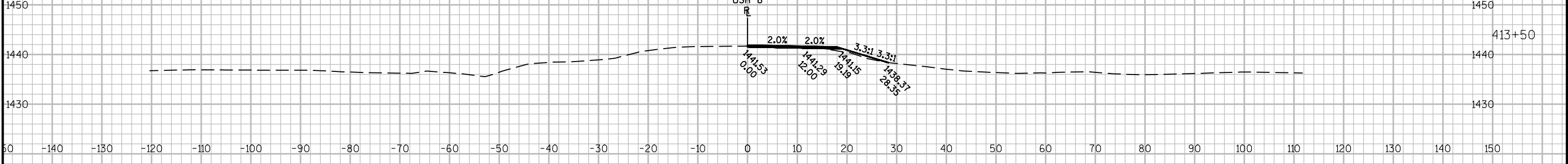
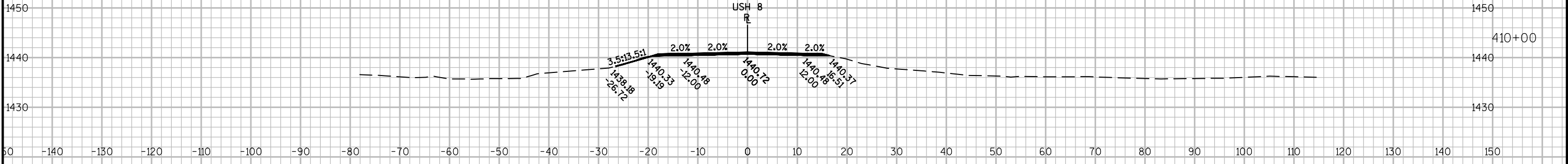
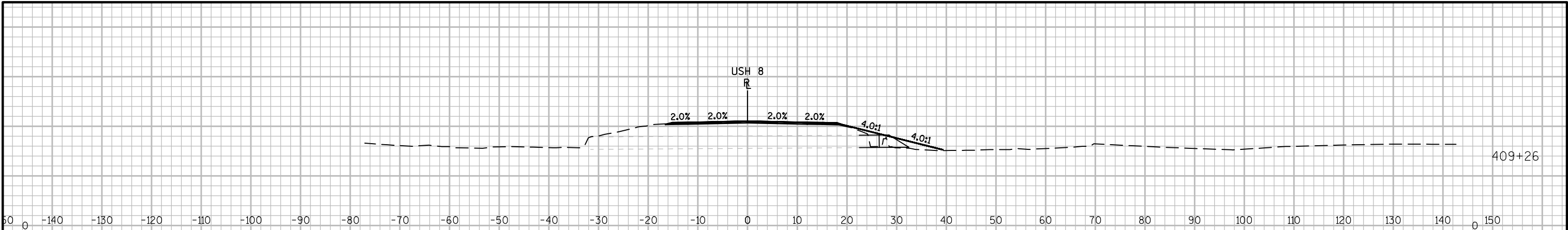
HWY: USH 8

COUNTY: MARINETTE

CROSS SECTIONS: USH 8

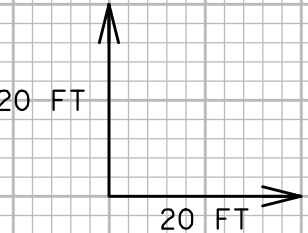
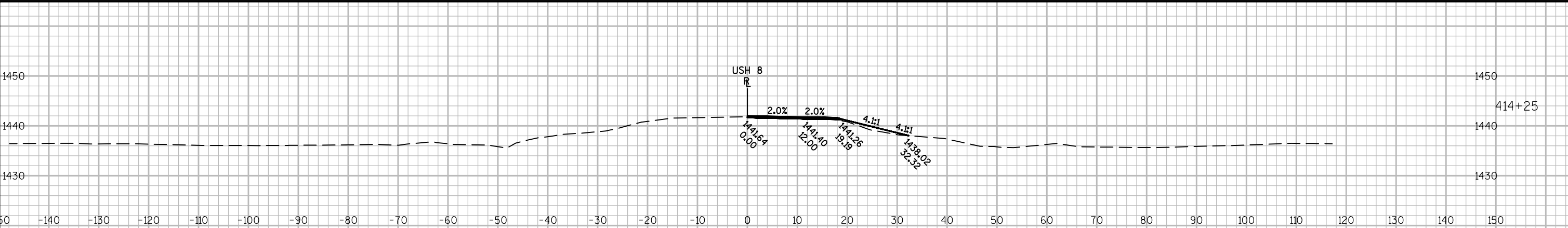
SHEET

E



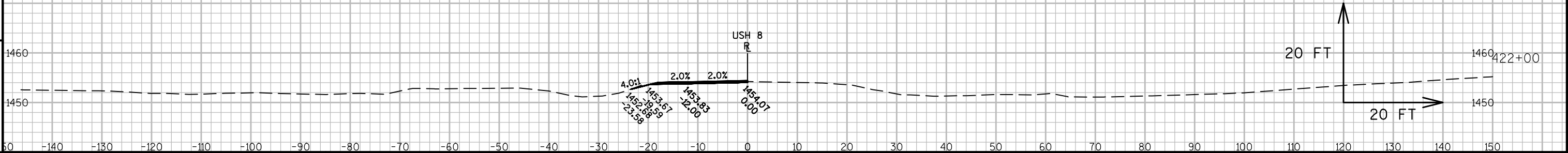
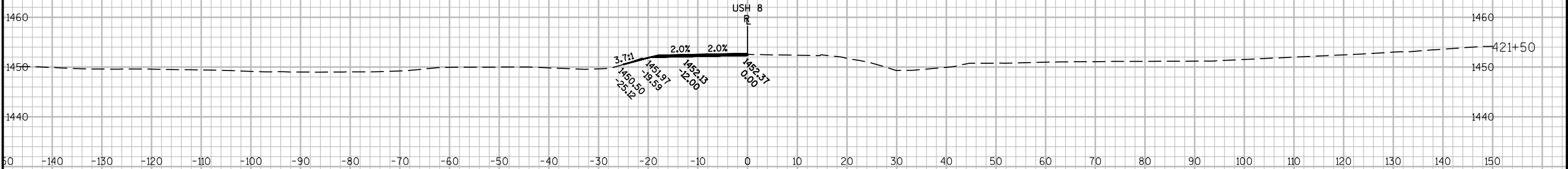
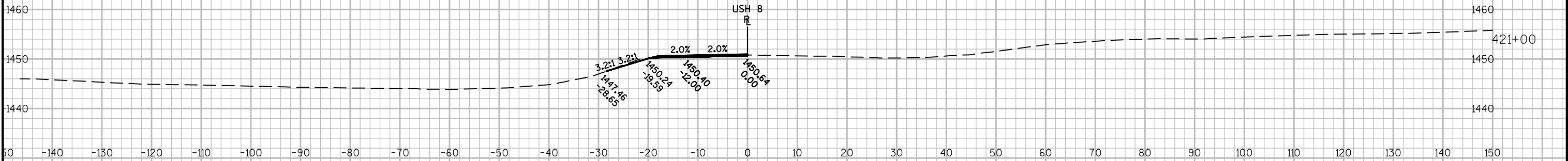
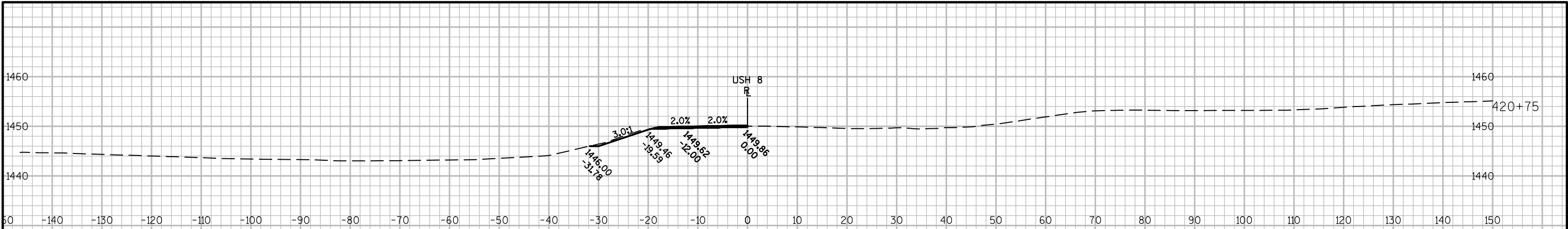
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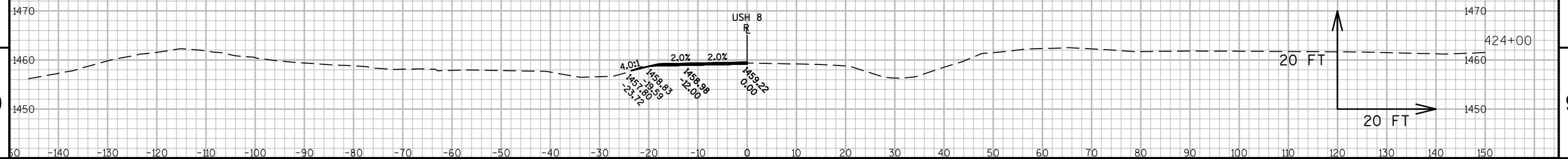
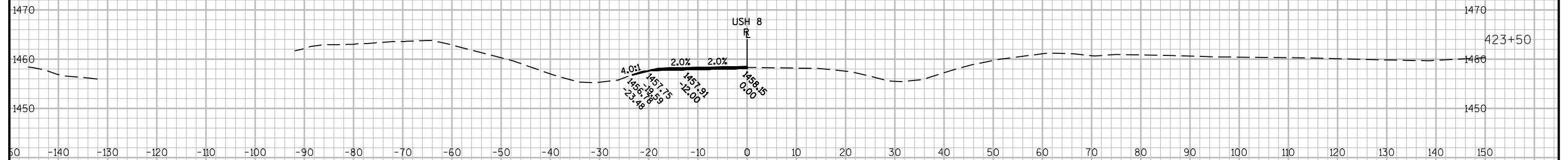
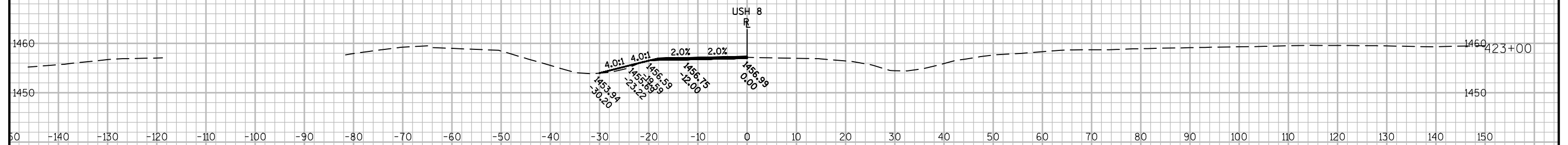
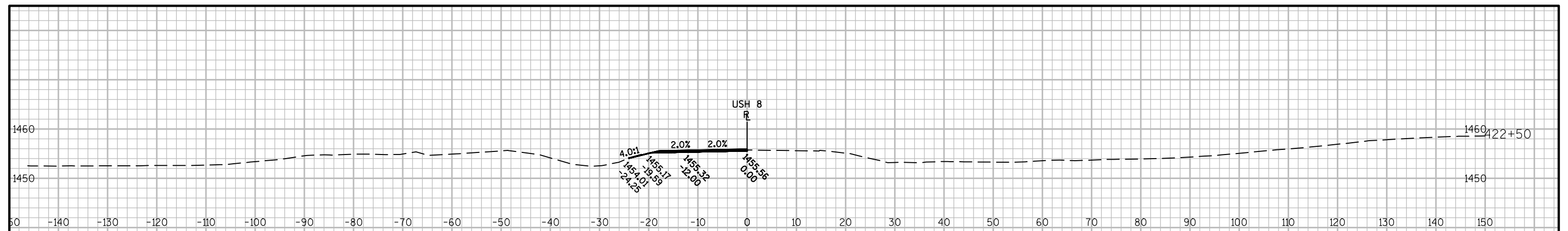
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20 FT

20 FT

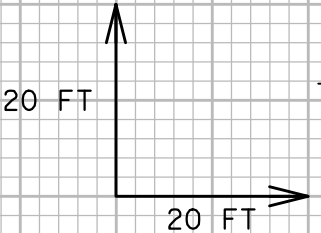
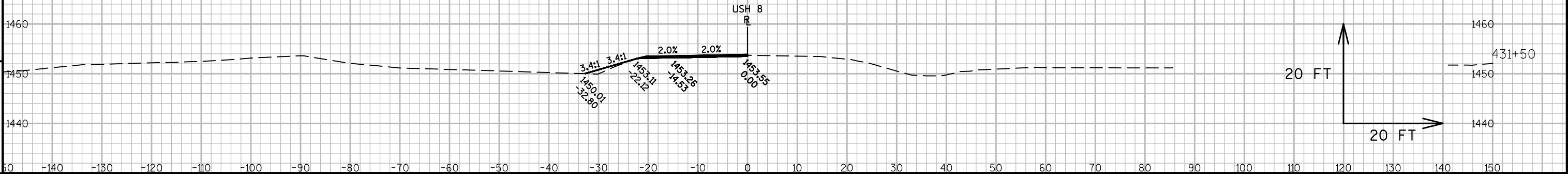
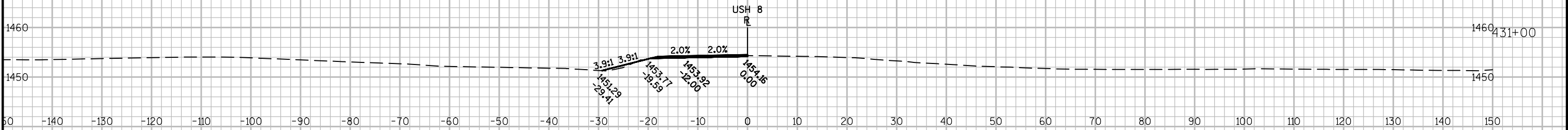
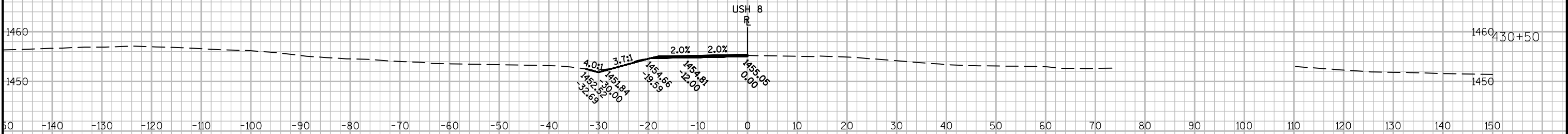
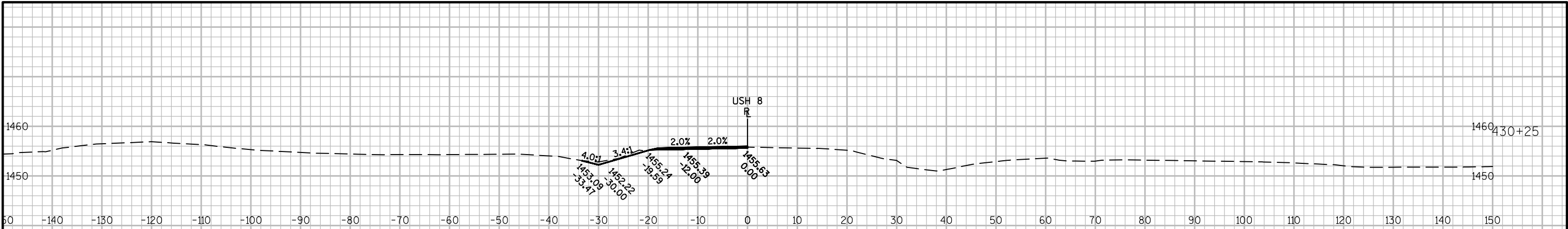
PROJECT NO:1590-16-71

HWY: USH 8

COUNTY: MARINETTE

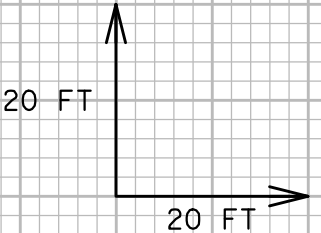
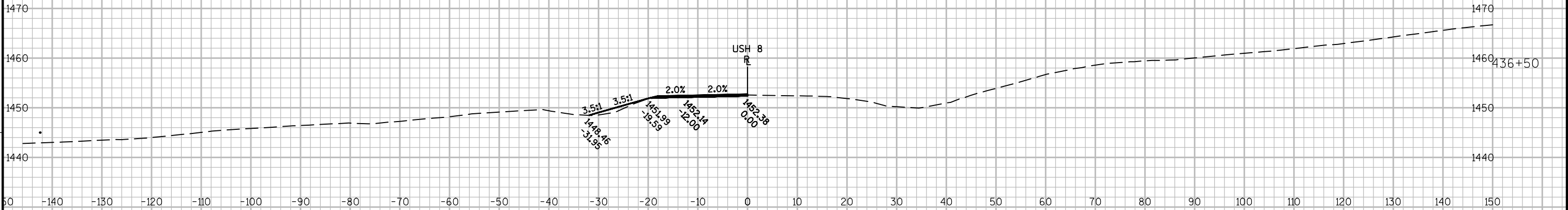
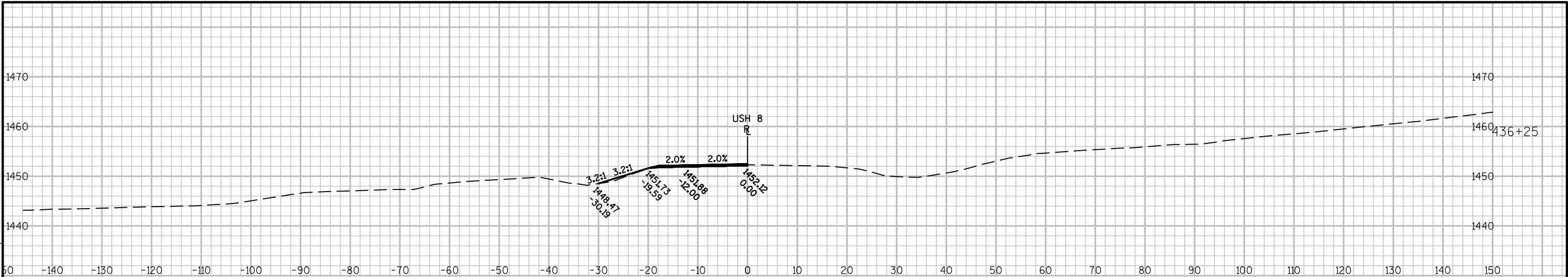
CROSS SECTIONS: USH 8

SHEET



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PROJECT NO:1590-16-71

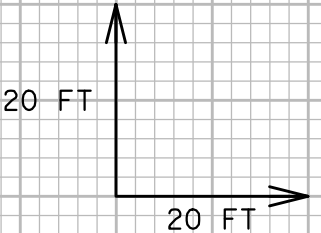
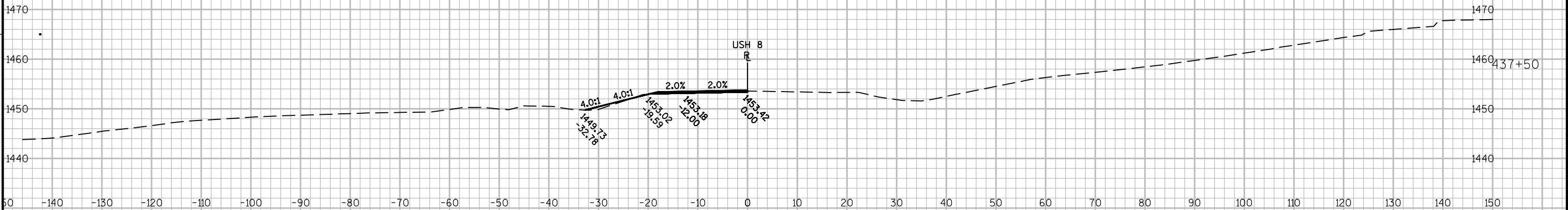
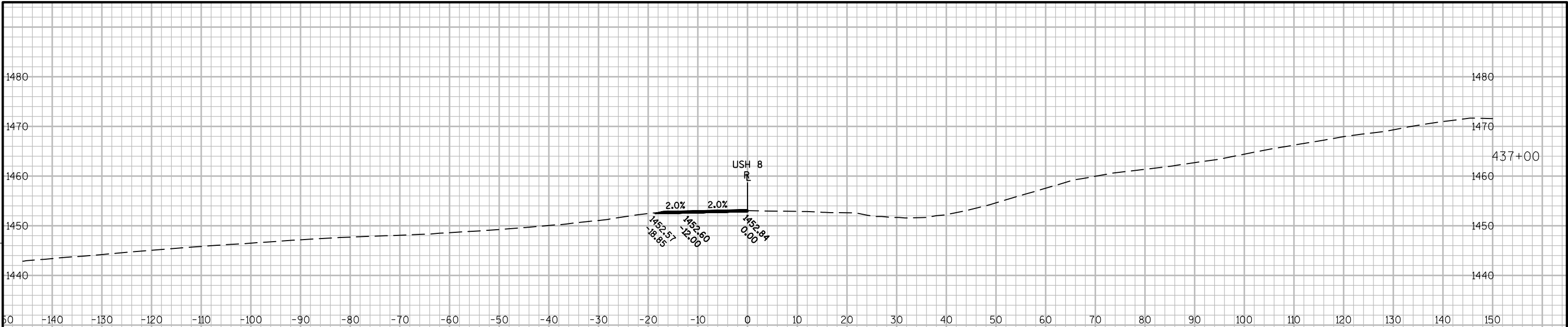
HWY: USH 8

COUNTY: MARINETTE

CROSS SECTIONS: USH 8

SHEET

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PROJECT NO:1590-16-71

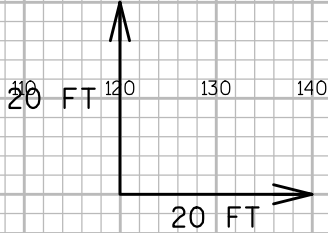
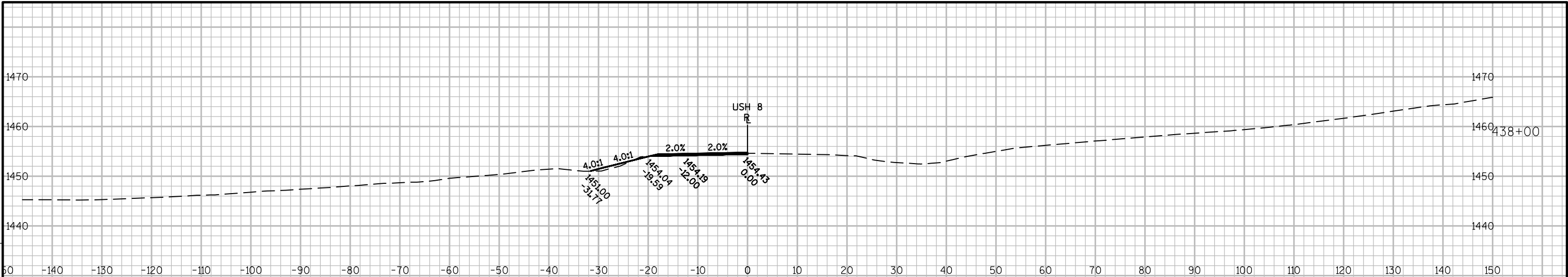
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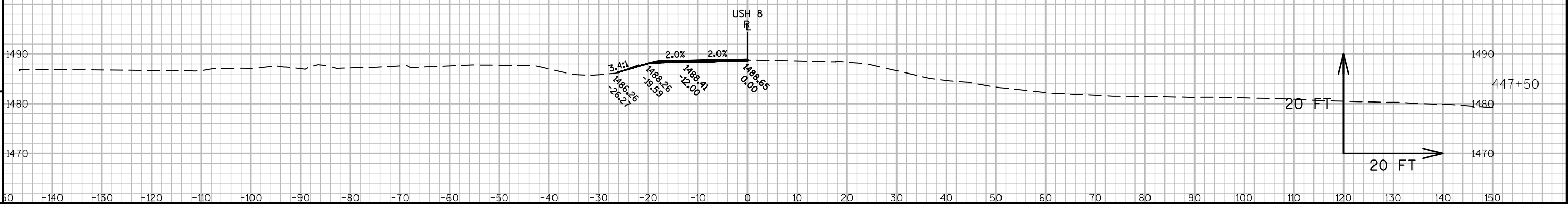
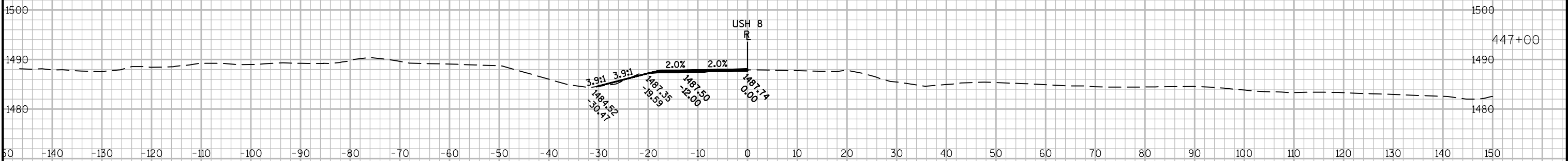
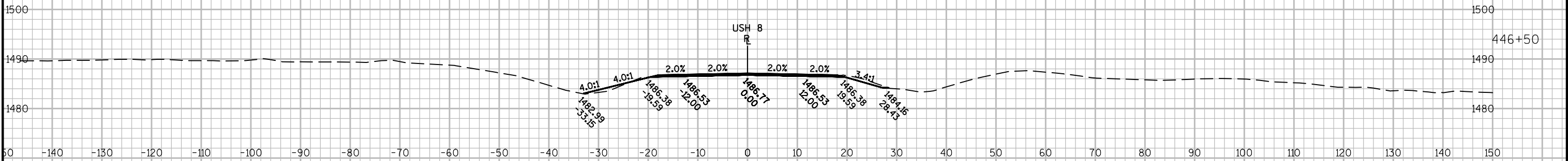
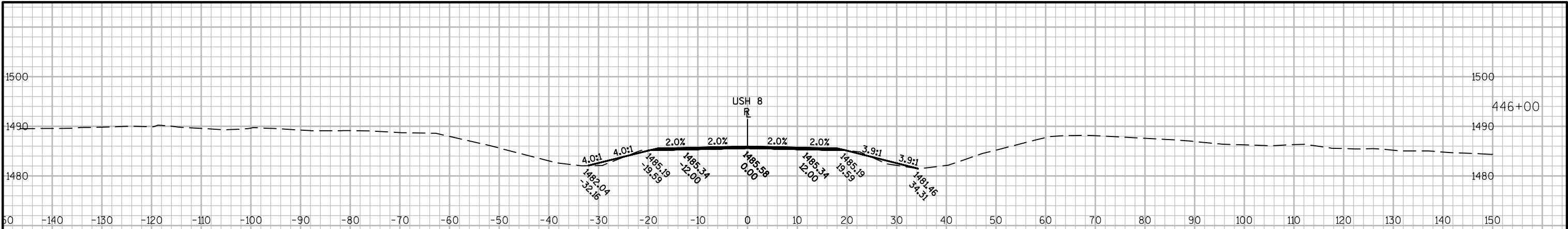
COUNTY: MARINETTE

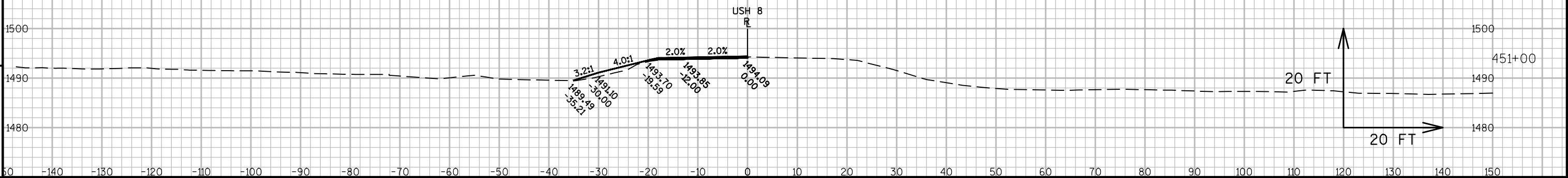
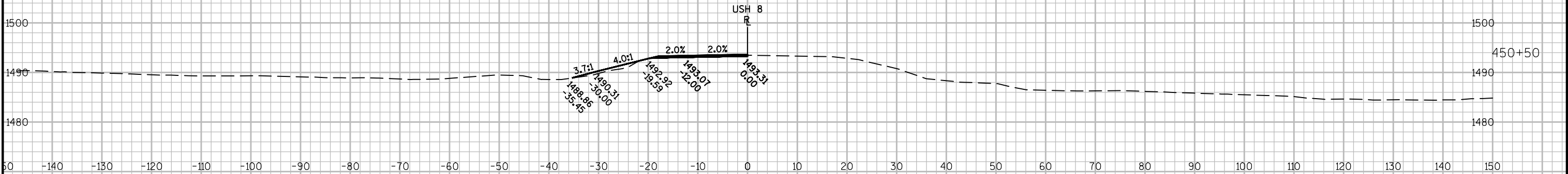
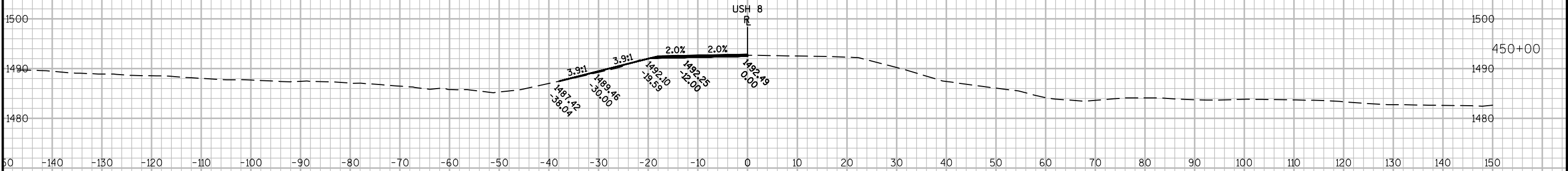
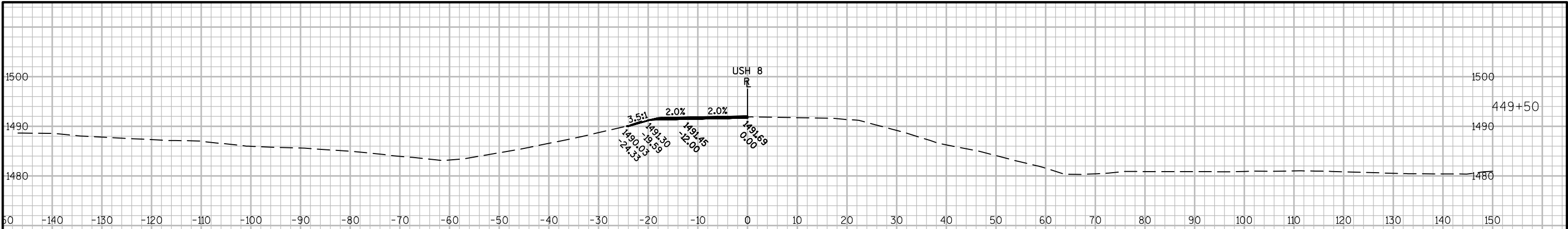
CROSS SECTIONS: USH 8

SHEET

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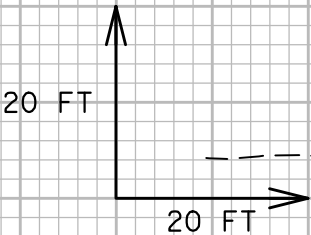
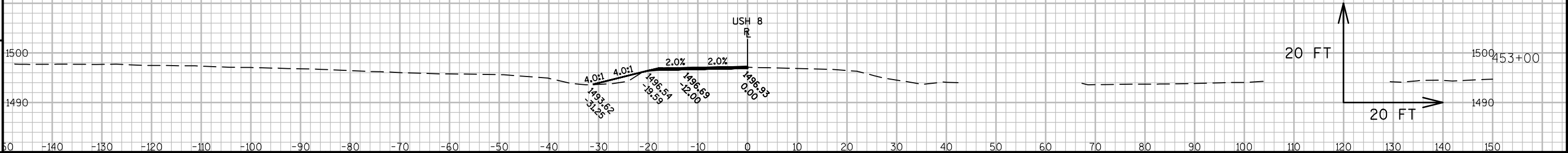
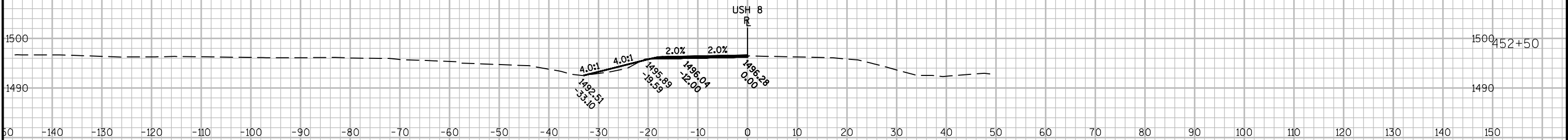
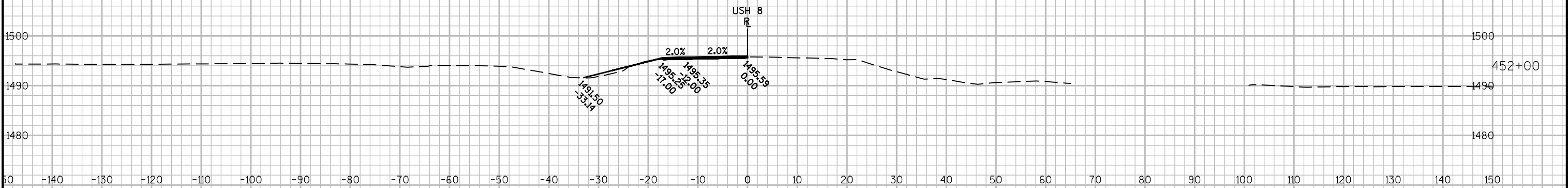
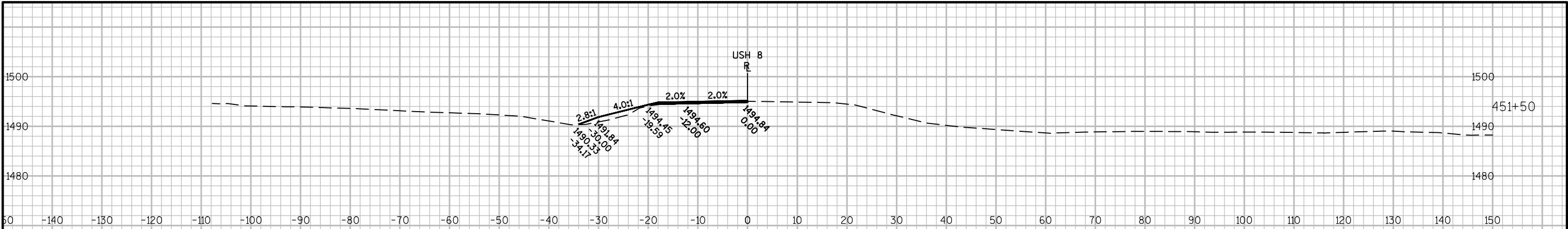






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PROJECT NO:1590-16-71

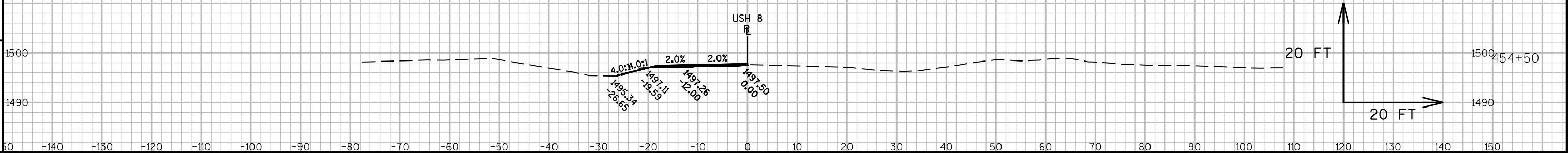
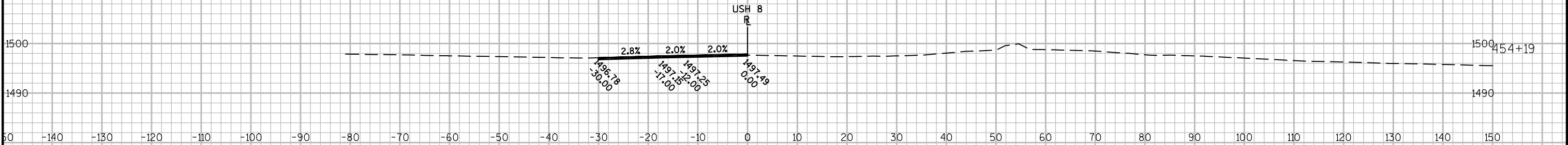
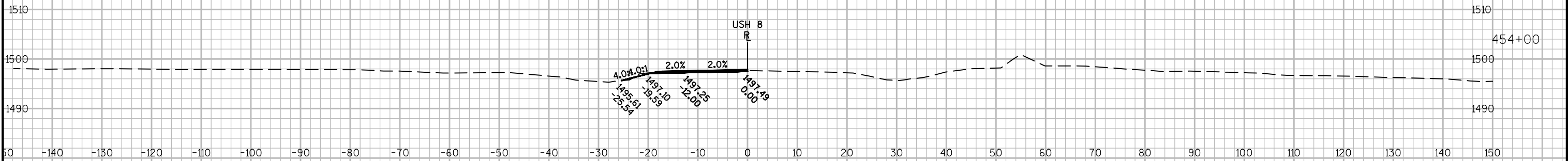
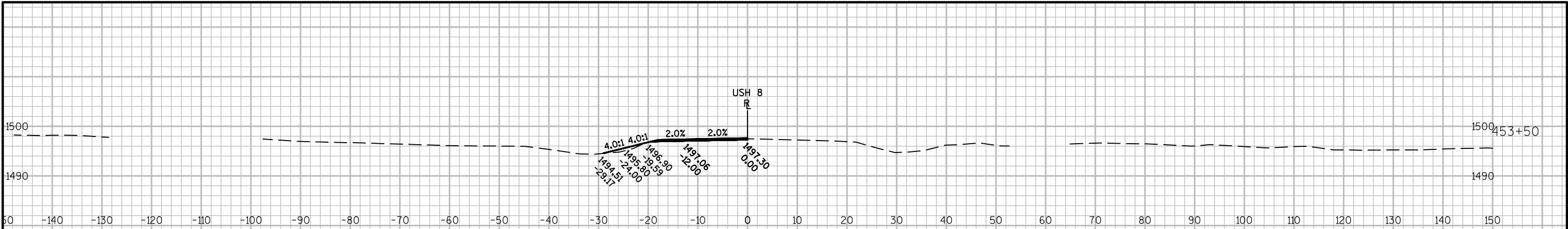
HWY: US H 8

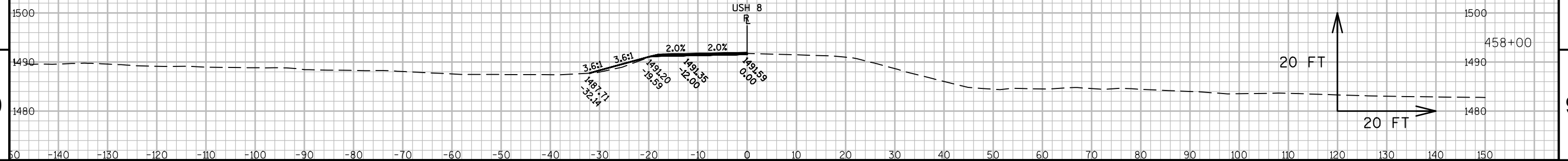
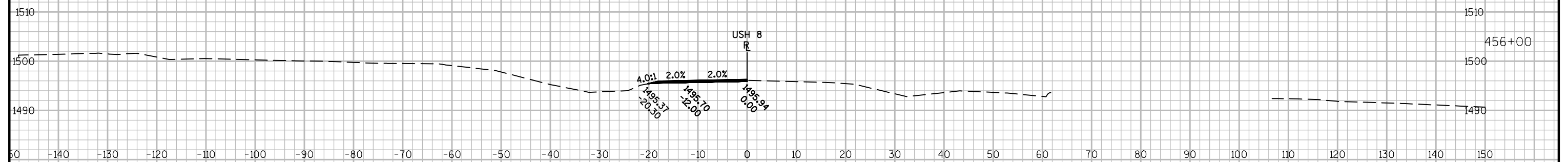
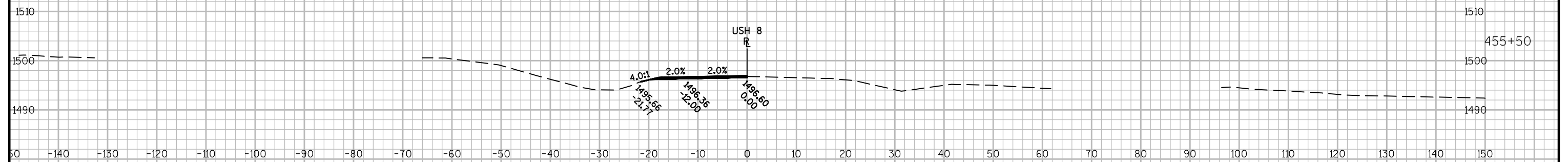
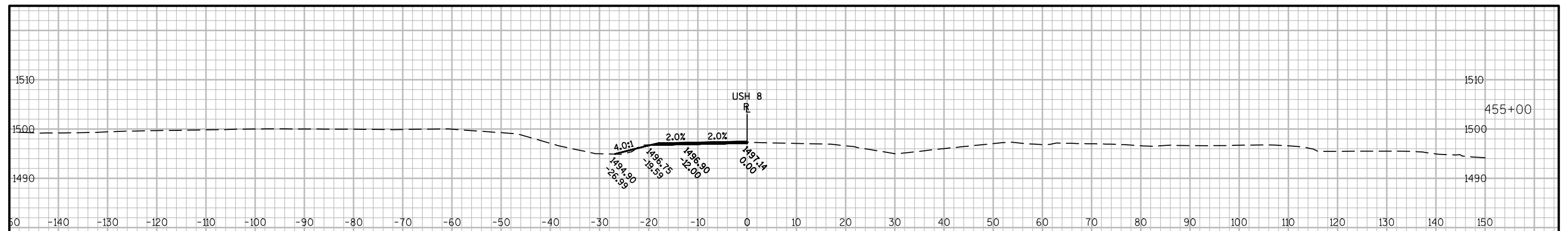
COUNTY: MARINETTE

CROSS SECTIONS: US H 8

SHEET

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PROJECT NO:1590-16-71

HWY: USH 8

COUNTY: MARINETTE

CROSS SECTIONS: USH 8

SHEET

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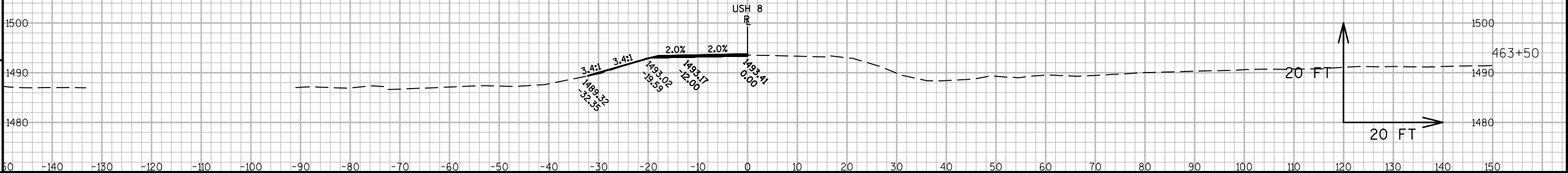
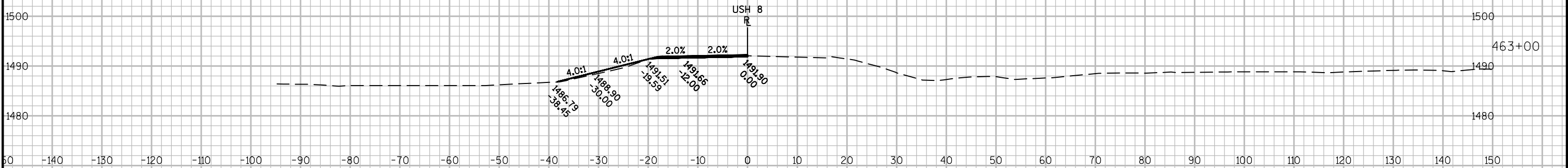
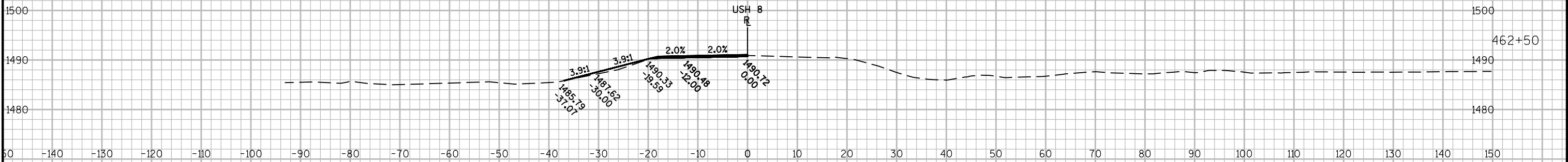
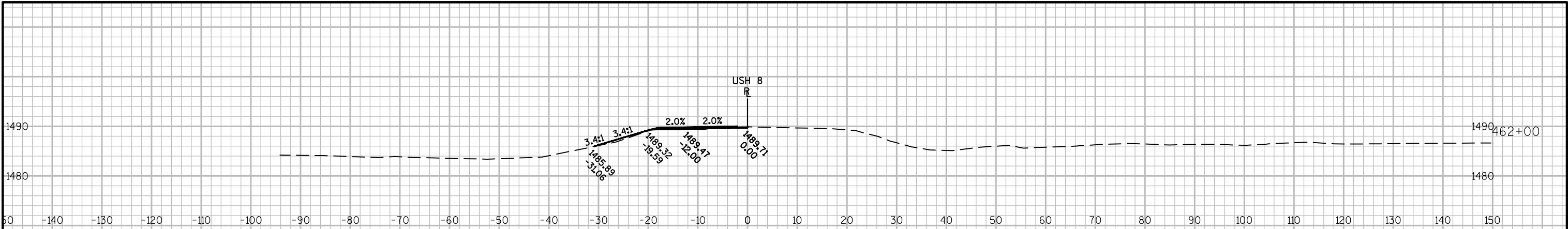
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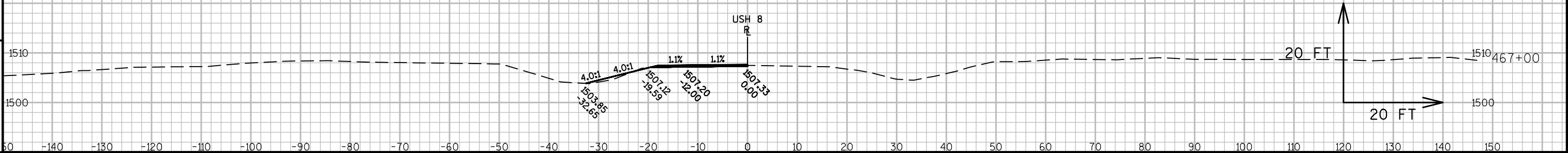
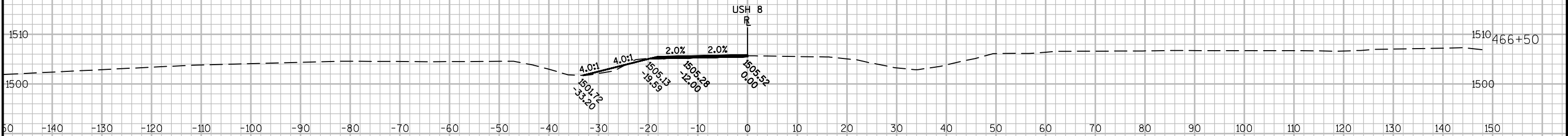
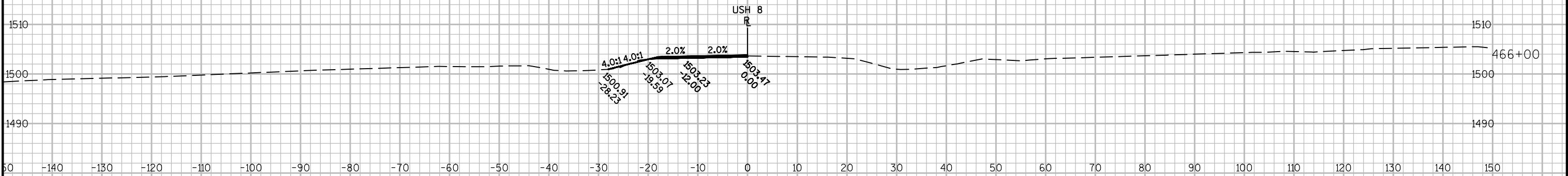
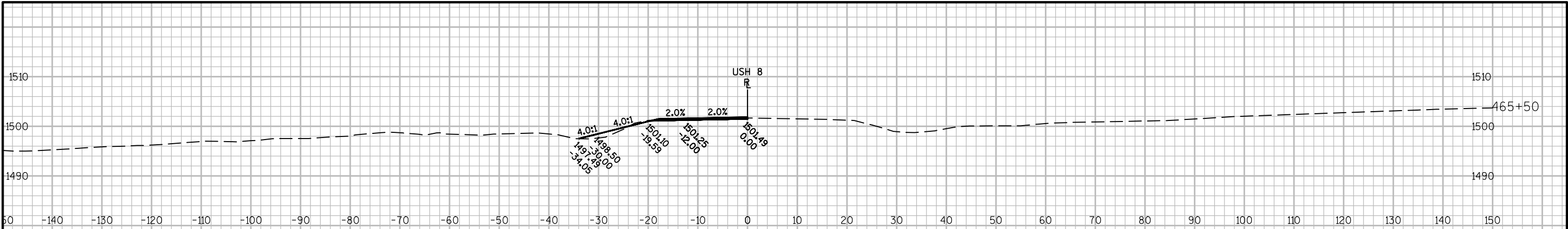
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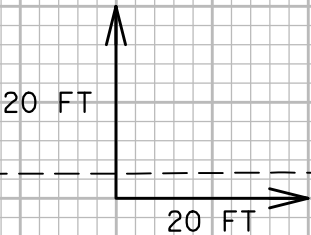
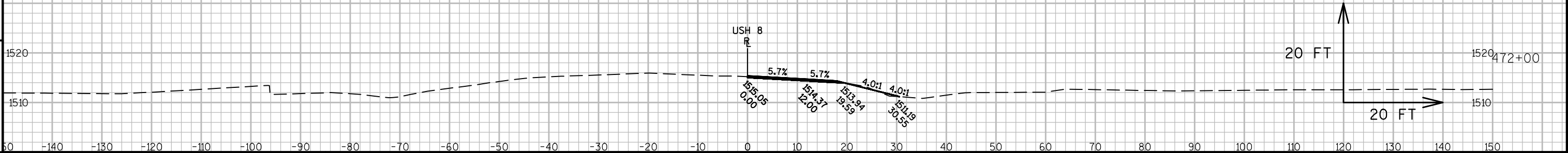
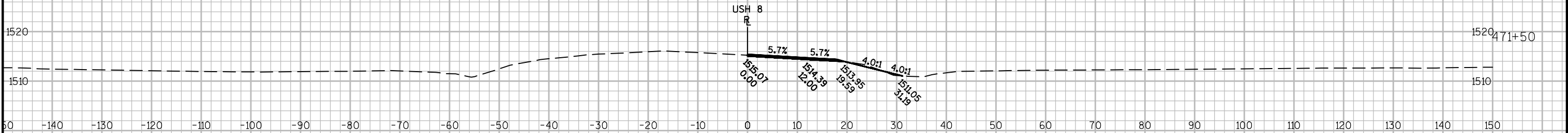
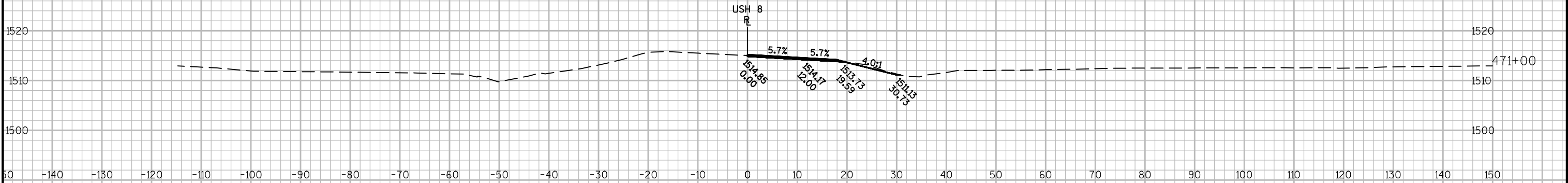
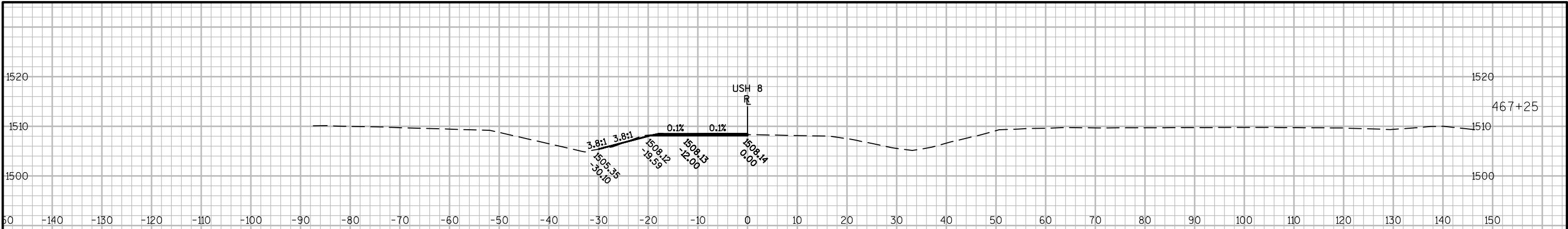
WISDOT/CADDS SHEET 49



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PROJECT NO:1590-16-71

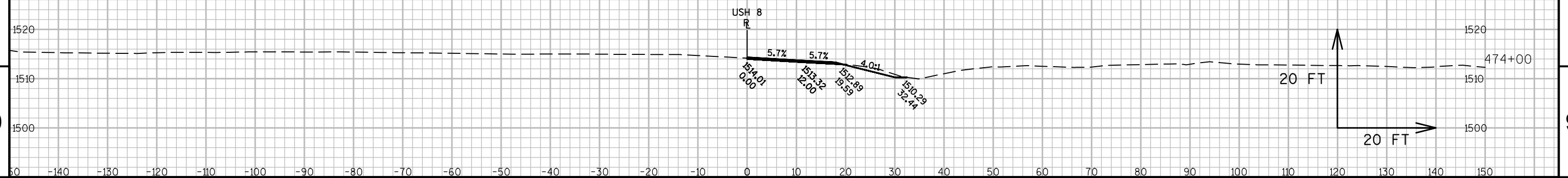
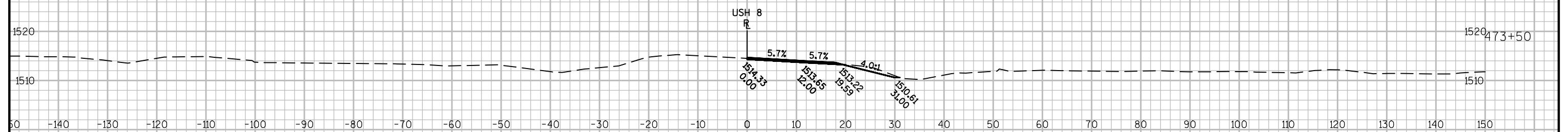
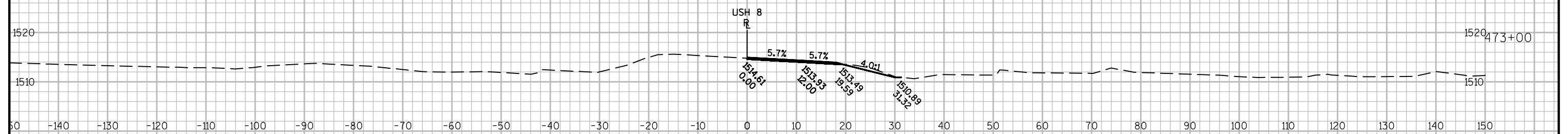
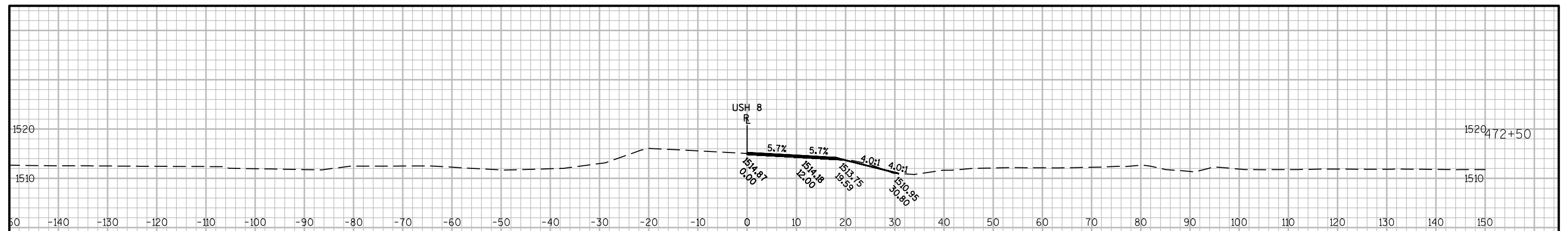
HWY: USH 8

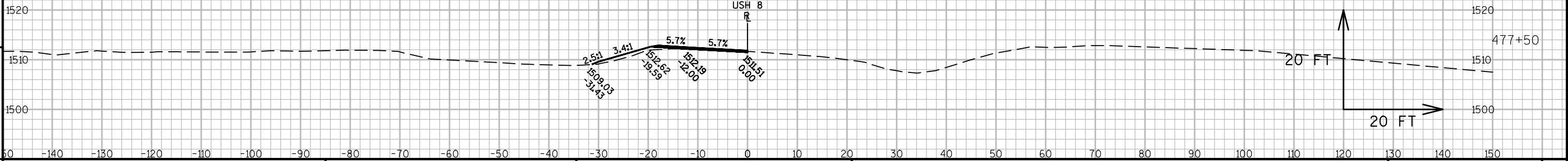
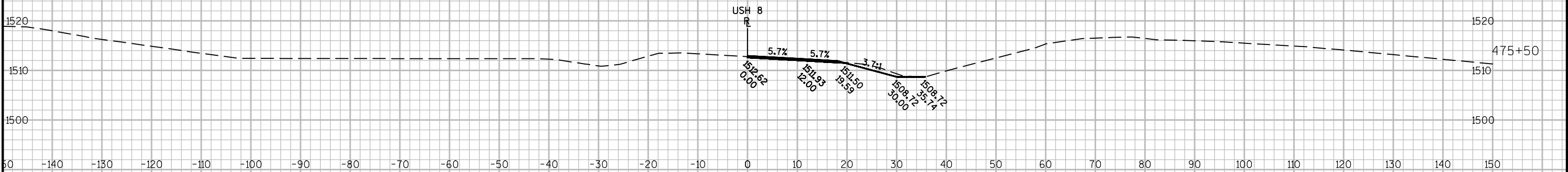
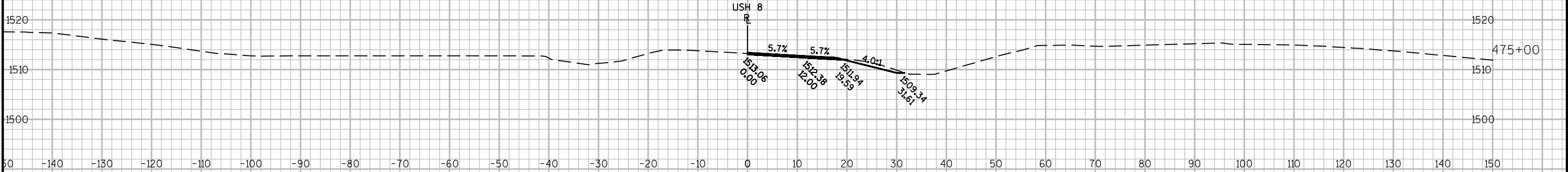
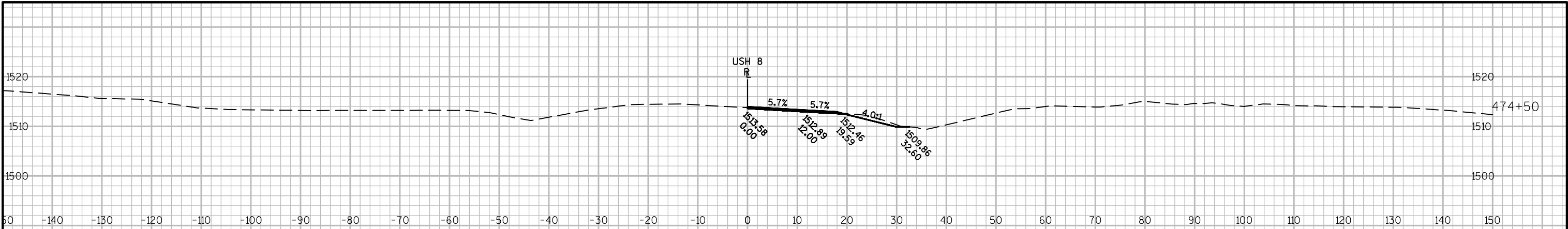
COUNTY: MARINETTE

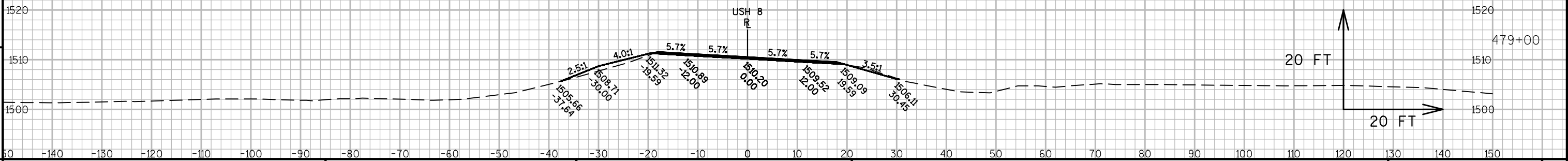
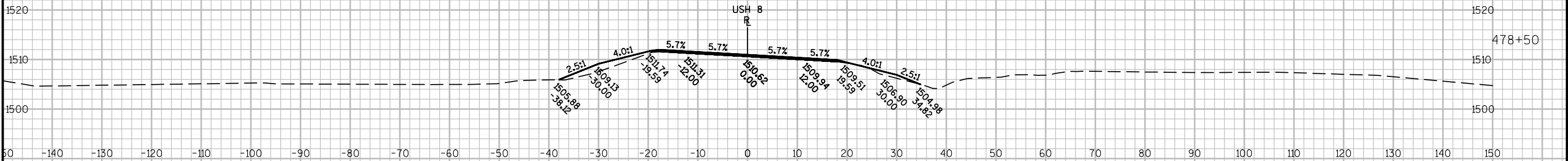
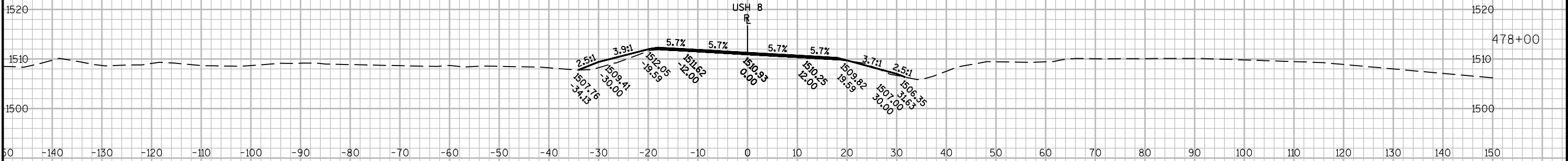
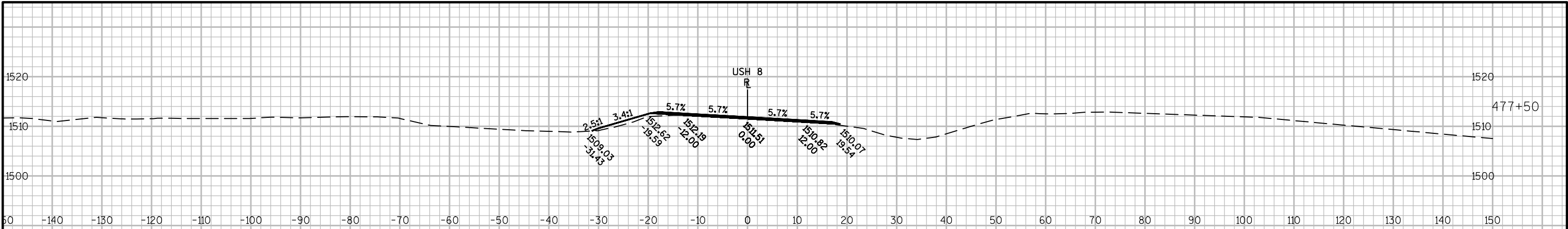
CROSS SECTIONS: USH 8

SHEET

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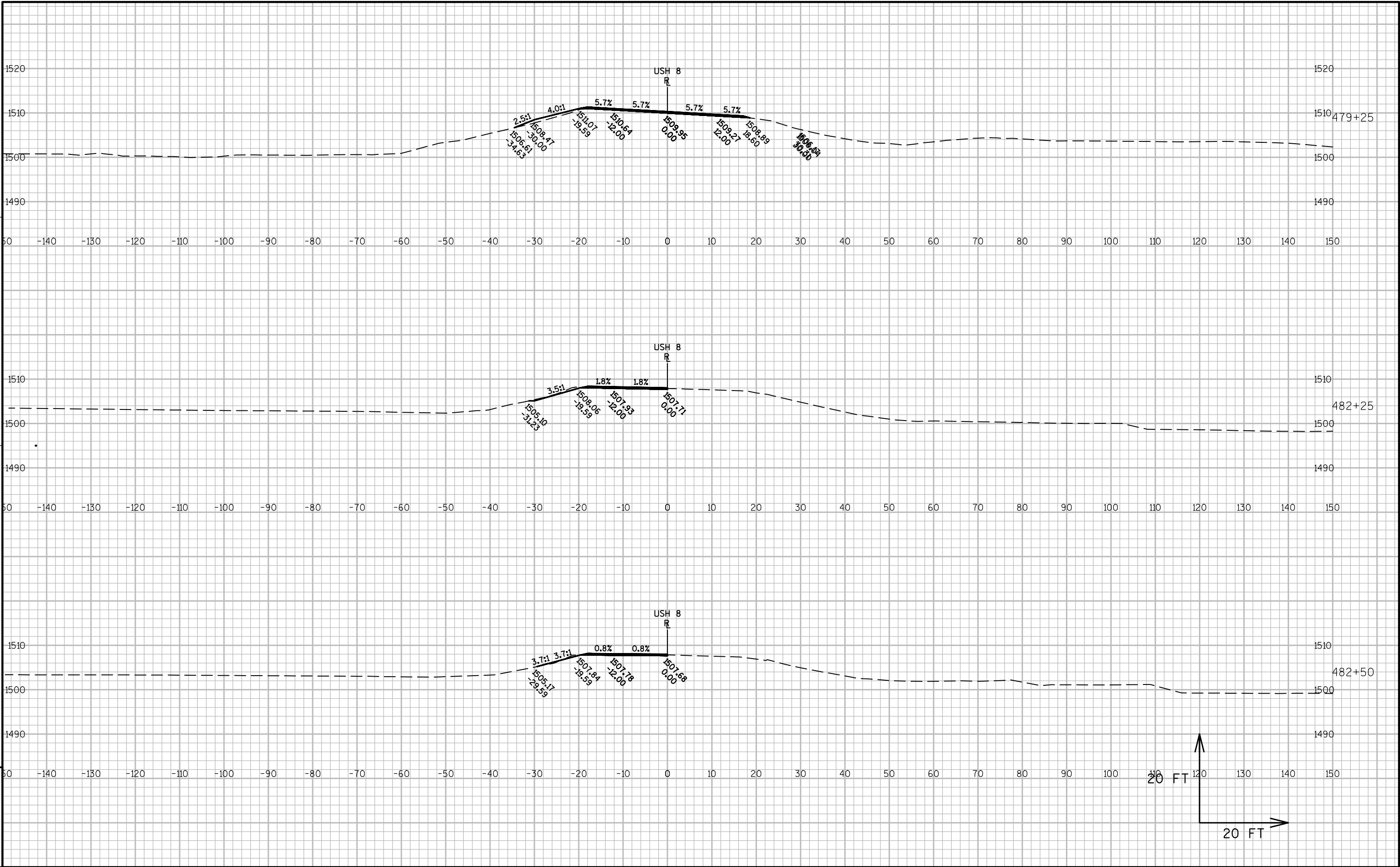


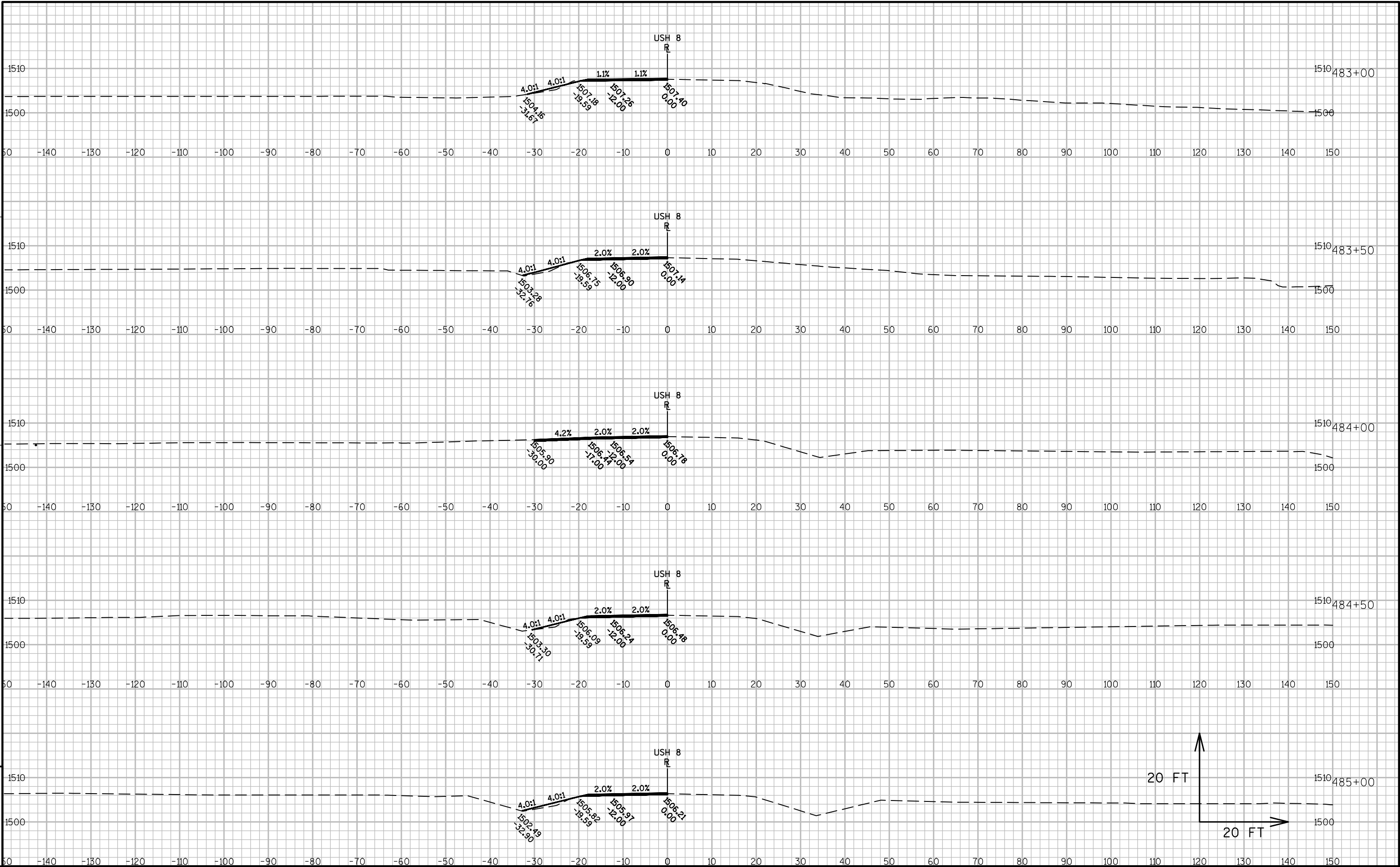


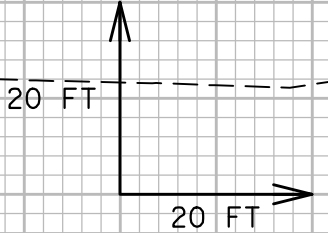
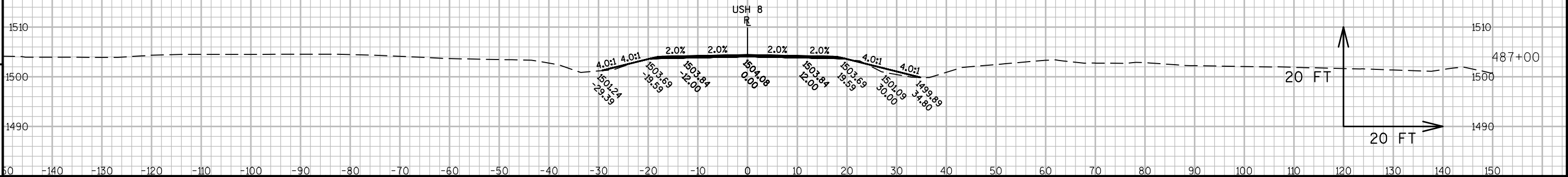
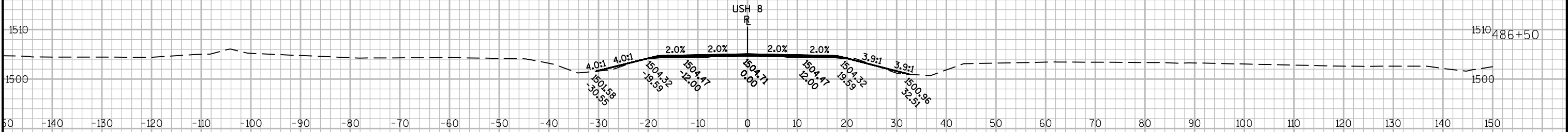
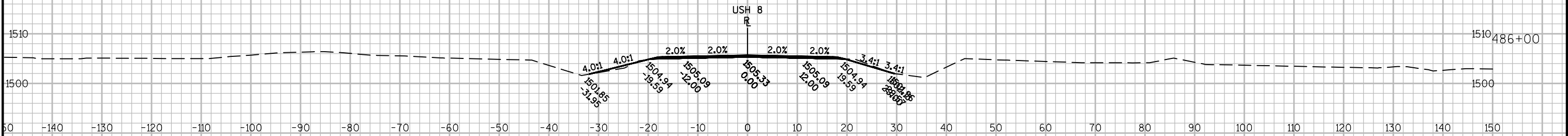
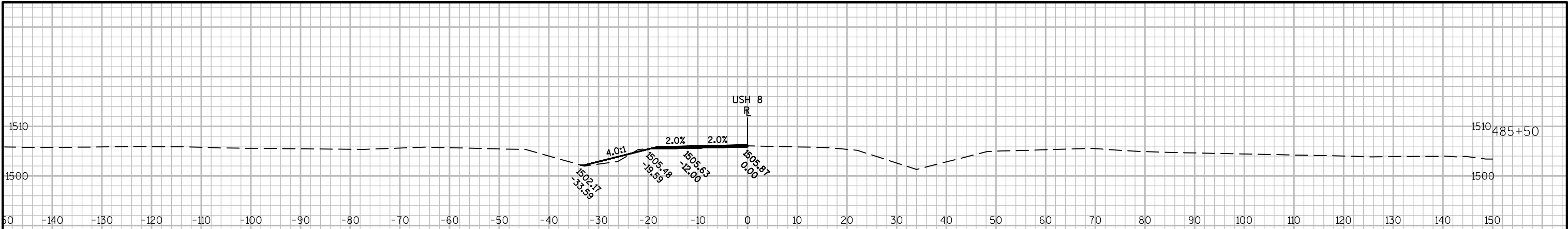


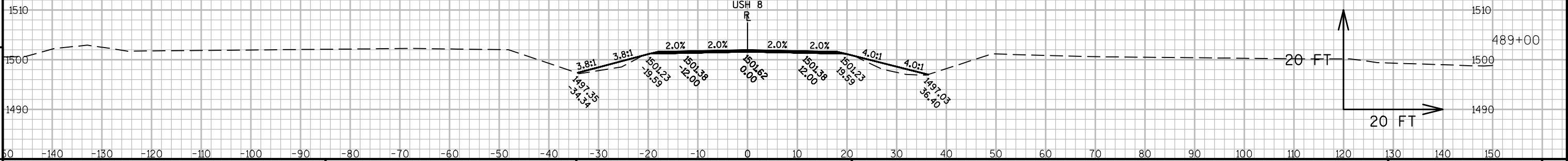
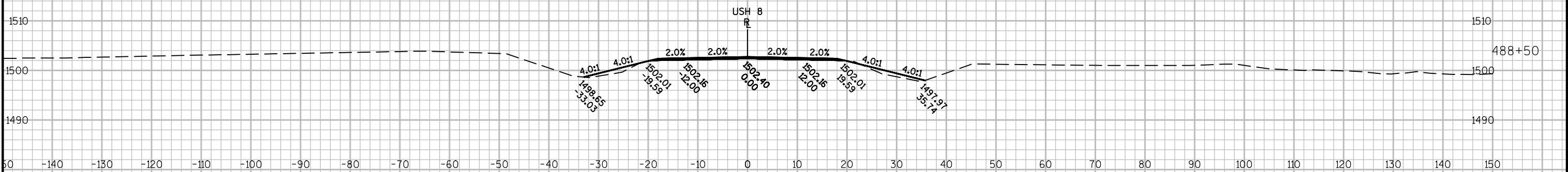
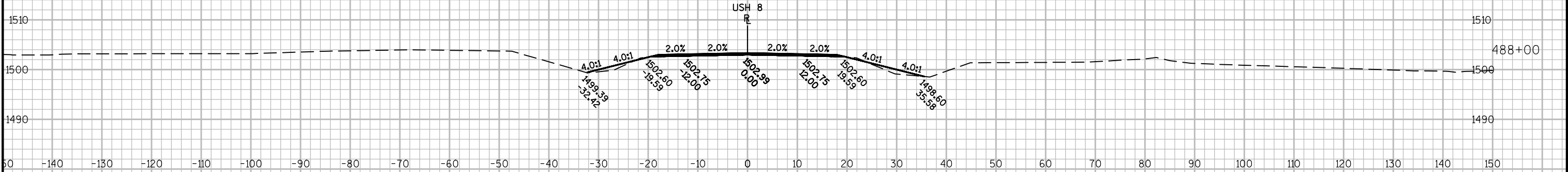
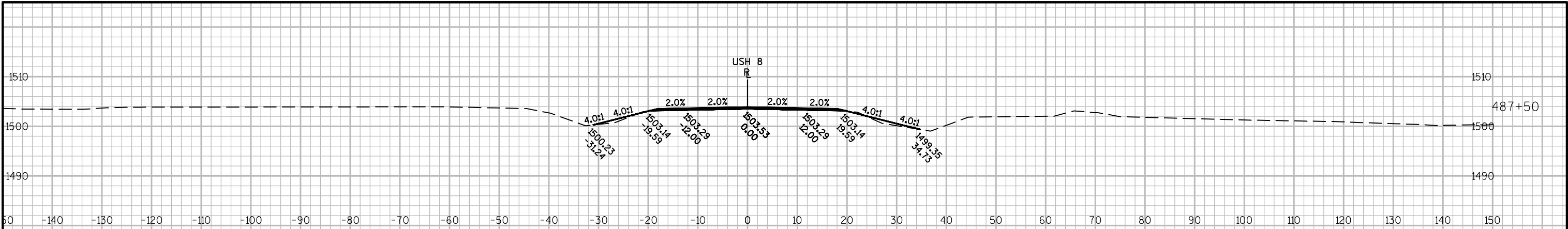
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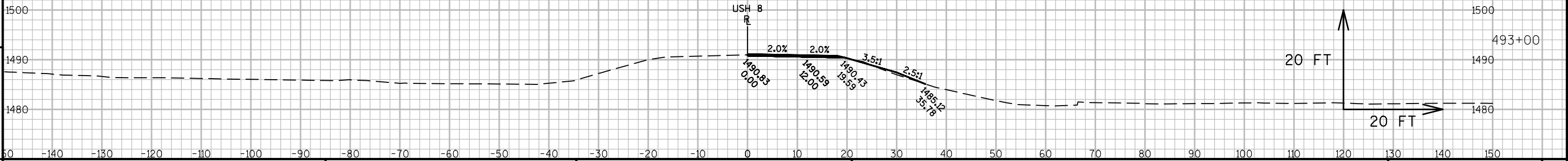
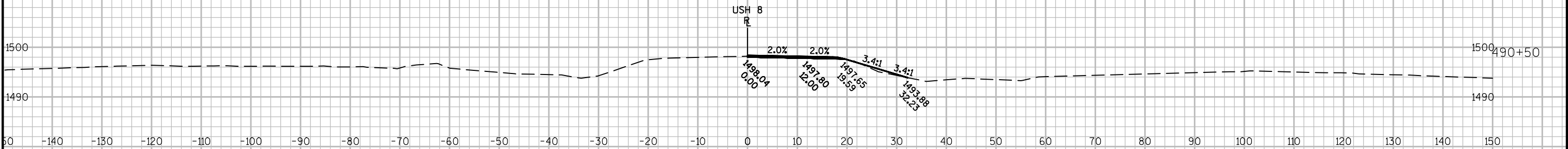
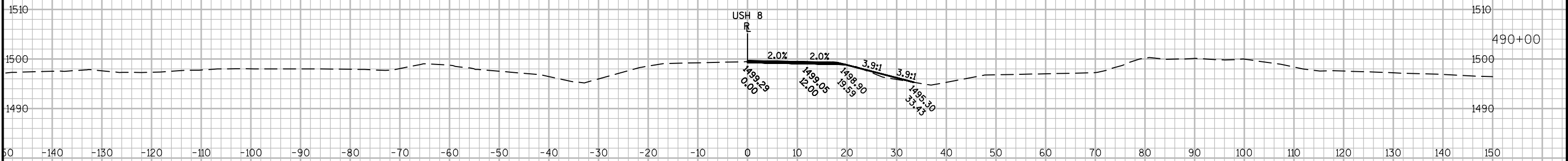
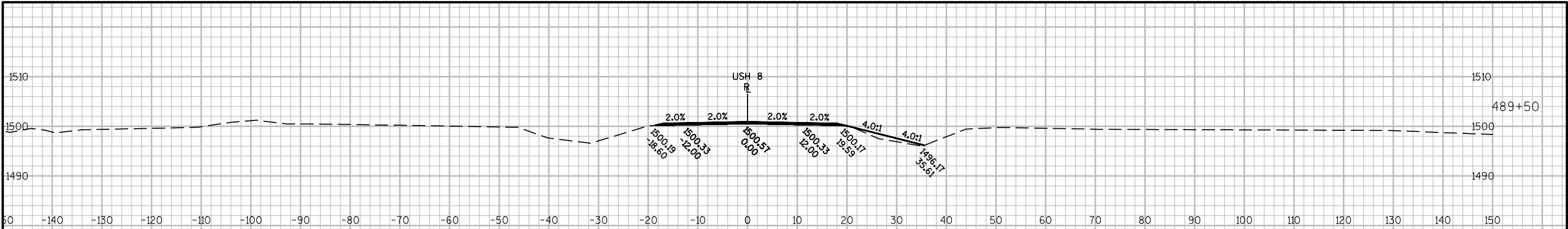
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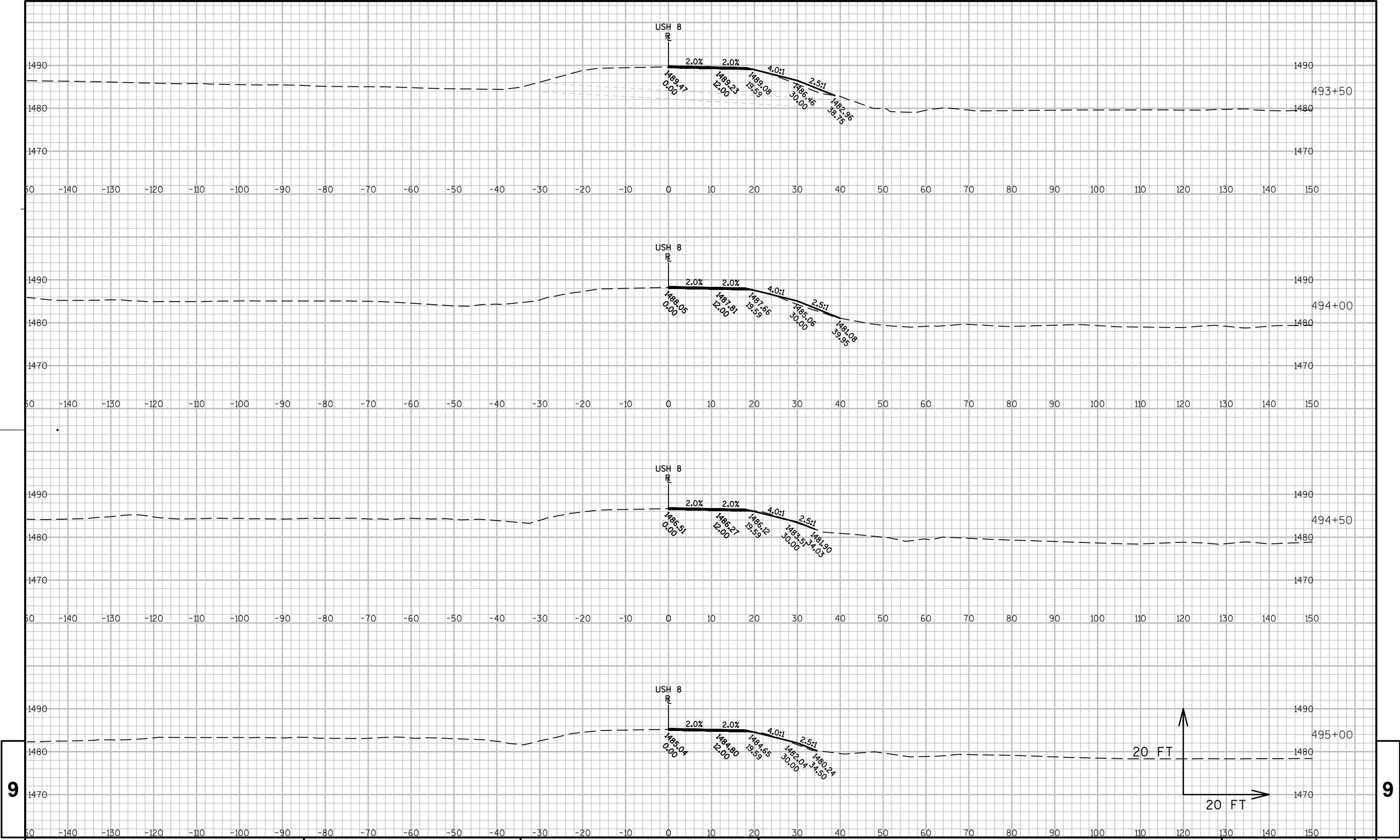


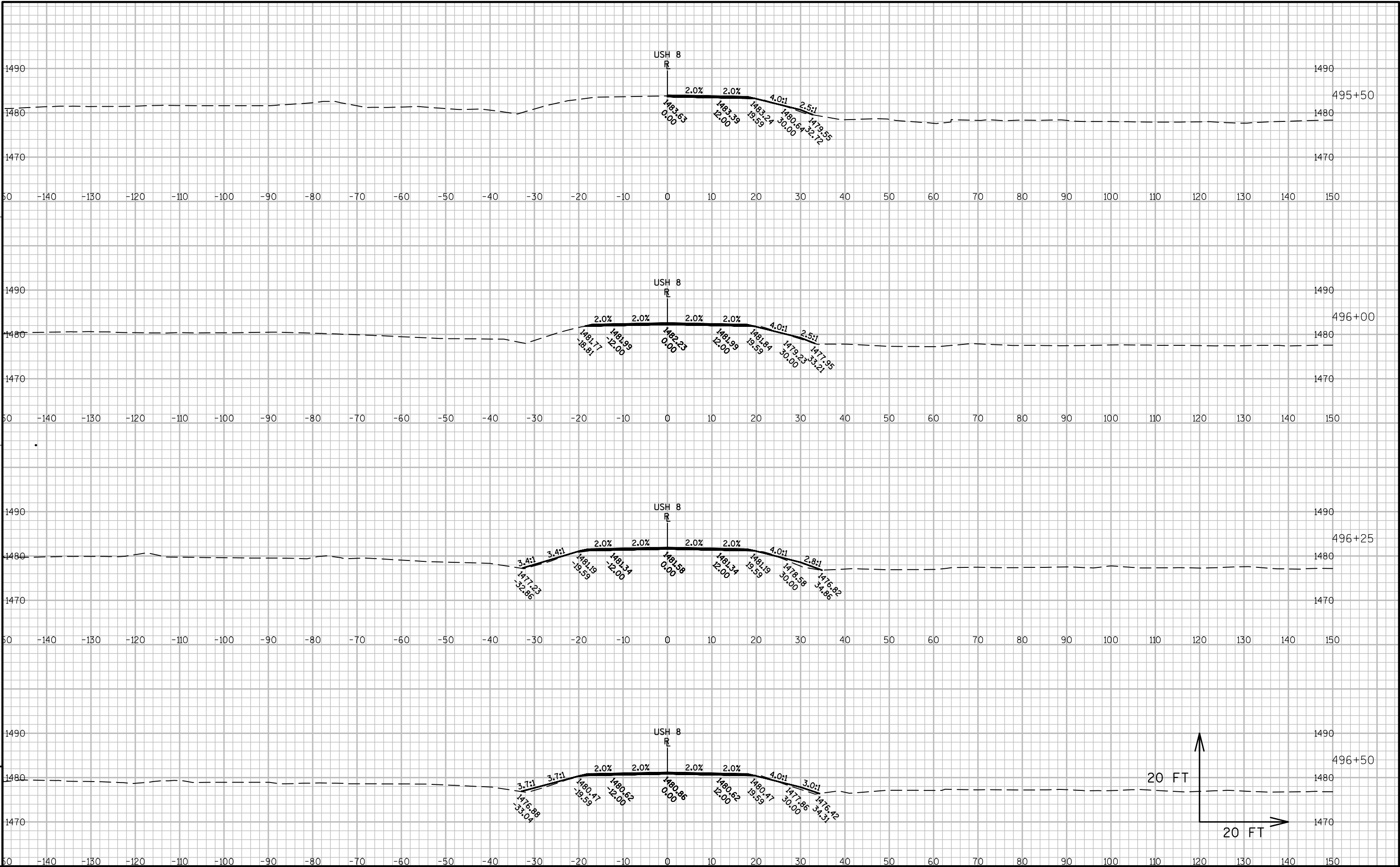


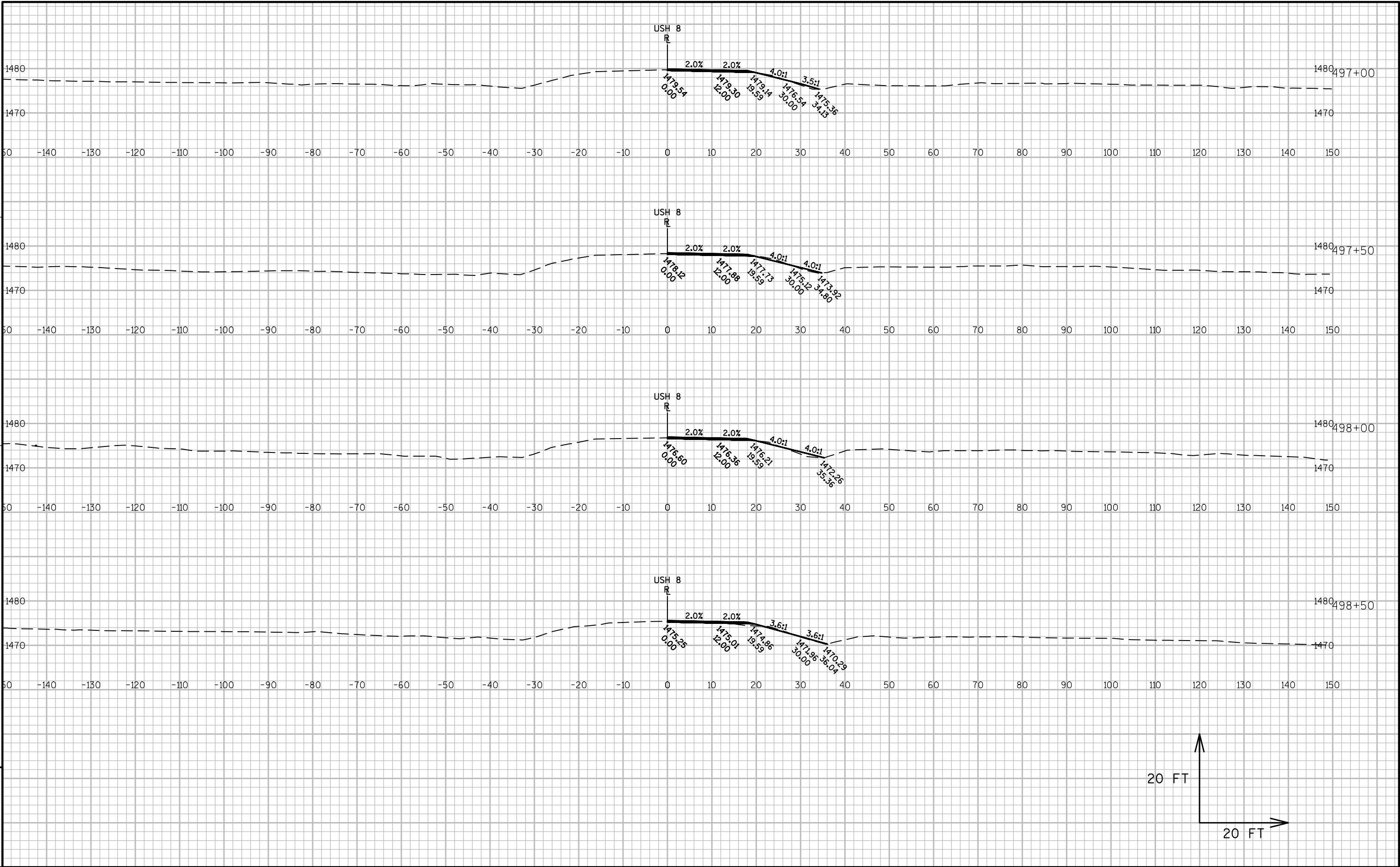








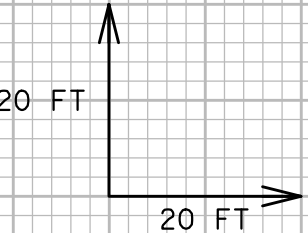
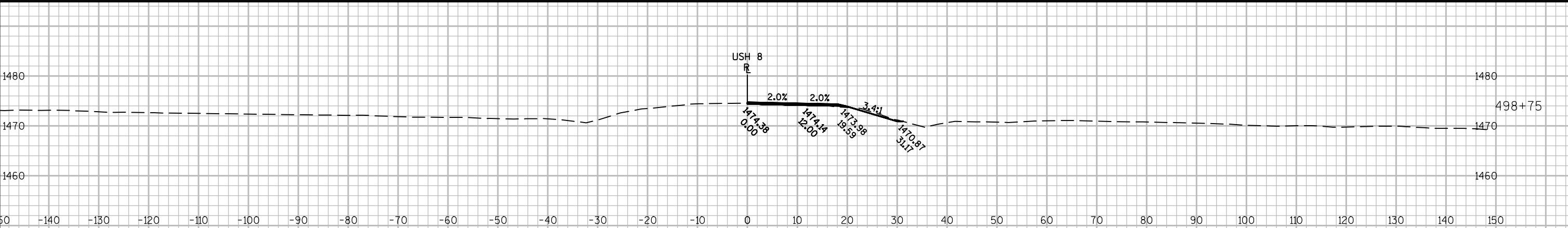




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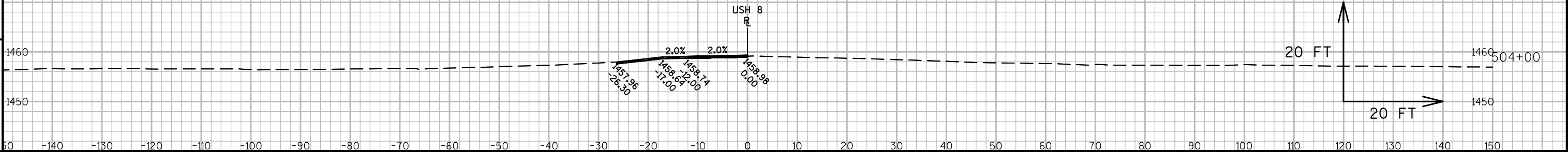
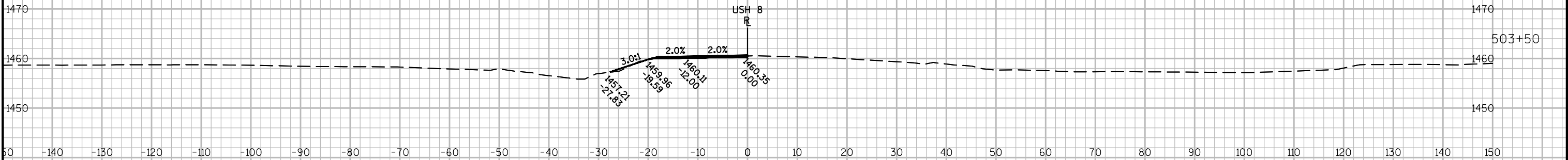
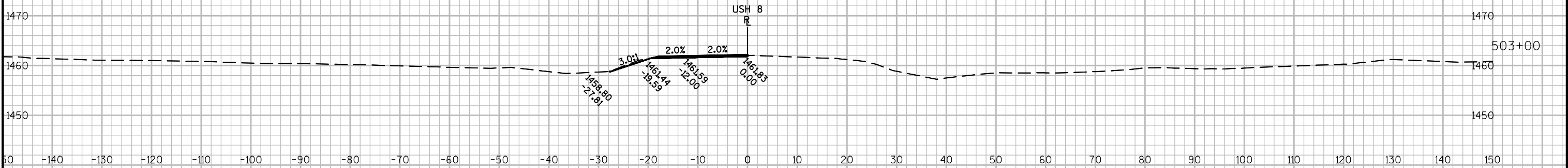
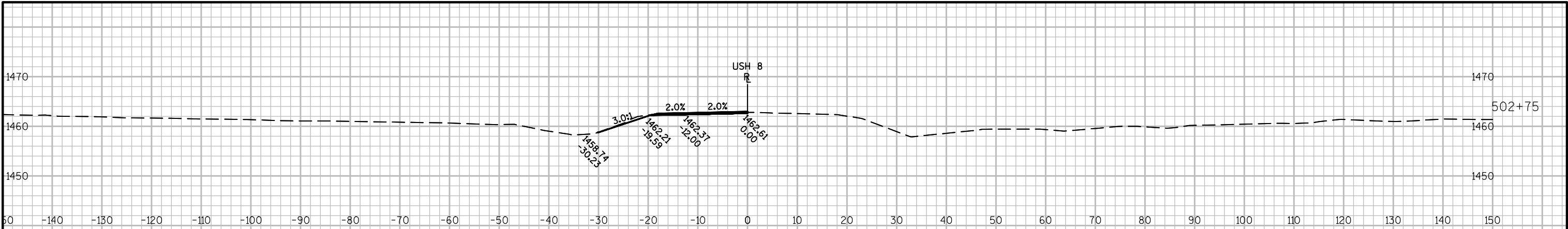
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PROJECT NO:1590-16-71	HWY: USH 8	COUNTY: MARINETTE	CROSS SECTIONS: USH 8	SHEET	E
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PROJECT NO:1590-16-71

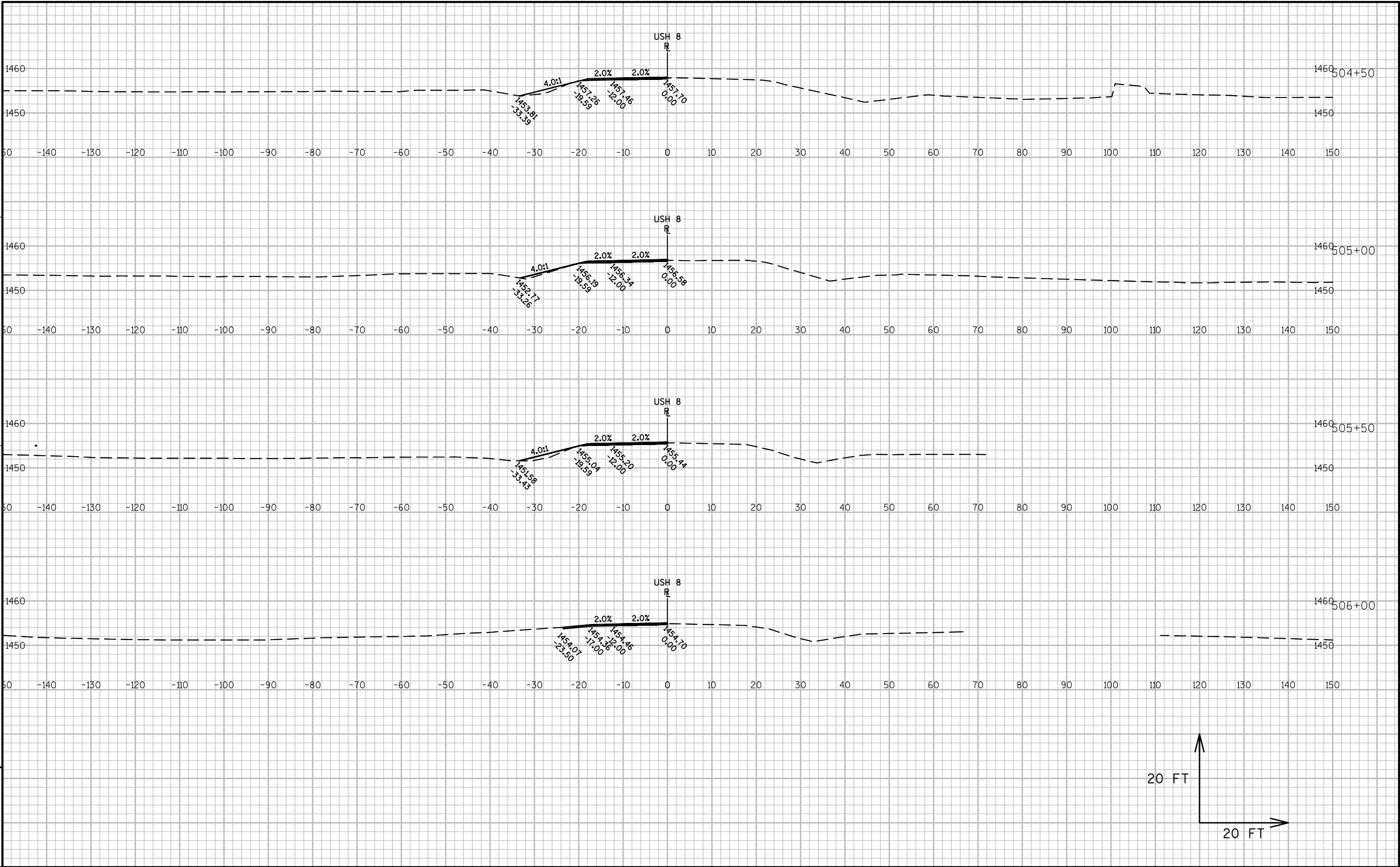
HWY: USH 8

COUNTY: MARINETTE

CROSS SECTIONS: USH 8

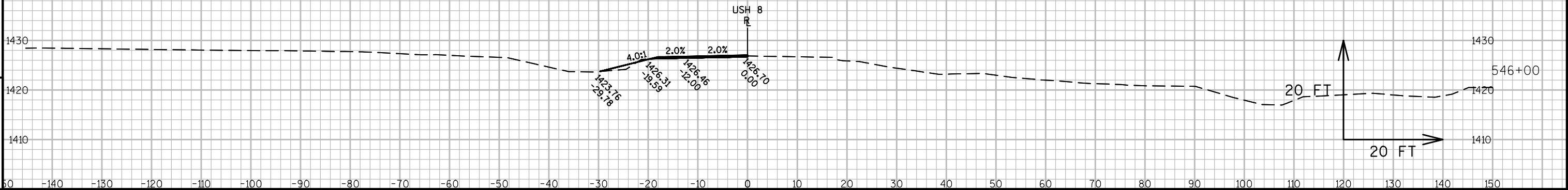
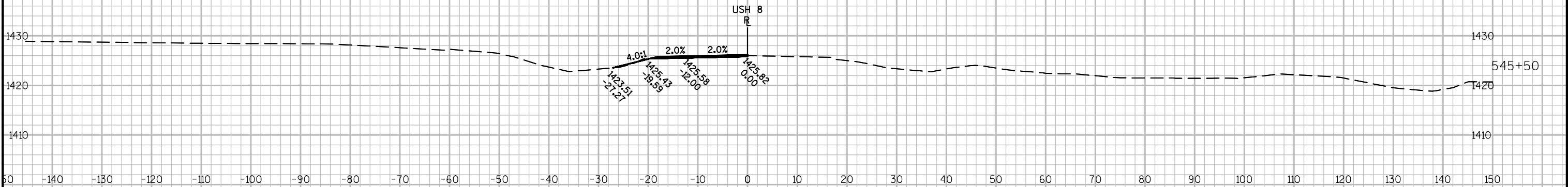
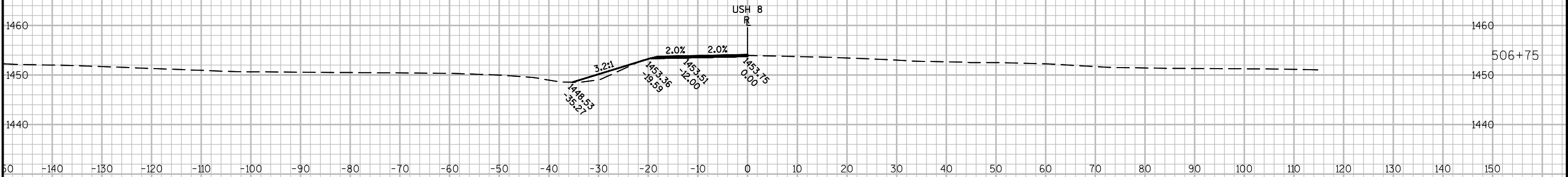
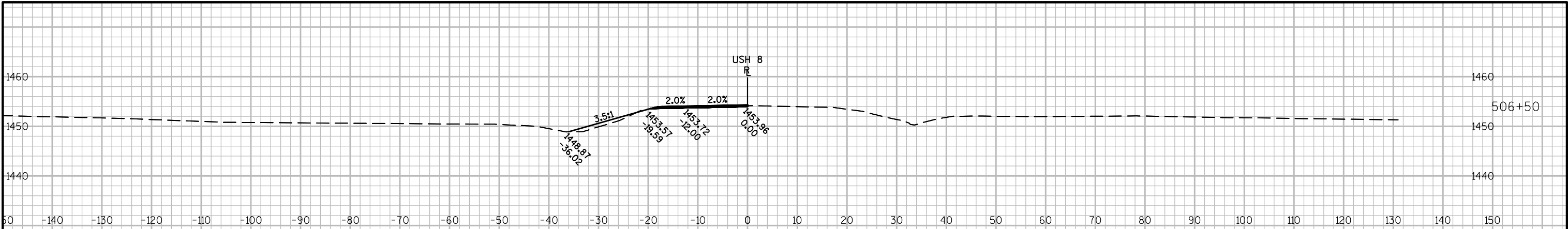
SHEET

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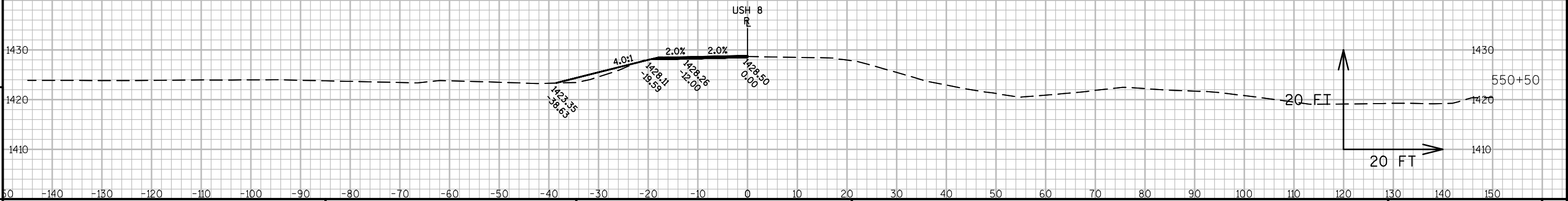
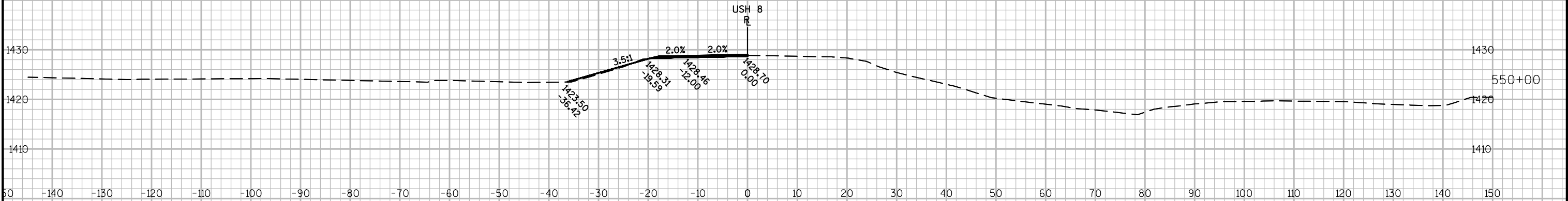
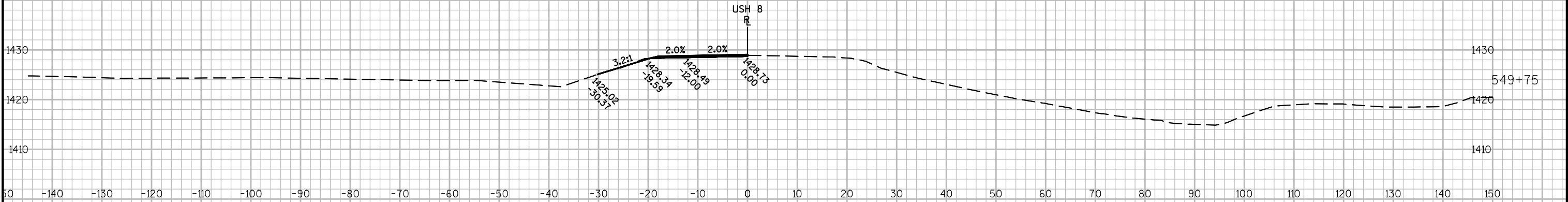
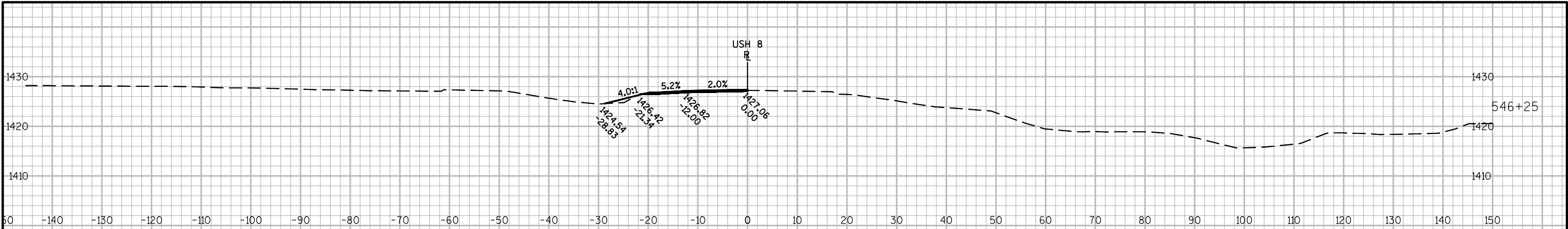
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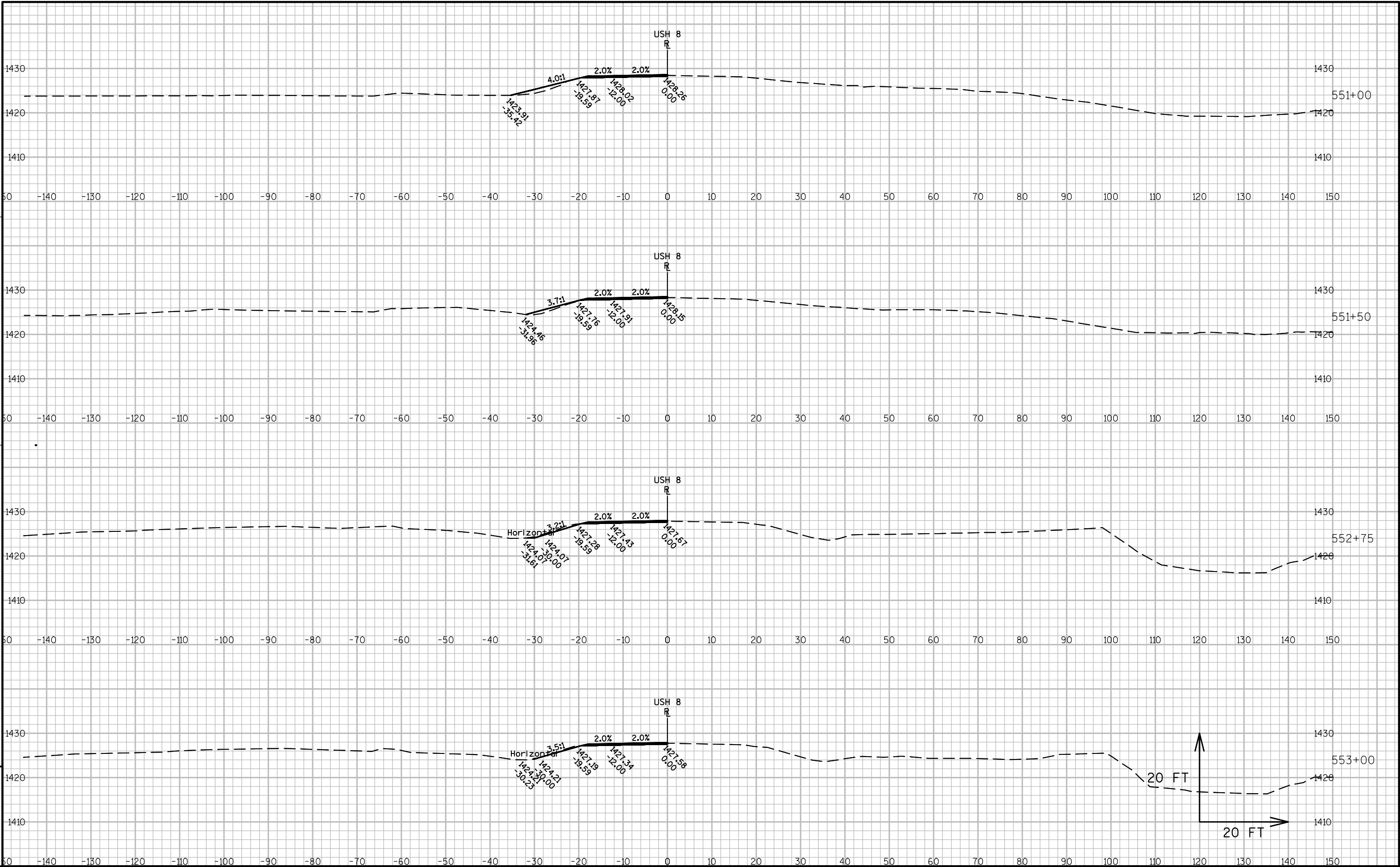
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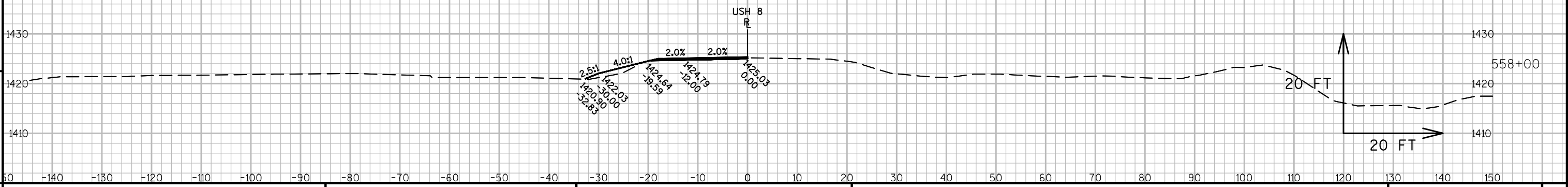
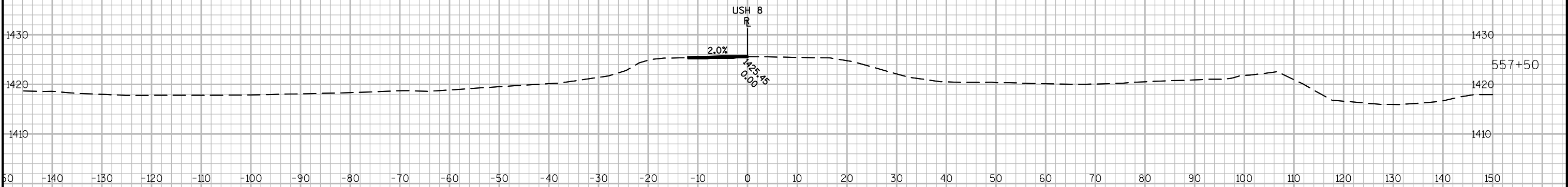
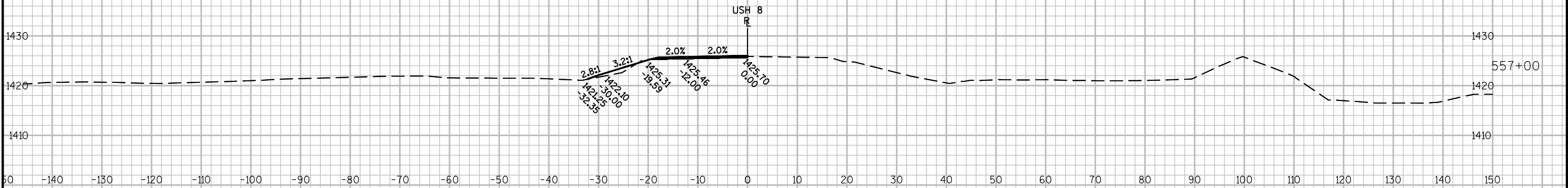
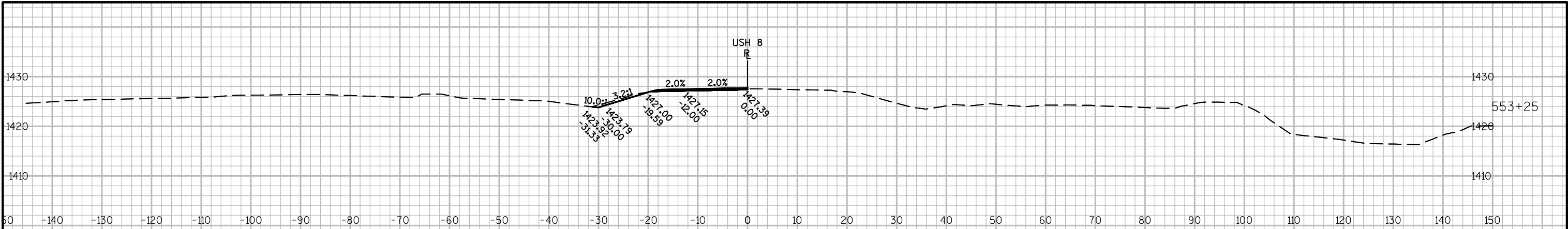
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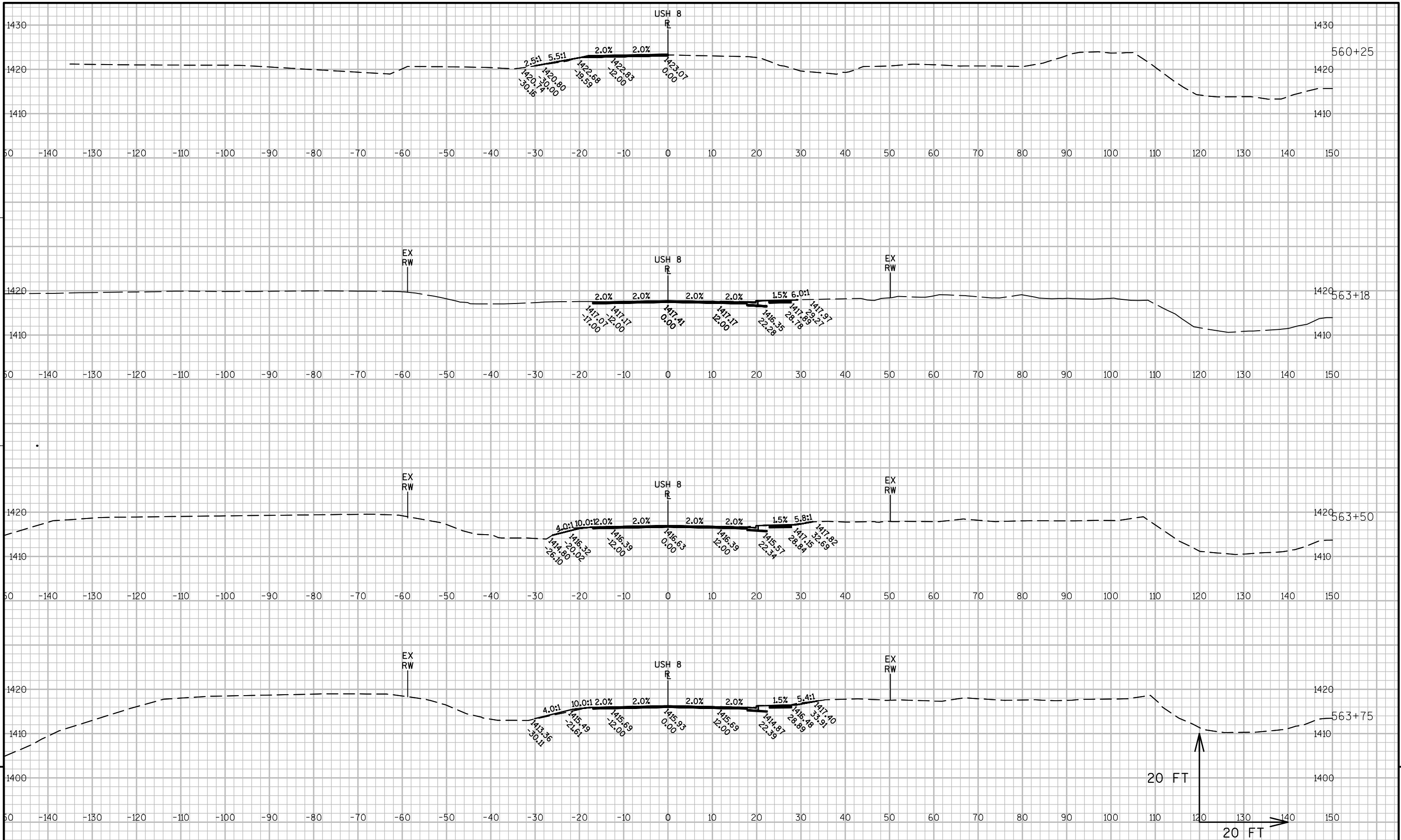
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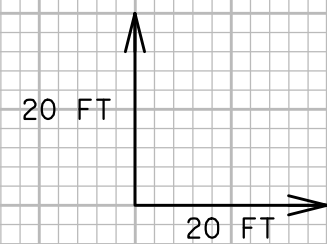
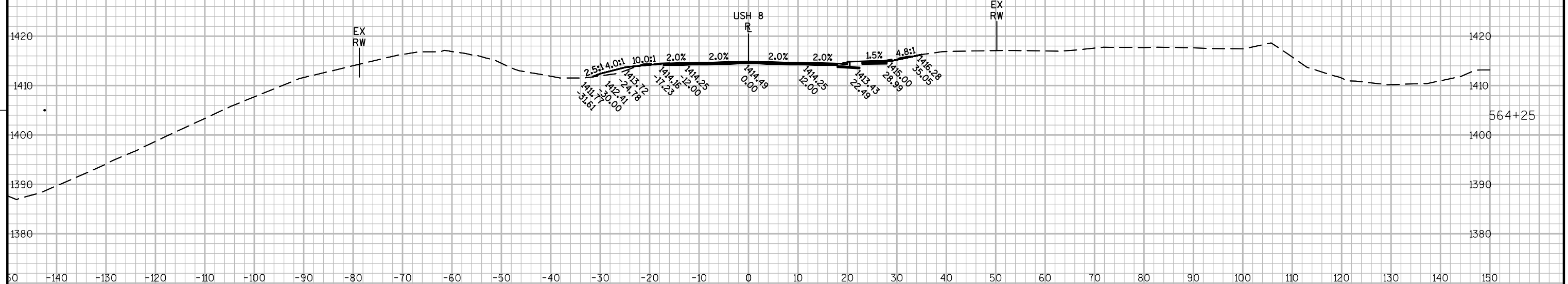
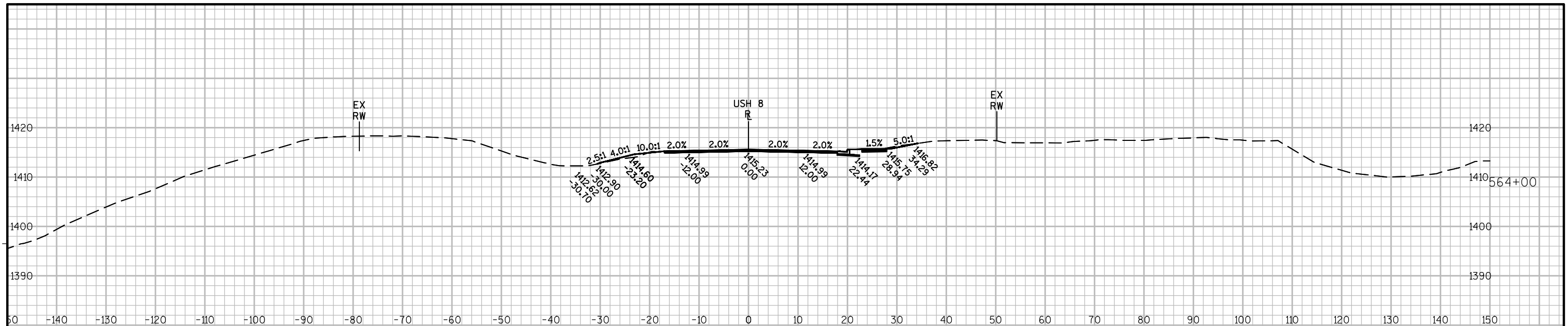


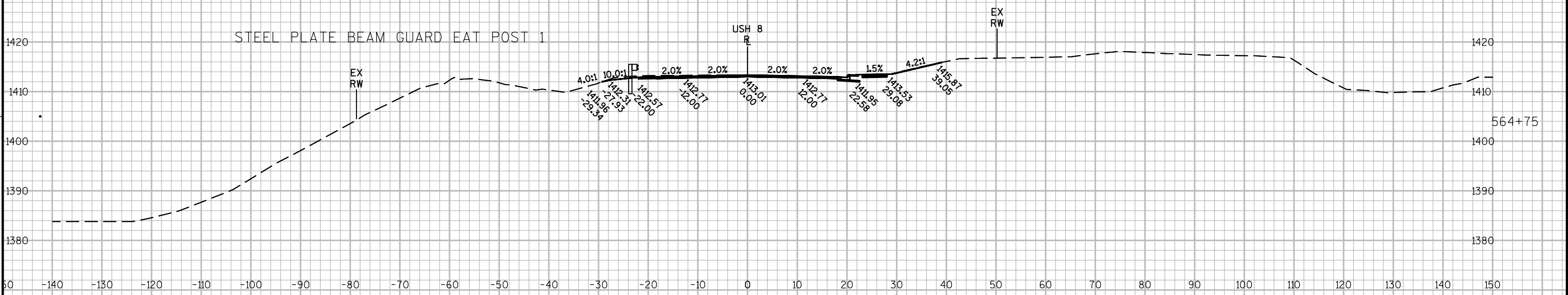
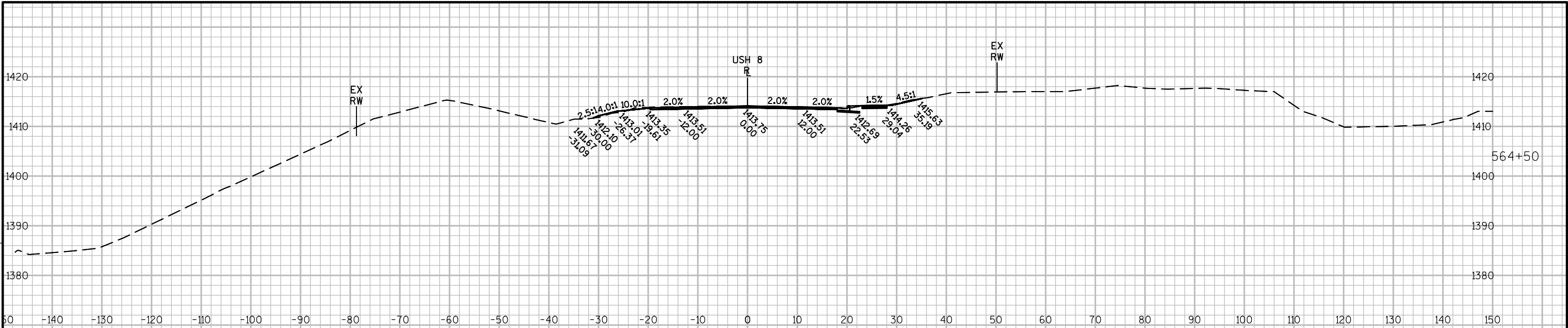


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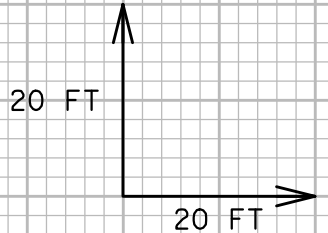
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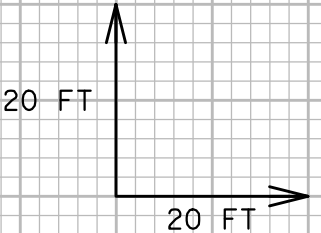
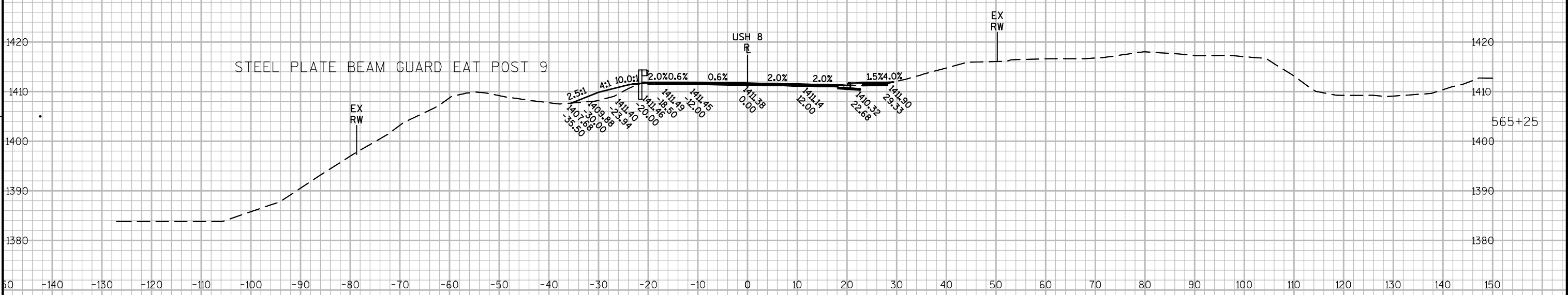
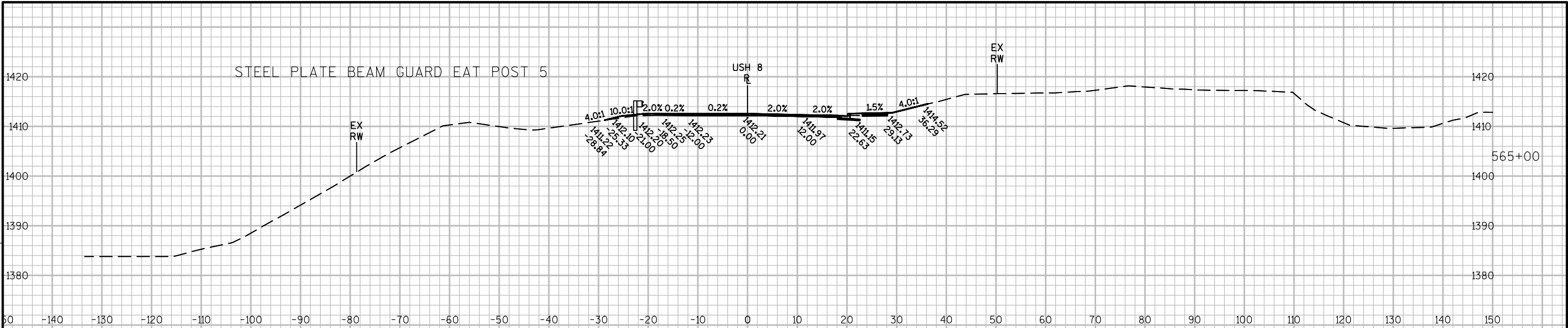






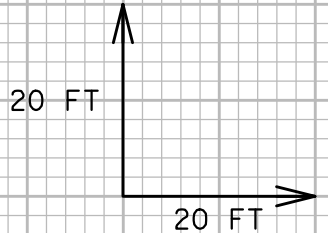
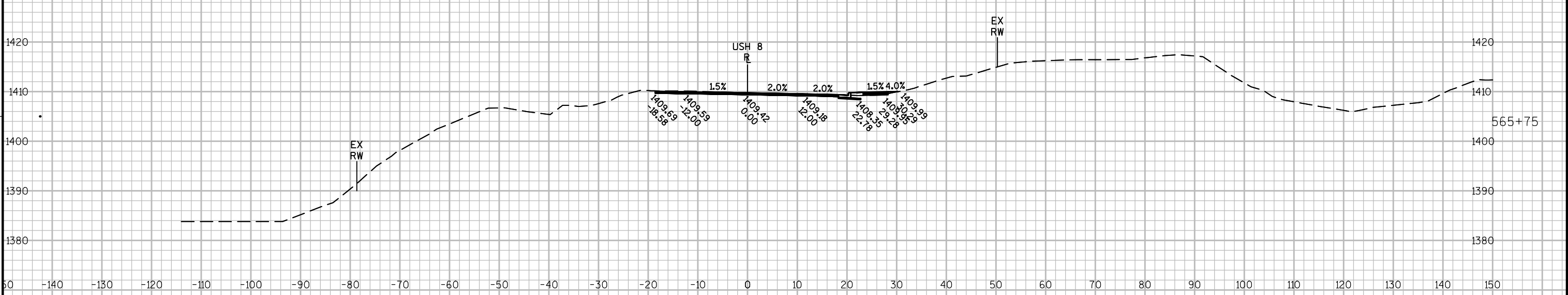
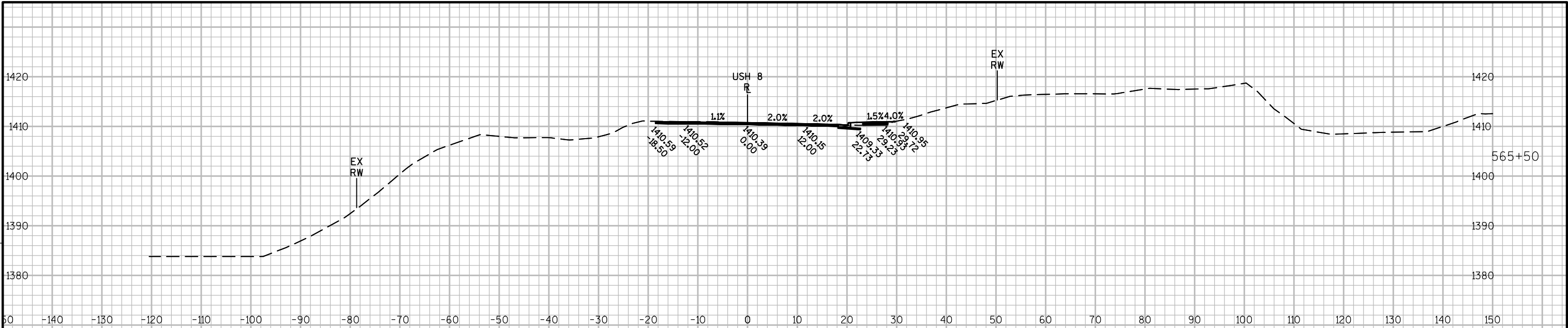
STEEL PLATE BEAM GUARD EAT POST 1





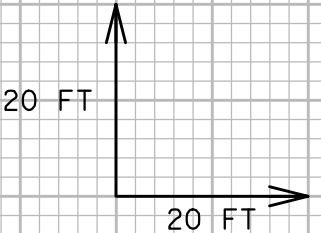
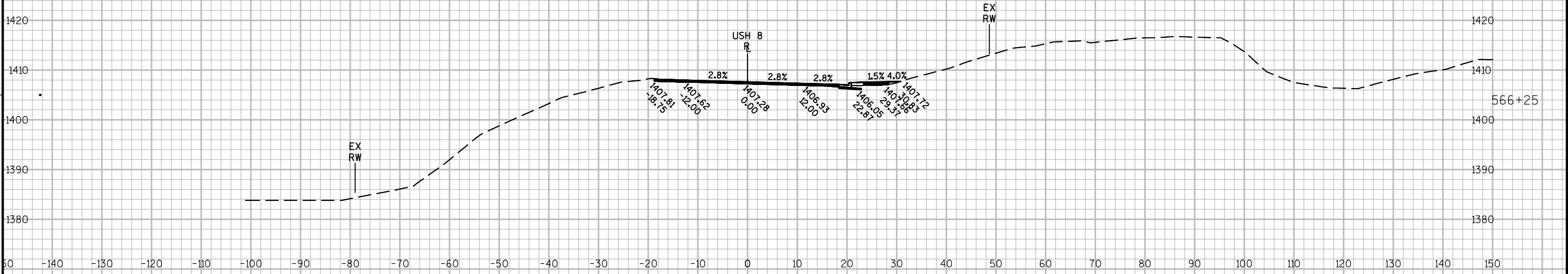
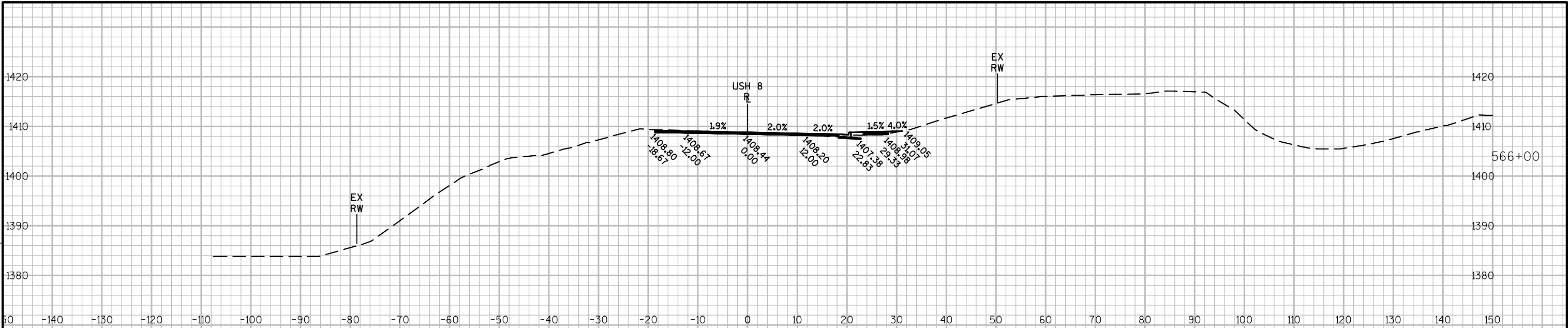
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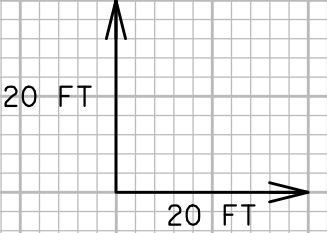
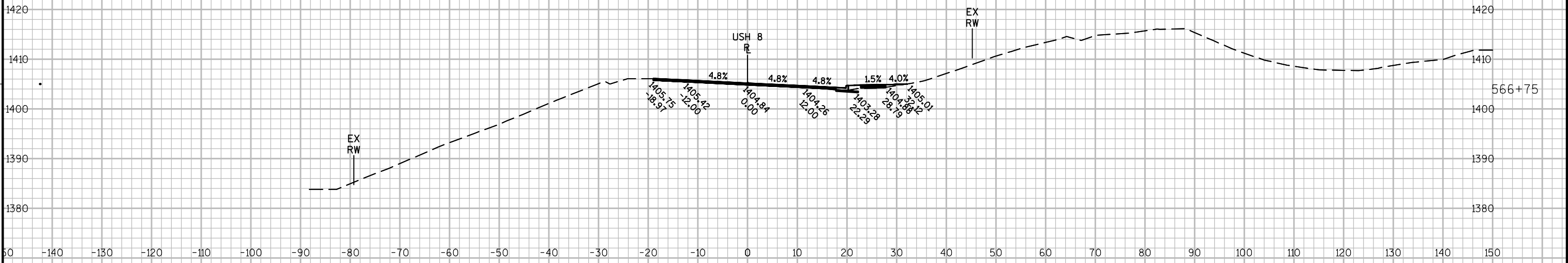
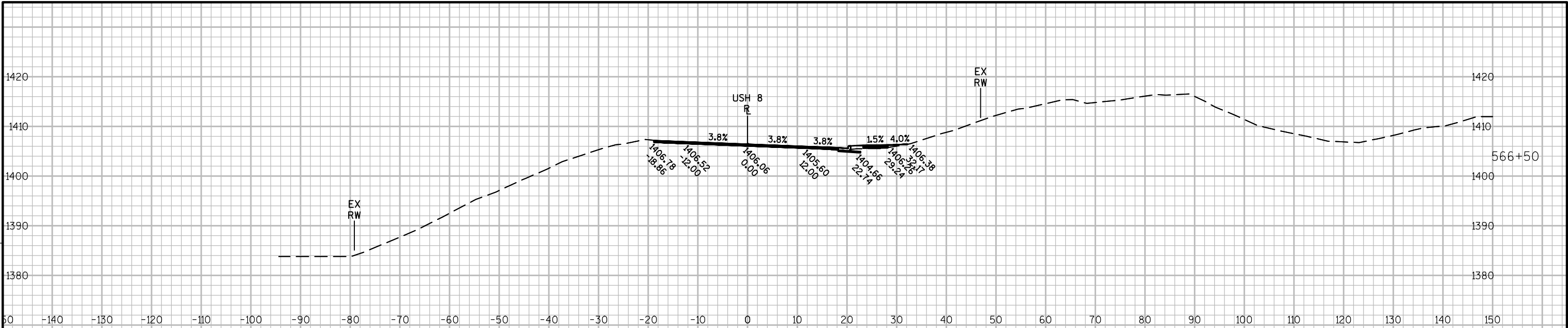
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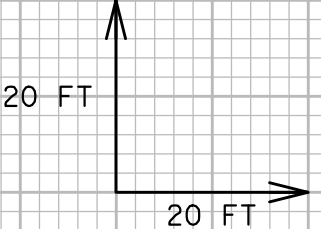
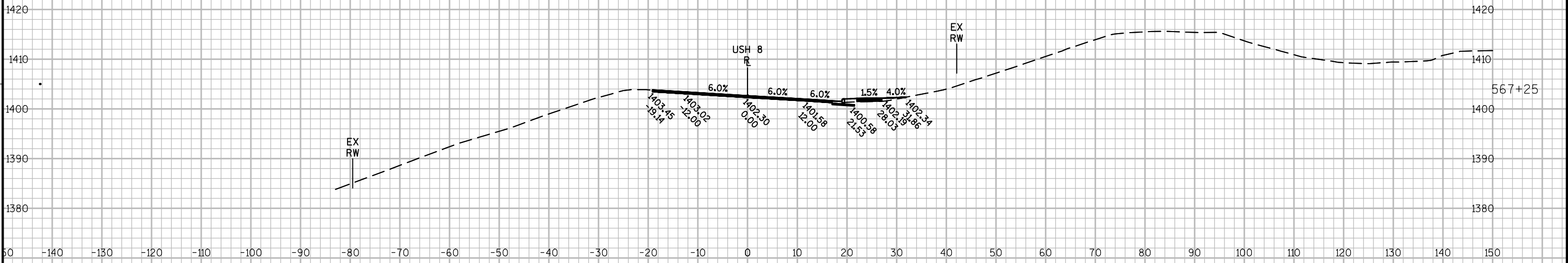
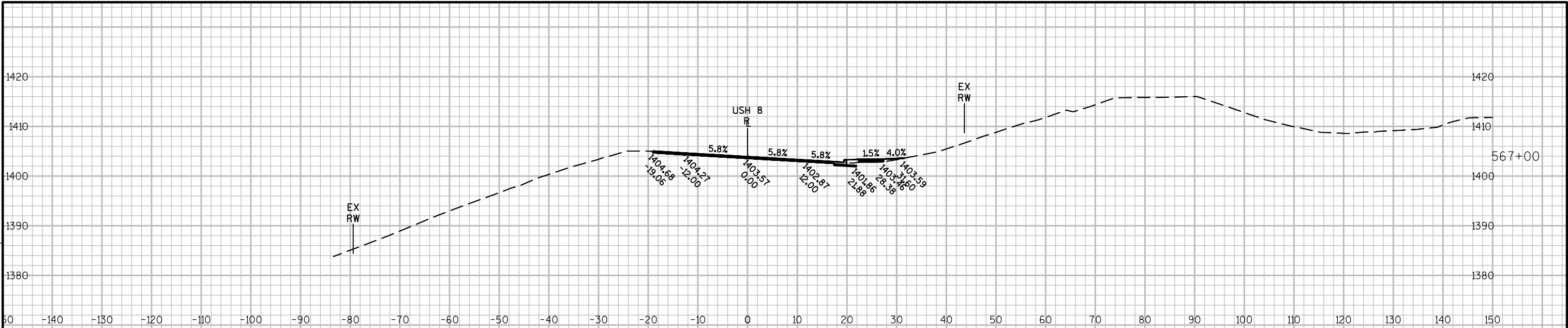
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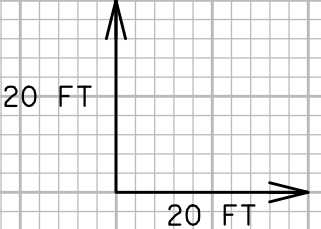
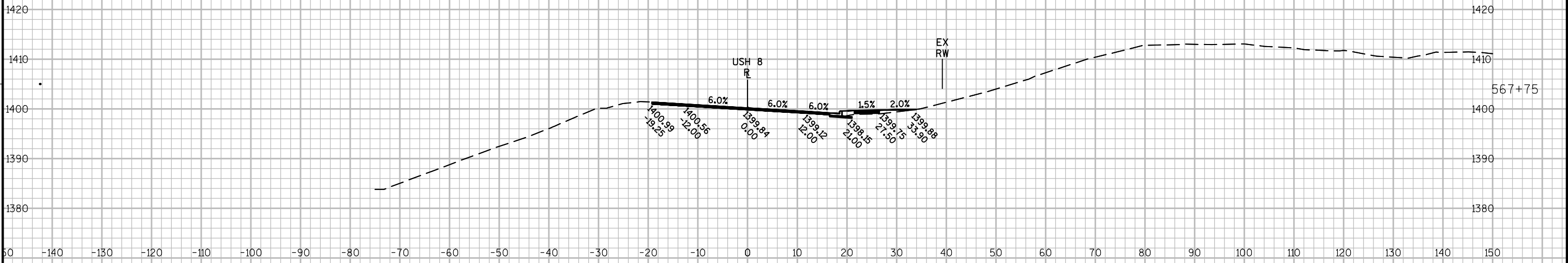
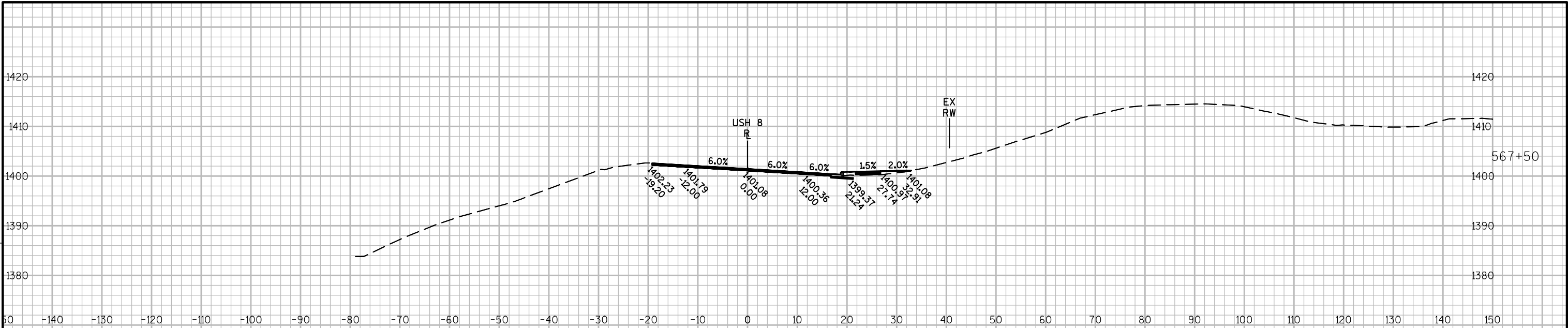


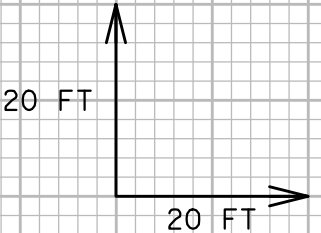
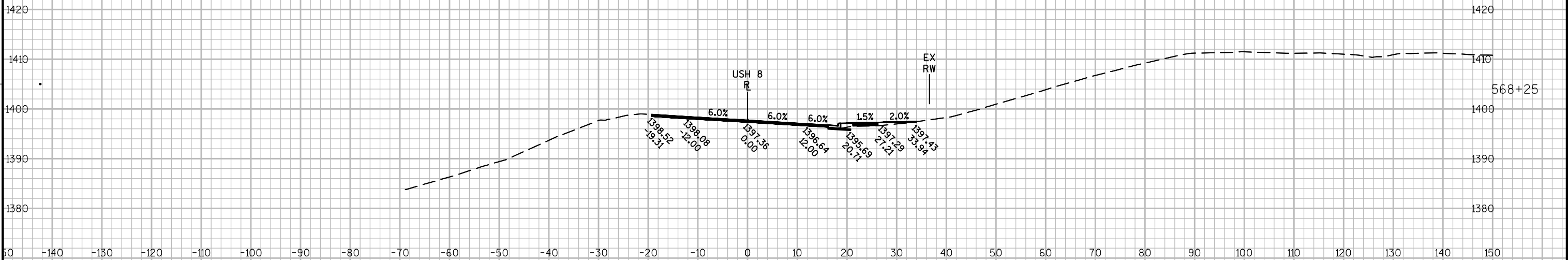
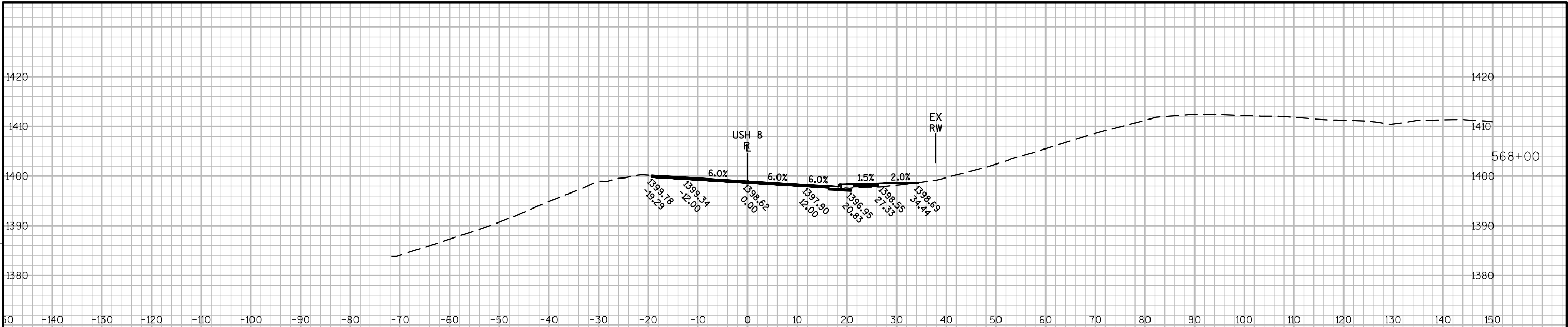


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PROJECT NO:1590-16-71

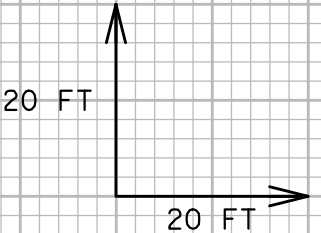
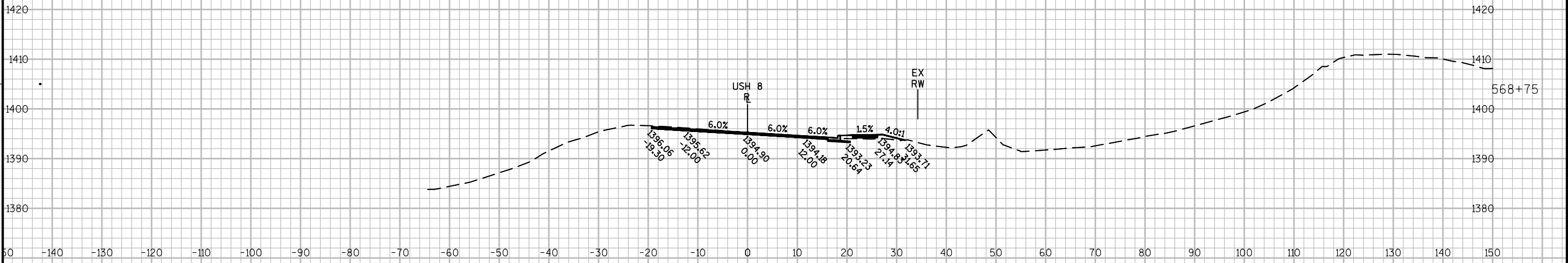
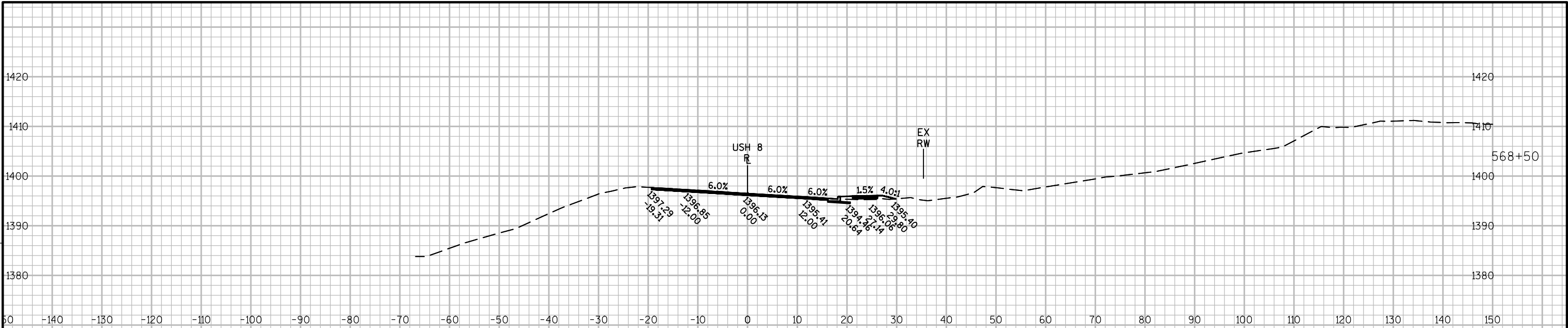
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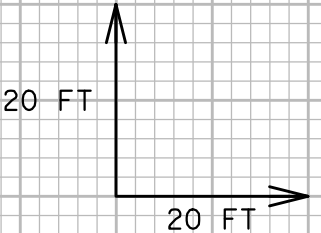
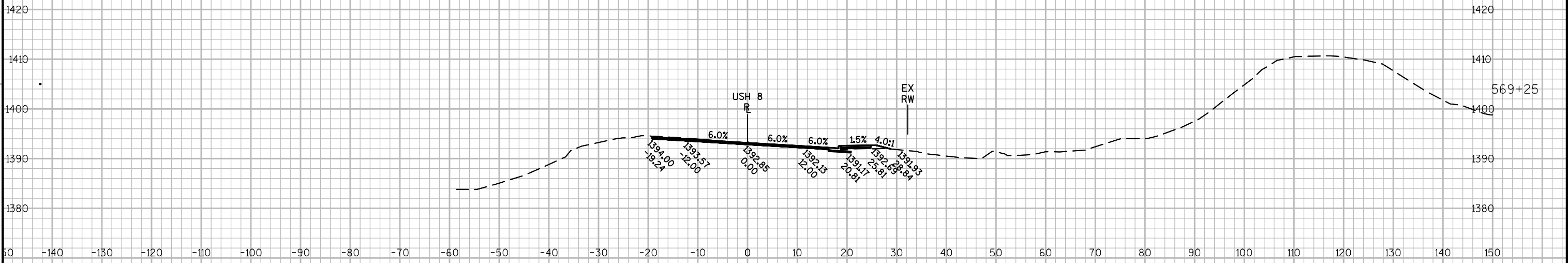
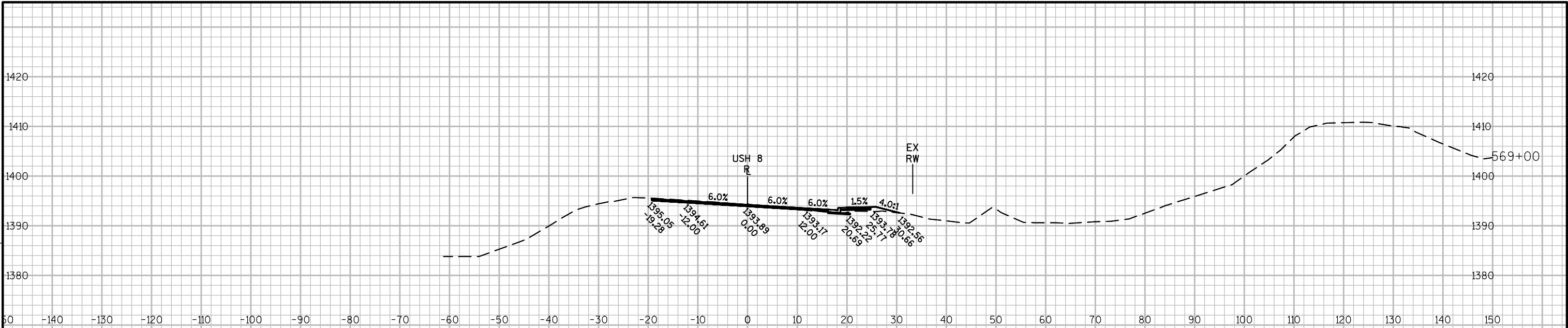
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CROSS SECTIONS: USH 8

SHEET

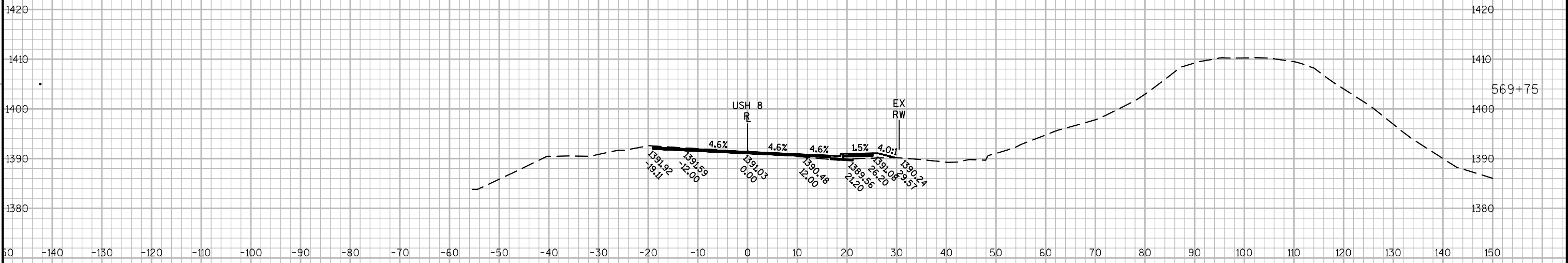
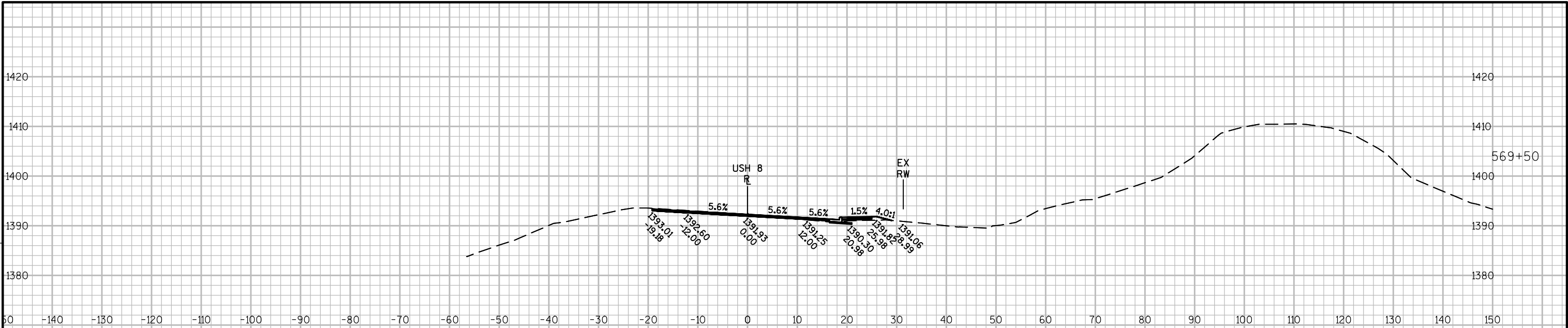
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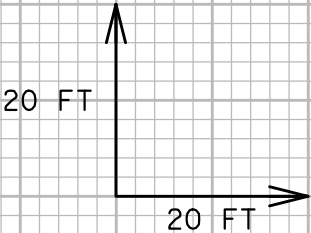
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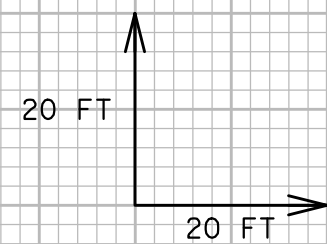
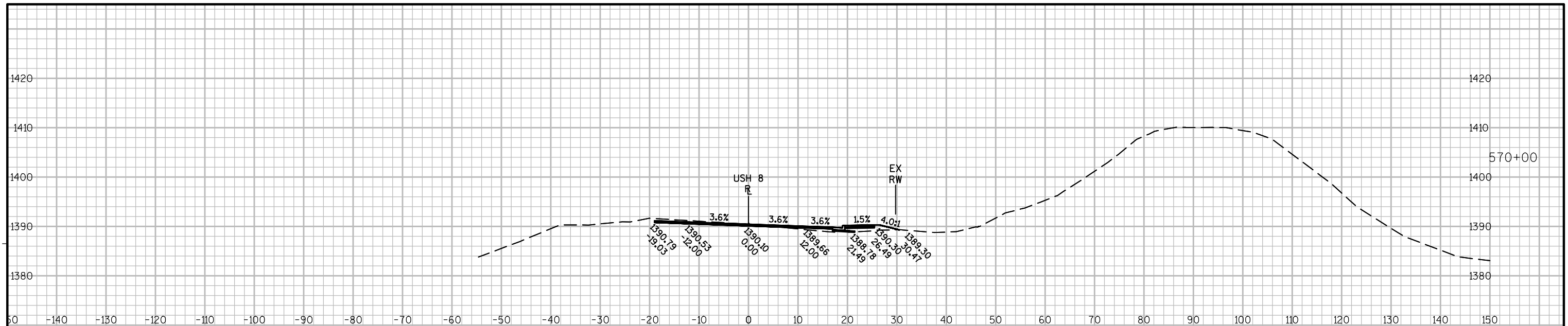
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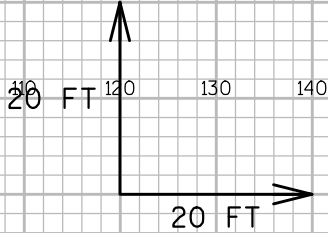
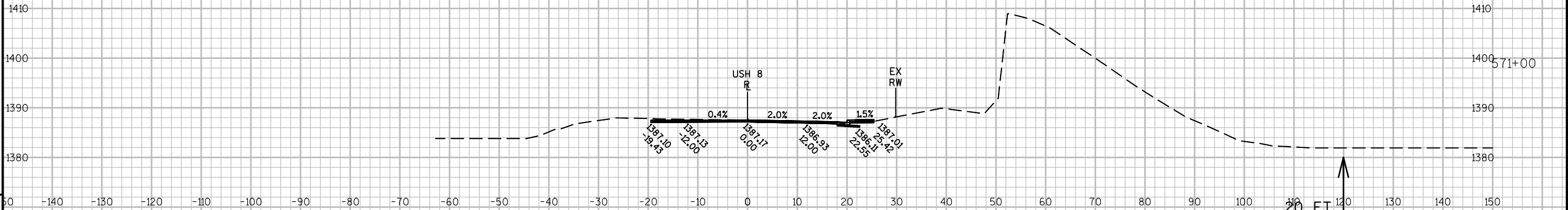
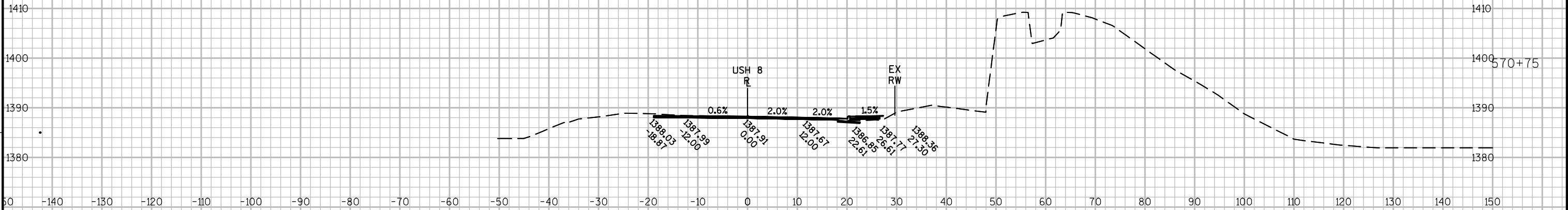
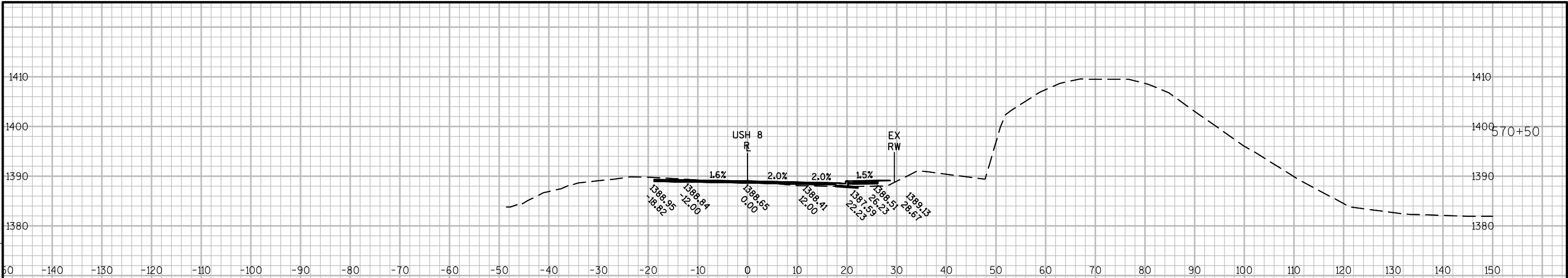


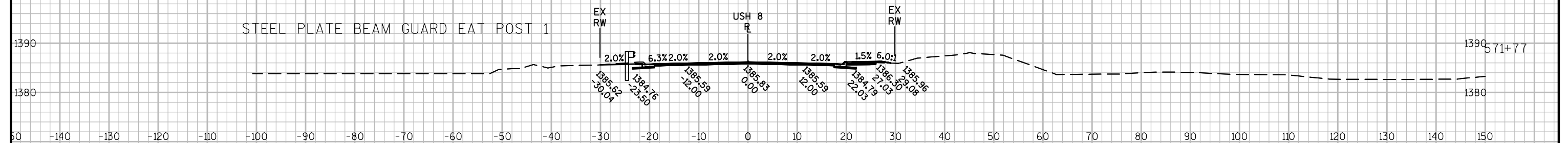
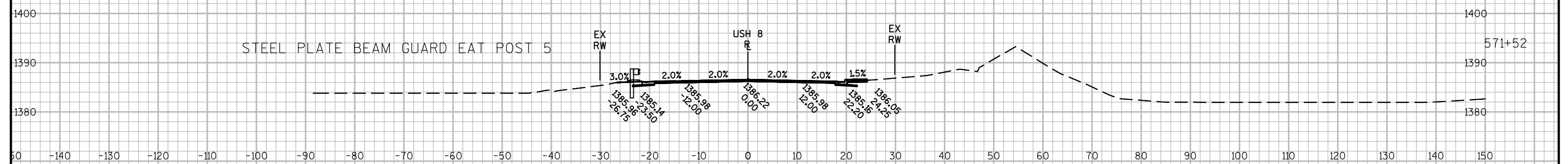
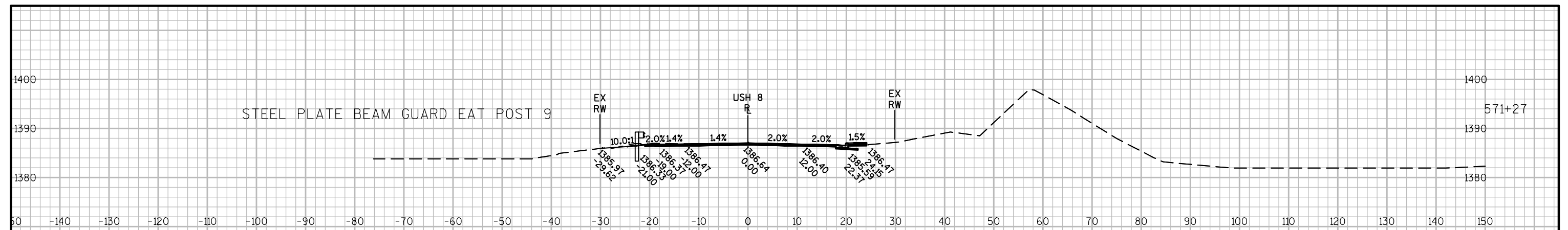
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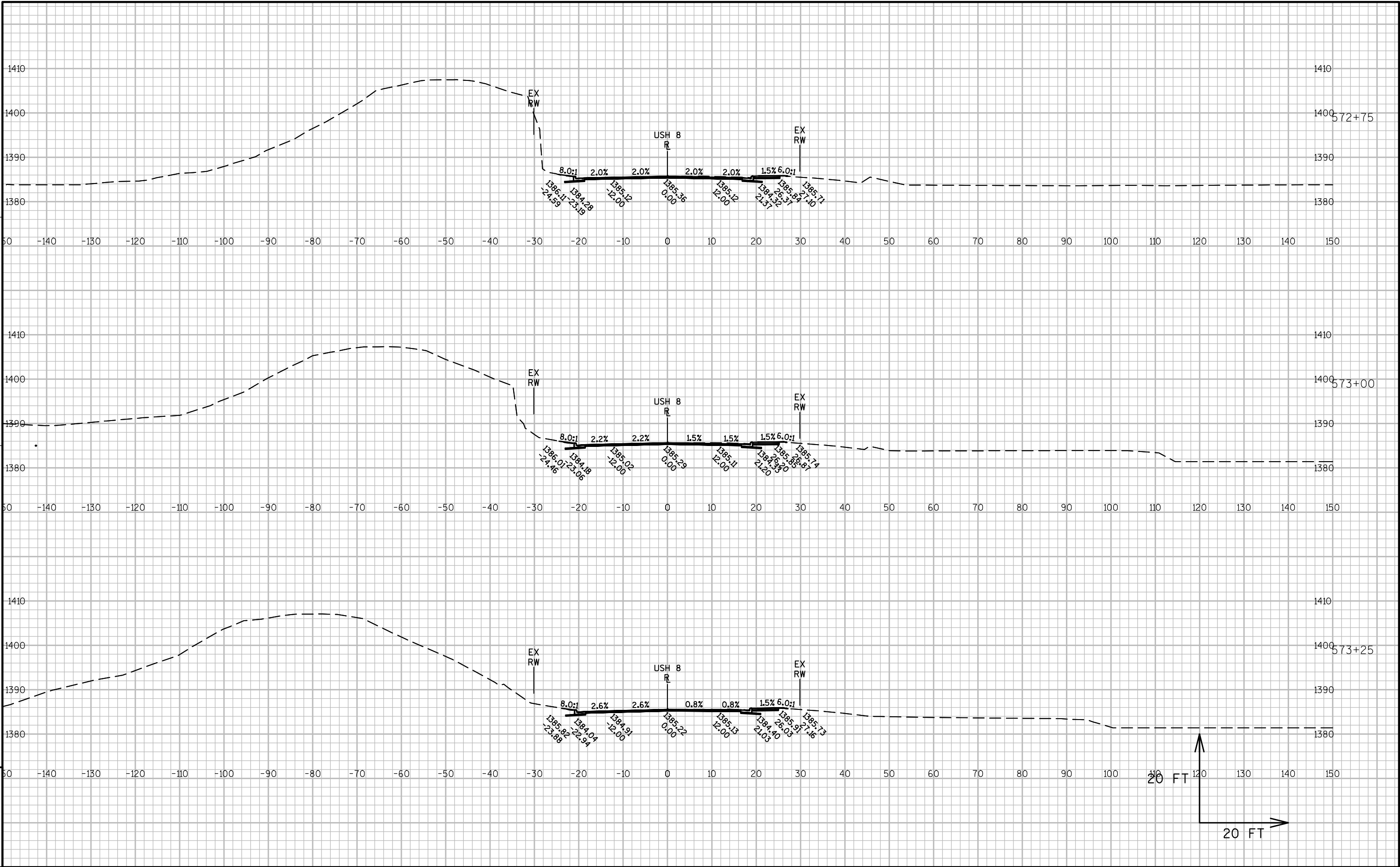


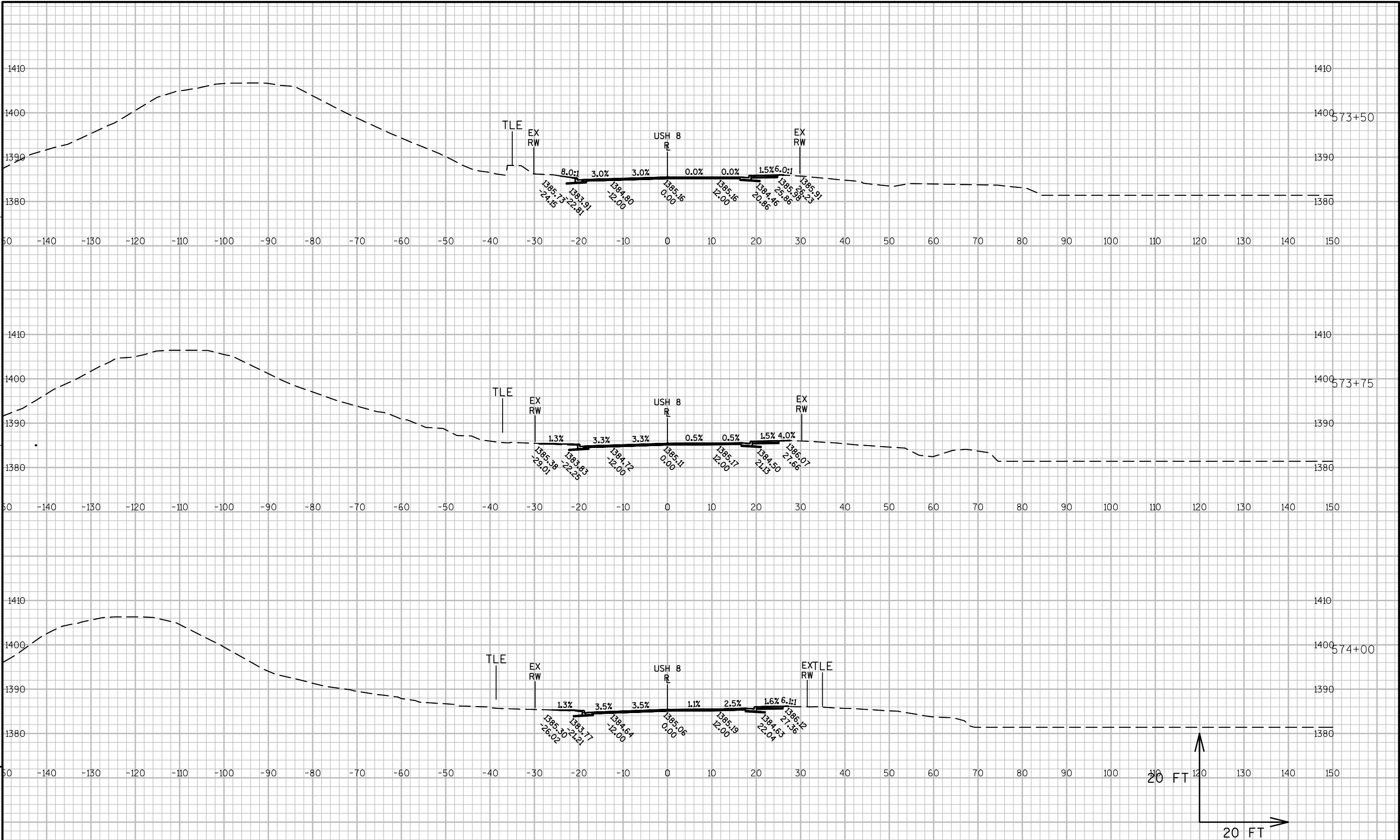


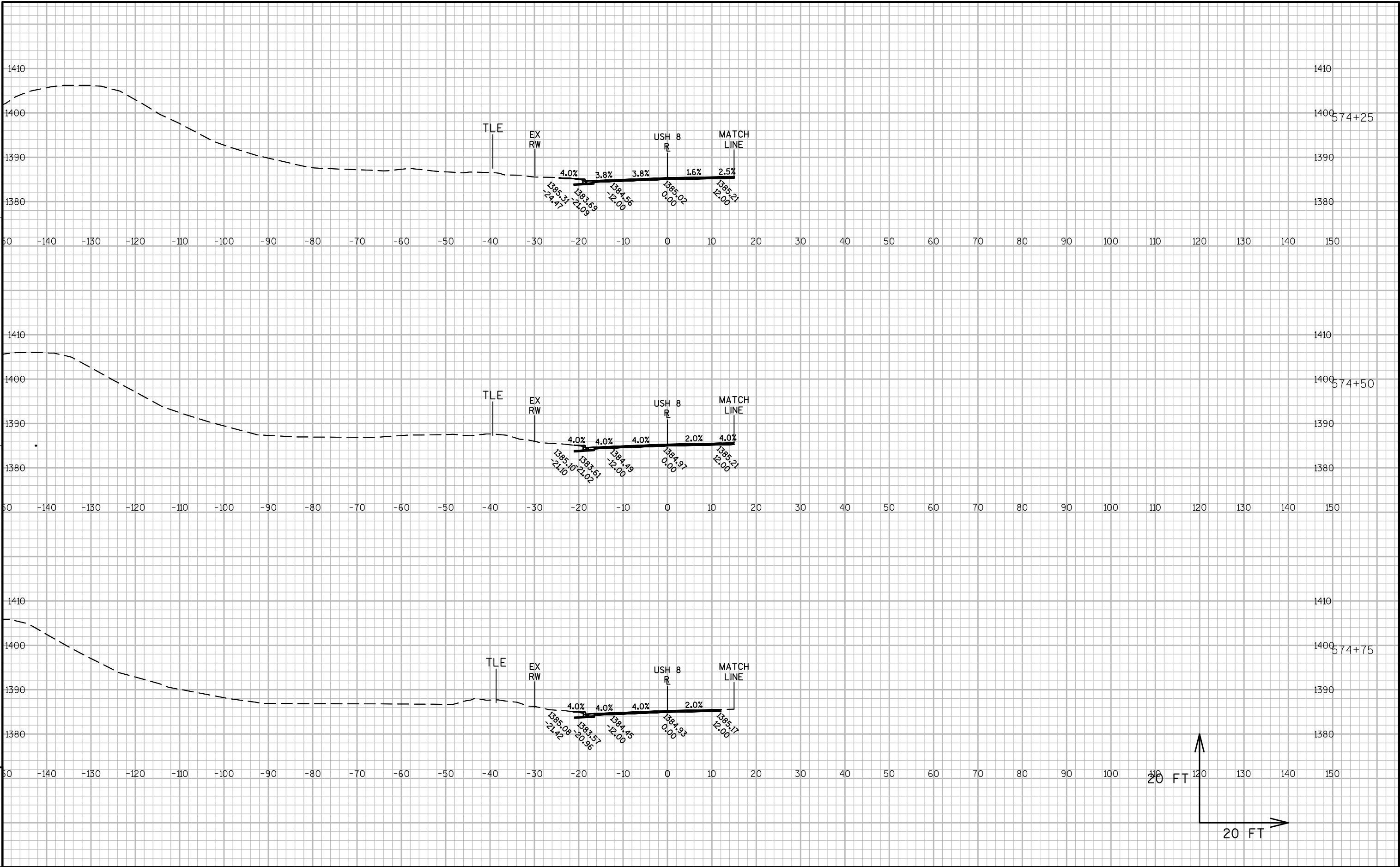


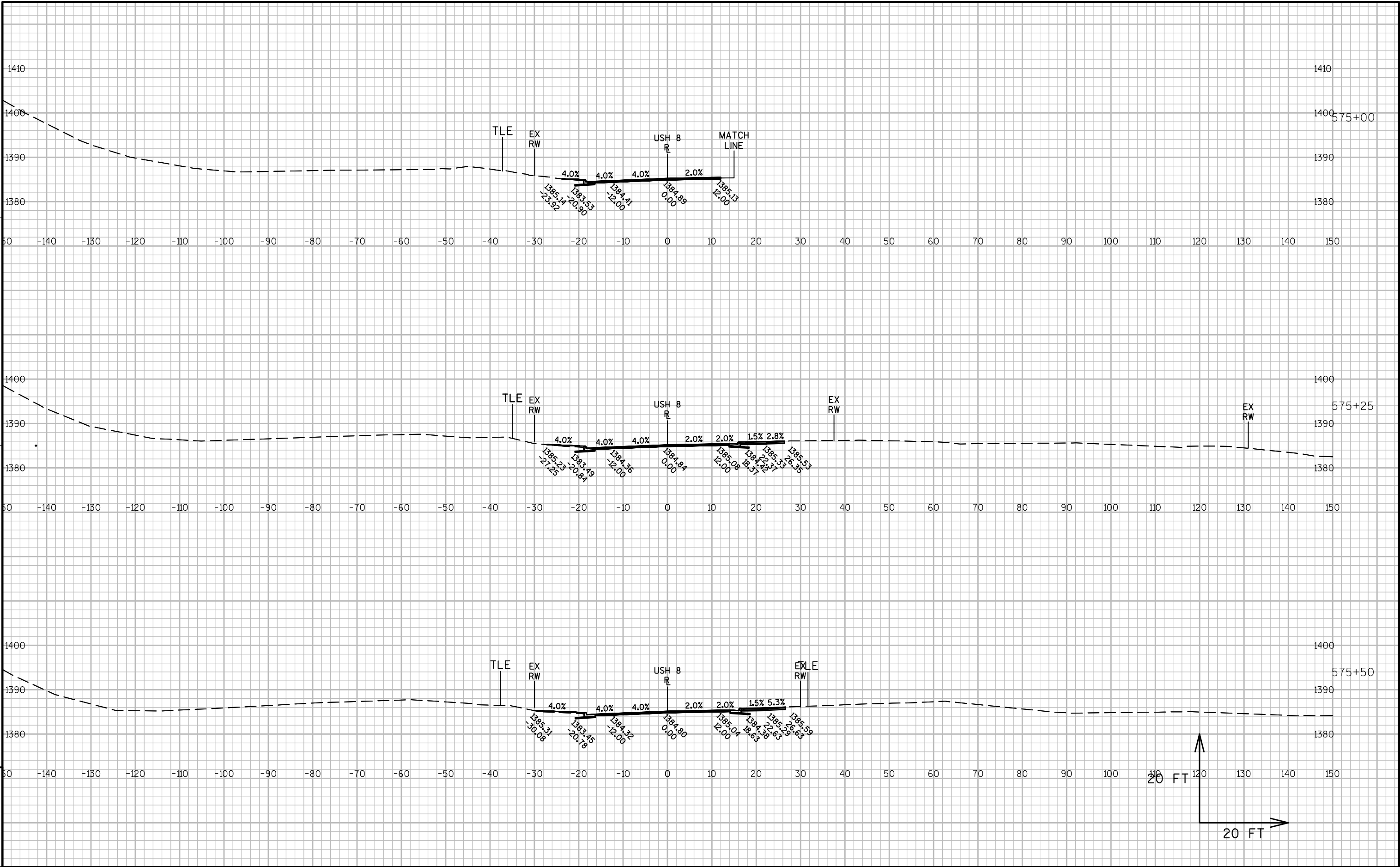
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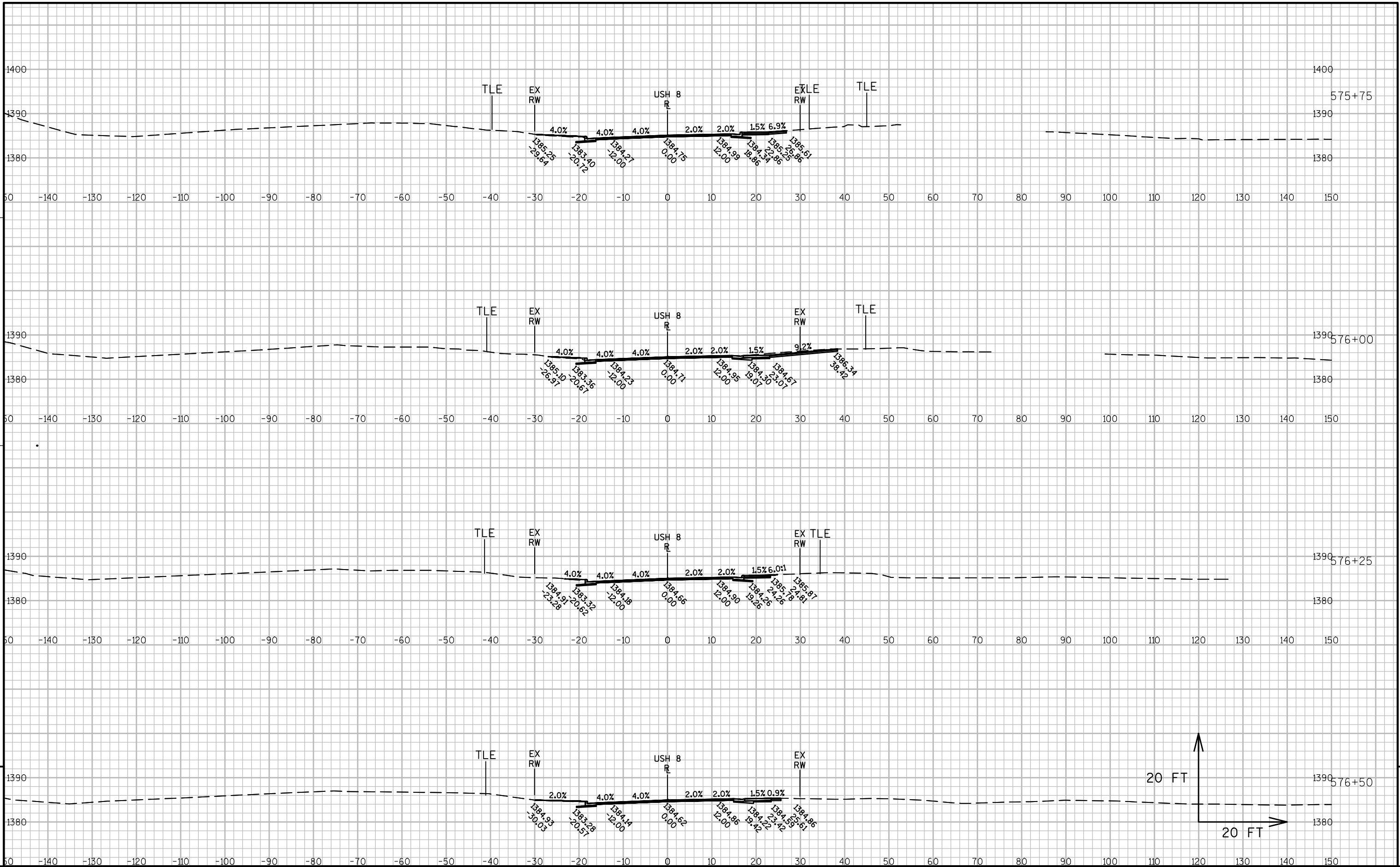
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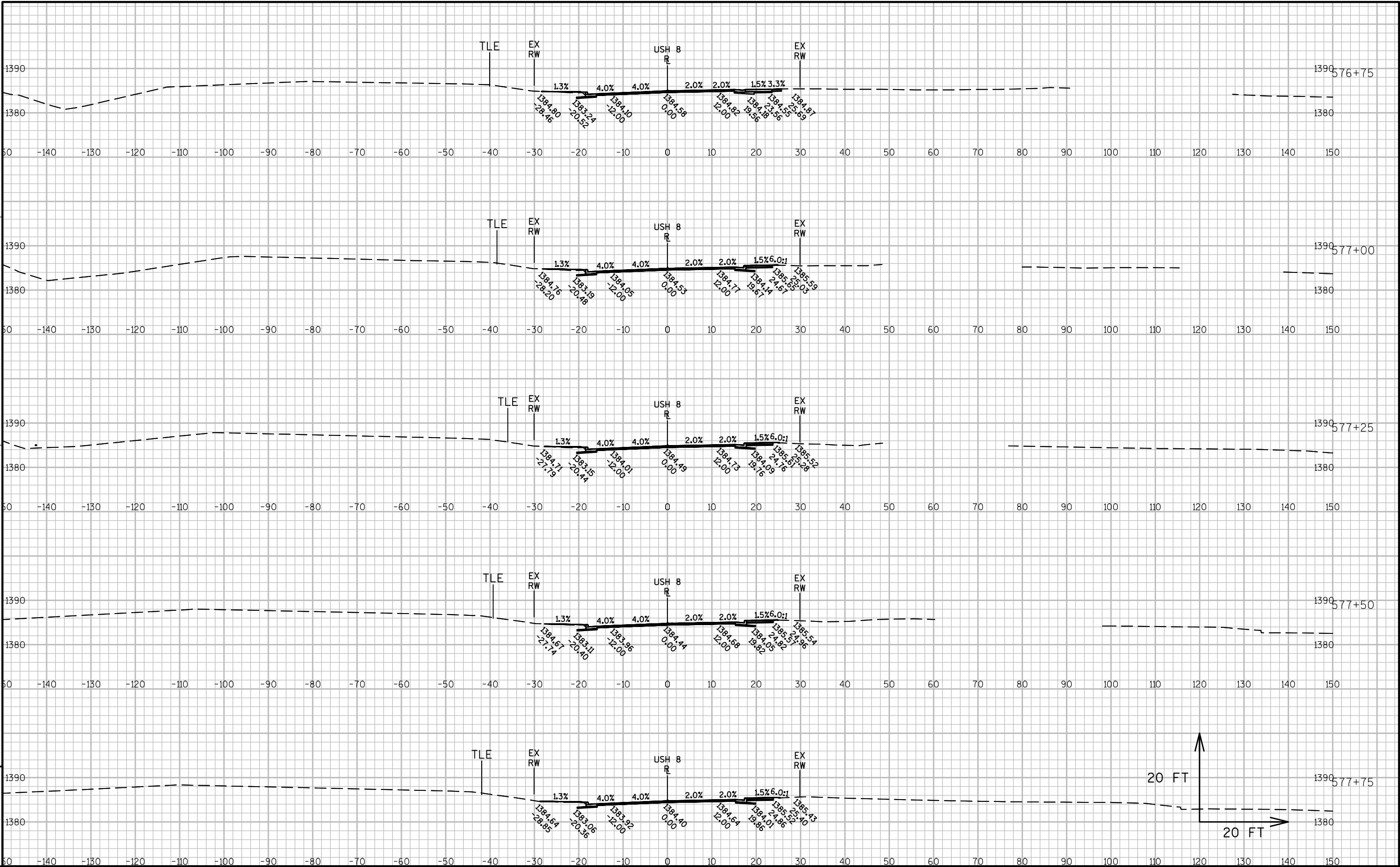


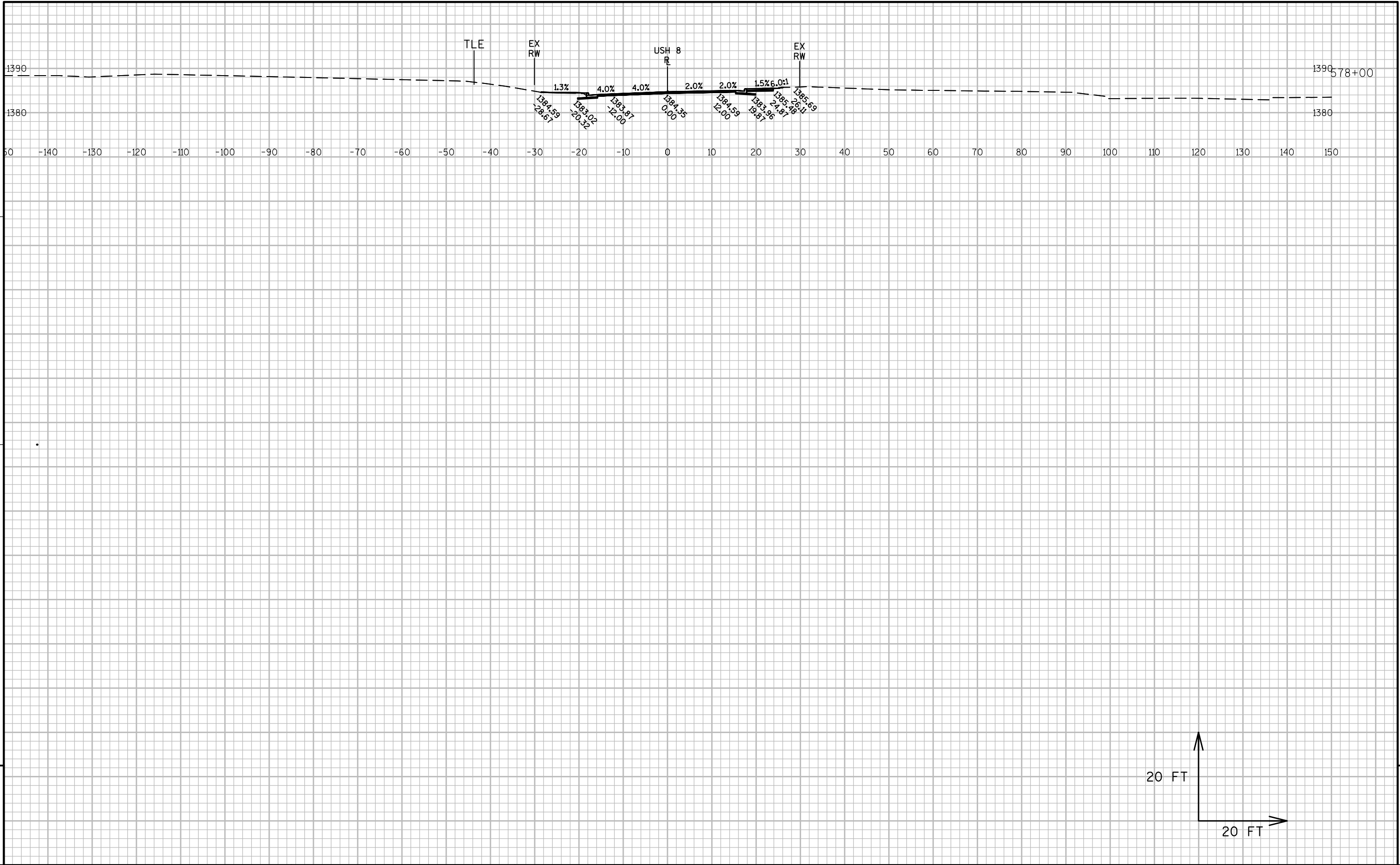


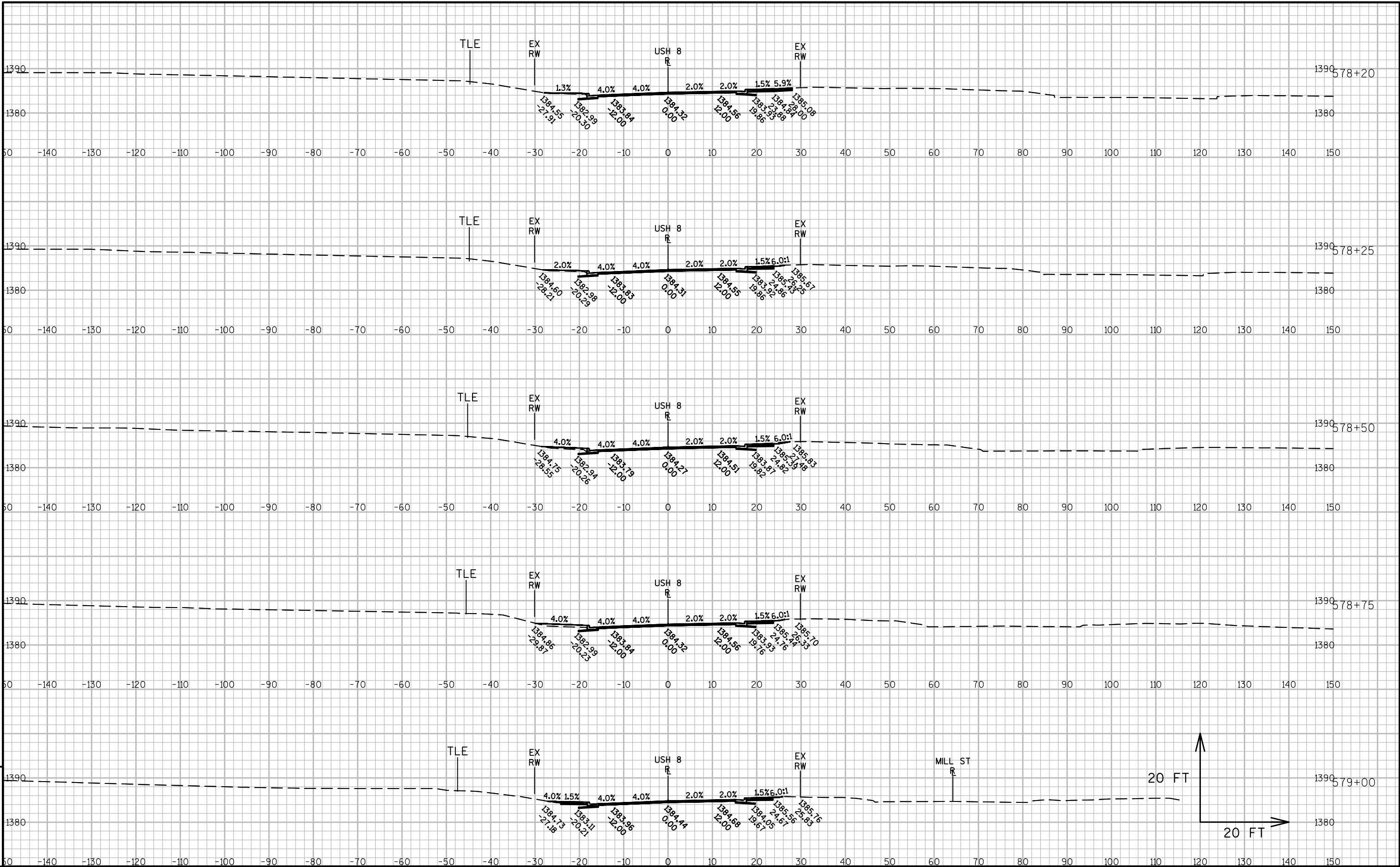


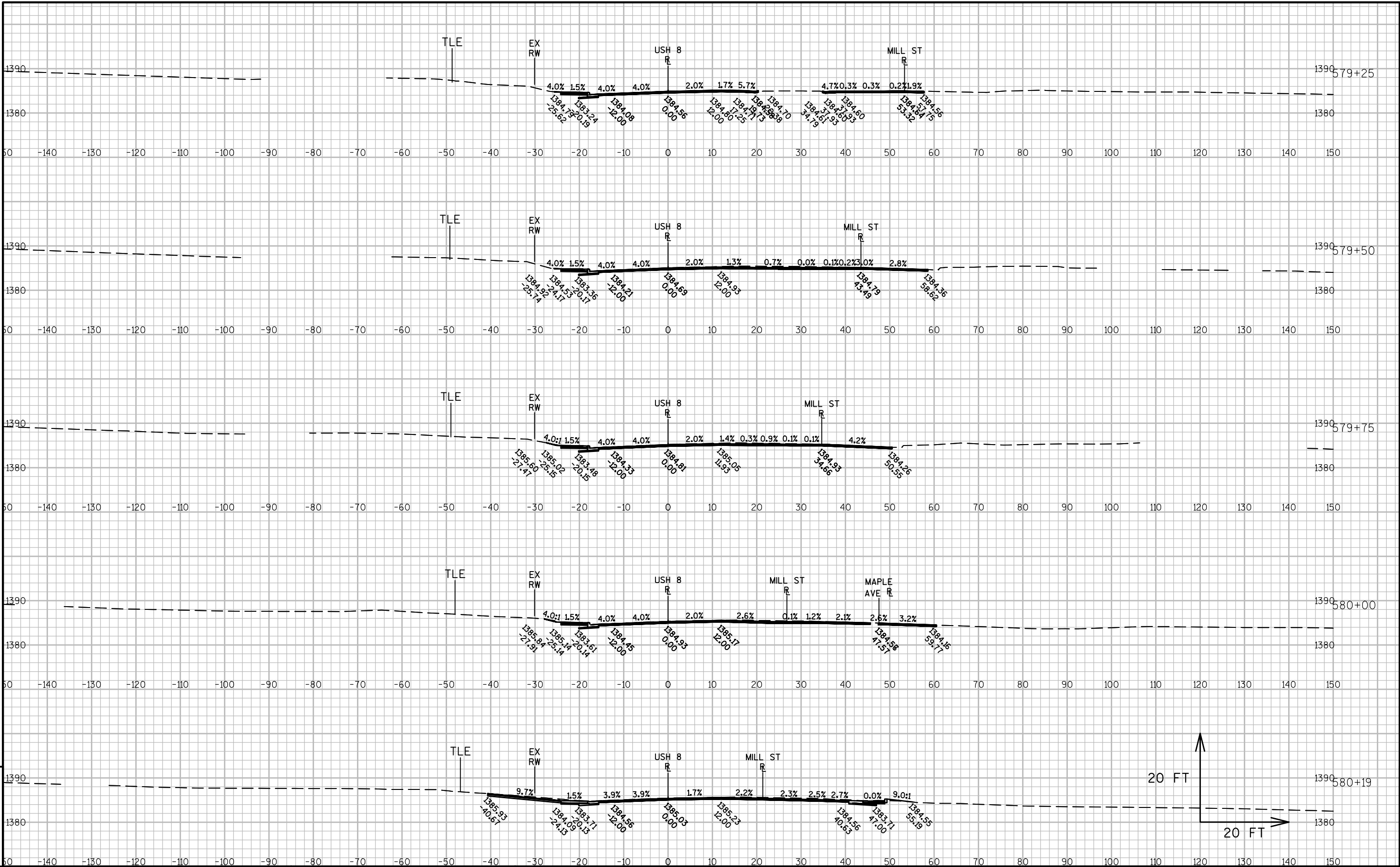


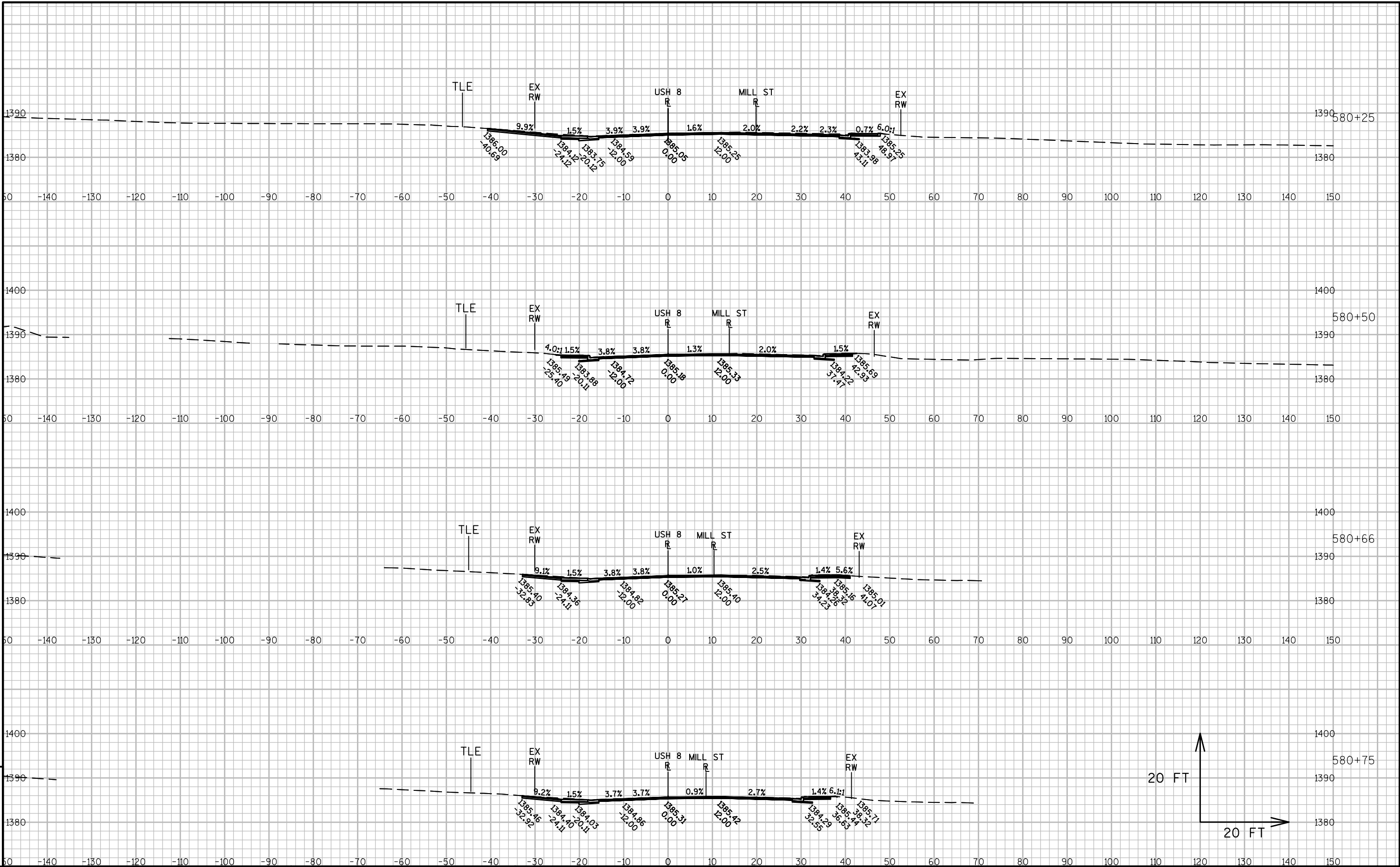


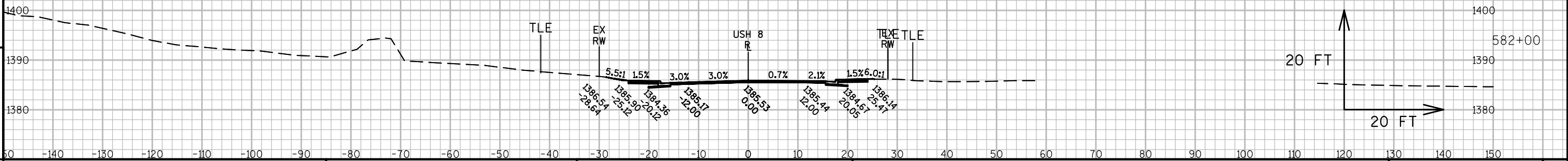
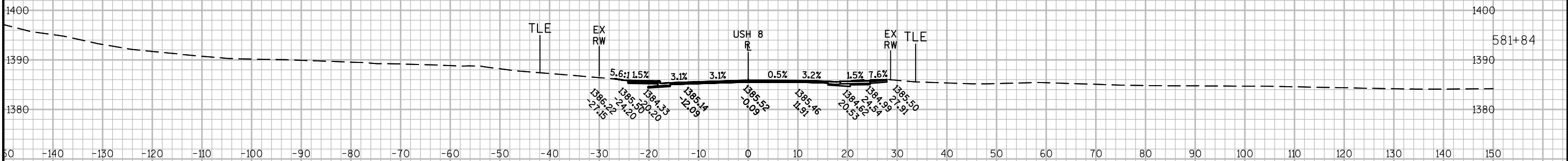
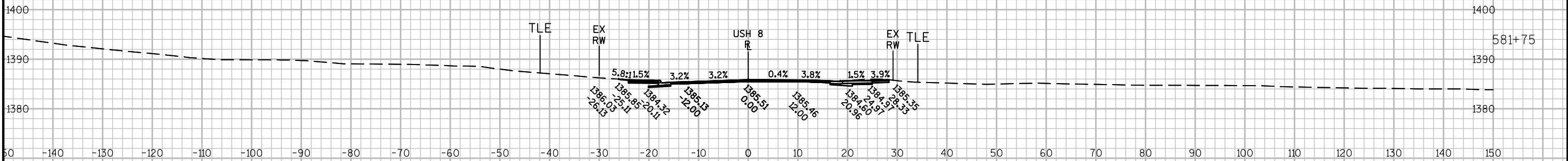
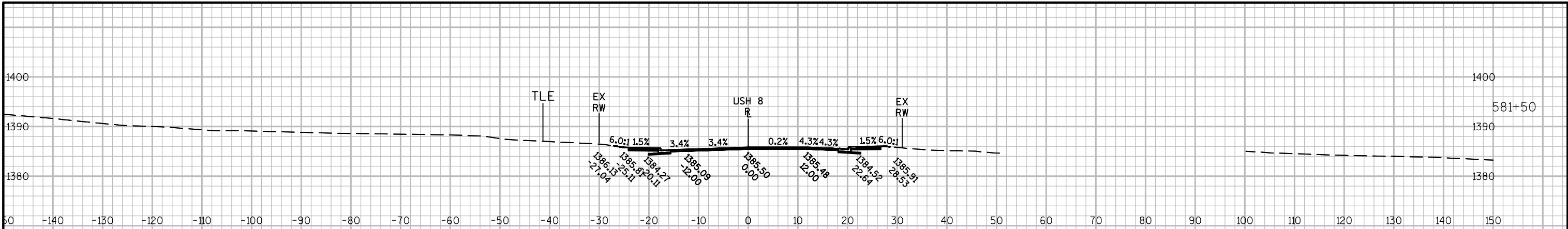


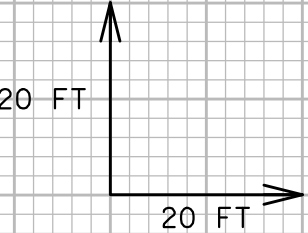
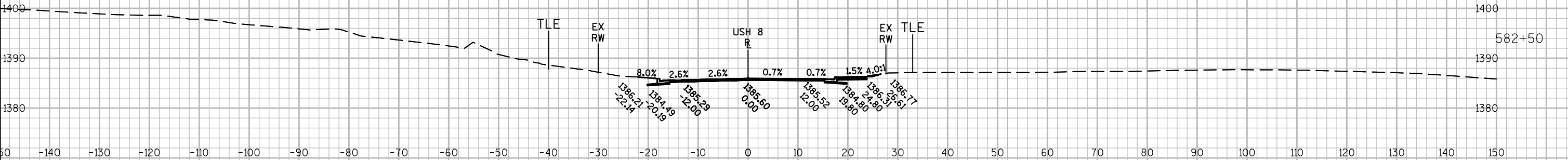
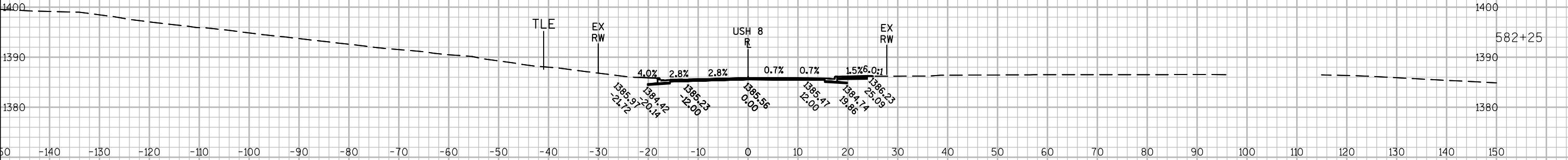
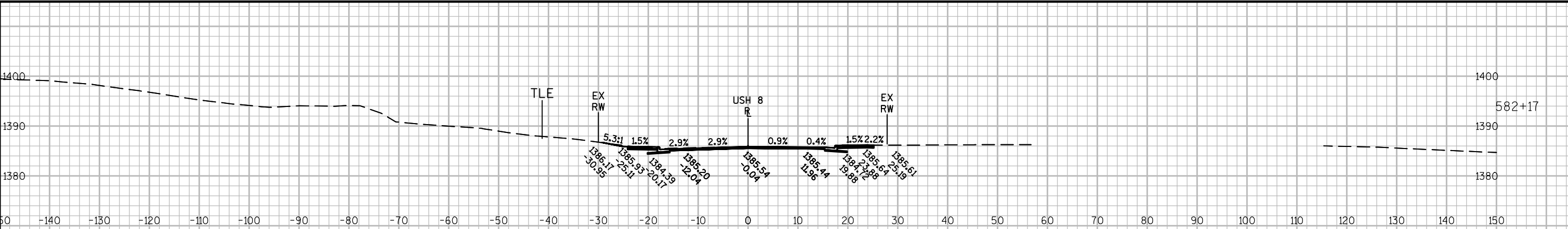






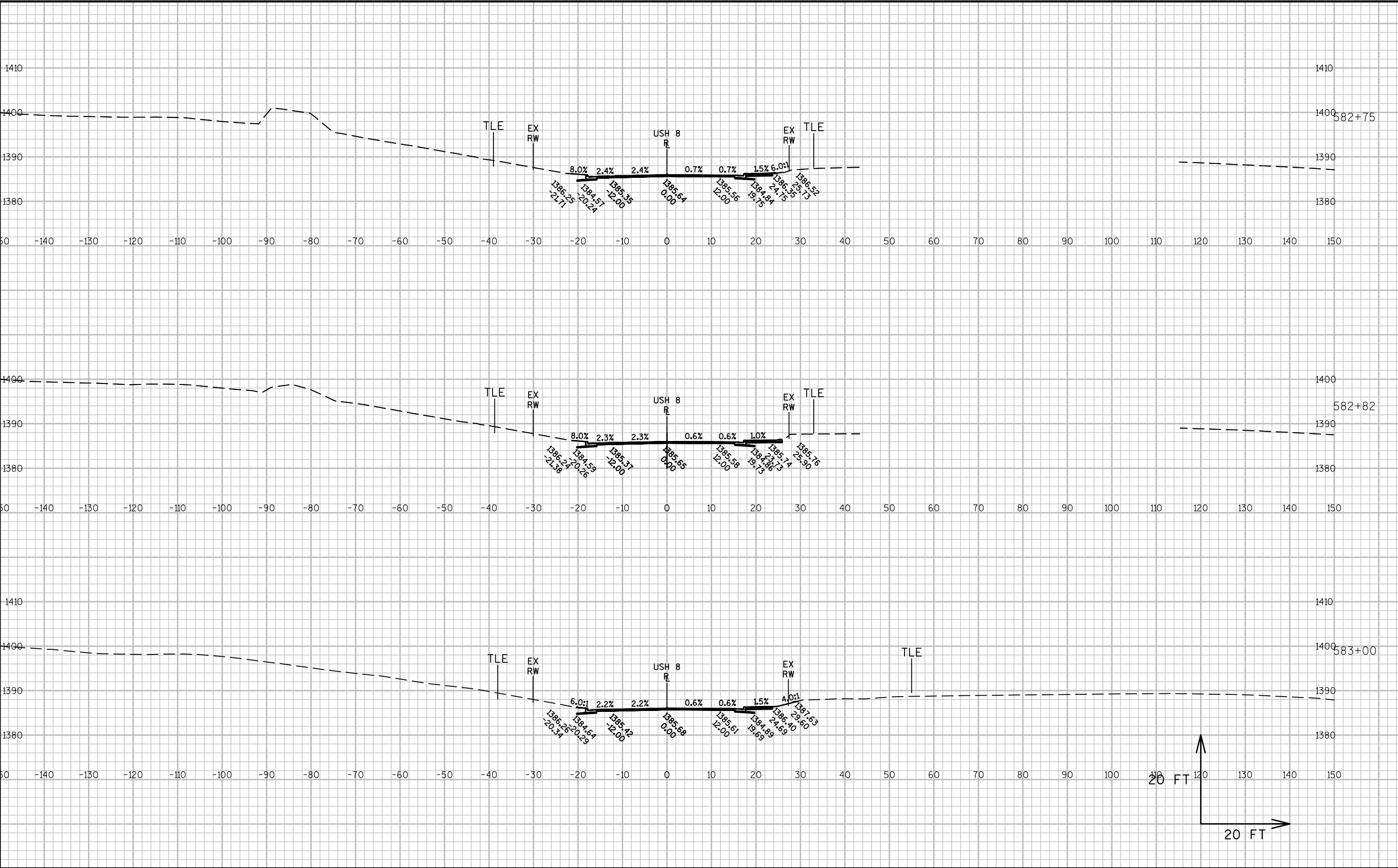


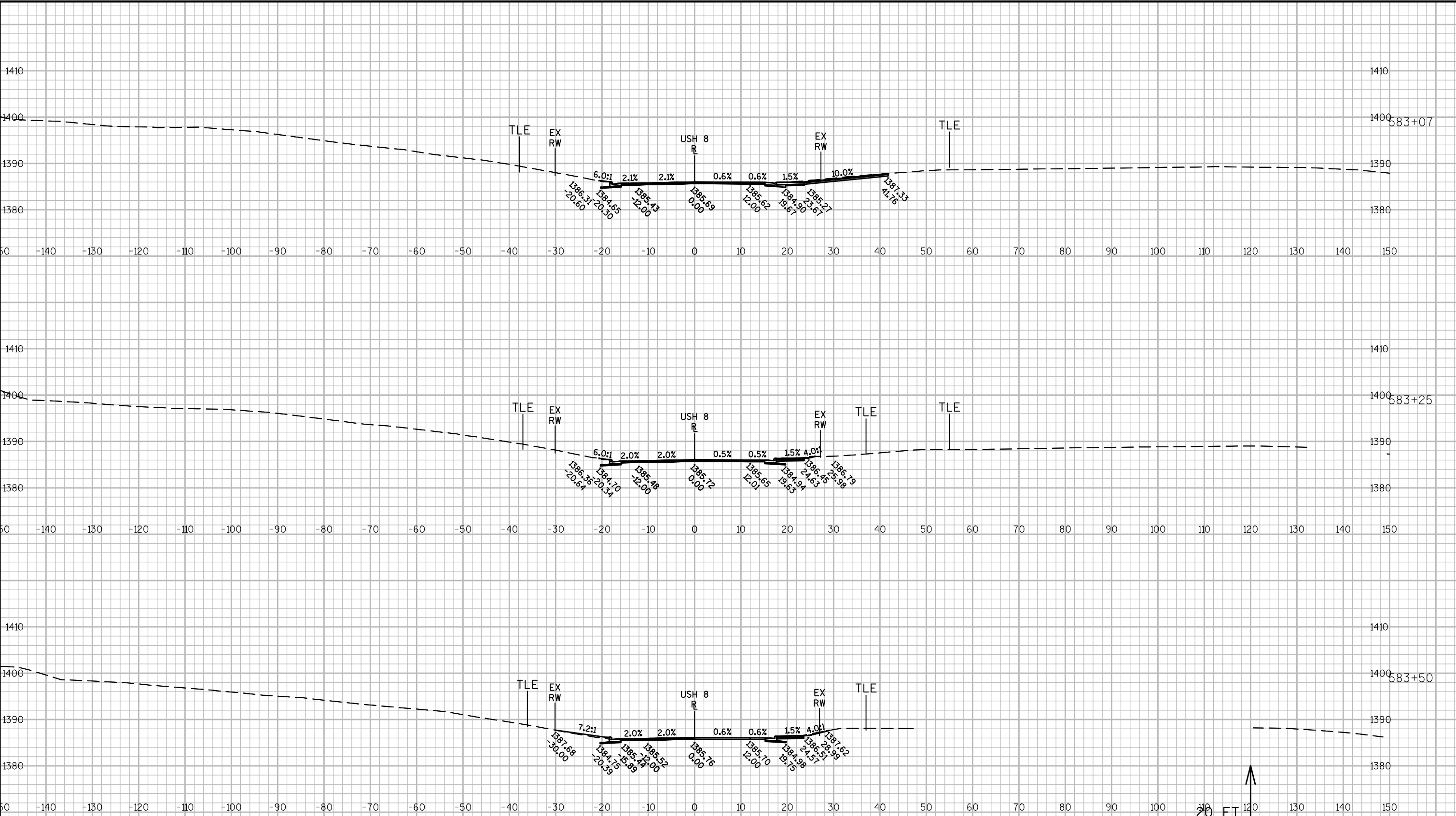


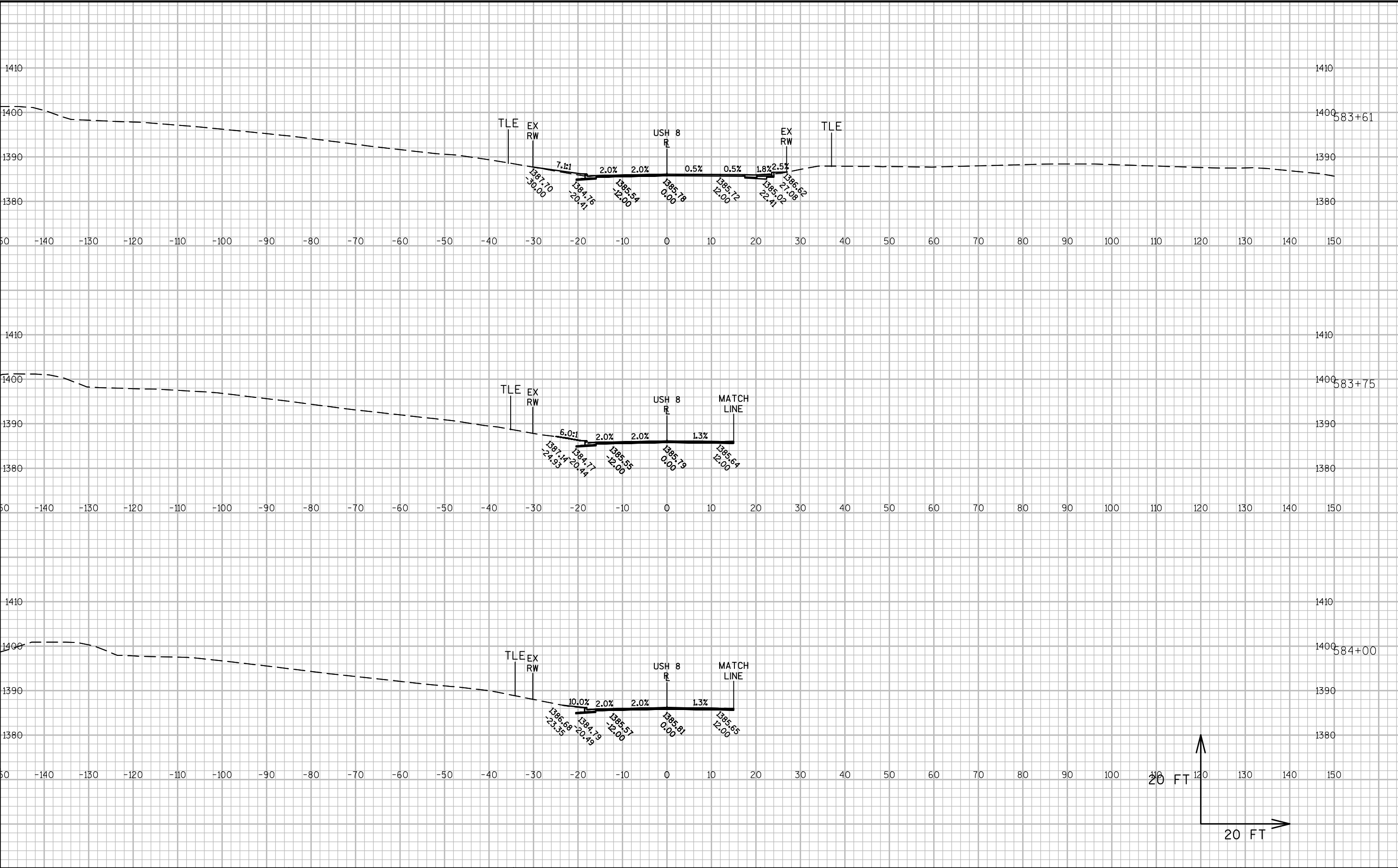


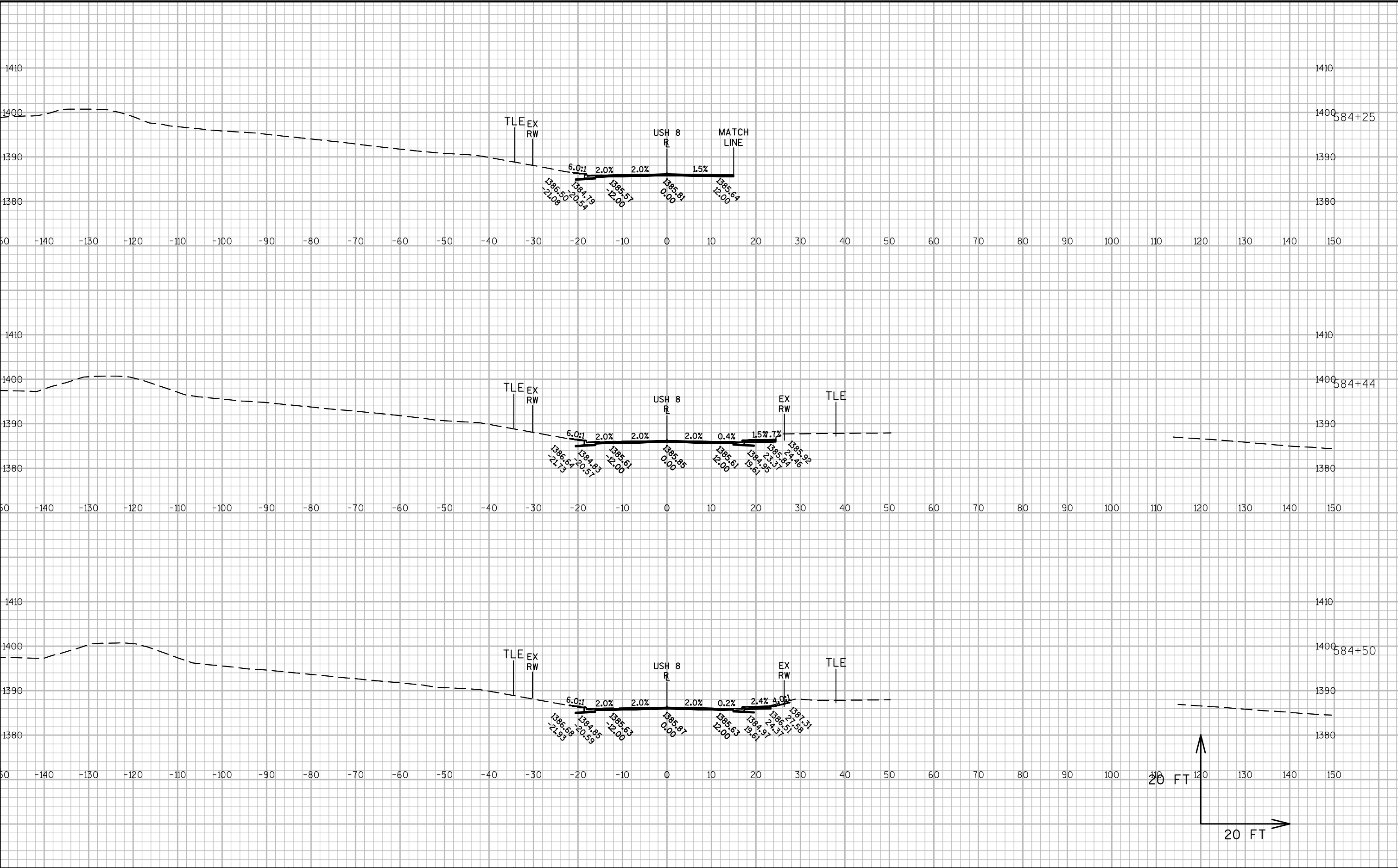
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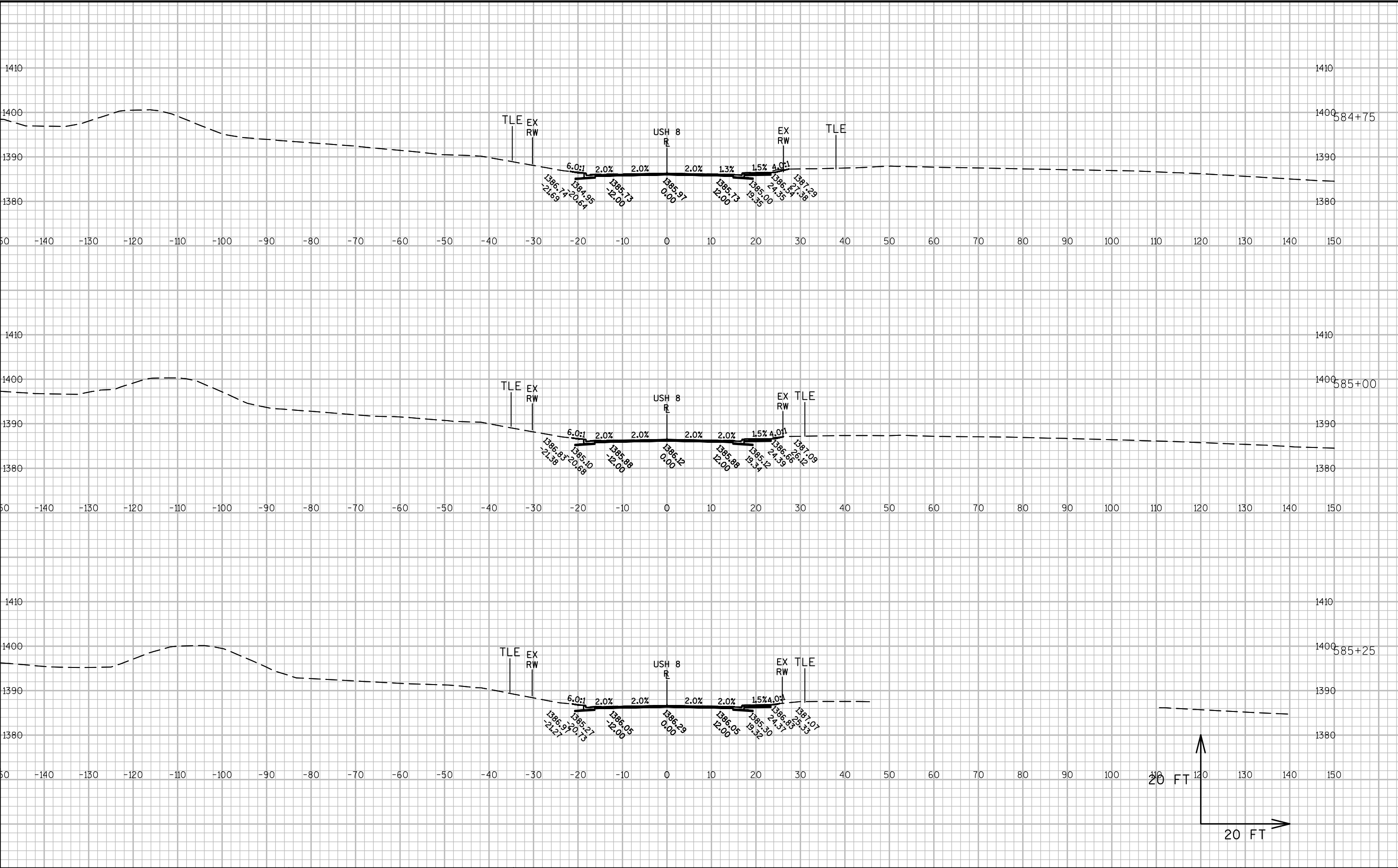
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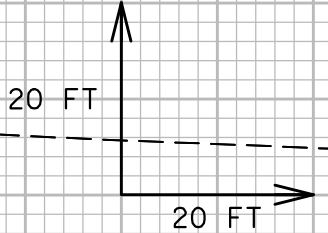
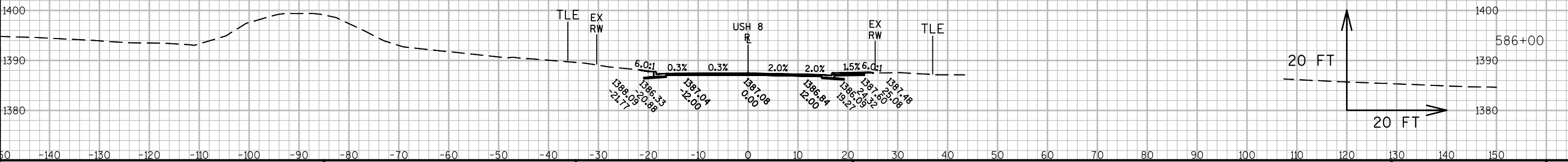
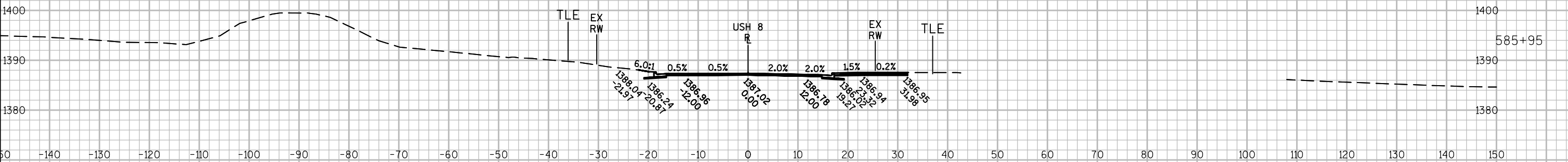
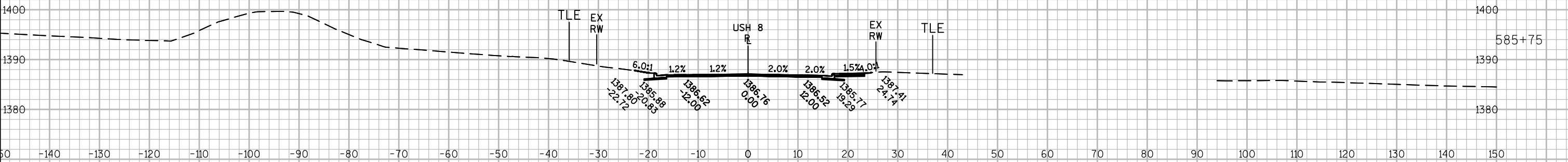
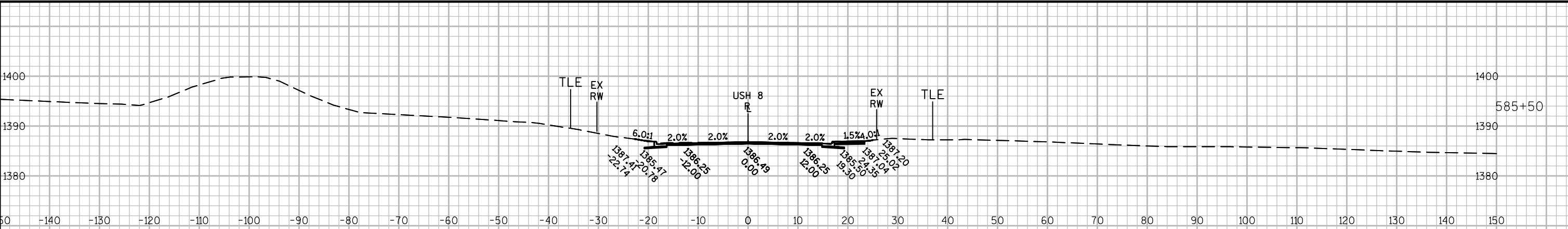


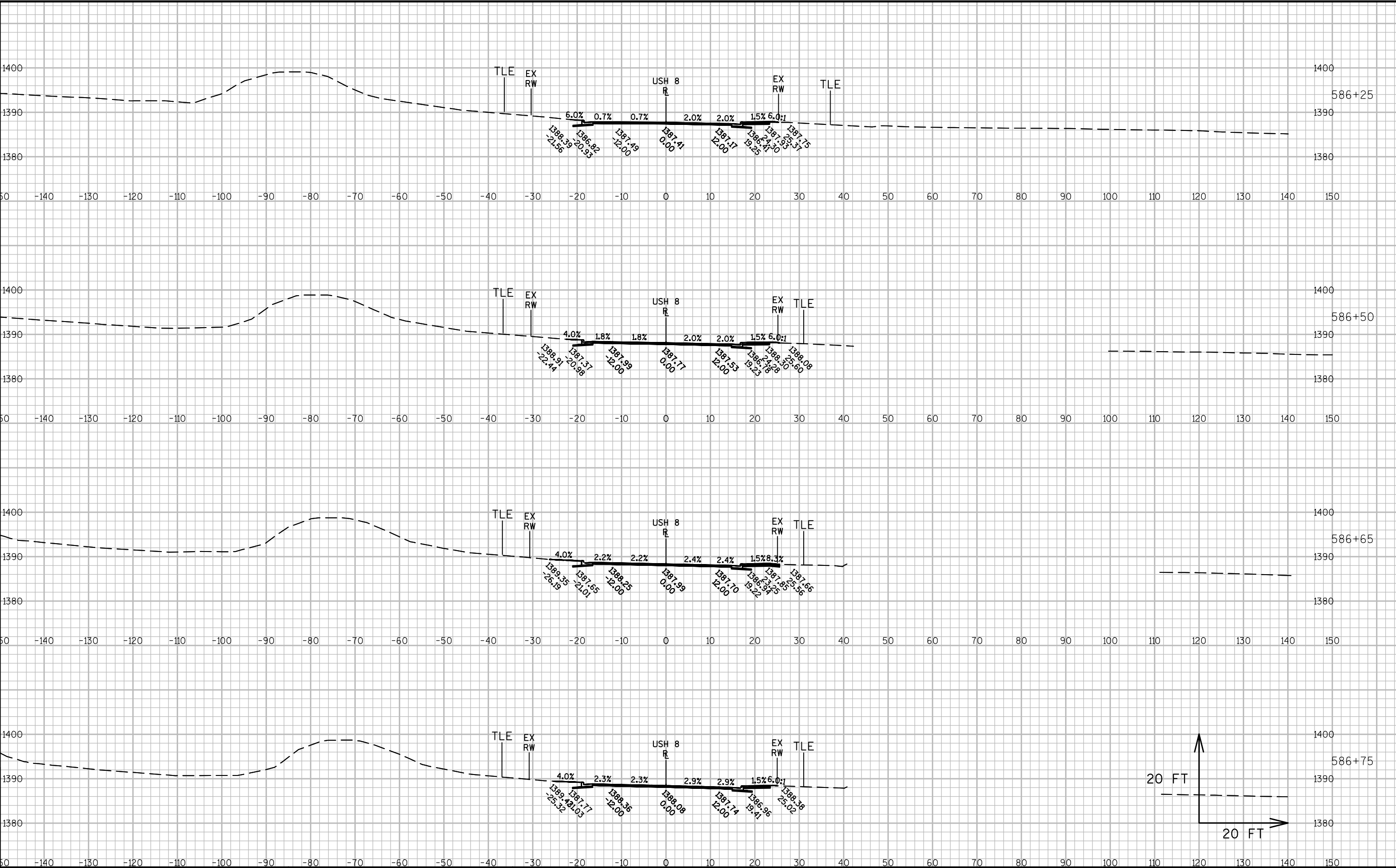


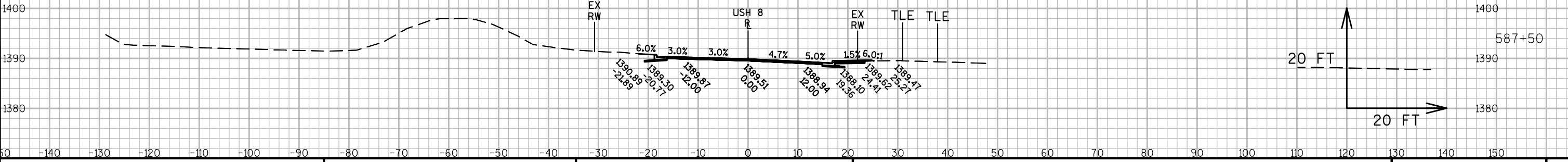
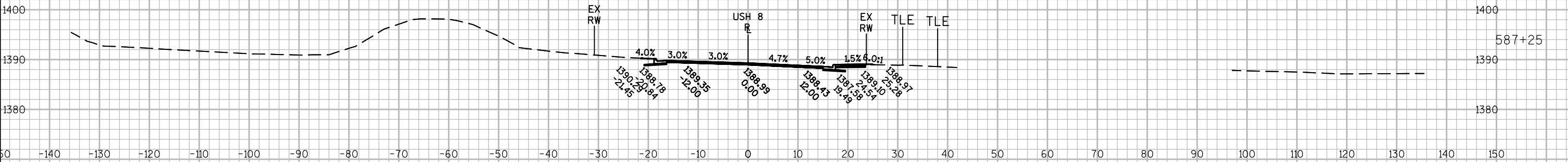
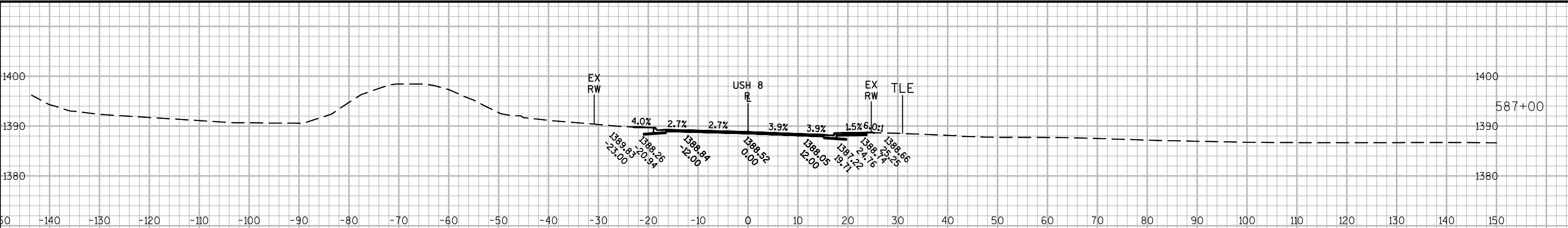






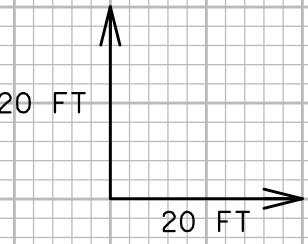
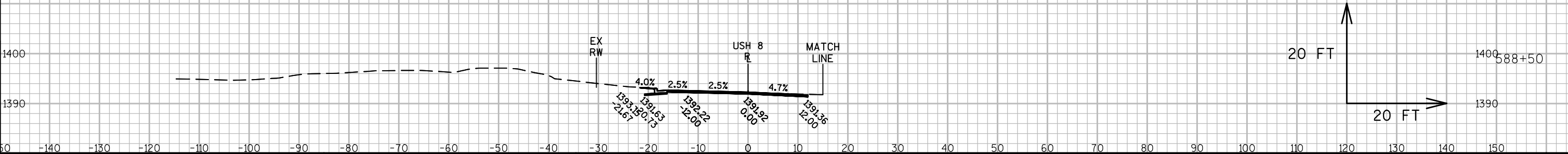
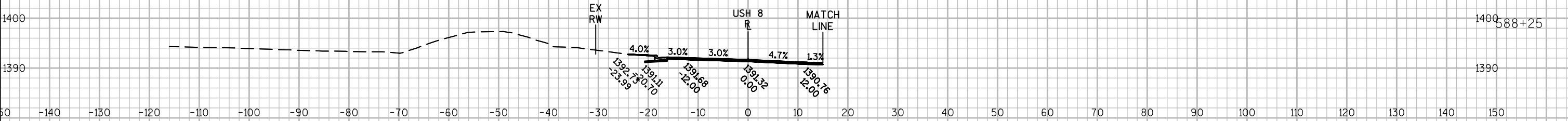
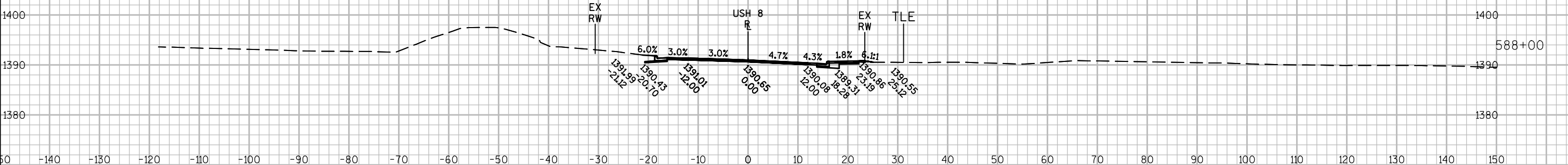
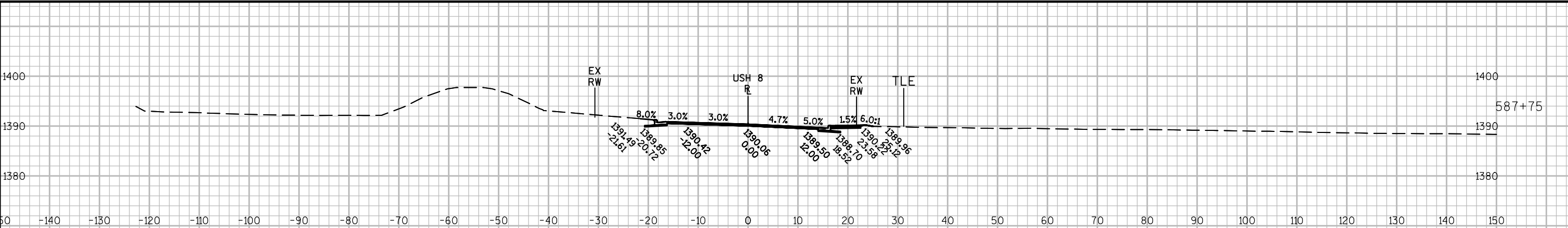


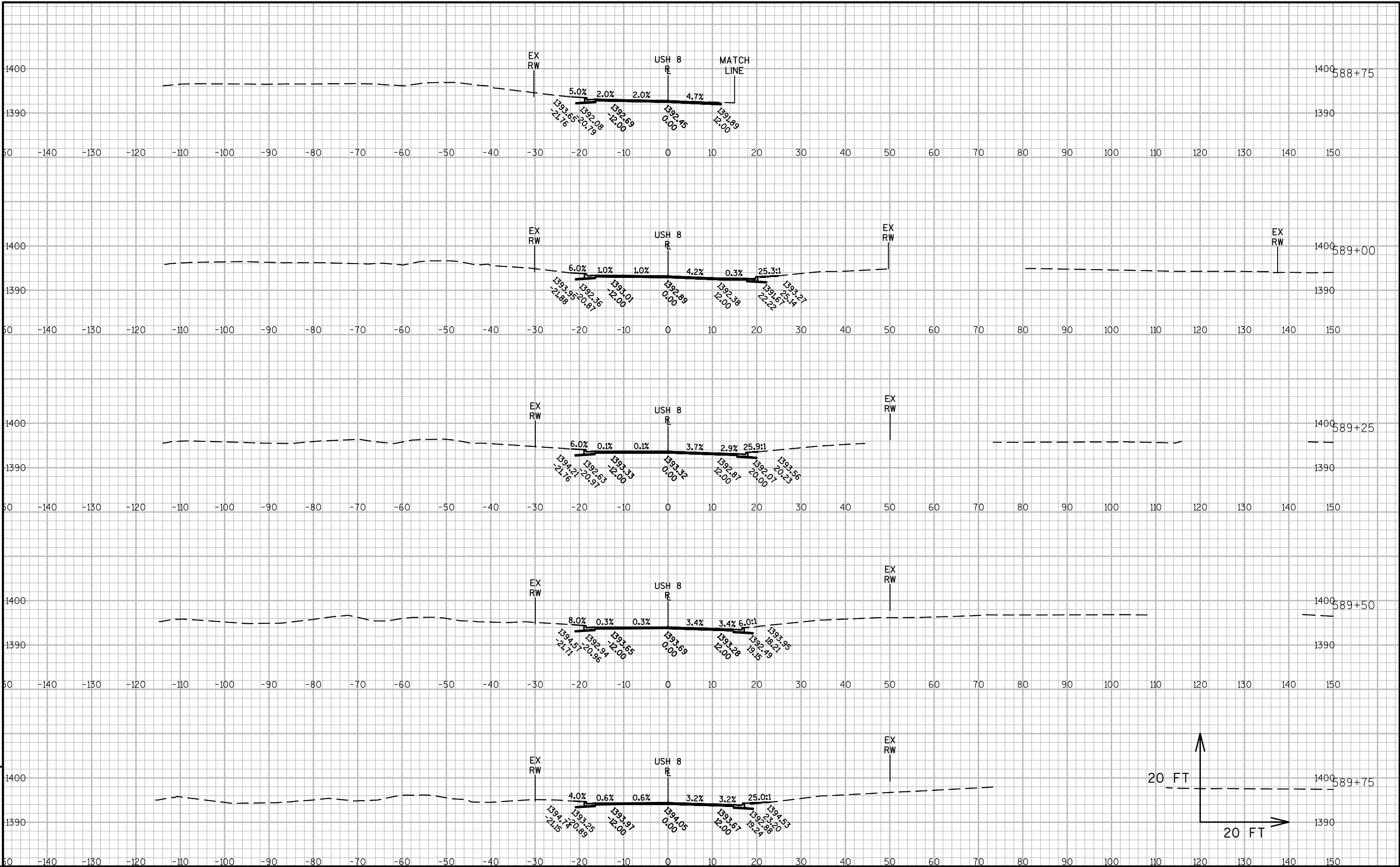


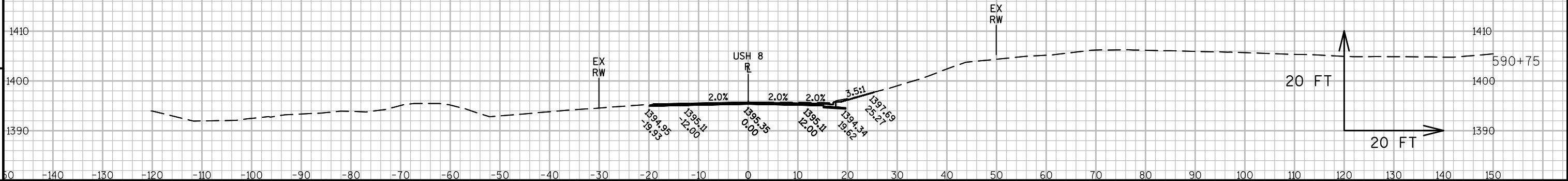
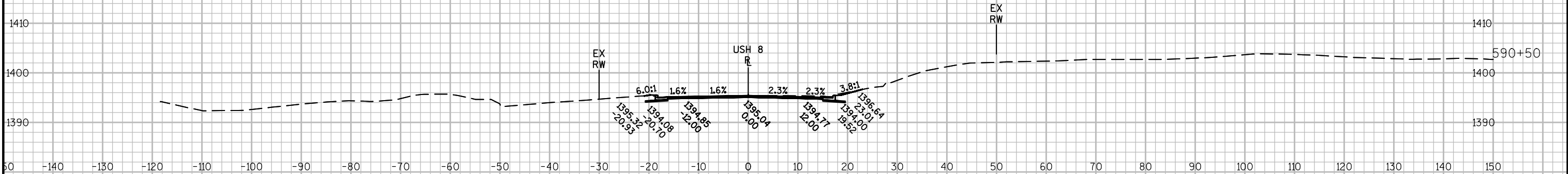
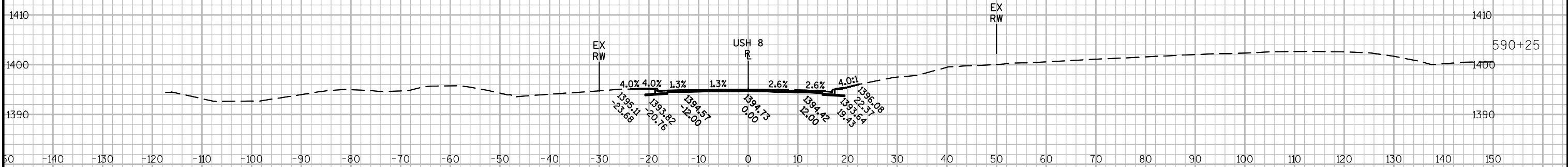
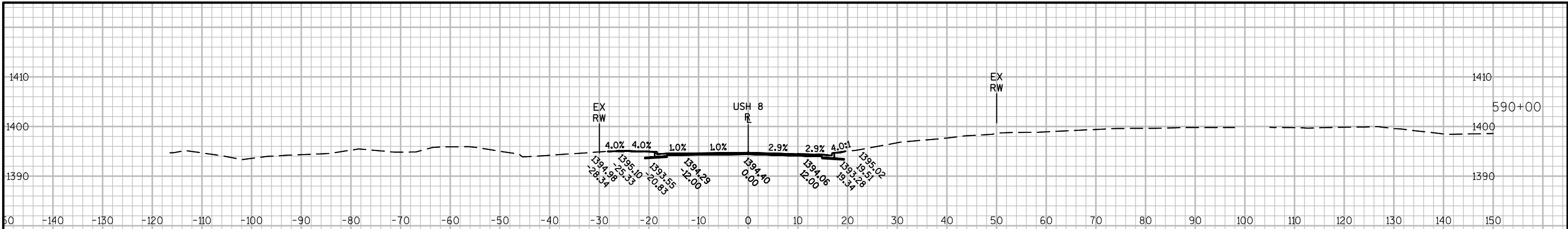


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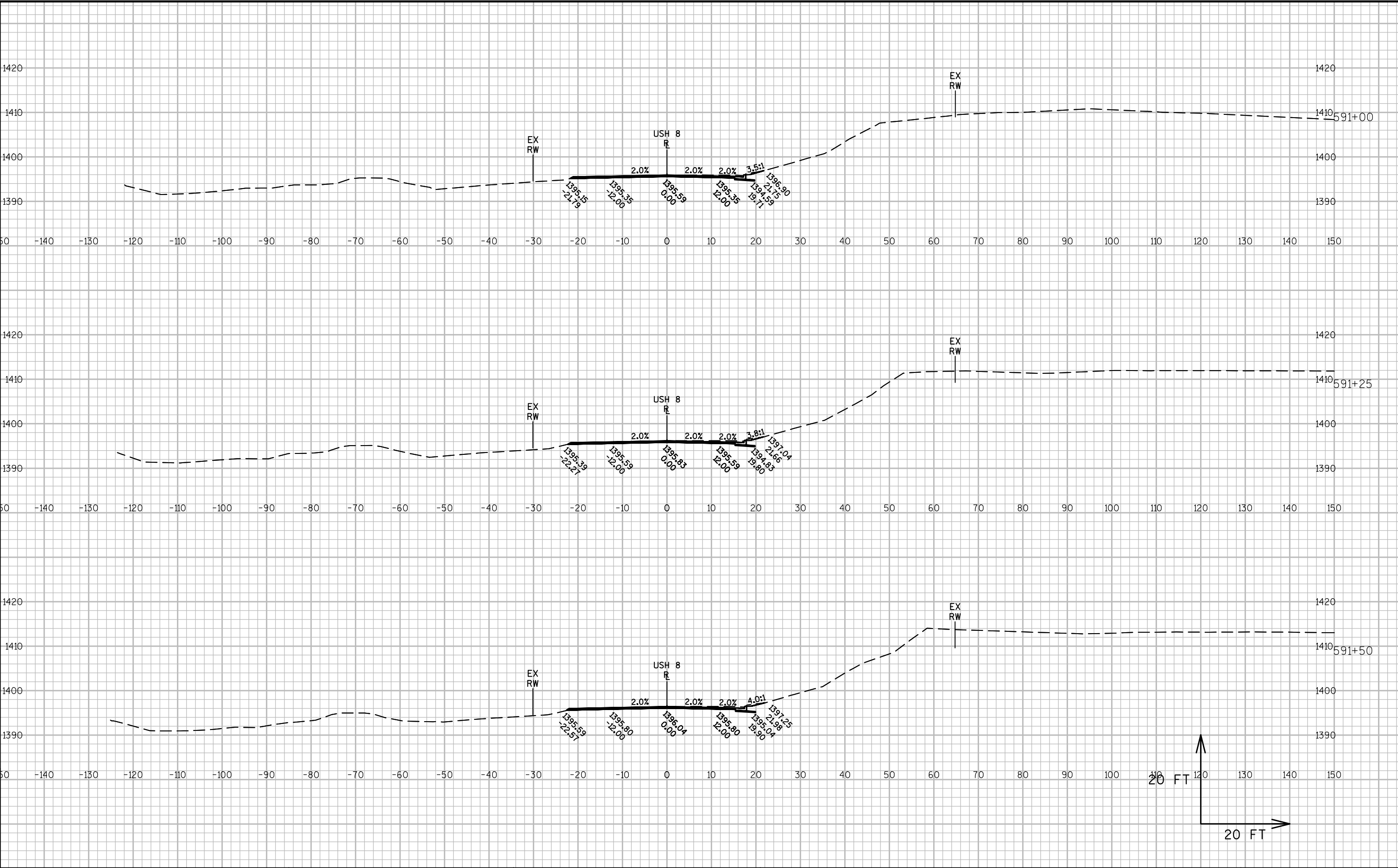






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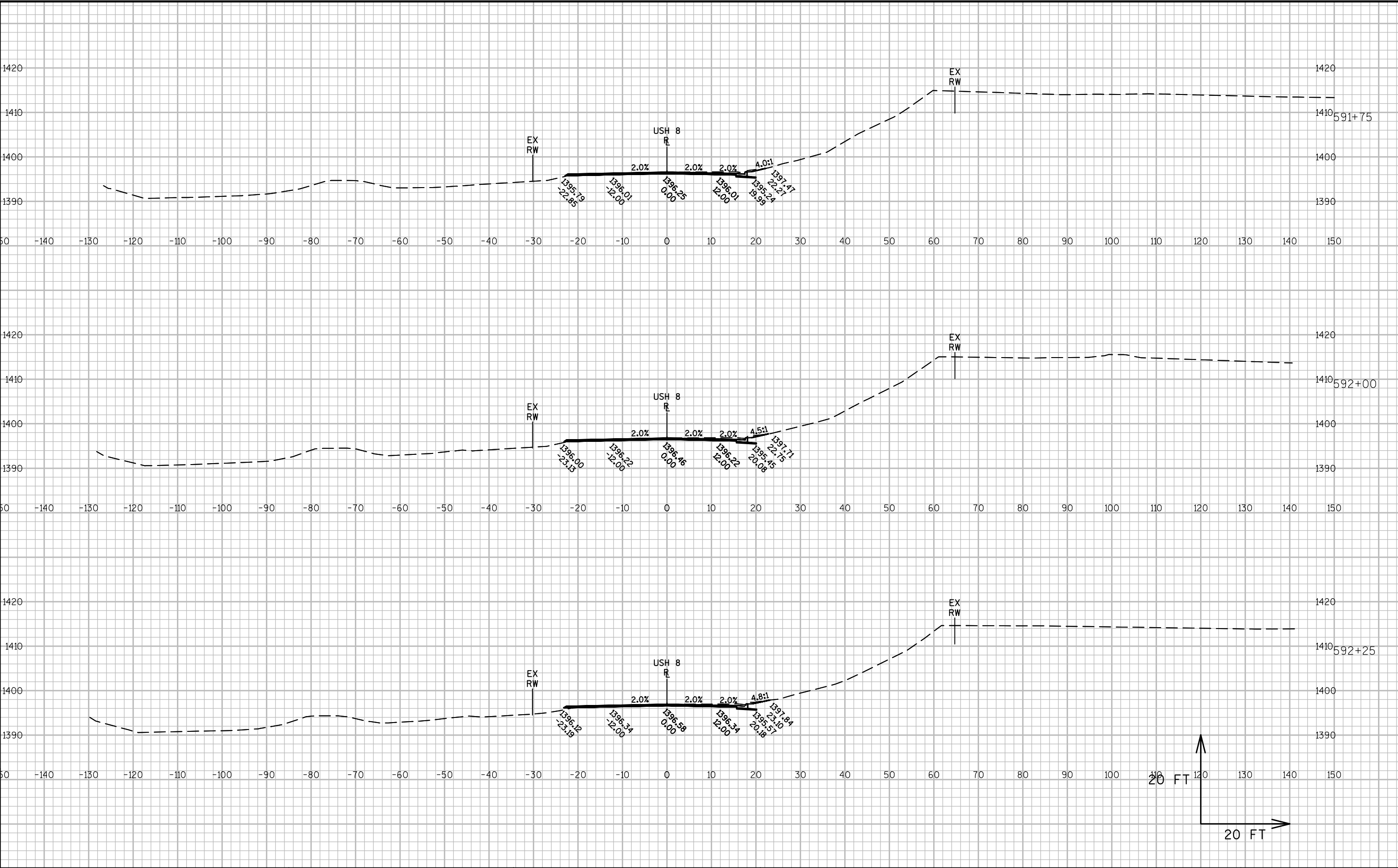
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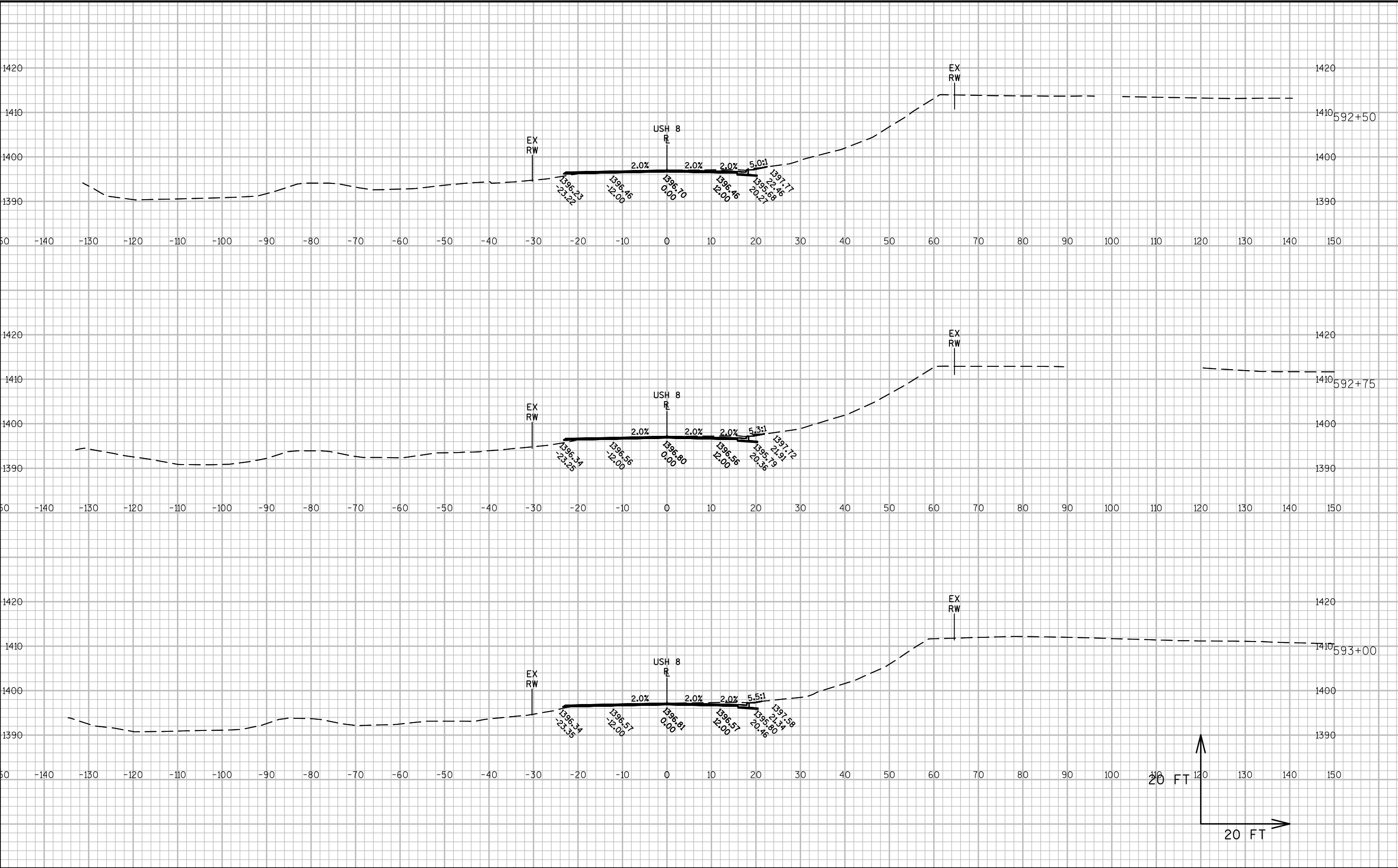


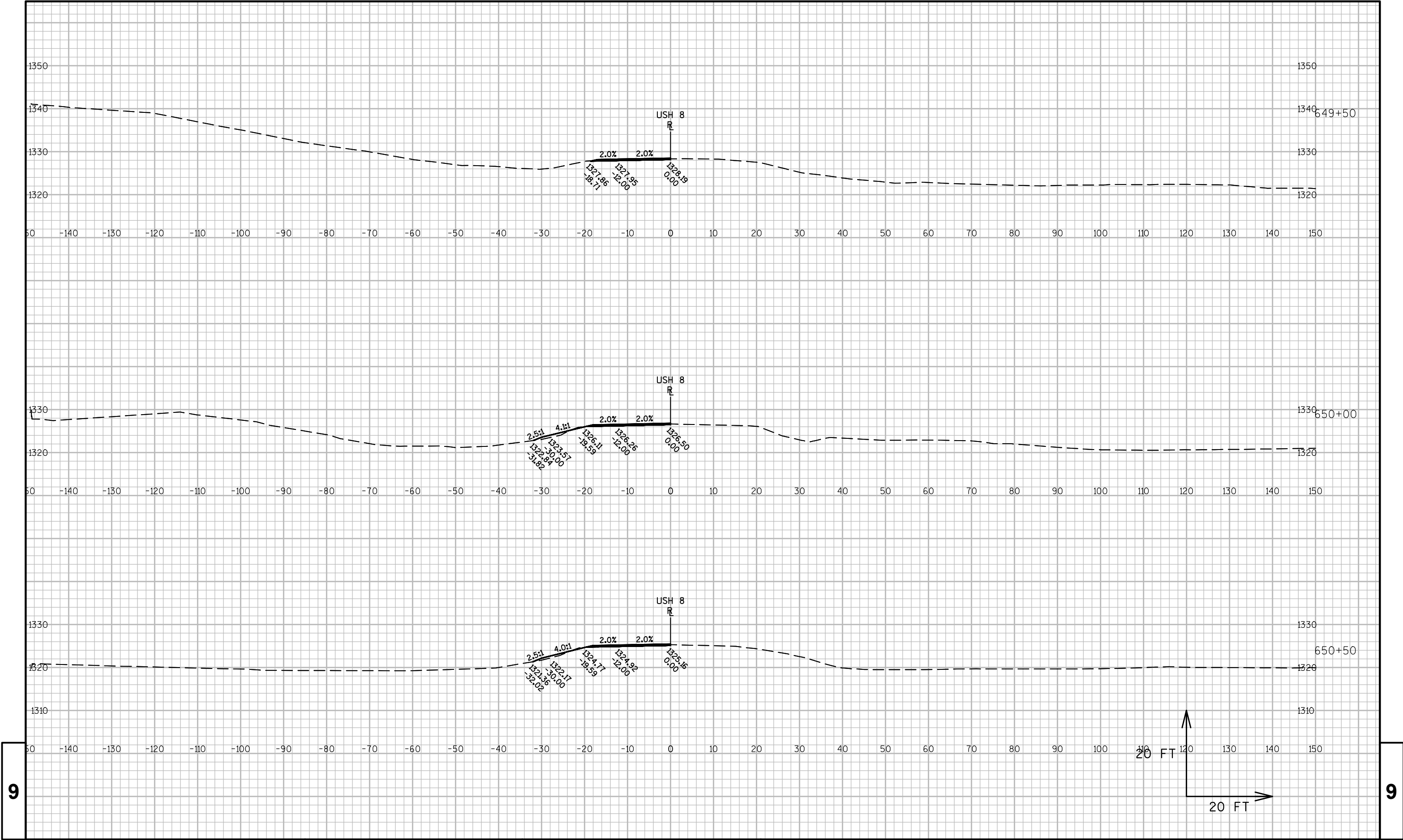
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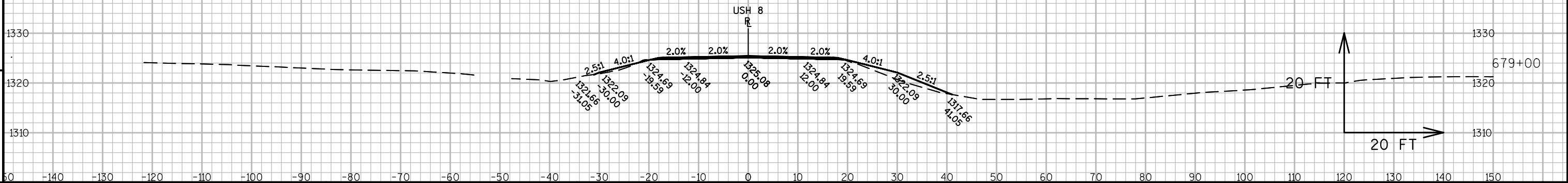
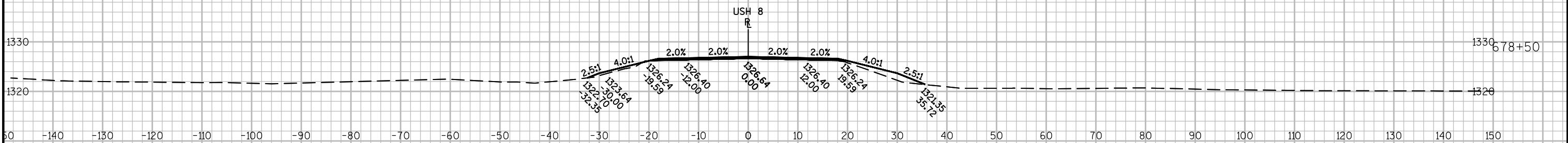
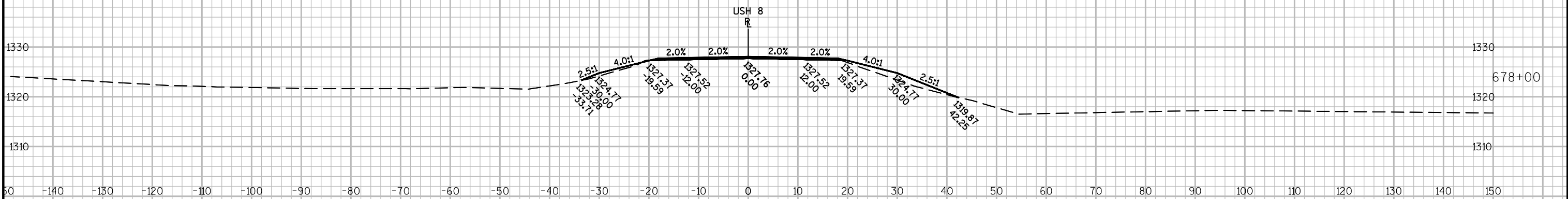
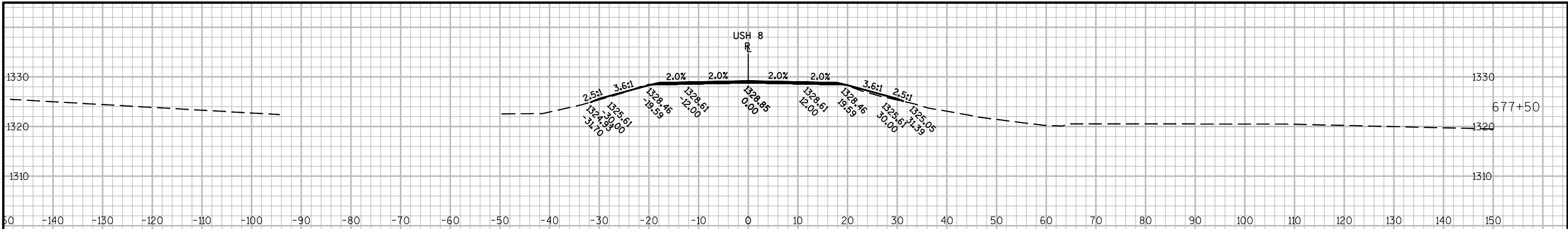
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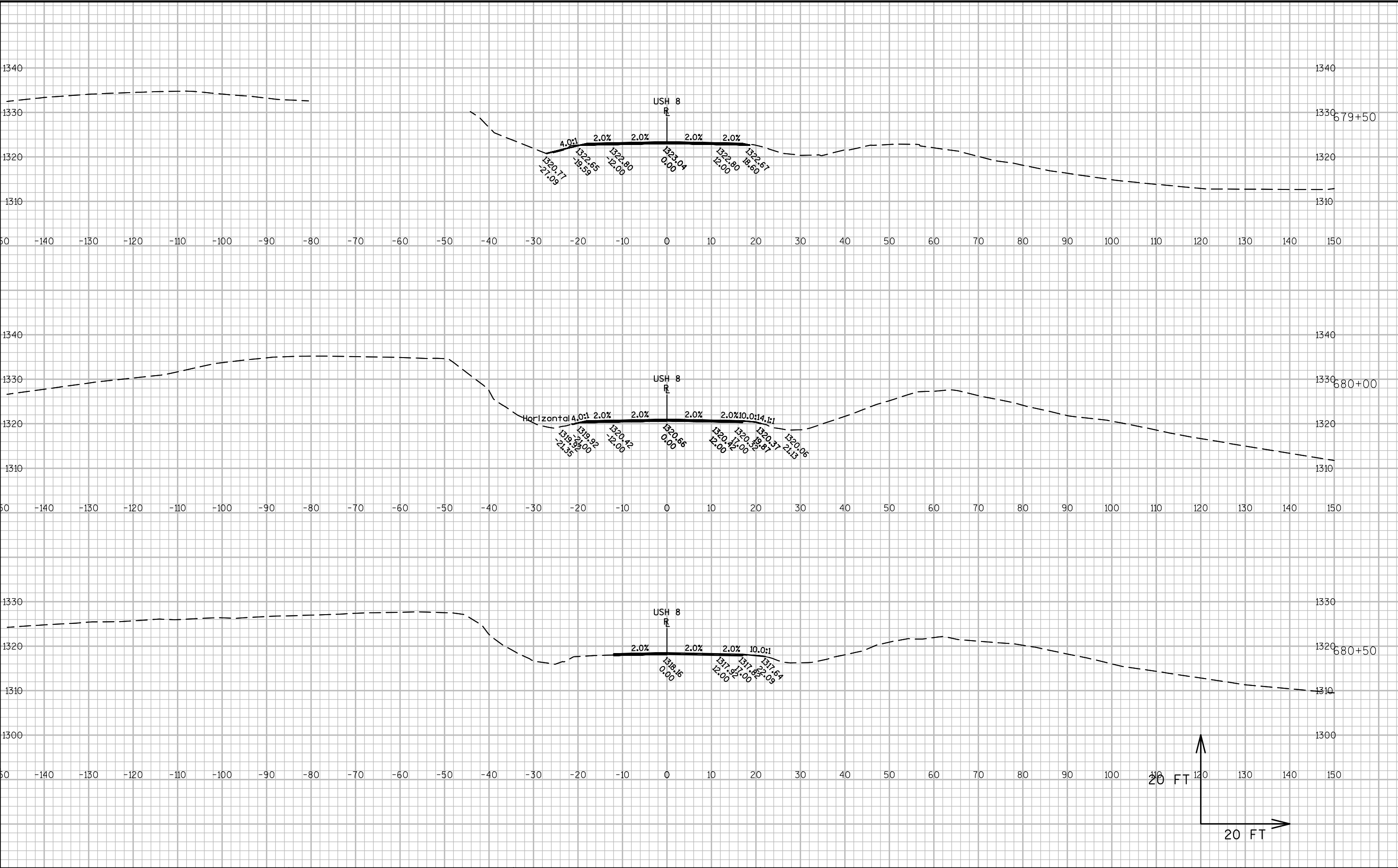
PROJECT NO:1590-16-71	HWY:USH 8	COUNTY:MARINETTE	CROSS SECTIONS: USH 8	SHEET	E
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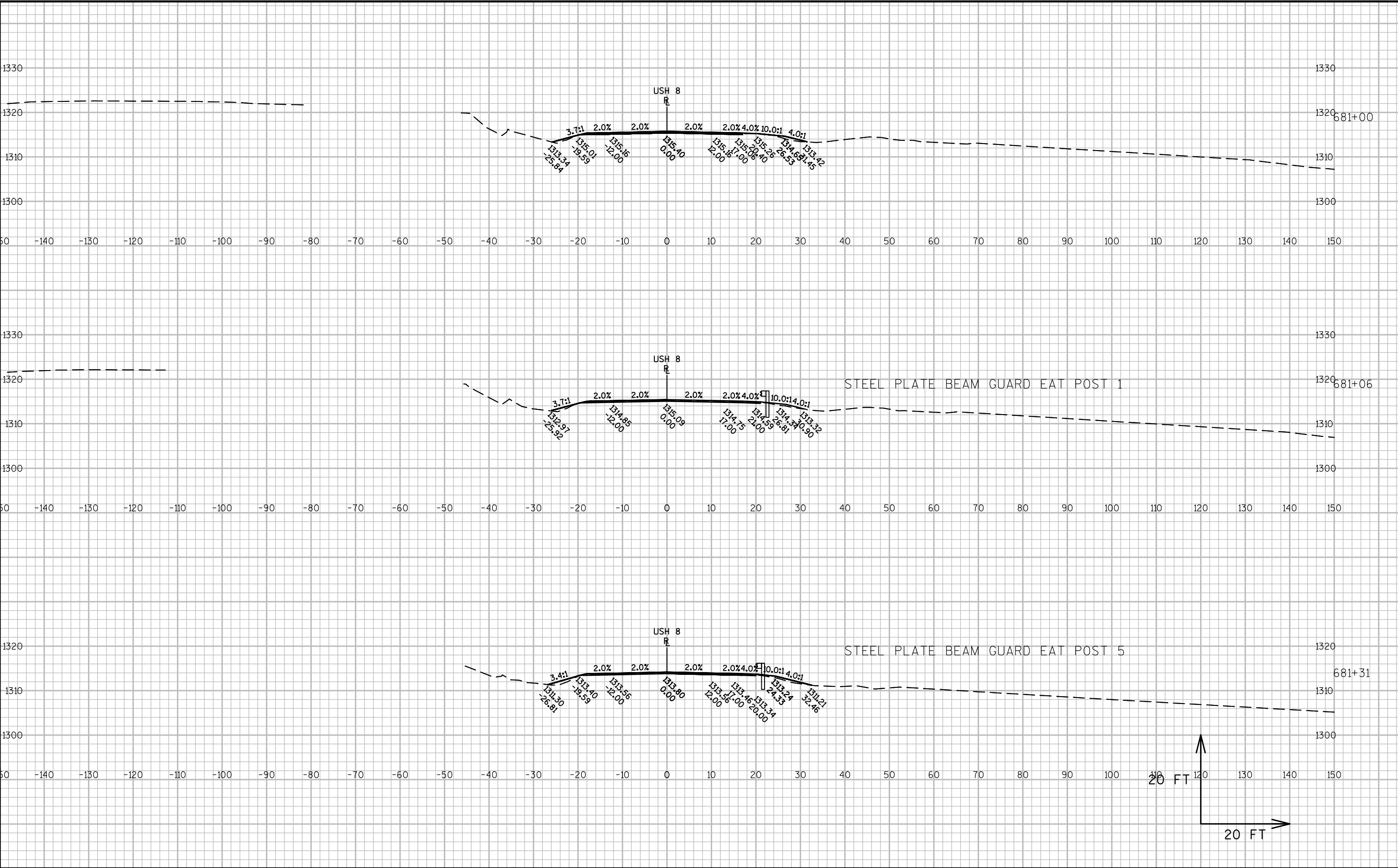


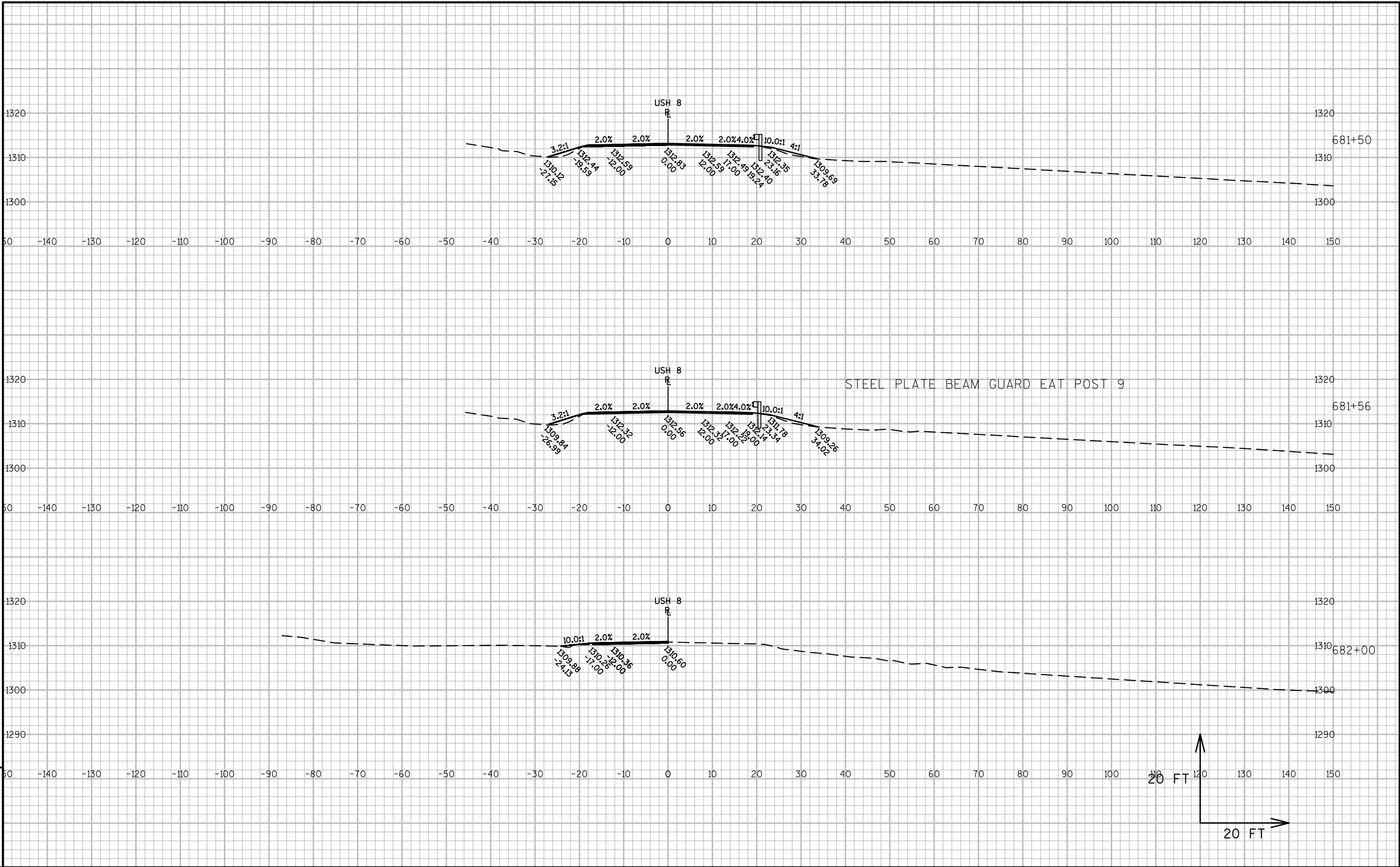


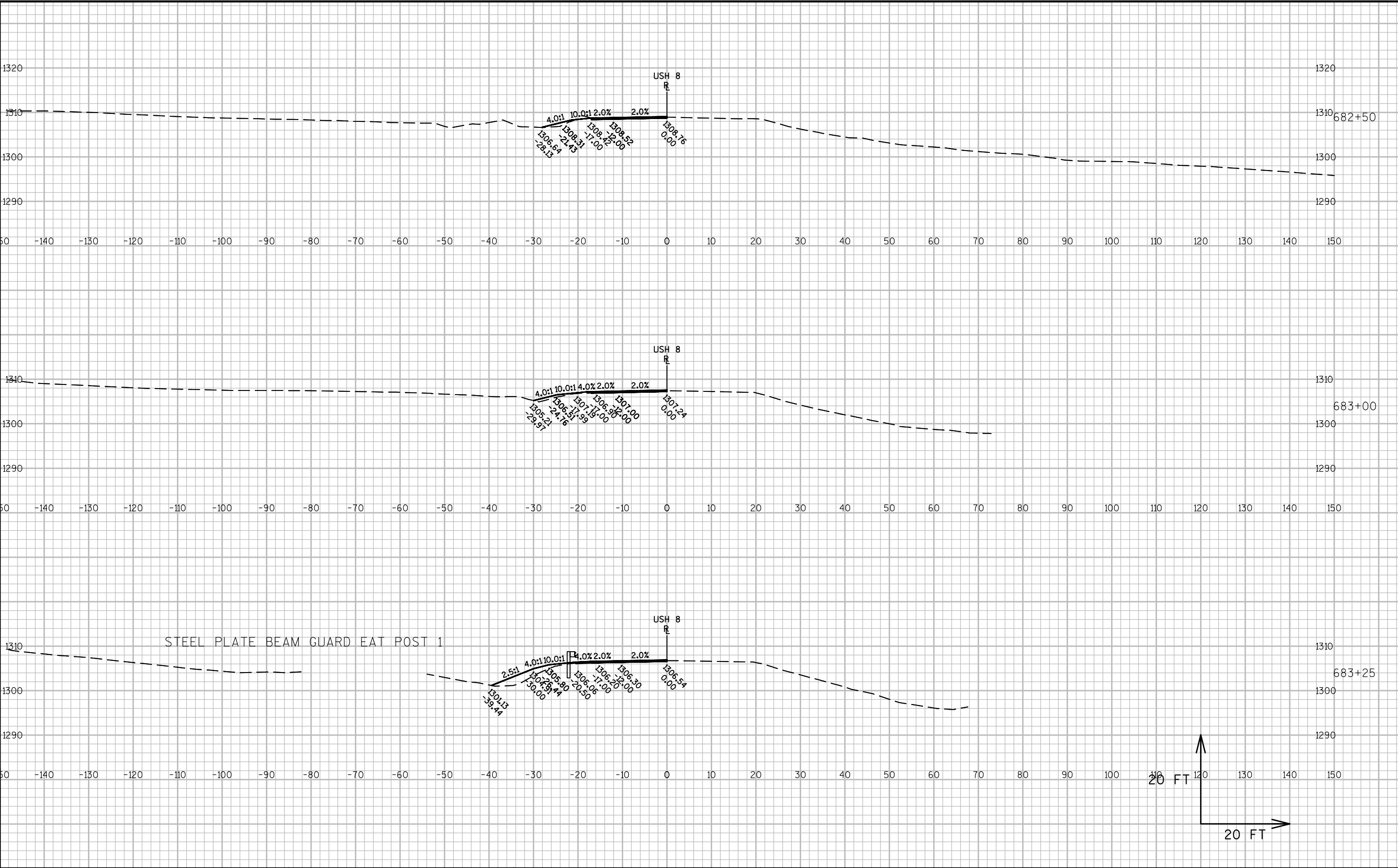


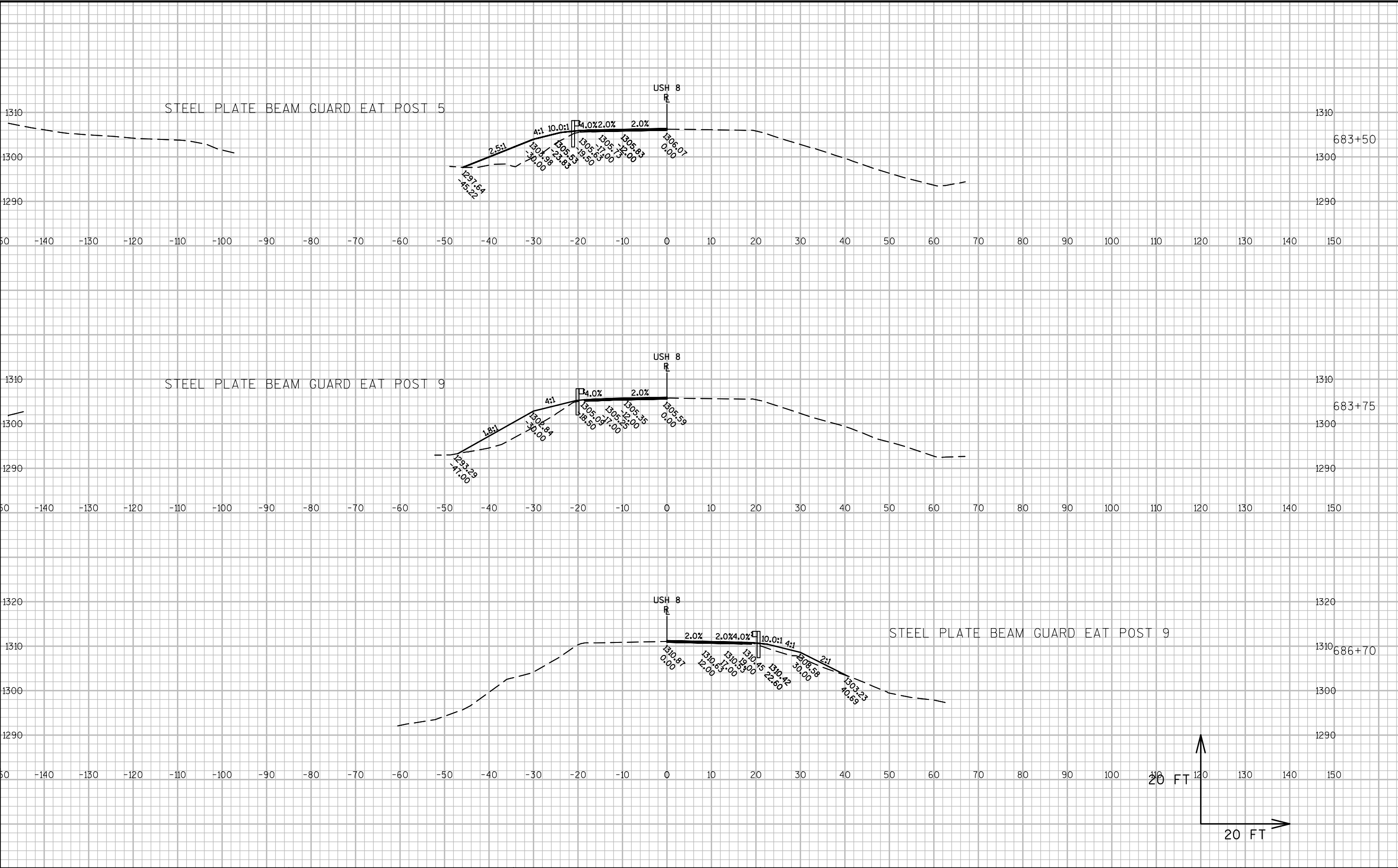


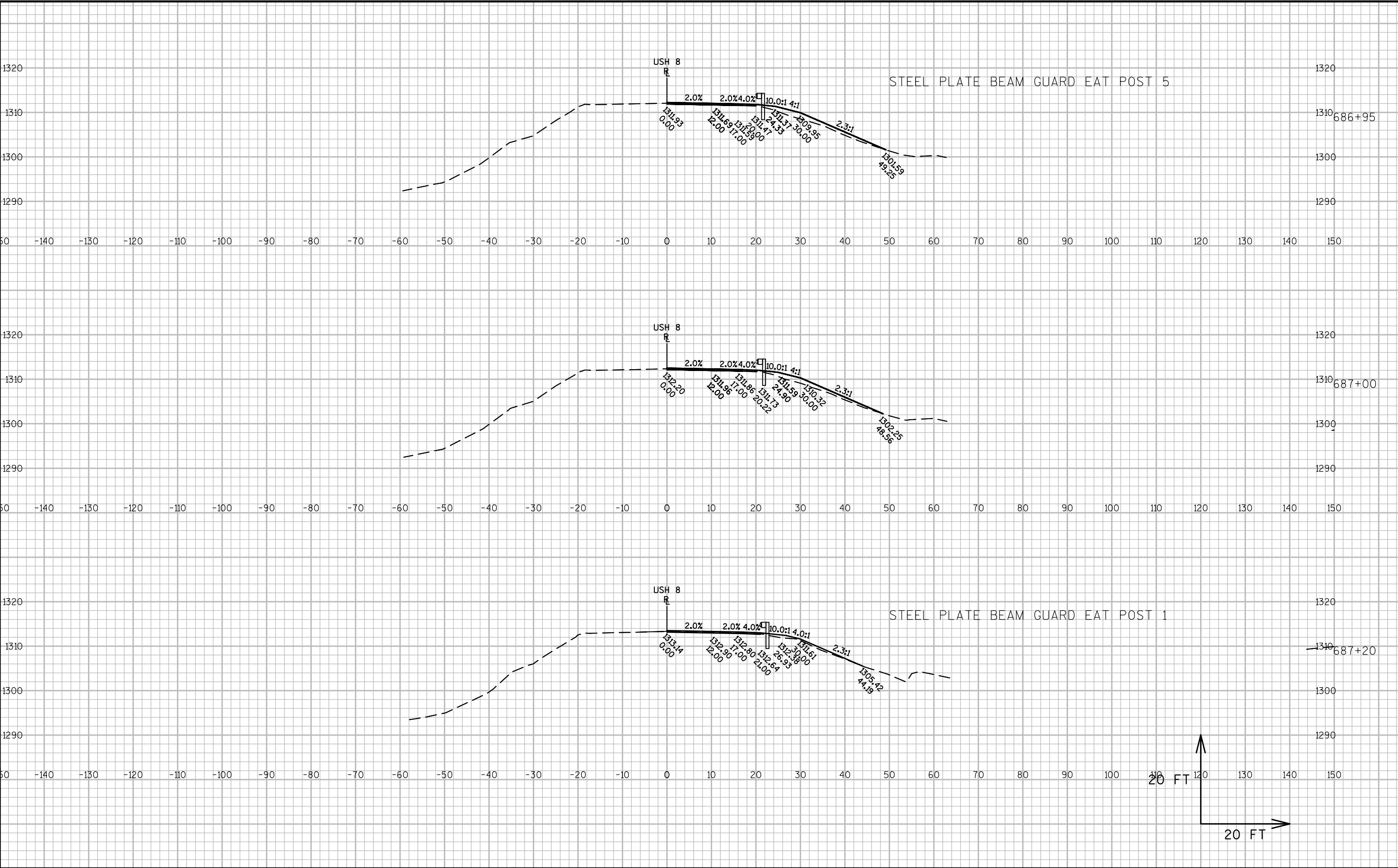


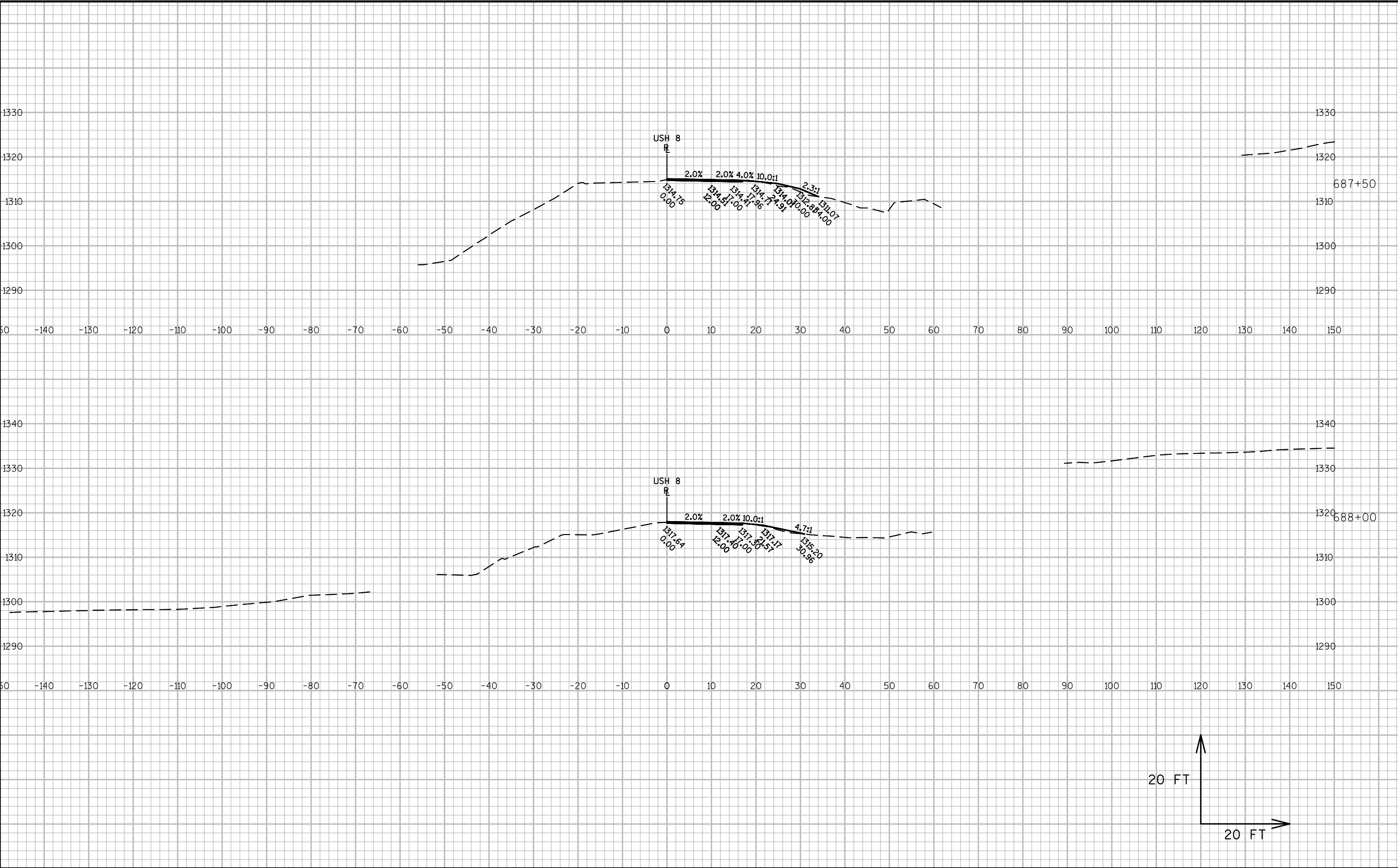


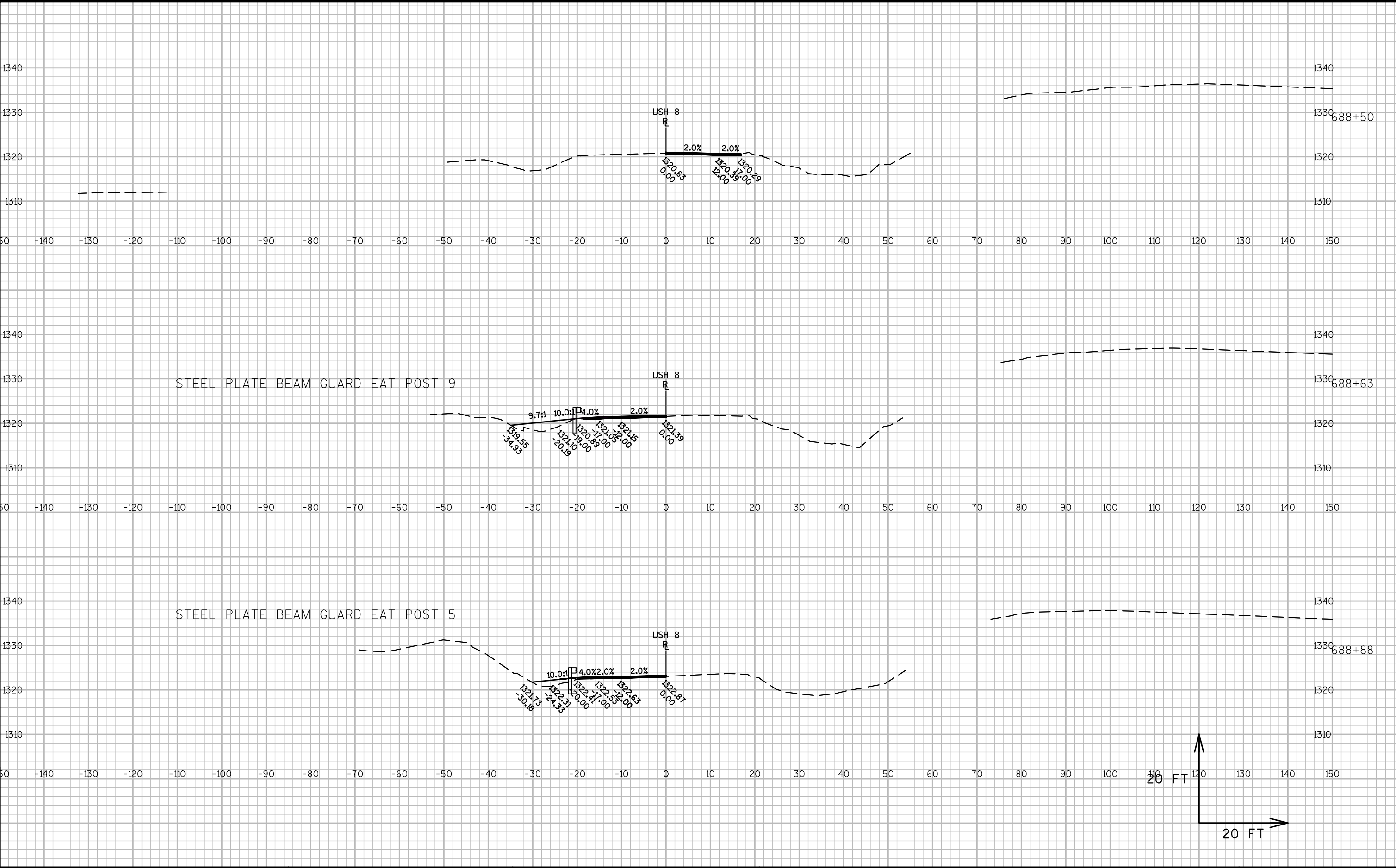


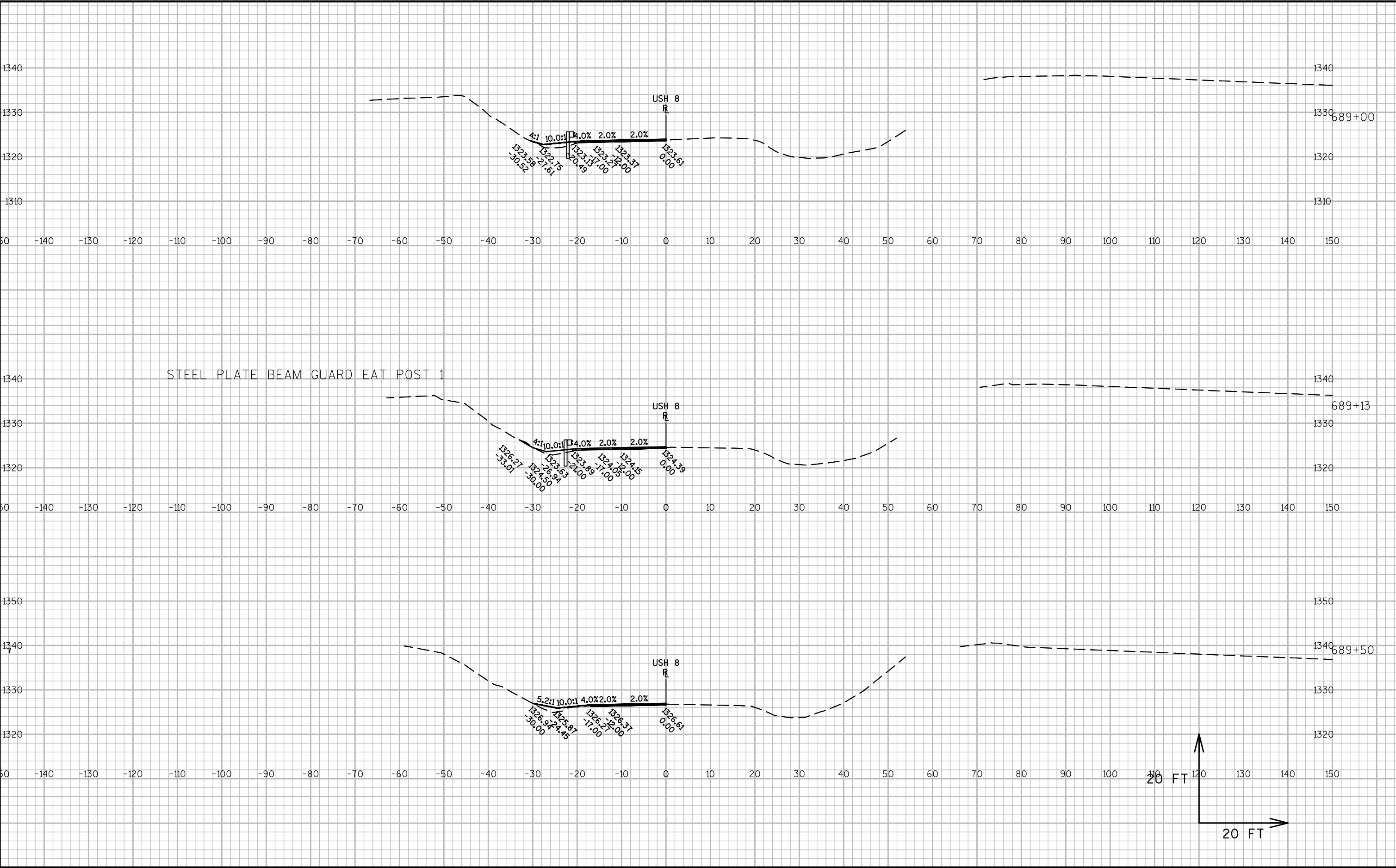








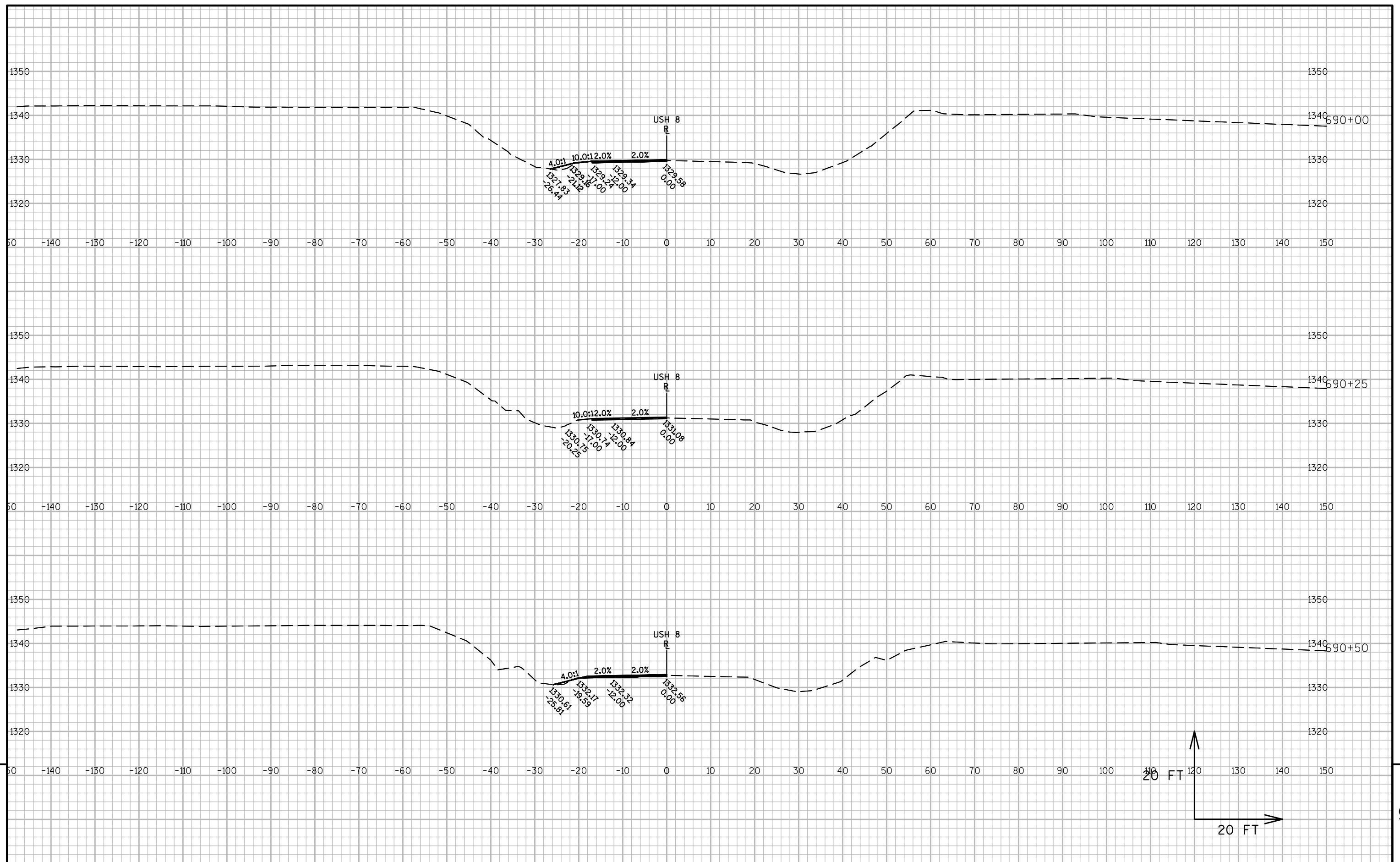


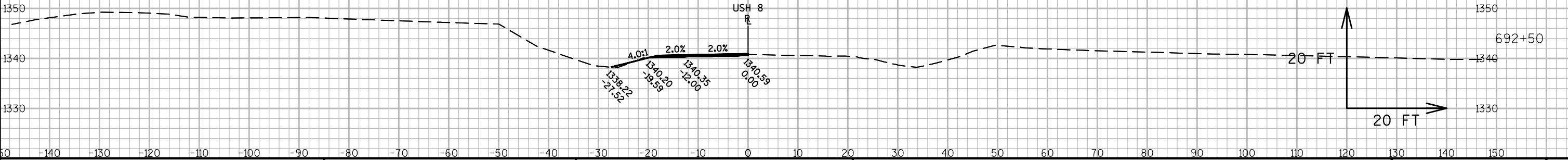
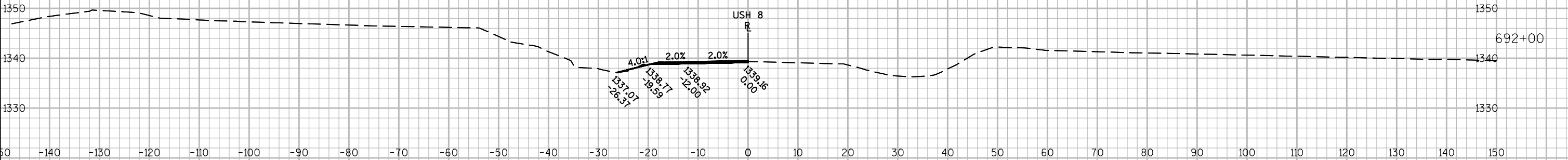
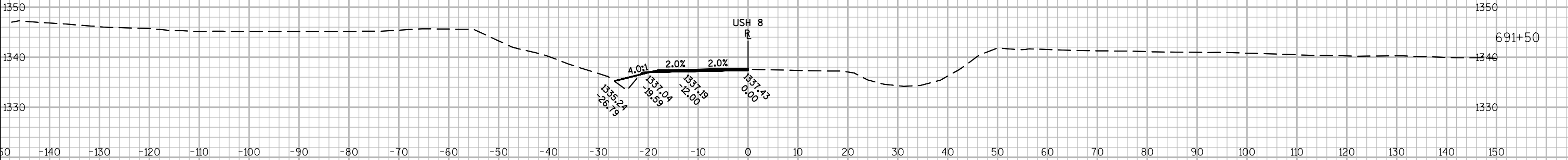
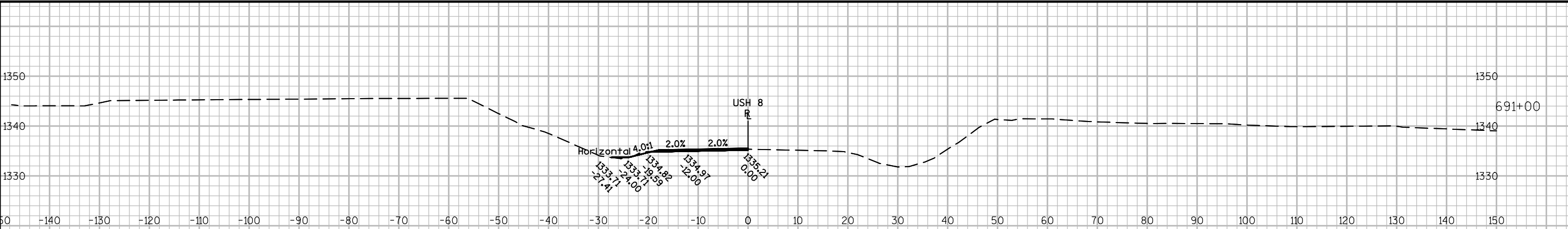


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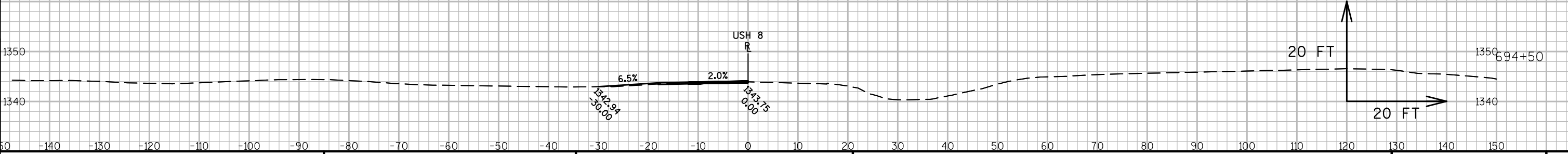
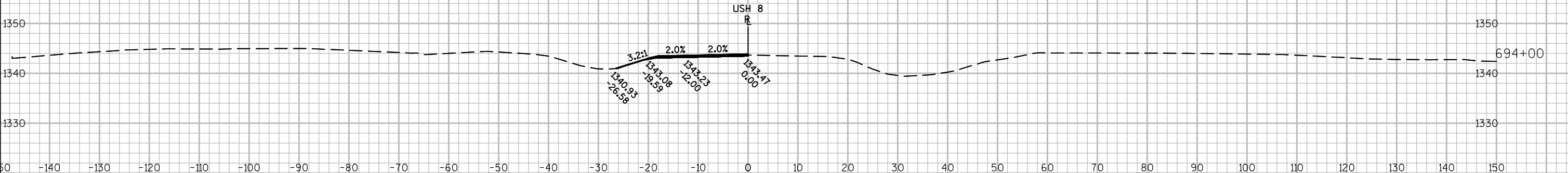
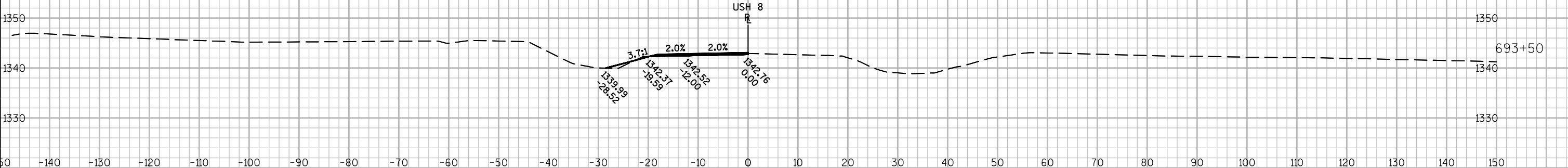
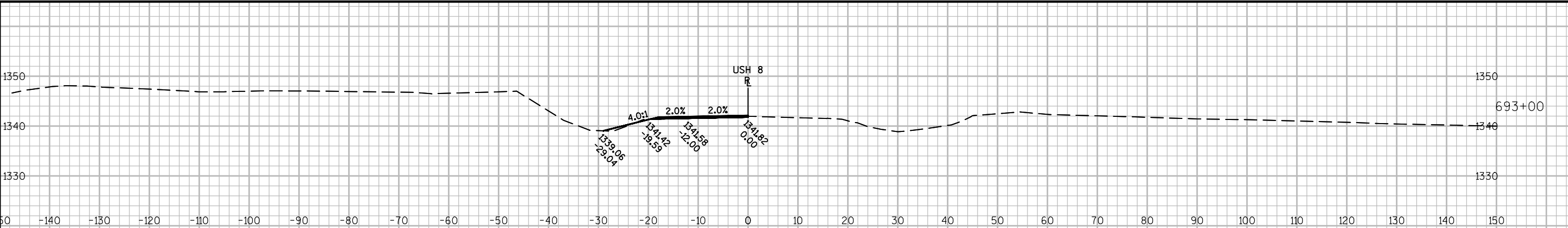
PROJECT NO:1590-16-71	HWY:USH 8	COUNTY:MARINETTE	CROSS SECTIONS: USH 8	SHEET	E
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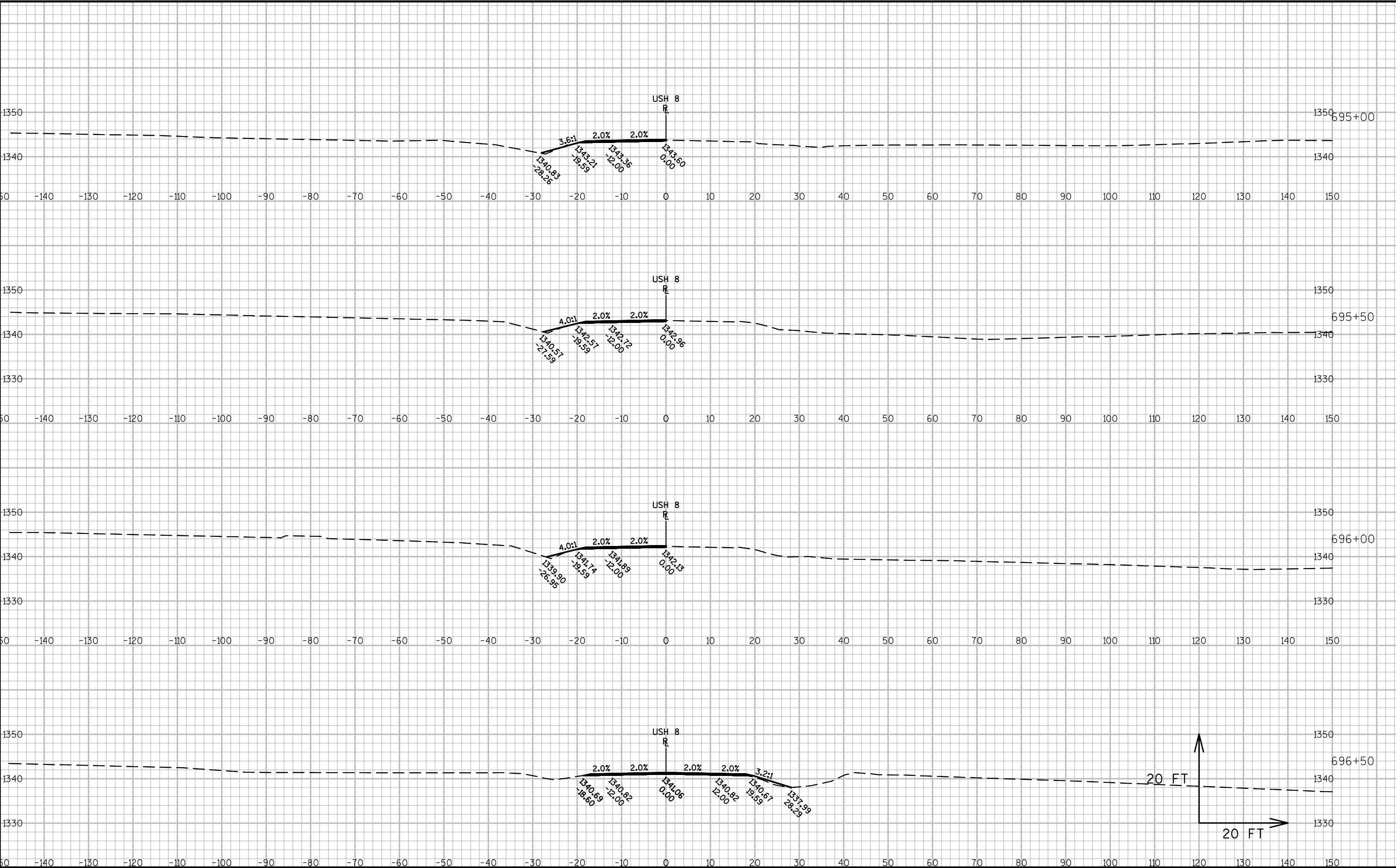
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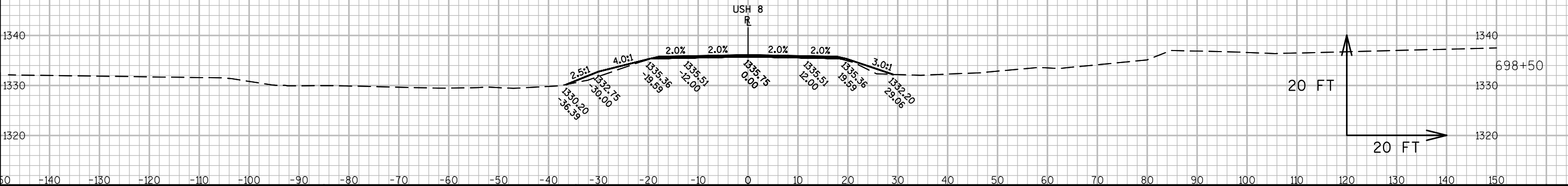
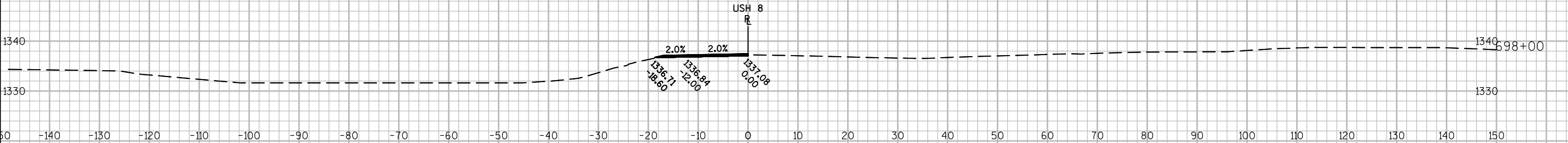
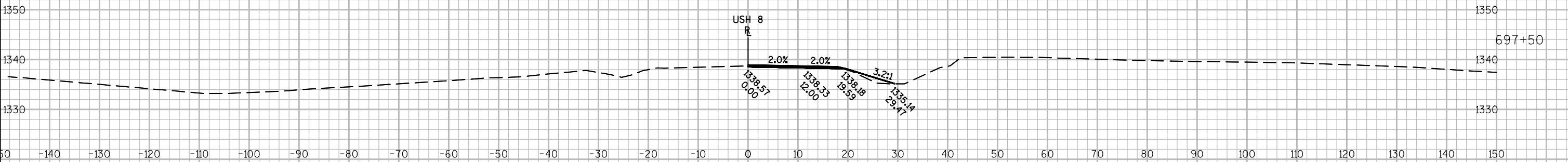
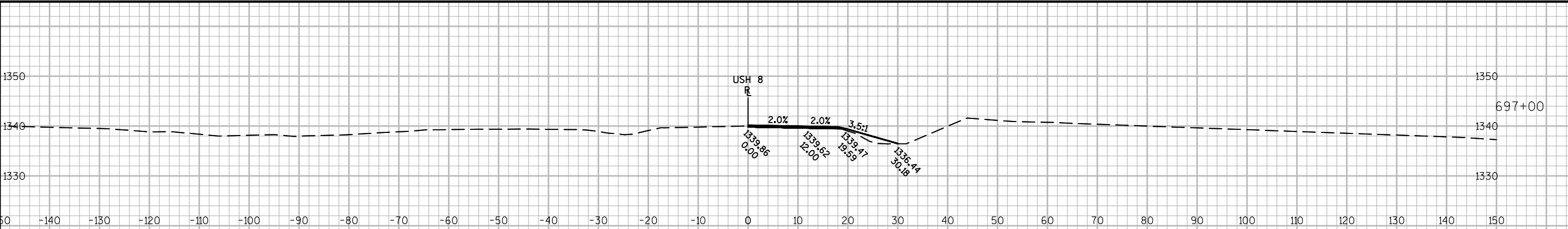
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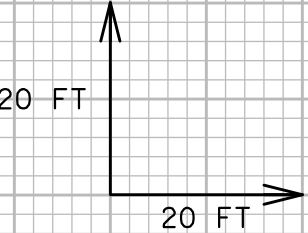
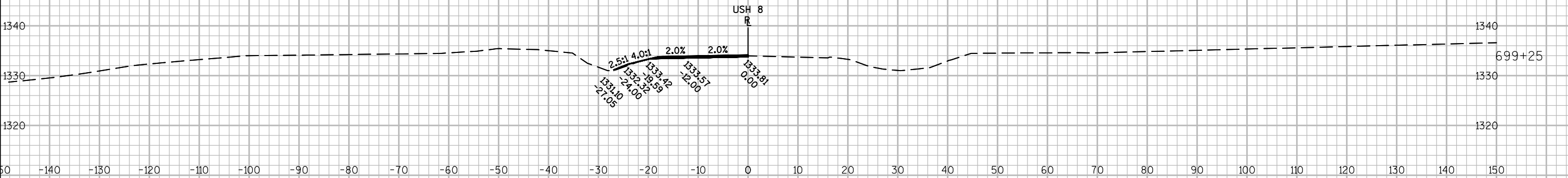
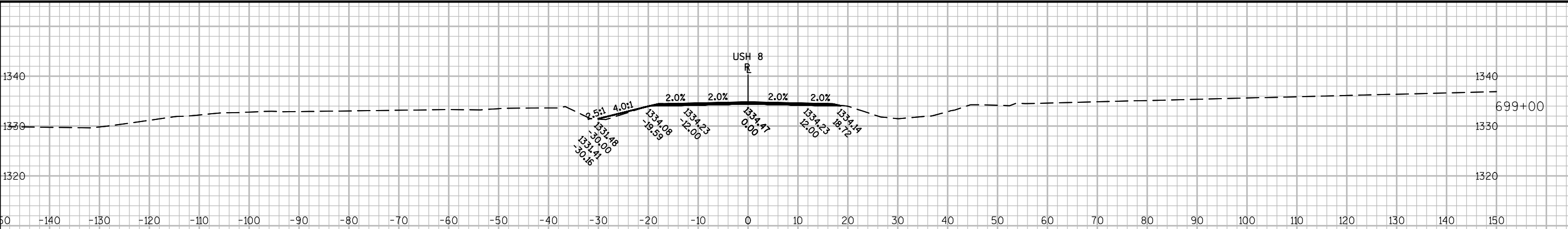


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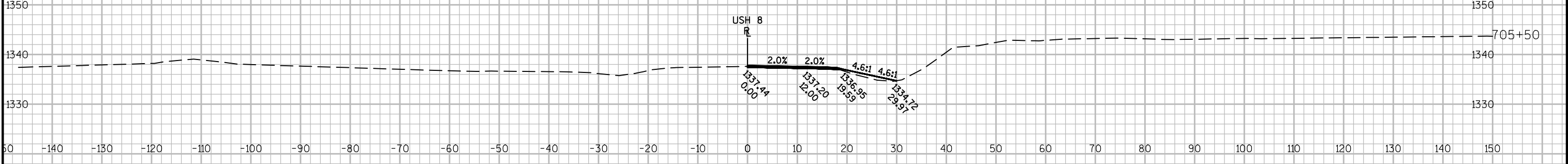
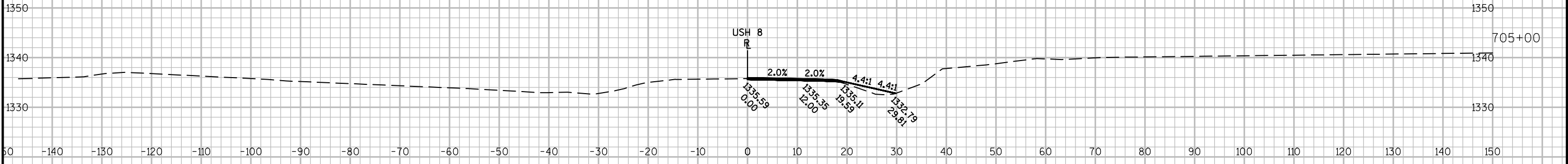
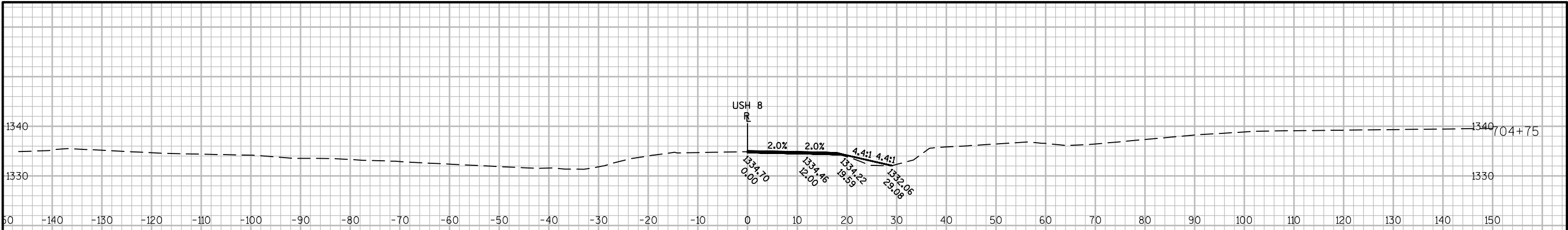


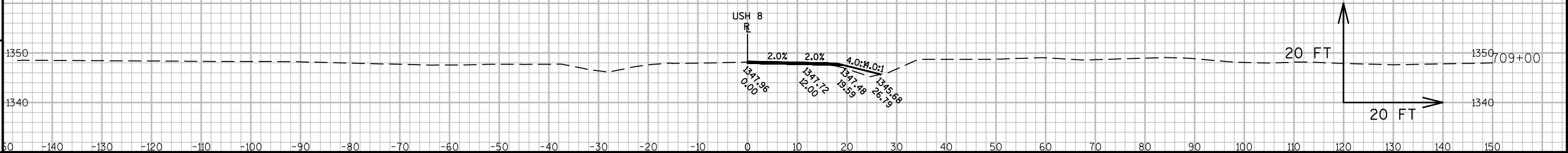
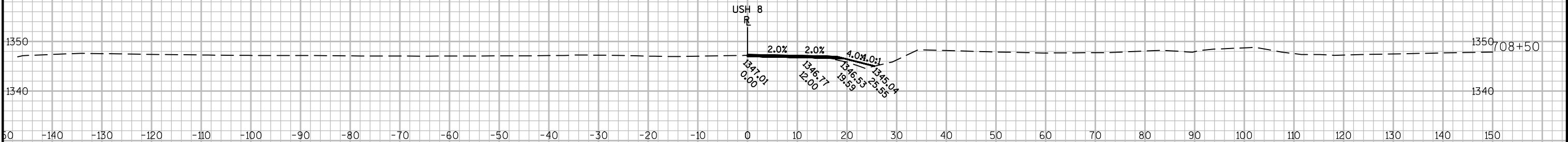
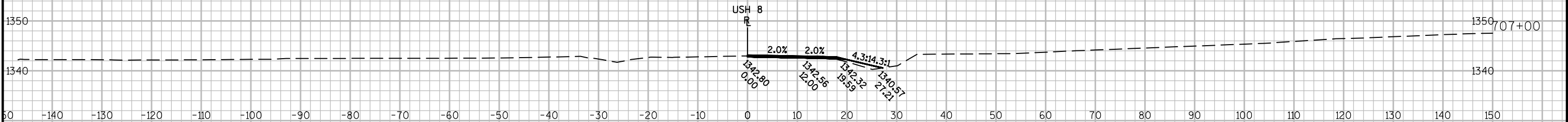
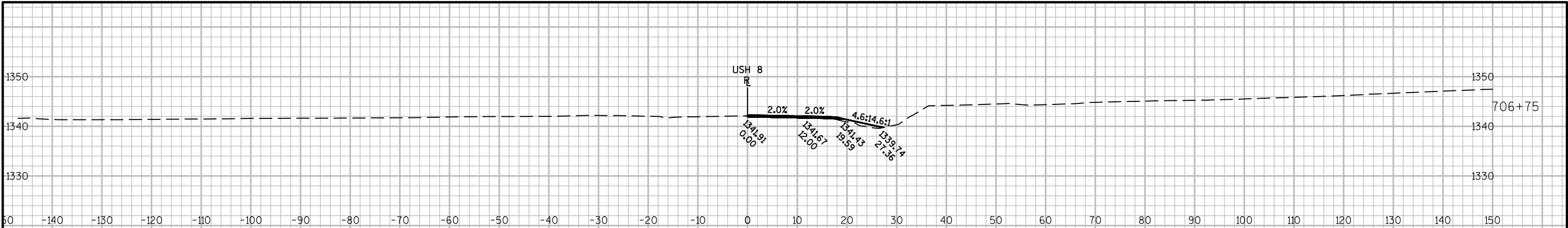


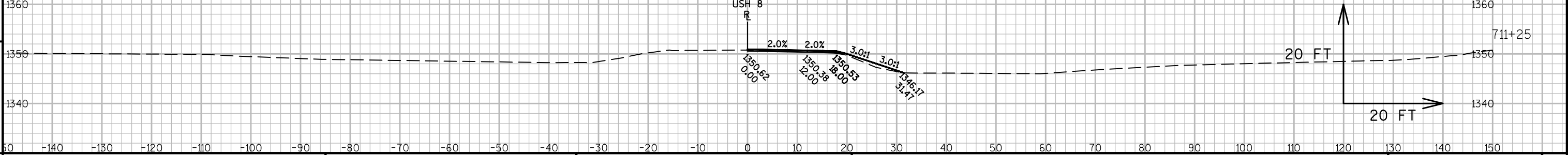
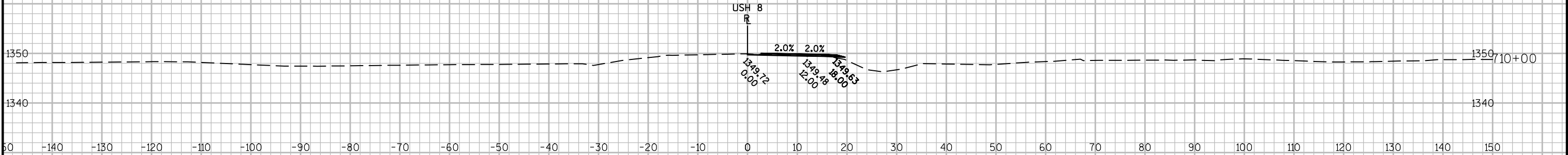
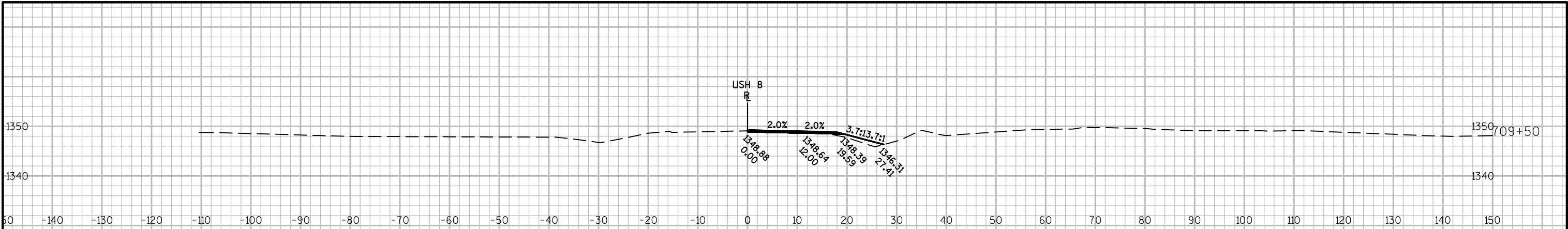


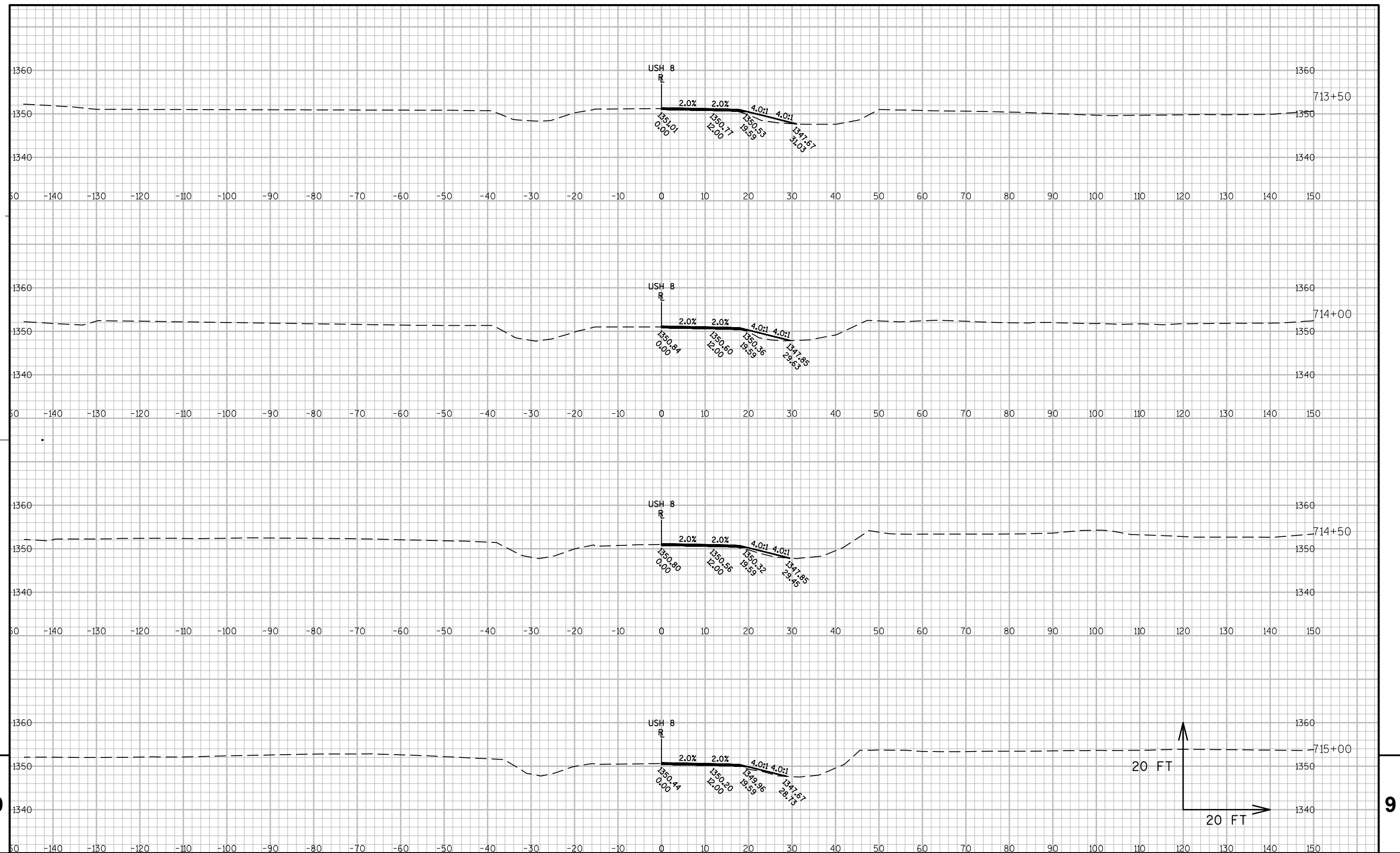
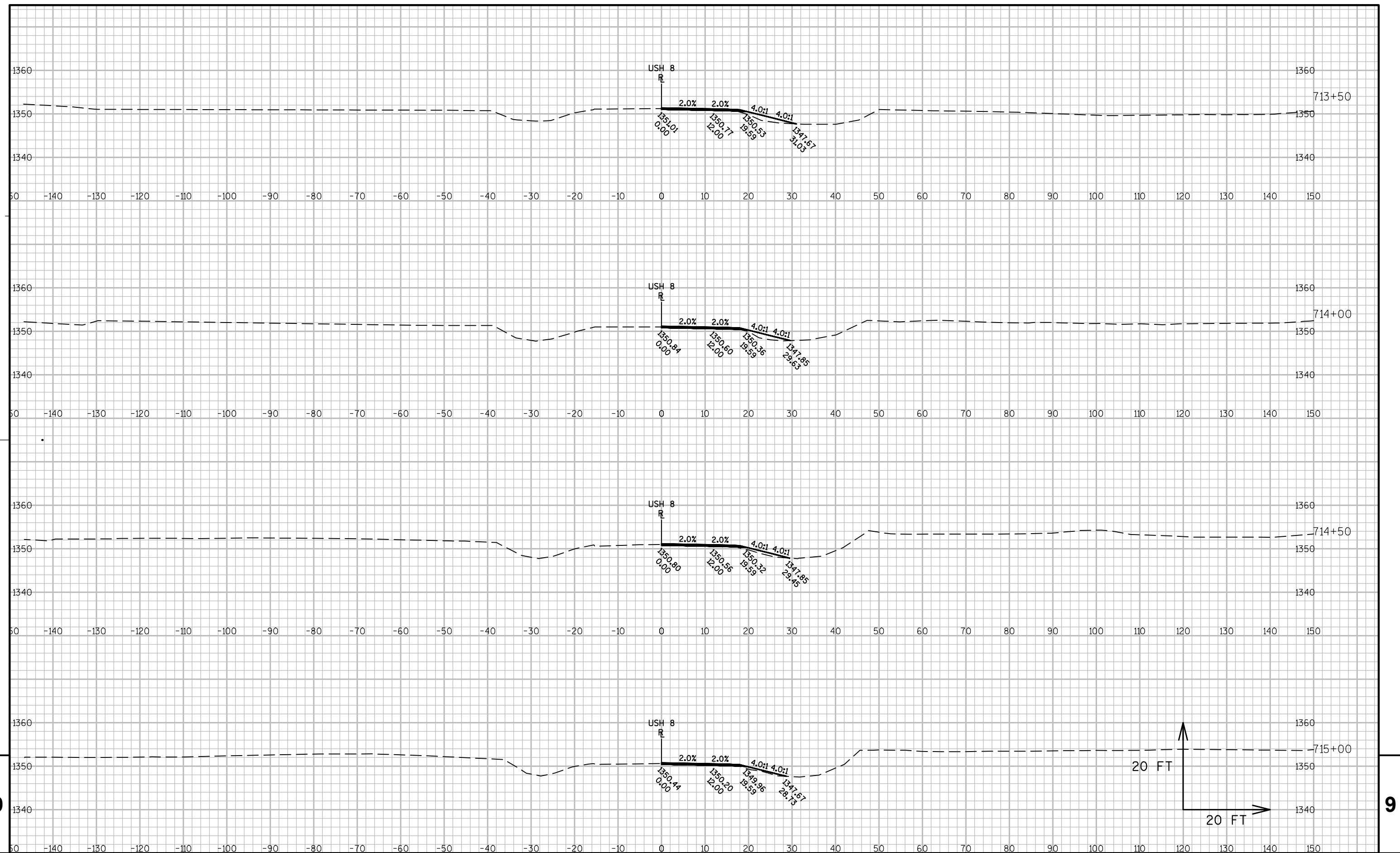
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PROJECT NO:1590-16-71

HWY: USH 8

COUNTY: MARINETTE

CROSS SECTIONS: USH 8

SHEET

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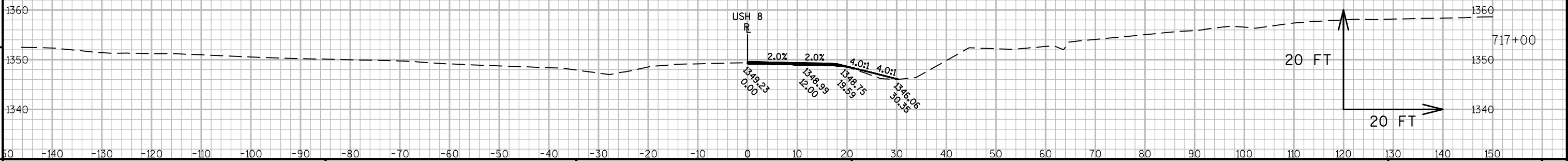
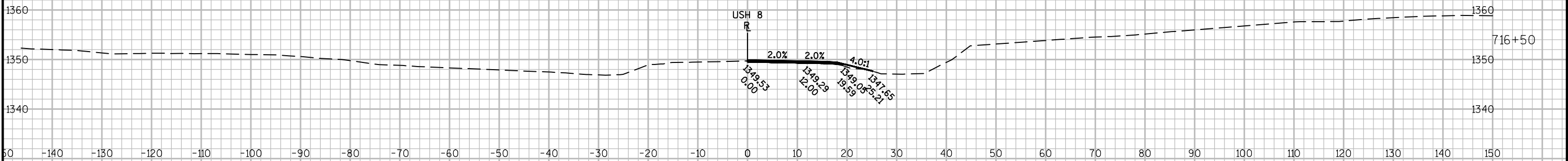
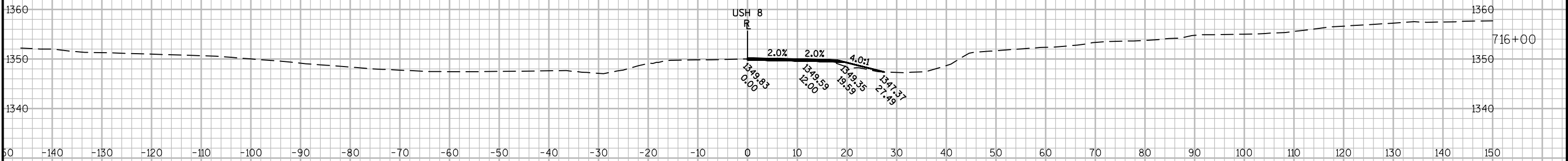
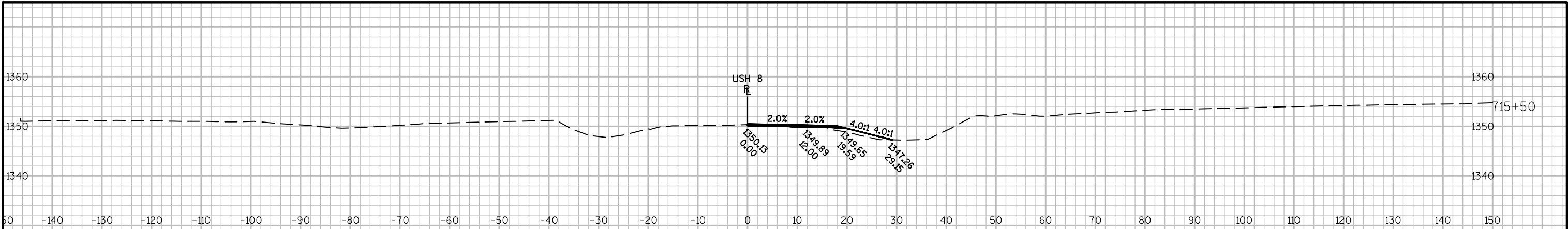
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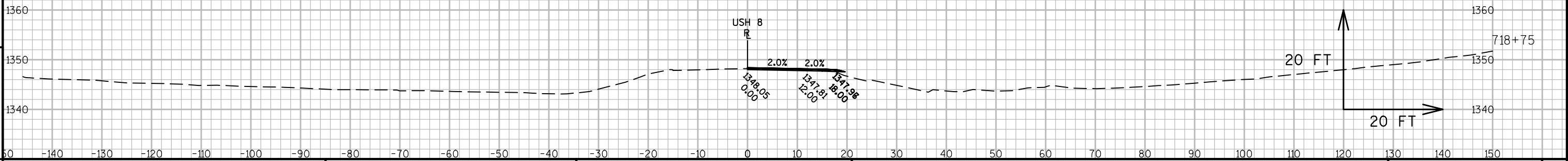
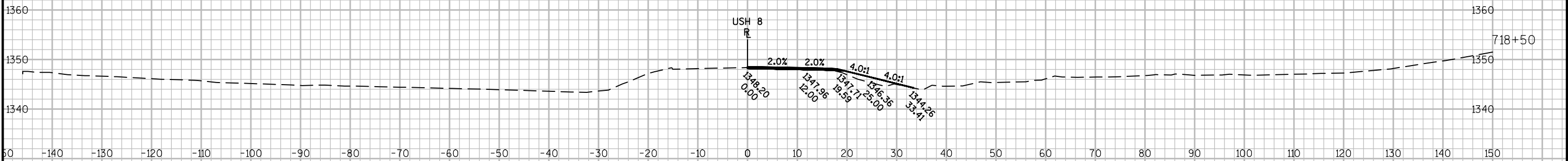
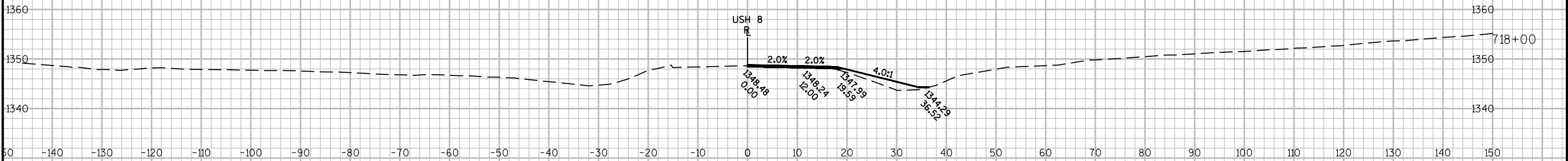
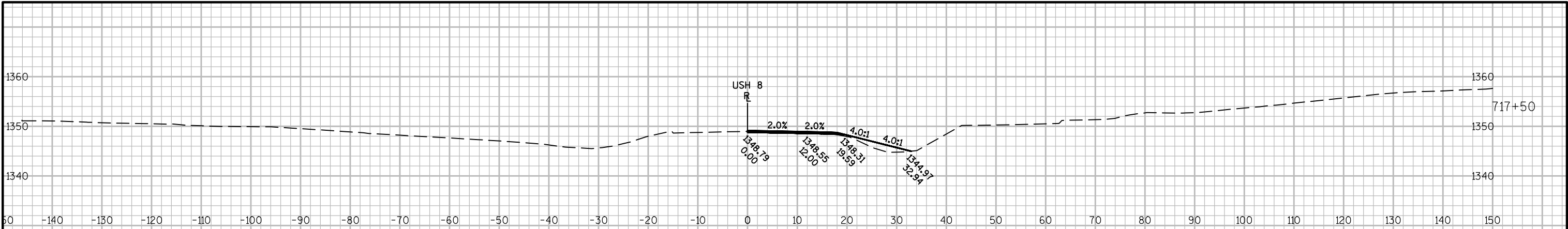
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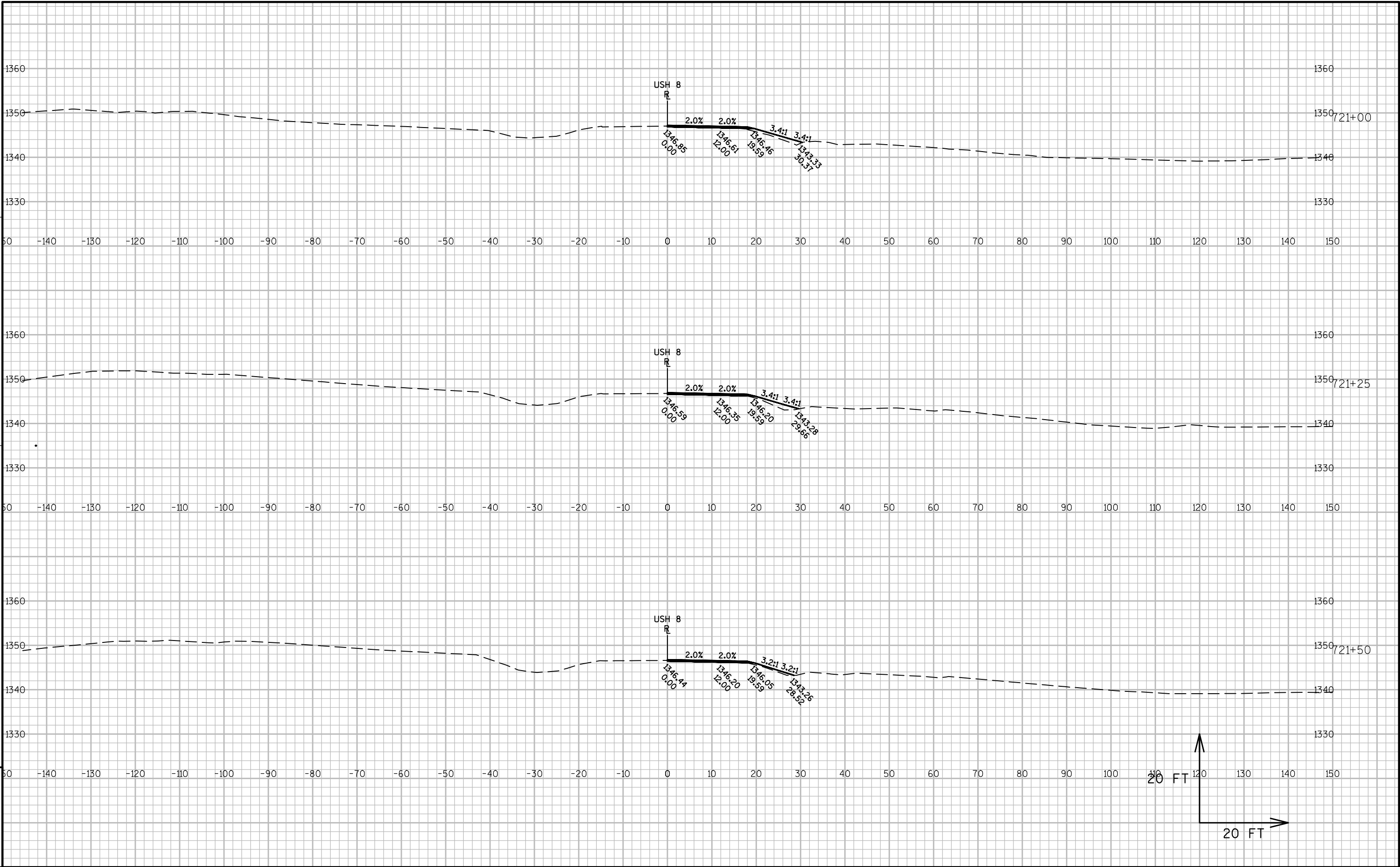
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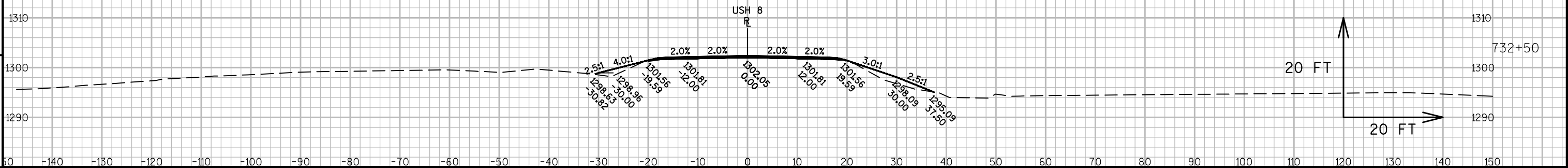
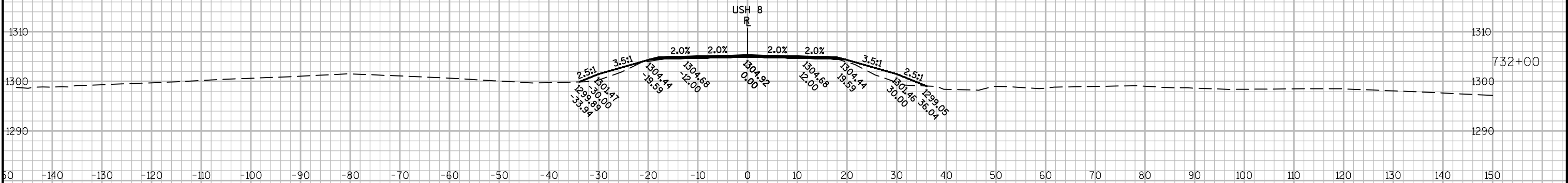
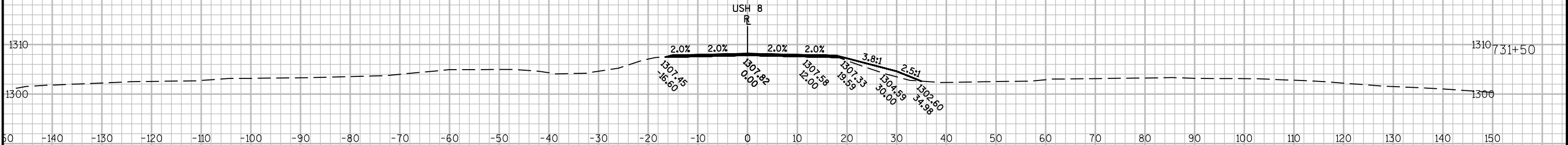
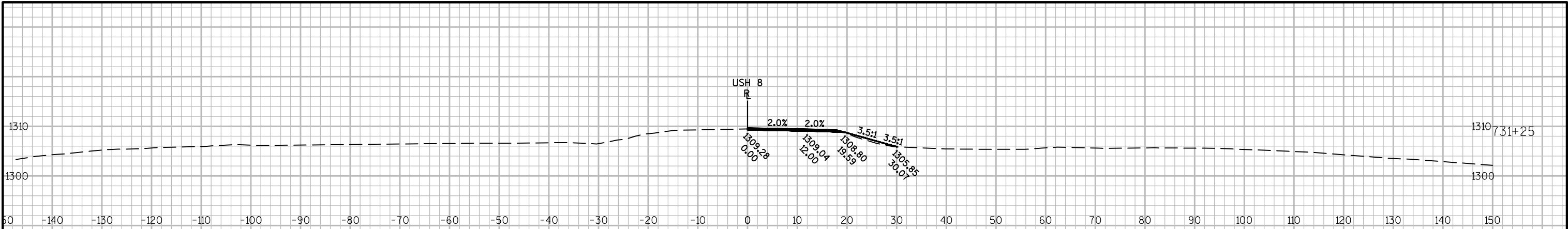
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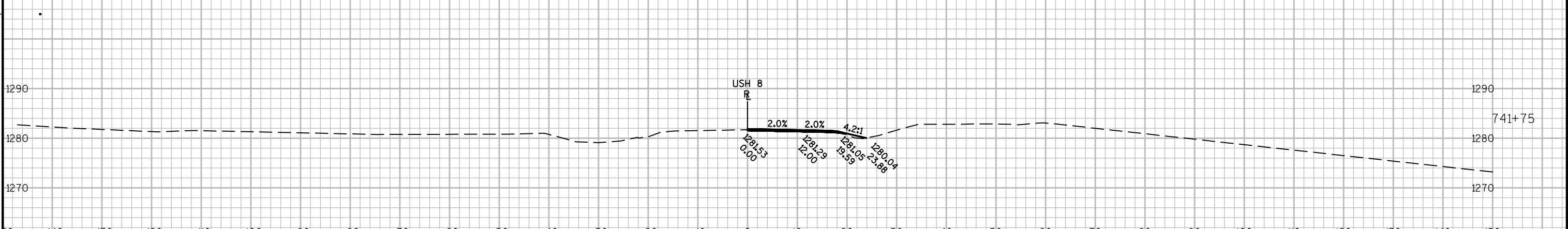
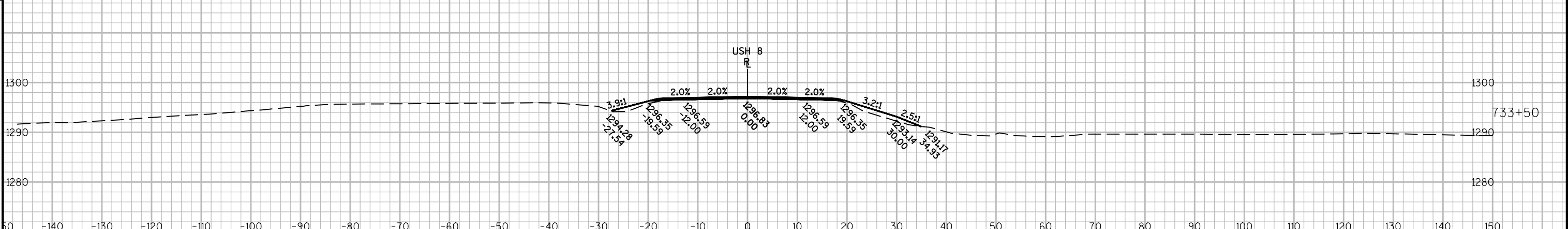
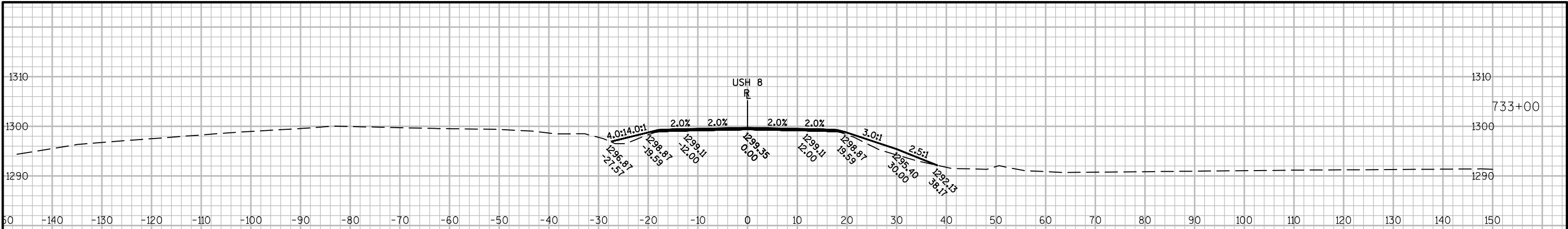
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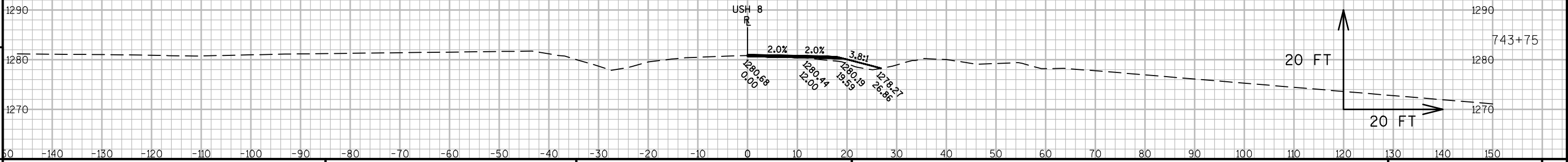
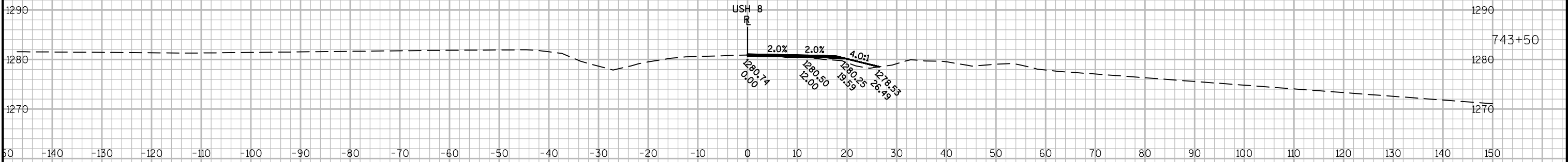
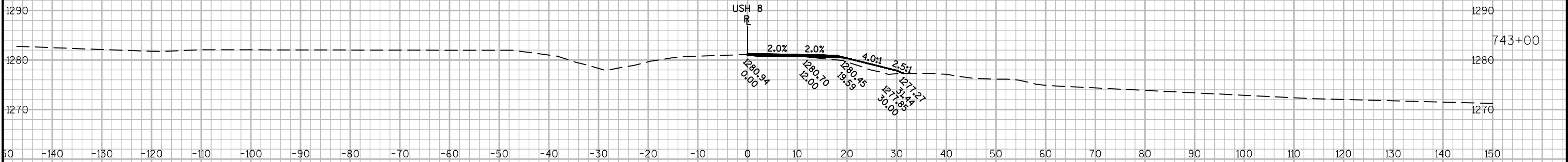
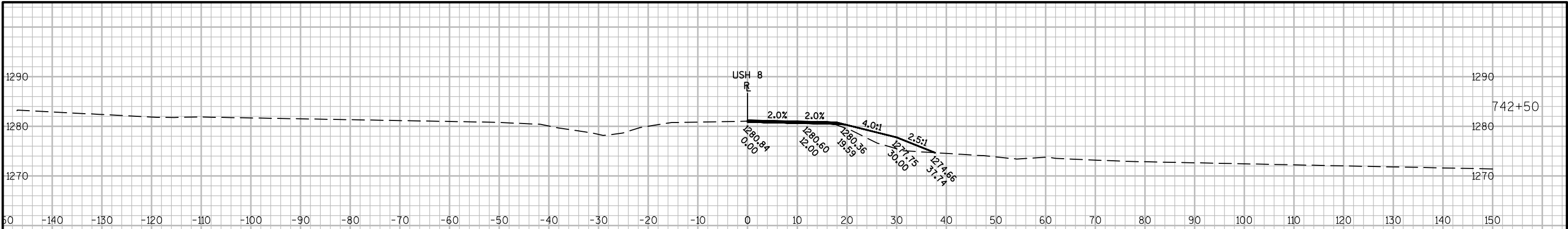


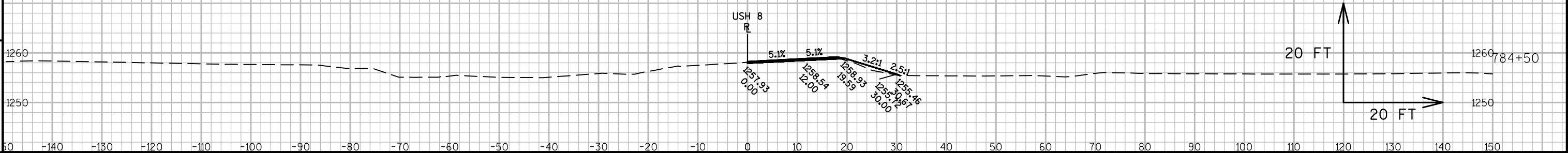
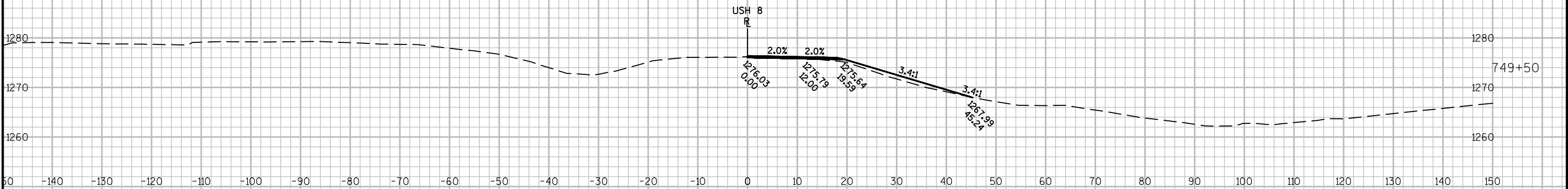
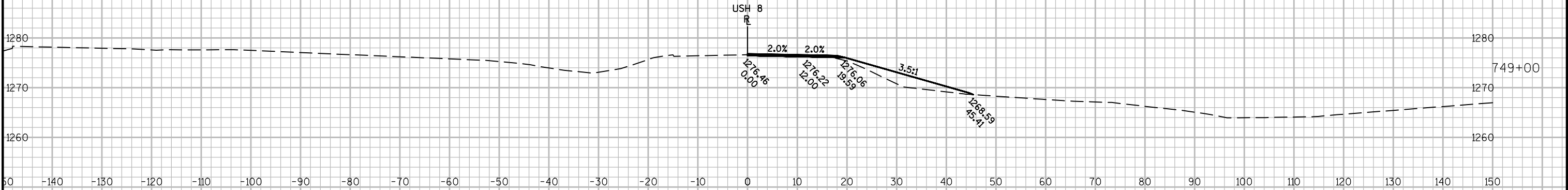
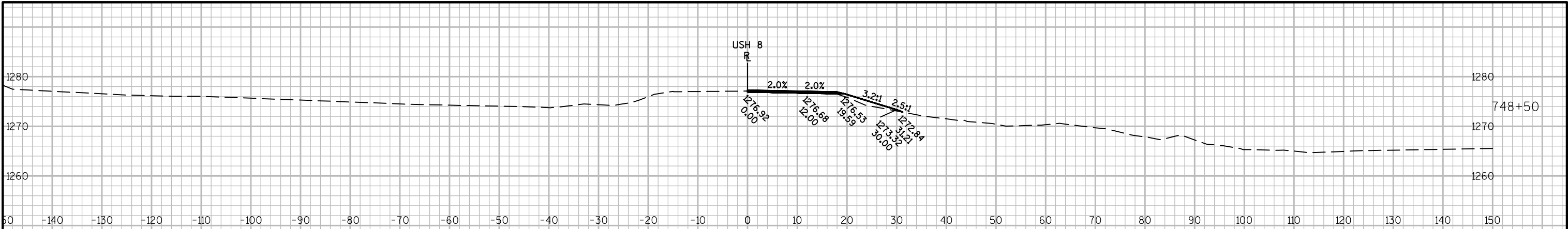




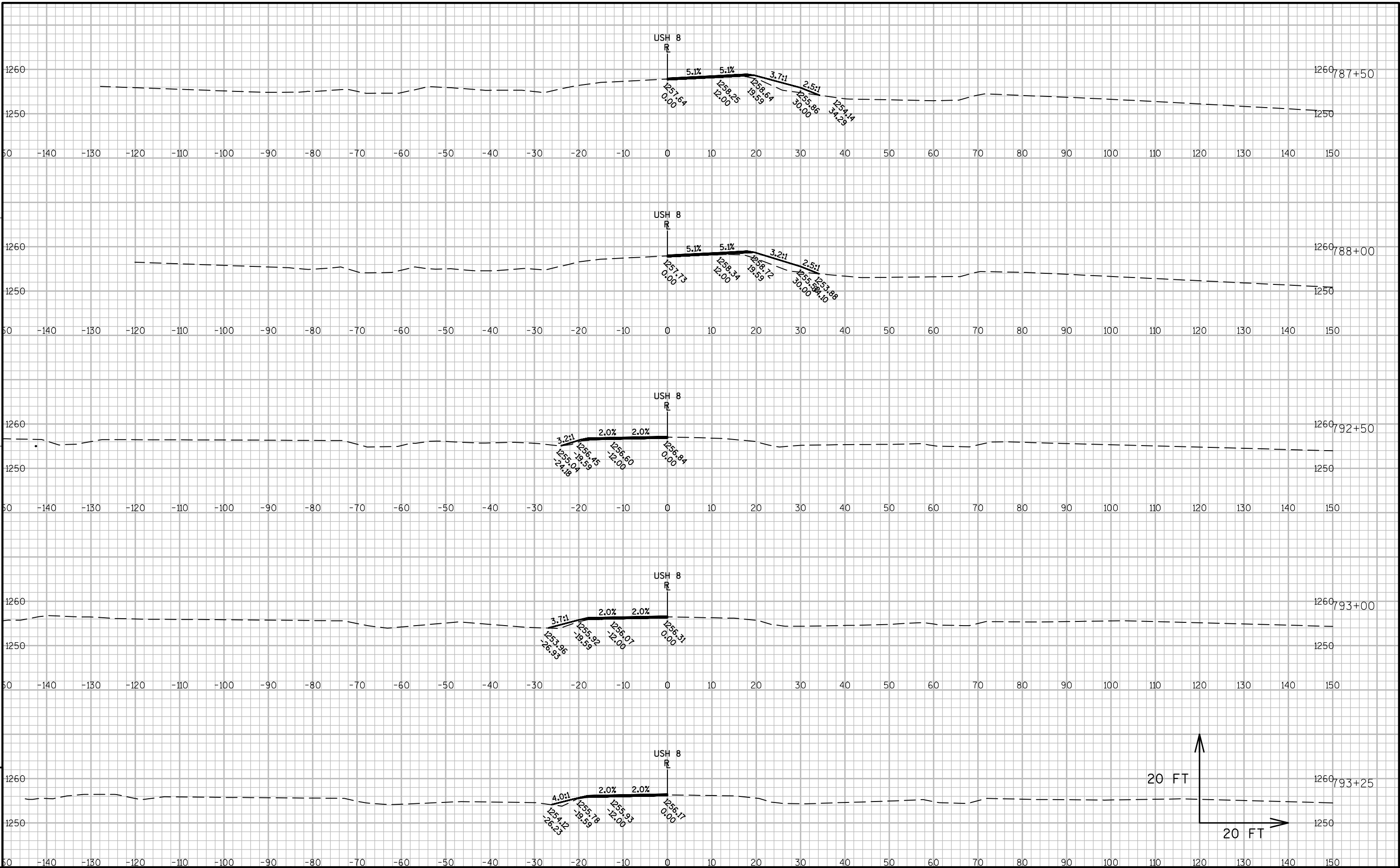


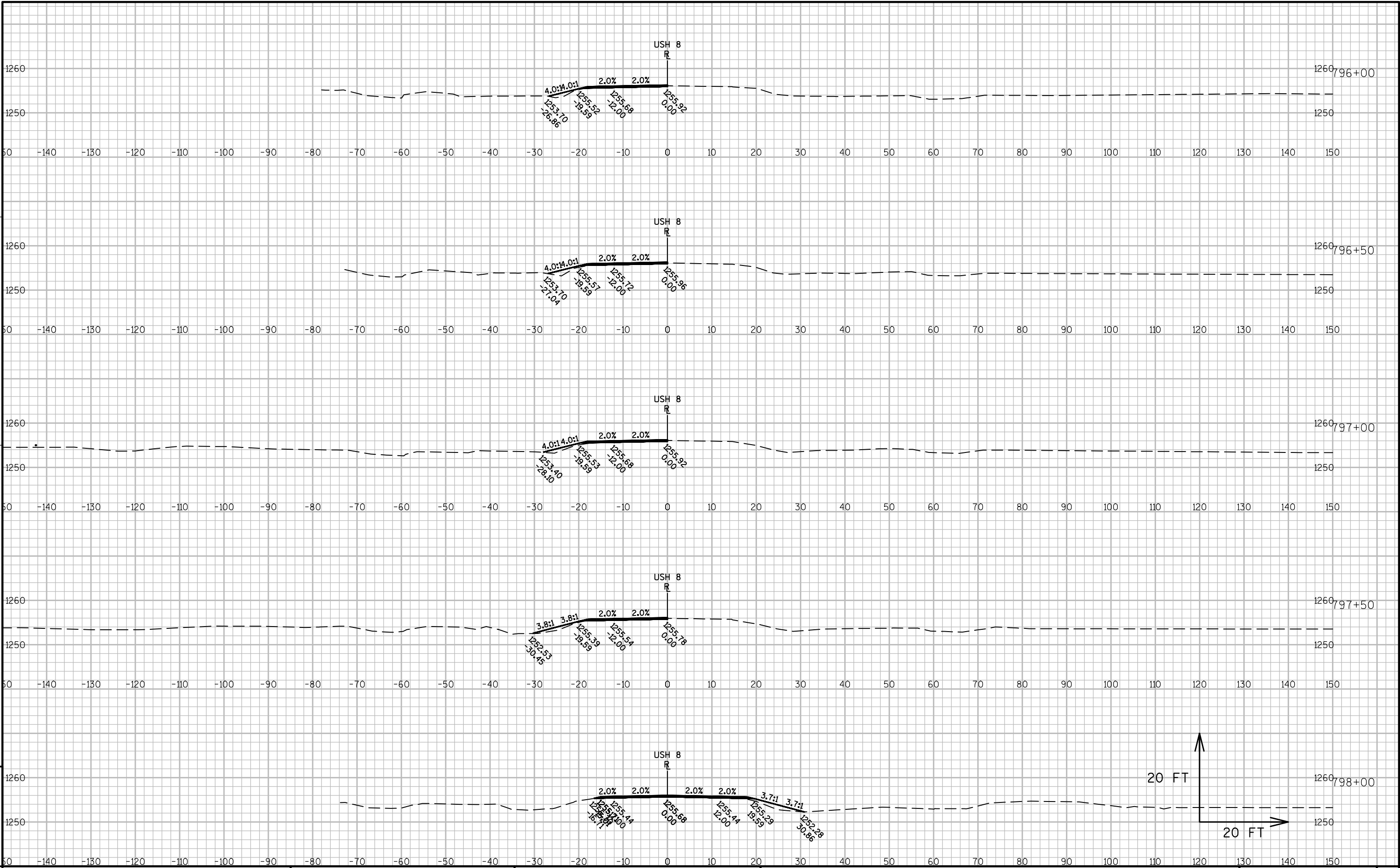


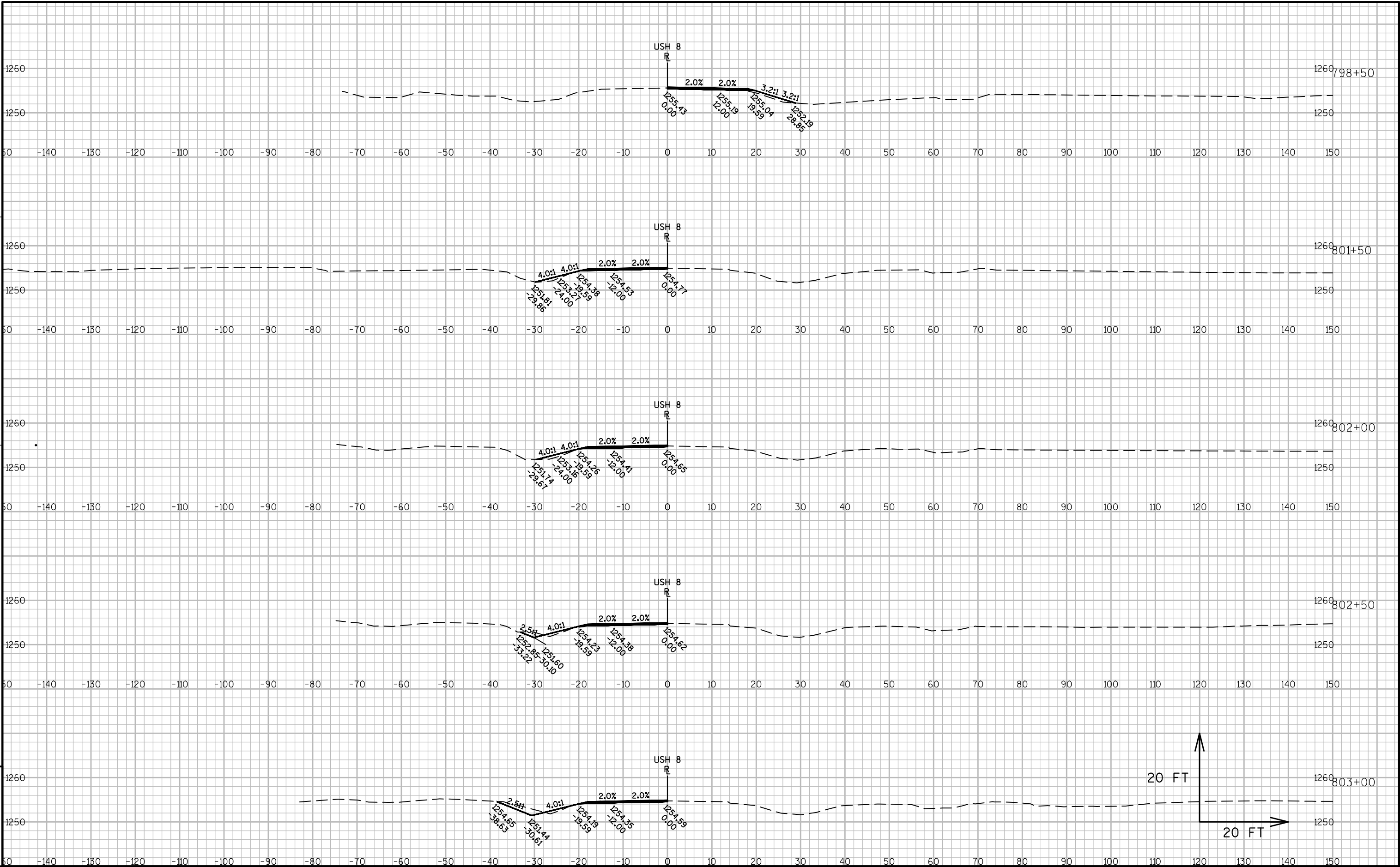


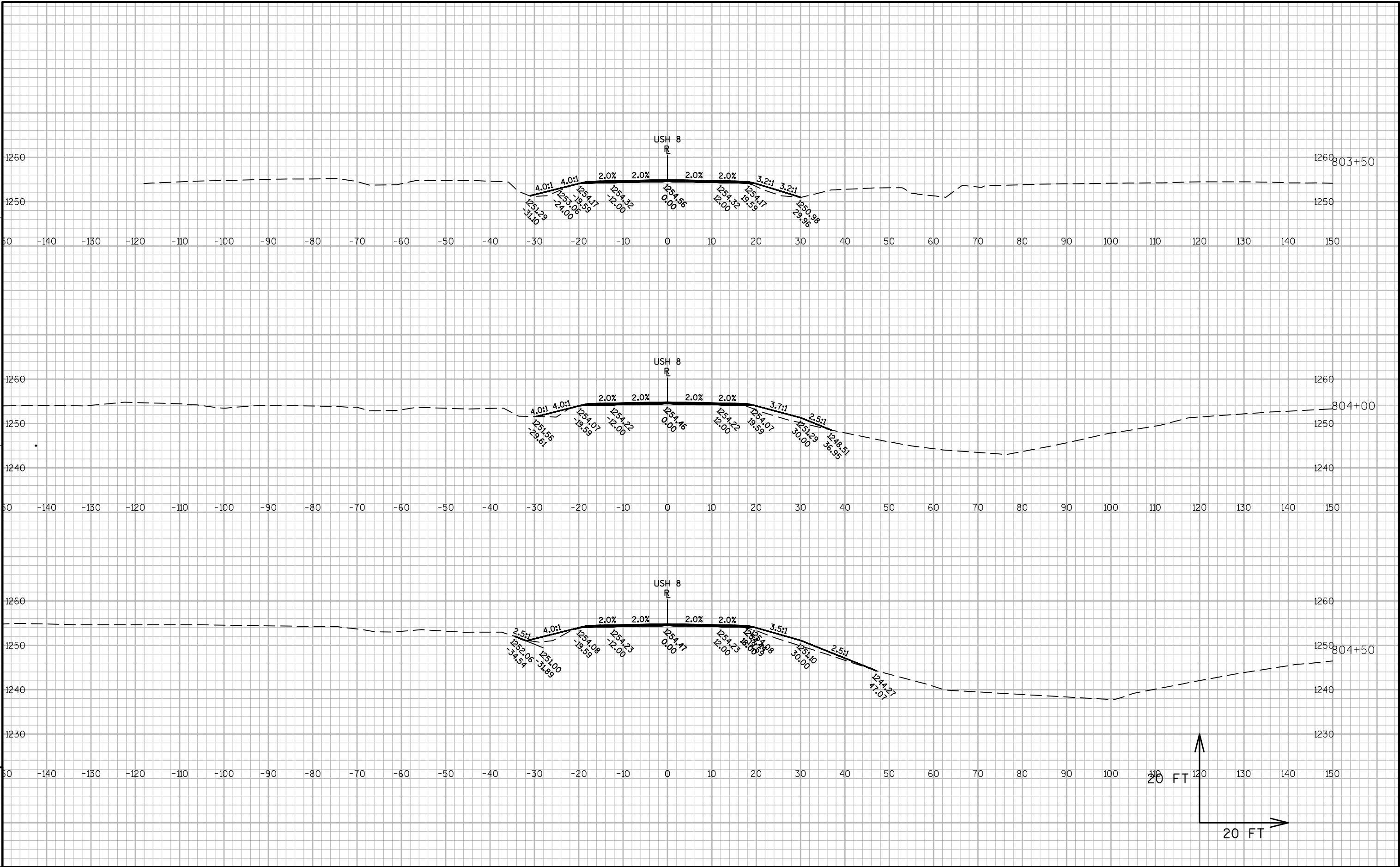


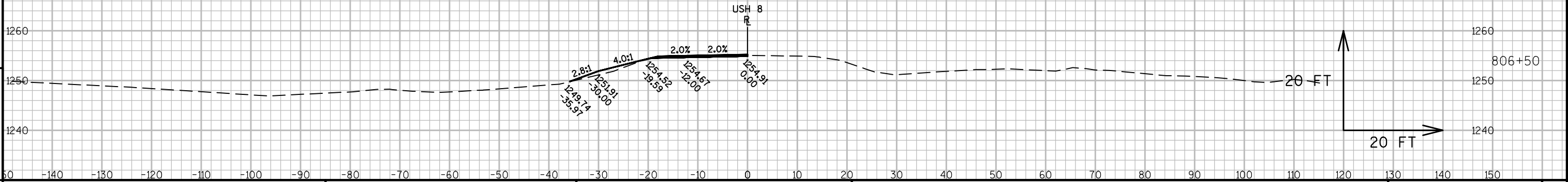
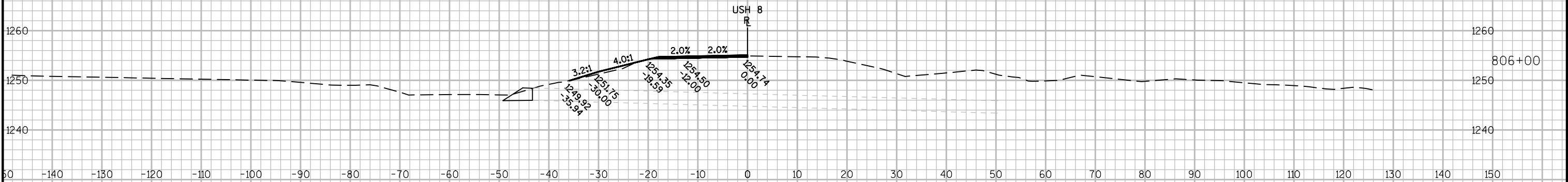
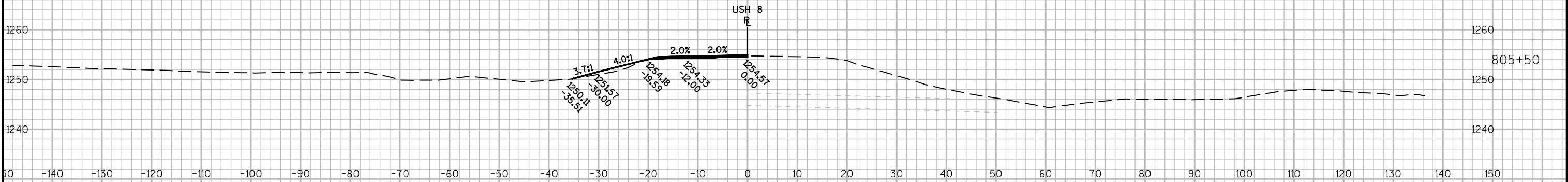
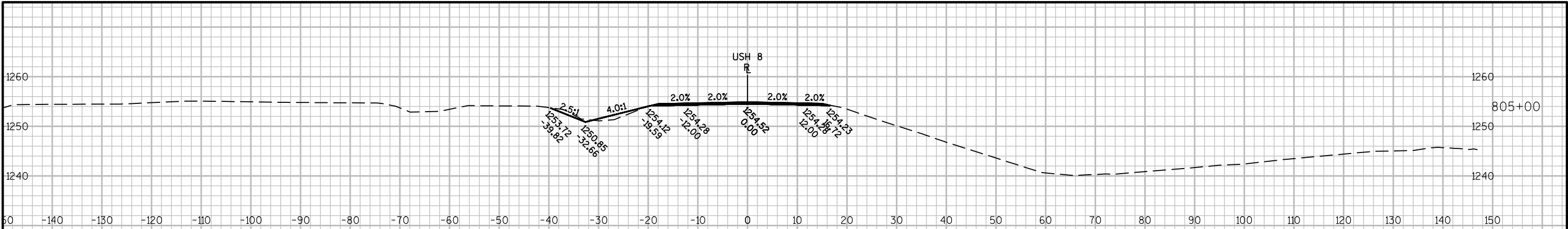






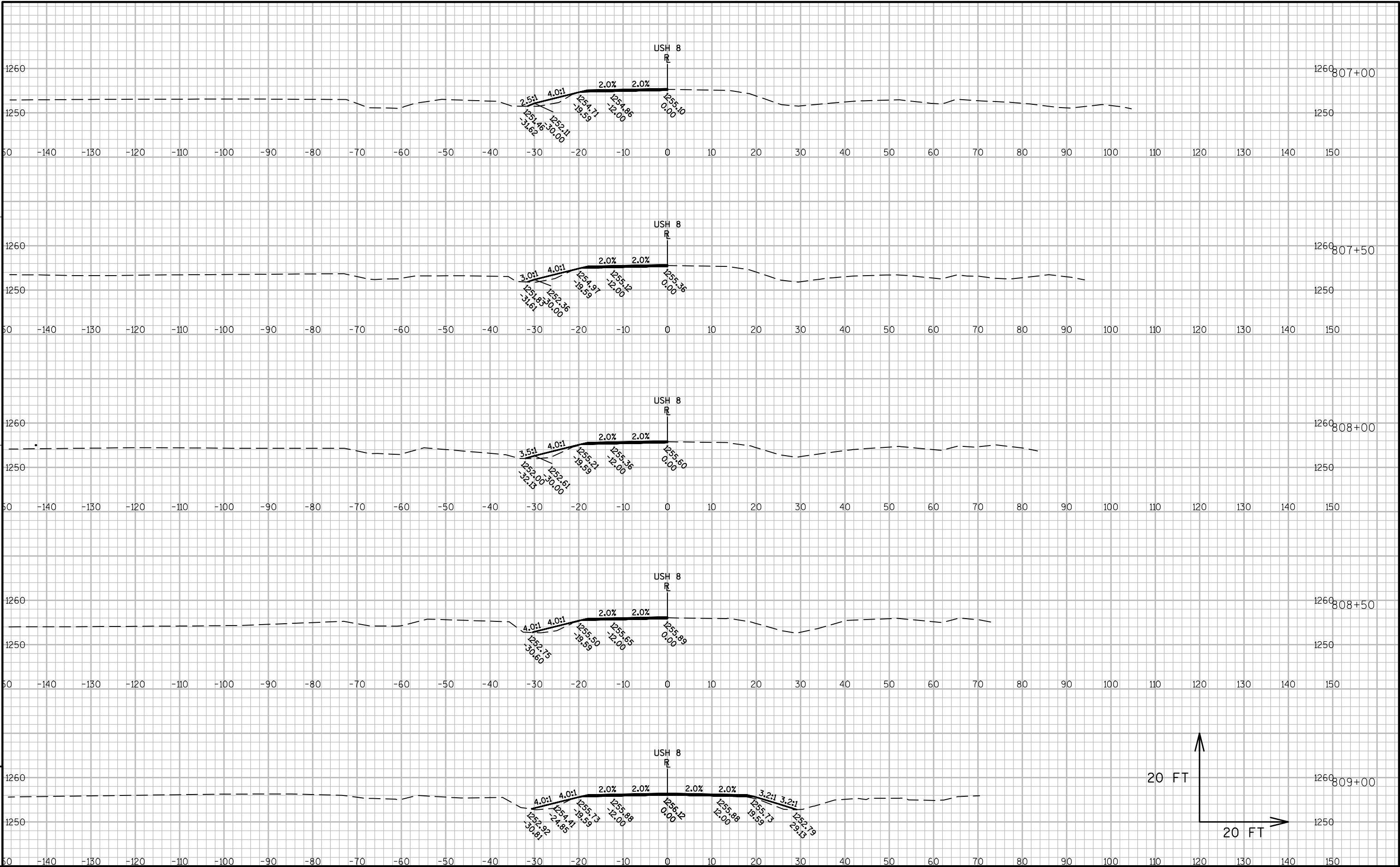






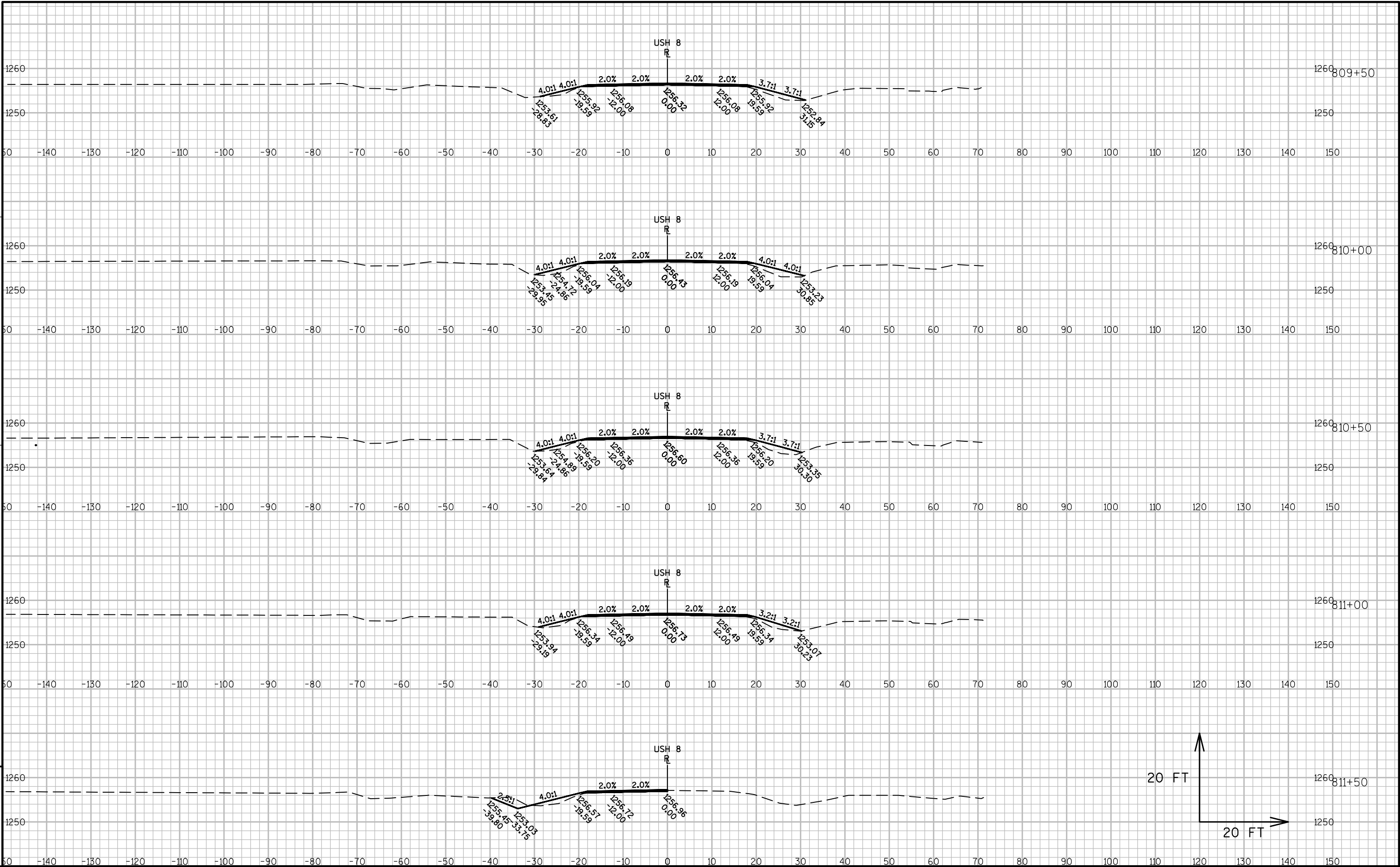
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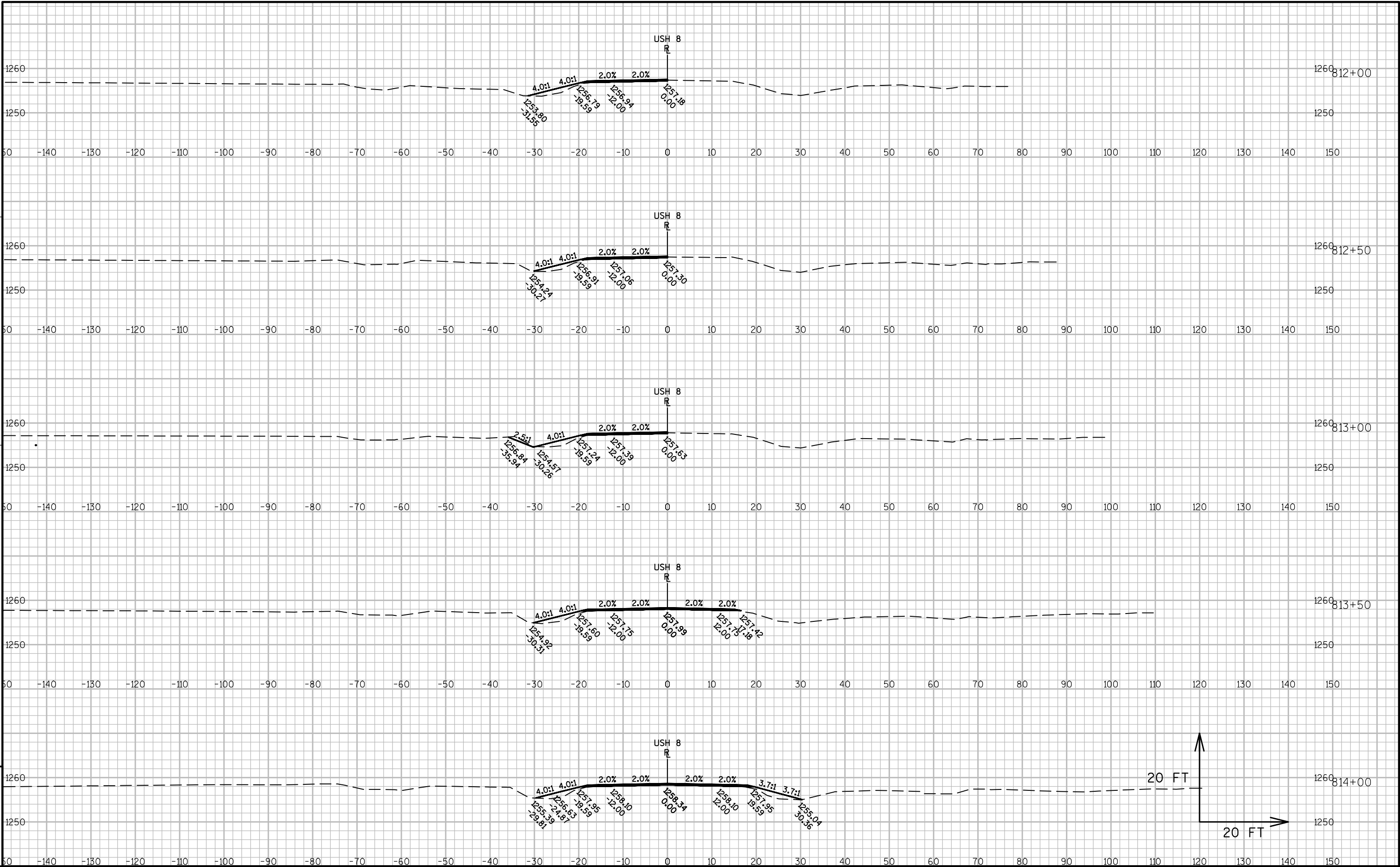
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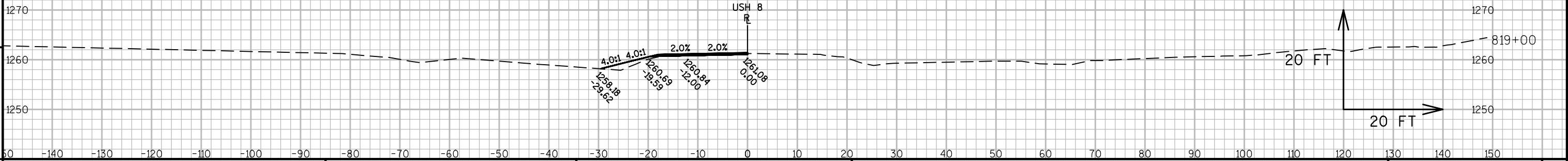
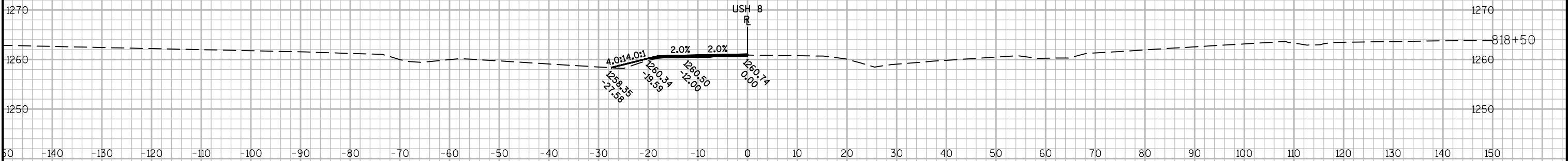
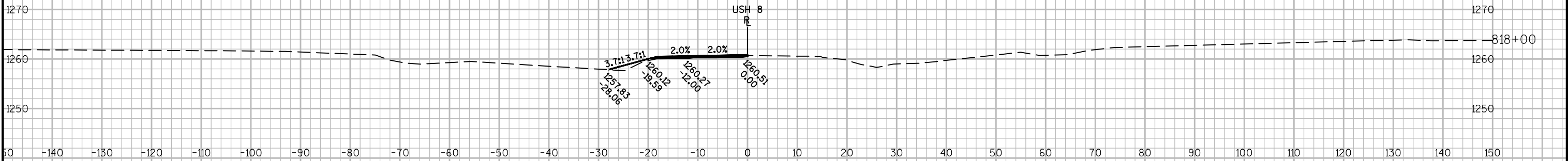
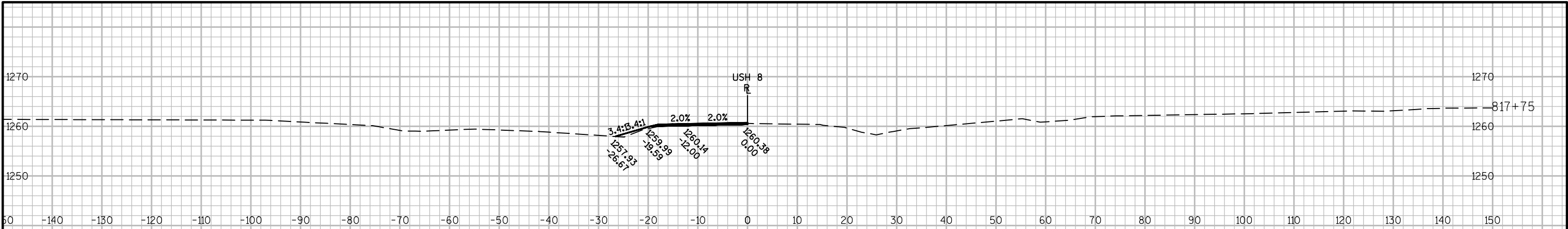


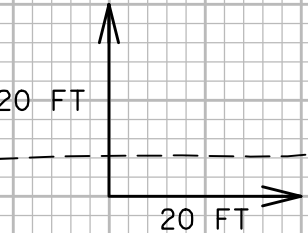
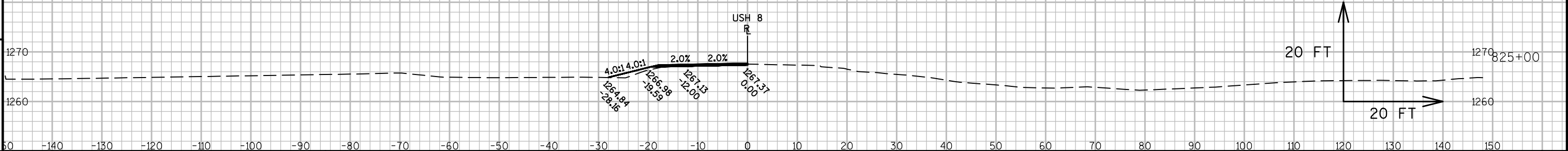
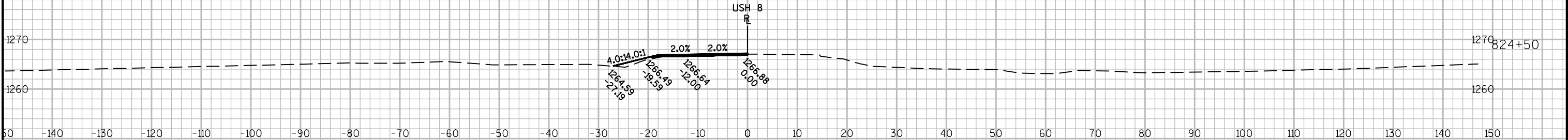
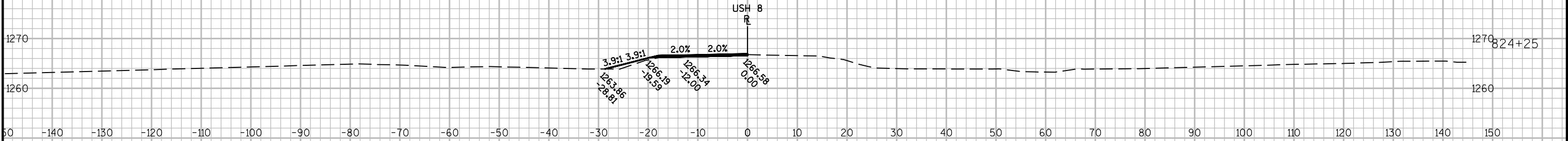
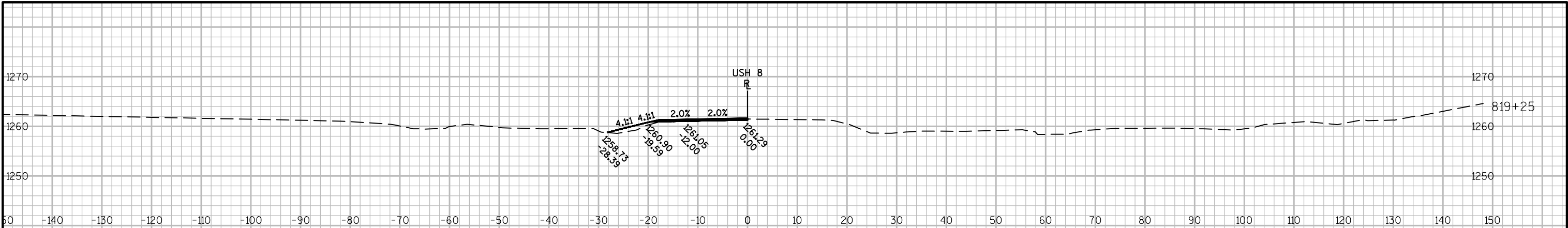
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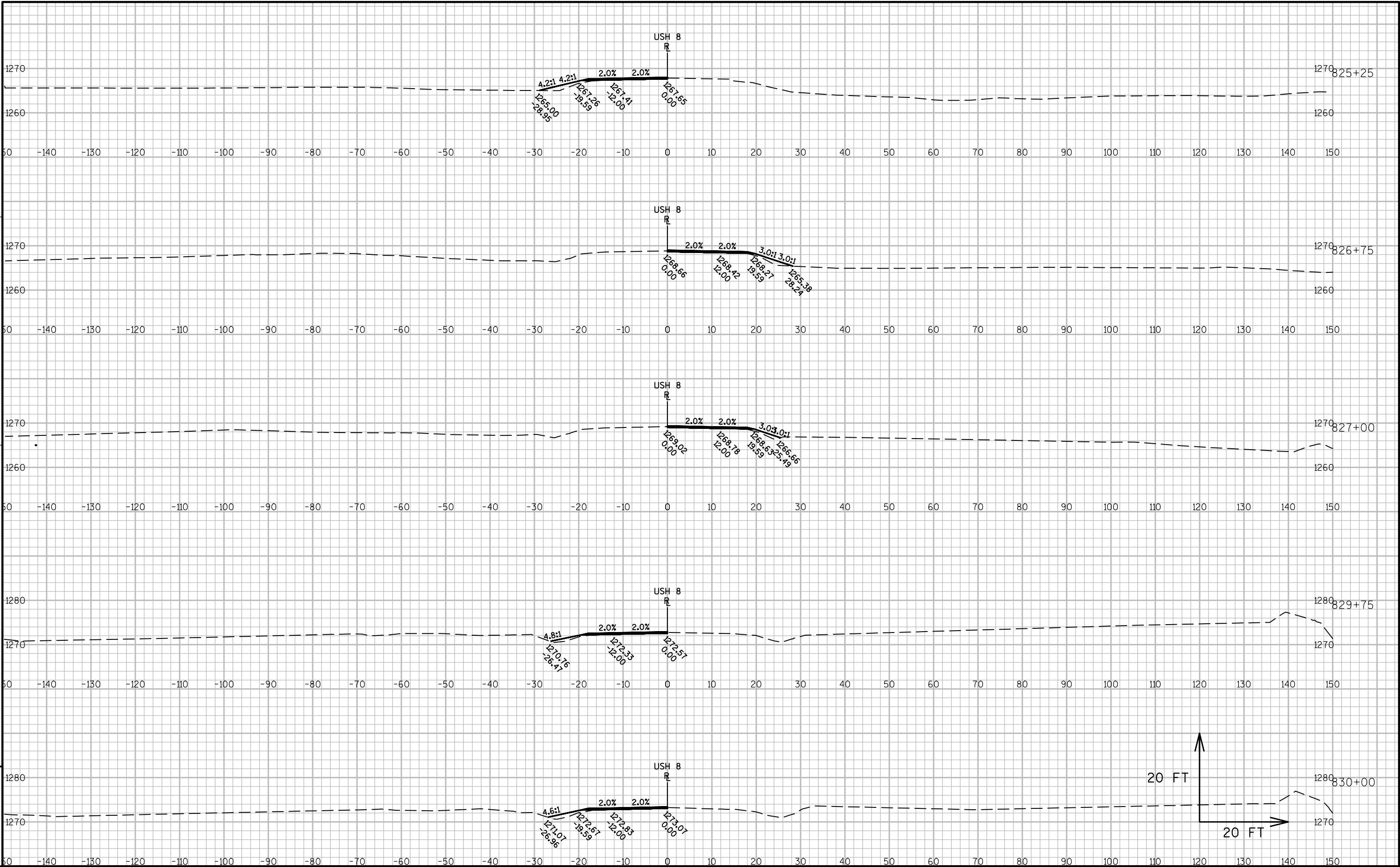
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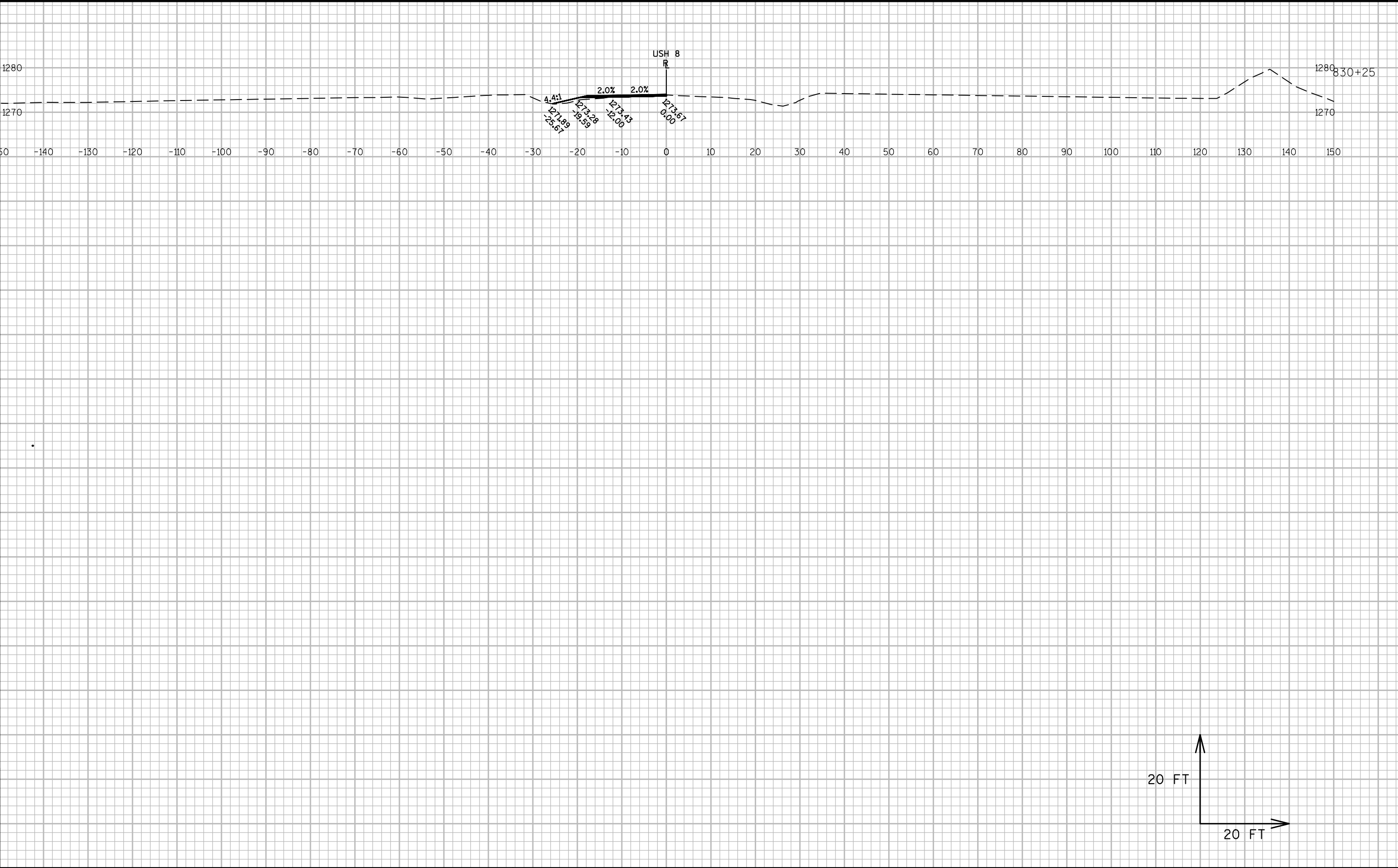








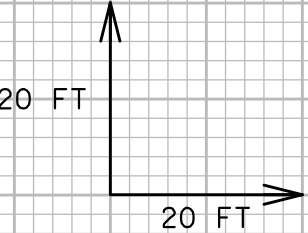
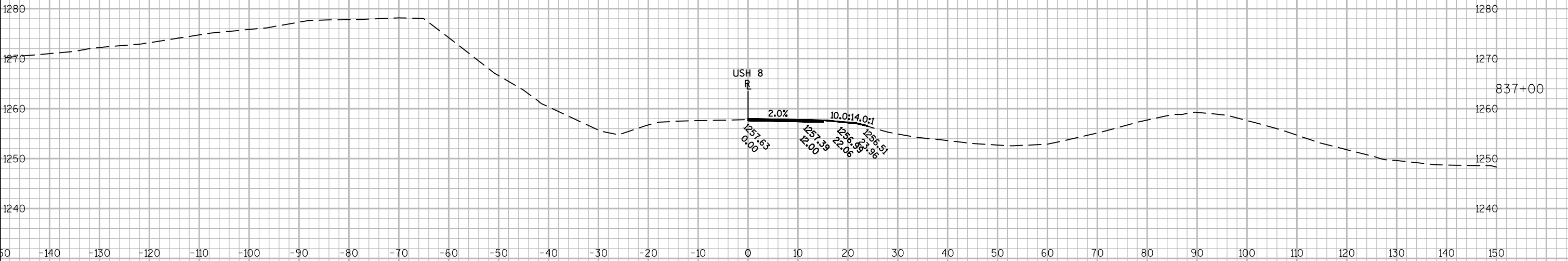
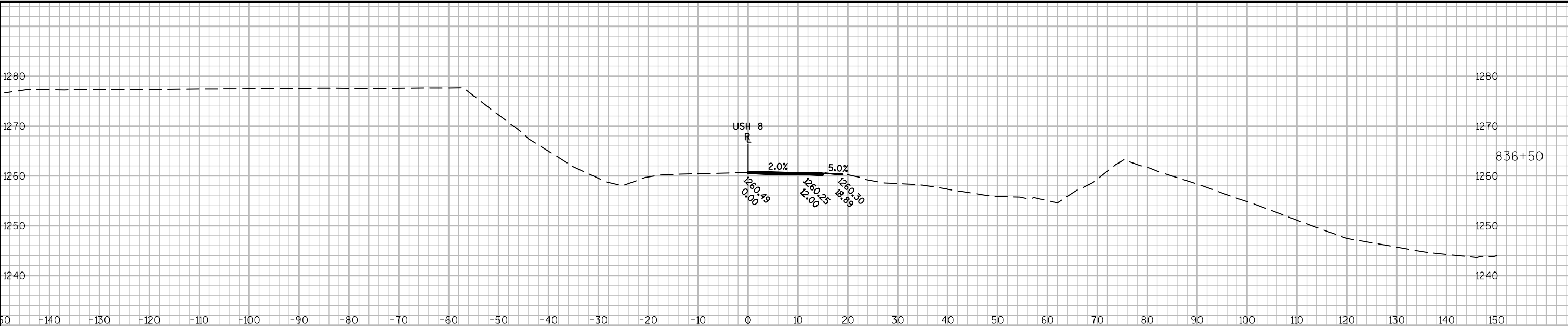




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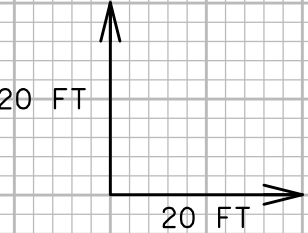
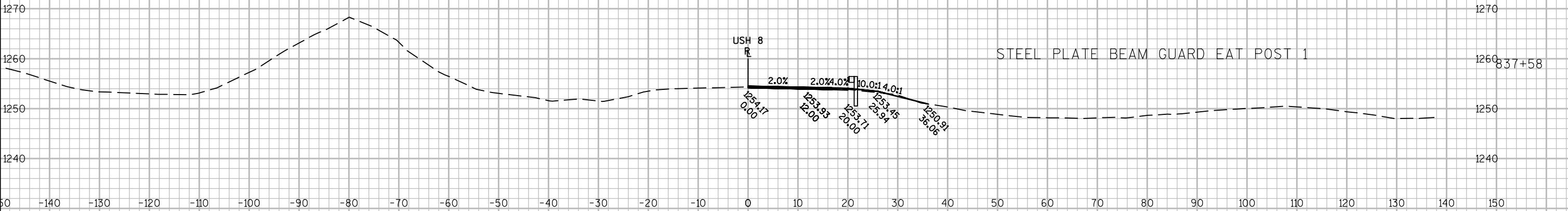
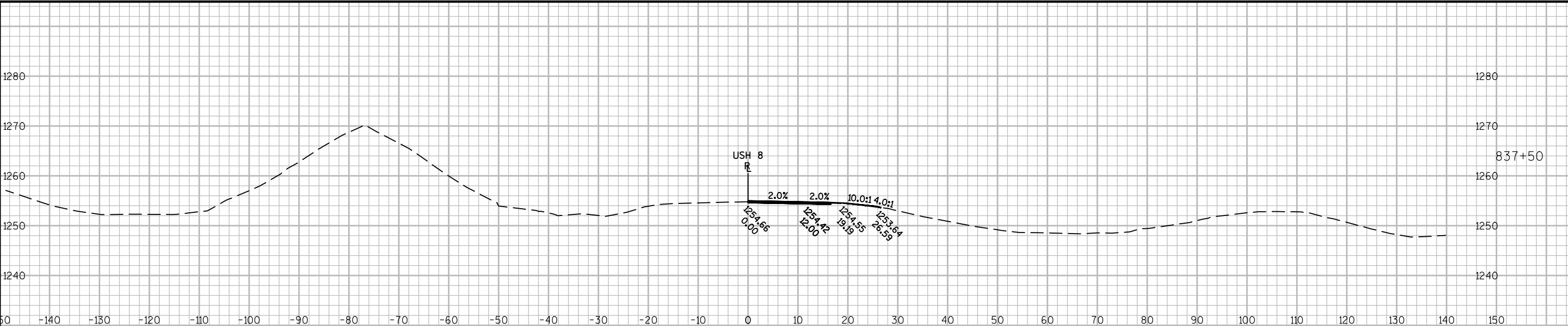
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PROJECT NO:1590-16-71	HWY: USH 8	COUNTY: MARINETTE	CROSS SECTIONS: USH 8	SHEET	E
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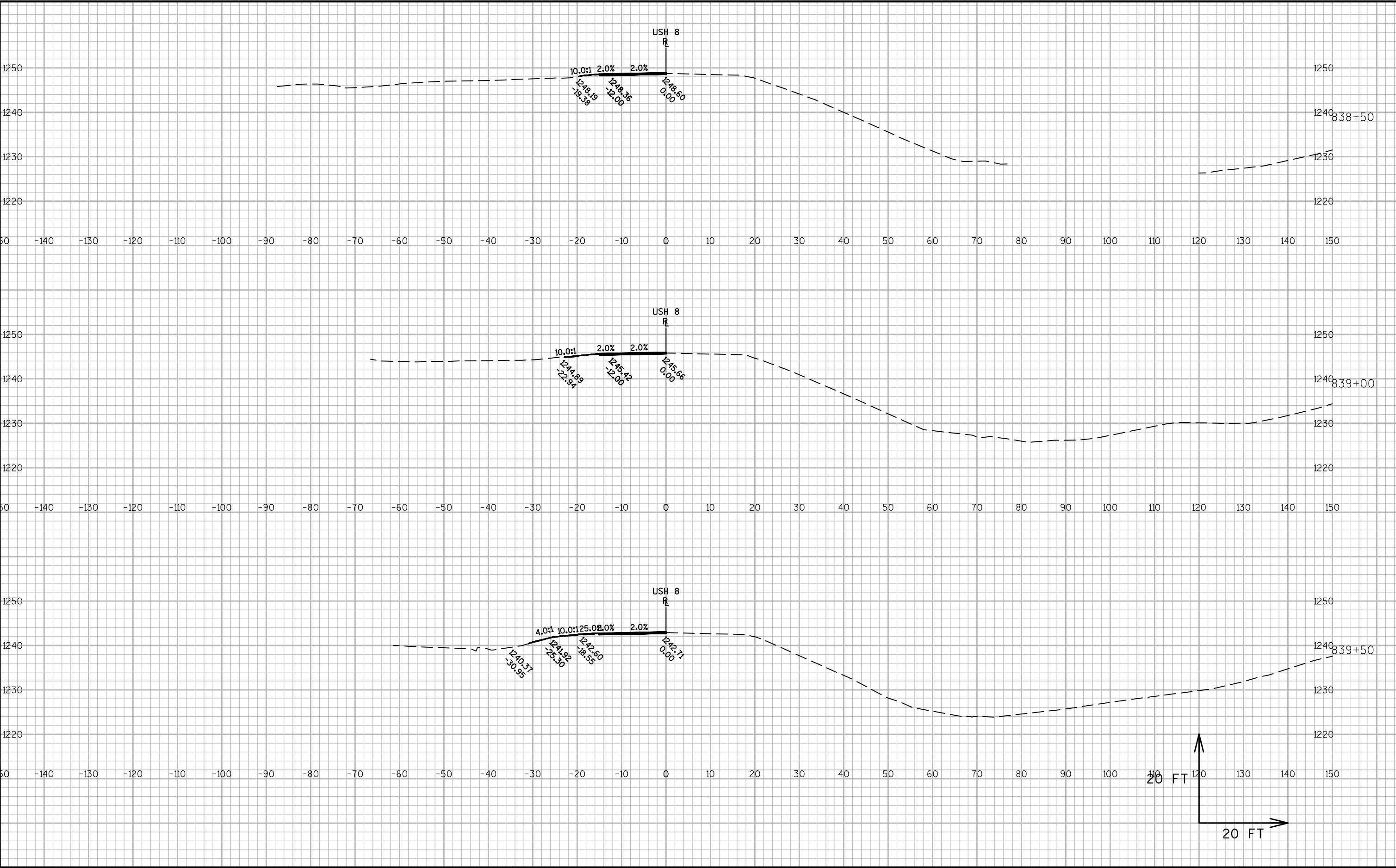
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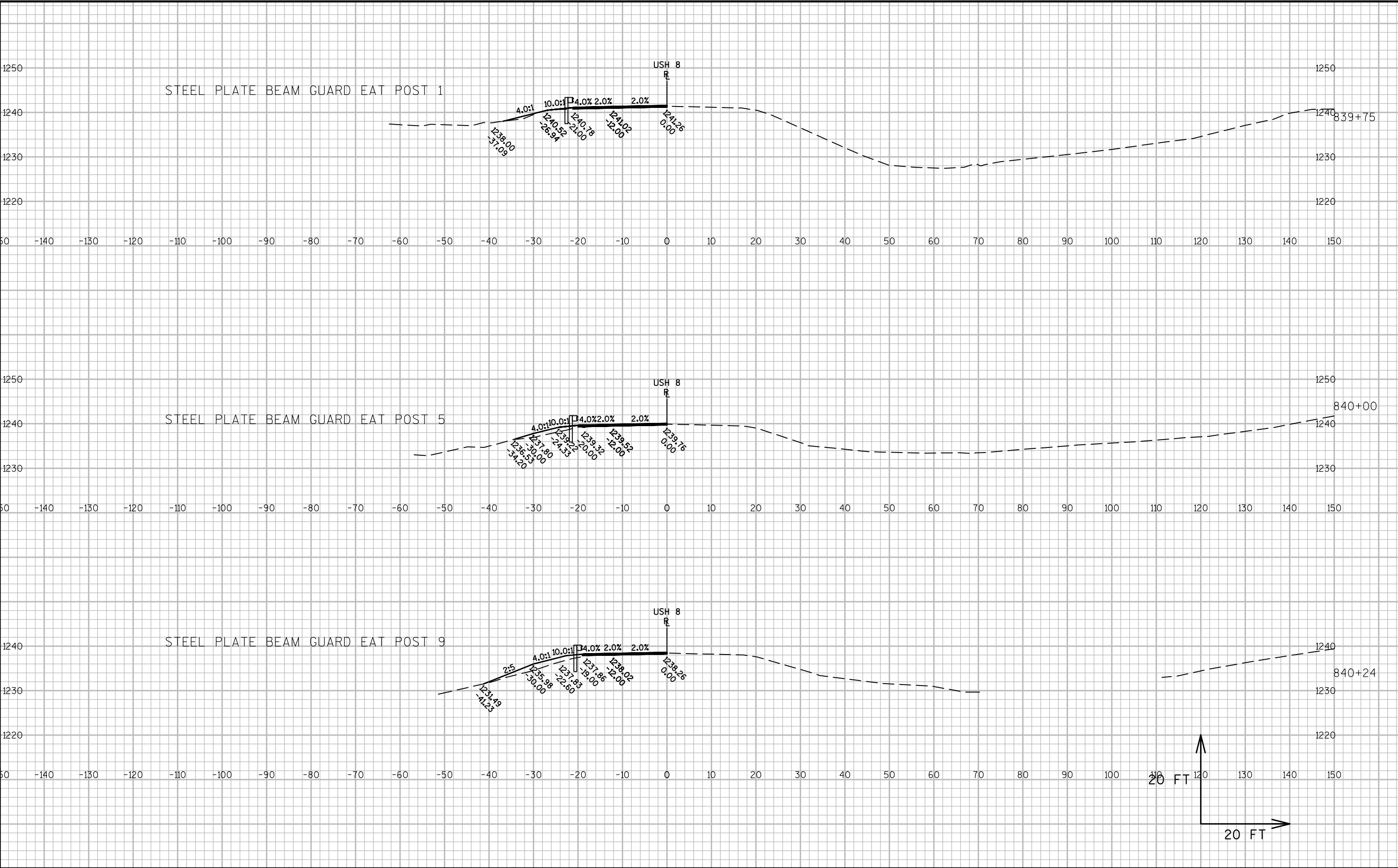
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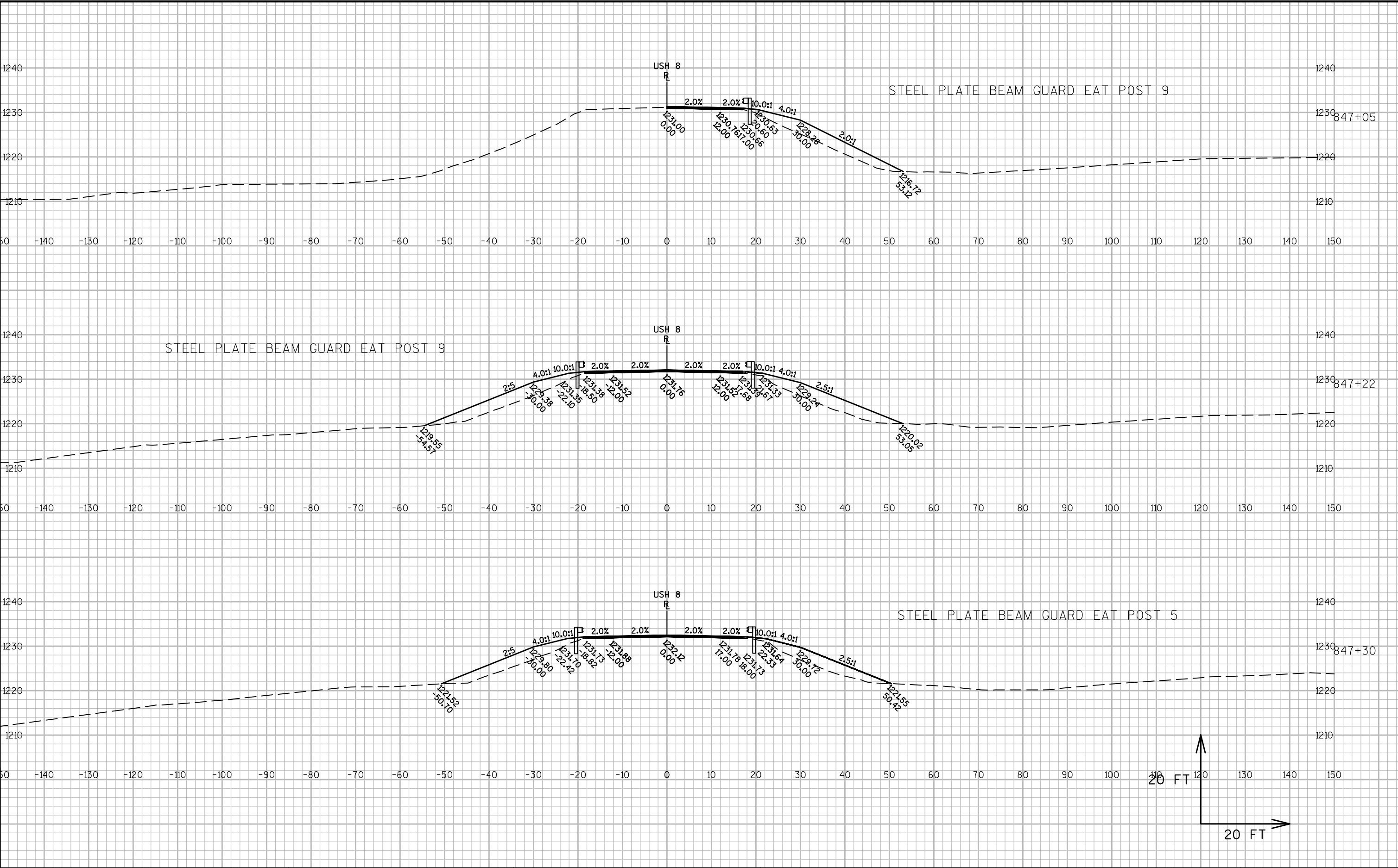


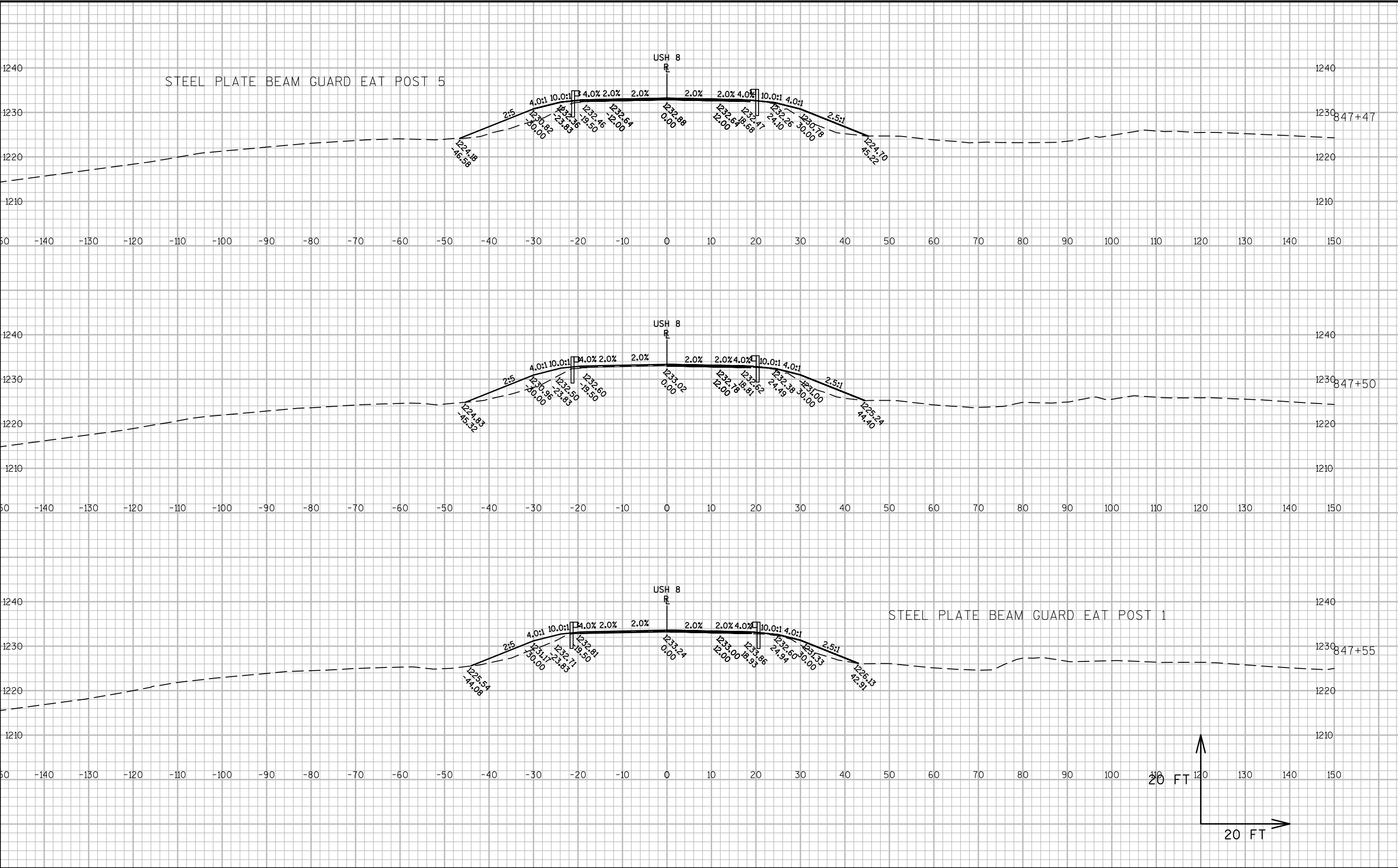
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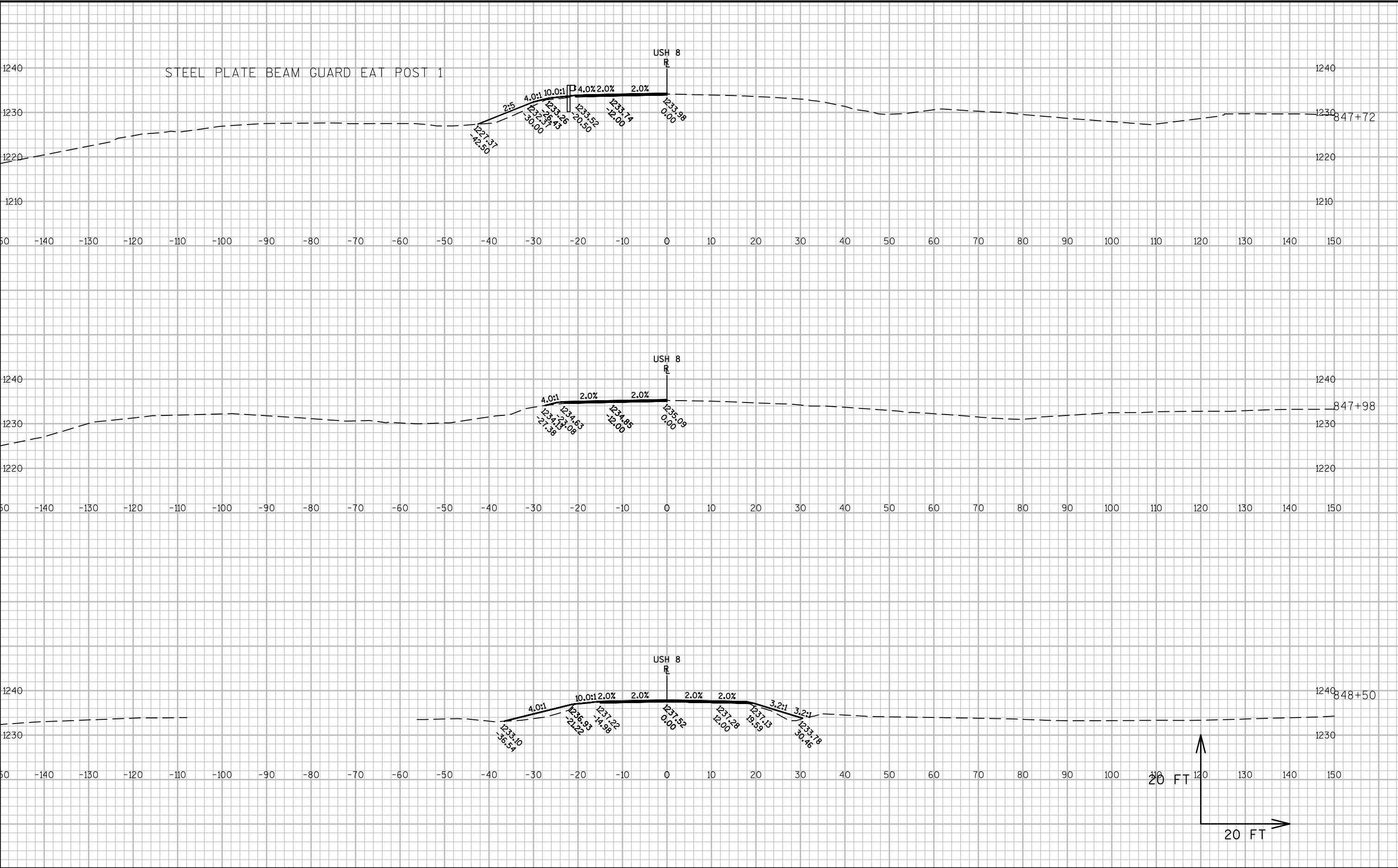
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PROJECT NO:1590-16-71	HWY:USHH 8	COUNTY:MARINETTE	CROSS SECTIONS: USH 8	SHEET	E
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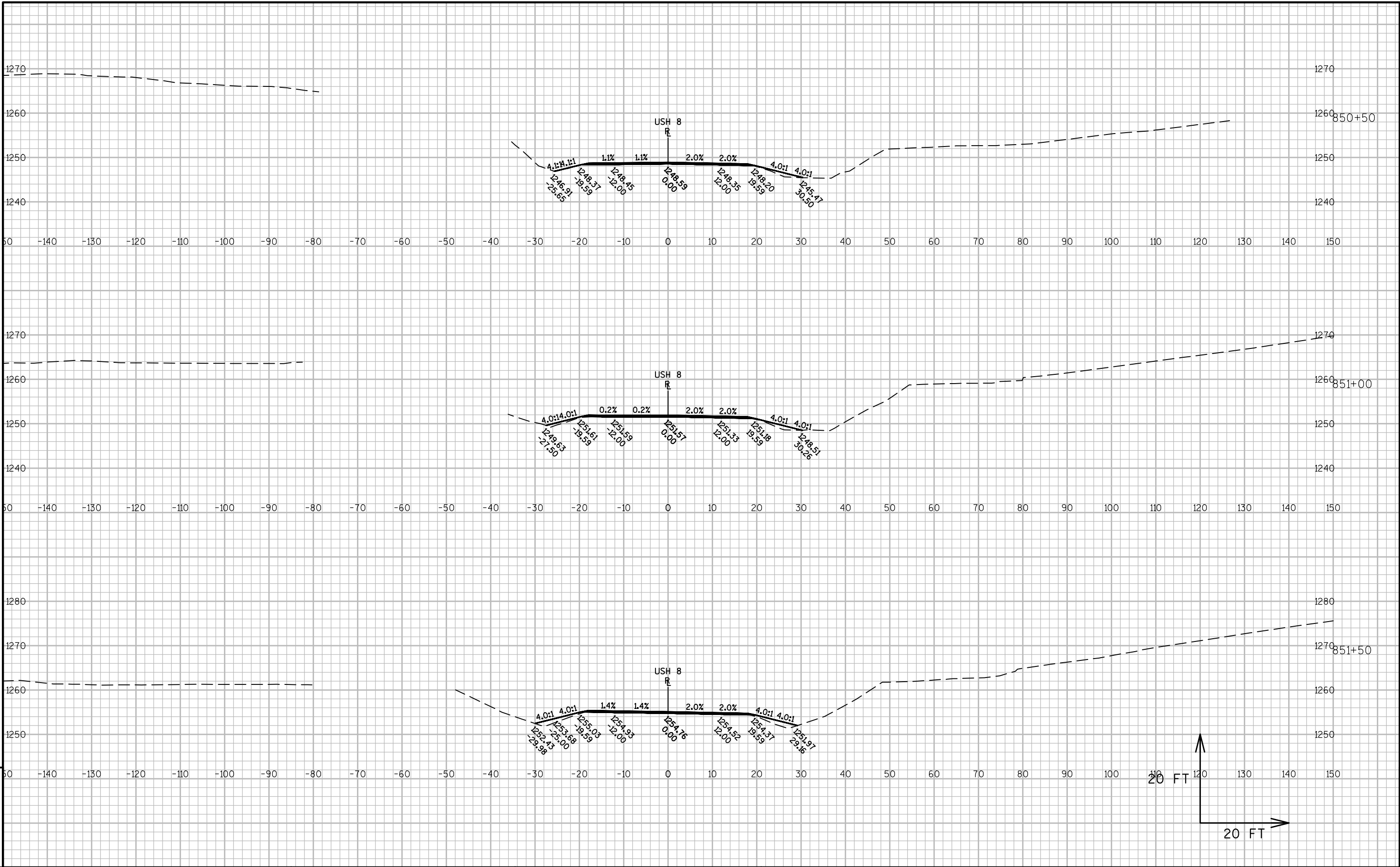


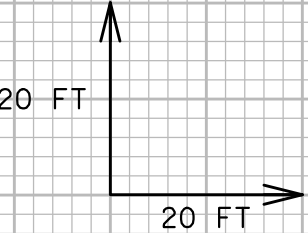
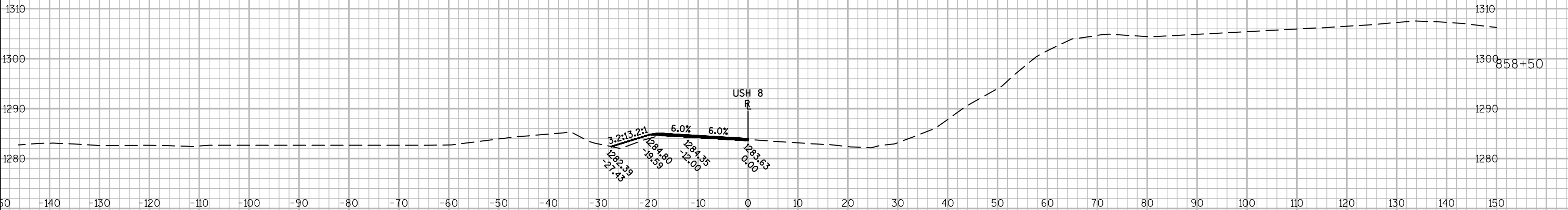
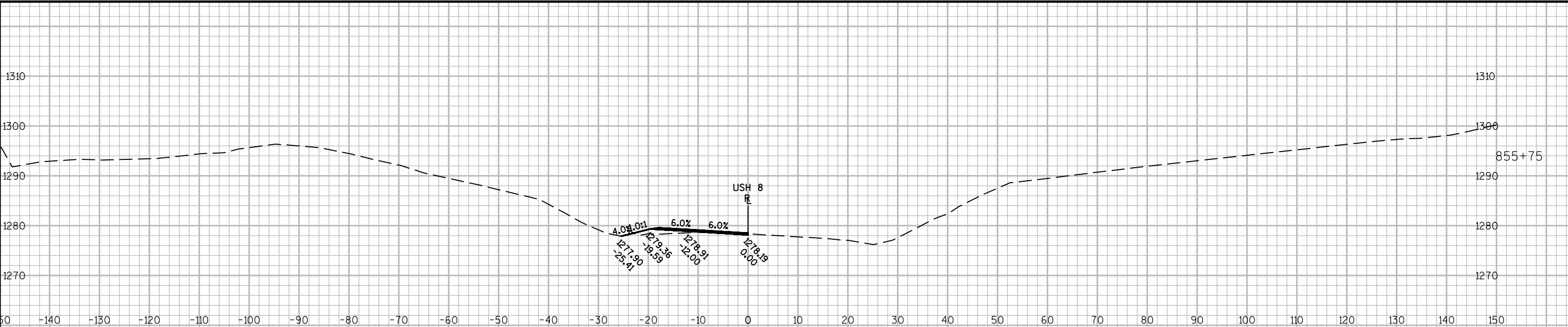


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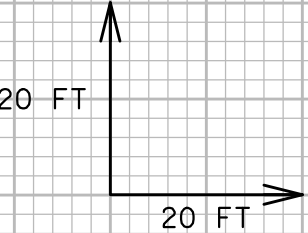
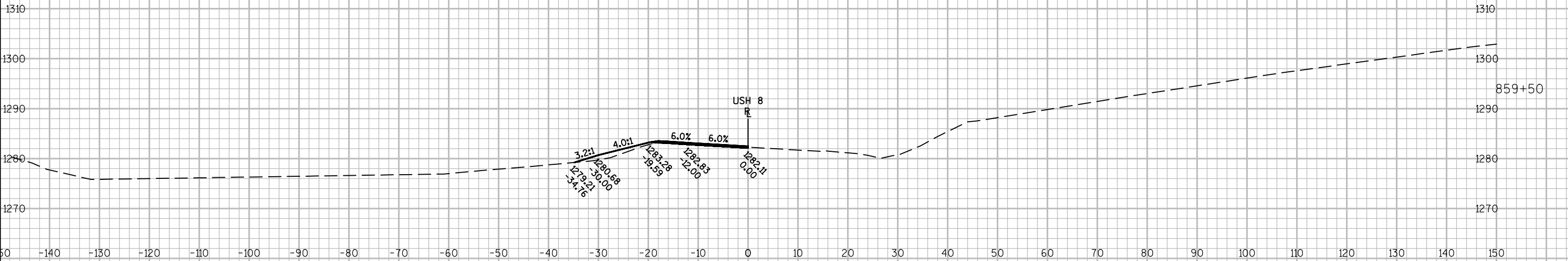
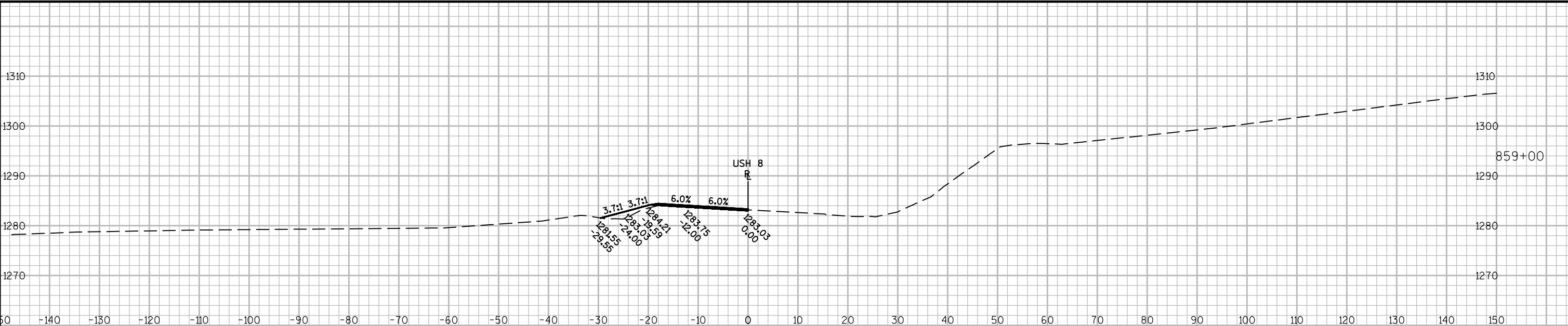
PROJECT NO:1590-16-71	HWY:USHH 8	COUNTY:MARINETTE	CROSS SECTIONS: USH 8	SHEET	E
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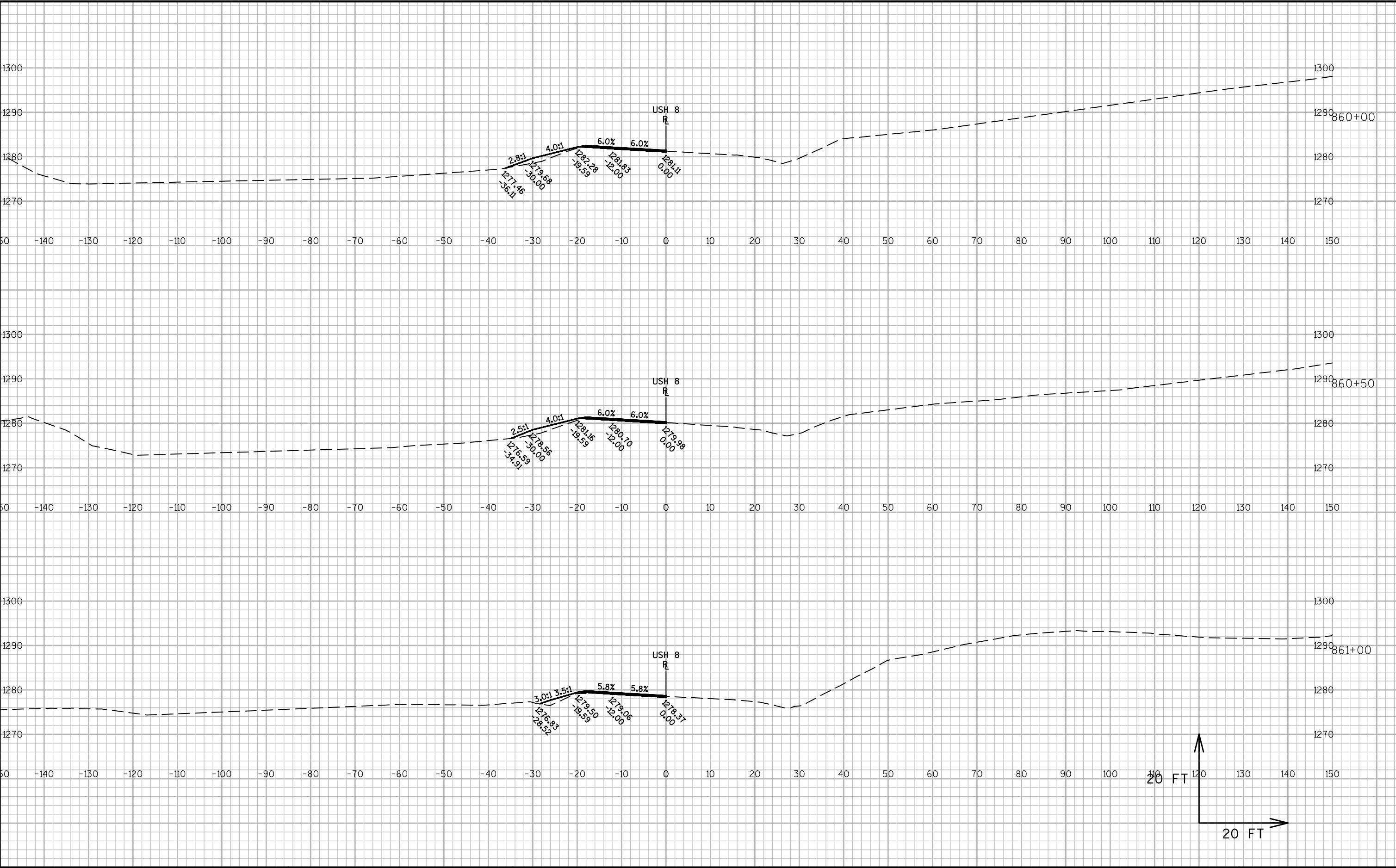
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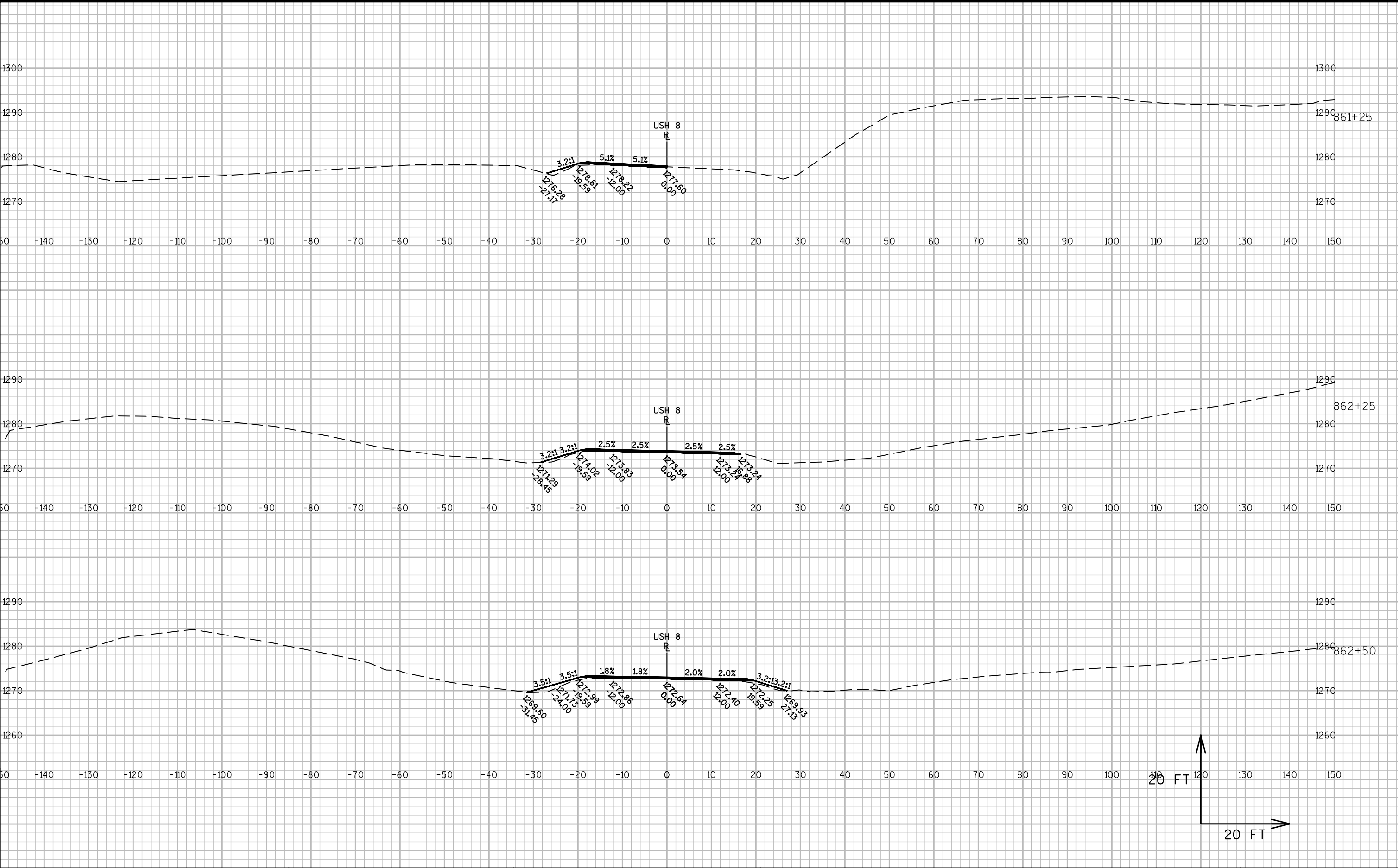
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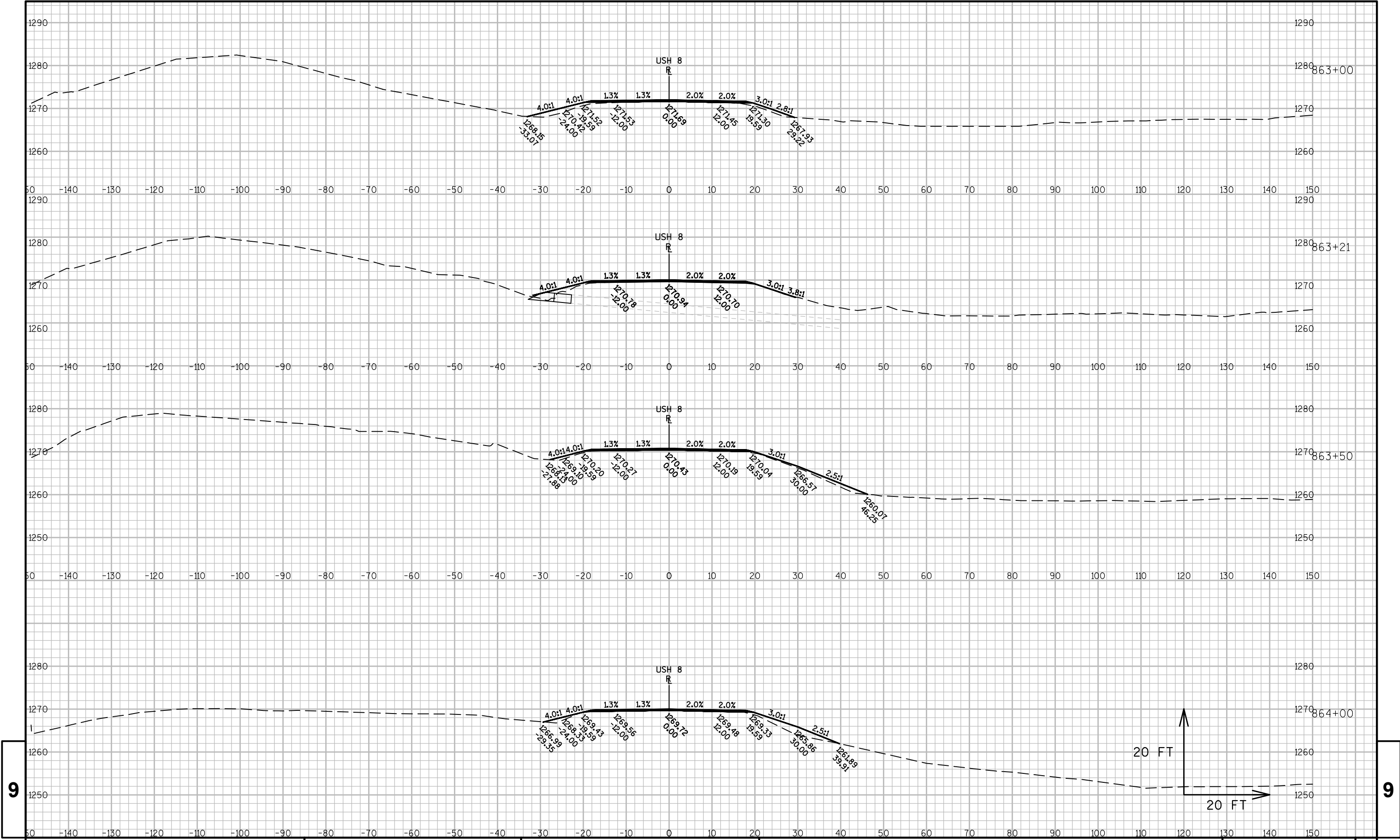


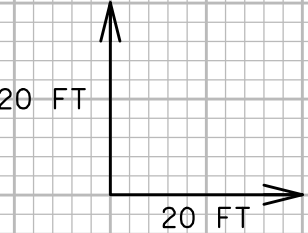
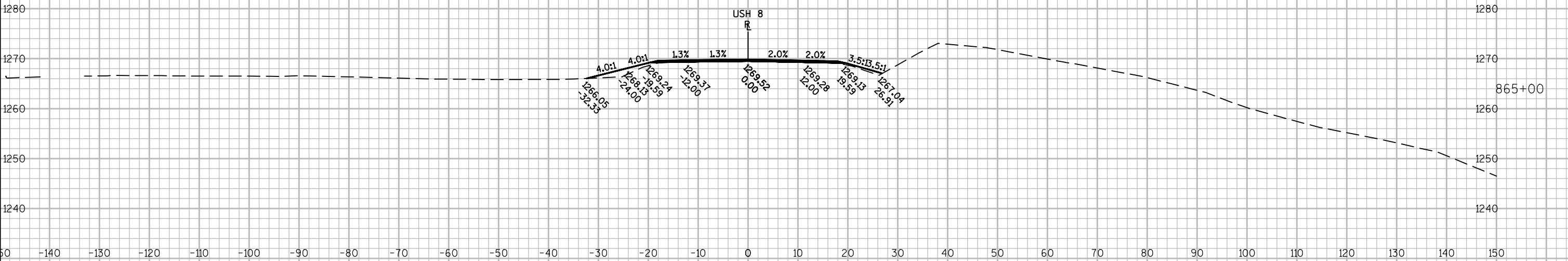
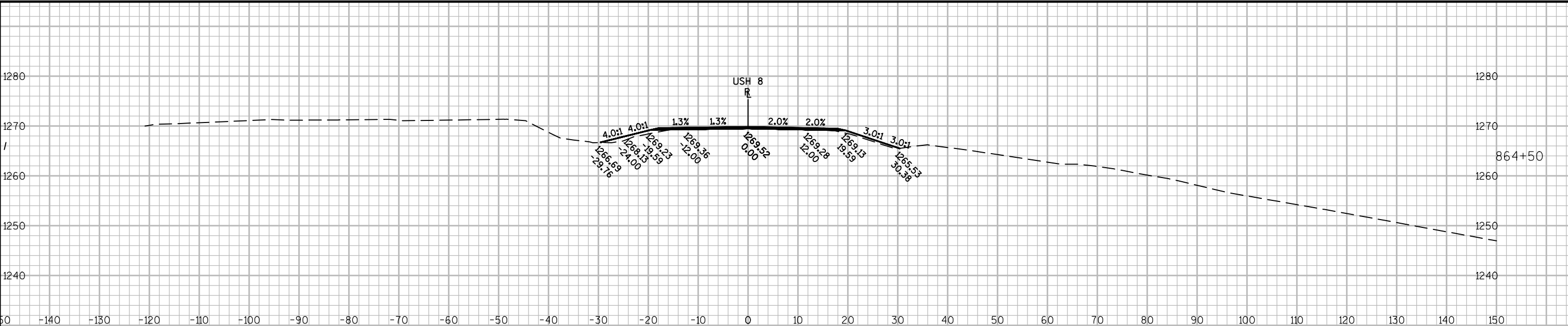
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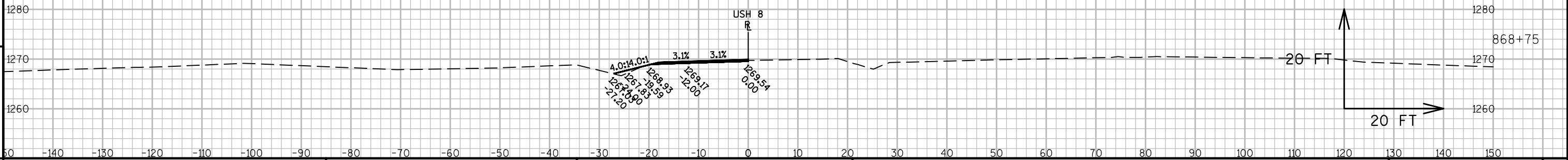
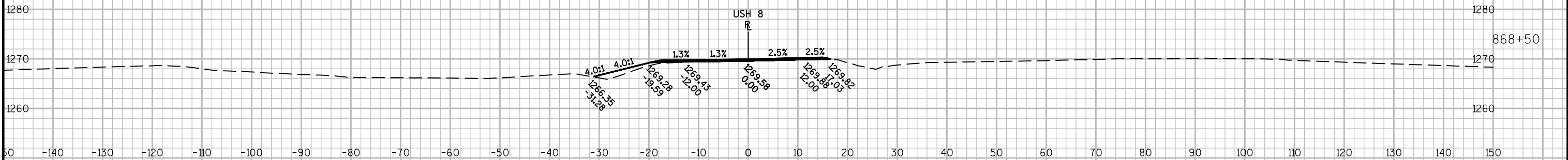
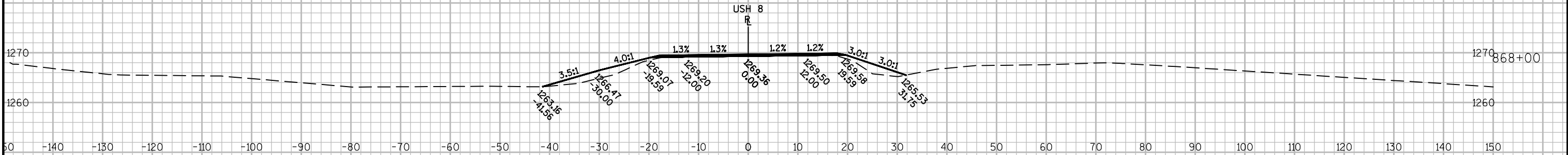
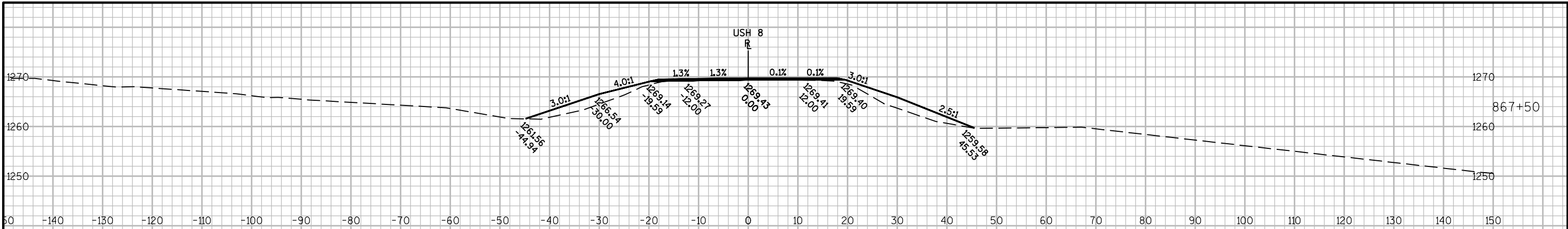






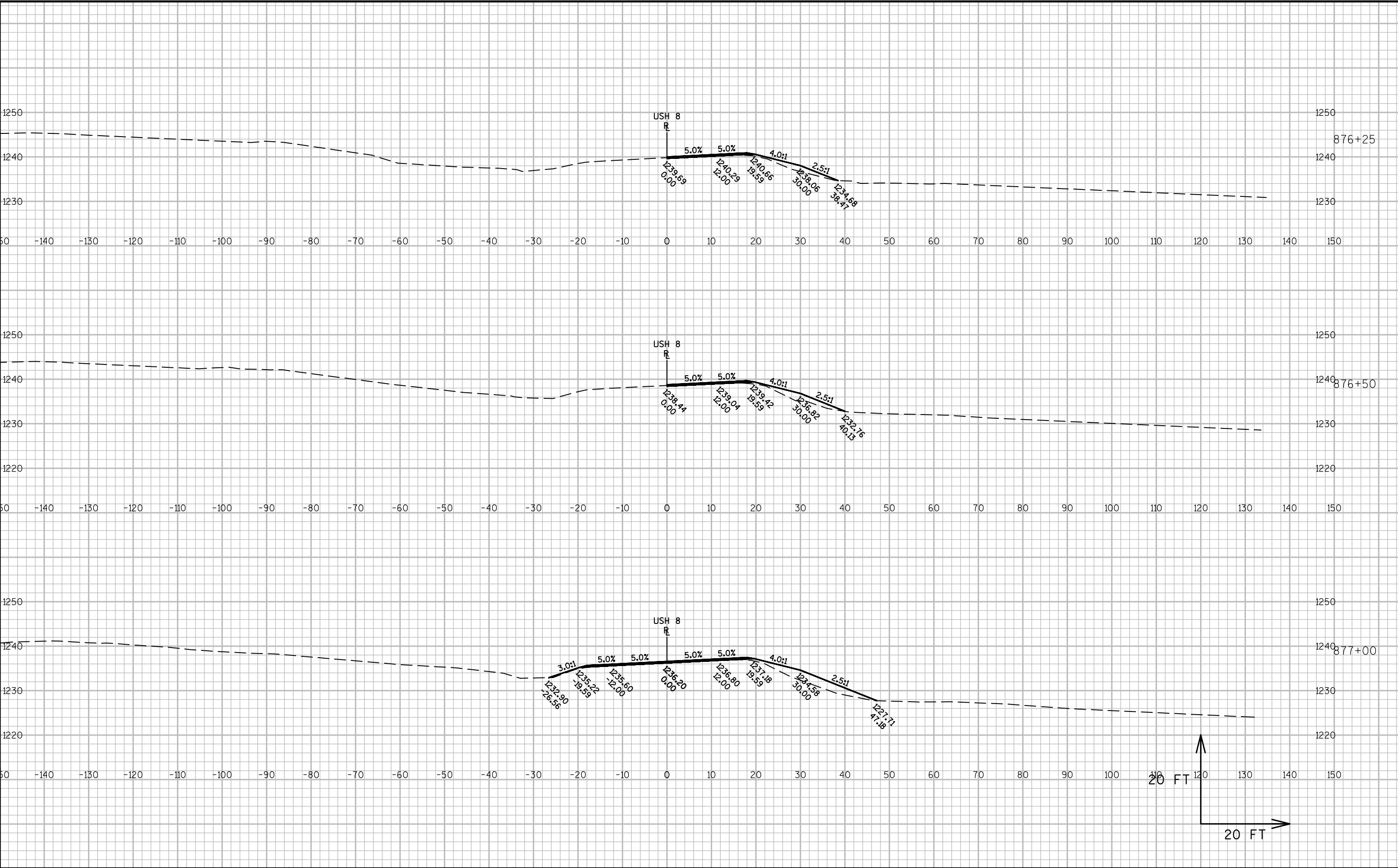
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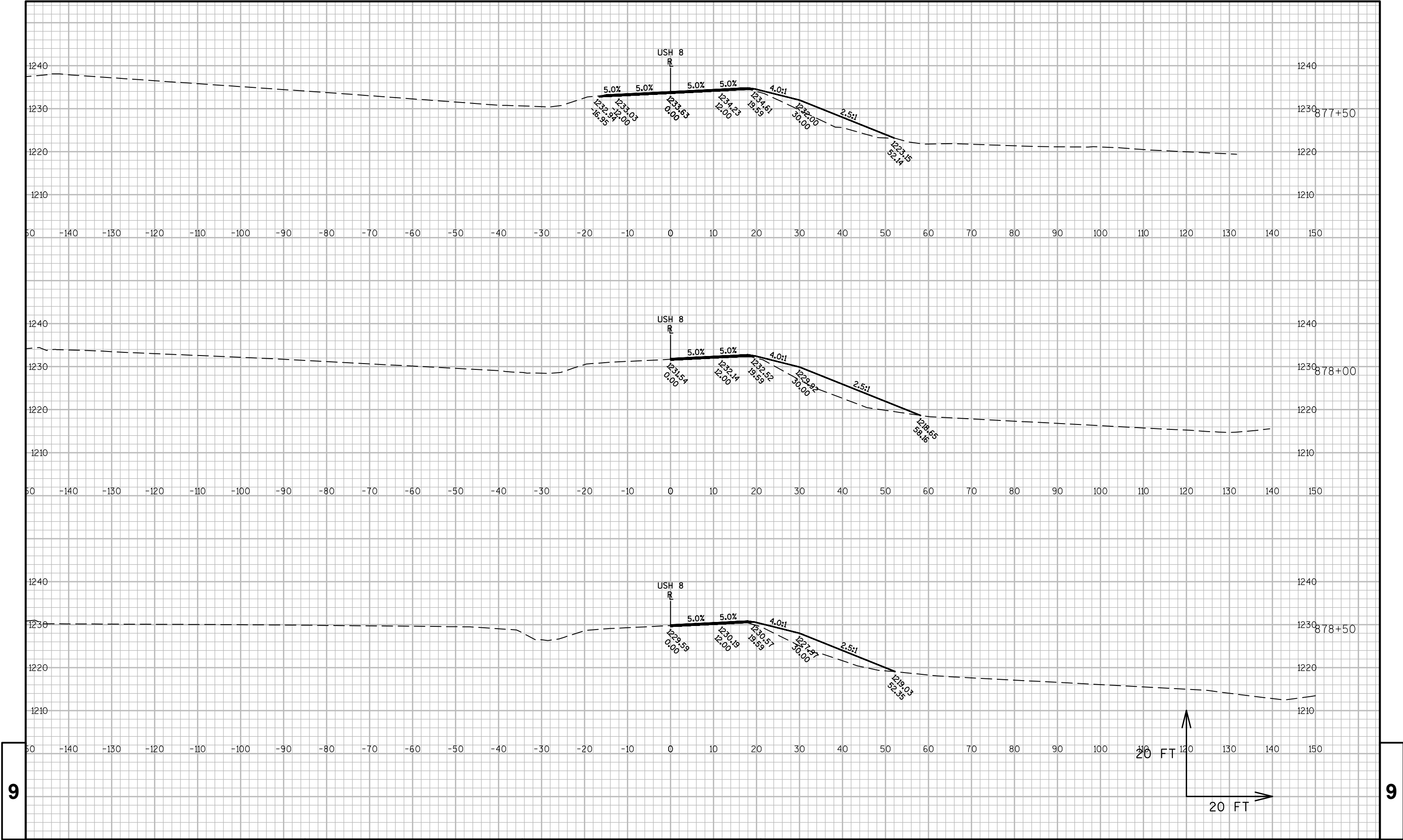
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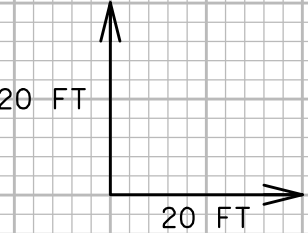
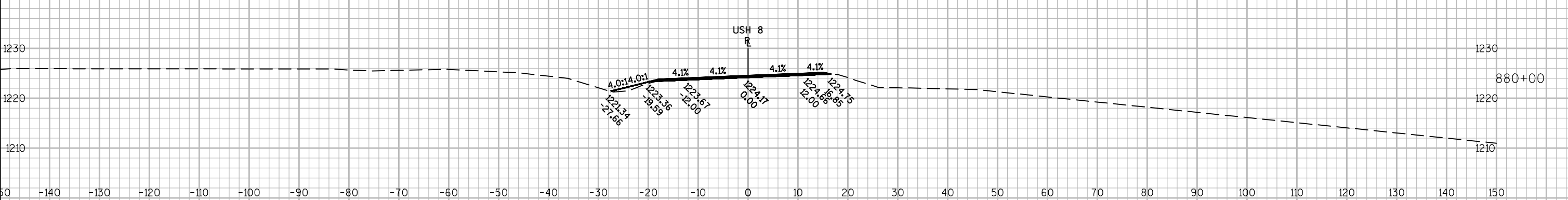
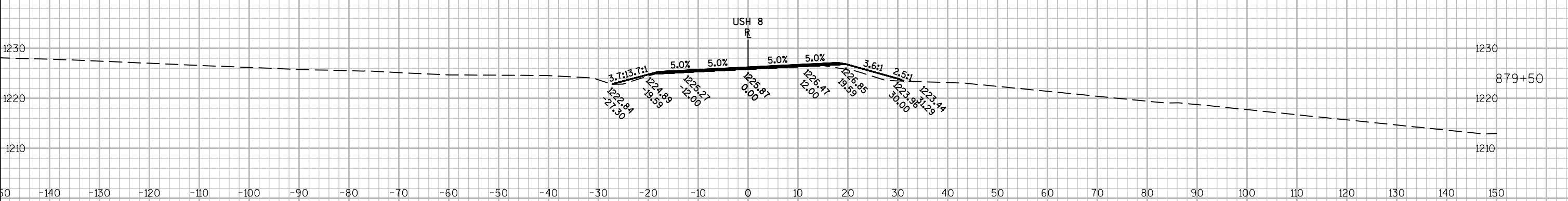
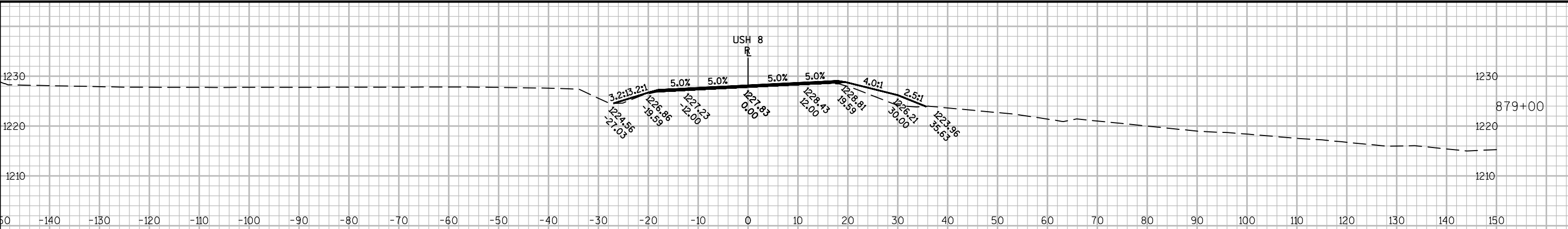


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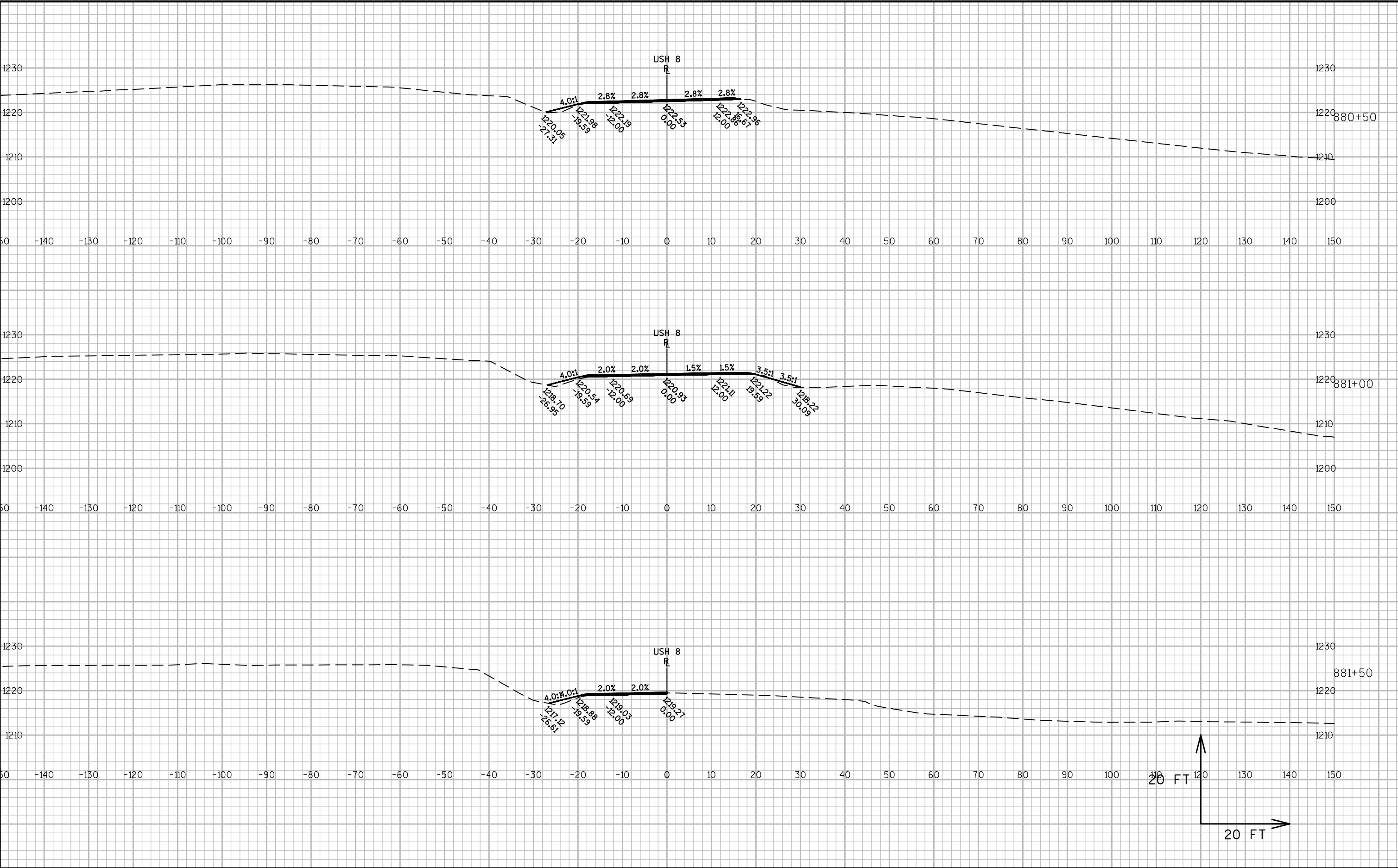


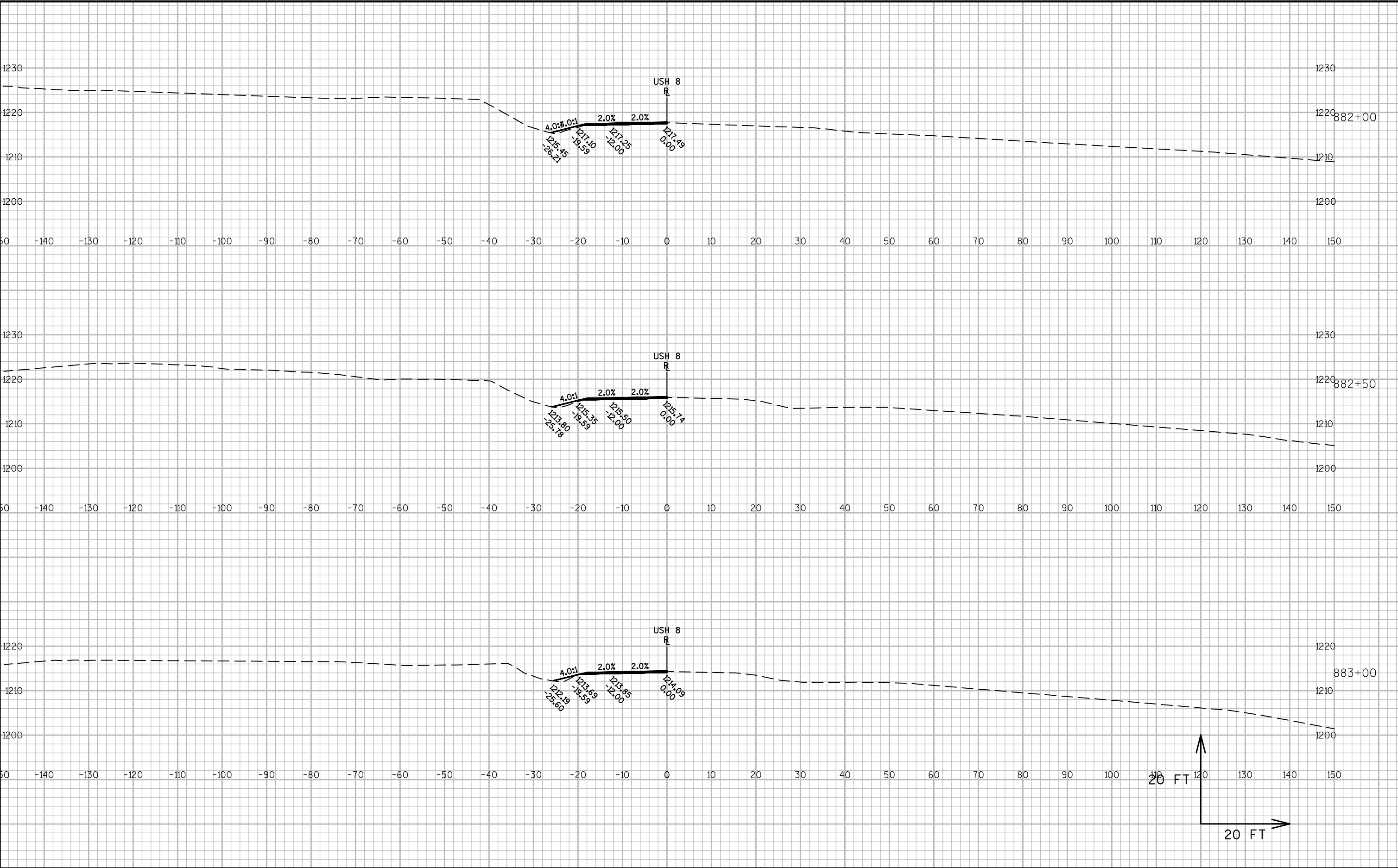


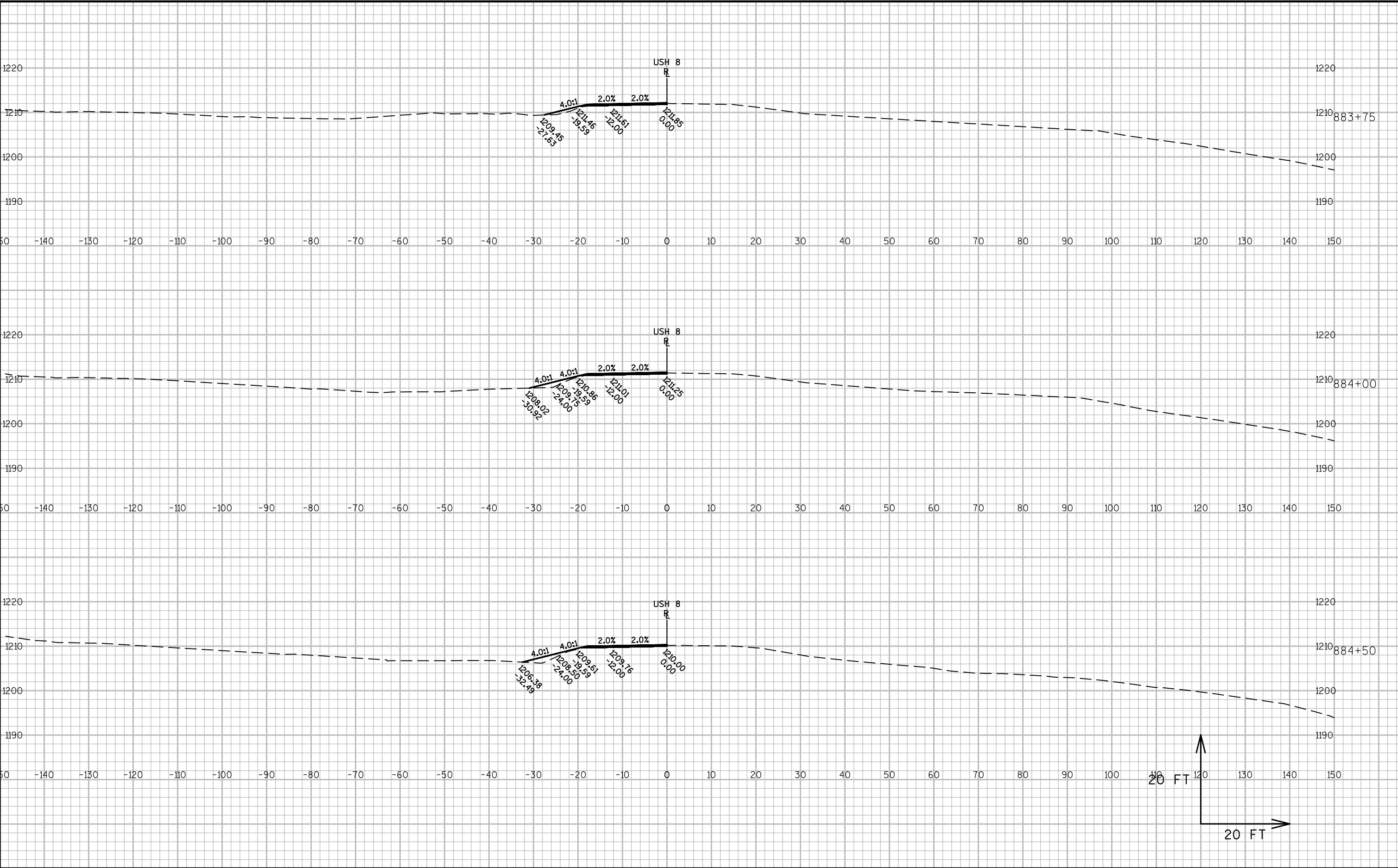


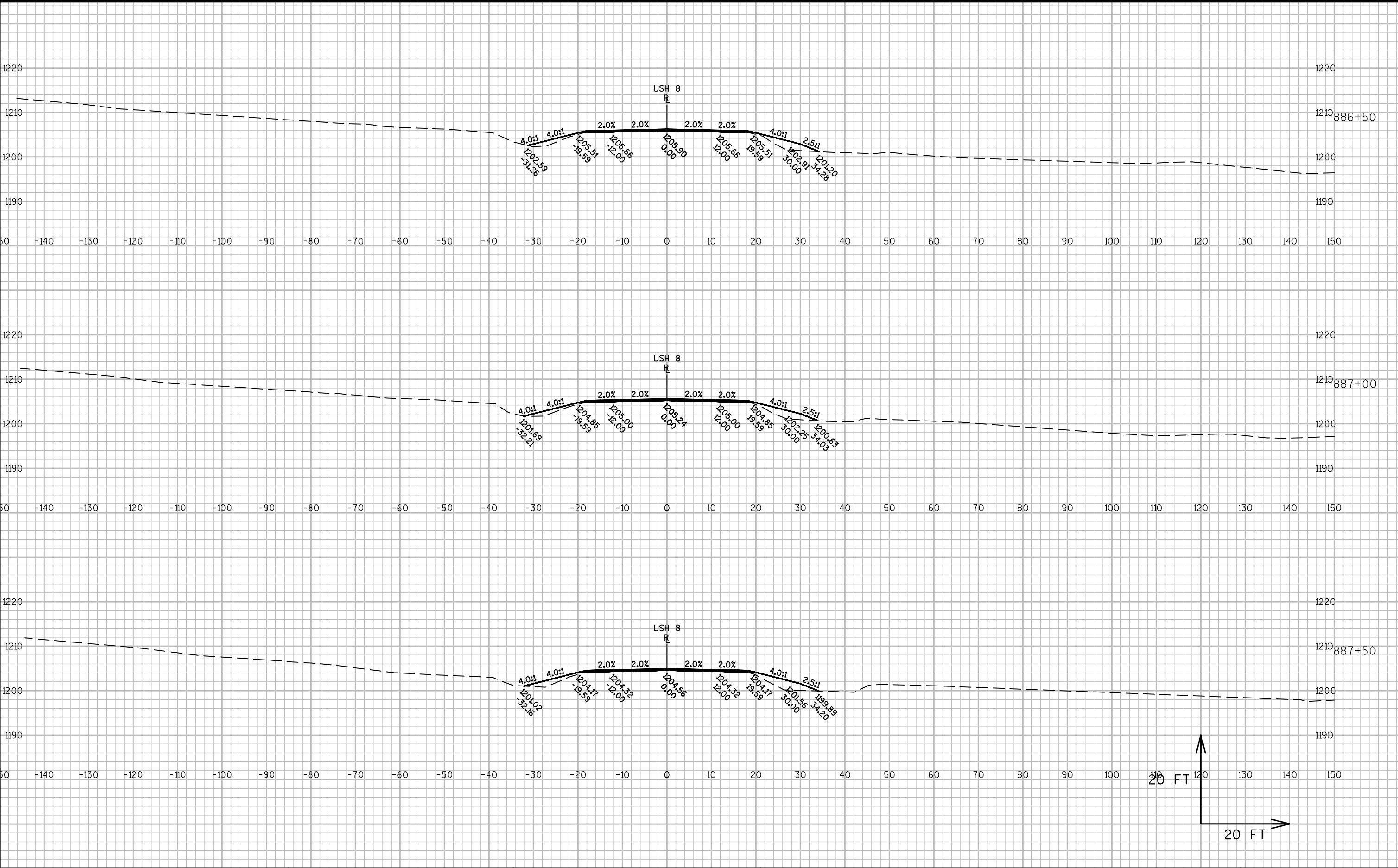
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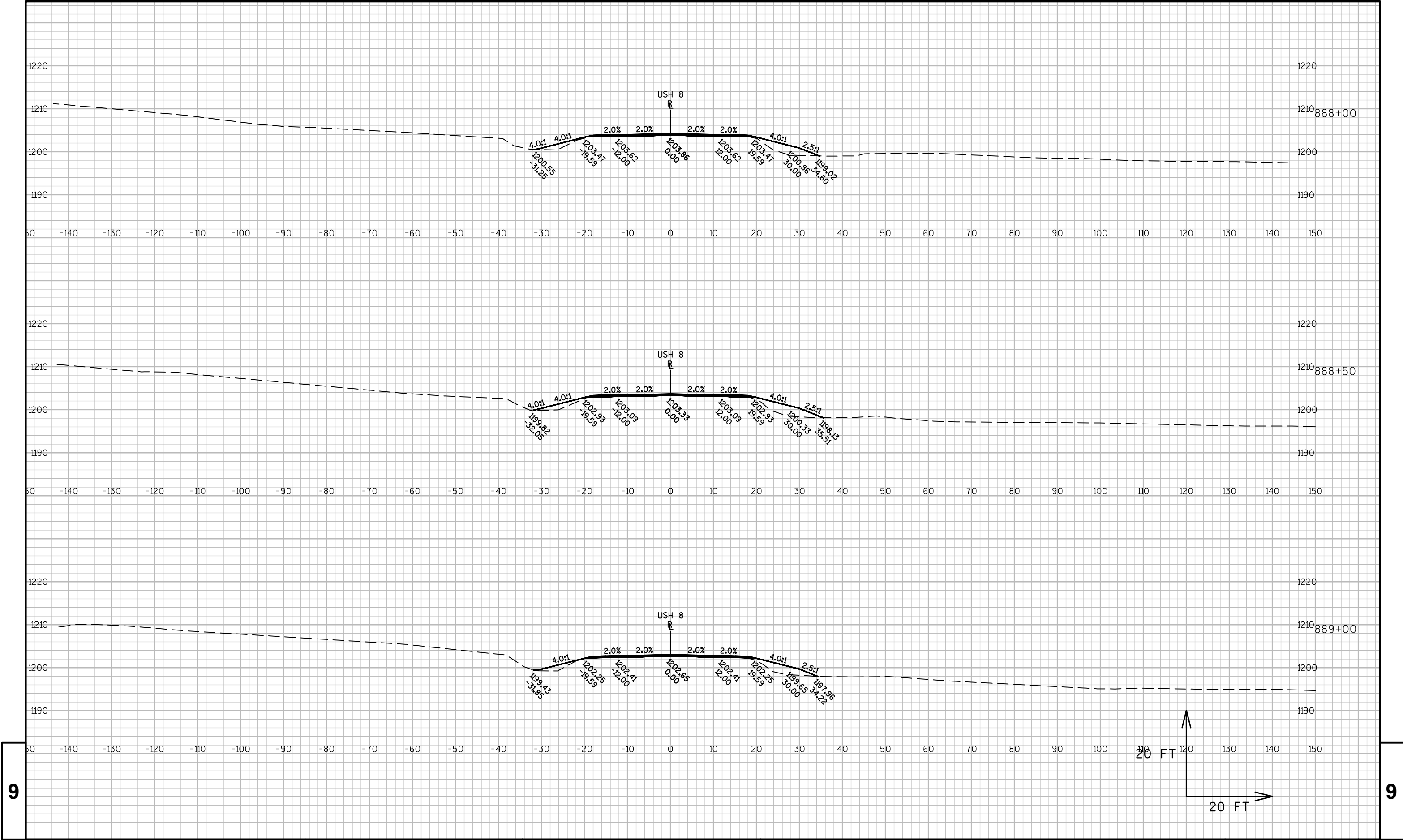
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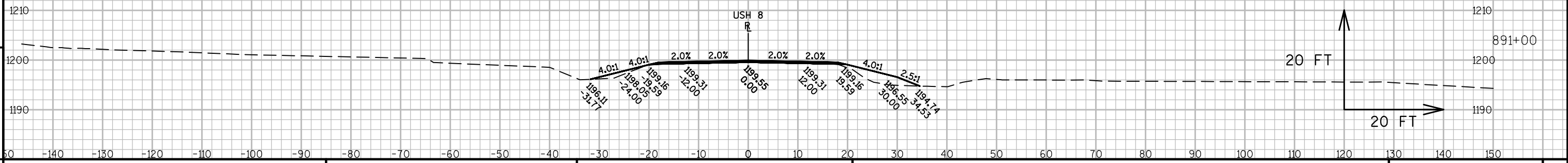
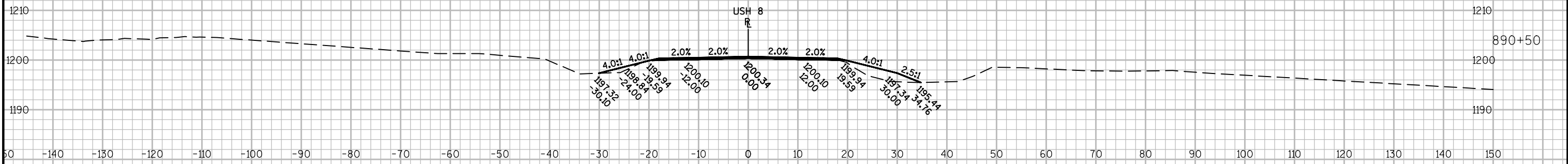
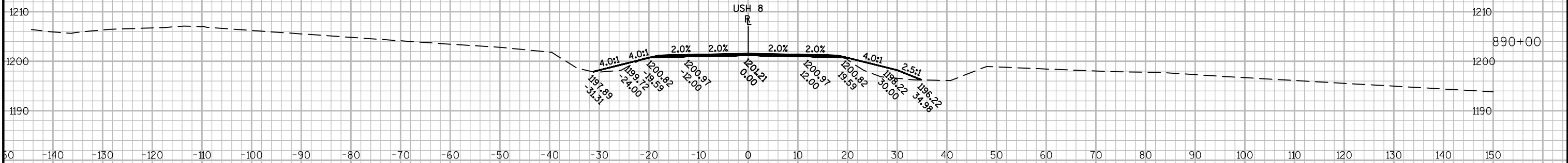
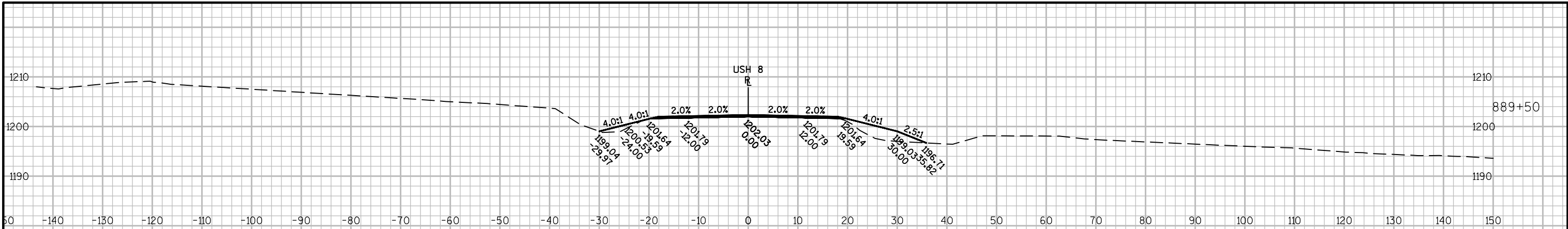










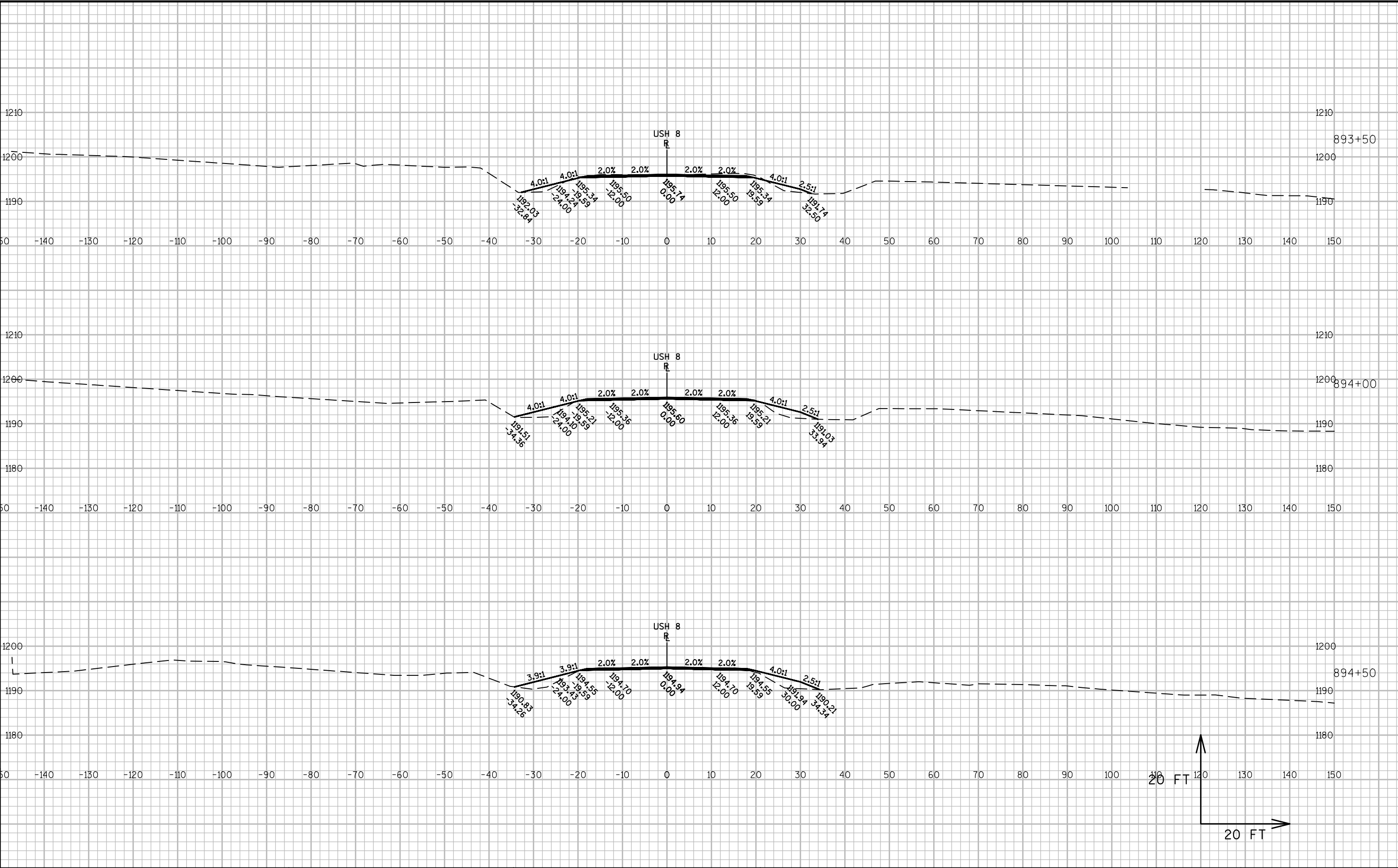


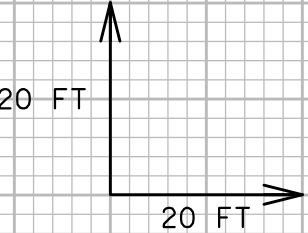
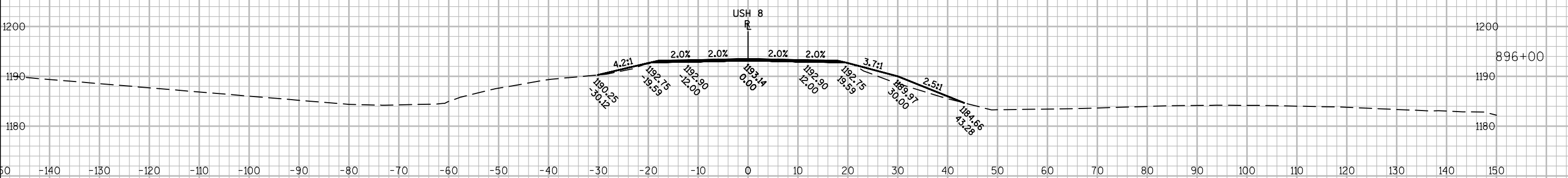
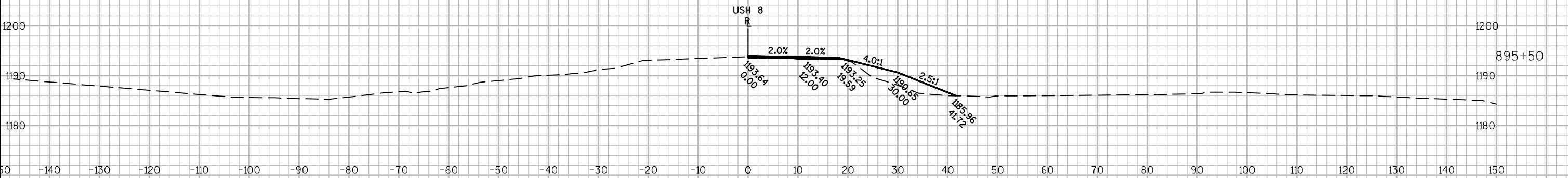
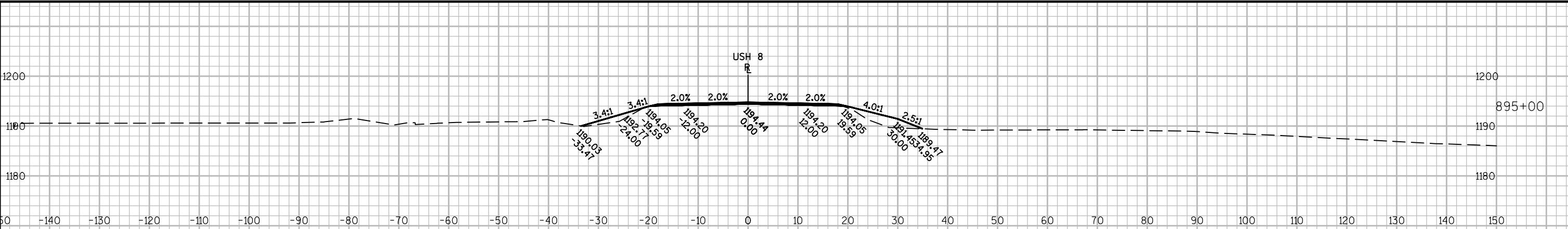
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20 FT

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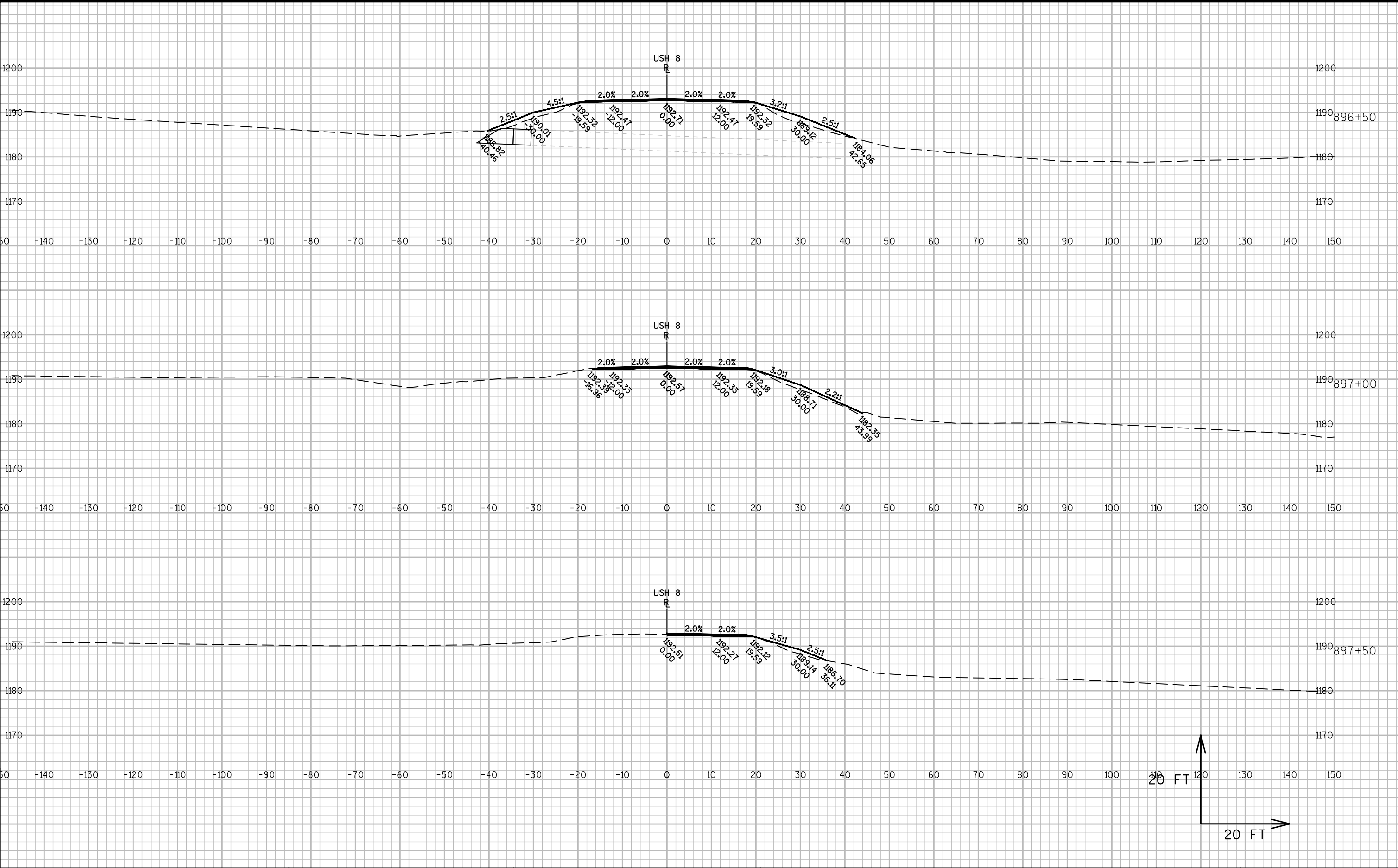
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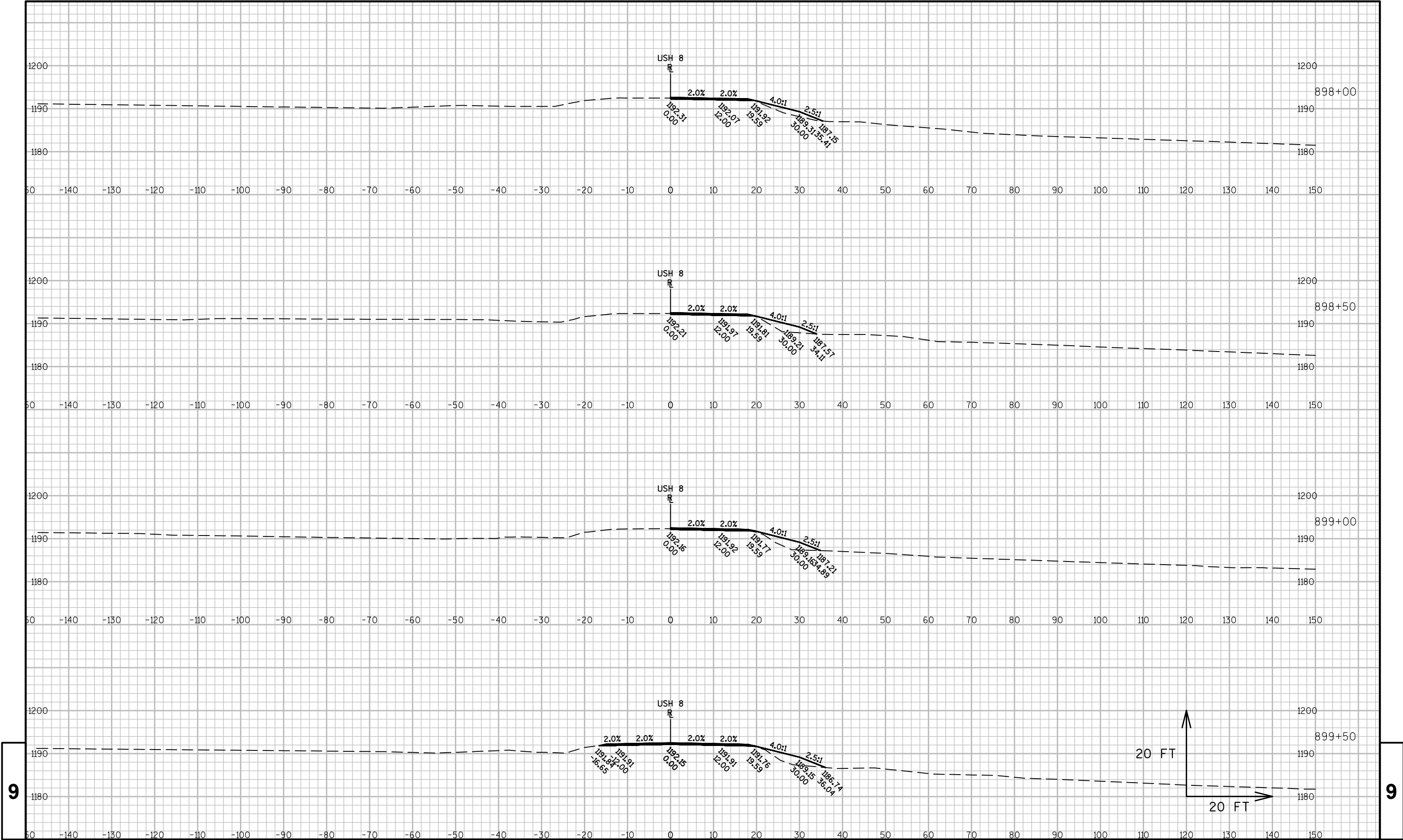


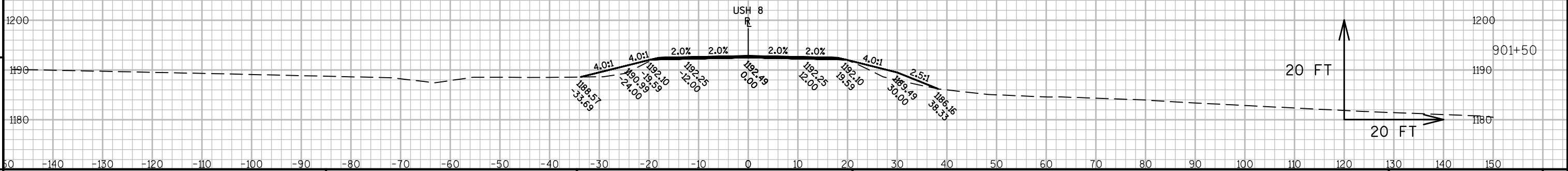
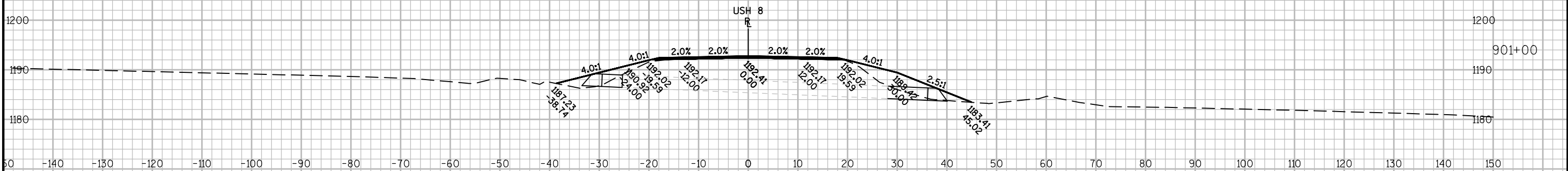
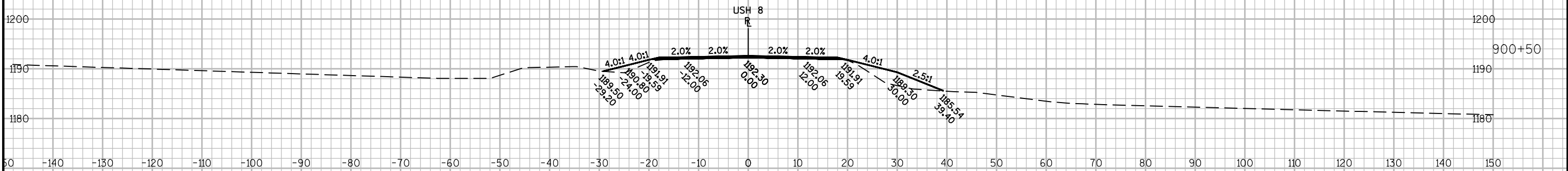
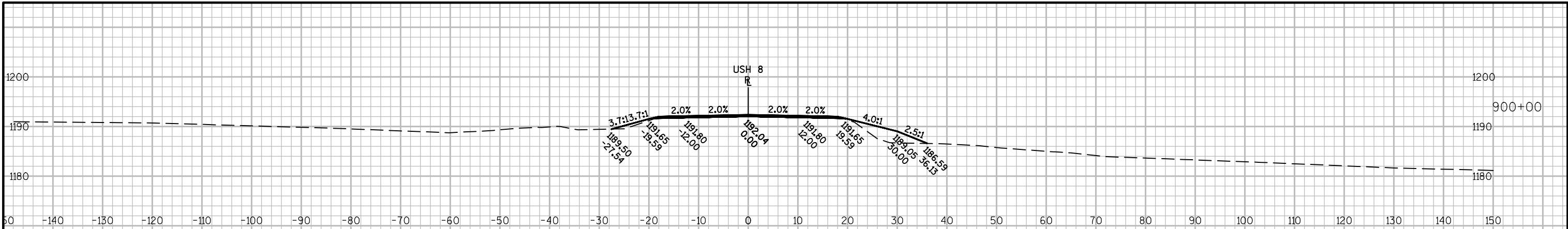


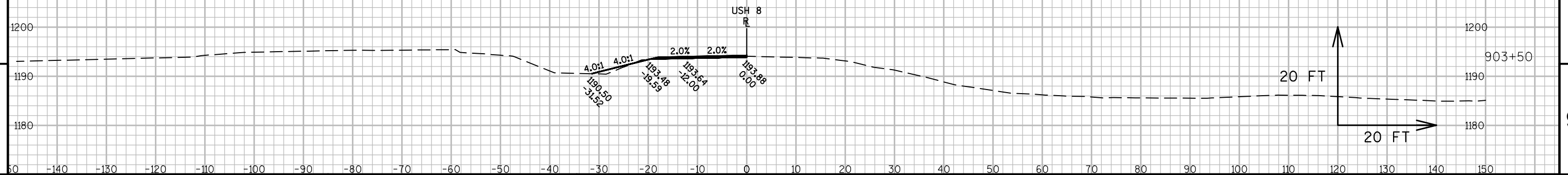
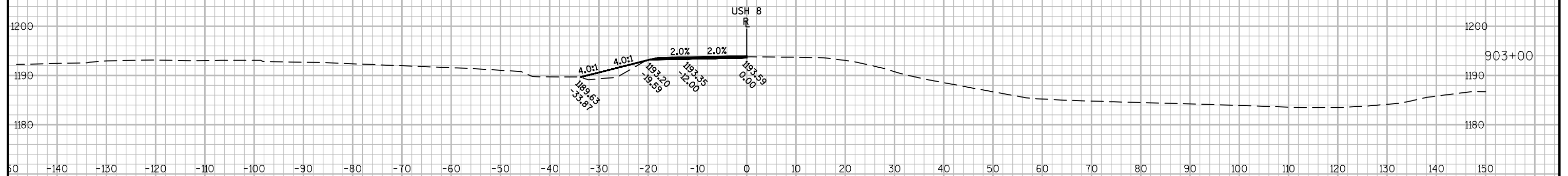
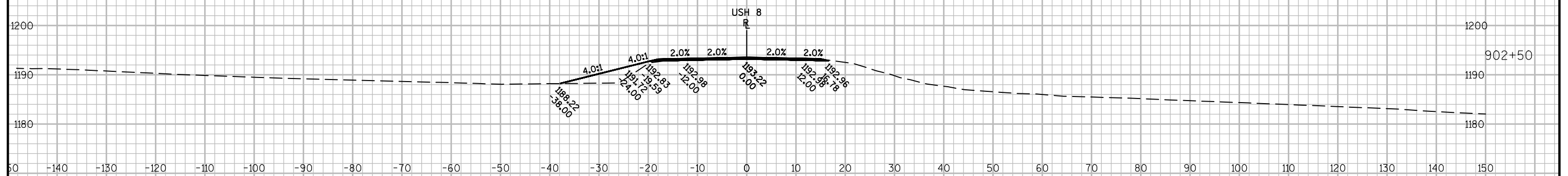
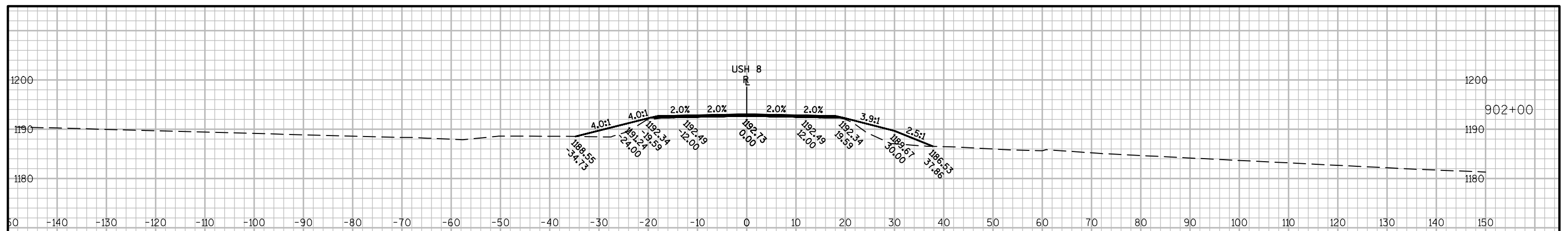
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PROJECT NO:1590-16-71

HWY: USHH 8

COUNTY: MARINETTE

CROSS SECTIONS: USH 8

SHEET

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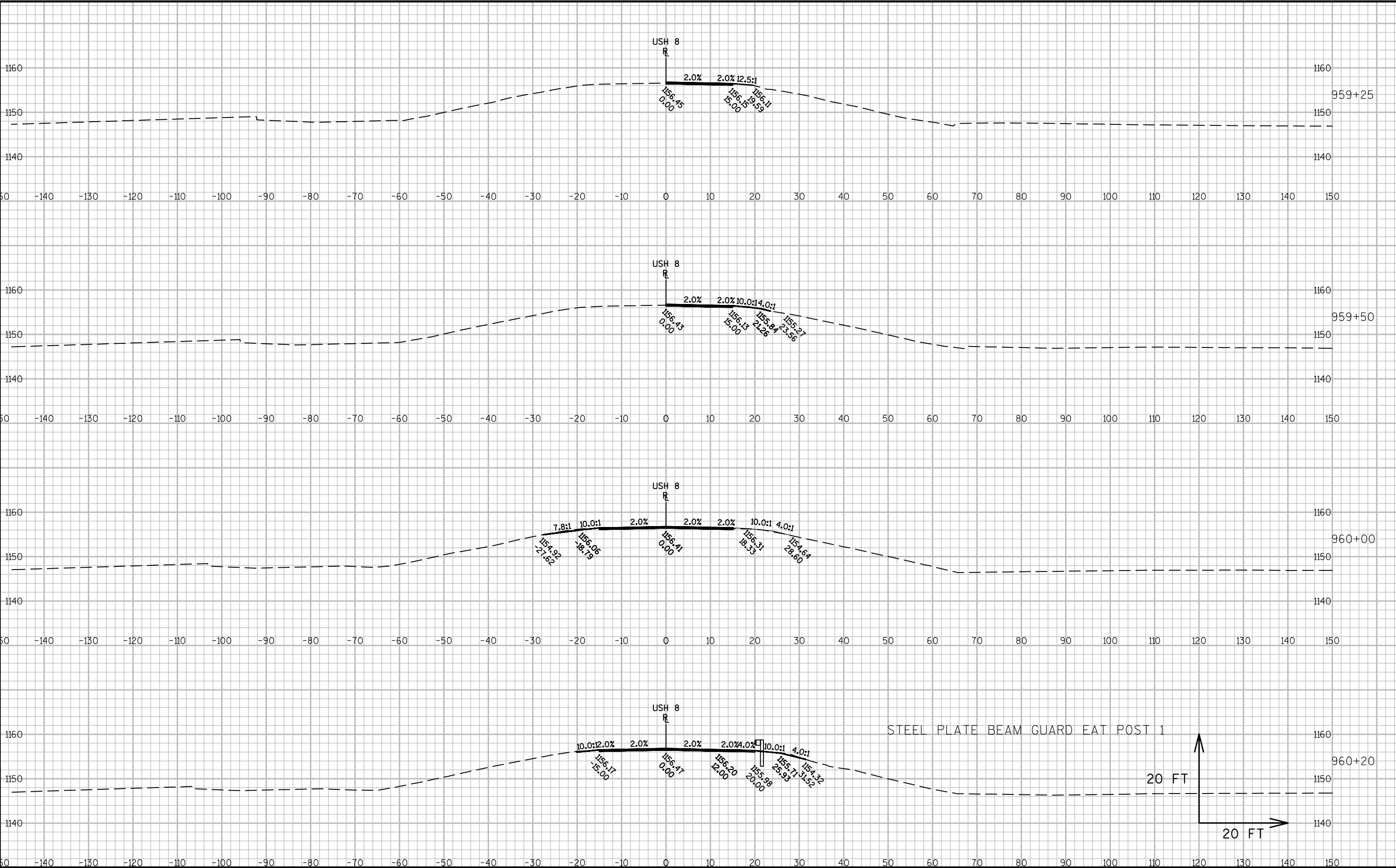
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PLOT BY : ANDY BLOCK

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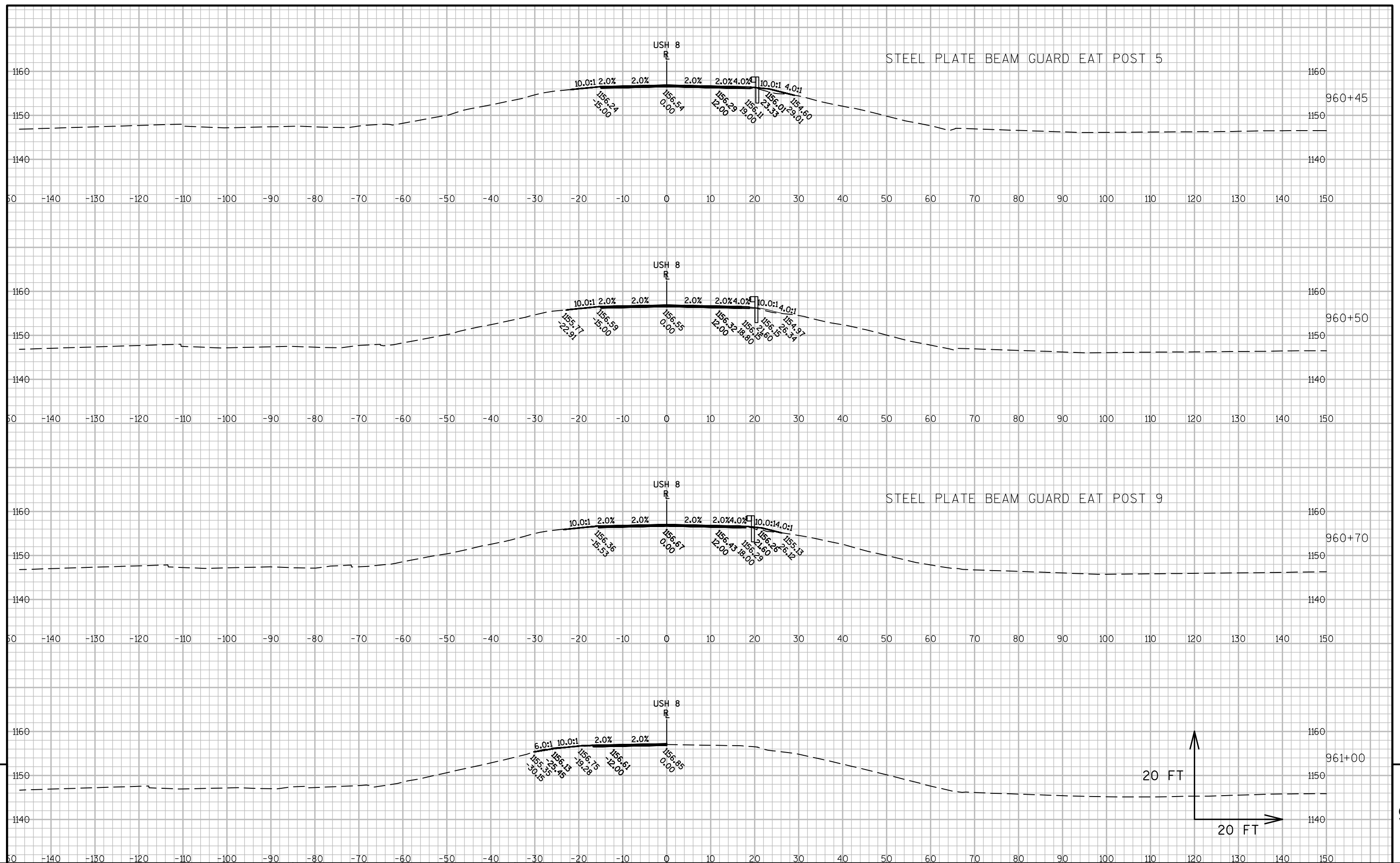
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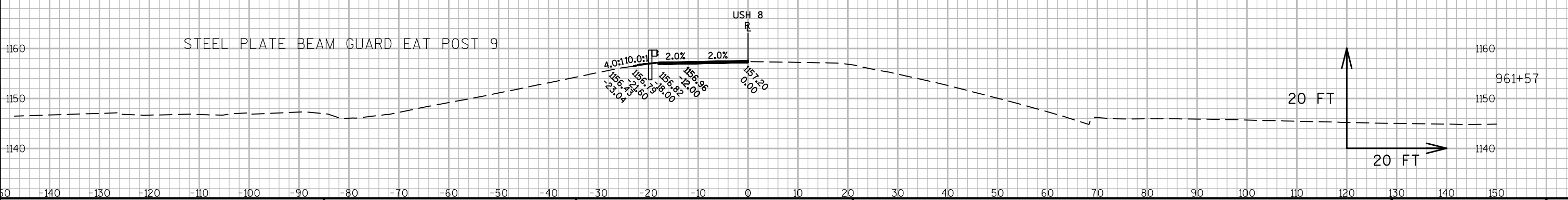
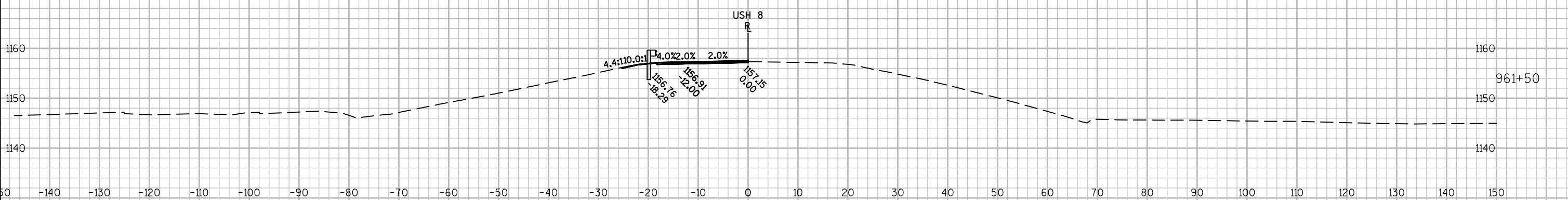
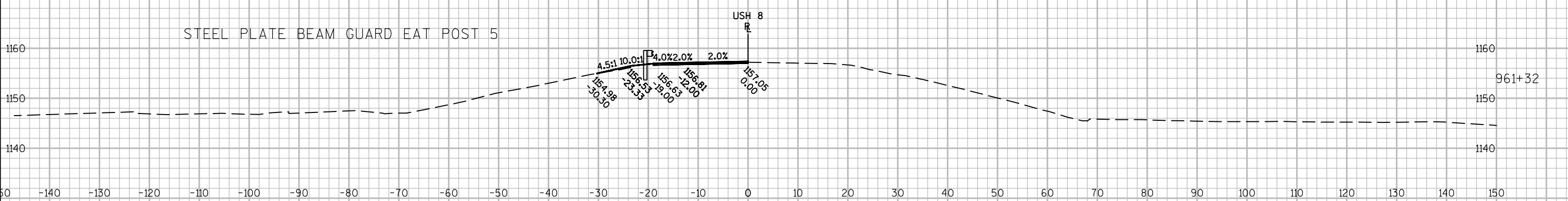
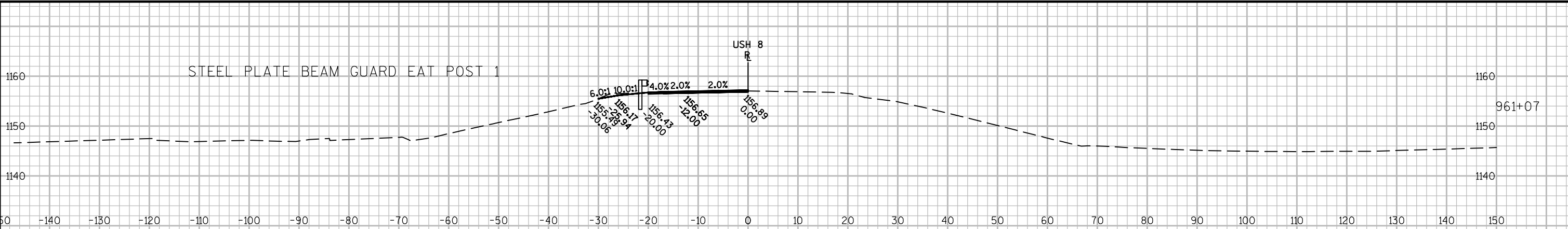
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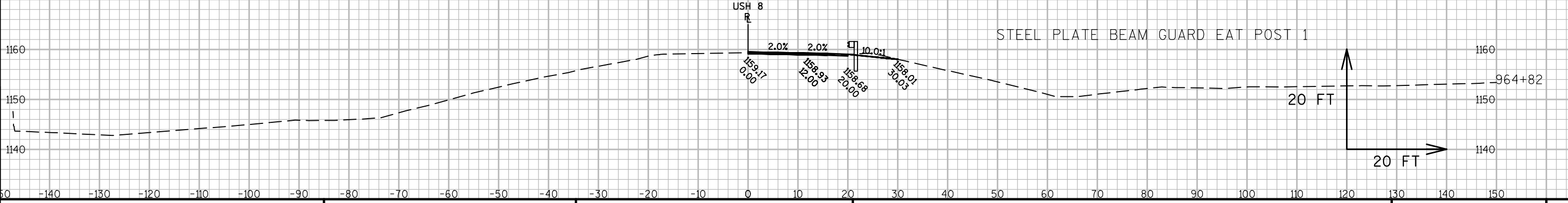
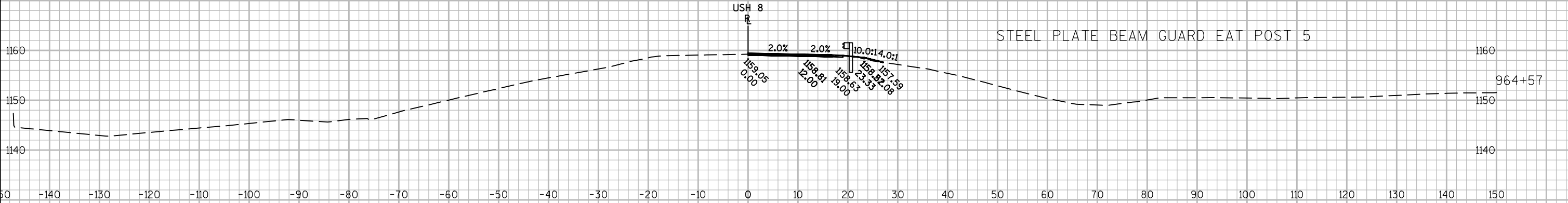
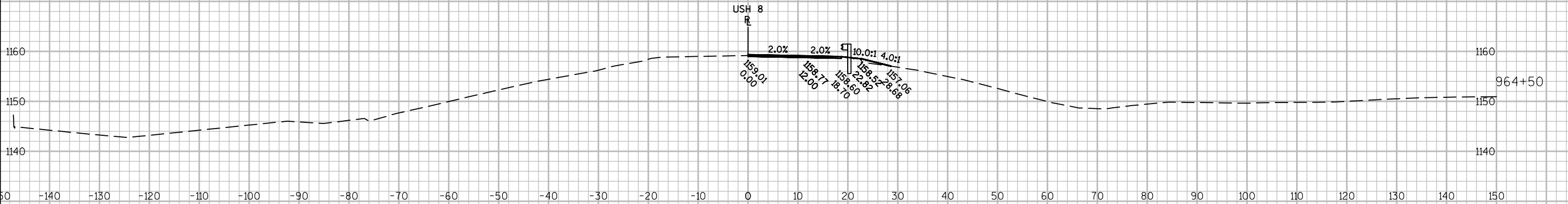
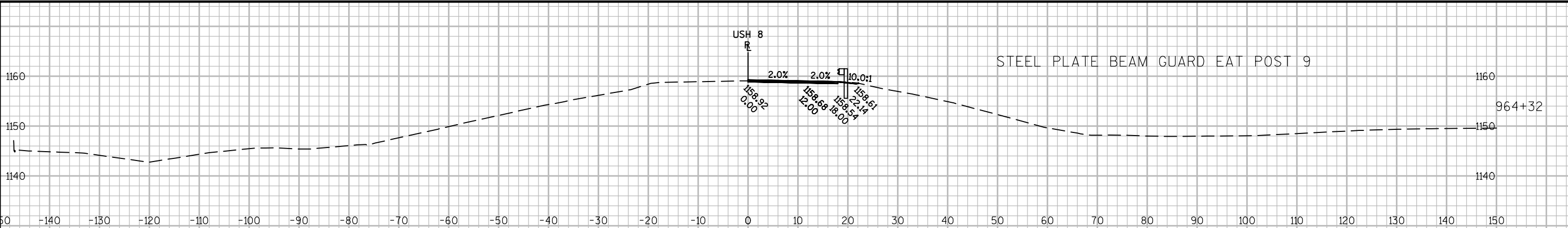
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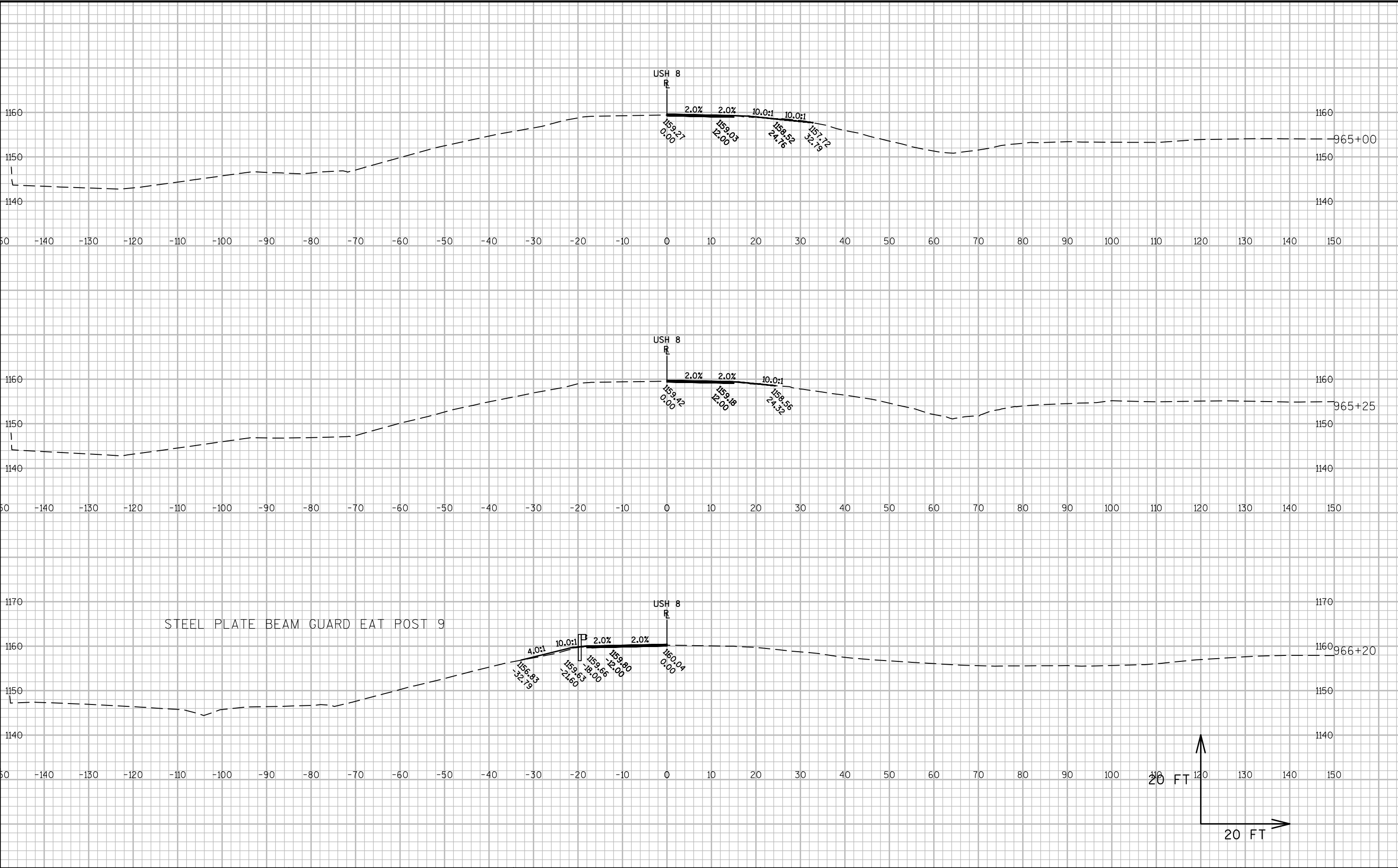


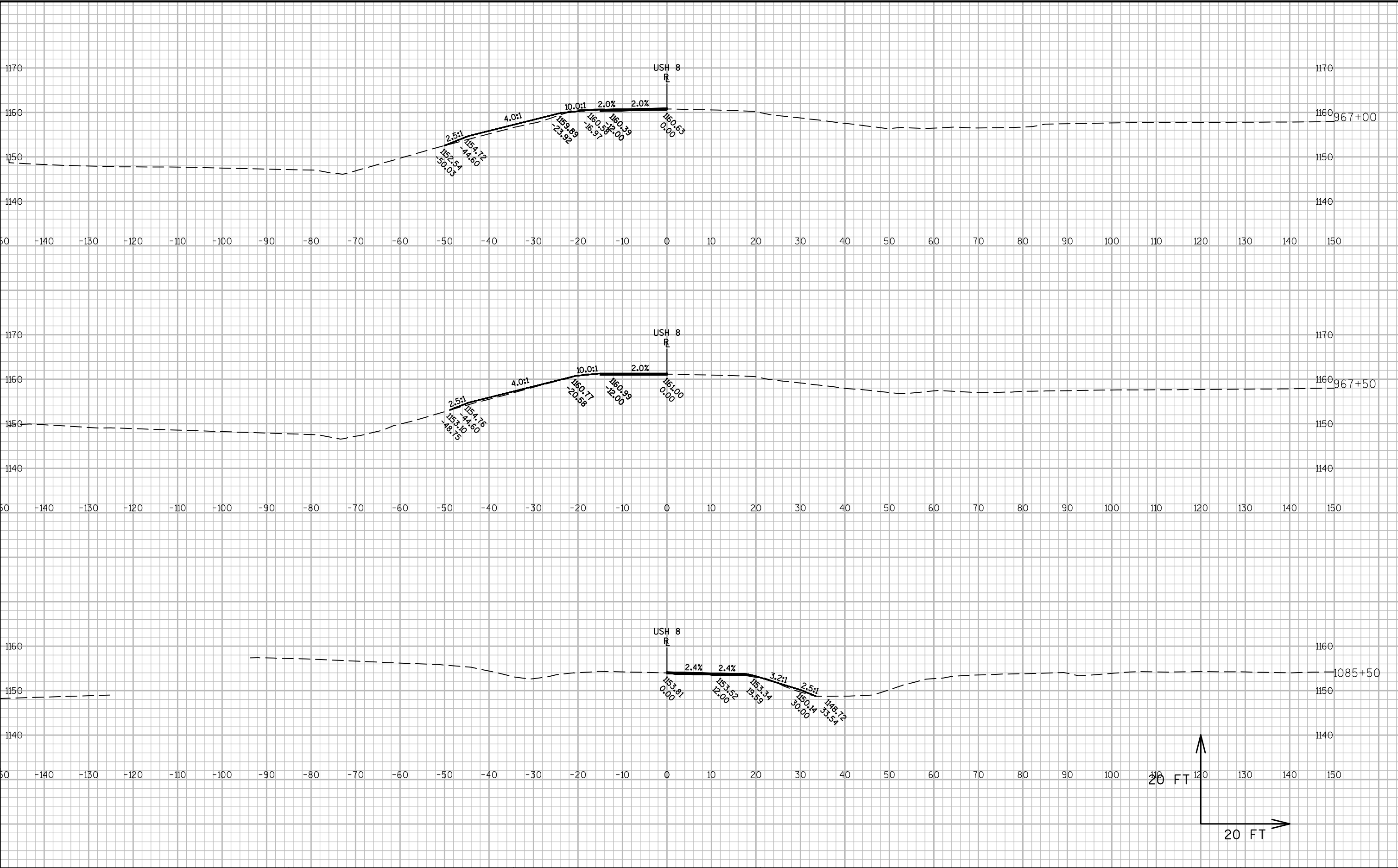


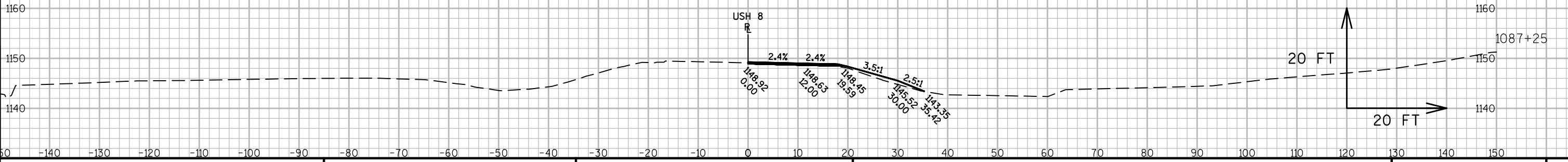
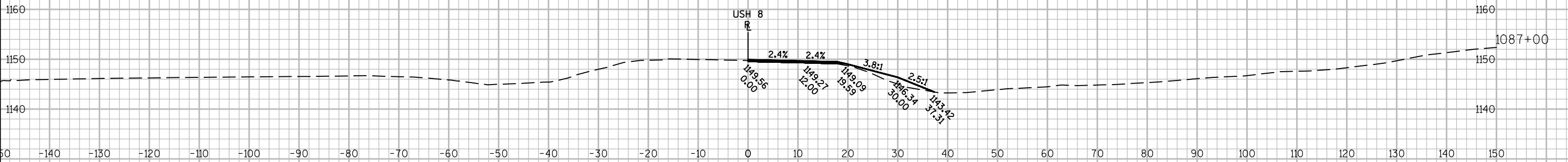
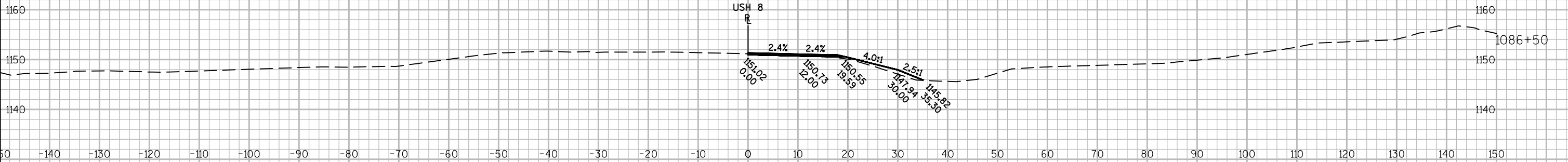
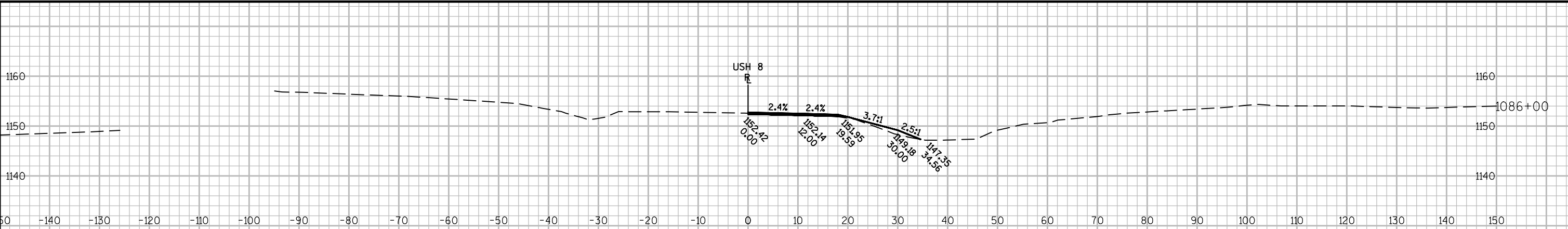
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PROJECT NO:1590-16-71

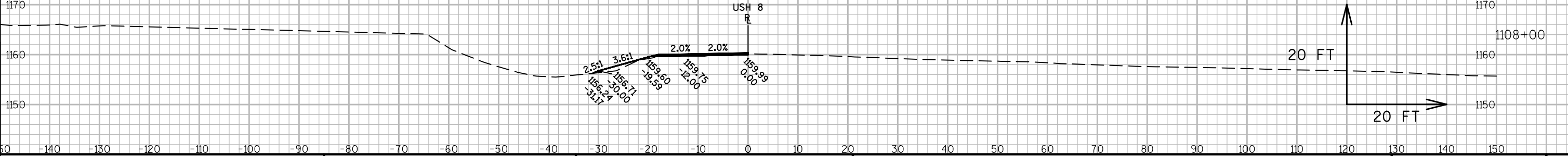
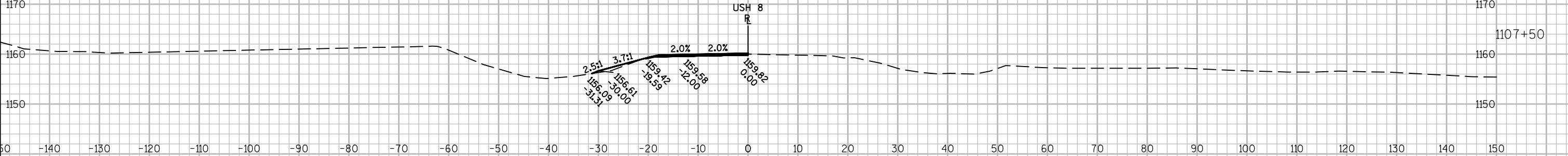
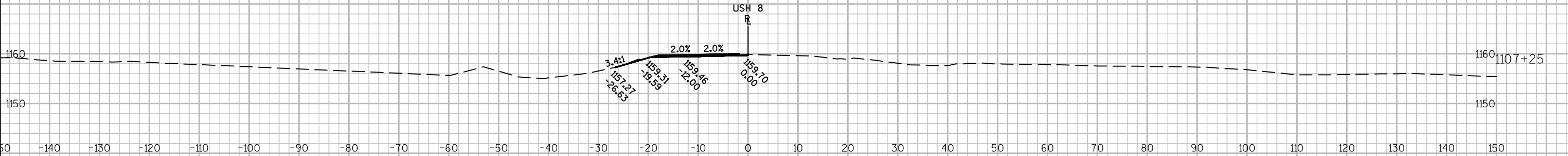
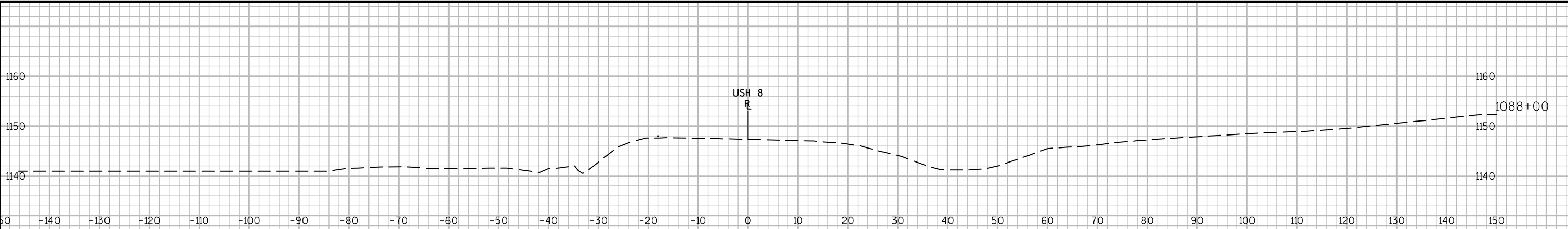
HWY:USHH 8

COUNTY:MARINETTE

CROSS SECTIONS: USH 8

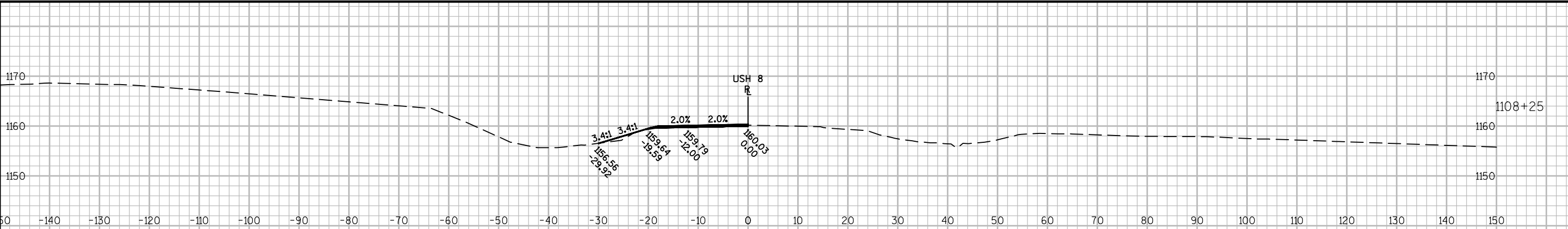
SHEET

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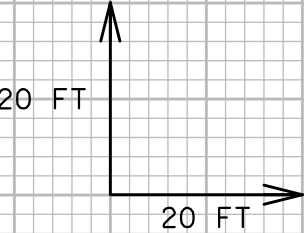


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PROJECT NO:1590-16-71	HWY:USHH 8	COUNTY:MARINETTE	CROSS SECTIONS: USH 8	SHEET	E
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Notes



Wisconsin Department of Transportation

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through innovation and exceptional service.

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