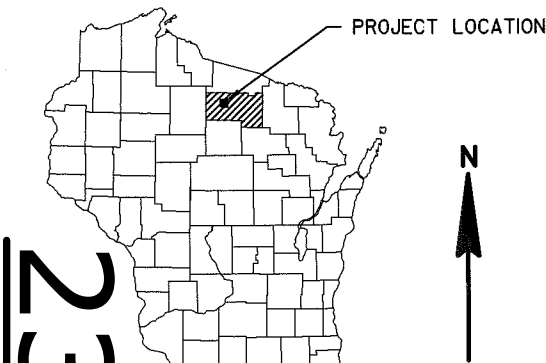


ORDER OF SHEETS

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

TOTAL SHEETS = 144



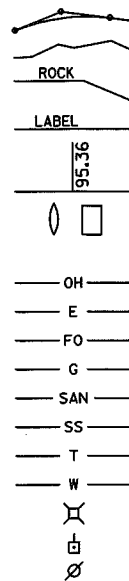
DESIGN DESIGNATION

- A.A.D.T. (2017) = 600
A.A.D.T. (2037) = 750
D.H.V. = 101
D.D. = 61/39
T. = 6.7%
DESIGN SPEED = 50 MPH
ESALS = 58,400

CONVENTIONAL SYMBOLS

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

- PROFILE
GRADE LINE
ORIGINAL GROUND
MARSH OR ROCK PROFILE (To be noted as such)
SPECIAL DITCH
GRADE ELEVATION
CULVERT (Profile View)
UTILITIES
OVERHEAD
ELECTRIC
FIBER OPTIC
GAS
SANITARY SEWER
STORM SEWER
TELEPHONE
WATER
UTILITY PEDESTAL
POWER POLE
TELEPHONE POLE



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

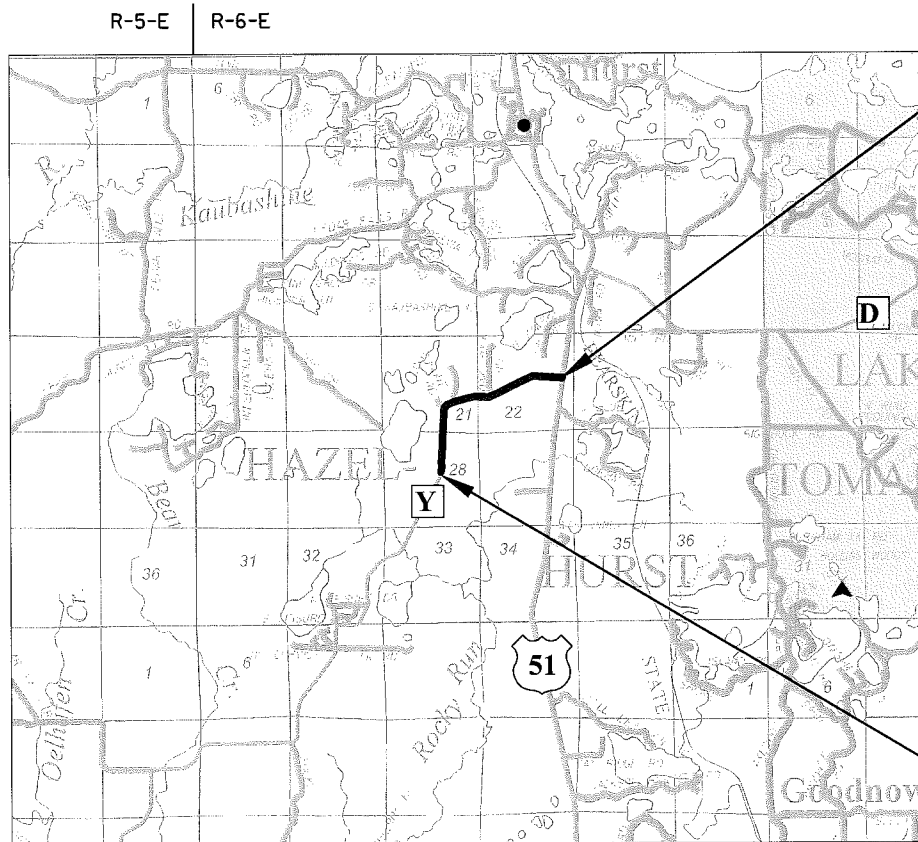
PLAN OF PROPOSED IMPROVEMENT

LINCOLN COUNTY LINE - USH 51

SOUTH GARTH LAKE ROAD TO USH 51

CTH Y
ONEIDA COUNTY

STATE PROJECT NUMBER
9465-00-70



LAYOUT
SCALE 0 2 MILE

TOTAL NET LENGTH OF CENTERLINE = 2.143 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, ONEIDA COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ELEVATIONS SHOWN ON THE PLANS ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9465-00-70	WISC 2018022	1

APPROVED FOR ONEIDA COUNTY

DATE: 7-10-17 *Bruce Sykes* (Signature)
Highway Commission (Title of Official)

ORIGINAL PLANS PREPARED BY
CORRE Structural Environmental Municipal Transportation
1802 WARDEN ROAD
EAU CLAIRE, WI 54603
(800) 828-1611
www.correinc.com

WISCONSIN
KEVIN L. MEYER
E-38309-006
ELK MOUND
WI
PROFESSIONAL ENGINEER

DATE: 7-5-17 (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor: CORRE, INC.
Designer: CORRE, INC.
Management Consultant: CEDAR CORPORATION

APPROVED FOR THE DEPARTMENT
DATE: 7-28-2017 *AM. Wolf*
MANAGEMENT CONSULTANT SIGNATURE

UTILITY CONTACTS

WISCONSIN PUBLIC SERVICE CORPORATION
CLAYTON VIRCKS
P.O. BOX 1166
WAUSAU, WI 54402-1166
715-848-7317
chvircks@wisconsinpublicservice.com

FRONTIER COMMUNICATIONS - COMMUNICATION LINE
CLAYIN KLADE
1851 N. 14TH AVENUE
WAUSAU, WI 54401
715-847-1525 OFFICE
715-573-2110 CELL
calvin.klade@ftr.com



Dial 811 or (800)242-8511

www.DiggersHotline.com

DNR CONTACT

JON SIMONSEN
107 SUTLIFF
RHINELANDER, WI 54501
715-365-8916
jonathan.simonsen@wisconsin.gov

CONSULTANT CONTACT

CORRE, INC.
1802 WARDEN STREET
EAU CLAIRE, WI 54703
KEVIN MEYER, P.E.
715-299-1894
kmeyer@correinc.com

COUNTY CONTACT

BRUCE STEFONEK
730 W KEMP STREET
RHINELANDER, WI 54501
715-396-6131
bstefonek@co.oneida.wi.us

GENERAL NOTES

WHEN THE QUANTITY OF BASE AGGREGATE OR ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

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

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

CURVE DATA IS BASED ON THE ARC DEFINITION.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE 4-INCH SALVAGED TOPSOILED/TOPSOILED, FERTILIZED, AND SEEDED AND MULCHED.

BEARINGS SHOWN ON THE PLANS ARE GRID BEARINGS TO THE NEAREST SECOND.

THE LOCATION OF ALL DRIVEWAYS WILL BE DETERMINED BY THE ENGINEER.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS AND PAVEMENTS AT REMOVAL LIMITS.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION.

4-INCH HMA PAVEMENT SHALL BE CONSTRUCTED WITH A 1.75-INCH UPPER LAYER WITH 4 MT 58-34S AND A 2.25-INCH LOWER LAYER WITH 3 MT 58-28S.

SILT FENCE IS TO BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, AND IN PLACE PRIOR TO REMOVALS.

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

EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS, EXACT LOCATIONS WILL BE DETERMINED BY THE E.C.I.P AND APPROVED BY THE ENGINEER IN THE FIELD.

RUNOFF COEFFICIENT TABLE

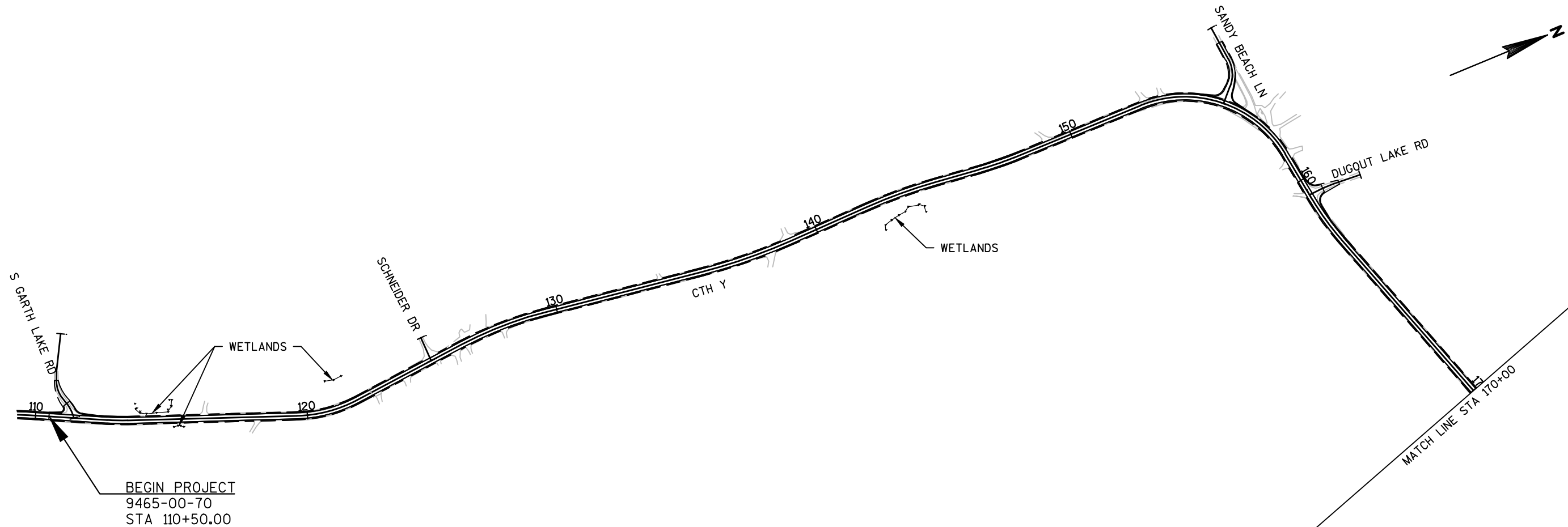
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33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

TOTAL PROJECT AREA = 18.30 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 12.41 ACRES

BORING LOG			
BORING NO.	STATION	ASPHALT DEPTH (IN.)	BASE DEPTH (IN)
11	114+50	3	6
12	120+00	2 1/2	5
13	135+00	2 1/2	4
14	143+50	3 1/4	4
15	157+00	3	4
16	164+50	2	5
17	172+00	3 1/2	6
18	183+50	2	6
19	191+00	2 1/2	5
20	201+00	3	5
21	212+00	2 3/4	4
22	219+75	2	4

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
SUPERELEVATION DETAILS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
EROSION CONTROL
PERMANENT SIGNING AND PAVEMENT MARKING
ALIGNMENT DIAGRAM & CONTROL POINT DETAIL



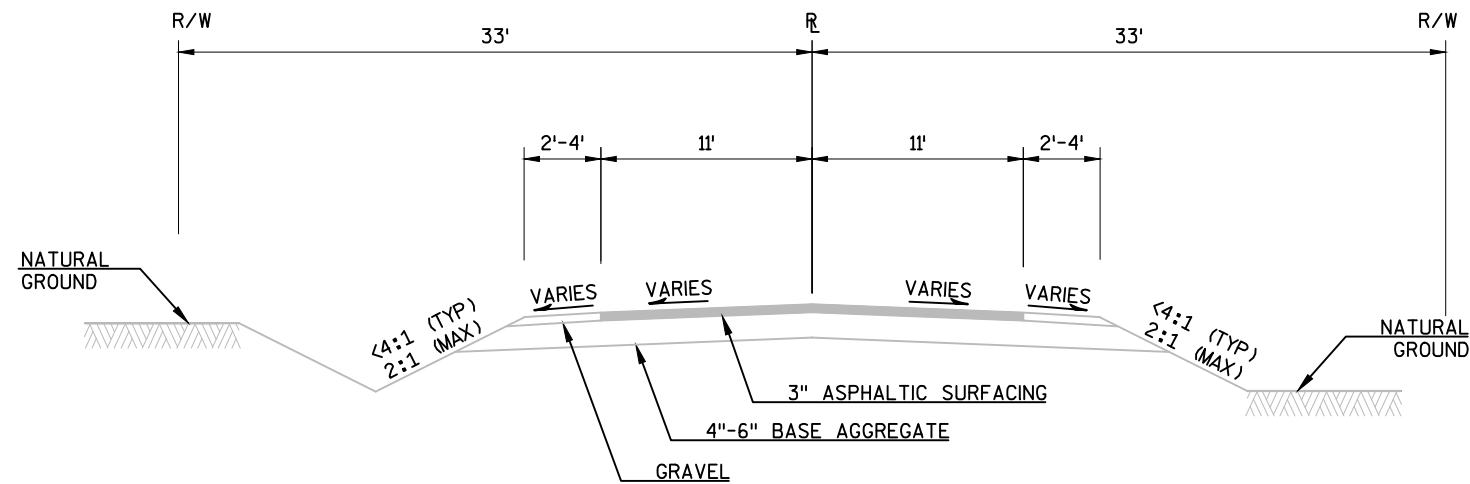
BEGIN PROJECT
9465-00-70
STA 110+50.00

MATCH LINE STA 170+00

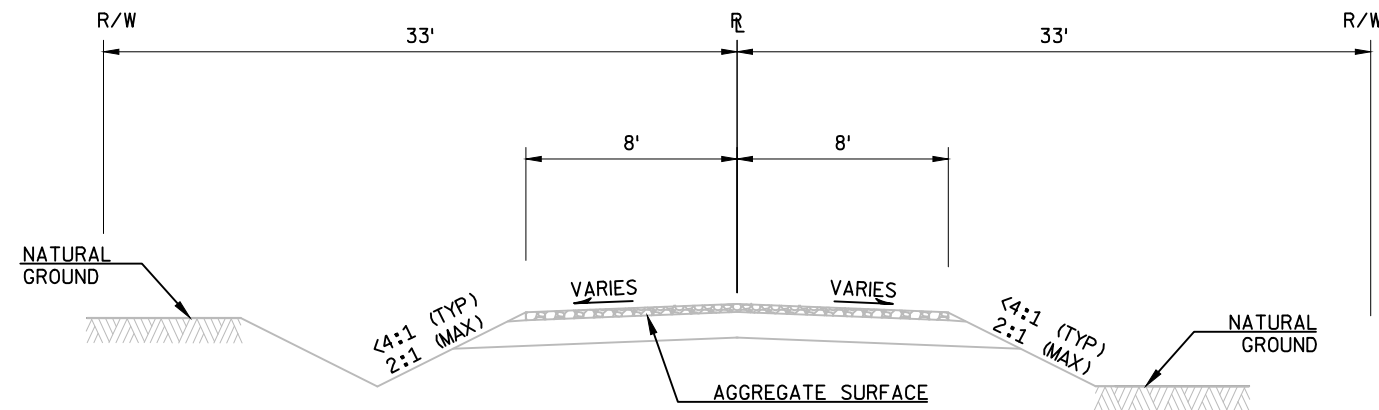
MATCH LINE STA 170+00

END PROJECT
9465-00-70
STA 223+64.03

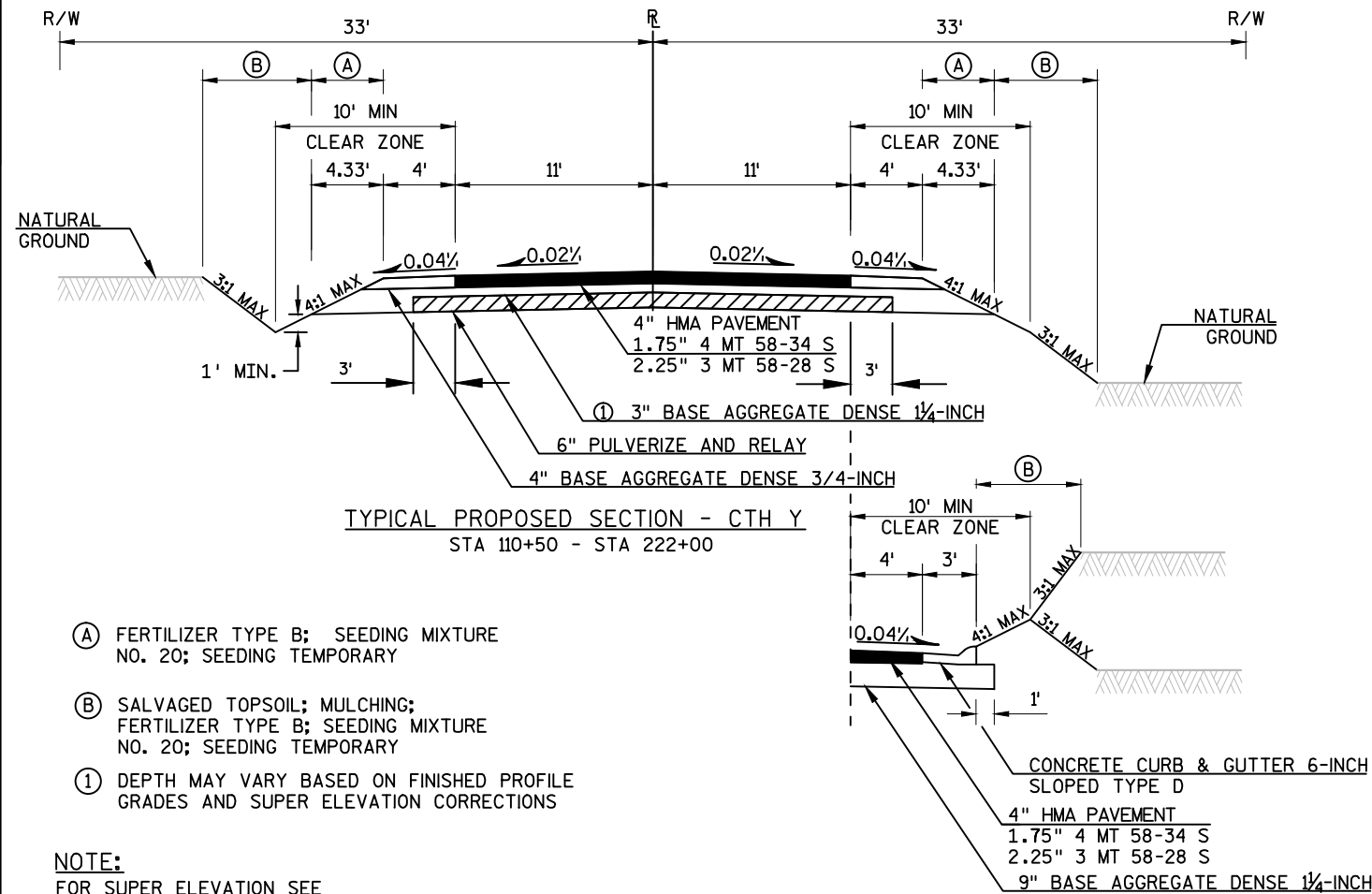
USH 51



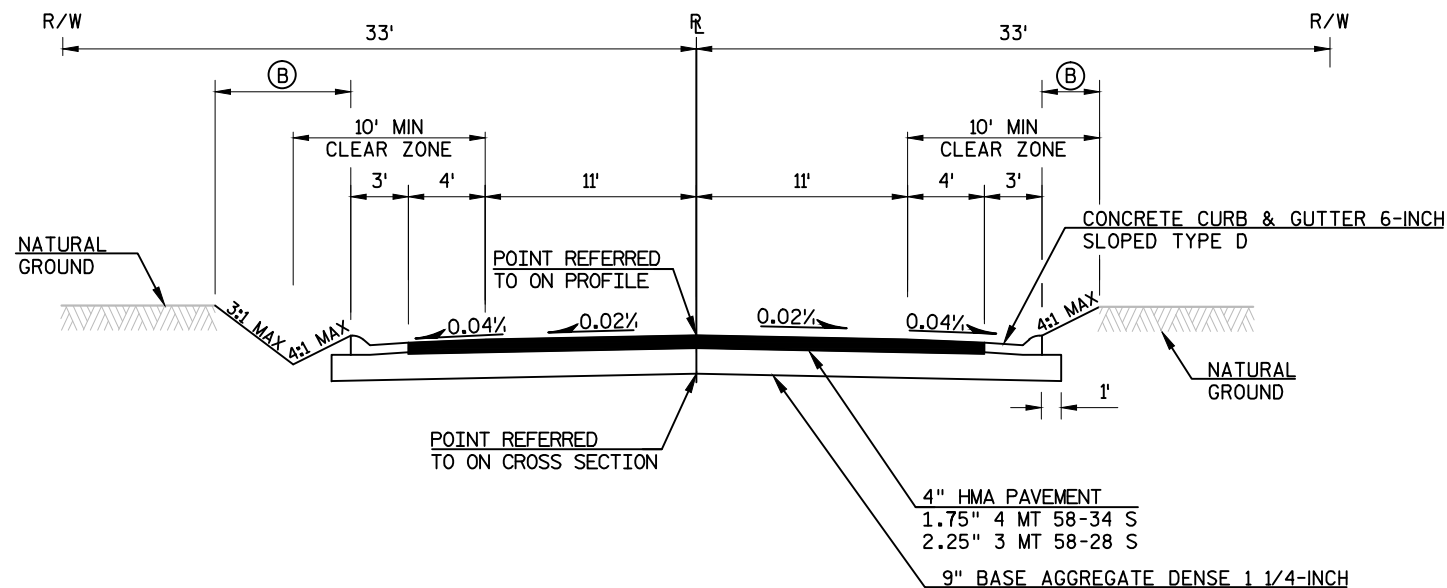
TYPICAL EXISTING SECTION - CTH Y AND SANDY BEACH LANE
 STA 110+50.00 - STA 223+57.65
 STA 18+30.38'SB' - STA 20+00.00'SB'



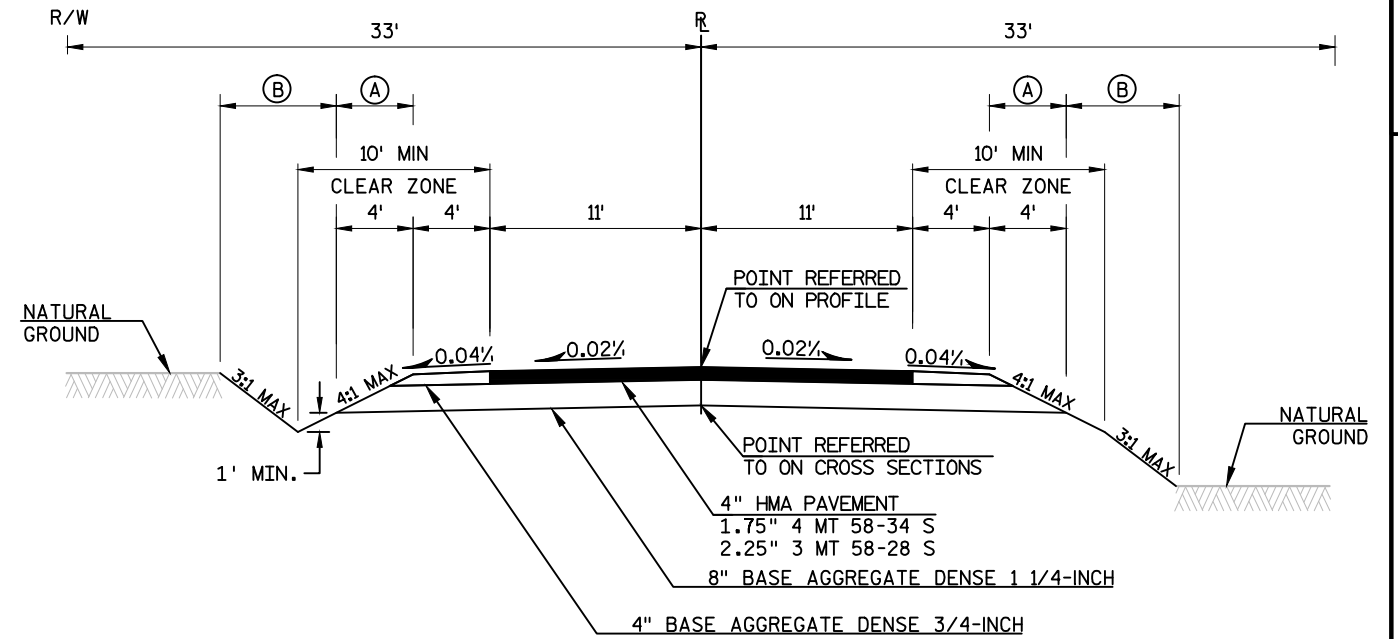
TYPICAL EXISTING SECTION - S. GARTH LAKE ROAD AND DUG OUT LAKE ROAD
 STA 18+46.00'GL' - STA 20+00.00'GL'
 STA 10+00.00'DL' - STA 11+17.00'DL'



STA 217+50.00, LT - STA 222+00, LT
STA 217+89.50, RT - STA 222+00, RT

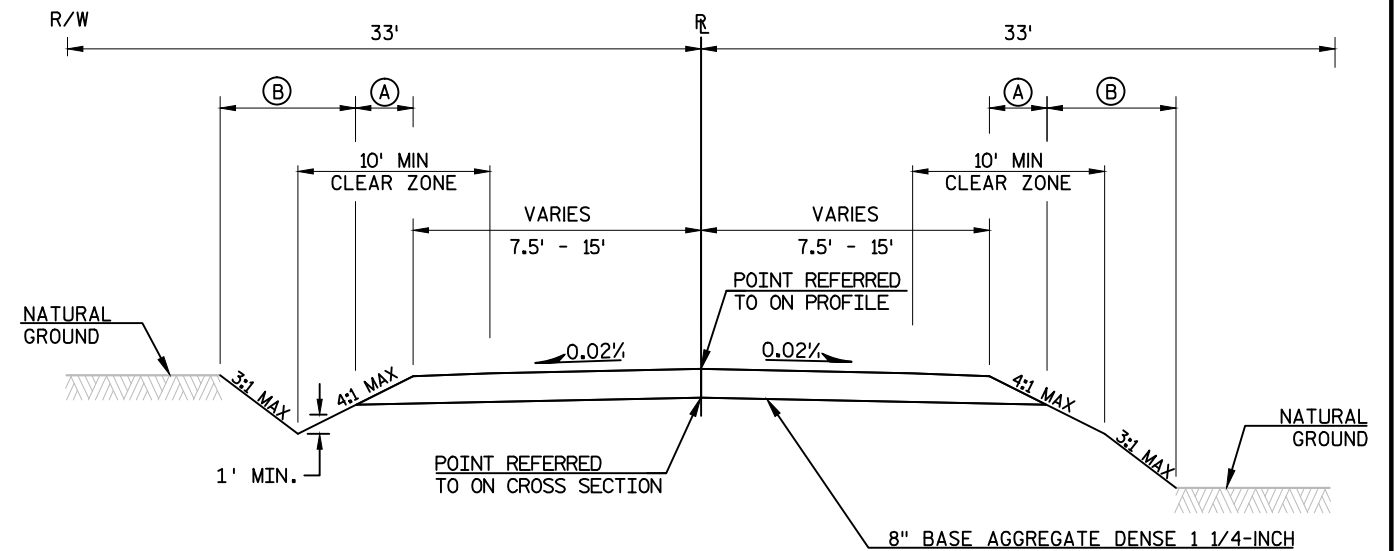


TYPICAL PROPOSED SECTION - CTH Y
STA 222+00.00 - STA 223+55.31



TYPICAL PROPOSED SECTION
SANDY BEACH LANE, S. GARTH LAKE ROAD, DUGOUT LAKE ROAD

STA 17+60.38'SB' - STA 19+88.97'SB'
STA 19+40.85'GL' - STA 19+88.21'GL'
STA 9+45.97'DL' - STA 9+88.97'DL'

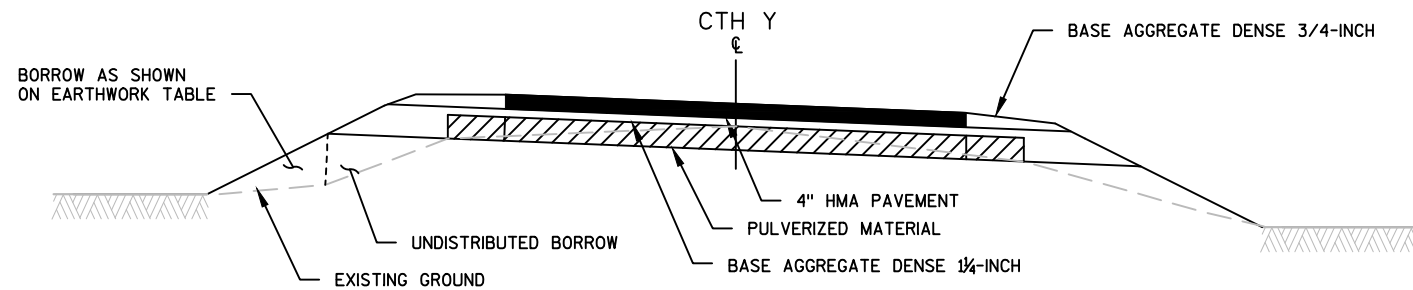


TYPICAL PROPOSED SECTION - S. GARTH ROAD AND DUGOUT LAKE ROAD

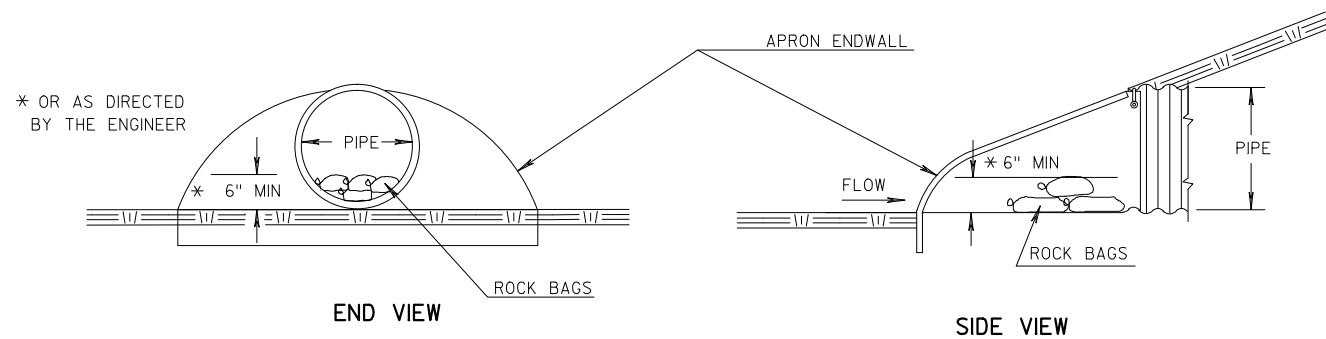
STA 18+45.92'GL' - STA 19+40.85'GL'
STA 8+83.09'DL' - STA 9+45.97'DL'

STATION	DESCRIPTION	LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
110+50.00	MANUAL STATION	-5.70%	-5.70%	0.32%	0.32%
111+67.50	LEVEL CROWN	-2.00%	-2.00%	0.00%	0.00%
112+15.50	REVERSE CROWN	-2.00%	-2.00%	2.00%	2.00%
112+91.40	END FULL SUPER	-6.00%	-6.00%	6.00%	6.00%
113+11.50	BEGIN FULL SUPER	-6.00%	-6.00%	6.00%	6.00%
113+87.40	REVERSE CROWN	-2.00%	-2.00%	2.00%	2.00%
114+35.40	LEVEL CROWN	-2.00%	-2.00%	0.00%	0.00%
114+83.40	BEGIN NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
115+31.40	BEGIN NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
117+69.19	END NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
118+17.19	END NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
118+65.19	LEVEL CROWN	-2.00%	-2.00%	0.00%	0.00%
119+13.19	REVERSE CROWN	-2.00%	-2.00%	2.00%	2.00%
120+09.19	BEGIN FULL SUPER	-6.00%	-6.00%	6.00%	6.00%
121+43.50	END FULL SUPER	-6.00%	-6.00%	6.00%	6.00%
122+39.50	REVERSE CROWN	-2.00%	-2.00%	2.00%	2.00%
122+87.50	LEVEL CROWN	-2.00%	-2.00%	0.00%	0.00%
123+35.50	BEGIN NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
123+83.50	BEGIN NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
124+46.01	END NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
124+94.09	END NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
125+42.16	LEVEL CROWN	0.00%	0.00%	-2.00%	-2.00%
125+90.24	REVERSE CROWN	2.00%	2.00%	-2.00%	-2.00%
126+67.16	BEGIN FULL SUPER	5.20%	5.20%	-5.20%	-5.20%
129+13.84	END FULL SUPER	5.20%	5.20%	-5.20%	-5.20%
129+90.77	REVERSE CROWN	2.00%	2.00%	-2.00%	-2.00%
130+38.84	LEVEL CROWN	0.00%	0.00%	-2.00%	-2.00%
130+86.92	BEGIN NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
131+35.00	BEGIN NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
133+81.16	END NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
134+29.34	END NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
134+77.52	LEVEL CROWN	-2.00%	-2.00%	0.00%	0.00%
135+25.70	REVERSE CROWN	-2.00%	-2.00%	2.00%	2.00%
135+83.52	BEGIN FULL SUPER	-4.40%	-4.40%	4.40%	4.40%
138+62.17	END FULL SUPER	-4.40%	-4.40%	4.40%	4.40%
139+19.99	REVERSE CROWN	-2.00%	-2.00%	2.00%	2.00%
139+68.17	LEVEL CROWN	-2.00%	-2.00%	0.00%	0.00%
140+16.35	BEGIN NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
140+84.23	END NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
141+32.06	LEVEL CROWN	0.00%	0.00%	-2.00%	-2.00%
141+79.88	REVERSE CROWN	2.00%	2.00%	-2.00%	-2.00%
142+42.06	BEGIN FULL SUPER	4.60%	4.60%	-4.60%	-4.60%
144+34.15	END FULL SUPER	4.60%	4.60%	-4.60%	-4.60%
146+15.12	END FULL SUPER	-6.00%	-6.00%	6.00%	6.00%
146+83.84	BEGIN FULL SUPER	-6.00%	-6.00%	6.00%	6.00%
147+26.17	END FULL SUPER	-6.00%	-6.00%	6.00%	6.00%
147+76.93	BEGIN FULL SUPER	-6.00%	-6.00%	6.00%	6.00%
148+70.17	LEVEL CROWN	-2.00%	-2.00%	0.00%	0.00%
149+18.17	BEGIN NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
149+66.17	BEGIN NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
150+82.73	END NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
151+30.73	END NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
151+78.73	LEVEL CROWN	0.00%	0.00%	-2.00%	-2.00%
152+26.73	REVERSE CROWN	2.00%	2.00%	-2.00%	-2.00%
153+22.73	BEGIN FULL SUPER	6.00%	6.00%	-6.00%	-6.00%

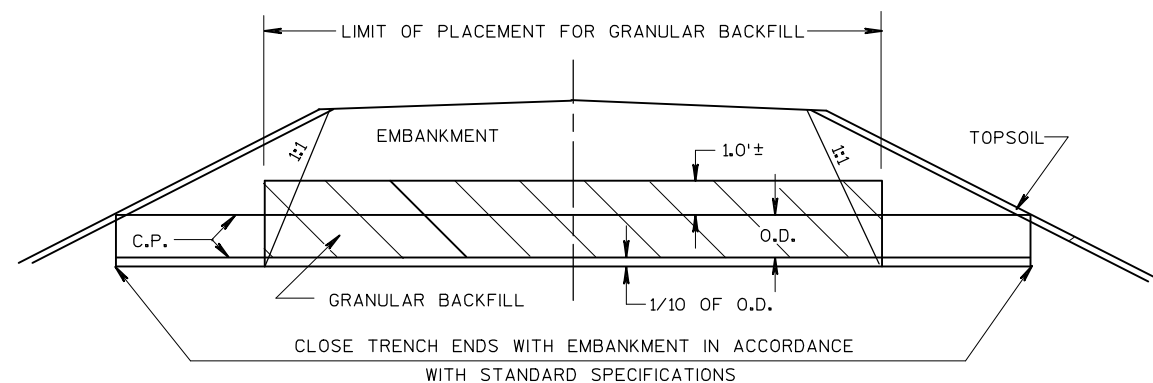
STATION	DESCRIPTION	LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
158+39.36	END FULL SUPER	6.00%	6.00%	-6.00%	-6.00%
161+30.87	BEGIN FULL SUPER	-6.00%	-6.00%	6.00%	6.00%
162+16.13	END FULL SUPER	-6.00%	-6.00%	6.00%	6.00%
163+12.13	REVERSE CROWN	-2.00%	-2.00%	2.00%	2.00%
163+60.13	LEVEL CROWN	-2.00%	-2.00%	0.00%	0.00%
164+08.13	BEGIN NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
164+56.13	BEGIN NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
168+19.72	END NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
168+67.72	END NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
169+15.72	LEVEL CROWN	0.00%	0.00%	-2.00%	-2.00%
169+63.72	REVERSE CROWN	2.00%	2.00%	-2.00%	-2.00%
170+59.72	BEGIN FULL SUPER	6.00%	6.00%	-6.00%	-6.00%
173+45.24	END FULL SUPER	6.00%	6.00%	-6.00%	-6.00%
176+39.36	BEGIN FULL SUPER	-5.80%	-5.80%	5.80%	5.80%
182+68.62	END FULL SUPER	-5.80%	-5.80%	5.80%	5.80%
183+59.69	REVERSE CROWN	-2.00%	-2.00%	2.00%	2.00%
184+07.62	LEVEL CROWN	-2.00%	-2.00%	0.00%	0.00%
184+55.55	BEGIN NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
185+03.48	BEGIN NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
201+41.57	END NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
201+89.42	END NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
202+37.28	LEVEL CROWN	0.00%	0.00%	-2.00%	-2.00%
202+85.14	REVERSE CROWN	2.00%	2.00%	-2.00%	-2.00%
203+71.28	BEGIN FULL SUPER	5.60%	5.60%	-5.60%	-5.60%
209+73.79	END FULL SUPER	5.60%	5.60%	-5.60%	-5.60%
210+59.93	REVERSE CROWN	2.00%	2.00%	-2.00%	-2.00%
211+07.79	LEVEL CROWN	0.00%	0.00%	-2.00%	-2.00%
211+55.65	BEGIN NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
212+03.50	BEGIN NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
212+44.62	END NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
212+92.31	END NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
213+40.01	LEVEL CROWN	-2.00%	-2.00%	0.00%	0.00%
213+87.70	REVERSE CROWN	-2.00%	-2.00%	2.00%	2.00%
214+02.01	BEGIN FULL SUPER	-2.60%	-2.60%	2.60%	2.60%
218+55.54	END FULL SUPER	-2.60%	-2.60%	2.60%	2.60%
218+69.85	REVERSE CROWN	-2.00%	-2.00%	2.00%	2.00%
219+17.54	LEVEL CROWN	-2.00%	-2.00%	0.00%	0.00%
219+65.23	BEGIN NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
220+12.92	BEGIN NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
220+59.21	END NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
221+07.21	END NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
221+55.21	LEVEL CROWN	0.00%	0.00%	-2.00%	-2.00%
222+03.21	REVERSE CROWN	2.00%	2.00%	-2.00%	-2.00%
222+99.21	BEGIN FULL SUPER	6.00%	6.00%	-6.00%	-6.00%
223+01.35	END FULL SUPER	6.00%	6.00%	-6.00%	-6.00%
223+97.35	REVERSE CROWN	2.00%	2.00%	-2.00%	-2.00%
224+45.35	LEVEL CROWN	0.00%	0.00%	-2.00%	-2.00%
224+93.35	BEGIN NORMAL CROWN	-2.00%	-2.00%	-2.00%	-2.00%
225+41.35	BEGIN NORMAL SHOULDER	-4.00%	-2.00%	-2.00%	-4.00%
224+50.00	END ALIGNMENT	-4.00%	-2.00%	-2.00%	-4.00%



SUPER ELEVATION CORRECTION

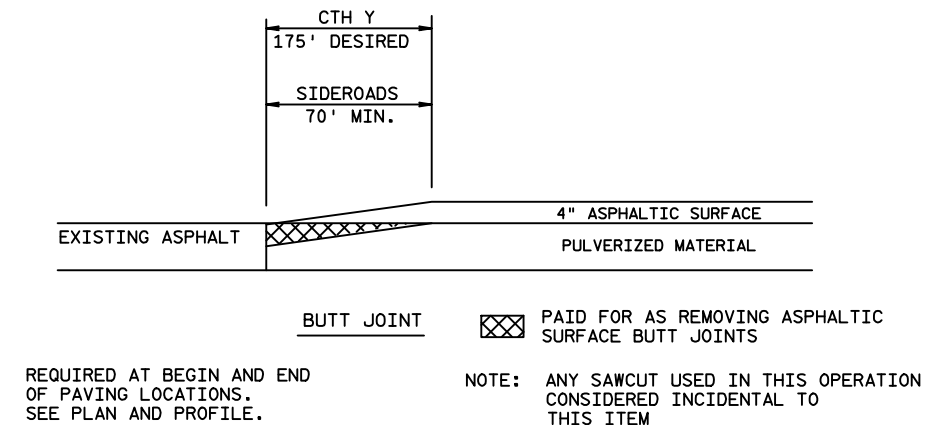
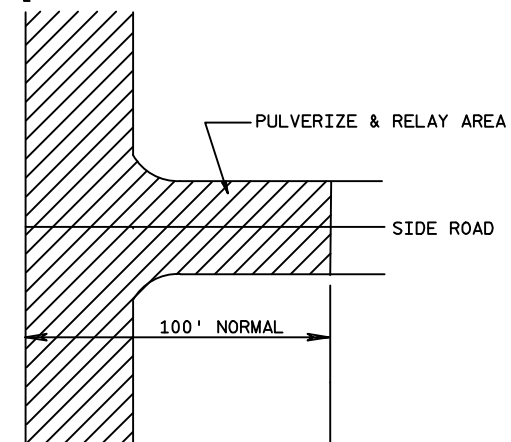


CULVERT PIPE CHECKS



CULVERT BACKFILL DETAIL

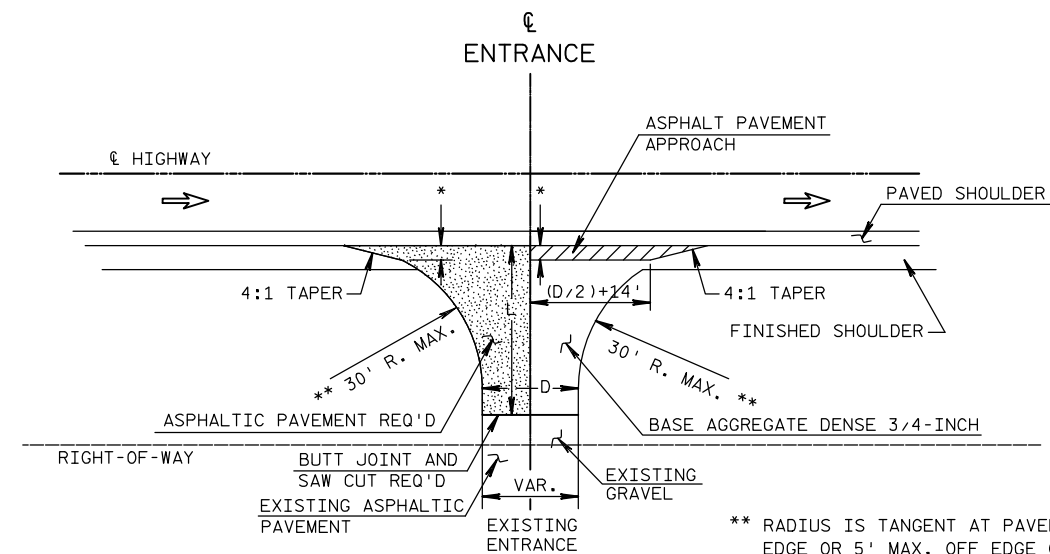
CTH Y



REMOVE MATERIAL UNDER ITEM 'REMOVING ASPHALT SURFACE , BUTT JOINTS' MATERIAL SHALL NOT BE REMOVED UNDER THIS ITEM UNTIL 24 HOURS BEFORE SIDEROAD PAVING.

SIDEROAD PAVEMENT DEPTH SHALL MATCH AT MAINLINE PAVEMENT EDGE AND BE TAPERED TO 3" MINIMUM AT JOINT

NOTE: ANY SAWCUT USED WILL BE CONSIDERED INCIDENTAL TO THE ITEM "REMOVING ASPHALTIC SURFACE, BUTT JOINTS."

PAVEMENT TRANSITION
NOT TO SCALE

L=VARIABLE, EXACT LENGTH TO BE DETERMINED IN THE FIELD BY THE ENGINEER. BLEND BACK ON THE ENTRANCE FAR ENOUGH TO GET A SMOOTH PROFILE.

D=DRIVEWAY WIDTH
D=20'TYP. (PE'S & FE'S) (16'MIN.-24'MAX.)
D=28'TYP. (CE'S & FARM ENT.) (24'MIN.-35'MAX.)

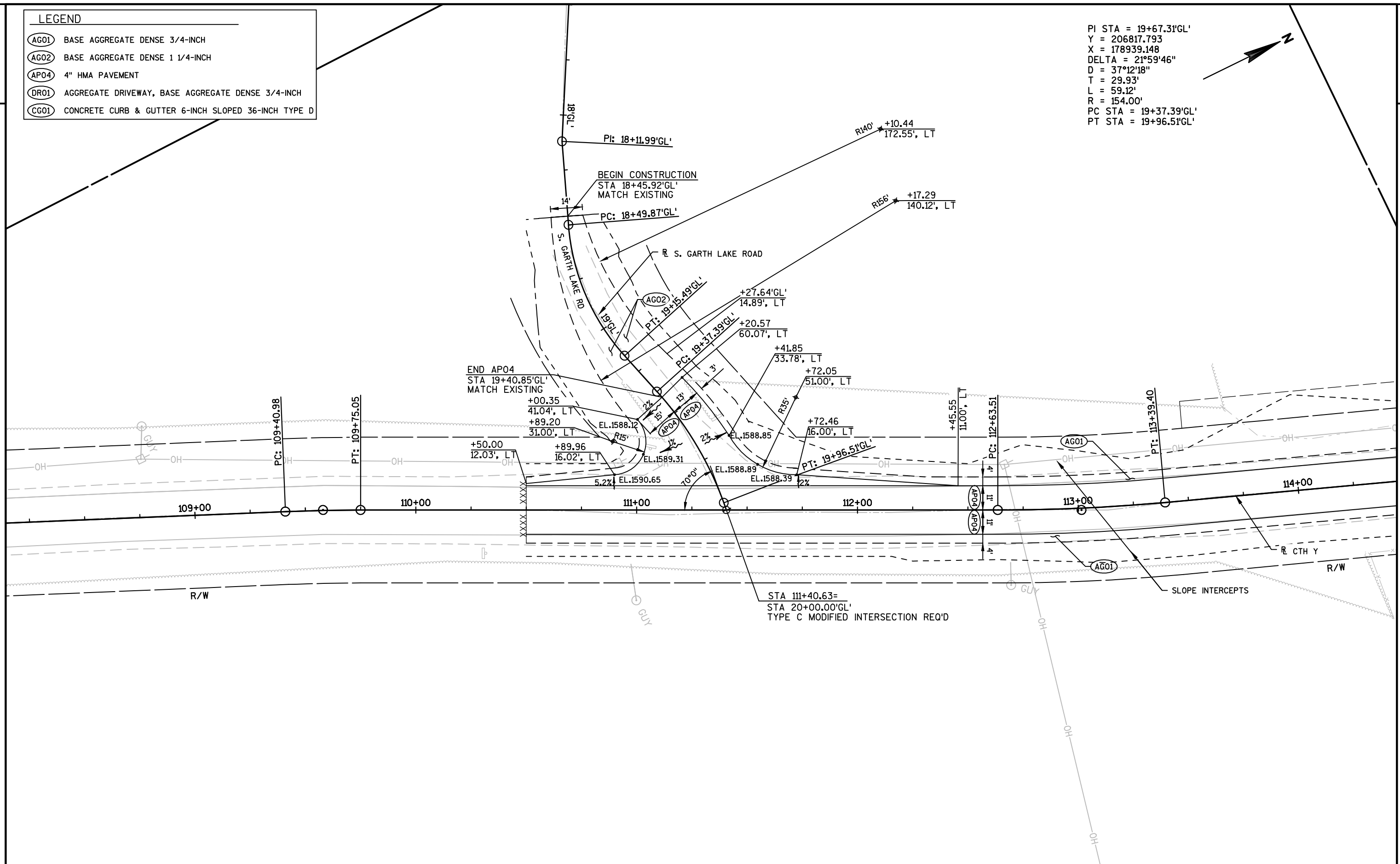
** RADIUS IS TANGENT AT PAVED SHOULDER EDGE OR 5' MAX. OFF EDGE OF MAIN LINE PAVEMENT WHICH EVER IS LESS.

* 3' MAX. OR TO FINISHED SHOULDER WHICH EVER IS LESS.

PLAN VIEW

RURAL DRIVEWAY INTERSECTION DETAIL
(PE'S, FE'S & CE'S)

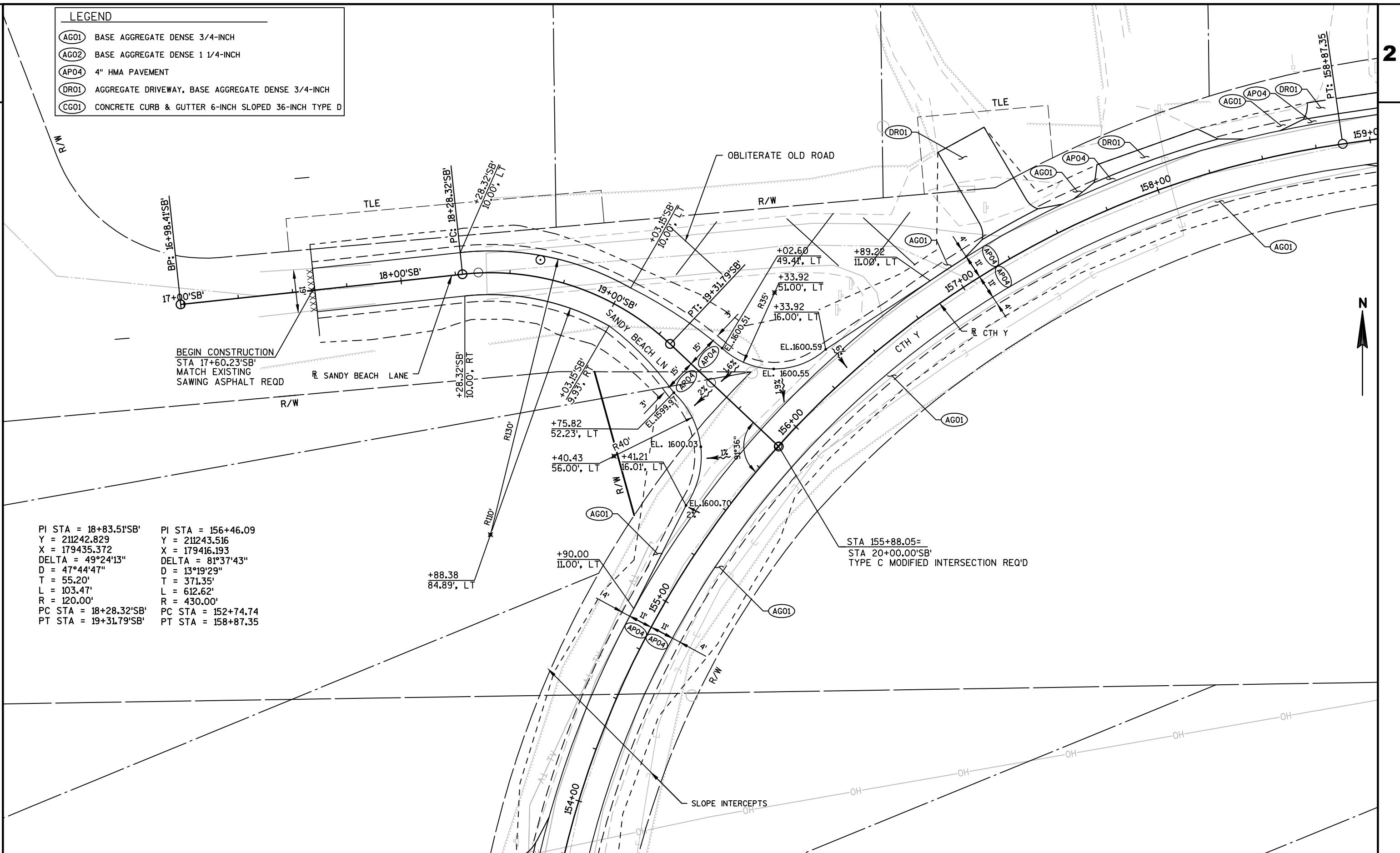
PI STA = 19+67.31'GL'
Y = 206817.793
X = 178939.148
DELTA = 21°59'46"
D = 37°12'18"
T = 29.93'
L = 59.12'
R = 154.00'
PC STA = 19+37.39'GL'
PT STA = 19+96.51'GL'



LEGEND

- (AG01) BASE AGGREGATE DENSE 3/4-INCH
(AG02) BASE AGGREGATE DENSE 1 1/4-INCH
(AP04) 4" HMA PAVEMENT
(DR01) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH
(CG01) CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

PI STA = 18+83.51'SB' PI STA = 156+46.09
Y = 211242.829 Y = 211243.516
X = 179435.372 X = 179416.193
DELTA = 49°24'13" DELTA = 81°37'43"
D = 47°44'47" D = 13°19'29"
T = 55.20' T = 371.35'
L = 103.47' L = 612.62'
R = 120.00' R = 430.00'
PC STA = 18+28.32'SB' PC STA = 152+74.74
PT STA = 19+31.79'SB' PT STA = 158+87.35



PROJECT NO: 9465-00-70

HWY: CTH Y

COUNTY: ONEIDA

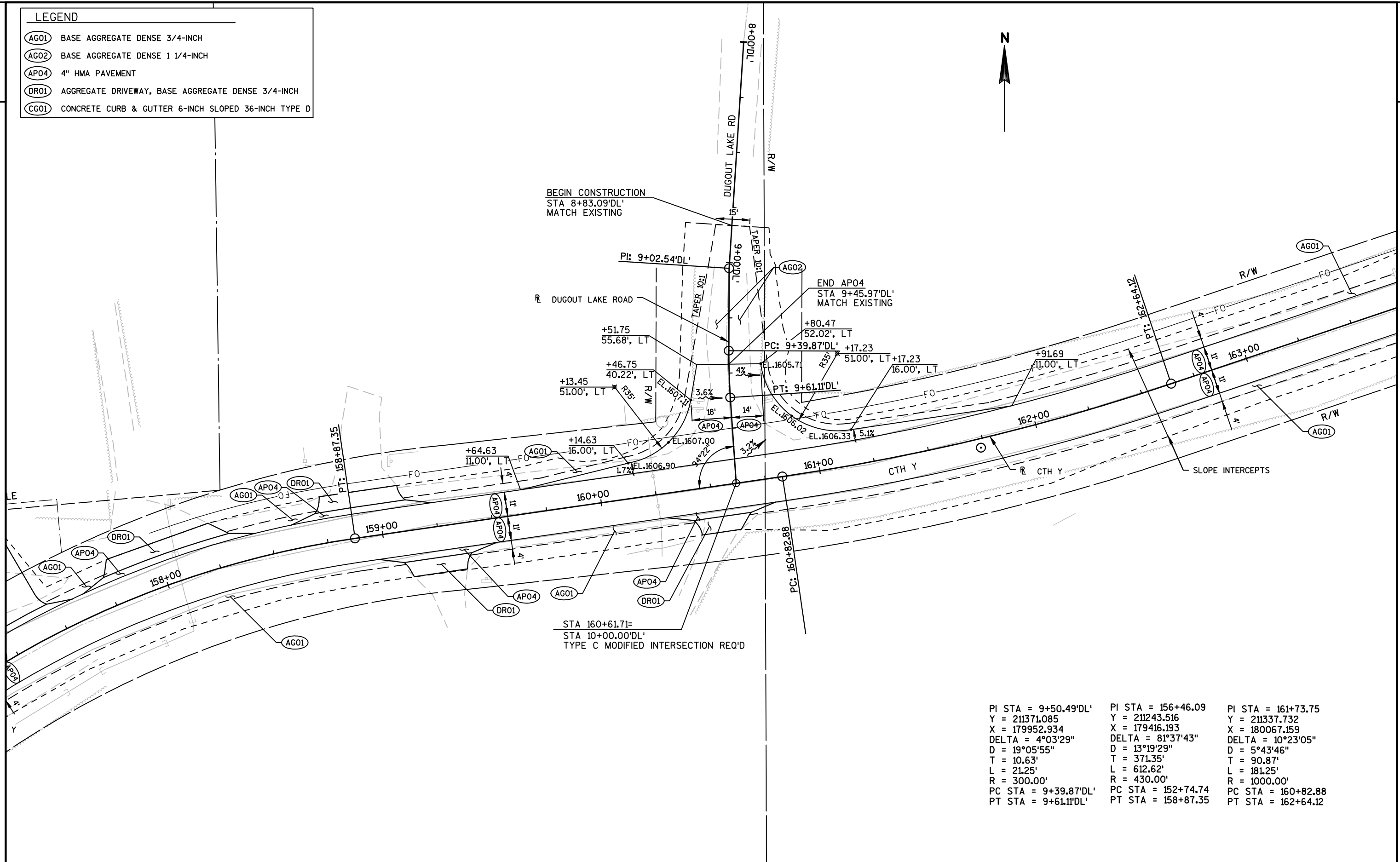
INTERSECTION DETAILS: CTH Y

SCALE, FEET

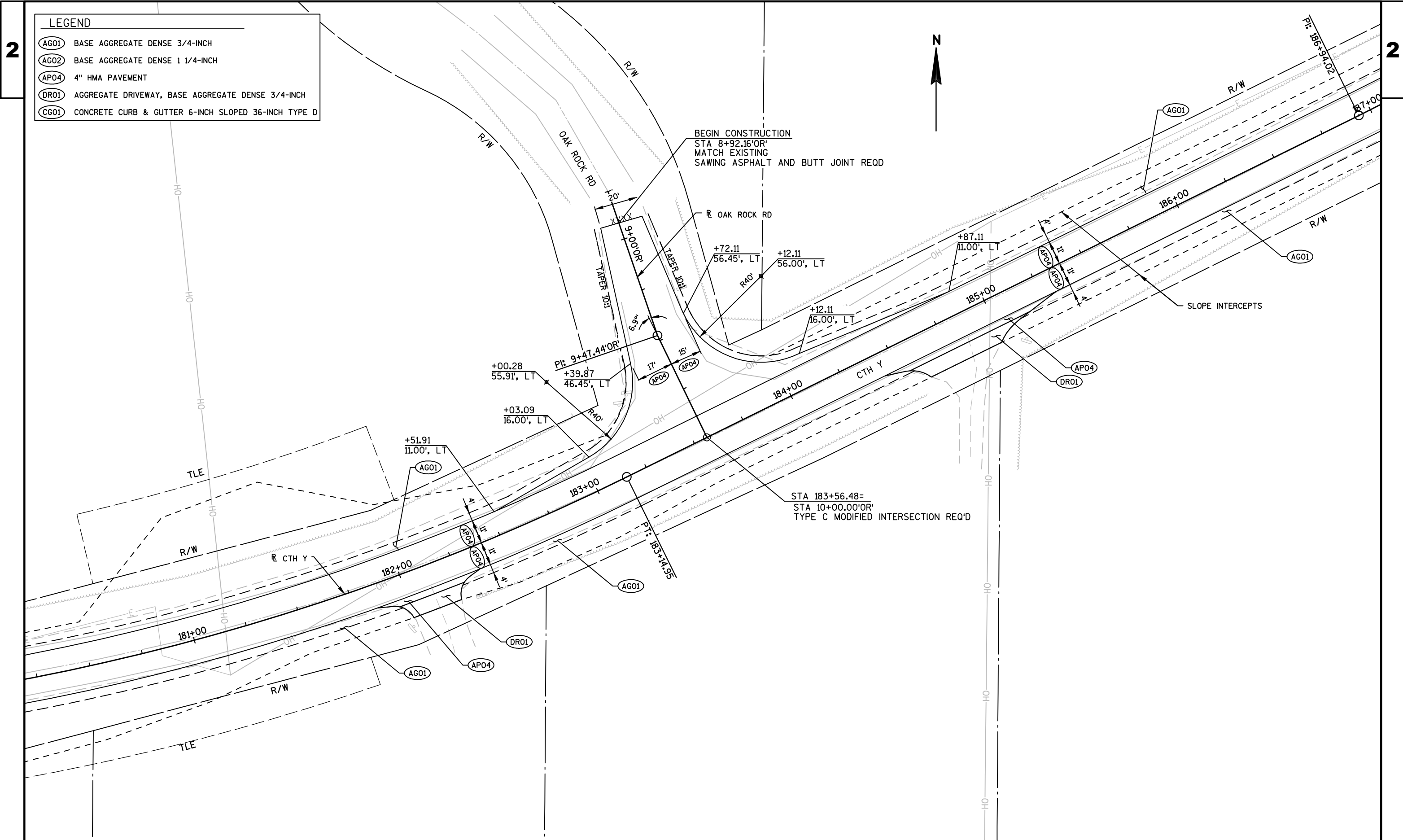
SHEET

E

- LEGEND
- AG01 BASE AGGREGATE DENSE 3/4-INCH
 - AG02 BASE AGGREGATE DENSE 1 1/4-INCH
 - AP04 4" HMA PAVEMENT
 - DR01 AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH
 - CG01 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D



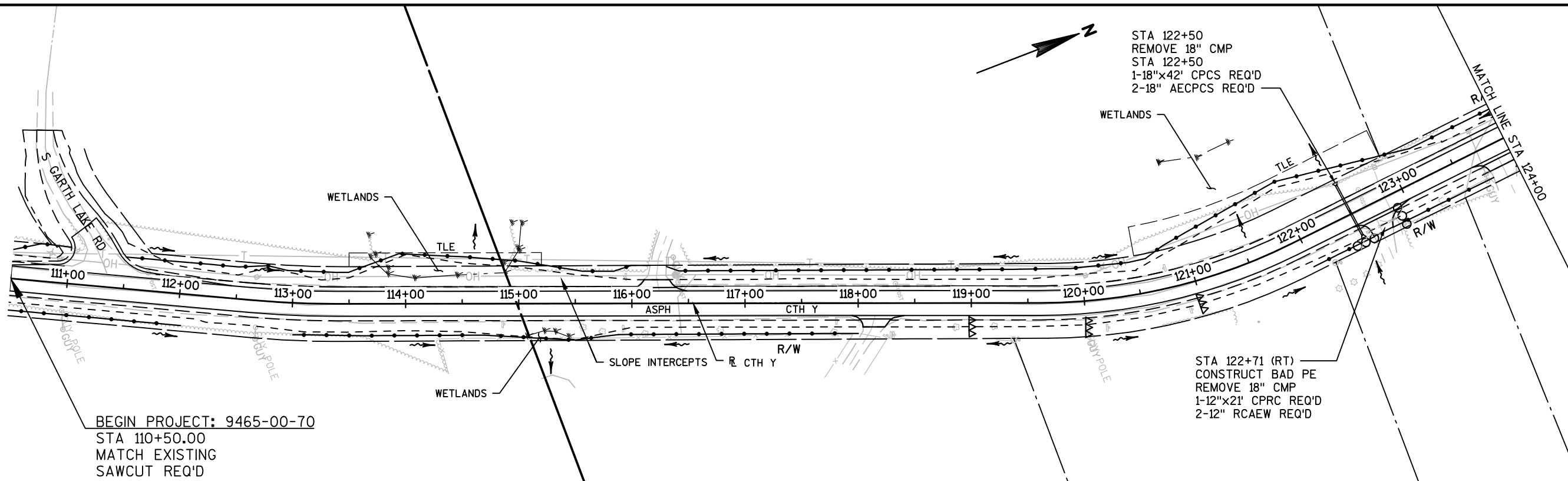
PI STA = 9+50.49'DL'	PI STA = 156+46.09	PI STA = 161+73.75
Y = 211371.085	Y = 211243.516	Y = 211337.732
X = 179952.934	X = 179416.193	X = 180067.159
DELTA = 4°03'29"	DELTA = 81°37'43"	DELTA = 10°23'05"
D = 19°05'55"	D = 13°19'29"	D = 5°43'46"
T = 10.63'	T = 371.35'	T = 90.87'
L = 21.25'	L = 612.62'	L = 181.25'
R = 300.00'	R = 430.00'	R = 1000.00'
PC STA = 9+39.87'DL'	PC STA = 152+74.74	PC STA = 160+82.88
PT STA = 9+61.11'DL'	PT STA = 158+87.35	PT STA = 162+64.12



[illegible]

2

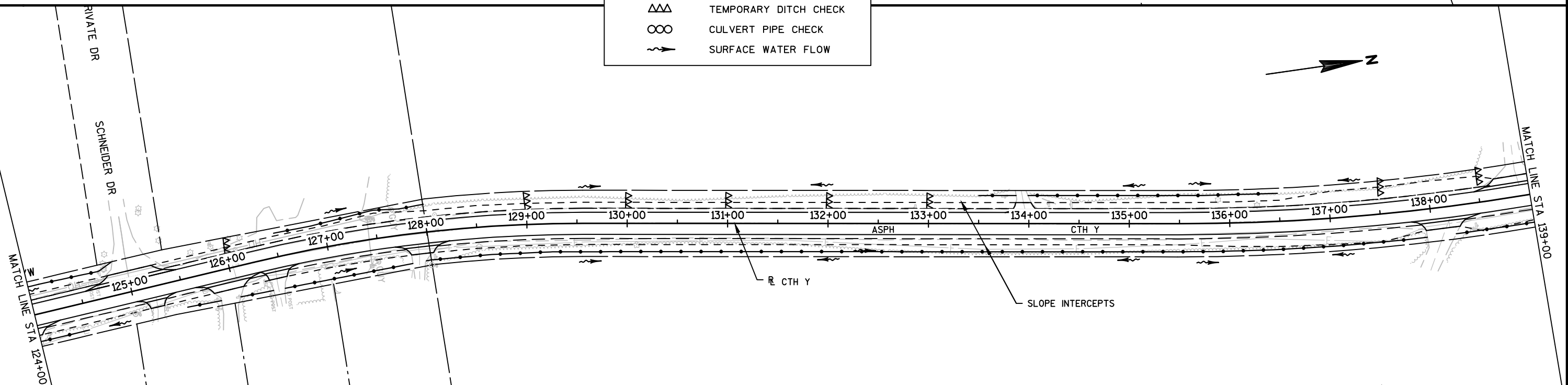
2



BEGIN PROJECT: 9465-00-70
STA 110+50.00
MATCH EXISTING
SAWCUT REQ'D

LEGEND

- SLOPE INTERCEPT
- SILT FENCE
- △△ TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- ~ SURFACE WATER FLOW



NE & SW ¼ OF SECTION 22,
SE ¼ OF SECTION 21, SE & NE ¼
OF SECTION 28, T38N, R6E

SCALE, FEET 0 50 100

PROJECT NO: 9465-00-70

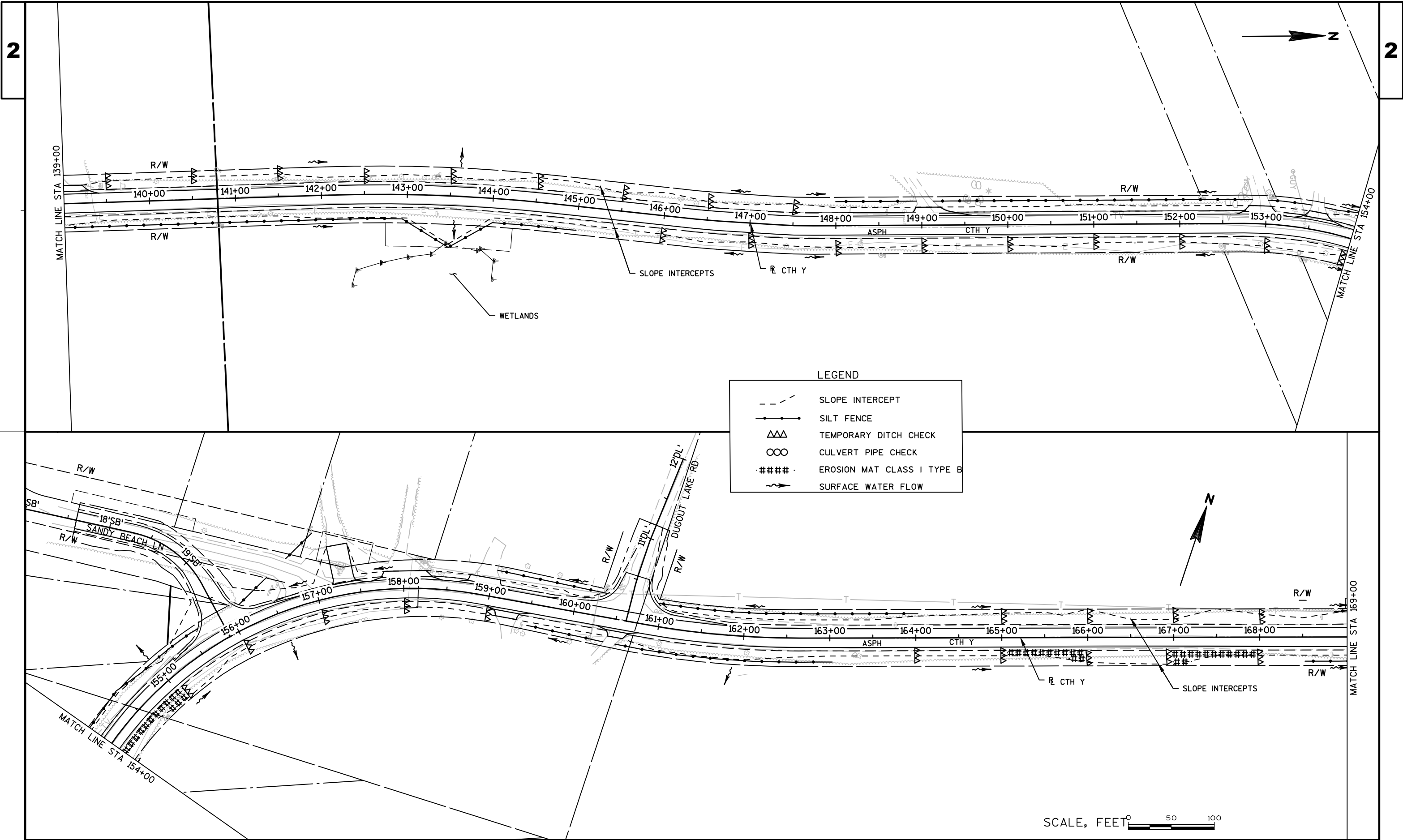
HWY: CTH Y

COUNTY: ONEIDA

EROSION CONTROL: CTH Y

SHEET

E



PROJECT NO:9465-00-70

HWY:CTH Y

COUNTY:ONEIDA

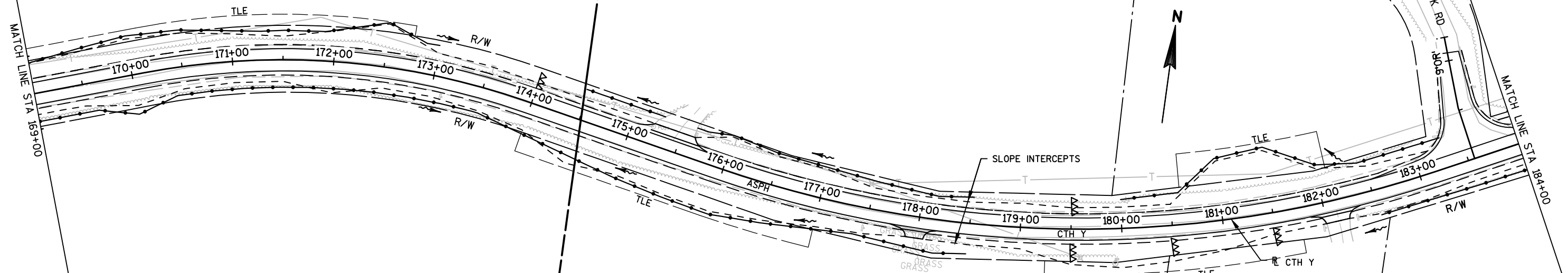
EROSION CONTROL: CTH Y

SHEET

E

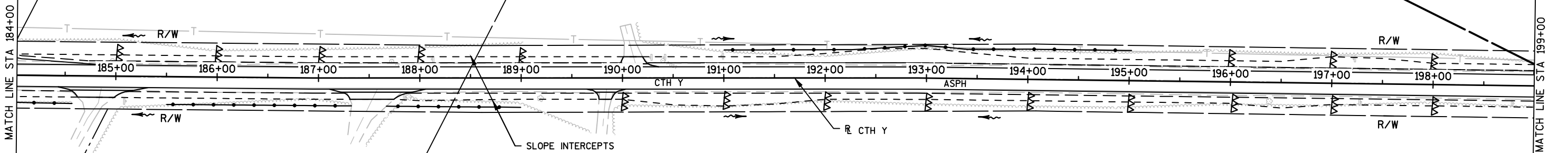
2

2



LEGEND

	SLOPE INTERCEPT
	SILT FENCE
	TEMPORARY DITCH CHECK
	CULVERT PIPE CHECK
	SURFACE WATER FLOW



SCALE, FEET

PROJECT NO: 9465-00-70

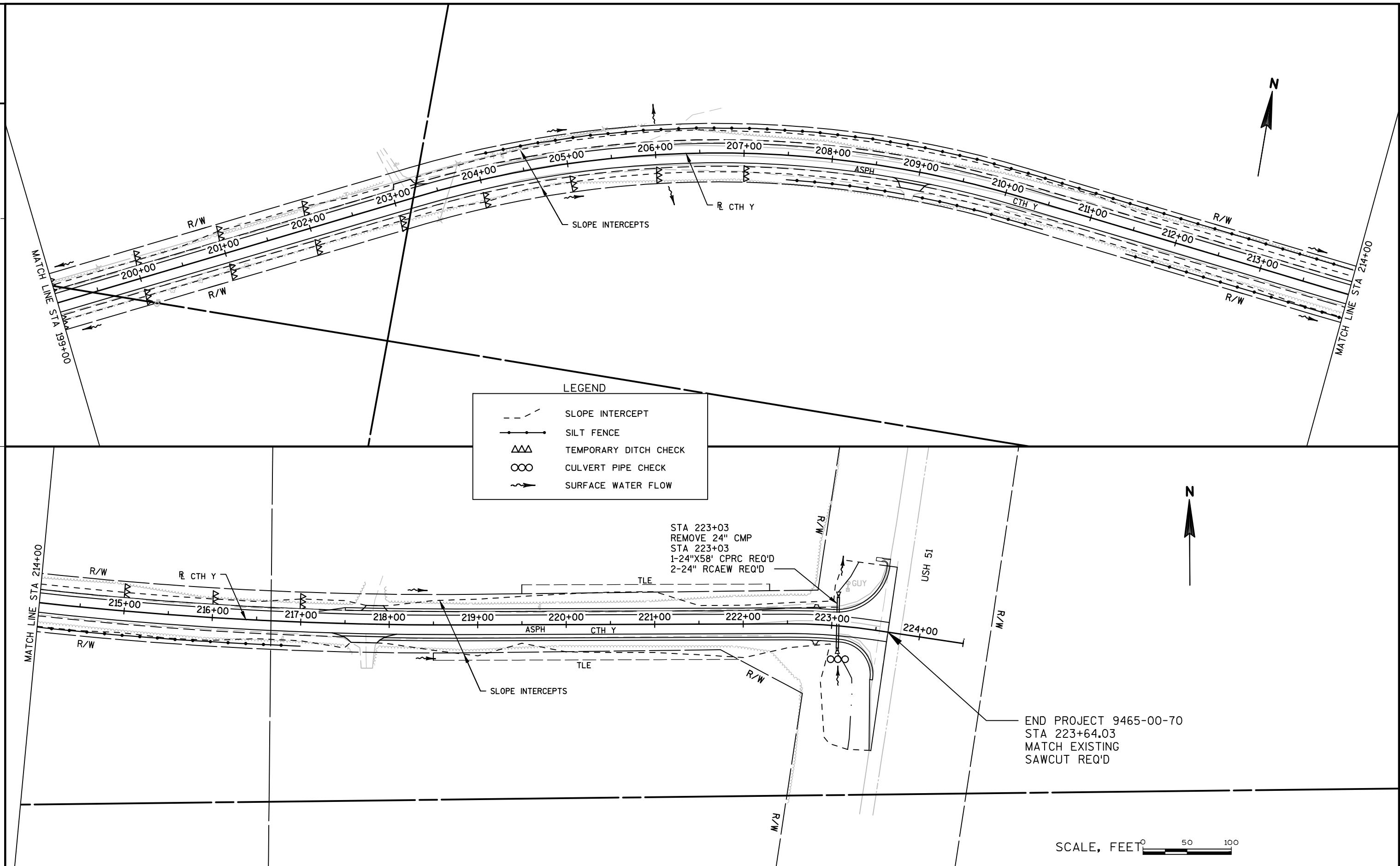
HWY: CTH Y

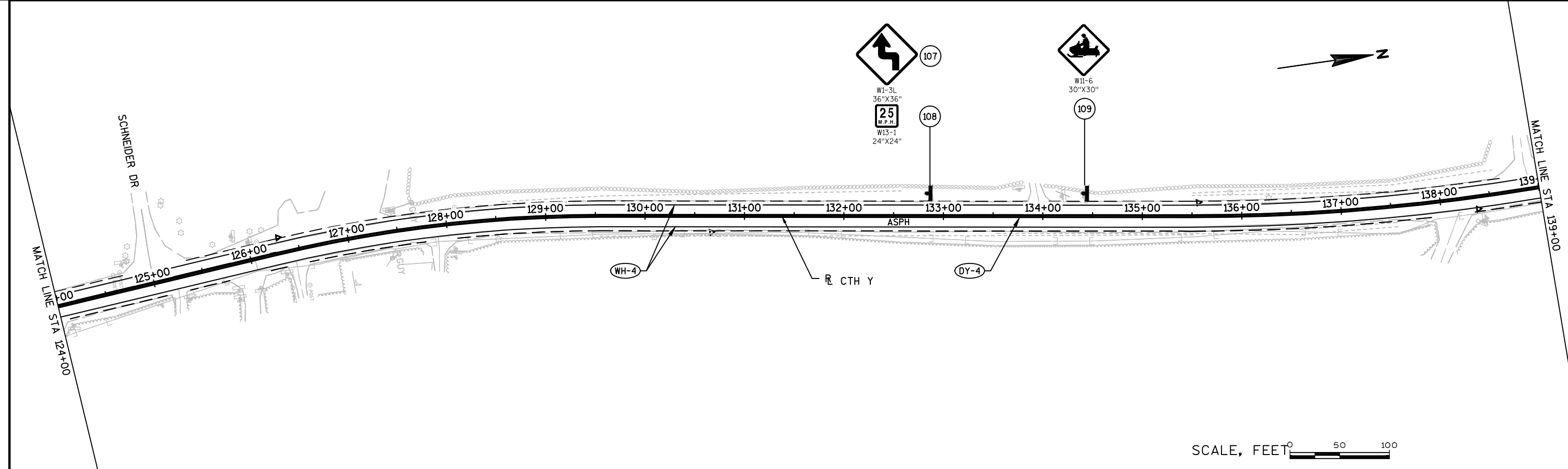
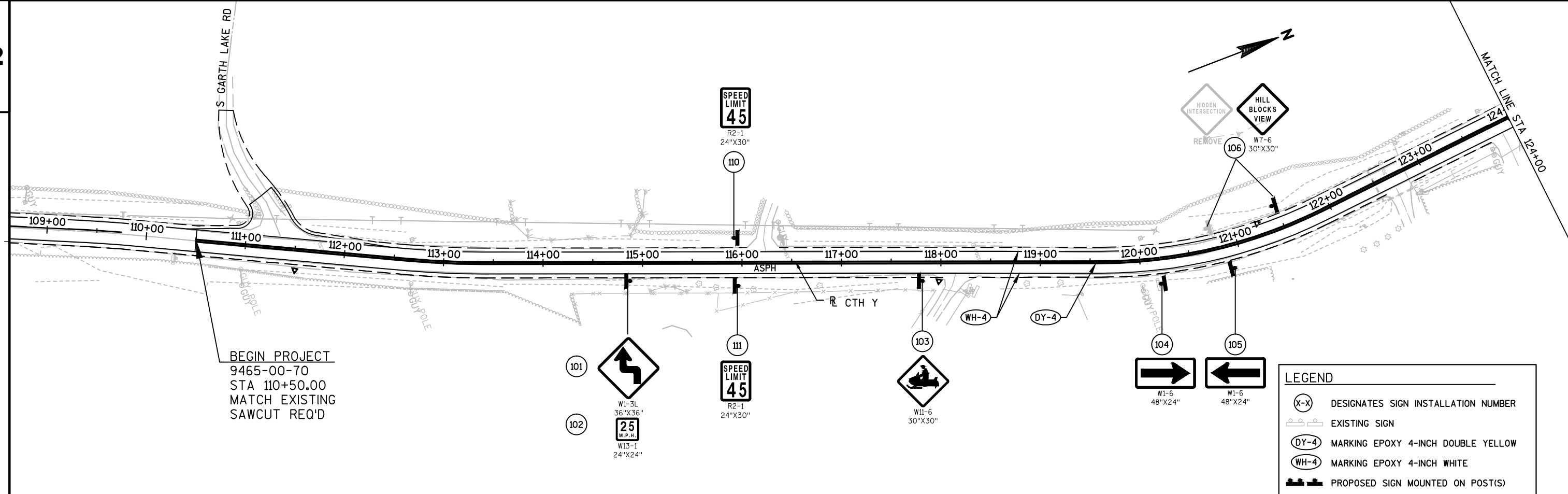
COUNTY: ONEIDA

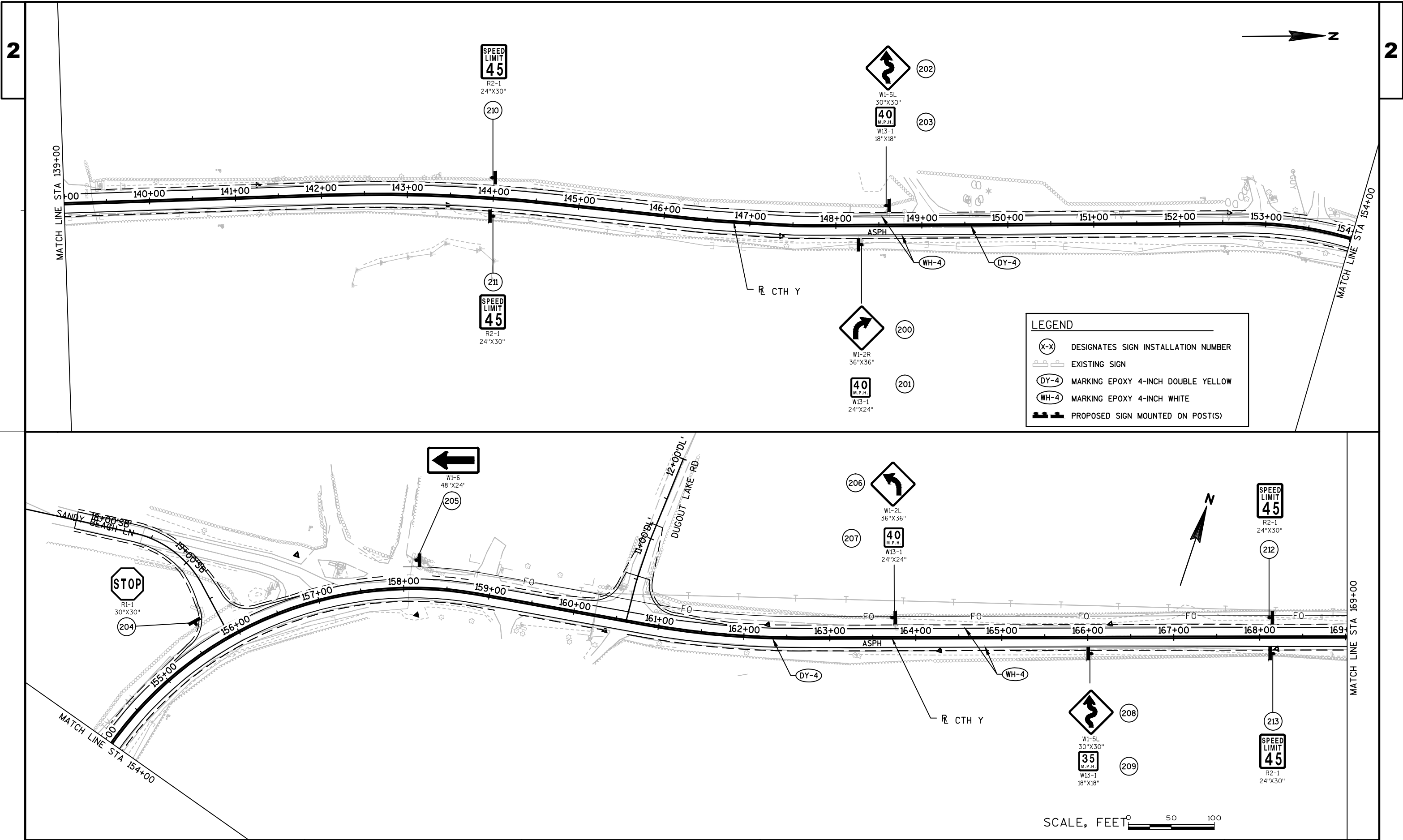
EROSION CONTROL: CTH Y

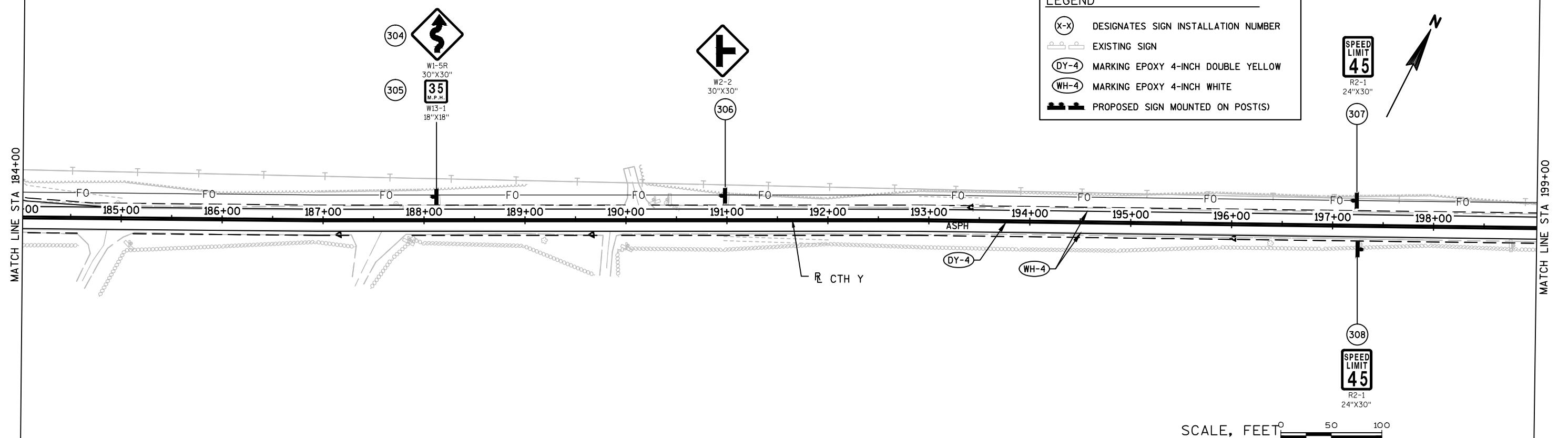
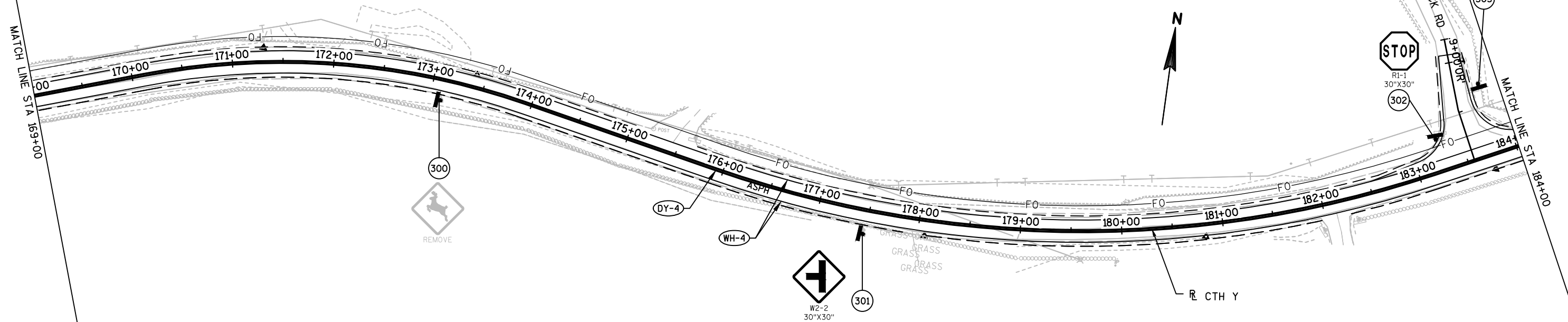
SHEET

E



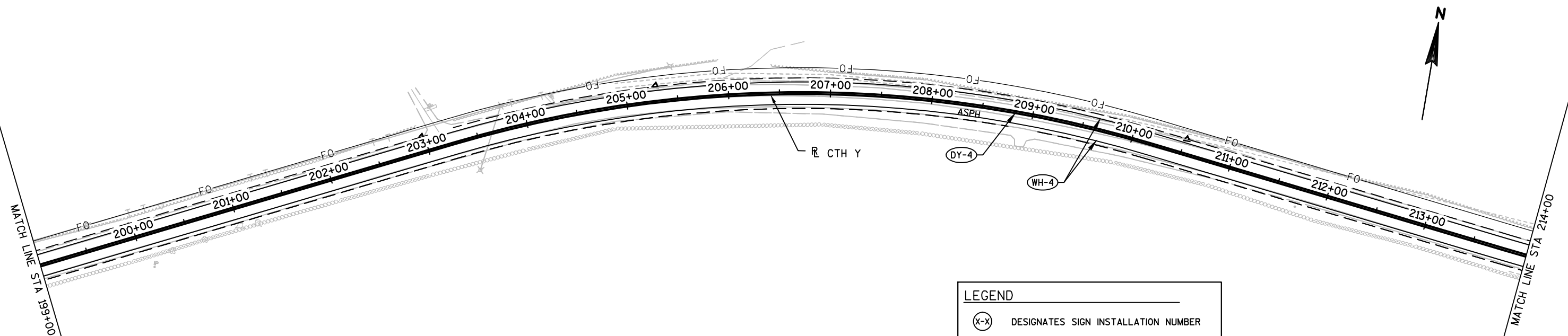




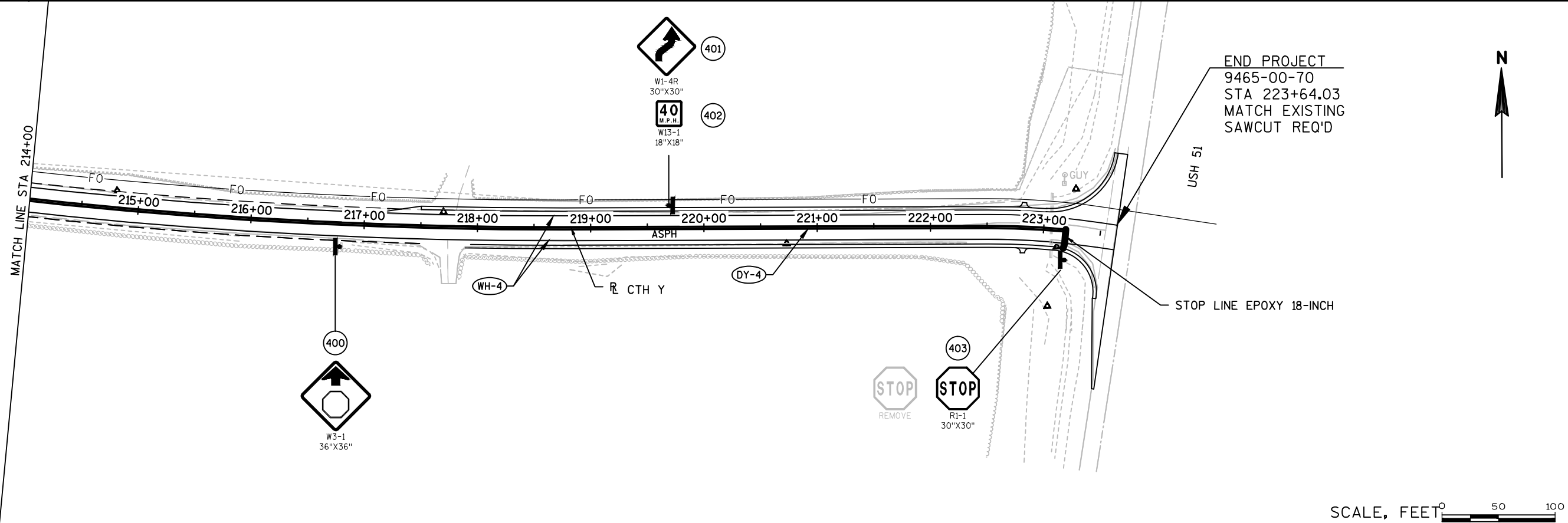


LEGEND





- (X-X) DESIGNATES SIGN INSTALLATION NUMBER
- EXISTING SIGN
- (DY-4) MARKING EPOXY 4-INCH DOUBLE YELLOW
- (WH-4) MARKING EPOXY 4-INCH WHITE
- PROPOSED SIGN MOUNTED ON POST(S)

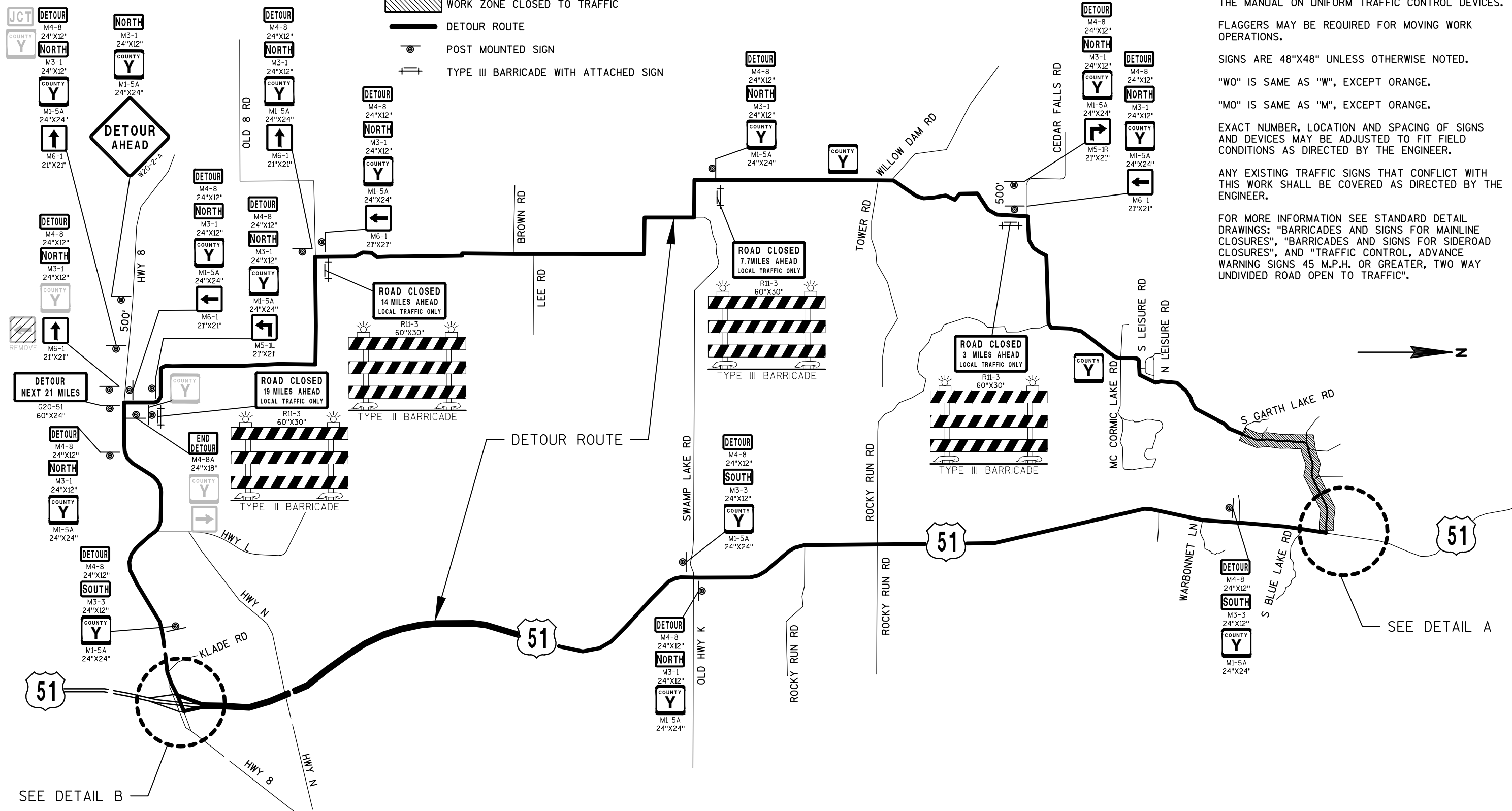


LEGEND	
(X-X)	DESIGNATES SIGN INSTALLATION NUMBER
EXISTING SIGN	
(DY-4)	MARKING EPOXY 4-INCH DOUBLE YELLOW
(WH-4)	MARKING EPOXY 4-INCH WHITE
PROPOSED SIGN MOUNTED ON POST(S)	



LEGEND

-  WORK ZONE CLOSED TO TRAFFIC
 DETOUR ROUTE
 POST MOUNTED SIGN
 TYPE III BARRICADE WITH ATTACHED SIGN



GENERAL NOTES:

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

FLAGGERS MAY BE REQUIRED FOR MOVING WORK OPERATIONS.

SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

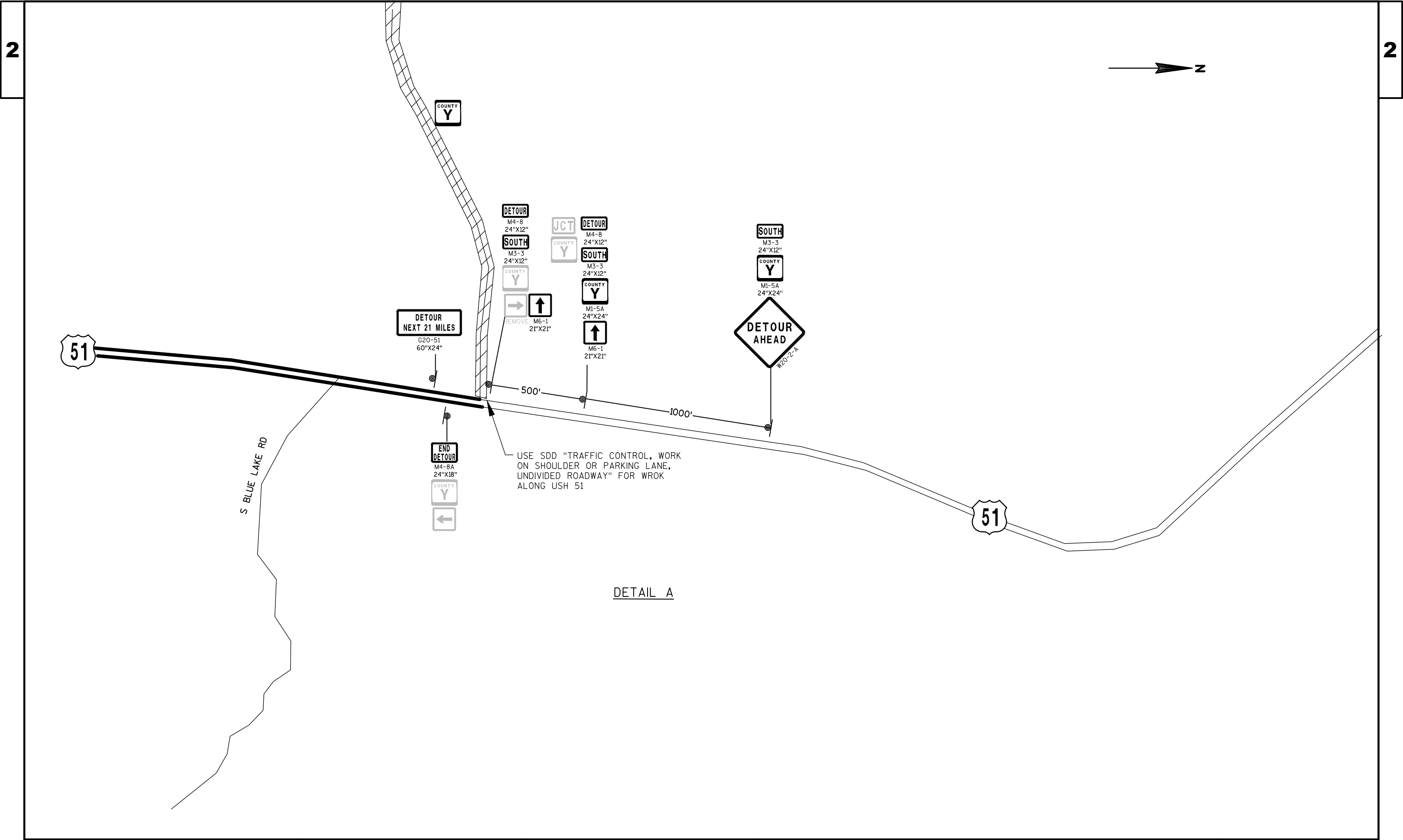
"WO" IS SAME AS "W", EXCEPT ORANGE.

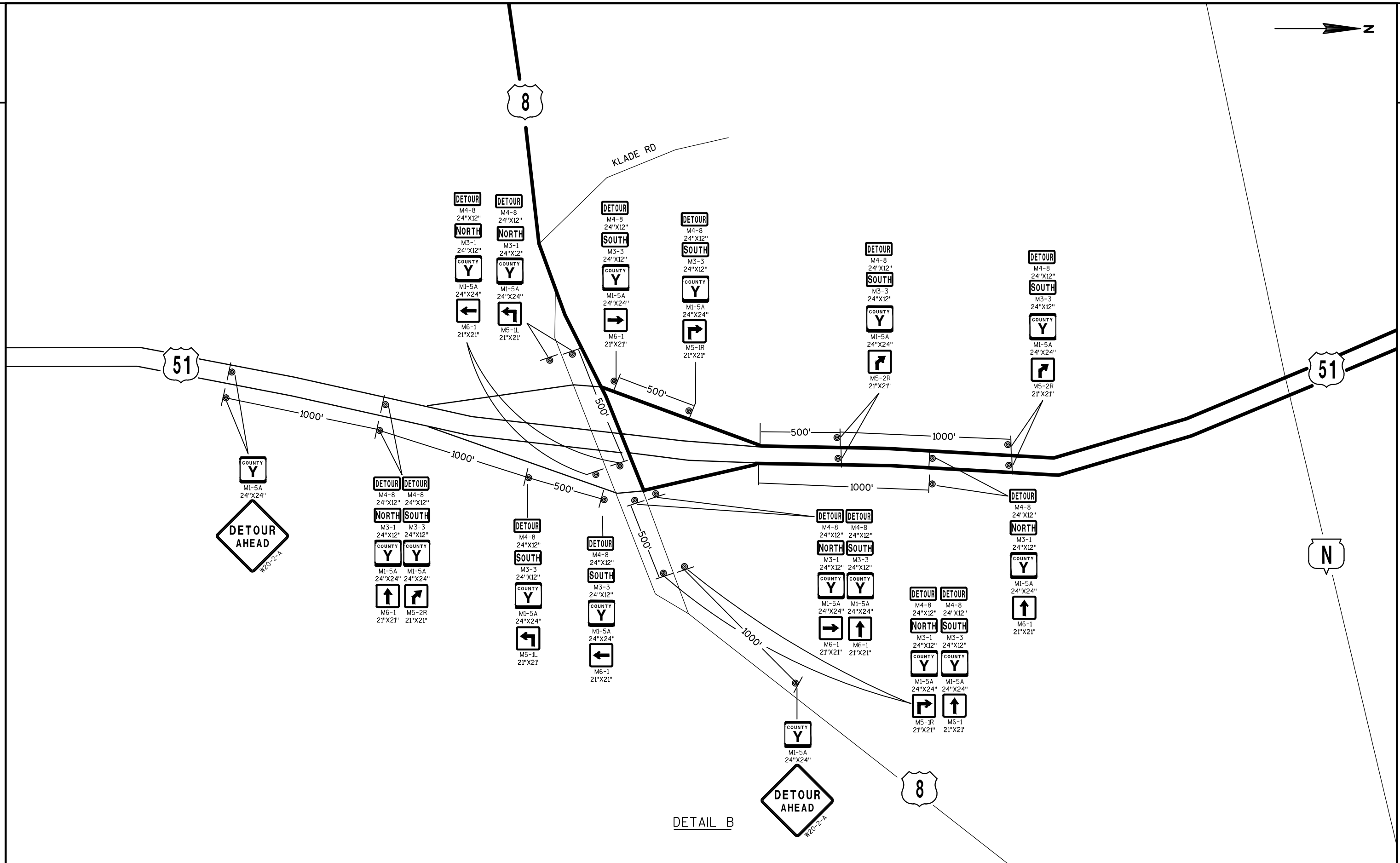
"MO" IS SAME AS "M", EXCEPT ORANGE.

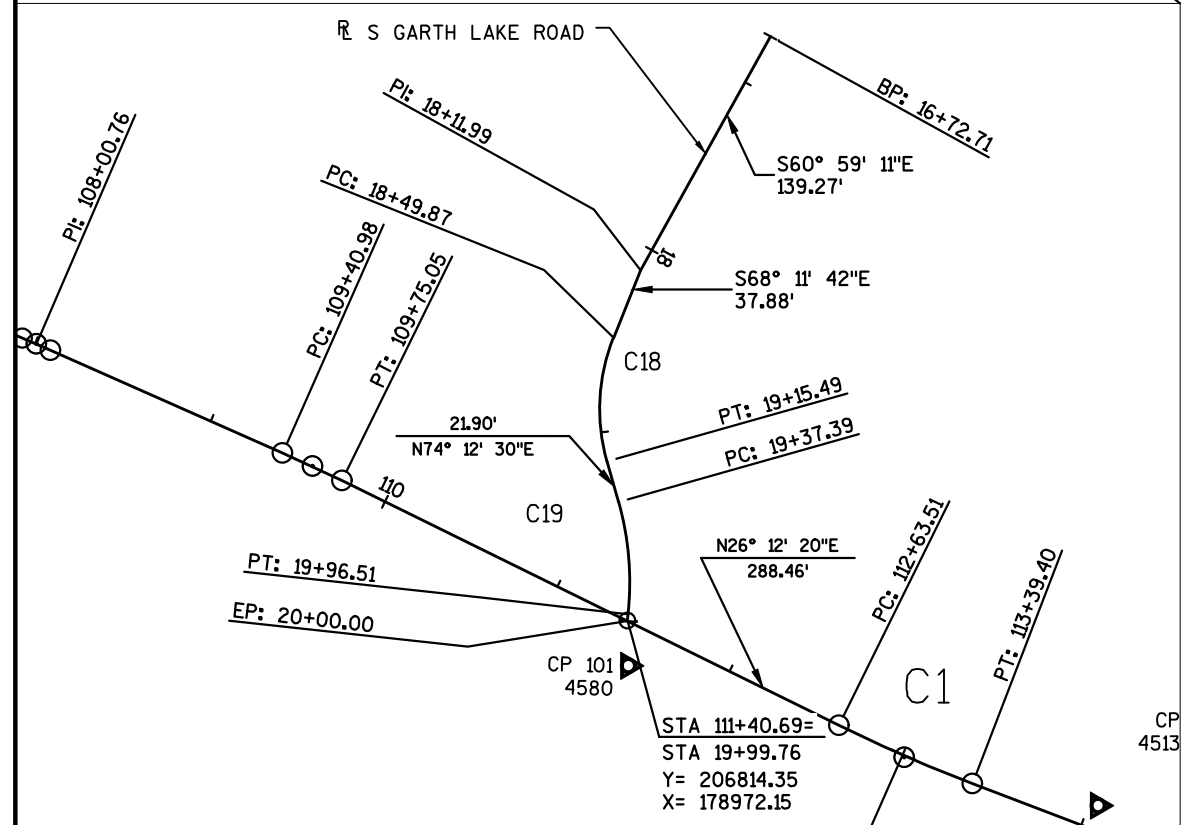
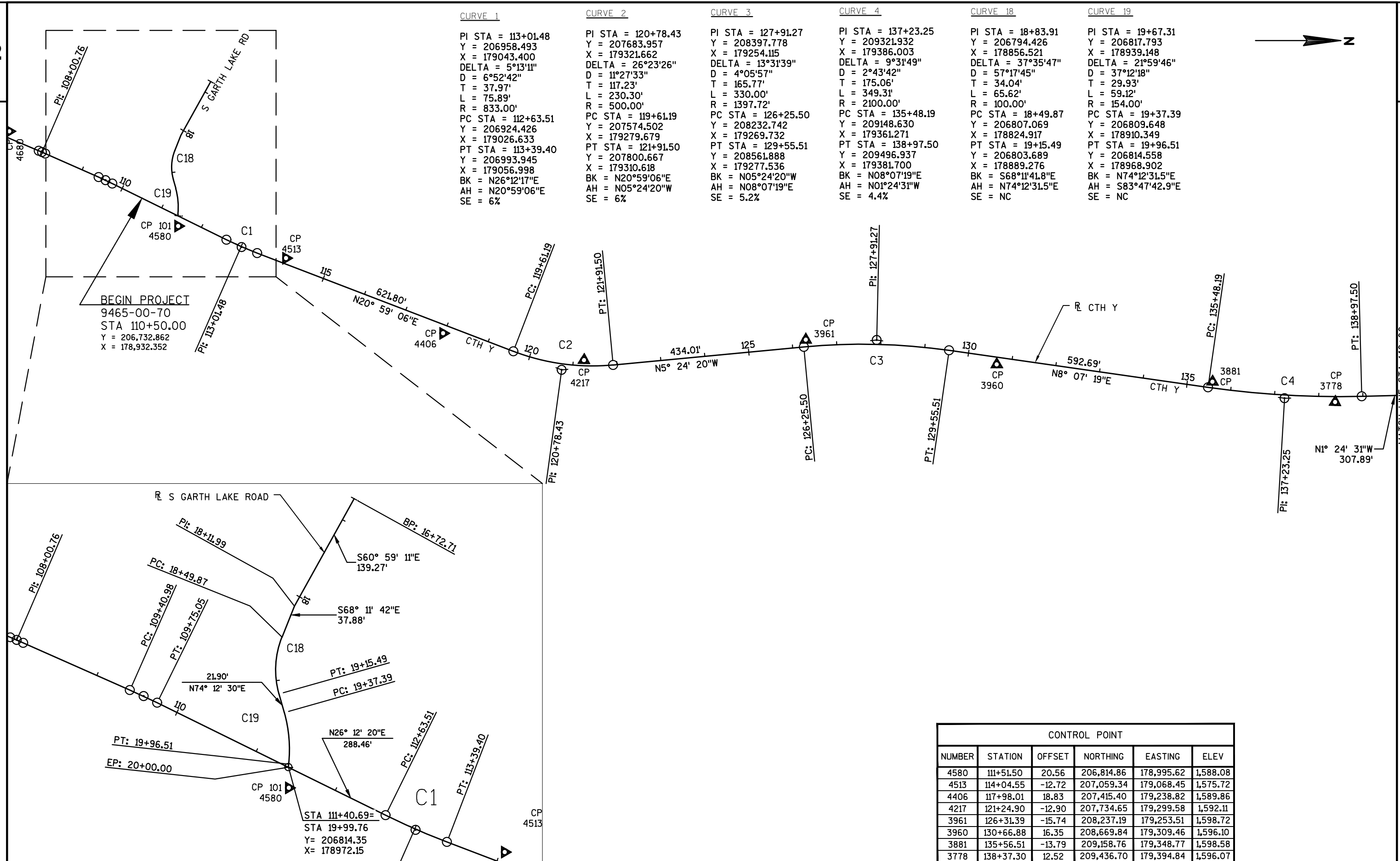
EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER.

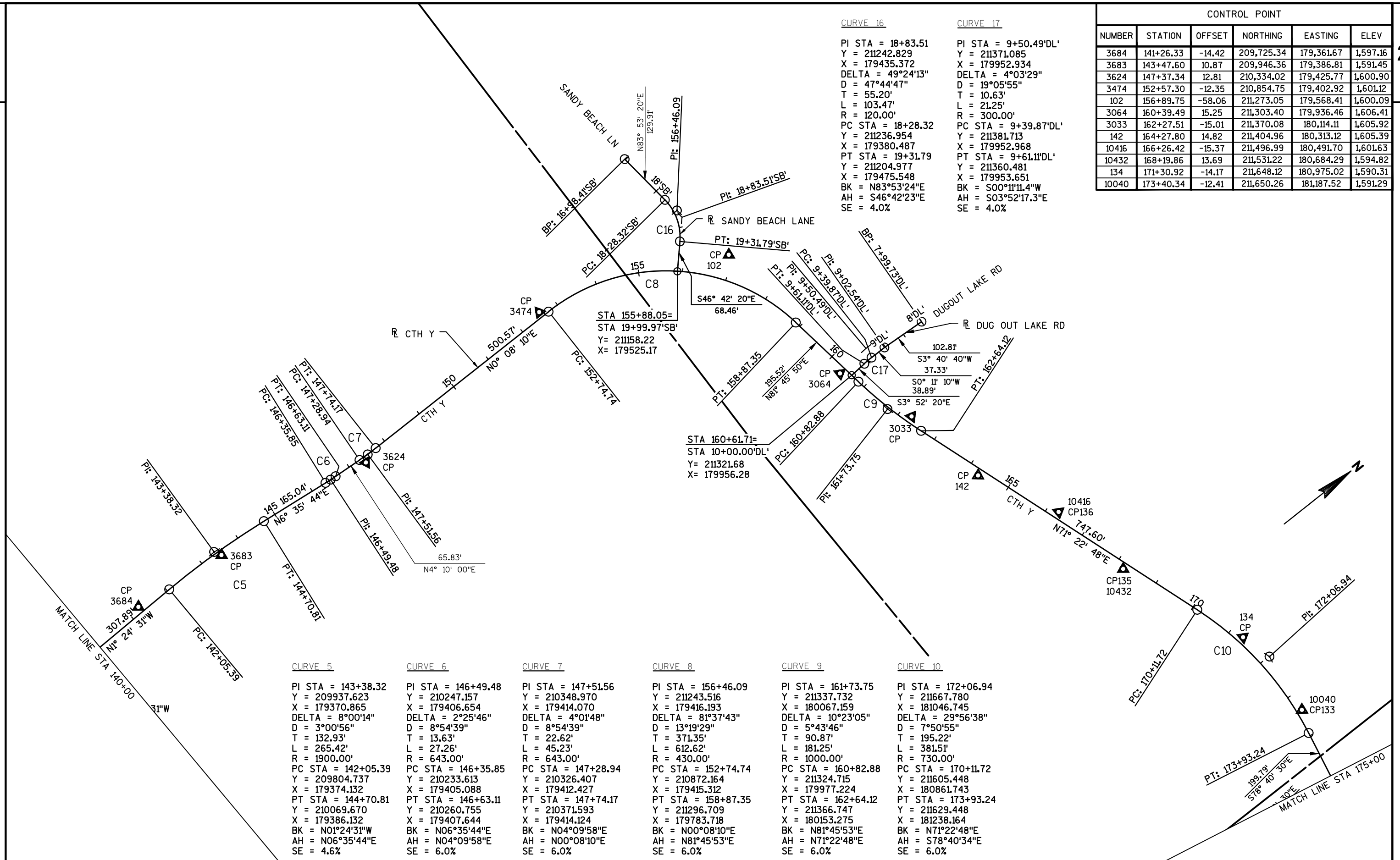
FOR MORE INFORMATION SEE STANDARD DETAIL DRAWINGS: "BARRICADES AND SIGNS FOR MAINLINE CLOSURES", "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES", AND "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC".







CONTROL POINT					
NUMBER	STATION	OFFSET	NORTHING	EASTING	ELEV
4580	111+51.50	20.56	206,814.86	178,995.62	1,588.08
4513	114+04.55	-12.72	207,059.34	179,068.45	1,575.72
4406	117+98.01	18.83	207,415.40	179,238.82	1,589.86
4217	121+24.90	-12.90	207,734.65	179,299.58	1,592.11
3961	126+31.39	-15.74	208,237.19	179,253.51	1,598.72
3960	130+66.88	16.35	208,669.84	179,309.46	1,596.10
3881	135+56.51	-13.79	209,158.76	179,348.77	1,598.58
3778	138+37.30	12.52	209,436.70	179,394.84	1,596.07



CONTROL POINT					
NUMBER	STATION	OFFSET	NORTHING	EASTING	ELEV
3684	141+26.33	-14.42	209,725.34	179,361.67	1,597.16
3683	143+47.60	10.87	209,946.36	179,386.81	1,591.45
3624	147+37.34	12.81	210,334.02	179,425.77	1,600.90
3474	152+57.30	-12.35	210,854.75	179,402.92	1,601.12
102	156+89.75	-58.06	211,273.05	179,568.41	1,600.09
3064	160+39.49	15.25	211,303.40	179,936.46	1,606.41
3033	162+27.51	-15.01	211,370.08	180,114.11	1,605.92
142	164+27.80	14.82	211,404.96	180,313.12	1,605.39
10416	166+26.42	-15.37	211,496.99	180,491.70	1,601.63
10432	168+19.86	13.69	211,531.22	180,684.29	1,594.82
134	171+30.92	-14.17	211,648.12	180,975.02	1,590.31
10040	173+40.34	-12.41	211,650.26	181,187.52	1,591.29

CURVE 5

PI STA = 143+38.32
Y = 209937.623
X = 179370.865
DELTA = 8°00'14"
D = 3°00'56"
T = 132.93'
L = 265.42'
R = 1900.00'
PC STA = 142+05.39
Y = 209804.737
X = 179374.132
PT STA = 144+70.81
Y = 210069.670
X = 179386.132
BK = N01°24'31"W
AH = N06°35'44"E
SE = 4.6%

CURVE 6

PI STA = 146+49.48
Y = 210247.157
X = 179406.654
DELTA = 2°25'46"
D = 8°54'39"
T = 13.63'
L = 27.26'
R = 643.00'
PC STA = 146+35.85
Y = 210233.613
X = 179405.088
PT STA = 146+63.11
Y = 210260.755
X = 179407.644
BK = N06°35'44"E
AH = N04°09'58"E
SE = 6.0%

CURVE 7

PI STA = 147+51.56
Y = 210348.970
X = 179414.070
DELTA = 4°01'48"
D = 8°54'39"
T = 22.62'
L = 45.23'
R = 643.00'
PC STA = 147+28.94
Y = 210326.407
X = 179412.427
PT STA = 147+74.17
Y = 210371.593
X = 179414.124
BK = N04°09'58"E
AH = N00°08'10"E
SE = 6.0%

CURVE 8

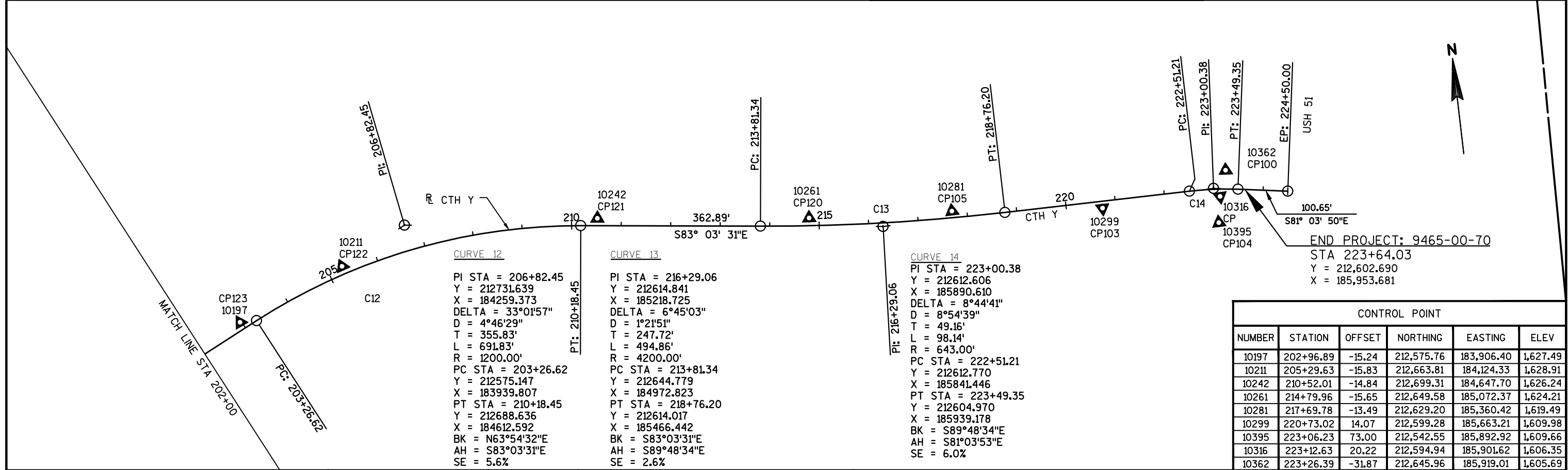
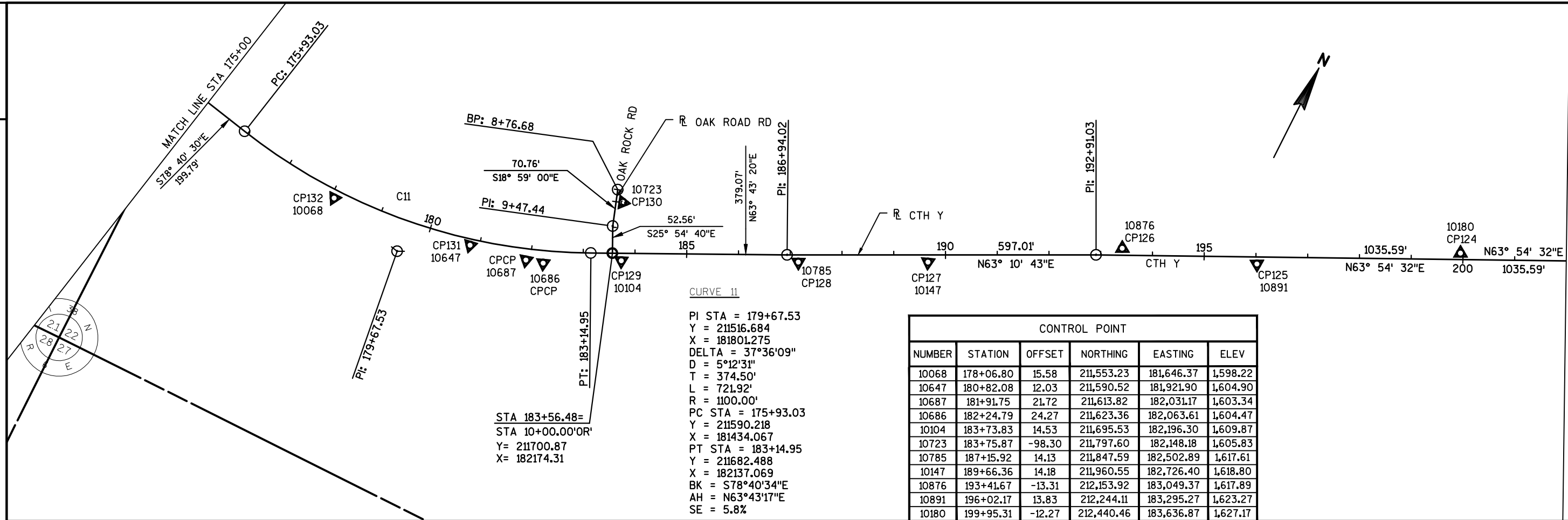
PI STA = 156+46.09
Y = 211243.516
X = 179416.193
DELTA = 81°37'43"
D = 13°19'29"
T = 371.35'
L = 612.62'
R = 430.00'
PC STA = 152+74.74
Y = 210872.164
X = 179415.312
PT STA = 158+87.35
Y = 211296.709
X = 179783.718
BK = N00°08'10"E
AH = N81°45'53"E
SE = 6.0%

CURVE 9

PI STA = 161+73.75
Y = 211337.732
X = 180067.159
DELTA = 10°23'05"
D = 5°43'46"
T = 90.87'
L = 181.25'
R = 1000.00'
PC STA = 160+82.88
Y = 211324.715
X = 179977.224
PT STA = 162+64.12
Y = 211366.747
X = 180153.275
BK = N81°45'53"E
AH = N71°22'48"E
SE = 6.0%

CURVE 10

PI STA = 172+06.94
Y = 211667.780
X = 181046.745
DELTA = 29°56'38"
D = 7°50'55"
T = 195.22'
L = 381.51'
R = 730.00'
PC STA = 170+11.72
Y = 211605.448
X = 180861.743
PT STA = 173+93.24
Y = 211629.448
X = 181238.164
BK = N71°22'48"E
AH = S78°40'34"E
SE = 6.0%



Estimate Of Quantities

9465-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	77.000	77.000
0004	201.0205	Grubbing	STA	77.000	77.000
0006	203.0100	Removing Small Pipe Culverts	EACH	3.000	3.000
0008	204.0115	Removing Asphaltic Surface Butt Joints	SY	889.000	889.000
0010	204.0150	Removing Curb & Gutter	LF	138.000	138.000
0012	204.9060.S	Removing (item description) 01. Removing Landscaping	EACH	1.000	1.000
0014	205.0100	Excavation Common	CY	2,650.000	2,650.000
0016	208.0100	Borrow	CY	3,633.000	3,633.000
0018	213.0100	Finishing Roadway (project) 01. 9465-00-70	EACH	1.000	1.000
0020	214.0100	Obliterating Old Road	STA	1.000	1.000
0022	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,124.000	2,124.000
0024	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	12,234.000	12,234.000
0026	325.0100	Pulverize and Relay	SY	34,500.000	34,500.000
0028	374.1020.S	QMP Pulverize and Relay Compaction	SY	34,500.000	34,500.000
0030	416.1010	Concrete Surface Drains	CY	2.000	2.000
0032	440.4410	Incentive IRI Ride	DOL	4,293.000	4,293.000
0034	455.0605	Tack Coat	GAL	1,496.000	1,496.000
0036	460.2000	Incentive Density HMA Pavement	DOL	4,542.000	4,542.000
0038	460.6223	HMA Pavement 3 MT 58-28 S	TON	3,986.000	3,986.000
0040	460.6244	HMA Pavement 4 MT 58-34 S	TON	3,096.000	3,096.000
0042	465.0315	Asphaltic Flumes	SY	20.000	20.000
0044	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	2.000	2.000
0046	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	2.000	2.000
0048	522.0324	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	58.000	58.000
0050	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000	2.000
0052	530.0112	Culvert Pipe Corrugated Polyethylene 12-Inch	LF	28.000	28.000
0054	530.0118	Culvert Pipe Corrugated Polyethylene 18-Inch	LF	50.000	50.000
0056	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	1,217.000	1,217.000
0058	618.0100	Maintenance And Repair of Haul Roads (project) 01. 9465-00-70	EACH	1.000	1.000
0060	619.1000	Mobilization	EACH	1.000	1.000
0062	624.0100	Water	MGAL	433.000	433.000
0064	625.0500	Salvaged Topsoil	SY	28,250.000	28,250.000
0066	627.0200	Mulching	SY	27,880.000	27,880.000
0068	628.1504	Silt Fence	LF	13,940.000	13,940.000
0070	628.1520	Silt Fence Maintenance	LF	13,940.000	13,940.000
0072	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0074	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0076	628.2004	Erosion Mat Class I Type B	SY	417.000	417.000

Estimate Of Quantities

9465-00-70

Line	Item	Item Description	Unit	Total	Qty
0078	628.7504	Temporary Ditch Checks	LF	975.000	975.000
0080	628.7555	Culvert Pipe Checks	EACH	9.000	9.000
0082	629.0210	Fertilizer Type B	CWT	17.800	17.800
0084	630.0120	Seeding Mixture No. 20	LB	763.000	763.000
0086	630.0200	Seeding Temporary	LB	381.000	381.000
0088	633.5200	Markers Culvert End	EACH	4.000	4.000
0090	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	1.000	1.000
0092	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	23.000	23.000
0094	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	5.000	5.000
0096	637.2210	Signs Type II Reflective H	SF	55.540	55.540
0098	637.2230	Signs Type II Reflective F	SF	159.250	159.250
0100	638.2602	Removing Signs Type II	EACH	30.000	30.000
0102	638.3000	Removing Small Sign Supports	EACH	30.000	30.000
0104	642.5001	Field Office Type B	EACH	1.000	1.000
0106	643.0420	Traffic Control Barricades Type III	DAY	560.000	560.000
0108	643.0705	Traffic Control Warning Lights Type A	DAY	1,120.000	1,120.000
0110	643.0900	Traffic Control Signs	DAY	10,640.000	10,640.000
0112	643.0920	Traffic Control Covering Signs Type II	EACH	1.000	1.000
0114	643.5000	Traffic Control	EACH	1.000	1.000
0116	646.1020	Marking Line Epoxy 4-Inch	LF	45,080.000	45,080.000
0118	646.6120	Marking Stop Line Epoxy 18-Inch	LF	17.000	17.000
0120	650.4500	Construction Staking Subgrade	LF	495.000	495.000
0122	650.5000	Construction Staking Base	LF	495.000	495.000
0124	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	1,217.000	1,217.000
0126	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000
0128	650.8000	Construction Staking Resurfacing Reference	LF	11,414.000	11,414.000
0130	650.9910	Construction Staking Supplemental Control (project) 01. 9465-00-70	LS	1.000	1.000
0132	650.9920	Construction Staking Slope Stakes	LF	11,909.000	11,909.000
0134	690.0150	Sawing Asphalt	LF	267.000	267.000
0136	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	300.000	300.000
0138	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000
0140	SPV.0170	Special 01. Proof Rolling	STA	110.000	110.000
0142	SPV.0180	Special 01. Salvaged Base	SY	3,450.000	3,450.000

3

CLEARING AND GRUBBING ITEMS

STATION - STATION LOCATION			201.0105 CLEARING (STA)	201.0205 GRUBBING (STA)
114+00 - 116+00	LT		2	2
121+00 - 123+00	LT		2	2
124+00 - 128+00	RT		4	4
129+00 - 132+00	RT		3	3
136+00 - 138+00	LT		2	2
139+00 - 147+00	LT & RT		8	8
154+00 - 156+00	LT & RT		2	2
160+00 - 168+00	LT & RT		8	8
169+00 - 183+00	LT & RT		14	14
191+00 - 193+00	LT		2	2
196+00 - 199+00	RT		3	3
200+00 - 223+00	LT & RT		23	23
19+00'GL' - 20+00'GL'	S GARTH LAKE RD		1	1
18+00'SB' - 20+00'SB'	SANDY BEACH LN		2	2
9+00'DL' - 10+00'DL'	DUGOUT LAKE RD		1	1
TOTALS			77	77

REMOVING SMALL PIPE CULVERTS

STATION LOCATION		203.0100 EACH	COMMENTS	
CATEGORY CODE 0010				
122+50	CL	1	18"	CMP
122+71	RT	1	18"	CMP
223+03	CL	1	24"	CMP
TOTALS		3		

REMOVALS

REMOVING
01. LANDSCAPING
204.9060.S

STATION LOCATION		EACH	COMMENTS
CATEGORY CODE 0020			
149+60	LT	1	STONE PILLAR
TOTALS		1	

REMOVING ASPHALTIC SURFACE

STATION - STATION LOCATION		204.0115 BUTT JOINTS SY	214.0100 OBLITERATING OLD ROAD STA
110+50 - 11225	CTH Y SANDY BEACH OAK ROCK	433 -- 456	-- 1 --
TOTALS		889	1

REMOVING CURB & GUTTER

STATION LOCATION		204.0150 LF
CATEGORY CODE 0010		
223+00	LT & RT	138
TOTALS		138

From/To Station	Location	Common (item # Excavation (1) 205.0100)		Salvaged/Unusable Pavement Material (4) CY	Available Material (5) CY	Unexpanded Fill CY	Expanded Fill (13)	Mass Ordinate +/- (14) CY	Waste CY	Borrow
		Cut (2) CY	EBS Excavation CY				Factor 1.25			(item #208.0100) CY
110+50 to 223+64	Mainline stage 1	2456	0	0	2456	2857	3571	-1116	0	1116
	S Garth Lake	86	0	0	86	0	0	86	86	0
	Sandy Beach	63	0	0	63	241	301	-238	0	238
	Dugout Lake	45	0	0	45	2	3	42	42	0
	Undistributed (Superelevation Correction)									2280
Grand Total		2650	0	0	2650	3100	3875	-1225	128	3633
Total Common Exc		2650								

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 4) Salvaged/Unusable Pavement Material
- 5) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 13) Expanded Fill. Factor = 1.25
- Depending on selections:
- Or

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor

Or

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor

Or

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor

Or

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor
- 14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

3

AGGREGATE ITEMS

STATION - STATION		LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL
CATEGORY CODE 0010					
110+50	- 223+64	MAINLINE	1,790	11,500	399
110+50	- 223+64	SIDERoadS	--	734	23
110+50	- 223+64	DRIVEWAYS	334	--	11
PROJECT TOTALS			2,124	12,234	433

CONCRETE CURB AND GUTTER ITEMS

STATION - STATION		LOCATION	416.1010 CONCRETE SURFACE DRAINS CY	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING CURB & GUTTER LF
CATEGORY CODE 0010					
217+50	- 223+50	LT	1	639	639
217+90	- 223+50	RT	1	578	578
TOTALS			2	1,217	1,217

CULVERT PIPE ITEMS

STATION CATEGORY		LOCATION CODE		CULVERT PIPE		APRON ENDWALLS FOR CULVERT PIPE REINFORCED		APRON ENDWALLS FOR CULVERT PIPE		MARKER POSTS CULVERT END	CULVERT PIPE CHECKS	CONSTRUCTION STAKING		
				CORRUGATED POLYETHLENE		REINFORCED CONCRETE CLASS IV		CONCRETE						
				530.0112	530.0118	522.0324	522.1024	521.1012	521.1018	633.52	628.7555	650.6000		
				12-INCH	18-INCH	24-INCH	24-INCH	12-INCH	18-Inch	FLEXIBLE	PIPE CULVERTS	PIPE CULVERTS		
		LF	LF	LF	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH		
CATEGORY CODE 0010														
122+50	CL	--	50	--	--	--	2	2	3	1				
122+71	RT	28	--	--	--	2	--	--	3	1				
223+03	CL	--	--	58	2	--	--	2	3	1				
TOTALS		28	50	58	2	2	2	4	9	3				

LANDSCAPING ITEMS

STATION - STATION			LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.2004 EROSION MAT CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEED MIX NO. 20 LBS	630.0200 SEED TEMPORARY LBS
CATEGORY CODE 0010									
110+50	- 223+00	LT & RT		22,600	22,300	333	14.2	610	305
UNDISTRIBUTED (25%)				5,650	5,580	83	3.6	153	76
TOTALS				28,250	27,880	417	17.8	763	381

PULVERIZE AND RELAY

STATION - STATION		LOCATION	325.0100 SY	374.1020.S QMP COMPACTION SY	SPV.0170.01 PROOF ROLLING STA	SPV.0180.01 SALVAGED BASE SY
112+25	- 222+00	CTH Y	34,500	34,500	110	3,450
TOTALS			34,500	34,500	110	3,450

ASPHALTIC ITEMS

STATION - STATION		LOCATION	455.0605 TACK COAT GAL	460.6223 HMA Pavement 3 MT 58-28 S TON	460.6244 HMA Pavement 4 MT 58-34 S TON	465.0315 ASPHALT FLUMES SY
CATEGORY CODE 0010						
110+50	- 217+50	MAINLINE	1,310	3,500	2,720	--
217+50	- 223+65	MAINLINE	103	275	213	20
18+30'SB'	- 20+00'SB'	SANDY BEACH LN	34	87	67	--
		SIDERoadS	49	124	96	--
TOTALS			1,496	3,986	3,096	20

3

EROSION CONTROL

			628.1504	628.1520	MOBILIZATIONS		628.7504
			SILT FENCE	SILT FENCE	628.1905	628.1910	TEMPORARY
				MAINTENANCE	EROSION CONTROL	EROSION CONTROL	DITCH CHECKS
STATION - STATION LOCATION			LF	LF	EACH	EACH	LF
CATEGORY CODE 0010							
110+50	-	145+00 LT & RT	4,500	4,500	2	1	170
148+00	-	195+00 LT & RT	4,800	4,800	2	1	410
195+00	-	217+00 LT & RT	1,850	1,850	1	1	200
UNDISTRIBUTED (25%)			2,790	2,790	1	1	195
TOTALS			13,940	13,940	6	4	975

SIGNING ITEMS

					637.2210	637.2230	634.0612	634.0614	634.0616	638.2602	638.3000		
					SIGNS TYPE II	SIGNS TYPE II	POSTS WOOD	POSTS WOOD	POSTS WOOD	REMOVING SIGNS	REMOVING SMALL		
					REFLECTIVE H	REFLECTIVE F	4X6X12	4X6X14	4X6X16	TYPE II	SIGN SUPPORTS		
SIGN NO.	SIGN CODE	STATION	LOCATION	SIZE	SF	SF	EACH	EACH	EACH	EACH	EACH	MESSAGE	REMARKS
101	W1-3L	114+90	RT	36" X 36"	-	9.00	---	---	1	1	1	CURVE AHEAD	SAME POST AS 101
102	W13-1	114+90	RT	24" X 24"	-	4.00	---	---	---	--	--	25 MPH WARNING	
103	W11-6	117+90	RT	30" X 30"	-	6.25	---	1	---	1	1	SNOWMOBILE CROSSING	
104	W1-6	120+10	RT	48" X 24"	-	8.00	---	1	---	1	1	NIGHT ARROW	
105	W1-6	120+90	RT	48" X 24"	-	8.00	---	1	---	1	1	NIGHT ARROW	
106	W7-6	120+90	LT	36" X 36"	-	9.00	---	1	---	1	1	HIDDEN INTERSECTION	SAME POST AS 107
107	W1-3L	132+90	LT	36" X 36"	-	9.00	---	---	1	1	1	CURVE AHEAD	
108	W13-1	132+90	LT	24" X 24"	-	4.00	---	---	---	--	--	25 MPH WARNING	
109	W11-6	134+50	LT	30" X 30"	-	6.25	---	1	---	1	1	SNOWMOBILE CROSSING	
110	R2-1	116+00	LT	24" X 30"	5.00	-	---	1	---	1	1	45 MPH	
111	R2-1	116+00	RT	24" X 30"	5.00	-	---	1	---	1	1	45 MPH	
200	W1-2R	148+30	RT	36" X 36"	-	9.00	---	--	1	1	1	CURVE WARNING	SAME POST AS 200
201	W13-1	148+30	RT	24" X 24"	-	4.00	---	--	---	--	--	40 MPH WARNING	
202	W1-5L	148+60	LT	30" X 30"	-	6.25	---	---	1	1	1	CURVE AHEAD	
203	W13-1	148+60	LT	18" X 18"	-	2.25	---	---	---	1	1	40 MPH WARNING	
204	R1-1	156+60	LT	30" X 30"	5.18	-	---	1	---	1	1	STOP SIGN	
205	W1-6	158+00	LT	48" X 24"	-	8.00	---	1	---	1	1	NIGHT ARROW	
206	W1-2L	163+70	LT	36" X 36"	-	9.00	---	---	1	1	1	CURVE WARNING	SAME POST AS 206
207	W13-1	163+70	LT	24" X 24"	-	4.00	---	---	---	--	--	40 MPH WARNING	
208	W1-5L	166+00	RT	30" X 30"	-	6.25	---	1	--	1	1	CURVE AHEAD	
209	W13-1	166+00	RT	18" X 18"	-	2.25	---	---	---	--	--	35 MPH WARNING	
210	R2-1	145+50	LT	24" X 30"	5.00	-	---	1	---	1	1	45 MPH	SAME POST AS 208
211	R2-1	145+50	RT	24" X 30"	5.00	-	---	1	---	1	1	45 MPH	
212	R2-1	168+50	LT	24" X 30"	5.00	-	---	1	---	1	1	45 MPH	
213	R2-1	168+50	RT	24" X 30"	5.00	-	---	1	---	1	1	45 MPH	
301	W2-2	177+45	RT	30" X 30"	-	6.25	---	1	---	1	1	INTERSECTION AHEAD	
302	R1-1	183+30	LT	30" X 30"	5.18	-	---	1	---	1	1	STOP SIGN	SAME POST AS 304
303	W14-1	183+90	LT	30" X 30"	-	6.25	---	1	---	1	1	DEAD END	
304	W1-5R	188+10	LT	30" X 30"	-	6.25	---	1	--	1	1	CURVE AHEAD	
305	W13-1	188+10	LT	18" X 18"	-	2.25	---	---	---	--	--	35 MPH WARNING	
306	W2-2	191+00	LT	30" X 30"	-	6.25	---	1	---	1	1	INTERSECTION AHEAD	
307	R2-1	197+50	LT	24" X 30"	5.00	-	---	1	---	1	1	45 MPH	SAME POST AS 401
308	R2-1	197+50	RT	24" X 30"	5.00	-	---	1	---	1	1	45 MPH	
400	W3-1	216+80	RT	36" X 36"	-	9.00	---	1	---	1	1	STOP AHEAD	
401	W1-4R	219+60	LT	30" X 30"	-	6.25	---	1	--	1	1	CURVE AHEAD	
402	W13-1	219+60	LT	18" X 18"	-	2.25	---	---	---	--	--	40 MPH WARNING	SAME POST AS 401
403	R1-1	223+10	RT	30" X 30"	5.18	-	1	---	---	1	1	STOP SIGN	
TOTALS					55.54	159.25	1	23	5	30	30		

TRAFFIC CONTROL ITEMS

LOCATION	643.0420 BARRICADES TYPE III EACH	643.0705 WARNING LIGHTS TYPE A DAYS	643.0900 SIGNS DAYS	643.0920 COVERING SIGNS TYPE II EACH	CYCLES EACH
CATEGORY CODE 0010					
PROJECT	560	1,120	10,640	1	1
TOTALS	560	1,120	10,640	1	1

MARKING ITEMS

STATION - STATION	LOCATION	646.1020 EPOXY 4-INCH		646.6120 STOP LINE EPOXY 18-INCH LF
		WHITE LF	YELLOW LF	
CATEGORY CODE 0010				
110+50 - 223+20	CL	---	22,540	17
110+50 - 223+20	EDGE LINE	22,540	---	
TOTALS		22,540	22,540	17
		45,080		

CONSTRUCTION STAKING ITEMS

STATION - STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.8000 RESURFACING REFERENCE LF	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF
CATEGORY CODE 0010						
110+50 - 223+64	MAINLINE	--	--	11,314	1	11,314
18+45 - 20+00	S GARTH LK RD	155	155	--	--	155
17+60 - 20+00	SANDY BEACH LN	240	240	--	--	240
10+00 - 11+00	DUGOUT LK RD	100	100	--	--	100
10+00 - 11+00	OAK ROCK RD	--	--	100	--	100
TOTALS		495	495	11,414	1	11,909

SAWING PAVEMENT ITEMS

STATION	LOCATION	690.0150 ASPHALT LF
CATEGORY CODE 0010		
17+60'SB'	SANDY BEACH	19
222+00	MAINLINE	26
223+64	USH 51	222
TOTALS		267

CONVENTIONAL SYMBOLS

SECTION LINE	---	SECTION CORNER SYMBOL		R/W MONUMENT (TO BE SET)	●
QUARTER LINE	---	SECTION CORNER MONUMENT		NON-MONUMENTED R/W POINT	○
SIXTEENTH LINE	---	GEODETIC SURVEY MONUMENT		FOUND IRON PIN (1-INCH UNLESS NOTED)	IP
NEW REFERENCE LINE	---	SIXTEENTH CORNER MONUMENT		OFF-PREMISE SIGN	
NEW R/W LINE	---	SIGN		COMPENSABLE	
EXISTING R/W OR HE LINE	---	PARALLEL OFFSETS		NON-COMPENSABLE	
PROPERTY LINE	---	PARCEL NUMBER (25)			
LOT, TIE & OTHER MINOR LINES	---	UTILITY NUMBER (40)			
SLOPE INTERCEPT	---				
CORPORATE LIMITS	---				
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)	---				
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	---				
TEMPORARY LIMITED EASEMENT AREA	---				
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	---				
TRANSMISSION STRUCTURES	---				
BUILDING	---				
BRIDGE	---				

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTRICTIVE DEVELOPMENT	RDE
CENTERLINE	C/L	EASEMENT	
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	RIGHT OF WAY	R/W
COUNTY	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SEPTIC VENT	SEPV
DISTANCE	DIST	SQUARE FEET	SF
CORNER	COR	STATE TRUNK HIGHWAY	STH
DOCUMENT NUMBER	DOC	STATION	STA
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV		
GRID NORTH	GN	TRANSPORTATION PROJECT	TPP
HIGHWAY EASEMENT	HE	PLAT	
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		
POINT OF COMPOUND CURVE	PCC		

CURVE DATA

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

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ONEIDA COUNTY, NAD 83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

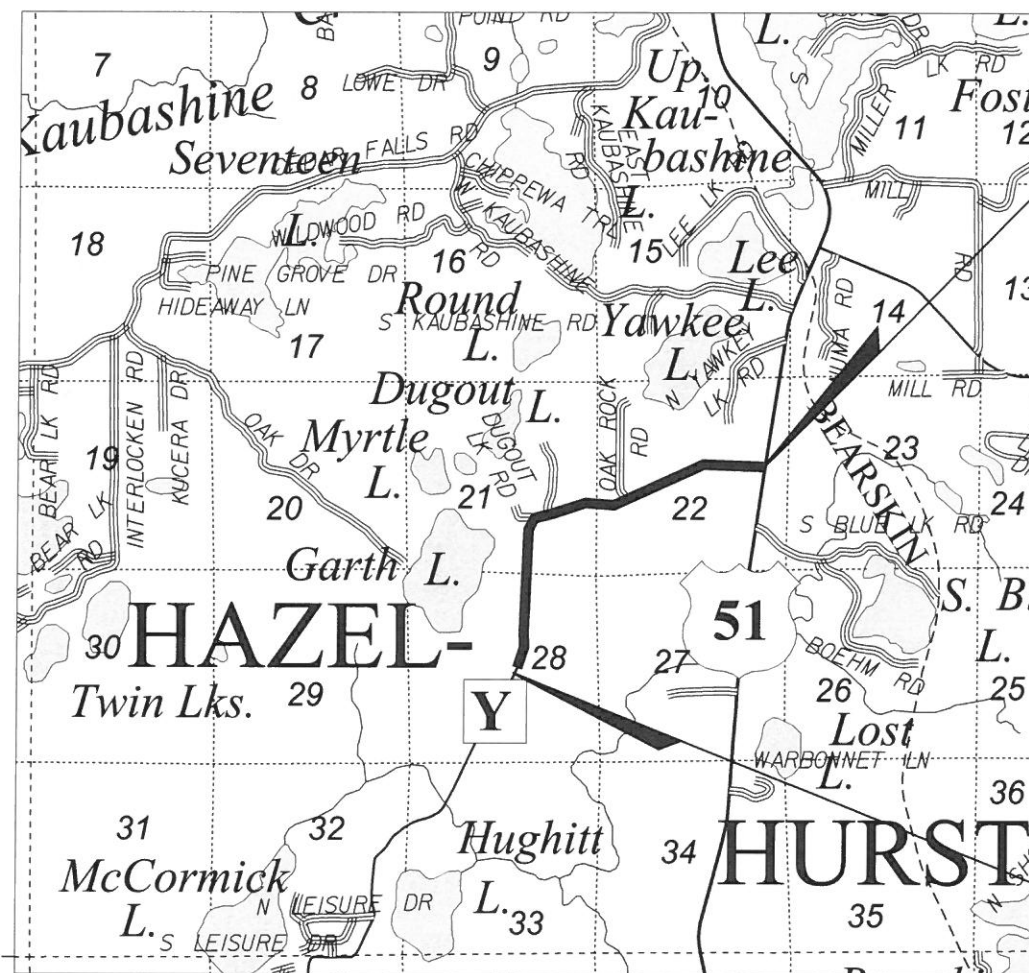
RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENT (TYPICALLY REBAR) AND WILL BE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

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

CONVENTIONAL UTILITY SYMBOLS

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

CAUTION
THIS PLAT IS FOR ILLUSTRATIVE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES.



LAYOUT
SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 2.093 MI.

END RELOCATION ORDER

STA 222+51.21

Y = 212,612.770
X = 185,841.446

190.02' NORTH AND 731.70' WEST OF
THE E. 1/4 CORNER OF SECTION 22
T-38-N, R-6-E

BEGIN RELOCATION ORDER

STA 110+50.00

Y = 206,732.861
X = 178,932.352

395.25' SOUTH AND 2,371.64' WEST OF
THE E. 1/4 CORNER OF SECTION 28
T-38-N, R-6-E

R/W PROJECT NUMBER 9465-00-00	SHEET NUMBER	TOTAL SHEETS
FEDERAL PROJECT NUMBER N/A	4.01	7
PLAT OF RIGHT OF WAY REQUIRED FOR LINCOLN COUNTY LINE - USH 51 S. GARTH LAKE ROAD TO USH 51 CTH Y ONEIDA COUNTY		
CONSTRUCTION PROJECT NUMBER 9465-00-70		

ORIGINAL PLAT PREPARED BY
CORRE
ENGINEERING
1802 WARDEN STREET
EAU CLAIRE, WI 54703
(608)828-1011
www.correinc.com

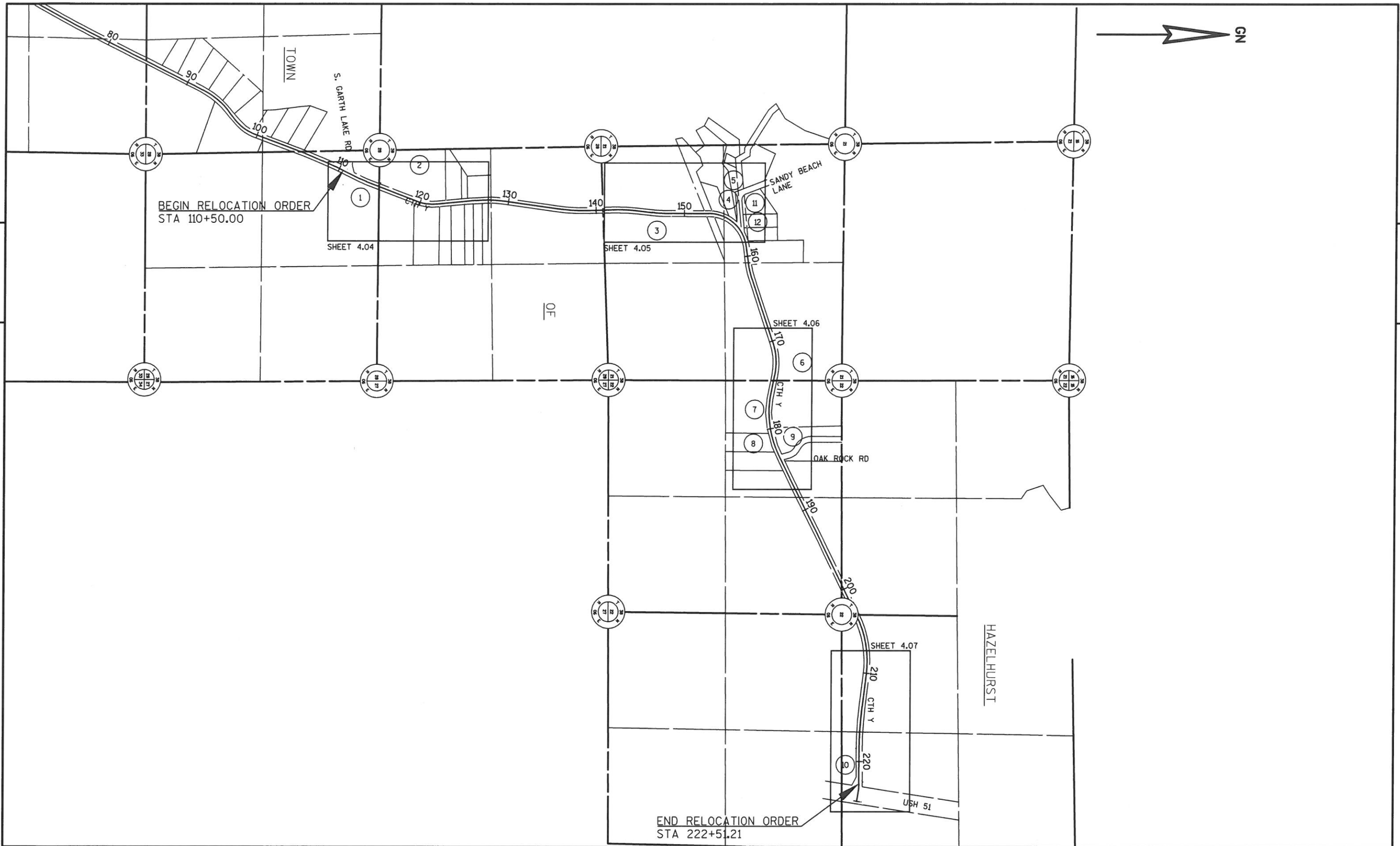


DATE: 3/7/17
Bryon J. Motszko
(Signature)

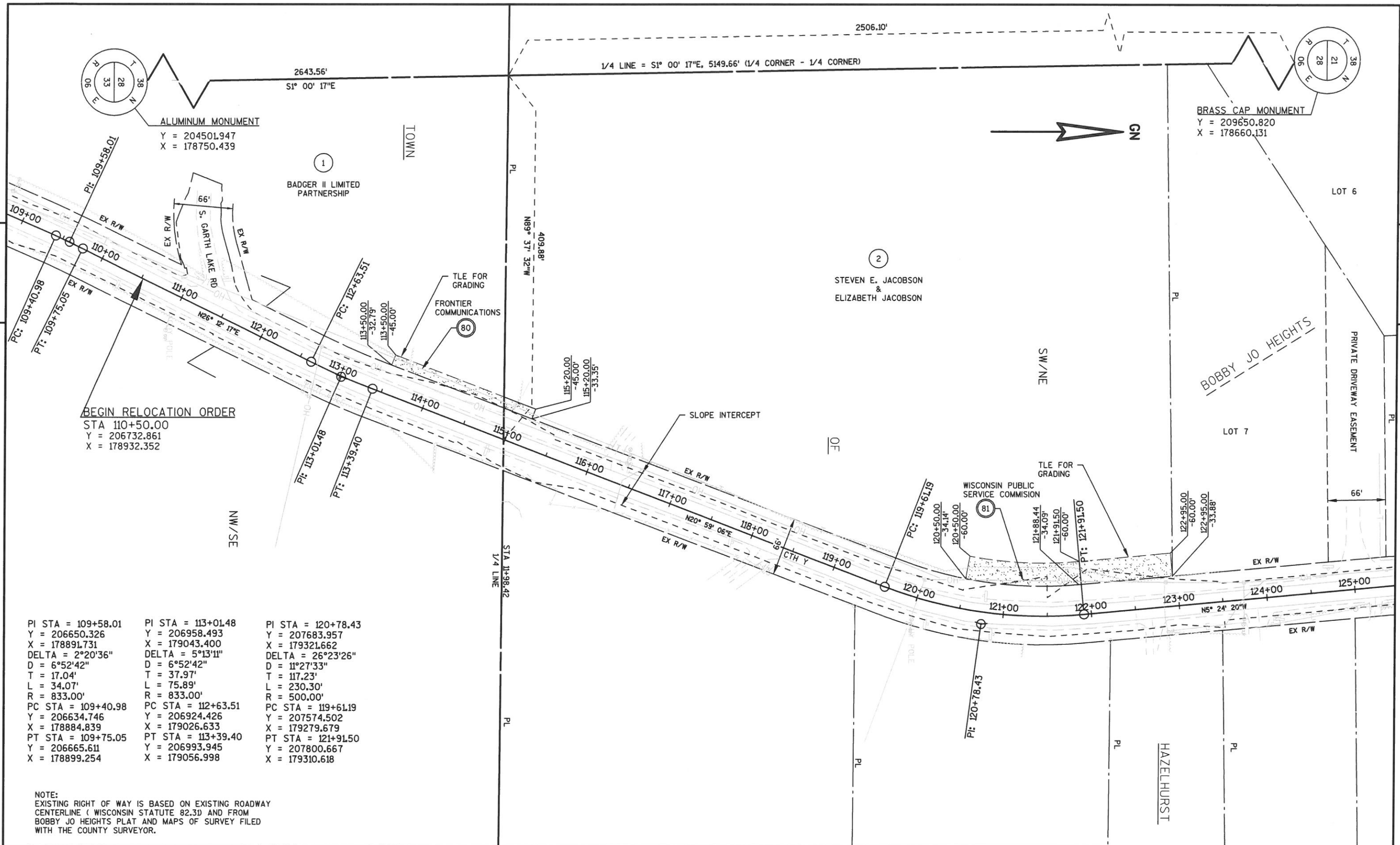
REVISION DATE	ONEIDA COUNTY HIGHWAY DEPARTMENT
APPROVED FOR THE COUNTY	
DATE: 3-23-17	

SCHEDULE OF LANDS & INTERESTS REQUIRED							
PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW AC	R/W EXISTING AC	R/W TOTAL AC	TLE AC
1	4.04	BADGER II LIMITED PARTNERSHIP	TLE	---	---	---	0.04
2	4.04	STEVEN E. JOCOBSON & ELIZABETH JACOBSON	TLE	---	---	---	0.15
3	4.05	JAMES SANTARIUS & JANET SANTARIUS	TLE	---	---	---	0.09
4	4.05	APRIL A. STONIS, JOHN W. STONIS, SUE ANN STONIS, CAROL LYNNE KOPCA	FEE	0.04	---	0.04	---
5	4.05	MARK W. JIROUSEK & JOY E. JIROUSEK	FEE	0.01	---	0.01	---
6	4.06	HUGO A. HOEHN & NANCY B. HOEHN	TLE	---	---	---	0.13
7	4.06	NEIL S. MANDEL AS TRUSTEE OF THE MANDEL REVOCABLE TRUST DATED MARCG 8, 2011	TLE	---	---	---	0.14
8	4.06	ALEC JOSEPH NELSON	TLE	---	---	---	0.05
9	4.06	WILLIAM J. BEDARD & TERRI L. BEDARD	TLE	---	---	---	0.11
10	4.07	YAWKEY 4, LLC	TLE	---	---	---	0.13
11	4.05	BENJAMIN R. ZANGERLE & KATHLEEN G. ZANGERLE	TLE	---	---	---	0.04
12	4.05	KEITH HAROLD BULLION & TRUDY BULLION	TLE	---	---	---	0.05
80	4.04, 4.06	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS				
81	4.04, 4.06	WISCONSIN PUBLIC SERVICE COMMISSION	RELEASE OF RIGHTS				

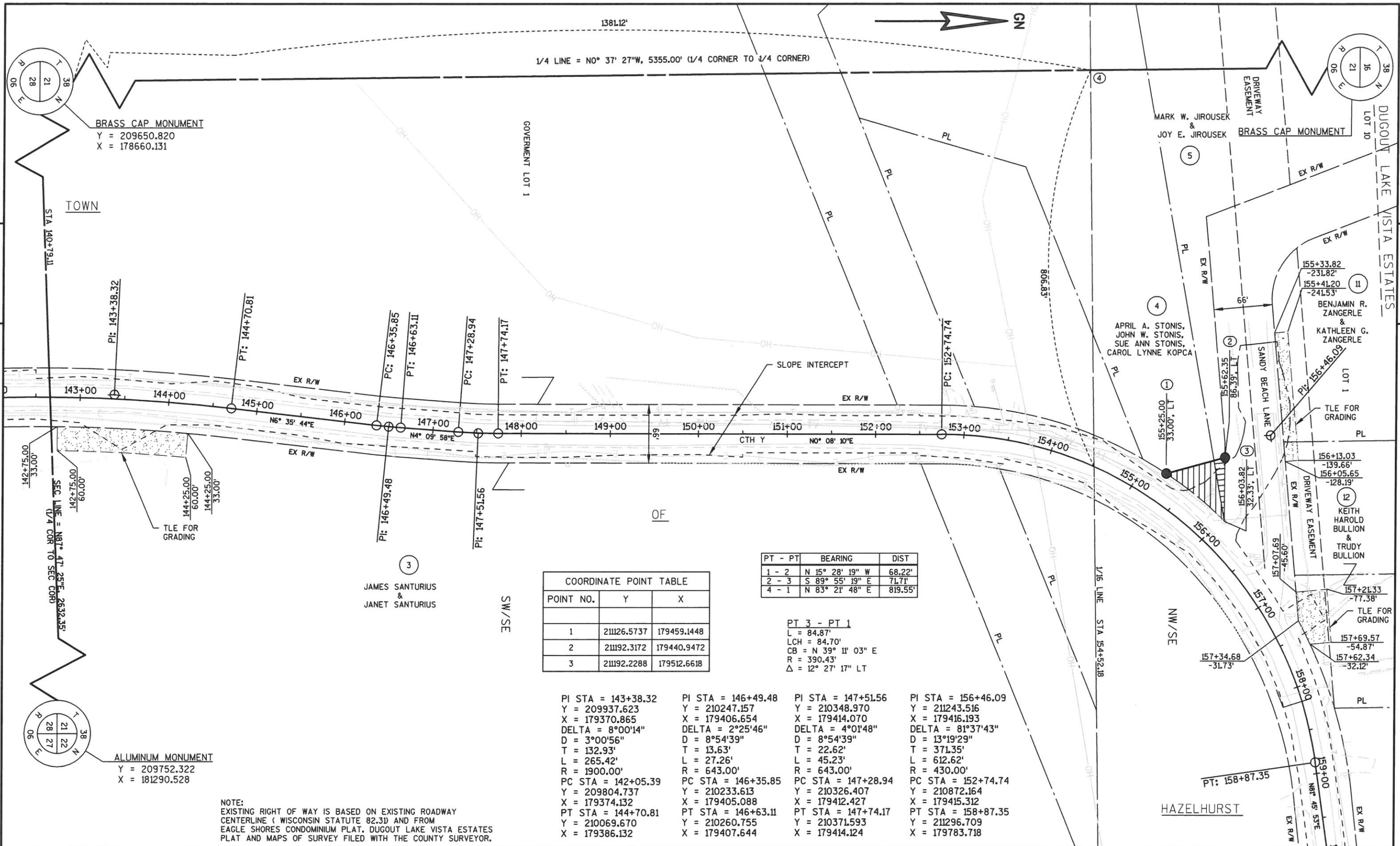
NOTE:
OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE COUNTY.



<div>REVISION DATE</div> <div> <div></div> <div></div> <div></div> <div></div> </div>	<div>DATE 3/7/17</div> <div>GRID FACTOR N/A</div>	<div>SCALE,</div> <div>NOT TO SCALE</div>	<div>HWY: CTH Y</div> <div>COUNTY: ONEIDA</div>	<div>STATE R/W PROJECT NUMBER 9465-00-00</div> <div>CONSTRUCTION PROJECT NUMBER 9465-00-70</div>	<div>PLAT SHEET 4.03</div> <div>PS&E SHEET</div>	<div>E</div>
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REVISION DATE	DATE 3/7/17	SCALE, FEET	HWY: CTH Y	STATE R/W PROJECT NUMBER 9465-00-00	PLAT SHEET 4.04
	GRID FACTOR N/A	0 50 100	COUNTY: ONEIDA	CONSTRUCTION PROJECT NUMBER 9465-00-70	PS&E SHEET
					E



COORDINATE POINT TABLE		
POINT NO.	Y	X
1	21126.5737	179459.1448
2	21192.3172	179440.9472
3	21192.2288	179512.6618

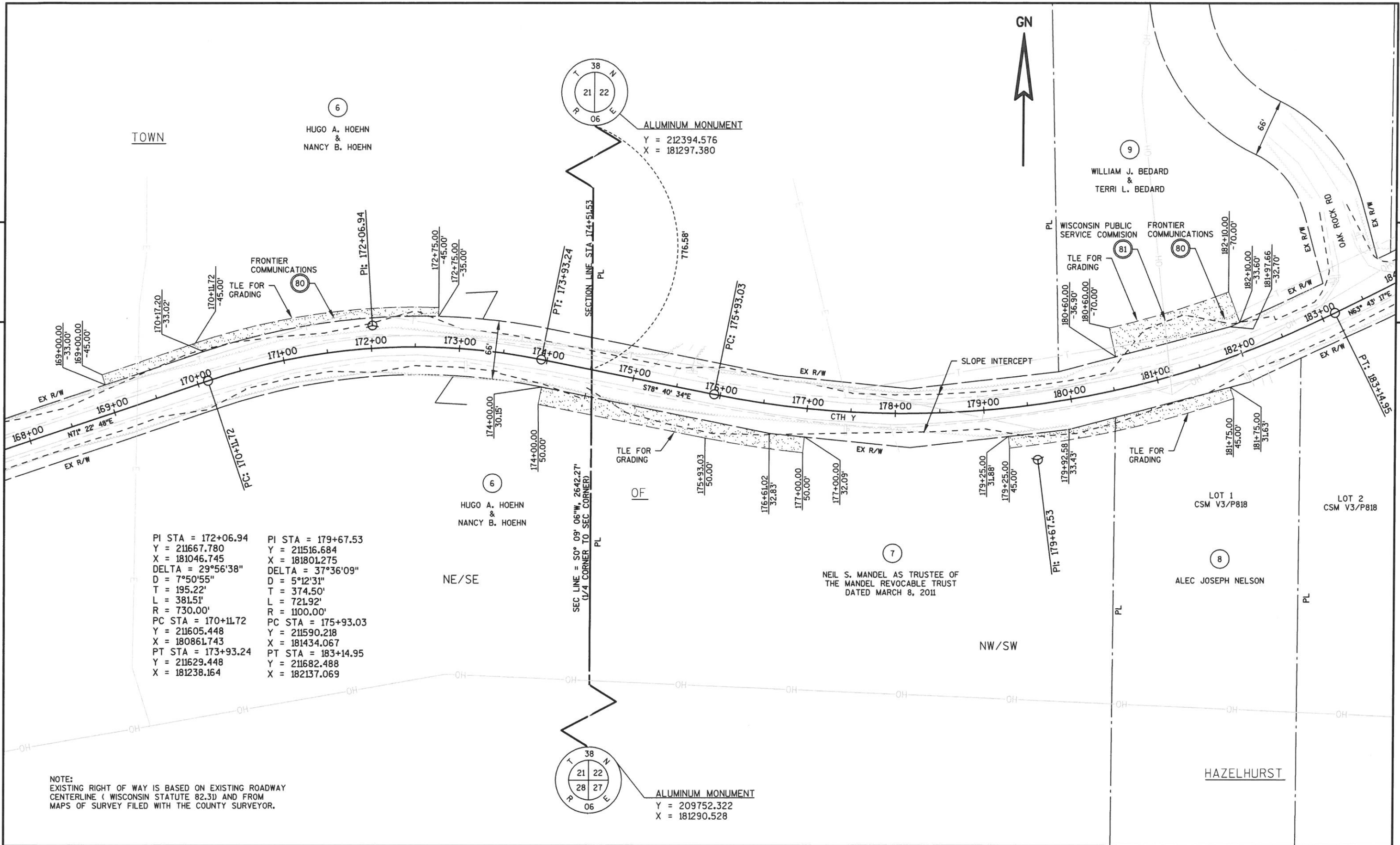
PT - PT	BEARING	DIST
1 - 2	N 15° 28' 19" W	68.22'
2 - 3	S 89° 55' 19" E	71.71'
4 - 1	N 83° 21' 48" E	819.55'

PT 3 - PT 1
 L = 84.87'
 LCH = 84.70'
 CB = N 39° 11' 03" E
 R = 390.43'
 Δ = 12° 27' 17" LT

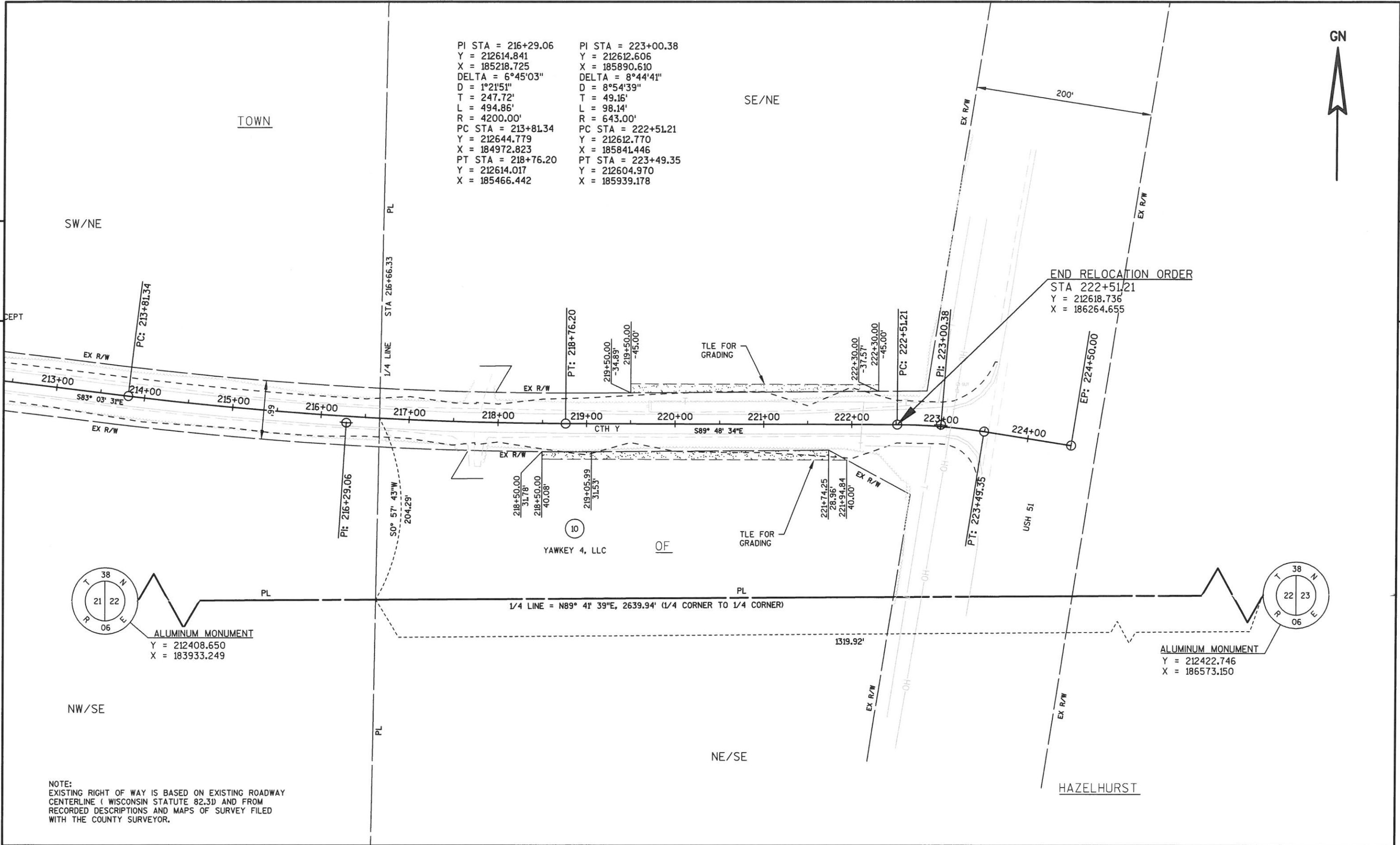
PI STA = 143+38.32 Y = 209937.623 X = 179370.865 DELTA = 8°00'14" D = 3°00'56" T = 132.93' L = 265.42' R = 1900.00' PC STA = 142+05.39 Y = 209804.737 X = 179374.132 PT STA = 144+70.81 Y = 210069.670 X = 179386.132	PI STA = 146+49.48 Y = 210247.157 X = 179406.654 DELTA = 2°25'46" D = 8°54'39" T = 13.63' L = 27.26' R = 643.00' PC STA = 146+35.85 Y = 210233.613 X = 179405.088 PT STA = 146+63.11 Y = 210260.755 X = 179407.644	PI STA = 147+51.56 Y = 210348.970 X = 179414.070 DELTA = 4°01'48" D = 8°54'39" T = 22.62' L = 45.23' R = 643.00' PC STA = 147+28.94 Y = 210326.407 X = 179412.427 PT STA = 147+74.17 Y = 210371.593 X = 179414.124	PI STA = 156+46.09 Y = 211243.516 X = 179416.193 DELTA = 81°37'43" D = 13°19'29" T = 371.35' L = 612.62' R = 430.00' PC STA = 152+74.74 Y = 210872.164 X = 179415.312 PT STA = 158+87.35 Y = 211296.709 X = 179783.718
--	---	---	---

NOTE:
 EXISTING RIGHT OF WAY IS BASED ON EXISTING ROADWAY
 CENTERLINE (WISCONSIN STATUTE 82.3D) AND FROM
 EAGLE SHORES CONDOMINIUM PLAT, DUGOUT LAKE VISTA ESTATES
 PLAT AND MAPS OF SURVEY FILED WITH THE COUNTY SURVEYOR.

REVISION DATE	DATE 3/7/17	SCALE, FEET	HWY: CTH Y	STATE R/W PROJECT NUMBER 9465-00-00	PLAT SHEET 4.05
	GRID FACTOR N/A	0 50 100	COUNTY: ONEIDA	CONSTRUCTION PROJECT NUMBER 9465-00-70	PS&E SHEET E

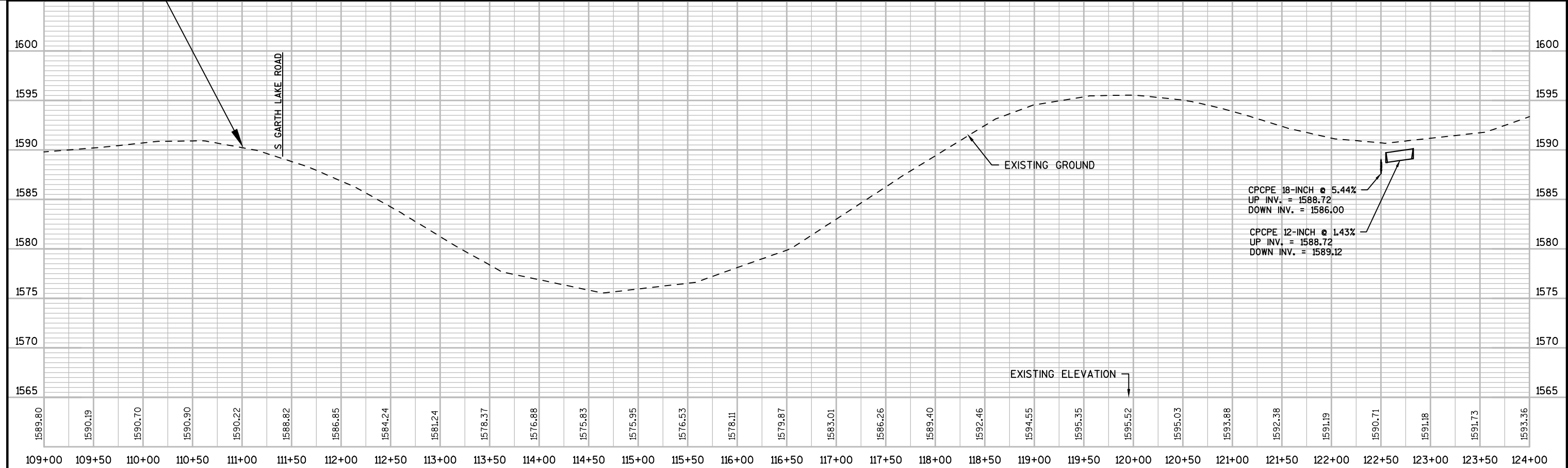
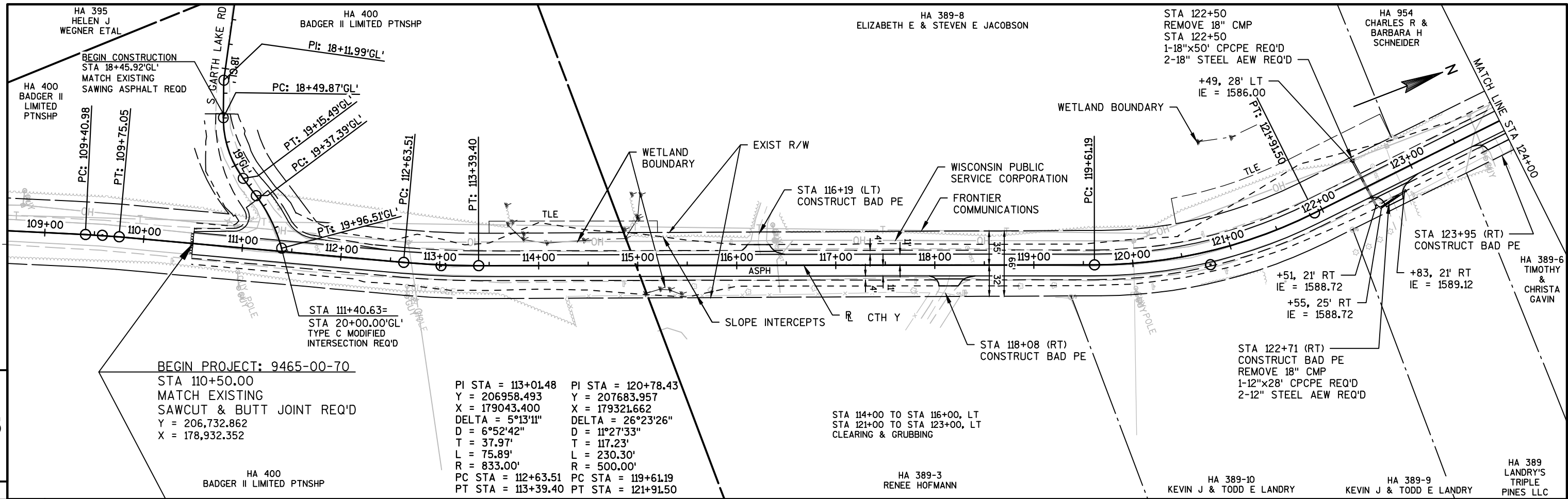


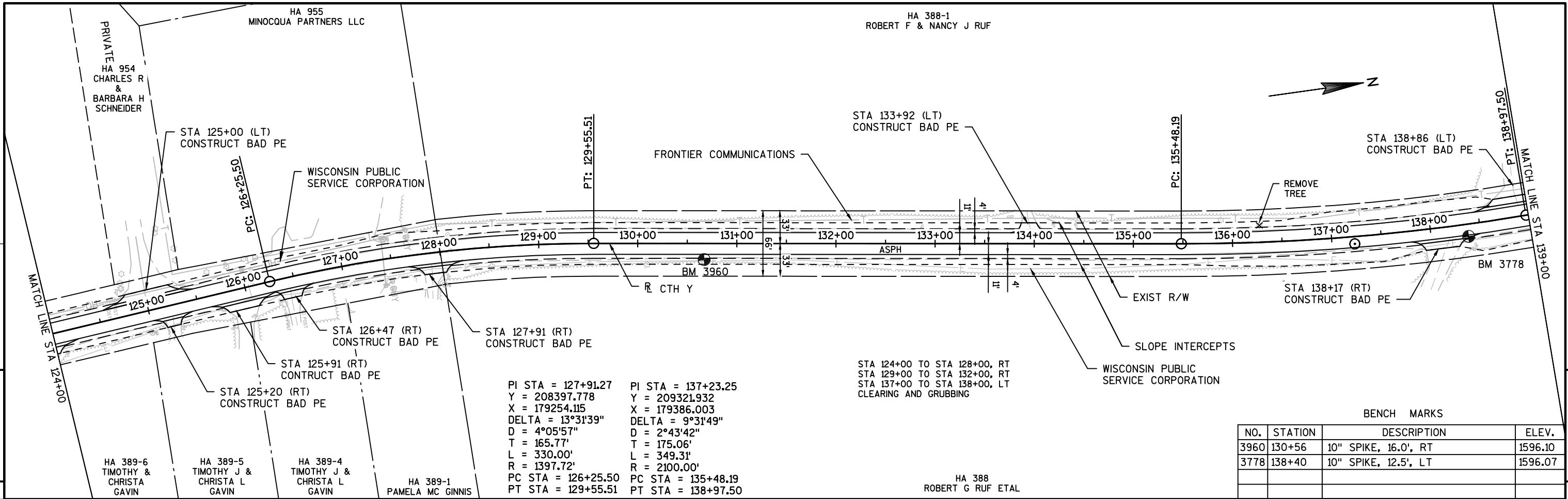
REVISION DATE	DATE 3/7/17	SCALE, FEET	HWY: CTH Y	STATE R/W PROJECT NUMBER 9465-00-00	PLAT SHEET 4.06
	GRID FACTOR N/A	0 50 100	COUNTY: ONEIDA	CONSTRUCTION PROJECT NUMBER 9465-00-70	PS&E SHEET E



NOTE:
EXISTING RIGHT OF WAY IS BASED ON EXISTING ROADWAY
CENTERLINE (WISCONSIN STATUTE 82.3D) AND FROM
RECORDED DESCRIPTIONS AND MAPS OF SURVEY FILED
WITH THE COUNTY SURVEYOR.

REVISION DATE	DATE 3/7/17	SCALE, FEET	HWY: CTH Y	STATE R/W PROJECT NUMBER 9465-00-00	PLAT SHEET 4.07
	GRID FACTOR N/A	0 50 100	COUNTY: ONEIDA	CONSTRUCTION PROJECT NUMBER 9465-00-70	PS&E SHEET

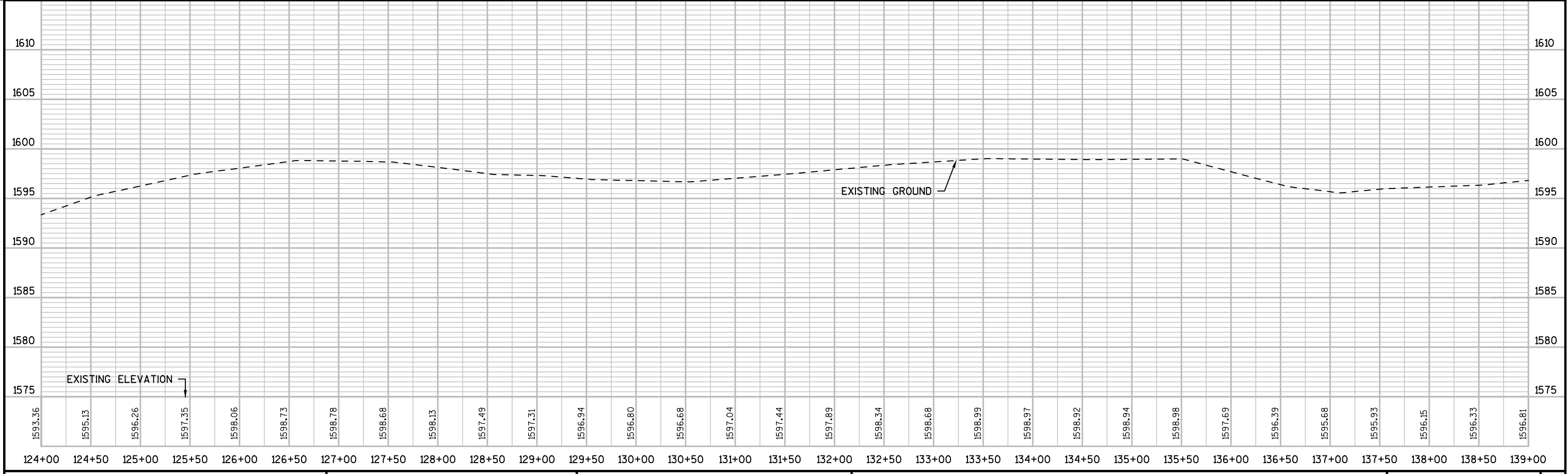


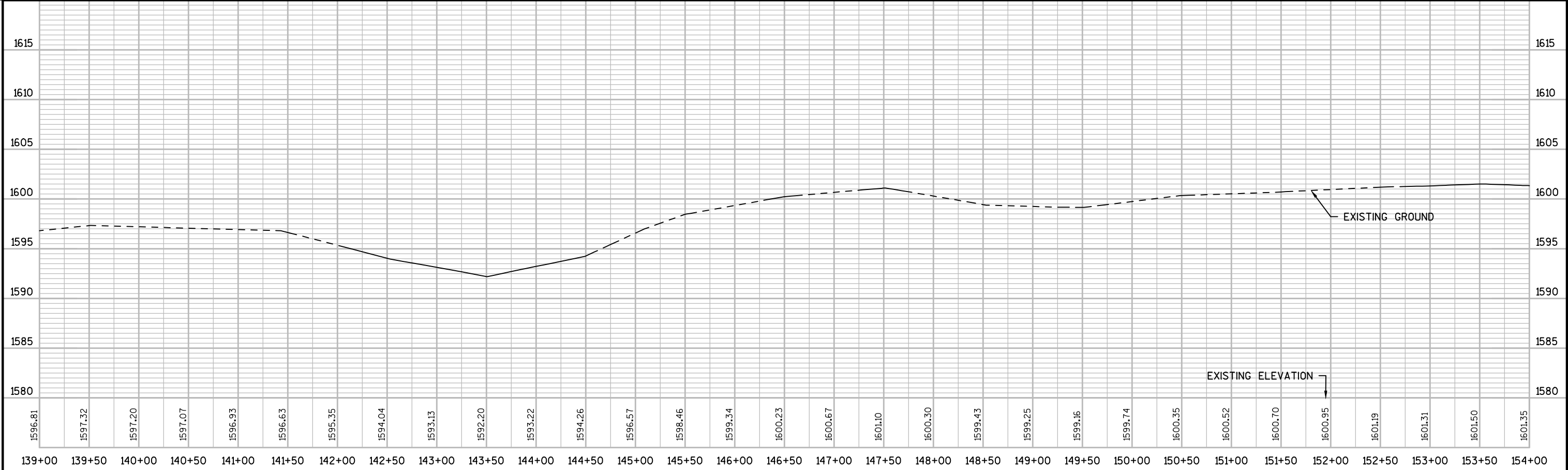
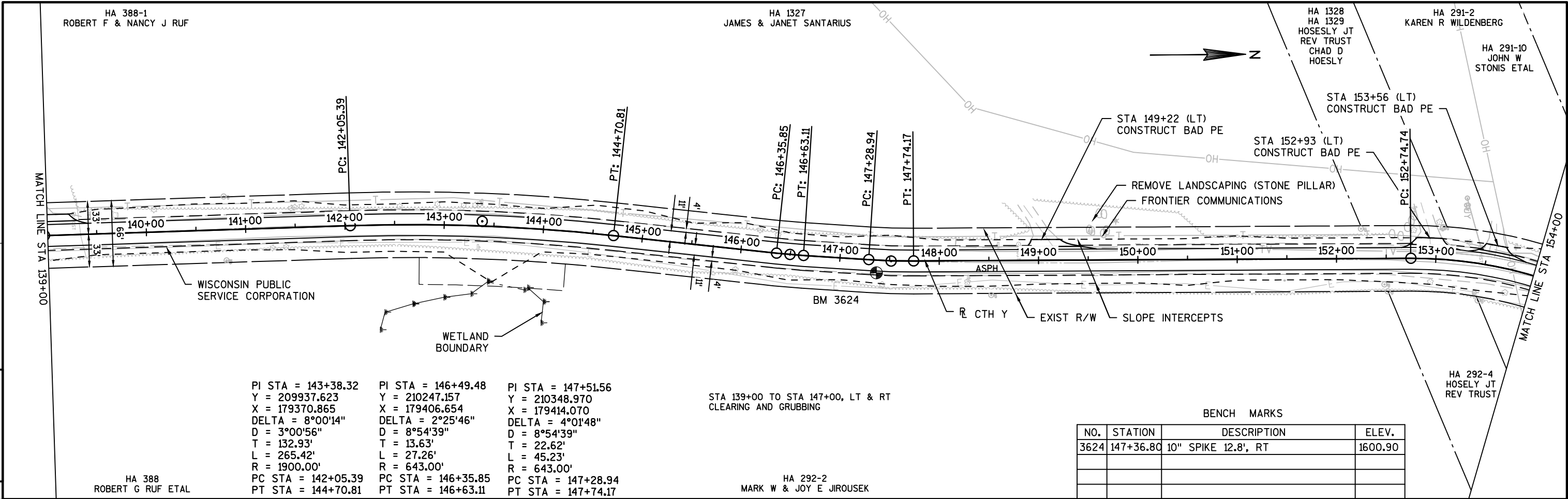


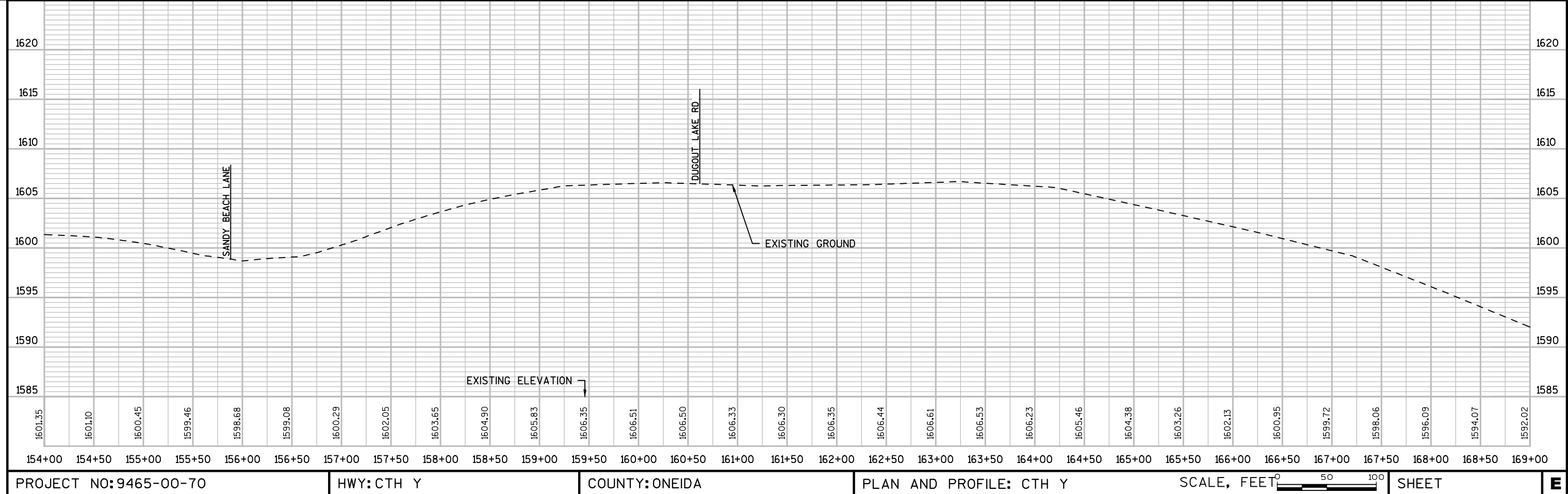
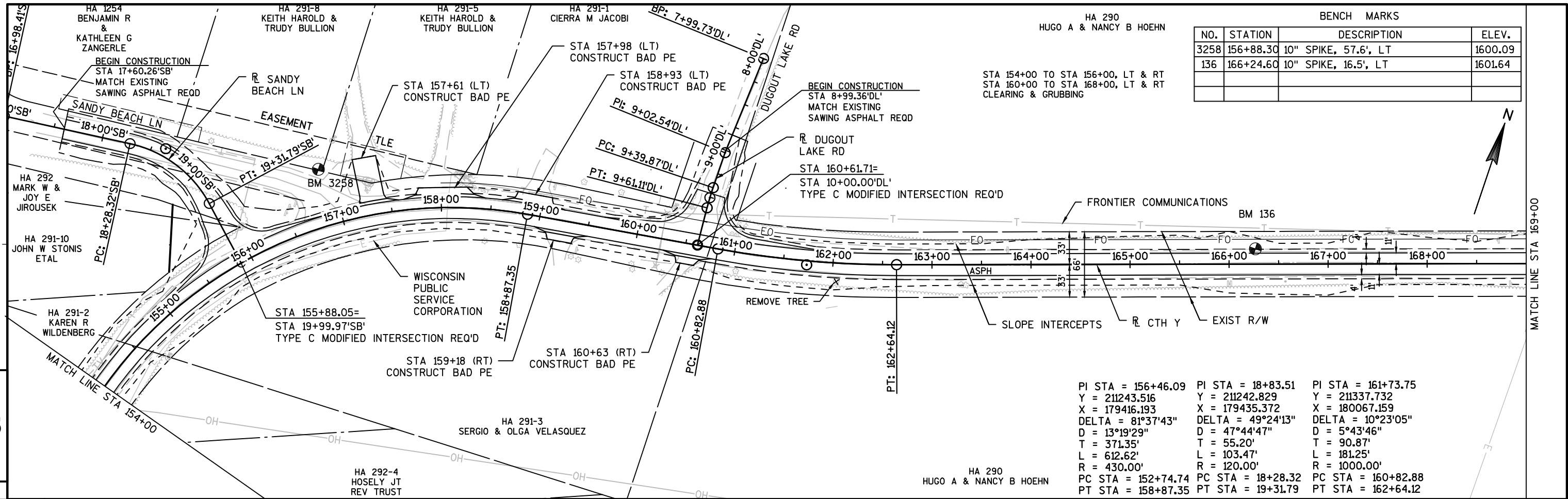
PI STA = 127+91.27	PI STA = 137+23.25
Y = 208397.778	Y = 209321.932
X = 179254.115	X = 179386.003
DELTA = 13°31'39"	DELTA = 9°31'49"
D = 4°05'57"	D = 2°43'42"
T = 165.77'	T = 175.06'
L = 330.00'	L = 349.31'
R = 1397.72'	R = 2100.00'
PC STA = 126+25.50	PC STA = 135+48.19
PT STA = 129+55.51	PT STA = 138+97.50

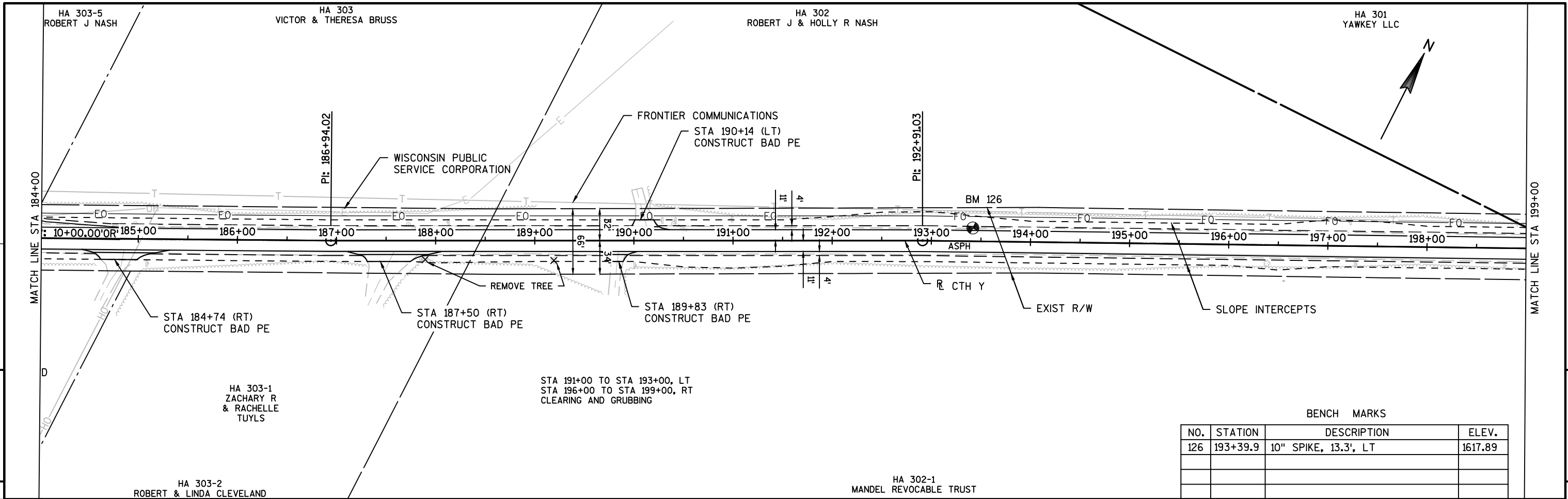
STA 124+00 TO STA 128+00, RT
STA 129+00 TO STA 132+00, RT
STA 137+00 TO STA 138+00, LT
CLEARING AND GRUBBING

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
3960	130+56	10" SPIKE, 16.0', RT	1596.10
3778	138+40	10" SPIKE, 12.5', LT	1596.07

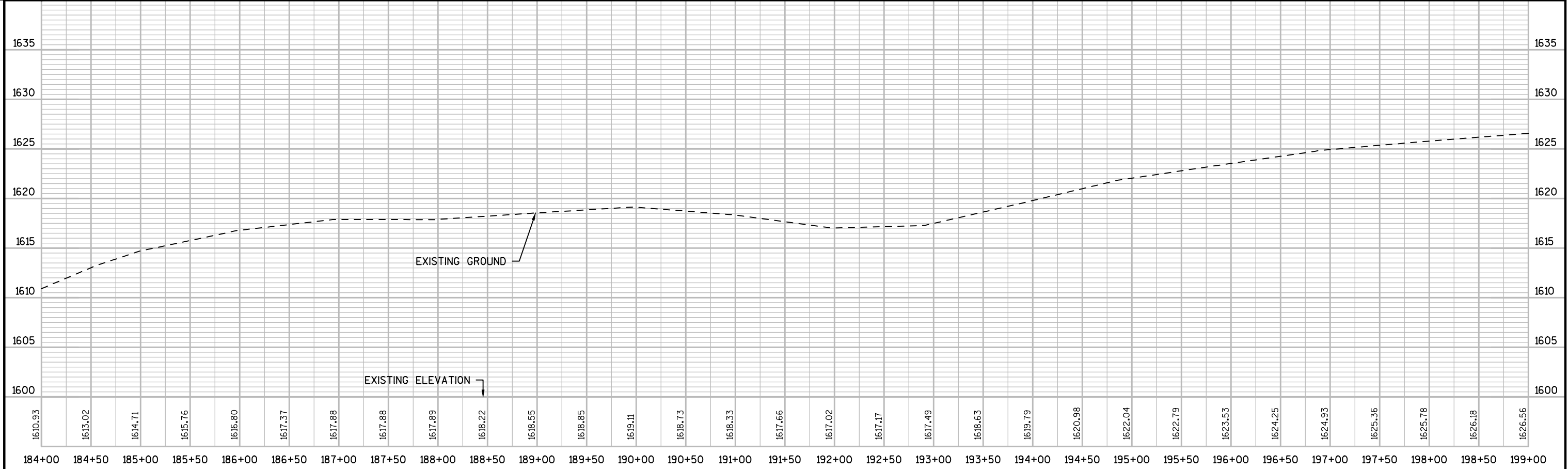


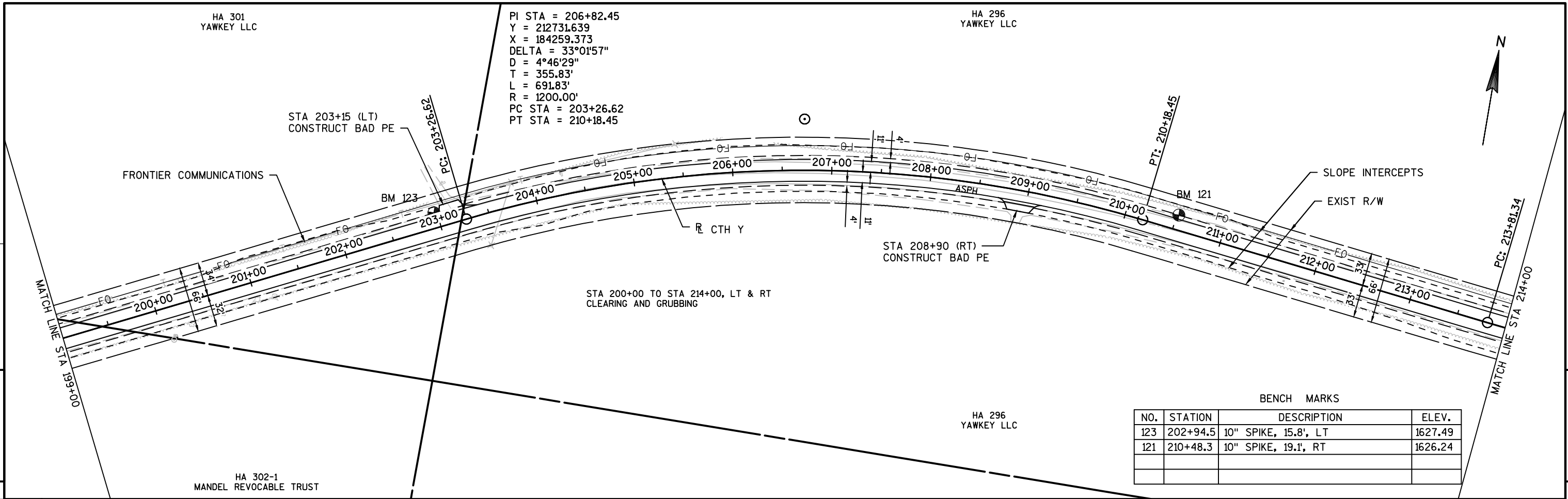




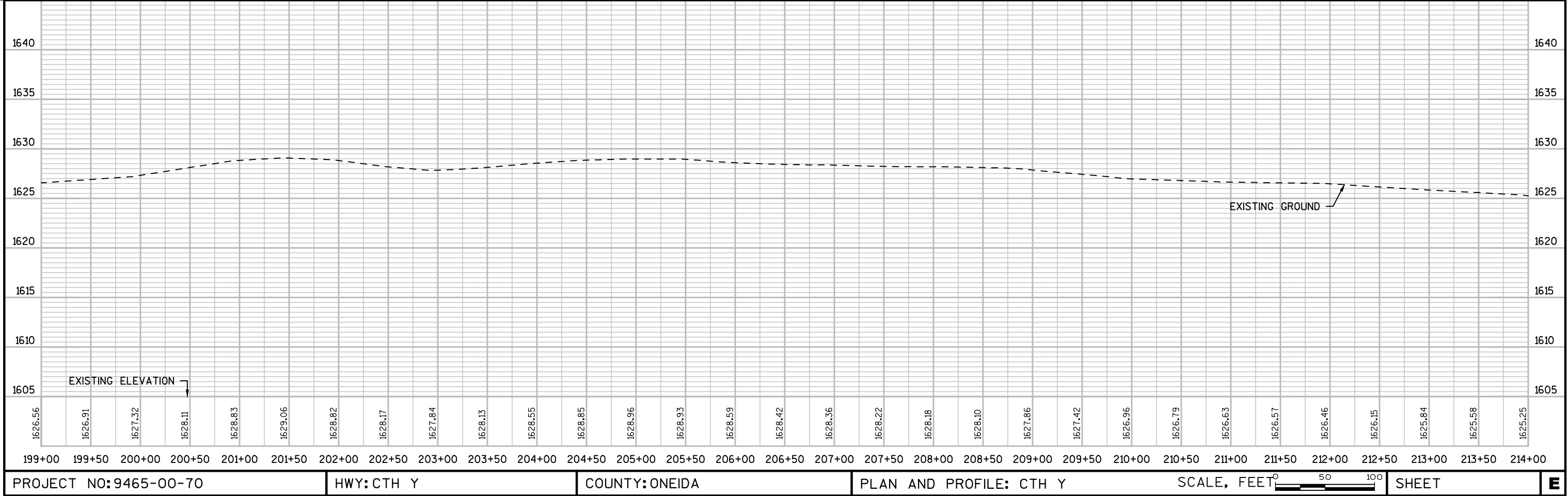


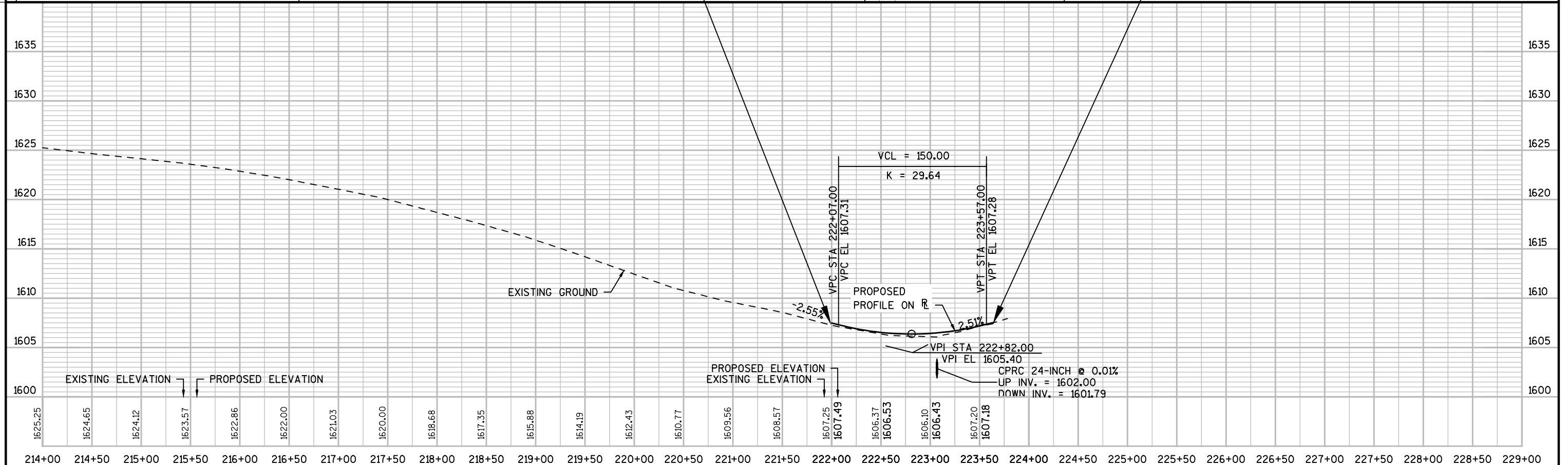
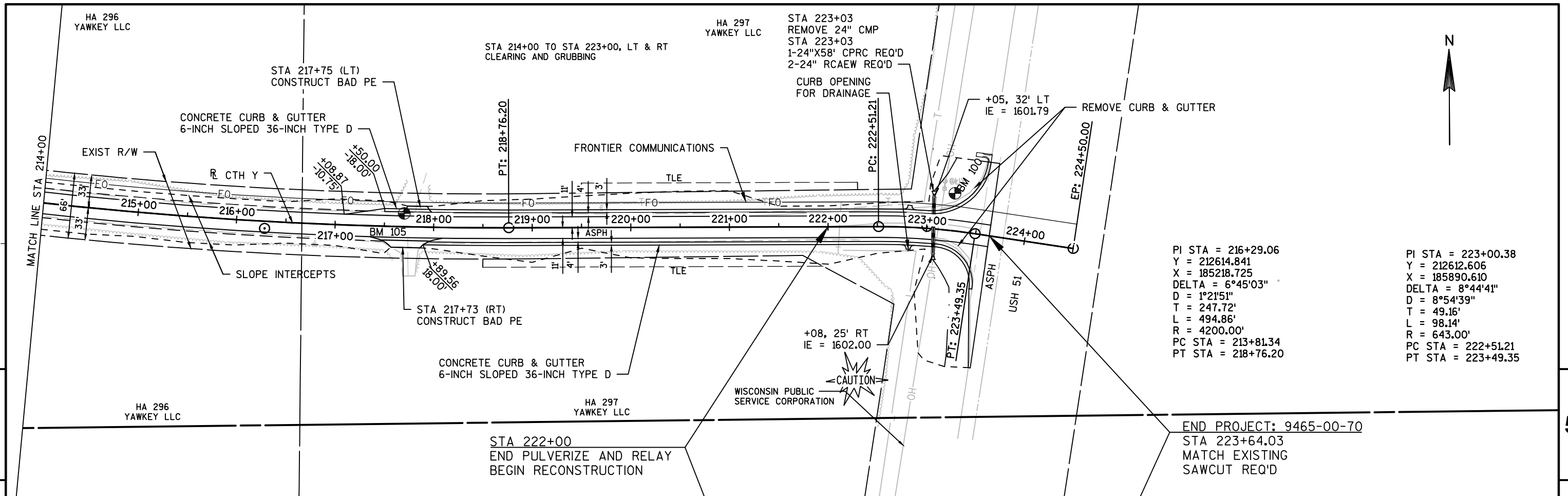
BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
126	193+39.9	10" SPIKE, 13.3', LT	1617.89

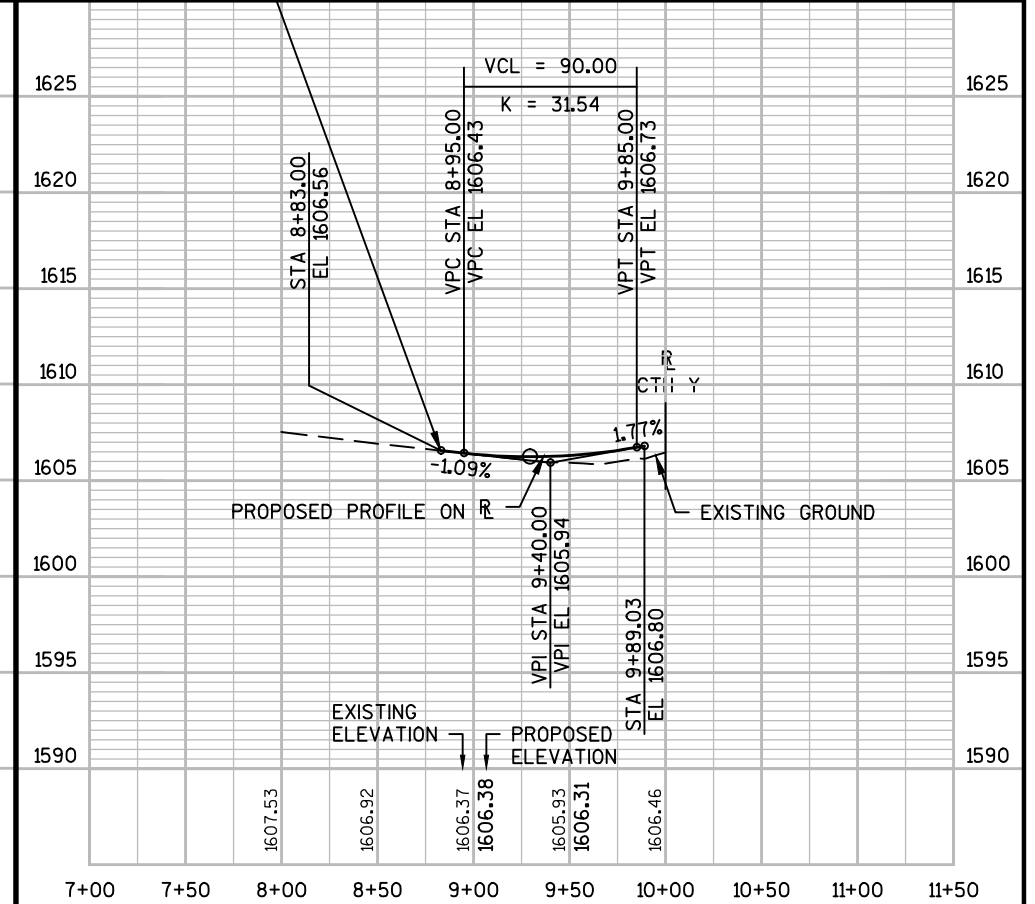
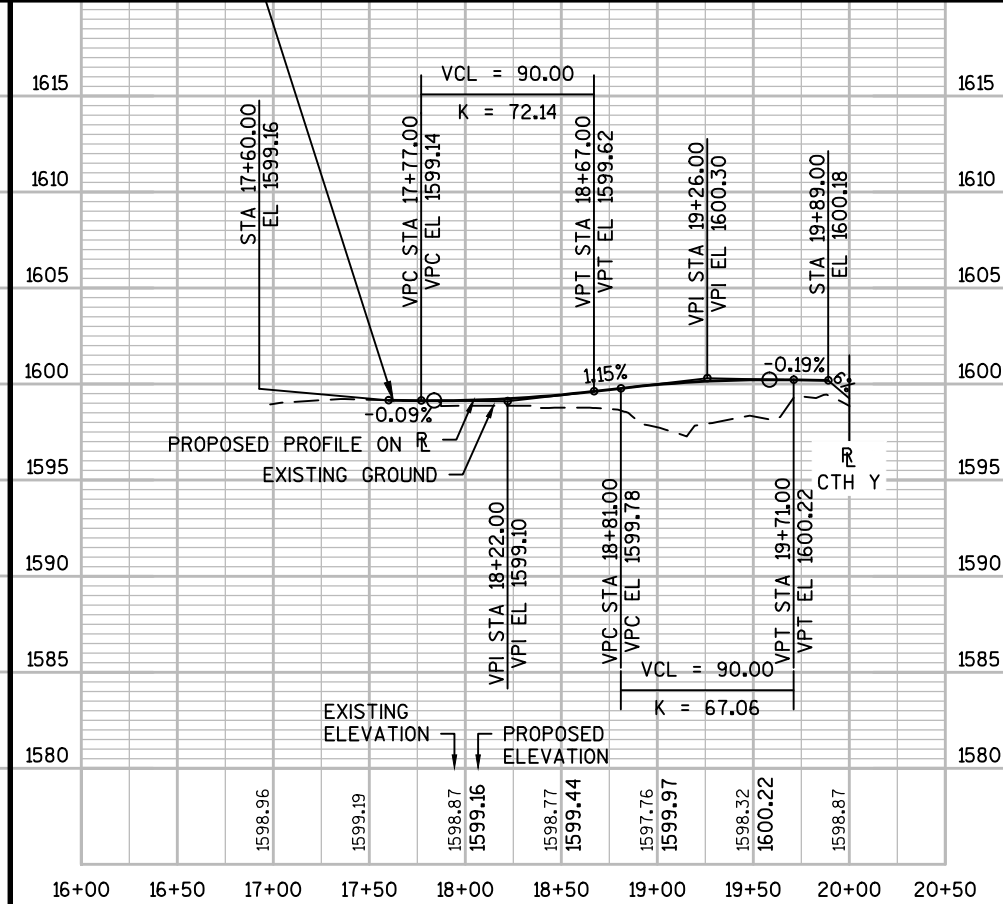
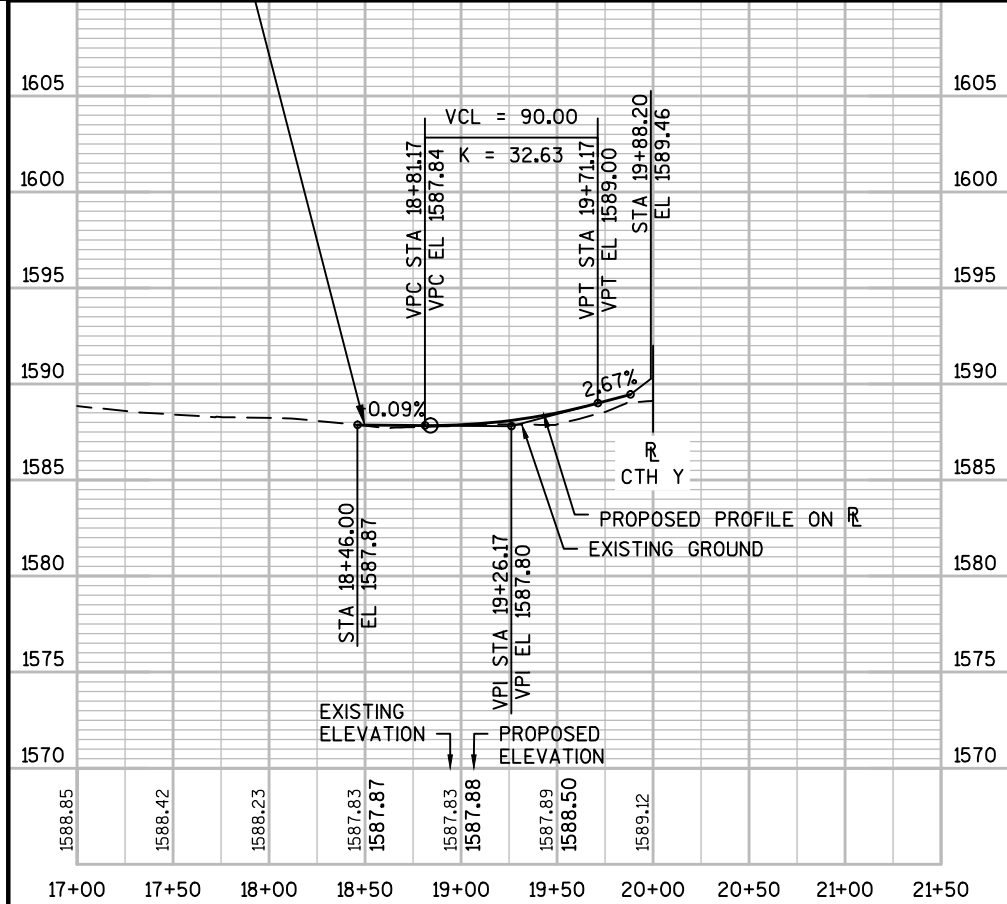
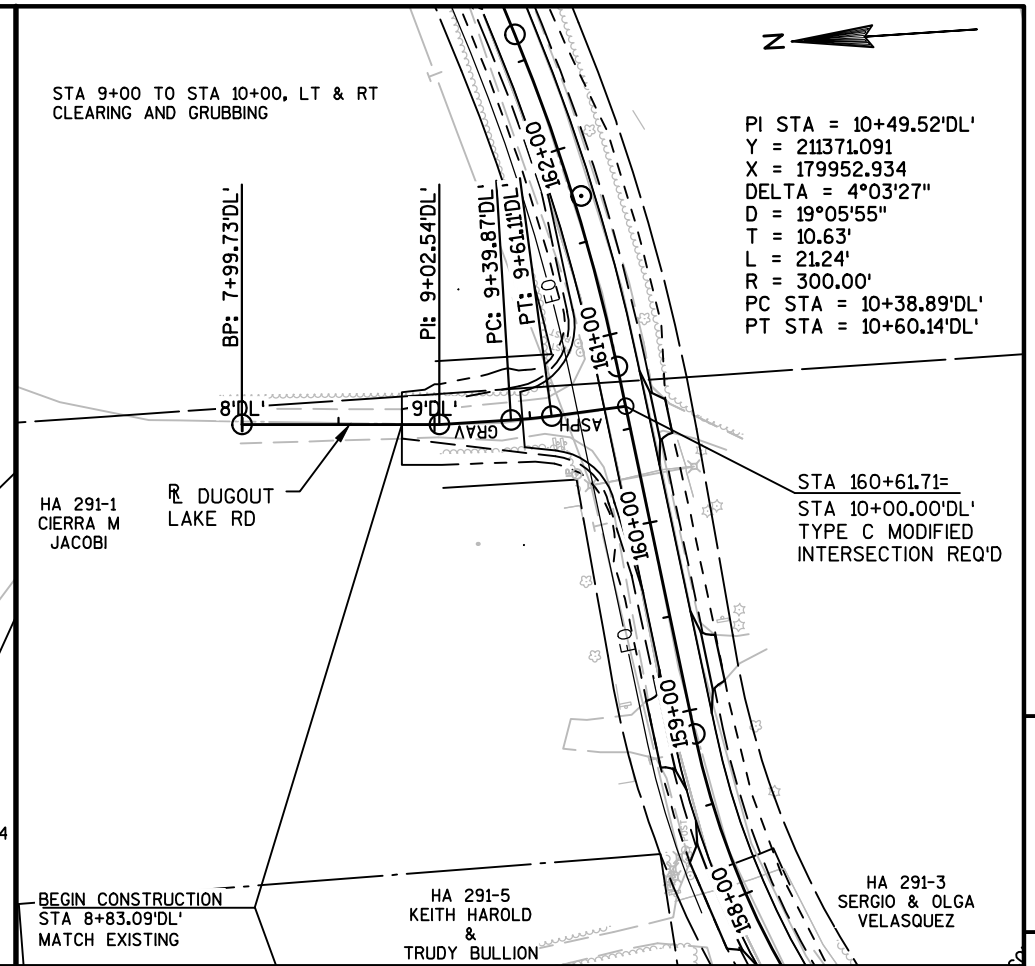
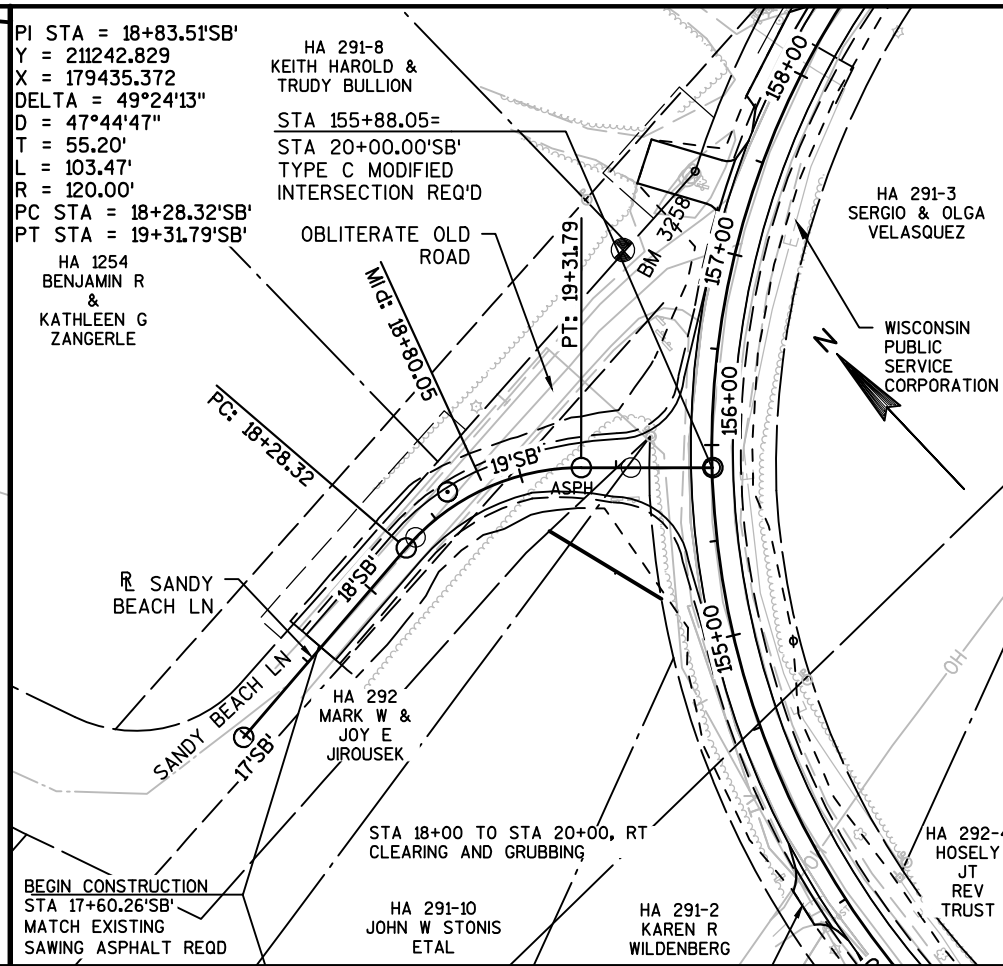
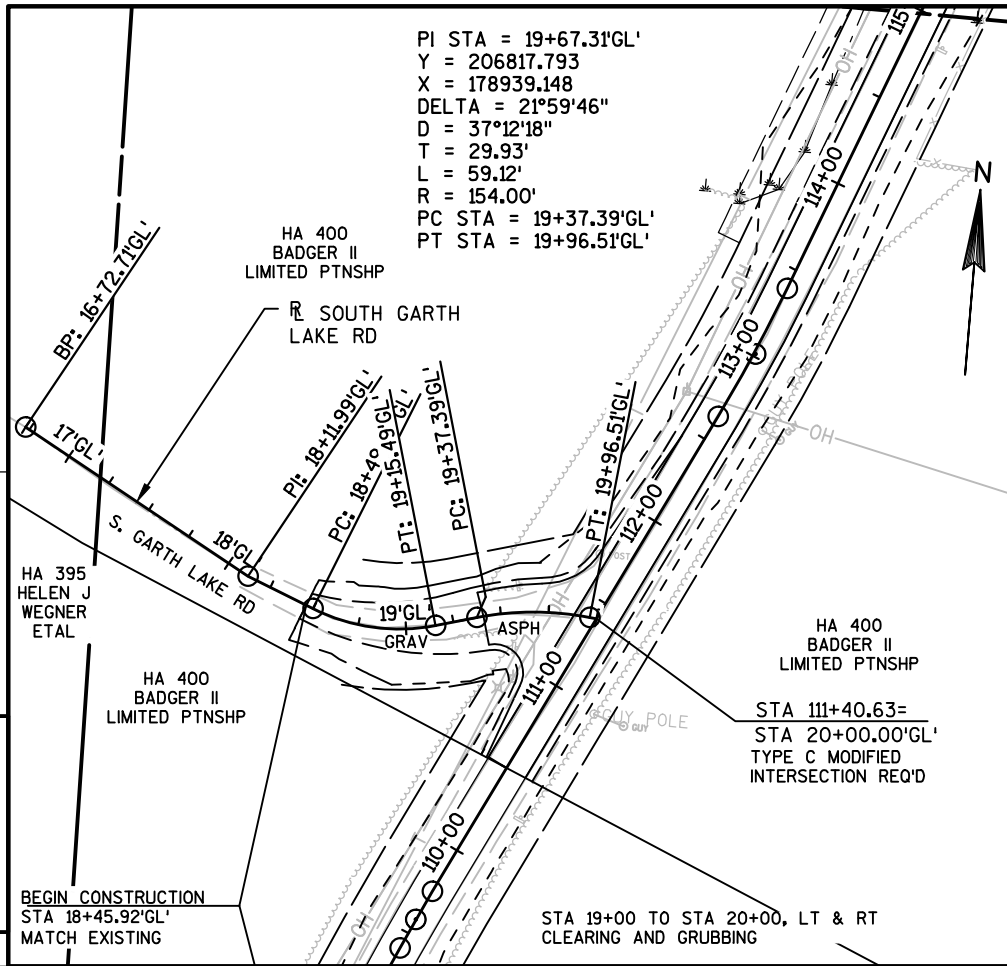




BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
123	202+94.5	10" SPIKE, 15.8', LT	1627.49
121	210+48.3	10" SPIKE, 19.1', RT	1626.24

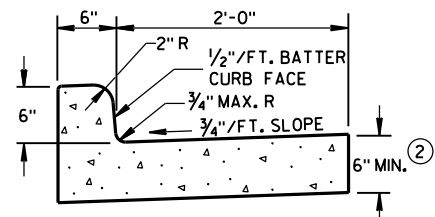




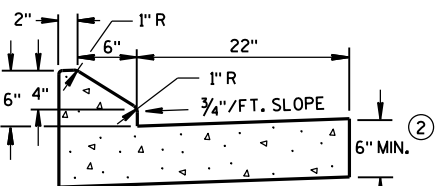


Standard Detail Drawing List

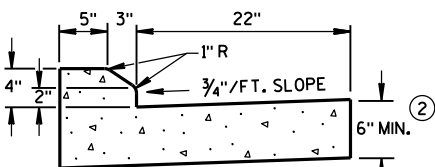
08D01-19	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C12-05	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-04A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-01A	PAVEMENT MARKING (INTERSECTIONS)
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-01A	TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS
15D38-01B	ATTACHMENT OF SIGNS TO POSTS



TYPES A & D ①

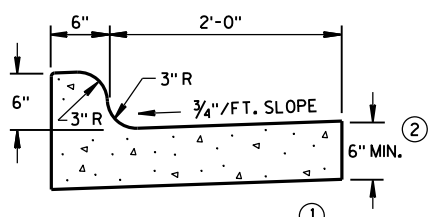


6" SLOPED CURB TYPES G & J ①



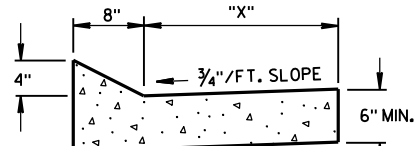
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"



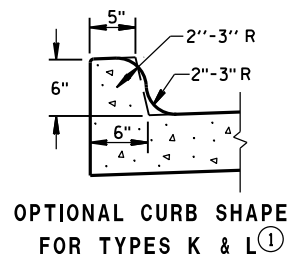
TYPES K & L ①

CONCRETE CURB & GUTTER 30"

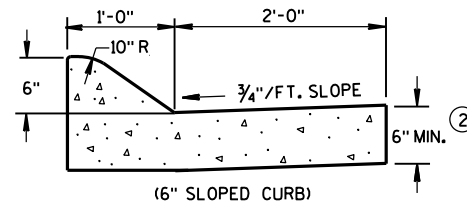


TYPES TBT & TBT ①
CONCRETE CURB & GUTTER

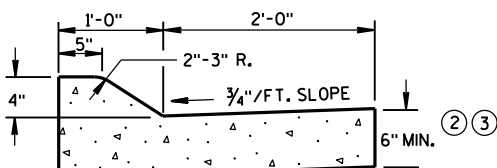
TBT & TBT	"X"
30"	22"
36"	28"



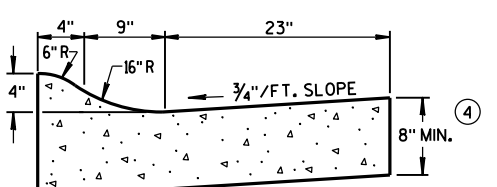
OPTIONAL CURB SHAPE
FOR TYPES K & L ①



(6" SLOPED CURB)

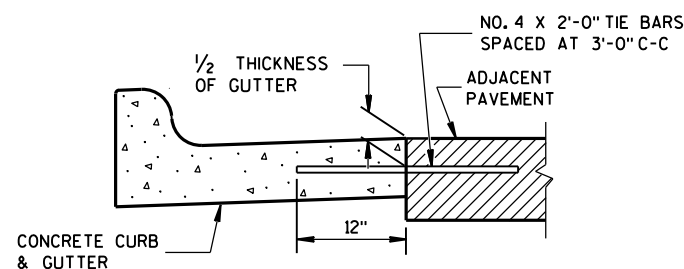


(4" SLOPED CURB)
TYPES A & D ①

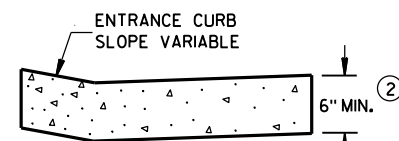


4" SLOPED CURB TYPES R & T ① ⑤

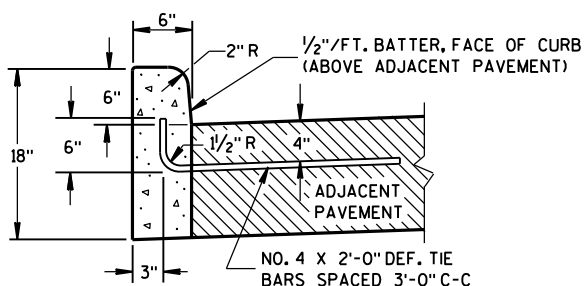
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①

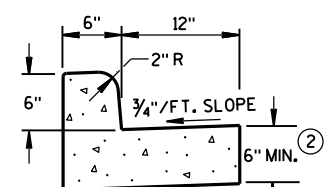


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

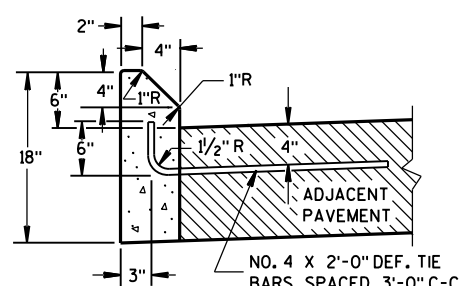


TYPES A & D ①

CONCRETE CURB



TYPES A & D
CONCRETE CURB & GUTTER 18"



TYPES G & J ①

GENERAL NOTES

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

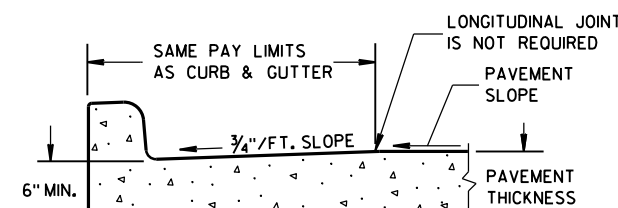
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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.

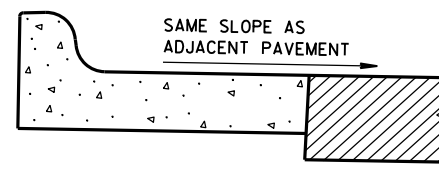
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

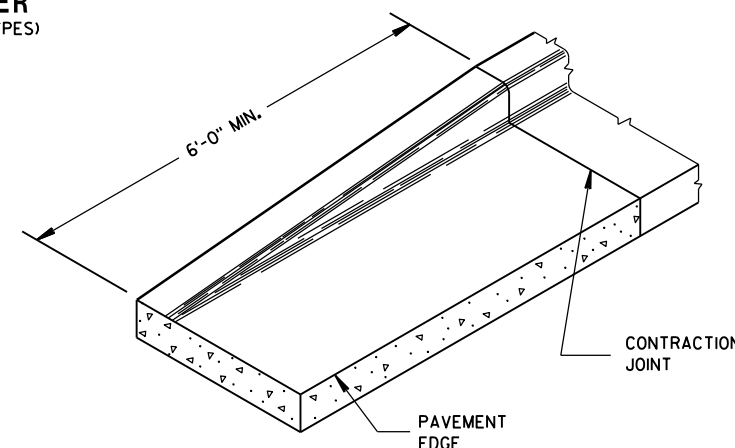
- TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBT.
- THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT 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.



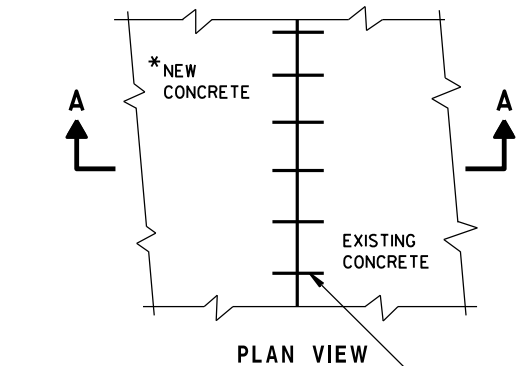
PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



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



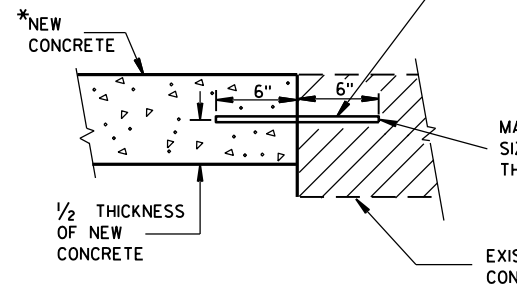
END SECTION CURB & GUTTER



PLAN VIEW

* 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.



SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

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
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

6



PLAN VIEW
FLUME AT CURB END



6

S.D.D. 8 D 4-5

- ① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- ② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- ③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

EXPANSION JOINT

CONCRETE CURB AND GUTTER

2" MIN. CURB HEIGHT

4" R

8'-0"

4'-0"

EDGE OF PAVEMENT

3'-0" MIN.

SURFACE DRAIN IS SYMMETRICAL WHEN CURB AND GUTTER IS CONTINUED

SHOULDER OR BERM HINGE POINT

4'-0"

JOINTS

W3 WIRE MESH (SEE SECTION D-D)

RIPRAP

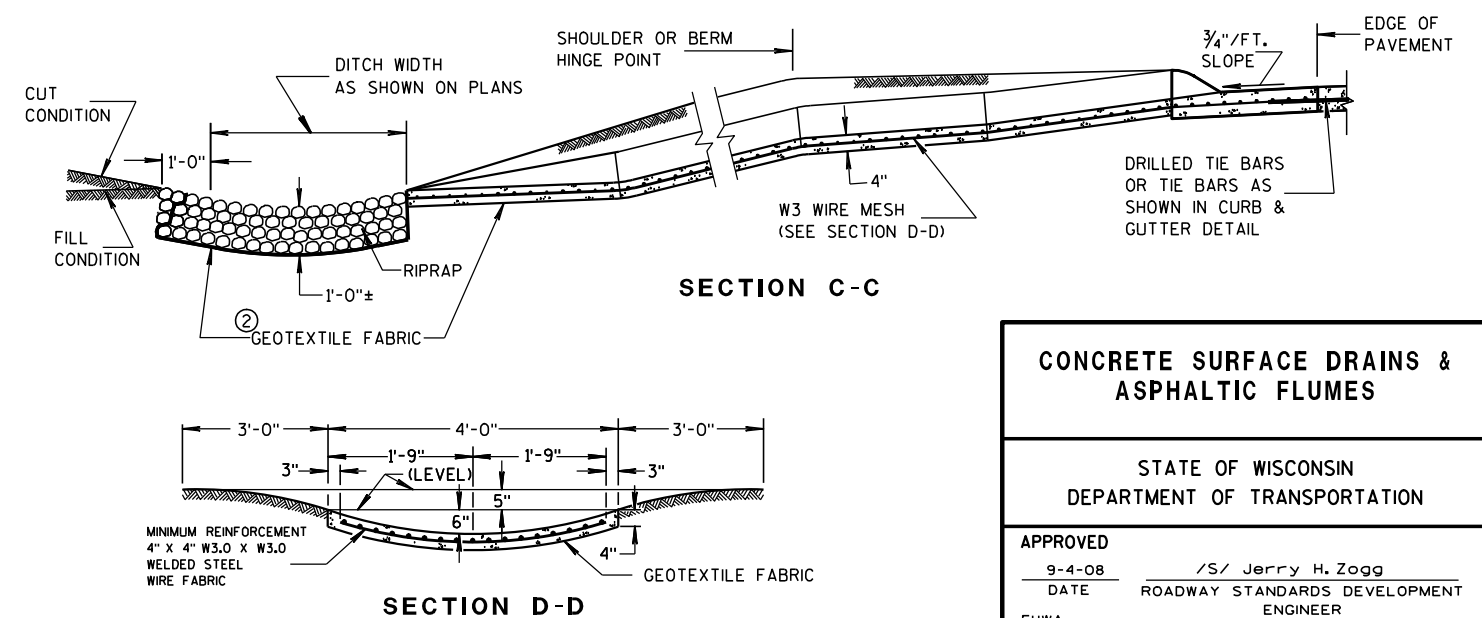
6'-0" OR AS REQUIRED

1'-0" ON CUT SLOPE

DITCH

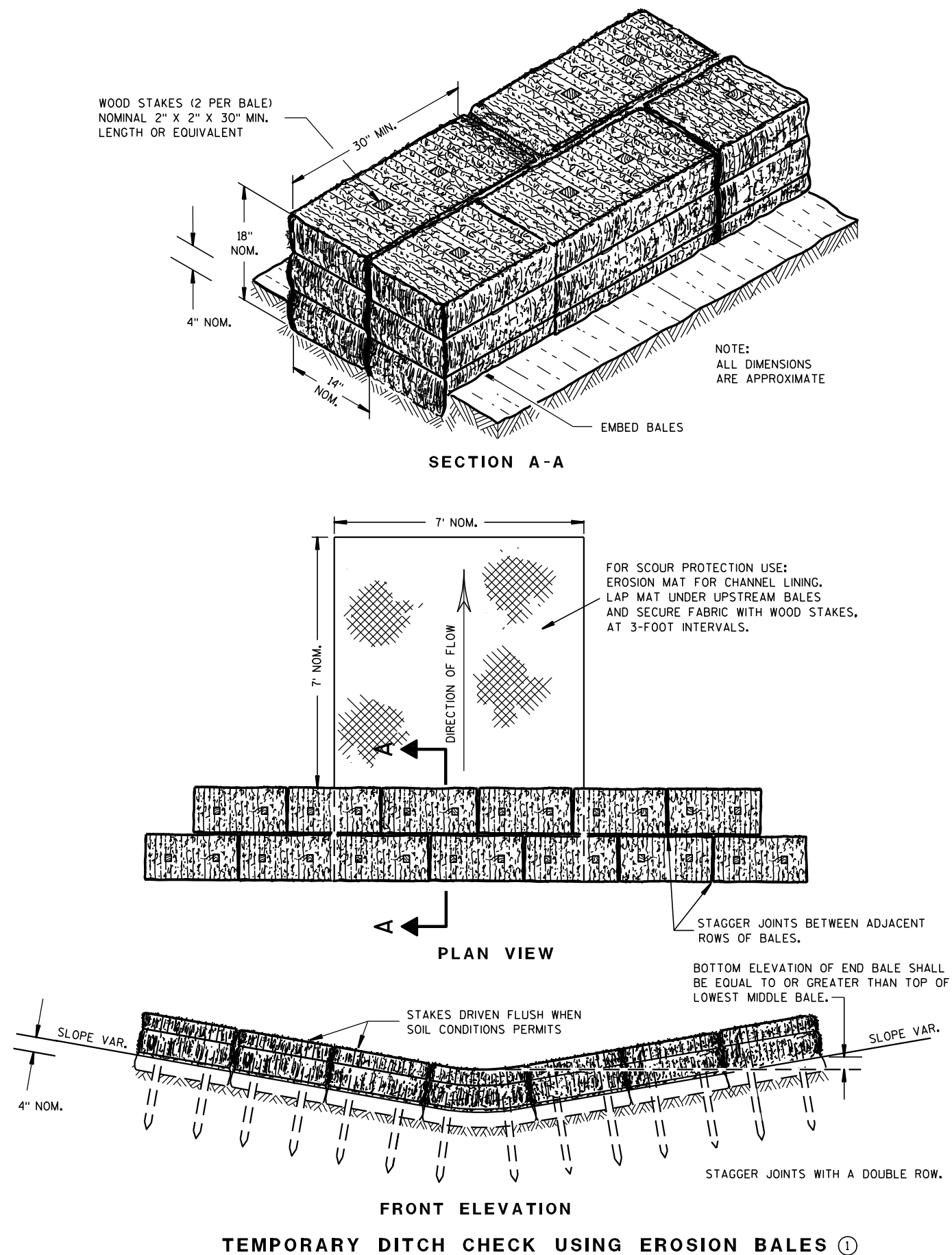
PLAN VIEW

PLAN VIEW



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

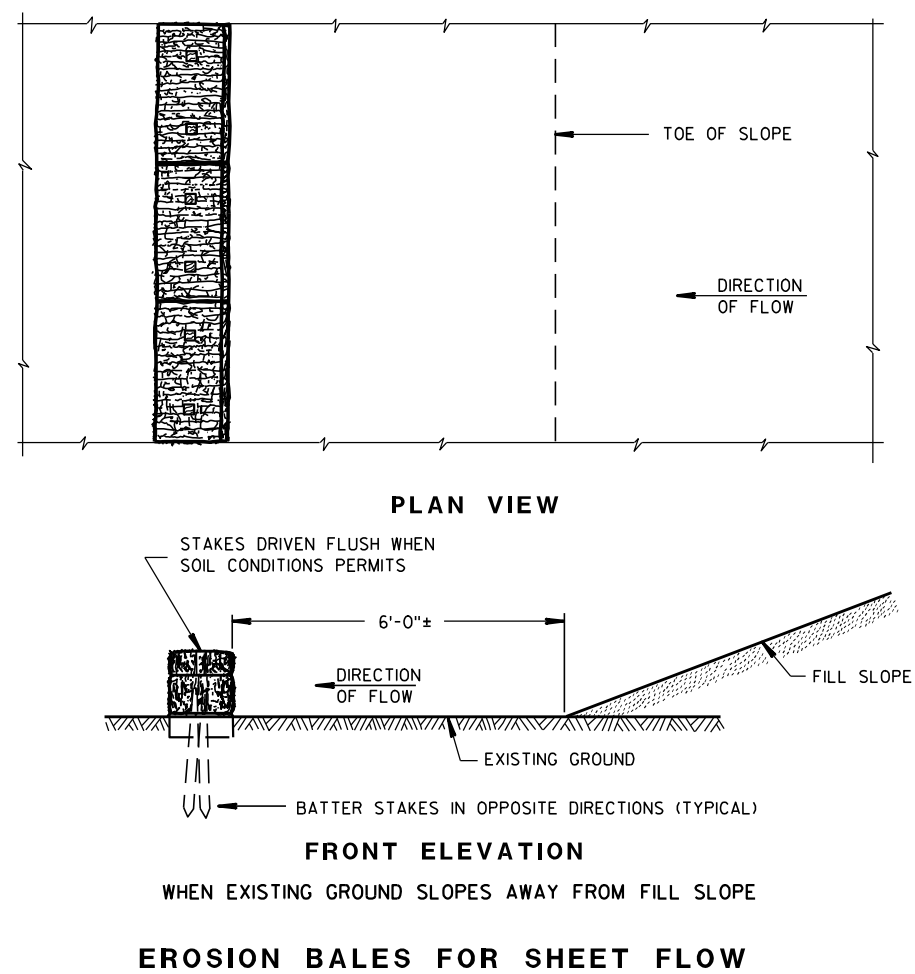
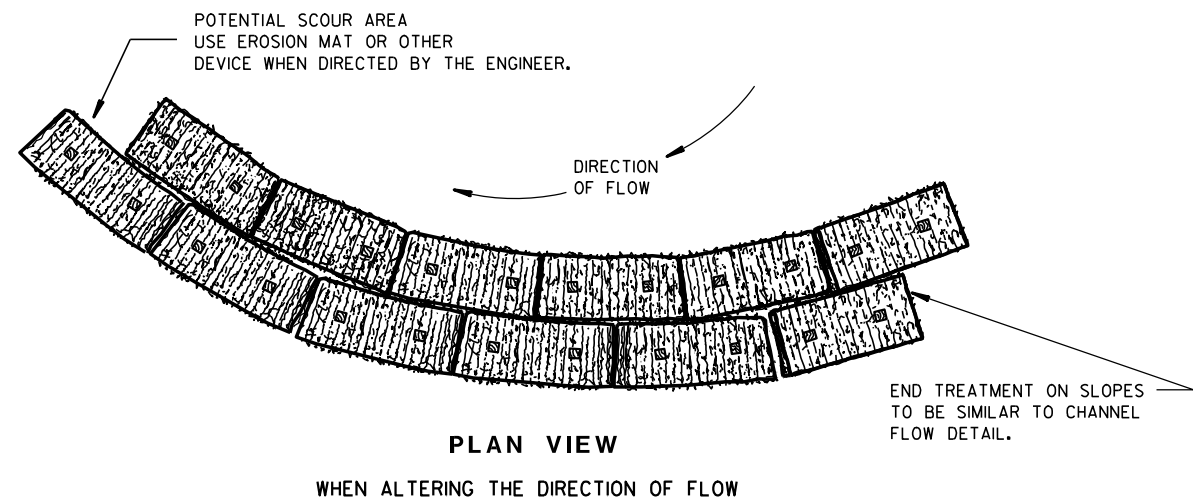
APPROVED
9-4-08 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



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

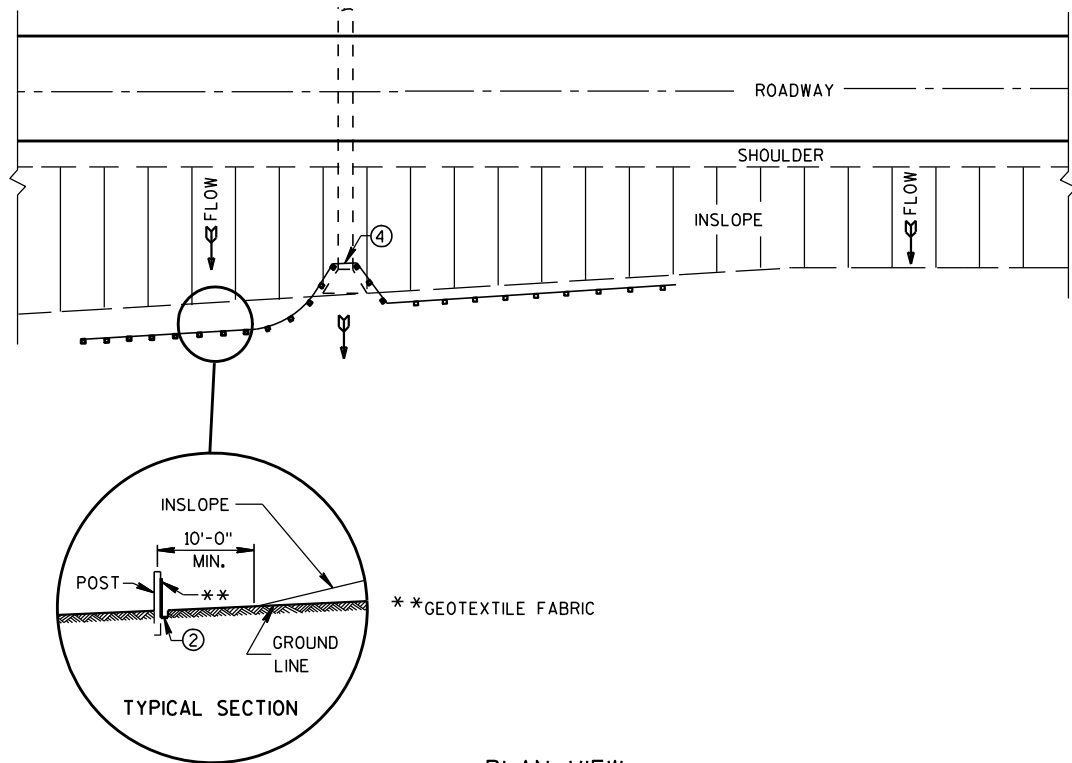
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

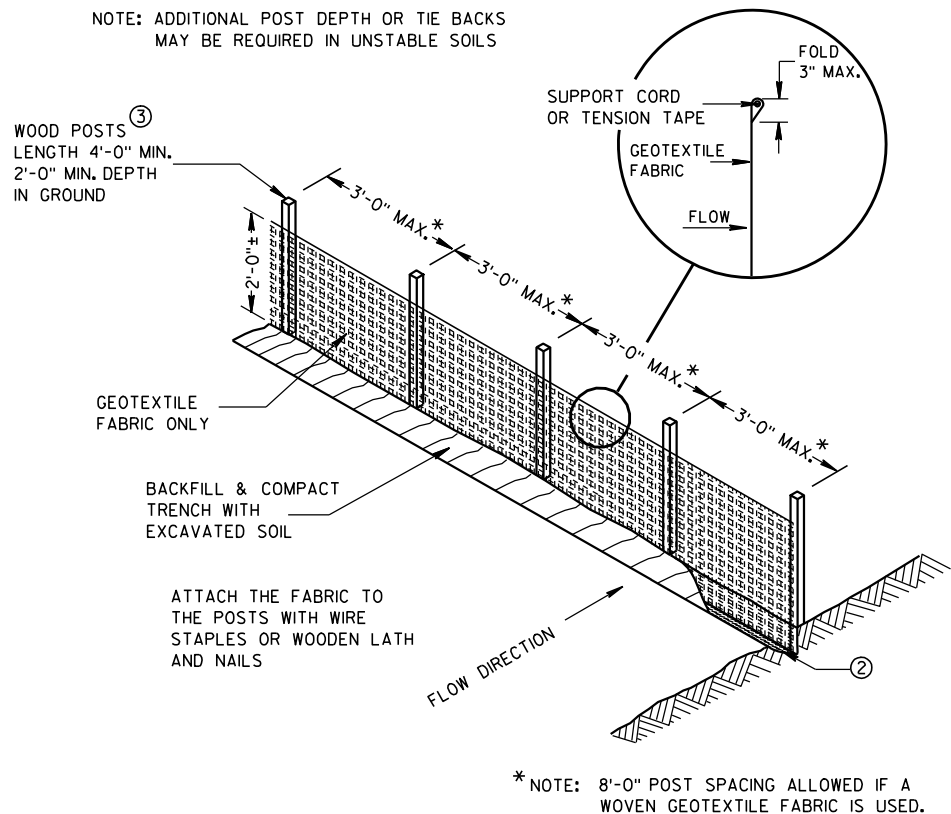
6/04/02
DATE

FHWA

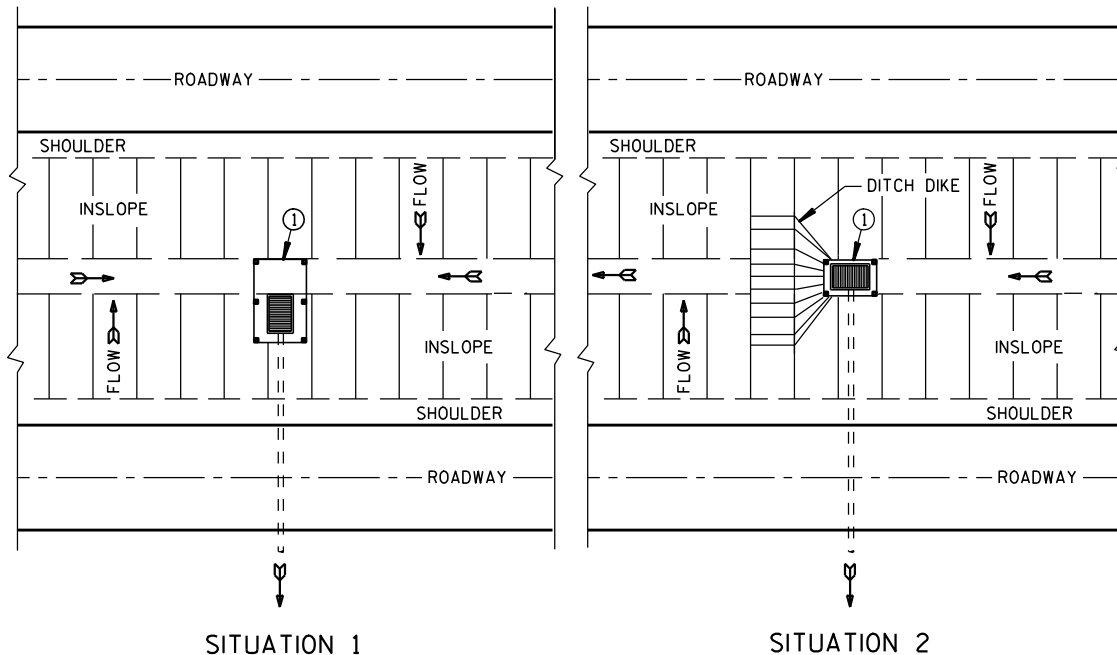
/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



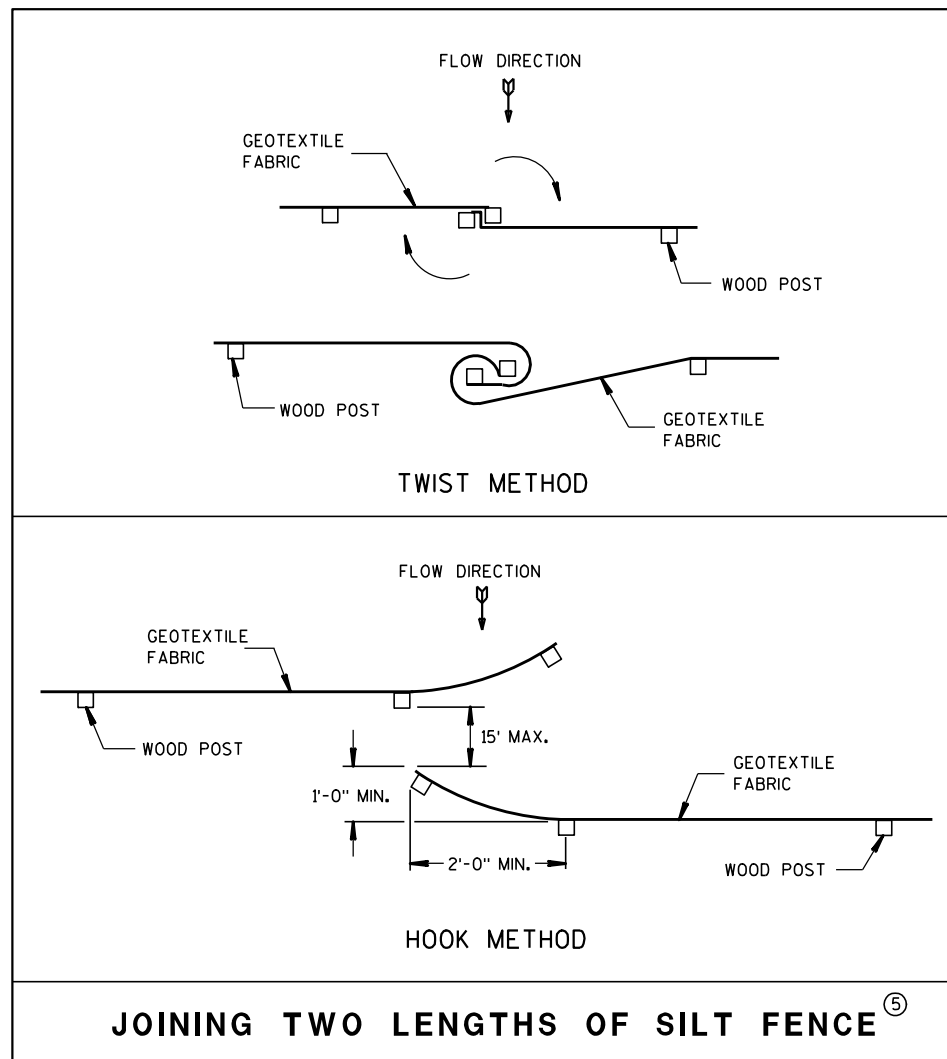
PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

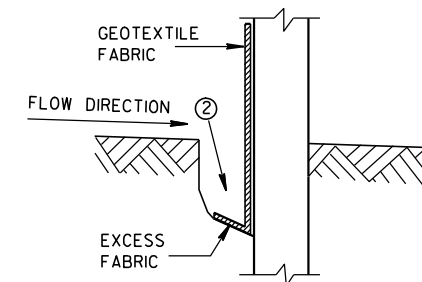


JOINING TWO LENGTHS OF SILT FENCE ⑤

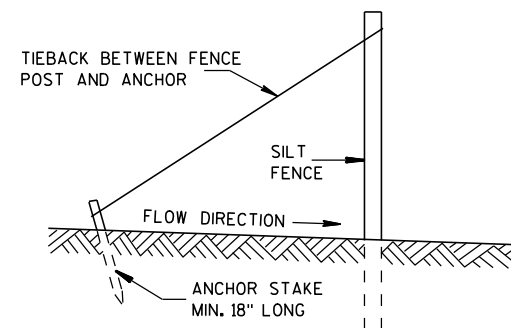
GENERAL NOTES

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

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL

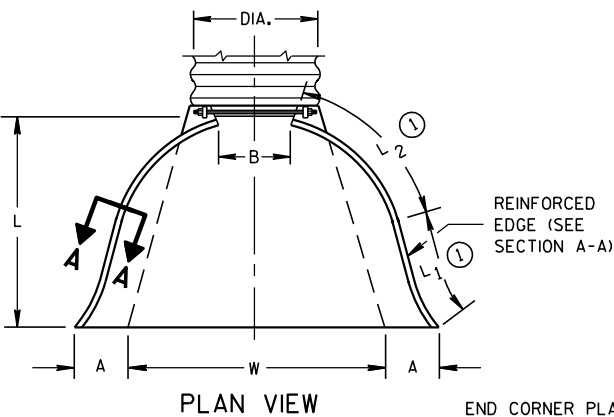


SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/S/ Beth Canestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

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.

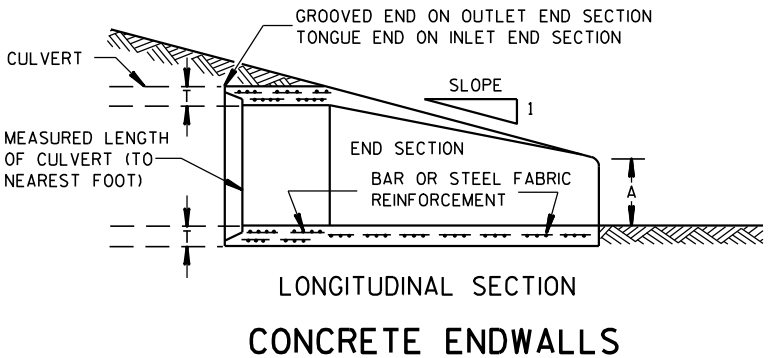
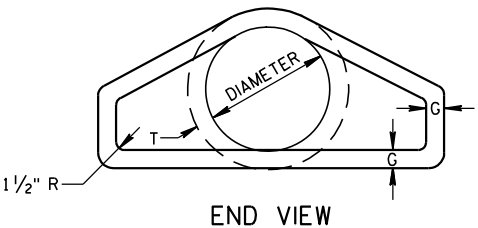
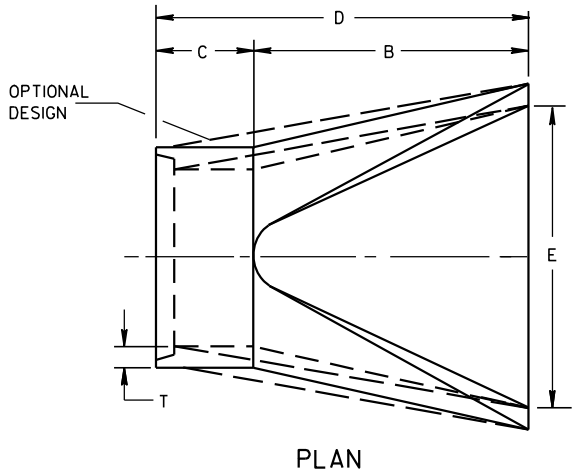
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



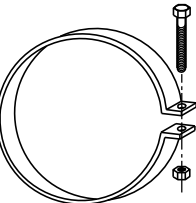
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

REINFORCED CONCRETE APRON ENDWALLS												
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE				
	T	A	B	C	D	E	G					
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1				
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1				
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1				
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1				
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1				
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1				
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1				
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1				
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1				
48	5	24	72	26	98	84	5	3 to 1				
54	5 1/2	27	65	33 1/4-35	98 1/4-100	90	5 1/2	2 2/5 to 1				
60	6	30-35	60	39	99	96	5	2 to 1				
66	6 1/2	24-30	72-78	21-27	99	102	5 1/2	2 to 1				
72	7	24-36	78	21	99	108	6	2 to 1				
78	7 1/2	24-36	78	21	99	114	6 1/2	2 to 1				
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1				
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1				

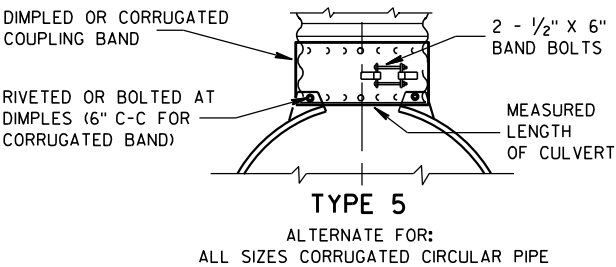
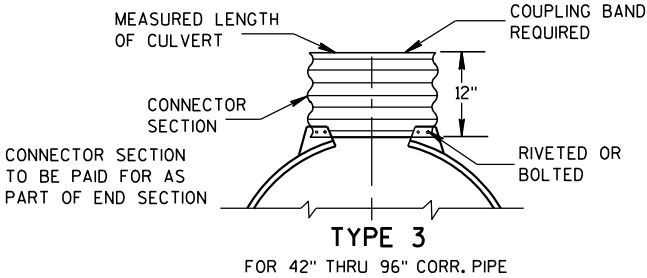
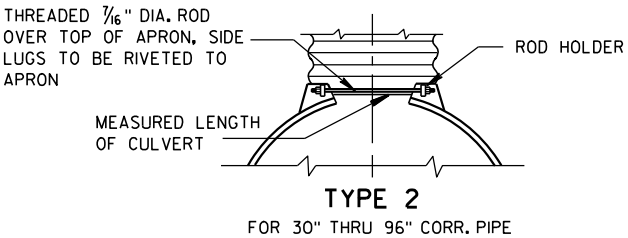
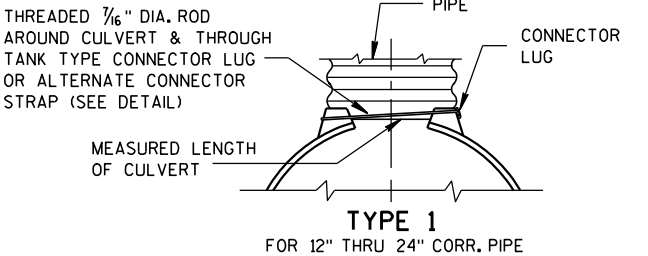
* MINIMUM
** MAXIMUM



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



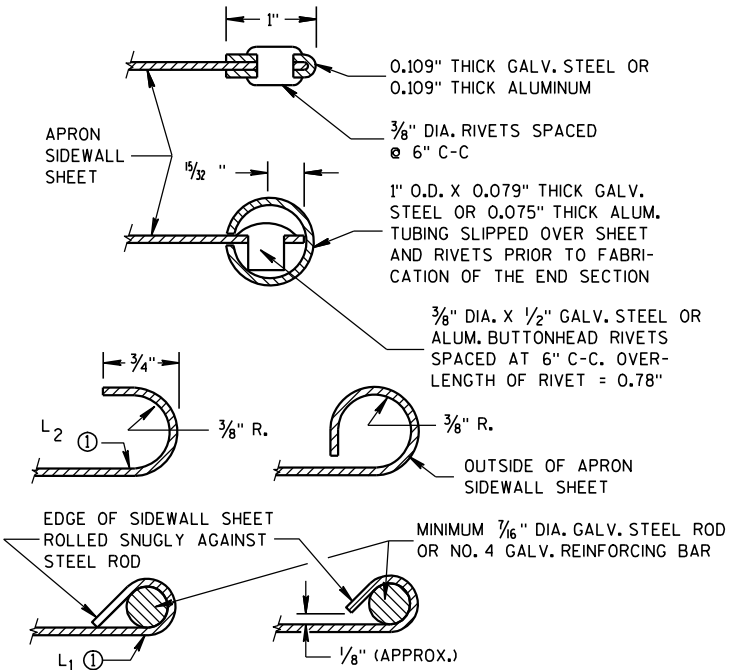
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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



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.

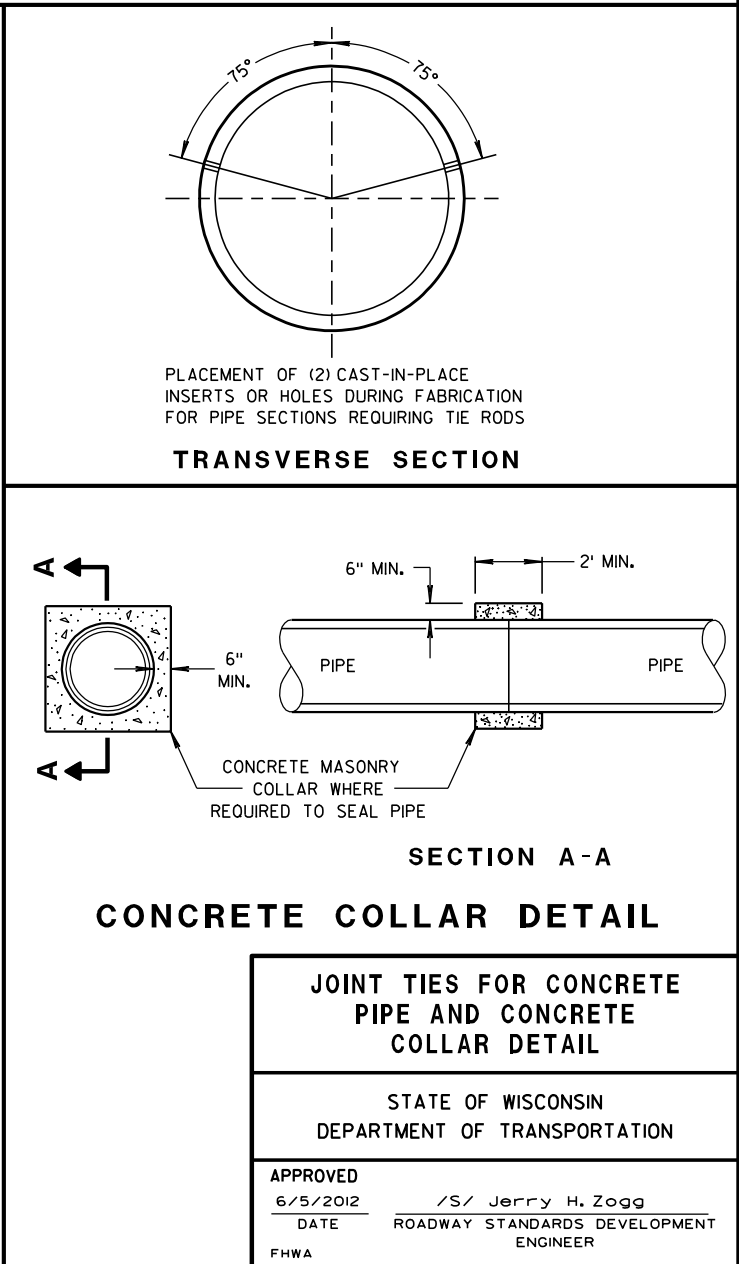
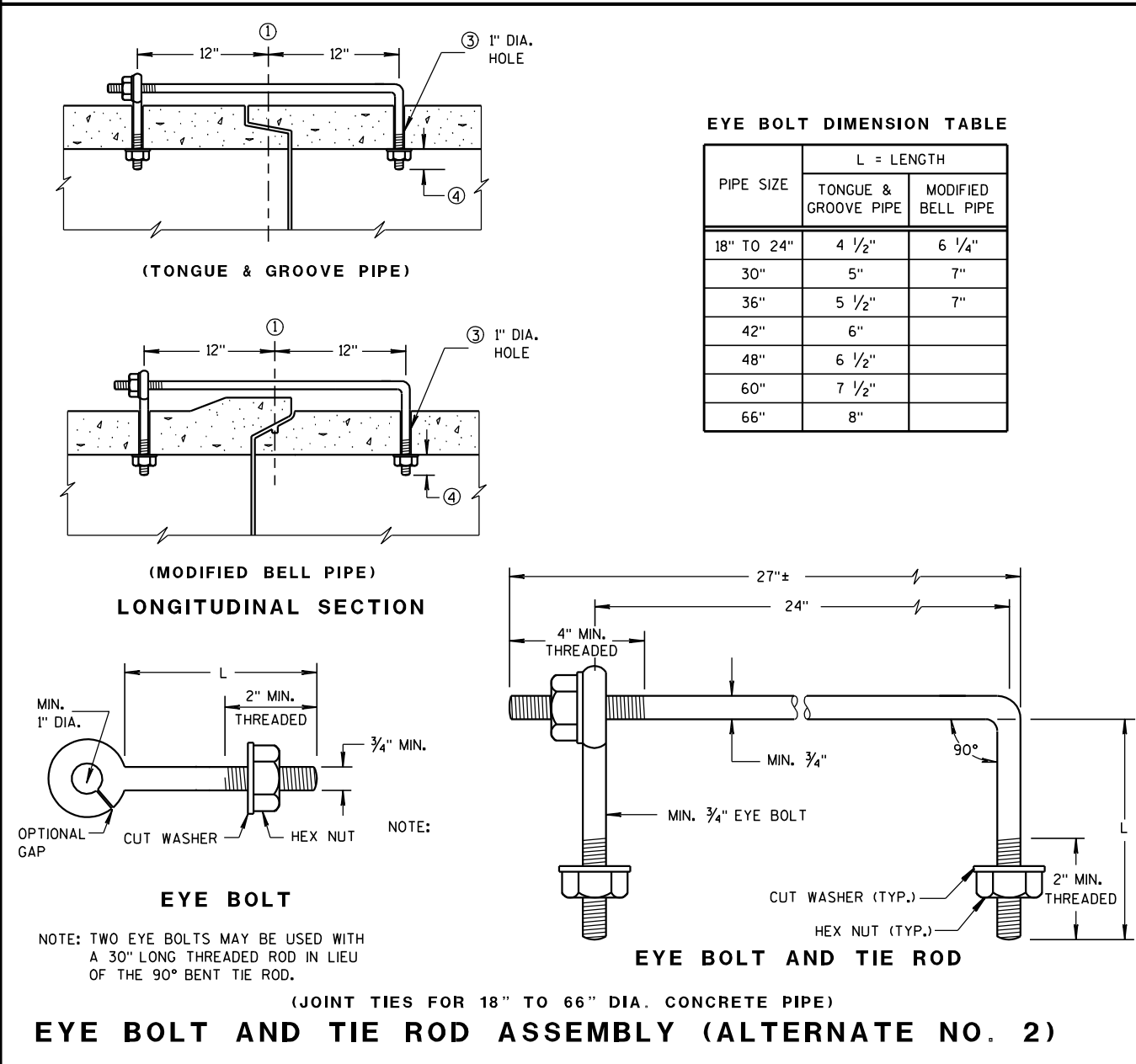
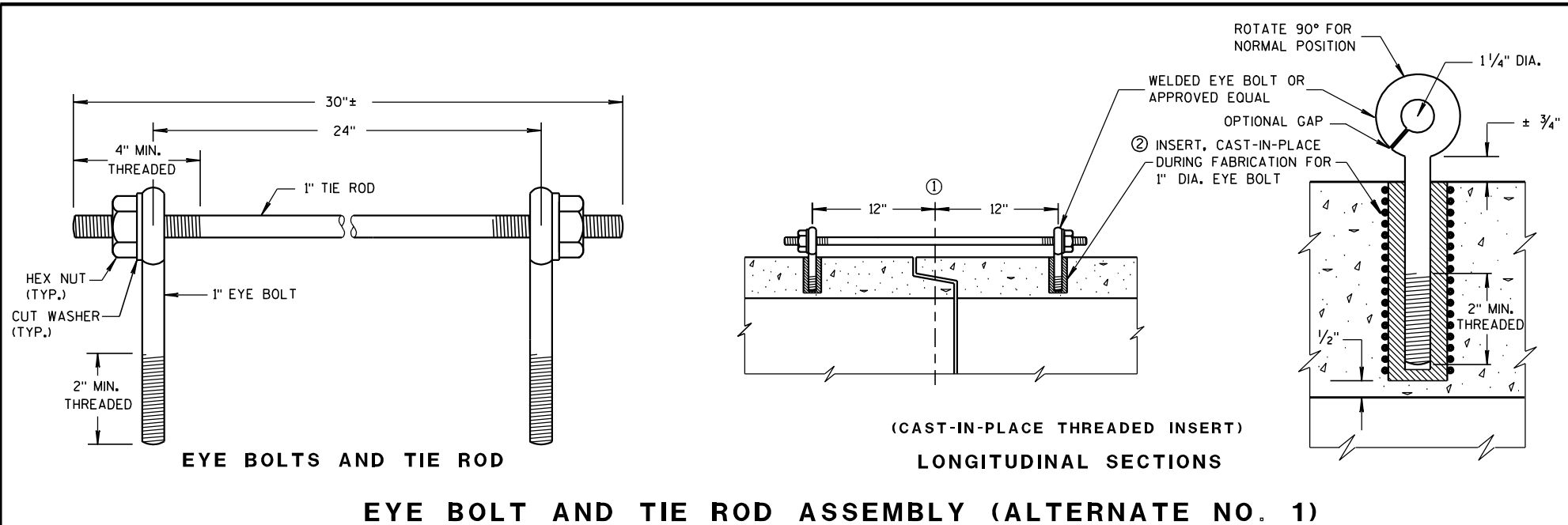
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT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

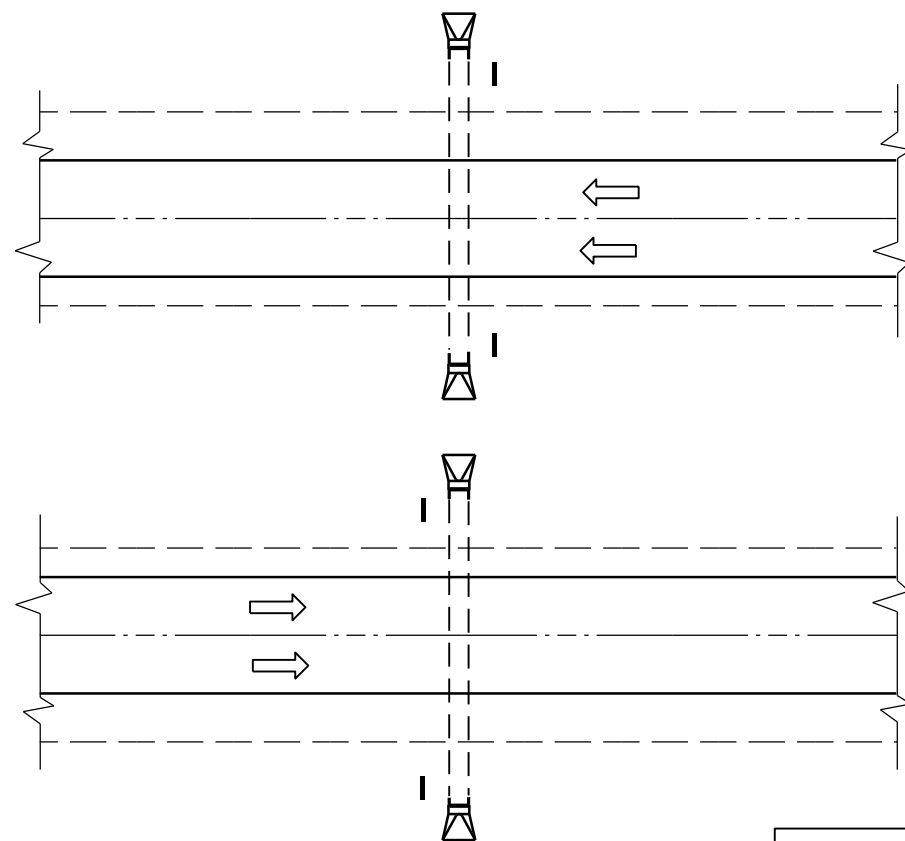
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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

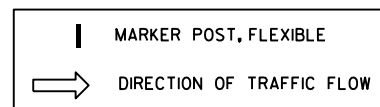
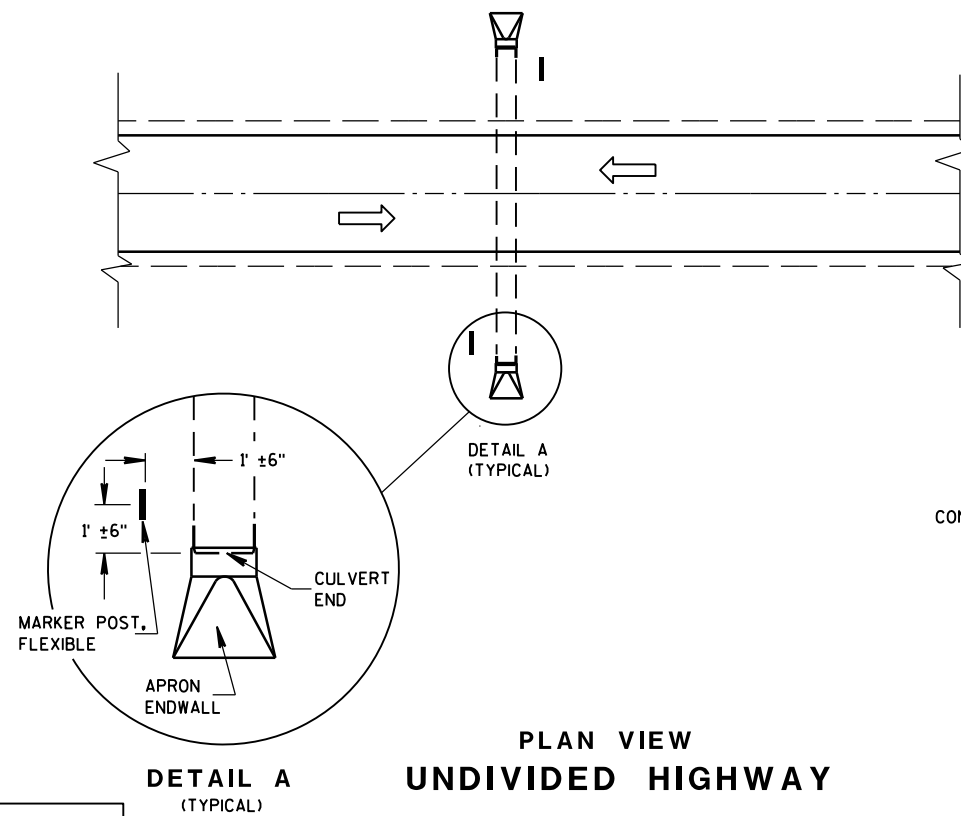
APRON ENDWALLS FOR CULVERT PIPE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 11/30/94 DATE	/S/ Rory L. Rhinesmith CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	



PLAN VIEW
DIVIDED HIGHWAY



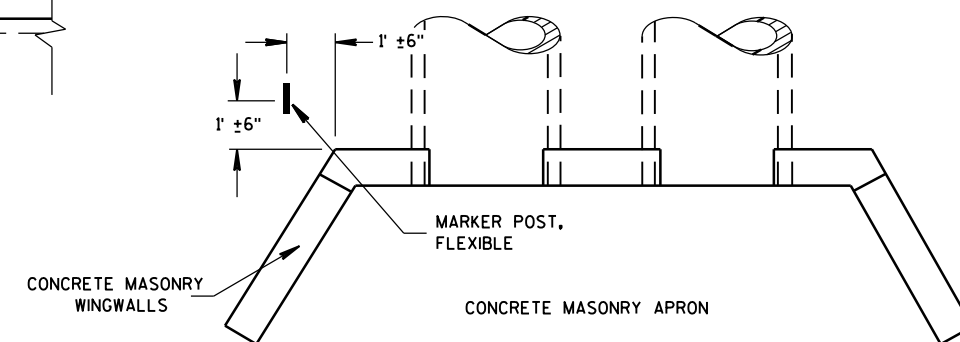
PLAN VIEW
UNDIVIDED HIGHWAY



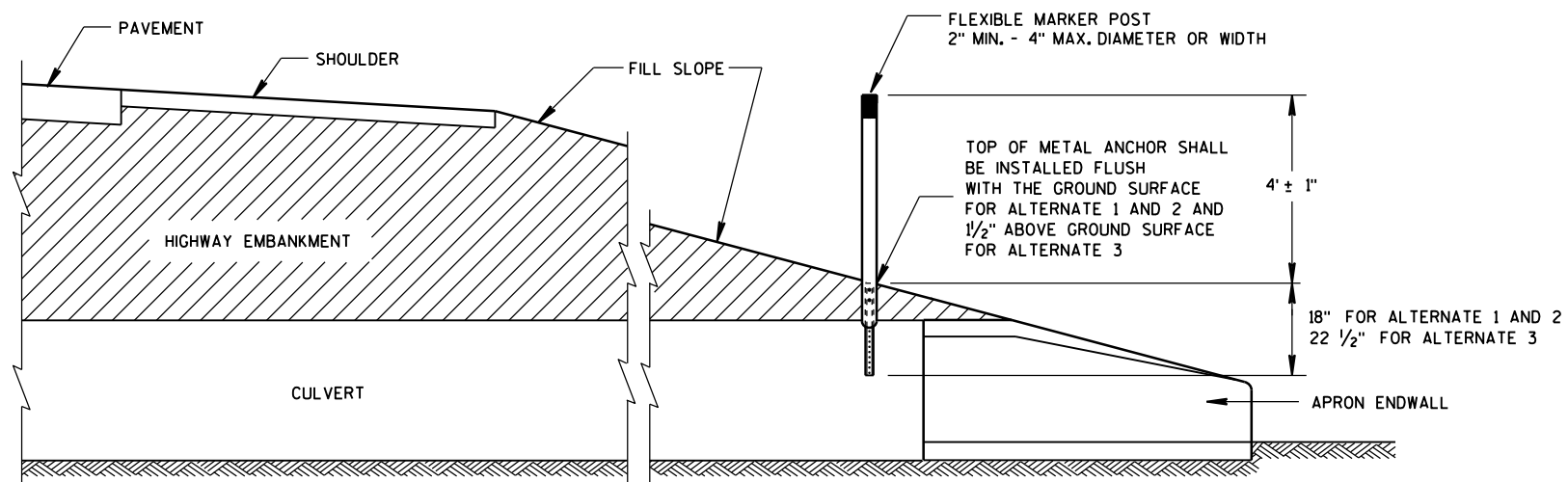
FLEXIBLE MARKER POST LOCATION

GENERAL NOTES

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



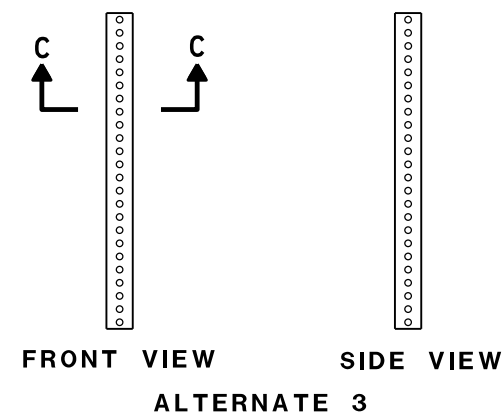
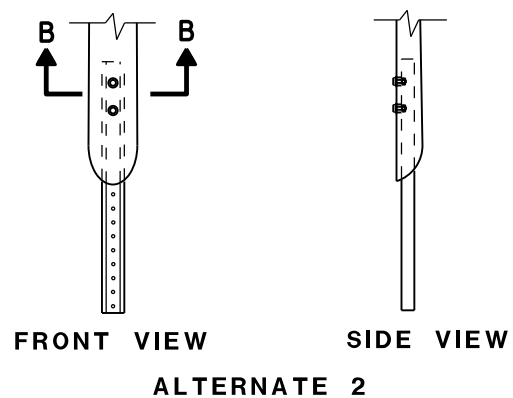
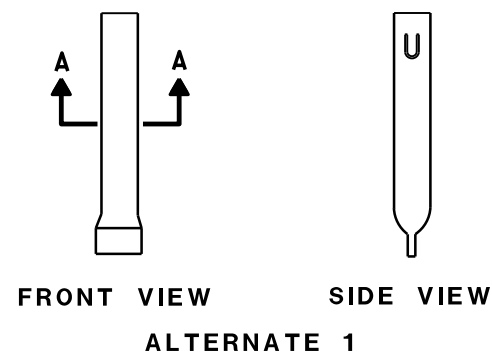
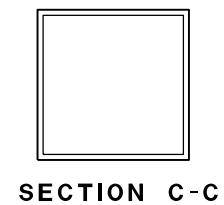
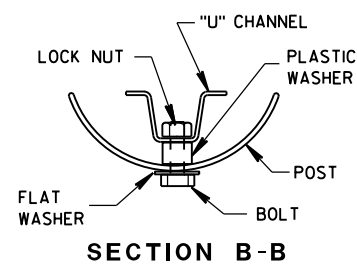
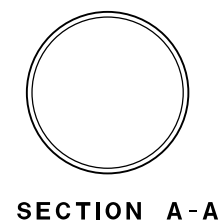
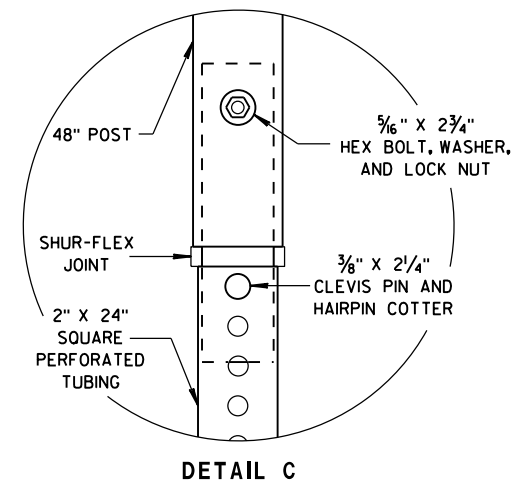
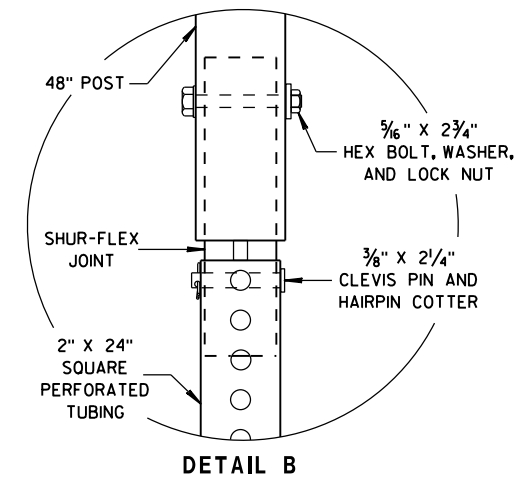
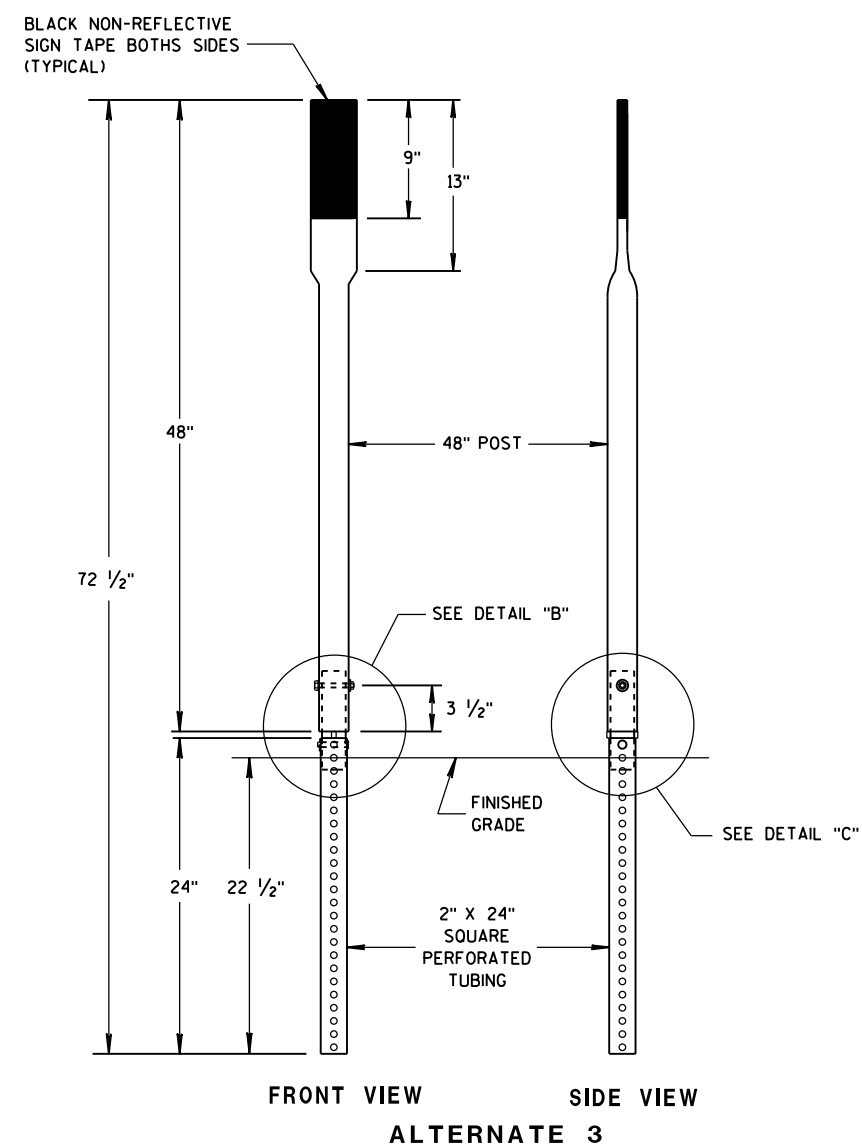
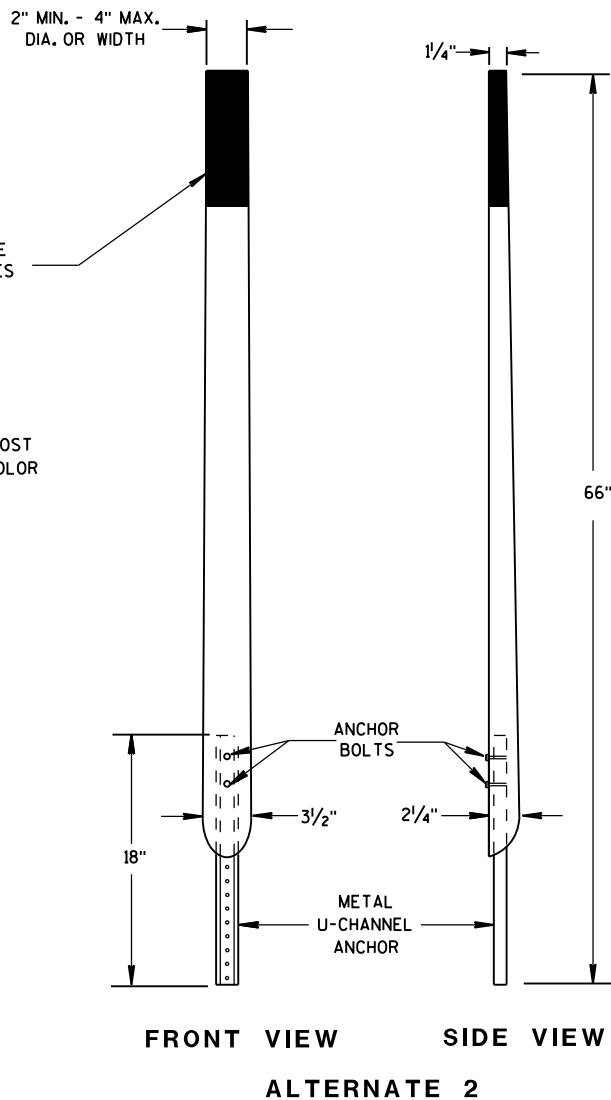
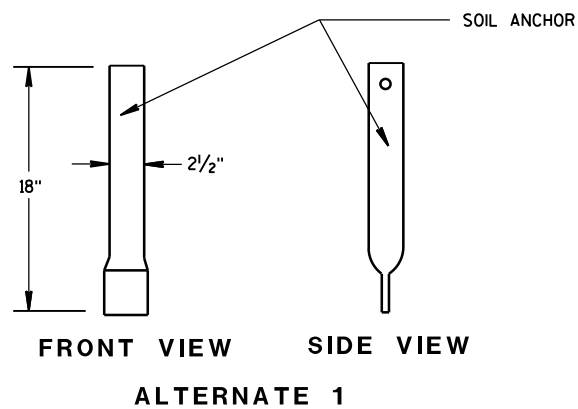
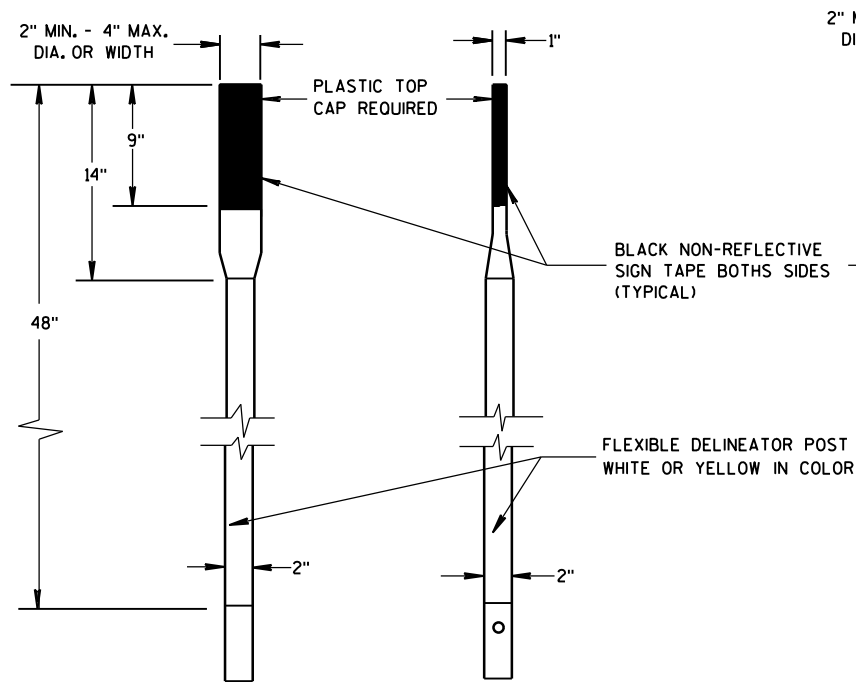
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

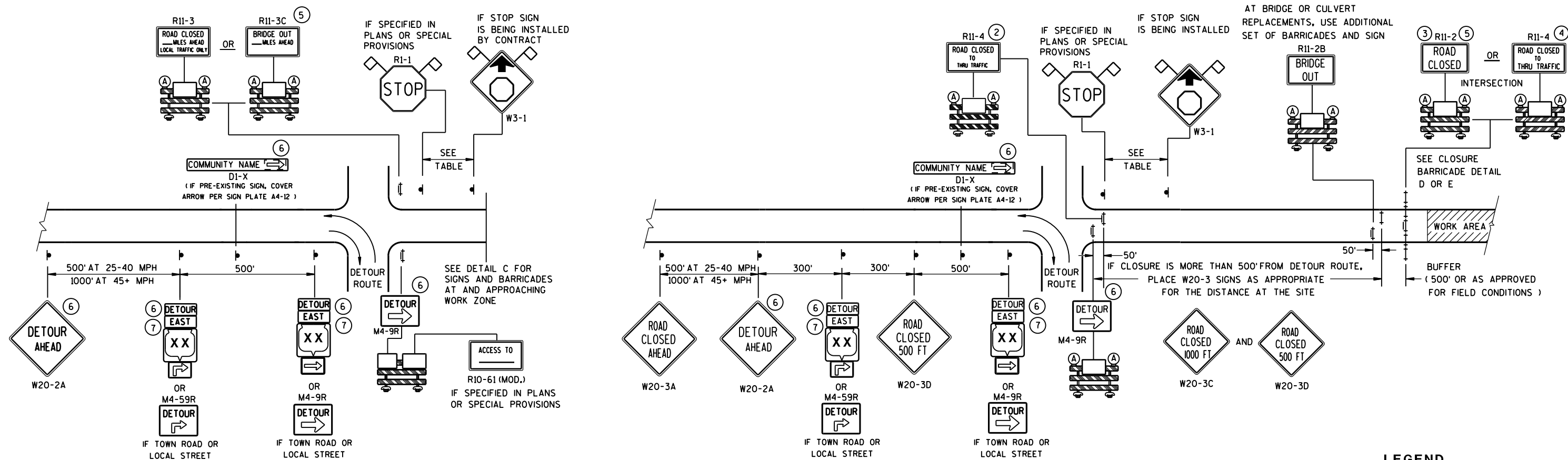
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

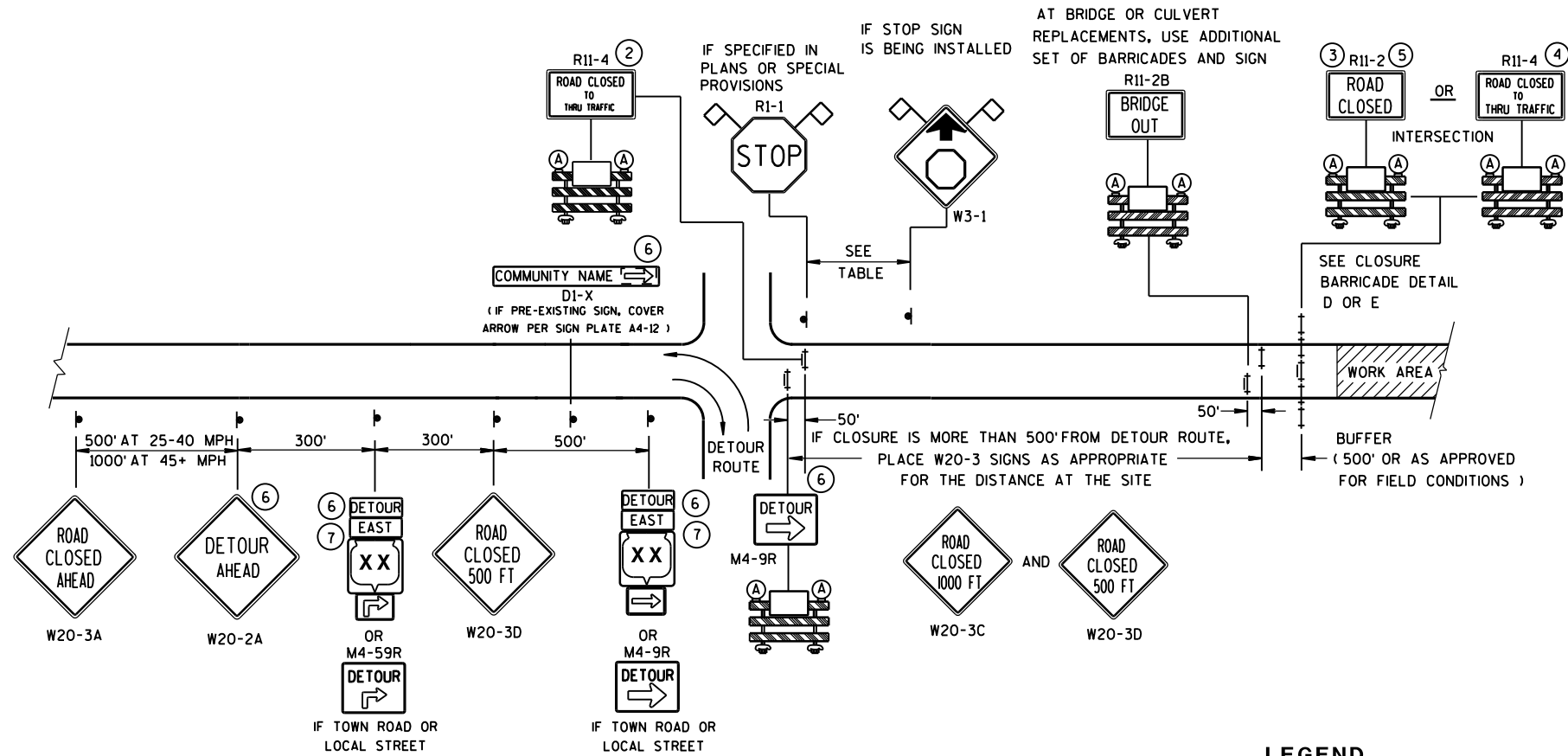
APPROVED
10/1/2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



DETAIL A

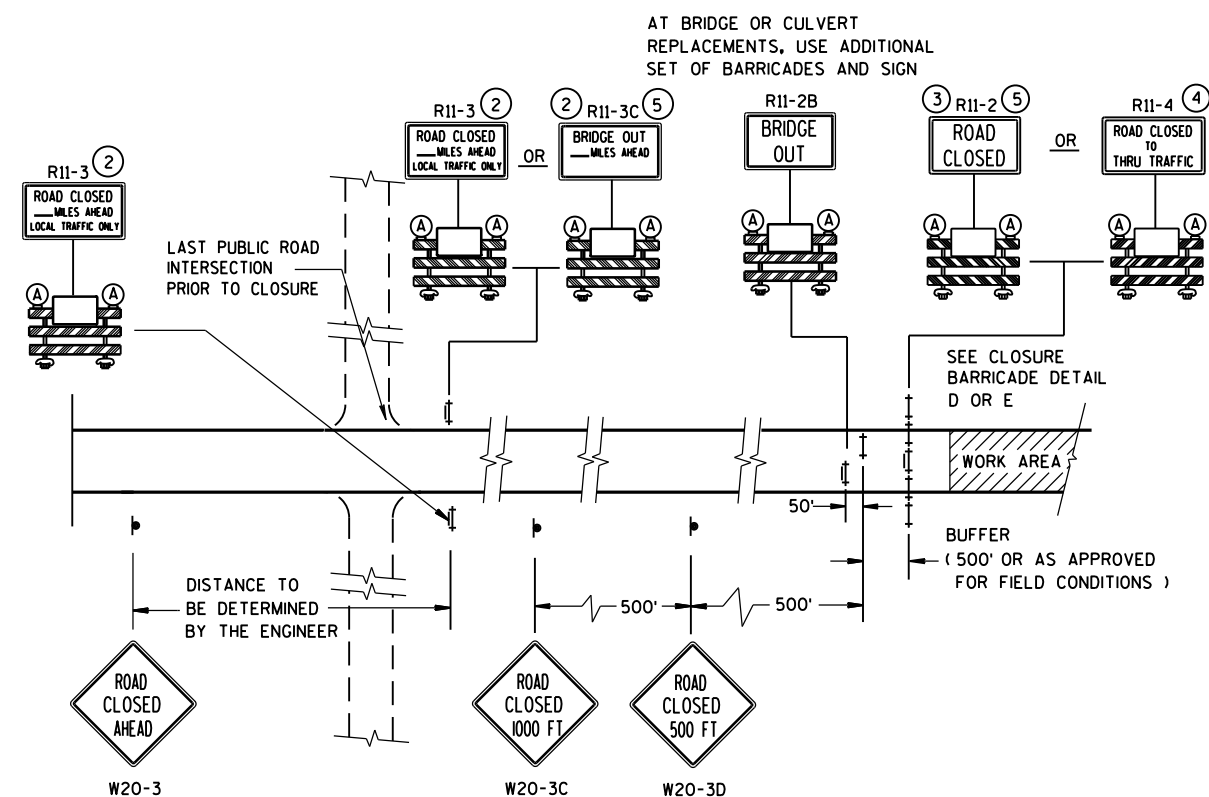
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR













WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (F T)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

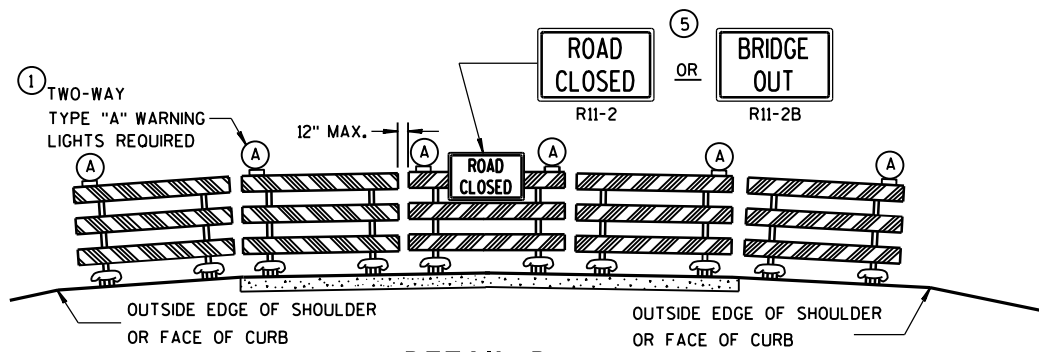
- # LEGEND
-  SIGN ON PERMANENT SUPPORT
-  TYPE III BARRICADE
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  WORK AREA
-  M4-8
-  M3-X
-  M1-4
-  M1-5A
-  M1-6
-  M05-1
-  M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

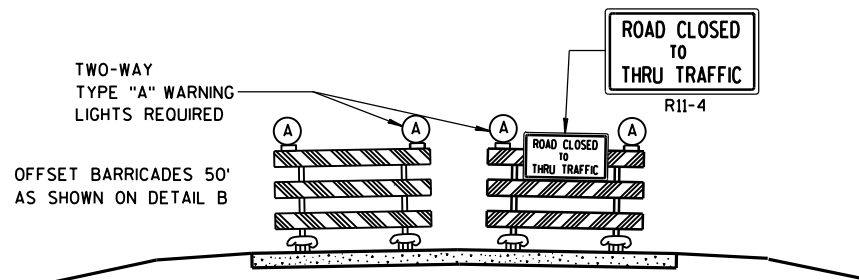
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".

M4-9 SHALL BE 30" X 24".

M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)

M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

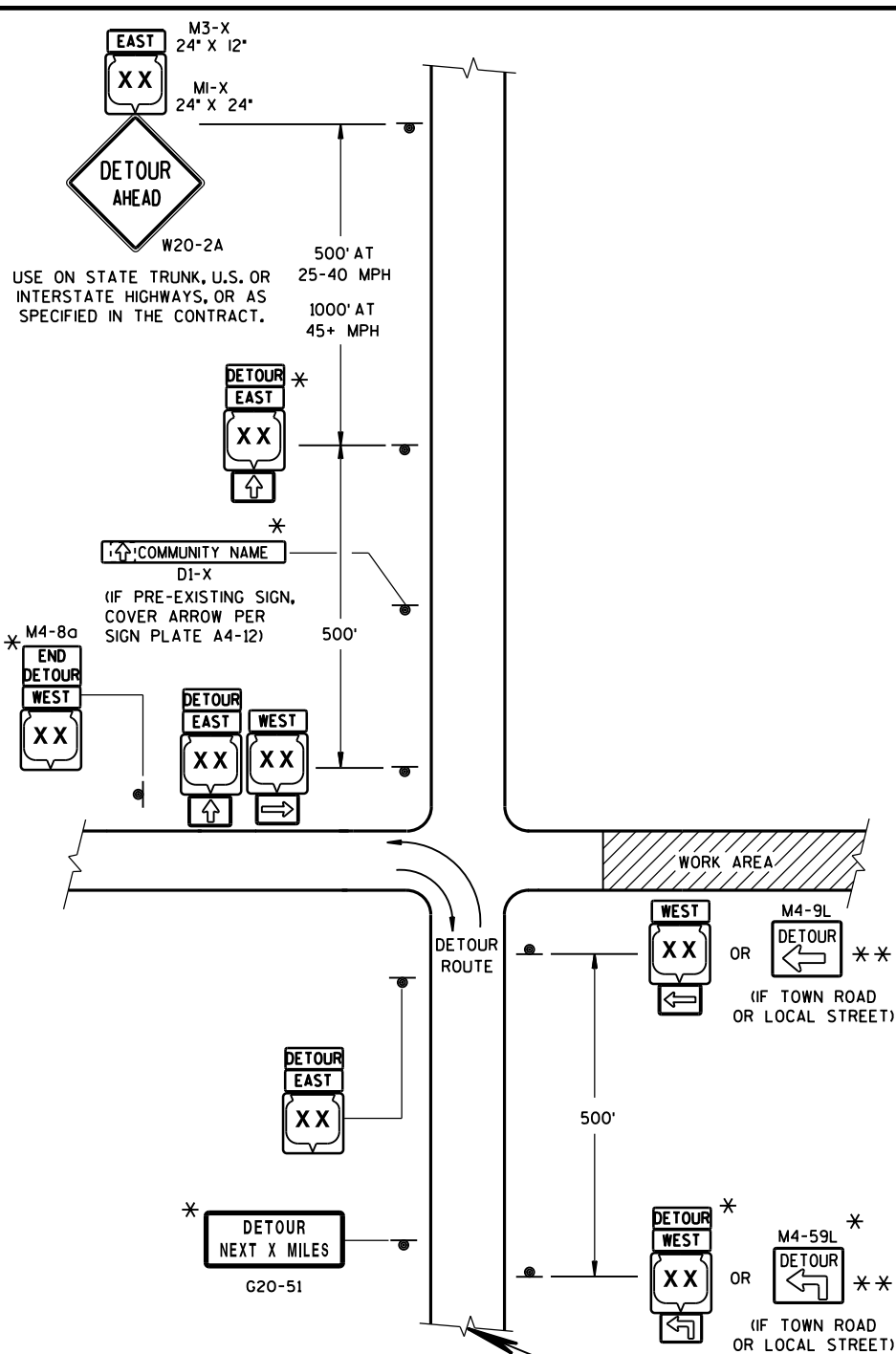
R1-1 SHALL BE 36" X 36".

- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

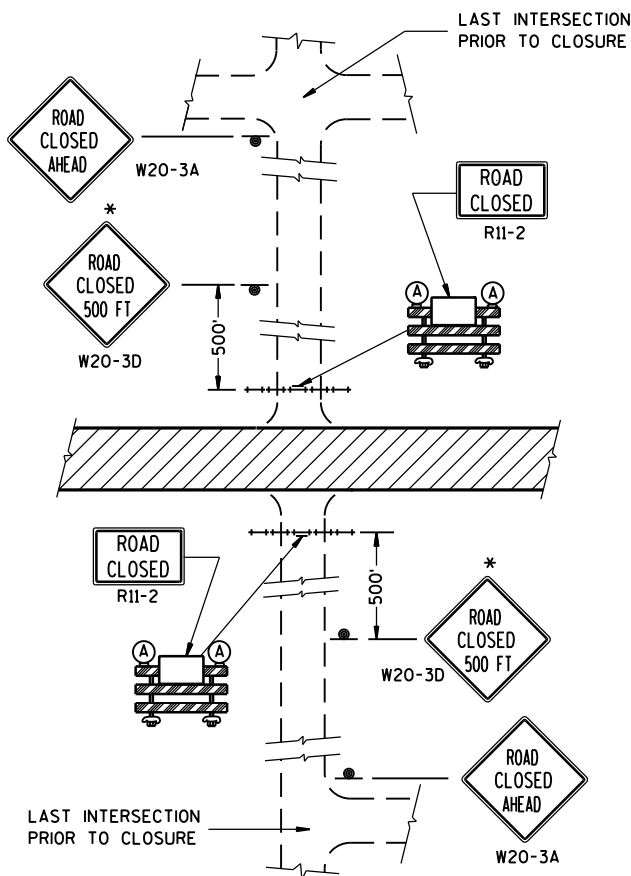
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

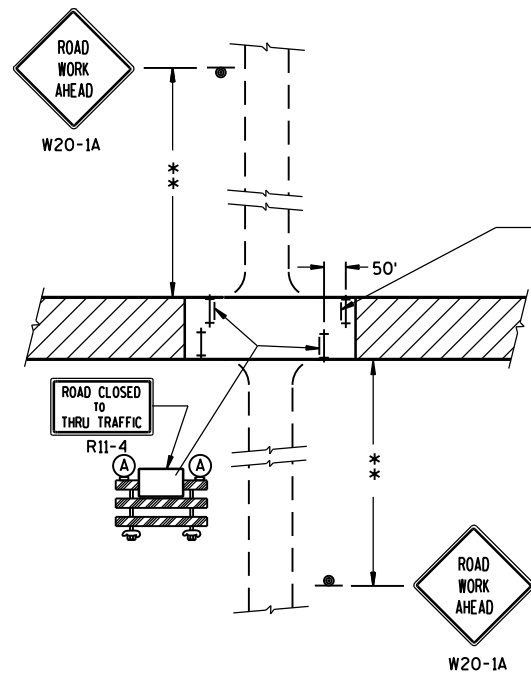
Sept. 2015 /S/ Peter Amokobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER



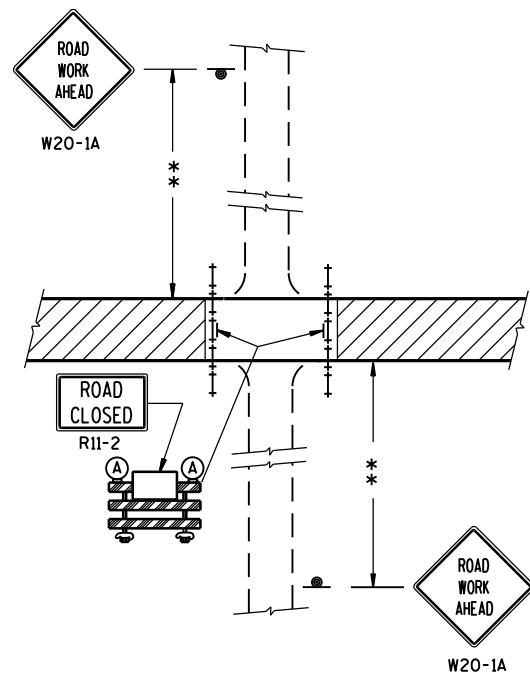
THIS DRAWING PROVIDES GENERAL GUIDANCE
ON TYPICAL DETOUR SIGN LAYOUT AND SPACING.
SEE PROJECT DETOUR SIGNING SHEETS FOR
SPECIFIC DETAILS FOR EACH PROJECT.



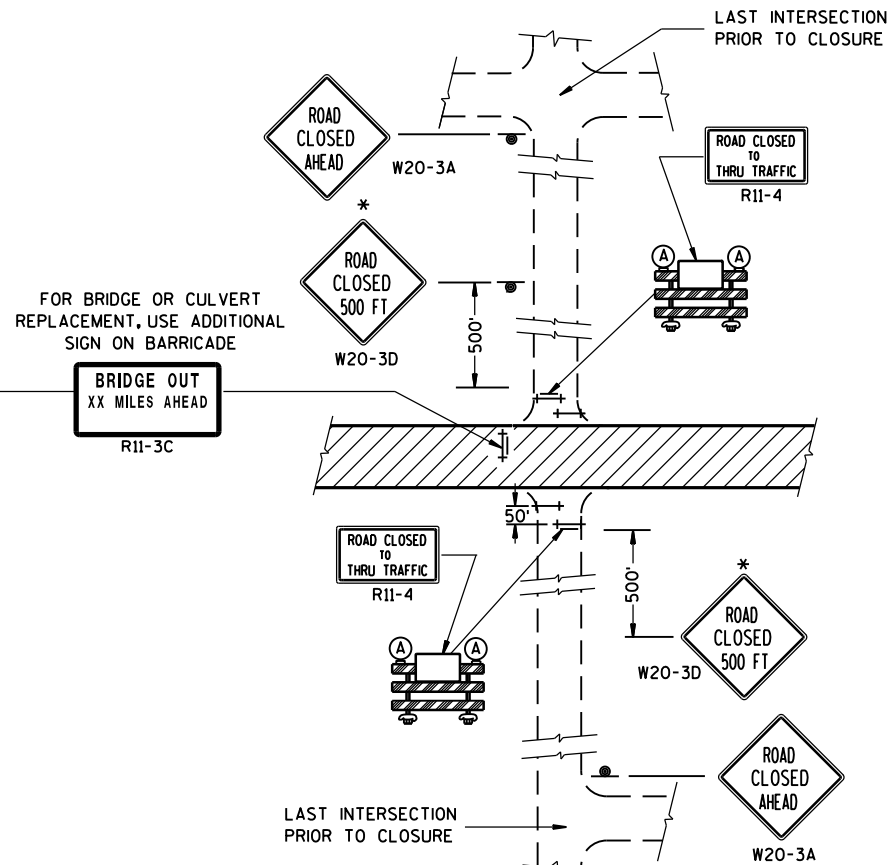
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015

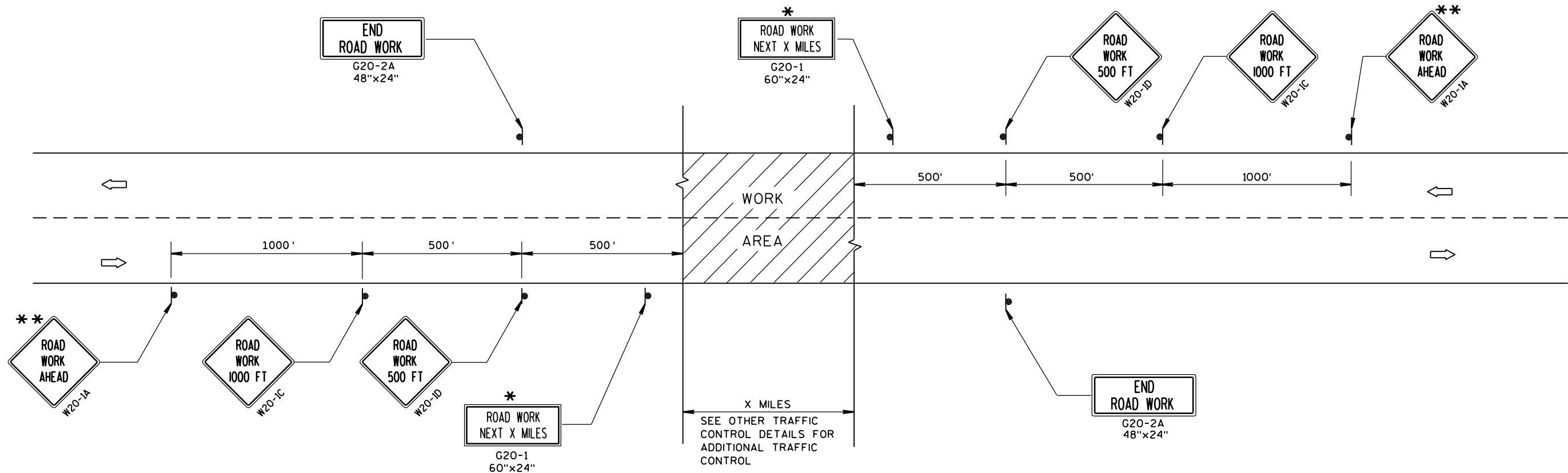
DATE

FHWA

/S/ Peter Amakobe Atepe

STATEWIDE WORK ZONE TRAFFIC

SAFETY 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.

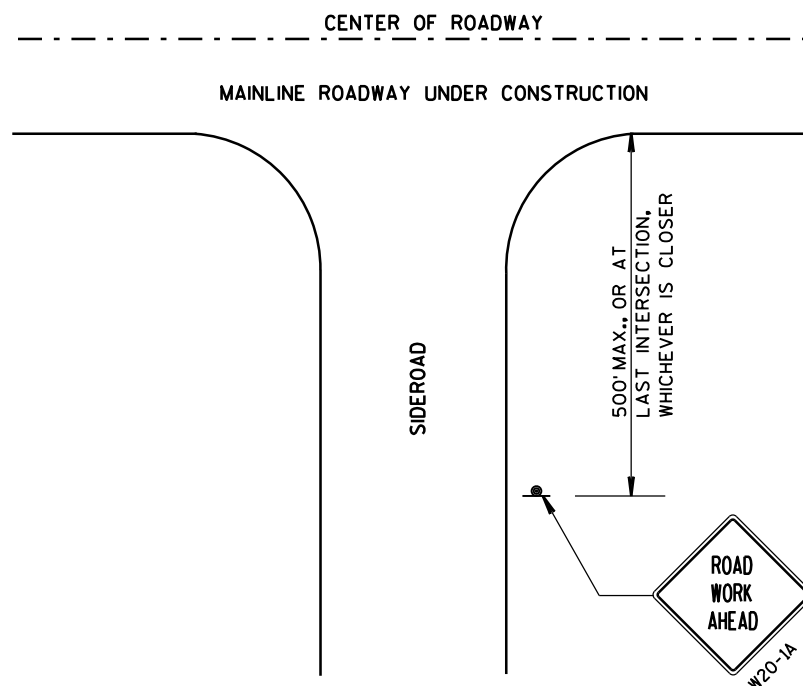
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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 DATE	/S/ Peter Amokobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

LEGEND

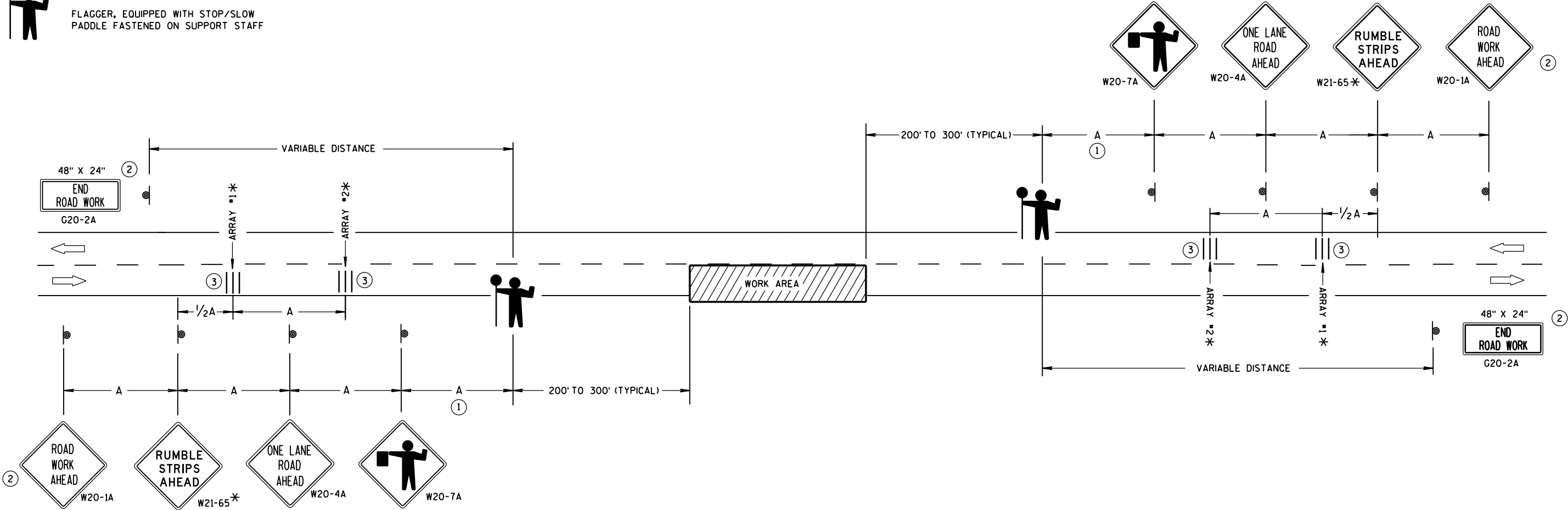
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

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.

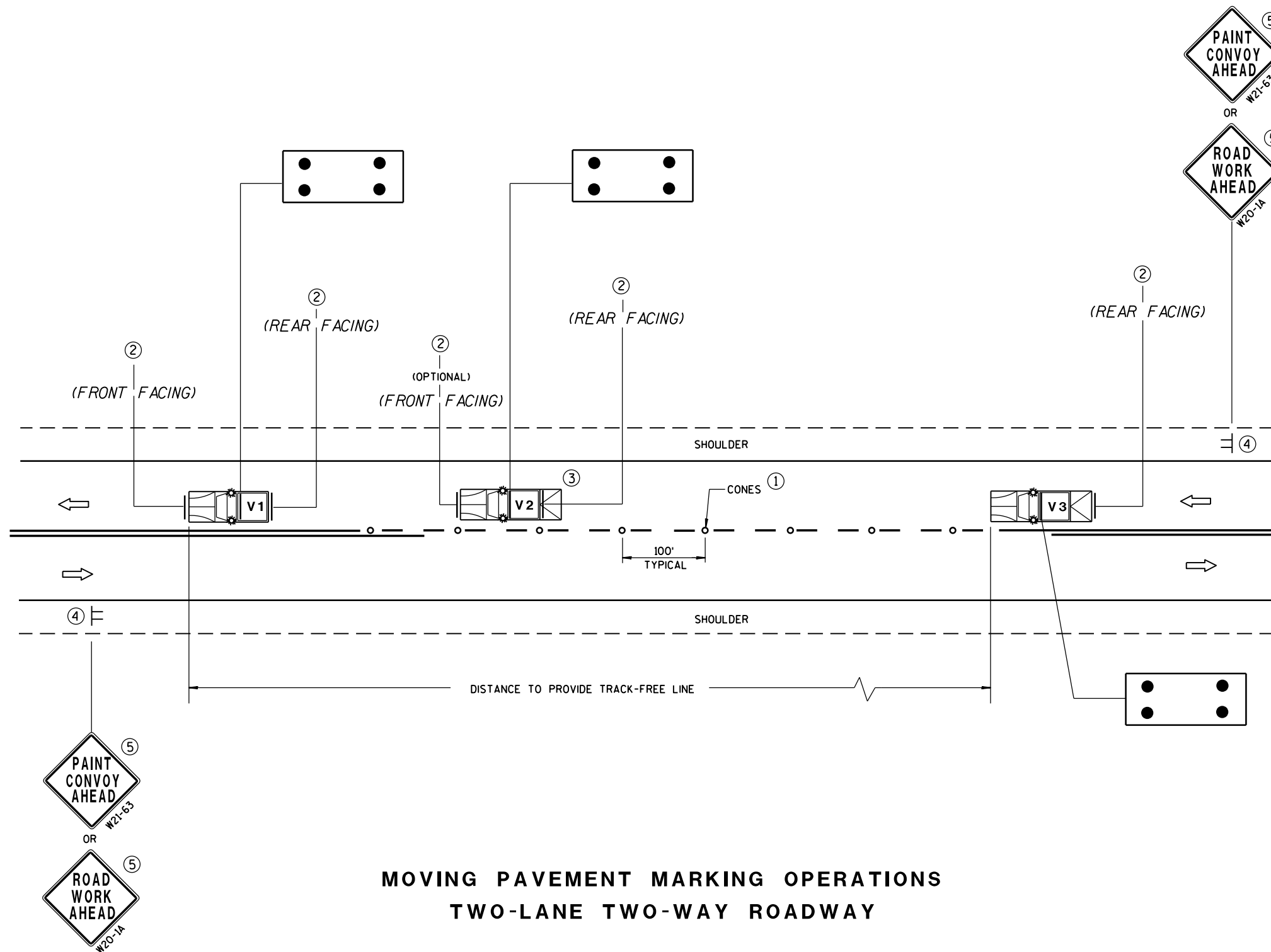
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- * 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.

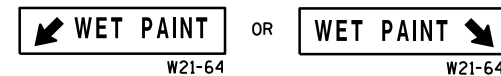
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

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

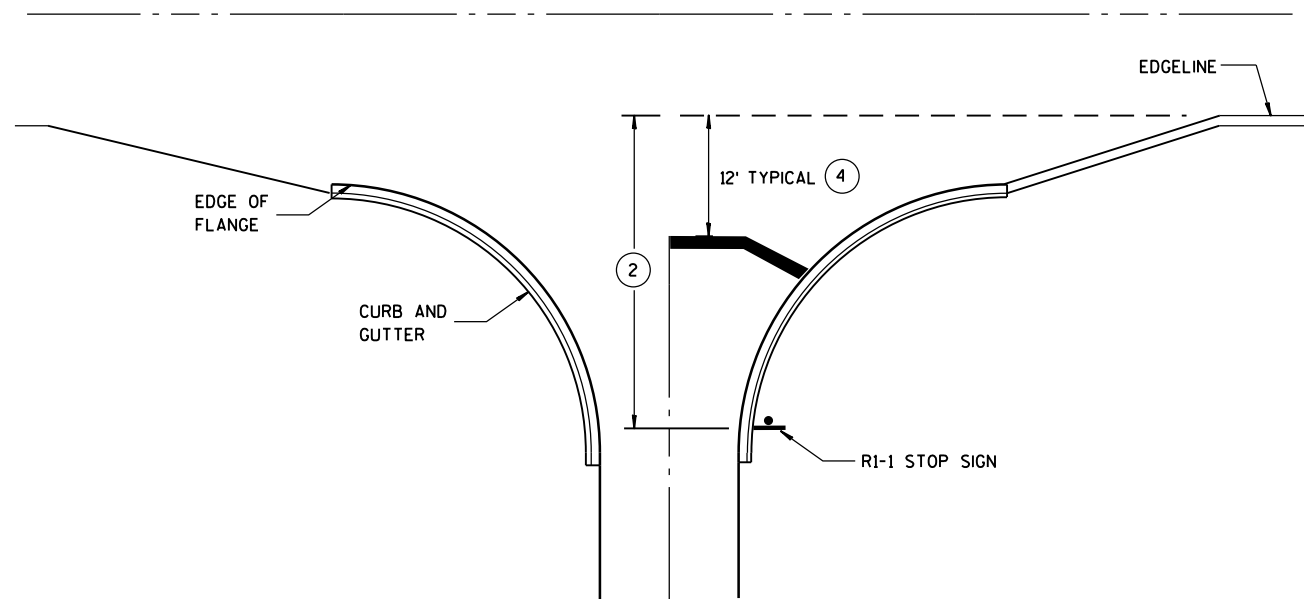
FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

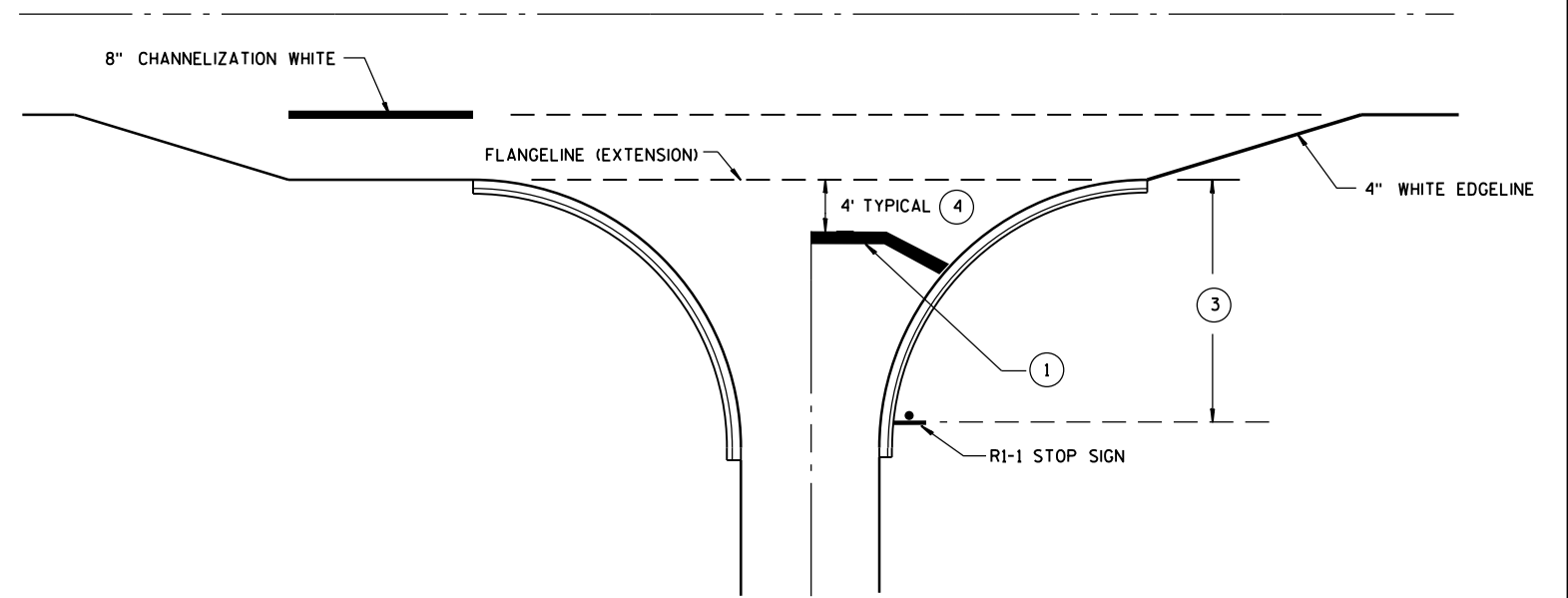
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016
DATE
FHWA

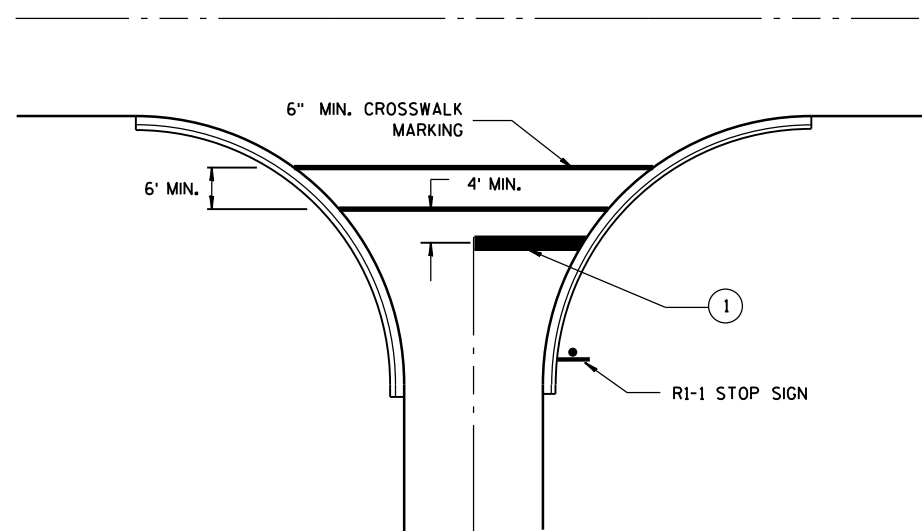
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER



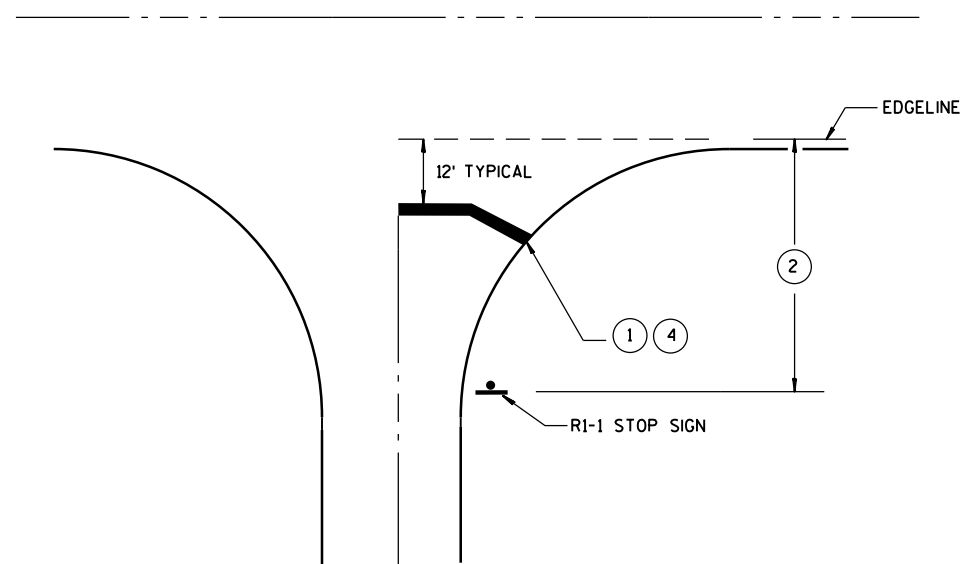
**TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER**



**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE**



**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING**



**TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER**

GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

**STOP LINE AND CROSSWALK
PAVEMENT MARKING**

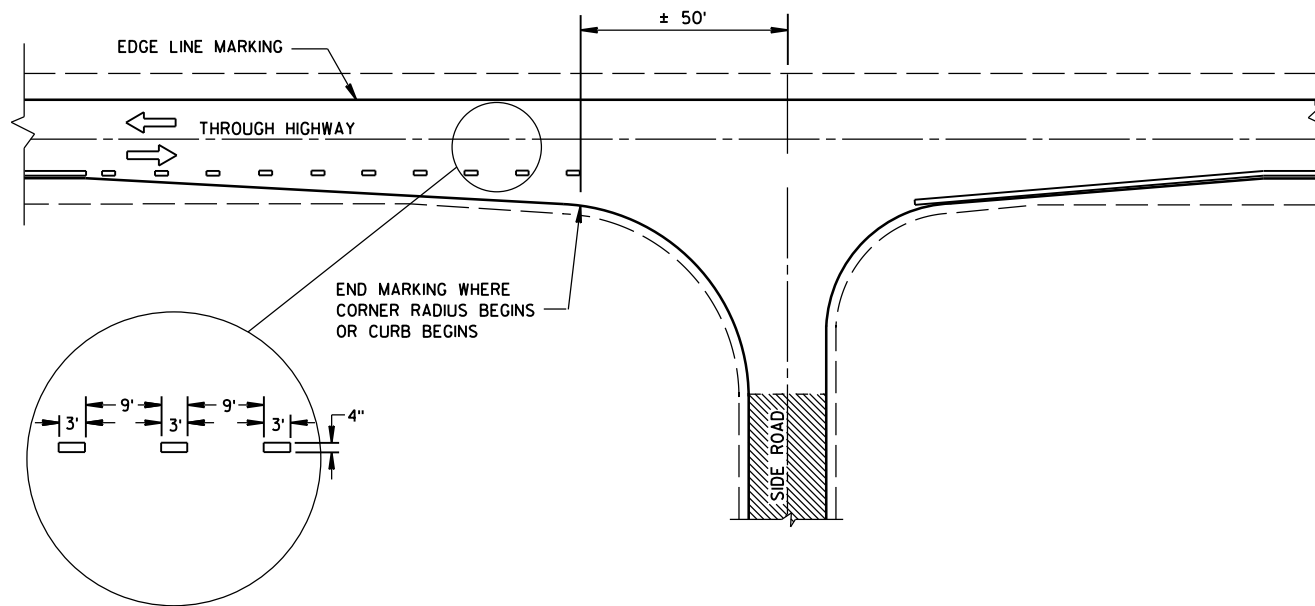
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-2016
DATE

FHWA

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER




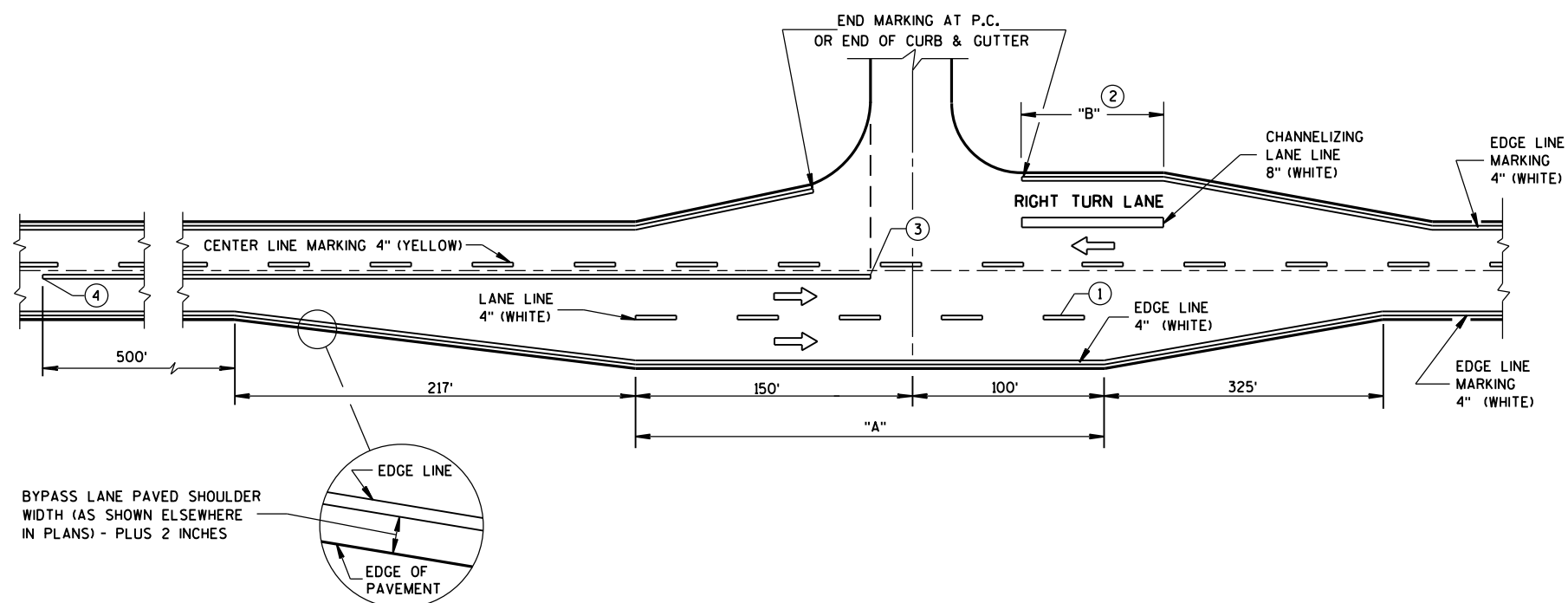
MINOR INTERSECTION WITHOUT CURBS

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

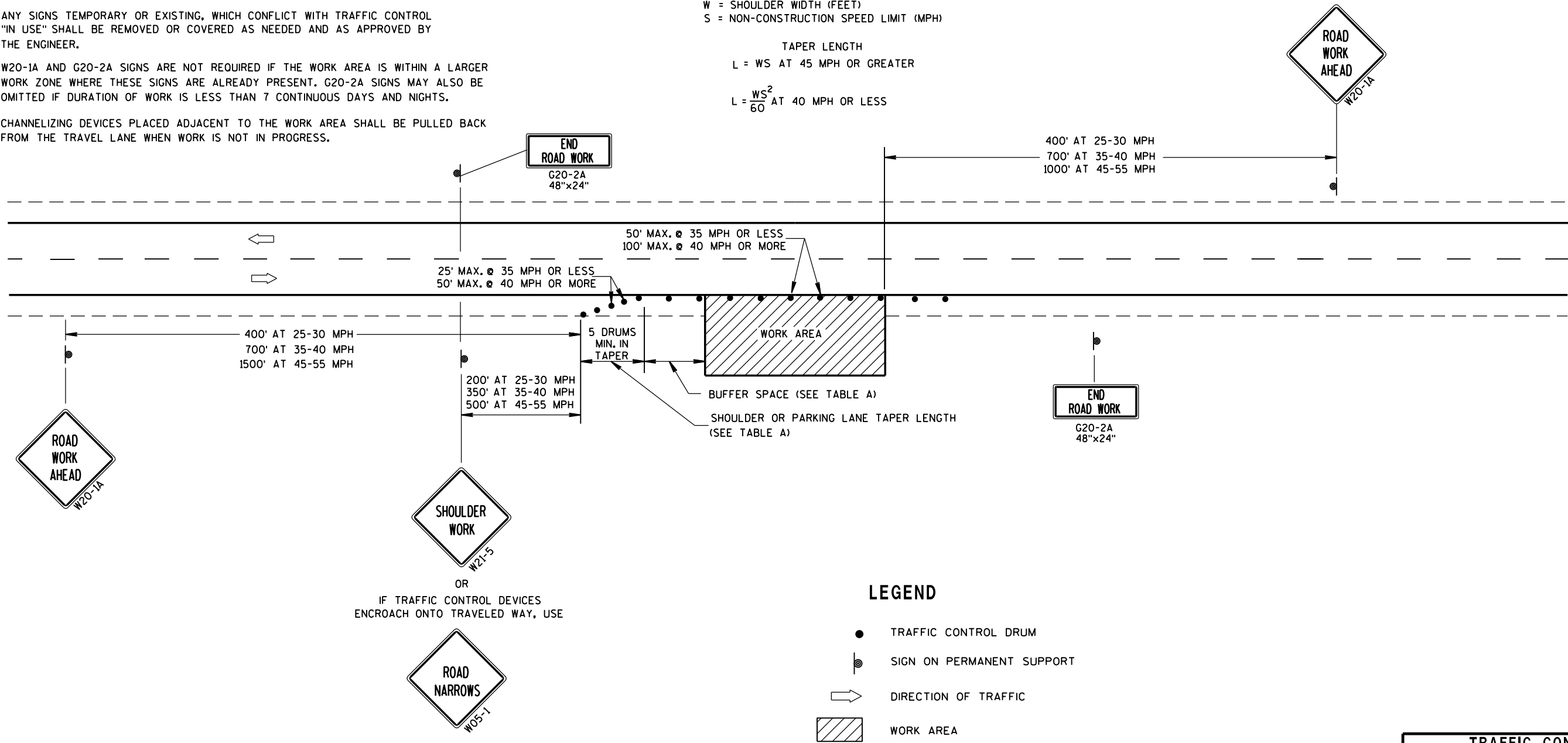
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

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

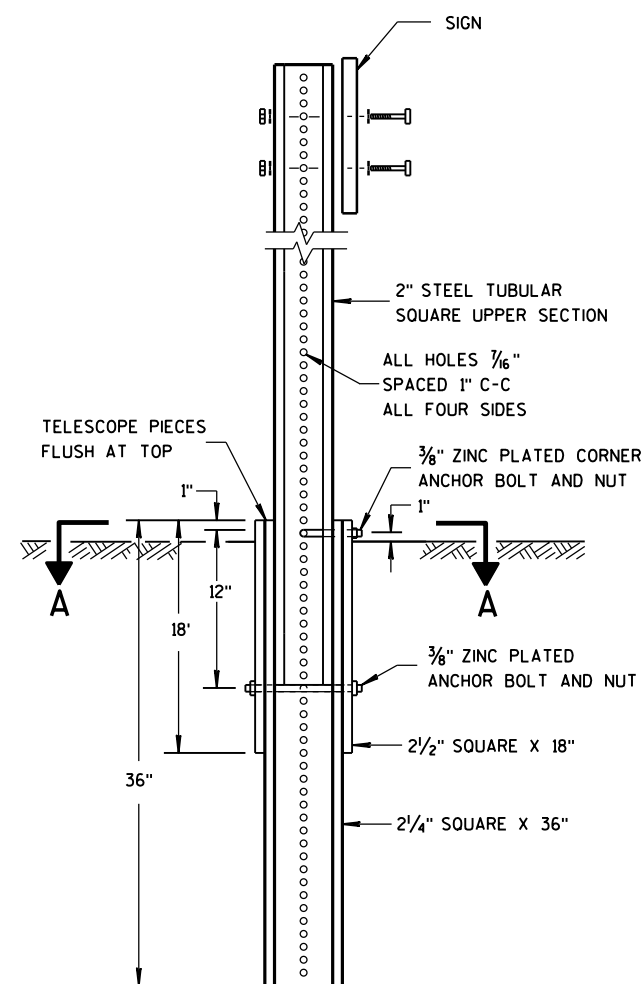
SHOULDER TAPER LENGTH = $\frac{1}{3}L$



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	



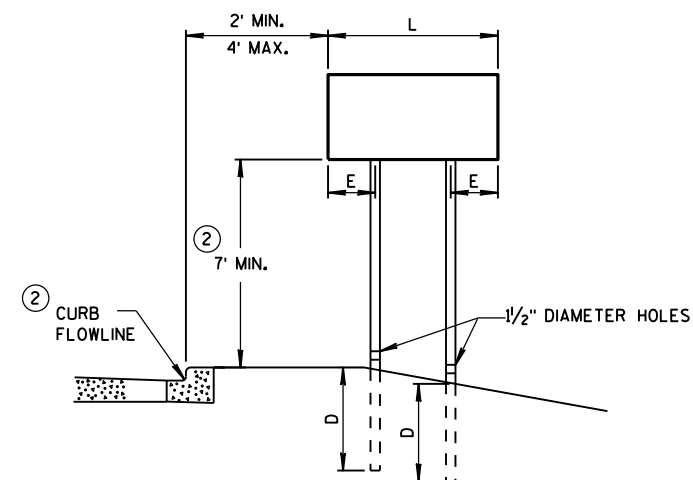
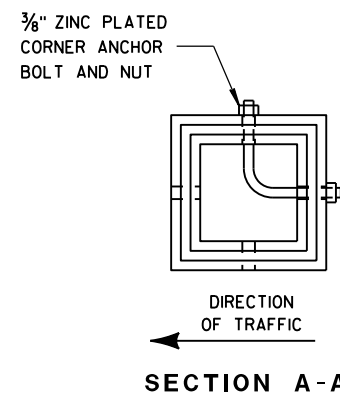
DETAIL OF TUBULAR STEEL SIGN POST

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ.FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

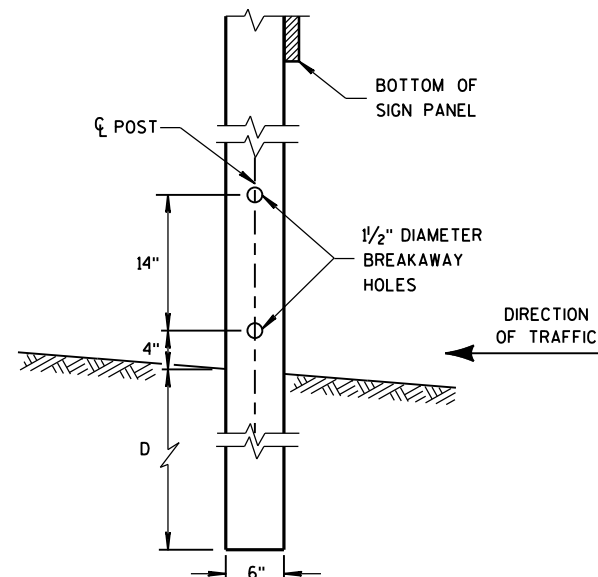


URBAN AREA

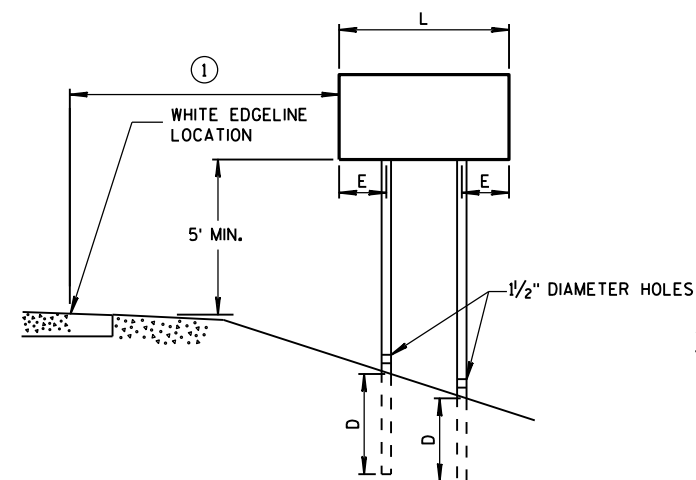
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST
EMBEDMENT DEPTH

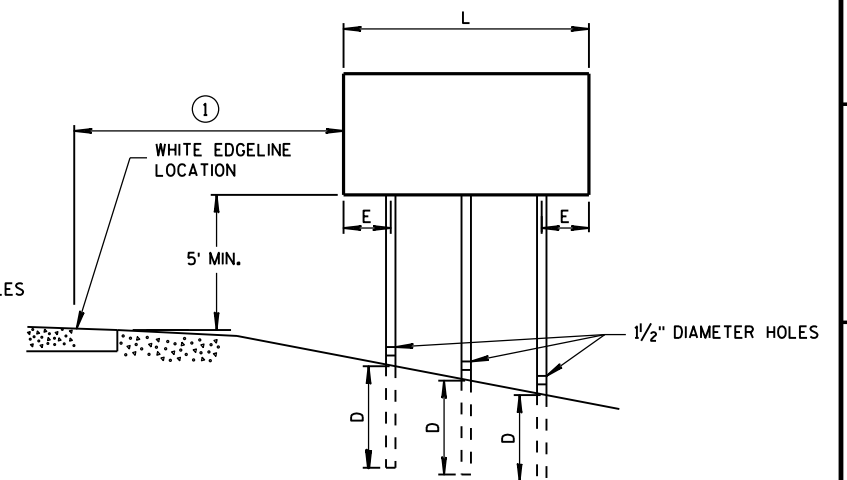
AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'



4"x6" WOOD POST MODIFICATION



RURAL AREA



4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

- A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3
- B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" X 3"
 - MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

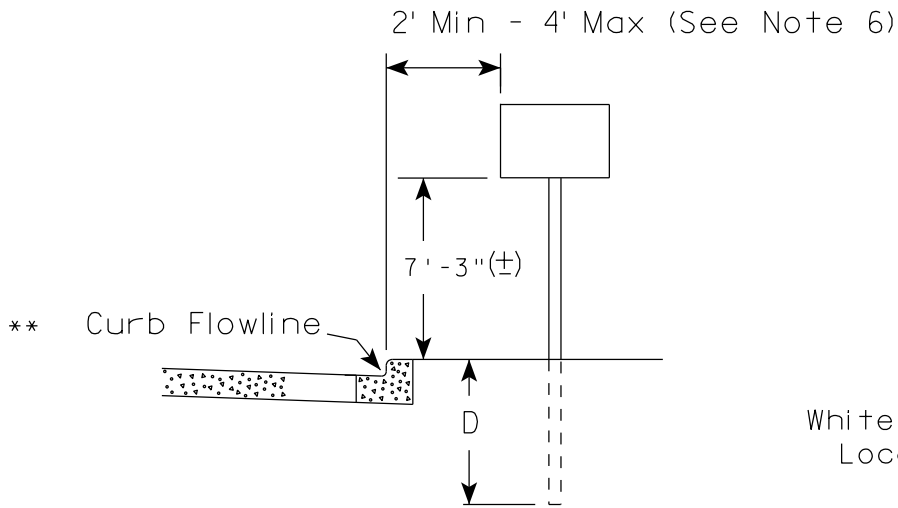
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS
 - RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

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

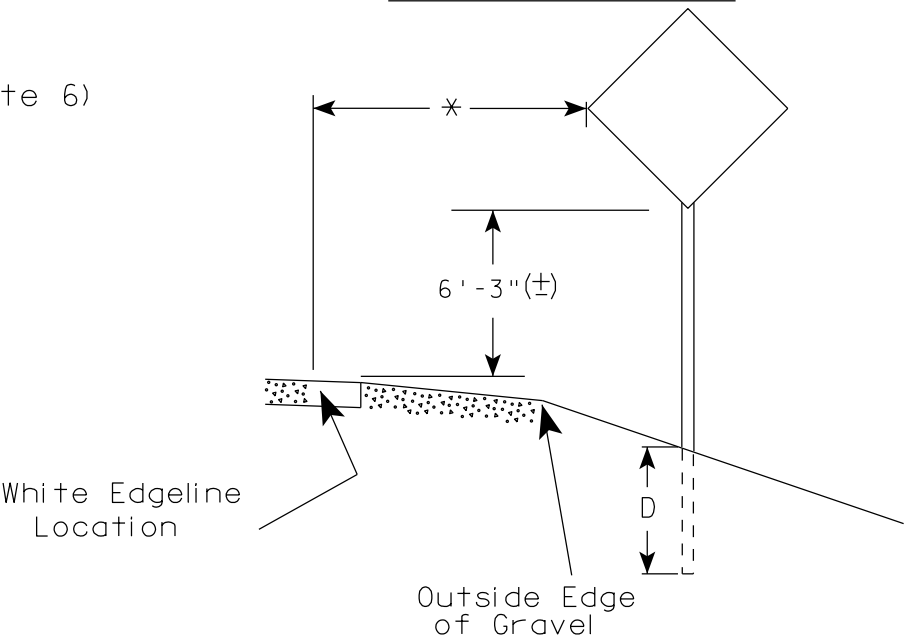
* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Feb. 2015 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

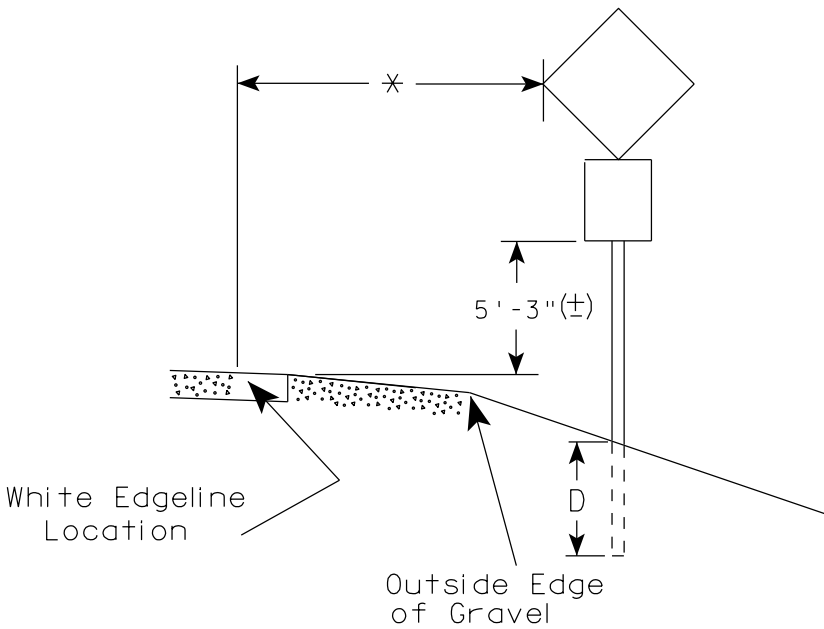
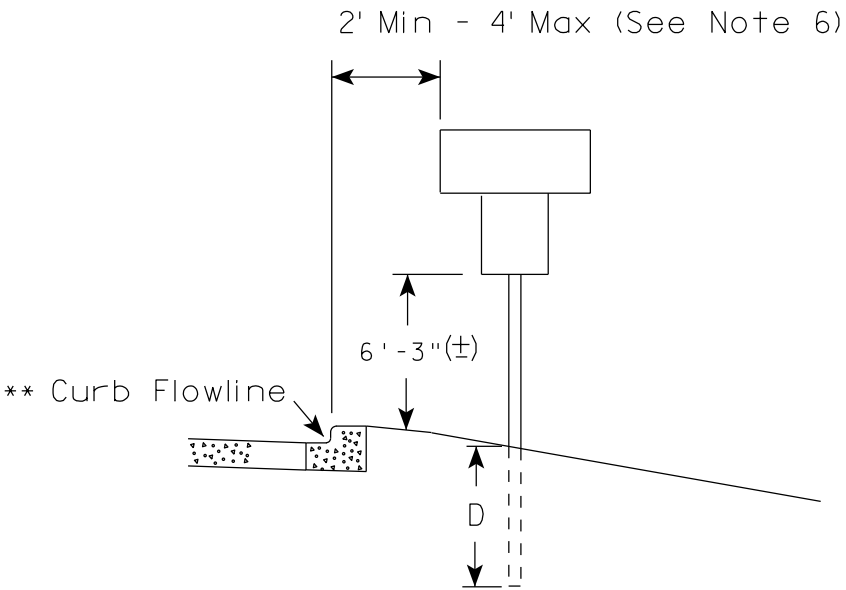
URBAN AREA



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.

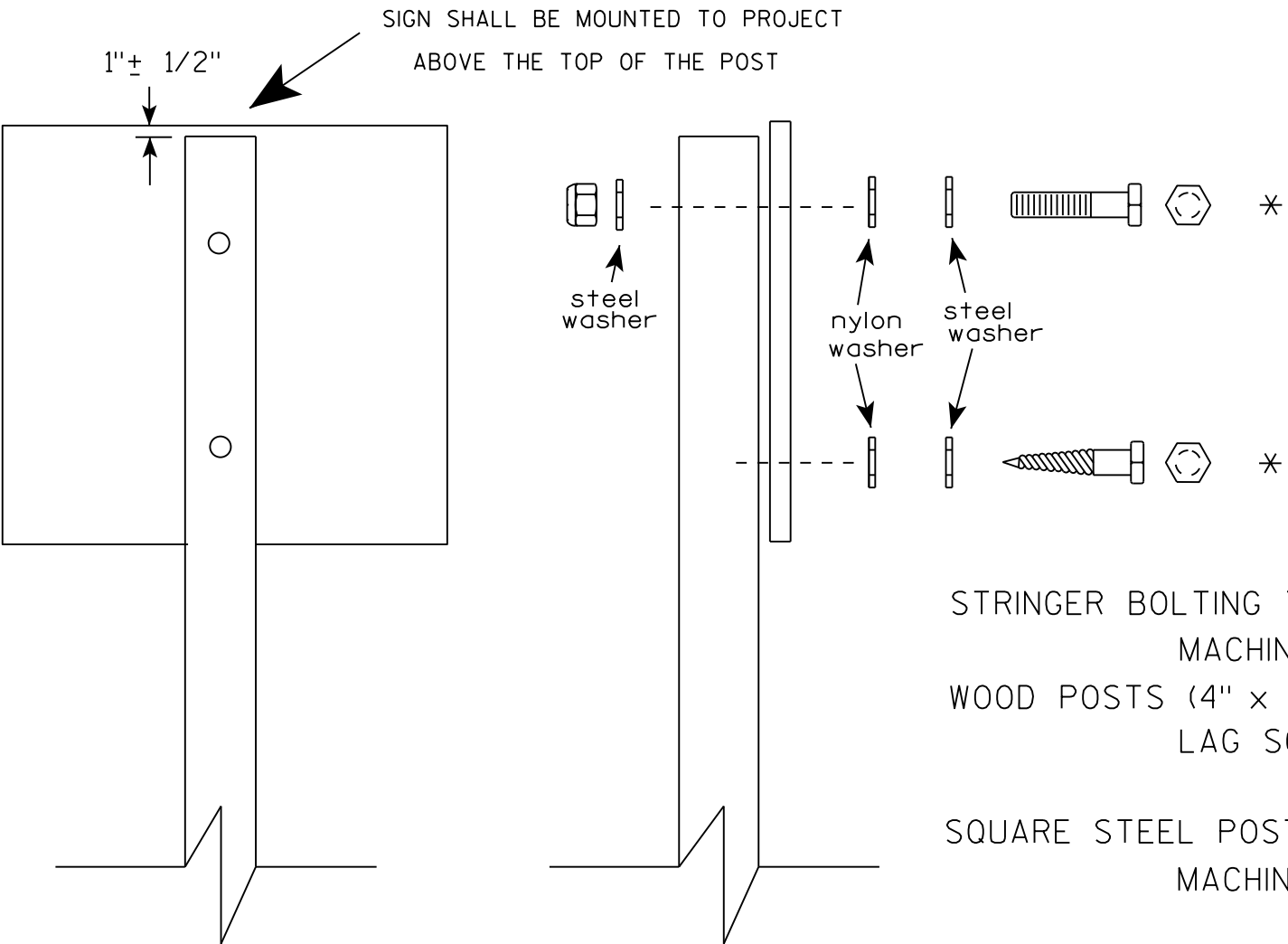
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

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



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.

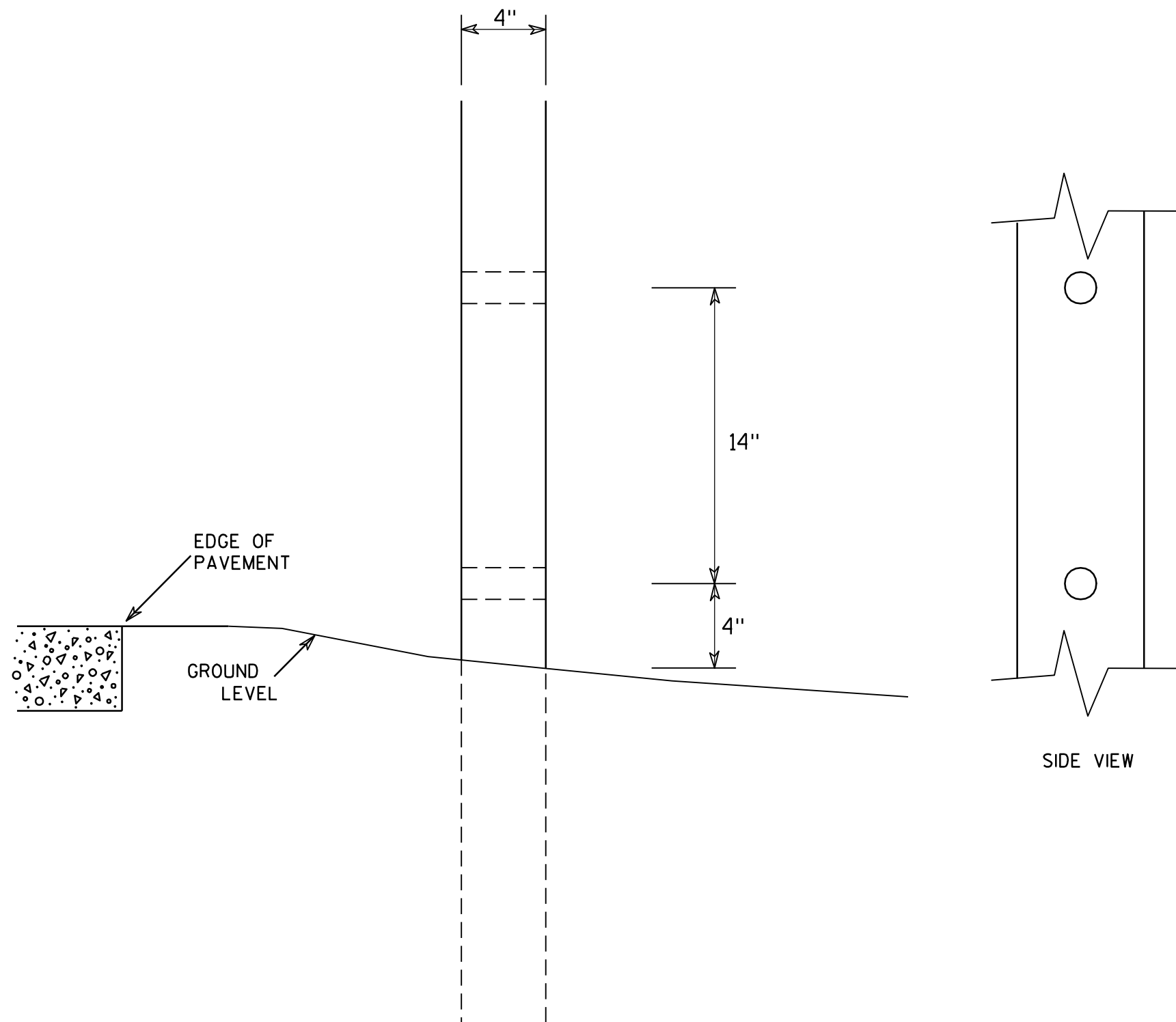
ATTACHMENT OF SIGNS
TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

7

GENERAL NOTES

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

7

**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:

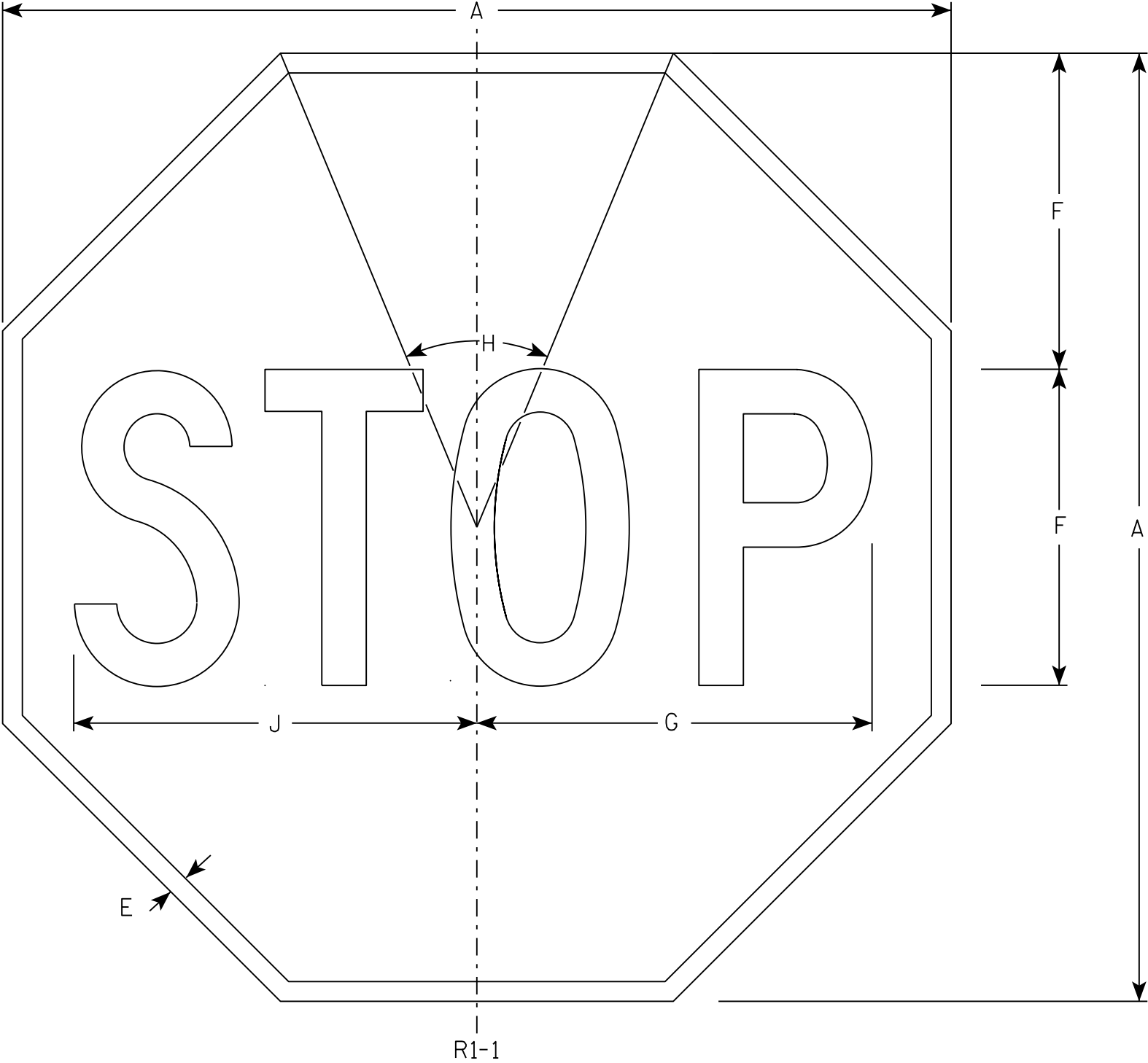
HWY:

COUNTY:

SHEET NO:

E

7



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

7

R1-1

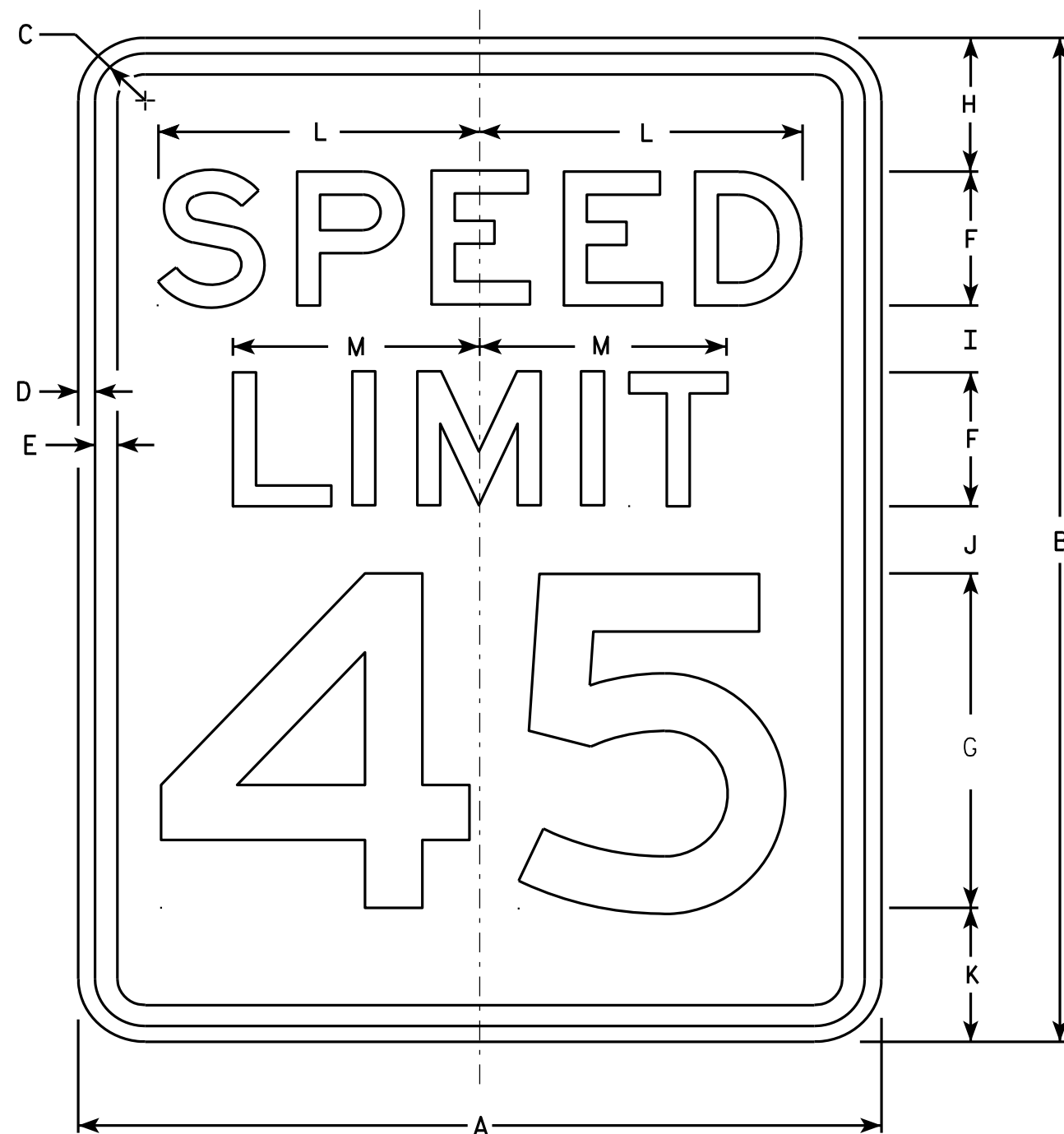
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		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



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.

R2-1

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

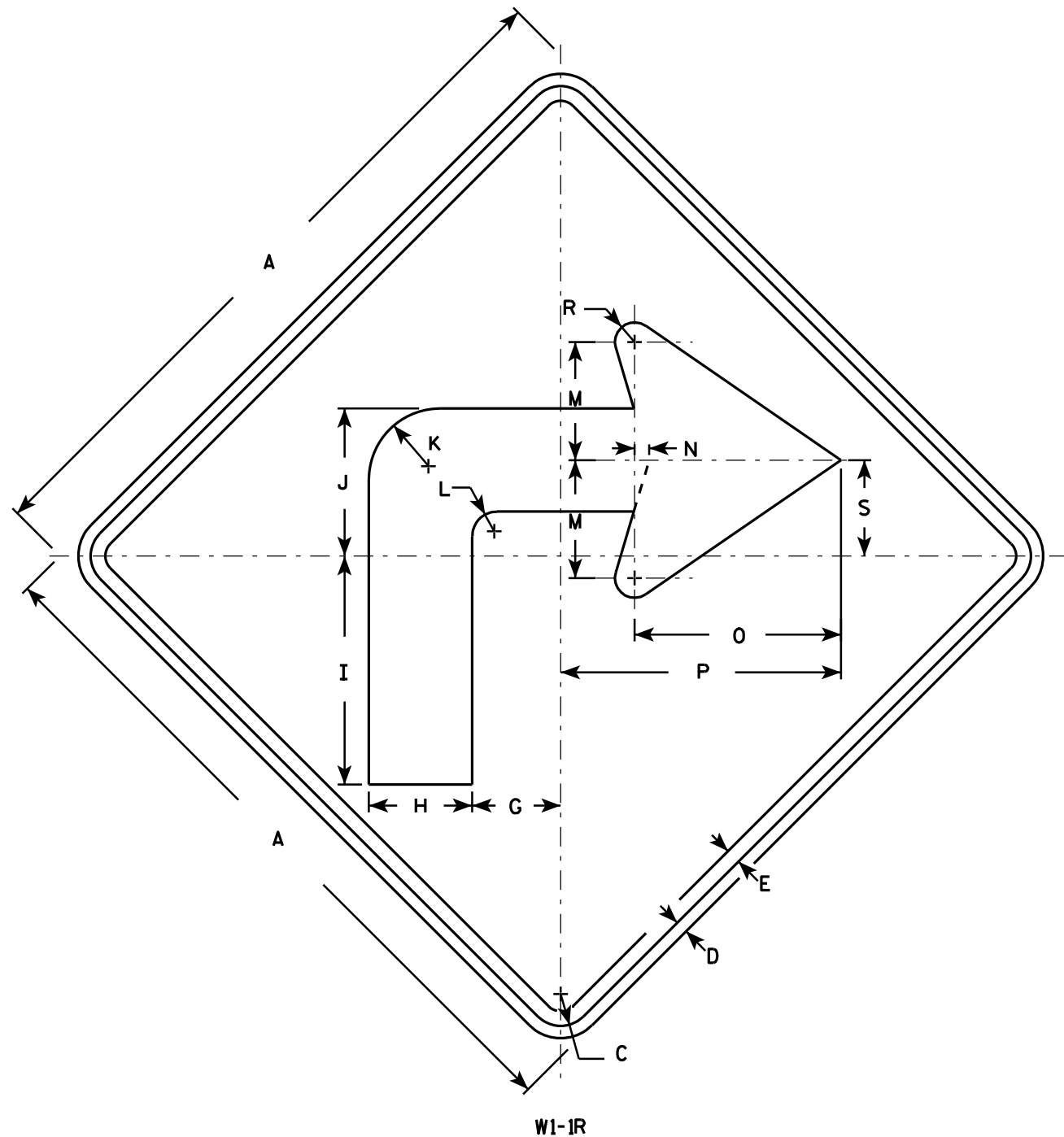
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-1L is the same as W1-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		3	3 1/2	7 3/4	5	2 1/2	7/8	4	1/2	7	9 1/2		5/8	3 1/4								4.0
2S	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
2M	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
3	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
4	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0
5	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0

STANDARD SIGN

W1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-1.11

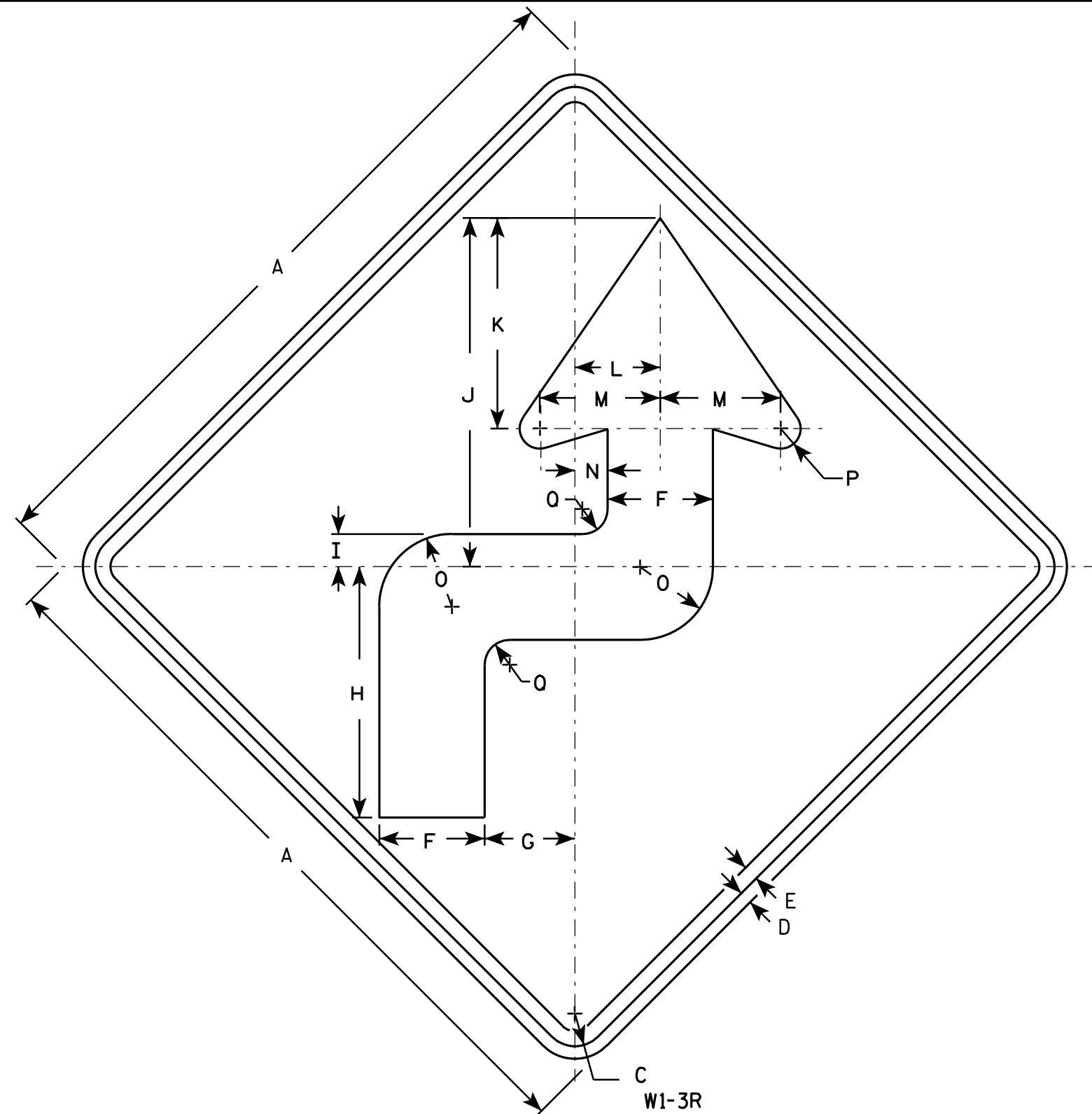
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

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. W1-3L is the same as W1-3R except the arrow is reversed along the vertical centerline.

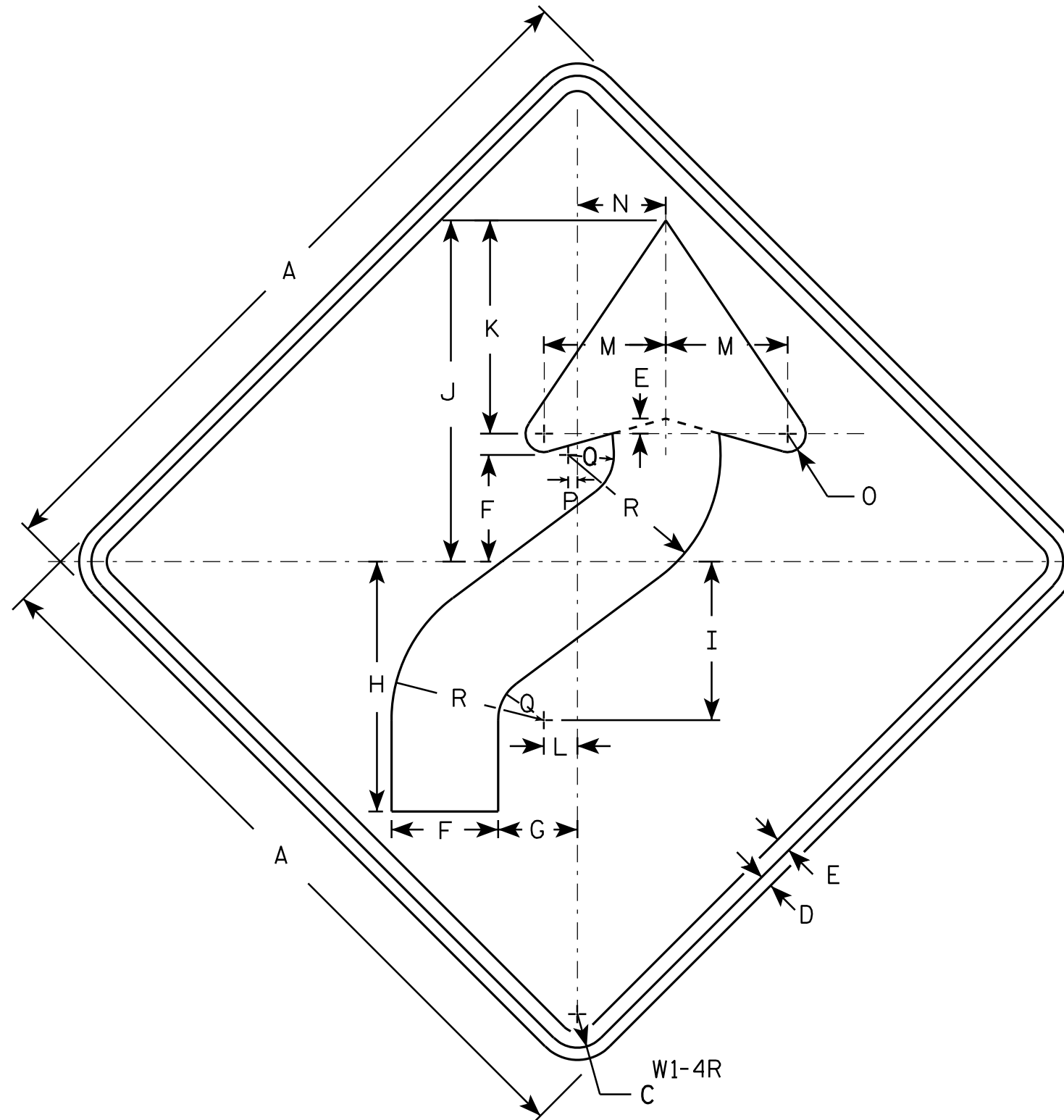
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	3 1/2	3	8 3/8	1 1/8	11 5/8	7	2 3/4	4	1 1/8	2 1/2	5/8	7/8										4.0
2S	36		1 5/8	5/8	3/4	5 1/4	4 1/2	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
2M	36		1 5/8	5/8	3/4	5 1/4	4 1/2	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
3	36		1 5/8	5/8	3/4	5 1/4	4 1/2	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
4	36		1 5/8	5/8	3/4	5 1/4	6	12 1/2	1 5/8	17 3/8	10 1/2	4 1/4	6	1 5/8	3 5/8	1	1 1/4										9.0
5	48		2 1/4	3/4	1	7	6	16 5/8	2 1/4	23 1/4	14	5 5/8	8	2 1/8	4 7/8	1 1/4	1 5/8										16.0

STANDARD SIGN W1-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 5/17/12 PLATE NO. W1-3.8

PROJECT NO: HWY: COUNTY: 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.
- 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

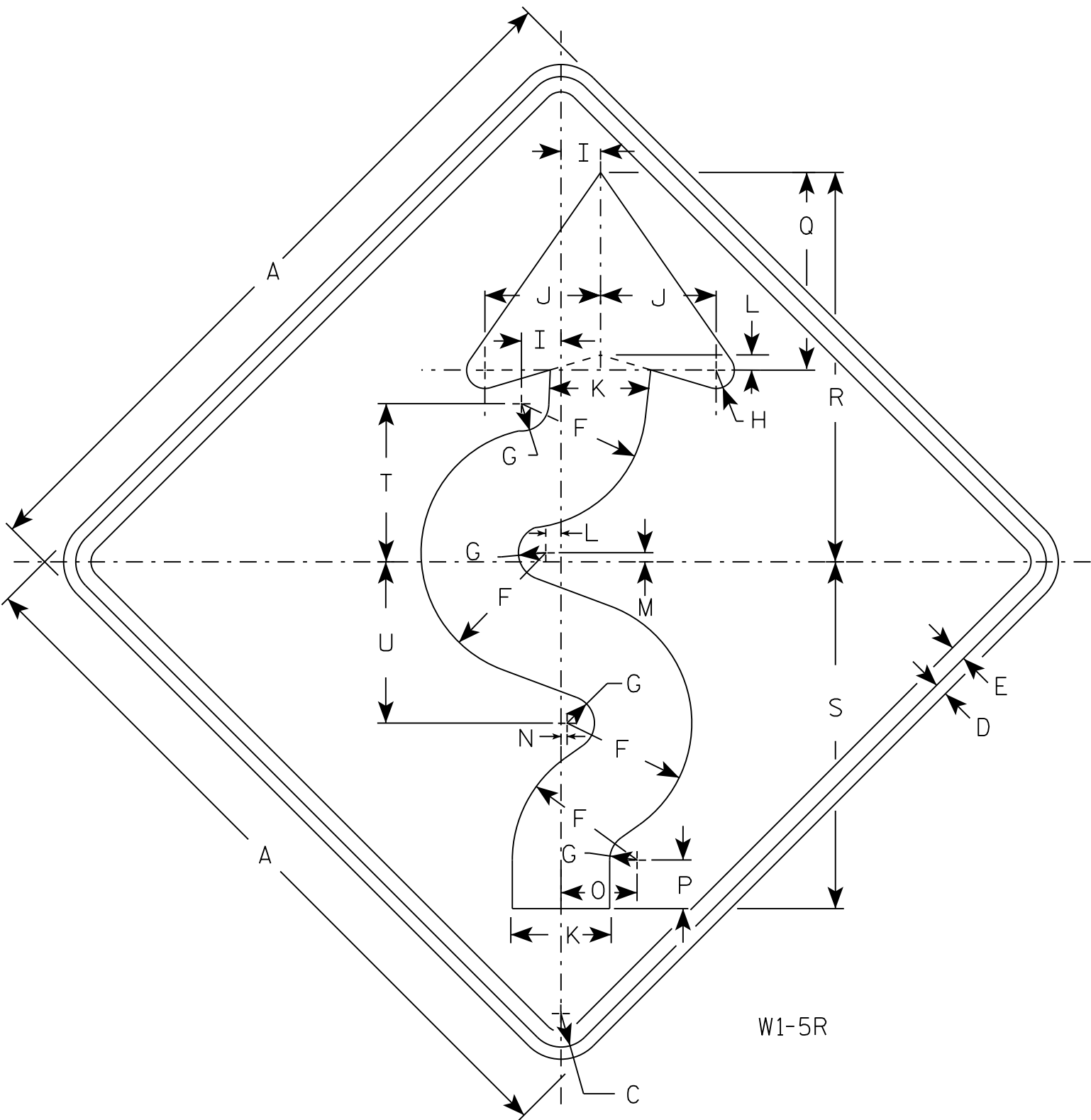
STANDARD SIGN W1 - 4

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
- 2. Color:
Background - Yellow
Message - Black
- 3. W1-5L is the same as W1-5R except the arrow is reversed along the vertical centerline.
- 4. If used with W13-1 of 30 MPH or less, use 36" sign for Size 2S.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4 1/8	7/8	5/8	1 1/4	3 3/4	3 1/4	1/2	1/4	1/8	2 1/2	1 5/8	6 1/2	12 3/4	11 3/8	5 1/4	5 1/4						4.0
2S	30		1 3/8	1/2	5/8	5 1/8	1 1/8	3/4	1 5/8	4 3/4	4 1/8	5/8	3/8	1/4	3 1/8	2	8 1/8	16	14 1/4	6 1/2	6 5/8						6.25
2M	36		1 5/8	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
3	36		1 5/8	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
4	36		1 5/8	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
5	48		2 1/4	3/4	1	8 1/4	1 3/4	1 1/4	2 1/2	7 1/2	6 1/2	1	1/2	3/8	5	3 1/4	13	25 1/2	22 3/4	10 3/8	10 1/2						16.0

STANDARD SIGN
W1-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

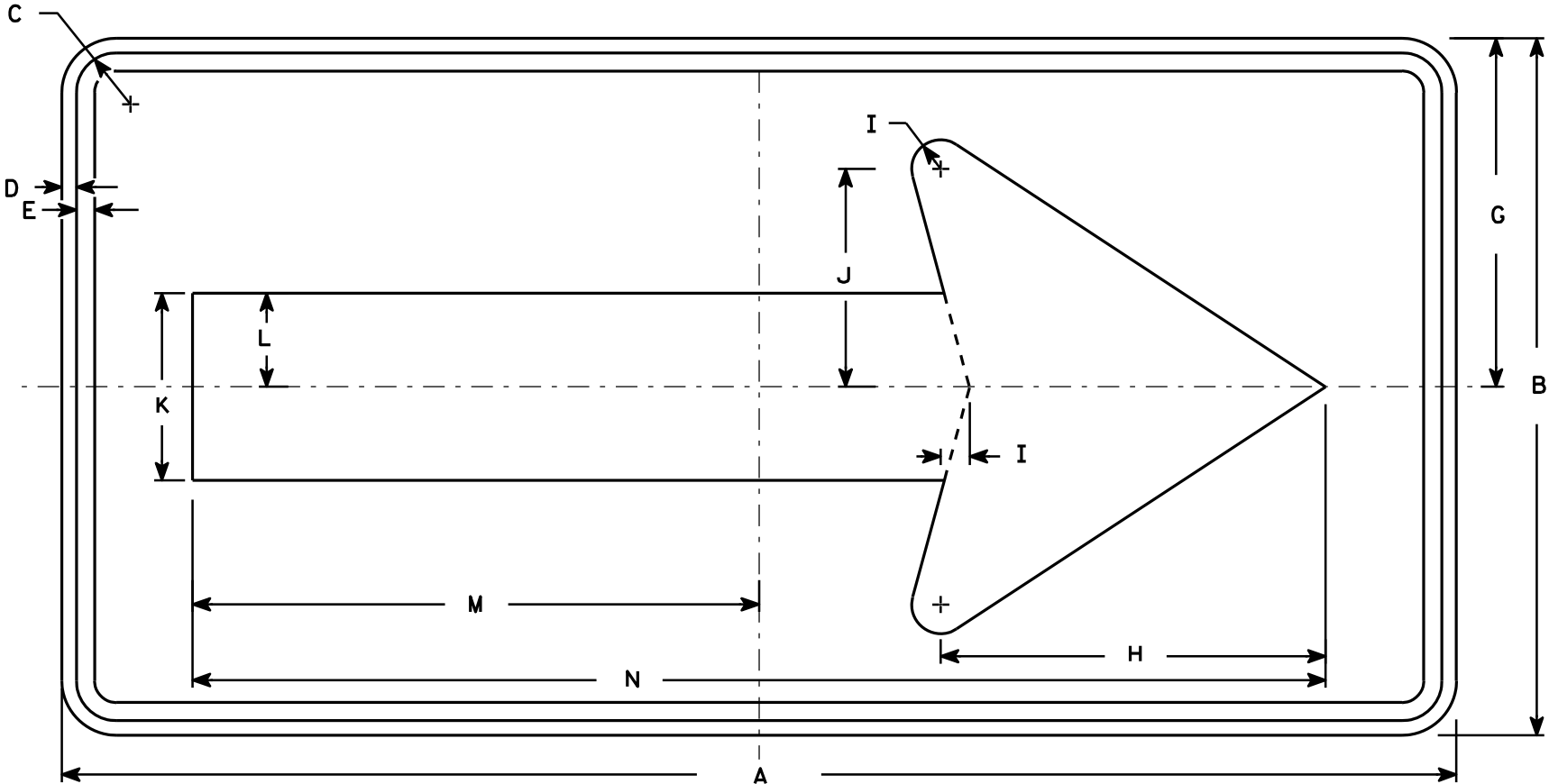
DATE 8/1/16 PLATE NO. W1-5.9

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. 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.



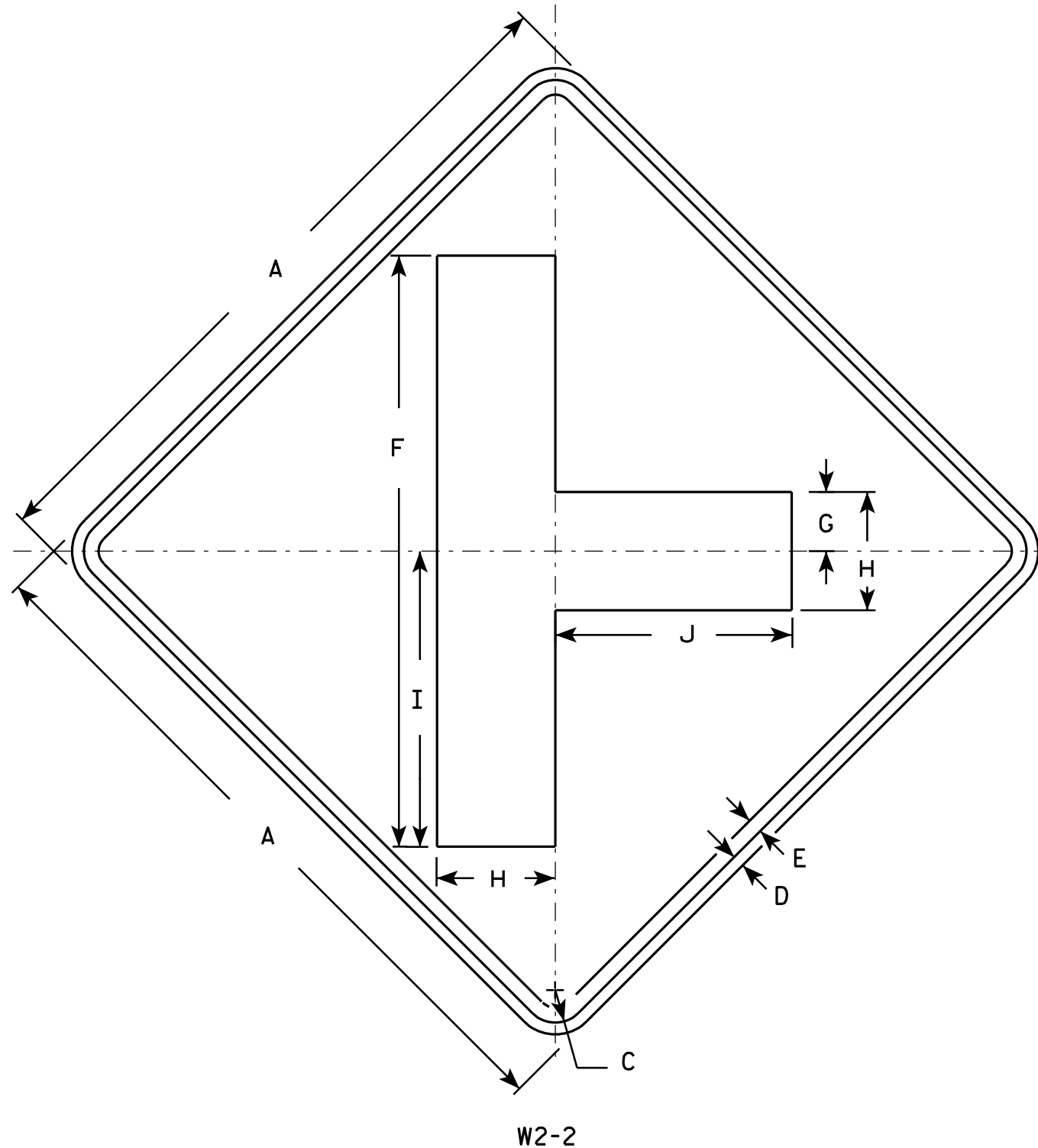
W1-6

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

- 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																											

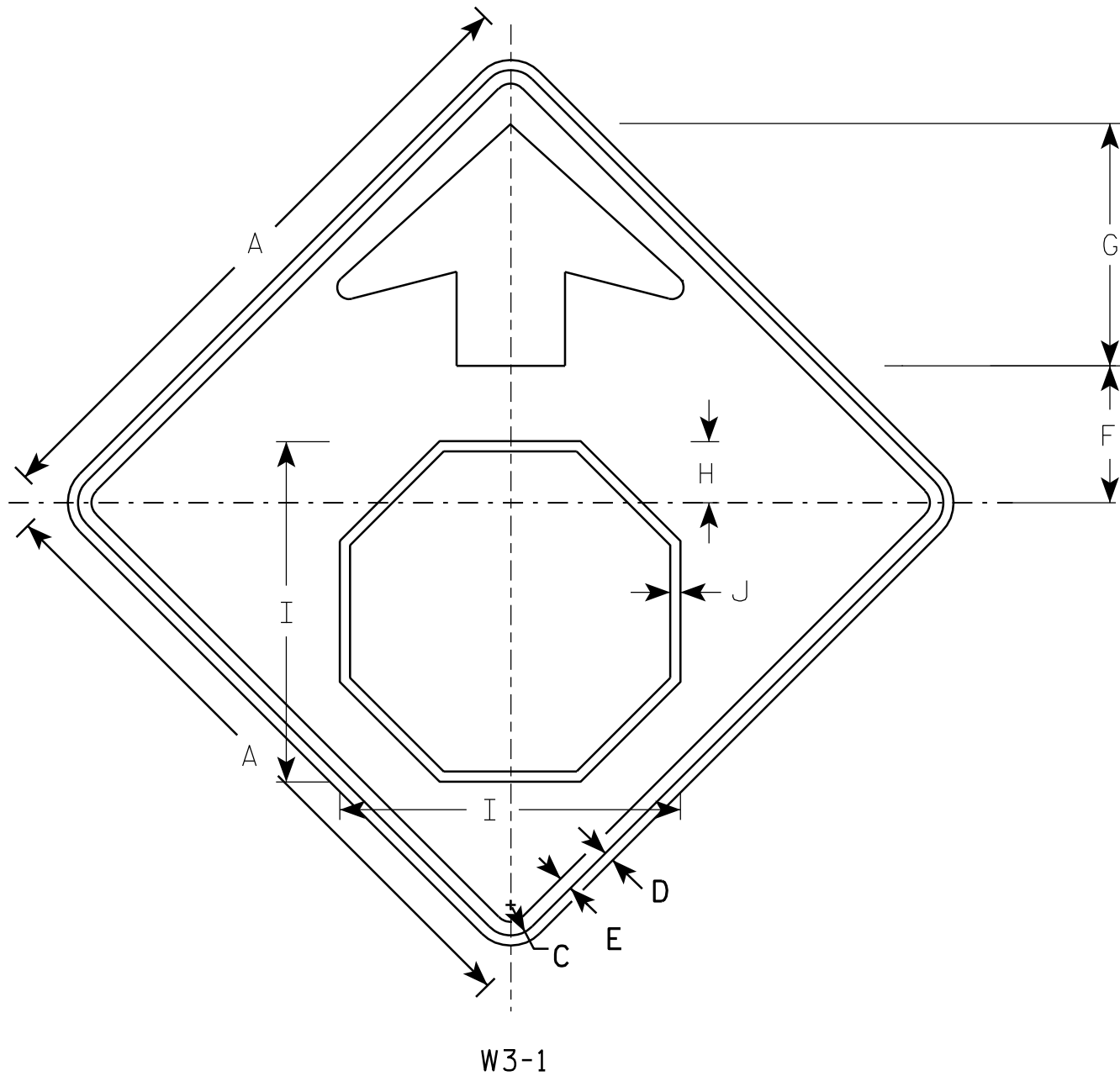
STANDARD SIGN W2-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

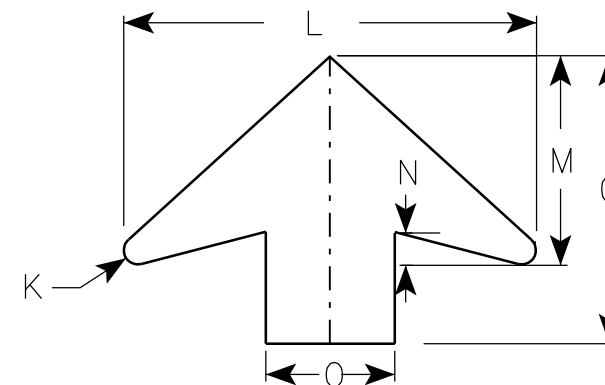
DATE 5/29/12 PLATE NO. W2-2.6

PROJECT NO: HWY: COUNTY: SHEET NO: E



NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - YELLOW
Arrow & Border - BLACK
Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

PROJECT NO:

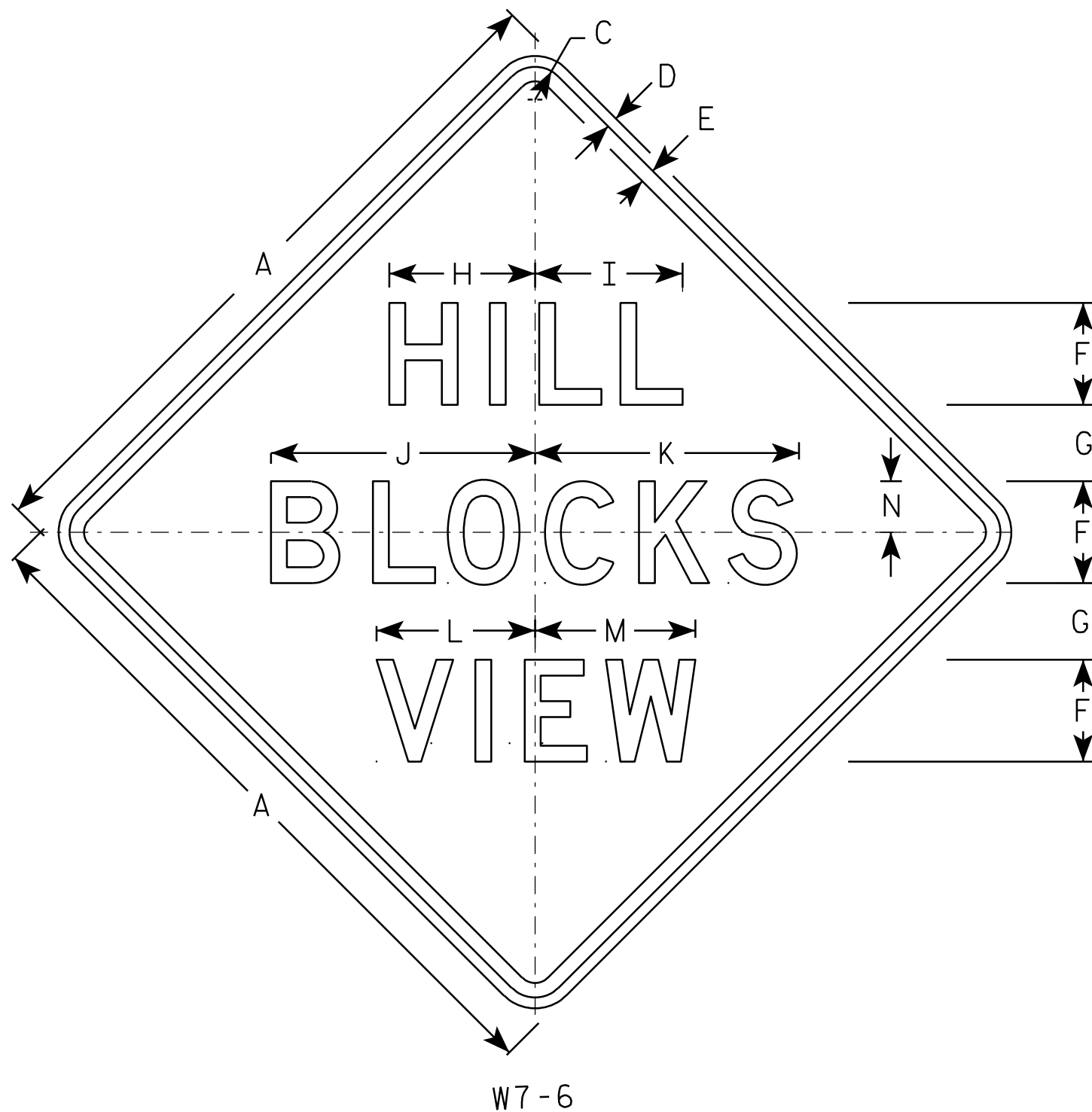
STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W3-1.12

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
- Message Series - D
- 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 1/8	1/2	5/8	5	3 3/4	6	8 3/8	12 7/8	13	7 7/8	7 3/4	2 1/2													6.25
2M	36		1 5/8	5/8	3/4	6	4 1/2	7 3/4	10 3/4	16	16 1/8	9 7/8	9 7/8	3													9.0
3	36		1 5/8	5/8	3/4	6	4 1/2	7 3/4	10 3/4	16	16 1/8	9 7/8	9 7/8	3													9.0
4	36		1 5/8	5/8	3/4	6	4 1/2	7 3/4	10 3/4	16	16 1/8	9 7/8	9 7/8	3													9.0
5	48		2 1/4	3/4	1	7	5 1/4	10	10 1/8	18 1/8	18 1/8	10 7/8	11	3 1/2													16.0

STANDARD SIGN

W7-6

WISCONSIN DEPT OF TRANSPORTATION

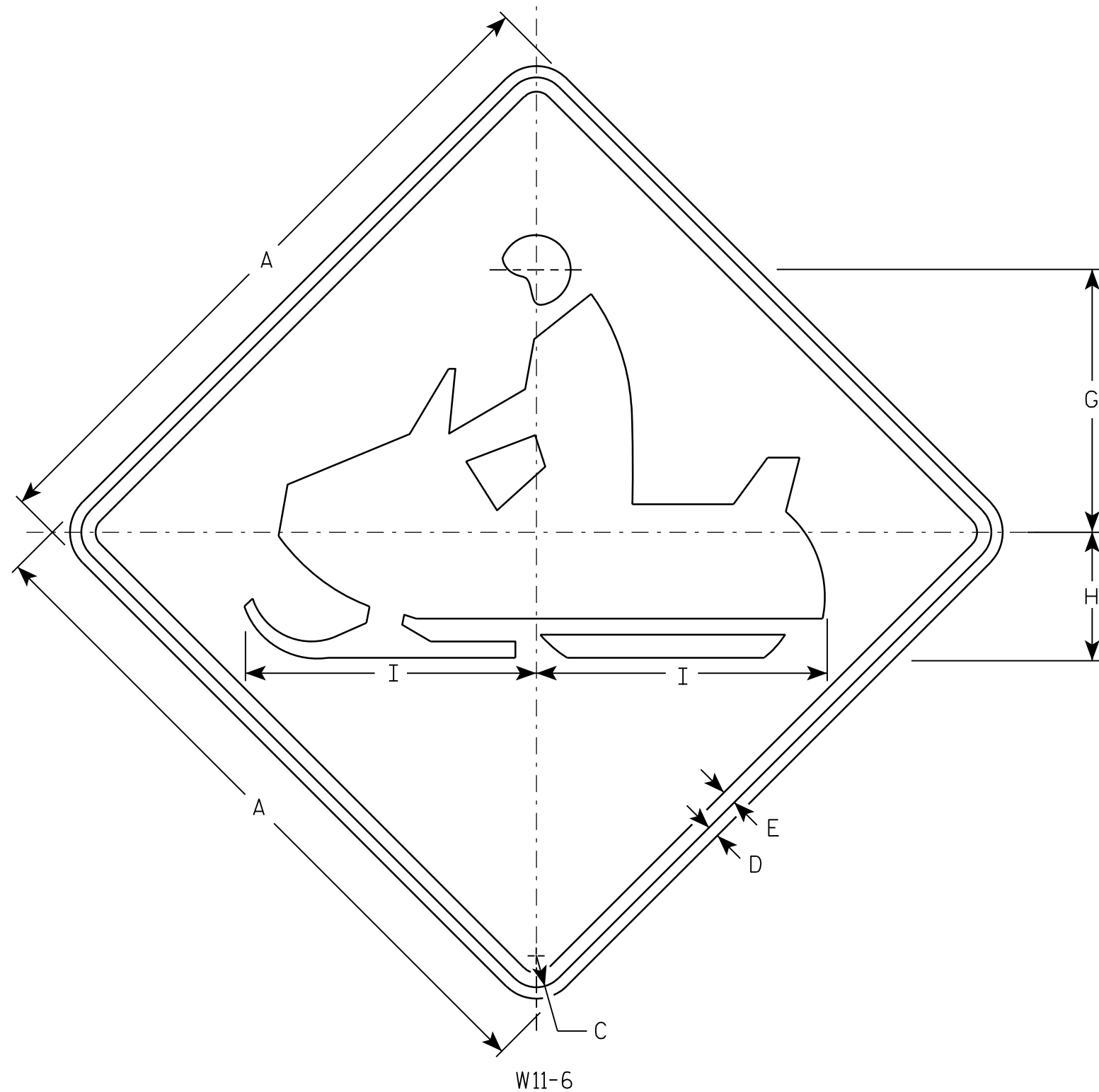
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W7-6.3

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.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		9 1/2	4 1/2	10 1/4																		4.0
2S	30		1 3/8	1/2	5/8		11 1/2	5 5/8	12 3/4																		6.25
2M	30		1 3/8	1/2	5/8		11 1/2	5 5/8	12 3/4																		6.25
3	36		1 5/8	5/8	3/4		14 1/8	6 3/4	15 1/4																		9.0
4	48		2 1/4	3/4	1		19	9	20 1/2																		16.0
5																											

STANDARD SIGN W11-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W11-6.8

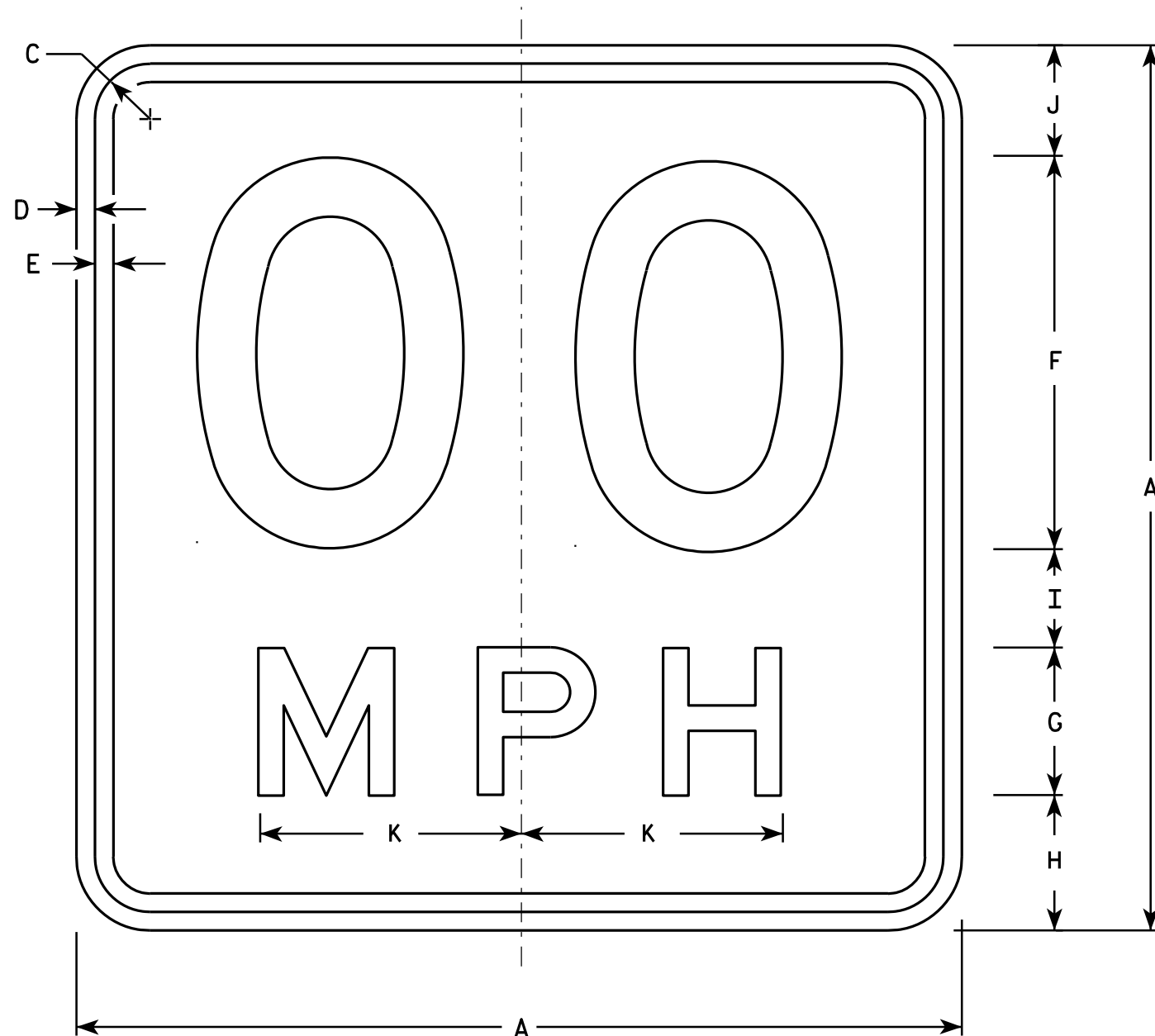
PROJECT NO:

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 - 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

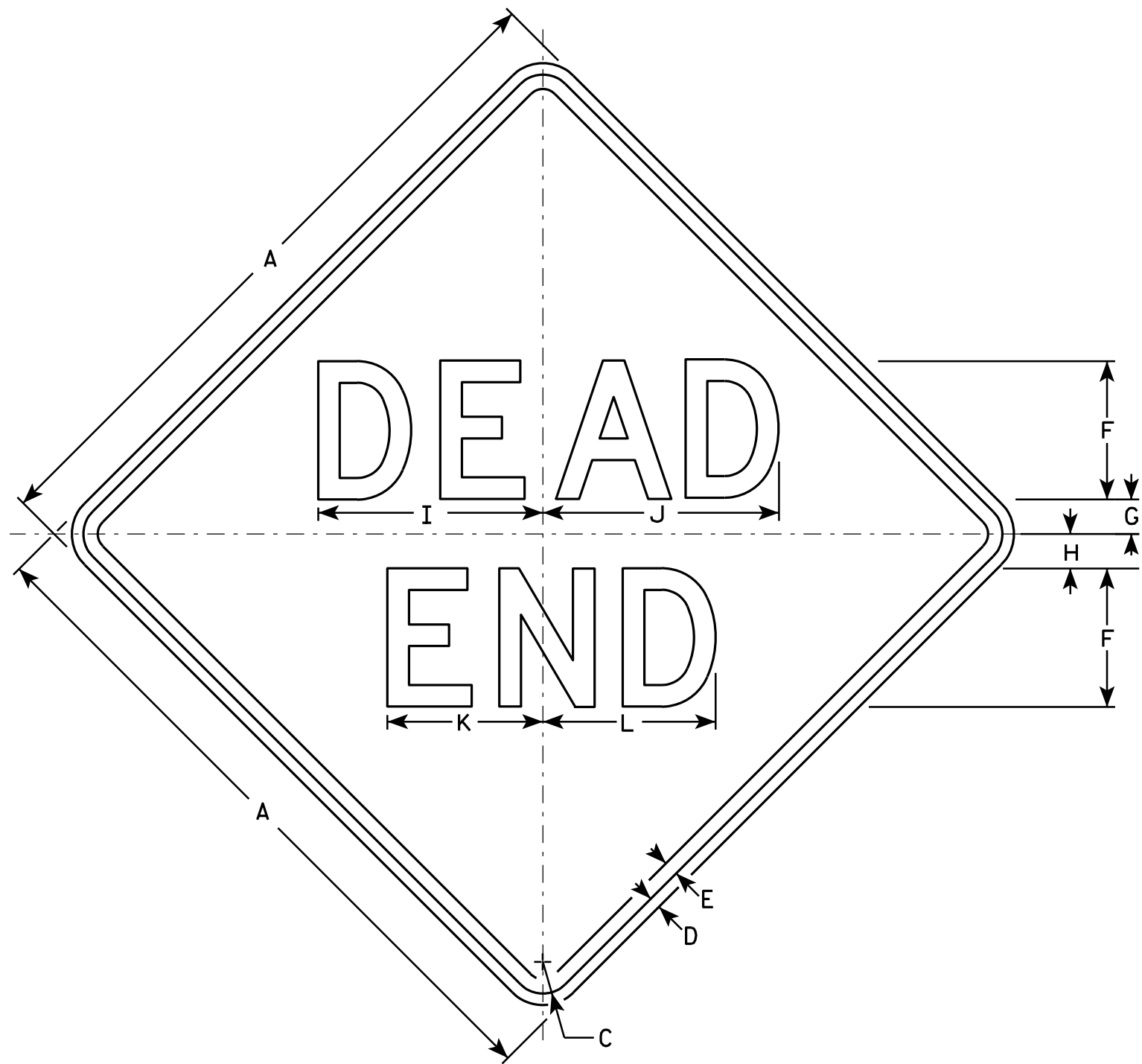
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



W14-1

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area, sq. ft.
1	24		1 1/8	3/8	1/2	5	1	2	8 1/4	8 5/8	5 5/8	6 1/4															4.0
2S	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
2M	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
3	36		1 5/8	5/8	3/4	7	2	3	11 3/8	12	7 7/8	8 3/4															9.0
4																											
5																											

STANDARD SIGN
W14-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
for State Traffic Engineer
DATE 3/13/13 PLATE NO. W14-1.7

PROJECT NO: HWY: COUNTY: SHEET NO: E

MAINLINE								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate Note 8
		Cut	Fill	Cut Note 1	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.25	
110+50.000	0	0.20	0.00	0.00	0.00	0	0	0
111+00.000	50	0.27	0.00	0.50	0.00	1	0	1
111+40.635	40	0.00	0.00	0.00	0.00	1	0	1
112+00.000	60	0.00	1.68	0.00	3.73	1	5	-4
113+00.000	100	4.78	6.70	17.70	24.81	18	36	-17
114+00.000	100	0.00	27.35	0.00	101.30	18	162	-144
115+00.000	100	0.00	27.73	0.00	102.70	18	291	-272
116+00.000	100	0.35	0.14	1.30	0.52	20	291	-272
117+00.000	100	0.00	1.42	0.00	5.26	20	298	-278
118+00.000	100	0.72	2.04	2.67	7.56	22	307	-285
119+00.000	100	0.00	0.15	0.00	0.56	22	308	-286
120+00.000	100	6.23	1.74	23.07	6.44	45	316	-271
121+00.000	100	0.22	12.57	0.81	46.56	46	374	-328
122+00.000	100	0.00	65.88	0.00	244.00	46	679	-633
122+50.139	59	0.00	41.01	0.00	89.61	46	791	-745
123+00.000	41	0.00	14.08	0.00	21.38	46	818	-772
124+00.000	100	0.00	1.04	0.00	3.85	46	823	-777
125+00.000	100	1.30	0.00	4.81	0.00	51	823	-772
126+00.000	100	0.00	1.27	0.00	4.70	51	829	-778
127+00.000	100	0.55	0.74	2.04	2.74	53	832	-779
128+00.000	100	0.00	2.67	0.00	9.89	53	845	-792
129+00.000	100	0.59	1.50	2.19	5.56	55	851	-796
130+00.000	100	0.00	0.91	0.00	3.37	55	856	-801
131+00.000	100	0.27	0.45	1.00	1.67	56	858	-802
132+00.000	100	0.36	0.70	1.33	2.59	57	861	-804
133+00.000	100	0.75	0.08	2.78	0.30	60	861	-801
134+00.000	100	0.30	0.84	1.11	3.11	61	865	-804
135+00.000	100	0.00	1.29	0.00	4.78	61	871	-810
136+00.000	100	0.44	5.28	1.63	19.56	63	896	-833
137+00.000	100	11.66	7.75	43.19	28.70	106	932	-825
138+00.000	100	9.59	4.09	35.52	15.15	142	950	-809
139+00.000	100	0.25	9.33	0.93	34.56	143	994	-851
140+00.000	100	8.37	0.44	31.00	1.63	174	996	-822
141+00.000	100	10.70	0.43	39.63	1.59	213	998	-785
142+00.000	100	0.00	4.36	0.00	16.15	213	1018	-805
143+00.000	100	0.82	4.17	3.04	15.44	216	1037	-821
144+00.000	100	0.00	2.32	0.00	8.59	216	1048	-832
145+00.000	100	16.08	0.00	59.56	0.00	276	1048	-772
146+00.000	100	11.24	4.38	41.63	16.22	317	1068	-751
147+00.000	100	0.22	4.81	0.81	17.81	318	1090	-772
148+00.000	100	5.08	0.40	18.81	1.48	337	1092	-755
149+00.000	100	8.57	0.40	31.74	1.48	369	1094	-725
150+00.000	100	6.09	0.07	22.56	0.26	391	1095	-703
151+00.000	100	0.66	2.44	2.44	9.04	394	1106	-712
152+00.000	100	0.05	0.76	0.19	2.81	394	1109	-715
153+00.000	100	6.70	1.74	24.81	6.44	419	1117	-699
154+00.000	100	0.59	12.07	2.19	44.70	421	1173	-752

MAINLINE								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate Note 8
		Cut	Fill	Cut Note 1	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.25	
155+00.000	100	25.81	0.00	95.59	0.00	517	1173	-657
156+00.000	100	0.30	0.00	1.11	0.00	518	1173	-656
157+00.000	100	0.15	1.31	0.56	4.85	518	1179	-661
158+00.000	100	0.00	1.55	0.00	5.74	518	1187	-668
159+00.000	100	0.40	0.87	1.48	3.22	520	1191	-671
160+00.000	100	0.00	2.54	0.00	9.41	520	1202	-683
160+61.712	62	0.22	0.00	0.51	0.00	520	1202	-682
161+00.000	38	0.39	8.33	0.55	11.72	521	1217	-696
162+00.000	100	0.22	7.18	0.81	26.59	522	1250	-729
163+00.000	100	0.00	1.31	0.00	4.85	522	1256	-735
164+00.000	100	5.88	0.03	21.78	0.11	543	1256	-713
165+00.000	100	12.55	0.00	46.48	0.00	590	1256	-667
166+00.000	100	45.39	0.00	168.11	0.00	758	1256	-498
167+00.000	100	29.47	0.00	109.15	0.00	867	1256	-389
168+00.000	100	6.34	0.57	23.48	2.11	891	1259	-368
169+00.000	100	0.00	9.57	0.00	35.44	891	1303	-413
170+00.000	100	0.62	54.69	2.30	202.56	893	1557	-664
171+00.000	100	0.47	12.73	1.74	47.15	895	1615	-721
172+00.000	100	0.00	18.22	0.00	67.48	895	1700	-805
173+00.000	100	0.78	2.72	2.89	10.07	898	1712	-815
174+00.000	100	0.00	6.81	0.00	25.22	898	1744	-846
175+00.000	100	0.00	36.24	0.00	134.22	898	1912	-1014
176+00.000	100	0.00	91.16	0.00	337.63	898	2334	-1436
177+00.000	100	0.00	26.91	0.00	99.67	898	2458	-1561
178+00.000	100	0.00	3.01	0.00	11.15	898	2472	-1575
179+00.000	100	4.55	1.05	16.85	3.89	914	2477	-1563
180+00.000	100	52.07	0.00	192.85	0.00	1107	2477	-1370
181+00.000	100	17.36	80.72	64.30	298.96	1172	2851	-1679
182+00.000	100	0.26	14.23	0.96	52.70	1172	2917	-1744
183+00.000	100	0.26	4.52	0.96	16.74	1173	2938	-1764
184+00.000	100	0.00	2.19	0.00	8.11	1173	2948	-1774
185+00.000	100	0.85	0.01	3.15	0.04	1177	2948	-1771
186+00.000	100	0.00	1.06	0.00	3.93	1177	2953	-1776
187+00.000	100	0.87	0.00	3.22	0.00	1180	2953	-1773
188+00.000	100	0.51	1.55	1.89	5.74	1182	2960	-1778
189+00.000	100	0.00	0.43	0.00	1.59	1182	2962	-1780
190+00.000	100	1.12	0.00	4.15	0.00	1186	2962	-1776
191+00.000	100	11.69	0.30	43.30	1.11	1229	2963	-1734
192+00.000	100	0.00	3.62	0.00	13.41	1229	2980	-1751
193+00.000	100	0.23	12.92	0.85	47.85	1230	3040	-1810
194+00.000	100	1.09	0.26	4.04	0.96	1234	3041	-1807
195+00.000	100	0.83	0.00	3.07	0.00	1237	3041	-1804
196+00.000	100	1.48	0.00	5.48	0.00	1243	3041	-1798
197+00.000	100	8.33	0.00	30.85	0.00	1273	3041	-1768
198+00.000	100	1.05	0.00	3.89	0.00	1277	3041	-1764
199+00.000	100	1.02	0.00	3.78	0.00	1281	3041	-1760
200+00.000	100	0.16	0.07	0.59	0.26	1282	3041	-1760

MAINLINE								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate Note 8
		Cut	Fill	Cut Note 1	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.25	
201+00.000	100	10.75	0.00	39.81	0.00	1322	3041	-1720
202+00.000	100	7.90	0.00	29.26	0.00	1351	3041	-1691
203+00.000	100	0.16	1.55	0.59	5.74	1351	3049	-1697
204+00.000	100	8.59	3.37	31.81	12.48	1383	3064	-1681
205+00.000	100	1.22	6.09	4.52	22.56	1388	3092	-1705
206+00.000	100	0.98	7.54	3.63	27.93	1391	3127	-1736
207+00.000	100	0.70	10.41	2.59	38.56	1394	3175	-1782
208+00.000	100	0.22	10.74	0.81	39.78	1395	3225	-1830
209+00.000	100	0.83	5.82	3.07	21.56	1398	3252	-1854
210+00.000	100	0.04	10.72	0.15	39.70	1398	3302	-1904
211+00.000	100	0.00	5.54	0.00	20.52	1398	3327	-1929
212+00.000	100	0.00	1.73	0.00	6.41	1398	3335	-1937
213+00.000	100	0.00	3.44	0.00	12.74	1398	3351	-1953
214+00.000	100	0.68	11.63	2.52	43.07	1400	3405	-2005
215+00.000	100	0.31	7.44	1.15	27.56	1402	3440	-2038
216+00.000	100	0.10	4.80	0.37	17.78	1402	3462	-2060
217+00.000	100	9.22	0.22	34.15	0.81	1436	3463	-2027
218+00.000	100	2.41	3.27	8.93	12.11	1445	3478	-2033
219+00.000	100	41.42	0.98	153.41	3.63	1598	3483	-1884
220+00.000	100	55.11	0.00	204.11	0.00	1803	3483	-1680
221+00.000	100	67.32	0.00	249.33	0.00	2052	3483	-1431
222+00.000	100	81.52	2.08	301.93	7.70	2354	3492	-1138
223+00.000	100	25.92	15.63	96.00	57.89	2450	3565	-1115
223+07.045	7	22.70	21.08	5.89	5.47	2456	3571	-1116
223+50.000	43	0.00	0.00	0.00	0.00	2456	3571	-1116
223+64.032	14	0.00	0.00	0.00	0.00	2456	3571	-1116
TOTAL				2456	2857			

SOUTH GARTH LAKE								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate Note 8
		Cut	Fill	Cut Note 1	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.25	
18+50	0	27.92	0.00	0.00	0.00	0	0	0
19+00	50	46.69	0.00	86.46	0.00	86	0	86
19+42	42	0.00	0.00	0.00	0.00	86	0	86

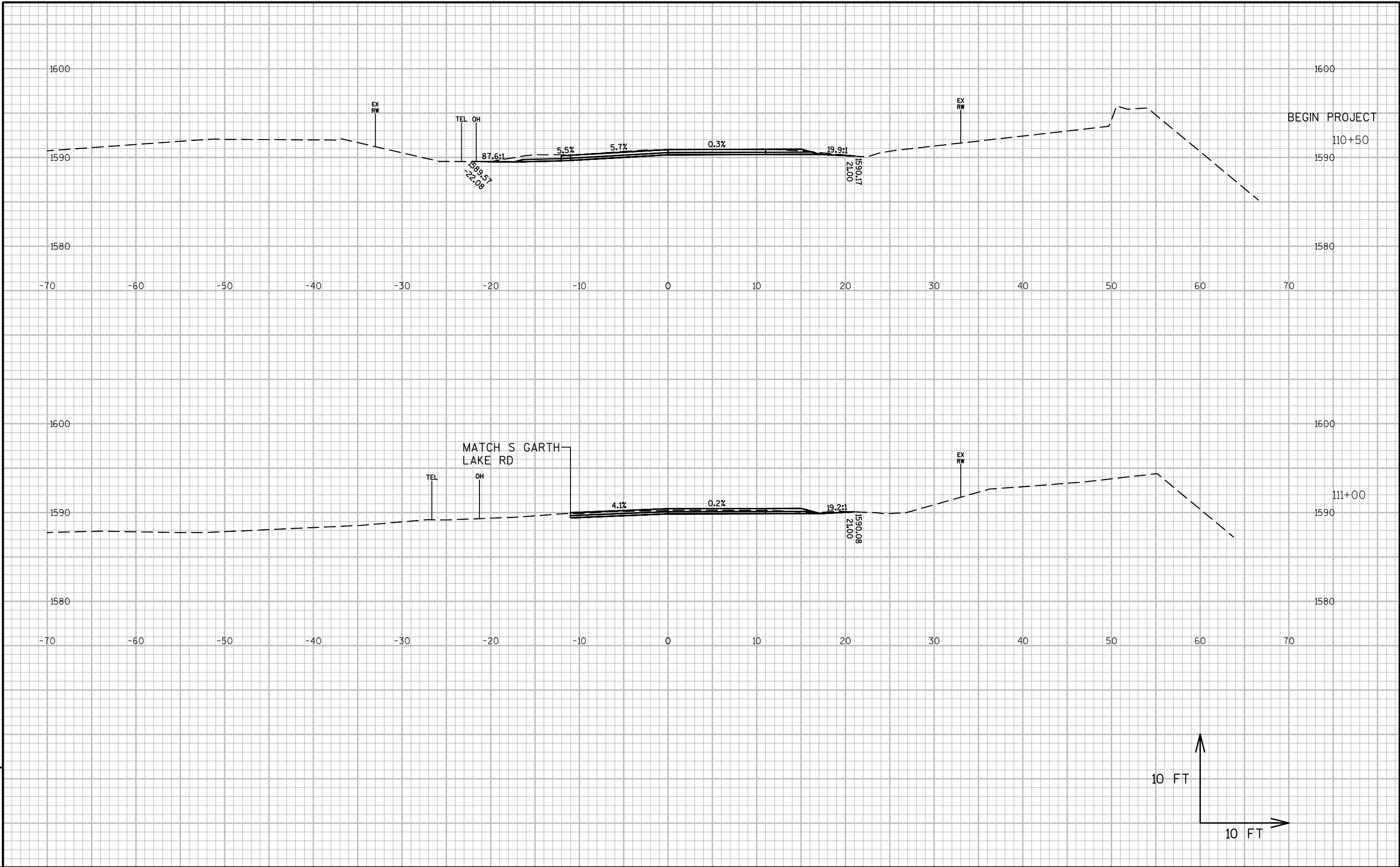
TOTAL	86	0
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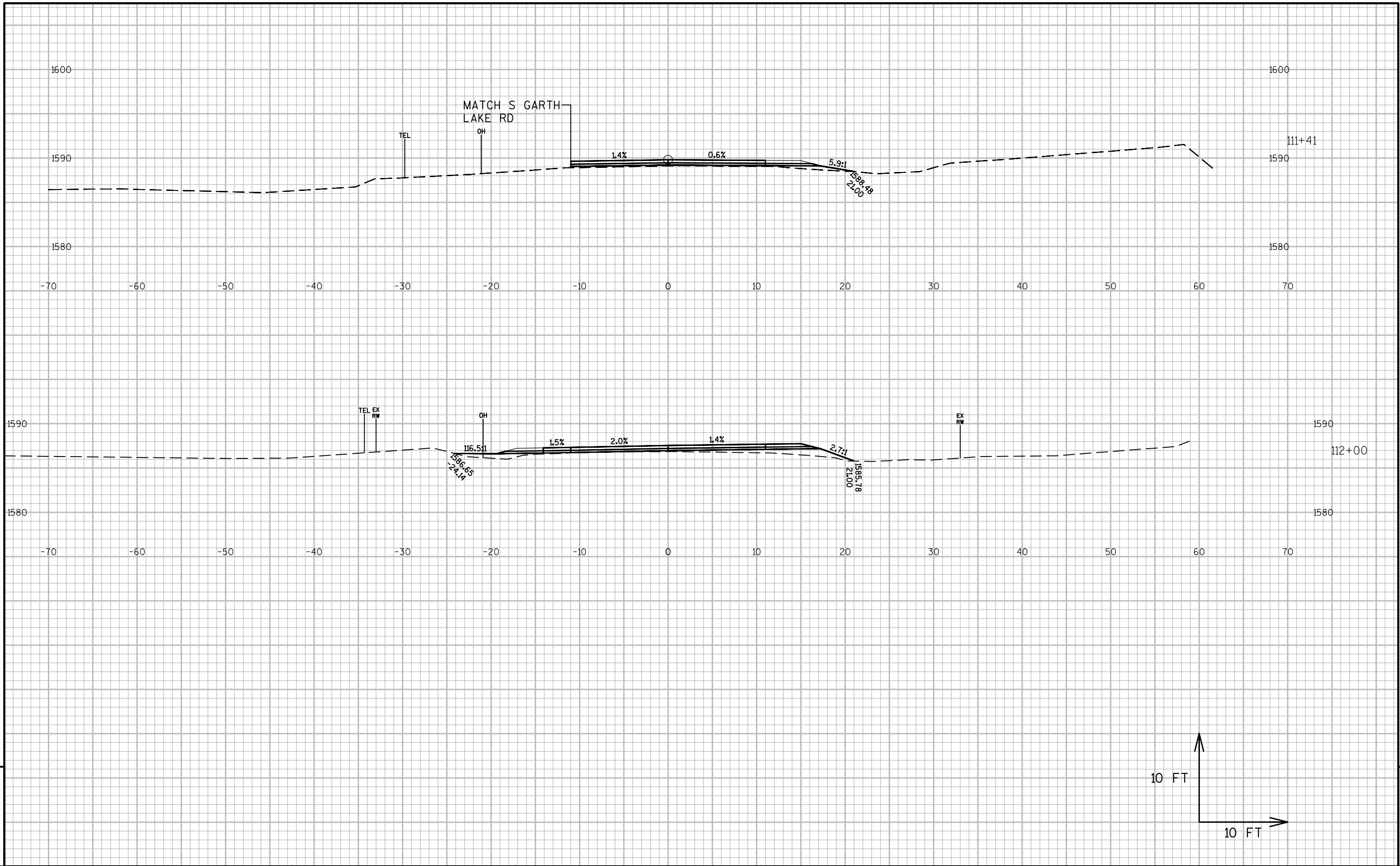
SANDY BEACH								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate Note 8
		Cut	Fill	Cut Note 1	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.25	
17+63	0	41.91	0.12	0.00	0.00	0	0	0
18+00	37	28.38	8.65	38.89	11.85	39	15	24
19+00	100	0.67	32.85	2.48	121.67	41	167	-126
19+50	50	11.71	57.88	21.69	107.19	63	301	-238

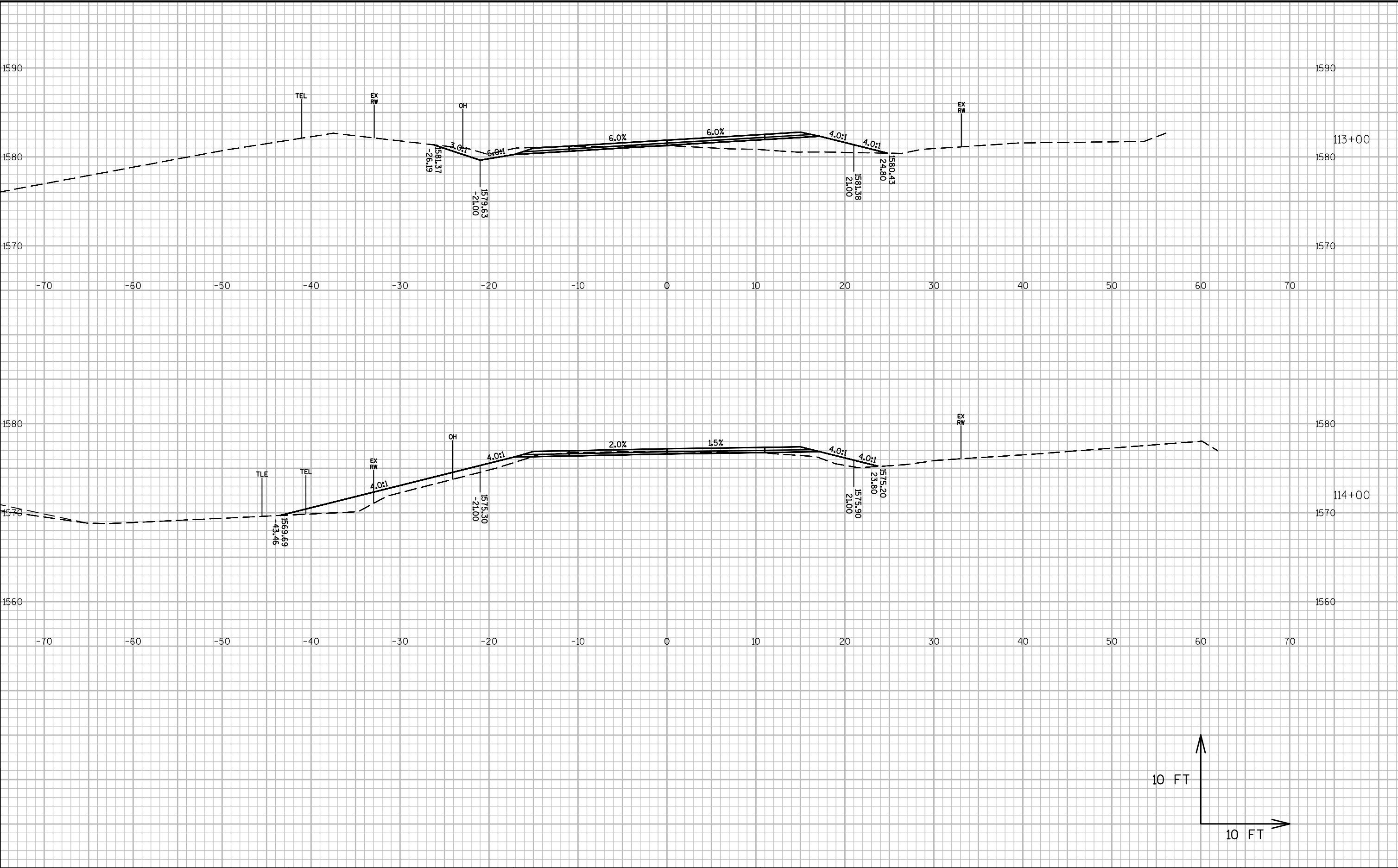
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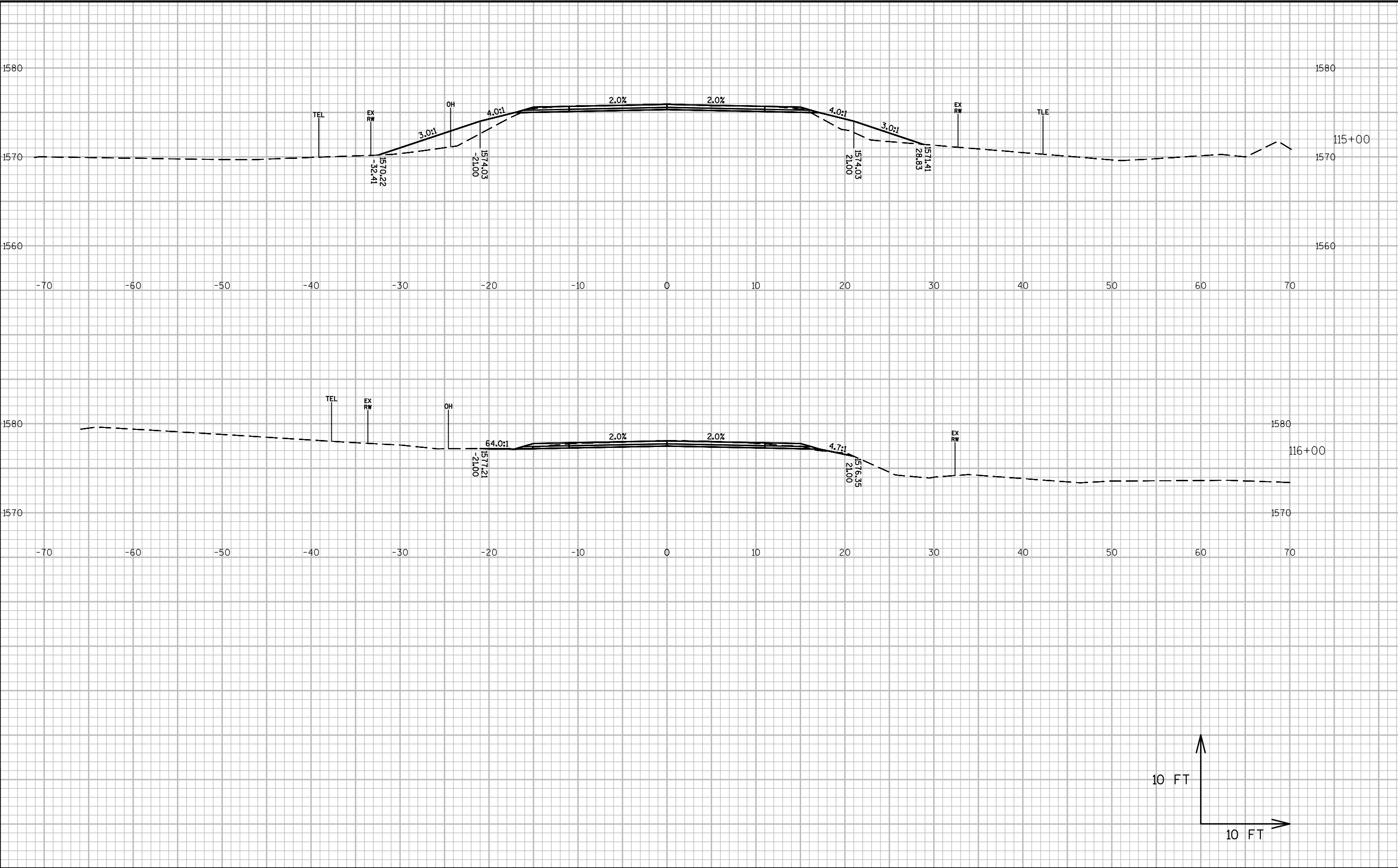
DUGOUT LAKE								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate Note 8
		Cut	Fill	Cut Note 1	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.25	
10+39	0	0.00	0.00	0.00	0.00	0	0	0
11+00	61	14.26	0.96	32.22	2.17	32	3	30
11+17	17	19.79	0.00	12.46	0.00	45	3	42

TOTALS	45	2
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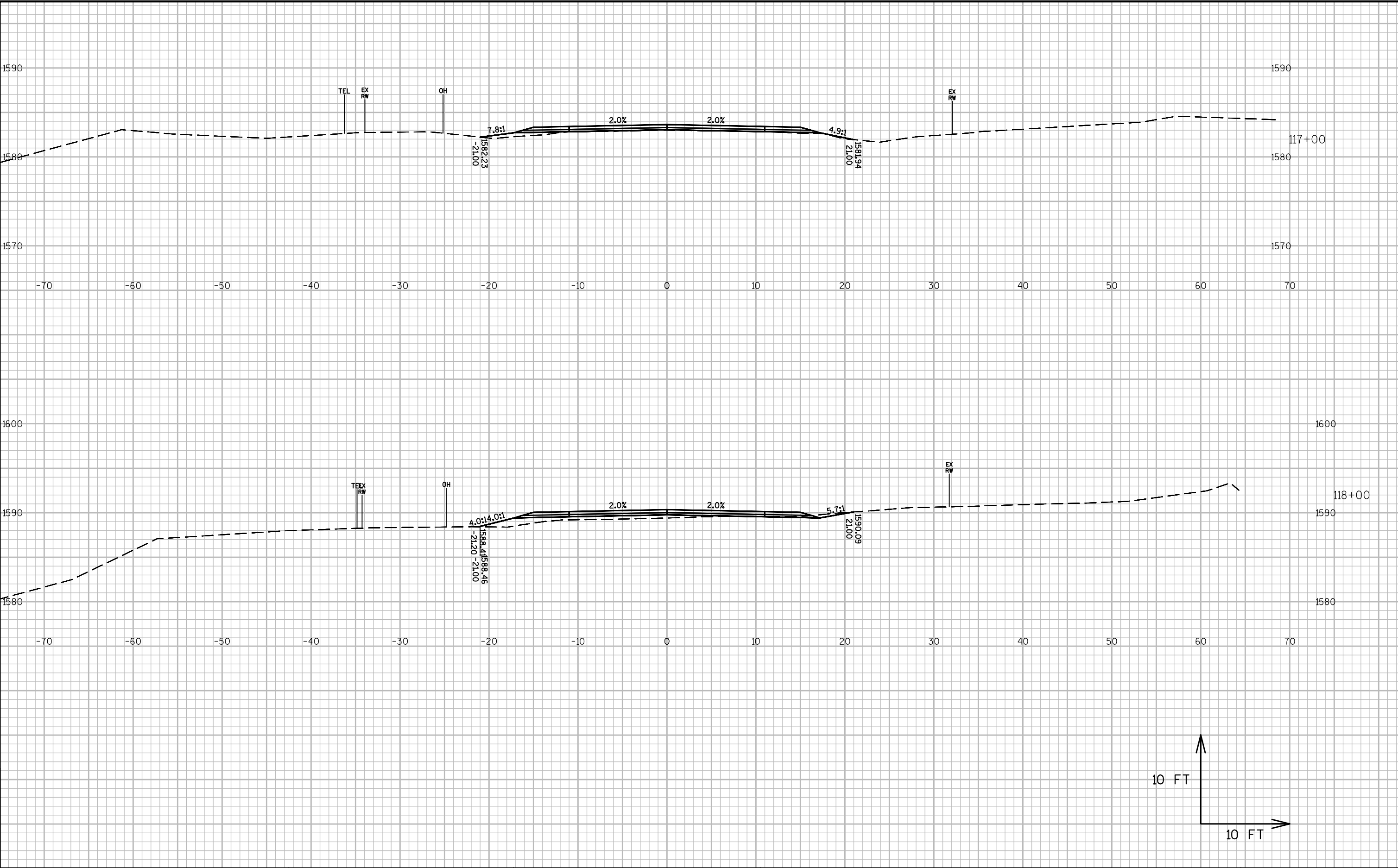






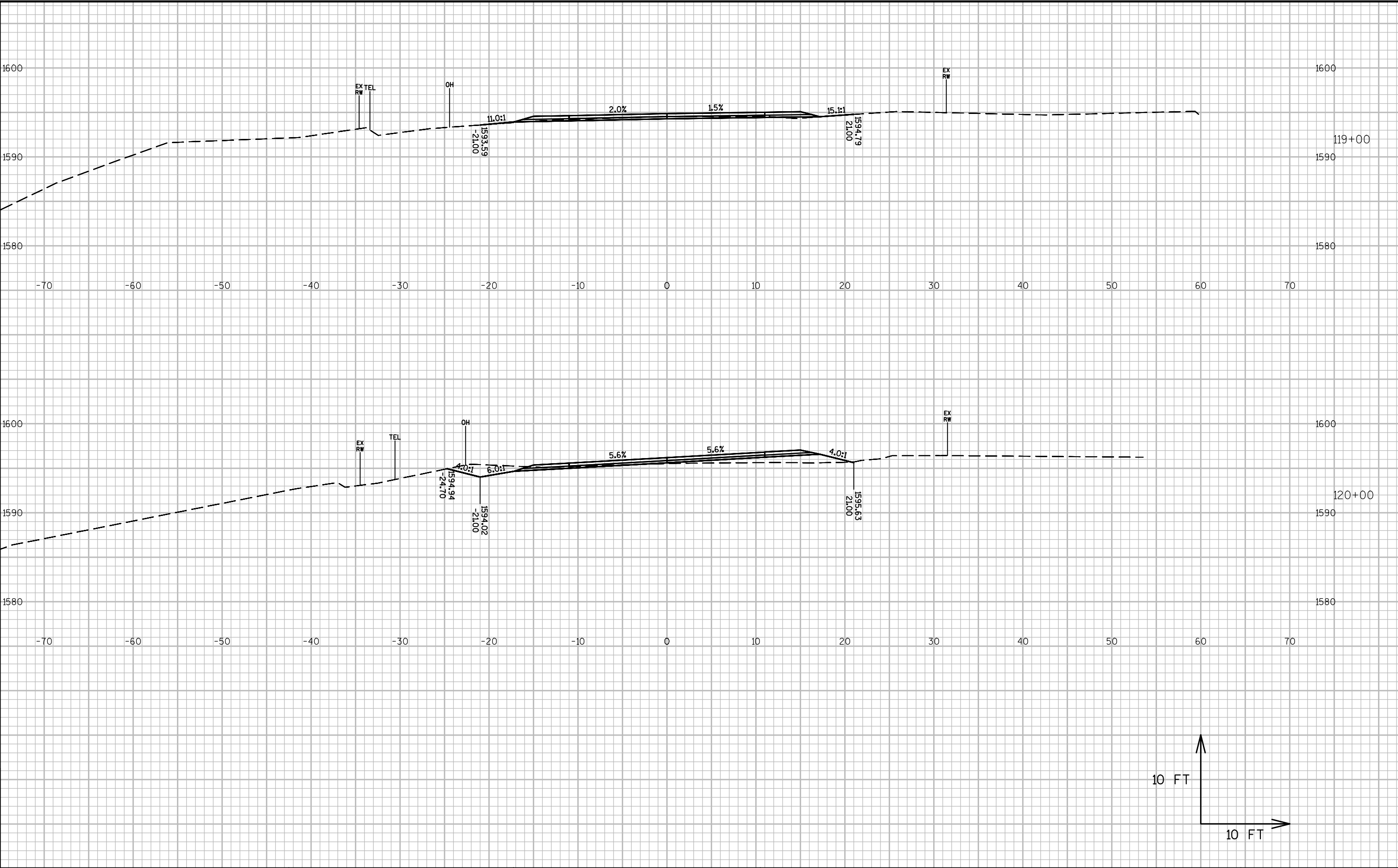
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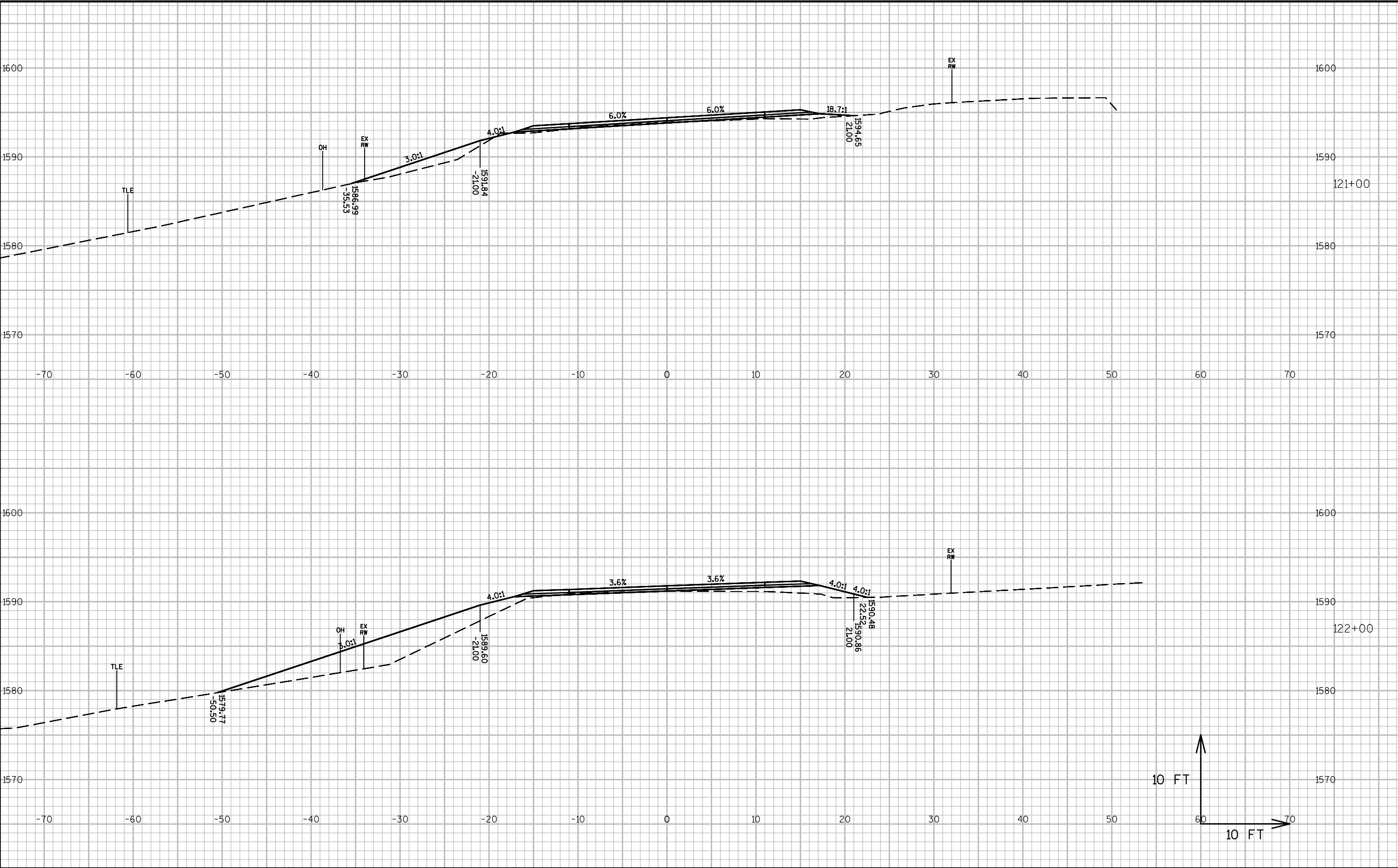
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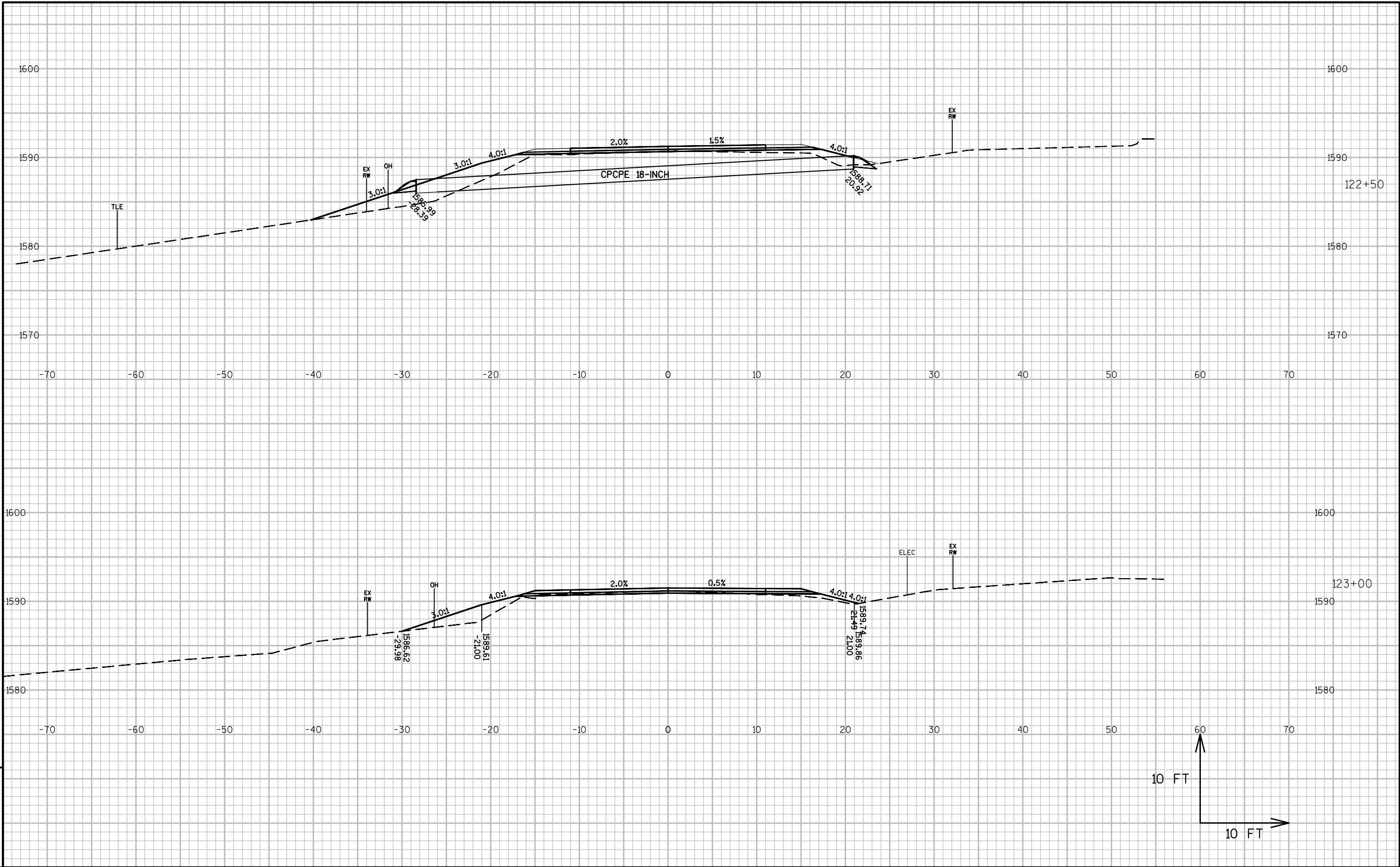


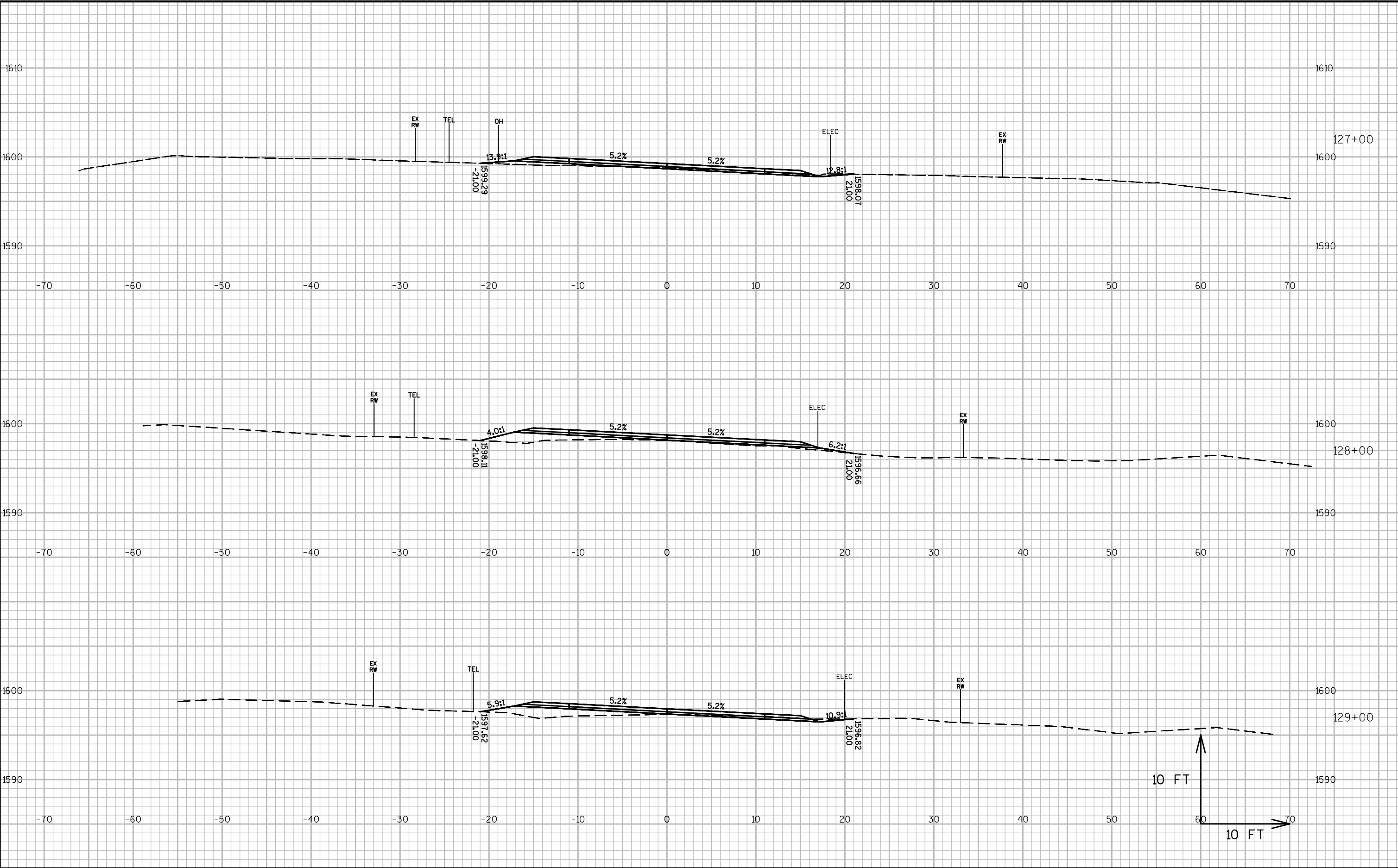
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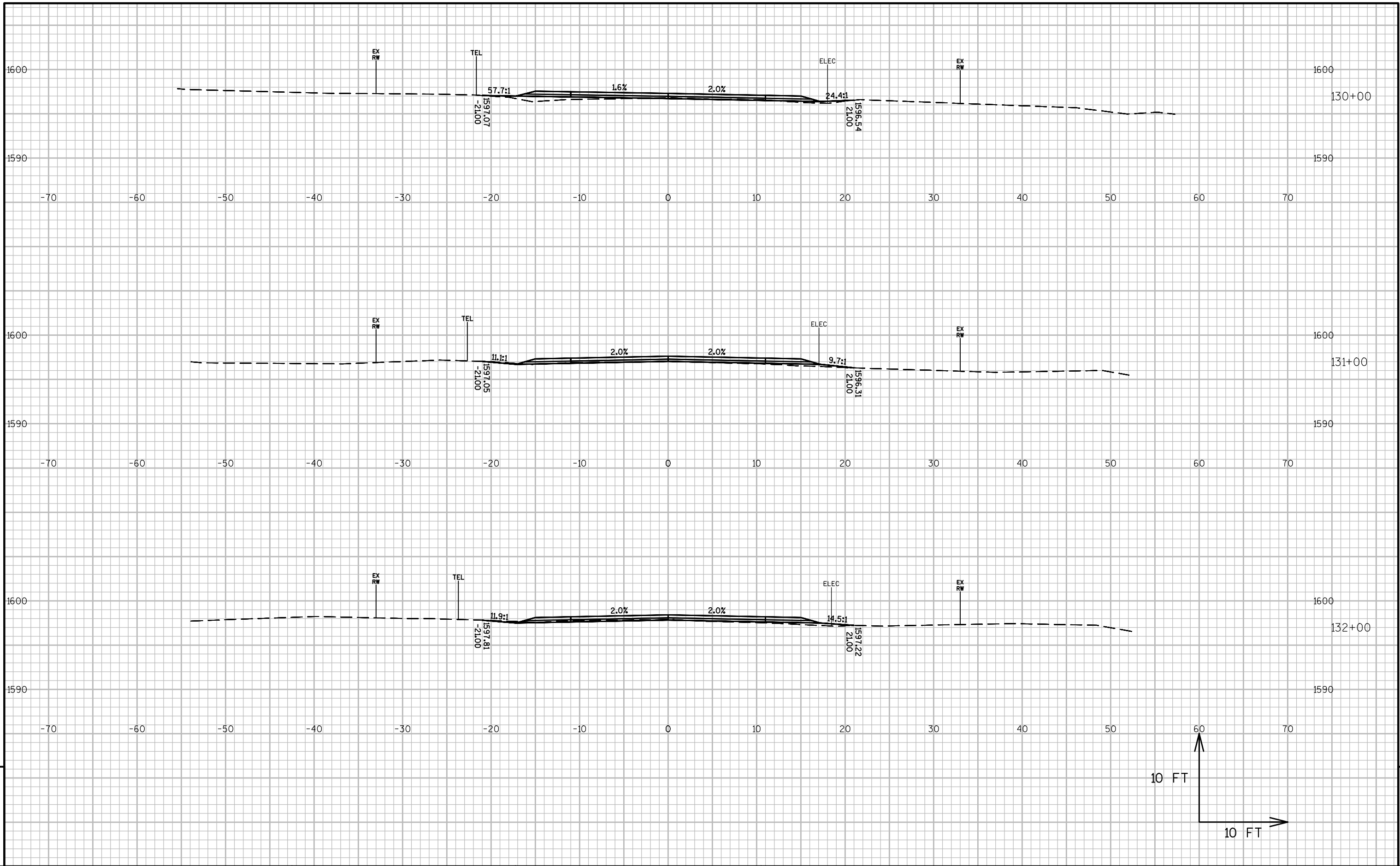
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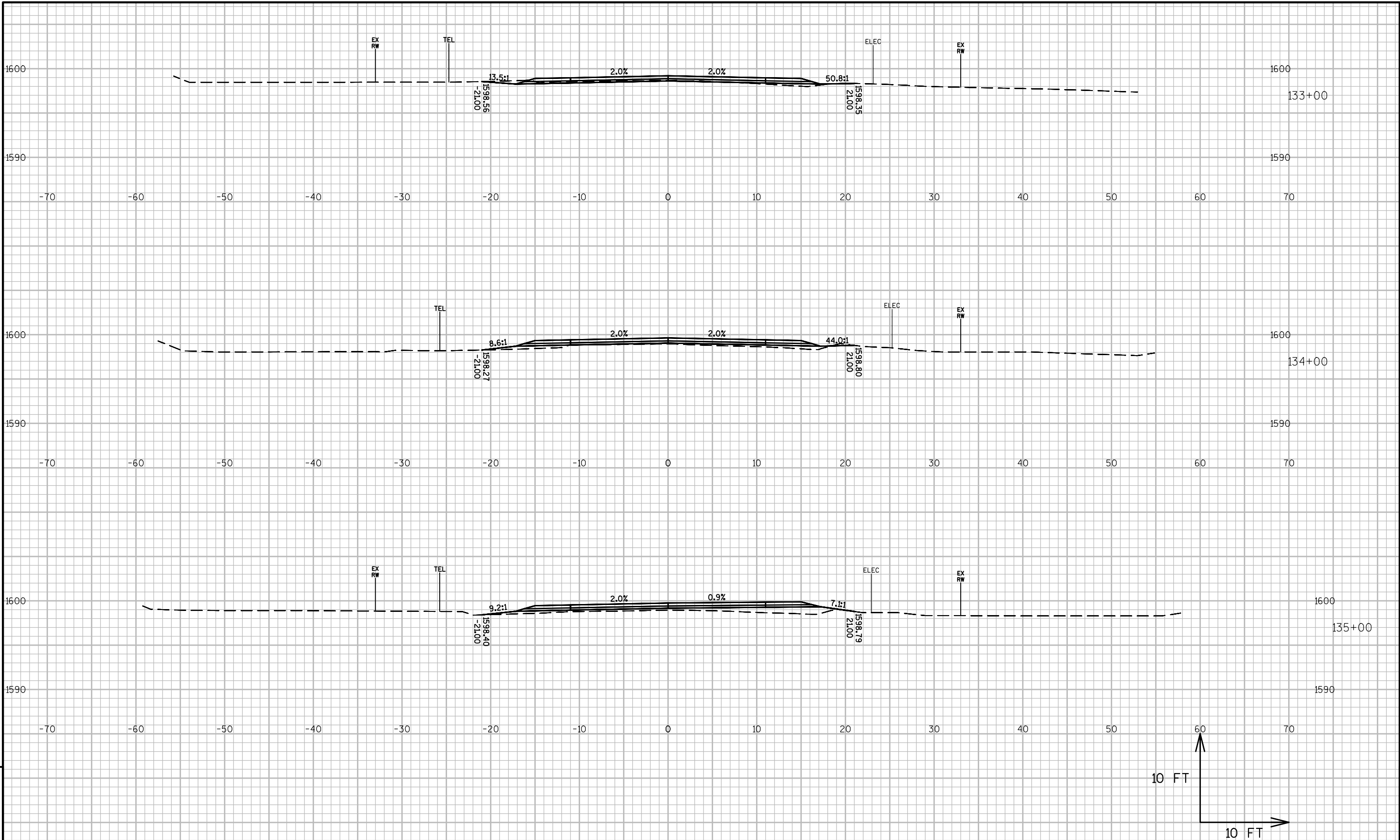








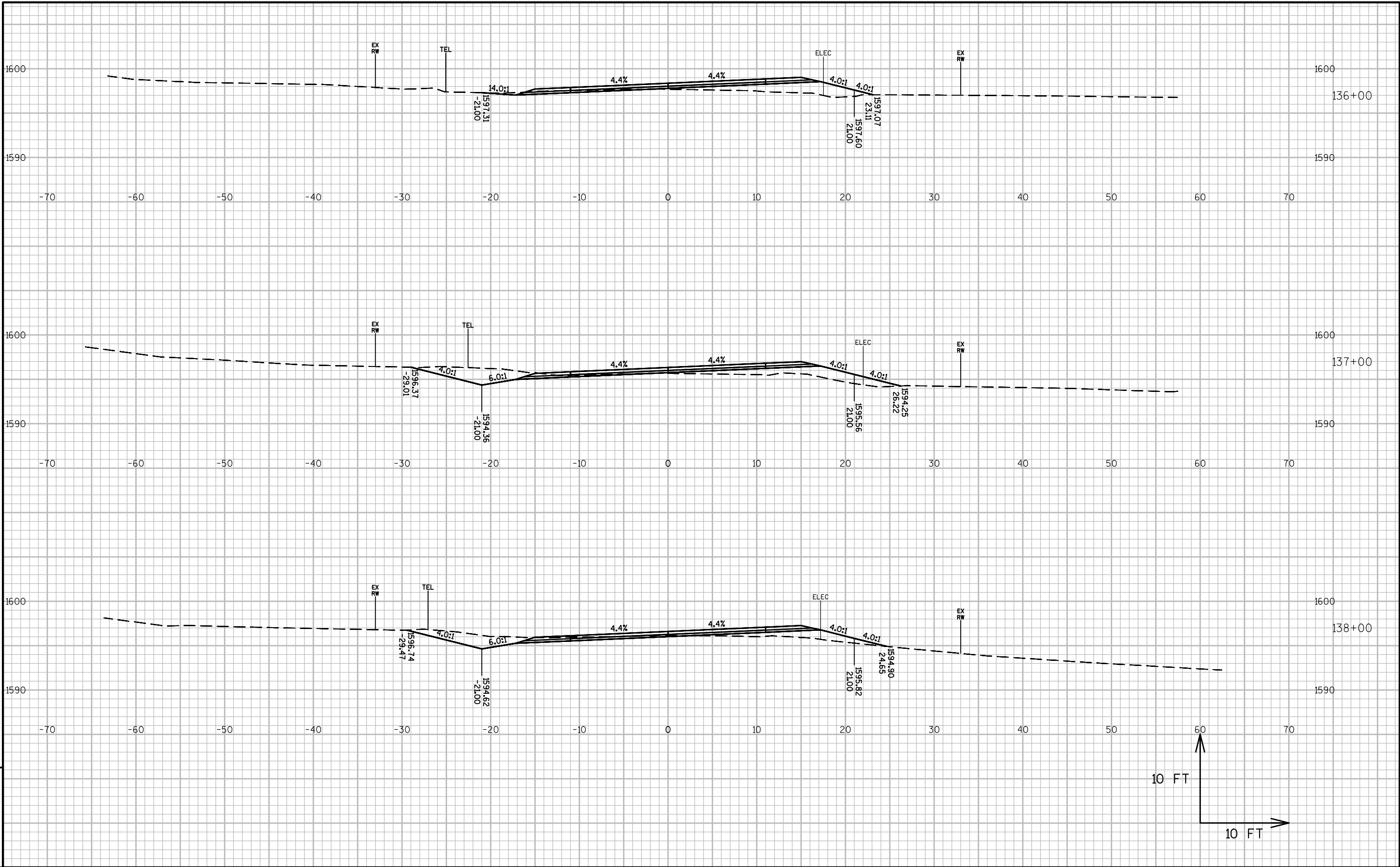


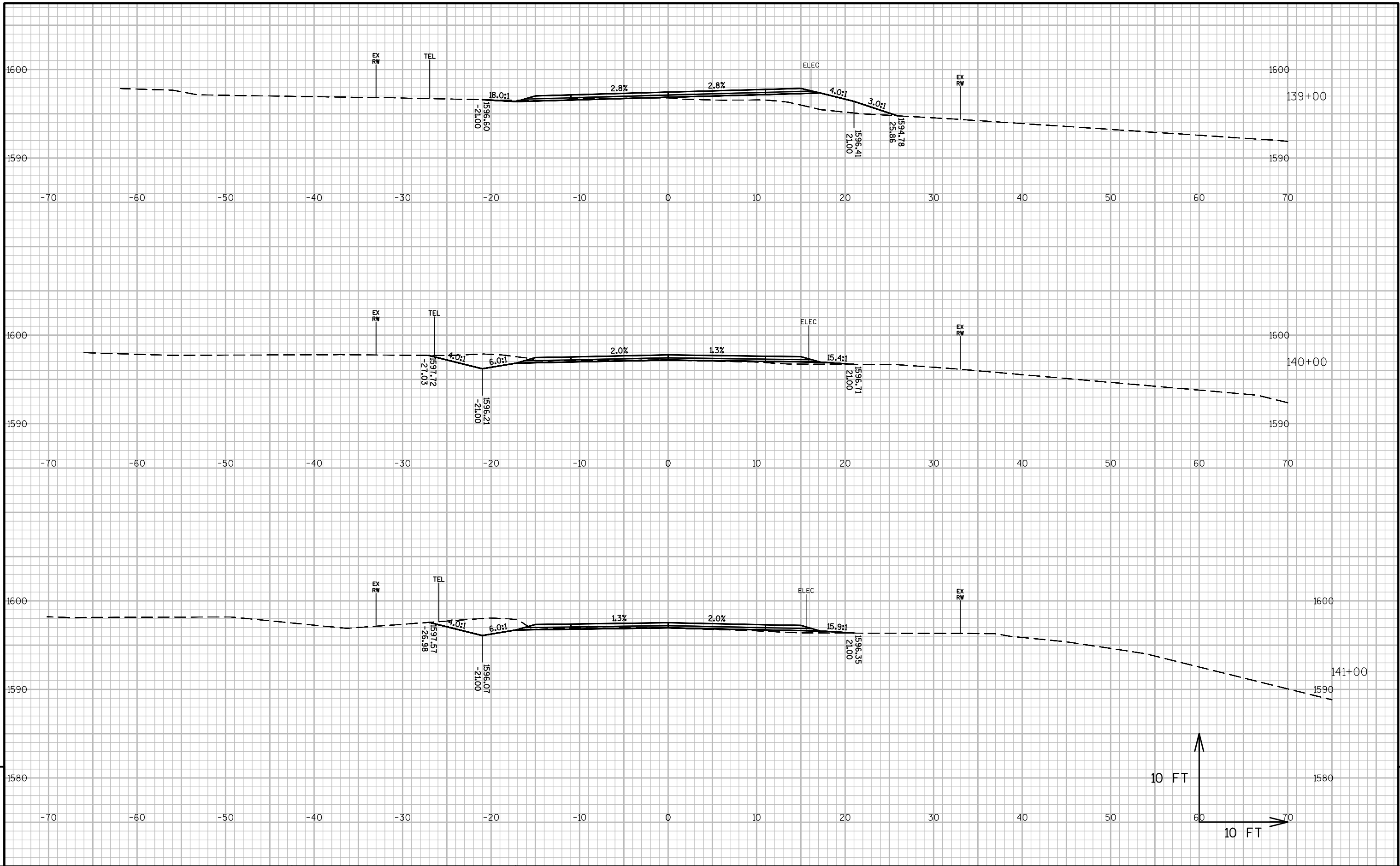


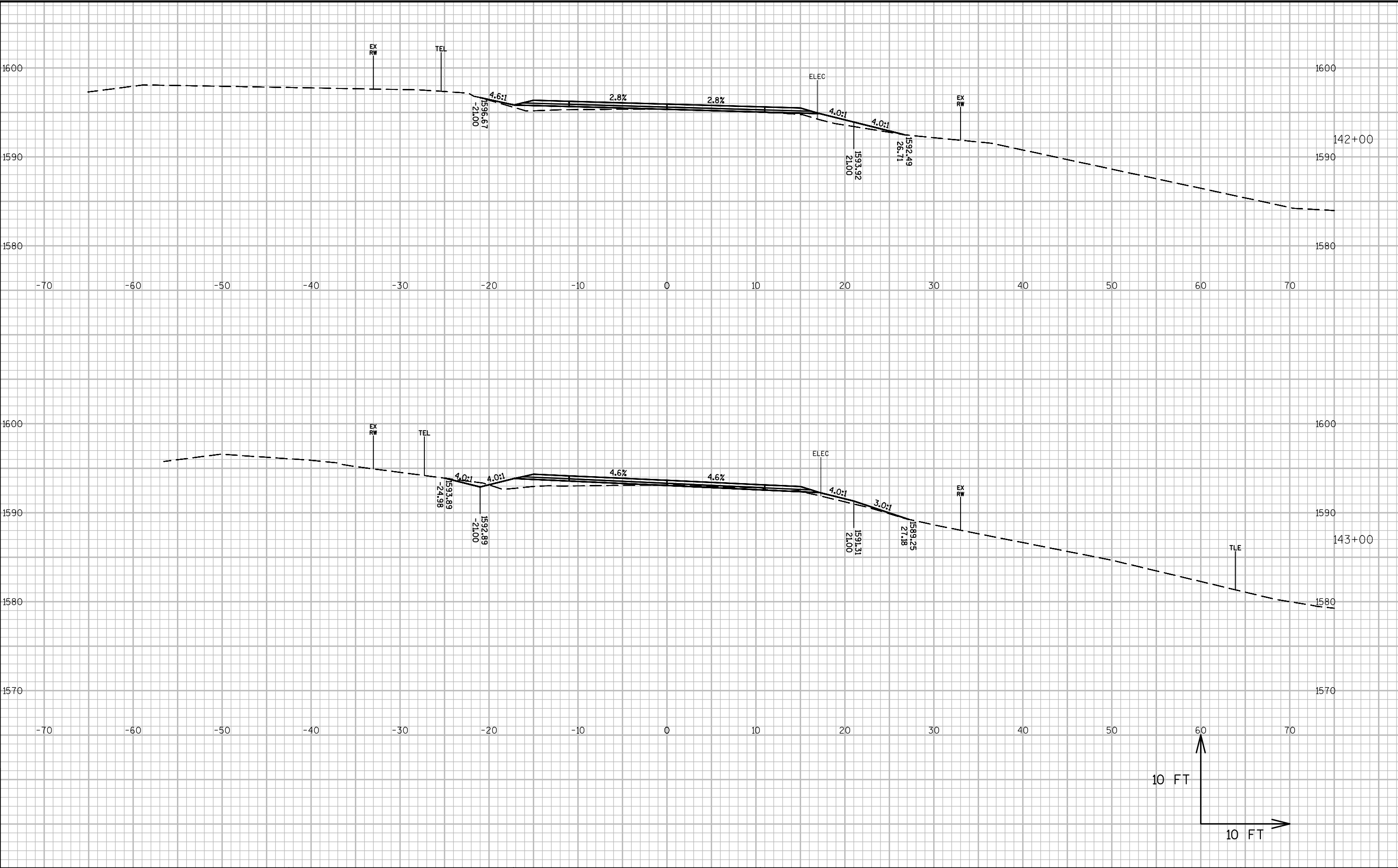
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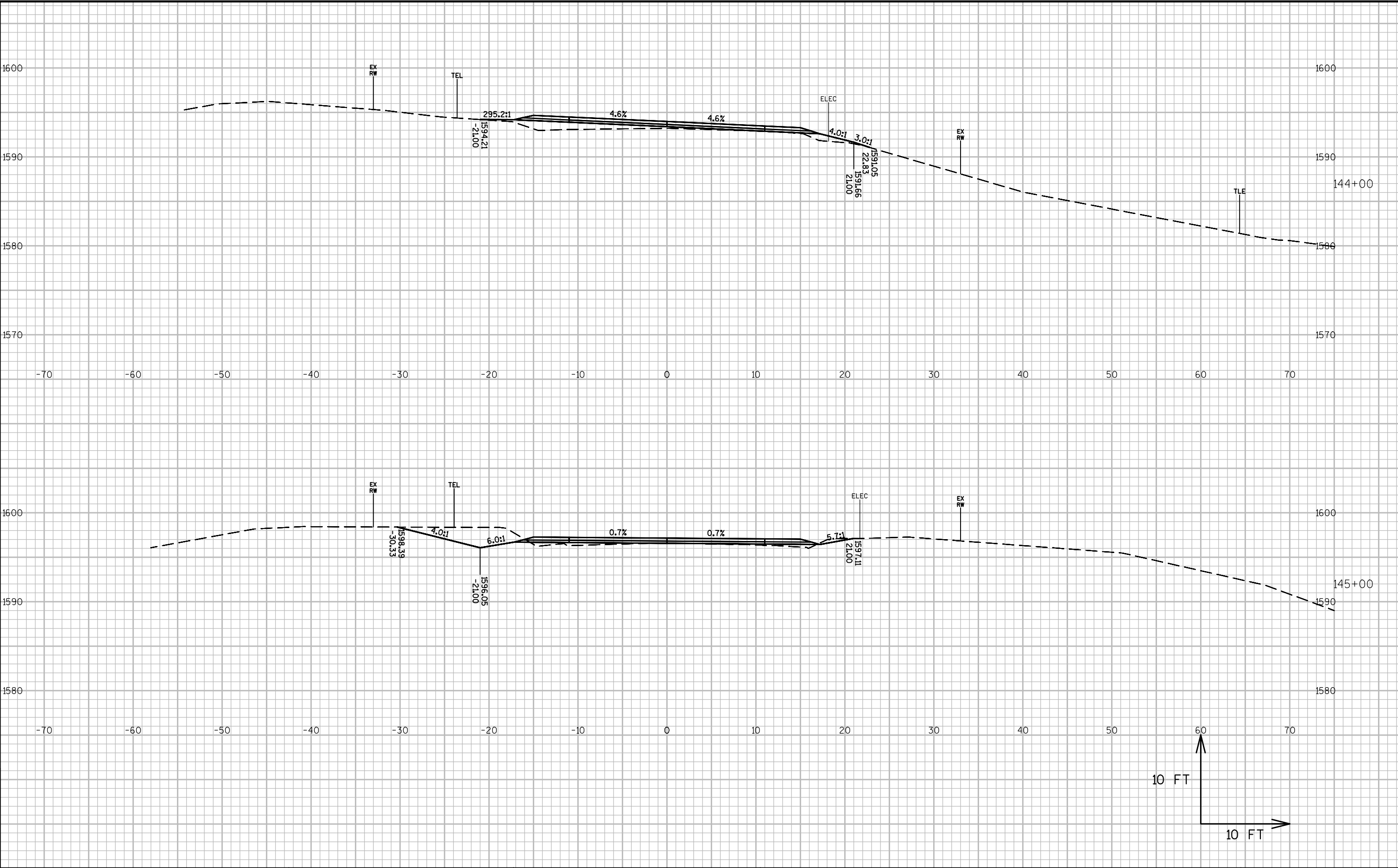
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PROJECT NO: 9465-00-70	HWY: CTH Y	COUNTY: ONEIDA	CROSS SECTIONS: CTH Y	SHEET	E
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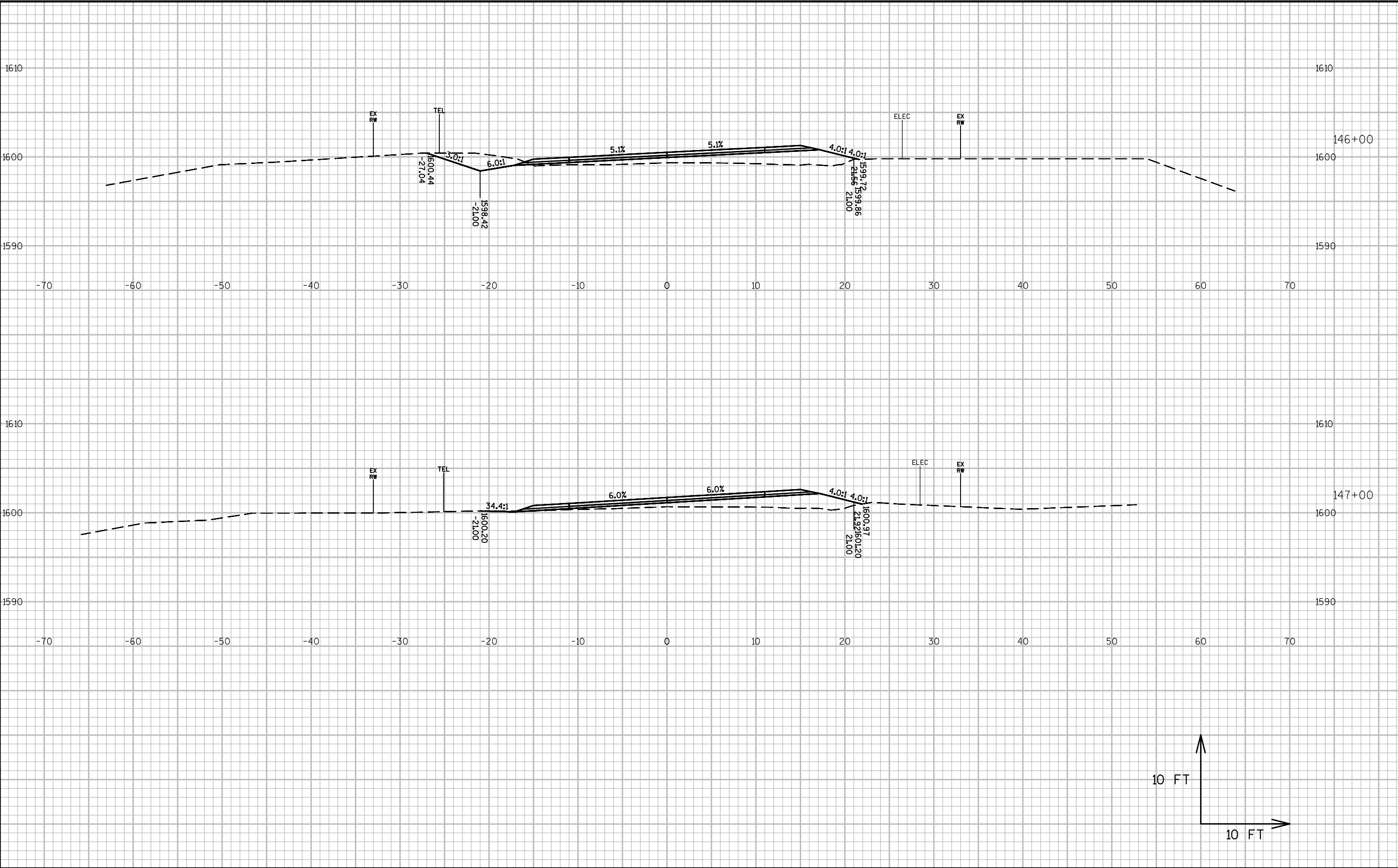


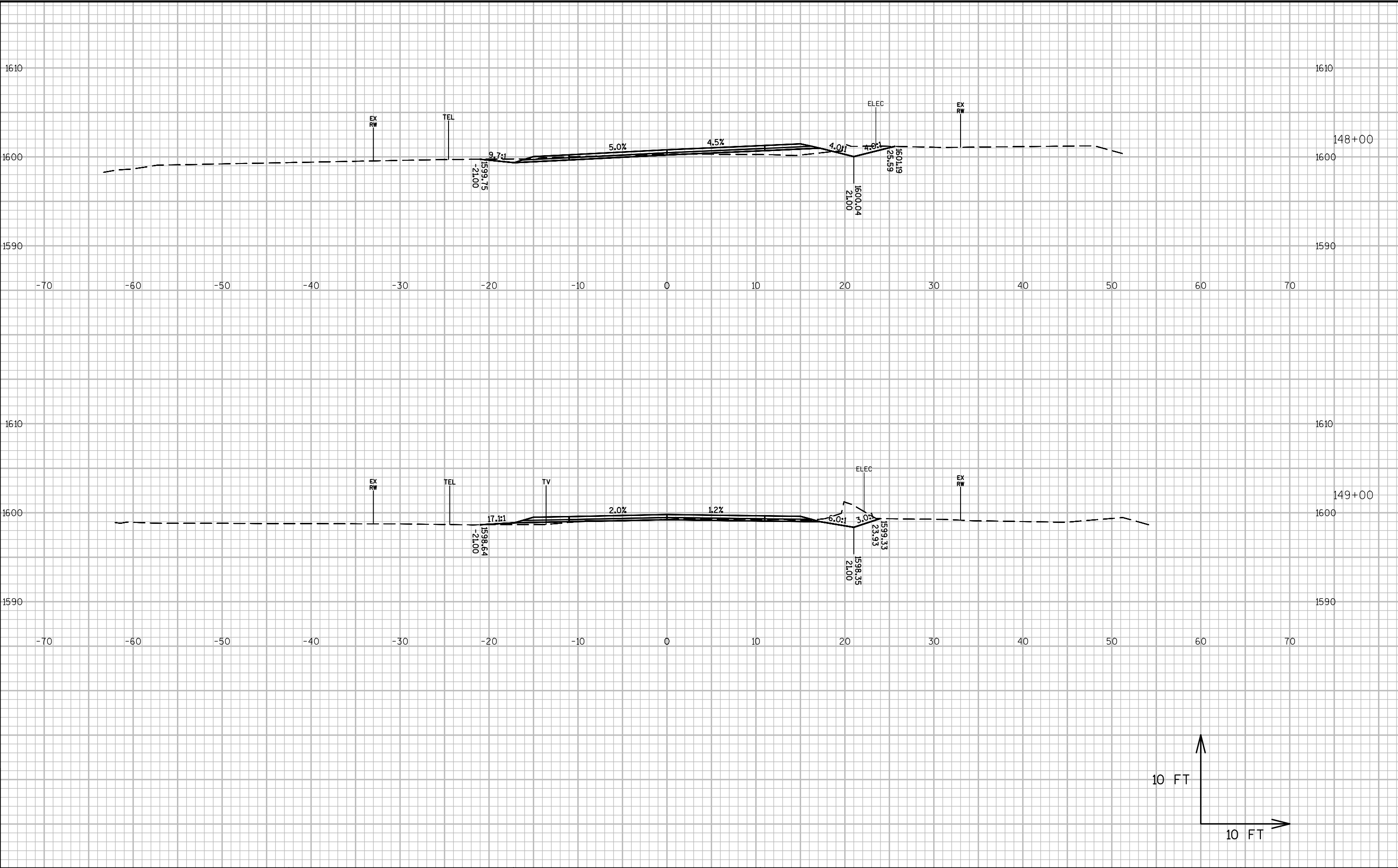


9

9

PROJECT NO: 9465-00-70	HWY: CTH Y	COUNTY: ONEIDA	CROSS SECTIONS: CTH Y	SHEET	E
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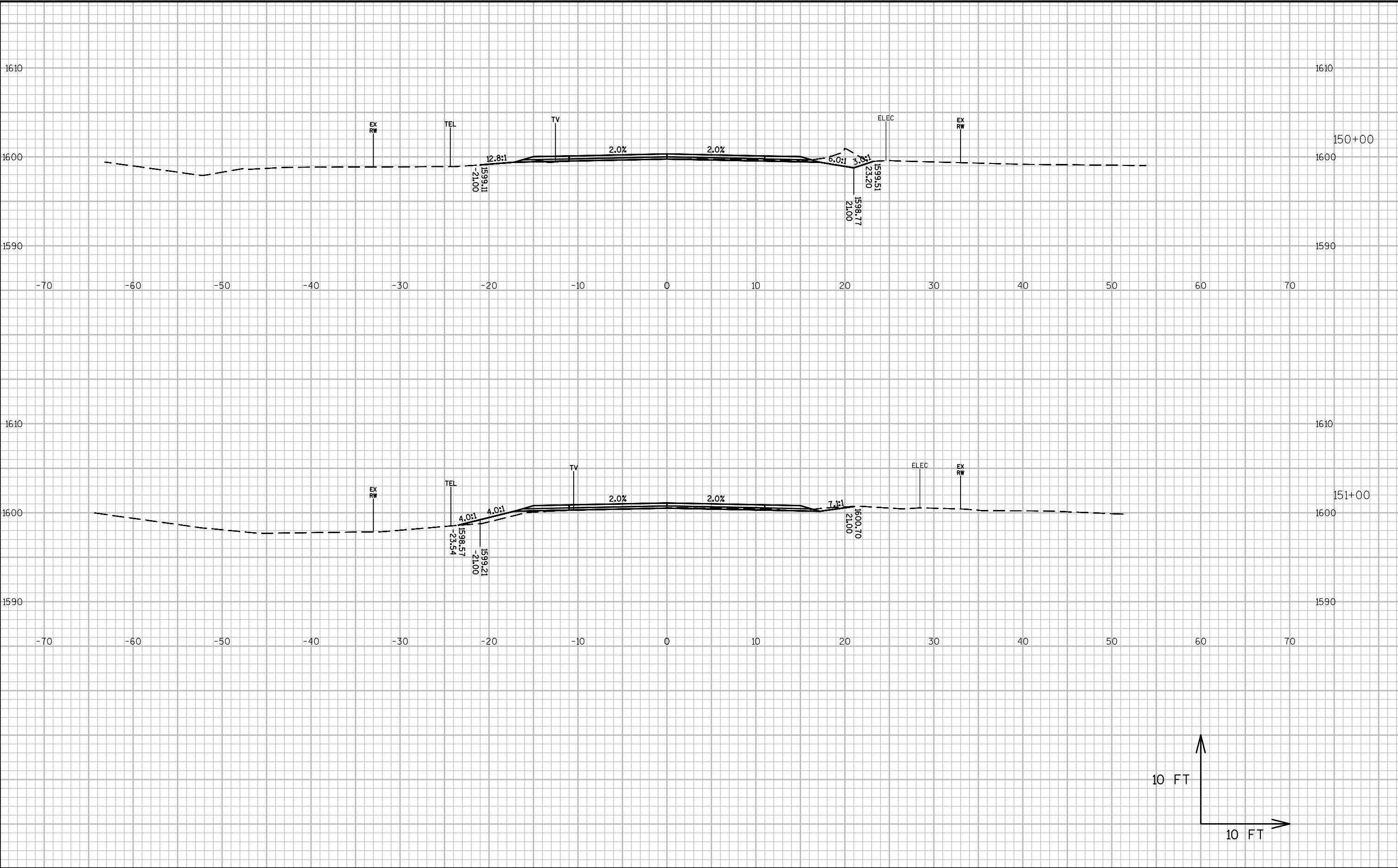




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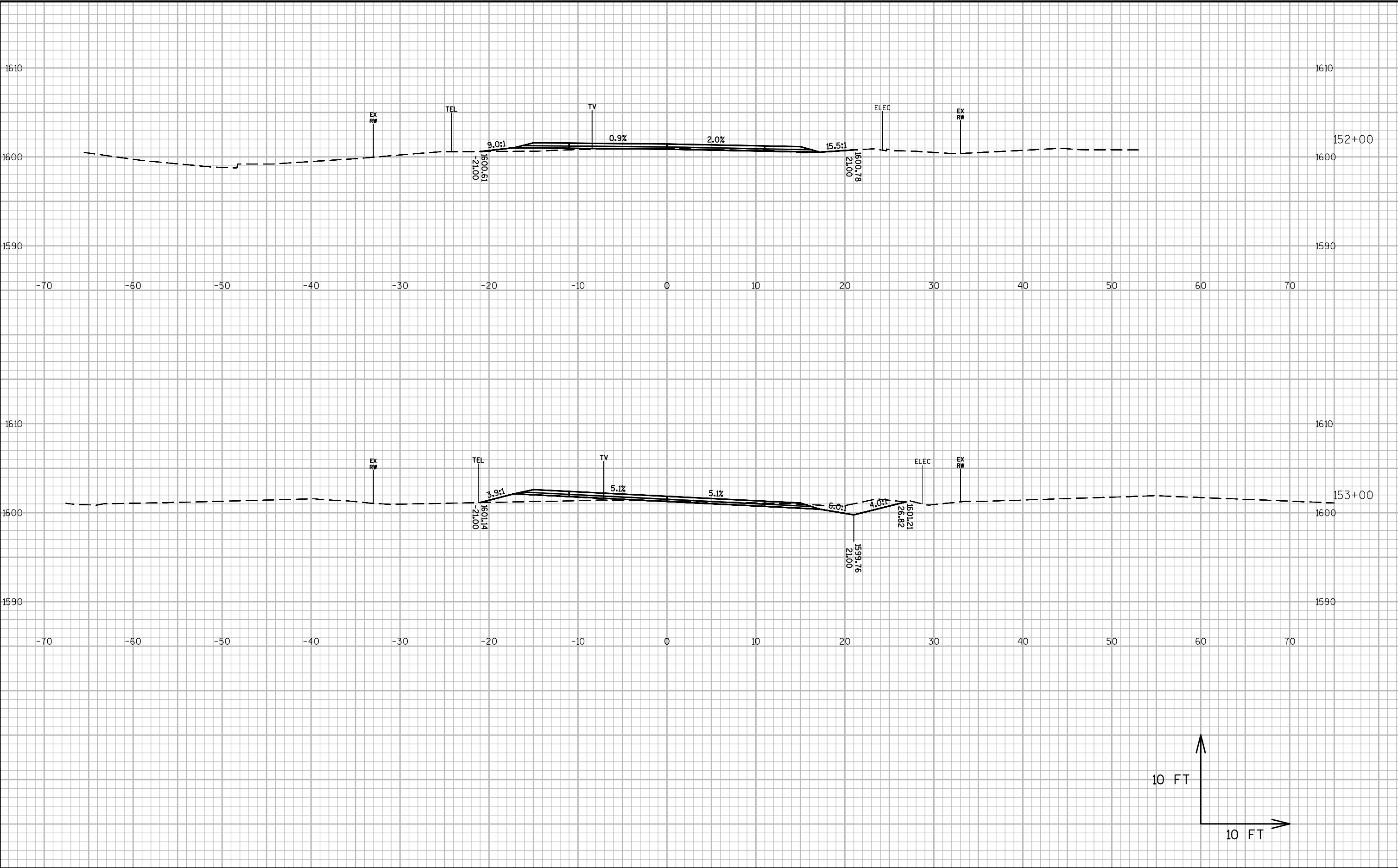
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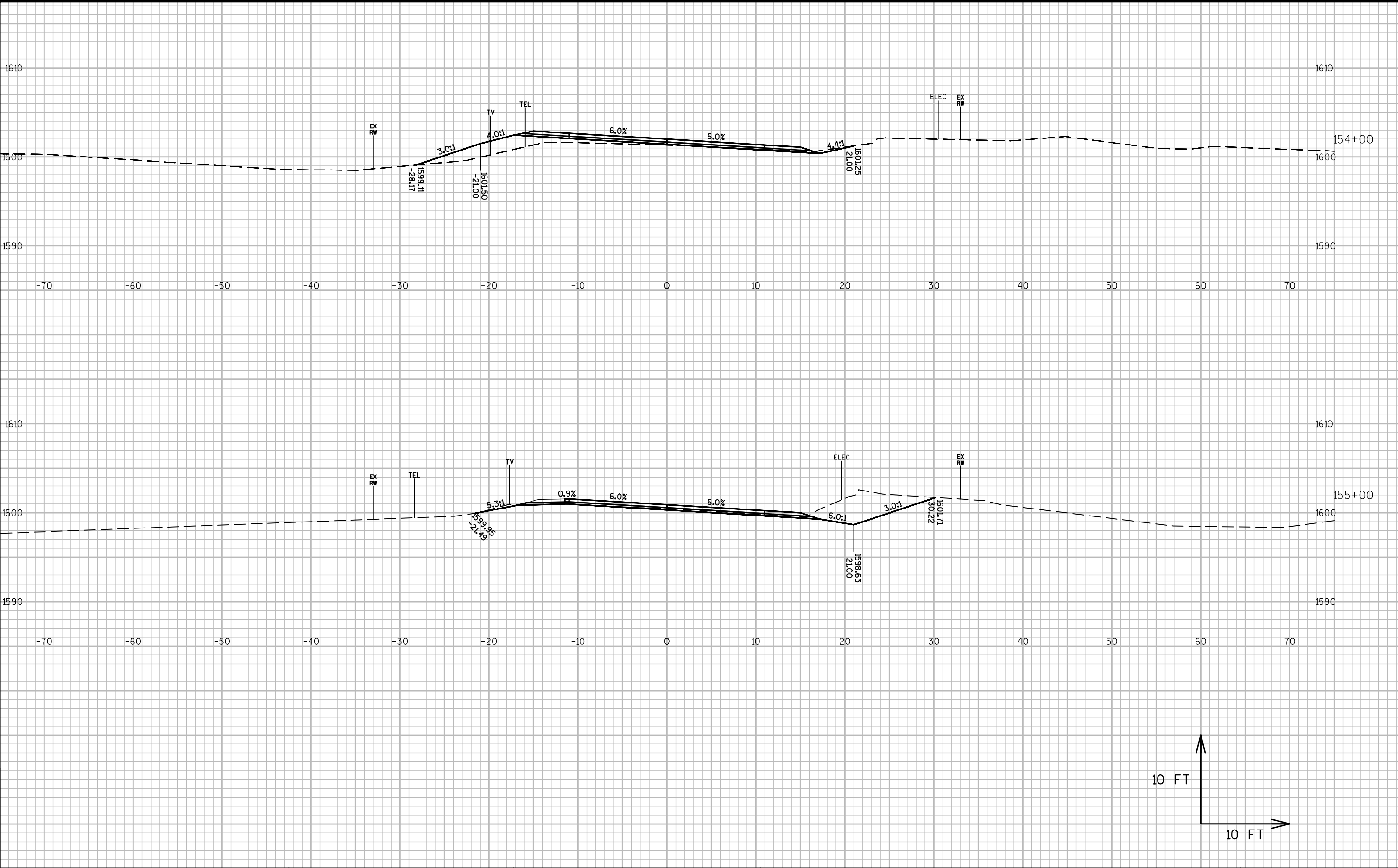
PROJECT NO: 9465-00-70	HWY: CTH Y	COUNTY: ONEIDA	CROSS SECTIONS: CTH Y	SHEET	E
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9

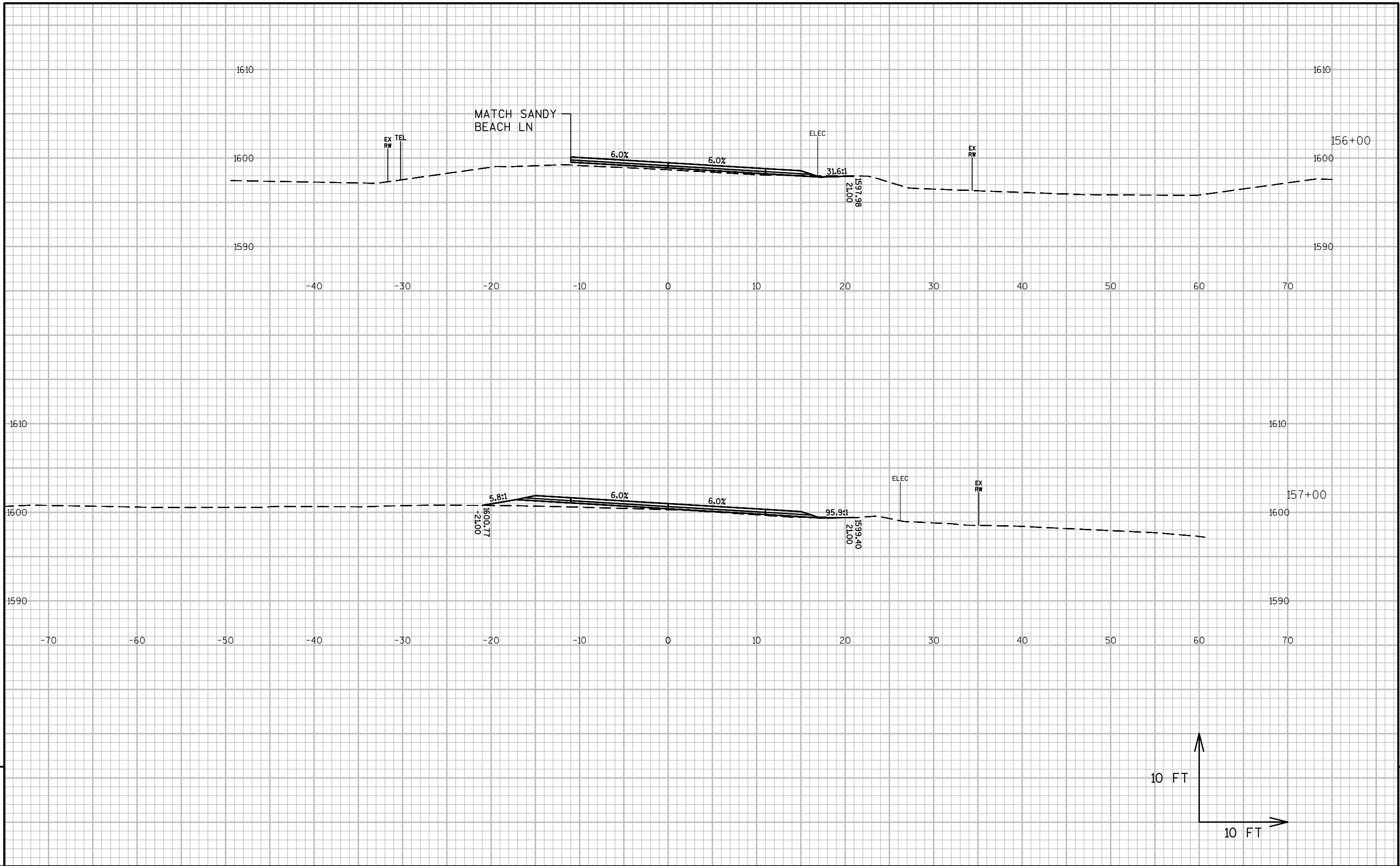
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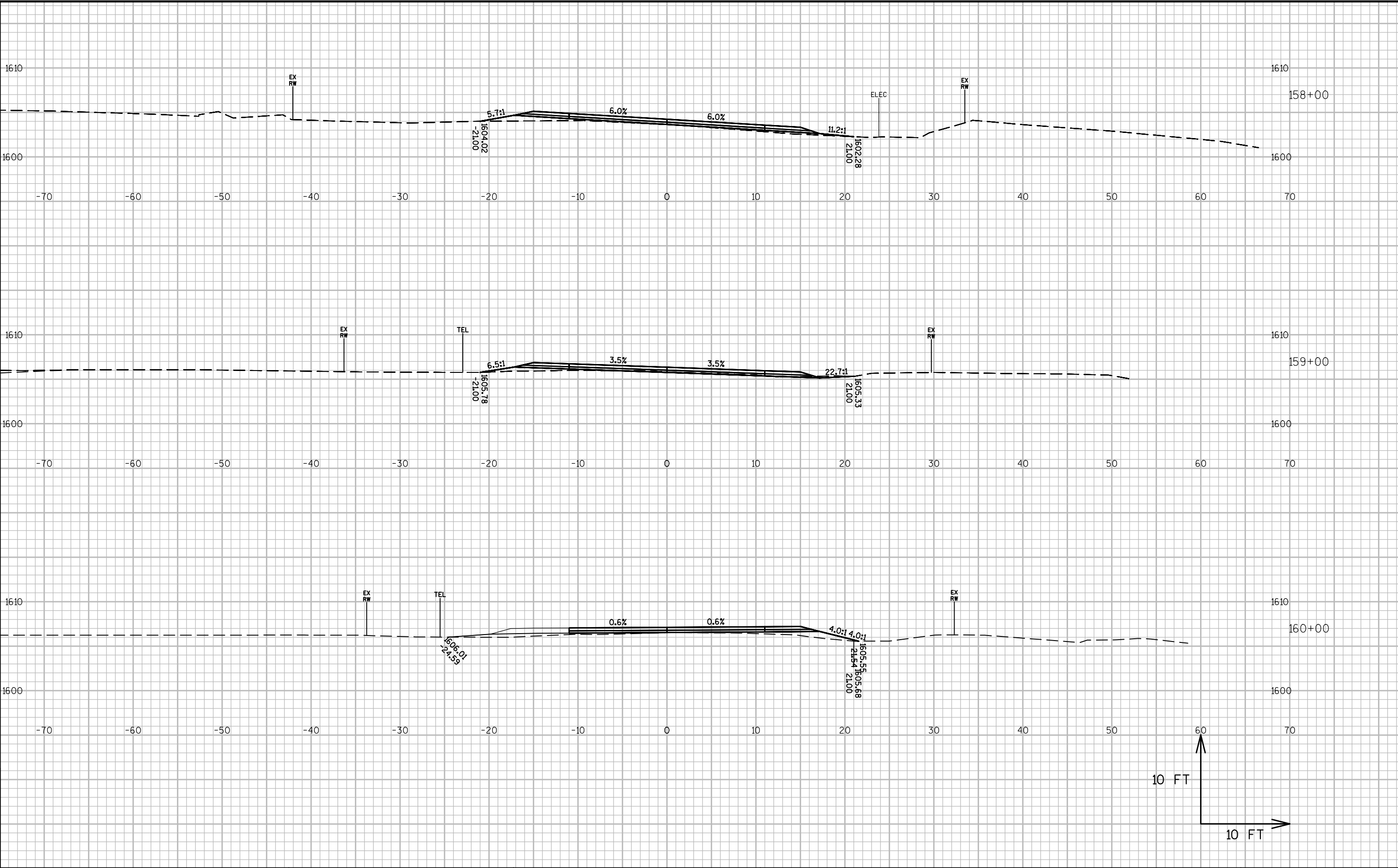




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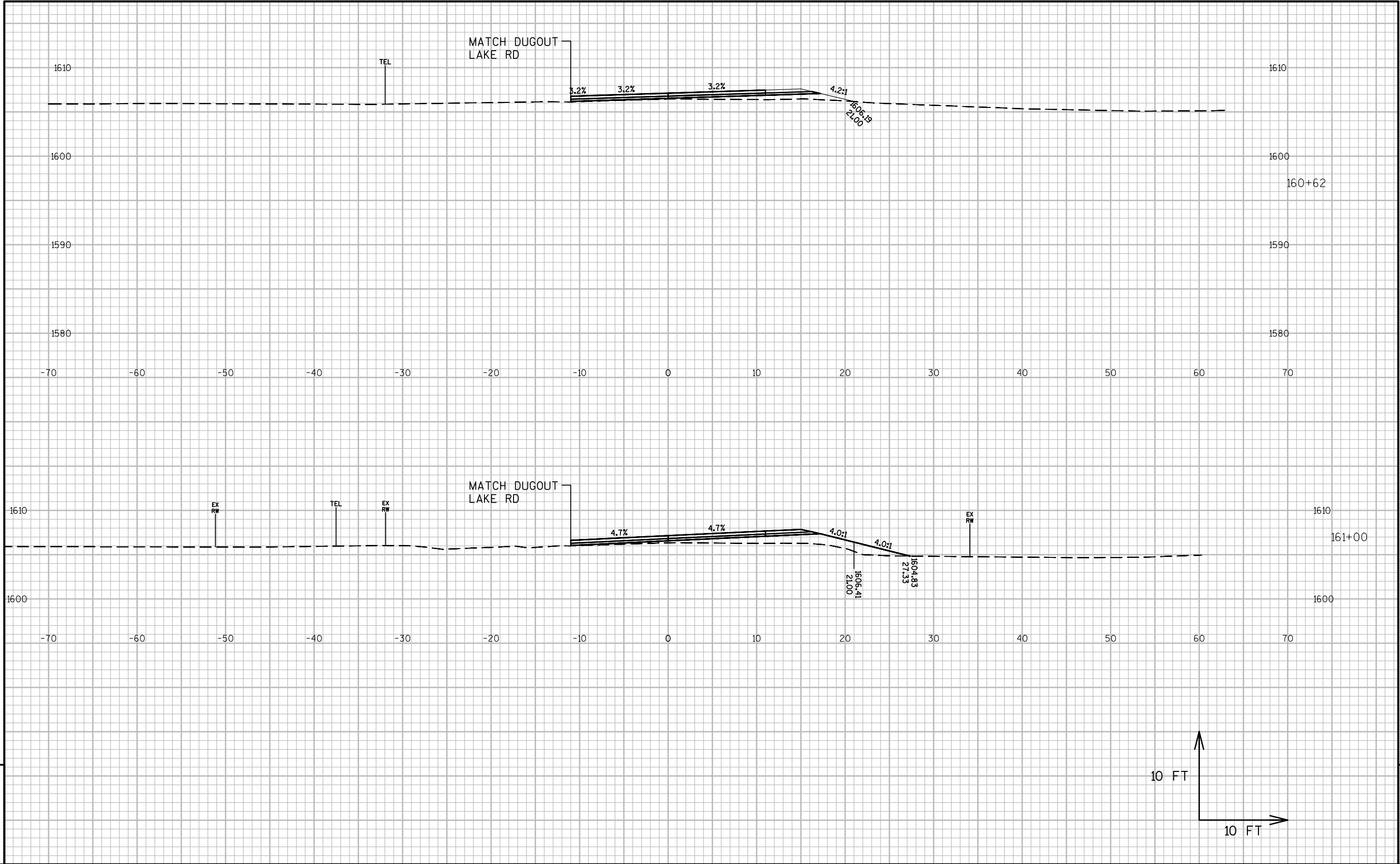




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PROJECT NO: 9465-00-70	HWY: CTH Y	COUNTY: ONEIDA	CROSS SECTIONS: CTH Y	SHEET	E
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PROJECT NO: 9465-00-70

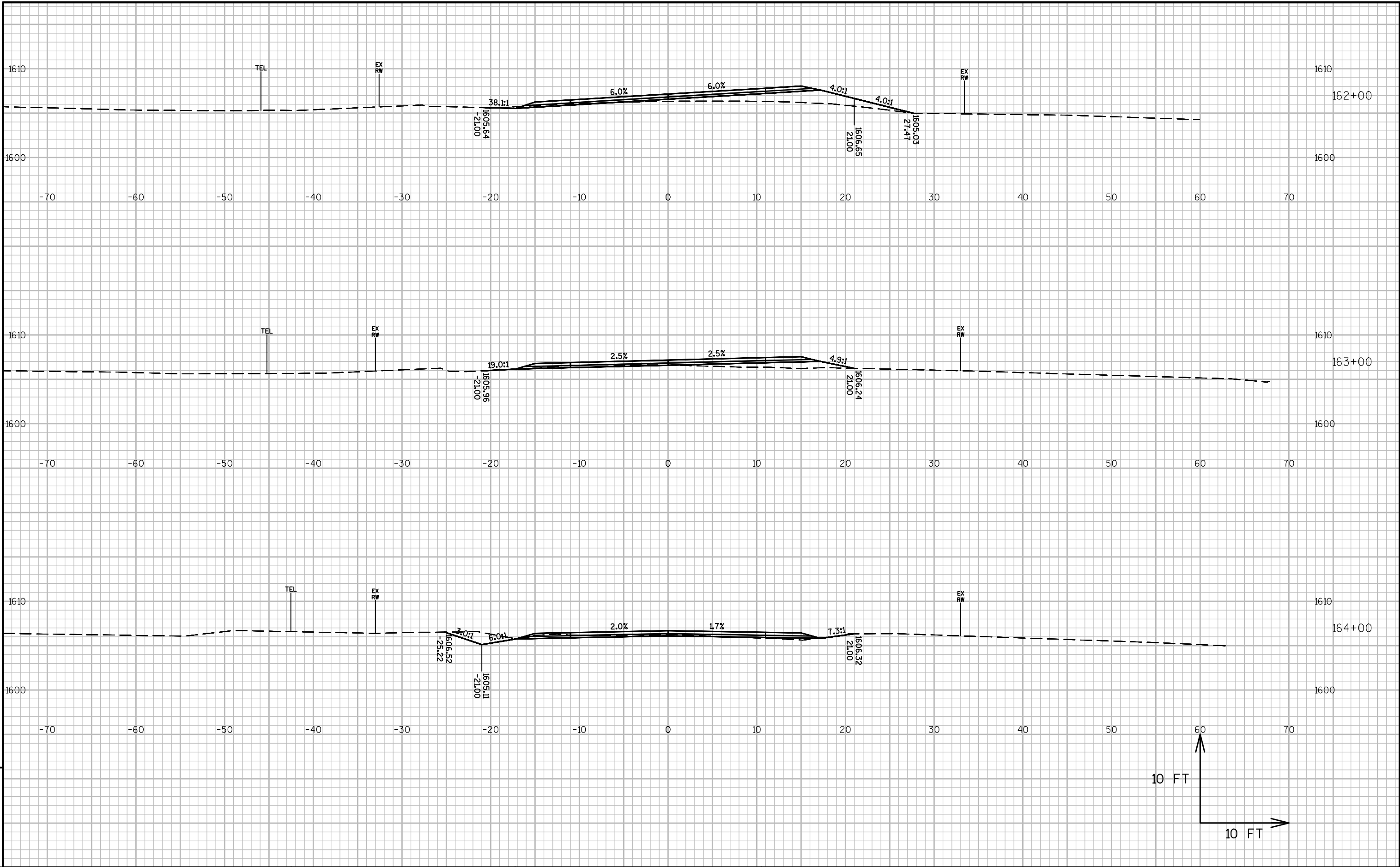
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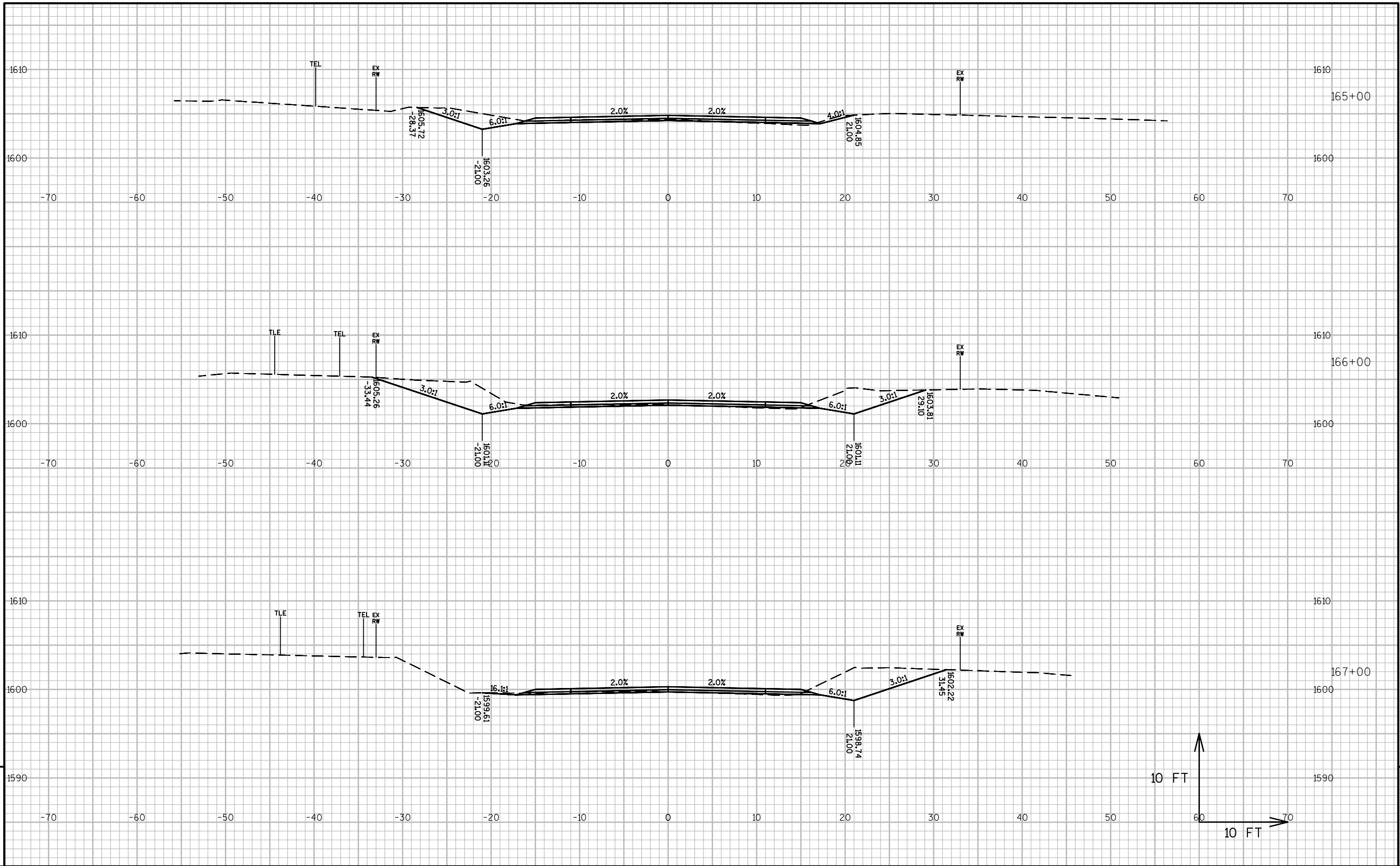
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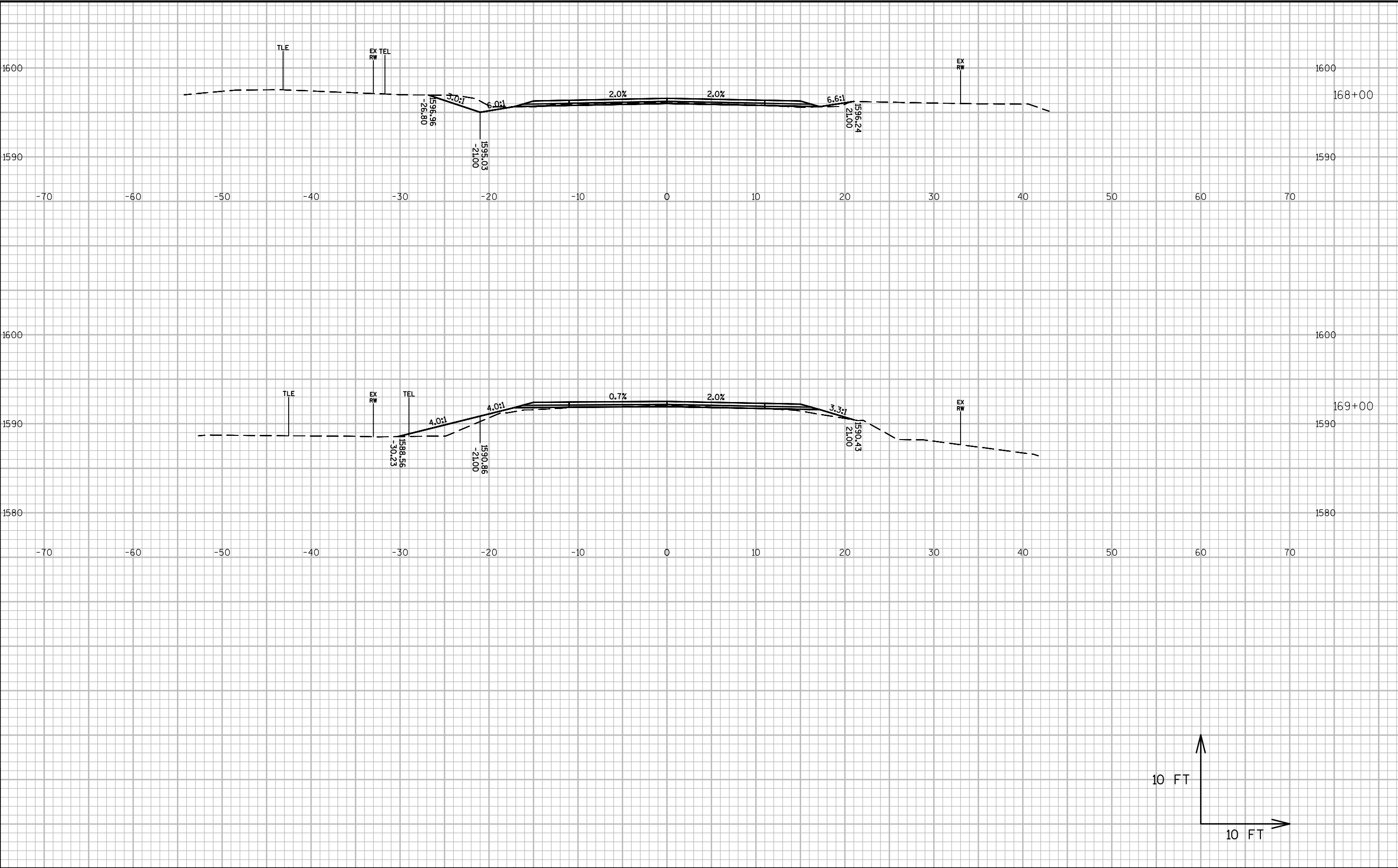
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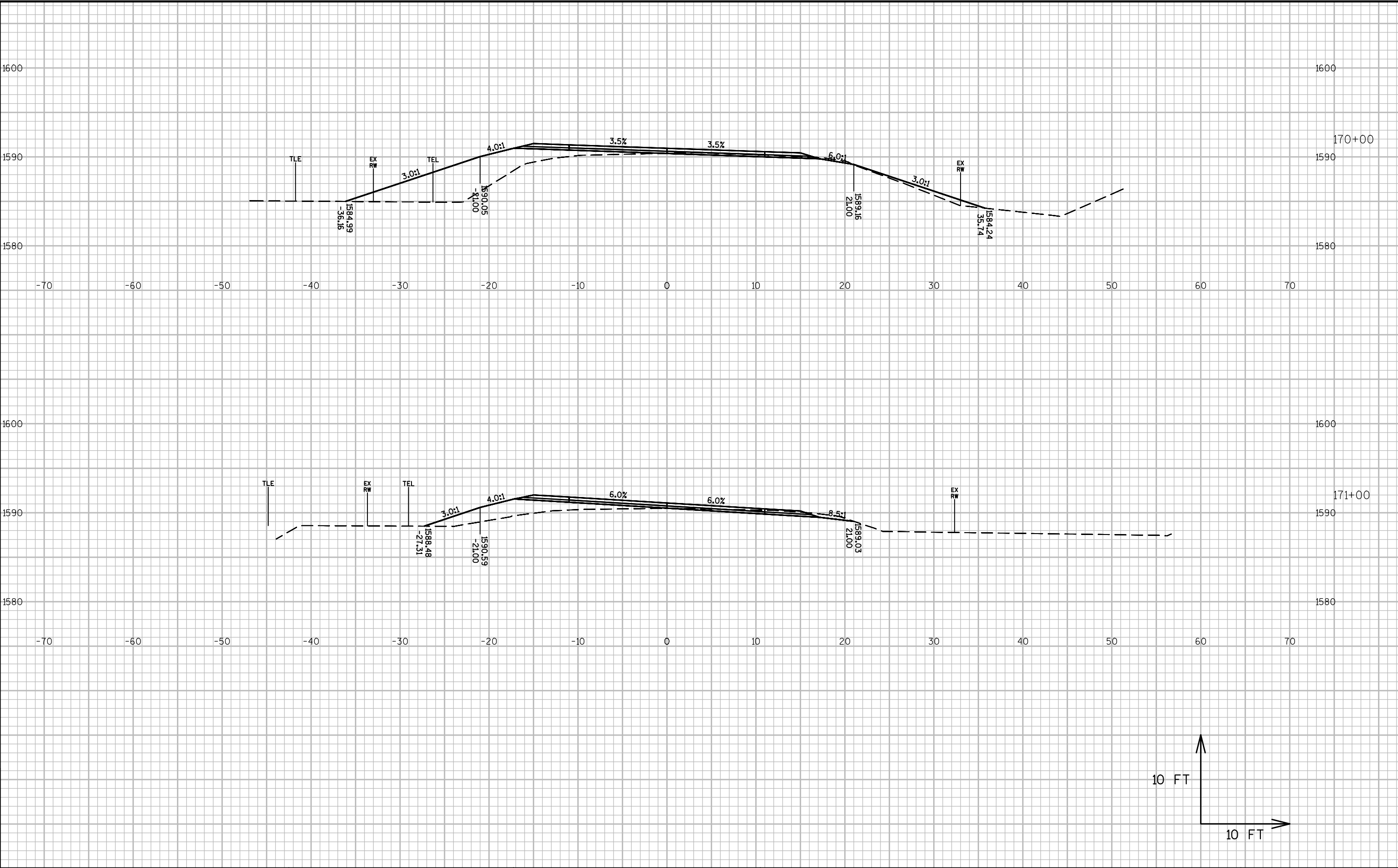
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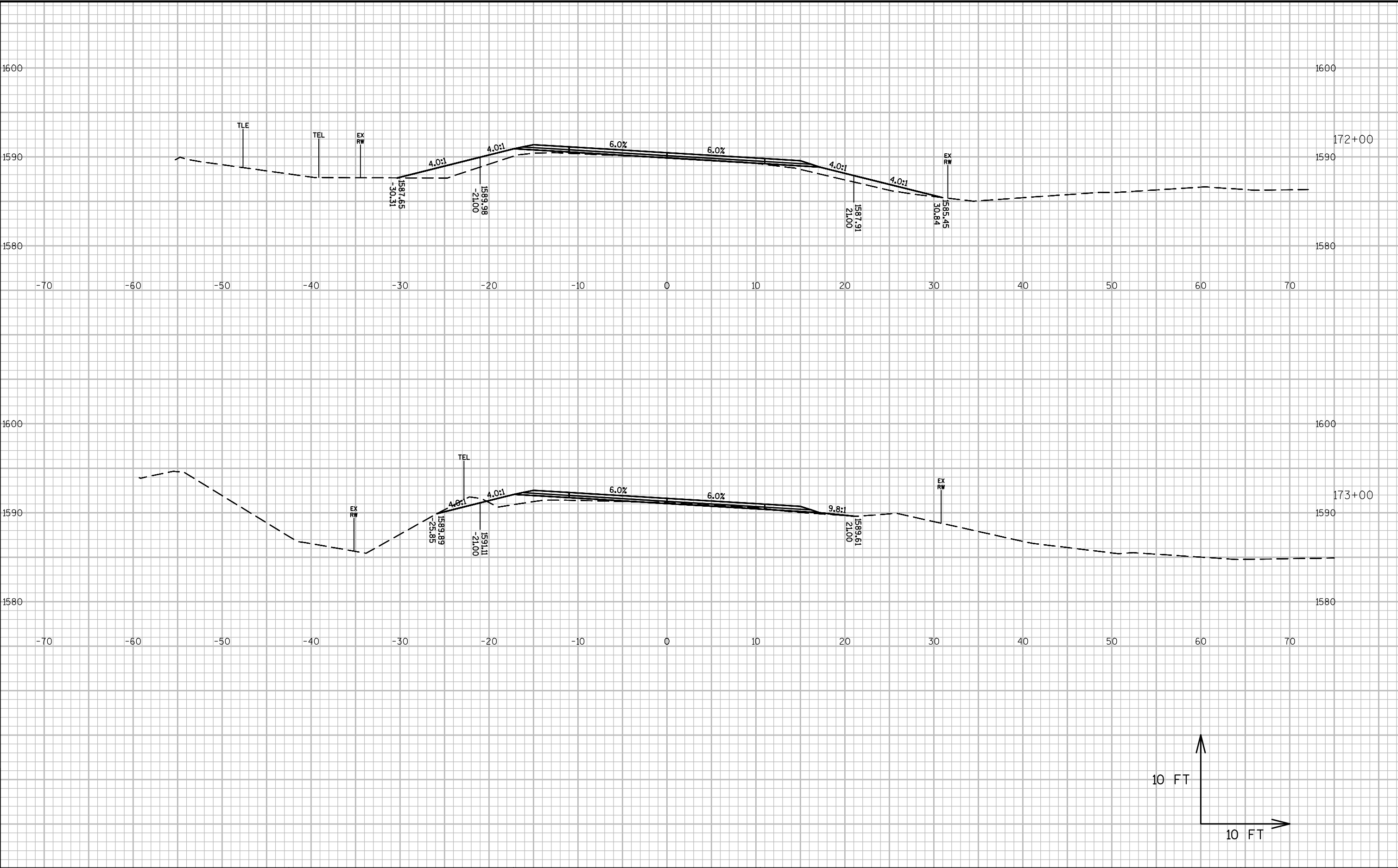
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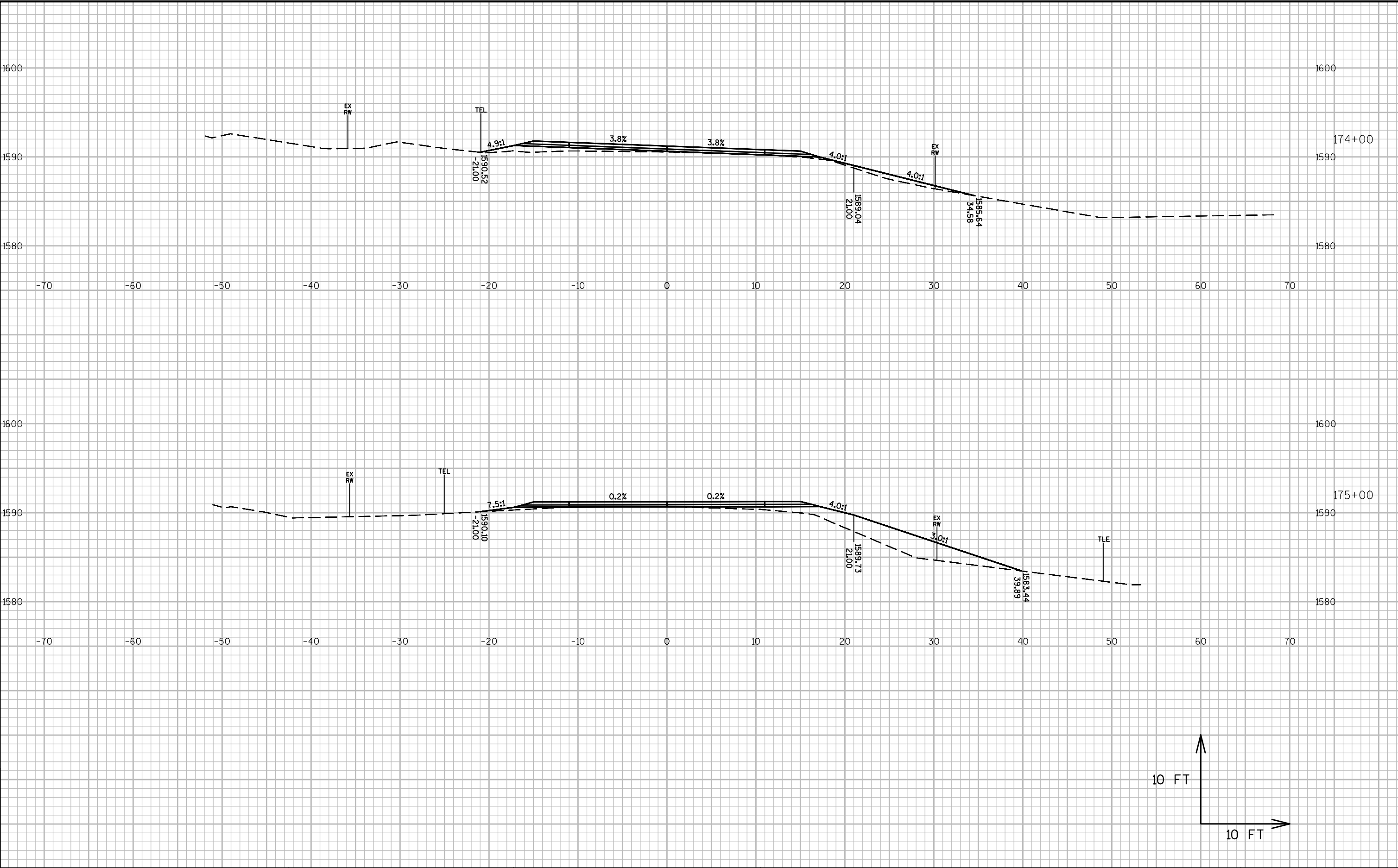






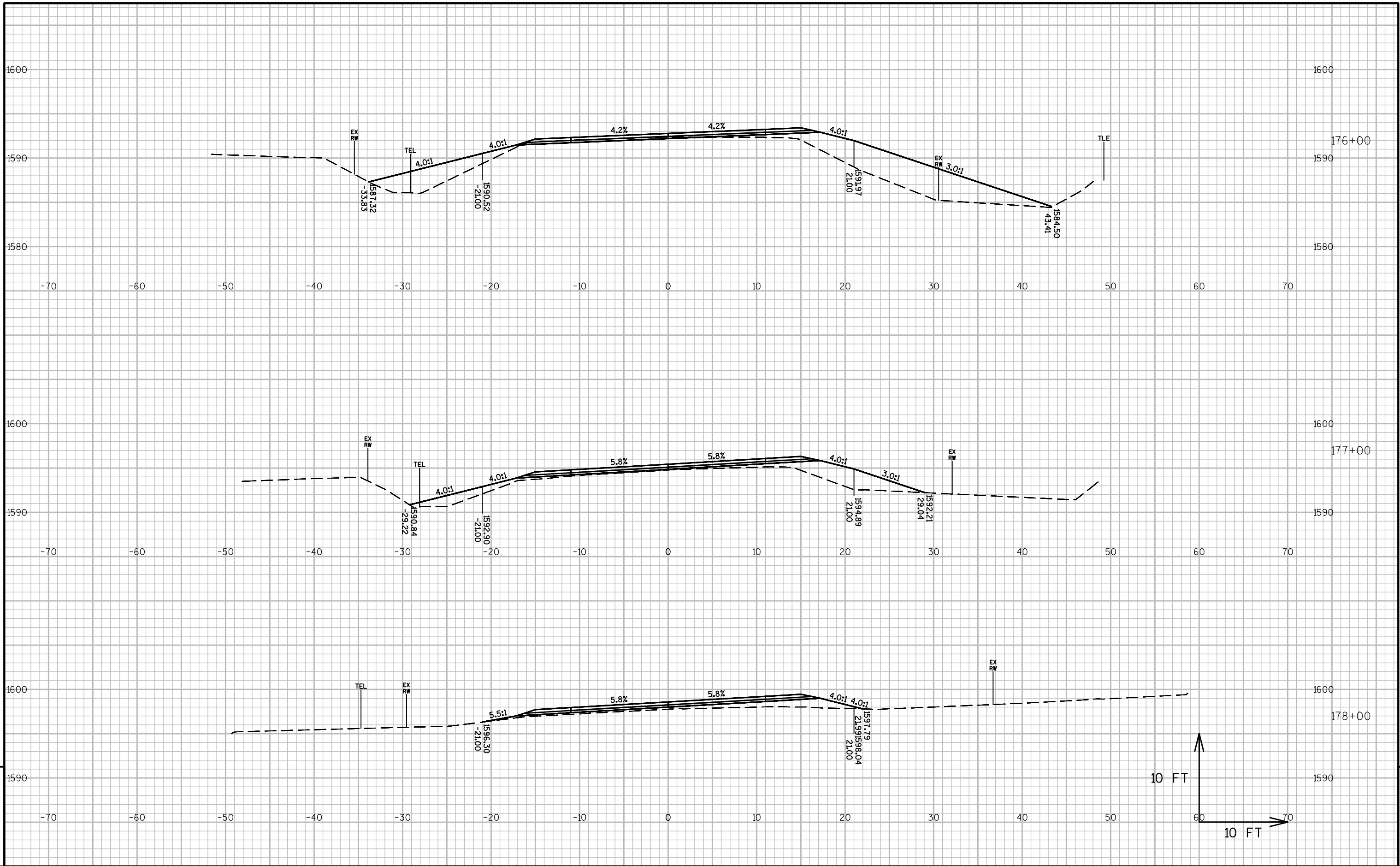
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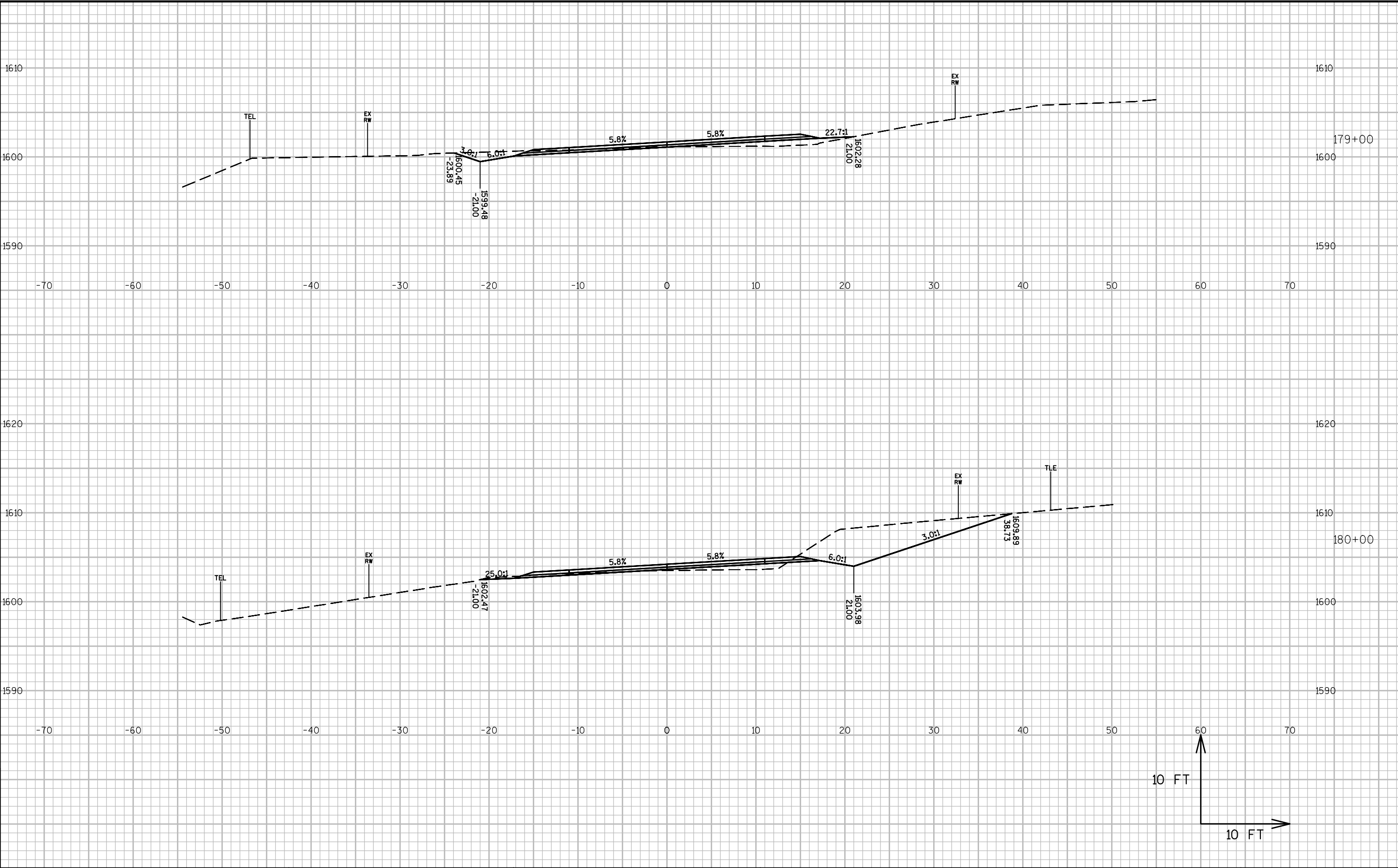
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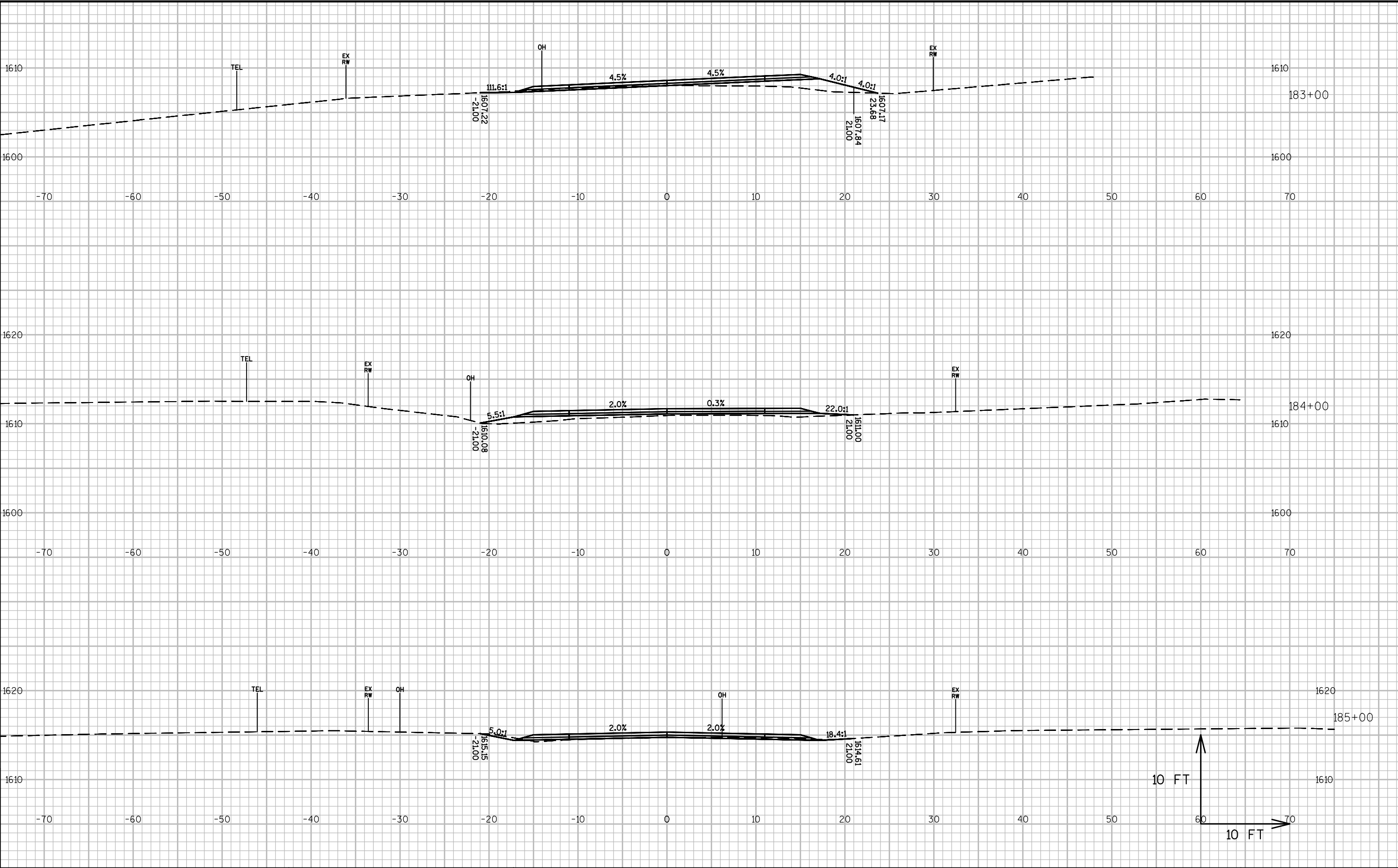


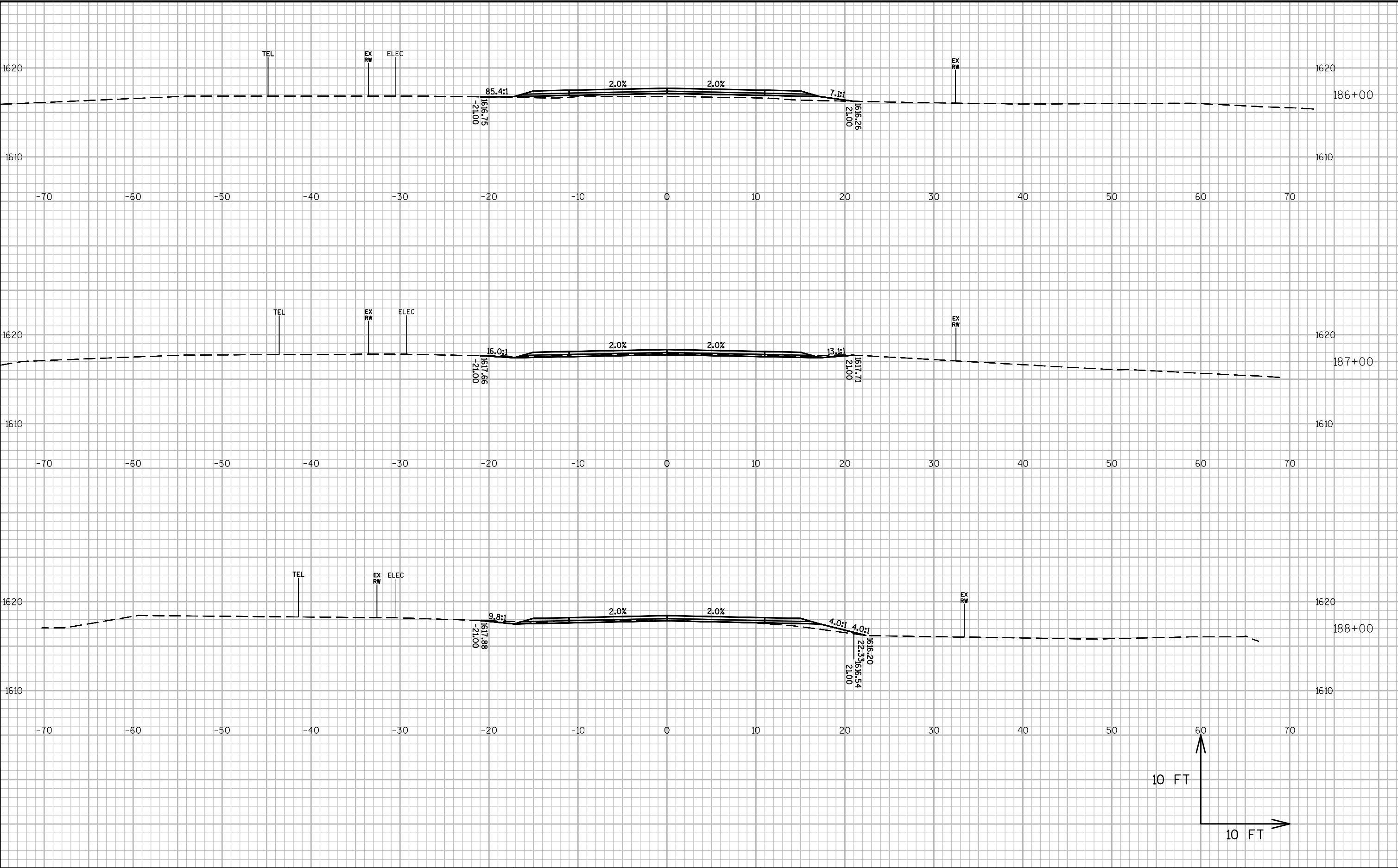
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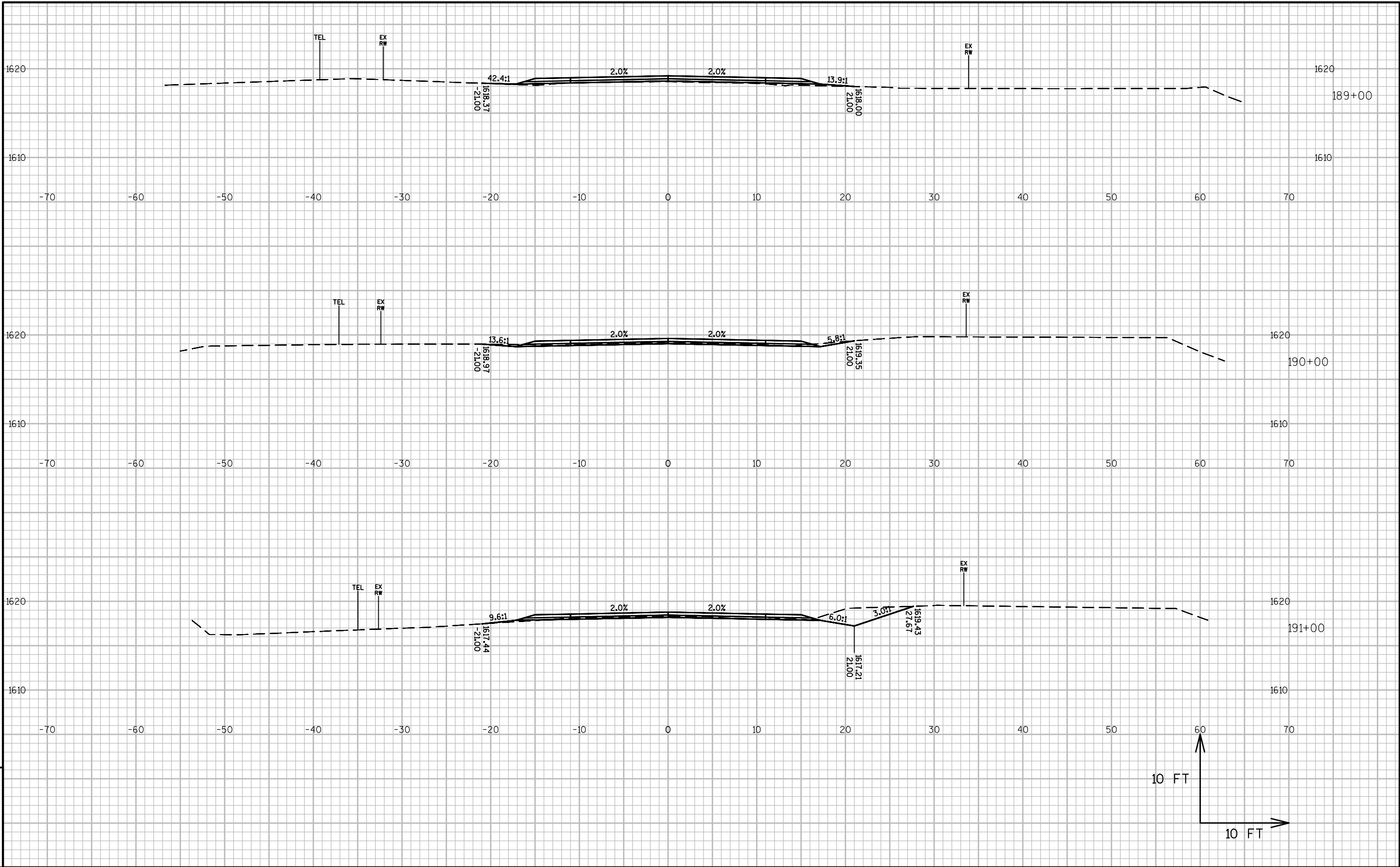


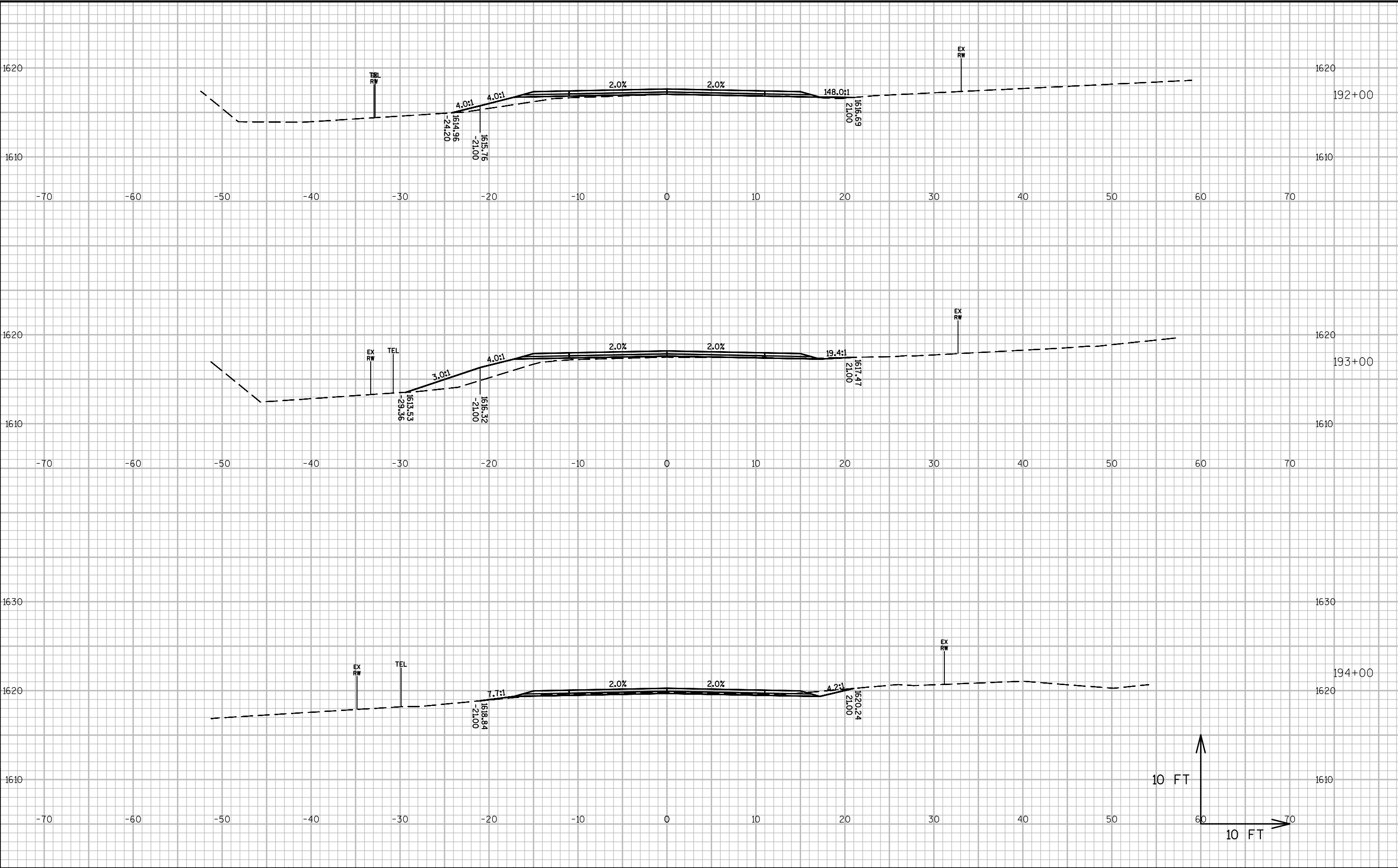


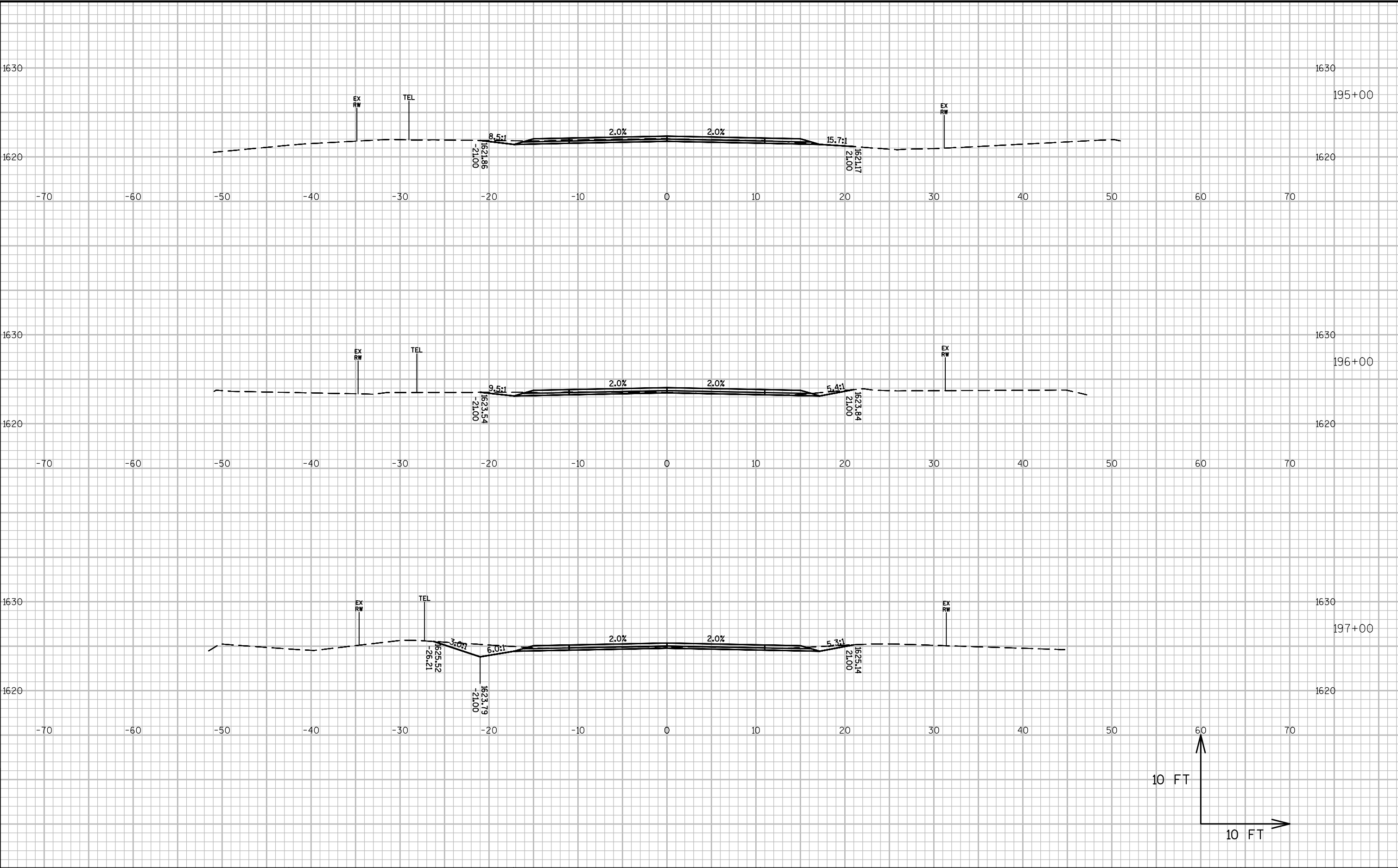
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PROJECT NO: 9465-00-70	HWY: CTH Y	COUNTY: ONEIDA	CROSS SECTIONS: CTH Y	SHEET	E
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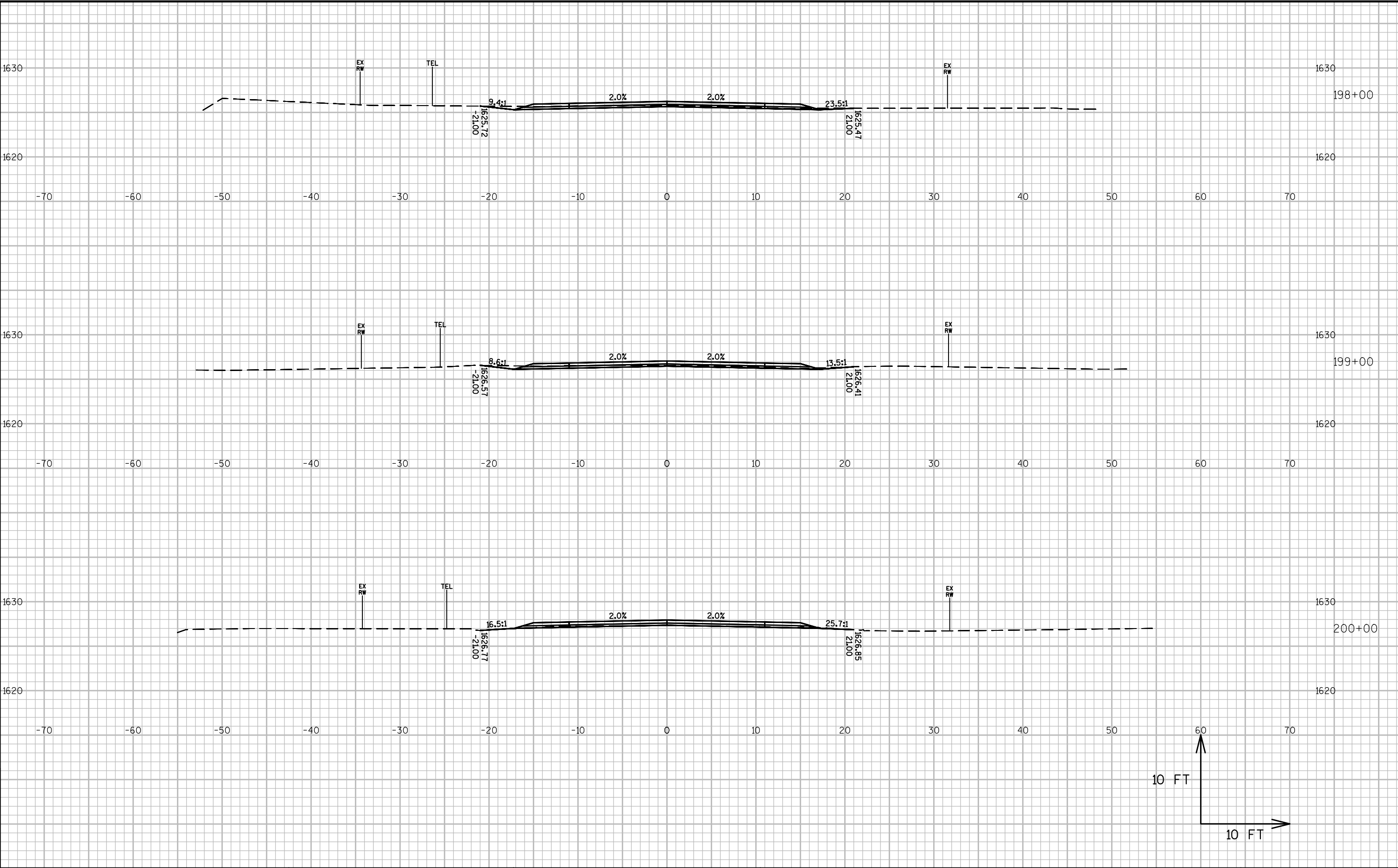




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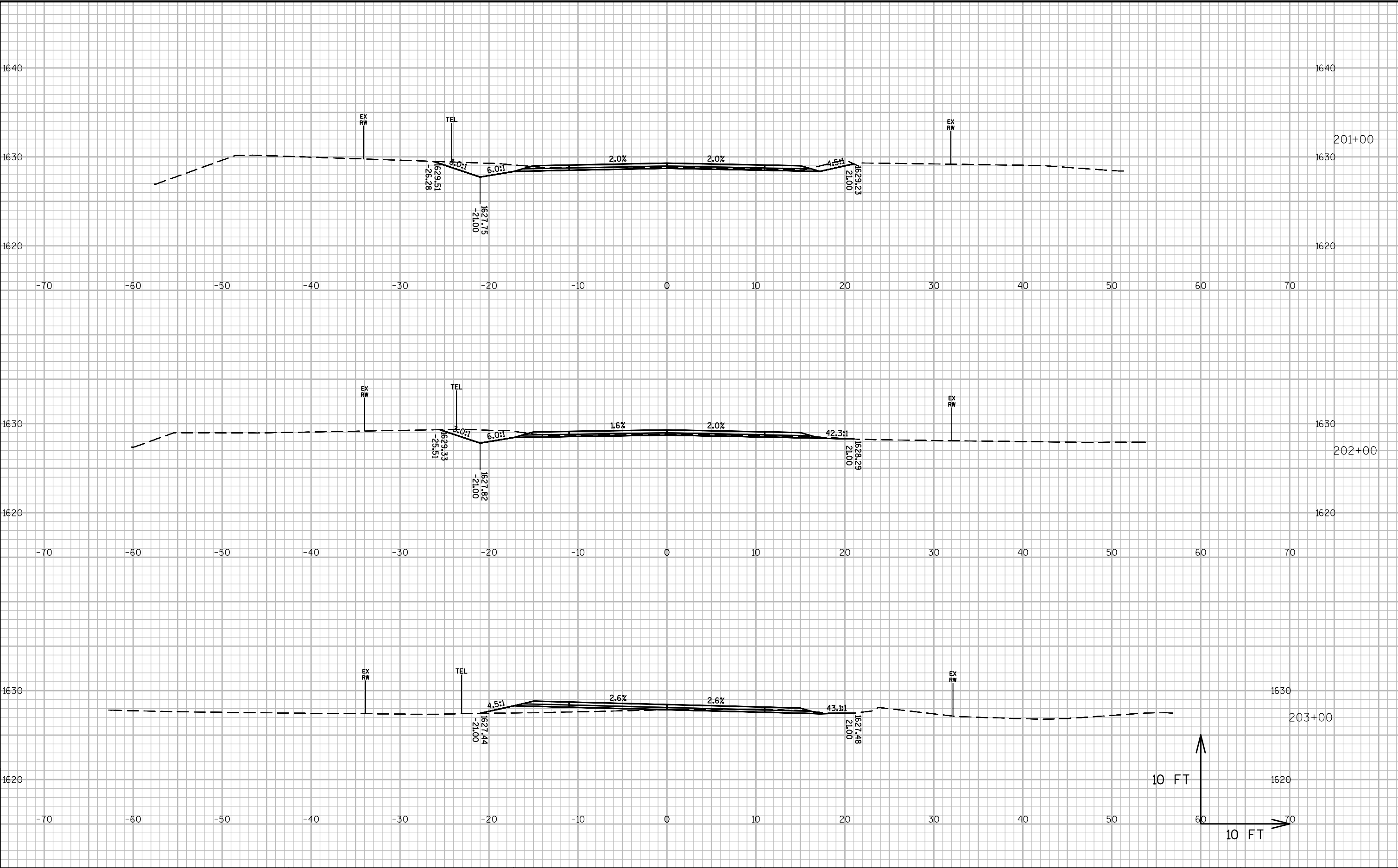
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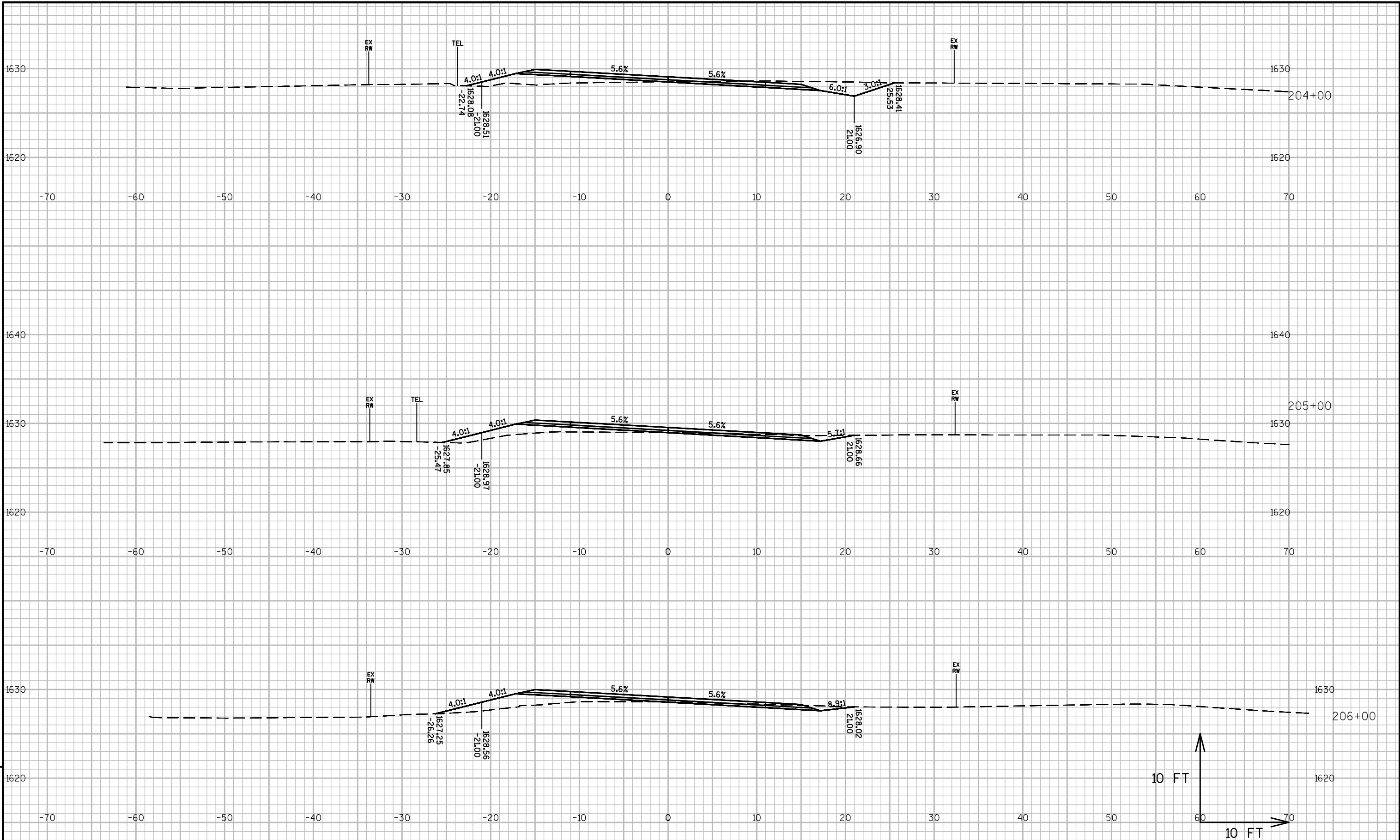
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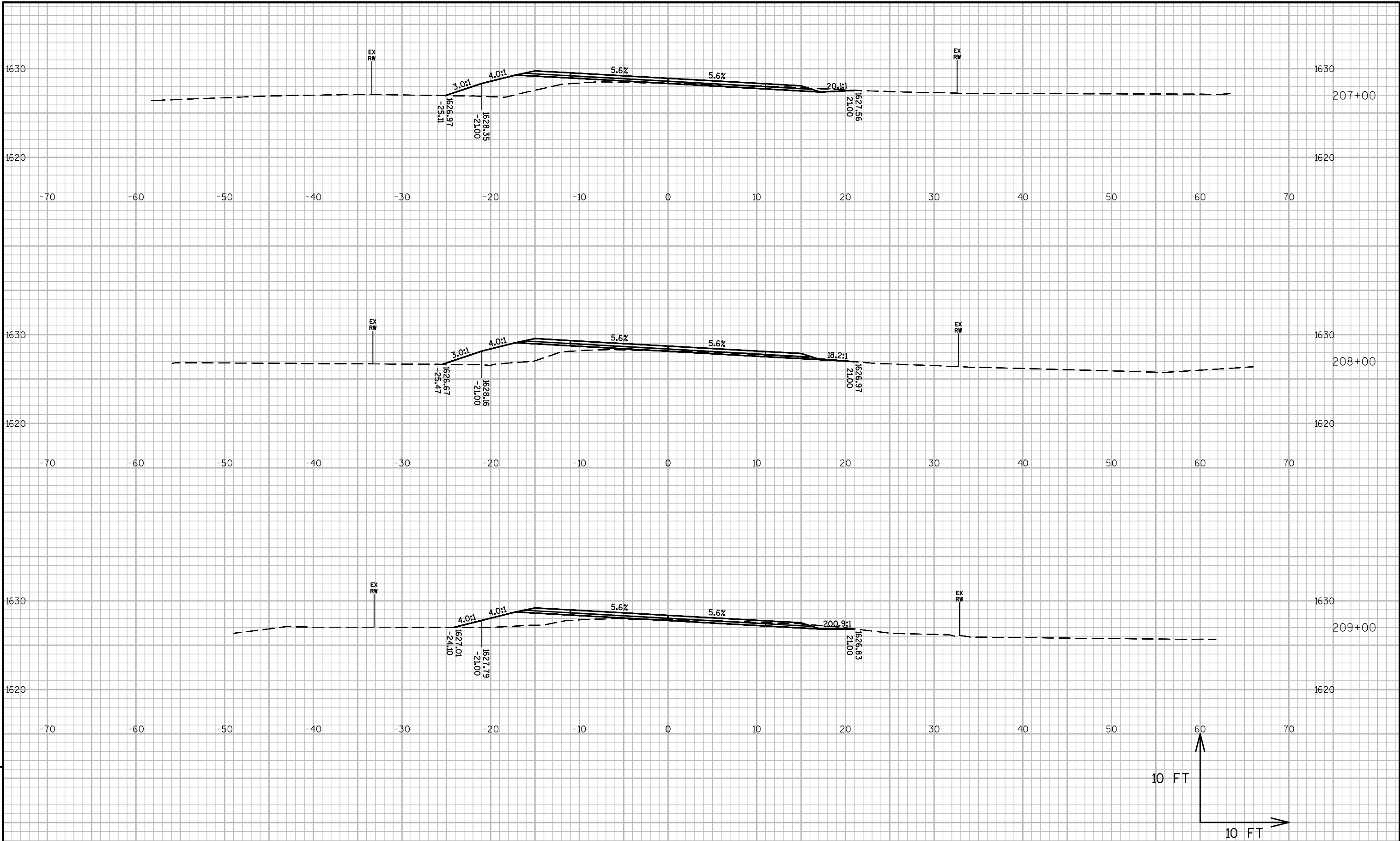


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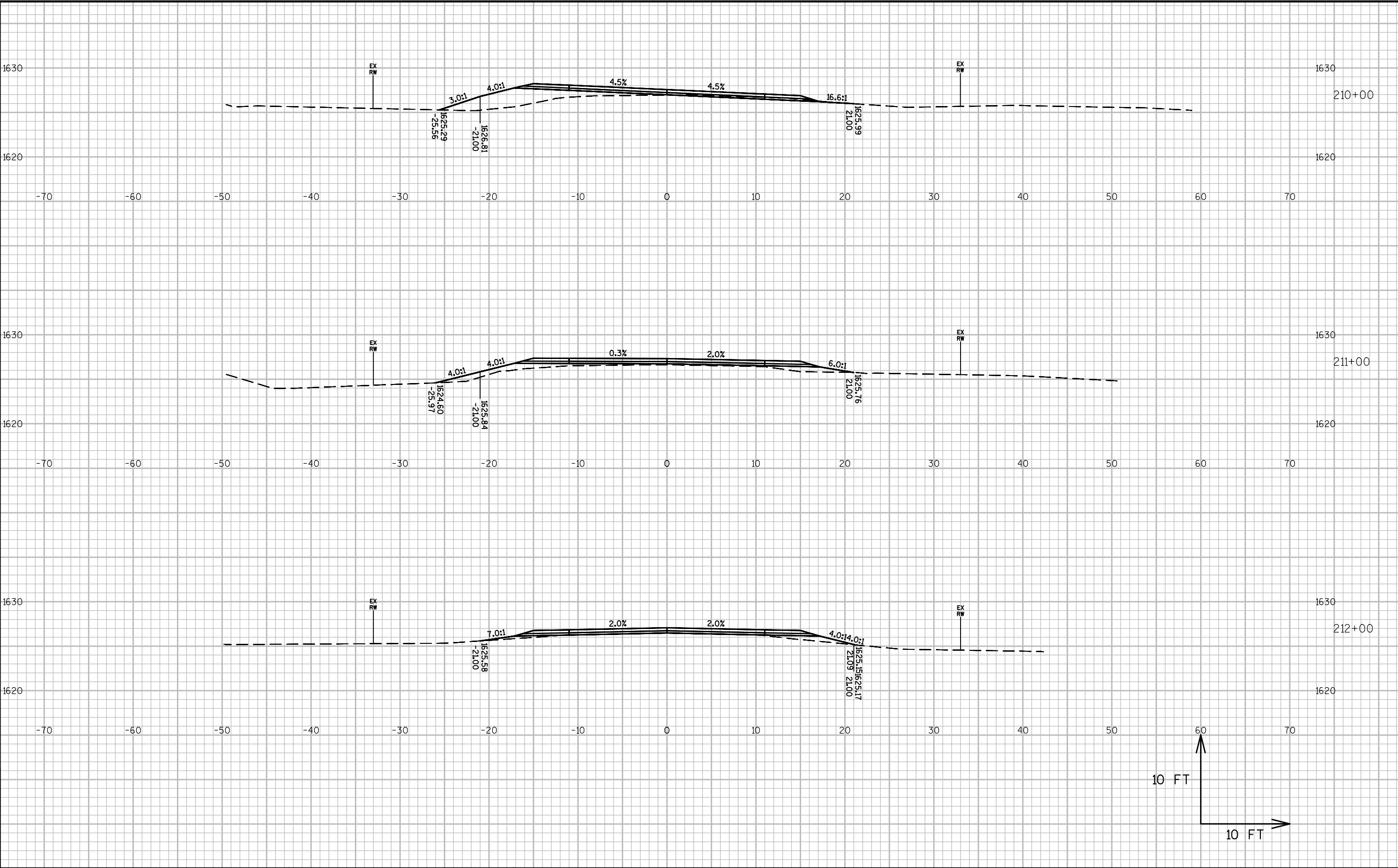


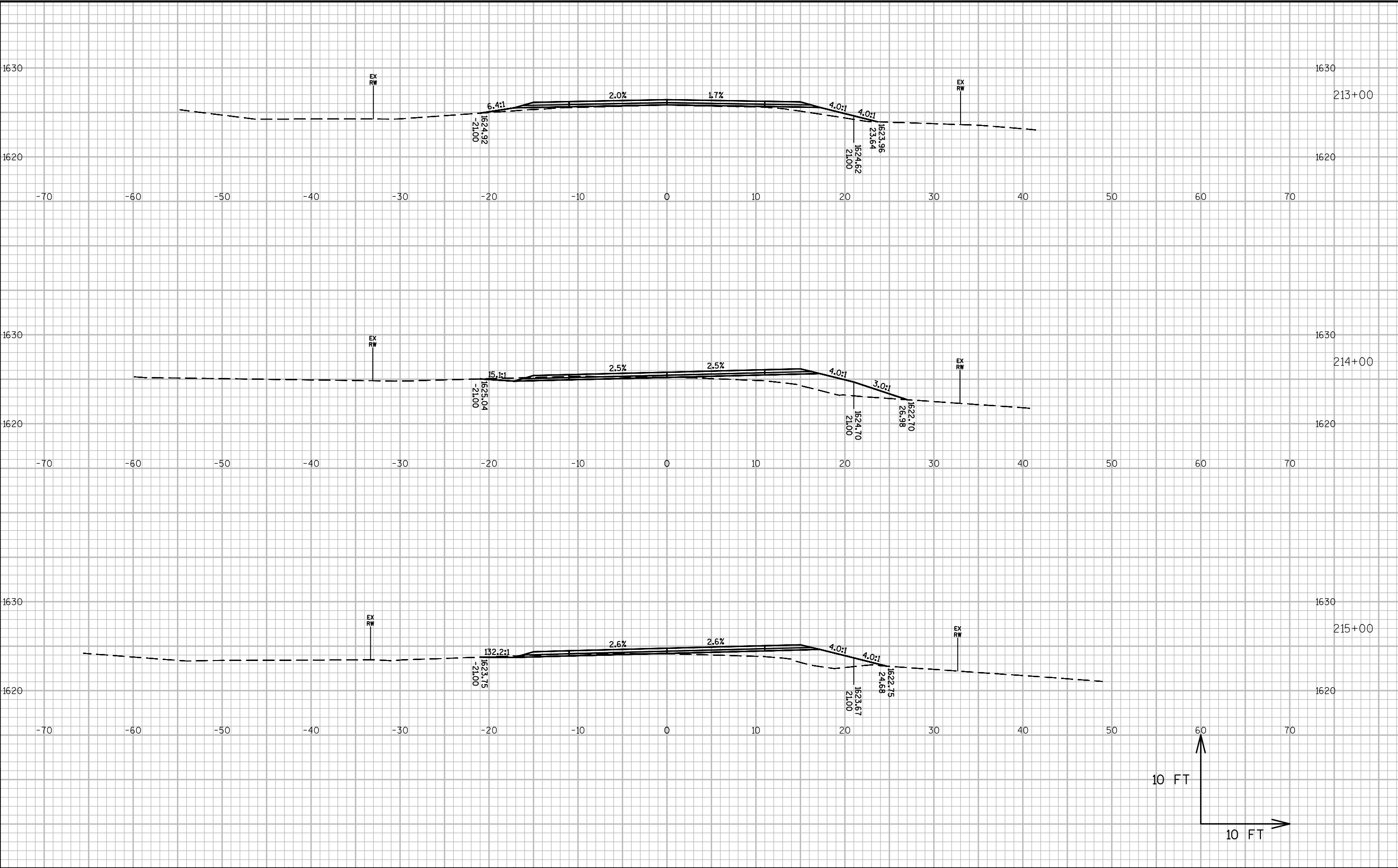


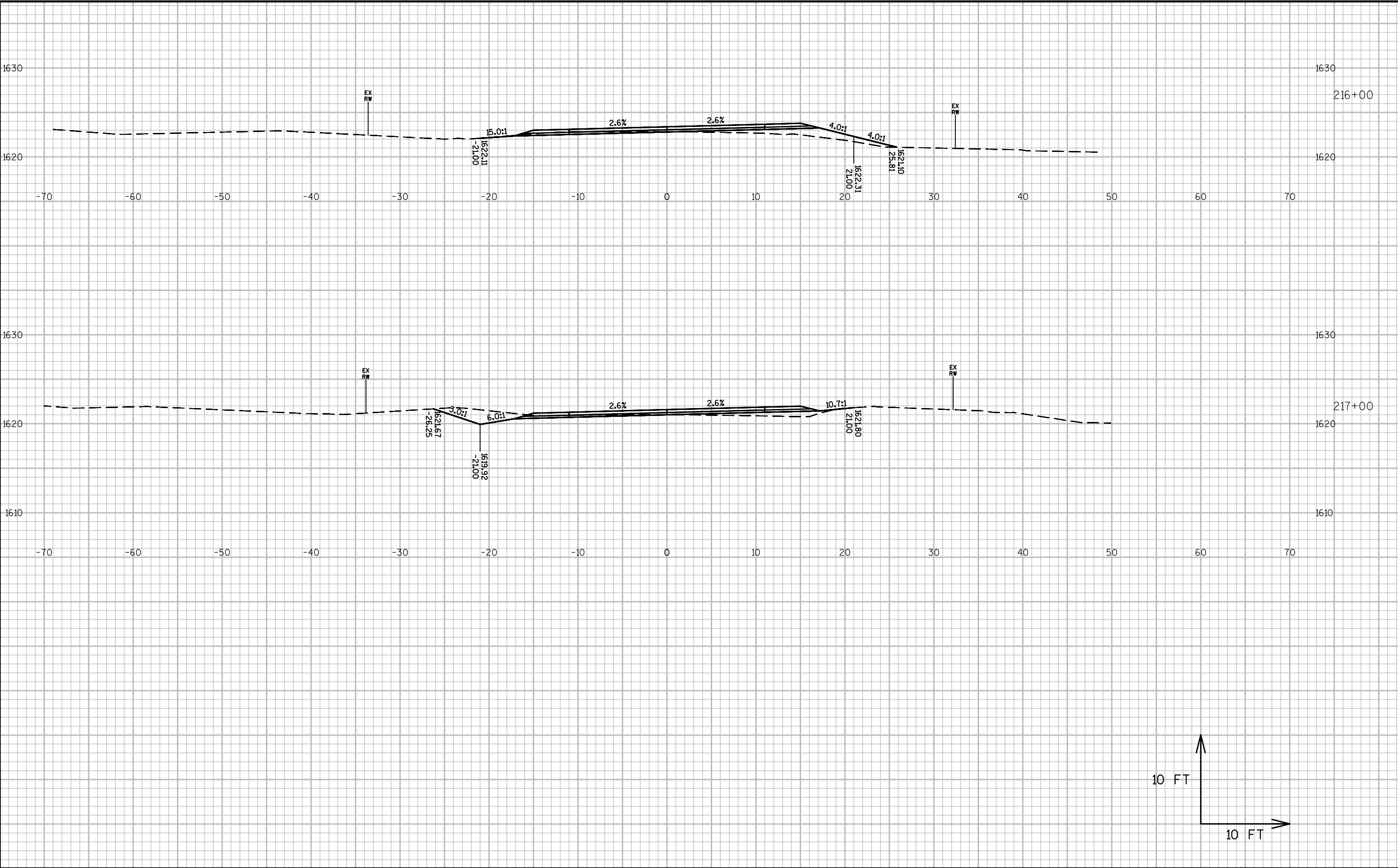


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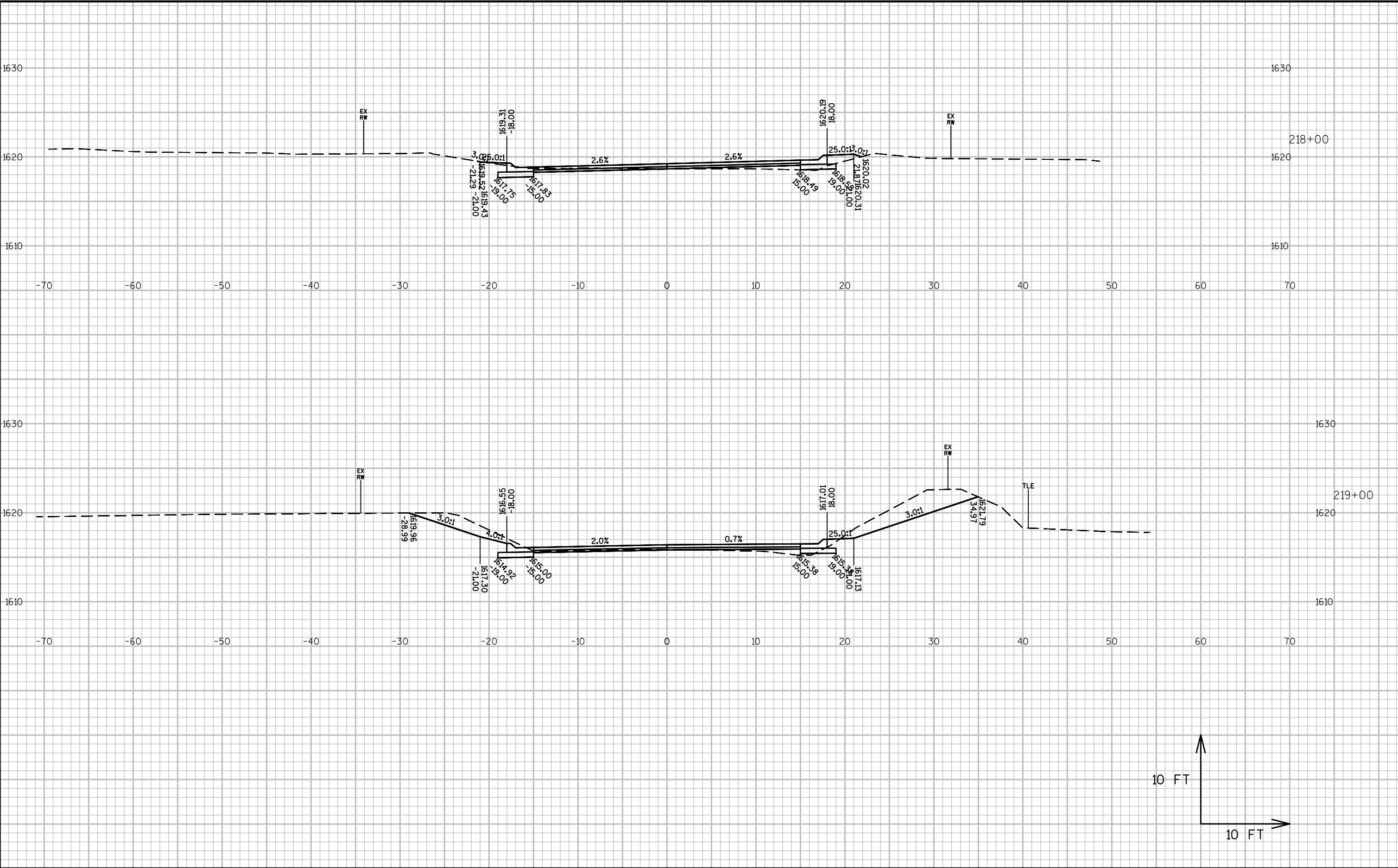


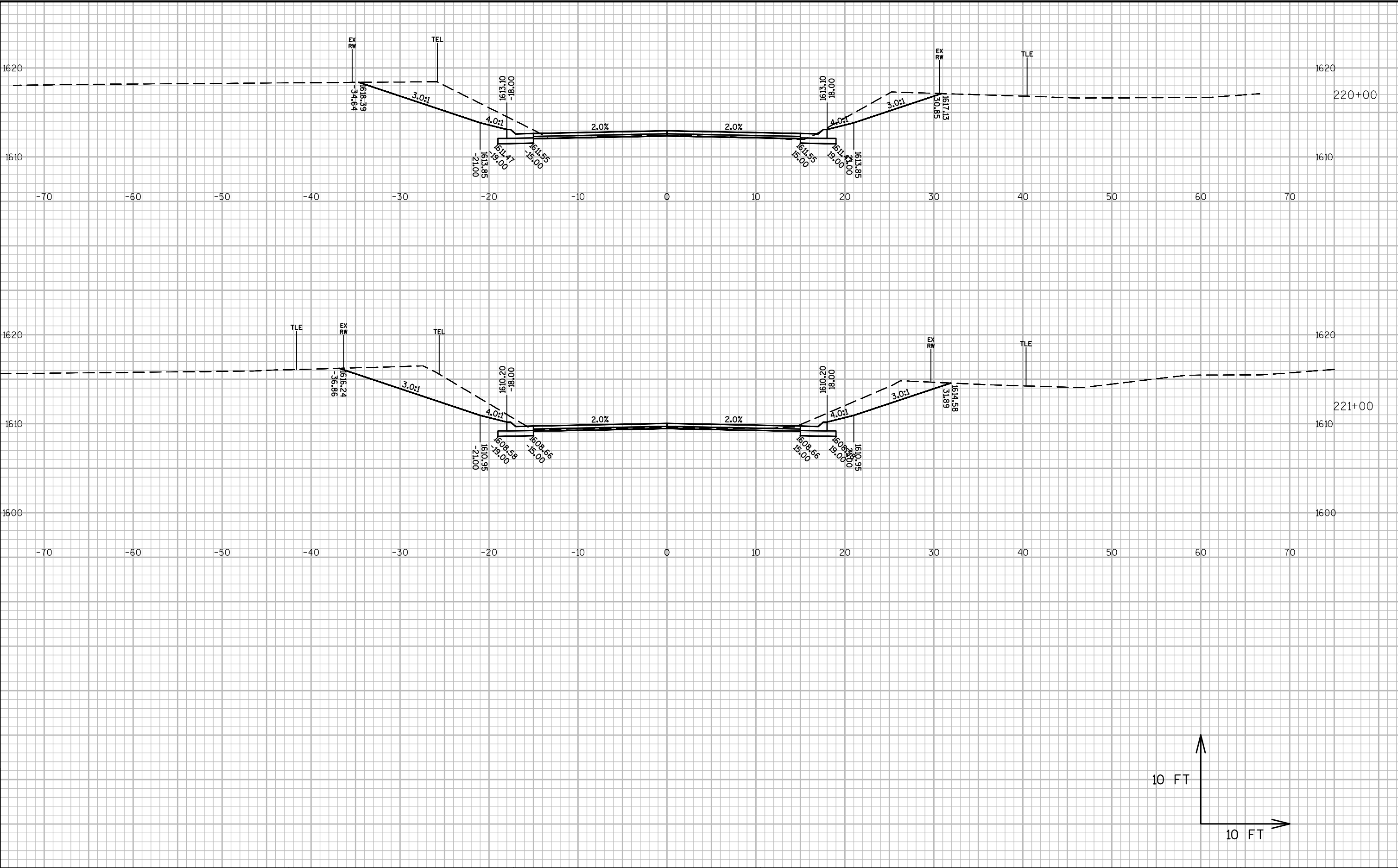


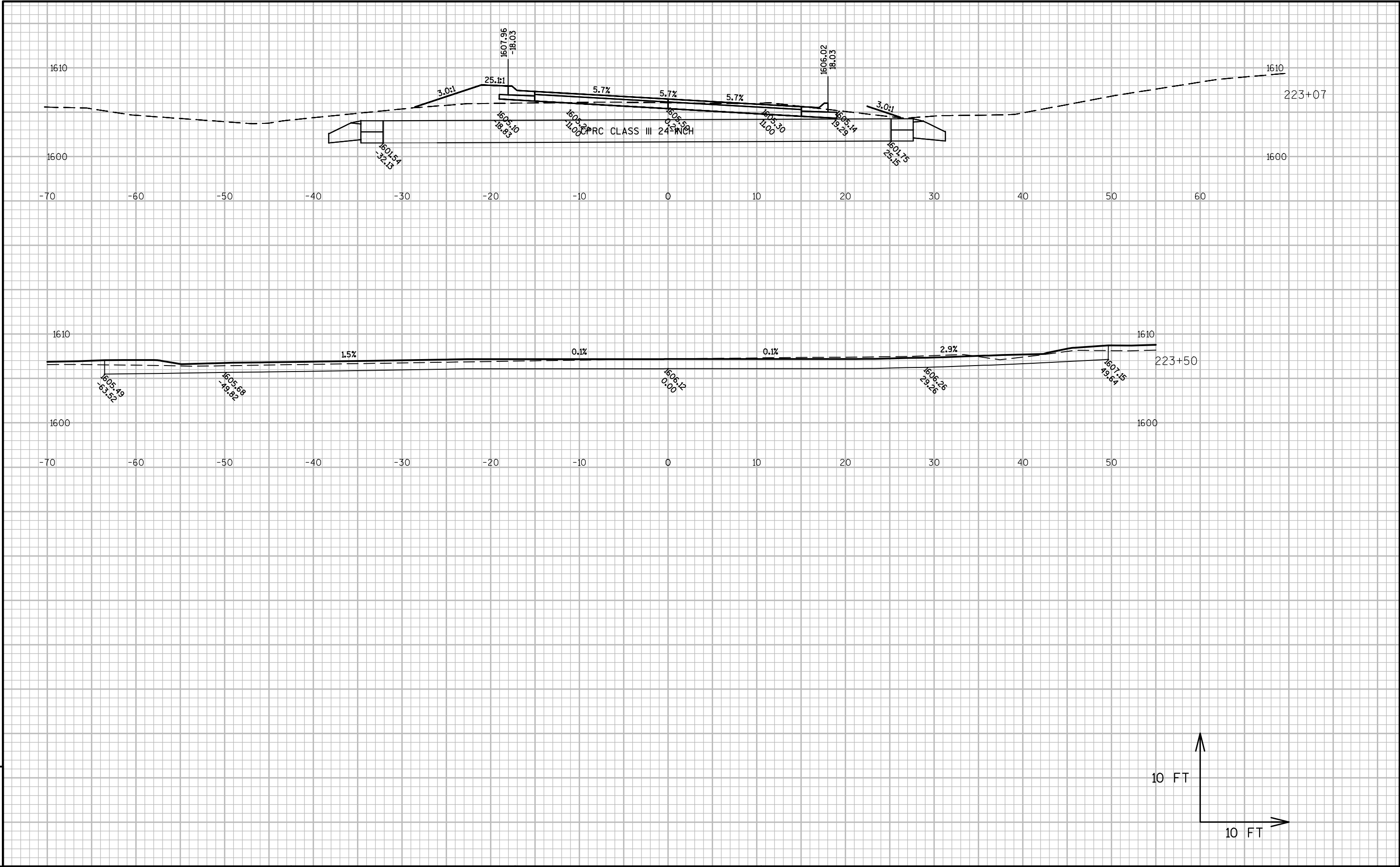


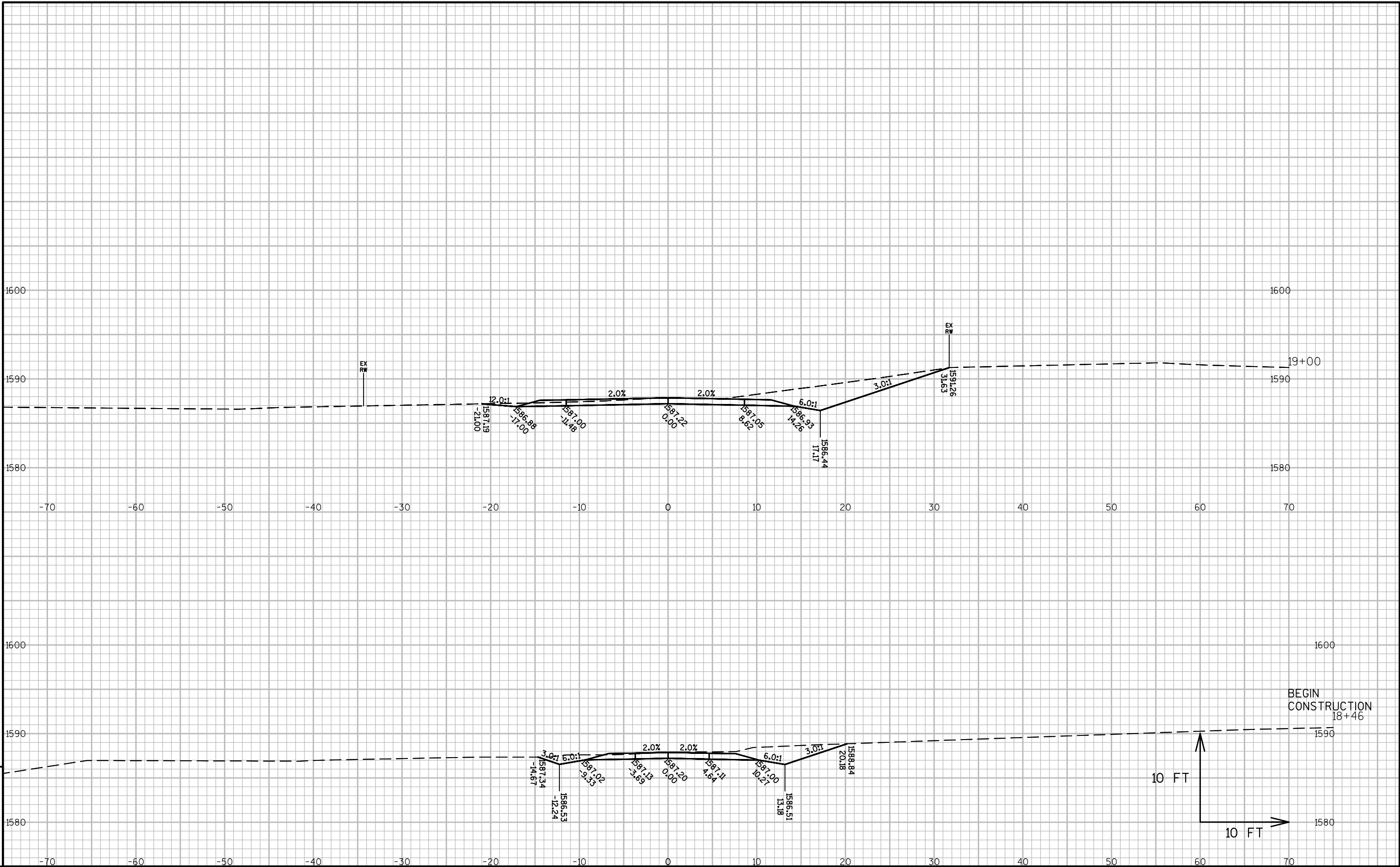
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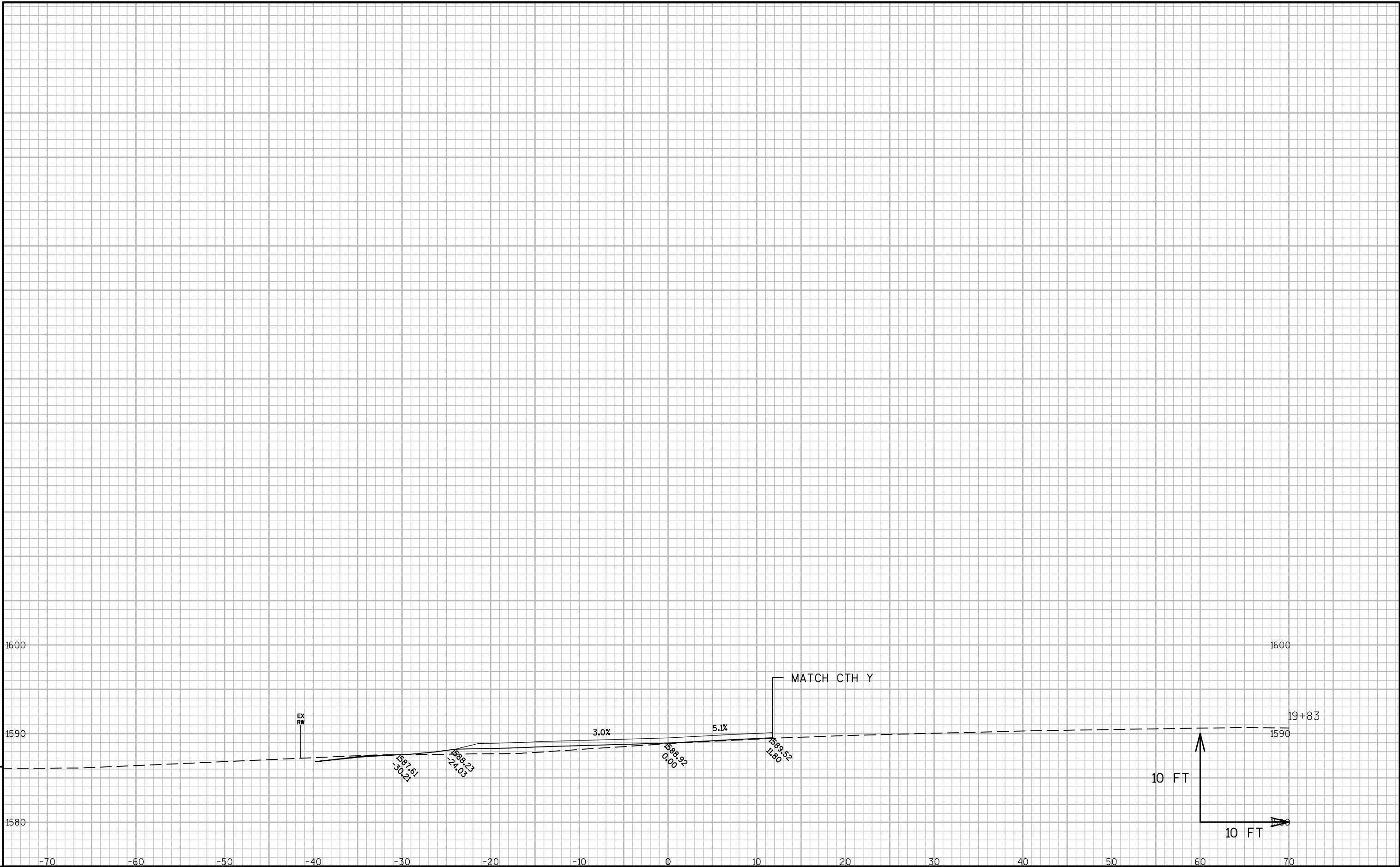
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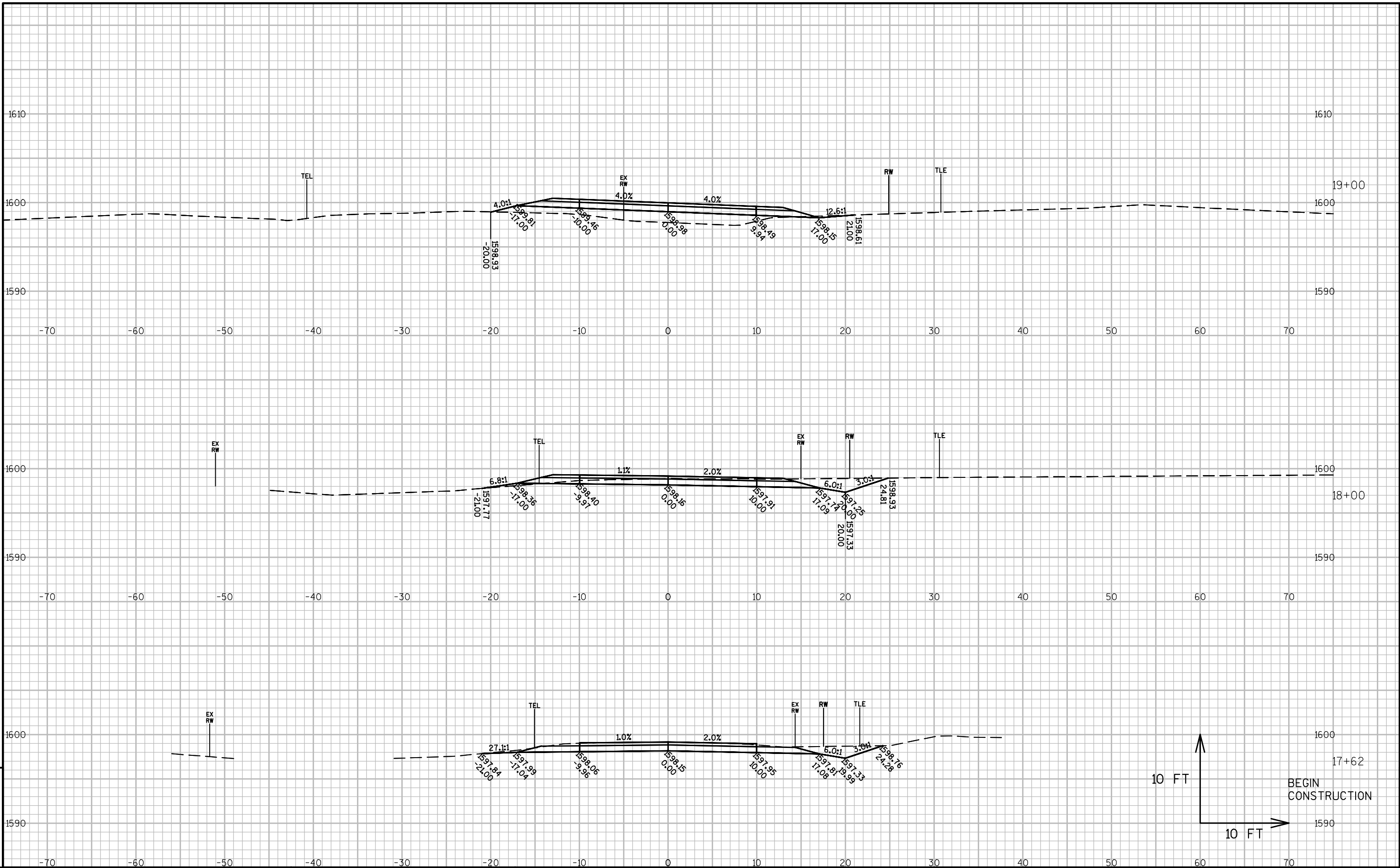


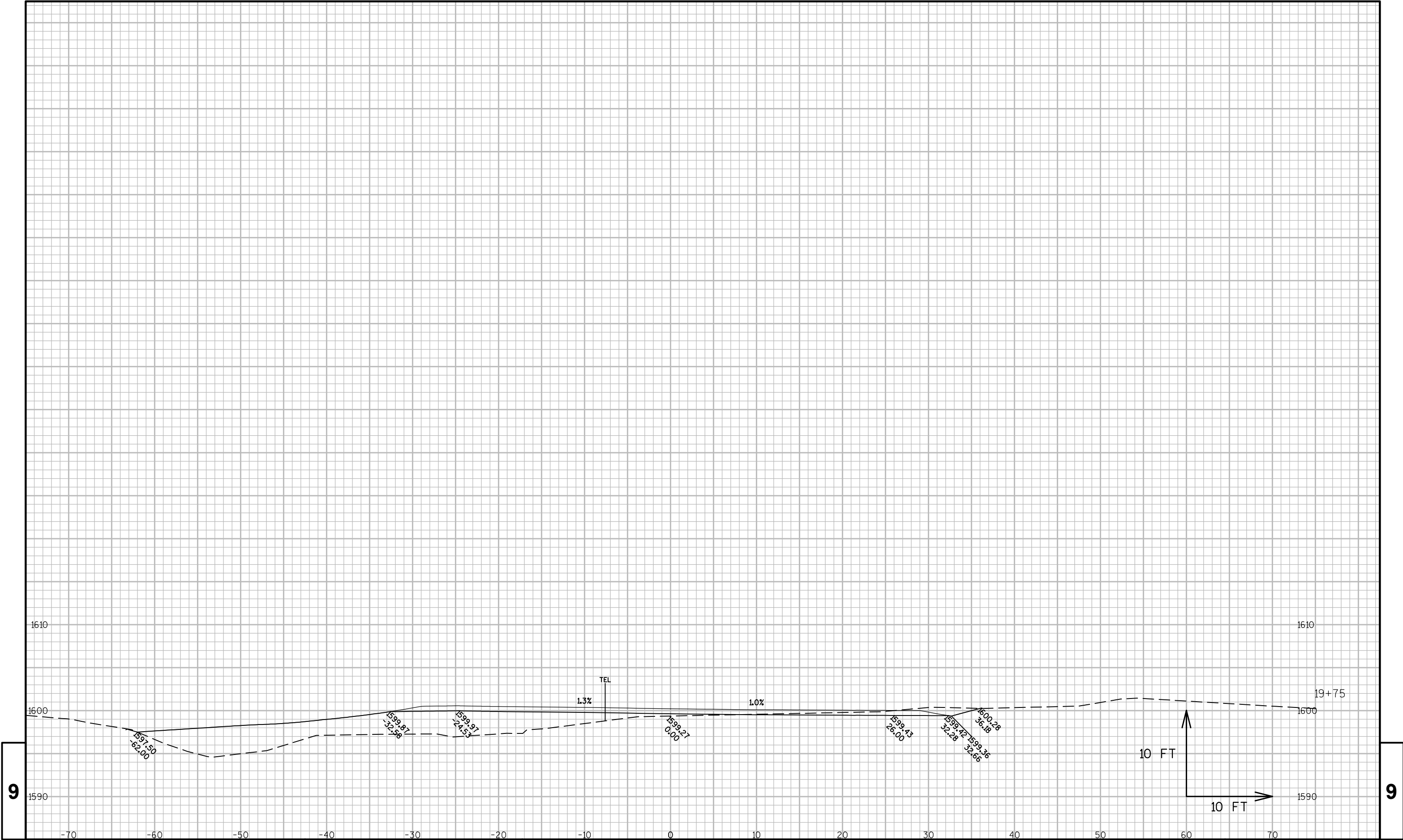






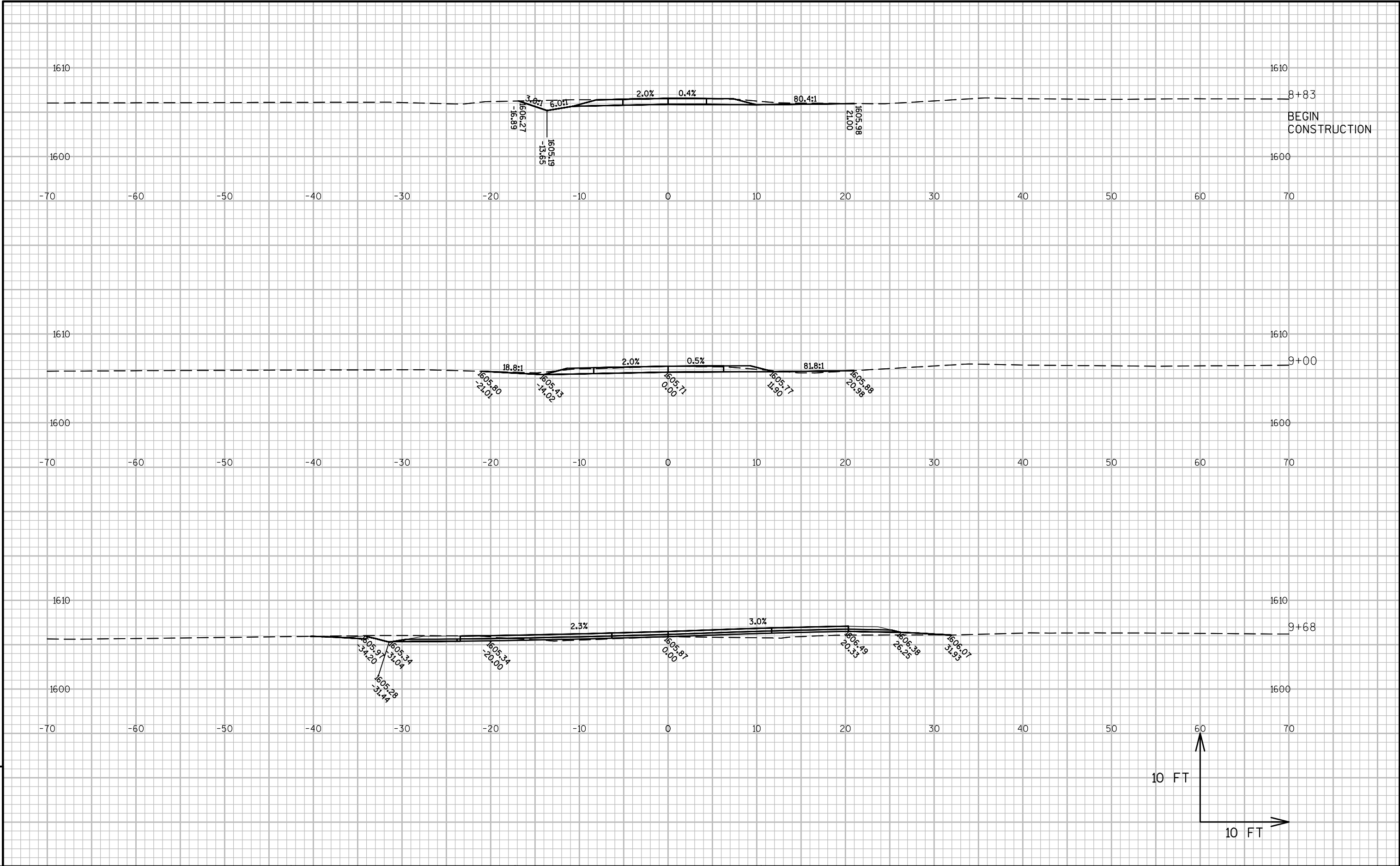






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Notes



Wisconsin Department of Transportation

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