

DALLAS CO.
GRADING AND NEW
IM-NHS-080-3(282)118--03-25
 LETTING DATE
 11-15-2022



Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

INTERSTATE ROAD SYSTEM

DALLAS COUNTY

HMA WIDENING/RESURFACING AND PCC RECONSTRUCTION

I-80 from Grand Prairie Parkway to 60th St

REVISIONS

TOTAL

130

PROJECT IDENTIFICATION NUMBER

18-25-080-020-01

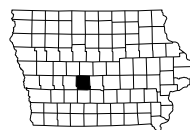
PROJECT NUMBER

IM-NHS-080-3(282)118--03-25

R.O.W. PROJECT NUMBER

IMN-080-3(294)118--0E-25

INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	Title Sheets
* A.1	Title Sheet
* A.2	Location Map Sheet
B Sheets	Typical Cross Sections and Details
B.1 - 11	Typical Grading Cross Sections and Details
B.12 - 22	Typical Cross Sections and Details
D Sheets	Mainline Plan and Profile Sheets
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2 - 8	ML080 Plan & Profiles
F Sheets	Detour or Temporary Pavement Sheets
* F.1 - 9	Detour Plan and Profile Sheets
G Sheets	Survey Sheets
G.1	Survey Information
G.2	Control Point Vicinity Map
G.3	Horizontal & Vertical Control Coordinates Listing
G.4 - 5	Horizontal Alignment Coordinates and Curve Data
G.6 - 9	Horizontal Alignment Geometry
J Sheets	Traffic Control and Staging Sheets
* J.1	Traffic Control Plan and Staging Notes
* J.2	Staging Tabulations
* J.3	Traffic Control & Staging Legend & Symbol Info. Sheet
* J.4 - 8	Staging Typical Sections
* J.9 - 93	Staging and Traffic Control Sheets Stages 1 thru 4
* J.94 - 95	Detours
K Sheets	Interchange Sheets
* K.1	Jordan Creek Parkway Ramps A & B Plan & Profile
* K.2	Jordan Creek Parkway Ramps B & C Plan & Profile
* K.3	Jordan Creek Parkway Loops E & F Plan & Profile
* K.4	60th St Ramp C Plan & Profile
* K.5 - 7	Interchange Drainage & Grading
U Sheets	500 Series, Mod.Stds. and Detail Sheets
U.1 - 18	500 Series, Modified Standards and Detail Sheets
V Sheets	Bridge, Culvert and Ret. Wall Plans
* V.1 - 16	I-80 EB & WB Bridge over U.P.R.R.
* V.17 - 20	Retaining Walls
V.21 - 29	Culverts
W Sheets	Mainline Cross Sections
W.1	Cross Sections Legend & Symbol Information Sheet
W.2 - 86	Mainline WB Cross Sections
W.87 - 164	Mainline EB Cross Sections
Y Sheets	Ramp Cross Sections
Y.1 - 19	Ramp Cross Sections
	* Color Plan Sheets



For Project Location Map
Refer to Sheet A.2

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.14 of the Specifications.



MILEAGE SUMMARY			
		105-1	
		09-27-94	
Div.	Location	Lin. Ft.	Miles
	Widening:	6,309.11	
	Sta. 1134+00 to Sta. 1197+09.11		
	Full Build:	2,115.89	
	Sta. 1197+09.11 to Sta. 1218+25		
	Deduct for Bridge:	266.30	
	Sta. 1209+29.60 to Sta. 1211+95.90		
	Widening:	7,329.65	
	Sta. 1218+25 to Sta. 1291+54.65		
	Total length of Roadway	15,754.65	2.984
	Total Length of Bridge	266.30	0.050
	Total Length	16,020.95	3.034

DESIGN DATA RURAL

2020 AADT	93,700	V.P.D.
2045 AADT	149,400	V.P.D.
20-- DHV	--	V.P.H.
TRUCKS	18 %	
Total		
Design ESALs	--	

PRELIMINARY PLANS

Subject to change by final design.

REVISED D5 PLAN

Date: February 5, 2021

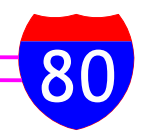
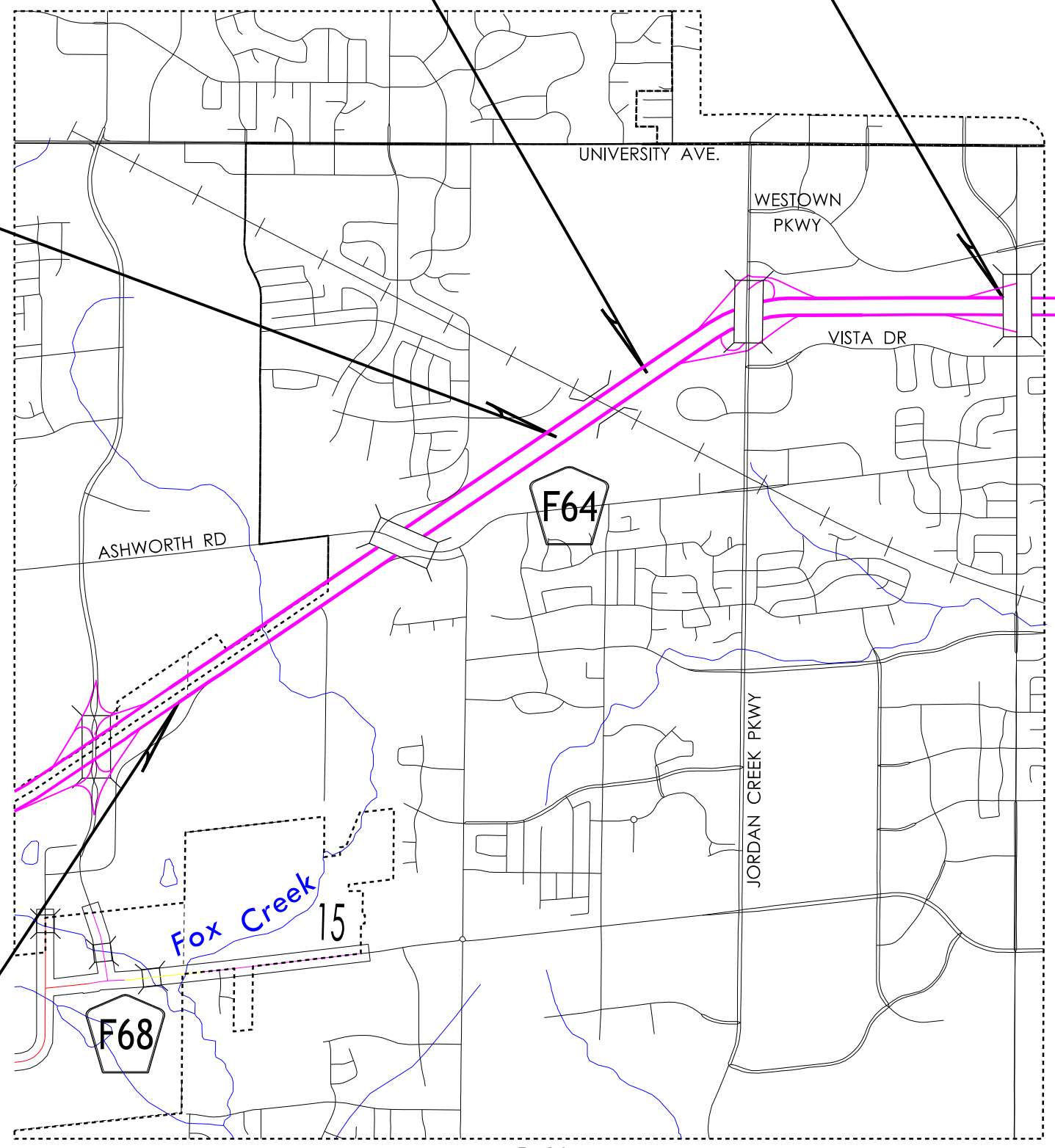


STA. 1218+25
END FULL BUILD

STA. 1291+54.65
END CONSTRUCTION

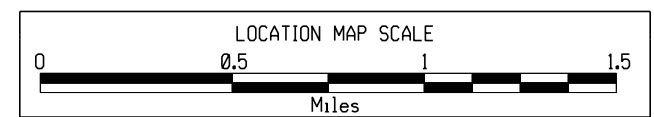
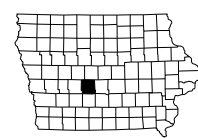
STA. 1197+09.11
BEGIN FULL BUILD

STA. 1134+00.00
BEGIN CONSTRUCTION



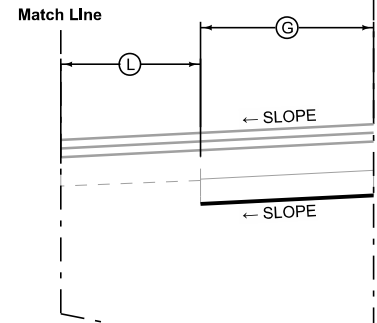
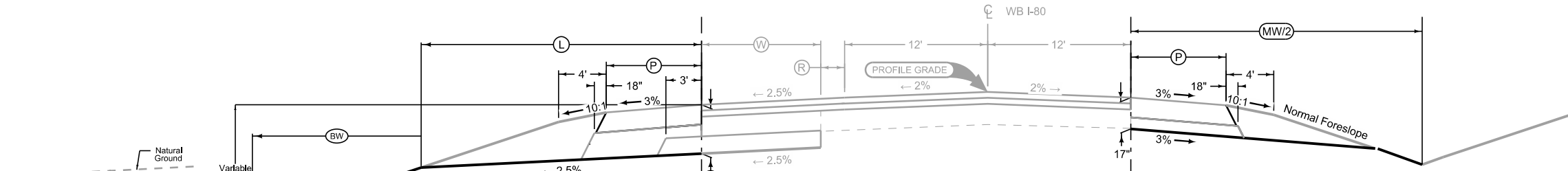
**WEST
DES MOINES**

POP.
63541



6-Lane Foreslope Grading

LOCATION		(P)	(L)	(BW)	(X)
STATION TO STATION		Feet	Feet	Feet	Inches
1139+98.99	1197+09.11	12	26.40	3.60	22
1218+25.00	1223+73.96	6	20.61	5.39	22
1223+73.96	1224+24.34	4-6	20.61	5.39	22
1224+24.34	1227+78.34	6	20.61	5.39	22
1243+26.37	1255+15.49	12	26.40	3.60	22

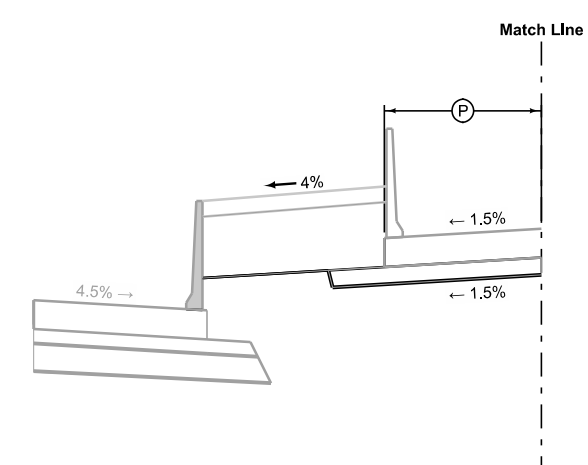
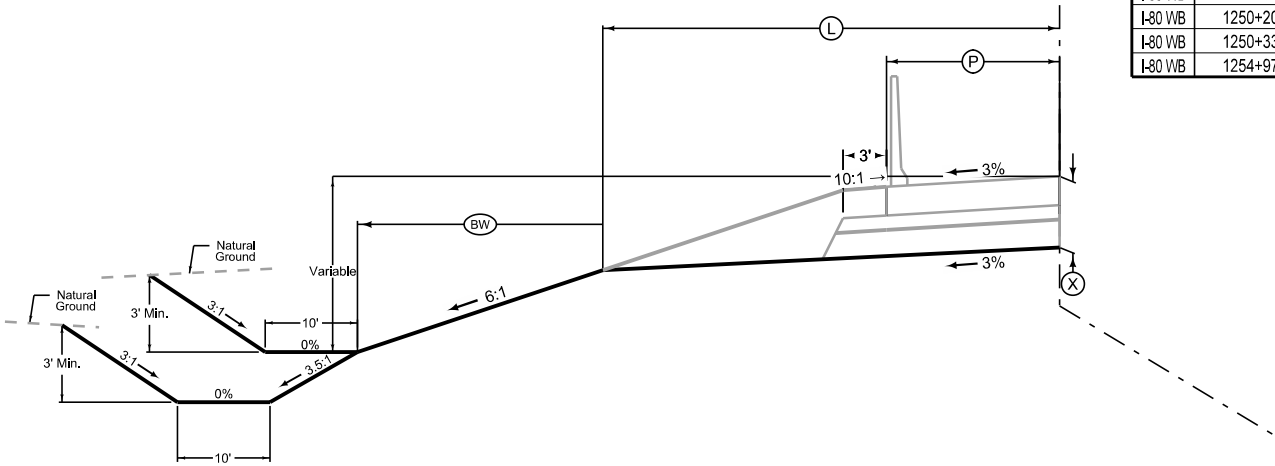


Section shown in the direction of stationing.
Mainline Jointing: CD at 20' spacing (Existing PCC)

Direction of Travel	BEGIN STATION	END STATION	6DP_Dprs_04-21-20		
			(MW/2) Feet	(R) Feet	(W) Feet
I-80 WB	1139+98.99	1197+09.11	25	2	12
I-80 WB	1218+25.00	1223+73.89	25	0.9-11.9	11.1-0.1
I-80 WB	1223+73.89	1224+24.34	25	14	0
I-80 WB	1224+24.34	1227+78.34	25	14-28	0
I-80 WB	1227+78.34	1231+08.19	25	12	0
I-80 WB	1231+08.19	1235+51.78	25	2	10
I-80 WB	1235+51.78	1247+82.97	25-21.5	2	10
I-80 WB	1247+82.97	1250+20.87	21.5-20.1	2-6	10-6
I-80 WB	1250+20.87	1250+33.59	20.1-20	6	6
I-80 WB	1250+33.59	1254+97.50	20	6	6
I-80 WB	1254+97.50	1291+54.65	20	12	0

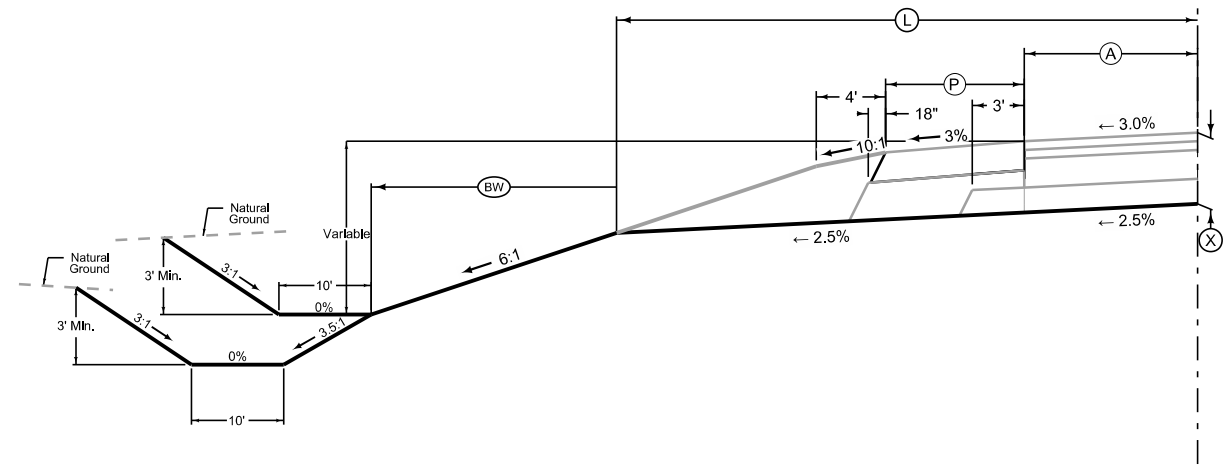
6-Lane Foreslope Grading

LOCATION		(P)	(L)	(BW)	(X)
STATION TO STATION		Feet	Feet	Feet	Inches
1254+96.42	1257+22.59	7.7	22.58	3.42	23



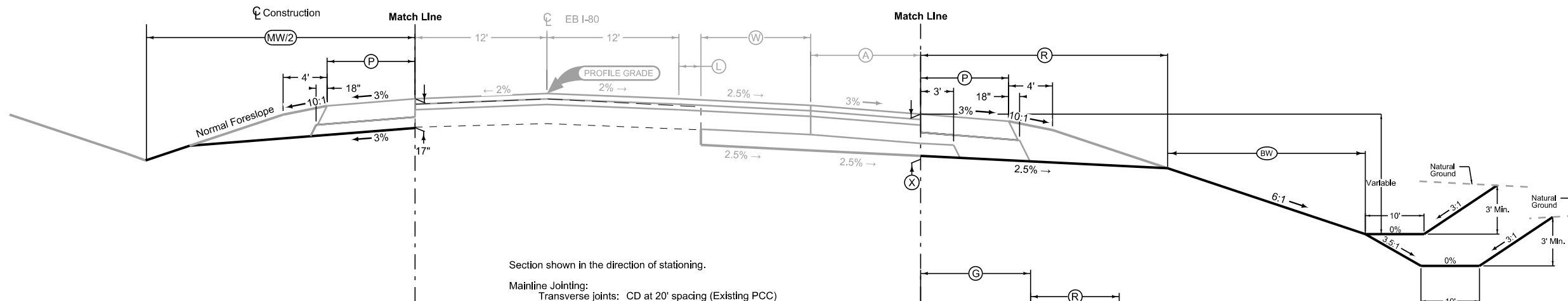
6-Lane Foreslope Grading

LOCATION		(A)	(P)	(L)	(BW)	(X)
STATION TO STATION		Feet	Feet	Feet	Feet	Inches
1257+22.59	1259+59.53	3.6-7.3	6	24.21-27.63	5.67	22
1259+59.53	1262+40.59	7.3-11.6	6-12	27.63-37.57	5.67-4.03	22
1262+40.59	1262+75.00	11.6-12	12	37.57-37.95	4.03-4.05	22
1262+75.00	1270+08.65	12	12	37.95	4.05	22
1270+08.65	1271+05.77	12-13.9	12-10.1	37.95	4.05-5.95	22
1271+05.77	1273+08.71	13.9-14.1	10.1-6	37.95-34.19	5.95-5.91	22
1273+08.71	1280+08.65	14.1-13.9	6	34.19-34	5.91	22
1282+74.25	1289+79.25	12	12	37.95	4.05	22
1289+74.25	1291+24.25	12-2	12-10	37.95-26.38	4.05-3.62	22
1291+24.25	1291+54.25	2	10	26.38	3.62	22



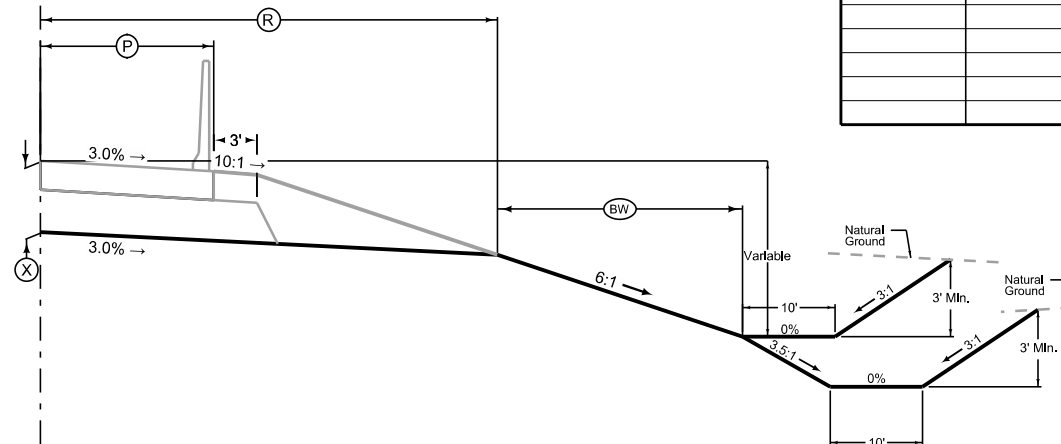
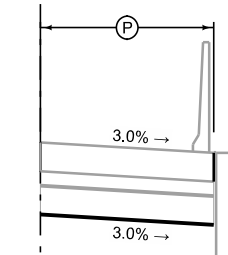
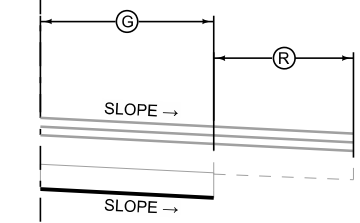
See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

**GRADING
WB I-80: 6 LANE SECTION**



Section shown in the direction of stationing.
 Mainline Jointing:
 Transverse joints: CD at 20' spacing (Existing PCC)

6DP_Dprs_MODIFIED						
Direction of Travel	BEGIN STATION	END STATION	(MW/2) Feet	(L) Feet	(W) Feet	(A) Feet
I-80 EB	1139+75.92	1197+09.11	25	2	10	0
I-80 EB	1218+25.00	1219+92.19	25	2	10	0
I-80 EB	1219+92.19	1220+07.24	25	2	10	1
I-80 EB	1220+07.24	1221+37.14	25	7.2-12	0	9.6
I-80 EB	1221+37.14	1222+72.19	25	12-17	0	9.6-13.6
I-80 EB	1222+72.19	1225+92.19	25	14.6-36	0	16
I-80 EB	1225+92.19	1226+34.26	25	12	0	0
I-80 EB	1226+34.26	1239+41.59	25	2	10	0
I-80 EB	1239+41.59	1240+87.06	25	12	0	0
I-80 EB	1240+87.06	1242+71.72	25-24.2	12	0	0
I-80 EB	1242+71.72	1243+00.73	24.2-24.1	14-12	0	0
I-80 EB	1243+00.73	1244+80.40	24.1-23.3	12	0	0
I-80 EB	1244+80.40	1249+35.34	23.3-21.3	14.5-14	0	9.5-12
I-80 EB	1249+35.34	1249+84.25	21.3-21.1	0	12	12
I-80 EB	1249+84.25	1252+33.59	21.1-20	0	12	12-2.2
I-80 EB	1252+33.59	1252+84.29	20	0	12	2.2-0
I-80 EB	1252+84.29	1254+72.03	20	0	12	0
I-80 EB	1254+72.03	1256+58.91	20	12	0	0
I-80 EB	1256+58.91	1256+62.18	20	30-29.9	0	0
I-80 EB	1256+62.18	1259+36.90	20	23.9-18	6	0
I-80 EB	1259+36.90	1263+94.23	20	24	0	0



6-Lane Foreslope Grading

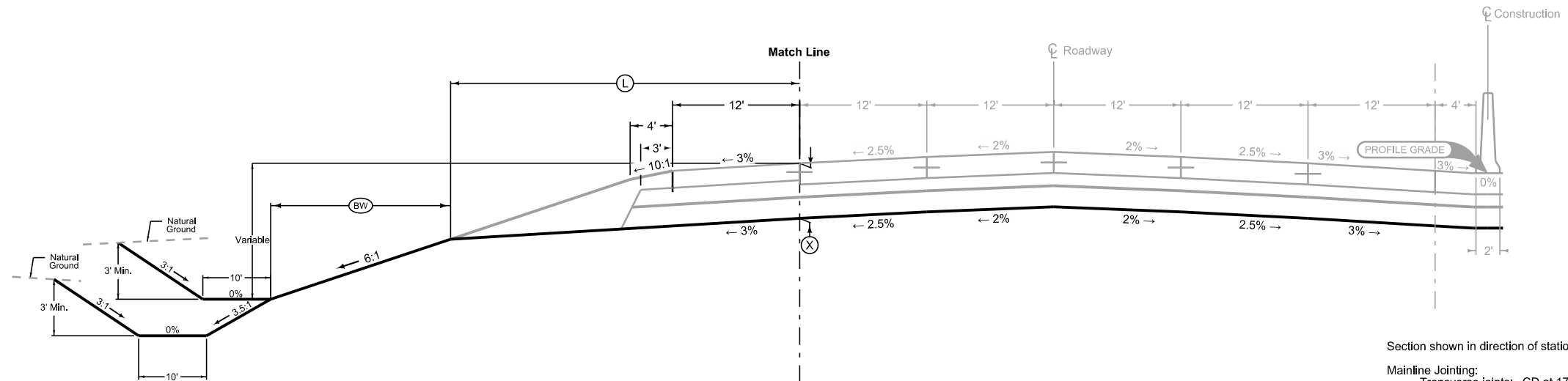
LOCATION		(P)	(R)	(BW)	(X)
STATION TO STATION		Feet	Feet	Feet	Inches
1134+00.00	1197+09.11	12	26.40	3.60	22
1221+72.72	1225+92.19	6	20.61	5.39	22
1225+92.19	1238+87.43	12	26.40	3.60	22
1244+80.46	1251+36.99	6	20.61	5.39	22
1251+36.99	1252+84.29	6-12	20.61-26.40	5.39-3.60	22
1252+84.29	1253+82.97	12	26.40	3.60	22
1256+15.83	1256+59.51	6	20.61	5.39	22
1256+59.51	1259+37.02	6-12	20.61-26.40	5.39-3.60	22
1259+37.02	1263+94.23	12	26.40	3.60	22

6-Lane Foreslope Grading with Barrier

LOCATION		(P)	(R)	(BW)	(X)
STATION TO STATION		Feet	Feet	Feet	Inches
1219+75.00	1219+92.19	17.6	32.48	0	22
1219+92.19	1221+42.45	17.6-7.6	32.48-22.48	0-3.52	22
1221+42.45	1221+72.72	7.6	22.48	3.52	22

See Tab 100-24 or 100-25 for pavement quantities.
 See Tab 112-9 for shoulder quantities.

**GRADING
 EB I-80: 6 LANE SECTION**



Section shown in direction of stationing.
Mainline Jointing:
Transverse joints: CD at 17' spacing

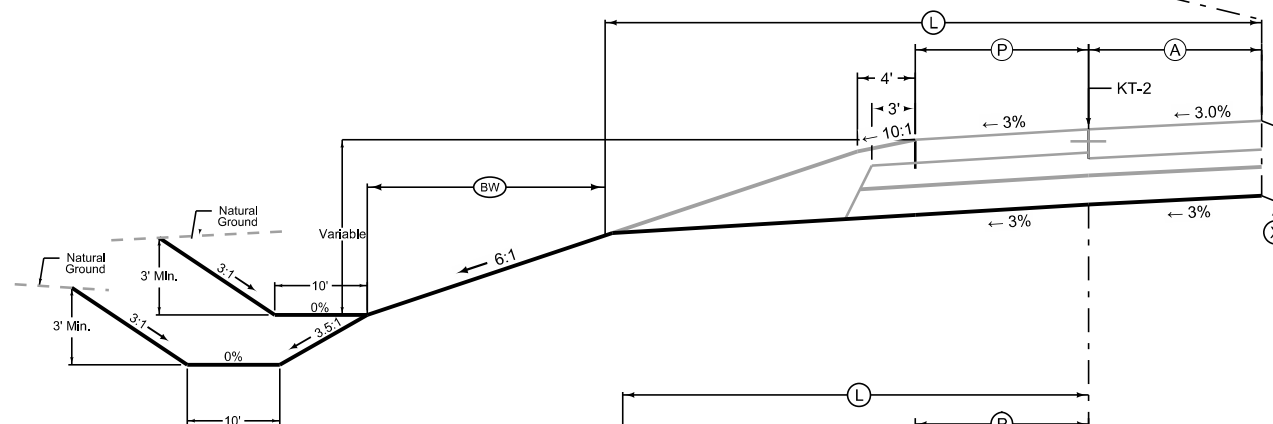
8 Lane Ultimate Foreslope Grading

6D_Closed_P_FullIPCC_04-21-20						
BEGIN STATION	END STATION	(P) Feet	(X) Inches	(L) Feet	(BW) Feet	
1197+09.11	1199+89.11	12	29	31.64	0	

8DP_Closed_04-21-20	
BEGIN STATION	END STATION
1197+09.11	1209+27.80
1211+95.23	1218+25.00

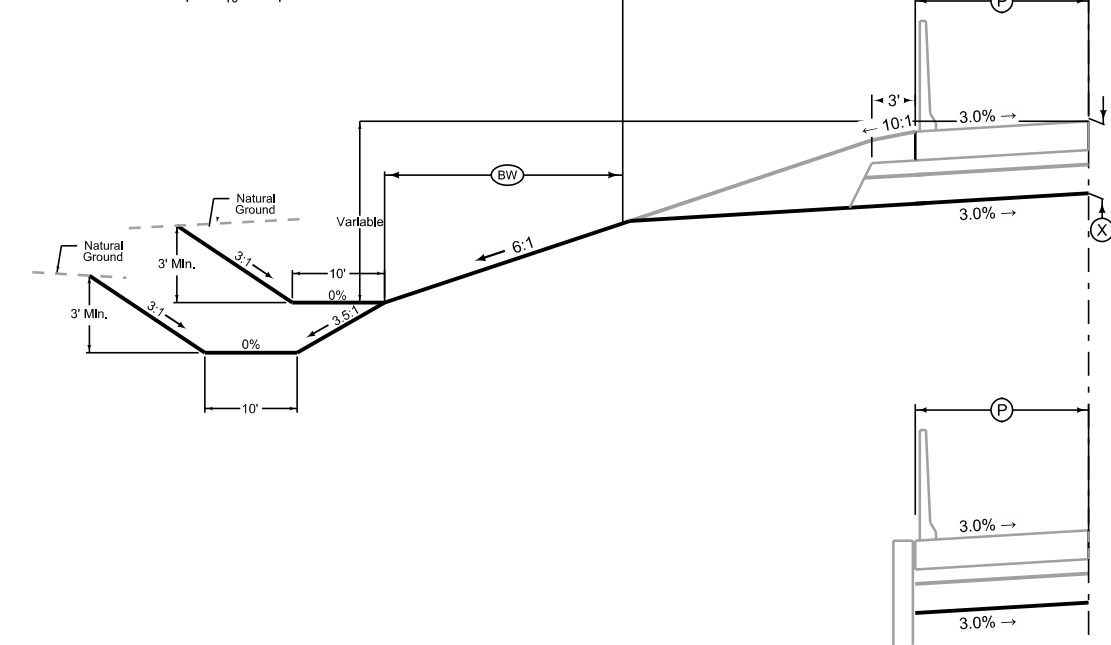
8 Lane Ultimate Foreslope Grading w/ Auxiliary Lane

6D_Closed_P_FullIPCC_04-21-20						
BEGIN STATION	END STATION	(A) Feet	(P) Feet	(X) Inches	(L) Feet	(BW) Feet
1199+89.11	1201+00.00	0-1.58	12 - 10.42	29	31.64	0



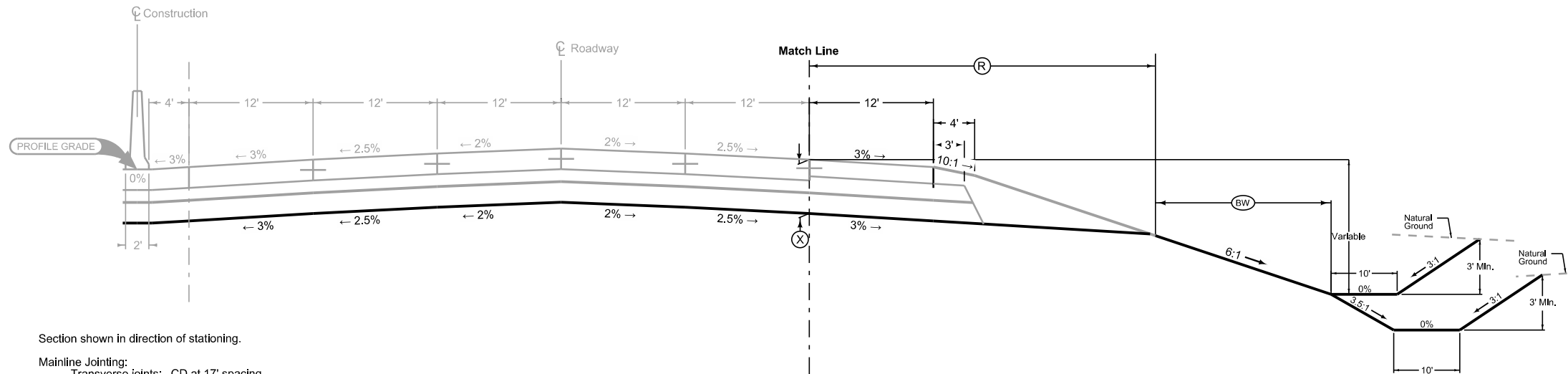
8 Lane Ultimate Foreslope Grading w/ Auxiliary Lane and Barrier

6D_Closed_P_FullIPCC_04-21-20						
BEGIN STATION	END STATION	(A) Feet	(P) Feet	(X) Inches	(L) Feet	(BW) Feet
1201+00.00	1203+00.00	1.58-4.44	12-9.14	29	32.74	0
1217+00.00	1218+25.00	12	7.58	29	38.74	0



See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

GRADING
WB I-80: 8 LANE ULTIMATE SECTION

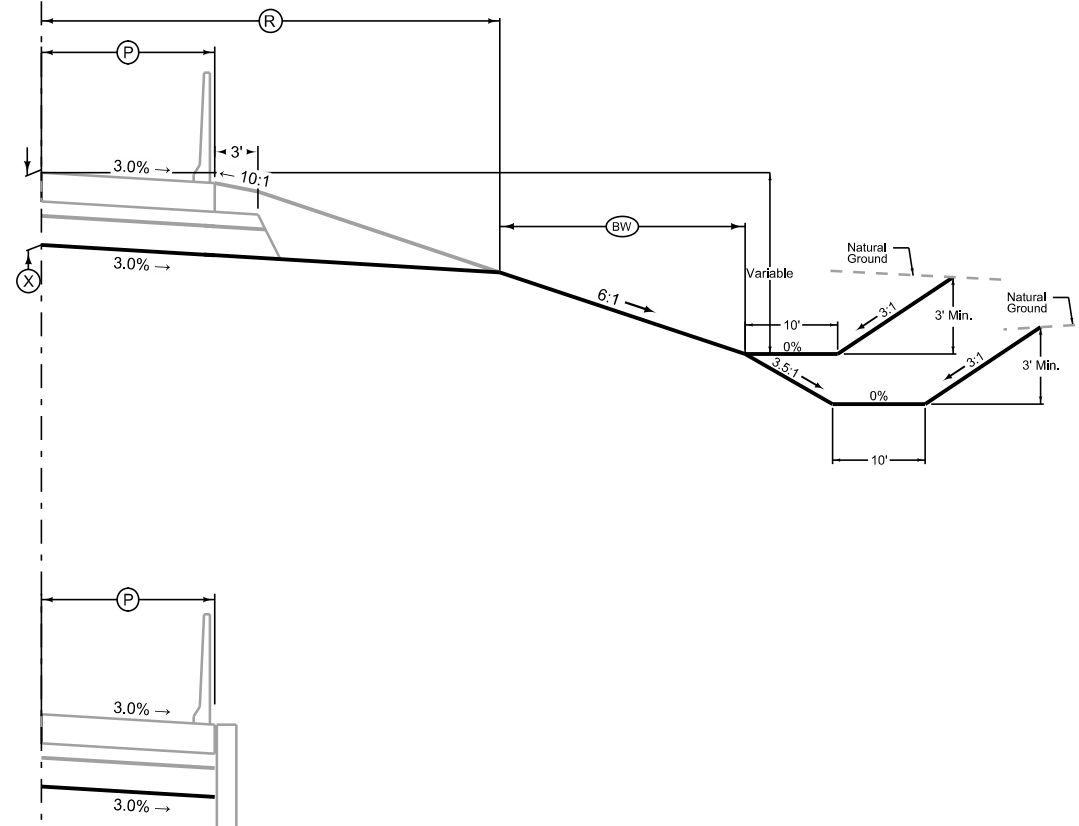


Section shown in direction of stationing.
Mainline Jointing:
Transverse joints: CD at 17' spacing

8DP_Closed_04-21-20	
BEGIN STATION	END STATION
1197+09.11	1209+27.80
1211+95.23	1218+25.00

8 Lane Ultimate Grading

6D_Closed_P_FullPCC_04-21-20				
BEGIN STATION	END STATION	(X) Inches	(R) Feet	(BW) Feet
1197+09.11	1201+00.00	29	31.64	0

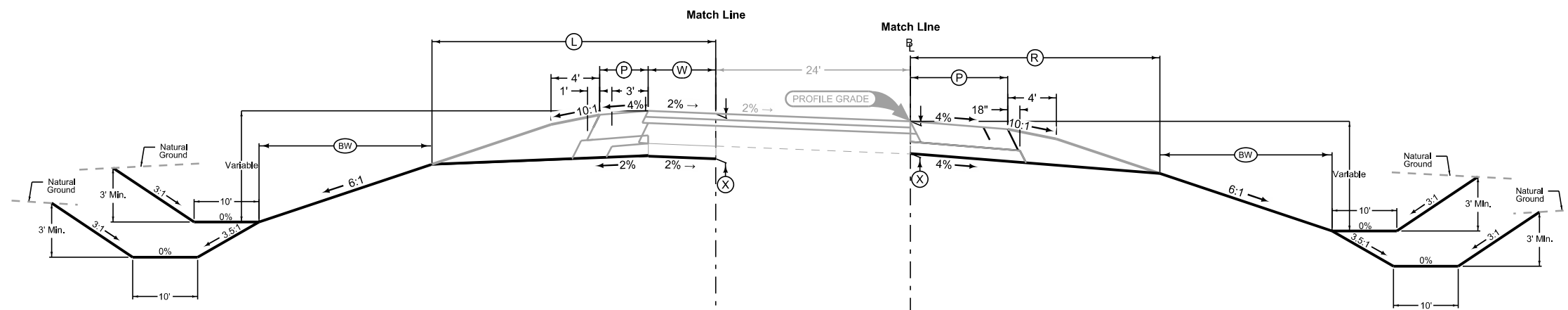


8 Lane Ultimate Foreslope Grading with Barrier

6D_Closed_P_FullPCC_04-21-20					
BEGIN STATION	END STATION	(P) Feet	(X) Inches	(L) Feet	
1201+00.00	1202+00.00	13.58	29	33.22	0

See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

GRADING EB I-80: 8 LANE ULTIMATE SECTION



RAMP A JORDAN CREEK FORESLOPE GRADING

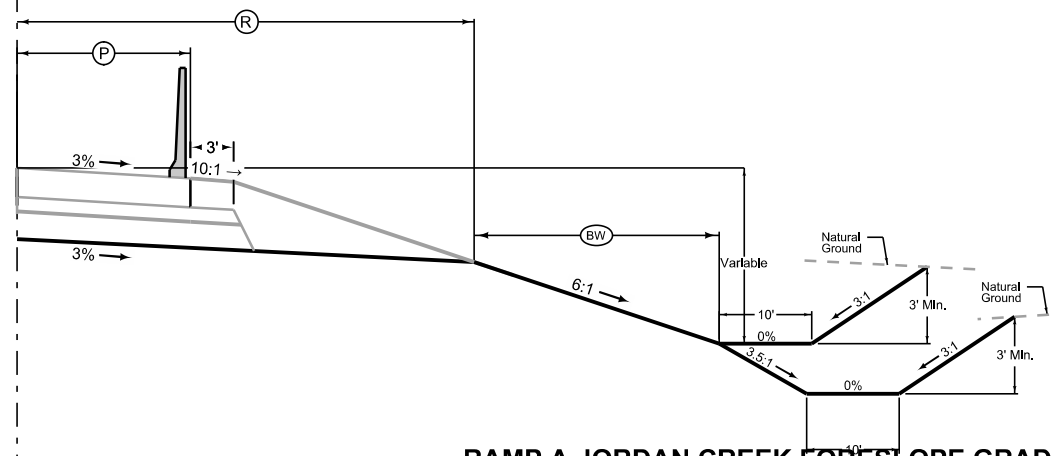
BEGIN STATION	END STATION	(X) Inches	(L) Feet	(BW) Feet	(P) Feet	(W) Feet
1253+18.59	1254+95.60	22	18.05-21.31	11.95-8.69	2-4	2-3.54
1254+95.60	1255+18.58	22	21.31-21.77	8.69-8.23	4	3.54-4

Section shown in the direction of traffic

3R_Overlay_ Modified	
STATION TO STATION	
1254+95.60	1255+18.58

RAMP A JORDAN CREEK FORESLOPE GRADING

BEGIN STATION	END STATION	(X) Inches	(R) Feet	(BW) Feet	(P) Feet
1254+95.60	1255+18.58	22	22.28	7.72	6



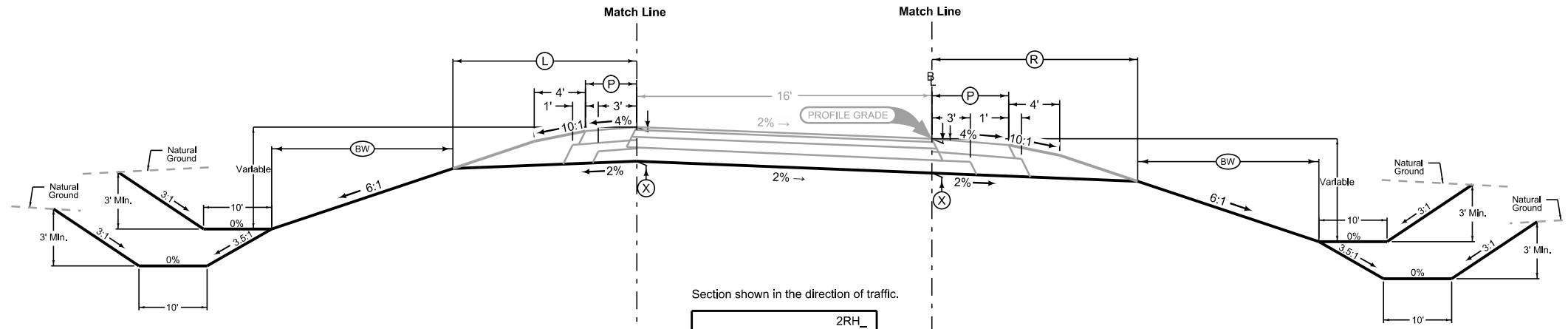
RAMP A JORDAN CREEK FORESLOPE GRADING WITH BARRIER

BEGIN STATION	END STATION	(X) Inches	(R) Feet	(BW) Feet	(P) Feet
1254+95.60	1255+18.58	29	26.86	3.14	7.71

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

**GRADING
RAMP A JORDAN CREEK**



RAMP B JORDAN CREEK FORESLOPE GRADING

Shoulder Jointing:
Longitudinal joint: B

BEGIN STATION	END STATION	(X) Inches	(L) Feet	(BW) Feet	(P) Feet
2225+91.13	2232+64.58	22	17.77	8.23	4

Section shown in the direction of traffic.

2RH_04-21-20	
BEGIN STATION	END STATION
2225+91.13	2232+64.58

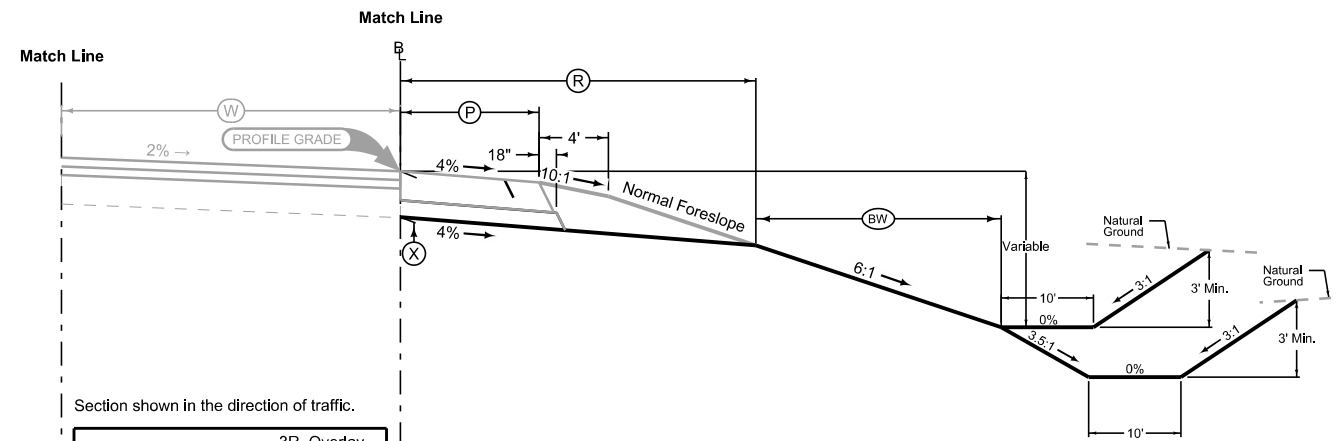
RAMP B JORDAN CREEK FORESLOPE GRADING

Shoulder Jointing:
Longitudinal joint: B

BEGIN STATION	END STATION	(X) Inches	(R) Feet	(BW) Feet	(P) Feet
2225+91.13	2232+64.58	22	19.50	6.50	6

See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

**GRADING
RAMP B JORDAN CREEK**



Section shown in the direction of traffic.

3R_Overlay_ Modified		
STATION TO STATION		(W) Feet
3233+39.15	3235+14.81	16

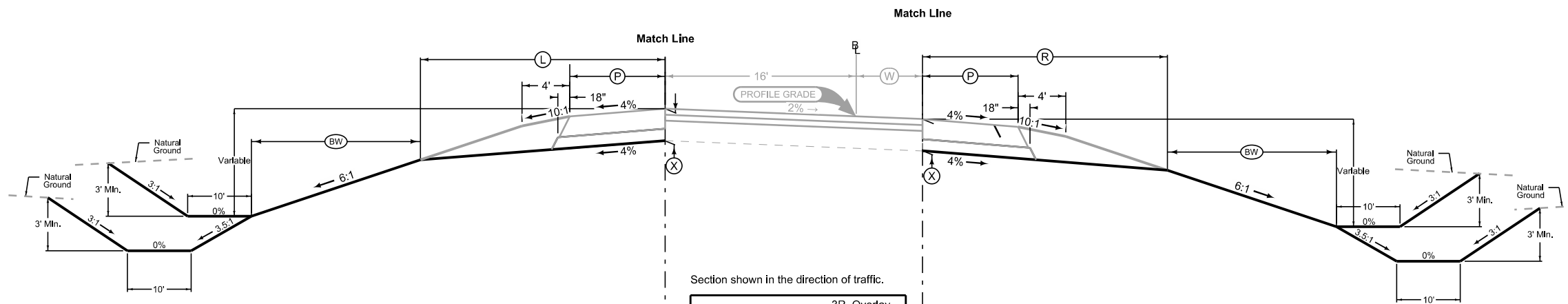
RAMP C JORDAN CREEK FORESLOPE GRADING

Shoulder Jointing:
Longitudinal joint: B

BEGIN STATION	END STATION	(X) Inches	(R) Feet	(BW) Feet	(P) Feet
3233+39.15	3235+14.81	22	22.58	3.42	6

See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

GRADING RAMP C JORDAN CREEK



RAMP D JORDAN CREEK FORESLOPE GRADING

Shoulder Jointing:
Longitudinal joint: B

BEGIN STATION	END STATION	(X) Inches	(L) Feet	(BW) Feet	(P) Feet
4246+44.82	4253+84.58	22	20.58	9.42	4

Section shown in the direction of traffic.

3R_Overlay_ Modified		
STATION TO STATION		(W) Feet
4246+44.99	4251+02.02	7.6 - 0
4251+02.02	4256+15.83	0

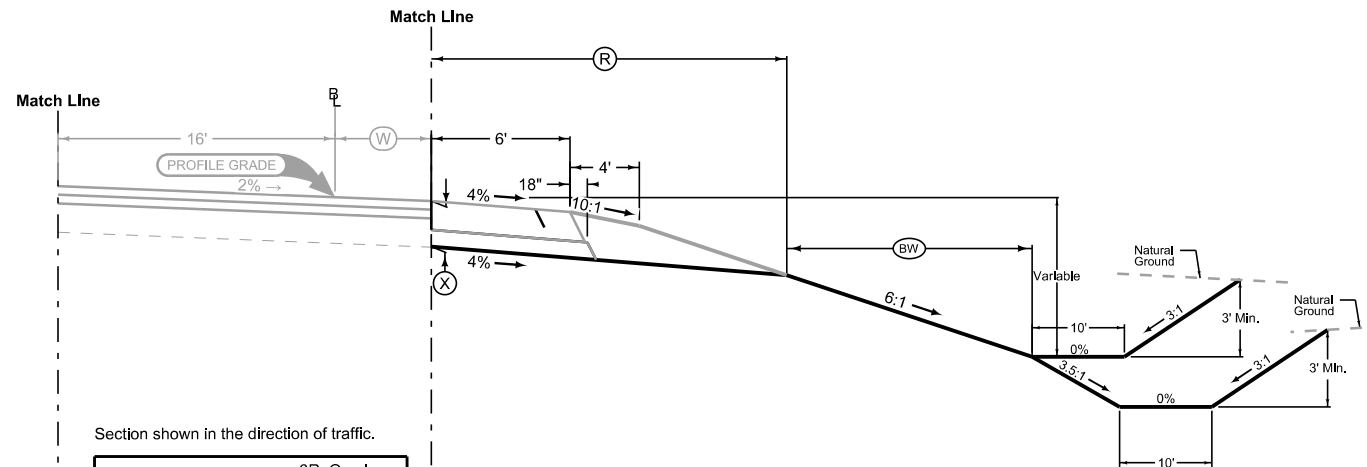
RAMP D JORDAN CREEK FORESLOPE GRADING

Shoulder Jointing:
Longitudinal joint: B

BEGIN STATION	END STATION	(X) Inches	(R) Feet	(BW) Feet	(P) Feet
4246+44.82	4256+15.83	22	22.58	7.42	6

See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

**PAVING
RAMP D JORDAN CREEK**



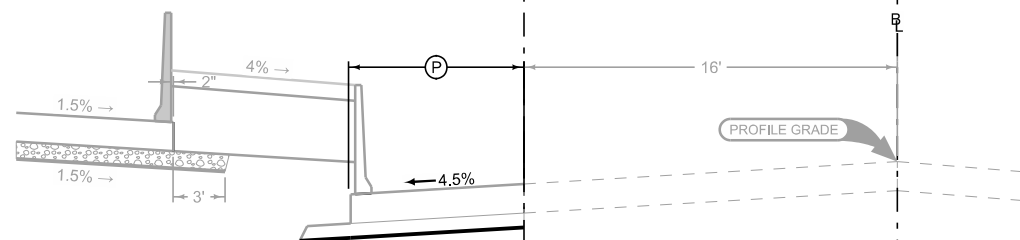
Section shown in the direction of traffic.

3R_Overlay_ Modified		
STATION TO STATION		(W) Feet
5227+78.34	5233+39.87	8.1-20
5233+39.87	5235+15.62	4-19.5

LOOP E JORDAN CREEK FORESLOPE GRADING

Shoulder Jointing:
Longitudinal joint: B

BEGIN STATION	END STATION	(X) Inches	(R) Feet	(BW) Feet
5224+00.27	5236+78.88	22	22.58	0

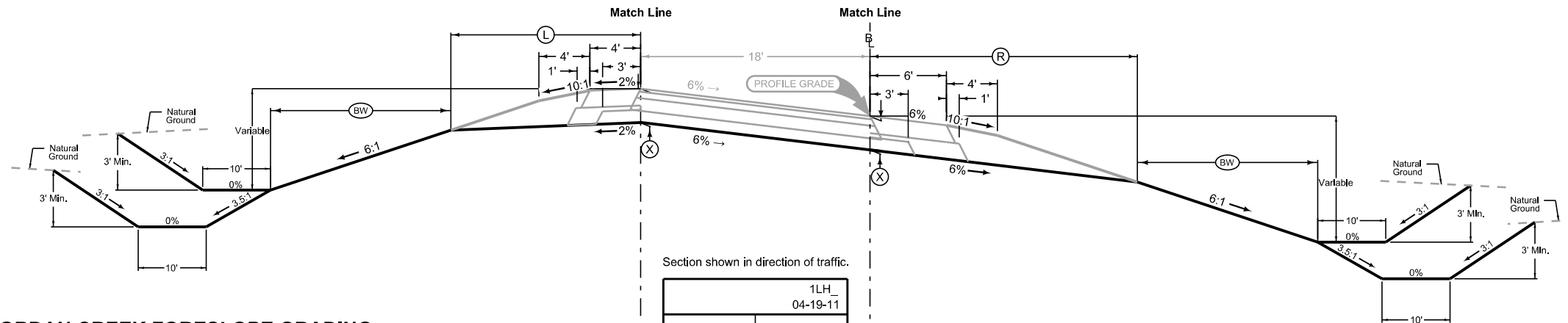


Section shown in the direction of traffic.

3R_Overlay_ Modified	
STATION TO STATION	
5235+15.62	5244+78.77

See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

GRADING LOOP E JORDAN CREEK



LOOP F JORDAN CREEK FORESLOPE GRADING

Shoulder Jointing:
Longitudinal joint: B

BEGIN STATION	END STATION	(X) Inches	(L) Feet	(BW) Feet
		22	18.32	0

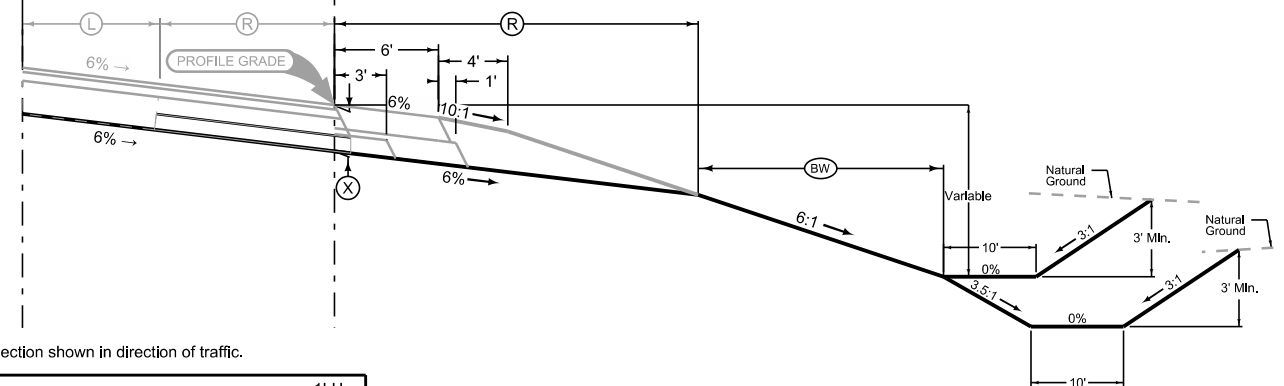
Section shown in direction of traffic.

1LH 04-19-11	
BEGIN STATION	END STATION
6236+89.74	6239+04.92

LOOP F JORDAN CREEK FORESLOPE GRADING

Shoulder Jointing:
Longitudinal joint: B

BEGIN STATION	END STATION	(X) Inches	(R) Feet	(BW) Feet
6236+89.74	6239+04.92	22	25.68	0



Section shown in direction of traffic.

1LH MOD			
BEGIN STATION	END STATION	(L) Feet	(R) Feet
6239+04.92	6243+06.49	VARIES	VARIES
6243+06.49	6244+80.46	6.7-2.5	11.3-9.5

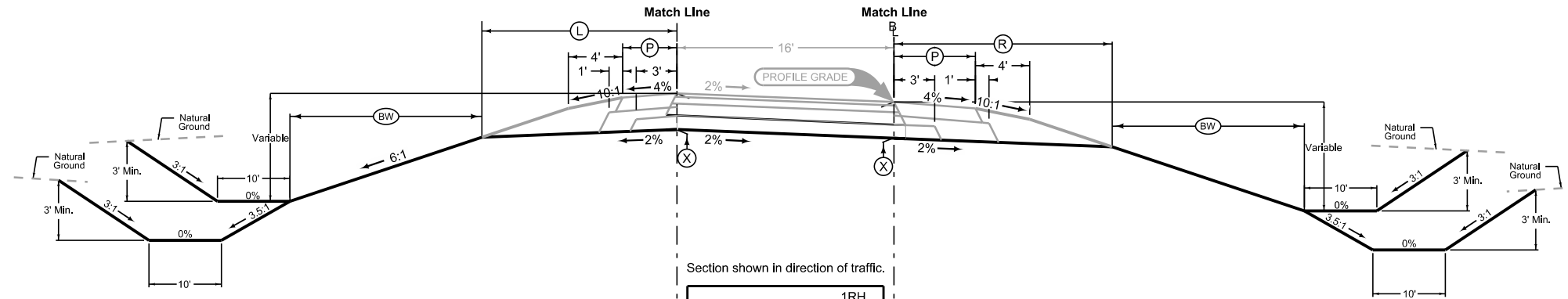
LOOP F JORDAN CREEK FORESLOPE GRADING

Shoulder Jointing:
Longitudinal joint: B

BEGIN STATION	END STATION	(X) Inches	(R) Feet	(BW) Feet
6239+04.92	6244+80.46	22	25.68	0

See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

**GRADING
LOOP F JORDAN CREEK**



RAMP C 60TH ST FORESLOPE GRADING

Shoulder Jointing:
Longitudinal joint: B

BEGIN STATION	END STATION	(X) Inches	(L) Feet	(BW) Feet	(P) Feet
7282+72.92	7286+29.70	22	17.77	8.23	4

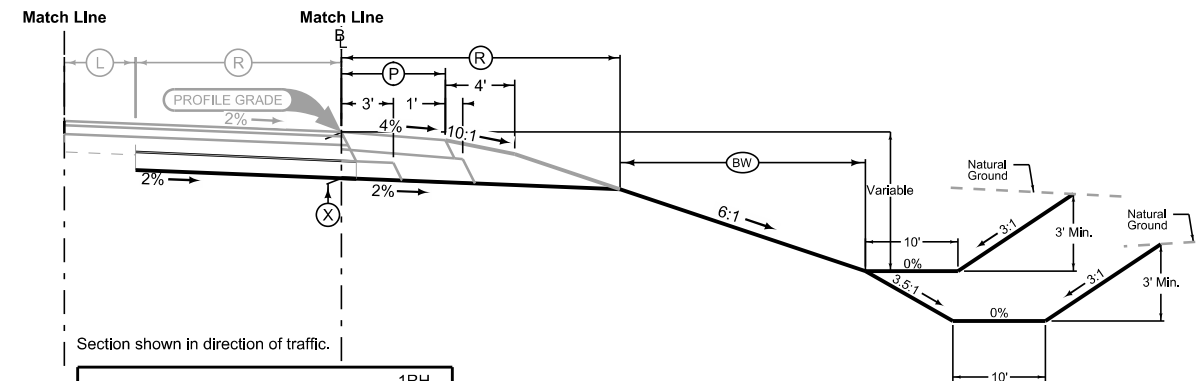
Section shown in direction of traffic.

1RH_04-19-11	
BEGIN STATION	END STATION
7282+72.53	7287+29.36

RAMP C 60TH ST FORESLOPE GRADING

Shoulder Jointing:
Longitudinal joint: B

BEGIN STATION	END STATION	(X) Inches	(R) Feet	(BW) Feet	(P) Feet
7282+72.53	7287+29.36	22	19.50	6.50	6



Section shown in direction of traffic.

1RH_MODIFIED			
BEGIN STATION	END STATION	(L) Feet	(R) Feet
7280+08.65	7282+72.53	2.2-8.7	13.8-7.3

RAMP C 60TH ST FORESLOPE GRADING

Shoulder Jointing:
Longitudinal joint: B

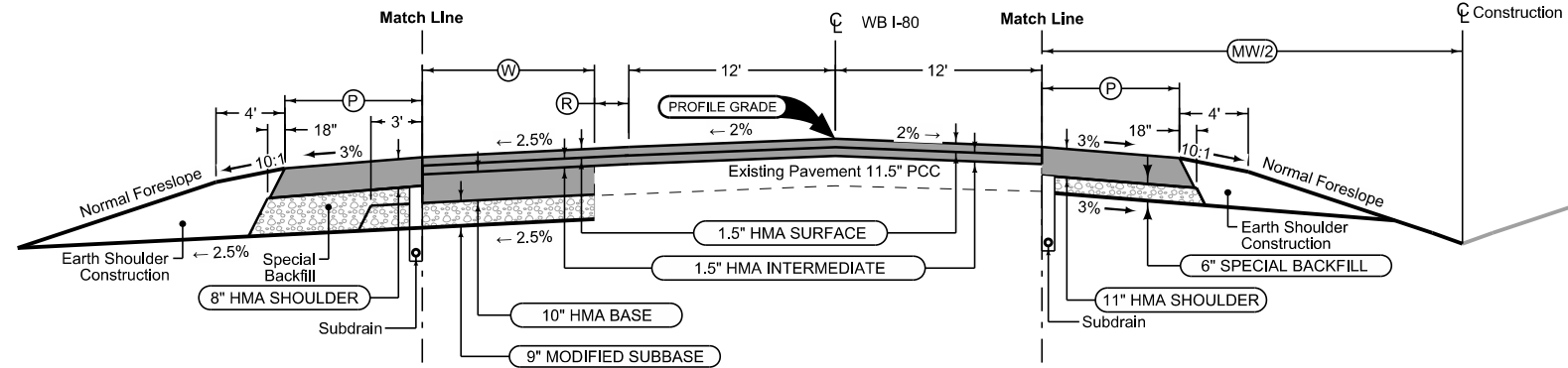
BEGIN STATION	END STATION	(X) Inches	(R) Feet	(BW) Feet	(P) Feet
7280+08.65	7282+72.53	22	19.50	6.50	6

See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

**GRADING
RAMP C 60TH ST**

HMA Shoulder

6_P_HMA_MOD			
Direction of Travel	BEGIN STATION	END STATION	(P) Feet
I-80 WB	1139+98.99	1197+09.11	12
I-80 WB	1218+25.00	1223+73.96	6
I-80 WB	1223+73.96	1224+24.34	4-6
I-80 WB	1224+24.34	1227+78.34	6
I-80 WB	1244+84.36	1255+15.49	12



Full Depth HMA Shoulder

2_P_FullHMA_04-21-20		
STATION TO STATION	(P) Feet	
1139+98.99	1197+09.11	12
1218+25.00	1291+54.65	12

Gore Widening and Overlay Section

BEGIN STATION	END STATION	(G) Feet	(L) Feet
1227+78.34	1231+08.19	0	4-10.6
1231+08.19	1234+99.27	10.6-18.2	0
1255+15.49	1255+60.27	28-23.2	24
1255+60.27	1257+22.59	0	47.2-32.5
1257+22.59	1262+75.00	0	28.9-0
1271+05.77	1273+08.71	0	0-4
1273+08.71	1280+08.65	0	4-18.1
1280+08.65	1282+56.98	0	16
1282+56.98	1282+74.25	21.4-24	8-7.3

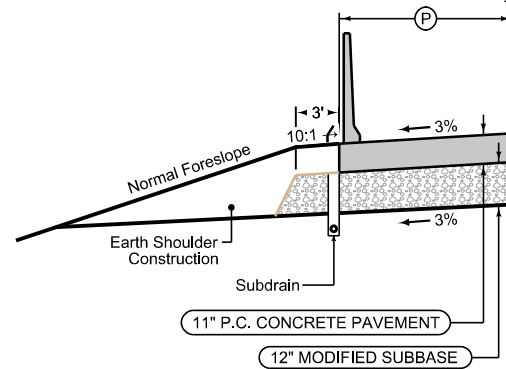


6DP_Dprs_04-21-20					
Direction of Travel	BEGIN STATION	END STATION	(MW/2) Feet	(R) Feet	(W) Feet
I-80 WB	1139+98.99	1197+09.11	25	2	10
I-80 WB	1218+25.00	1231+08.19	25	12	0
I-80 WB	1231+08.19	1235+51.78	25	2	10
I-80 WB	1235+51.78	1247+82.97	25-21.5	2	10
I-80 WB	1247+82.97	1250+20.87	21.5-20.1	2-6	10-6
I-80 WB	1250+20.87	1250+33.59	20.1-20	6	6
I-80 WB	1250+33.59	1254+97.50	20	6	6
I-80 WB	1254+97.50	1291+54.65	20	12	0

Full Depth PCC Shoulder with Barrier

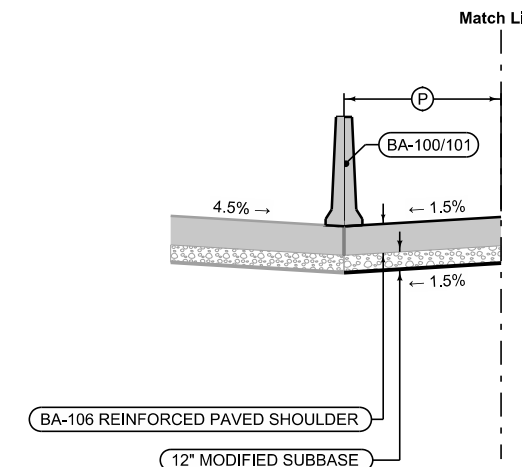
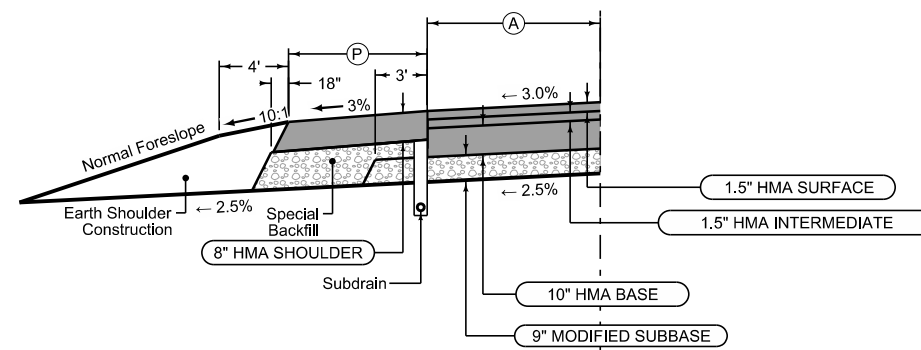
Shoulder Jointing:
 Longitudinal joint: L-2 or KT-2
 Transverse joints: CD match mainline spacing

BEGIN STATION	END STATION	(P) Feet
1255+15.49	1257+16.03	7.7



HMA Auxiliary Lane and HMA Shoulder

6_P_HMA_MOD				
Direction of Travel	BEGIN STATION	END STATION	(A) Feet	(P) Feet
I-80 WB	1257+22.59	1259+59.53	3.6-7.3	6
I-80 WB	1259+59.53	1262+40.59	7.3-11.6	6-12
I-80 WB	1262+40.59	1262+75.00	11.6-12	12
I-80 WB	1262+75.00	1270+08.65	12	12
I-80 WB	1270+08.65	1271+05.77	12-13.9	12-10.1
I-80 WB	1271+05.77	1273+08.71	13.9-14.1	10.1-6
I-80 WB	1273+08.71	1280+08.65	14.1-13.9	6
I-80 WB	1282+74.25	1289+79.25	12	12
I-80 WB	1289+74.25	1291+24.25	12-2	12-10
I-80 WB	1291+24.25	1291+54.25	2	10

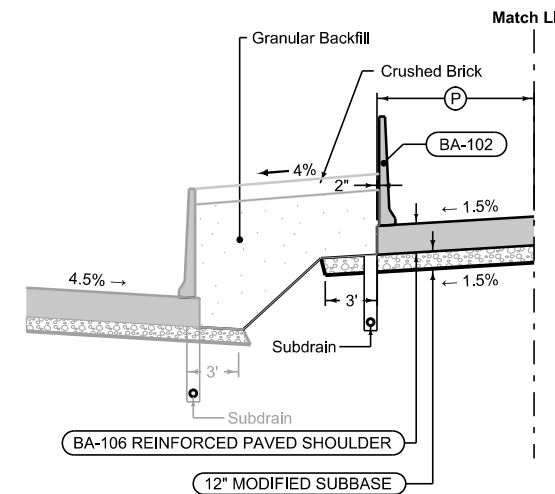


Reinforced PCC Shoulder with Barrier

Longitudinal joint: L-2 or KT-2
 Transverse joint: Match Mainline

STATION TO STATION	(P) Feet	
1234+99.27	1236+09.52	VARIES
1244+44.81	1244+84.31	VARIES

* Attenuator: 1244+55.84 - 1244+84.31



Reinforced PCC Shoulder with Barrier

Longitudinal joint: L-2 or KT-2
 Transverse joint: Match Mainline

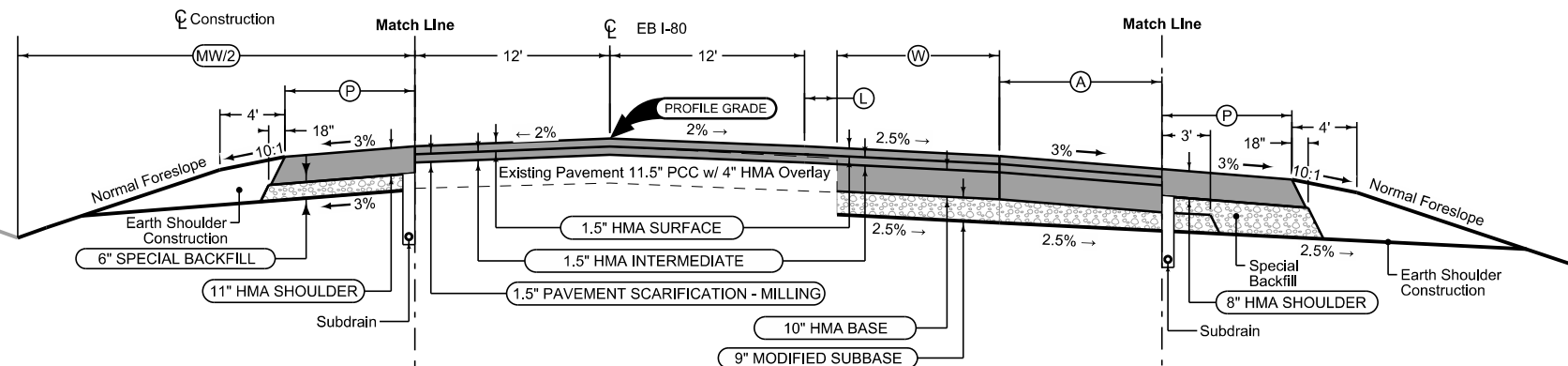
STATION TO STATION	(P) Feet	
1236+09.52	1244+44.81	13.6

See Tab 100-24 or 100-25 for pavement quantities.
 See Tab 112-9 for shoulder quantities.

**PAVING
 WB I-80: 6 LANE SECTION**

Full Depth HMA Shoulder

2_P_FullHMA_04-21-20		(P)
STATION TO STATION		Feet
1139+75.92	1197+09.11	12
1218+25.00	1263+94.23	12



Section shown in the direction of stationing.
Mainline Jointing:
Transverse joints: CD at 20' spacing (Existing PCC)

6DP_Dprs_MODIFIED						
Direction of Travel	BEGIN STATION	END STATION	(MW/2) Feet	(L) Feet	(W) Feet	(A) Feet
I-80 EB	1139+75.92	1197+09.11	25	2	10	0
I-80 EB	1218+25.00	1219+92.19	25	2	10	0
I-80 EB	1219+92.19	1220+07.24	25	2	10	1
I-80 EB	1220+07.24	1221+37.14	25	7.2-12	0	9.6
I-80 EB	1221+37.14	1222+72.19	25	12-17	0	9.6-13.6
I-80 EB	1222+72.19	1225+92.19	25	14.6-36	0	16
I-80 EB	1225+92.19	1226+34.26	25	12	0	0
I-80 EB	1226+34.26	1239+41.59	25	2	10	0
I-80 EB	1239+41.59	1240+87.06	25	12	0	0
I-80 EB	1240+87.06	1242+71.72	25-24.2	12	0	0
I-80 EB	1242+71.72	1243+00.73	24.2-24.1	14-12	0	0
I-80 EB	1243+00.73	1244+80.40	24.1-23.3	12	0	0
I-80 EB	1244+80.40	1249+35.34	23.3-21.3	14.5-14	0	9.5-12
I-80 EB	1249+35.34	1249+84.25	21.3-21.1	0	12	12
I-80 EB	1249+84.25	1252+33.59	21.1-20	0	12	12-2.2
I-80 EB	1252+33.59	1252+84.29	20	0	12	2.2-0
I-80 EB	1252+84.29	1254+72.03	20	0	12	0
I-80 EB	1254+72.03	1256+58.91	20	12	0	0
I-80 EB	1256+58.91	1256+62.18	20	30-29.9	0	0
I-80 EB	1256+62.18	1259+36.90	20	23.9-18	6	0
I-80 EB	1259+36.90	1263+94.23	20	24	0	0

Sta 1181+15 to 1181+83
Full Build Travel Lanes at Pipe Construction Area using 1.5" HMA Surface, 1.5" HMA Intermediate, and 9" Modified Subbase on 10" HMA Base. (Match Existing Grades)

HMA Shoulder

6_P_HMA_MOD			
Direction of Travel	BEGIN STATION	END STATION	(P) Feet
I-80 EB	1134+00.00	1197+09.11	12
I-80 EB	1221+72.72	1225+92.19	6
I-80 EB	1225+92.19	1238+87.43	12
I-80 EB	1244+80.46	1251+36.99	6
I-80 EB	1251+36.99	1252+84.29	6-12
I-80 EB	1252+84.29	1253+82.97	12
I-80 EB	1256+15.83	1256+59.51	6
I-80 EB	1256+59.51	1259+37.02	6-12
I-80 EB	1259+37.02	1263+94.23	12

Gore Widening and Overlay Section

BEGIN STATION	END STATION	(G) Feet	(R) Feet
1238+87.43	1239+41.55	17-11.5	4.6-7.9
1239+41.55	1242+71.72	0	19.4-2
1253+82.97	1254+72.03	25-12.3	1-2.9
1254+72.03	1256+14.98	0	15.2-4
1256+14.98	1256+58.91	0	20-18

Full Depth PCC Reinforced Shoulder with Barrier and Wall

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: CD match mainline spacing

BEGIN STATION	END STATION	(P) Feet
1218+25.00	1219+75.00	17.6

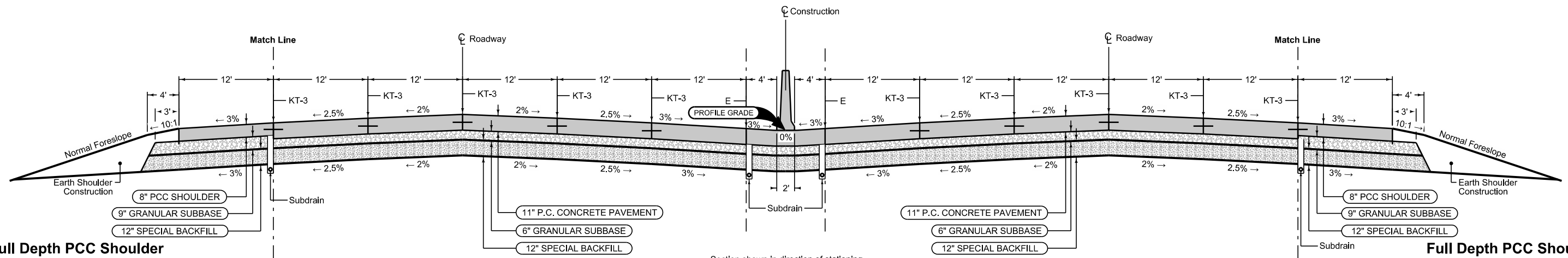
Full Depth PCC Shoulder with Barrier

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: CD match mainline spacing

BEGIN STATION	END STATION	(P) Feet
1219+75.00	1219+92.19	17.6
1219+92.19	1221+42.45	17.6-7.6
1221+42.45	1221+72.72	7.6

See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

**PAVING
EB I-80: 6 Lane Widening Section**



Full Depth PCC Shoulder

Shoulder Jointing:
 Longitudinal joint: L-2 or KT-2
 Transverse joints: C at 17' spacing

6D_Closed_P_FullPCC_04-21-20	
BEGIN STATION	END STATION
1197+09.11	1199+89.11

Section shown in direction of stationing.

Mainline Jointing:
 Transverse joints: CD at 17' spacing

8DP_Closed_04-21-20	
BEGIN STATION	END STATION
1197+09.11	1209+26.90
1211+95.90	1218+25.00

Full Depth PCC Shoulder

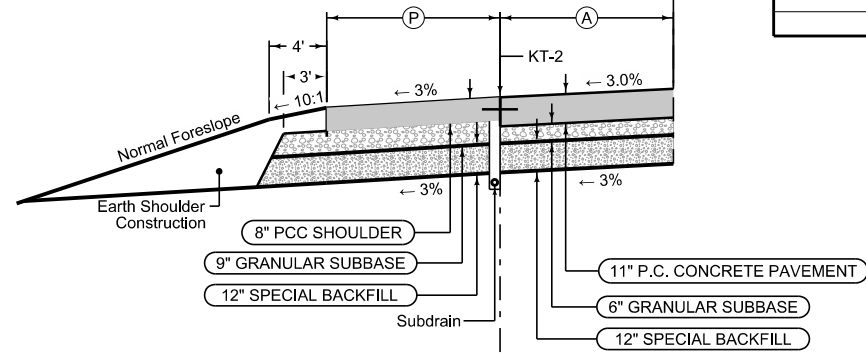
Shoulder Jointing:
 Longitudinal joint: L-2 or KT-2
 Transverse joints: C at 17' spacing

6D_Closed_P_FullPCC_04-21-20	
BEGIN STATION	END STATION
1197+09.11	1201+00.00

Full Depth PCC Shoulder and Aux. Lane

Shoulder Jointing:
 Longitudinal joint: L-2 or KT-2
 Transverse joints: C at 17' spacing

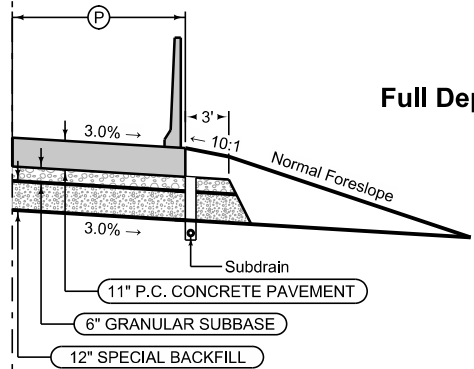
6D_Closed_P_FullPCC_04-21-20				
BEGIN STATION	END STATION	(A) Feet	(P) Feet	
1199+89.11	1201+00.00	0-1.58	12 - 10.42	



Full Depth PCC Reinforced Shoulder with Barrier

Shoulder Jointing:
 Longitudinal joint: L-2 or KT-2
 Transverse joints: CD match mainline spacing

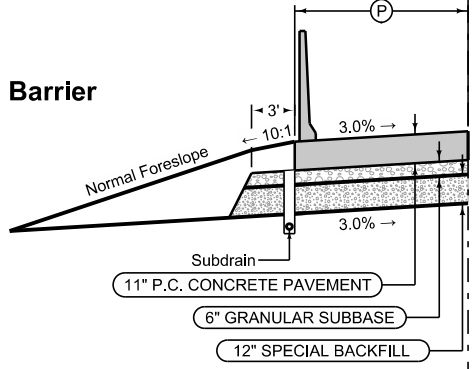
BEGIN STATION	END STATION	(P) Feet
1201+00.00	1202+00.00	13.58



Full Depth PCC Reinforced Shoulder with Barrier

Shoulder Jointing:
 Longitudinal joint: L-2 or KT-2
 Transverse joints: CD match mainline spacing

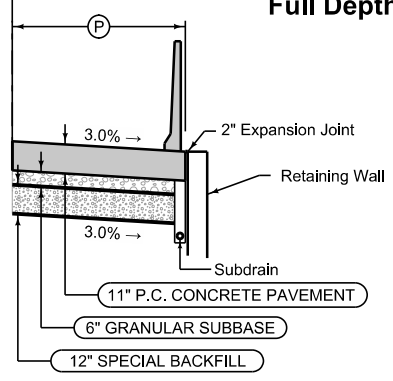
BEGIN STATION	END STATION	(A) Feet	(P) Feet
1201+00.00	1203+00.00	1.58-4.44	12-9.14
1217+00.00	1218+25.00	12	7.58



Full Depth PCC Reinforced Shoulder with Barrier and Wall

Shoulder Jointing:
 Longitudinal joint: L-2 or KT-2
 Transverse joints: CD match mainline spacing

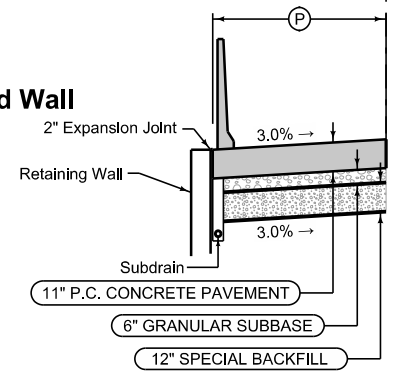
BEGIN STATION	END STATION	(P) Feet
1202+00.00	1209+10.19	13.58
1212+55.75	1218+25.00	13.58



Full Depth PCC Reinforced Shoulder with Barrier and Wall

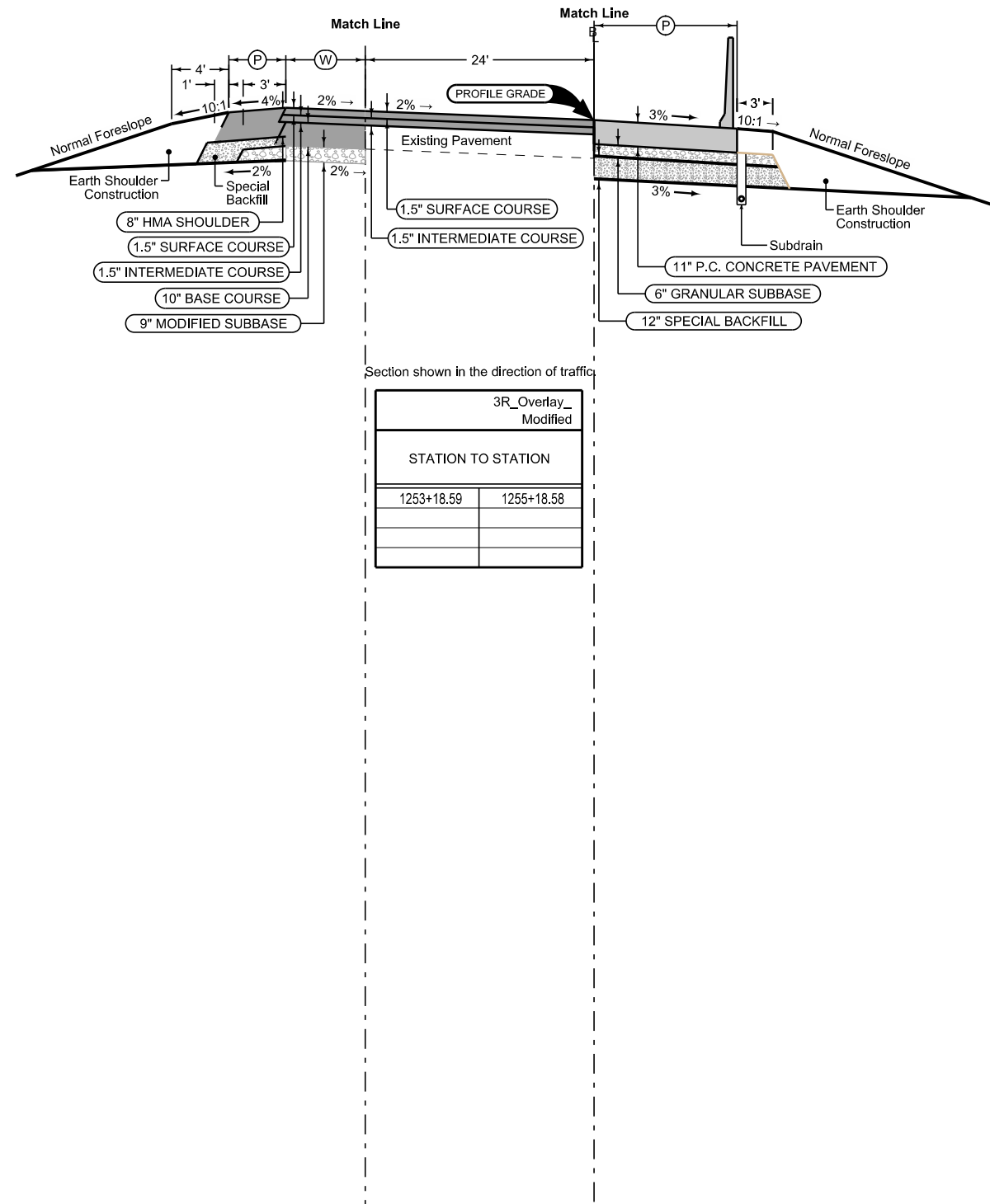
Shoulder Jointing:
 Longitudinal joint: L-2 or KT-2
 Transverse joints: CD match mainline spacing

BEGIN STATION	END STATION	(A) Feet	(P) Feet
1203+00.00	1204+09.08	4.44-6	9.14-7.58
1204+09.08	1208+29.11	6-12	7.58
1208+29.11	1208+63.75	12	7.58
1212+12.61	1217+00.00	12	7.58



See Tab 100-24 or 100-25 for pavement quantities.
 See Tab 112-9 for shoulder quantities.

**PAVING
 I-80: 8 Lane Ultimate Section**



HMA Shoulder

1R_P_HMA_ Modified			
BEGIN STATION	END STATION	(P) Feet	(W) Feet
1253+18.59	1254+95.60	4	0-3.54
1254+95.60	1255+18.58	4	3.54-4

Section shown in the direction of traffic

3R_Overlay_ Modified	
STATION TO STATION	
1253+18.59	1255+18.58

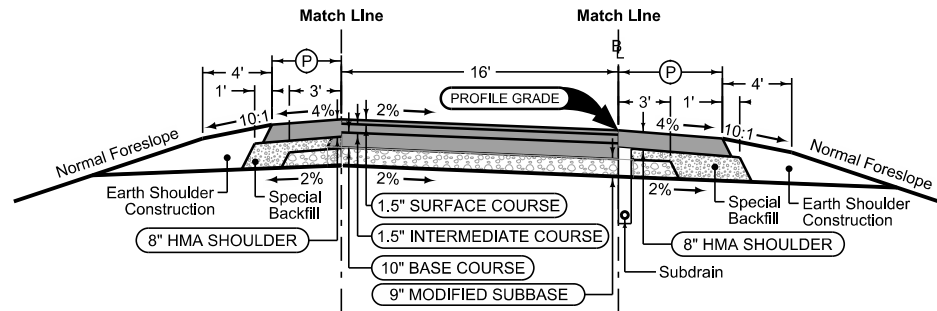
Full Depth PCC Shoulder with Barrier

Shoulder Jointing:
 Longitudinal joint: BT
 Transverse joints: CD match mainline spacing

BEGIN STATION	END STATION	(P) Feet
1254+95.60	1255+18.58	7.71

See Tab 100-24 or 100-25 for pavement quantities.
 See Tab 112-9 for shoulder quantities.

**PAVING
 RAMP A JORDAN CREEK**



Section shown in direction of traffic.

HMA Shoulder

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
2225+91.13	2231+12.18	4
2231+12.18	2232+75.00	4-7.25

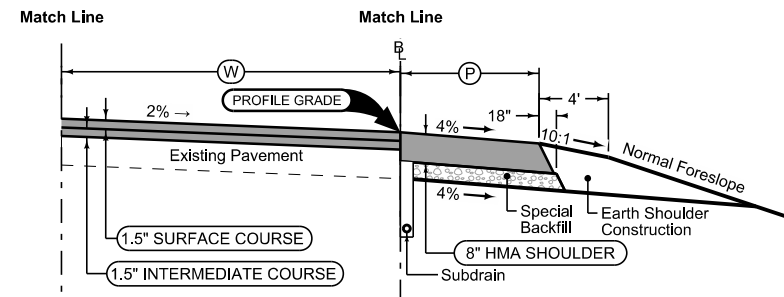
1RH_04-19-11	
BEGIN STATION	END STATION
2225+91.13	2232+75.00

HMA Shoulder

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
2225+91.13	2232+75.00	6

See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

**PAVING
RAMP B JORDAN CREEK**



Section shown in the direction of traffic.

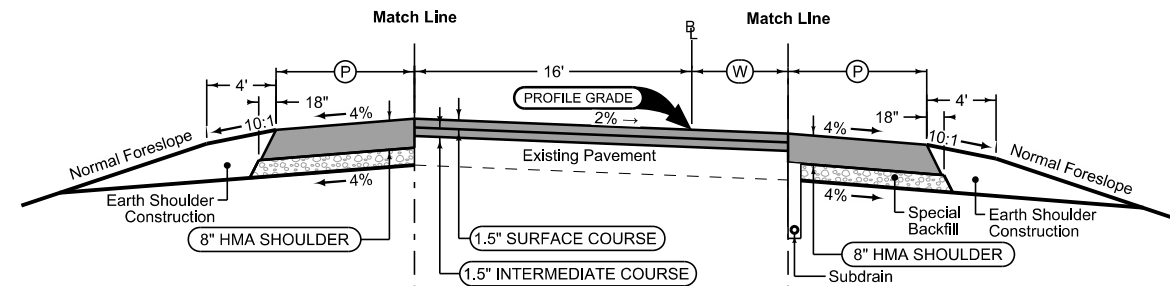
3R_Overlay_ Modified		
STATION TO STATION		(W) Feet
3233+39.15	3235+14.81	16

HMA Shoulder

1R_P_HMA_ Modified		
BEGIN STATION	END STATION	(P) Feet
3233+39.15	3235+14.81	6

See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

PAVING RAMP C JORDAN CREEK



HMA Shoulder

1R_P_HMA_ Modified		
BEGIN STATION	END STATION	(P) Feet
4246+44.82	4253+84.58	4

Section shown in the direction of traffic.

3R_Overlay_ Modified		
STATION TO STATION		(W) Feet
4246+44.82	4251+02.02	7.6 - 0
4251+02.02	4256+15.83	0

HMA Shoulder

1R_P_HMA_ Modified		
BEGIN STATION	END STATION	(P) Feet
4246+44.82	4256+15.83	6

See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

**PAVING
RAMP D JORDAN CREEK**

**Reinforced PCC
Shoulder with Barrier**

Longitudinal joint: L-2 or KT-2
Transverse joint: Match Mainline

STATION TO STATION		(P) Feet
5235+01.59	5235+15.62	VARIES

**Reinforced PCC
Shoulder with Barrier**

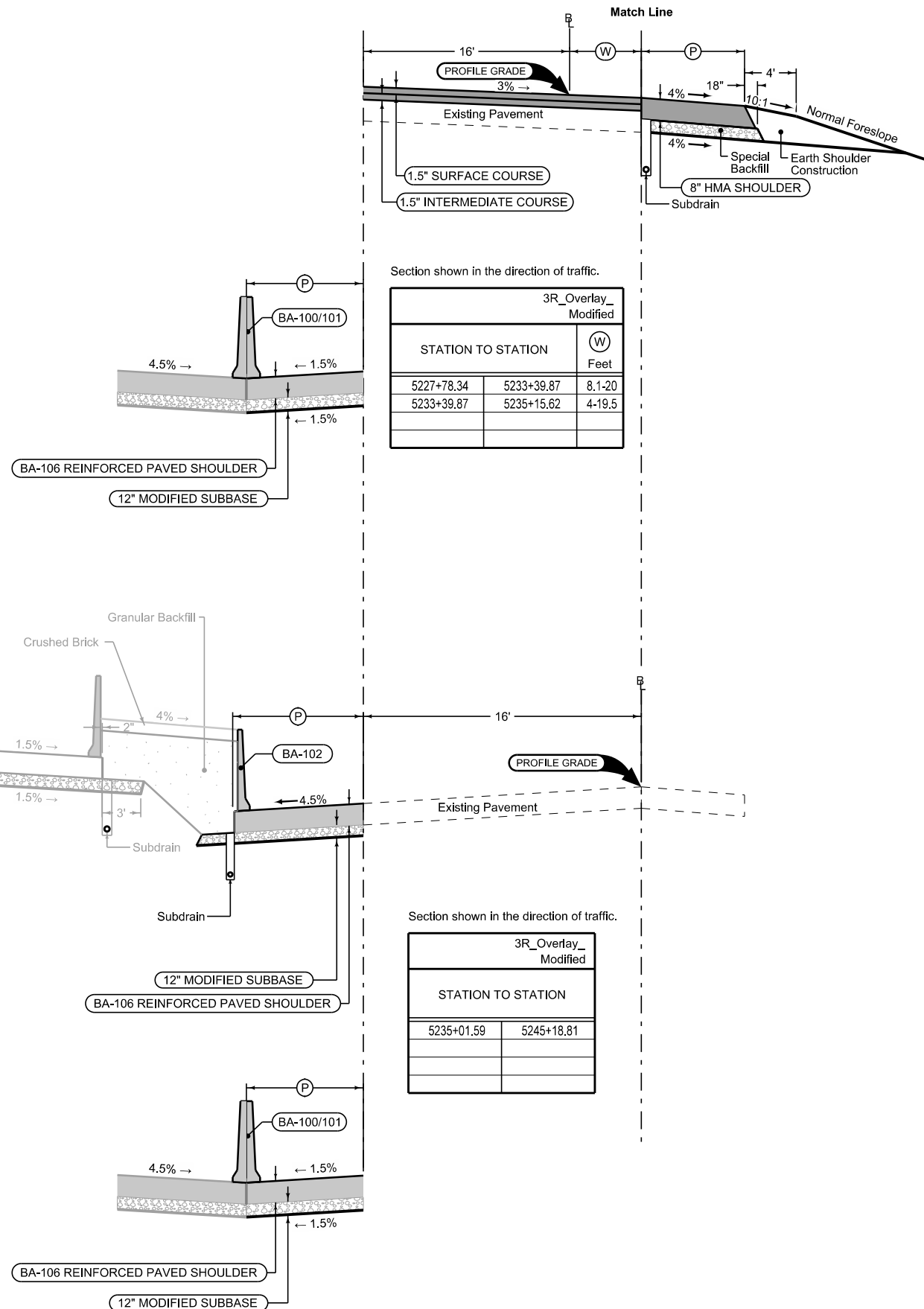
Longitudinal joint: L-2 or KT-2
Transverse joint: Match Mainline

STATION TO STATION		(P) Feet
5235+15.62	5244+78.77	VARIES

**Reinforced PCC
Shoulder with Barrier**

Longitudinal joint: L-2 or KT-2
Transverse joint: Match Mainline

STATION TO STATION		(P) Feet
5244+78.77	5245+18.81	VARIES



HMA Shoulder

1R_P_HMA_Modified		
BEGIN STATION	END STATION	(P) Feet
5227+78.34	5233+39.87	6

Section shown in the direction of traffic.

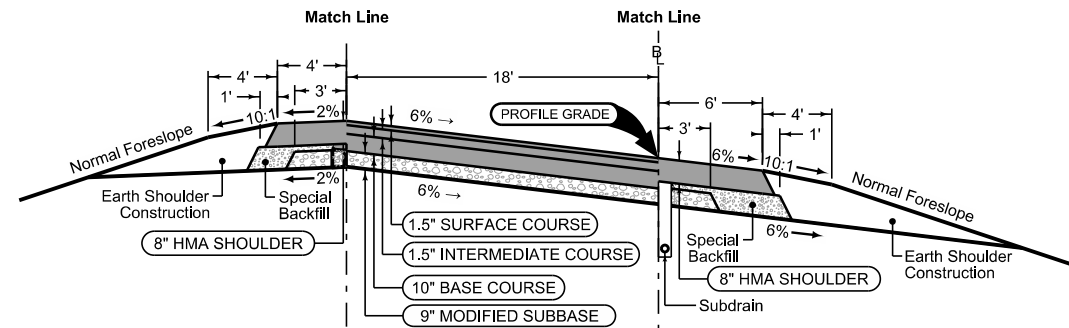
3R_Overlay_Modified		
STATION TO STATION		(W) Feet
5227+78.34	5233+39.87	8.1-20
5233+39.87	5235+15.62	4-19.5

Section shown in the direction of traffic.

3R_Overlay_Modified		
STATION TO STATION		(W) Feet
5235+01.59	5245+18.81	

See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

**PAVING
LOOP E JORDAN CREEK**



HMA Shoulder

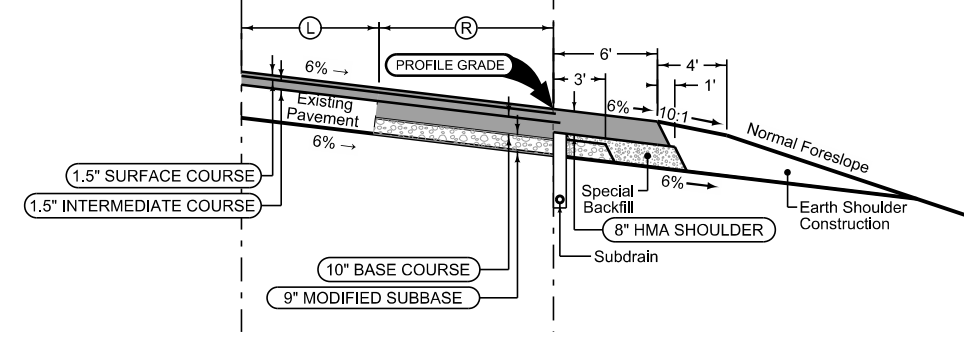
1L_P_HMA_04-21-20	
BEGIN STATION	END STATION
6236+89.74	6239+04.92

Section shown in direction of traffic.

1LH_04-19-11	
BEGIN STATION	END STATION
6236+89.74	6239+04.92

HMA Shoulder

1L_P_HMA_04-21-20	
BEGIN STATION	END STATION
6236+89.74	6239+04.92



Section shown in direction of traffic.

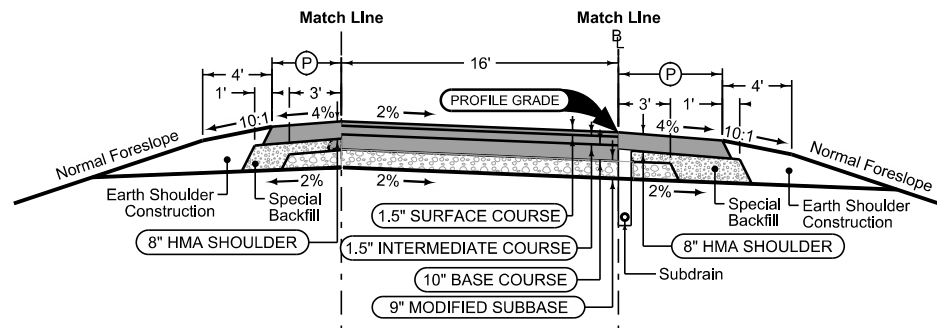
		1LH_MOD	
BEGIN STATION	END STATION	(L) Feet	(R) Feet
6239+04.92	6243+06.49	VARIES	VARIES
6243+06.49	6244+80.46	6.7-2.5	11.3-9.5

HMA Shoulder

1L_P_HMA_04-21-20	
BEGIN STATION	END STATION
6239+04.92	6244+80.46

See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

**PAVING
LOOP F JORDAN CREEK**



Section shown in direction of traffic.

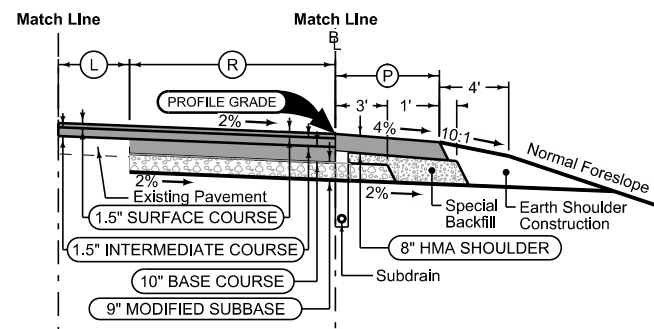
HMA Shoulder

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
7282+72.53	7287+29.36	4

1RH_04-19-11		
BEGIN STATION	END STATION	
7282+72.53	7287+29.36	

HMA Shoulder

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
7282+72.53	7287+29.36	6



Section shown in direction of traffic.

HMA Shoulder

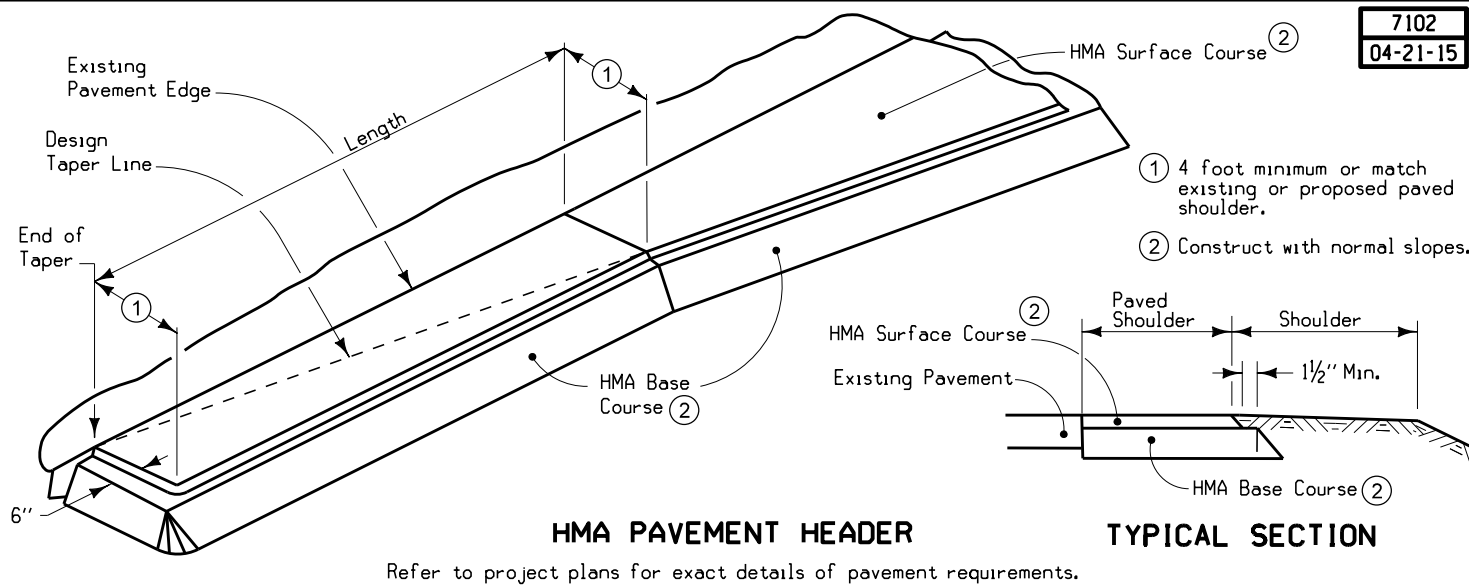
1RH_MODIFIED			
BEGIN STATION	END STATION	(L) Feet	(R) Feet
7280+08.65	7282+72.53	2.2-8.7	13.8-7.3

1R_P_HMA_10-19-10		
BEGIN STATION	END STATION	(P) Feet
7280+08.65	7282+72.53	6

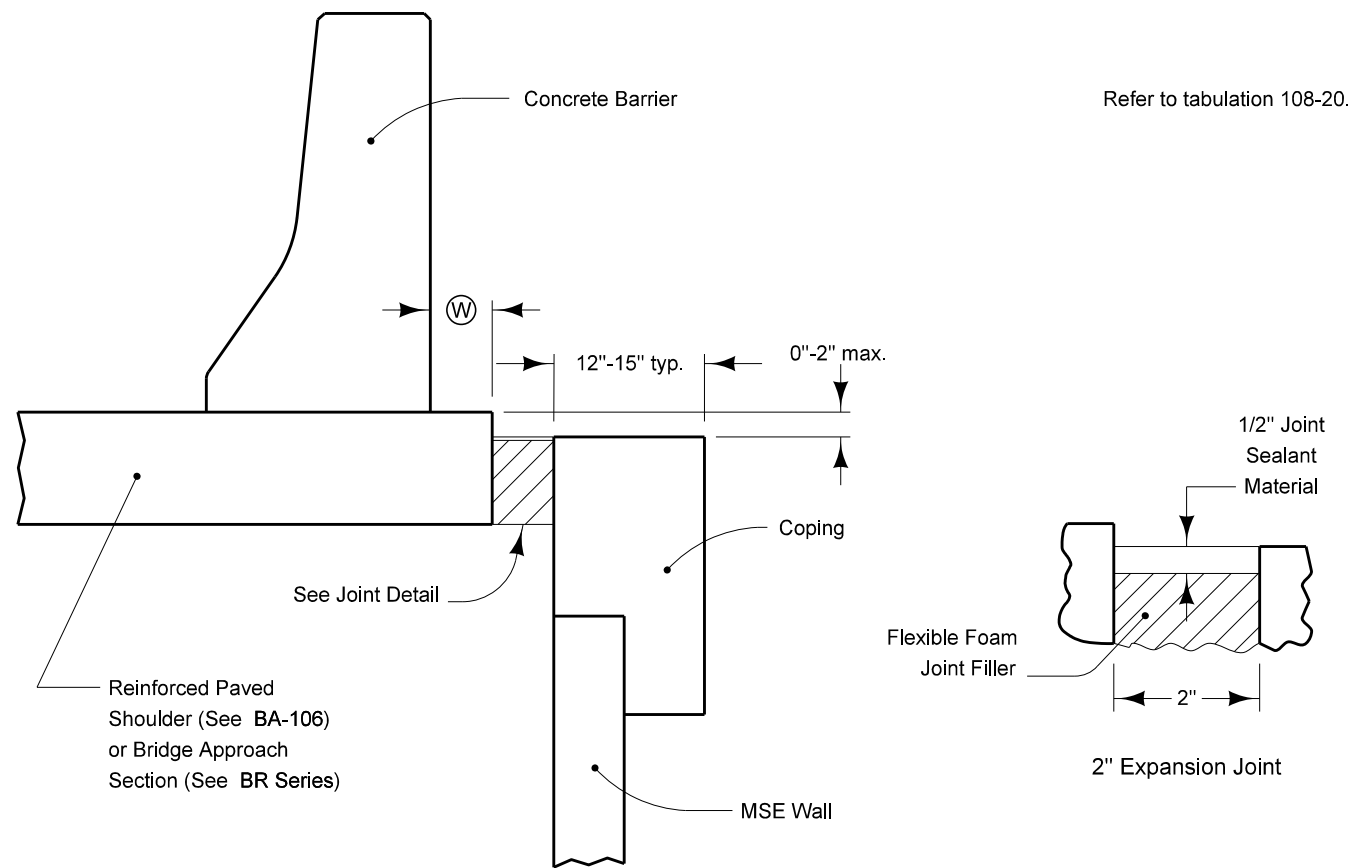
See Tab 100-24 or 100-25 for pavement quantities.
See Tab 112-9 for shoulder quantities.

**PAVING
RAMP C 60TH ST**

7102
04-21-15



8208
04-21-15



CONCRETE BARRIER WITH MSE WALL

SURVEY SYMBOLS

- PPA Power Pole Co. 1
- PRA Power Riser Co. 1
- UB Utility Box
- TSG Traffic Signal
- TSL Traffic Signal and Luminaire
- TCB Traffic Signal Box
- LUM Luminaire
- TPD Telephone Pedestal
- MH Utility Access (Manhole)
- IN Storm Sewer Intake
- INB Storm Sewer Beehive Intake
- WV Water Valve
- FHYD Fire Hydrant
- SI Sign
- SL Speed Limit Sign
- BB Billboard
- MM Mile Marker Post
- ROW Right of Way Rail
- TEV Evergreen Tree
- SHR Shrub
- TDC Tree Deciduous
- SWAMP
- FLG Flagpole
- BCL Bridge Centerline
- BD Bridge Deck
- BLS Bridge Low Steel
- UE Utility Elevation
- PRO Profile Shot
- BRG Bridge
- PLG Location of General Photo
- PIP Pipe Culvert
- SOP Size of Pipe or Culvert
- DU Centerline Draw or Stream (Up)
- D Centerline Draw or Stream (Down)
- DIK Centerline of Dike or Dam
- GDL Guard Rail Steel
- GPR Guard Post (4 or More Posts)
- GDC Guard Rail Cable
- RIP Rip-Rap
- TLN Tree Line
- TIL Tile Line
- FCL Chain Link and Security Fence
- FW Wire Fence
- RET Retaining Walls

- City of West Des Moines Sanitary
 - San.3(B)
 - San.3(C)
- Mediacom Communications Corp
 - TV(B)
- Des Moines Water Works
 - W2(B)
 - W2(C)
- West Des Moines Water Works
 - W5(B)

UTILITY LEGEND

This is a POINT 25 Project and is subject to the provisions of IAC 761-115.25.

- Mid American Energy - Power and Gas
 - Craig Ranfeld
 - E(B) mecdsmdesignlocates@midamerican.com
 - G(B) 515-252-6632
- Iowa D. O. T. - Lighting and Fiber Optic
 - E5(B) Jason Dale
 - DOT-I0C-Traffic@iowadot.us
 - 515-239-1995
- Iowa Communications Network (ICN) - Fiber Optics
 - Shannon Marlow
 - F0(B) icnoutsideplantiowaonecall@iowa.gov
 - 800-572-3940
- Centurylink - Telephone and Fiber Optics
 - T(C) Tom Sturmer
 - F02(B) thomas.sturmer@centurylink.com
 - F02(C) 720-578-8090
- Consolidated Communications
 - F03(B) Weston Grow
 - F03(C) weston.grow@consolidated.com
 - 507-387-1770
- Aureon Network Services
 - F04(B) Jeff Klocko
 - jeff.klocko@aureon.com
 - 515-830-0445
- City of West Des Moines Traffic
 - F08(B) Jim Dickinson
 - jim.dickinson@wdm.iowa.gov
 - 515-222-3482
- Unite Private Networks, LLC
 - F09(B) Joe Kilzer
 - upngis@upnfiber.com
 - 816-425-3556
- Windstream Communications
 - F10(B) Locate Desk
 - locate.desk@windstream.com
 - 800-289-1901
- Wells Fargo Home Mortgage
 - F13(B) Lee Rose
 - LRose@bakerelectric.com
 - 515-288-6774

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)	Existing Utilities
SHADING	Design Color No.	
Yellow	(4)	Highlight for Critical Notes or Features
Red	(3)	Delineates Restricted Areas
Lavender	(9)	Temporary Pavement Shading
Gray, Light	(48)	Proposed Pavement Shading
Gray, Med	(64)	Proposed PCC Pavement Shading
Gray, Dark	(80)	Proposed Pavement Shading - Mill & Overlay
Brown, Light	(236)	Grading Shading
Tan	(8)	Proposed Sidewalk Shading
Blue, Light	(230)	Proposed Sidewalk Landing Shading
Pink	(11)	Proposed Sidewalk Ramp Shading

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Ground Line Profile
Blue	(1)	Proposed Profile and Annotation
Magenta	(5)	Existing Utilities
Blue, Light	(230)	Proposed Ditch Grades, Left
Black	(0)	Proposed Ditch Grades, Median
Rust	(14)	Proposed Ditch Grades, Right
Gray, Dark	(112)	Existing PGL Plus Overlay

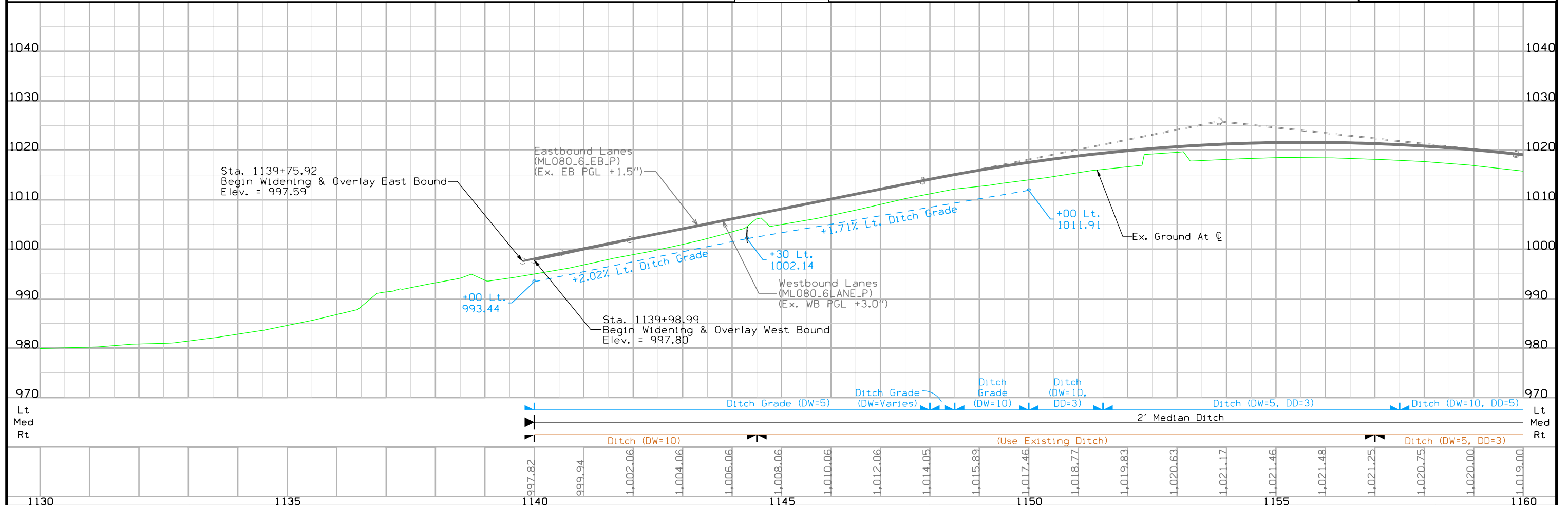
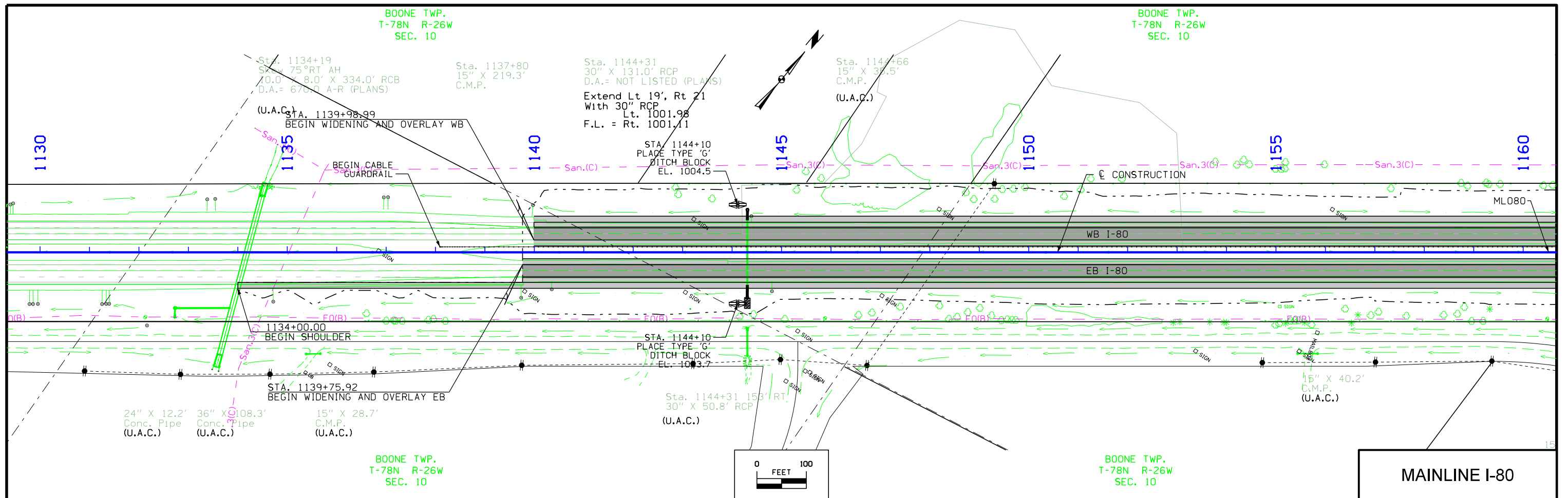
- Reference Point
- Station
- Survey Line
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Trench Drain
- HighTension Cable Guardrail
- Sheet Pile
- Pavement Removal
- Clearing & Grubbing Area
- Reinforced Concrete Shoulder
- Resurfacing Notches

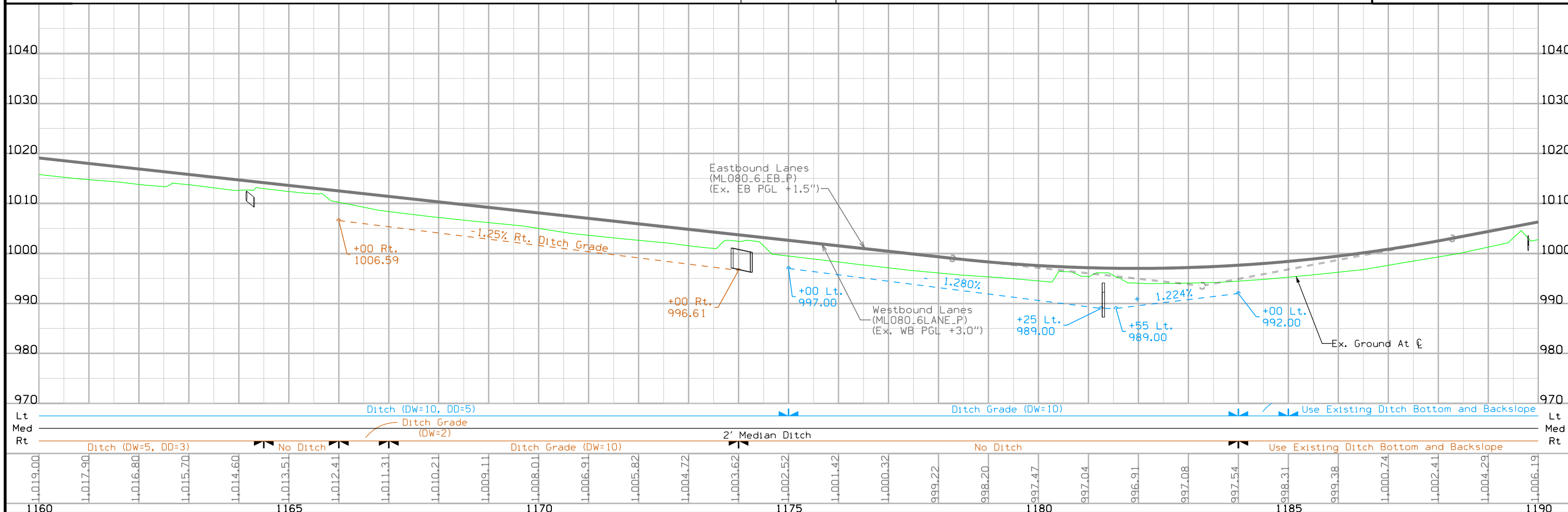
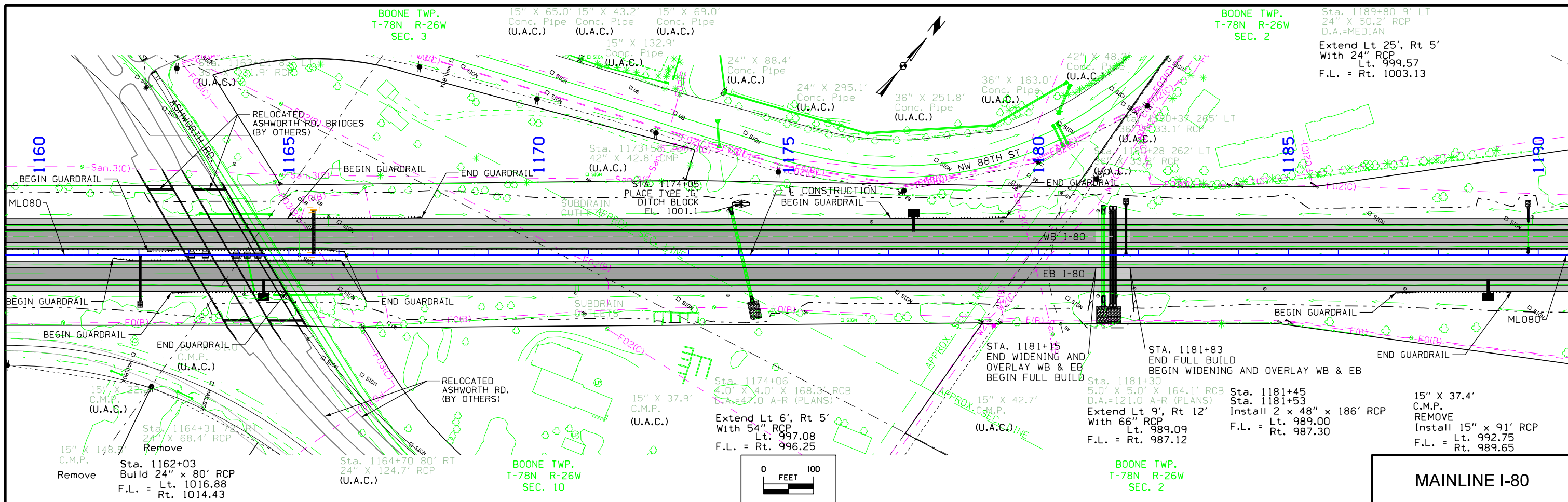
RIGHT-OF-WAY LEGEND

- Proposed Right-of-Way
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Easement (Temporary)
- Easement
- C/A Access Control
- Property Line

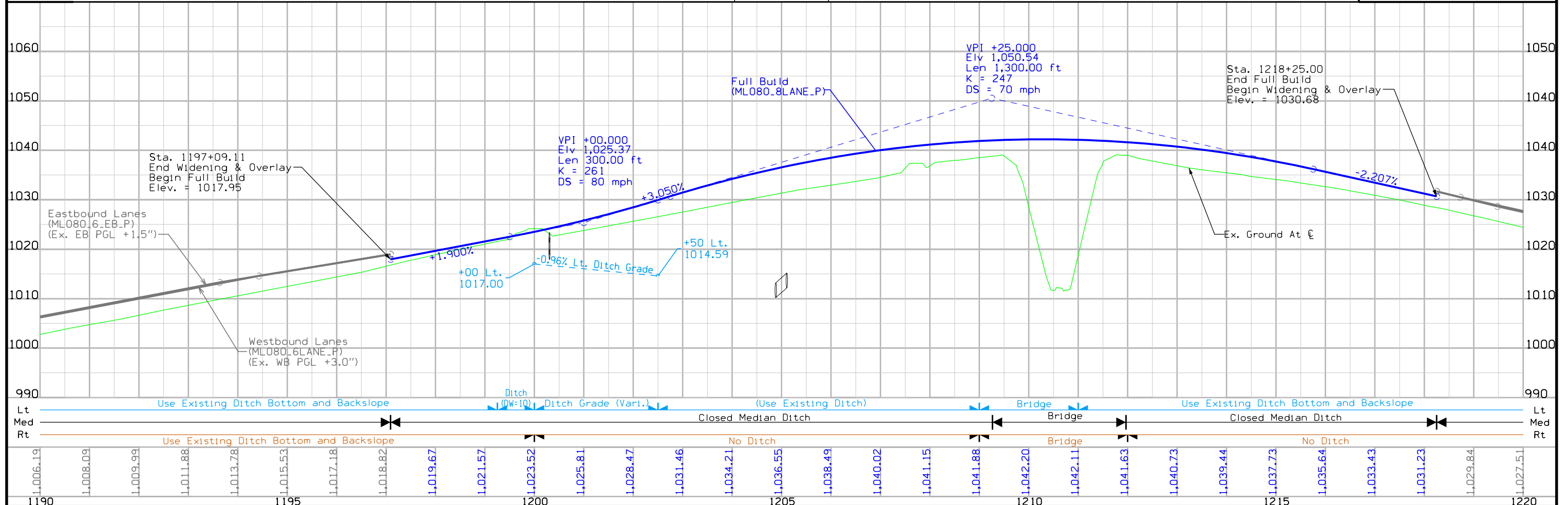
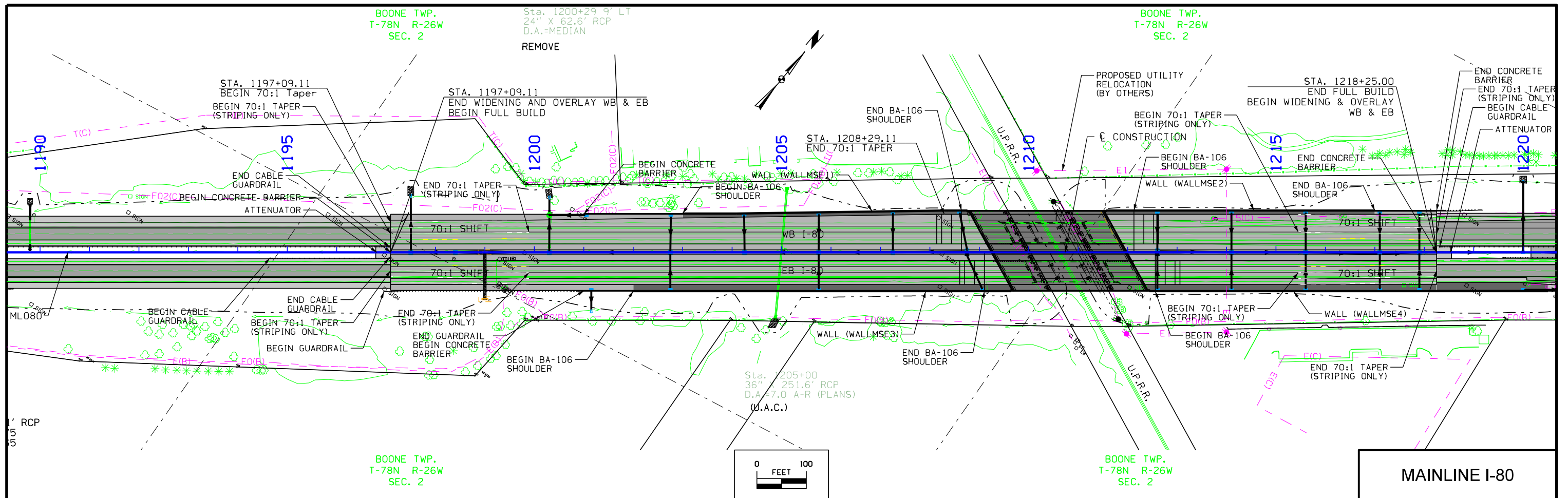
PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES D, E, F, & K)





FILE NO.	ENGLISH	DESIGN TEAM	COUNTY	PROJECT NUMBER	SHEET NUMBER
					D.3



BOONE TWP.
T-78N R-26W
SEC. 2

BOONE TWP.
T-78N R-26W
SEC. 1

15" X 268.5'
C.M.P.
Remove

Sta. 1234+50
Build SW-511 Intake w/24" x 104' RCP
F.L. = Lt. 989.37
Rt. 987.77
Form Grade 993.60

Sta. 1234+21 68' LT
24"x76.6' RCP
(U.A.C.)

Sta. 1241+42 437'
30"x70.2' RCP

Sta. 1239+74 472' LT
24"x87.0' RCP
(U.A.C.)

Sta. 1249+79
5.0'x5.0'x172.2' RCB
Extend Lt 22'
With 66" RCP
Lt. 958.30
F.L. = Rt. 959.23

Sta. 1249+57 314' LT
15"x67.3' RCP
(U.A.C.)

Sta. 1238+15 67' LT
24"x61.4' RCP
(U.A.C.)

Sta. 1241+80 68' LT
30"x80.9' RCP
D.A. = MEDIAN
(U.A.C.)

Sta. 1242+87 145' LT
38"x273.4' RCP
(U.A.C.)

STA. 1233+30.87 25' LT.
BEGIN MEDIAN TRANSITION
BEGIN GUARDRAIL

BEGIN BA-106
SHOULDER

END CONCRETE
BARRIER

Sta. 1246+42 199' LT
42"x58' RCP
(U.A.C.)

CONSTRUCTION

END CONCRETE BARRIER
ATTENUATOR

ML080
BEGIN GUARDRAIL

BEGIN BA-106
SHOULDER

END CONCRETE
BARRIER

ATTENUATOR

END CONCRETE
BARRIER

END CONCRETE BARRIER
ATTENUATOR
BEGIN CONCRETE BARRIER
ATTENUATOR
END BA-106 SHOULDER
BEGIN CABLE GUARDRAIL

30" X 33.1'
Conc. Pipe
(U.A.C.)

24" X 91.1'
Conc. Pipe
(U.A.C.)

12" X 19.4'
Conc. Pipe
(U.A.C.)

24" X 131.6'
Conc. Pipe
(U.A.C.)

21" X 179.1'
Conc. Pipe
(U.A.C.)

12" X 18.8'
Conc. Pipe
(U.A.C.)

15" X 13.1'
Conc. Pipe
(U.A.C.)

12" X 176.7'
H.D.P.E.
(U.A.C.)

12" X 20.6'
Conc. Pipe
(U.A.C.)

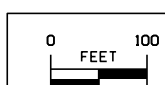
SCS PI Sta 1243+08.38
 $\Delta = 34^\circ 03' 06.60''$ (RT)
 $\text{Theta} = 1^\circ 59' 59.47''$
Ls = 200.00
Ts = 977.51
Ts = 977.51
Es = 131.93
P = 0.58
K = 100.00
Xc = 199.98
Yc = 2.33
LT = 133.34
ST = 66.67
LC = 199.99

Curve Data
 $\Delta = 30^\circ 03' 07.66''$ (RT)
T = 769.07
L = 1,502.72
R = 2,865.00
E = 101.43

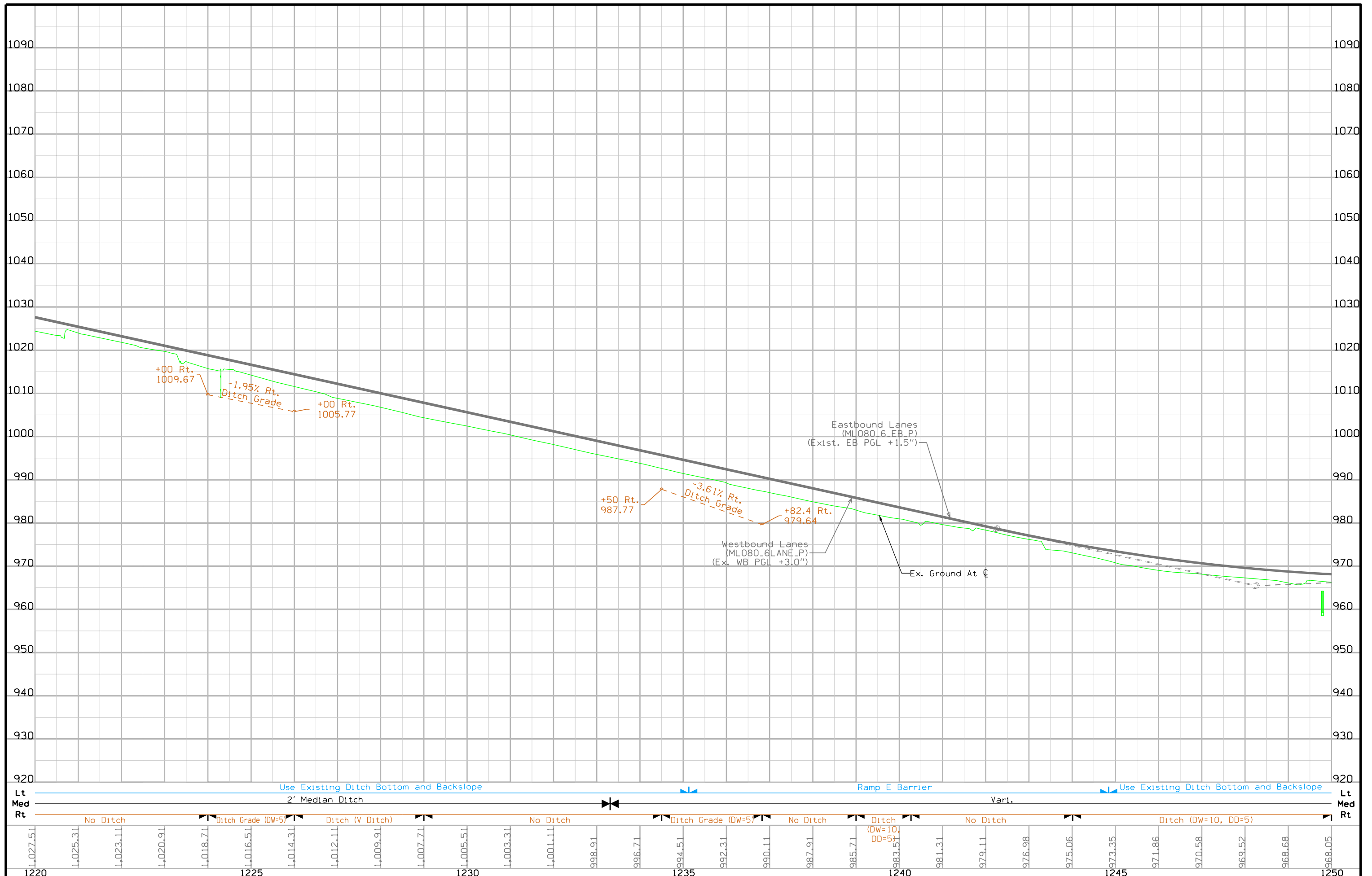
Sta. 1224+30 6' RT
24"x87.2' RCP
D.A. = MEDIAN
Extend Lt 4', Rt 14'
With 24" RCP
Lt. 1014.95
F.L. = Rt. 1009.08

BOONE TWP.
T-78N R-26W
SEC. 2

BOONE TWP.
T-78N R-26W
SEC. 1



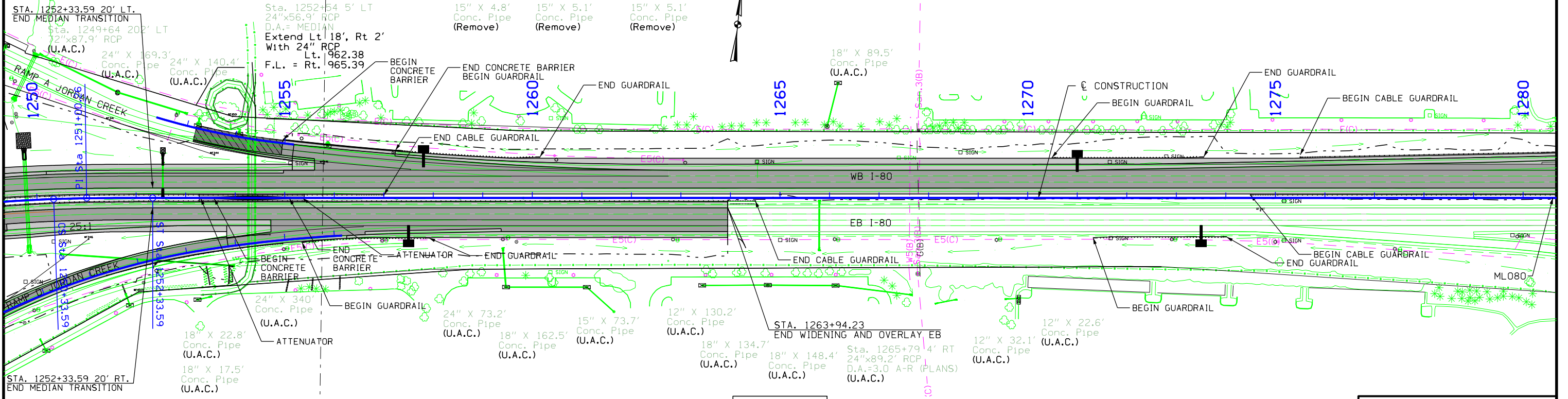
MAINLINE I-80



Use Existing Ditch Bottom and Backslope												Ramp E Barrier		Use Existing Ditch Bottom and Backslope																
2' Median Ditch														Vari.																
No Ditch												Ditch Grade (DW=5)		Ditch (V Ditch)		No Ditch												Ditch (DW=10, DD=5)		
1,027.51	1,025.31	1,023.11	1,020.91	1,018.71	1,016.51	1,014.31	1,012.11	1,009.91	1,007.71	1,005.51	1,003.31	1,001.11	998.91	996.71	994.51	992.31	990.11	987.91	985.71	983.51	981.31	979.11	976.98	975.06	973.35	971.86	970.58	969.52	968.68	968.05
1220				1225						1230					1235					1240					1245					1250

BOONE TWP.
T-78N R-26W
SEC. 1

BOONE TWP.
T-78N R-26W
SEC. 1

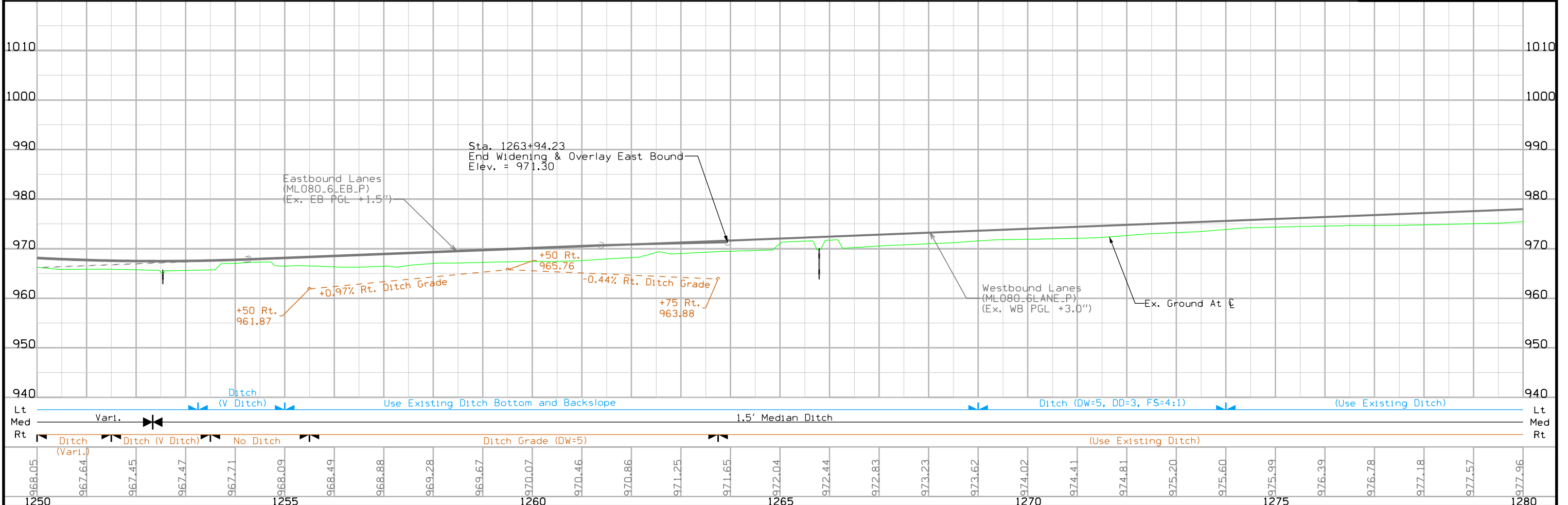


BOONE TWP.
T-78N R-26W
SEC. 1

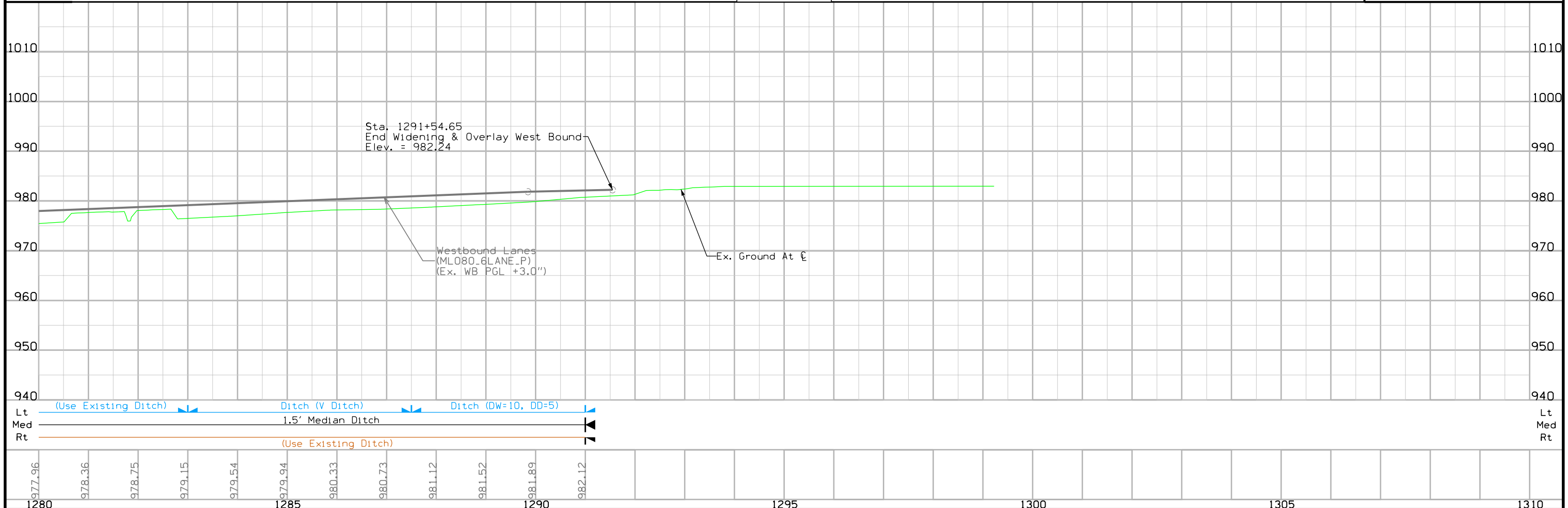
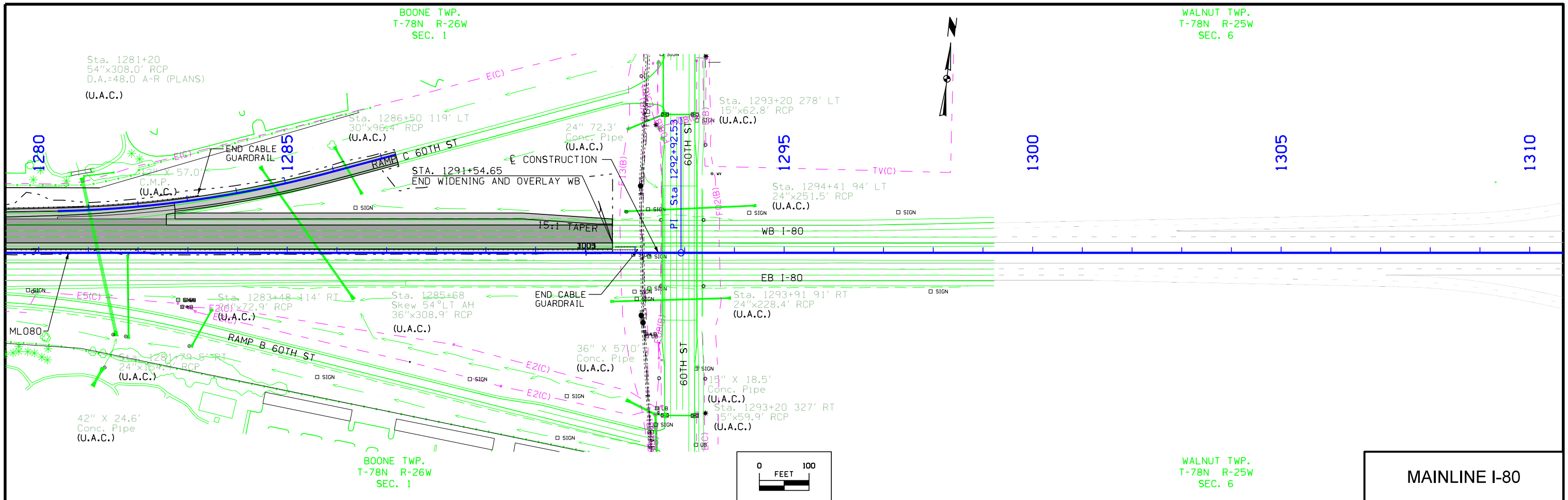


BOONE TWP.
T-78N R-26W
SEC. 1

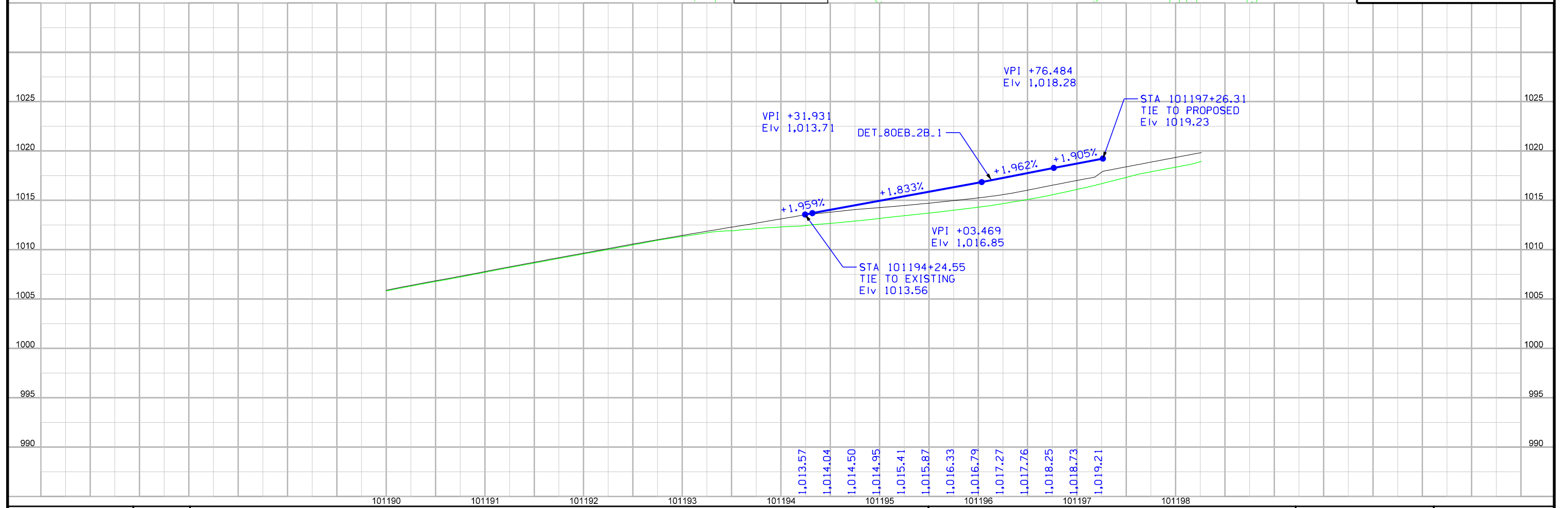
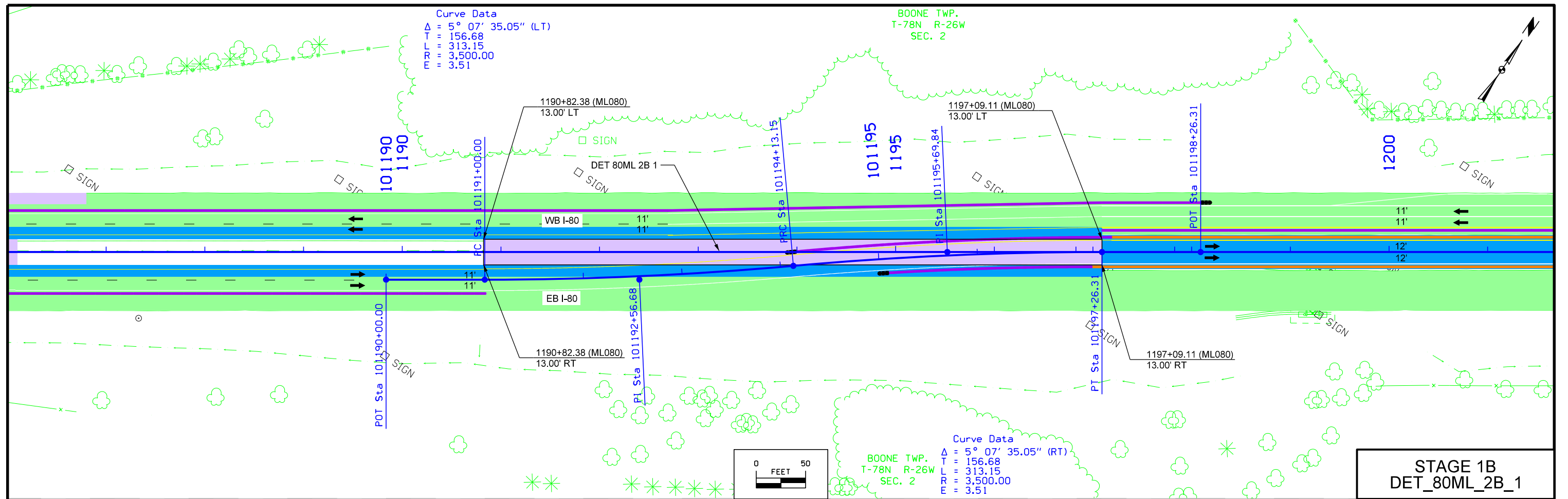
MAINLINE I-80

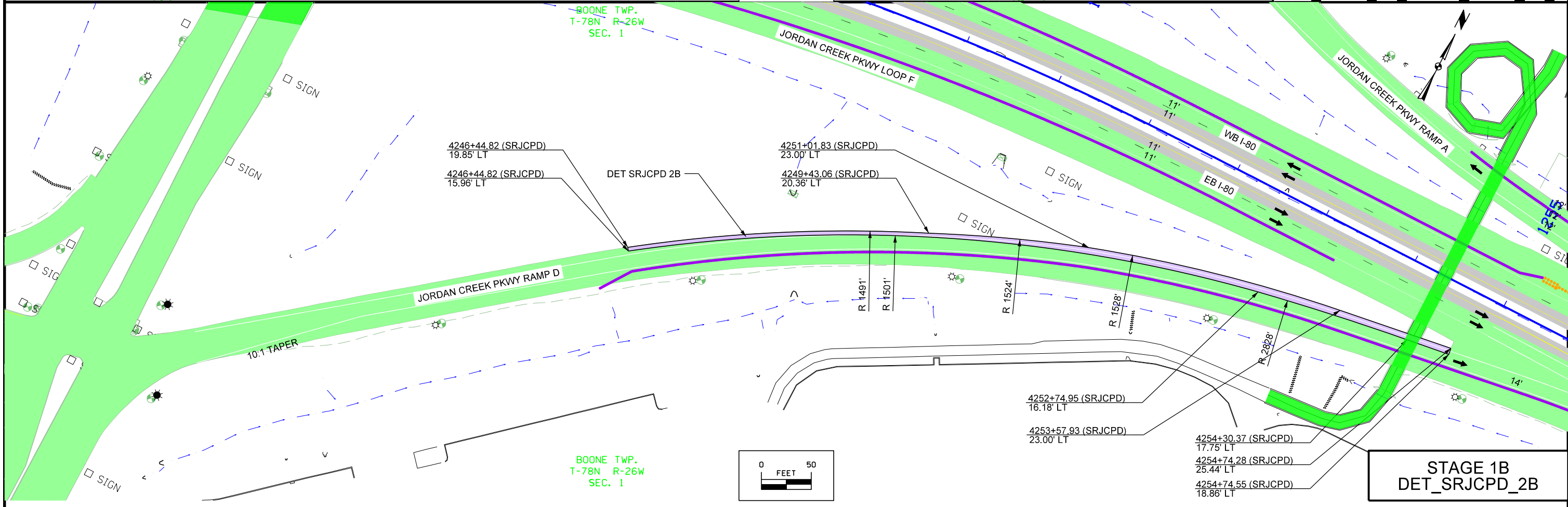
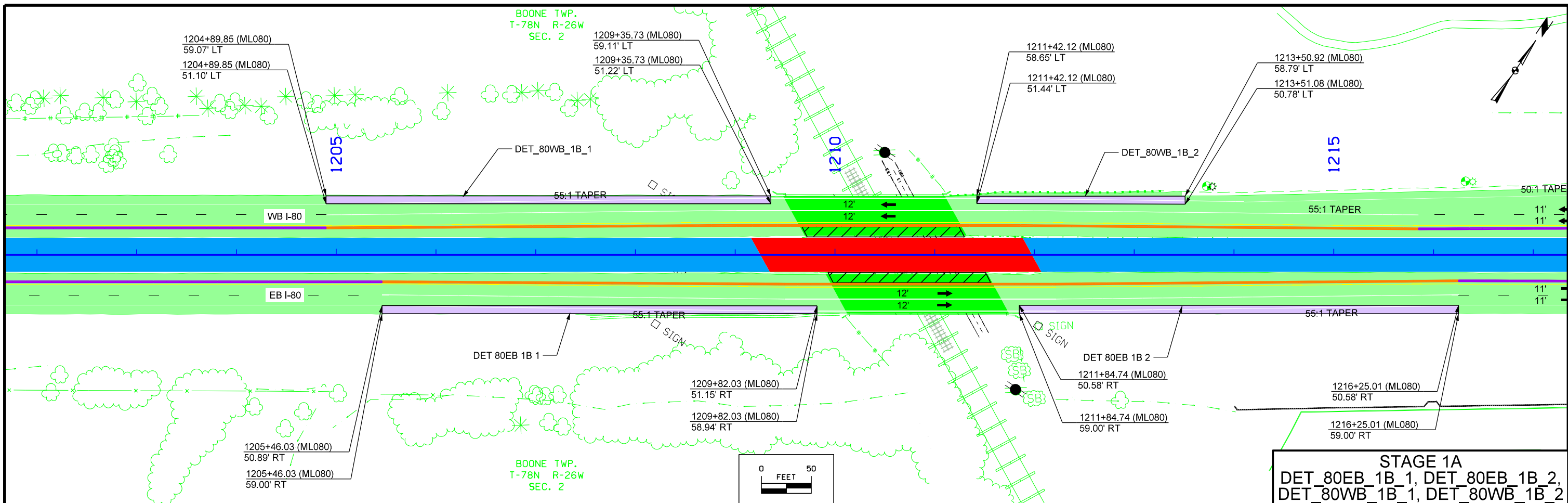


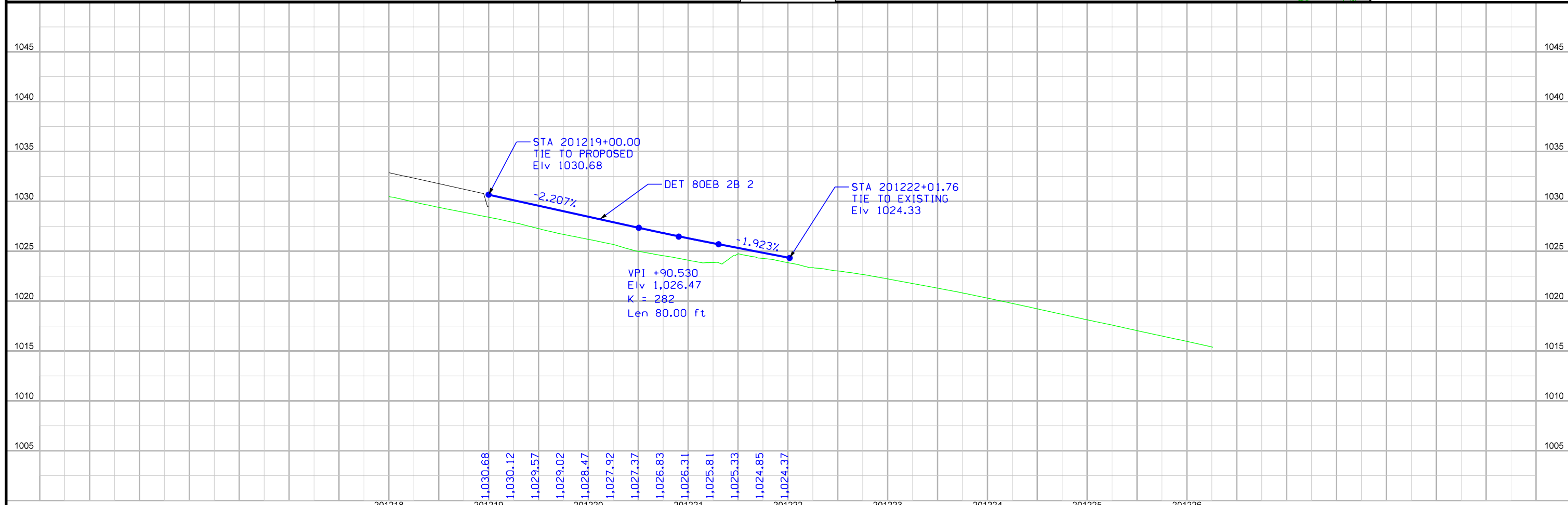
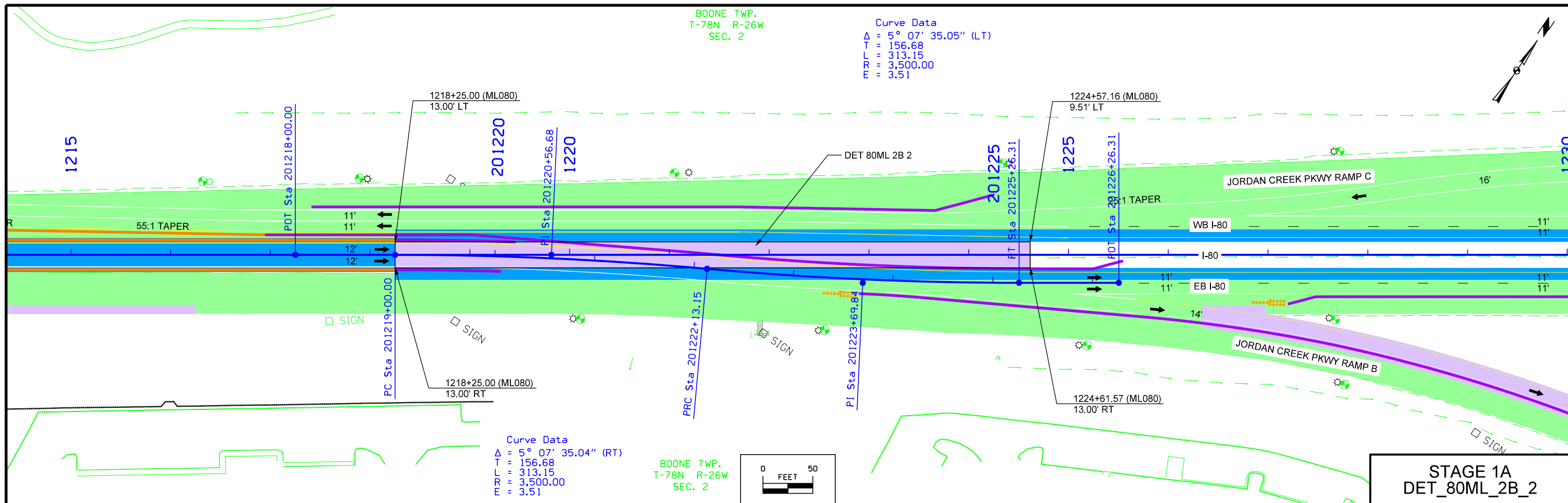
968.05	967.64	967.45	967.47	967.71	968.09	968.49	968.88	969.28	969.67	970.07	970.46	970.86	971.25	971.65	972.04	972.44	972.83	973.23	973.62	974.02	974.41	974.81	975.20	975.60	975.99	976.39	976.78	977.18	977.57	977.96
1250				1255						1260					1265					1270				1275					1280	

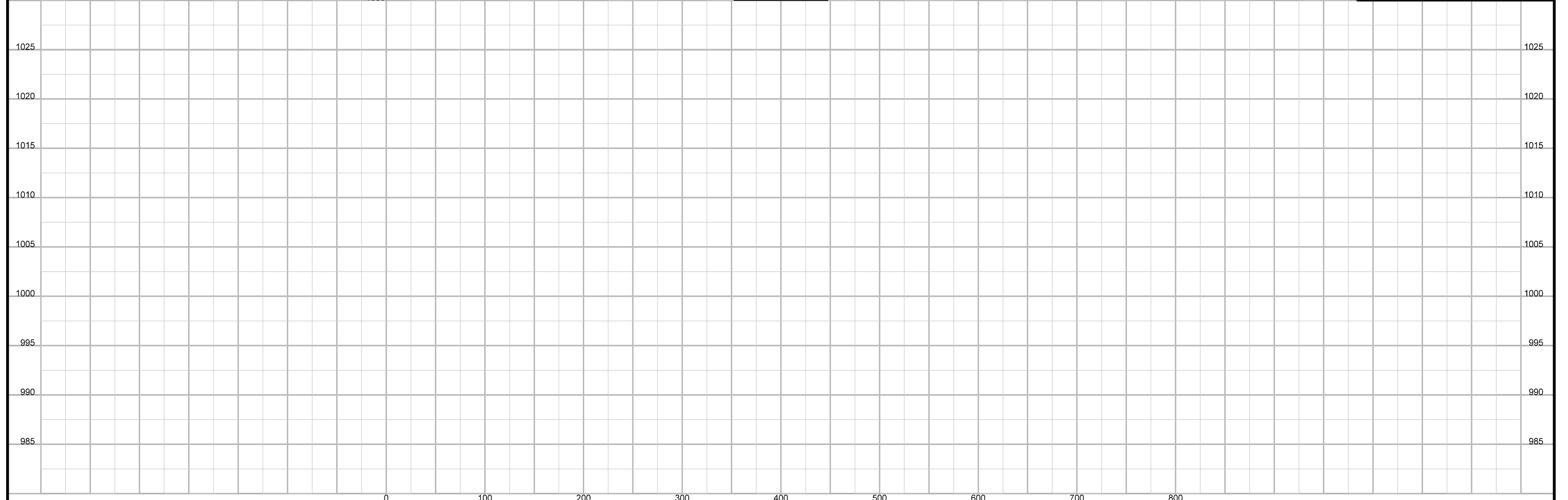
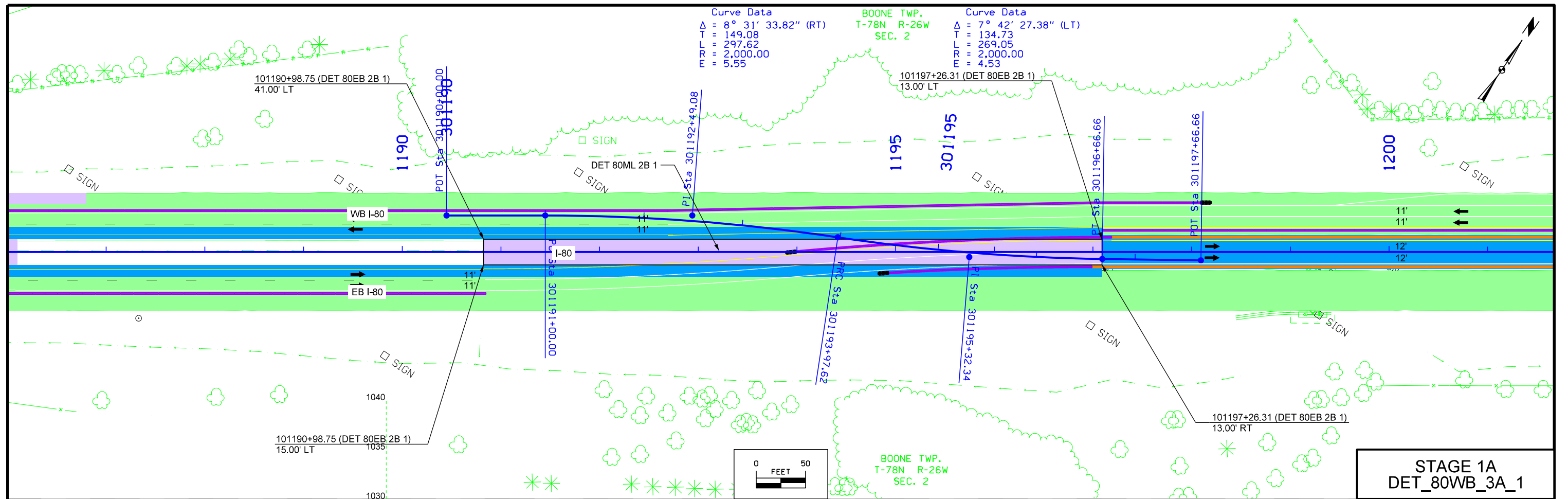


FILE NO.	ENGLISH	DESIGN TEAM	Iowa DOT \ HDR	DALLAS COUNTY	PROJECT NUMBER	IM-NHS-080-3(282)18--03-25	SHEET NUMBER	D.8
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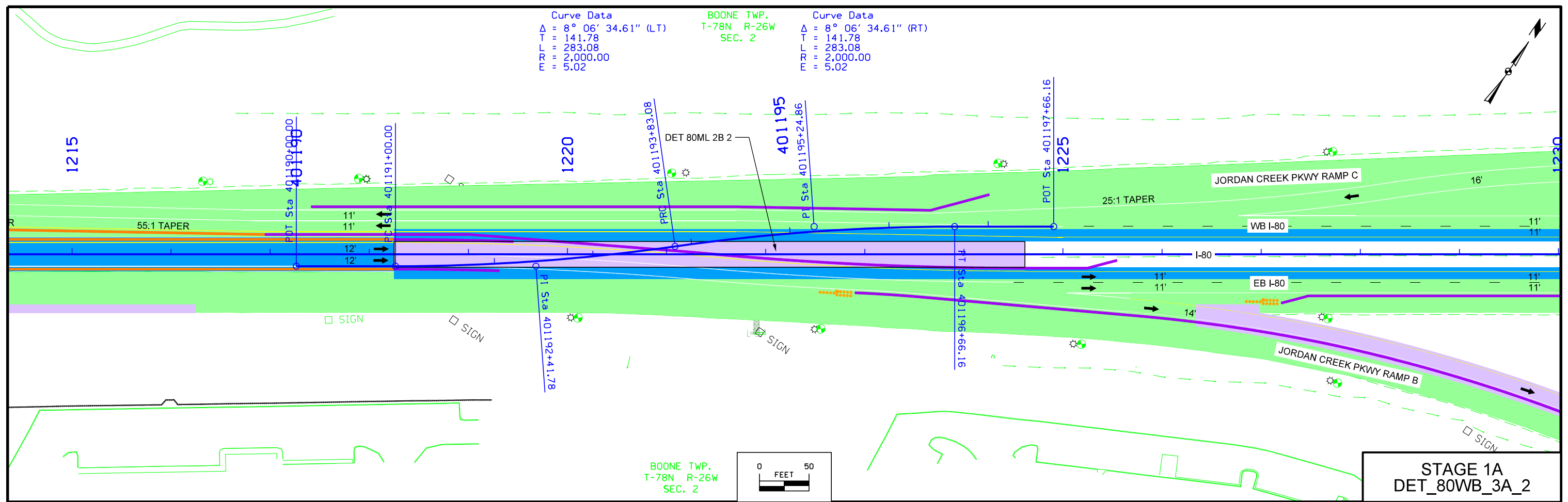




Curve Data
 $\Delta = 8^{\circ} 06' 34.61''$ (LT)
 T = 141.78
 M = 283.08
 P = 2,000.00
 E = 5.02

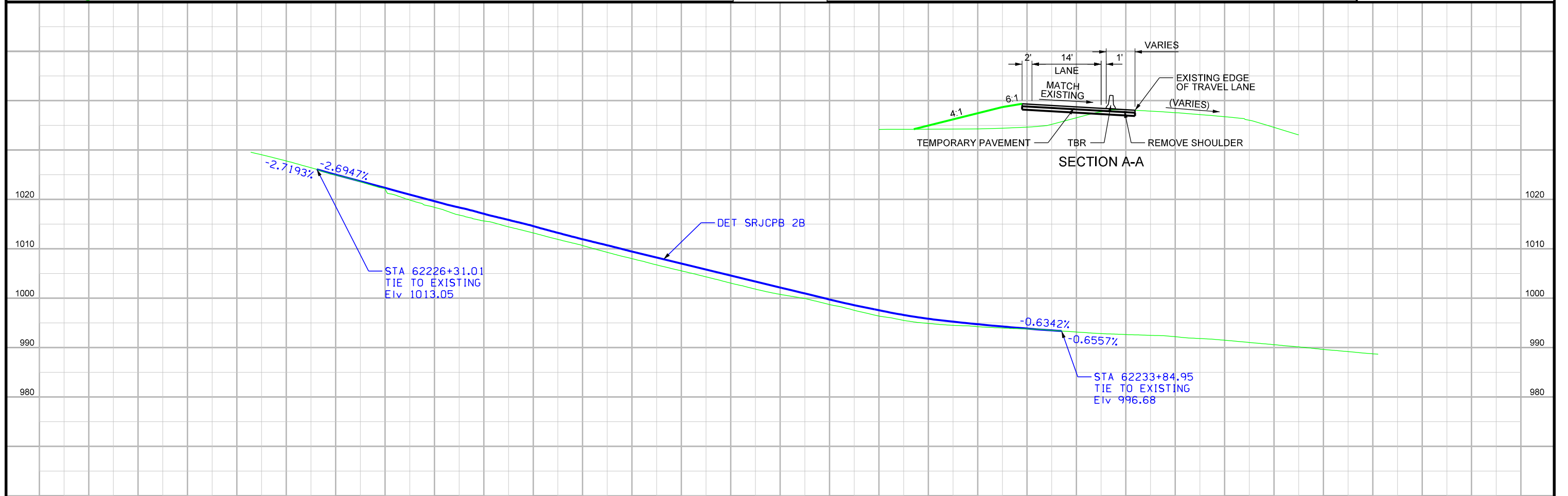
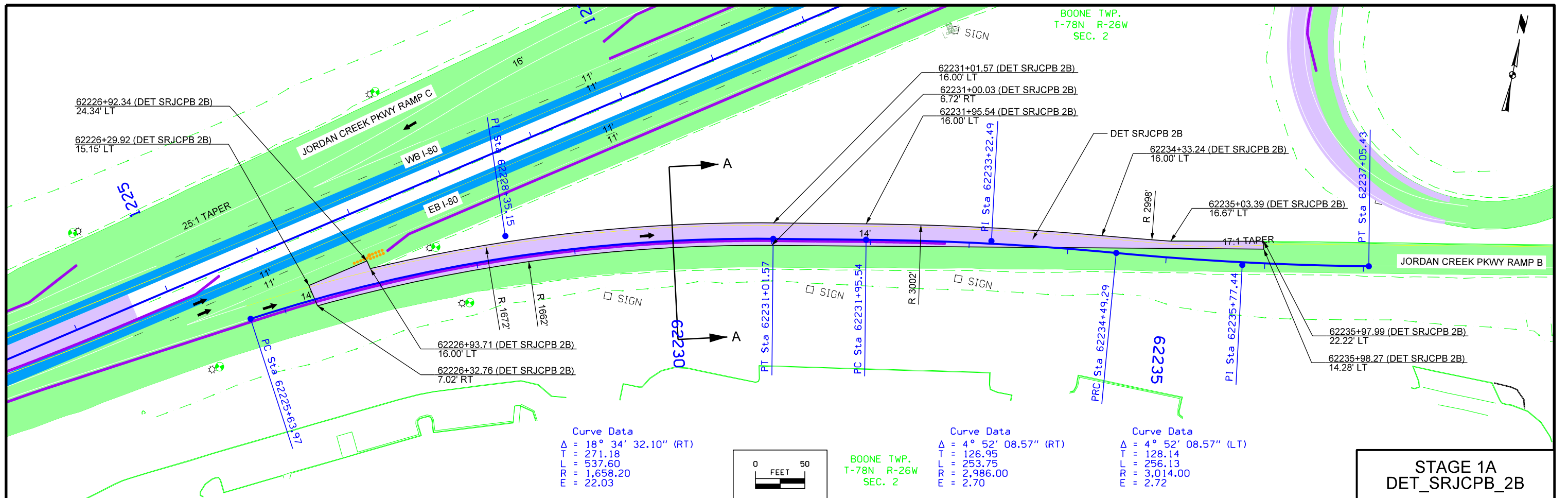
BOONE TWP.
 T-78N R-26W
 SEC. 2

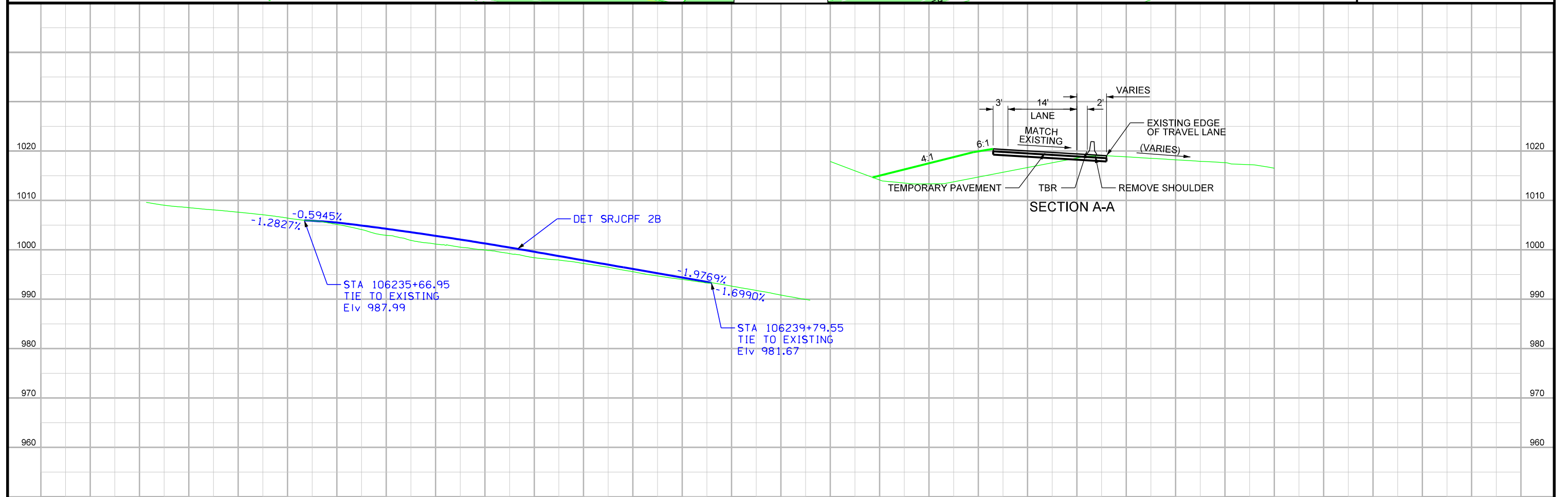
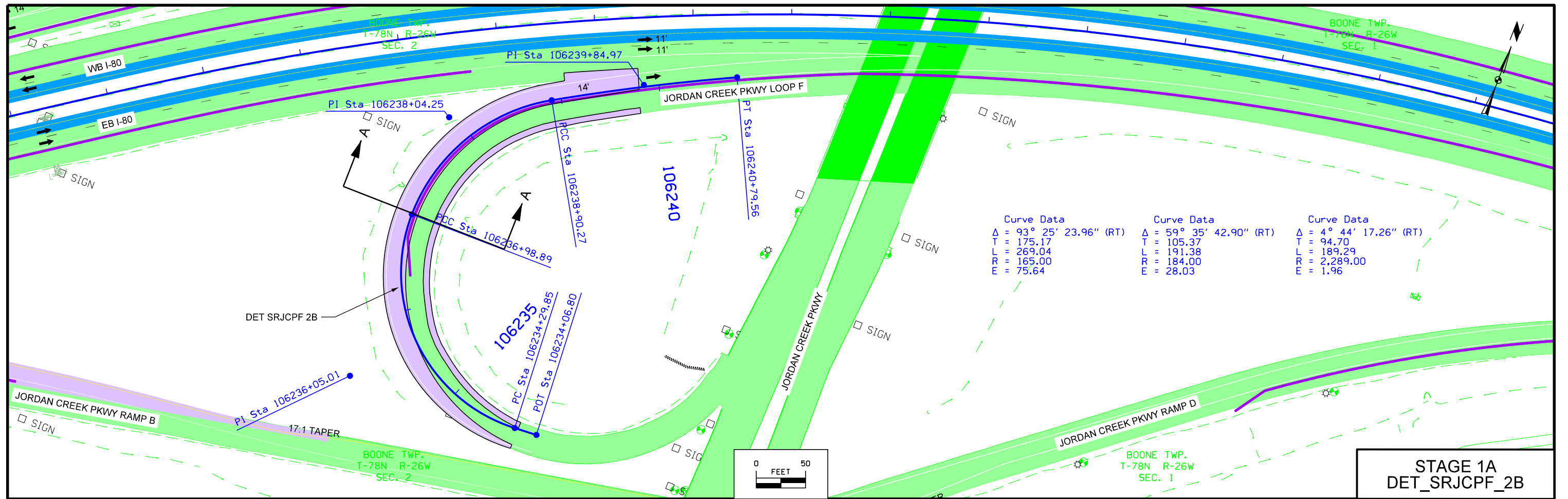
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 T = 141.78
 M = 283.08
 P = 2,000.00
 E = 5.02

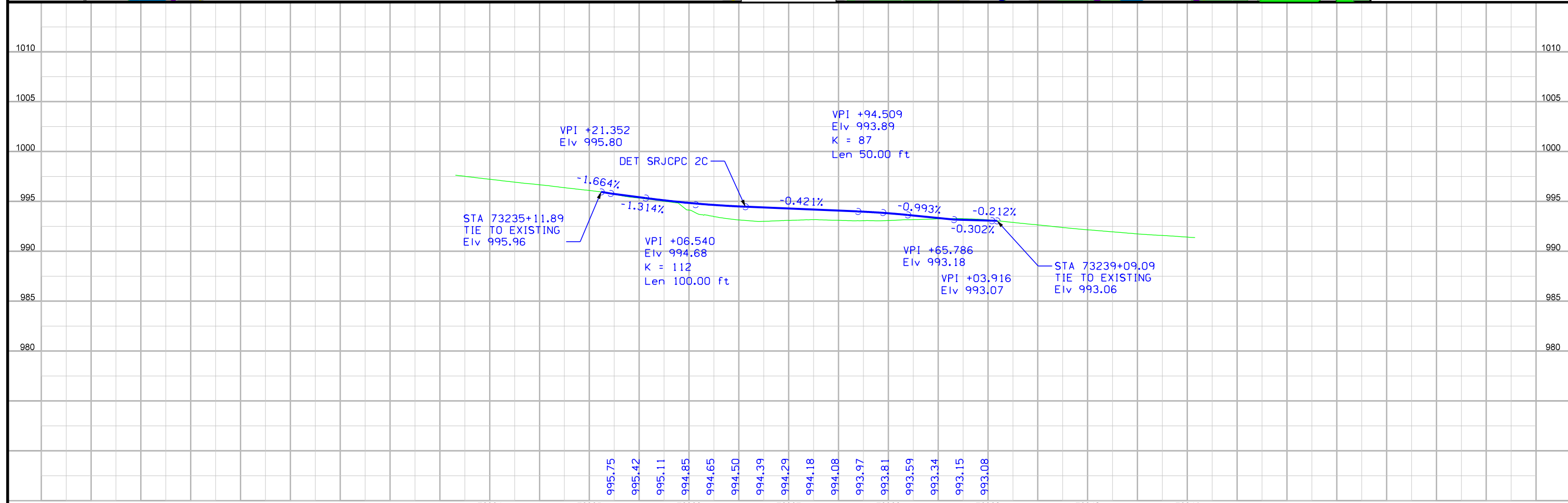
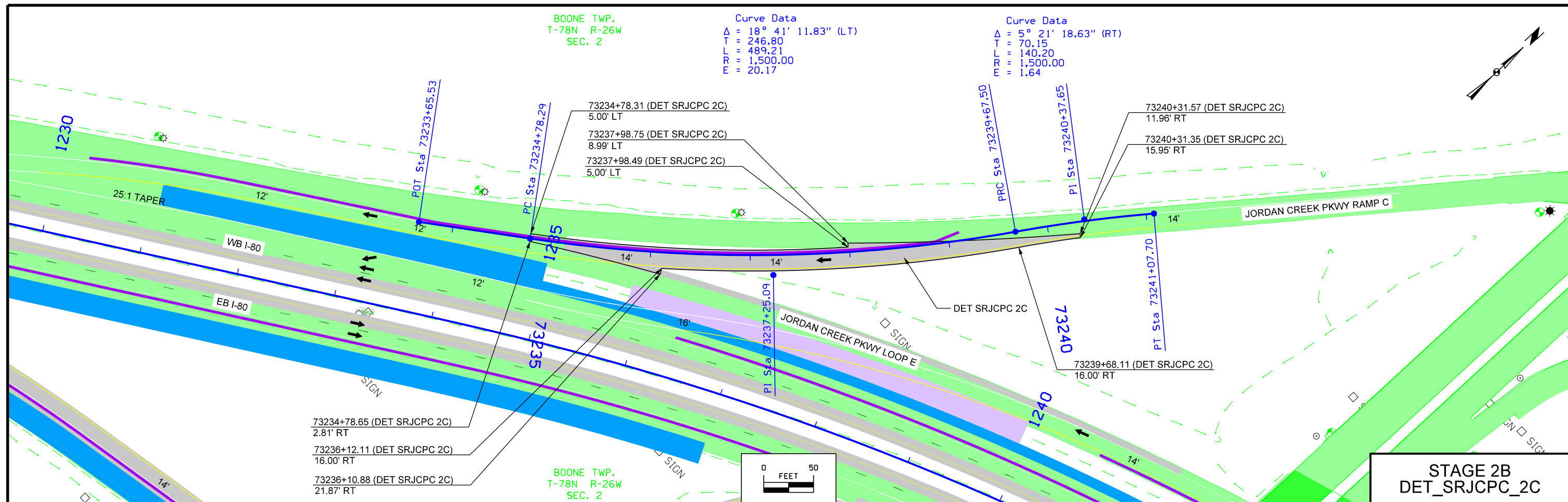


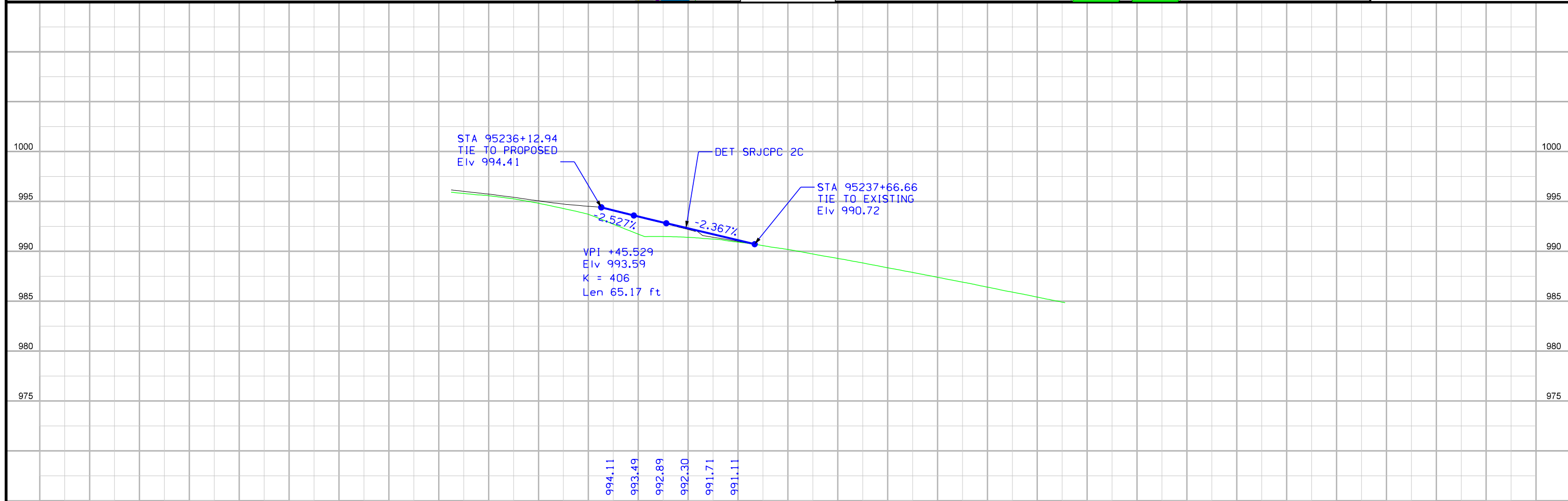
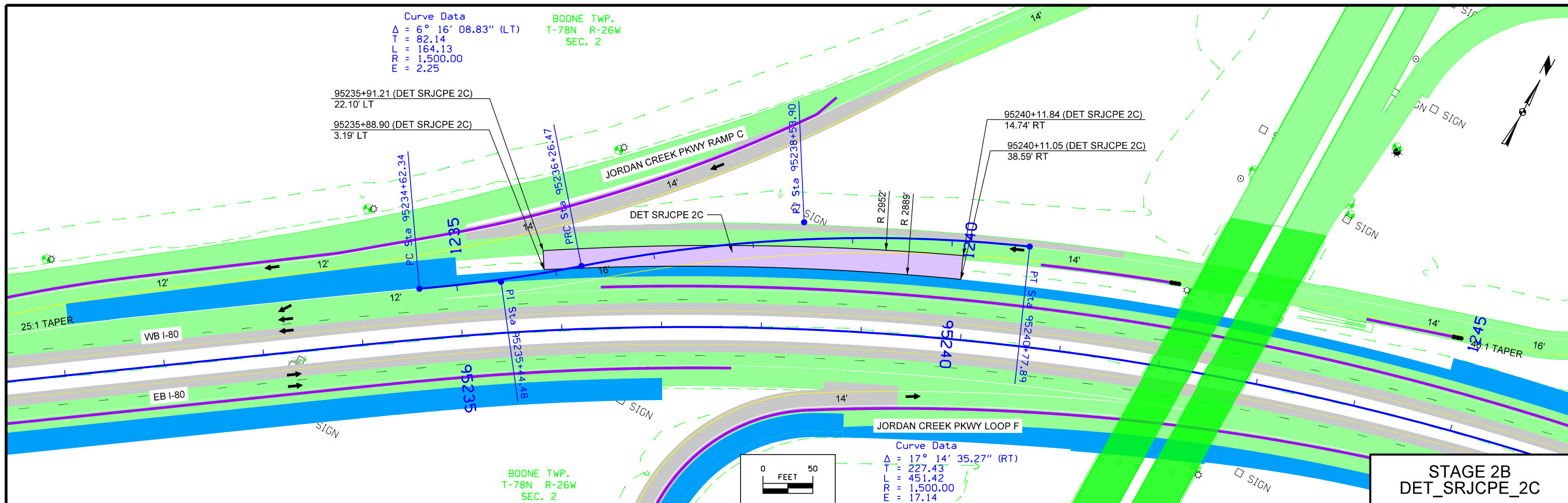
BOONE TWP.
 T-78N R-26W
 SEC. 2

0 FEET 50









Survey Information

Dallas County
IM-080-3(245)113—13-25
W of the US 6/US 169 Interchange to
E of Jordan Creek Pkwy in West Des Moines
PIN 18-25-080-020

Party Personnel

Jody Budde - PLS
 Wes Shimp - PLS
 Dave Overman - Party Chief
 Aaron Paulsen - Party Chief
 Lee Budde - Party Chief
 Katerina Wyatt - Party Chief
 Jason Flaherty - Assistant Survey Party Chief
 Logan Hook - Assistant Survey Party Chief
 Scott Dillavou - Assistant Survey Party Chief

Date(s) of Survey

Begin Date 11/19/2018
 End Date 03/16/2020

General Information

Measurement units for this survey are US survey feet. This survey is for the preliminary design for the section of I-80 from west of the US 6/US 169 Interchange to east of Jordan Creek Pkwy in West Des Moines. Project datum and control information is provided by Design Survey Office. This project is a Partial DTM with Photo control. This survey request was for the I-80 corridor only. Project horizontal datum is NAD83 (2011), Iowa RCS Zone 8 (Ames – Des Moines).

Vertical Control

Vertical datum for this survey is relative to NAVD88 (computed using Geoid12B for the 2019 new FENOs, FENO 1-8, and in 2020 Geoid18 used for FENOs 9-10 for derived orthometric elevations listed). This survey consisted of observing 10 new FENO 1-meter rod monuments using minimum 2hr initial static observations along with data from 3 Iowa RTN CORS sites: Des Moines (IADM), De Soto (IADS), and Martensdale (IAMD).

Additionally, 10 local existing GPS monuments with published NAVD88 elevations were observed and used that are located in proximity to the I-80 corridor area: Dallas County GPS points G104, G114, G115, and G116; City of West Des Moines Benchmark point 032; Three existing FENOs supplied by the DOT (set by others) and NGS BM A162:

Dallas County GPS Pt G104 has a published Elv of: 915.493 usft
 Survey Elv = 915.49 usft

Dallas County GPS Pt G114 has a published Elv of 959.402 usft
 Survey Elv = 959.40 usft

Dallas County GPS Pt G115 has a published Elv of 1017.98 usft
 Survey Elv = 1017.98 usft

Dallas County GPS Pt G116 has a published Elv of 875.76 usft
 Survey Elv = 875.64 usft

GPS Pt A162 has a published Elv of 1095.82 usft
 Survey Elv = 1095.82 usft

GPS Pt 25002 has a published Elv of 957.79 usft
 Survey Elv = 957.79 usft

GPS Pt 25003 has a published Elv of 925.96 usft
 Survey Elv = 925.96 usft

GPS Pt 25005 has a published Elv of 1007.86 usft
 Survey Elv = 1007.86 usft

GPS Pt GPS9 has a published Elv of 938.993 usft
 Survey Elv = 938.91 usft

City of West Des Moines BM WDM032 has a published Elv of 996.30 usft
 Survey Elv = 996.30 usft

The final vertical adjustment results show standard deviations were less than 0.02 ft. at 95% confidence level (2 sigma) for the new FENO monuments.

Horizontal Control

The project coordinate system for this survey is NAD83 (2011) Iowa RCS Zone 8 (Ames – Des Moines) US survey feet. This survey control is relative to IARTN reference stations. IARTN Reference Station coordinates are relative to the National Reference Station network datum: NAD83 (2011) for Epoch 2010.00. Coordinates were determined by observing each mark for 120 minutes minimum for the first observation and 35 minutes minimum for the second observation with appropriate time spans between each session.

For the February 2020 survey portion which added FENO monuments FENO9 and FENO10, the same three IARTN CORS stations were utilized as well as HARN station GPS 9. FENO8 was re-observed as part of the establishment of the two new FENO markers to complete out the survey project control network.

The horizontal standard deviation of these adjusted observations was less than 0.02 ft. at 95% confidence level (2 sigma).

Alignment Information

The horizontal alignment for this survey is a retrace of As-built Plans No. I-80-3(14)109, I-80-3(15)113, I-80-3(20)121. Survey stationing was equated to the plan PI at STA 606+22.0 and run back and ahead throughout the survey.

Survey stationing relates to as built plan stationing as follows:

PI STA 606+22.0 As-built Plans Project No. I-80-3(14)109
 Survey PI STA 606+22.0

PI STA 783+24.4 As-built Plans Project No. I-80-3(15)113
 Survey PI STA 783+23.03

PI STA 833+66.1 As-built Plans Project No. I-80-3(15)113
 Survey PI STA 833+59.82

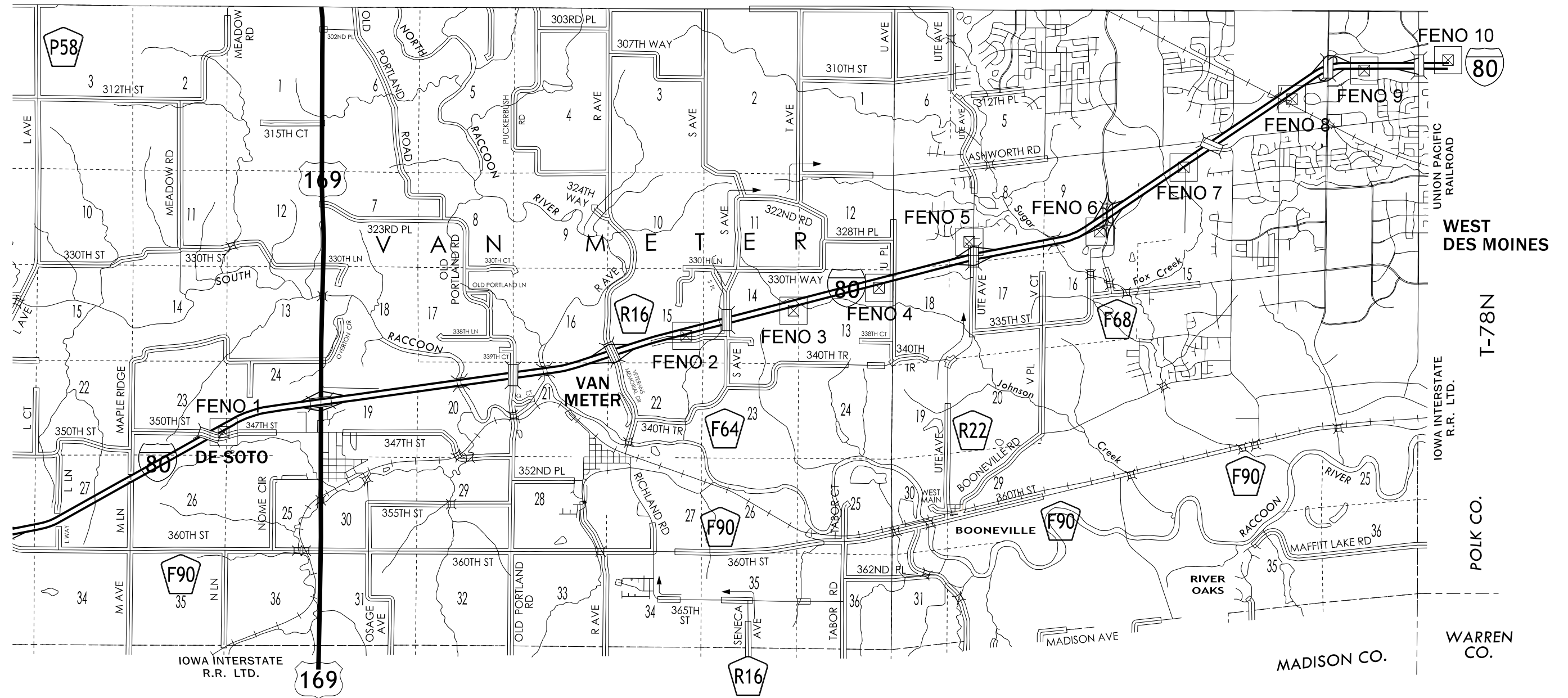
PI STA 1016+72.0 As-built Plans Project No. I-80-3(15)113
 Survey PI STA 1016+58.94

PI STA 1074+13.1 As-built Plans Project No. I-80-3(20)121
 Survey PI STA 1073+94.23

PI STA 1243+30.0 As-built Plans Project No. I-80-3(20)121
 Survey PI STA 1242+99.94

CONTROL POINT VICINITY MAP

This map is a guide to the vicinity of the primary project control points
 Primary control is for use with RTK base stations and for RTN validation.
 Future surveys will use primary project control to establish temporary control as needed for construction or other surveying applications.



HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

1a. Regional Coordinate System Zone 8

Coordinate listing from next sheet will be used with 1aRTN for monument recovery. No other reference ties are given.

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

1a. Regional Coordinate System Zone 8

Point ID	Northing(sft)	Easting(sft)	Elev (sft)	Description
25002	7470971.24	18422177	957.79	FENO EXISTING JEO
25003	7471429.88	18428282.04	925.96	FENO EXISTING JEO
25005	7470137.41	18417327.09	1007.86	FENO EXISTING JEO
FENO1	7468376.54	18413068.82	1019.46	FENO FOTH SET
FENO2	7474164.86	18439441.53	989.79	FENO FOTH SET
FENO3	7475282.36	18445058.65	999.34	FENO FOTH SET
FENO4	7476856.55	18450086.15	968.57	FENO FOTH SET
FENO5	7479233.68	18455057.76	999.53	FENO FOTH SET
FENO6	7479877.63	18462182.05	981.09	FENO FOTH SET
FENO7	7483298.16	18466546.88	1003.75	FENO FOTH SET
FENO8	7487283.68	18472431.59	1015.73	FENO FOTH SET
FENO9	7488897.18	18476761.16	964.37	FENO FOTH SET
FENO10	7489182.34	18481417.43	973.17	FENO FOTH SET
WDM032	7485410.9	18469228.11	996.3	CP City WDM BM

ALIGNMENT COORDINATES

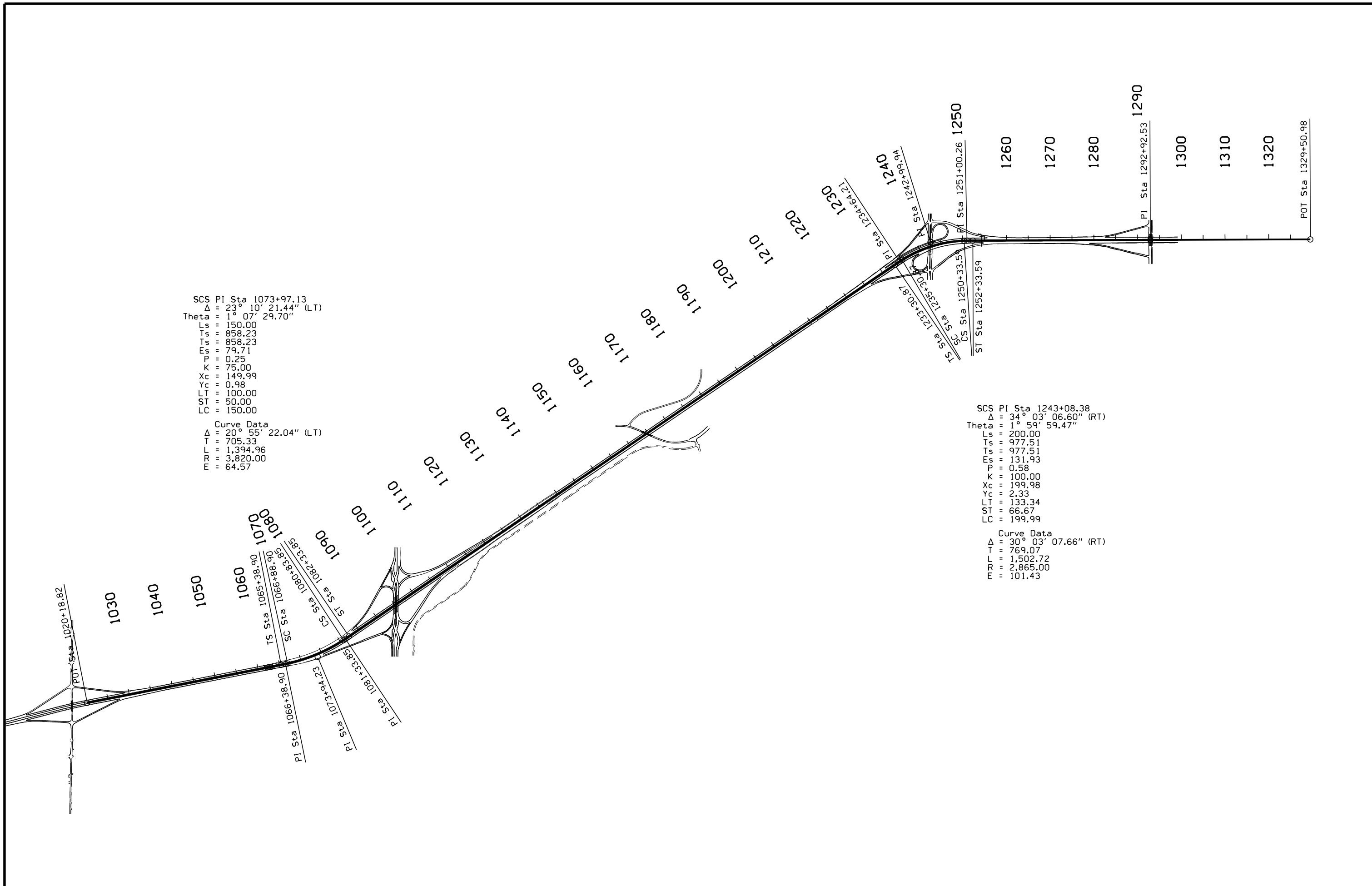
101-16
10-20-09

Name	Location	Point on Tangent			Begin Spiral			Begin Curve			Simple Curve PI or Master PI of SCS			End Curve			End Spiral		
		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates	
			Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)
MAINLINE I-80																			
ML20000	ML080	1020+18.82	7,478,453.80	18,455,468.06															
ML20001B	ML080				1065+38.90	7,479,322.30	18,459,903.91				1066+38.90	7,479,341.51	18,460,002.05			1066+38.90	7,479,352.08	18,460,050.92	
ML20001A	ML080							1066+88.90	7,479,352.08	18,460,050.92	1073+94.23	7,479,501.17	18,460,740.32	1080+83.85	7,479,886.62	18,461,331.02			
ML20002B	ML080				1080+83.85	7,479,886.62	18,461,331.02				1081+33.85	7,479,913.94	18,461,372.89			1082+33.85	7,479,970.22	18,461,455.55	
ML20002	ML080				1233+30.87	7,488,467.00	18,473,934.52				1234+64.21	7,488,542.05	18,474,044.74			1235+30.87	7,488,577.63	18,474,101.13	
ML20002A	ML080							1235+30.87	7,488,577.63	18,474,101.13	1242+99.94	7,488,988.02	18,474,751.55	1250+33.59	7,489,017.53	18,475,520.05			
ML20003	ML080	1292+92.53	7,489,034.62	18,479,778.94	1250+33.59	7,489,017.53	18,475,520.05				1251+00.26	7,489,020.09	18,475,586.68			1252+33.59	7,489,020.55	18,475,720.02	
ML20004	ML080	1329+50.98	7,489,047.30	18,483,437.36															
60th ST RAMP C																			
46001	SR60C							7280+08.65	7,489,118.17	18,478,494.76	7283+09.06	7,489,119.21	18,478,795.17	7286+06.05	7,489,197.64	18,479,085.15			
46002	SR60C	7287+29.36	7,489,229.83	18,479,204.18															
JCP RAMP A																			
34001	SRJCPA							1252+35.42	7,489,183.11	18,475,727.04	1253+65.85	7,489,146.24	18,475,852.15	1254+95.60	7,489,131.88	18,475,981.78			
34002	SRJCPA							1254+95.60	7,489,131.88	18,475,981.78	1255+07.09	7,489,130.61	18,475,993.21	1255+18.58	7,489,129.39	18,476,004.63			
JCP RAMP B																			
35000	SRJCPB	2225+91.13	7,487,967.24	18,473,379.86															
35001	SRJCPB							2226+23.37	7,487,983.57	18,473,407.66	2228+65.36	7,488,106.16	18,473,616.30	2231+02.61	7,488,151.60	18,473,853.98			
35002	SRJCPB	2232+85.18	7,488,185.88	18,474,033.31															
JCP RAMP C																			
36001	SRJCPC							3233+39.15	7,488,564.15	18,473,877.77	3236+89.05	7,488,779.43	18,474,153.60	3240+35.70	7,489,053.23	18,474,371.46			
JCP RAMP D																			
37001	SRJCPC							4246+44.82	7,488,653.55	18,475,191.56	4250+08.20	7,488,865.53	18,475,486.71	4253+57.93	7,488,919.43	18,475,846.07			
37002	SRJCPC							4253+57.93	7,488,919.43	18,475,846.07	4254+86.97	7,488,938.57	18,475,973.69	4256+15.83	7,488,945.90	18,476,102.53			
JCP LOOP E																			
38000	SRJCPE	5227+78.34	7,488,222.99	18,473,432.21															
38001	SRJCPE							5233+99.60	7,488,582.88	18,473,938.62	5235+89.36	7,488,692.80	18,474,093.29	5237+78.59	7,488,782.02	18,474,260.76			
JCP LOOP F																			
39001	SRJCPE							6236+31.68	7,488,433.93	18,474,363.77	6236+61.02	7,488,460.39	18,474,351.10	6236+89.74	7,488,489.60	18,474,348.40			
39002	SRJCPE							6236+89.74	7,488,489.60	18,474,348.40	6237+97.46	7,488,596.87	18,474,338.47	6238+79.36	7,488,646.42	18,474,434.12			
39003	SRJCPE							6238+79.36	7,488,646.42	18,474,434.12	6240+88.63	7,488,742.68	18,474,619.93	6242+97.52	7,488,819.03	18,474,814.78			
39004	SRJCPE							6242+97.52	7,488,819.03	18,474,814.78	6243+89.13	7,488,852.45	18,474,900.08	6244+80.46	7,488,873.87	18,474,989.15			
MSE WALL 1																			
WALLMSE11	WALLMSE1	511203+00.00	7,486,826.69	18,471,384.65															
WALLMSE12	WALLMSE1	511204+09.07	7,486,888.08	18,471,474.81															
WALLMSE13	WALLMSE1	511208+29.09	7,487,129.41	18,471,818.58															
WALLMSE14	WALLMSE1	511208+77.45	7,487,156.63	18,471,858.55															
MSE WALL 2																			
WALLMSE21	WALLMSE2	521211+54.41	7,487,312.52	18,472,087.52															
WALLMSE22	WALLMSE2	521218+00.00	7,487,675.87	18,472,621.15															
MSE WALL 3																			
WALLMSE31	WALLMSE3	531201+00.00	7,486,583.13	18,471,308.53															
WALLMSE32	WALLMSE3	531209+65.32	7,487,070.15	18,472,023.79															
MSE WALL 4																			
WALLMSE41	WALLMSE4	541212+42.32	7,487,226.05	18,472,252.76															
WALLMSE42	WALLMSE4	541220+00.00	7,487,652.48	18,472,879.04															

SPIRAL OR CIRCULAR CURVE DATA

101-17
04-19-11

Name	Location	Δ_{scs}	Horizontal Alignment Data										Remarks			
			Spiral Data					Curve Data								
			θ_s	L_s	T_s	E_s	X_c	Y_c	L.T.	S.T.	Δ_c	T	L	R	E	
MAINLINE I-80																
ML20001	ML080	23° 10' 21.44" LT	1° 07' 29.70"	-150.00'	TS	50.00'	149.99'	0.98'	100.00'	50.00'	20° 55' 22.04" LT	705.33'	1,394.96'	3,820.00'	64.57'	
ML20002	ML080	34° 03' 06.61" RT	1° 59' 59.47"	200.00'	TS	66.67'	199.98'	2.33'	133.34'	66.67'	30° 03' 07.67" RT	769.07'	1,502.72'	2,865.00'	101.43'	
60th ST RAMP C																
46001	SR60C										14° 56' 06.47" LT	300.41'	597.40'	2,291.83'	19.60'	
JCP RAMP A																
34001	SRJCPA										10° 05' 59.34" LT	130.43'	260.18'	1,476.00'	5.75'	
34002	SRJCPA										0° 12' 02.64" LT	11.49'	22.98'	6,560.00'	0.01'	
JCP RAMP B																
35001	SRJCPB										19° 36' 47.39" RT	241.99'	479.24'	1,400.00'	20.76'	
JCP RAMP C																
36001	SRJCPC										13° 31' 09.99" LT	349.90'	696.55'	2,952.00'	20.66'	
JCP RAMP D																
37001	SRJCPD										27° 09' 23.51" RT	363.38'	713.11'	1,504.54'	43.26'	
37002	SRJCPD										5° 16' 38.88" RT	129.04'	257.91'	2,800.00'	2.97'	
JCP LOOP E																
38001	SRJCPE										7° 21' 20.76" RT	189.75'	378.98'	2,952.00'	6.09'	
JCP LOOP F																
39001	SRJCPE										20° 17' 05.71" RT	29.34'	58.06'	164.00'	2.60'	
39002	SRJCPE										67° 54' 06.59" RT	107.72'	189.62'	160.00'	32.88'	
39003	SRJCPE										5° 59' 22.98" RT	209.27'	418.16'	4,000.00'	5.47'	
39004	SRJCPE										7° 52' 50.63" RT	91.61'	182.93'	1,330.00'	3.15'	

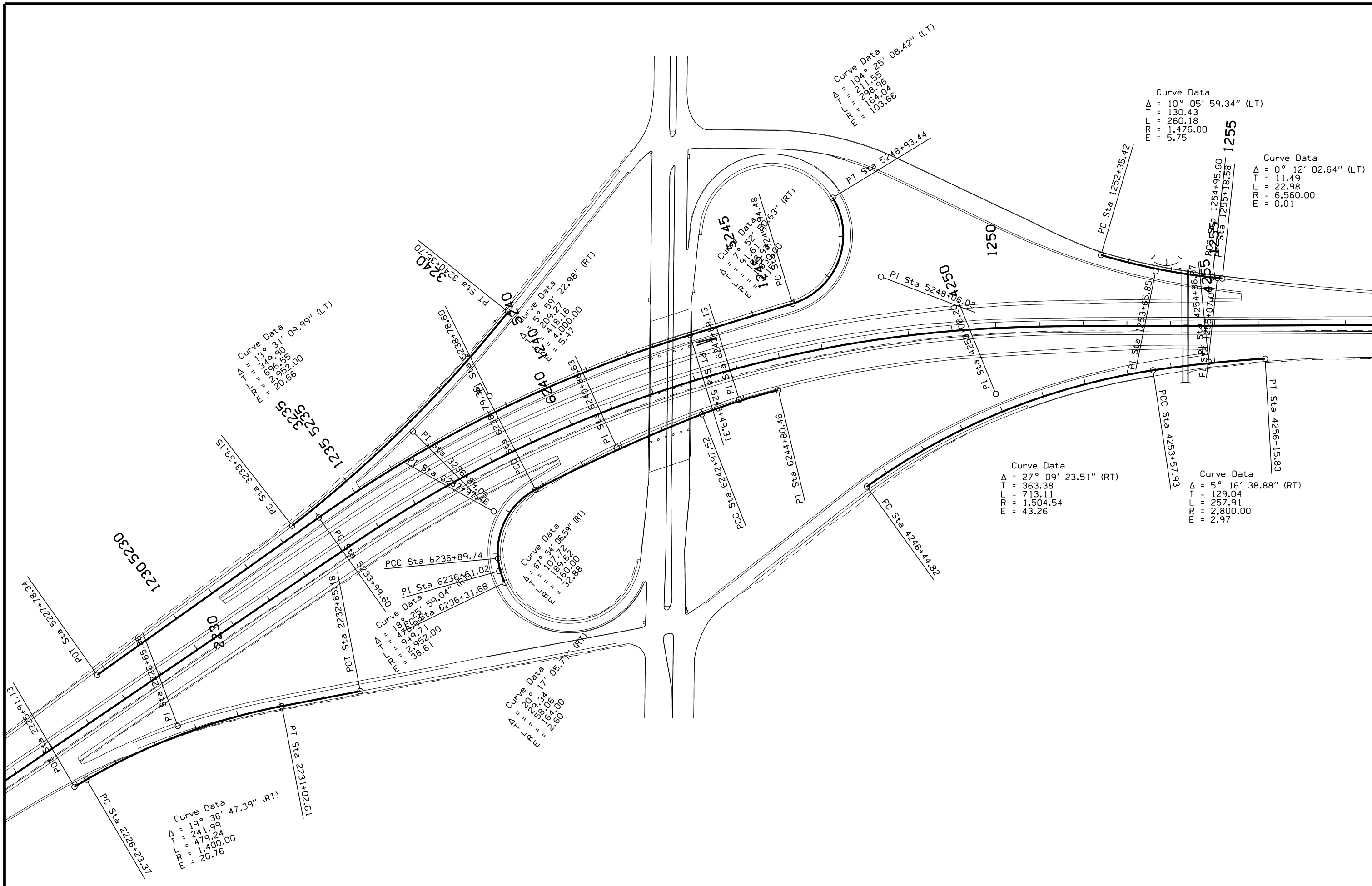


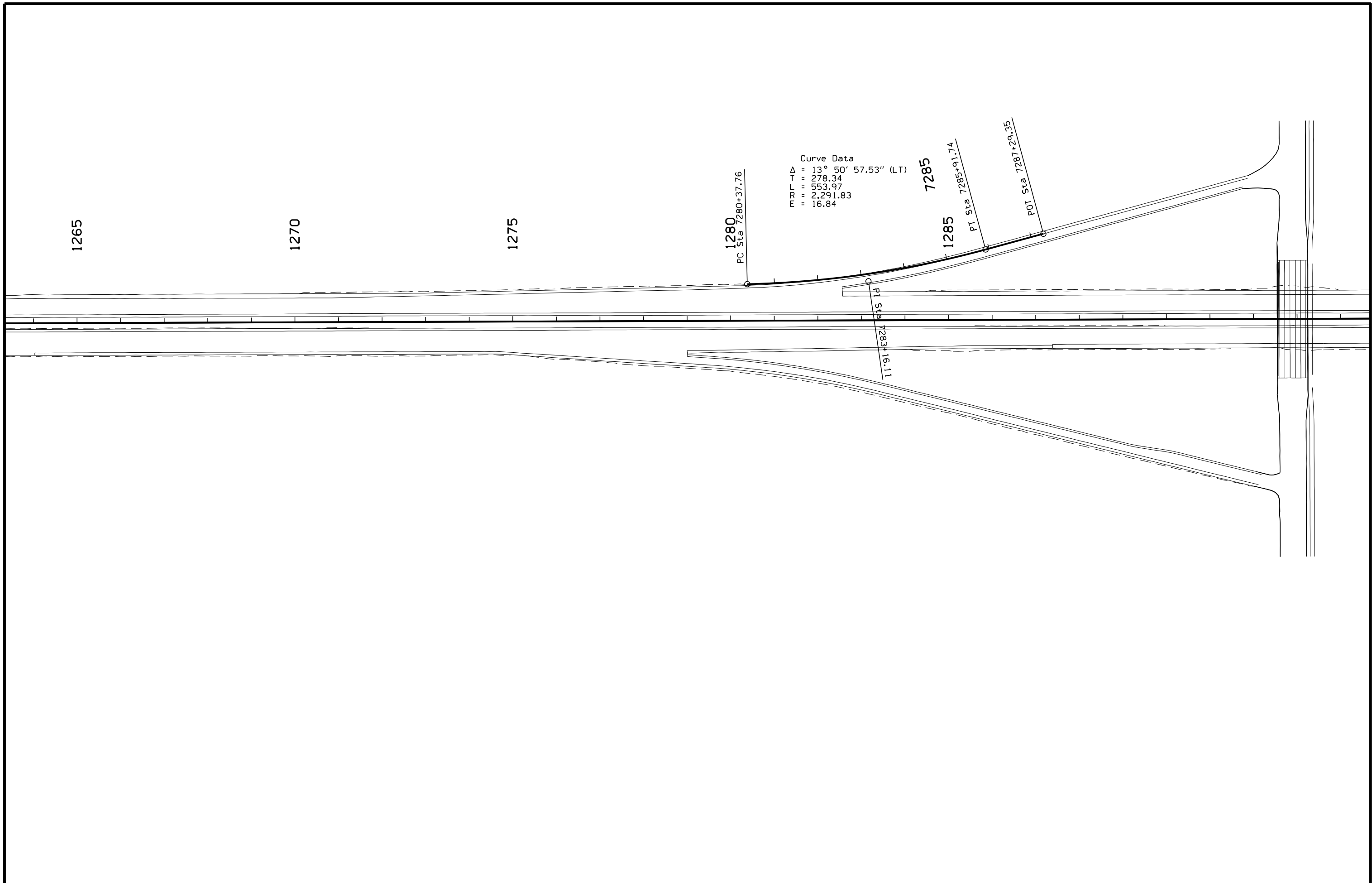
SCS PI Sta 1073+97.13
 $\Delta = 23^\circ 10' 21.44''$ (LT)
 Theta = $1^\circ 07' 29.70''$
 Ls = 150.00
 Ts = 858.23
 Es = 858.23
 P = 79.71
 K = 0.25
 Xc = 75.00
 Yc = 149.99
 LT = 0.98
 ST = 100.00
 LC = 50.00

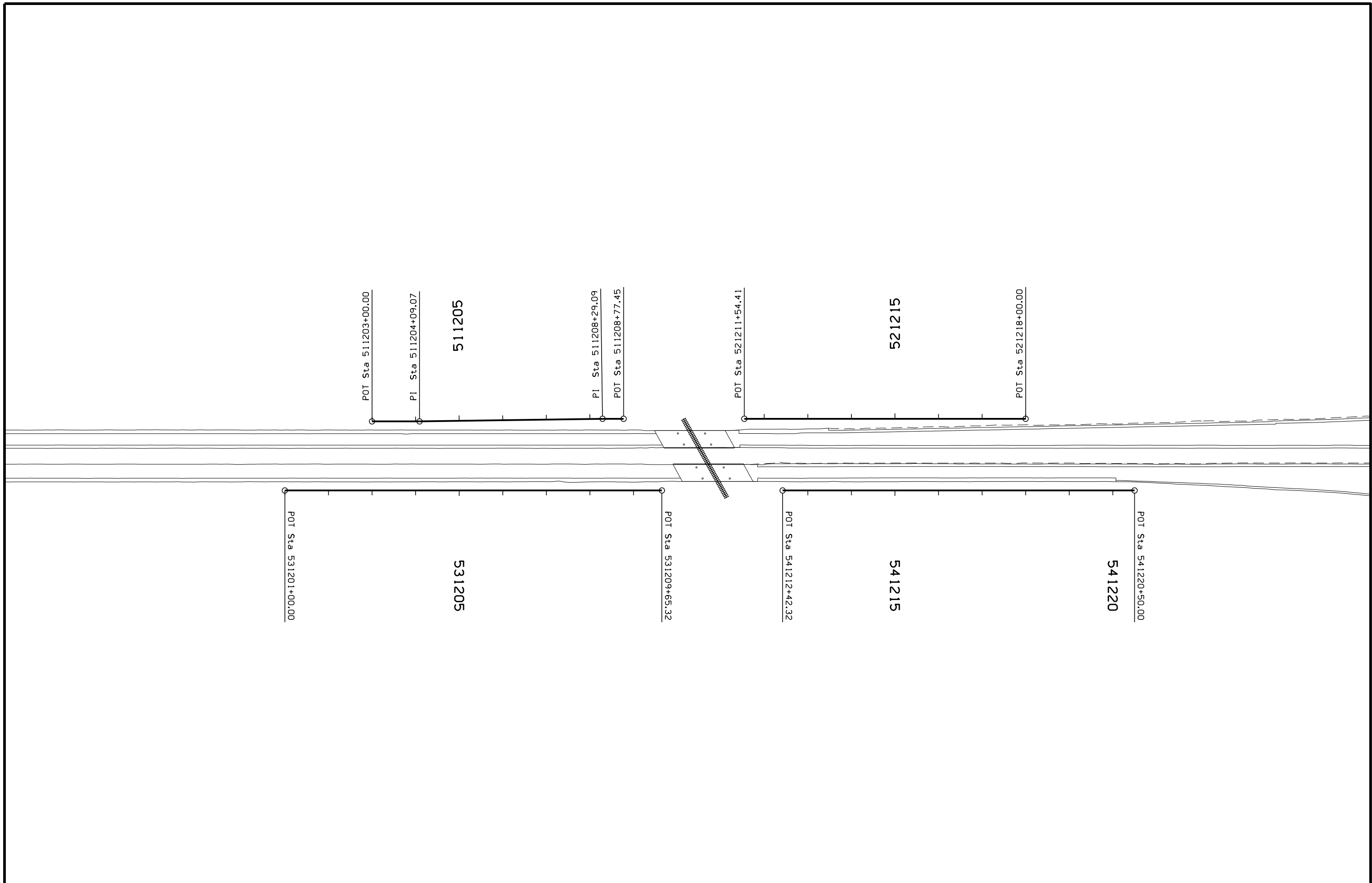
Curve Data
 $\Delta = 20^\circ 55' 22.04''$ (LT)
 T = 705.33
 L = 1,394.96
 R = 3,820.00
 E = 64.57

SCS PI Sta 1243+08.38
 $\Delta = 34^\circ 03' 06.60''$ (RT)
 Theta = $1^\circ 59' 59.47''$
 Ls = 200.00
 Ts = 977.51
 Es = 977.51
 P = 131.93
 K = 0.58
 Xc = 100.00
 Yc = 199.98
 LT = 2.33
 ST = 133.34
 LC = 66.67

Curve Data
 $\Delta = 30^\circ 03' 07.66''$ (RT)
 T = 769.07
 L = 1,502.72
 R = 2,865.00
 E = 101.43







Dallas	ROW: IMN-080-3(294)118--0E-25					PIN 18-25-080-020													
	W of Grand Prairie Pkwy to E of Jordan Creek Pkwy																		
			STATE			COUNTY						TEMP EASE	BORROW						
PARCEL NO.	OWNER NAME	FEE	EASE	FEE	EASE	FEE	EASE	EXCESS				FEE	T.E.	MITIGATION	OTHER	HOUSE	BUILDING(S)	A/C ONLY	TOTAL ACQ.
1	Dickson D Jensen - Fee	1938 SF																	
2	Guy J Gilreath - Fee	1811 SF																	
4	Monterey Building, LLC - Fee																		
3 PARCELS	"TOTALS	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC				
		3749 SF	12072 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF							

NO ACCESS RIGHTS ARE TO BE ACQUIRED ON THIS PROJECT.

ACCESS CONTROL PREVIOUSLY ACQUIRED.

Sta. 1137+80
15" X 219.3'
C.M.P.

BOONE TWP.
T-78N R-26W
SEC. 10

Sta. 1144+31
30" X 131.0' RCP
D.A.= NOT LISTED (PLANS)

DOUGLAS J & MARCY L
OSTRANDER

Extend Lt 19', Rt 21'
With 30" RCP
Lt. 1001.98
F.L. = Rt. 1001.11

JAMES & WANDA COONS
REV LIVING TRUST

CHARLES F & CHERYL A
GOODALL

STA. 1139+98.99
BEGIN WIDENING AND OVERLAY WB

WILLIAM G & MARY M
CROSS

STA. 1144+10
PLACE TYPE 'G'
DITCH BLOCK
EL. 1004.5

Sta. 1134+19
Skew 75° RT AH
10.0' X 8.0' X 334.0' RCB
D.A. = 670.0' A-R (PLANS)
(U.A.C.)

SW 1/4 NW 1/4
SEC 10

NE 1/4 NW 1/4
SEC 10

+ 1144+10 Prop.
Type "M" Dike
Elev. = 1004.25

15" X 35.5'
C.M.P.

1134+00.00
BEGIN SHOULDER

STA. 1144+10
PLACE TYPE 'G'
DITCH BLOCK
EL. 1003.7

24" X 12.2'
Conc. Pipe
(U.A.C.)

36" X 108.3'
Conc. Pipe
(U.A.C.)

15" X 28.7'
C.M.P.
(U.A.C.)

PAVILION PARK, LC

Sta. 1144+31
153' RT
30" X 50.8' RCP
(U.A.C.)

STA. 1139+75.92
BEGIN WIDENING AND OVERLAY EB

BOONE TWP.
T-78N R-26W
SEC. 10

SE 1/4 NW 1/4
SEC 10

+ 1144+00 Prop.
Type "M" Dike
Elev. = 1003.60

Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

ROW Team: Larson / Hughes
ROW #: IMN-080-3(294)118--OE-25
Plan Date: 3-31-2021

Color Legend:
Property Lines
Temporary Easement
Permanent Acquisition



DOUGLAS J &
MARCY L
OSTRANDER

BOONE TWP.
T-78N R-26W
SEC. 10

WILLIAM B CHASE TRUST

JAMES & WANDA COONS
REV LIVING TRUST

1150

1155

1160

80

WENDOVER RD

15" X 40.2'
C.M.P.
(U.A.C.)

15" X 22.7'
C.M.P.
(U.A.C.)

ROBYN RAE LEE STOTTLEMYER

JARED B & JOLEE A
WILLIAMS

15" X 143.5'
C.M.P.
Remove

BOONE TWP.
T-78N R-26W
SEC. 10

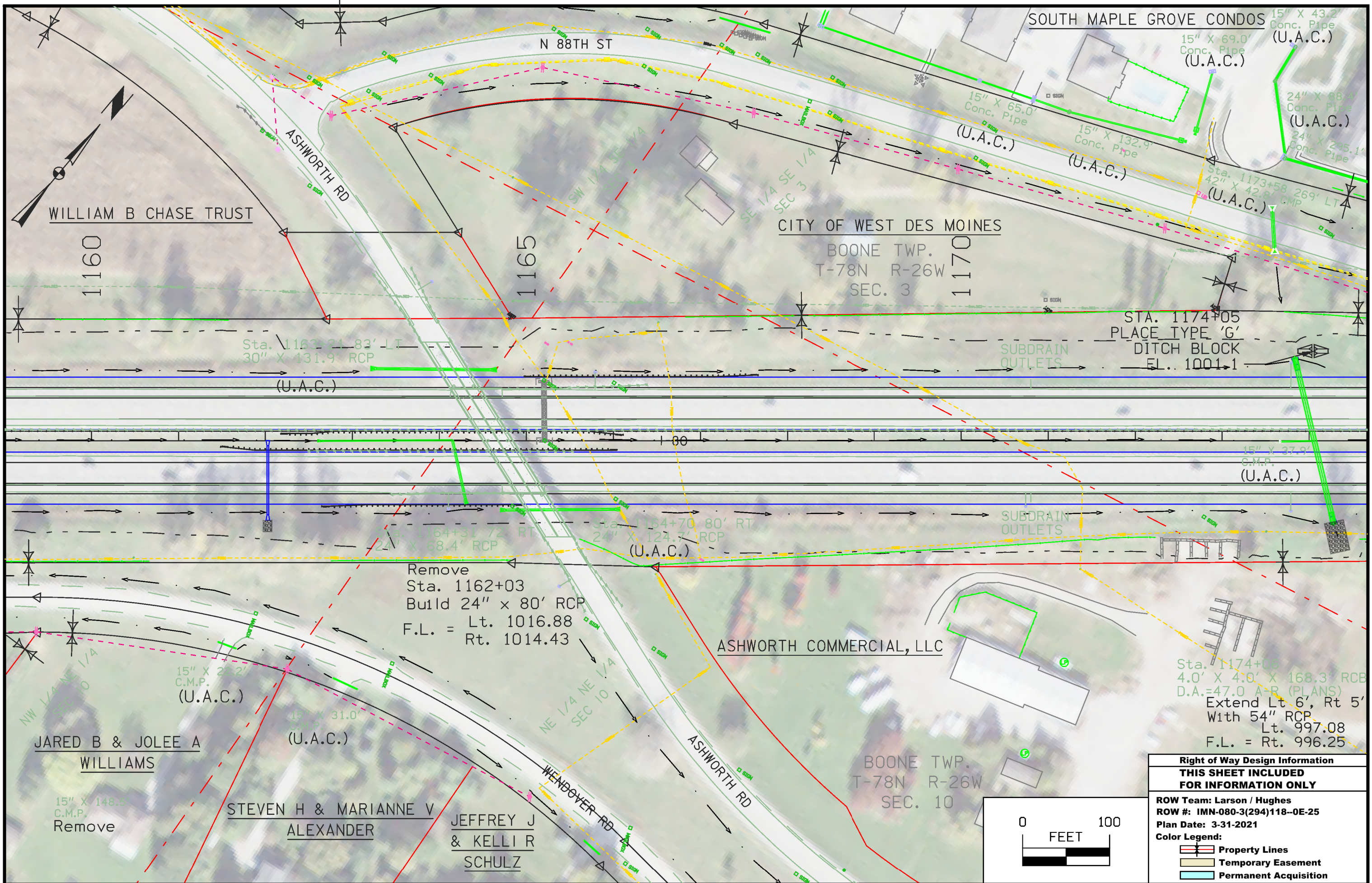
NW 1/4 NE 1/4
SEC 10

Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

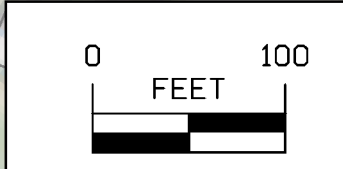
ROW Team: Larson / Hughes
ROW #: IMN-080-3(294)118--0E-25
Plan Date: 3-31-2021

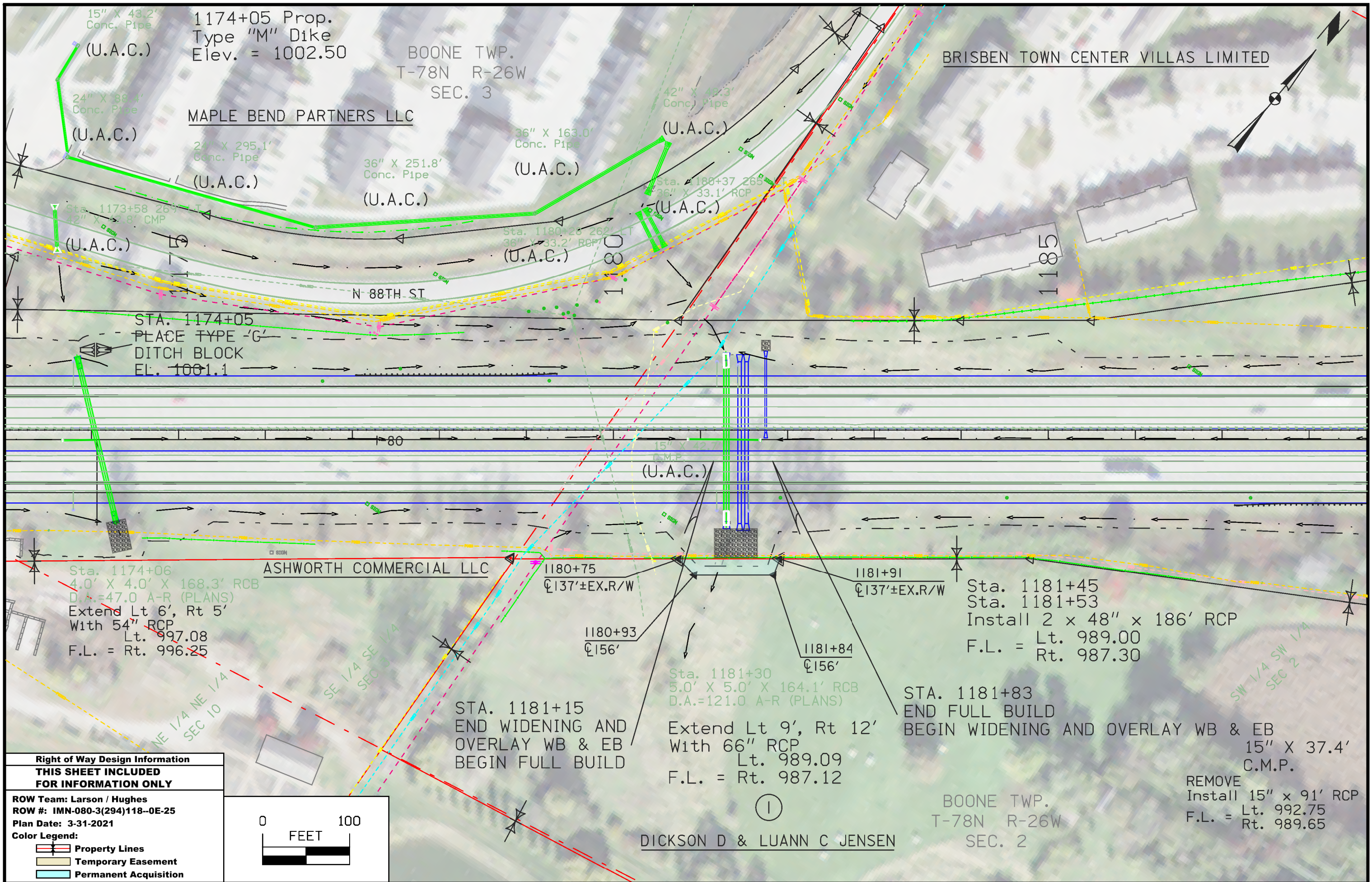
- Color Legend:
-  Property Lines
 -  Temporary Easement
 -  Permanent Acquisition





Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: Larson / Hughes	
ROW #: IMN-080-3(294)118-0E-25	
Plan Date: 3-31-2021	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition





1174+05 Prop.
Type "M" Dike
Elev. = 1002.50

BOONE TWP.
T-78N R-26W
SEC. 3

BRISBEN TOWN CENTER VILLAS LIMITED

MAPLE BEND PARTNERS LLC

24" X 295.1'
Conc. Pipe
(U.A.C.)

36" X 251.8'
Conc. Pipe
(U.A.C.)

36" X 163.0'
Conc. Pipe
(U.A.C.)

42" X 48.3'
Conc. Pipe
(U.A.C.)

Sta. 1180+28 262' LT
36" X 33.2' RCP
(U.A.C.)

Sta. 1180+37 265'
36" X 33.1' RCP
(U.A.C.)

STA. 1174+05
PLACE TYPE 'G'
DITCH BLOCK
EL. 1001.1

ASHWORTH COMMERCIAL LLC

1180+75
±137'±EX.R/W

1181+91
±137'±EX.R/W

Sta. 1181+45
Sta. 1181+53
Install 2 x 48" x 186' RCP
F.L. = Lt. 989.00
Rt. 987.30

Sta. 1174+06
4.0' X 4.0' X 168.3' RCB
D.A.=47.0 A-R (PLANS)
Extend Lt 6', Rt 5'
With 54" RCP
Lt. 997.08
F.L. = Rt. 996.25

1180+93
±156'

1181+84
±156'

Sta. 1181+30
5.0' X 5.0' X 164.1' RCB
D.A.=121.0 A-R (PLANS)

STA. 1181+15
END WIDENING AND
OVERLAY WB & EB
BEGIN FULL BUILD

Extend Lt 9', Rt 12'
With 66" RCP
Lt. 989.09
F.L. = Rt. 987.12

STA. 1181+83
END FULL BUILD
BEGIN WIDENING AND OVERLAY WB & EB
15" X 37.4'
C.M.P.

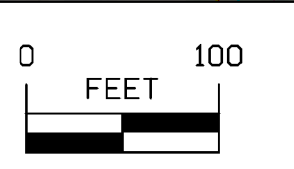
REMOVE
Install 15" x 91' RCP
F.L. = Lt. 992.75
Rt. 989.65

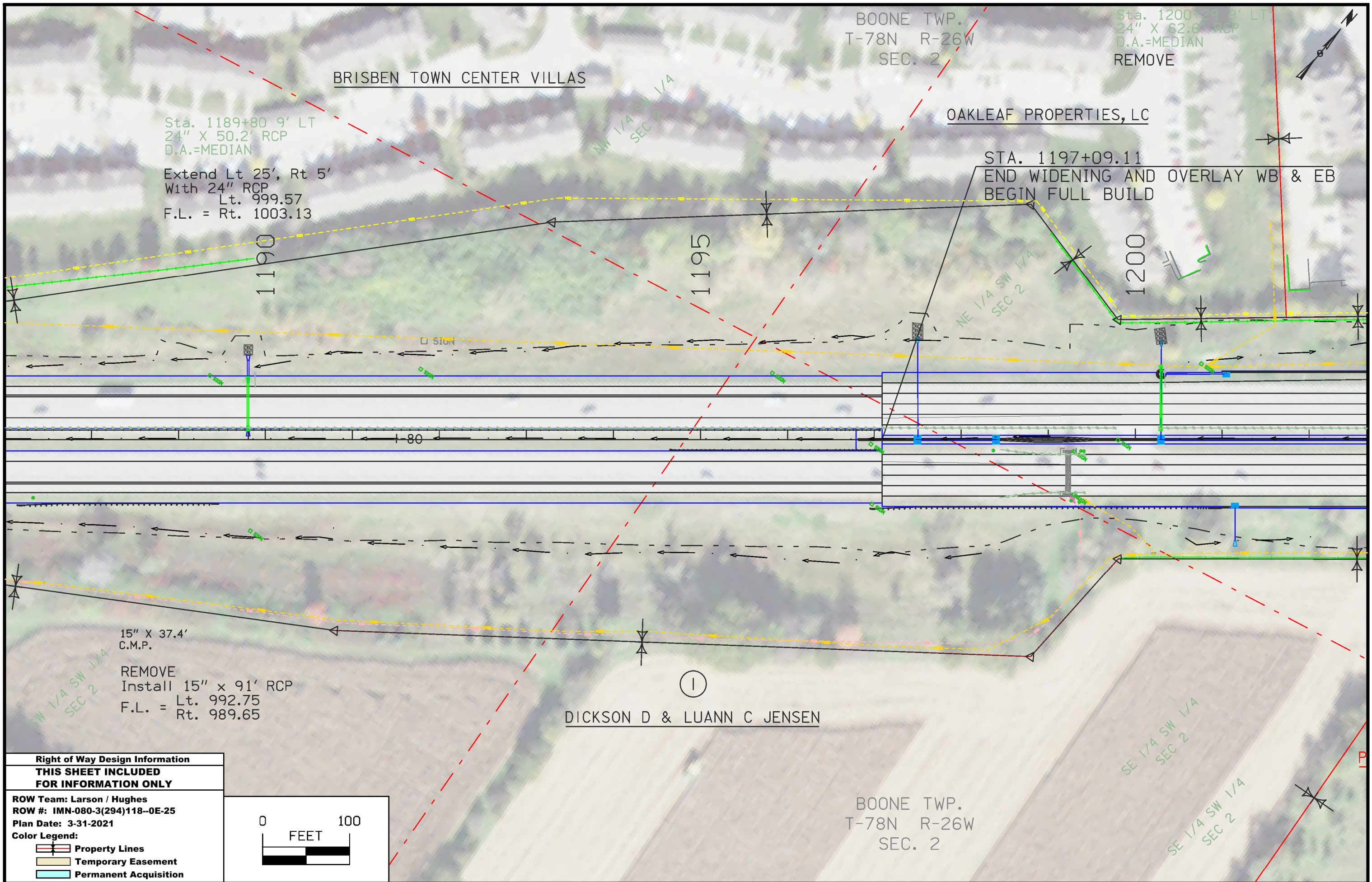
BOONE TWP.
T-78N R-26W
SEC. 2

DICKSON D & LUANN C JENSEN

Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

ROW Team: Larson / Hughes
ROW #: IMN-080-3(294)118--0E-25
Plan Date: 3-31-2021
Color Legend:
Property Lines
Temporary Easement
Permanent Acquisition





Sta. 1189+80 9' LT
24" X 50.2' RCP
D.A.=MEDIAN
Extend Lt 25', Rt 5'
With 24" RCP
Lt. 999.57
F.L. = Rt. 1003.13

Sta. 1200+24 9' LT
24" X 62.6' RCP
D.A.=MEDIAN
REMOVE

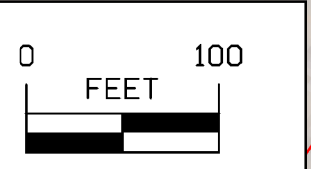
15" X 37.4'
C.M.P.
REMOVE
Install 15" x 91' RCP
F.L. = Lt. 992.75
Rt. 989.65

STA. 1197+09.11
END WIDENING AND OVERLAY WB & EB
BEGIN FULL BUILD

Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

ROW Team: Larson / Hughes
ROW #: IMN-080-3(294)118--0E-25
Plan Date: 3-31-2021

Color Legend:
 Property Lines
 Temporary Easement
 Permanent Acquisition



THE VILLAGE AT MAPLE GROVE
TOWN HOME OWNERS ASSOCIATION

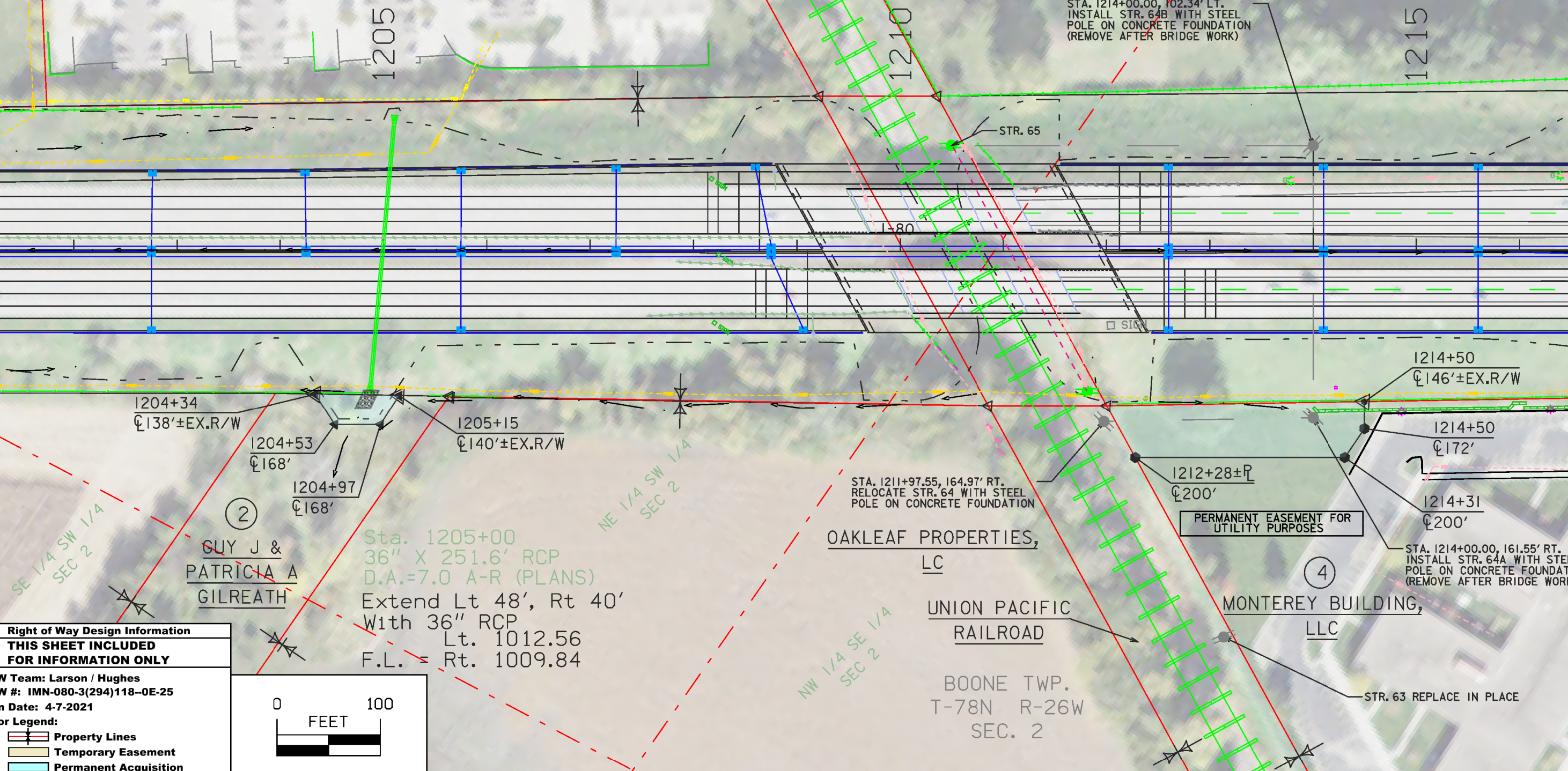
DES MOINES GOLF & COUNTRY CLUB

BOONE TWP.
T-78N R-26W
SEC. 2

OAKLEAF PROPERTIES, LC

UNION PACIFIC
RAILROAD

STA. 1214+00.00, 102.34' LT.
INSTALL STR. 64B WITH STEEL
POLE ON CONCRETE FOUNDATION
(REMOVE AFTER BRIDGE WORK)



GUY J &
PATRICIA A
GILREATH

Sta. 1205+00
36" X 251.6' RCP
D.A.=7.0 A-R (PLANS)
Extend Lt 48', Rt 40'
With 36" RCP
Lt. 1012.56
F.L. = Rt. 1009.84

OAKLEAF PROPERTIES,
LC

UNION PACIFIC
RAILROAD

MONTEREY BUILDING,
LLC

BOONE TWP.
T-78N R-26W
SEC. 2

Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

ROW Team: Larson / Hughes
ROW #: IMN-080-3(294)118--0E-25
Plan Date: 4-7-2021
Color Legend:

- Property Lines
- Temporary Easement
- Permanent Acquisition



BOONE TWP.
T-78N R-26W
SEC. 2

DES MOINES GOLF & COUNTRY CLUB

STA. 1218+25.00
END FULL BUILD
BEGIN WIDENING & OVERLAY
WB & EB

1220

1225

1230

15" X 268.5'
C.M.P.
Remove

80

4

MONTEREY BUILDING, LLC

DALLAS COUNTY PARTNERS

Sta. 1224+30/ 6' RT
24" x 84.2' RCP
D.A. = MEDIAN

Extend Lt 4', Rt 14'
With 24" RCP
Lt. 1014.95
F.L. = Rt. 1009.08

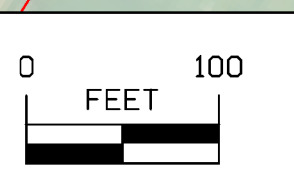
G6 HOSPITALITY PROPERTY,
LLC

HAWTHORNE BUILDING, LLC

Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

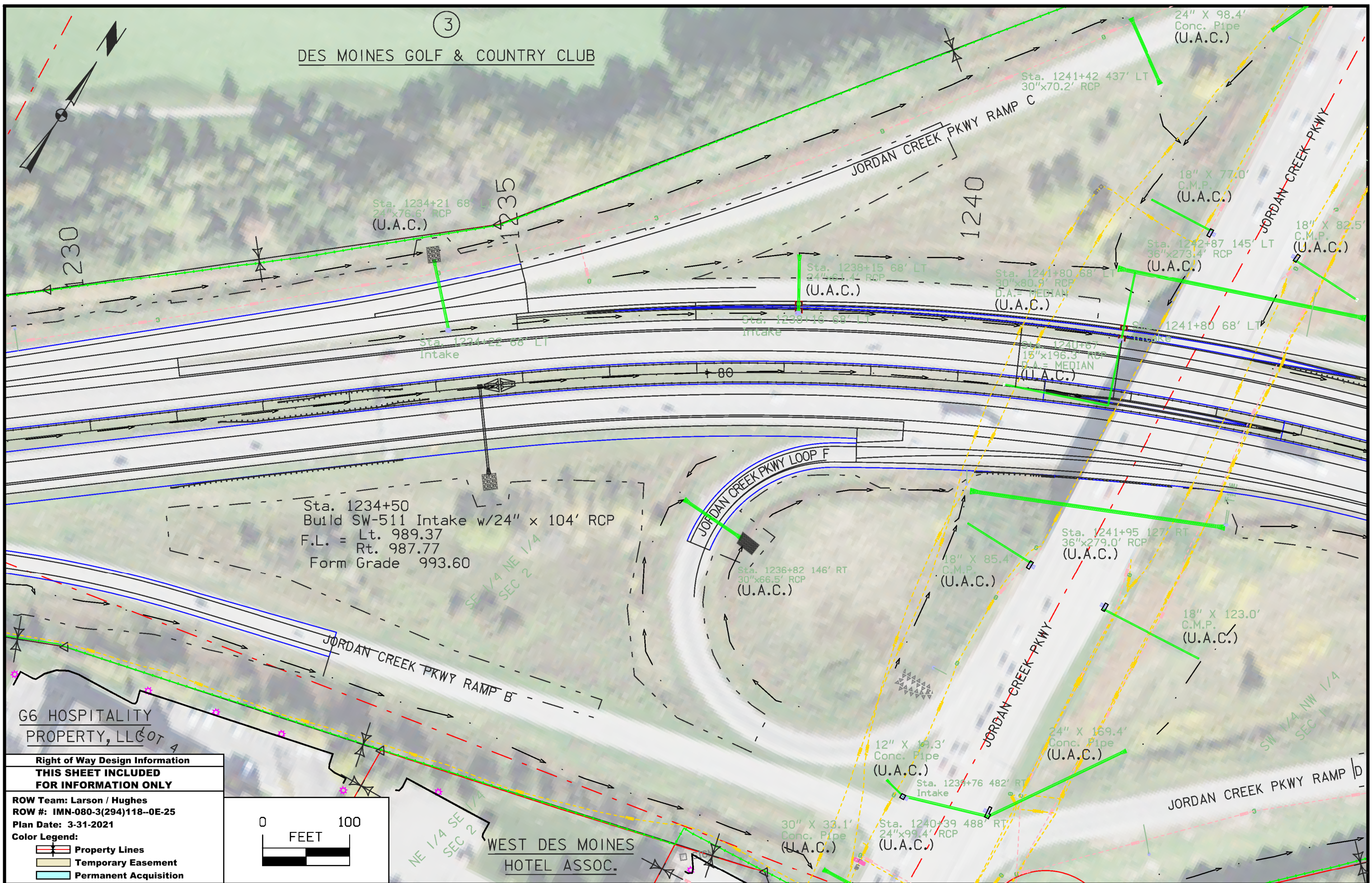
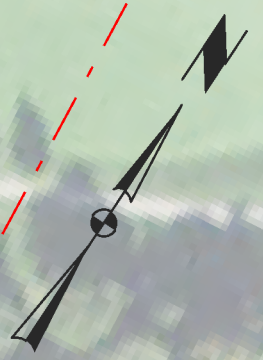
ROW Team: Larson / Hughes
ROW #: IMN-080-3(294)118--0E-25
Plan Date: 4-7-2021

Color Legend:
Property Lines
Temporary Easement
Permanent Acquisition



3

DES MOINES GOLF & COUNTRY CLUB



Sta. 1234+50
Build SW-511 Intake w/24" x 104' RCP
F.L. = Lt. 989.37
Rt. 987.77
Form Grade 993.60

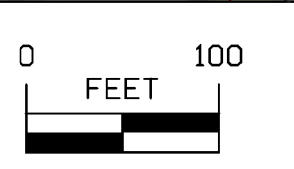
G6 HOSPITALITY
PROPERTY, LLC

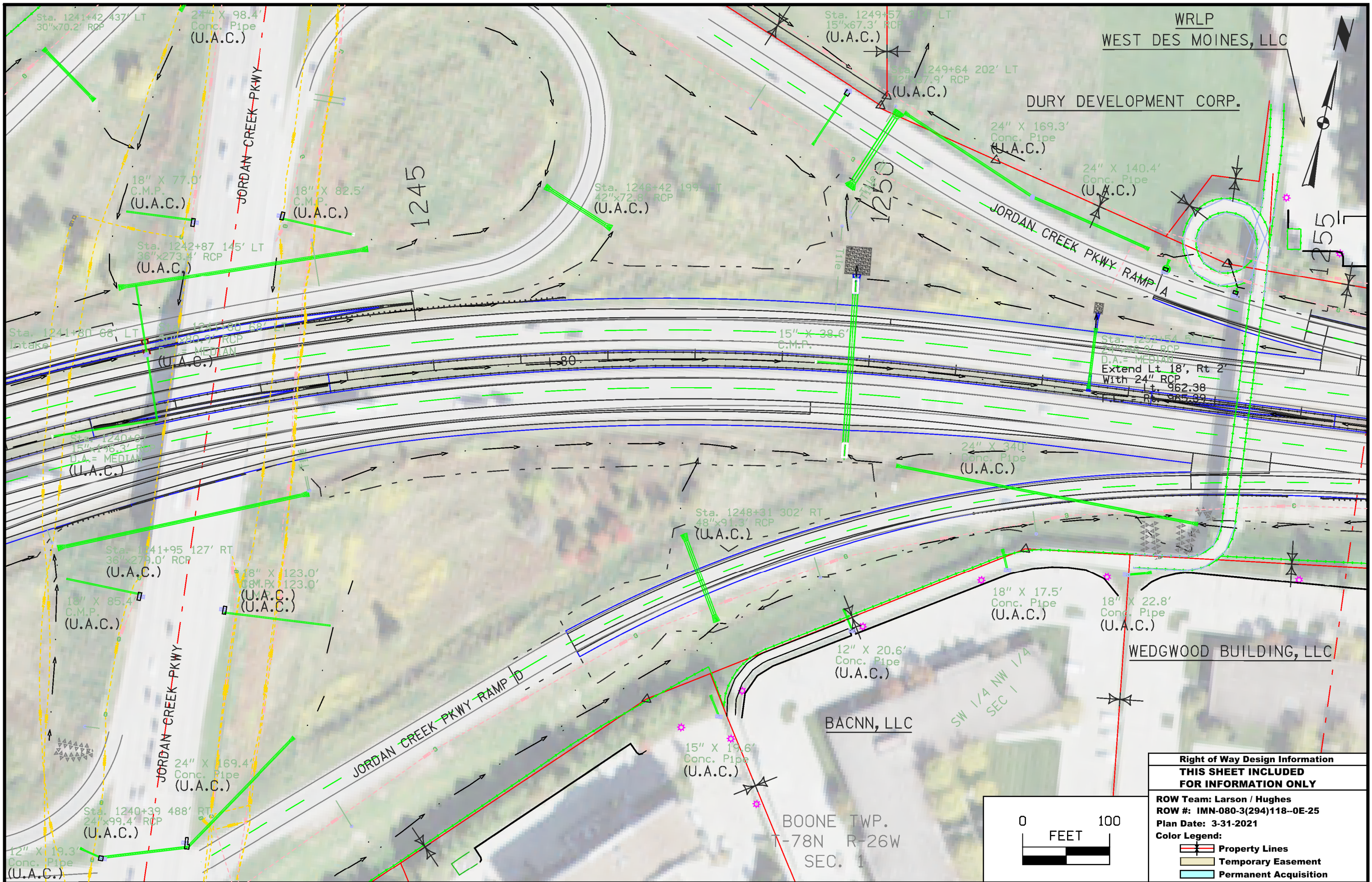
WEST DES MOINES
HOTEL ASSOC.

Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

ROW Team: Larson / Hughes
ROW #: IMN-080-3(294)118--0E-25
Plan Date: 3-31-2021

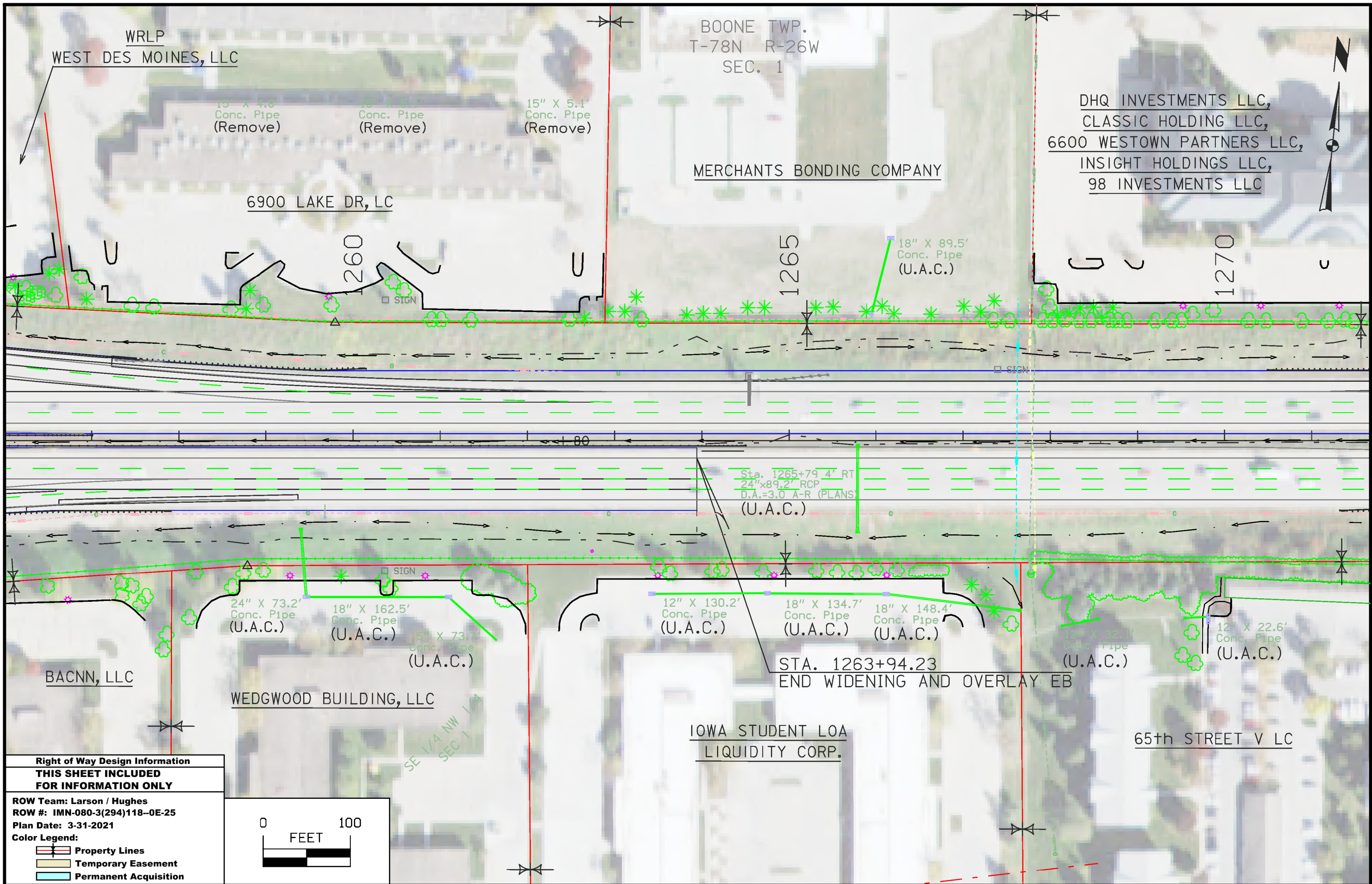
Color Legend:
Property Lines
Temporary Easement
Permanent Acquisition





**Right of Way Design Information
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ROW Team: Larson / Hughes
 ROW #: IMN-080-3(294)118-0E-25
 Plan Date: 3-31-2021
 Color Legend:
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BOONE TWP.
T-78N R-26W
SEC. 1

DHQ INVESTMENTS LLC,
CLASSIC HOLDING LLC,
6600 WESTOWN PARTNERS LLC,
INSIGHT HOLDINGS LLC,
98 INVESTMENTS LLC

MERCHANTS BONDING COMPANY

WRLP
WEST DES MOINES, LLC

15" X 4.8
Conc. Pipe
(Remove)

15" X 5.1
Conc. Pipe
(Remove)

15" X 5.1
Conc. Pipe
(Remove)

6900 LAKE DR, LC

260

1265

18" X 89.5'
Conc. Pipe
(U.A.C.)

1270

Sta. 1265+79.4' RT
24" X 89.2" RCP
D.A.=3.0' A-R (PLANS)
(U.A.C.)

24" X 73.2'
Conc. Pipe
(U.A.C.)

18" X 162.5'
Conc. Pipe
(U.A.C.)

15" X 73.7'
Conc. Pipe
(U.A.C.)

12" X 130.2'
Conc. Pipe
(U.A.C.)

18" X 134.7'
Conc. Pipe
(U.A.C.)

18" X 148.4'
Conc. Pipe
(U.A.C.)

12" X 130.2'
Conc. Pipe
(U.A.C.)

12" X 22.6'
Conc. Pipe
(U.A.C.)

BACNN, LLC

WEDGWOOD BUILDING, LLC

STA. 1263+94.23
END WIDENING AND OVERLAY EB

IOWA STUDENT LOA
LIQUIDITY CORP.

65th STREET V LC

Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

ROW Team: Larson / Hughes
ROW #: IMN-080-3(294)118--0E-25
Plan Date: 3-31-2021

Color Legend:
 Property Lines
 Temporary Easement
 Permanent Acquisition



BOONE TWP.
T-78N R-26W
SEC. 1

Extend Lt 12'
With 54" RCP
Lt. 967.41
F.L. = Rt. 957.31

WOLF REAL ESTATE INVESTMENT LLC

WESTOWN PARKWAY, LLC

DHQ INVESTMENTS LLC,
CLASSIC HOLDING LLC,
6600 WESTOWN PARTNERS LLC,
INSIGHT HOLDINGS LLC,
98 INVESTMENTS LLC

Sta. 1286+50 119' LT
30"x96.4' RCP
(U.A.C.)

SW 1/4 NE 1/4
SEC 1

1275

1280

12" X 57.0'
(U.A.C.)

1285

Sta. 1281+20
54"x308.0' RCP
D.A.=48.0 A-R (PLANS)
(U.A.C.)

Sta. 1281+79 5' RT
24"x154.9' RCP
(U.A.C.)

Sta. 1285+68
Skew 54° LT AH
36"x308.9' RCP
(U.A.C.)

Sta. 1283+48 114' RT
24"x72.9' RCP
(U.A.C.)

12" X 243'
Canc. 1114'
(U.A.C.)

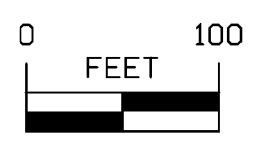
65th STREET V LC

60th STREET III LC

Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

ROW Team: Larson / Hughes
ROW #: IMN-080-3(294)118--0E-25
Plan Date: 3-31-2021

Color Legend:
Property Lines
Temporary Easement
Permanent Acquisition



WESTOWN EQUITY, LLC

BOONE TWP.
T-78N R-26W
SEC. 1

SE 1/4 NE 1/4
SEC 1



15" X 304.1'
Conc. Pipe

24" 72.3'
Conc. Pipe
(U.A.C.)

Sta. 1293+20 278' LT
15"x621.8' RCP
(U.A.C.)

Sta. 1294+41 94' LT
24"x251.5' RCP
(U.A.C.)

Sta. 1293+9 24" x 228.4' RCP
(U.A.C.)

Sta. 1293+20 327' RT
15"x59.9' RCP
(U.A.C.)

36" X 57.0'
Conc. Pipe
(U.A.C.)

15" X 18.5'
Conc. Pipe
(U.A.C.)

36" X 25.3'
Conc. Pipe

Sta. 1286+50 119' LT
30"x96.4' RCP
(U.A.C.)

Sta. 1286+50 119' LT
30"x96.4' RCP
(U.A.C.)

STA. 1291+54.65
END WIDENING AND OVERLAY WB

CONSTRUCTION

1295

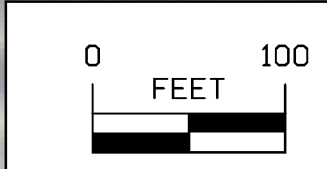
1300

80

Sta. 1285+68
Skew 54° LT AH
36"x208.9' RCP
(U.A.C.)

CITY OF WEST DES MOINES

Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: Larson / Hughes	
ROW #: IMN-080-3(294)118-0E-25	
Plan Date: 3-31-2021	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition



CROSS SECTION VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Lavender	(9)	Temporary Pavement Shading
Brown, Med	(237)	Future Proposed Pavement Shading

CROSS SECTION VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

	Pavement Removal		Proposed Granular Shoulder
	Proposed Granular Subbase		Temporary Shoulder
	Proposed Special Backfill		Existing Shoulder Strengthening
	Temporary Barrier Rail		Permanent Barrier Rail
			Channelizing Device

PLAN VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Magenta	(5)	Pavement Marking Call Outs
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Yellow	(4)	Pavement Markings, Yellow
Off White	(254)	Pavement Markings, White

SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(80)	Proposed Granular Surface Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Lavender	(9)	Temporary Pavement Shading
Brown, Light	(236)	Proposed Grading Limits Shading
Pink, Dark	(13)	Proposed MSE or CIP Wall Shading
Red	(3)	Proposed Bridge Shading and Sign Trusses
Black w/Gray, Light Fill	(0,48)	Previously Constructed Structure

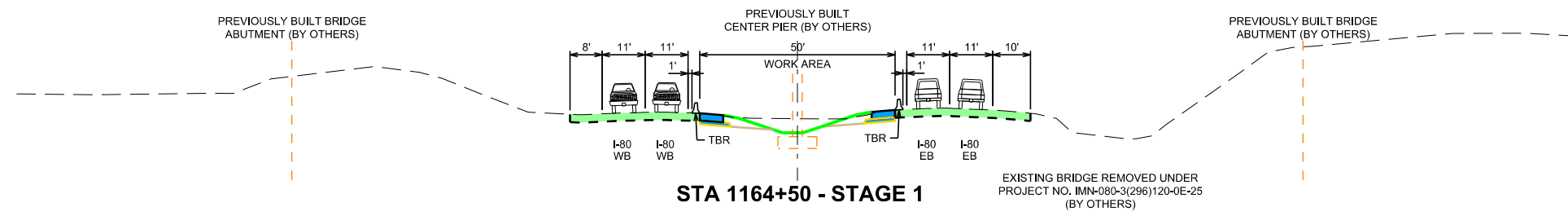
PLAN VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

●	Channelizing Device		Crash Cushion
✕	Drum		Crash Cushion (Sand Barrel)
■	Temporary Lane Separator		Traffic Signal
◆	Tubular Marker		Flagger
♦	Channelizer Marker		Temporary Floodlighting
△	Concrete Barrier Marker		Traffic Sign
<	Delineator		Type III Barricade
	Temporary Barrier Rail Unpinned		Type A Warning Light
	Temporary Barrier Rail Pinned		Direction of Traffic
	Pavement Removal		Safety Closure
	Contractor Ingress		
	Contractor Egress		

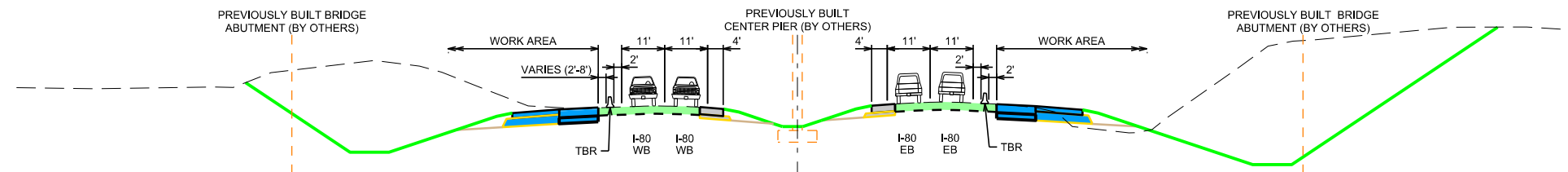
NOTE: Device spacing according to Standard Road Plans unless specifically dimensioned.

TRAFFIC CONTROL AND STAGING LEGEND AND SYMBOL INFORMATION SHEET

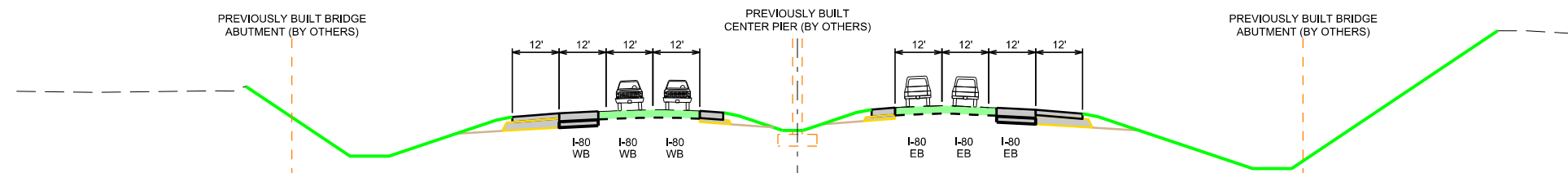
(COVERS SHEET SERIES J)



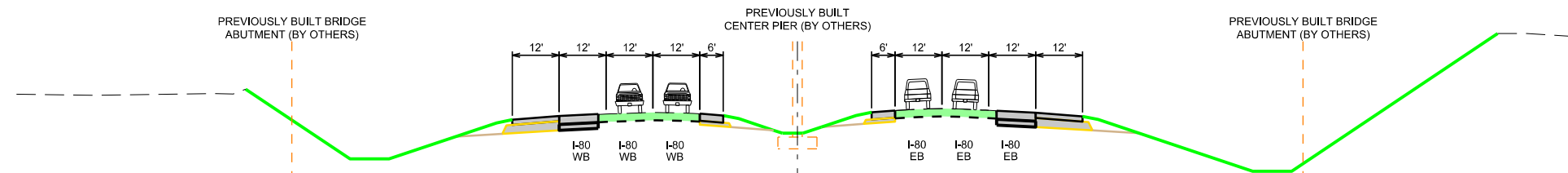
STA 1164+50 - STAGE 1



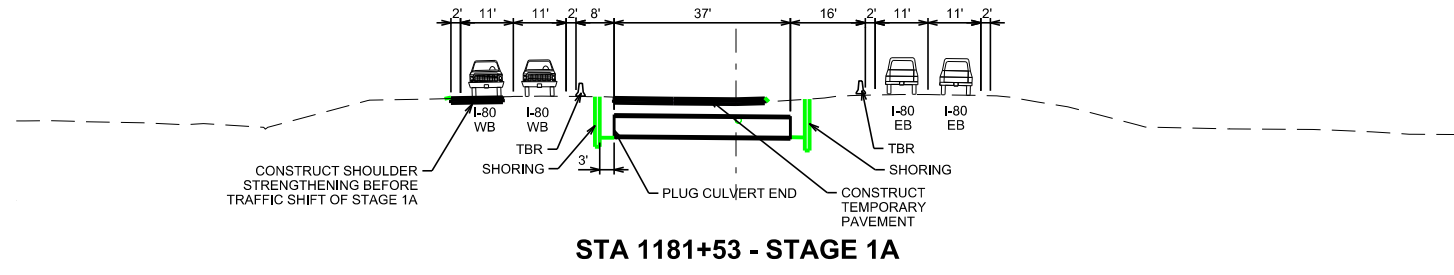
STA 1164+50 - STAGE 2B



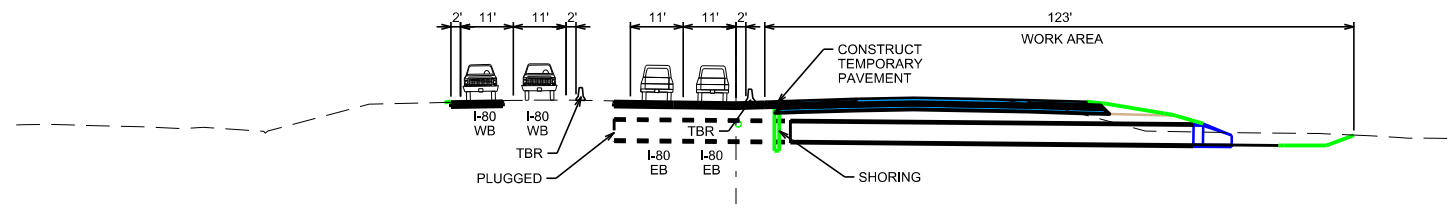
STA 1164+50 - STAGE 3



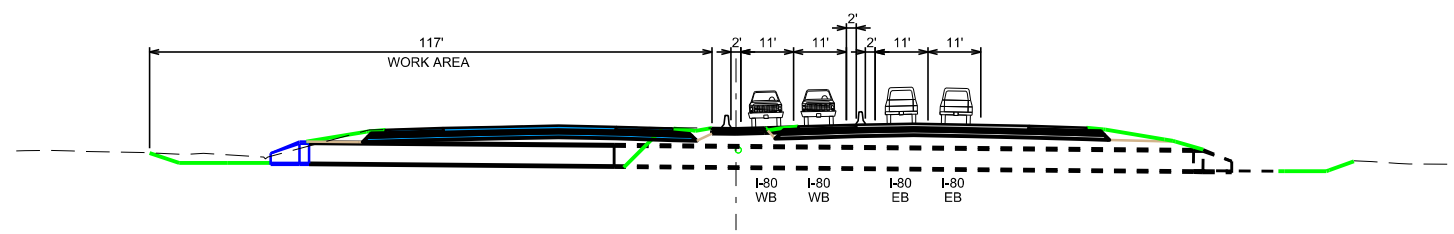
STA 1164+50 - STAGE 4



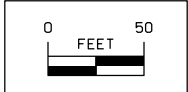
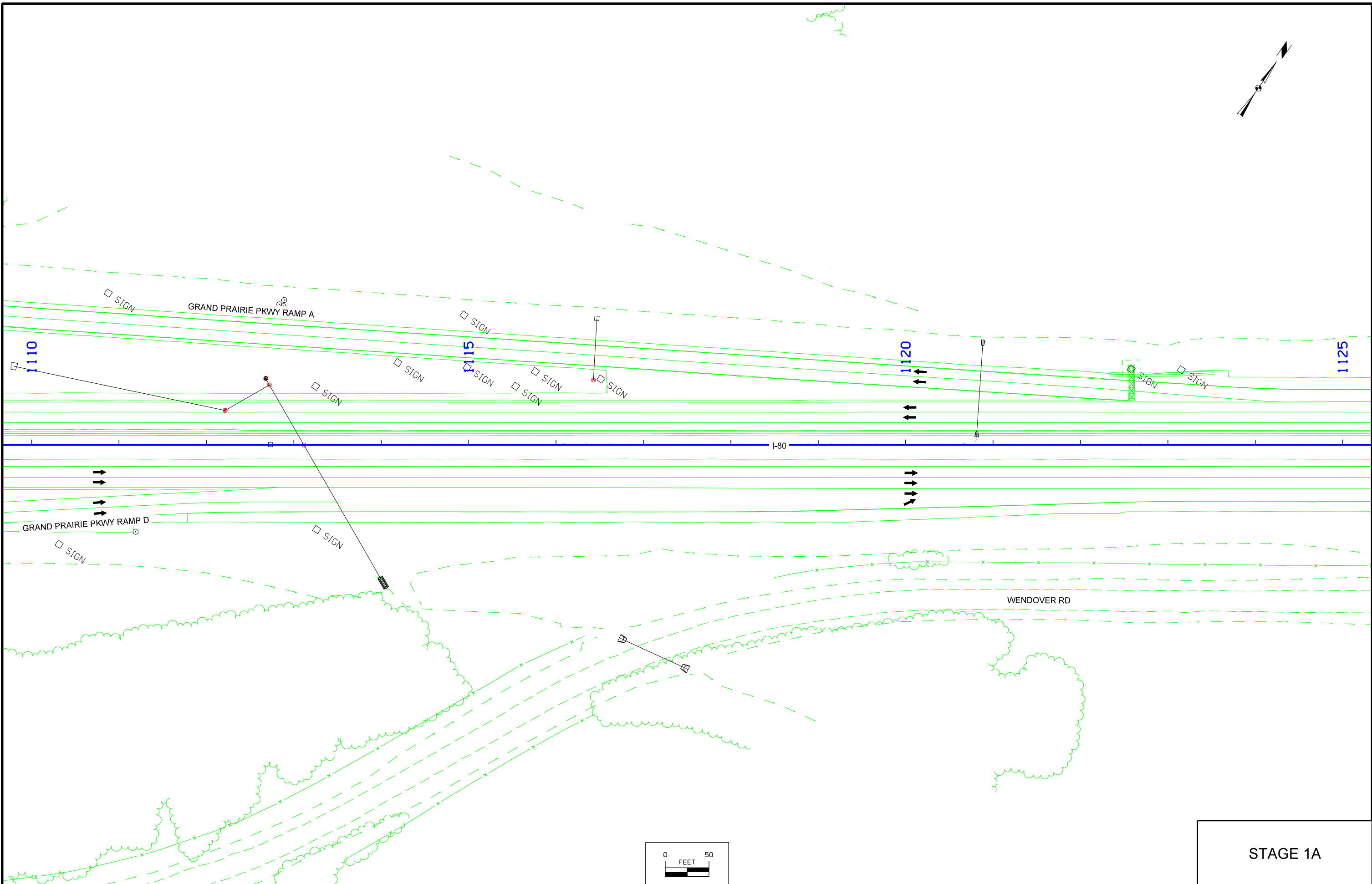
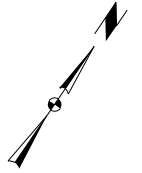
STA 1181+53 - STAGE 1A



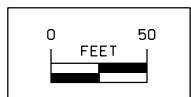
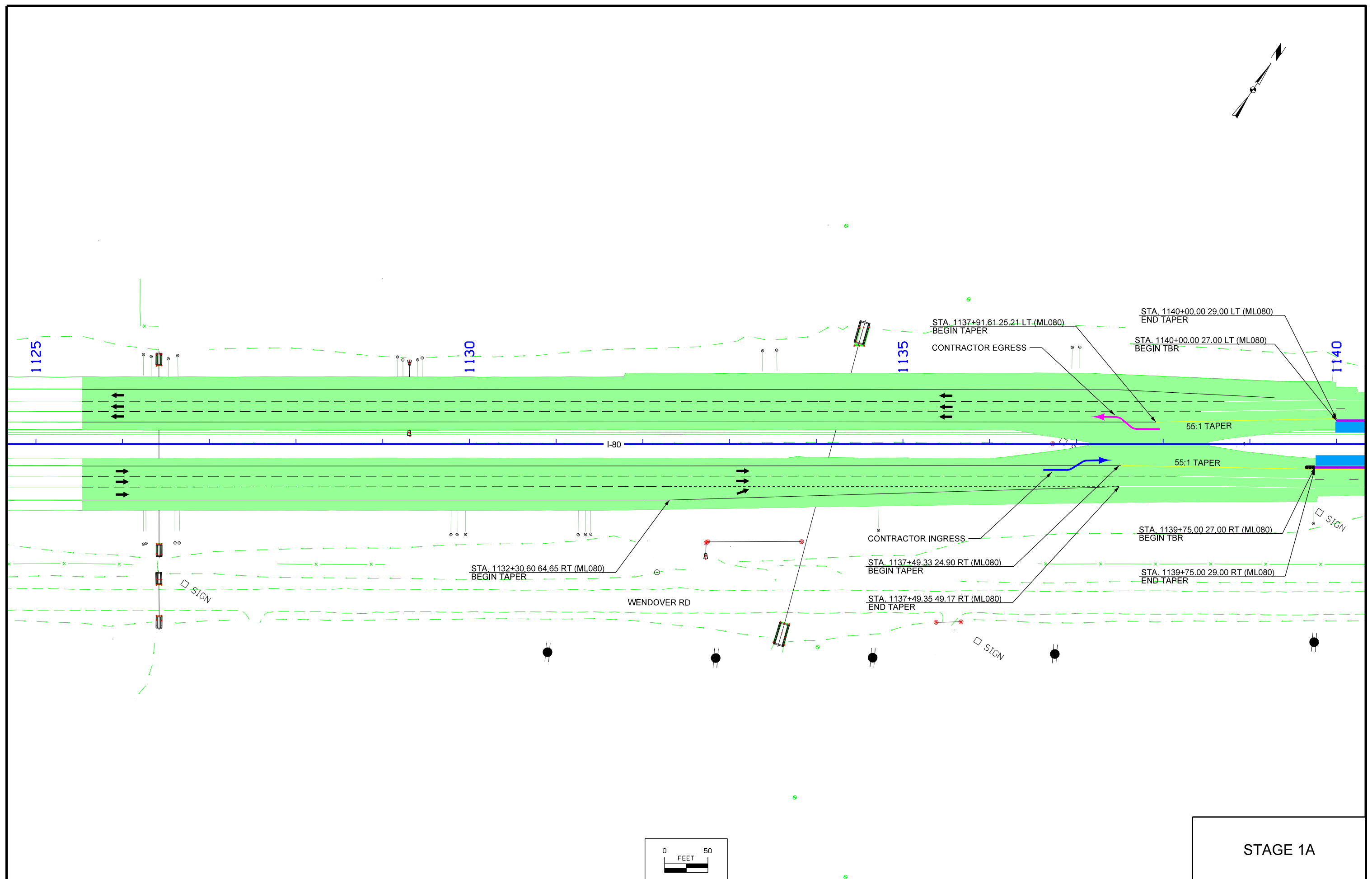
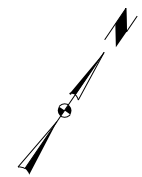
STA 1181+53 - STAGE 1B



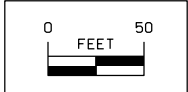
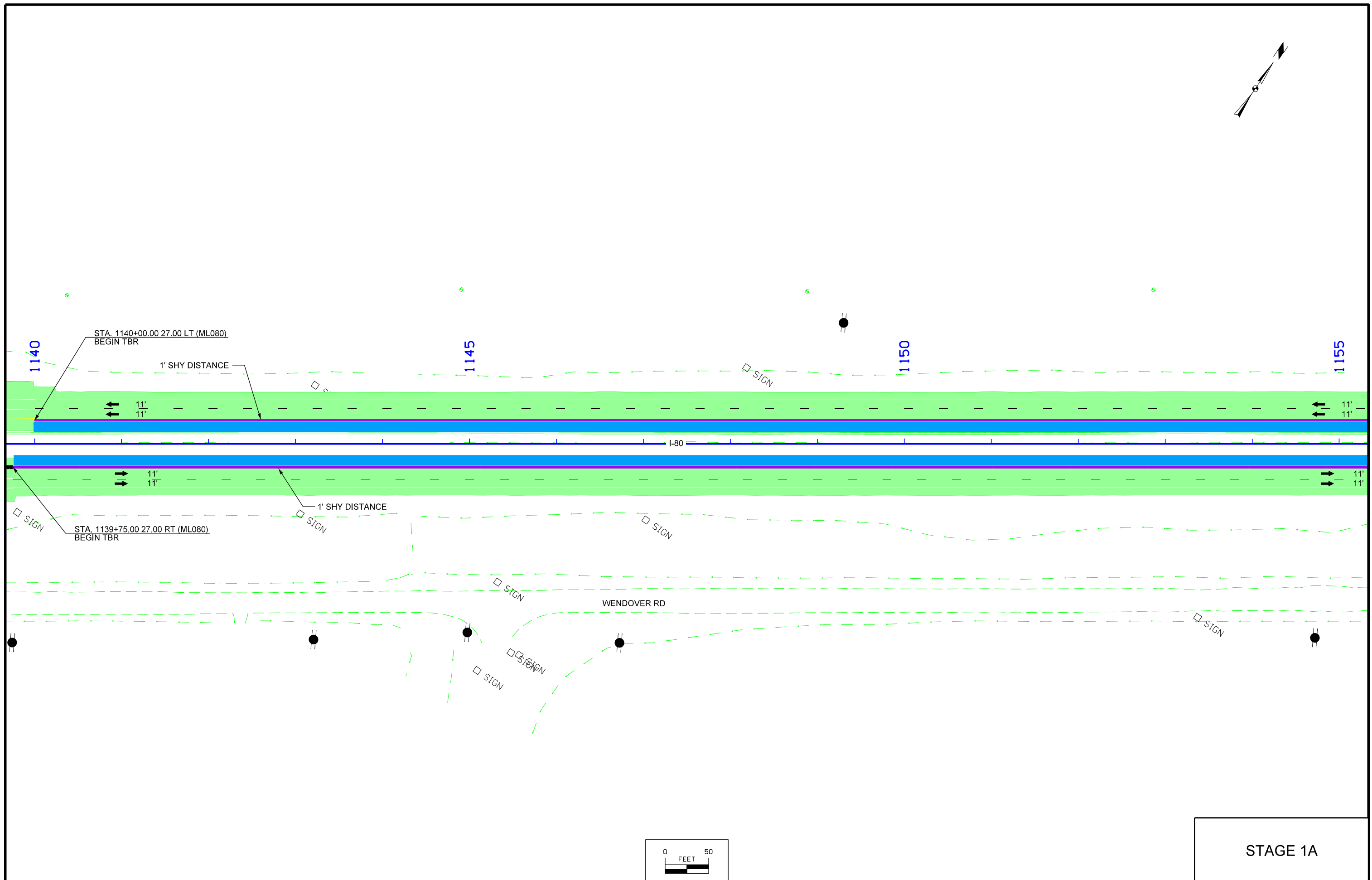
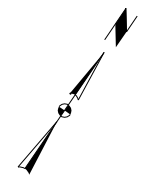
STA 1181+53 - STAGE 1C



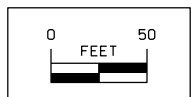
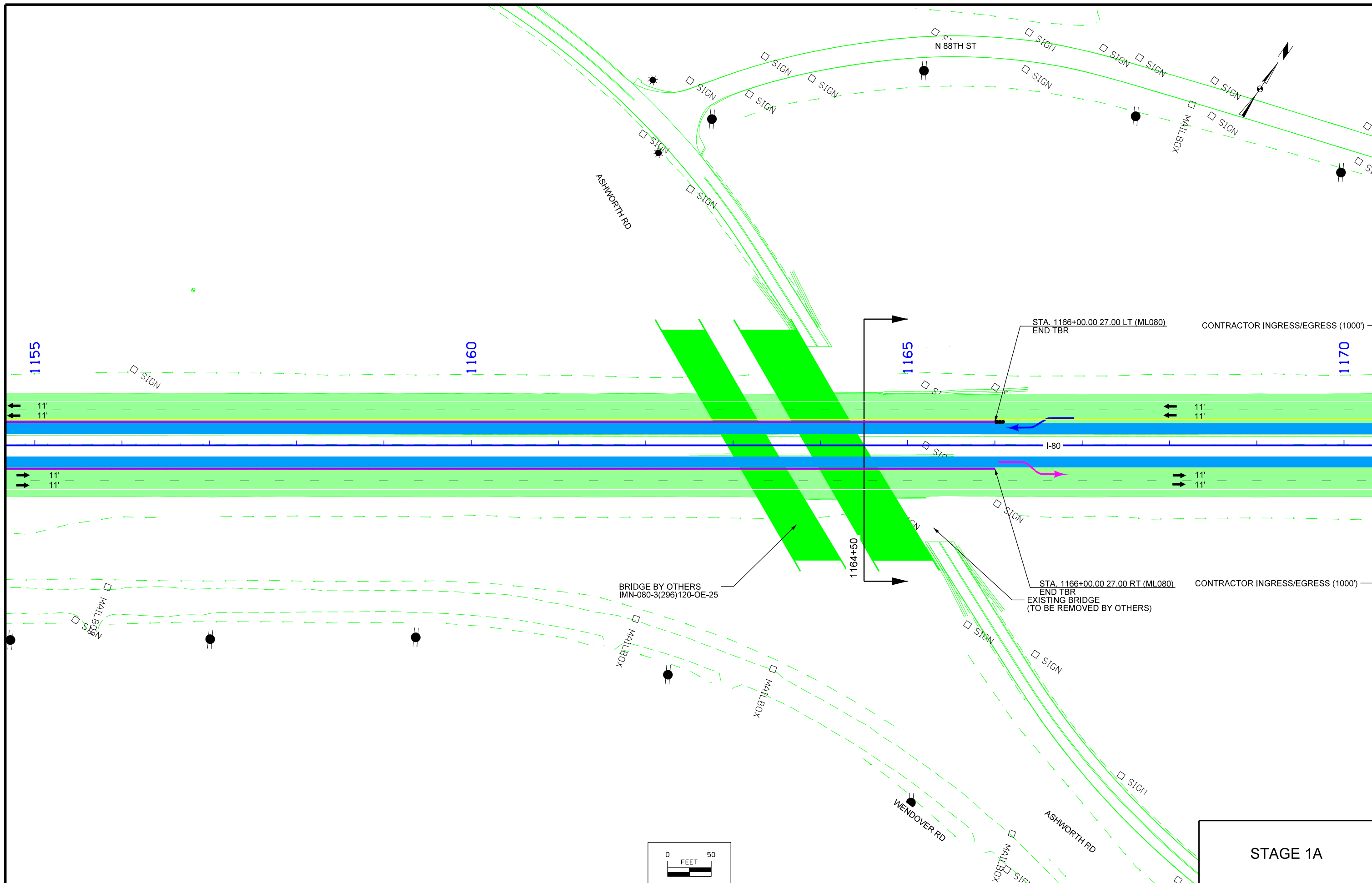
STAGE 1A



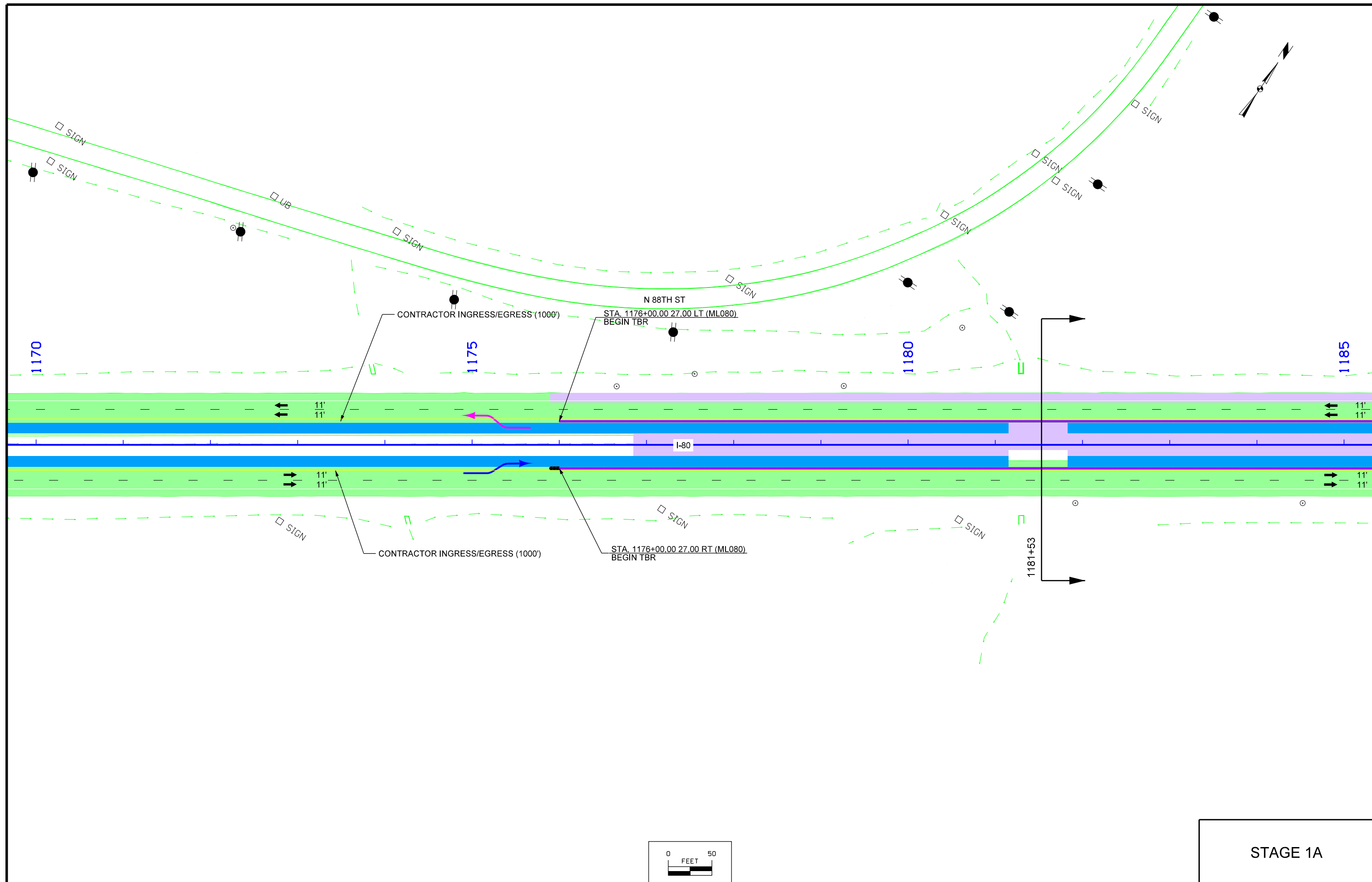
STAGE 1A



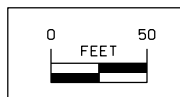
STAGE 1A

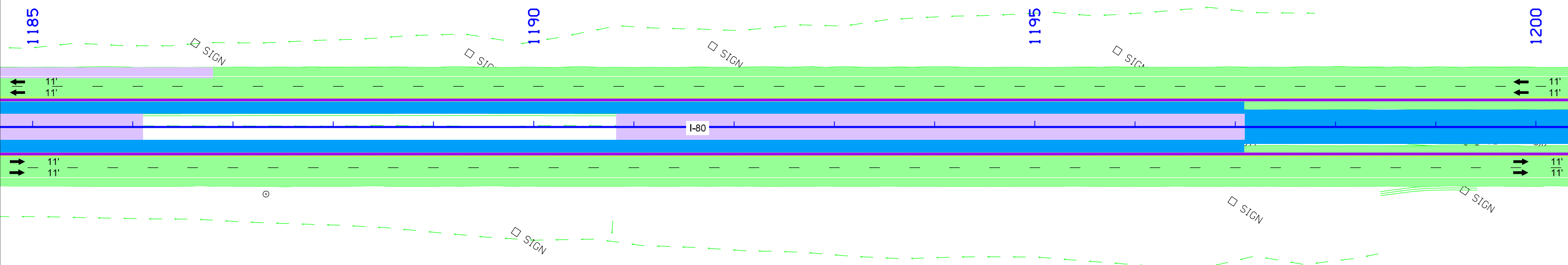
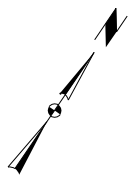


STAGE 1A

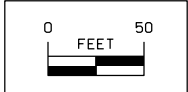


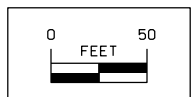
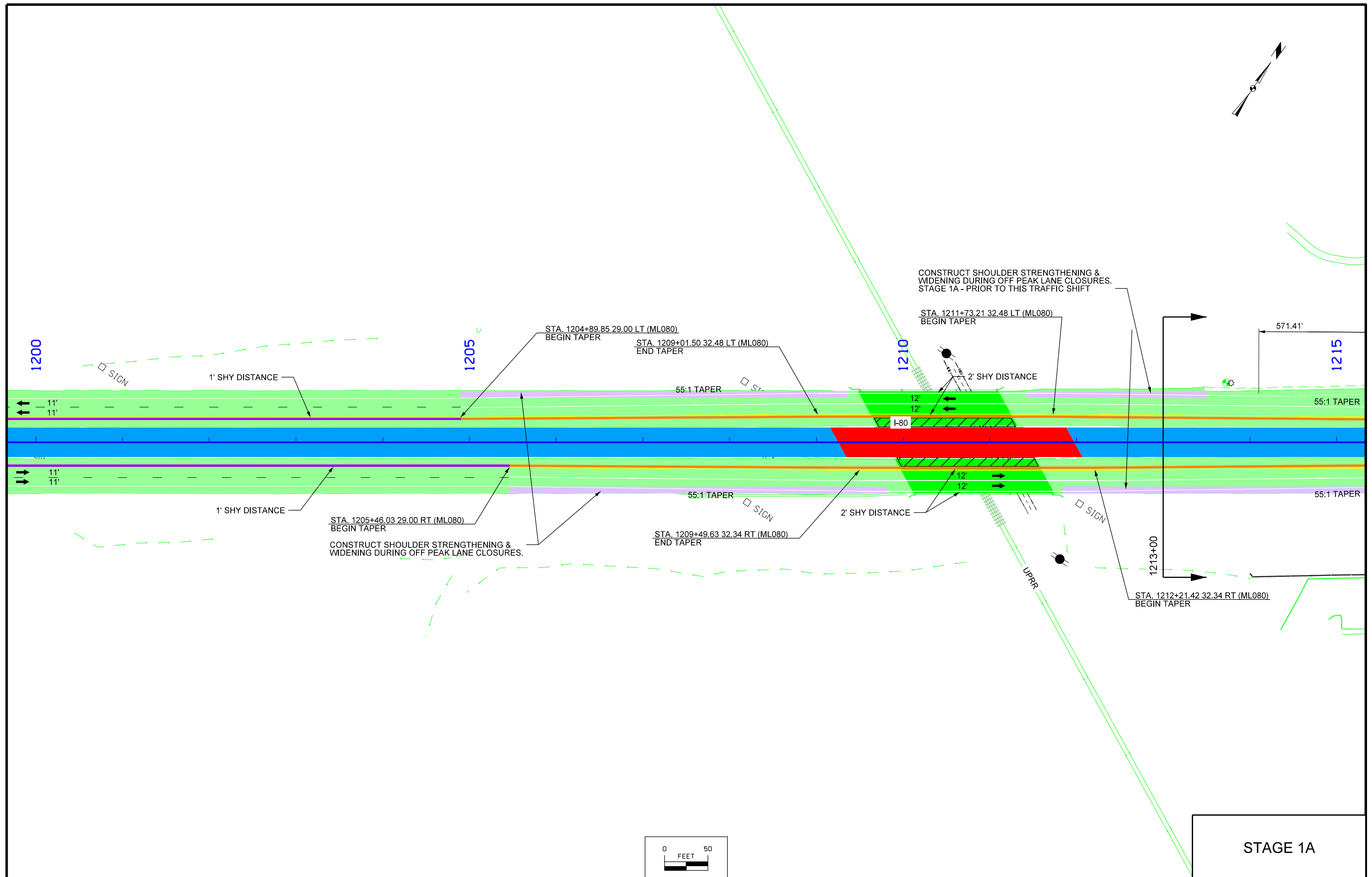
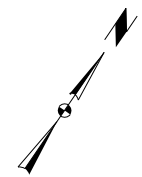
STAGE 1A



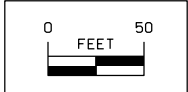
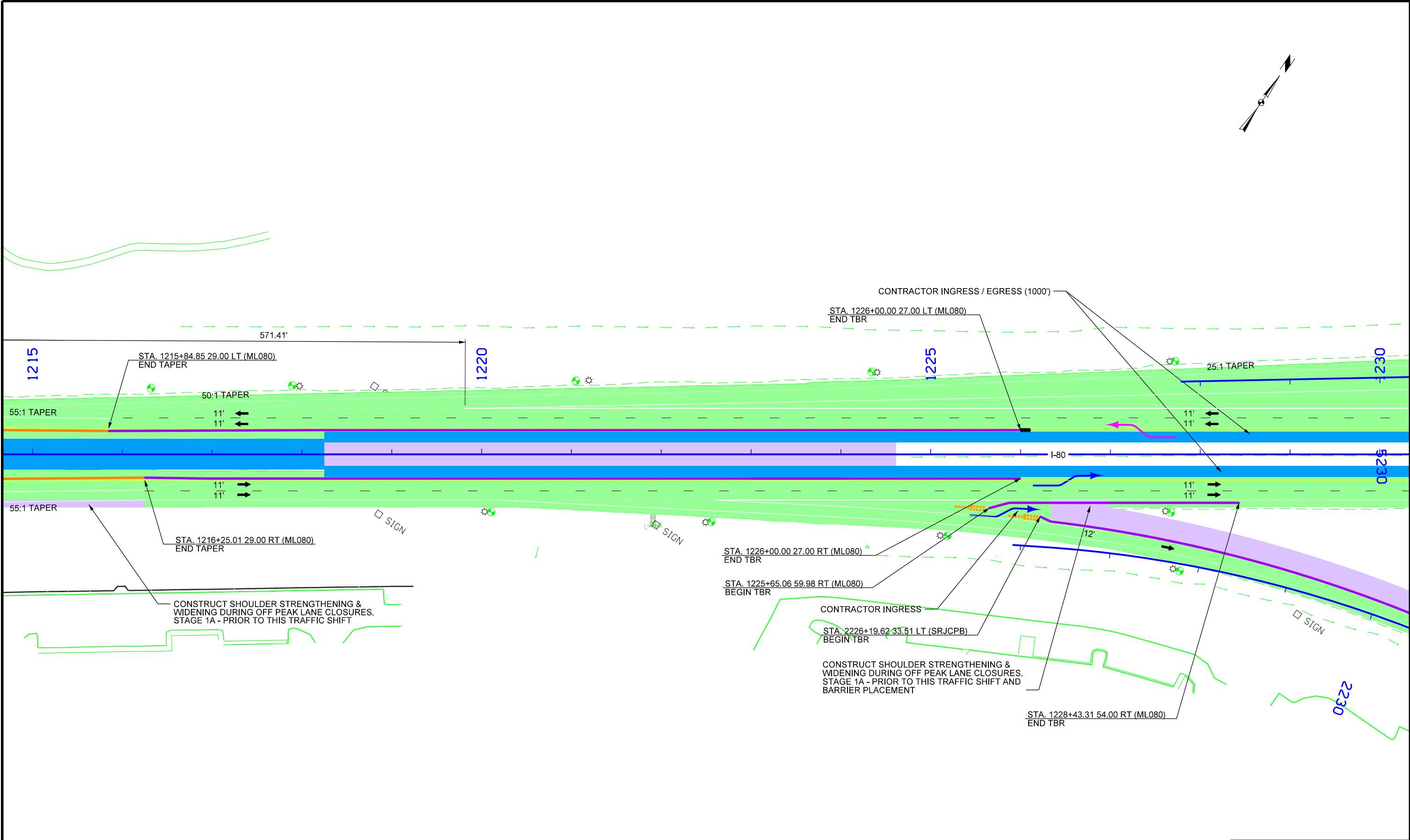
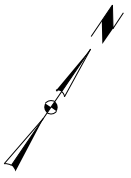


STAGE 1A

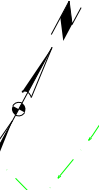
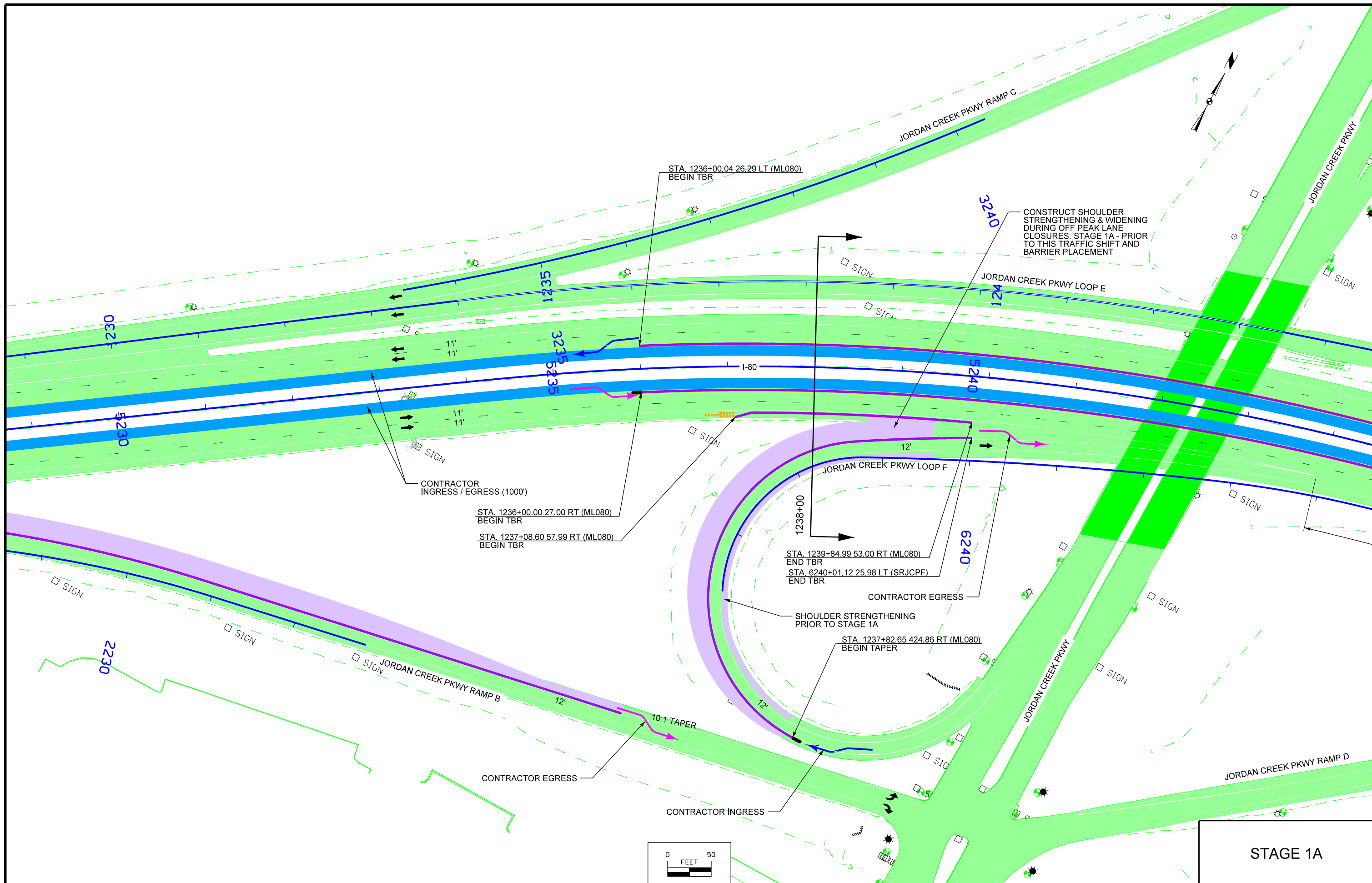




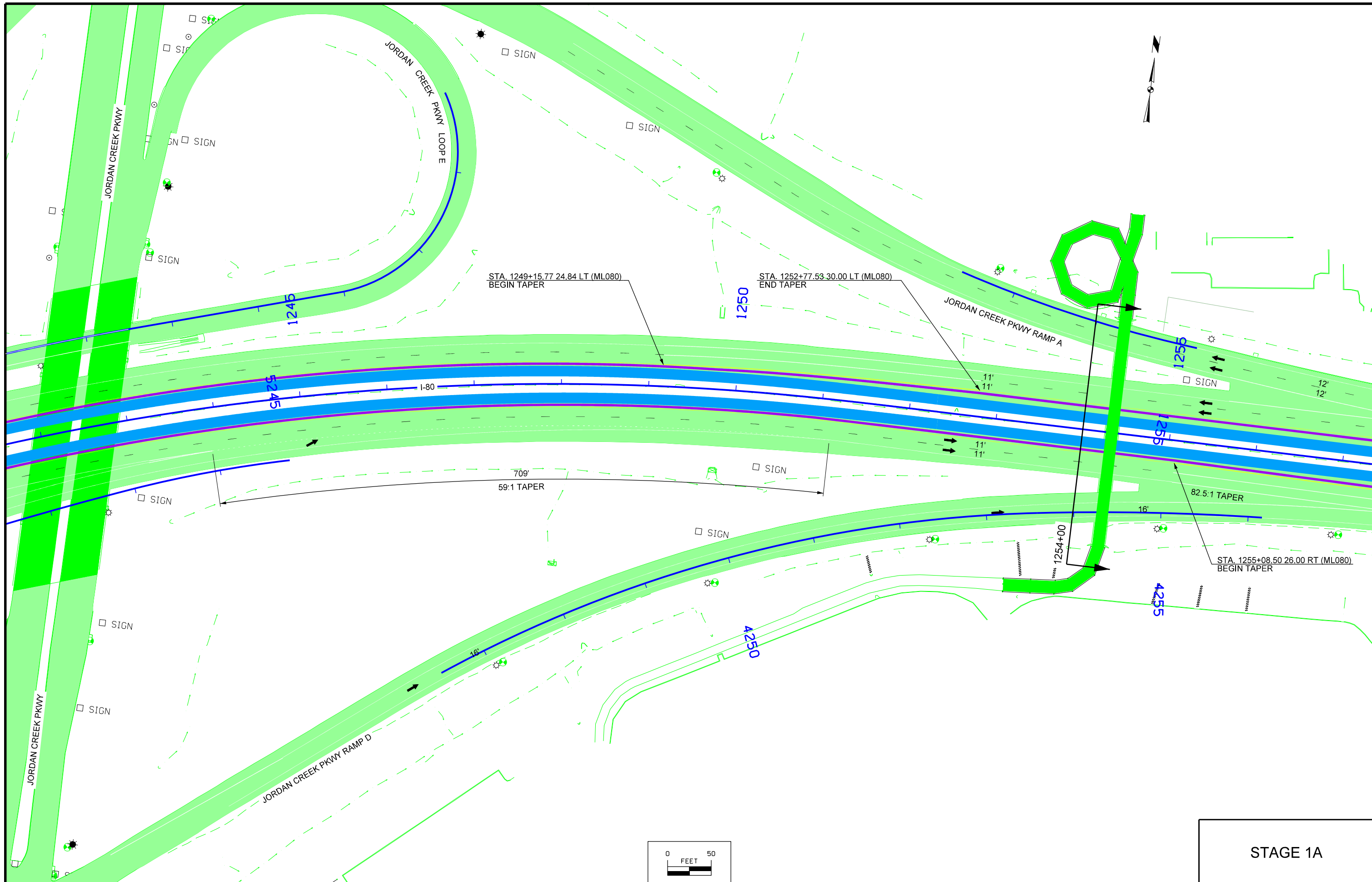
STAGE 1A



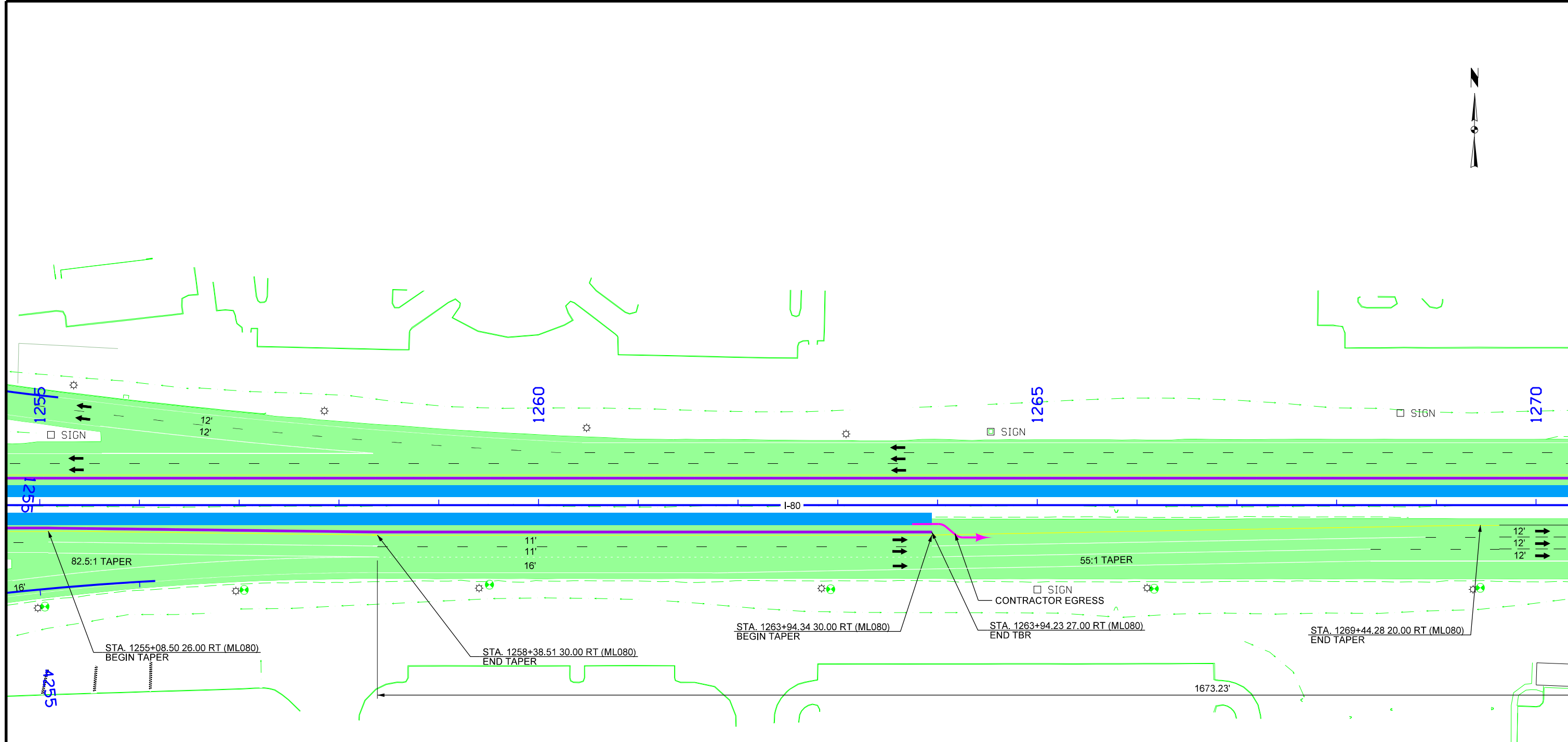
STAGE 1A



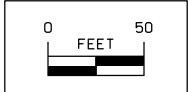
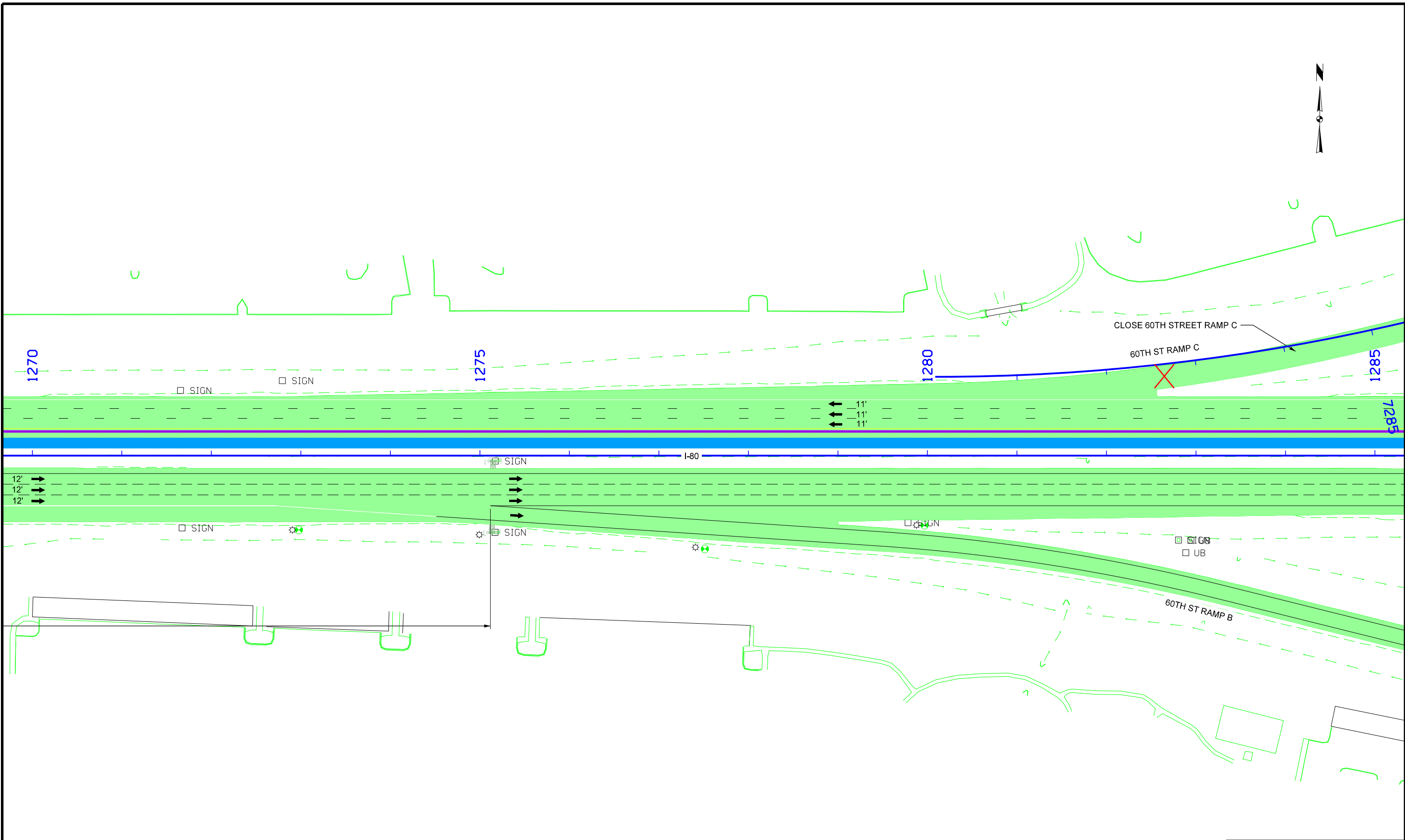
STAGE 1A



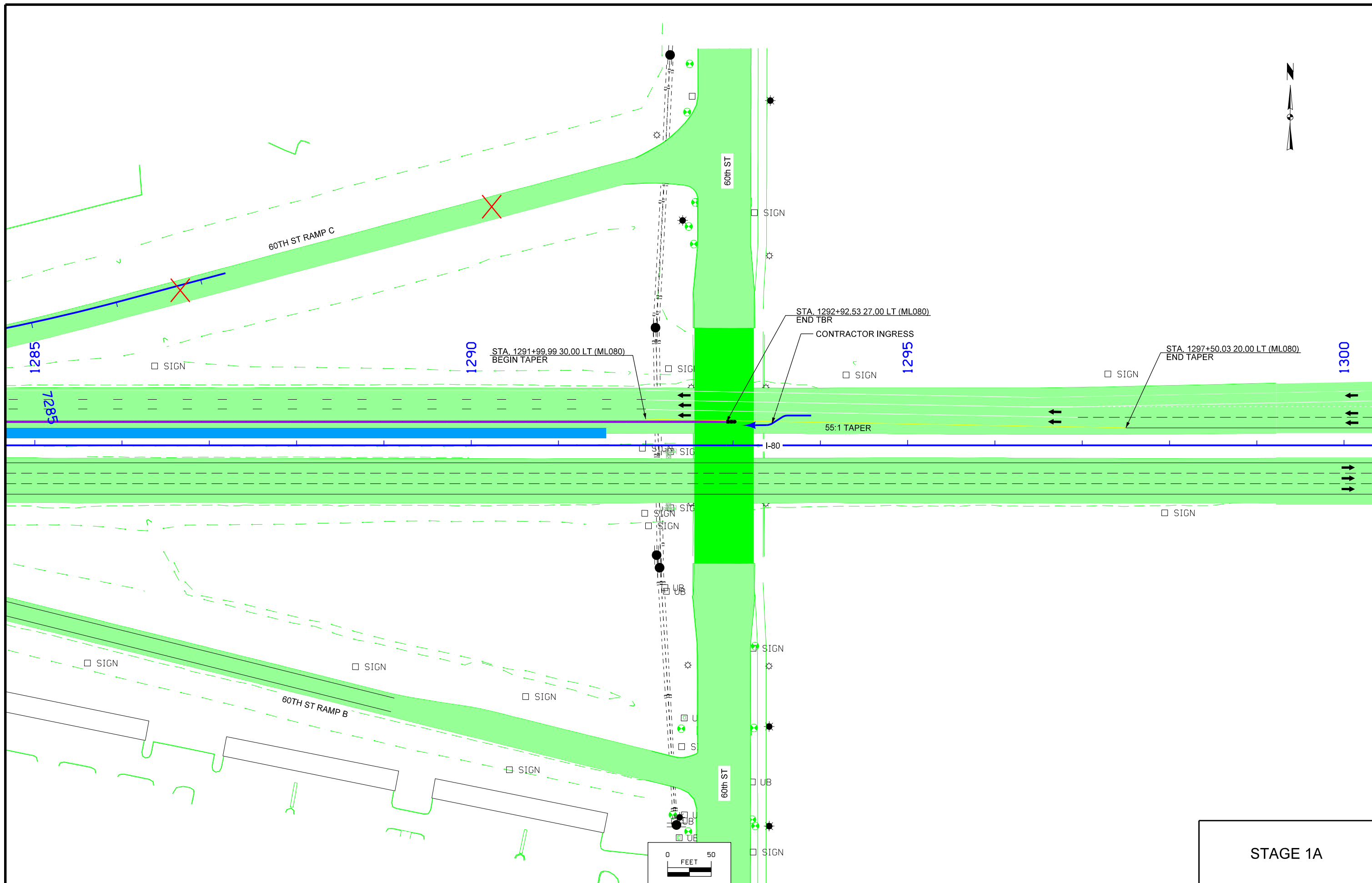
STAGE 1A



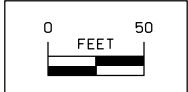
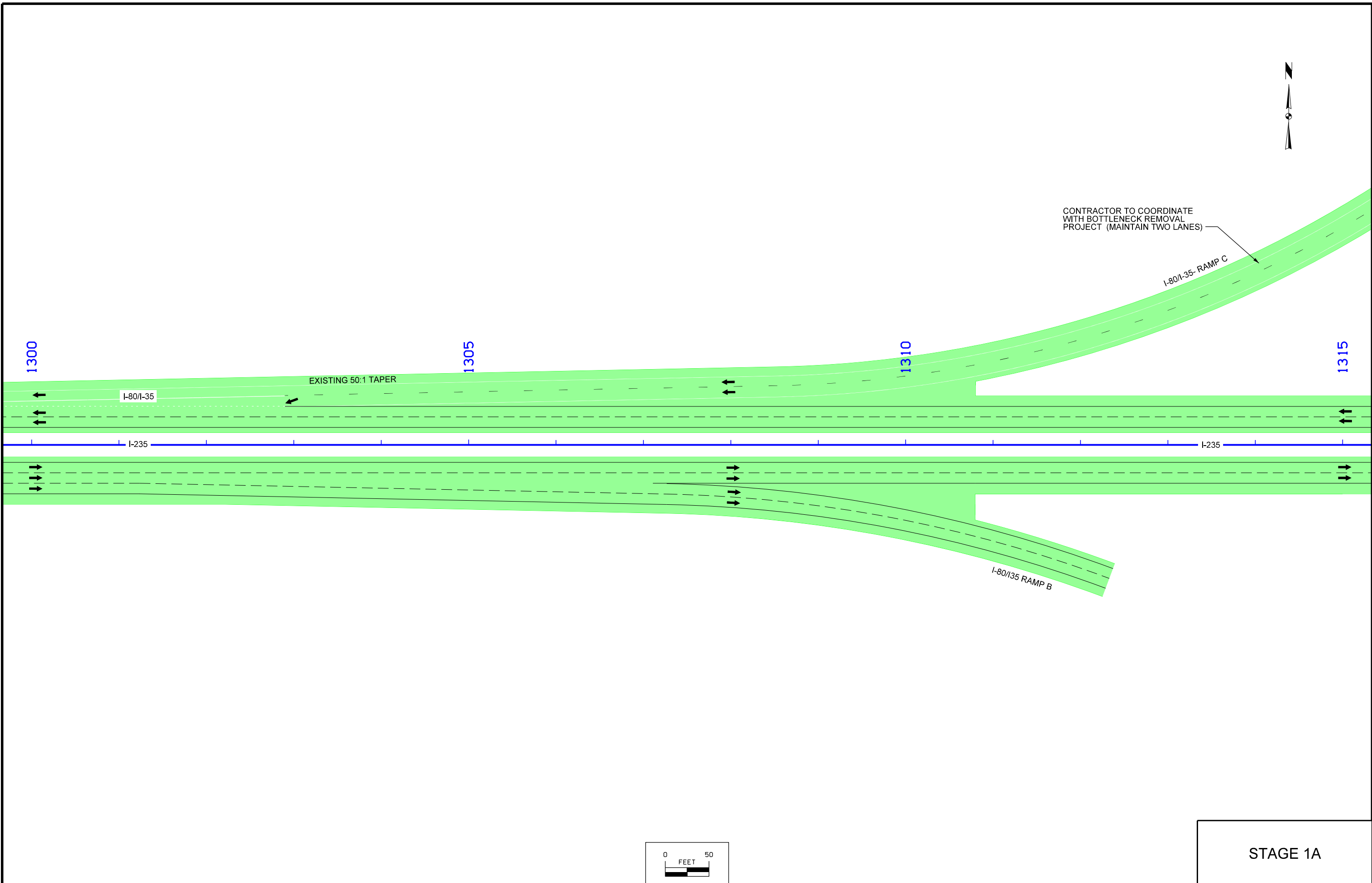
STAGE 1A



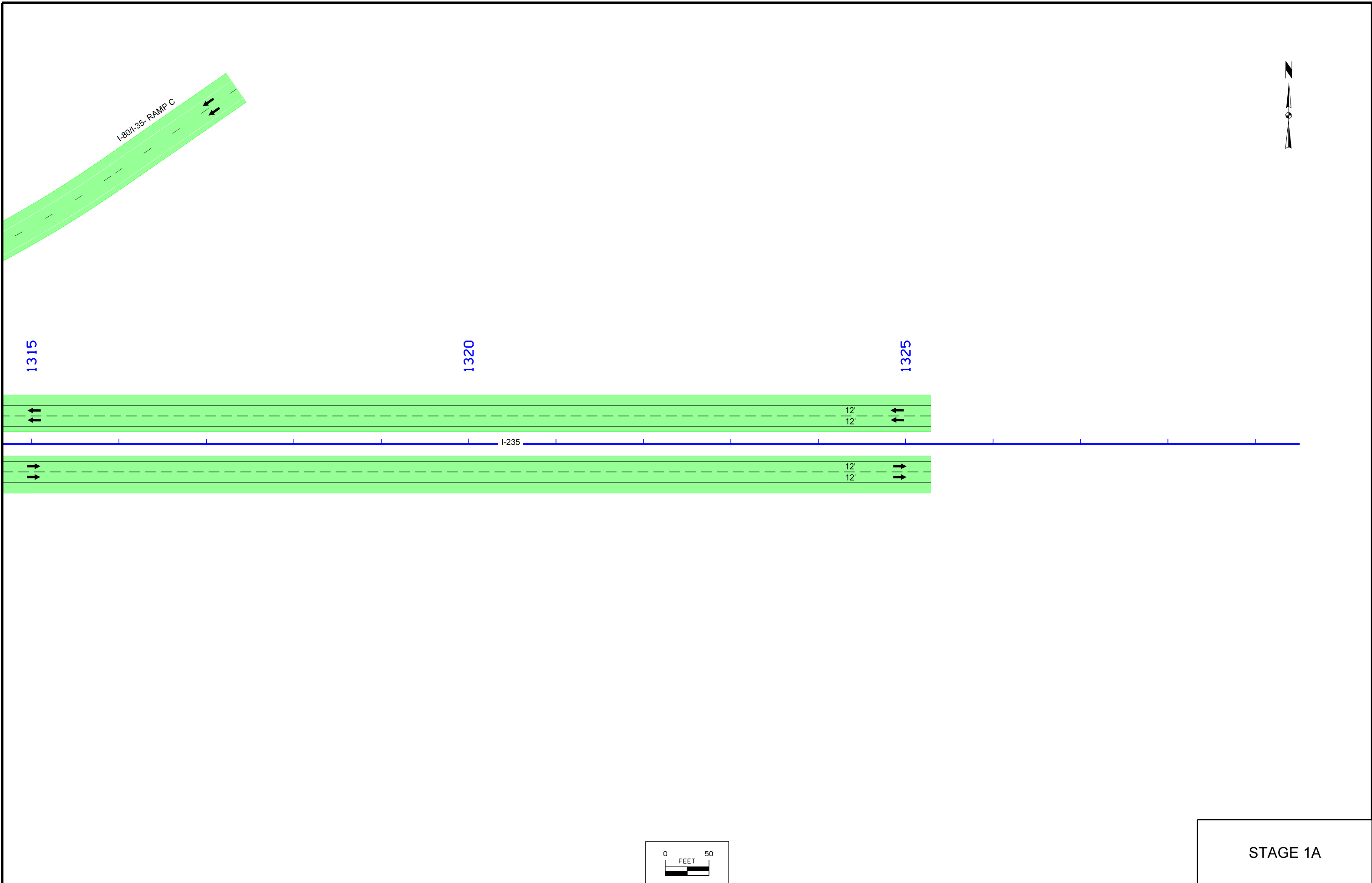
STAGE 1A



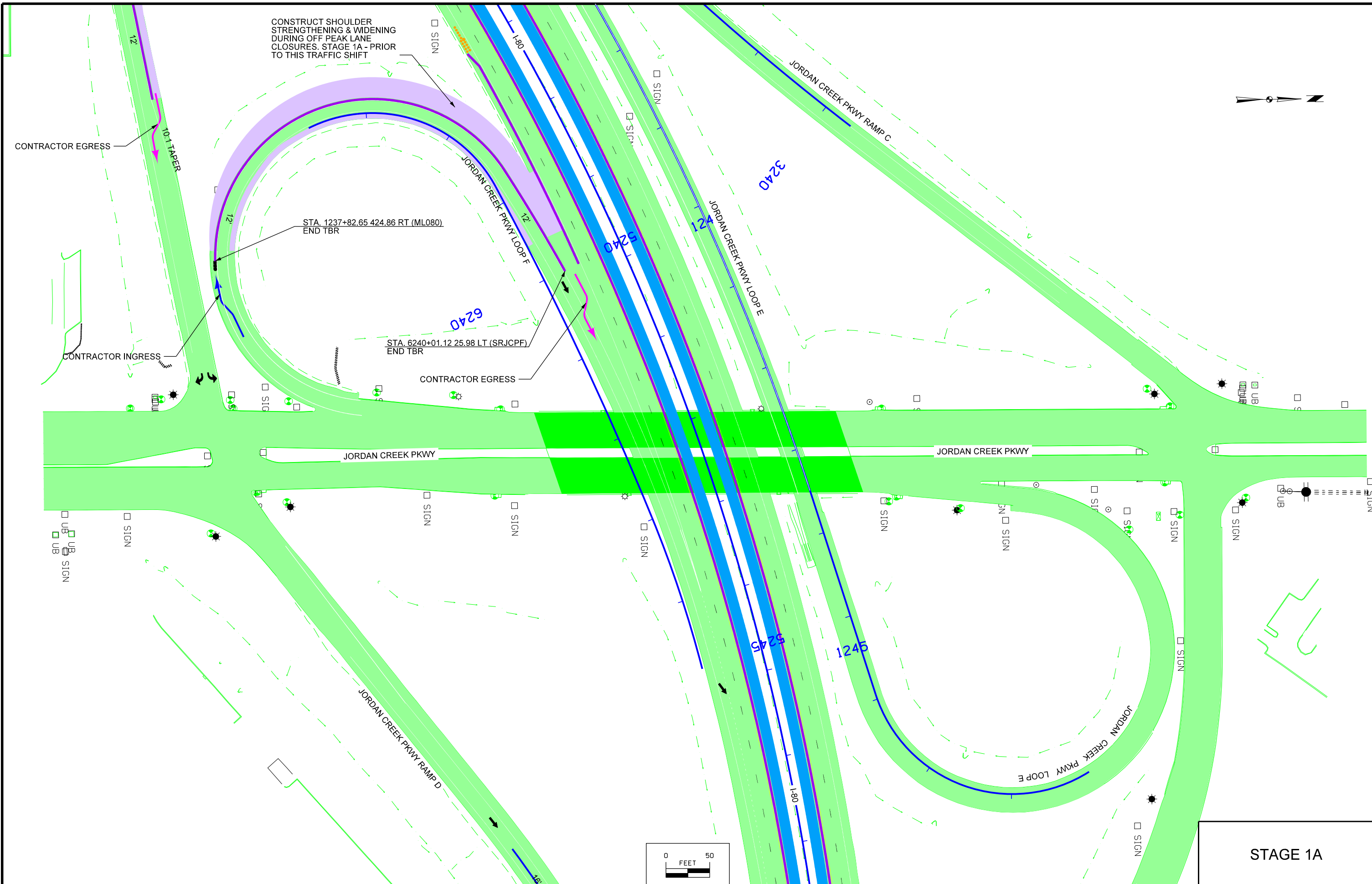
STAGE 1A



STAGE 1A



STAGE 1A



CONSTRUCT SHOULDER STRENGTHENING & WIDENING DURING OFF PEAK LANE CLOSURES, STAGE 1A - PRIOR TO THIS TRAFFIC SHIFT

CONTRACTOR EGRESS

TOT TAPER

STA. 1237+82.65 424.86 RT (ML080)
END TBR

6240

STA. 6240+01.12 25.98 LT (SRJCPF)
END TBR

CONTRACTOR EGRESS

CONTRACTOR INGRESS

JORDAN CREEK PKWY

JORDAN CREEK PKWY

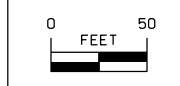
JORDAN CREEK PKWY RAMP D

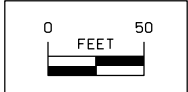
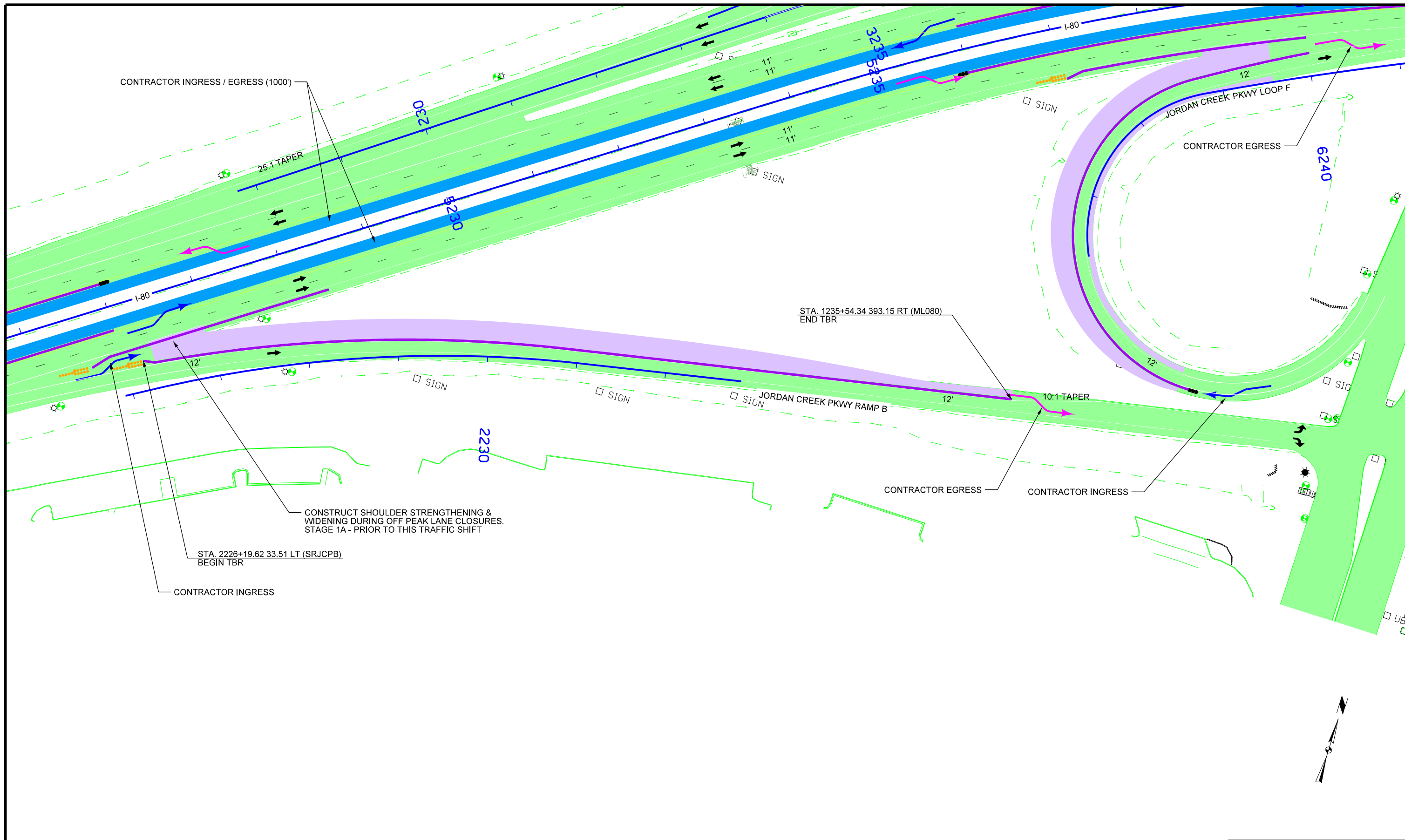
5245

1245

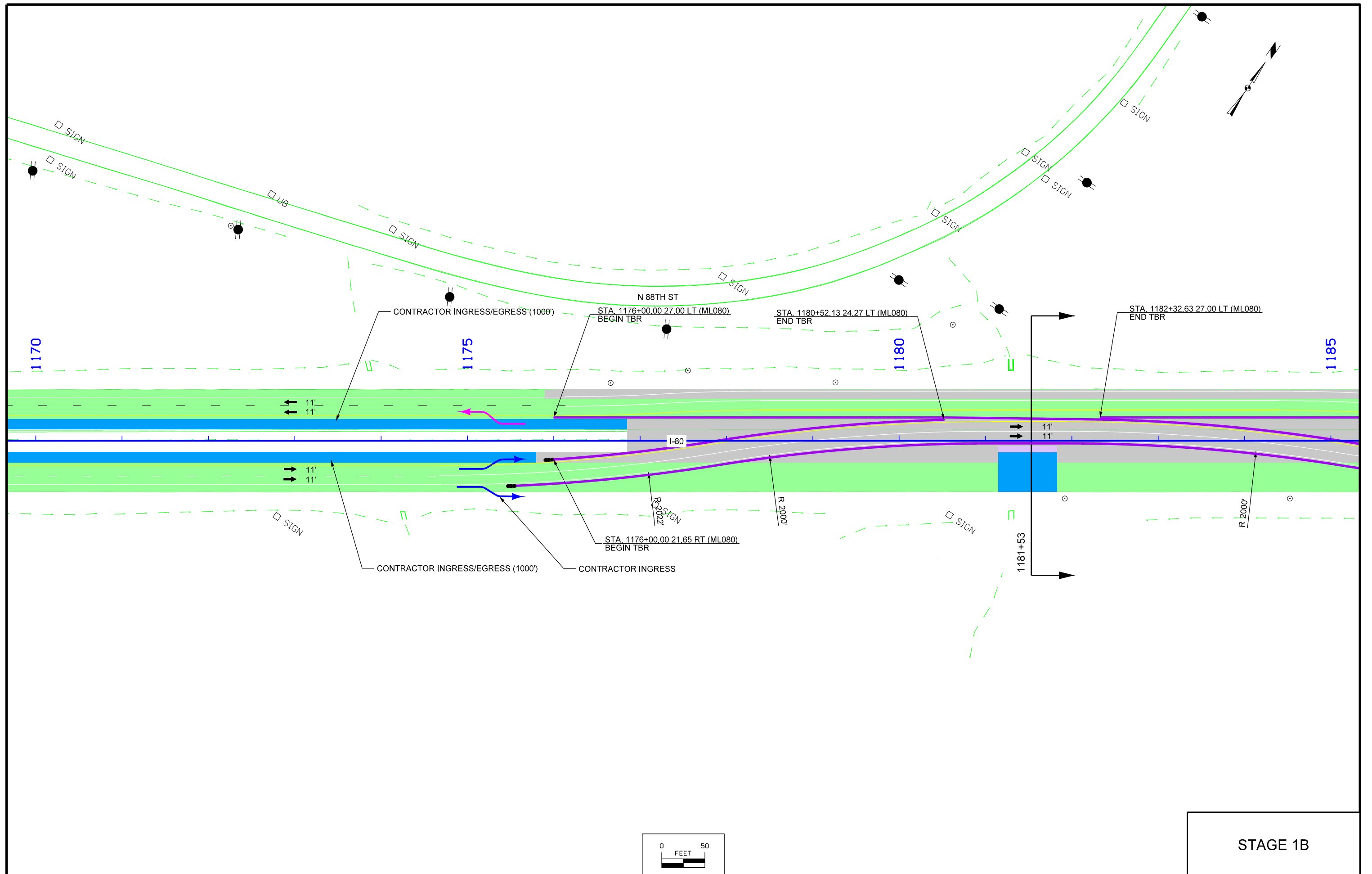
JORDAN CREEK PKWY LOOP E

STAGE 1A

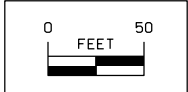
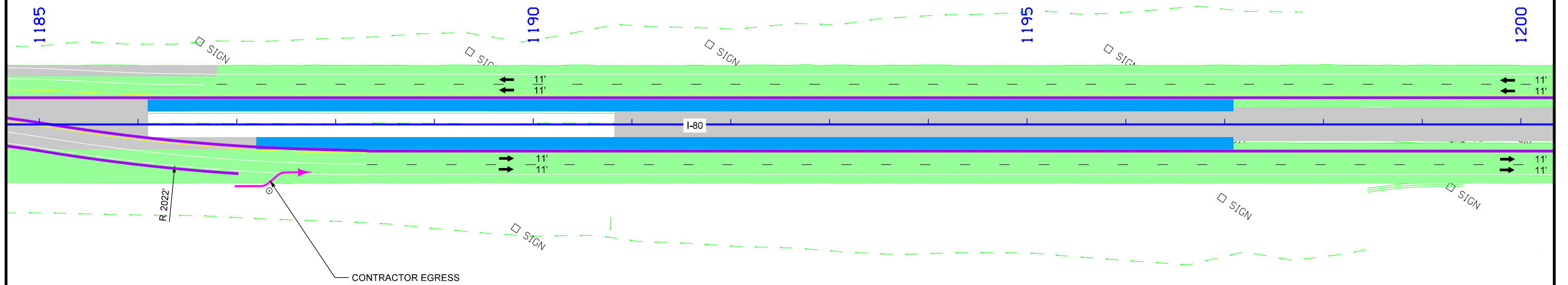
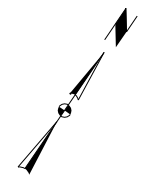




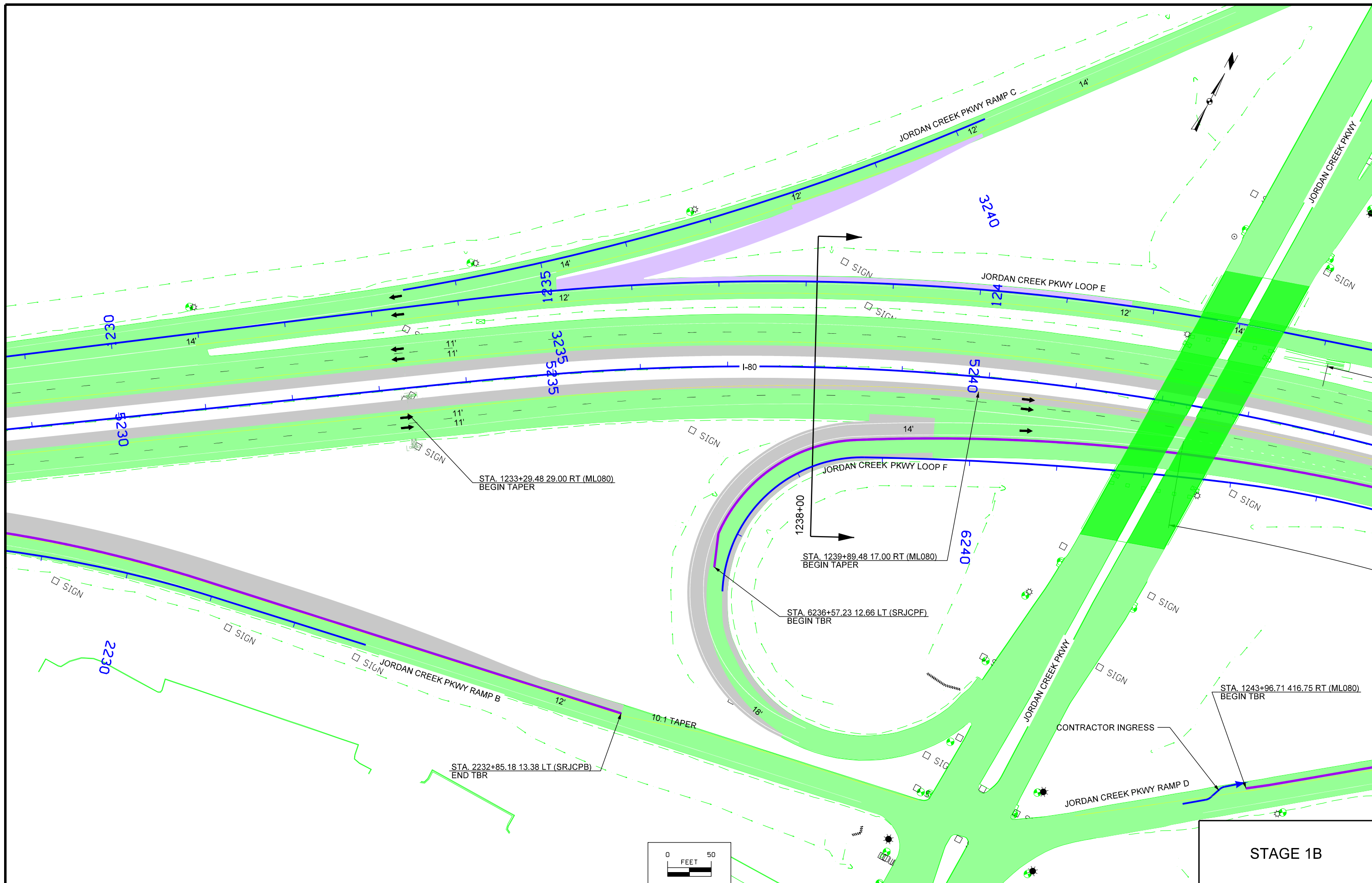
STAGE 1A



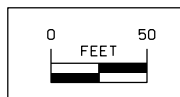
STAGE 1B

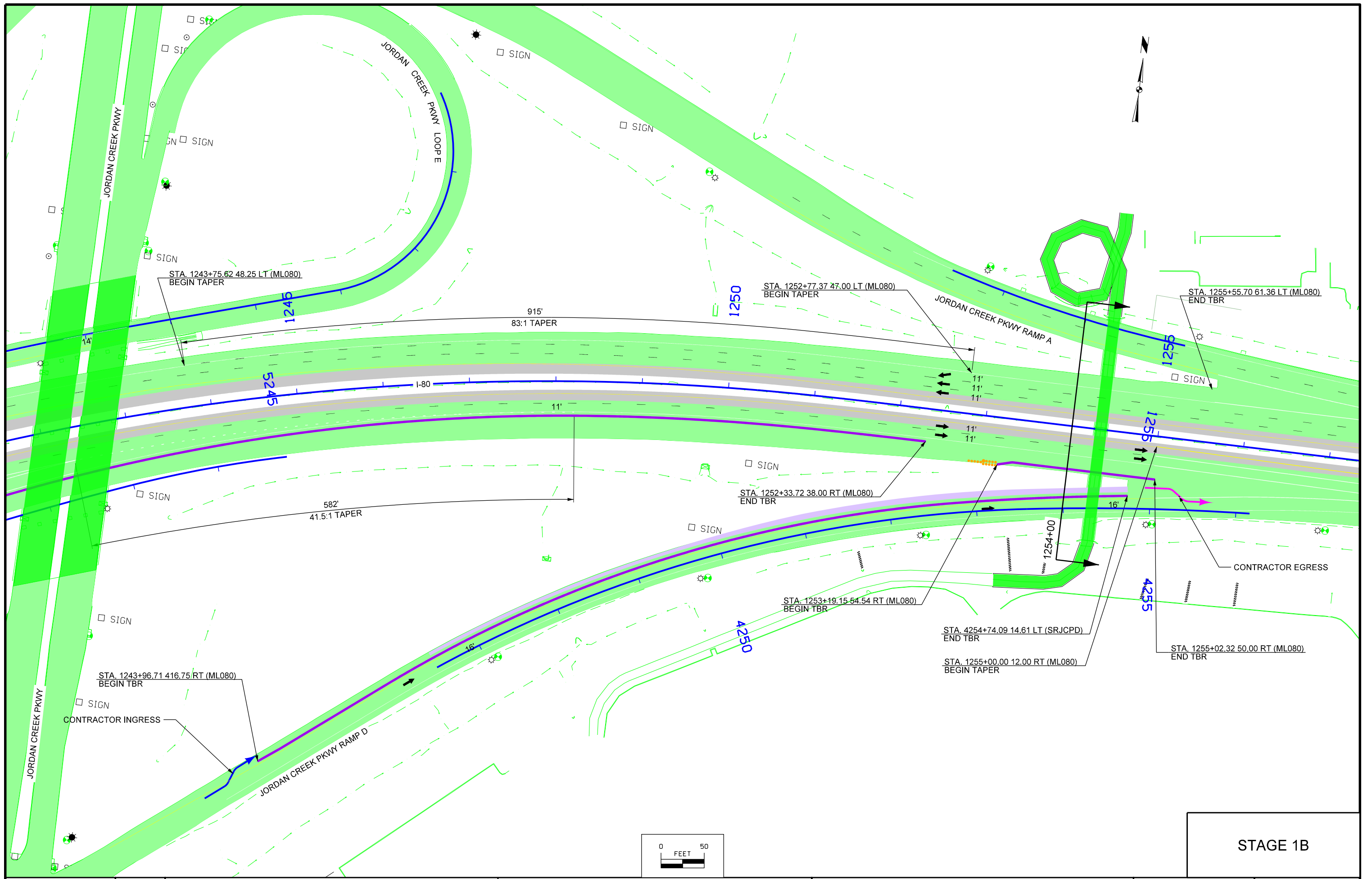


STAGE 1B

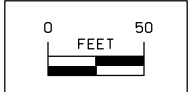


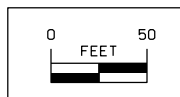
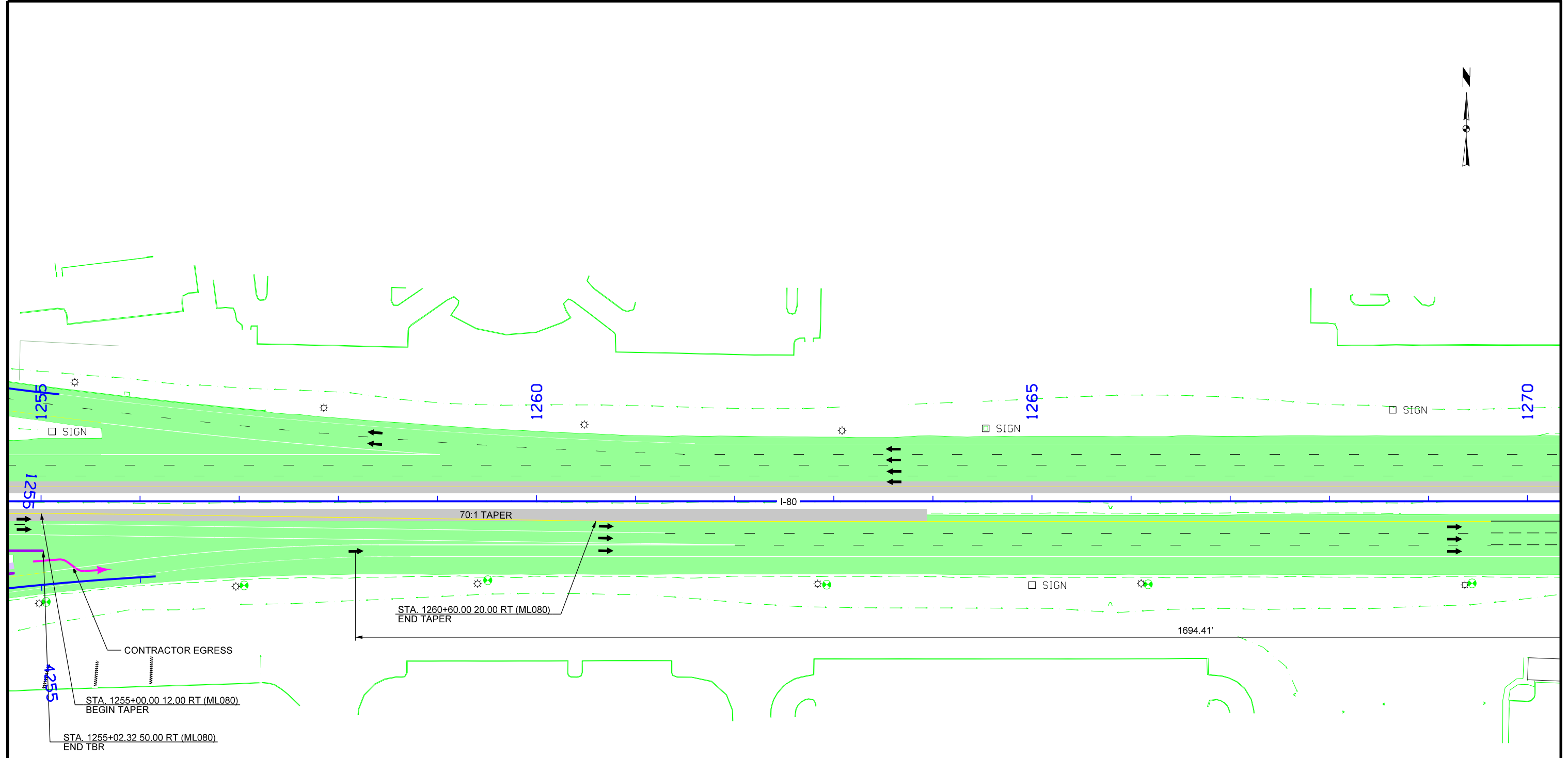
STAGE 1B



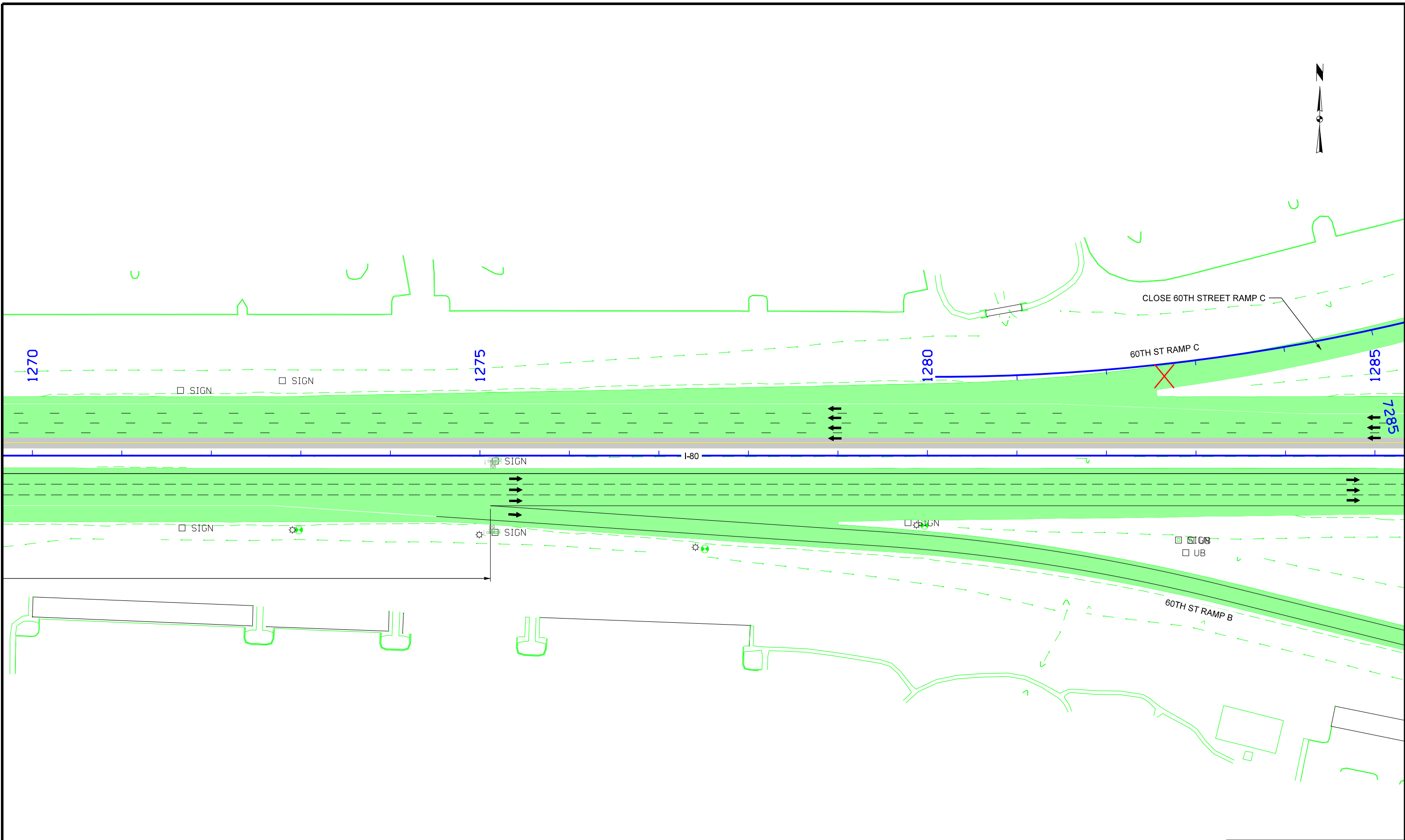


STAGE 1B

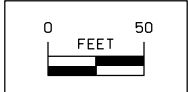


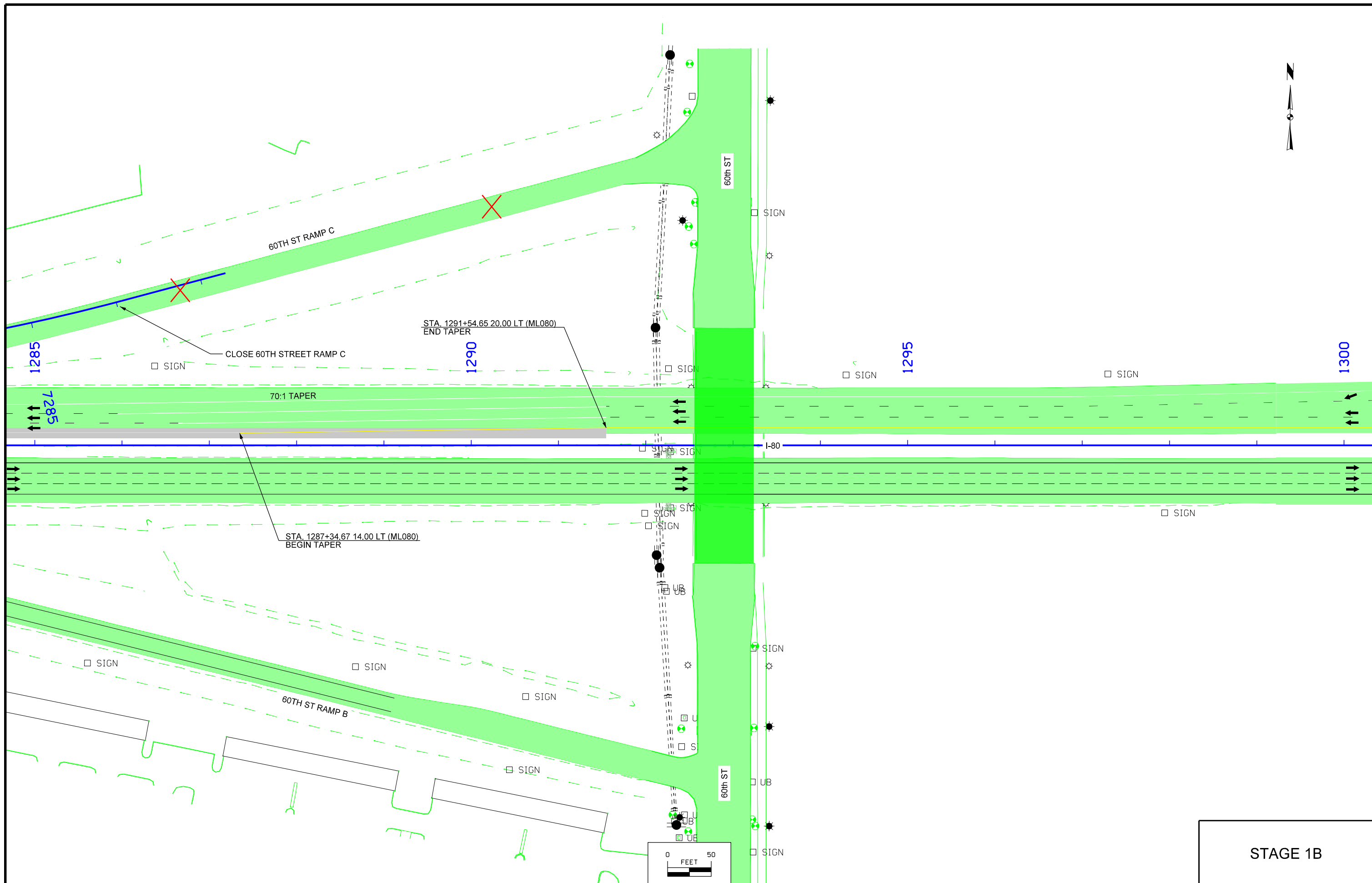


STAGE 1B

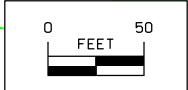


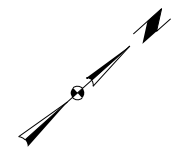
STAGE 1B



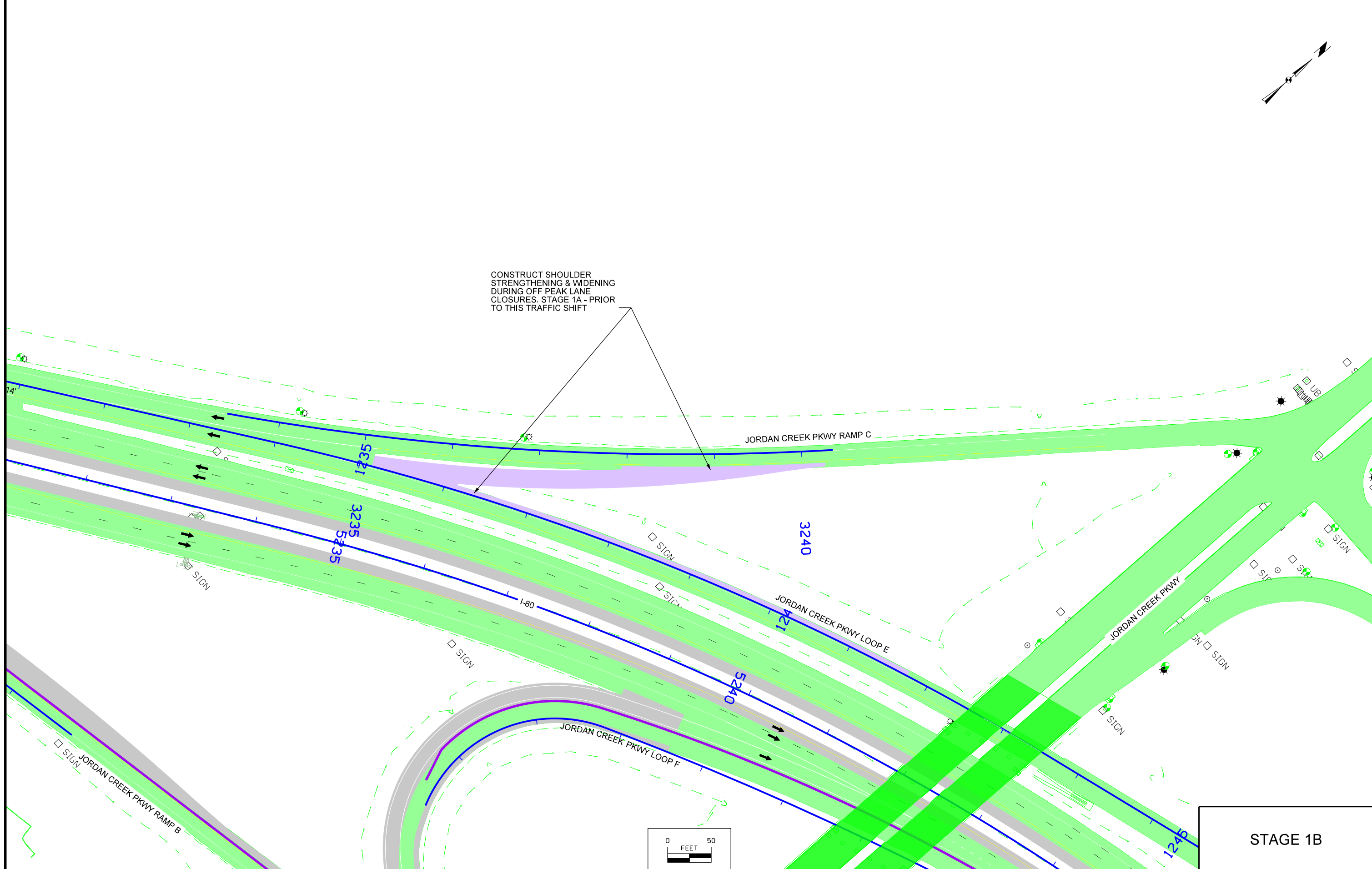


STAGE 1B

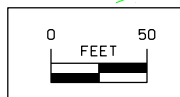


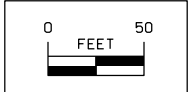
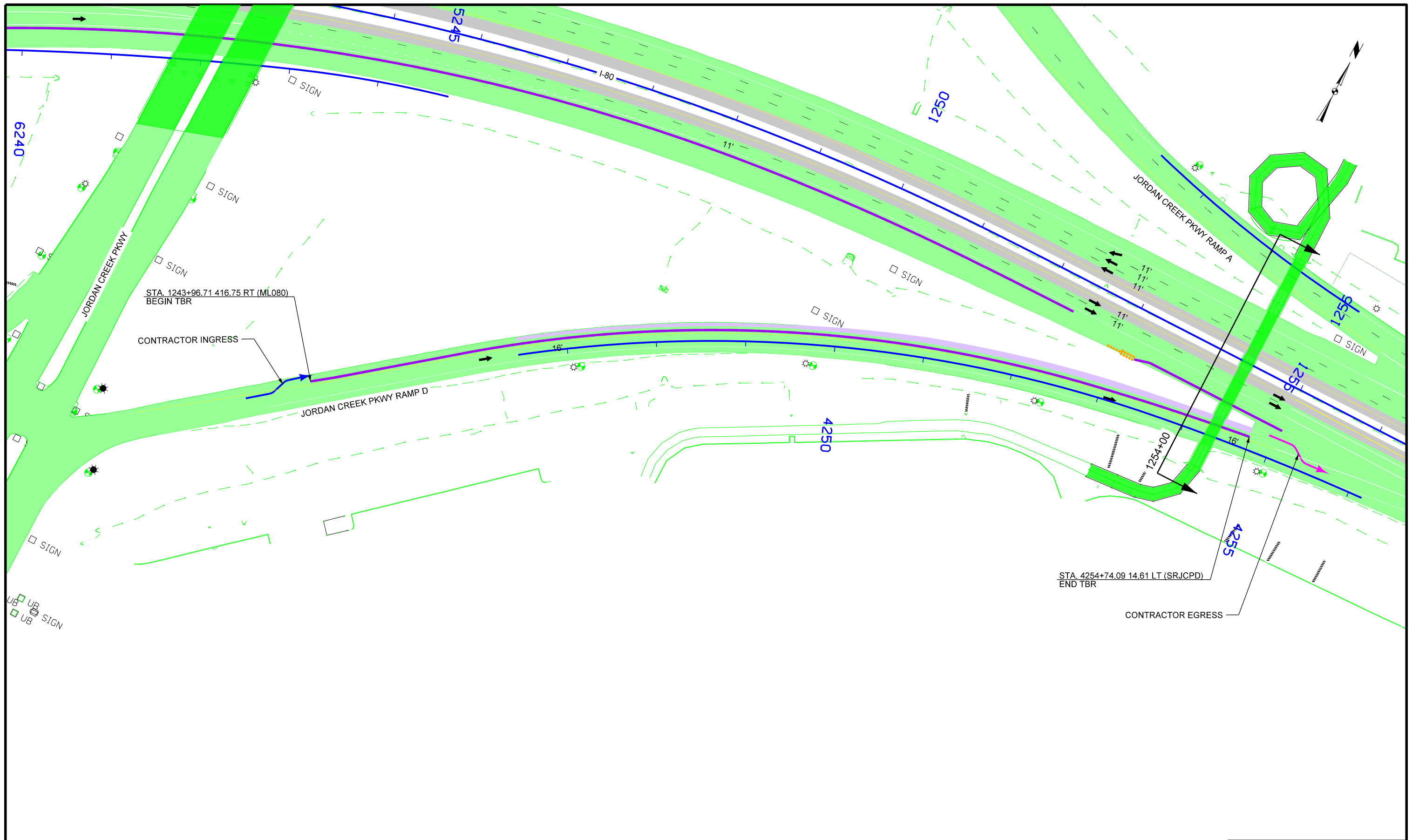


CONSTRUCT SHOULDER
STRENGTHENING & WIDENING
DURING OFF PEAK LANE
CLOSURES. STAGE 1A - PRIOR
TO THIS TRAFFIC SHIFT

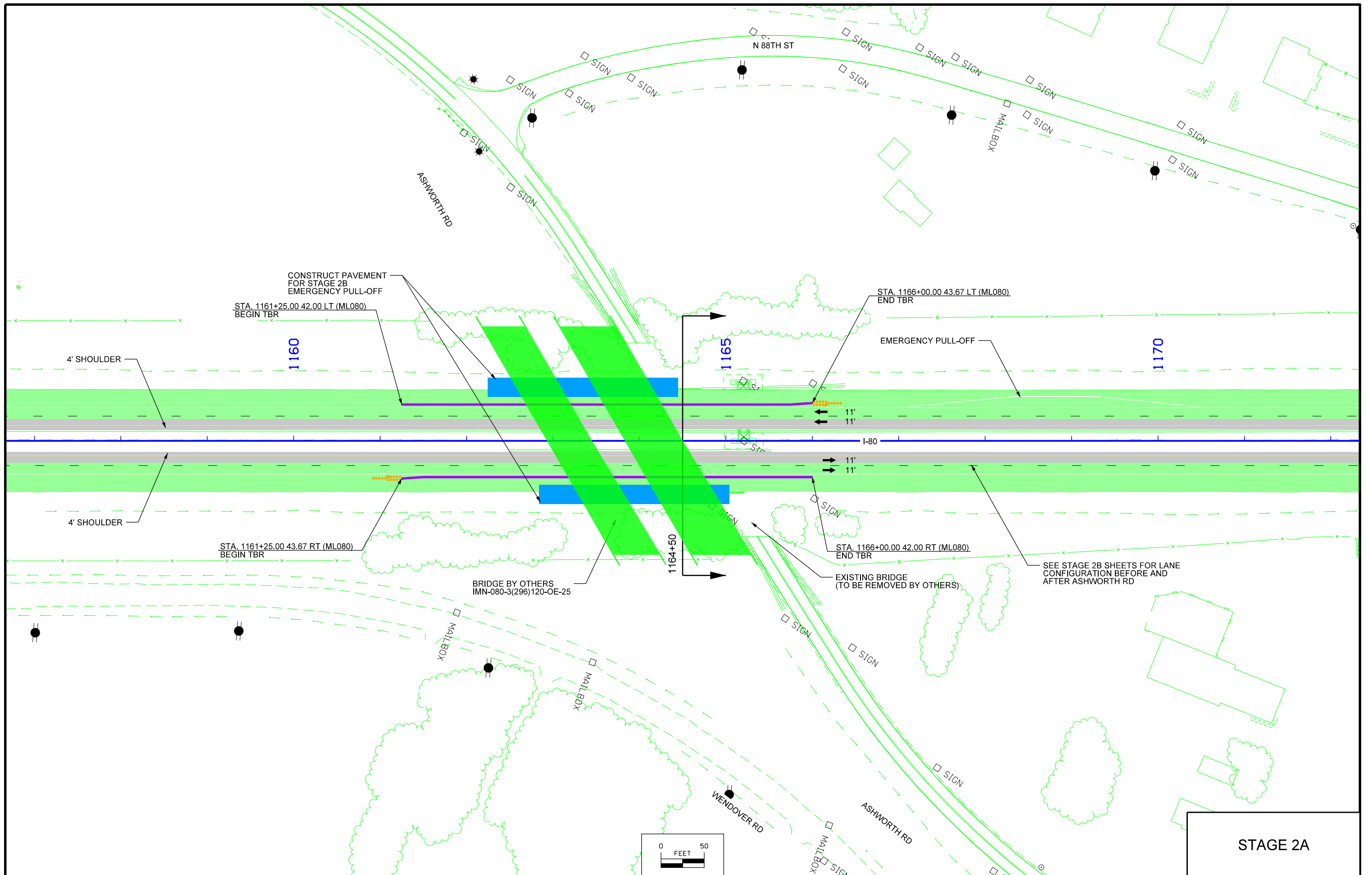


STAGE 1B

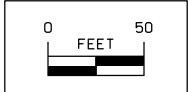
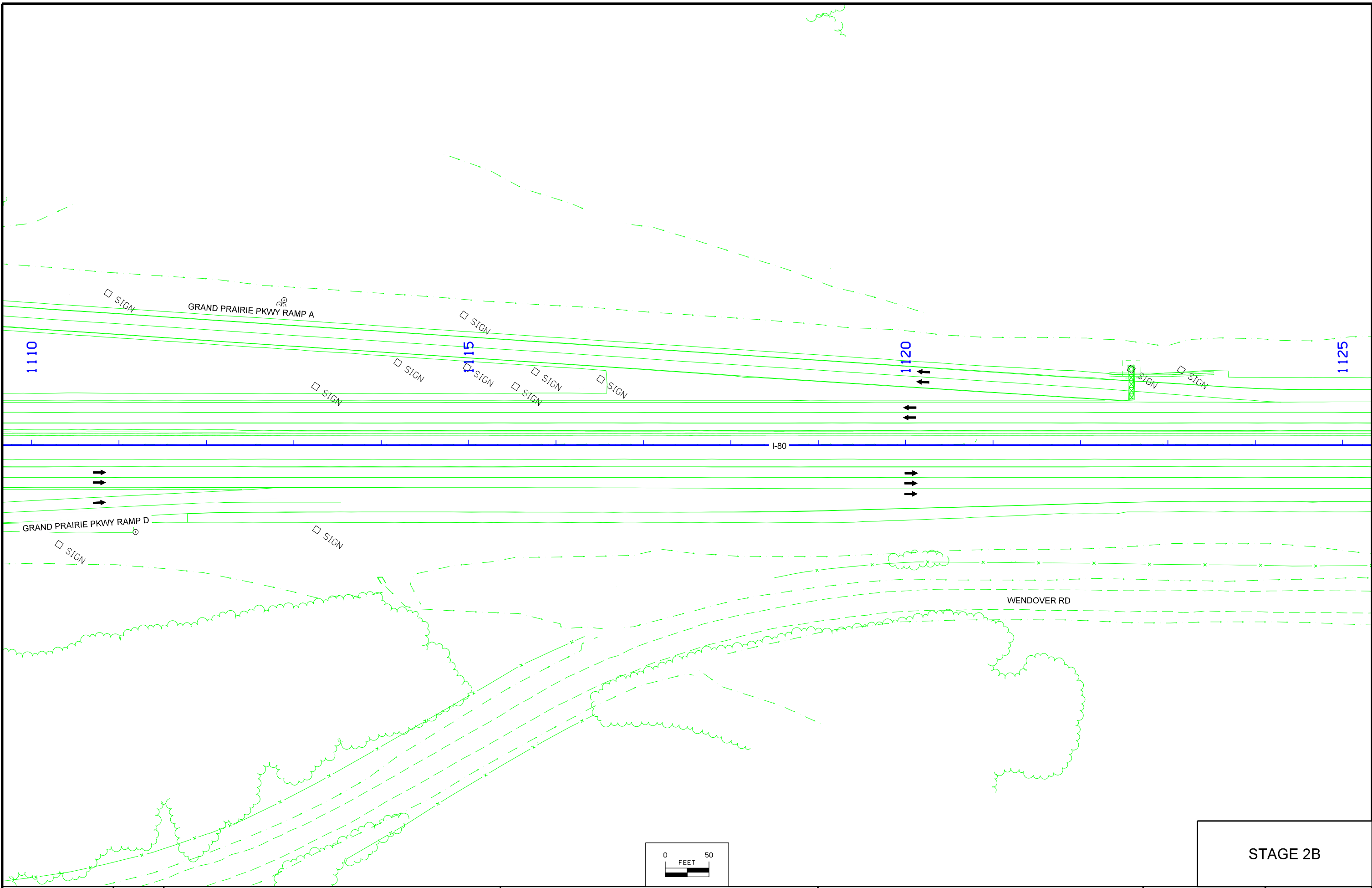




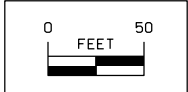
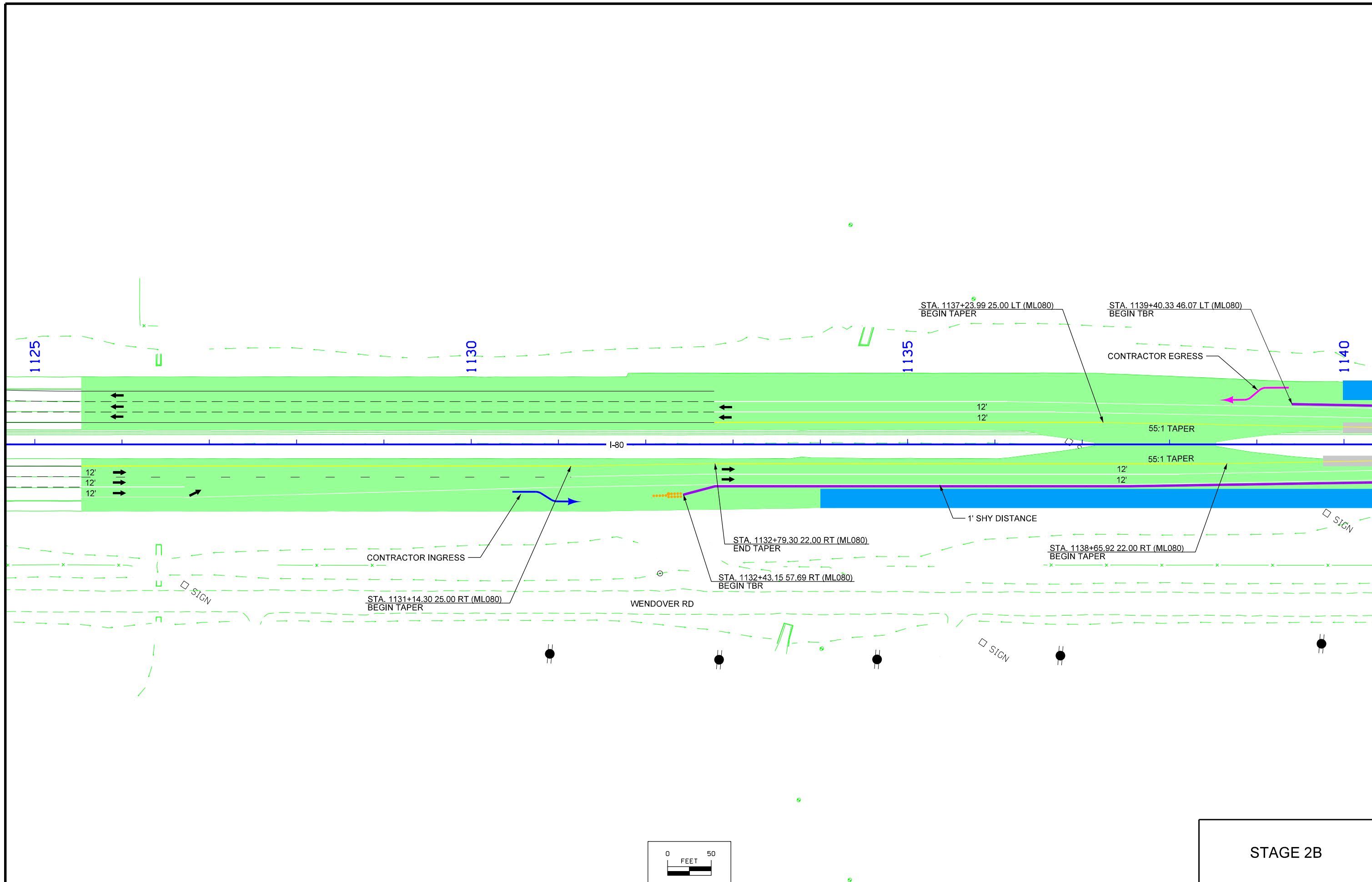
STAGE 1B



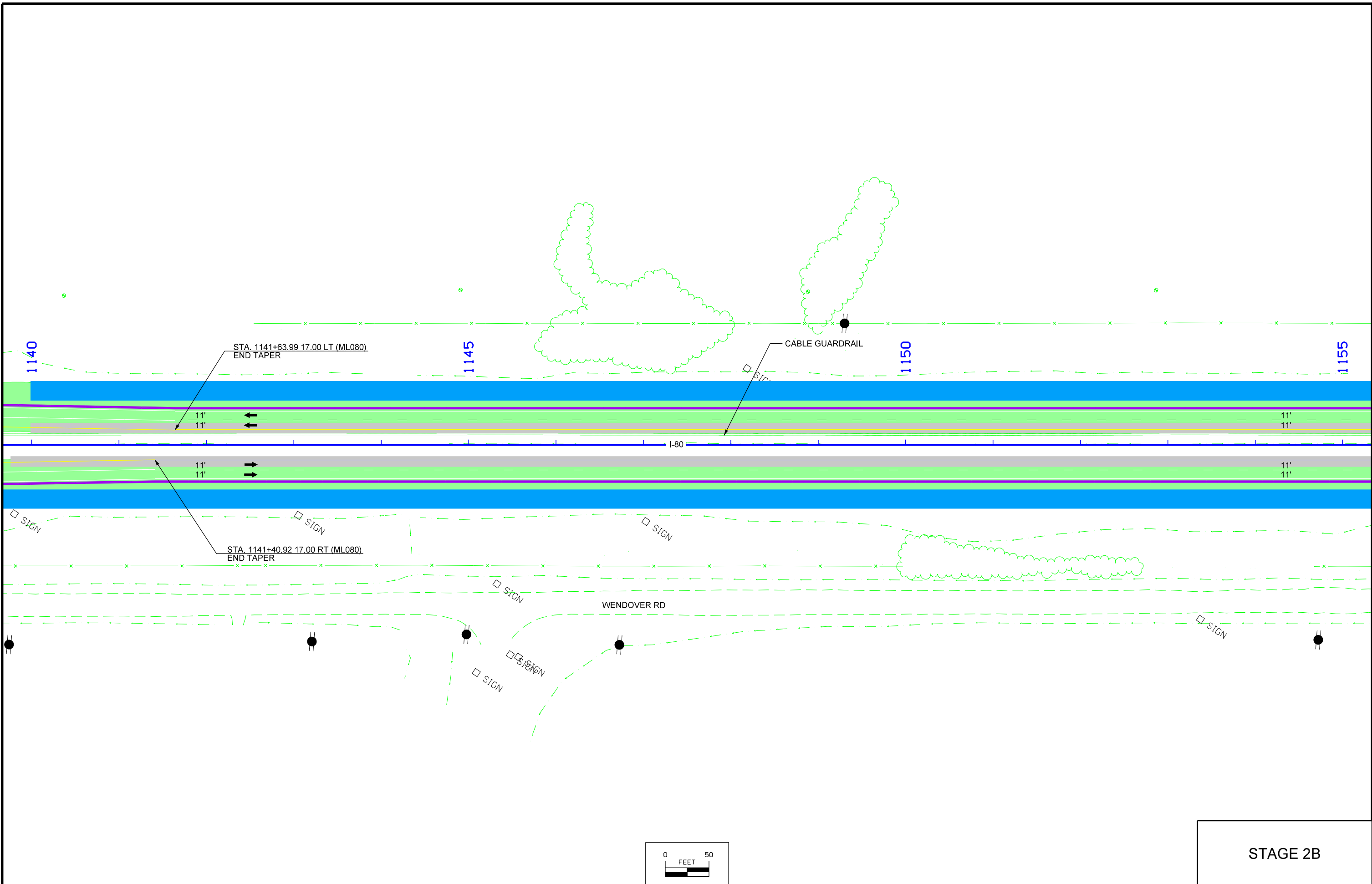
STAGE 2A

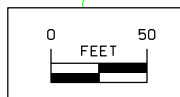
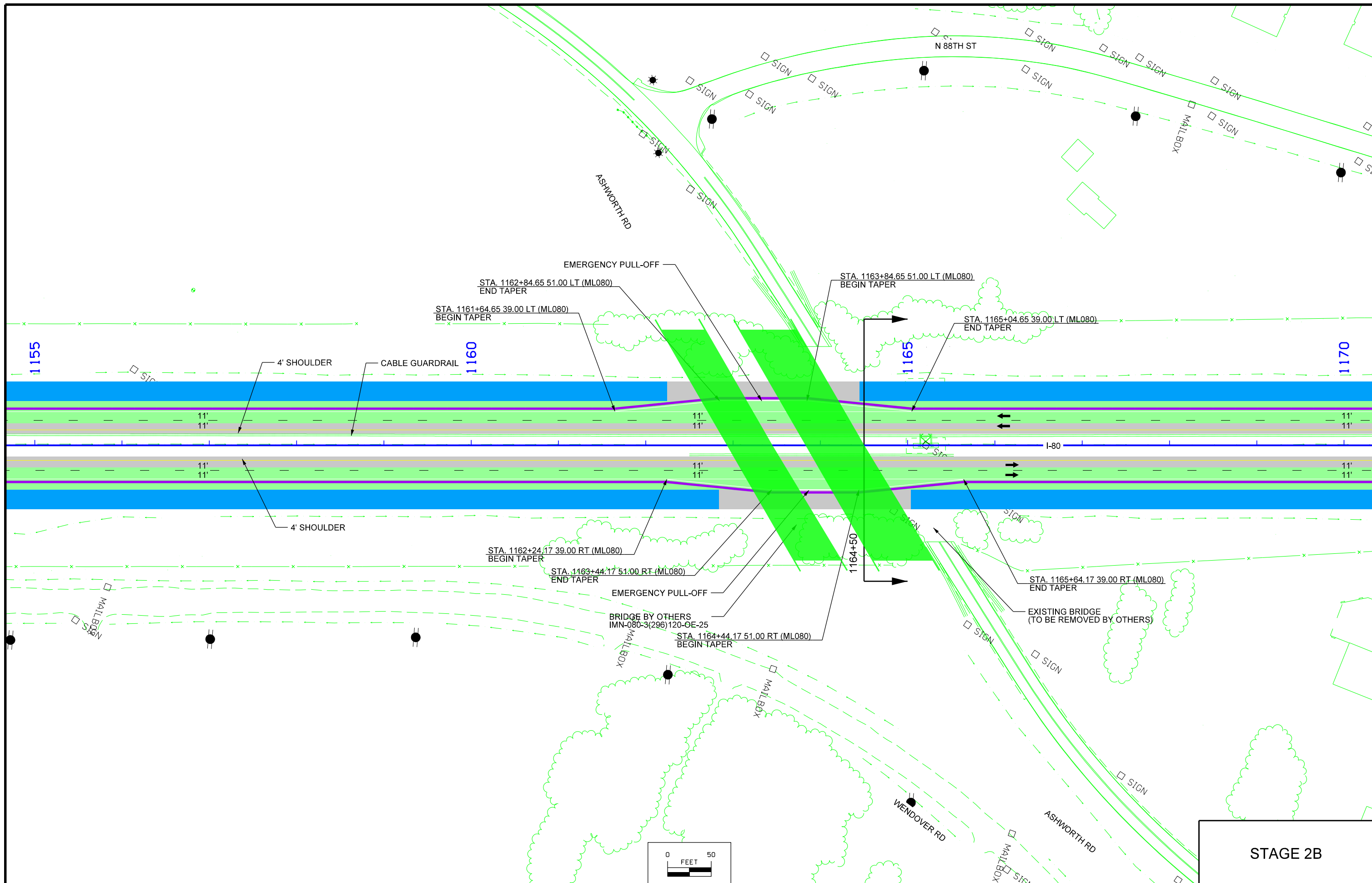


STAGE 2B

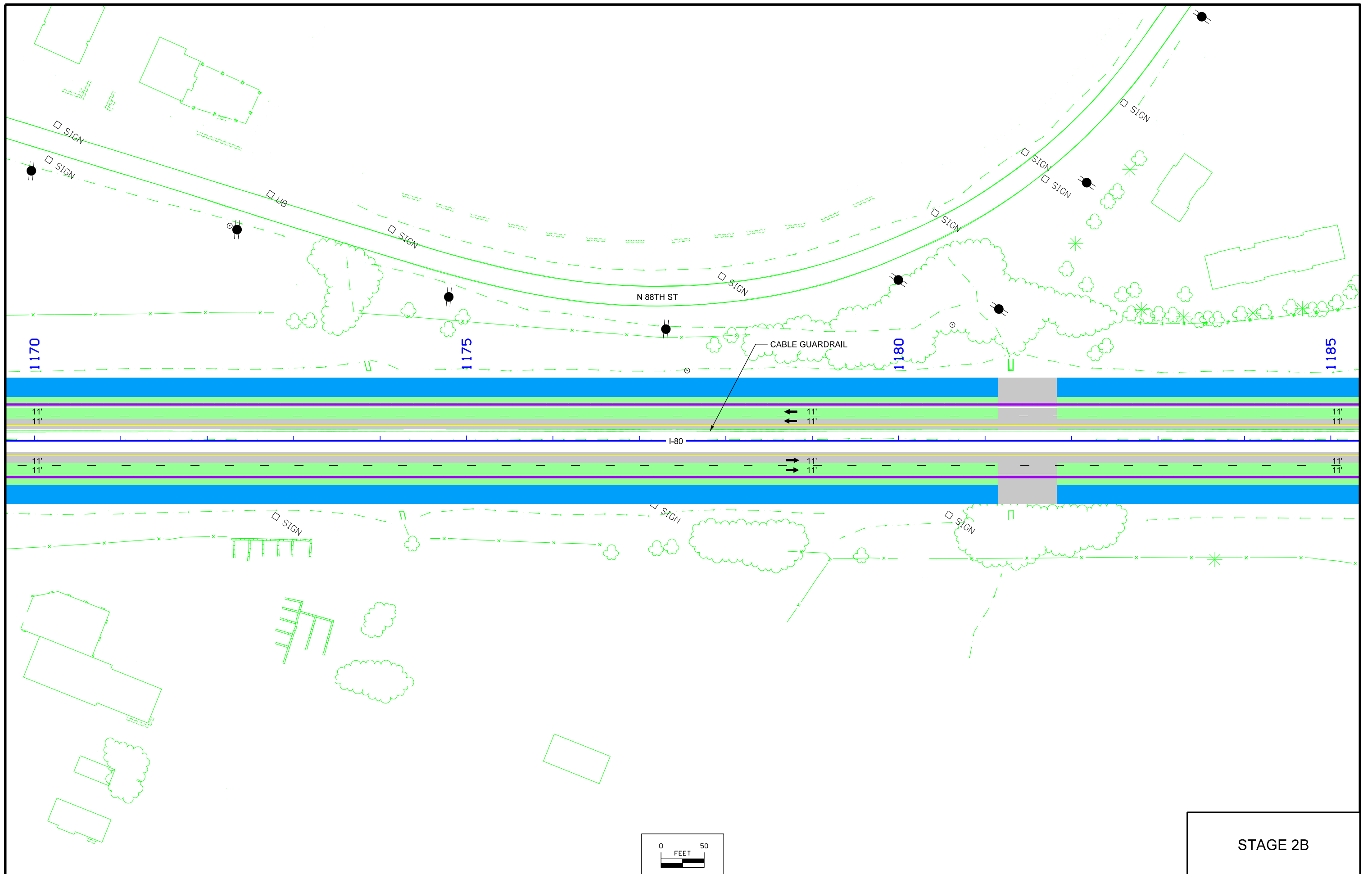


STAGE 2B

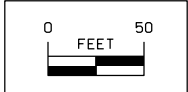


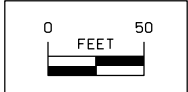
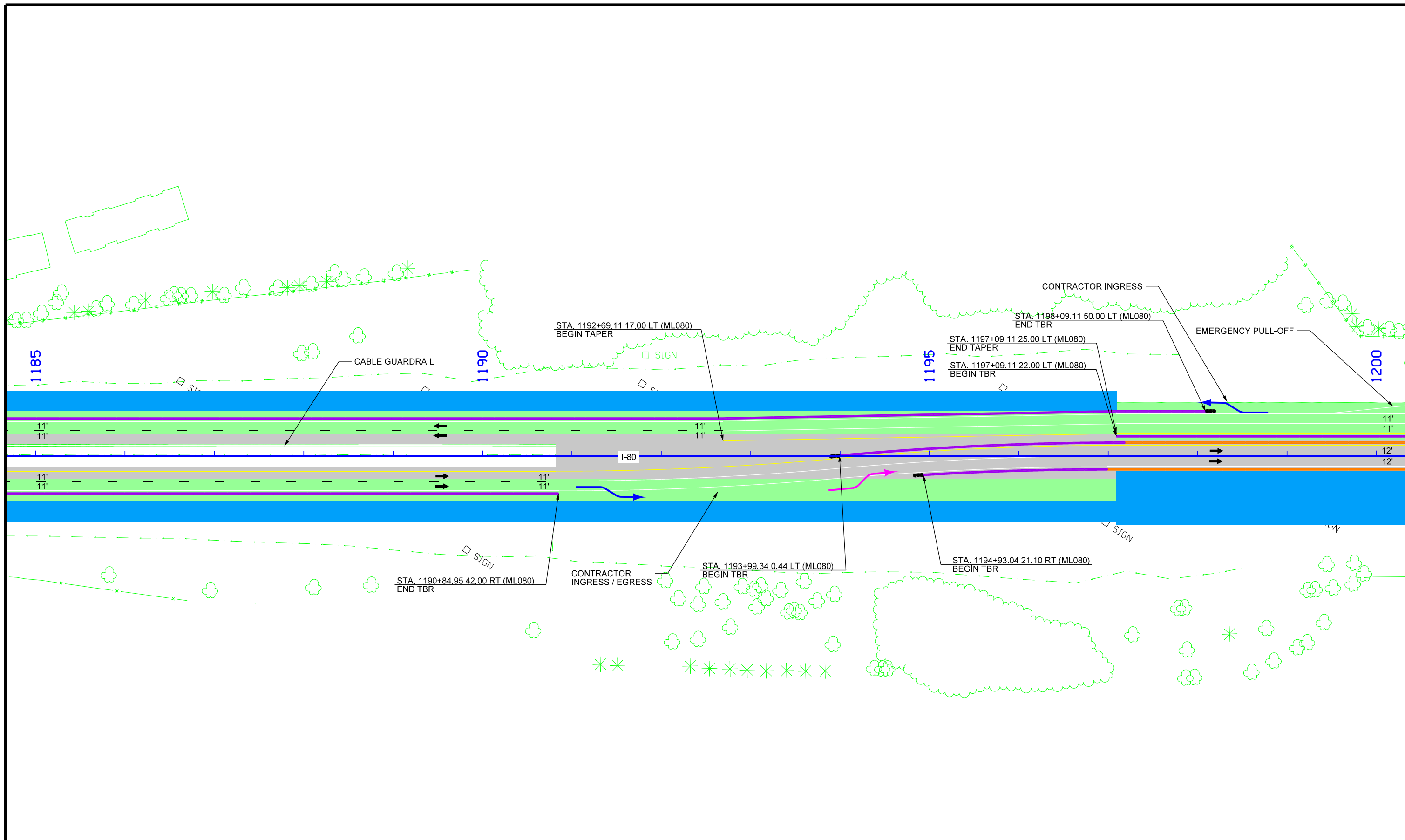


STAGE 2B

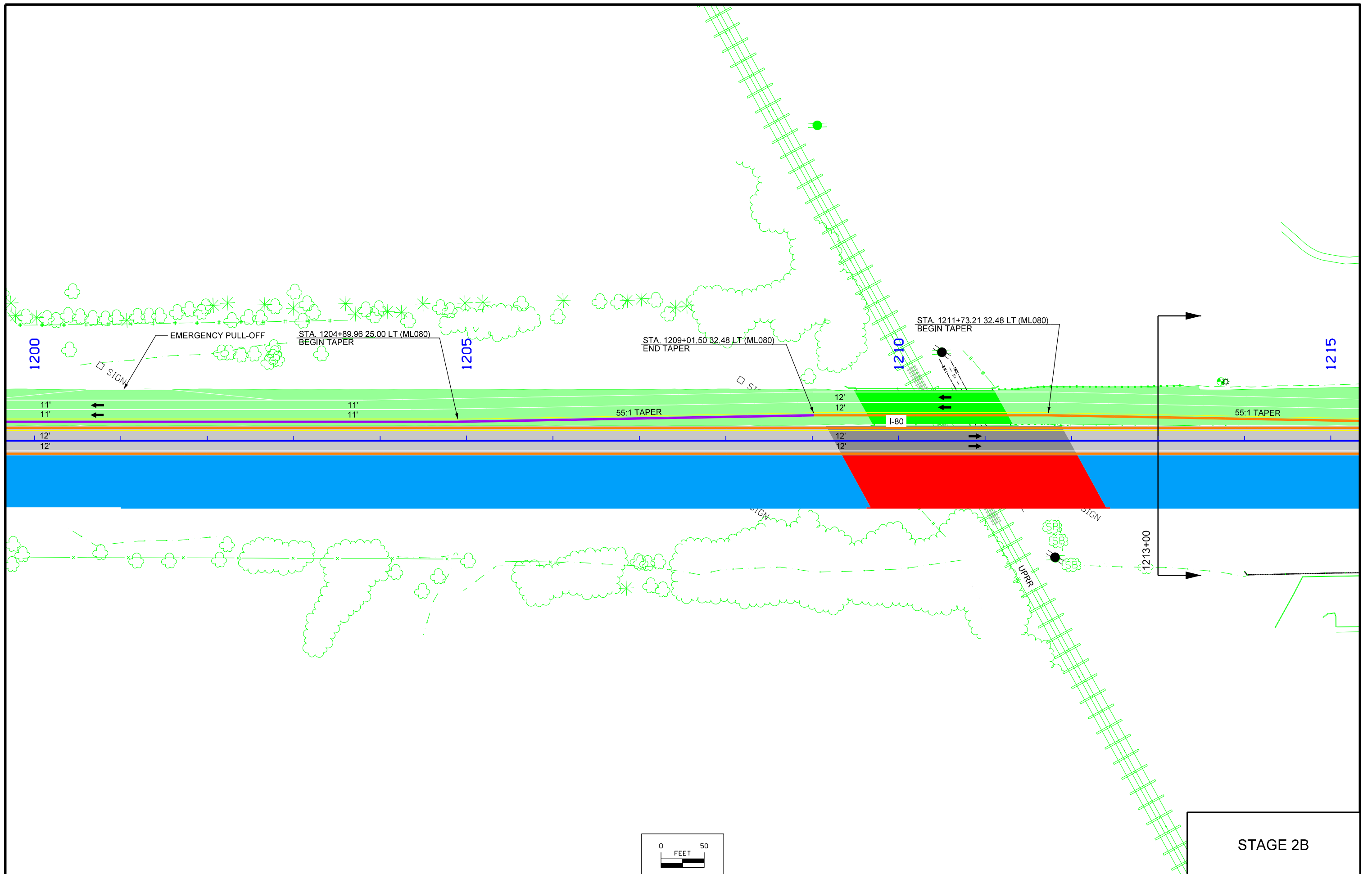


STAGE 2B

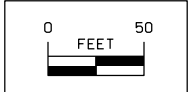


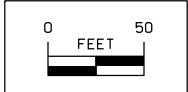
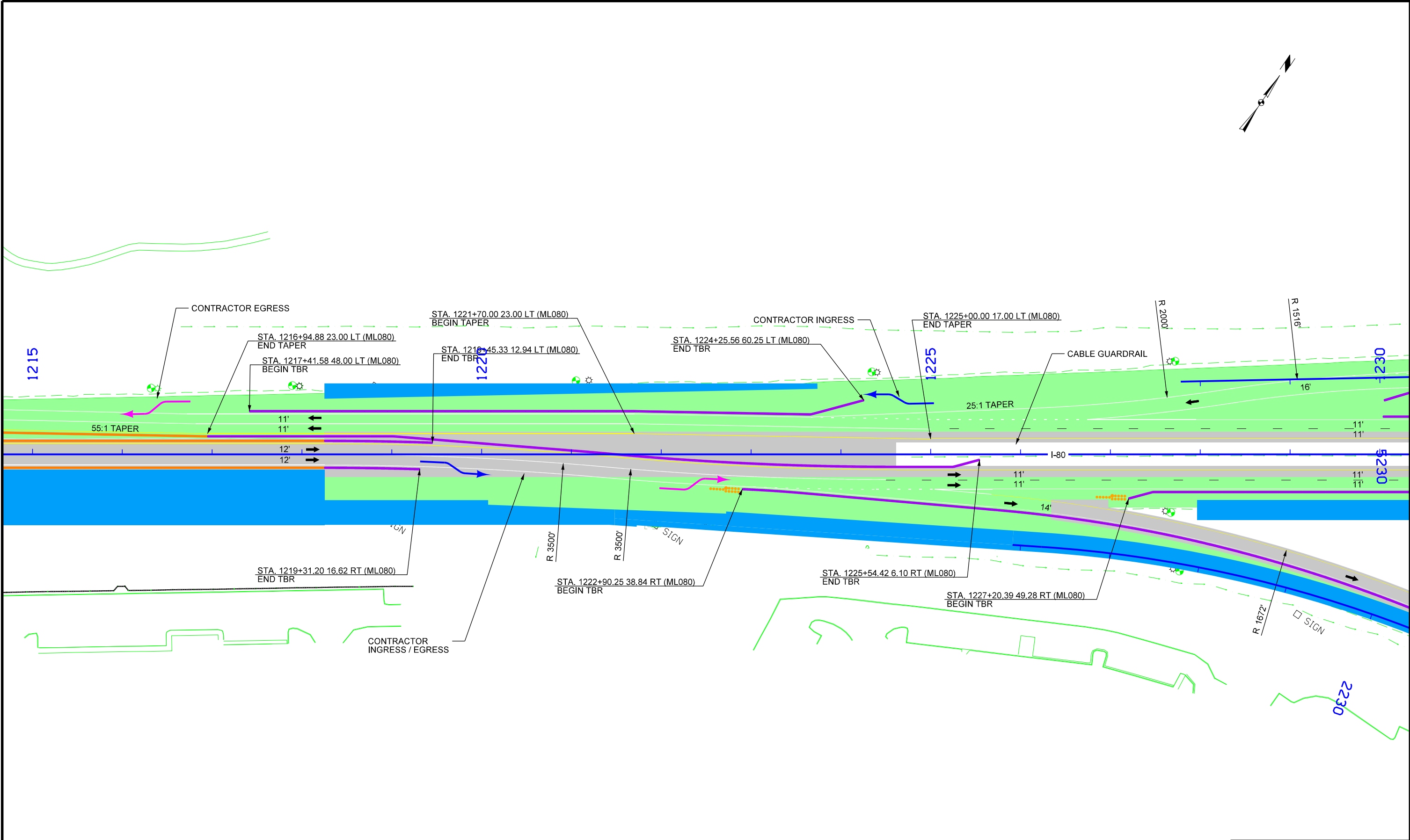
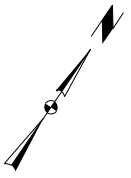


STAGE 2B

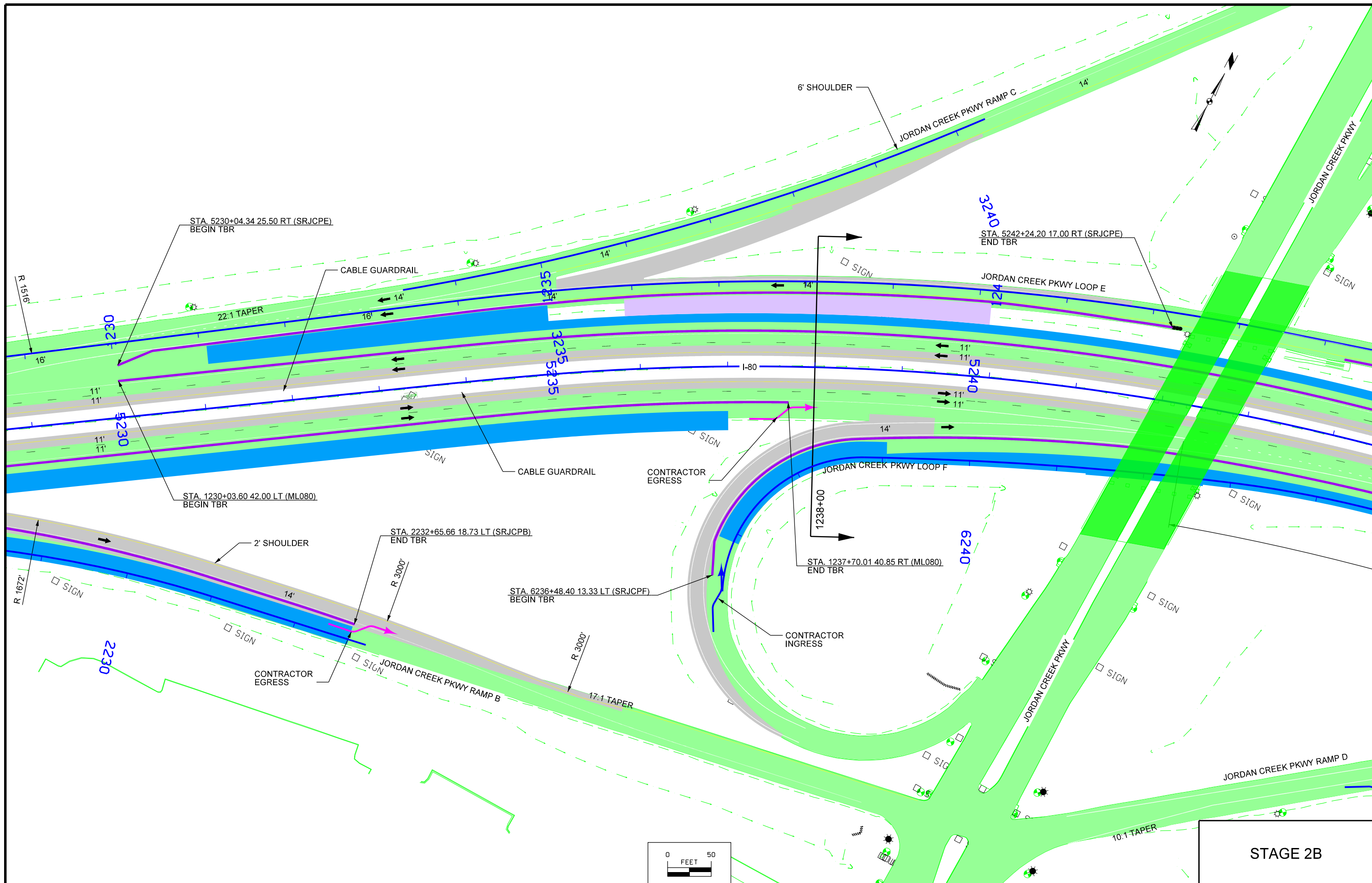


STAGE 2B

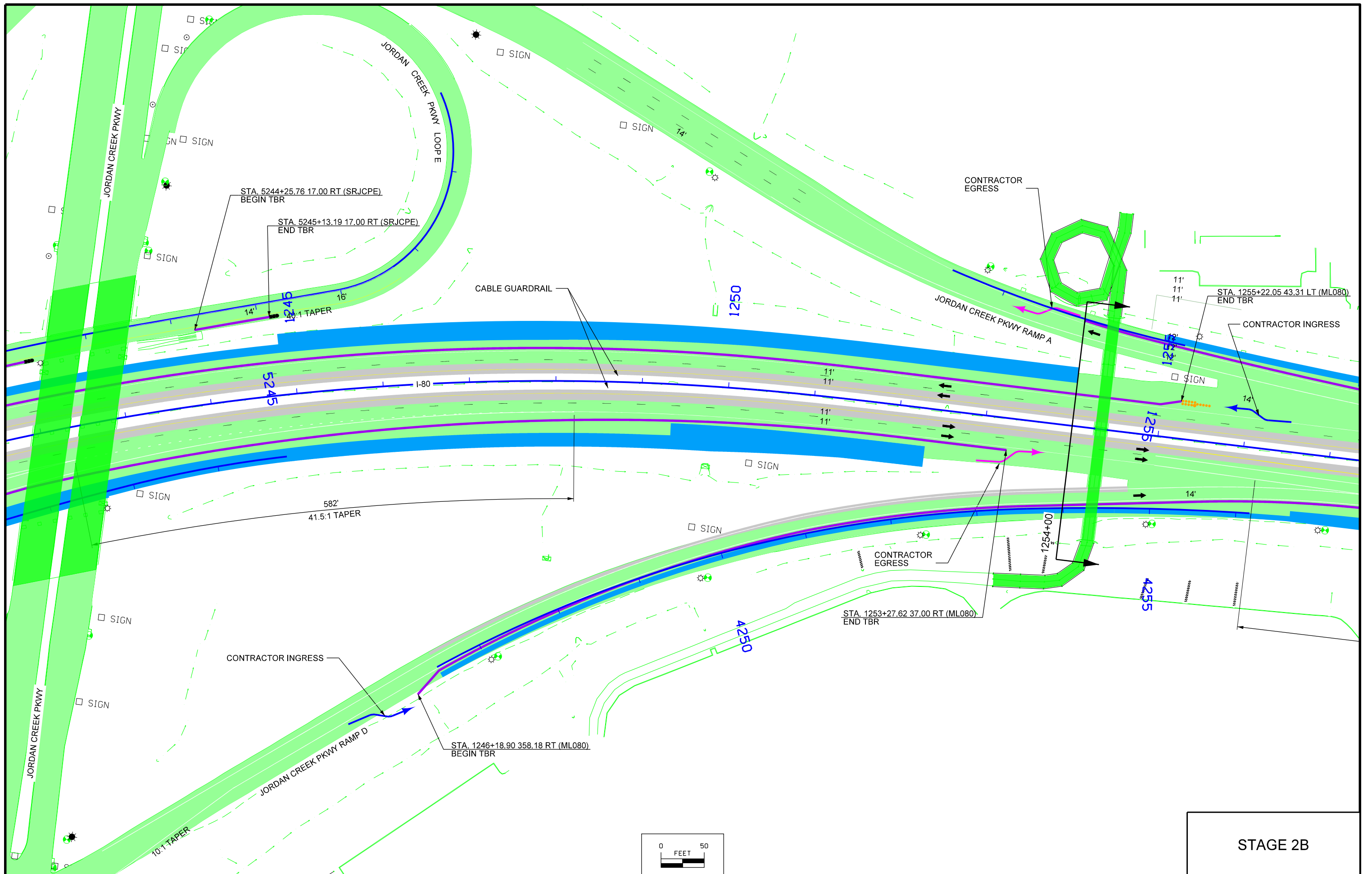




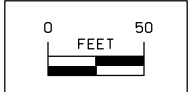
STAGE 2B

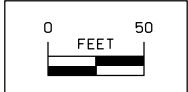
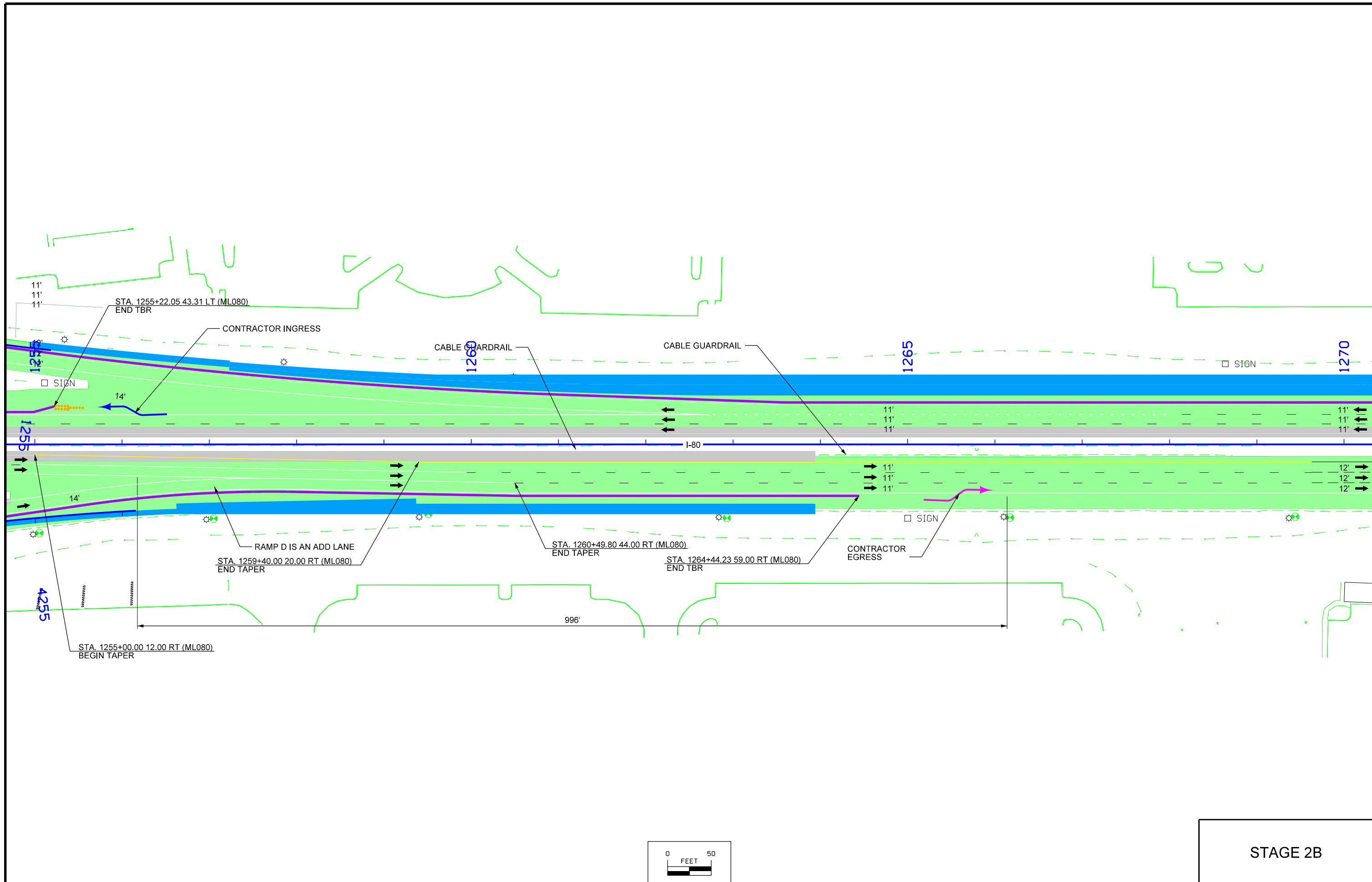


STAGE 2B

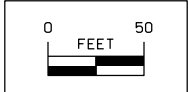
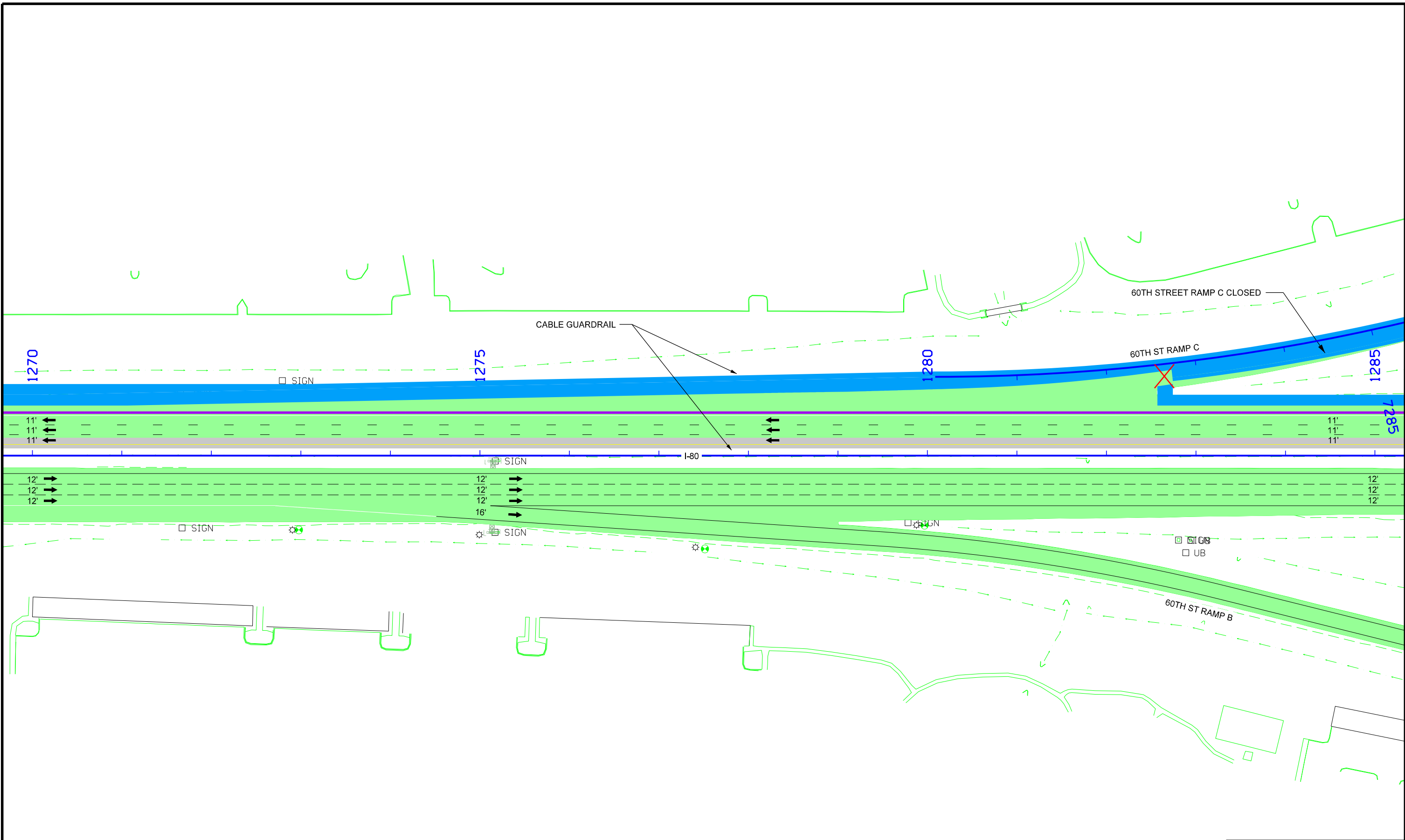


STAGE 2B

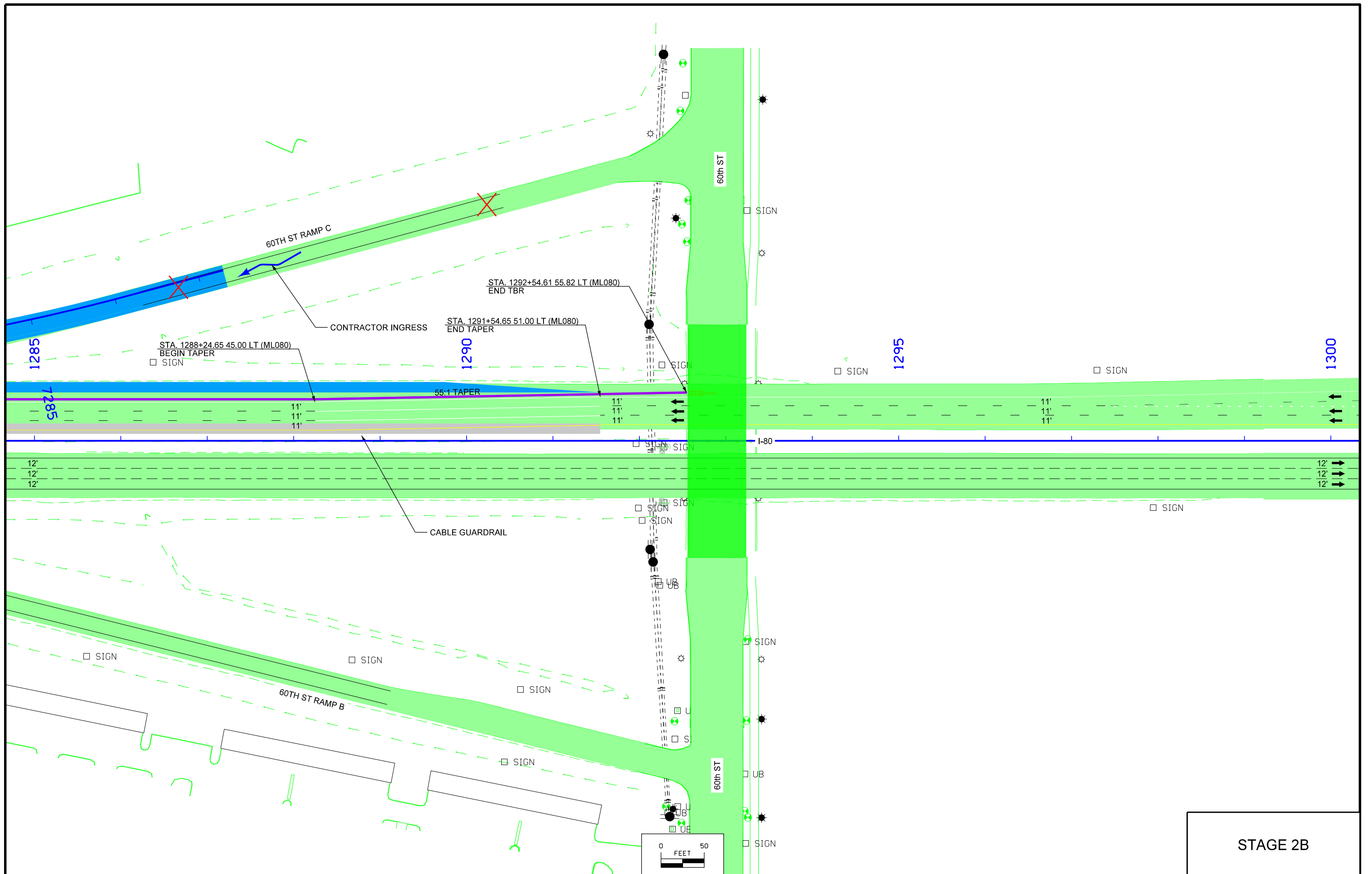




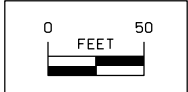
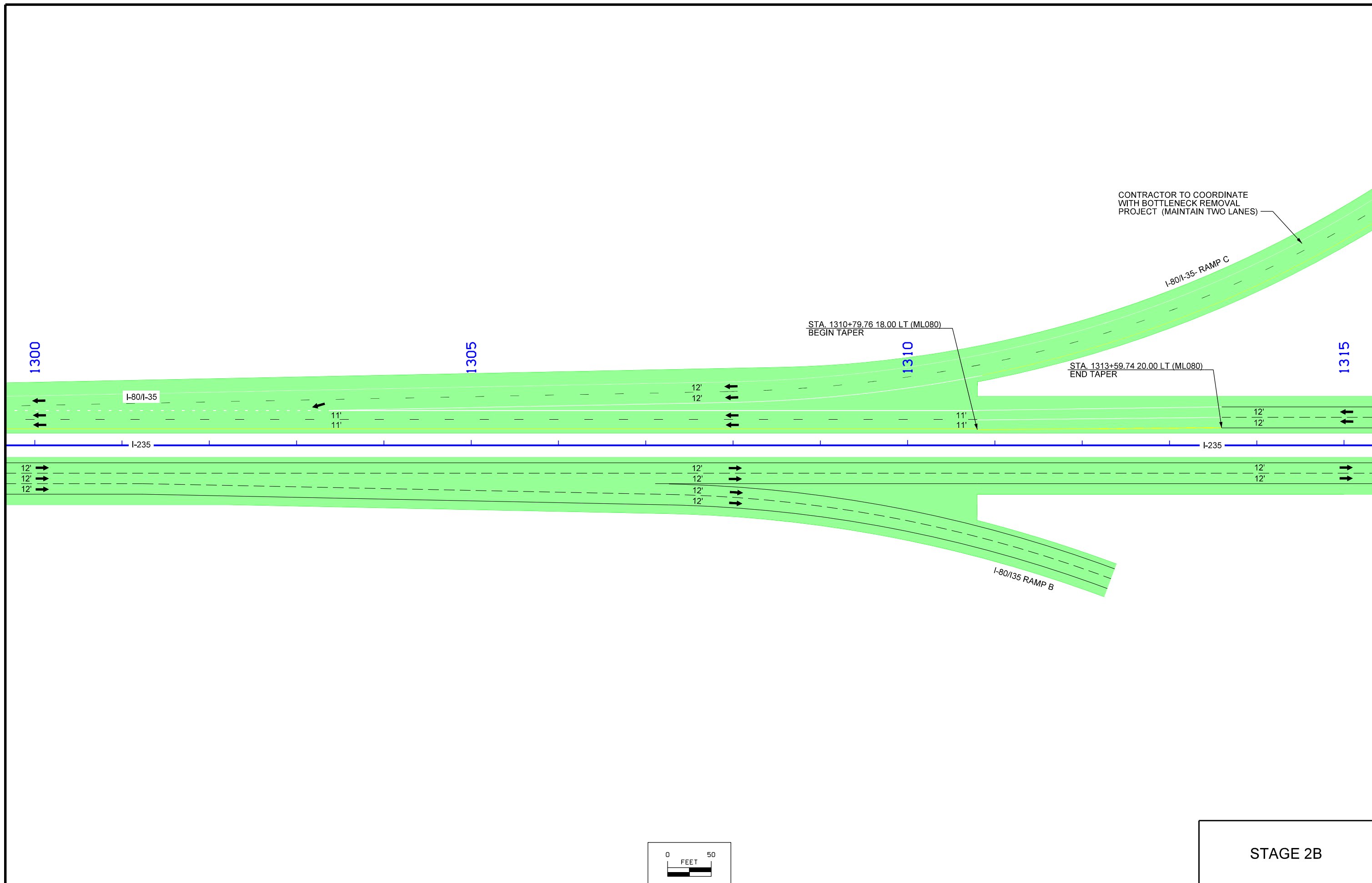
STAGE 2B



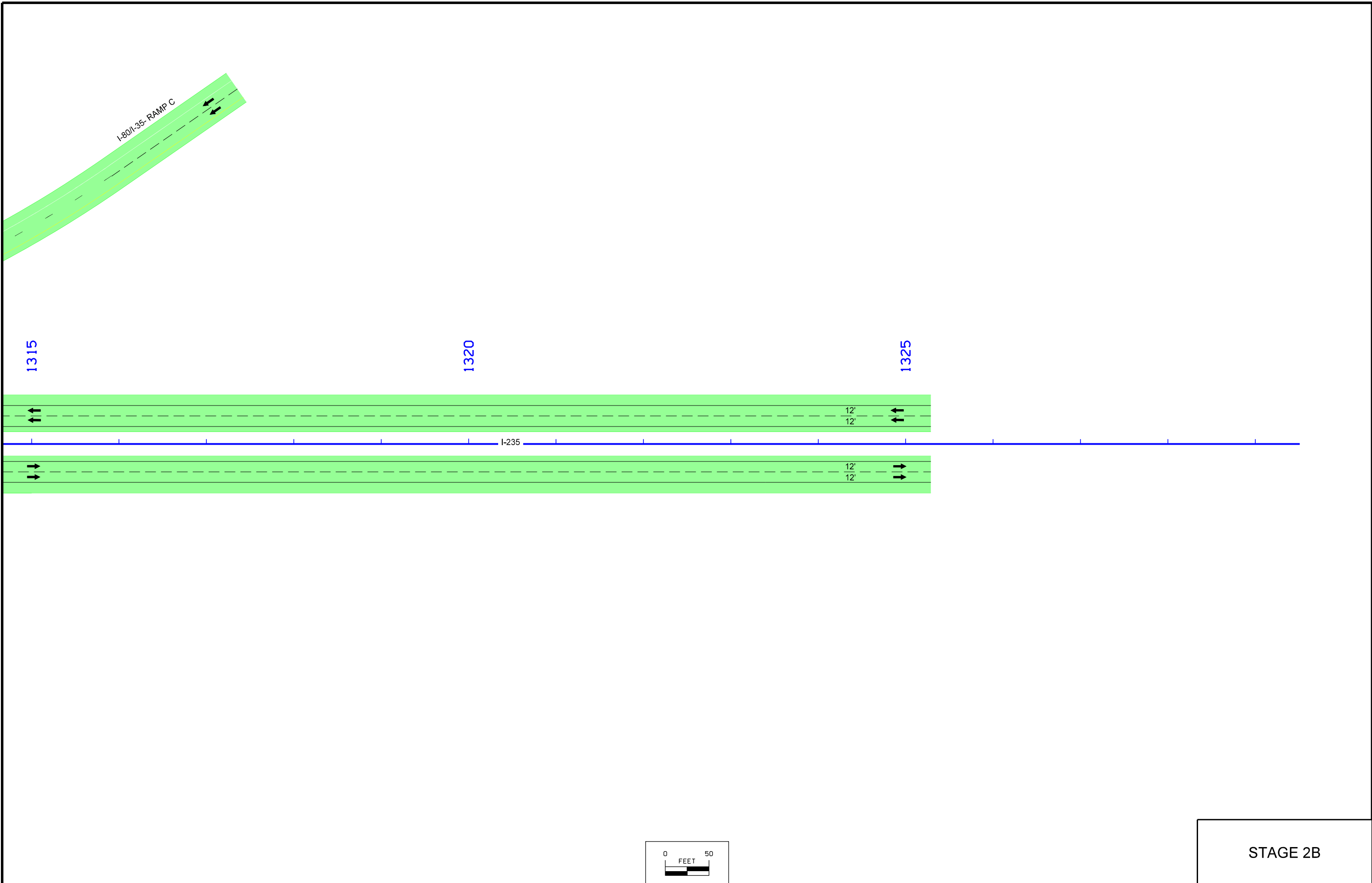
STAGE 2B



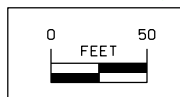
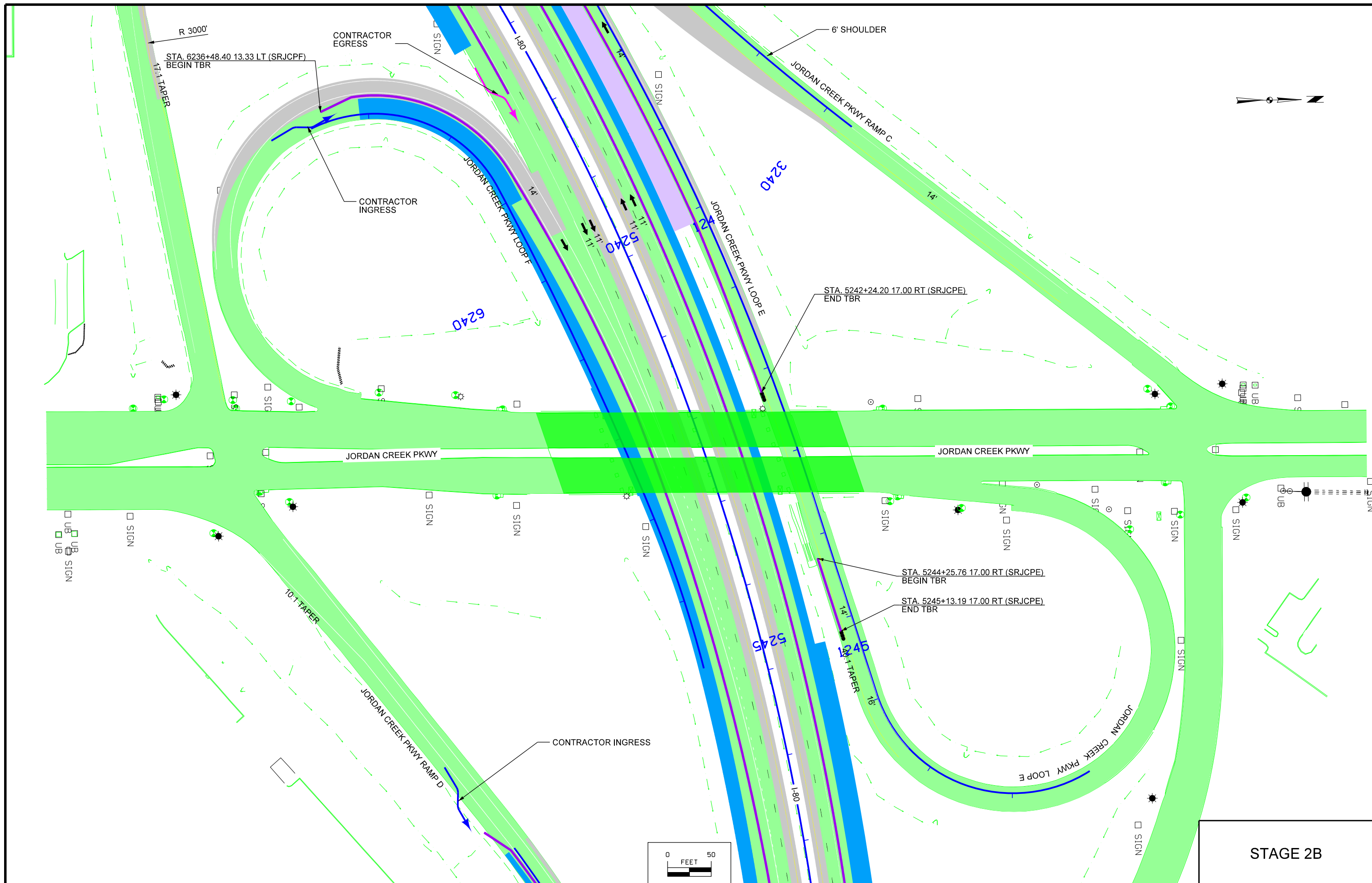
STAGE 2B



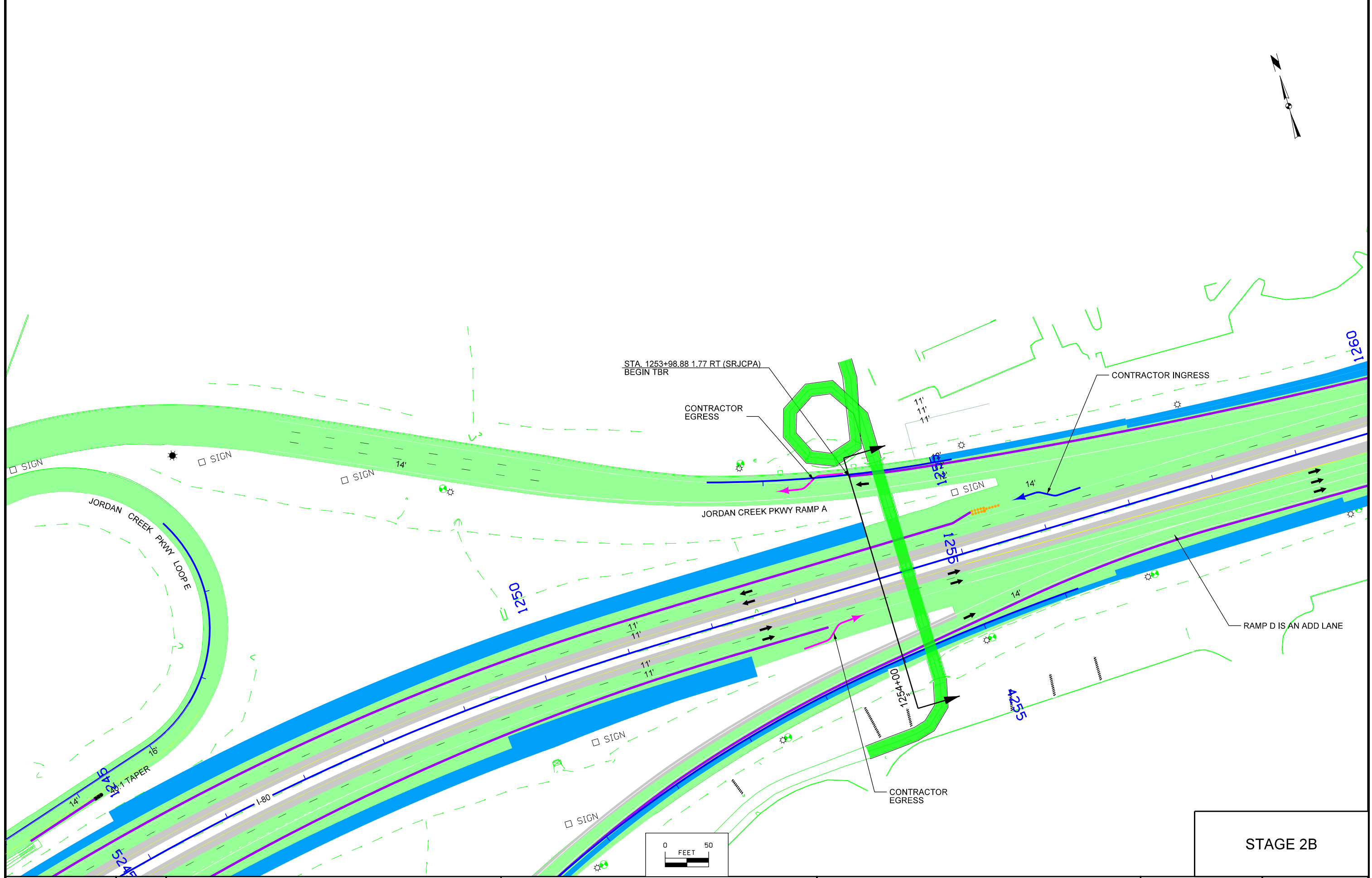
STAGE 2B



STAGE 2B



STAGE 2B



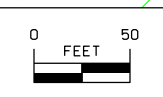
STA. 1253+98.88 1.77 RT (SRJCPA)
BEGIN TBR

CONTRACTOR
EGRESS

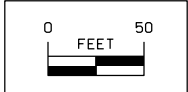
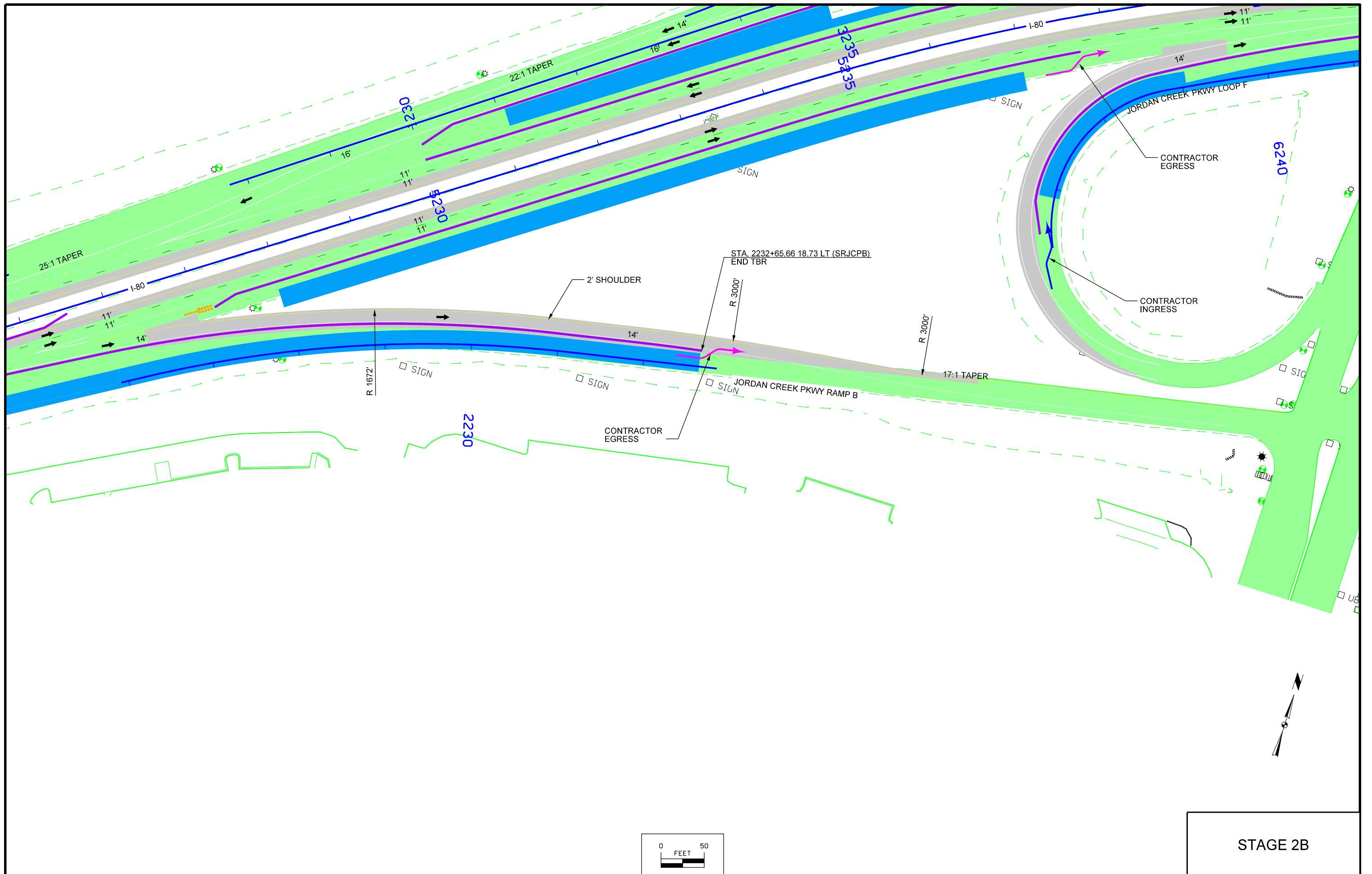
CONTRACTOR INGRESS

JORDAN CREEK PKWY RAMP A

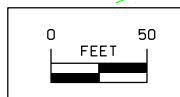
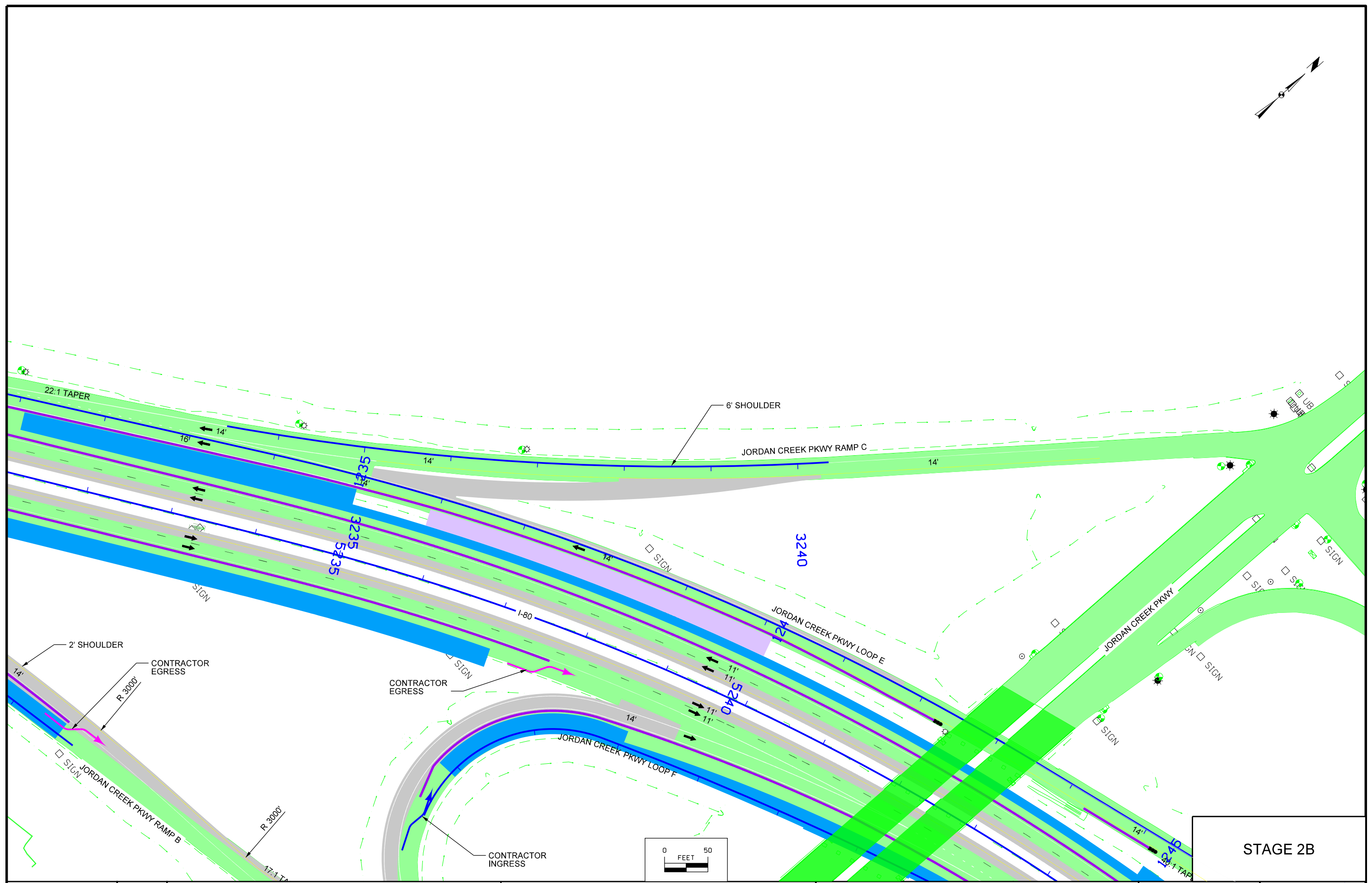
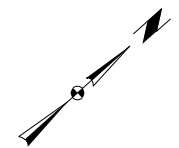
RAMP D IS AN ADD LANE



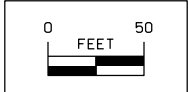
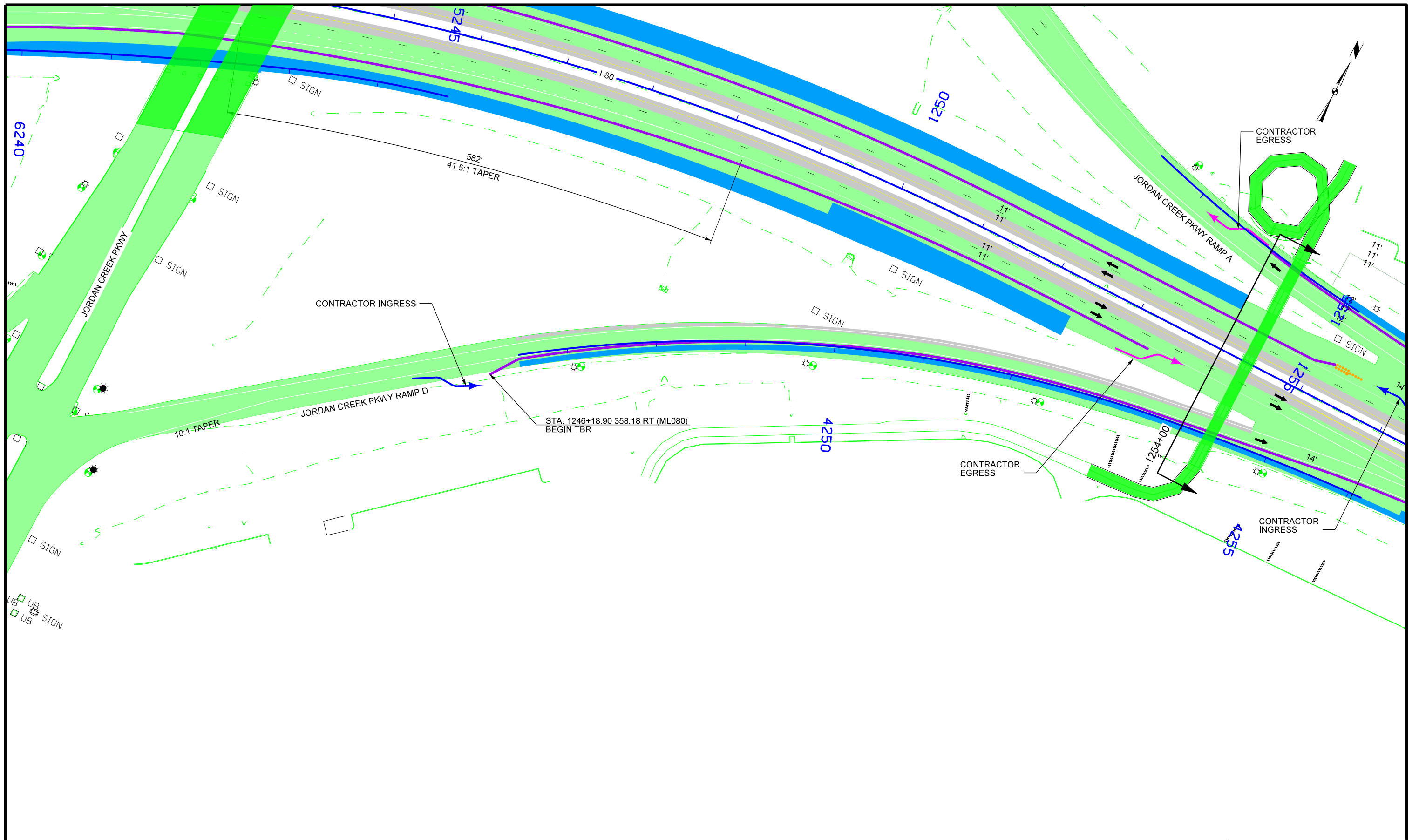
STAGE 2B



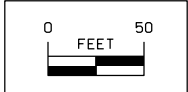
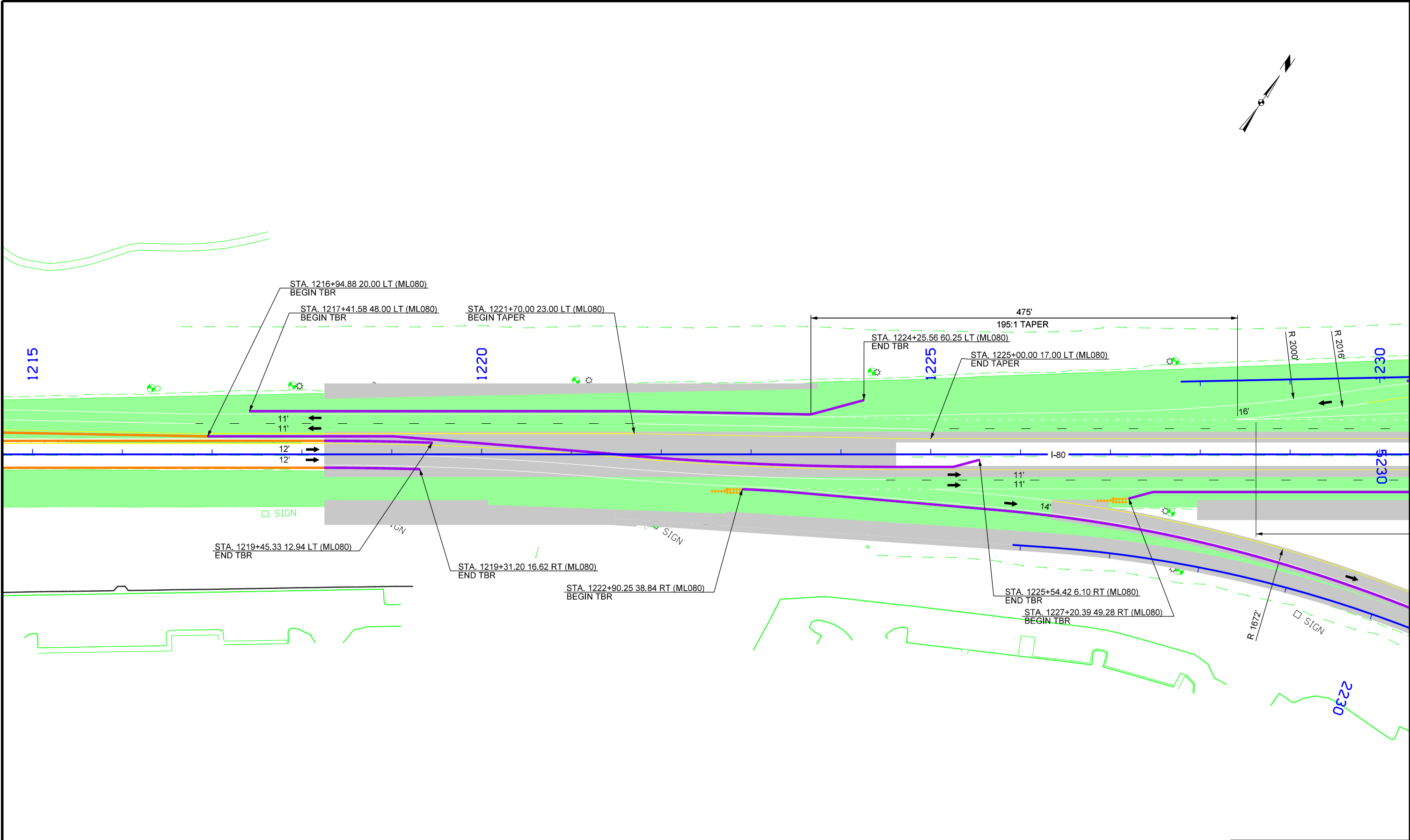
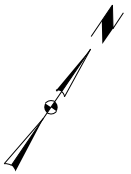
STAGE 2B



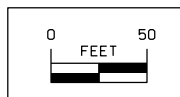
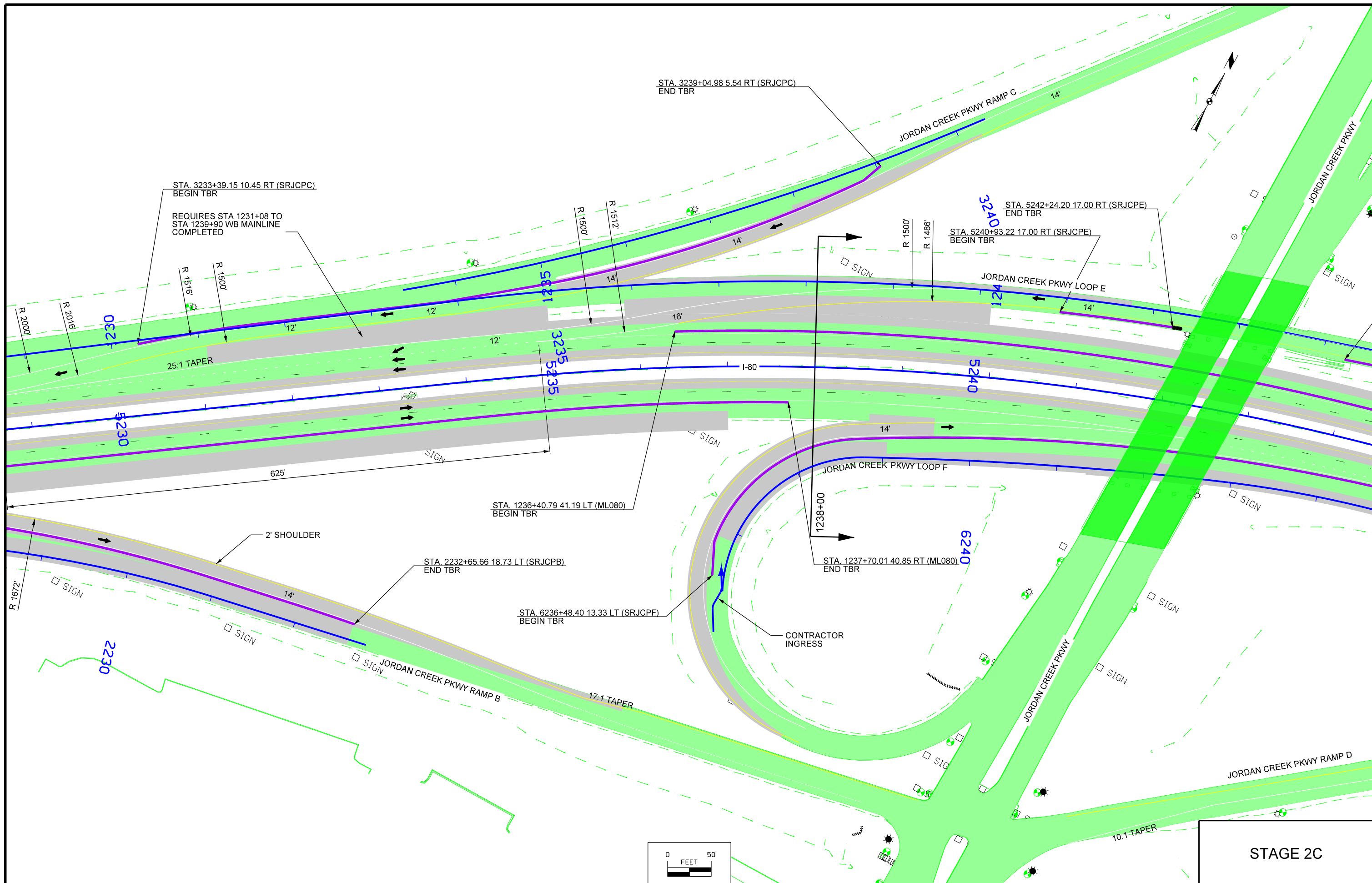
STAGE 2B



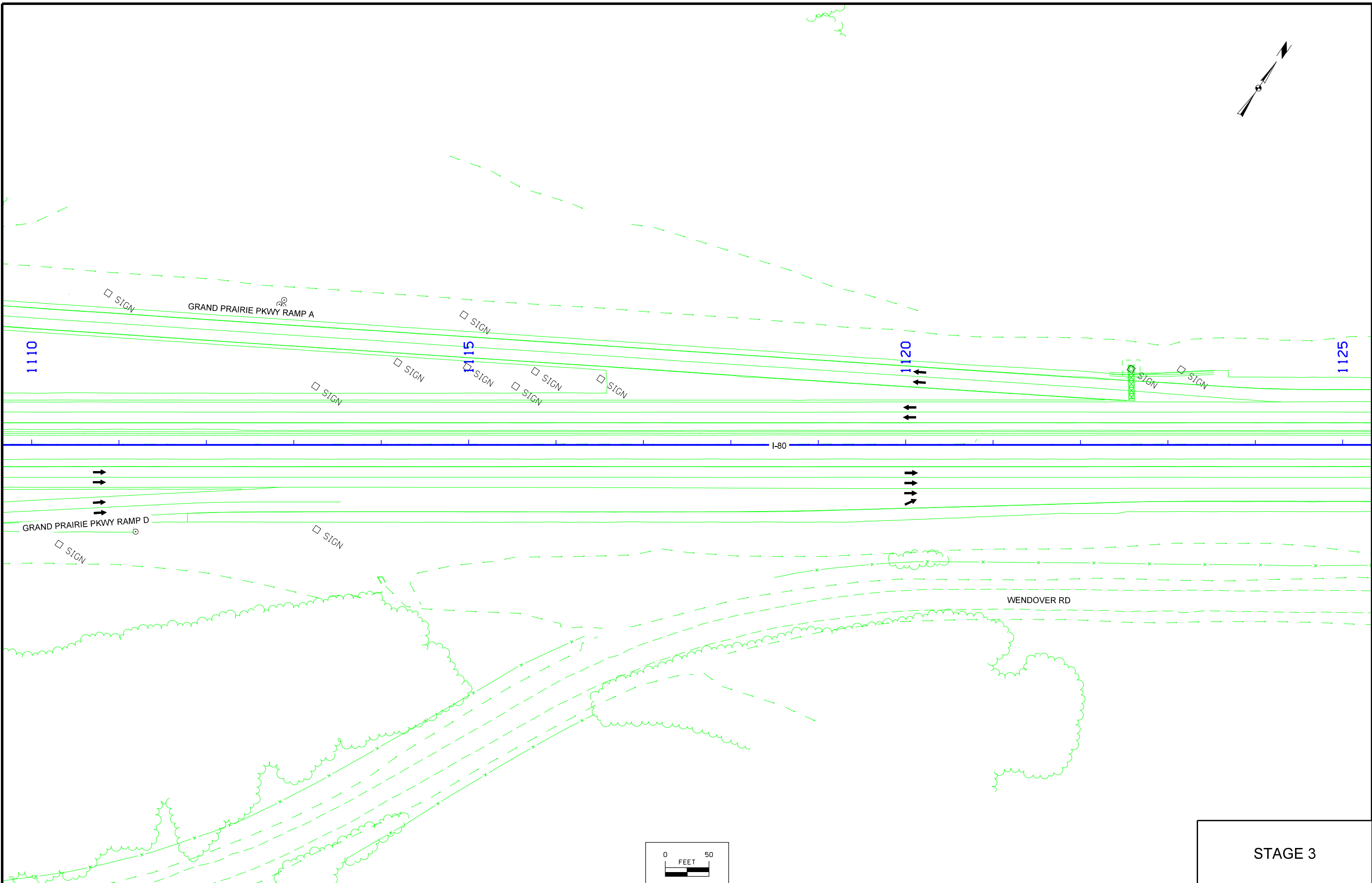
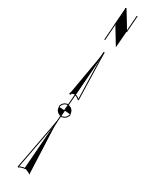
STAGE 2B



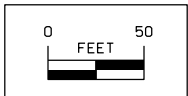
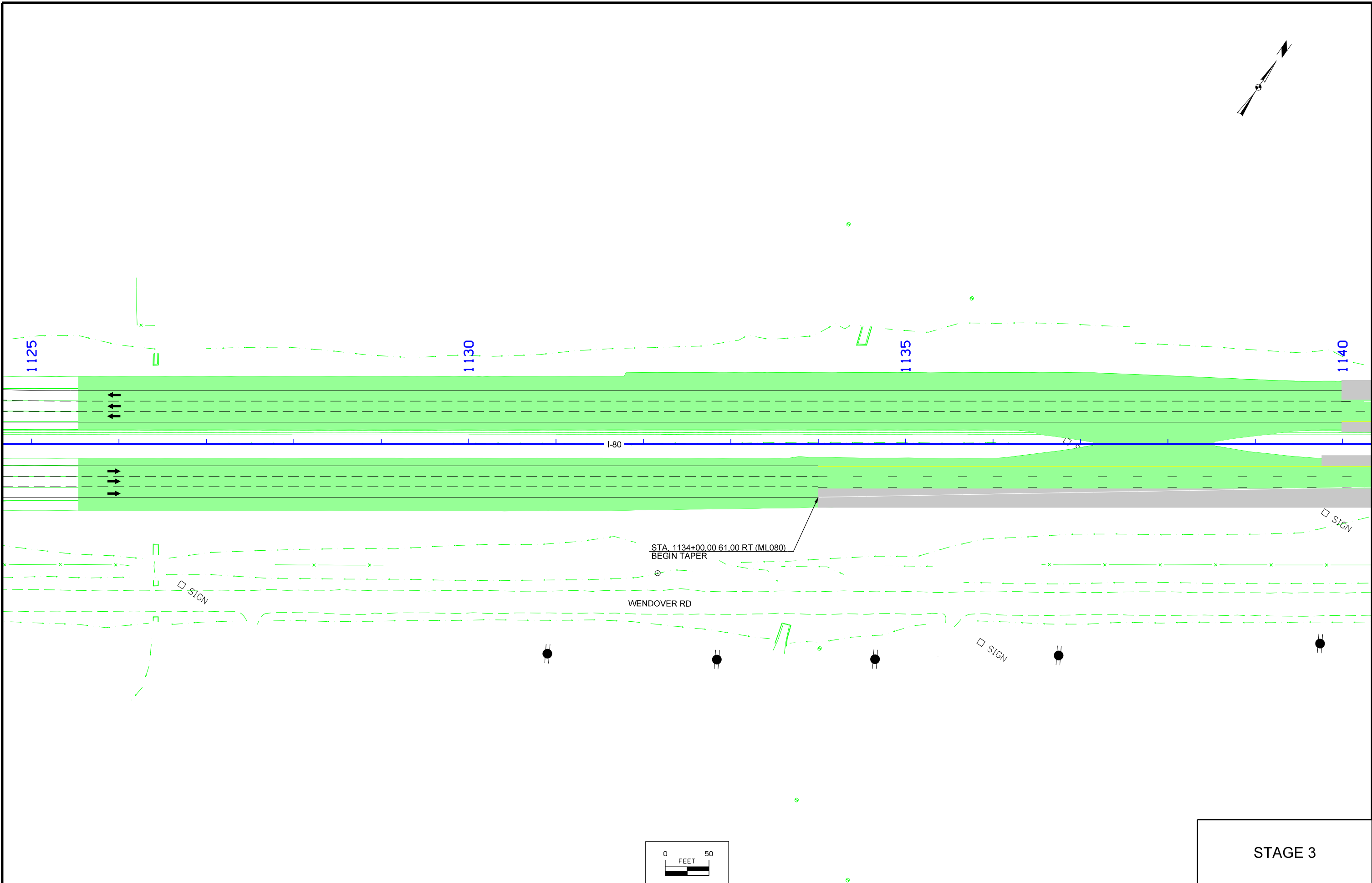
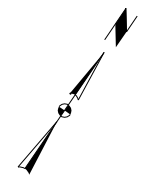
STAGE 2C



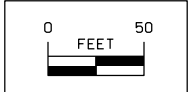
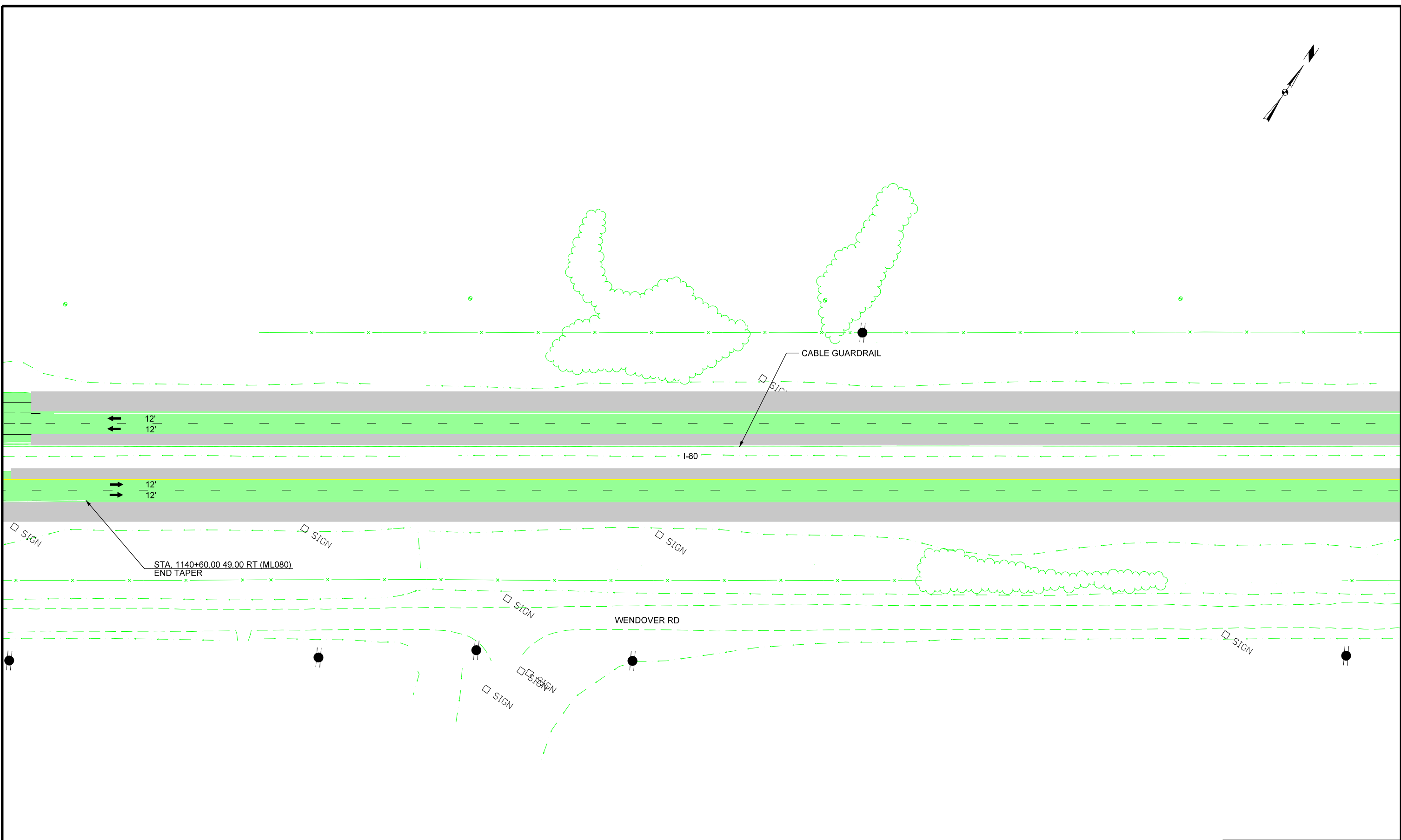
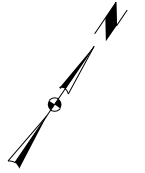
STAGE 2C



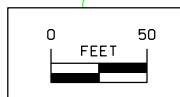
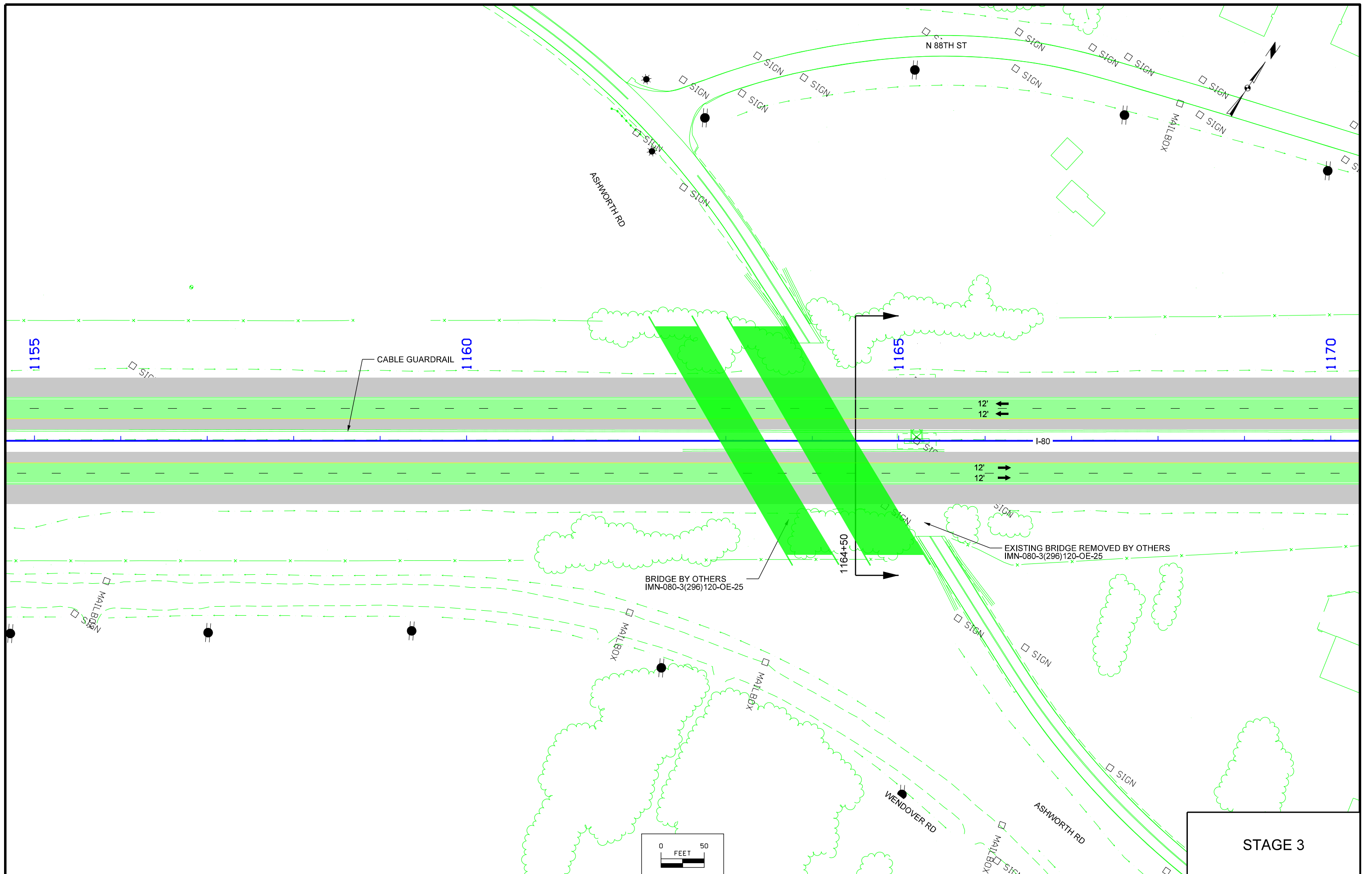
STAGE 3



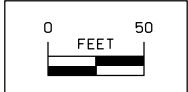
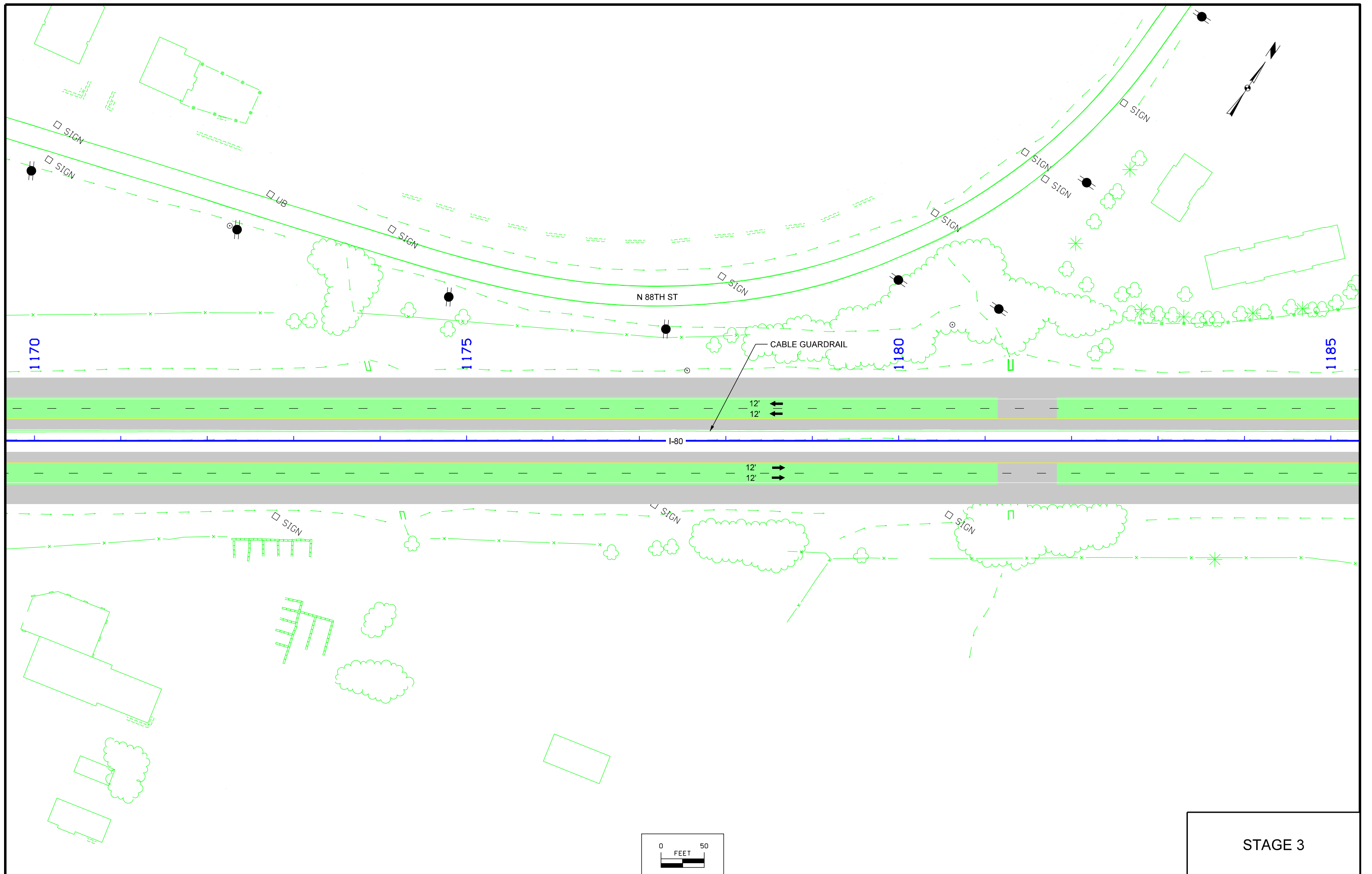
STAGE 3



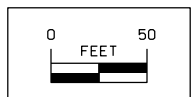
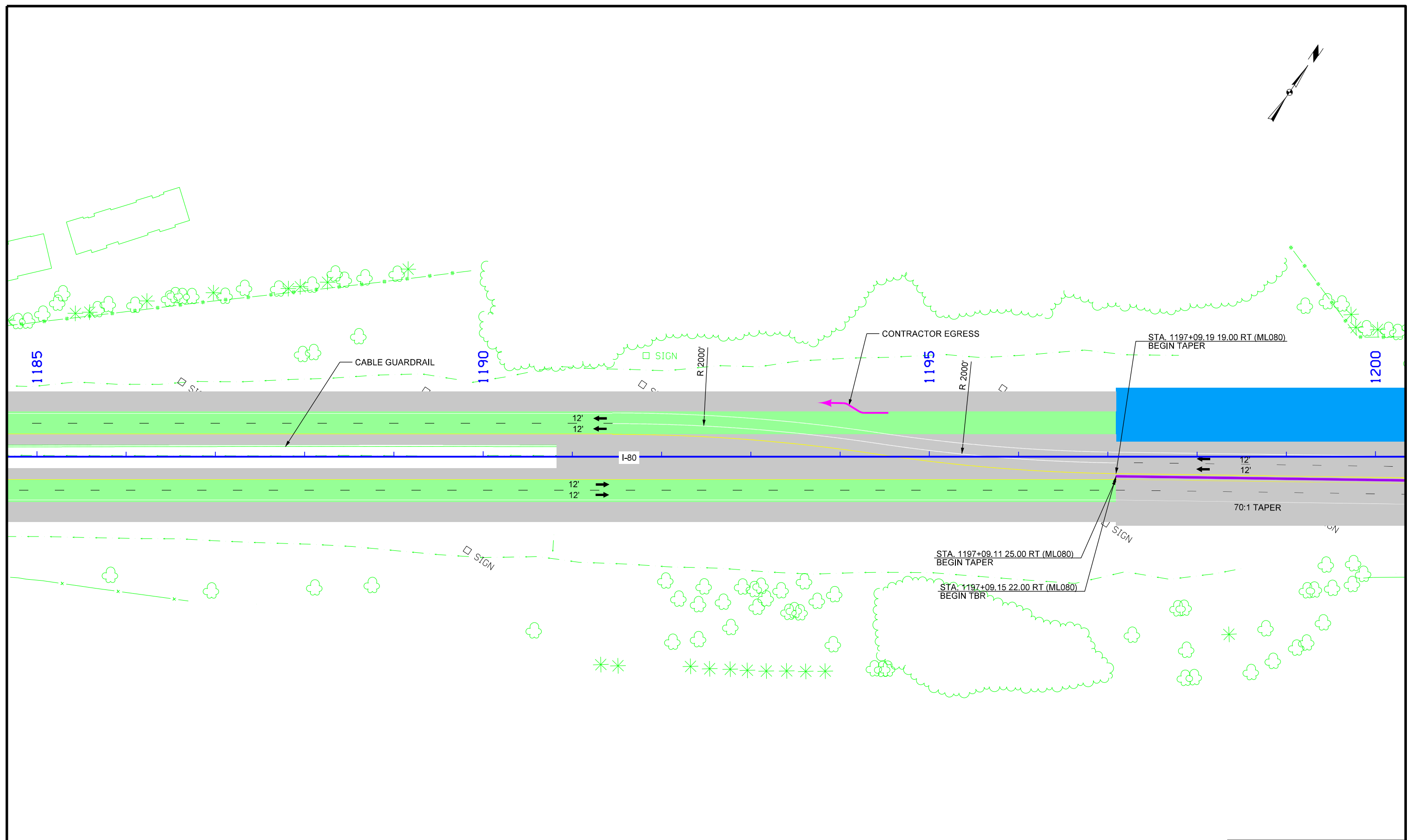
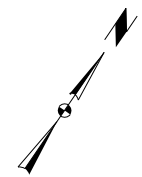
STAGE 3



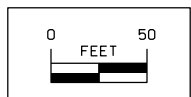
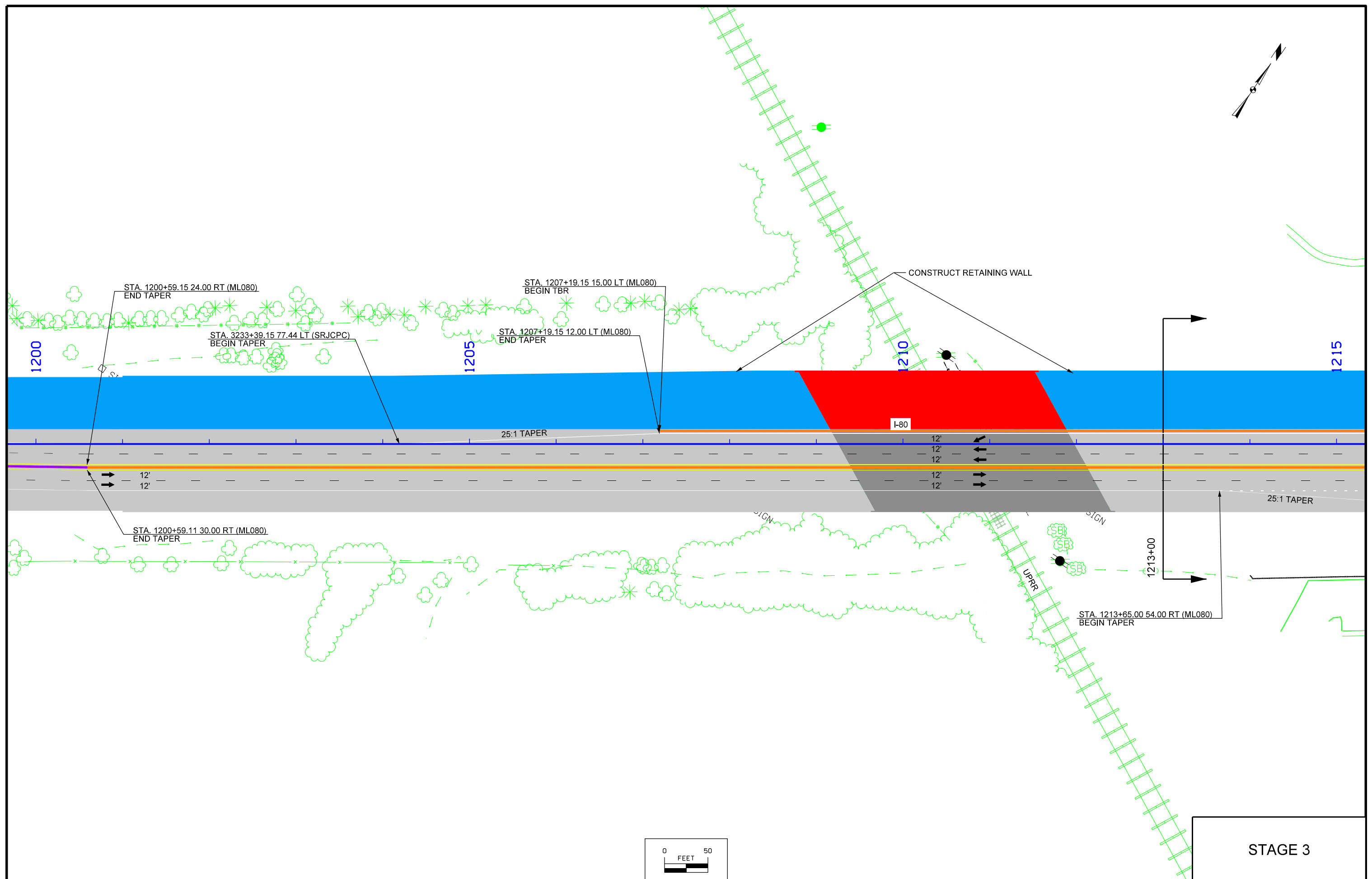
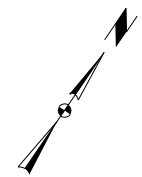
STAGE 3



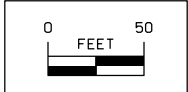
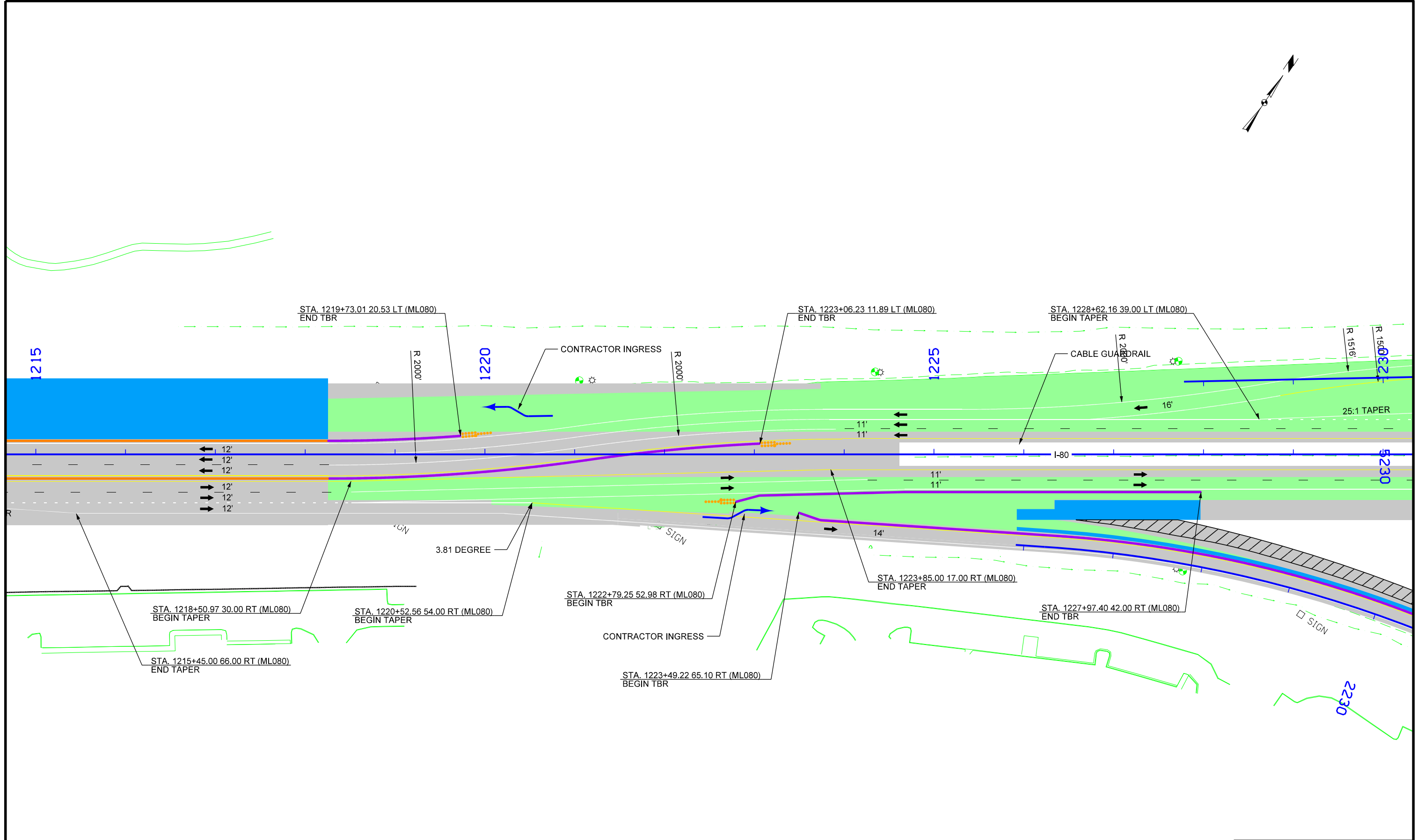
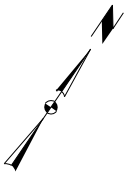
STAGE 3



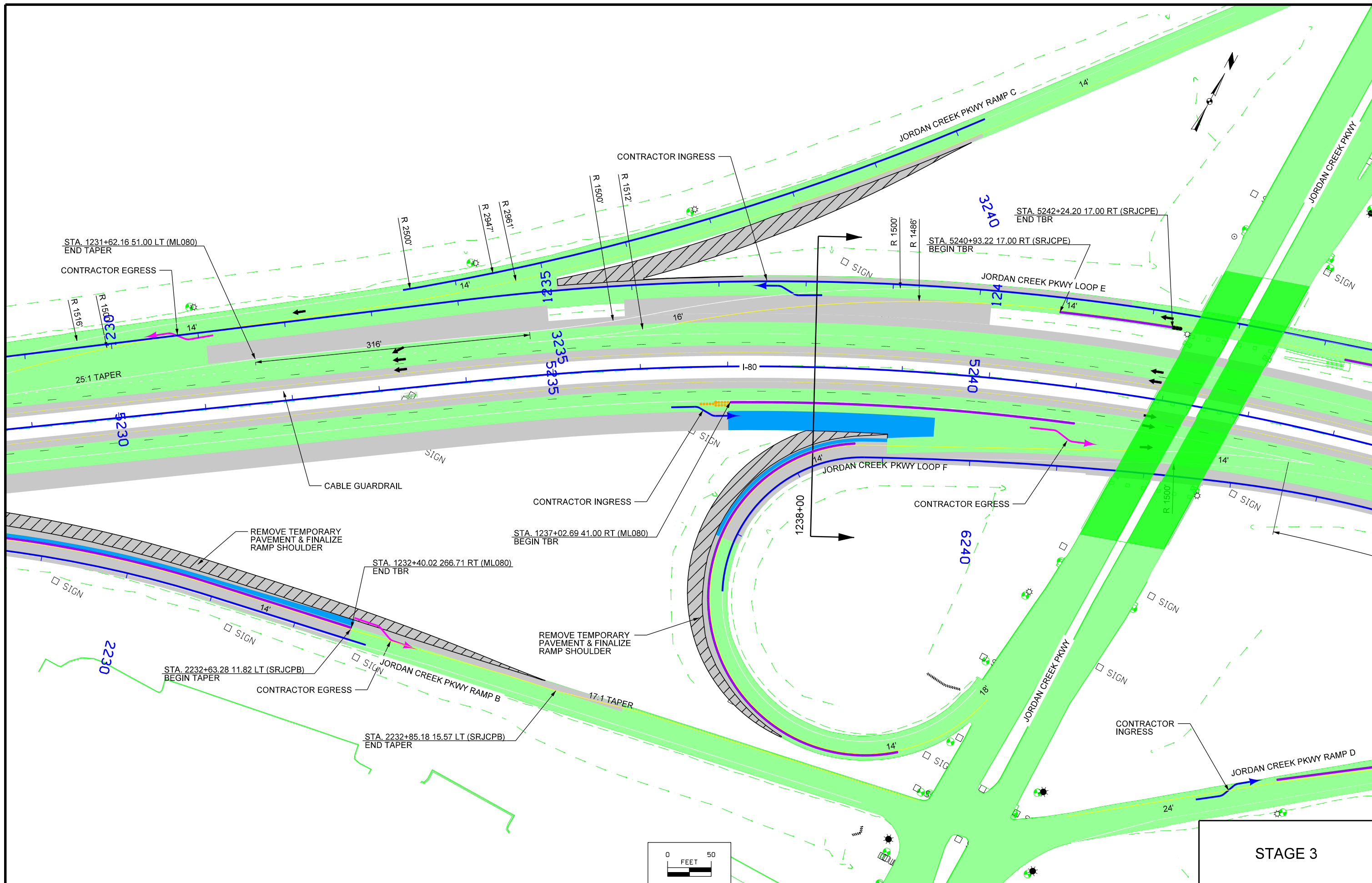
STAGE 3



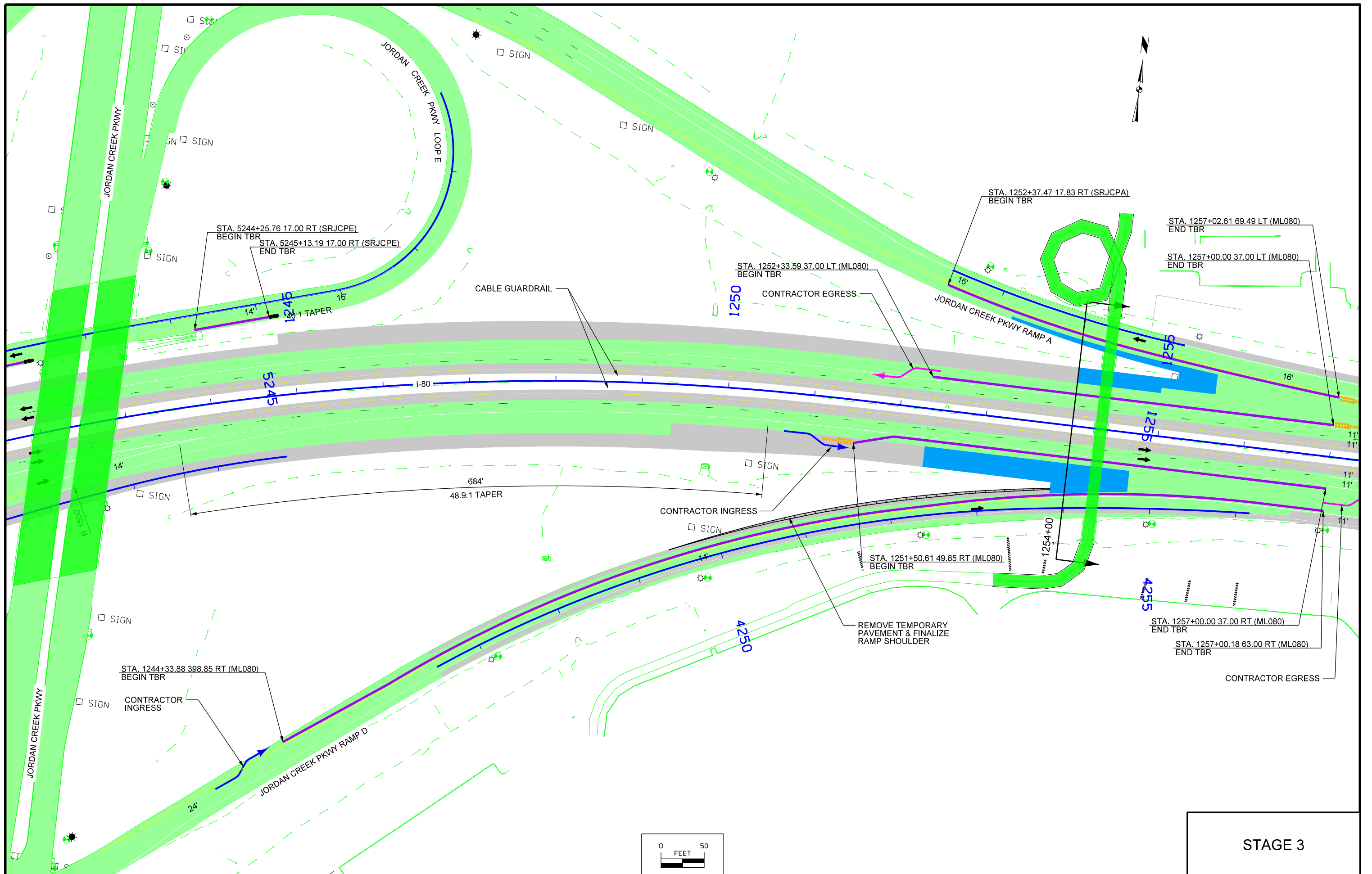
STAGE 3



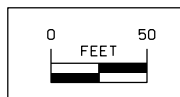
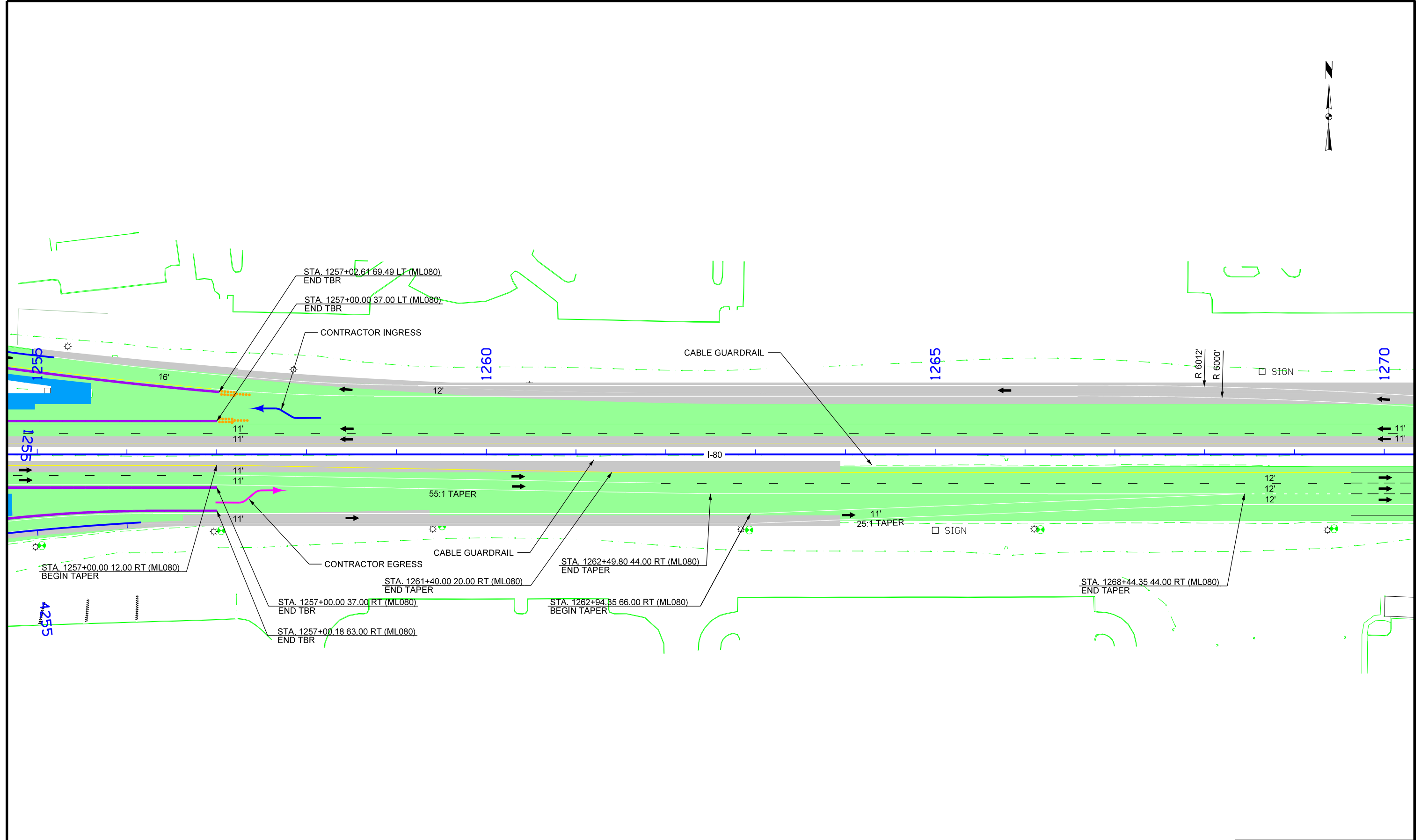
STAGE 3



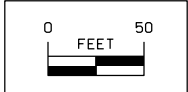
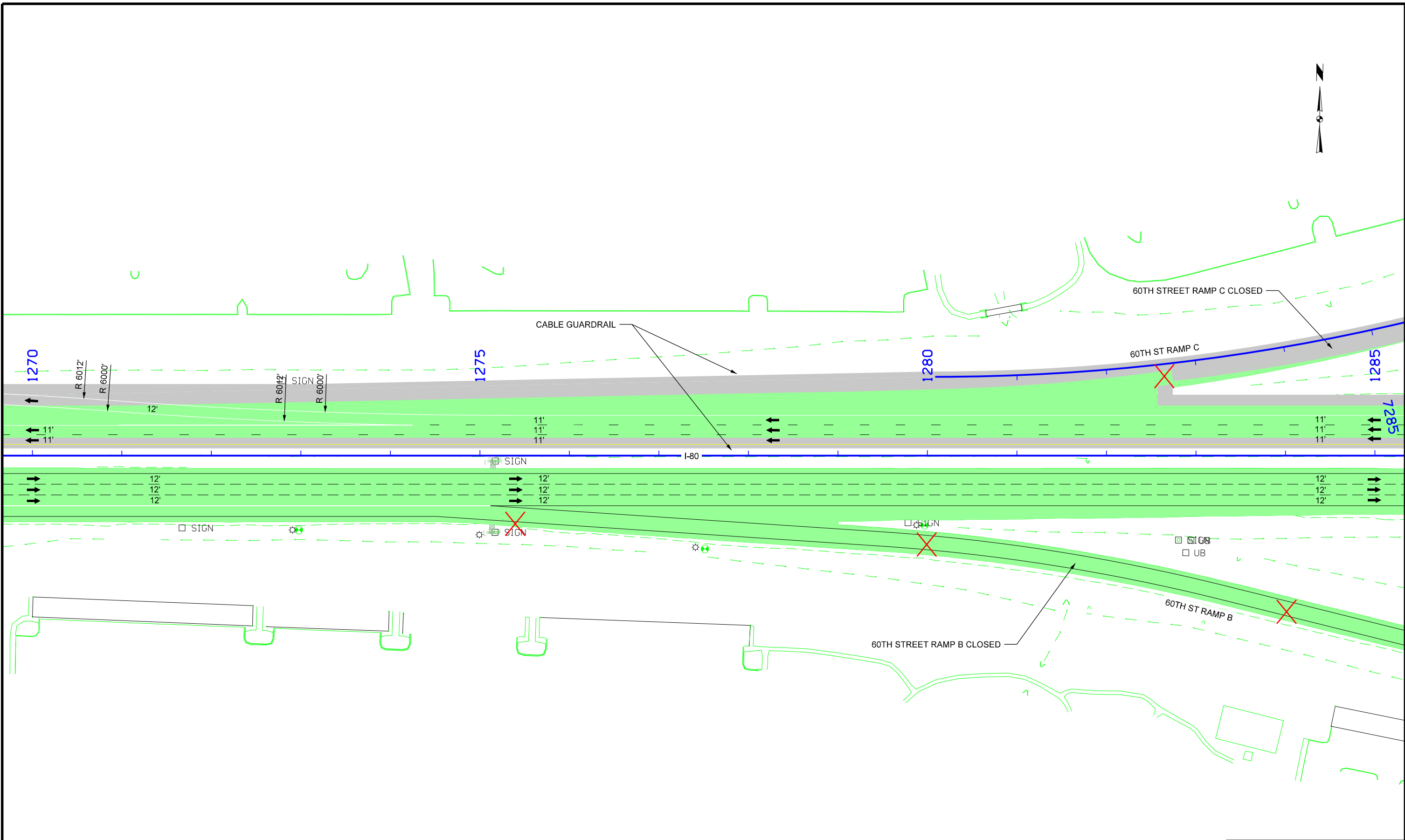
STAGE 3



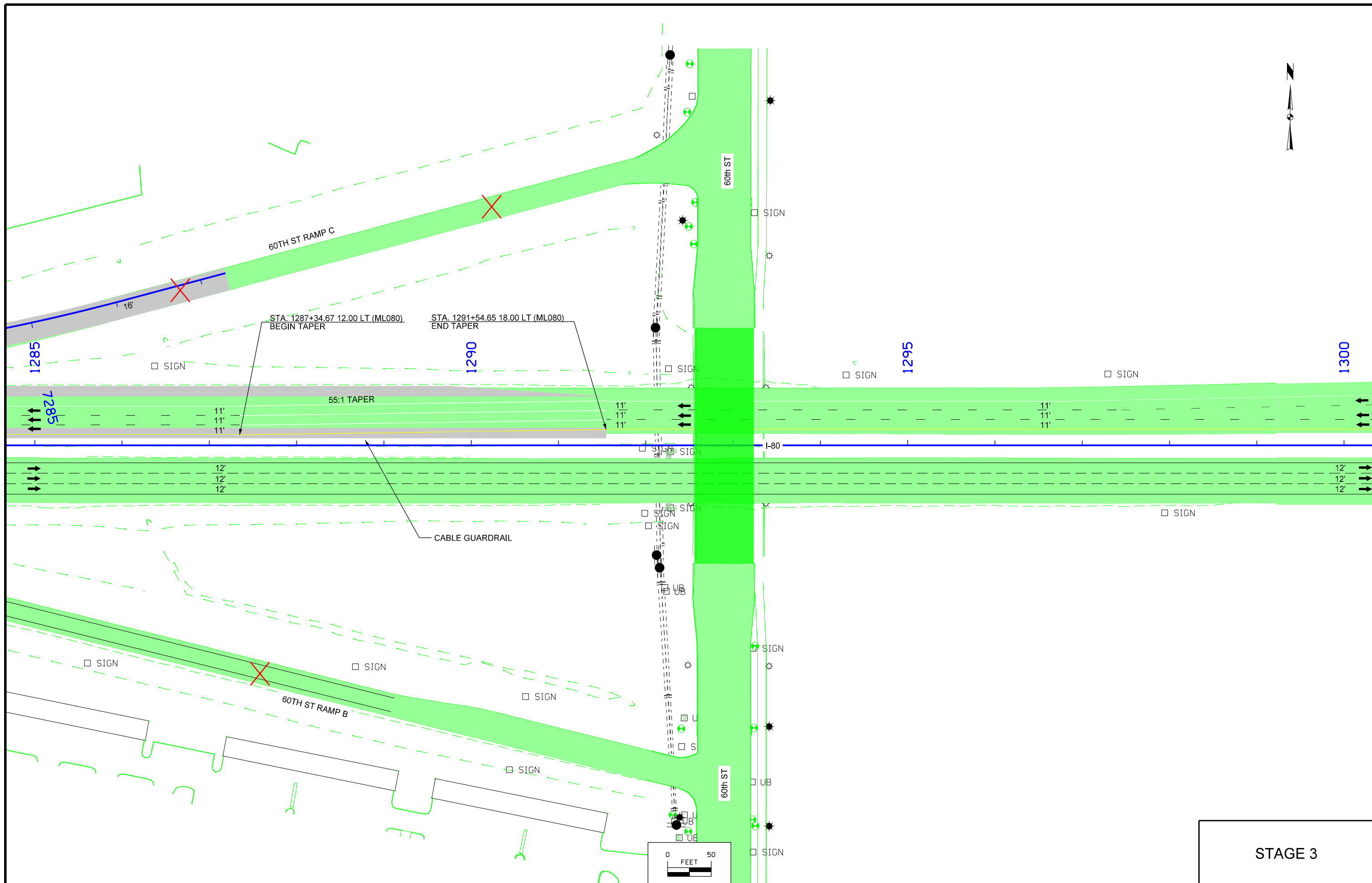
STAGE 3



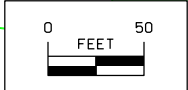
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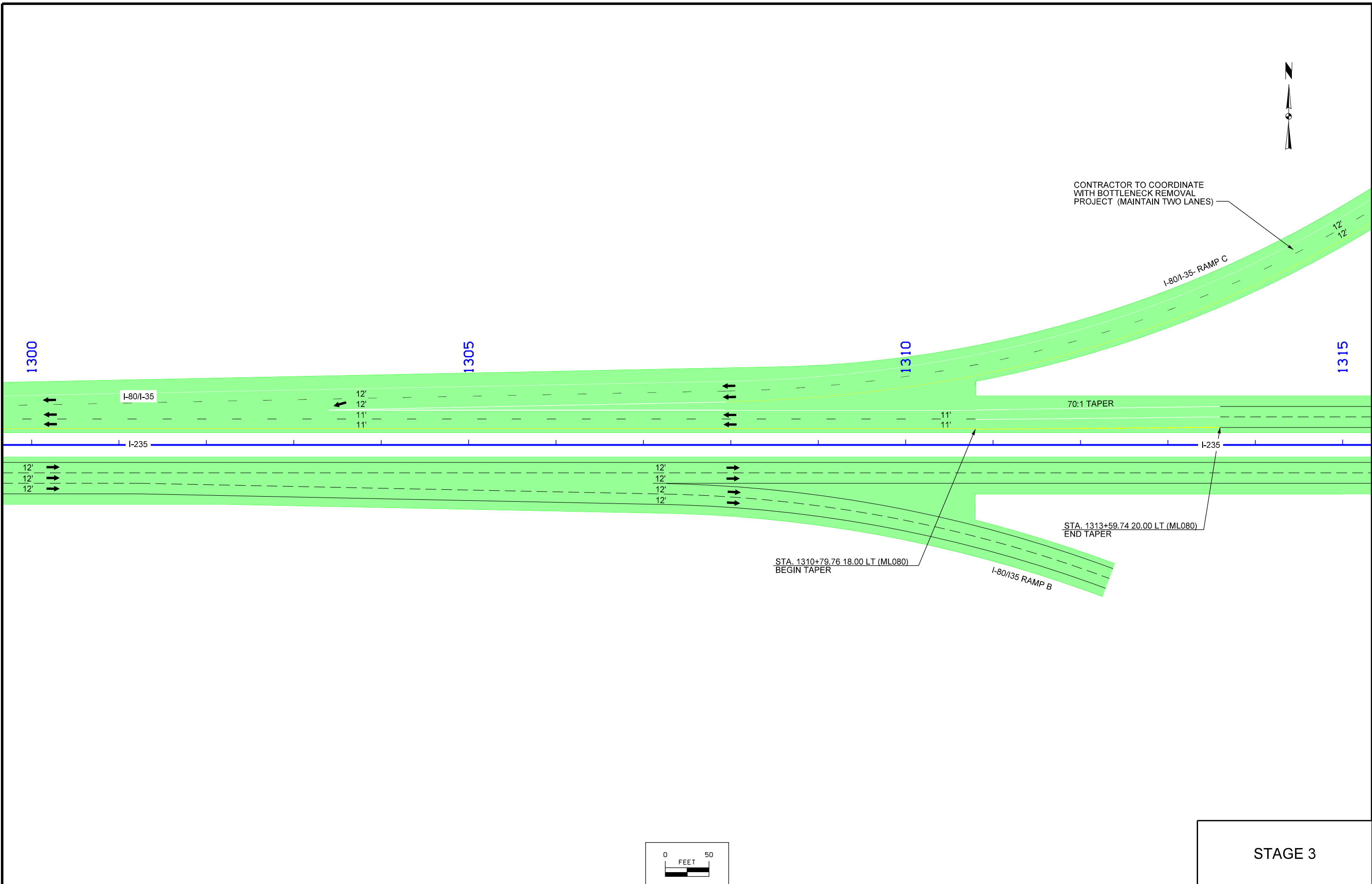


STAGE 3

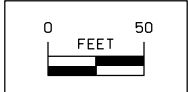


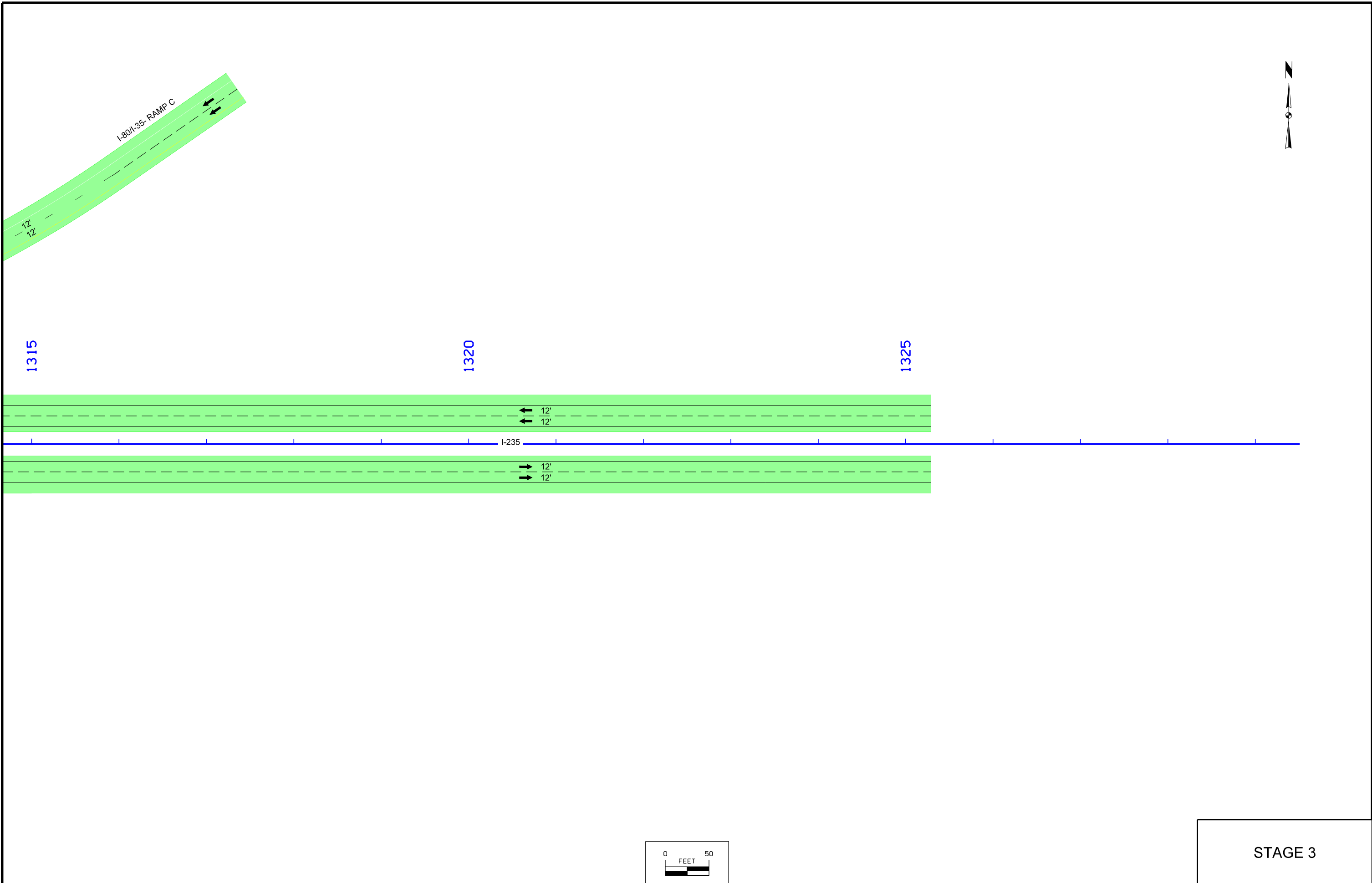
STAGE 3



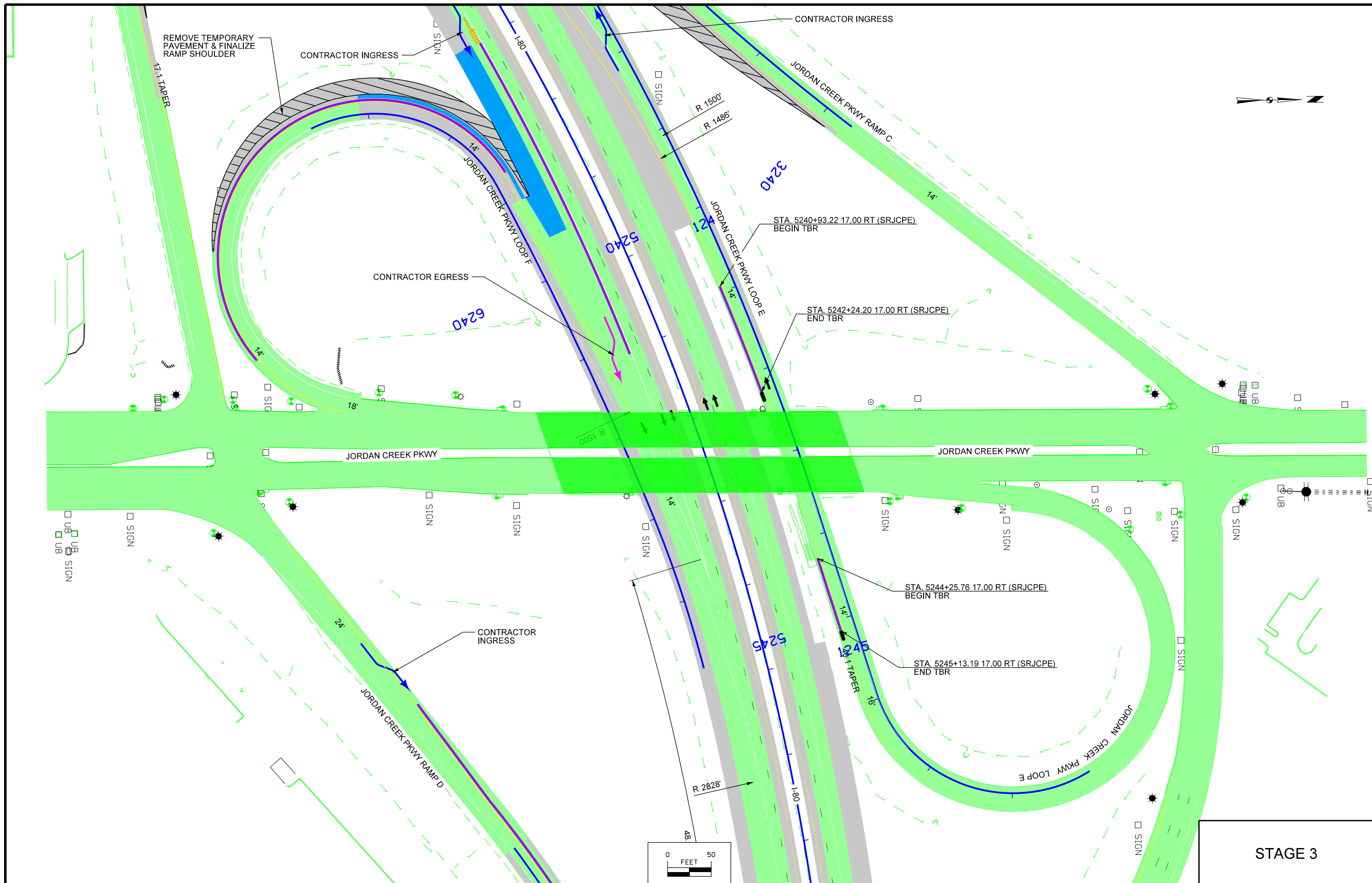


STAGE 3

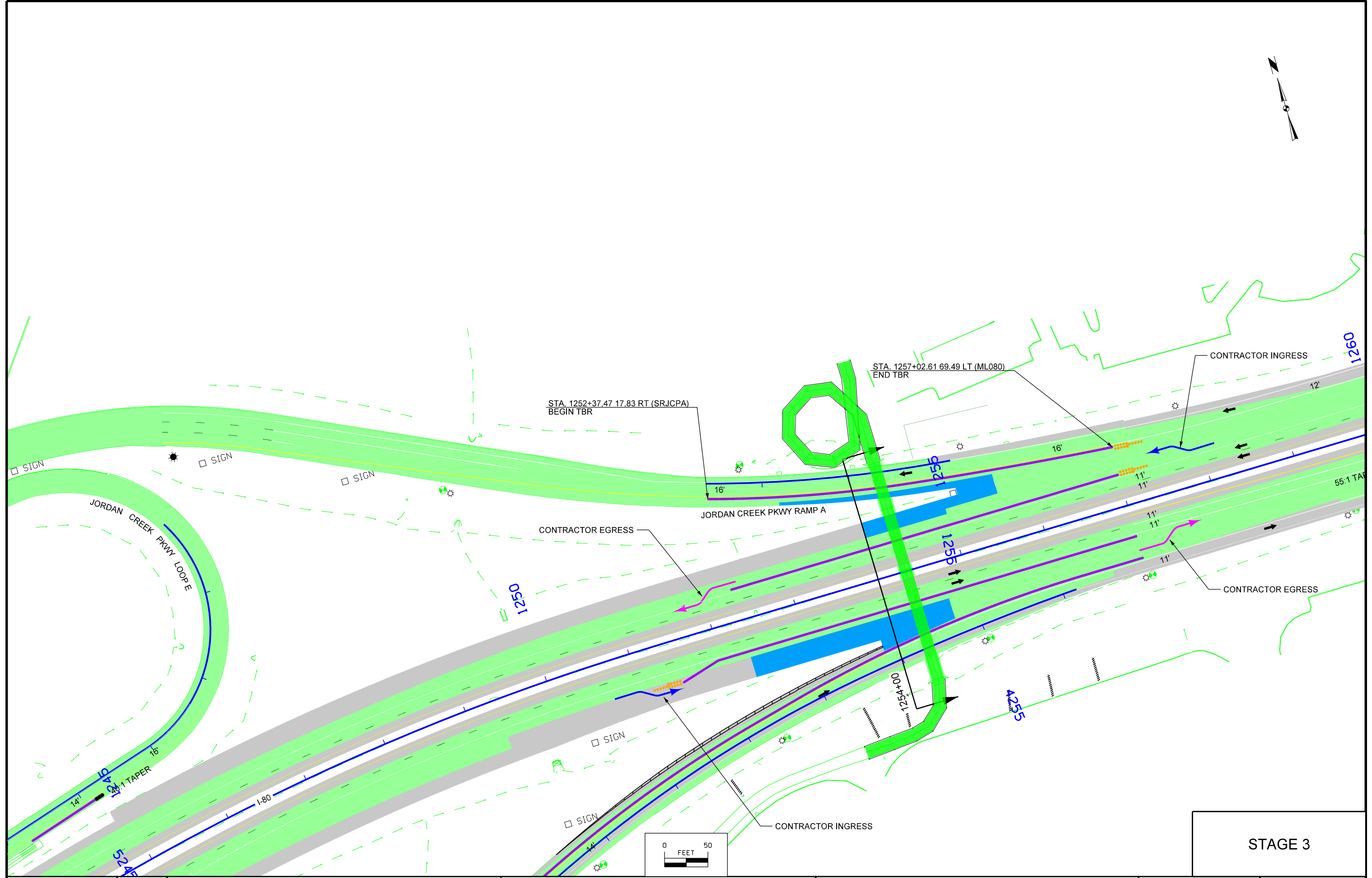




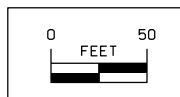
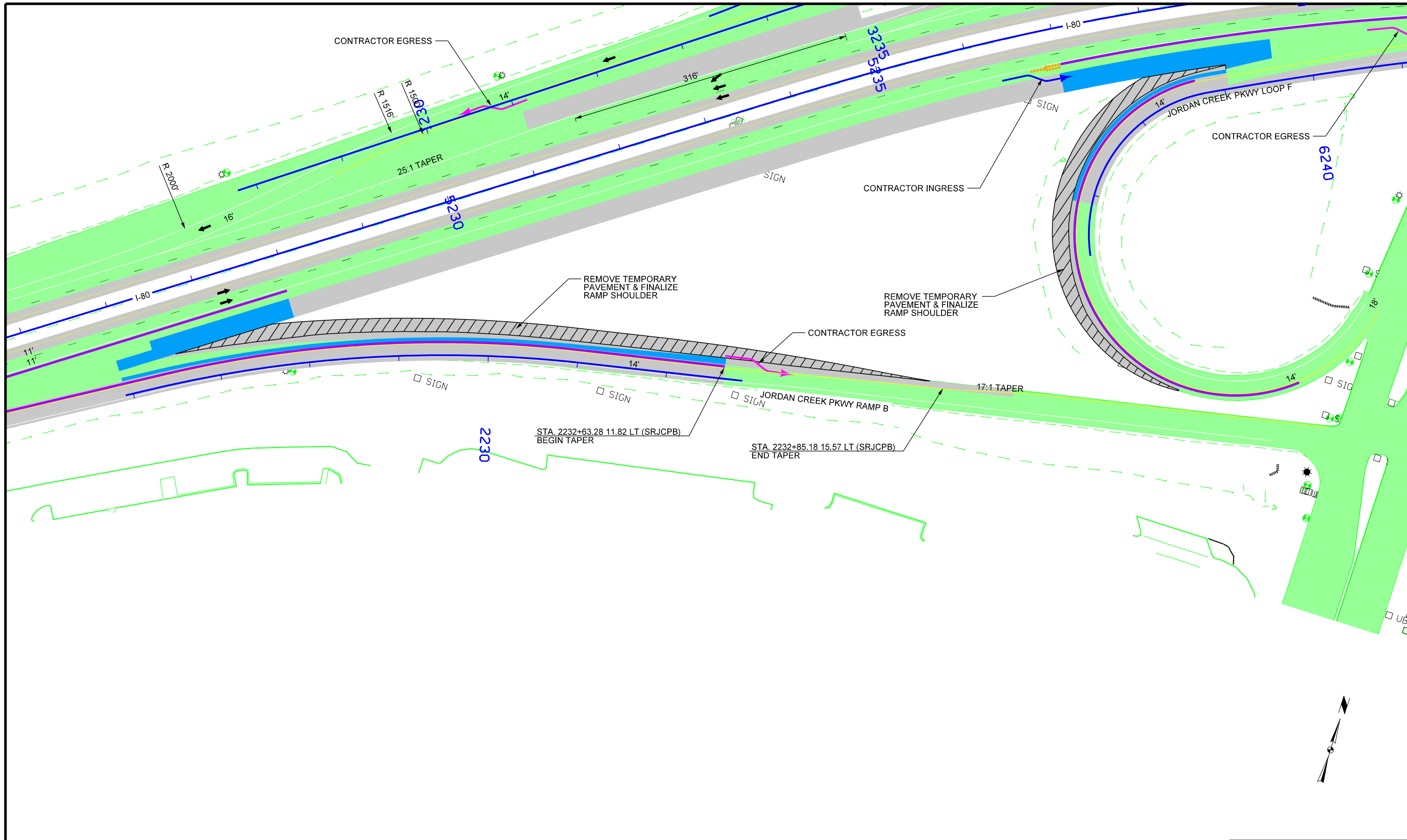
STAGE 3



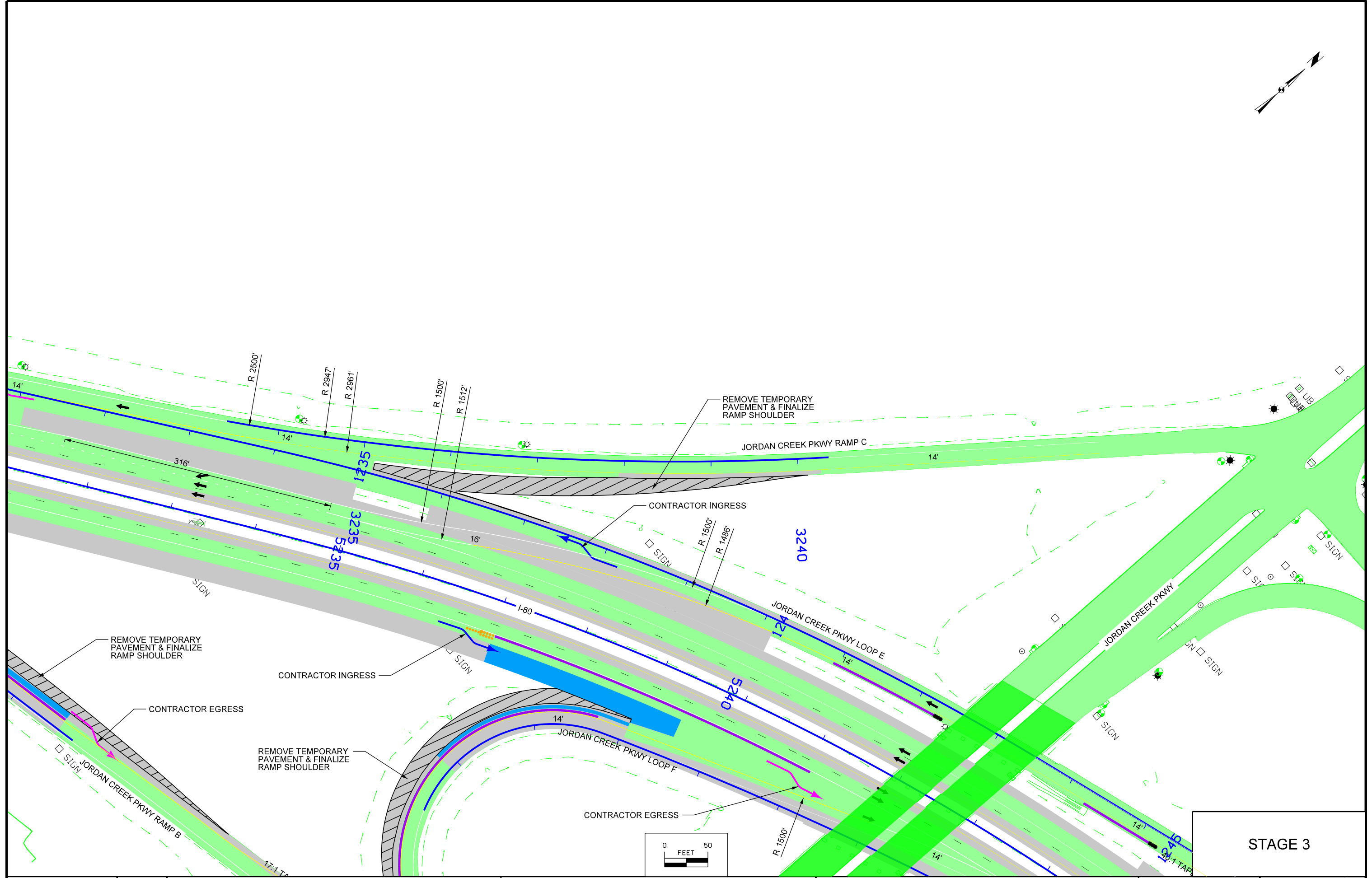
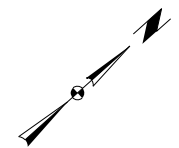
STAGE 3

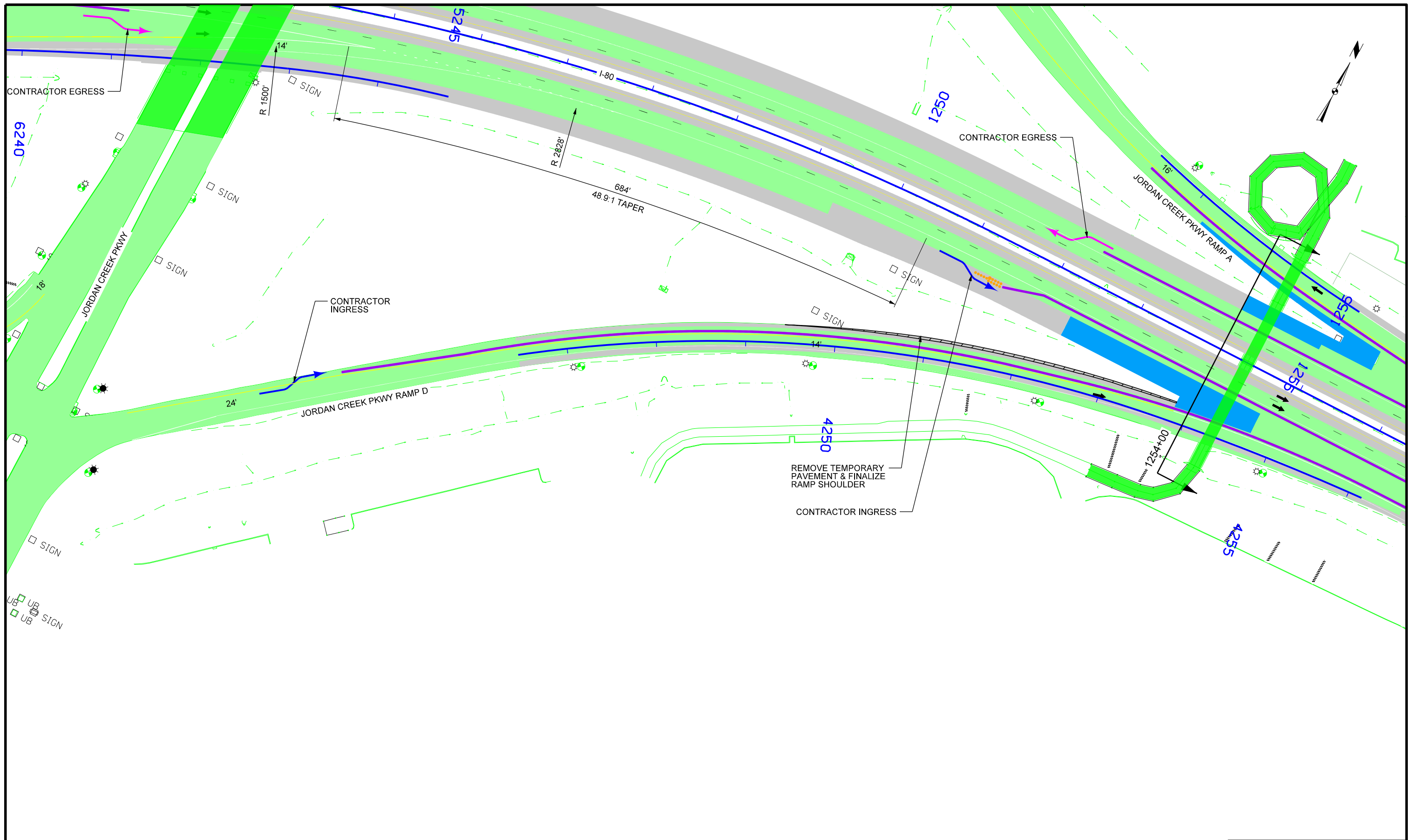


STAGE 3

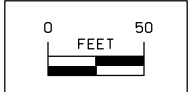


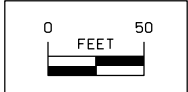
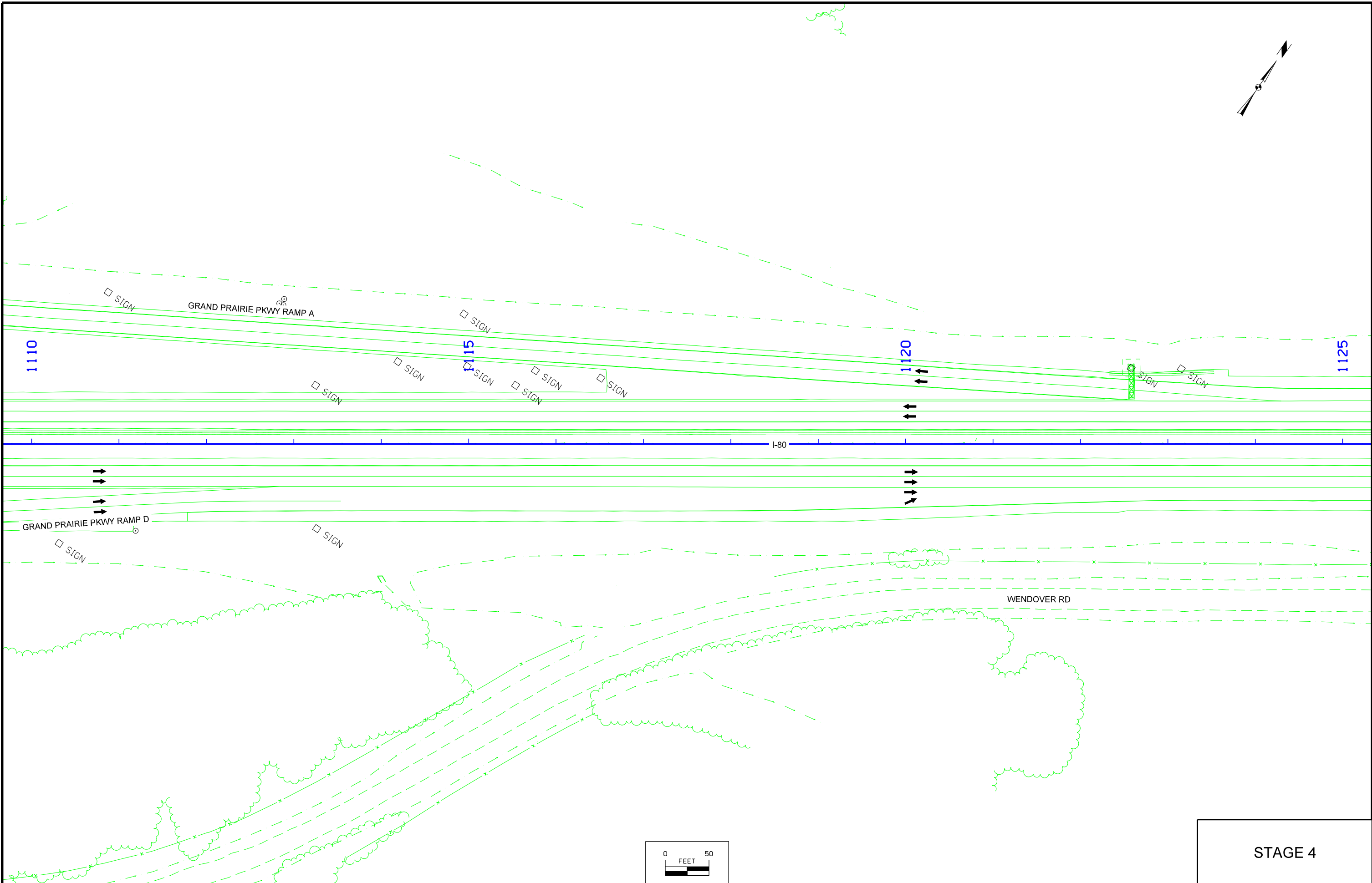
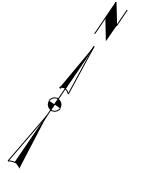
STAGE 3



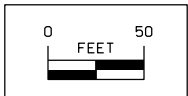
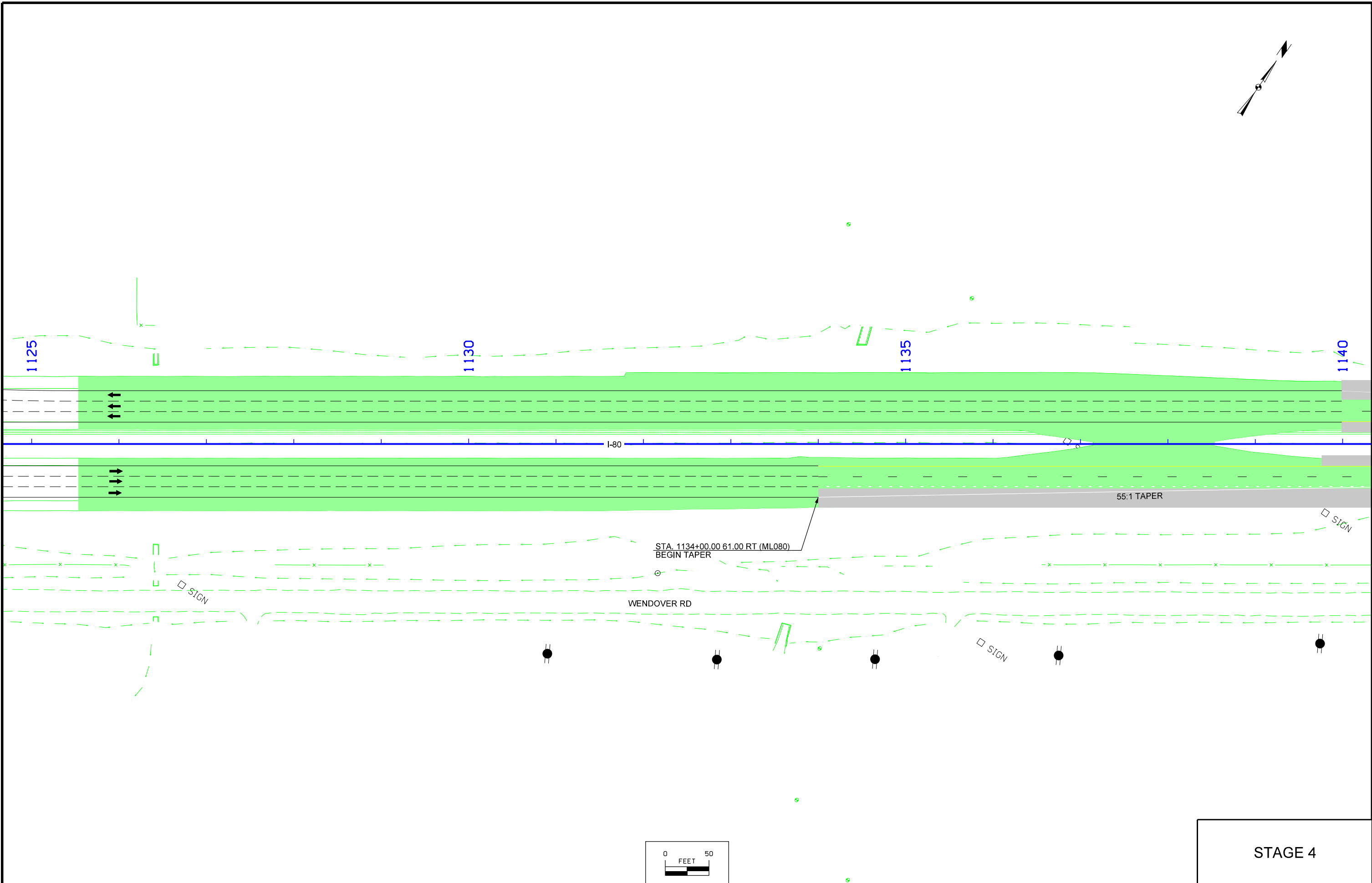
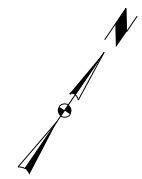


STAGE 3

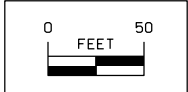
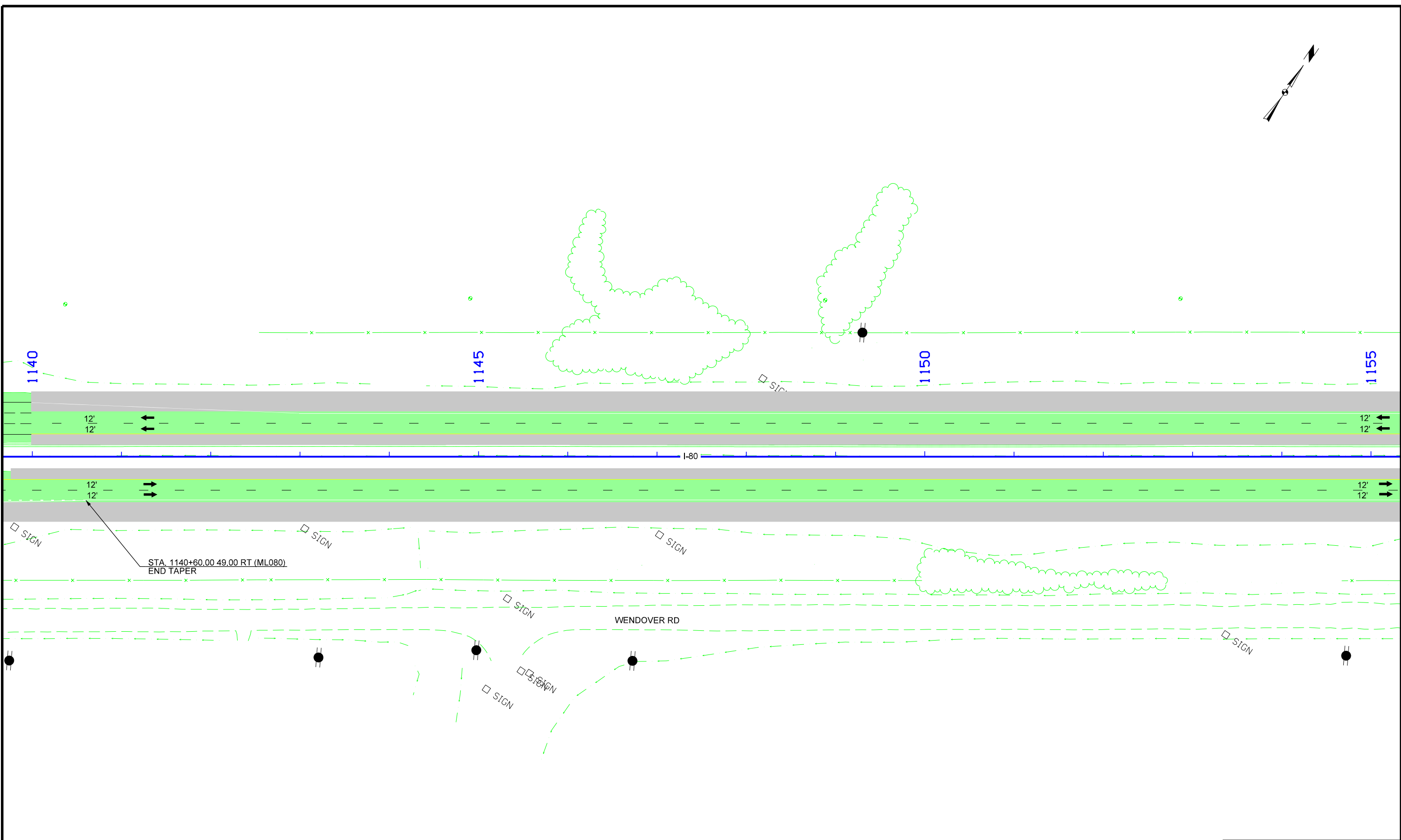
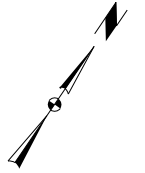




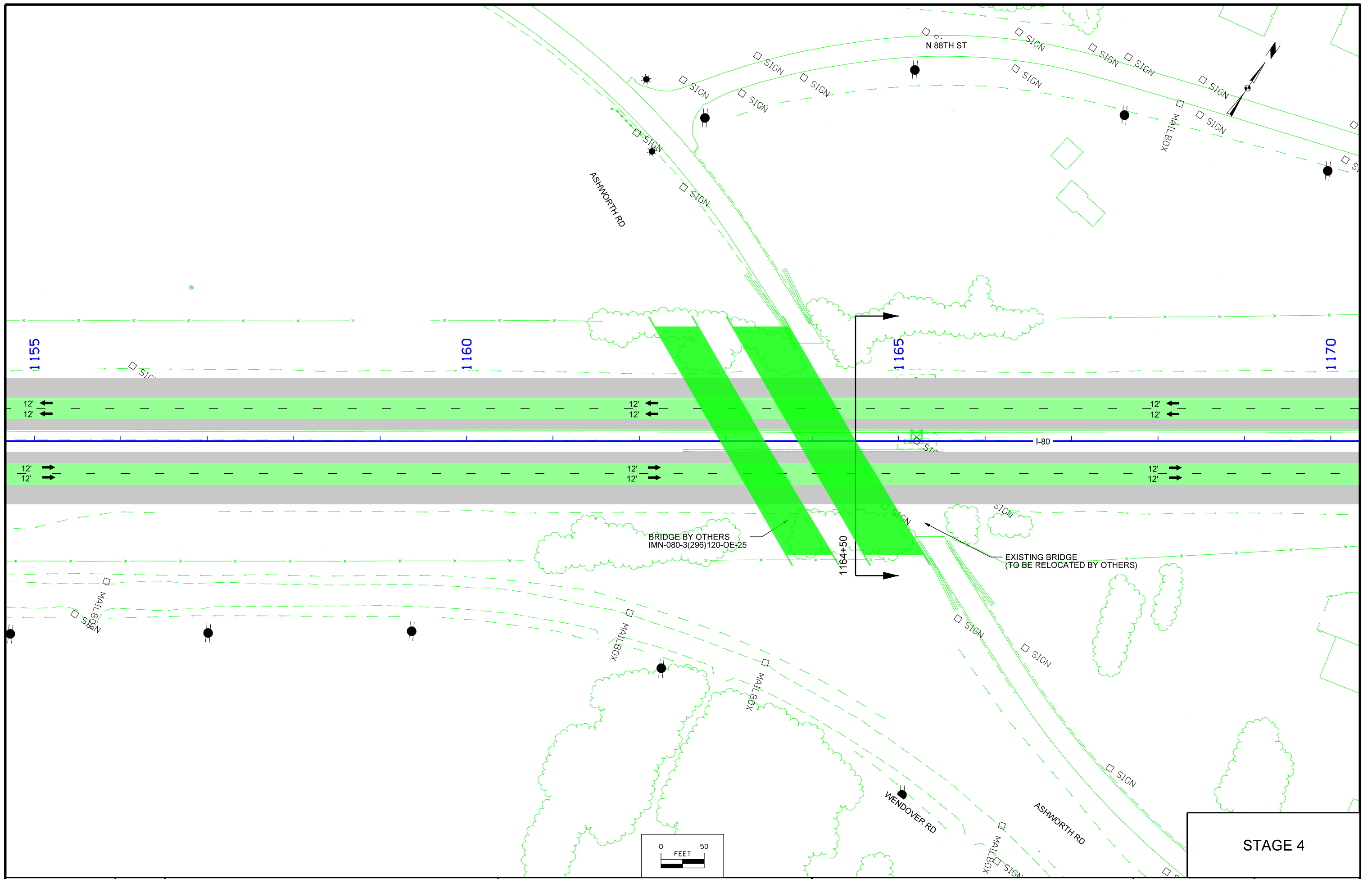
STAGE 4

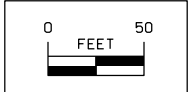
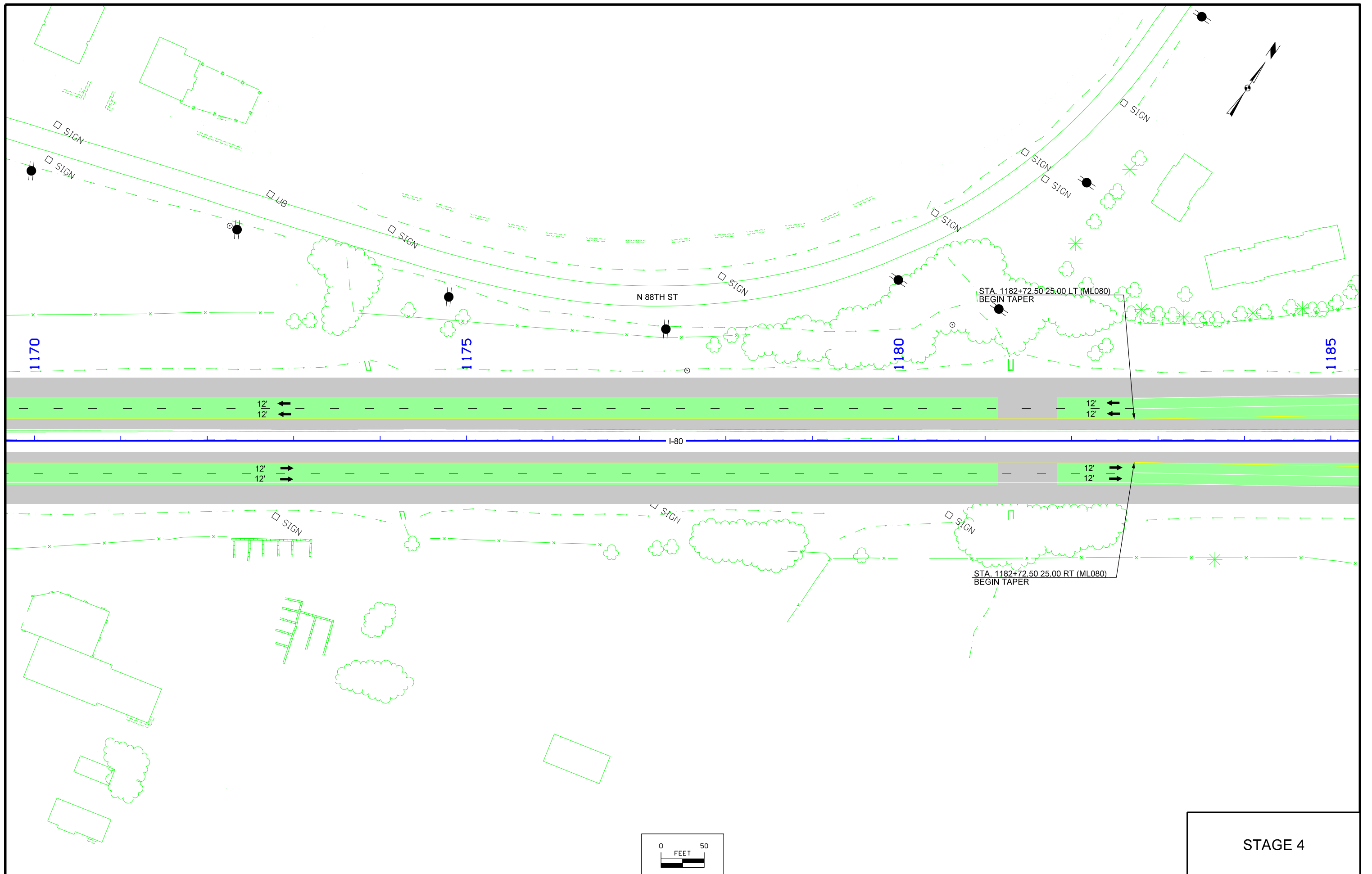


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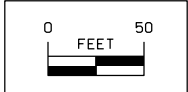
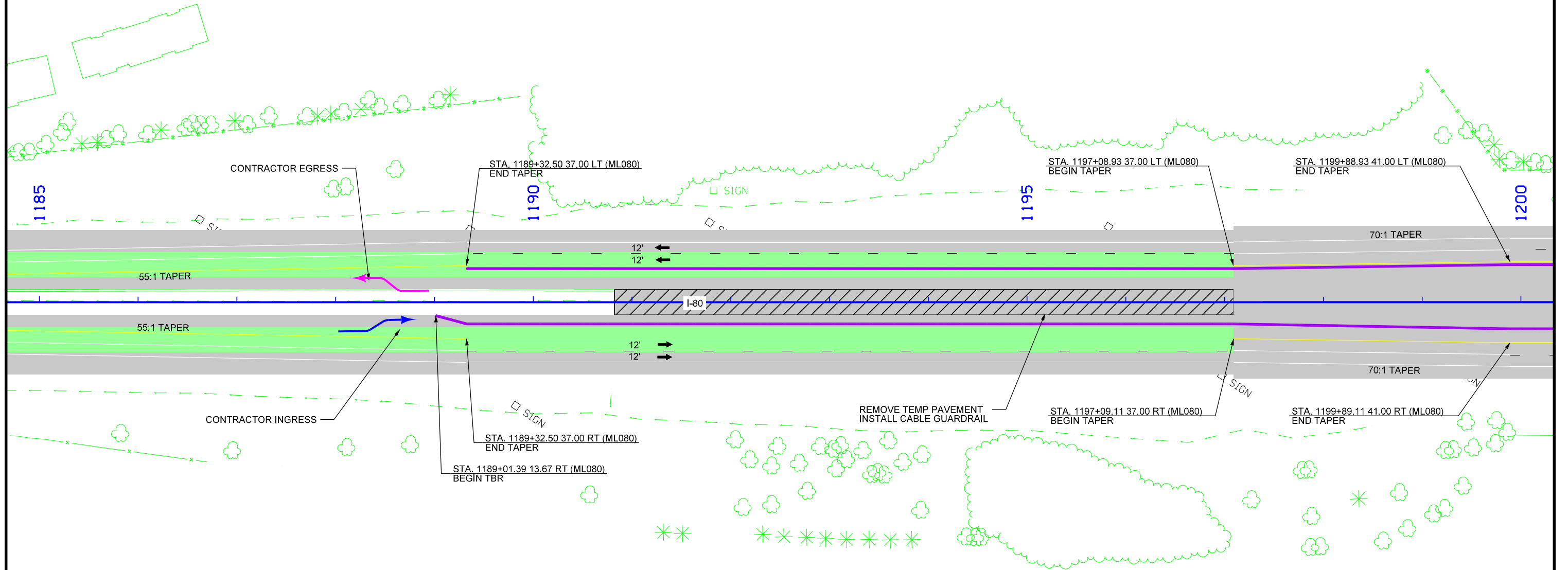
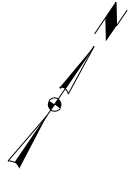


STAGE 4

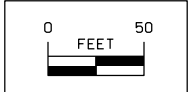
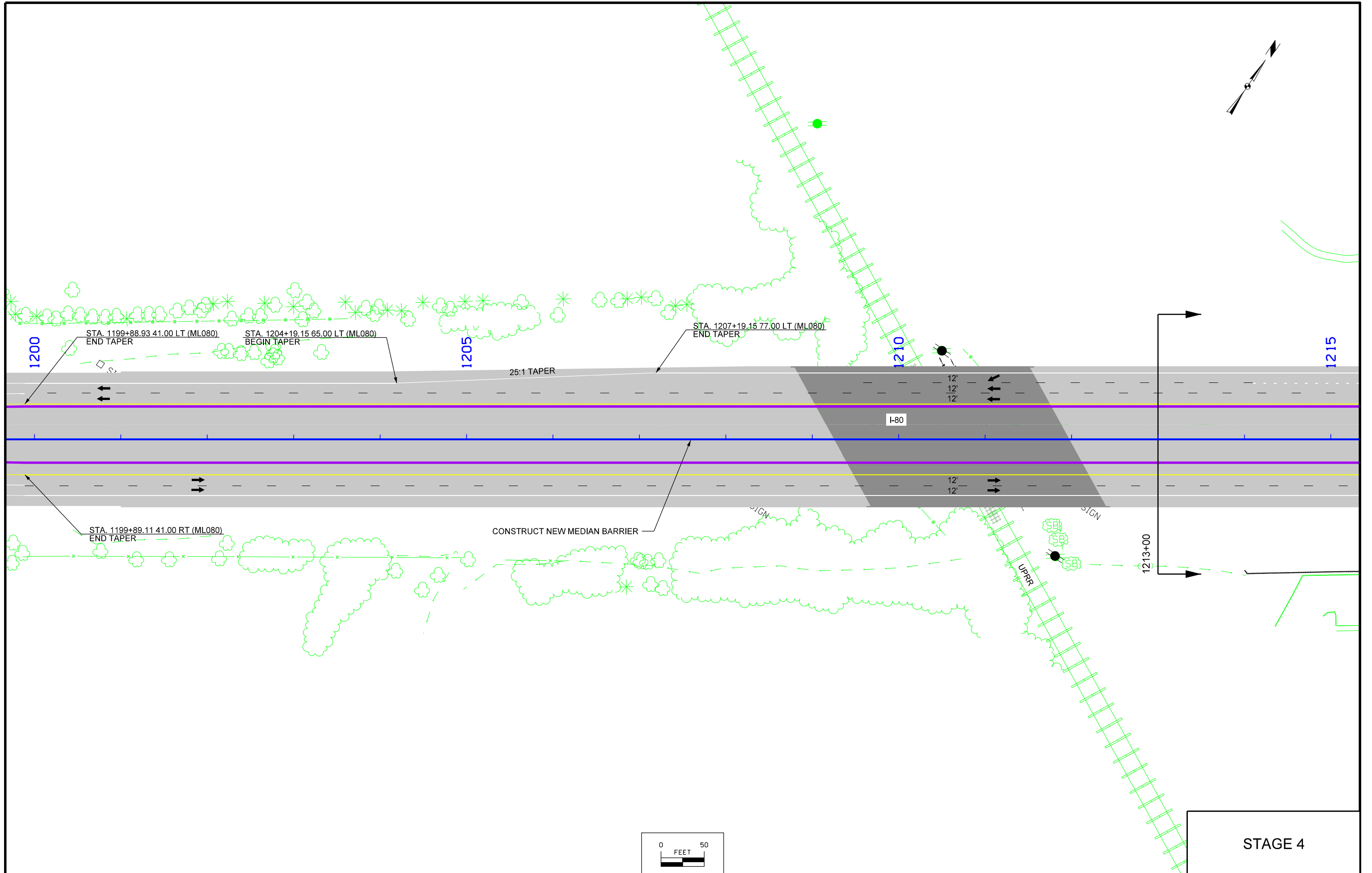
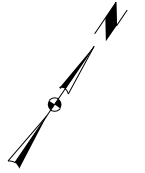




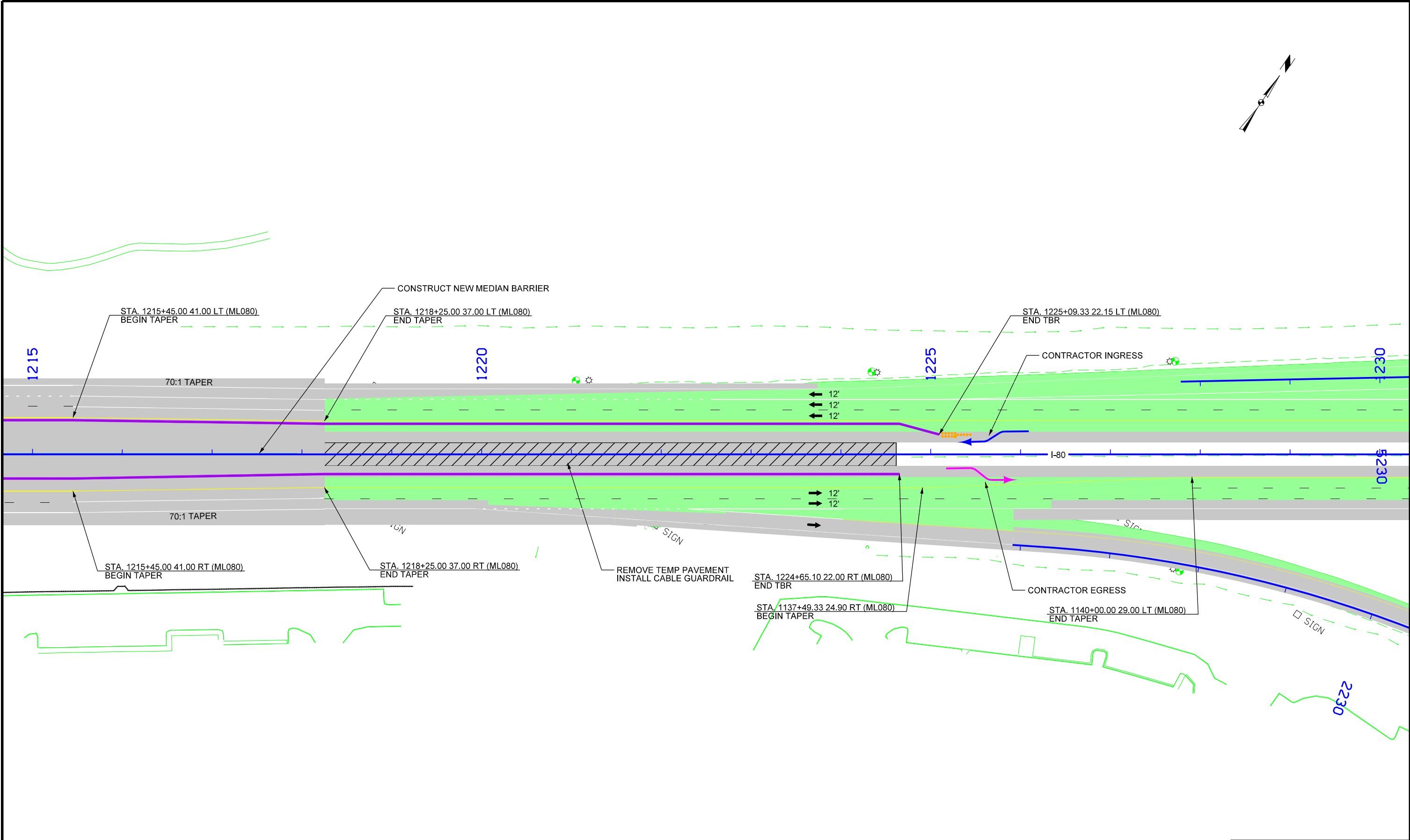
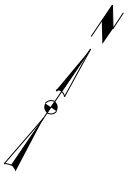
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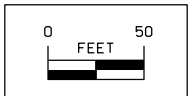
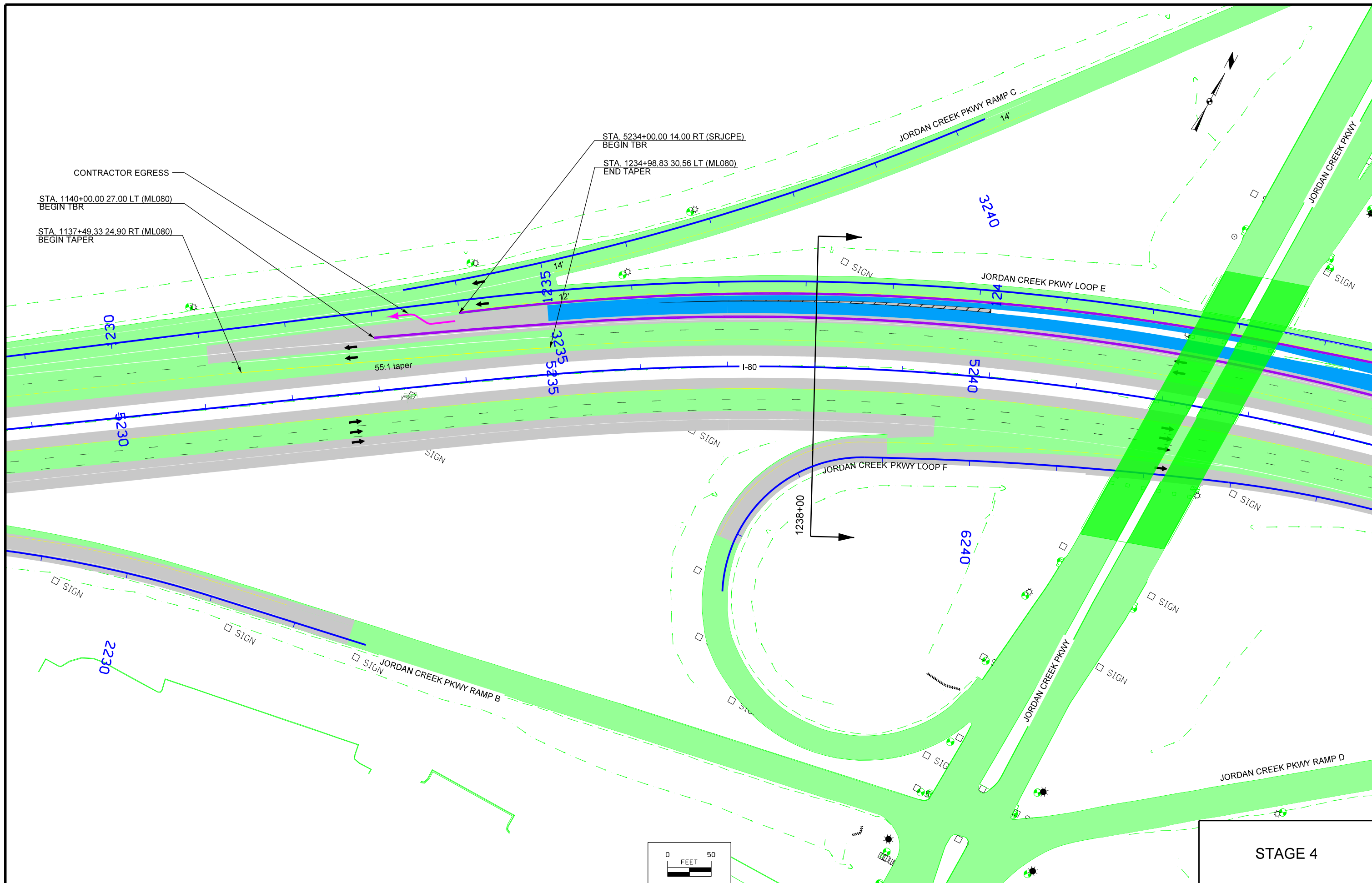
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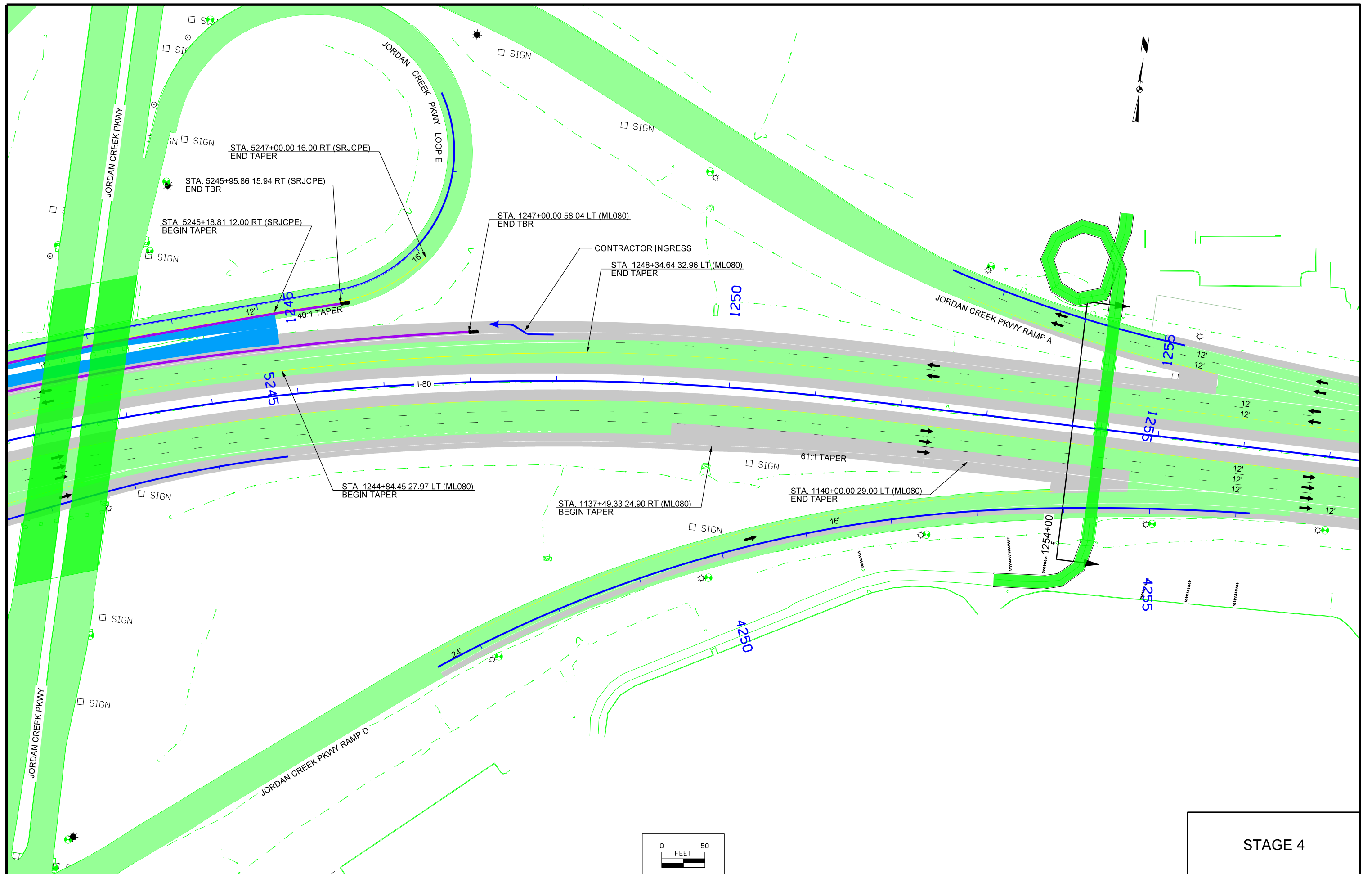
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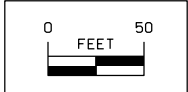
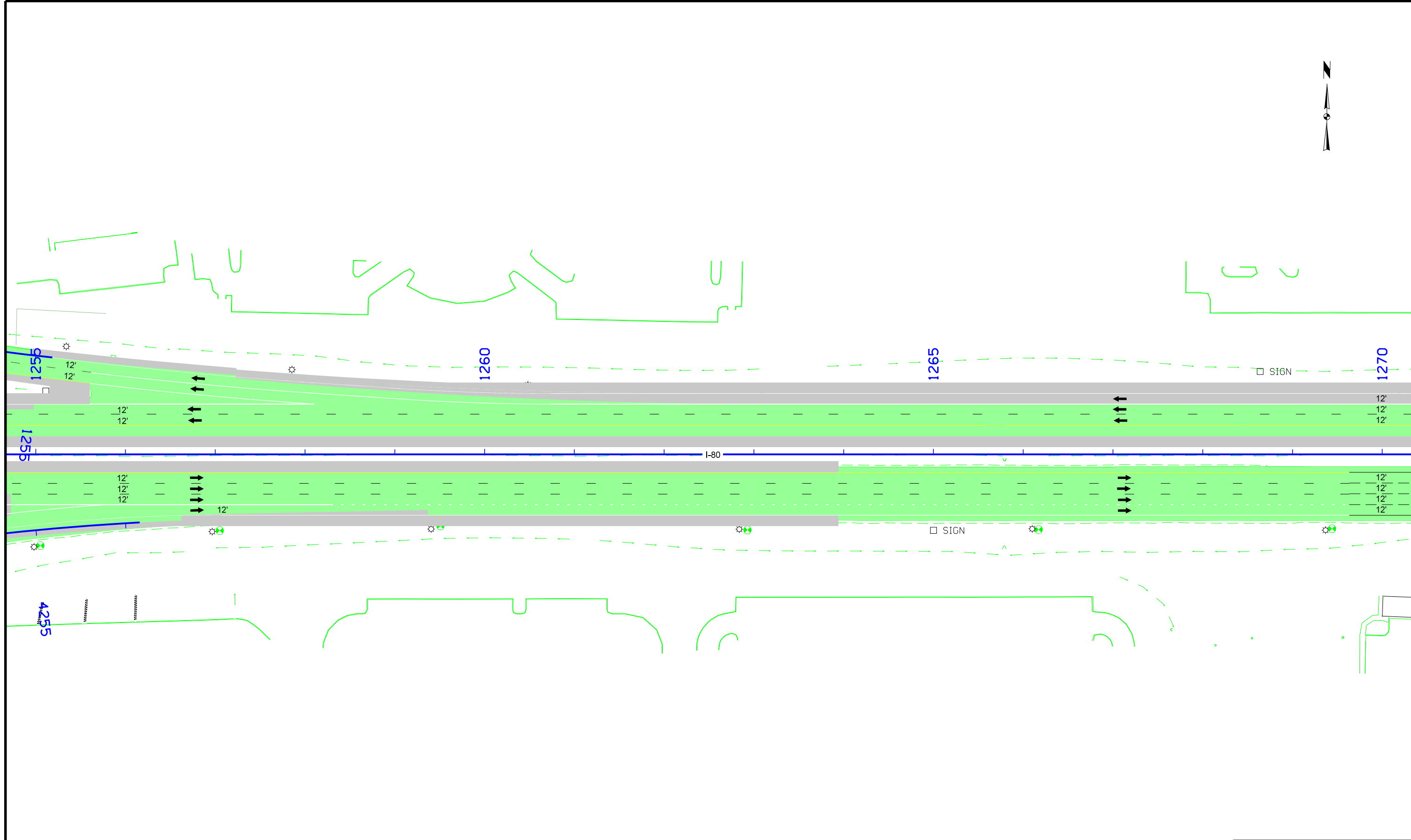
STAGE 4



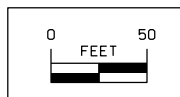
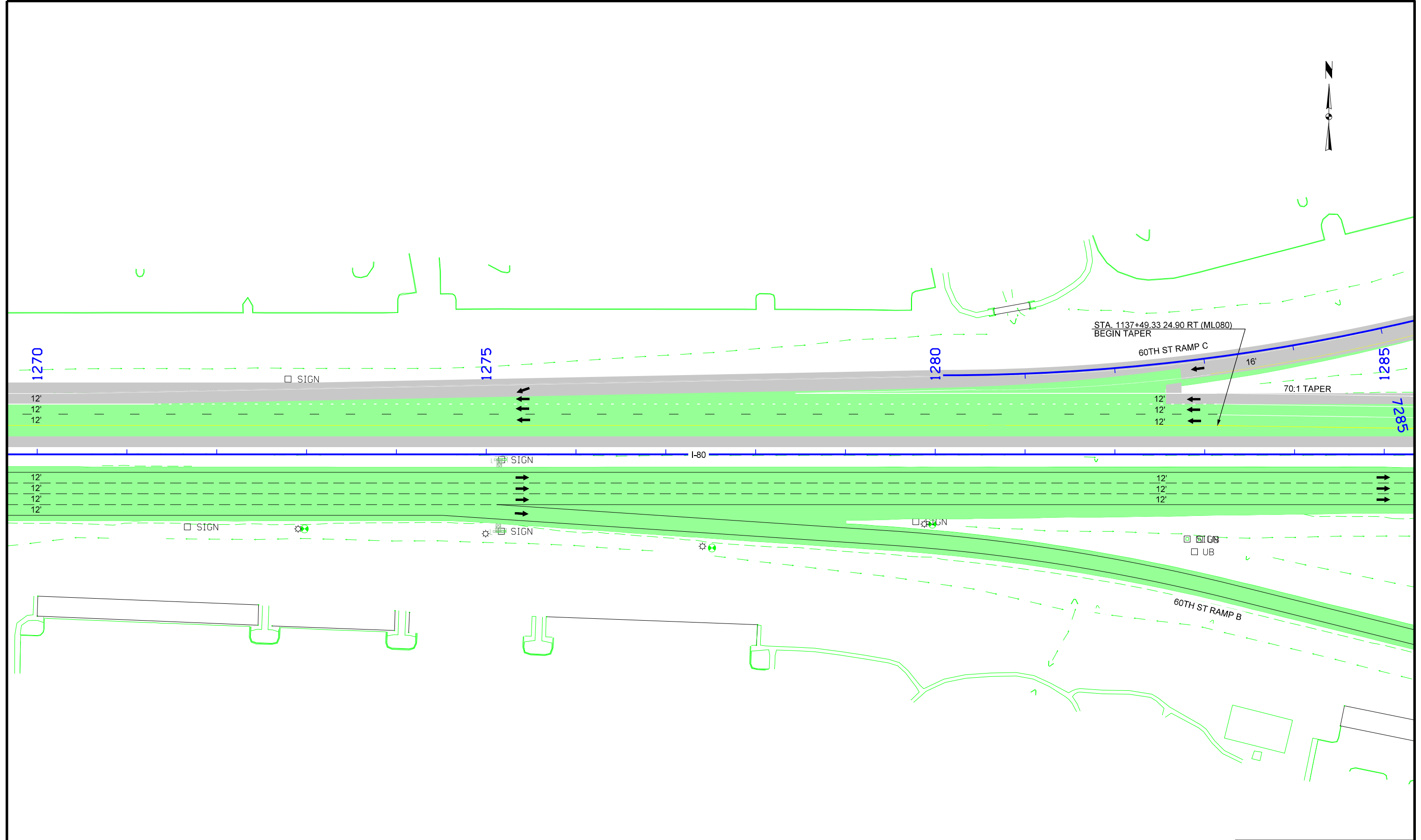
STAGE 4



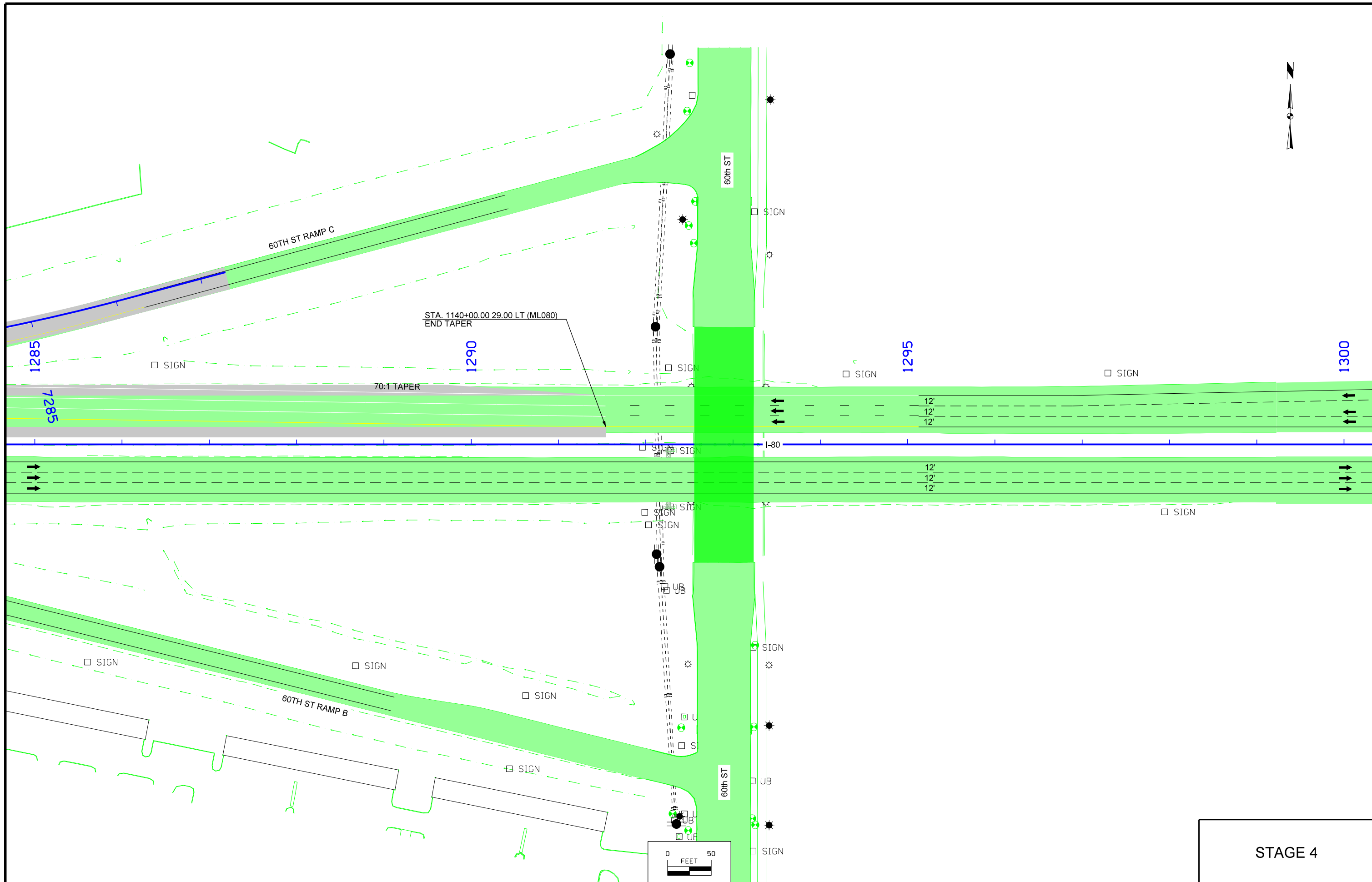
STAGE 4



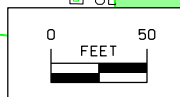
STAGE 4

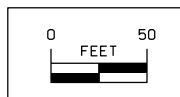
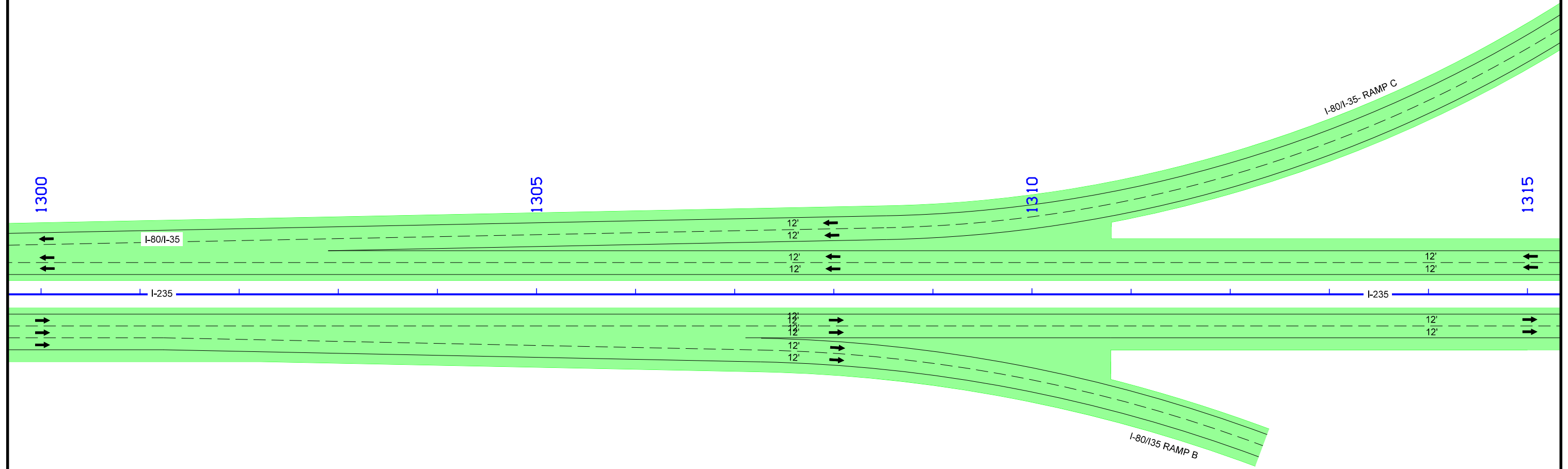


STAGE 4

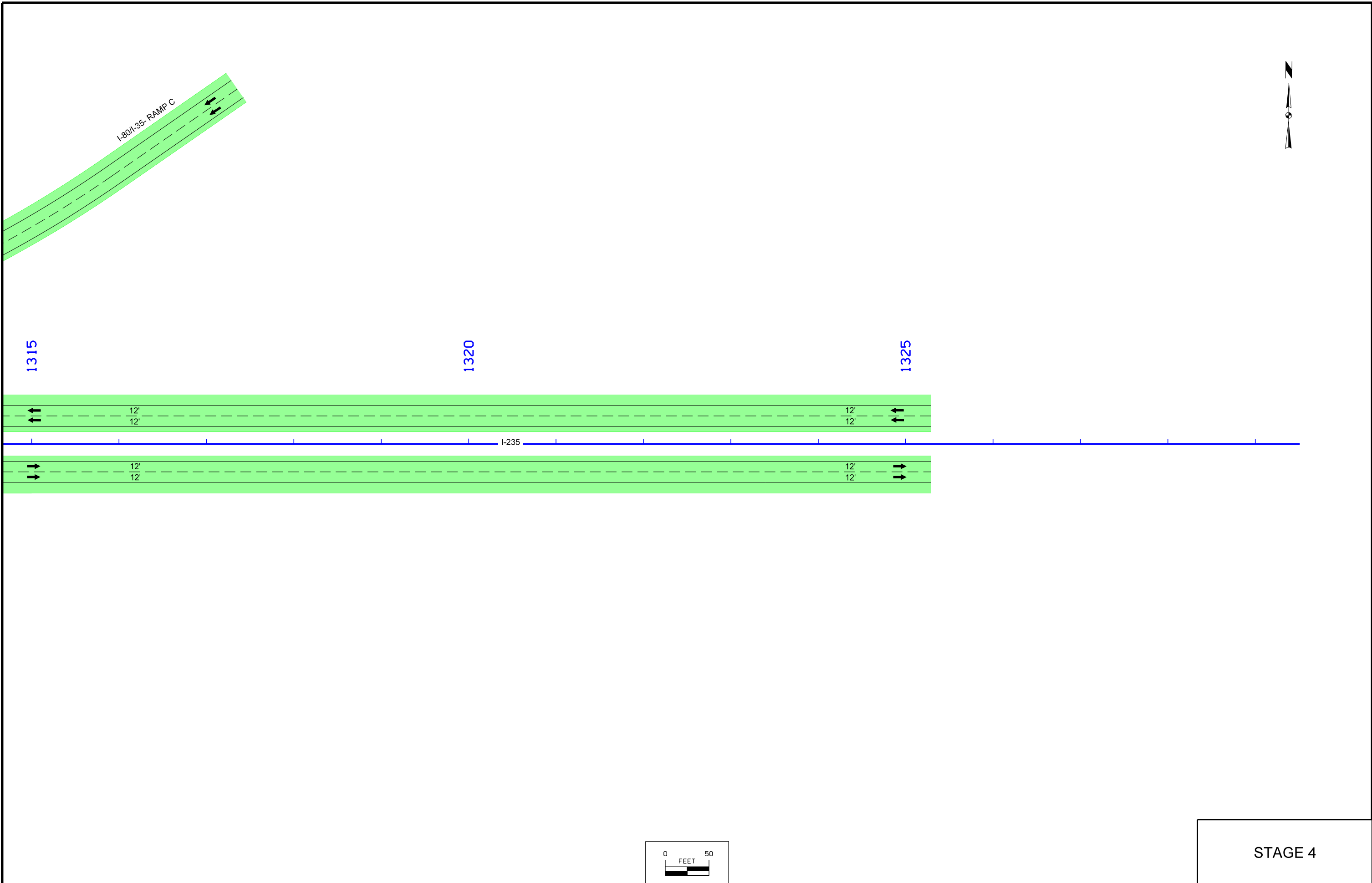


STAGE 4



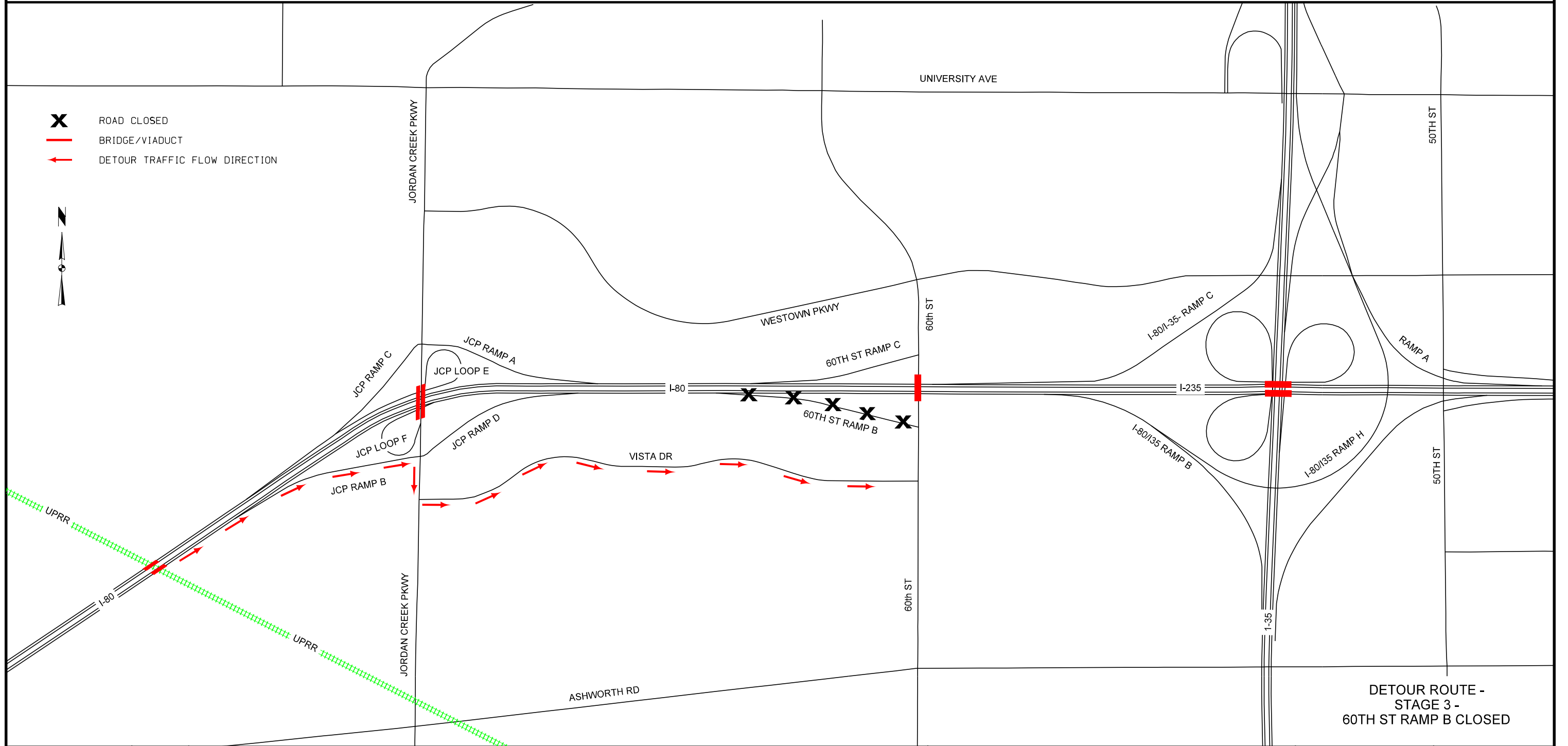


STAGE 4



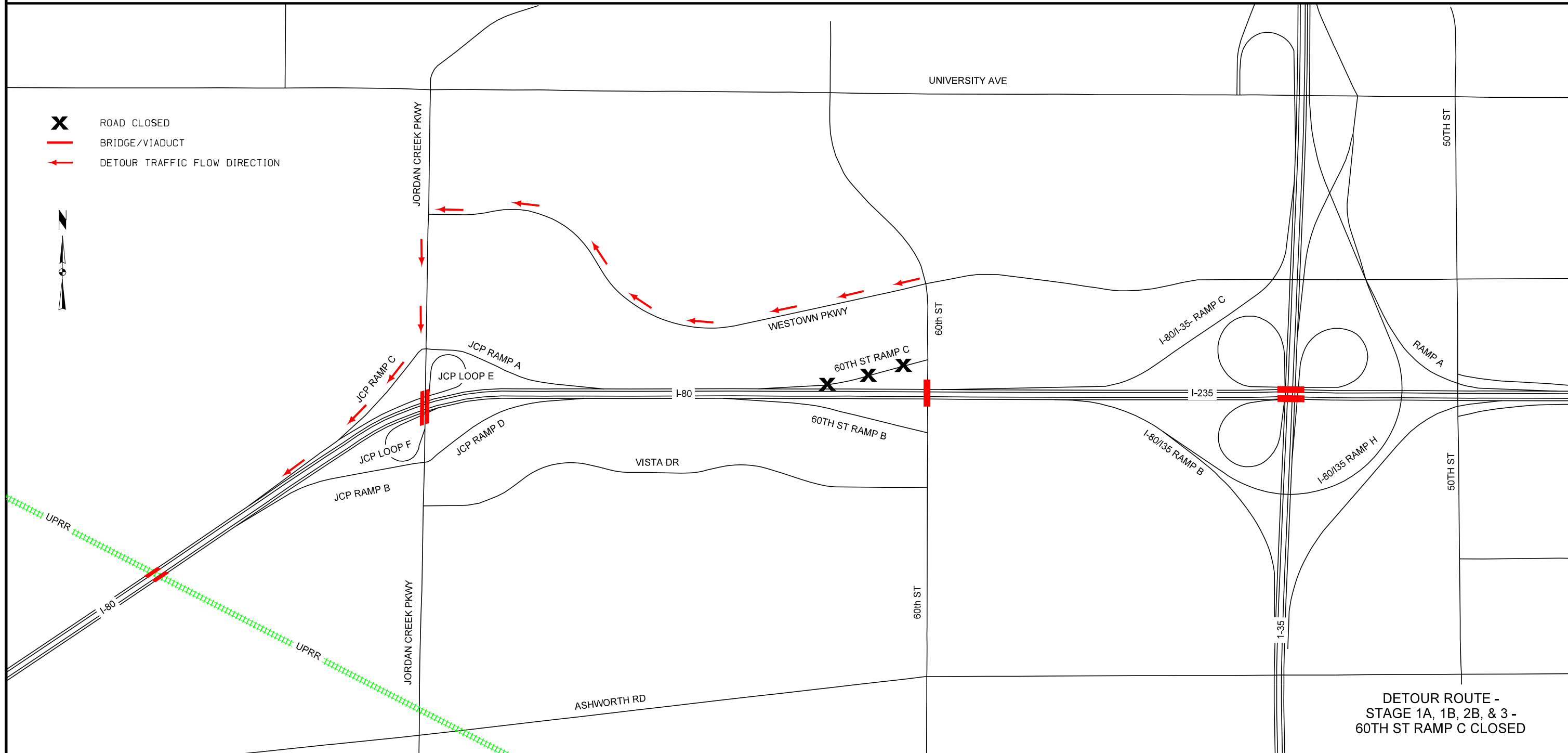
STAGE 4

- X** ROAD CLOSED
- BRIDGE/VIADUCT
- ← DETOUR TRAFFIC FLOW DIRECTION

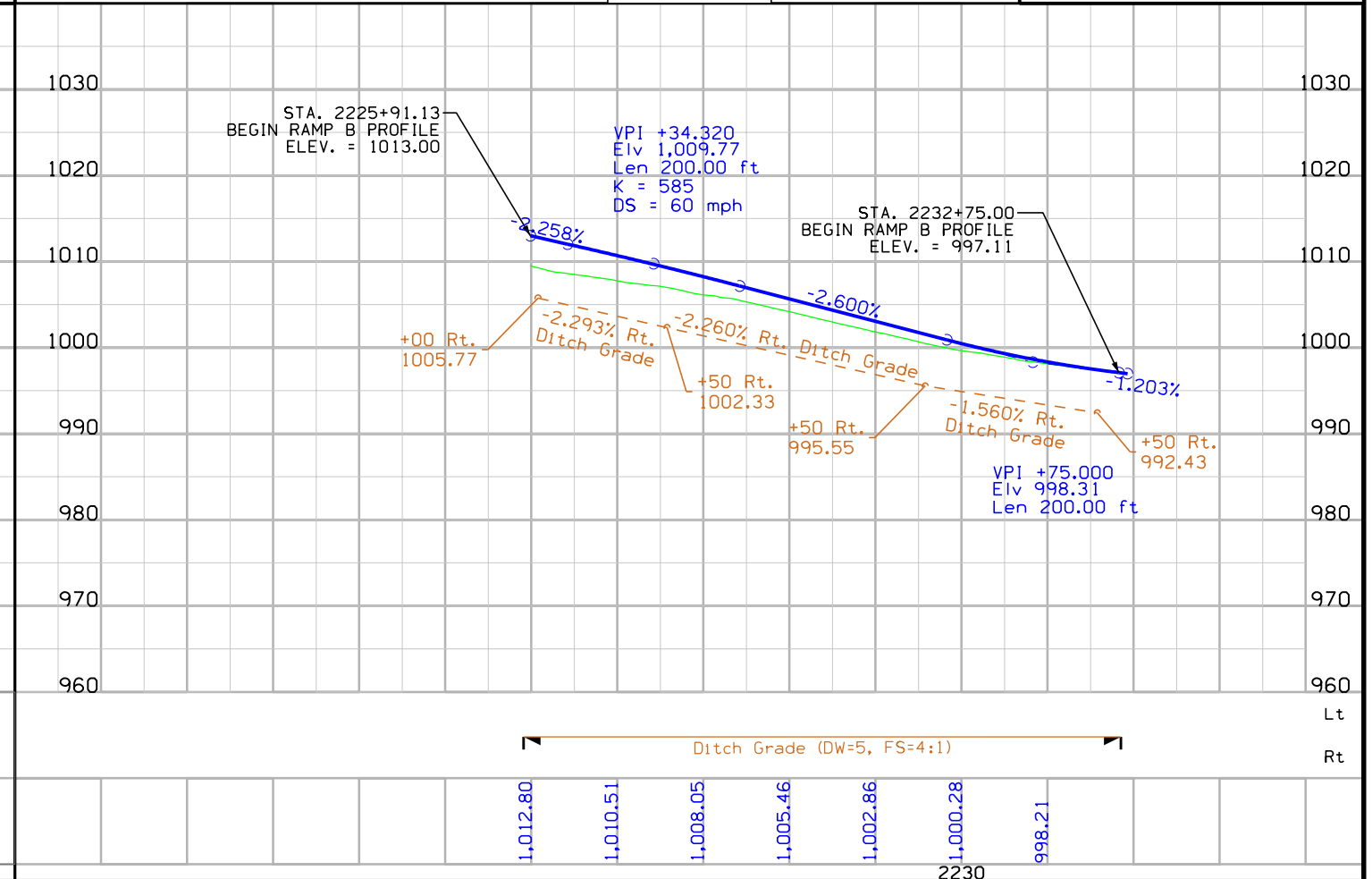
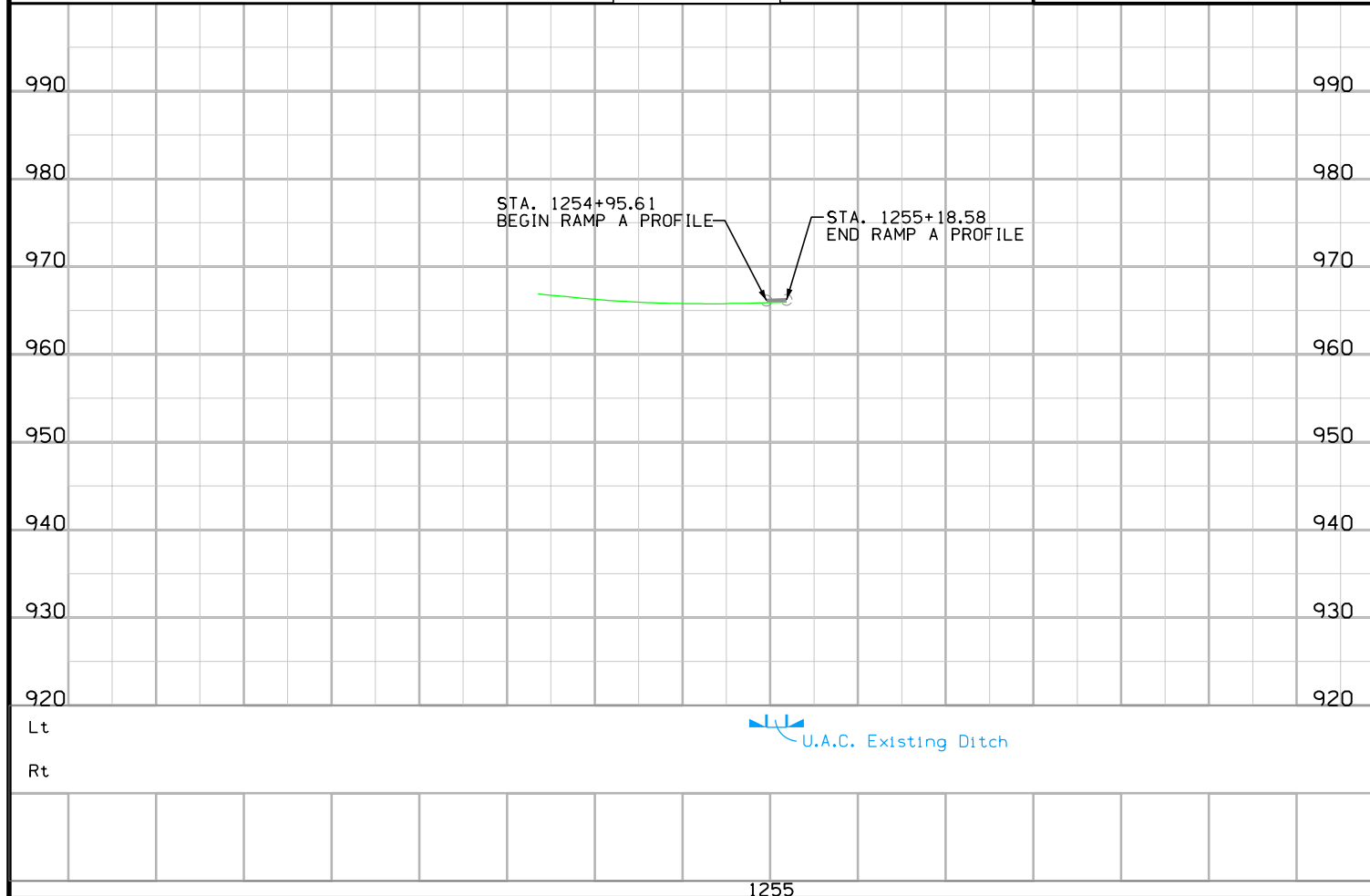
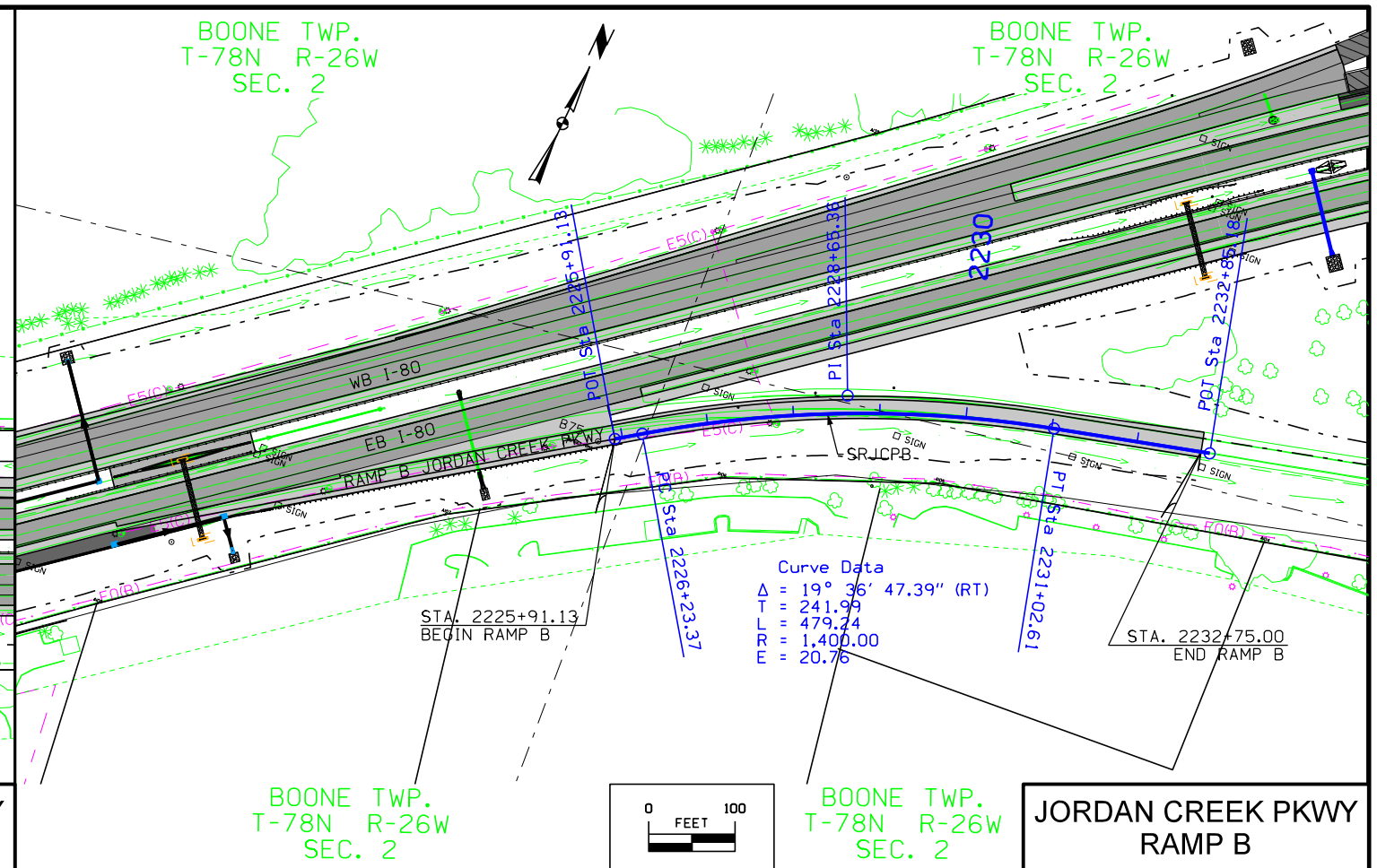
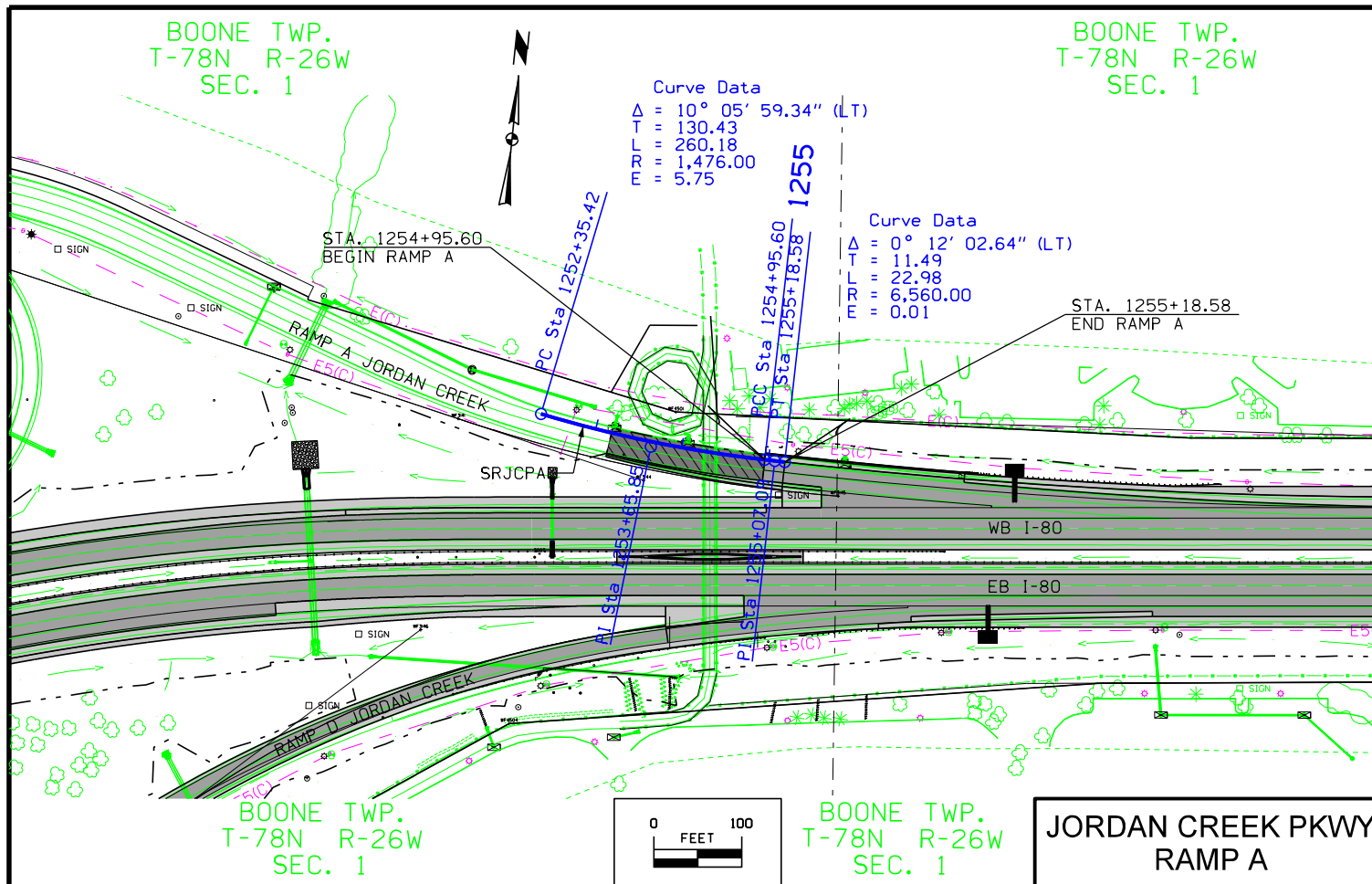


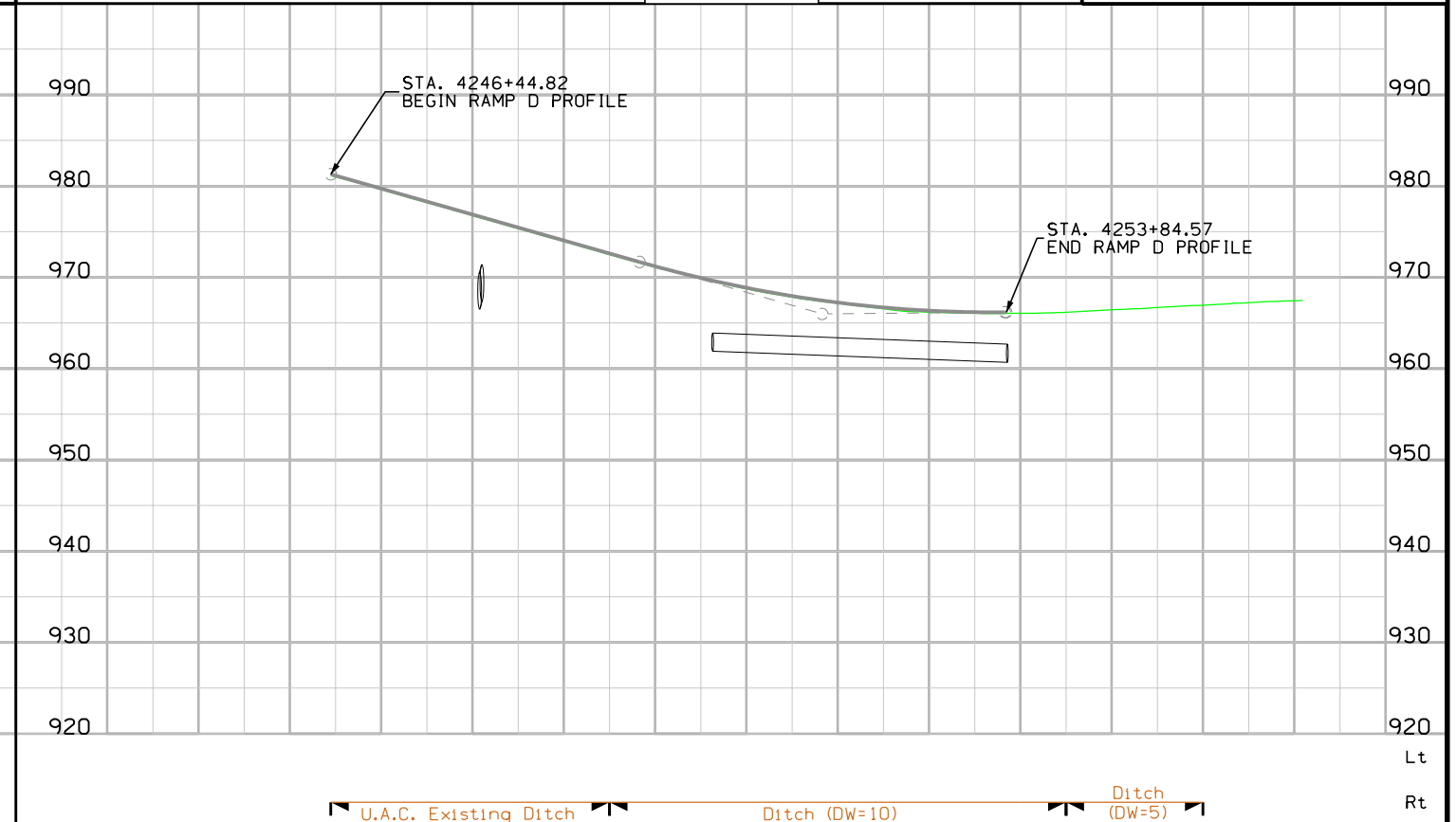
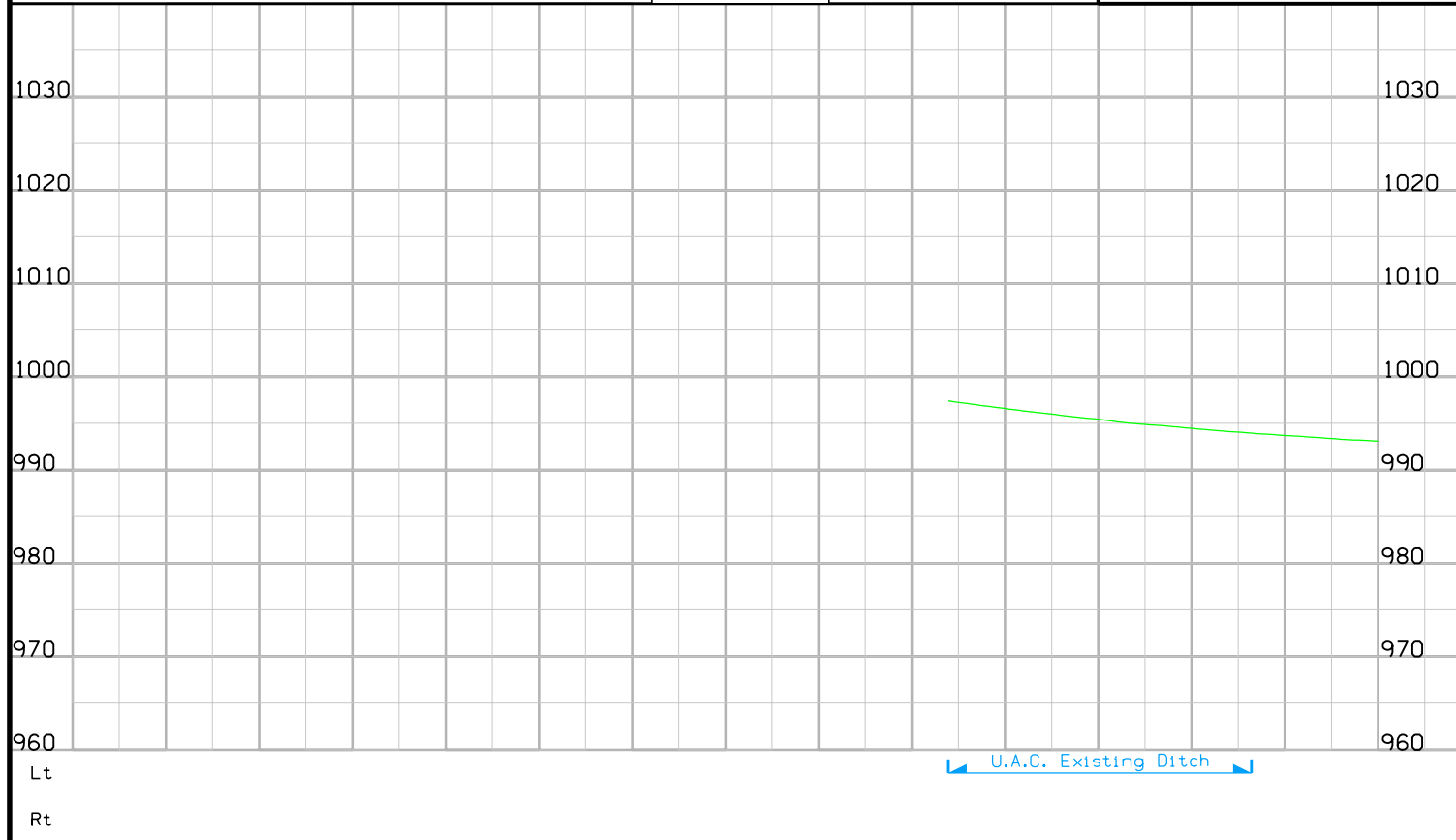
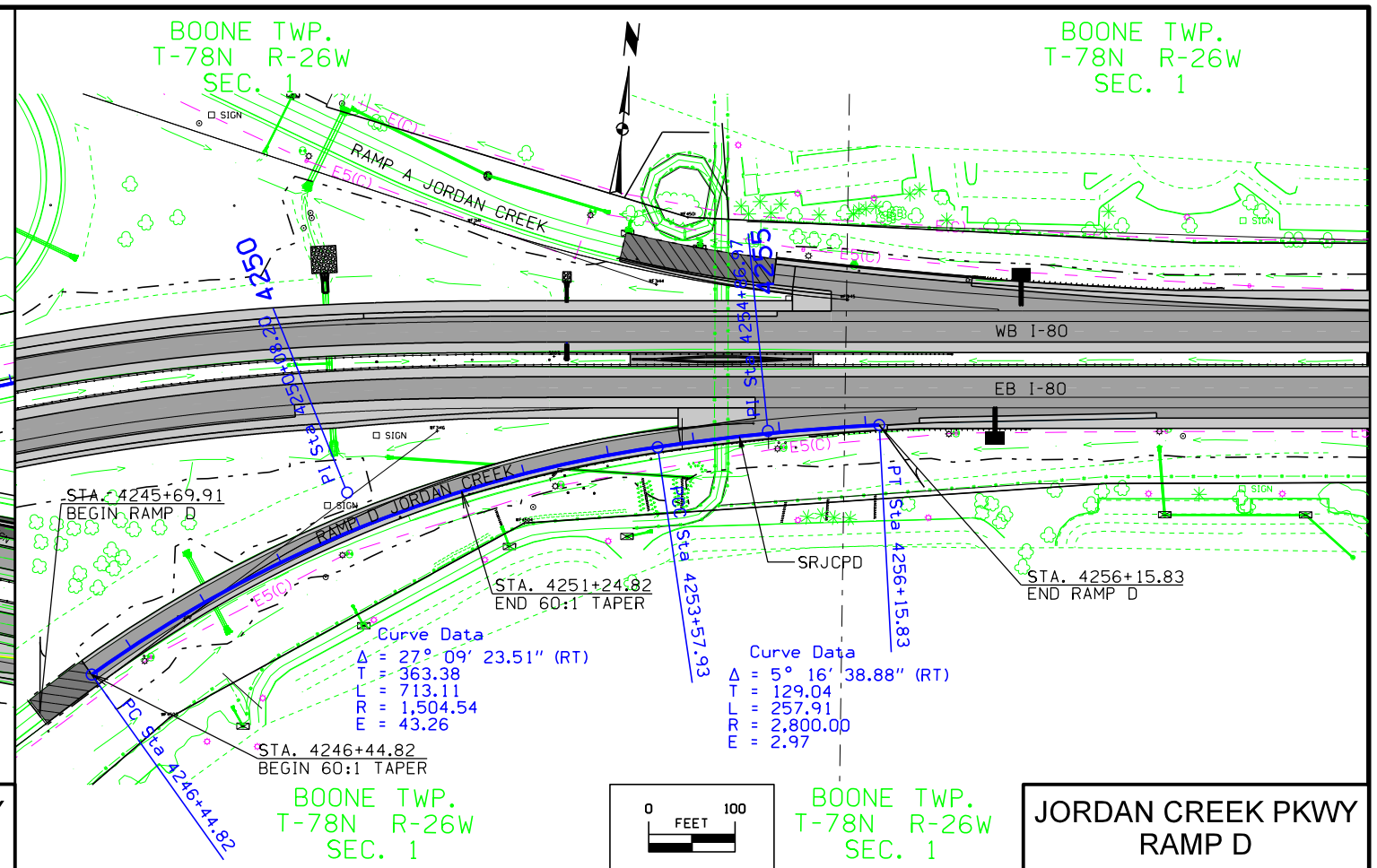
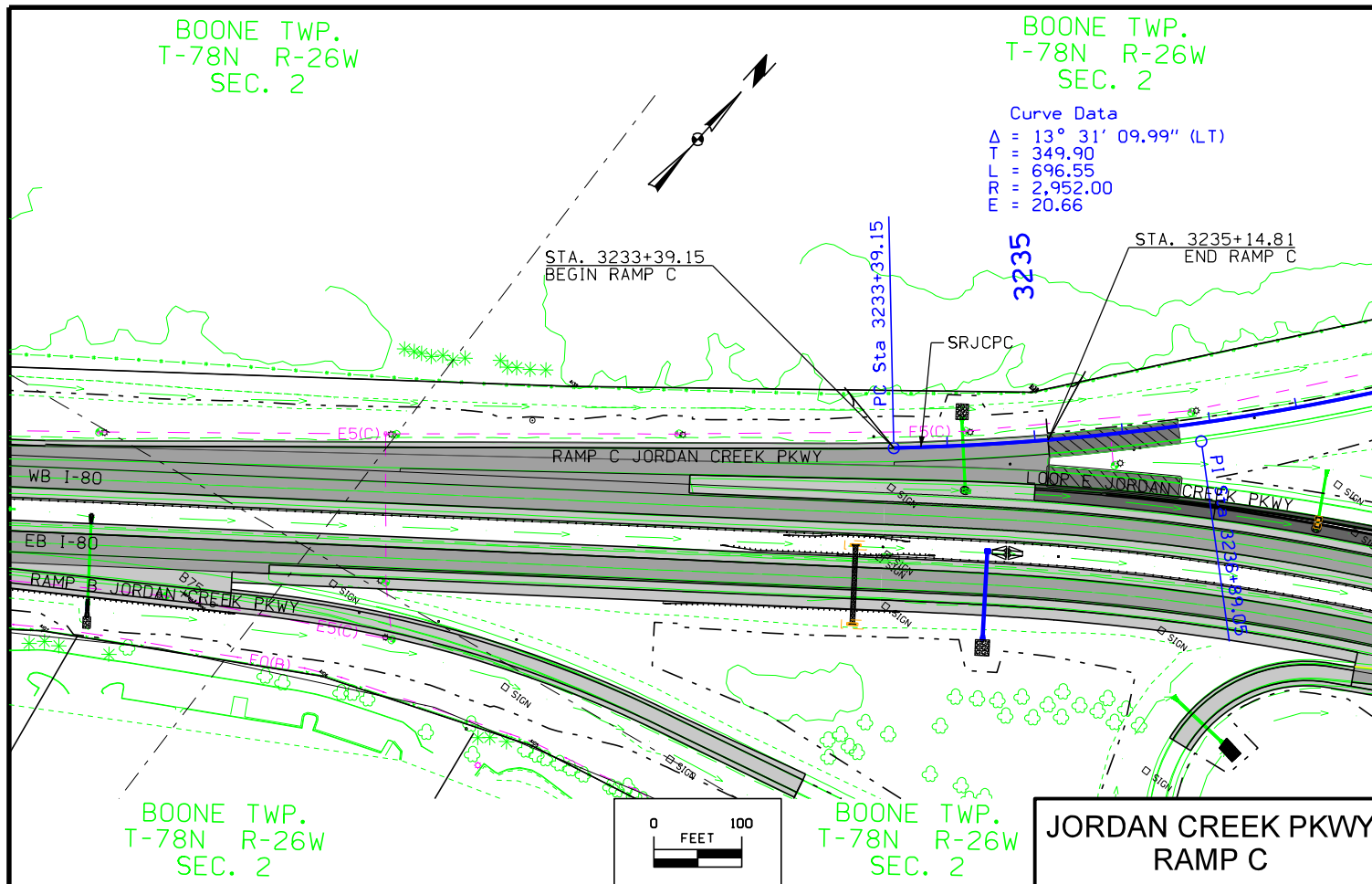
DETOUR ROUTE -
STAGE 3 -
60TH ST RAMP B CLOSED

- X** ROAD CLOSED
- BRIDGE/VIADUCT
- ← DETOUR TRAFFIC FLOW DIRECTION

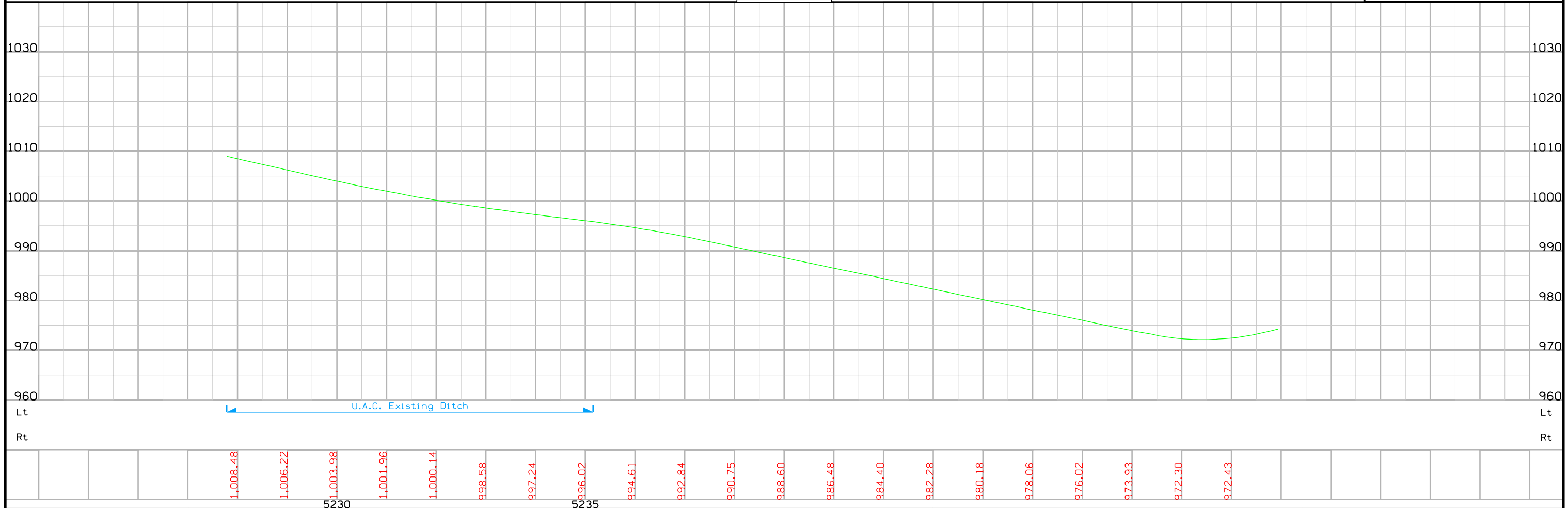
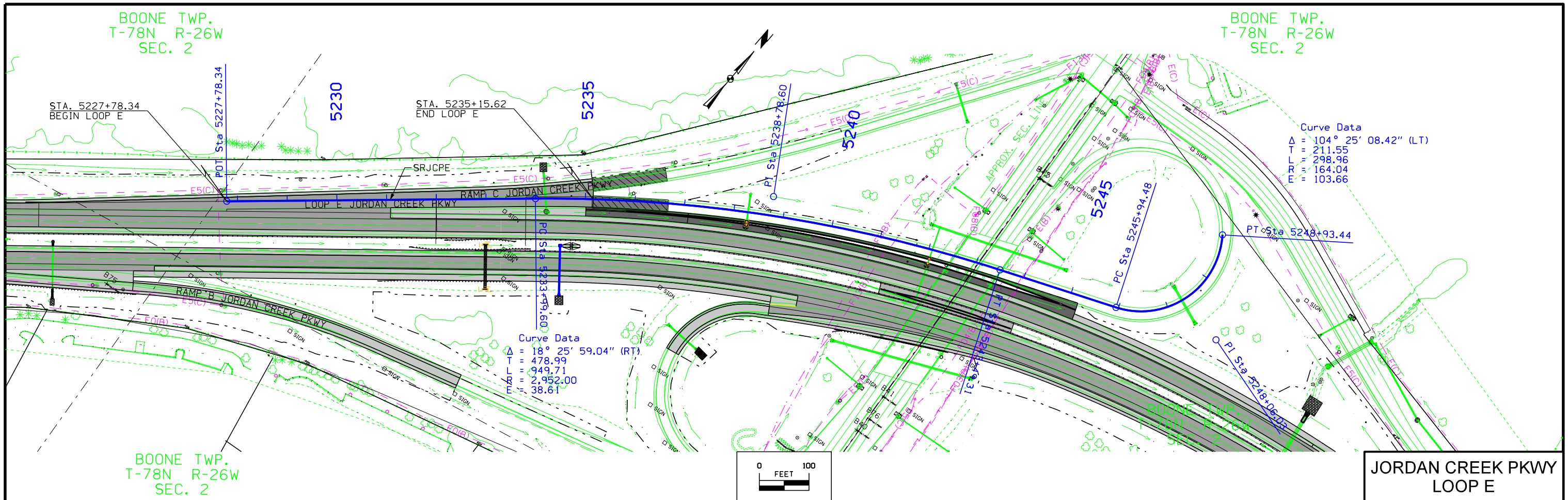


DETOUR ROUTE -
 STAGE 1A, 1B, 2B, & 3 -
 60TH ST RAMP C CLOSED

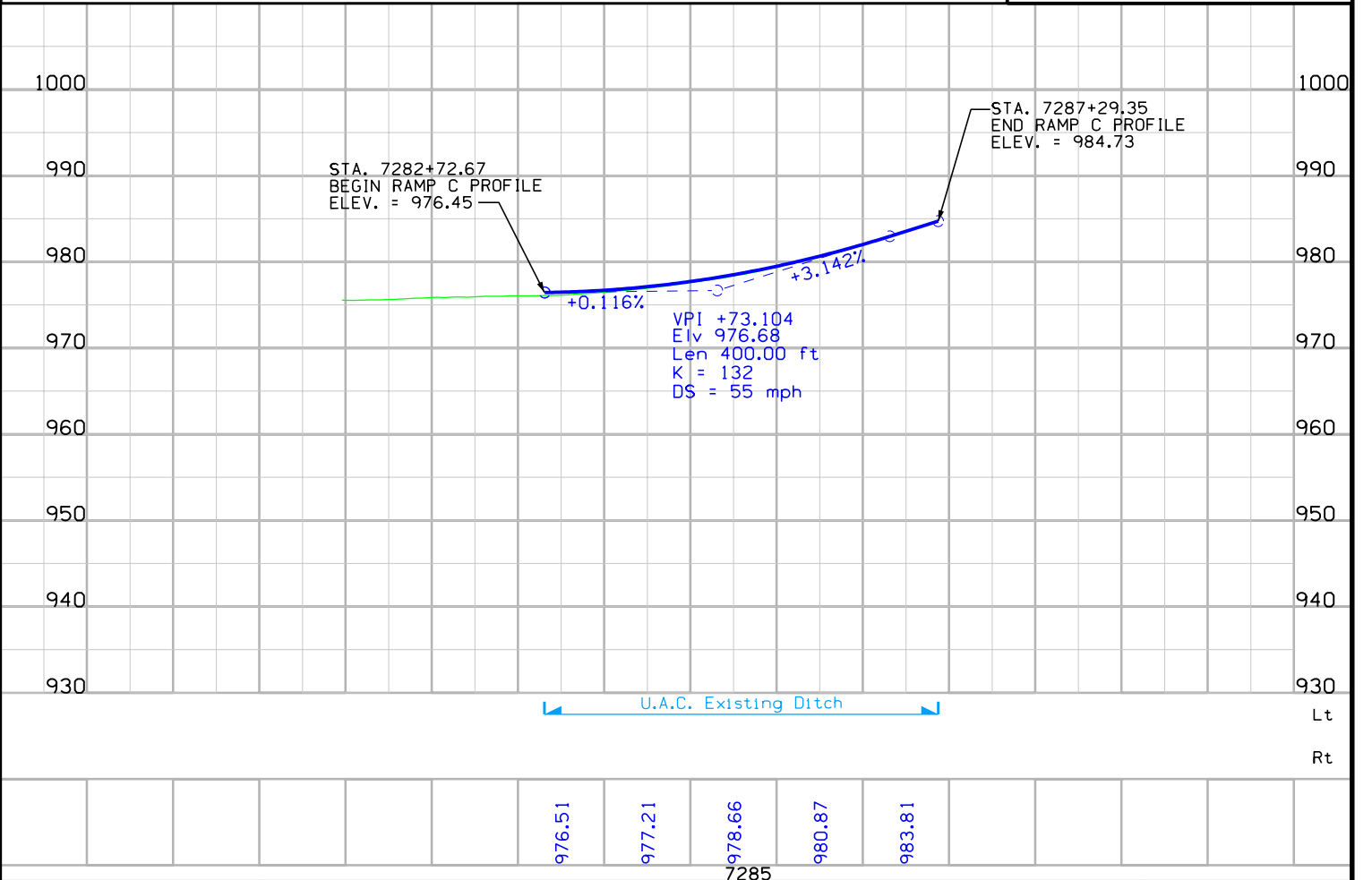
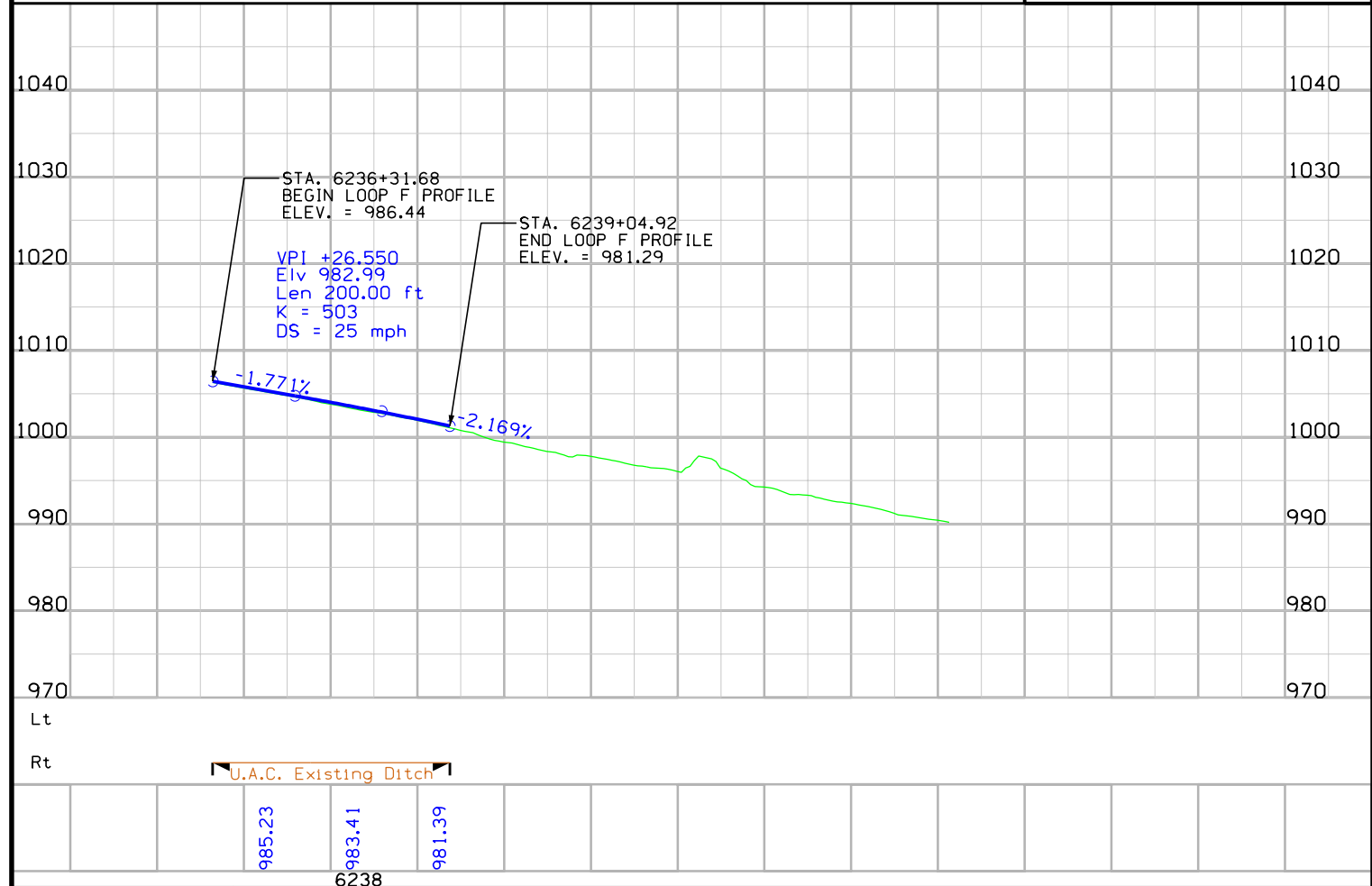
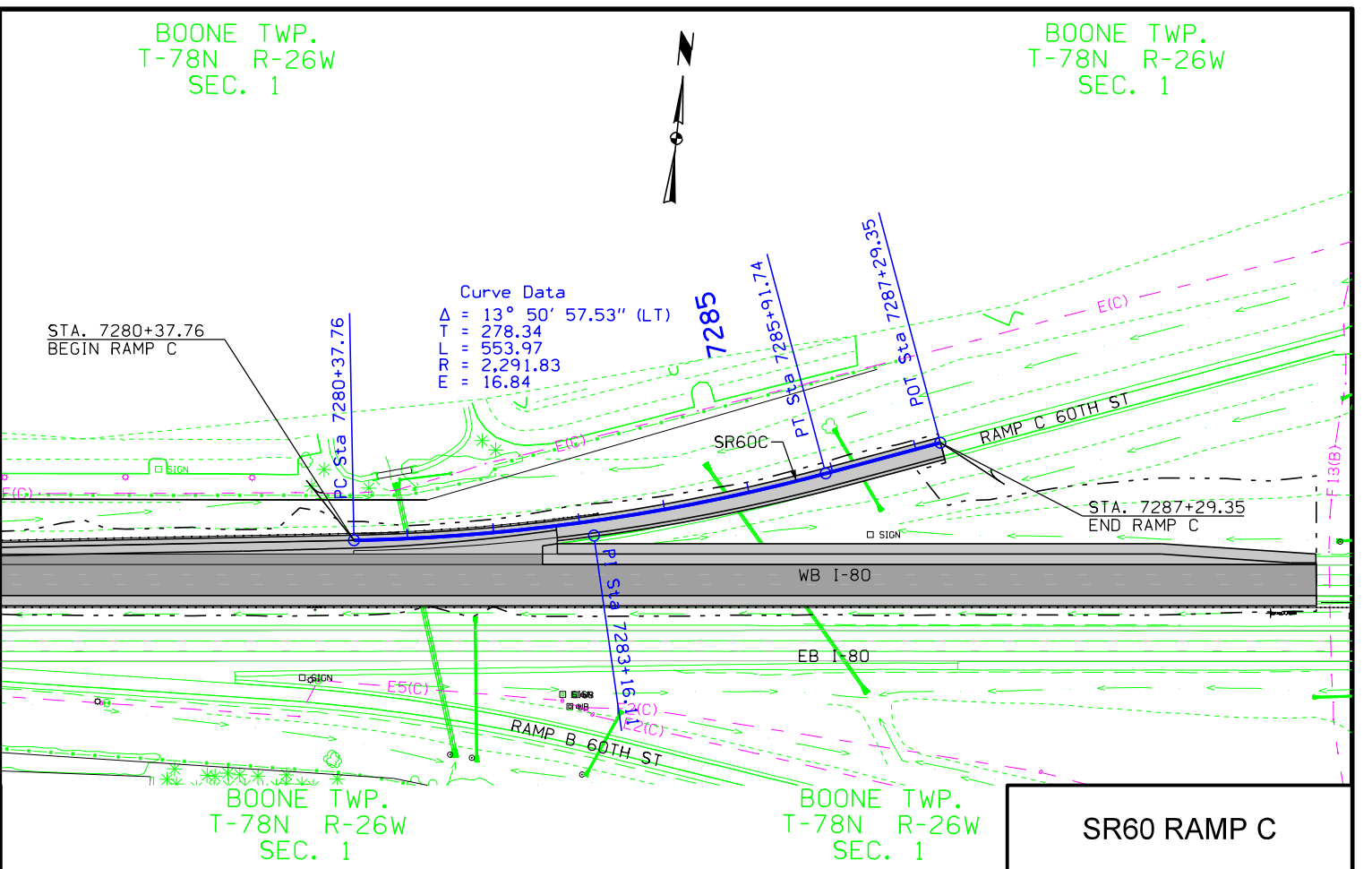
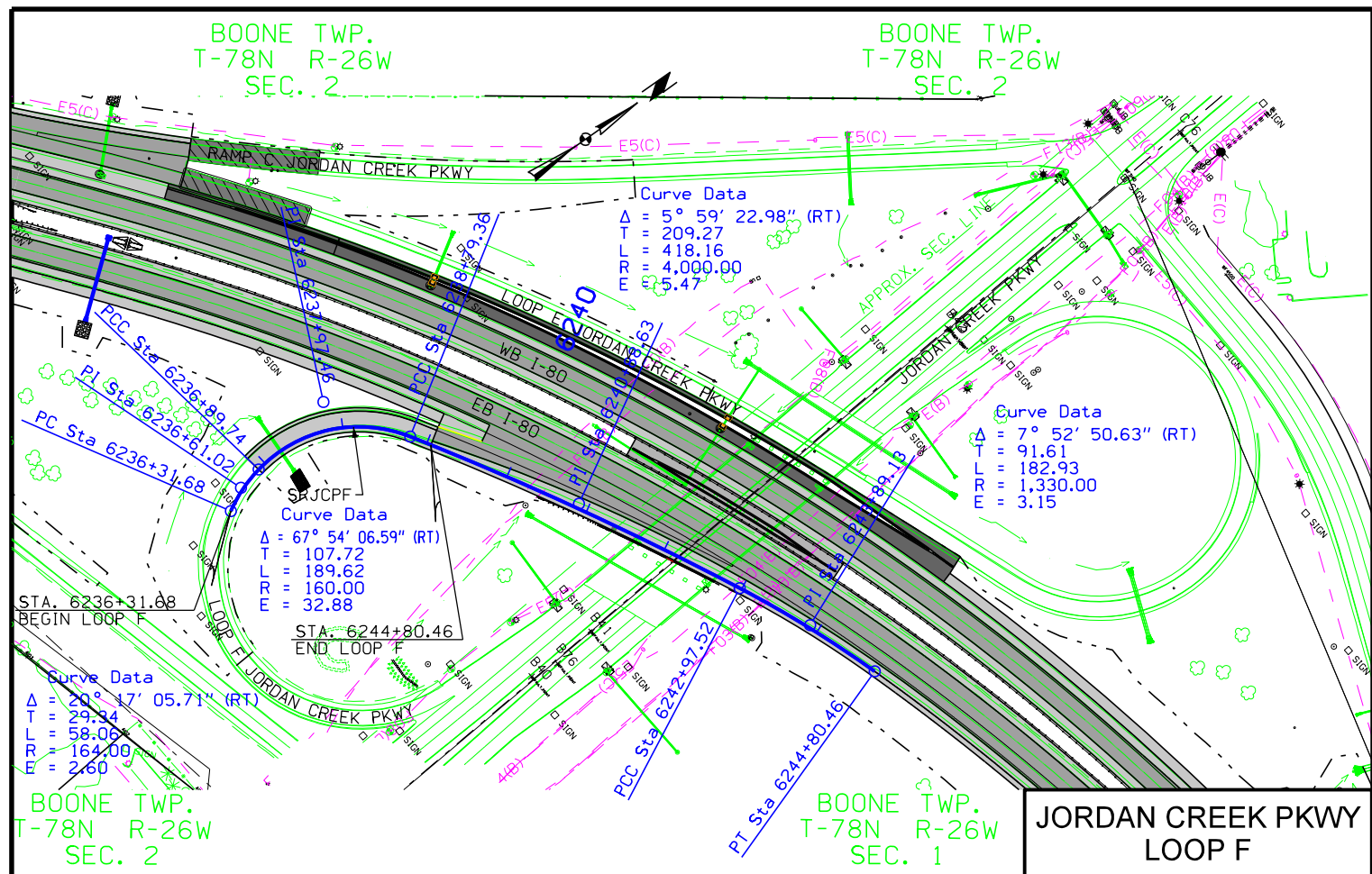


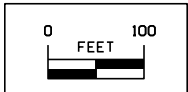
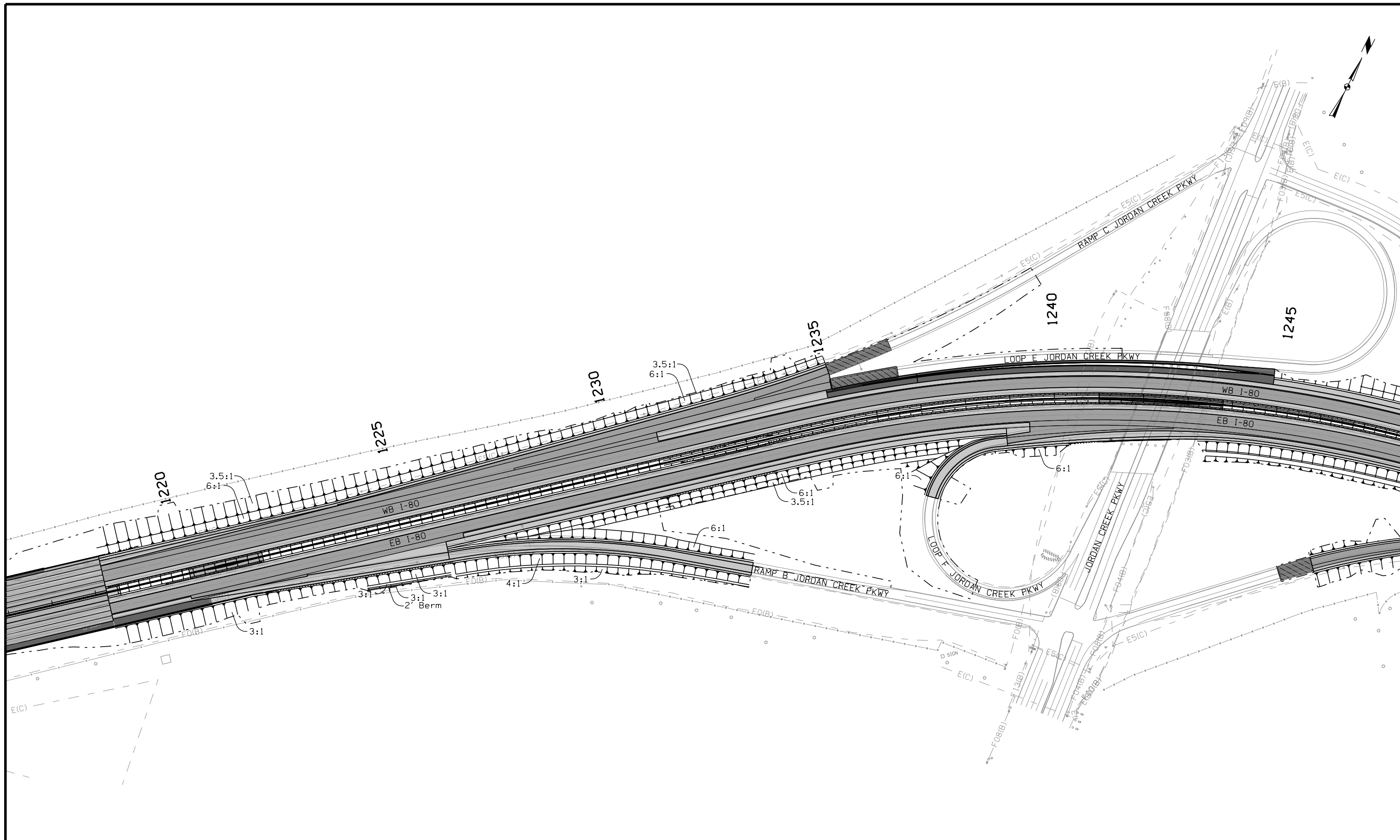


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3230	3235	4255						



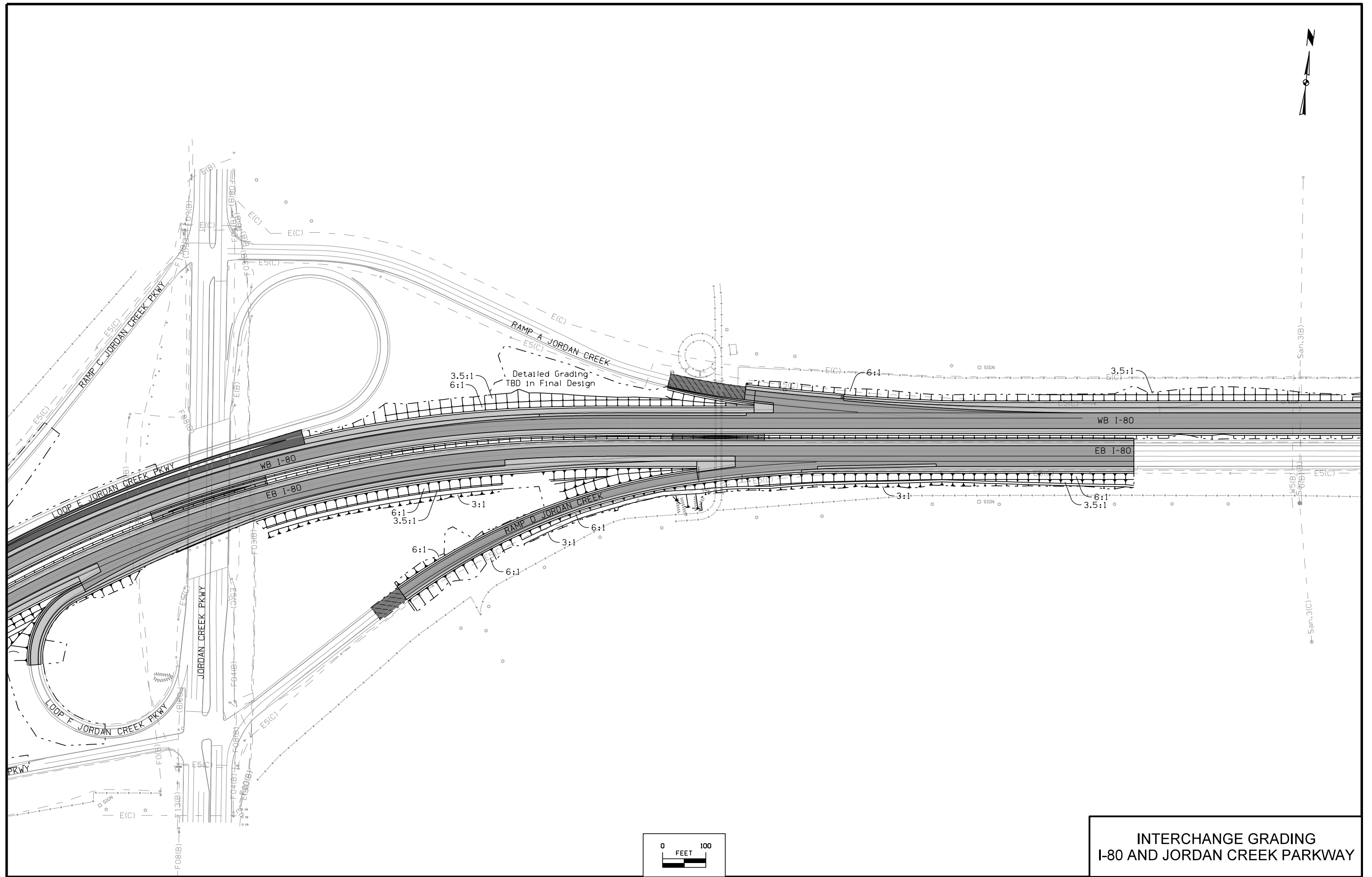
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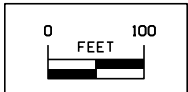


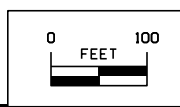
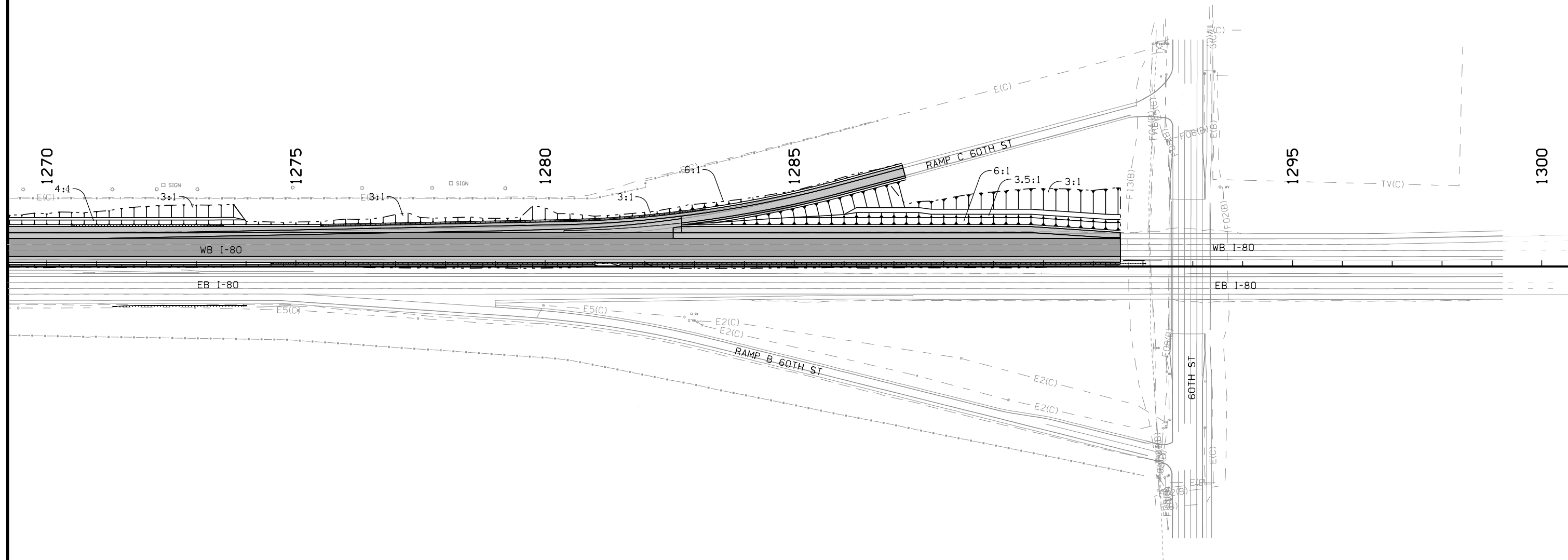
INTERCHANGE GRADING
I-80 AND JORDAN CREEK PARKWAY

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT \ HDR	DALLAS COUNTY	PROJECT NUMBER IM-NHS-080-3(282)118--03-25	SHEET NUMBER K.5
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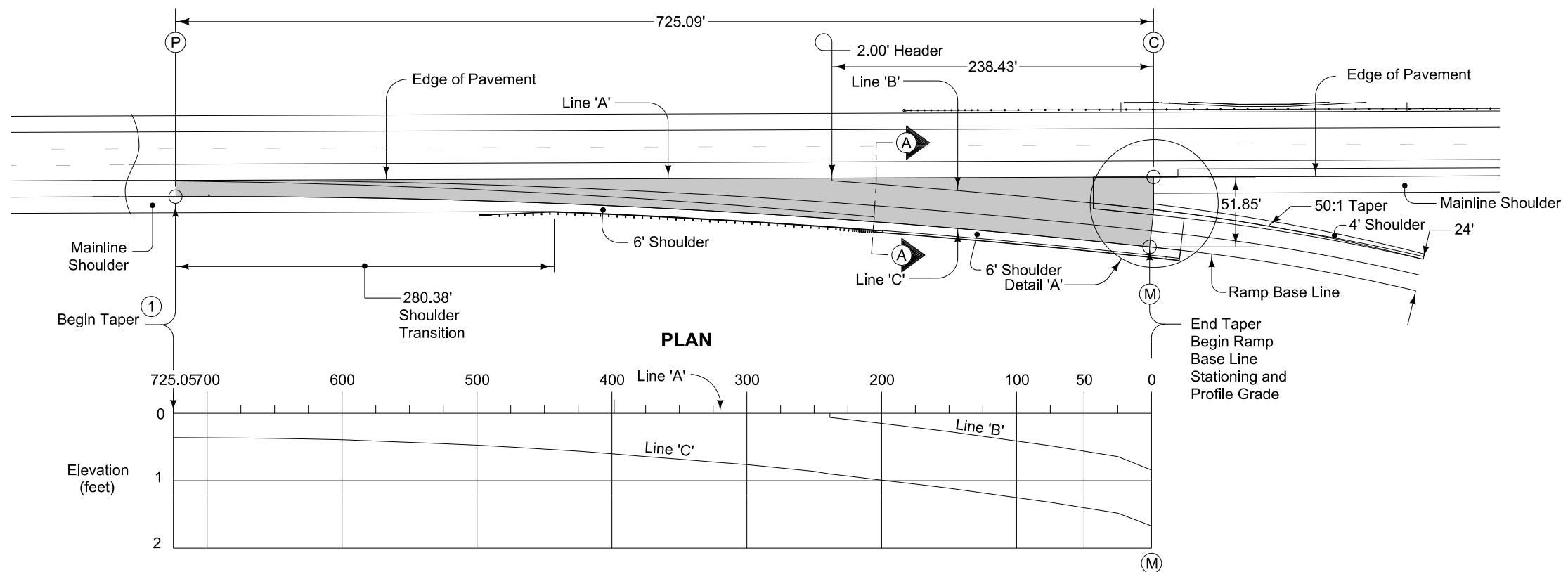


**INTERCHANGE GRADING
I-80 AND JORDAN CREEK PARKWAY**





INTERCHANGE GRADING
I-80 AND 60TH STREET



NOTE: The algebraic difference between profile grade for Ramp Base Line at (M) and relative profile grade of Mainline at (C) is 0.2%.

PROFILE

Construct ramp exit pavement the same thickness as mainline pavement.
 Ramp exit pavement shown by shaded area is 1332 square yards.
 For joint details, see PV-101.

- ① For header construction details at the beginning of taper, see Typical 7101 or Typical 7102.
- ② Construct subbase for ramp exit pavement the same thickness as mainline subbase.

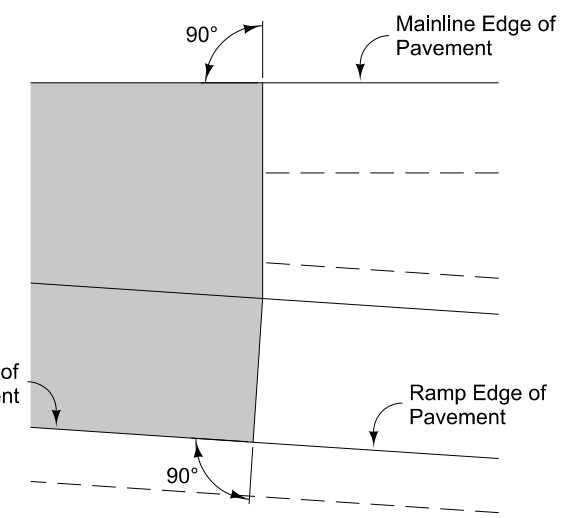
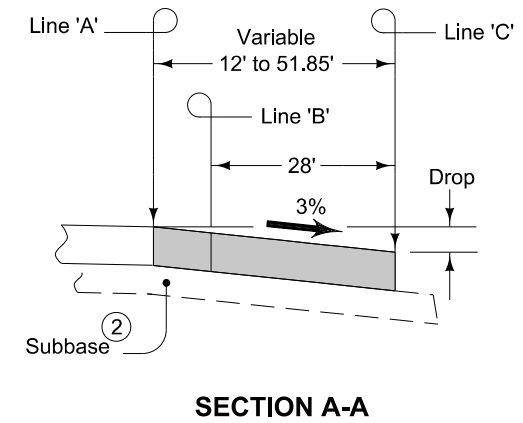
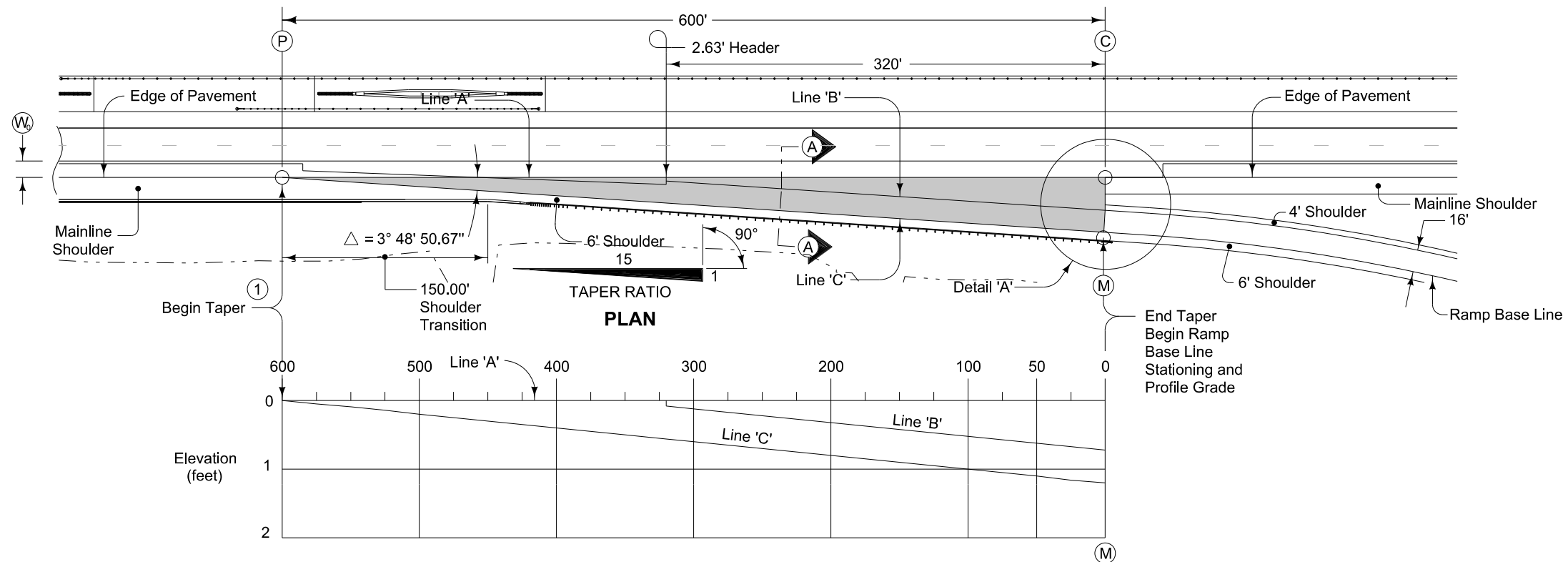


		TABLE OF OFFSETS AND DROPS FOR 16' RAMP TAPER																														
DISTANCE FROM POINT (C) ALONG LINE 'A' (Ft.)		725.05	700	675	650	625	600	575	550	525	500	475	450	425	400	375	350	320	300	275	250	238.43	225	200	175	150	125	100	75	50	25	0
From Line 'A' To Line 'B'	OFFSET (Ft.)																					2.00	3.01	4.96	7.00	9.15	11.38	13.72	16.15	18.67	21.30	24.02
	SLOPE (%)	← Constant 3.0% Slope →																														
	DROP (Ft.)																						0.06	0.09	0.15	0.21	0.27	0.34	0.41	0.48	0.56	0.64
From Line 'B' To Line 'C'	OFFSET (Ft.)	← Constant 28' Offset →																														
	SLOPE (%)	← Constant 3.0% Slope →																														
	DROP (Ft.)																						0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
From Line 'A' To Line 'C'	OFFSET (Ft.)	12.00	12.05	12.19	12.43	12.76	13.19	13.72	14.34	15.05	15.86	16.77	17.77	18.86	20.06	21.34	22.73	24.21	25.78	27.45	29.22											
	SLOPE (%)	← Constant 3.0% Slope →																														
	DROP (Ft.)	0.36	0.36	0.37	0.37	0.38	0.39	0.41	0.43	0.45	0.47	0.50	0.53	0.57	0.60	0.64	0.68	0.73	0.77	0.82	0.88	0.90	0.93	0.99	1.05	1.11	1.18	1.25	1.32	1.40	1.48	1.67



<h1>MODIFIED STANDARD ROAD PLAN</h1>	REVISION	
	7	04-21-20
	PV-410	
SHEET 1 of 2		
MODIFICATIONS: Changed		
<h2>JORDAN CREEK PARKWAY RAMP A DECELERATION TAPER FOR 24' RAMP</h2>		



NOTE: The algebraic difference between profile grade for Ramp Base Line at (M) and relative profile grade of Mainline at (C) is 0.2%.

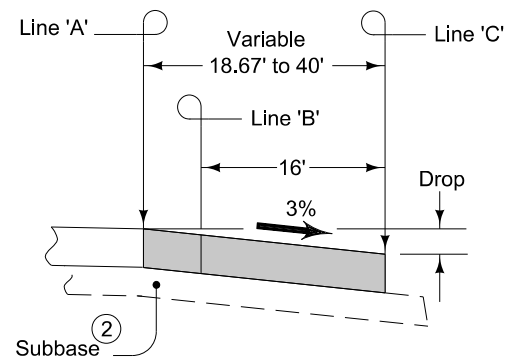
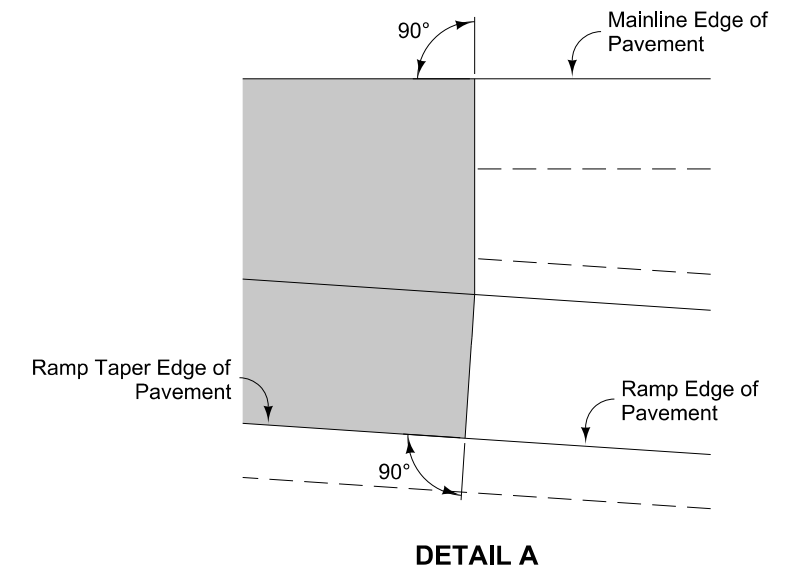
PROFILE

TABLE OF OFFSETS AND DROPS FOR 16' RAMP TAPER

DISTANCE FROM POINT (C) ALONG LINE 'A' (Ft.)		600	575	550	525	500	475	450	425	400	375	350	320	300	275	250	225	200	175	150	125	100	75	50	25	0
From Line 'A' To Line 'B'	OFFSET (Ft.)												2.63	3.96	5.63	7.30	8.96	10.63	12.30	13.96	15.63	17.30	18.96	20.63	22.30	23.96
	SLOPE (%)														Constant 3.0% Slope											
	DROP (Ft.)													0.08	0.12	0.17	0.22	0.27	0.32	0.37	0.42	0.47	0.52	0.57	0.62	0.67
From Line 'B' To Line 'C'	OFFSET (Ft.)														Constant 16' Offset											
	SLOPE (%)														Constant 2.85% Slope											
	DROP (Ft.)													0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
From Line 'A' To Line 'C'	OFFSET (Ft.)	0	1.66	3.33	5.00	6.67	8.33	10.00	11.67	13.33	15.00	16.67														
	SLOPE (%)	Constant 3.00% Slope																								
	DROP (Ft.)	0	0.05	0.09	0.14	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.56	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.16	1.20

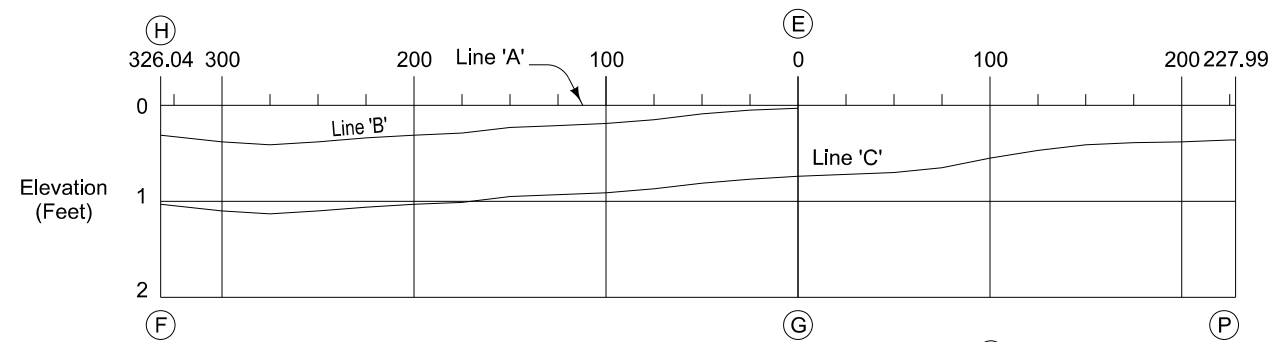
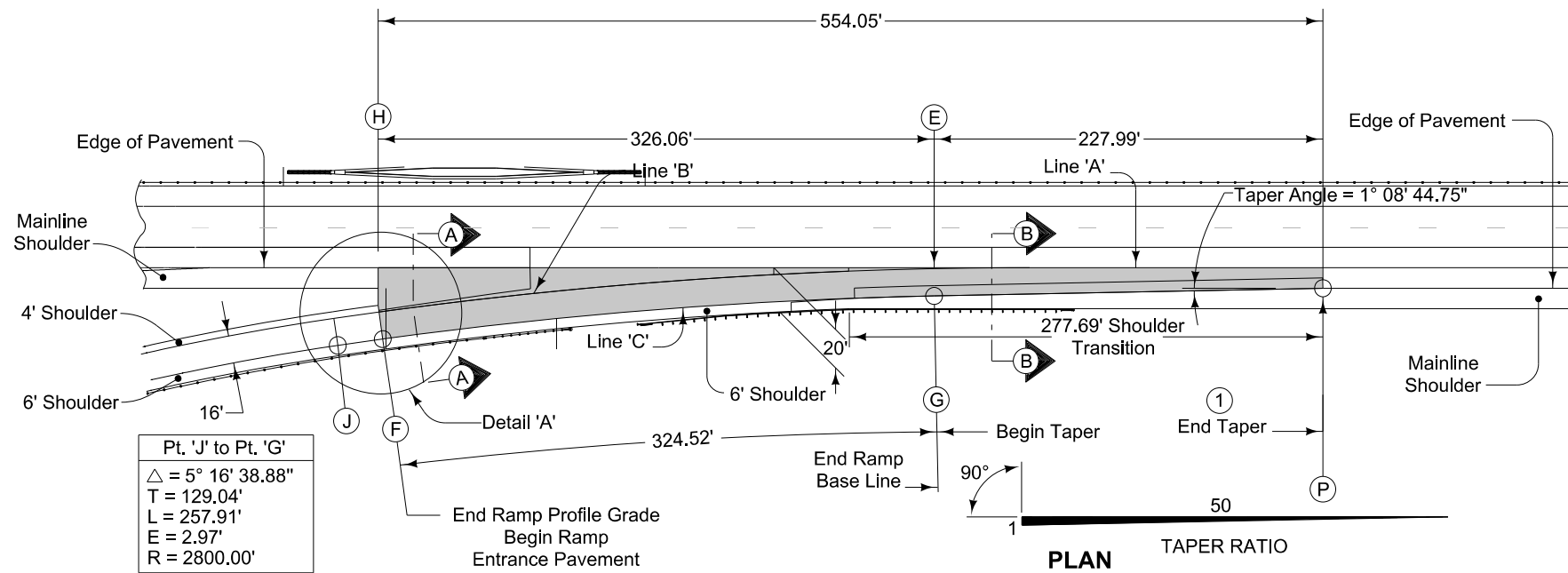
Construct ramp exit pavement the same thickness as mainline pavement.
 Ramp exit pavement shown by shaded area is 1332 square yards.
 For joint details, see PV-101.

- ① For header construction details at the beginning of taper, see Typical 7101 or Typical 7102.
- ② Construct subbase for ramp exit pavement the same thickness as mainline subbase.



SECTION A-A

MODIFIED STANDARD ROAD PLAN	REVISION	
	7	04-21-20
	PV-410	
SHEET 1 of 2		
MODIFICATIONS: Changed		
JORDAN CREEK PARKWAY RAMP B DECELERATION TAPER FOR 16' RAMP		



NOTE: The algebraic difference between profile grade for Ramp Base Line at (F) and relative profile grade of Mainline at (H) is 0.54%.

Construct ramp entrance pavement the same thickness as mainline pavement.

Ramp entrance pavement shown by shaded area is 1793 square yards.

For joint details, see PV-101

① For header construction details at the end of taper, see Typical 7101 or Typical 7102.

② Construct subbase for ramp entrance pavement the same thickness as mainline subbase.

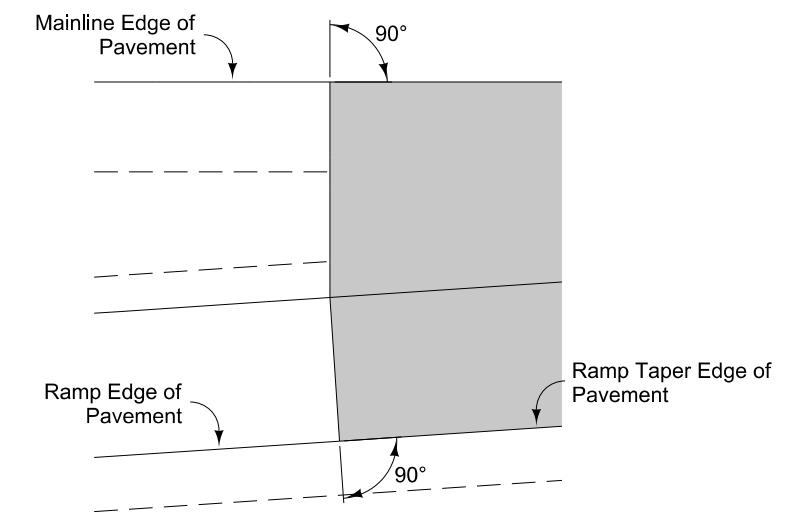
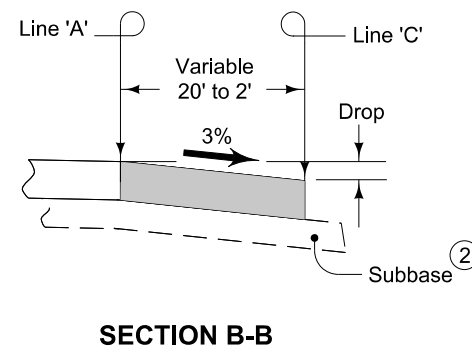
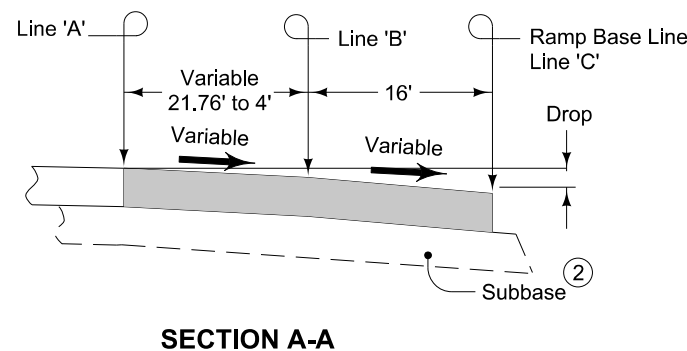
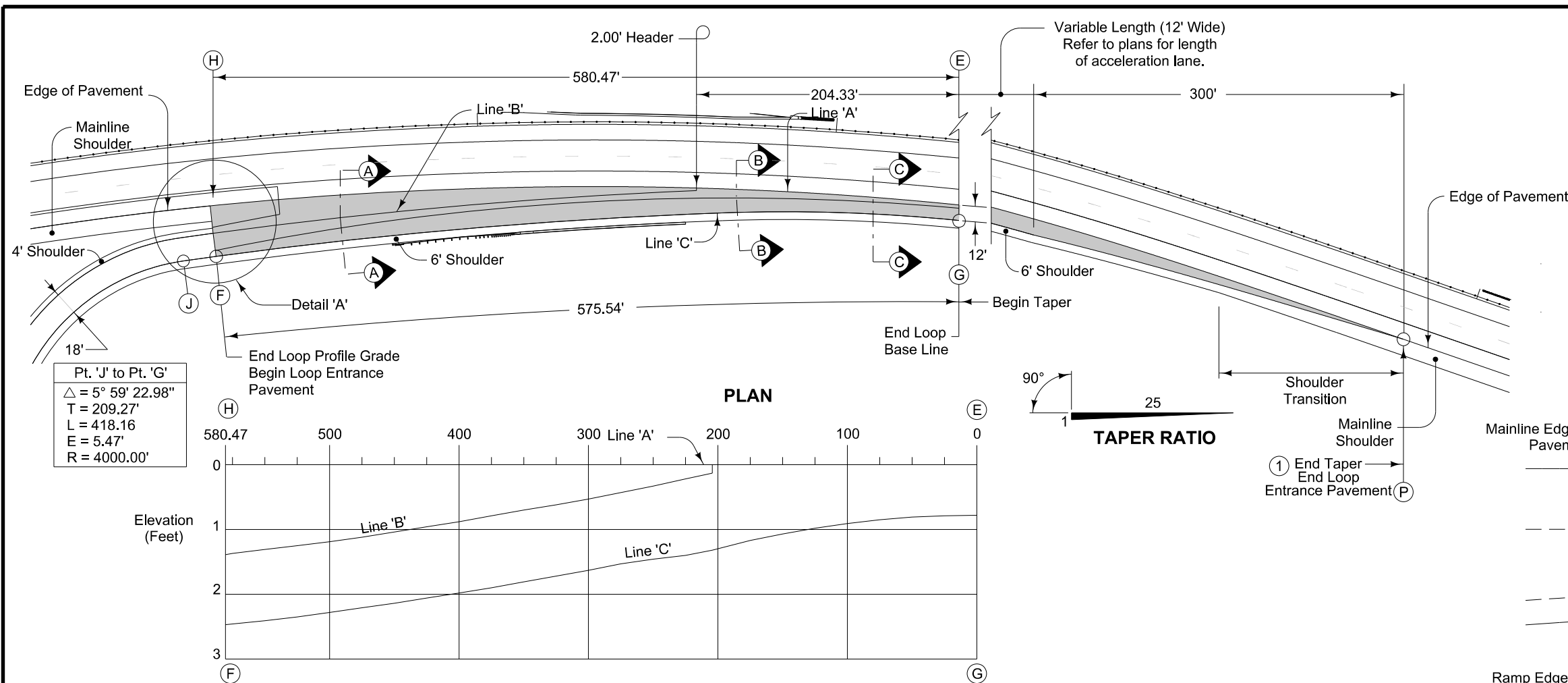


TABLE OF OFFSETS AND DROPS FOR 16' RAMP TAPER

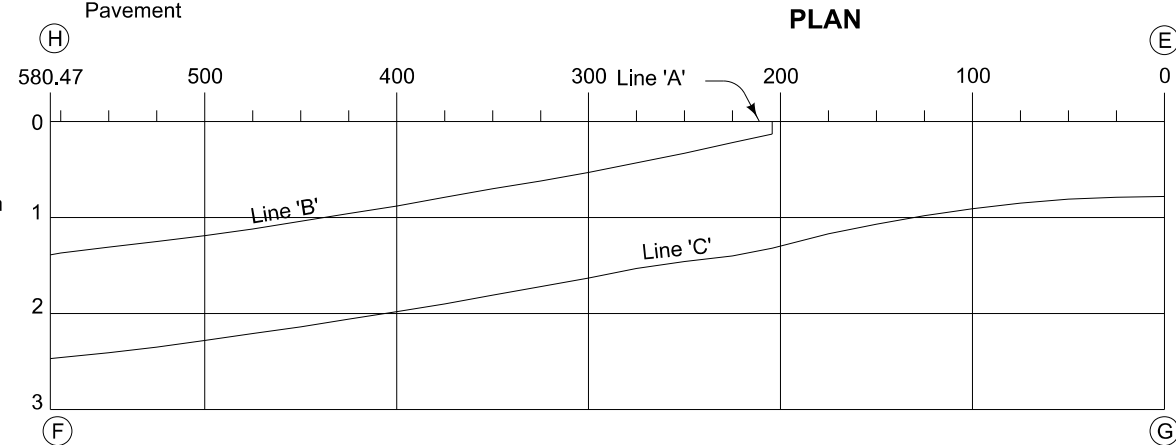
Distance From Point (E) Along Line 'A' (Ft.)	326.06	300	275	250	225	200	175	150	125	100	75	50	25	0	25	50	75	100	125	150	175	200	225	227.99		
From Line 'A' To Line 'B'	Offset (Ft.)	25.96	22.59	19.52	16.67	14.05	11.66	9.49	7.54	5.82	4.32	3.05	2.00	1.16	0.56											
	Slope (%)	1.19	1.68	2.09	2.29	2.42	2.64	3.01	3.08	3.54	4.40	4.90	4.50	4.50	4.50											
	Drop (Ft.)	0.31	0.38	0.41	0.38	0.34	0.31	0.29	0.23	0.21	0.19	0.15	0.09	0.05	0.03											
From Line 'B' To Line 'C'	Offset (Ft.)	← Constant 16.0' Offset →																								
	Slope (%)	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50											
	Drop (Ft.)	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72											
From Line 'A' To Line 'C'	Offset (Ft.)														16.06	15.56	15.06	14.56	14.06	13.56	13.06	12.56	12.06	12		
	Slope (%)														4.50	4.50	4.17	3.76	3.36	← Constant 3.0% Slope →						
	Drop (Ft.)	1.03	1.10	1.13	1.10	1.06	1.03	1.01	0.95	0.93	0.91	0.87	0.81	0.77	0.74	0.72	0.70	0.63	0.55	0.47	0.41	0.39	0.38	0.36	0.36	
Distance From Point (E) Along Line 'C' (Ft.)		324.52	298.92	273.88	248.86	223.86	198.89	173.94	149.01	124.09	99.19	74.30	49.42	24.55	0.00											



MODIFIED STANDARD ROAD PLAN	REVISION
	6 04-21-20
	PV-411
SHEET 1 of 2	
MODIFICATIONS: Changed	
JORDAN CREEK PARKWAY RAMP D ACCELERATION TAPER FOR 16' ENTRANCE RAMP	



Pt. 'J' to Pt. 'G'
 $\Delta = 5^\circ 59' 22.98''$
 $T = 209.27'$
 $L = 418.16$
 $E = 5.47'$
 $R = 4000.00'$

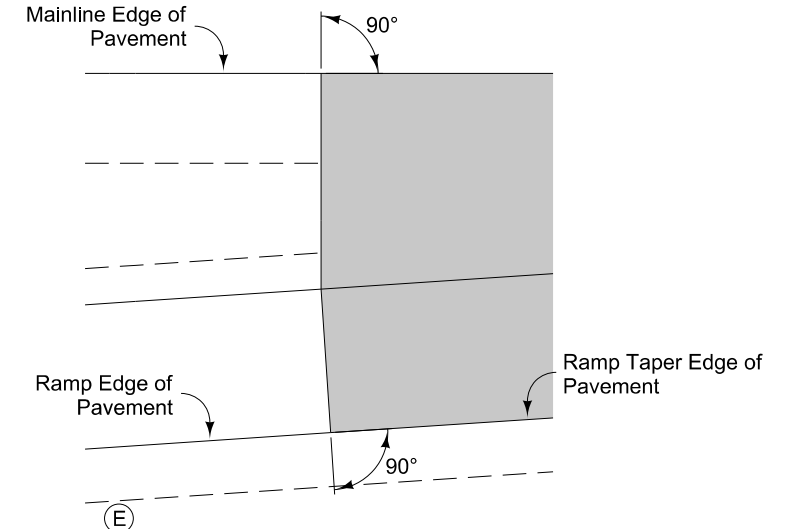
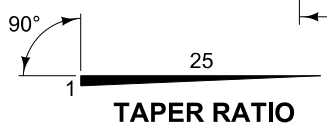


NOTE: The algebraic difference between profile grade for Loop Base Line at (F) and relative profile grade of Mainline at (H) is 0.36%.

PROFILE

Construct loop entrance pavement the same thickness as mainline pavement.
 Loop entrance pavement shown by shaded area is 1329 square yards.
 For joint details, see PV-101.

- ① For header construction details at the end of taper, see Typical 7101 or Typical 7102.
- ② Construct subbase for loop entrance pavement the same thickness as mainline subbase.

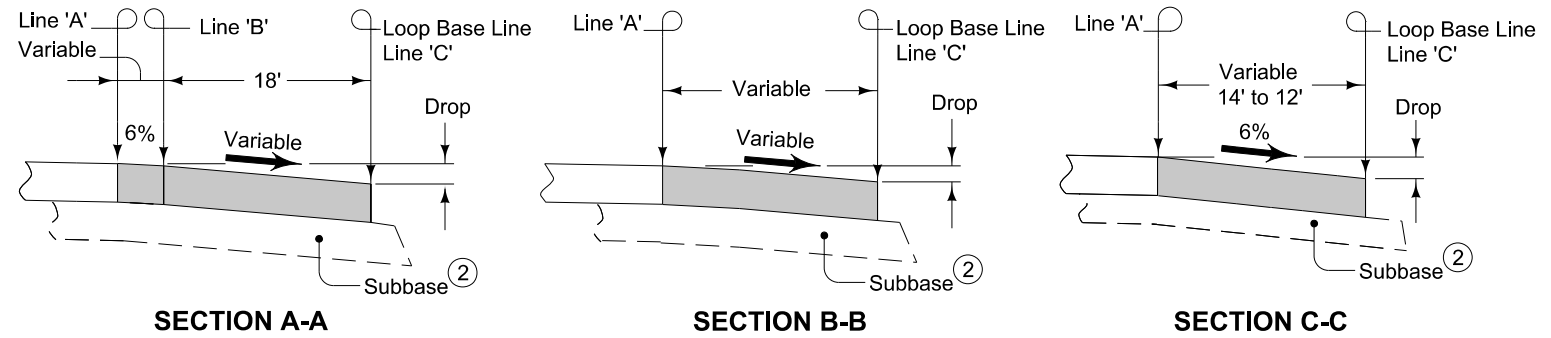


DETAIL A

TABLE OF OFFSETS AND DROPS FOR 18' LOOP TAPER

Distance From Point (E) Along Line 'A' (Ft.)	580.47	575	550	525	500	475	450	425	400	375	350	325	300	275	250	225	204.33	175	150	125	100	75	50	25	0
From Line 'A' To Line 'B'	Offset (Ft.)	21.32	21.08	20.20	19.26	18.25	17.16	16.01	14.80	13.51	12.21	10.90	9.52	8.09	6.61	5.03	3.38	2.00							
	Slope (%)	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50							
	Drop (Ft.)	1.39	1.37	1.31	1.25	1.19	1.12	1.04	0.96	0.88	0.79	0.71	0.62	0.53	0.43	0.33	0.22	0.13							
From Line 'B' To Line 'C'	Offset (Ft.)	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0								
	Slope (%)	6.00	6.04	6.08	6.09	6.09	6.10	6.11	6.11	6.12	6.12	6.12	6.13	6.14	6.28	6.53	6.63								
	Drop (Ft.)	1.08	1.09	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.13	1.18	1.19								
From Line 'A' To Line 'C'	Offset (Ft.)																	17.94	16.37	15.03	13.94	13.09	12.48	12.12	12.00
	Slope (%)																	6.51	6.51	6.51	6.51	6.51	6.51	6.51	6.51
	Drop (Ft.)	2.47	2.46	2.41	2.35	2.28	2.21	2.14	2.06	1.98	1.90	1.81	1.72	1.63	1.53	1.46	1.40	1.32	1.17	1.07	0.98	0.91	0.85	0.81	0.79
Distance From Point (G) Along Line 'C' (Ft.)	575.54	568.57	543.85	519.12	494.38	469.62	444.85	420.07	395.28	370.55	345.82	320.99	296.39	272.02	247.13	222.30	202.22	173.75	148.93	124.03	99.21	74.48	49.58	24.89	0.00

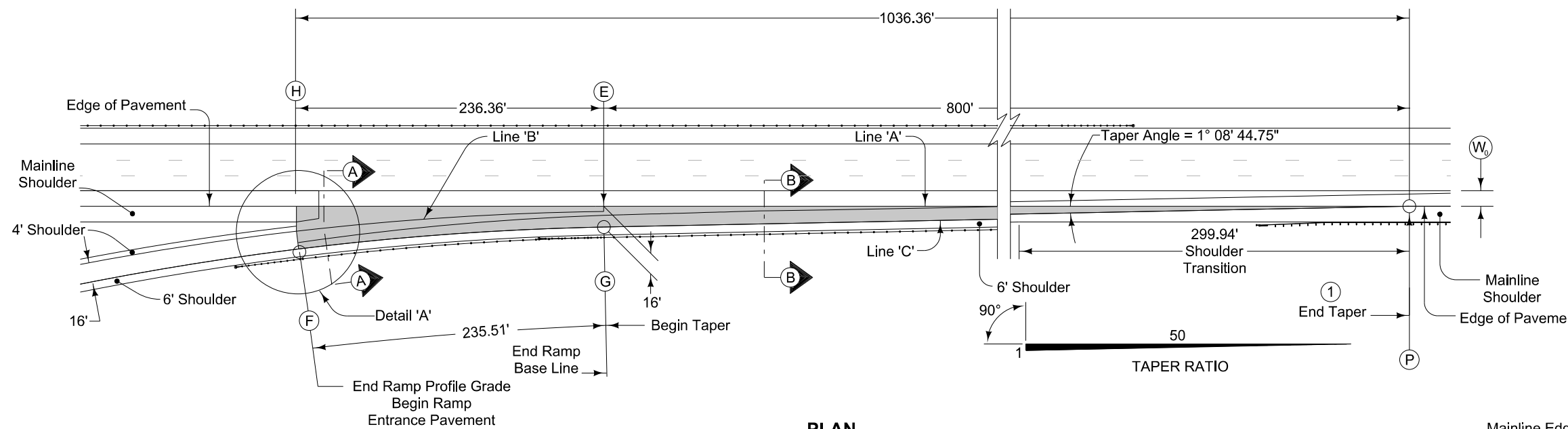
NOTE: From (G) to (P) cross-slope between Line 'A' and Line 'C' is a constant 3%.



MODIFIED STANDARD ROAD PLAN	REVISION
	6 04-21-20
	PV-414
SHEET 1 of 2	

MODIFICATIONS: Changed

**JORDAN CREEK PARKWAY LOOP F
ACCELERATION TAPER
FOR 18' ENTRANCE LOOP**

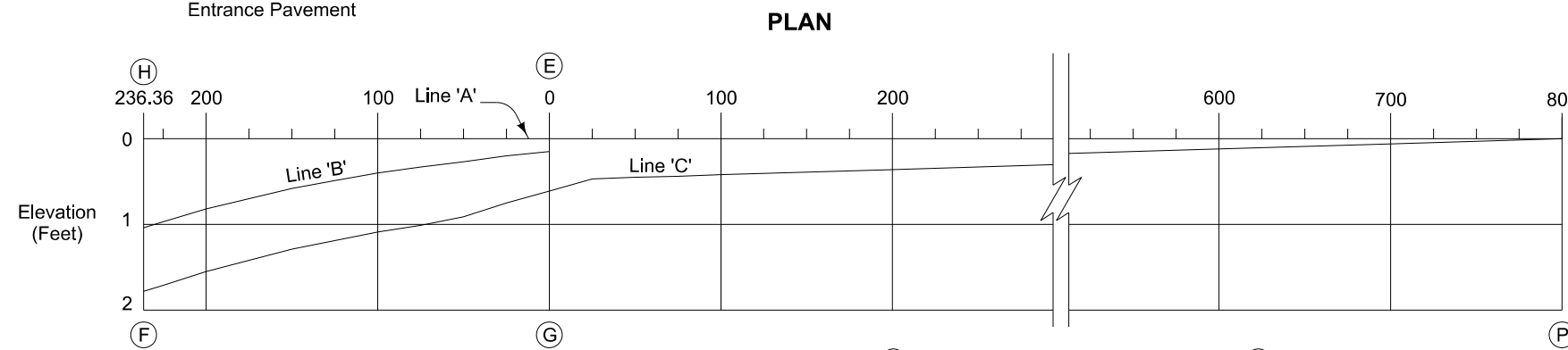


Construct ramp entrance pavement the same thickness as mainline pavement.

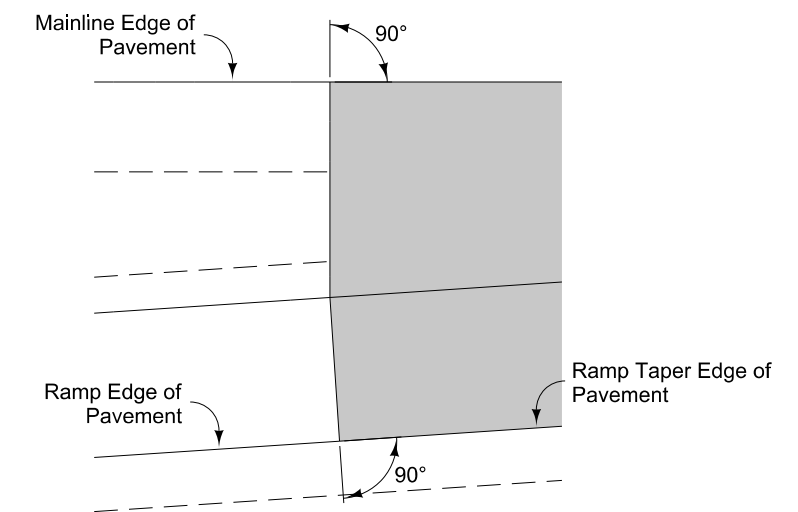
Ramp entrance pavement shown by shaded area is 1793 square yards.

For joint details, see PV-101

- ① For header construction details at the end of taper, see Typical 7101 or Typical 7102.
- ② Construct subbase for ramp entrance pavement the same thickness as mainline subbase.



NOTE: The algebraic difference between profile grade for Ramp Base Line at (F) and relative profile grade of Mainline at (H) is 0.54%.

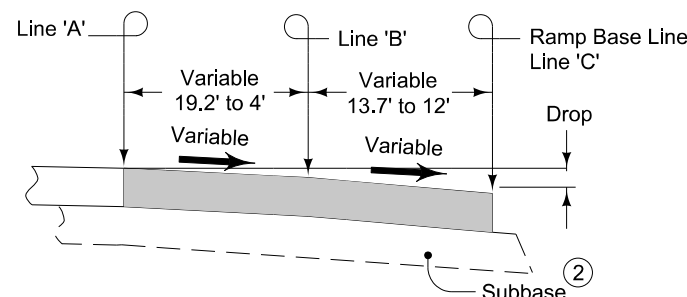


PROFILE

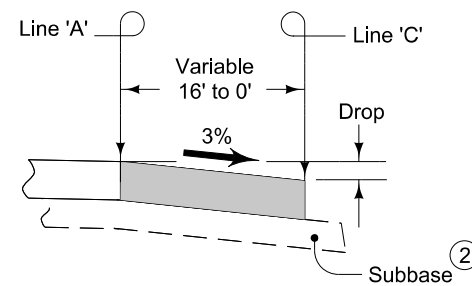
DETAIL A

TABLE OF OFFSETS AND DROPS FOR RAMP TAPER

Distance From Point (E) Along Line 'A' (Ft.)	236.36	225	200	175	150	125	100	75	50	25	0	25	50	75	100	120	100	80	60	40	20	0.0		
From Line 'A' To Line 'B'	Offset (Ft.)	19.20	17.91	15.27	12.91	10.82	9.00	7.46	6.19	5.19	4.46	4.0												
	Slope (%)	← Constant 5.4% Slope →																						
	Drop (Ft.)	1.04	0.97	0.82	0.70	0.58	0.49	0.40	0.33	0.27	0.20	0.15												
From Line 'B' To Line 'C'	Offset (Ft.)	13.70	13.61	13.43	13.25	13.07	12.89	12.71	12.53	12.35	12.18	12.0												
	Slope (%)	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.20	4.50	3.80												
	Drop (Ft.)	0.75	0.74	0.73	0.72	0.71	0.70	0.69	0.68	0.64	0.55	0.46												
From Line 'A' To Line 'C'	Offset (Ft.)												15.5	15.0	14.5	14.0	12.0	10.0	8.0	6.0	4.0	2.0	0.0	
	Slope (%)												← Constant 3.0% Slope →											
	Drop (Ft.)	1.78	1.71	1.55	1.42	1.29	1.19	1.09	1.01	0.91	0.75	0.61	0.47	0.45	0.44	0.42	0.36	0.30	0.24	0.18	0.12	0.06	0.00	
Distance From Point (G) Along Line 'C' (Ft.)	235.51	223.80	198.86	173.95	149.07	124.19	99.34	74.49	49.66	24.83	0.00													

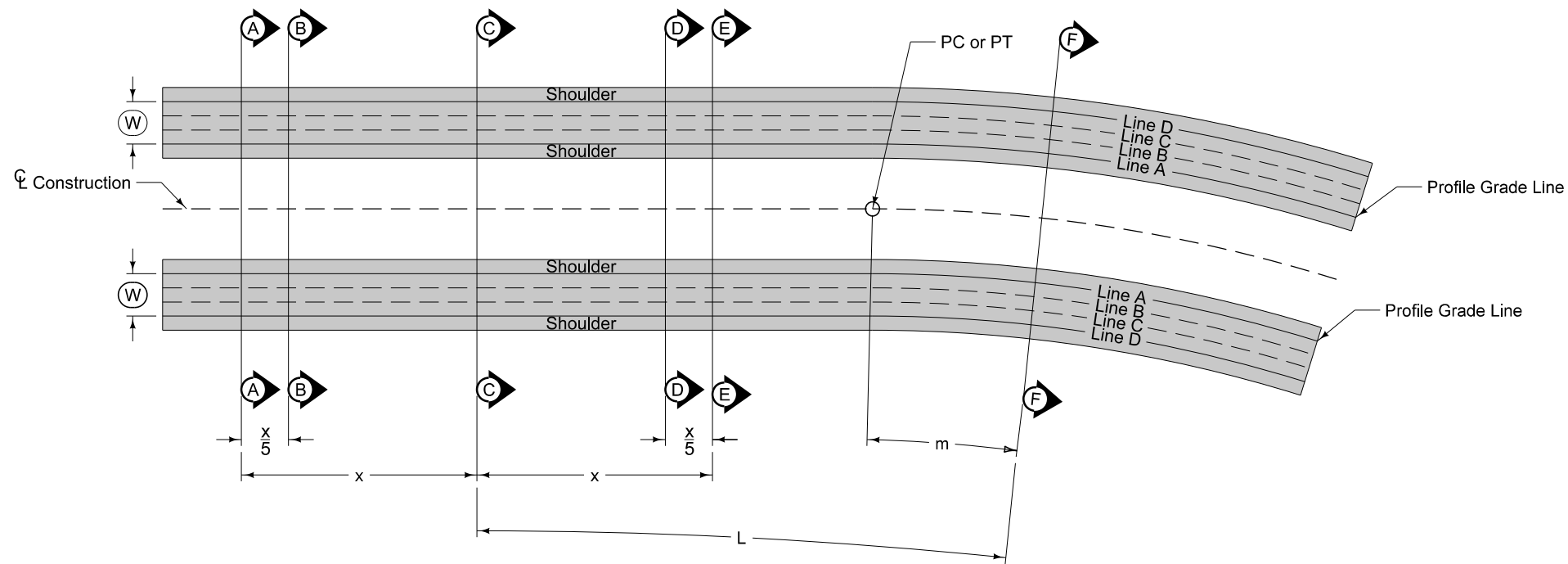


SECTION A-A

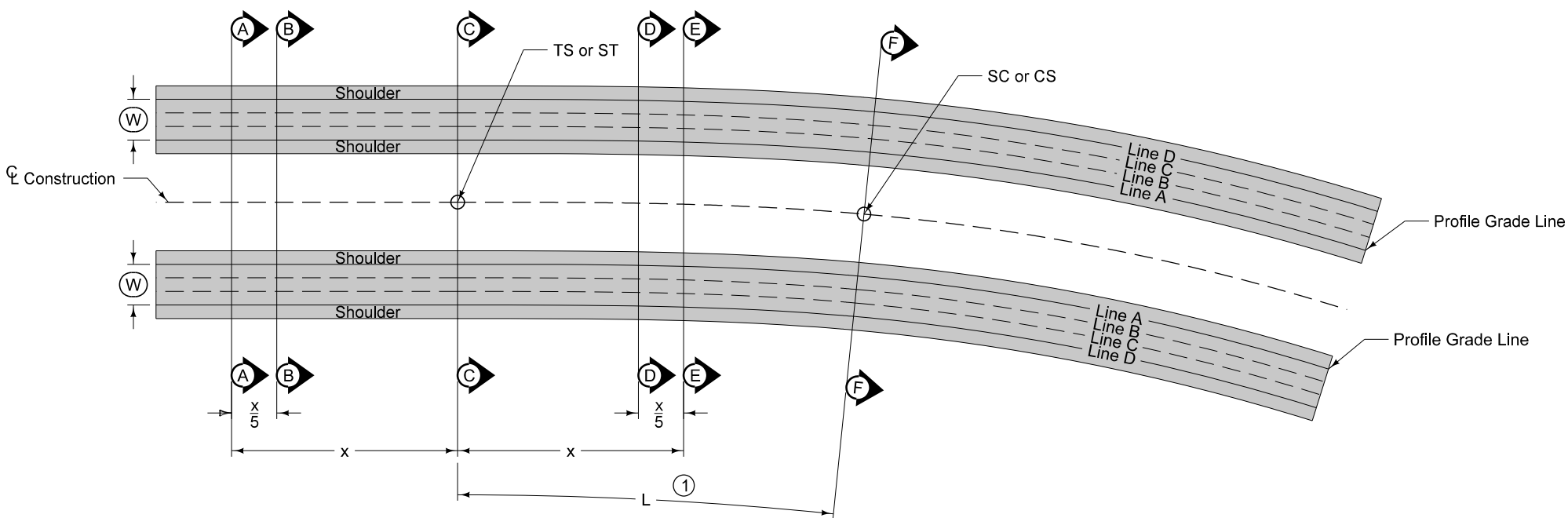


SECTION B-B

<h1>MODIFIED STANDARD ROAD PLAN</h1>	REVISION
	6 04-21-20
	PV-411
SHEET 1 of 2	
MODIFICATIONS: Changed	
60TH STREET RAMP C ACCELERATION TAPER FOR 16' ENTRANCE RAMP	



TRANSITION DETAILS - TANGENT TO CURVE



TRANSITION DETAILS - SPIRAL CURVE

Refer to specific curve data contained in project plans for tangent runout length (x), runoff length (L) and full superelevation (e).

When spiral curve transitions are not required:
 Place 70% of full superelevation at the PC and PT.
 Place 30% of the runoff length within the curve.

Unless otherwise specified, all lengths are measured along the centerline of construction.

Superelevations on this standard are shown for curves to the right. Curves to the left are a mirror image of what is shown.

Smooth curves should be established at the time of construction at sections A-F along the profile edges of lines A-D.

Axis of rotation coincides with profile grade location.

$m = 30\%$ of Runoff Length (L)

$W = 36'$ Regardless of Pavement Width

$g =$ Normal Cross Slope (2.5%)

$L =$ Distance to Change Cross Slope from 0% to e

$e =$ Superelevation Rate

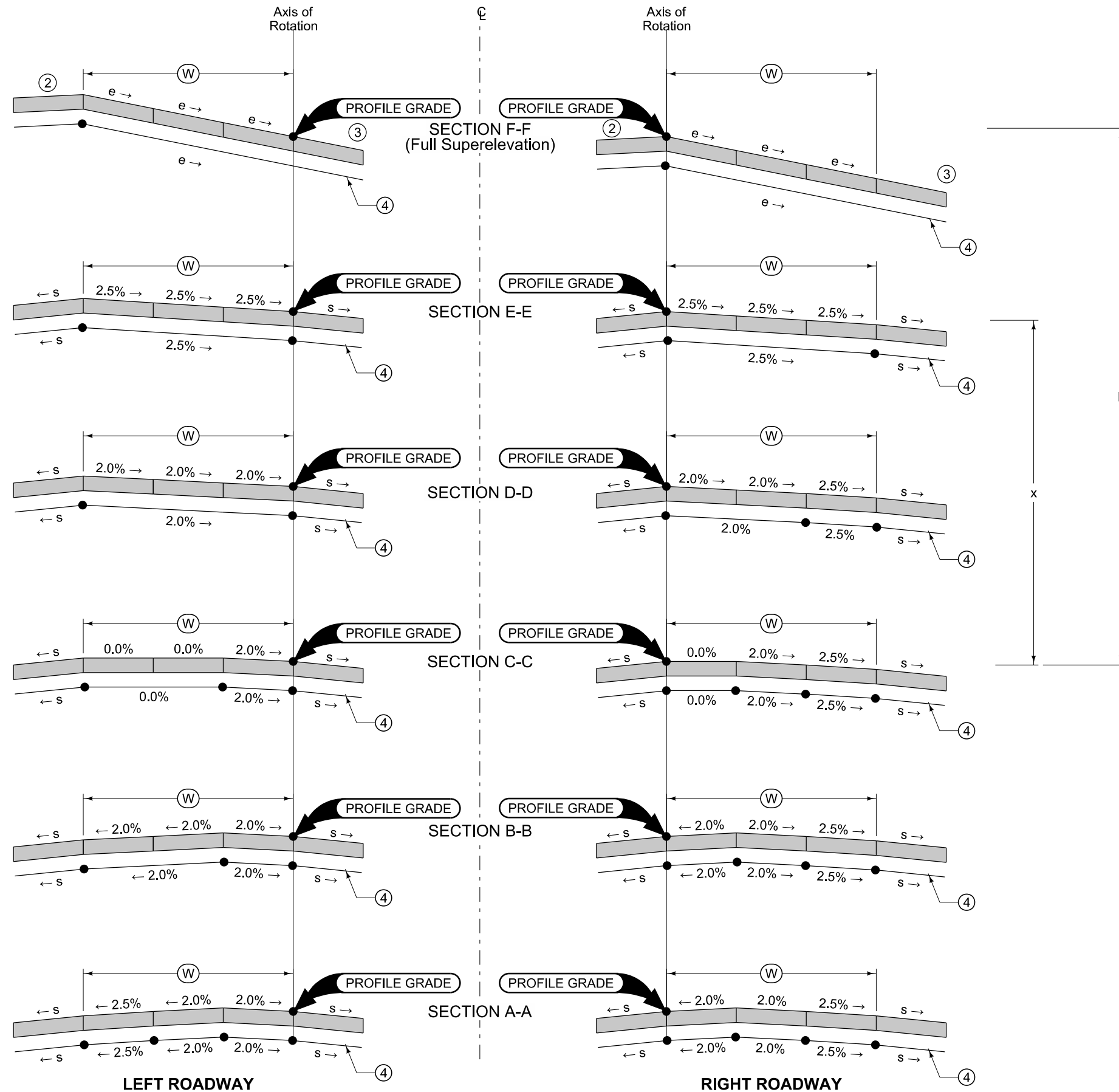
$x =$ Distance to Change Cross Slope from 0% to 2.5%

$s =$ Normal Shoulder Slope

① Spiral curve length coincides with runoff length (L)

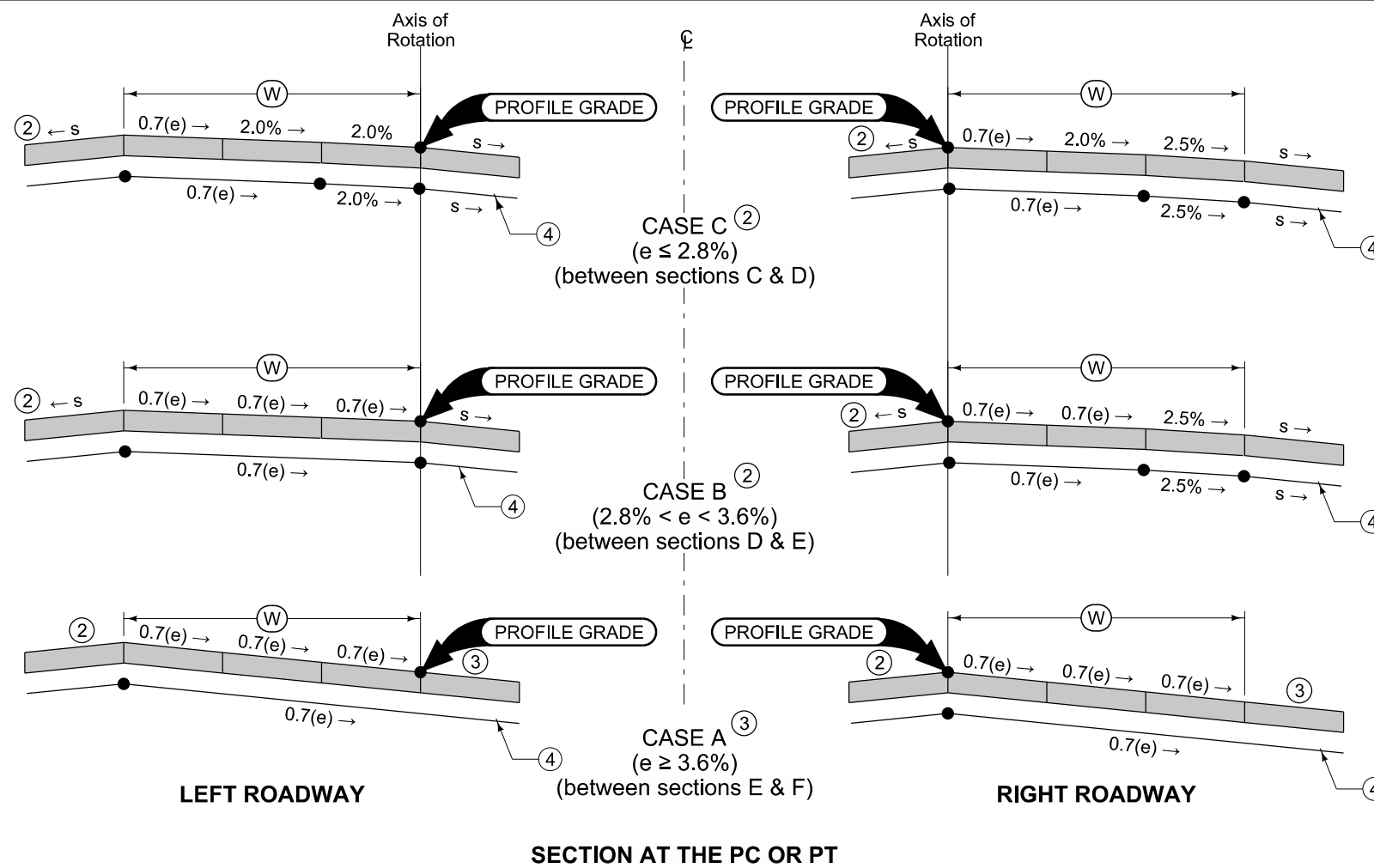
Possible Tabulation:
101-18

MODIFIED STANDARD ROAD PLAN	REVISION	
	2	04-21-20
PV-304		SHEET 1 of 4
MODIFICATIONS: Changed		
SUPERELEVATION DETAILS SIX LANE ROADWAY DEPRESSED MEDIAN		

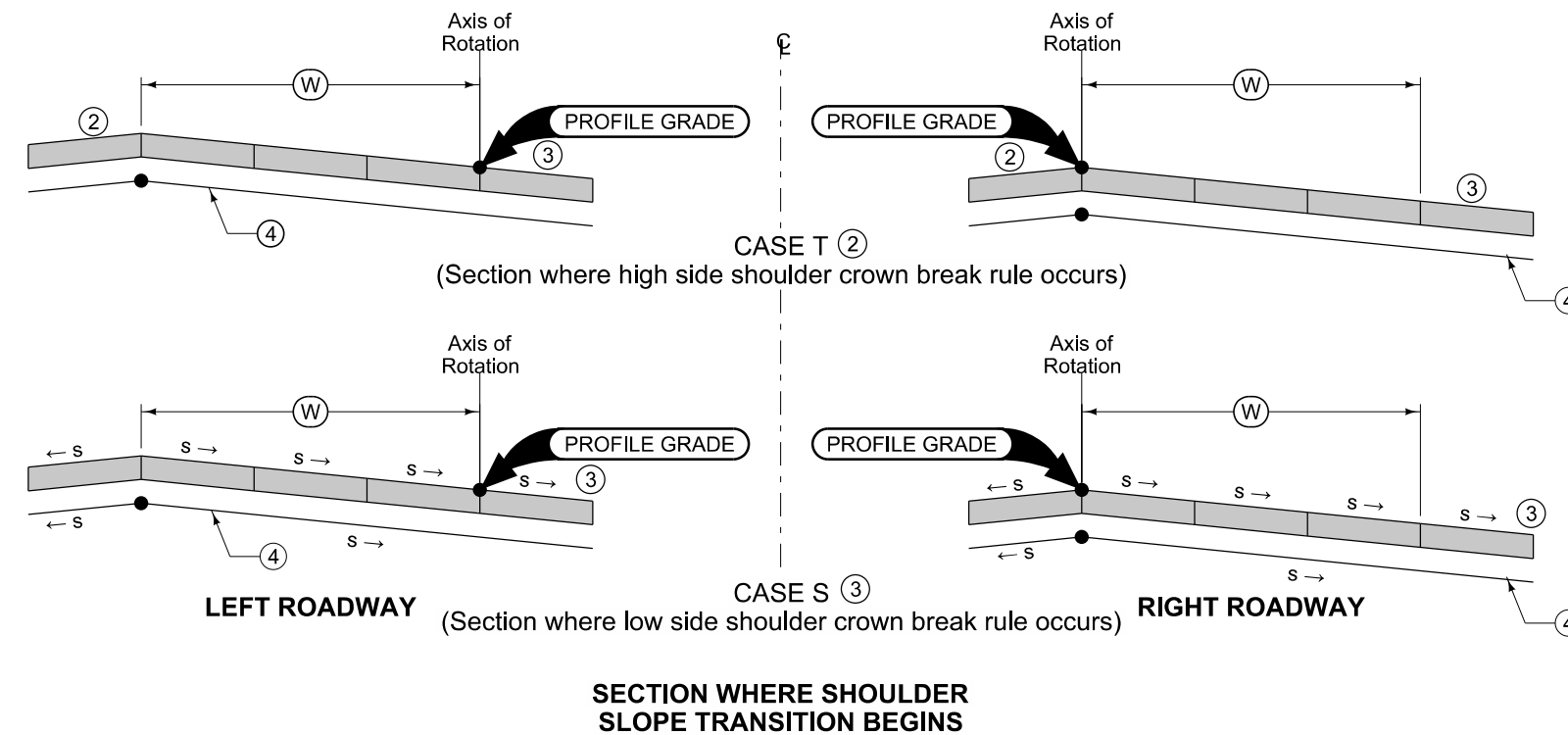


- ② High Side Shoulder: Maintain normal shoulder cross slope (s), until the cross slope break with the adjacent pavement reaches 8.0%. Maintain 8% breakover until super-elevation rate reaches 7%. If super-elevation rate exceeds 7.0%, maintain a 1% shoulder cross slope away from the adjacent pavement.
- ③ Low Side Shoulder: Maintain normal shoulder cross slope (s) until the adjacent pavement slope equals s, then slope the shoulder at the same cross slope as the adjacent pavement.
- ④ Subgrade Surface: Subgrade surface cross slope parallel to pavement surface cross slope.

<h1>MODIFIED</h1> <h2>STANDARD ROAD PLAN</h2>	REVISION	
	2	04-21-20
	PV-304	
SHEET 2 of 4		
MODIFICATIONS: Changed		
SUPERELEVATION DETAILS SIX LANE ROADWAY DEPRESSED MEDIAN		

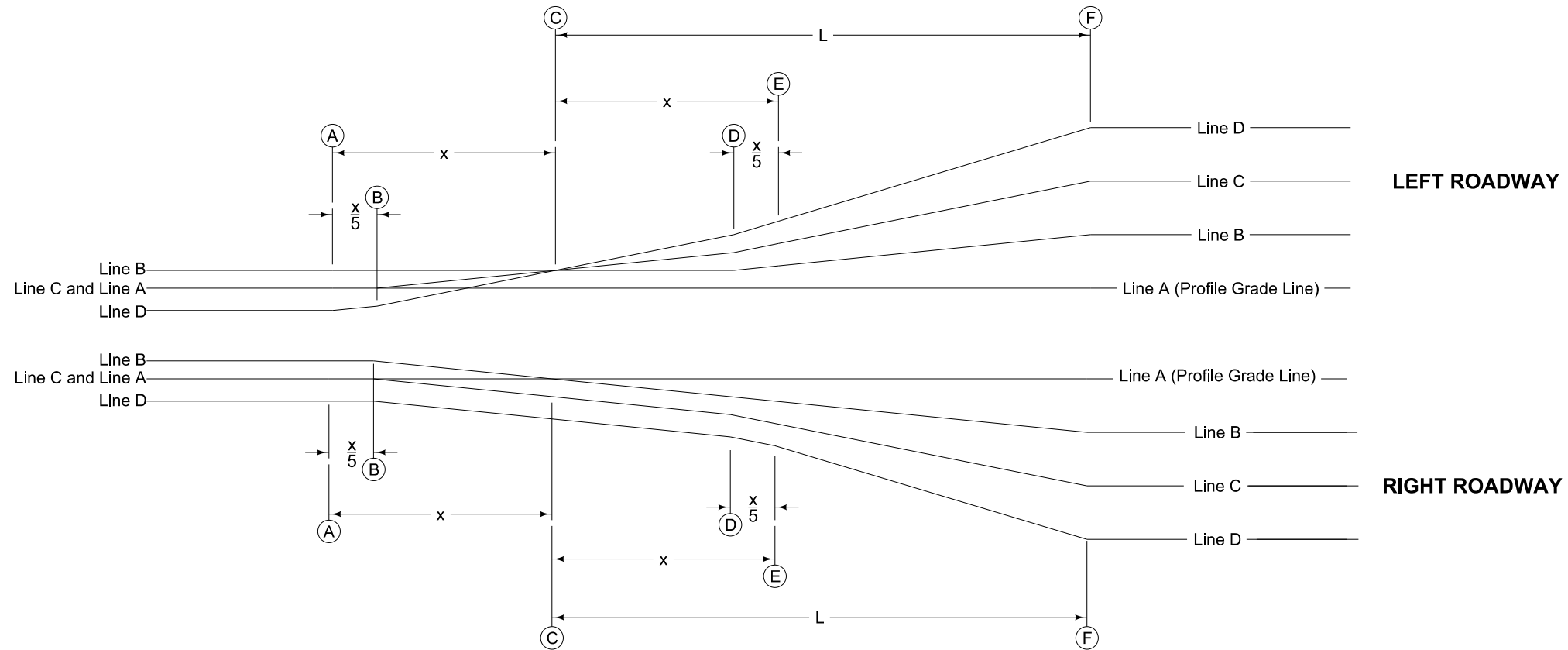


- ② High Side Shoulder: Maintain normal shoulder cross slope (s), until the cross slope break with the adjacent pavement reaches 8.0%. Maintain 8% breakover until superelevation rate reaches 7%. If superelevation rate exceeds 7.0%, maintain a 1% shoulder cross slope away from the adjacent pavement.
- ③ Low Side Shoulder: Maintain normal shoulder cross slope (s) until the adjacent pavement slope equals s, then slope the shoulder at the same cross slope as the adjacent pavement.
- ④ Subgrade Surface: Subgrade surface cross slope parallel to pavement surface cross slope.



MODIFIED STANDARD ROAD PLAN	REVISION	
	2	04-21-20
	PV-304	
SHEET 3 of 4		
MODIFICATIONS: Changed		
SUPERELEVATION DETAILS SIX LANE ROADWAY DEPRESSED MEDIAN		

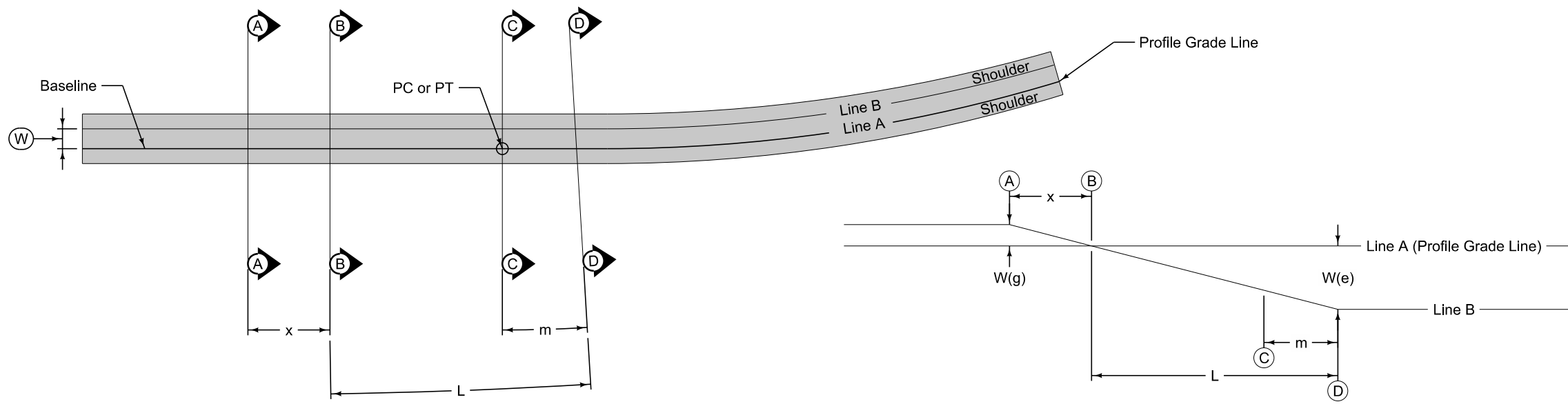
TABLE OF OFFSETS AND DROPS FOR LEFT ROADWAY							
Location of Cross Sections		(A)	(B)	(C)	(D)	(E)	(F)
From Line A To Line B	Offset (Ft.)	12	12	12	12	12	12
	Slope (%)	2.0	2.0	2.0	2.0	2.5	e
	Drop (Ft.)	0.24	0.24	0.24	0.24	0.30	12(e)
From Line B To Line C	Offset (Ft.)	12	12	12	12	12	12
	Slope (%)	-2.0	-2.0	0.0	2.0	2.5	e
	Drop (Ft.)	-0.24	-0.24	0.0	0.24	0.30	12(e)
From Line C To Line D	Offset (Ft.)	12	12	12	12	12	12
	Slope (%)	-2.5	-2.0	0.0	2.0	2.5	e
	Drop (Ft.)	-0.30	-0.24	0.0	0.24	0.30	12(e)
From Line A To Line D	Offset (Ft.)	36	36	36	36	36	36
	Drop (Ft.)	-0.30	-0.24	0.24	0.72	0.90	36(e)



DIAGRAMMATIC PROFILES OF THE PAVEMENT EDGE LINES

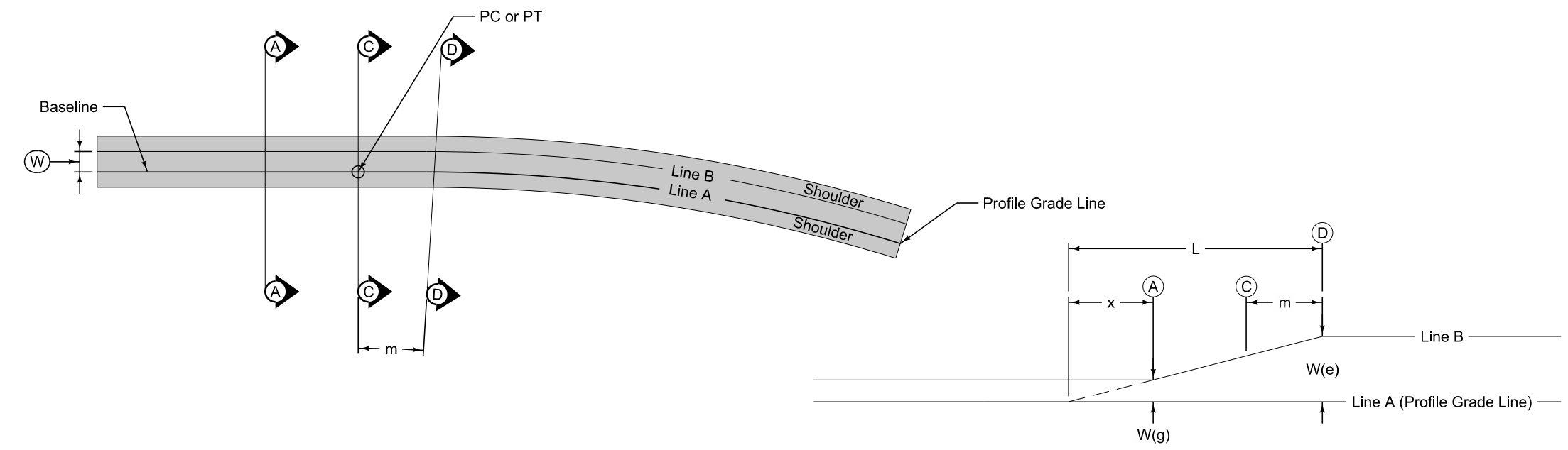
TABLE OF OFFSETS AND DROPS FOR RIGHT ROADWAY							
Location of Cross Sections		(A)	(B)	(C)	(D)	(E)	(F)
From Line A To Line B	Offset (Ft.)	12	12	12	12	12	12
	Slope (%)	2.0	2.0	0.0	-2.0	-2.5	-e
	Drop (Ft.)	0.24	0.24	0.0	-0.24	-0.30	-12(e)
From Line B To Line C	Offset (Ft.)	12	12	12	12	12	12
	Slope (%)	-2.0	-2.0	-2.0	-2.0	-2.5	-e
	Drop (Ft.)	-0.24	-0.24	-0.24	-0.24	-0.30	-12(e)
From Line C To Line D	Offset (Ft.)	12	12	12	12	12	12
	Slope (%)	-2.5	-2.5	-2.5	-2.5	-2.5	-e
	Drop (Ft.)	-0.30	-0.30	-0.30	-0.30	-0.30	-12(e)
From Line A To Line D	Offset (Ft.)	36	36	36	36	36	36
	Slope (%)						
	Drop (Ft.)	-0.30	-0.30	-0.54	-0.78	-0.90	-36(e)

<h1>MODIFIED STANDARD ROAD PLAN</h1>	REVISION	
	2	04-21-20
	PV-304	
SHEET 4 of 4		
MODIFICATIONS: Changed		
<p>SUPERELEVATION DETAILS SIX LANE ROADWAY DEPRESSED MEDIAN</p>		



DIAGRAMMATIC PROFILES OF THE PAVEMENT EDGE LINES

**CASE A
TRANSITION DETAILS - TANGENT TO CURVE
WHEN NORMAL CROSS SLOPE IS IN THE OPPOSITE DIRECTION AS SUPERELEVATION**



DIAGRAMMATIC PROFILES OF THE PAVEMENT EDGE LINES

**CASE B
TRANSITION DETAILS - TANGENT TO CURVE
WHEN NORMAL CROSS SLOPE IS IN THE SAME DIRECTION AS SUPERELEVATION**

Refer to specific curve data contained in project plans for tangent runout length (x), runoff length (L) and full superelevation (e).
Place 70% of full superelevation at the P.C. and P.T.
Place 30% of the runoff length within the curve.
Unless otherwise specified, all lengths are measured along the baseline.
Smooth curves should be established at the time of construction at sections A-D along the profile edge of lines A and B.
Axis of rotation coincides with profile grade location.

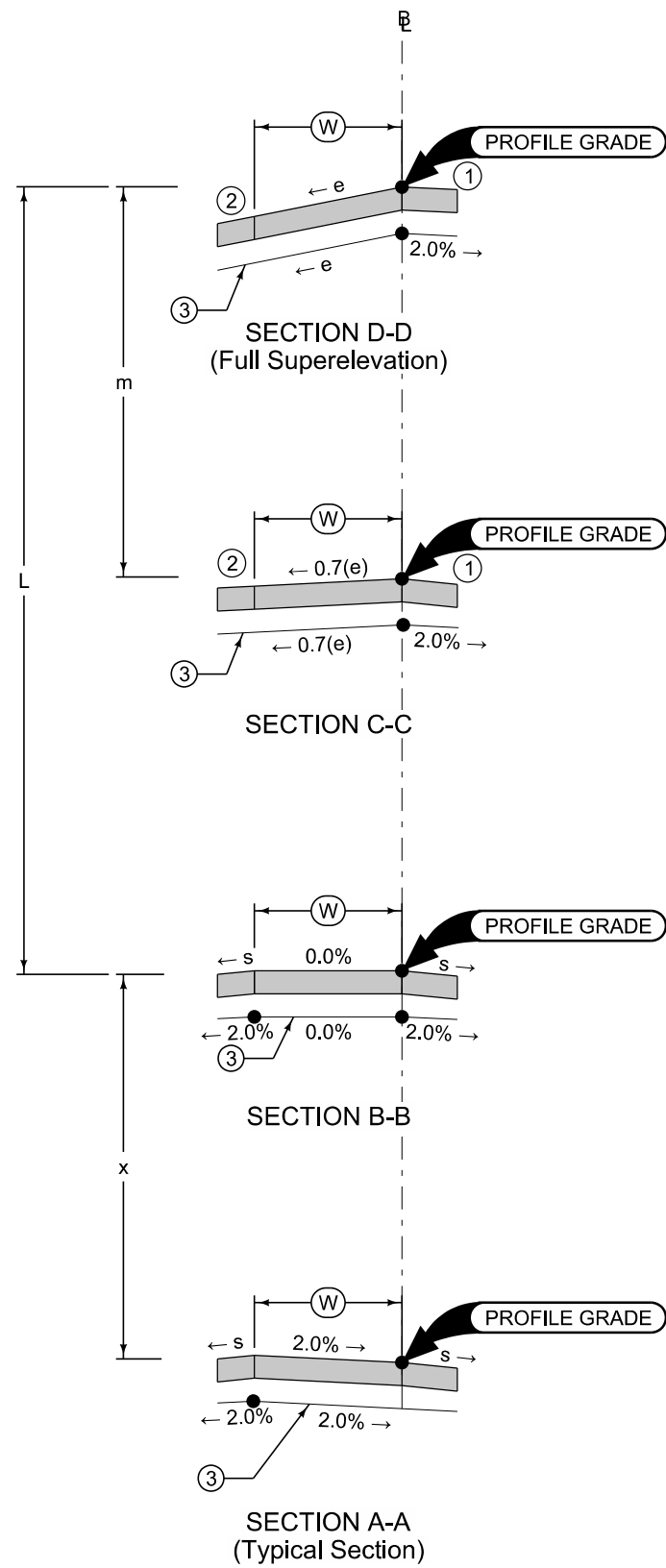
- m = 30% of Runoff Length (L)
- Ⓜ = Pavement Width
- g = Normal Cross Slope (2%)
- L = Distance to Change Cross Slope from 0% to e
- e = Superelevation Rate
- x = Distance to Change Cross Slope from 0% to 2%
- s = Normal Shoulder Slope

Possible Tabulation:
101-18

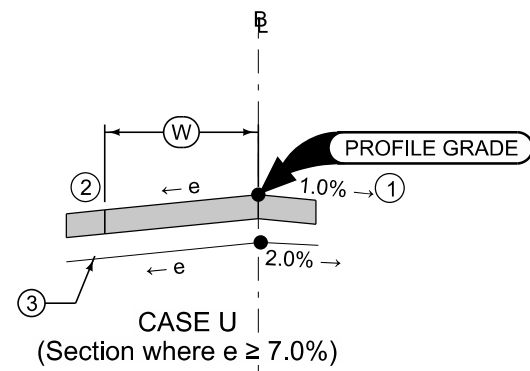
MODIFIED STANDARD ROAD PLAN	REVISION	
	2	04-21-20
PV-303		SHEET 1 of 3

MODIFICATIONS: Changed

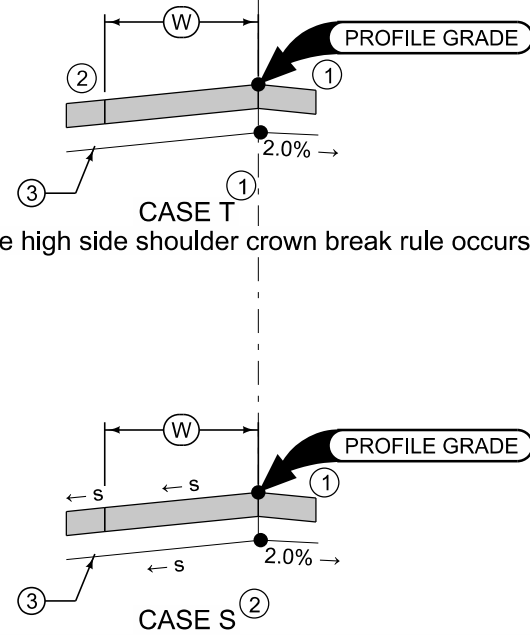
**SUPERELEVATION DETAILS
RAMPS**



CASE A



CASE T
(Section where high side shoulder crown break rule occurs)

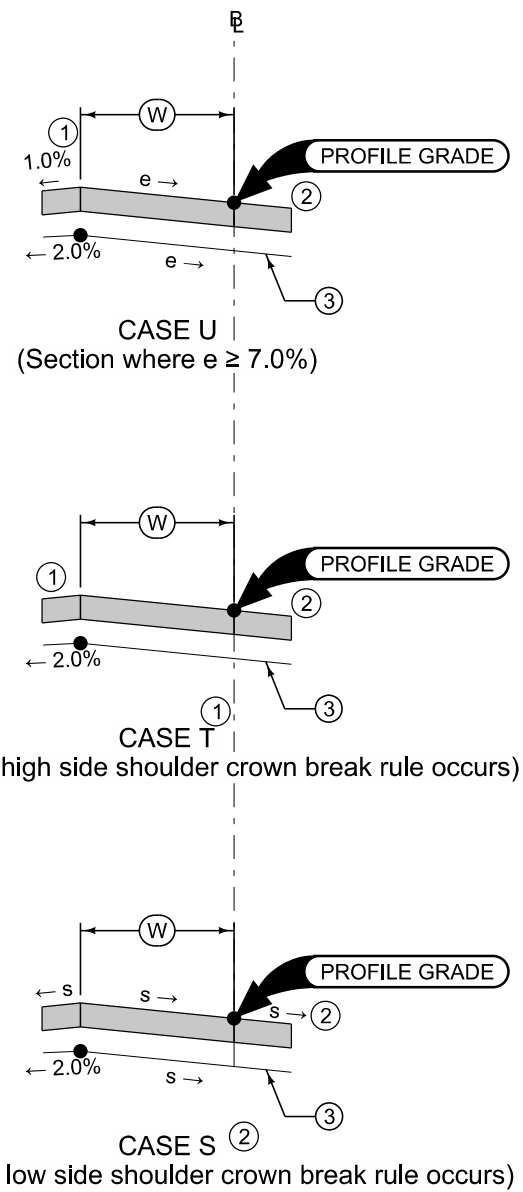
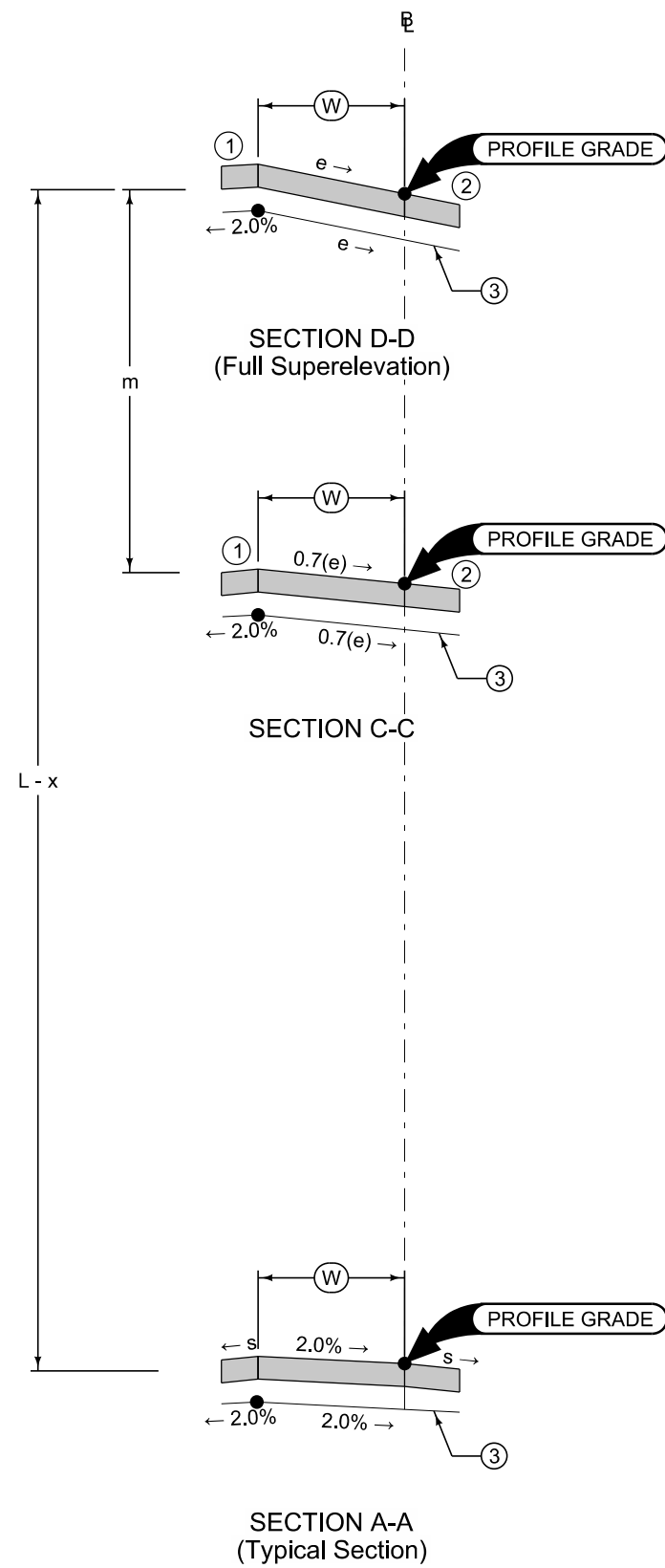


CASE S
(Section where low side shoulder crown break rule occurs)

SECTION WHERE SHOULDER SLOPE TRANSITION BEGINS

- ① High Side Shoulder: Maintain normal shoulder cross slope (s), until the cross slope break with the adjacent pavement reaches 8.0%. Maintain 8% breakover until superelevation rate reaches 7%. If superelevation rate exceeds 7.0%, maintain a 1% shoulder cross slope away from the adjacent pavement.
- ② Low Side Shoulder: Maintain normal shoulder cross slope (s) until the adjacent pavement slope equals s, then slope the shoulder at the same cross slope as the adjacent pavement.
- ③ Subgrade Surface: Subgrade surface cross slope parallel to pavement surface cross slope.

MODIFIED STANDARD ROAD PLAN	REVISION	
	2	04-21-20
PV-303		SHEET 2 of 3
MODIFICATIONS: Changed		
SUPERELEVATION DETAILS RAMPS		

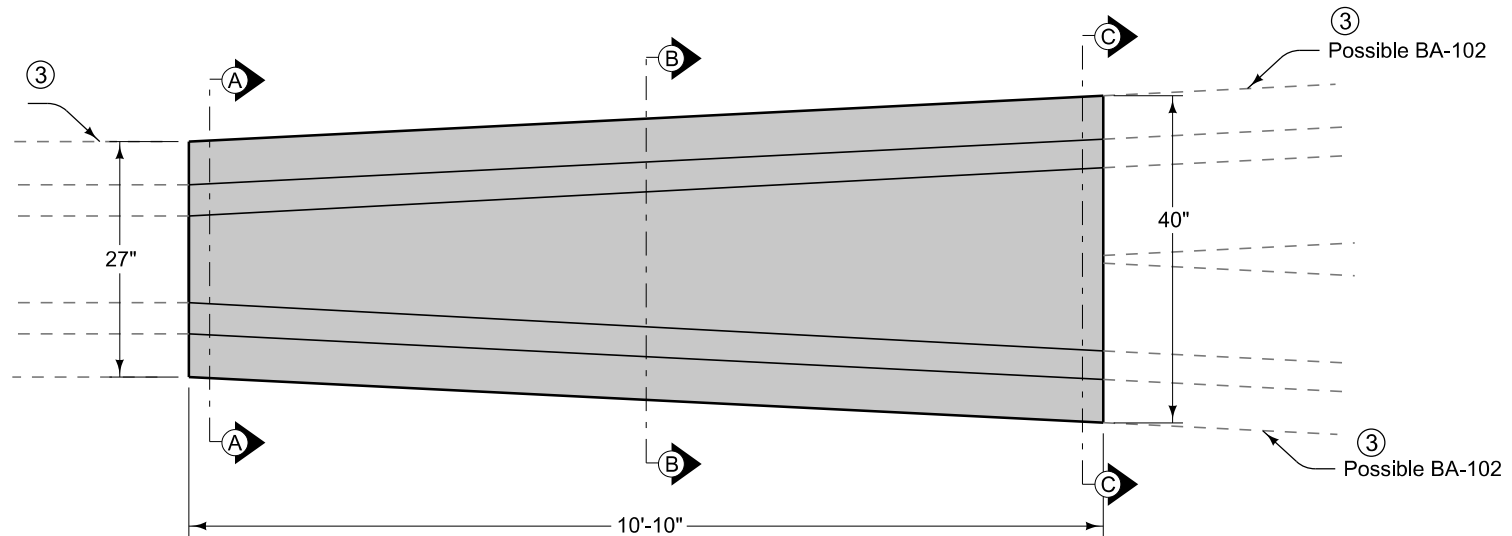


**SECTION WHERE SHOULDER
SLOPE TRANSITION BEGINS**

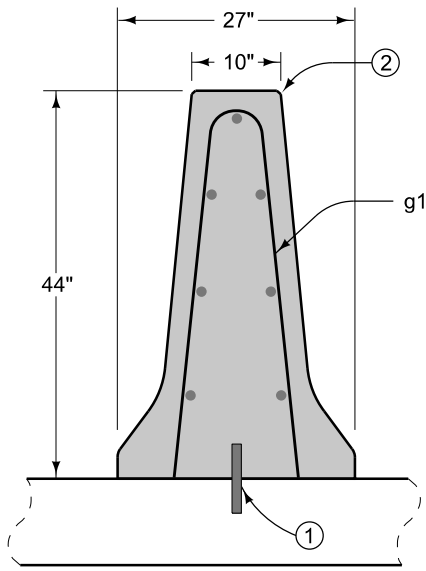
- ① High Side Shoulder: Maintain normal shoulder cross slope (s), until the cross slope break with the adjacent pavement reaches 8.0%. Maintain 8% breakover until superelevation rate reaches 7%. If superelevation rate exceeds 7.0%, maintain a 1% shoulder cross slope away from the adjacent pavement.
- ② Low Side Shoulder: Maintain normal shoulder cross slope (s) until the adjacent pavement slope equals s, then slope the shoulder at the same cross slope as the adjacent pavement.
- ③ Subgrade Surface: Subgrade surface cross slope parallel to pavement surface cross slope.

CASE B

MODIFIED STANDARD ROAD PLAN	REVISION	
	2	04-21-20
PV-303		SHEET 3 of 3
MODIFICATIONS: Changed		
SUPERELEVATION DETAILS RAMPS		



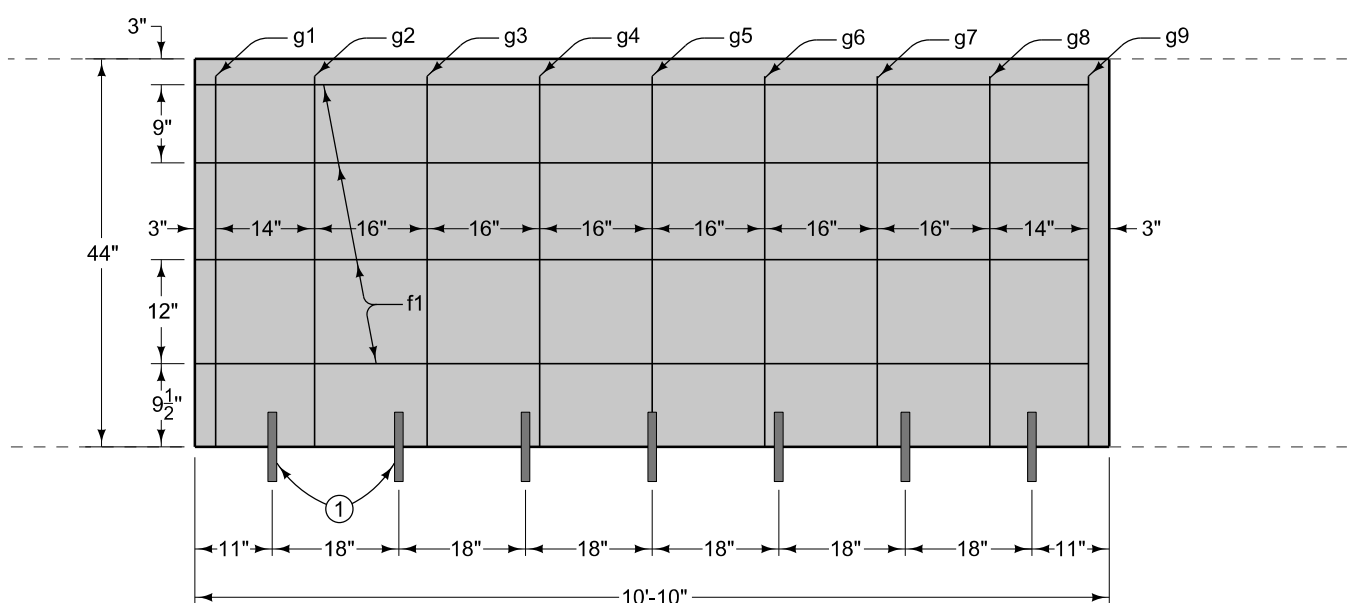
PLAN



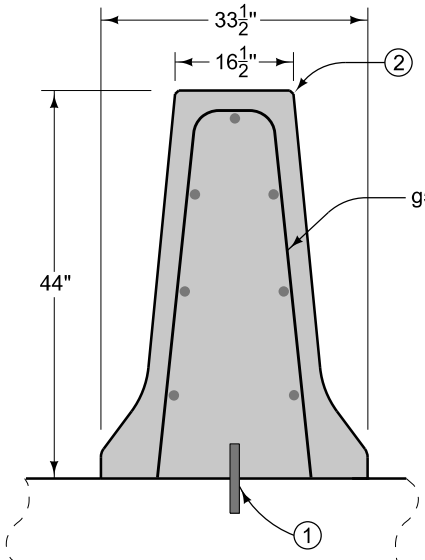
SECTION A-A

Use epoxy-coated grade 60 reinforcing bars. Provide 2 inches minimum cover. Anchor barrier reinforcement to prevent movement. Secure each section at the front, back, and at 3'-6" minimum intervals using a method approved by the Engineer.

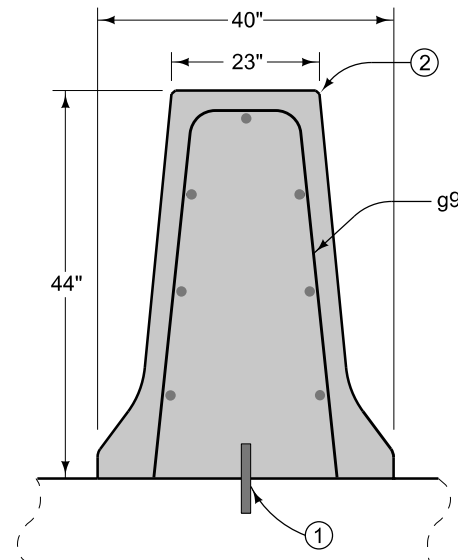
- ① Use 1 inch diameter deformed dowel bars of sufficient length to ensure 6 inch minimum embedment in barrier and supporting surface. Install bars either in supporting surface when placed or in drilled holes using polymer grout complying with Materials I.M. 491.11 or hydraulic cement grout complying with Materials I.M. 491.13.
- ② Fillet all exposed corners with a $\frac{3}{4}$ inch dressed and beveled strip.
- ③ Provide 18 inch overlap of reinforcing steel between sections.



ELEVATION



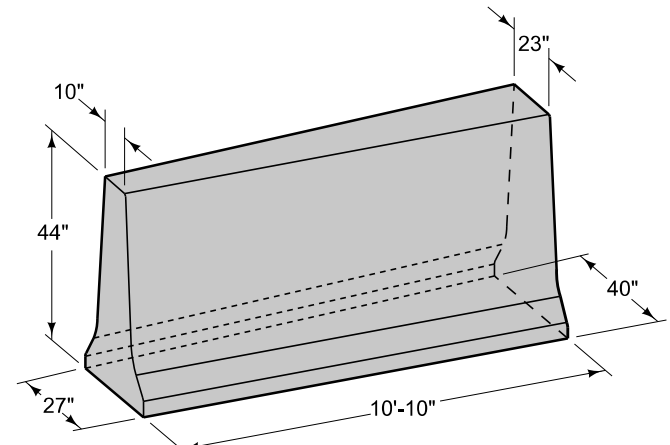
SECTION B-B



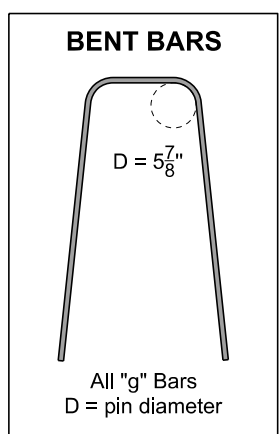
SECTION C-C

Possible Contract Item:
Concrete Barrier, BA-101 Modified

Possible Tabulation:
108-18



ISOMETRIC

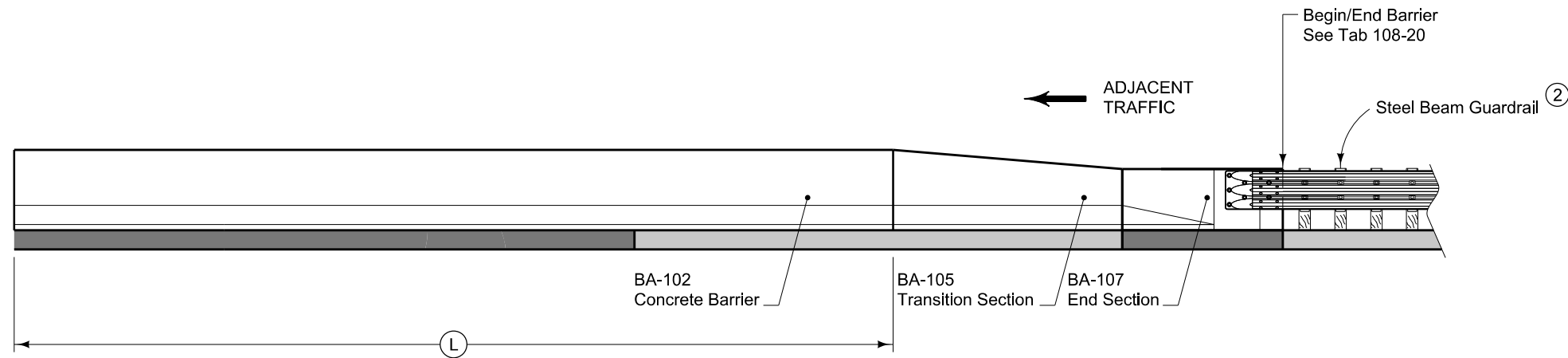


REINFORCING BAR LIST Per Section (10'-10")				
Mark	Size	Number of Bars	Length	Weight (lbs.)
f1	5	7	127"	79
g1	5	1	88"	8
g2	5	1	89"	8
g3	5	1	91"	8
g4	5	1	93"	8
g5	5	1	94"	8
g6	5	1	96"	8
g7	5	1	97"	8
g8	5	1	99"	9
g9	5	1	100"	9

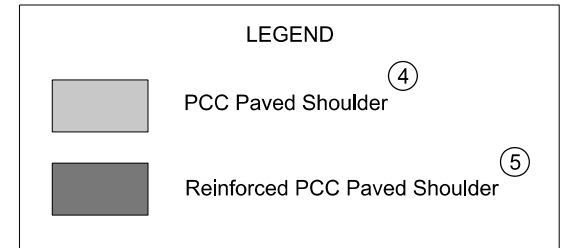
MODIFIED STANDARD ROAD PLAN	REVISION	
	New	04-20-10
BA-101		SHEET 1 of 1

MODIFICATIONS: Revised length & width

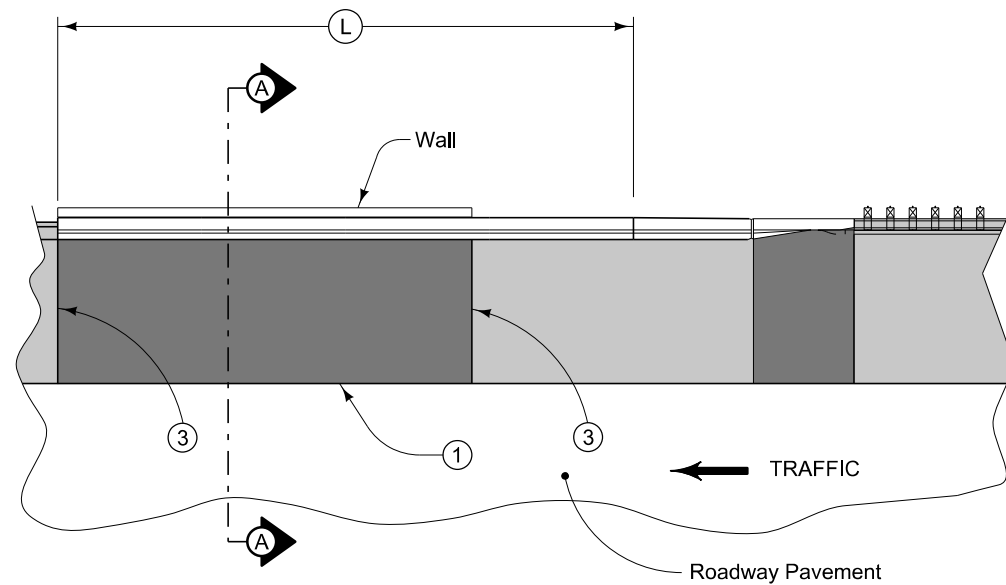
**44" CONCRETE MEDIAN BARRIER
WIDTH TRANSITION**



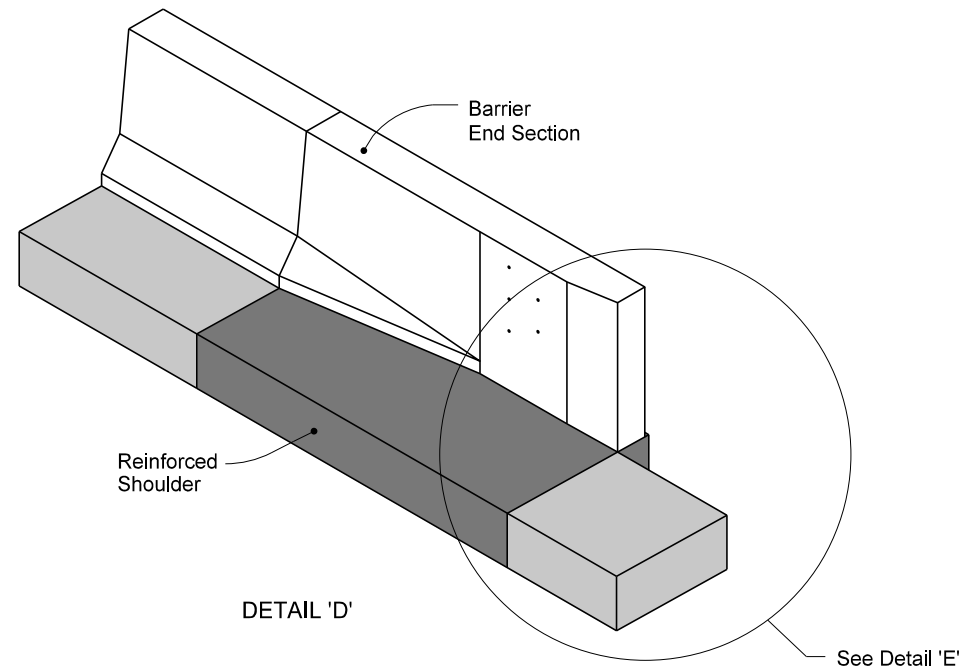
ELEVATION



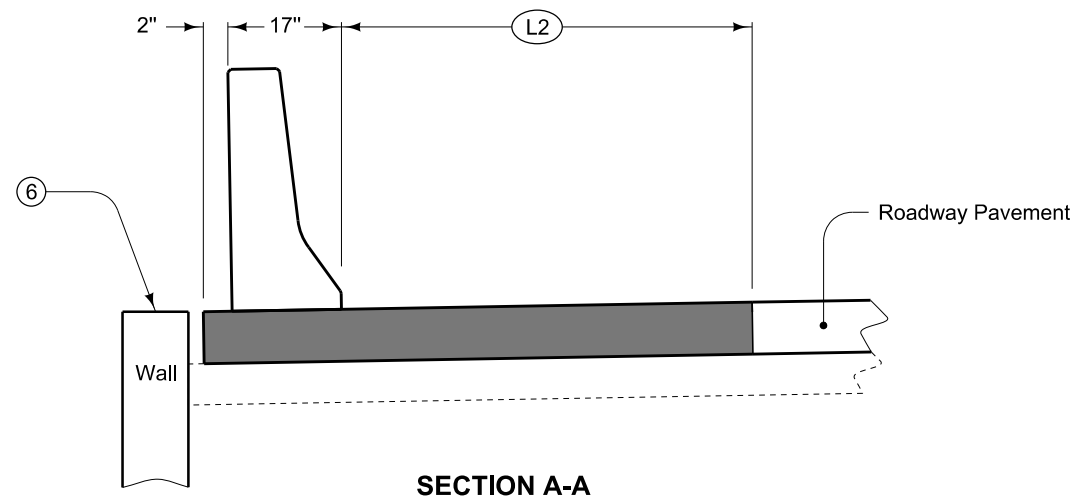
- ① "L-2" or "KT-2" joint. When roadway pavement is existing, use "BT-3" joint. See PV-101.
- ② Refer to BA-250.
- ③ "CD" Joint; match existing roadway joints when possible. See PV-101.
- ④ Refer to project typicals.
- ⑤ Refer to BA-106.
- ⑥ Refer to Typical Detail 8208.



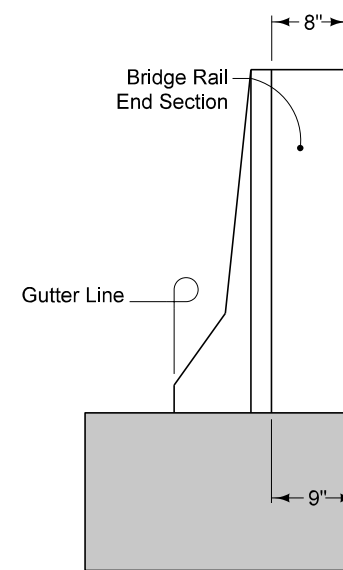
PLAN



DETAIL 'D'



SECTION A-A



DETAIL 'E'

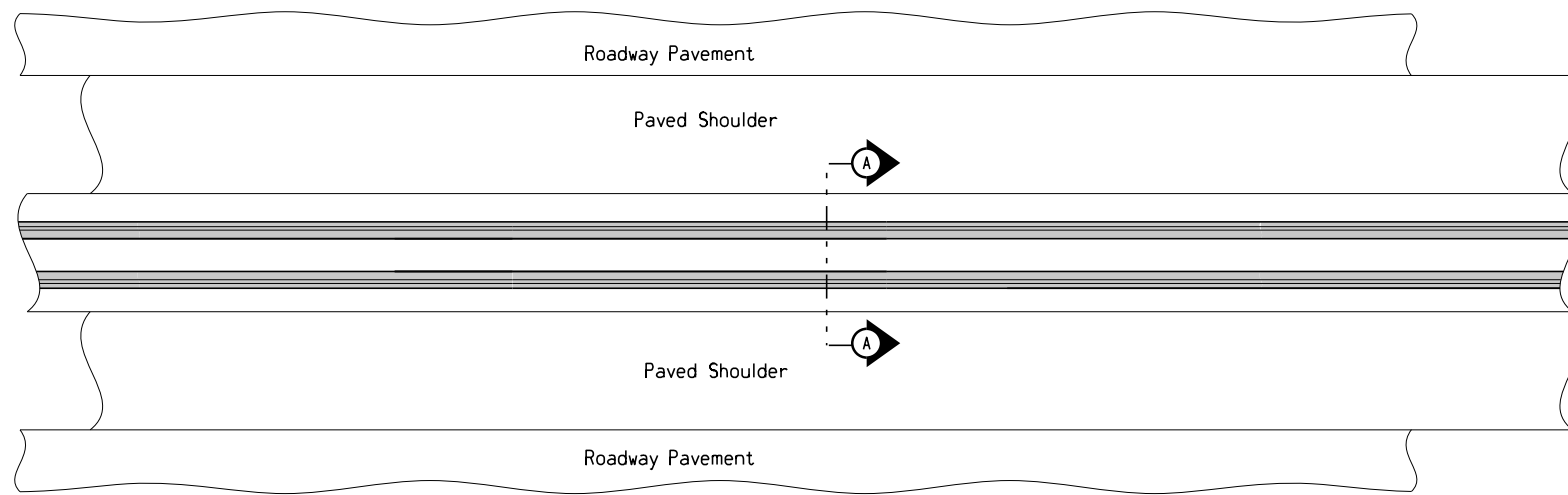
Possible Contract Items:
 Concrete Barrier items
 Steel Beam Guardrail items
 PCC Paved Shoulder
 Reinforced Paved Shoulder
 MSE Retaining Wall

Possible Tabulations:
 108-18B
 108-20
 112-9

MODIFIED STANDARD ROAD PLAN	REVISION	
	1	04-19-11
	BA-150	
SHEET 1 of 1		

REVISIONS: Revised side obstacle to wall. Added curb.

**SIDE OBSTACLE PROTECTION
WITH
CONCRETE BARRIER AND GUARDRAIL**

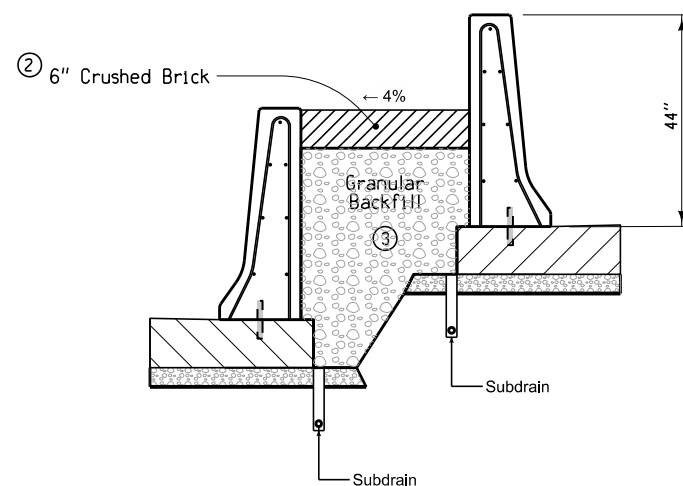


PLAN VIEW

NOTES:

- ① Weep holes shall be rectangular PVC Pipe, 2 inches tall by 4 inches wide, placed at 20 foot intervals. Weep holes shall not be placed near transverse joints (5 feet min. separation). Placement will be modified by the Engineer in areas of super-elevation. Weep holes shall not drain across the pavement. The PVC pipe for Weep holes shall be secured sufficiently to prevent movement during slip form operations and shall be cleaned to remove any concrete immediately after slip forming. The interior of the weep holes shall be covered with copper screening or galvanized hardware cloth with 1/8 inch mesh secured at least 6 inches above the top of the weep hole. The cost of supplying and installing the weep holes and screening shall be considered incidental to the Concrete Barrier bid item.
- ② ???
- ③ The percent passing the No. 200 sieve shall not exceed 4.0 percent for Granular Backfill.

DESIGN RATE	
ITEM	RATE
Crushed Brick	?.? ton / cu yd
Granular Backfill	1.7 ton / cu yd



SECTION A-A

Possible Contract Item:

- Concrete Barrier items (Refer to Tab 108-18B for Types and Locations)
- Granular Backfill
- Crushed Brick

Refer to Standard Road Plans, "BA-102 44" Concrete Barrier (Half Section)" for barrier details.

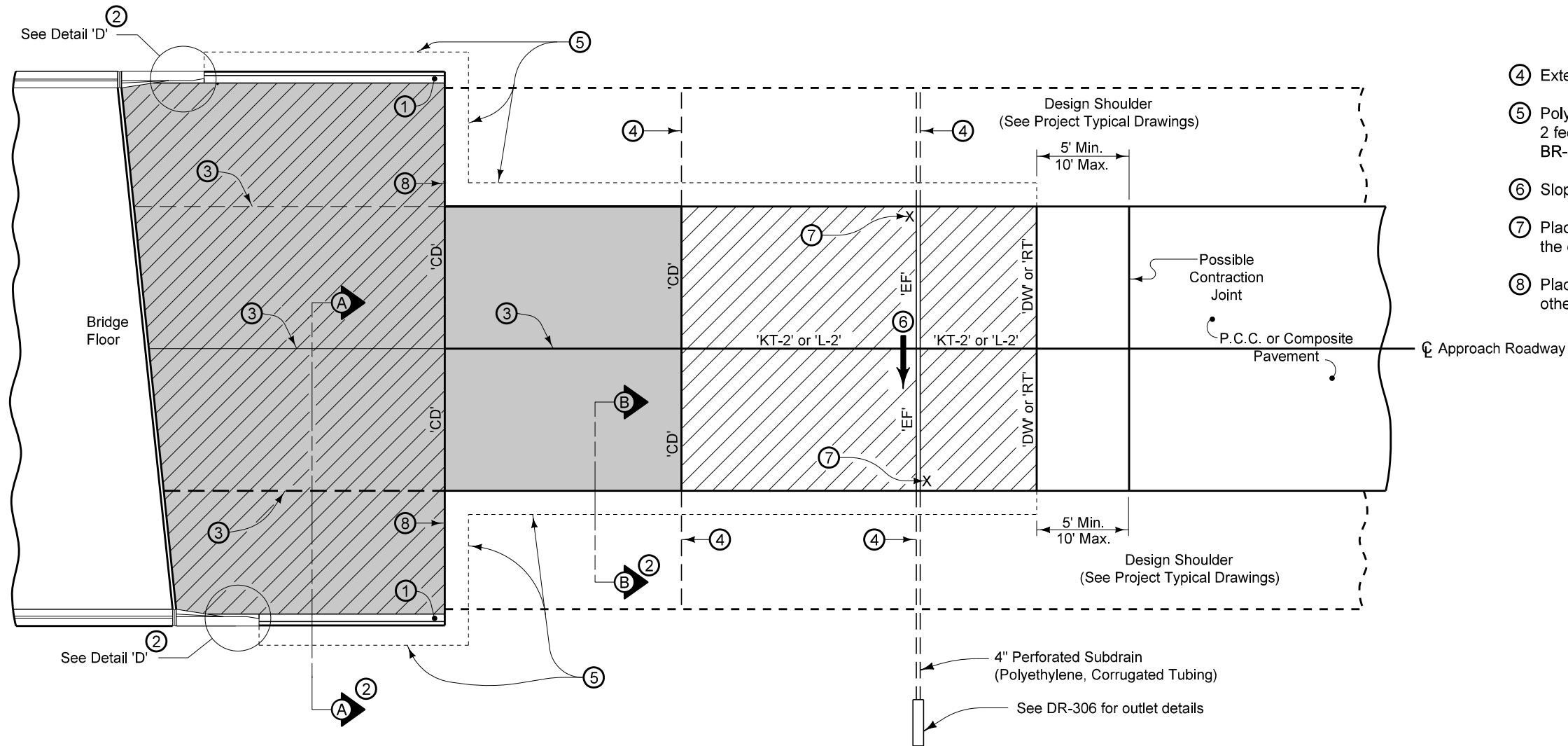
All dimensions given in inches unless noted.

**CONCRETE BARRIER
HALF SECTION SEPARATED
WITH WEEP HOLES**

NEEDS TO BE MODIFIED FOR 3 LANES




For joint details, see PV-101.

- ① Build 4 inch Sloped Curb to end of Double Reinforced Section.
- ② See BR-201, BR-202, BR-203, or BR-204.
- ③ Longitudinal Joint (PV-101):
Single Pour - Saw cut joint per Detail B.
Two Pours - Use 'KS-1' joint (Single Reinforced Section).
Use 'KS-2' joint (Double Reinforced Section).
- ④ Extend 'CD' and 'EF' joints where PCC Shoulder.
- ⑤ Polymer Grid and excavation limits of Modified Subbase 2 feet outside of pavement edge. See BR-201, BR-202, BR-203, or BR-204.
- ⑥ Slope subdrain to drain.
- ⑦ Place an "X" in the plastic concrete near the 'EF' joint at the outside edge of pavement.
- ⑧ Place 'RD' Joint where PCC shoulder. Place 'B' joint otherwise.



PLAN VIEW

Pay limits for contract item include the following areas:

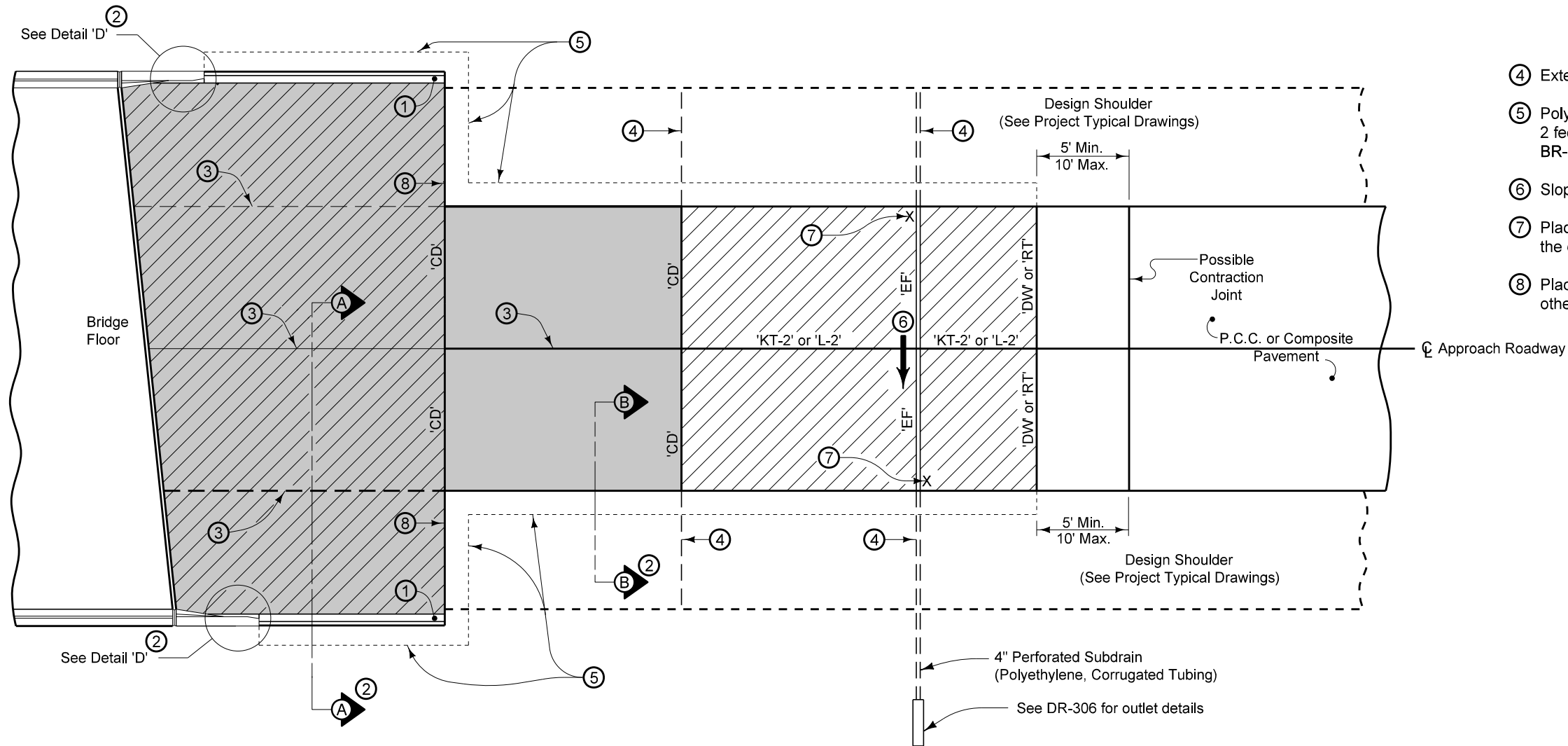
-  Double Reinforced Section
-  Single Reinforced Section
-  Non-Reinforced Section

MODIFIED STANDARD ROAD PLAN	REVISION	
	1	10-17-17
BR-211		SHEET 1 of 1
MODIFICATIONS: Changed		
BRIDGE APPROACH (ABUTTING PCC OR COMPOSITE PAVEMENT)		

NEEDS TO BE MODIFIED FOR 4 LANES




For joint details, see PV-101.

- ① Build 4 inch Sloped Curb to end of Double Reinforced Section.
- ② See BR-201, BR-202, BR-203, or BR-204.
- ③ Longitudinal Joint (PV-101):
Single Pour - Saw cut joint per Detail B.
Two Pours - Use 'KS-1' joint (Single Reinforced Section).
Use 'KS-2' joint (Double Reinforced Section).
- ④ Extend 'CD' and 'EF' joints where PCC Shoulder.
- ⑤ Polymer Grid and excavation limits of Modified Subbase 2 feet outside of pavement edge. See BR-201, BR-202, BR-203, or BR-204.
- ⑥ Slope subdrain to drain.
- ⑦ Place an "X" in the plastic concrete near the 'EF' joint at the outside edge of pavement.
- ⑧ Place 'RD' Joint where PCC shoulder. Place 'B' joint otherwise.



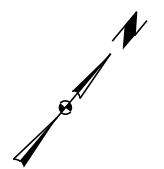
PLAN VIEW

Pay limits for contract item include the following areas:

-  Double Reinforced Section
-  Single Reinforced Section
-  Non-Reinforced Section

MODIFIED STANDARD ROAD PLAN	REVISION	
	1	10-17-17
BR-211		SHEET 1 of 1
MODIFICATIONS: Changed		
BRIDGE APPROACH (ABUTTING PCC OR COMPOSITE PAVEMENT)		

BOONE TWP.
T-78N R-26W
SEC. 2



STR. 66 REPLACE IN PLACE

STA. 1210+15.93, 164.86' LT.
RELOCATE STR. 65 WITH STEEL
POLE ON CONCRETE FOUNDATION

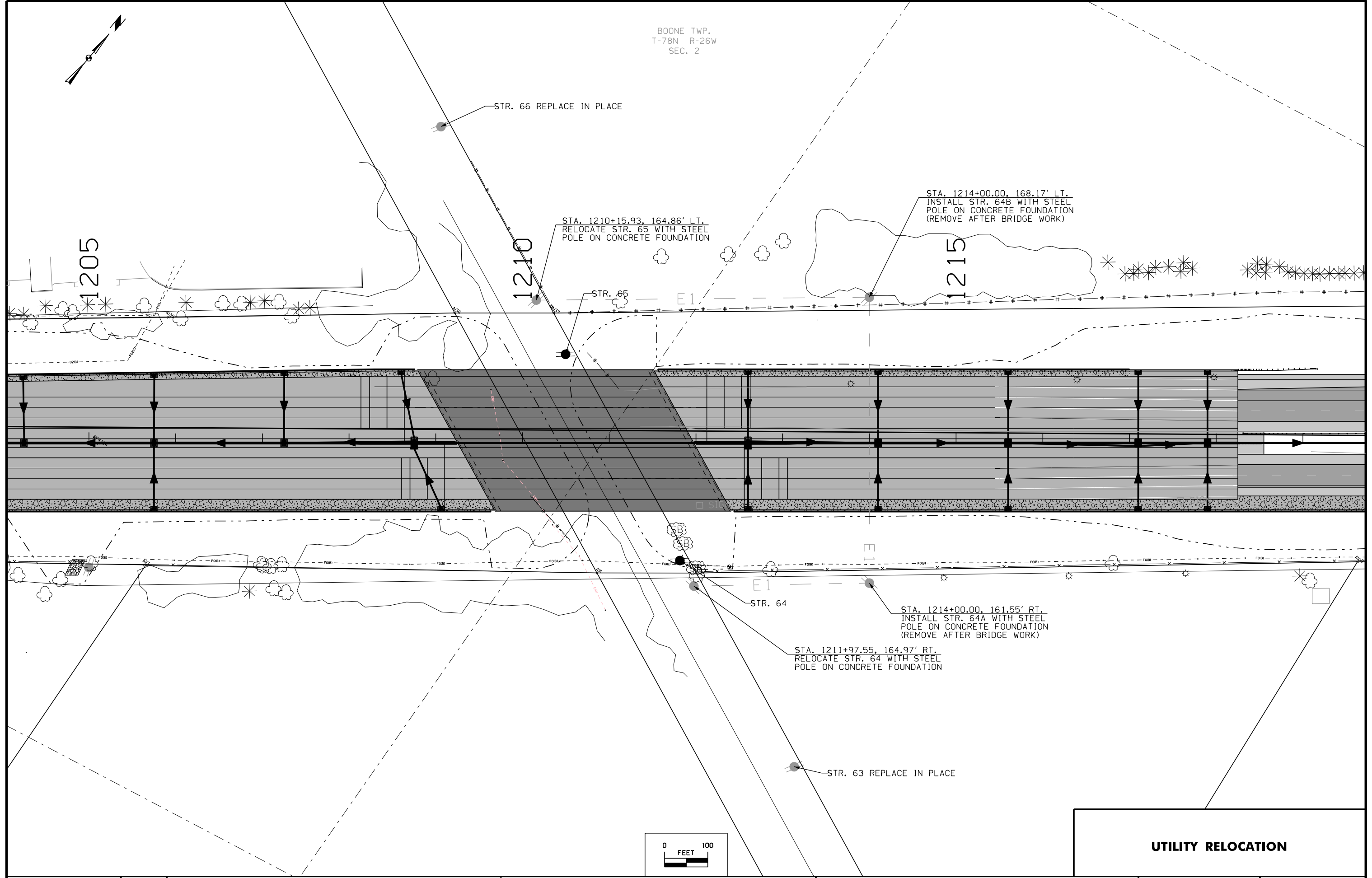
STA. 1214+00.00, 168.17' LT.
INSTALL STR. 64B WITH STEEL
POLE ON CONCRETE FOUNDATION
(REMOVE AFTER BRIDGE WORK)

1205

1210

1215

STR. 65 E1

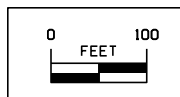


STR. 64

STA. 1211+97.55, 164.97' RT.
RELOCATE STR. 64 WITH STEEL
POLE ON CONCRETE FOUNDATION

STA. 1214+00.00, 161.55' RT.
INSTALL STR. 64A WITH STEEL
POLE ON CONCRETE FOUNDATION
(REMOVE AFTER BRIDGE WORK)

STR. 63 REPLACE IN PLACE



UTILITY RELOCATION

$G1=3.0500\%$ $G2=-2.2067\%$
 VPC STA. = 1202+75.00 VPI STA. = 1209+25.00 VPT STA. = 1215+75.00
 VPC ELEV. = 1030.71 VPI ELEV. = 1050.54 VPT ELEV. = 1036.19
 VC = 1300'

PROPOSED PROFILE GRADE I-80

MINIMUM VERTICAL CLEARANCE

OVERHEAD STATION = 1210+91.33, 2.58' RT.
 OVERHEAD ELEVATION = 1042.09
 DEPTH OF SUPERSTRUCTURE = 5.46
 TOP OF RAIL ELEVATION = 1012.42
 MINIMUM VERTICAL CLEARANCE = 24.22'

TRAFFIC ESTIMATE

(I-80 E.B. ROADWAY)

2020 AADT	28,000	V.P.D.
2040 AADT	47,500	V.P.D.
2040 DHV	5,145	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALs		

NOTES:

THIS DESIGN IS FOR THE REPLACEMENT OF THE EXISTING 160'x39' CWG BRIDGE, DALLAS DESIGN NO. 1965, FHWA NO. 22410, MAINT. NO. 2520.8R080.

TL-5 MEDIAN BRIDGE RAIL TO BE CONSTRUCTED IN STAGE 4.

STAGE I OF W.B. BRIDGE (SEPARATE DESIGN) TO BE CONSTRUCTED WITH THIS DESIGN. SLOTTED DRAIN REQUIRED IN THE 2" GAP.

PIER TYPE - FRAME; BEAM TYPE - BTD.

BRIDGE AESTHETICS TO BE INCORPORATED IN FINAL DESIGN.

SEE DESIGN SHEET 3 FOR TOP OF RAIL ELEVATIONS ALONG UPRR TRACK.

UTILITIES LEGEND:

- OHE - OVERHEAD ELECTRIC (MID AMERICAN ENERGY)
- EO1 - BURIED ELECTRIC (MID AMERICAN ENERGY)
- EO2 - BURIED FIBER OPTIC (ICN)

LOCATION

I-80 E.B. OVER UPRR
 T-78N R-26W
 SECTION 2
 BOONE TOWNSHIP
 DALLAS COUNTY
 REPLACEMENT FHWA NO. 022411
 BRIDGE MAINT. NO. 2520.8R080
 LATITUDE 41.587021°
 LONGITUDE -93.818647°
 FRA CROSSING NO. 193 008L



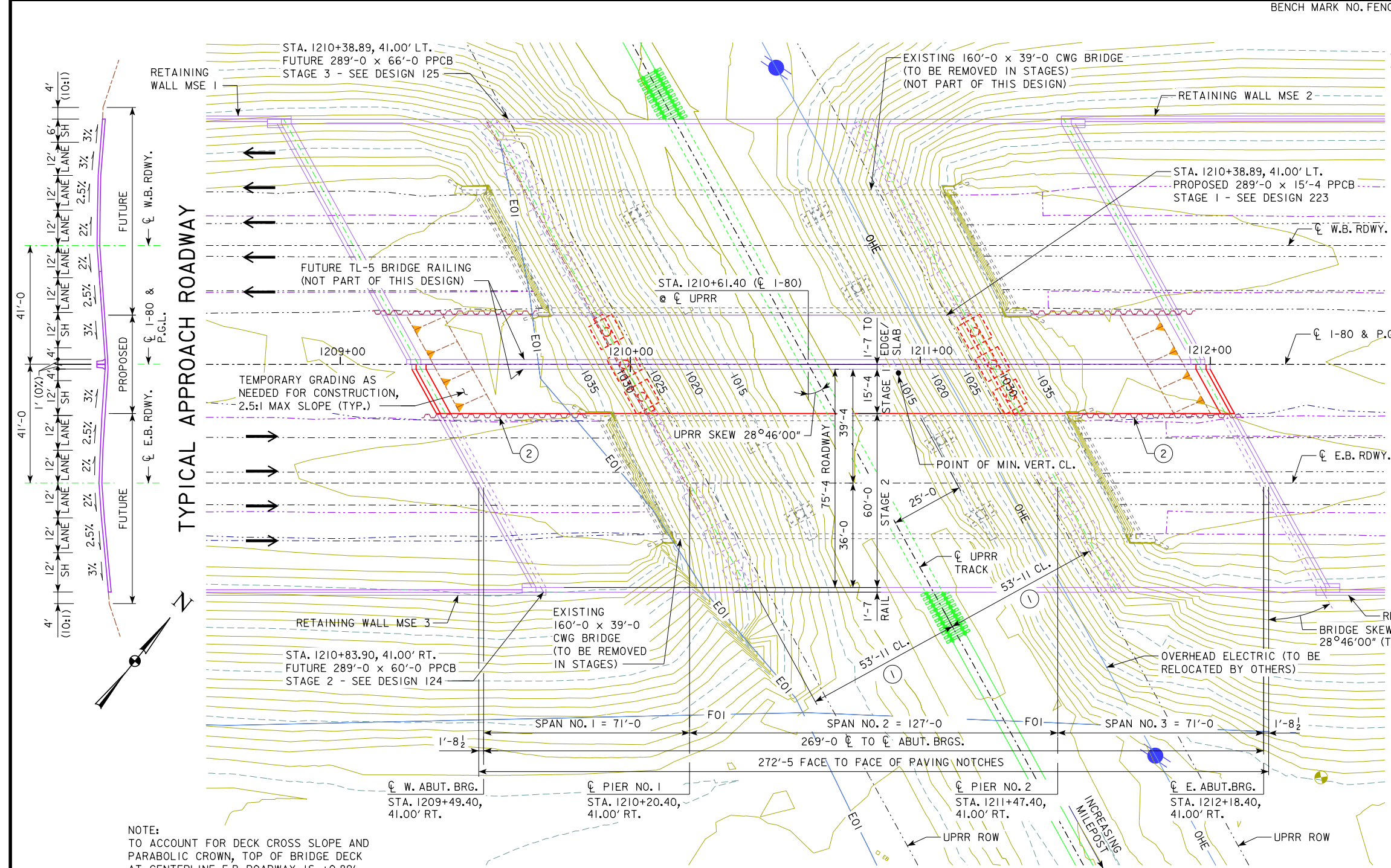
PRELIMINARY

DESIGN FOR 28°46' SKEW (RA)
269'-0" x 15'-4" (STAGE I) PRETEN. PRESTR. CONCRETE BEAM BRIDGE
 71'-0" END SPANS (BTD BEAM TYPE) 127'-0" INTERIOR SPAN
SITUATION PLAN
 (1210+83.90, 41' RIGHT ϕ I-80)

OCTOBER, 2020

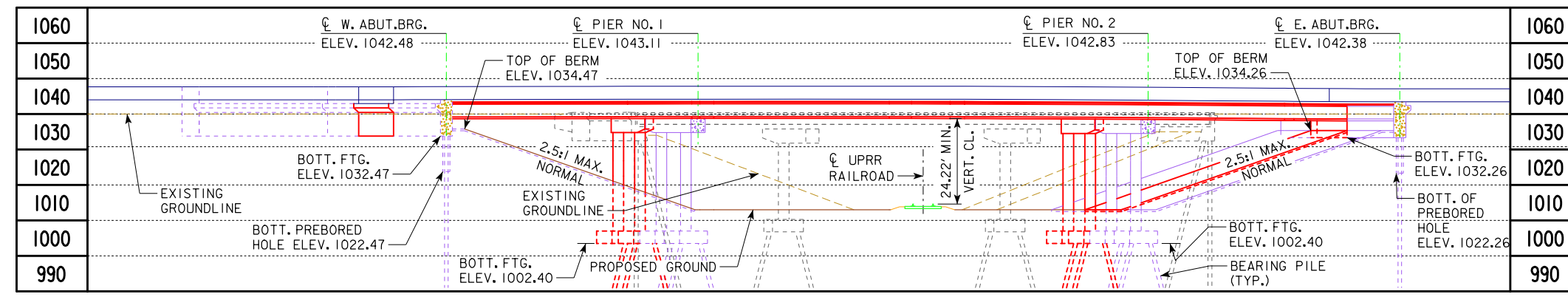
DALLAS COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 4 FILE NO. 32036 DESIGN NO. 123

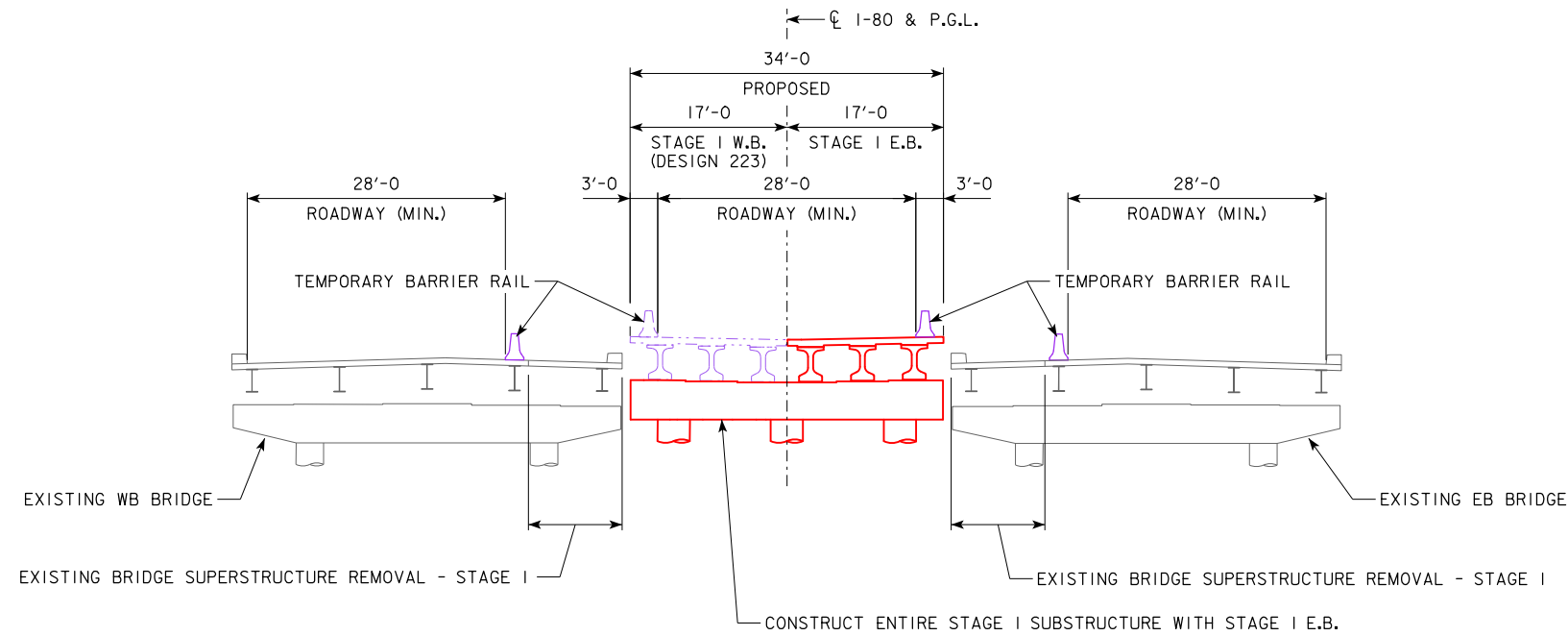


SITUATION PLAN

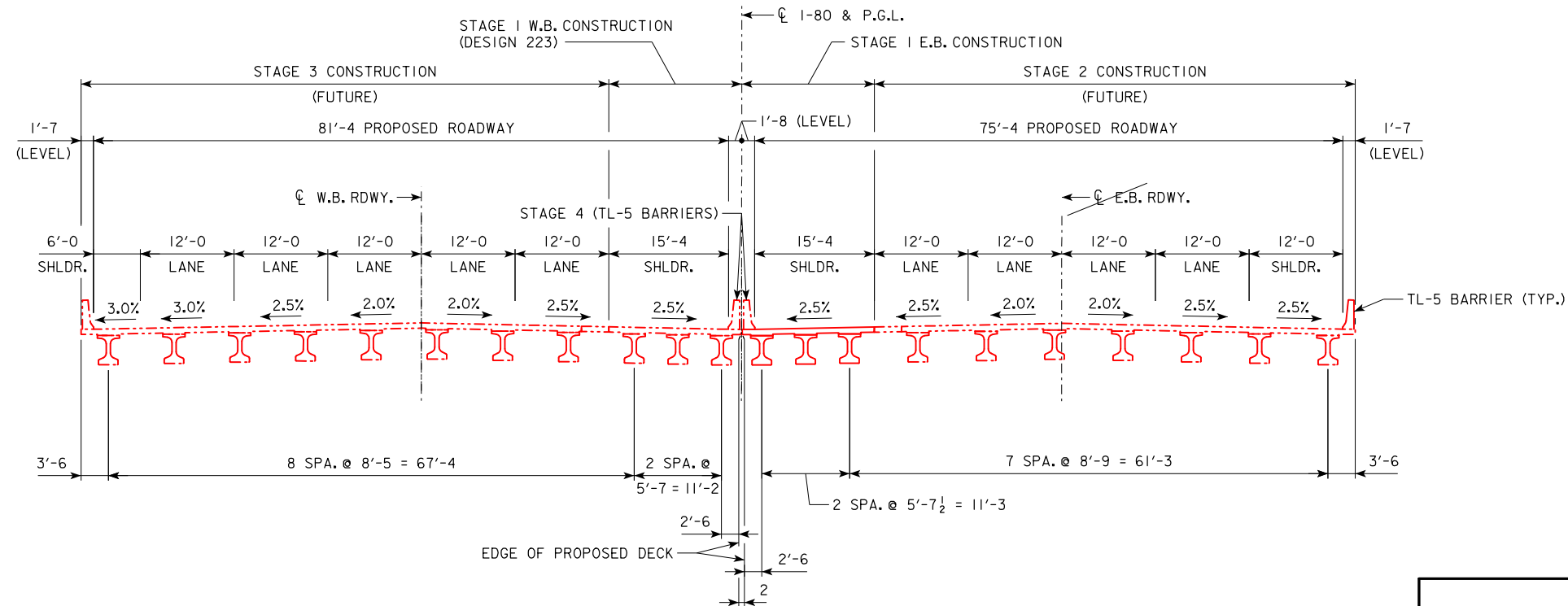
NOTE:
TO ACCOUNT FOR DECK CROSS SLOPE AND PARABOLIC CROWN, TOP OF BRIDGE DECK AT CENTERLINE E.B. ROADWAY IS +0.89' ABOVE PROFILE GRADE.



LONGITUDINAL SECTION ALONG ϕ E.B. ROADWAY



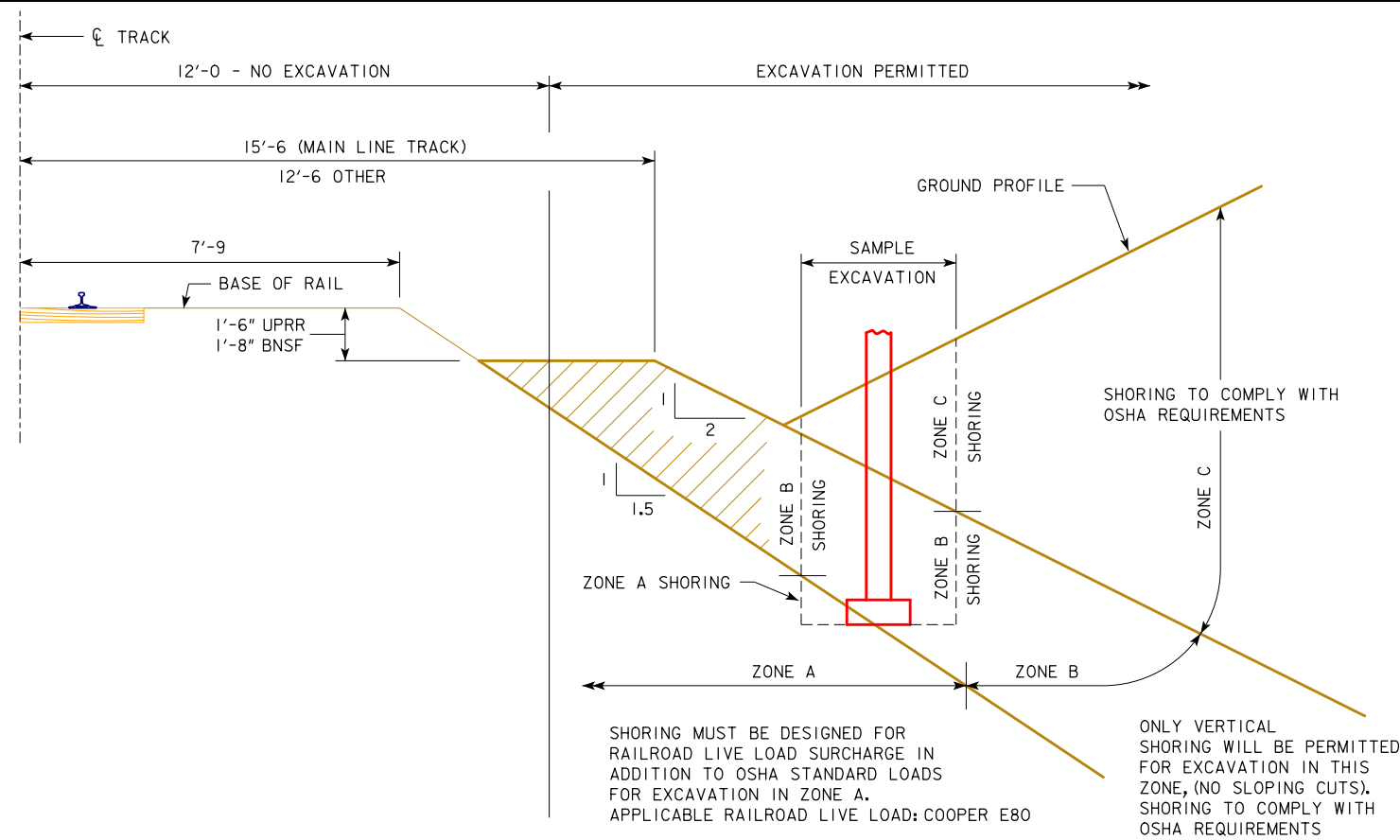
PROPOSED STAGE I - TYPICAL BRIDGE SECTION



PROPOSED ULTIMATE BRIDGE TYPICAL SECTION

PRELIMINARY
 DESIGN FOR 28°46' SKEW (RA)
269'-0" x 15'-4" (STAGE I) PRETEN. PRESTR. CONCRETE BEAM BRIDGE
 71'-0" END SPANS (BTD BEAM TYPE) 127'-0" INTERIOR SPAN
SITUATION PLAN - MISC.
 (1210+83.90, 41' RIGHT CL I-80) OCTOBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 2 OF 4 FILE NO. 32036 DESIGN NO. 123

REVISED 09-13 - RAILROAD CHANGED THE MINIMUM VERTICAL CONSTRUCTION CLEARANCE TO 21'-6" DISTANCE FROM MAINLINE TRACK TO EDGE OF EMBANKMENT CHANGED TO 15'-6".
 REVISED 06-2017 - ADDED NOTE OUTSIDE OF SHEET BORDER TO EXPLAIN THE USE OF THIS STANDARD SHEET WITH ARCHIVED METHODS MEMO MM201.
 REVISED 07-2019: FOR UPRR, CHANGED HORIZONTAL DISTANCE OF MINIMUM CONSTRUCTION CLEARANCE ENVELOPE TO 15'-0" (WAS 12'-0").
 ENGLISHMISCELLANEOUSBRIDGES.DGN - 1067 - THIS SHEET ISSUED 12-08.



RAILROAD GENERAL NOTES:

1. RAILROAD REVIEW AND APPROVAL OF SHORING, ERECTION, DEMOLITION, AND FALSEWORK IS REQUIRED. ALLOW A MINIMUM OF FOUR WEEKS FOR THE REVIEW AND APPROVAL OF EACH SUBMITTAL.
2. THE PROPOSED GRADE SEPARATION PROJECT SHALL NOT INCREASE THE QUANTITY AND/OR CHARACTERISTICS OF THE FLOW IN THE RAILROAD'S DITCHES AND/OR DRAINAGE STRUCTURES.
3. THE ELEVATION OF THE EXISTING TOP-OF-RAIL PROFILE SHALL BE VERIFIED BEFORE BEGINNING CONSTRUCTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE RAILROAD PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR MUST SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD.
5. ALL SHORING SYSTEMS THAT IMPACT THE RAILROAD'S OPERATIONS AND/OR SUPPORTS THE RAILROAD'S EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER CURRENT RAILROAD GUIDELINES FOR TEMPORARY SHORING.
6. ALL DEMOLITIONS WITHIN THE RAILROAD'S RIGHT-OF-WAY AND/OR DEMOLITION THAT MAY IMPACT THE RAILROAD'S TRACKS OR OPERATIONS SHALL BE IN COMPLIANCE WITH THE RAILROAD'S DEMOLITION GUIDELINES.
7. ERECTION OVER THE RAILROAD'S RIGHT-OF-WAY SHALL BE DESIGNED TO CAUSE NO INTERRUPTION TO THE RAILROAD'S OPERATION, ENABLING THE TRACK(S) TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD'S REQUIREMENTS.
8. ALL CONSTRUCTION PHASING THAT MAY IMPACT THE RAILROAD OPERATIONS SHALL BE DESIGNED TO CAUSE NO INTERRUPTION TO THE RAILROAD'S OPERATION, ENABLING THE TRACK(S) TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD'S REQUIREMENTS.
9. FALSE-WORK CLEARANCES SHALL COMPLY WITH MINIMUM CONSTRUCTION CLEARANCES.
10. ALL PERMANENT CLEARANCES SHALL BE VERIFIED BEFORE PROJECT CLOSING.
11. FOR RAILROAD COORDINATION PLEASE REFER TO THE RAILROAD COORDINATION REQUIREMENTS AS PART OF SPECIAL PROVISIONS.

GENERAL EXCAVATION ZONES

GENERAL SHORING NOTES:

1. ALL DIMENSIONS ARE MEASURED PERPENDICULAR TO TRACK.
2. PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL BY THE RAILROAD DETAILED PLANS INDICATING THE NATURE AND EXTENT OF THE TRACK PROTECTION SHORING PROPOSED. THE CONTRACTOR SHALL INSTALL THE TEMPORARY SHORING SYSTEM PER THE APPROVED PLANS. DESIGN OF THE TEMPORARY SHORING SYSTEM TO COMPLY WITH GUIDELINES FOR TEMPORARY SHORING.
3. FOR EXCAVATIONS WHICH ENCROACH INTO ZONE A OR B, SHORING PLANS SHALL BE ACCOMPANIED BY DESIGN CALCULATIONS. PLANS AND CALCULATIONS MUST BE SIGNED AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF IOWA.

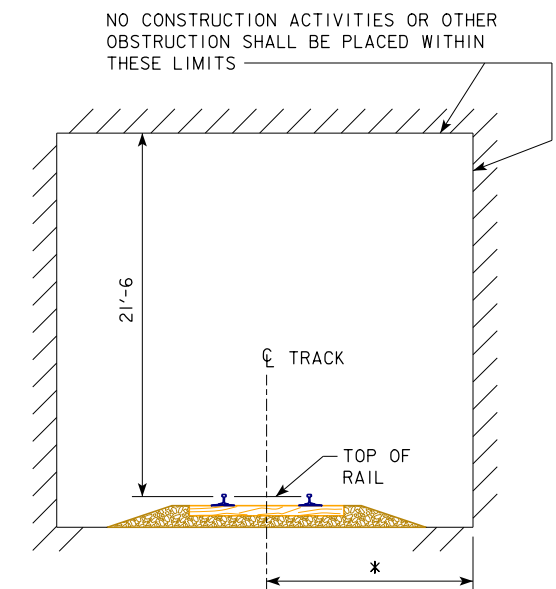
NOTE:
 BNSF = BURLINGTON NORTHERN SANTA FE RAILROAD
 UPRR = UNION PACIFIC RAILROAD

TOP OF RAIL ELEVATIONS

(STATIONS INCREASE WITH MILEPOST INCREASE)

MAIN LINE			
ALIGNMENT: LEFT RAIL		ALIGNMENT: RIGHT RAIL	
STATION	ELEVATION	STATION	ELEVATION
0+00.0	*1012.34	0+00.0	*1012.35
1+16.9	1012.39	1+16.7	1012.41
2+48.2	1012.44	2+48.2	1012.46
3+62.4	1012.25	3+62.4	1012.27
4+60.9	1012.25	4+61.4	1012.24
5+64.5	1012.40	5+64.5	1012.41
6+65.2	1012.44	6+65.1	1012.46
7+60.9	1012.64	7+61.3	1012.66
8+61.5	1012.76	8+61.8	1012.73
9+12.0	1012.69	9+12.1	1012.63
9+55.5	1012.61	9+54.2	1012.59
9+84.4	1012.50	9+84.1	1012.50
9+98.6	1012.46	9+98.2	1012.41
① 10+00.0	----	① 10+00.0	----
10+21.2	1012.41	10+21.1	1012.42
10+46.6	1012.31	10+47.0	1012.30
10+76.7	1012.16	10+77.3	1012.15
11+39.7	1011.87	11+40.4	1011.87
12+10.8	1011.44	12+11.1	1011.46
13+10.5	1010.60	13+10.9	1010.61
14+11.1	1009.52	14+11.1	1009.53
15+10.9	1008.31	15+11.1	1008.31
16+10.8	1007.23	16+11.0	1007.24
17+10.9	1006.23	17+10.8	1006.24
18+11.1	1005.37	18+11.0	1005.36
19+11.0	1004.55	19+11.0	1004.55
20+00.00	*1003.70	20+00.0	*1003.69

① EXISTING TRACK MP STA. 299.25 (CL. UPRR AT CL 1-80) = STA. 10+00.0
 *ELEVATION INTERPOLATED BETWEEN SURVEY SHOTS.

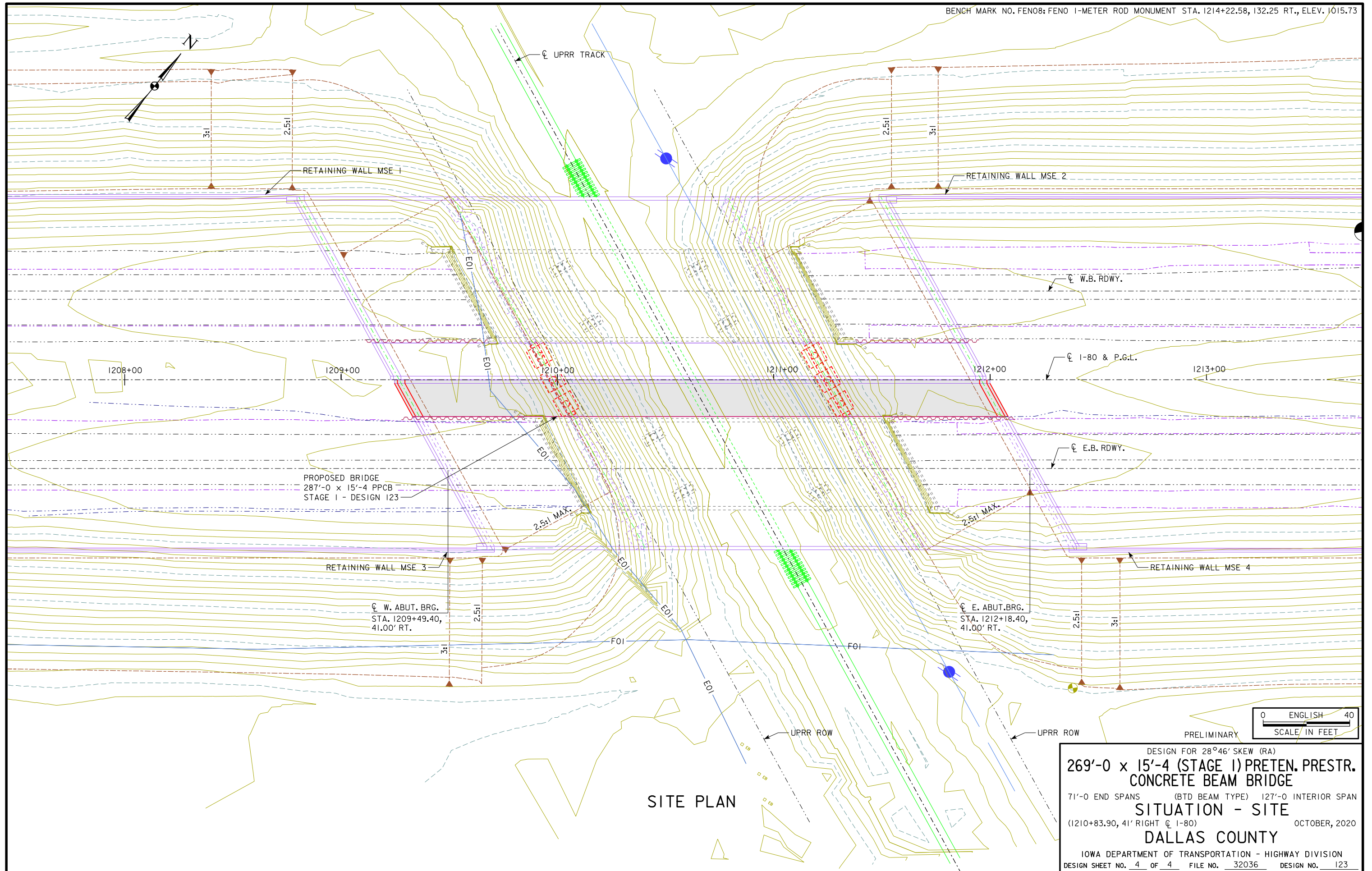


MINIMUM CONSTRUCTION CLEARANCE ENVELOPE
 (NORMAL TO RAILROAD)

* 15'-0" FOR BNSF AND 15'-0" FOR UPRR

PRELIMINARY

DESIGN FOR 28°46' SKEW (RA)
269'-0 x 15'-4 (STAGE I) PRETEN. PRESTR. CONCRETE BEAM BRIDGE
 71'-0 END SPANS (BTD BEAM TYPE) 127'-0 INTERIOR SPAN
SITUATION PLAN - RAILROAD
 (1210+83.90, 41' RIGHT @ 1-80) OCTOBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 3 OF 4 FILE NO. 32036 DESIGN NO. 123



SITE PLAN



PRELIMINARY

DESIGN FOR 28°46' SKEW (RA)

269'-0 x 15'-4 (STAGE I) PRETEN. PRESTR. CONCRETE BEAM BRIDGE

71'-0 END SPANS (BTD BEAM TYPE) 127'-0 INTERIOR SPAN

SITUATION - SITE

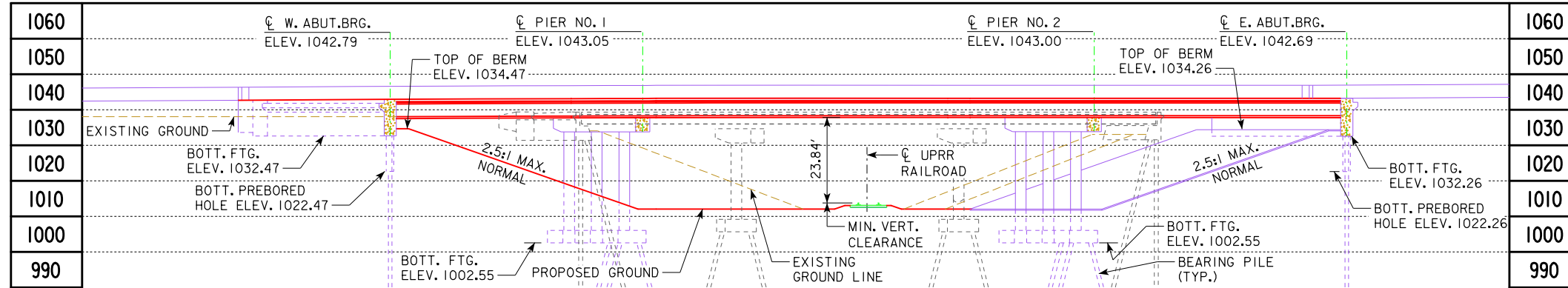
(1210+83.90, 41' RIGHT \bar{C} I-80)

OCTOBER, 2020

DALLAS COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 4 OF 4 FILE NO. 32036 DESIGN NO. 123



PROPOSED PROFILE GRADE 1-80
 MINIMUM VERTICAL CLEARANCE
 OVERHEAD STATION = 1209+88.36, 81.08' LT.
 OVERHEAD ELEVATION = 1242.02
 DEPTH OF SUPERSTRUCTURE = 5.46
 TOP OF RAIL ELEVATION 1012.72
 MINIMUM VERTICAL CLEARANCE = 23.84'

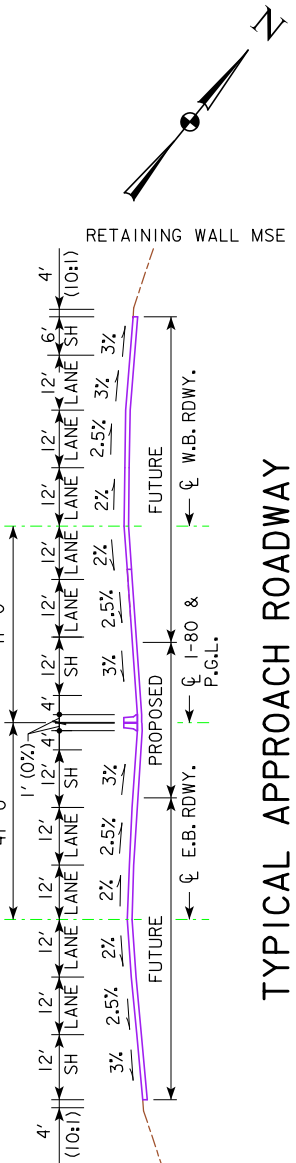
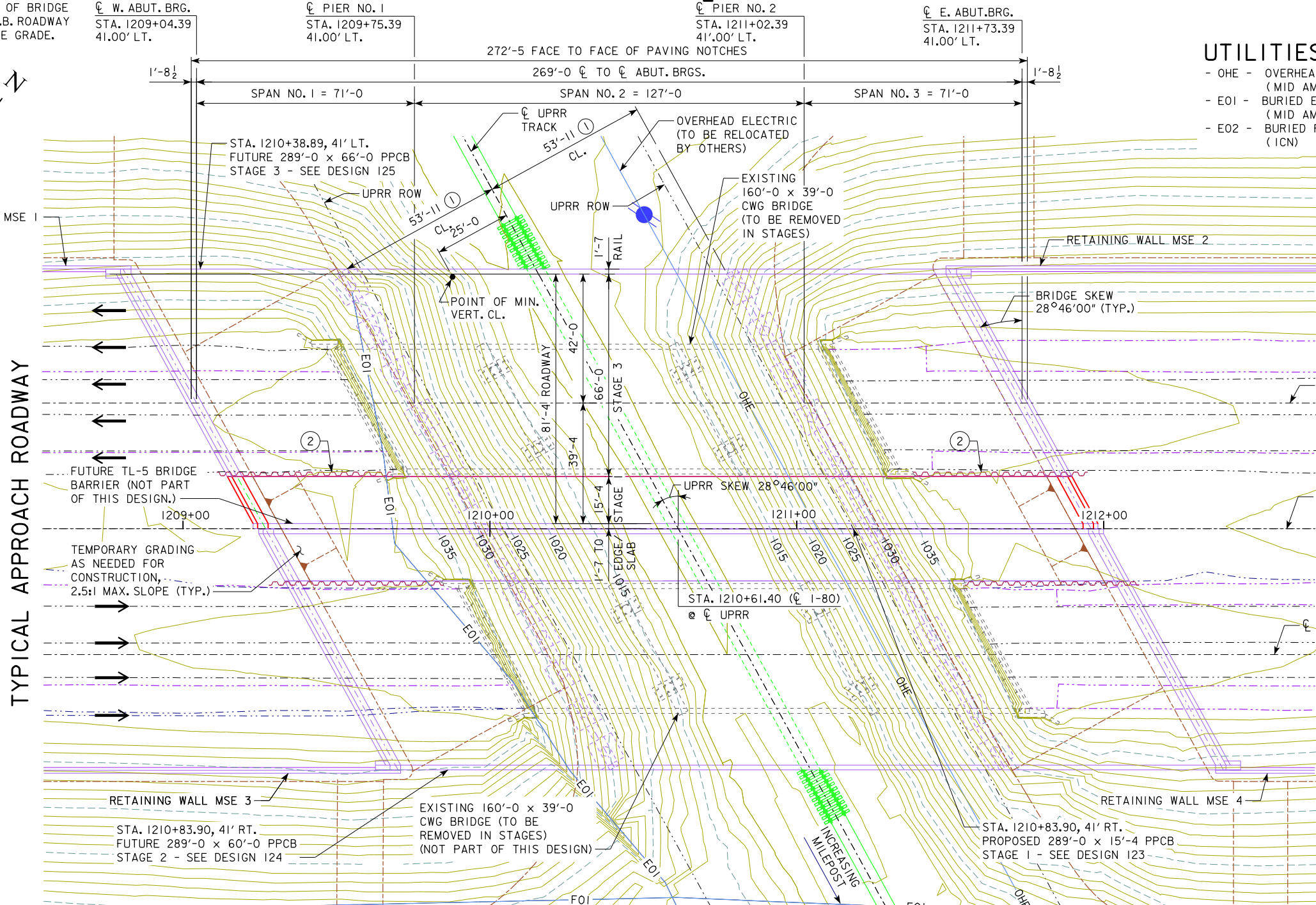
TRAFFIC ESTIMATE
 (I-80 W.B. ROADWAY)

2020 AADT	26,100	V.P.D.
2040 AADT	47,100	V.P.D.
2040 DHV	4,935	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALS		

UTILITIES LEGEND:
 - OHE - OVERHEAD ELECTRIC (MID AMERICAN ENERGY)
 - E01 - BURIED ELECTRIC (MID AMERICAN ENERGY)
 - E02 - BURIED FIBER OPTIC (ICN)

NOTE:
 TO ACCOUNT FOR CROSS SLOPE AND PARABOLIC CROWN, TOP OF BRIDGE DECK AT CENTERLINE W.B. ROADWAY IS +0.89' ABOVE PROFILE GRADE.

LONGITUDINAL SECTION ALONG W.B. ROADWAY



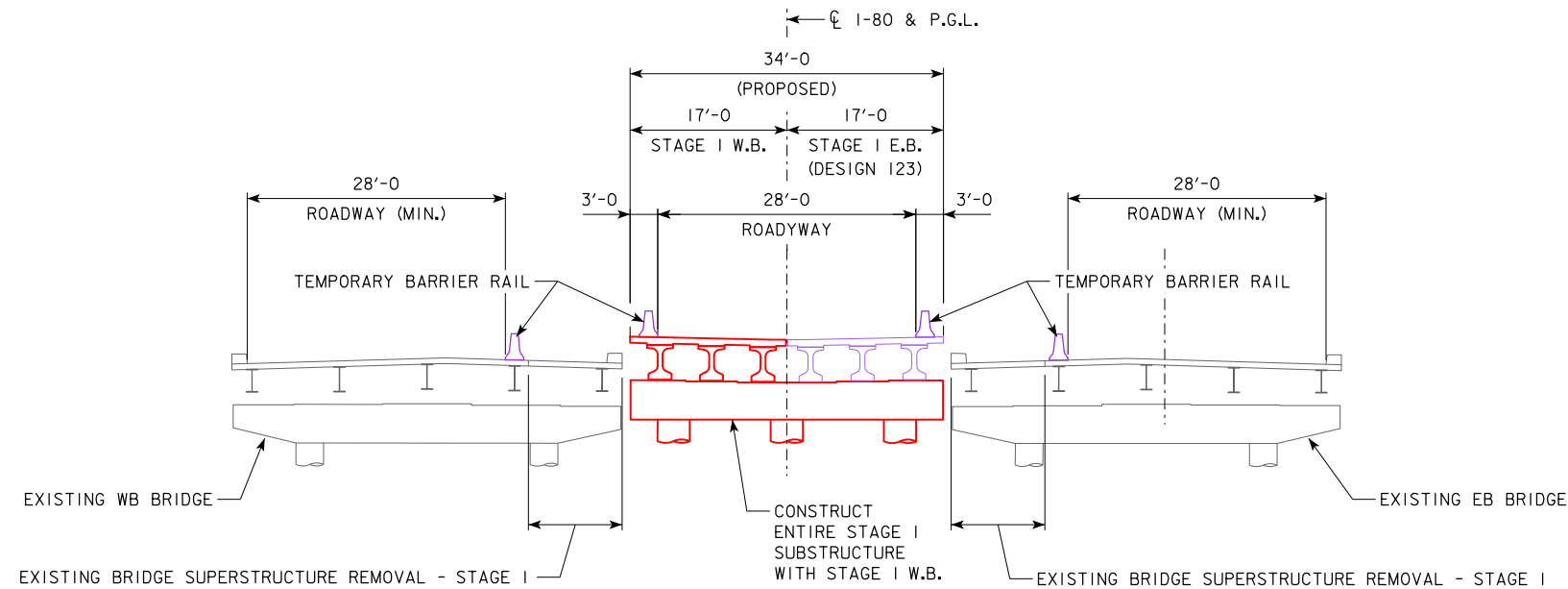
NOTES:
 THIS DESIGN IS FOR THE REPLACEMENT OF THE EXISTING 160'x39' CWG BRIDGE, DALLAS DESIGN NO. 1965, FHWA NO. 22420, MAINT. NO. 2520.8L080.
 TL-5 MEDIAN BRIDGE RAIL TO BE CONSTRUCTED IN STAGE 4.
 STAGE 1 OF E.B. BRIDGE (SEPARATE DESIGN) TO BE CONSTRUCTED WITH THIS DESIGN. SLOTTED DRAIN REQUIRED IN THE 2" GAP.
 PIER TYPE - FRAME; BEAM TYPE - BTD.
 BRIDGE AESTHETICS TO BE INCORPORATED IN FINAL DESIGN.
 SEE DESIGN SHEET 3 FOR TOP OF RAIL ELEVATIONS ALONG UPRR TRACK.
 SEE DESIGN SHEET 4 FOR BERM SLOPE LOCATION TABLE.
 SEE DESIGN SHEET 4 FOR BERM SLOPE LOCATION TABLE.

LOCATION
 I-80 W.B. OVER UPRR
 T-78N R-26W
 SECTION 2
 BOONE TOWNSHIP
 DALLAS COUNTY
 REPLACEMENT FHWA NO. 022421
 BRIDGE MAINT. NO. 2520.8L080
 LATITUDE 41.587137°
 LONGITUDE -93.818952°
 FRA CROSSING NO. 193 008L

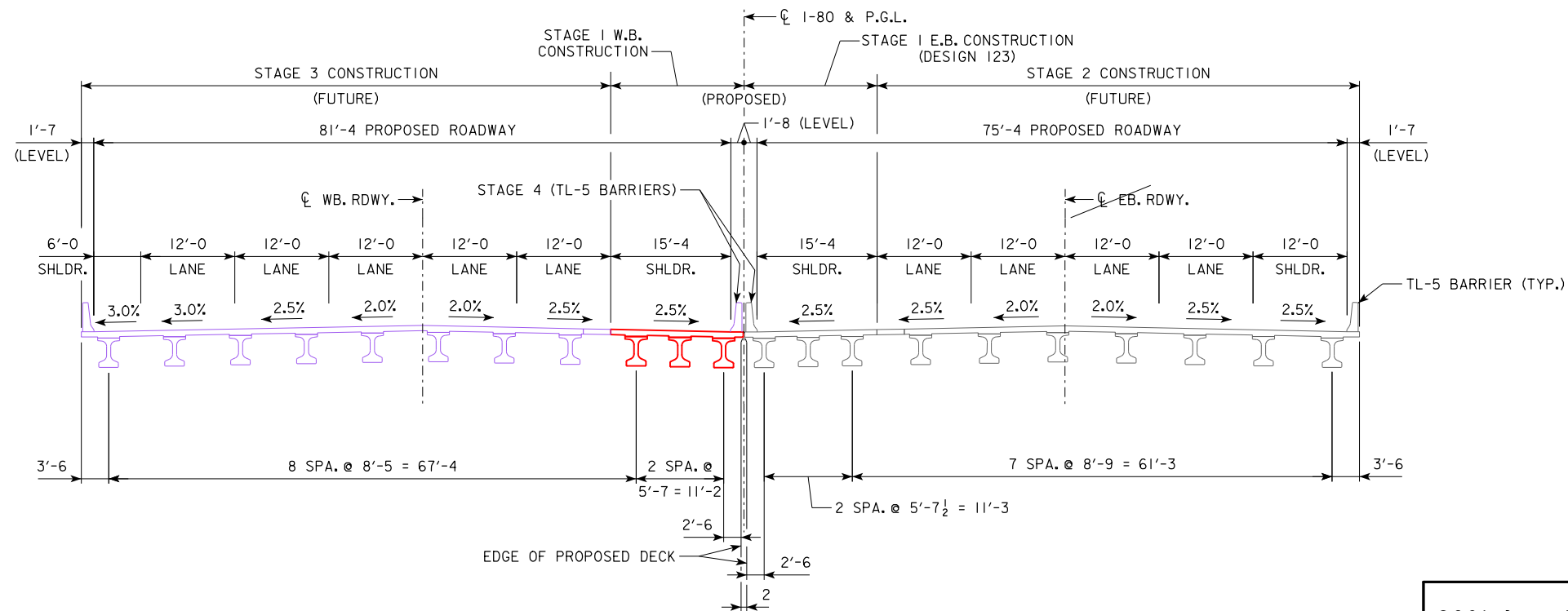
PRELIMINARY

SCALE IN FEET

DESIGN FOR 28°46' SKEW (RA)
269'-0" x 15'-4" (STAGE 1) PRETEN. PRESTR. CONCRETE BEAM BRIDGE
 71'-0" END SPANS (BTD BEAM TYPE) 127'-0" INTERIOR SPAN
SITUATION PLAN
 (1210+38.89, 41' LEFT CL I-80) OCTOBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 4 FILE NO. 32036 DESIGN NO. 223



PROPOSED STAGE I W.B. - TYPICAL BRIDGE SECTION



PROPOSED ULTIMATE BRIDGE TYPICAL SECTION

PRELIMINARY

DESIGN FOR 28°46' SKEW (RA)

269'-0" x 15'-4" (STAGE I) PRETEN. PRESTR. CONCRETE BEAM BRIDGE

71'-0" END SPANS (BTD BEAM TYPE) 127'-0" INTERIOR SPAN

SITUATION PLAN - MISC.

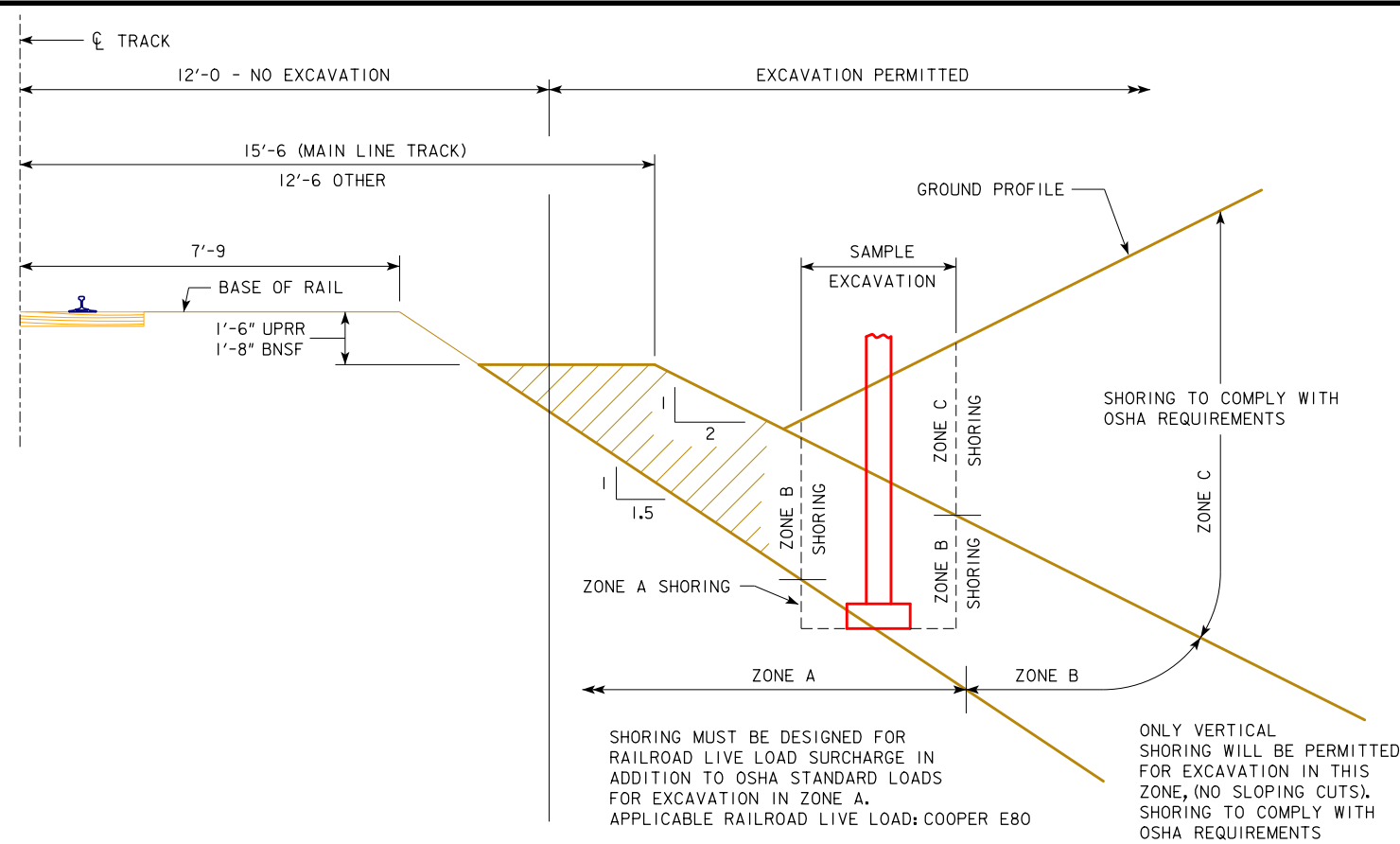
(1210+38.89, 41' LEFT CL I-80) OCTOBER, 2020

DALLAS COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 2 OF 4 FILE NO. 32036 DESIGN NO. 223

REVISED 09-13 - RAILROAD CHANGED THE MINIMUM VERTICAL CONSTRUCTION CLEARANCE TO 21'-6" DISTANCE FROM MAINLINE TRACK TO EDGE OF EMBANKMENT CHANGED TO 15'-6".
 REVISED 06-2017 - ADDED NOTE OUTSIDE OF SHEET BORDER TO EXPLAIN THE USE OF THIS STANDARD SHEET WITH ARCHIVED METHODS MEMO MM201.
 REVISED 07-2019: FOR UPRR, CHANGED HORIZONTAL DISTANCE OF MINIMUM CONSTRUCTION CLEARANCE ENVELOPE TO 15'-0" (WAS 12'-0").
 ENGLISHMISCELLANEOUSBRIDGES.DGN - 1067 - THIS SHEET ISSUED 12-08.



RAILROAD GENERAL NOTES:

1. RAILROAD REVIEW AND APPROVAL OF SHORING, ERECTION, DEMOLITION, AND FALSEWORK IS REQUIRED. ALLOW A MINIMUM OF FOUR WEEKS FOR THE REVIEW AND APPROVAL OF EACH SUBMITTAL.
2. THE PROPOSED GRADE SEPARATION PROJECT SHALL NOT INCREASE THE QUANTITY AND/OR CHARACTERISTICS OF THE FLOW IN THE RAILROAD'S DITCHES AND/OR DRAINAGE STRUCTURES.
3. THE ELEVATION OF THE EXISTING TOP-OF-RAIL PROFILE SHALL BE VERIFIED BEFORE BEGINNING CONSTRUCTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE RAILROAD PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR MUST SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD.
5. ALL SHORING SYSTEMS THAT IMPACT THE RAILROAD'S OPERATIONS AND/OR SUPPORTS THE RAILROAD'S EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER CURRENT RAILROAD GUIDELINES FOR TEMPORARY SHORING.
6. ALL DEMOLITIONS WITHIN THE RAILROAD'S RIGHT-OF-WAY AND/OR DEMOLITION THAT MAY IMPACT THE RAILROAD'S TRACKS OR OPERATIONS SHALL BE IN COMPLIANCE WITH THE RAILROAD'S DEMOLITION GUIDELINES.
7. ERECTION OVER THE RAILROAD'S RIGHT-OF-WAY SHALL BE DESIGNED TO CAUSE NO INTERRUPTION TO THE RAILROAD'S OPERATION, ENABLING THE TRACK(S) TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD'S REQUIREMENTS.
8. ALL CONSTRUCTION PHASING THAT MAY IMPACT THE RAILROAD OPERATIONS SHALL BE DESIGNED TO CAUSE NO INTERRUPTION TO THE RAILROAD'S OPERATION, ENABLING THE TRACK(S) TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD'S REQUIREMENTS.
9. FALSE-WORK CLEARANCES SHALL COMPLY WITH MINIMUM CONSTRUCTION CLEARANCES.
10. ALL PERMANENT CLEARANCES SHALL BE VERIFIED BEFORE PROJECT CLOSING.
11. FOR RAILROAD COORDINATION PLEASE REFER TO THE RAILROAD COORDINATION REQUIREMENTS AS PART OF SPECIAL PROVISIONS.

GENERAL EXCAVATION ZONES

GENERAL SHORING NOTES:

1. ALL DIMENSIONS ARE MEASURED PERPENDICULAR TO TRACK.
2. PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL BY THE RAILROAD DETAILED PLANS INDICATING THE NATURE AND EXTENT OF THE TRACK PROTECTION SHORING PROPOSED. THE CONTRACTOR SHALL INSTALL THE TEMPORARY SHORING SYSTEM PER THE APPROVED PLANS. DESIGN OF THE TEMPORARY SHORING SYSTEM TO COMPLY WITH GUIDELINES FOR TEMPORARY SHORING.
3. FOR EXCAVATIONS WHICH ENCR OACH INTO ZONE A OR B, SHORING PLANS SHALL BE ACCOMPANIED BY DESIGN CALCULATIONS. PLANS AND CALCULATIONS MUST BE SIGNED AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF IOWA.

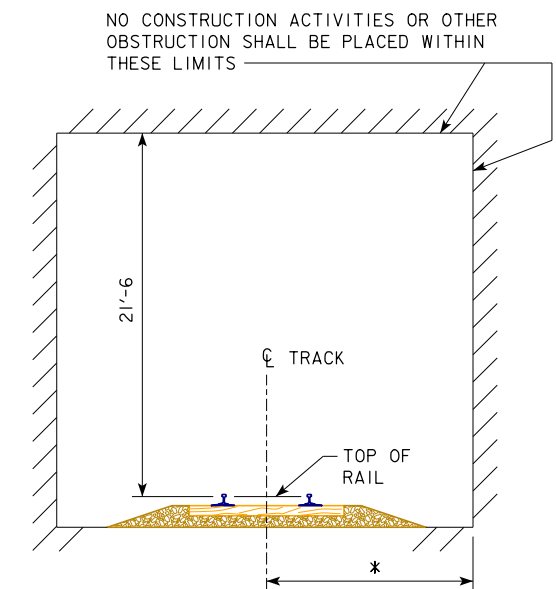
NOTE:
 BNSF = BURLINGTON NORTHERN SANTA FE RAILROAD
 UPRR = UNION PACIFIC RAILROAD

TOP OF RAIL ELEVATIONS

(STATIONS INCREASE WITH MILEPOST INCREASE)

MAIN LINE			
ALIGNMENT: LEFT RAIL		ALIGNMENT: RIGHT RAIL	
STATION	ELEVATION	STATION	ELEVATION
0+00.0	*1012.34	0+00.0	*1012.35
1+16.9	1012.39	1+16.7	1012.41
2+48.2	1012.44	2+48.2	1012.46
3+62.4	1012.25	3+62.4	1012.27
4+60.9	1012.25	4+61.4	1012.24
5+64.5	1012.40	5+64.5	1012.41
6+65.2	1012.44	6+65.1	1012.46
7+60.9	1012.64	7+61.3	1012.66
8+61.5	1012.76	8+61.8	1012.73
9+12.0	1012.69	9+12.1	1012.63
9+55.5	1012.61	9+54.2	1012.59
9+84.4	1012.50	9+84.1	1012.50
9+98.6	1012.46	9+98.2	1012.41
① 10+00.0	----	① 10+00.0	----
10+21.2	1012.41	10+21.1	1012.42
10+46.6	1012.31	10+47.0	1012.30
10+76.7	1012.16	10+77.3	1012.15
11+39.7	1011.87	11+40.4	1011.87
12+10.8	1011.44	12+11.1	1011.46
13+10.5	1010.60	13+10.9	1010.61
14+11.1	1009.52	14+11.1	1009.53
15+10.9	1008.31	15+11.1	1008.31
16+10.8	1007.23	16+11.0	1007.24
17+10.9	1006.23	17+10.8	1006.24
18+11.1	1005.37	18+11.0	1005.36
19+11.0	1004.55	19+11.0	1004.55
20+00.00	*1003.70	20+00.0	*1003.69

① EXISTING TRACK MP STA. 299.25 (CL. UPRR AT CL 1-80) = STA. 10+00.0
 *ELEVATION INTERPOLATED BETWEEN SURVEY SHOTS.

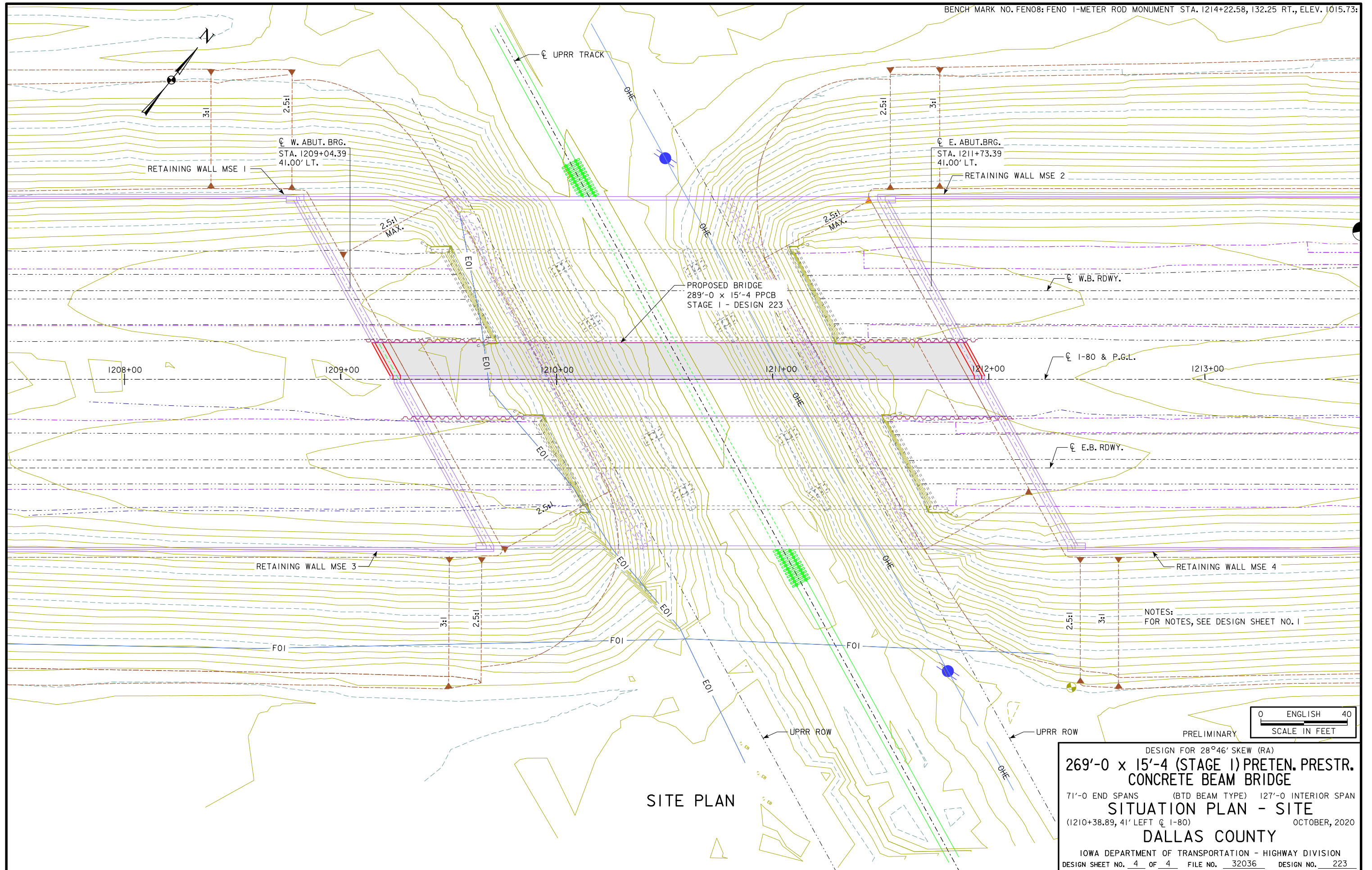


MINIMUM CONSTRUCTION CLEARANCE ENVELOPE
 (NORMAL TO RAILROAD)

* 15'-0" FOR BNSF AND 15'-0" FOR UPRR

PRELIMINARY

DESIGN FOR 28°46' SKEW (RA)
269'-0 x 15'-4 (STAGE I) PRETEN. PRESTR. CONCRETE BEAM BRIDGE
 71'-0 END SPANS (BTD BEAM TYPE) 127'-0 INTERIOR SPAN
SITUATION PLAN - RAILROAD
 (1210+38.89, 41' LEFT CL 1-80) OCTOBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 3 OF 4 FILE NO. 32036 DESIGN NO. 223



SITE PLAN

NOTES:
FOR NOTES, SEE DESIGN SHEET NO. 1



PRELIMINARY

DESIGN FOR 28°46' SKEW (RA)

269'-0 x 15'-4 (STAGE I) PRETEN. PRESTR. CONCRETE BEAM BRIDGE

71'-0 END SPANS (BTD BEAM TYPE) 127'-0 INTERIOR SPAN

SITUATION PLAN - SITE

(1210+38.89, 41' LEFT ϕ I-80) OCTOBER, 2020

DALLAS COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 4 OF 4 FILE NO. 32036 DESIGN NO. 223

G1=3.0500% G2=-2.2067%
 VPC STA. = 1202+75.00 VPI STA. = 1209+25.00 VPT STA. = 1215+75.00
 VPC ELEV. = 1030.71 VPI ELEV. = 1050.54 VPT ELEV. = 1036.19
 VC = 1300'

PROPOSED PROFILE GRADE I-80

MINIMUM VERTICAL CLEARANCE

OVERHEAD STATION = 1210+91.33, 2.58' RT.
 OVERHEAD ELEVATION = 1042.09
 DEPTH OF SUPERSTRUCTURE = 5.46
 TOP OF RAIL ELEVATION 1012.42
 MINIMUM VERTICAL CLEARANCE = 24.22'

TRAFFIC ESTIMATE
(I-80 E.B. ROADWAY)

2020 AADT	28,000	V.P.D.
2040 AADT	47,500	V.P.D.
2040 DHV	5.145	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALS		

NOTES:

THIS DESIGN IS FOR THE REPLACEMENT OF THE EXISTING 160'x39' CWG BRIDGE, DALLAS DESIGN NO. 1965, FHWA NO. 22410, MAINT. NO. 2520.8R080.

- TL-5 BRIDGE RAILING PROPOSED
- BRIDGE AESTHETICS TO BE INCORPORATED IN FINAL DESIGN.
- PIER TYPE-FRAME; BEAM TYPE-BTD.
- SEE DESIGN SHEET 3 FOR TOP OF RAIL ELEVATIONS ALONG UPRR TRACK.
- SEE DESIGN SHEET 4 FOR BERM SLOPE LOCATION TABLE.

UTILITIES LEGEND:

- ① MIN. CL. TO FACE OF 3'-6" WIDE PIER CAP.
- ② TEMP. SHORING FROM E.B. BRIDGE STAGE 1 CONSTR. TO BE REMOVED (TYP.)
- OHE - OVERHEAD ELECTRIC (MID AMERICAN ENERGY)
- E01 - BURIED ELECTRIC (MID AMERICAN ENERGY)
- E02 - BURIED FIBER OPTIC (ICN)

LOCATION

I-80 E.B. OVER UPRR
 T-78N R-26W
 SECTION 2
 BOONE TOWNSHIP
 DALLAS COUNTY
 REPLACEMENT FHWA NO. 022411
 BRIDGE MAINT. NO. 2520.8R080
 LATITUDE 41.587021°
 LONGITUDE -93.818647°
 FRA CROSSING NO. 193 008L



PRELIMINARY

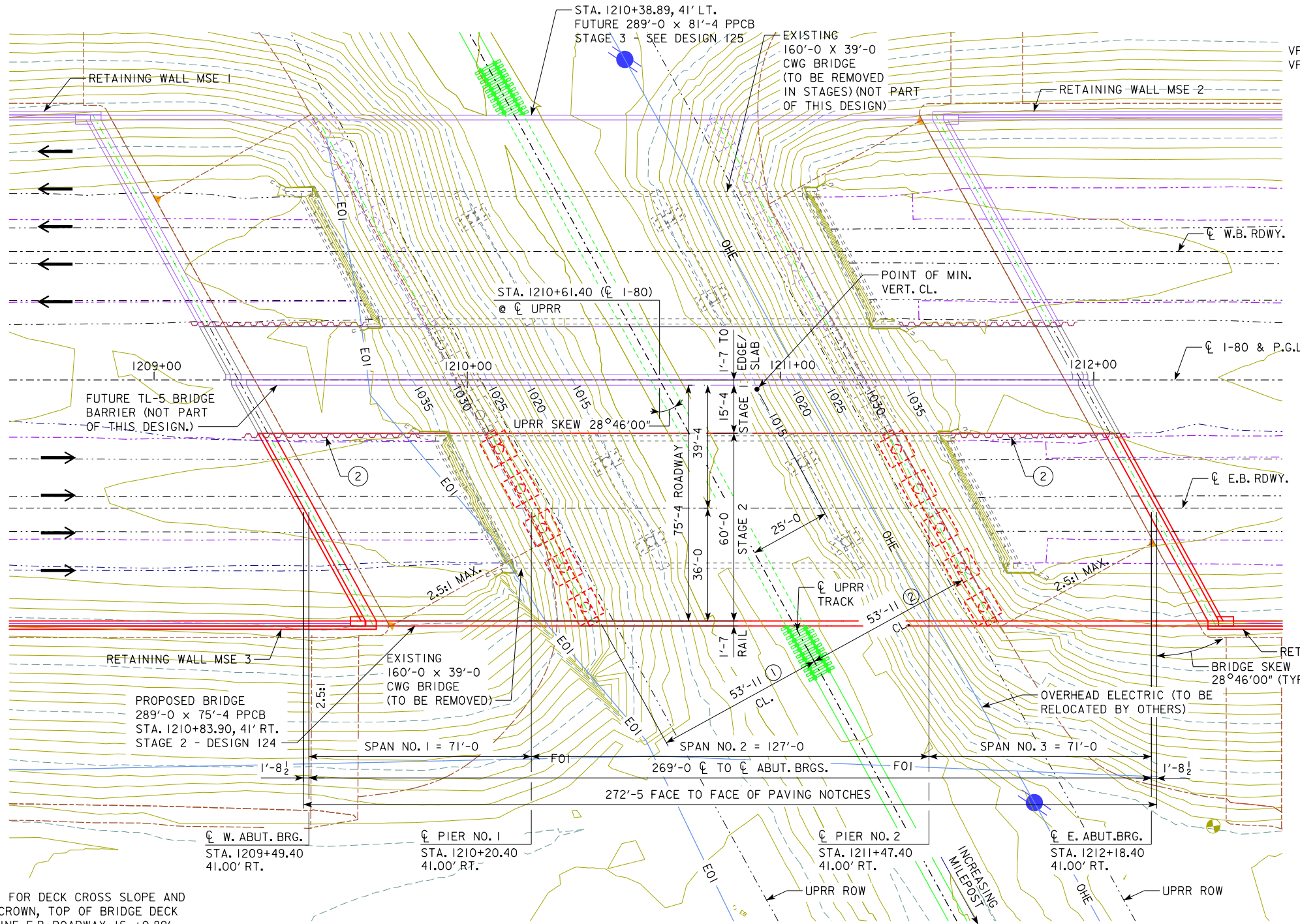
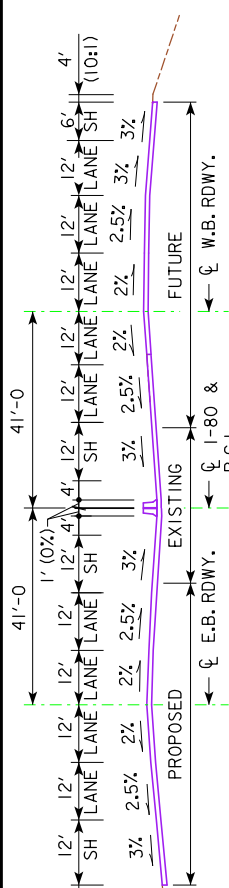
DESIGN FOR 28°46' SKEW (RA)
269'-0" x 75'-4" (STAGE 2) PRETEN. PRESTR. CONCRETE BEAM BRIDGE

71'-0" END SPANS (BTD BEAM TYPE) 127'-0" INTERIOR SPAN
SITUATION PLAN
 (1210+83.90, 41' RIGHT OF I-80) OCTOBER, 2020

DALLAS COUNTY

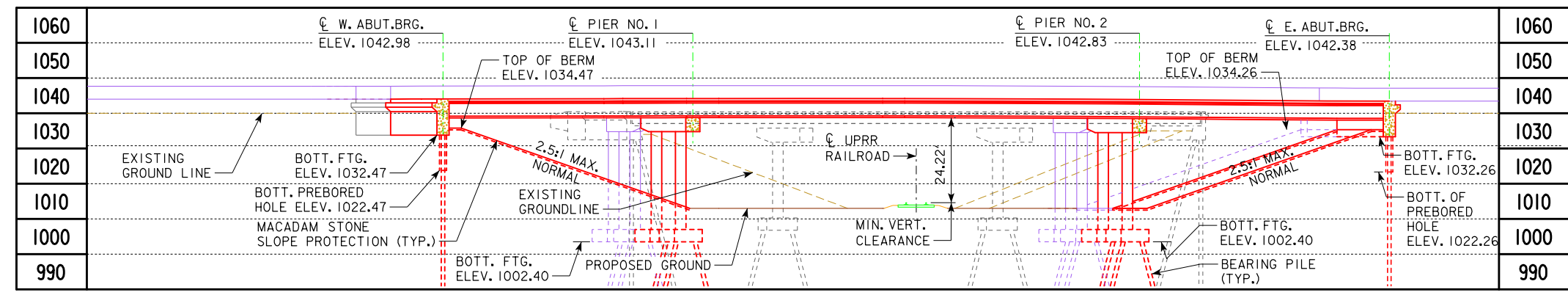
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 4 FILE NO. 32036 DESIGN NO. 124

TYPICAL APPROACH ROADWAY

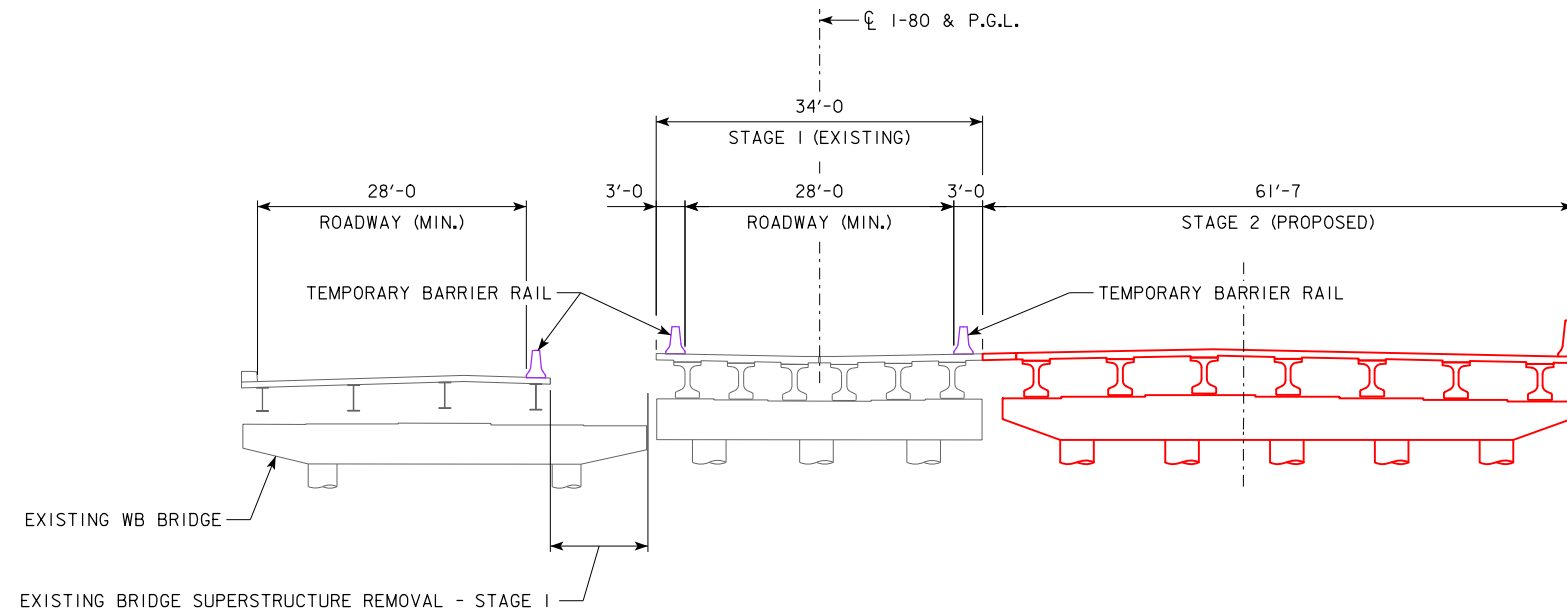


SITUATION PLAN

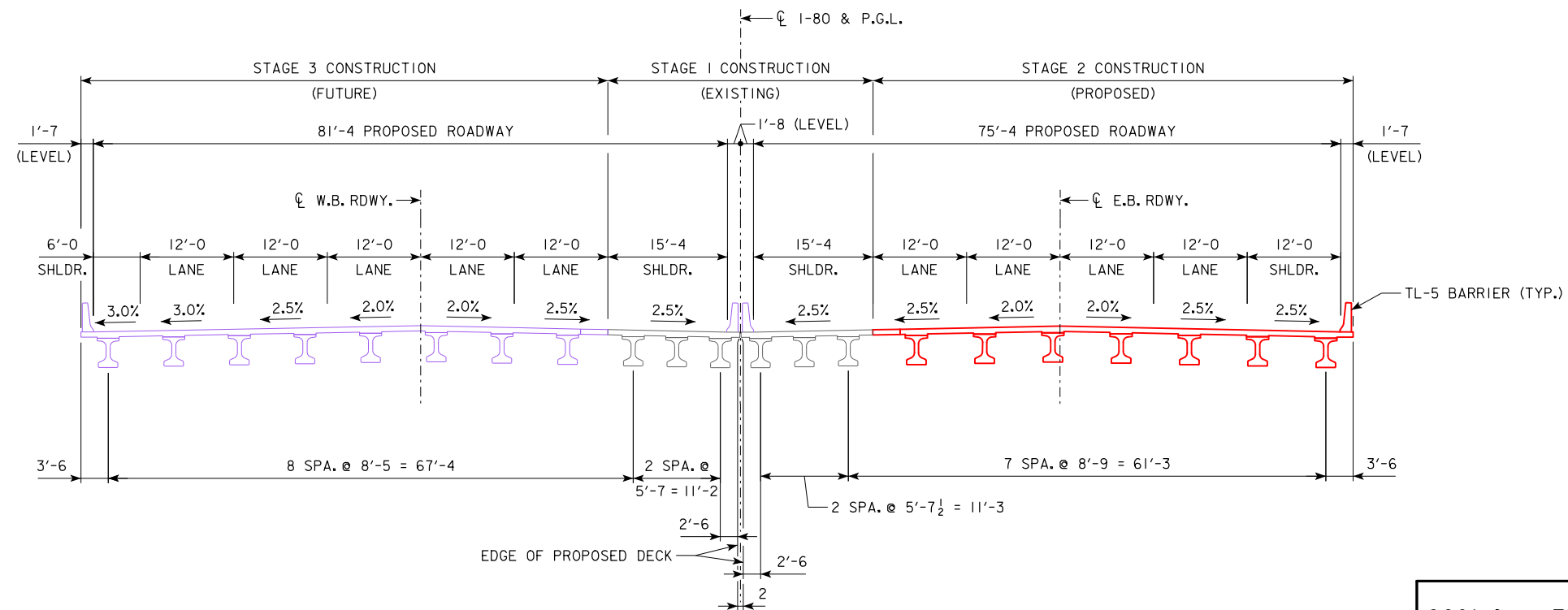
NOTE:
 TO ACCOUNT FOR DECK CROSS SLOPE AND PARABOLIC CROWN, TOP OF BRIDGE DECK AT CENTERLINE E.B. ROADWAY IS +0.89' ABOVE PROFILE GRADE.



LONGITUDINAL SECTION ALONG OF E.B. ROADWAY



PROPOSED STAGE 2 - TYPICAL BRIDGE SECTION



PROPOSED ULTIMATE BRIDGE TYPICAL SECTION

PRELIMINARY

DESIGN FOR 28°46' SKEW (RA)

269'-0 x 75'-4 (STAGE 2) PRETEN. PRESTR. CONCRETE BEAM BRIDGE

71'-0 END SPANS (BTD BEAM TYPE) 127'-0 INTERIOR SPAN

SITUATION PLAN - MISC.

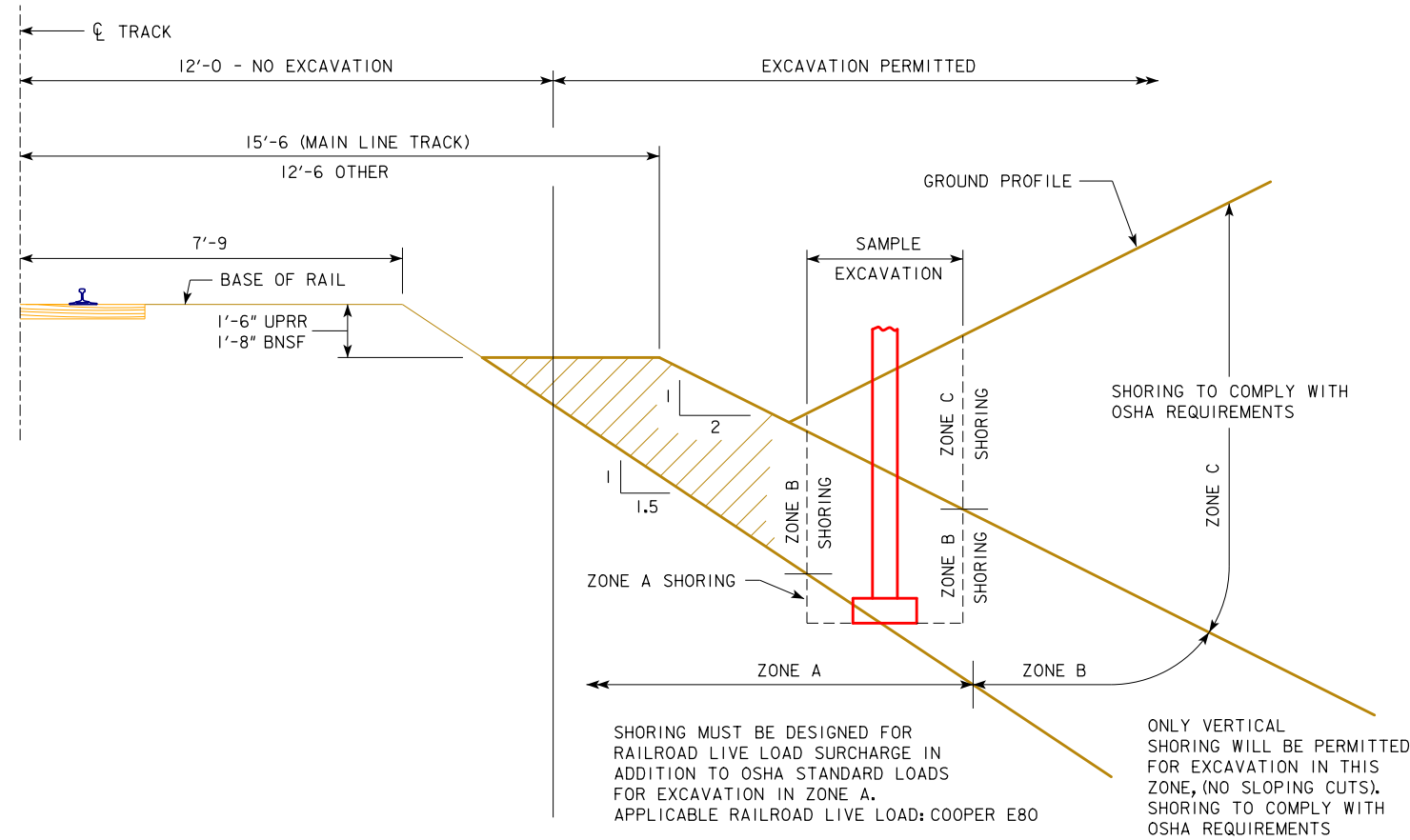
(1210+83.90, 41' RIGHT @ I-80) OCTOBER, 2020

DALLAS COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 2 OF 4 FILE NO. 32036 DESIGN NO. 124

REVISED 09-13 - RAILROAD CHANGED THE MINIMUM VERTICAL CONSTRUCTION CLEARANCE TO 21'-6" DISTANCE FROM MAINLINE TRACK TO EDGE OF EMBANKMENT CHANGED TO 15'-6".
 REVISED 06-2017 - ADDED NOTE OUTSIDE OF SHEET BORDER TO EXPLAIN THE USE OF THIS STANDARD SHEET WITH ARCHIVED METHODS MEMO MM201.
 REVISED 07-2019: FOR UPRR, CHANGED HORIZONTAL DISTANCE OF MINIMUM CONSTRUCTION CLEARANCE ENVELOPE TO 15'-0" (WAS 12'-0").
 ENGLISHMISCELLANEOUSBRIDGES.DGN - 1067 - THIS SHEET ISSUED 12-08.



RAILROAD GENERAL NOTES:

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GENERAL EXCAVATION ZONES

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3. FOR EXCAVATIONS WHICH ENCROACH INTO ZONE A OR B, SHORING PLANS SHALL BE ACCOMPANIED BY DESIGN CALCULATIONS. PLANS AND CALCULATIONS MUST BE SIGNED AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF IOWA.

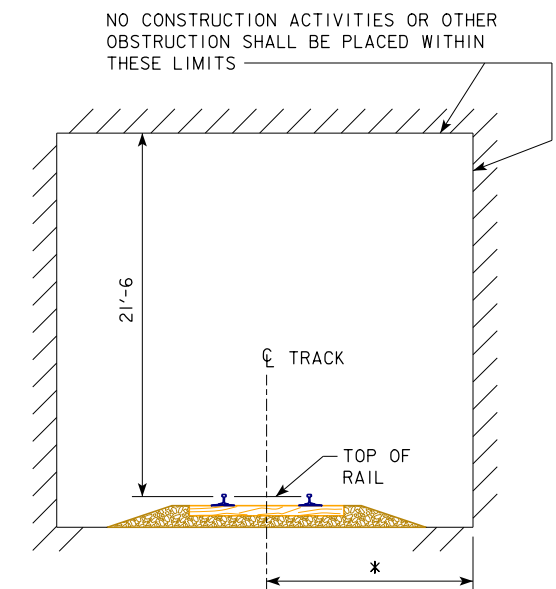
NOTE:
 BNSF = BURLINGTON NORTHERN SANTA FE RAILROAD
 UPRR = UNION PACIFIC RAILROAD

TOP OF RAIL ELEVATIONS

(STATIONS INCREASE WITH MILEPOST INCREASE)

MAIN LINE			
ALIGNMENT: LEFT RAIL		ALIGNMENT: RIGHT RAIL	
STATION	ELEVATION	STATION	ELEVATION
0+00.0	*1012.34	0+00.0	*1012.35
1+16.9	1012.39	1+16.7	1012.41
2+48.2	1012.44	2+48.2	1012.46
3+62.4	1012.25	3+62.4	1012.27
4+60.9	1012.25	4+61.4	1012.24
5+64.5	1012.40	5+64.5	1012.41
6+65.2	1012.44	6+65.1	1012.46
7+60.9	1012.64	7+61.3	1012.66
8+61.5	1012.76	8+61.8	1012.73
9+12.0	1012.69	9+12.1	1012.63
9+55.5	1012.61	9+54.2	1012.59
9+84.4	1012.50	9+84.1	1012.50
9+98.6	1012.46	9+98.2	1012.41
① 10+00.0	----	① 10+00.0	----
10+21.2	1012.41	10+21.1	1012.42
10+46.6	1012.31	10+47.0	1012.30
10+76.7	1012.16	10+77.3	1012.15
11+39.7	1011.87	11+40.4	1011.87
12+10.8	1011.44	12+11.1	1011.46
13+10.5	1010.60	13+10.9	1010.61
14+11.1	1009.52	14+11.1	1009.53
15+10.9	1008.31	15+11.1	1008.31
16+10.8	1007.23	16+11.0	1007.24
17+10.9	1006.23	17+10.8	1006.24
18+11.1	1005.37	18+11.0	1005.36
19+11.0	1004.55	19+11.0	1004.55
20+00.00	*1003.70	20+00.0	*1003.69

① EXISTING TRACK MP STA. 299.25 (CL. UPRR AT CL 1-80) = STA. 10+00.0
 *ELEVATION INTERPOLATED BETWEEN SURVEY SHOTS.

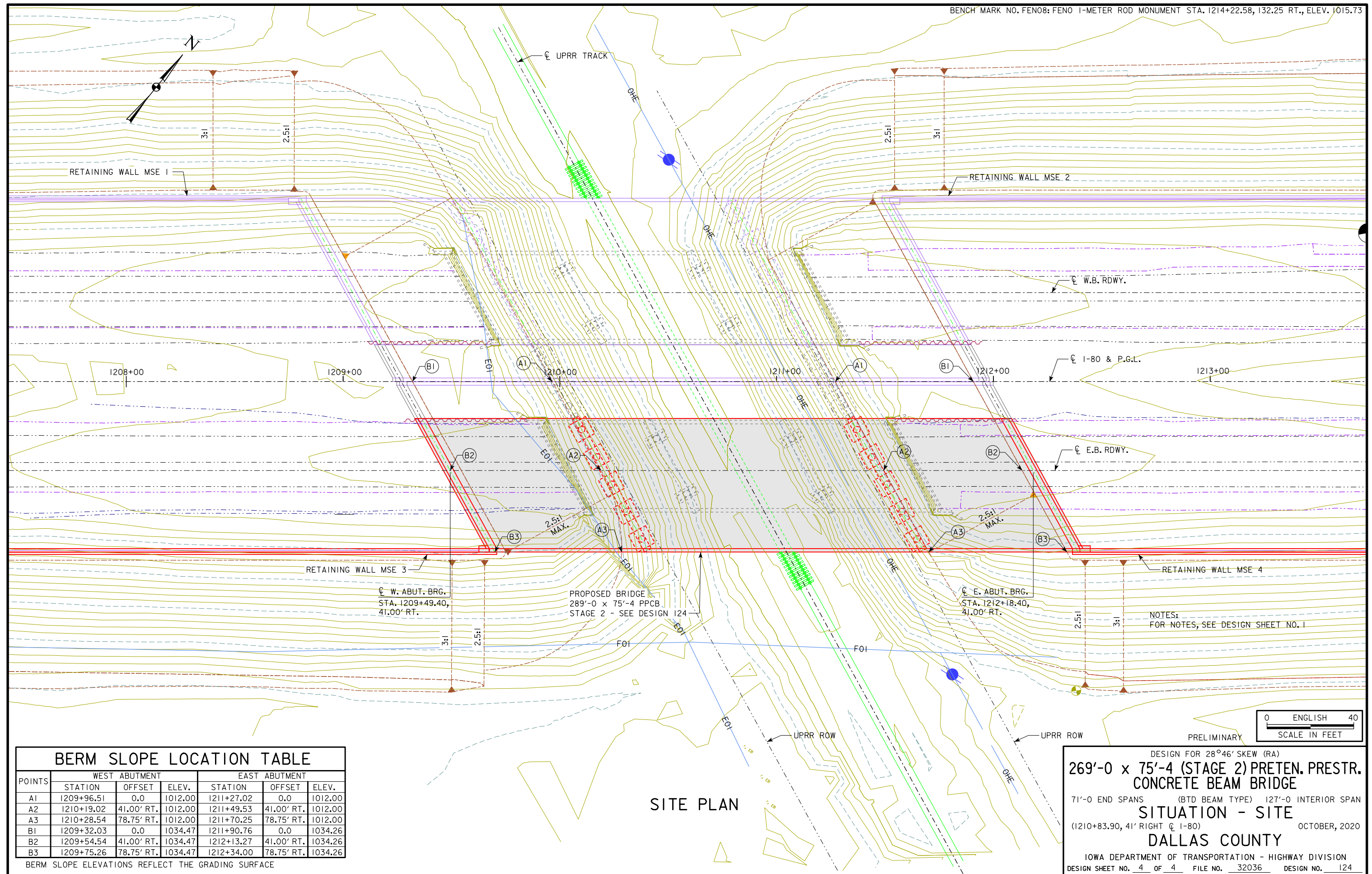


MINIMUM CONSTRUCTION CLEARANCE ENVELOPE
 (NORMAL TO RAILROAD)

* 15'-0" FOR BNSF AND 15'-0" FOR UPRR

PRELIMINARY

DESIGN FOR 28°46' SKEW (RA)
269'-0 x 75'-4 (STAGE 2) PRETEN. PRESTR. CONCRETE BEAM BRIDGE
 71'-0 END SPANS (BTD BEAM TYPE) 127'-0 INTERIOR SPAN
SITUATION PLAN - RAILROAD
 (1210+83.90, 41' RIGHT @ 1-80) OCTOBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 3 OF 4 FILE NO. 32036 DESIGN NO. 124



BERM SLOPE LOCATION TABLE

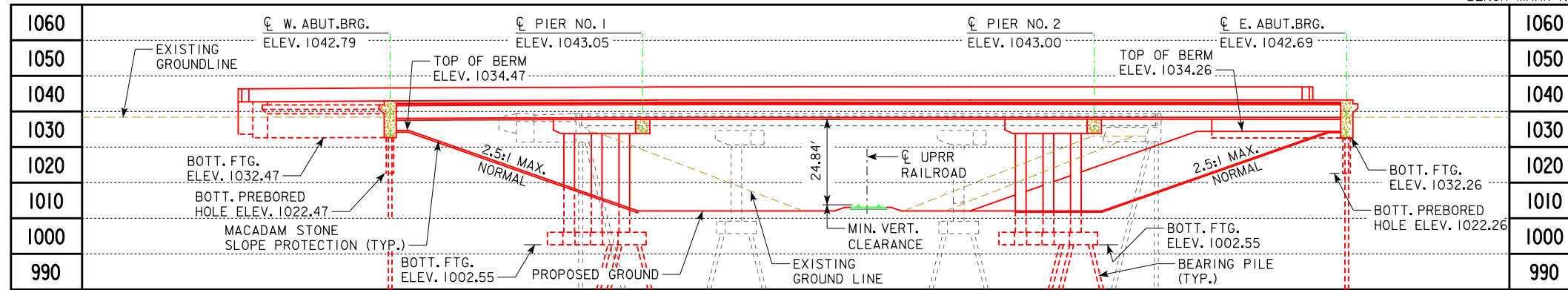
POINTS	WEST ABUTMENT			EAST ABUTMENT		
	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
A1	1209+96.51	0.0	1012.00	1211+27.02	0.0	1012.00
A2	1210+19.02	41.00' RT.	1012.00	1211+49.53	41.00' RT.	1012.00
A3	1210+28.54	78.75' RT.	1012.00	1211+70.25	78.75' RT.	1012.00
B1	1209+32.03	0.0	1034.47	1211+90.76	0.0	1034.26
B2	1209+54.54	41.00' RT.	1034.47	1212+13.27	41.00' RT.	1034.26
B3	1209+75.26	78.75' RT.	1034.47	1212+34.00	78.75' RT.	1034.26

BERM SLOPE ELEVATIONS REFLECT THE GRADING SURFACE

DESIGN FOR 28°46' SKEW (RA)
269'-0" x 75'-4" (STAGE 2) PRETEN. PRESTR. CONCRETE BEAM BRIDGE
 71'-0" END SPANS (BTD BEAM TYPE) 127'-0" INTERIOR SPAN
SITUATION - SITE
 (1210+83.90, 41' RIGHT ϕ I-80) OCTOBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 4 OF 4 FILE NO. 32036 DESIGN NO. 124

SITE PLAN





$G1=3.0500\%$ $G2=-2.2067\%$
 VPC STA. = 1202+75.00 VPI STA. = 1209+25.00 VPT STA. = 1215+75.00
 VPC ELEV. = 1030.71 VPI ELEV. = 1050.54 VPT ELEV. = 1036.19
 VC = 1300'

PROPOSED PROFILE GRADE 1-80

MINIMUM VERTICAL CLEARANCE

OVERHEAD STATION = 1209+88.36, 81.08' LT.
 OVERHEAD ELEVATION = 1242.02
 DEPTH OF SUPERSTRUCTURE = 5.46
 TOP OF RAIL ELEVATION = 1012.72
 MINIMUM VERTICAL CLEARANCE = 23.84'

TRAFFIC ESTIMATE

(1-80 W.B. ROADWAY)

2020 AADT	26,100	V.P.D.
2040 AADT	47,100	V.P.D.
2040 DHV	4,935	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALS		

NOTES:

THIS DESIGN IS FOR THE REPLACEMENT OF THE EXISTING 160'x39' CWG BRIDGE, DALLAS DESIGN NO. 1965, FHWA NO. 22420, MAINT. NO. 2520.8L080.

- TL-5 BRIDGE RAILING PROPOSED
- PIER TYPE-FRAME; BEAM TYPE-BTD.
- SEE DESIGN SHEET 3 FOR TOP OF RAIL ELEVATIONS ALONG UPRR TRACK.
- BRIDGE AESTHETICS TO BE INCORPORATED IN FINAL DESIGN.
- SEE DESIGN SHEET 4 FOR BERM SLOPE LOCATION TABLE.

UTILITIES LEGEND:

- OHE - OVERHEAD ELECTRIC (MID AMERICAN ENERGY)
- E01 - BURIED ELECTRIC (MID AMERICAN ENERGY)
- E02 - BURIED FIBER OPTIC (ICN)

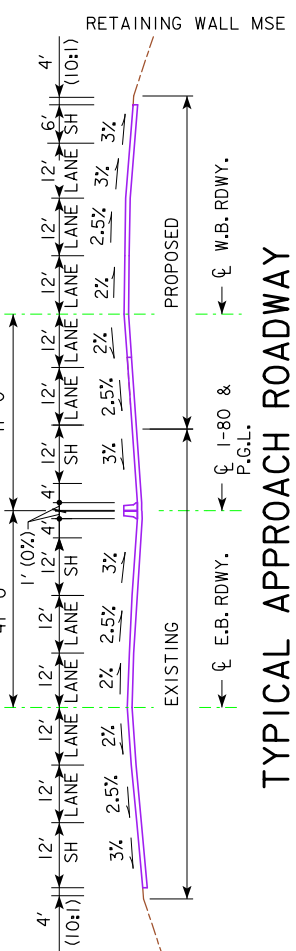
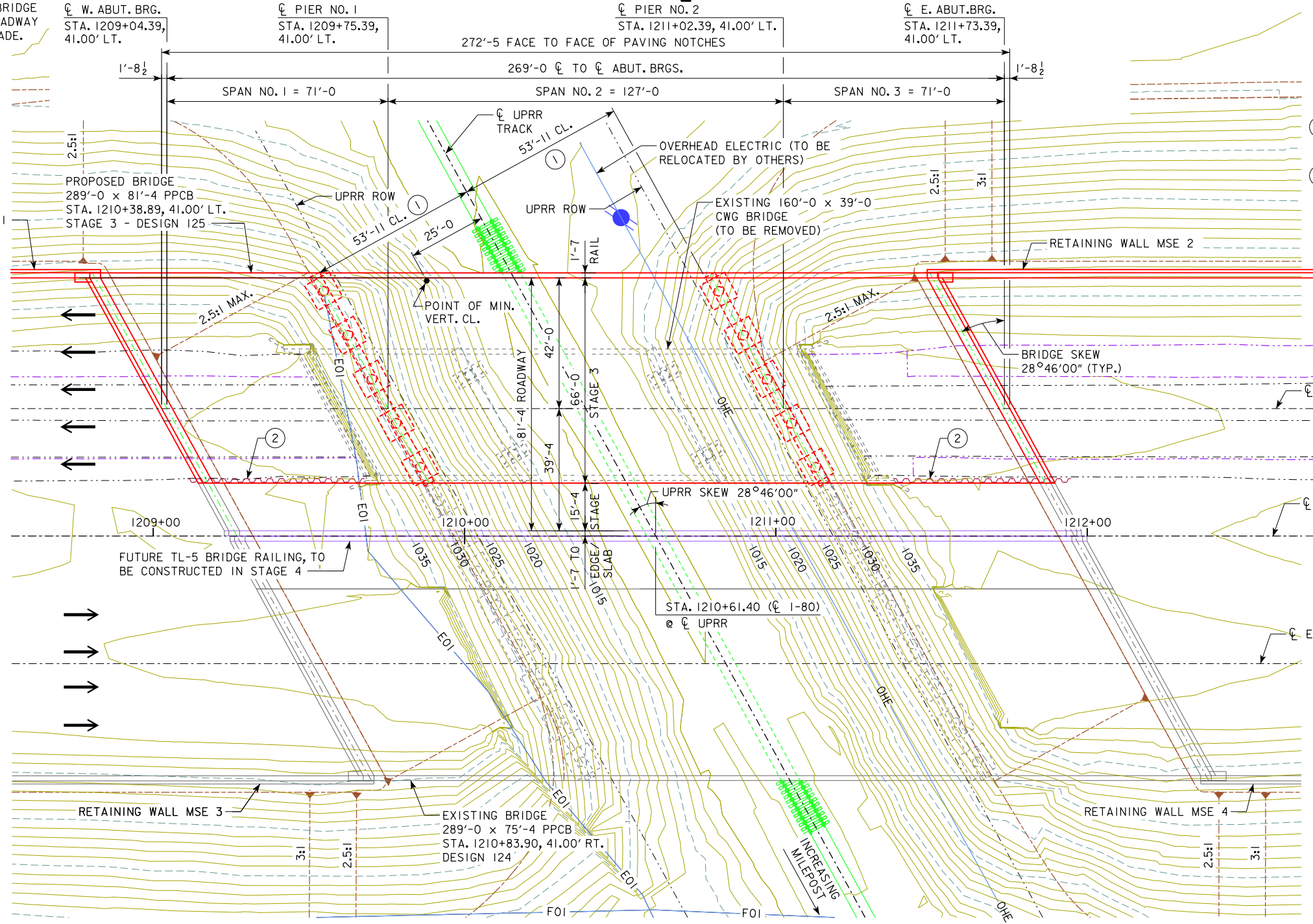
LOCATION

1-80 W.B. OVER UPRR
 T-78N R-26W
 SECTION 2
 BOONE TOWNSHIP
 DALLAS COUNTY
 REPLACEMENT FHWA NO. 022411
 BRIDGE MAINT. NO. 2520.8L080
 LATITUDE 41.587137°
 LONGITUDE -93.818952°
 FRA CROSSING NO. 193 008L



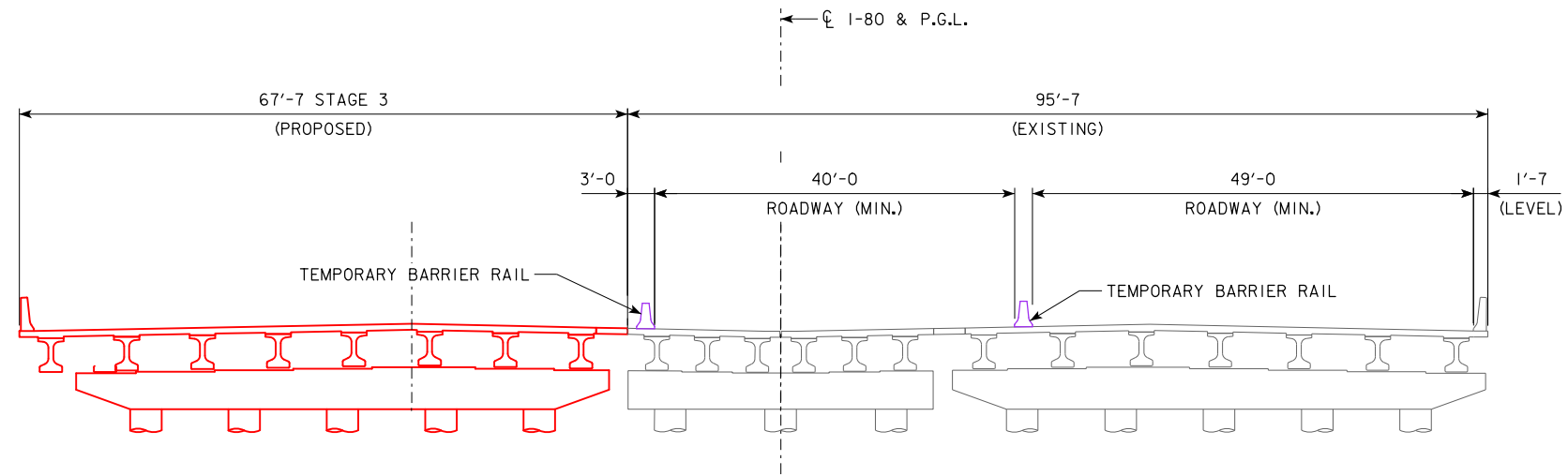
NOTE:
 TO ACCOUNT FOR CROSS SLOPE AND PARABOLIC CROWN, TOP OF BRIDGE DECK AT CENTERLINE W.B. ROADWAY IS +0.89' ABOVE PROFILE GRADE.

LONGITUDINAL SECTION ALONG CL W.B. ROADWAY

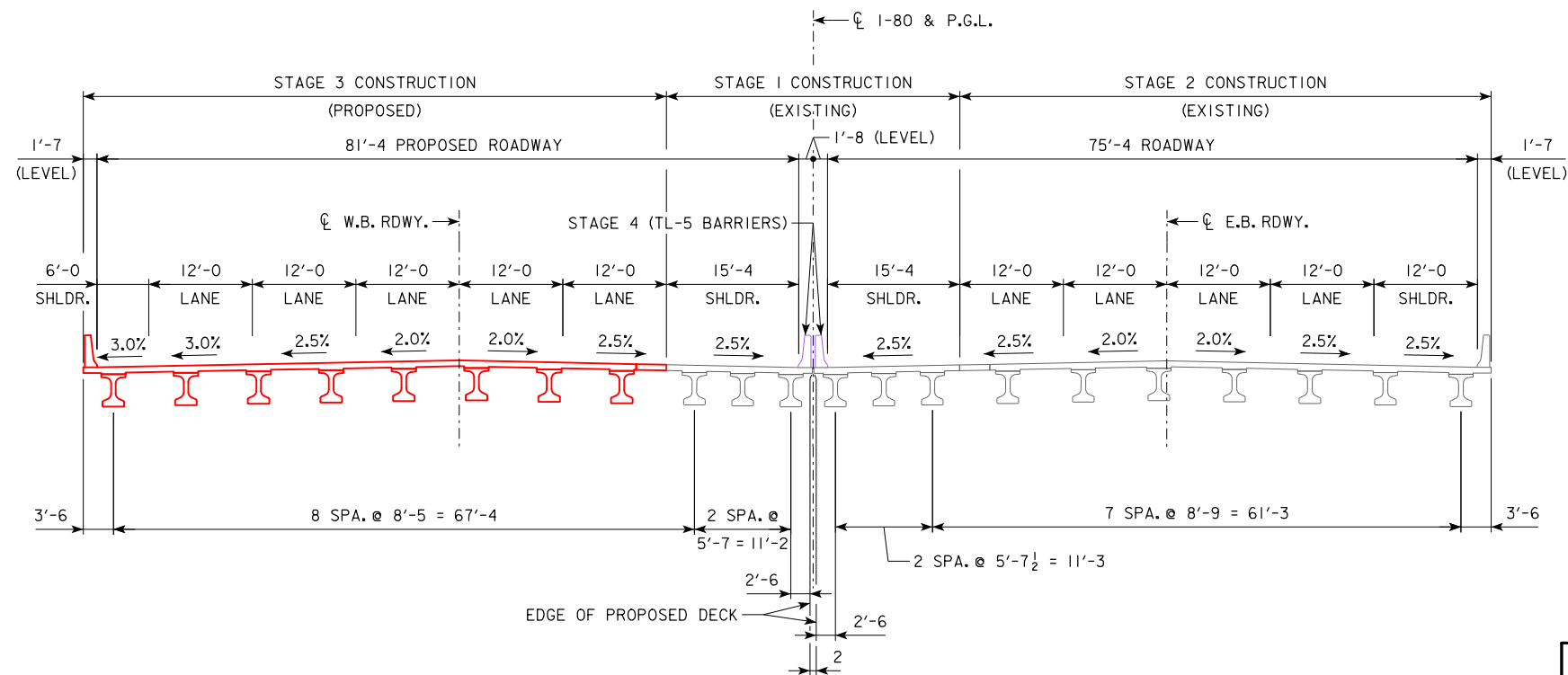


SITUATION PLAN

PRELIMINARY
 DESIGN FOR 28°46' SKEW (RA)
269'-0 x 81'-4 (STAGE 3) PRETEN. PRESTR. CONCRETE BEAM BRIDGE
 71'-0 END SPANS (BTD BEAM TYPE) 127'-0 INTERIOR SPAN
SITUATION PLAN
 (1210+38.89, 41' LEFT CL I-80) OCTOBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 4 FILE NO. 32036 DESIGN NO. 125



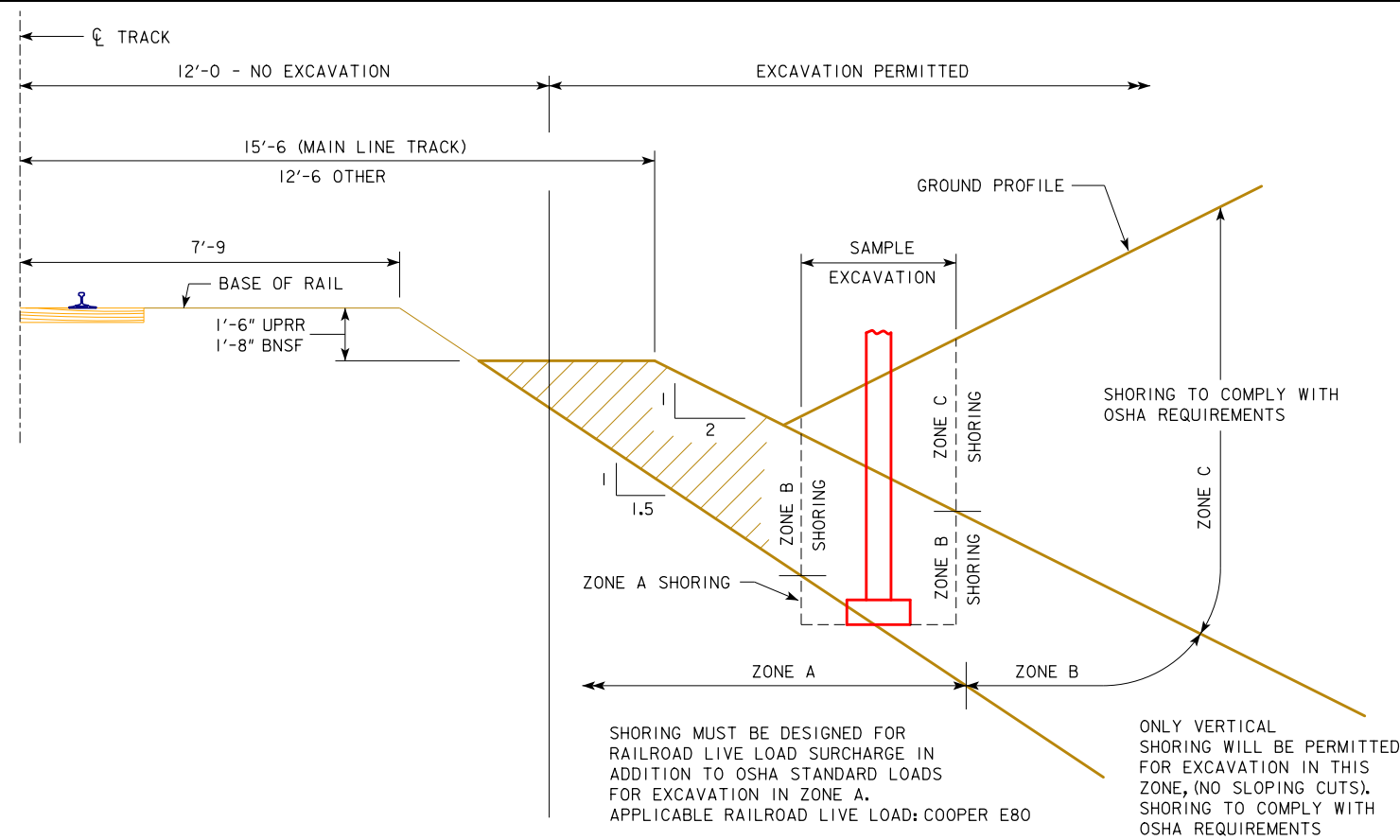
PROPOSED STAGE 3 - TYPICAL BRIDGE SECTION



PROPOSED ULTIMATE BRIDGE TYPICAL SECTION

PRELIMINARY
 DESIGN FOR 28°46' SKEW (RA)
269'-0 x 81'-4 (STAGE 3) PRETEN. PRESTR. CONCRETE BEAM BRIDGE
 71'-0 END SPANS (BTD BEAM TYPE) 127'-0 INTERIOR SPAN
SITUATION PLAN - MISC.
 (1210+38.89, 41' LEFT CL I-80) OCTOBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 2 OF 4 FILE NO. 32036 DESIGN NO. 125

REVISED 09-13 - RAILROAD CHANGED THE MINIMUM VERTICAL CONSTRUCTION CLEARANCE TO 21'-6" DISTANCE FROM MAINLINE TRACK TO EDGE OF EMBANKMENT CHANGED TO 15'-6".
 REVISED 06-2017 - ADDED NOTE OUTSIDE OF SHEET BORDER TO EXPLAIN THE USE OF THIS STANDARD SHEET WITH ARCHIVED METHODS MEMO MM201.
 REVISED 07-2019: FOR UPRR, CHANGED HORIZONTAL DISTANCE OF MINIMUM CONSTRUCTION CLEARANCE ENVELOPE TO 15'-0" (WAS 12'-0").
 ENGLISHMISCELLANEOUSBRIDGES.DGN - 1067 - THIS SHEET ISSUED 12-08.



RAILROAD GENERAL NOTES:

1. RAILROAD REVIEW AND APPROVAL OF SHORING, ERECTION, DEMOLITION, AND FALSEWORK IS REQUIRED. ALLOW A MINIMUM OF FOUR WEEKS FOR THE REVIEW AND APPROVAL OF EACH SUBMITTAL.
2. THE PROPOSED GRADE SEPARATION PROJECT SHALL NOT INCREASE THE QUANTITY AND/OR CHARACTERISTICS OF THE FLOW IN THE RAILROAD'S DITCHES AND/OR DRAINAGE STRUCTURES.
3. THE ELEVATION OF THE EXISTING TOP-OF-RAIL PROFILE SHALL BE VERIFIED BEFORE BEGINNING CONSTRUCTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE RAILROAD PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR MUST SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD.
5. ALL SHORING SYSTEMS THAT IMPACT THE RAILROAD'S OPERATIONS AND/OR SUPPORTS THE RAILROAD'S EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER CURRENT RAILROAD GUIDELINES FOR TEMPORARY SHORING.
6. ALL DEMOLITIONS WITHIN THE RAILROAD'S RIGHT-OF-WAY AND/OR DEMOLITION THAT MAY IMPACT THE RAILROAD'S TRACKS OR OPERATIONS SHALL BE IN COMPLIANCE WITH THE RAILROAD'S DEMOLITION GUIDELINES.
7. ERECTION OVER THE RAILROAD'S RIGHT-OF-WAY SHALL BE DESIGNED TO CAUSE NO INTERRUPTION TO THE RAILROAD'S OPERATION, ENABLING THE TRACK(S) TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD'S REQUIREMENTS.
8. ALL CONSTRUCTION PHASING THAT MAY IMPACT THE RAILROAD OPERATIONS SHALL BE DESIGNED TO CAUSE NO INTERRUPTION TO THE RAILROAD'S OPERATION, ENABLING THE TRACK(S) TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD'S REQUIREMENTS.
9. FALSE-WORK CLEARANCES SHALL COMPLY WITH MINIMUM CONSTRUCTION CLEARANCES.
10. ALL PERMANENT CLEARANCES SHALL BE VERIFIED BEFORE PROJECT CLOSING.
11. FOR RAILROAD COORDINATION PLEASE REFER TO THE RAILROAD COORDINATION REQUIREMENTS AS PART OF SPECIAL PROVISIONS.

GENERAL EXCAVATION ZONES

GENERAL SHORING NOTES:

1. ALL DIMENSIONS ARE MEASURED PERPENDICULAR TO TRACK.
2. PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL BY THE RAILROAD DETAILED PLANS INDICATING THE NATURE AND EXTENT OF THE TRACK PROTECTION SHORING PROPOSED. THE CONTRACTOR SHALL INSTALL THE TEMPORARY SHORING SYSTEM PER THE APPROVED PLANS. DESIGN OF THE TEMPORARY SHORING SYSTEM TO COMPLY WITH GUIDELINES FOR TEMPORARY SHORING.
3. FOR EXCAVATIONS WHICH ENCROACH INTO ZONE A OR B, SHORING PLANS SHALL BE ACCOMPANIED BY DESIGN CALCULATIONS. PLANS AND CALCULATIONS MUST BE SIGNED AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF IOWA.

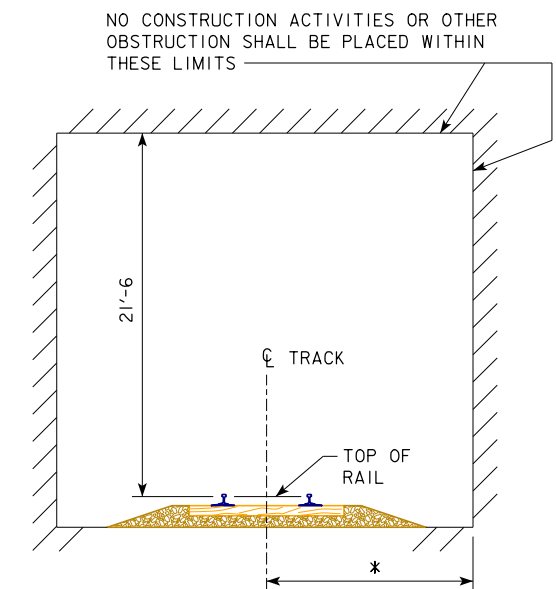
NOTE:
 BNSF = BURLINGTON NORTHERN SANTA FE RAILROAD
 UPRR = UNION PACIFIC RAILROAD

TOP OF RAIL ELEVATIONS

(STATIONS INCREASE WITH MILEPOST INCREASE)

MAIN LINE			
ALIGNMENT: LEFT RAIL		ALIGNMENT: RIGHT RAIL	
STATION	ELEVATION	STATION	ELEVATION
0+00.0	*1012.34	0+00.0	*1012.35
1+16.9	1012.39	1+16.7	1012.41
2+48.2	1012.44	2+48.2	1012.46
3+62.4	1012.25	3+62.4	1012.27
4+60.9	1012.25	4+61.4	1012.24
5+64.5	1012.40	5+64.5	1012.41
6+65.2	1012.44	6+65.1	1012.46
7+60.9	1012.64	7+61.3	1012.66
8+61.5	1012.76	8+61.8	1012.73
9+12.0	1012.69	9+12.1	1012.63
9+55.5	1012.61	9+54.2	1012.59
9+84.4	1012.50	9+84.1	1012.50
9+98.6	1012.46	9+98.2	1012.41
① 10+00.0	----	① 10+00.0	----
10+21.2	1012.41	10+21.1	1012.42
10+46.6	1012.31	10+47.0	1012.30
10+76.7	1012.16	10+77.3	1012.15
11+39.7	1011.87	11+40.4	1011.87
12+10.8	1011.44	12+11.1	1011.46
13+10.5	1010.60	13+10.9	1010.61
14+11.1	1009.52	14+11.1	1009.53
15+10.9	1008.31	15+11.1	1008.31
16+10.8	1007.23	16+11.0	1007.24
17+10.9	1006.23	17+10.8	1006.24
18+11.1	1005.37	18+11.0	1005.36
19+11.0	1004.55	19+11.0	1004.55
20+00.00	*1003.70	20+00.0	*1003.69

① EXISTING TRACK MP STA. 299.25 (CL. UPRR AT CL 1-80) = STA. 10+00.0
 *ELEVATION INTERPOLATED BETWEEN SURVEY SHOTS.



MINIMUM CONSTRUCTION CLEARANCE ENVELOPE
 (NORMAL TO RAILROAD)

* 15'-0" FOR BNSF AND 15'-0" FOR UPRR

PRELIMINARY

DESIGN FOR 28°46' SKEW (RA)

269'-0 x 81'-4 (STAGE 3) PRETEN. PRESTR. CONCRETE BEAM BRIDGE

71'-0 END SPANS (BTD BEAM TYPE) 127'-0 INTERIOR SPAN

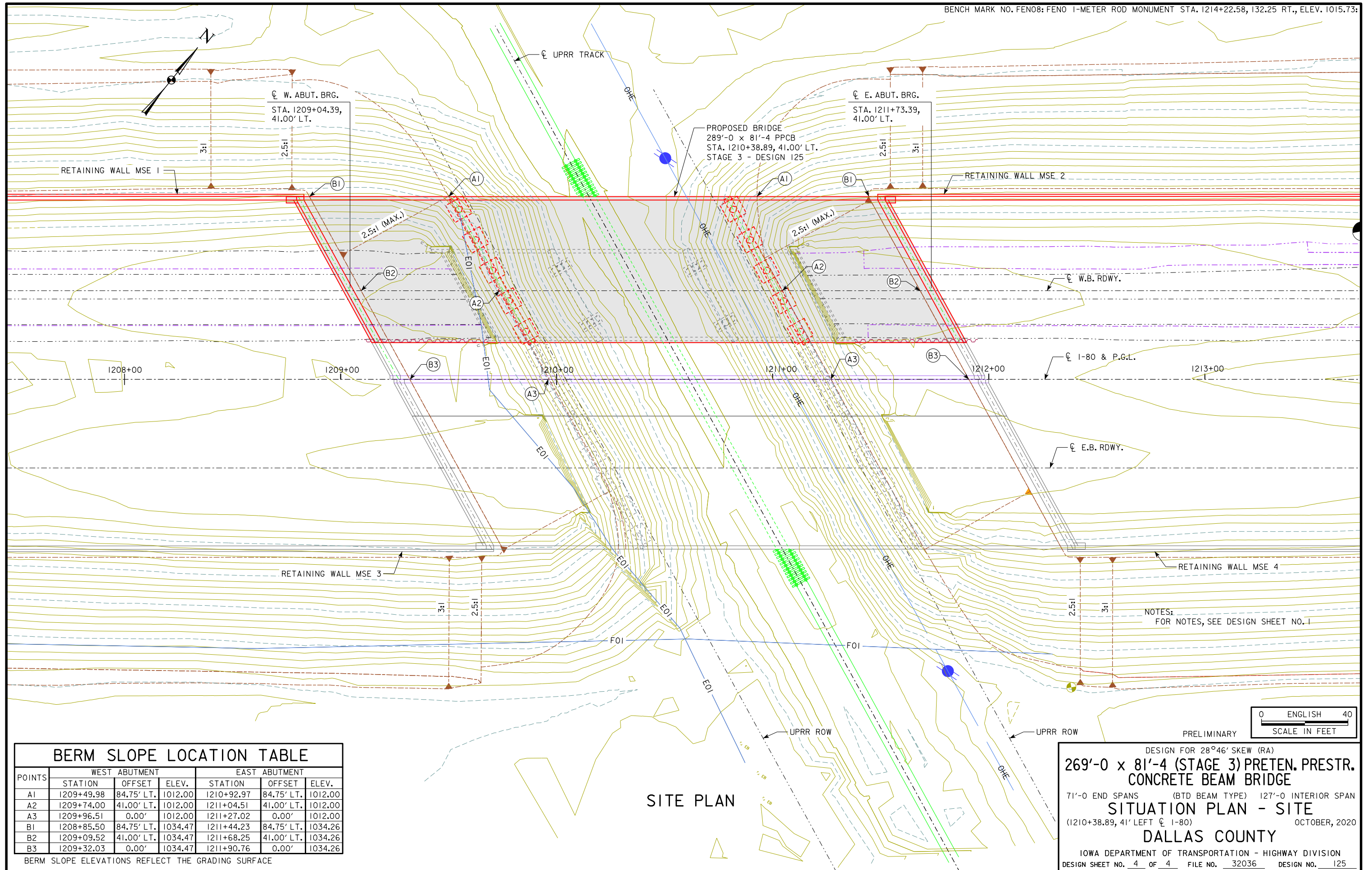
SITUATION PLAN - RAILROAD

(1210+38.89, 41' LEFT CL 1-80) OCTOBER, 2020

DALLAS COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 3 OF 4 FILE NO. 32036 DESIGN NO. 125



SITE PLAN

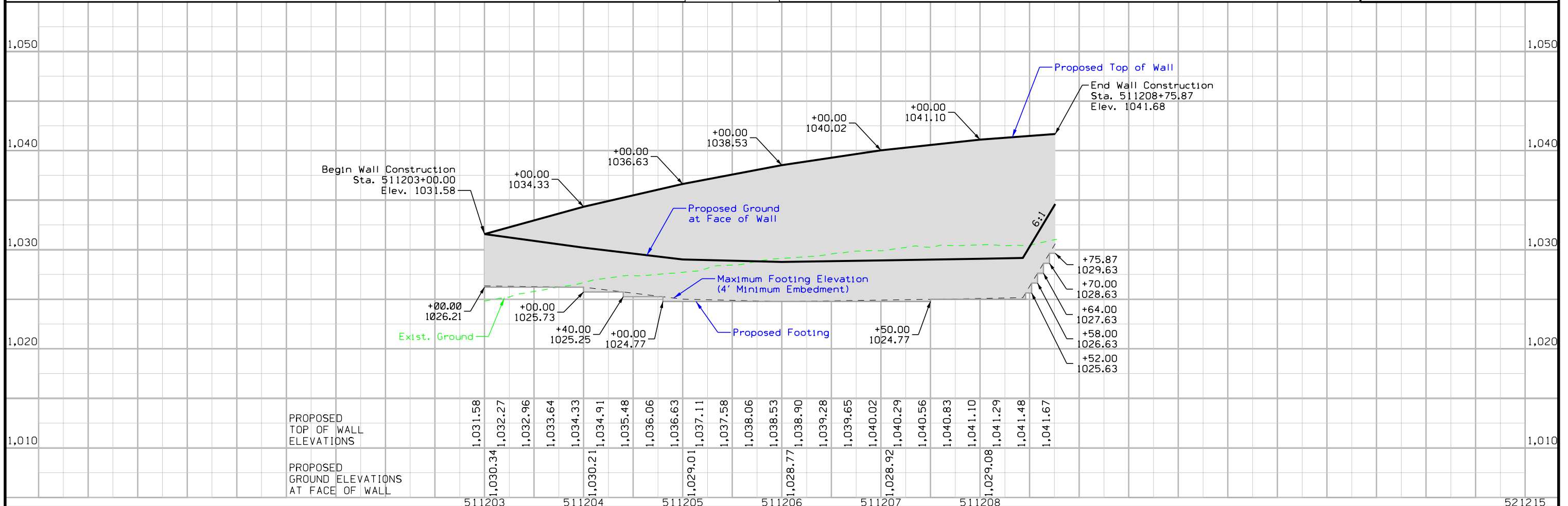
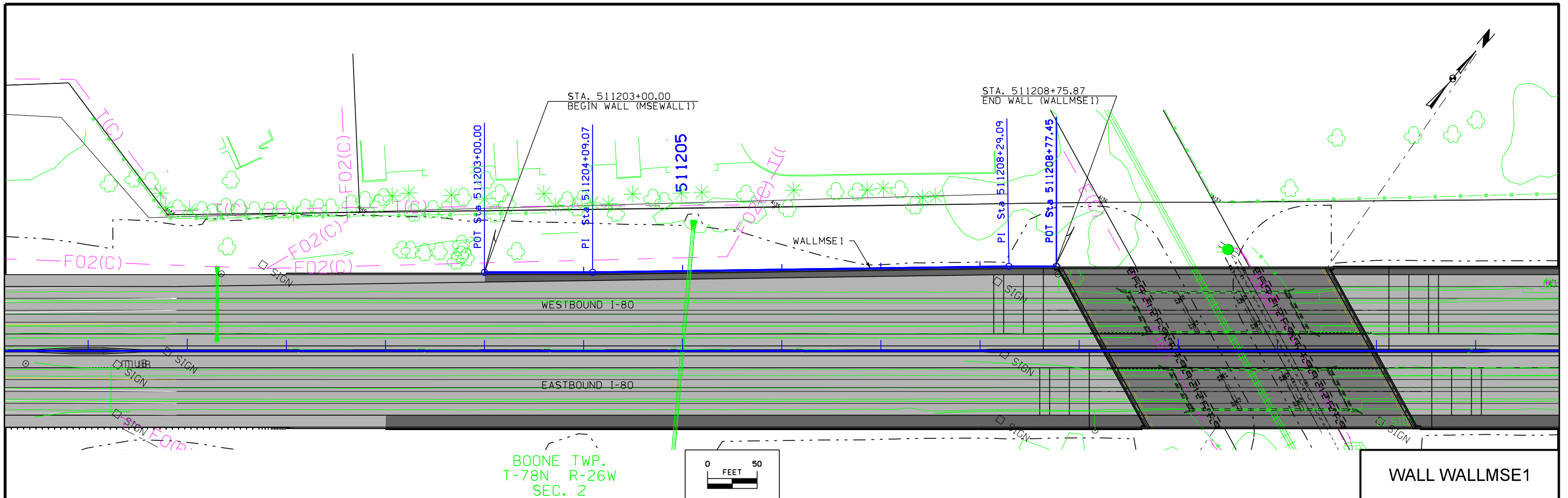
BERM SLOPE LOCATION TABLE						
POINTS	WEST ABUTMENT			EAST ABUTMENT		
	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
A1	1209+49.98	84.75' LT.	1012.00	1210+92.97	84.75' LT.	1012.00
A2	1209+74.00	41.00' LT.	1012.00	1211+04.51	41.00' LT.	1012.00
A3	1209+96.51	0.00'	1012.00	1211+27.02	0.00'	1012.00
B1	1208+85.50	84.75' LT.	1034.47	1211+44.23	84.75' LT.	1034.26
B2	1209+09.52	41.00' LT.	1034.47	1211+68.25	41.00' LT.	1034.26
B3	1209+32.03	0.00'	1034.47	1211+90.76	0.00'	1034.26

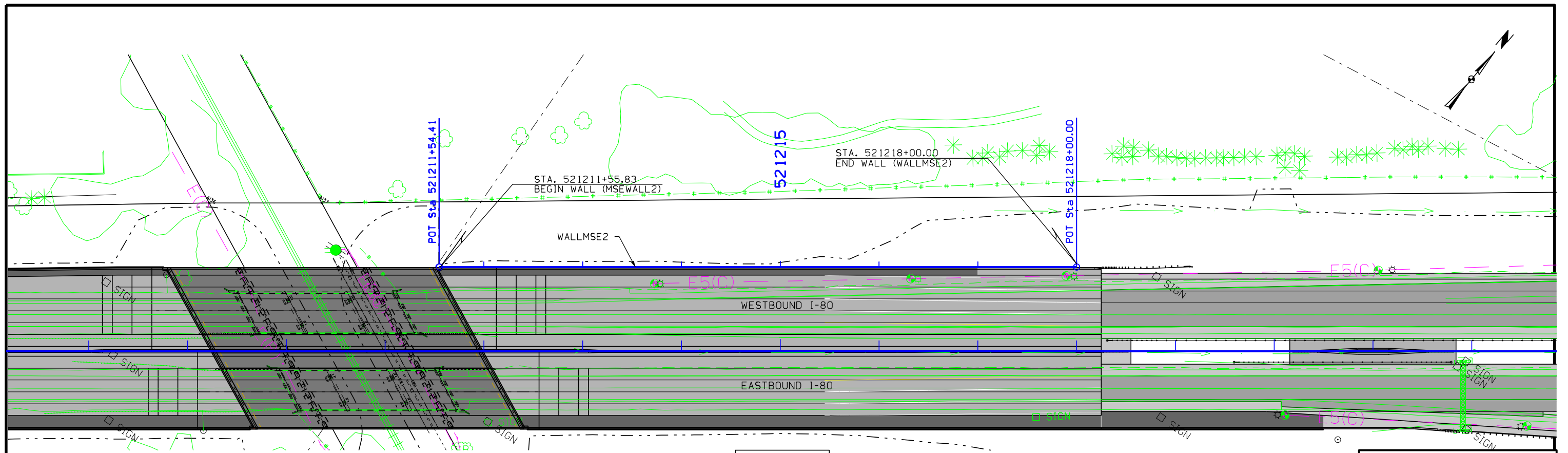
BERM SLOPE ELEVATIONS REFLECT THE GRADING SURFACE

DESIGN FOR 28°46' SKEW (RA)
269'-0" x 81'-4" (STAGE 3) PRETEN. PRESTR. CONCRETE BEAM BRIDGE
 71'-0" END SPANS (BTD BEAM TYPE) 127'-0" INTERIOR SPAN
SITUATION PLAN - SITE
 (1210+38.89, 41' LEFT CL I-80) OCTOBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 4 OF 4 FILE NO. 32036 DESIGN NO. 125

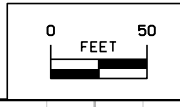


NOTES:
FOR NOTES, SEE DESIGN SHEET NO. 1

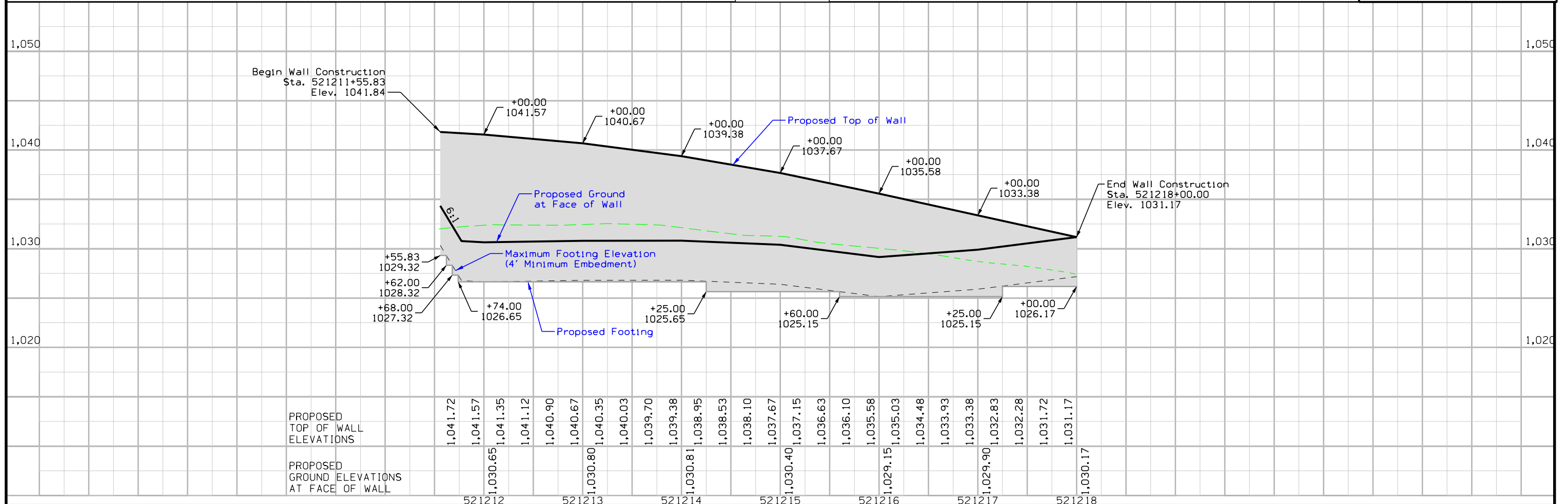




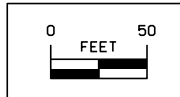
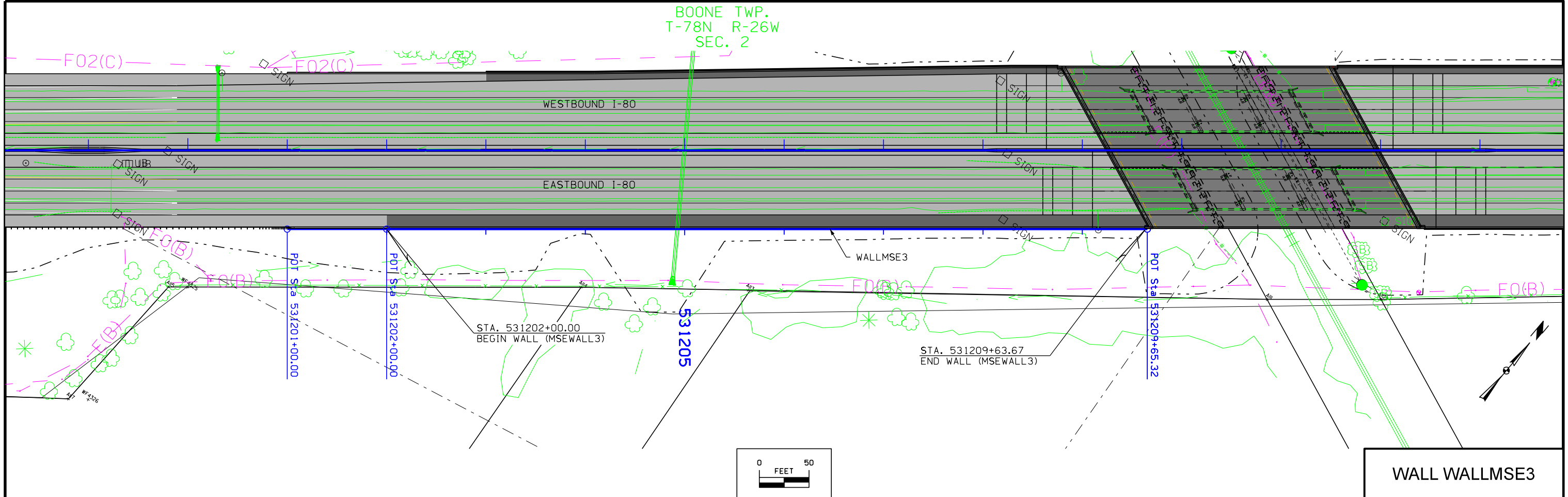
BOONE TWP.
T-78N R-26W
SEC. 2



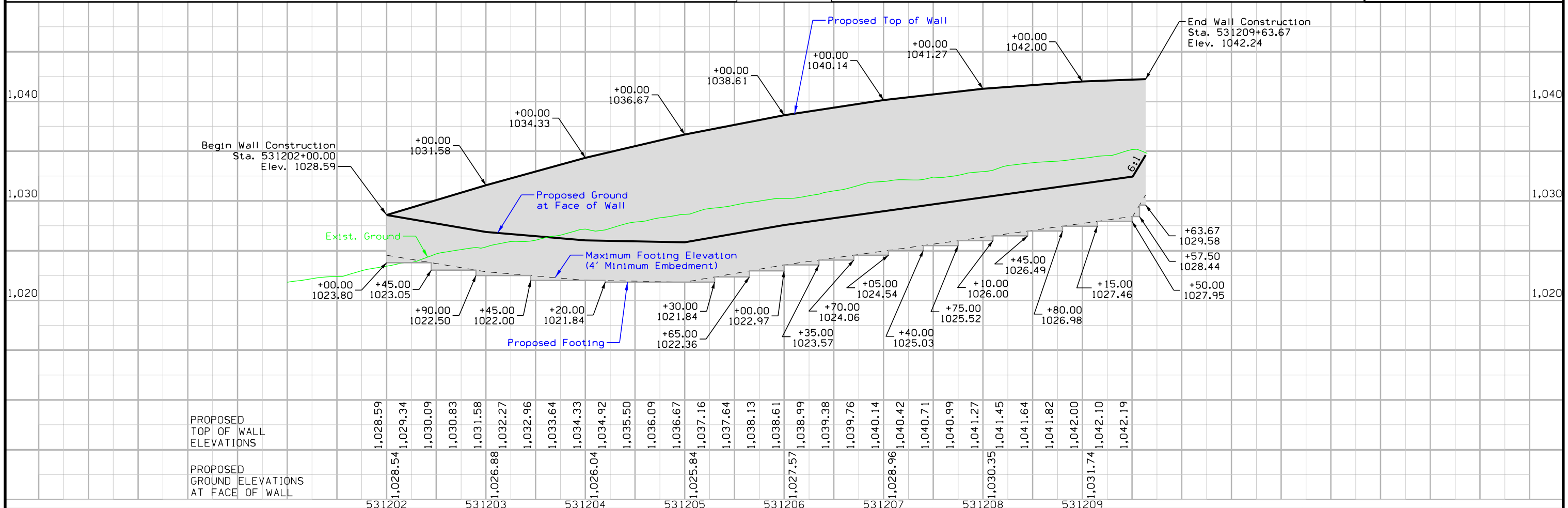
WALL WALLMSE2



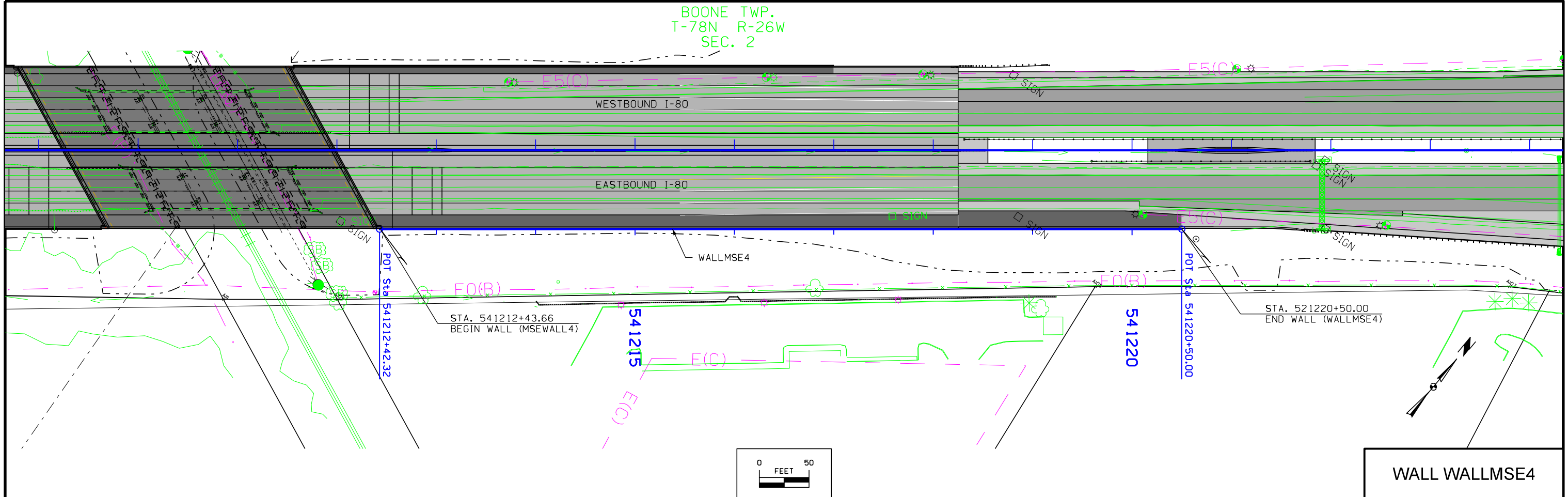
BOONE TWP.
T-78N R-26W
SEC. 2



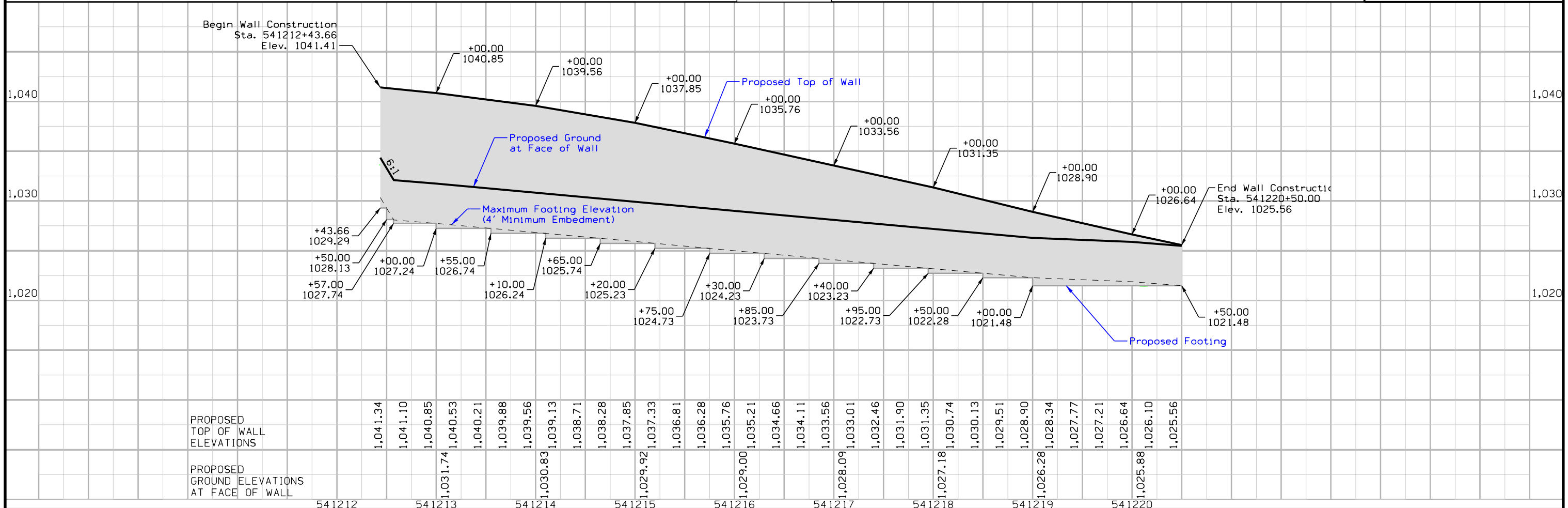
WALL WALLMSE3

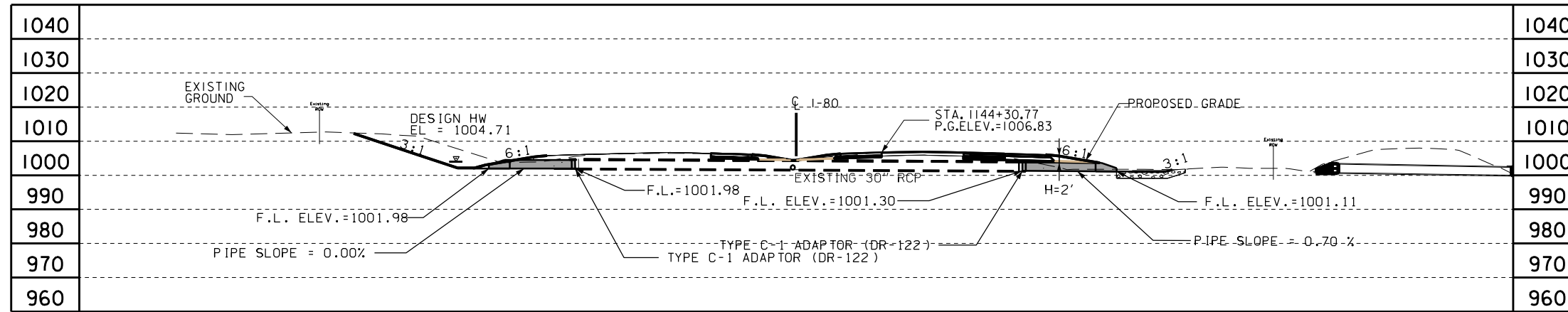


BOONE TWP.
T-78N R-26W
SEC. 2



WALL WALLMSE4





LONGITUDINAL SECTION ALONG CULVERT

TRAFFIC ESTIMATE

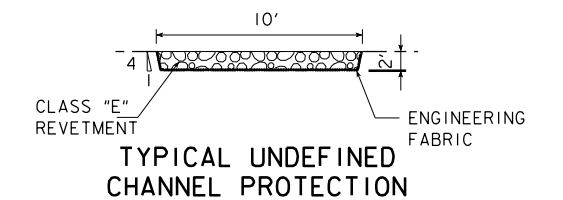
2020 AADT	93700	V.P.D.
2045 AADT	149000	V.P.D.
2045 DHV	7000	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALS	--	

LOCATION

INTERSTATE 80
 T-78 N R-26 W
 SECTION 10
 BOONE TOWNSHIP
 DALLAS COUNTY
 LATITUDE 41.576817°
 LONGITUDE -93.838769°

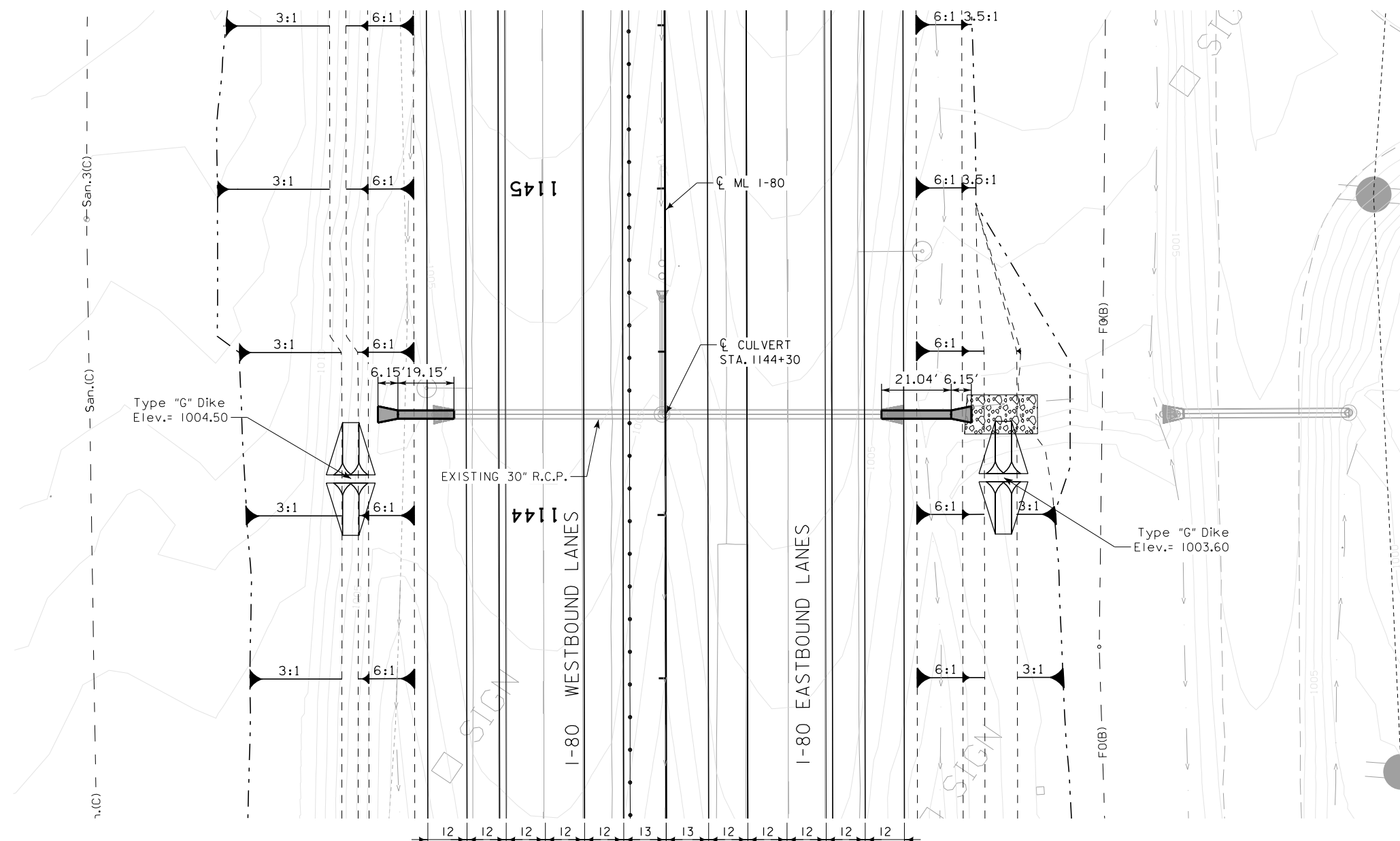
HYDRAULIC DATA

DRAINAGE AREA = 6.3 ACRES
 $Q_{50} = 25.2$ CFS
 HW ELEV. = 1004.71

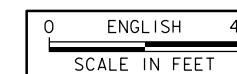


QUANTITIES

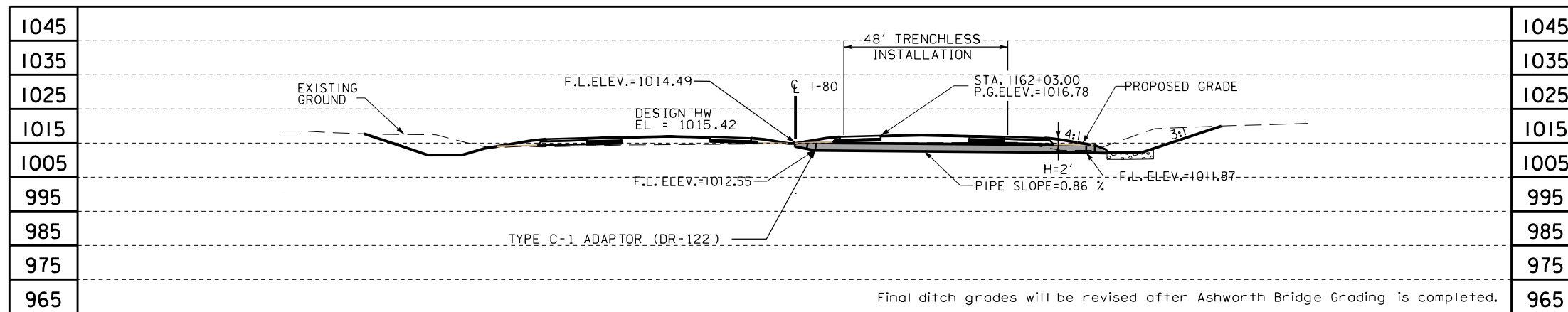
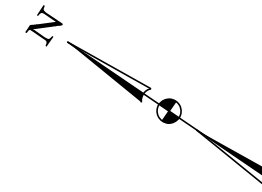
CLASS 'E' REVETMENT 28 TONS
 ENGINEERING FABRIC 15 SQ. YDS.



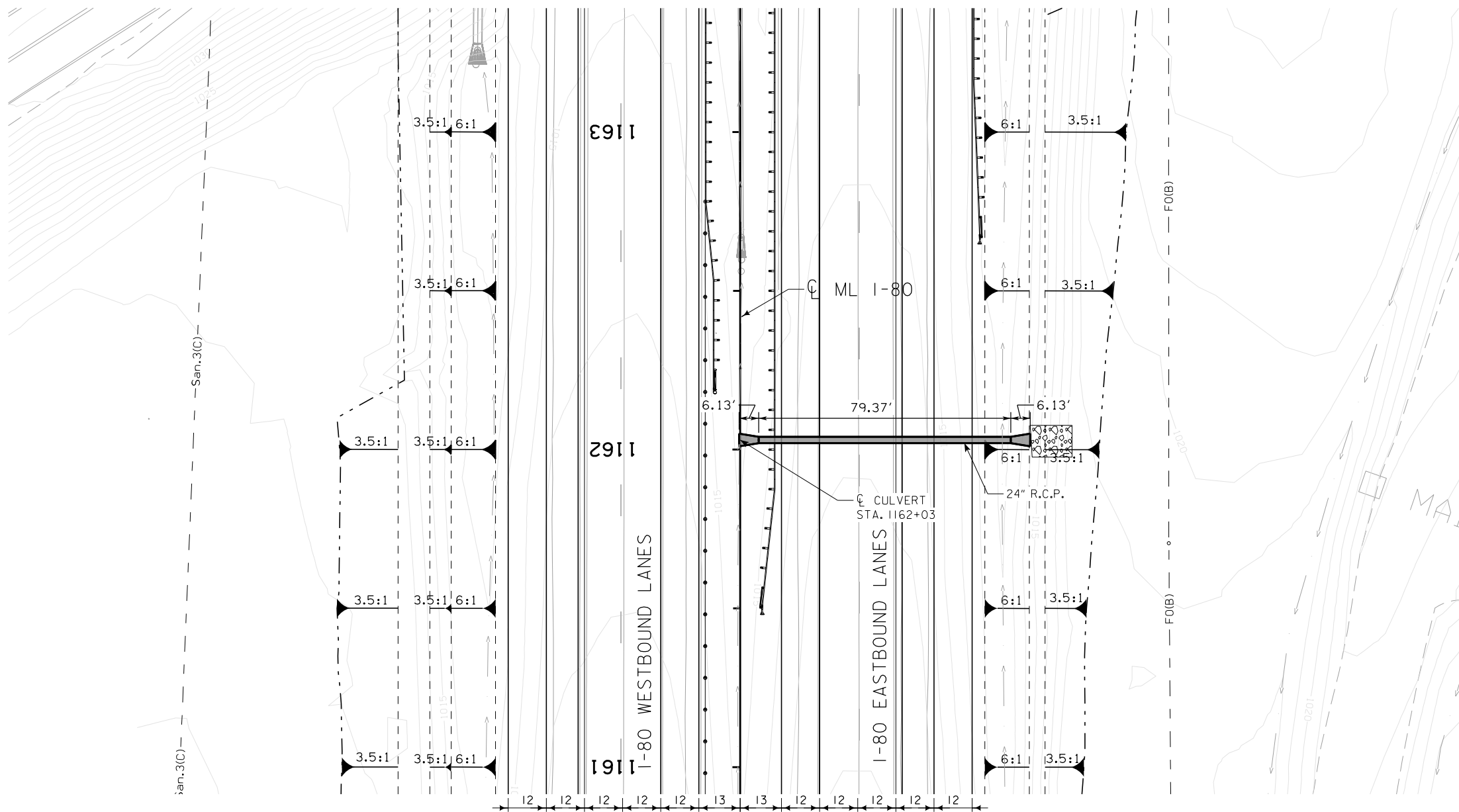
PLAT PLAN



DESIGN FOR A 0° SKEW
30 in. x 19 ft. - Left
30 in. x 21 ft. - Right
REINFORCED CONC. PIPE EXTENSIONS
PLAT PLAN
 STA. 1144+30 (ML_080) DECEMBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.



LONGITUDINAL SECTION ALONG \bar{C} CULVERT



PLAT PLAN



TRAFFIC ESTIMATE

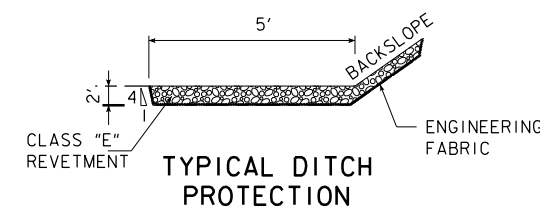
2020 AADT	93700	V.P.D.
2045 AADT	149000	V.P.D.
2045 DHV	7000	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALs	--	

LOCATION

INTERSTATE 80
 T-78 N R-26 W
 SECTION 3
 BOONE TOWNSHIP
 DALLAS COUNTY
 LATITUDE 41.579506°
 LONGITUDE -93.833408°

HYDRAULIC DATA

DRAINAGE AREA = 1.11 ACRES - ROLLING
 Q₅₀ = 4.0 CFS
 HW ELEV. = 1015.42



QUANTITIES

CLASS 'E' REVETMENT 14 TONS
 ENGINEERING FABRIC 8 SQ. YDS.

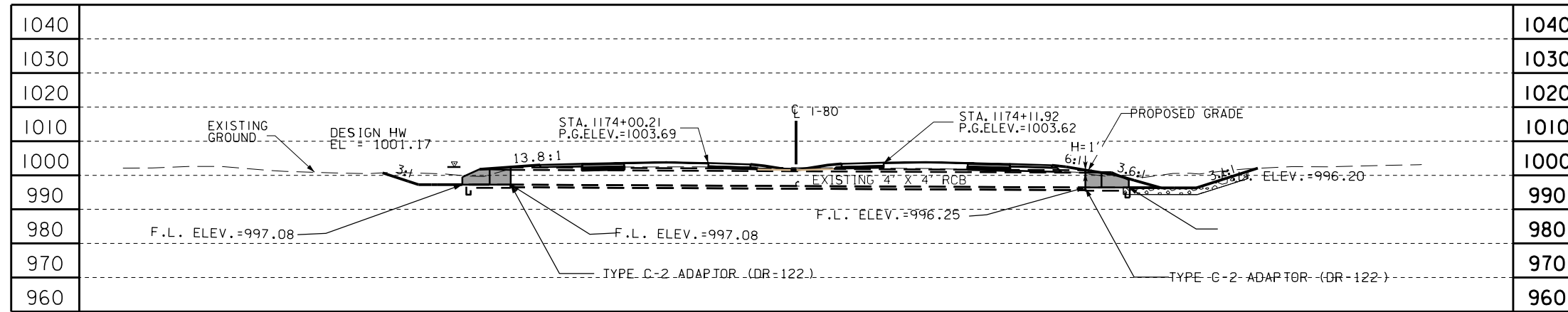
DESIGN FOR A 0° SKEW
**24 in. x 79 ft.
 REINFORCED CONC. PIPE**

PLAT PLAN

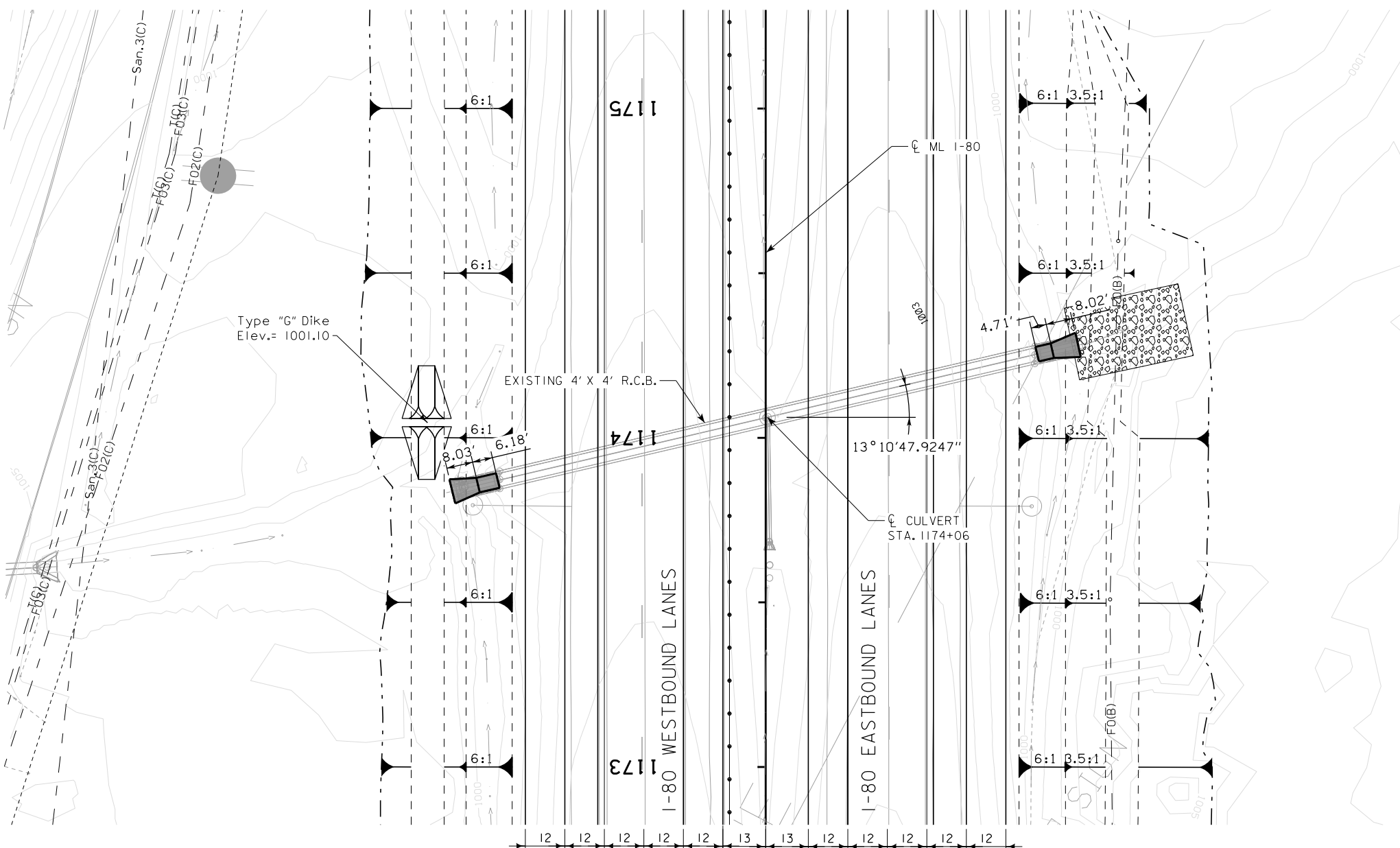
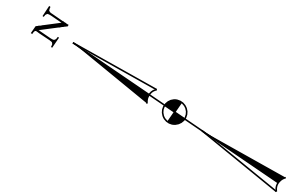
STA. 1162+03 (ML-080) DECEMBER, 2020

DALLAS COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.



LONGITUDINAL SECTION ALONG CL CULVERT



PLAT PLAN

TRAFFIC ESTIMATE

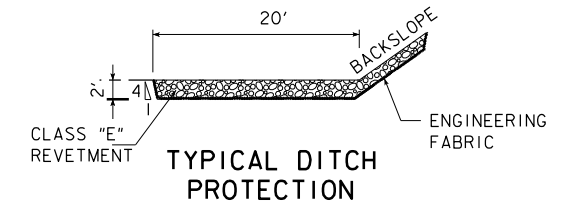
2020 AADT	93700	V.P.D.
2045 AADT	149000	V.P.D.
2045 DHV	7000	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALS	--	

LOCATION

INTERSTATE 80
T-78 N R-26 W
SECTIONS 3 & 10
BOONE TOWNSHIP
DALLAS COUNTY
LATITUDE 41.581444°
LONGITUDE -93.829844°

HYDRAULIC DATA

DRAINAGE AREA = 58 ACRES - ROLLING
Q₅₀ = 169.5 CFS
HW ELEV. = 1001.17

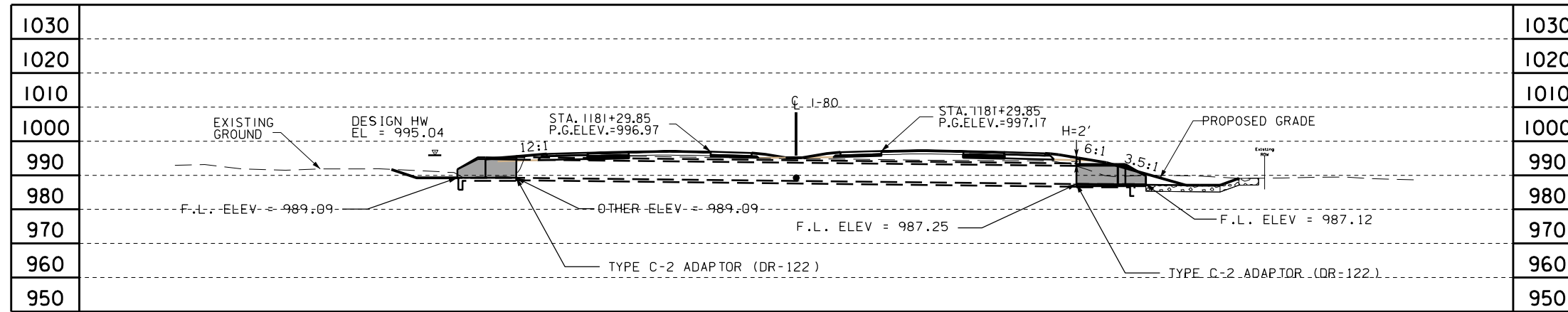


QUANTITIES

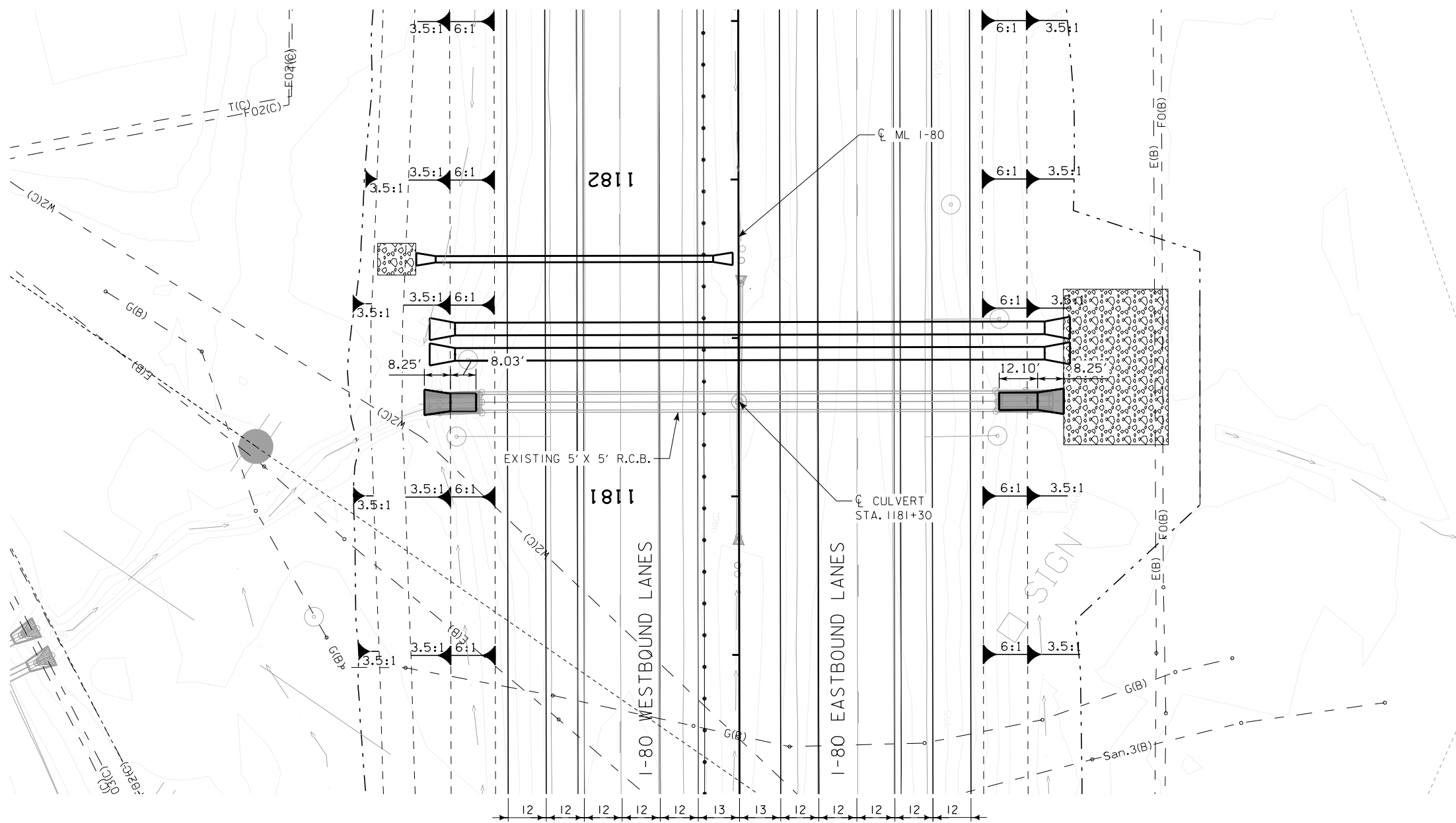
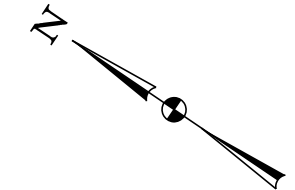
CLASS 'E' REVETMENT 83 TONS
ENGINEERING FABRIC 38 SQ. YDS.

DESIGN FOR A 13° 10' 47.9247" RT AHEAD SKEW
54 in. x 6 ft. - Left
54 in. x 5 ft. - Right
REINFORCED CONC. PIPE EXTENSIONS
PLAT PLAN
STA. 1174+06 (ML-080) DECEMBER, 2020
DALLAS COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.





LONGITUDINAL SECTION ALONG CULVERT



PLAT PLAN

TRAFFIC ESTIMATE

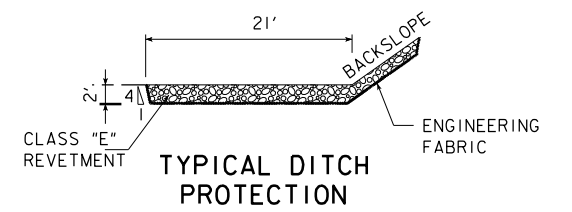
2020 AADT	93700	V.P.D.
2045 AADT	149000	V.P.D.
2045 DHV	7000	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALS	--	

LOCATION

INTERSTATE 80
 T-78 N R-26 W
 SECTION 2
 BOONE TOWNSHIP
 DALLAS COUNTY
 LATITUDE 41.582539°
 LONGITUDE -93.827669°

HYDRAULIC DATA

DRAINAGE AREA = 121 ACRES - ROLLING
 Q₅₀ = 397.7 CFS
 HW ELEV. = 995.04

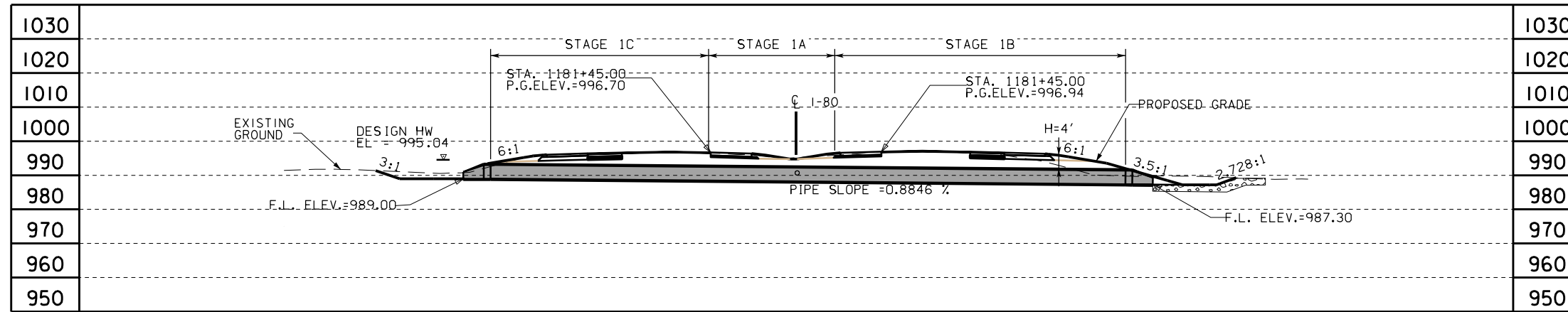


QUANTITIES

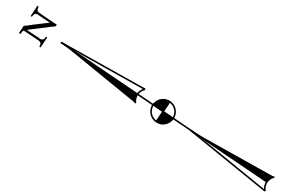
CLASS 'E' REVETMENT	95 TONS
ENGINEERING FABRIC	43 SQ. YDS.

DESIGN FOR A 0° SKEW
66 in. x 8 ft. - Left
66 in. x 12 ft. - Right
REINFORCED CONC. PIPE EXTENSIONS
PLAT PLAN
 STA. 1181+30 (ML-080) DECEMBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.





LONGITUDINAL SECTION ALONG ϕ CULVERT



TRAFFIC ESTIMATE

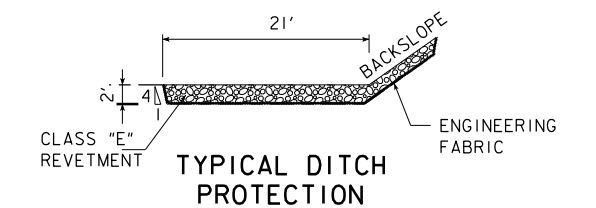
2020 AADT	93700	V.P.D.
2045 AADT	149000	V.P.D.
2045 DHV	7000	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALs	--	

LOCATION

INTERSTATE 80
 T-78 N R-26 W
 SECTION 2
 BOONE TOWNSHIP
 DALLAS COUNTY
 LATITUDE 41.582539°
 LONGITUDE -93.827669°

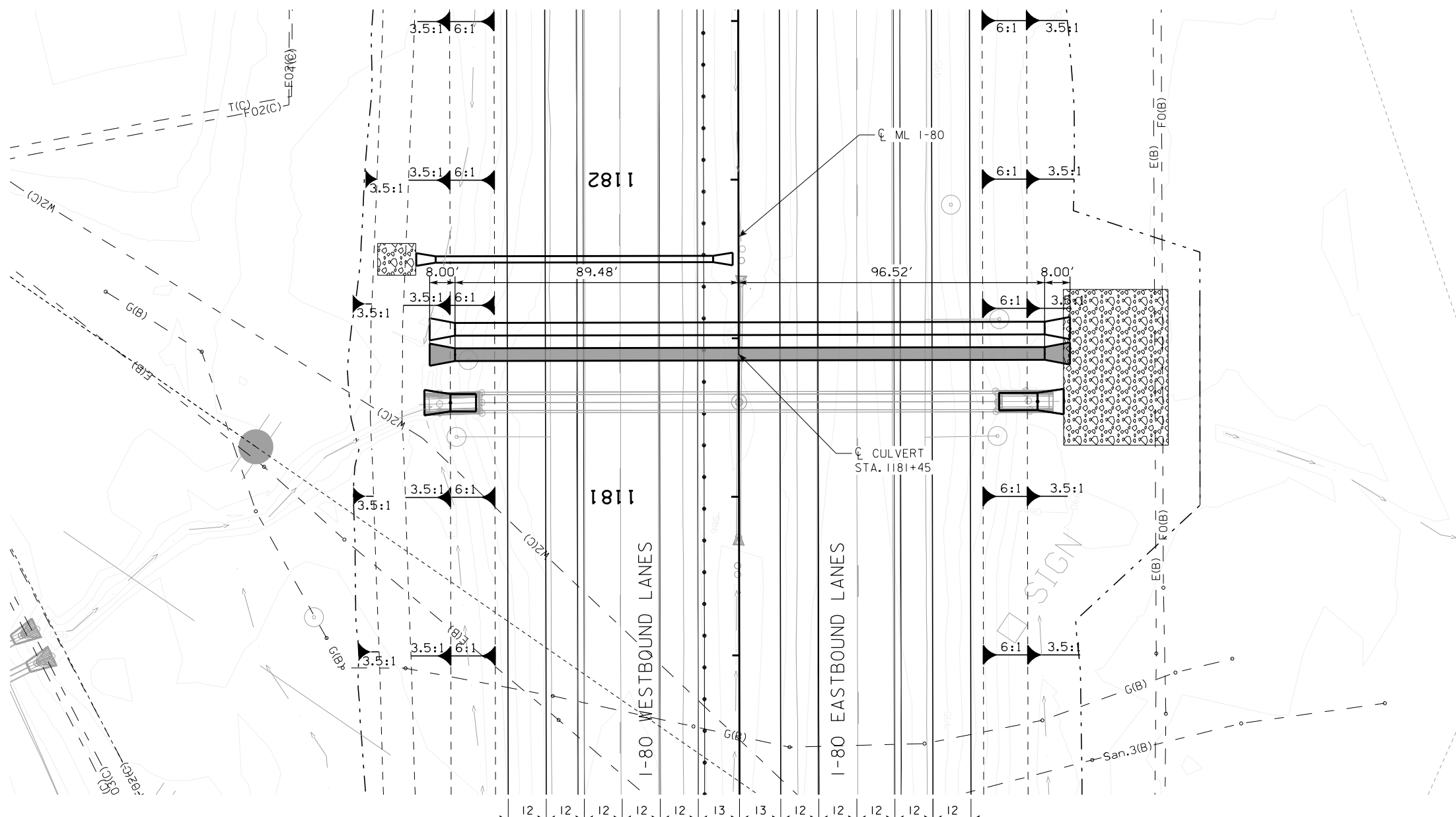
HYDRAULIC DATA

DRAINAGE AREA = 121 ACRES - ROLLING
 $Q_{50} = 397.7$ CFS
 HW ELEV. = 995.04



QUANTITIES

CLASS 'E' REVETMENT 95 TONS
 ENGINEERING FABRIC 43 SQ. YDS.



PLAT PLAN



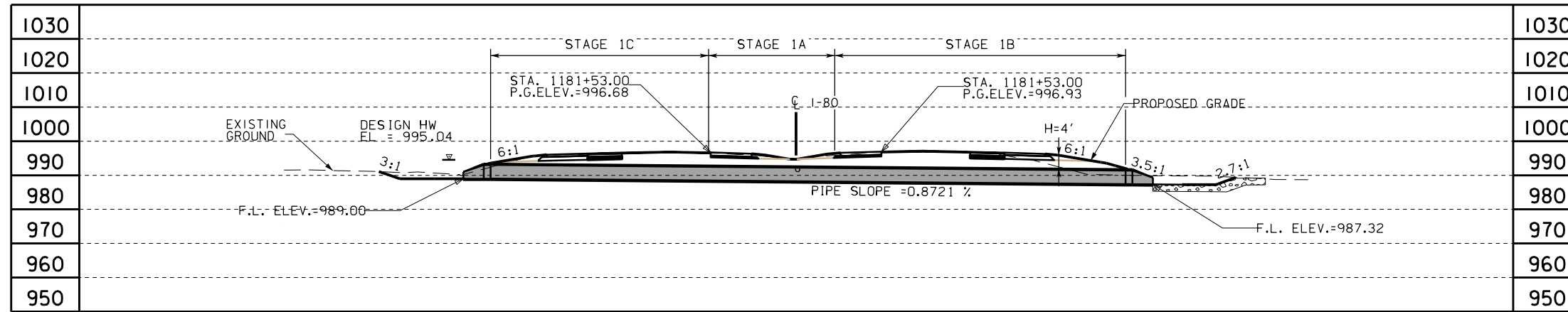
DESIGN FOR A 0° SKEW
48 in. x 186 ft.
REINFORCED CONCRETE PIPE

PLAT PLAN

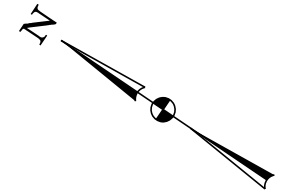
STA. 1181+45 (ML-080) DECEMBER, 2020

DALLAS COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.



LONGITUDINAL SECTION ALONG ϕ CULVERT



TRAFFIC ESTIMATE

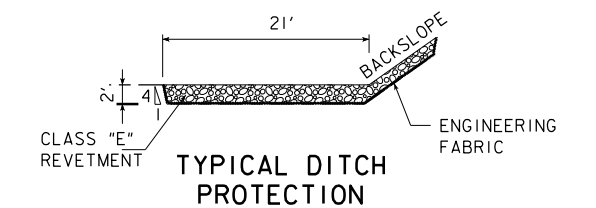
2020 AADT	93700	V.P.D.
2045 AADT	149000	V.P.D.
2045 DHV	7000	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALS	--	

LOCATION

INTERSTATE 80
 T-78 N R-26 W
 SECTION 2
 BOONE TOWNSHIP
 DALLAS COUNTY
 LATITUDE 41.582539°
 LONGITUDE -93.827669°

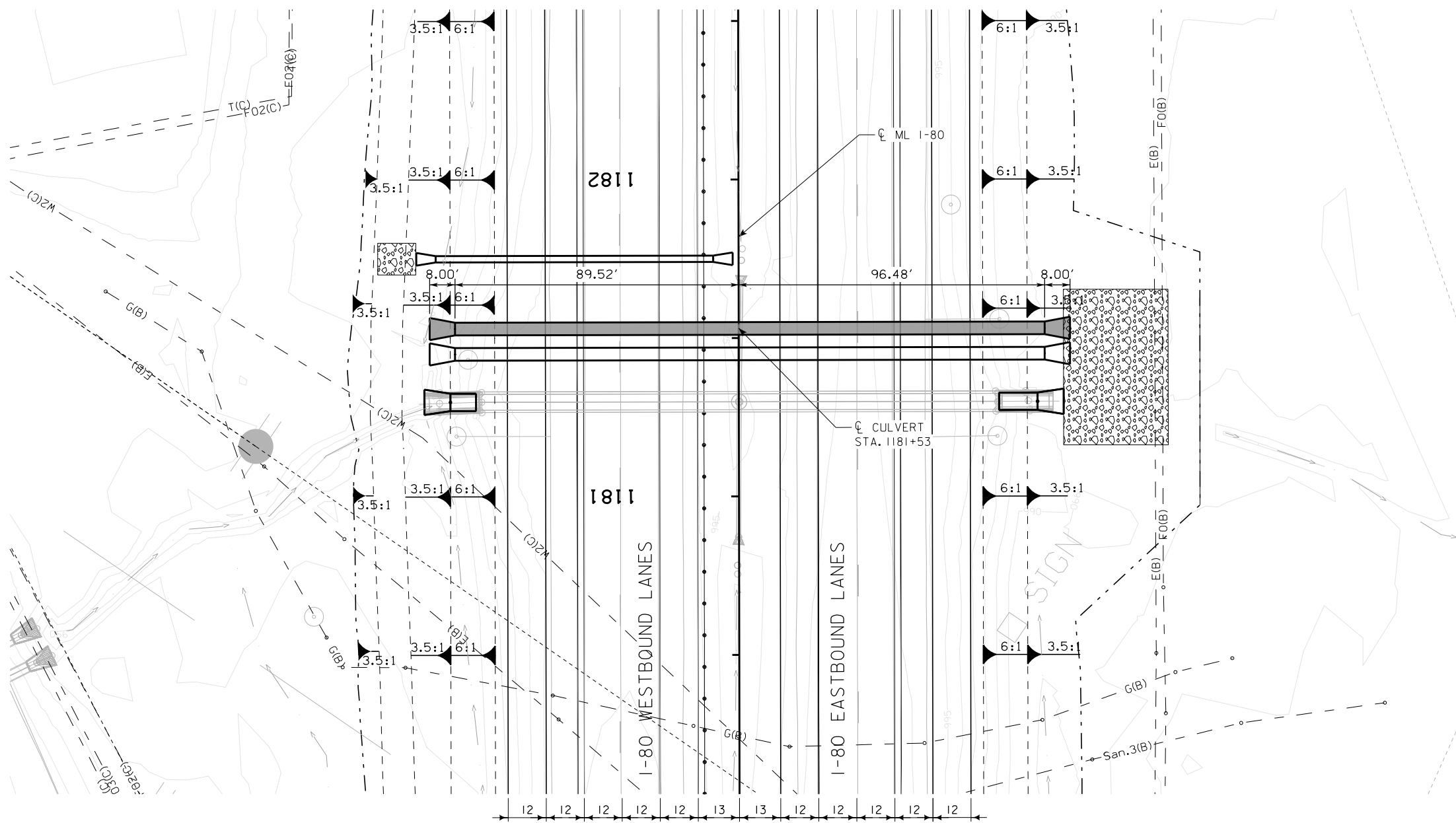
HYDRAULIC DATA

DRAINAGE AREA = 121 ACRES - ROLLING
 $Q_{50} = 397.7$ CFS
 HW ELEV. = 995.04



QUANTITIES

CLASS 'E' REVETMENT 95 TONS
 ENGINEERING FABRIC 43 SQ. YDS.



PLAT PLAN



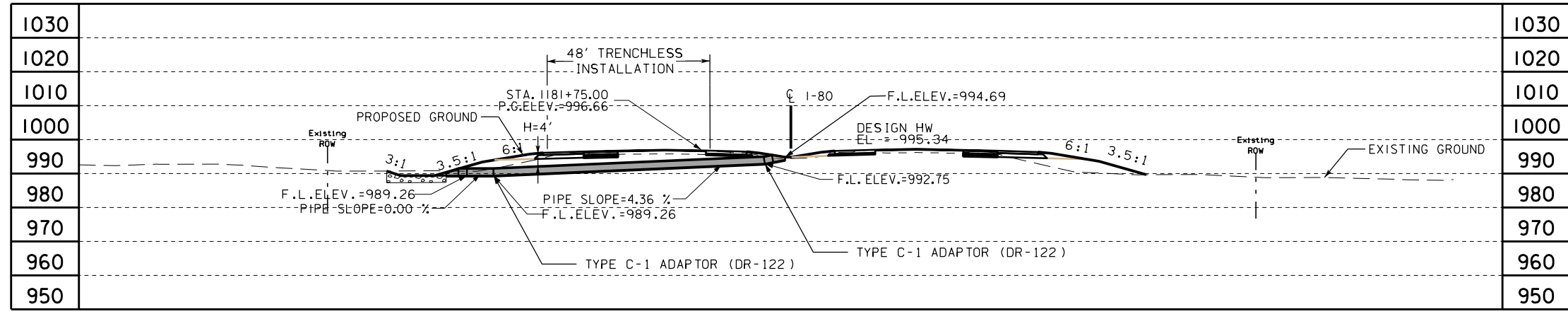
DESIGN FOR A 0° SKEW
48 in. x 186 ft.
REINFORCED CONCRETE PIPE

PLAT PLAN

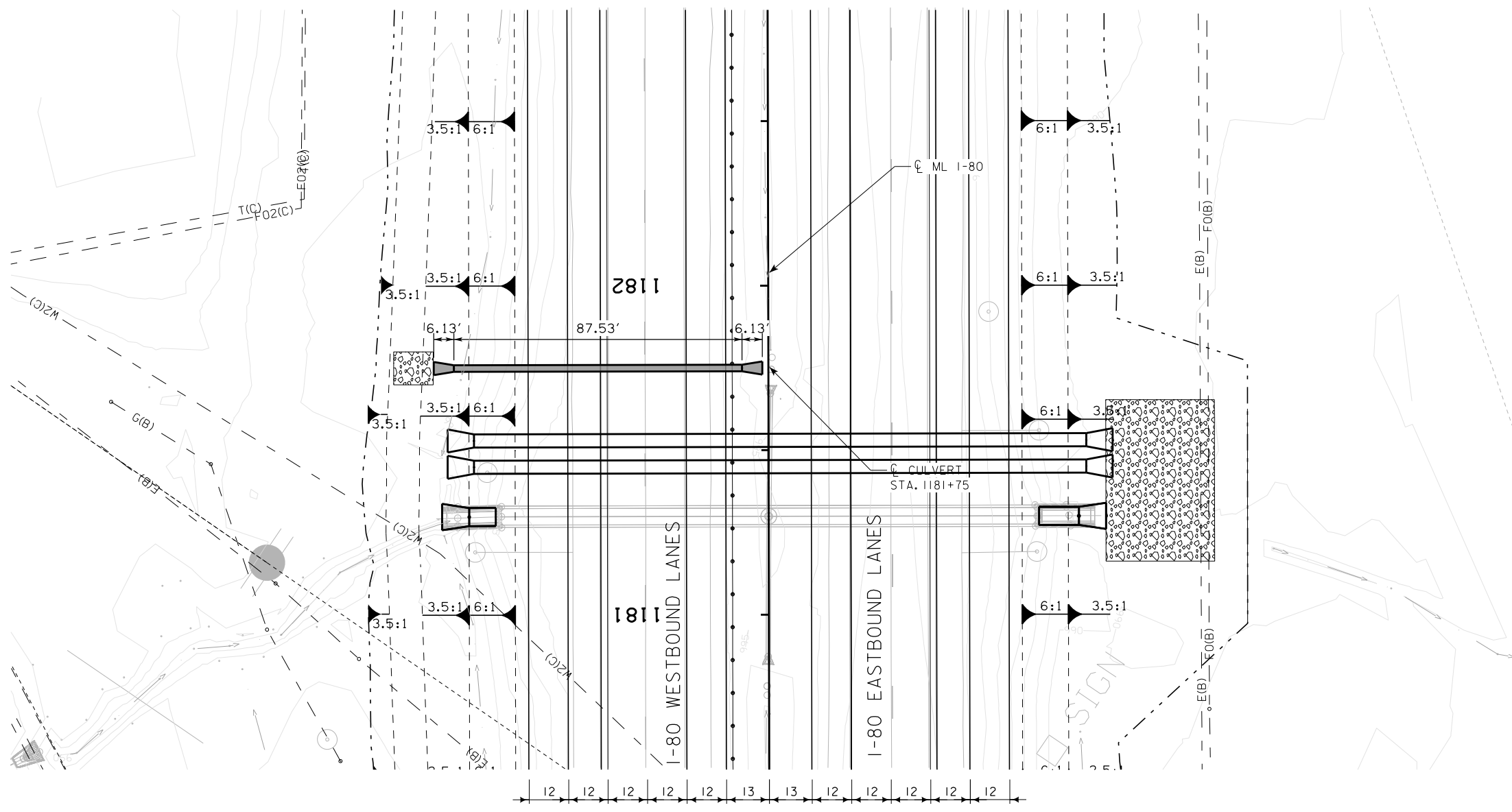
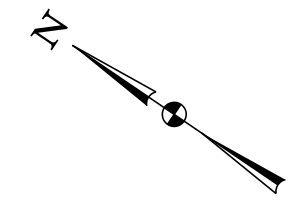
STA. 1181+53 (ML-080) DECEMBER, 2020

DALLAS COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.



LONGITUDINAL SECTION ALONG CL CULVERT



PLAT PLAN

TRAFFIC ESTIMATE

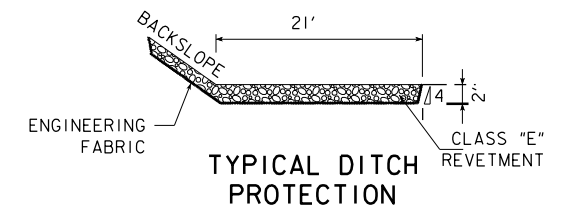
2020 AADT	93700	V.P.D.
2045 AADT	149000	V.P.D.
2045 DHV	7000	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALs	--	

LOCATION

INTERSTATE 80
 T-78 N R-26 W
 SECTION 2
 BOONE TOWNSHIP
 DALLAS COUNTY
 LATITUDE 41.582608°
 LONGITUDE -93.827522°

HYDRAULIC DATA

DRAINAGE AREA = 1.5 ACRES - MEDIAN
 Q₅₀ = 8.4 CFS
 HW ELEV. = 995.34



QUANTITIES

CLASS 'E' REVETMENT 95 TONS
 ENGINEERING FABRIC 43 SQ. YDS.

DESIGN FOR A 0° SKEW
24 in. x 88 ft.
REINFORCED CONCRETE PIPE

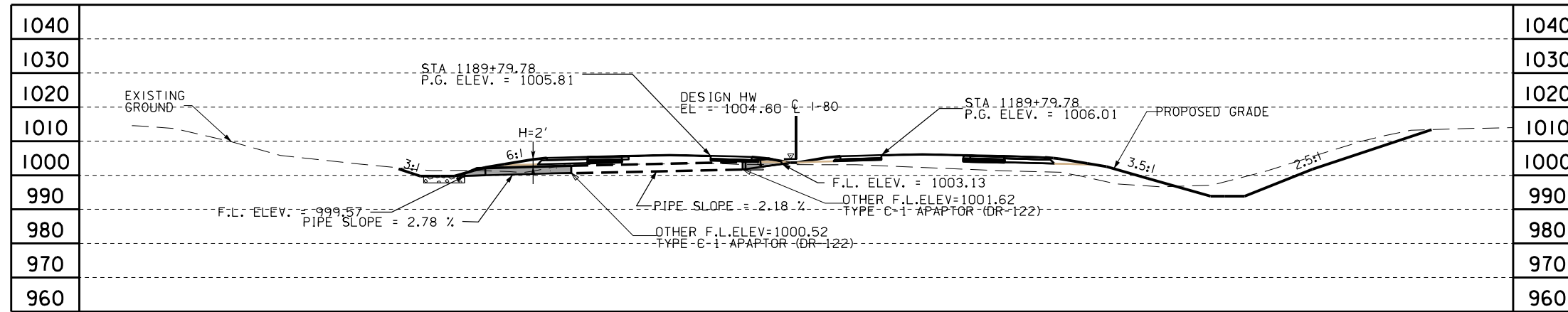
PLAT PLAN

STA. 1181+75 (ML-080) DECEMBER, 2020

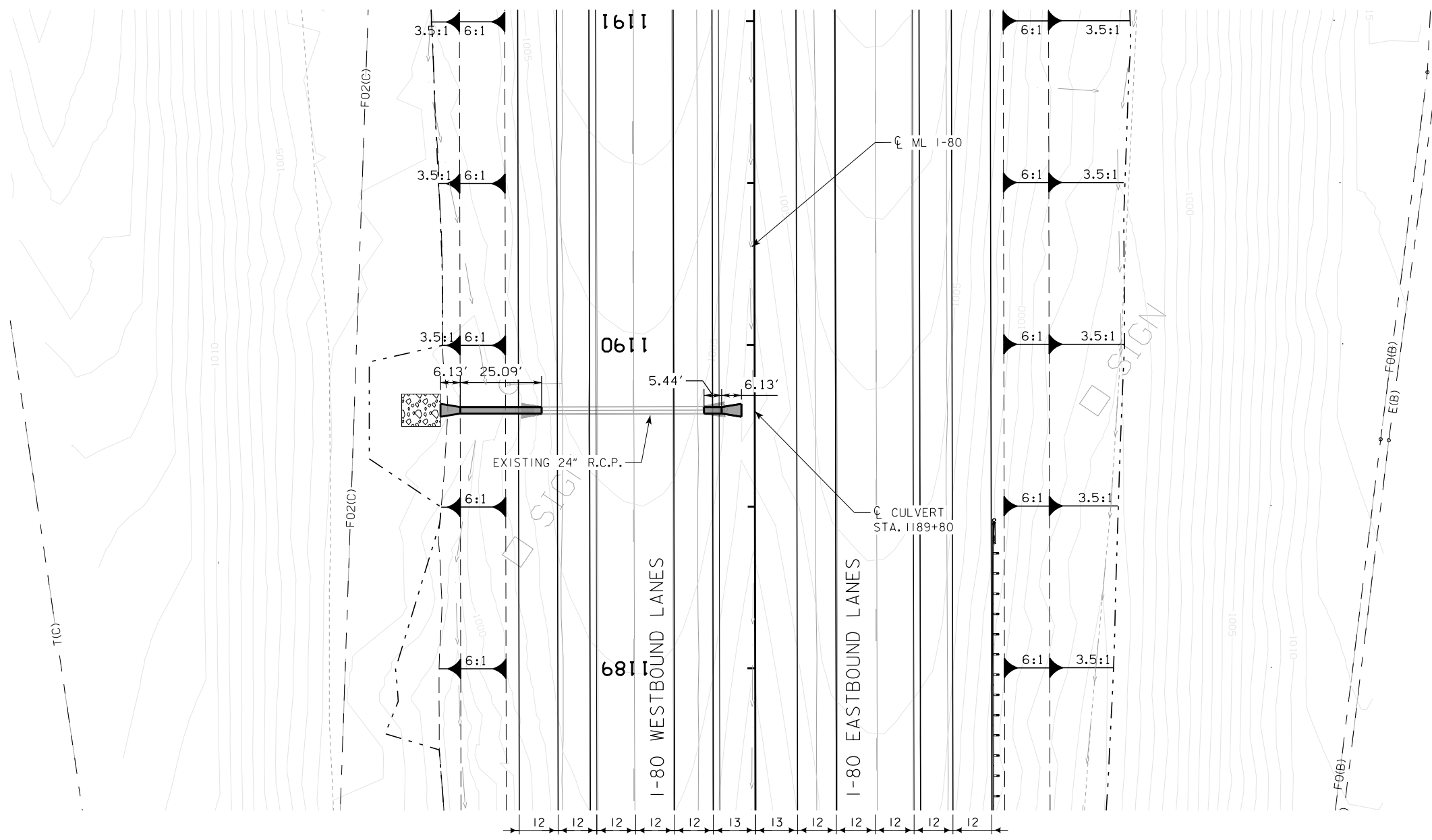
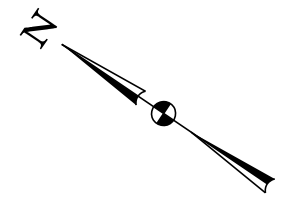
DALLAS COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.





LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN

TRAFFIC ESTIMATE

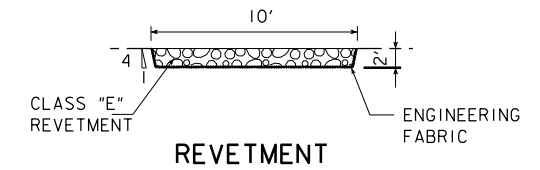
2020 AADT	93700	V.P.D.
2045 AADT	149000	V.P.D.
2045 DHV	7000	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALS	--	

LOCATION

INTERSTATE 80
T-78 N R-26 W
SECTION 2
BOONE TOWNSHIP
DALLAS COUNTY
LATITUDE 41.583878°
LONGITUDE -93.825097°

HYDRAULIC DATA

DRAINAGE AREA = 1.26 ACRES - MEDIAN
Q₅₀ = 8.6 CFS
HW ELEV. = 1004.60

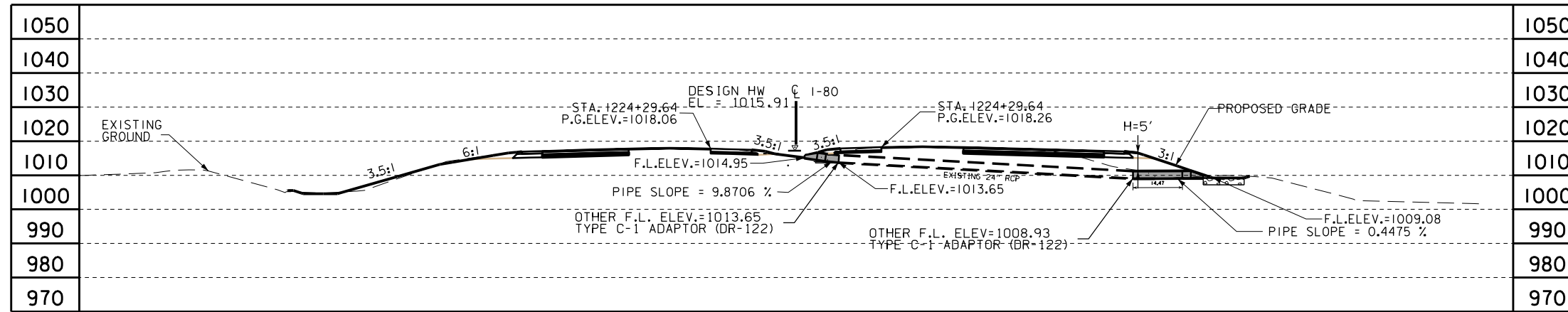


QUANTITIES

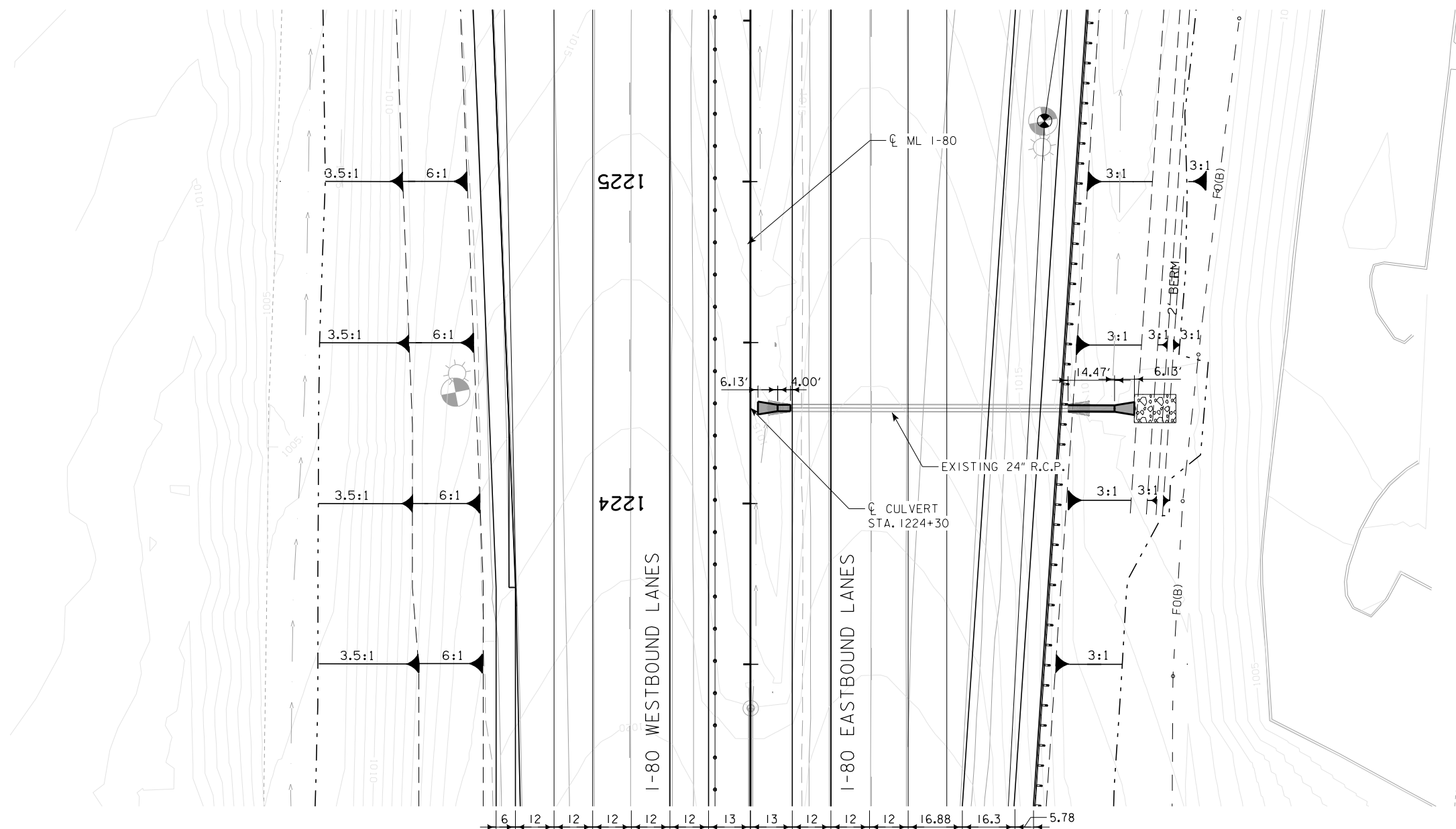
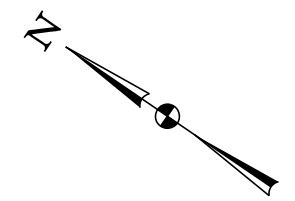
CLASS "E" REVELTMENT	13 TONS
ENGINEERING FABRIC	8 SQ. YDS.

DESIGN FOR A 0° SKEW
24 in. x 25 ft. - Left
24 in. x 6 ft. - Right
REINFORCED CONC. PIPE EXTENSIONS
PLAT PLAN
STA. 1189+80 (ML_080) DECEMBER, 2020
DALLAS COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.





LONGITUDINAL SECTION ALONG CL CULVERT



PLAT PLAN

TRAFFIC ESTIMATE

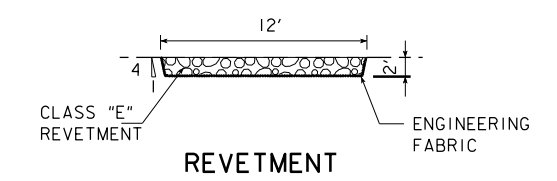
2020 AADT	93700	V.P.D.
2045 AADT	149000	V.P.D.
2045 DHV	7000	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALS	--	

LOCATION

INTERSTATE 80
 T-78 N R-26 W
 SECTION 2
 BOONE TOWNSHIP
 DALLAS COUNTY
 LATITUDE 41.589186°
 LONGITUDE -93.814656°

HYDRAULIC DATA

DRAINAGE AREA = 0.73 ACRES - MEDIAN
 Q₅₀ = 5.0 CFS
 HW ELEV. = 1015.91

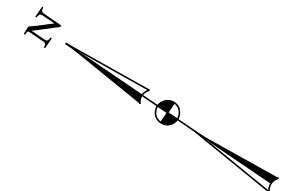
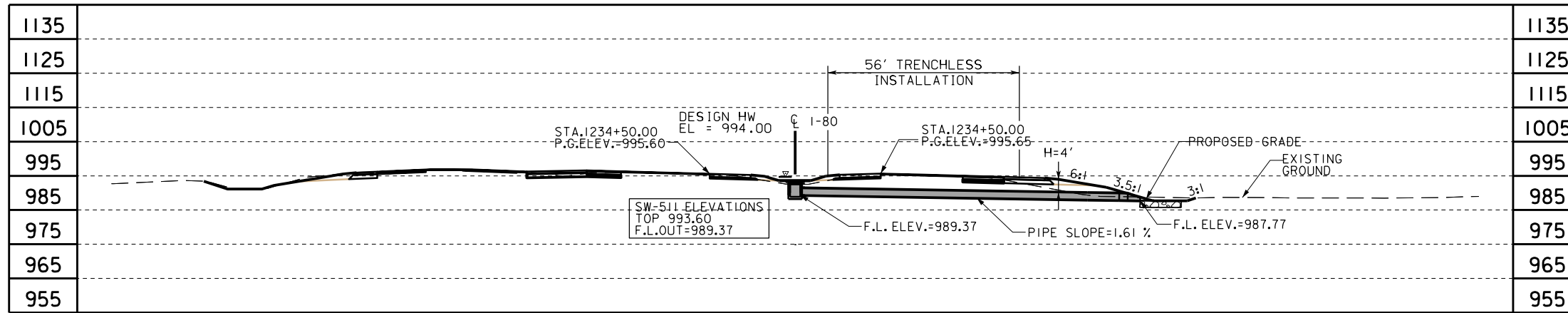


QUANTITIES

CLASS 'E' REVETMENT	12 TONS
ENGINEERING FABRIC	7 SQ. YDS.

DESIGN FOR A 0° SKEW
24 in. x 4 ft. - Left
24 in. x 14 ft. - Right
REINFORCED CONC. PIPE EXTENSIONS
PLAT PLAN
 STA. 1224+30 (ML_080) DECEMBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.





LONGITUDINAL SECTION ALONG CL CULVERT

TRAFFIC ESTIMATE

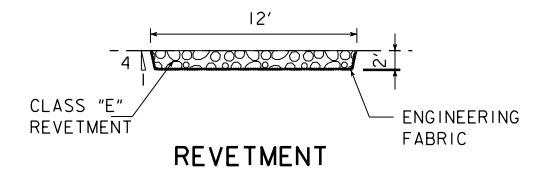
2020 AADT	93700	V.P.D.
2045 AADT	149000	V.P.D.
2045 DHV	7000	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALS	--	

LOCATION

INTERSTATE 80
 T-78 N R-26 W
 SECTION 2
 BOONE TOWNSHIP
 DALLAS COUNTY
 LATITUDE 41.590769°
 LONGITUDE -93.811567°

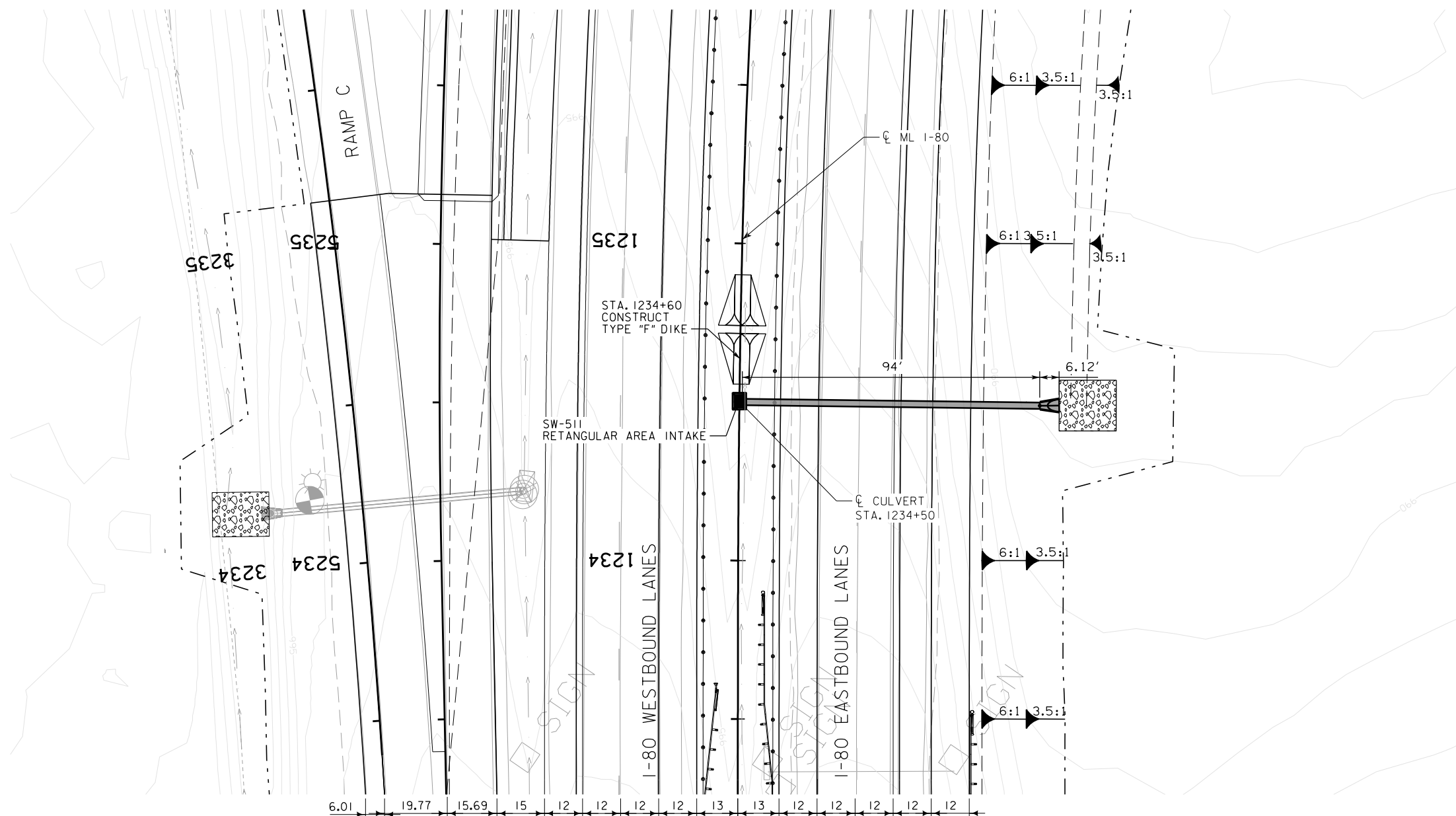
HYDRAULIC DATA

DRAINAGE AREA = 1.77 ACRES - MEDIAN
 Q₅₀ = 12.5 CFS
 HW ELEV. = 994.00

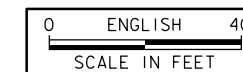


QUANTITIES

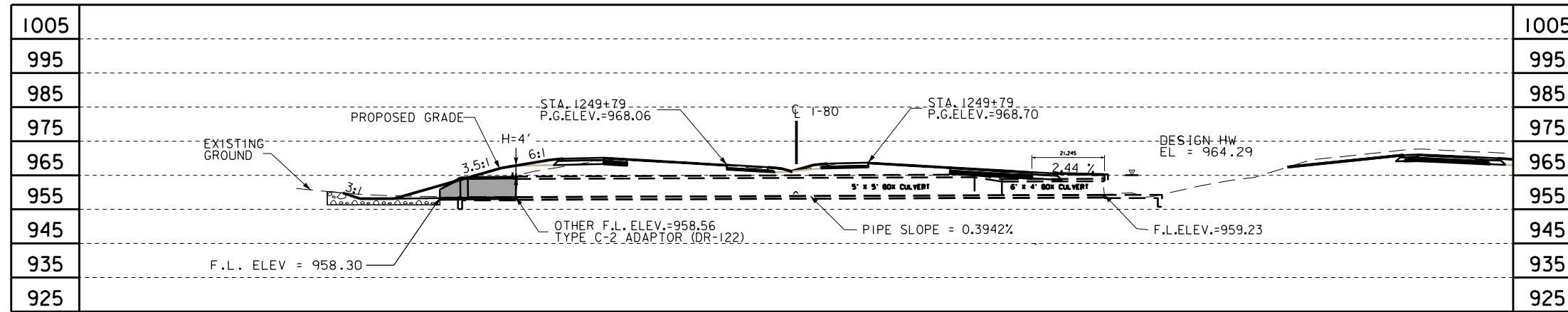
CLASS 'E' REVETMENT	30 TONS
ENGINEERING FABRIC	16 SQ. YDS.



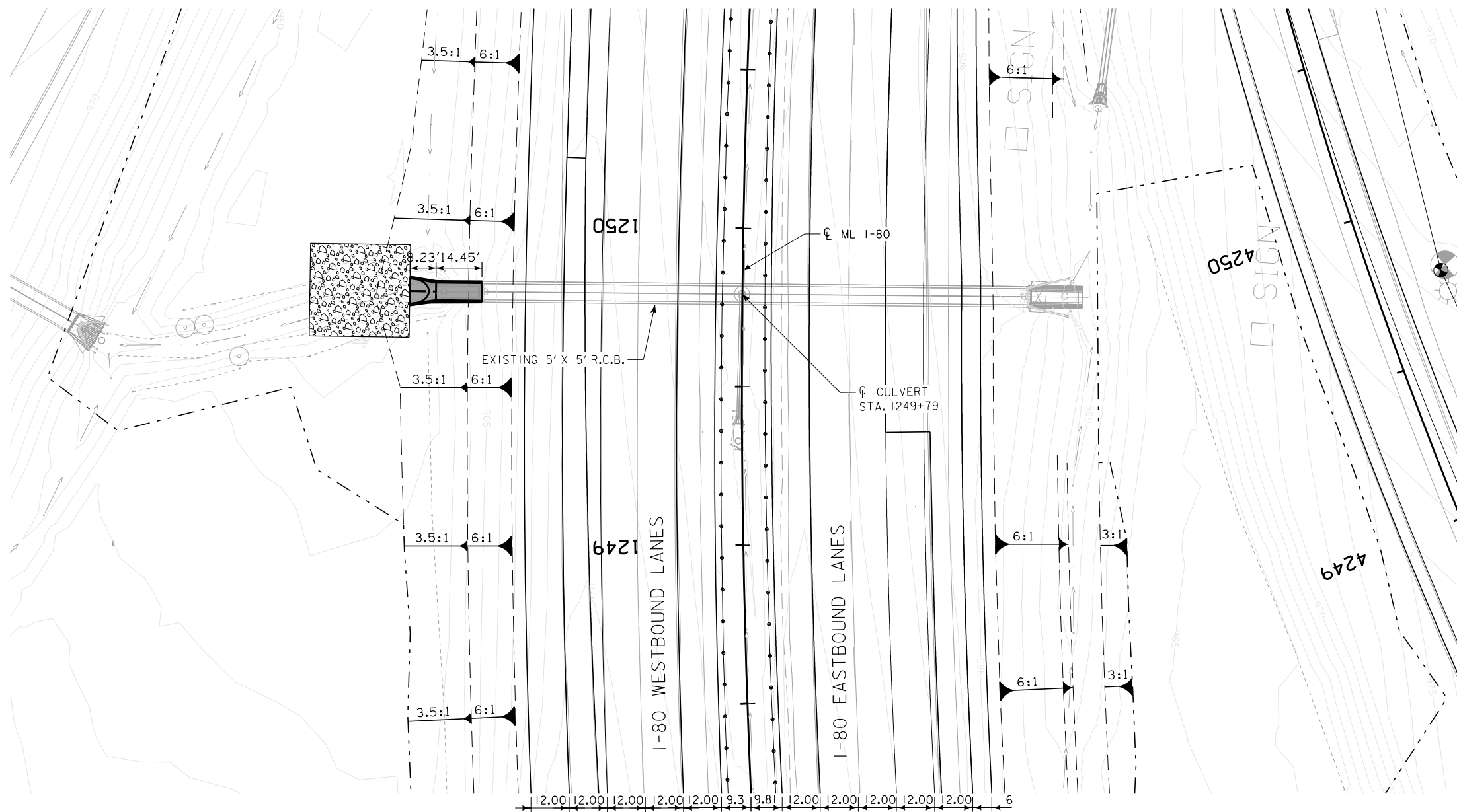
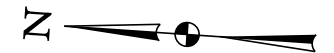
PLAT PLAN



DESIGN FOR A 0° SKEW
24 in. x 94'
REINFORCED CONCRETE PIPE WITH INTAKE
PLAT PLAN
 STA. 1234+50 (ML_080) DECEMBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.



LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN



TRAFFIC ESTIMATE

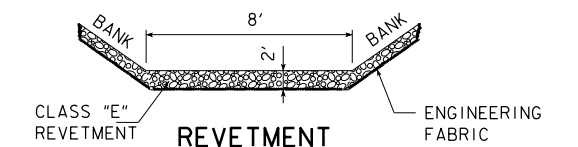
2020 AADT	93700	V.P.D.
2045 AADT	149000	V.P.D.
2045 DHV	7000	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALS	--	

LOCATION

INTERSTATE 80
 T-78 N R-26 W
 SECTION 1
 BOONE TOWNSHIP
 DALLAS COUNTY
 LATITUDE 41.592097°
 LONGITUDE -93.806358°

HYDRAULIC DATA

DRAINAGE AREA = 48.9 ACRES - ROLLING
 $Q_{50} = 201.4$ CFS
 HW ELEV. = 964.29



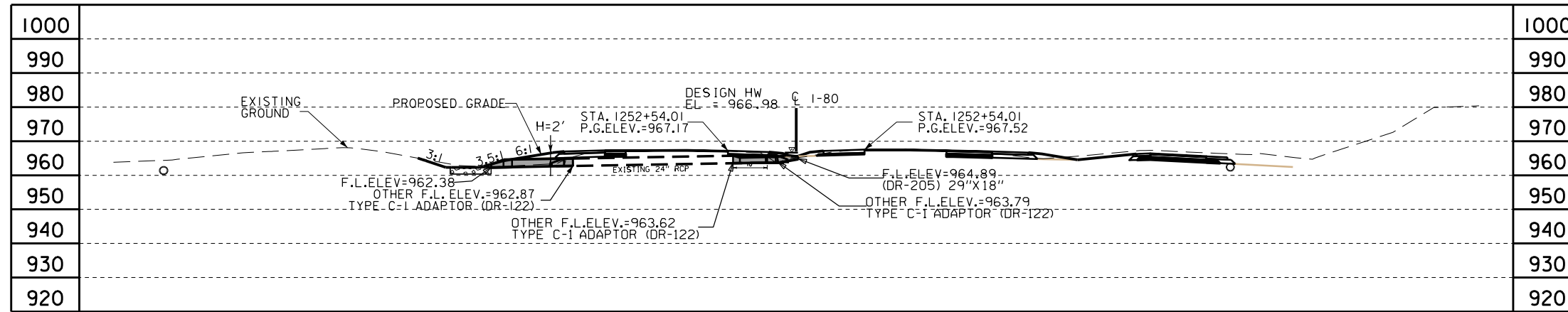
QUANTITIES

CLASS 'E' REVETMENT 97 TONS
 ENGINEERING FABRIC 43 SQ. YDS.

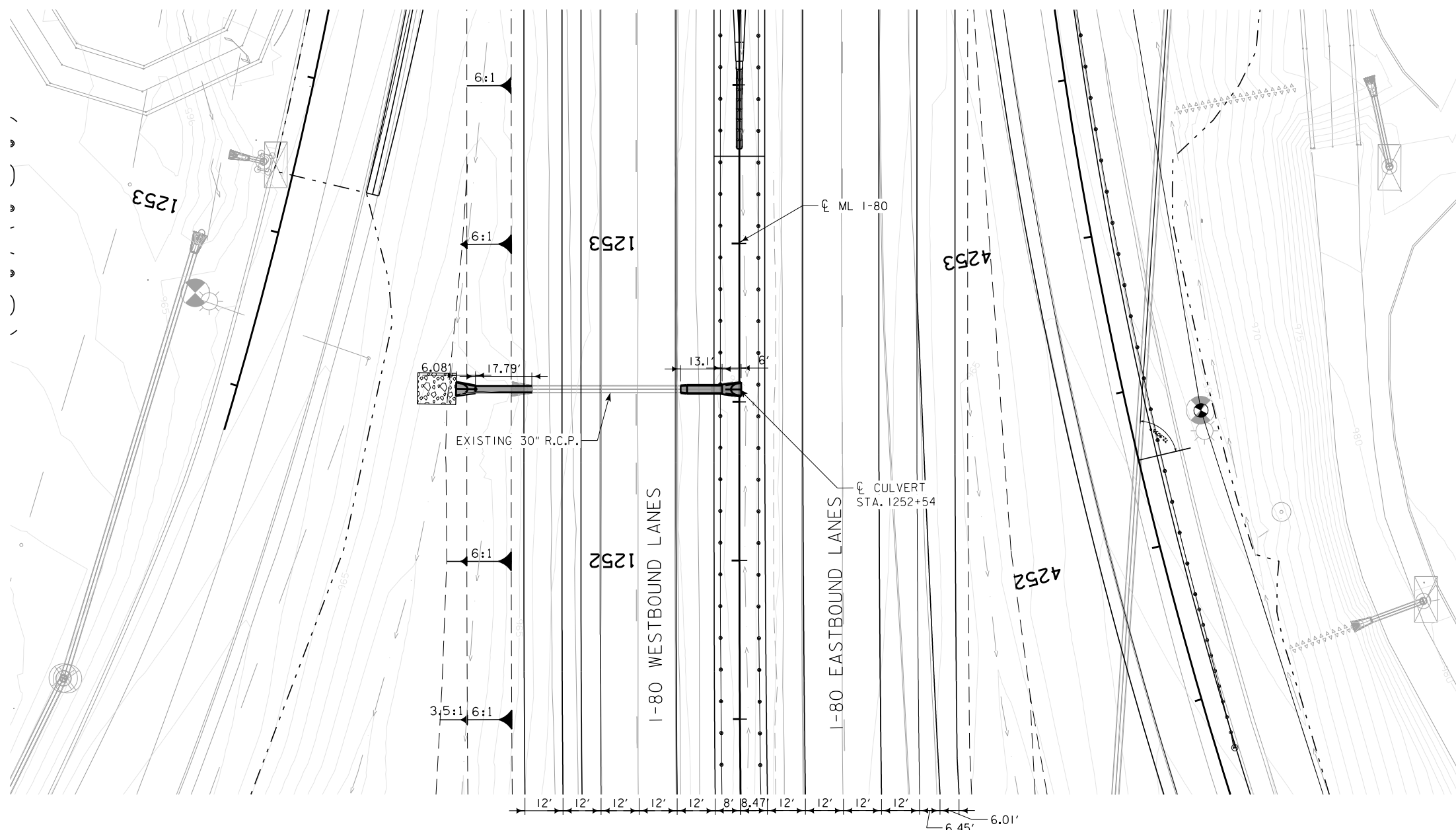
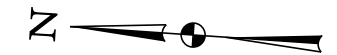
DESIGN FOR A 0° SKEW
66 in x 14 ft - LEFT REINFORCED CONC. PIPE EXTENSION

PLAT PLAN

STA. 1249+79 (ML_080) DECEMBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.



LONGITUDINAL SECTION ALONG ϕ CULVERT



PLAT PLAN

TRAFFIC ESTIMATE

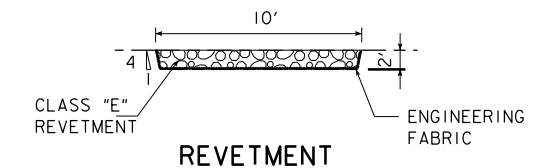
2020 AADT	93700	V.P.D.
2045 AADT	149000	V.P.D.
2045 DHV	7000	V.P.H.
TRUCKS	18	%
TOTAL DESIGN ESALS	--	

LOCATION

INTERSTATE 80
 T-78 N R-26 W
 SECTION 1
 BOONE TOWNSHIP
 DALLAS COUNTY
 LATITUDE 41.592206°
 LONGITUDE -93.805367°

HYDRAULIC DATA

DRAINAGE AREA = 2.0 ACRES
 $Q_{50} = 9$ CFS
 HW ELEV. = 966.98



QUANTITIES

CLASS 'E' REVETMENT 13 TONS
 ENGINEERING FABRIC 8 SQ. YDS.

DESIGN FOR A 0° SKEW
24 in. x 18 ft. - Left
29 in x 18 in x 13 ft. - Right
REINFORCED CONC. PIPE EXTENSION
PLAT PLAN
 STA. 1252+54 (ML_080) DECEMBER, 2020
DALLAS COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 1 FILE NO. DESIGN NO.



LINE STYLE LEGEND OF CROSS SECTION SHEETS (ROAD)

- Theoretical Levee Protection
- Existing Ground Line
- ===== Proposed Template
- ===== Proposed Topsoil Placement
- Additional Topsoil Removal
- Subgrade Treatment
- Granular Shoulder
- ===== Pavement
- Existing Pipe\R/CB
- ===== Proposed Pipe\R/CB
- ===== Proposed Dike
- ===== All Elements Associated with Proposed Entrances

LINE STYLE LEGEND OF CROSS SECTION SHEETS (SOILS)

- TS ----- Topsoil (Class 10)
- SLOPE DRESSING ----- Slope Dressing Only
- CL 10 ----- Class 10 Materials
- SEL LO ----- Select Loams And Clay-Loams
- SEL SA ----- Select Sand
- UNS A ----- Unsuitable Type A Disposal
- UNS B ----- Unsuitable Type B Disposal
- UNS C ----- Unsuitable Type C Disposal
- SHALE ----- Shale
- WASTE ----- Waste
- B&W LS ----- Broken and Weathered Rock
- ROCK ----- Solid Rock
- BLDRS ----- Boulders

Note: All layer lines and descriptions identify layers above the line.

Note: Vertical or near vertical lines connecting soil layers at edges of cross sections are only for the purpose of calculating template quantities and do not depict soil stratification.

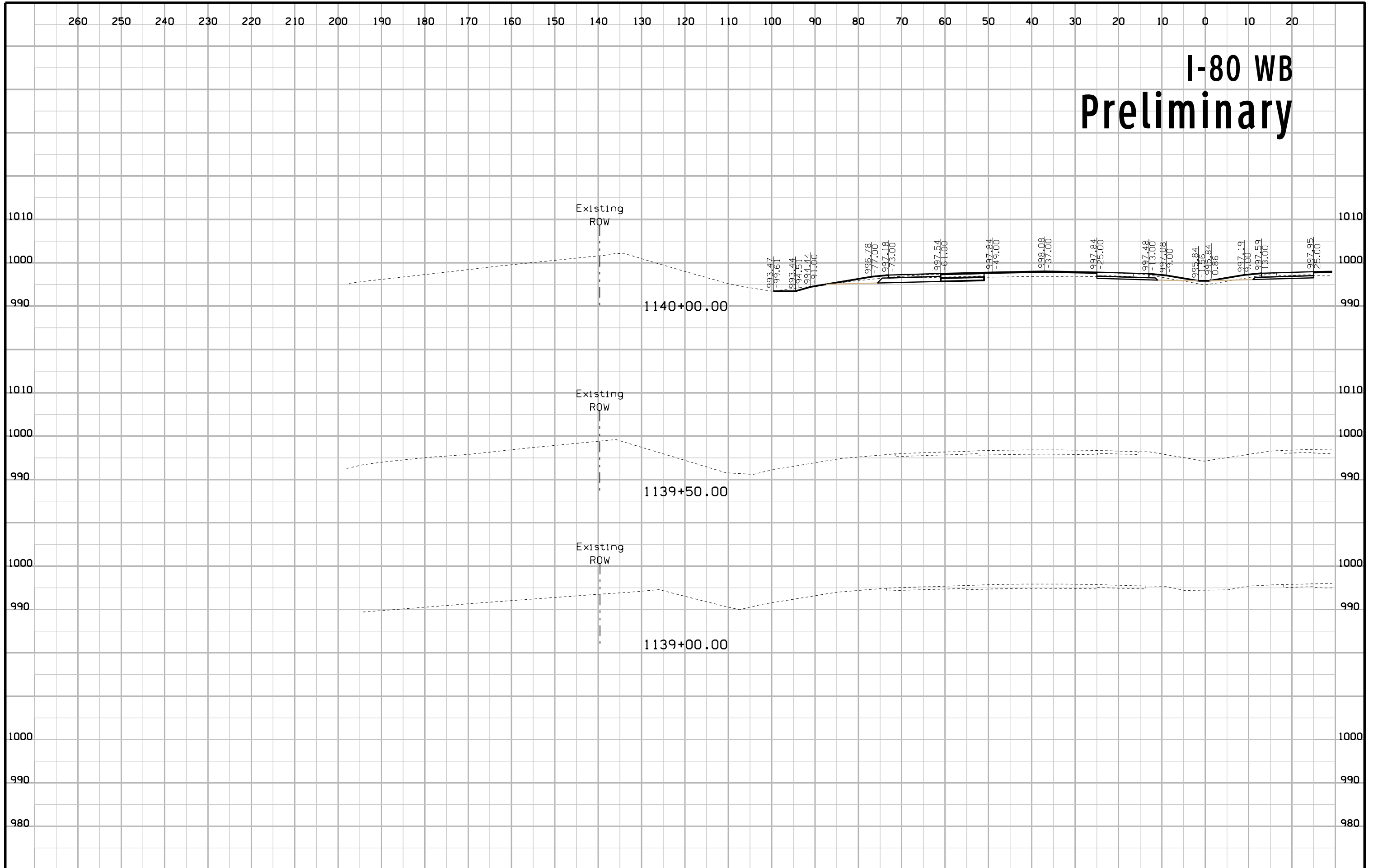
SYMBOL LEGEND OF CROSS SECTION SHEETS

- Existing ROW
|
----- Existing Right-of-Way Limit
- Proposed ROW
|
----- Proposed Right-of-Way Limit
- Temporary ROW
|
----- Temporary Right-of-Way Limit

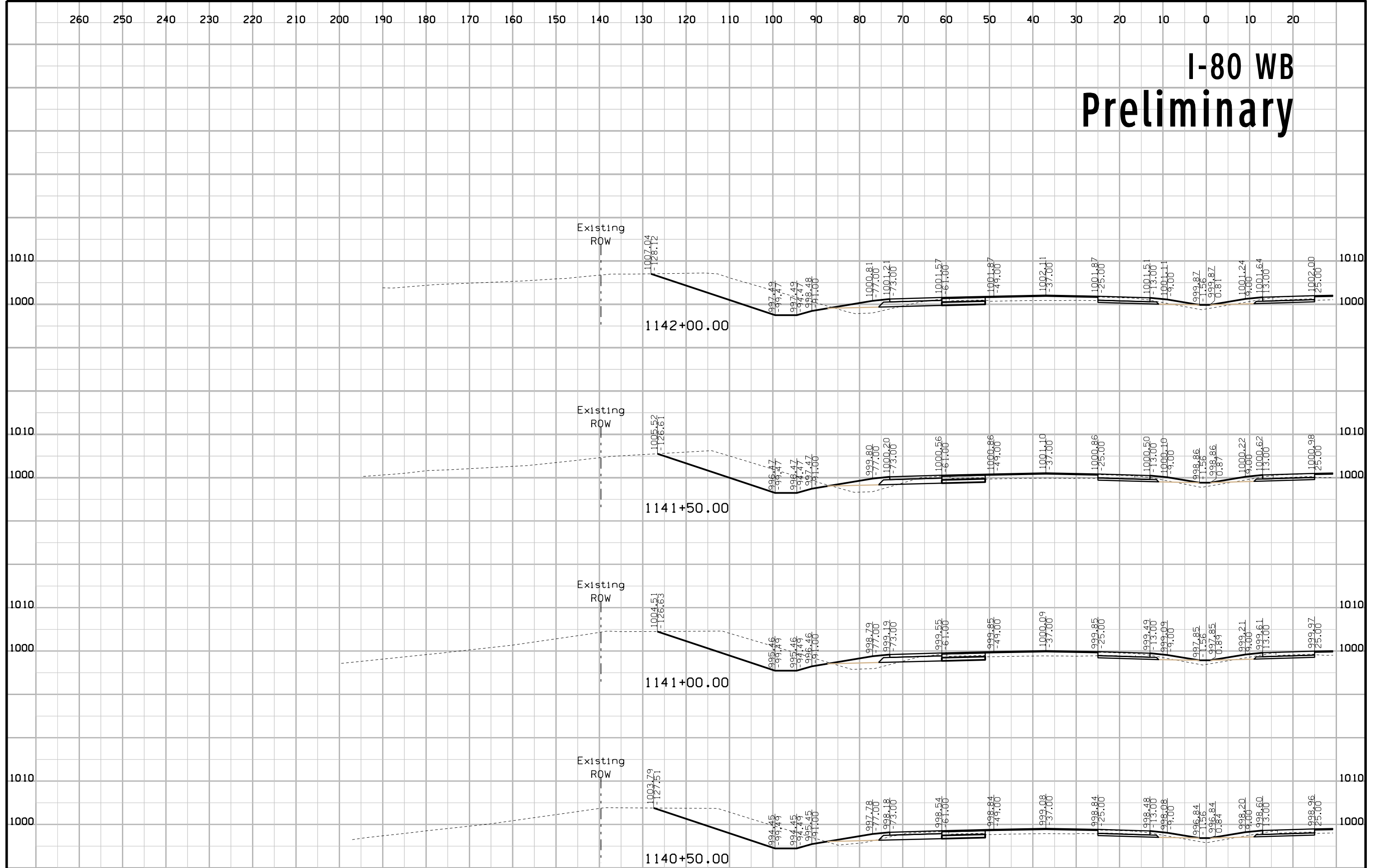
**CROSS SECTION
LEGEND AND SYMBOL
INFORMATION SHEET**

(COVERS SHEET SERIES W, X, Y, & Z)

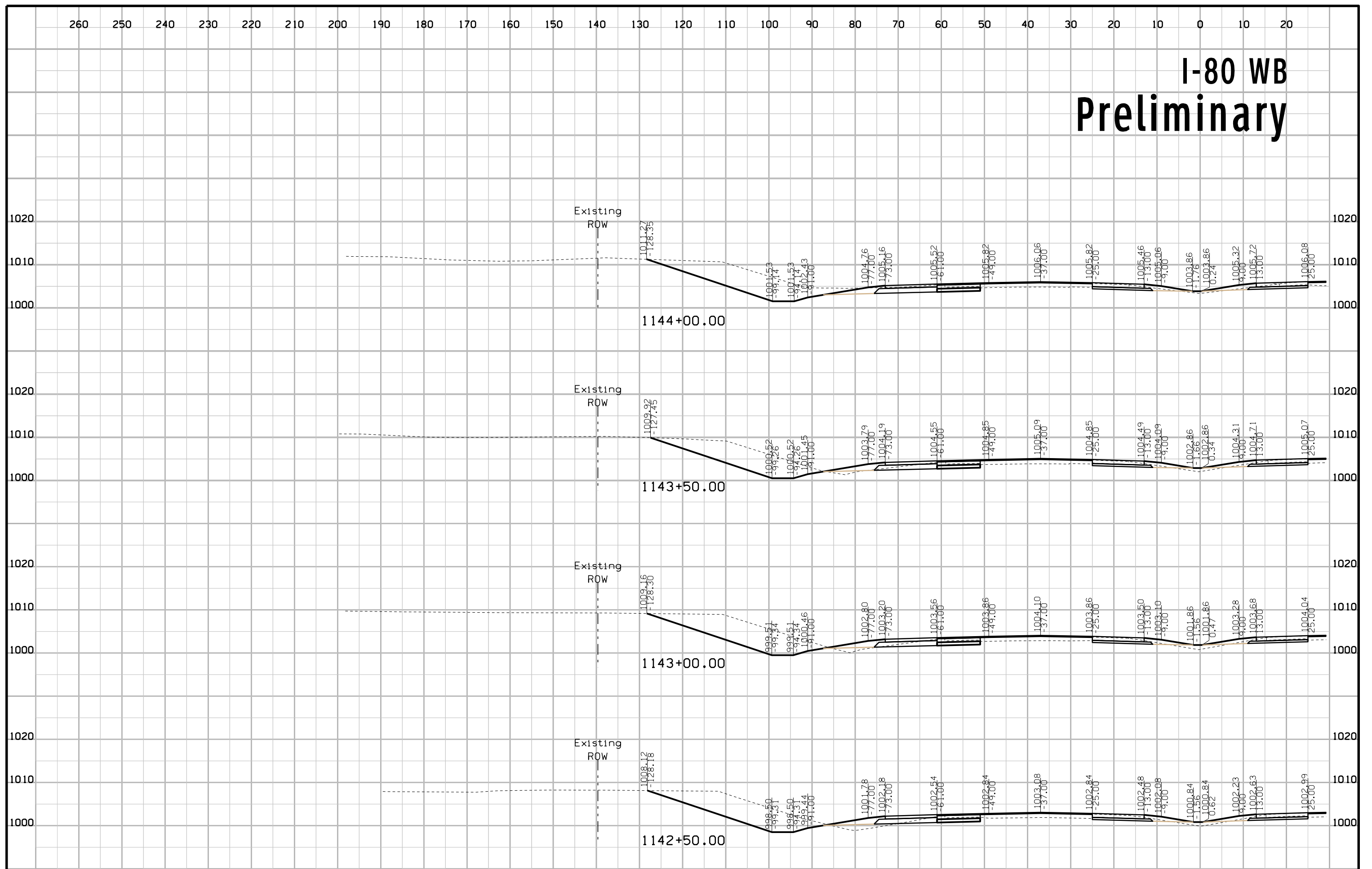
I-80 WB Preliminary



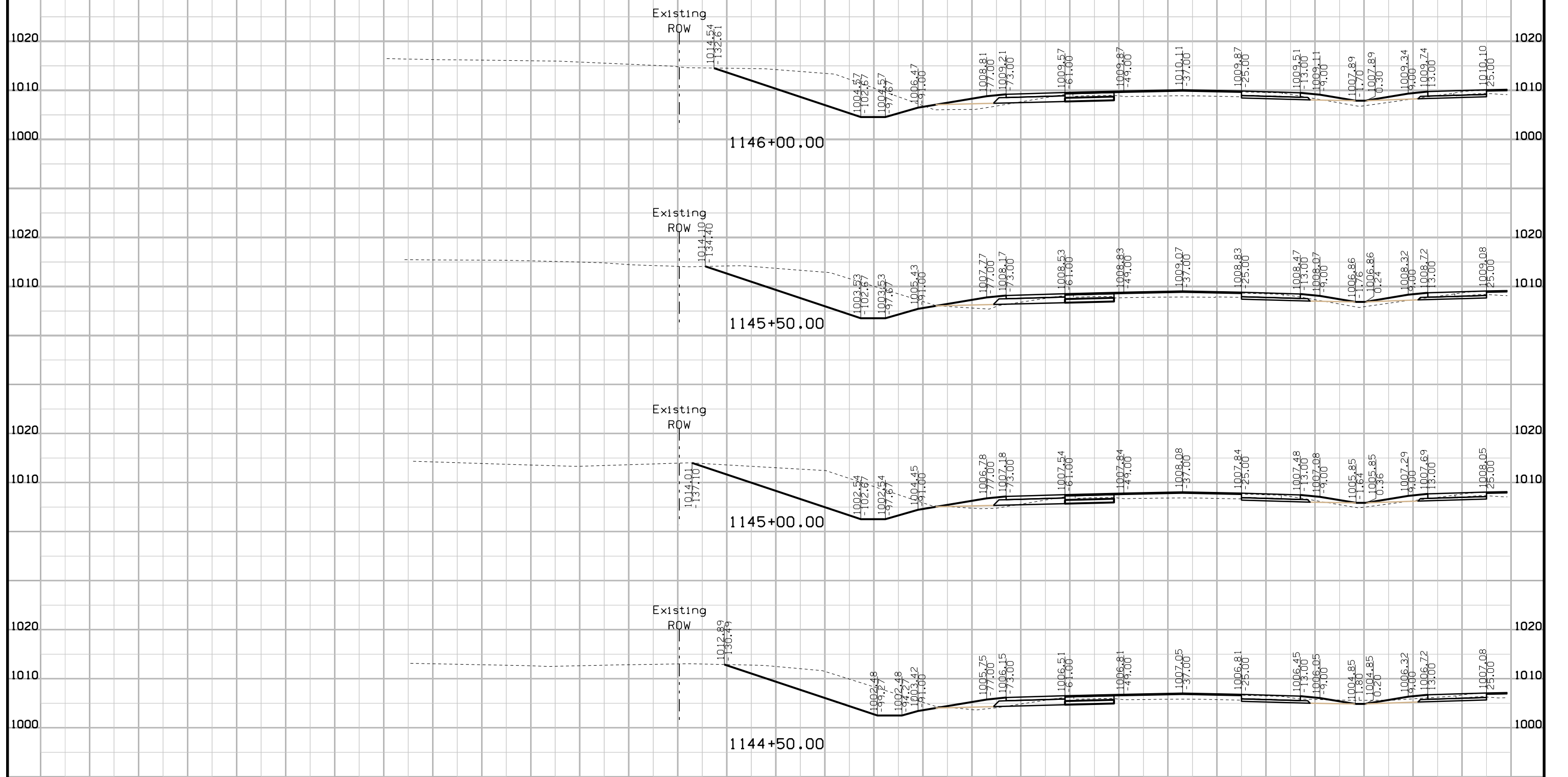
I-80 WB Preliminary



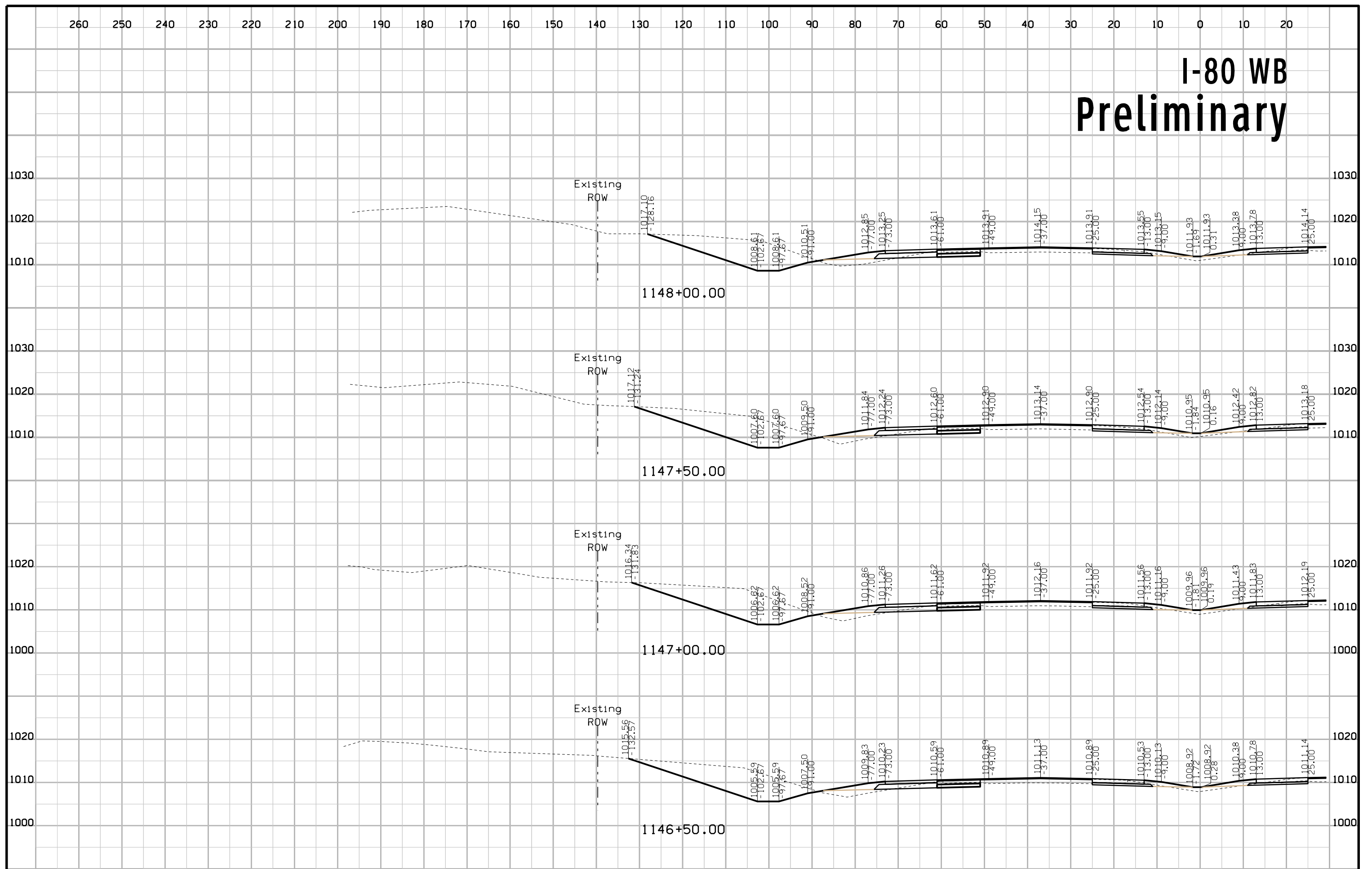
I-80 WB Preliminary



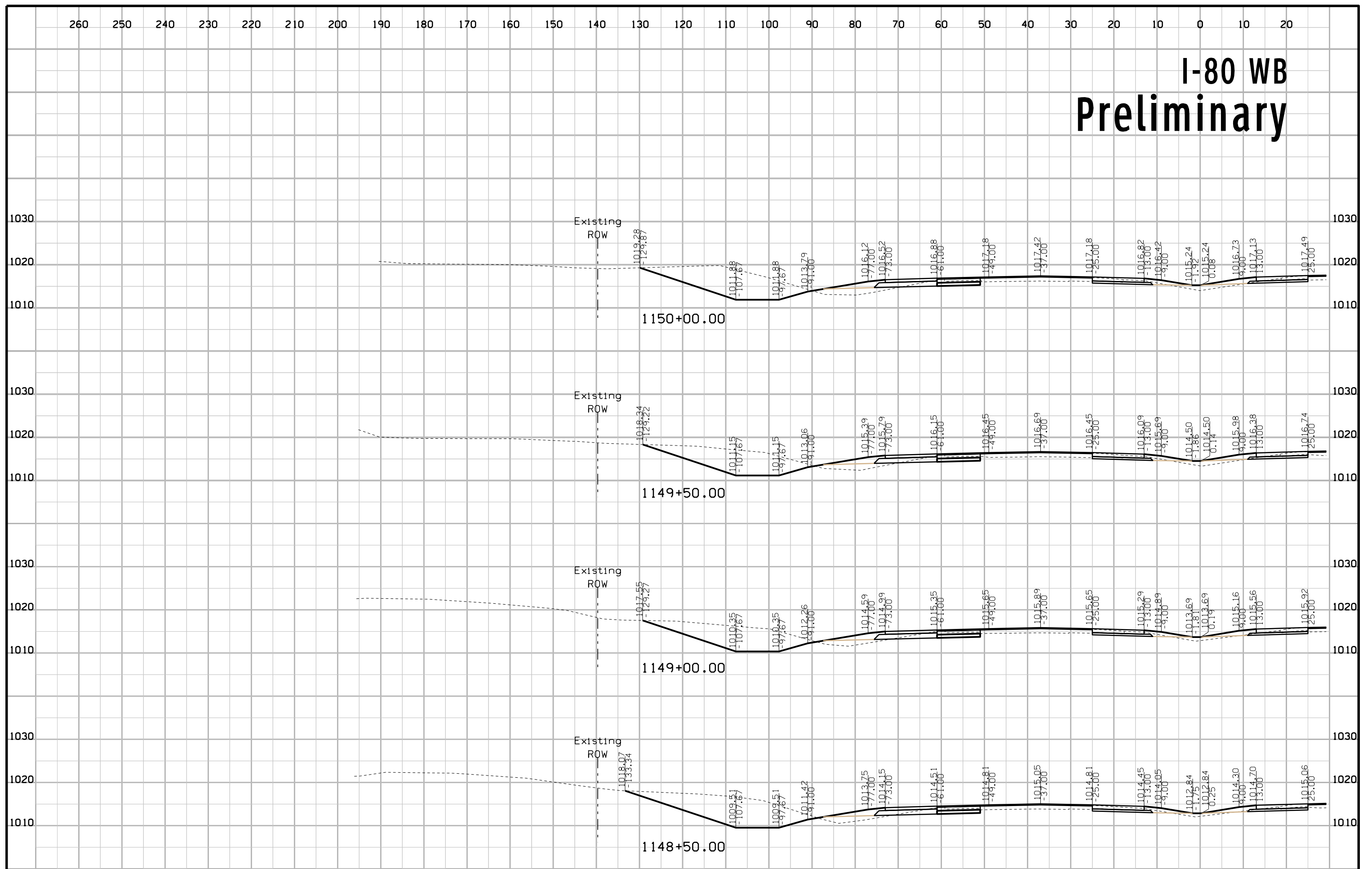
I-80 WB Preliminary



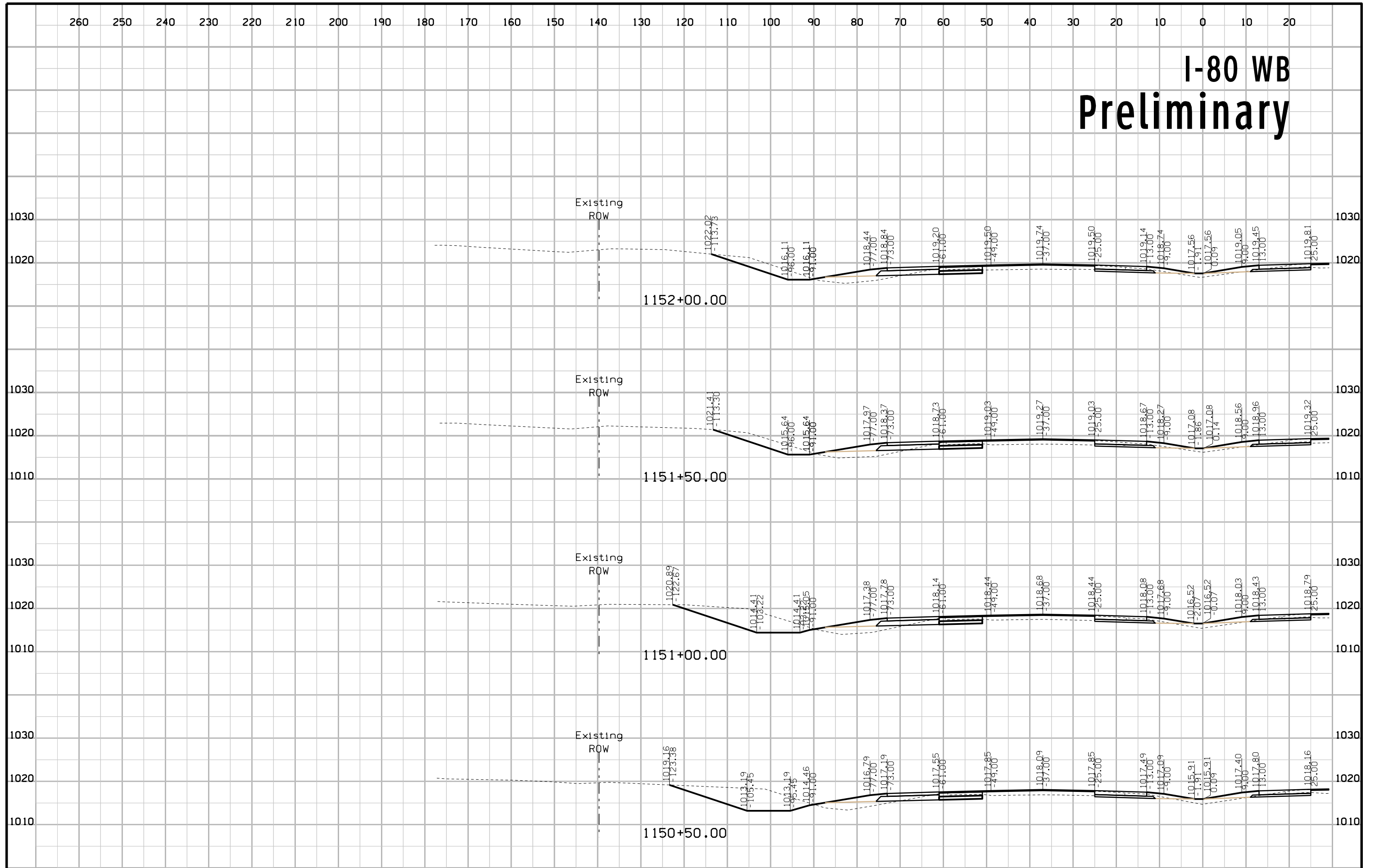
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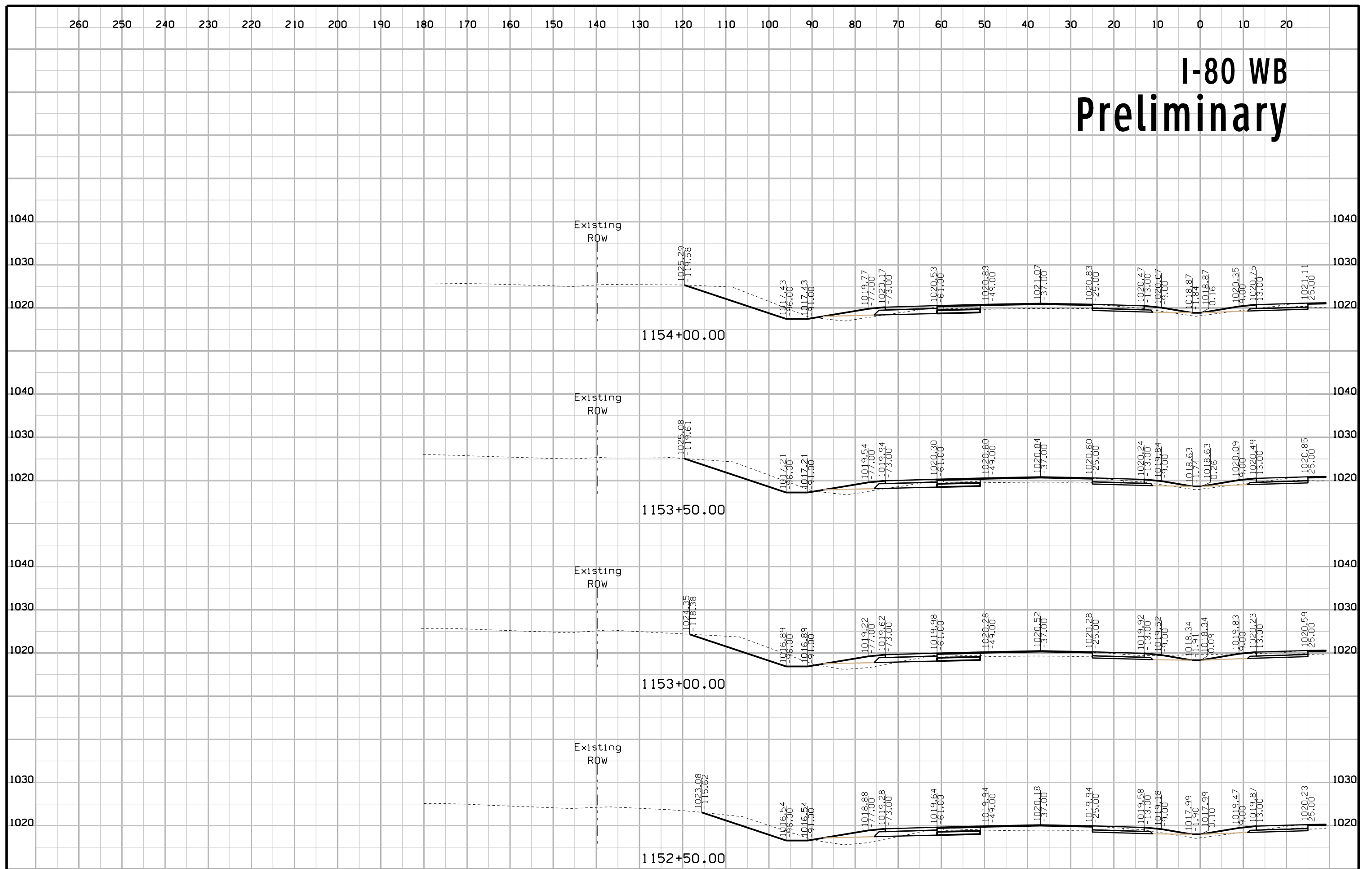
I-80 WB Preliminary



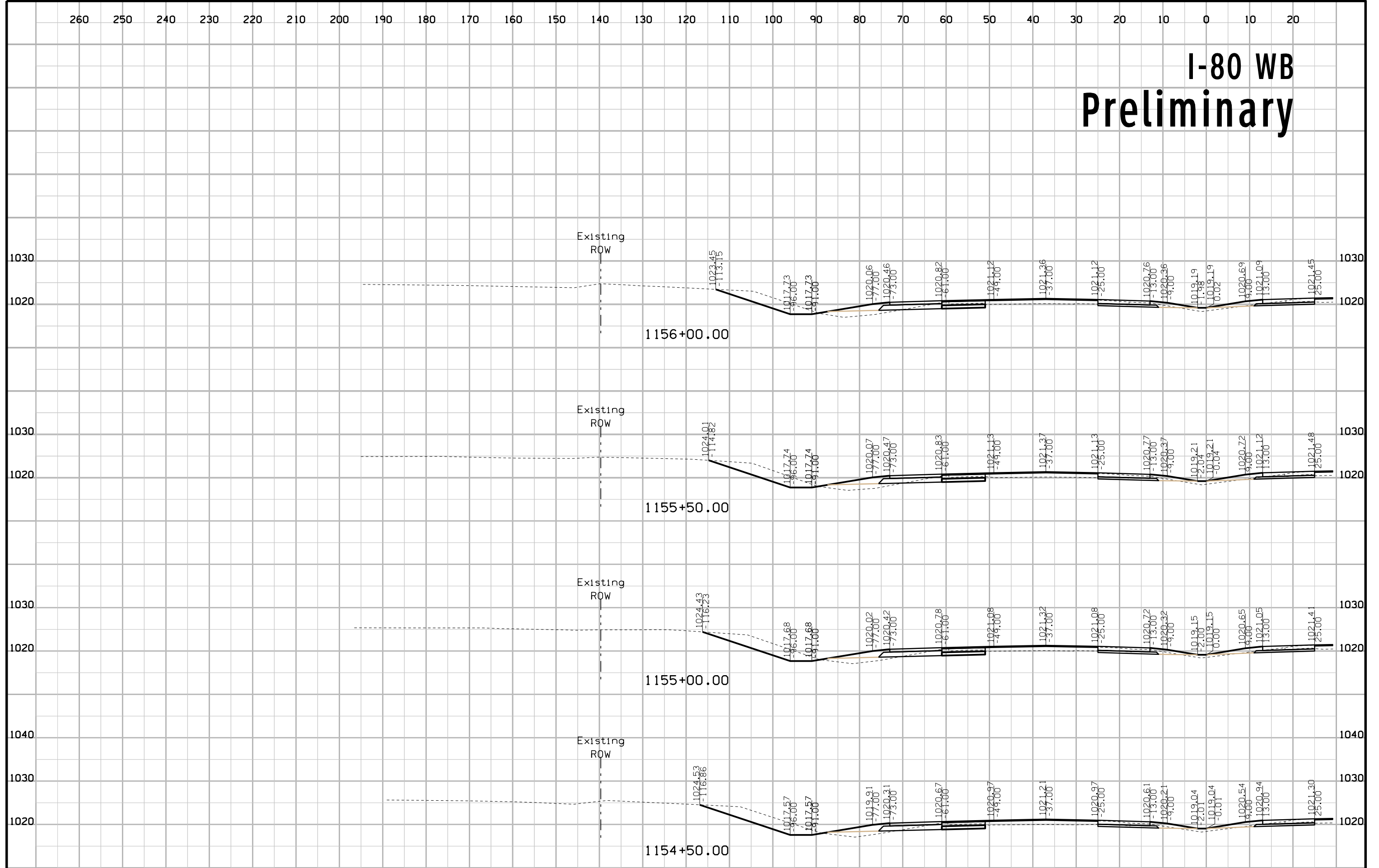
I-80 WB Preliminary



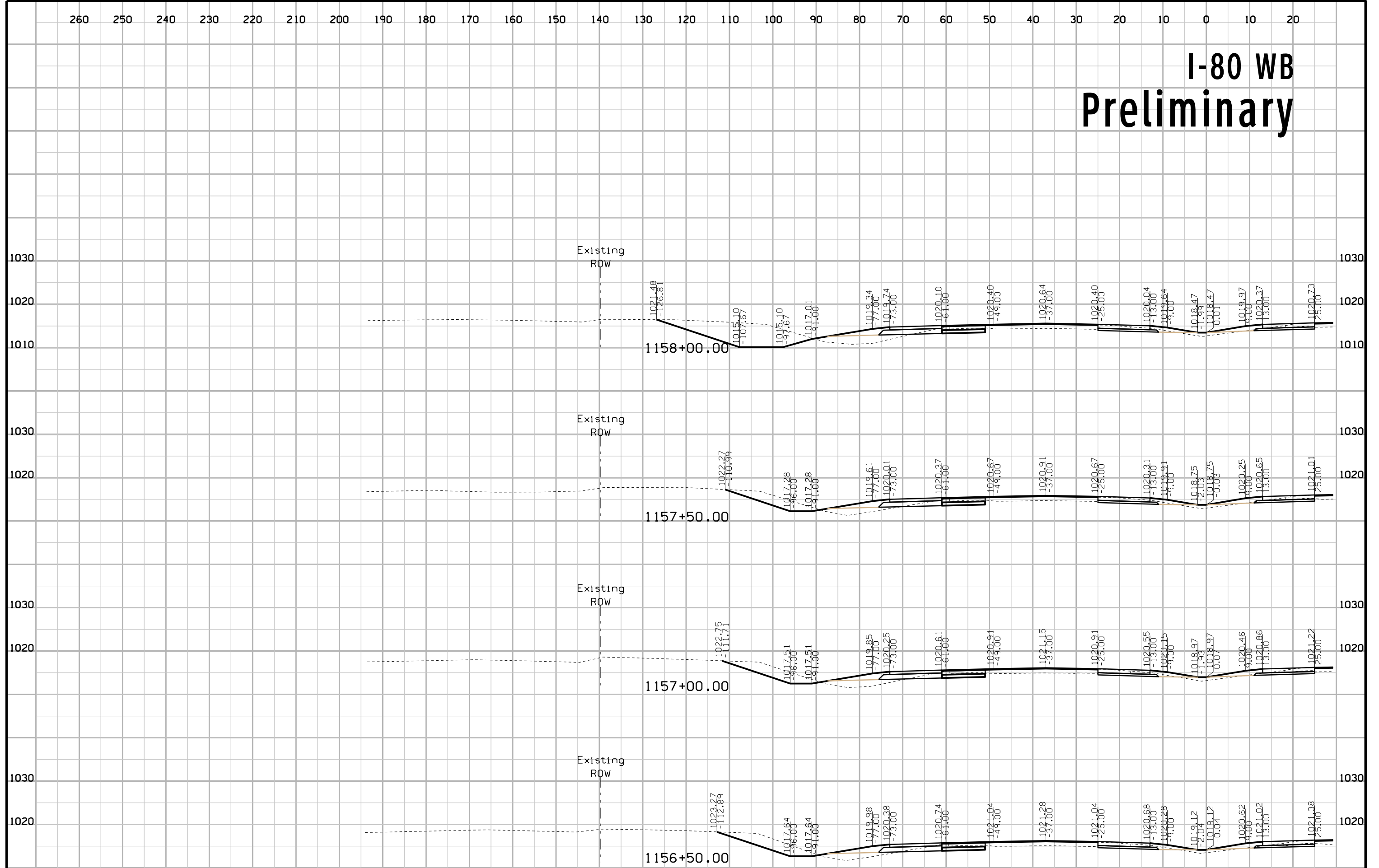
I-80 WB Preliminary



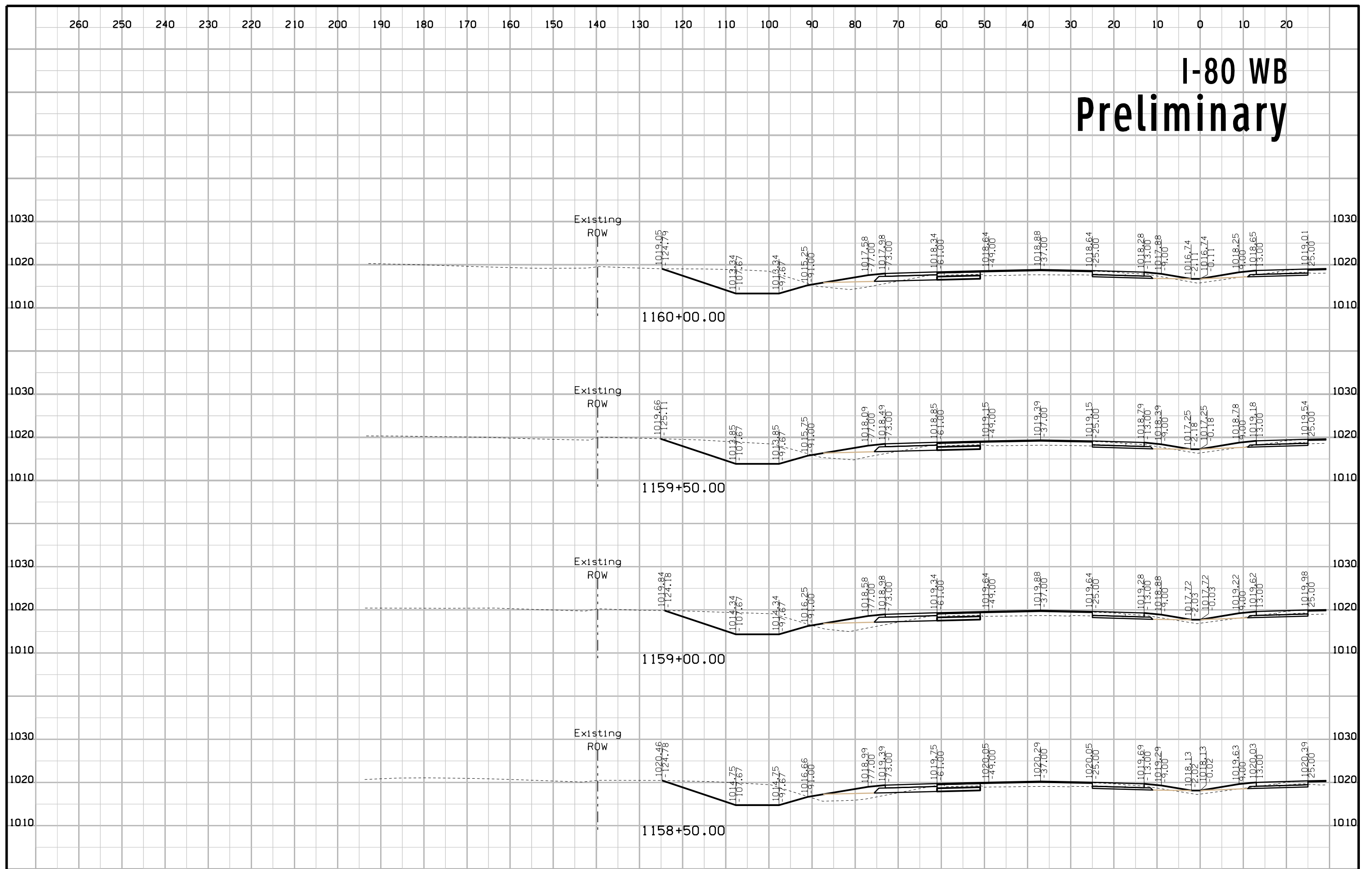
I-80 WB Preliminary



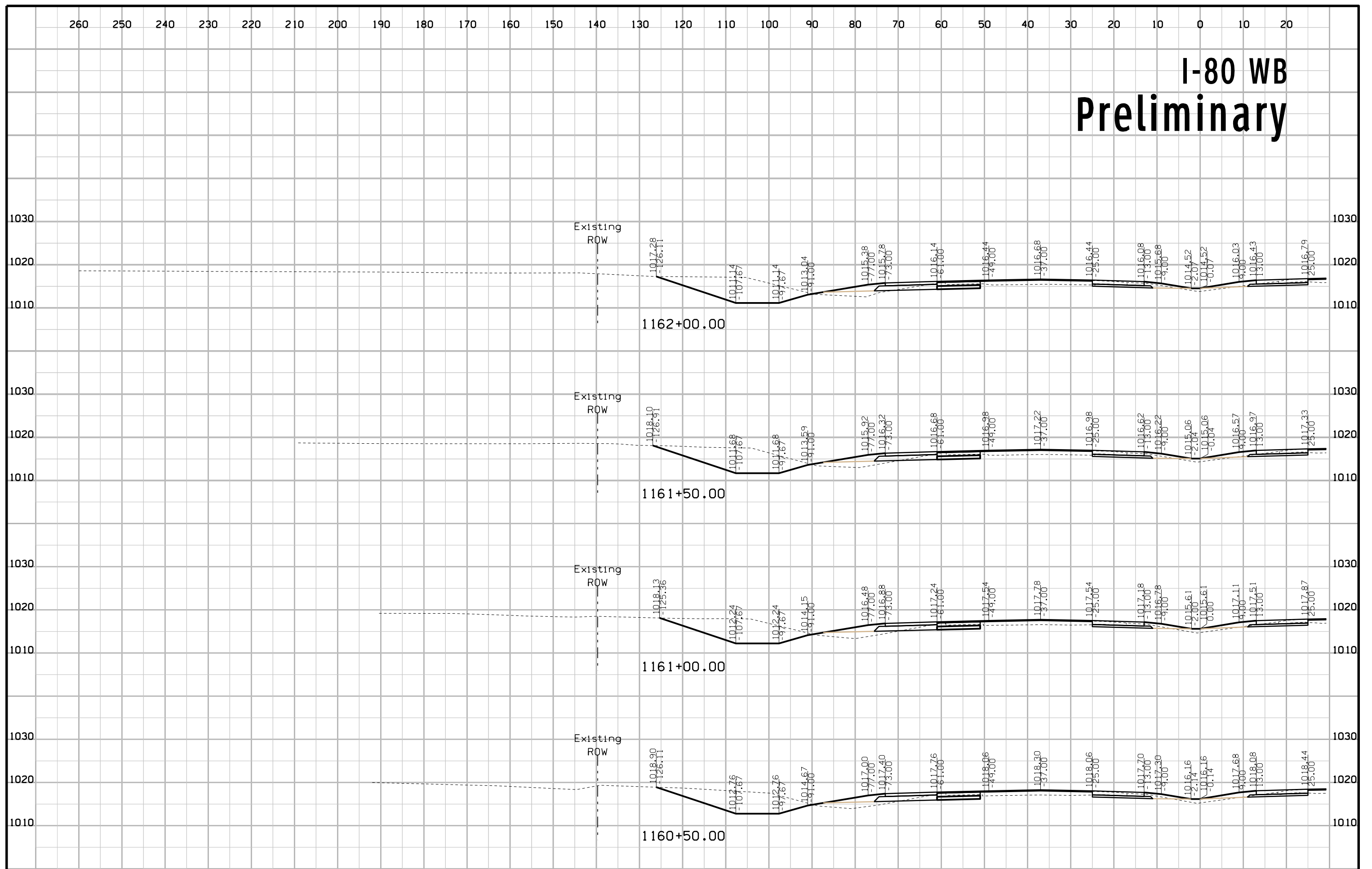
I-80 WB Preliminary



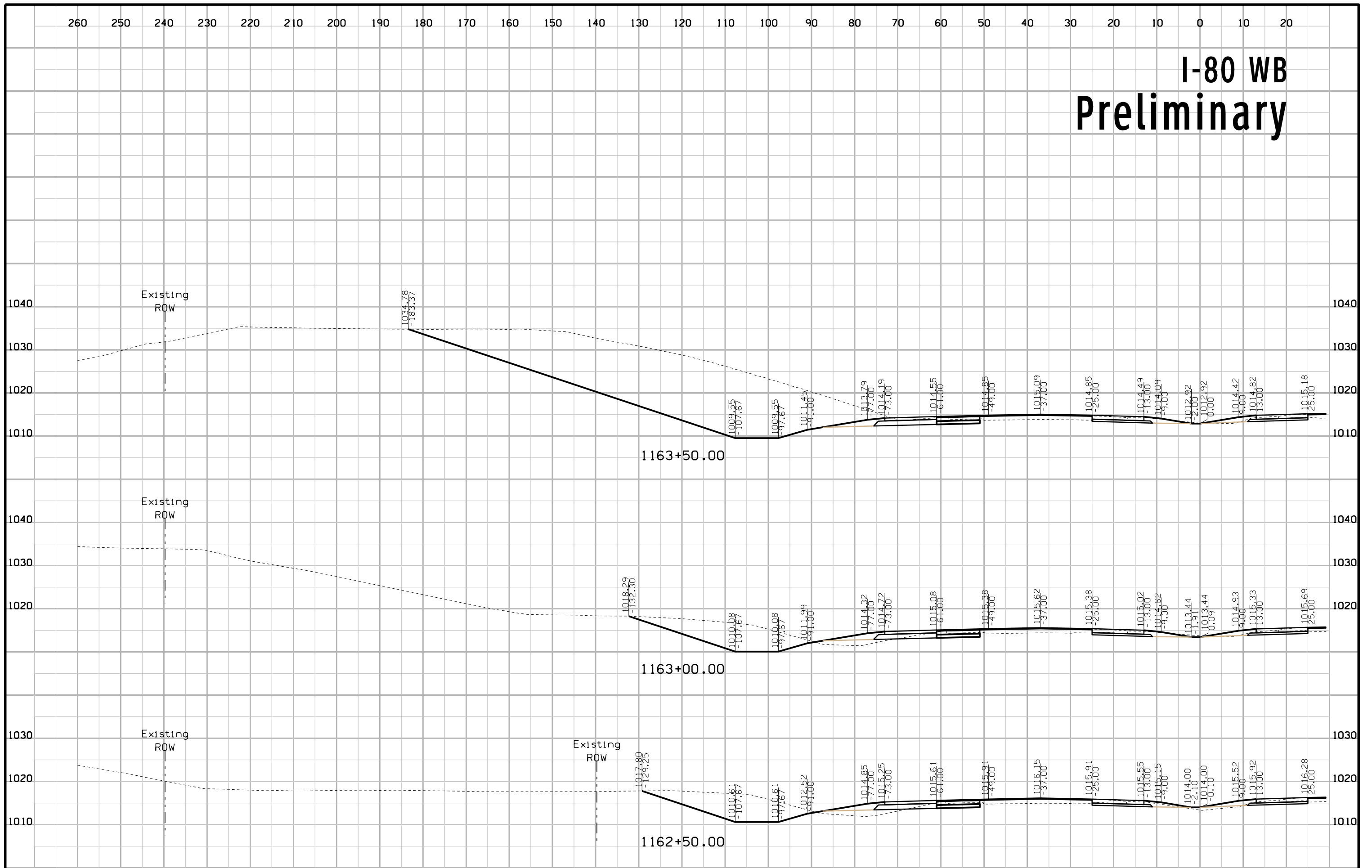
I-80 WB Preliminary



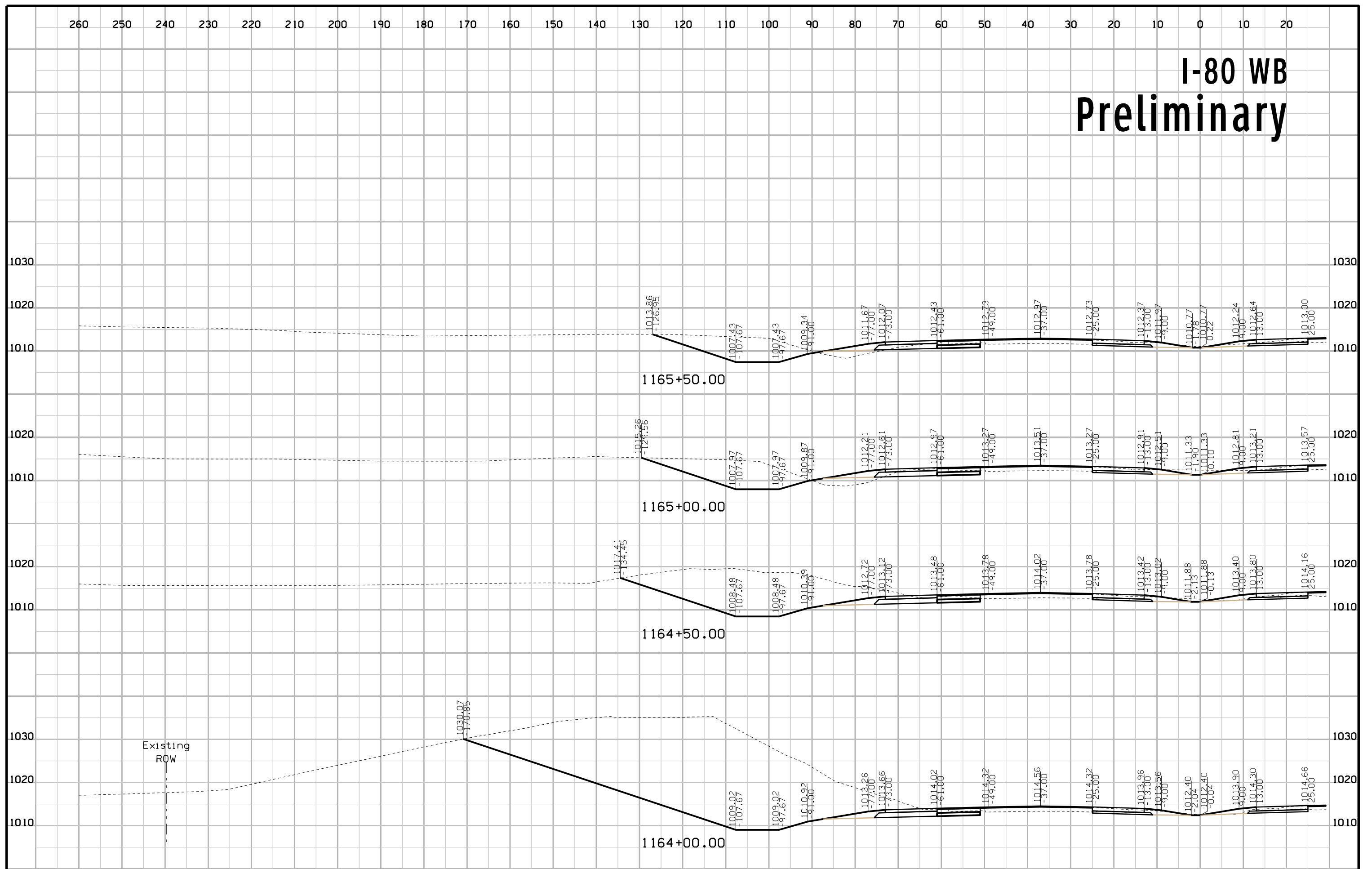
I-80 WB Preliminary



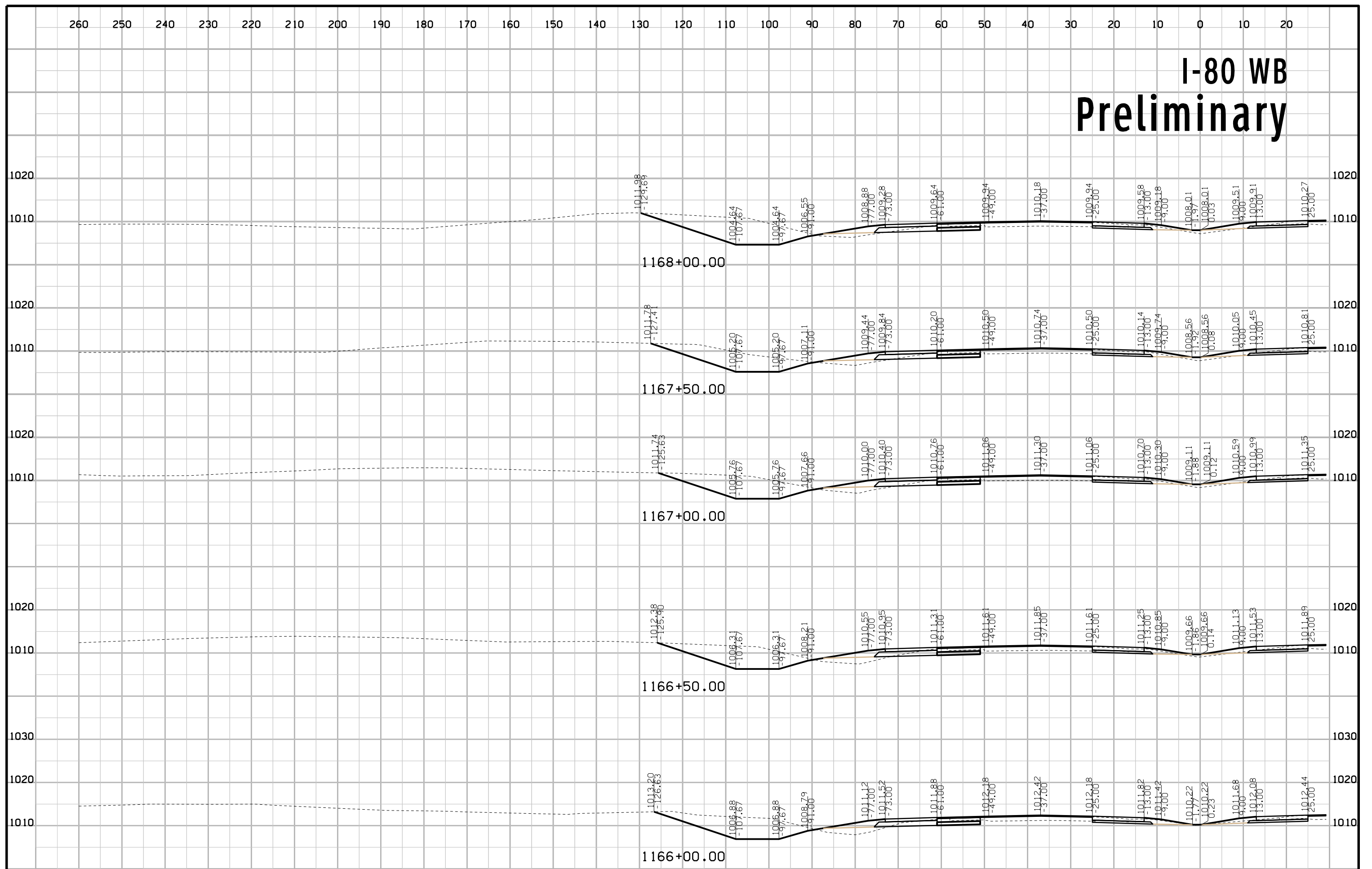
I-80 WB Preliminary



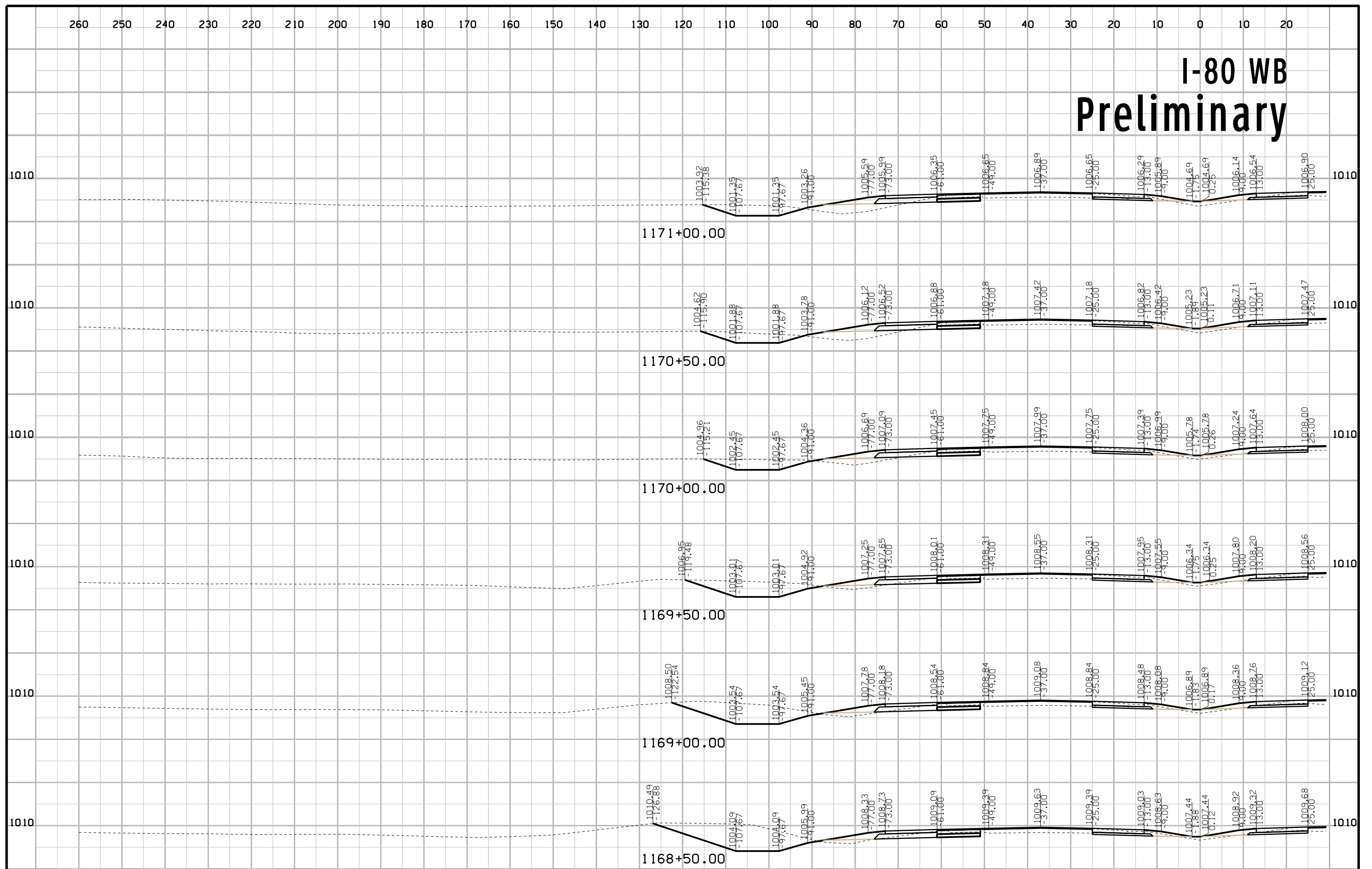
I-80 WB Preliminary



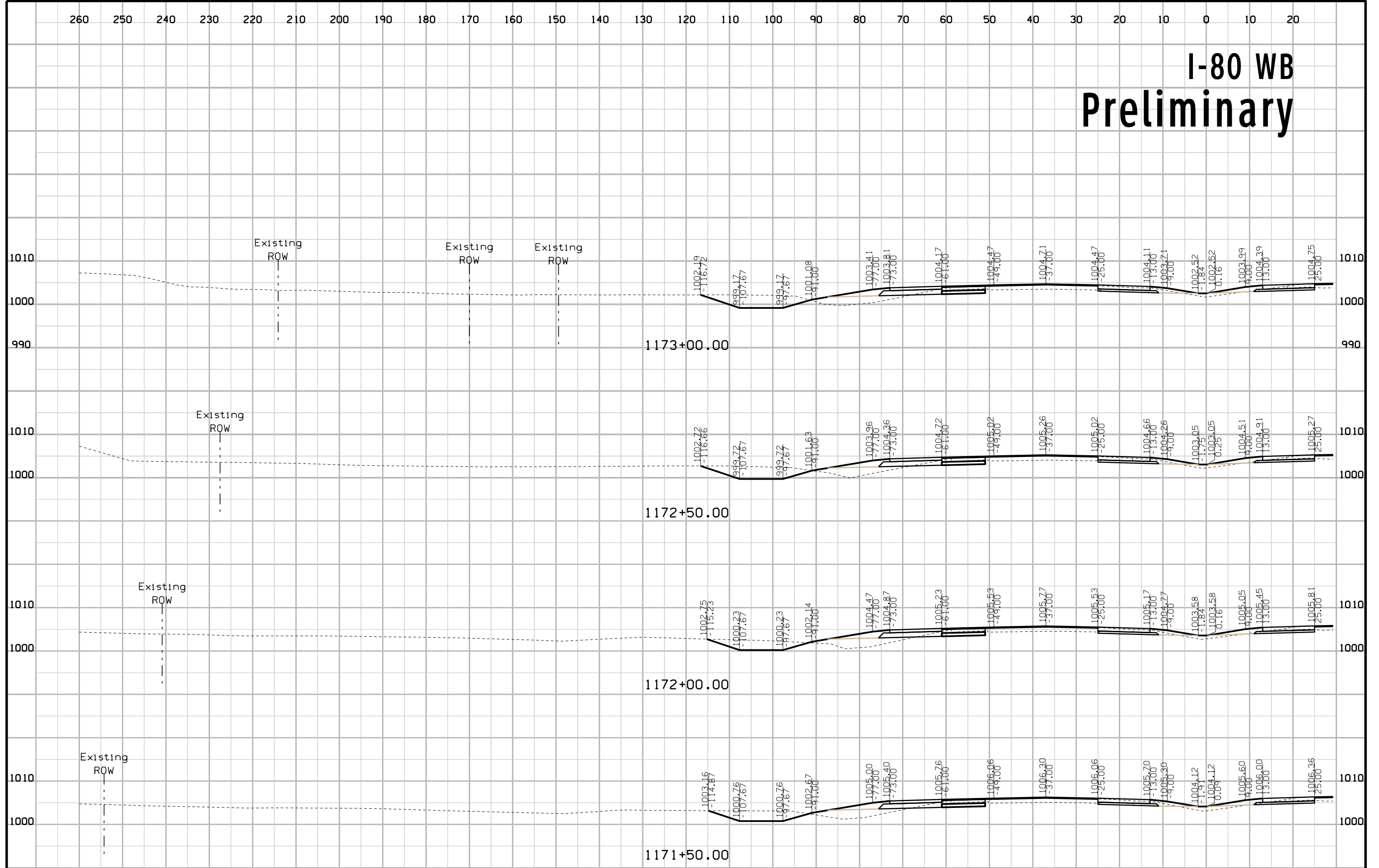
I-80 WB Preliminary



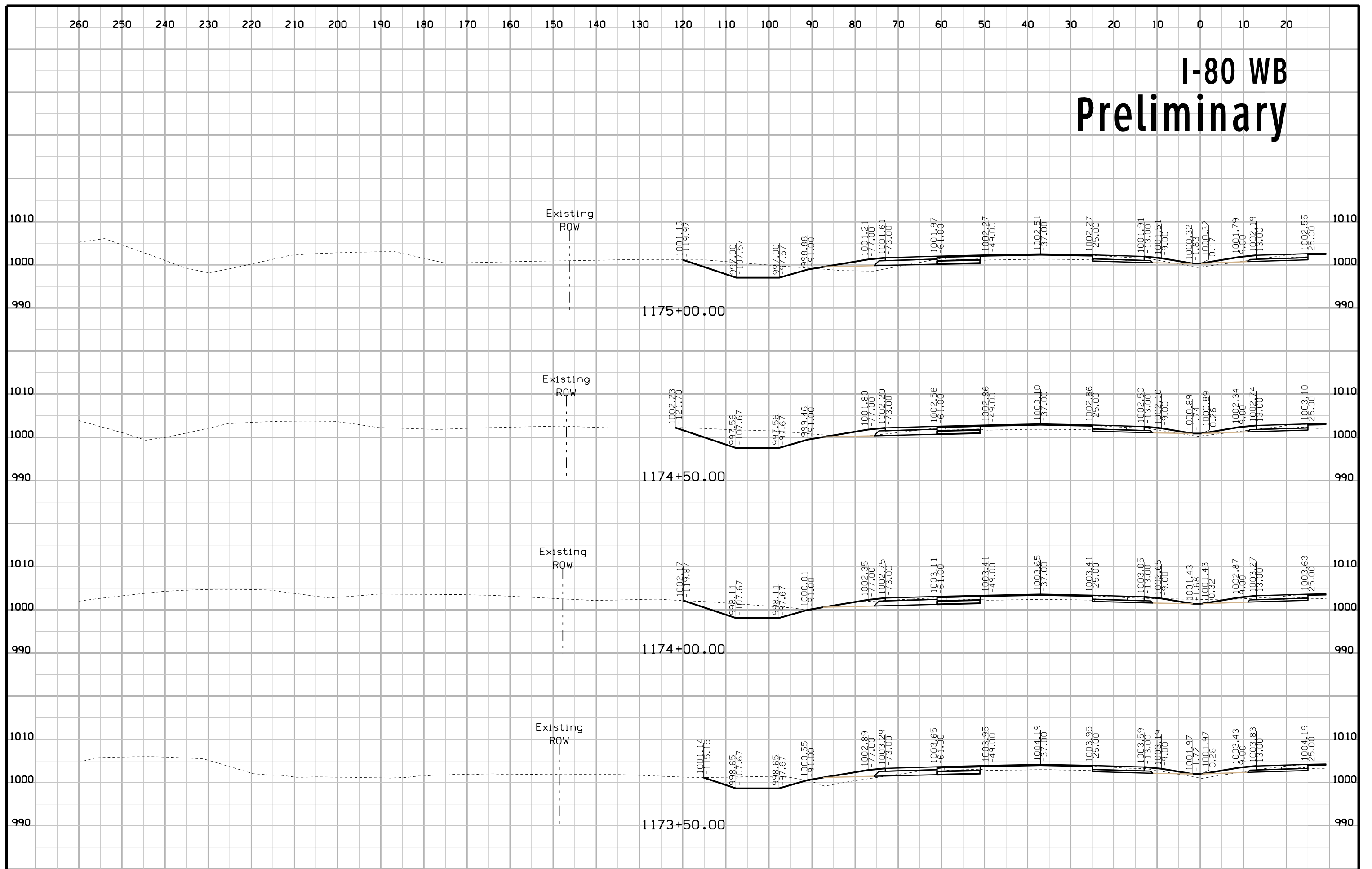
I-80 WB Preliminary



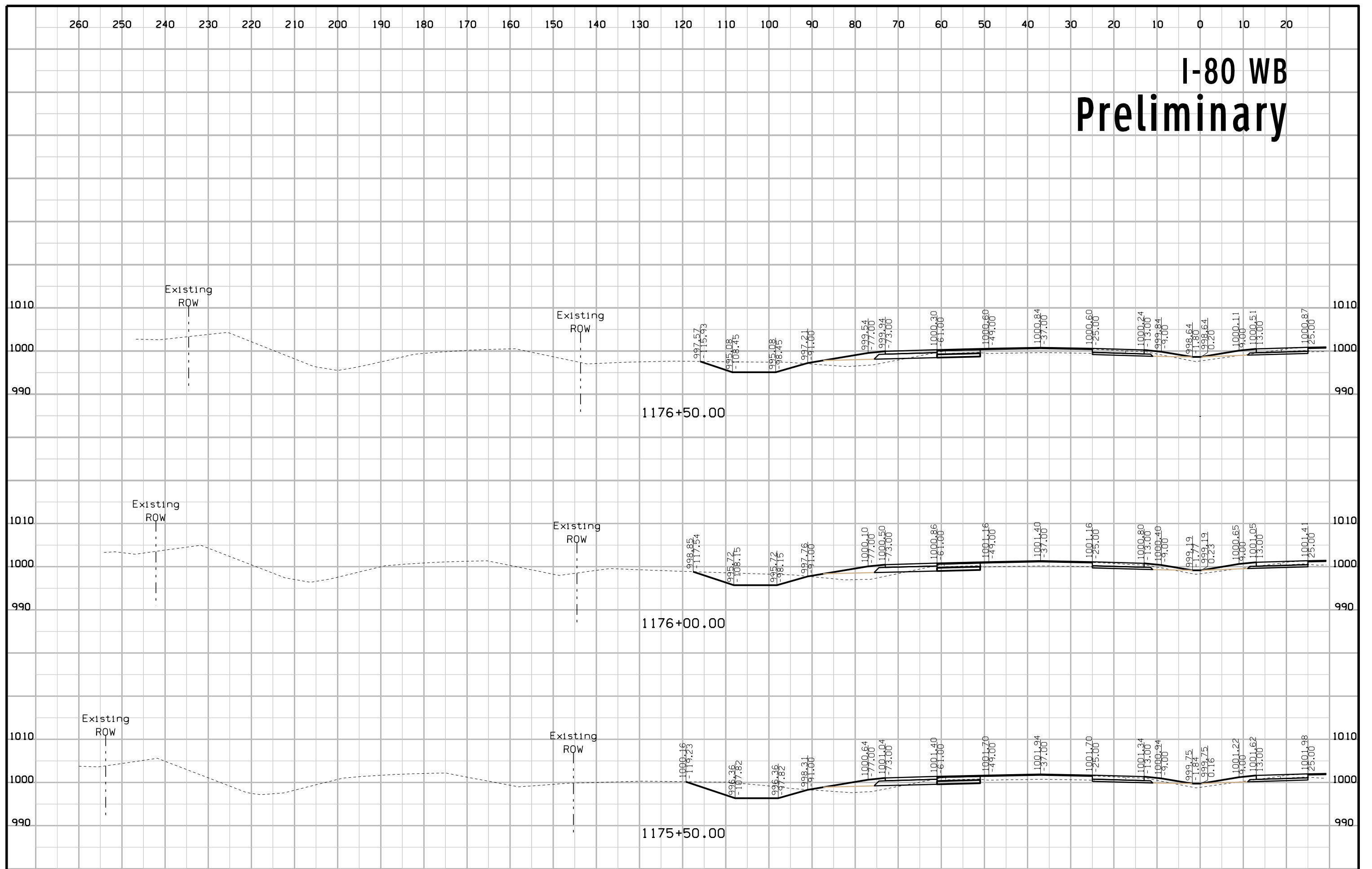
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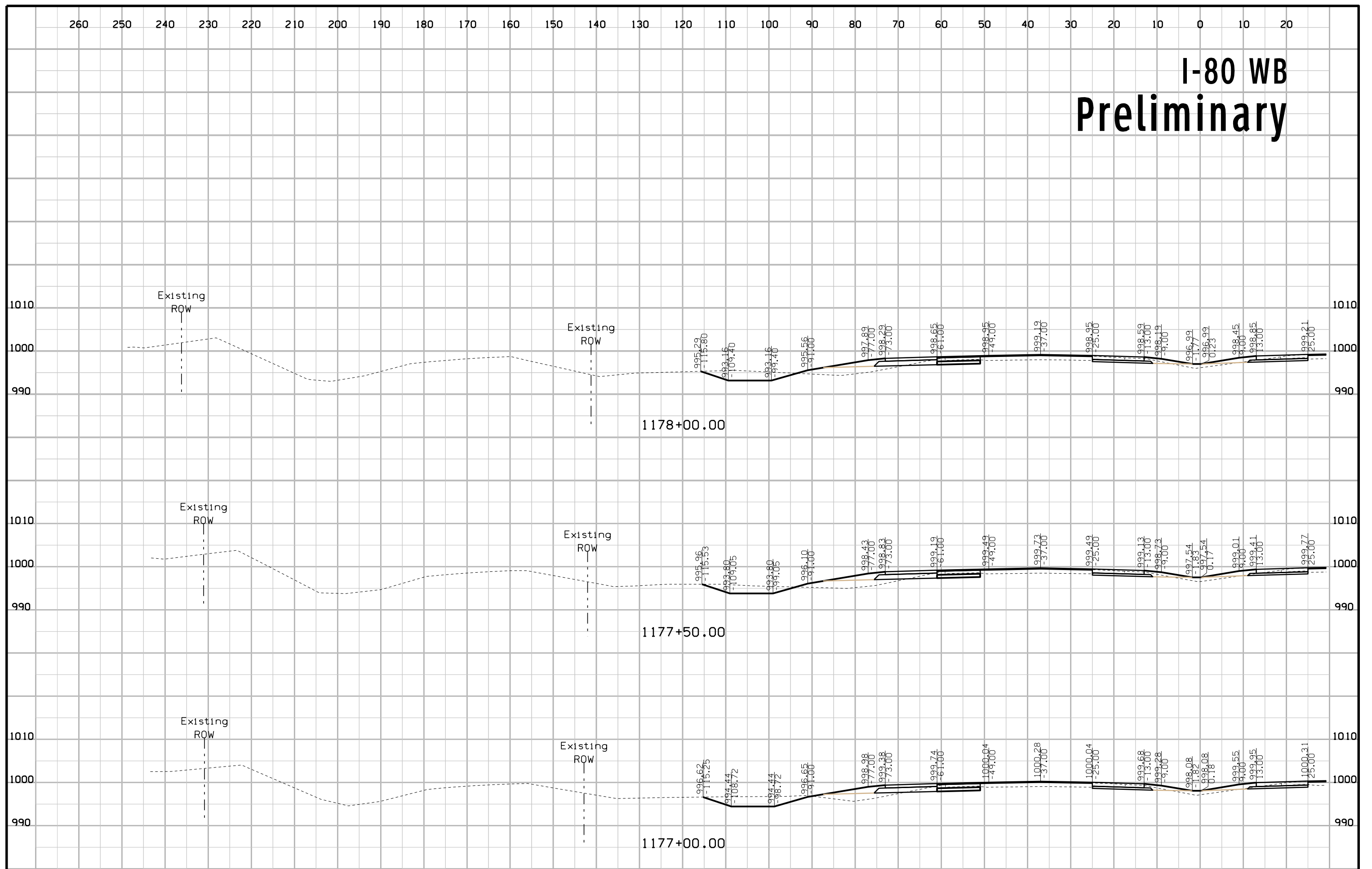
I-80 WB Preliminary



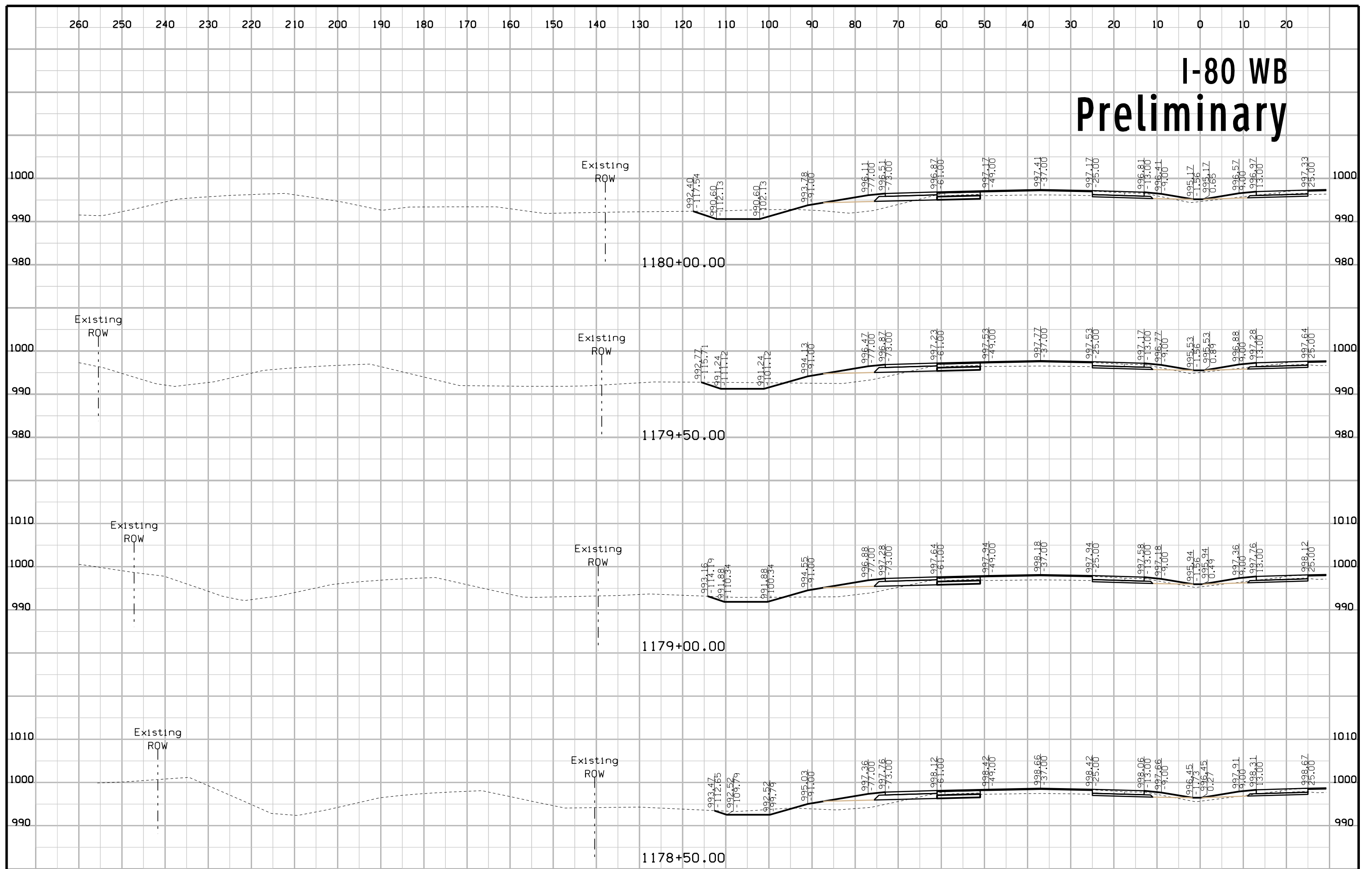
I-80 WB Preliminary



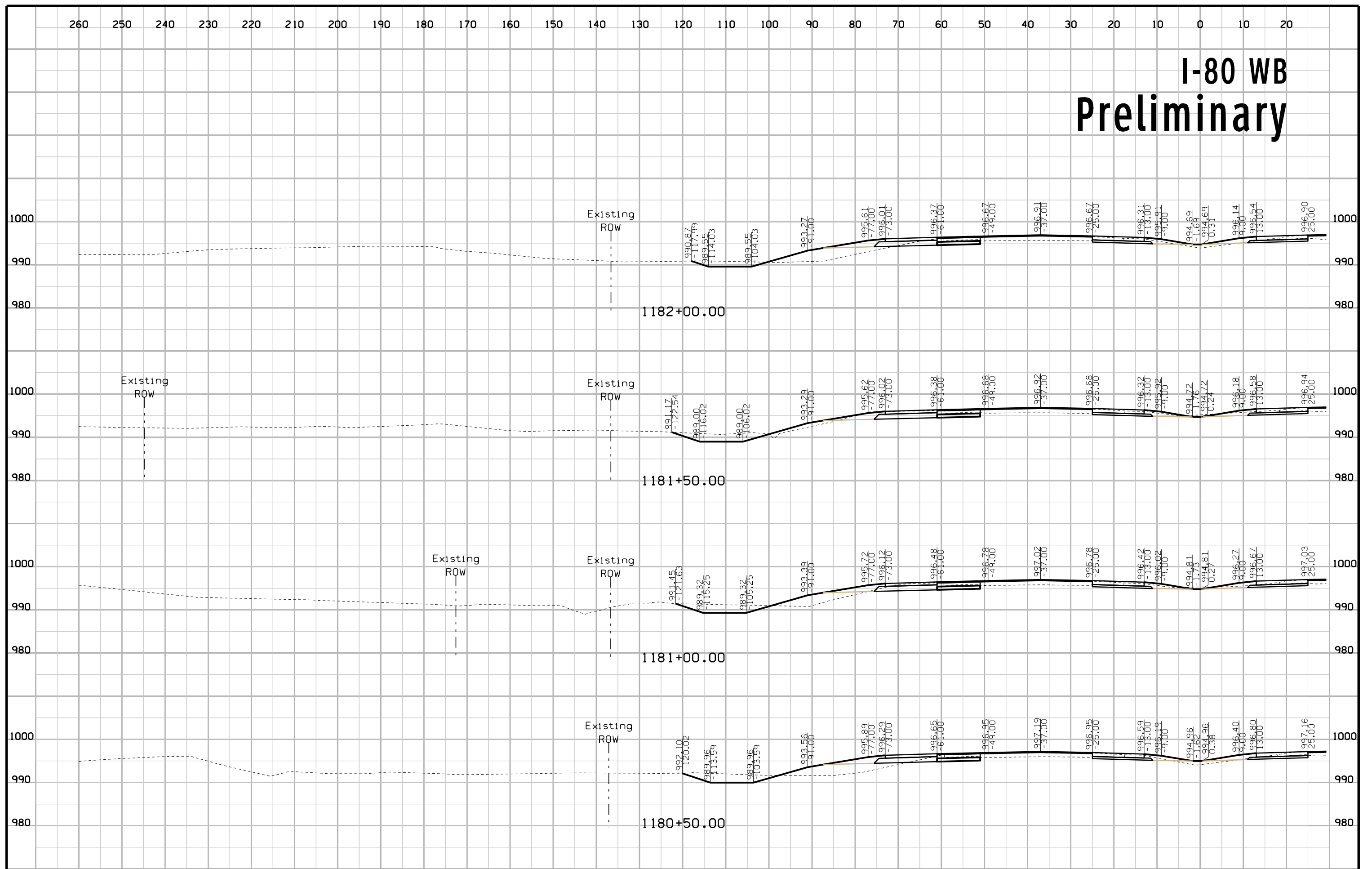
I-80 WB Preliminary



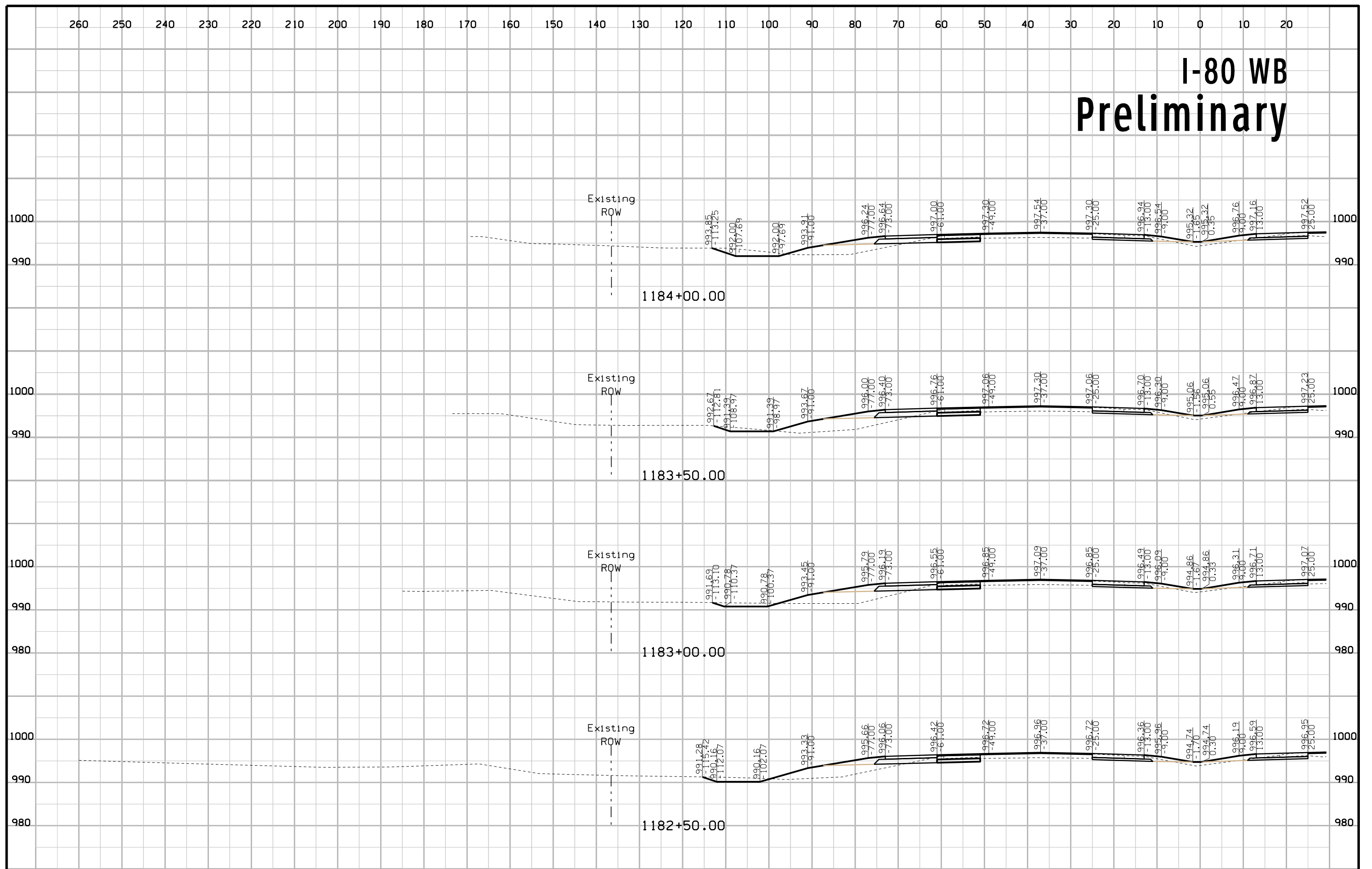
I-80 WB Preliminary



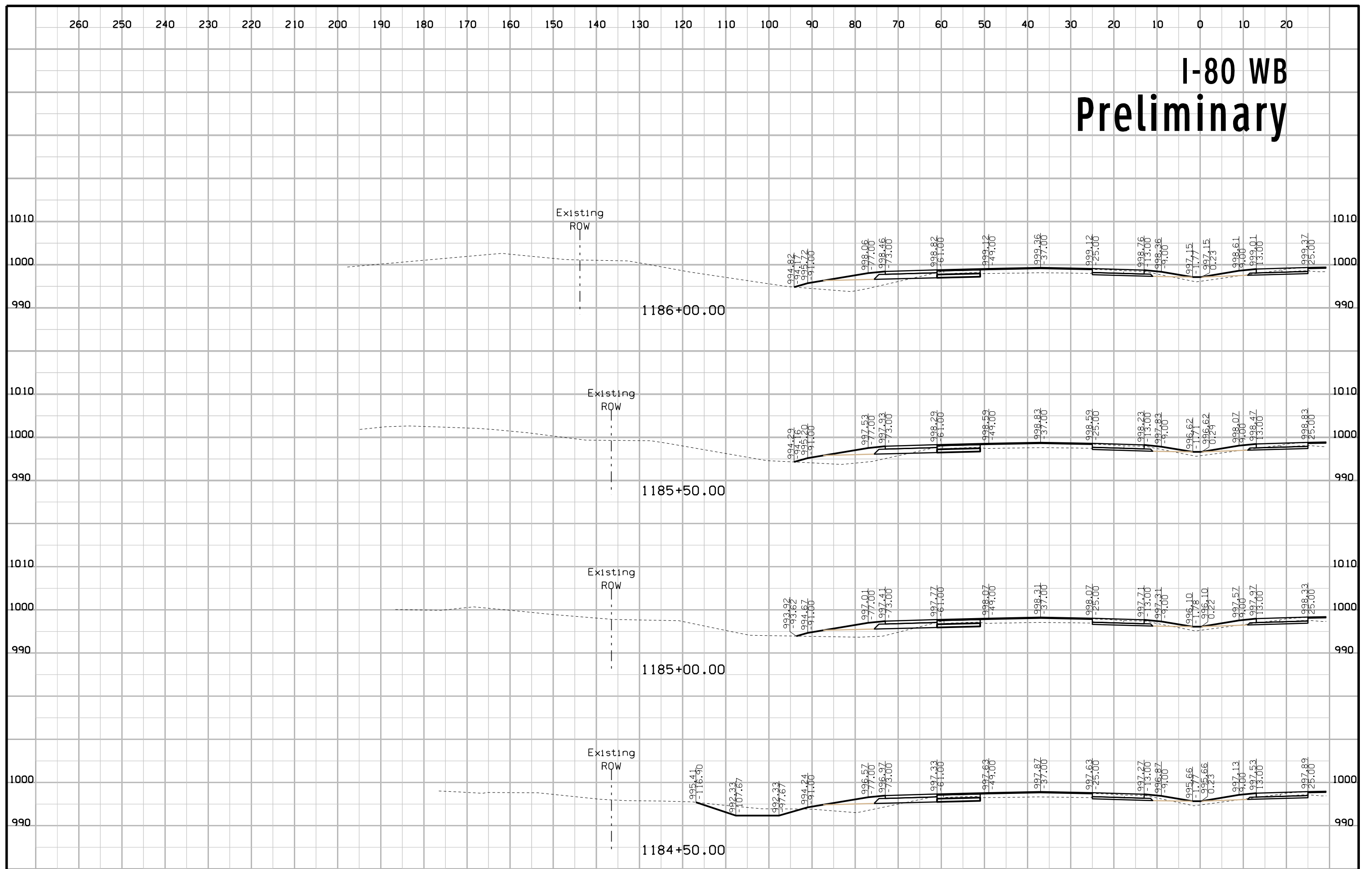
I-80 WB Preliminary



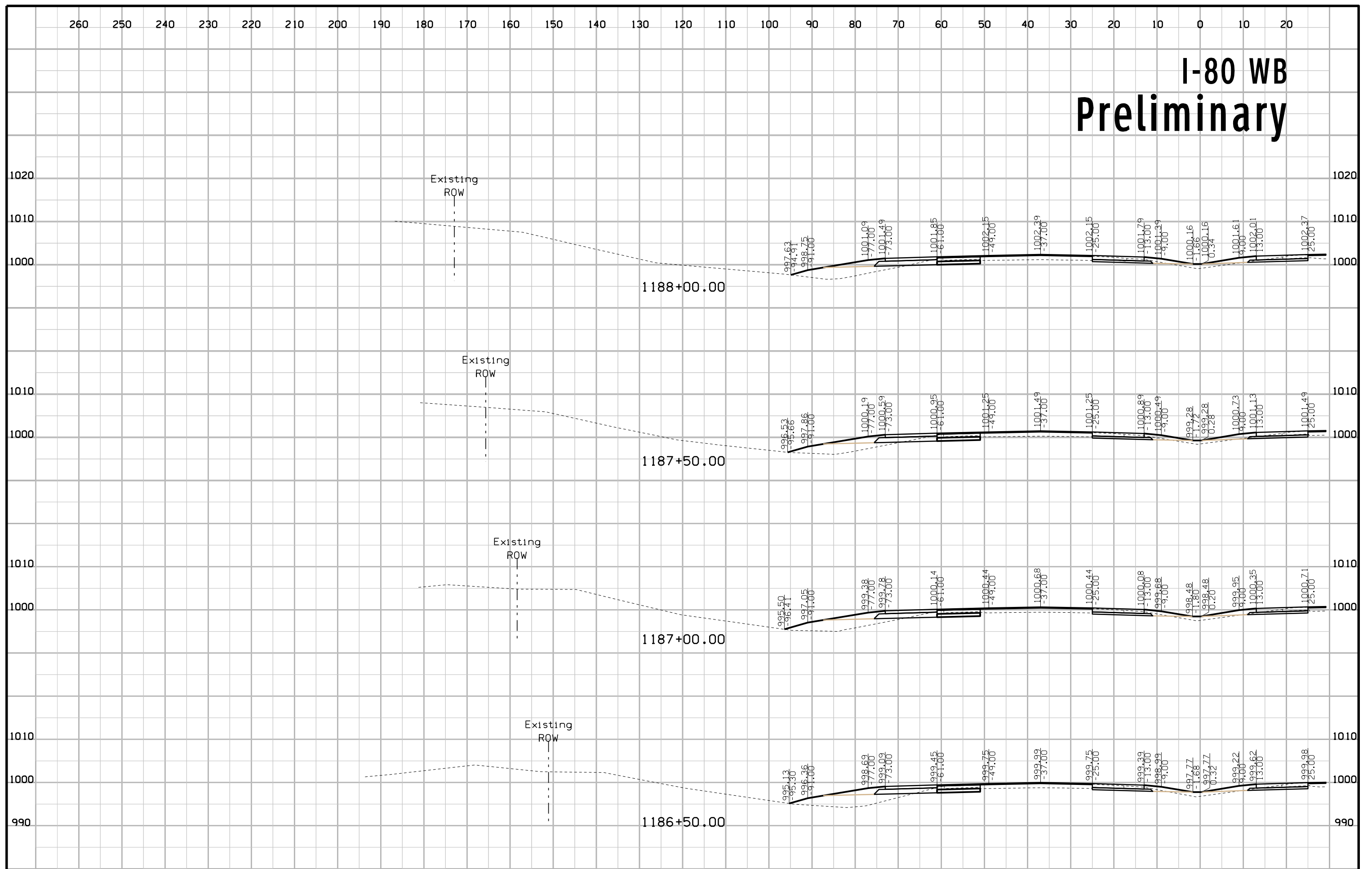
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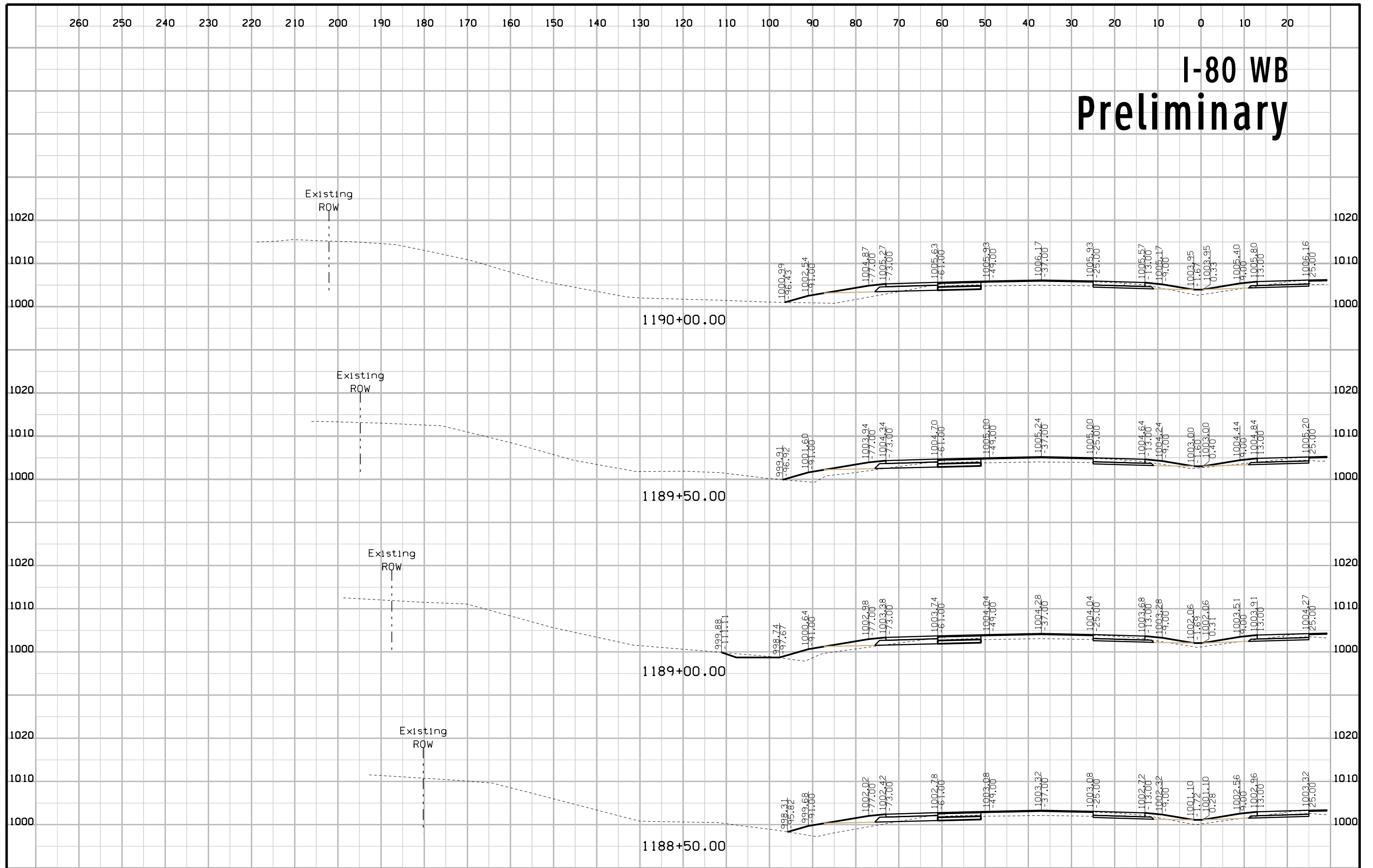
I-80 WB Preliminary



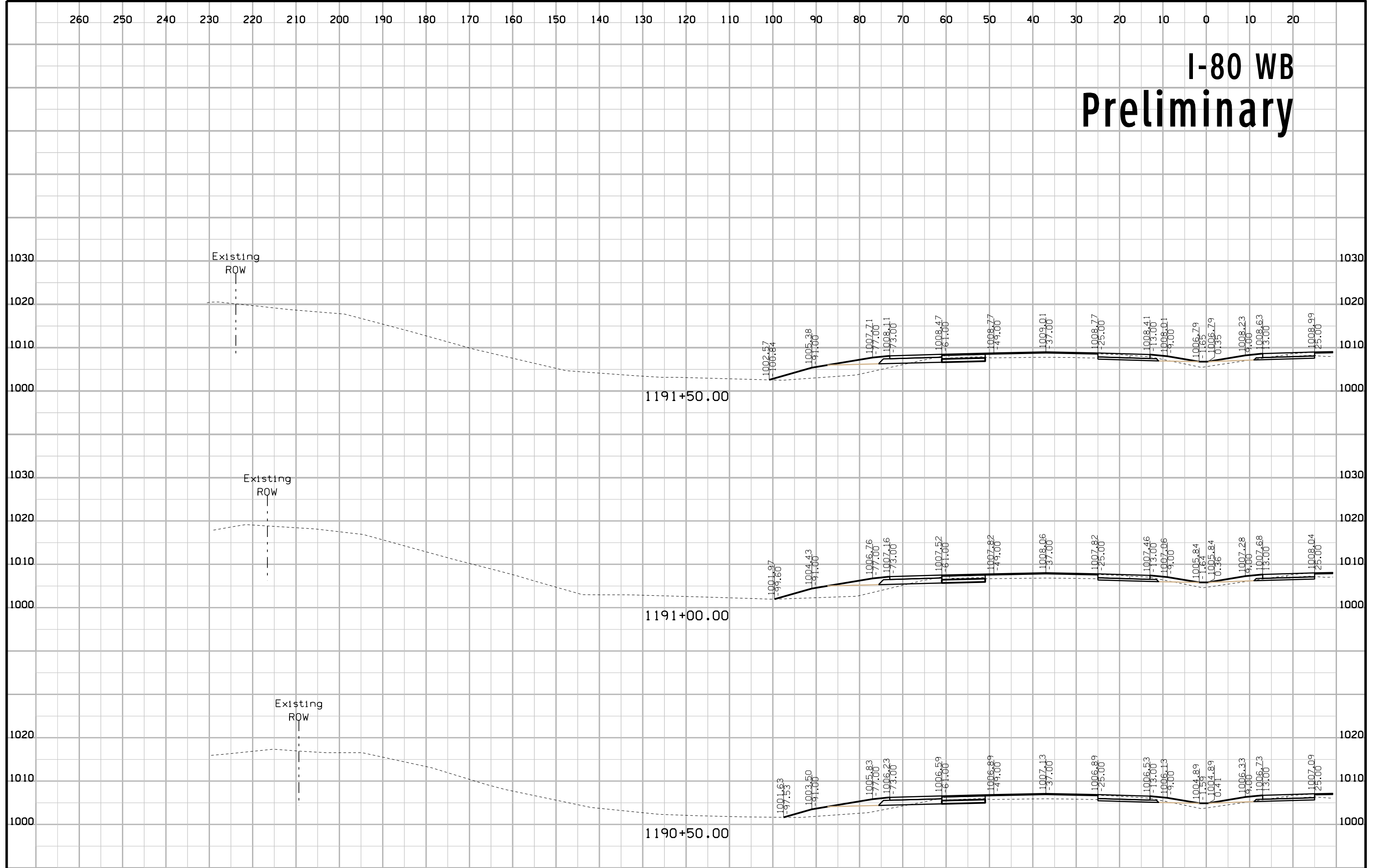
I-80 WB Preliminary



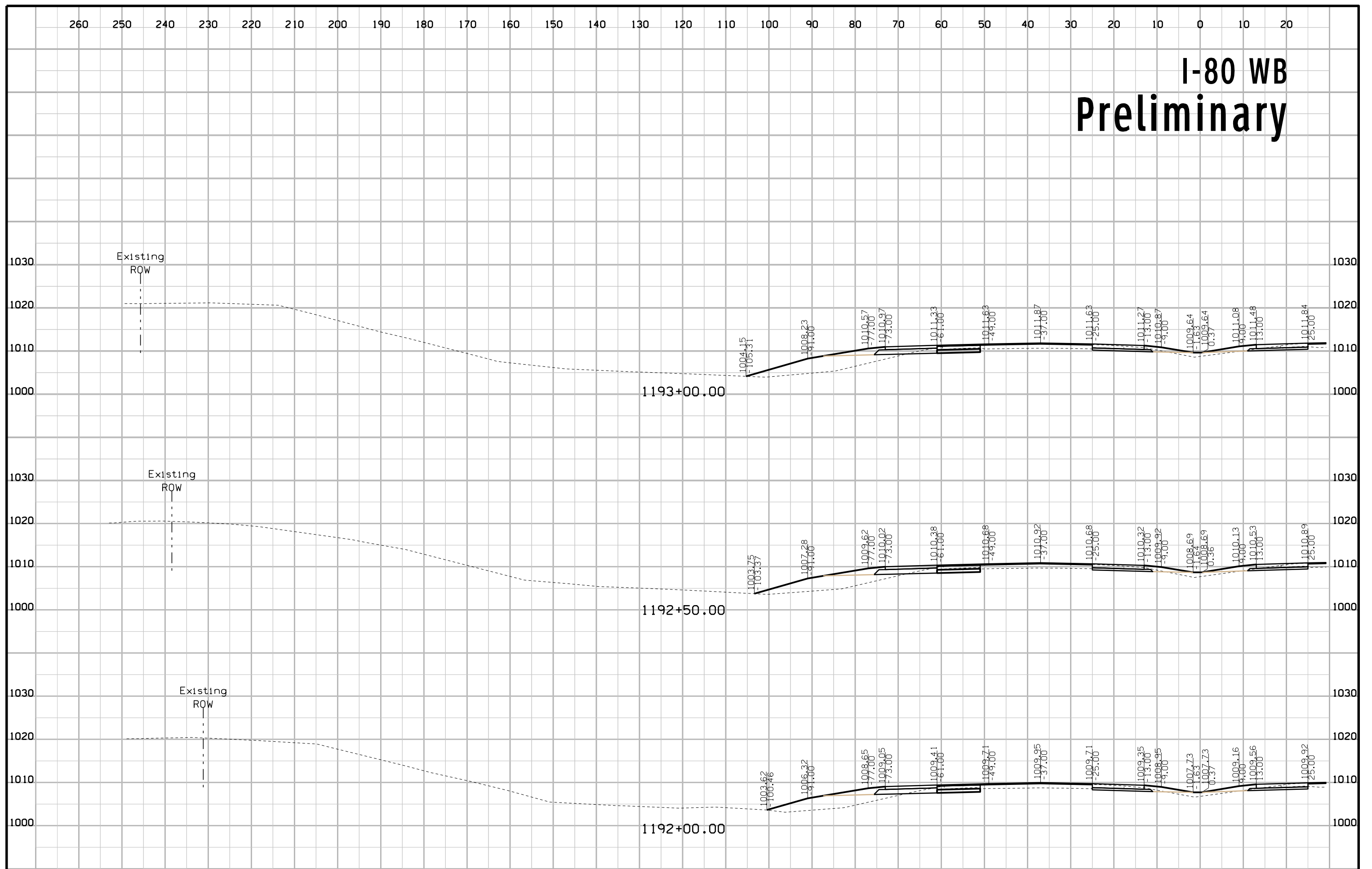
I-80 WB Preliminary



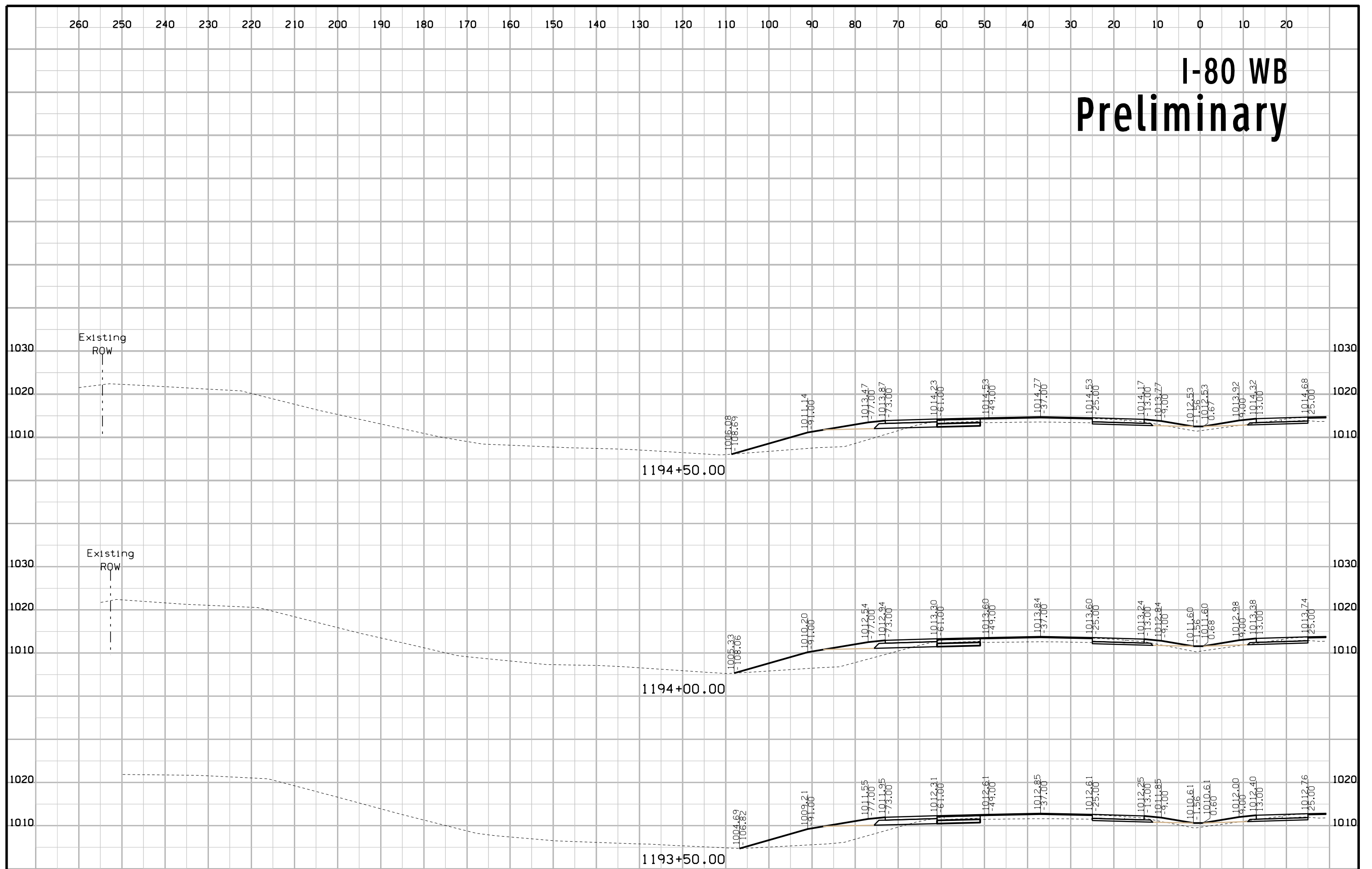
I-80 WB Preliminary



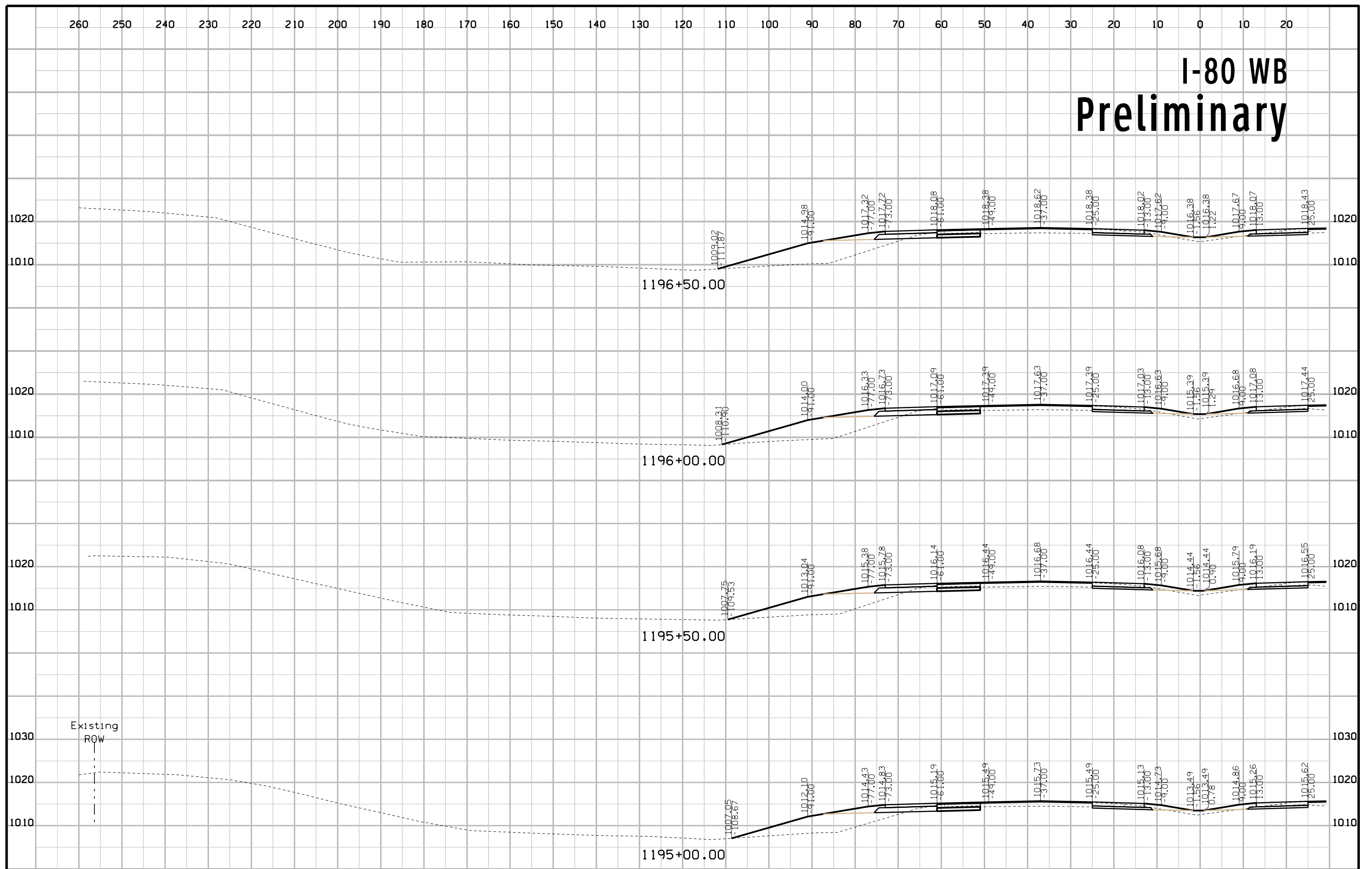
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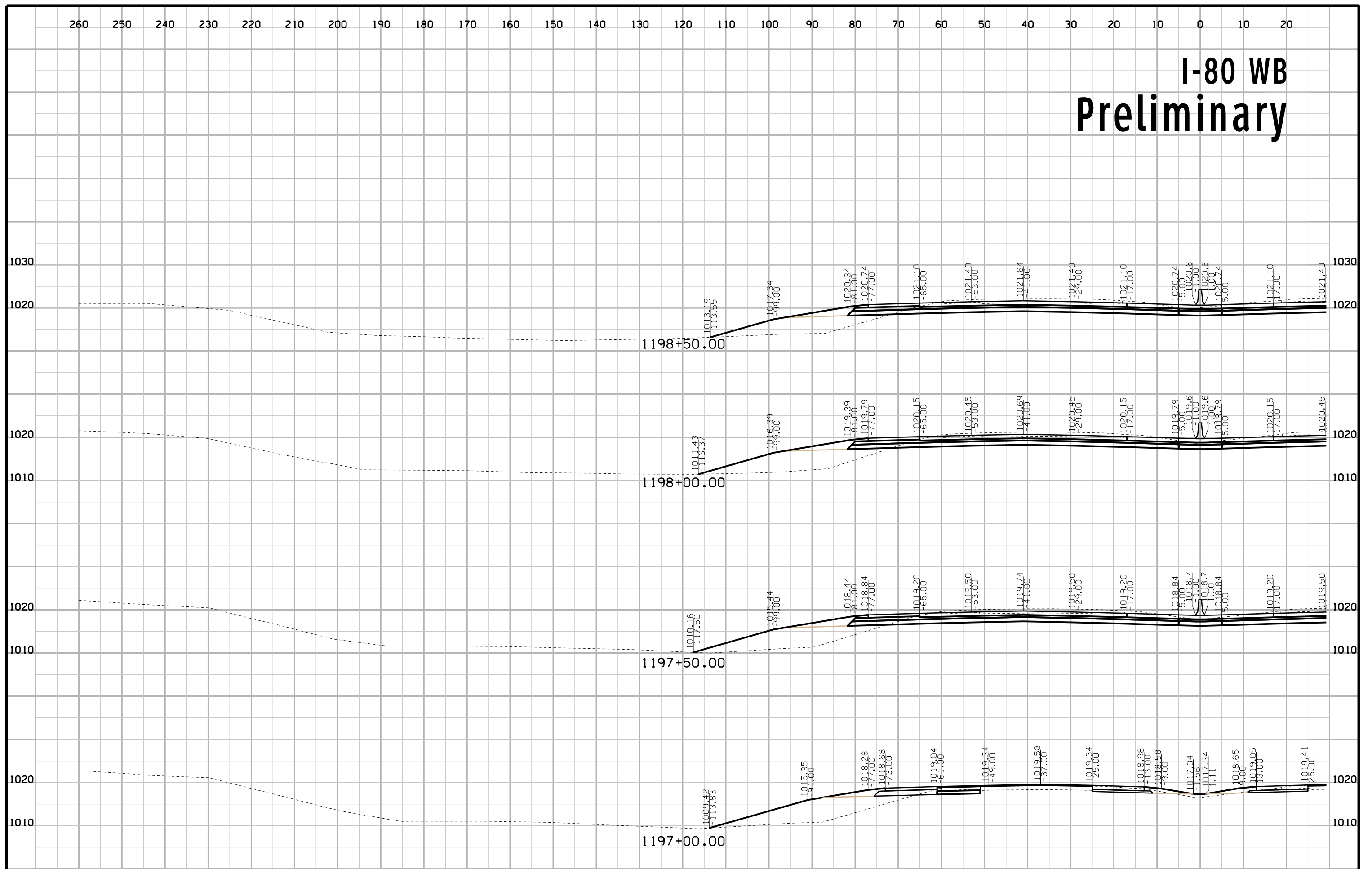
I-80 WB Preliminary



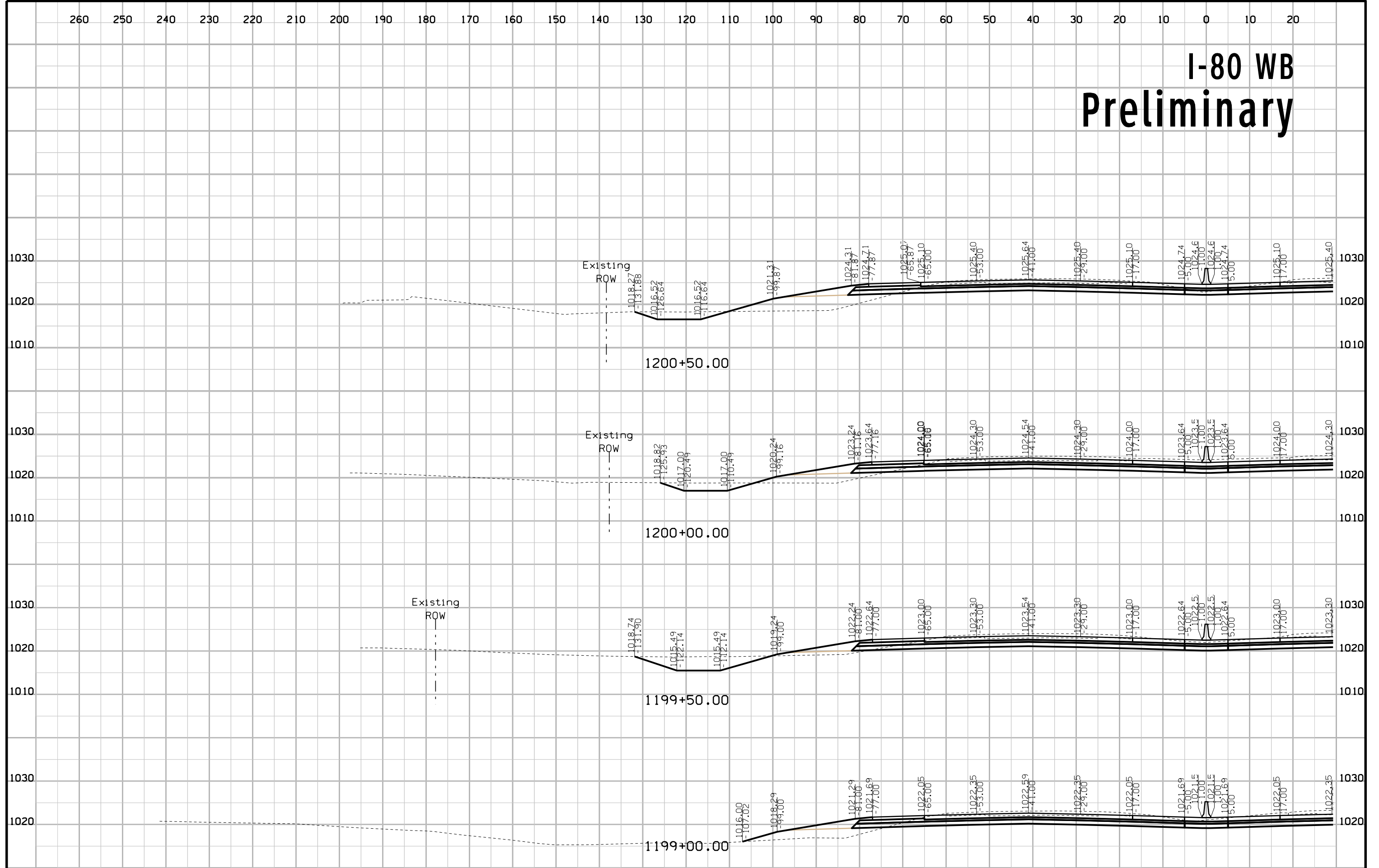
I-80 WB Preliminary



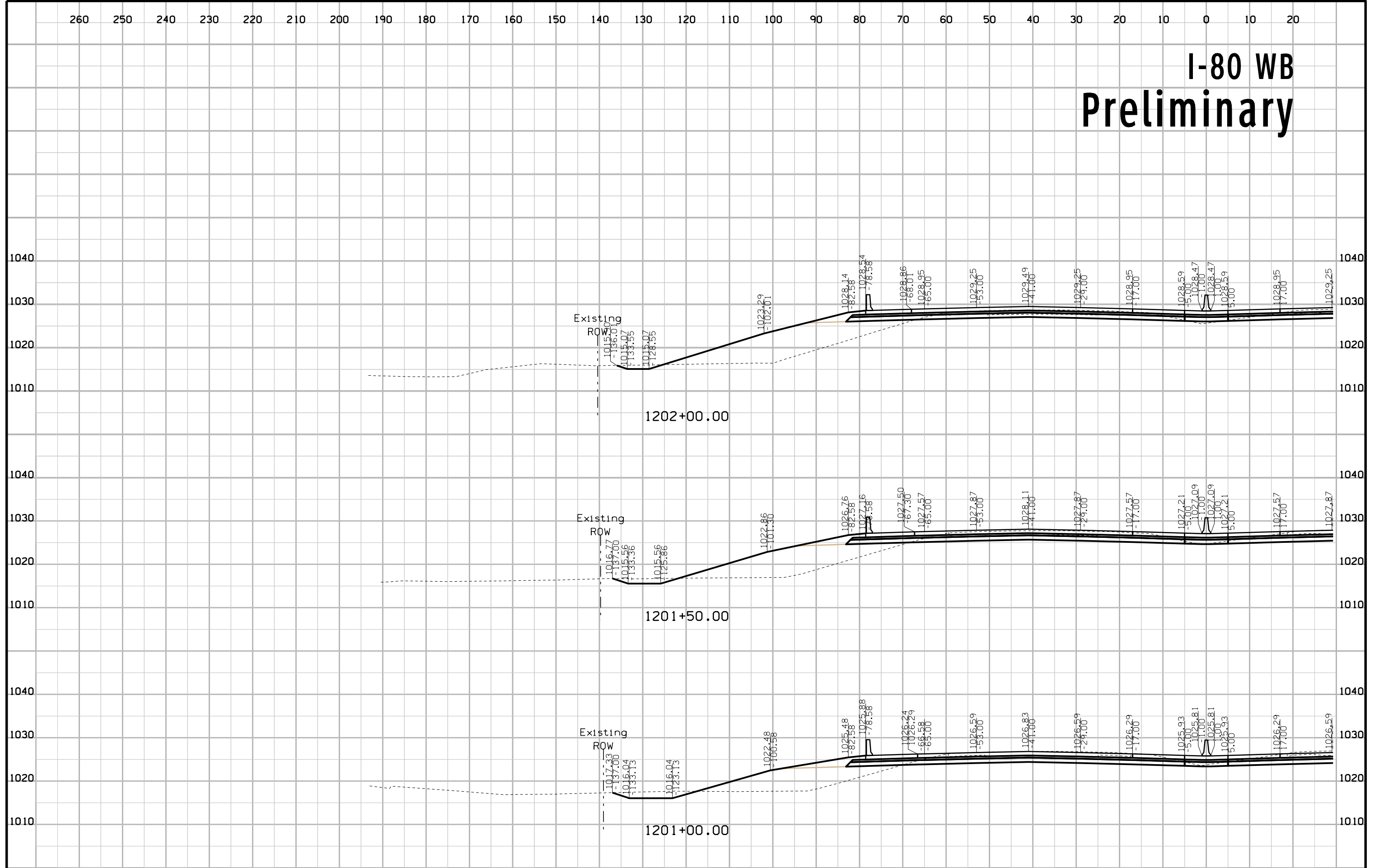
I-80 WB Preliminary



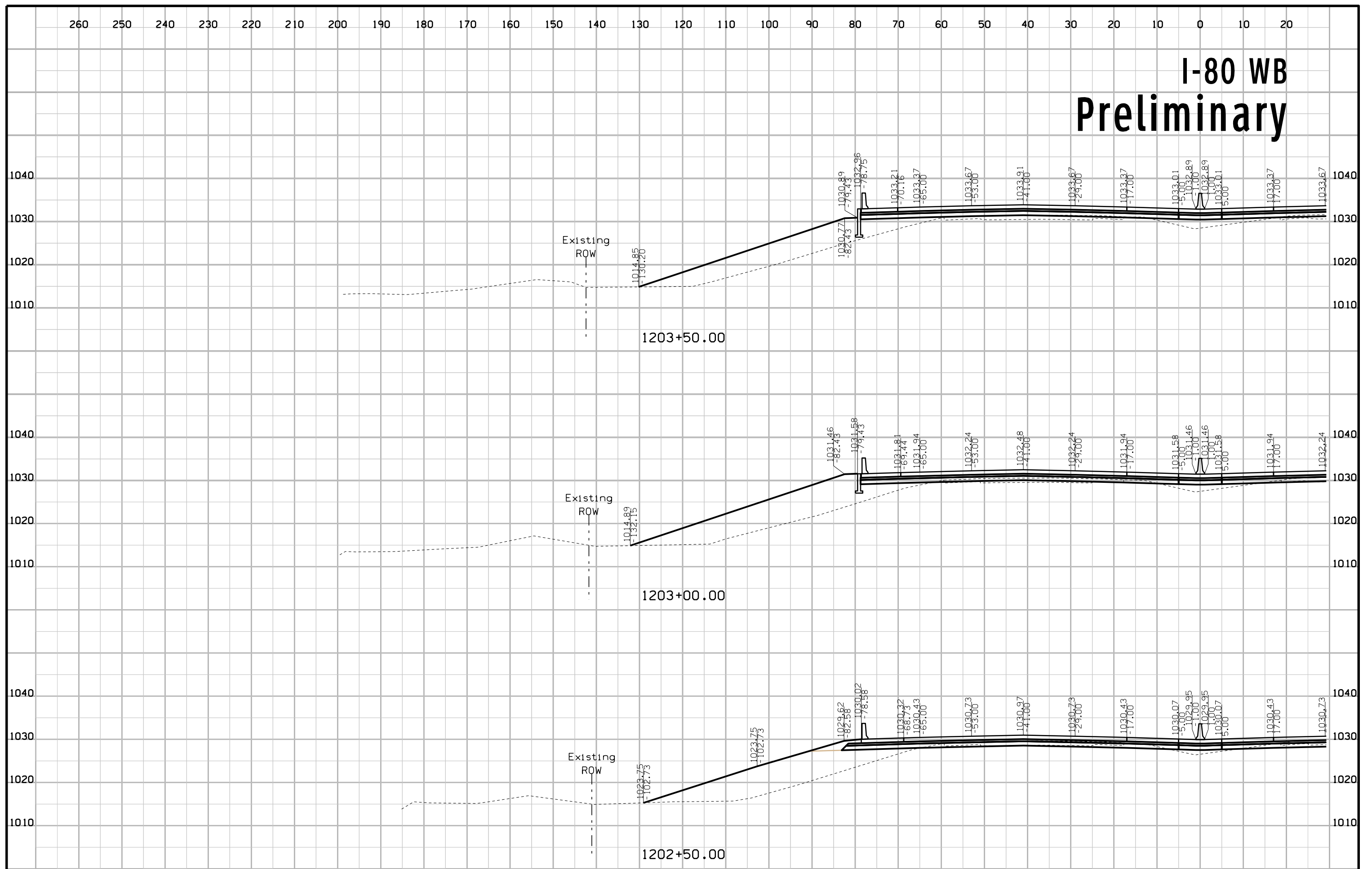
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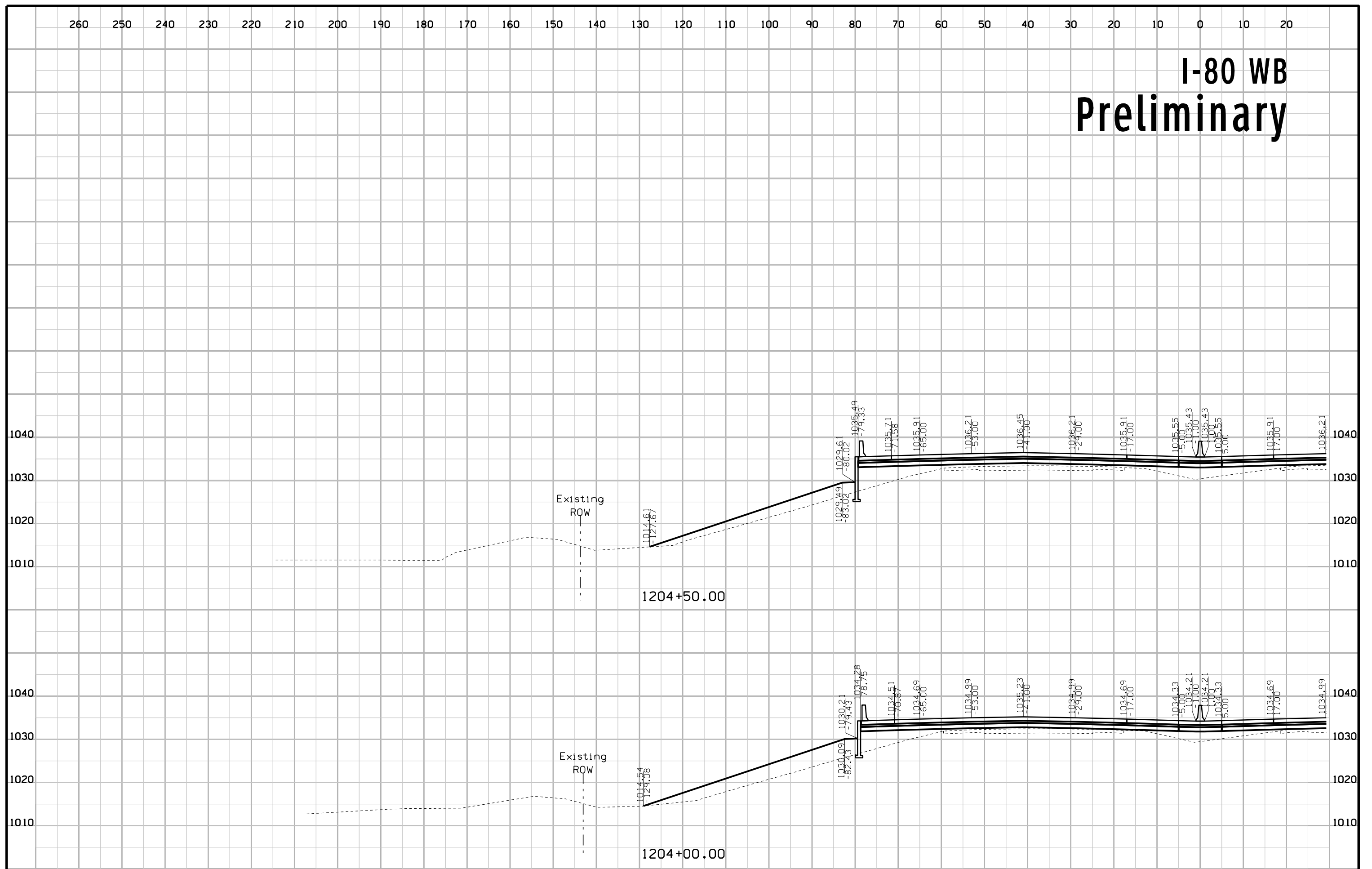
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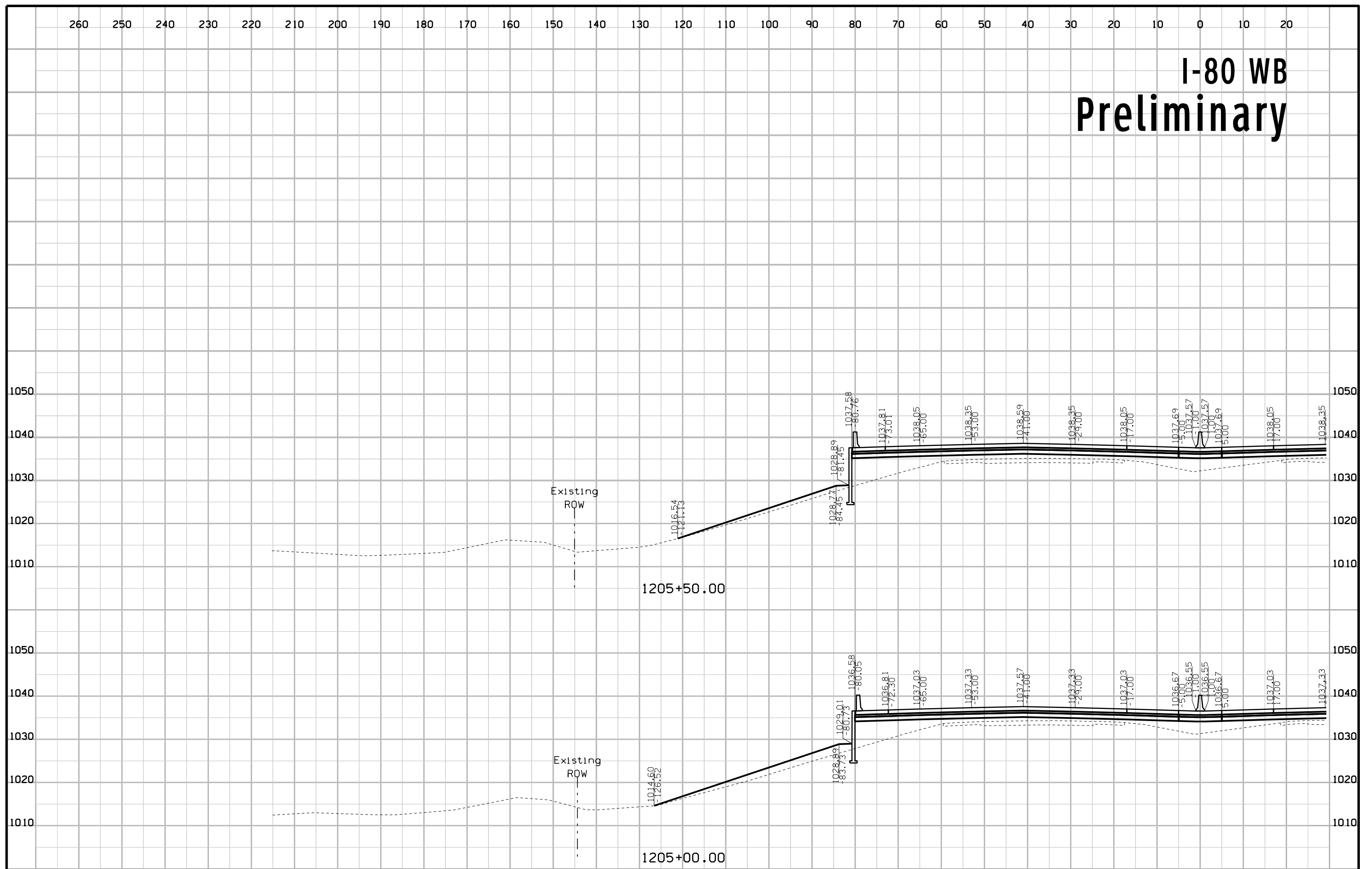
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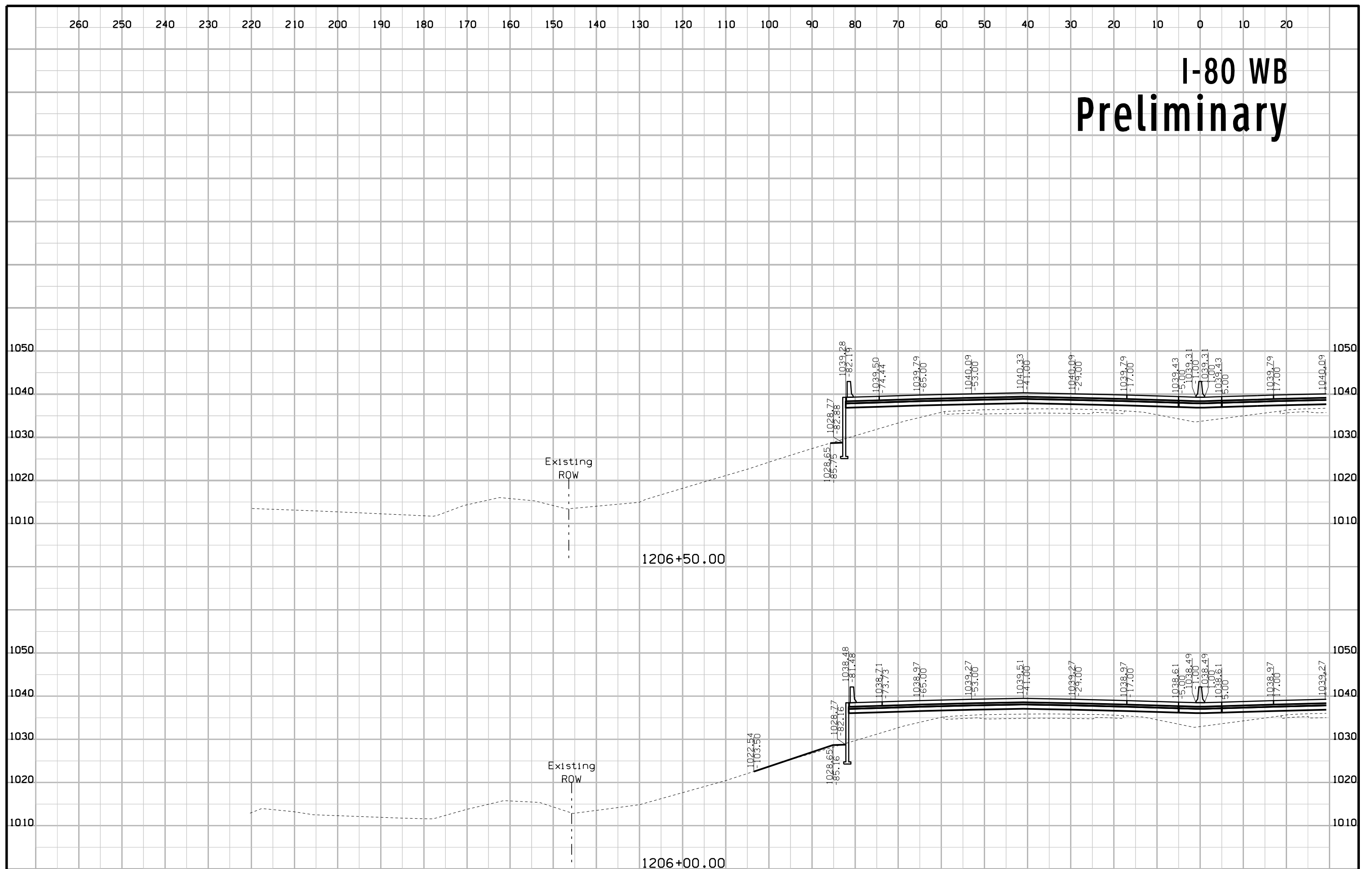
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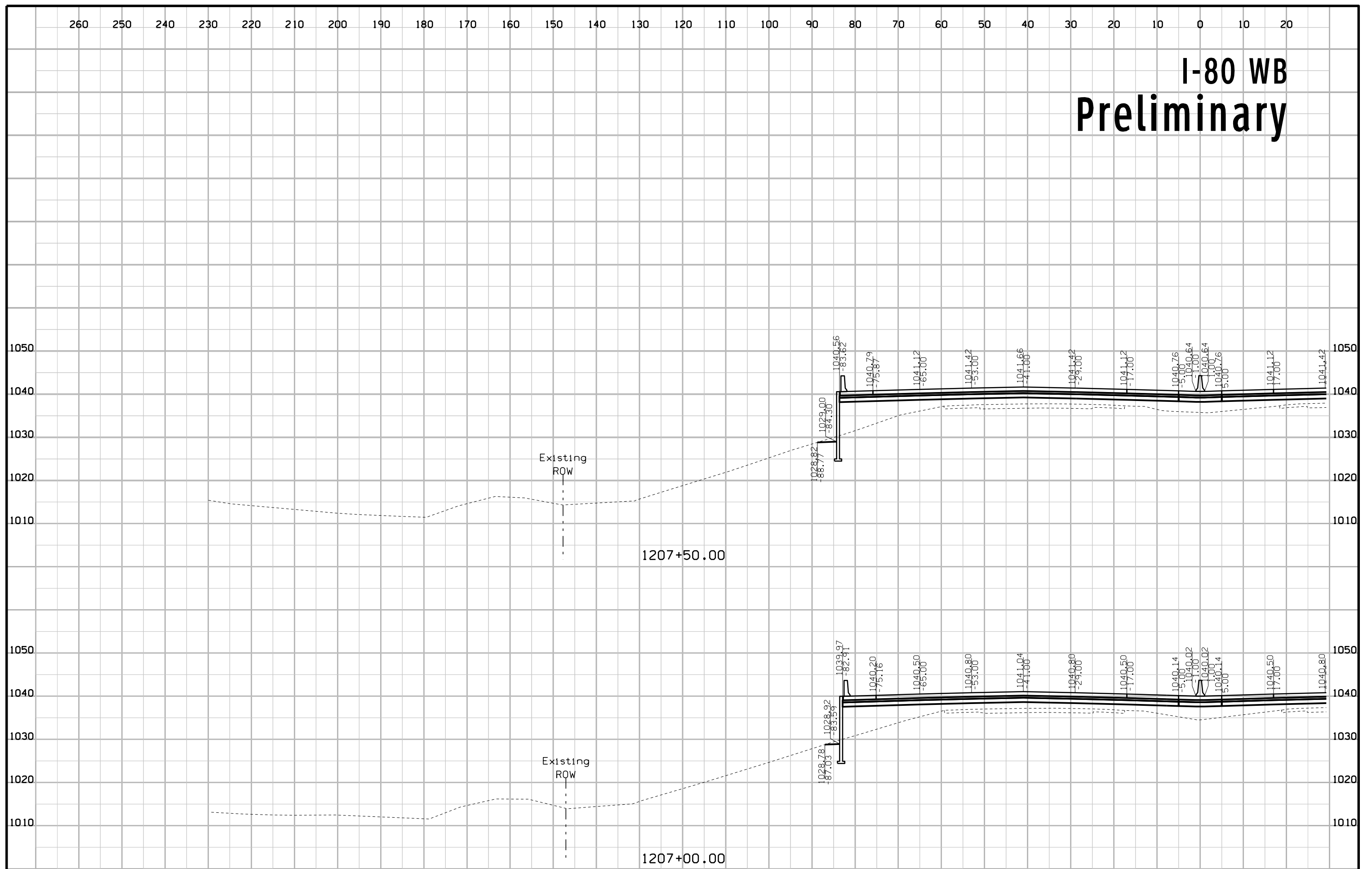
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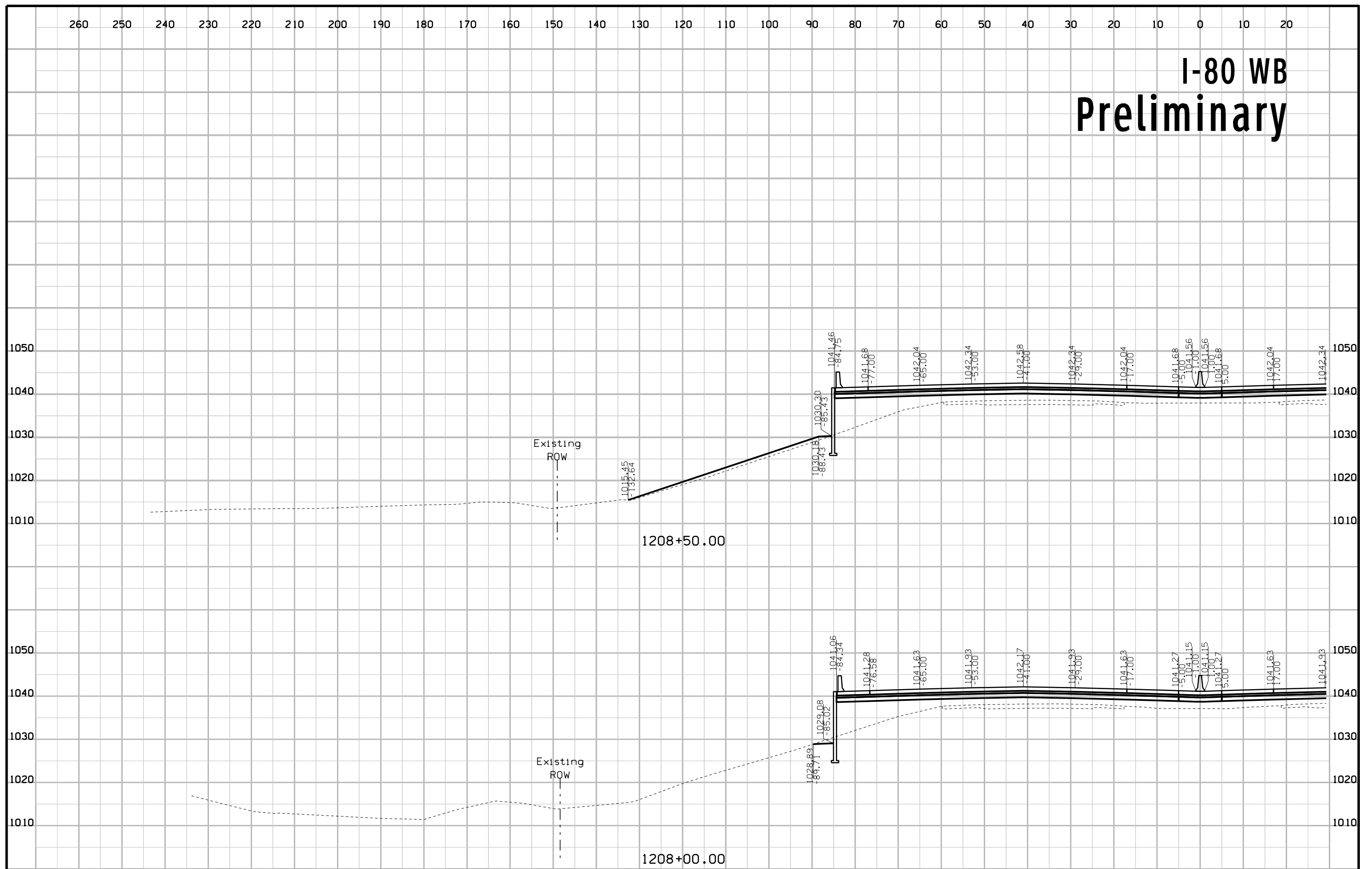
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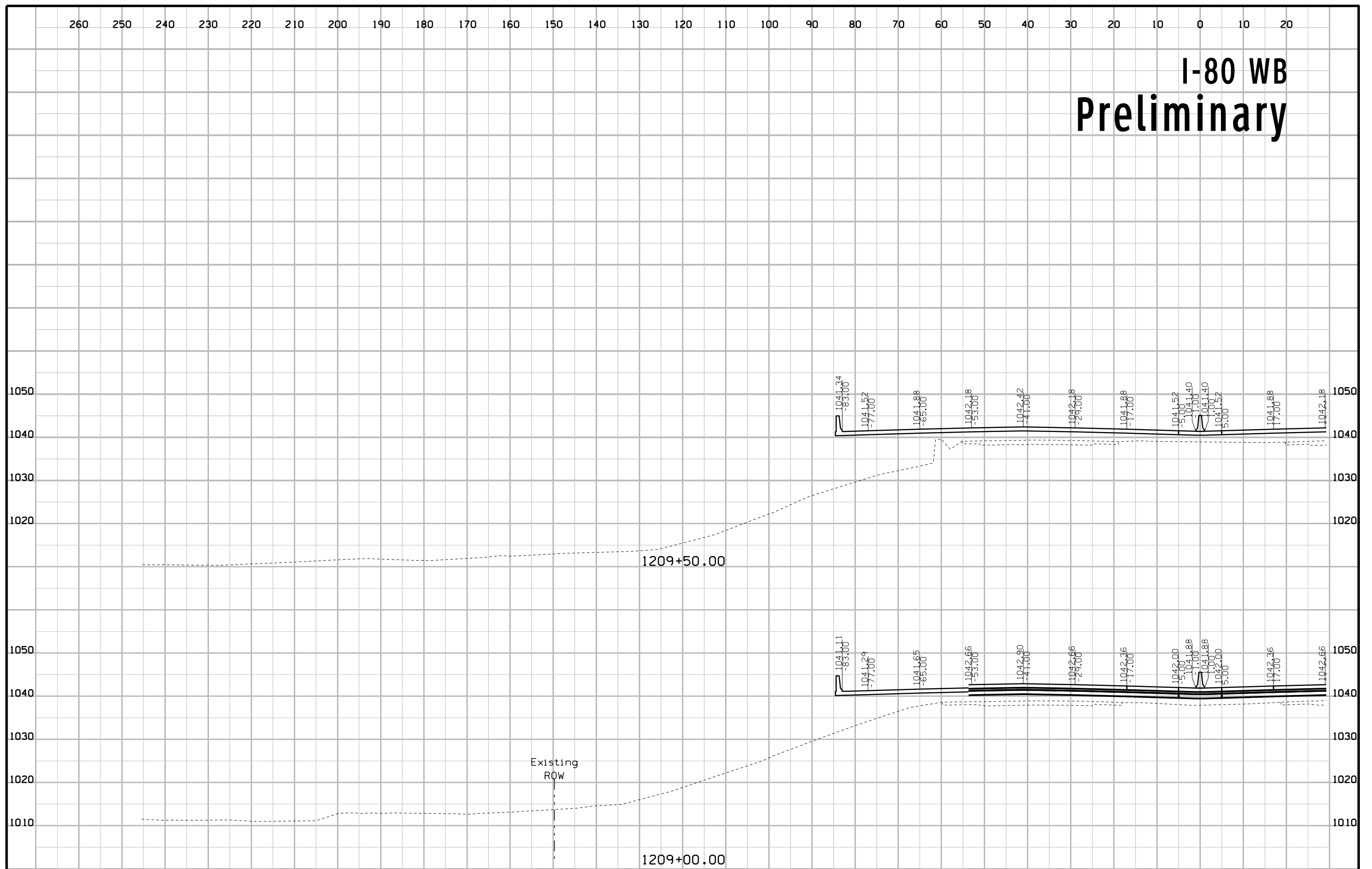
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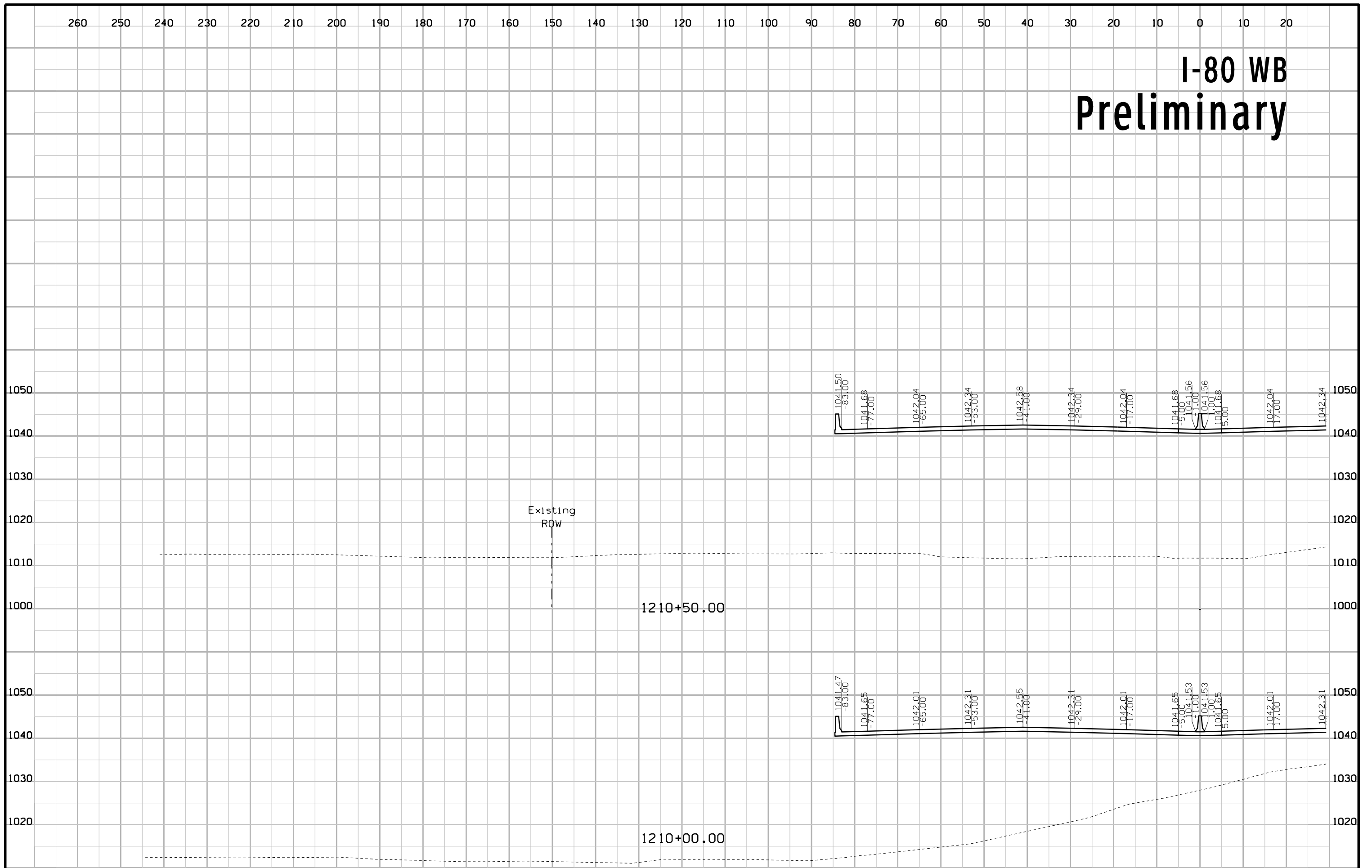
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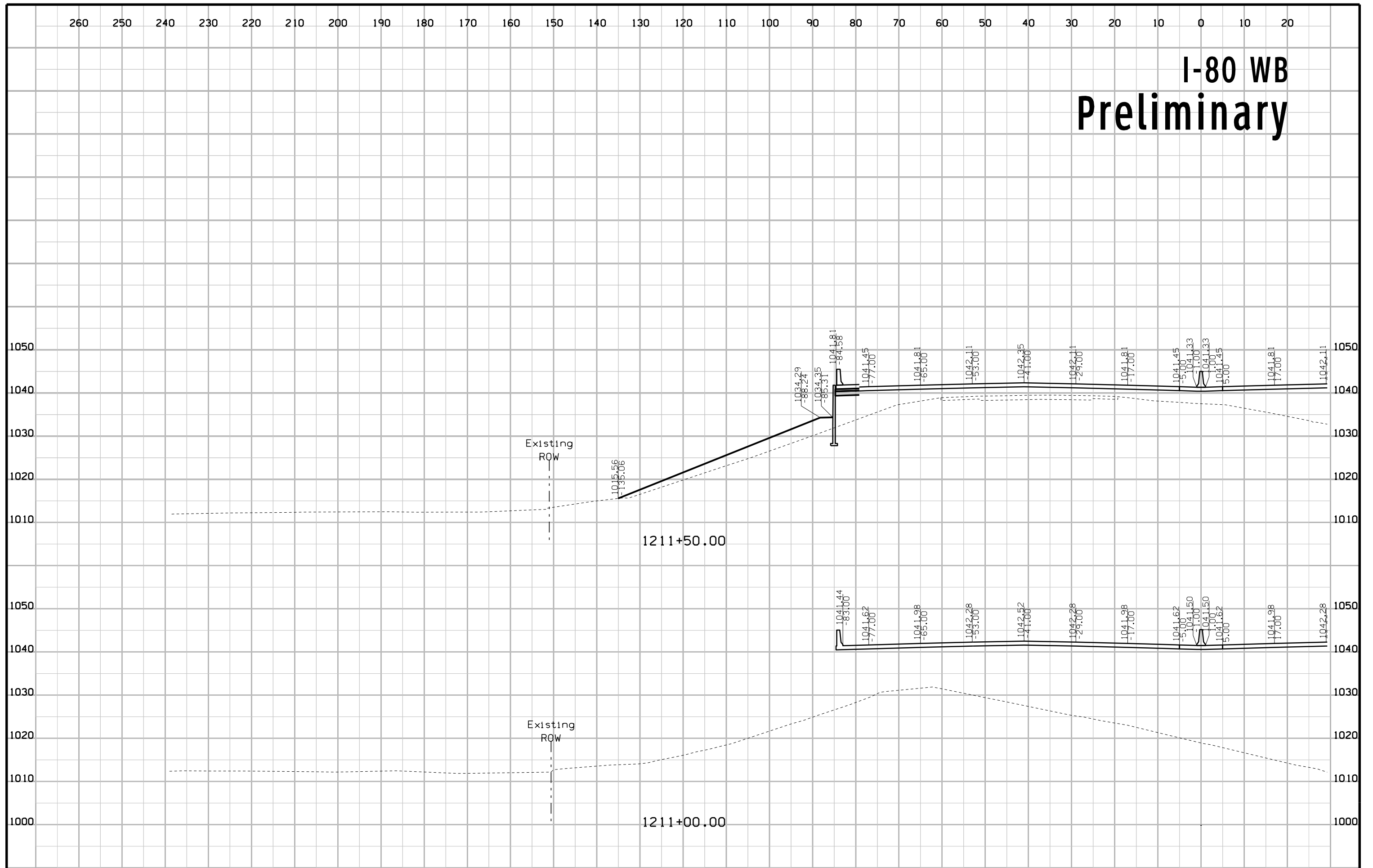
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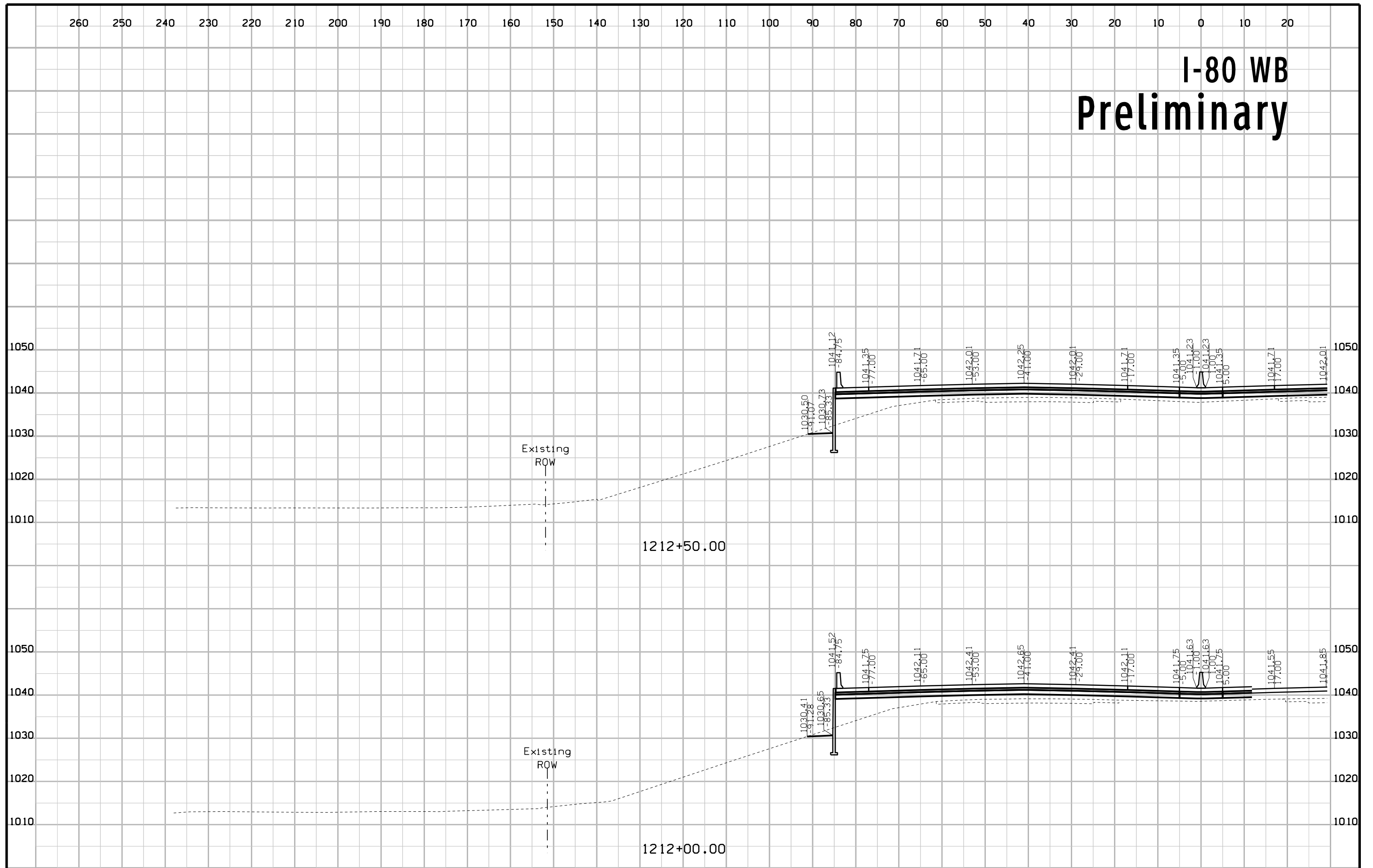
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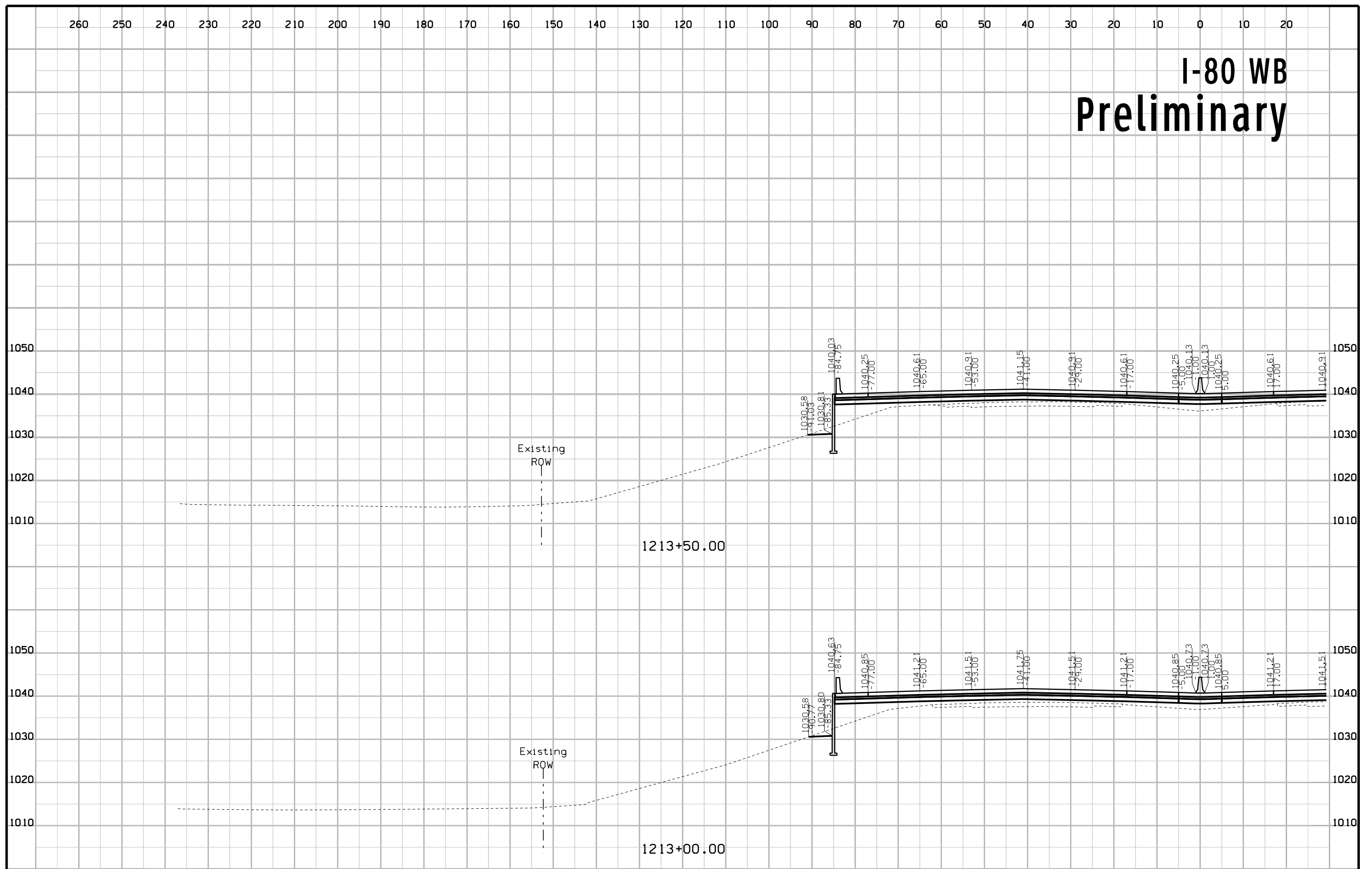
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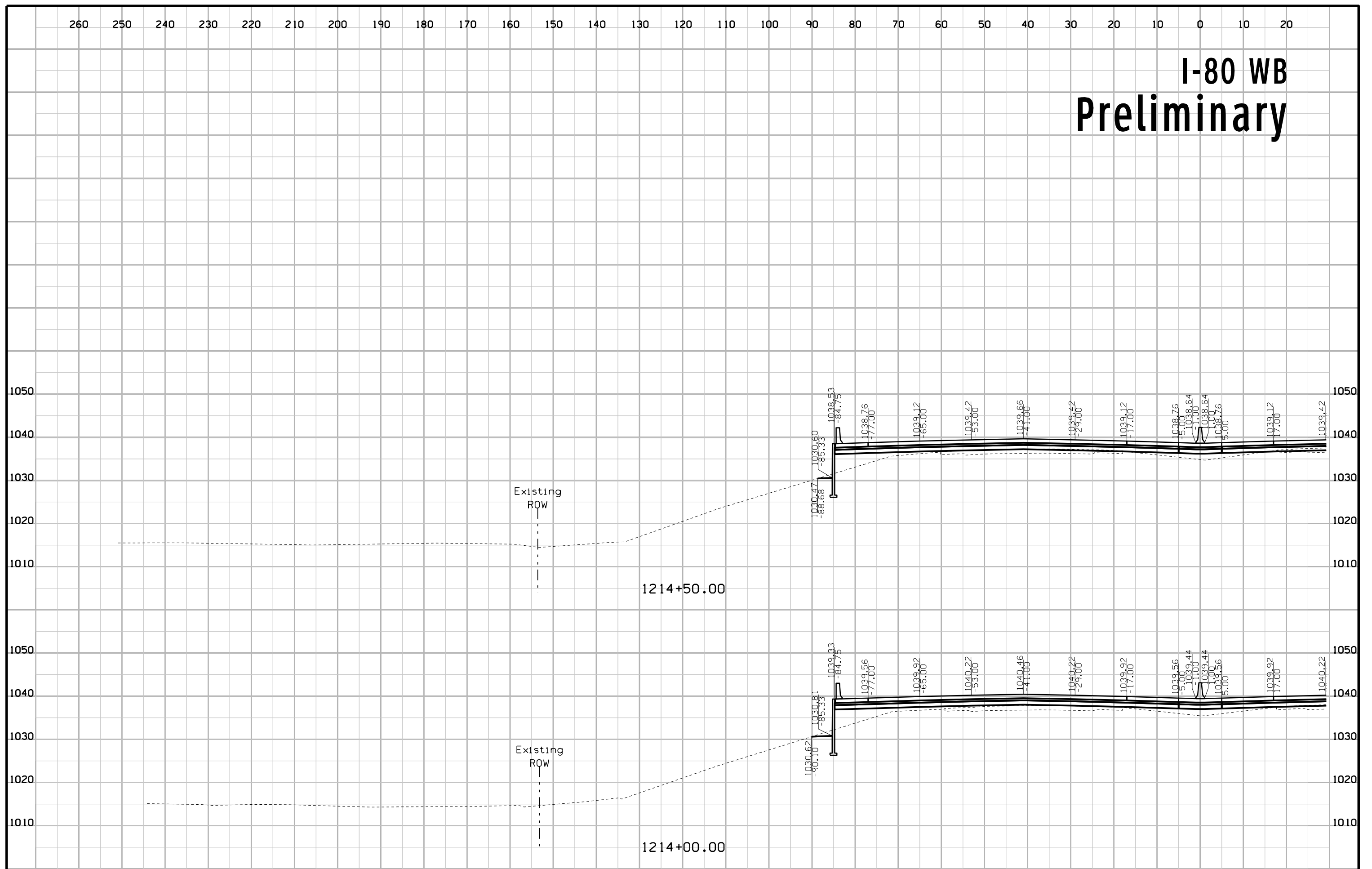
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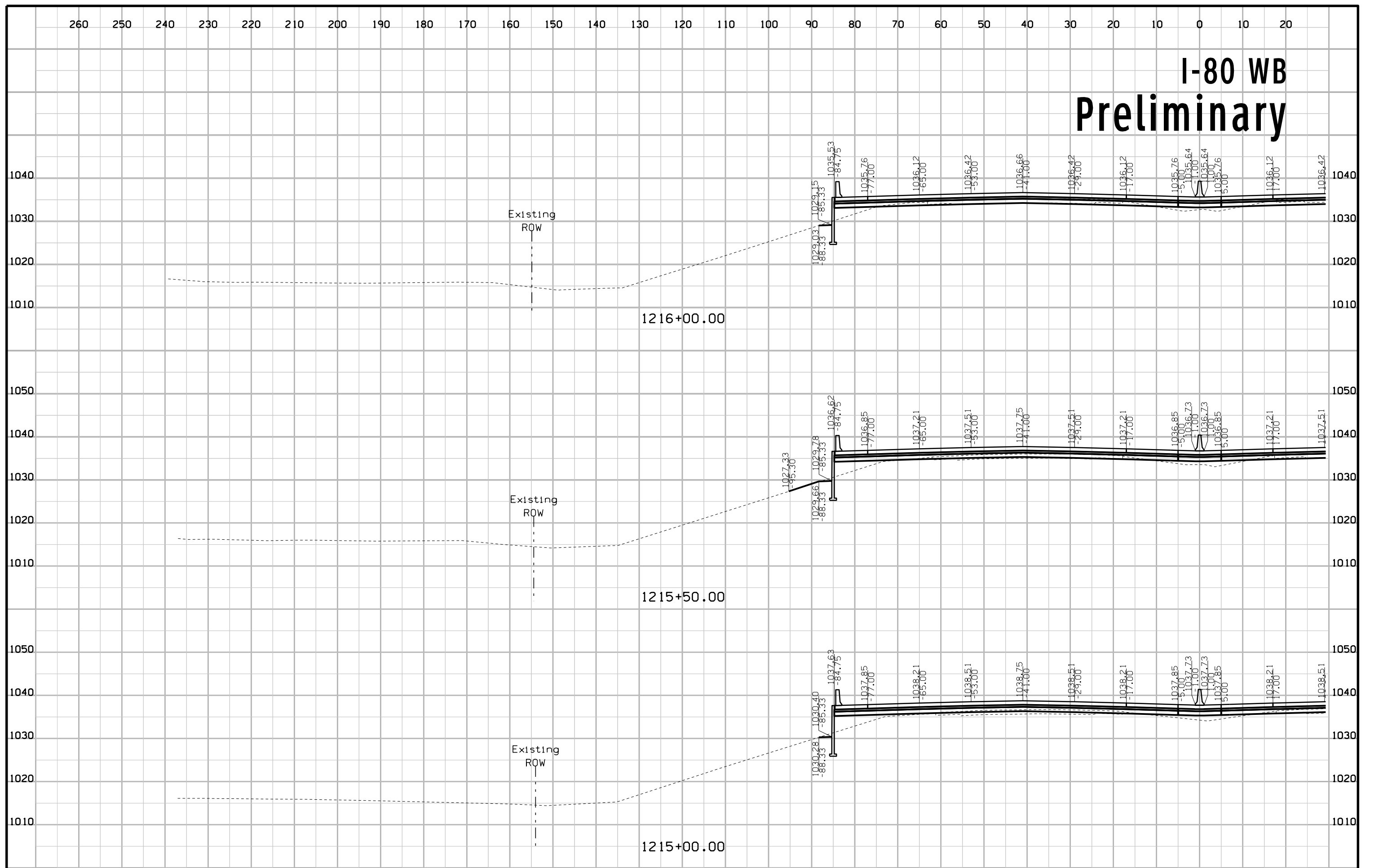
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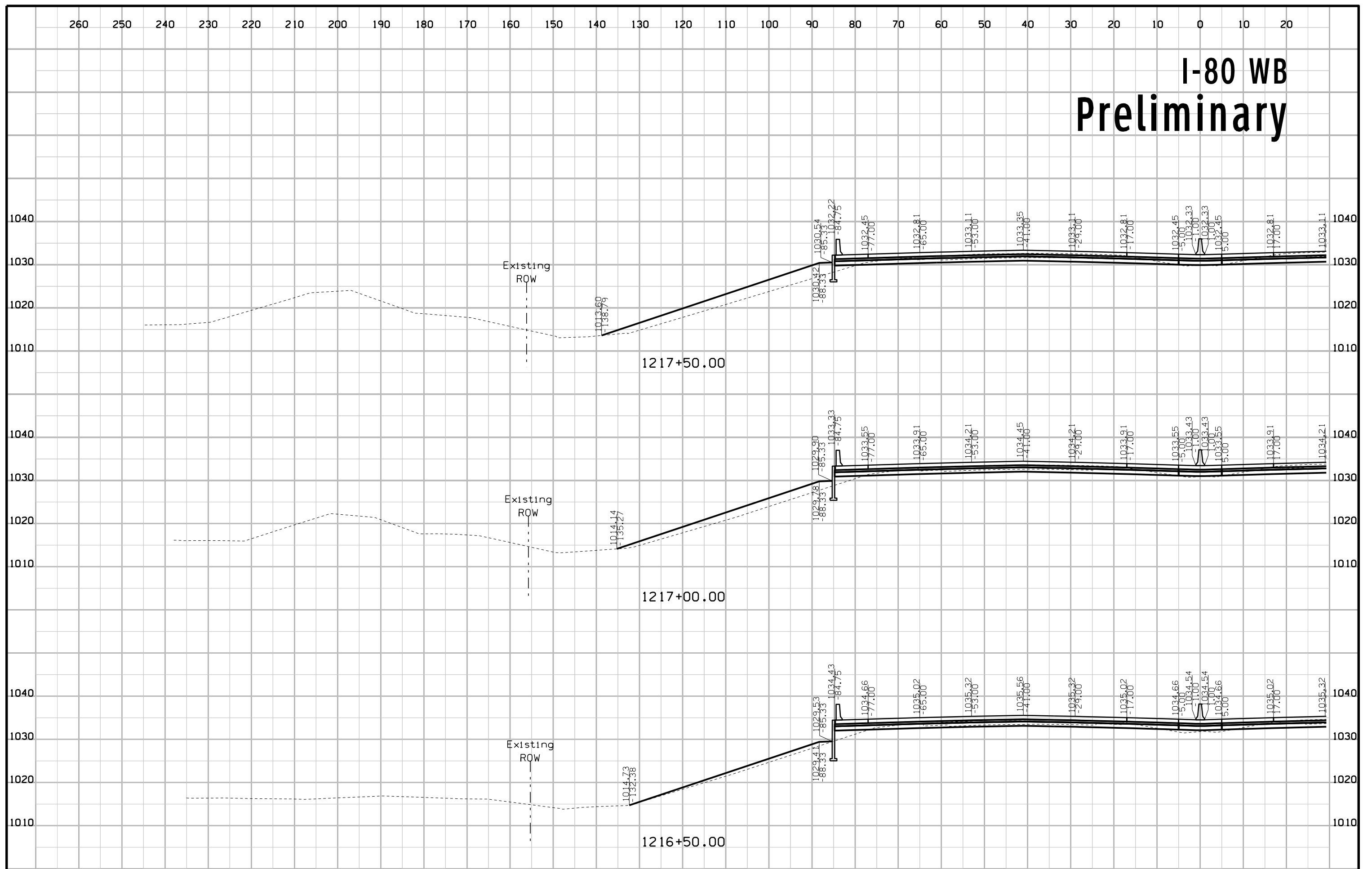
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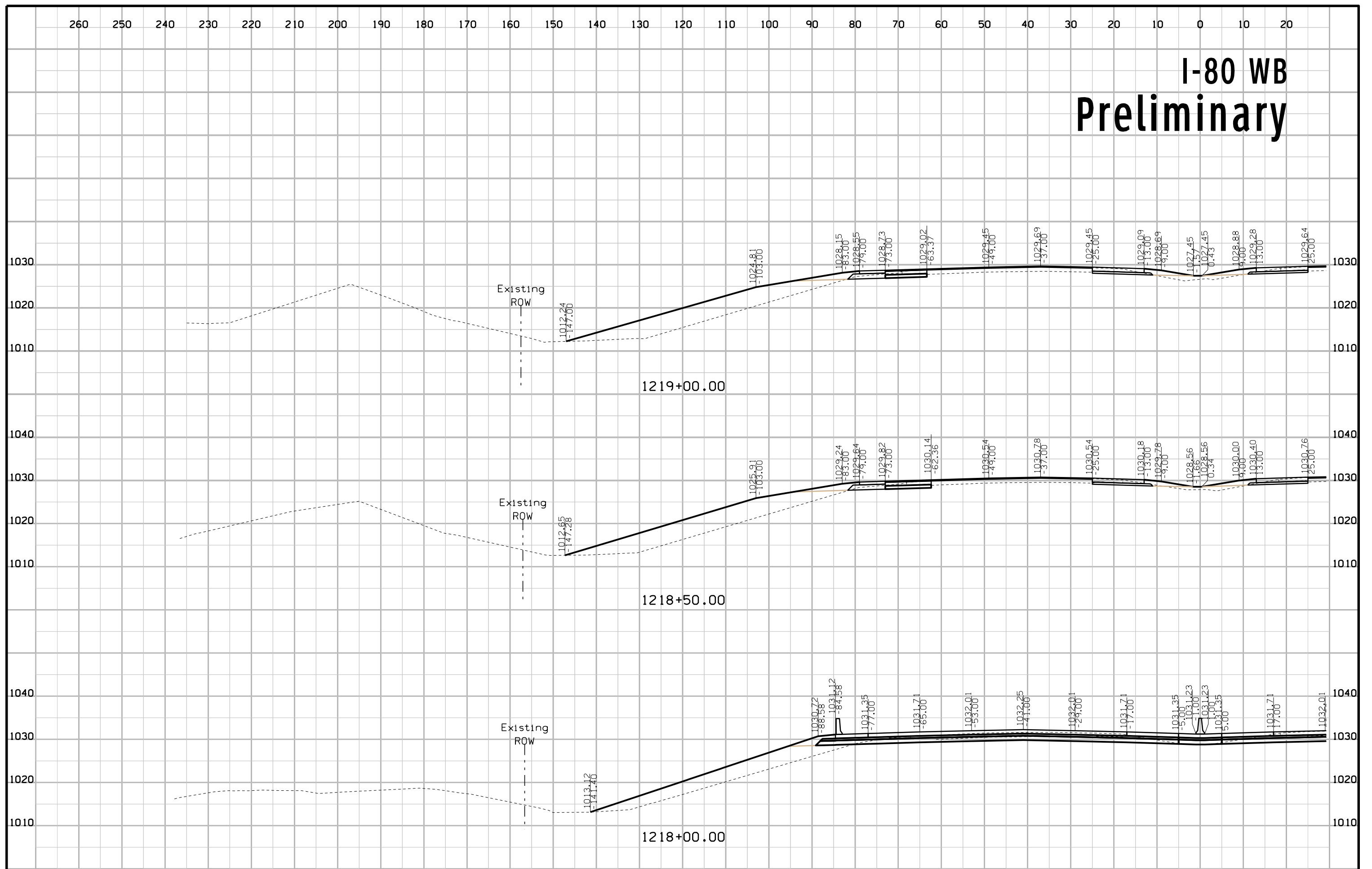
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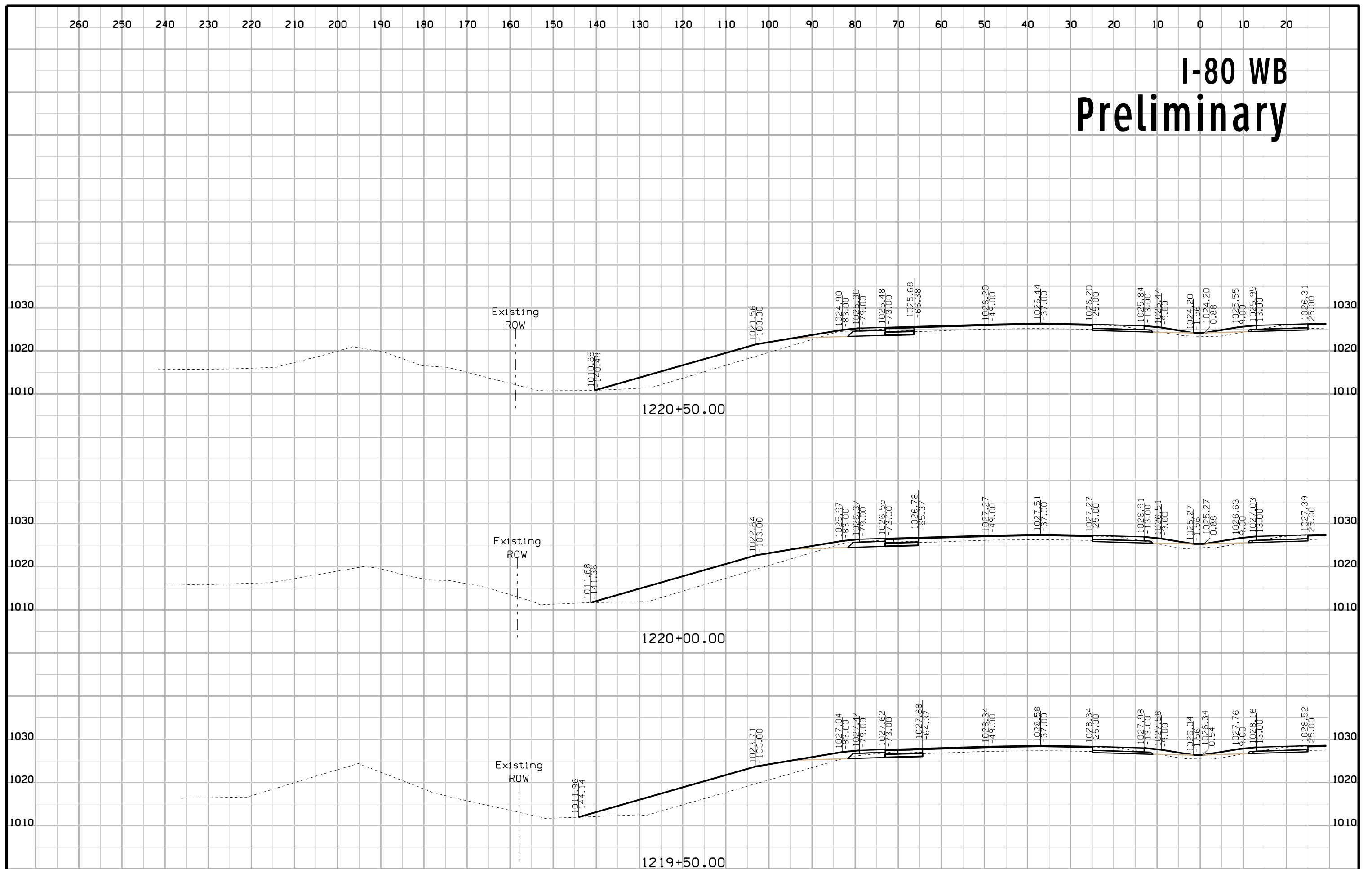
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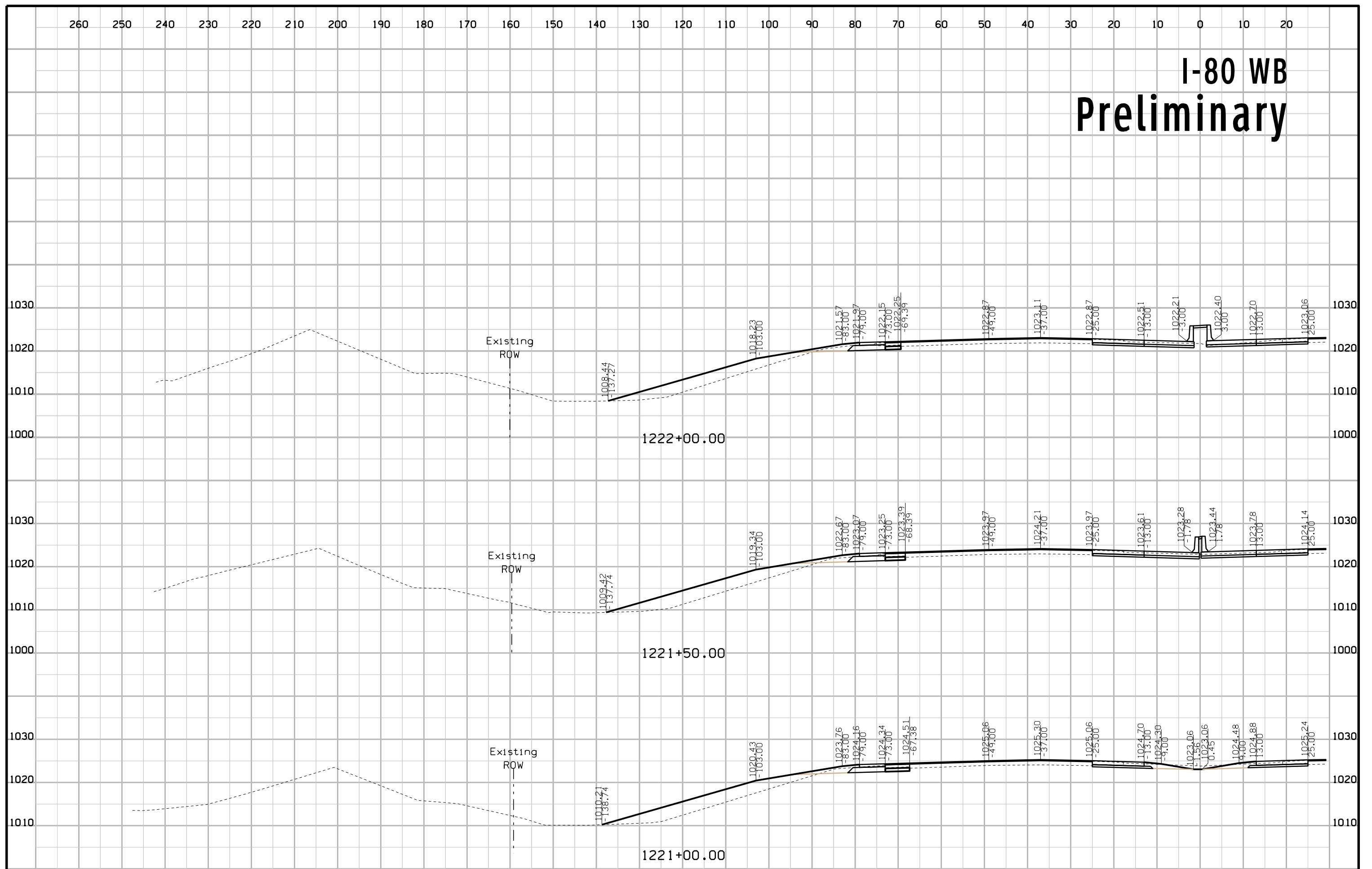
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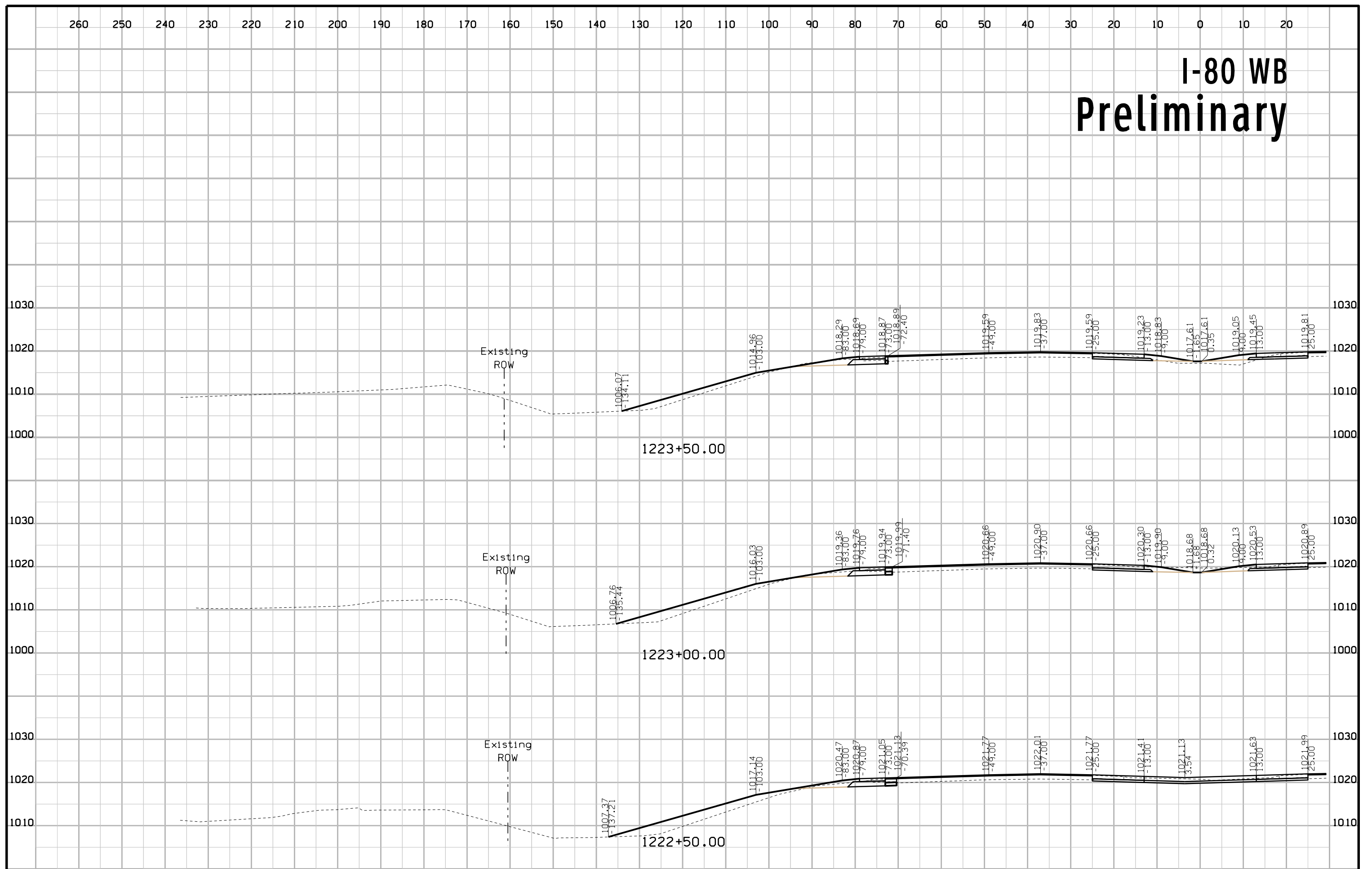
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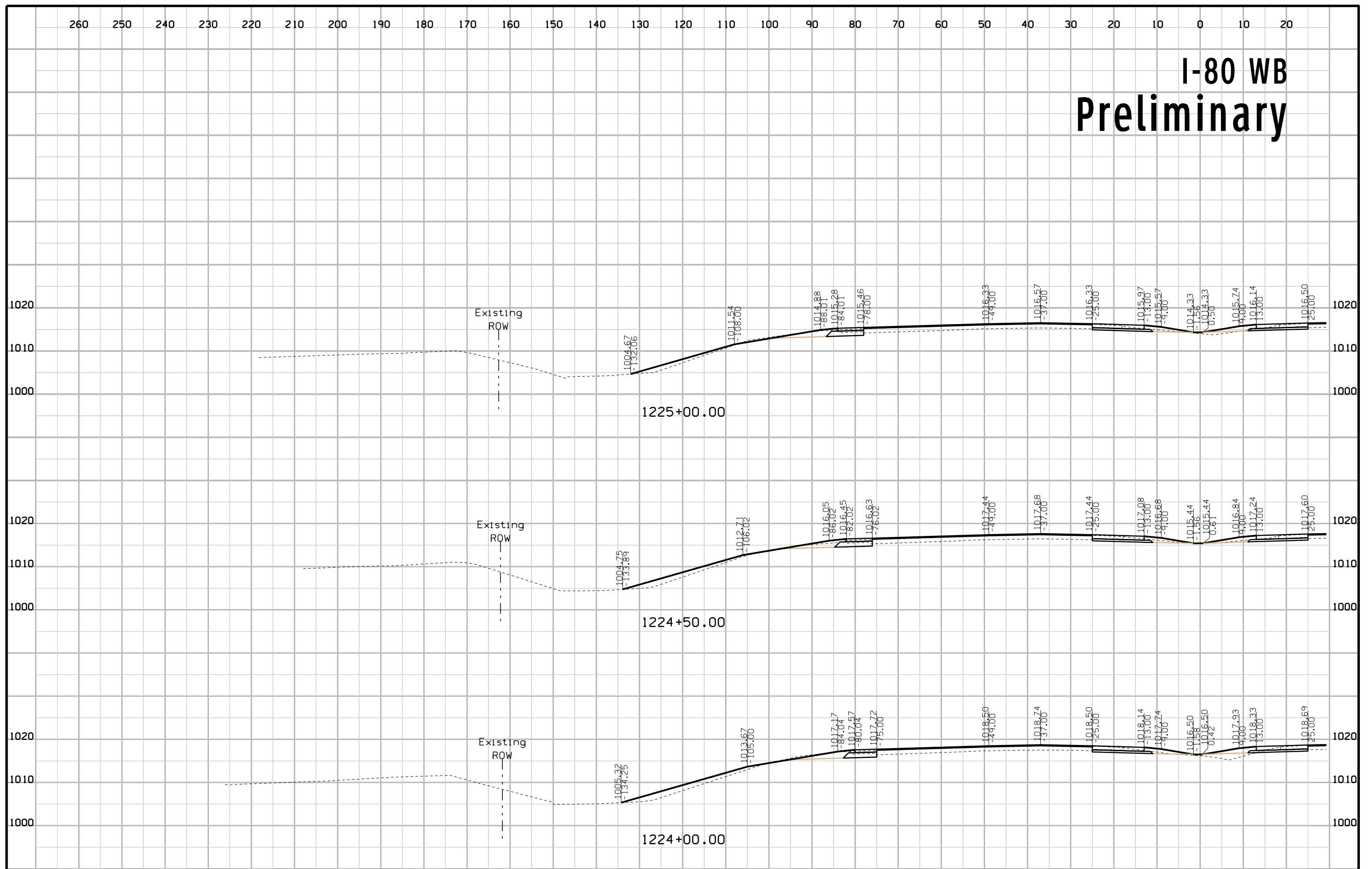
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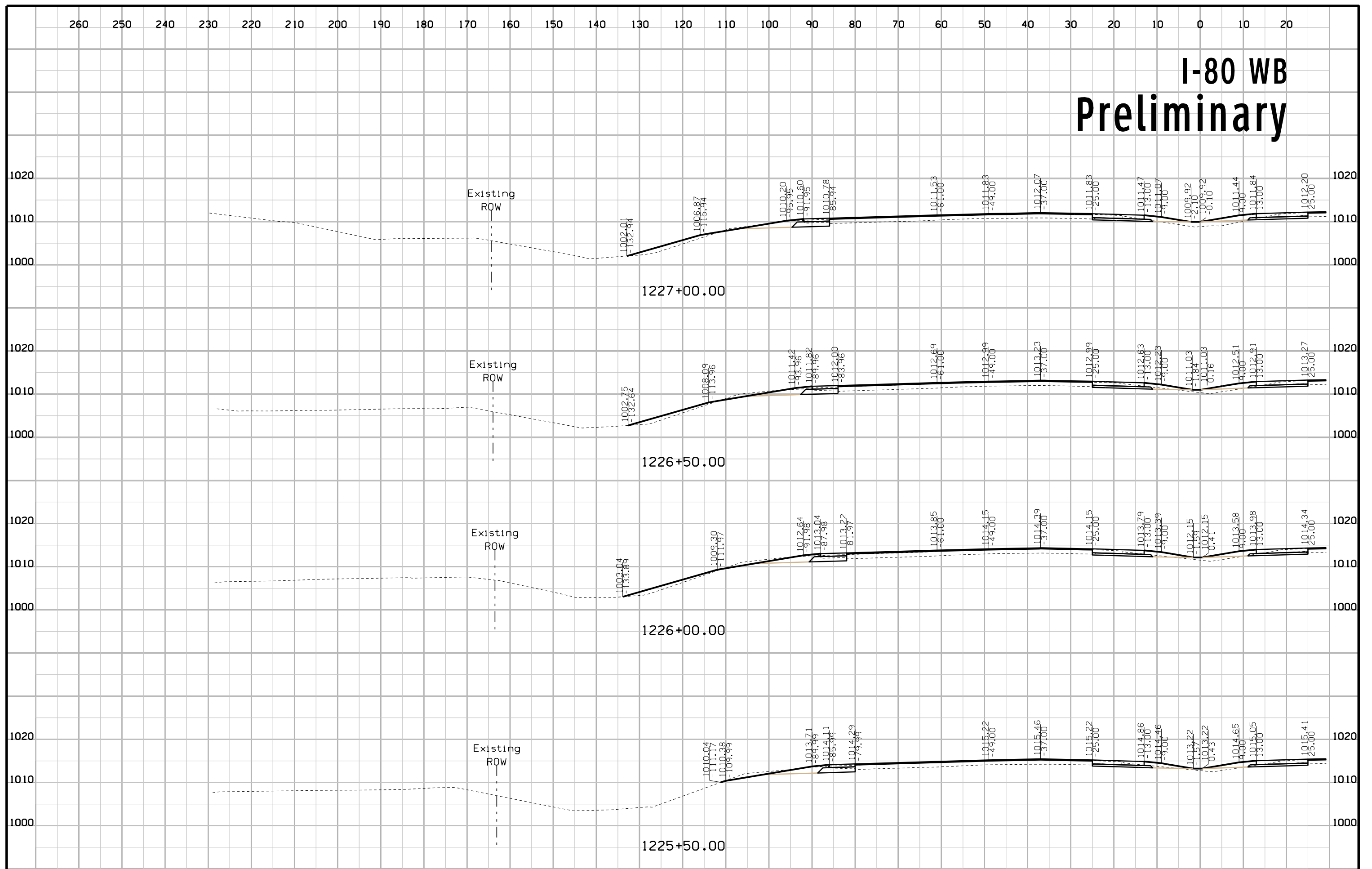
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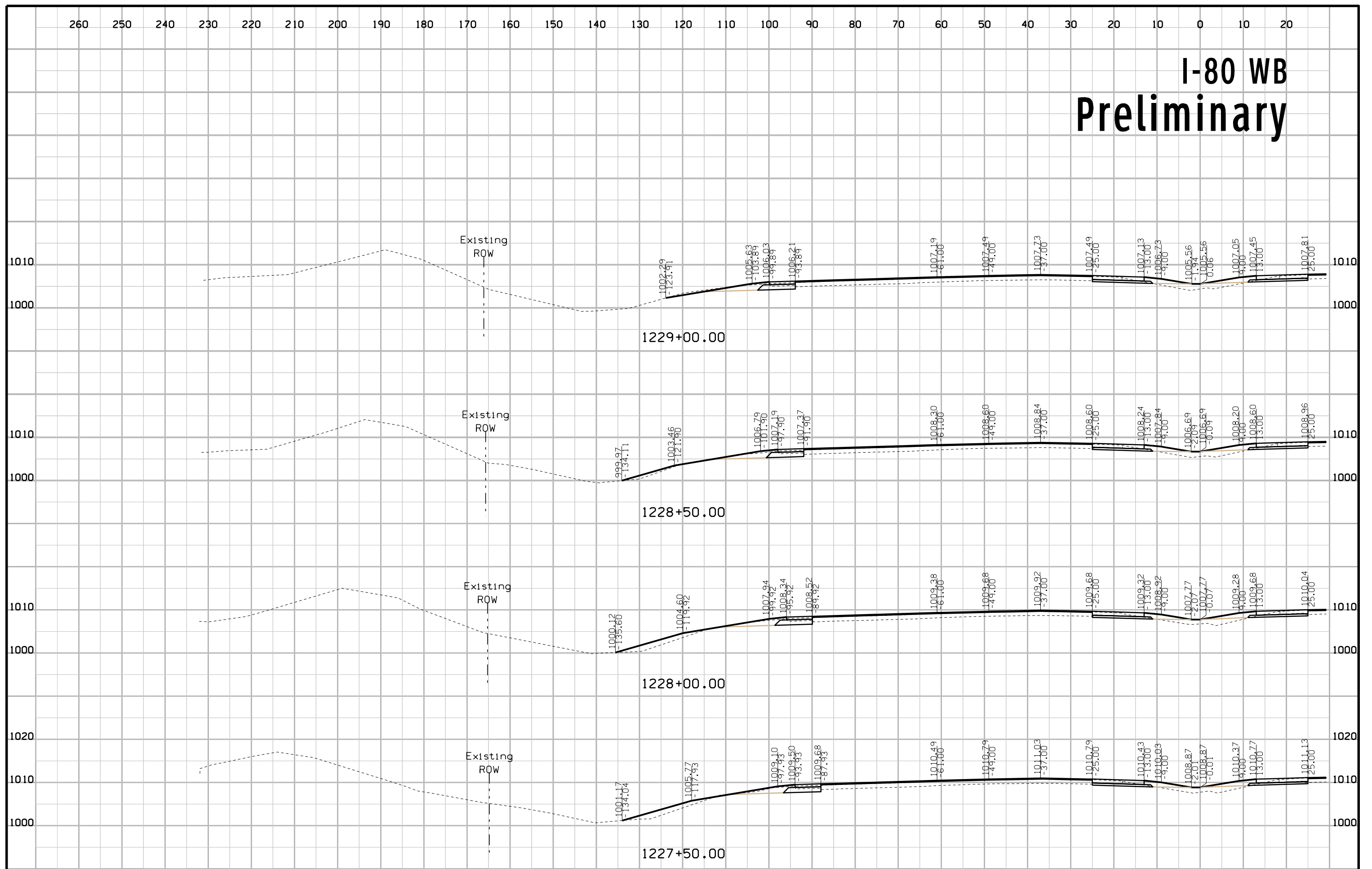
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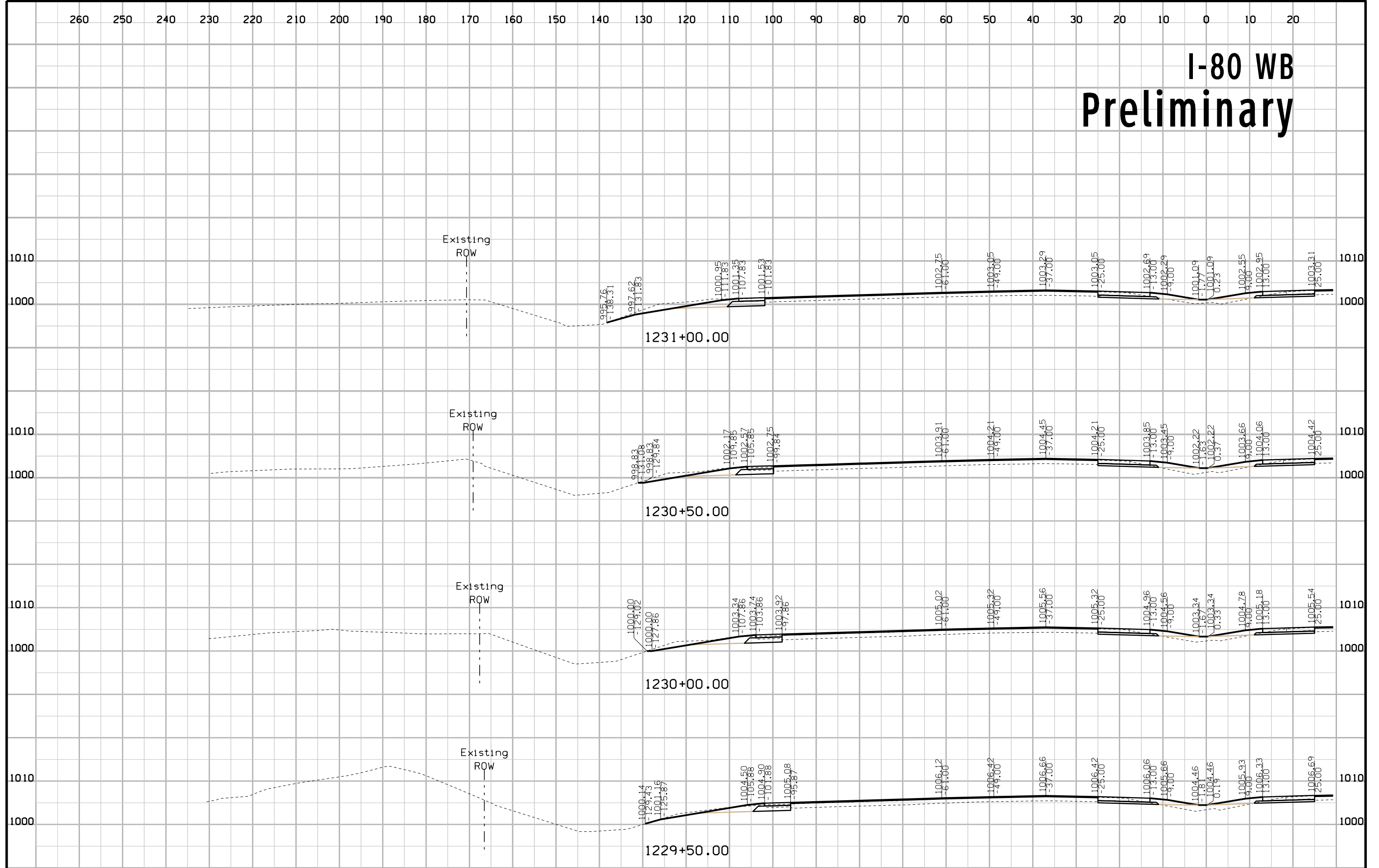
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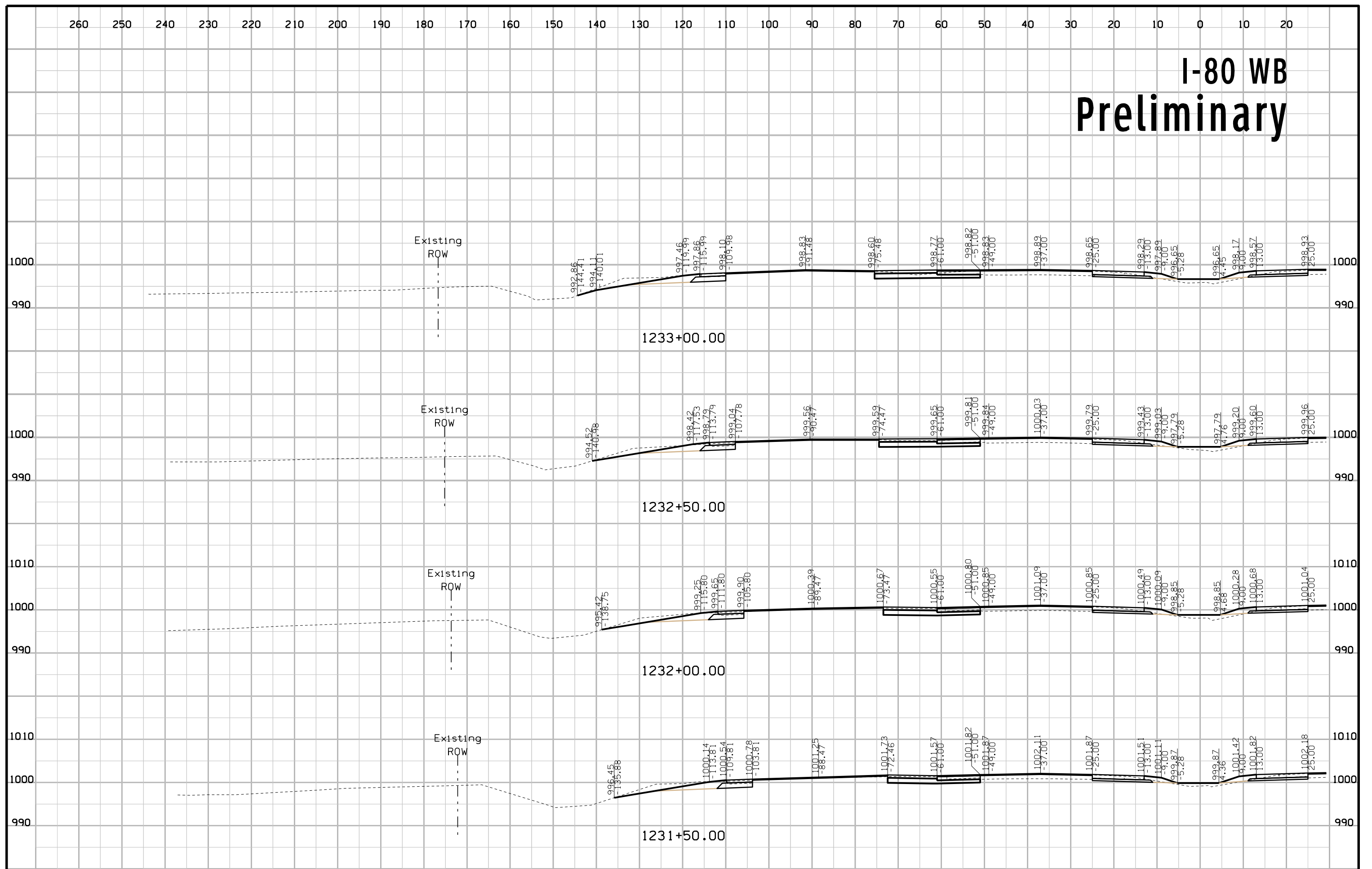
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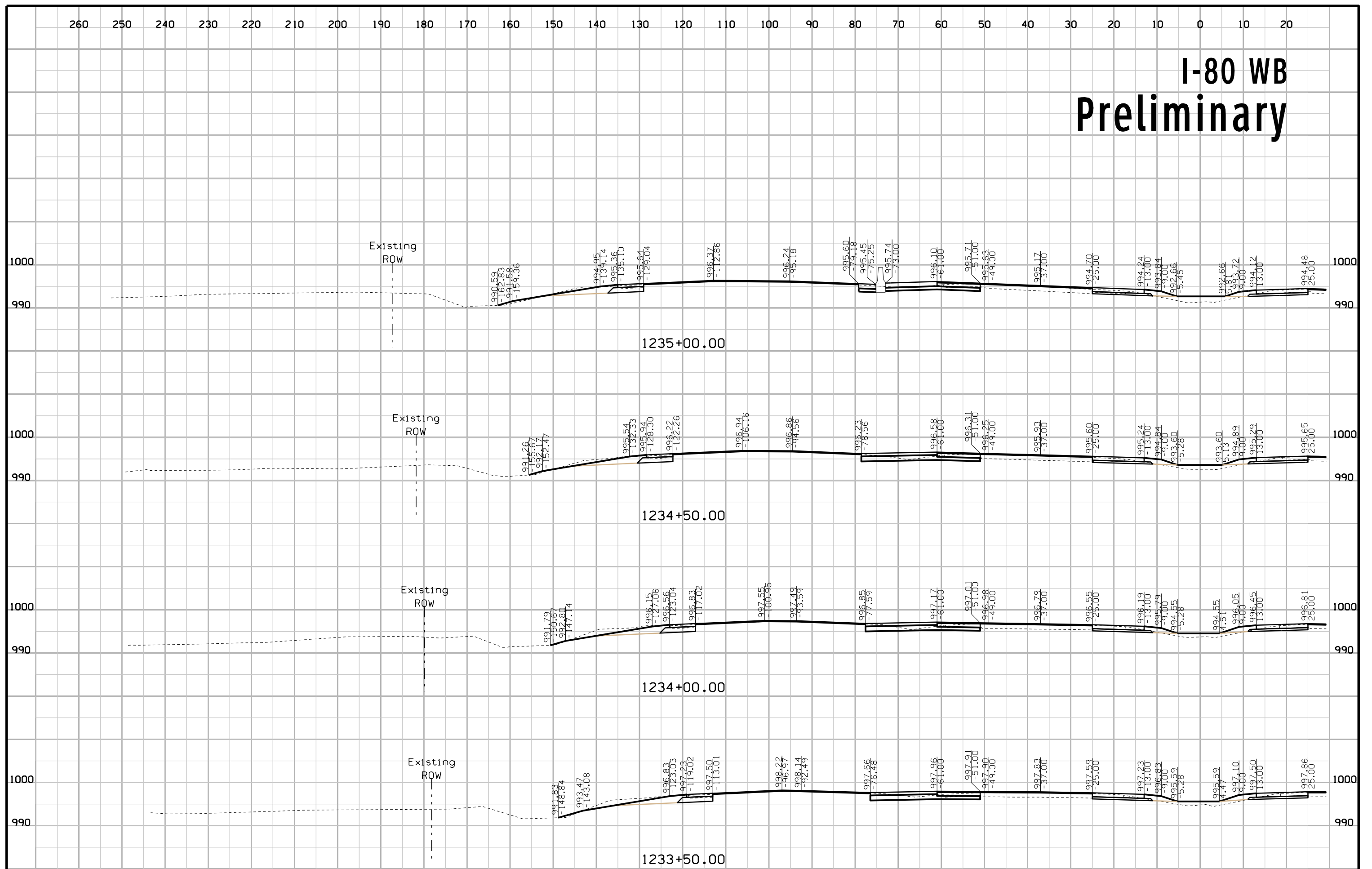
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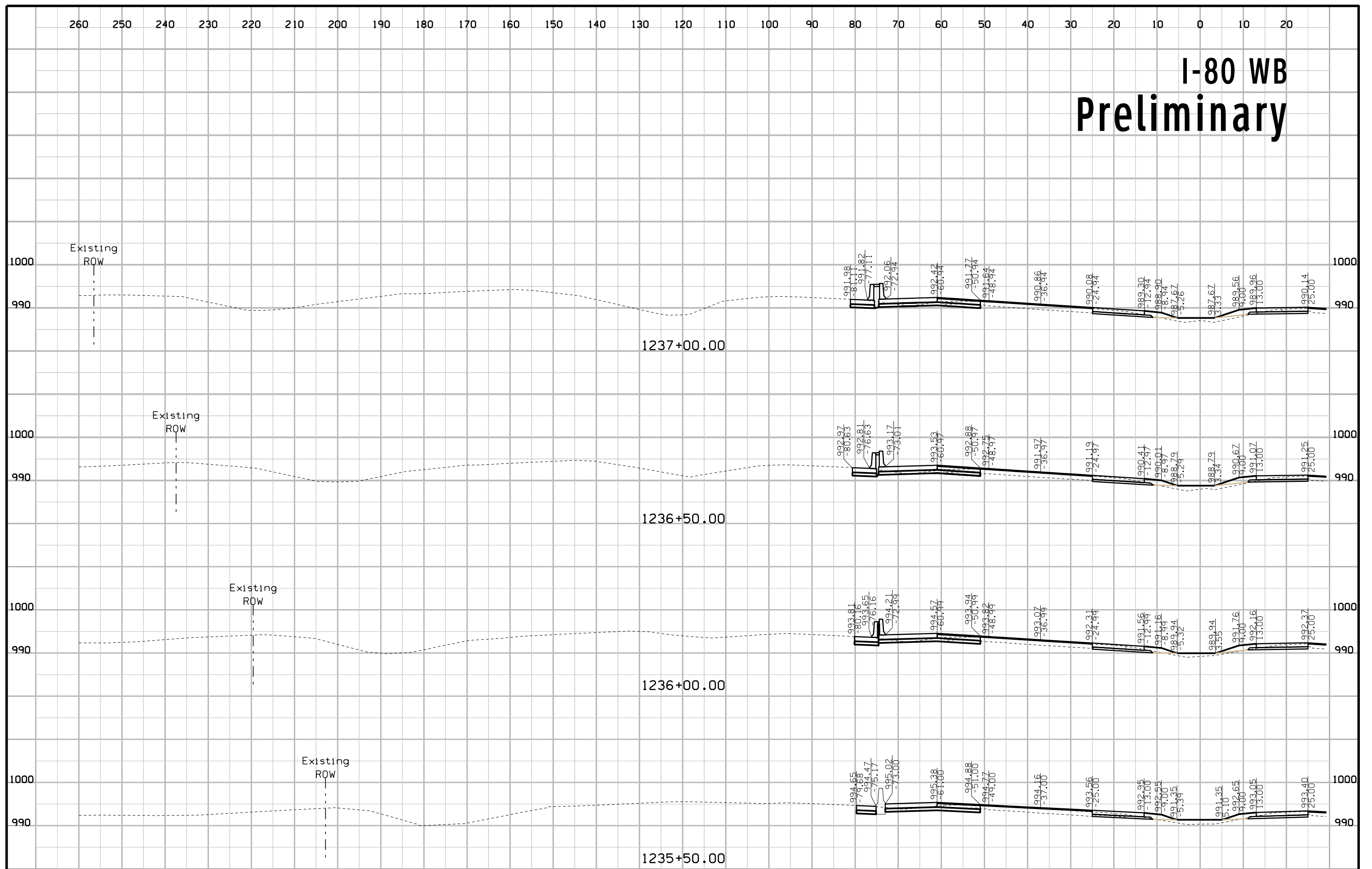
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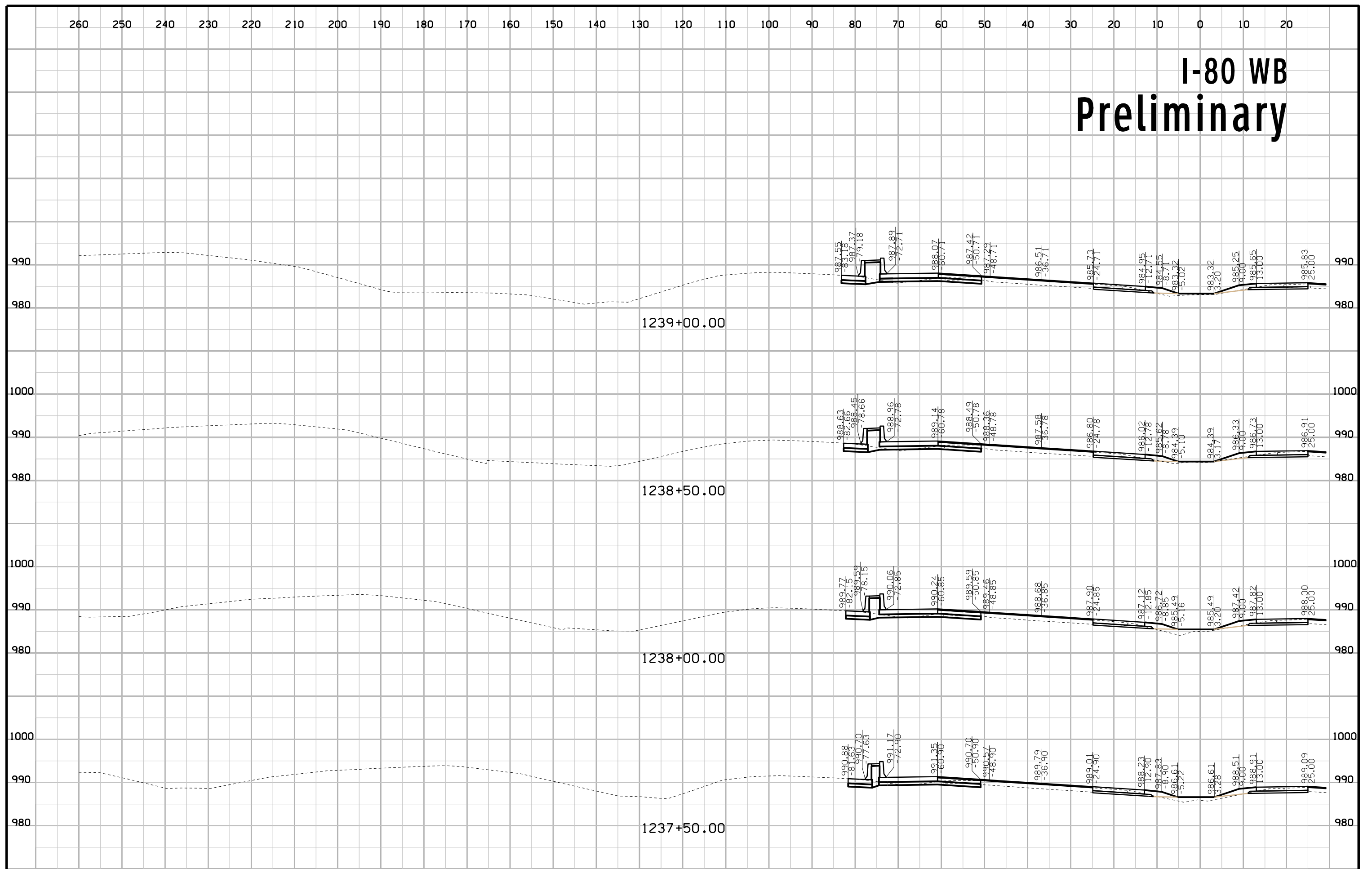
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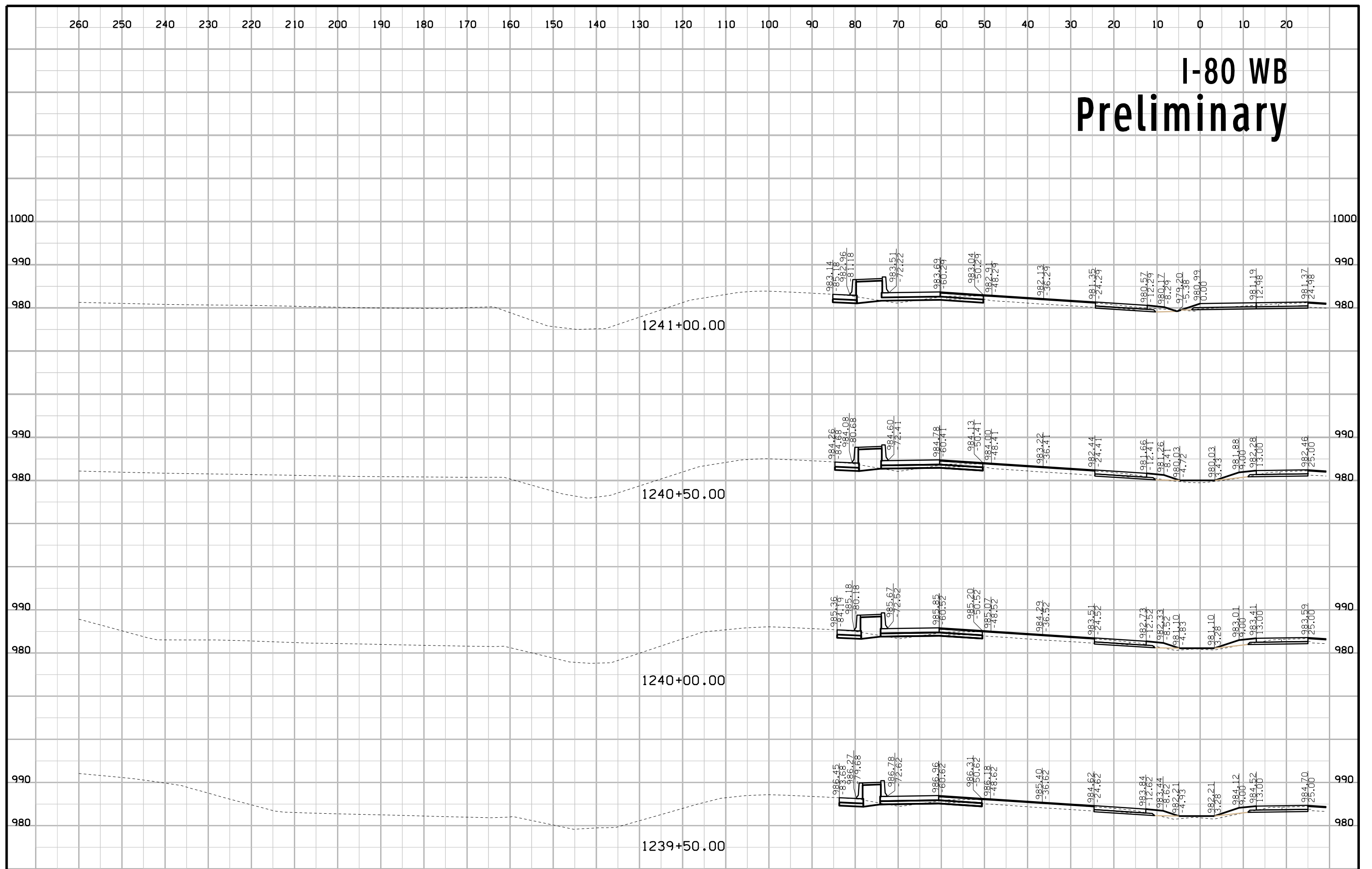
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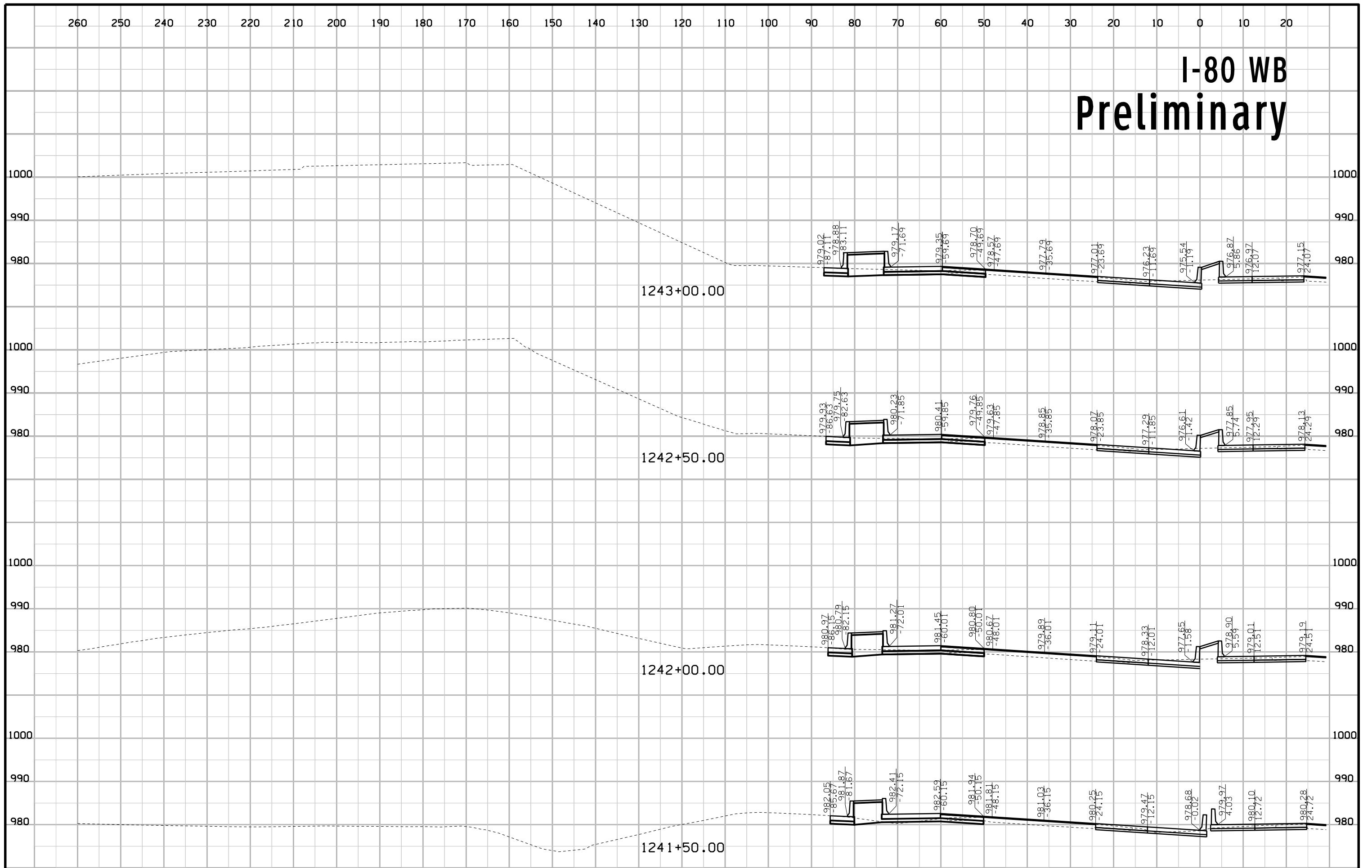
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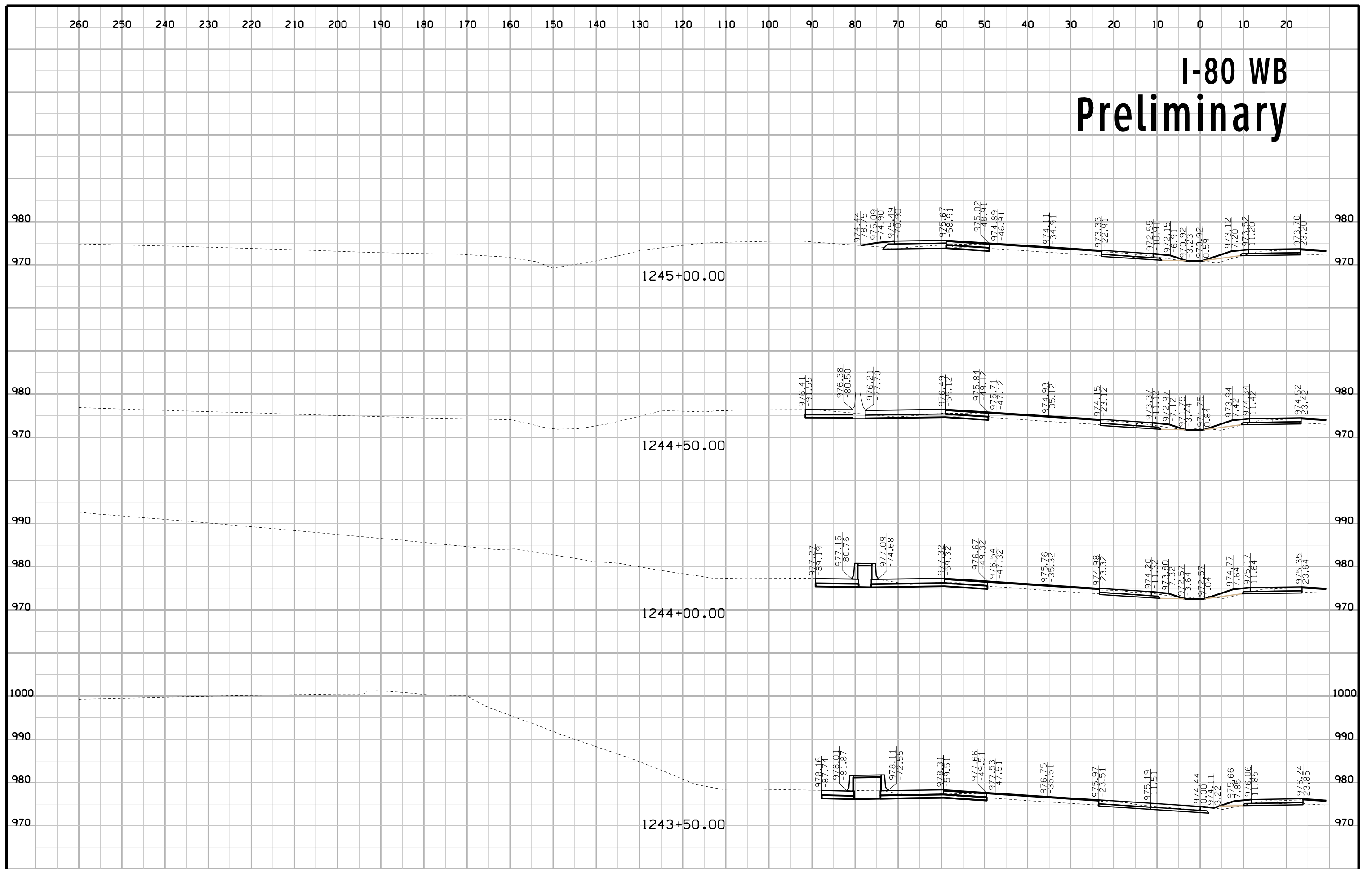
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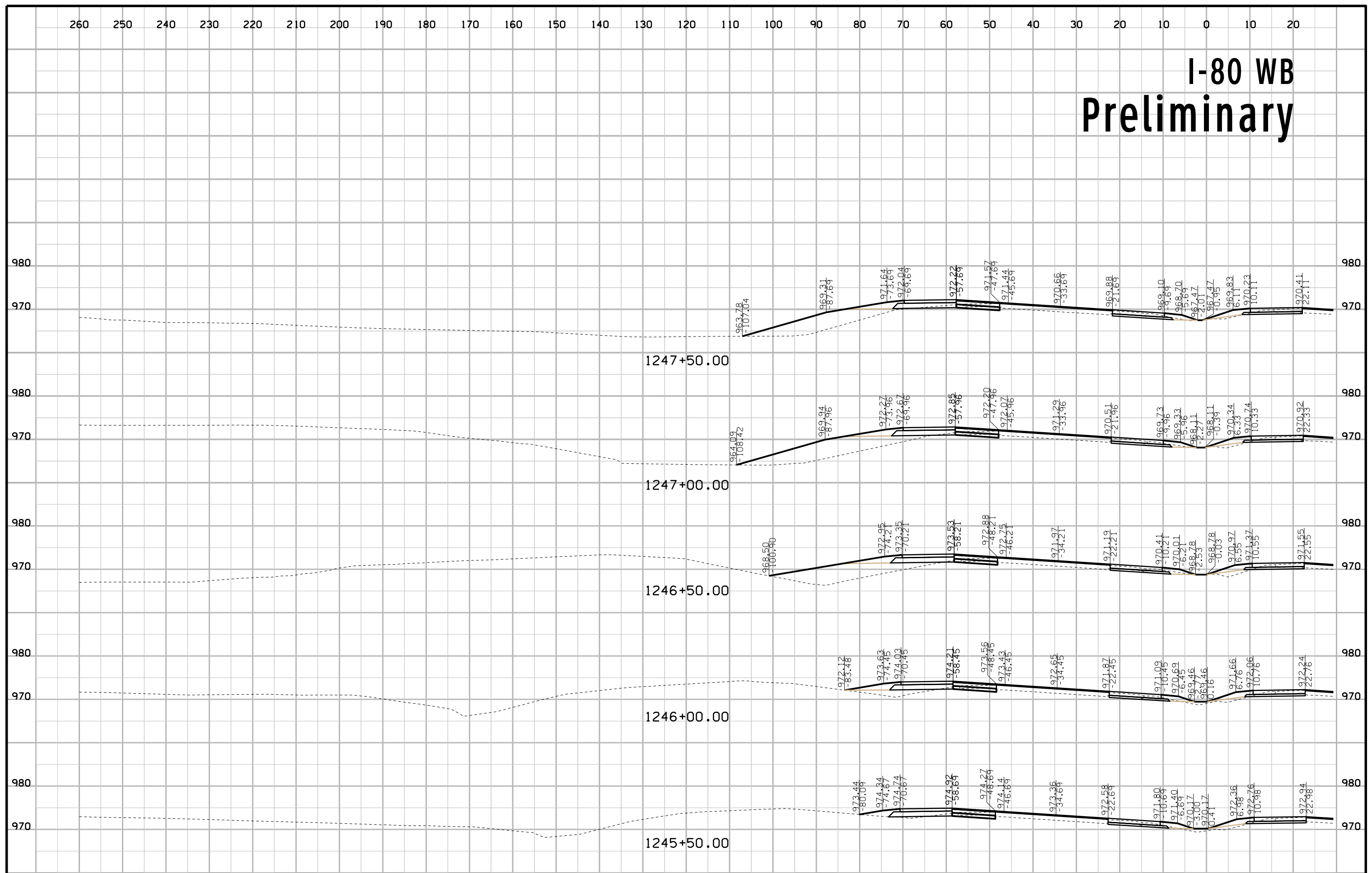
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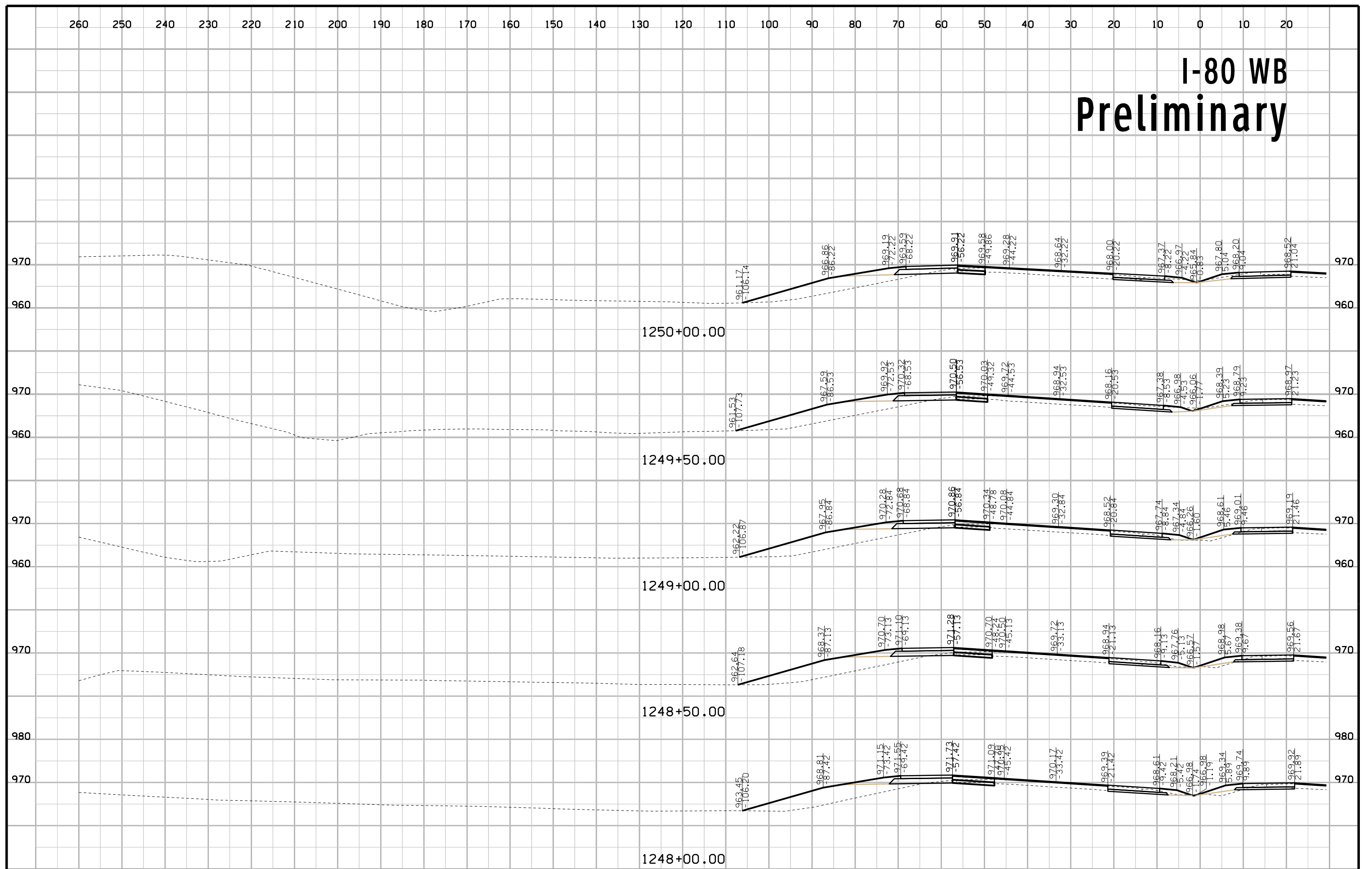
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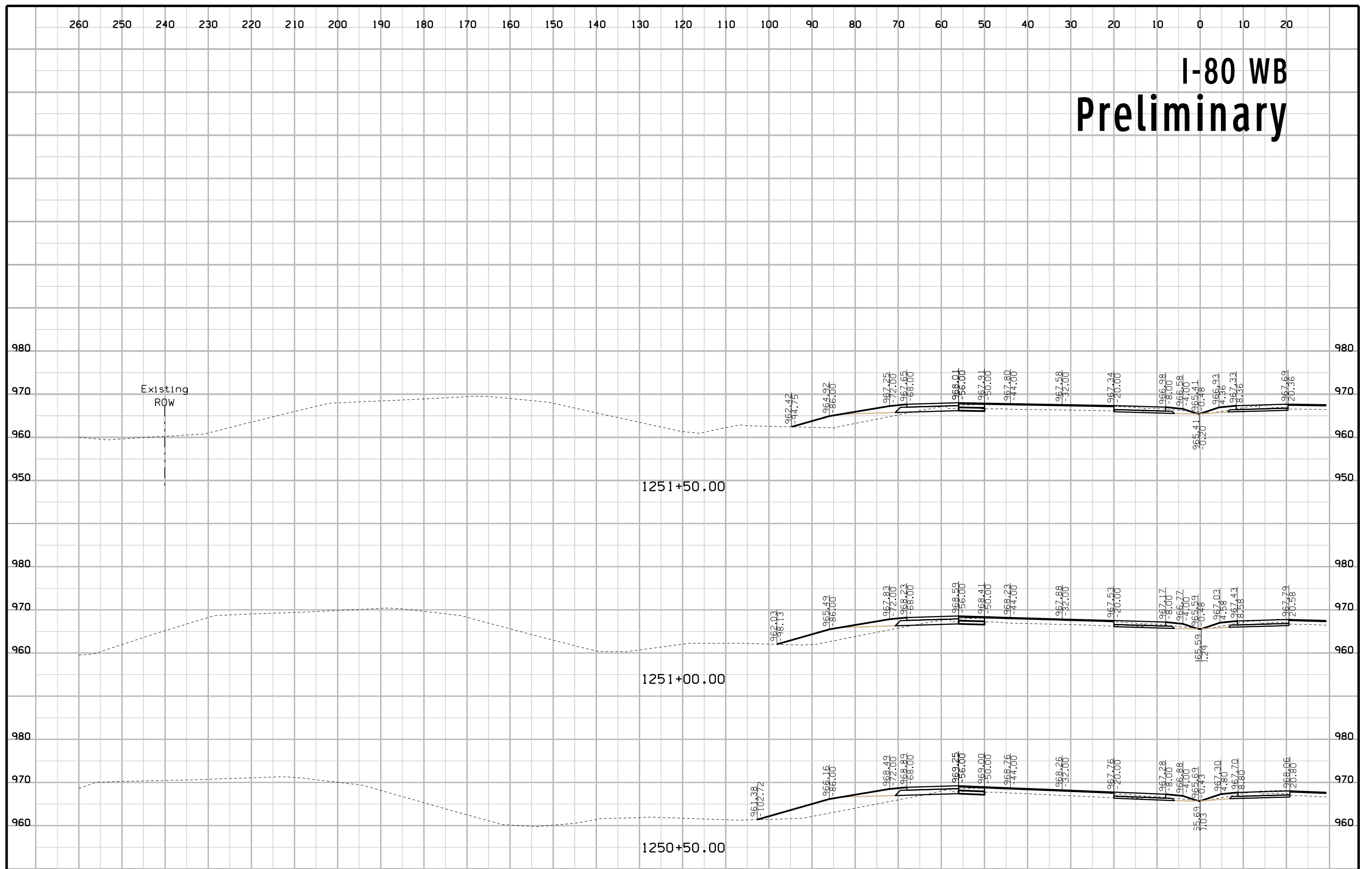
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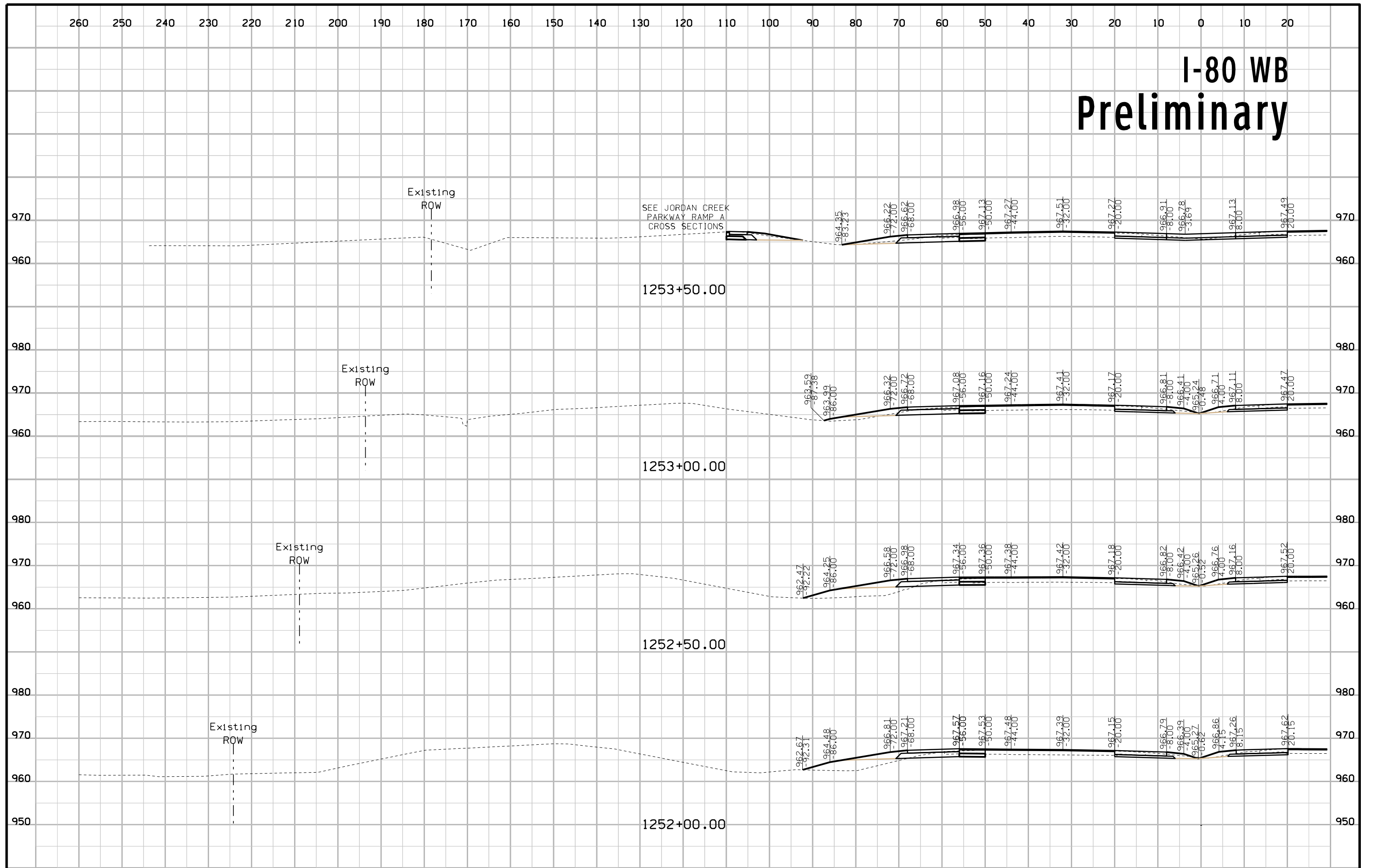
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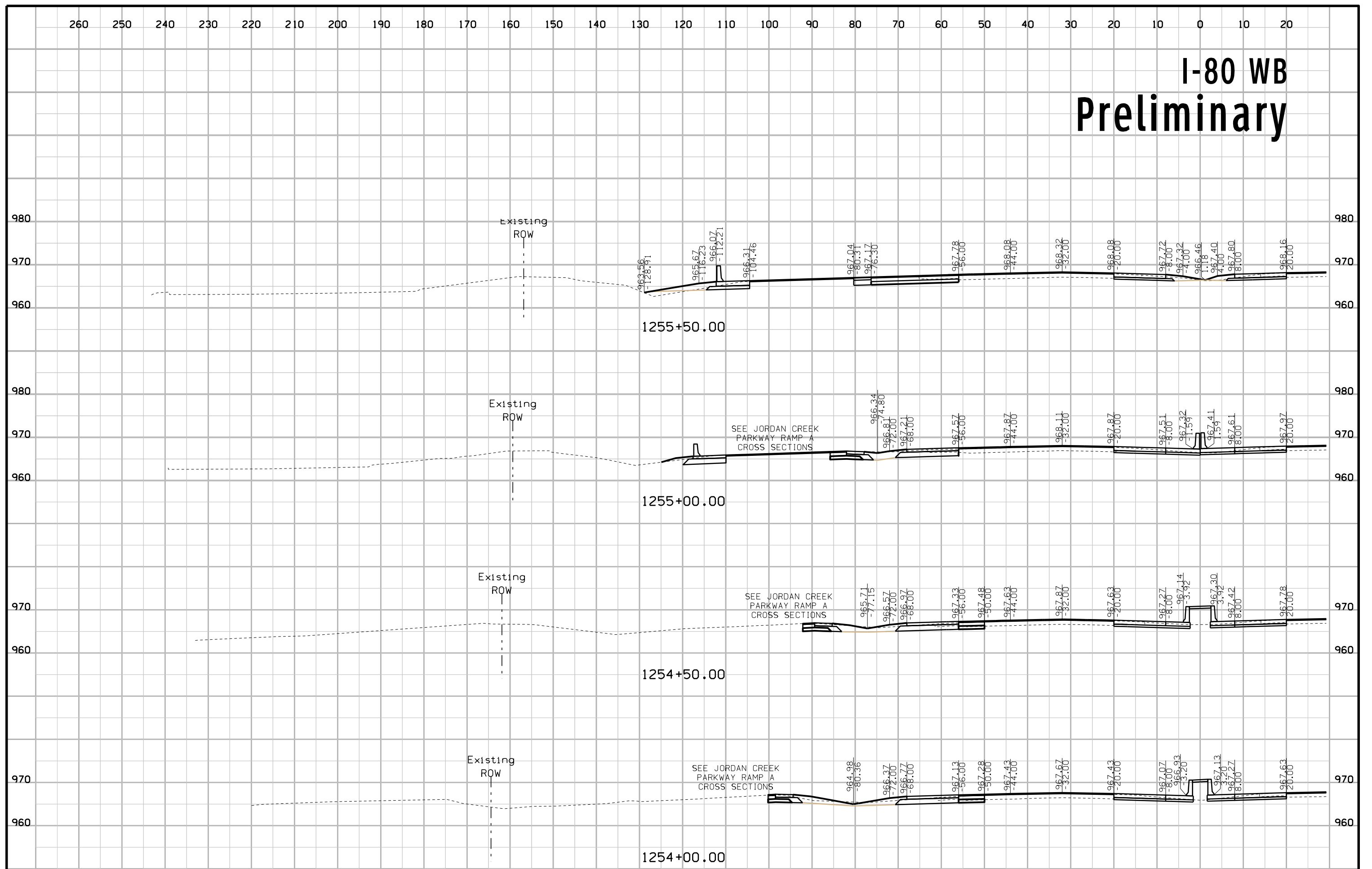
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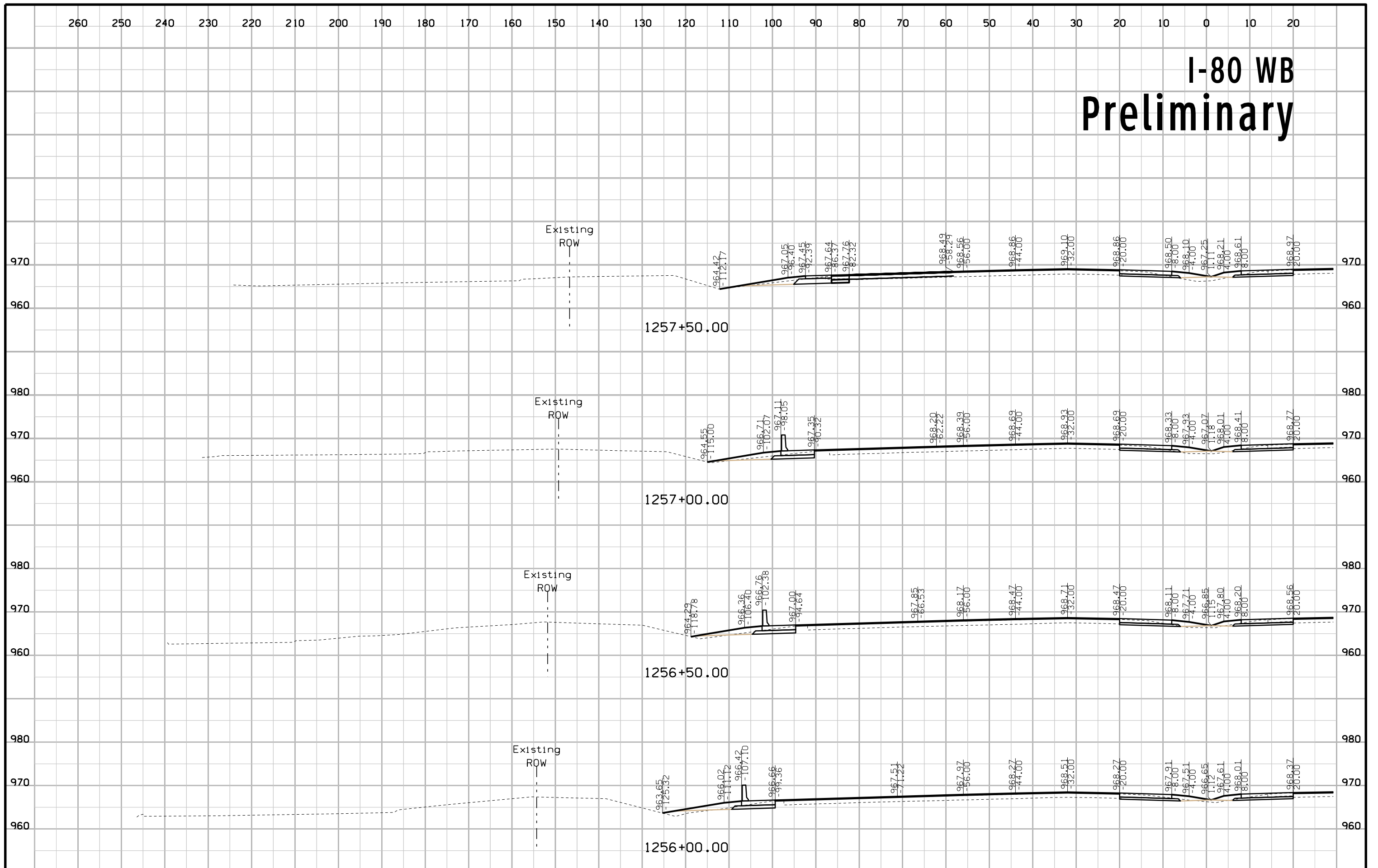
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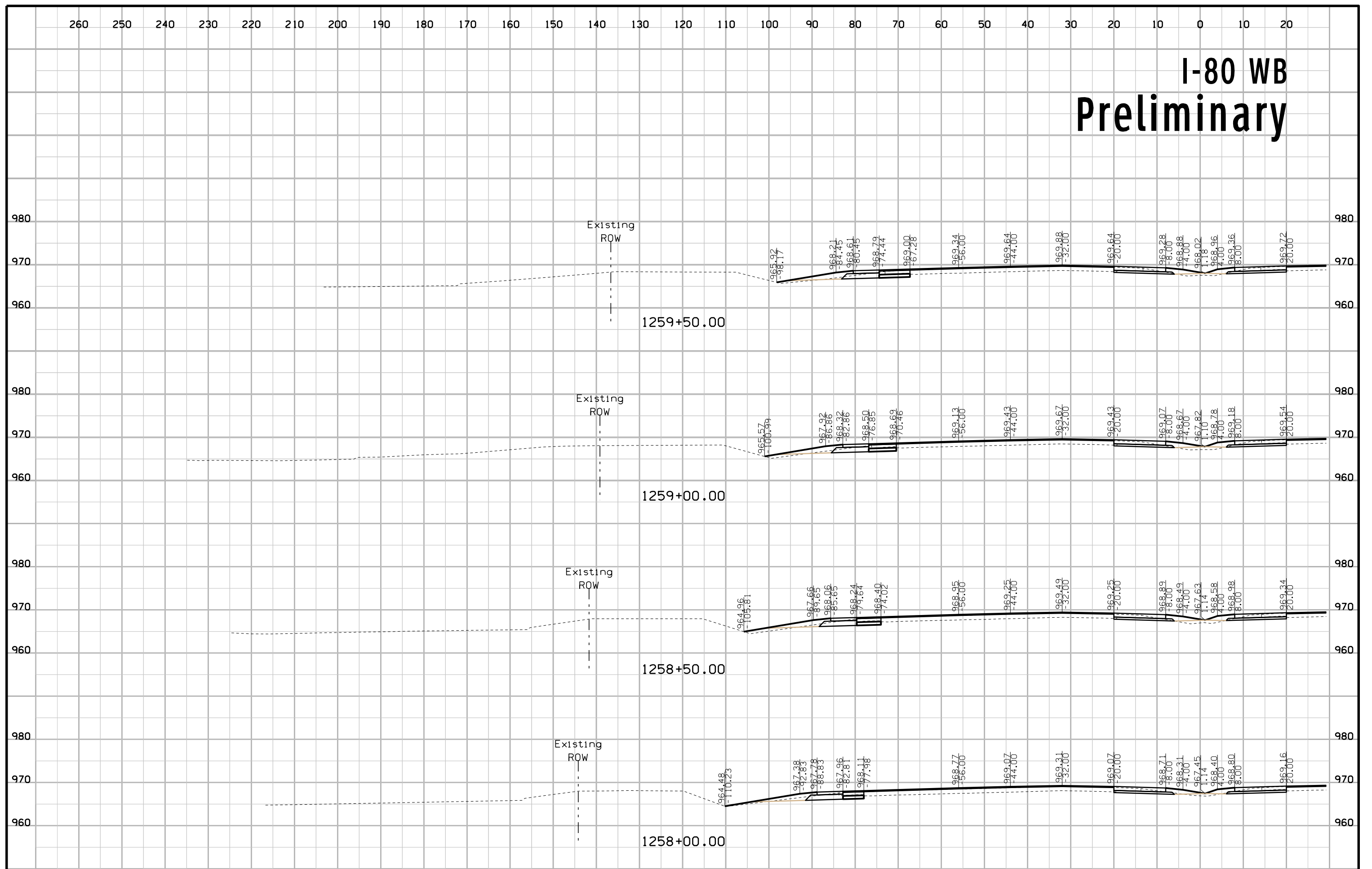
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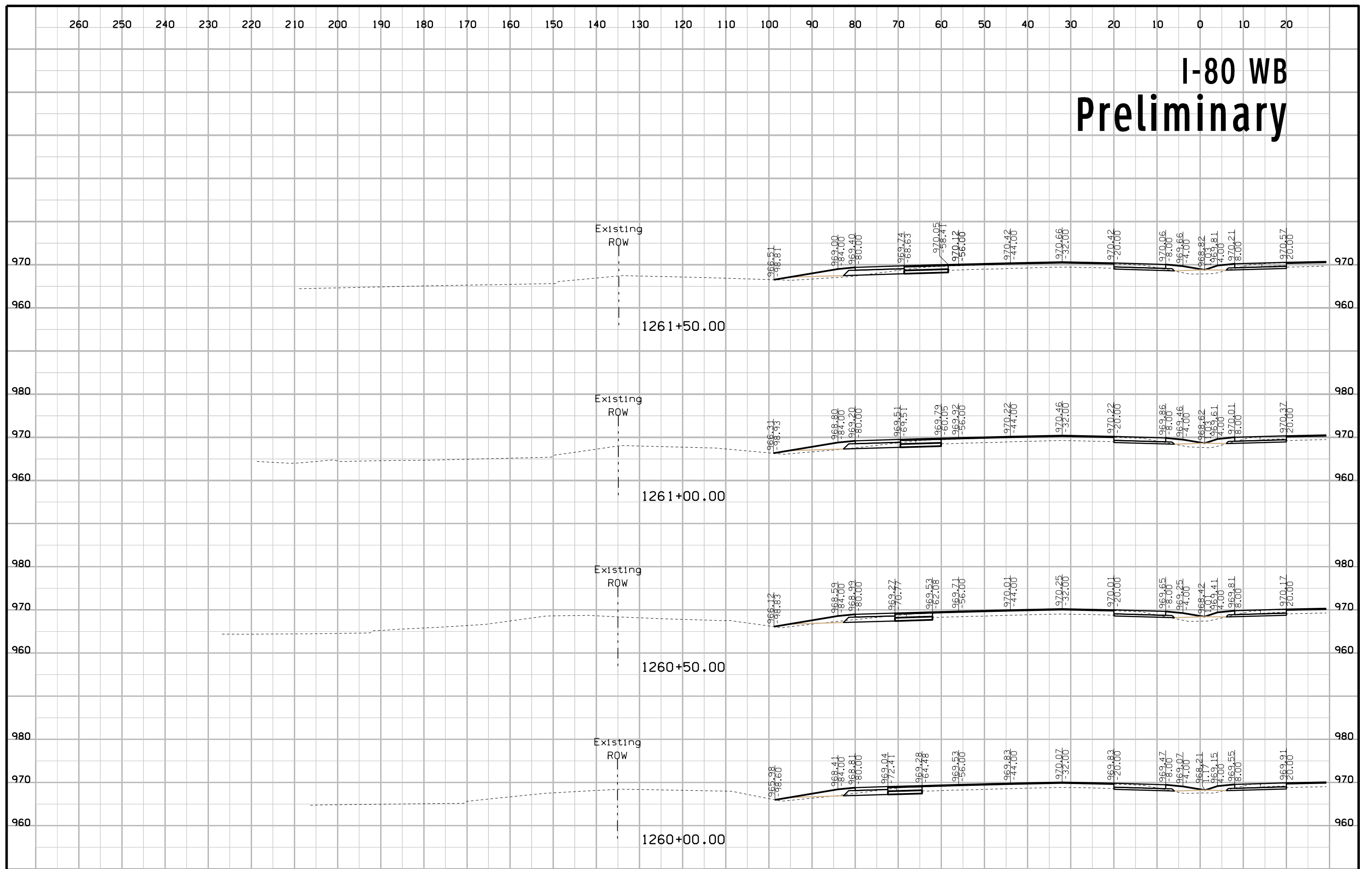
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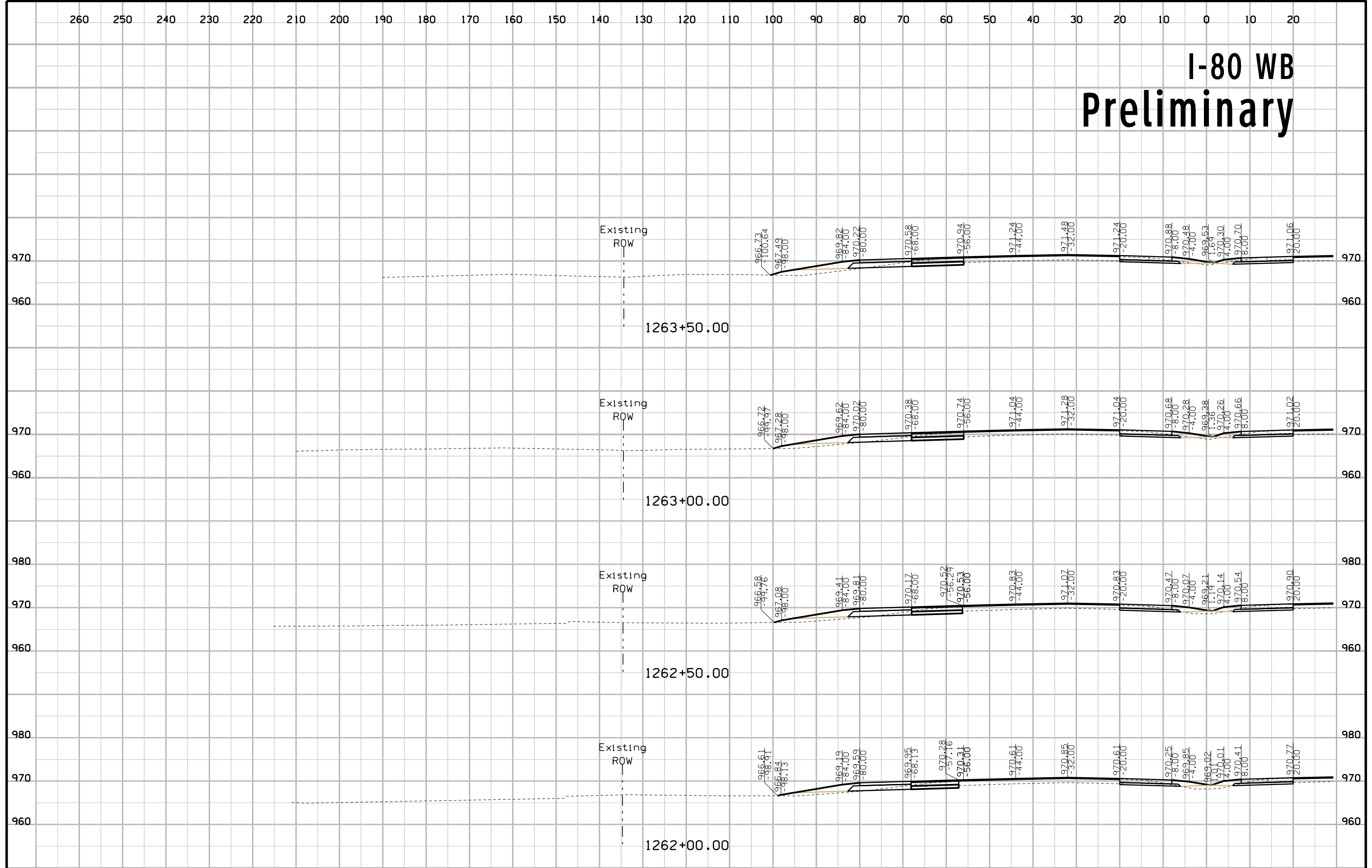
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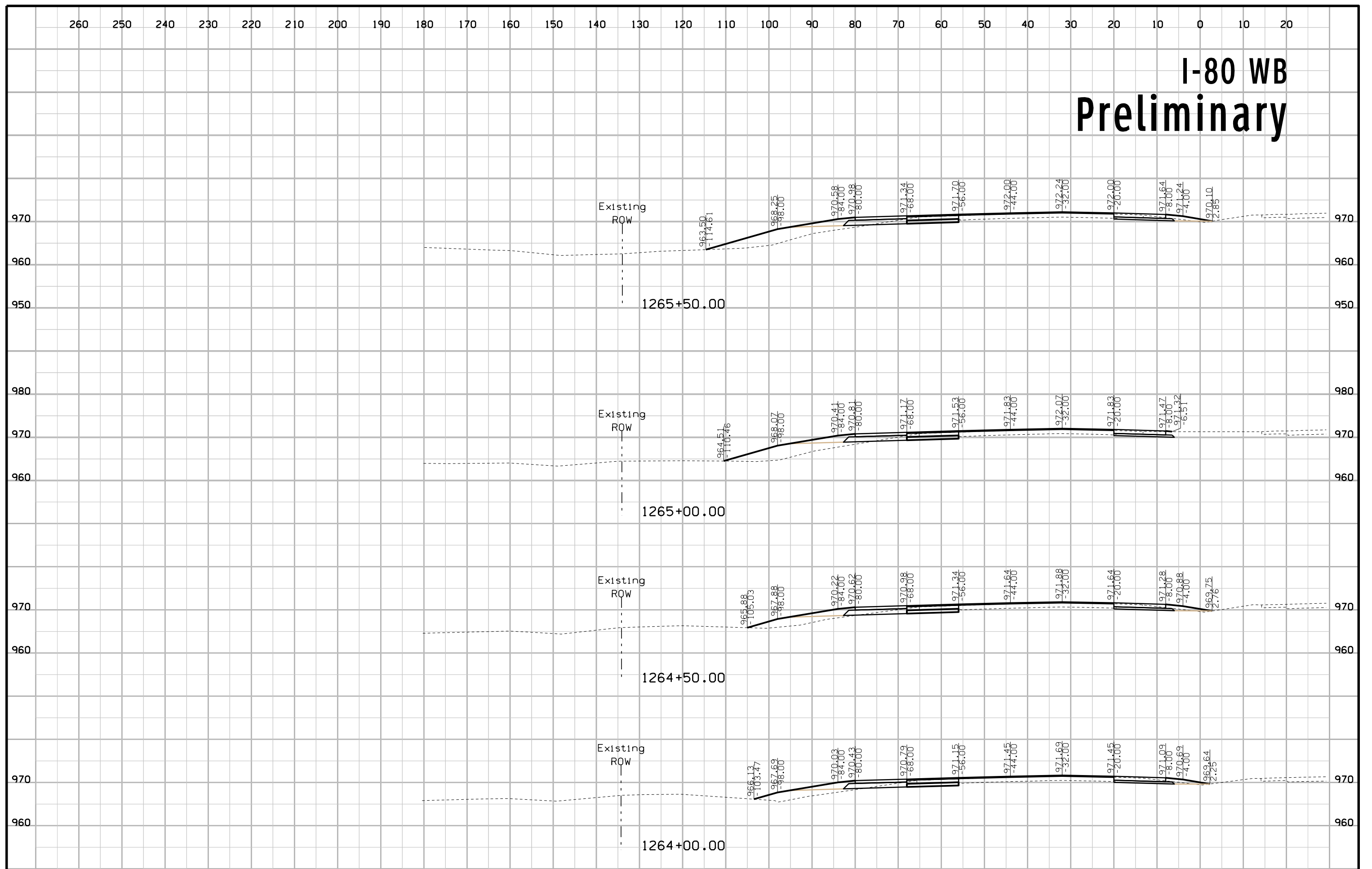
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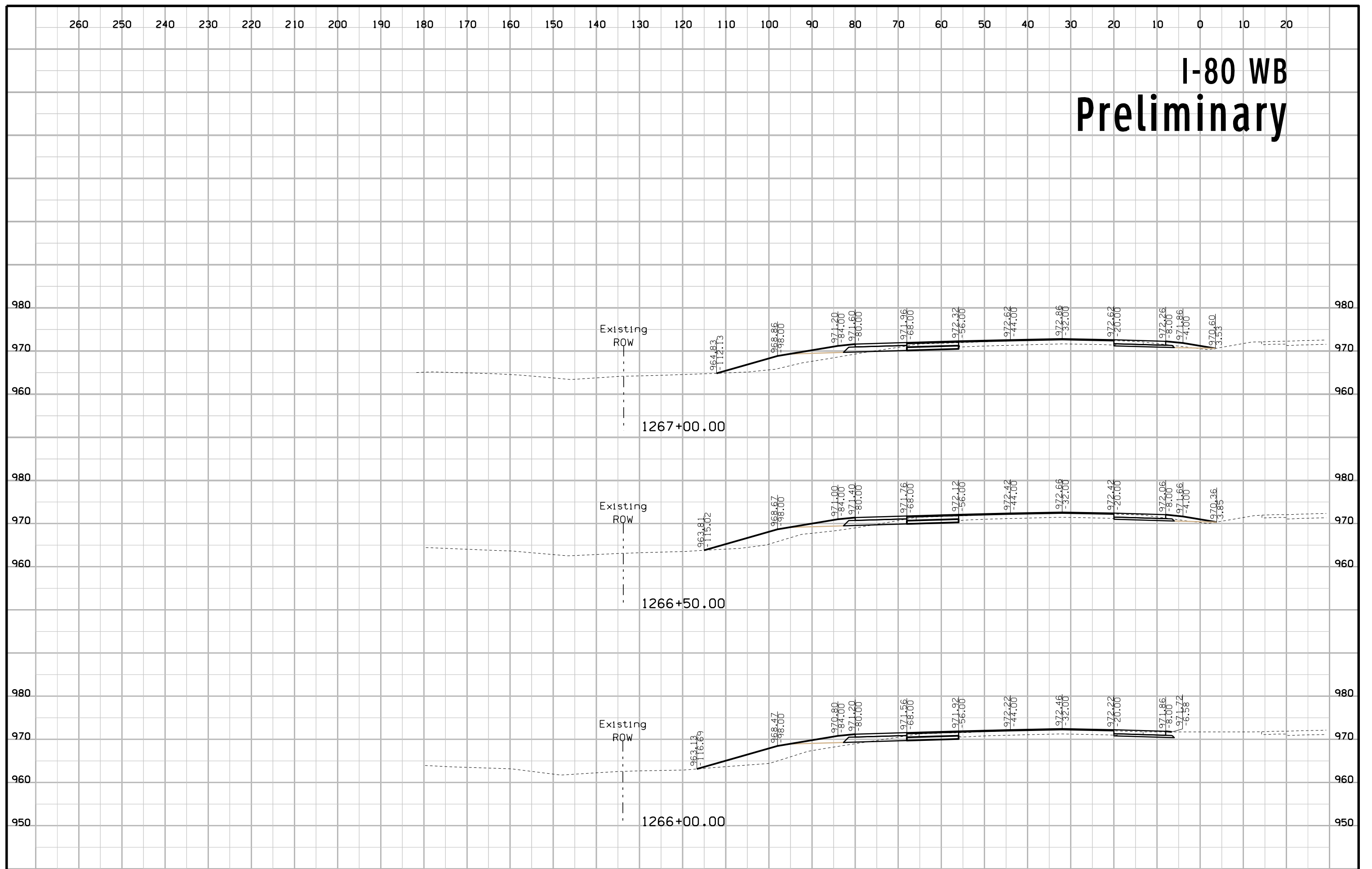
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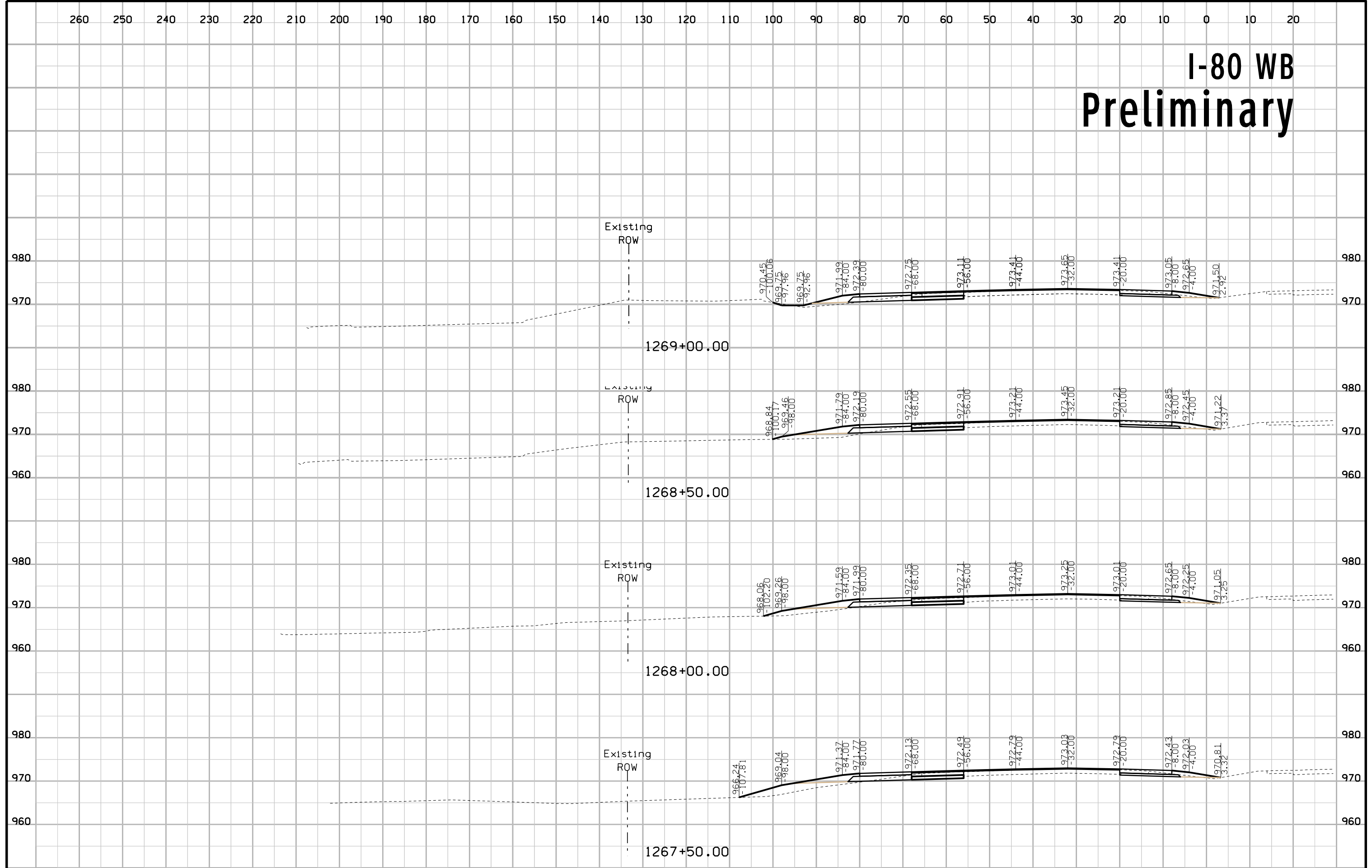
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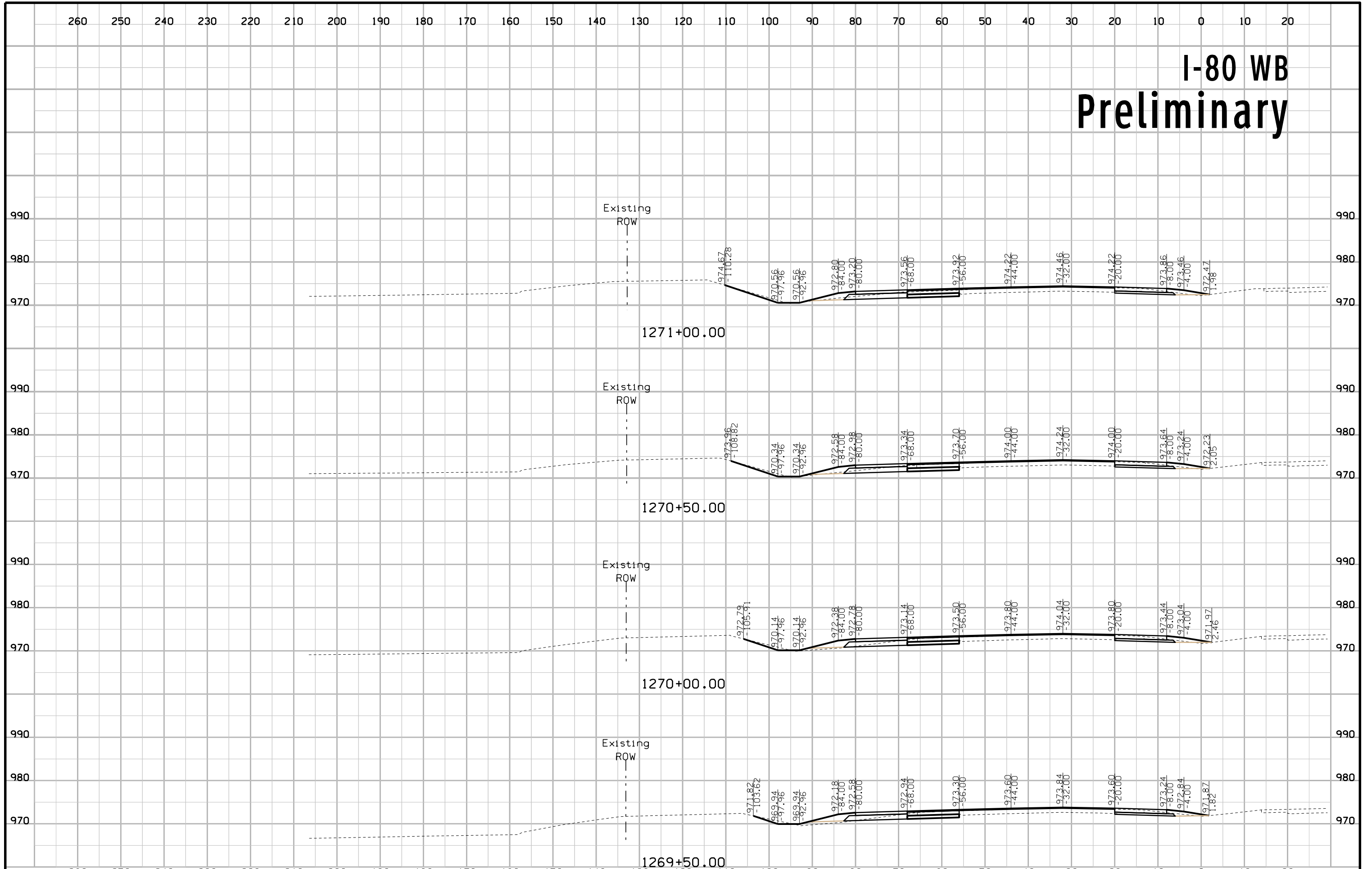
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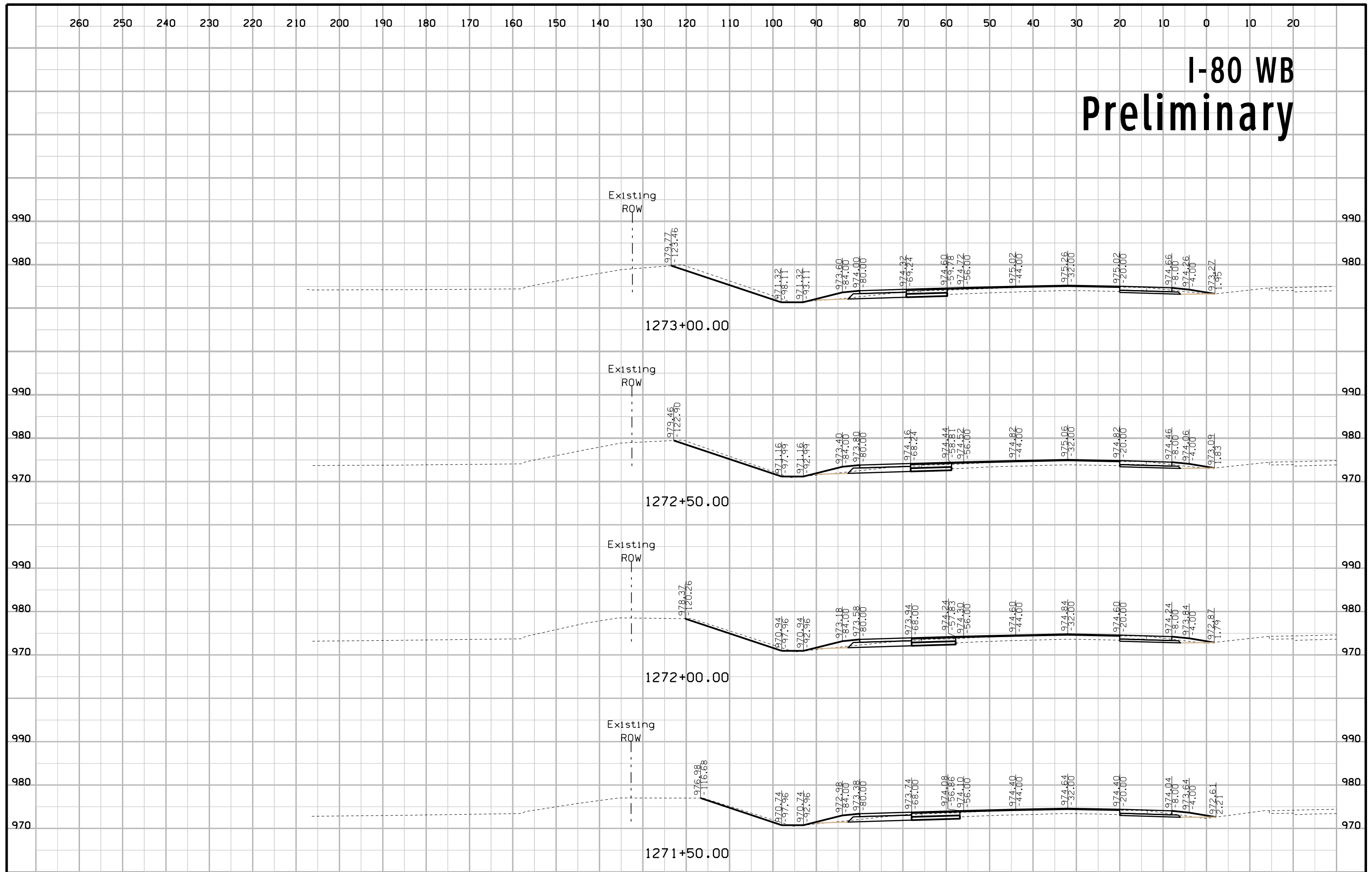
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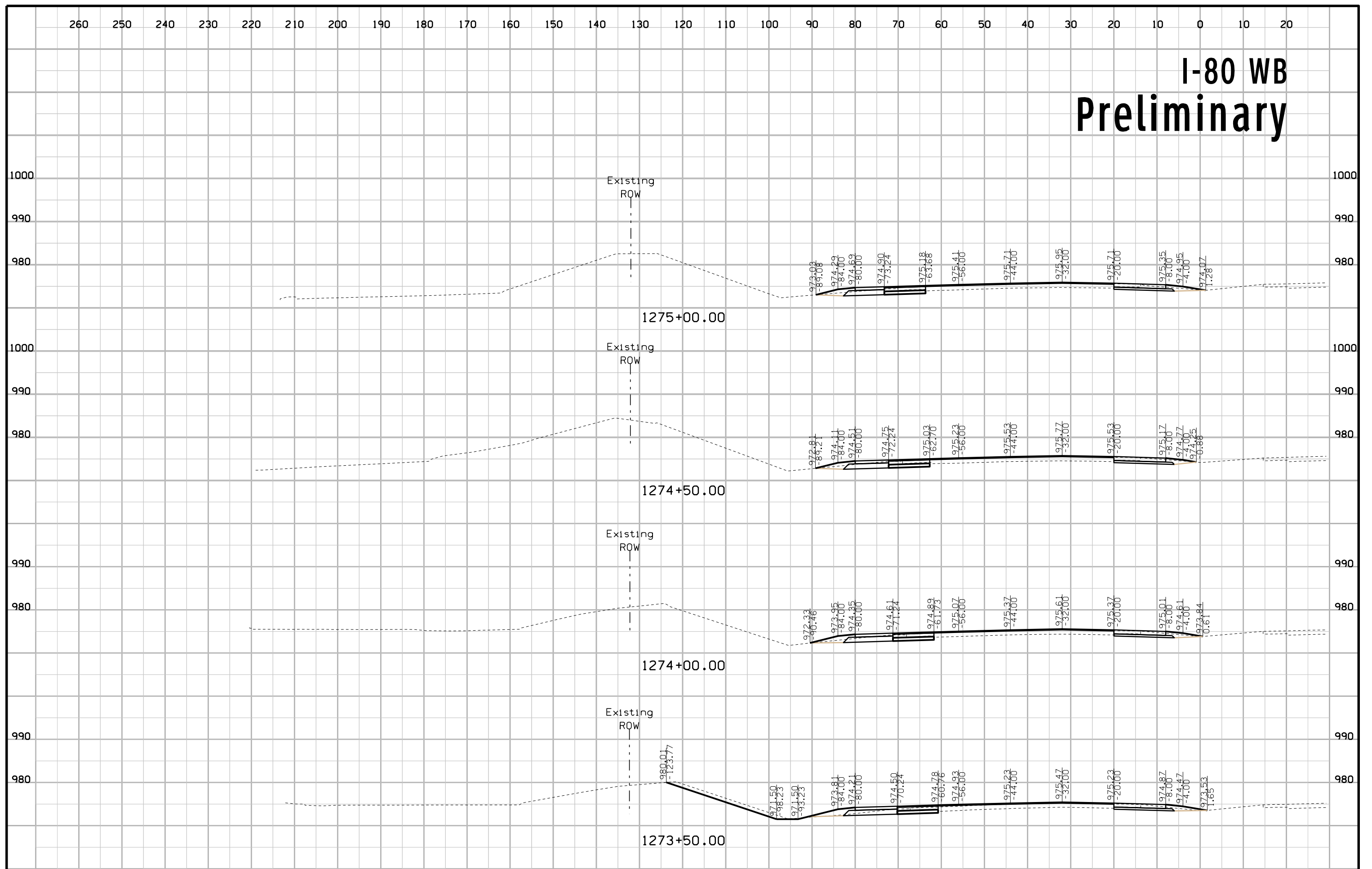
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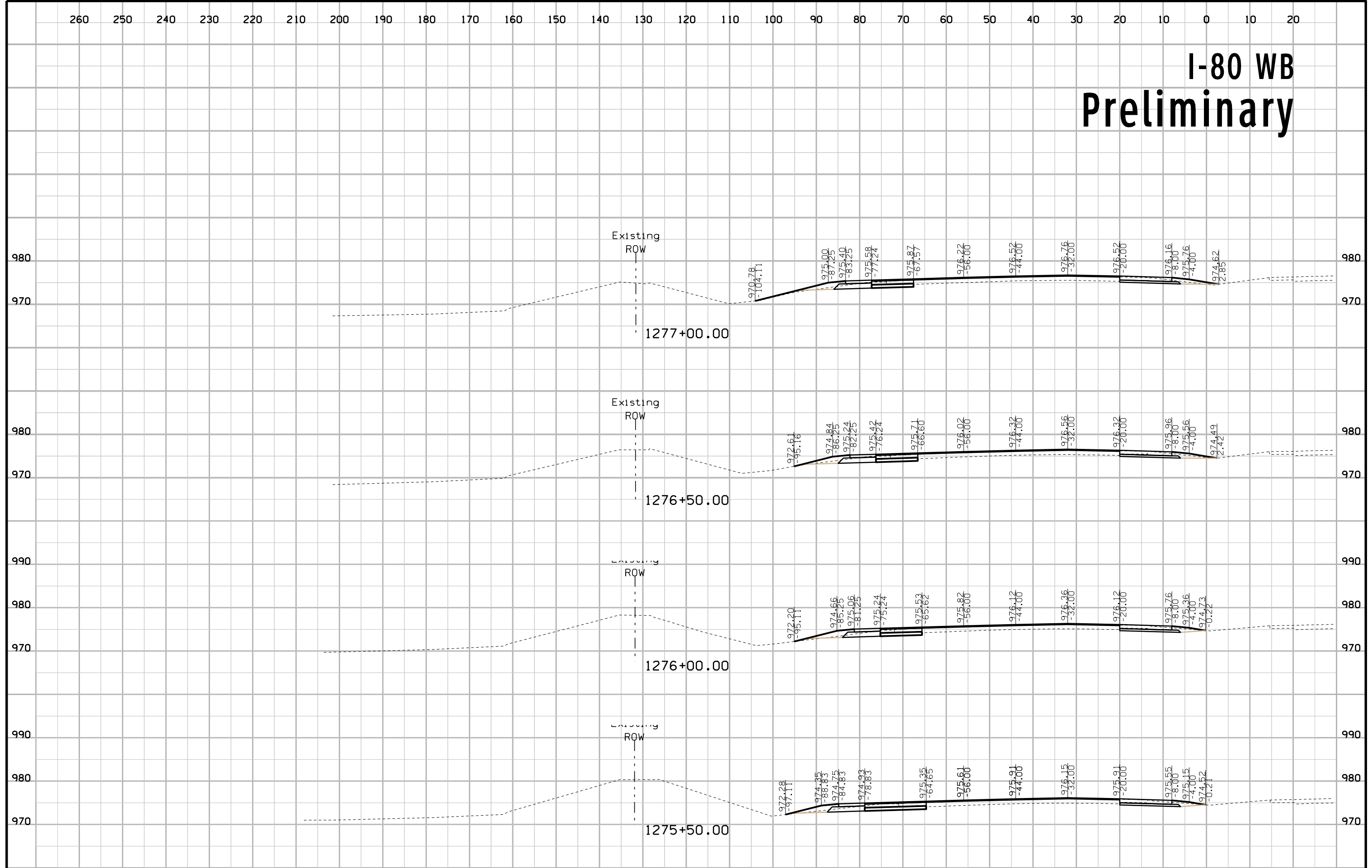
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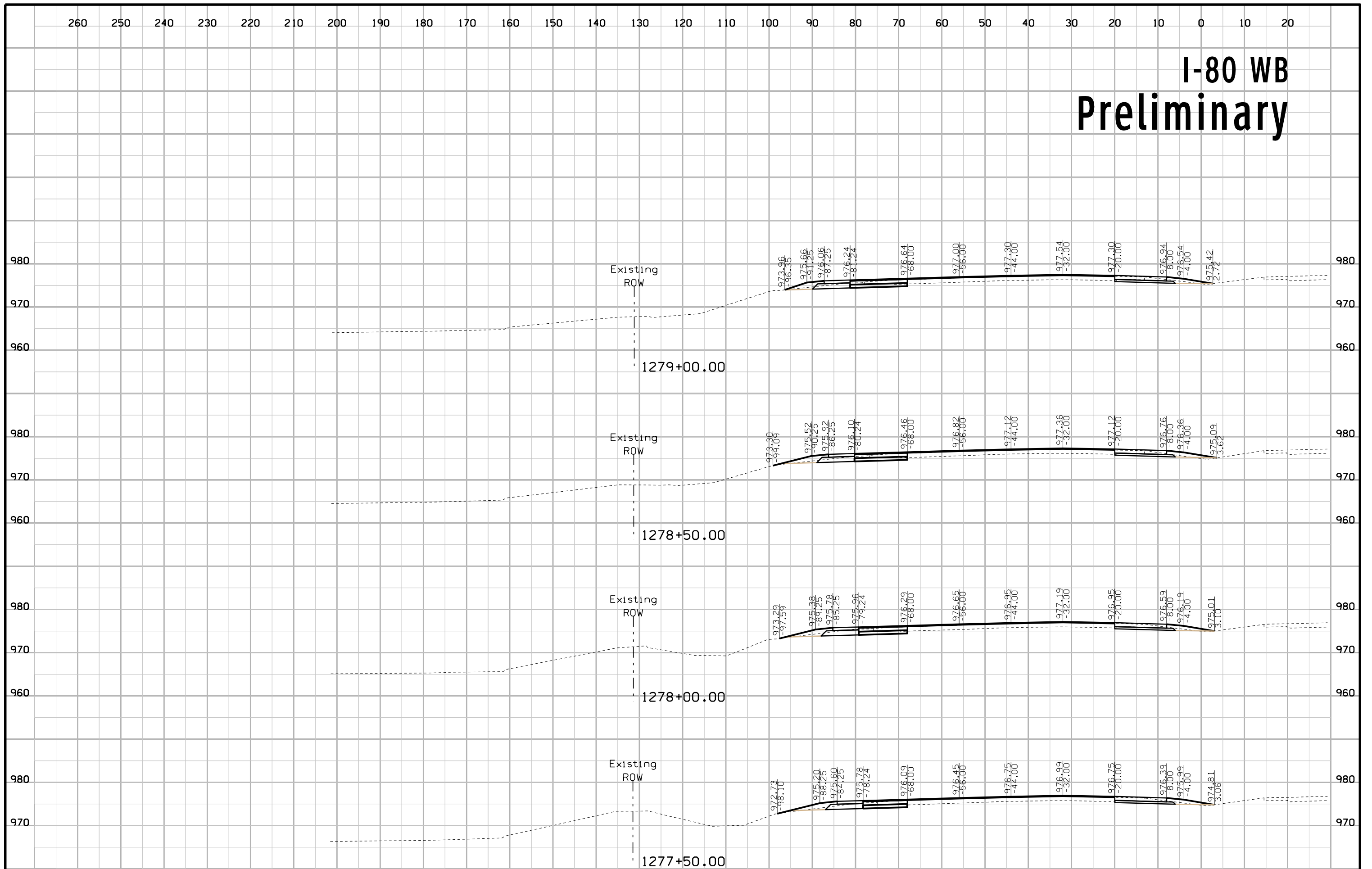
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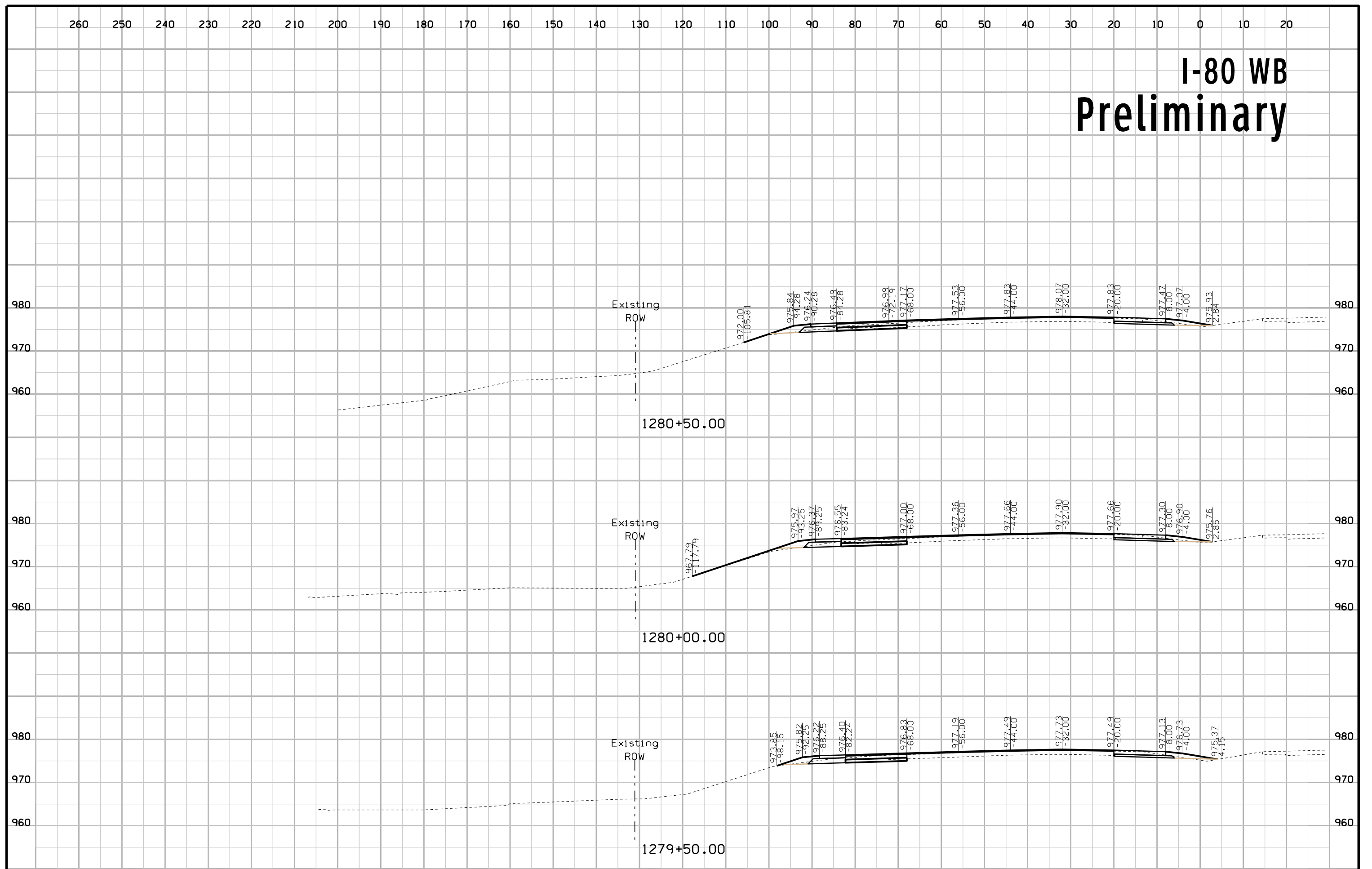
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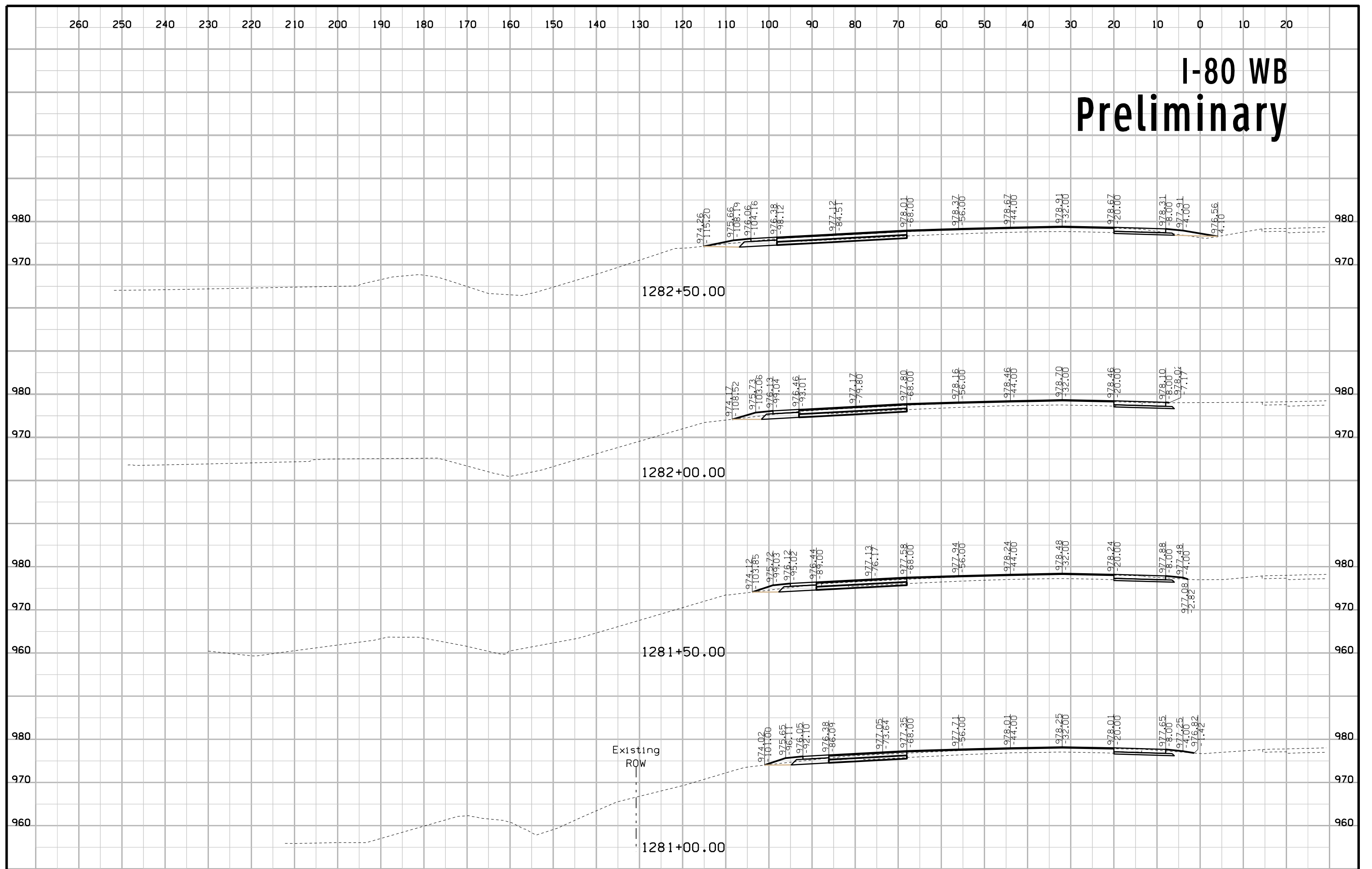
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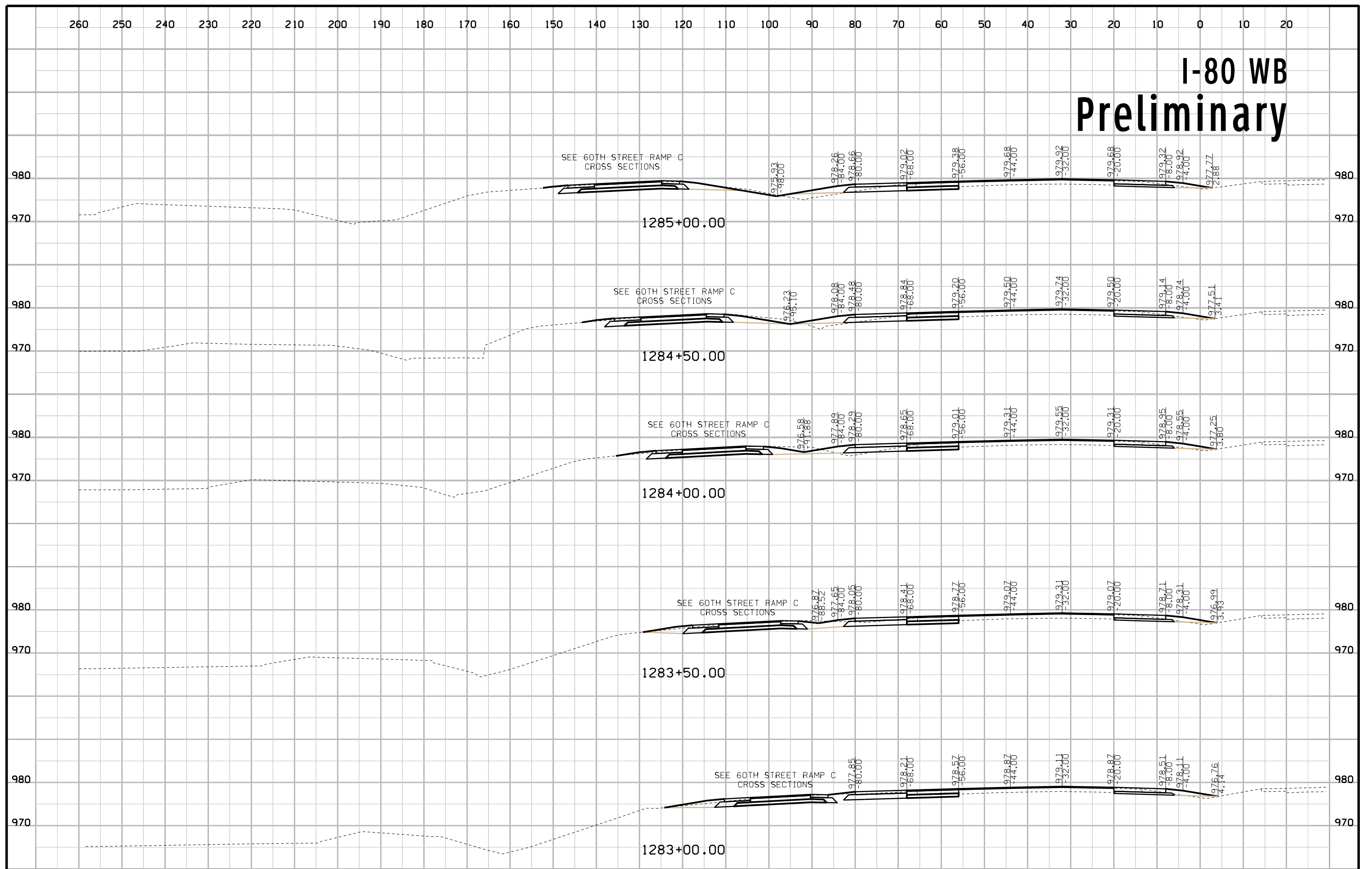
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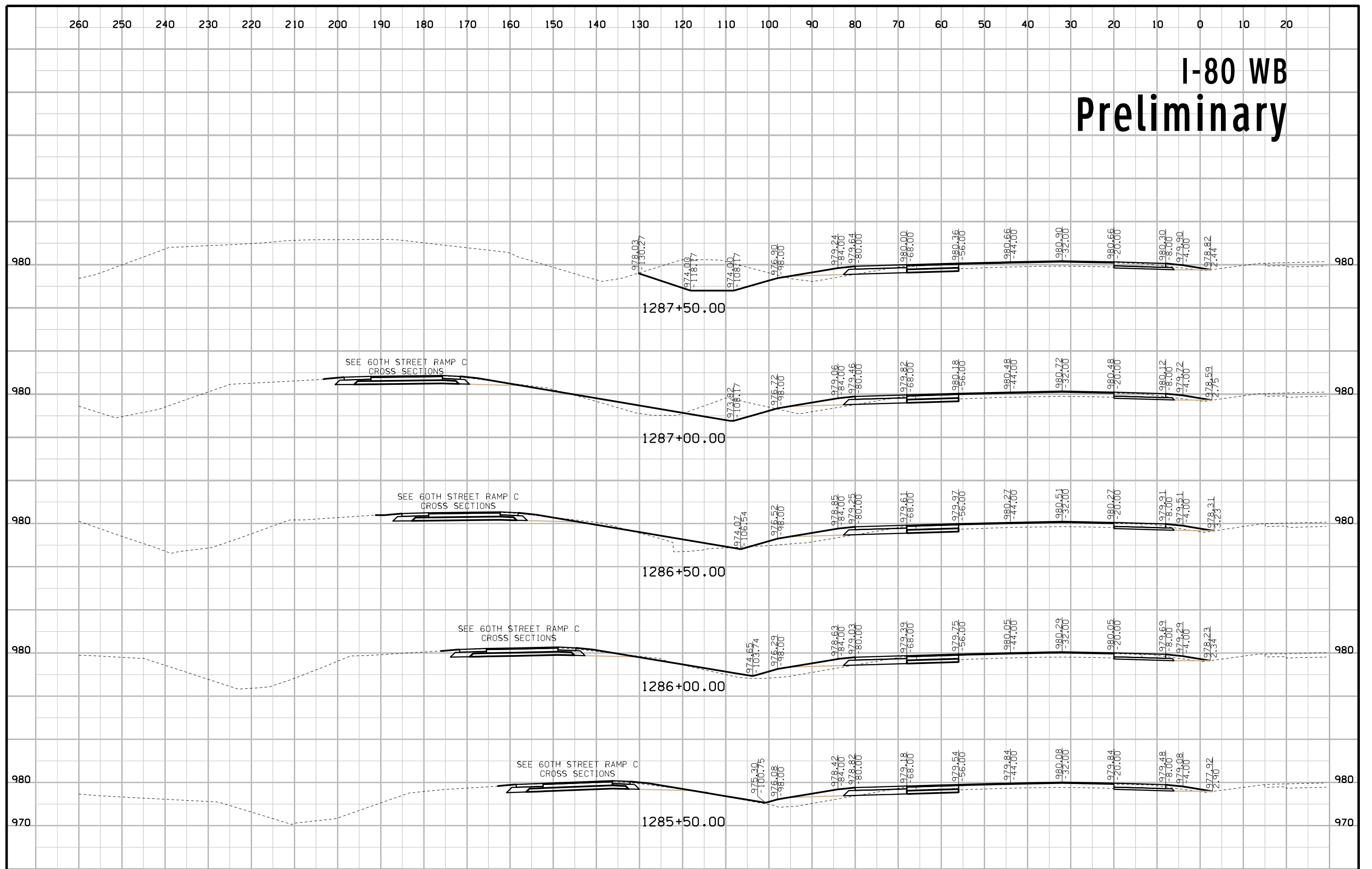
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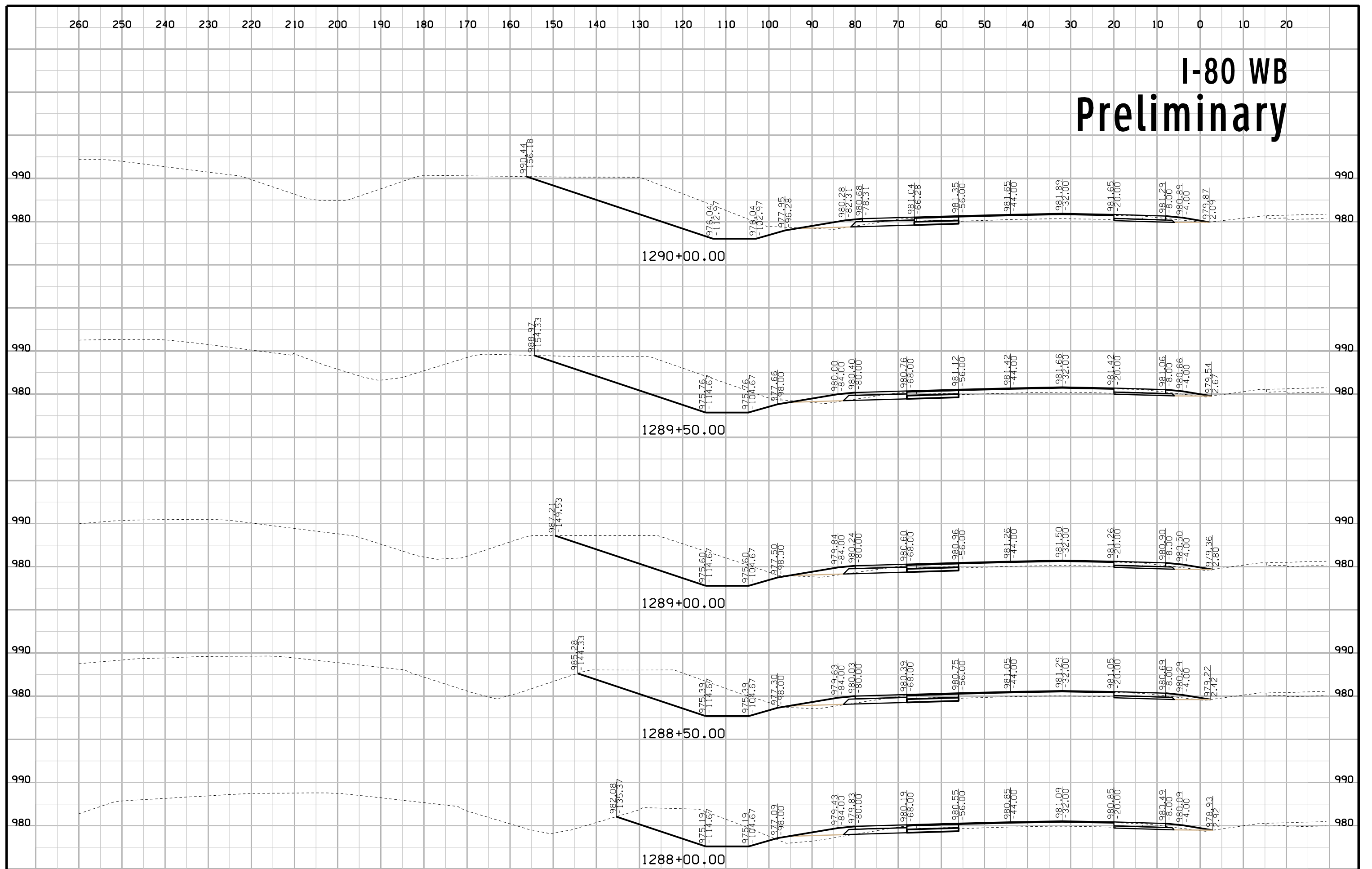
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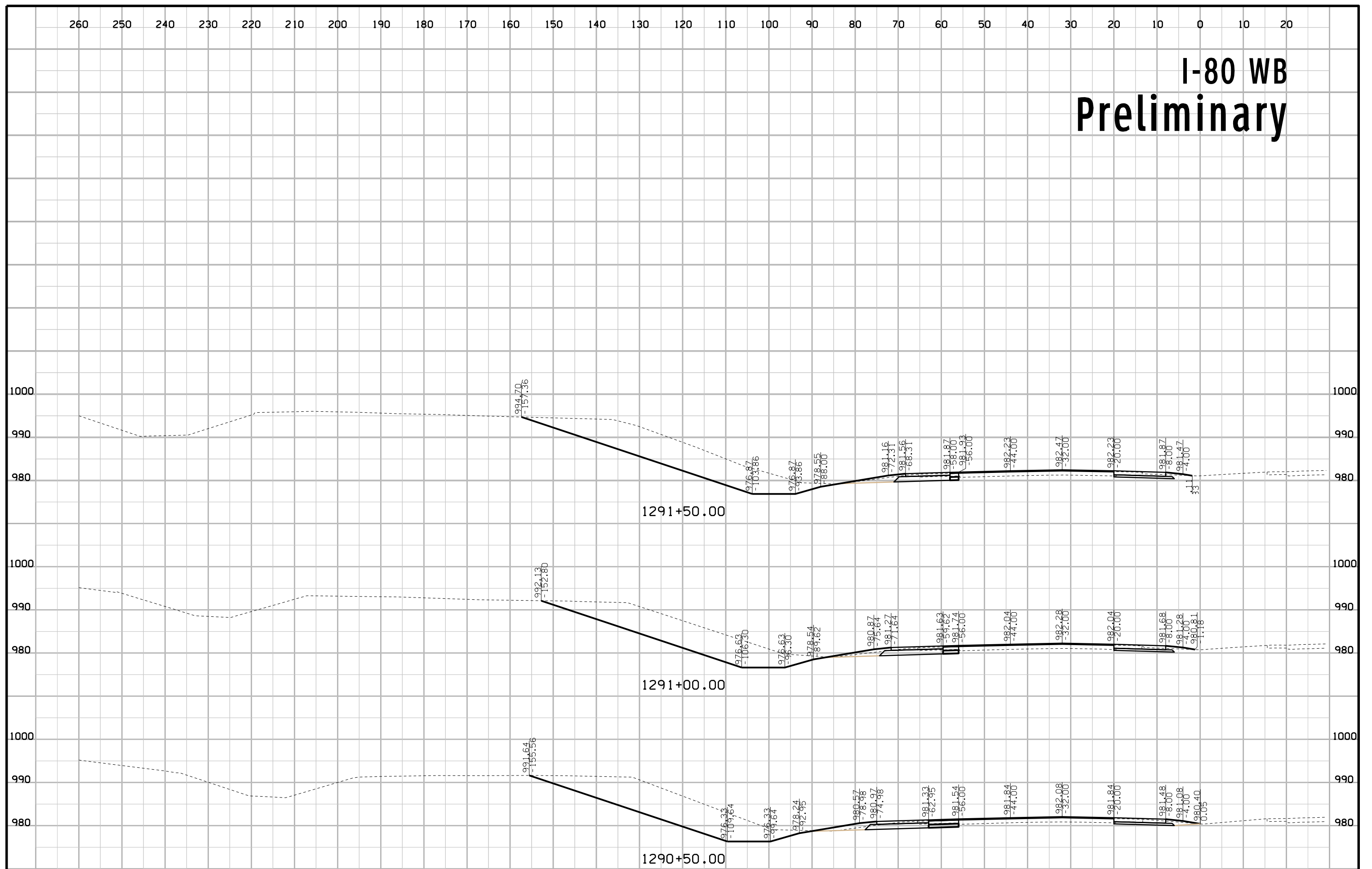
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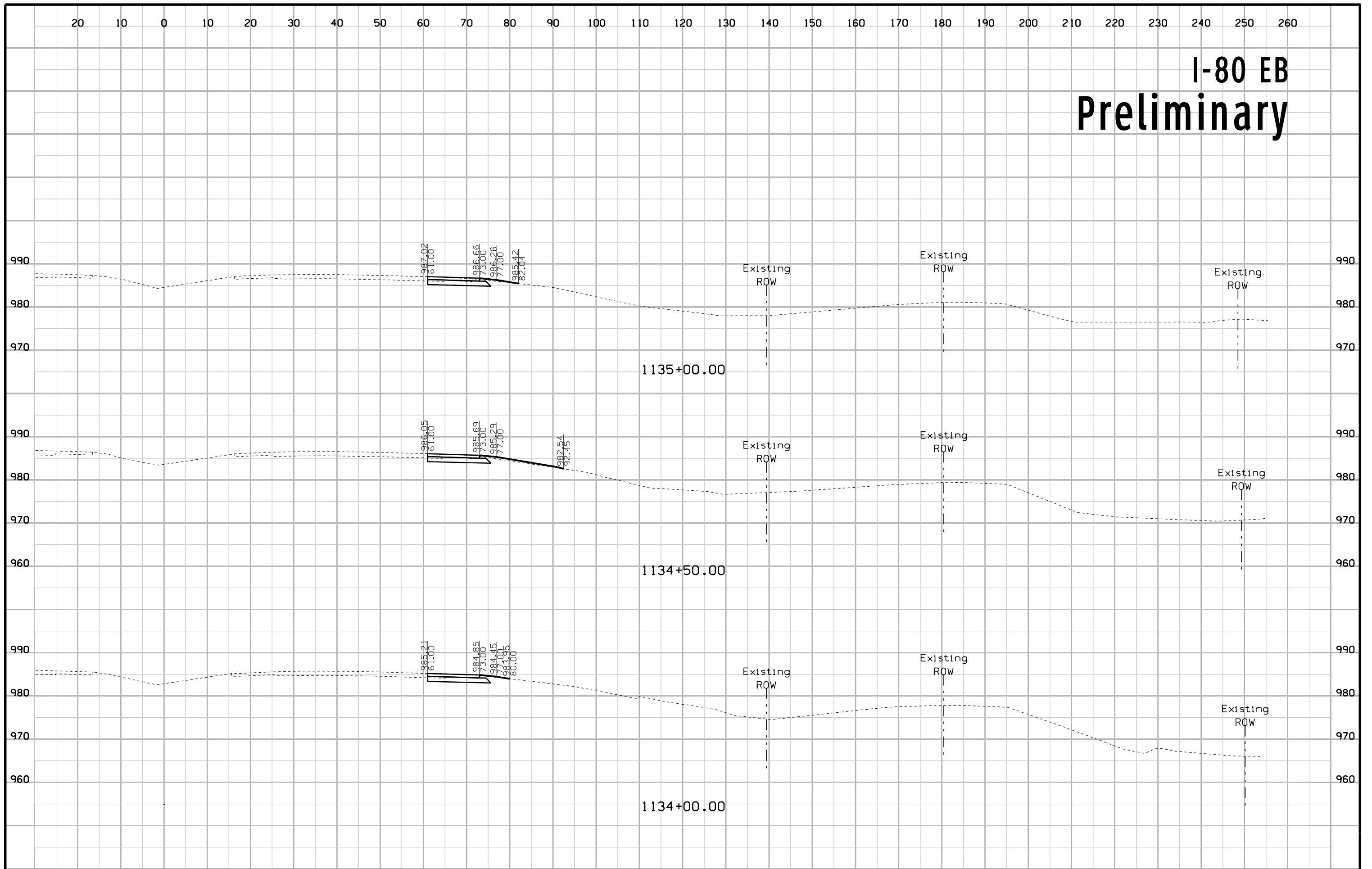
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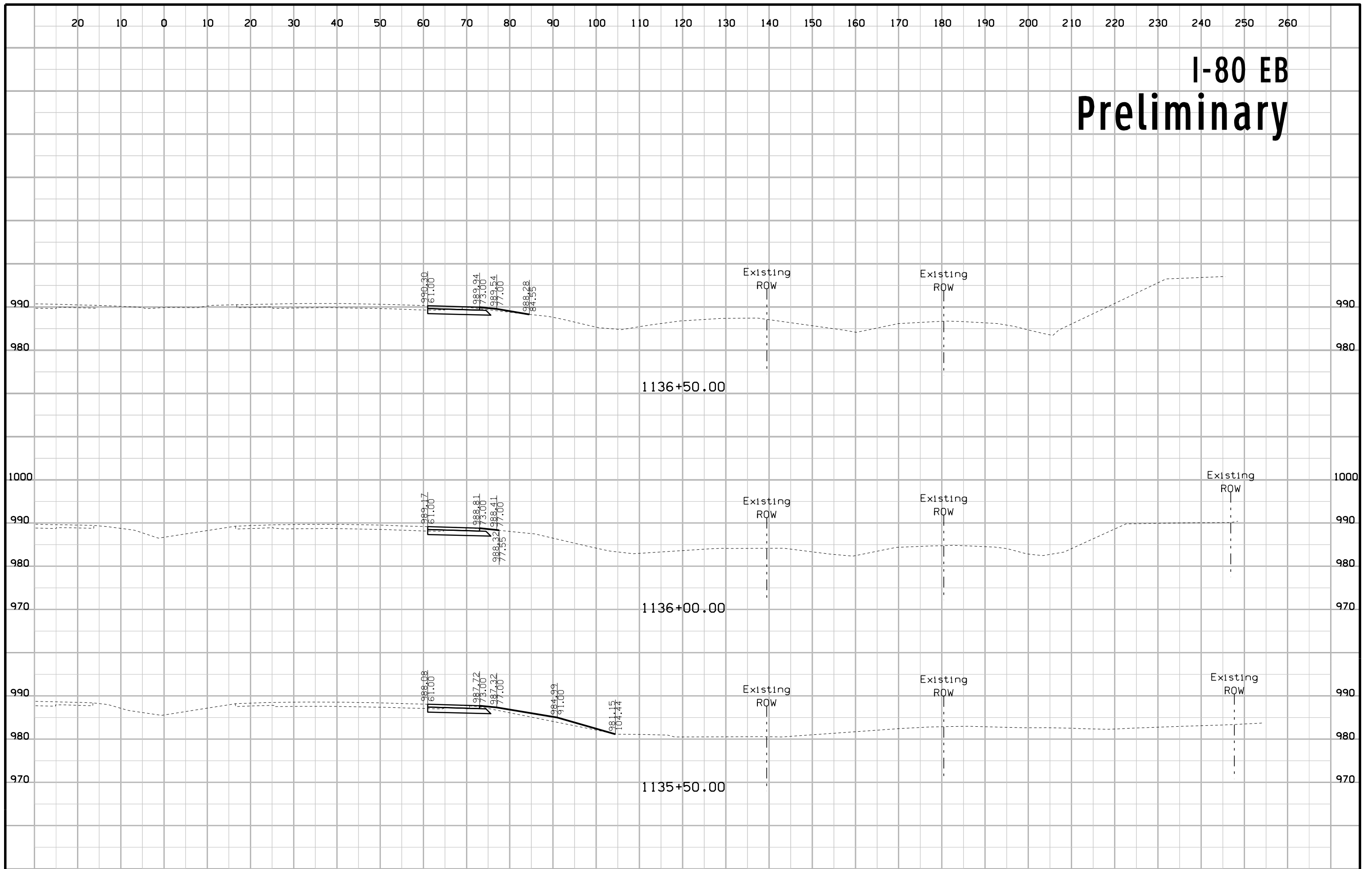
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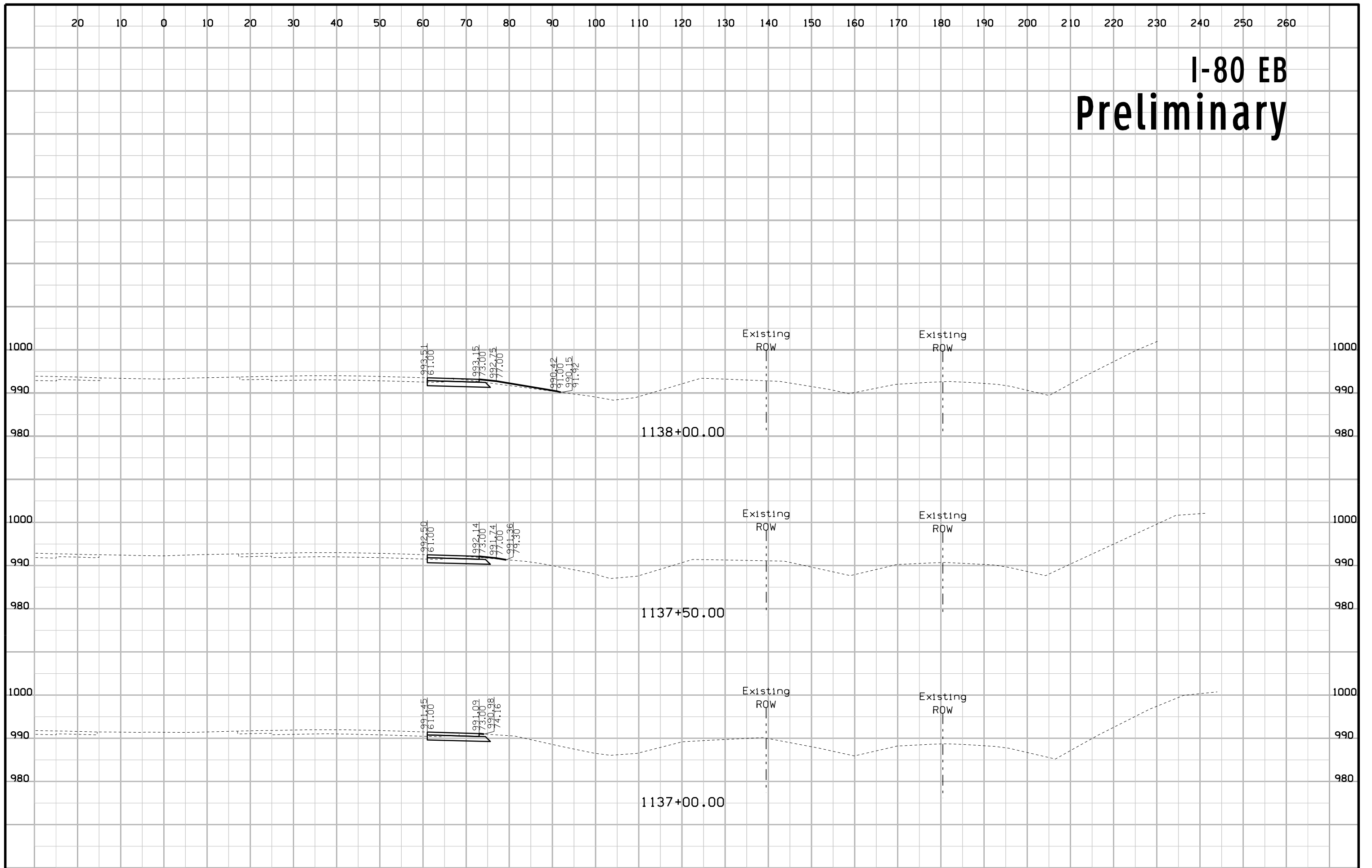
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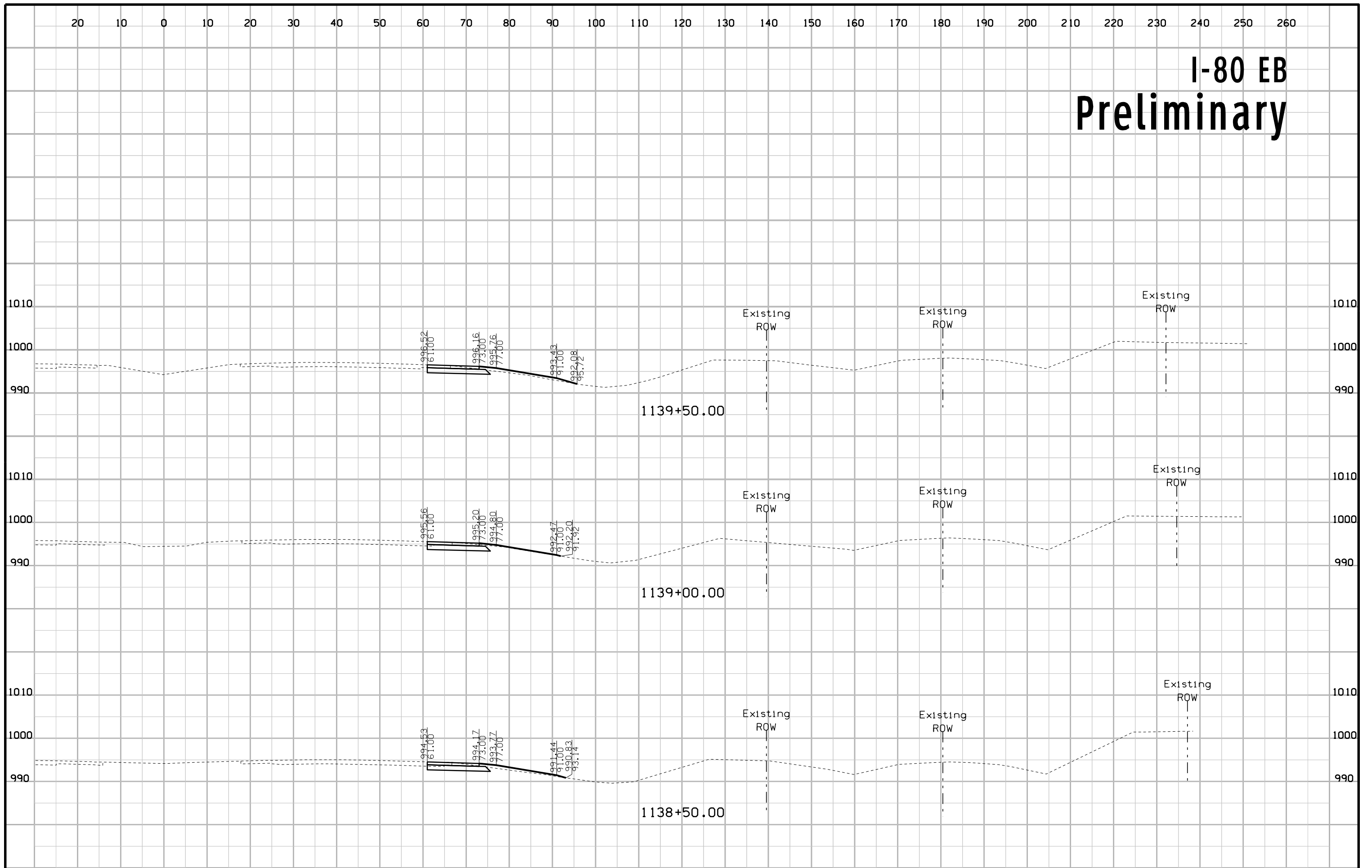
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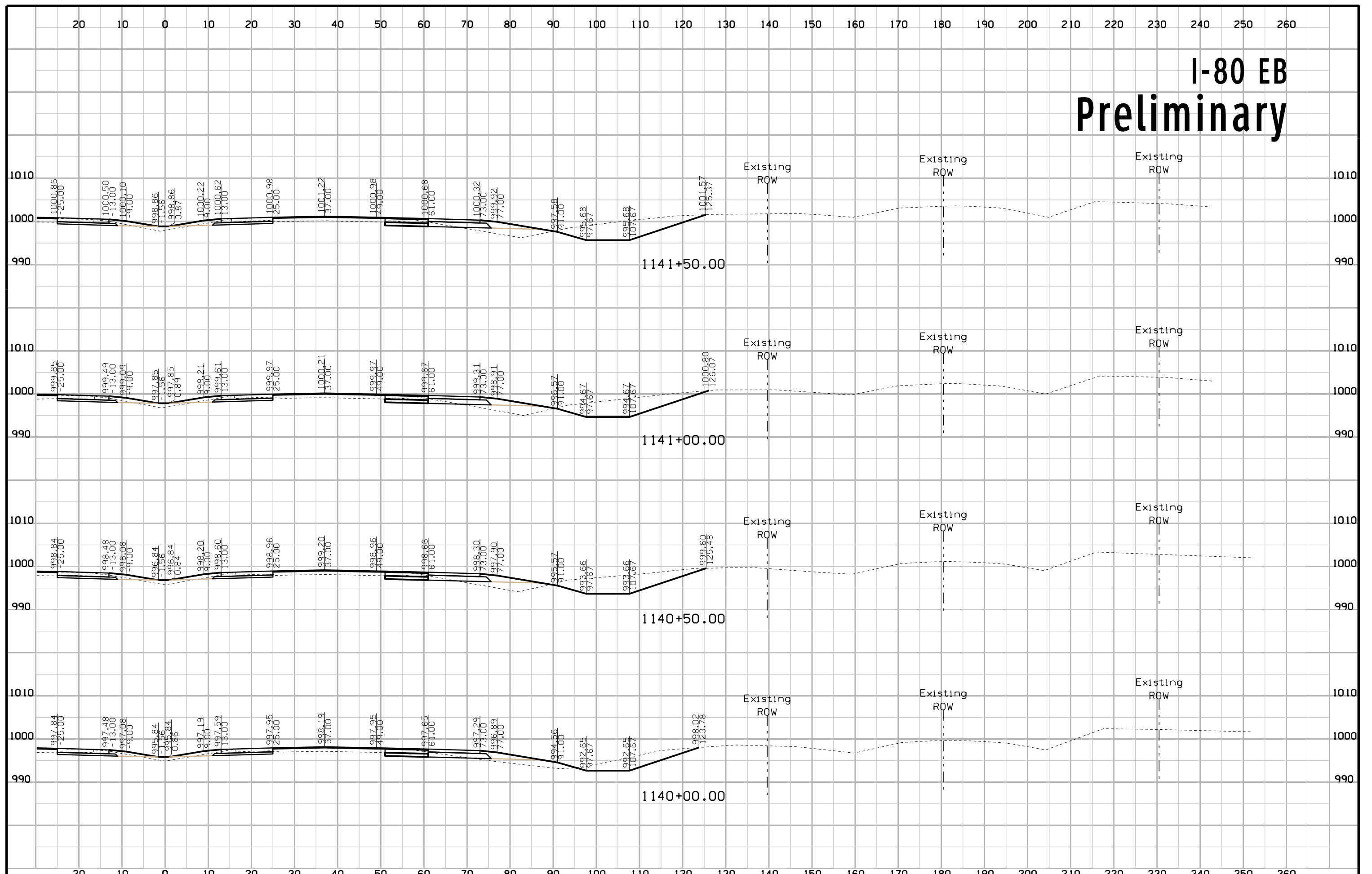
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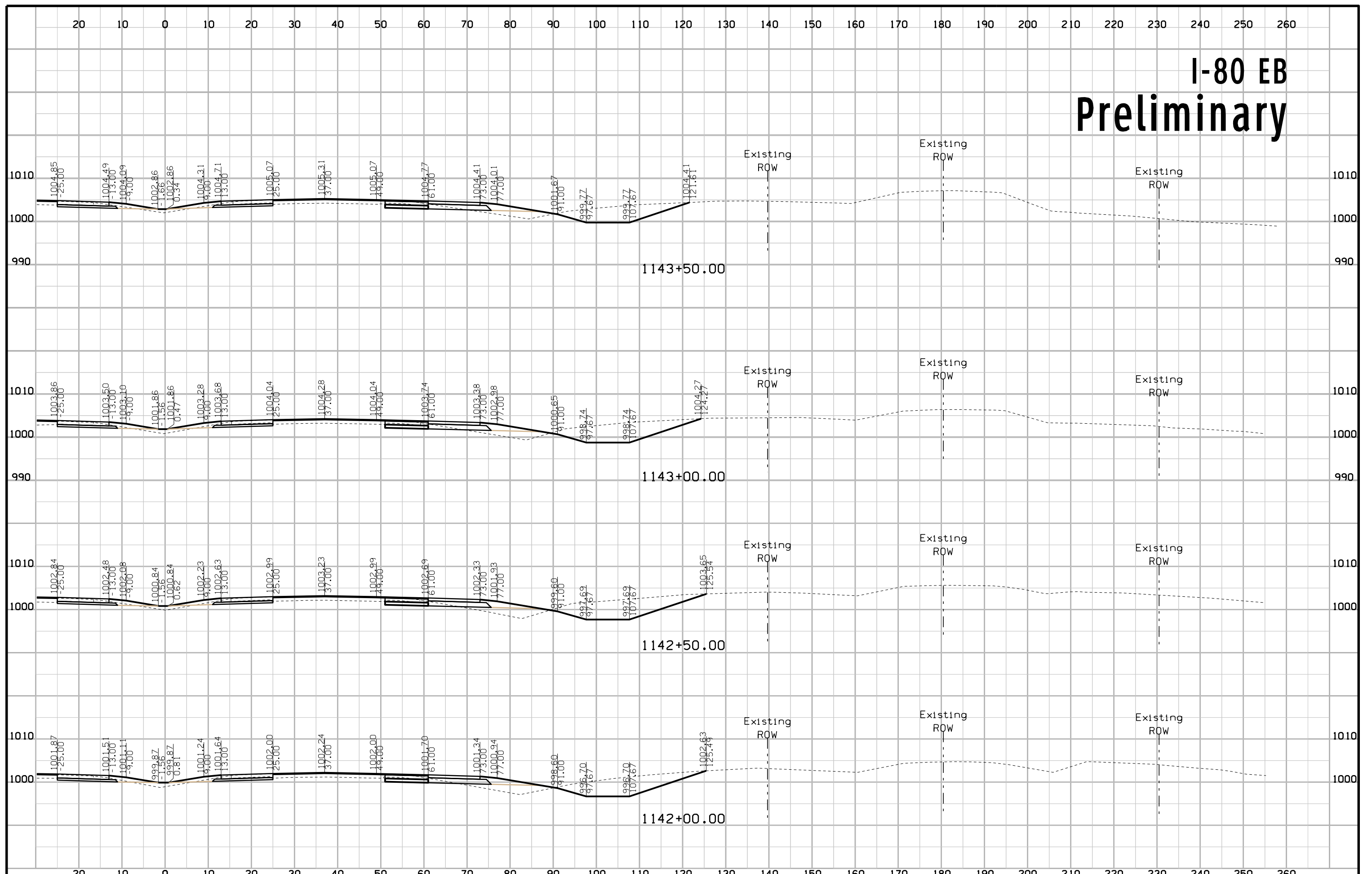
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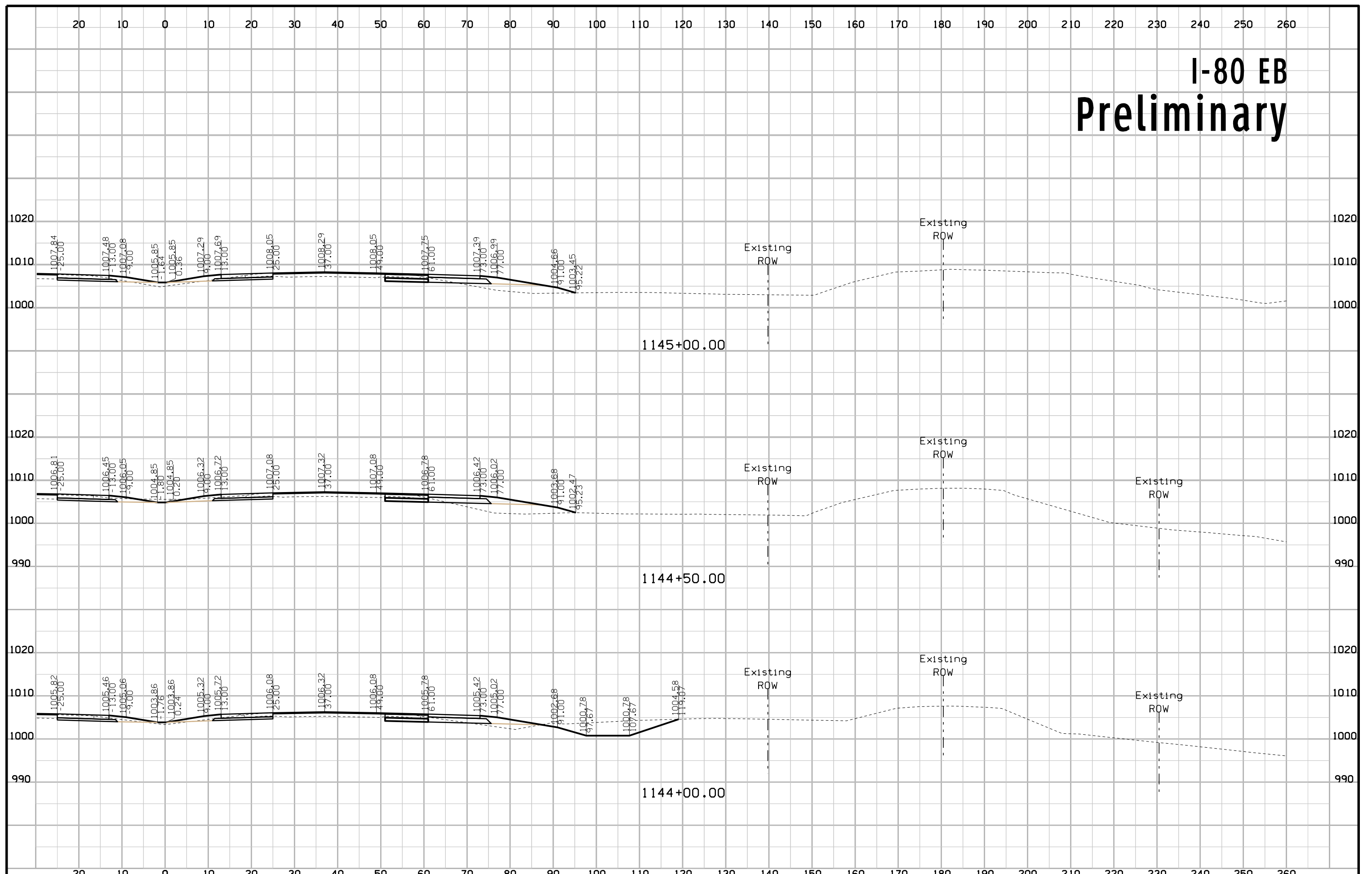
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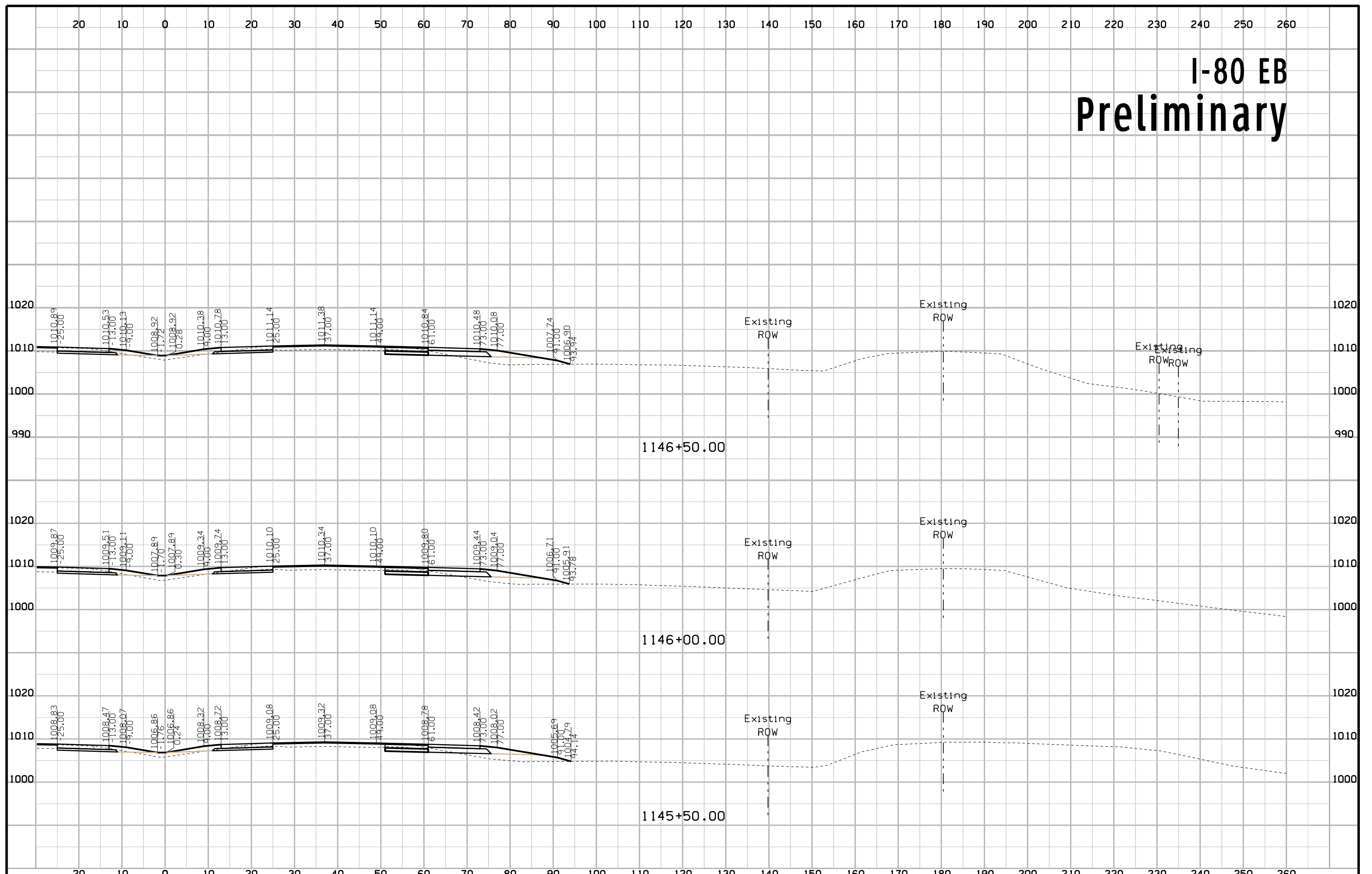
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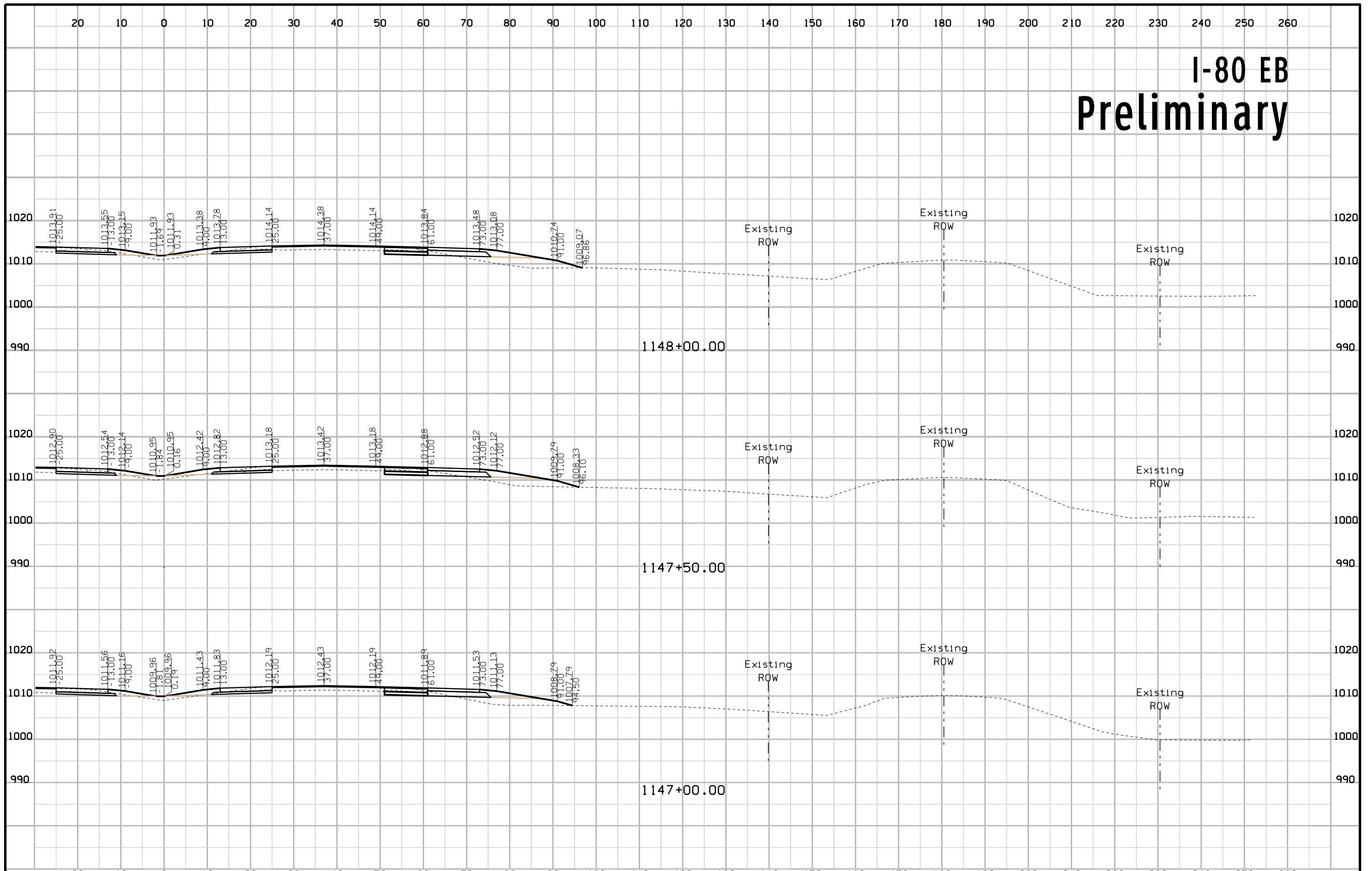
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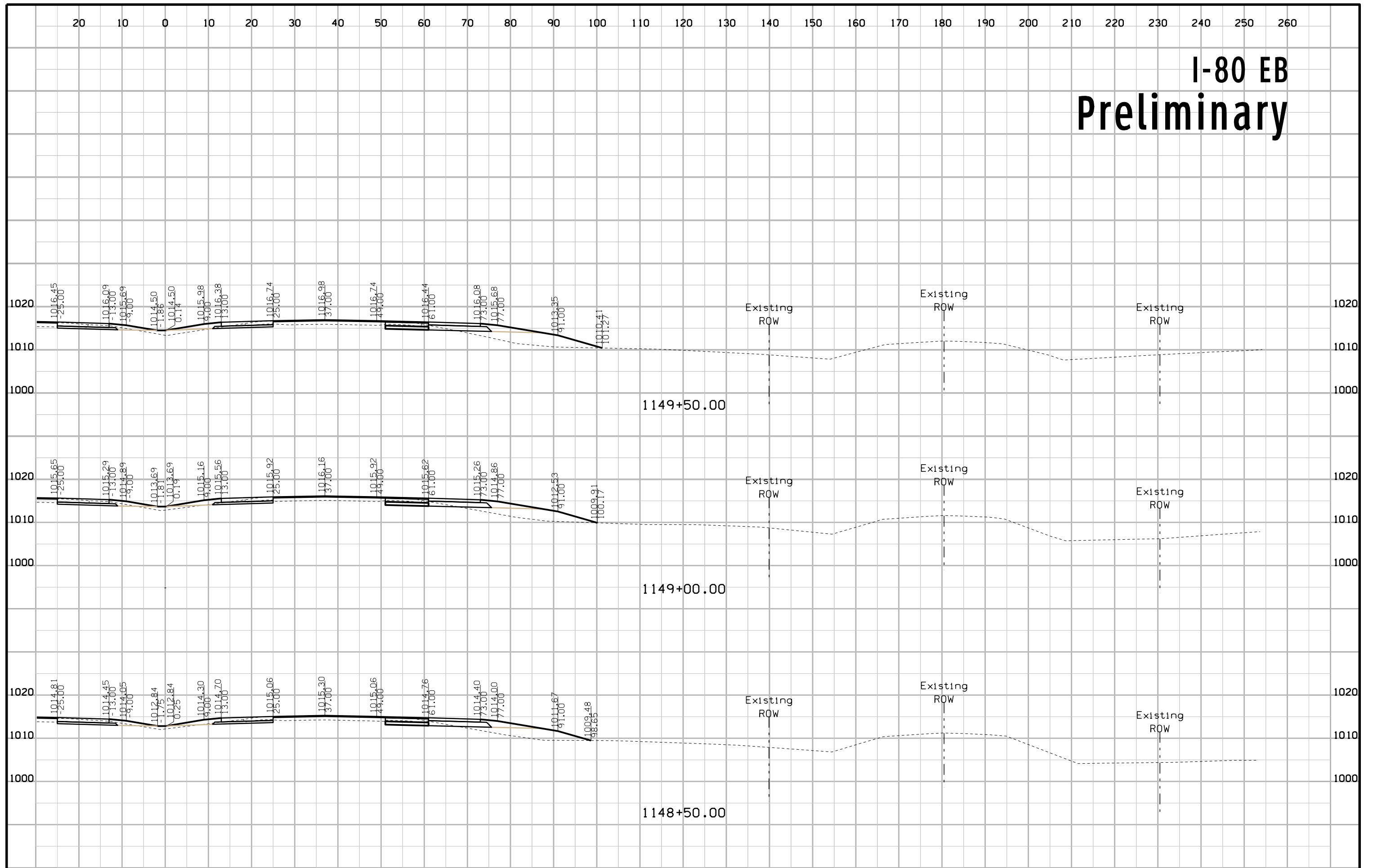
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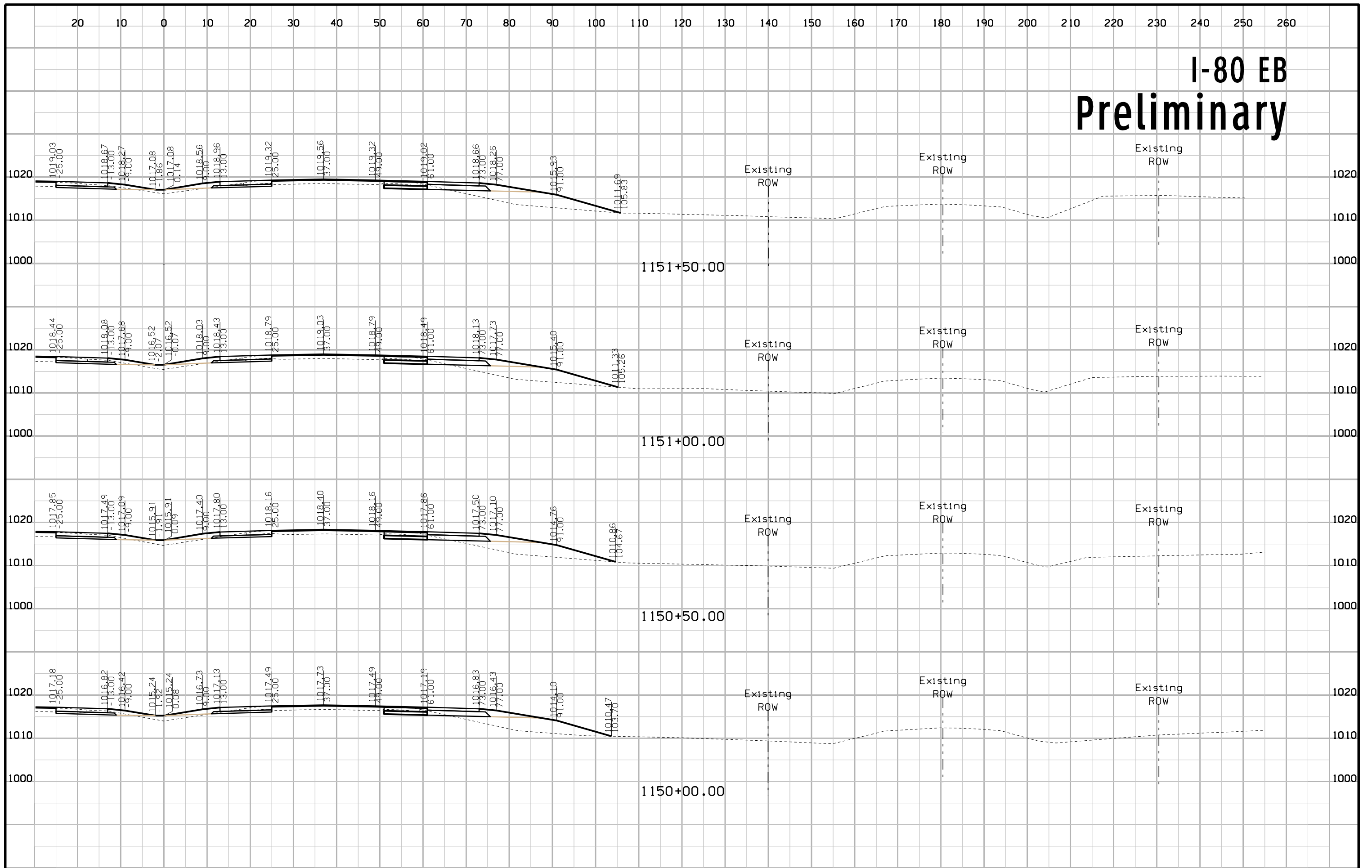
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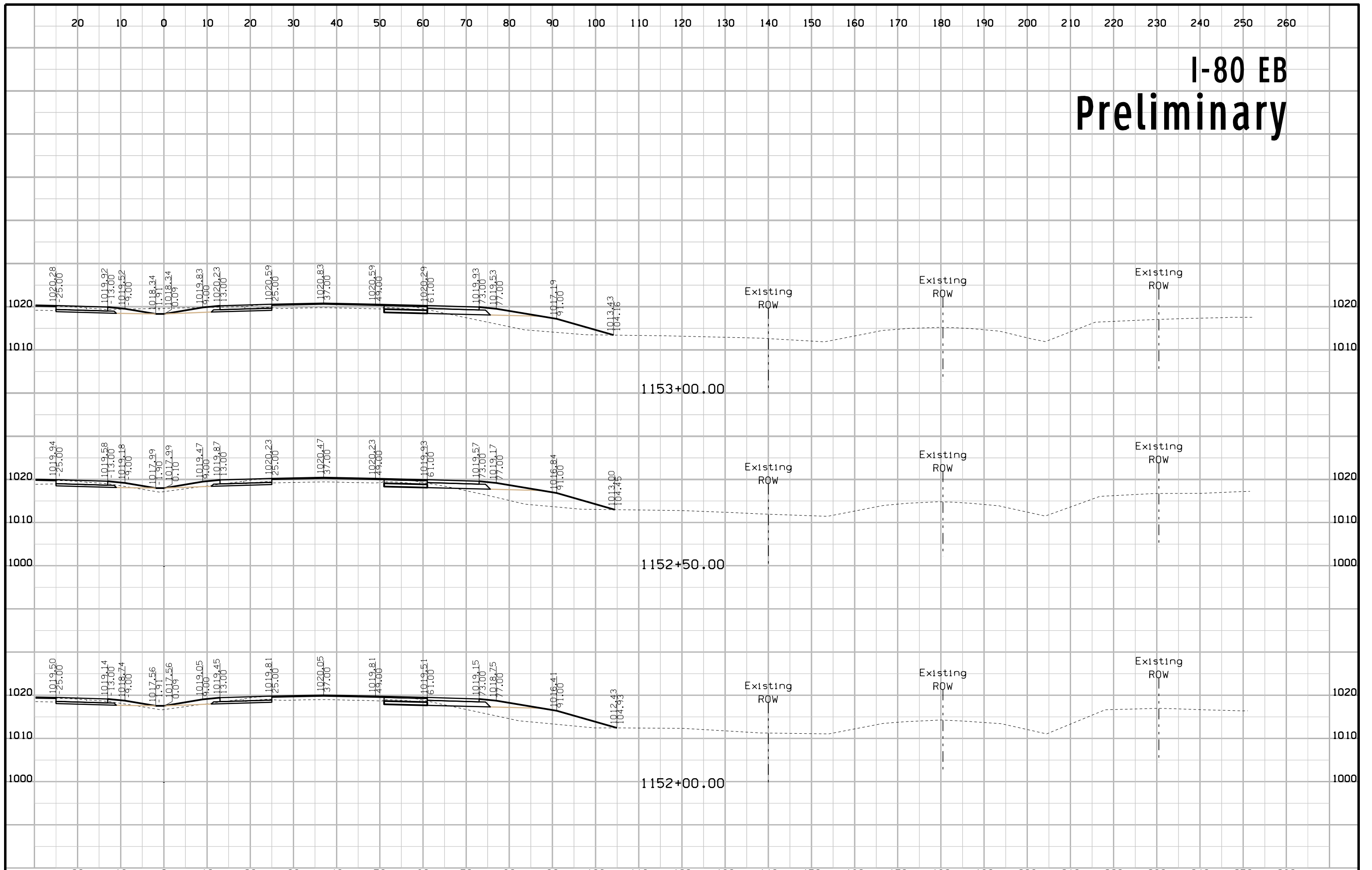
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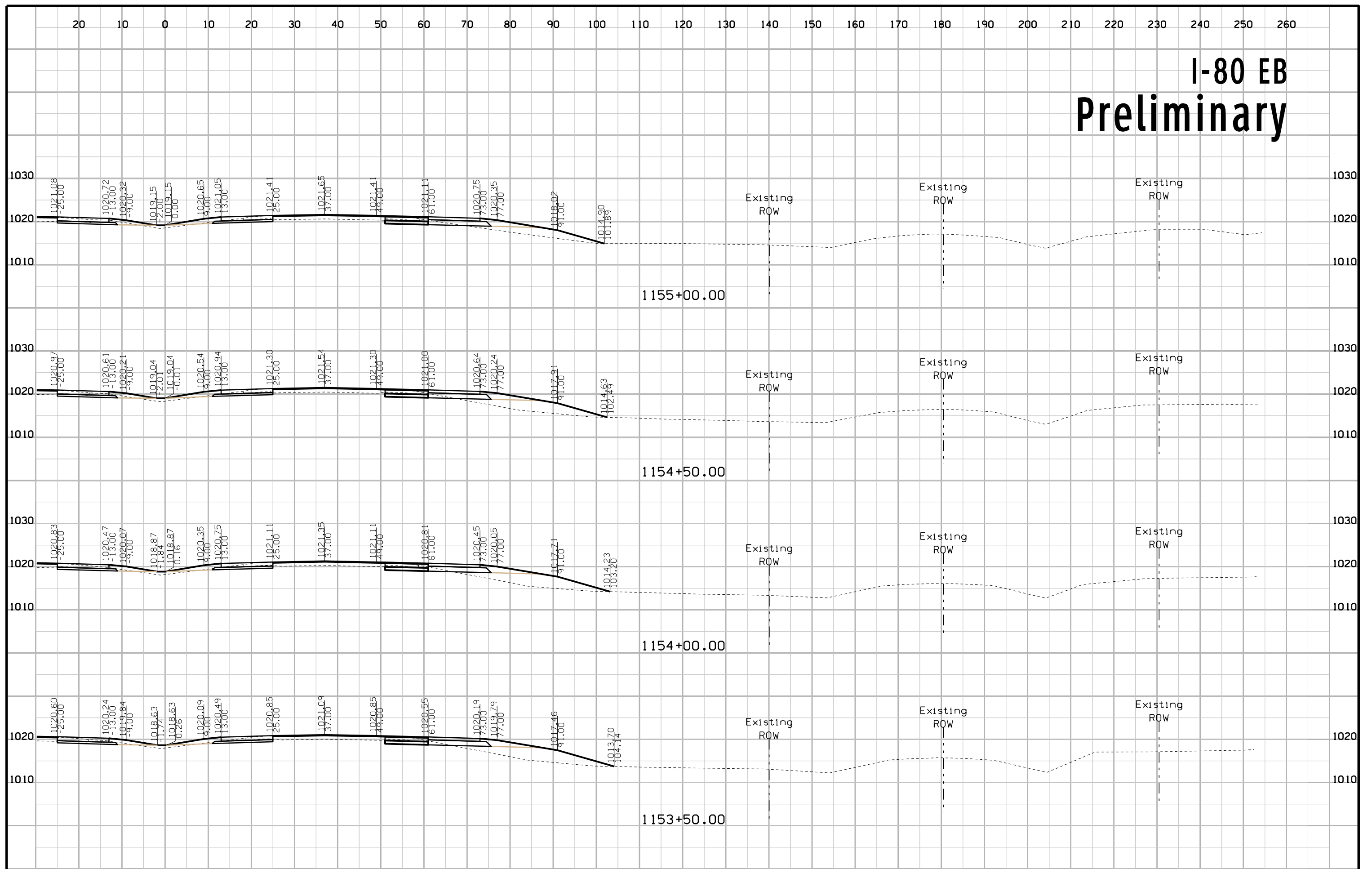
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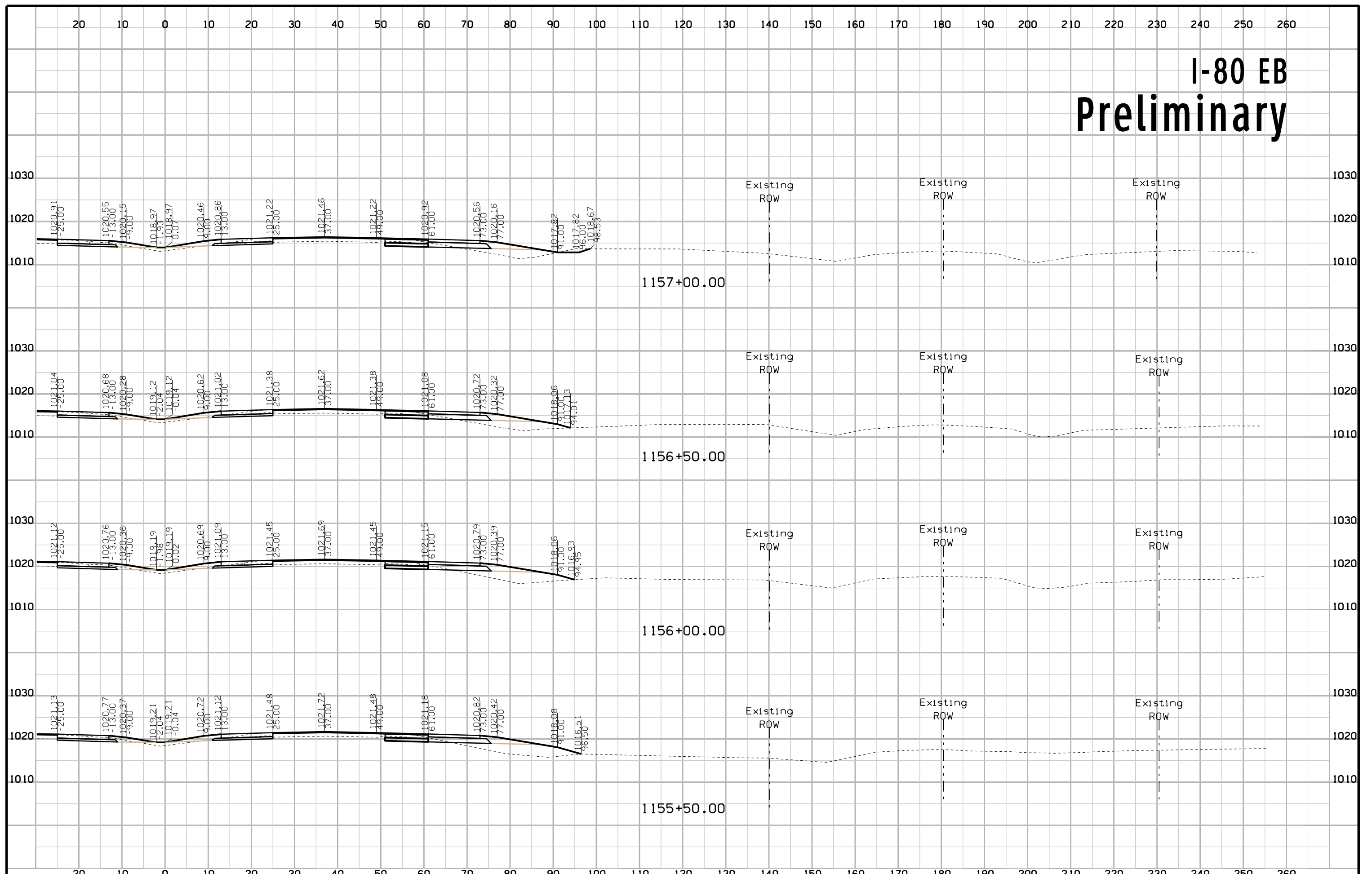
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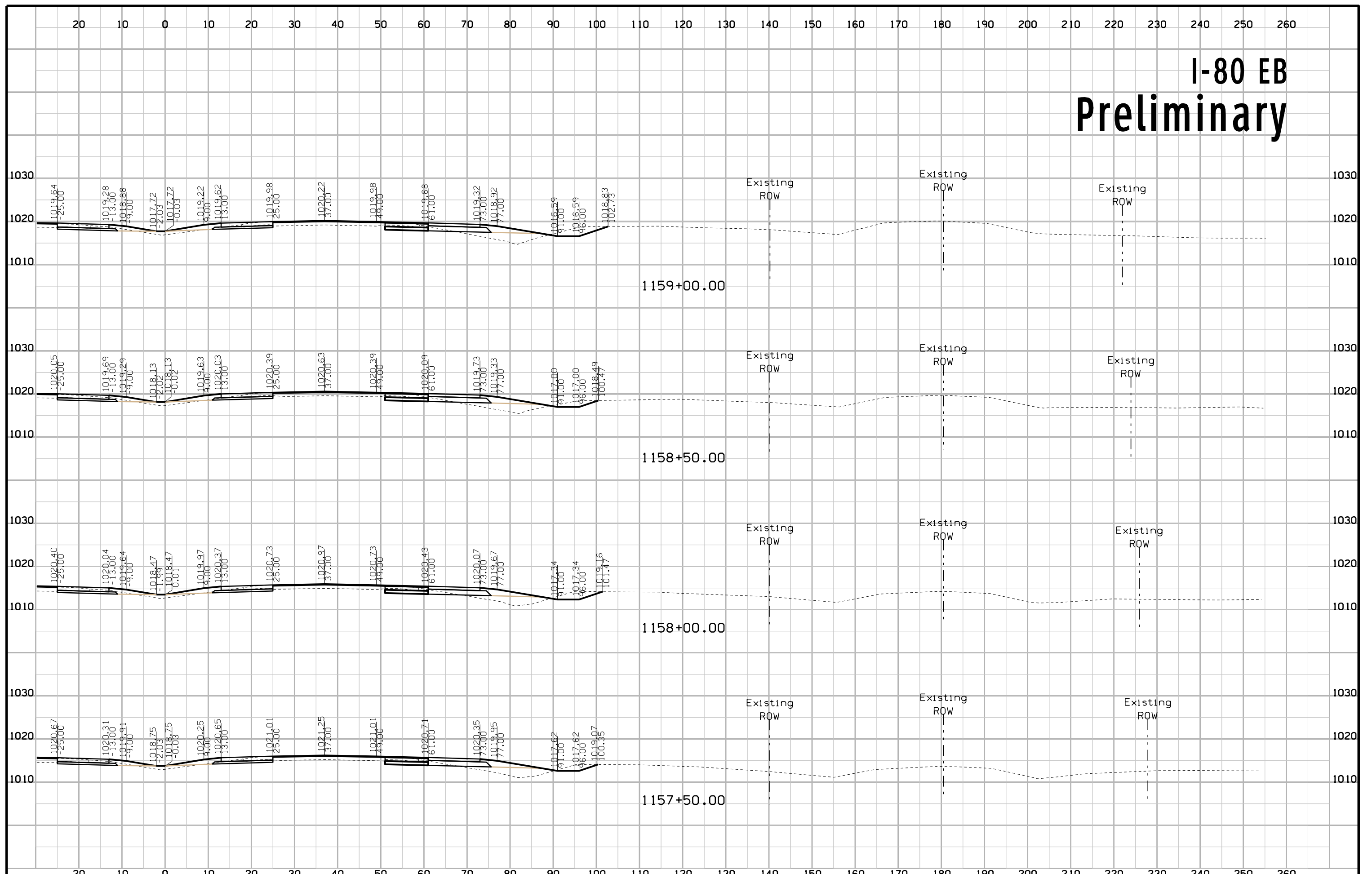
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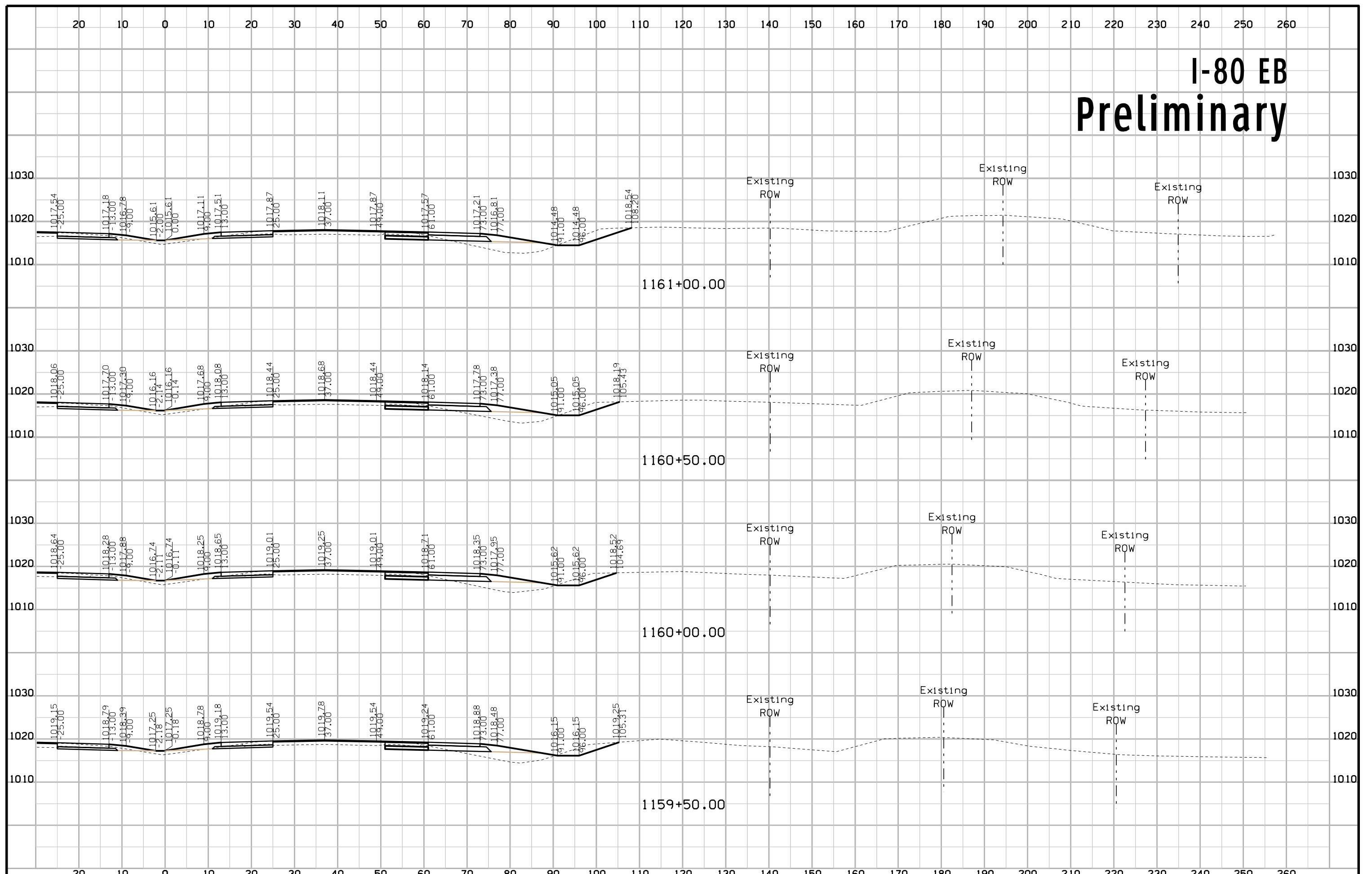
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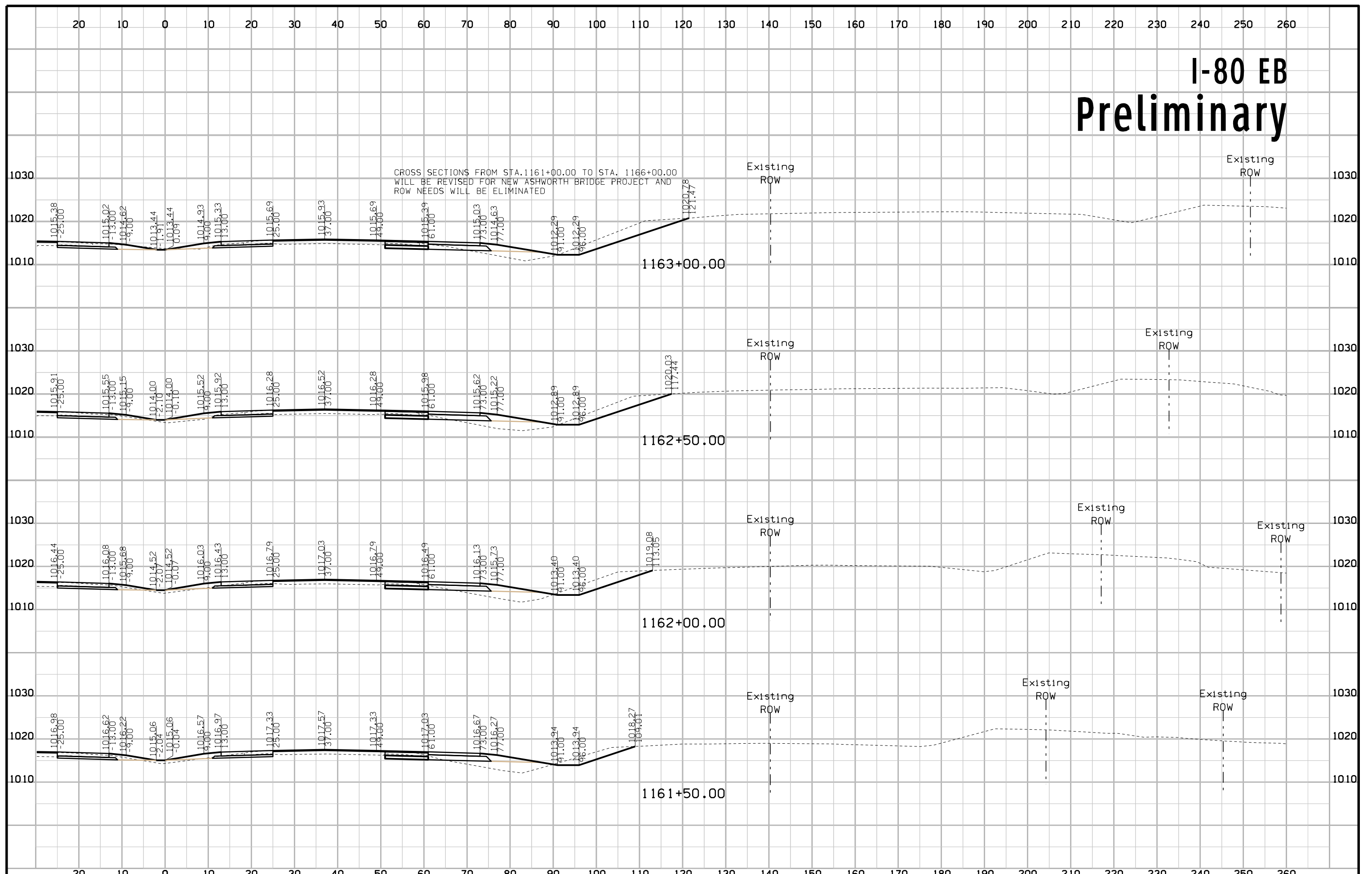
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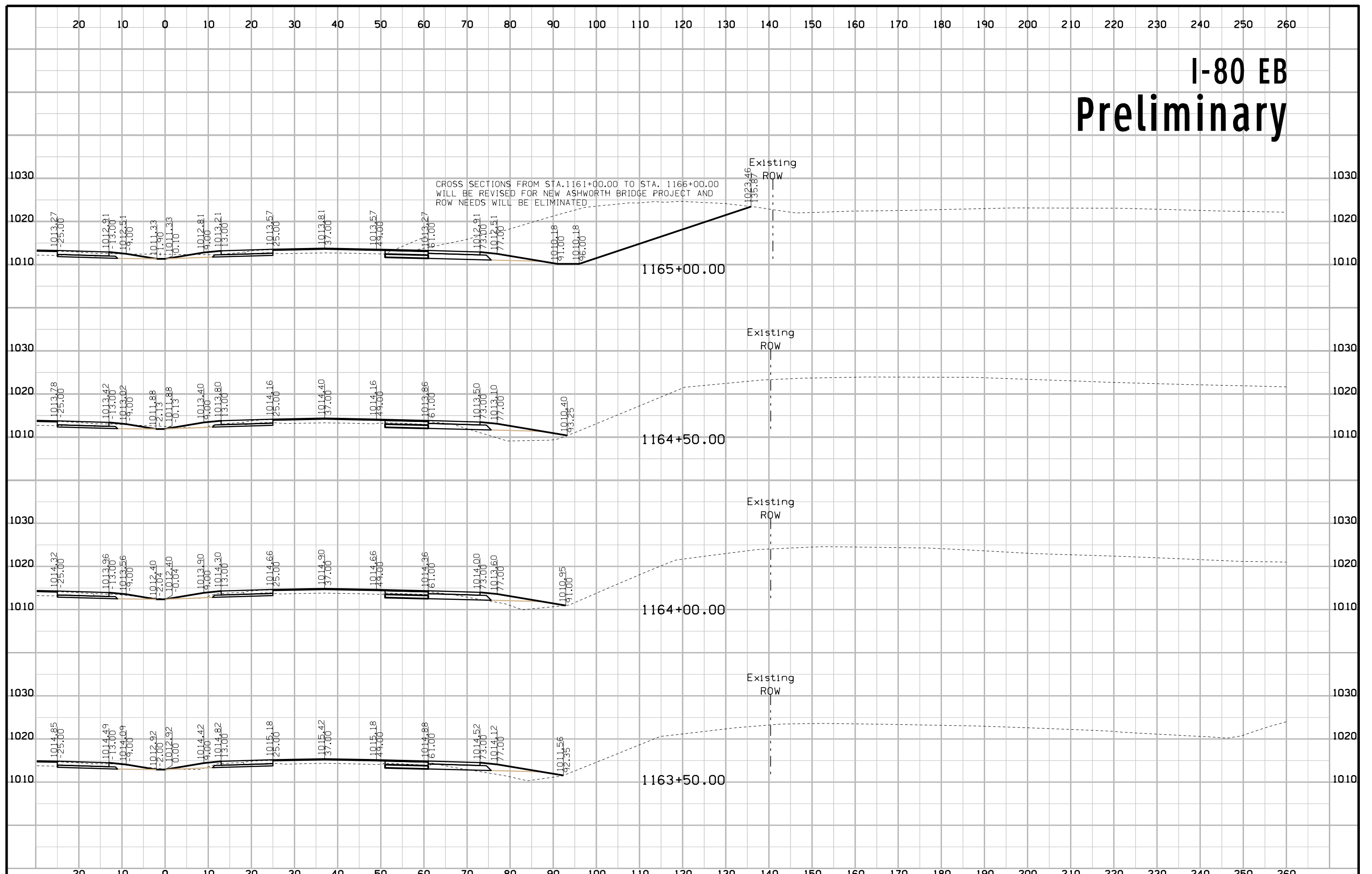
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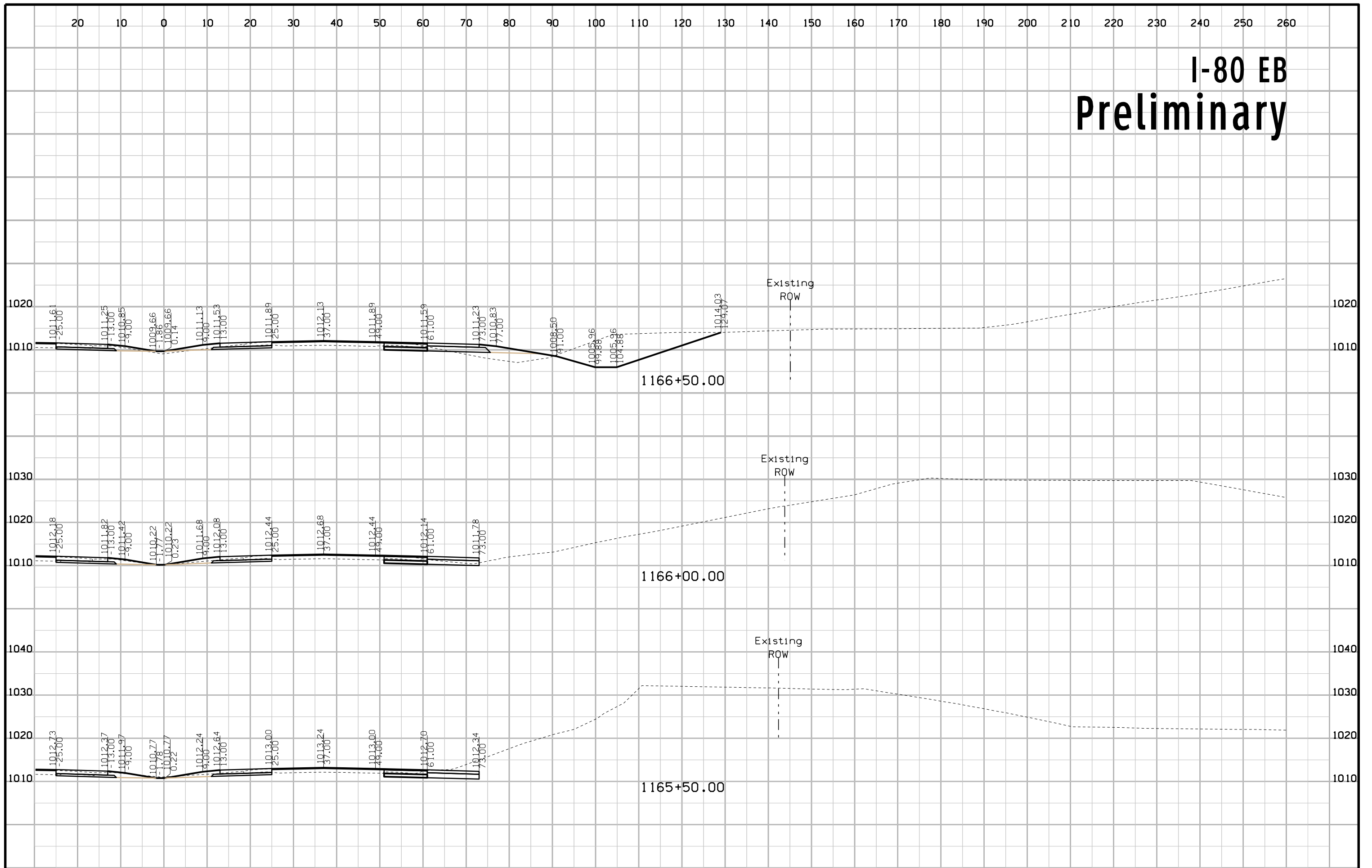
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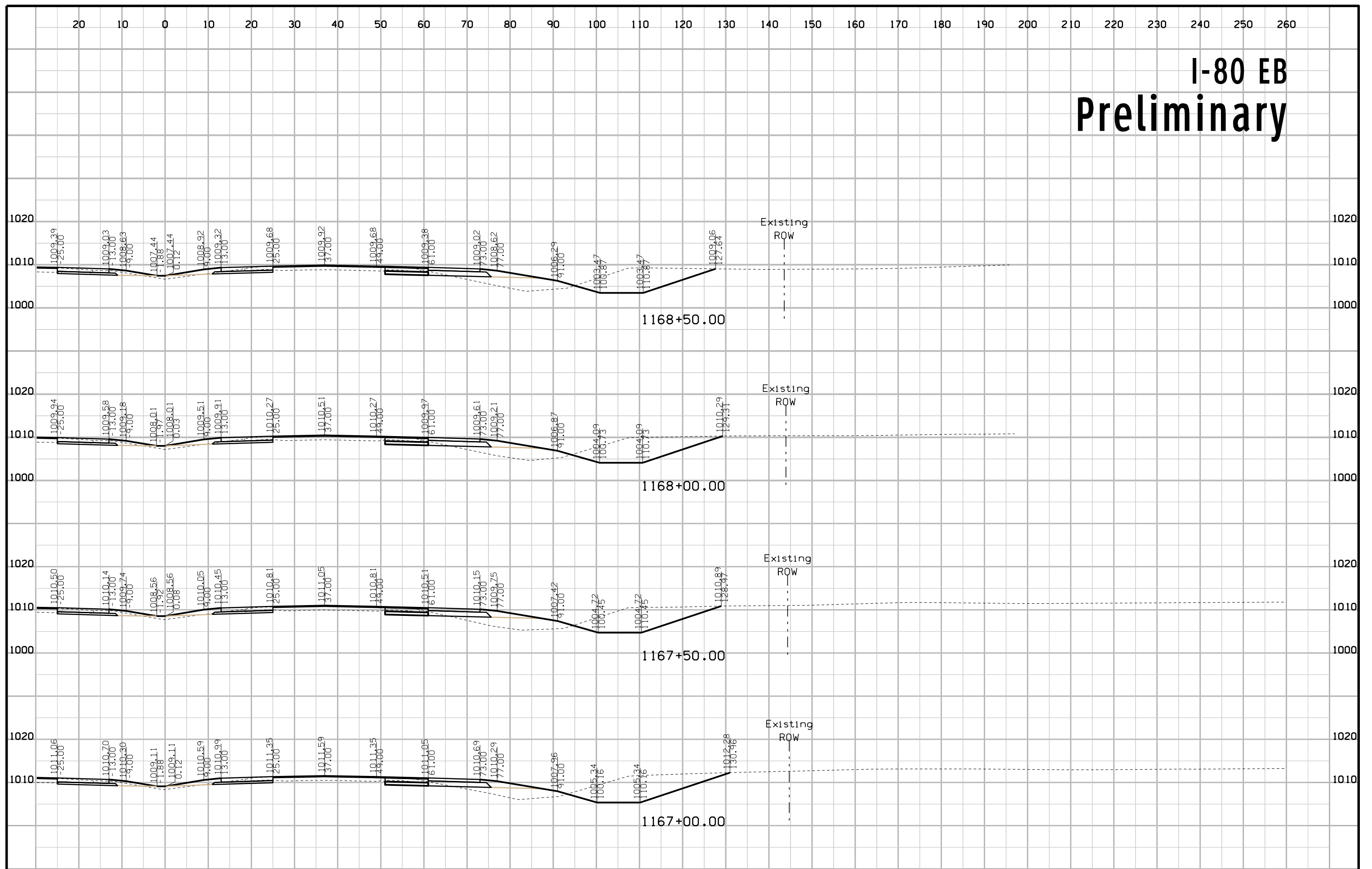
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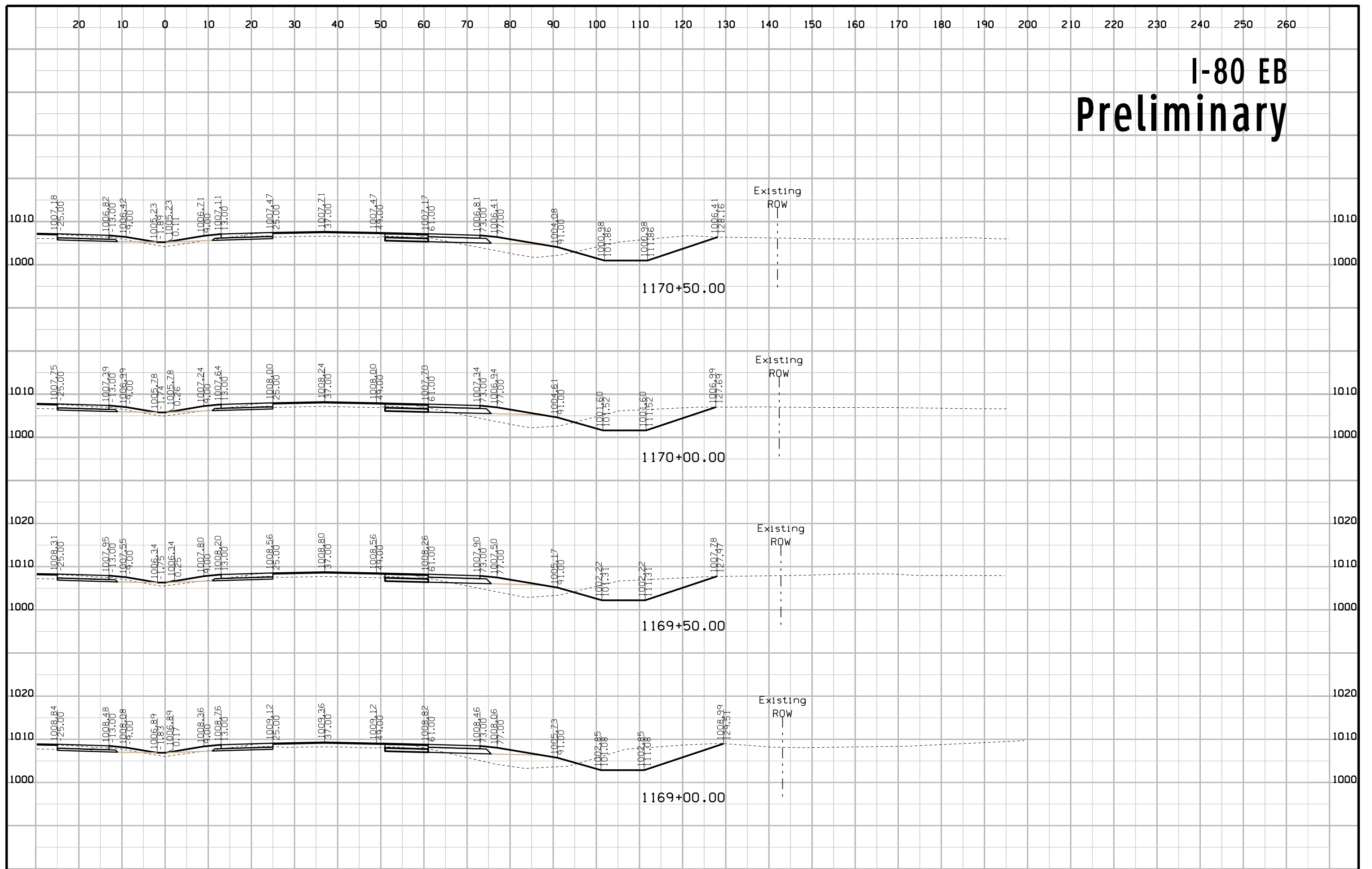
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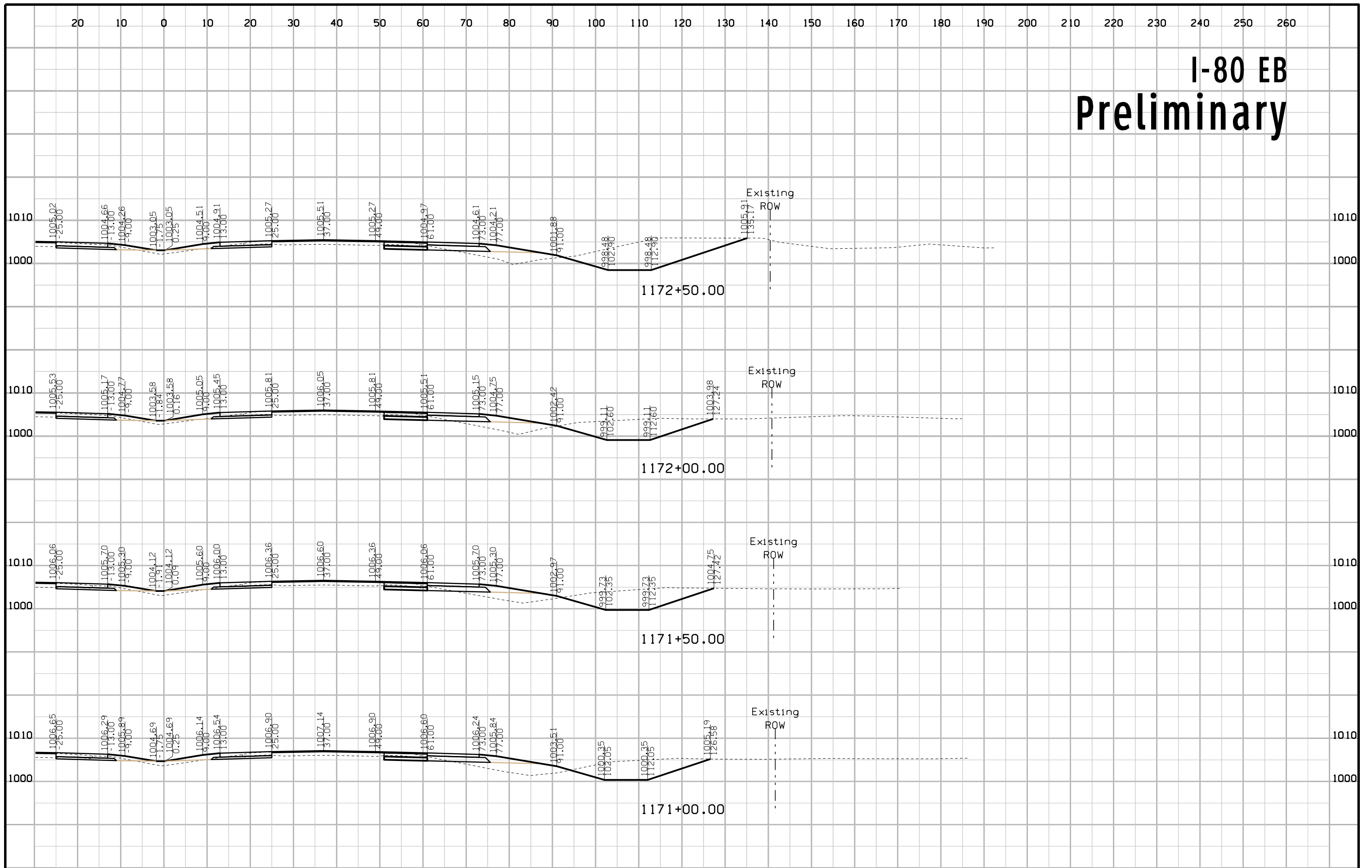
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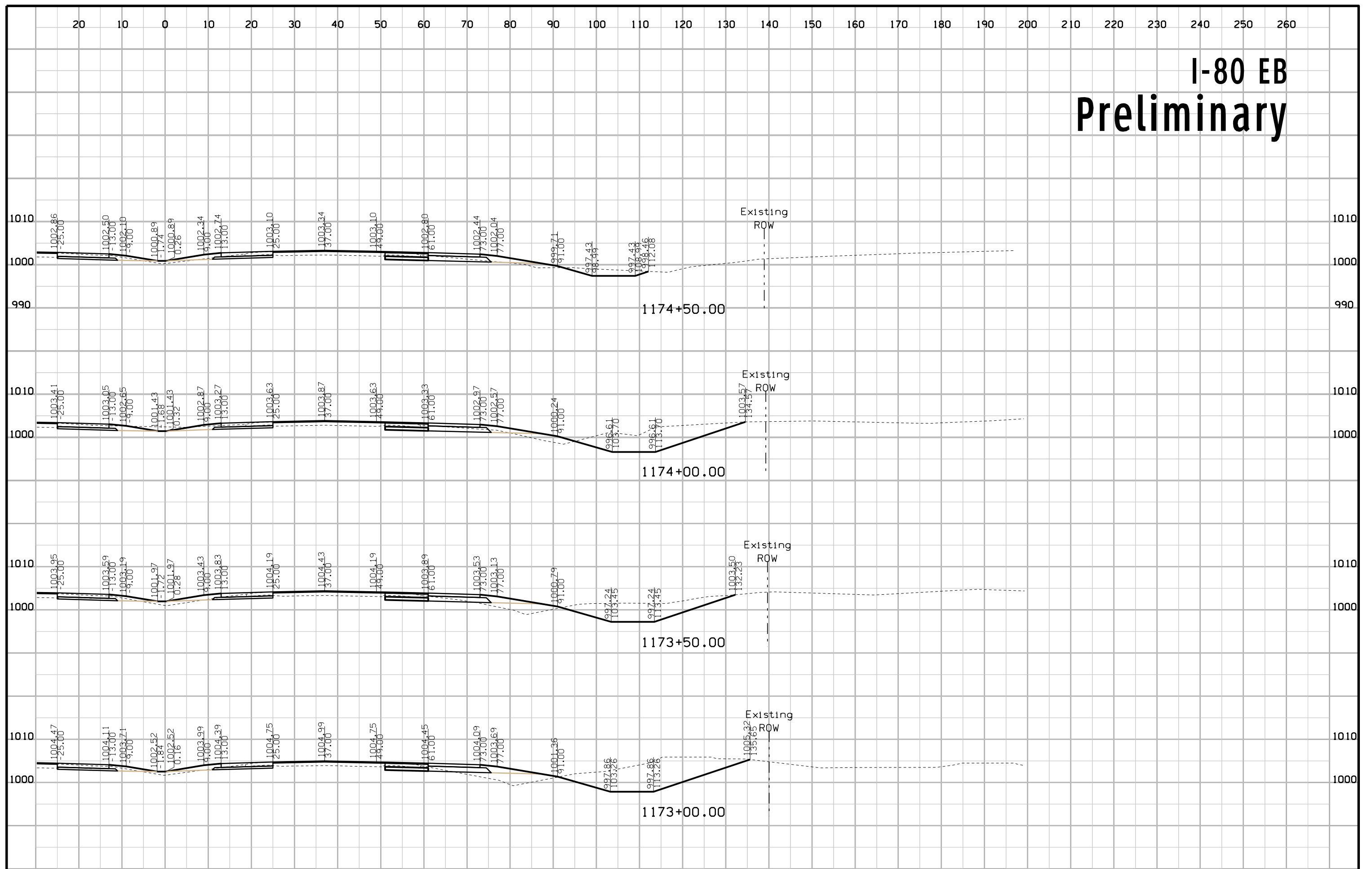
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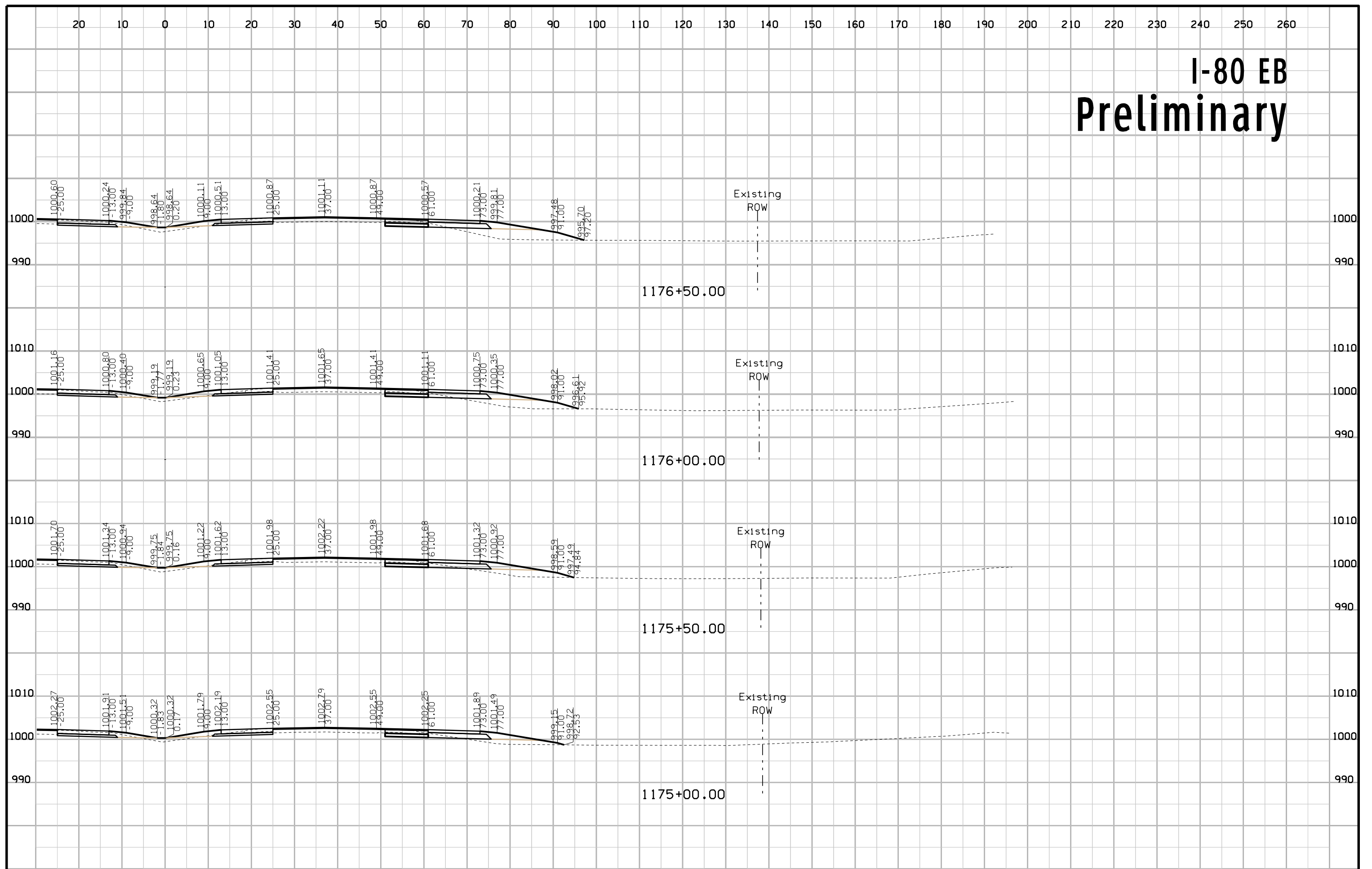
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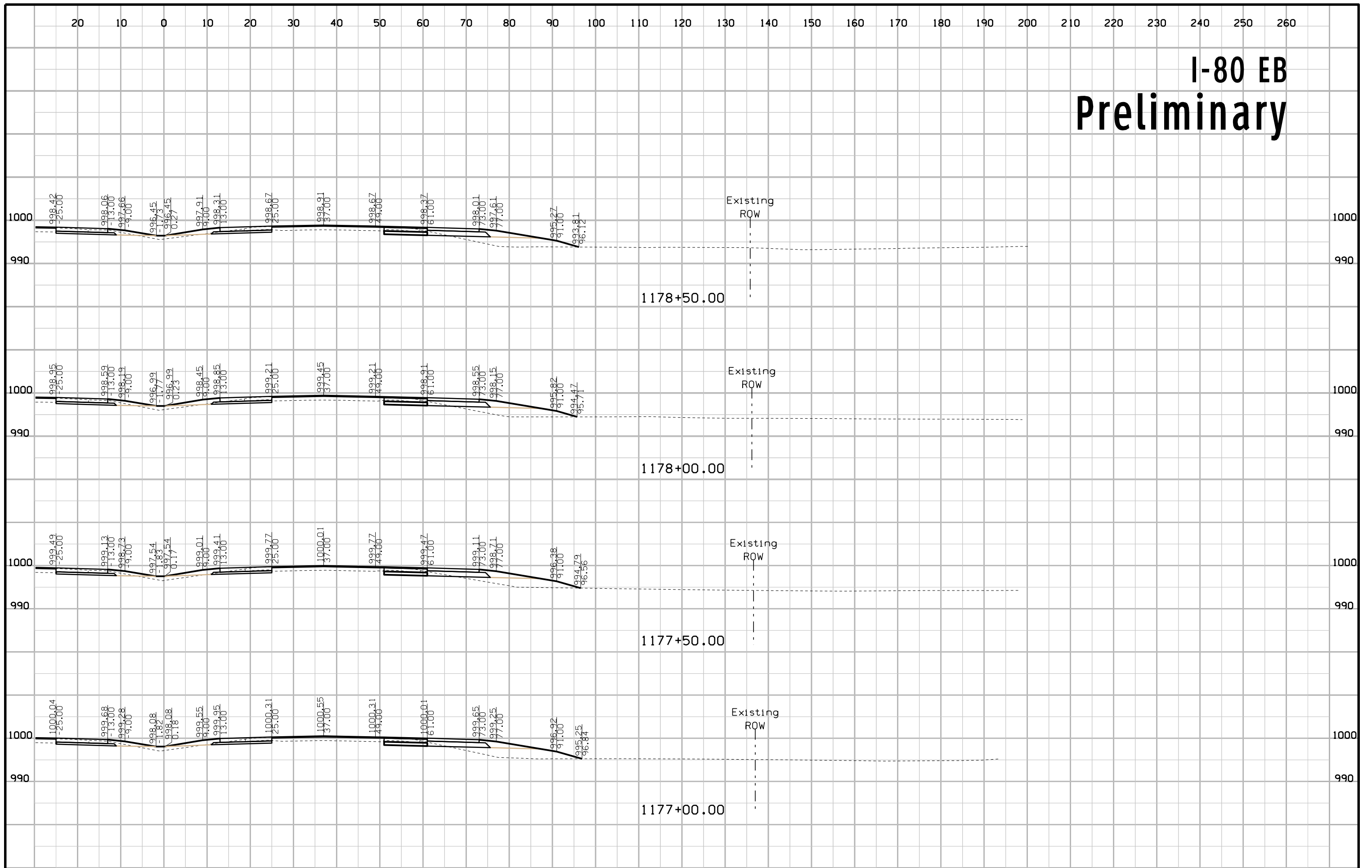
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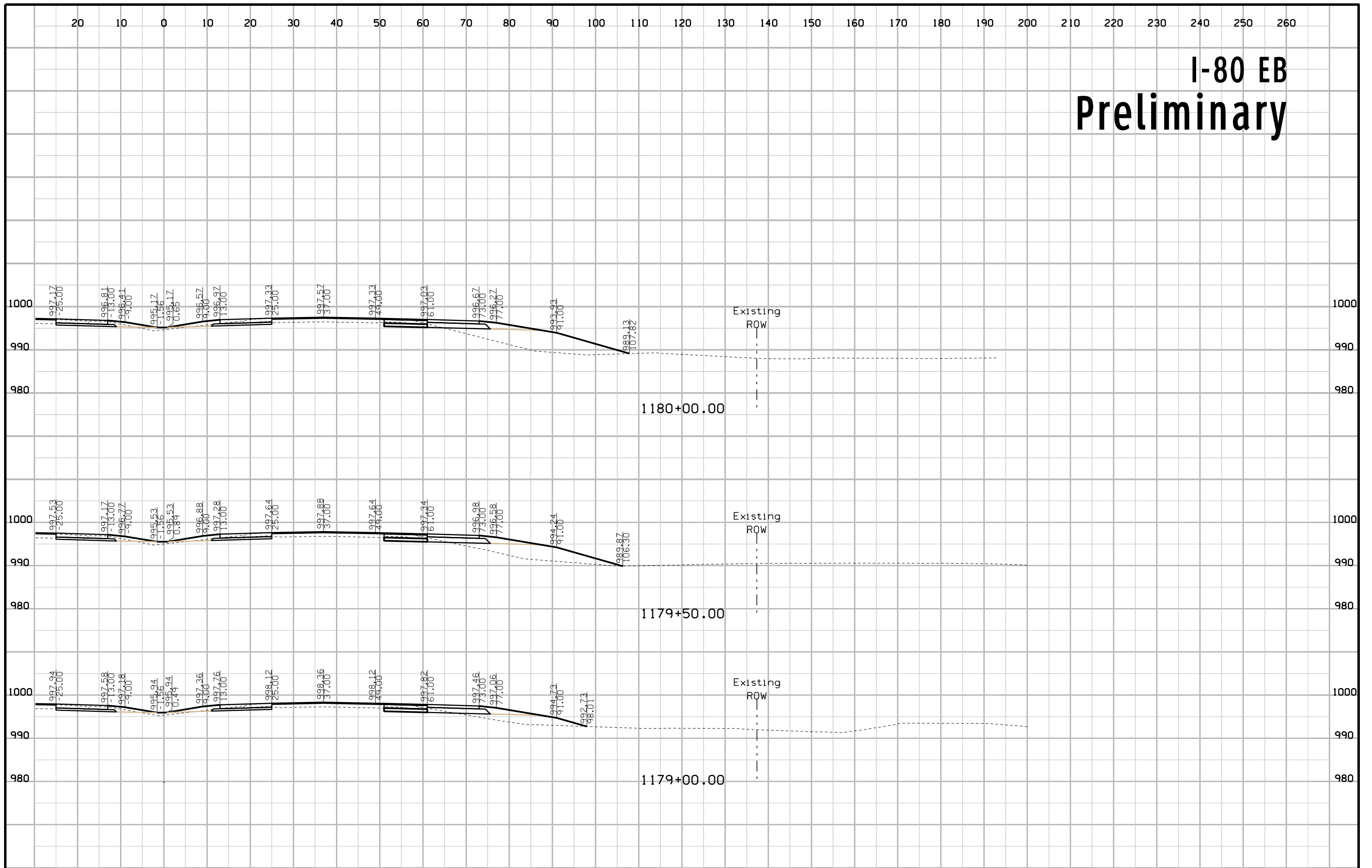
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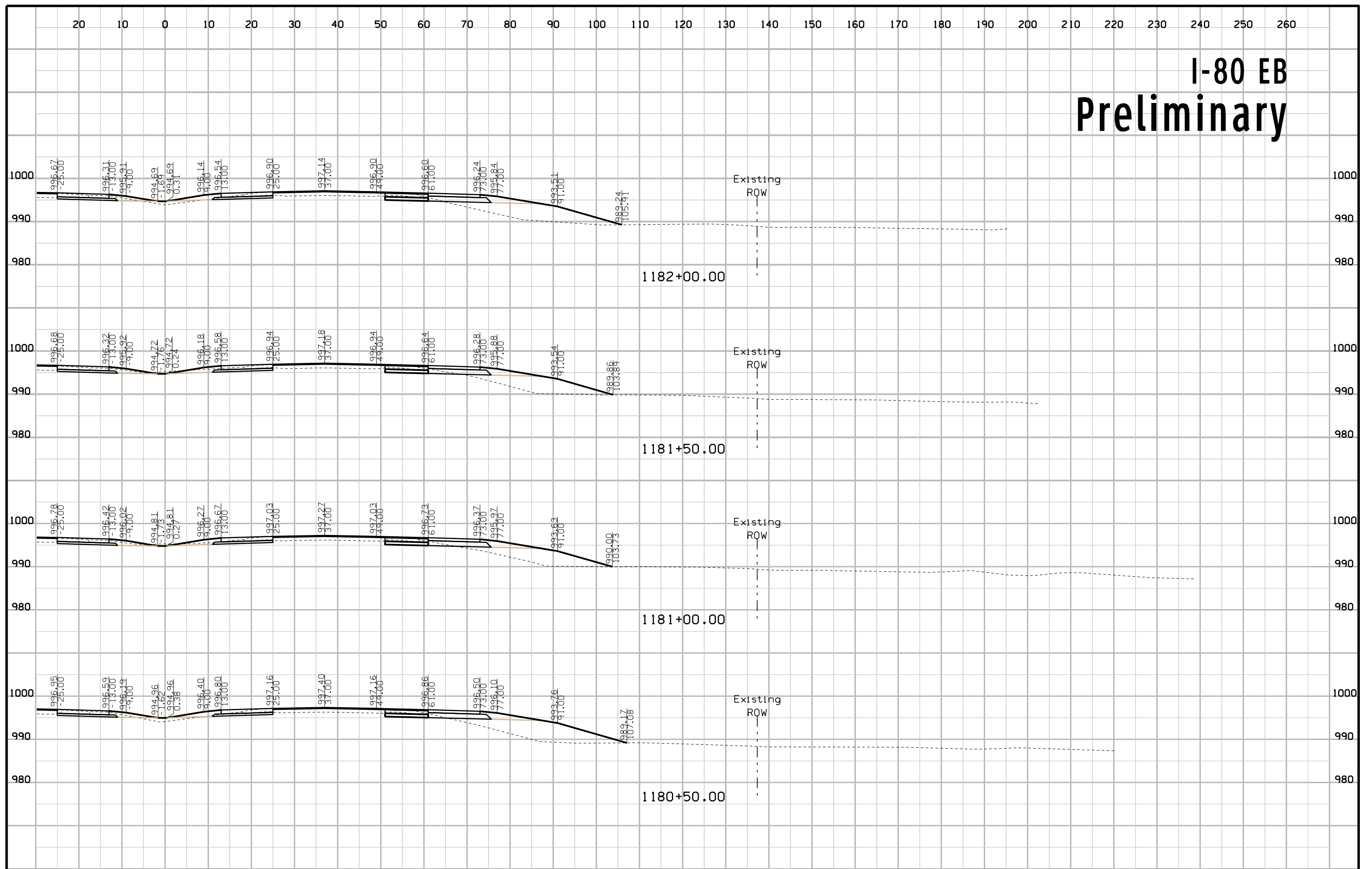
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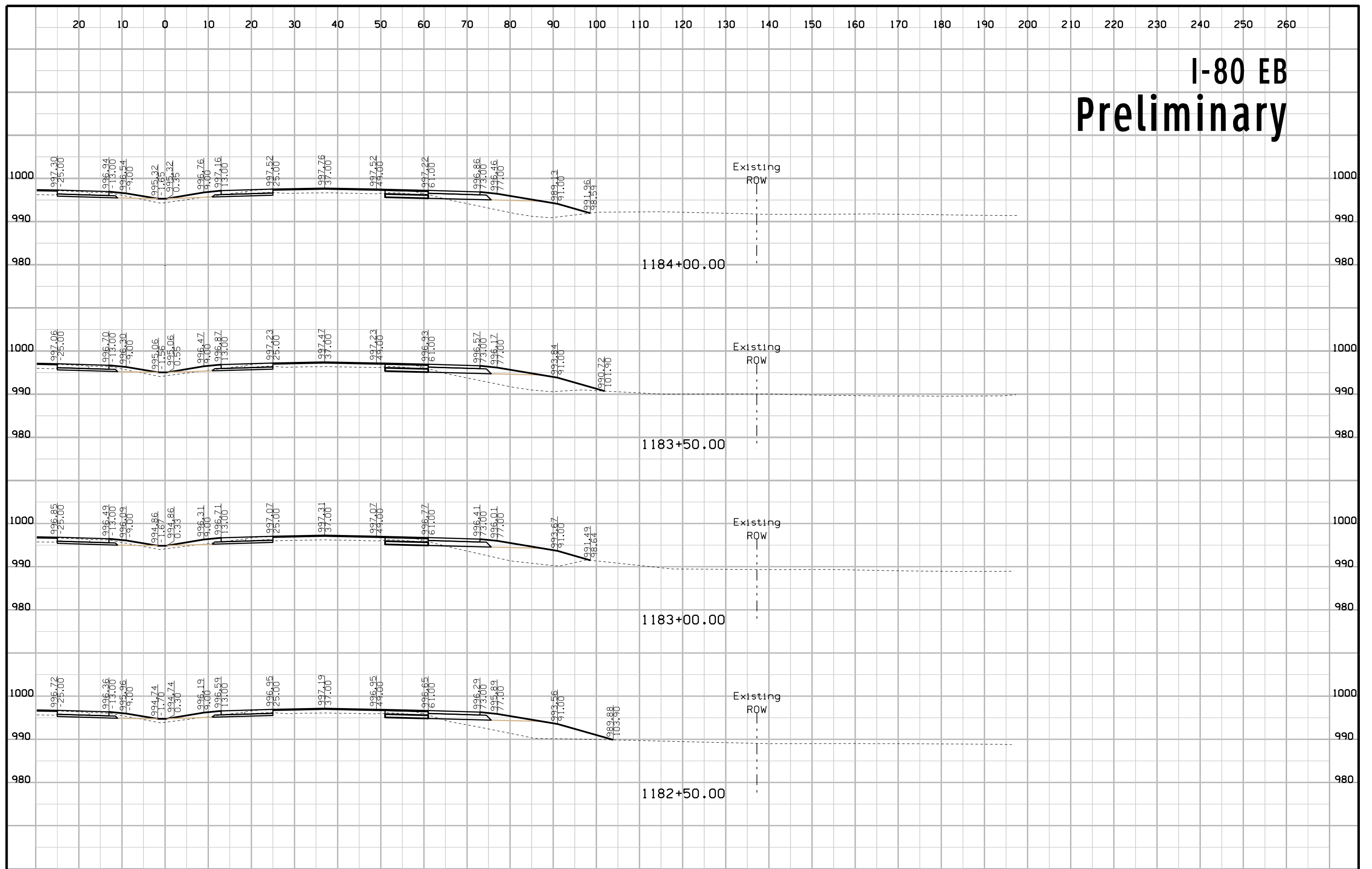
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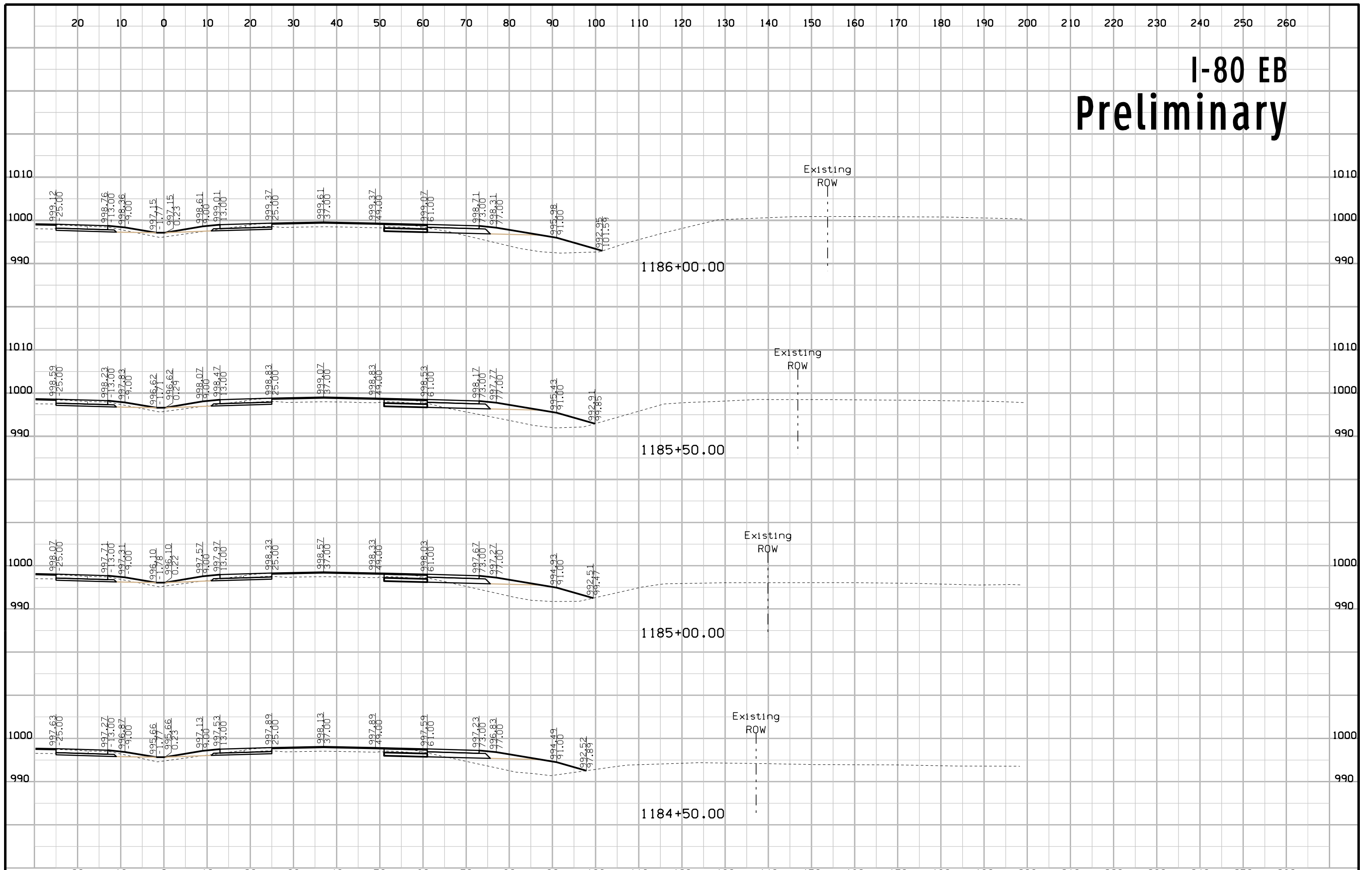
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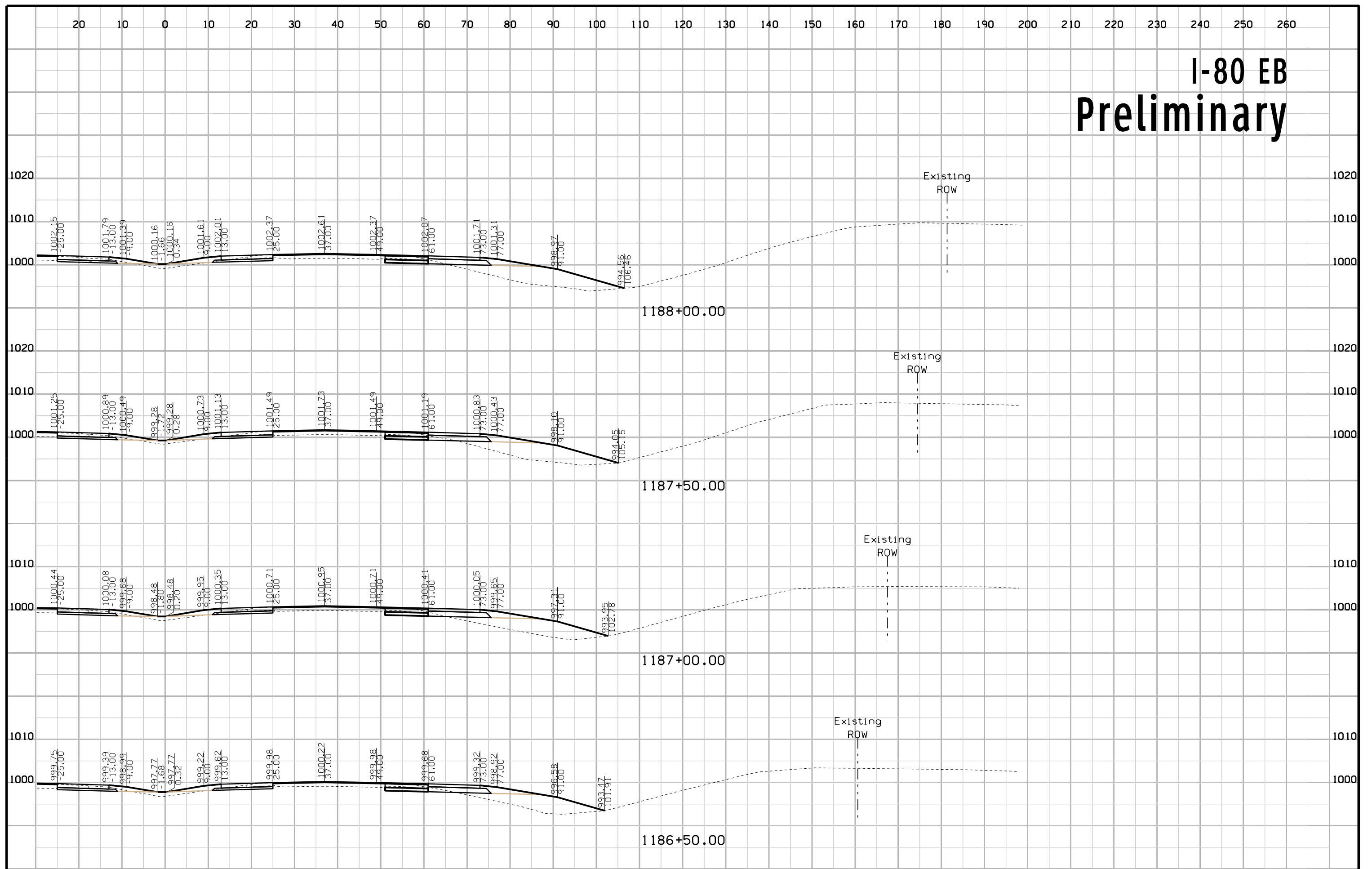
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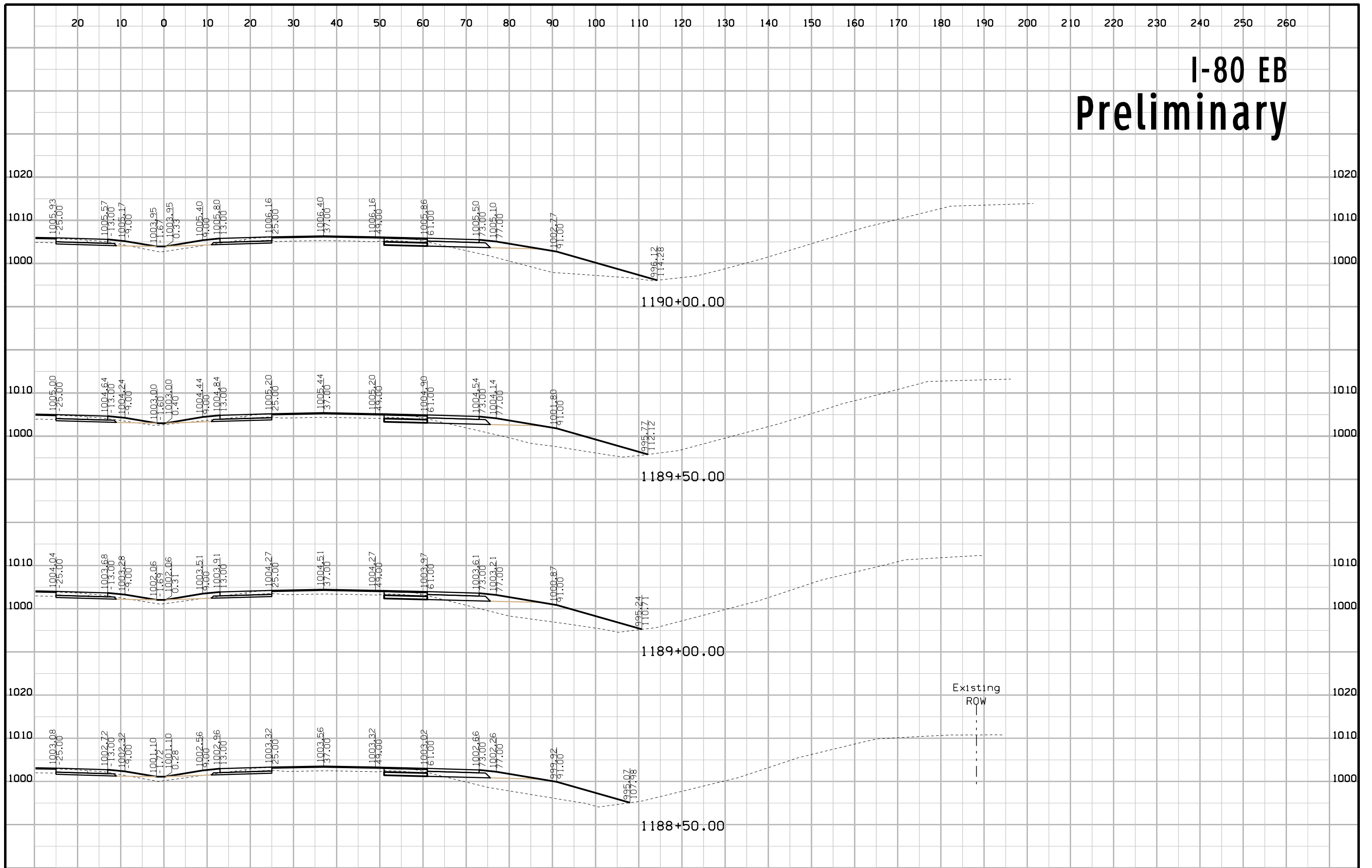
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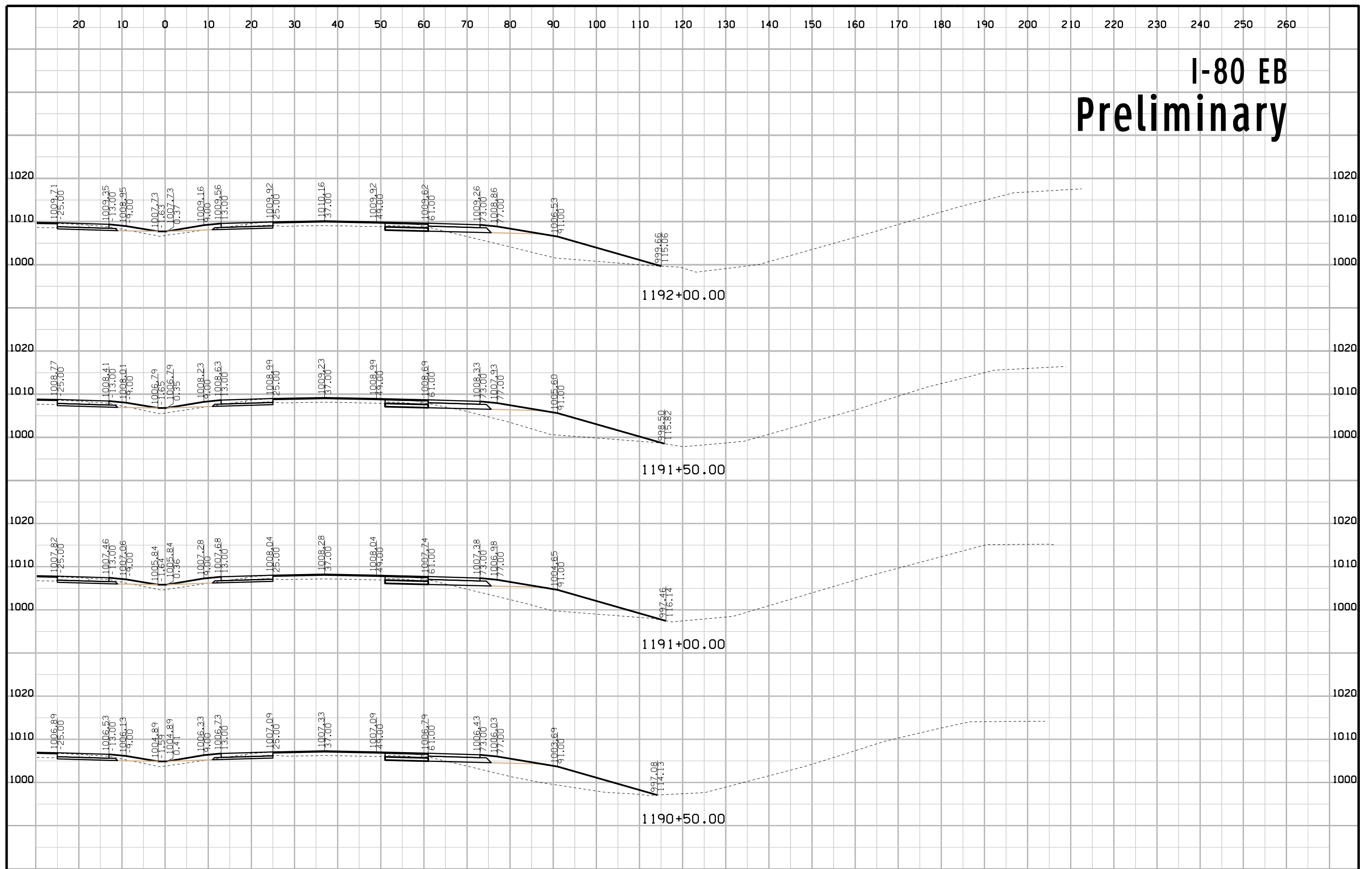
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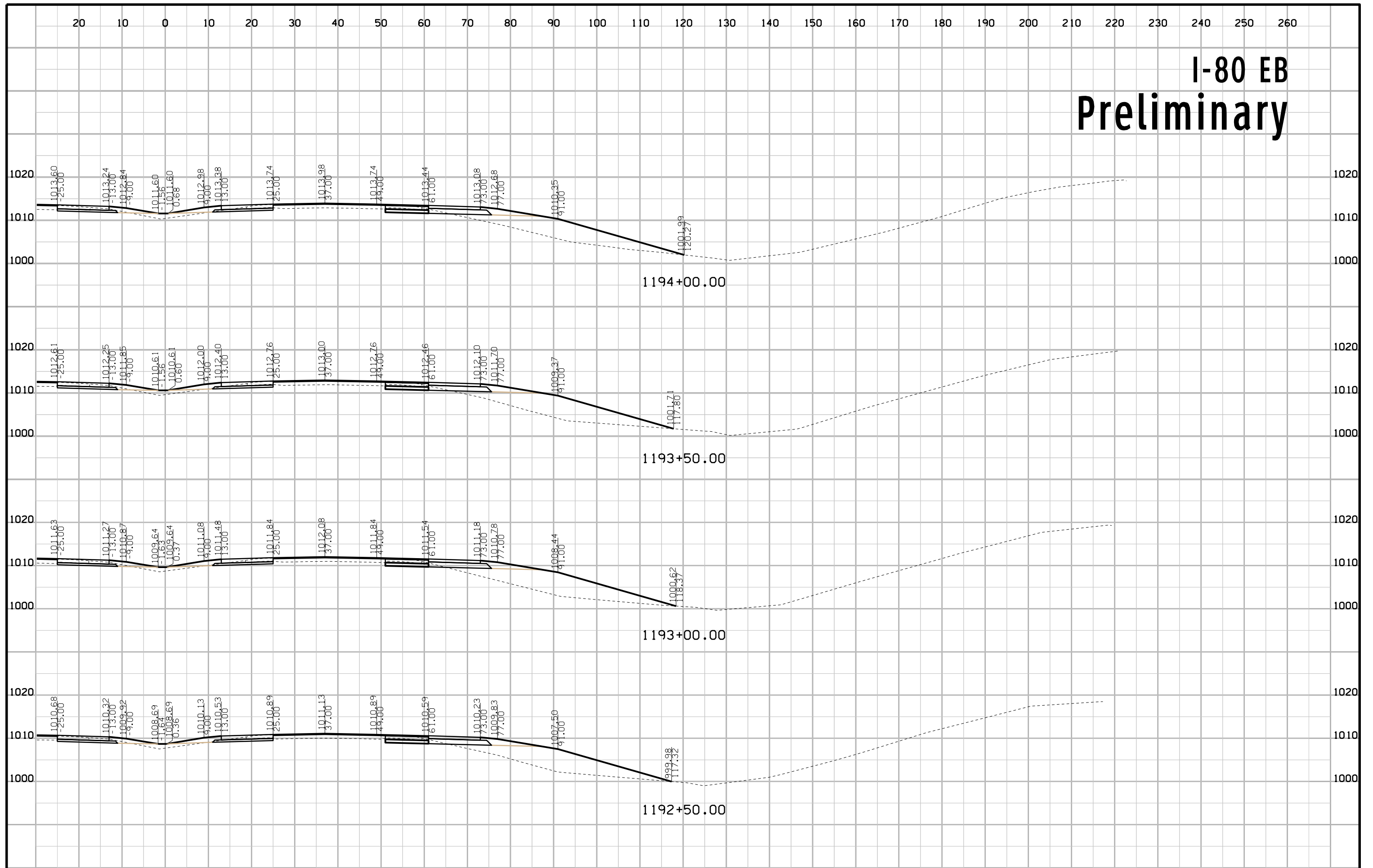
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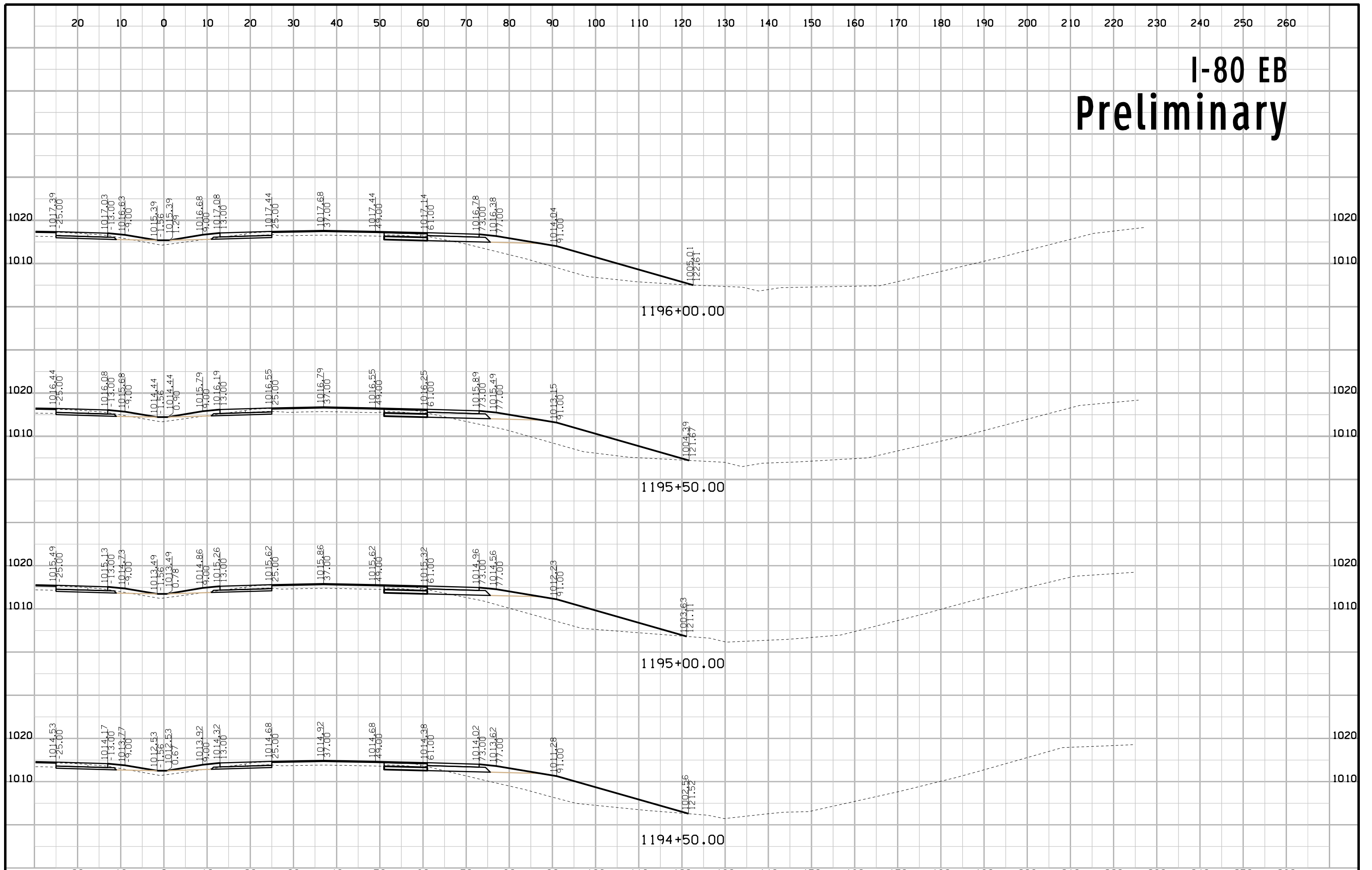
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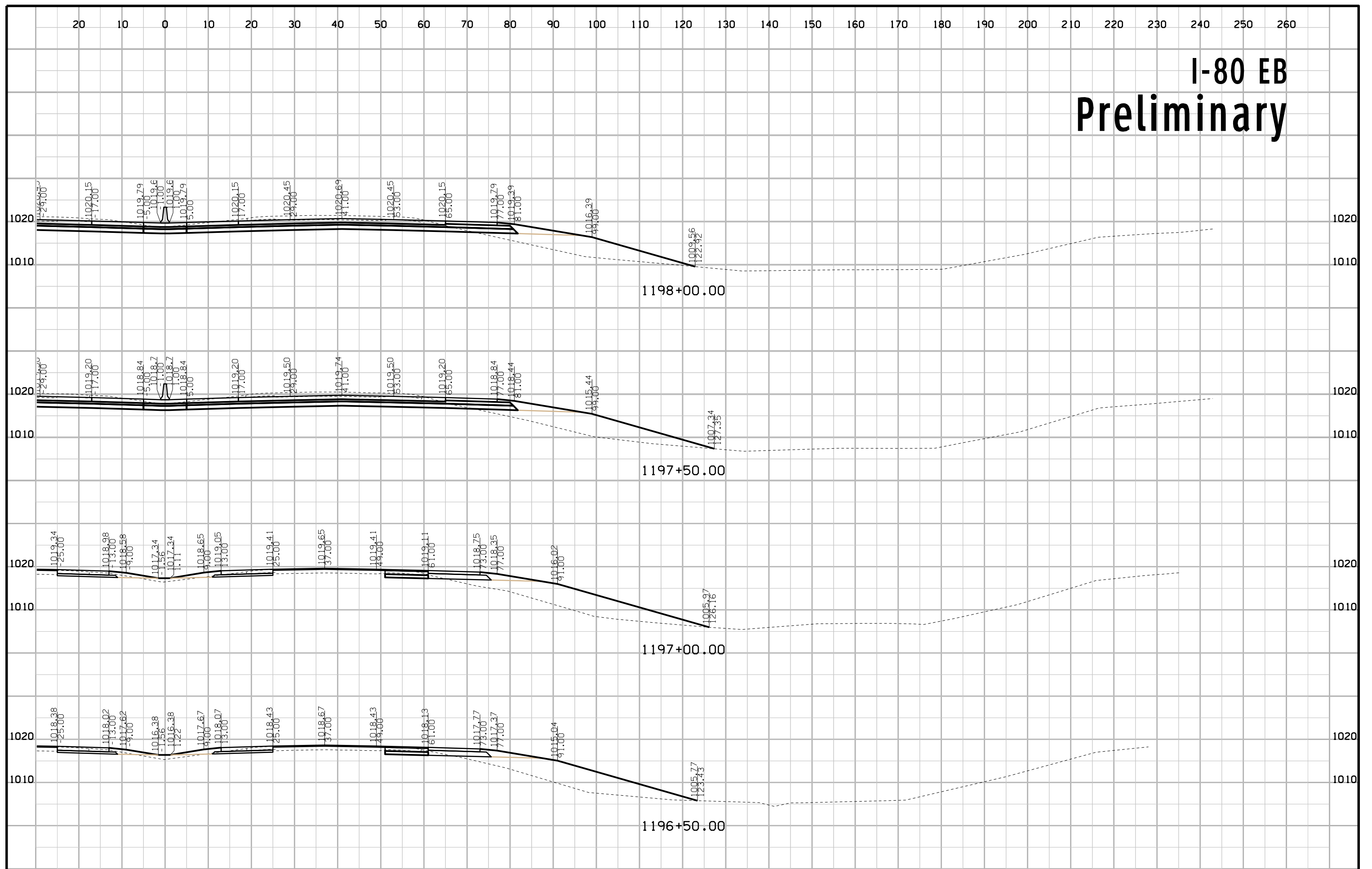
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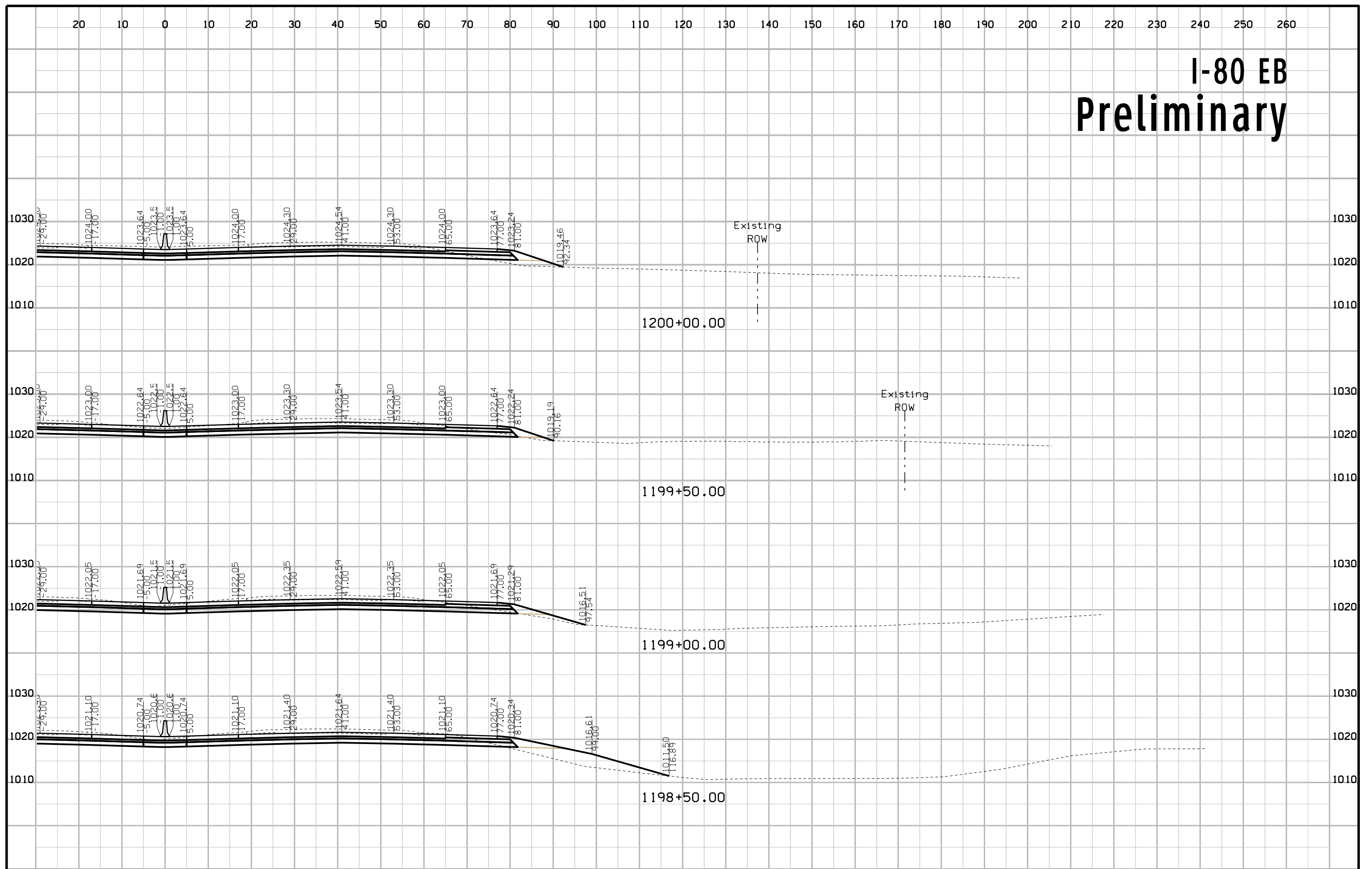
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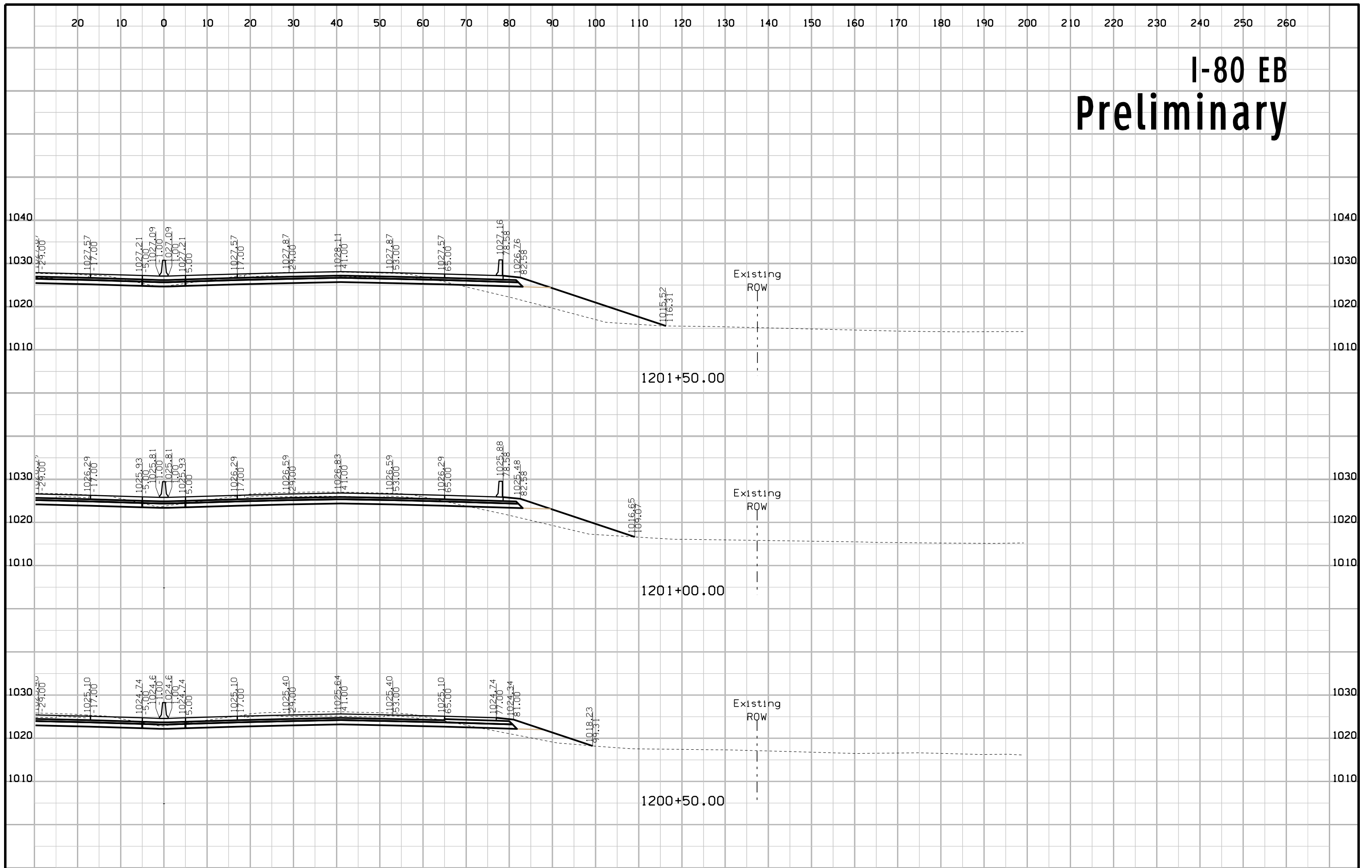
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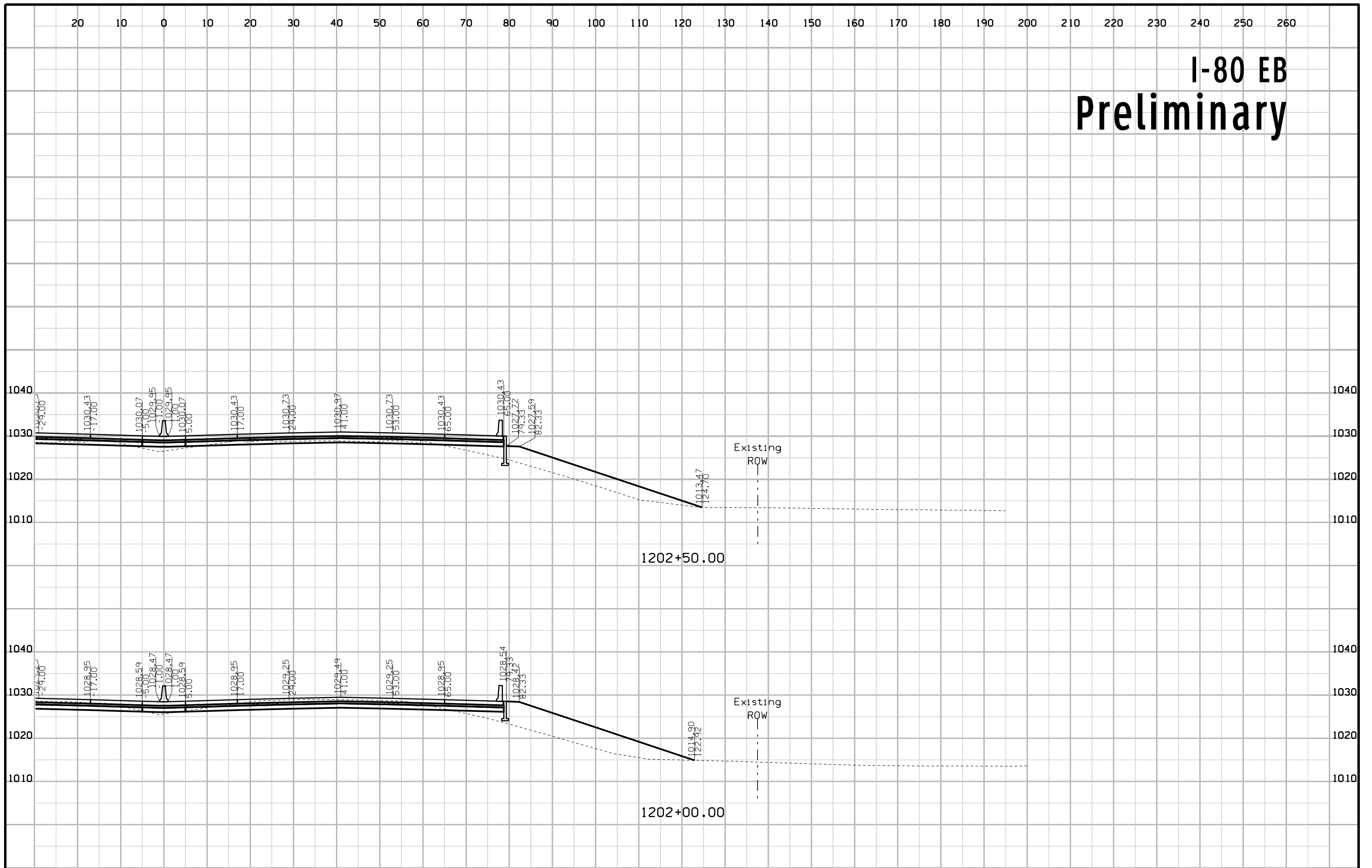
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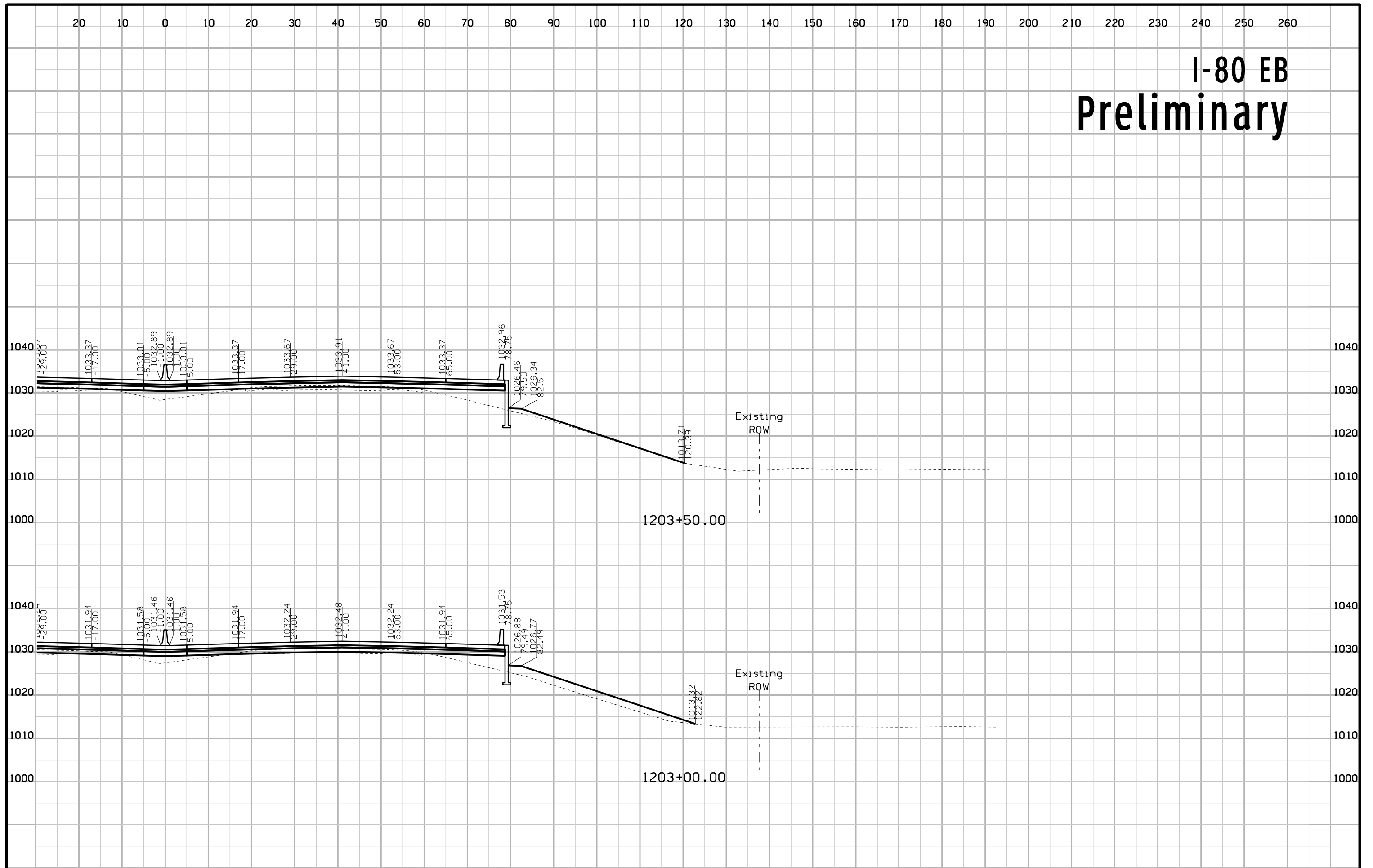
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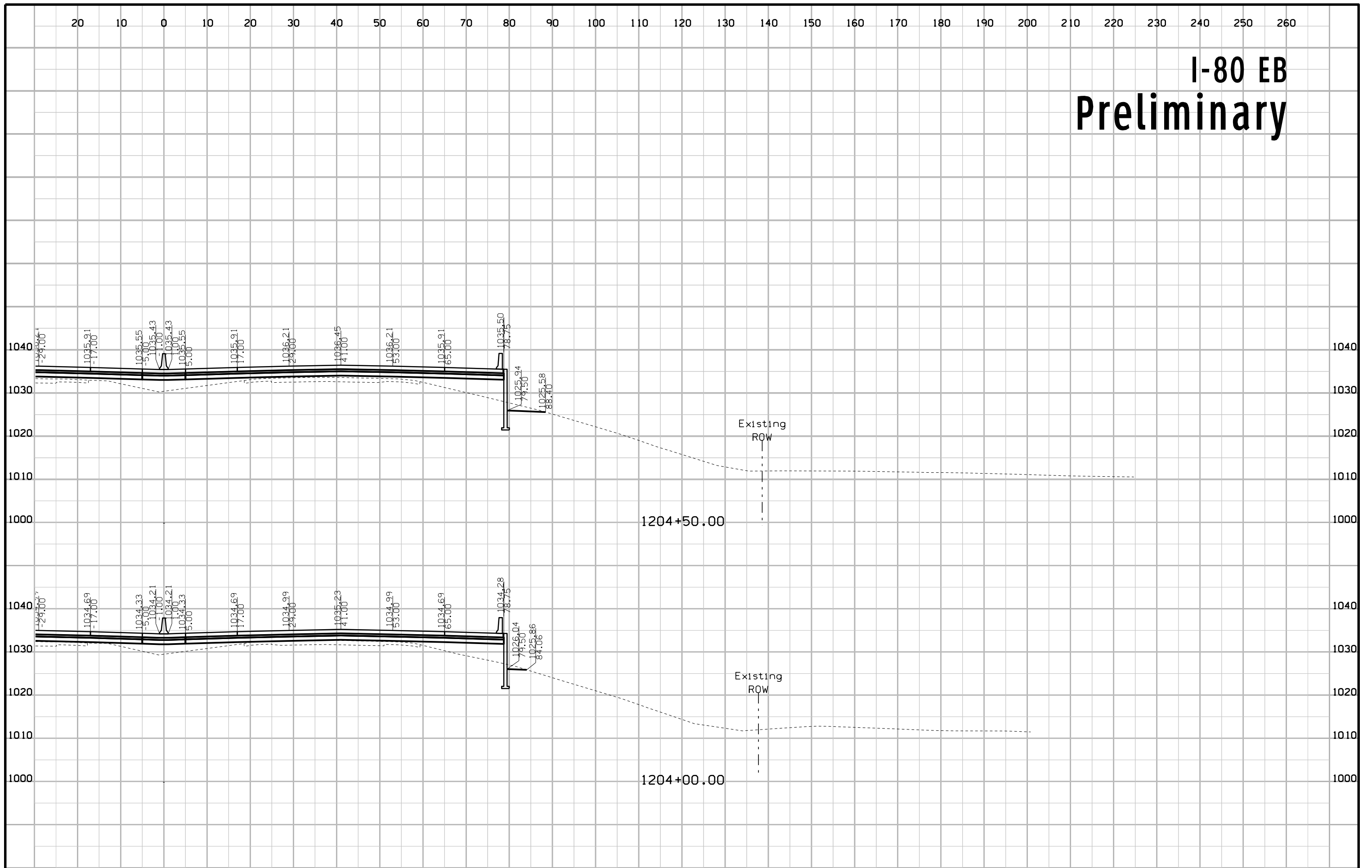
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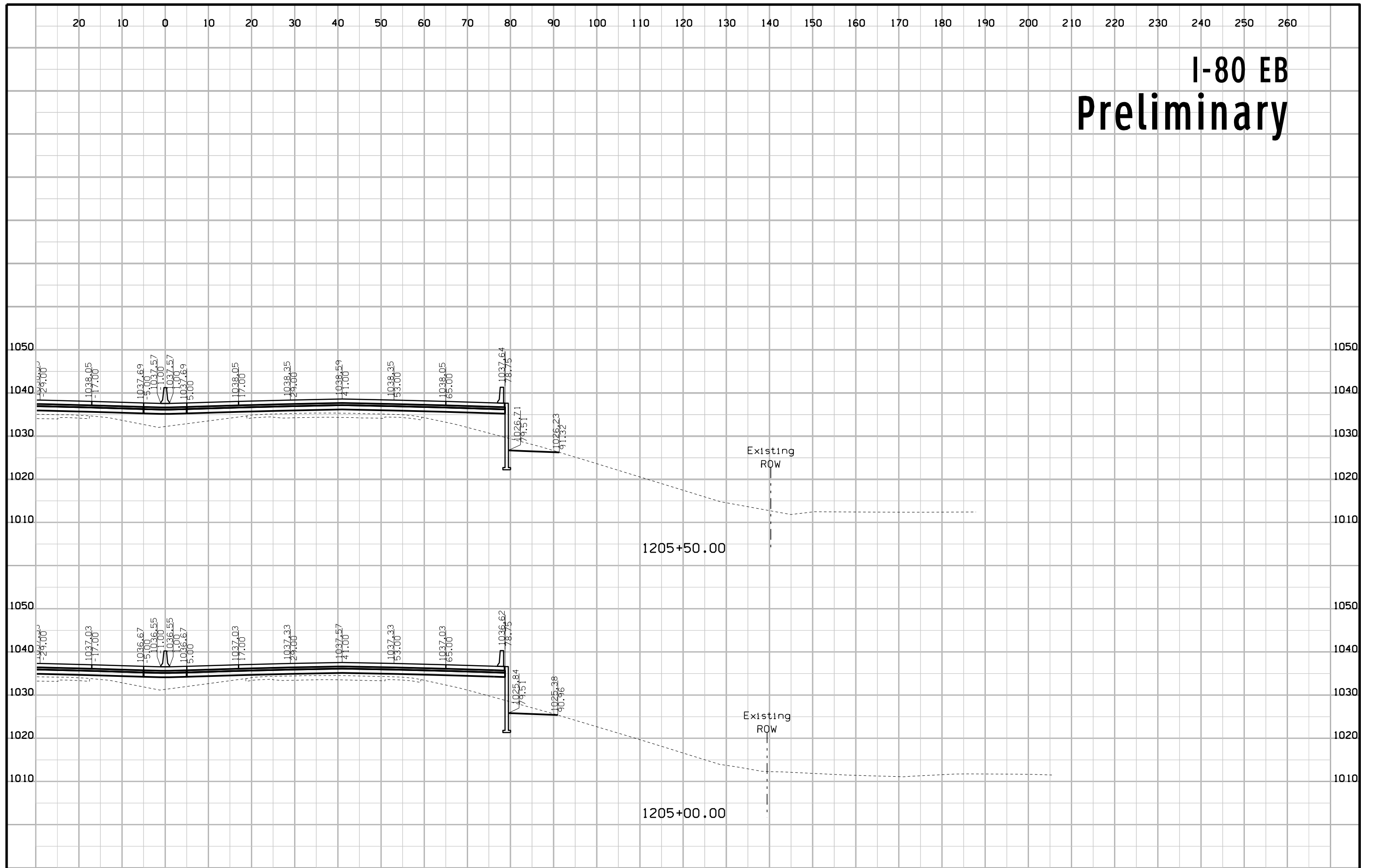
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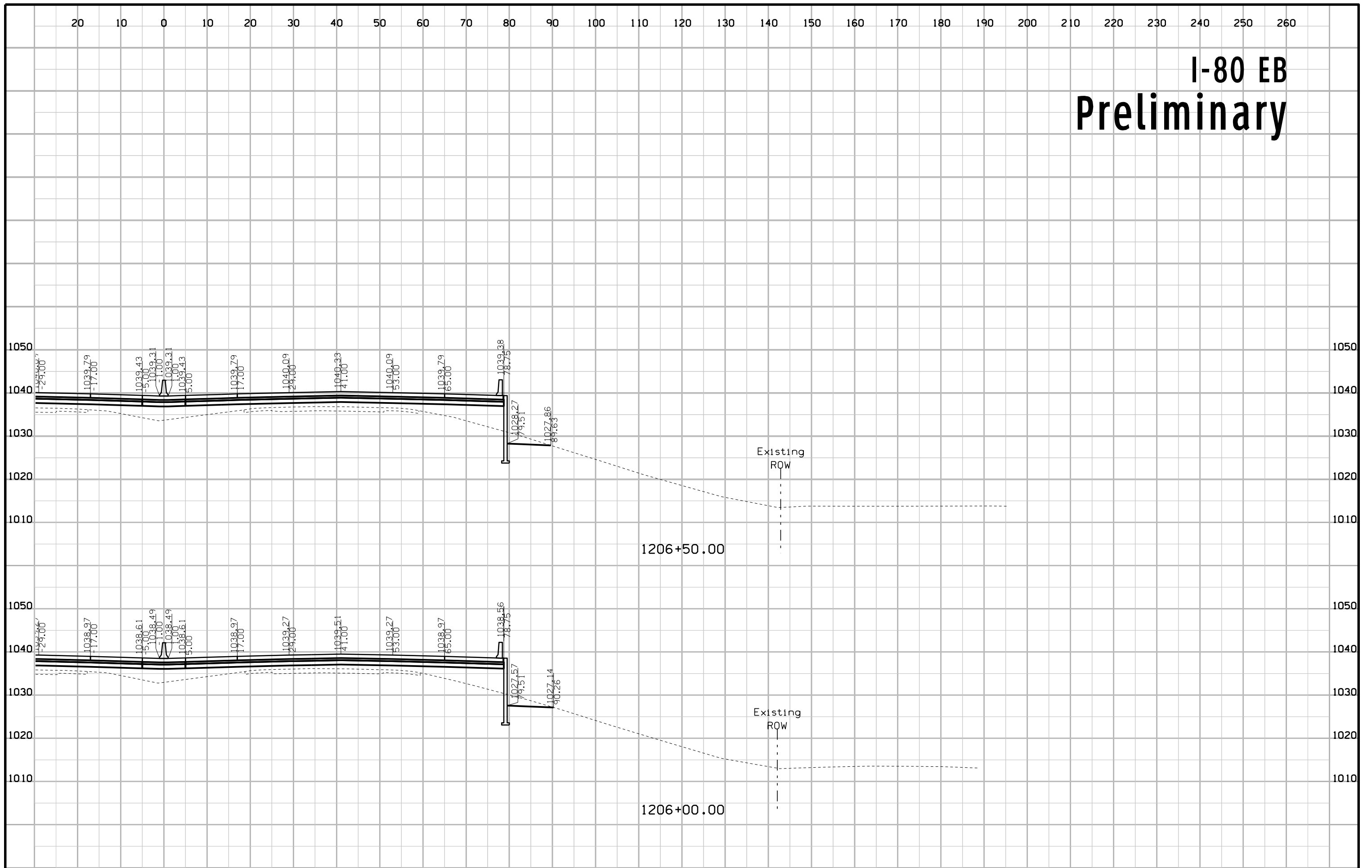
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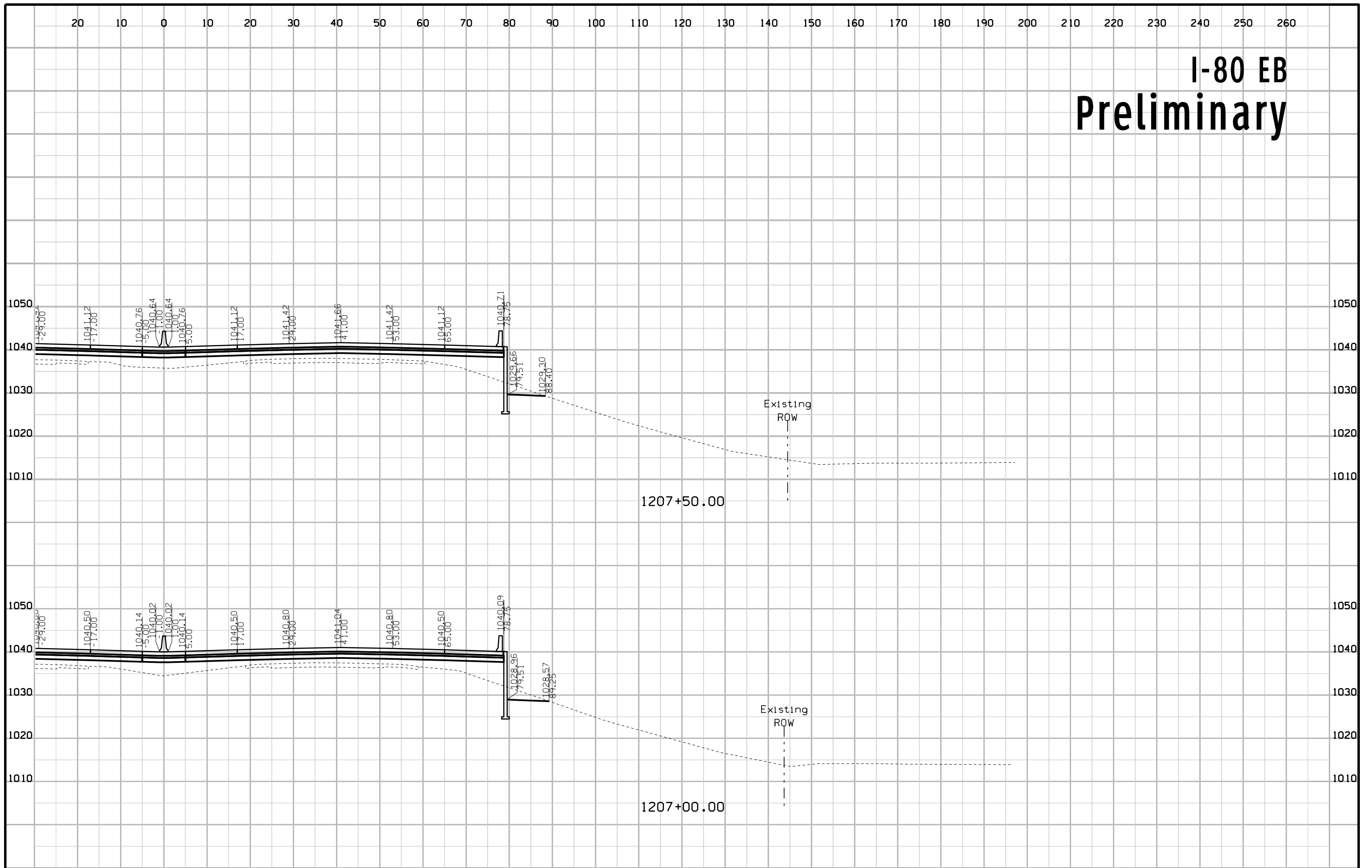
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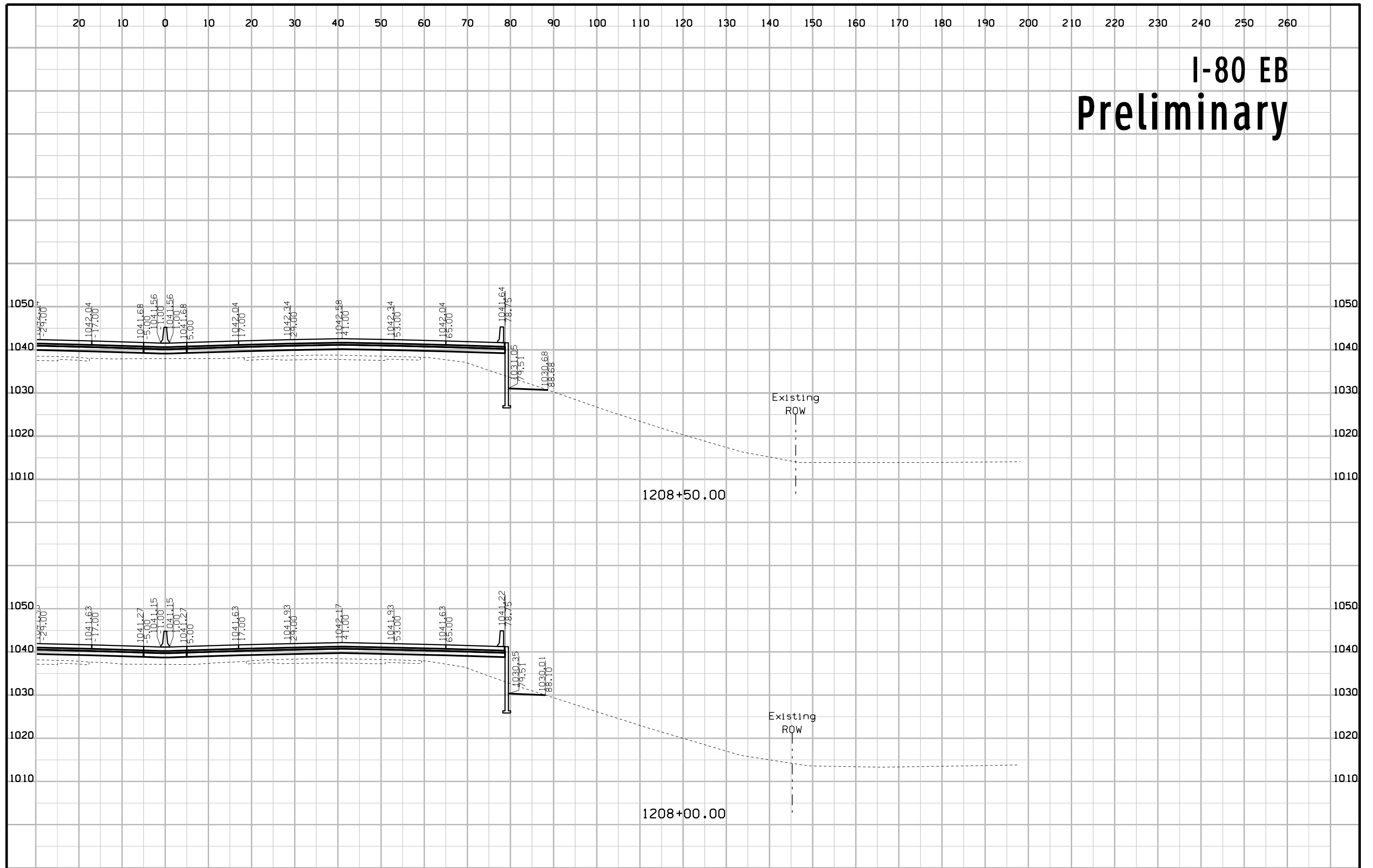
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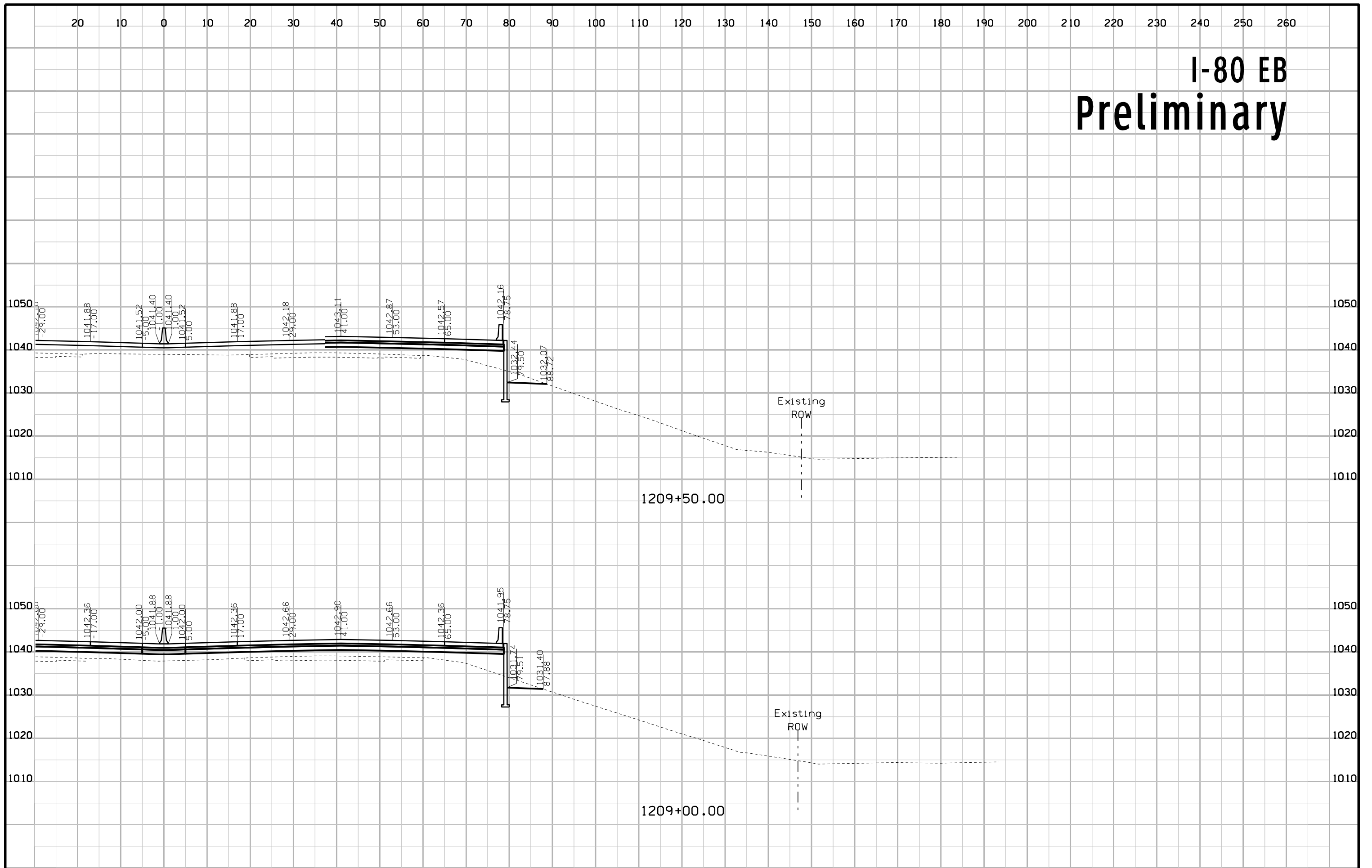
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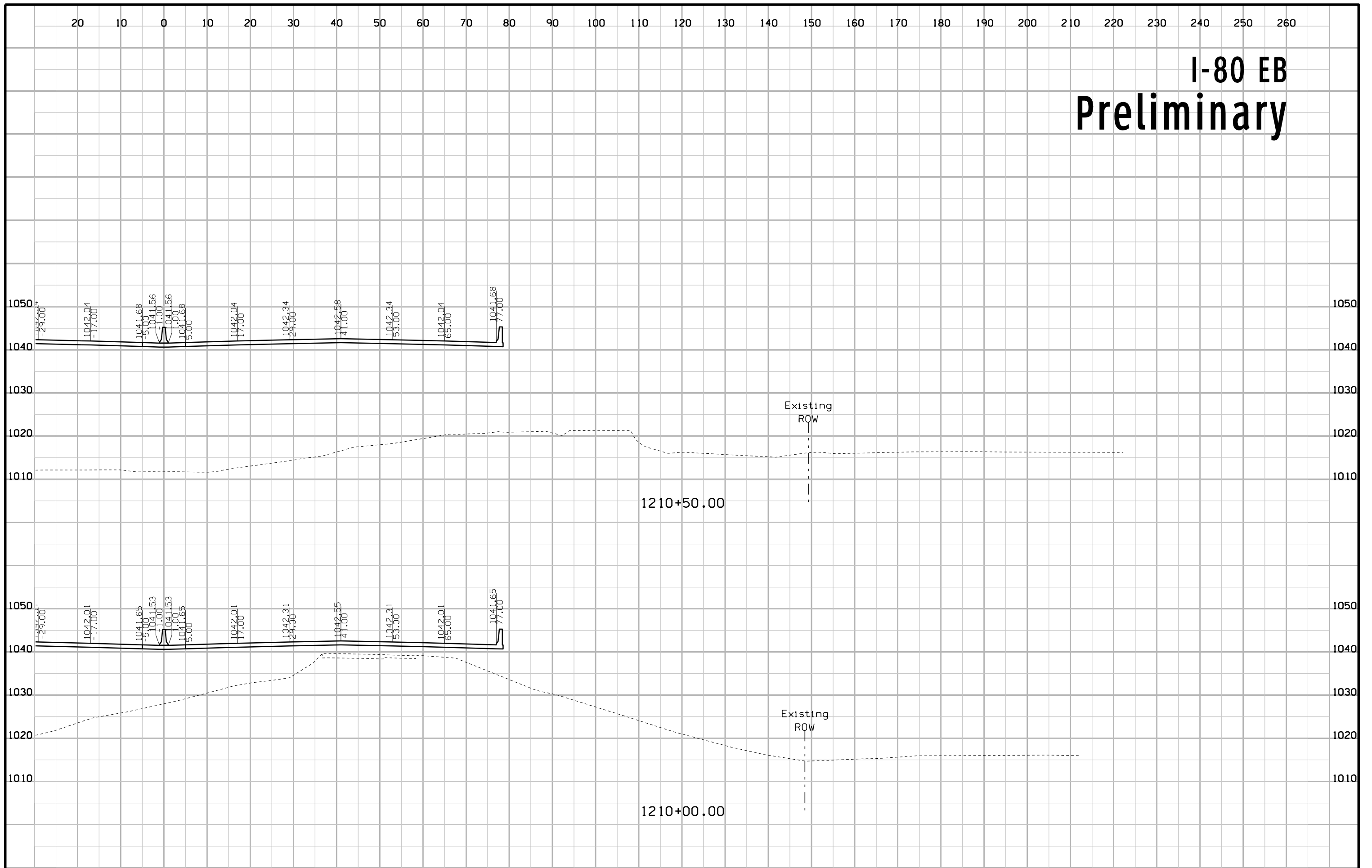
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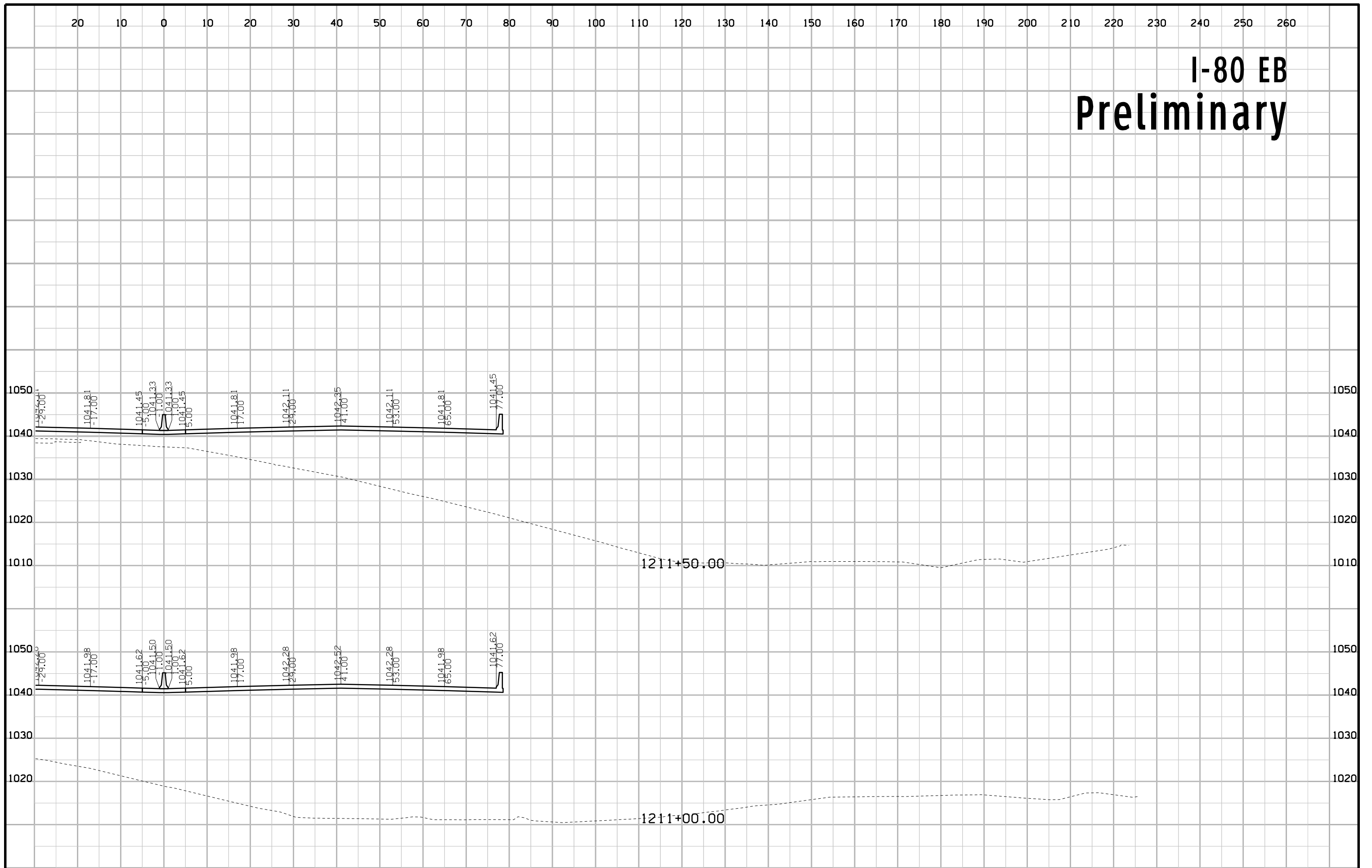
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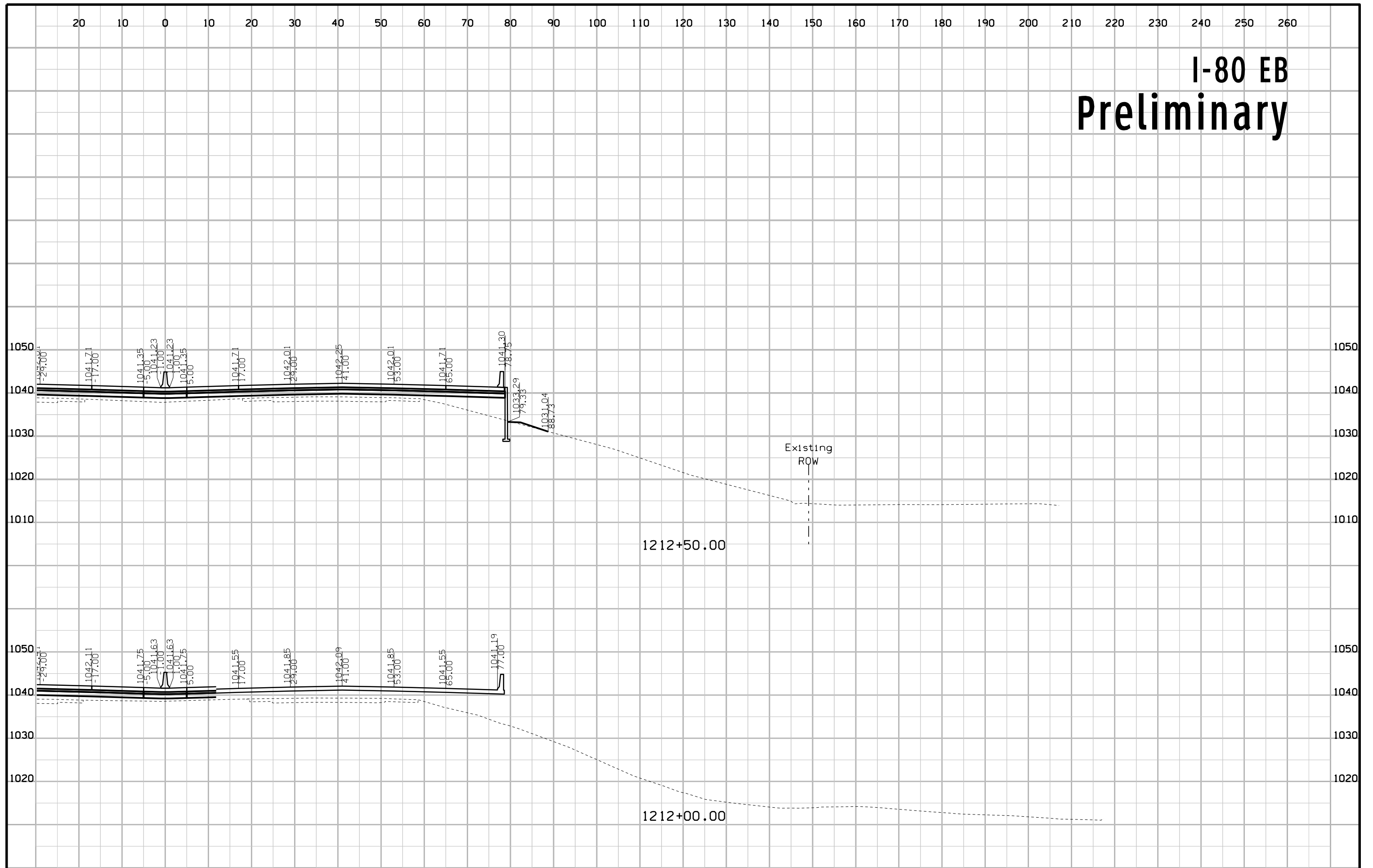
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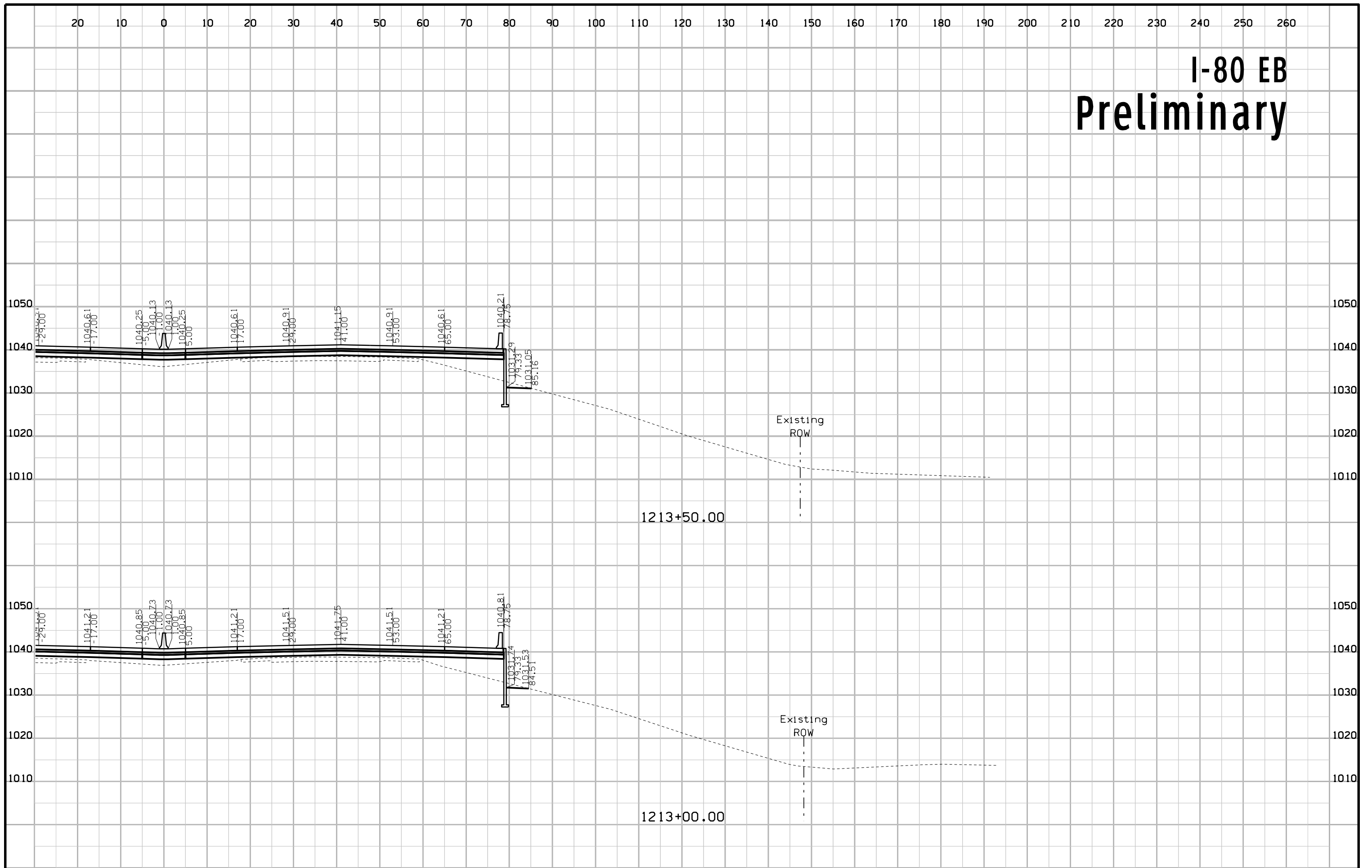
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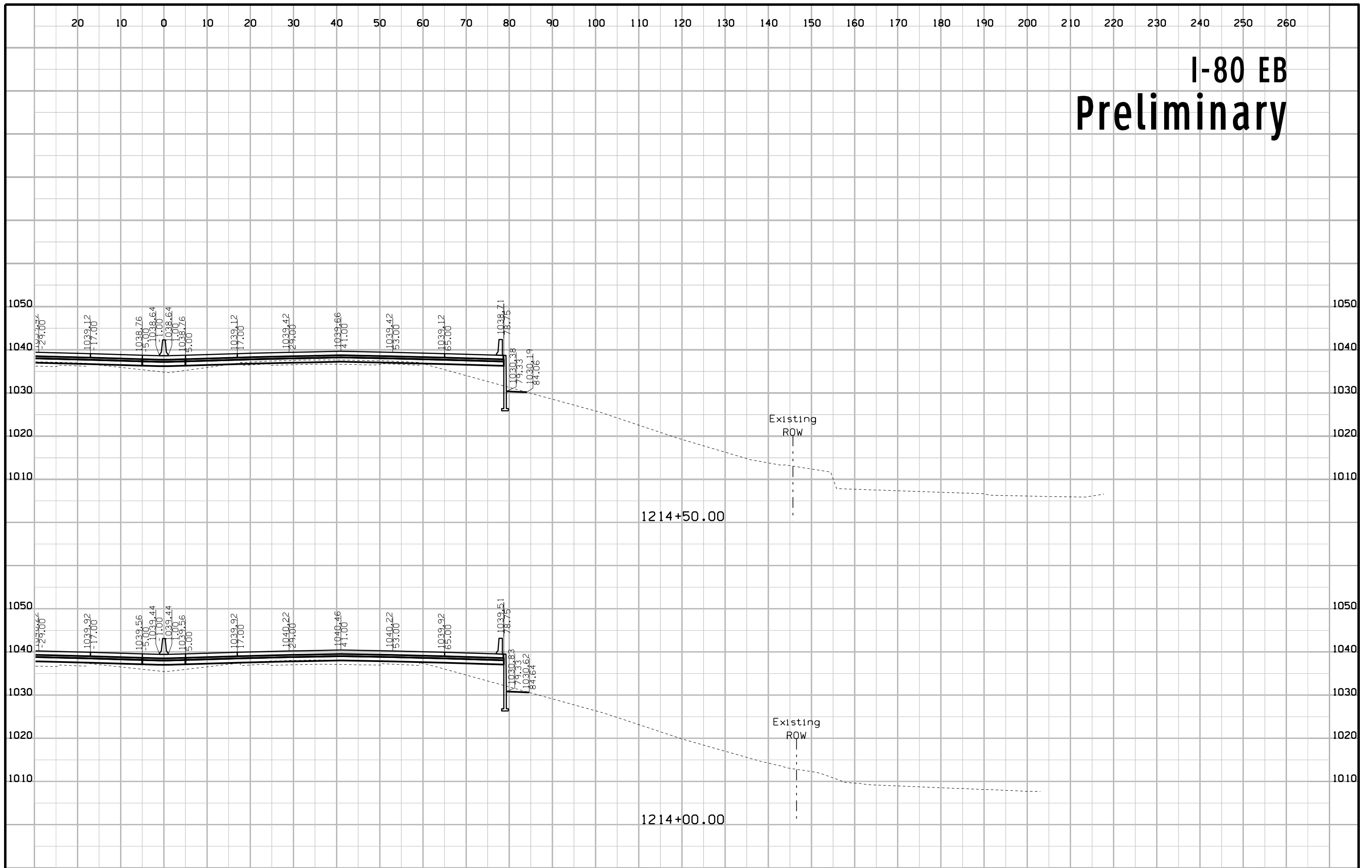
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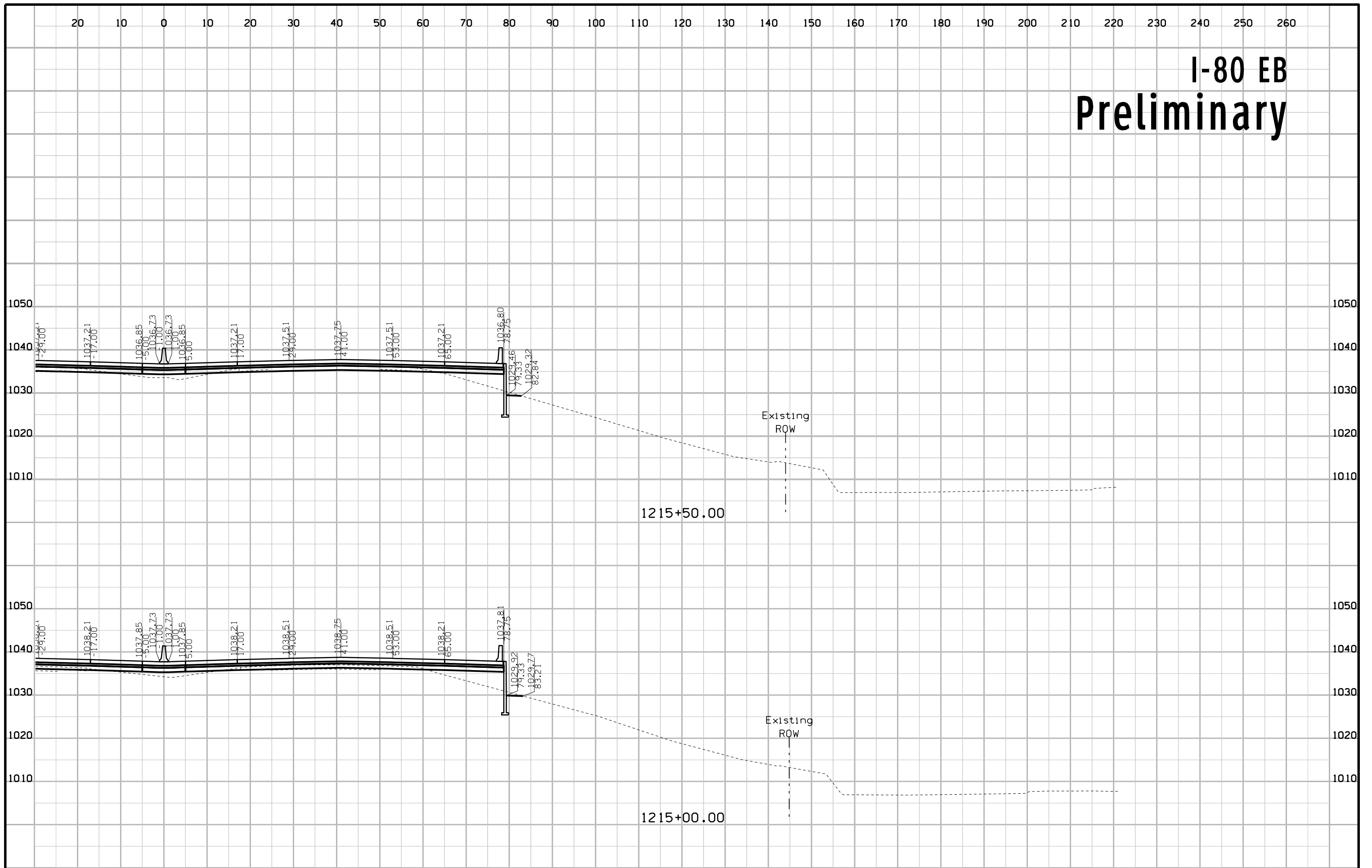
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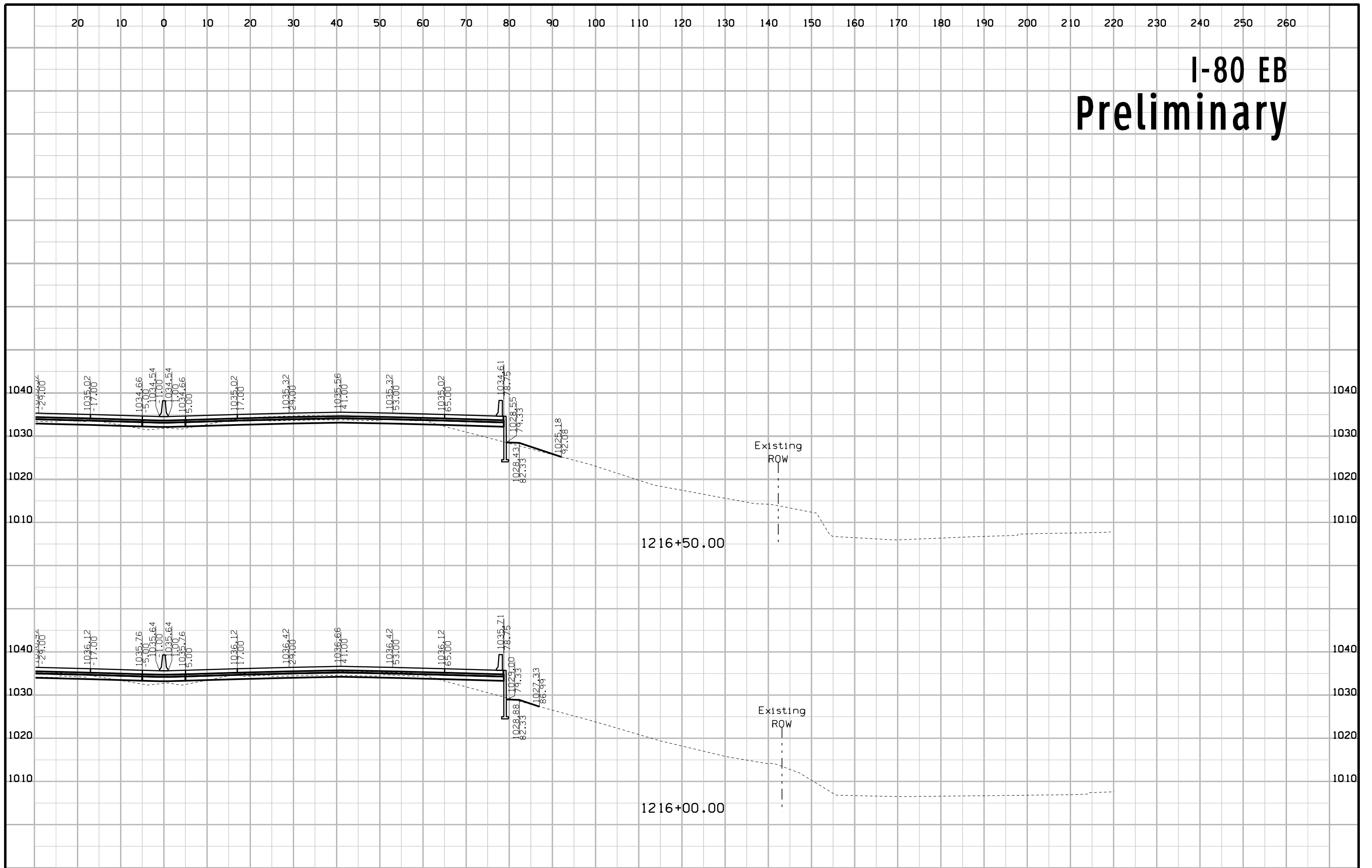
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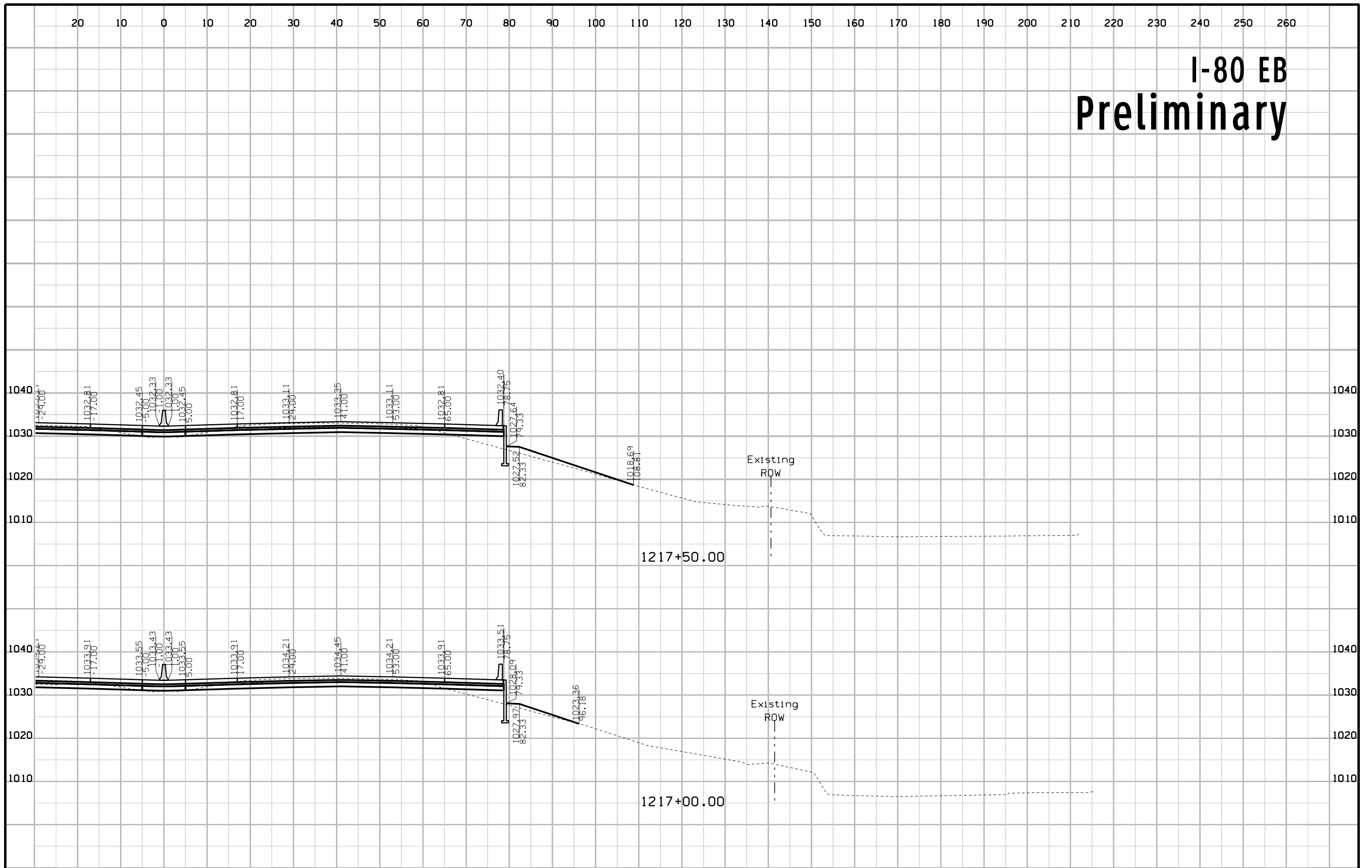
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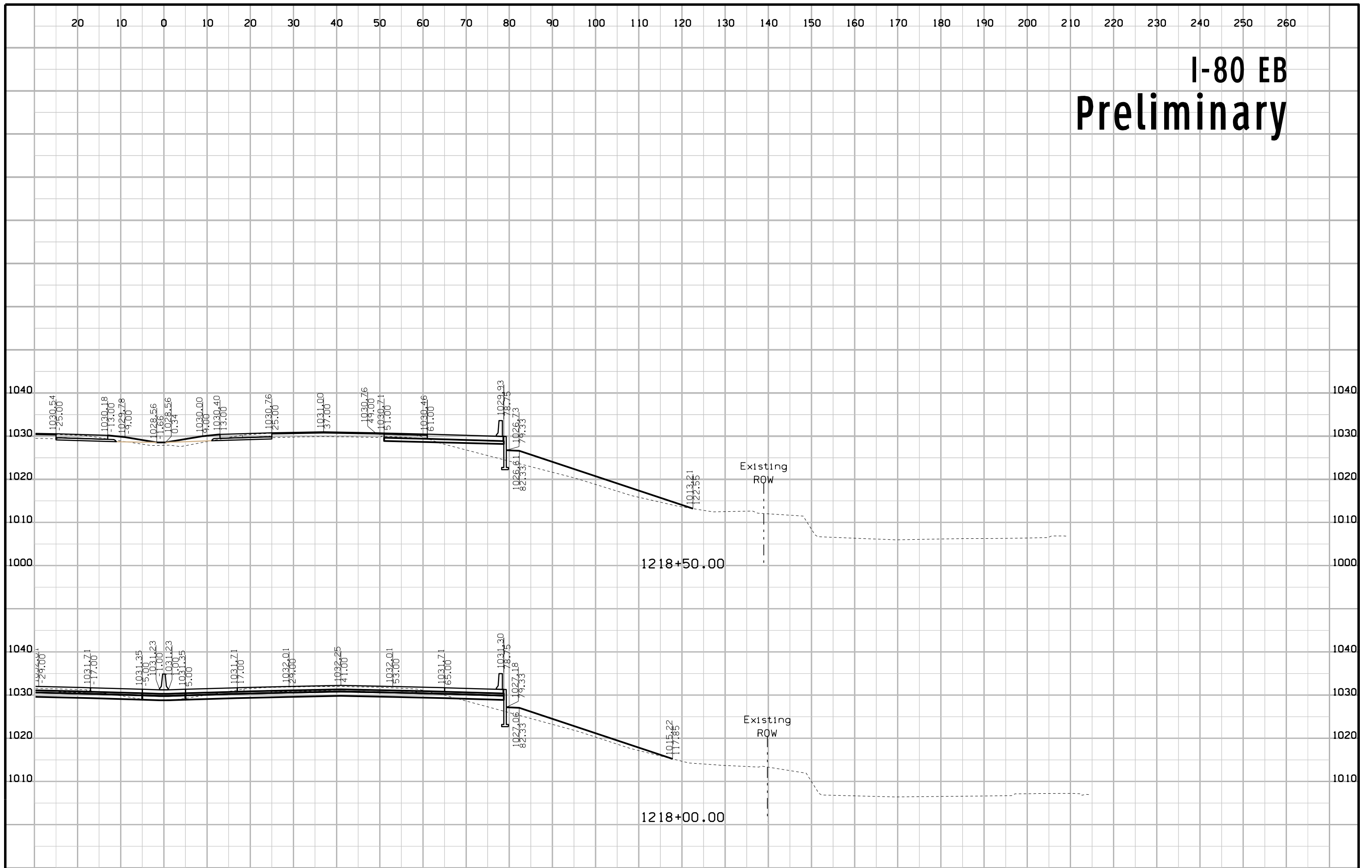
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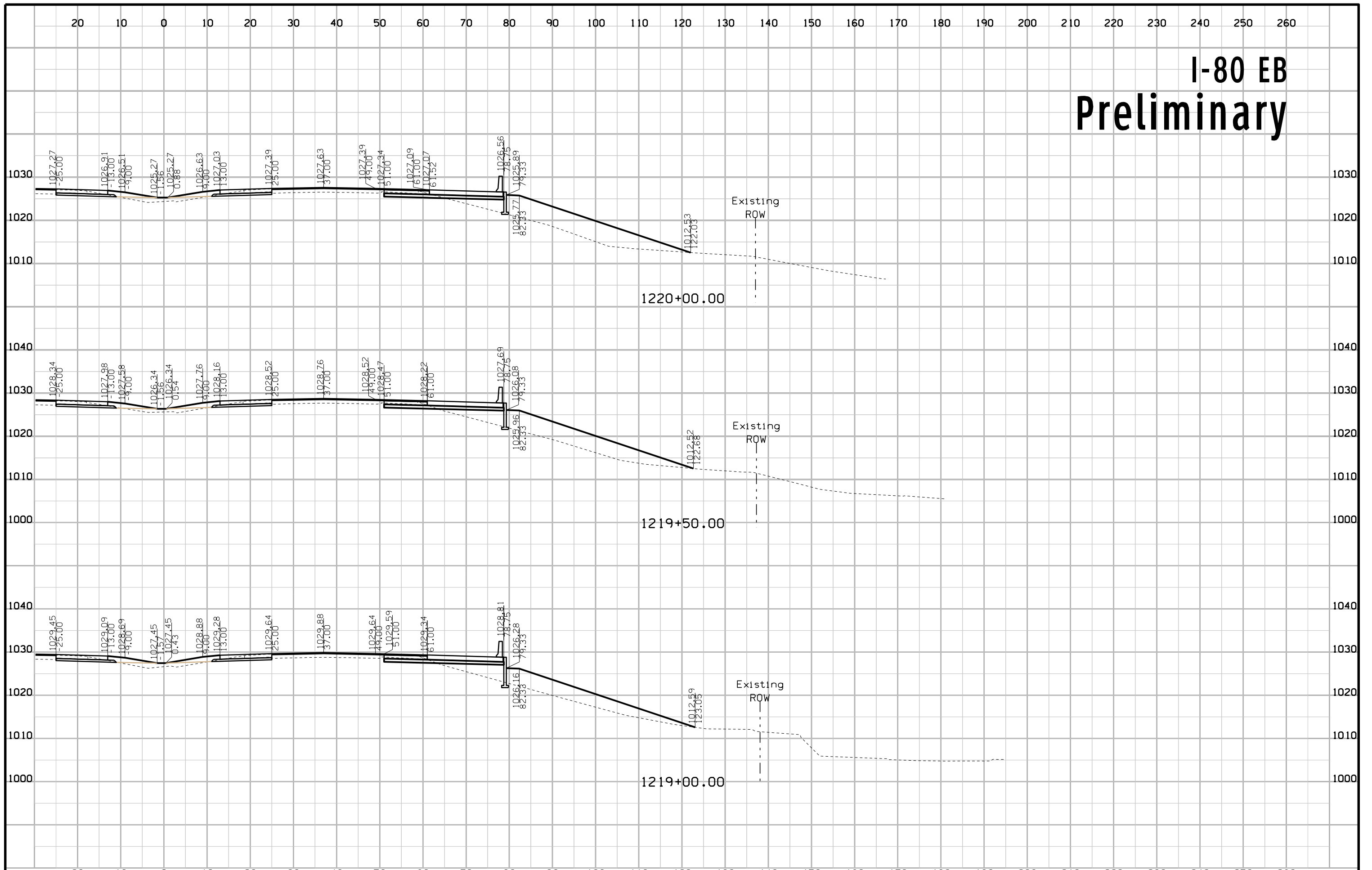
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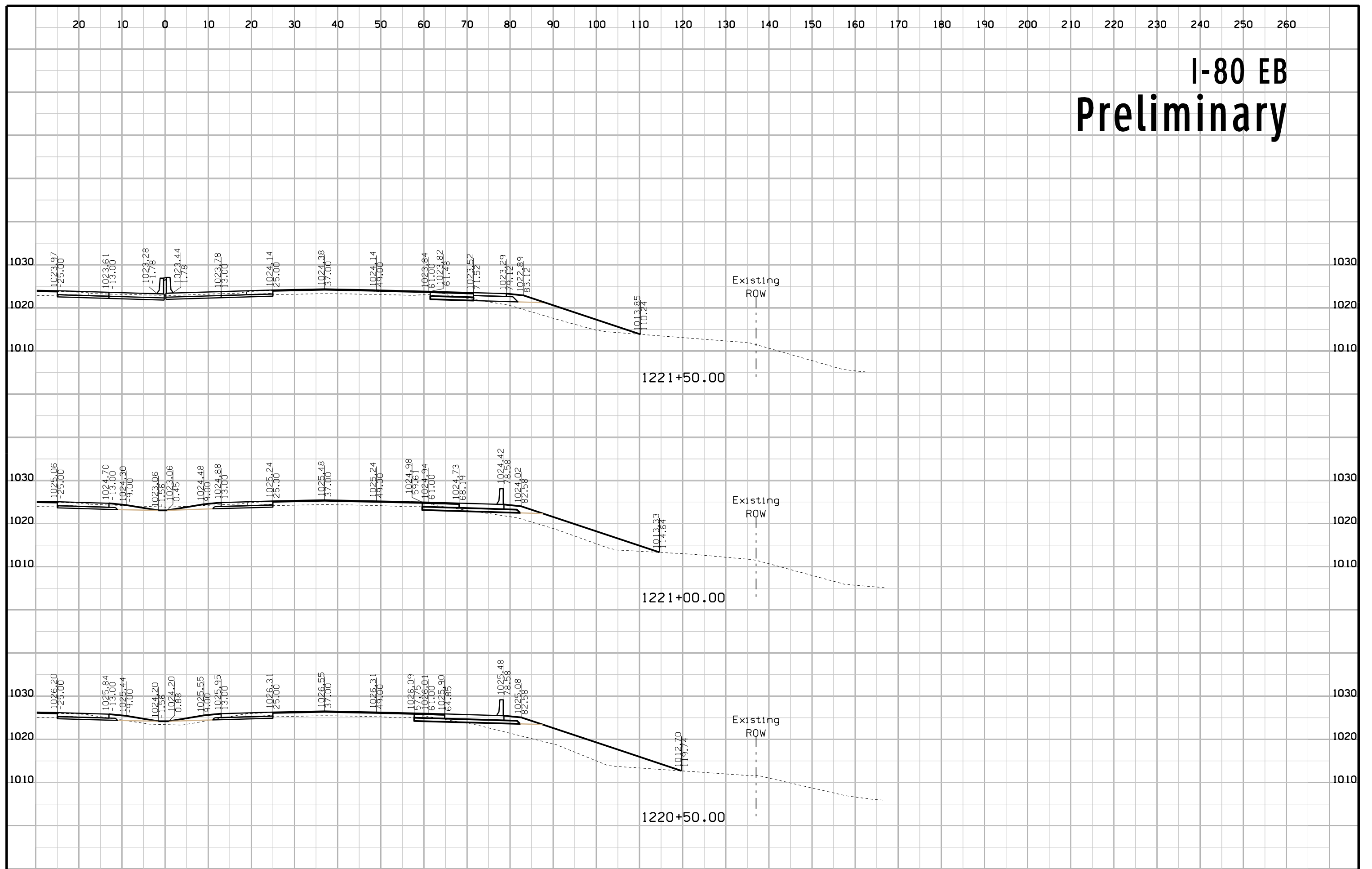
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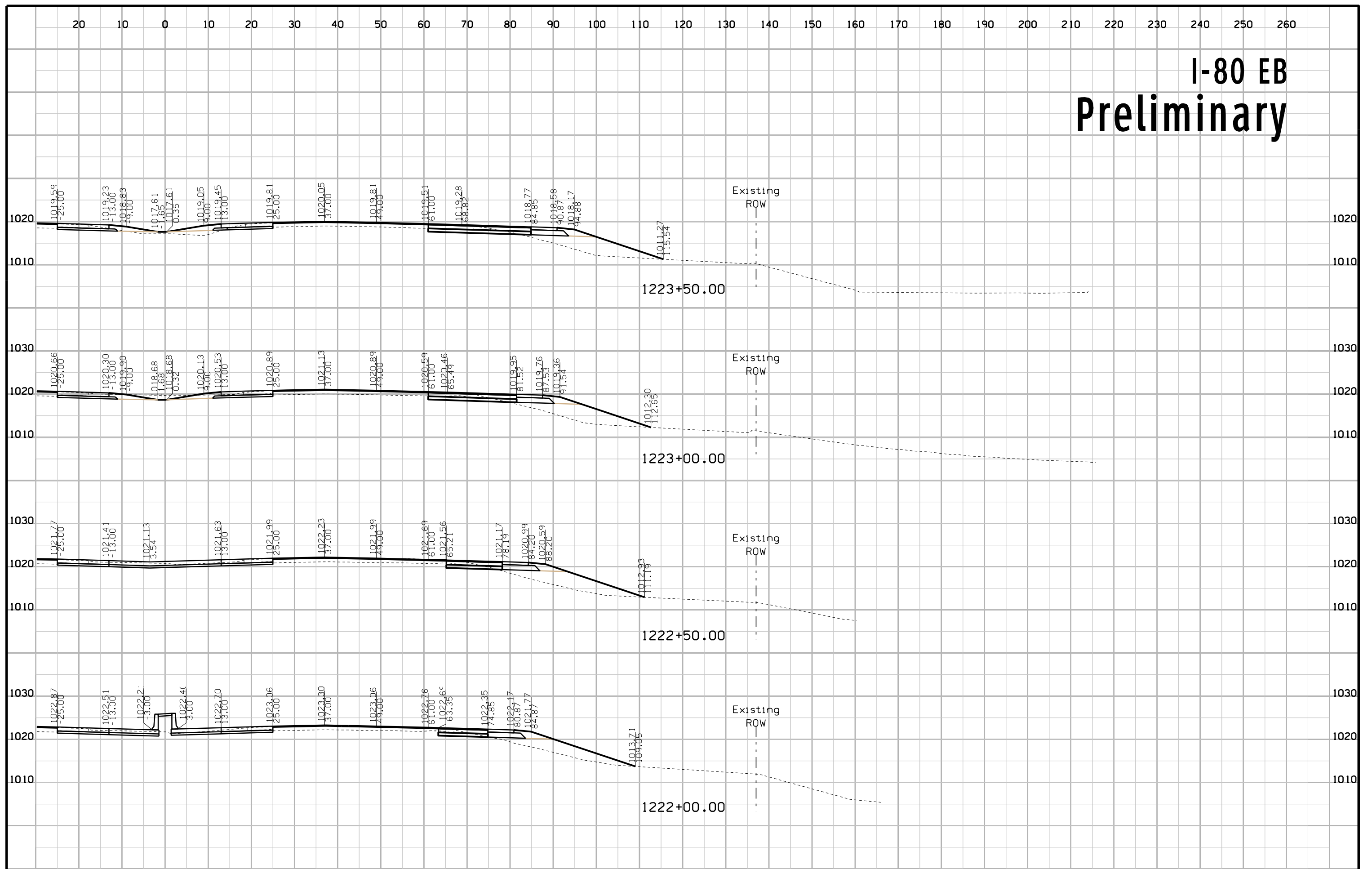
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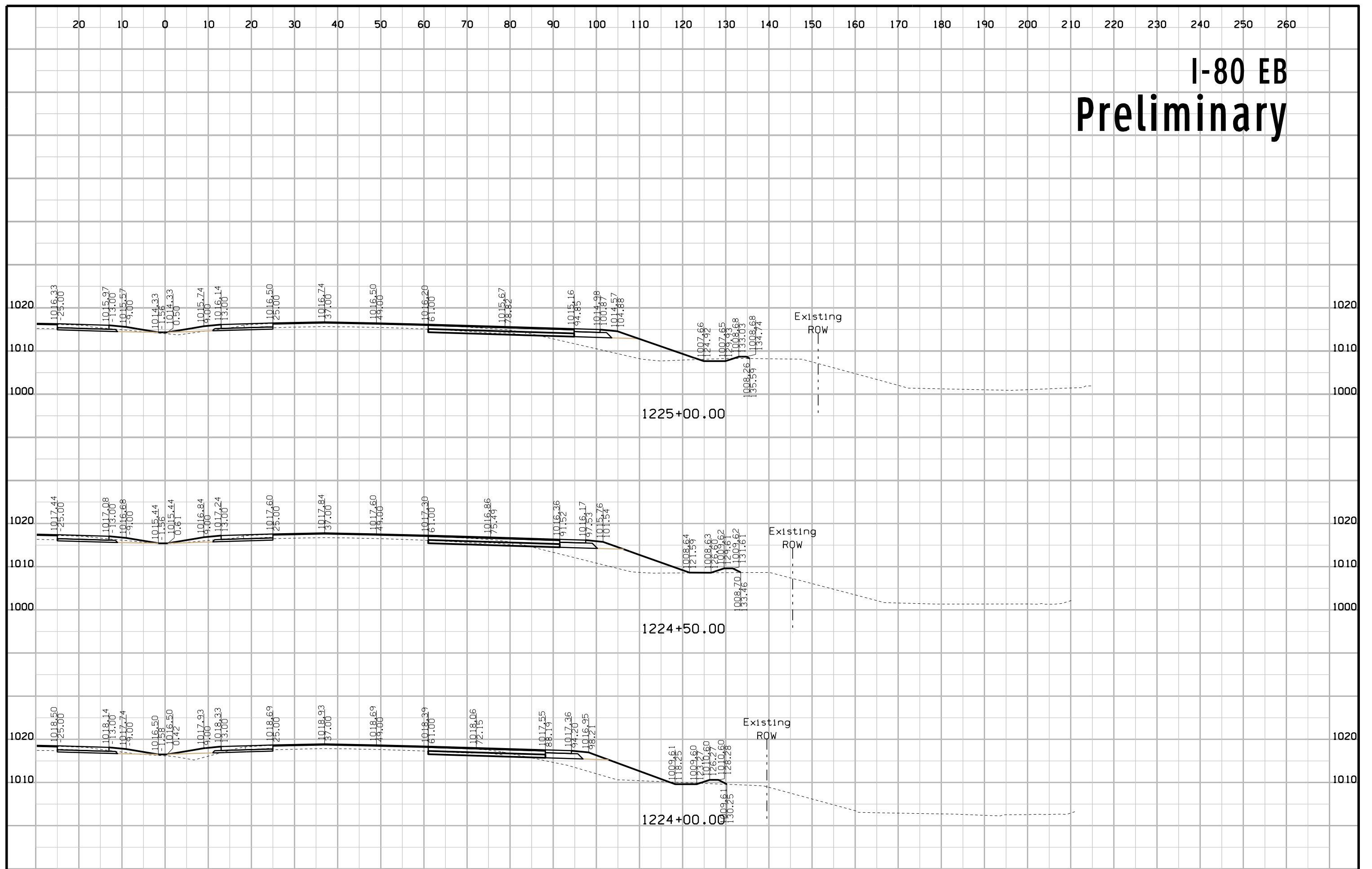
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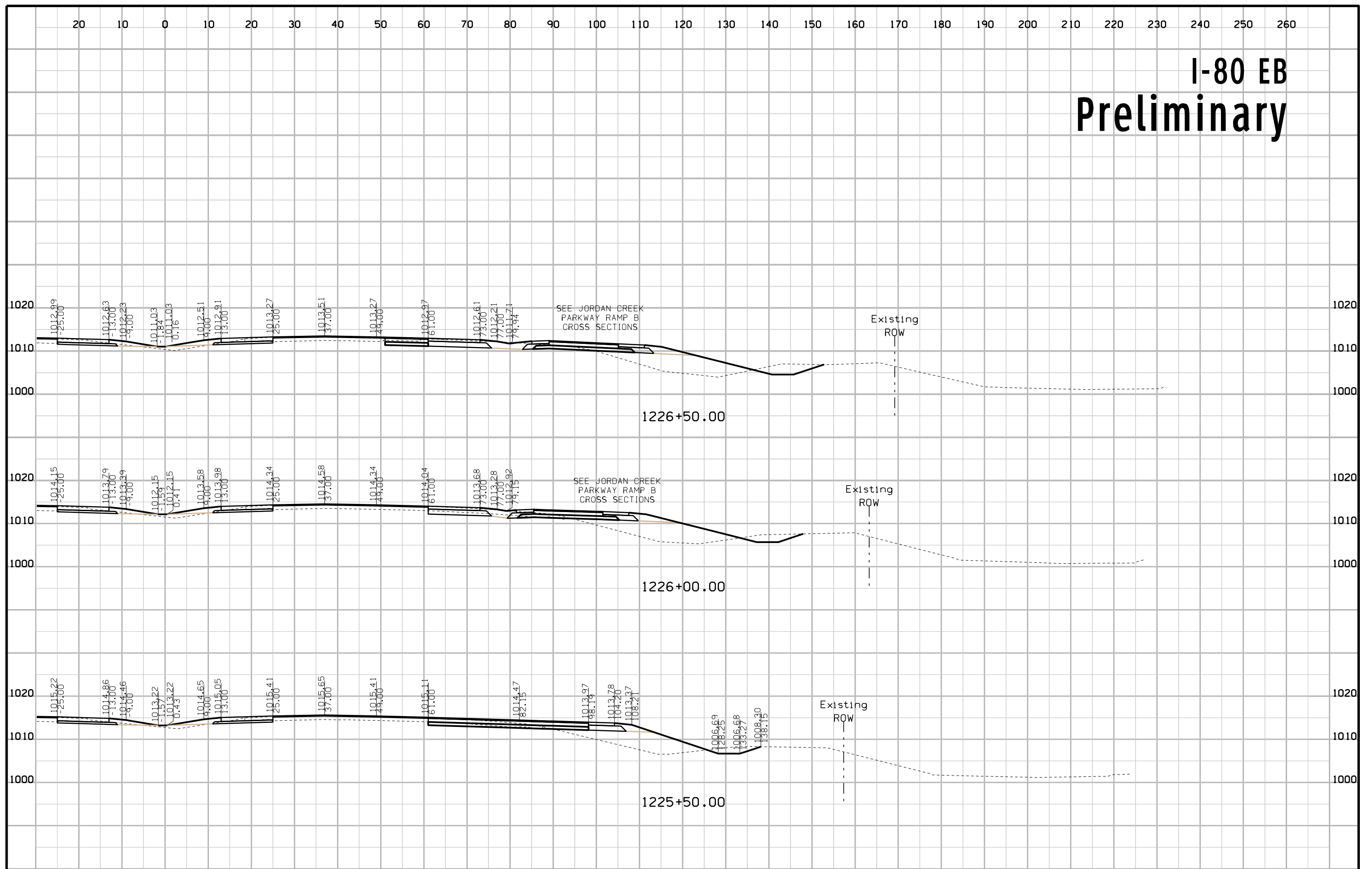
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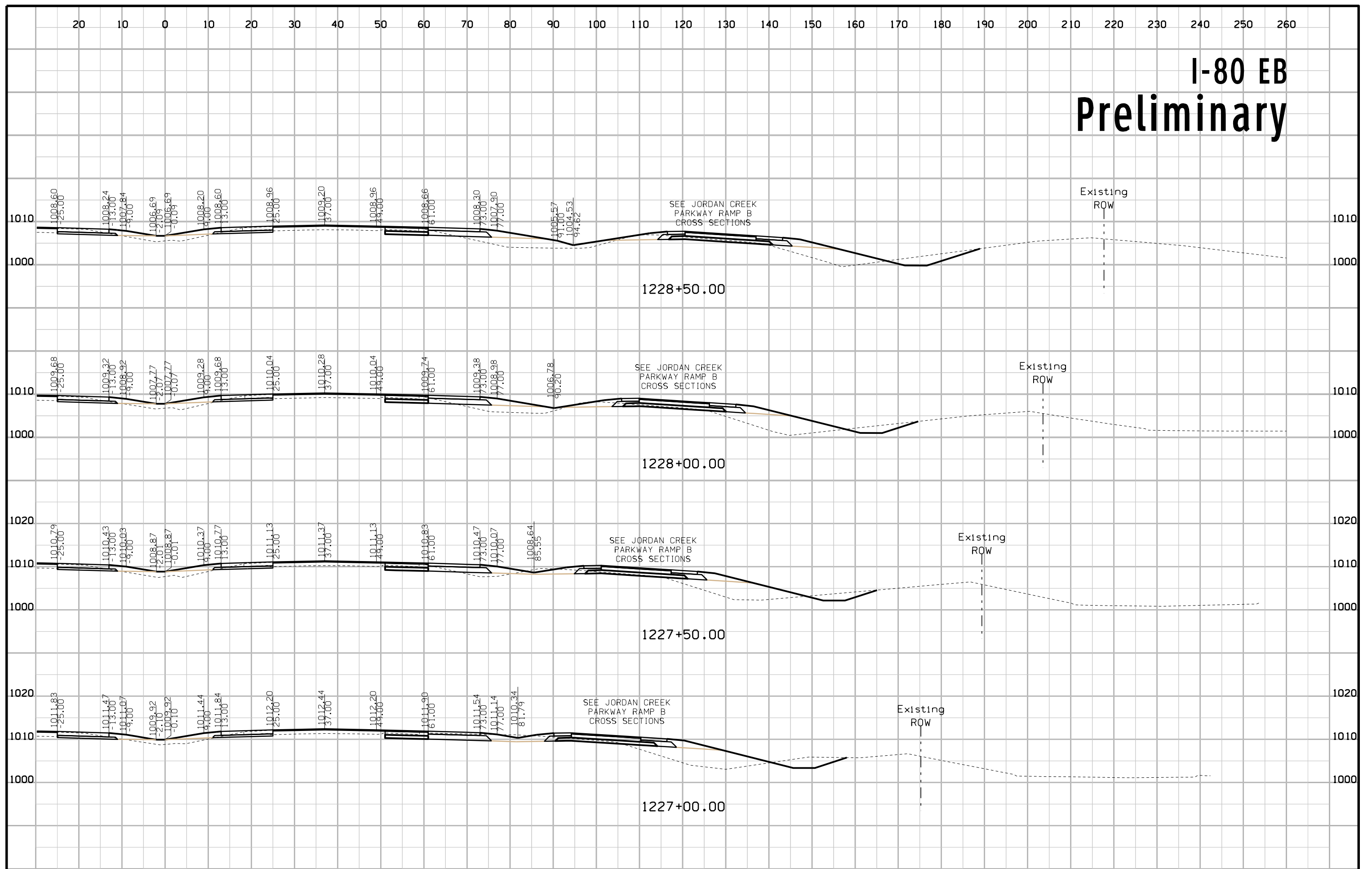
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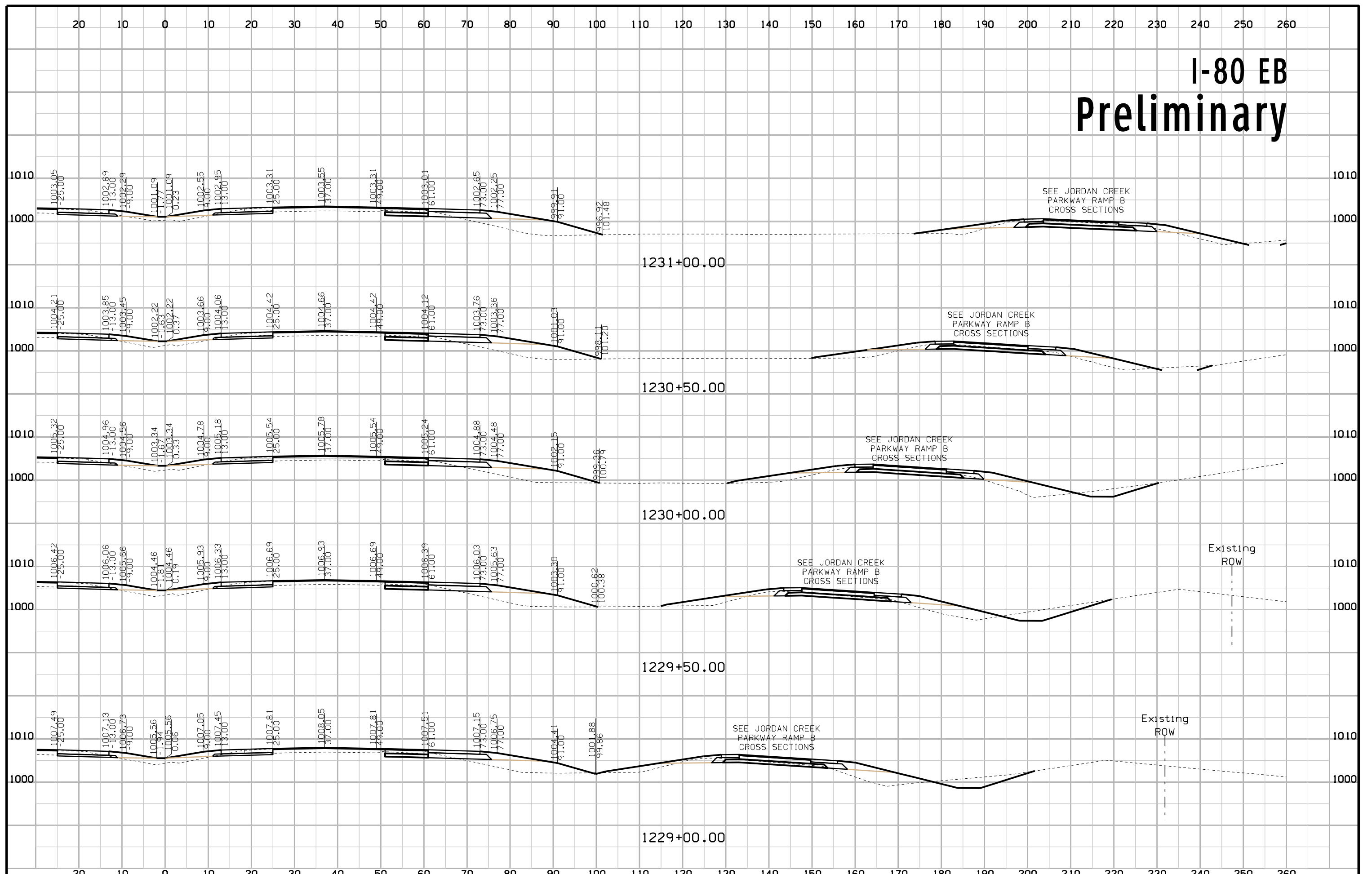
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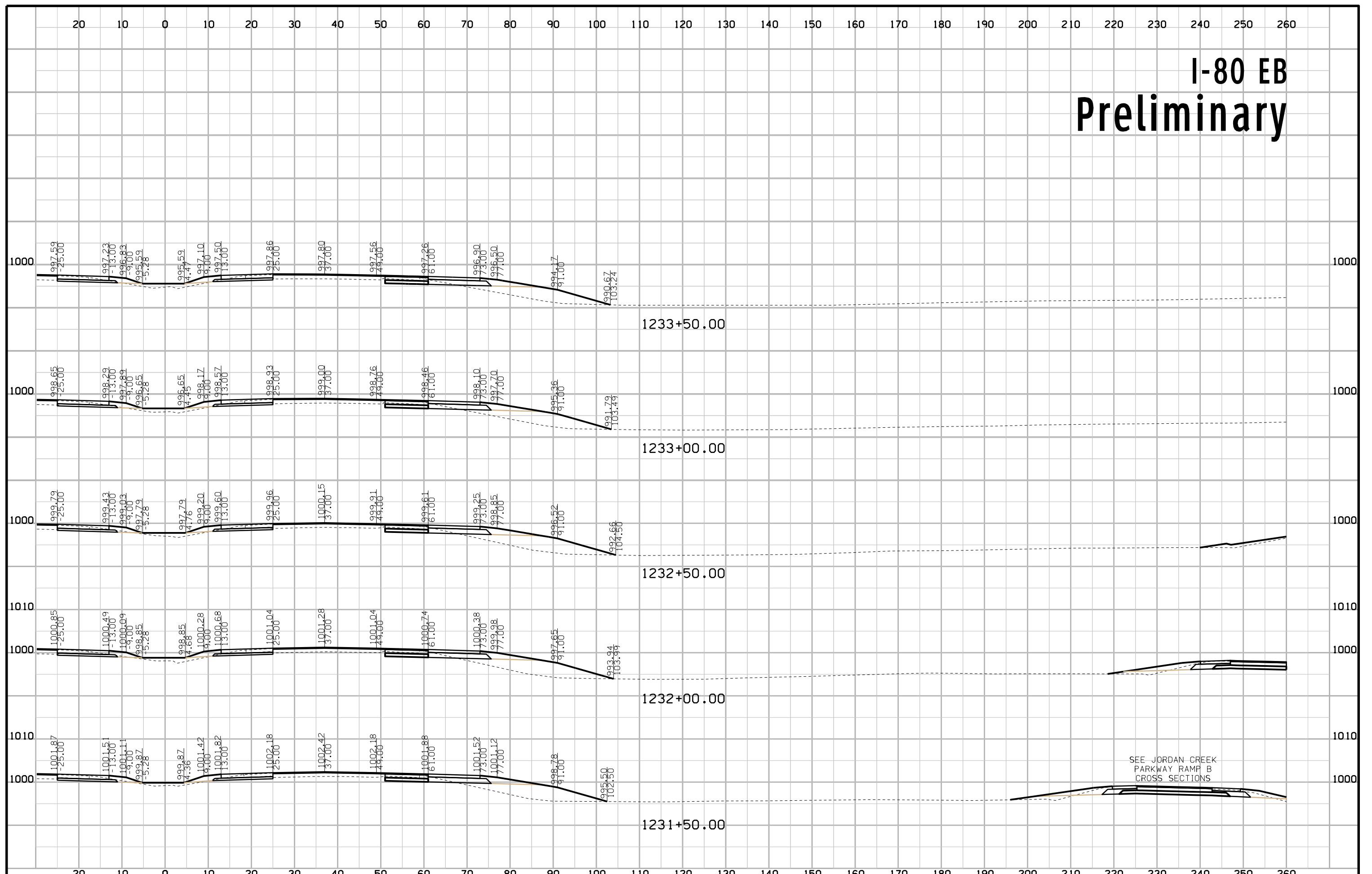
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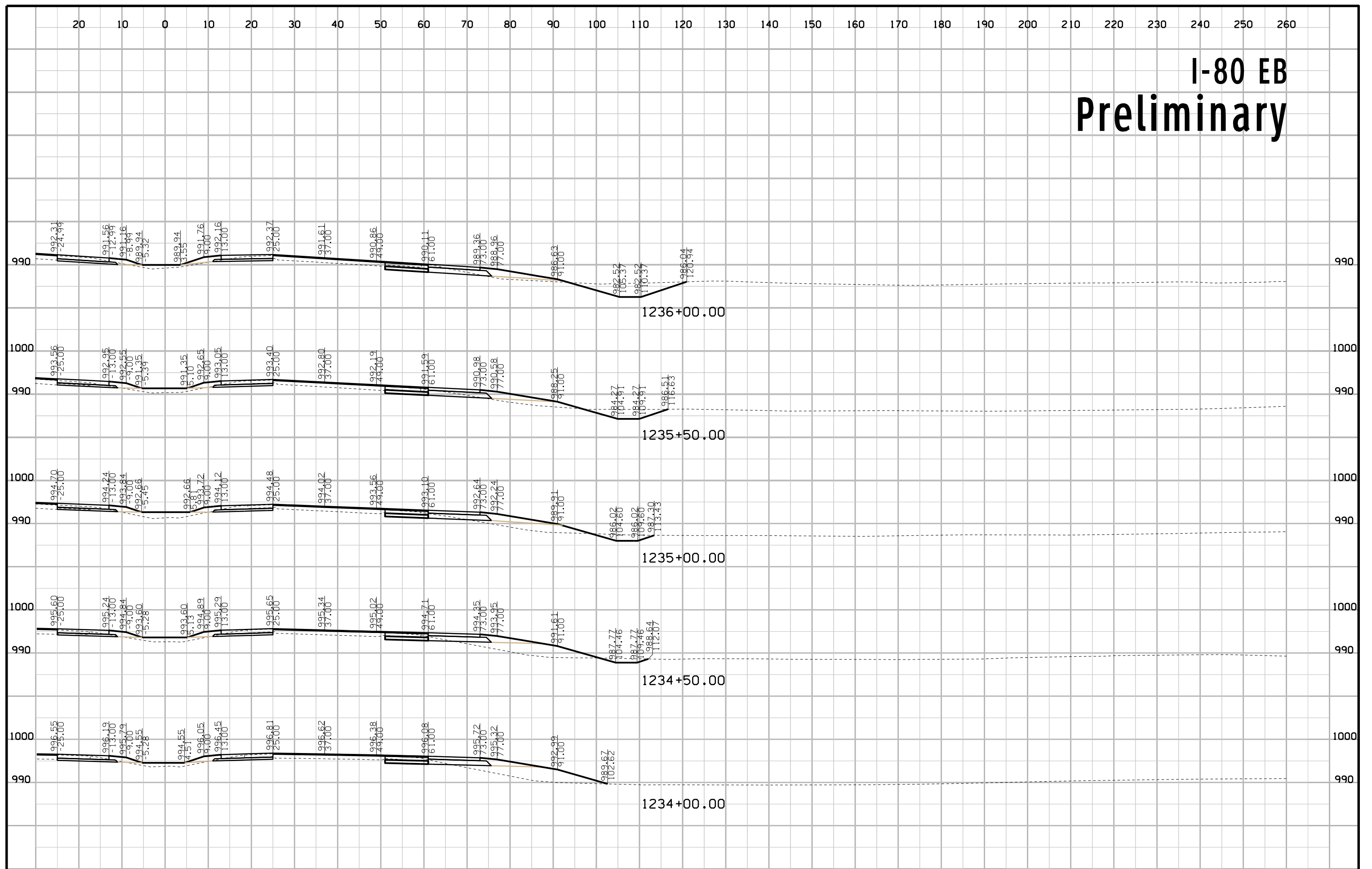
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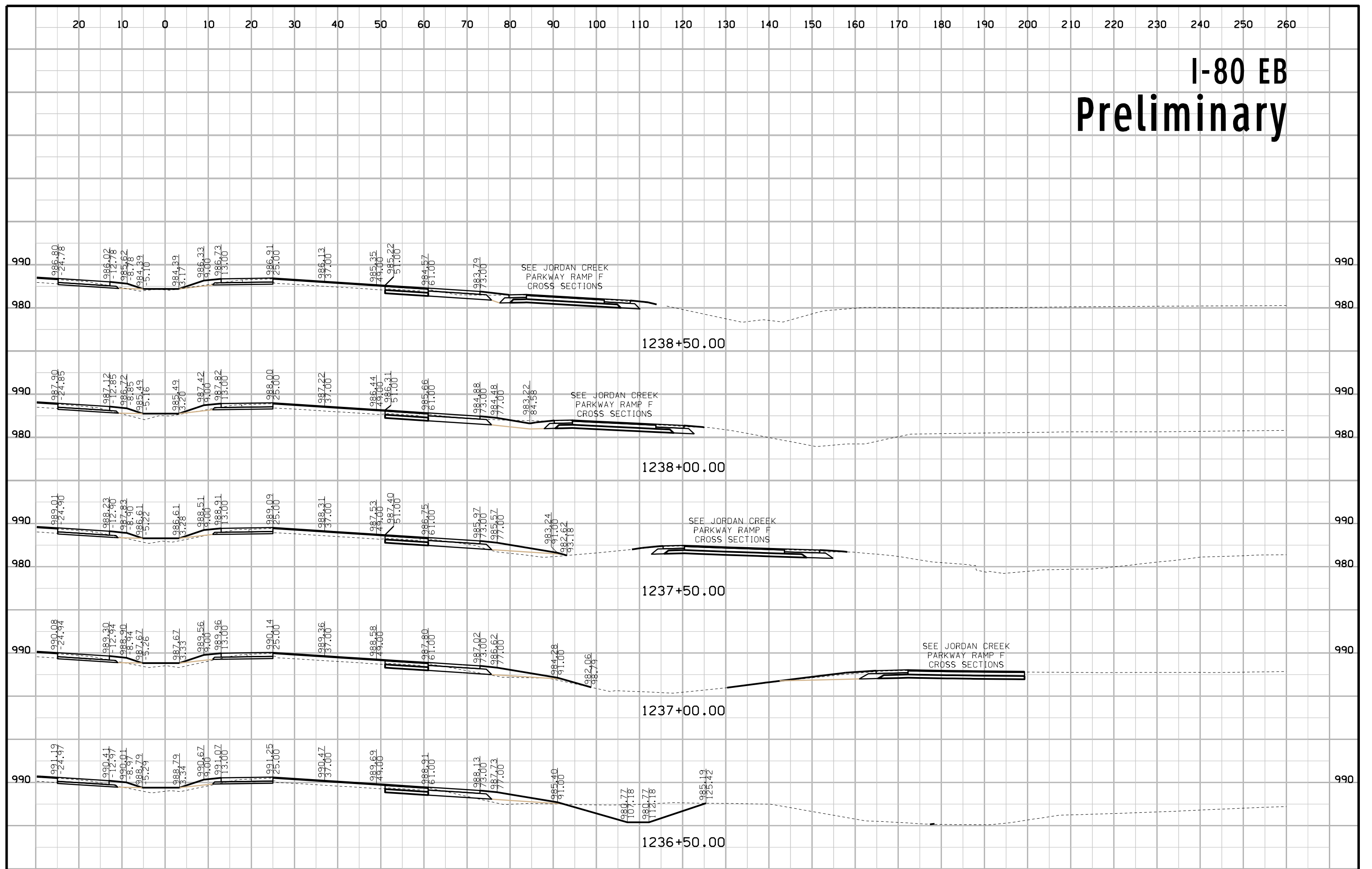
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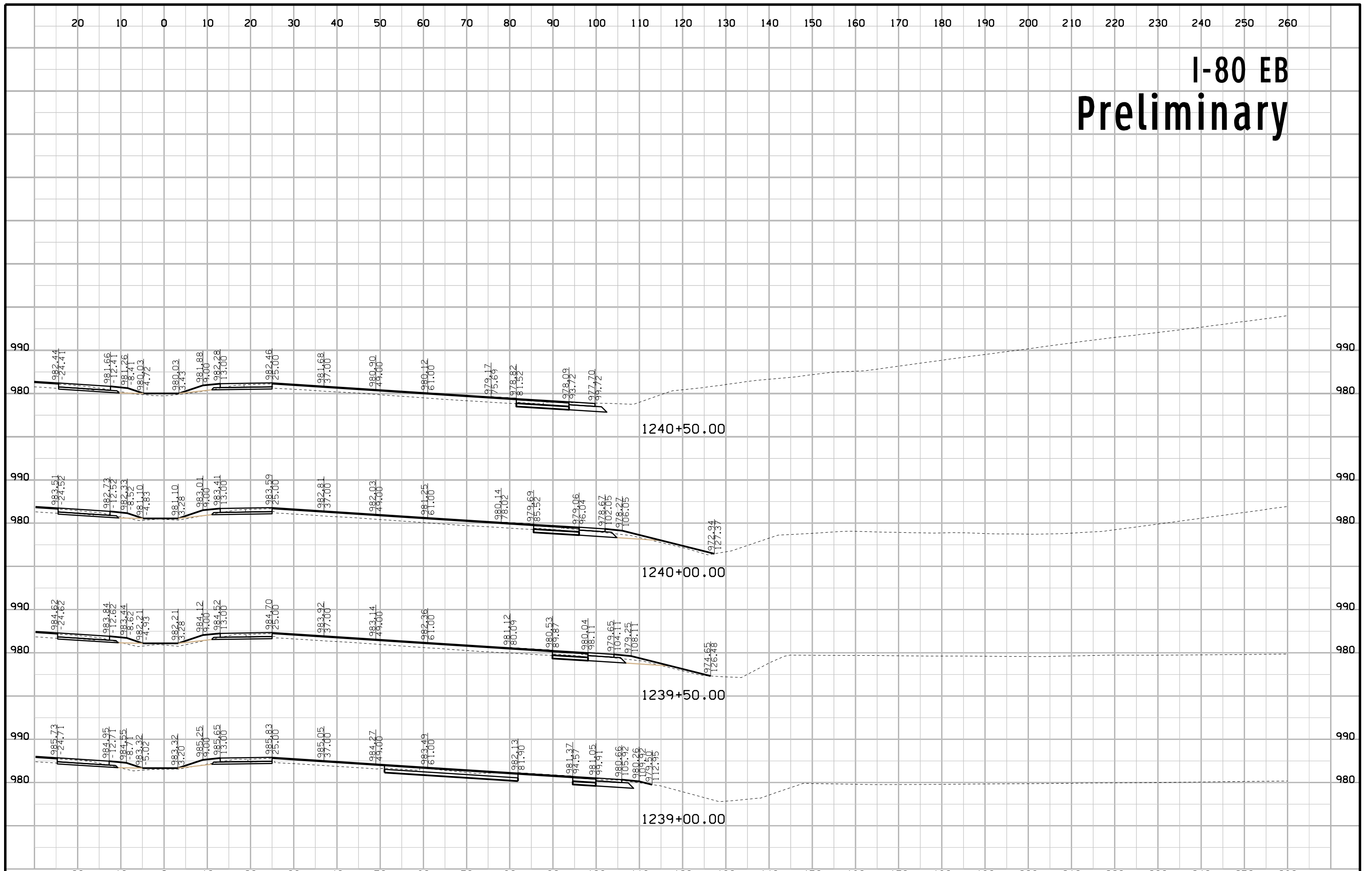
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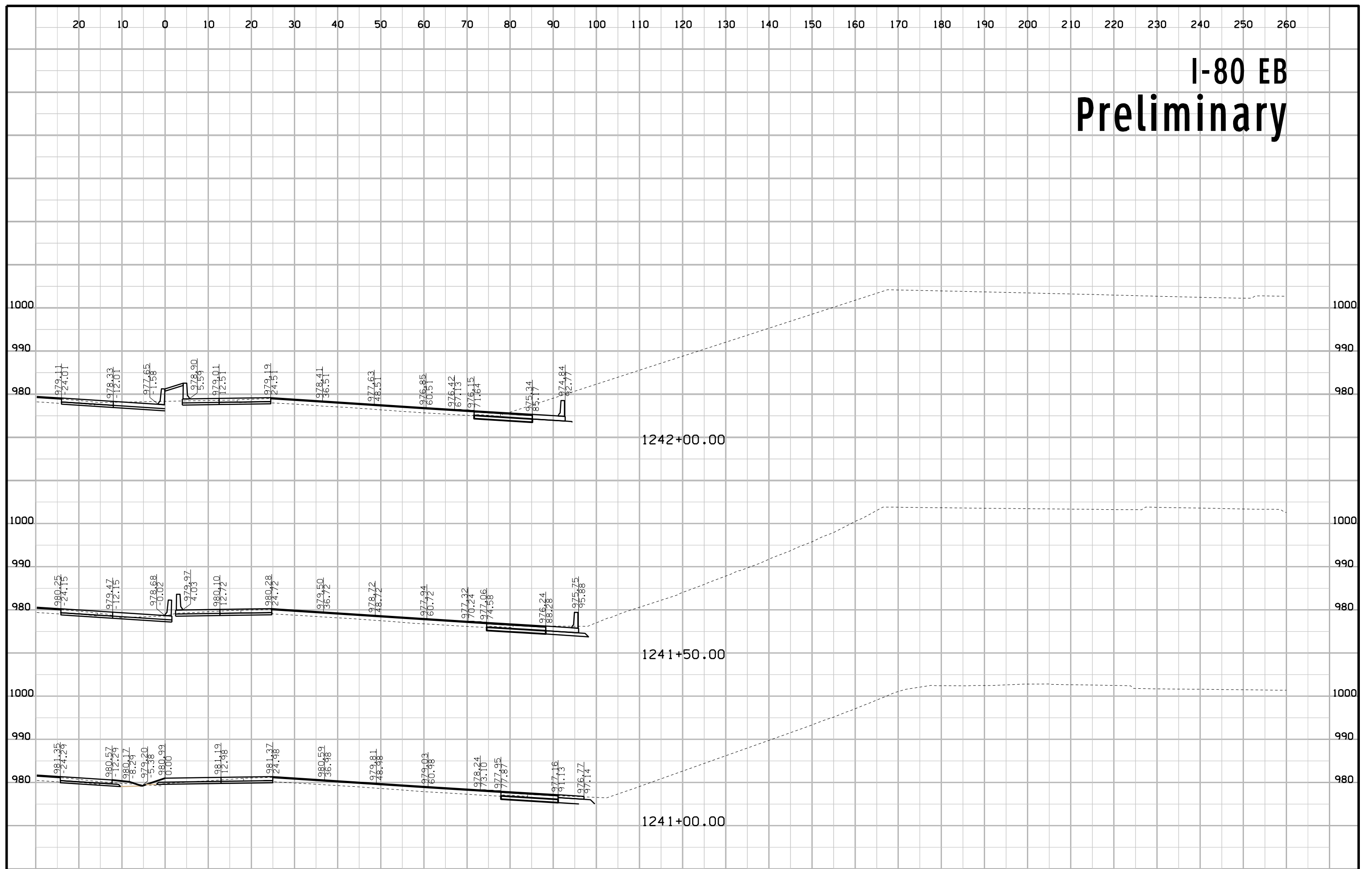
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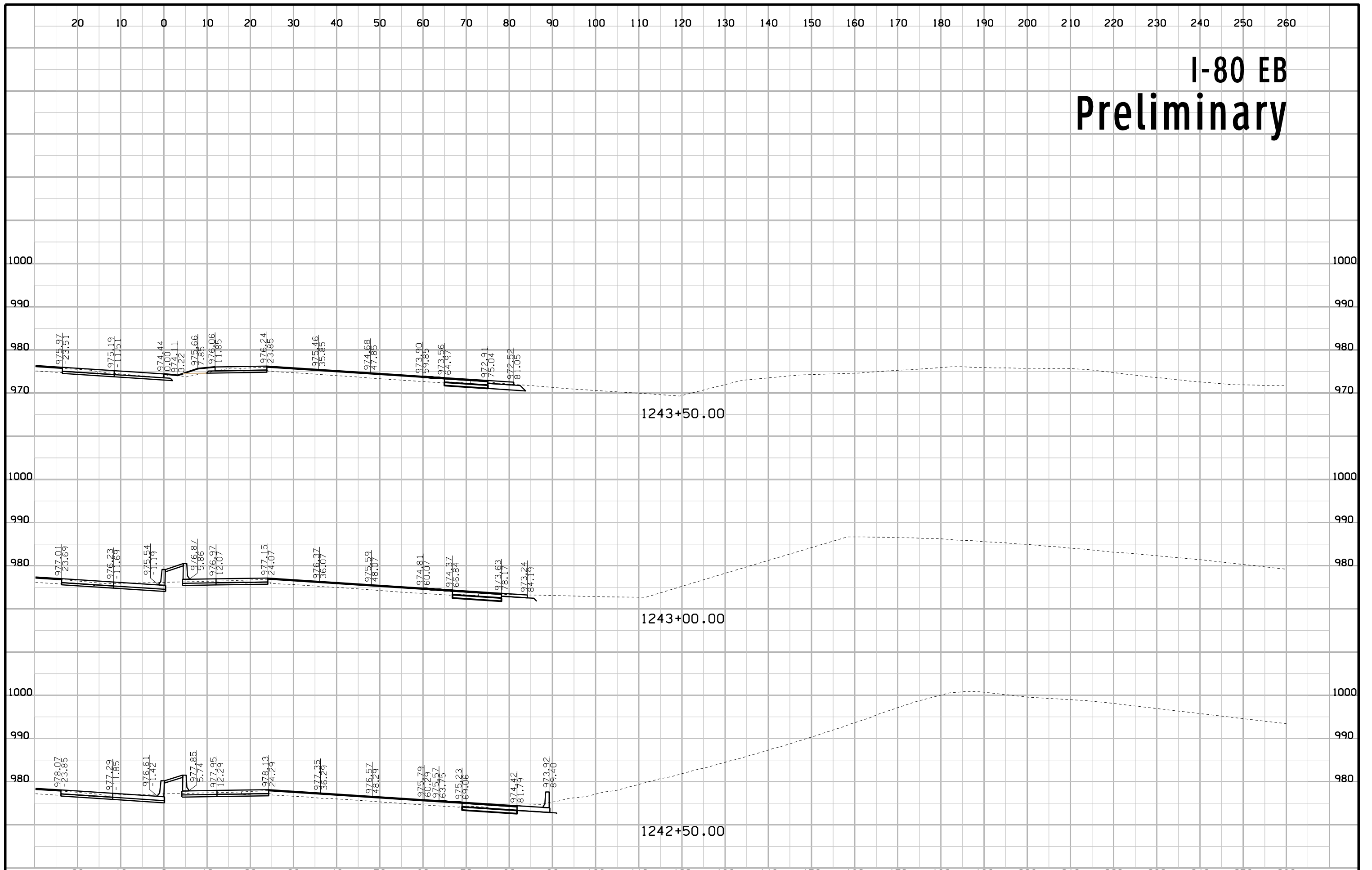
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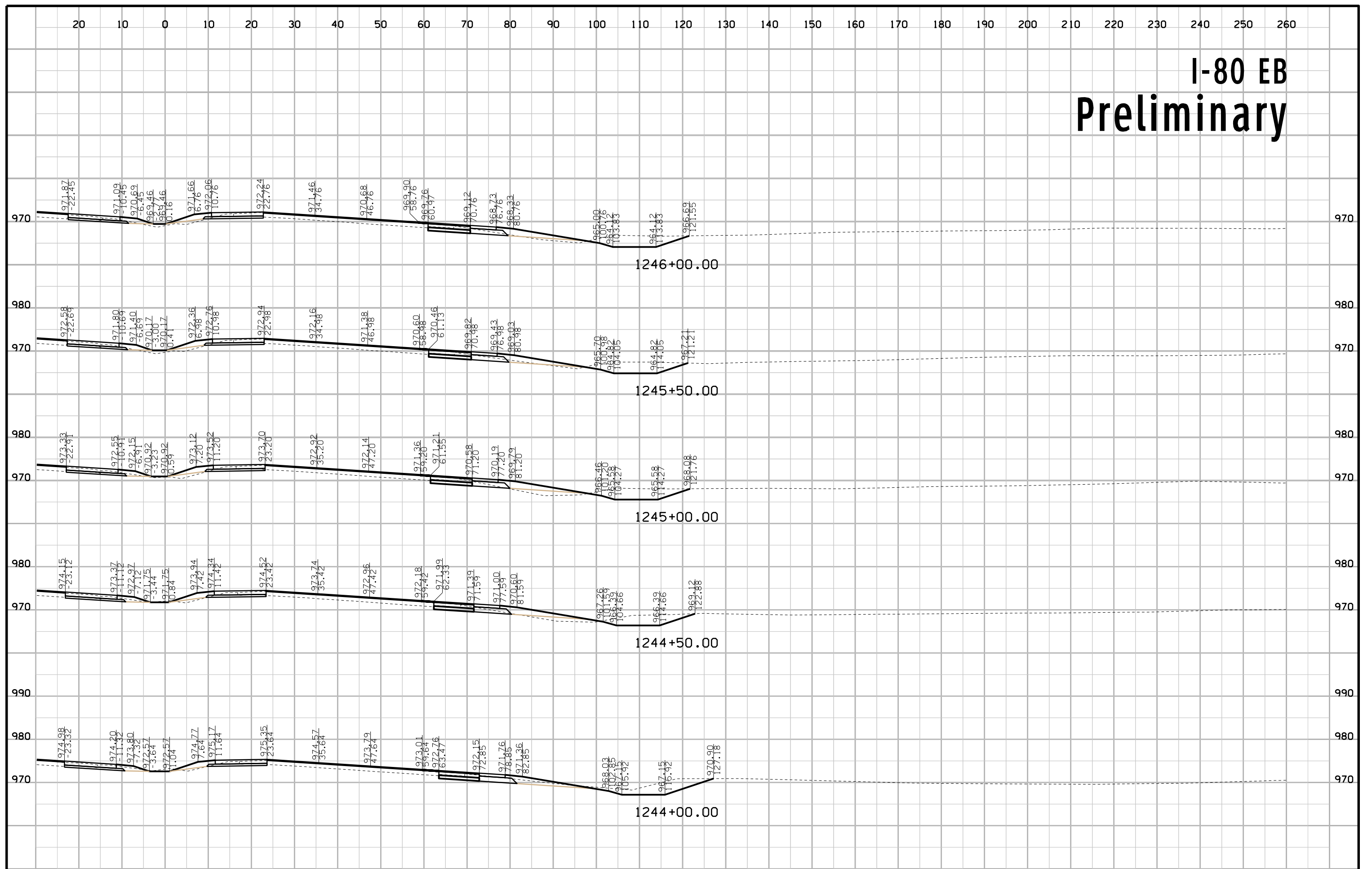
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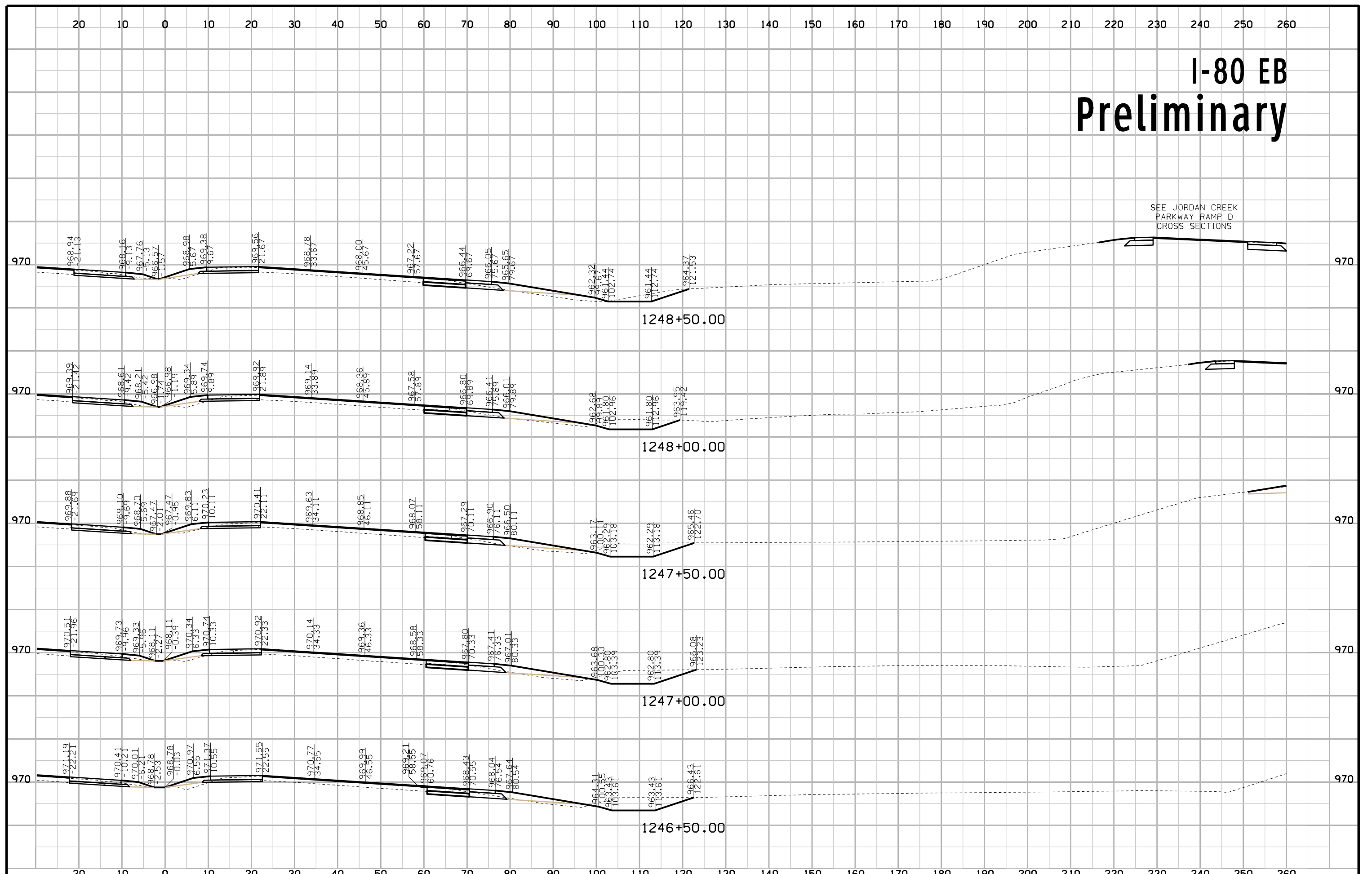
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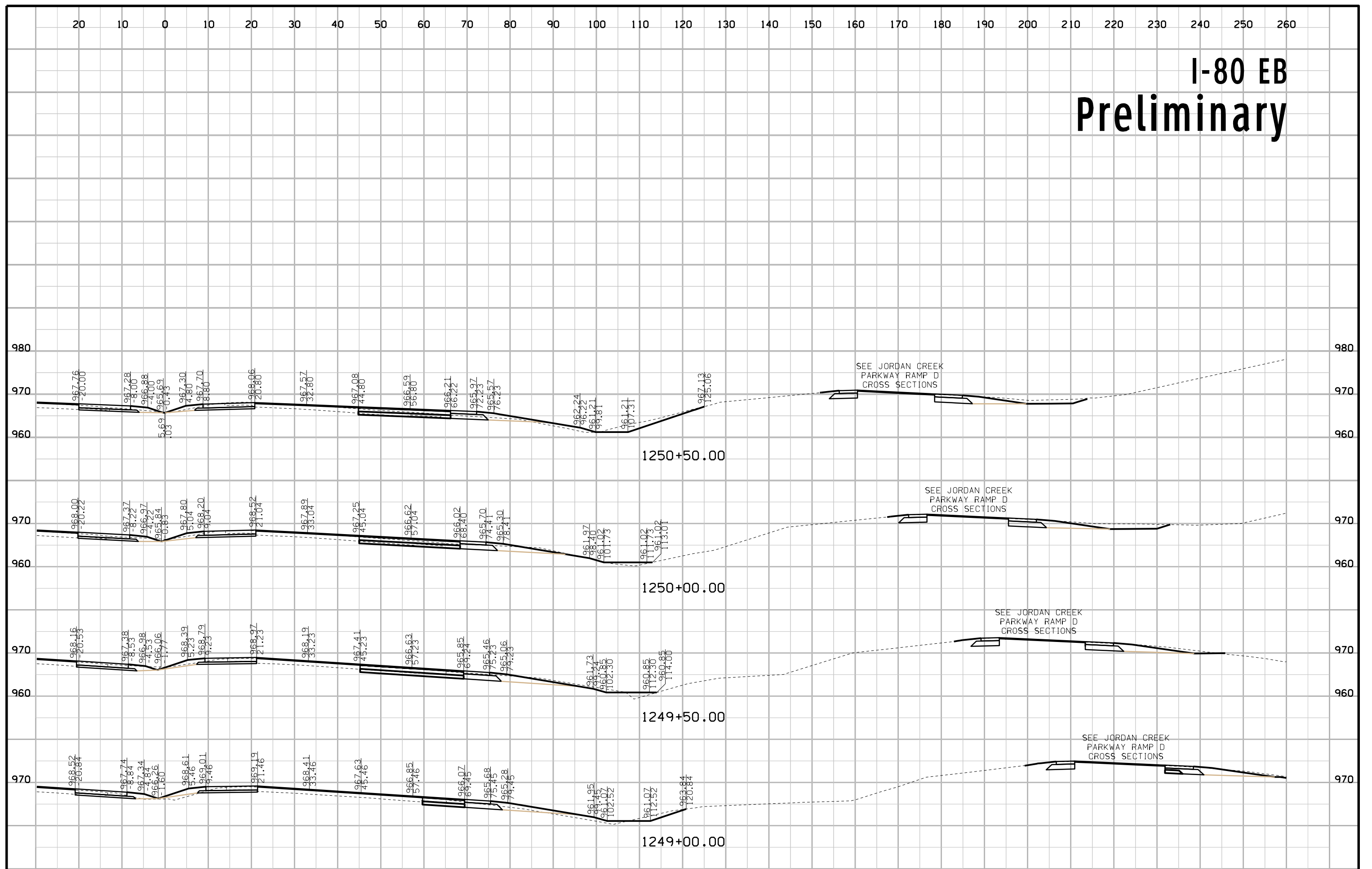
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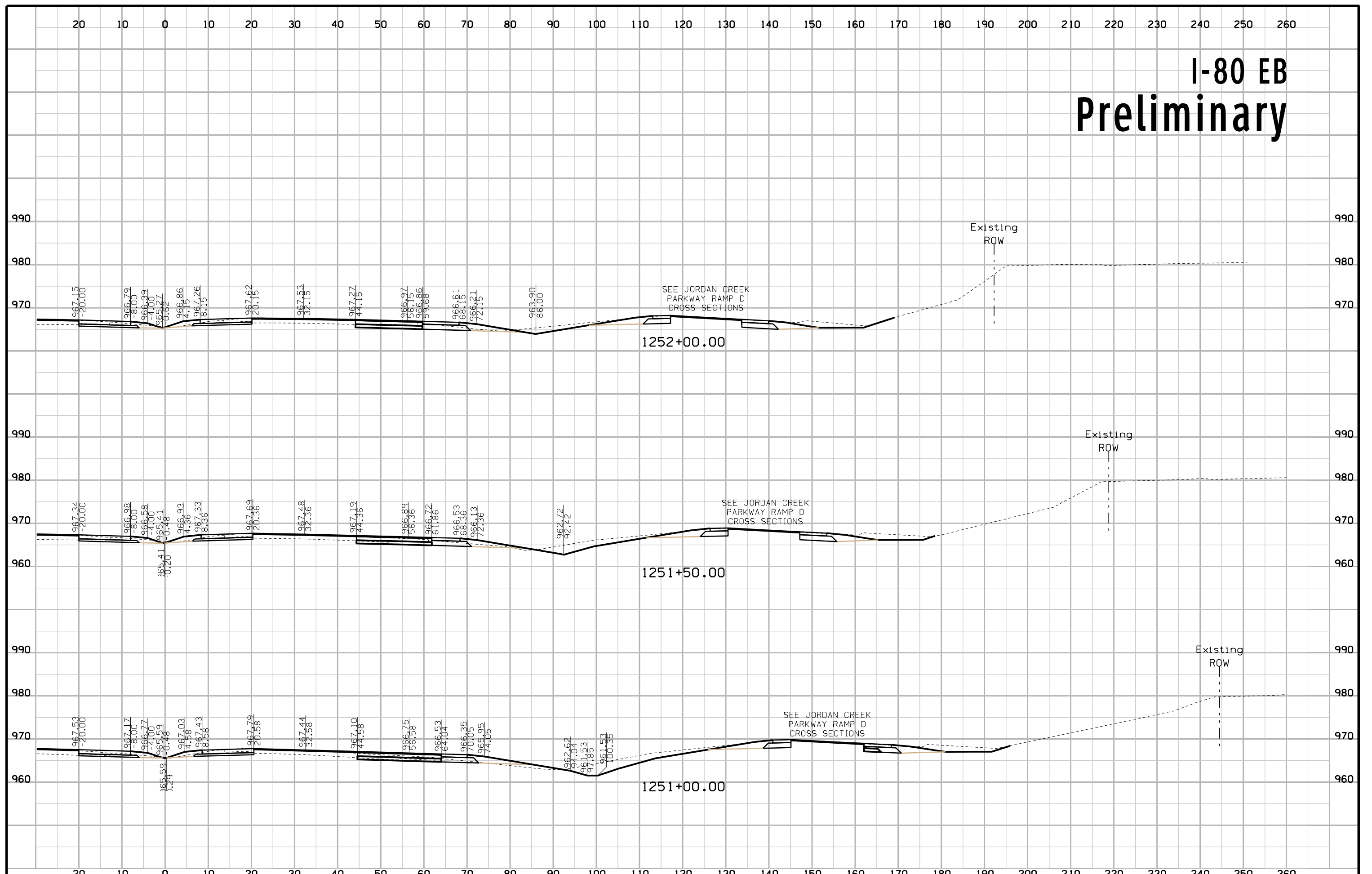
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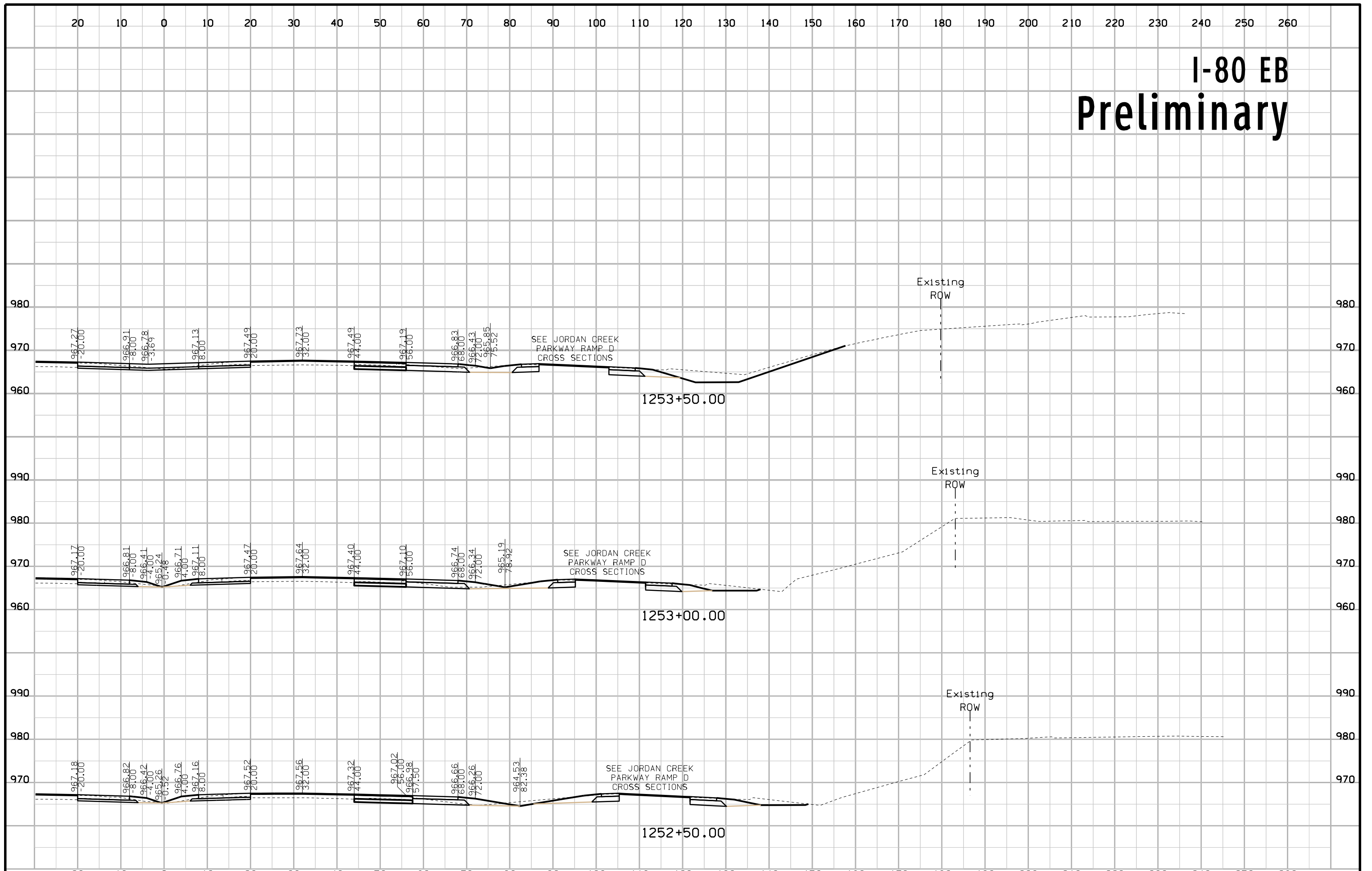
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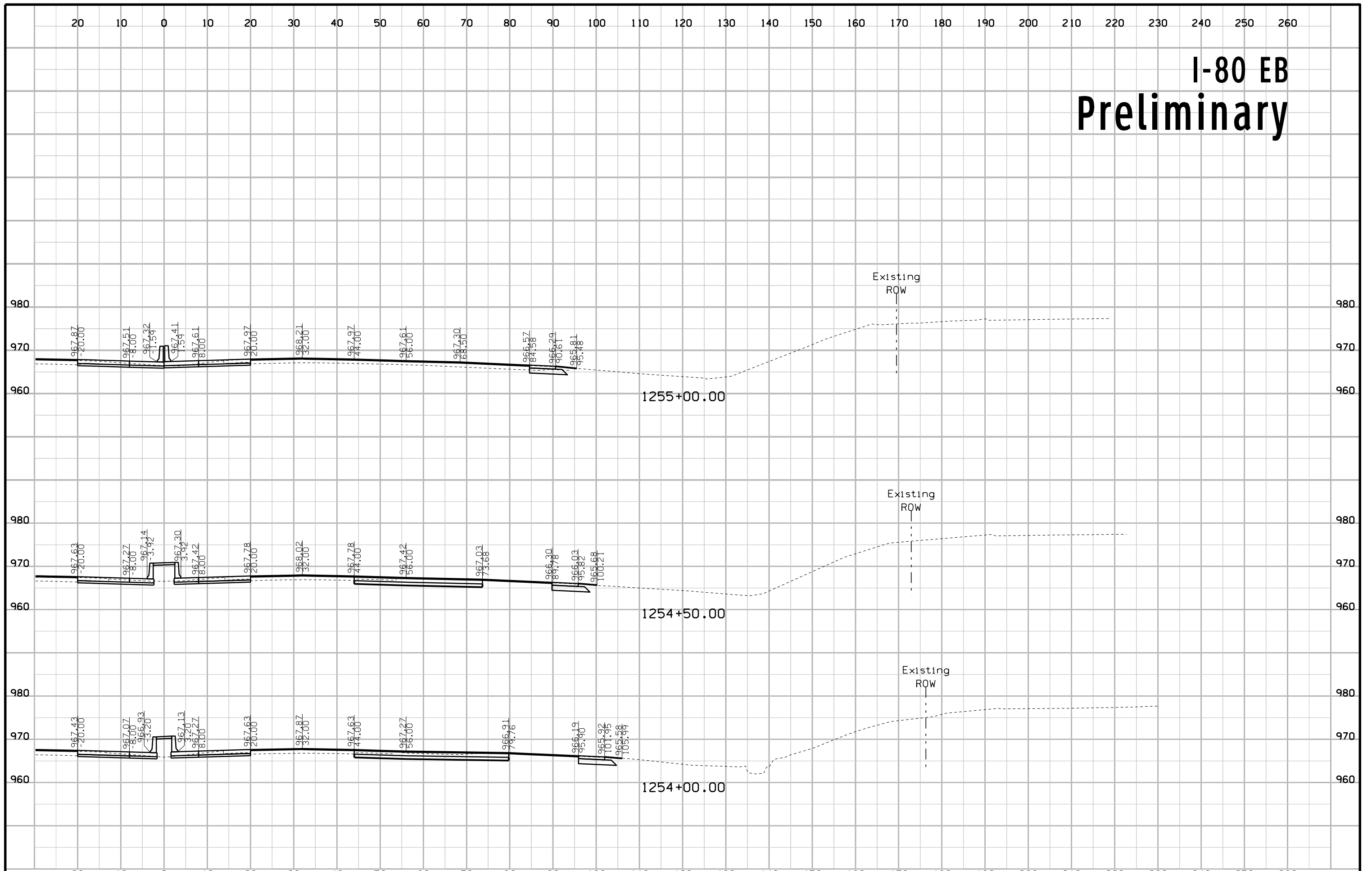
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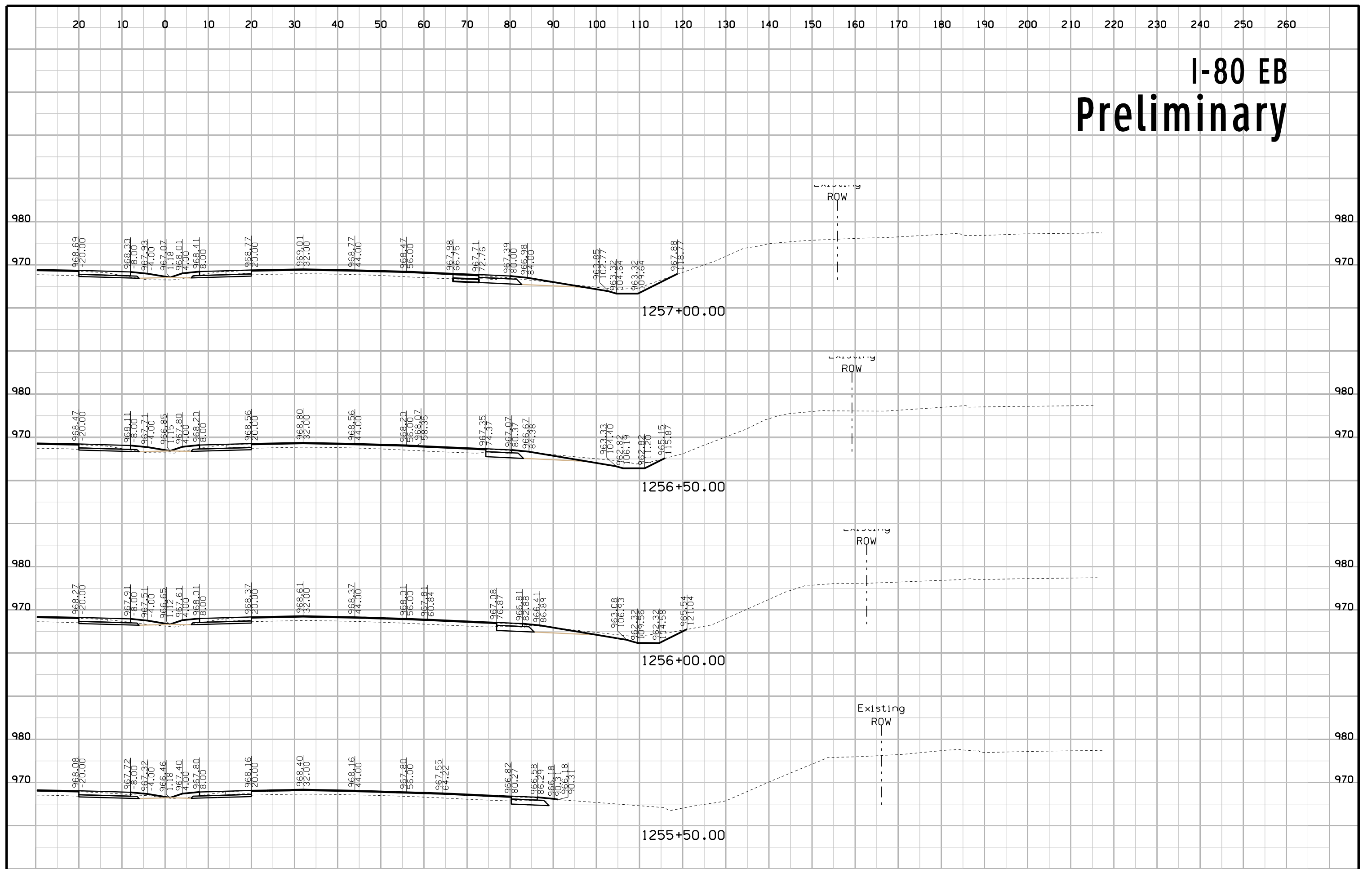
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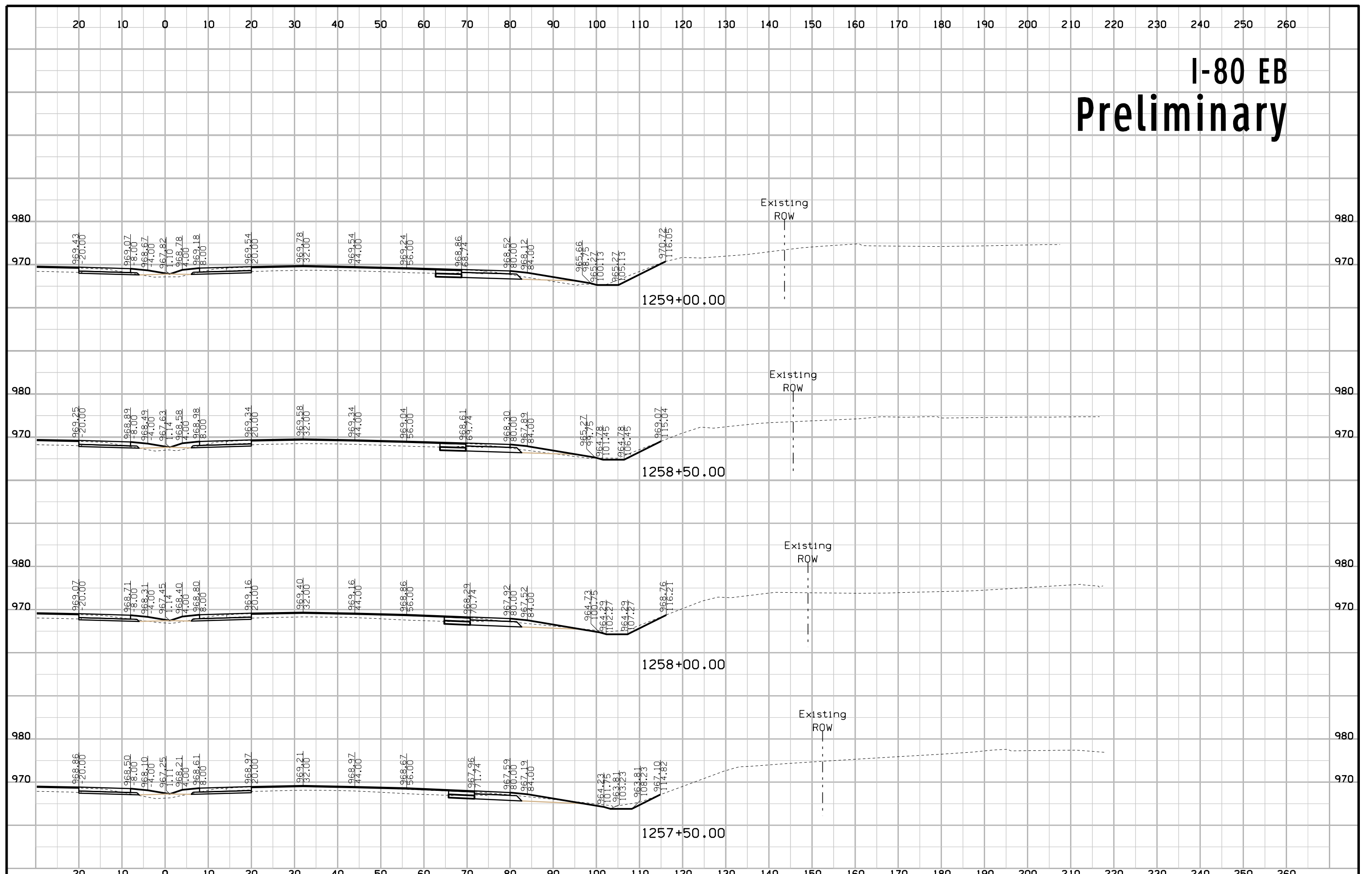
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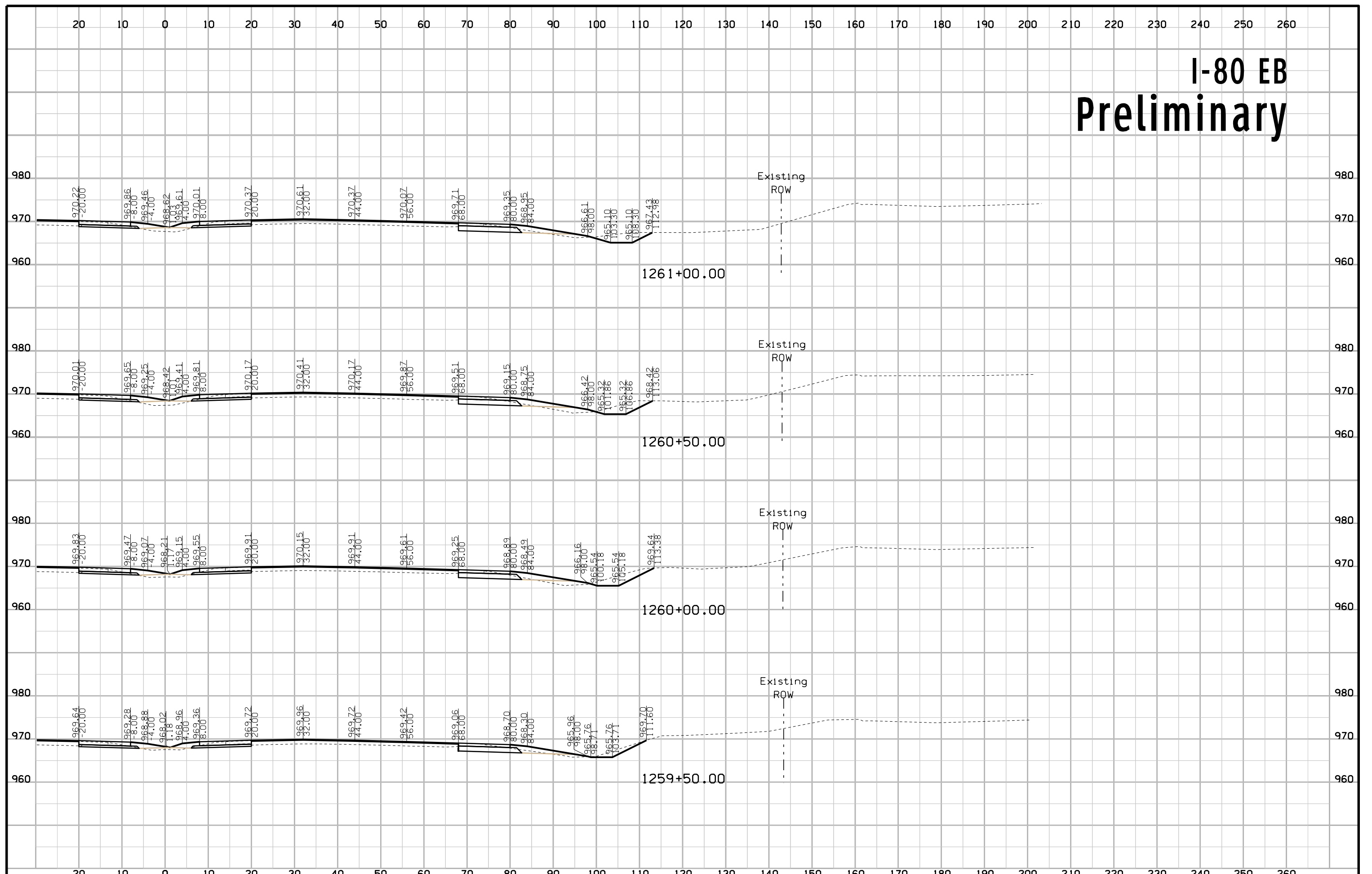
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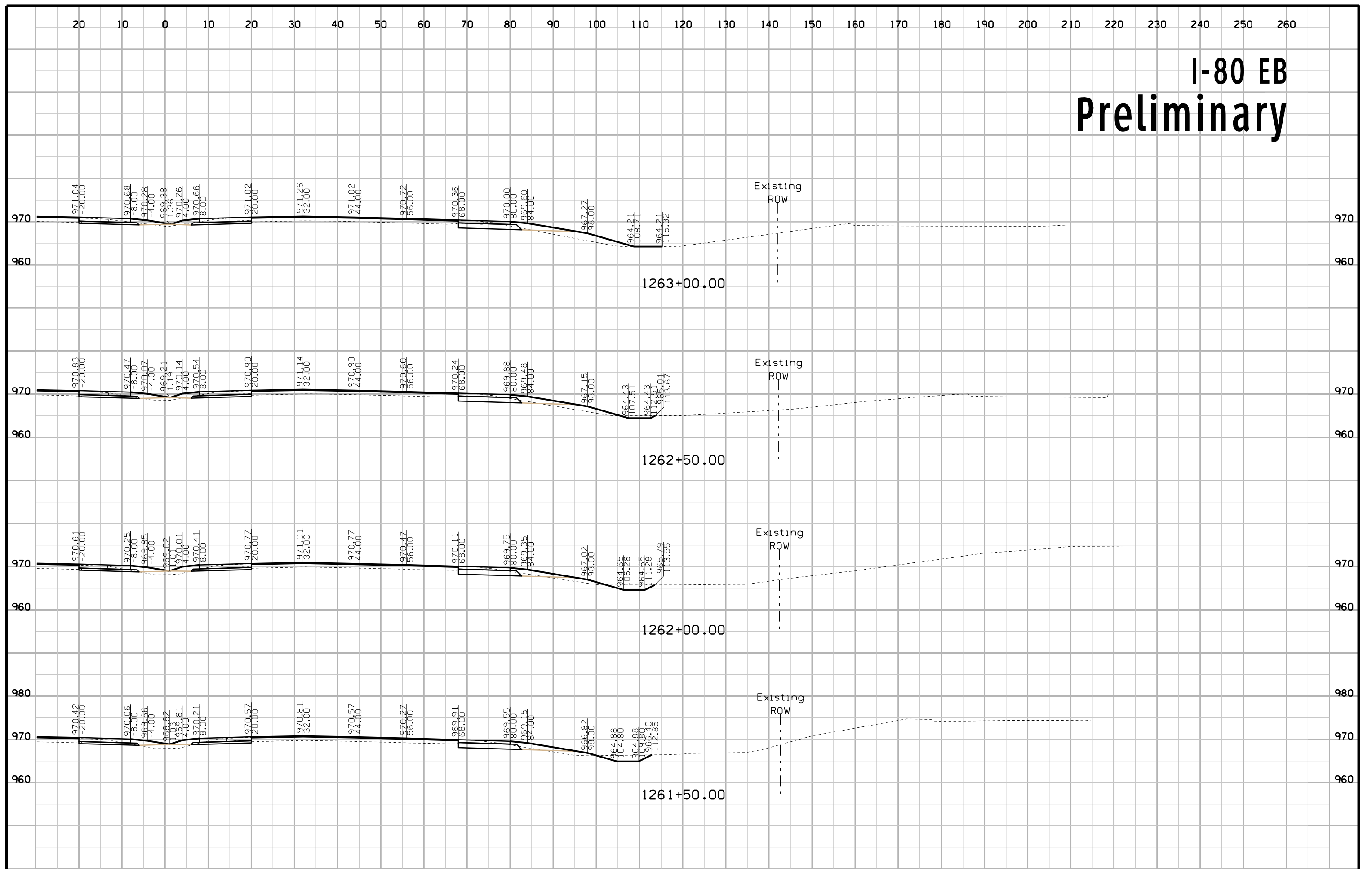
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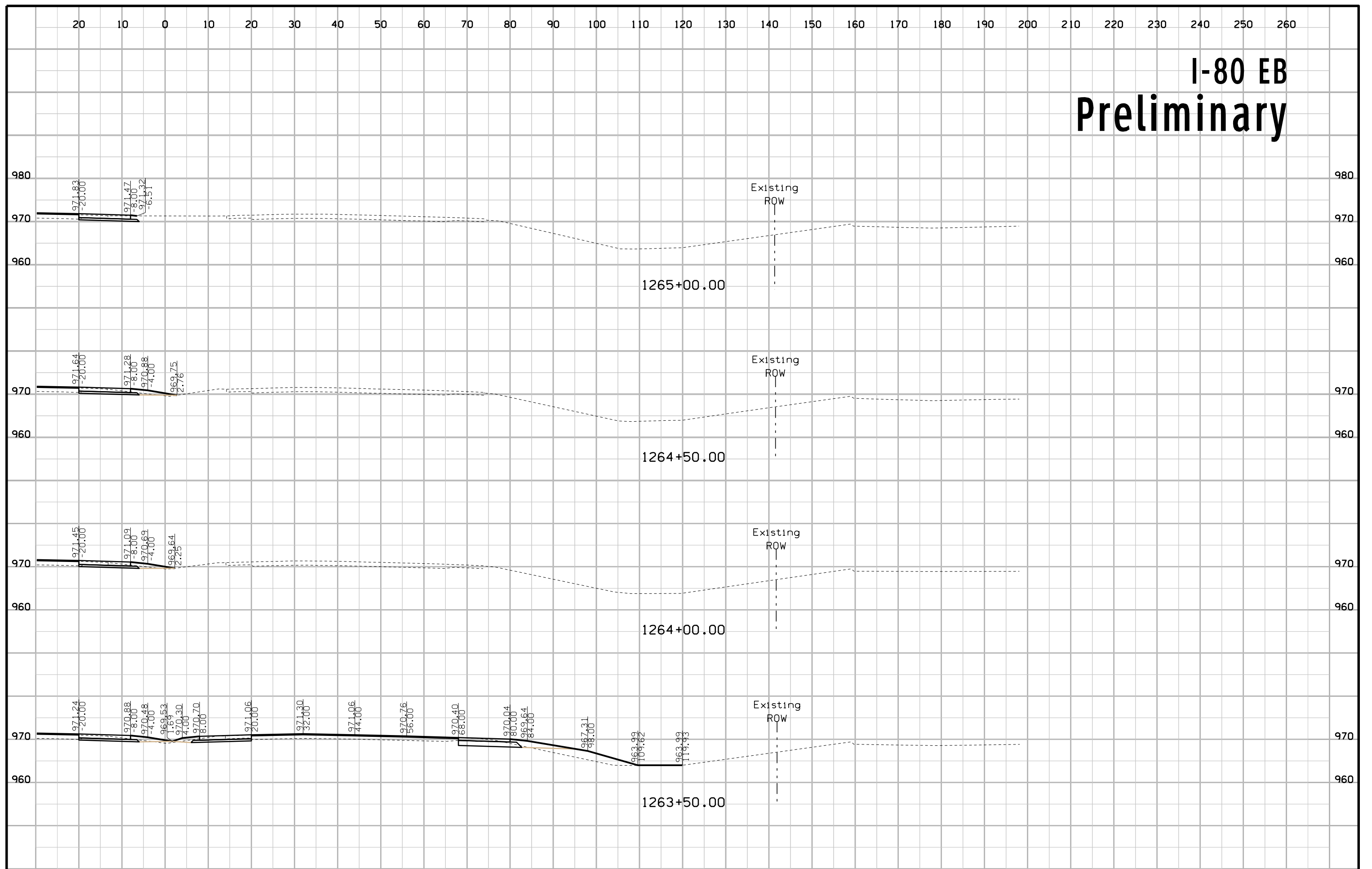
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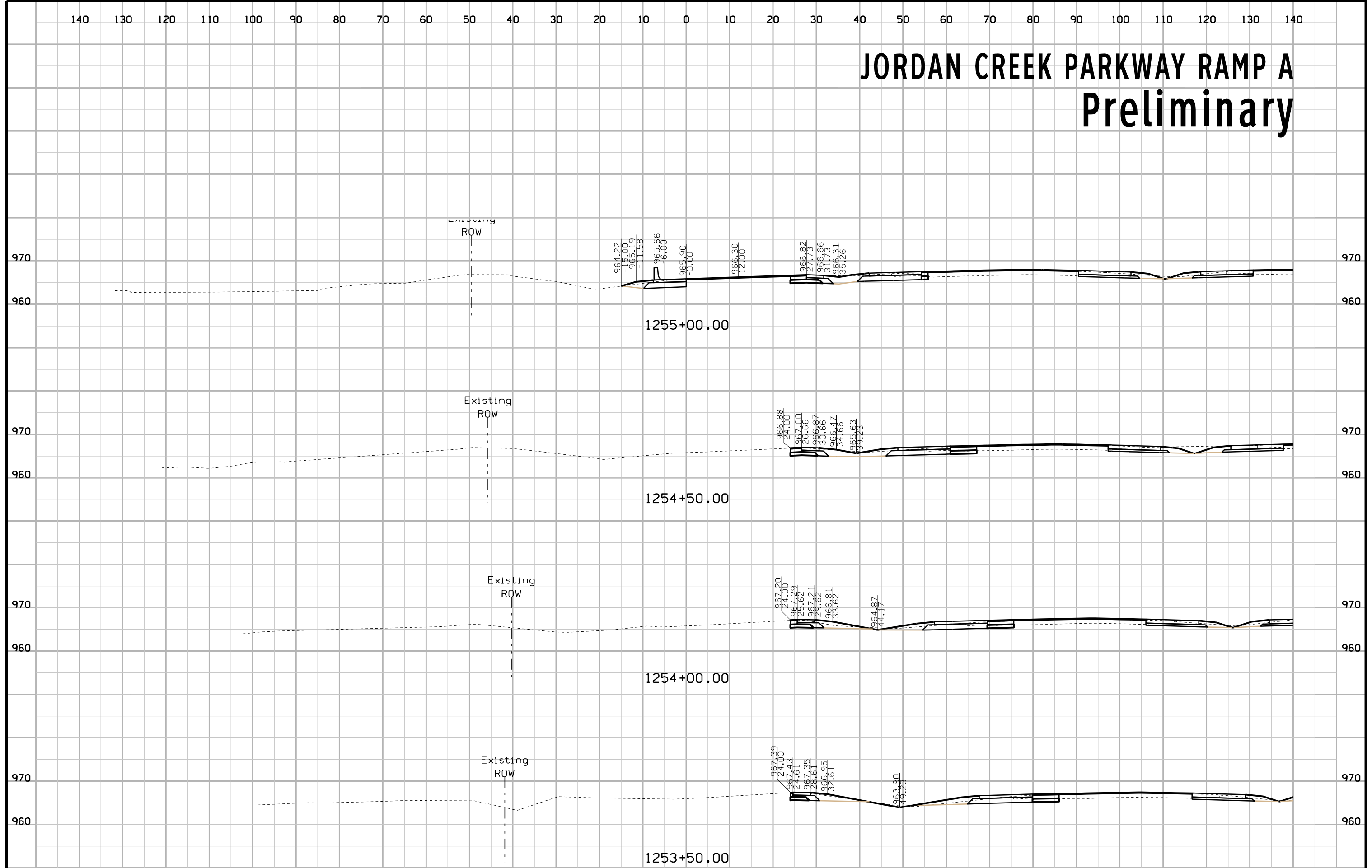
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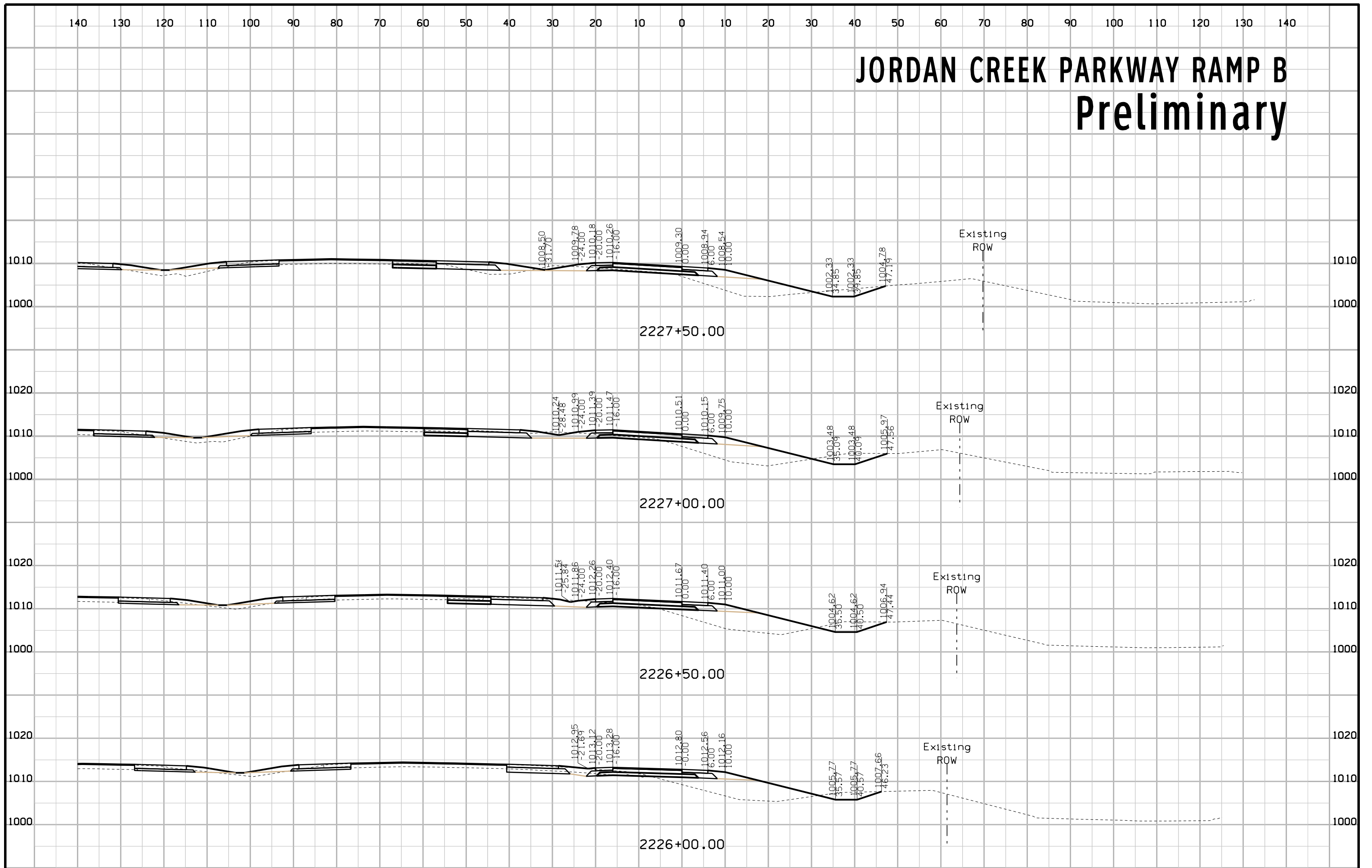
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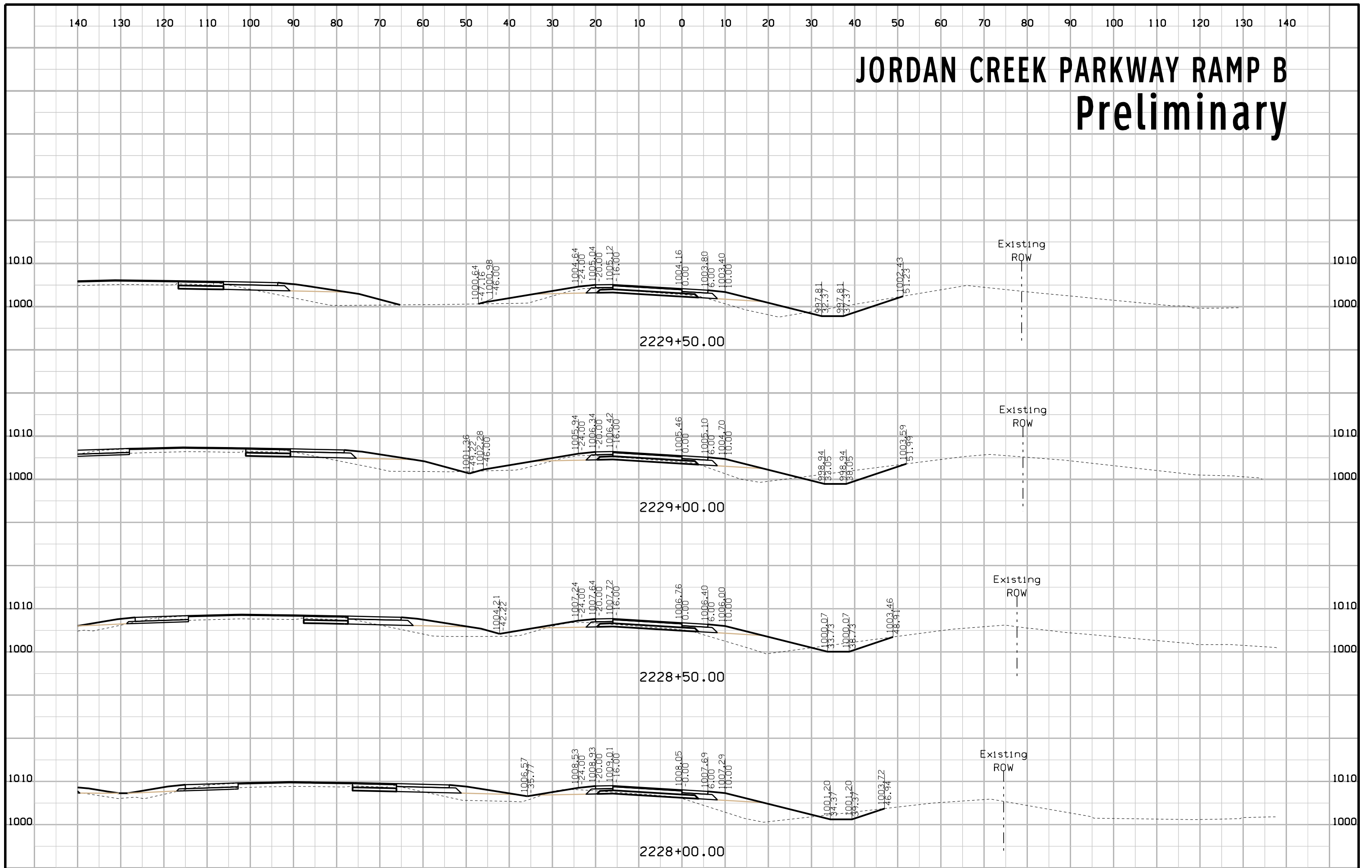
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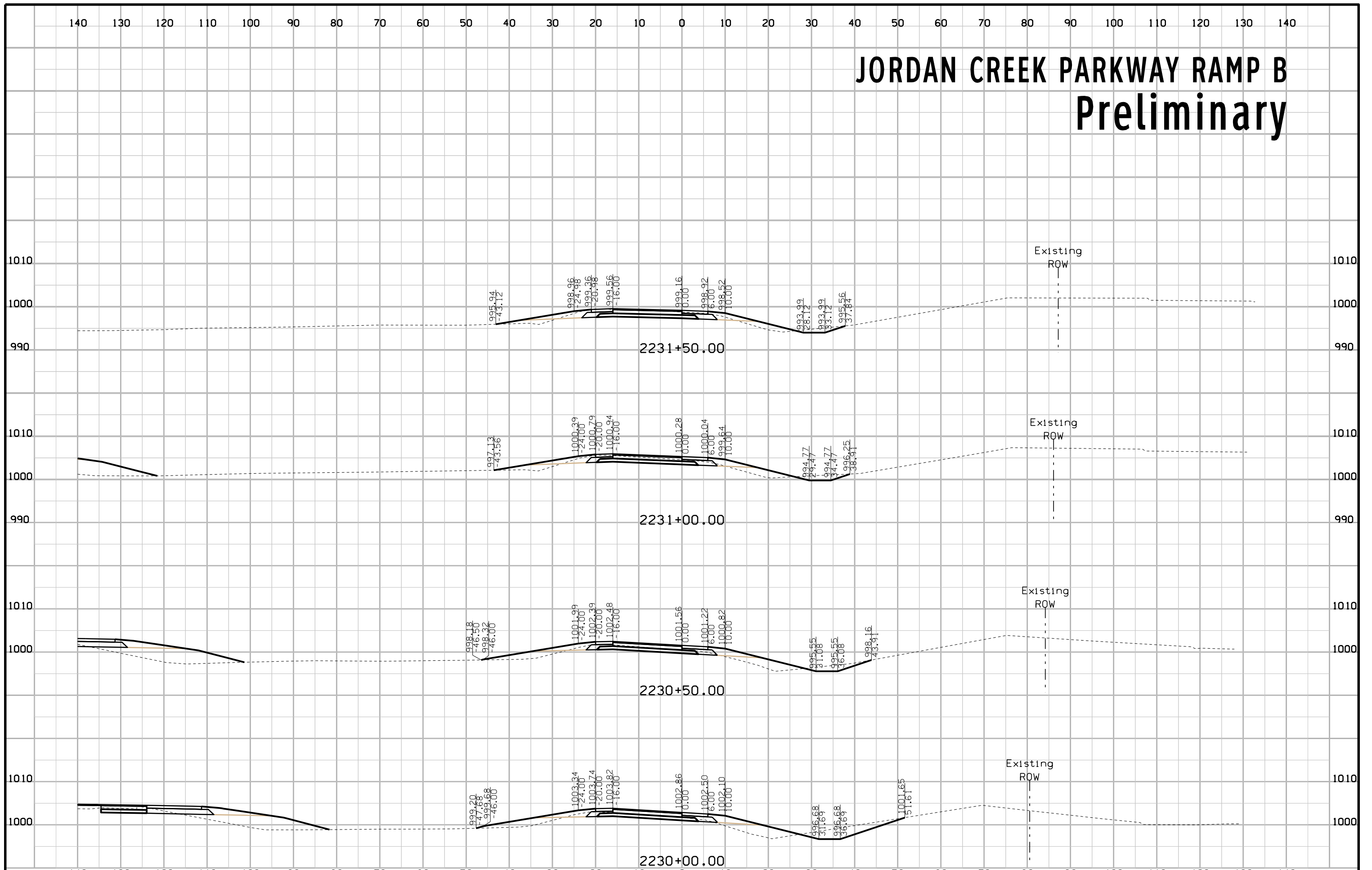
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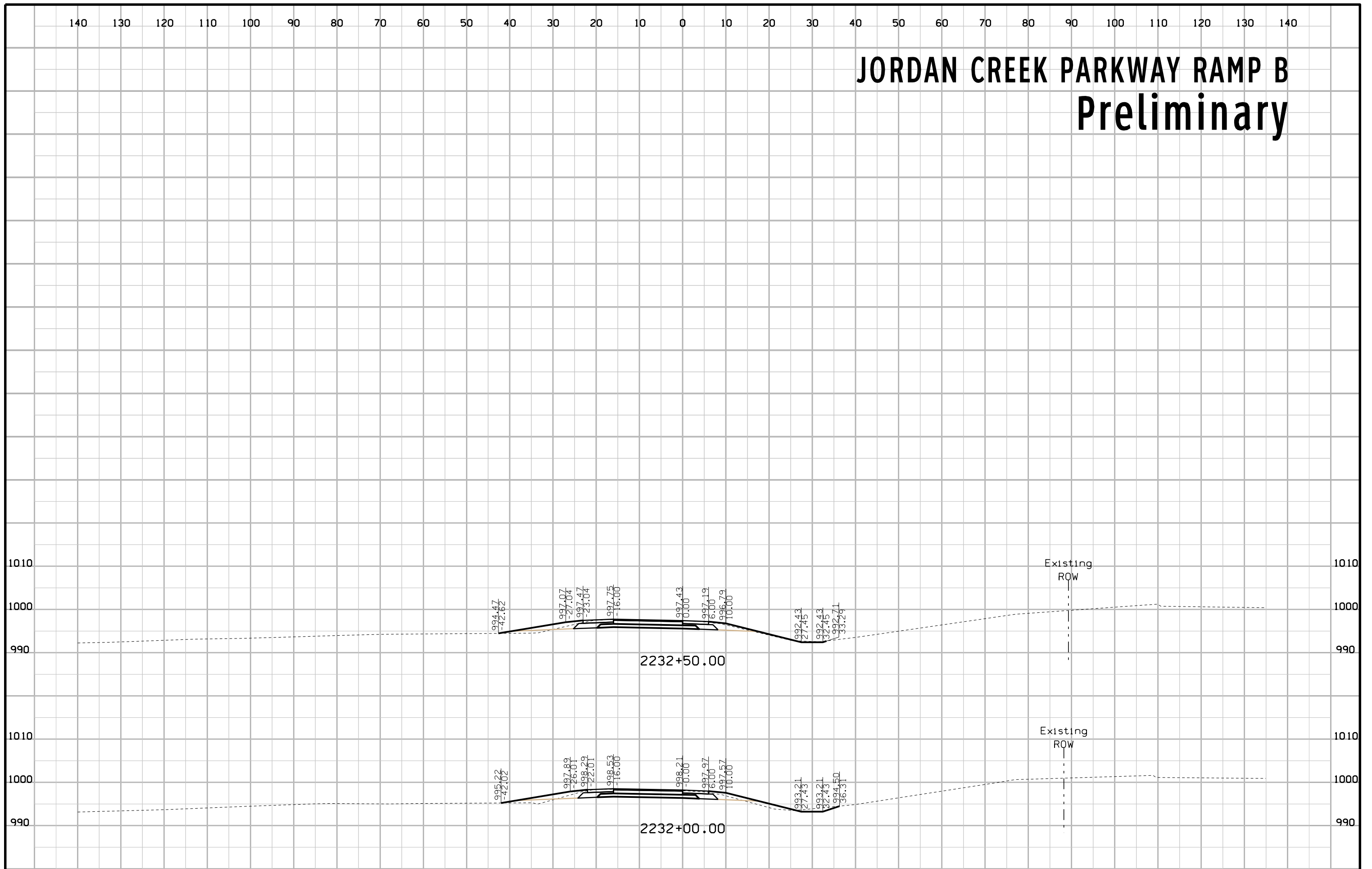
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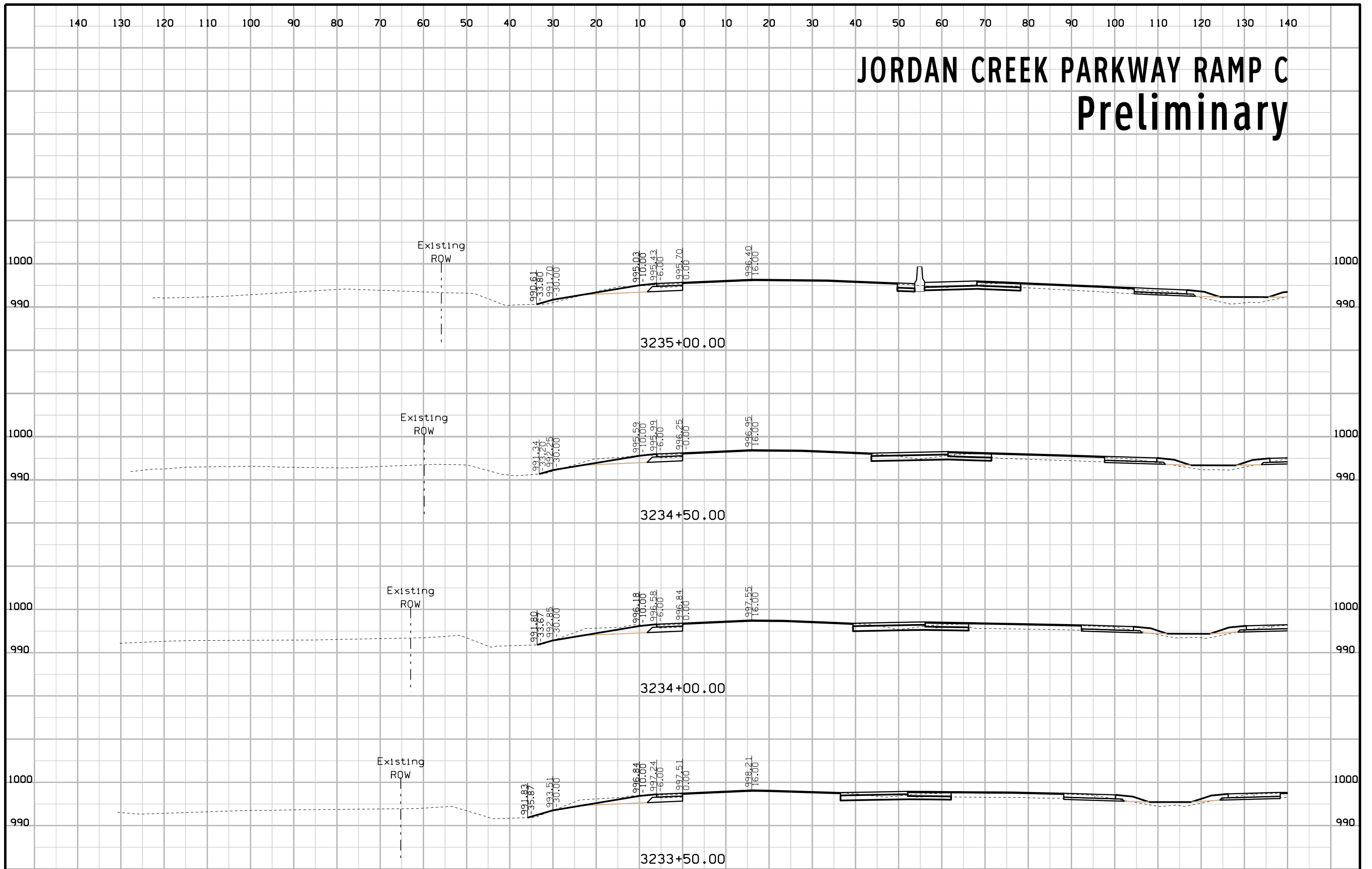
JORDAN CREEK PARKWAY RAMP B Preliminary



JORDAN CREEK PARKWAY RAMP B Preliminary

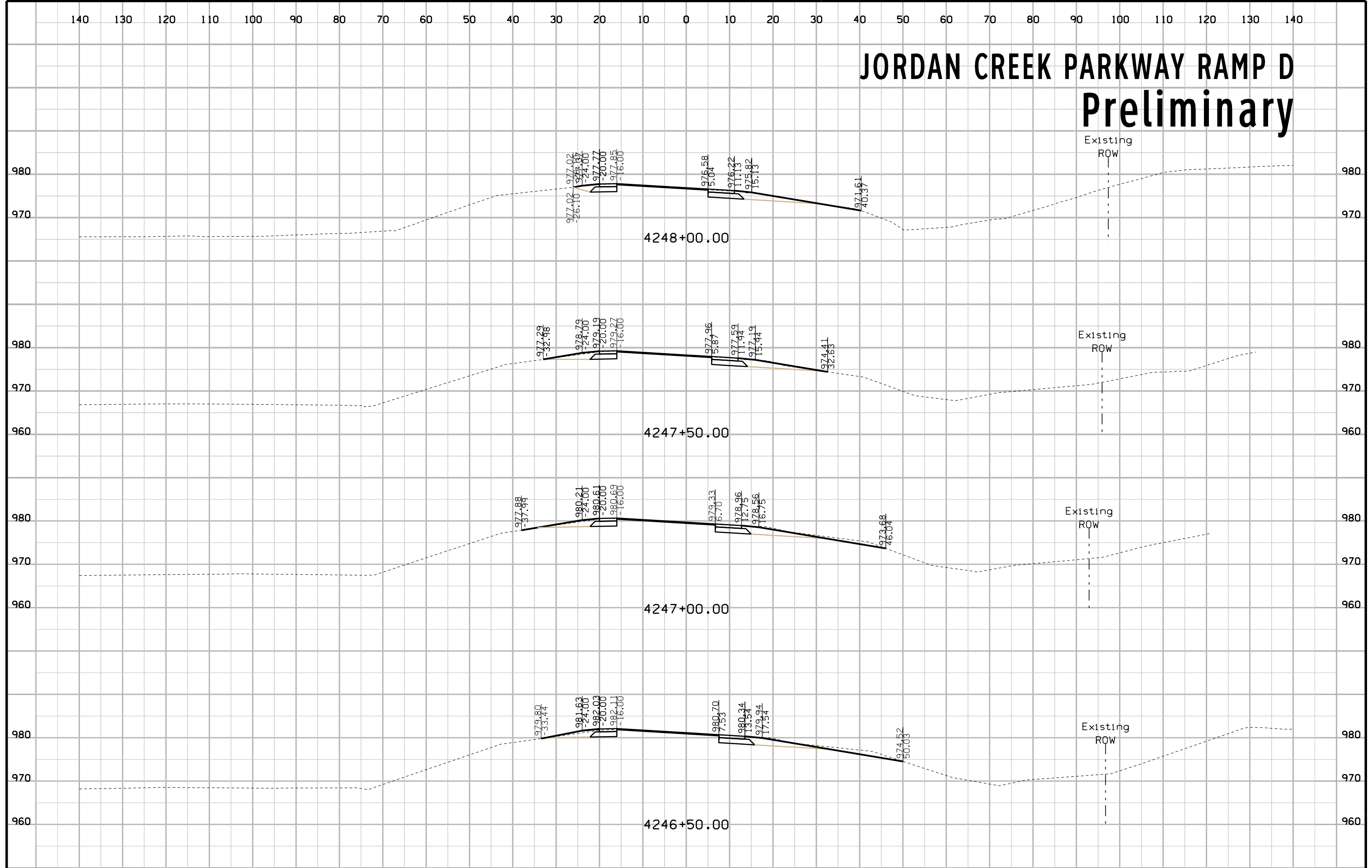


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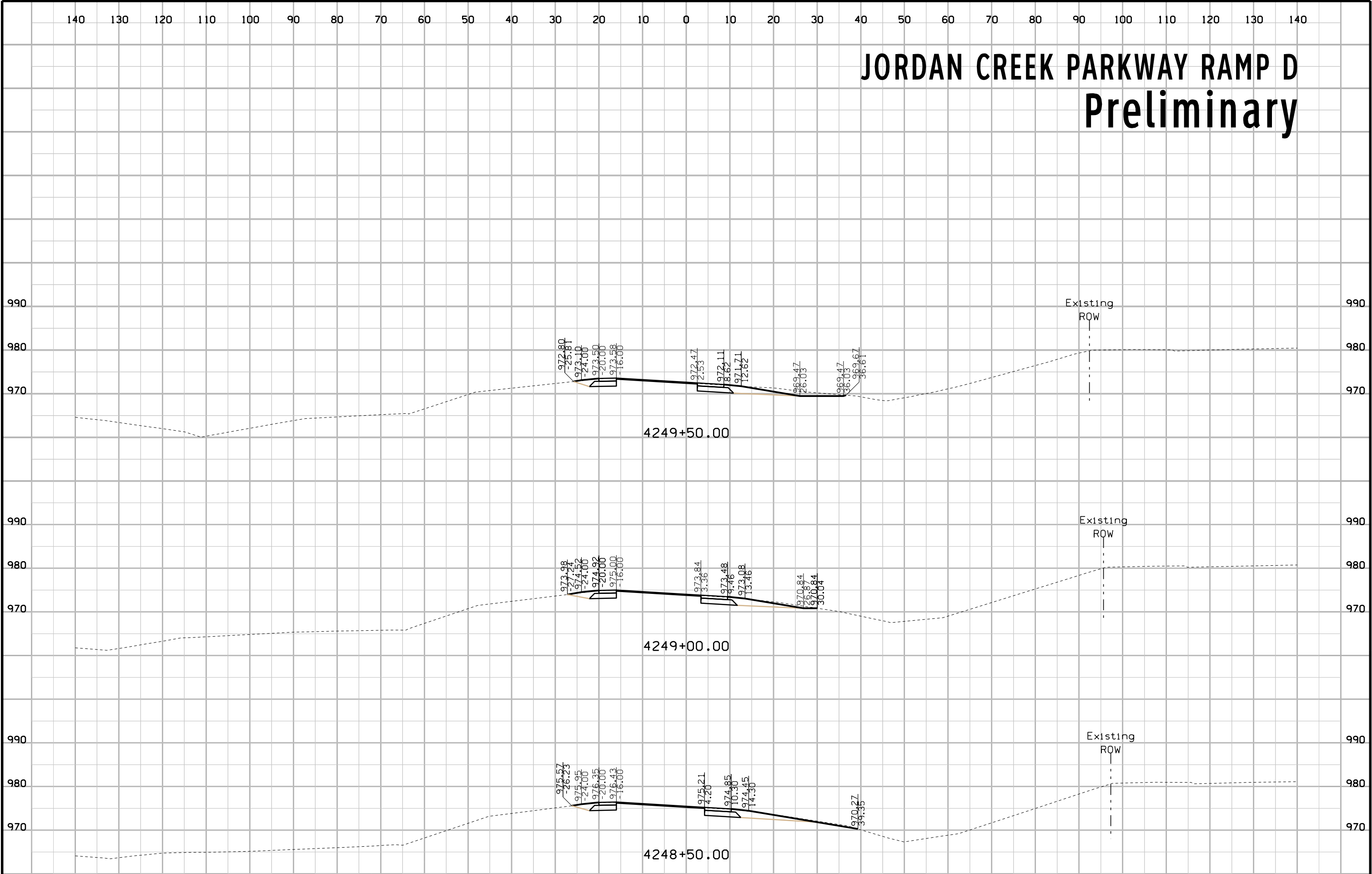


JORDAN CREEK PARKWAY RAMP D

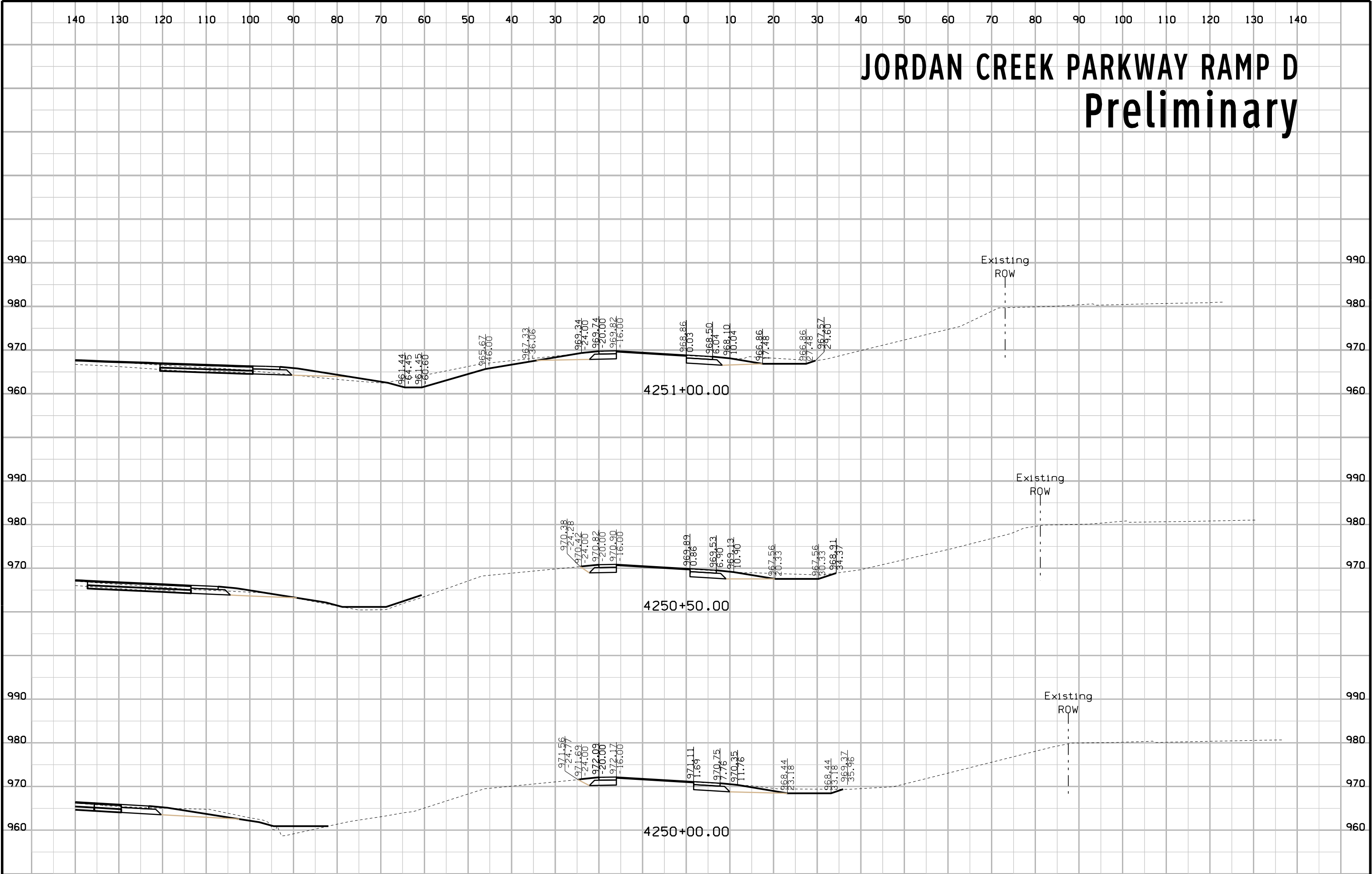
Preliminary



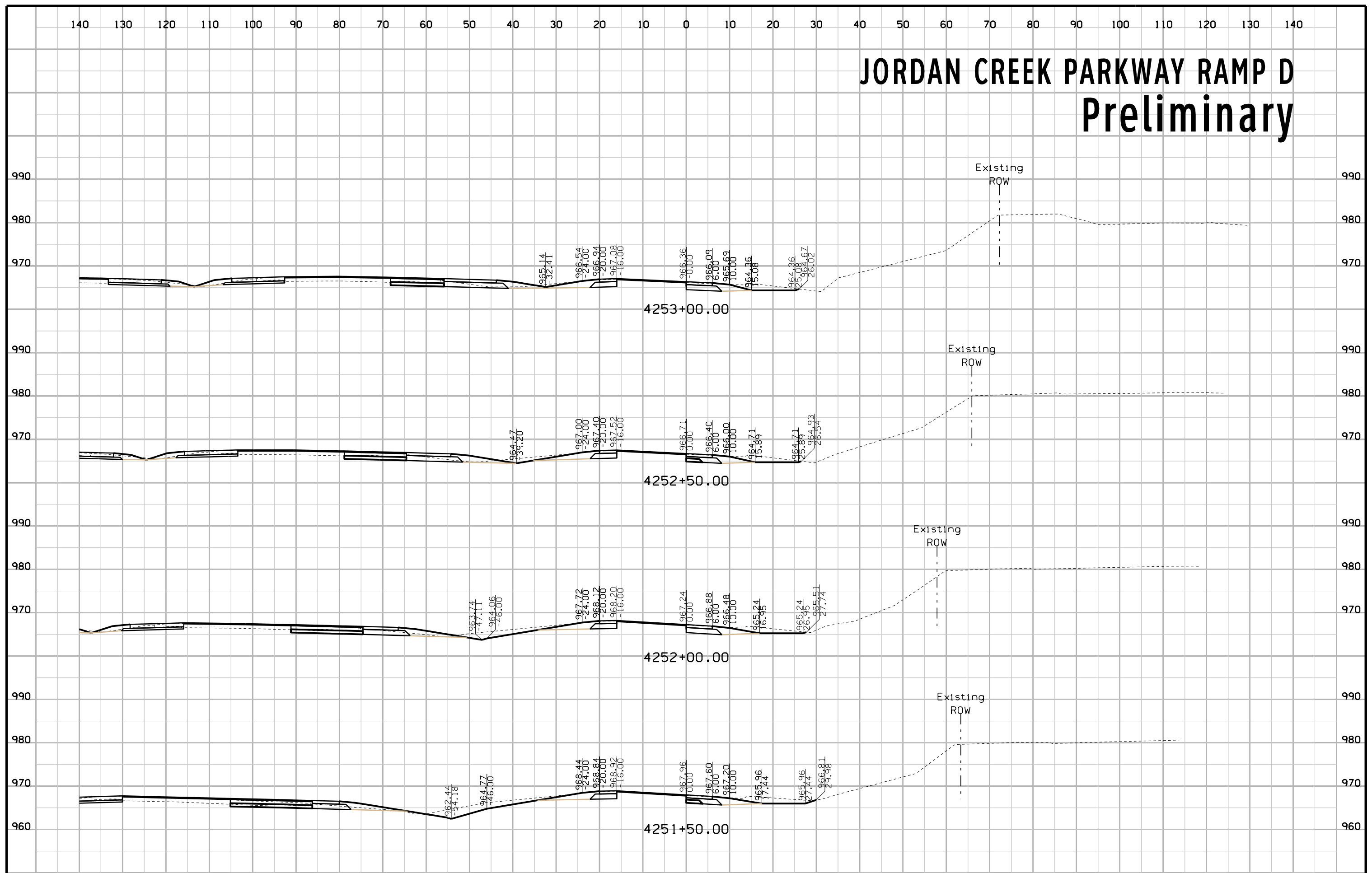
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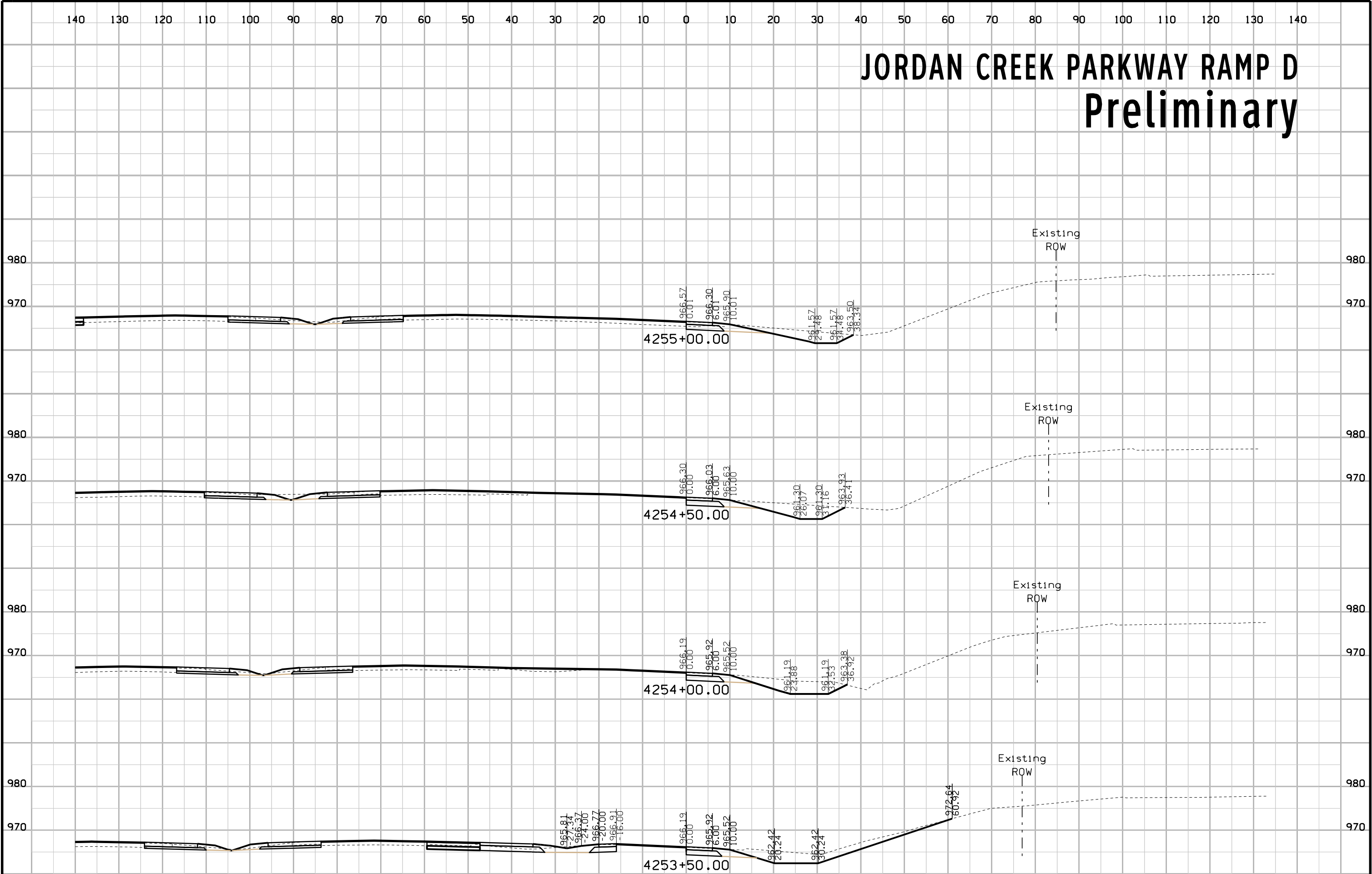
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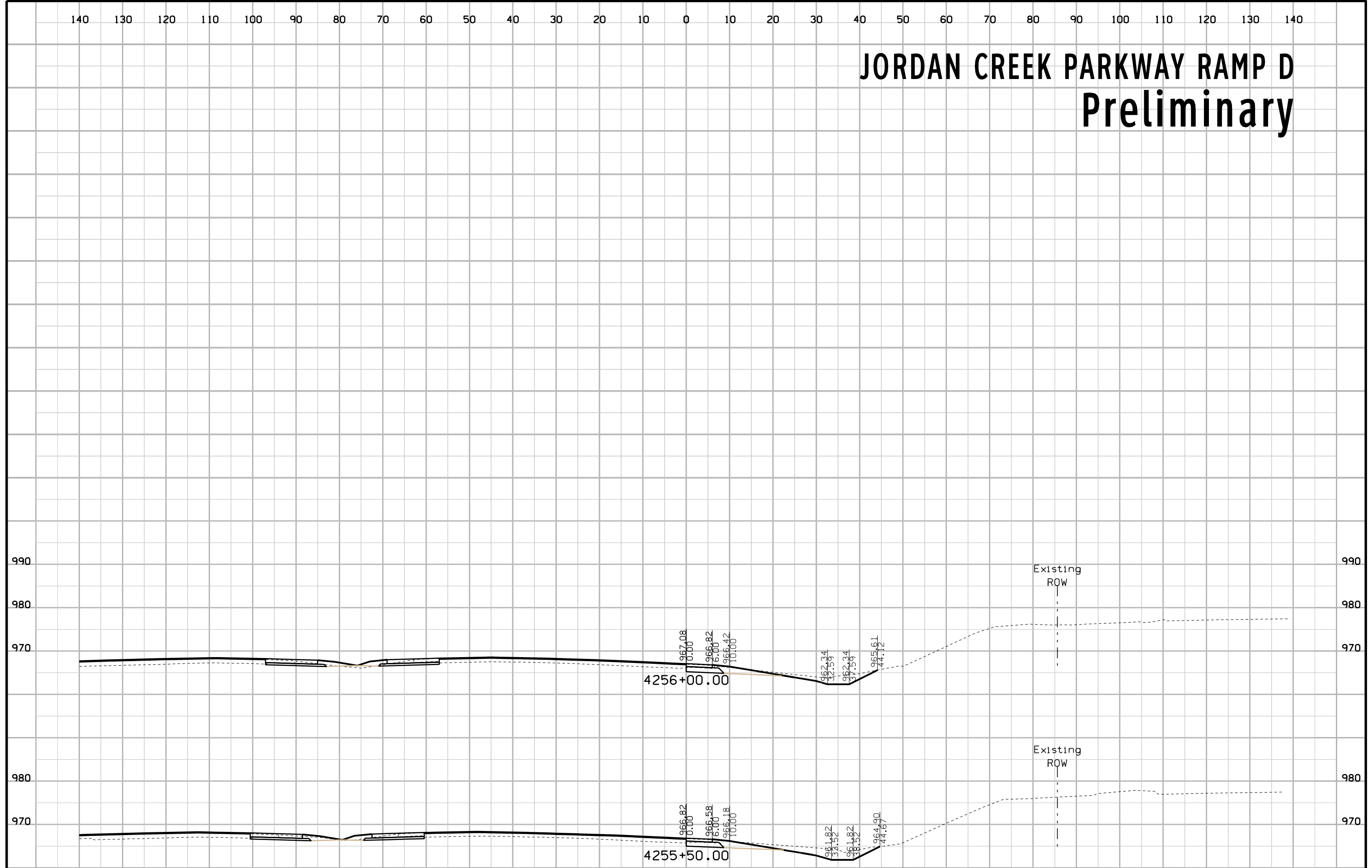
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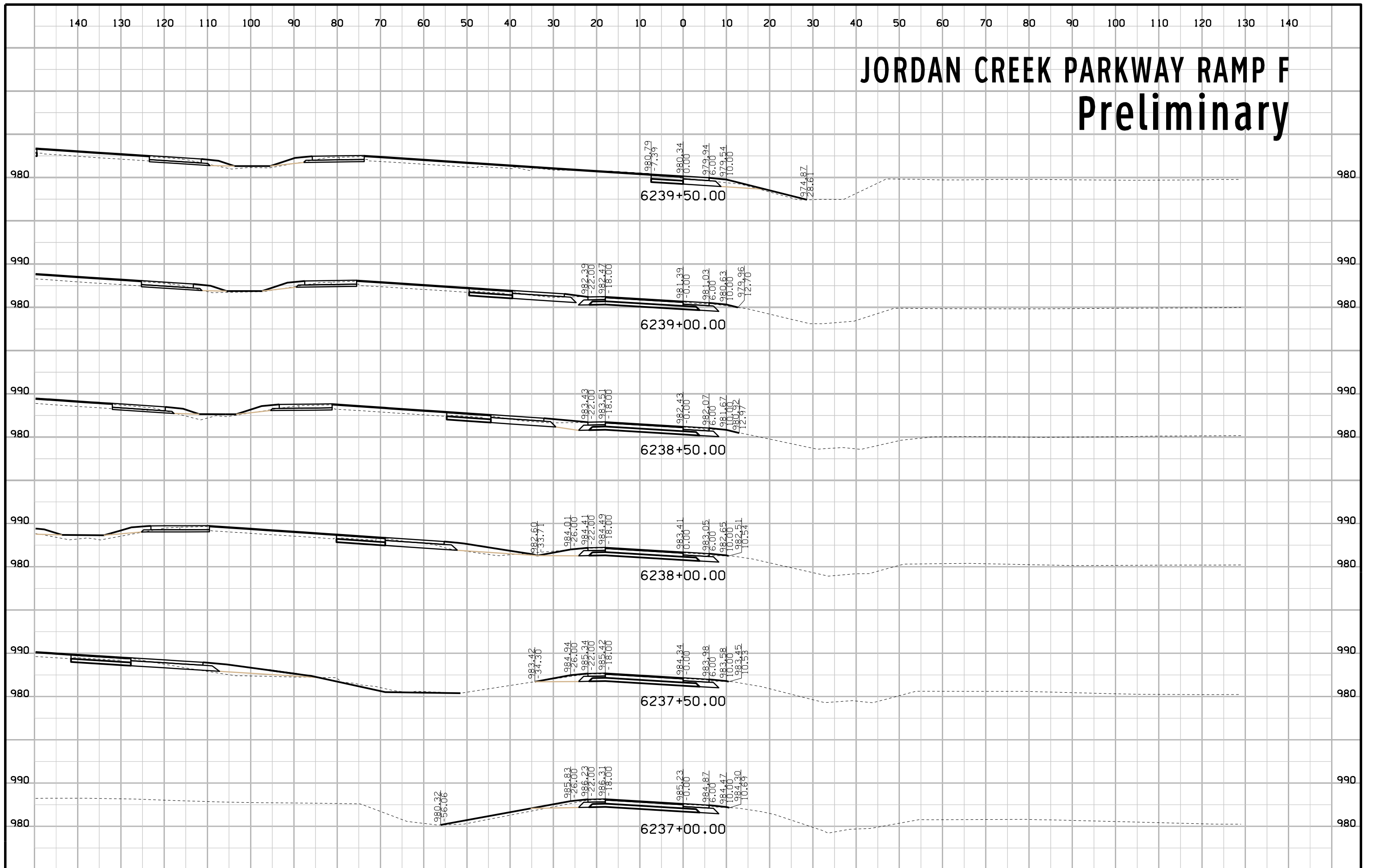
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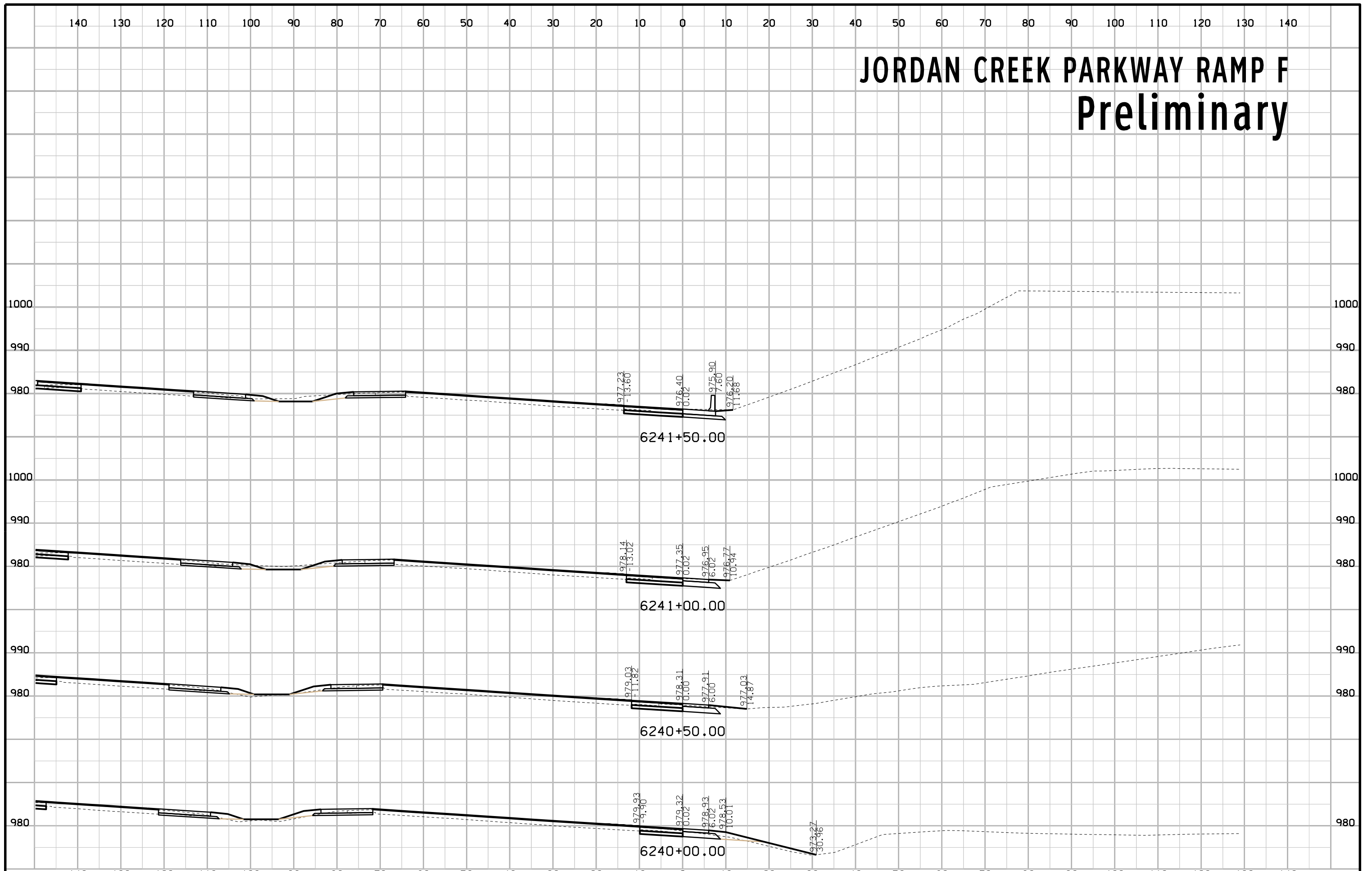
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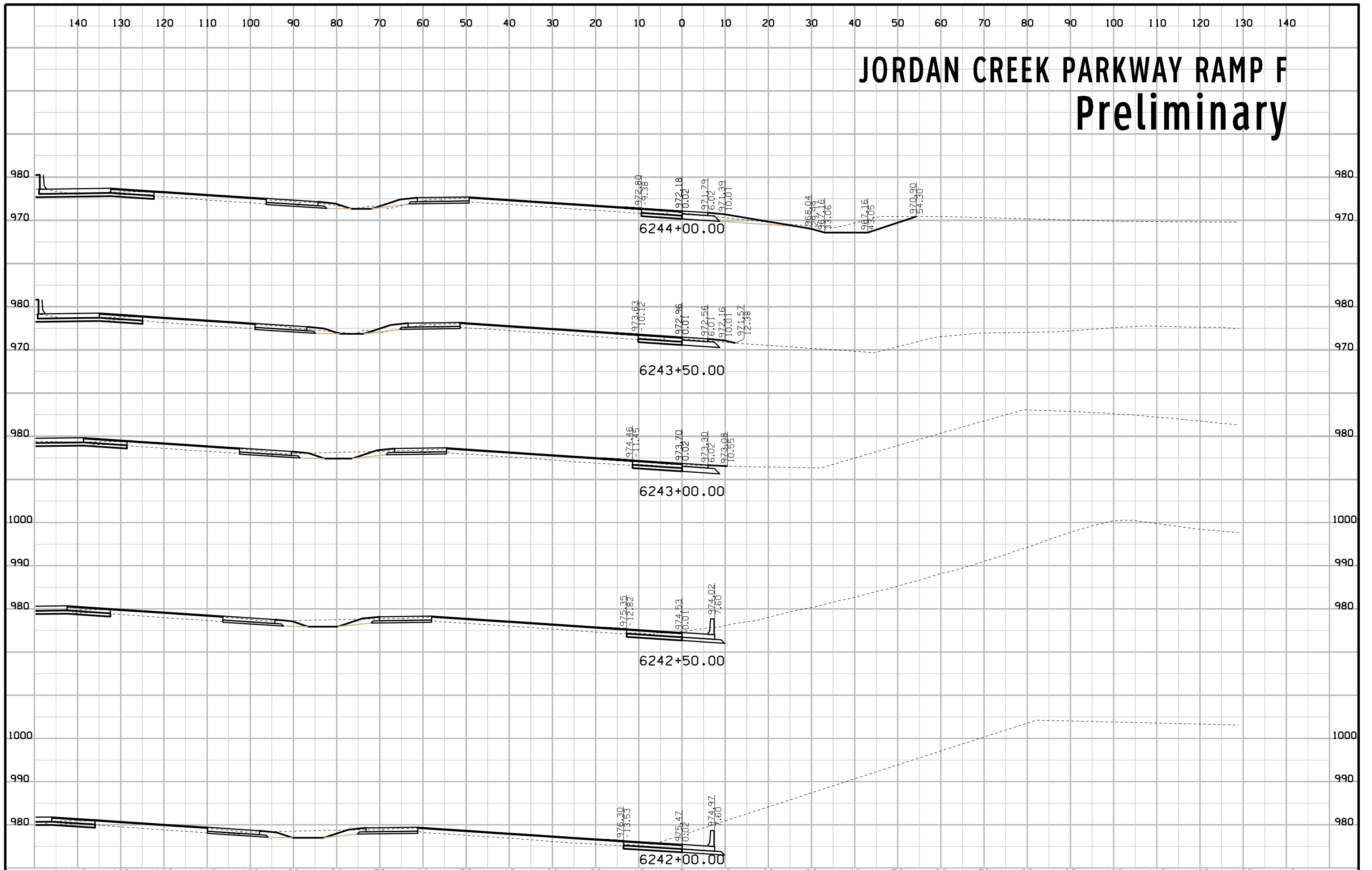
JORDAN CREEK PARKWAY RAMP F Preliminary



JORDAN CREEK PARKWAY RAMP F Preliminary

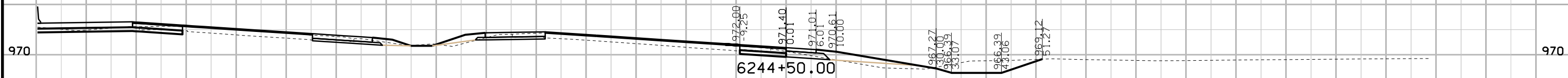


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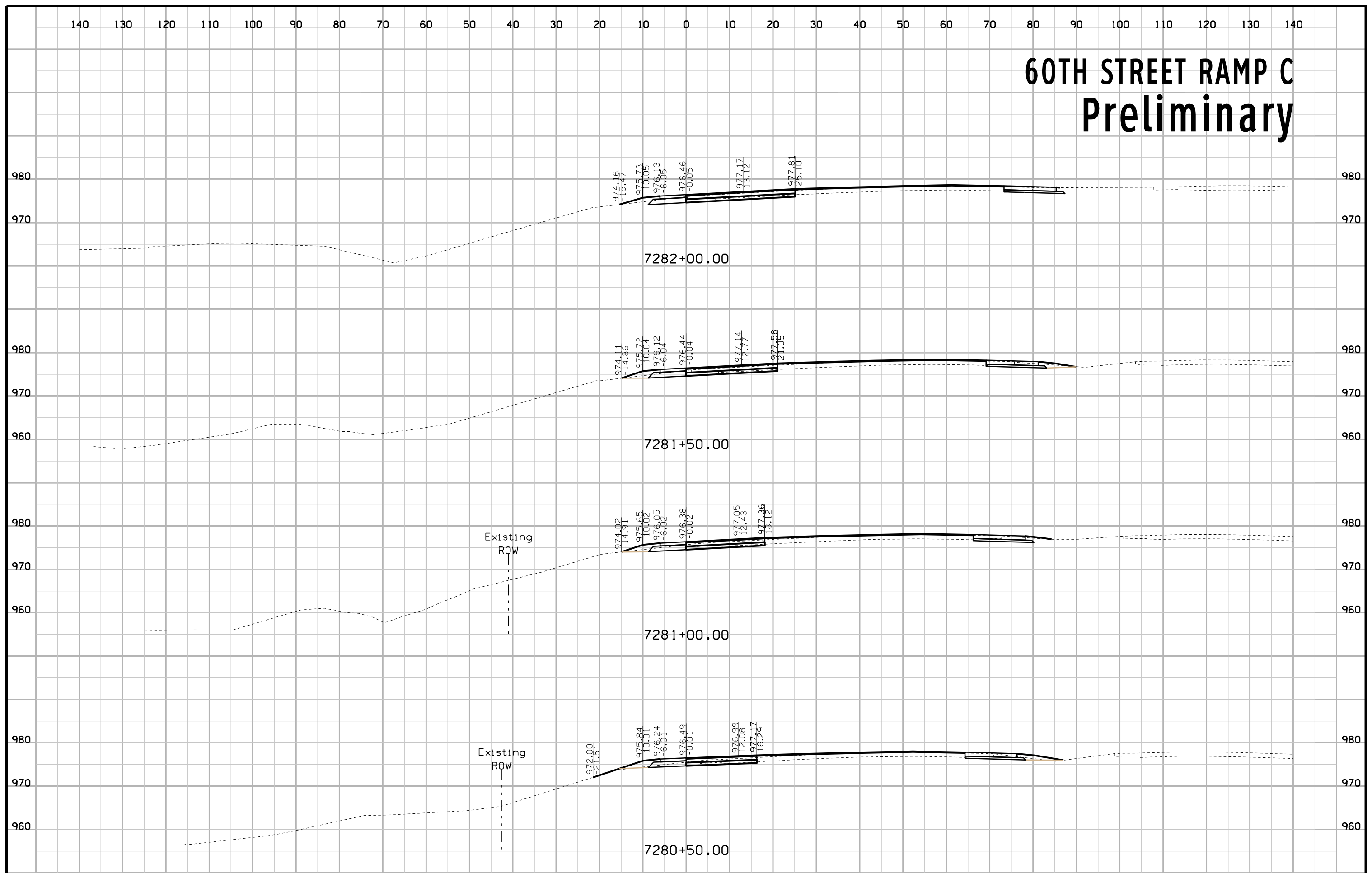


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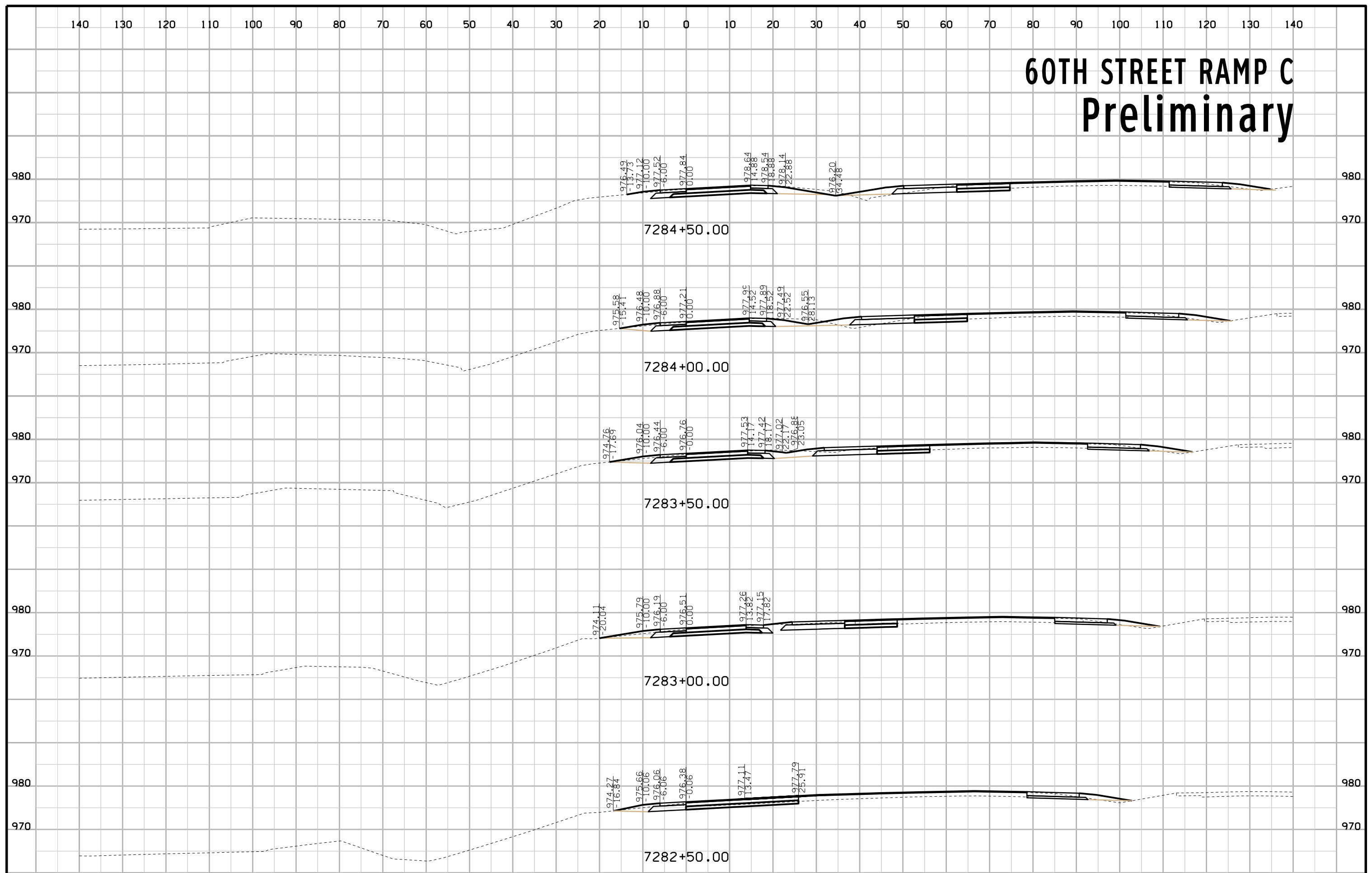
JORDAN CREEK PARKWAY RAMP F Preliminary



60TH STREET RAMP C Preliminary



60TH STREET RAMP C Preliminary



60TH STREET RAMP C Preliminary

