

DELAWARE/DUBUQUE CO.
PCC PAVEMENT - GRADE AND REPLACE
NHSN-020-9(195)--2R-31
 LETTING DATE

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 - 8	Typical Cross Sections and Details
D Sheets	Mainline Plan and Profile Sheets
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2 - 4	US 20
E Sheets	Side Road Plan and Profile Sheets
* E.1 - 8	330th Ave./332th Ave.
* E.9	Industrial Parkway
* E.10 - 11	221st Street
* E.12	218th Street
* E.13	Field of Dreams Way
* E.14	330th Avenue - Channel
* E.15	320th Avenue/7th Street SW
G Sheets	Survey Sheets
G.1 - 3	Reference Ties and Bench Marks
G.4 - 5	Horizontal Control Tab. & Super for all Alignments
J Sheets	Traffic Control and Staging Sheets
* J.1	Traffic Control Plan
* J.2	Traffic Control & Staging Legend & Symbol Info. Sheet
* J.3	Staging Typical Section
* J.4 - 8	Staging and Traffic Control Sheets Stage 1
* J.9 - 13	Staging and Traffic Control Sheets Stage 2
* J.14	Staging and Traffic Control Sheet Stage 3
K Sheets	Interchange Sheets
* K.1 - 2	Interchange Layout Sheets
* K.3	330th Ave./332th Ave. RAMP A Plan and Profile Sheets
* K.4	330th Ave./332th Ave. RAMP B Plan and Profile Sheets
* K.5	330th Ave./332th Ave. RAMP C Plan and Profile Sheets
* K.6	330th Ave./332th Ave. RAMP D Plan and Profile Sheets
V Sheets	Bridge and Culvert Situation Plans
V.1 - 2	Bridge and Culvert Situation Plans
W Sheets	Mainline Cross Sections
W.1	Cross Sections Legend & Symbol Information Sheet
W.2 - 20	Mainline US 20 Cross Sections - Stage 1
W.21 - 40	Mainline US 20 Cross Sections - Stage 2
X Sheets	Side Road Cross Sections
X.1 - 31	Side Road 330th Ave./332th Ave. Cross Sections
X.32 - 38	Side Road Industrial Parkway Cross Sections
X.39 - 55	Side Road 221st Street Cross Sections
X.56 - 65	Side Road 218th Street Cross Sections
X.66 - 76	Side Road Field of Dreams Way Cross Sections
X.77 - 81	Side Road 330th Avenue - Channel
Y Sheets	Ramp Cross Sections
Y.1 - 8	Ramp A Cross Sections
Y.9 - 16	Ramp B Cross Sections
Y.17 - 27	Ramp C Cross Sections
Y.28 - 37	Ramp D Cross Sections
	* Color Plan Sheets



Iowa Department of Transportation

Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM

DELAWARE/DUBUQUE COUNTIES

PCC PAVEMENT - GRADE AND REPLACE

BRIDGE NEW - PPCB

U.S. 20 Interchange at 330th Avenue/332nd Avenue

SCALES: As Noted

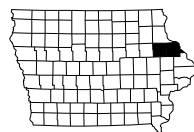
Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.15 of the Specifications.



MILEAGE SUMMARY			
		105-1	
		09-27-94	
Div.	Location	Lin. Ft.	Miles
1	US 20		
	Sta. 1039+98.04 to Sta. 1077+25.00	3726.96	
	330th Avenue		
	Sta. 11037+07.02 to Sta. 11059+90.41	2283.39	
	332nd Avenue		
	Sta. 11059+90.41 to Sta. 11082+51.85	2261.44	
	Industrial Parkway		
	Sta. 21046+49.14 to Sta. 21053+69.86	720.72	
	Field of Dreams Way		
	Sta. 51074+02.60 to Sta. 51086+18.48	1215.88	
	Ramp A		
	Sta. 2065+44.21 to Sta. 2077+25.00	1180.79	
	Ramp B		
	Sta. 3050+50.00 to Sta. 3062+35.32	1185.32	
	Ramp C		
	Sta. 4049+98.04 to Sta. 4065+85.11	1587.07	
	Ramp D		
	Sta. 5061+94.60 to Sta. 5077+69.92	1575.32	
	221st Street		
	Sta. 31053+93.86 to Sta. 31094+91.50	4097.64	
	218th Street		
	Sta. 41053+46.33 to Sta. 41073+78.41	2032.08	
	Deduct Bridge at Sta. 1063+89.71	252.00	
	Total Length of Roadway	21614.61	4.094
	Total Length of Bridge	252.00	0.048
	Total Length of Project	21866.61	4.141

PRELIMINARY EARTHWORK QUANTITY SUMMARY			
	Excavation (CYD)	Fill +30% (CYD)	Borrow (CYD)
Northside (Incl. WB US 20)	149,539	160,849	11,310
Southside (Incl. EB US 20)	211,843	218,158	6,315
(Refer to Profiles for Breakdown by Road Segments)			



For Project Location Map Refer to Sheet A.2

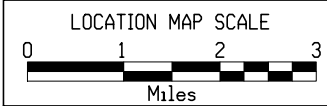
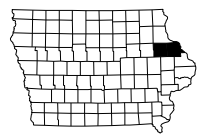
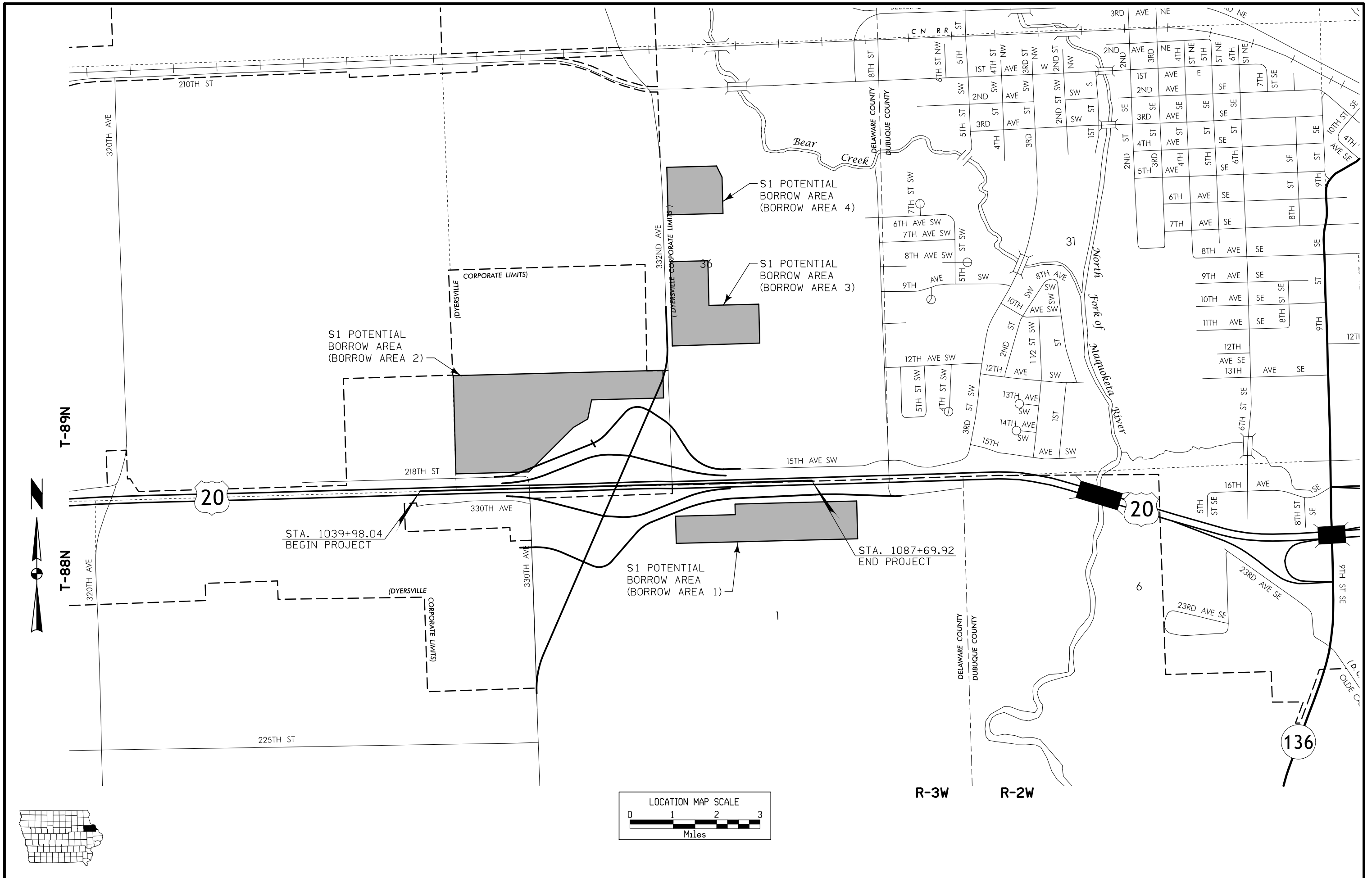
DESIGN DATA RURAL			
2015 AADT	14,662	V.P.D.	
2035 AADT	22,113	V.P.D.	
20-- DHV	--	V.P.H.	
TRUCKS	25%	%	
Total Design ESALs	--		

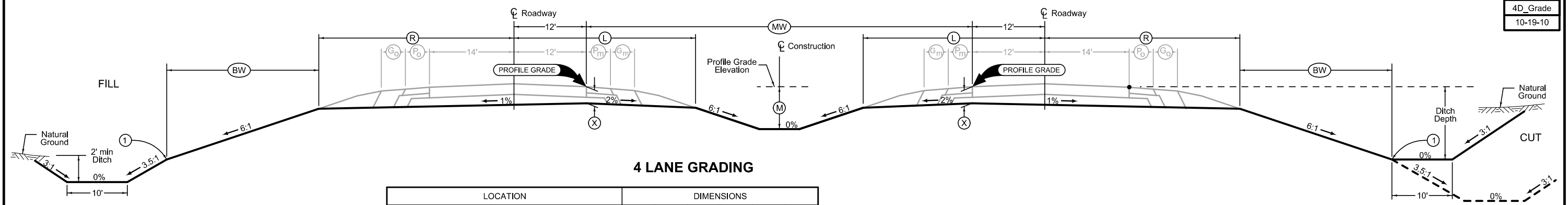
INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	X	Primary Signature Block
X	X	X

PRELIMINARY PLANS

Subject to change by final design.

D5 PLAN - Date: JAN 11, 2013





4 LANE GRADING

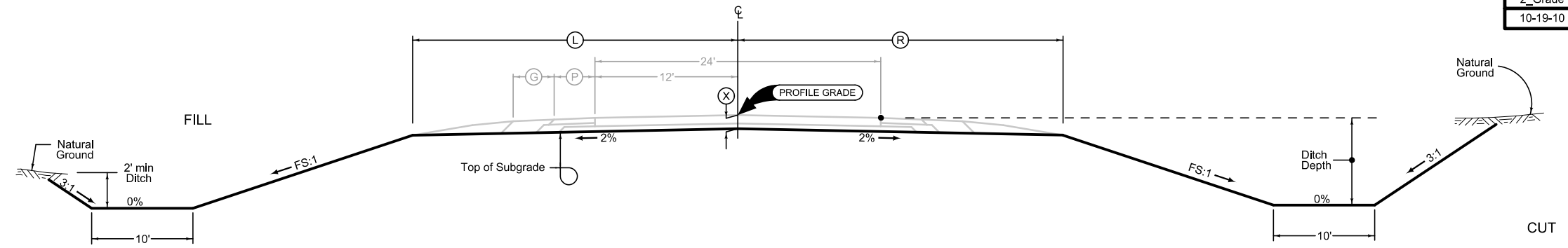
Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See Plan & Profile sheets and cross sections for additional details of ditches and backslopes.

① Refer to project plan and cross sections for specific location of foreslope change.

ROAD IDENTIFICATION	LOCATION		DIMENSIONS						
	STATION TO STATION		L Feet	R Feet	X Inches	BW Feet	MW Feet	M Feet	
US 20	1039+98.04	1077+25.00	28.1	32.1	16	19.6	50	3	

LOCATION		DIMENSIONS			
ROAD IDENTIFICATION	STATION TO STATION	(L) Feet	(R) Feet	(X) Inches	FS
330TH AVENUE	11037+07.02 - 11059+90.41	27.7-41.9	27.7-47.7	16	4
332ND AVENUE	11059+90.41 - 11082+51.85	27.7-47.7	27.7-47.7	16	4
INDUSTRIAL PARKWAY	21046+49.14 - 21053+69.86	38.2	38.2	16	4
221ST STREET	31053+93.86 - 31094+91.50	24.0	24.0	16	4
FIELD OF DREAMS WAY	51074+02.60 - 51086+18.48	38.2	38.2	16	4



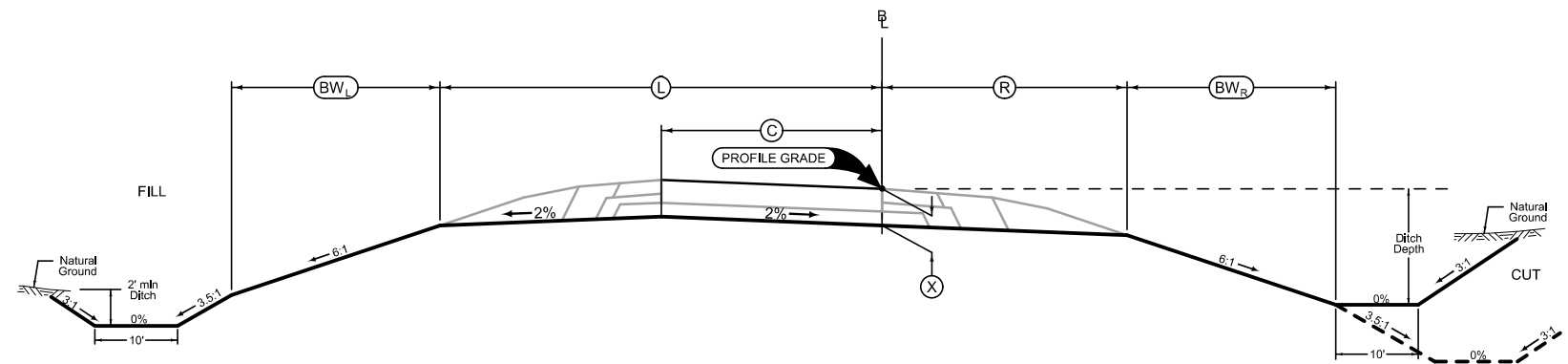
Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See plan & profile sheets and cross sections for additional details of ditches and backslopes.

2 LANE GRADING

2_Grade
10-19-10

LOCATION			DIMENSIONS					
INTERCHANGE	RAMP	STATION TO STATION	(L) Feet	(R) Feet	(C) Feet	(X) Inches	(BW) _L Feet	(BW) _R Feet
330/332	A	2065+44.21 - 2067+42.61	30.36	28.09	16	16	20.27	20.06
330/332	A	2067+42.61 - 2069+22.61	30.36	VARIES	16	16	20.27	20.06
330/332	A	2069+22.61 - 2077+25.00	30.36	16.09	16	16	20.27	20.06
330/332	B	3050+50.00 - 3058+58.92	30.36	16.09	16	16	20.27	20.06
330/332	B	3058+58.92 - 3060+38.92	30.36	VARIES	16	16	20.27	20.06
330/332	B	3060+38.92 - 3062+35.32	30.36	28.09	16	16	20.27	20.06
330/332	C	4049+98.04 - 4065+85.11	30.36	16.09	16	16	20.27	20.06
330/332	D	5061+94.60 - 5077+69.92	30.36	16.09	16	16	20.27	20.06



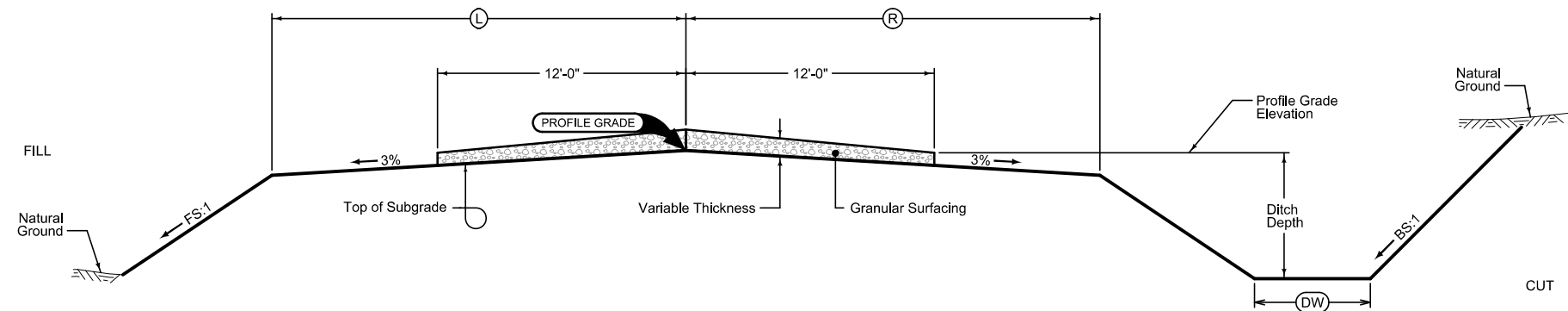
Section view is in direction of traffic.

Normal sections shown may be appropriately modified for areas specifically designated by the Engineer such as intersections or superelevated curves.

RAMP GRADING

1R_Grade
10-18-11

LOCATION		DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION	(L) Feet	(R) Feet	FS	BS	(DW) Feet
218TH STREET	41053+46.33 - 41073+78.41	16	16	4	3	10



Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See plan & profile sheets and cross sections for additional details of ditches and backslopes.

Place Granular Surfacing as follows:
Grading design application rate is 2330 tons per mile.
Paving design application rate is 0 tons per mile.

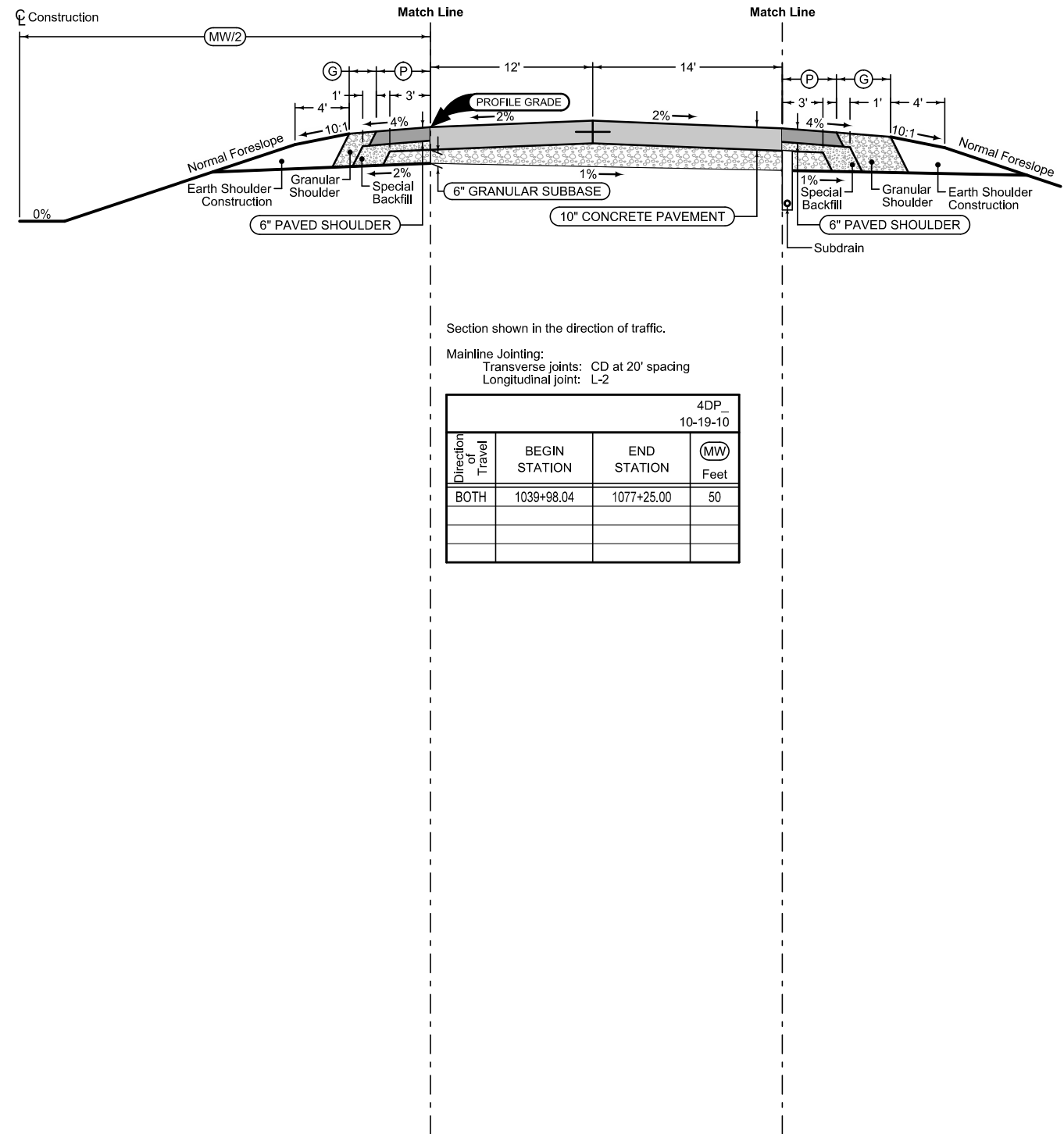
GRADING AND GRANULAR SURFACING

2_GradeGran
04-17-12

Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

Direction of Travel	BEGIN STATION	END STATION	4_C_	
			(P) Feet	(G) Feet
BOTH	1039+98.04	1077+25.00	4	2



Section shown in the direction of traffic.

Mainline Jointing:
Transverse joints: CD at 20' spacing
Longitudinal joint: L-2

Direction of Travel	BEGIN STATION	END STATION	4DP_	
			(MW) Feet	
BOTH	1039+98.04	1077+25.00	50	

Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

Direction of Travel	BEGIN STATION	END STATION	4_C_	
			(P) Feet	(G) Feet
BOTH	1039+98.04	1077+25.00	4	4

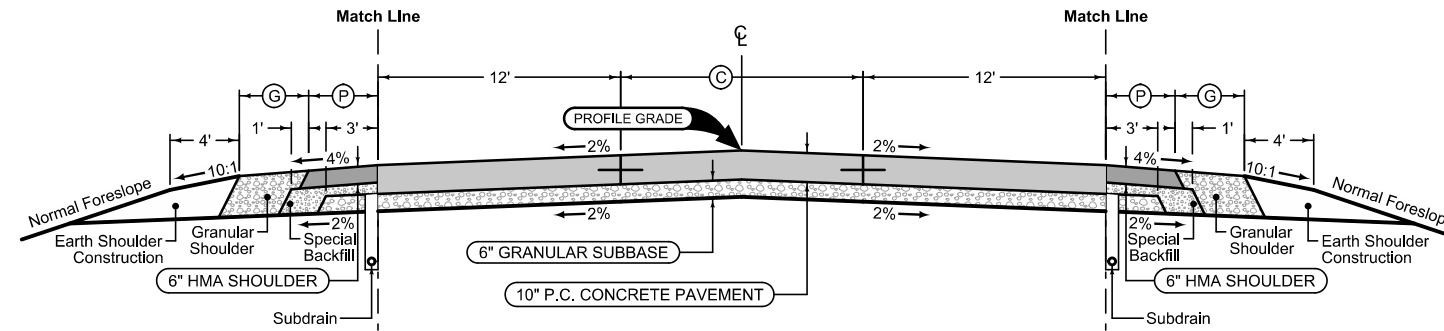
See Tab 100-24 for pavement quantities.
See Tab 112-9 for shoulder quantities.

US HIGHWAY 20

Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

STATION TO STATION		(P) Feet	(G) Feet
11060+14.41	11067+66.41	2	6



Mainline Jointing:
Transverse joints: CD at 20' spacing
Longitudinal joint: L-2

STATION TO STATION		(C) Feet
11060+14.41	11067+66.41	16

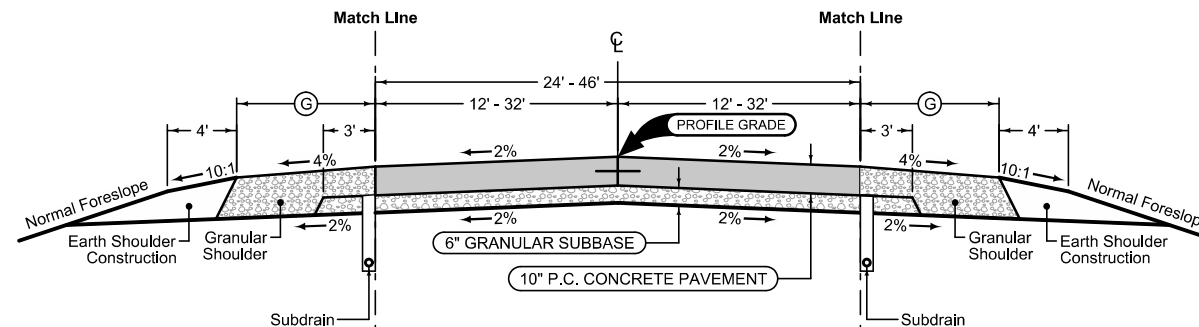
Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

STATION TO STATION		(P) Feet	(G) Feet
11060+14.41	11067+66.41	2	6

Granular Shoulder

STATION TO STATION		(G) Feet
11052+63.36	11059+90.41	8
11067+90.41	11082+51.85	8



Mainline Jointing:
Transverse joints: CD at 20' spacing
Longitudinal joint: L-2

STATION TO STATION	
11052+63.36	11059+90.41
11067+90.41	11082+51.85

Granular Shoulder

STATION TO STATION		(G) Feet
11052+63.36	11059+90.41	8
11067+90.41	11082+51.85	8

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

330TH / 332ND AVENUE

Curbed Shoulder

Shoulder Jointing:
 Longitudinal joint not required when distance from back of
 curb to nearest joint is less than 15':

Single pour: L-2
 Staged: KT-2
 Transverse: C at 20' spacing

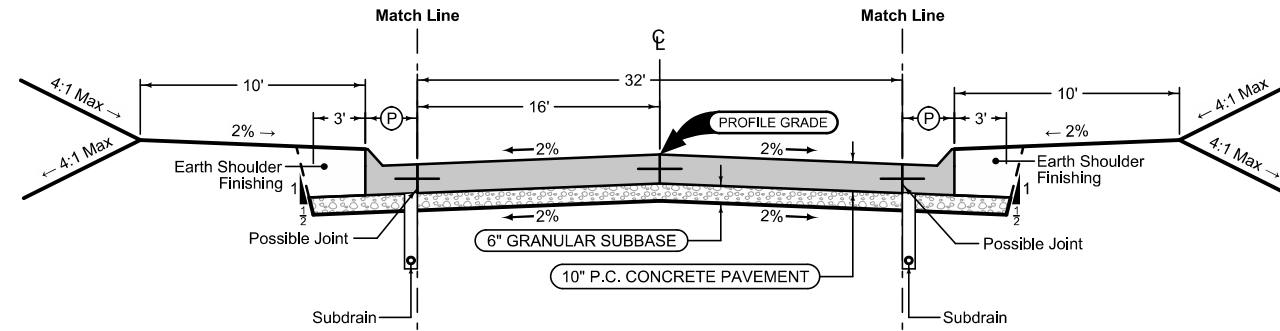
2_Curb_ MODIFIED				
ROAD IDENTIFICATION	STATION TO STATION		(P) Feet	Curb Type See PV-102
INDUSTRIAL PARKWAY	21046+49.14	21049+14.47	2.5	6" STANDARD CURB
FIELD OF DREAMS WAY	51074+71.95	51086+18.48	2.5	6" STANDARD CURB

Curbed Shoulder

Shoulder Jointing:
 Longitudinal joint not required when distance from back of
 curb to nearest joint is less than 15':

Single pour: L-2
 Staged: KT-2
 Transverse: C at 20' spacing

2_Curb_ MODIFIED				
ROAD IDENTIFICATION	STATION TO STATION		(P) Feet	Curb Type See PV-102
INDUSTRIAL PARKWAY	21046+49.14	21053+61.86	2.5	6" STANDARD CURB
FIELD OF DREAMS WAY	51074+33.58	51086+18.48	2.5	6" STANDARD CURB

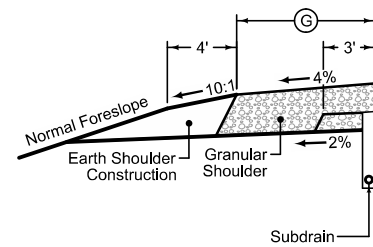


Mainline Jointing:
 Transverse joints: CD at 20' spacing
 Longitudinal joint: L-2

2P_ MODIFIED		
ROAD IDENTIFICATION	STATION TO STATION	
INDUSTRIAL PARKWAY	21046+48.14	21053+69.86
FIELD OF DREAMS WAY	51074+02.60	51086+18.48

Granular Shoulder

2_G_SR_ MODIFIED			
ROAD IDENTIFICATION	STATION TO STATION		(G) Feet
INDUSTRIAL PARKWAY	21049+14.47	21053+69.86	8

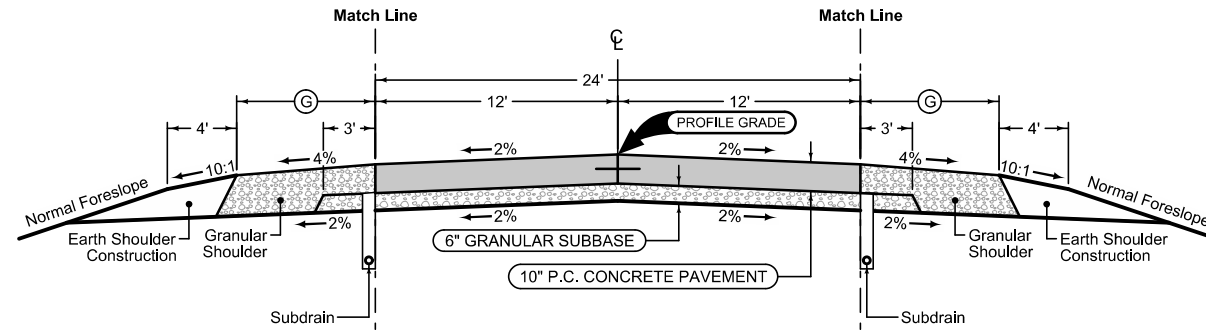


See Tab 100-24 for pavement quantities.
 See Tab 112-9 for shoulder quantities.

INDUSTRIAL PARKWAY & FIELD OF DREAMS WAY

Granular Shoulder

2_G_SR_10-19-10		Ⓞ Feet
STATION TO STATION		
31053+93.86	31094+91.50	4



Granular Shoulder

2_G_SR_10-19-10		Ⓞ Feet
STATION TO STATION		
31053+93.86	31094+91.50	4

Mainline Jointing:
 Transverse joints: CD at 20' spacing
 Longitudinal joint: L-2

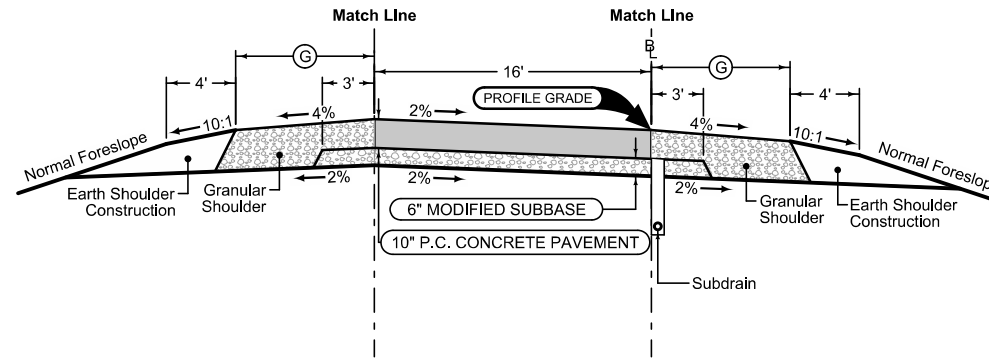
2P_10-19-10	
STATION TO STATION	
31053+93.86	31094+91.50

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

221ST STREET

Granular Shoulder

1R_G_ 10-19-10		
BEGIN STATION	END STATION	⊙ Feet
2069+22.61	2077+25.00	4
3050+50.00	3058+58.92	4
4049+98.04	4065+85.11	4
5061+94.60	5077+69.92	4



Section shown in the direction of traffic.

Ramp Jointing:
Transverse joints: CD at 20' spacing.

1RP_ 10-19-10	
BEGIN STATION	END STATION
2065+44.21	2077+25.00
3050+50.00	3062+35.32
4049+98.04	4065+85.11
5061+94.60	5077+69.92

Granular Shoulder

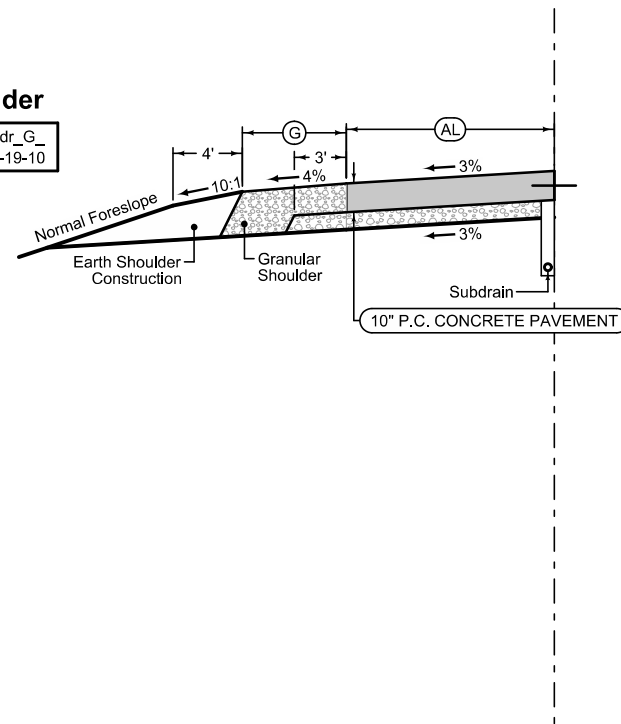
1R_G_ 10-19-10		
BEGIN STATION	END STATION	⊙ Feet
2065+44.21	2077+25.00	6
3050+50.00	3062+35.32	6
4049+98.04	4065+85.11	6
5061+94.60	5077+69.92	6

Auxiliary Lane

Longitudinal joint: L or KT
Transverse joint: Match Mainline

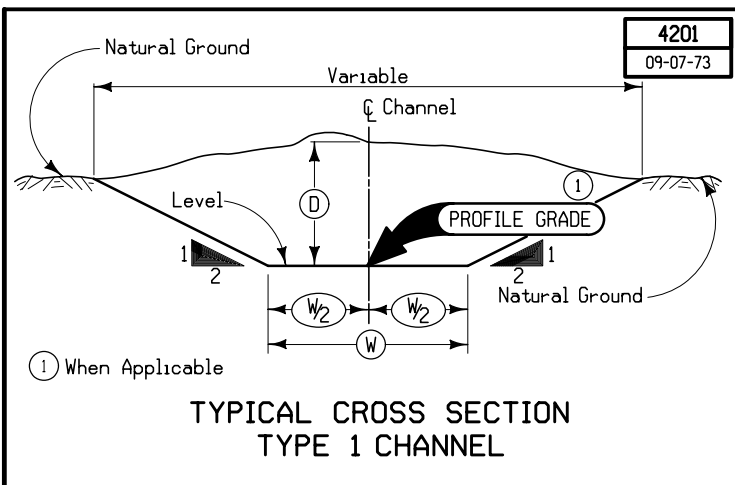
2_AuxLane_PCC_ 10-19-10		2_AL_Shldr_G_ 10-19-10	
STATION TO STATION	⊙ Feet	⊙ Feet	⊙ Feet
2066+22.41	2067+42.61	8	4
2067+42.61	2069+22.61	0-8	4
3058+58.92	3060+38.92	0-8	4
3060+38.92	3061+56.85	8	4

Auxiliary Lane Granular Shoulder



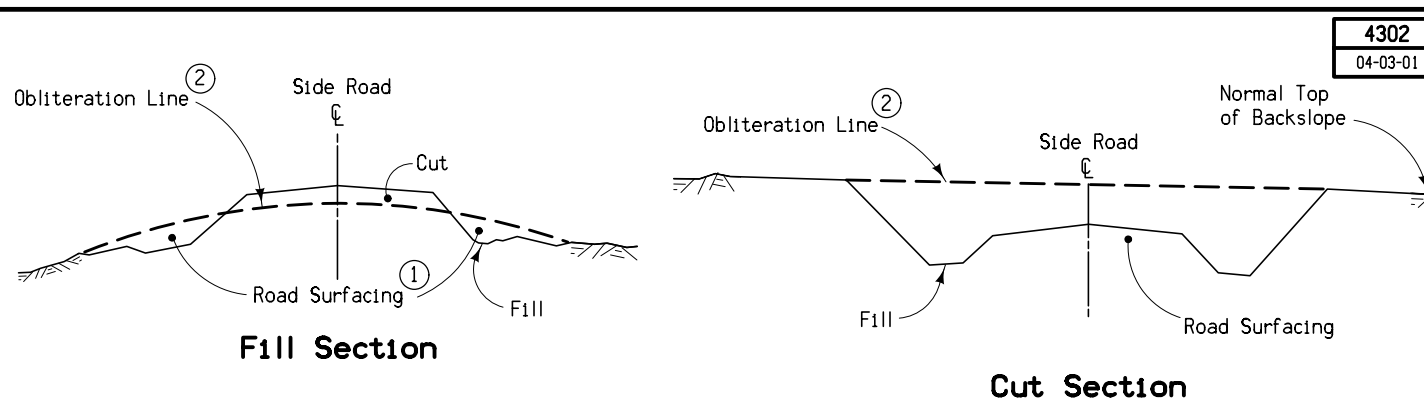
See Tab 100-24 for pavement quantities.
See Tab 112-9 for shoulder quantities.

RAMPS A, B, C, and D



TYPICAL CROSS SECTION
TYPE 1 CHANNEL

LOCATION		WIDTH	DEPTH (Average)
STATION	SIDE	(W)	(D)
2032+50 to 2045+25	BOTH	Refer to XS	5ft

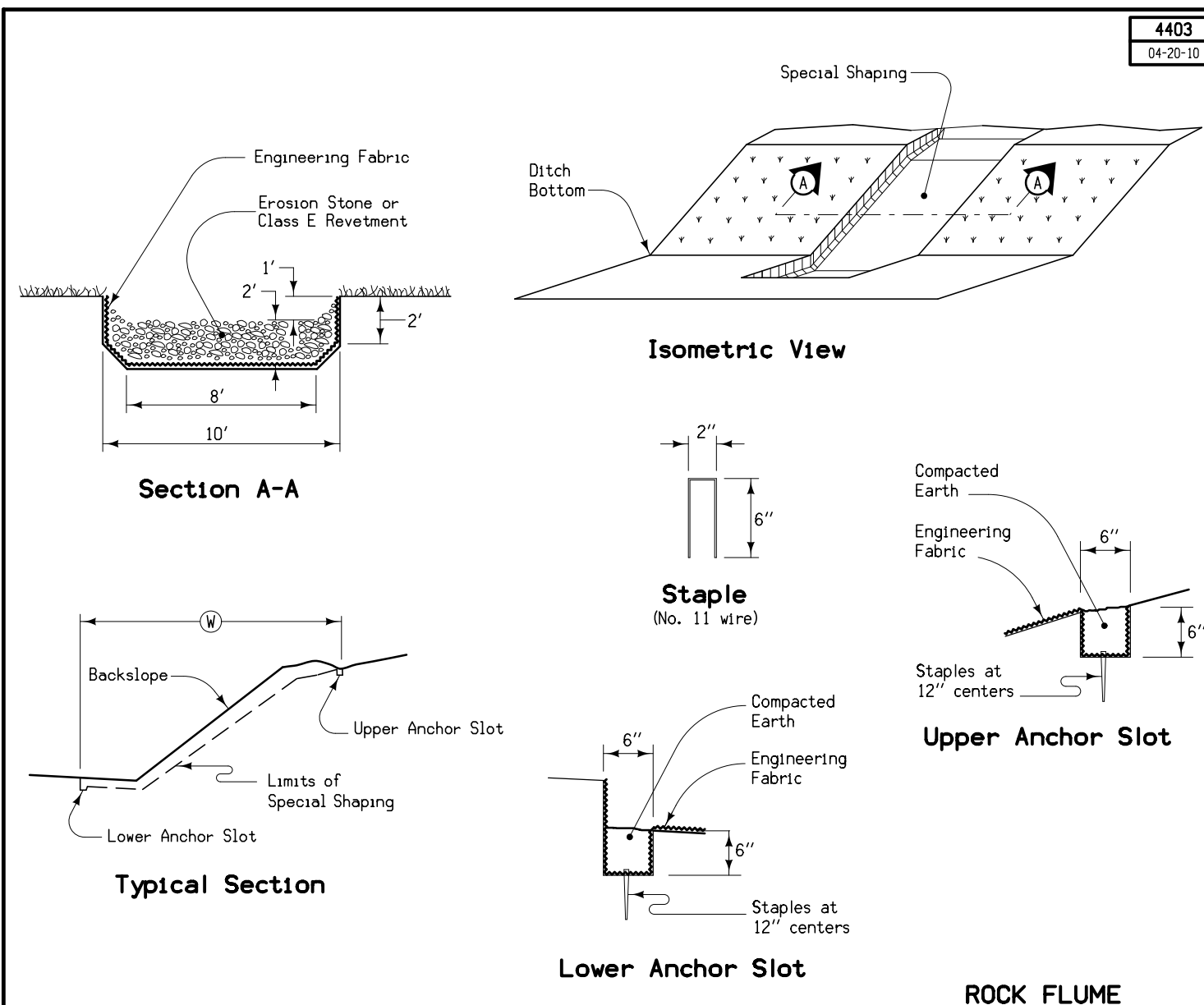


① Existing road surfacing (granular material) shall be placed as shown unless otherwise directed by the Engineer or provided for in the detail project plans.

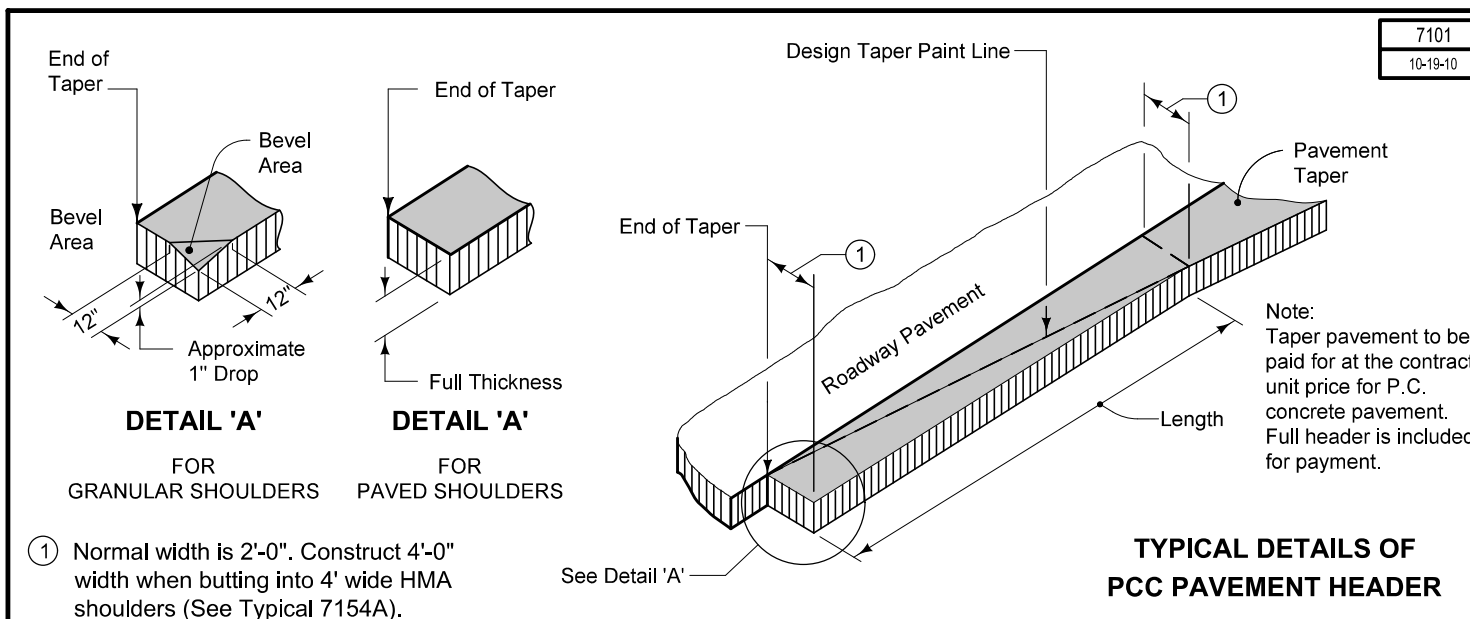
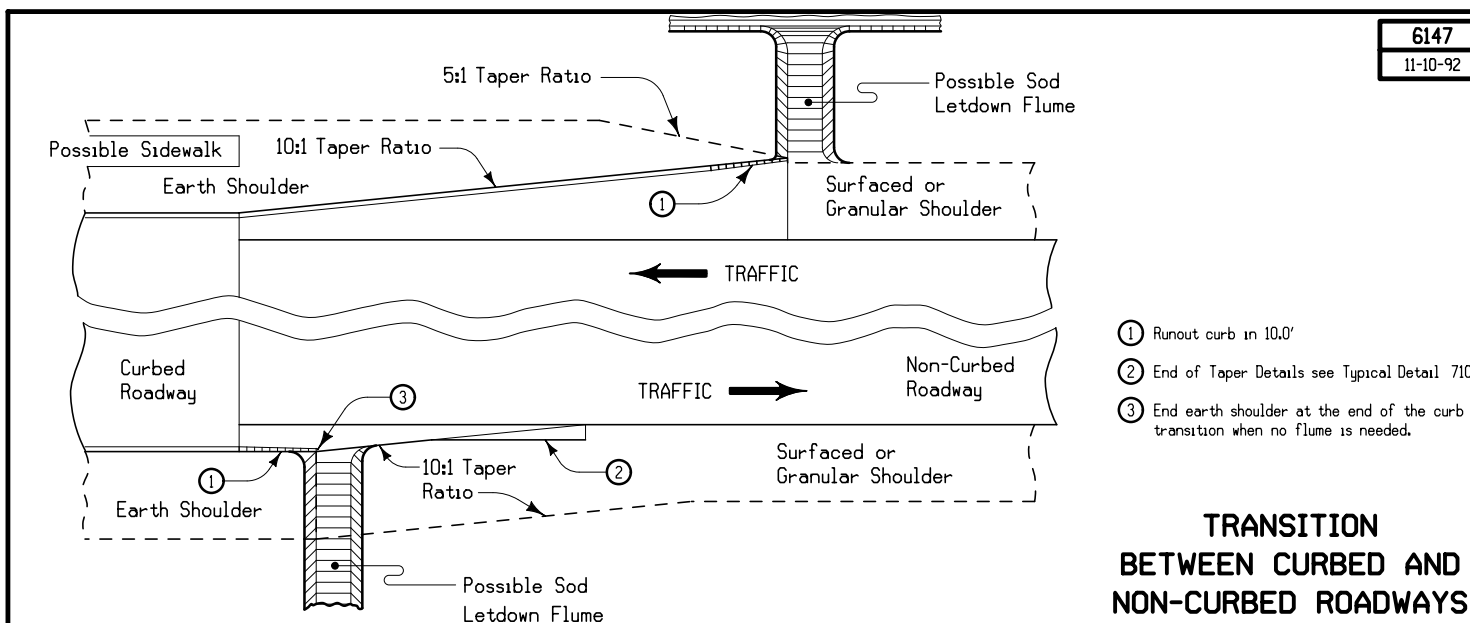
② When specified, the upper 1' to be suitable for vegetation (grass or crops).

Note:
The work of obliterating or reshaping old roadbeds shall be done at the direction of the Engineer.

TYPICAL DETAILS FOR OBLITERATION EXISTING ROADBED



Refer to Tabulation 100-23 for additional information.



SURVEY SYMBOLS

- SIGN SI Sign
- PLG Location of General Photo
- PIP Pipe Culvert
- TP TPD Telephone Pedestal
- ⊗ INB Storm Sewer Beehive Intake
- ⊕ MH Utility Access (Manhole)
- BB BB Billboard
- BLD Building or Foundation
- ⊙ MM Mile Marker Post
- x FW Wire Fence
- OUT Tile Outlet
- ⊗ IN Storm Sewer Intake
- LIN Miscellaneous Line
- LUM Luminaire
- ⊙ FLG Flag Poles
- ⊙ WV Water Valve
- ⊙ X LC Approx. Lot Corner
- EB Electrical Box
- TVP TV Pedestal
- MIS Miscellaneous
- ⊕ PR Electric Riser Pole
- ⊕ FHD Fire Hydrants
- SIGN SL Speed Limit Sign
- # FCL Chain Link and Security Fence
- TDC Tree Deciduous
- SHR Shrub
- TEV Evergreen Tree
- TLNR Tree Line Right
- WHD Water Hydrant
- FWD Wood Fence
- ROC Rock Outcropping
- TLNL Tree Line Left
- CUL Culvert
- TIL Tile Line
- LP L.P. Tank
- WEL Well
- EG Edge of Gravel Road
- EP Edge of Paved Roads (ML or SR)
- CU Back of Curb
- GU Gutter In Front of Curb
- CON Concrete or A/C Slab
- ENP Edge Paved Entrance & Park Lot
- ENT Centerline BL of Entrance
- SH Paved Shoulder
- ENU Edge Unpaved Entrance & Parking
- SNP Unpaved Shoulder
- D Centerline Draw or Stream (Down)
- DU Centerline Draw or Stream (Up)
- RIP Rip-Rap
- CP Control Point
- PRO Profile Shot
- SOP Size of Pipe or Culvert
- UE Utility Elevation
- BL Topo Breakline

UTILITY LEGEND

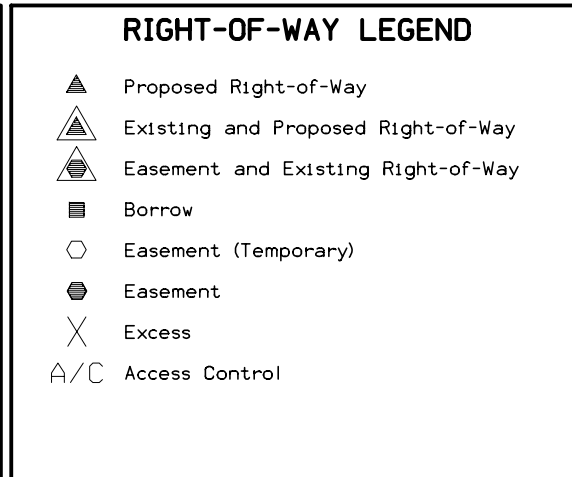
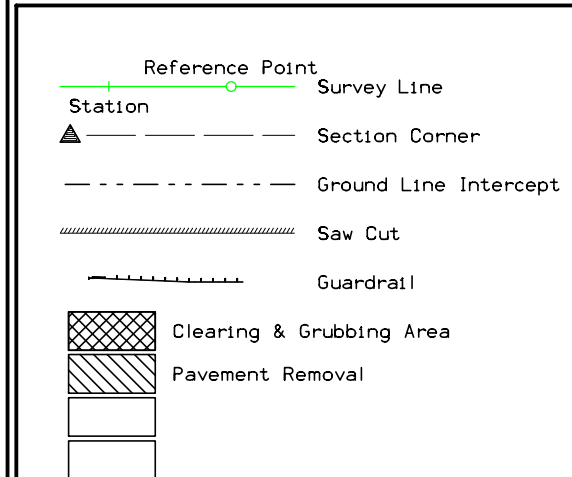
- ALLIANT ENERGY
Jason Hogan
4902 North Biltmore
Madison, WI 53707-1007
608-458-4871
jasonhogan@alliantenergy.com
- Maquoketa Valley Electric Cooperative
Jeremy Richert
P.O. Box 370
Anamosa, IA 52205
319-462-3541 : Ext 209
jrichert@mvec.com
- Windstream Communications(Formerly Iowa Telecom)
Dan Hogan
107 East Fayette
Manchester, IA 52057
563-927-2623
daniel.hogan@windstream.com
- City of Dyersville
David Vorwald
340 1st Avenue East
Dyersville, IA 52040
563-875-7724
dvorwald@cityofdyersville.com
- Black Hills Energy
Brad Fleming
1815 Capital Avenue
Omaha, NE 68102
402-221-2714
brad.fleming@blackhillscorp.com
- ICN
Larry Klawitter
400 East 1st Street / Grimes Office Building
Des Moines, IA 50319
515-725-4741
larry.klawitter@iowa.gov
- Mediacom
Bob Frazer
207 West Pearl Street
Decorah, IA 52101
563-387-6119
bfrazer@mediacomcc.com

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	(80)	Proposed Granular Shading
Gray, Dark	(112)	Proposed Grade and Pave Shading
Brown, Light	(236)	Grading Shading
Tan	(8)	Proposed Sidewalk Shading
Blue, Light	(230)	Proposed Sidewalk Landing Shading
Pink	(11)	Proposed Sidewalk Ramp Shading

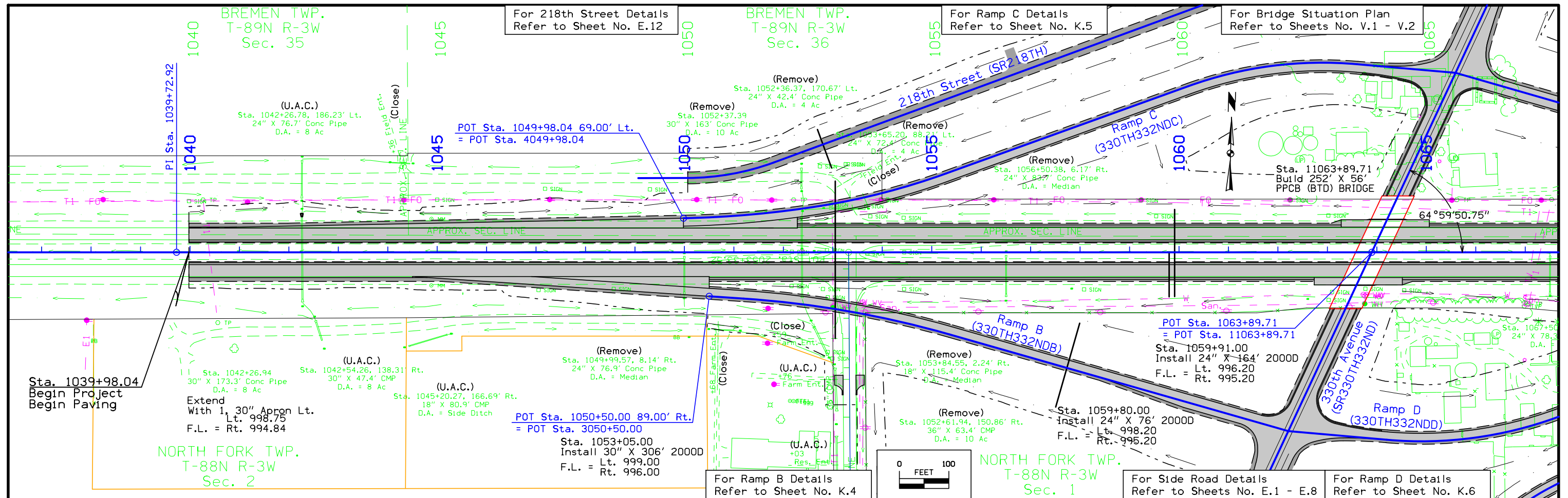
PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

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



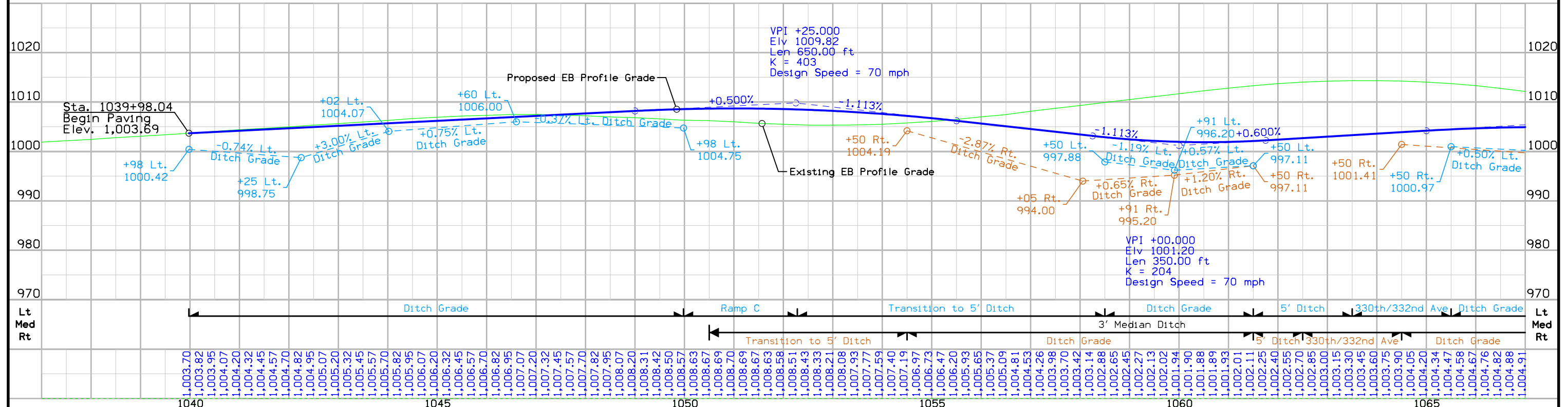
PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

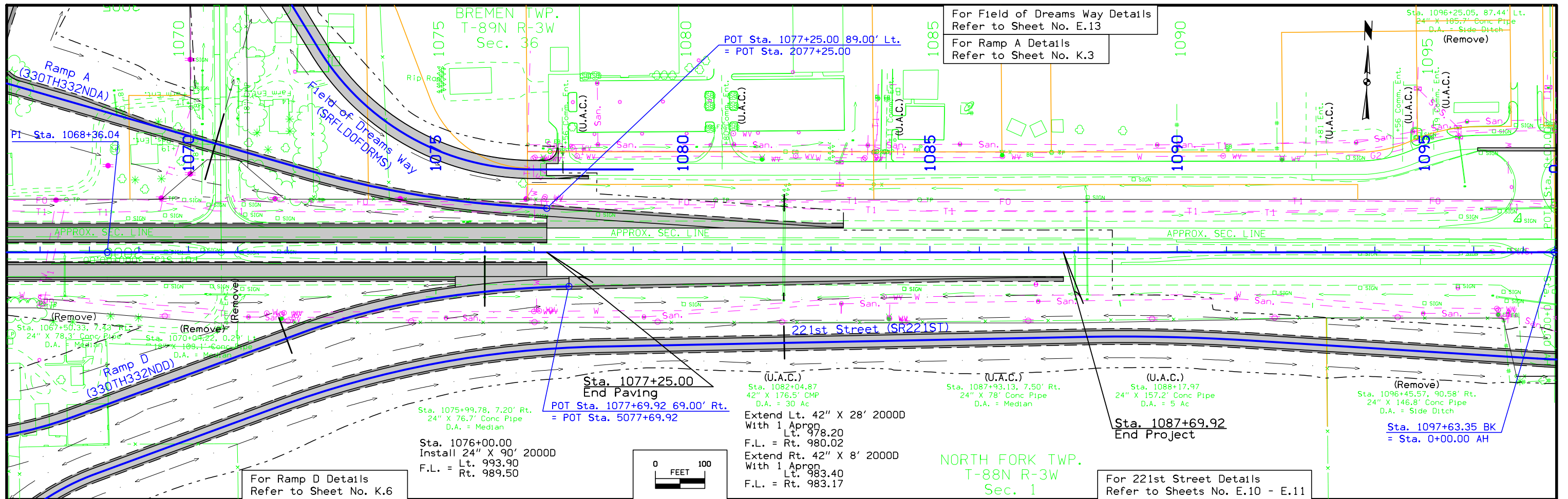
(COVERS SHEET SERIES D, E, F, & K)



For 218th Street Details Refer to Sheet No. E.12	For Ramp C Details Refer to Sheet No. K.5	For Bridge Situation Plan Refer to Sheets No. V.1 - V.2
For Ramp B Details Refer to Sheet No. K.4	For Side Road Details Refer to Sheets No. E.1 - E.8	For Ramp D Details Refer to Sheet No. K.6
		For WB Profile Details Refer to Sheet No. D.4

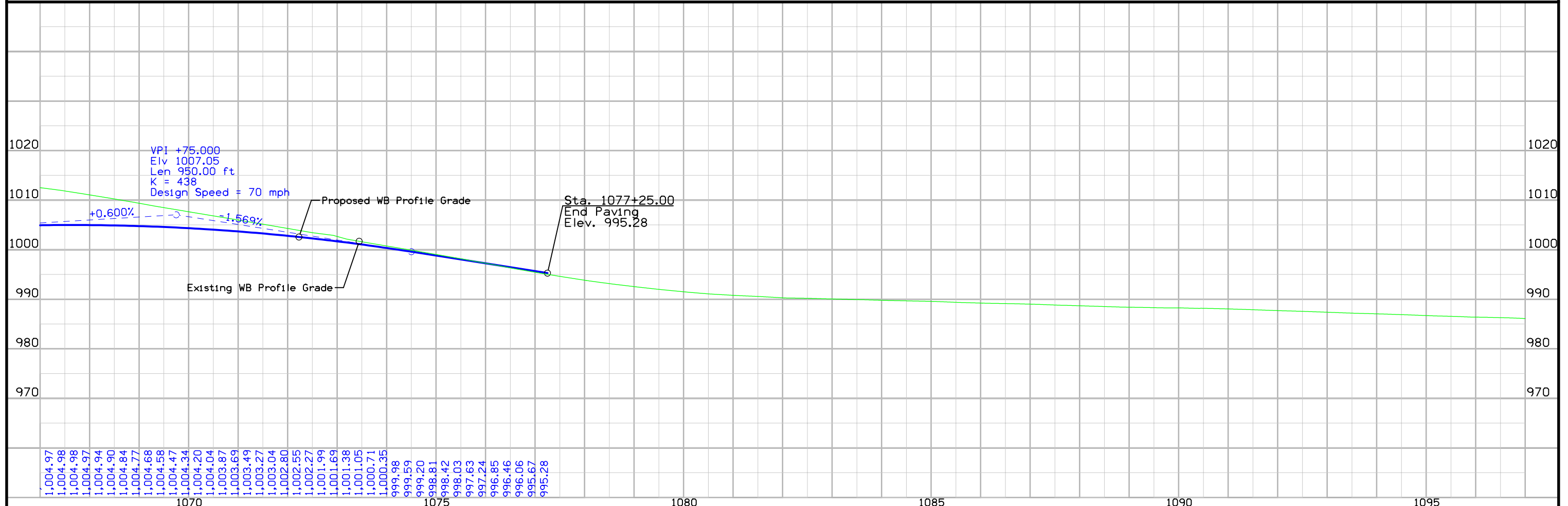
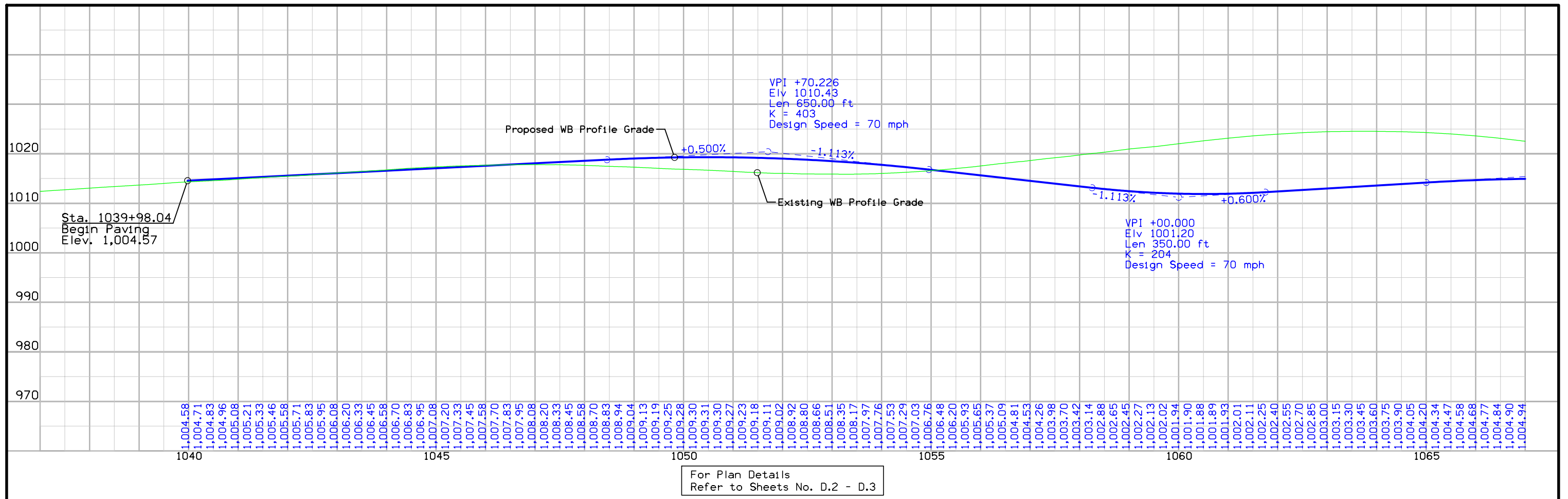
Stage 1	Cut = 46300 CY	Fill+30% = 5022 CY	Waste = 41278 CY	46300 CY
Stage 2	Cut = 54656 CY	Fill+30% = 5225 CY	Waste = 49431 CY	54656 CY





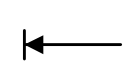
Stage 1	Cut = 17278 CY	Fill+30% = 1169 CY	Waste = 16109 CY
			17278 CY
Stage 2	Cut = 15665 CY	Fill+30% = 3353 CY	Waste = 12312 CY
			15665 CY





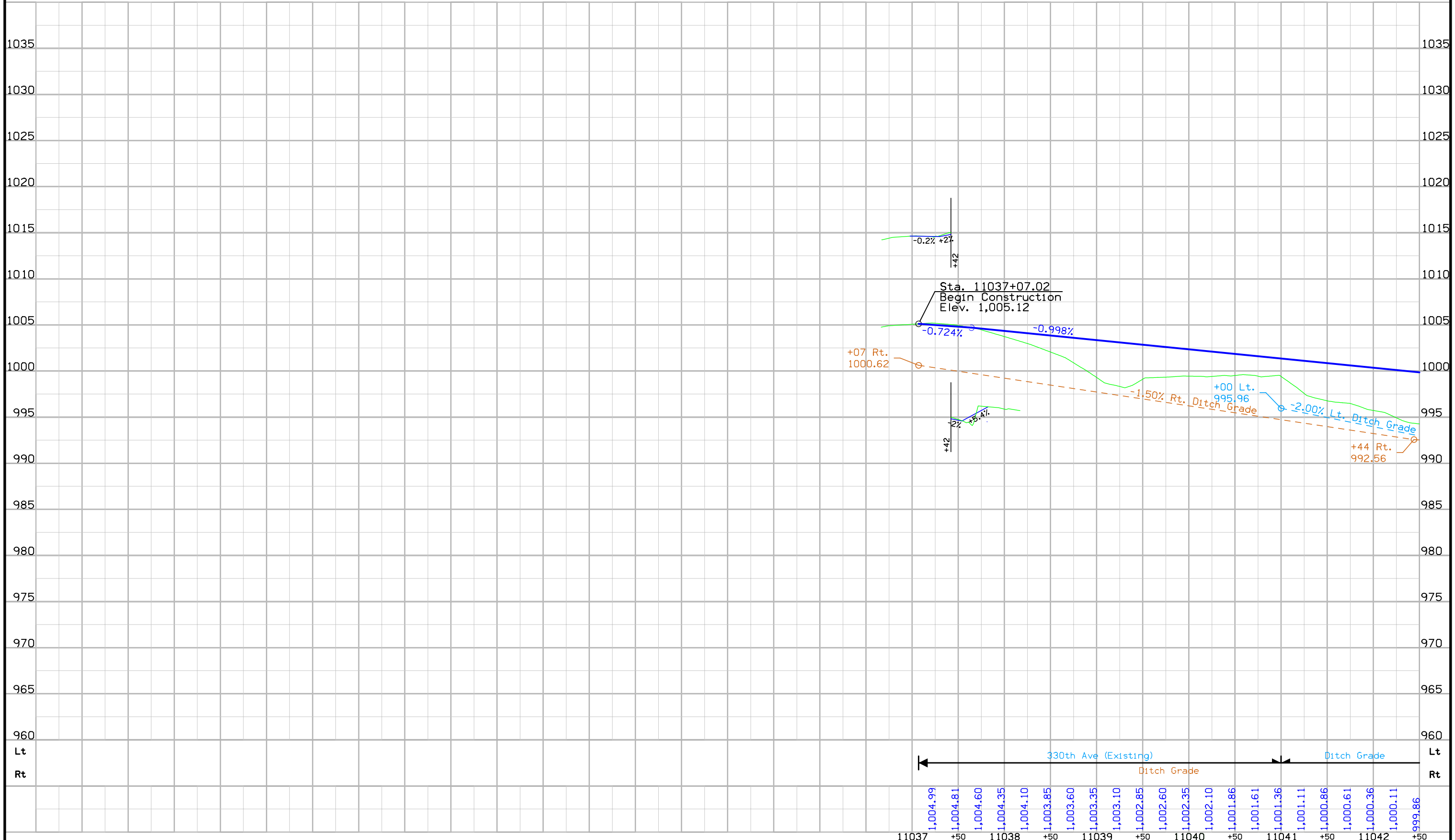
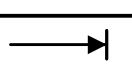
For Plan Details
Refer to Sheet No. E.1

330th Avenue



Cut = 4059 CY

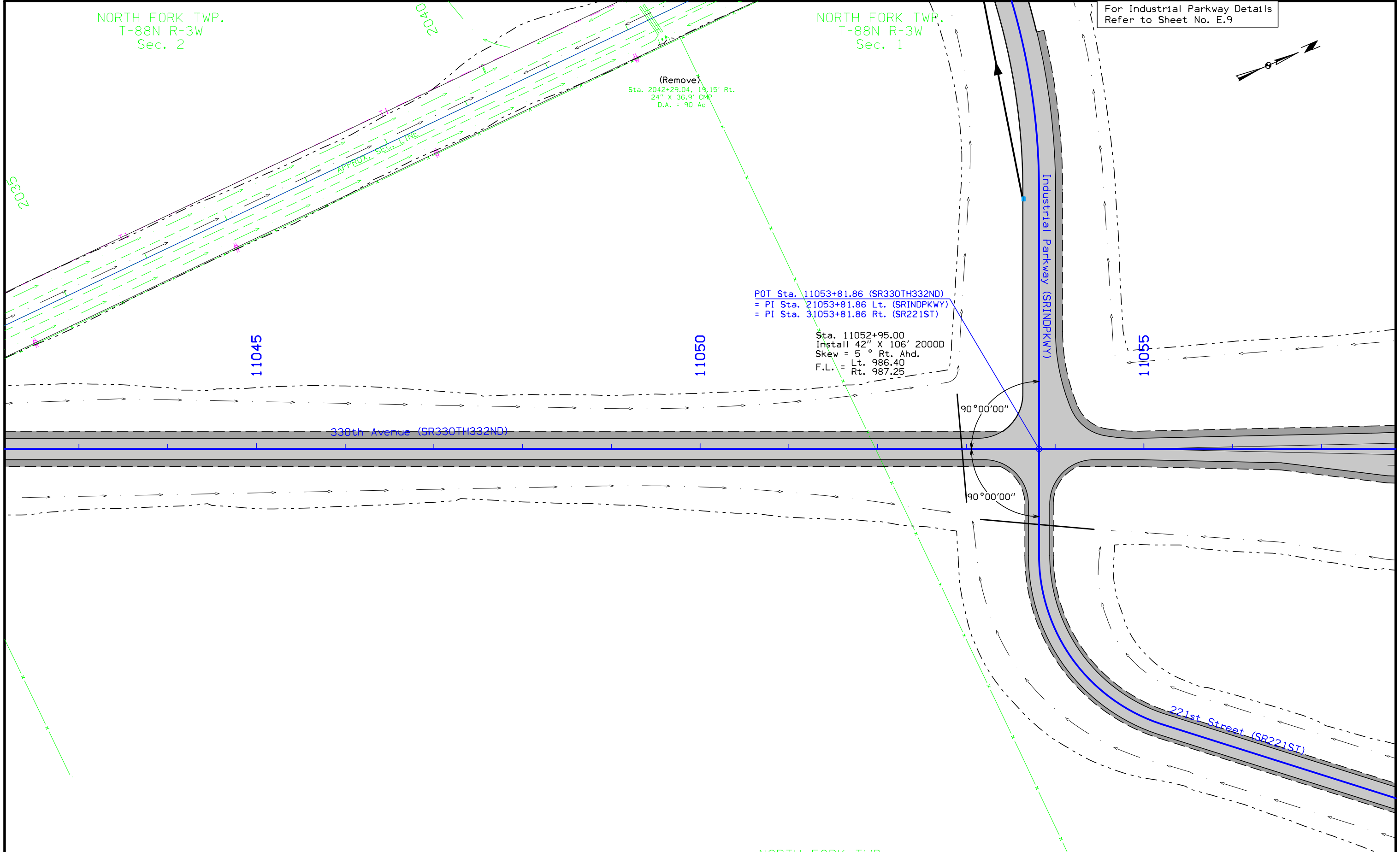
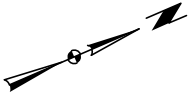
Fill+30% = 2726 CY
Waste = 1333 CY
4059 CY



NORTH FORK TWP.
T-88N R-3W
Sec. 2

NORTH FORK TWP.
T-88N R-3W
Sec. 1

For Industrial Parkway Details
Refer to Sheet No. E.9

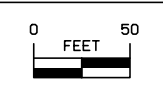


POT Sta. 11053+81.86 (SR330TH332ND)
= PI Sta. 21053+81.86 Lt. (SRINDPKWY)
= PI Sta. 31053+81.86 Rt. (SR221ST)

Sta. 11052+95.00
Install 42" X 106' 20000
Skew = 5° Rt. Ahd.
F.L. = Lt. 986.40
Rt. 987.25

90°00'00"

90°00'00"



NORTH FORK TWP.
T-88N R-3W
Sec. 1

For Profile Details
Refer to Sheet No. E.4

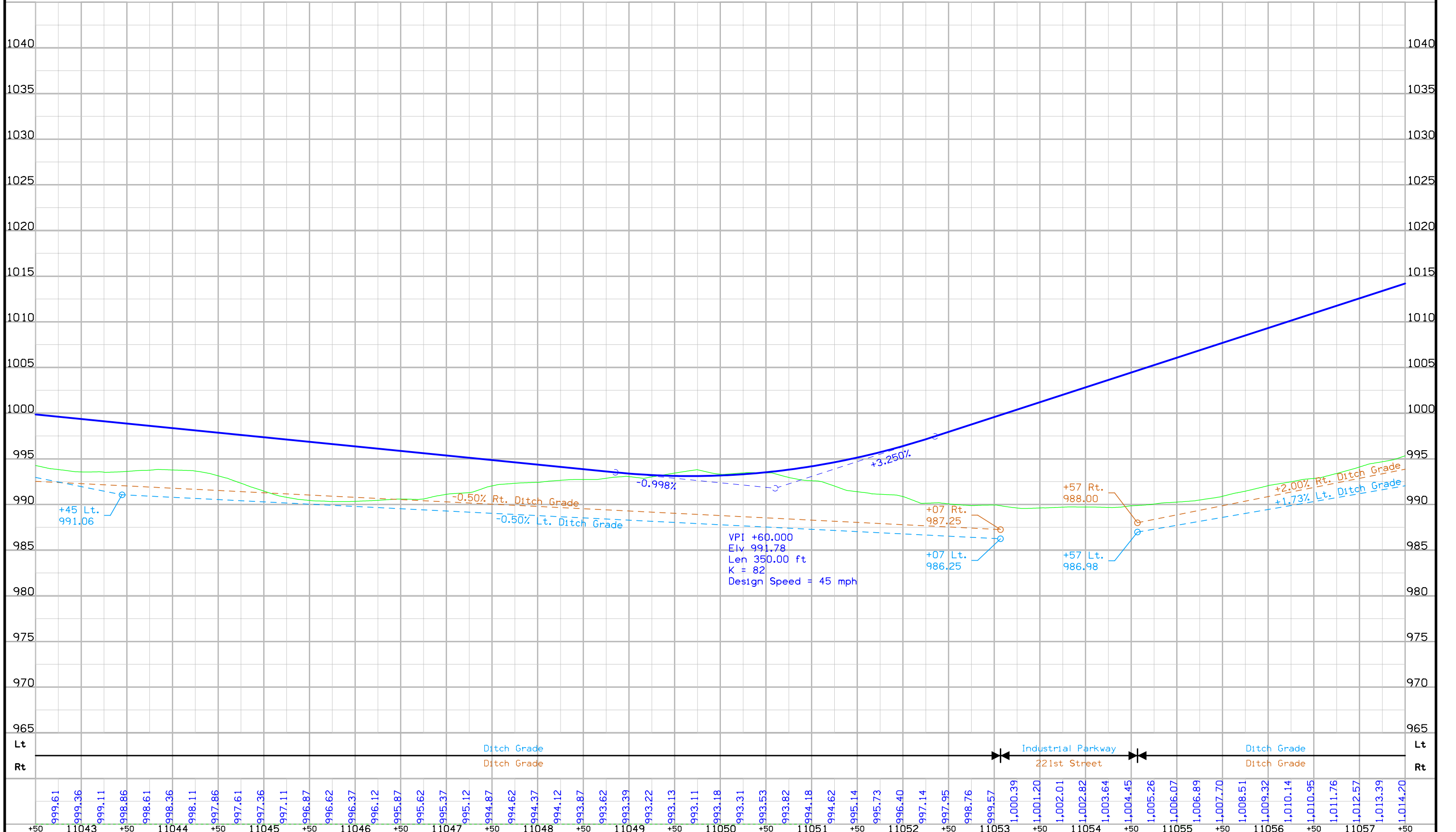
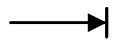
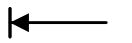
For 221st Street Details
Refer to Sheets No. E.10 - E.11

330th Avenue

For Plan Details
Refer to Sheet No. E.3

330th Avenue

Fill+30% = 38959 CY Cut = 6515 CY
Borrow = 32444 CY 38959 CY



999.61	999.36	999.11	998.86	998.61	998.36	998.11	997.86	997.61	997.36	997.11	996.87	996.62	996.37	996.12	995.87	995.62	995.37	995.12	994.87	994.62	994.37	994.12	993.87	993.62	993.39	993.22	993.13	993.11	993.18	993.31	993.53	993.82	994.18	994.62	995.14	995.73	996.40	997.14	997.95	998.76	999.57	1,000.39	1,001.20	1,002.01	1,002.82	1,003.64	1,004.45	1,005.26	1,006.07	1,006.89	1,007.70	1,008.51	1,009.32	1,010.14	1,010.95	1,011.76	1,012.57	1,013.39	1,014.20
+50	11043	+50	11044	+50	11045	+50	11046	+50	11047	+50	11048	+50	11049	+50	11050	+50	11051	+50	11052	+50	11053	+50	11054	+50	11055	+50	11056	+50	11057	+50																													

NORTH FORK TWP.
T-88N R-3W
Sec. 1

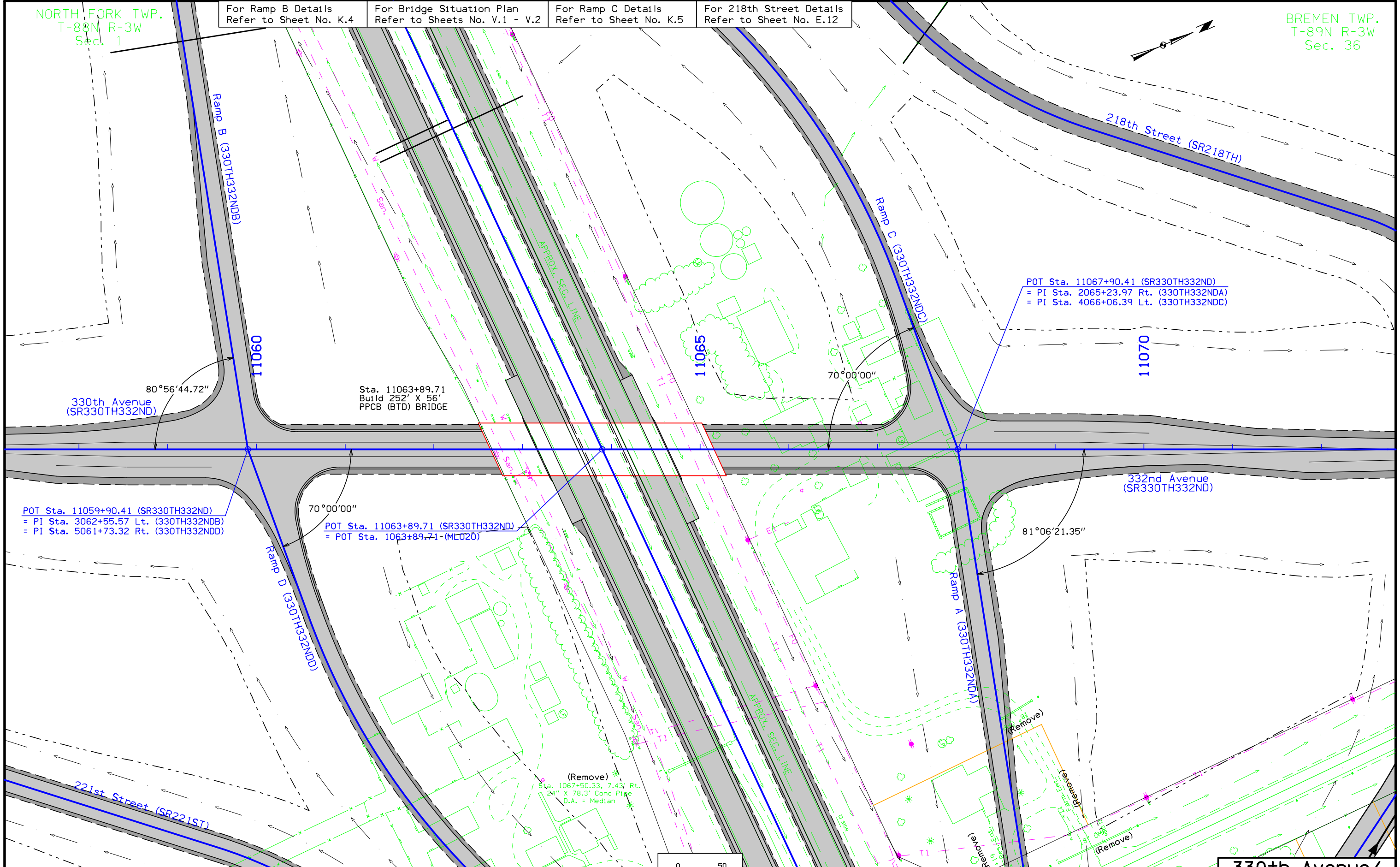
BREMEN TWP.
T-89N R-3W
Sec. 36

For Ramp B Details
Refer to Sheet No. K.4

For Bridge Situation Plan
Refer to Sheets No. V.1 - V.2

For Ramp C Details
Refer to Sheet No. K.5

For 218th Street Details
Refer to Sheet No. E.12

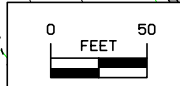


POT Sta. 11067+90.41 (SR330TH332ND)
= PI Sta. 2065+23.97 Rt. (330TH332NDA)
= PI Sta. 4066+06.39 Lt. (330TH332NDC)

POT Sta. 11059+90.41 (SR330TH332ND)
= PI Sta. 3062+55.57 Lt. (330TH332NDB)
= PI Sta. 5061+73.32 Rt. (330TH332NDD)

POT Sta. 11063+89.71 (SR330TH332ND)
= POT Sta. 1063+89.71 (ML020)

(Remove)
Sta. 1067+50.33, 7.43' Rt.
24" X 78.3' Conc Pipe
D.A. = Median



For 221st Street Details
Refer to Sheets No. E.10 - E.11

For Ramp D Details
Refer to Sheet No. K.6

For Profile Details
Refer to Sheet No. E.6

For Main Line Details
Refer to Sheets No. D.2 - D.4

For Ramp A Details
Refer to Sheet No. K.3

330th Avenue/
332nd Avenue

For Plan Details
Refer to Sheet No. E.5

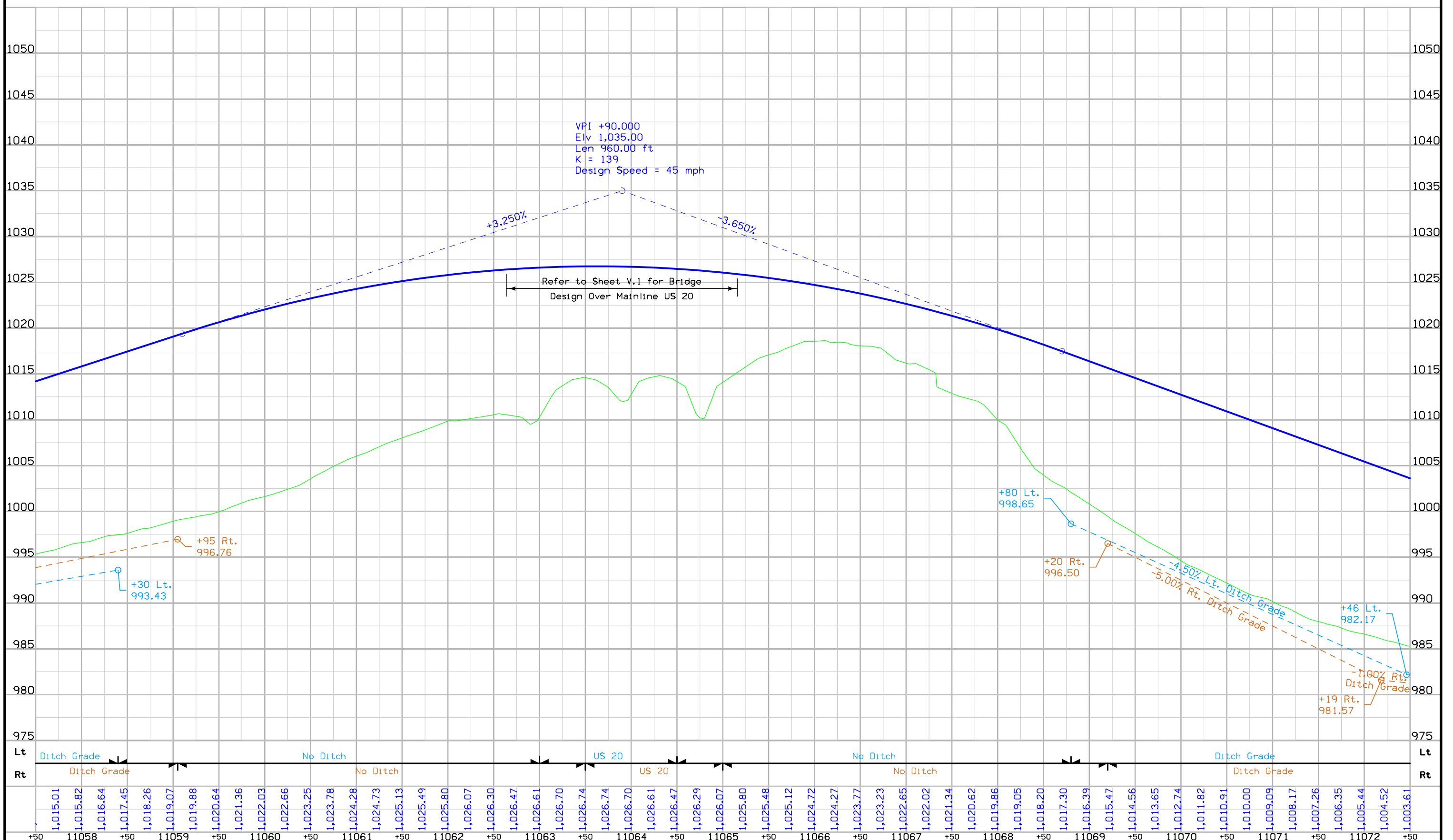
330th Avenue/ 332nd Avenue

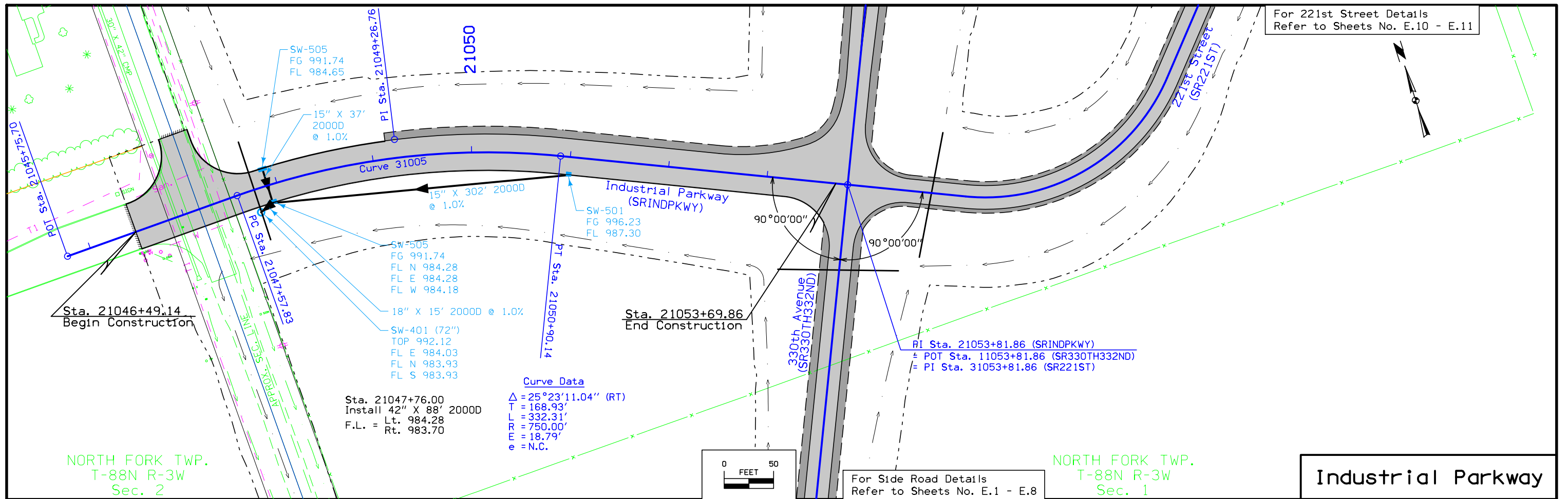
Fill+30% = 54785 CY

Cut = 328 CY
Borrow = $\frac{54457}{54785}$ CY

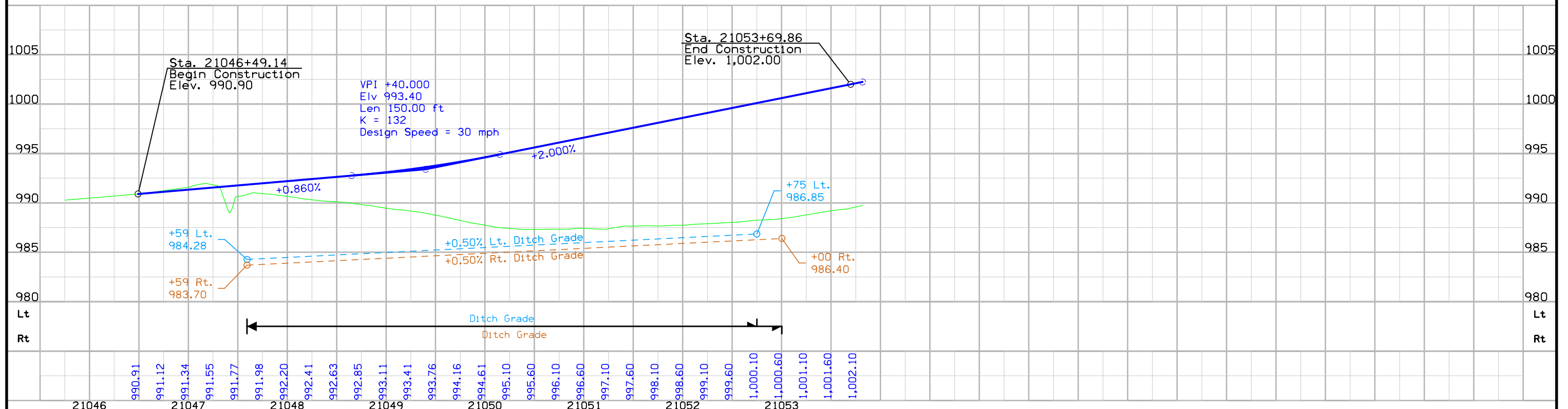
Fill+30% = 52205 CY

Cut = 1952 CY
Borrow = $\frac{50253}{52205}$ CY

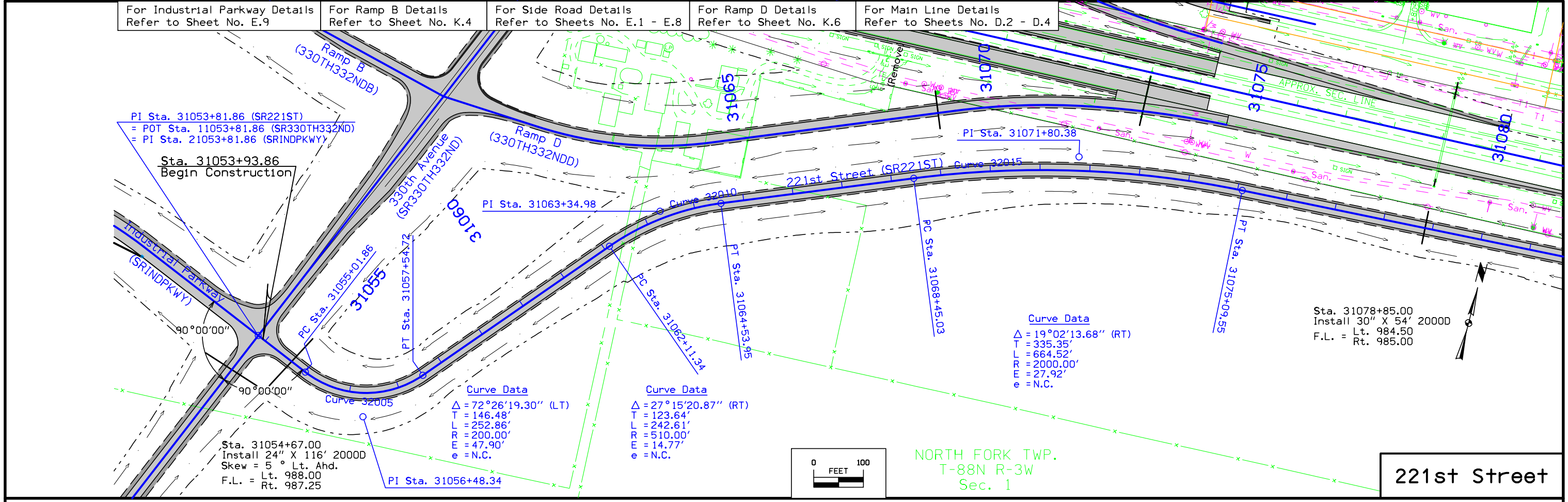




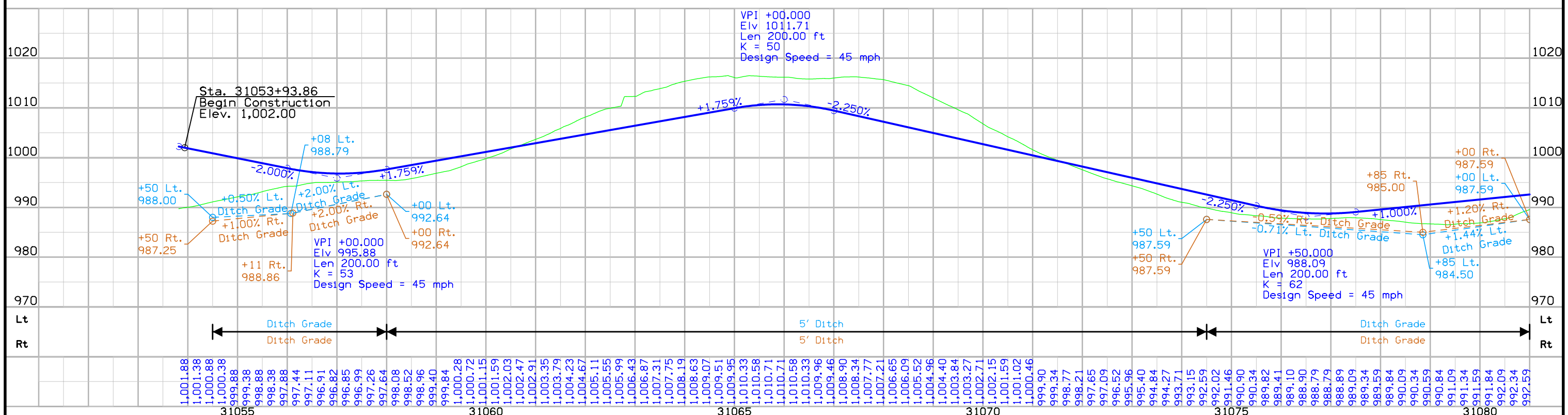
Fill+30% = 17605 CY Cut = 3987 CY
Borrow = 13618 CY 17605 CY

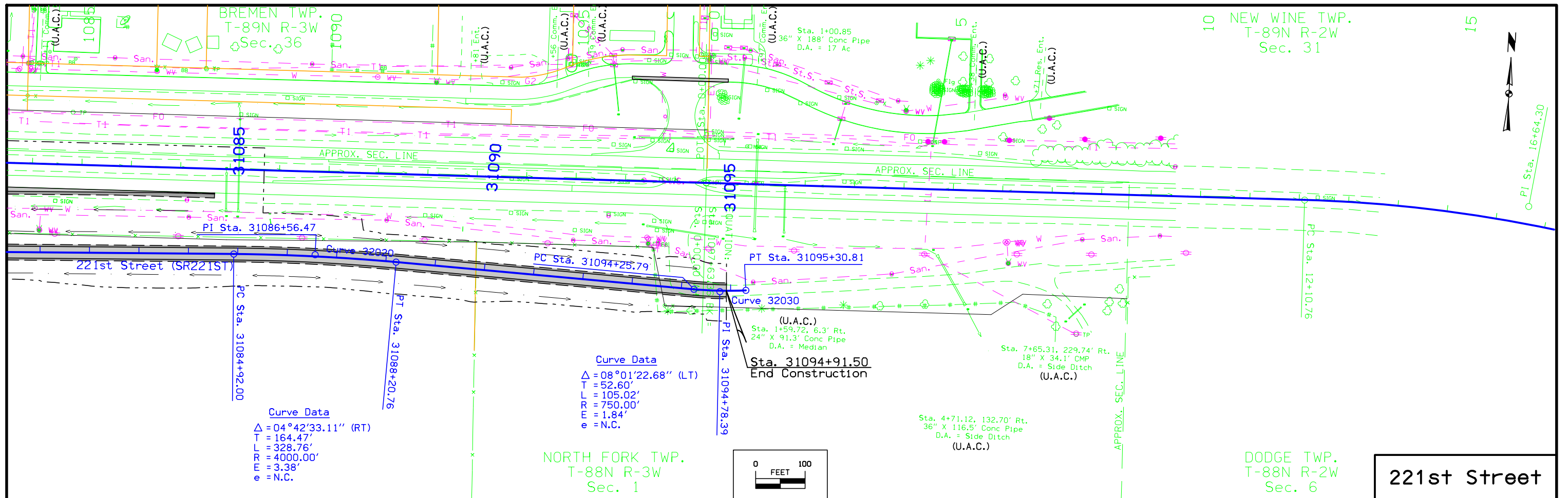


For Industrial Parkway Details Refer to Sheet No. E.9 | For Ramp B Details Refer to Sheet No. K.4 | For Side Road Details Refer to Sheets No. E.1 - E.8 | For Ramp D Details Refer to Sheet No. K.6 | For Main Line Details Refer to Sheets No. D.2 - D.4

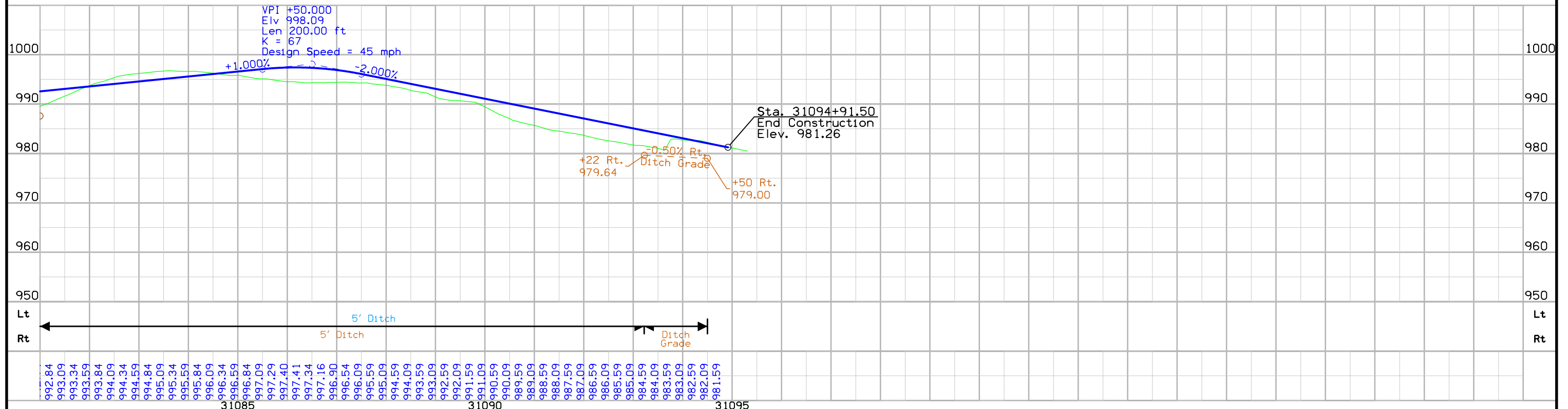


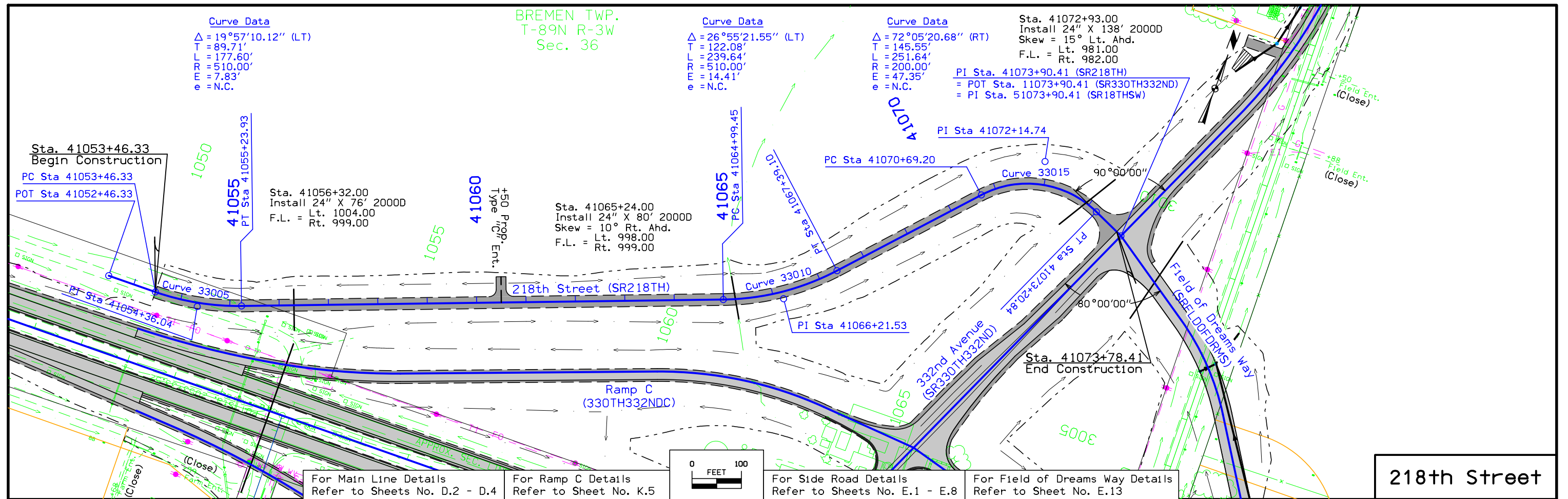
Cut = 50780 CY | Fill+30% = 7735 CY | Waste = 43045 CY | 50780 CY



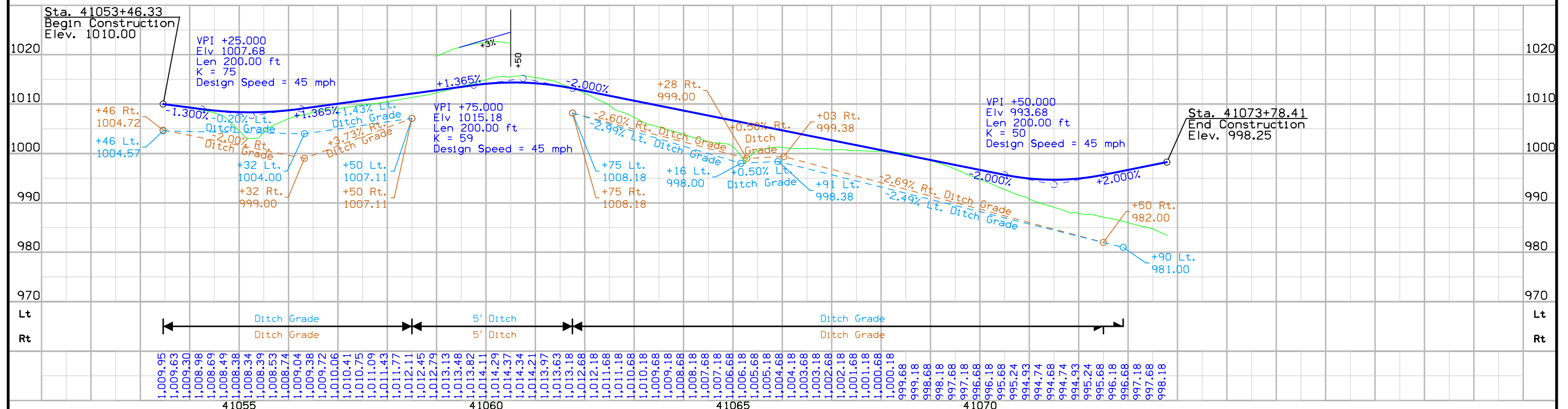


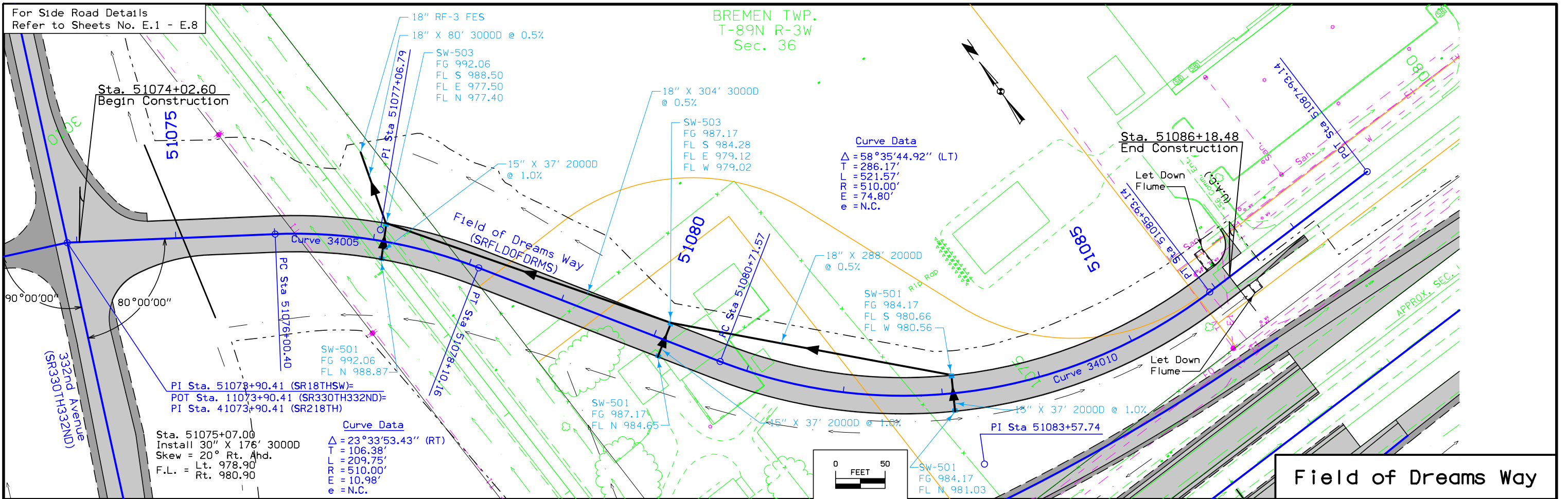
Cut = 10681 CY Fill+30% = 3191 CY
 Waste = 7490 CY
 10681 CY



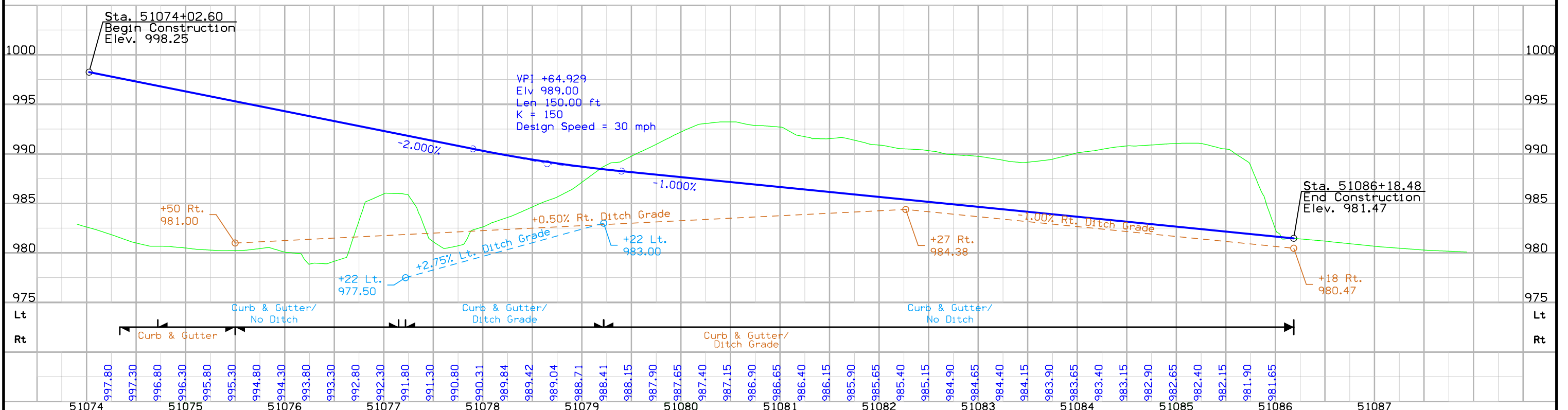


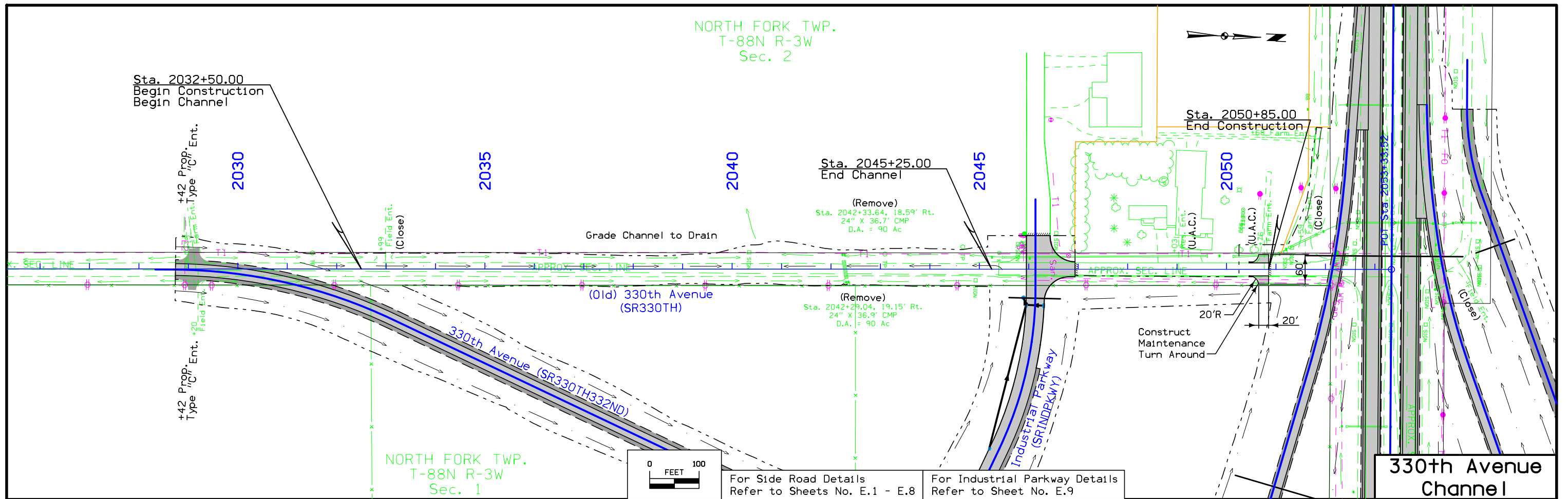
Cut = 16786 CY Fill+30% = 12131 CY
 Waste = 4655 CY
 16786 CY



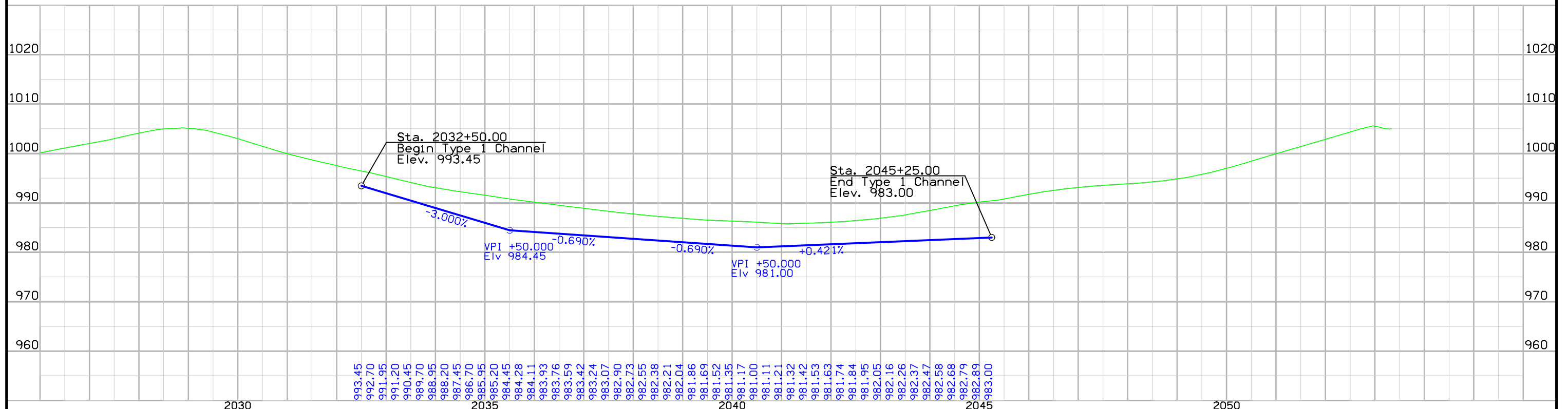


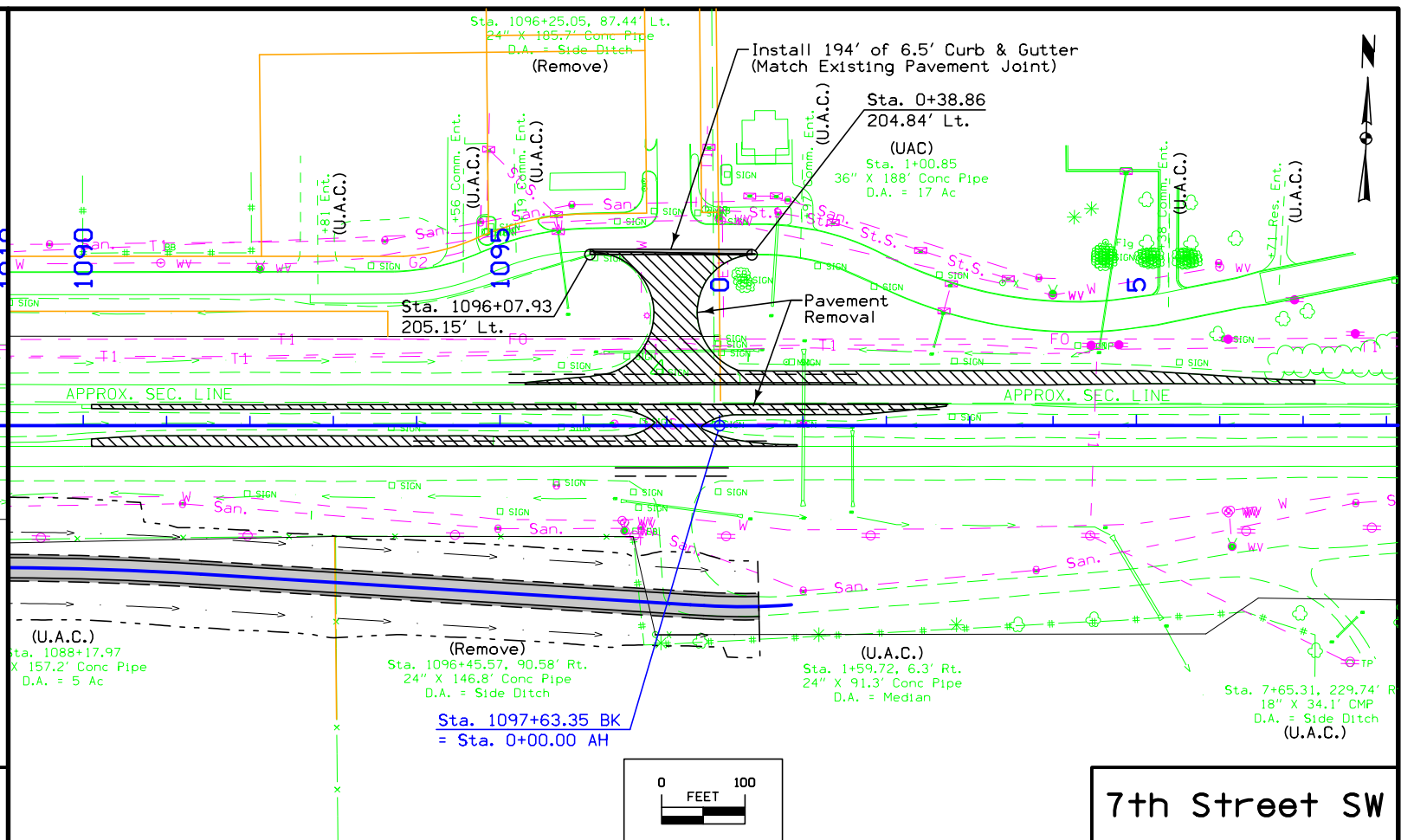
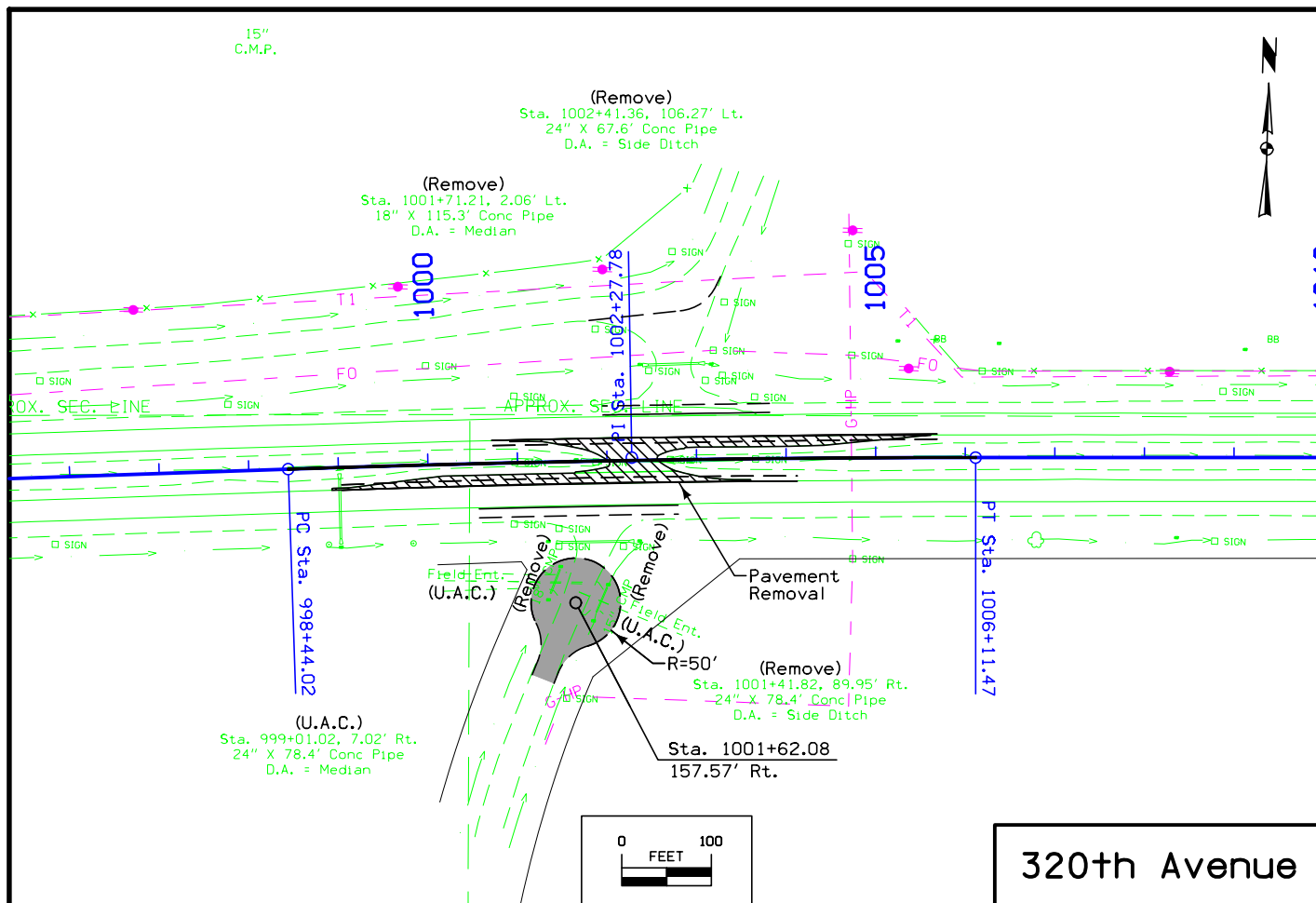
Fill+30% = 22120 CY Cut = 17197 CY
Borrow = 4923 CY
22120 CY





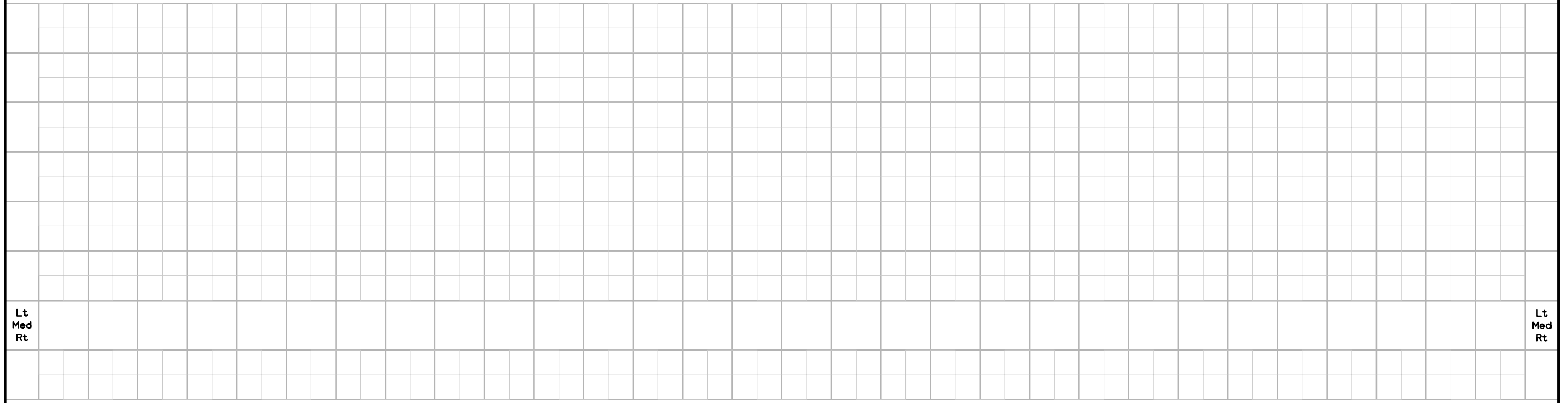
← Cut = 10570 CY Fill+30% = 24 CY Waste = 10546 CY / 10570 CY →





320th Avenue

7th Street SW



Survey Information

General Information

Measurement units for this survey are US survey feet. This survey is for proposed Dyersville Interchange between Co. Rd. X-47 and IA 136 in Dubuque County, Iowa. Project Datum was established using Opus and verified with multiple Iowa RTN observations. Horizontal Datum is a scaled Iowa North Coordinate System. This project is a Partial DTM field survey for the digital terrain model. It is anticipated aerial coverage will be added at a later. Full survey was not obtained on the Elenz property as anticipated. Access was not granted to our surveyors in the field and by the advice of the IDOT, we were not to survey this property.

Vertical Control

Vertical datum for this survey is relative to NAVD88.

Vertical datum for this survey is NAVD88 as computed by OPUS using GEOID09. A 5hr and 13min static session was completed on point G10 (Opus_1). The Reported peak-to-peak accuracy of the orthometric height was 0.063(m). A level run opening on G10, turning through all project benchmarks and closing on G10 was performed. All tolerances were accepted and was distributed proportionately among all turns.

Ia RTN orthometric height was checked against OPUS by averaging the first 5 wildcards collected on G10. The Pt Id's are as follows: 8605, 8244, 8243, 4015 and CHKG10. A difference of 0.0138 was found.

Vertical equations are as follows:

Datum Benchmark

BM # 508 this survey = Elev. 989.20
= Proj. F-20-8(25)--20-28 BM # 40 = Elev. 1000.89

Datum Benchmark

BM NGS100 this survey = Elev. 966.46
= NGS Monument NJ0503 = Elev. 966.54

Horizontal Control

Measurement units for this survey are US survey feet. Iowa State Plane South coordinates were transformed to project ground coordinates by applying a combined scale factor (computed by OPUS) from held point G10 at the center of the project.

Alignment Information

The horizontal alignment for this survey is a retrace of Delaware County Plans F-20-8(25)--20-28. Survey stationing was equated to the plan at found Sta. POT Sta 980+95.71 and found PC and PT points were held as shown below. Sideroad alignments were best fit from existing centerlines as surveyed.

Equations are as follows:

SUR020

POT Sta. 980+95.71 This Survey
= POT Sta. 980+95.71 Delaware County Project No. F-20-8(25)--20-28

PC STA 998+44.58 this survey
= PC STA 998+44.58 Delaware County Project No. F-20-8(25)--20-28

PT STA 1006+15.29 this survey
= PT STA 1006+15.38 Delaware County Project No. F-20-8(25)--20-28

POT Sta. 1093+63.36 This Survey
= POT Sta. 1093+63.45 Delaware County Project No. F-20-8(25)--20-28
=POT Sta. 0+00.00 Dubuque County Project No. F-20-8(25)--20-28

PT STA 21+10.24 this survey
= PT STA 21+10.19 Dubuque County Project No. F-20-8(25)--20-28

PC STA 39+25.99 this survey
= PC STA 39+25.98 Dubuque County Project No. F-20-8(25)--20-28

SUR330TH

PI STA 2053+33.52 this survey
=PI STA 2053+33.52 Delaware County Project No. F-20-8(25)--20-28

SUR332ND

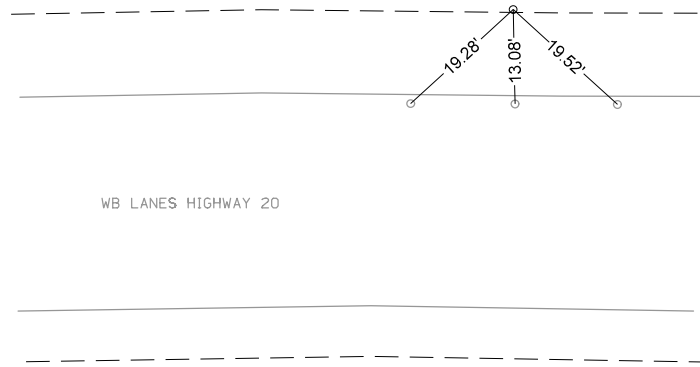
PI STA 3000+00 this survey
=PI STA 0+00 Delaware County Project No. F-20-8(25)--20-28

PI STA 3036+19.70 this survey
=PI STA 36+19.70 Delaware County Project No. L-626

VERTICAL CONTROL

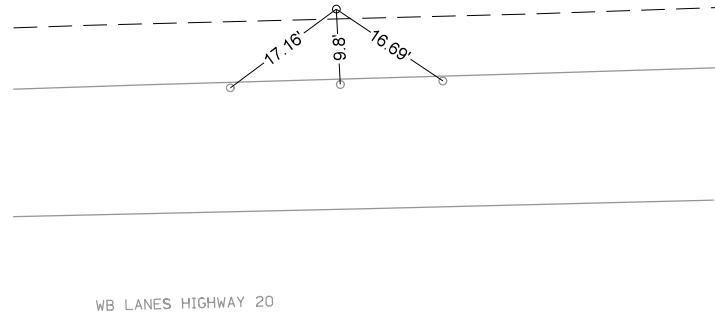
Point	North	East	Elevation	Station	Offset	Feature	Description
500	3643593.871	5560469.981	990.003	9+74.56	112.434	BM	SET RR SPIKE IN POWER POLE
501	3643545.372	5559394.864	982.316	1096+61.88	131.692	BM	SET RR SPIKE IN POWER POLE
502	3643504.172	5558183.464	990.987	1084+49.81	139.948	BM	SET RR SPIKE IN POWER POLE
503	3643472.254	5556936.085	1010.698	1072+02.02	137.948	BM	SET RR SPIKE IN POWER POLE
504	3643697.915	5556279.339	1014.413	1065+51.65	-105.481	BM	SET RR SPIKE IN POWER POLE
505	3643656.520	5554753.227	1004.130	1050+24.98	-105.585	BM	SET RR SPIKE IN POWER POLE
506	3643624.519	5553553.476	1003.385	1038+24.80	-106.208	BM	SET RR SPIKE IN POWER POLE
507	3643580.260	5552322.792	997.857	1025+93.37	-95.418	BM	SET RR SPIKE IN POWER POLE
508	3643523.813	5551398.033	989.200	1016+67.42	-64.129	BM	FND PLUG IN CL HEADWALL
509	3643527.550	5550267.445	996.299	1005+37.68	-98.728	BM	SET RR SPIKE IN POWER POLE
510	3643548.939	5549105.599	1014.432	993+82.14	-180.052	BM	SET RR SPIKE IN POWER POLE
511	3642814.845	5555016.475	993.689	1052+65.25	742.935	BM	SET ARROW 2008 KENNEDY HYDRANT
512	3644251.179	5556715.912	983.661	1070+03.10	-646.674	BM	SET RR SPIKE IN POWER POLE
513	3645995.558	5556654.906	957.557	1069+89.53	-2392.067	BM	SET RR SPIKE IN POWER POLE

STA. 13+22.78, 61.66' Lt.
 CP G001, SET 1/2" REBAR
 N=3643775.178 E=55560815.800



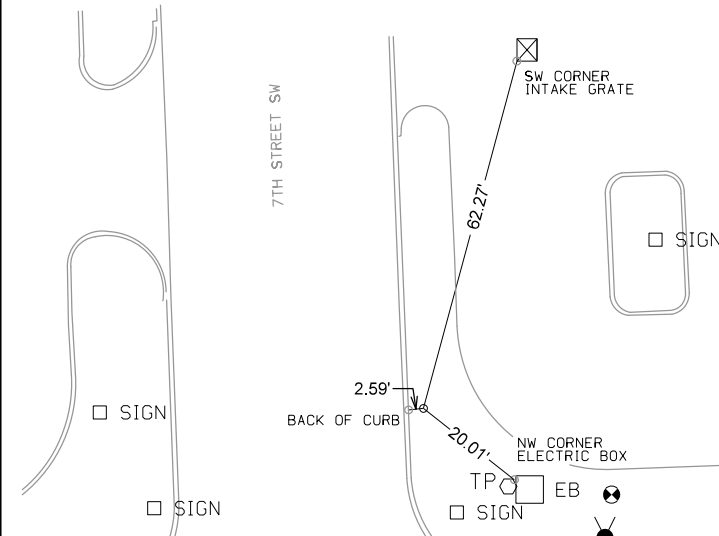
ALL TIES SET
 MAG NAIL WITH
 SURVEY MARKER

STA. 1+72.82, 74.83' Lt.
 CP G002, SET 1/2" REBAR
 N=3643759.269 E=5559663.450

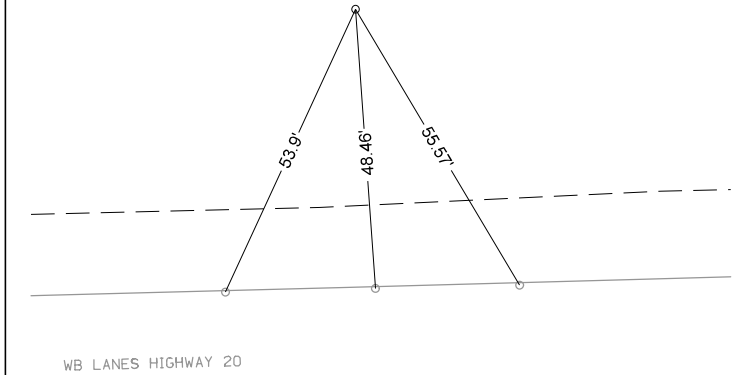


ALL TIES SET
 MAG NAIL WITH
 SURVEY MARKER

STA. 1097+32.18, 273.25' Lt.
 CP G003, SET 1/2" REBAR
 N=3643952.078 E=5559454.130

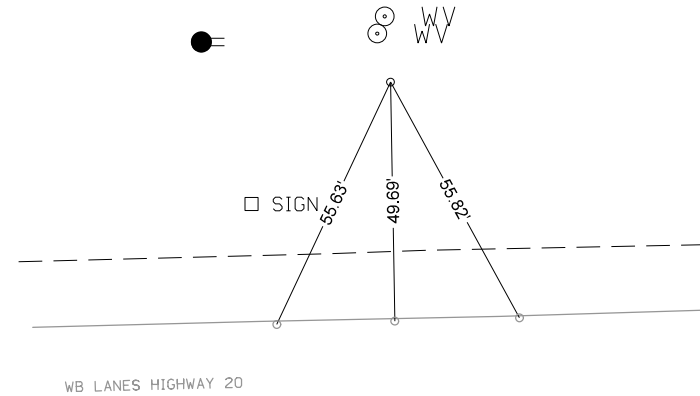


STA. 1085+71.92, 96.76' Lt.
 CP G004, SET 1/2" REBAR
 N=3643744.108 E=5558299.096



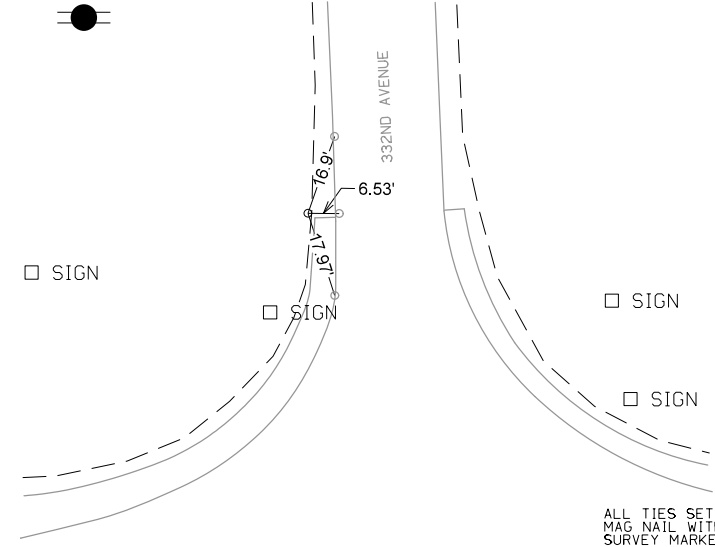
ALL TIES SET
 MAG NAIL WITH
 SURVEY MARKER

STA. 1077+22.50, 98.50' Lt.
 CP G005, SET 1/2" REBAR
 N=3643722.758 E=5557449.950



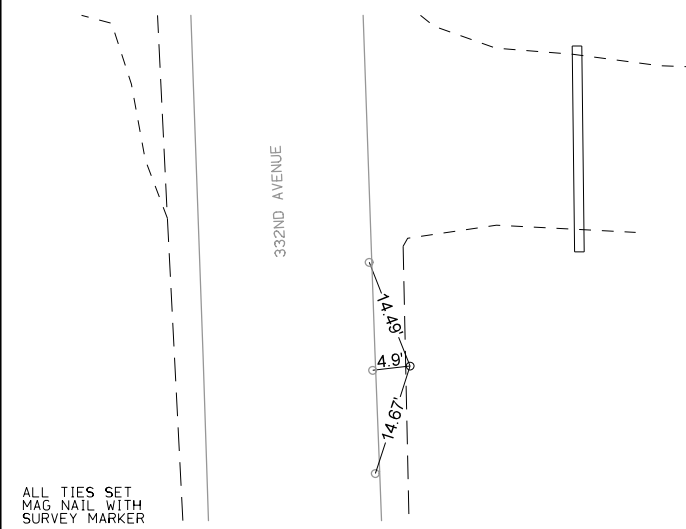
ALL TIES SET
 MAG NAIL WITH
 SURVEY MARKER

STA. 1070+49.33, 116.71' Lt.
 CP G006, SET 1/2" REBAR
 N=3643722.665 E=5556776.529



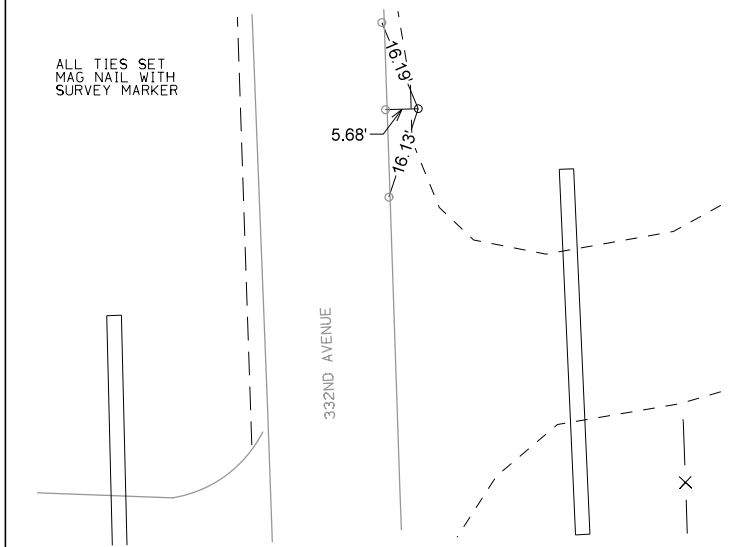
ALL TIES SET
 MAG NAIL WITH
 SURVEY MARKER

STA. 1070+72.60, 1320.72' Lt.
 CP G007, SET 1/2" REBAR
 N=3644926.867 E=5556767.060



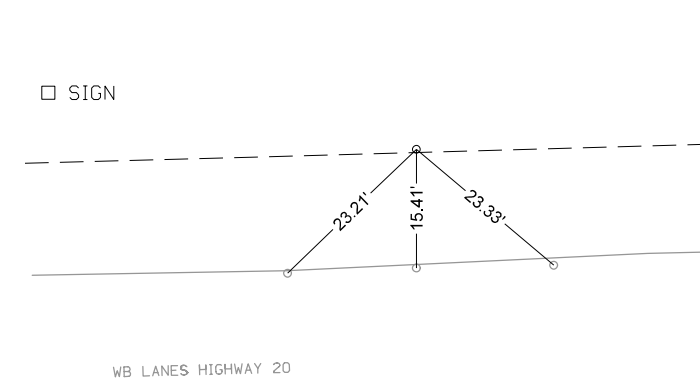
ALL TIES SET
 MAG NAIL WITH
 SURVEY MARKER

STA. 1070+61.74, 2867.87' Lt.
 CP G008, SET 1/2" REBAR
 N=3646473.143 E=5556714.150



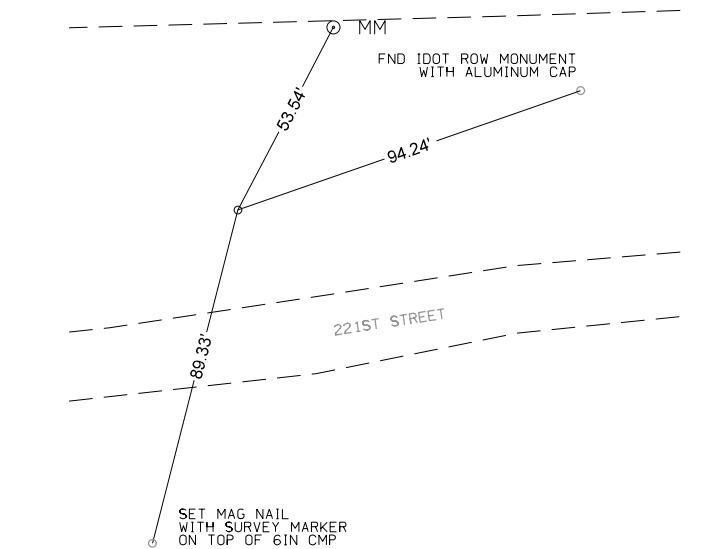
ALL TIES SET
 MAG NAIL WITH
 SURVEY MARKER

STA. 1060+01.35, 64.32' Lt.
 CP G009, SET 1/2" REBAR
 N=3643641.812 E=5555730.360



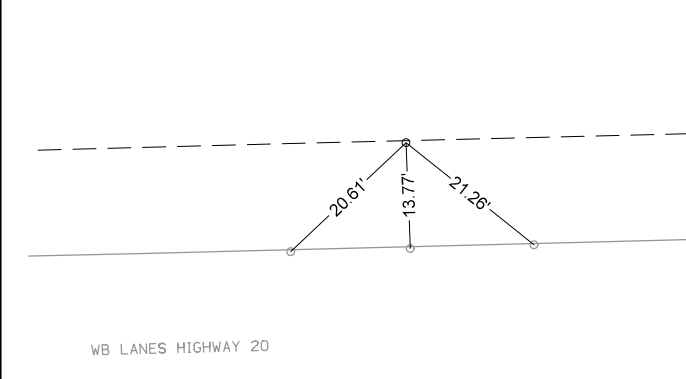
ALL TIES SET
 MAG NAIL WITH
 SURVEY MARKER

STA. 1044+61.89, 113.68 Rt.
 CP G010, SET 1/2" REBAR
 N=3643422.030 E=5554196.310



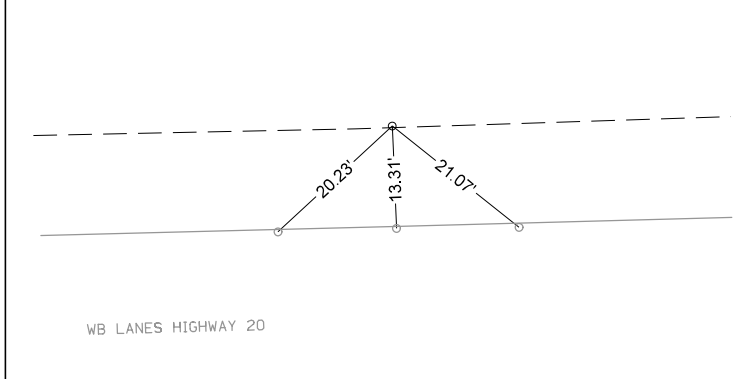
SET MAG NAIL
 WITH SURVEY MARKER
 ON TOP OF 6IN CMP

STA. 1050+26.02, 63.14' Lt.
 CP G011, SET 1/2" REBAR
 N=3643614.120 E=5554755.420



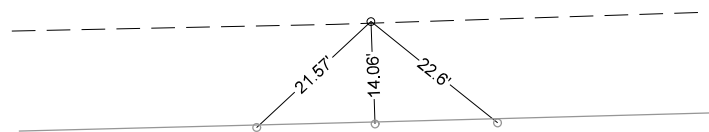
ALL TIES SET
 MAG NAIL WITH
 SURVEY MARKER

STA. 1033+30.04, 63.04' Lt.
 CP G012, SET 1/2" REBAR
 N=3643567.920 E=5553060.070



ALL TIES SET
 MAG NAIL WITH
 SURVEY MARKER

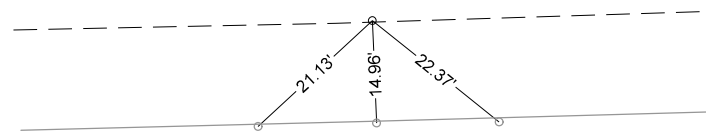
STA. 1021+89.66, 62.87' Lt.
 CP G013, SET 1/2" REBAR
 N=3643536.748 E=5551920.120



WB LANES HIGHWAY 20

ALL TIES SET
 MAG NAIL WITH
 SURVEY MARKER

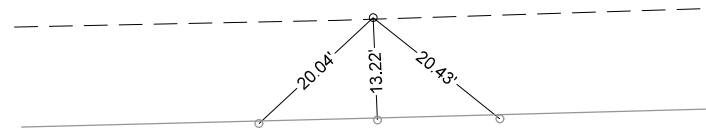
STA. 1010+68.09, 63.58' Lt.
 CP G014, SET 1/2" REBAR
 N=3643506.977 E=5550798.940



WB LANES HIGHWAY 20

ALL TIES SET
 MAG NAIL WITH
 SURVEY MARKER

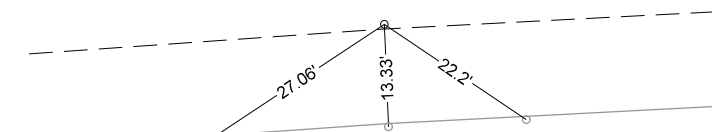
STA. 999+94.25, 61.87' Lt.
 CP G015, SET 1/2" REBAR
 N=3643467.636 E=5549724.180



WB LANES HIGHWAY 20

ALL TIES SET
 MAG NAIL WITH
 SURVEY MARKER

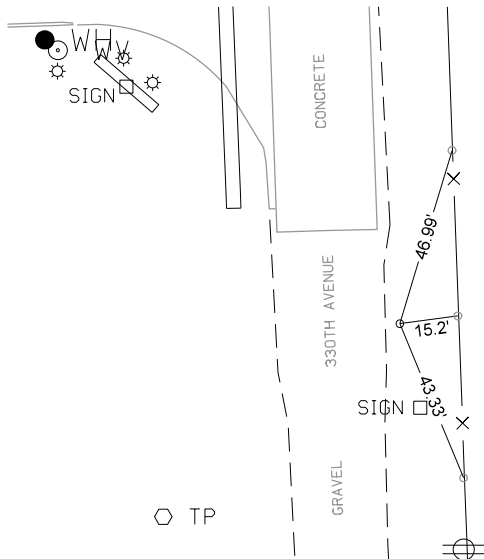
STA. 988+88.23, 62.19' Lt.
 CP G016, SET 1/2" REBAR
 N=3643401.346 E=5548619.750



WB LANES HIGHWAY 20

ALL TIES SET
 MAG NAIL WITH
 SURVEY MARKER

STA. 1053+55.49, 818.93' Rt.
 CP G017, SET 1/2" REBAR
 N=3642741.330 E=5555108.748



○ TP

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)
US20																			
20005							998+44.02	3,643,397.28	5,549,577.55	1002+27.78	3,643,420.56	5,549,960.61	1006+11.47	3,643,431.01	5,550,344.23				
20010		1039+72.92	3,643,522.50	5,553,704.43															
20015		1068+36.04	3,643,600.23	5,556,566.50															
20020		1097+63.35	3,643,679.77	5,559,492.73															
330th Ave./332th Ave.																			
30000		11036+66.42	3,641,060.60	5,555,148.90															
30005							11037+07.02	3,641,101.19	5,555,147.89	11039+38.57	3,641,332.67	5,555,142.13	11041+62.83	3,641,545.10	5,555,234.27				
30020							11077+29.57	3,644,817.34	5,556,653.46	11079+66.45	3,645,034.66	5,556,747.71	11081+95.52	3,645,271.39	5,556,739.53				
30025		11086+95.52	3,645,771.10	5,556,722.27															
Industrial Parkway																			
31000		21045+75.70	3,642,834.89	5,554,945.84															
31005							21047+57.83	3,642,841.05	5,555,127.87	21049+26.76	3,642,846.77	5,555,296.70	21050+90.14	3,642,779.56	5,555,451.68				
31010		21053+81.86	3,642,663.48	5,555,719.31															
221st St																			
32000		31053+81.86	3,642,663.48	5,555,719.31															
32005							31055+01.86	3,642,615.73	5,555,829.41	31056+48.34	3,642,557.45	5,555,963.79	31057+54.72	3,642,667.99	5,556,059.91				
32010							31062+11.34	3,643,012.56	5,556,359.53	31063+34.98	3,643,105.86	5,556,440.66	31064+53.95	3,643,151.65	5,556,555.51				
32015							31068+45.03	3,643,296.48	5,556,918.79	31071+80.38	3,643,420.68	5,557,230.30	31075+09.55	3,643,436.47	5,557,565.28				
32020							31084+92.00	3,643,482.73	5,558,546.63	31086+56.47	3,643,490.48	5,558,710.93	31088+20.76	3,643,484.71	5,558,875.30				
32030							31094+25.79	3,643,463.48	5,559,479.96	31094+78.39	3,643,461.64	5,559,532.52	31095+30.81	3,643,467.15	5,559,584.83				
32035		31095+30.81	3,643,467.15	5,559,584.83															
218th St																			
33000		41052+46.33	3,643,697.90	5,554,633.56															
33005							41053+46.33	3,643,700.98	5,554,733.52	41054+35.13	3,643,703.75	5,554,823.18	41055+23.93	3,643,736.94	5,554,906.52				
33010							41064+99.45	3,644,097.95	5,555,812.79	41066+19.28	3,644,143.13	5,555,926.20	41067+39.10	3,644,234.76	5,556,006.86				
33015							41070+69.20	3,644,482.53	5,556,224.98	41071+95.02	3,644,591.78	5,556,321.15	41073+20.84	3,644,533.87	5,556,454.68				
33020		41073+90.41	3,644,506.18	5,556,518.51															
Field of Dreams Way																			
34000		51073+90.41	3,644,506.18	5,556,518.51															
34005							51076+00.40	3,644,390.44	5,556,693.73	51077+05.28	3,644,331.81	5,556,782.49	51078+10.16	3,644,242.58	5,556,840.41				
34010							51080+71.57	3,644,023.31	5,556,982.74	51083+32.35	3,643,783.27	5,557,138.55	51085+93.14	3,643,791.19	5,557,424.62				
34015		51087+93.14	3,643,796.72	5,557,624.54															
330th Ave./332th Ave. Ramp A																			
35000		2065+23.97	3,643,955.72	5,556,279.77															
35005							2072+28.85	3,643,778.61	5,556,962.04	2074+44.28	3,643,724.48	5,557,170.55	2076+58.05	3,643,715.99	5,557,385.81				
35010		2077+25.00	3,643,713.36	5,557,452.71															
330th Ave./332th Ave. Ramp B																			
36005		3050+50.00	3,643,462.77	5,554,783.53															
36010							3051+19.79	3,643,460.02	5,554,853.27	3053+32.37	3,643,451.65	5,555,065.68	3055+43.36	3,643,398.81	5,555,271.59				
36015		3062+55.57	3,643,221.78	5,555,961.45															
330th Ave./332th Ave. Ramp C																			
37010							4049+98.04	3,643,619.31	5,554,727.30	4051+38.27	3,643,625.92	5,554,867.37	4052+78.04	3,643,652.01	5,555,005.15				
37020							4052+78.04	3,643,652.01	5,555,005.15	4054+08.90	3,643,676.35	5,555,133.72	4055+39.00	3,643,724.11	5,555,255.56				
37030							4060+59.43	3,643,914.02	5,555,740.10	4062+35.68	3,643,978.34	5,555,904.20	4064+06.39	3,643,967.75	5,556,080.13				
37035		4066+06.39	3,643,955.72	5,556,279.77															
330th Ave./332th Ave. Ramp D																			
38000		5061+73.32	3,643,221.78	5,555,961.45															
38005							5063+73.32	3,643,209.75	5,556,161.09	5065+52.02	3,643,199.01	5,556,339.46	5067+24.94	3,643,265.19	5,556,505.45				
38015							5072+20.85	3,643,448.84	5,556,966.10	5073+55.80	3,643,498.82	5,557,091.46	5074+89.92	3,643,523.93	5,557,224.05				
38025							5074+89.92	3,643,523.93	5,557,224.05	5076+30.15	3,643,550.02	5,557,361.83	5077+69.92	3,643,556.64	5,557,501.91				
330th Ave. Channel																			
39000		2013+33.52	3,639,561.64	5,555,199.11															
39005		2053+33.52	3,643,559.31	5,555,062.80															

SPIRAL OR CIRCULAR CURVE DATA

101-17
04-19-11

Name	Location	Δ _{scs}	Horizontal Alignment Data											Remarks		
			Spiral Data					Curve Data								
			θs	Ls	Ts	Es	Xc	Yc	L.T.	S.T.	Δ _c	T	L	R	E	
US20 20005											01° 55' 07.06" RT	383.76'	767.45'	22,918.32'	3.21'	
330th Ave./332th Ave. 30005 30020											24° 52' 19.43" RT 25° 25' 32.33" LT	231.55' 236.87'	455.80' 465.95'	1,050.00' 1,050.00'	25.23' 26.39'	
Industrial Parkway 31005											25° 23' 11.04" RT	168.93'	332.31'	750.00'	18.79'	
221st St 32005 32010 32015 32020 32030											72° 26' 19.30" LT 27° 15' 20.87" RT 19° 02' 13.68" RT 04° 42' 33.11" RT 08° 01' 22.68" LT	146.48' 123.64' 335.35' 164.47' 52.60'	252.86' 242.61' 664.52' 328.76' 105.02'	200.00' 510.00' 2,000.00' 4,000.00' 750.00'	47.90' 14.77' 27.92' 3.38' 1.84'	
218th St 33005 33010 33015											19° 57' 10.12" LT 26° 55' 21.55" LT 72° 05' 20.68" RT	89.71' 122.08' 145.55'	177.60' 239.64' 251.64'	510.00' 510.00' 200.00'	7.83' 14.41' 47.35'	
Field of Dreams Way 34005 34010											23° 33' 53.43" RT 58° 35' 44.92" LT	106.38' 286.17'	209.75' 521.57'	510.00' 510.00'	10.98' 74.80'	
330th Ave./332th Ave. Ramp A 35005											12° 17' 44.12" LT	215.43'	429.20'	2,000.00'	11.57'	
330th Ave./332th Ave. Ramp B 36010											12° 08' 03.30" RT	212.58'	423.57'	2,000.00'	11.27'	
330th Ave./332th Ave. Ramp C 37010 37020 37030											08° 01' 17.07" LT 10° 40' 47.54" LT 24° 50' 58.62" RT	140.23' 130.86' 176.25'	280.00' 260.96' 346.97'	2,000.00' 1,400.00' 800.00'	4.91' 6.10' 19.19'	
330th Ave./332th Ave. Ramp D 38005 38015 38025											25° 10' 58.43" LT 11° 00' 43.17" RT 08° 01' 17.07" RT	178.70' 134.95' 140.23'	351.62' 269.07' 280.00'	800.00' 1,400.00' 2,000.00'	19.71' 6.49' 4.91'	

PARCEL CHECK LIST

04/15/13 13:48 HSL PRINT FOR N L CUVA PAGES: 1 - 4 GEN: 1

PARCEL CHECK BY PROJ UPDATED 04/15/13 13:48 PAGE: 1
AND: 2

R2360003 PARCEL CHECK LIST BY PROJECT NUMBER
 COUNTY : DELAWARE PROJECT NO. :NHSN-020-8(48)--2R-28 PIN: 10-31-020010-00
 CONSTRUCTION NO.:NHSN-020-9(195)--2R-31 ASSIGNED TO: NLC

DESCRIPTION : Dyersville Interchange between 330th Ave and 332nd Ave

PARCEL	KEY	OWNER	TYPE	R/W W.D OR EASE.	BORROW W.D OR EASE.	HOUSE OR OTHER	COMMERCIAL	OCC ENVIRONMENTAL CONCERNS
0001	26643	GARY G. WESSELS LORI WESSELS	FEE DYERSVILLE CITY					
			FEE	10.82 WD ACRE				
			STATE OF IOWA					
				13.50 WD ACRE				
0002	26644	HERBERT P. RECKER MARY M. RECKER	FEE STATE OF IOWA					
			FEE	4.86 WD ACRE				
0003	26645	HERBERT P. RECKER MARY M. RECKER MICHAEL RECKER	FEE STATE OF IOWA					
			FEE	3,035.00 WD SQFT				
			CP1					
0003 A	26725	DYERSVILLE INDUSTRIES, INC	FEE DYERSVILLE CITY					
				0.13 WD ACRE				
0004	26646	LEON ELENZ	FEE DELAWARE COUNTY					
				19.62 WD ACRE				
			STATE OF IOWA					
				16.83 WD ACRE				
				10.76 EXCESS AC				
0004 A	26739	PHILIP WESTHOFF MONICA WESTHOFF	FEE DELAWARE COUNTY					
			FEE	1.22 WD ACRE				
0005	26647	GLADYS R. WESSELS	FEE STATE OF IOWA					
				0.69 WD ACRE				
0006	26648	PAUL E. CHRISTOFFER TAMMY L. CHRISTOFFER	FEE DELAWARE COUNTY					
			FEE	1,953.00 WD SQFT				
0007	26649	KAREN M. TEGELER DAVID D. TEGELER	FEE DELAWARE COUNTY					
			FEE	159.00 WD SQFT				

PARCEL CHECK LIST

04/15/13 13:48 HSL PRINT FOR N L CUVA PAGES: 1 - 4 GEN: 1

PARCEL CHECK BY PROJ UPDATED 04/15/13 13:48 PAGE: 3
AND: 4

R2360003 PARCEL CHECK LIST BY PROJECT NUMBER
 COUNTY : DELAWARE PROJECT NO. :NHSN-020-8(48)--2R-28 PIN: 10-31-020010-00
 CONSTRUCTION NO.:NHSN-020-9(195)--2R-31 ASSIGNED TO: NLC
 DESCRIPTION : Dyersville Interchange between 330th Aveand 332nd Ave

PARCEL	KEY	OWNER	TYPE	R/W W.D OR EASE.	BORROW W.D OR EASE.	HOUSE OR OTHER	COMMERCIAL	OCC ENVIRONMENTAL CONCERNS
--------	-----	-------	------	------------------	---------------------	----------------	------------	----------------------------

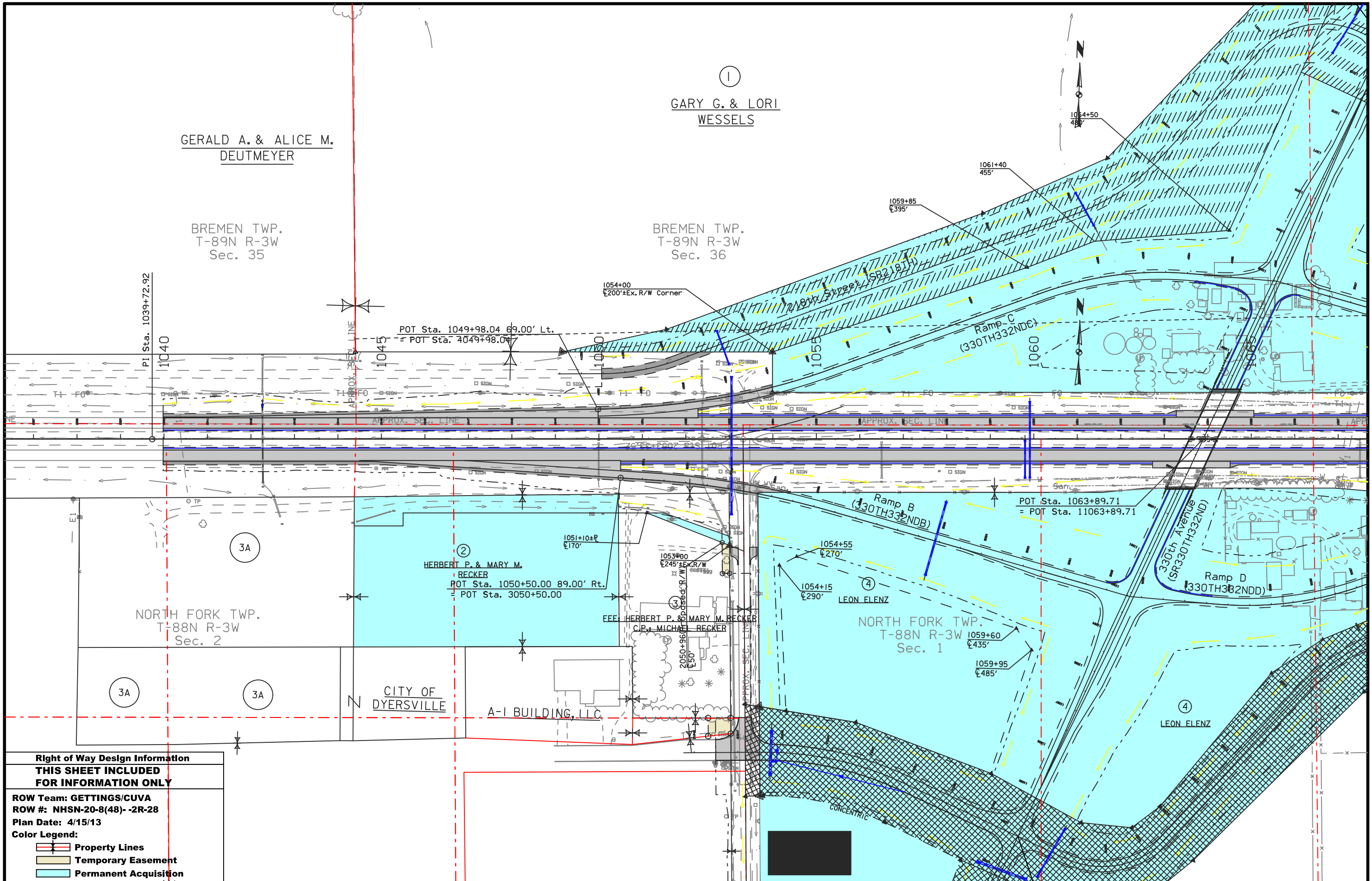
0008	26650	KENNETH G. TUETKEN	FEE DYERSVILLE CITY	1.64	WD ACRE			
			STATE OF IOWA	0.62	WD ACRE			
0009	26651	BGPD LAND HOLDINGS, LLC	FEE DYERSVILLE CITY	2.00	WD ACRE			
0009	26651							
0010	26652	C&G PARTNERSHIP	FEE DYERSVILLE CITY	1.02	WD ACRE			

CITY of DYERSVILLE
15.61 WARRANTY DEED ACRES

COUNTY of DELAWARE
20.84 WARRANTY DEED ACRES
2,112.00 WARRANTY DEED SQFT

STATE OF IOWA
36.50 WARRANTY DEED ACRES
3,035.00 WARRANTY DEED SQFT
10.76 EXCESS ACRES

12 TOTAL PARCELS ON PROJECT



GERALD A. & ALICE M.
DEUTMEYER

GARY G. & LORI
WESSELS

BREMEN TWP.
T-89N R-3W
Sec. 35

BREMEN TWP.
T-89N R-3W
Sec. 36

PI Sta. 1039+72.92

1040

POT Sta. 1049+98.04 69.00' Lt.
= POT Sta. 1049+98.04

1054+00
±200'±Ex. R/W Corner

1061+40
455'

1059+85
±395'

1054+50
485'

Ramp C
(330TH332NDC)

NORTH FORK TWP.
T-88N R-3W
Sec. 2

HERBERT P. & MARY M.
RECKER
POT Sta. 1050+50.00 89.00' Rt.
= POT Sta. 3050+50.00

HERBERT P. & MARY M. RECKER
CIP MICHAEL RECKER

NORTH FORK TWP.
T-88N R-3W
Sec. 1

POT Sta. 1063+89.71
= POT Sta. 11063+89.71

Ramp B
(330TH332NDB)

330th Avenue
(SR330TH332ND)

Ramp D
(330TH332NDD)

3A

3A

CITY OF
DYERSVILLE

A-I BUILDING, LLC

1054+55
±270'

1054+15
±290'

LEON ELENZ

1059+60
±435'

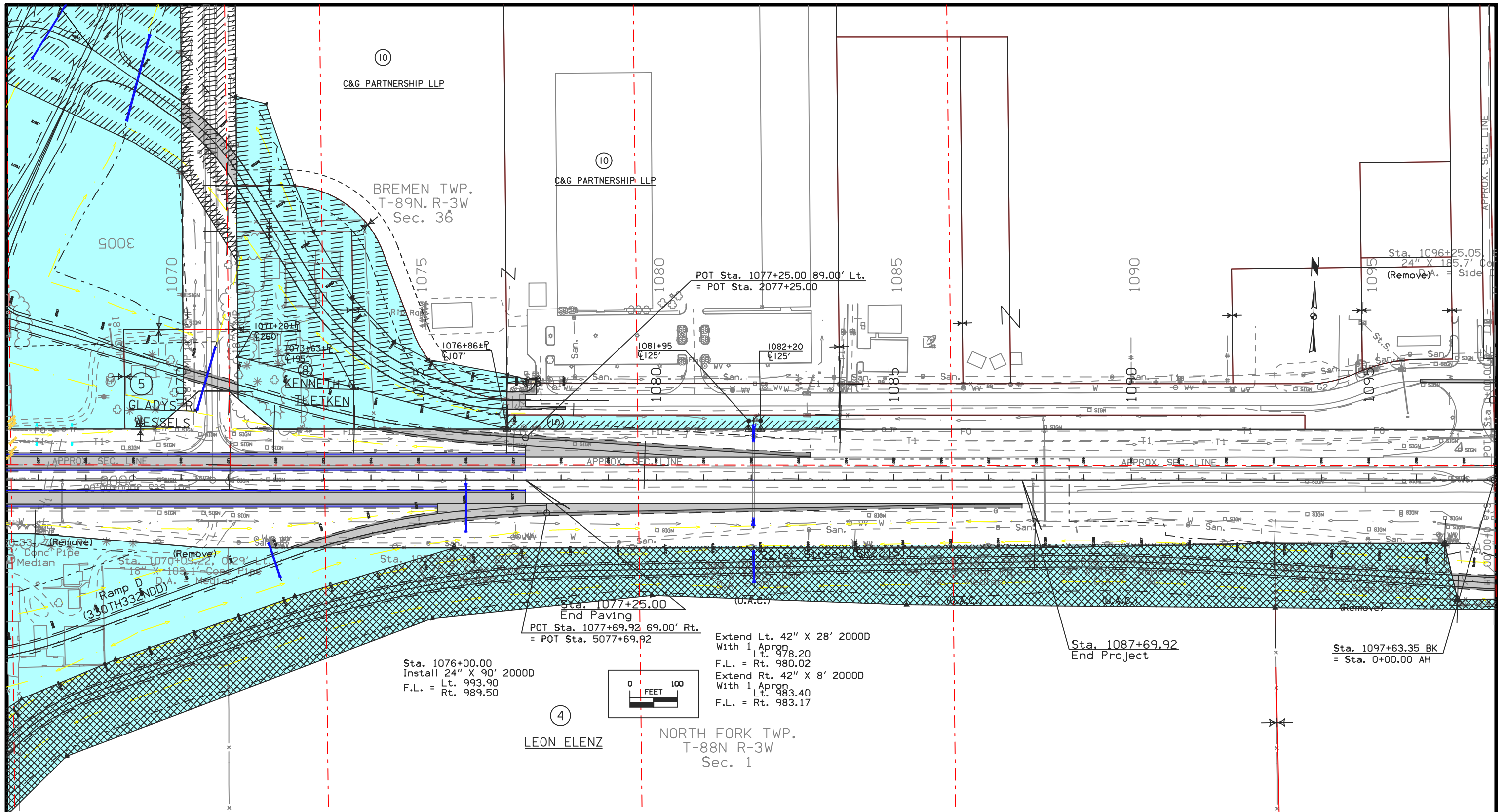
1059+95
±485'

LEON ELENZ

Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

ROW Team: GETTINGS/CUVA
ROW #: NHSN-20-8(48)-2R-28
Plan Date: 4/15/13

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



⑩
C&G PARTNERSHIP LLP

BREMEN TWP.
T-89N. R-3W
Sec. 36

⑩
C&G PARTNERSHIP LLP

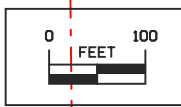
POT Sta. 1077+25.00 89.00' Lt.
= POT Sta. 2077+25.00

⑤
GLADYS TR
WESSELS

⑧
KENNETH
THEIKEN

④
LEON ELENZ

NORTH FORK TWP.
T-88N R-3W
Sec. 1



Sta. 1076+00.00
Install 24" X 90' 2000D
F.L. = Lt. 993.90
Rt. 989.50

Sta. 1077+25.00
End Paving
POT Sta. 1077+69.92 69.00' Rt.
= POT Sta. 5077+69.92

Extend Lt. 42" X 28' 2000D
With 1 Apron
Lt. 978.20
F.L. = Rt. 980.02
Extend Rt. 42" X 8' 2000D
With 1 Apron
Lt. 983.40
F.L. = Rt. 983.17

Sta. 1087+69.92
End Project

Sta. 1097+63.35 BK
= Sta. 0+00.00 AH

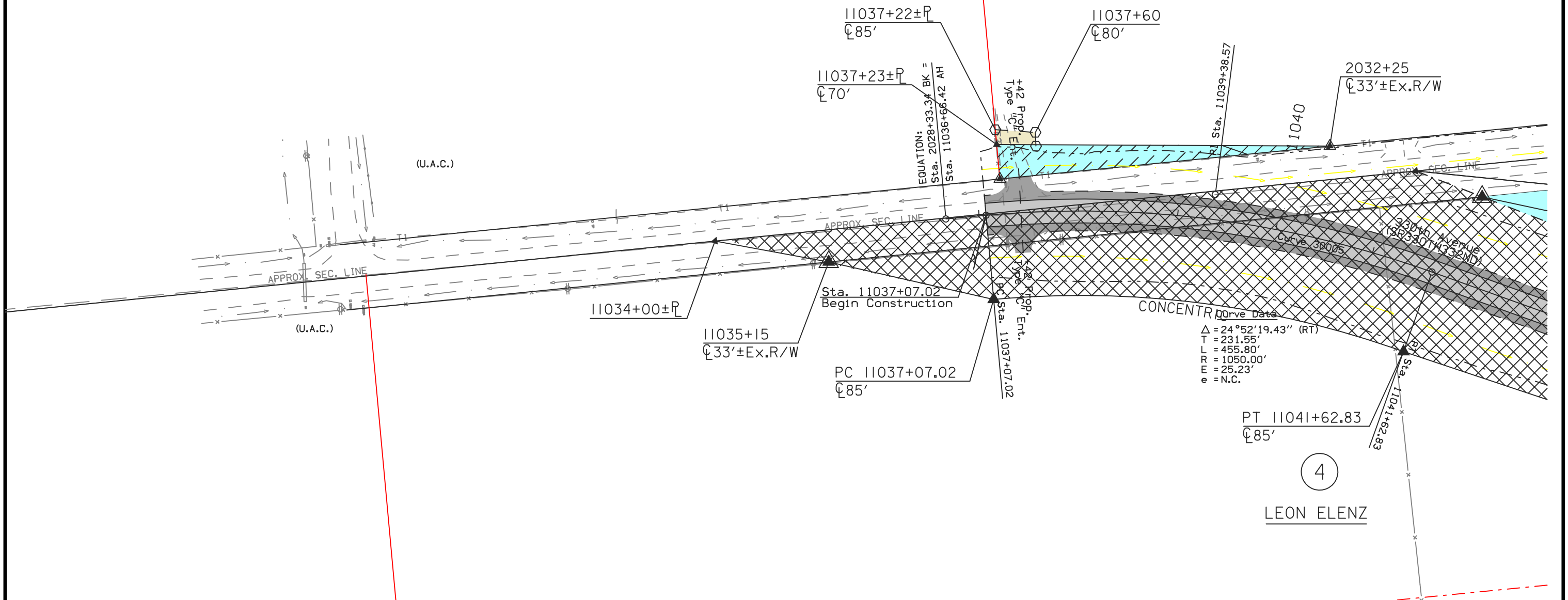
Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: GETTINGS/CUVA	
ROW #: NHSN-20-8(48)-2R-28	
Plan Date: 4/15/13	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

3A



DYERSVILLE INDUSTRIES, INC.

TEMPORARY EASEMENT TO CONSTRUCT ENTRANCE



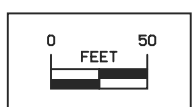
CONCENTRIC Curve Data

$\Delta = 24^\circ 52' 19.43''$ (RT)
 $T = 231.55'$
 $L = 455.80'$
 $R = 1050.00'$
 $E = 25.23'$
 $e = N.C.$

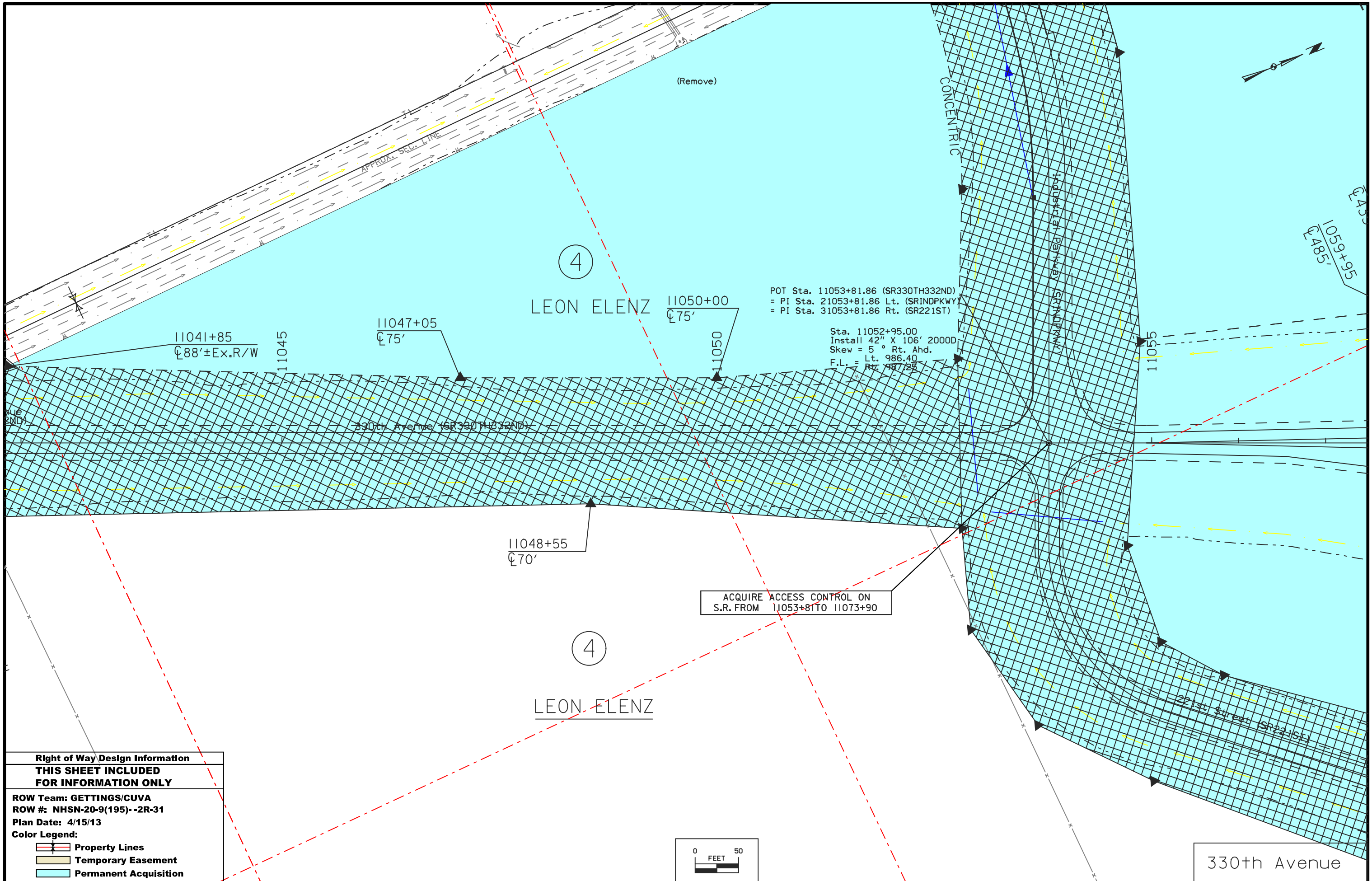
4

LEON ELENZ

Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: GETTINGS/CUVA	
ROW #: NHSN-20-9(195)-2R-31	
Plan Date: 4/15/13	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition



330th Avenue

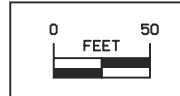


Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

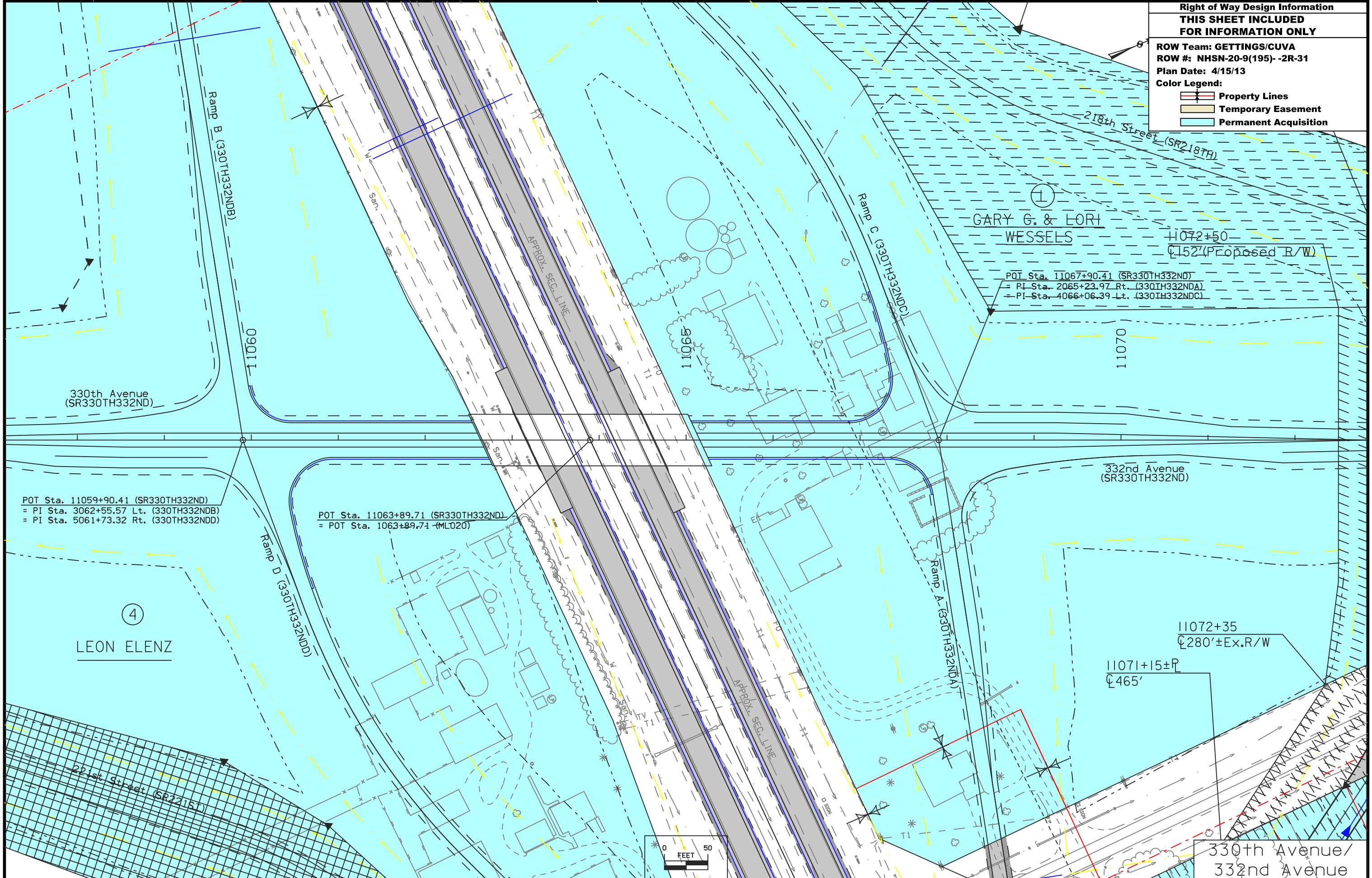
ROW Team: GETTINGS/CUVA
 ROW #: NHSN-20-9(195)-2R-31
 Plan Date: 4/15/13

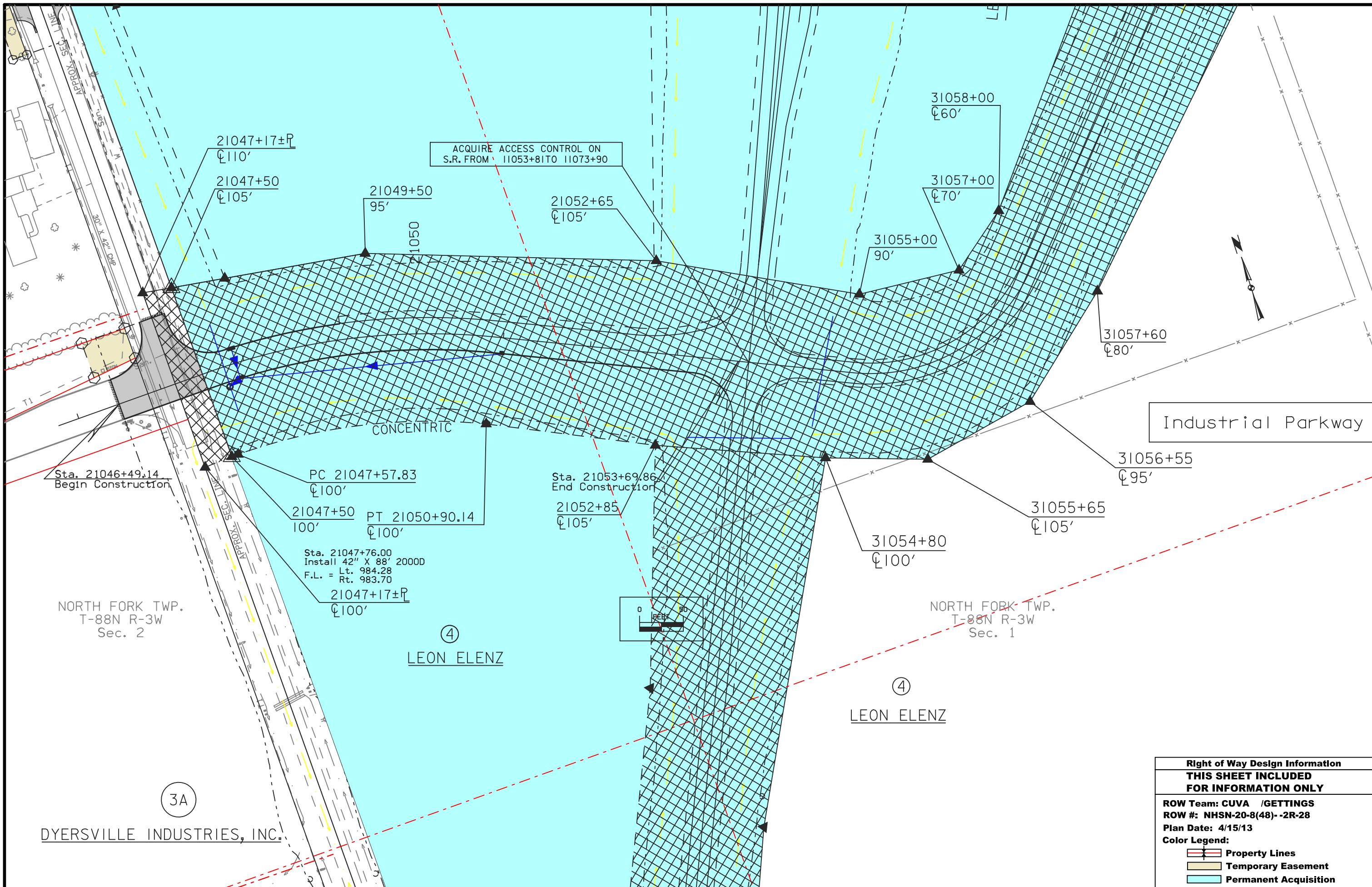
Color Legend:

- Property Lines
- Temporary Easement
- Permanent Acquisition

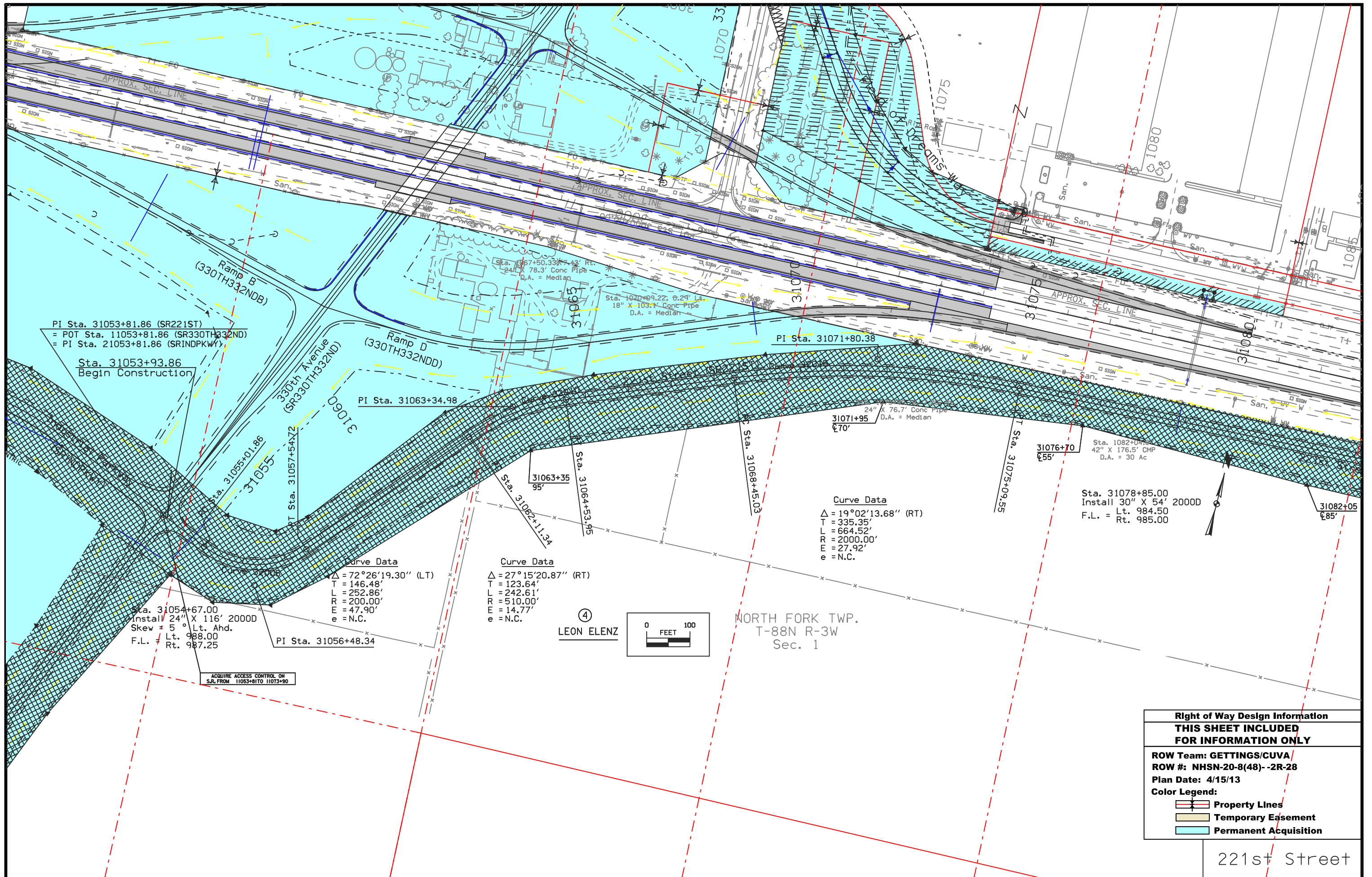


Right of Way Design Information
THIS SHEET INCLUDED FOR INFORMATION ONLY
 ROW Team: GETTINGS/CUVA
 ROW #: NHSN-20-9(195)-2R-31
 Plan Date: 4/15/13
 Color Legend:
 - Property Lines
 - Temporary Easement
 - Permanent Acquisition



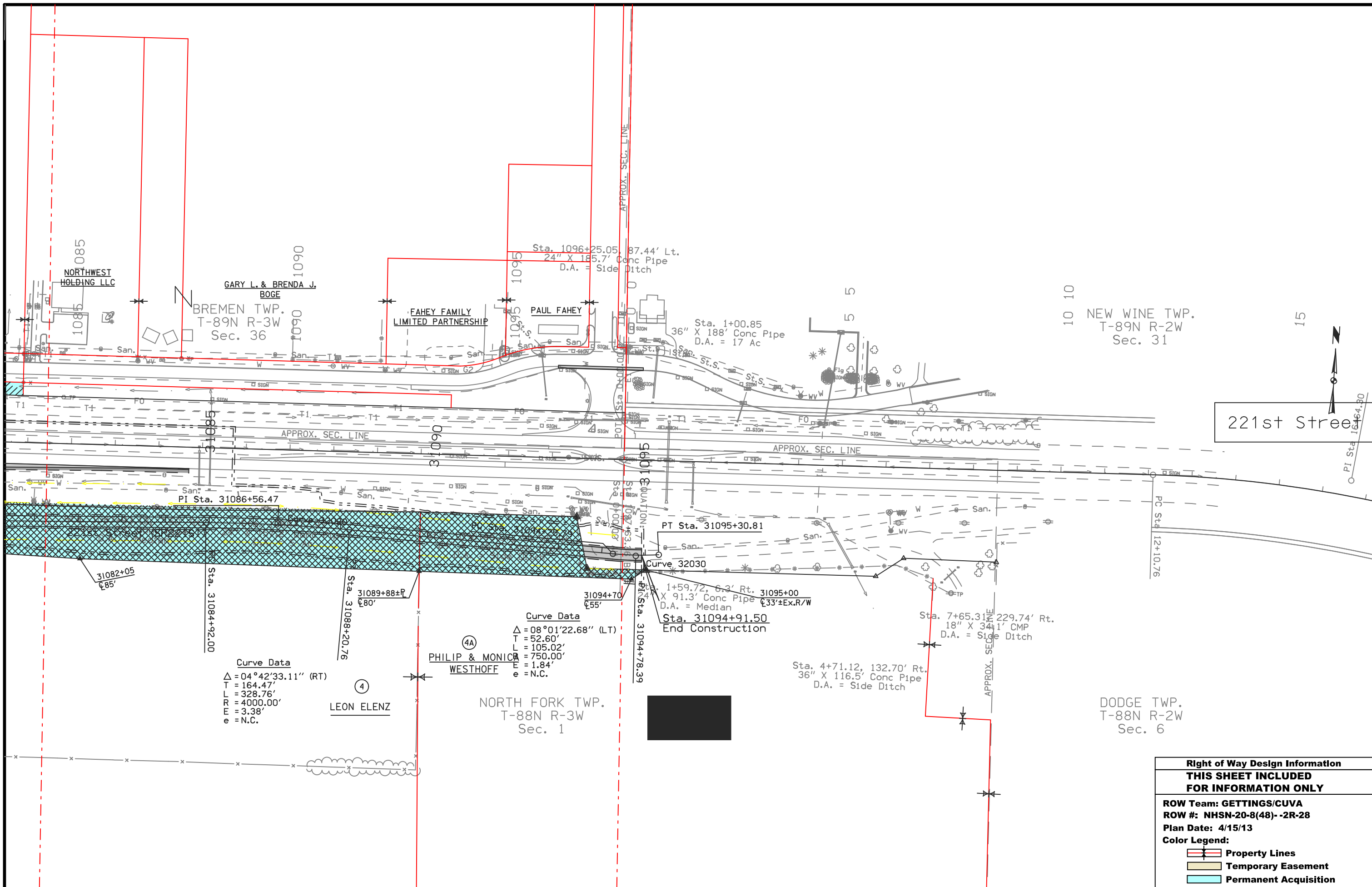


Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: CUVA /GETTINGS	
ROW #: NHSN-20-8(48)-2R-28	
Plan Date: 4/15/13	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition



Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: GETTINGS/CUVA	
ROW #: NHSN-20-8(48)-2R-28	
Plan Date: 4/15/13	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

221st Street

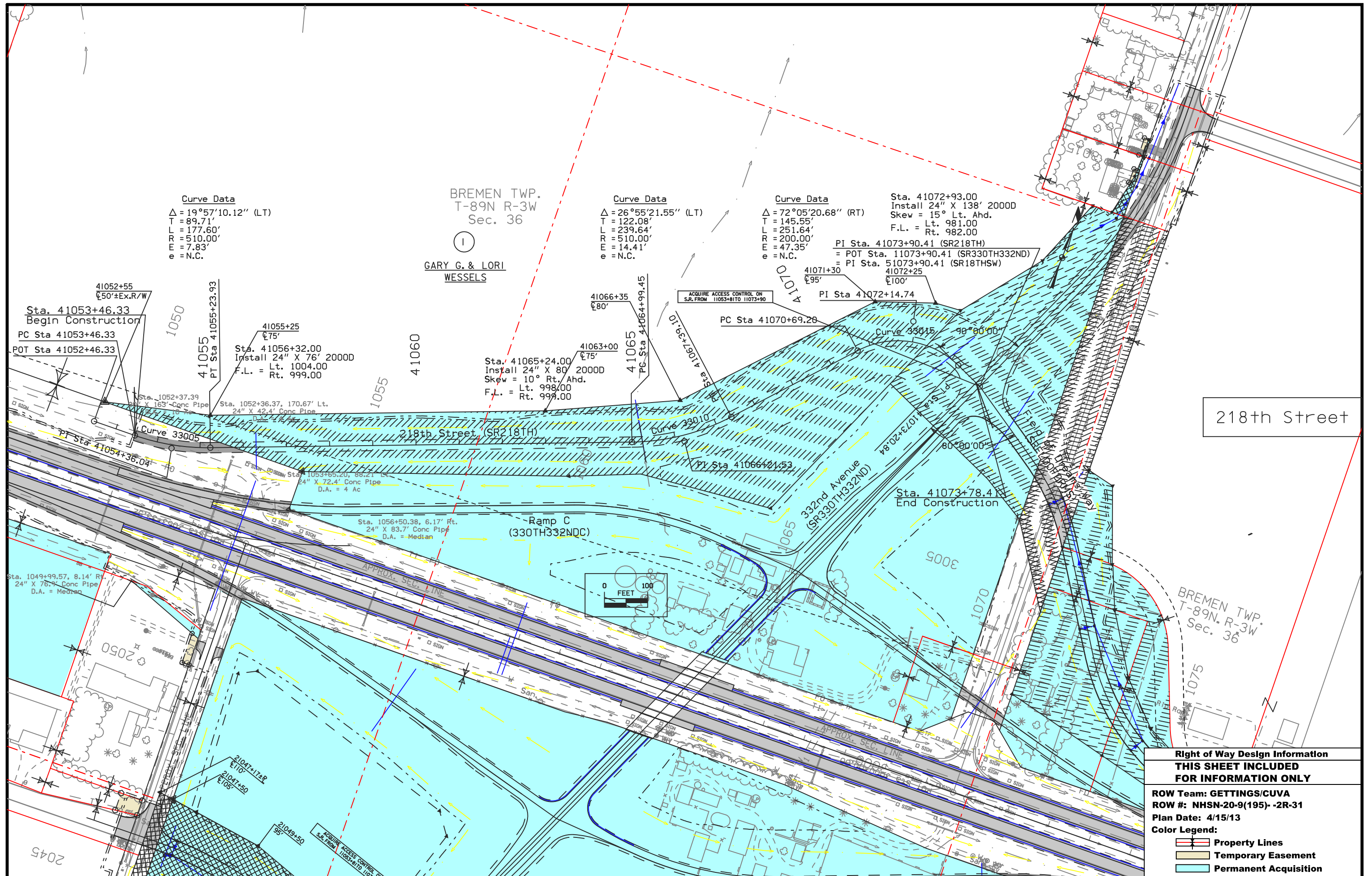


221st Street

Curve Data
 $\Delta = 04^{\circ}42'33.11''$ (RT)
 T = 164.47'
 L = 328.76'
 R = 4000.00'
 E = 3.38'
 e = N.C.

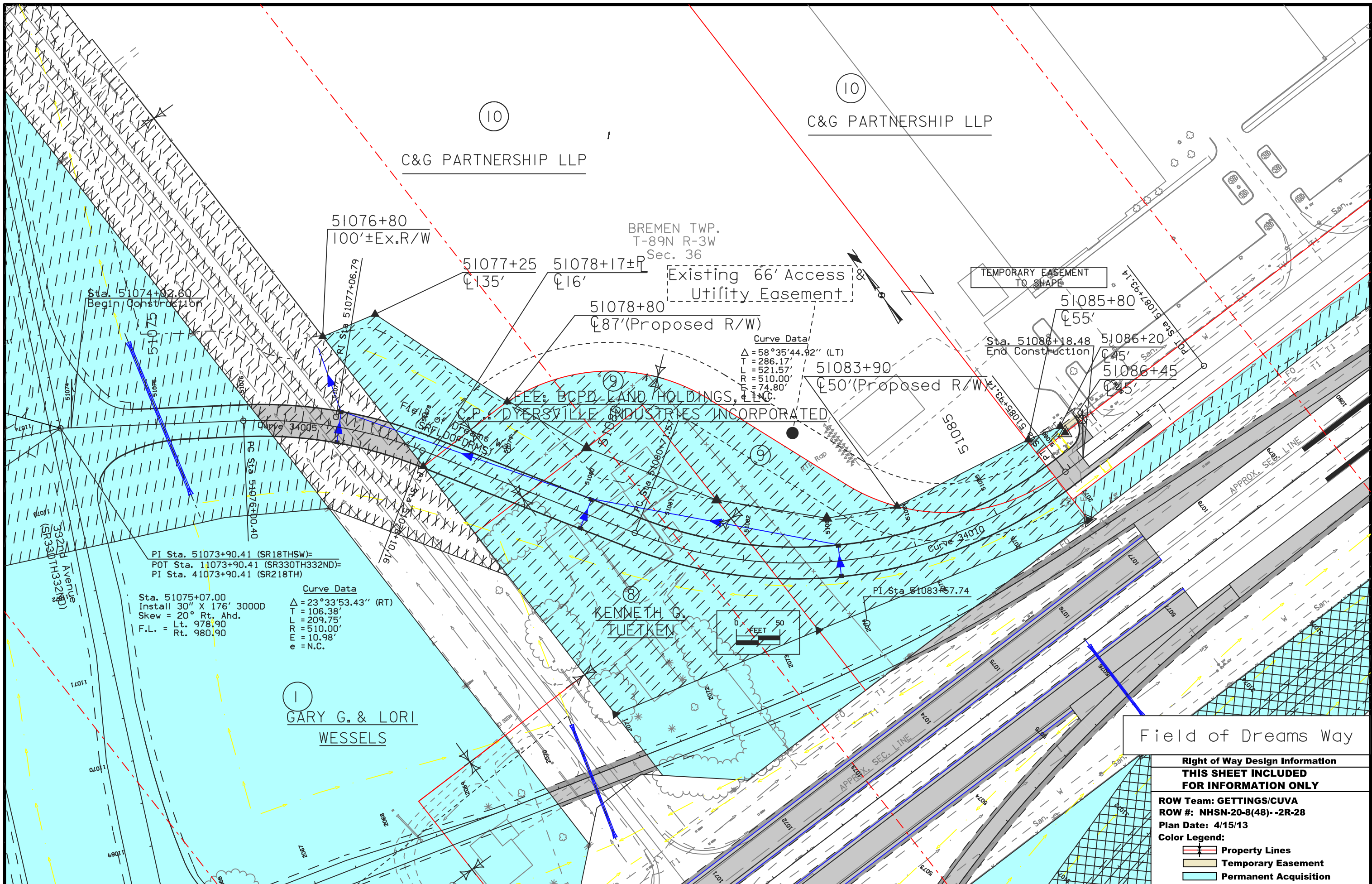
Curve Data
 $\Delta = 08^{\circ}01'22.68''$ (LT)
 T = 52.60'
 L = 105.02'
 R = 750.00'
 E = 1.84'
 e = N.C.

Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: GETTINGS/CUVA	
ROW #: NHSN-20-8(48)-2R-28	
Plan Date: 4/15/13	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition



218th Street

Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: GETTINGS/CUVA	
ROW #: NHSN-20-9(195)-2R-31	
Plan Date: 4/15/13	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition



10
C&G PARTNERSHIP LLP

10
C&G PARTNERSHIP LLP

BREMEN TWP.
T-89N R-3W
Sec. 36

Existing 66' Access &
Utility Easement

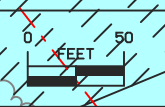
TEMPORARY EASEMENT
TO SHAPE

Curve Data
 $\Delta = 58^{\circ}35'44.92''$ (LT)
 T = 286.17'
 L = 521.57'
 R = 510.00'
 E = 74.80'
 e = N.C.

PI Sta. 51073+90.41 (SR18THSW)=
 POT Sta. 51073+90.41 (SR330TH332ND)=
 PI Sta. 51073+90.41 (SR218TH)

Sta. 51075+07.00
 Install 30" X 176' 3000D
 Skew = 20° Rt. Ahd.
 F.L. = Lt. 978.90
 Rt. 980.90

Curve Data
 $\Delta = 23^{\circ}33'53.43''$ (RT)
 T = 106.38'
 L = 209.75'
 R = 510.00'
 E = 10.98'
 e = N.C.



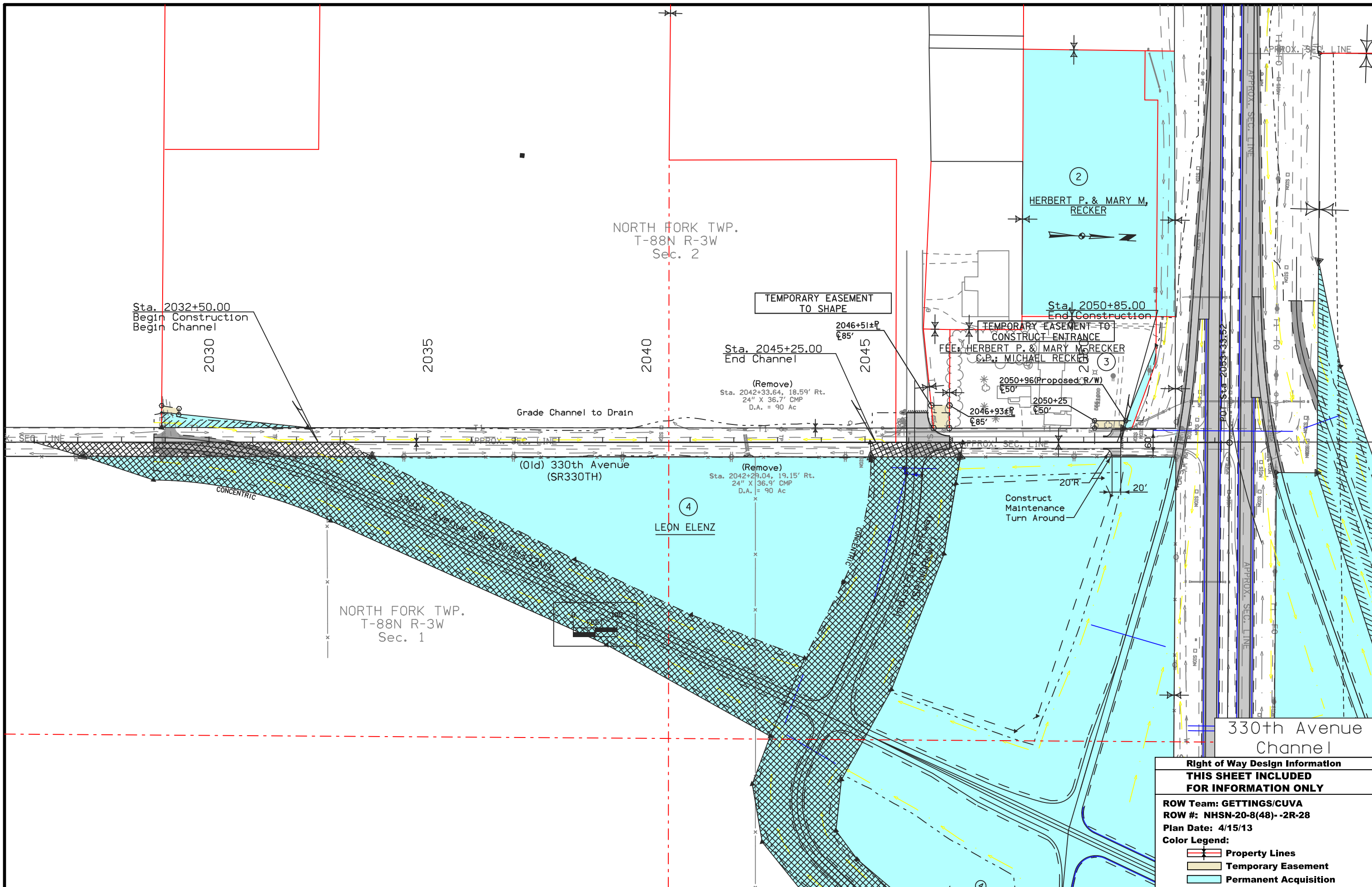
1
GARY G. & LORI
WESSELS




Field of Dreams Way

Right of Way Design Information
THIS SHEET INCLUDED
FOR INFORMATION ONLY

ROW Team: GETTINGS/CUVA
 ROW #: NHSN-20-8(48)--2R-28
 Plan Date: 4/15/13

Color Legend:
 Property Lines
 Temporary Easement
 Permanent Acquisition



Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: GETTINGS/CUVA	
ROW #: NHSN-20-8(48)-2R-28	
Plan Date: 4/15/13	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

TRAFFIC CONTROL PLAN

STAGING NOTES

US 20
At all times, at least one lane of traffic shall be maintained on US 20 in each direction.

330th AVENUE
330th Avenue will be closed at US 20 until the new interchange is open to traffic.
Iowa DOT staff will sign a detour route along 320th Avenue to 225th Street.

332nd AVENUE
332nd Avenue will be closed at US 20 until the new interchange is open to traffic.
Iowa DOT staff will sign a detour route along 320th Avenue to 210th Street. (Alternate: 7th Street SW to 12th Avenue SW)

320th AVENUE
320th Avenue will remain open until the new interchange is open to traffic.
Once the interchange is open to traffic, 320th will be closed at US 20.

7th STREET SW
7th Street SW will remain open until the new interchange is open to traffic.
Once the interchange is open to traffic, 7th Street SW will be closed at US 20.

Borrow areas are located on both sides of US 20 to avoid hauling across 20.

Stage 1A
Traffic Control
Close 330th Avenue south of the proposed southerly tie-in.
Maintain access to existing Industrial Parkway via existing 330th Avenue to the north.

Construction
Construct new 330th Avenue, between southerly tie-in and Industrial Parkway.
Construct the extension of Industrial Parkway between existing 330th Avenue and 221st Street.
Construct 221st Street, between new 330th Avenue and the US-20 Access to the east.
Obliterate existing 330th Avenue south of Industrial Parkway to new tie-in and re-establish existing drainage.

Stage 1B
Traffic Control
EB and WB traffic shifted to outside lanes to construct median crossovers.
Move Industrial Parkway traffic to new construction (Industrial Parkway extension and 221st Street).

Construction
Construct both median crossovers.

Stage 1C
Traffic Control
EB and WB traffic shifted to WB lanes utilizing new median crossovers, one lane in each direction.
Close access to 330th Avenue and 332nd Avenue at US 20. Construct turnaround on 330th Avenue.
Maintain access to existing Industrial Parkway via extension of Industrial Parkway and 221st Street.
Maintain access to existing Field of Dreams Way via 7th Street SW.

Construction
Reconstruct EB lanes of US 20. Construct Ramp B, Ramp D, and 330th Avenue between Industrial Parkway and Ramps B and D.

Stage 2
Traffic Control
EB and WB traffic shifted to newly constructed EB lanes utilizing median crossovers, one lane in each direction.
Access to 330th Avenue and 332nd Avenue to remain closed at US 20.
Maintain access to existing Industrial Parkway via extension of Industrial Parkway and 221st Street.
Maintain access to existing Field of Dreams Way via 7th Street SW.

Construction
Reconstruct WB lanes of US 20. Construct Ramp A, Ramp C, 332nd Avenue, Field of Dreams Way, and 218th Street.
Remove 332nd Avenue between US 20 and Field of Dreams Way.










Stage 3
Traffic Control
EB and WB traffic shifted to outside lanes to remove median crossovers and construct median bridge pier.
Maintain access to existing Industrial Parkway via extension of Industrial Parkway and 221st Street.

Construction
Construct 330th Avenue/332nd Avenue bridge over US 20.
Construct bridge approaches.
Remove 7th Street SW access at US 20.
Remove 320th Street access at US 20 and construct turnaround.
Remove access to 221st Street at US 20 opposite 7th Street SW.

**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, Light	(236)	Proposed Grading Limits 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)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Tan	(8)	Proposed Granular Surface 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

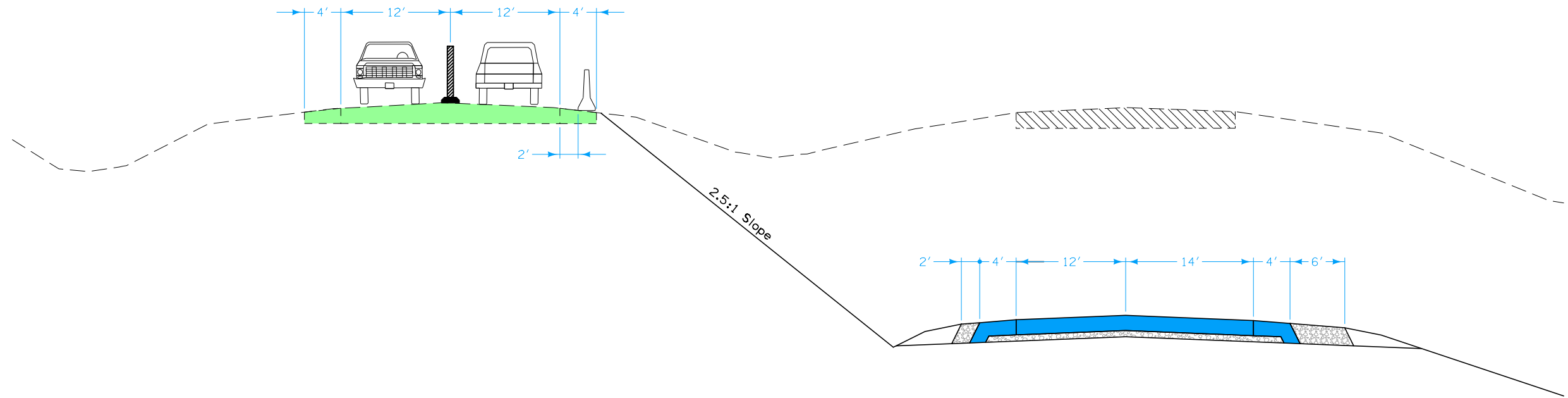
**PLAN VIEW PATTERN AND SYMBOL LEGEND
OF TRAFFIC CONTROL AND STAGING SHEETS**

	Channelizing Device		Crash Cushion
	Drum		Traffic Signal
	Temporary Lane Separator		Flagger
	Tubular Marker		Temporary Floodlighting
	Channelizer Marker		Traffic Sign
	Concrete Barrier Marker		Type III Barricade
	Delineator		Type A Warning Light
	Temporary Barrier Rail		Direction of Traffic
	Pavement Removal		Road Closure

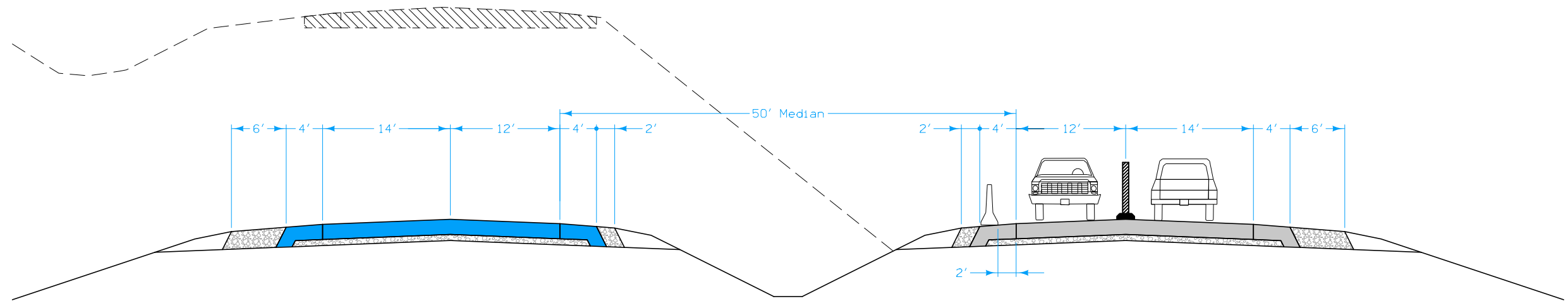
NOTE: Device spacing according to Standard Road Plans unless specifically dimensioned.

**TRAFFIC CONTROL
AND
STAGING
LEGEND AND SYMBOL
INFORMATION SHEET**

(COVERS SHEET SERIES J)

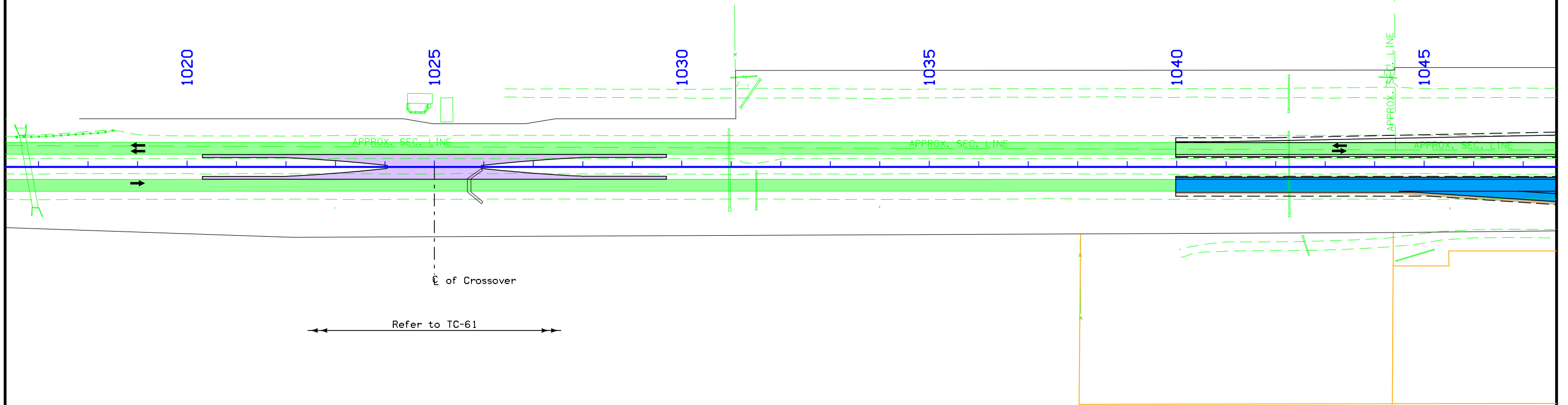


U.S. 20 - STAGE 1 - STA. 1062+00.00

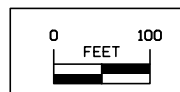


U.S. 20 - STAGE 2 - STA. 1062+00.00

BREMEN TWP.
T-89N R-3W
Sec. 35

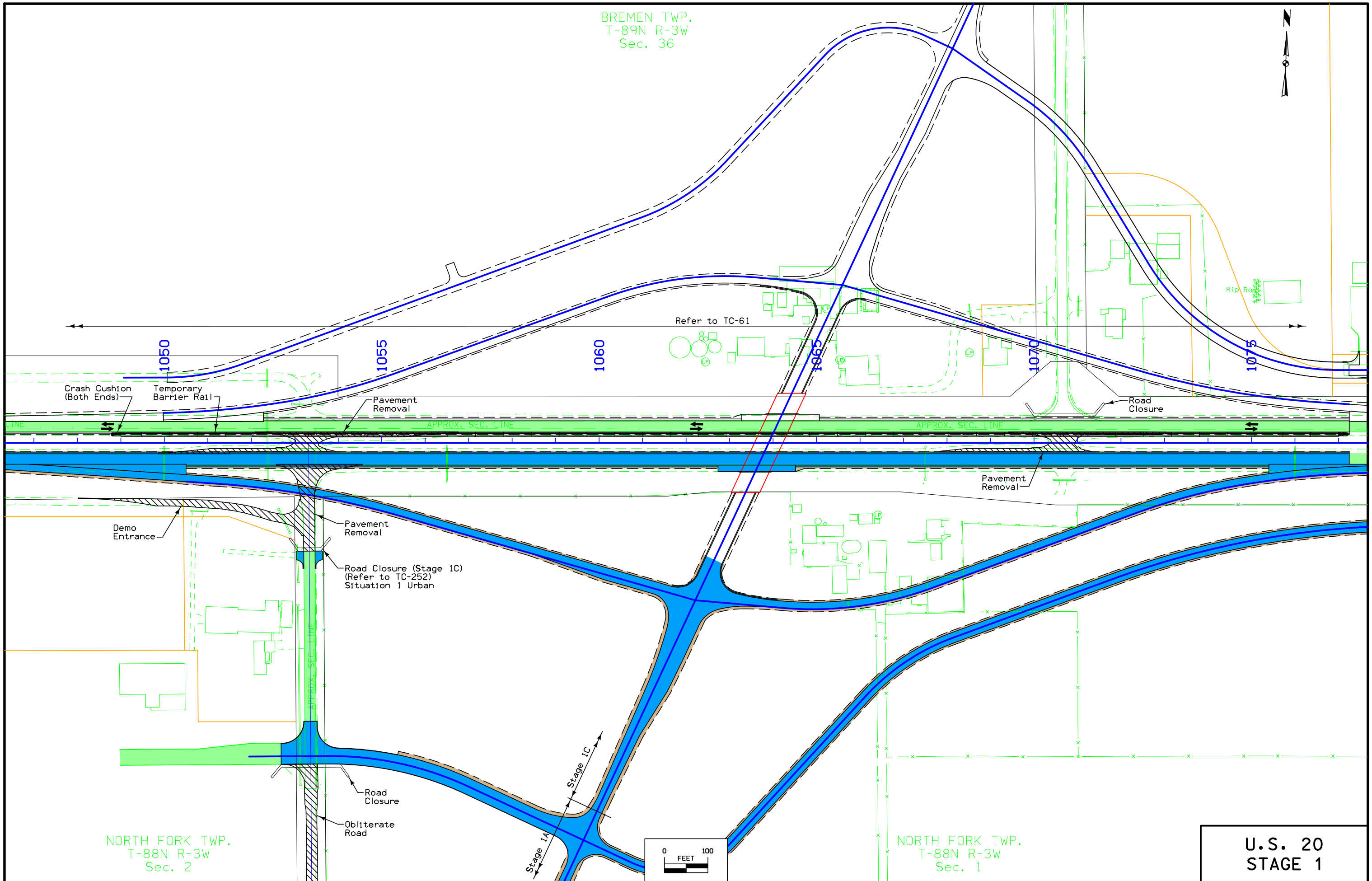


NORTH FORK TWP.
T-88N R-3W
Sec. 2



U.S. 20
STAGE 1

BREMEN TWP.
T-89N R-3W
Sec. 36



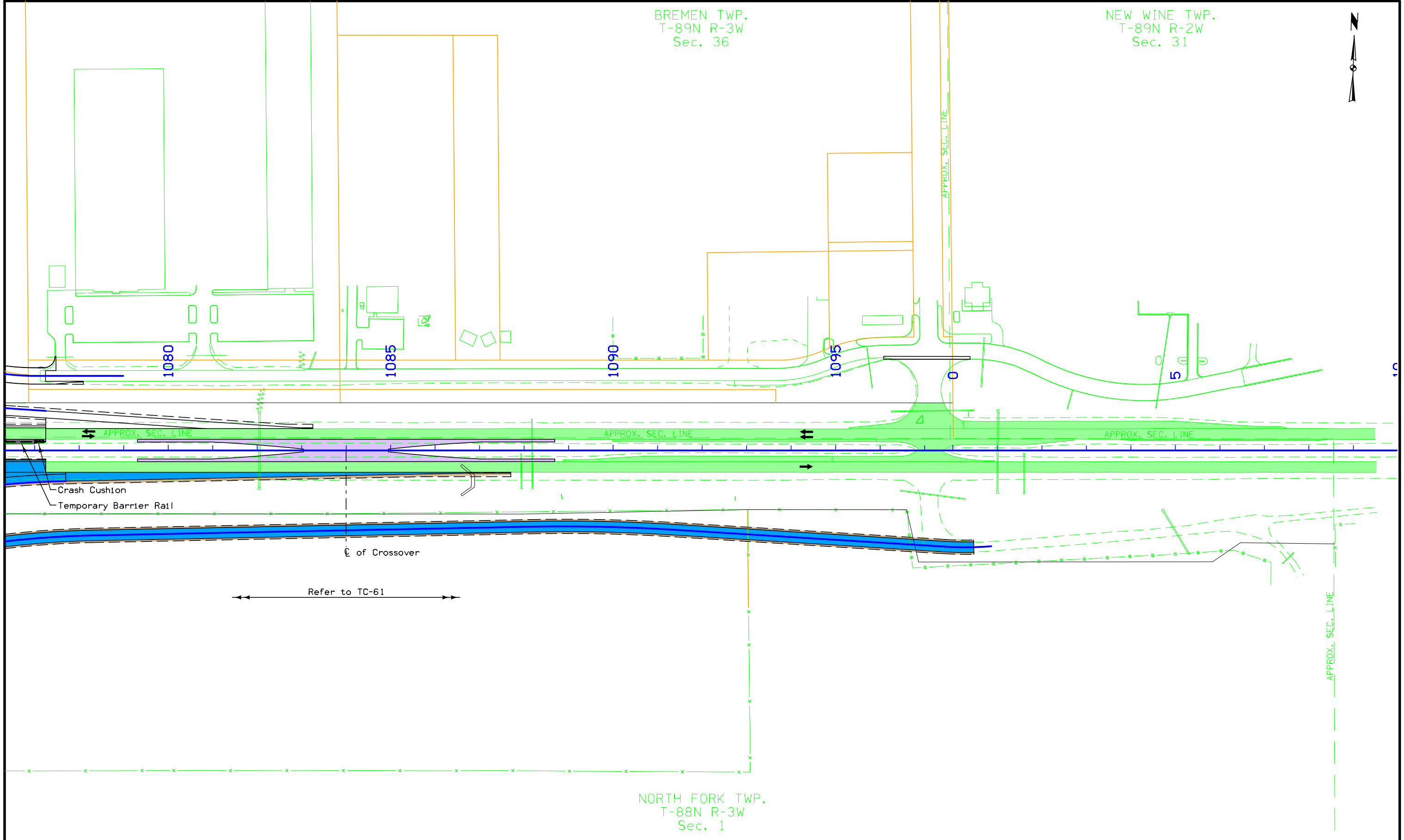
NORTH FORK TWP.
T-88N R-3W
Sec. 2

NORTH FORK TWP.
T-88N R-3W
Sec. 1

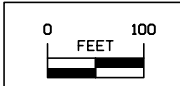
U.S. 20
STAGE 1

BREMEN TWP.
T-89N R-3W
Sec. 36

NEW WINE TWP.
T-89N R-2W
Sec. 31

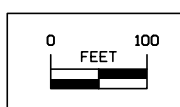
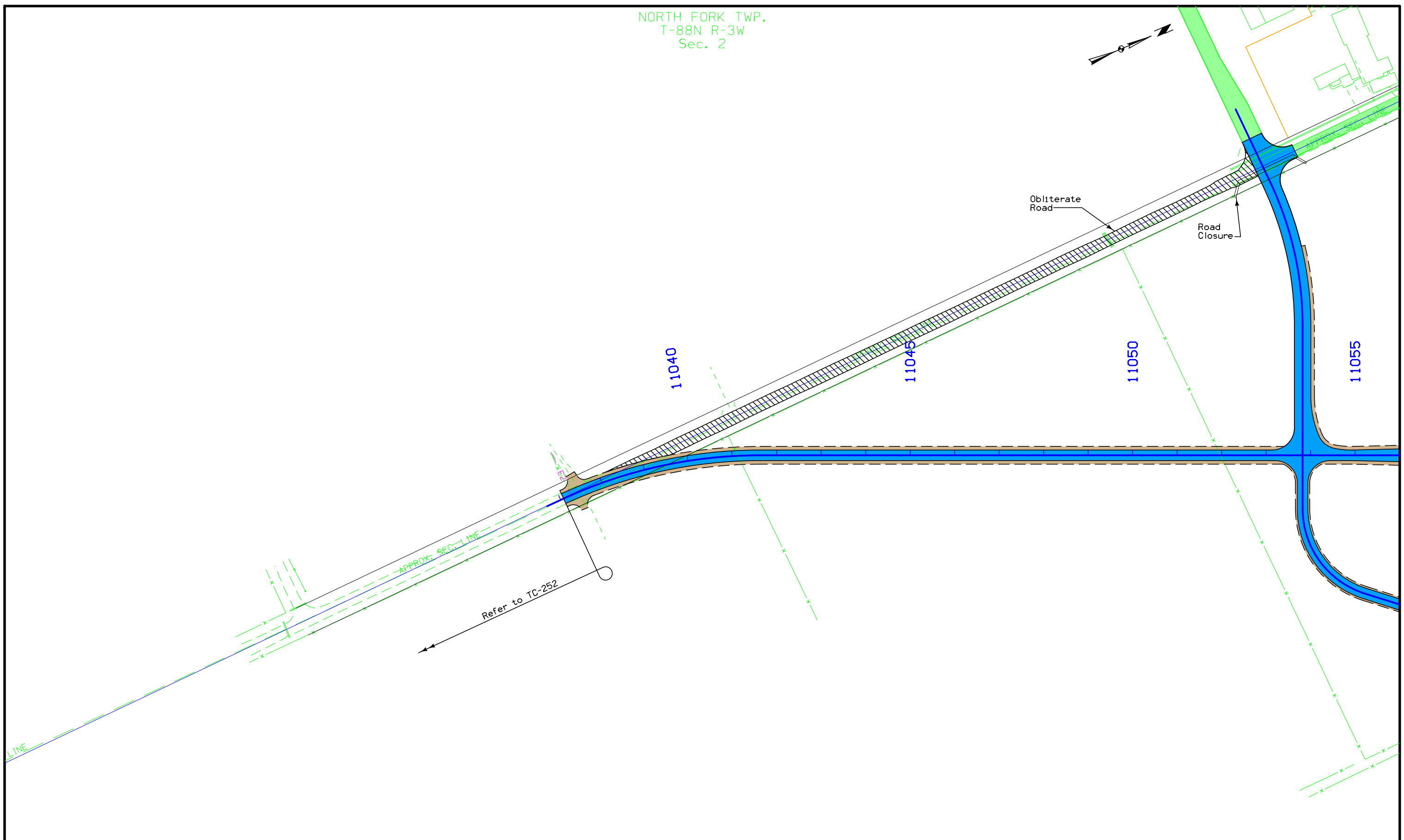
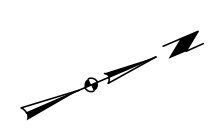


NORTH FORK TWP.
T-88N R-3W
Sec. 1



U.S. 20
STAGE 1

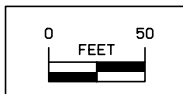
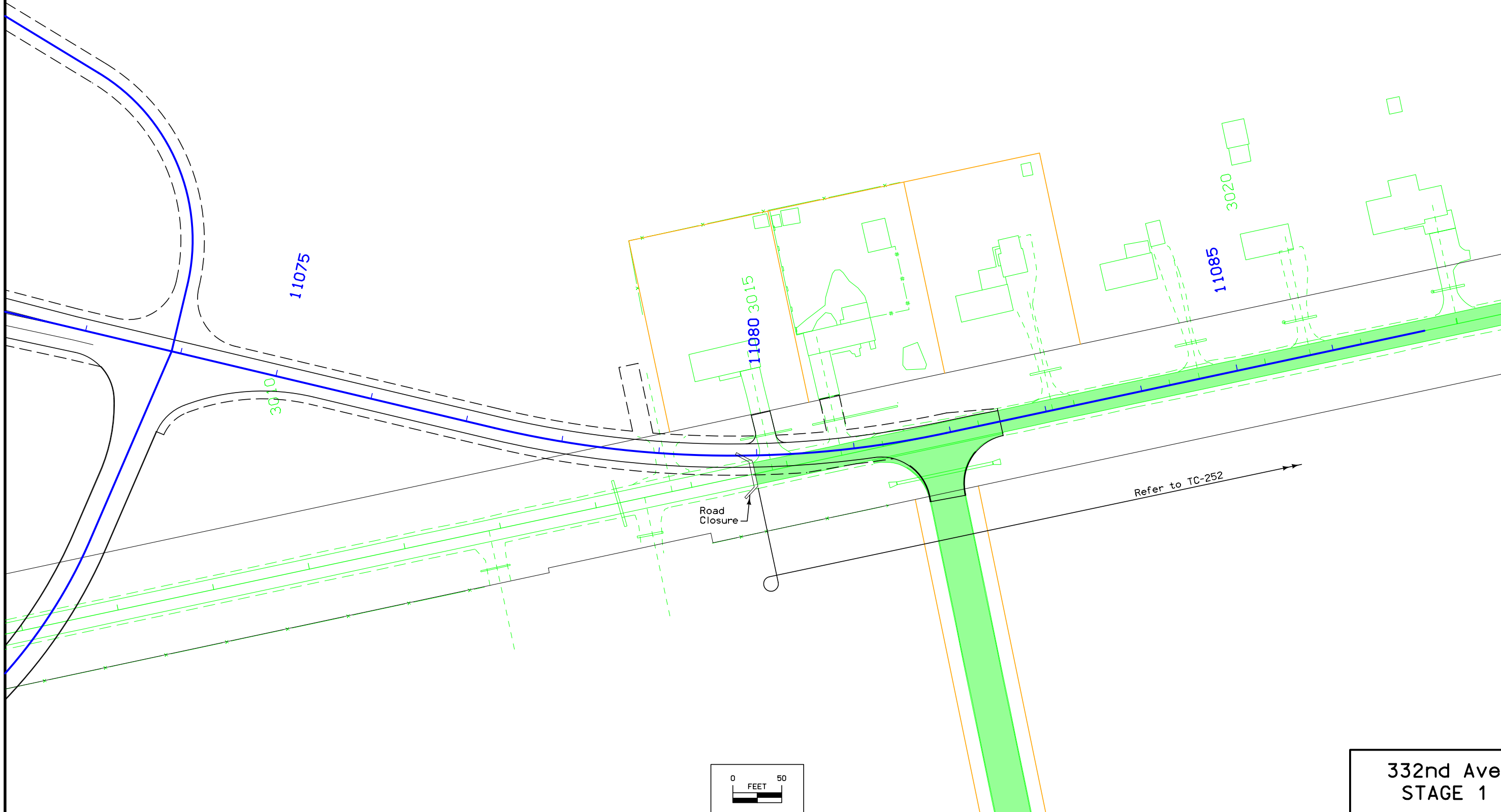
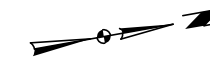
NORTH FORK TWP.
T-88N R-3W
Sec. 2



NORTH FORK TWP.
T-88N R-3W
Sec. 1

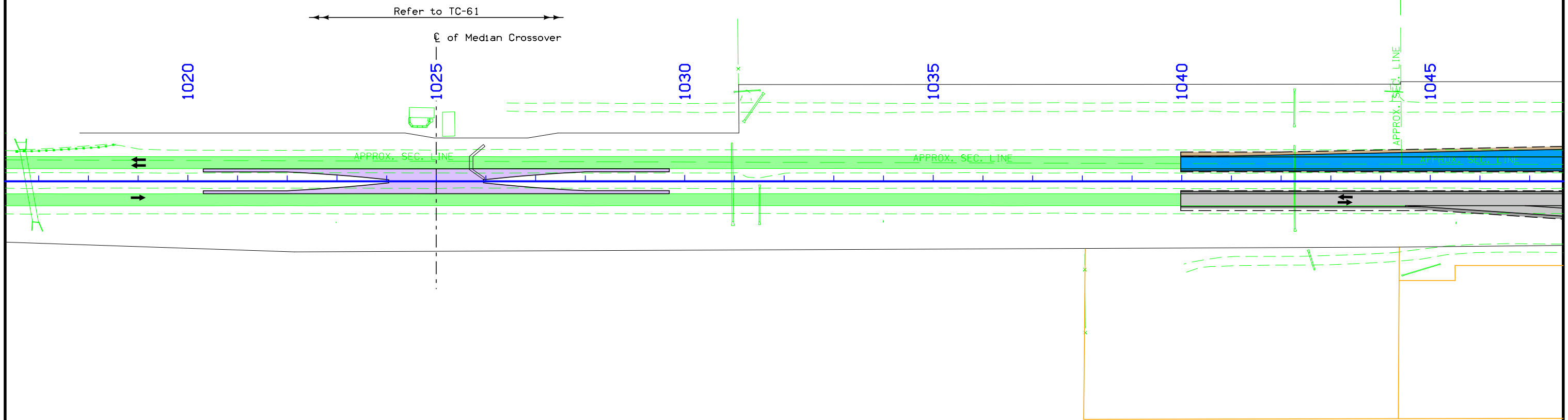
**330th Ave
STAGE 1**

BREMEN TWP.
T-89N R-3W
Sec. 36

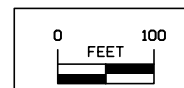


332nd Ave
STAGE 1

BREMEN TWP.
T-89N R-3W
Sec. 35



NORTH FORK TWP.
T-88N R-3W
Sec. 2



U.S. 20
STAGE 2

BREMEN TWP.
T-89N R-3W
Sec. 36



Pavement Removal

Rip Road

Refer to TC-61

1050

1055

1060

1065

1070

1075

Crash Cushion
(Both Ends)

Temporary
Barrier Rail

Demo
Entrance

APPROX. SEC. LINE

APPROX. SEC. LINE

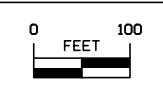
APPROX. SEC. LINE

Road
Closure

Road
Closure

NORTH FORK TWP.
T-88N R-3W
Sec. 2

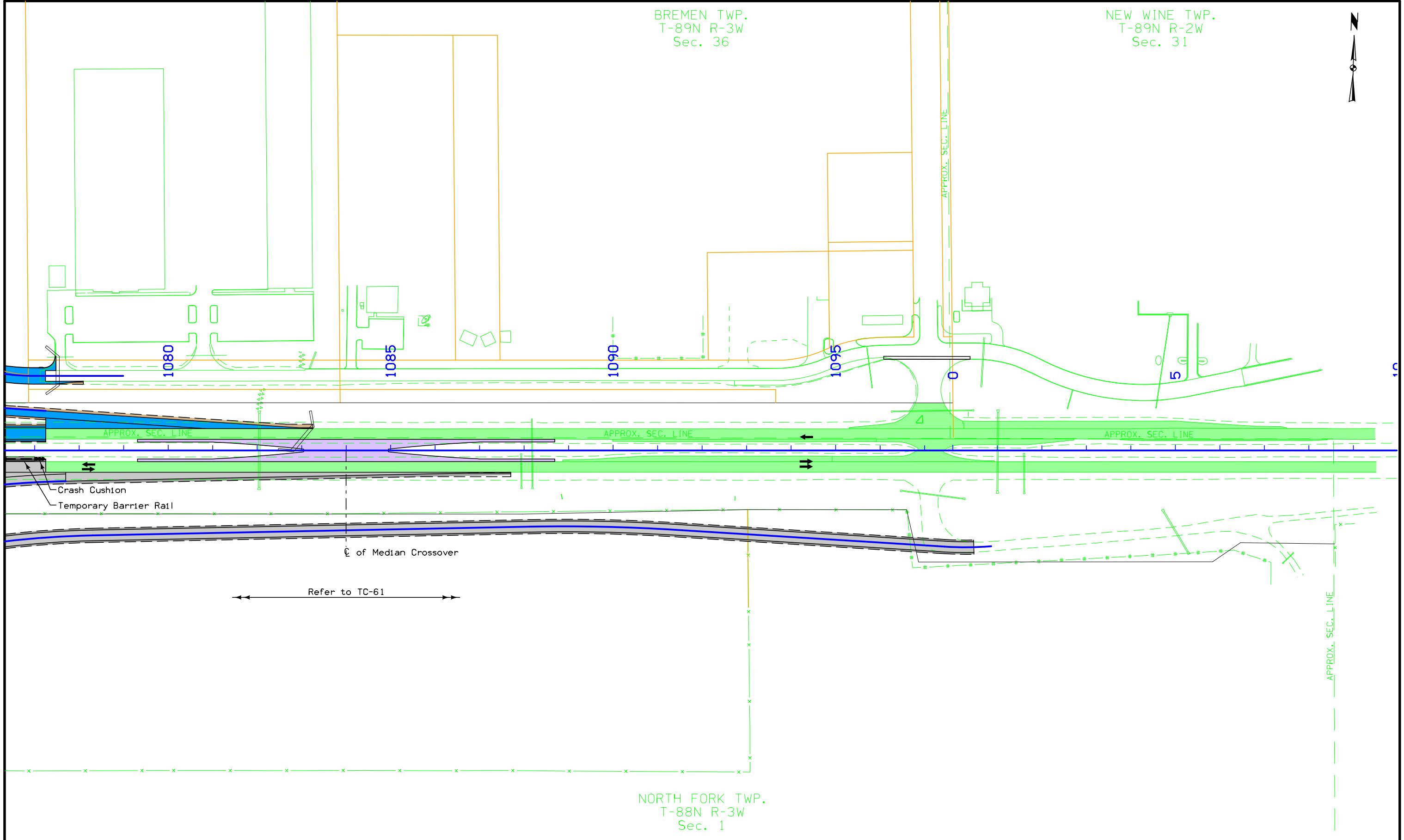
NORTH FORK TWP.
T-88N R-3W
Sec. 1



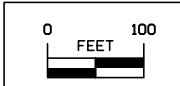
U.S. 20
STAGE 2

BREMEN TWP.
T-89N R-3W
Sec. 36

NEW WINE TWP.
T-89N R-2W
Sec. 31

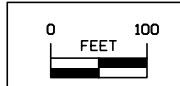
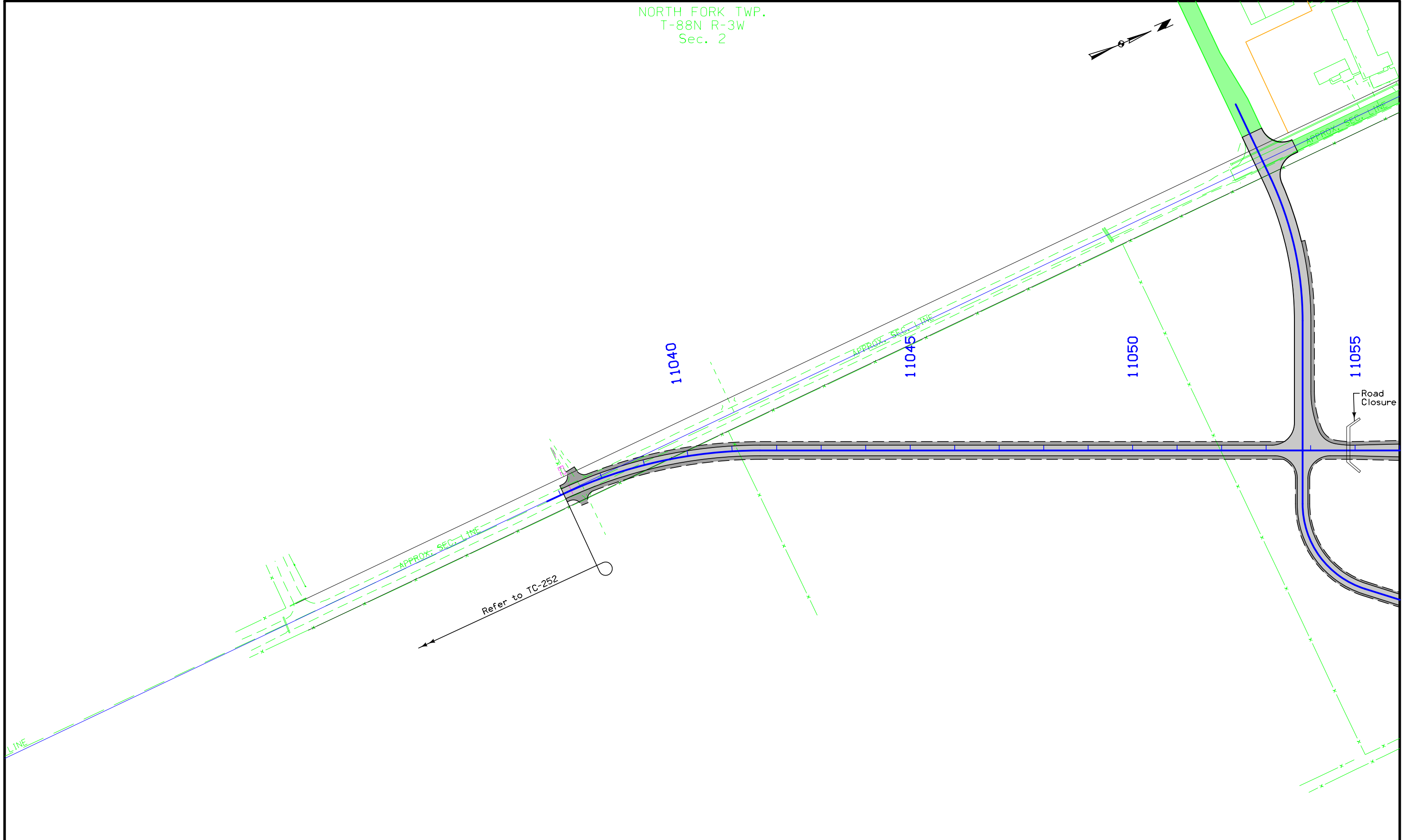


NORTH FORK TWP.
T-88N R-3W
Sec. 1



**U.S. 20
STAGE 2**

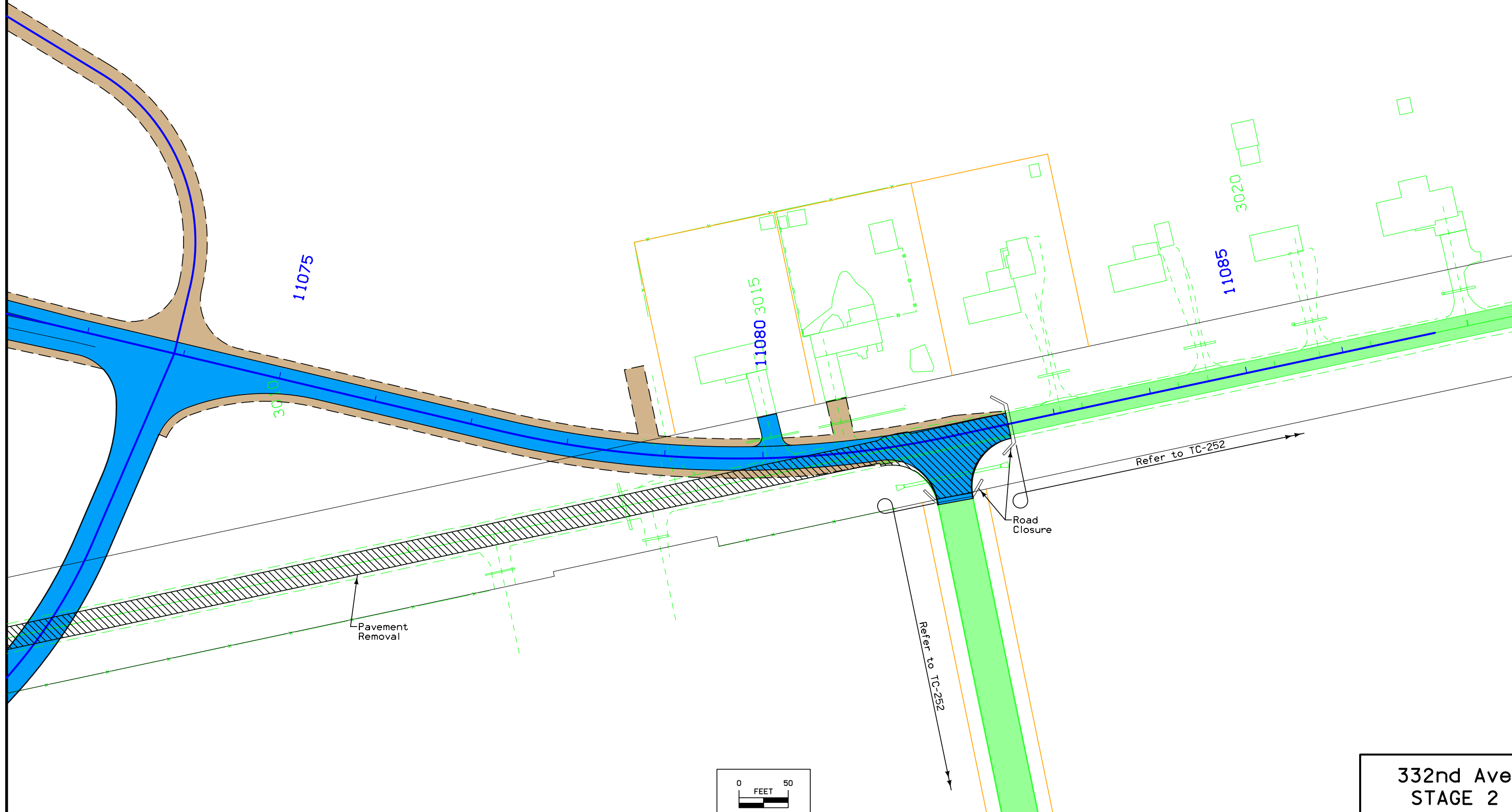
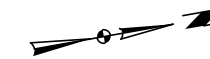
NORTH FORK TWP.
T-88N R-3W
Sec. 2



NORTH FORK TWP.
T-88N R-3W
Sec. 1

330th Ave
STAGE 2

BREMEN TWP.
T-89N R-3W
Sec. 36



332nd Ave
STAGE 2

BREMEN TWP.
T-89N R-3W
Sec. 36

BREMEN TWP.
T-89N R-3W
Sec. 36

NORTH FORK TWP.
T-88N R-3W
Sec. 2

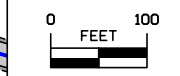
NORTH FORK TWP.
T-88N R-3W
Sec. 1

U.S. 20
STAGE 3

Refer to TC-402 (Both Directions)

Refer to TC-252

Refer to TC-252



DELAWARE/DUBUQUE COUNTY

PROJECT NUMBER

NHSN-020-9(195)--2R-31

SHEET NUMBER

J.14

C ENGLISH IOWA DOT DESIGN TEAM

Stanley Consultants Inc.

9:46:14 AM 5/23/2013 3994 c:\projects\datasource-1\common\d0132212\31020195.j14.sht

BREMEN TWP.
T-89N R-3W
Sec. 35

BREMEN TWP.
T-89N R-3W
Sec. 36

Curve Data
 $\Delta = 24^\circ 50' 58.62''$ (RT)
 $D = 07^\circ 09' 43.10''$
 $R = 800.00'$
 $T = 176.25'$
 $L = 346.97'$
 $E = 19.19'$
 $e = 5.40\%$
 $L = 130'$
 $x = 48'$
 $m = 39.0'$

Curve Data
 $\Delta = 08^\circ 01' 17.07''$ (LT)
 $D = 02^\circ 51' 53.24''$
 $R = 2000.00'$
 $T = 140.23'$
 $L = 280.00'$
 $E = 4.91'$
 $e = 5.40\%$
 $L = 168'$
 $x = 62'$
 $m = 50.4'$

Curve Data
 $\Delta = 10^\circ 40' 47.54''$ (RT)
 $D = 04^\circ 05' 33.20''$
 $R = 1400.00'$
 $T = 130.86'$
 $L = 260.96'$
 $E = 6.10'$
 $e = 6.00\%$
 $L = 186'$
 $x = 62'$
 $m = 55.8'$

PI Sta. 2065+23.97 (330TH332NDA)
 = PI Sta. 4066+06.39 (330TH332NDC)
 = POT Sta. 11067+90.41 (SR330TH332ND)
 PI Sta. 4062+35.68

POT Sta. 1050+87.28
 POT Sta. 1049+98.04 69.00' Lt.
 = PC Sta. 4049+98.04
 Point 'G' Standard Road Plan PV-411

1045

4050

4055

1055

1060

11065

11070

4065

Ramp C

Ramp B (330TH332NDC)

Curve 37010

Curve 37020

Curve 37030

604.84'

15°56'53.97"

Curve 36010

Curve 36020

115°00'09.25"

64°59'50.75"

81°06'21.35"

70°00'00"

70°00'00"

70°00'00"

POT Sta. 1063+89.71
= POT Sta. 11063+89.71

POT Sta. 1049+54.58
 POT Sta. 1050+50.00 89.00' Rt.
 = POT Sta. 3050+50.00
 Point 'M' Standard Road Plan PV-410

Curve Data
 $\Delta = 12^\circ 08' 03.30''$ (RT)
 $D = 02^\circ 51' 53.24''$
 $R = 2000.00'$
 $T = 212.58'$
 $L = 423.57'$
 $E = 11.27'$
 $e = 5.40\%$
 $L = 168'$
 $x = 62'$
 $m = 50.4'$

PI Sta. 3062+55.57 (330TH332NDB)
 = PI Sta. 5061+73.32 (330TH332NDD)
 = POT Sta. 11059+90.41 (SR330TH332ND)

Curve Data
 $\Delta = 25^\circ 10' 58.43''$ (LT)
 $D = 07^\circ 09' 43.10''$
 $R = 800.00'$
 $T = 178.70'$
 $L = 351.62'$
 $E = 19.71'$
 $e = 5.40\%$
 $L = 130'$
 $x = 48'$
 $m = 39.0'$

Ramp D

Ramp B

11055

11060

3060

5065

Curve 38005 PI Sta. 5065+52.02

PC Sta. 5063+73.32

PC Sta. 4064+06.39

PC Sta. 4060+59.43

PI Sta. 4064+06.39

PI Sta. 4062+35.68

PI Sta. 4062+35.68

PI Sta. 4062+35.68

PI Sta. 4062+35.68

PI Sta. 4064+06.39

PI Sta. 4062+35.68

PI Sta. 4062+35.68

PI Sta. 4062+35.68

PI Sta. 1039+72.92

1040

APPROX. SEC. LINE

APPROX. SEC. LINE

APPROX. SEC. LINE

APPROX. SEC. LINE

APPROX. SEC. LINE

NORTH FORK TWP.
T-88N R-3W
Sec. 2

NORTH FORK TWP.
T-88N R-3W
Sec. 1



BREMEN TWP.
T-89N R-3W
Sec. 36



Curve Data
 $\Delta = 24^\circ 50' 58.62''$ (RT)
D = 07'09'43.10"
R = 800.00'
T = 176.25'
L = 346.97'
E = 19.19'
e = 5.40%
L = 130'
x = 48'
m = 39.0'

Curve Data
 $\Delta = 12^\circ 17' 44.12''$ (LT)
D = 02'51'53.24"
R = 2000.00'
T = 215.43'
L = 429.20'
E = 11.57'
e = 5.40%
L = 168'
x = 62'
m = 50.4'

PI Sta. 2065+23.97 (330TH332NDA)
= PI Sta. 4066+06.39 (330TH332NDC)
= POT Sta. 11067+90.41 (SR330TH332ND)
PI Sta. 4062+35.68

POT Sta. 1077+25.00 89.00' Lt.
= POT Sta. 2077+25.00
Point 'M' Standard Road Plan PV-410

Ramp C

Ramp A

4065
1070

2070

2075

1075

1080

1090

81°06'21.35"

70°00'00"

Ramp B (330TH332NDA)

Curve 35005

PI Sta. 2072+28.85

PI Sta. 2076+58.05

POT Sta. 1078+16.44

11065

115°00'09.25"

64°59'50.75"

PI Sta. 1068+36.04

PI Sta. 2074+44.28

16°06'34.79"

APPROX. SEC. LINE

APPROX. SEC. LINE

POT Sta. 1063+89.71
= POT Sta. 11063+89.71

20°10'44.99"

Curve 38015

PI Sta. 5073+55.80

PI Sta. 5076+30.15

POT Sta. 1077+69.92 69.00' Rt.
= POT Sta. 5077+69.92
Point 'G' Standard Road Plan PV-411

POT Sta. 1076+72.72

70°00'00"

Curve 38005 PI Sta. 5065+52.02

Ramp D (330TH332NDD)

PC Sta. 5072+20.85

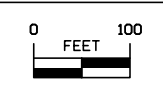
PCC Sta. 5074+89.92

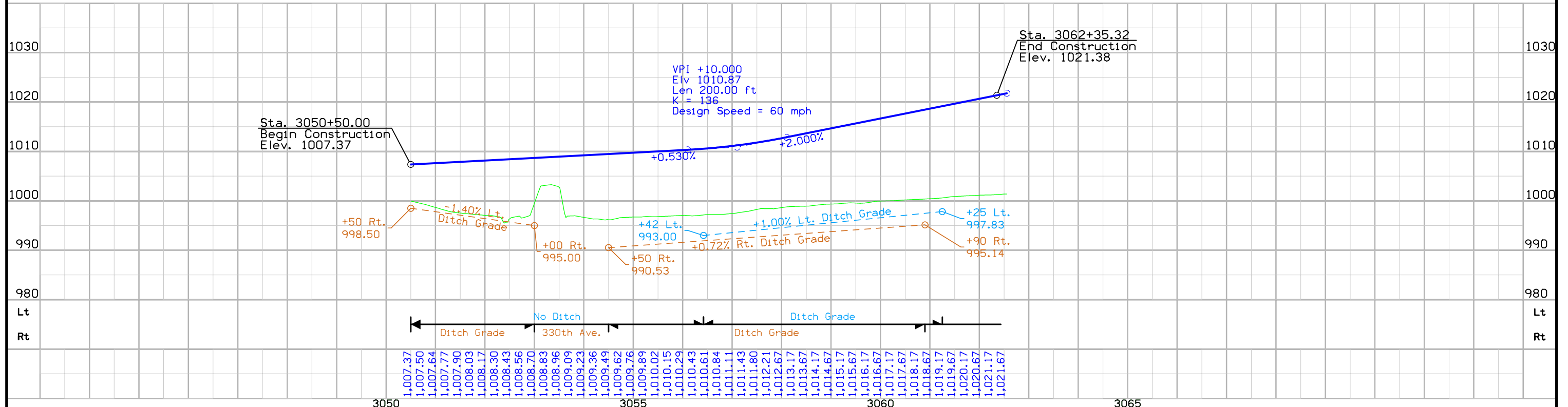
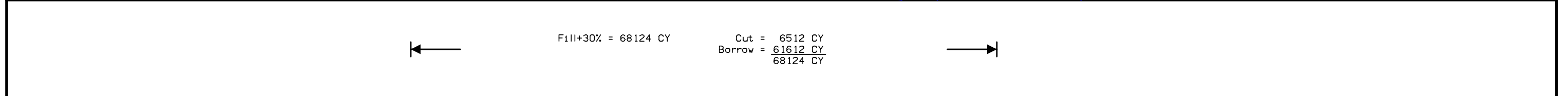
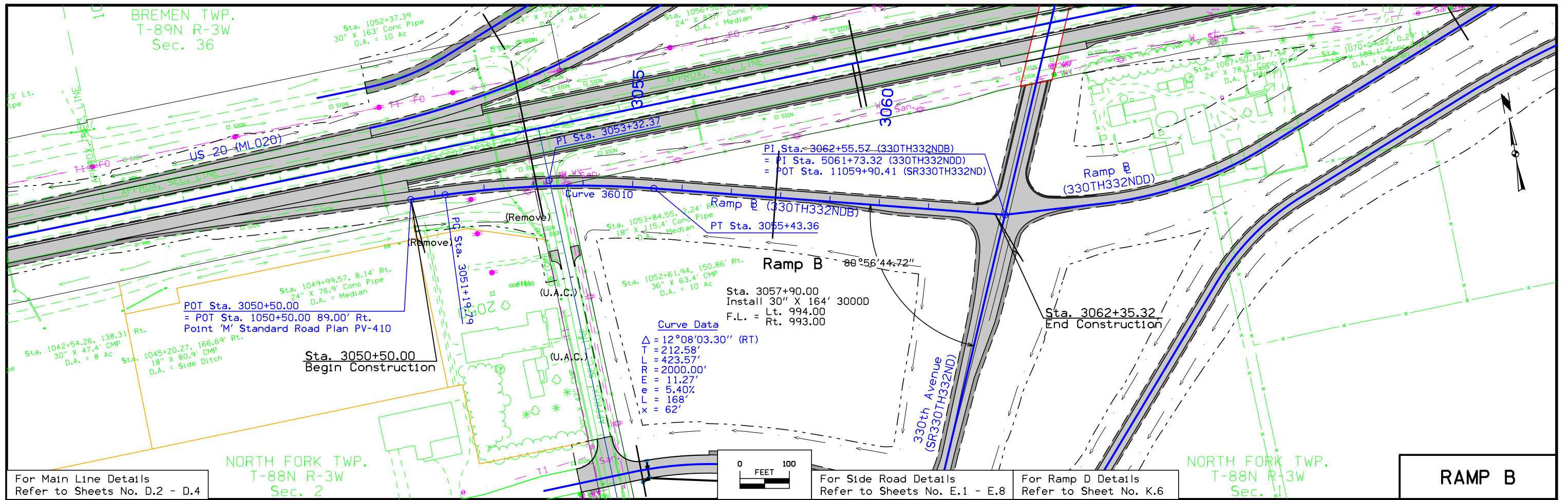
Curve Data
 $\Delta = 25^\circ 10' 58.43''$ (LT)
D = 07'09'43.10"
R = 800.00'
T = 178.70'
L = 351.62'
E = 19.71'
e = 5.40%
L = 130'
x = 48'
m = 39.0'

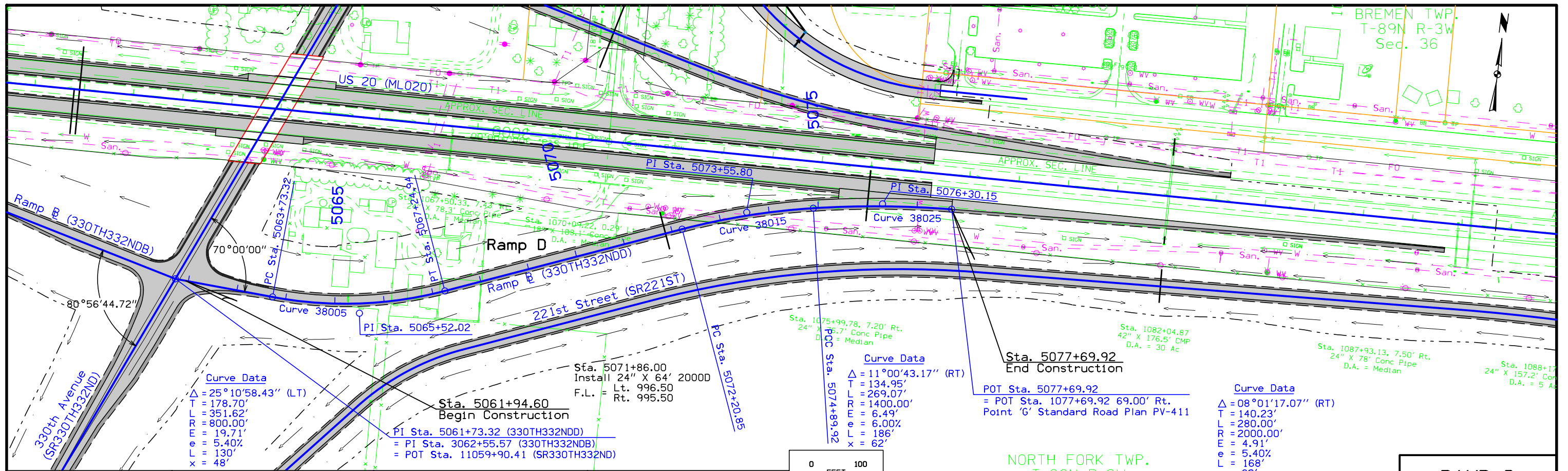
Curve Data
 $\Delta = 11^\circ 00' 43.17''$ (RT)
D = 04'05'33.20"
R = 1400.00'
T = 134.95'
L = 269.07'
E = 6.49'
e = 6.00%
L = 186'
x = 62'
m = 55.8'

Curve Data
 $\Delta = 08^\circ 01' 17.07''$ (RT)
D = 02'51'53.24"
R = 2000.00'
T = 140.23'
L = 280.00'
E = 4.91'
e = 5.40%
L = 168'
x = 62'
m = 50.4'

NORTH FORK TWP.
T-88N R-3W
Sec. 1



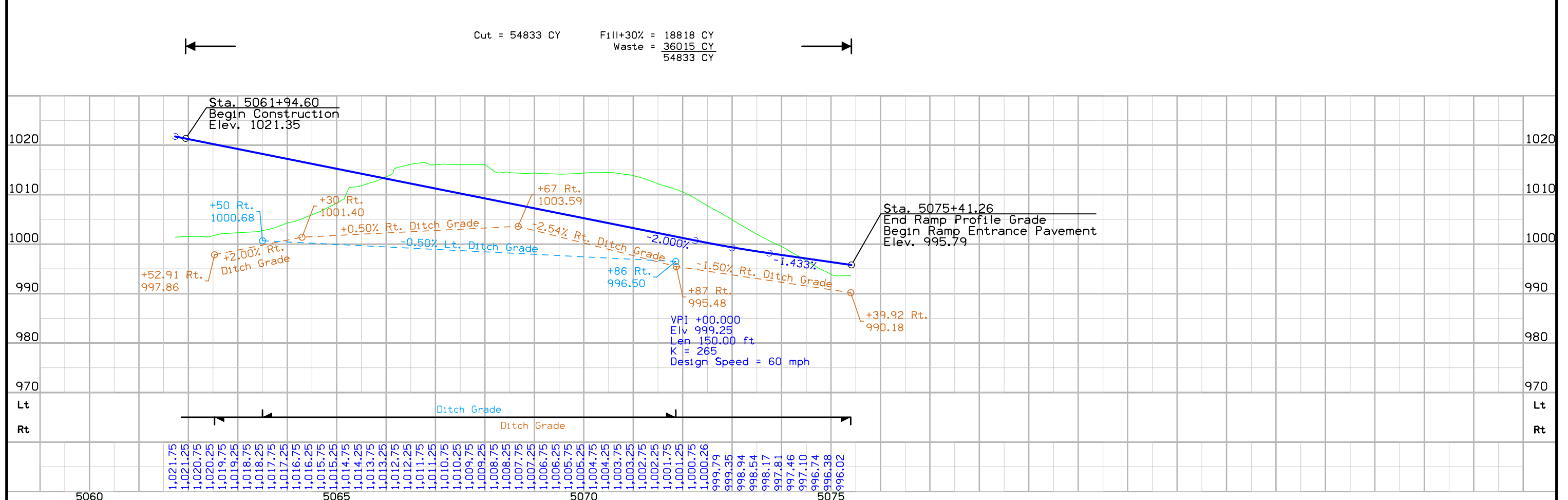


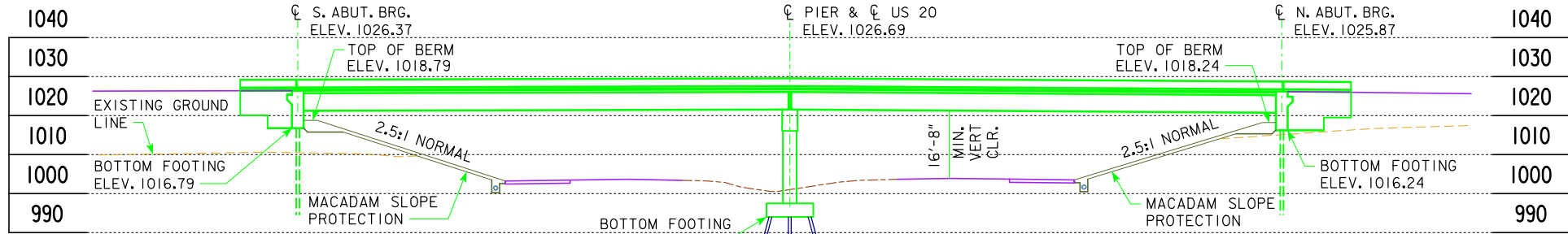


For Ramp B Details Refer to Sheet No. K.4 | For Side Road Details Refer to Sheets No. E.1 - E.8 | For 221st Street Details Refer to Sheets No. E.10 - E.11 | For Main Line Details Refer to Sheets No. D.2 - D.4

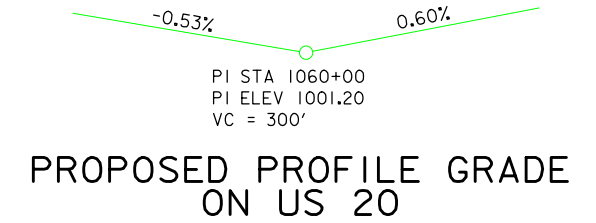
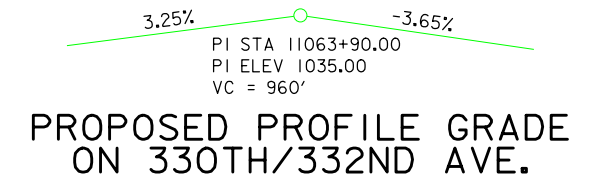
0 100 FEET

RAMP D





LONGITUDINAL SECTION ALONG CL BRIDGE ROADWAY



MINIMUM VERTICAL CLEARANCE

OVERHEAD STATION	11064+42.70
OVERHEAD ELEVATION	1025.93
DEPTH OF SUPERSTRUCTURE	5.25'
UNDER PASS STATION	1064+37.12
UNDER PASS ELEVATION	1003.82
MINIMUM VERTICAL CLEARANCE	16'-8"

PIER SHALL BE DESIGNED FOR COLLISION FORCE.
 2-SPAN GRADING SHOWN (SEE EW 203/204 -5' OFFSET)
 TOP OF BRIDGE DECK CROWN IS 0.03' BELOW PROFILE GRADE.
 TL-4 BRIDGE RAILING PROPOSED

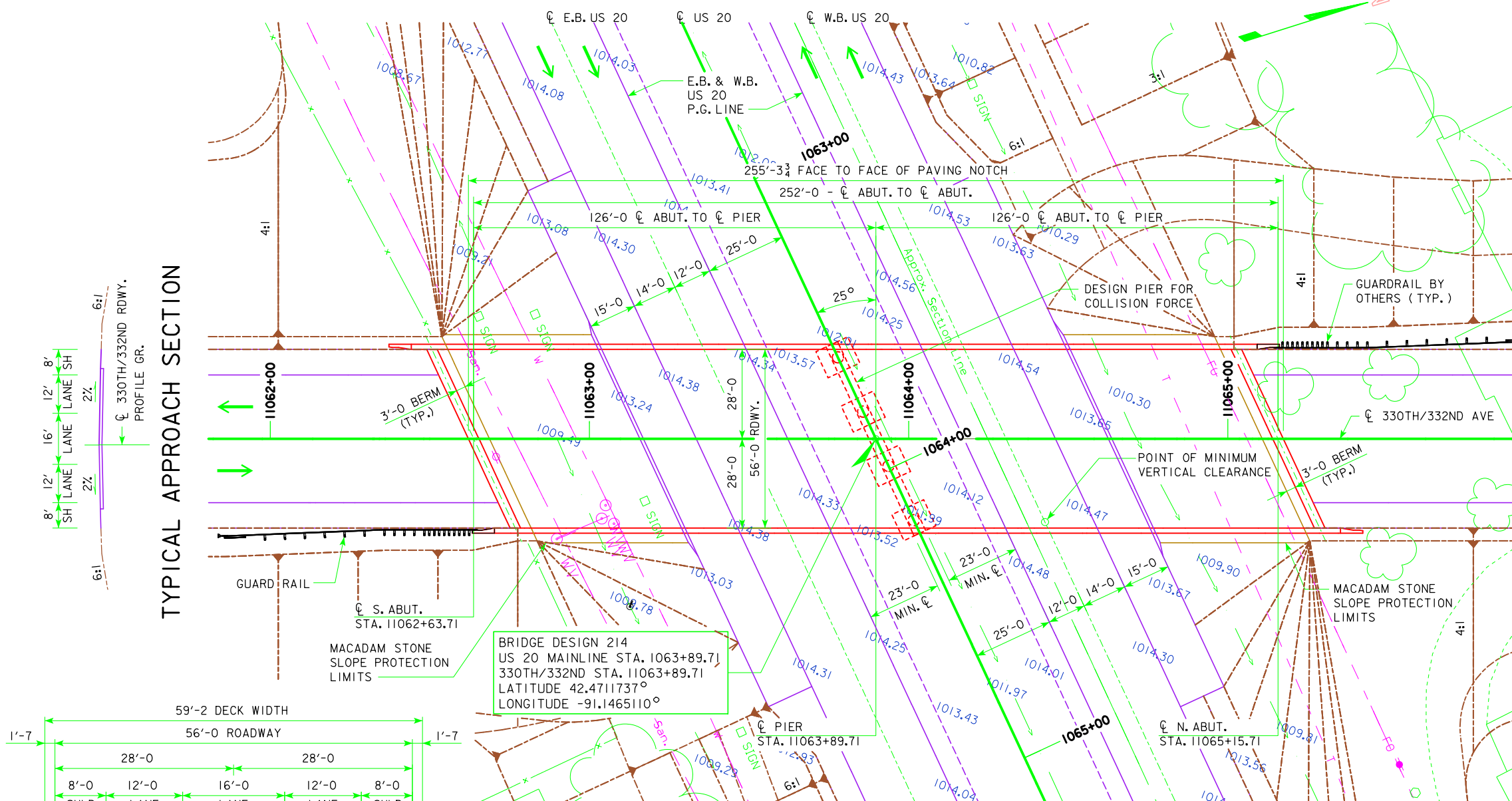
LOCATION

330TH/332ND AVE OVER US 20
 T-88N R-3W SECTION 1
 NORTH FORK TWP.
 T-89N R-3W SECTION 36
 BREMEN TWP.
 DELAWARE COUNTY
 LATITUDE 42.4711737°
 LONGITUDE -91.1465110°

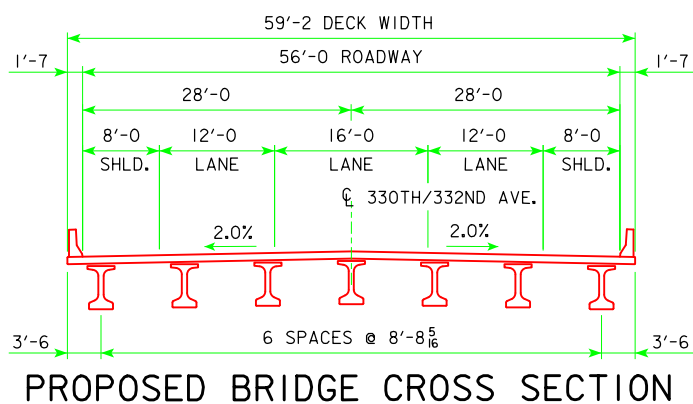
TRAFFIC ESTIMATE

2015 AADT	5420	V.P.D.
2035 AADT	9420	V.P.D.
2035 DHV	2355	V.P.H.
TRUCKS	25	%
TOTAL DESIGN ESALs		

TYPICAL APPROACH SECTION



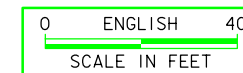
SITUATION PLAN



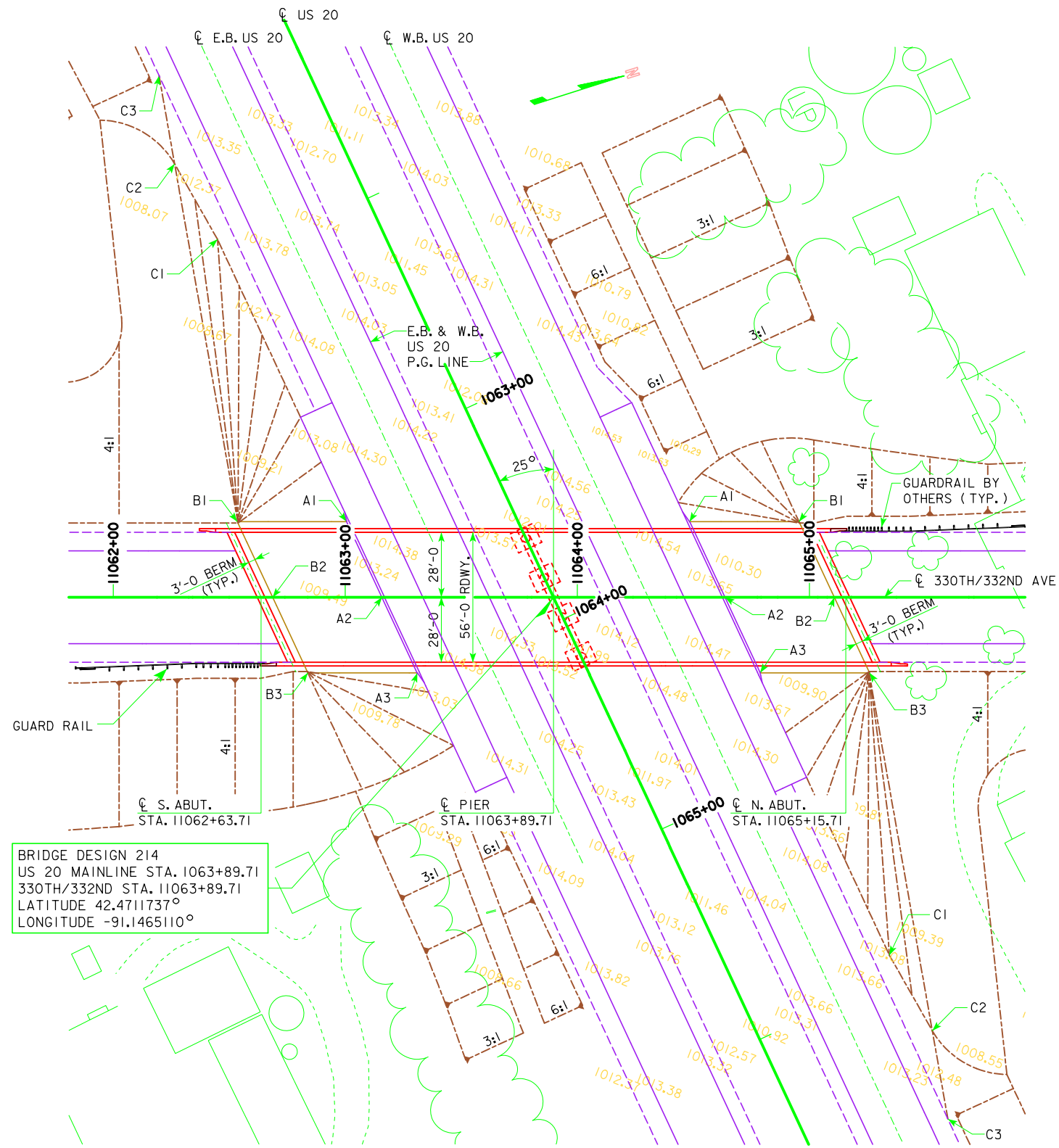
BRIDGE DESIGN 214
 US 20 MAINLINE STA. 1063+89.71
 330TH/332ND STA. 11063+89.71
 LATITUDE 42.4711737°
 LONGITUDE -91.1465110°

UTILITY LEGEND

FO	FIBER OPTIC - ICN
San.	SANITARY - CITY OF DYERSVILLE
T	TELEPHONE - MEDIACOM
W	WATER - CITY OF DYERSVILLE



PRELIMINARY
 DESIGN FOR 25° SKEW (R.A.)
**252'-0 x 56'-0 PRETENSIONED
 PRESTRESSED CONCRETE BEAM BRIDGE**
 (BTD BEAM)
 126'-0 AND 126'-0 END SPANS
SITUATION PLAN
 US 20 MAINLINE STA. 1063+89.71
 330TH/332ND STA. 11063+89.71
 OCTOBER, 2012
DELAWARE COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 1 OF 2 FILE NO. 30549 DESIGN NO. 214



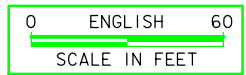
BERM SLOPE LOCATION TABLE						
SOUTH ABUTMENT			NORTH ABUTMENT			
MK.	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
A1	11063+00.59	32.58' LT	1003.00	11064+48.44	32.58' LT	1003.37
A2	11063+15.78	0.000	1003.21	11064+63.64	0.000	1003.59
A3	11063+30.98	32.58' RT	1003.43	11064+78.83	32.58' RT	1003.80
B1	11062+53.48	32.58' LT	1018.79	11064+95.55	32.58' LT	1018.24
B2	11062+68.75	0.000	1018.79	11065+10.75	0.000	1018.24
B3	11062+83.87	32.58' RT	1018.79	11065+25.94	32.58' RT	1018.24

RECOVERABLE BERM LOCATION TABLE						
SOUTH ABUTMENT			NORTH ABUTMENT			
MK.	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
C1	11062+44.94	154.28' LT	1001.69	11065+34.49	154.28' RT	1004.01
C2	11062+26.45	186.83' LT	1001.34	11065+52.98	186.83' RT	1004.02
C3	11062+19.74	224.88' LT	1001.54	11065+59.69	224.88' RT	1004.51

SEE EW-203 FOR SHAPING

BRIDGE DESIGN 214
 US 20 MAINLINE STA. 1063+89.71
 330TH/332ND STA. 11063+89.71
 LATITUDE 42.4711737°
 LONGITUDE -91.1465110°

SITE PLAN



PRELIMINARY
 DESIGN FOR 25° SKEW (R.A.)
**252'-0" x 56'-0" PRETENSIONED
 PRESTRESSED CONCRETE BEAM BRIDGE**
 (BTD BEAM)
 126'-0" AND 126'-0" END SPANS
SITUATION PLAN - SITE
 US 20 MAINLINE STA. 1063+89.71
 330TH/332ND STA. 11063+89.71
 OCTOBER, 2012
DELAWARE COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 2 OF 2 FILE NO. 30549 DESIGN NO. 214

LEGEND OF CROSS SECTION SHEETS (ROAD)

- - - - - - 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

LEGEND OF CROSS SECTION SHEETS (SOILS)

- TS----- Topsoil (Class 10)
- TS A----- Topsoil (Type A Disposal)
- TS B----- Topsoil (Type B Disposal)
- TS C----- Topsoil (Type C Disposal)
- 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

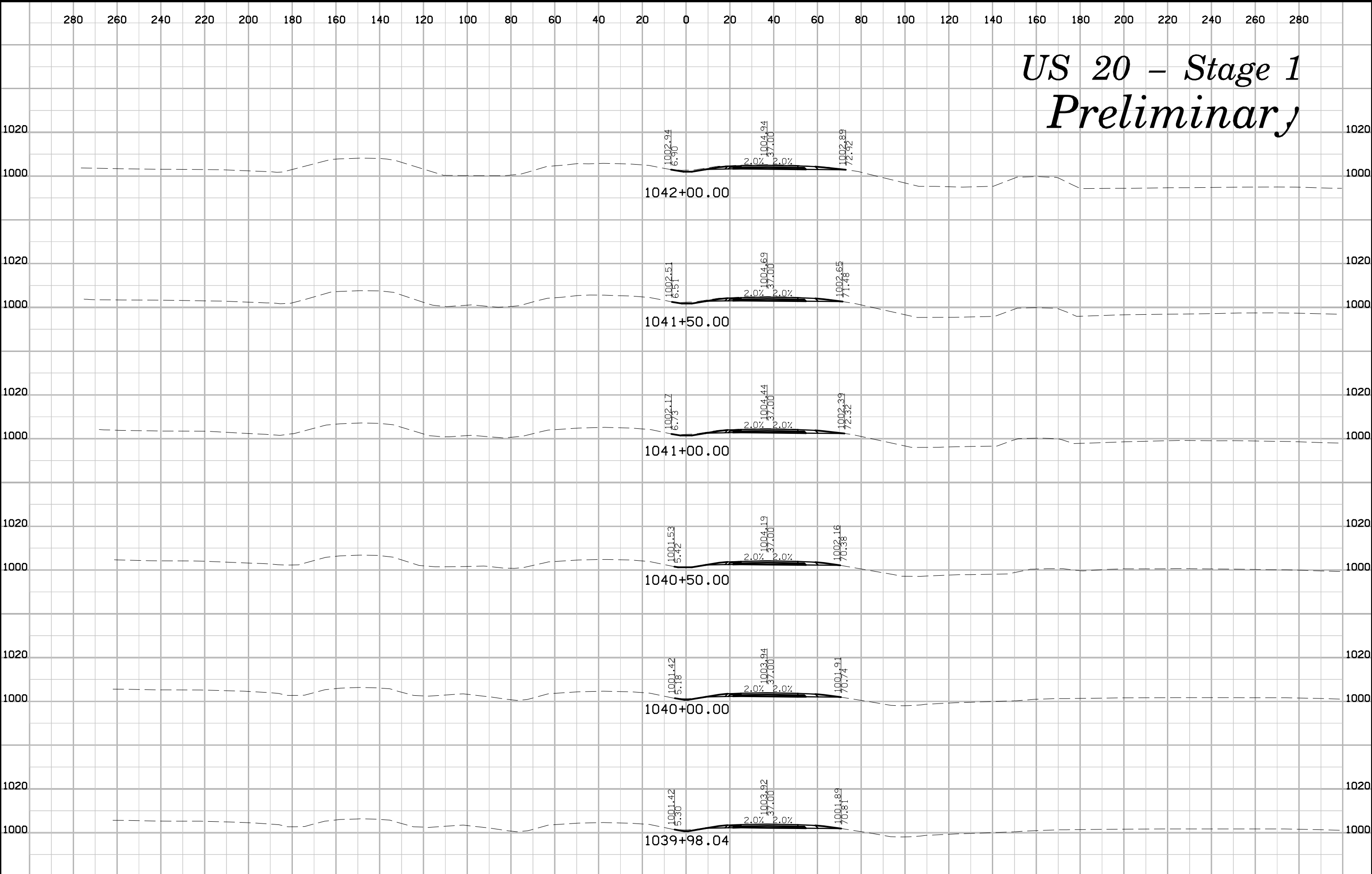
Note: All layer lines and descriptions identify layers above the line.

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.

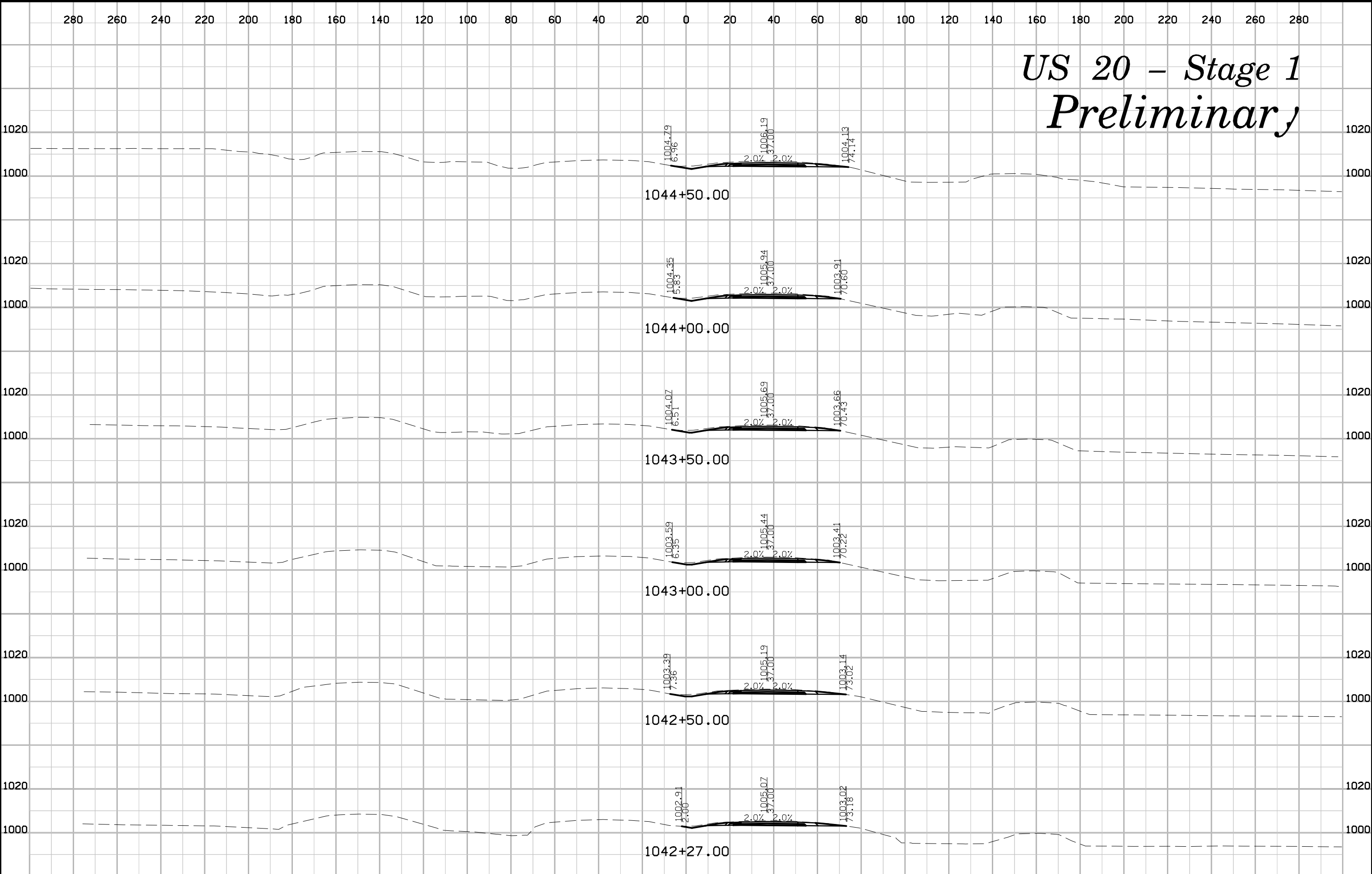
**CROSS SECTION
LEGEND AND SYMBOL
INFORMATION SHEET**

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

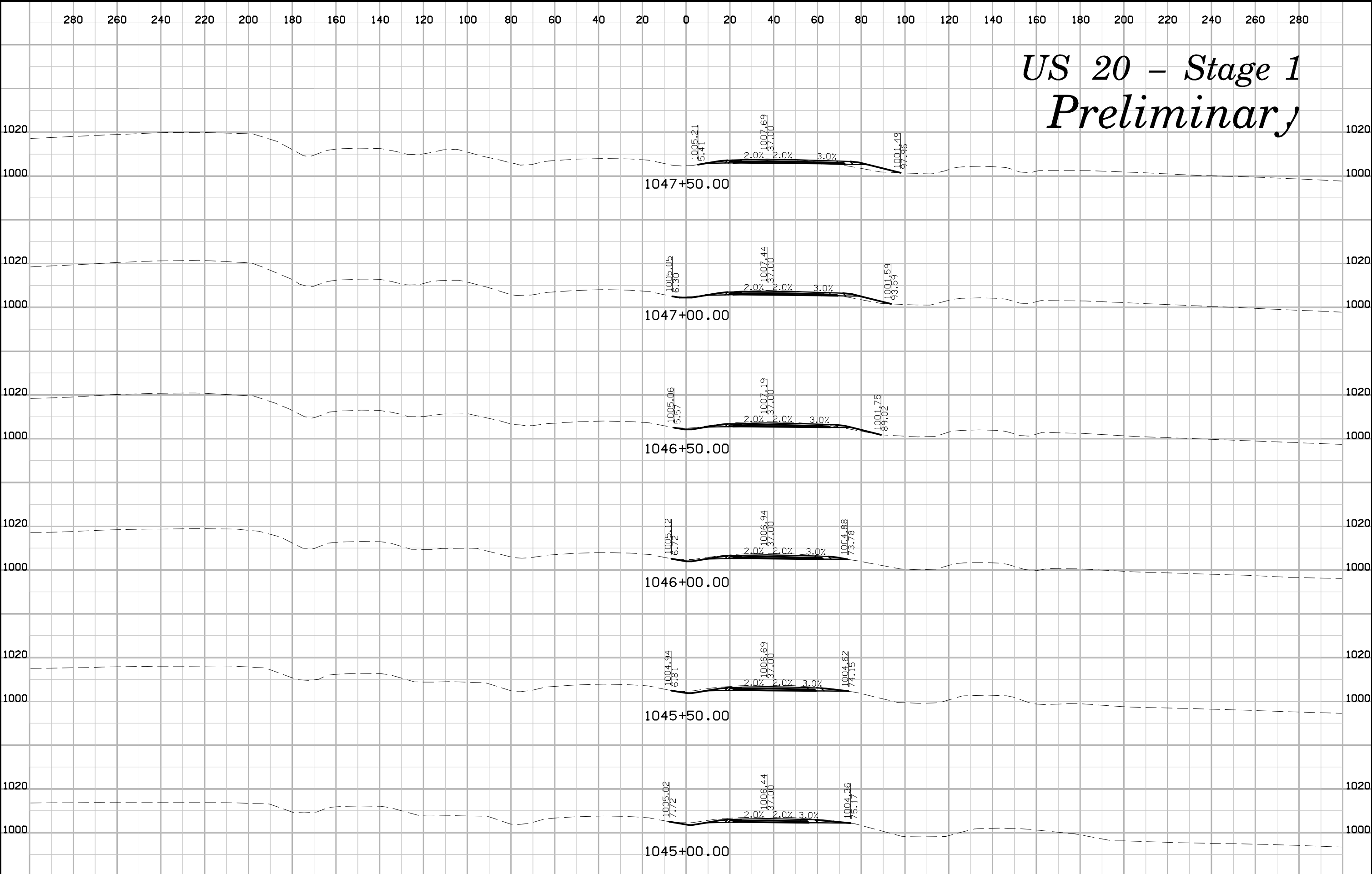
US 20 - Stage 1 Preliminary



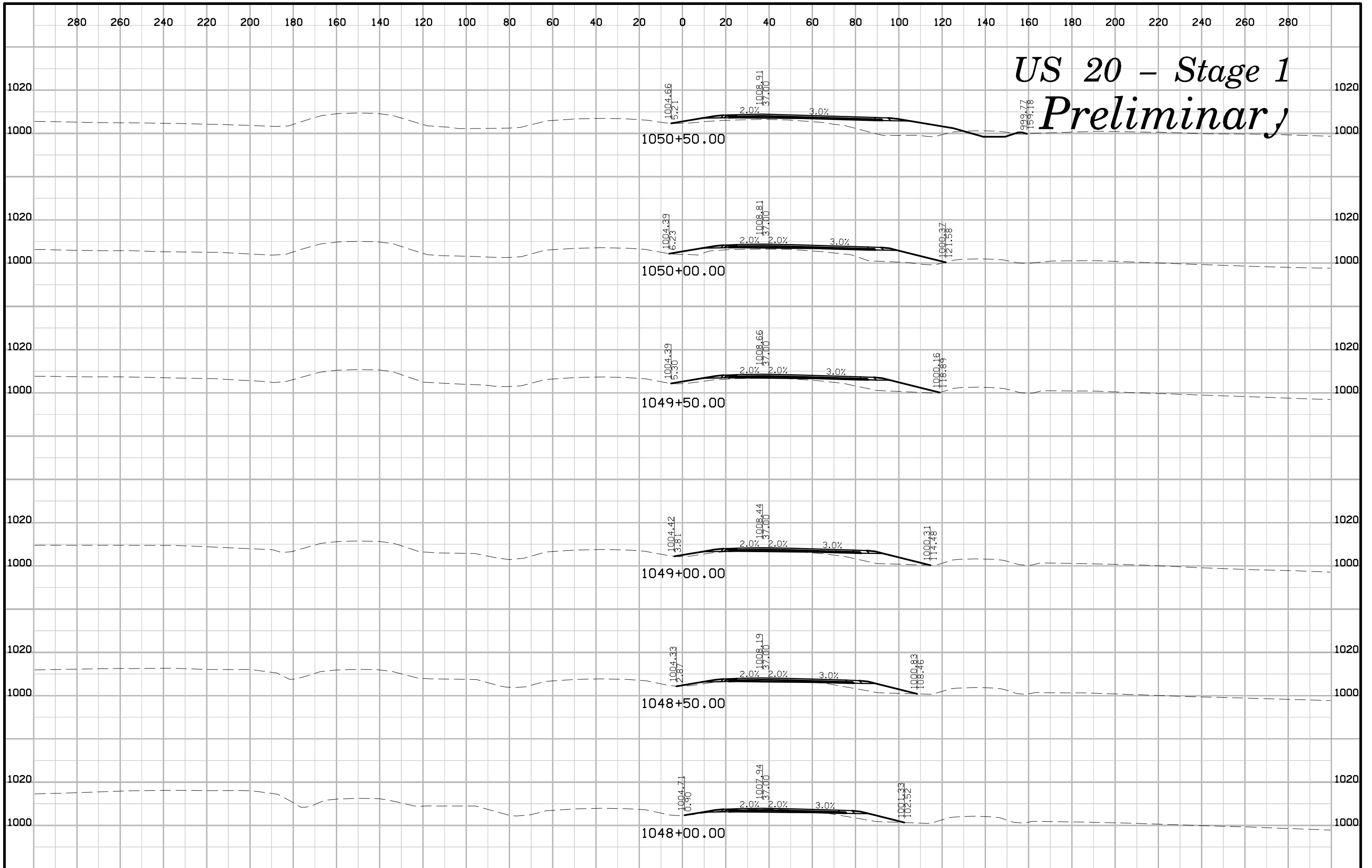
US 20 - Stage 1 Preliminary



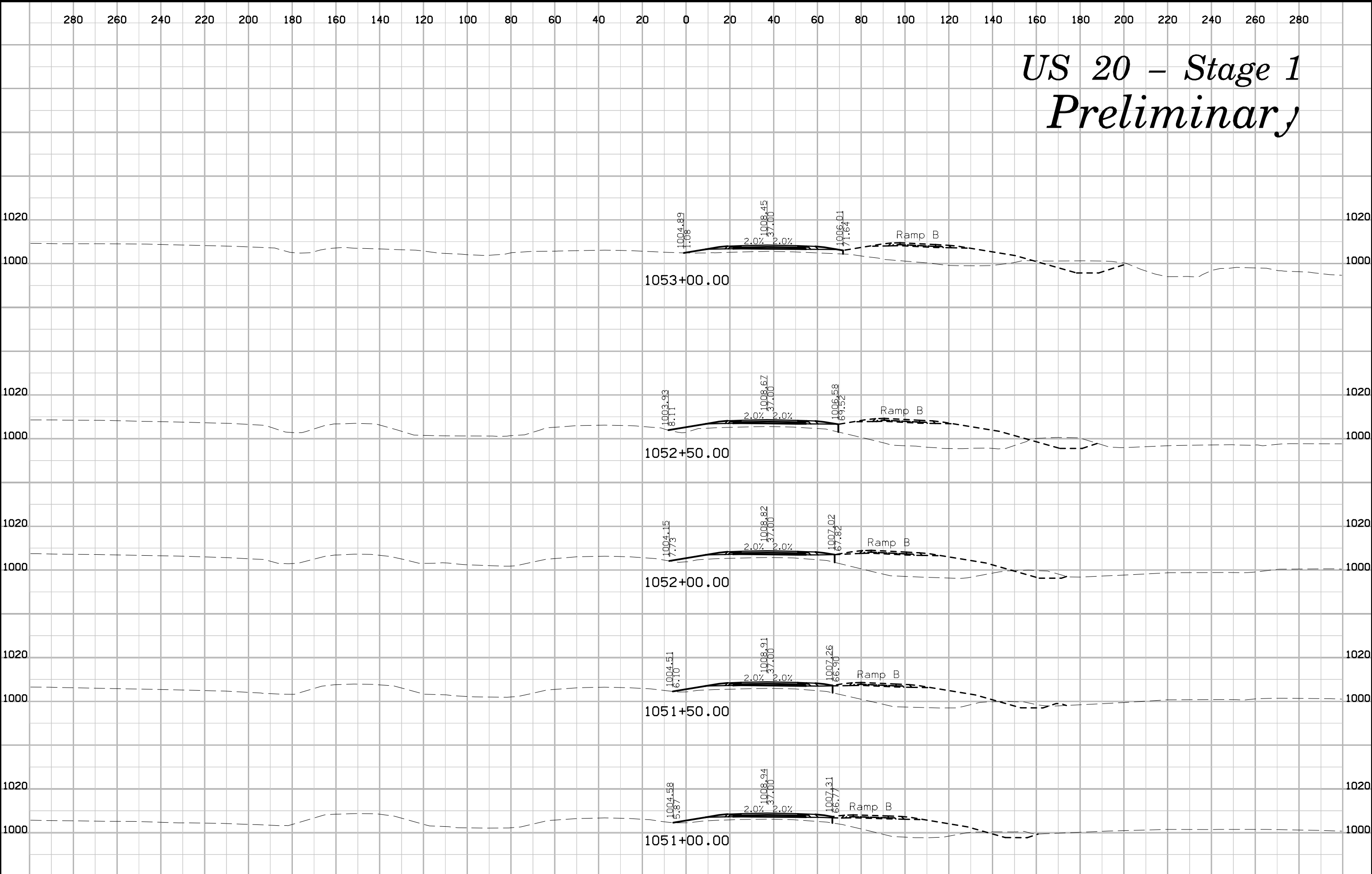
US 20 - Stage 1 Preliminary



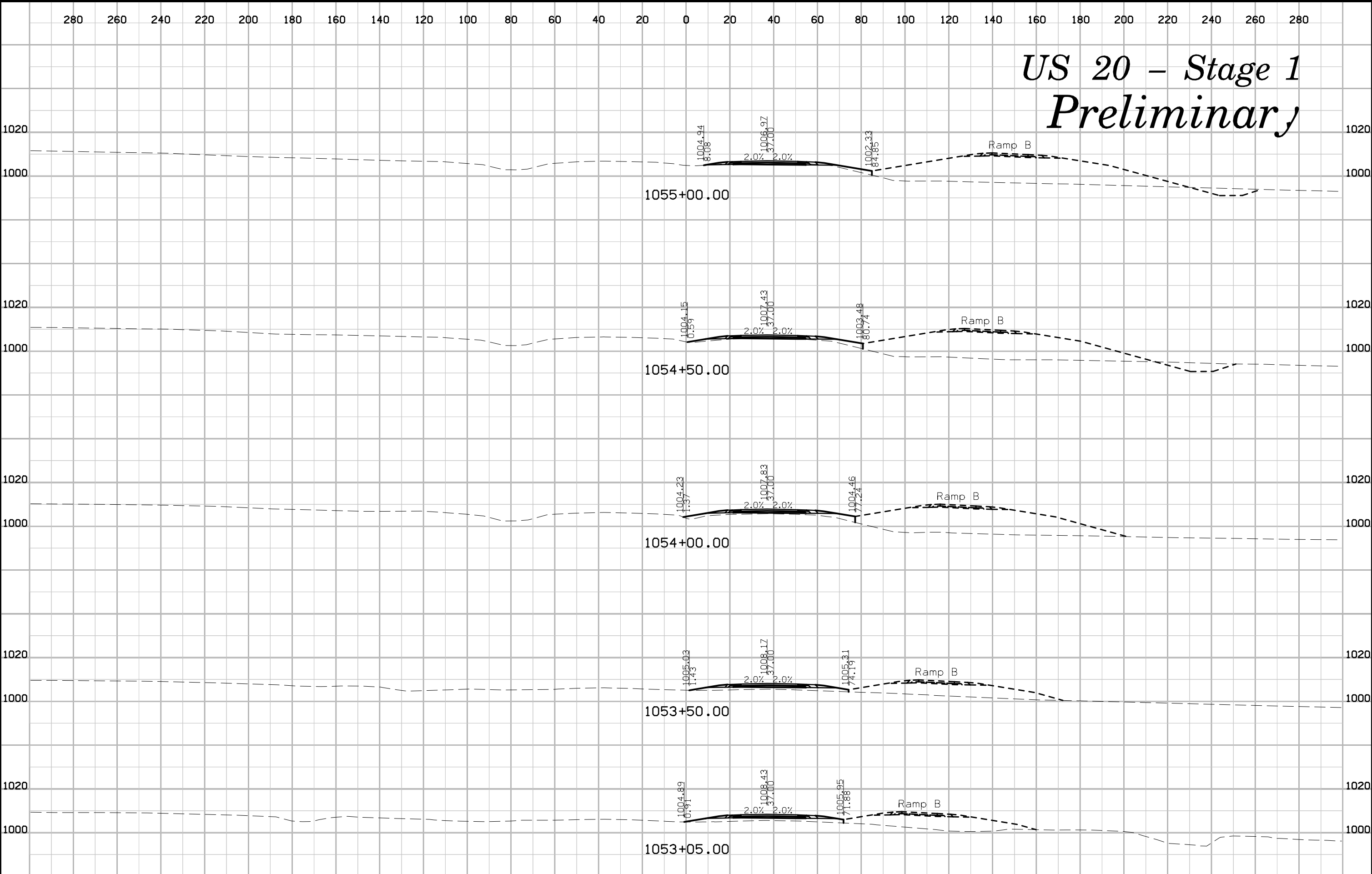
US 20 - Stage 1 Preliminary



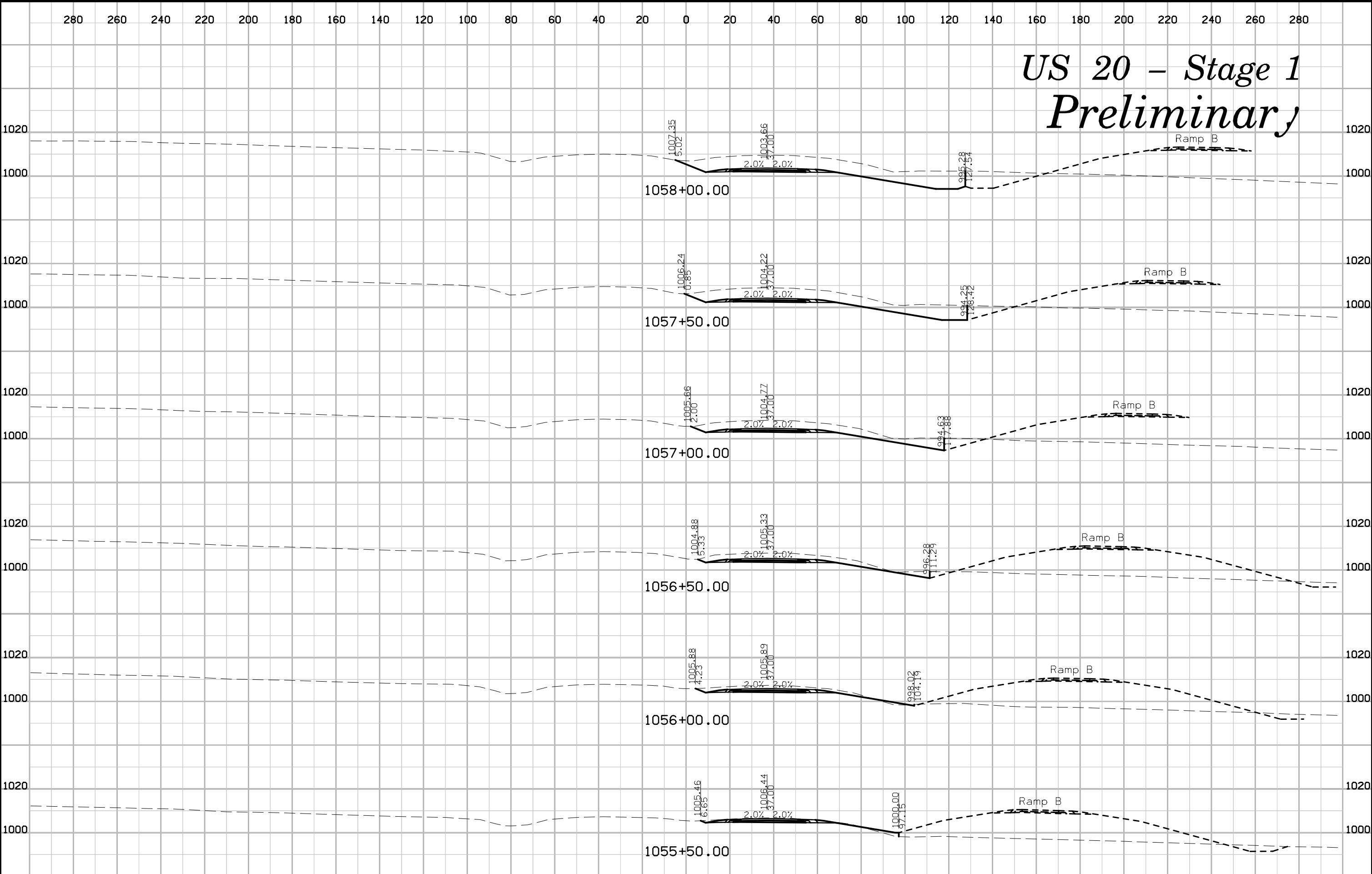
US 20 - Stage 1 Preliminary



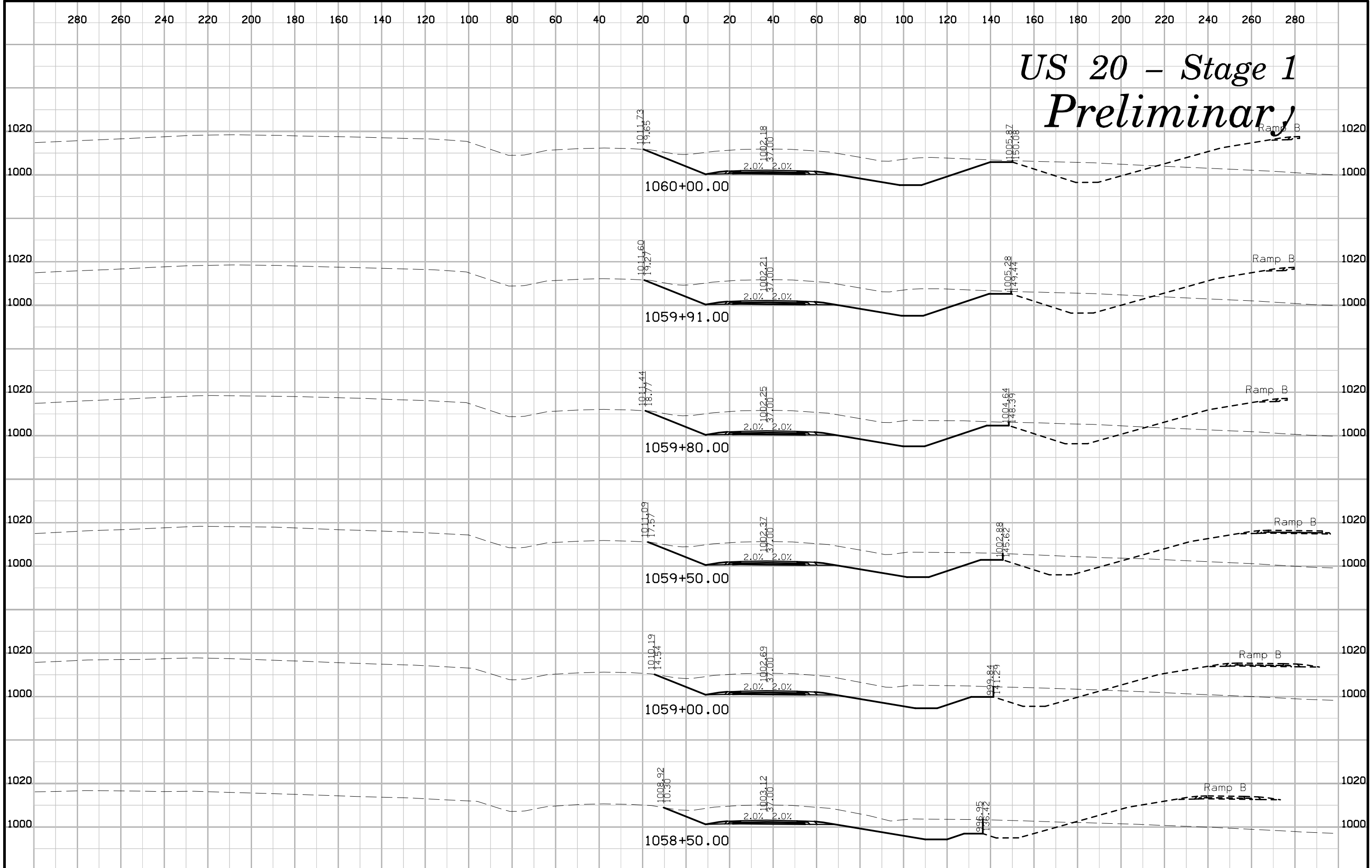
US 20 - Stage 1 Preliminary



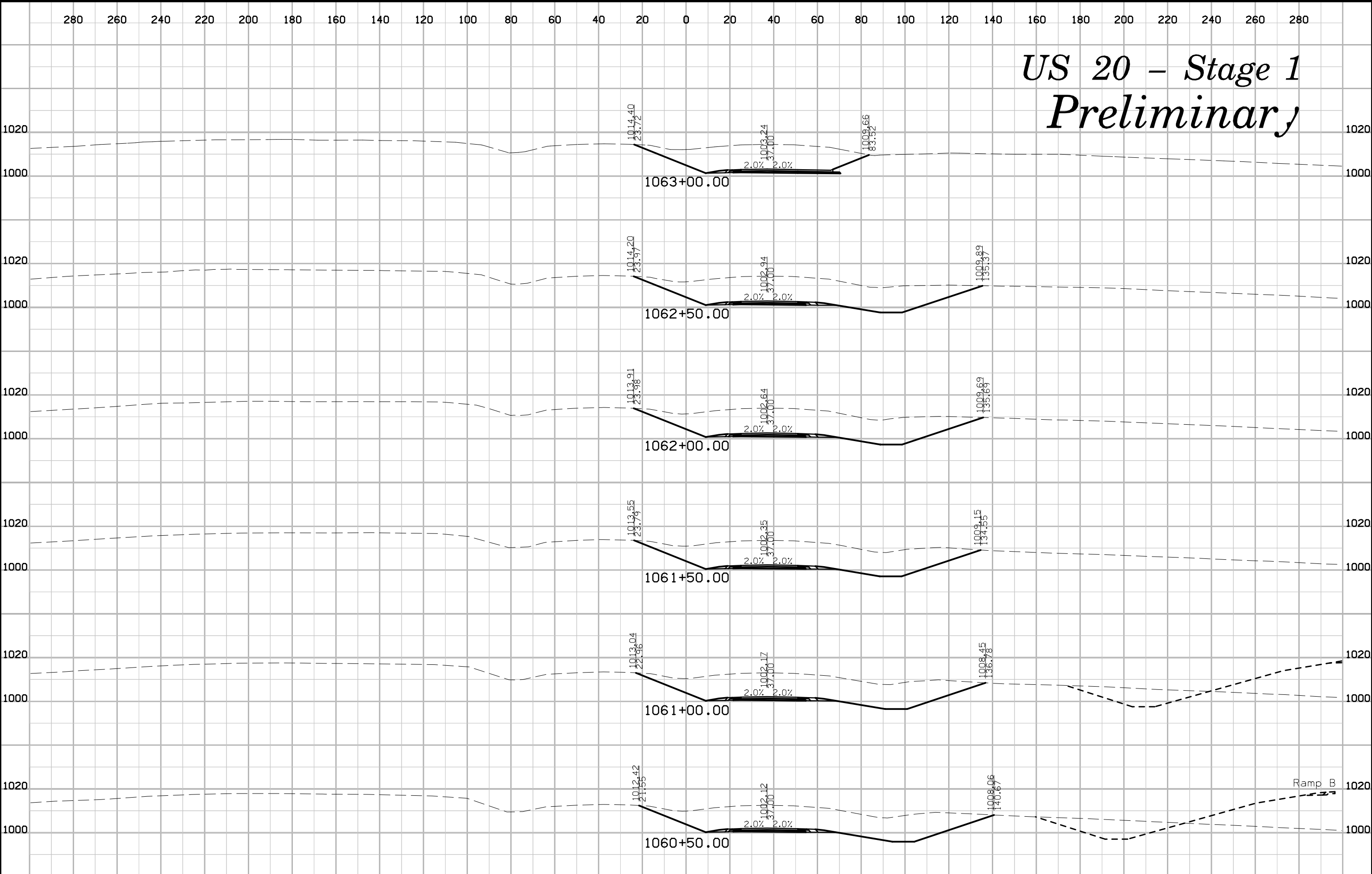
US 20 - Stage 1 Preliminary



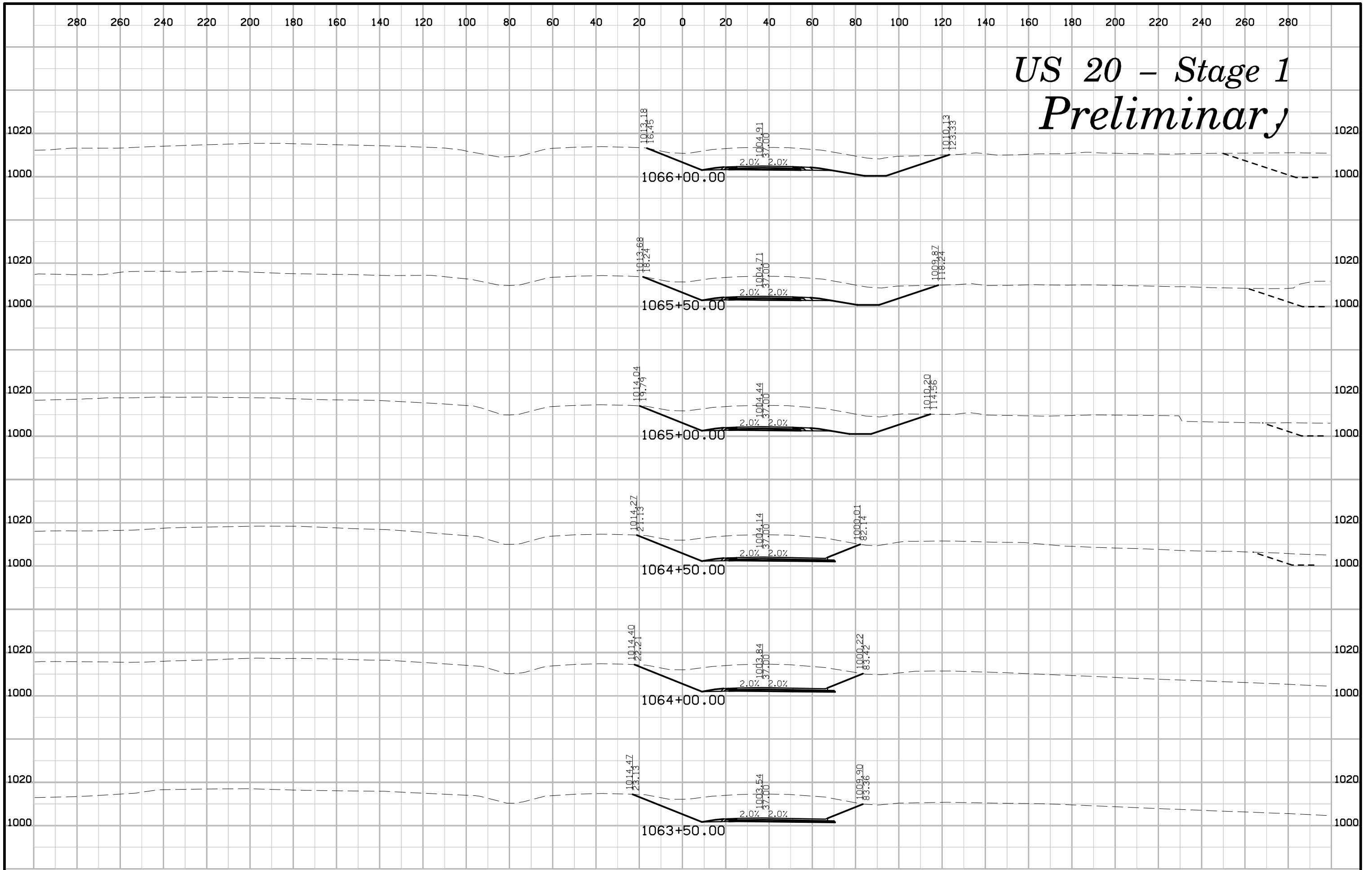
US 20 - Stage 1 Preliminary



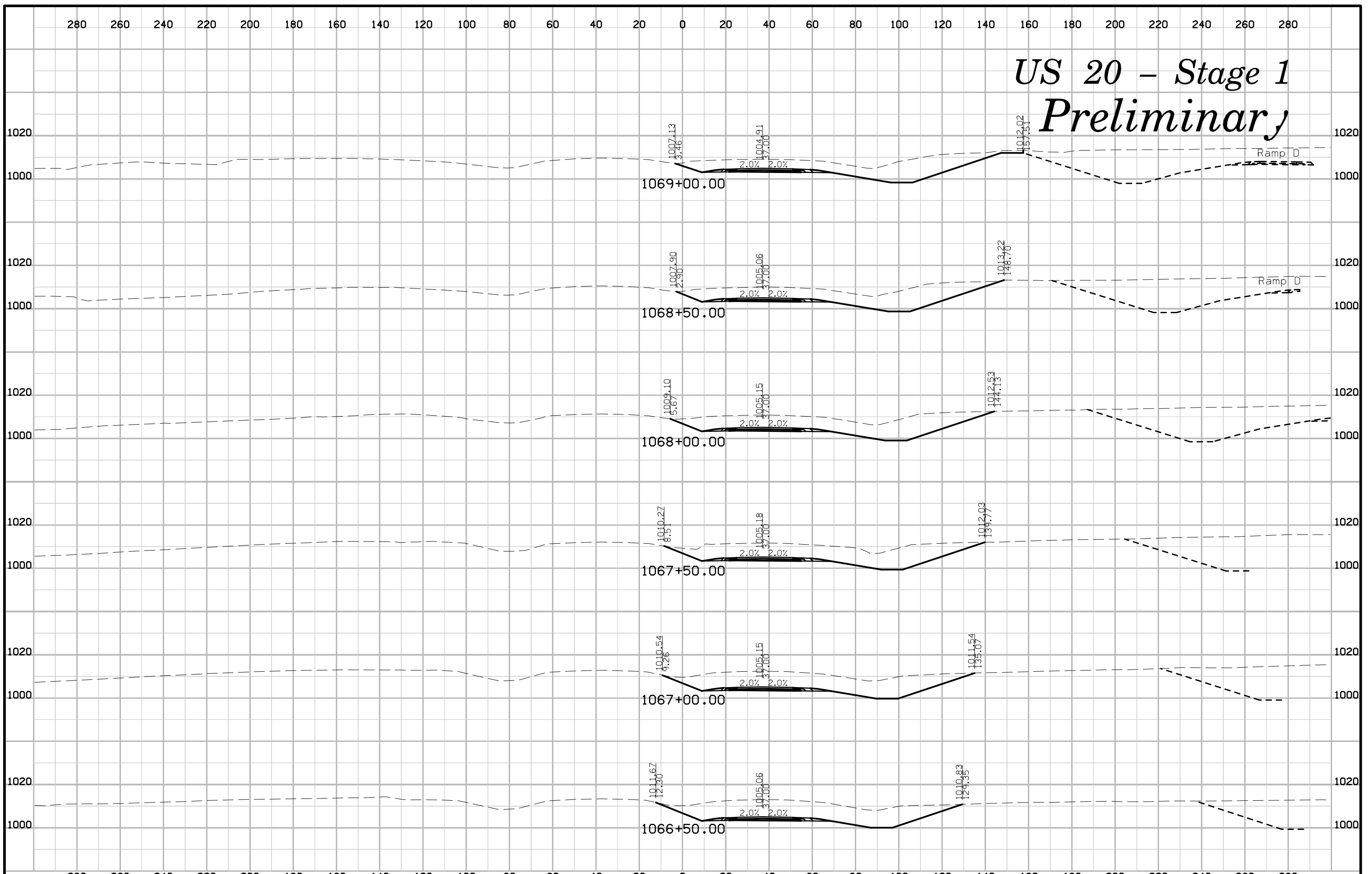
US 20 - Stage 1 Preliminary



US 20 - Stage 1 Preliminary



US 20 - Stage 1 Preliminary



Ramp D

Ramp D

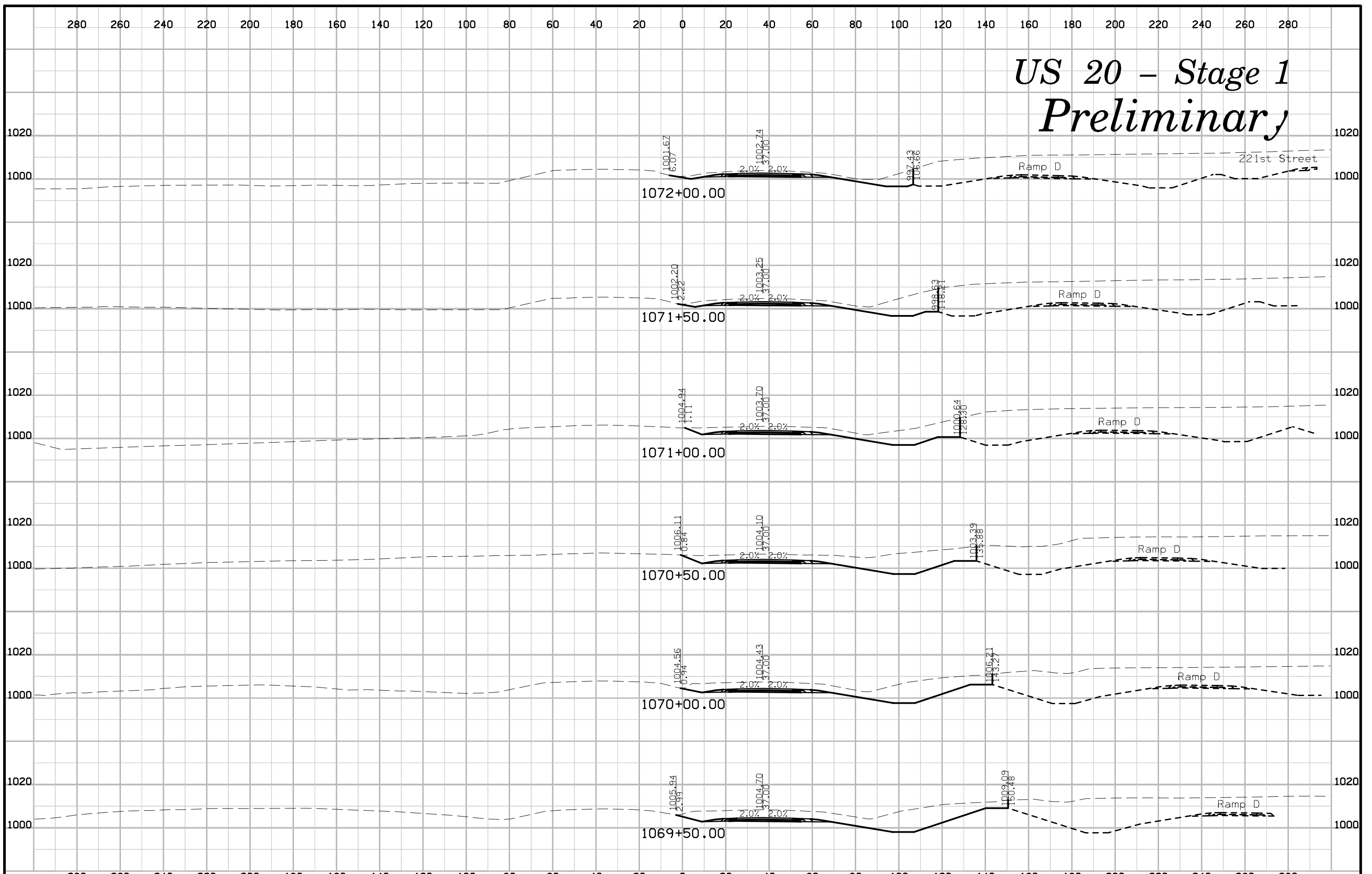
Ramp D

Ramp D

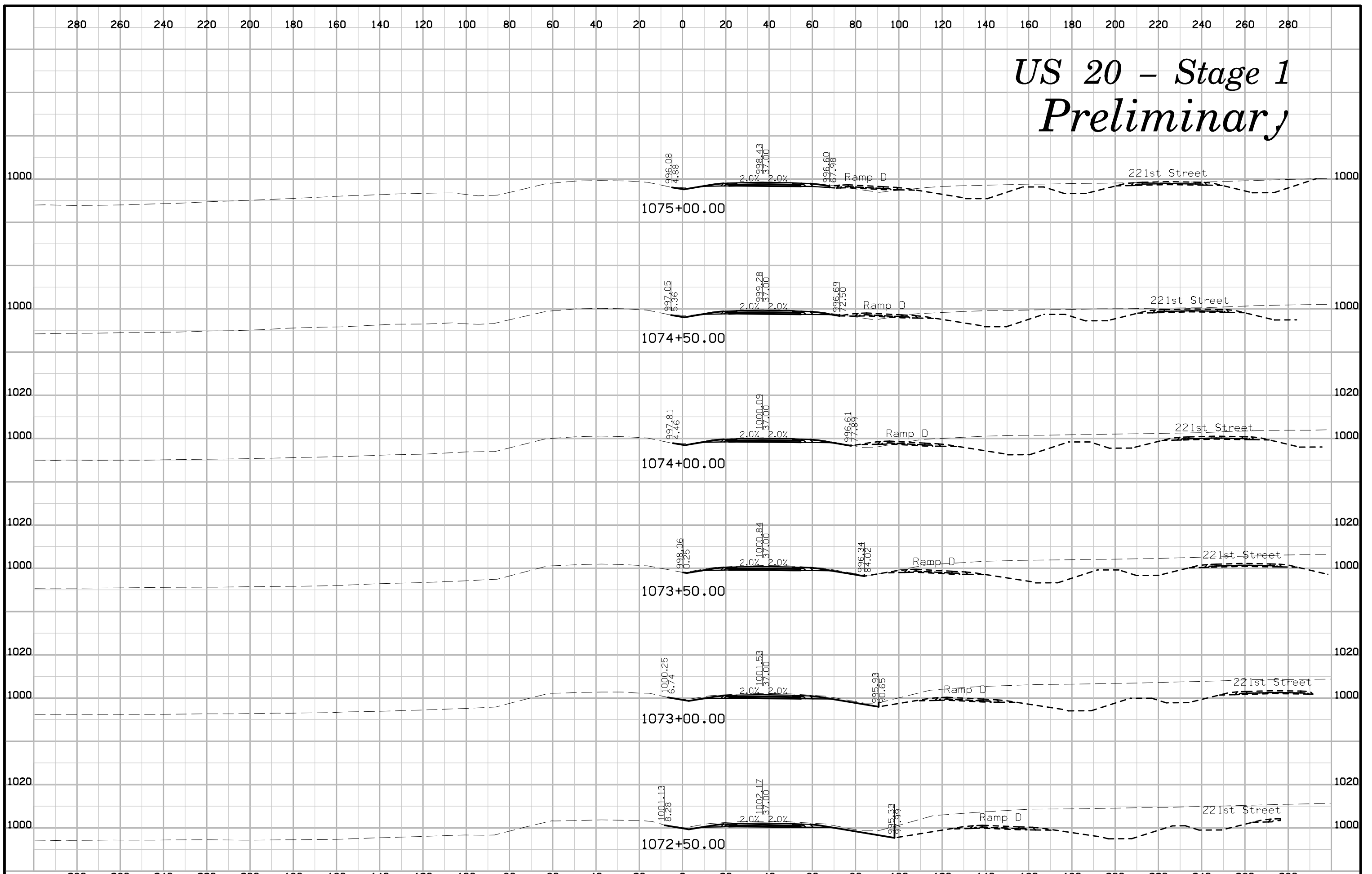
Ramp D

Ramp D

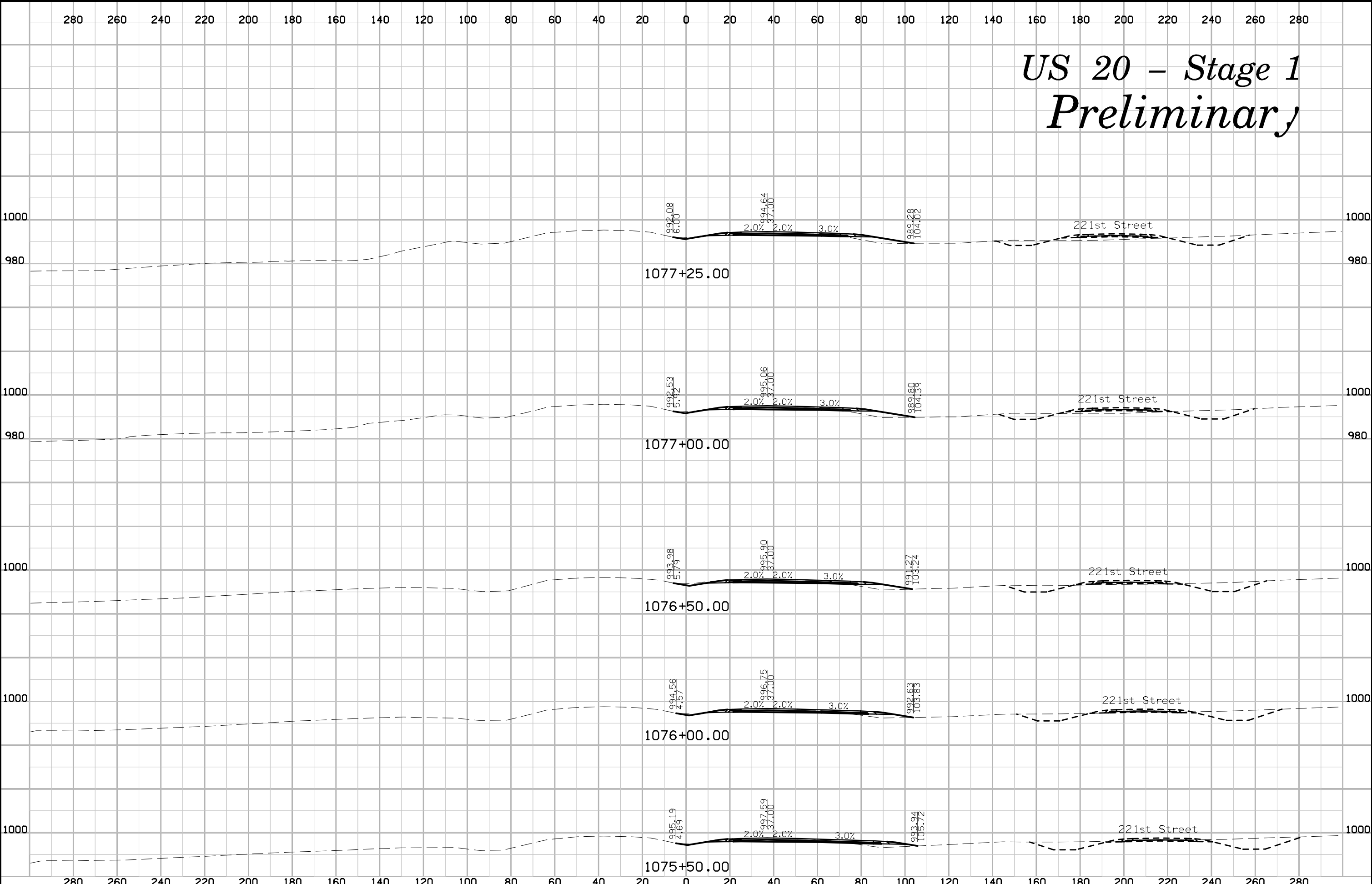
US 20 - Stage 1 Preliminary



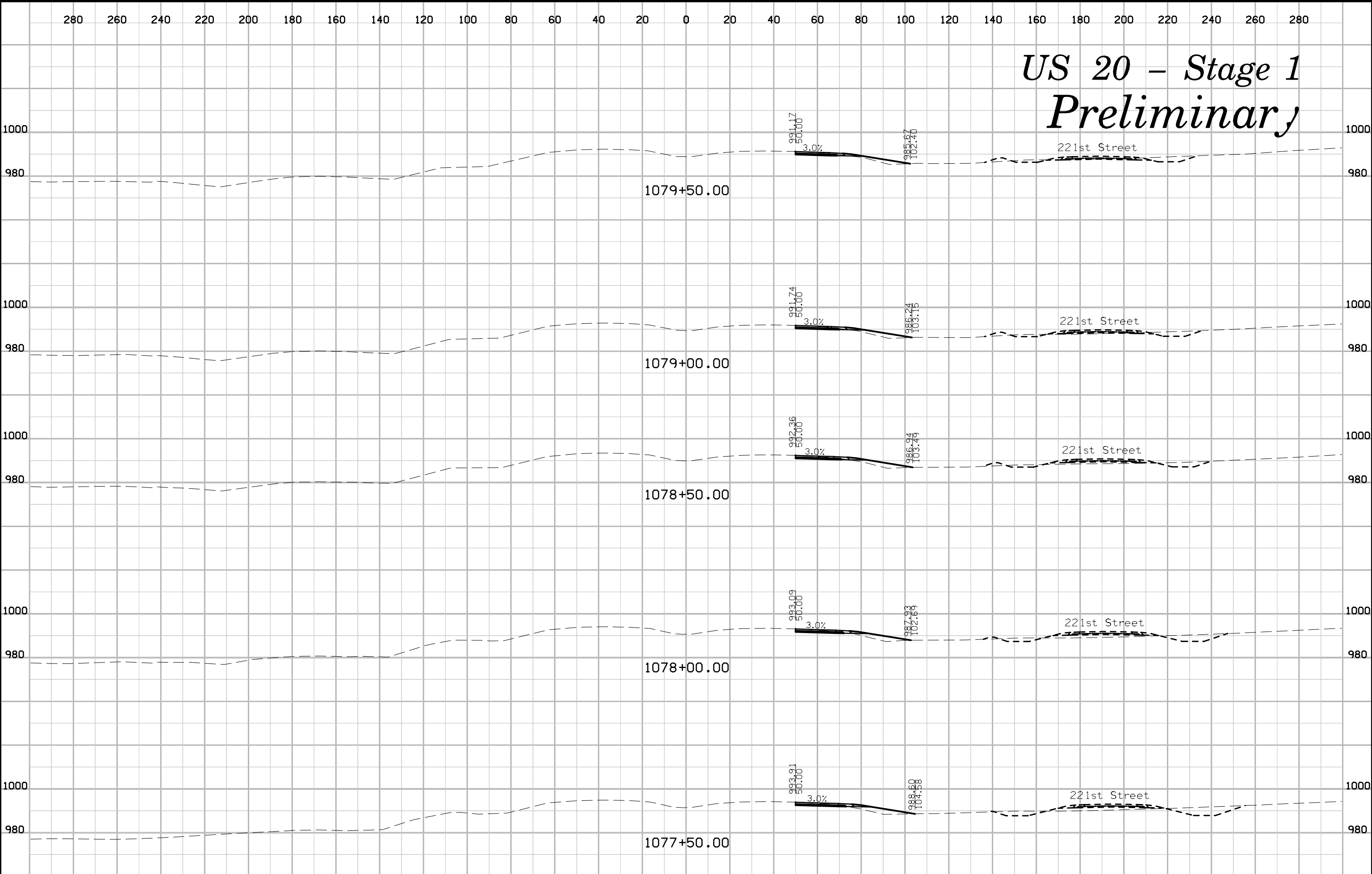
US 20 - Stage 1 Preliminary

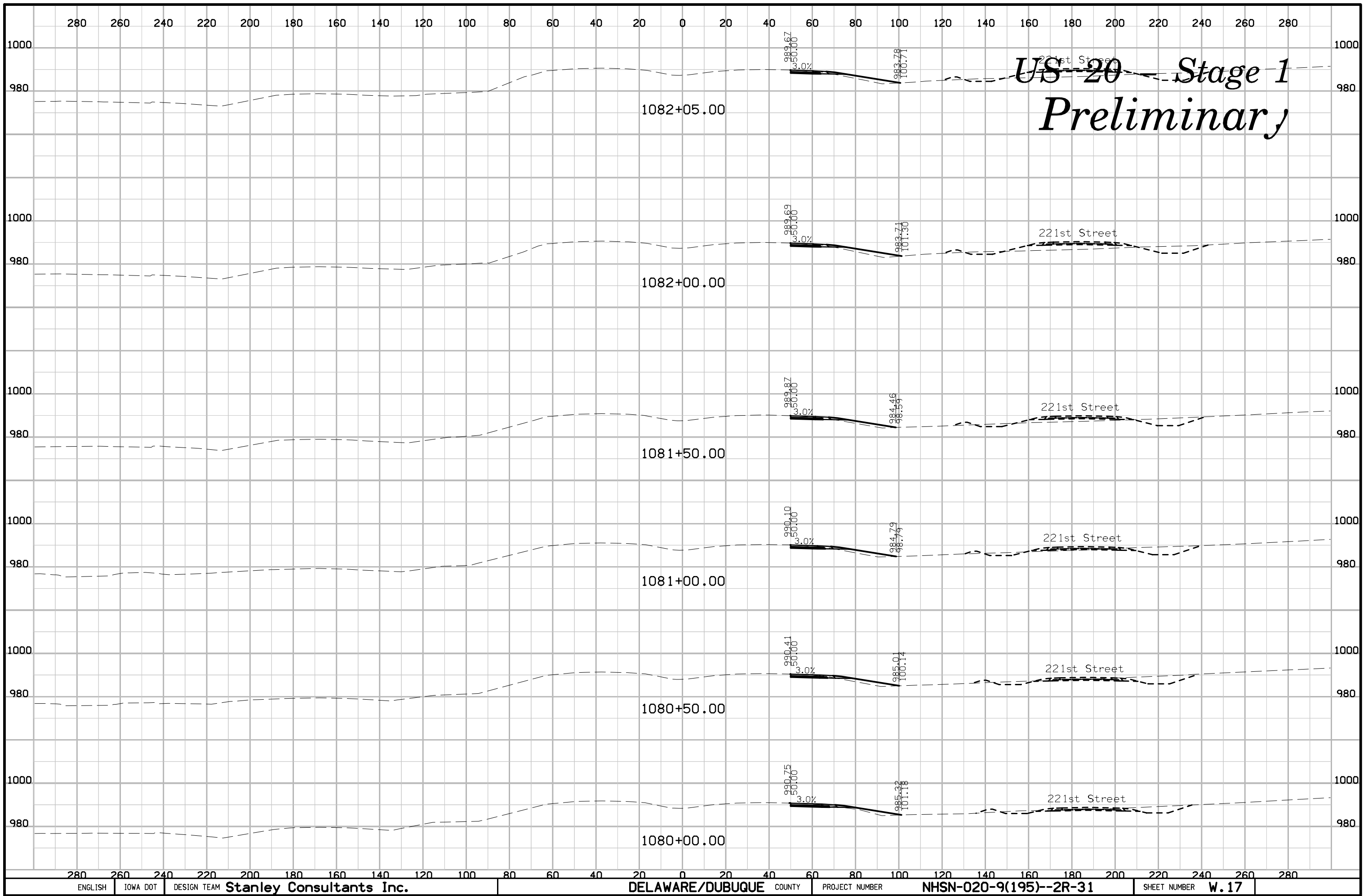


US 20 - Stage 1 Preliminary



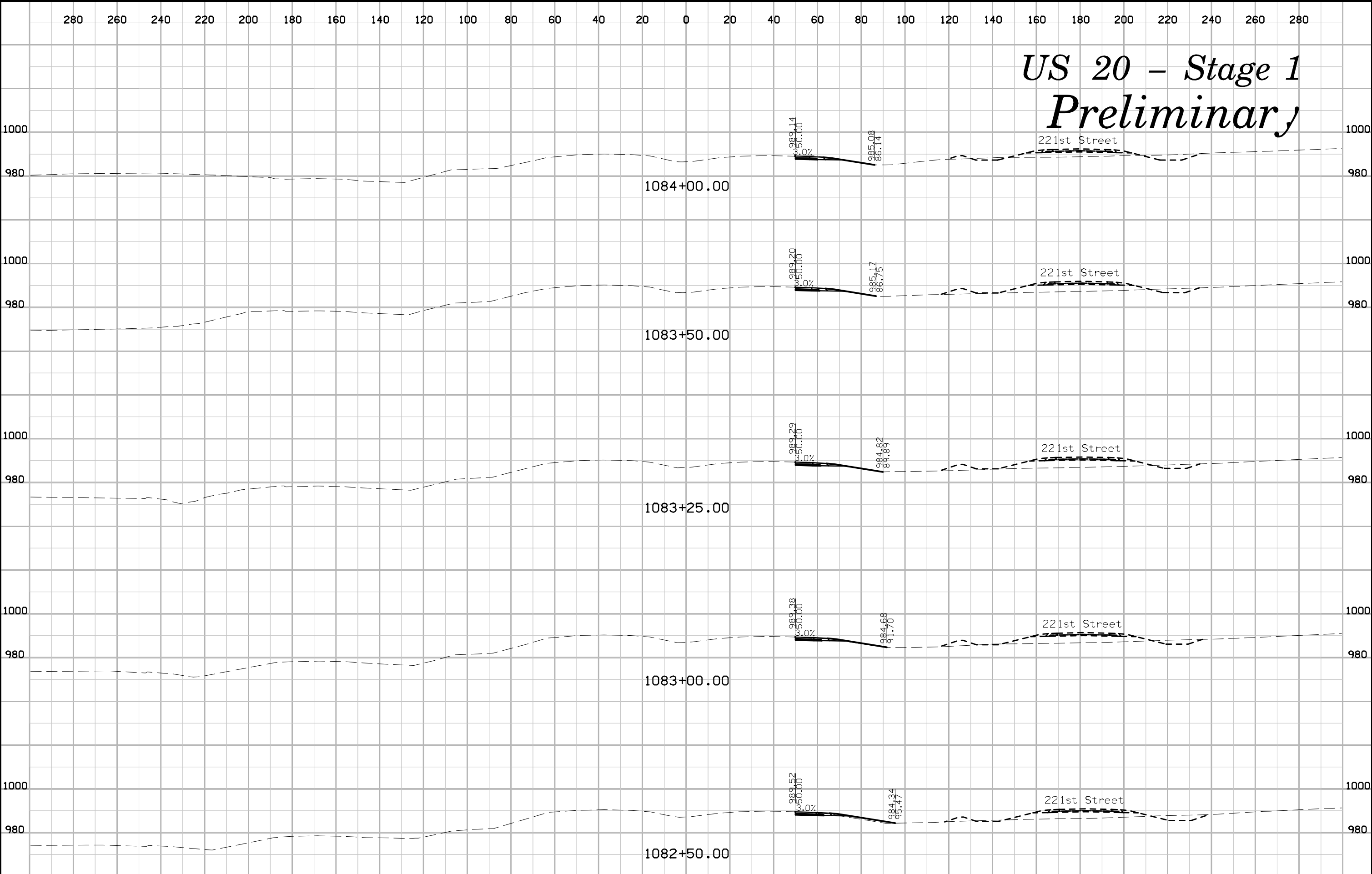
US 20 - Stage 1 Preliminary



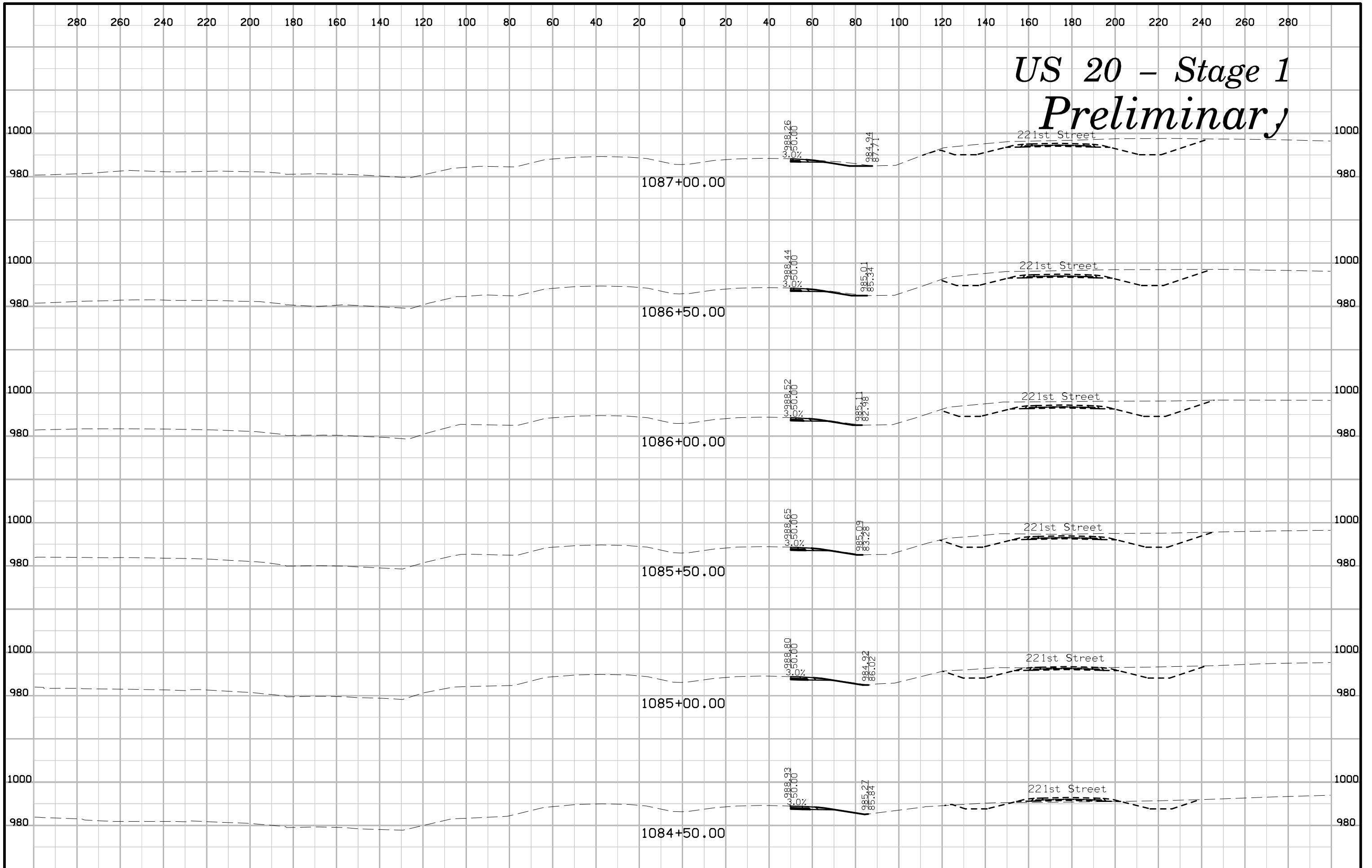


US-20 Stage 1 Preliminary

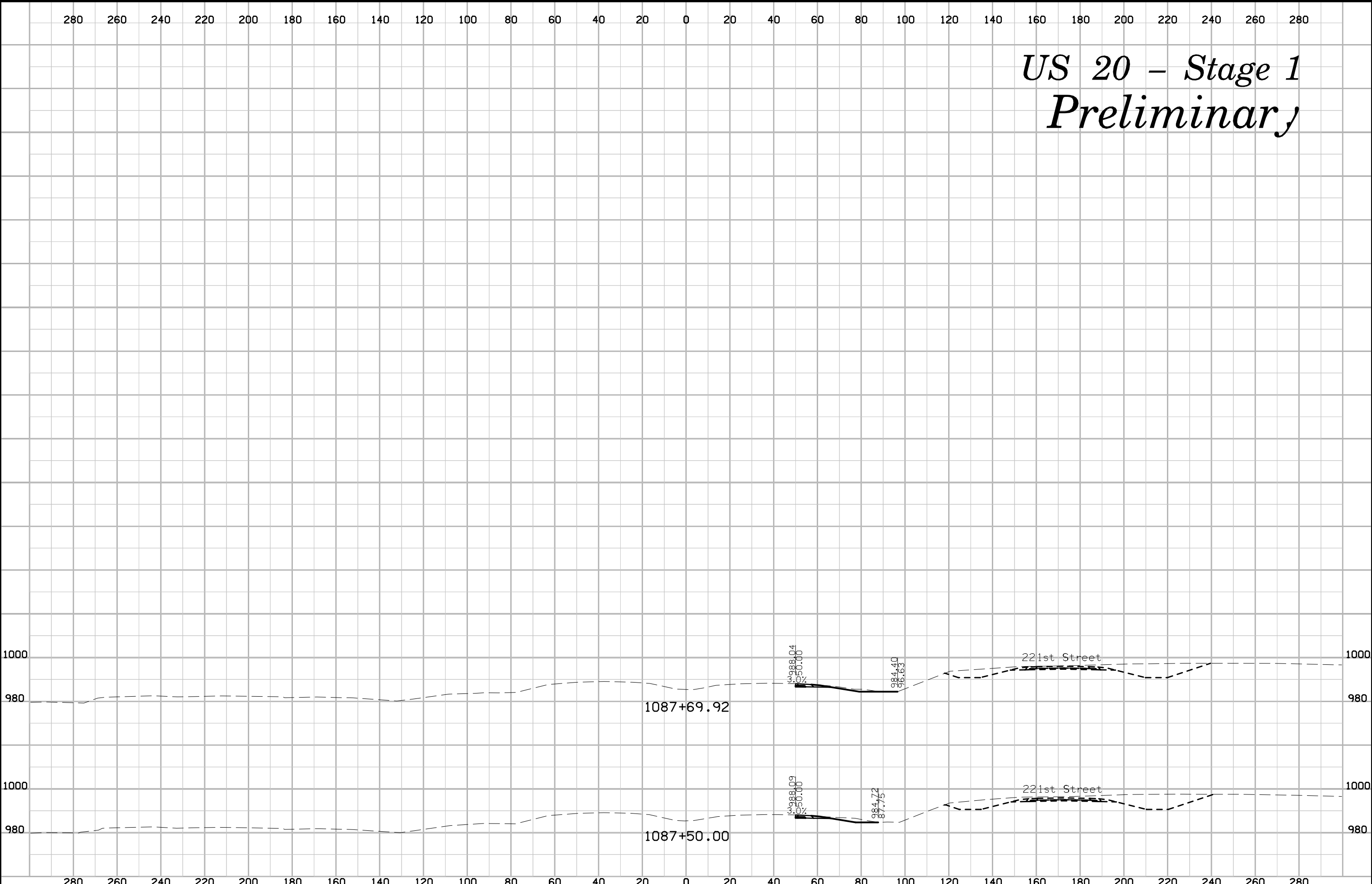
US 20 - Stage 1 Preliminary



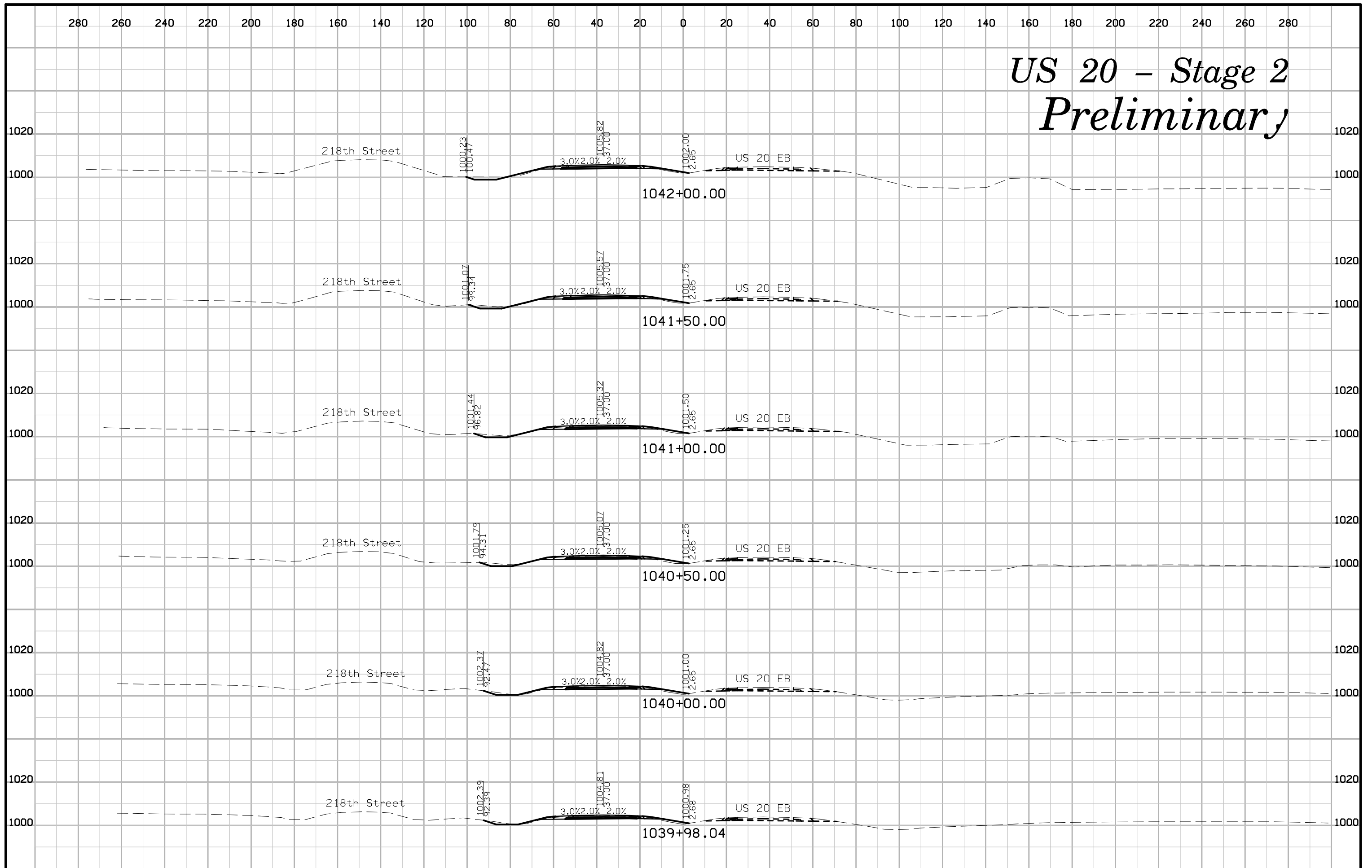
US 20 - Stage 1 Preliminary



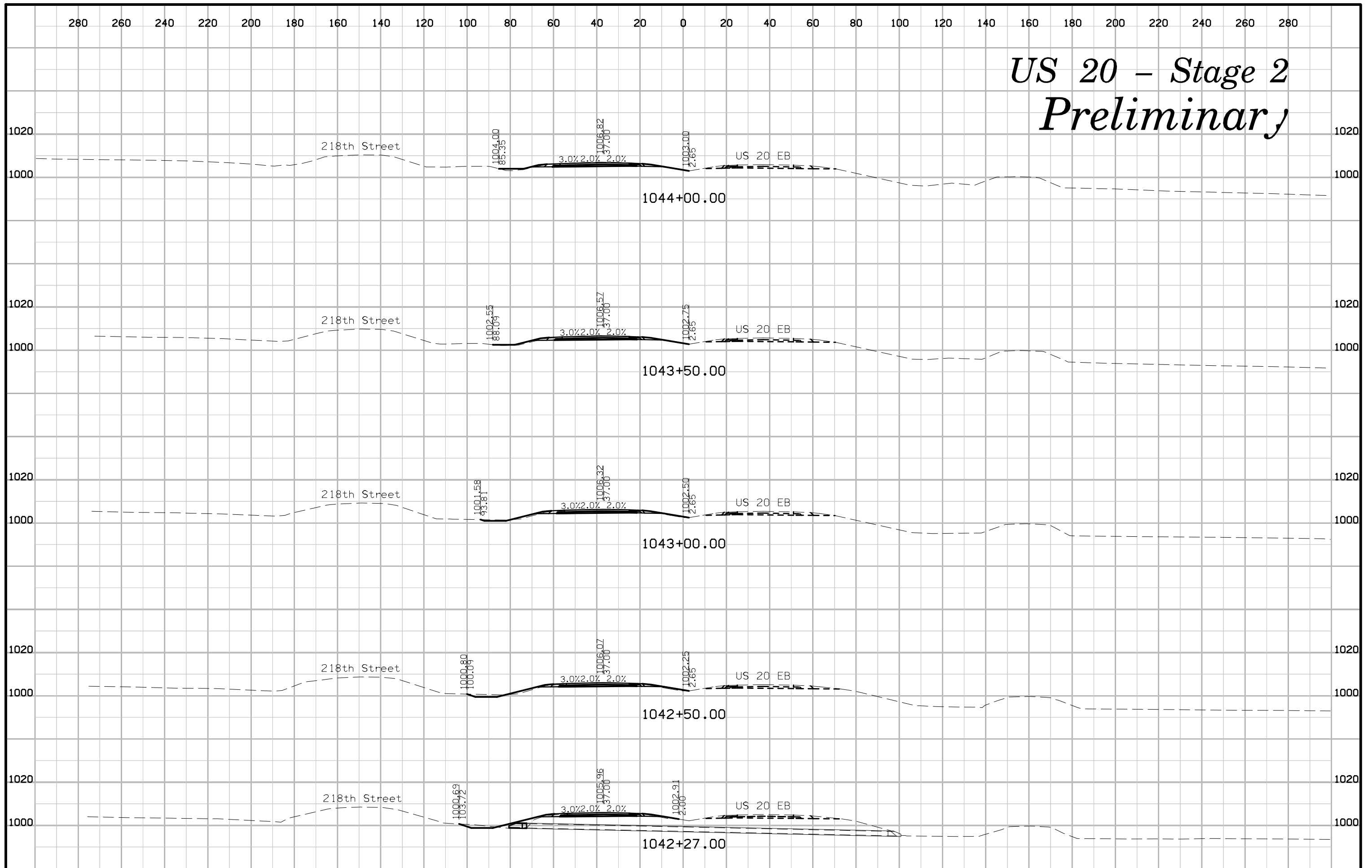
US 20 - Stage 1 Preliminary



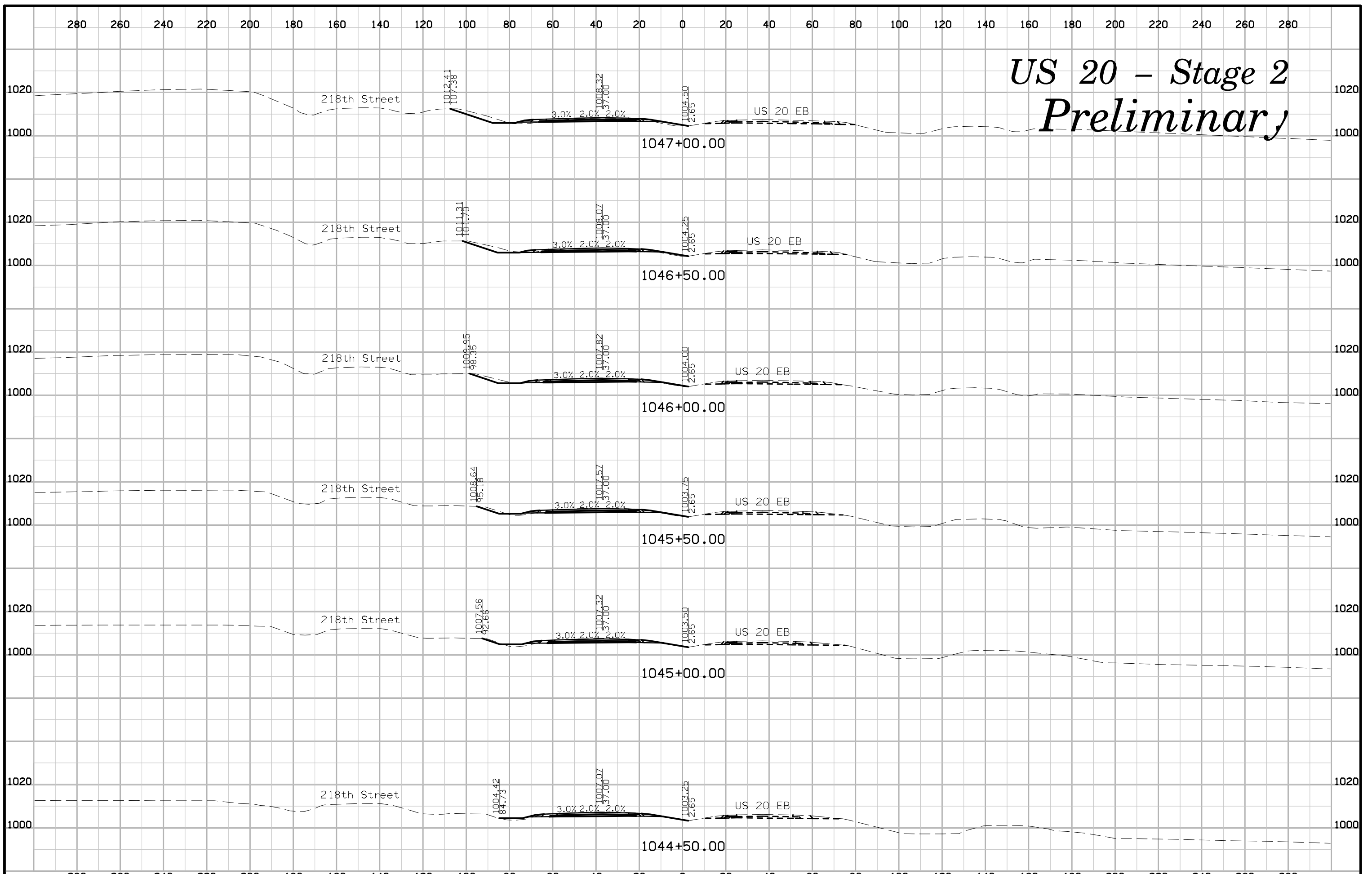
US 20 - Stage 2 Preliminary



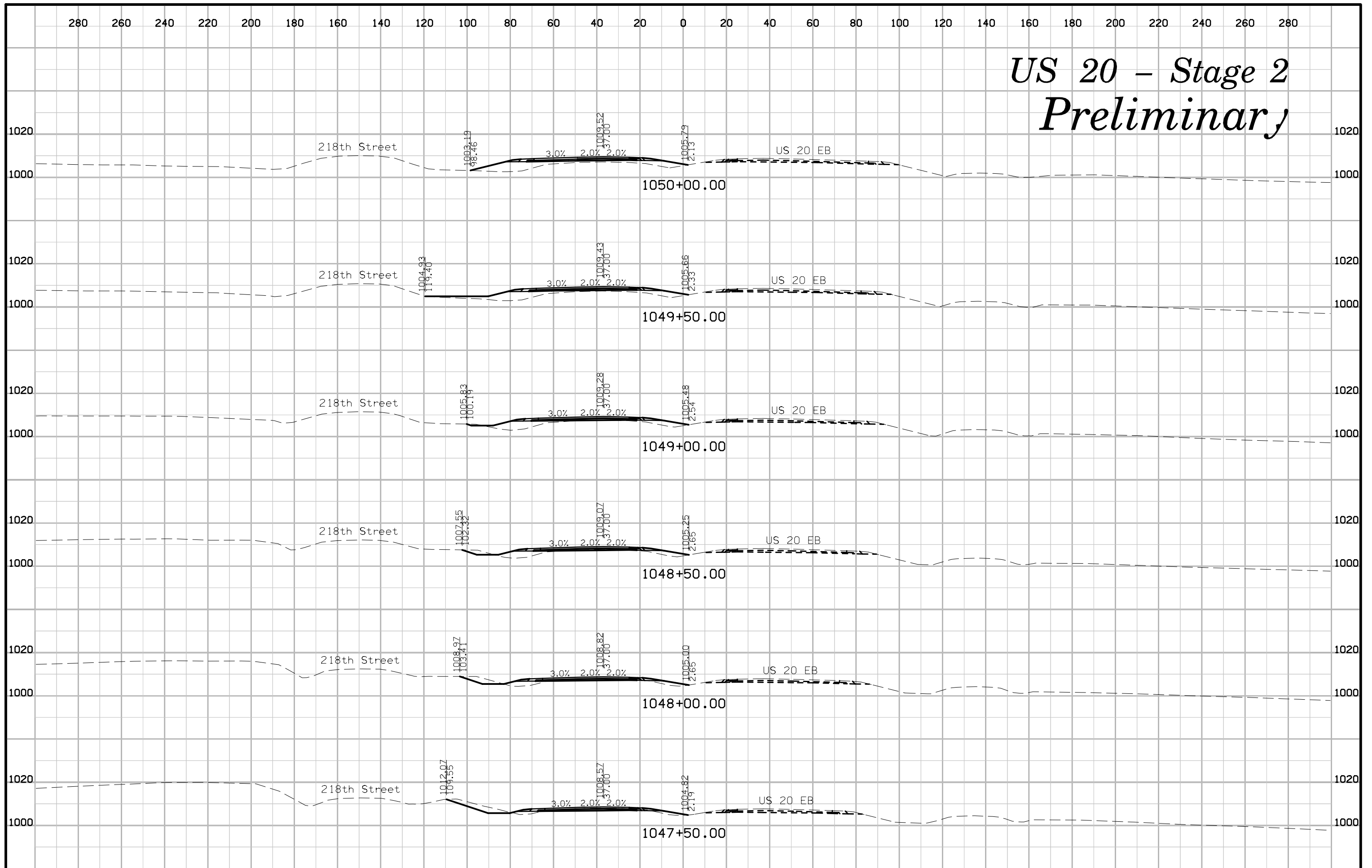
US 20 - Stage 2 Preliminary



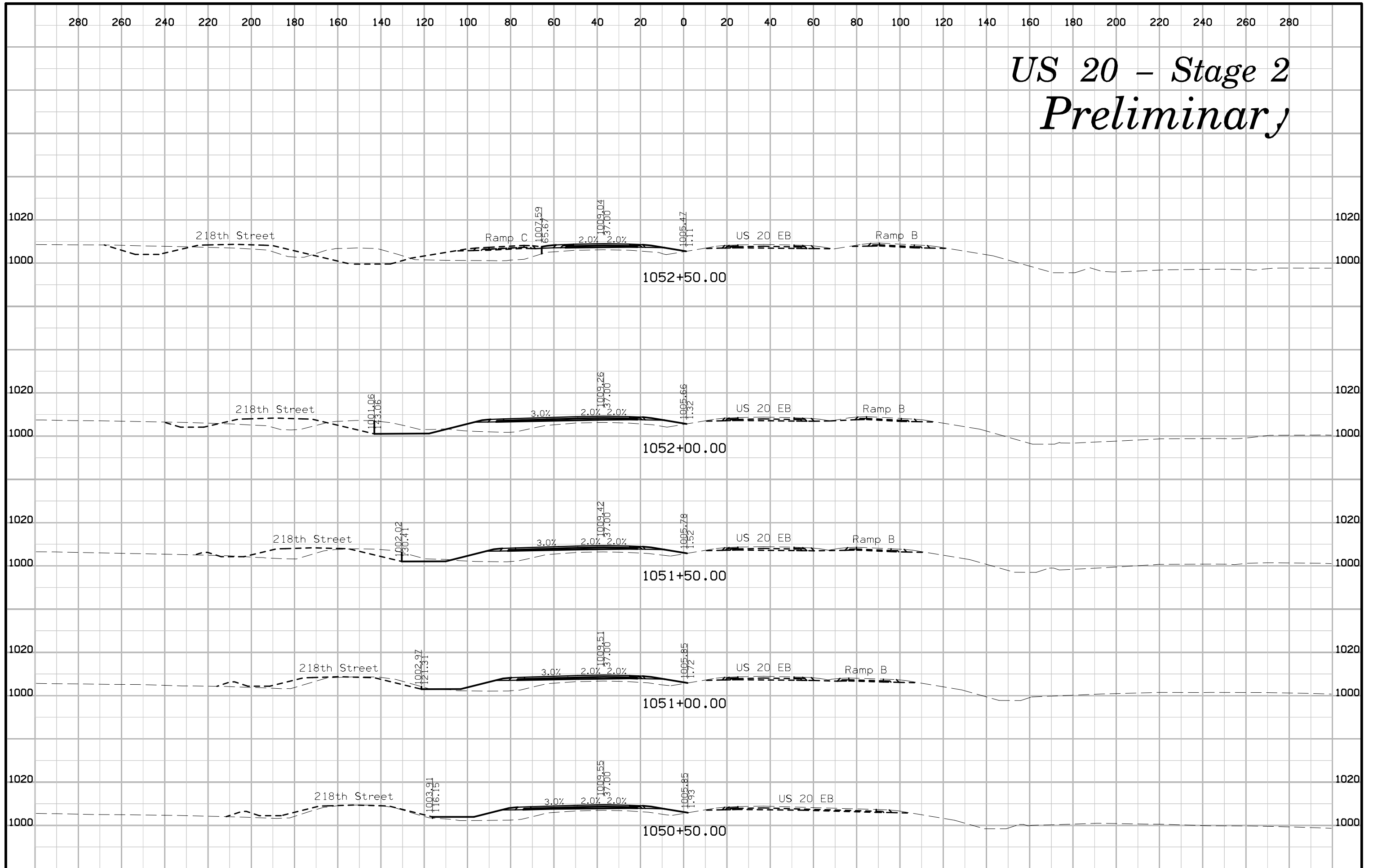
US 20 - Stage 2 Preliminary



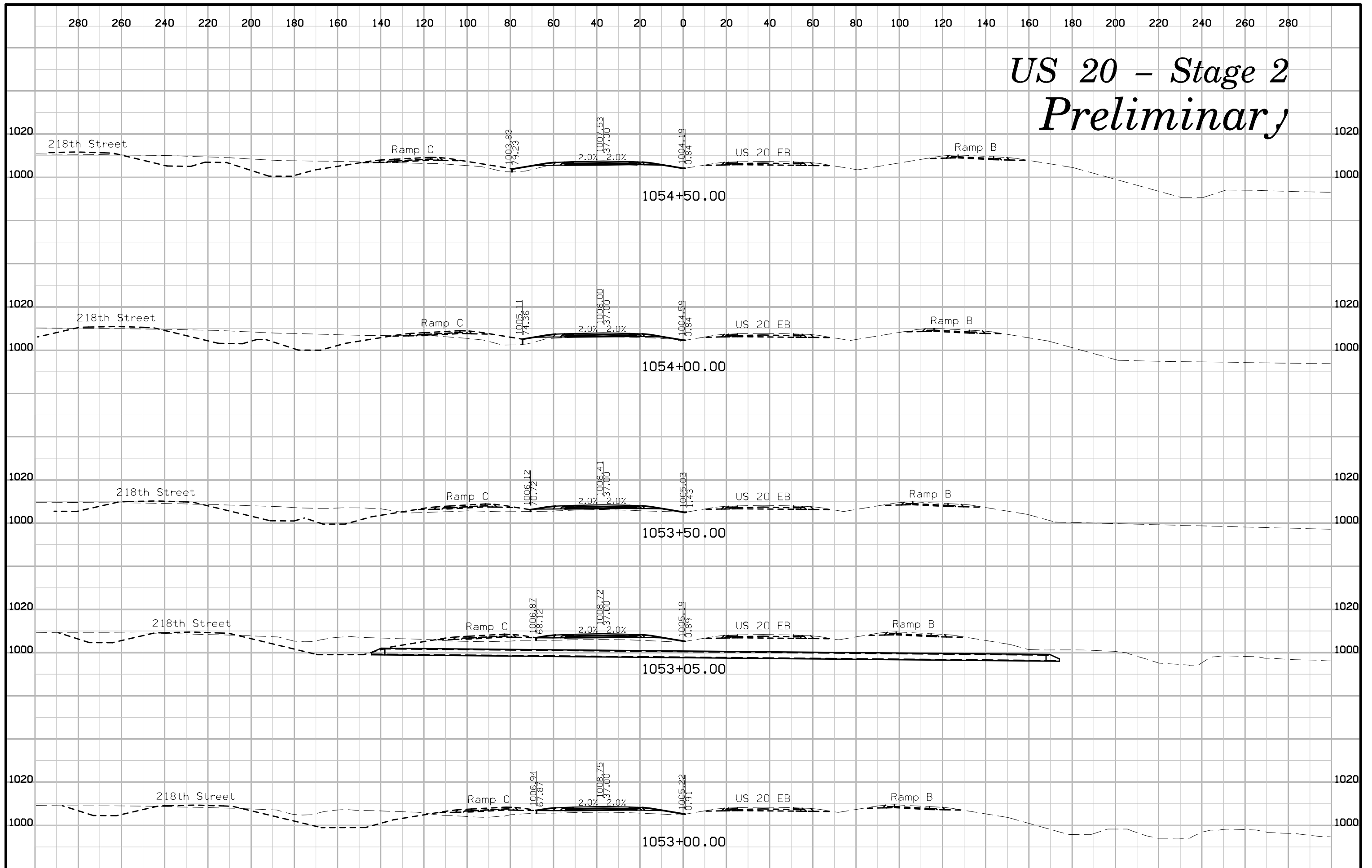
US 20 - Stage 2 Preliminary



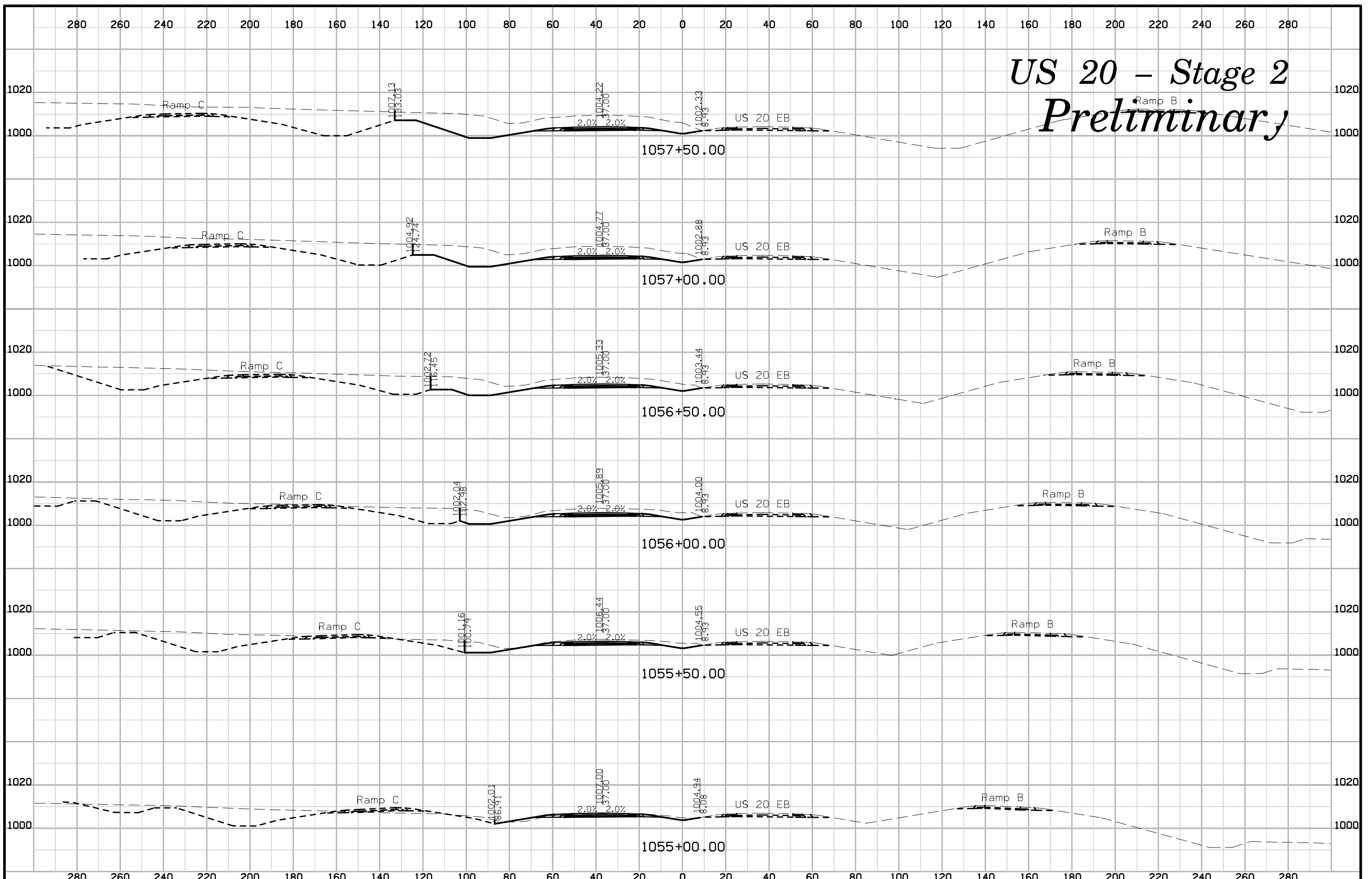
US 20 - Stage 2 Preliminary



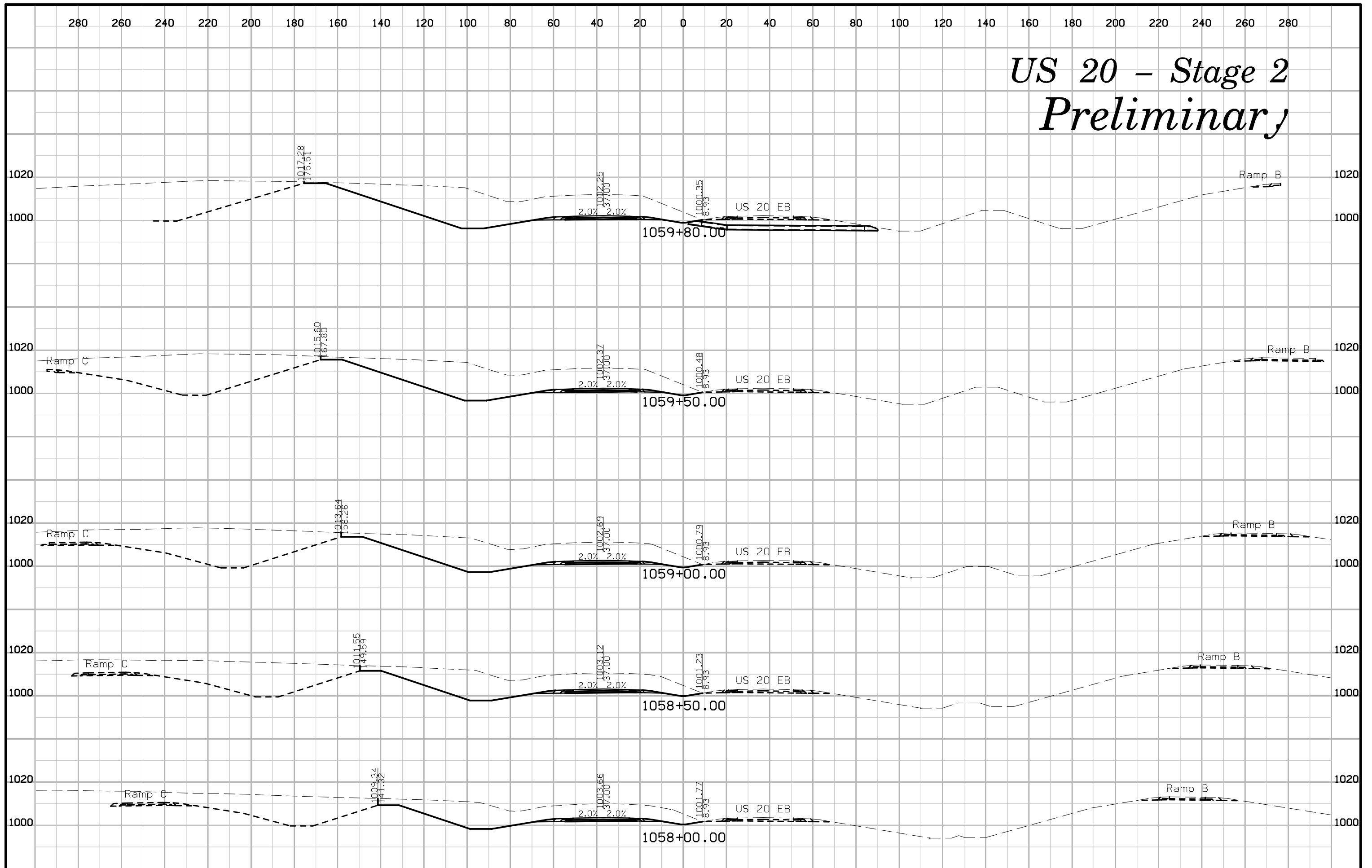
US 20 - Stage 2 Preliminary



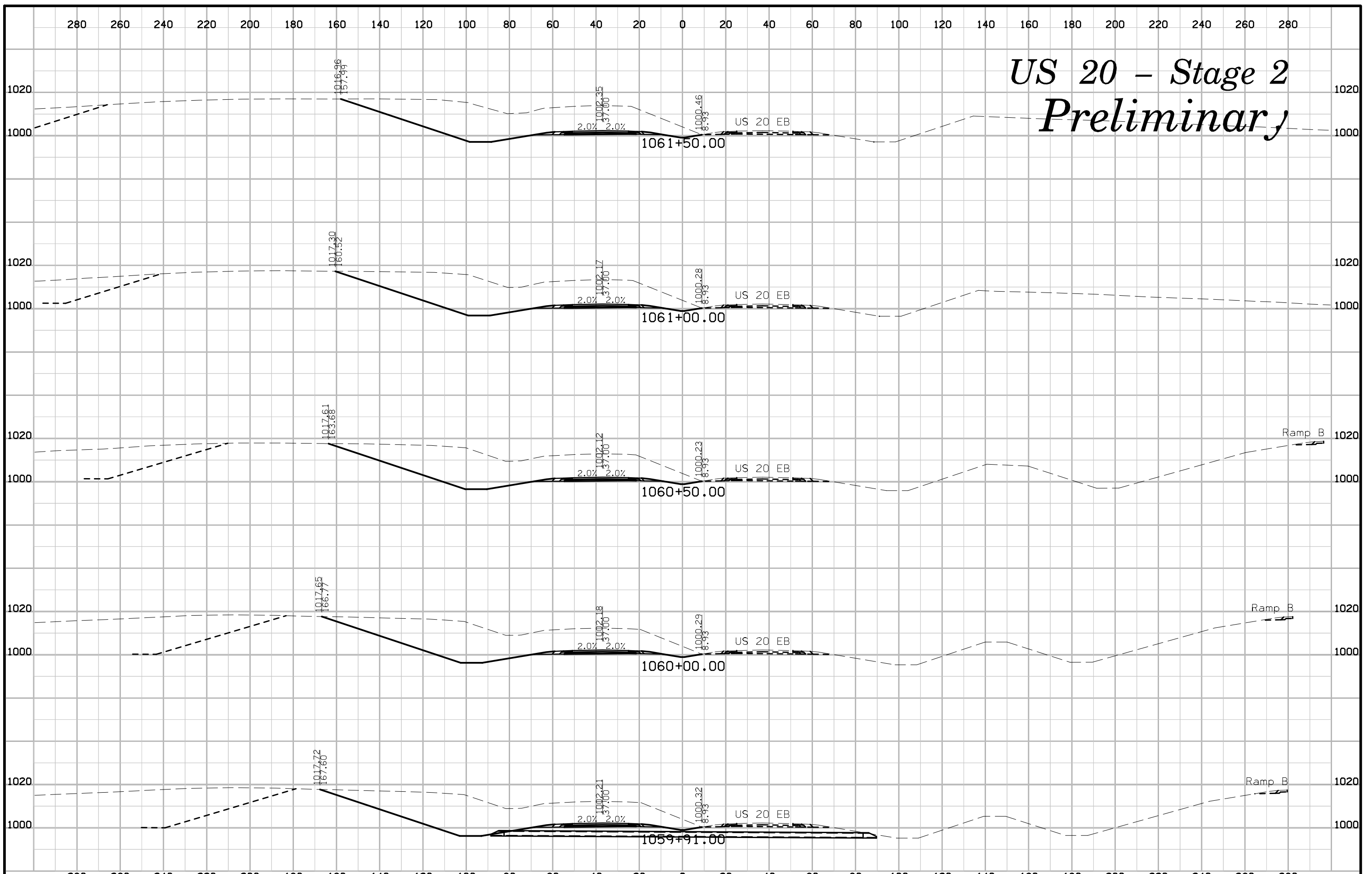
US 20 - Stage 2 Preliminary



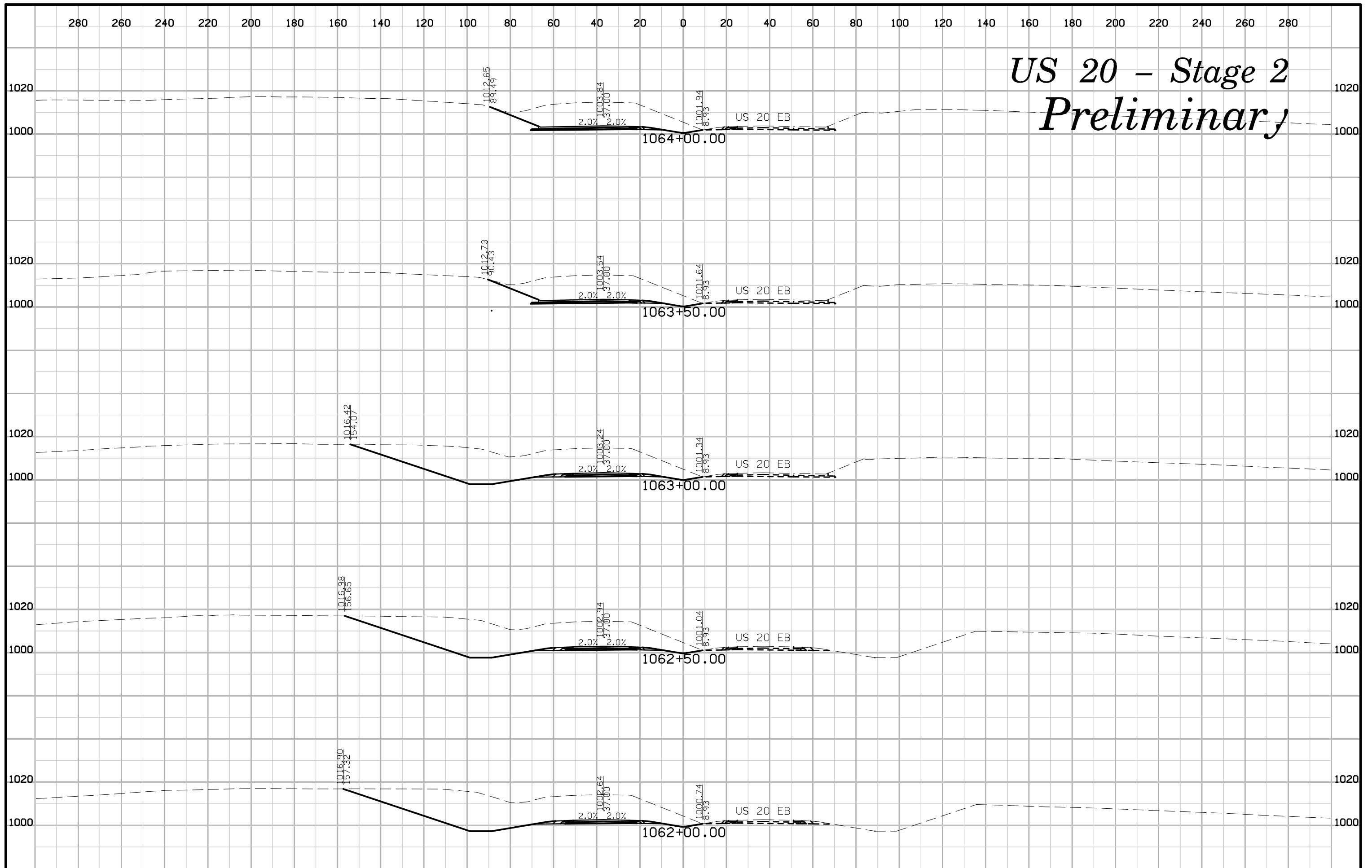
US 20 - Stage 2 Preliminary



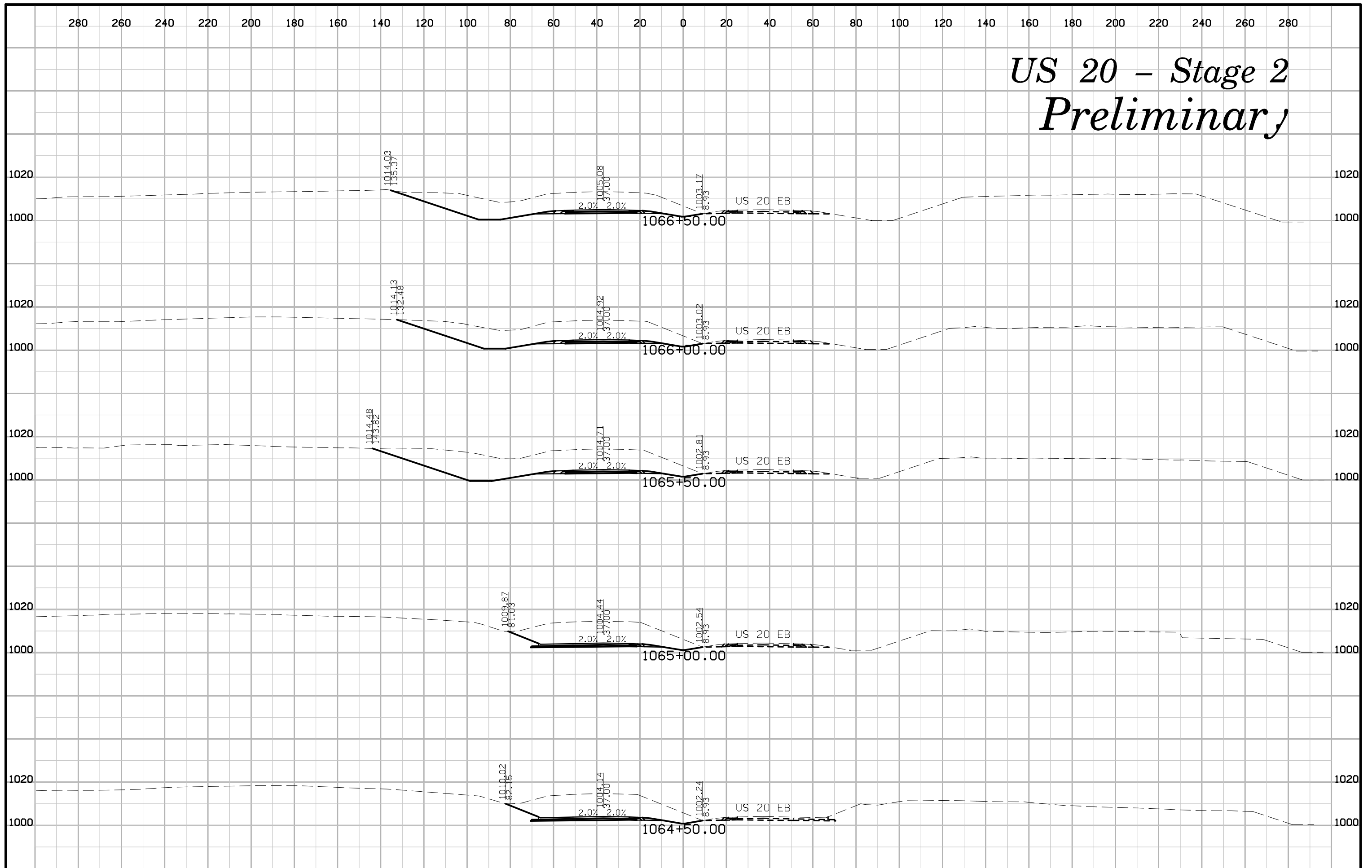
US 20 - Stage 2 Preliminary



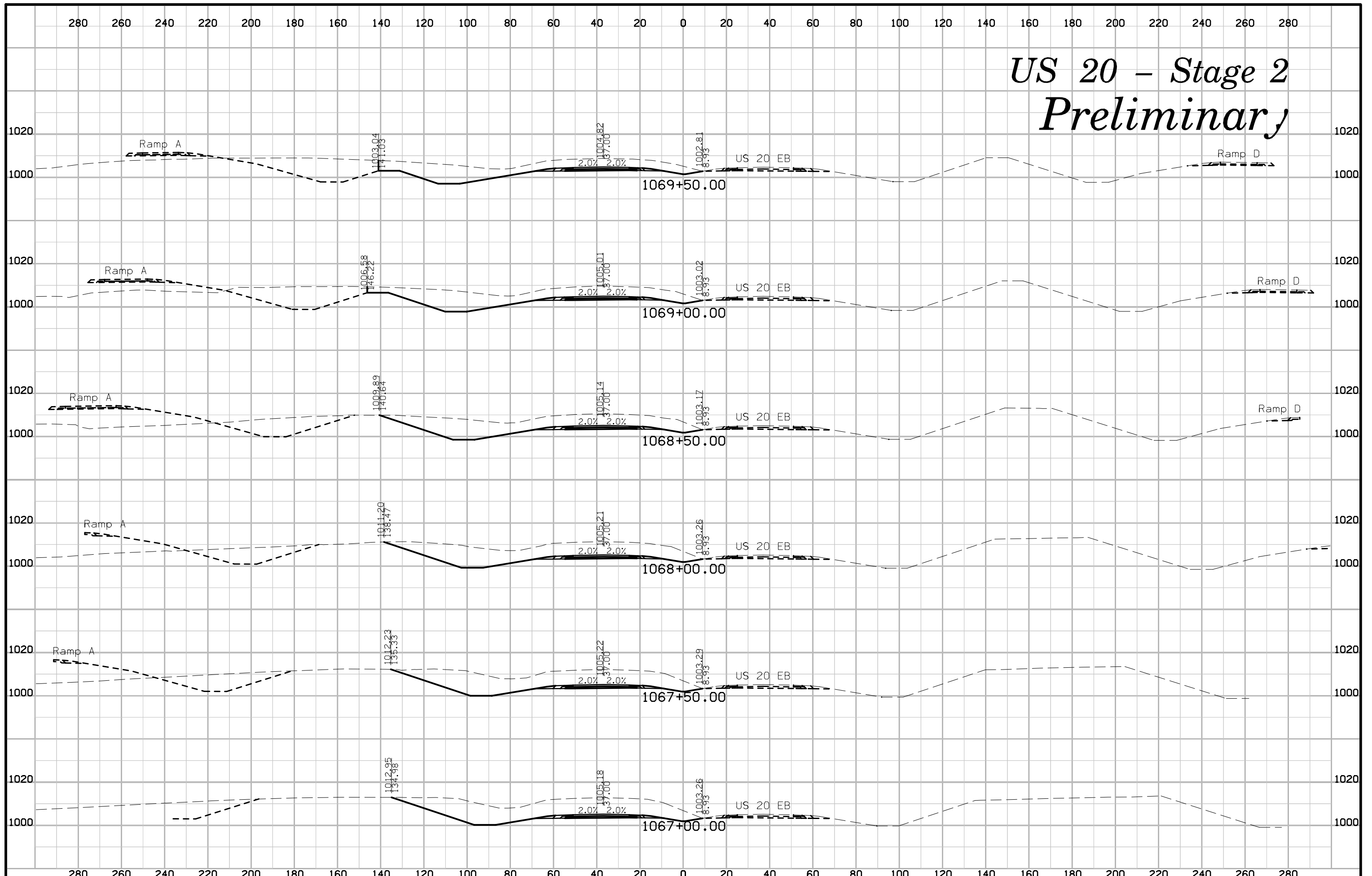
US 20 - Stage 2 Preliminary



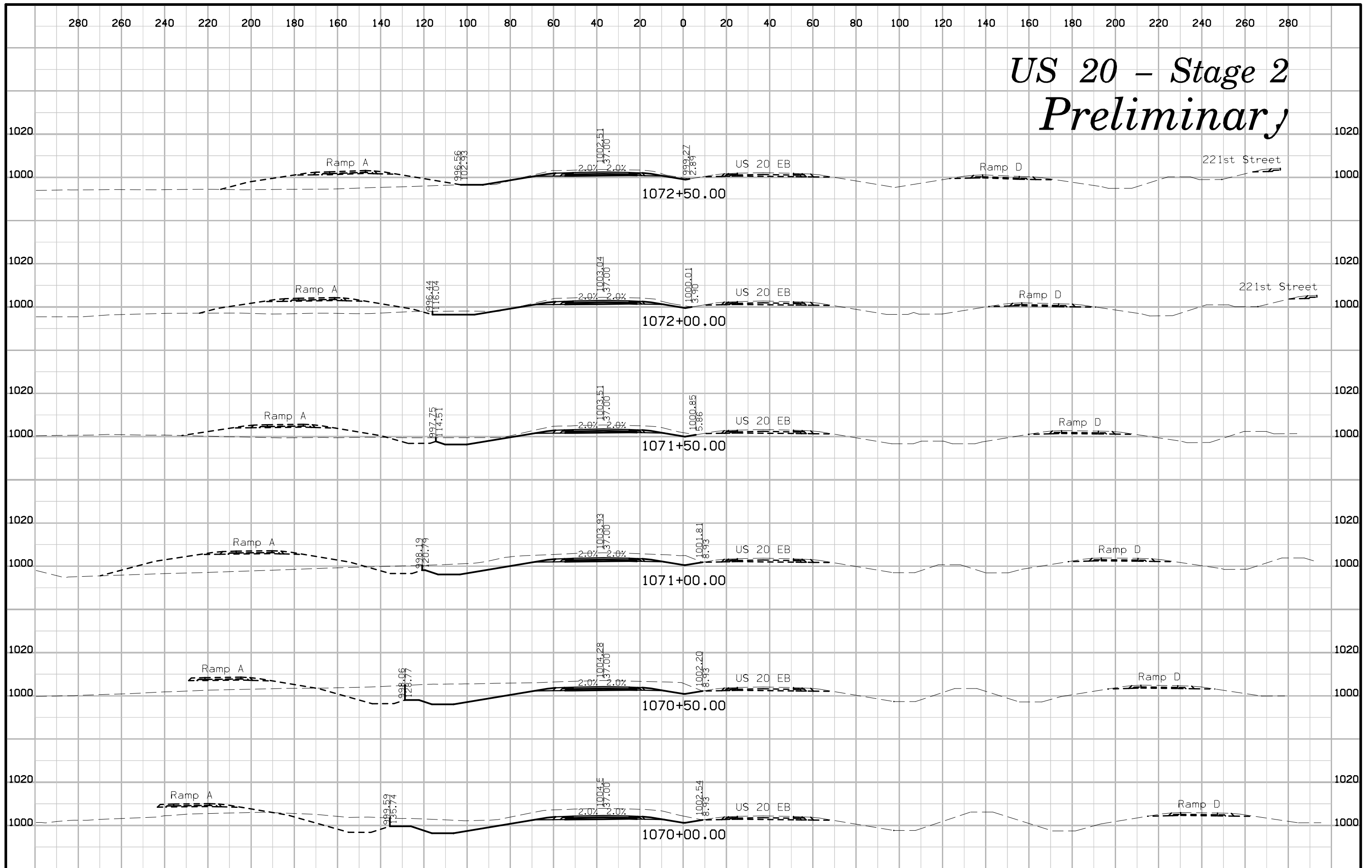
US 20 - Stage 2 Preliminary



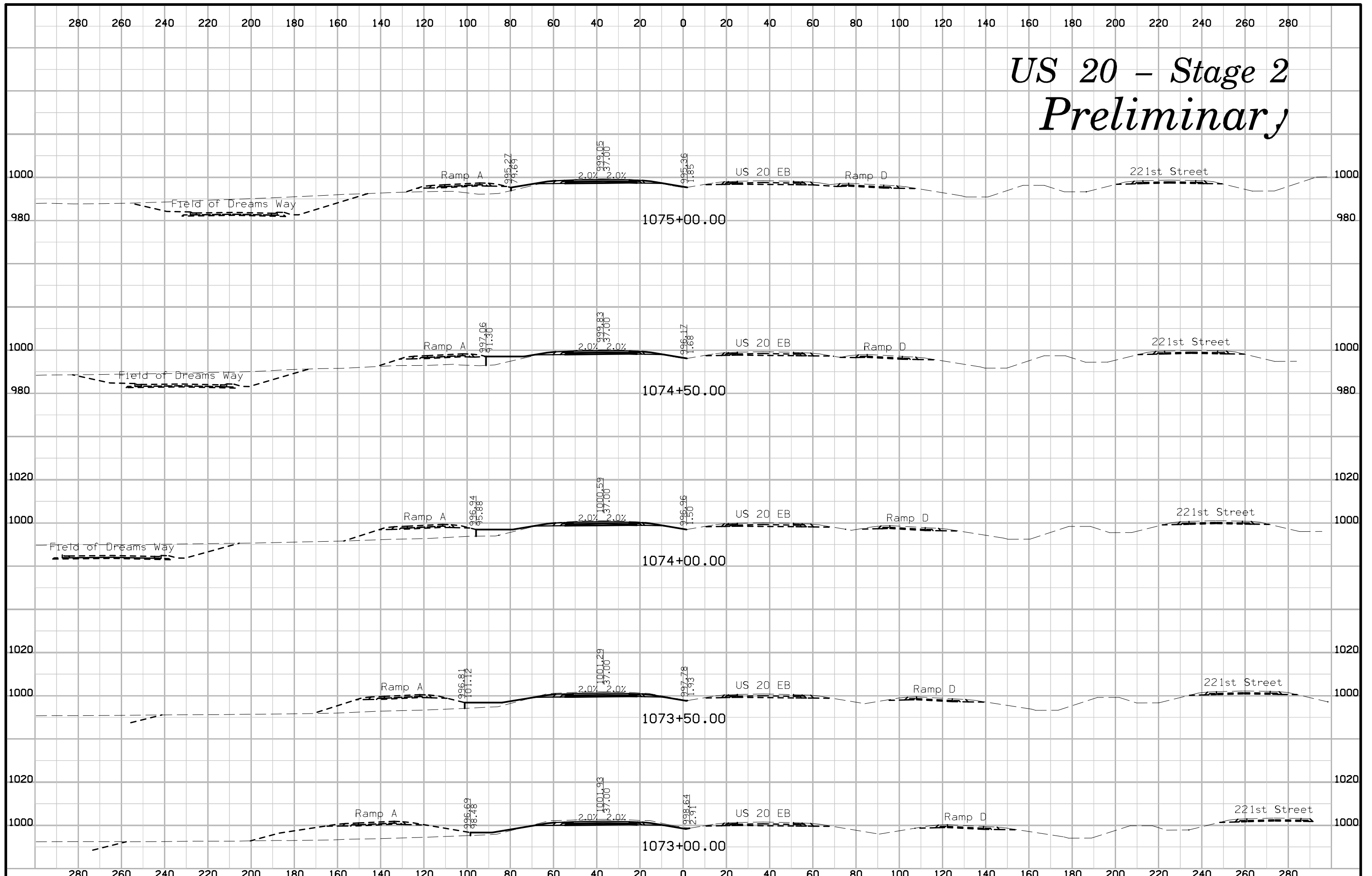
US 20 - Stage 2 Preliminary



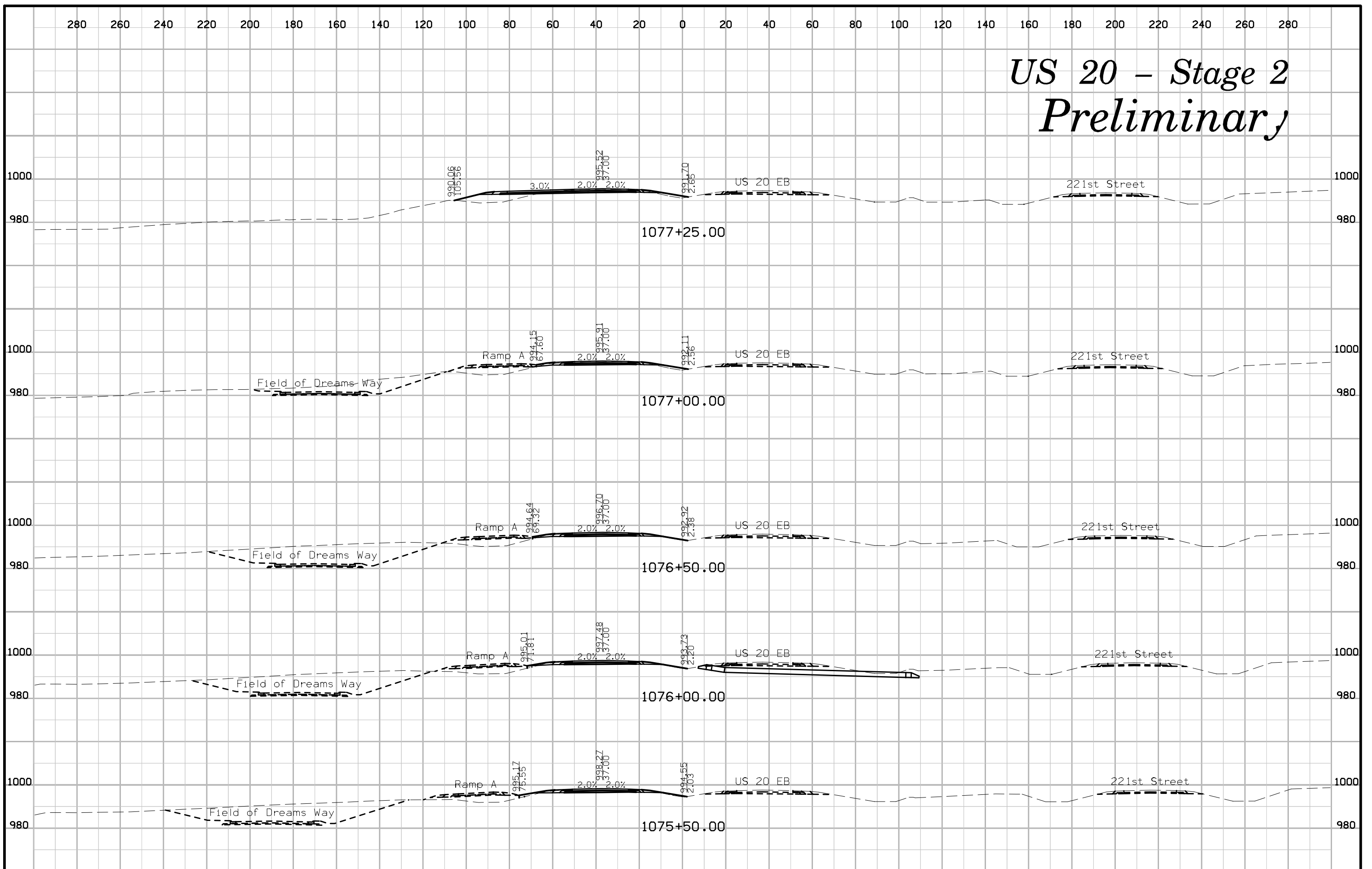
US 20 - Stage 2 Preliminary



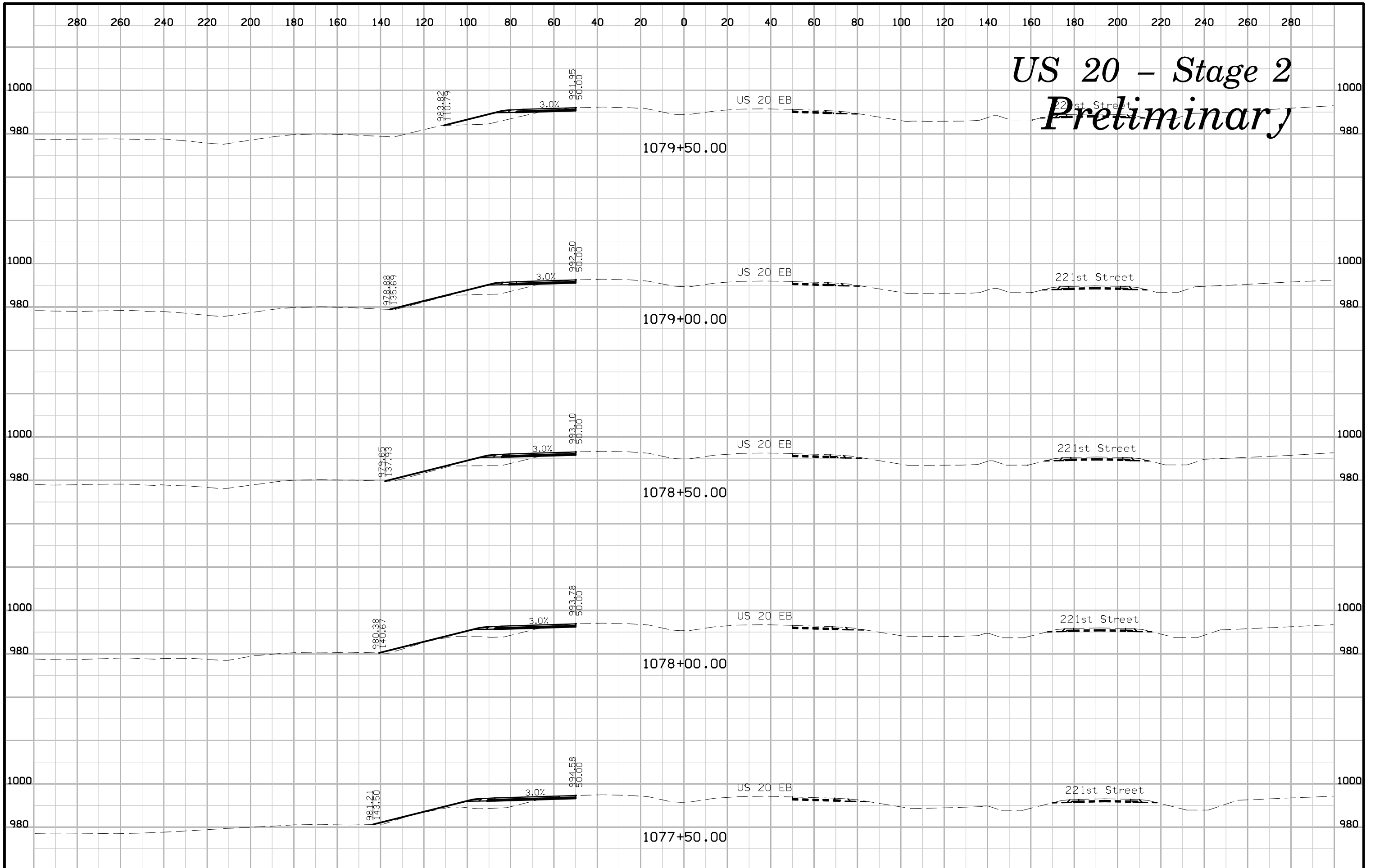
US 20 - Stage 2 Preliminary



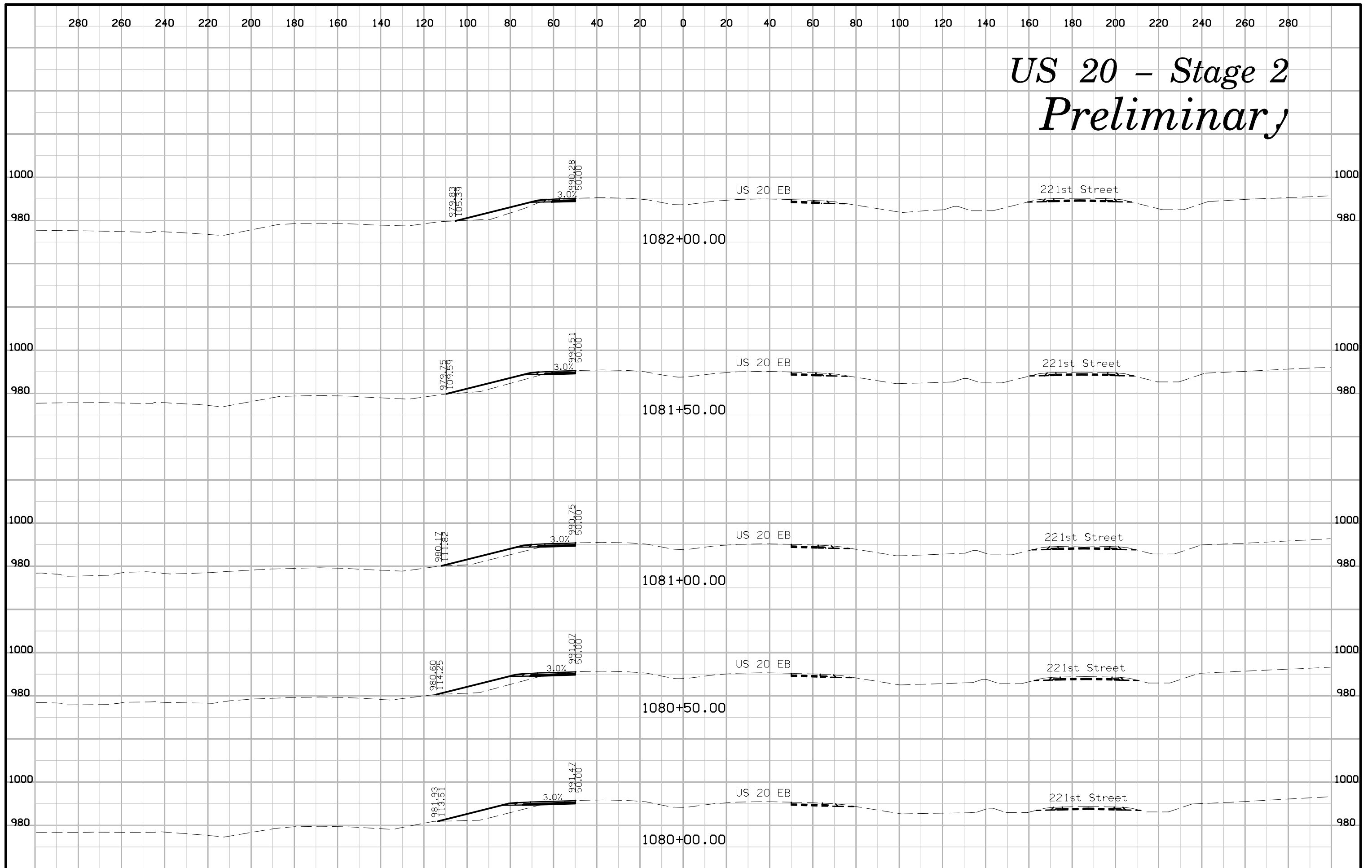
US 20 - Stage 2 Preliminary



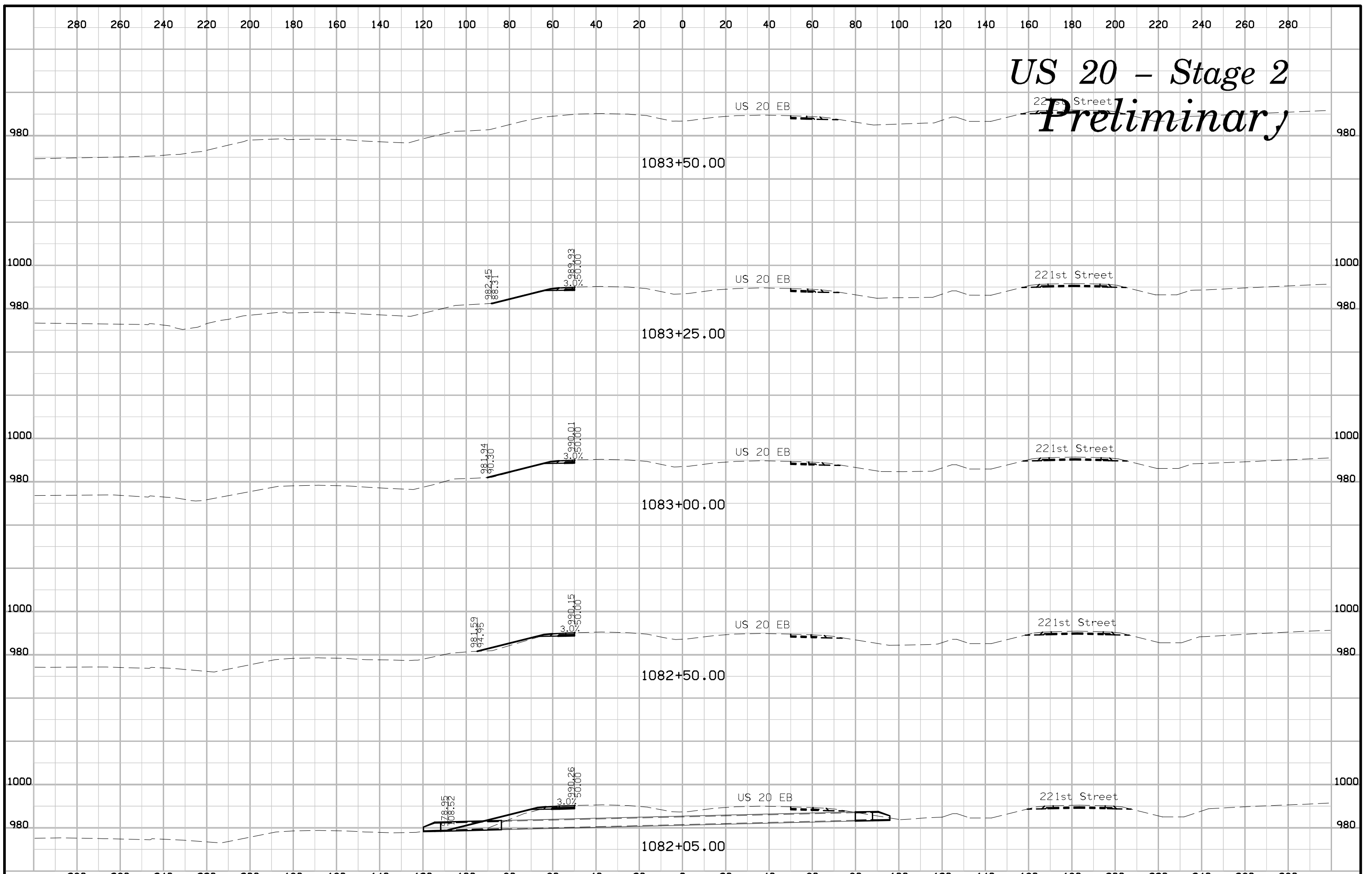
US 20 - Stage 2 Preliminary



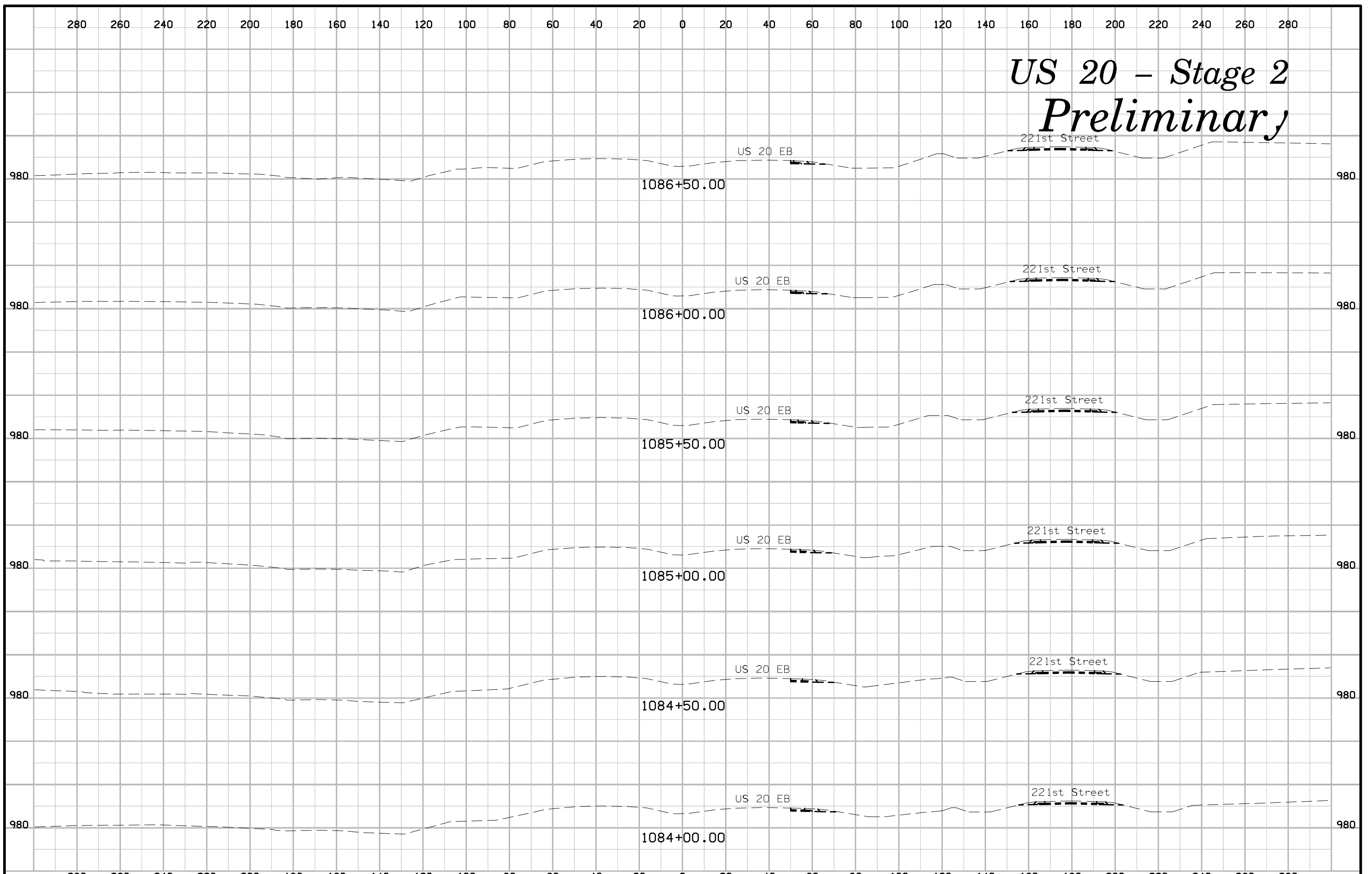
US 20 - Stage 2 Preliminary



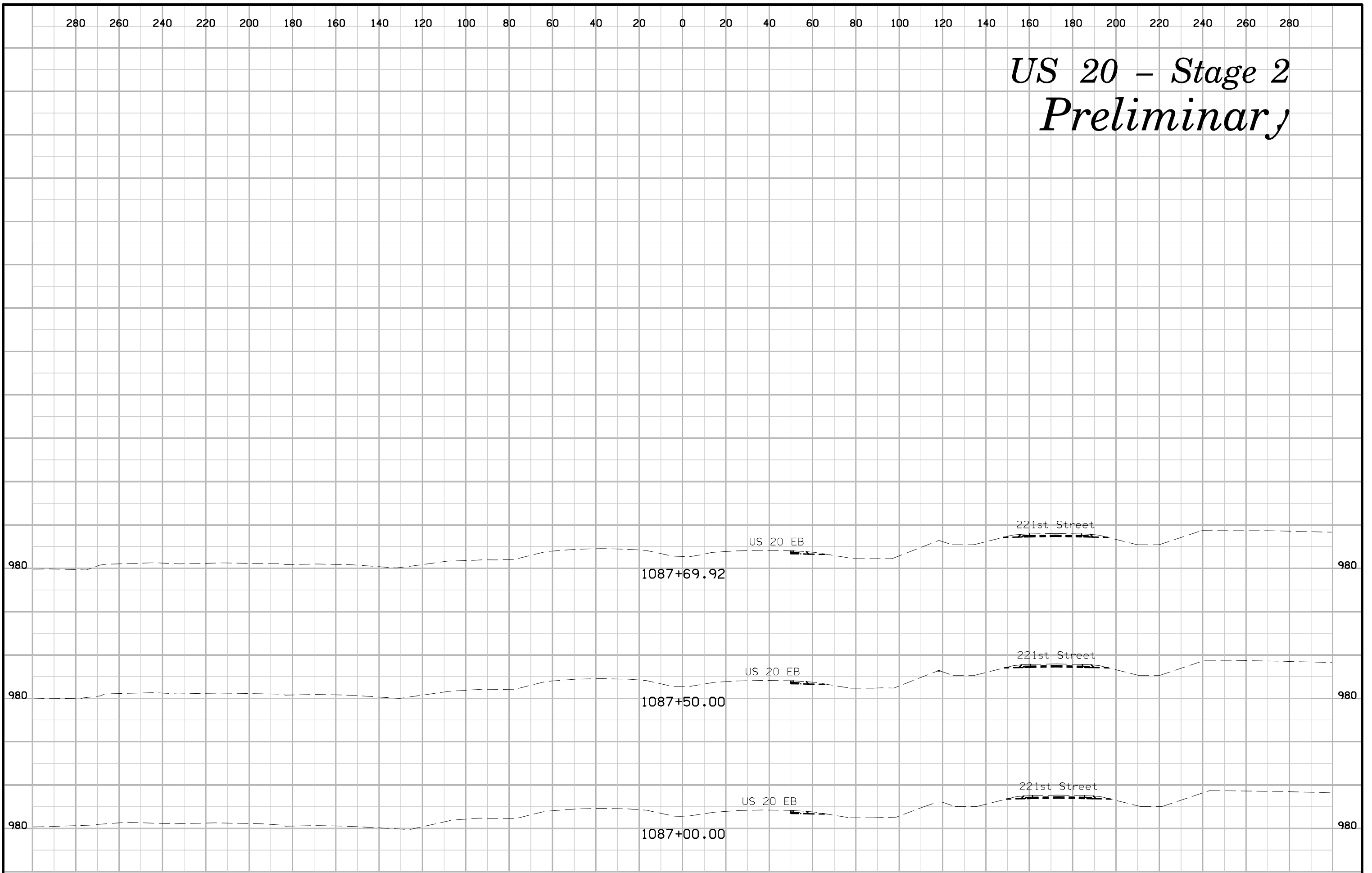
US 20 - Stage 2 Preliminary



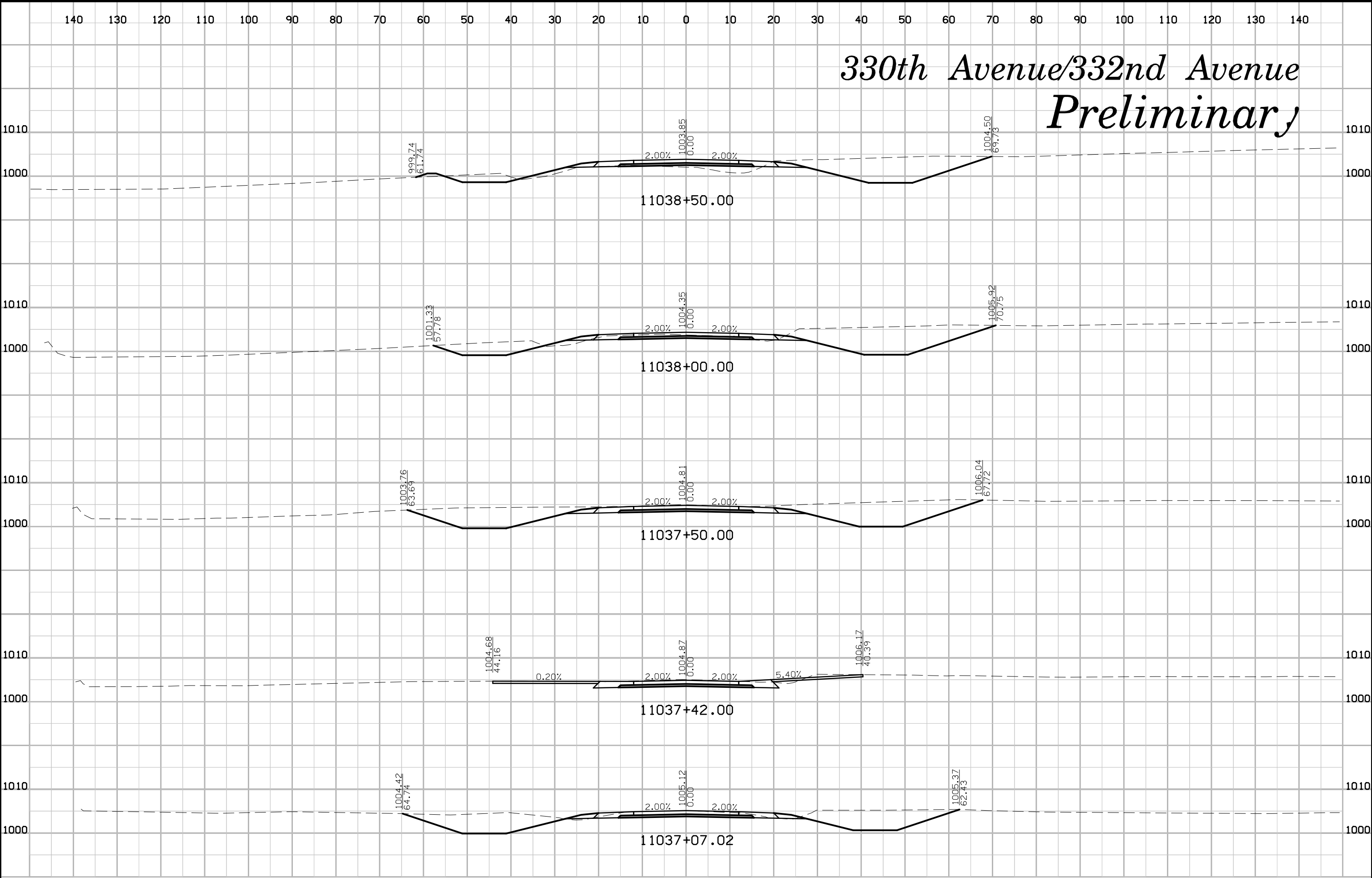
US 20 - Stage 2 Preliminary

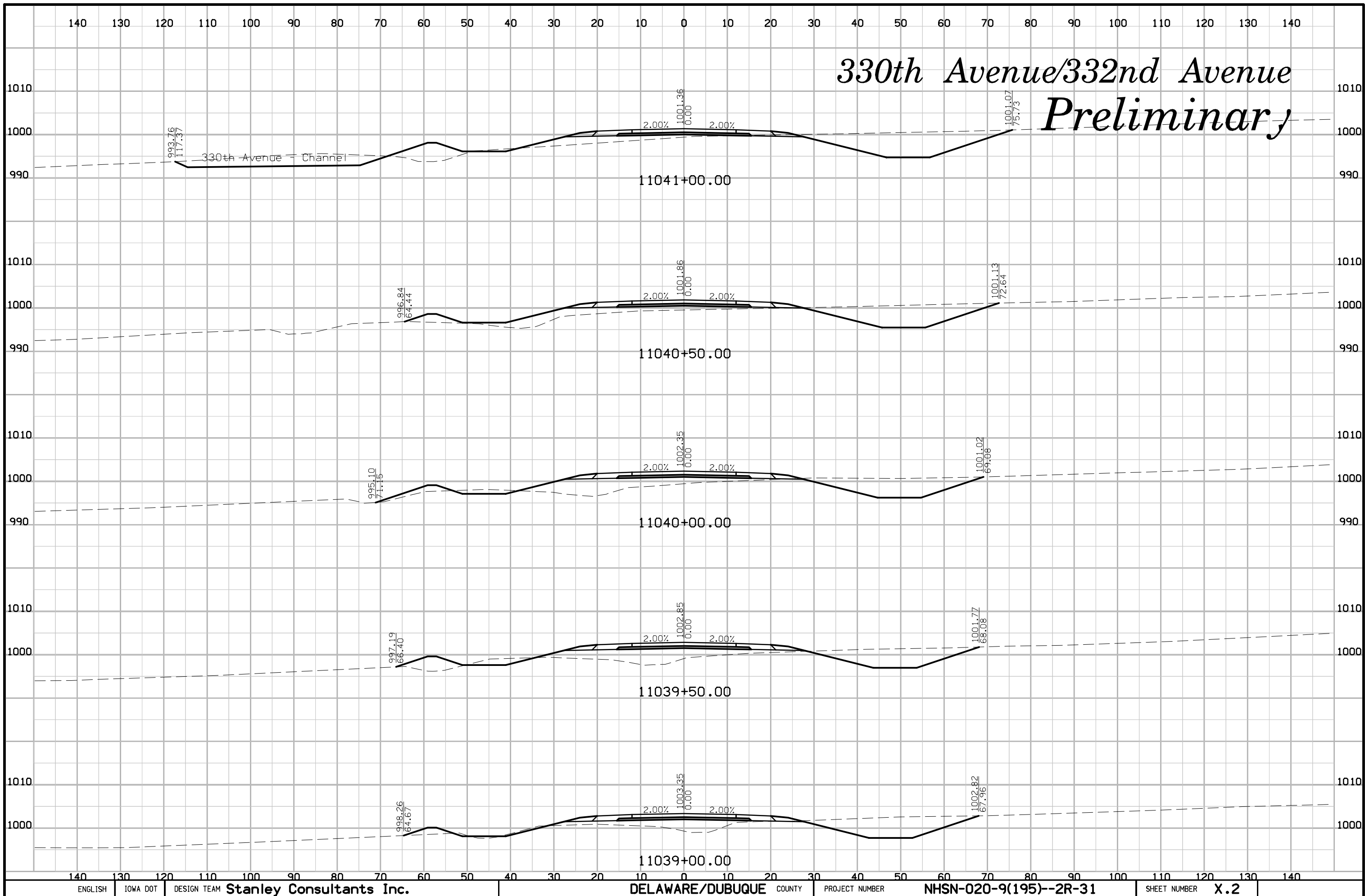


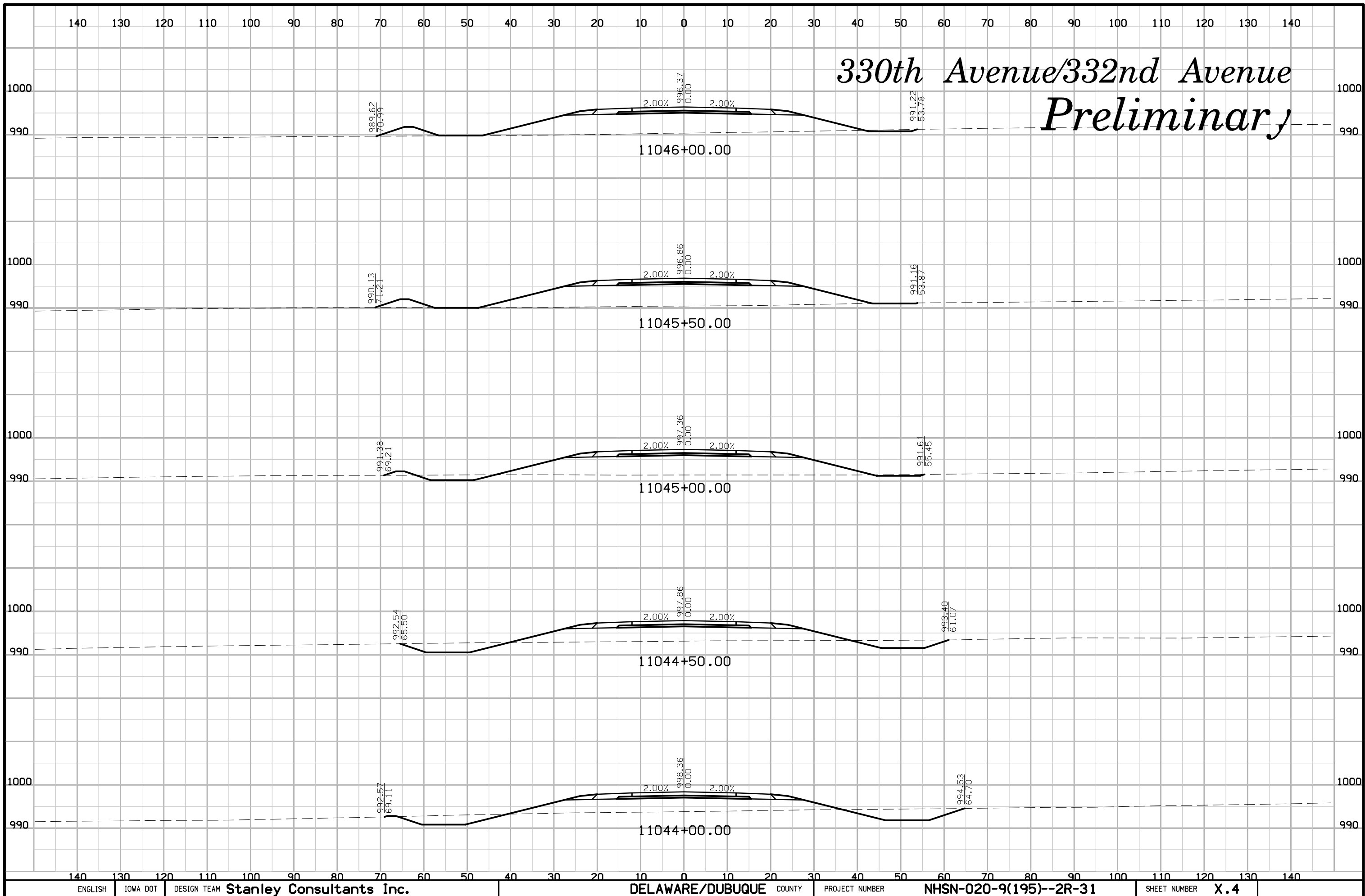
US 20 - Stage 2 Preliminary



330th Avenue/332nd Avenue Preliminary

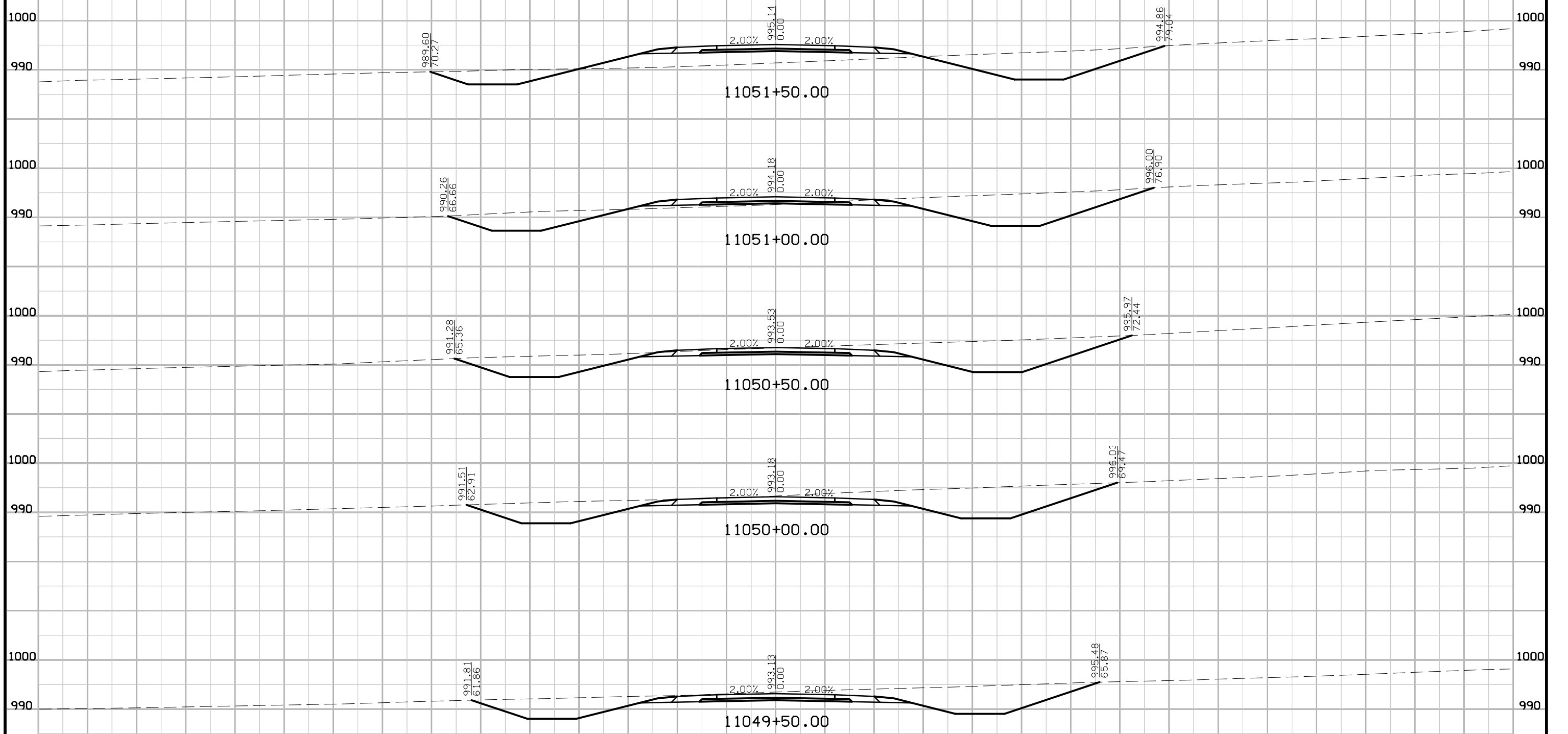




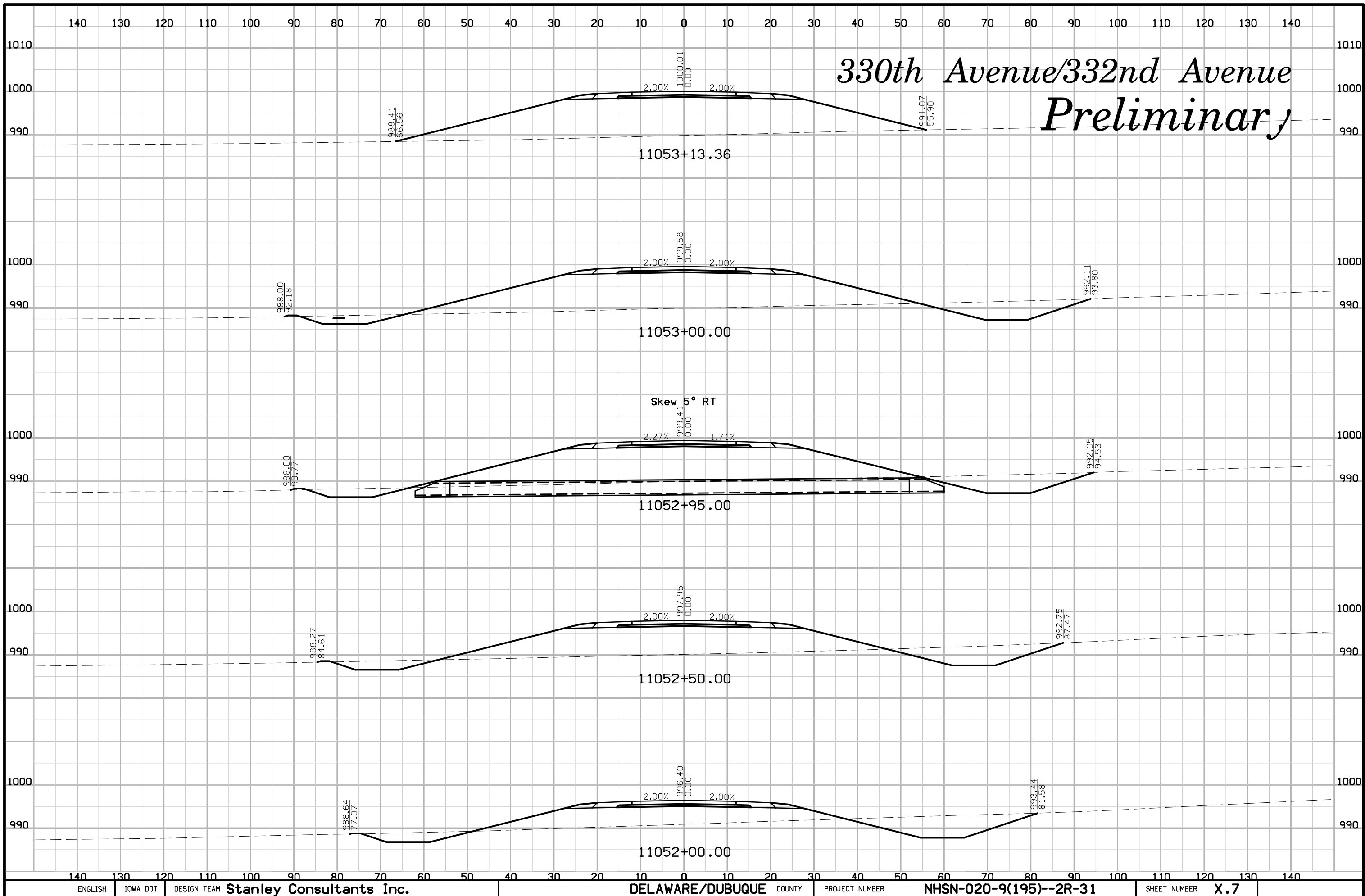


140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

330th Avenue/332nd Avenue Preliminary

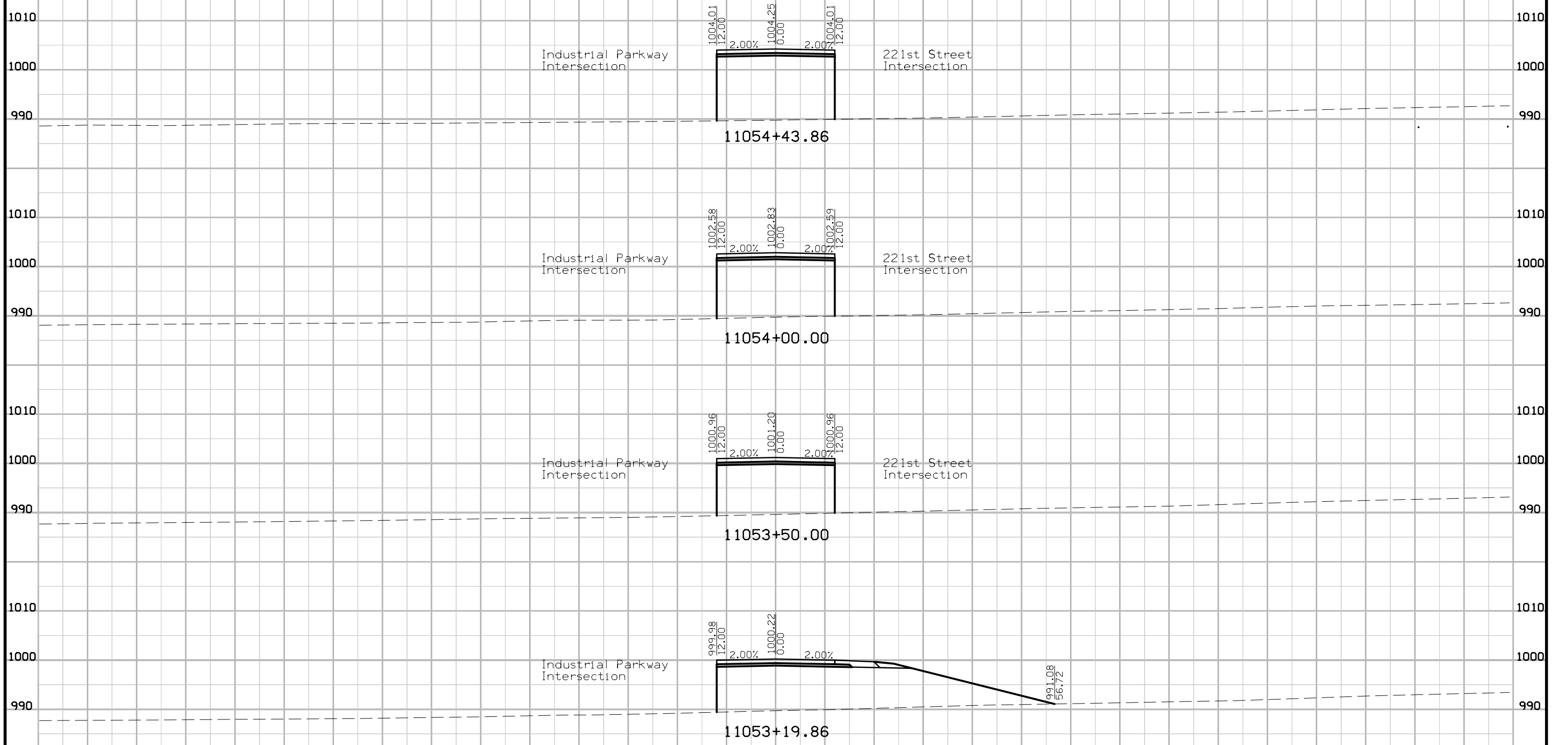


140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

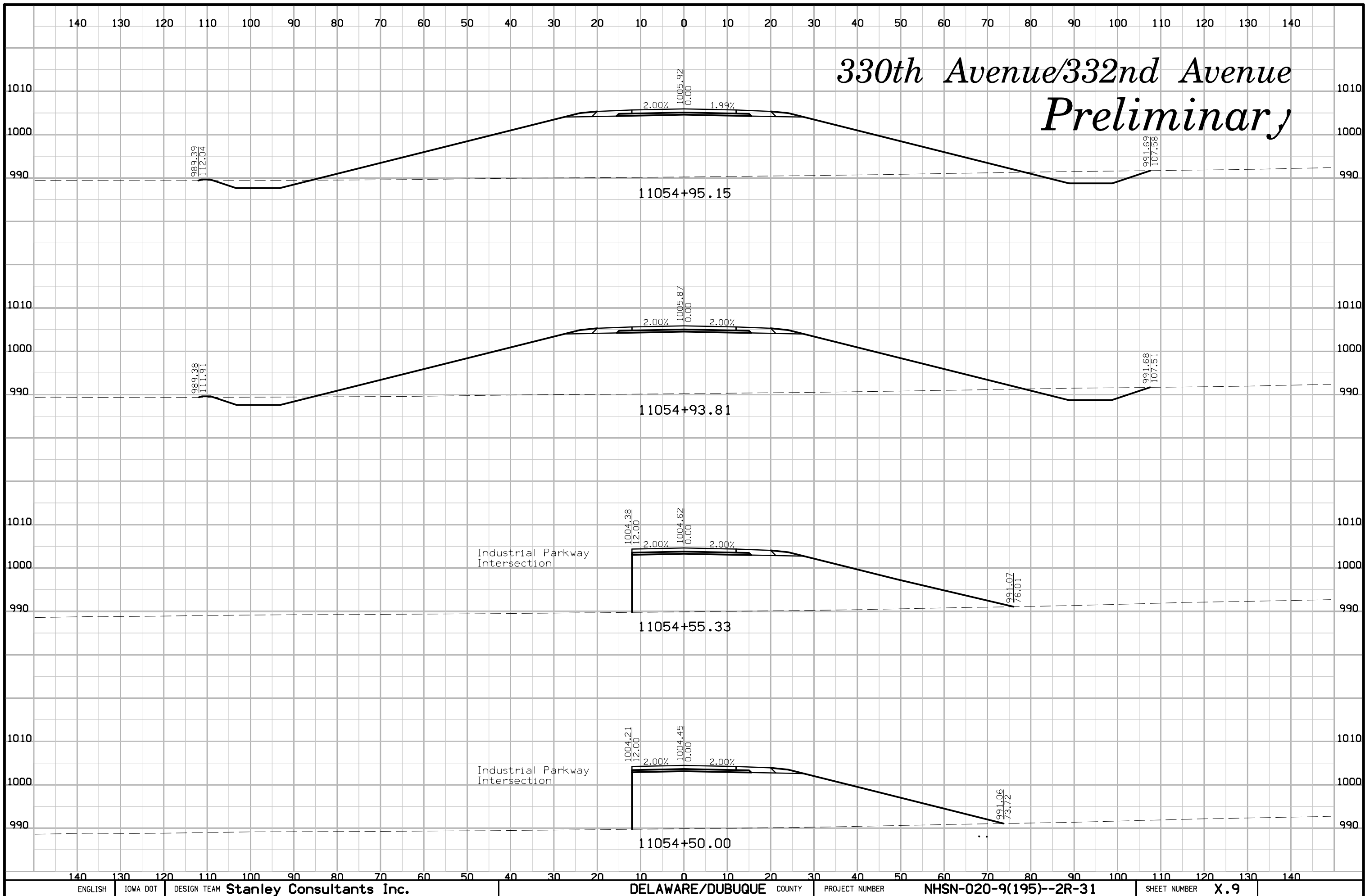


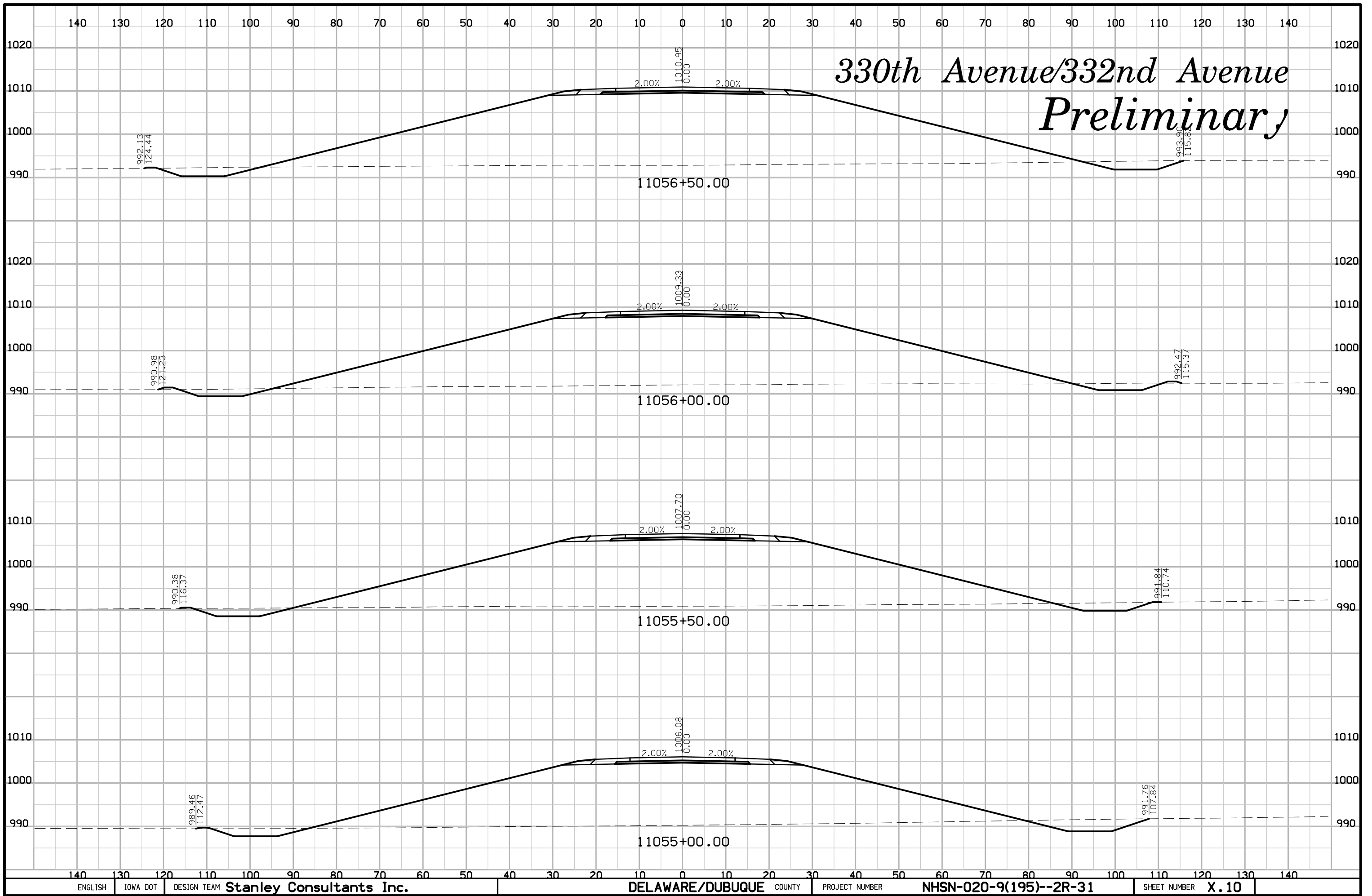
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

330th Avenue/332nd Avenue Preliminary



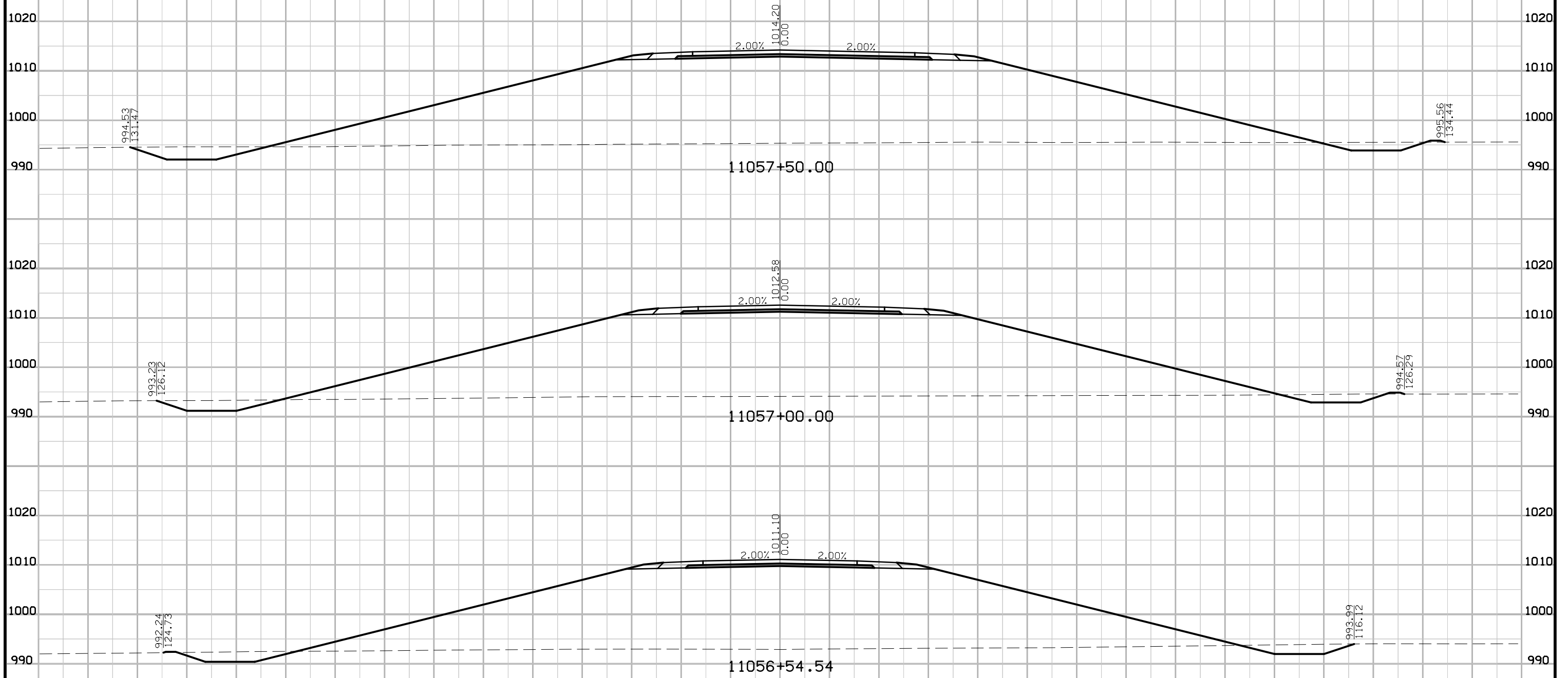
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140





140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

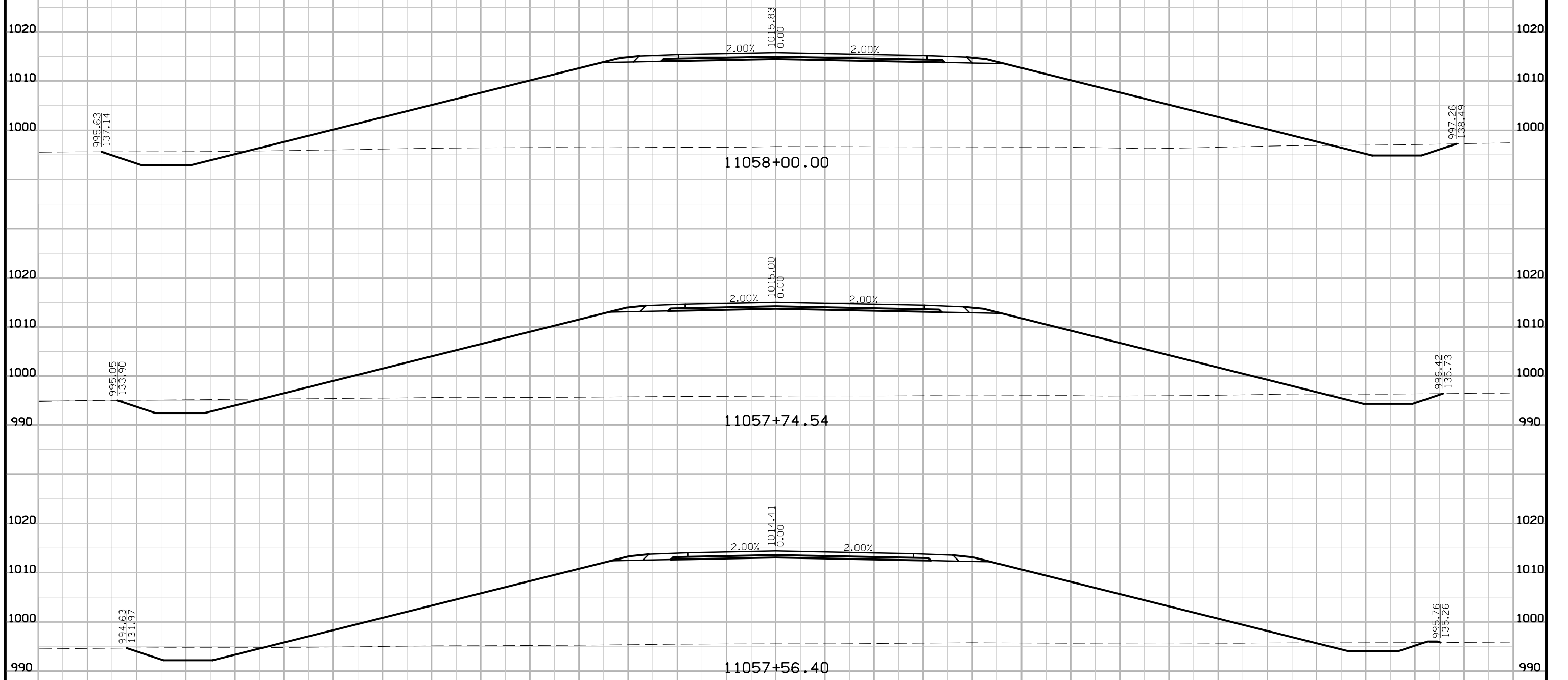
330th Avenue/332nd Avenue Preliminary



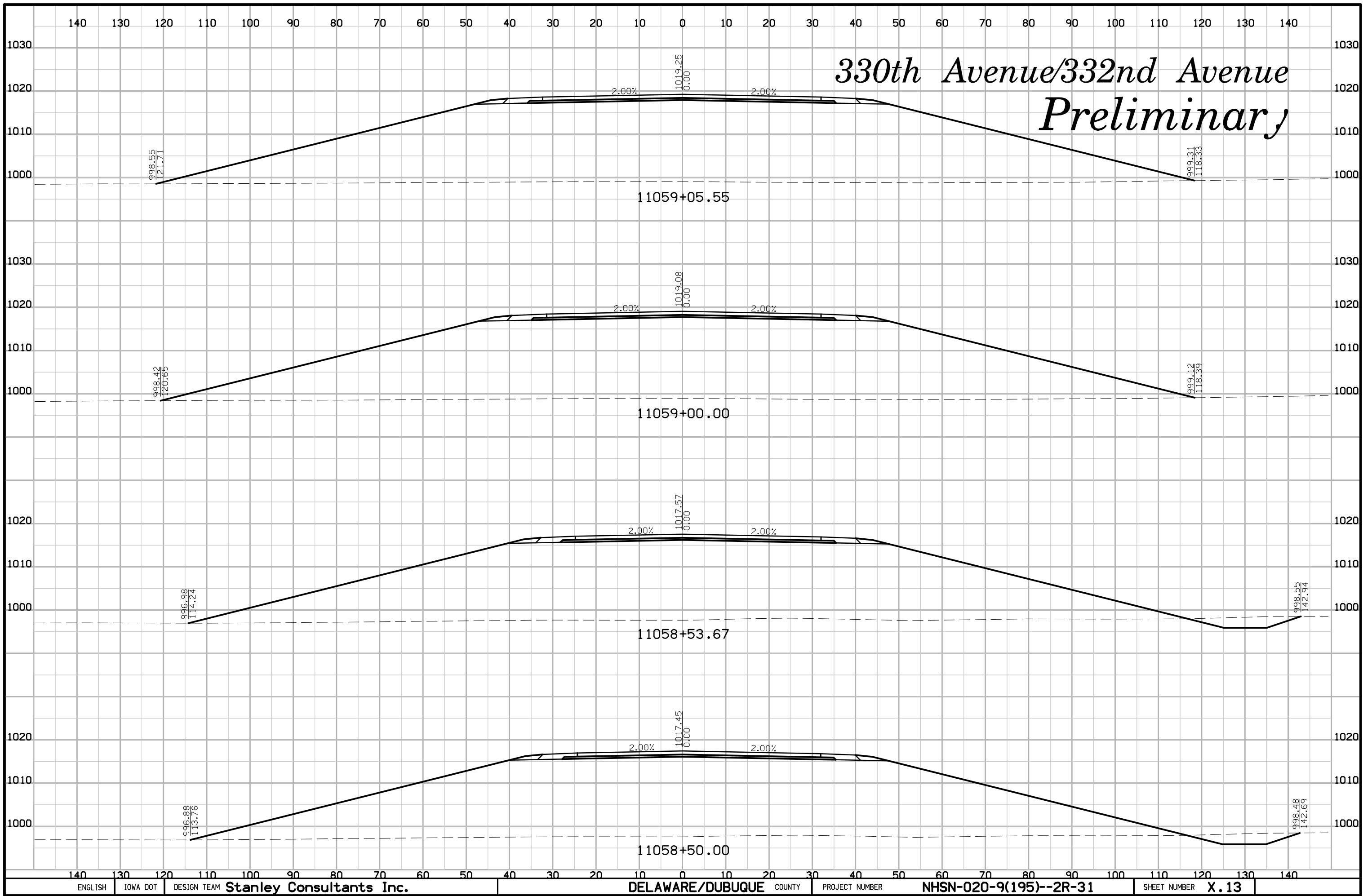
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

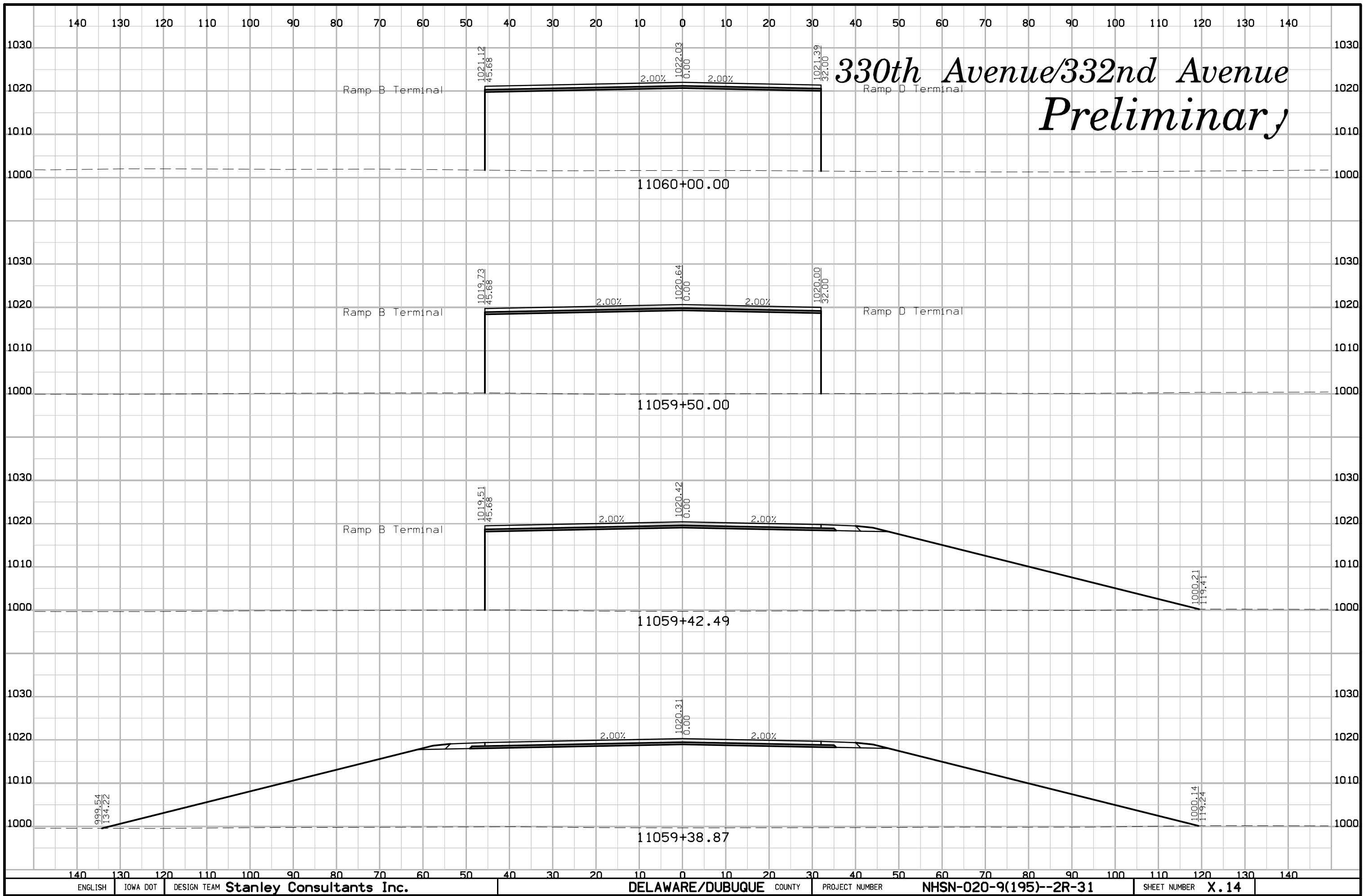
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

330th Avenue/332nd Avenue Preliminary



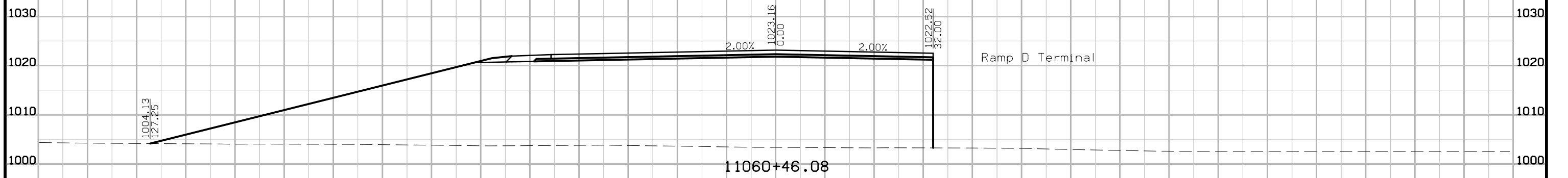
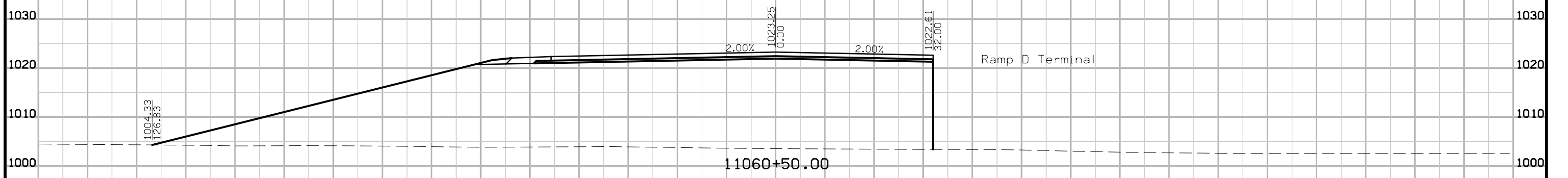
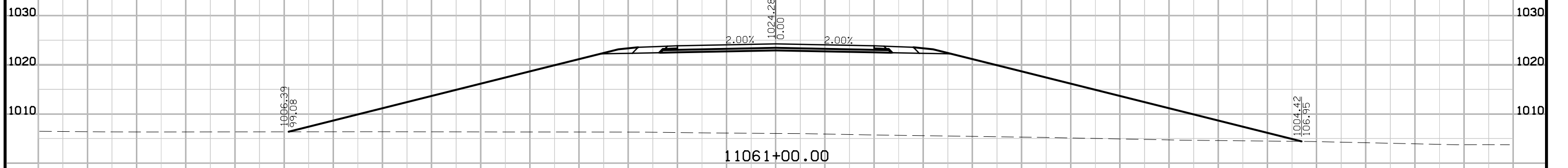
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140





140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

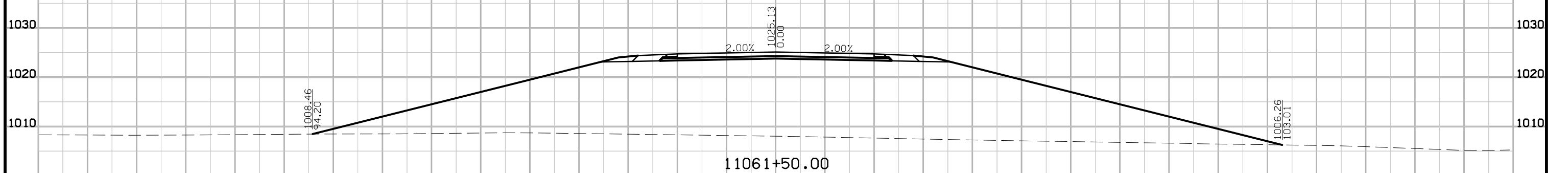
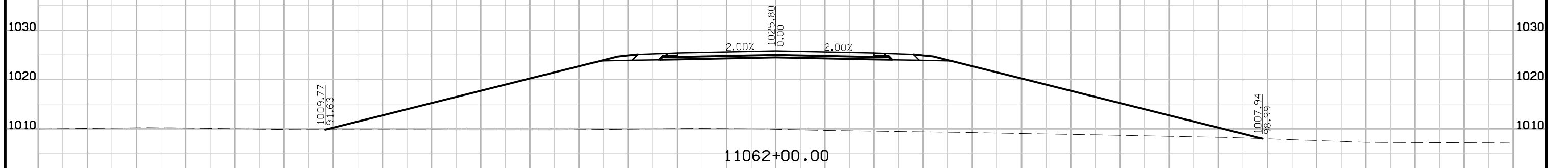
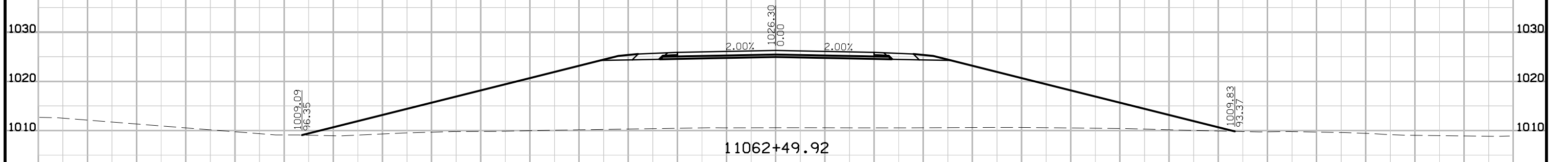
330th Avenue/332nd Avenue Preliminary



140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

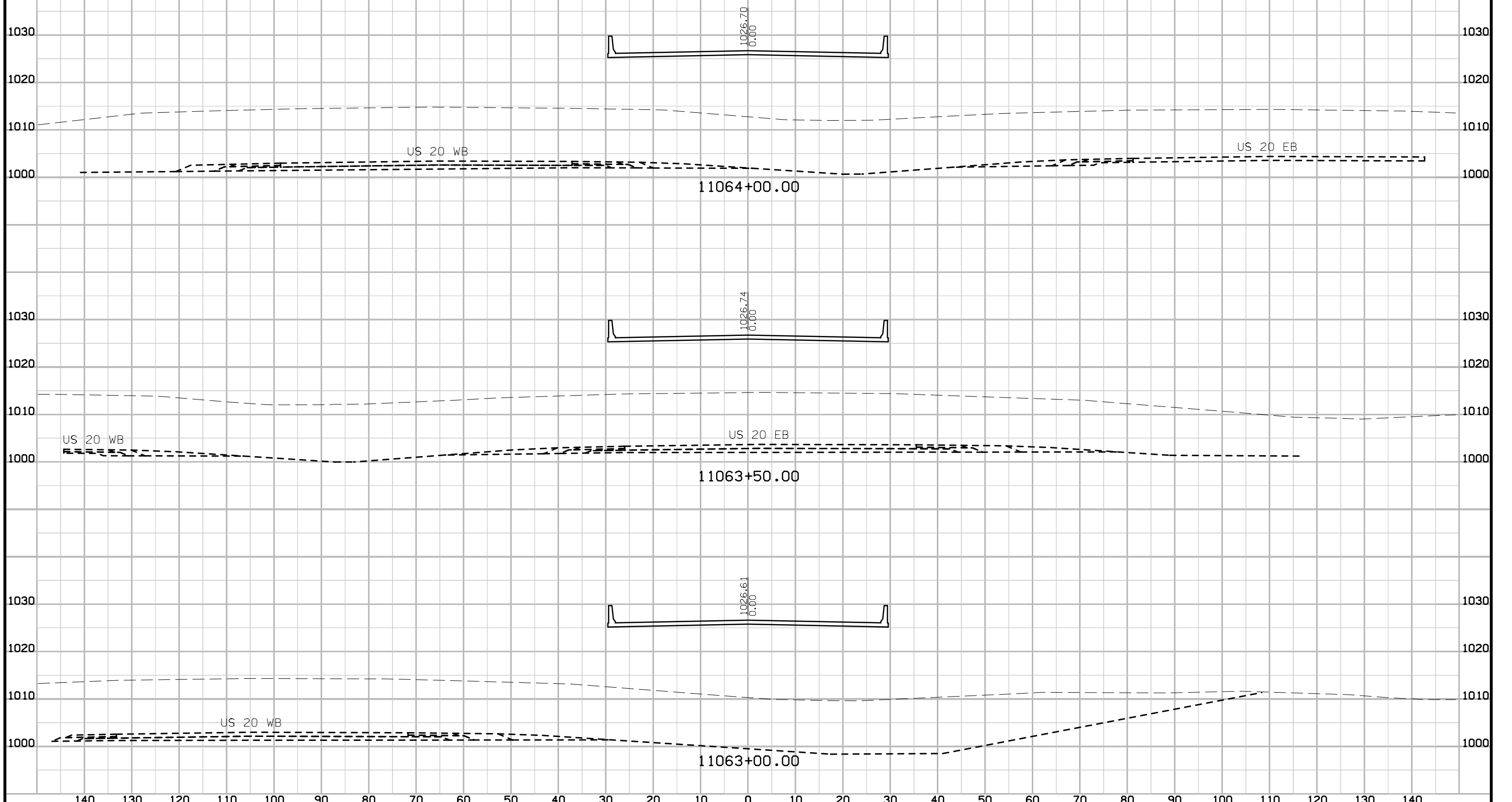
330th Avenue/332nd Avenue Preliminary

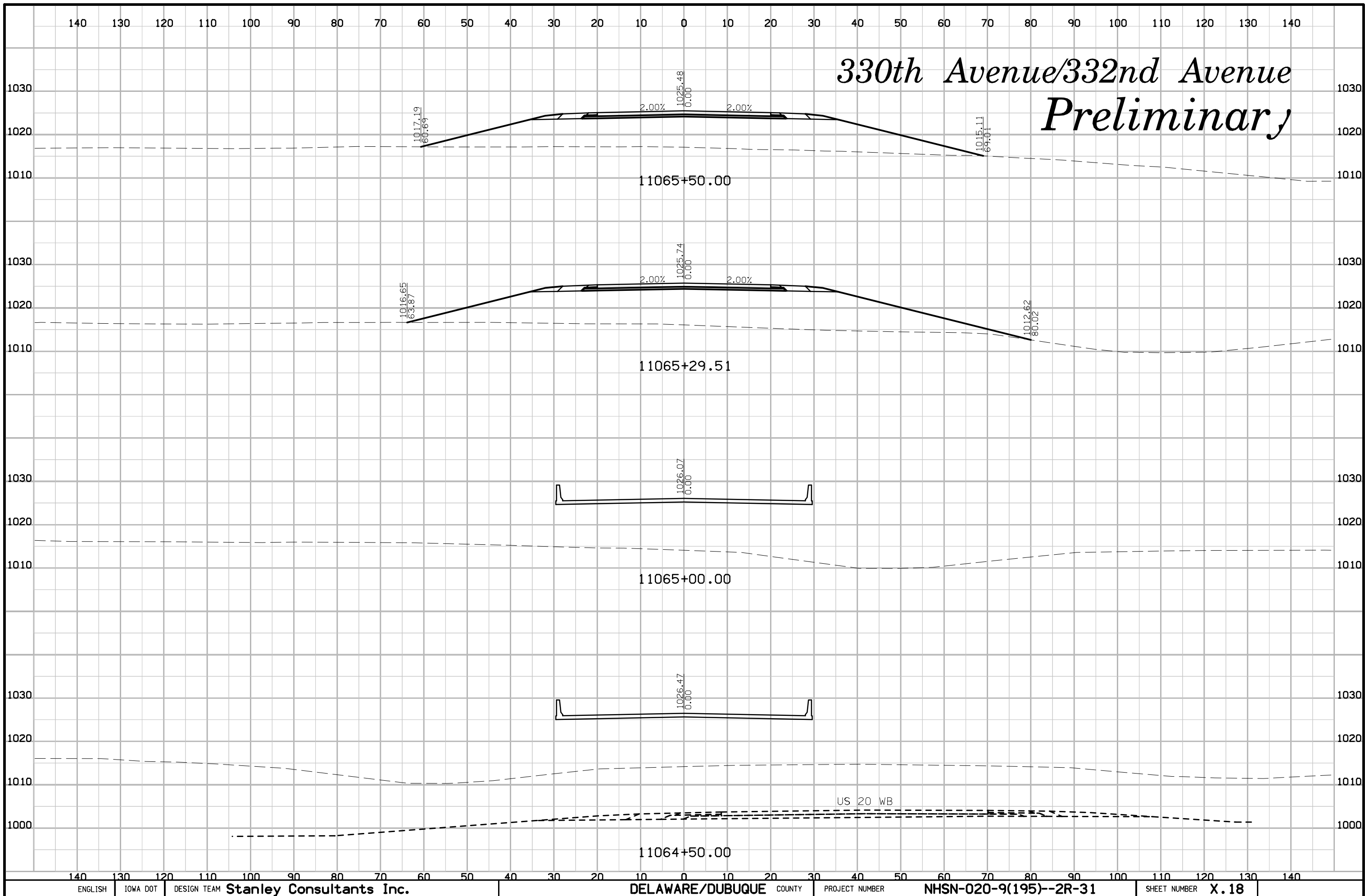


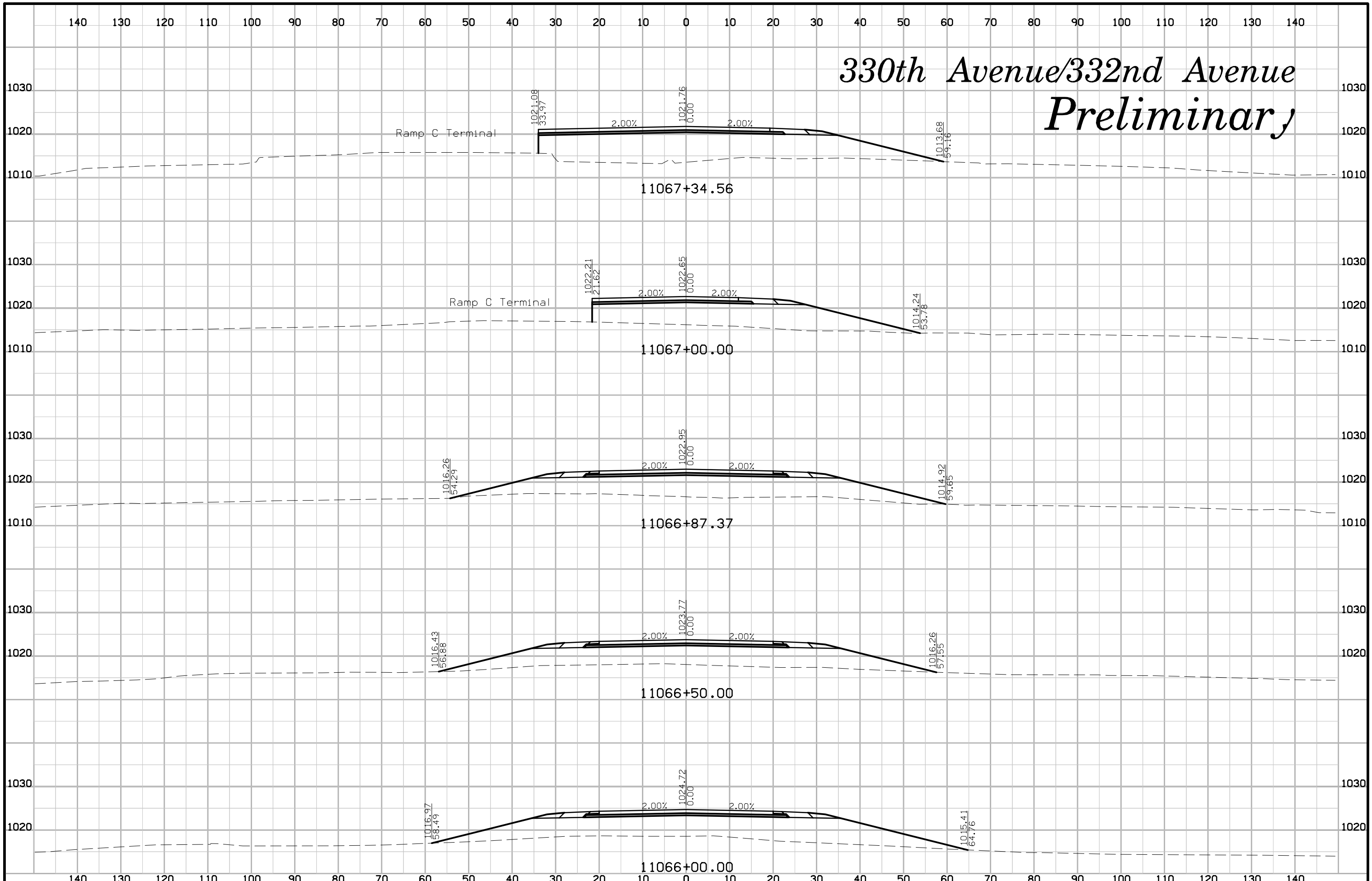
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

330th Avenue/332nd Avenue Preliminary



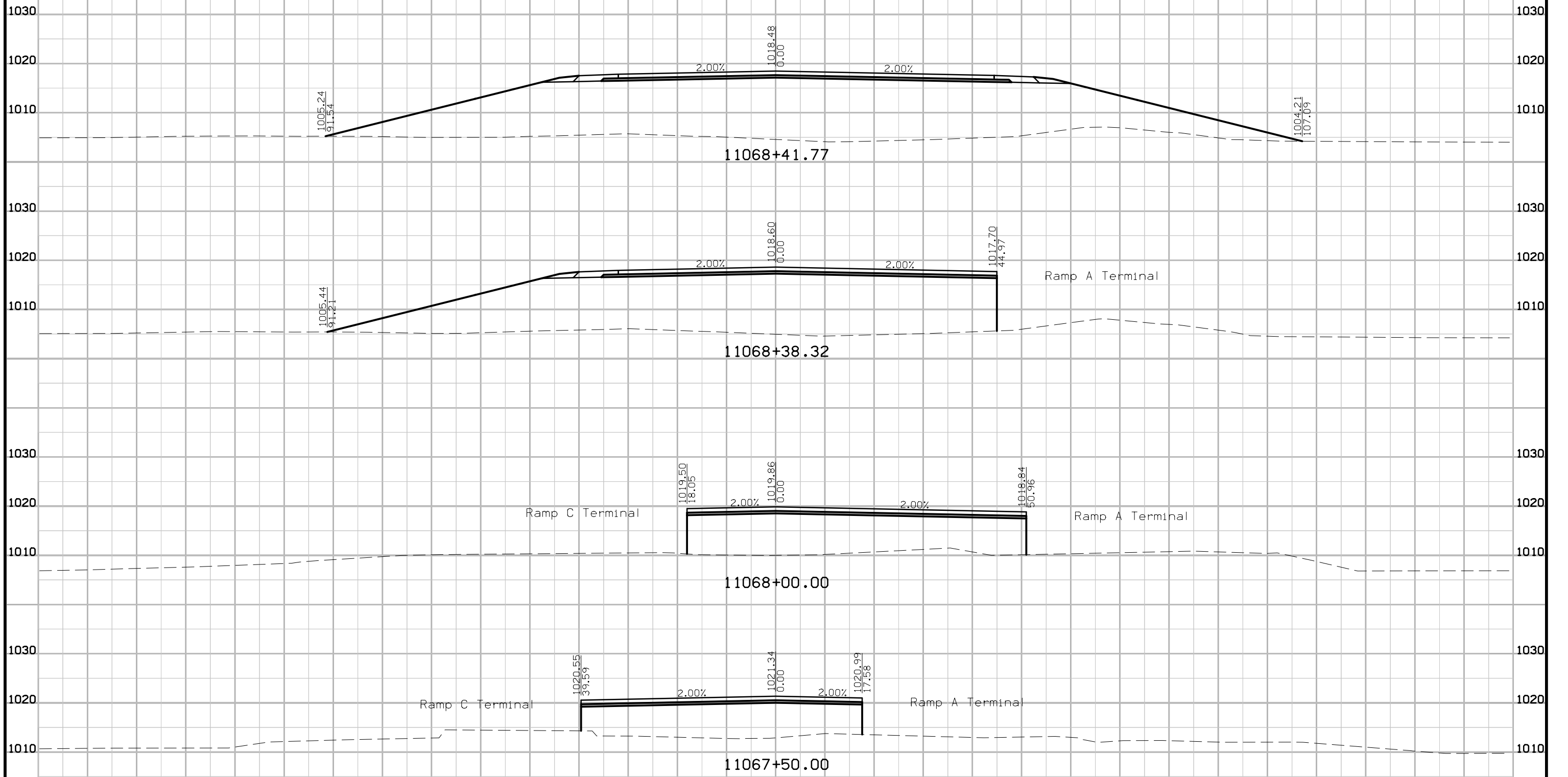




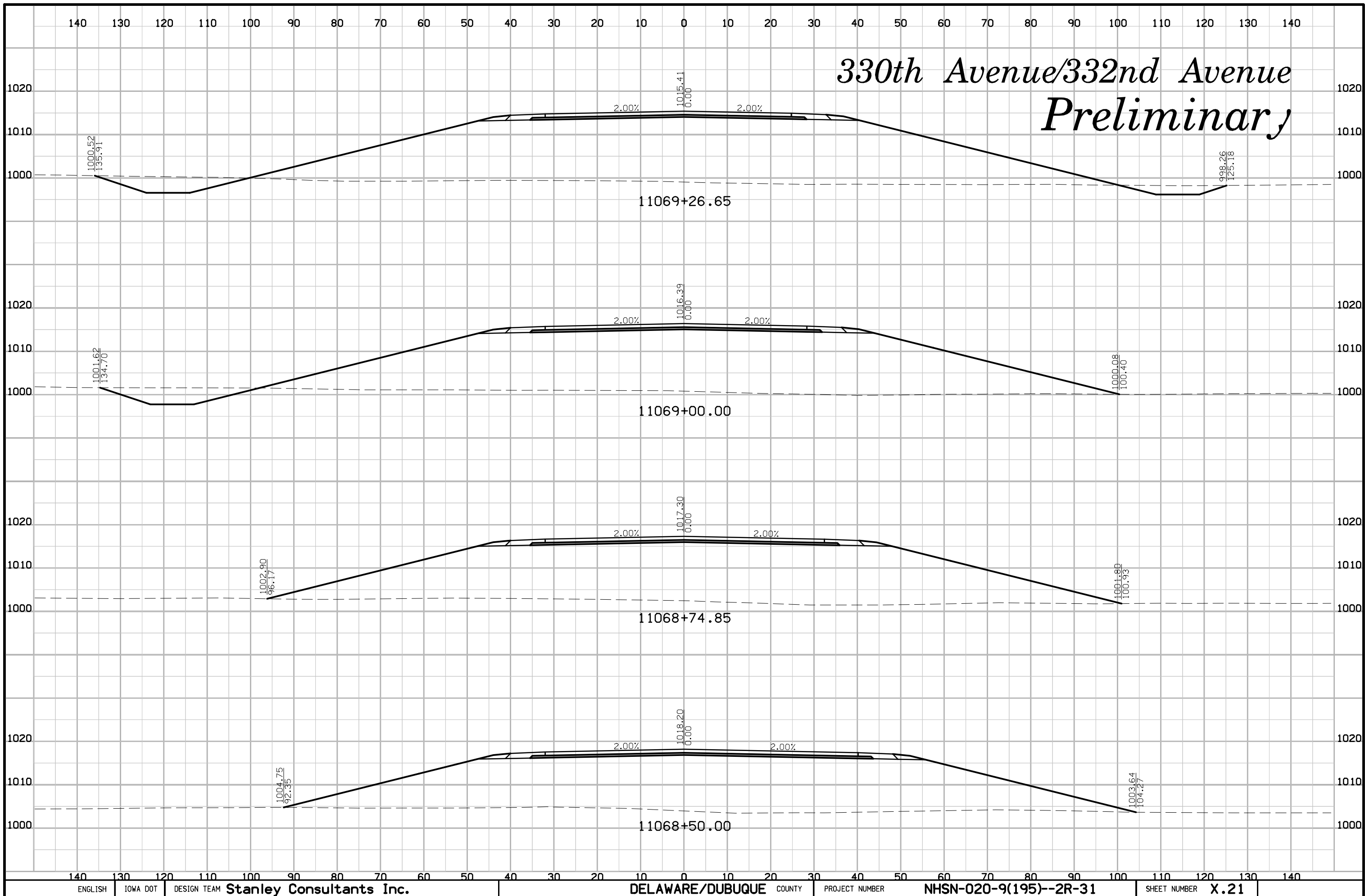
330th Avenue/332nd Avenue Preliminary

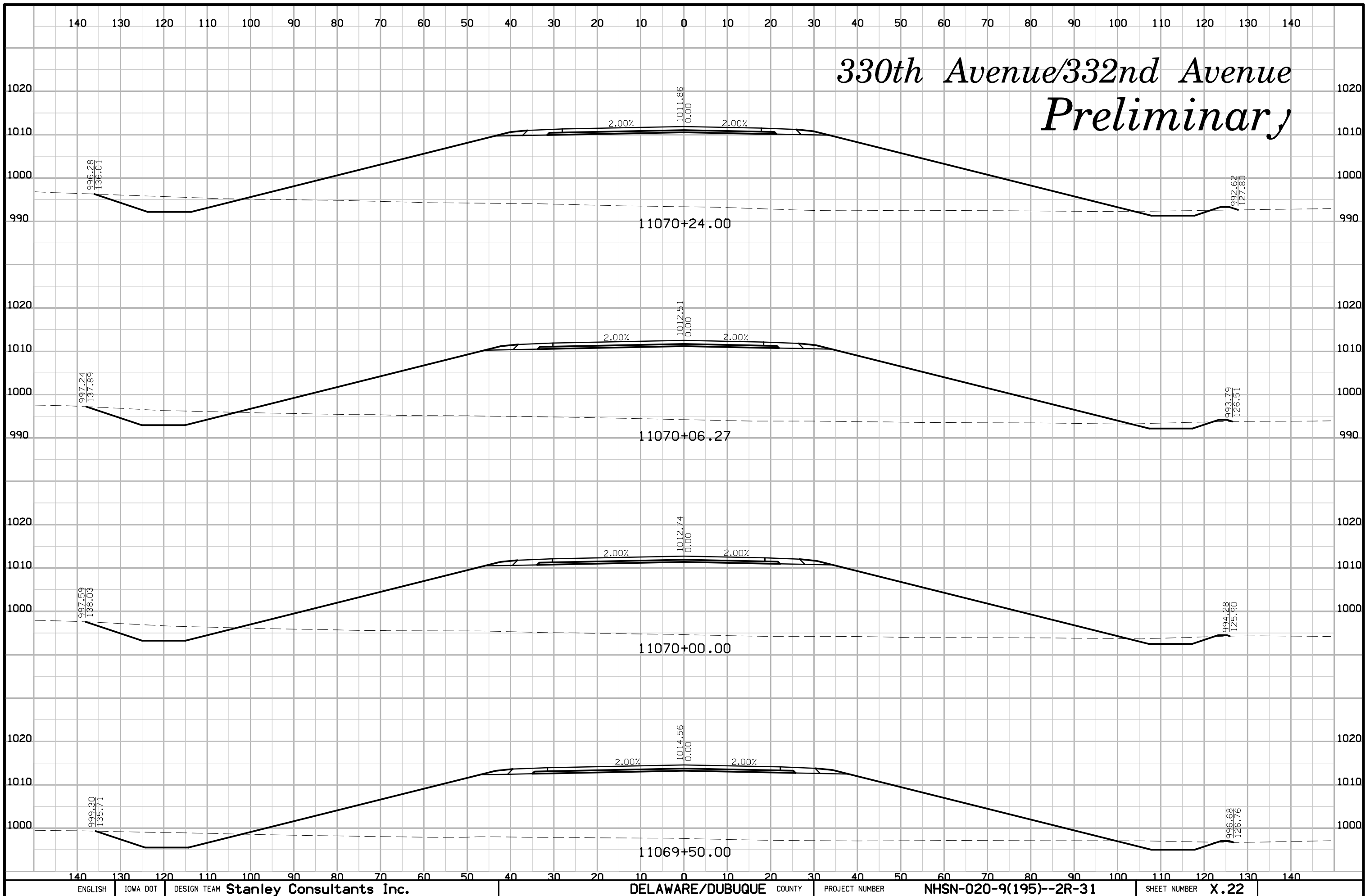
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

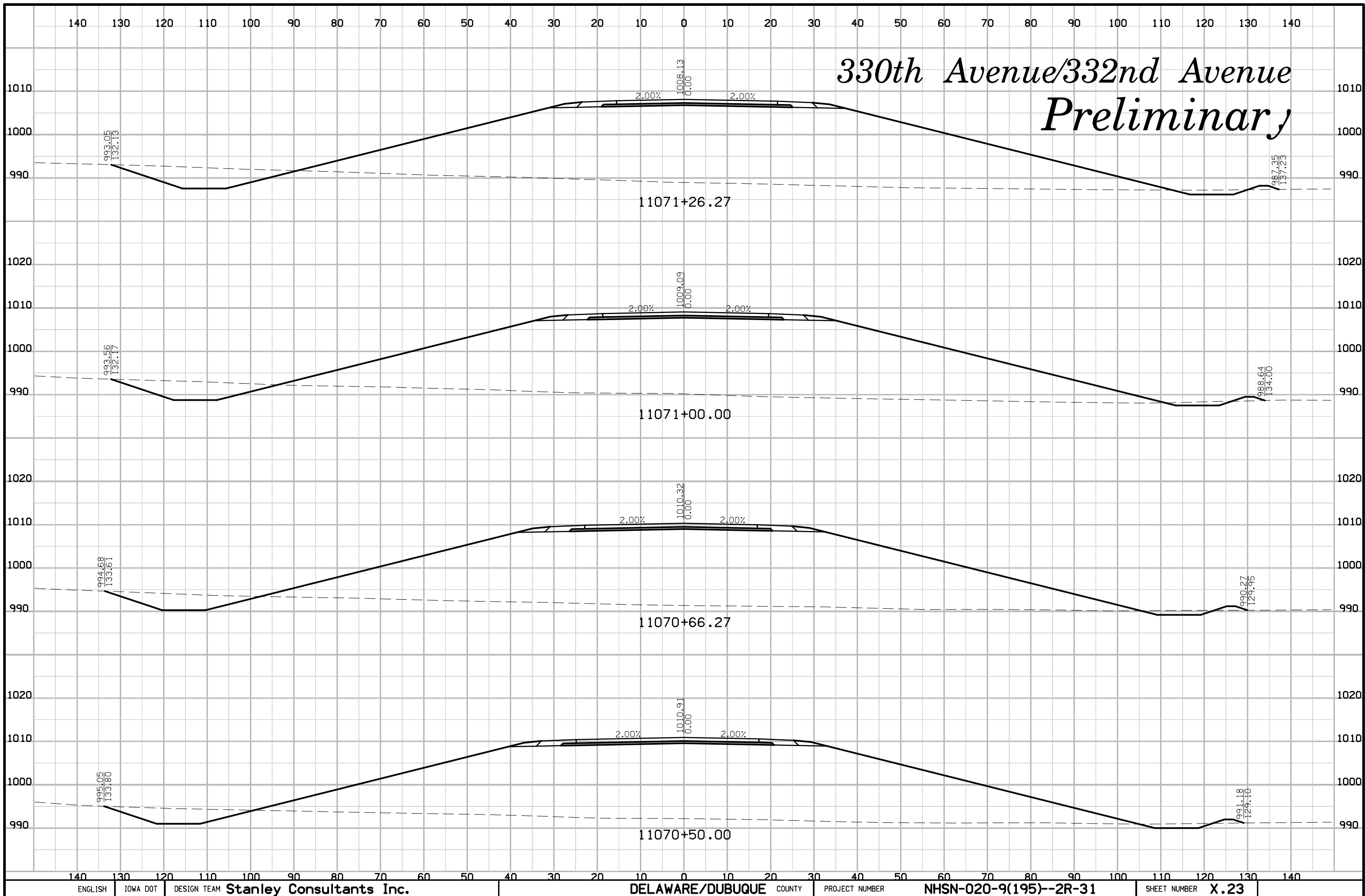
330th Avenue/332nd Avenue Preliminary

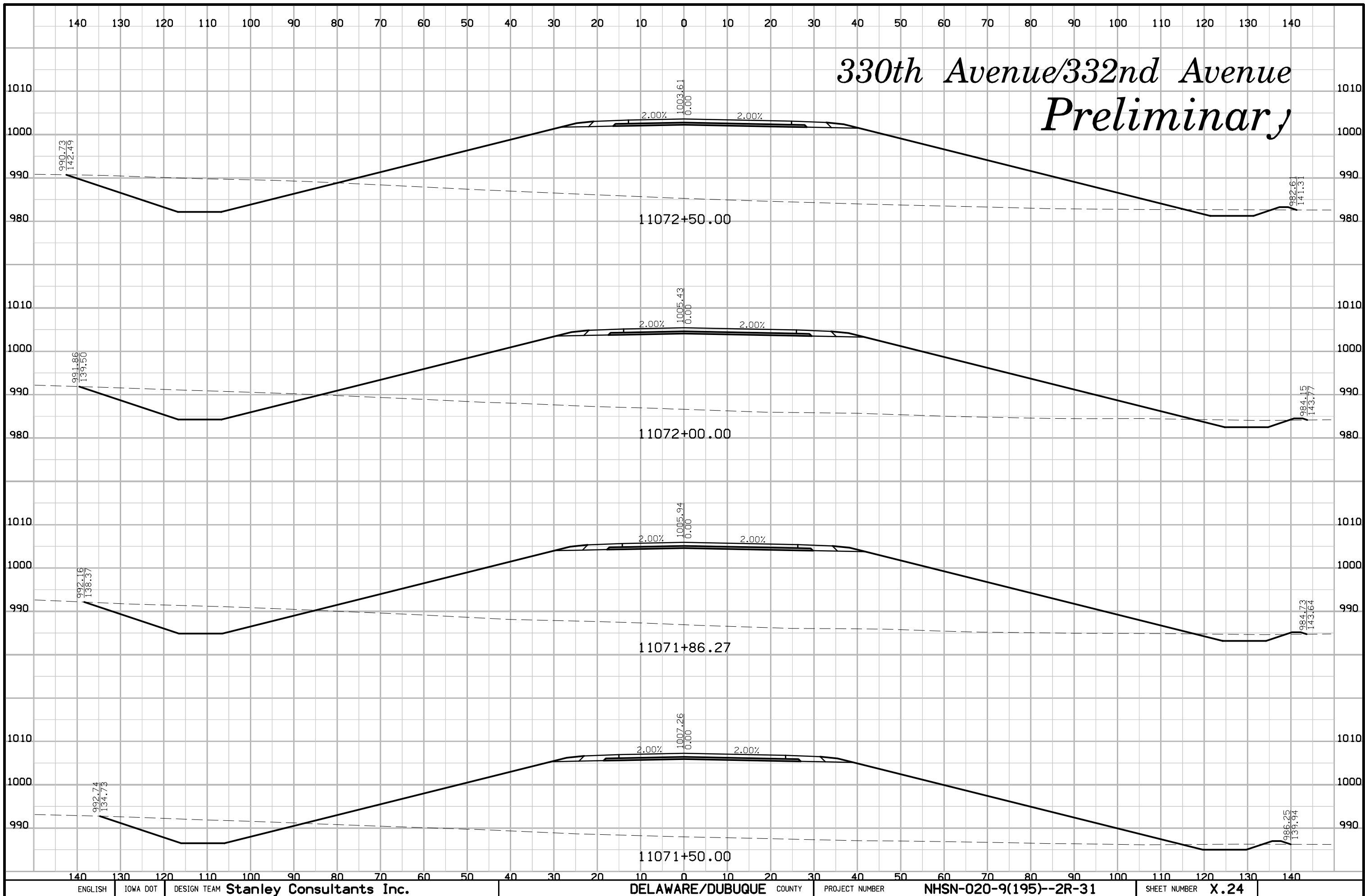


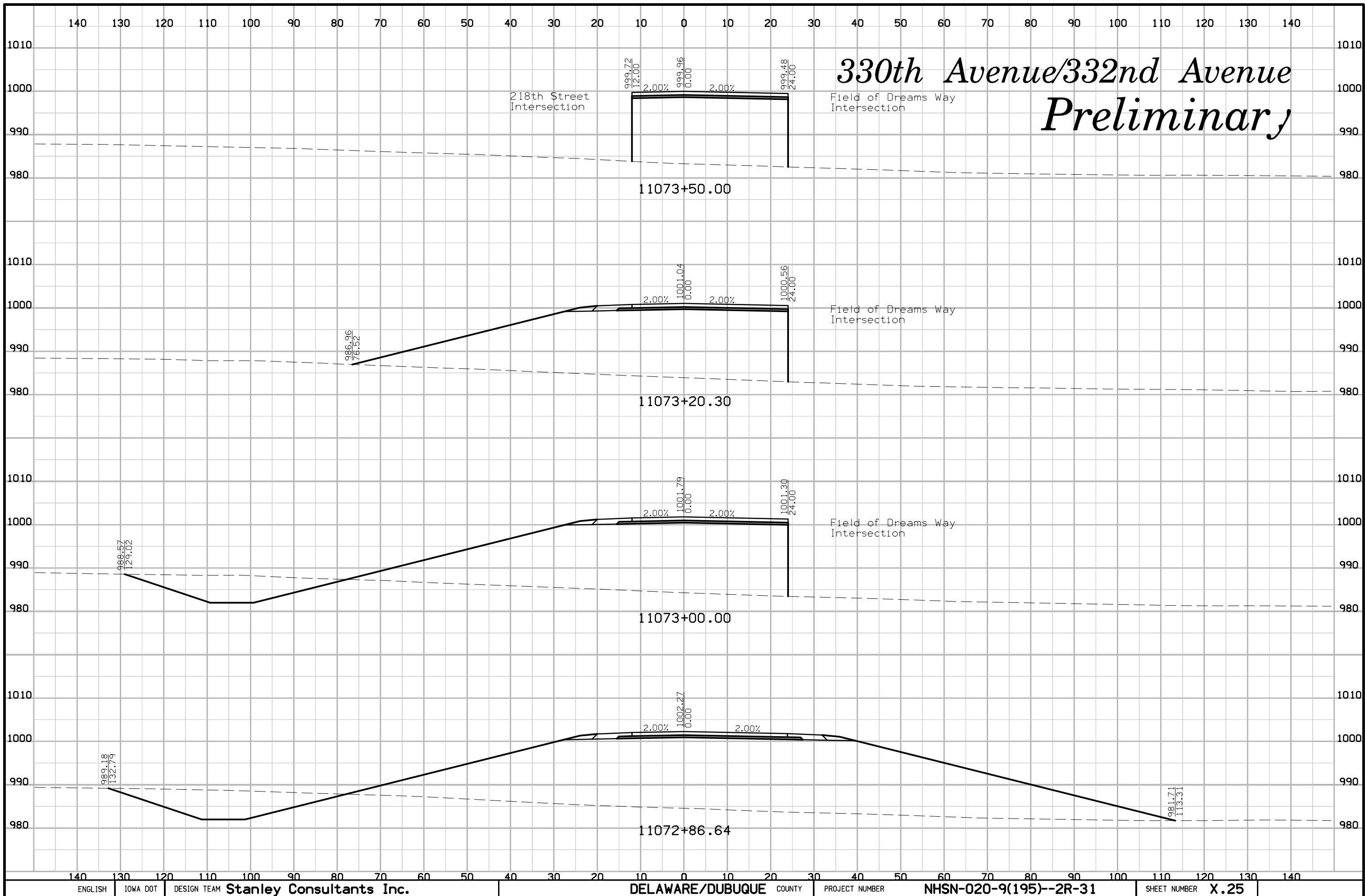
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

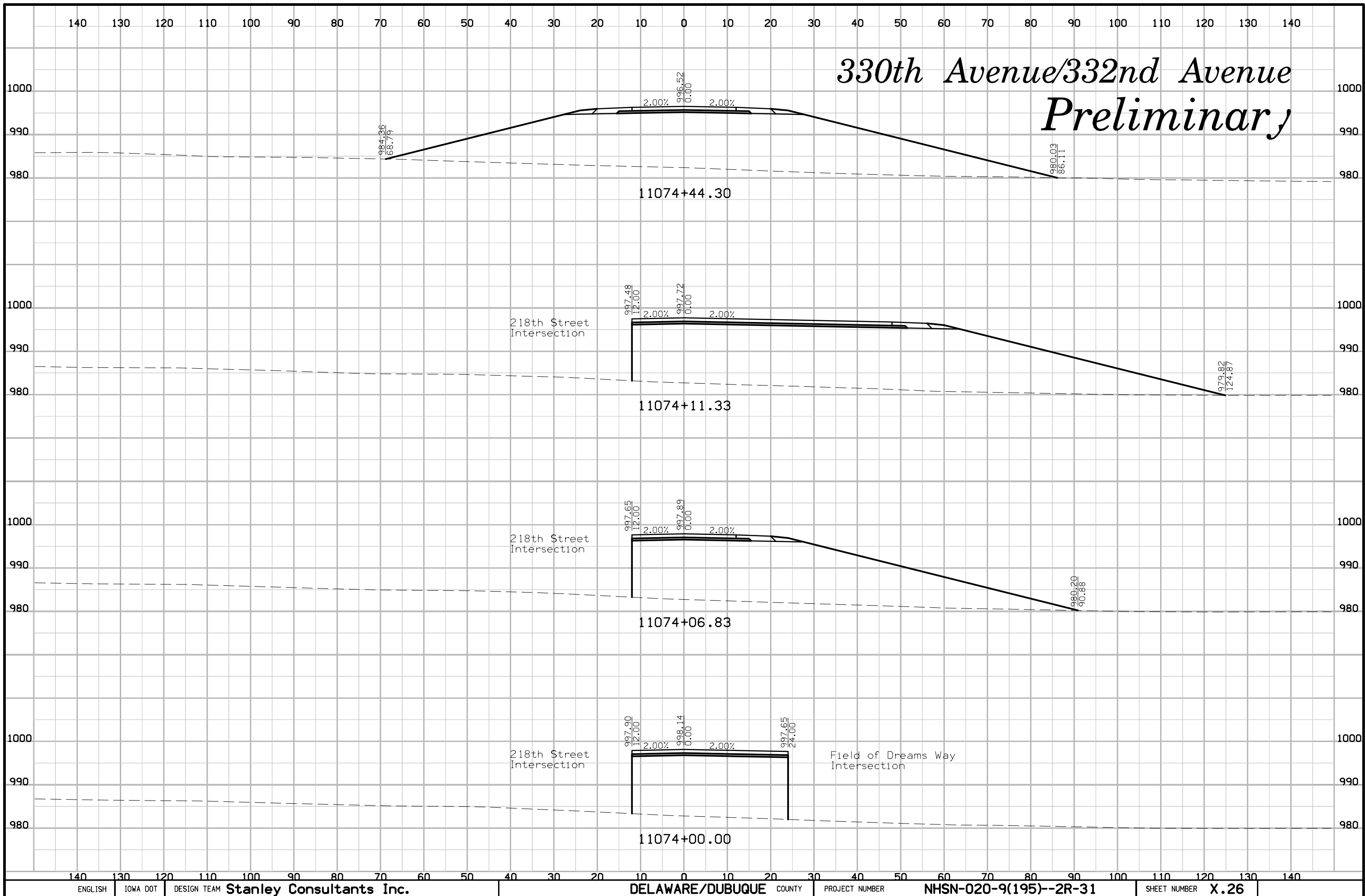


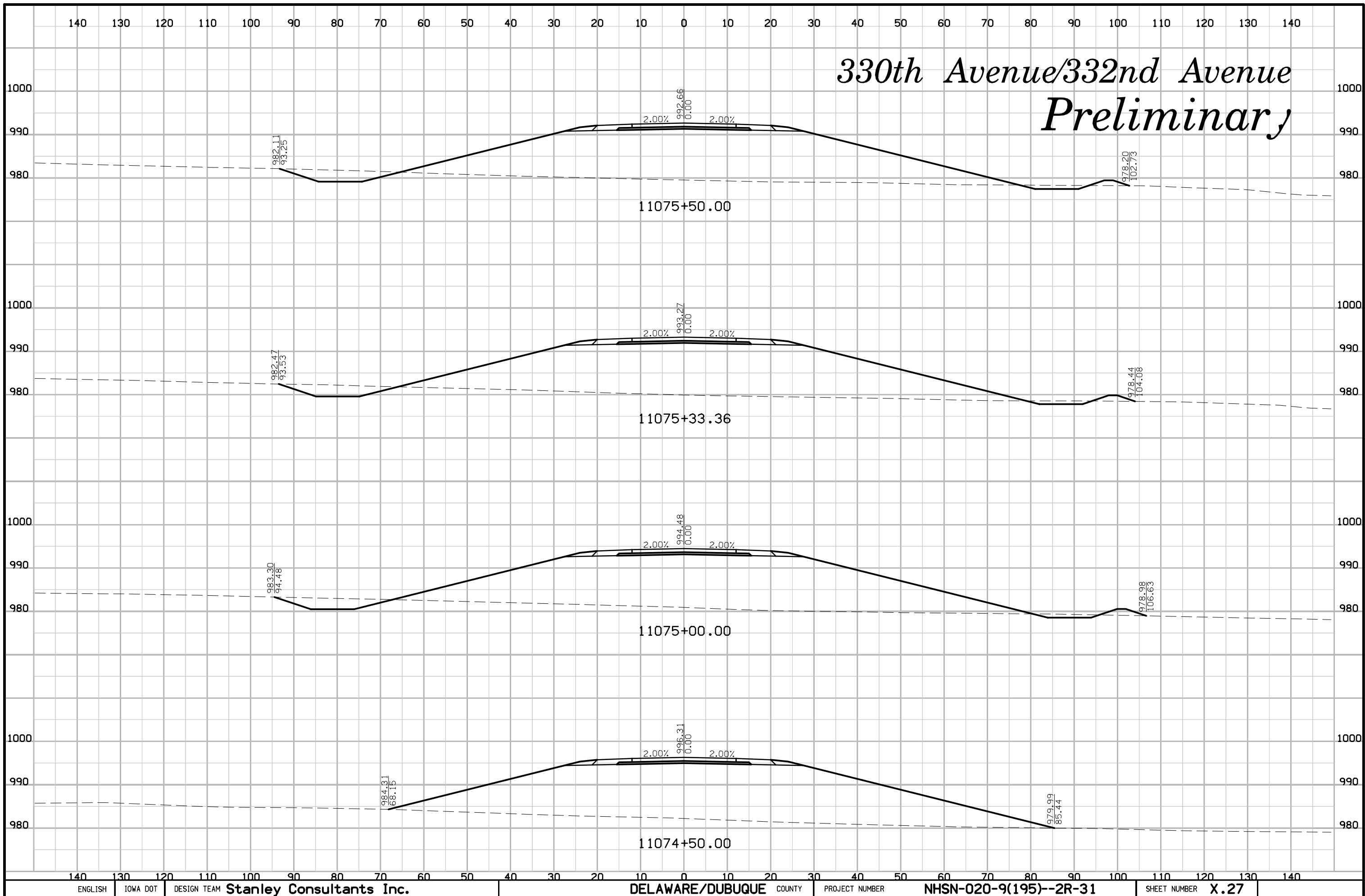






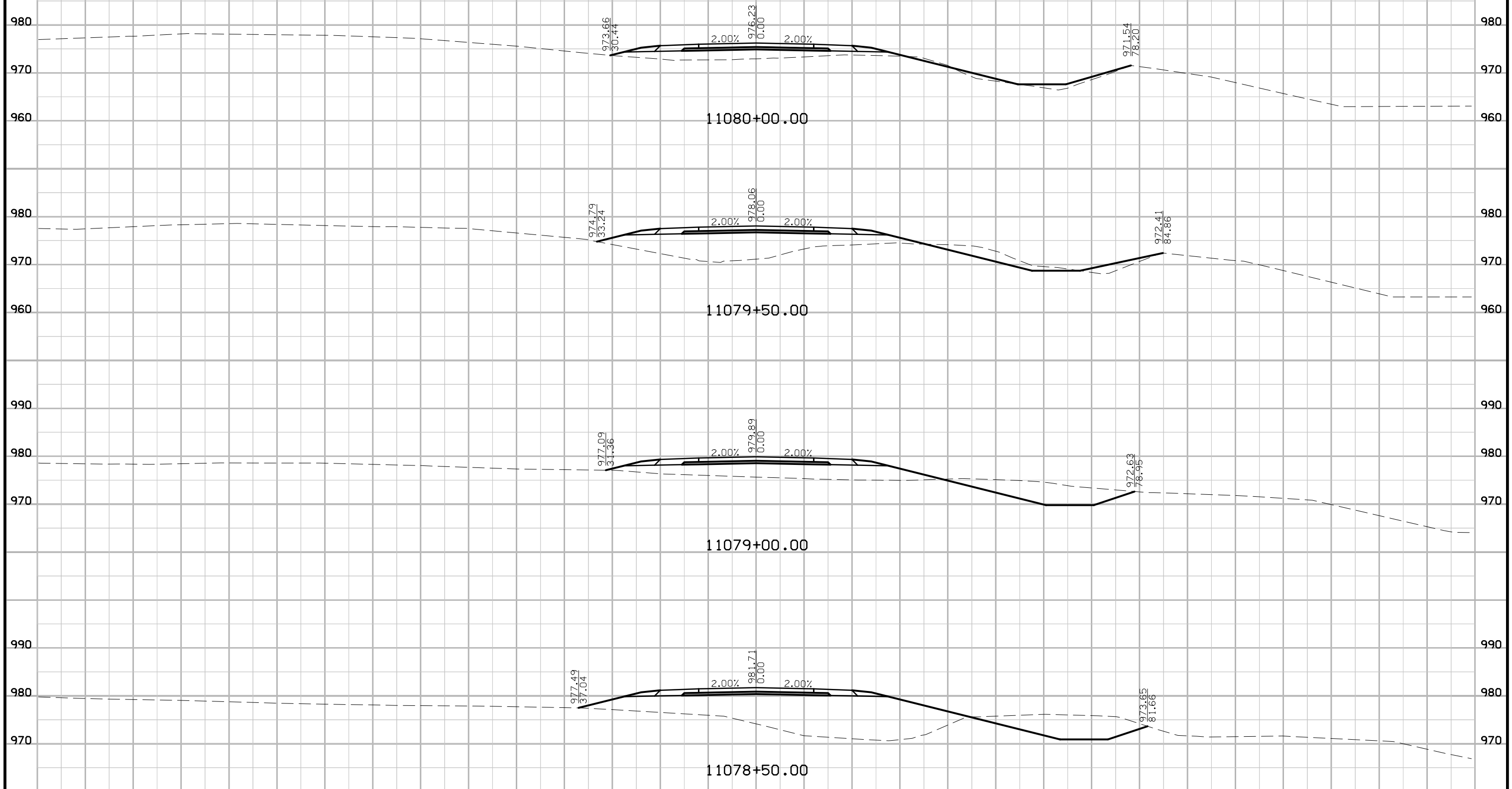


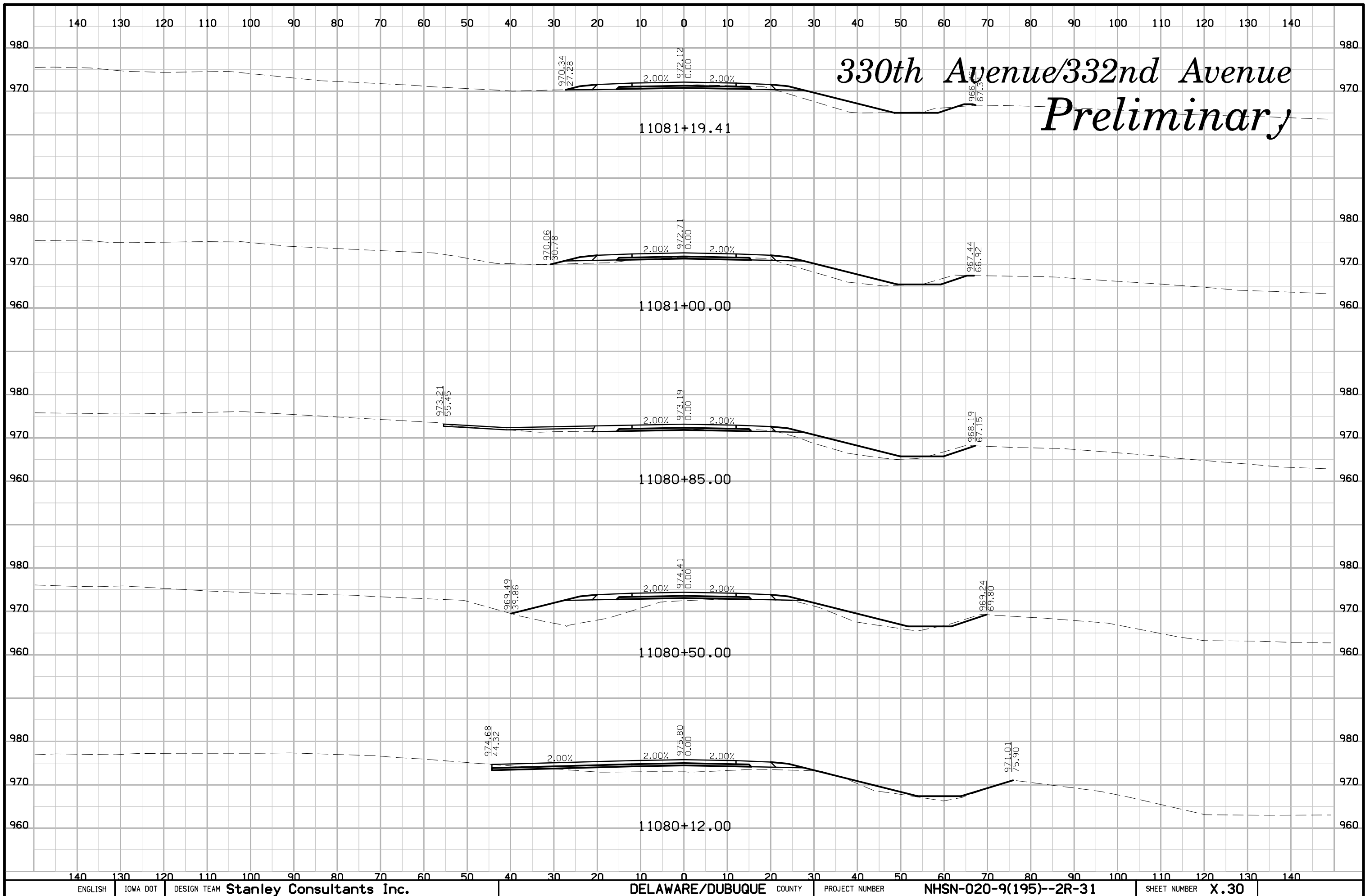




140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

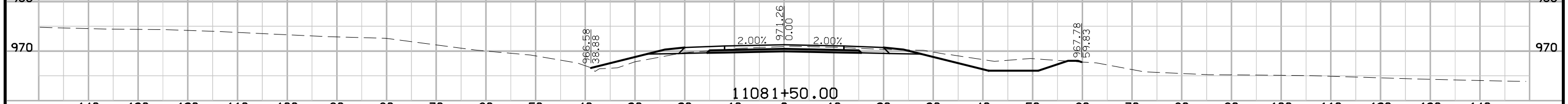
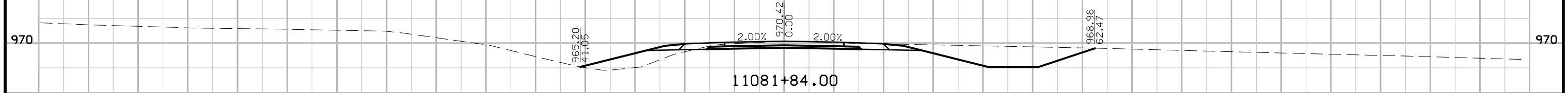
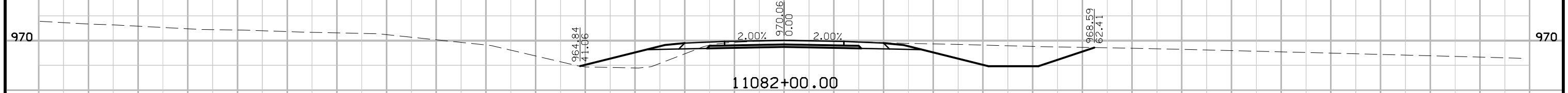
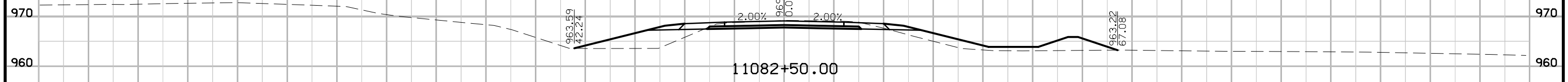
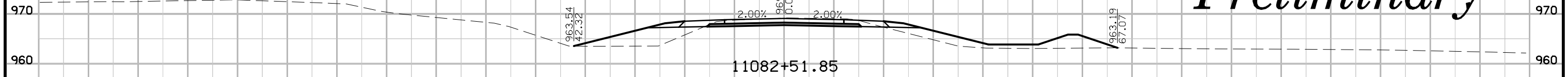
330th Avenue/332nd Avenue Preliminary





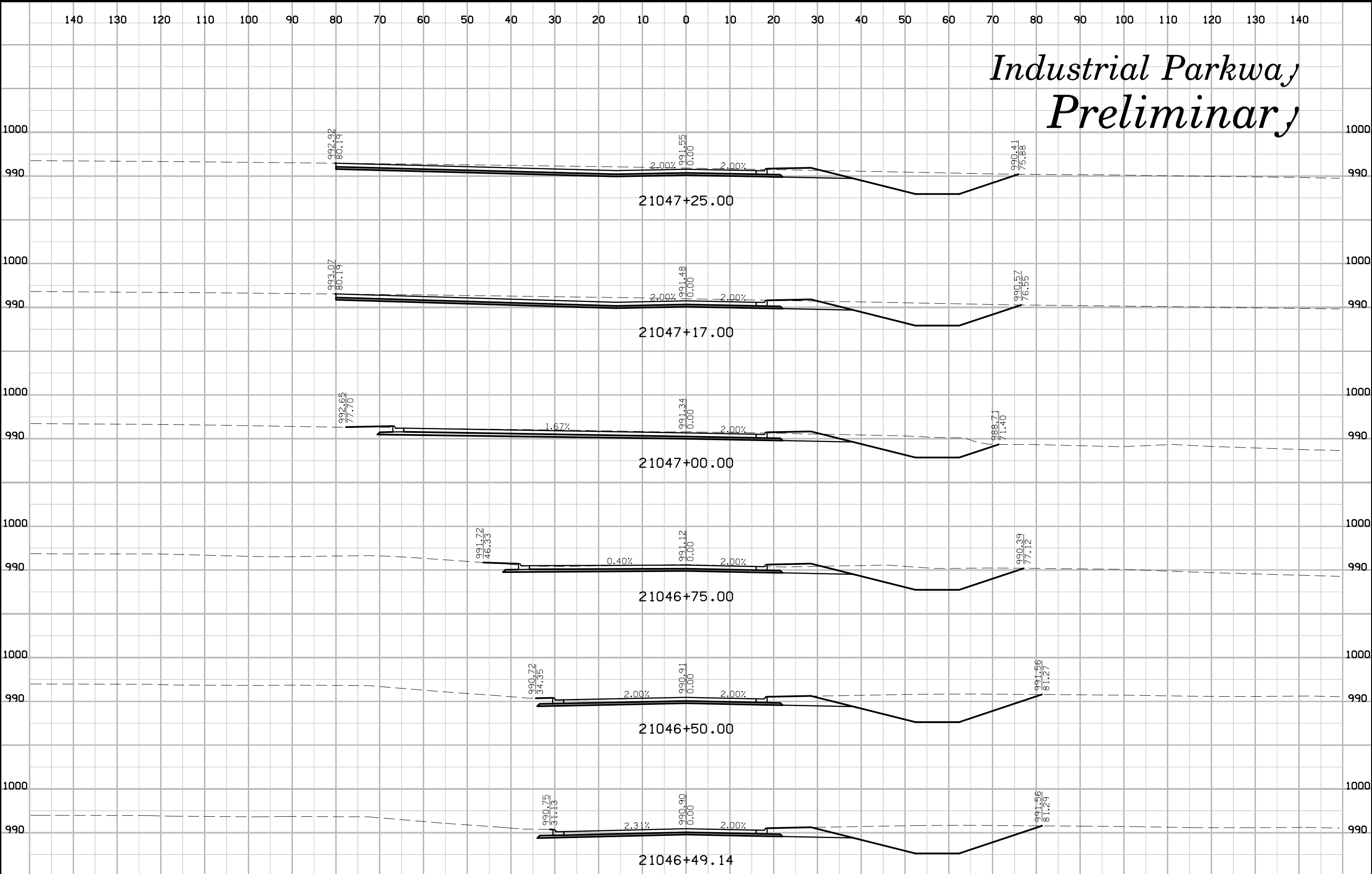
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

330th Avenue/332nd Avenue Preliminary

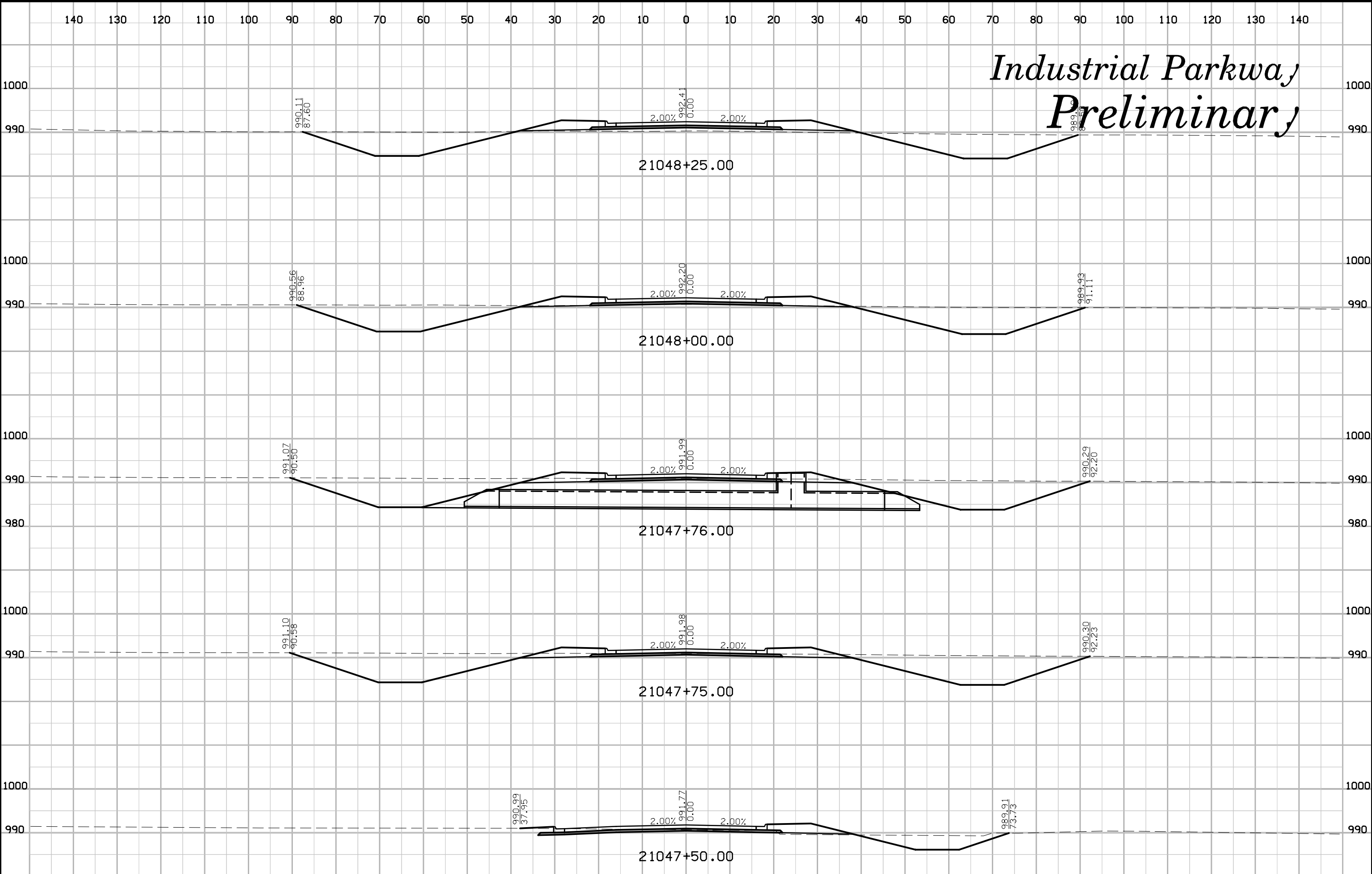


140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

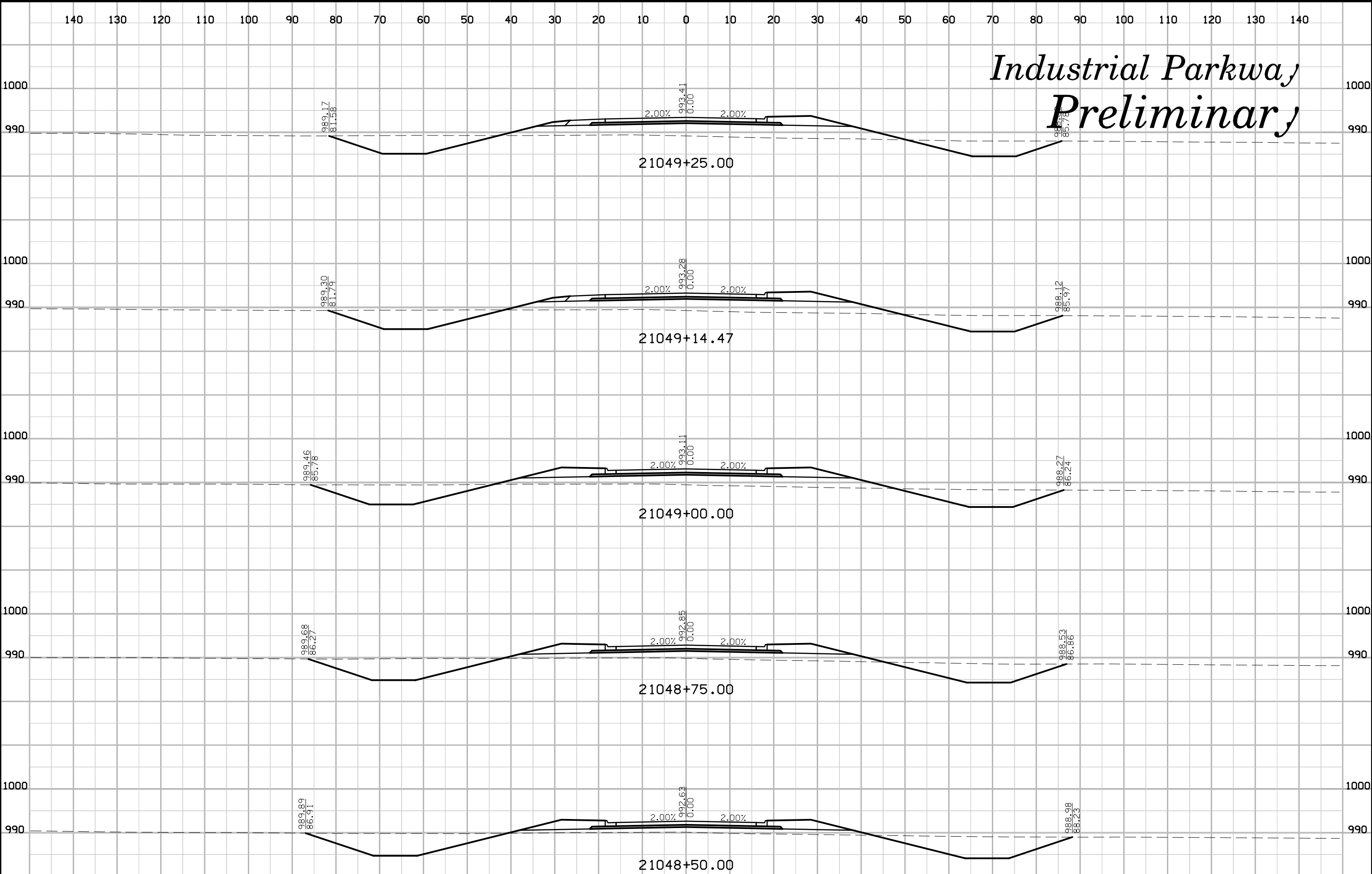
Industrial Parkway Preliminary



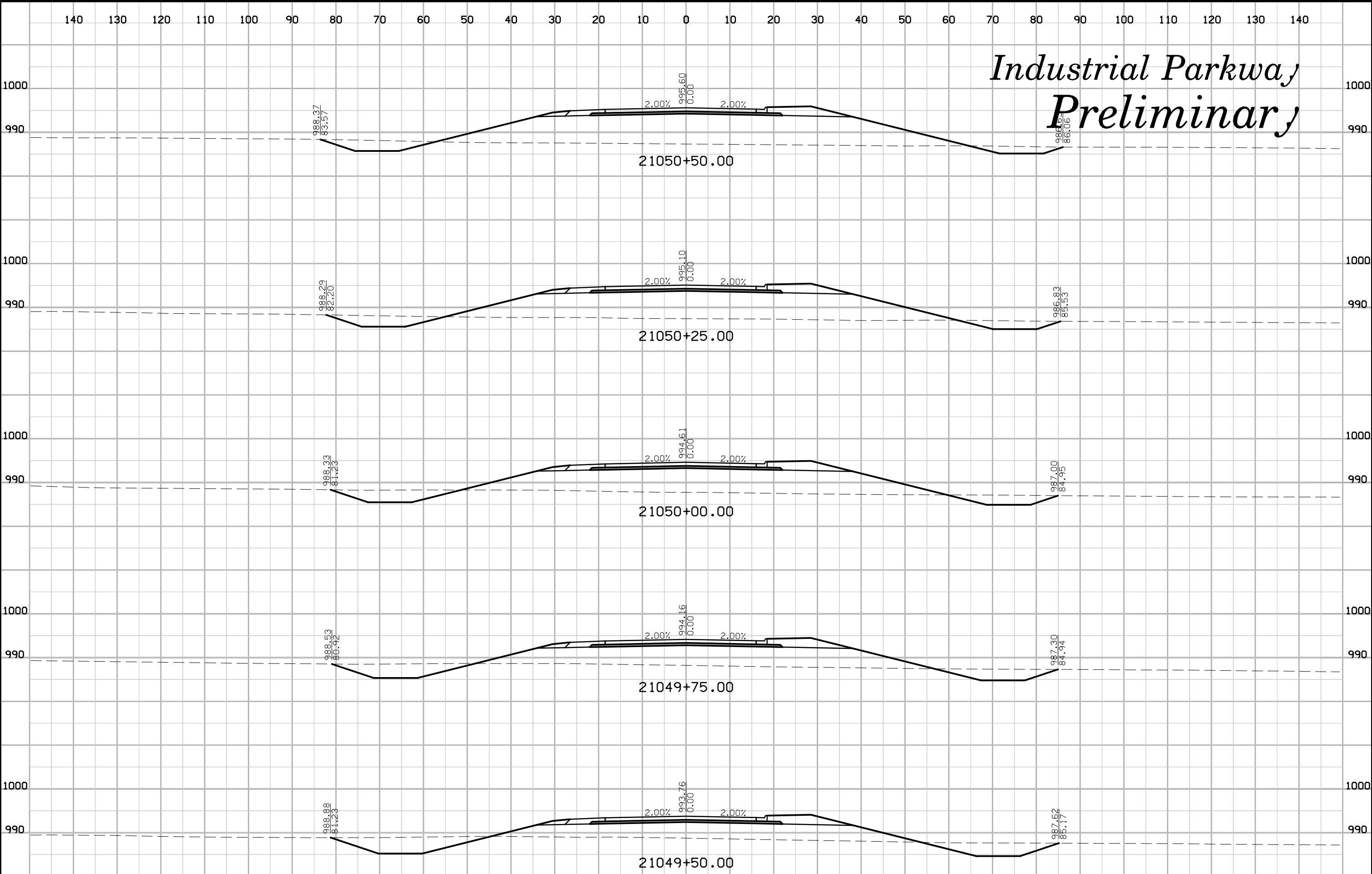
Industrial Parkway Preliminary



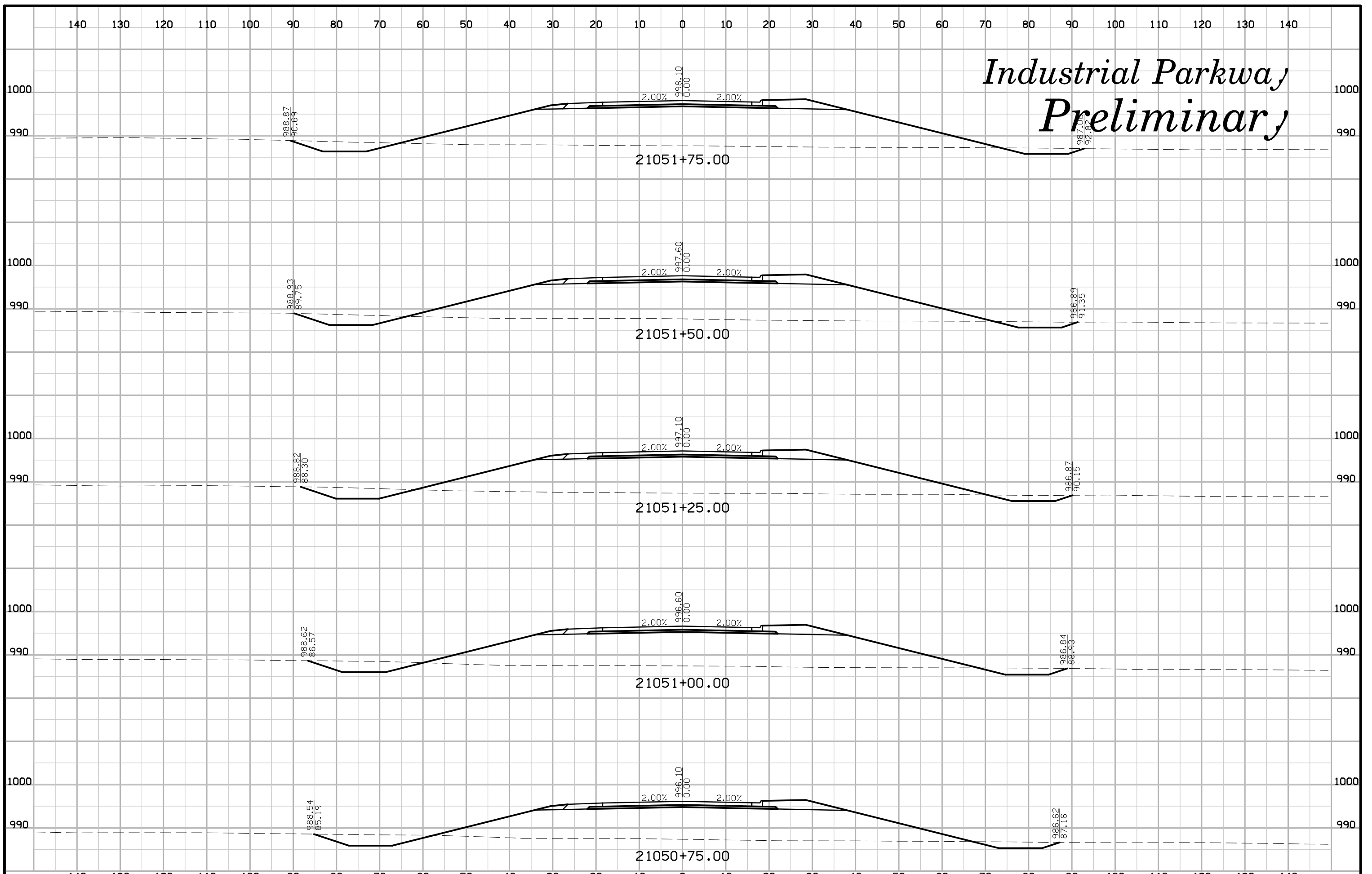
Industrial Parkway Preliminary

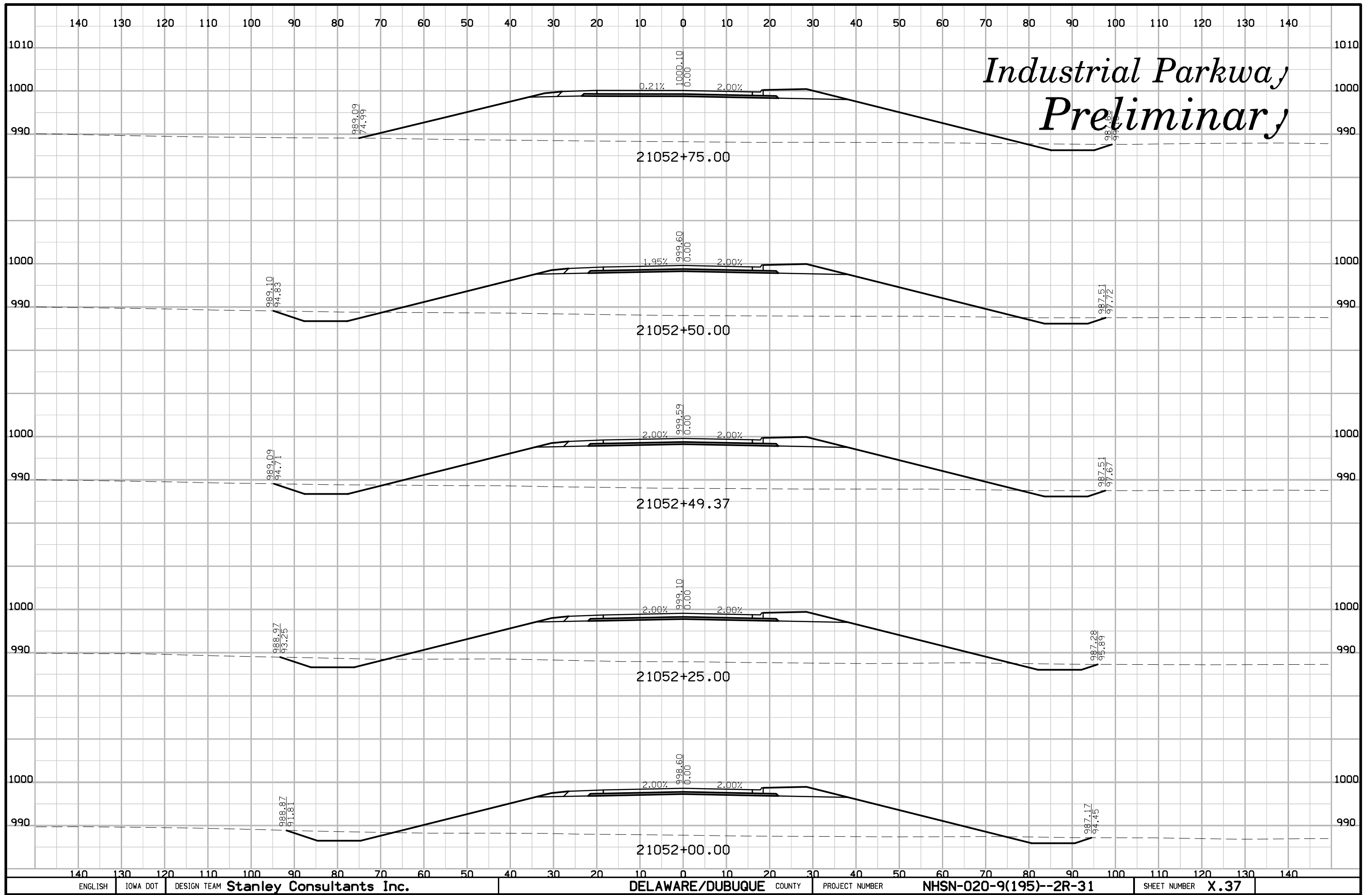


Industrial Parkway Preliminary

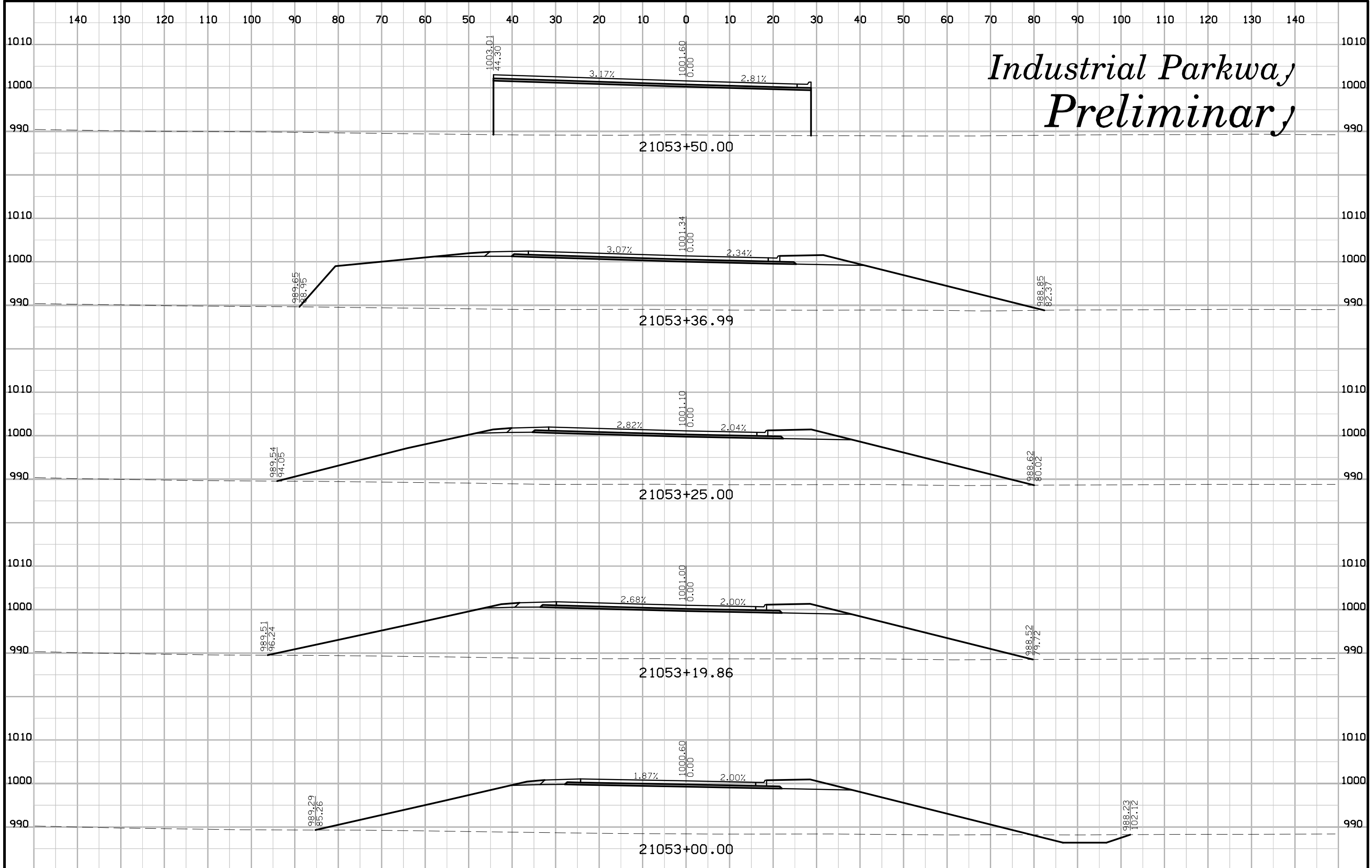


Industrial Parkway Preliminary

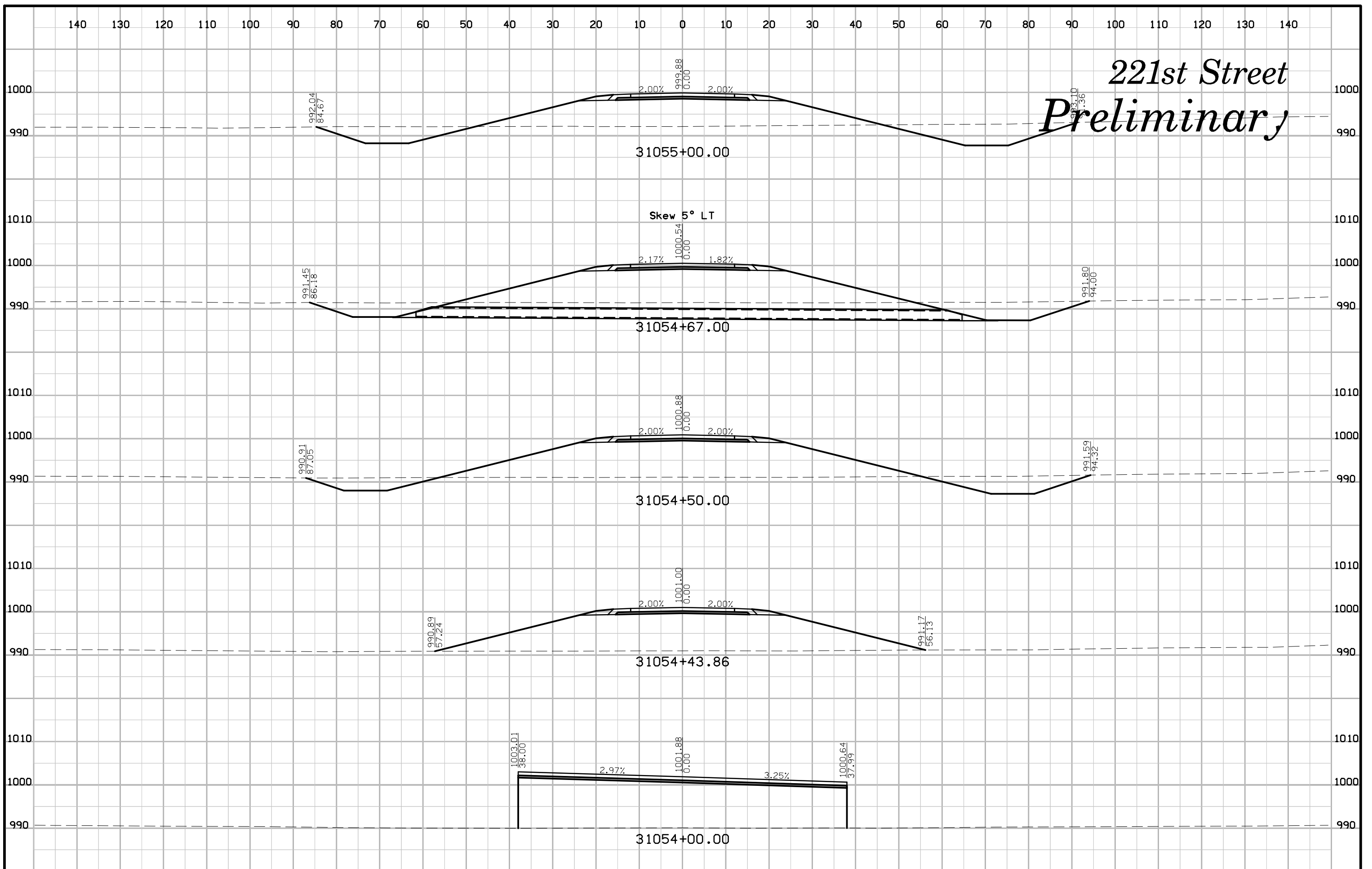




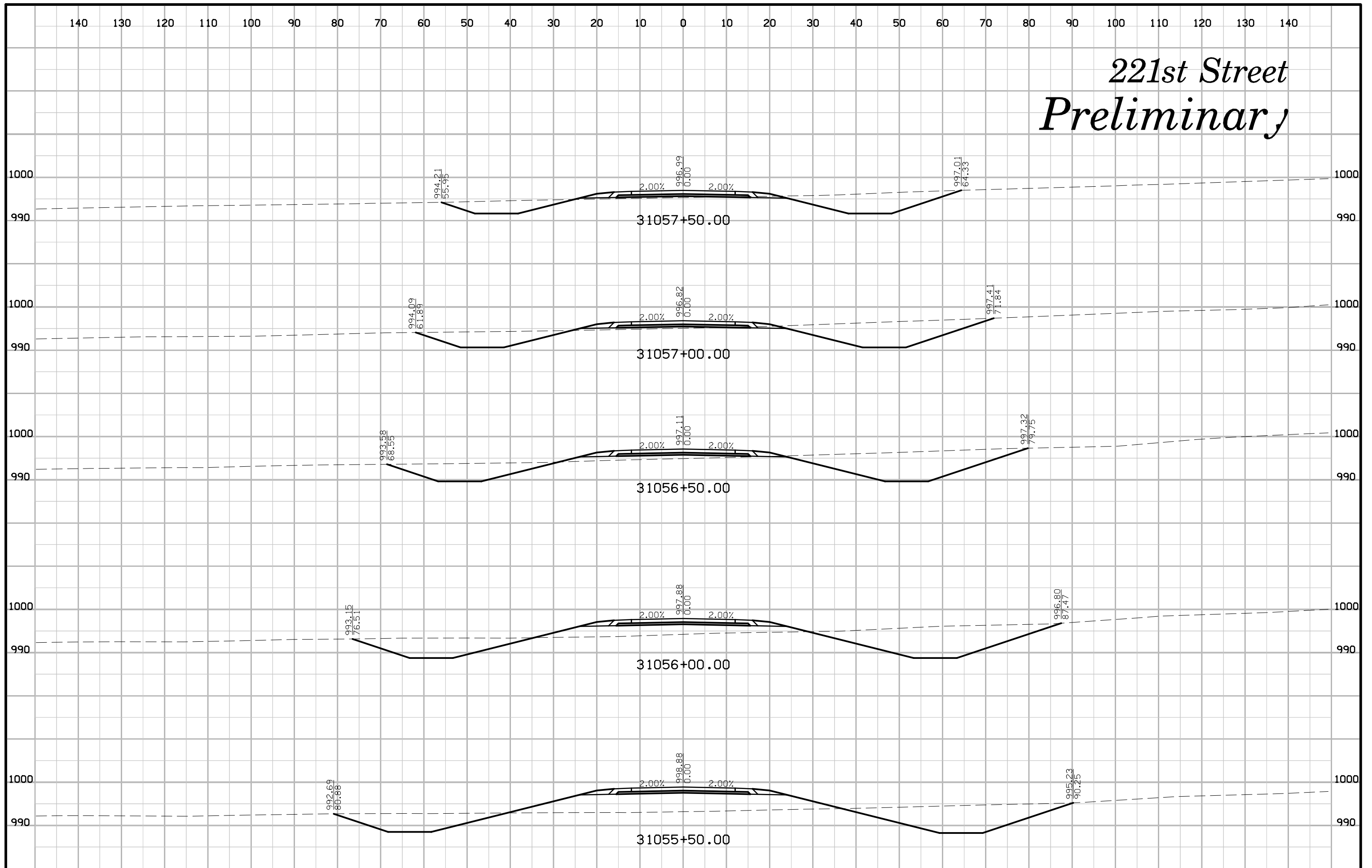
Industrial Parkway Preliminary



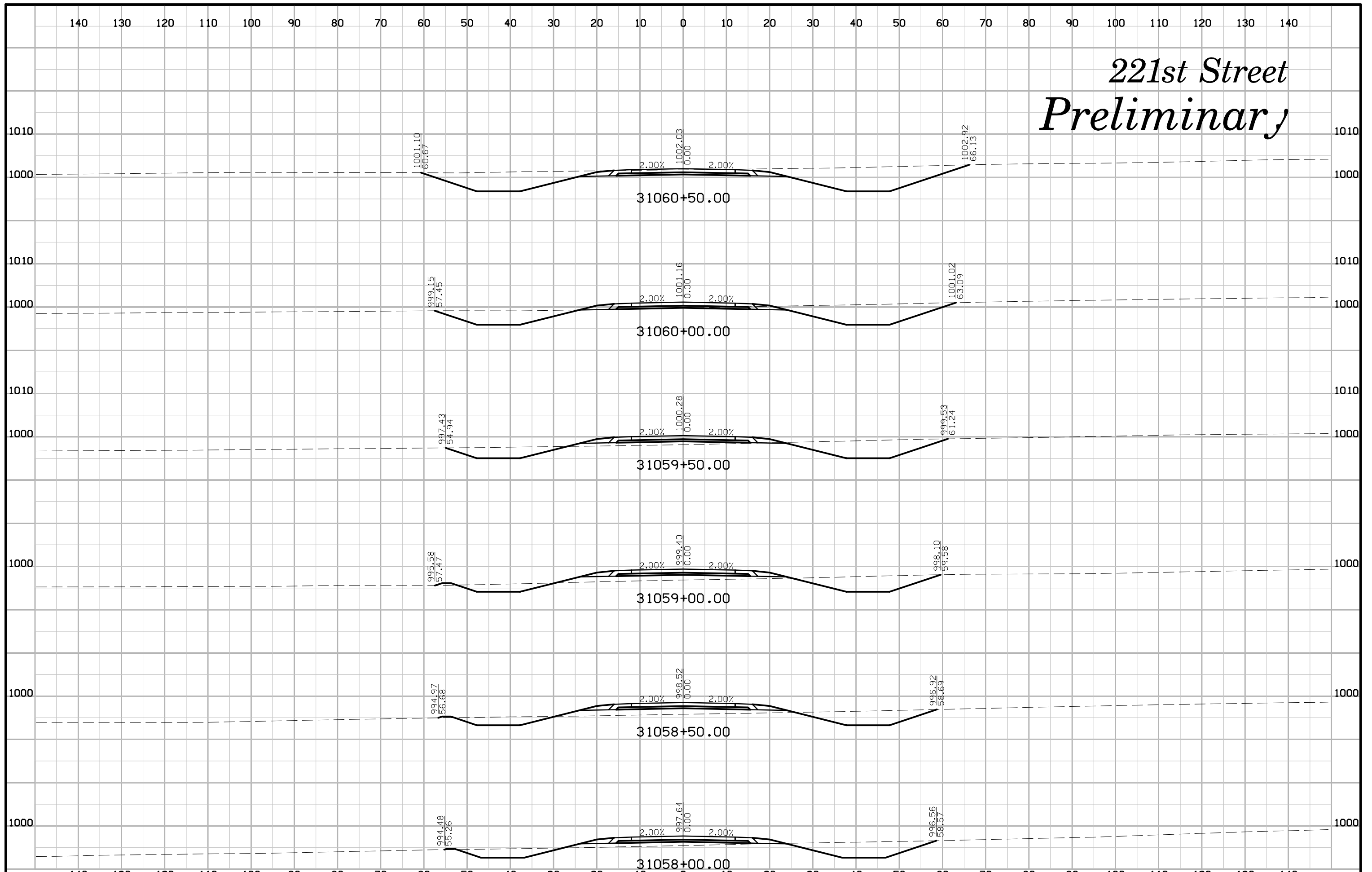
221st Street Preliminary



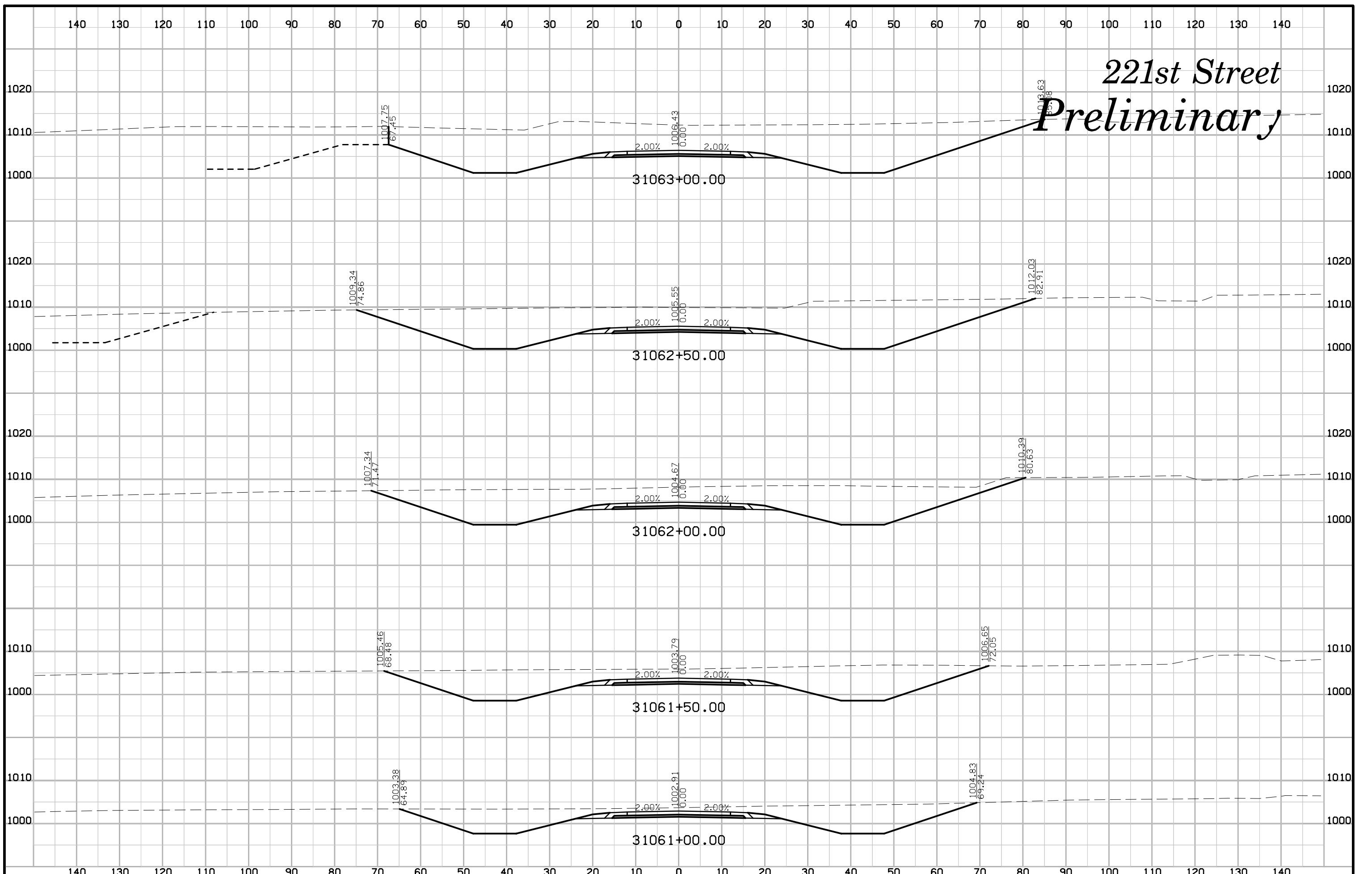
221st Street Preliminary



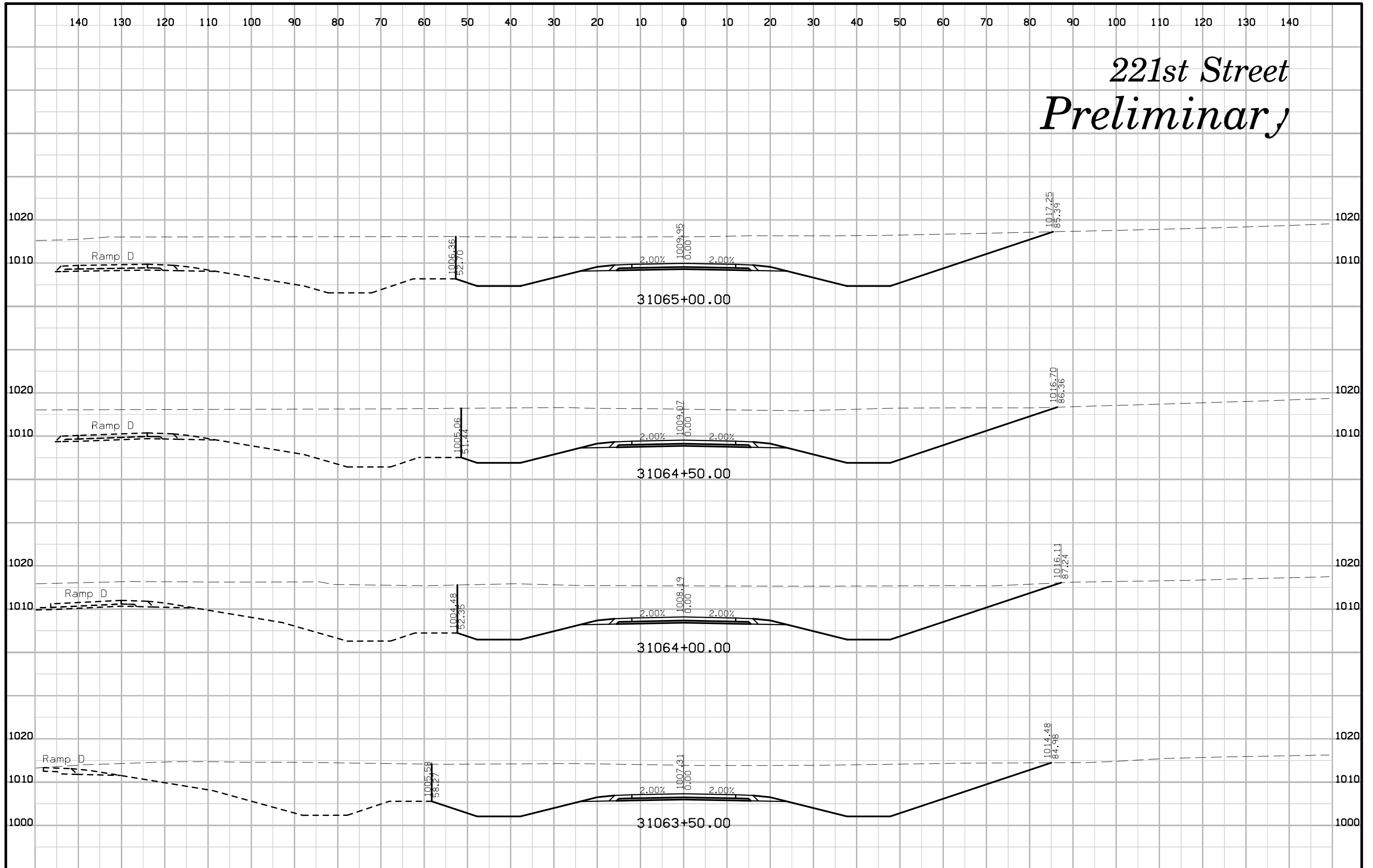
221st Street Preliminary



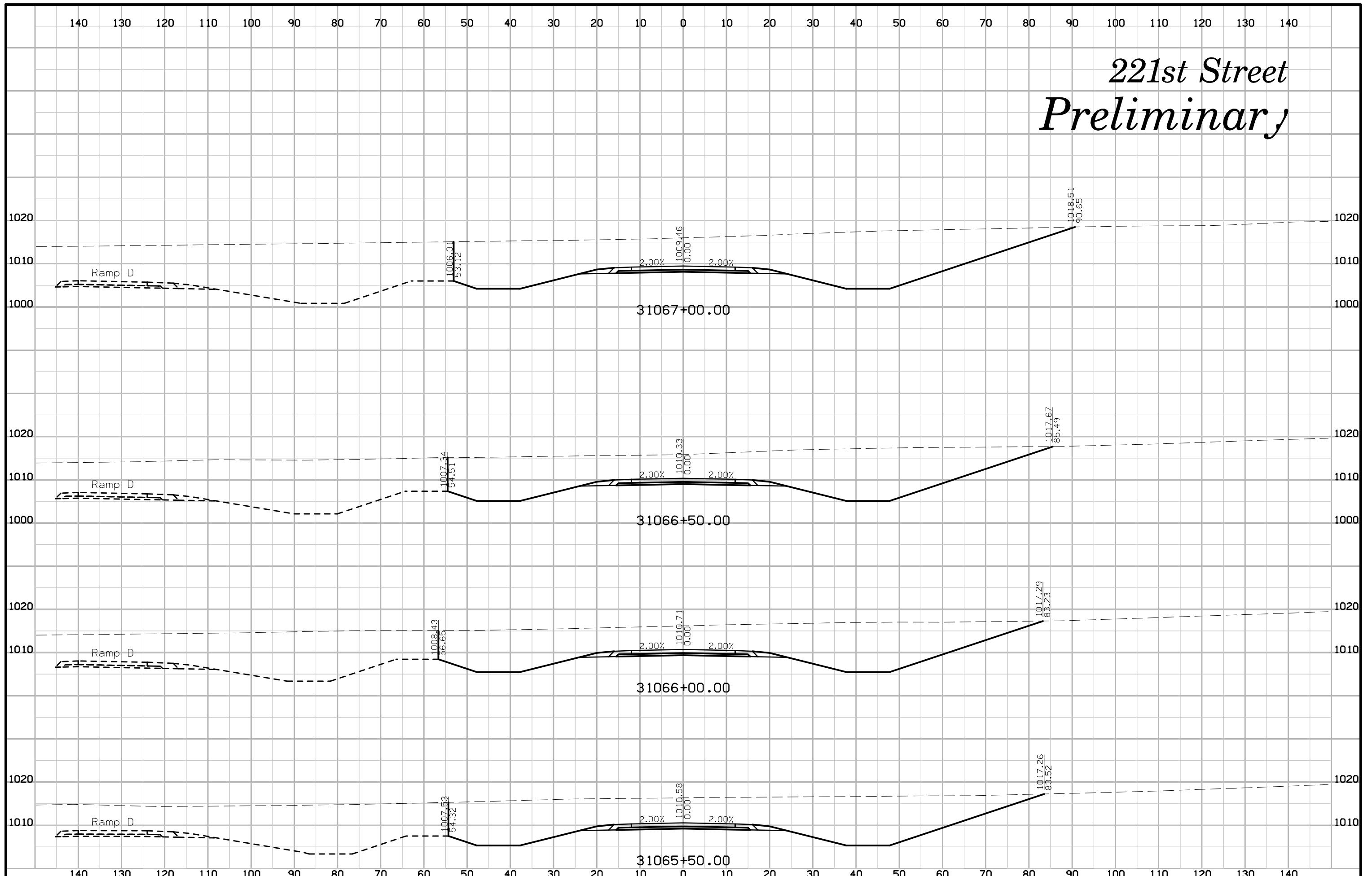
221st Street Preliminary



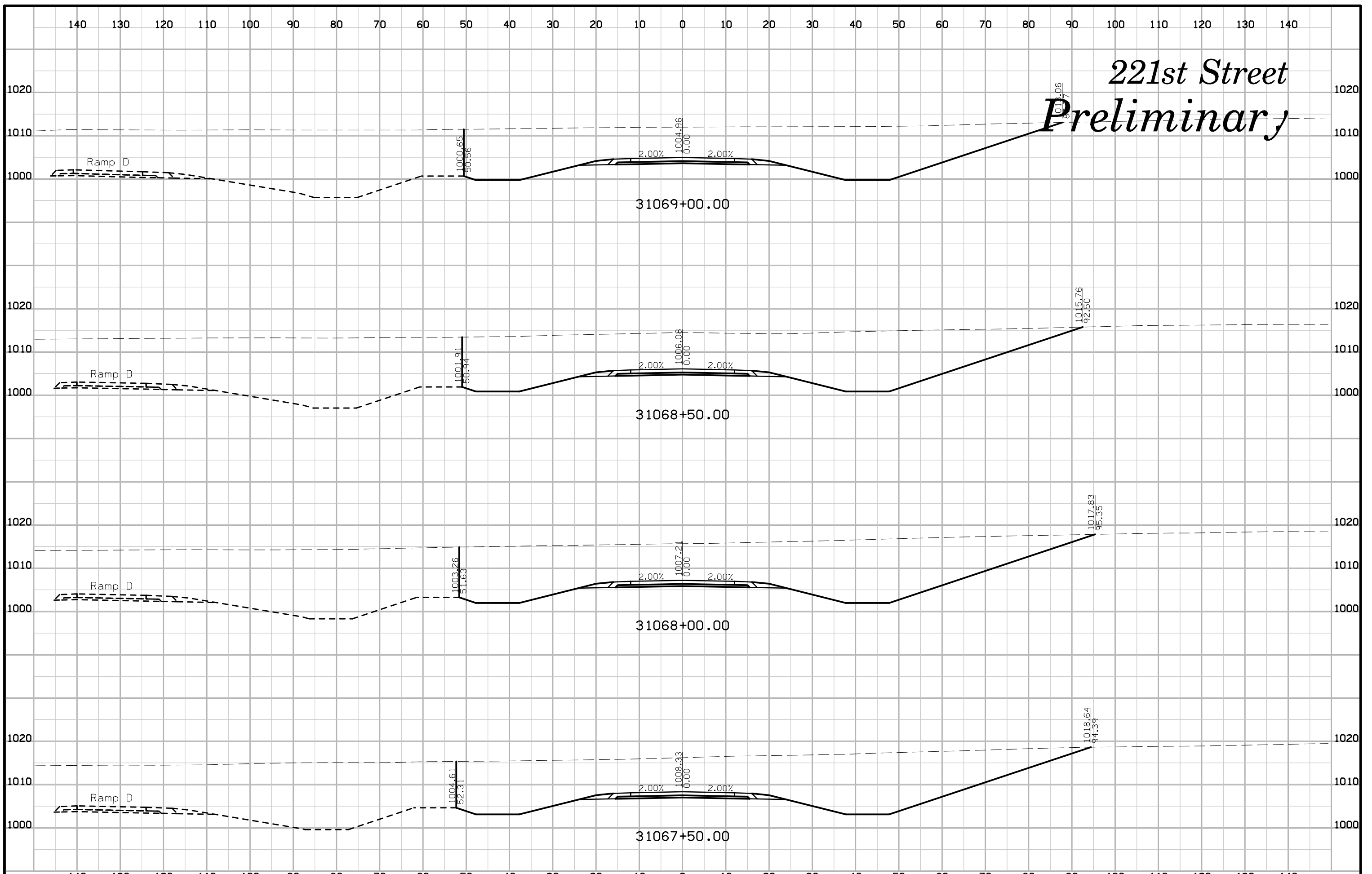
221st Street Preliminary



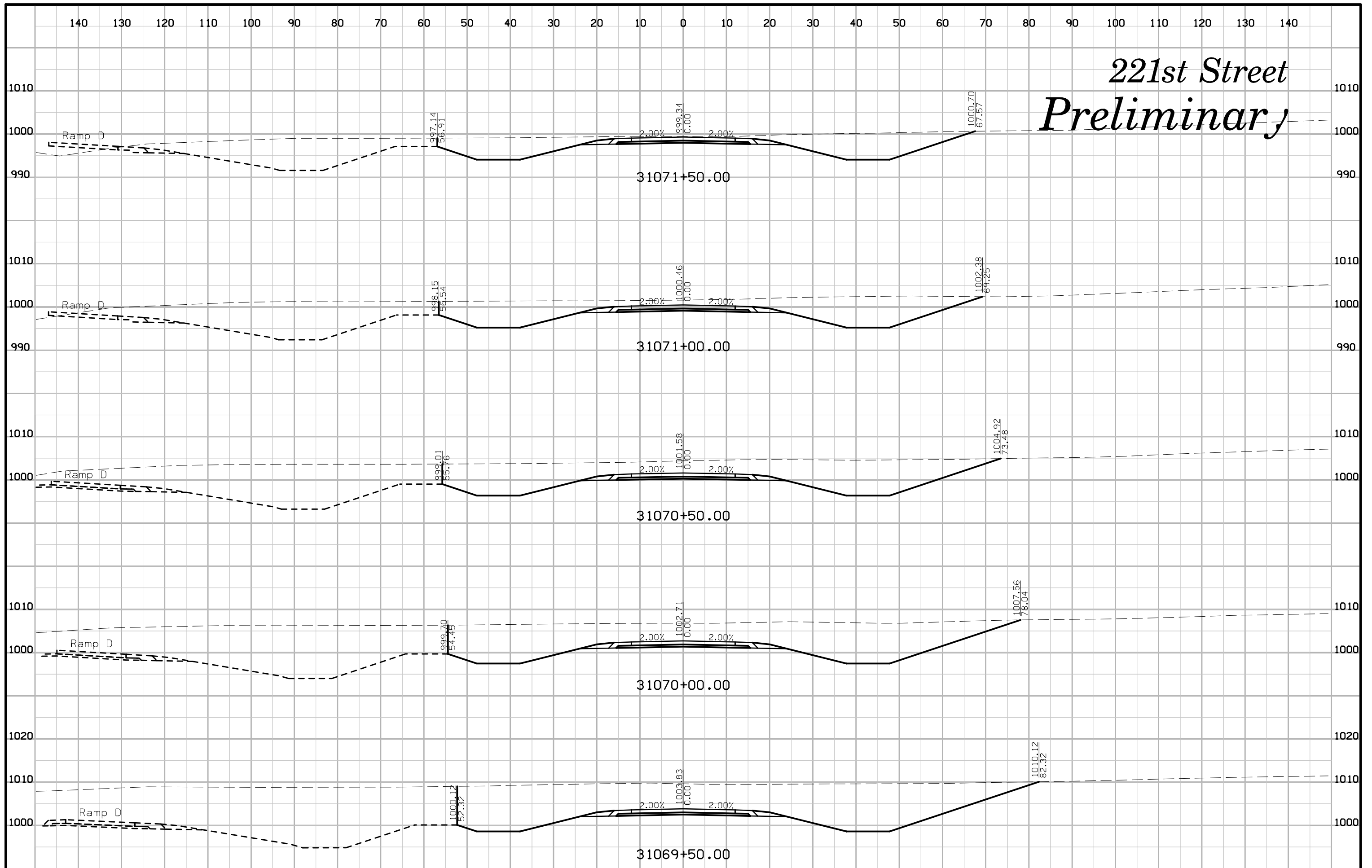
221st Street Preliminary



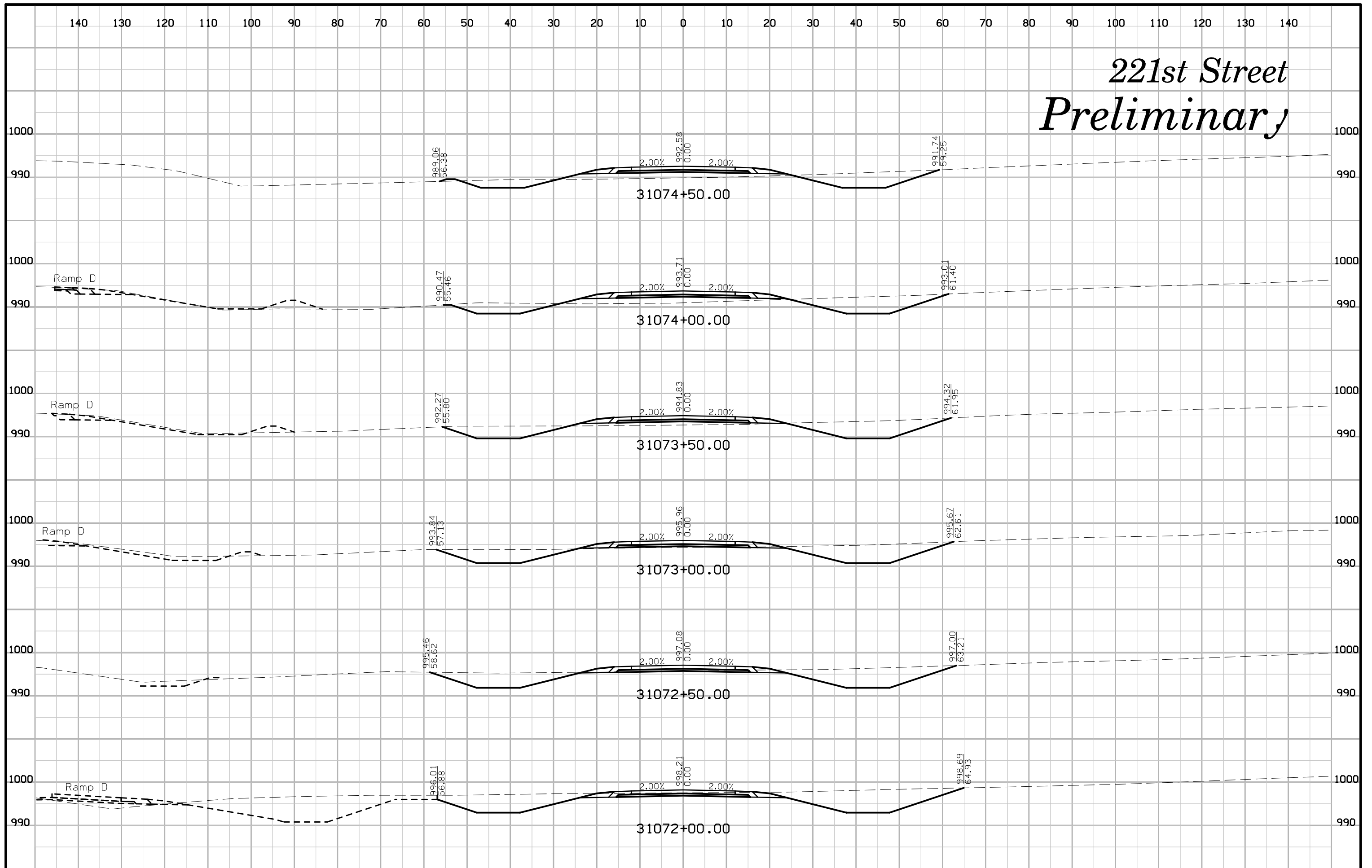
221st Street Preliminary



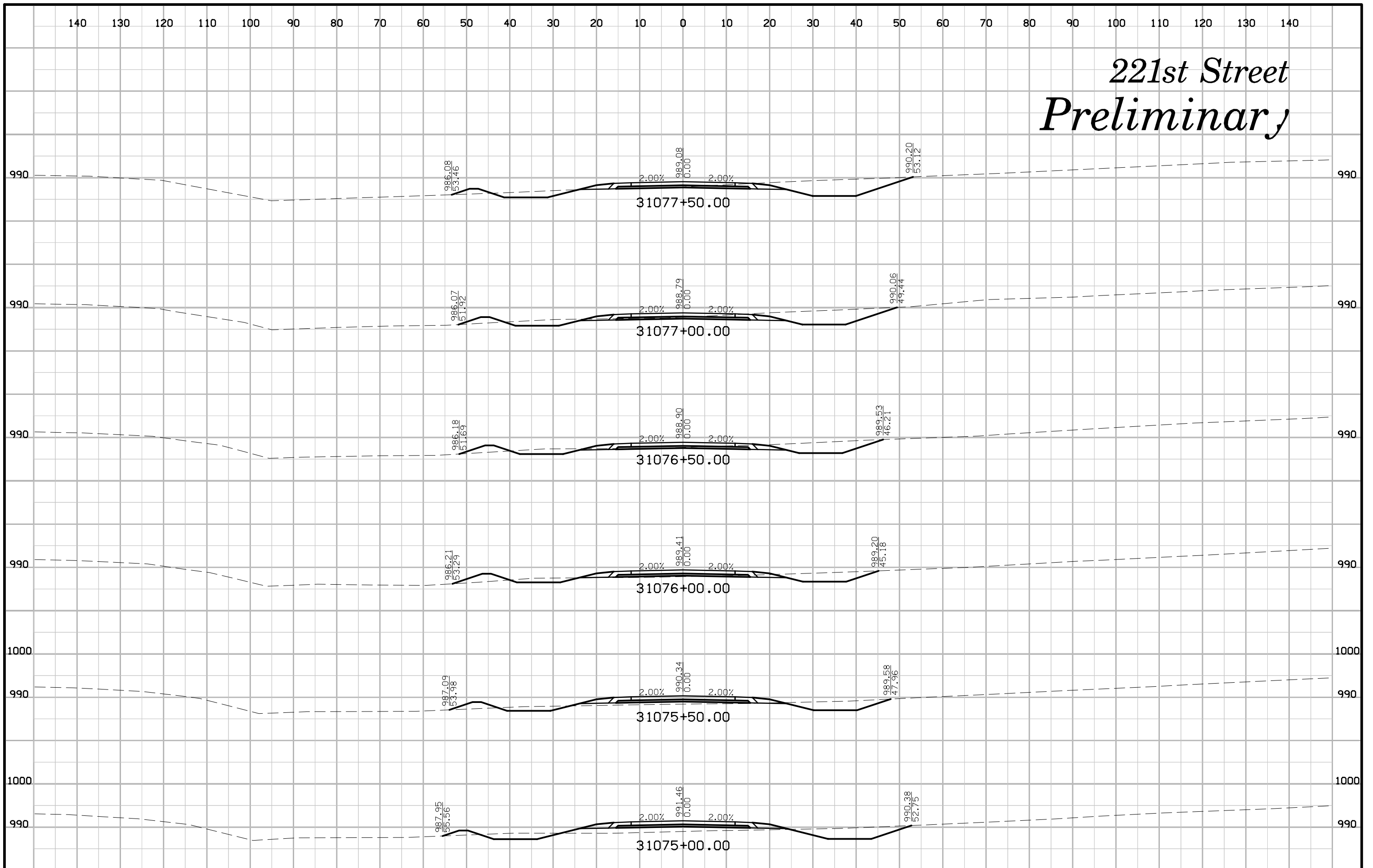
221st Street Preliminary



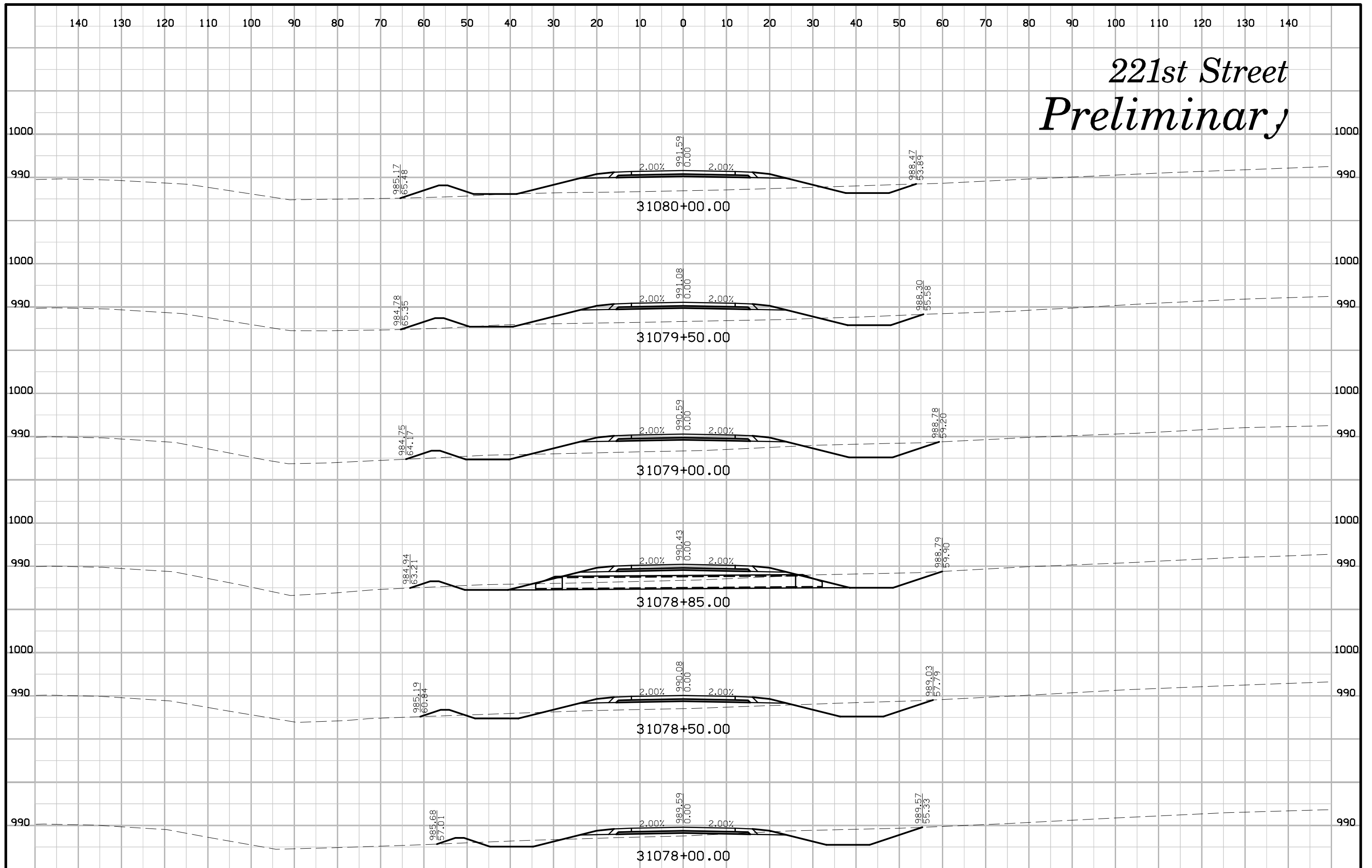
221st Street Preliminary



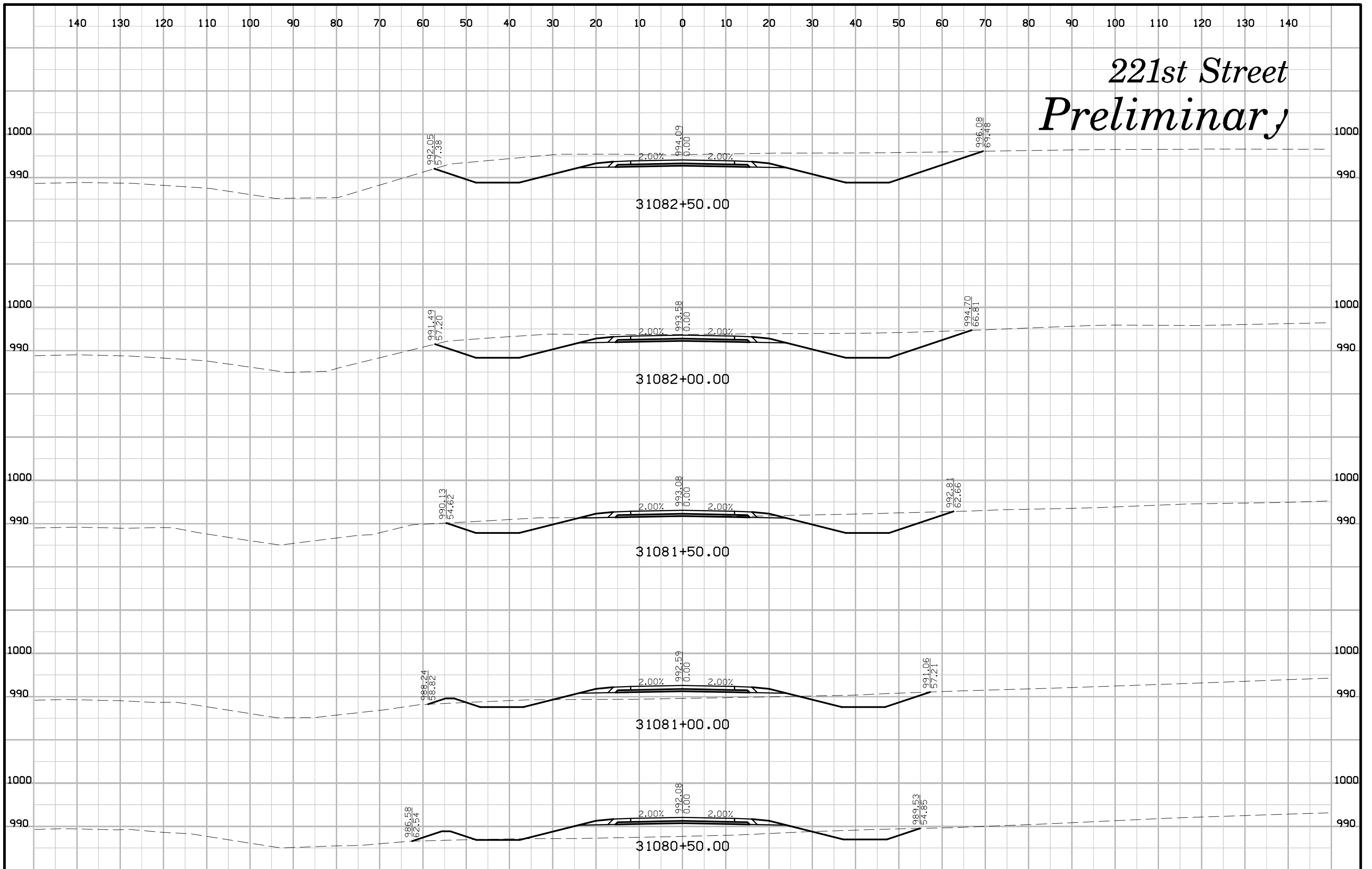
221st Street Preliminary



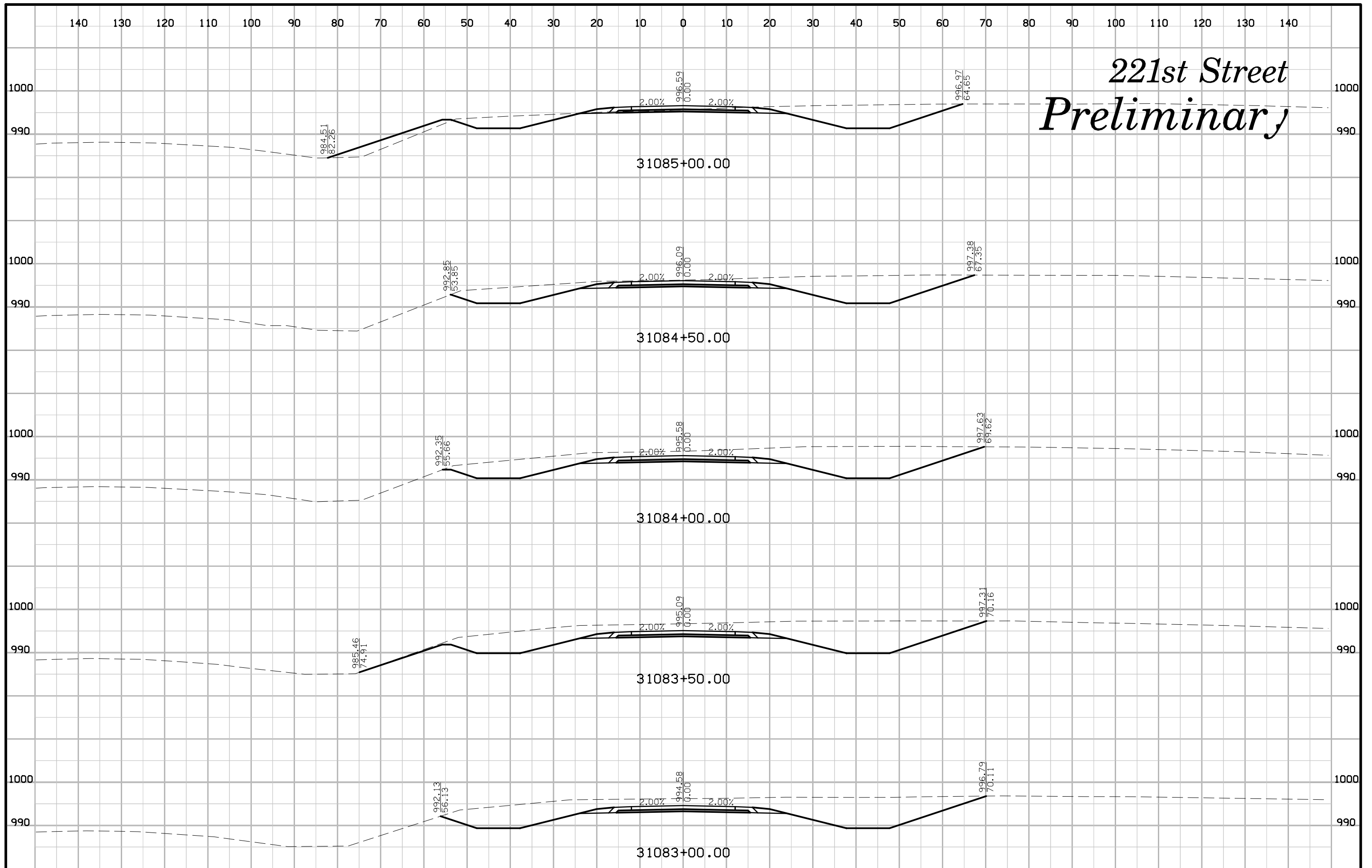
221st Street Preliminary



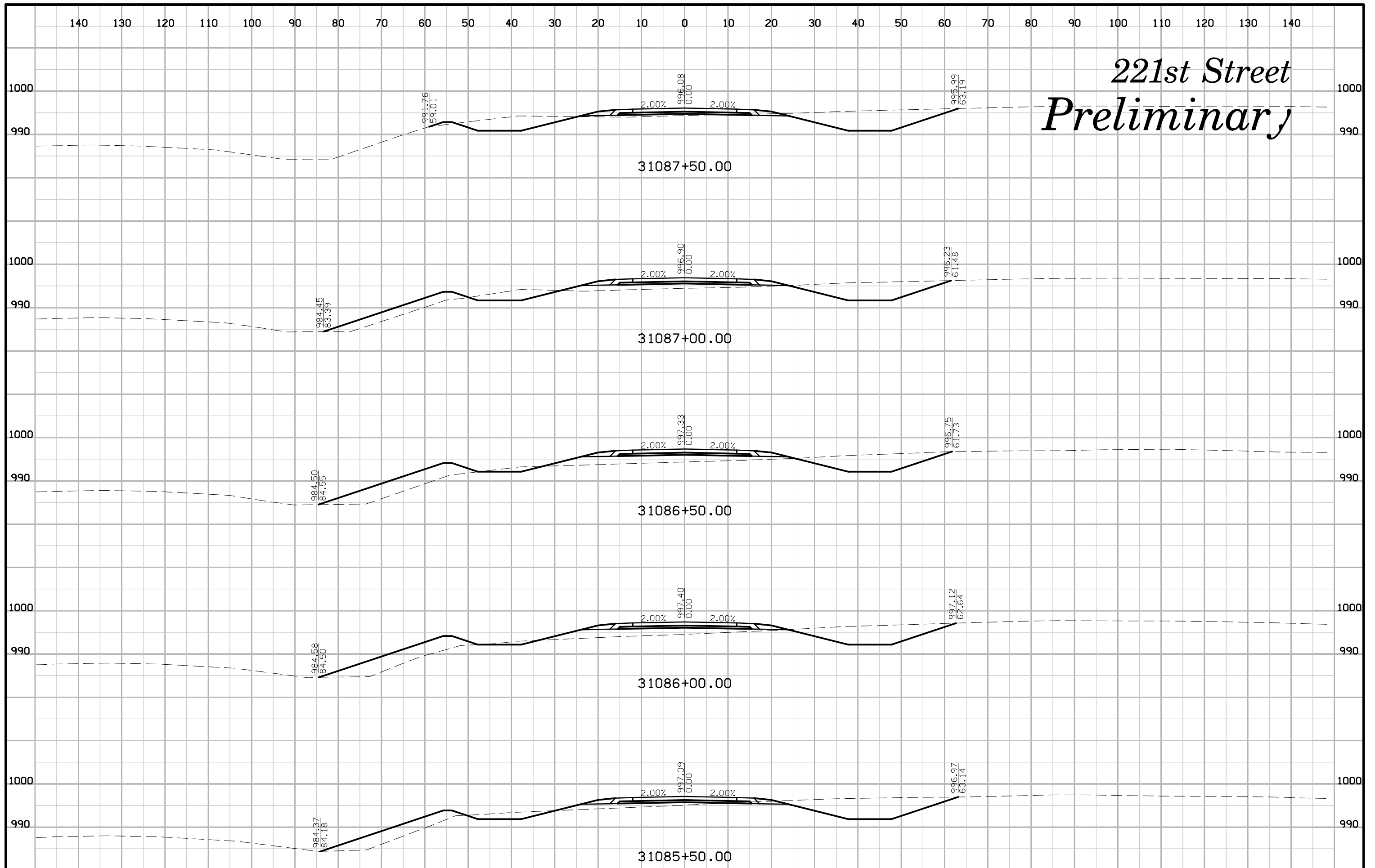
221st Street Preliminary



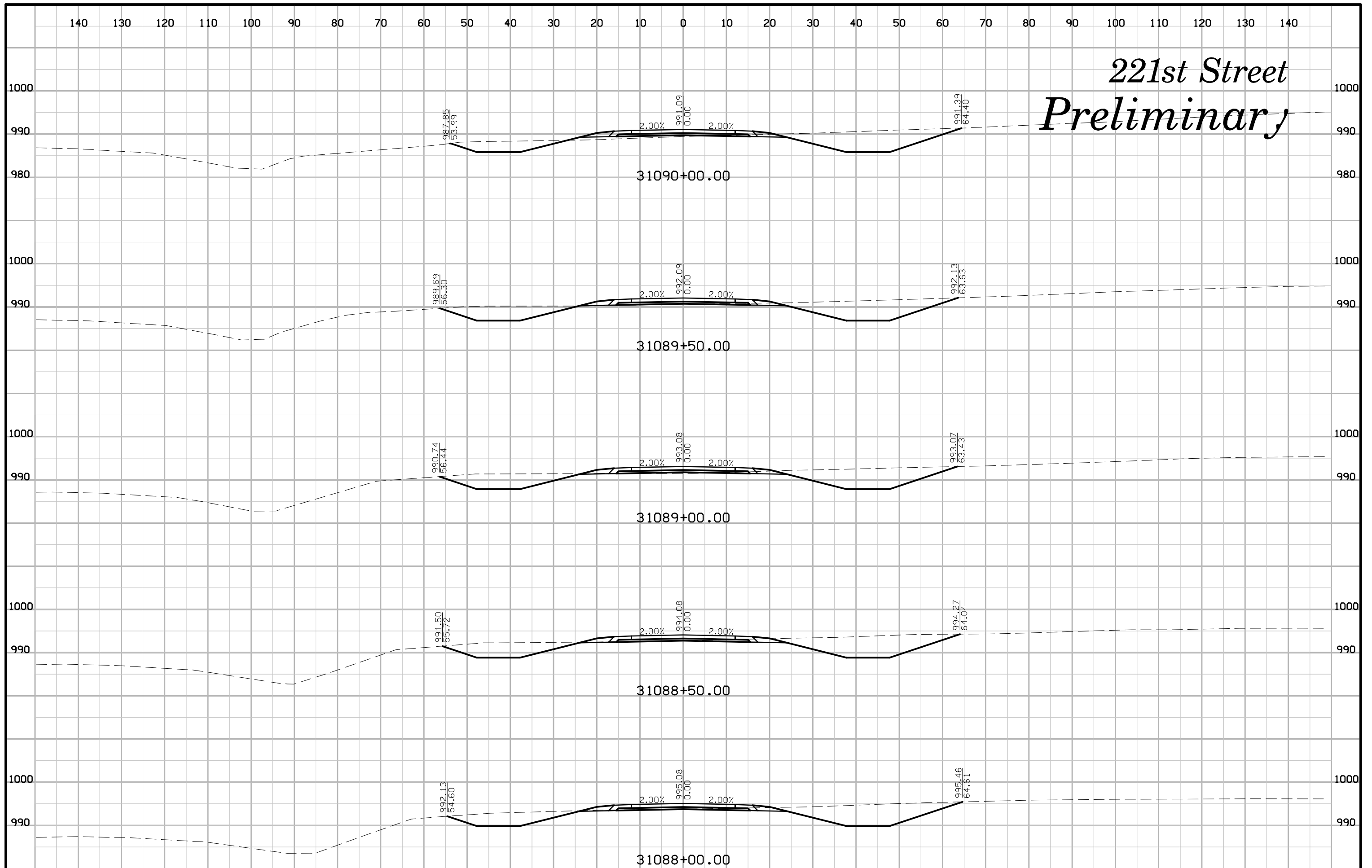
221st Street Preliminary



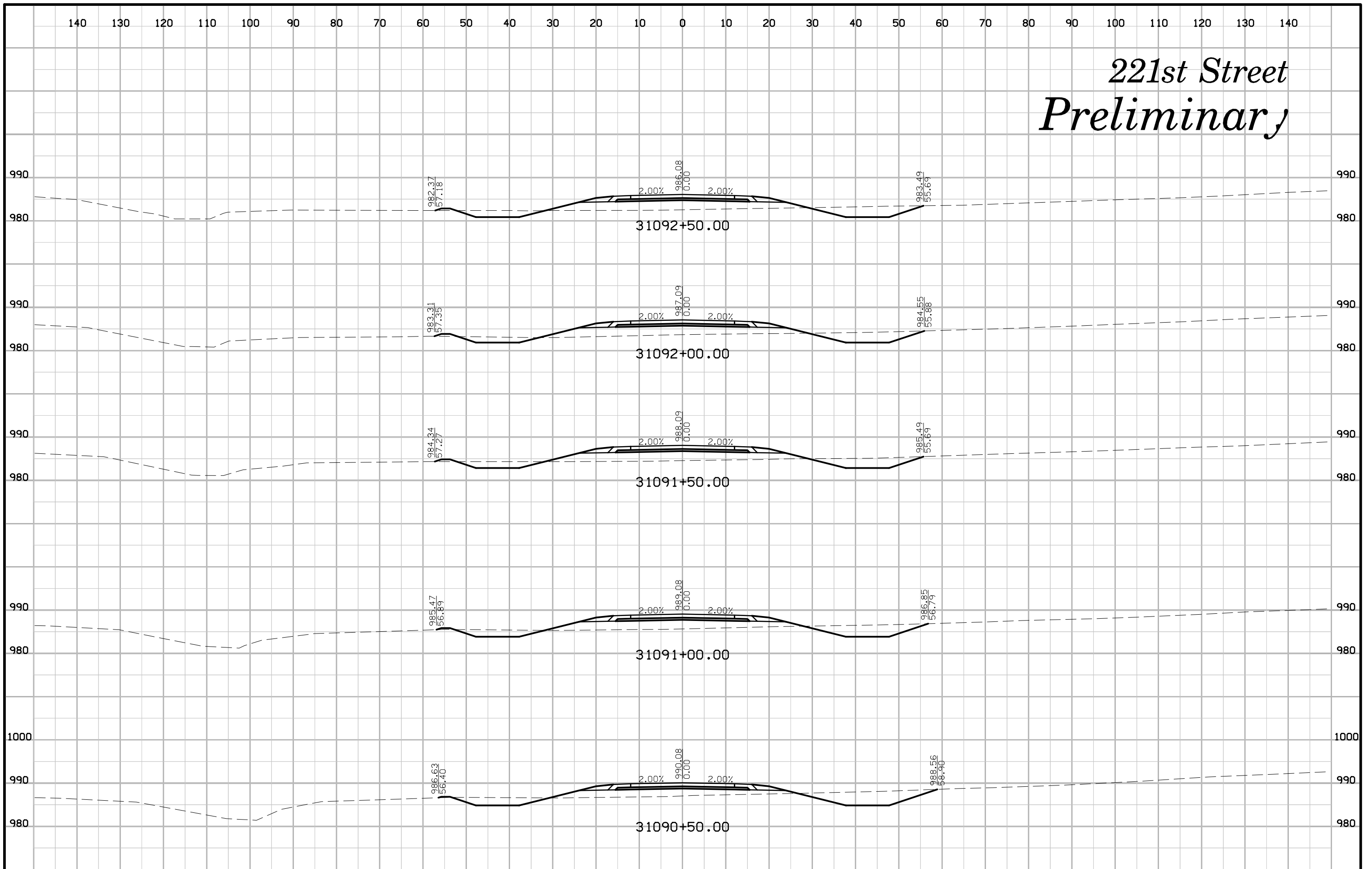
221st Street Preliminary



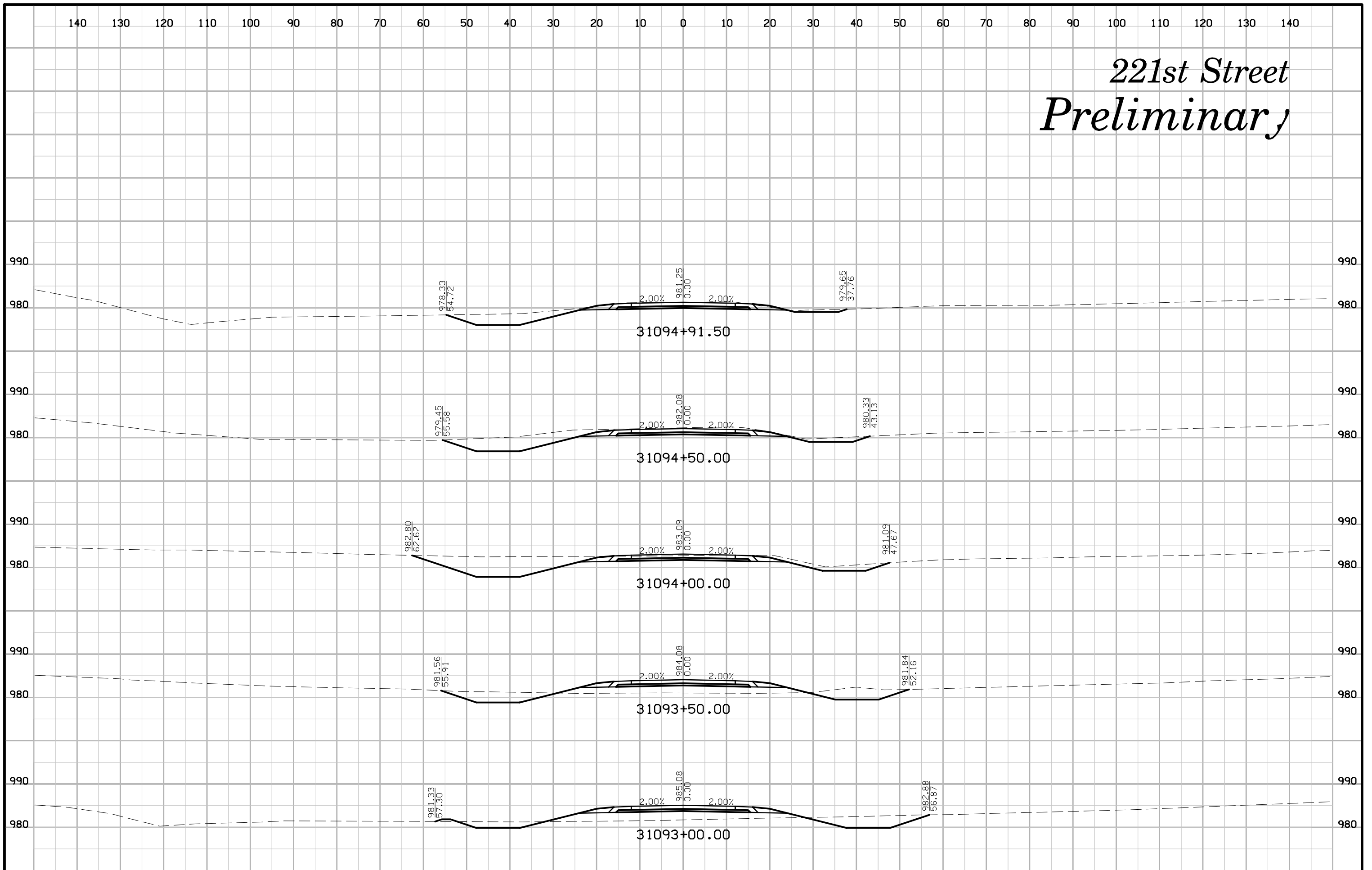
221st Street Preliminary



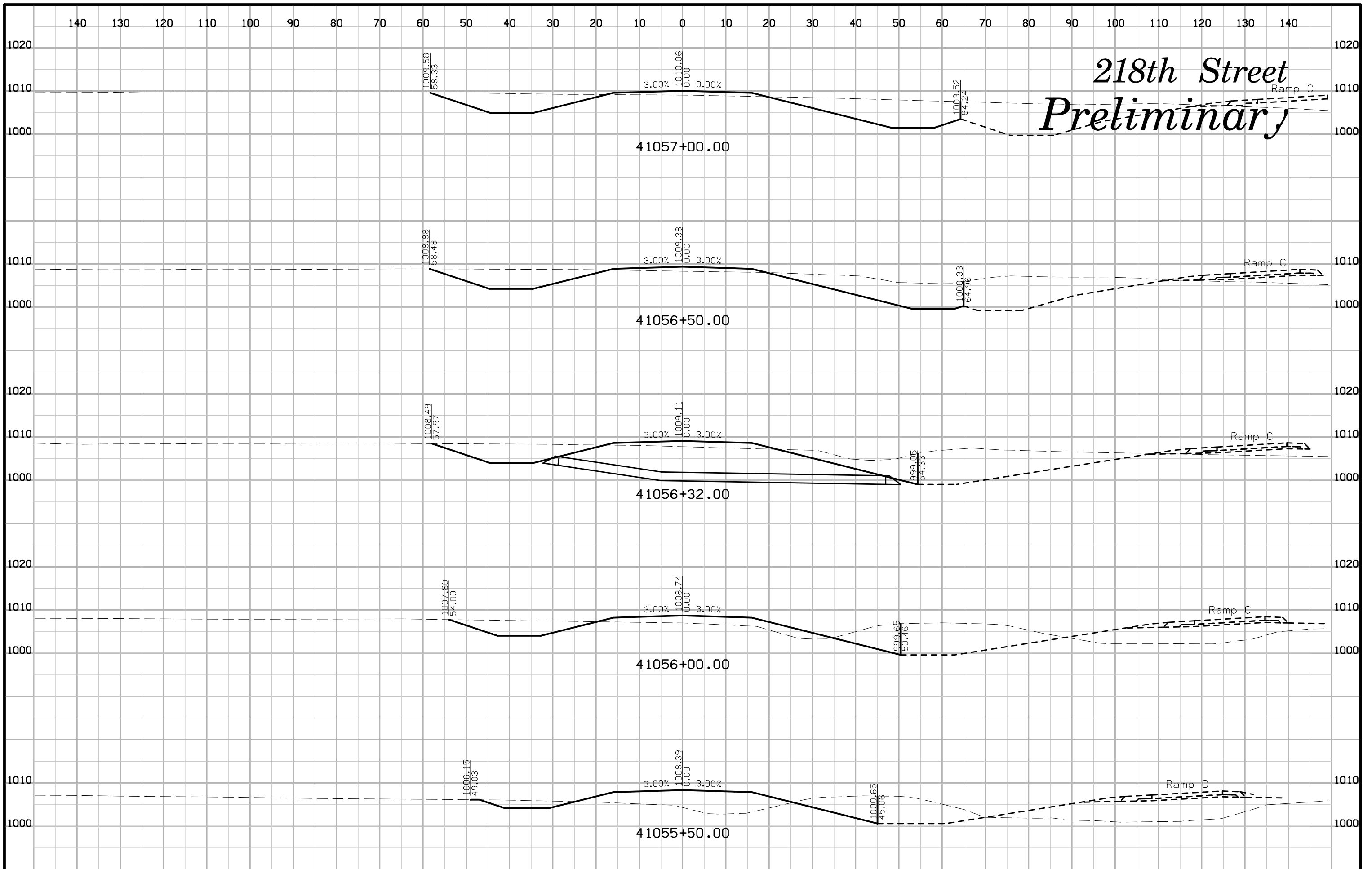
221st Street Preliminary



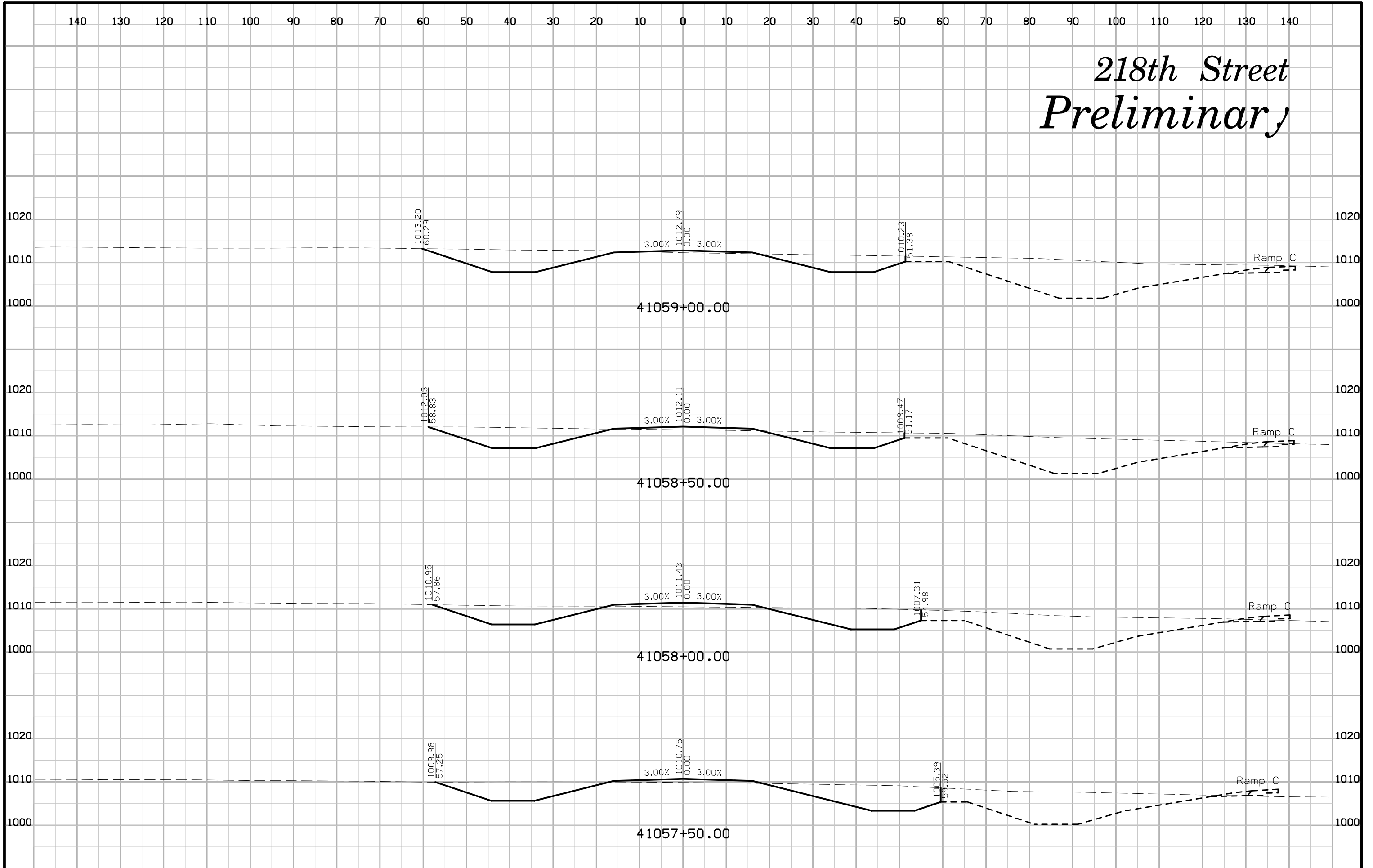
221st Street Preliminary



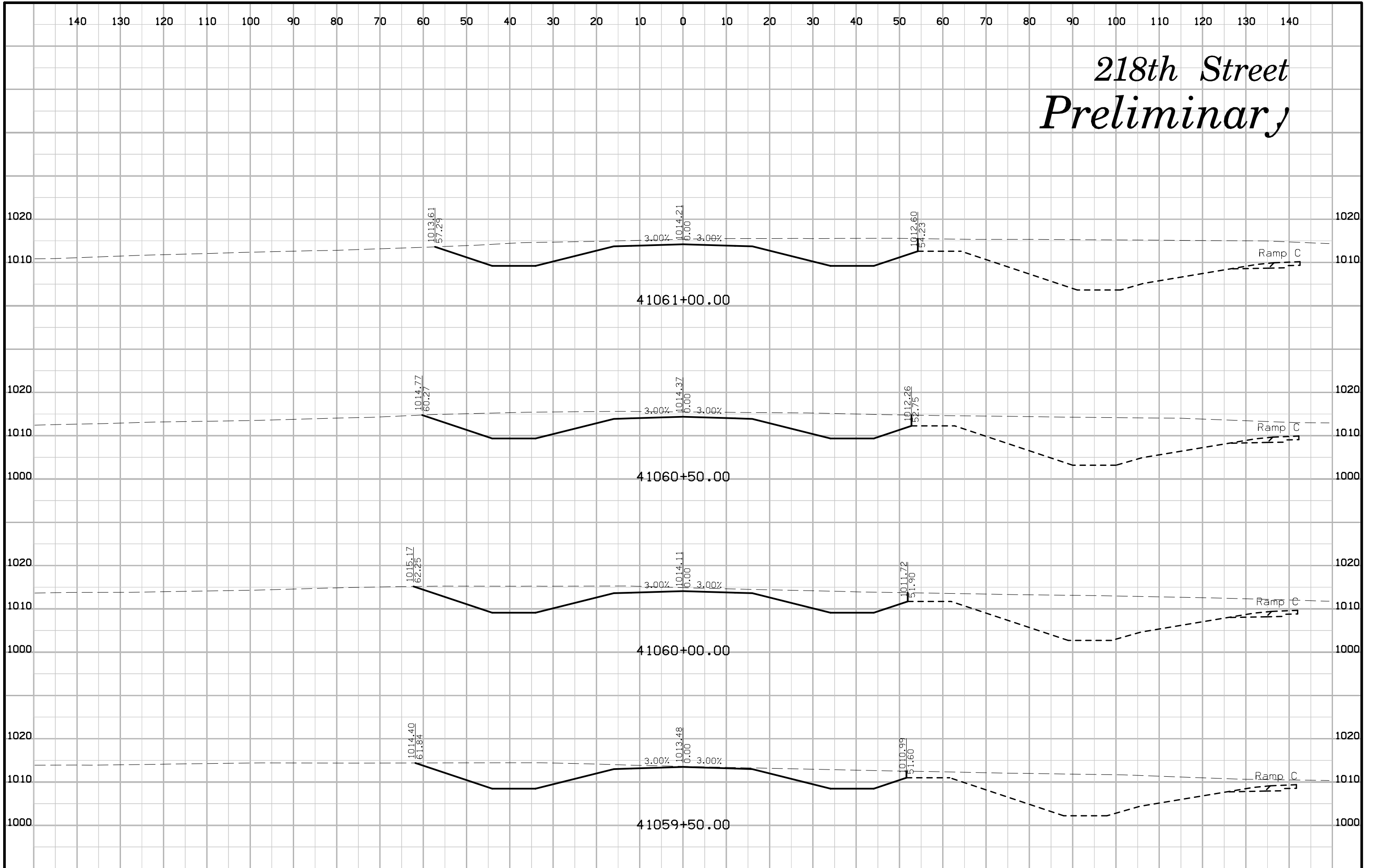
218th Street Preliminary



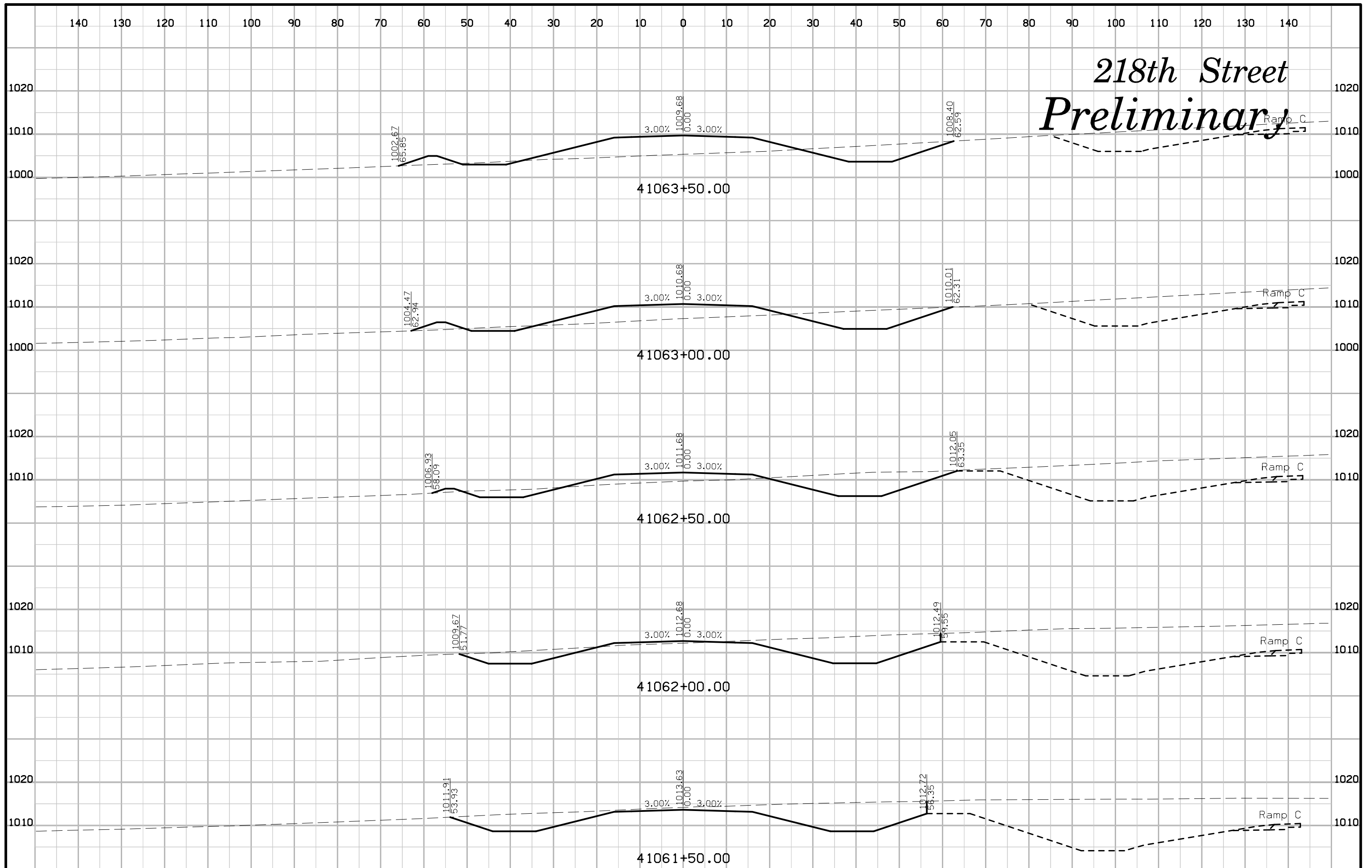
218th Street Preliminary



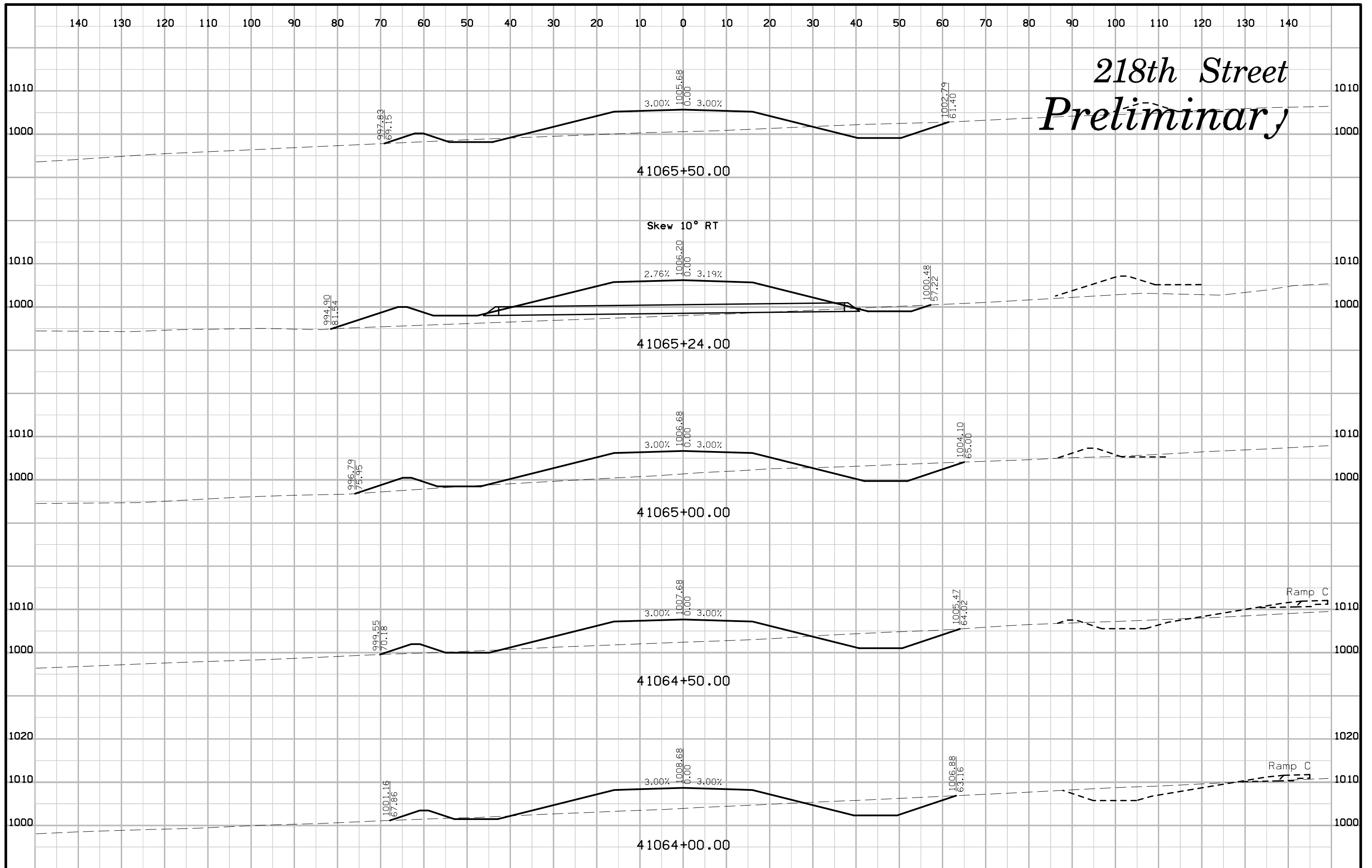
218th Street Preliminary



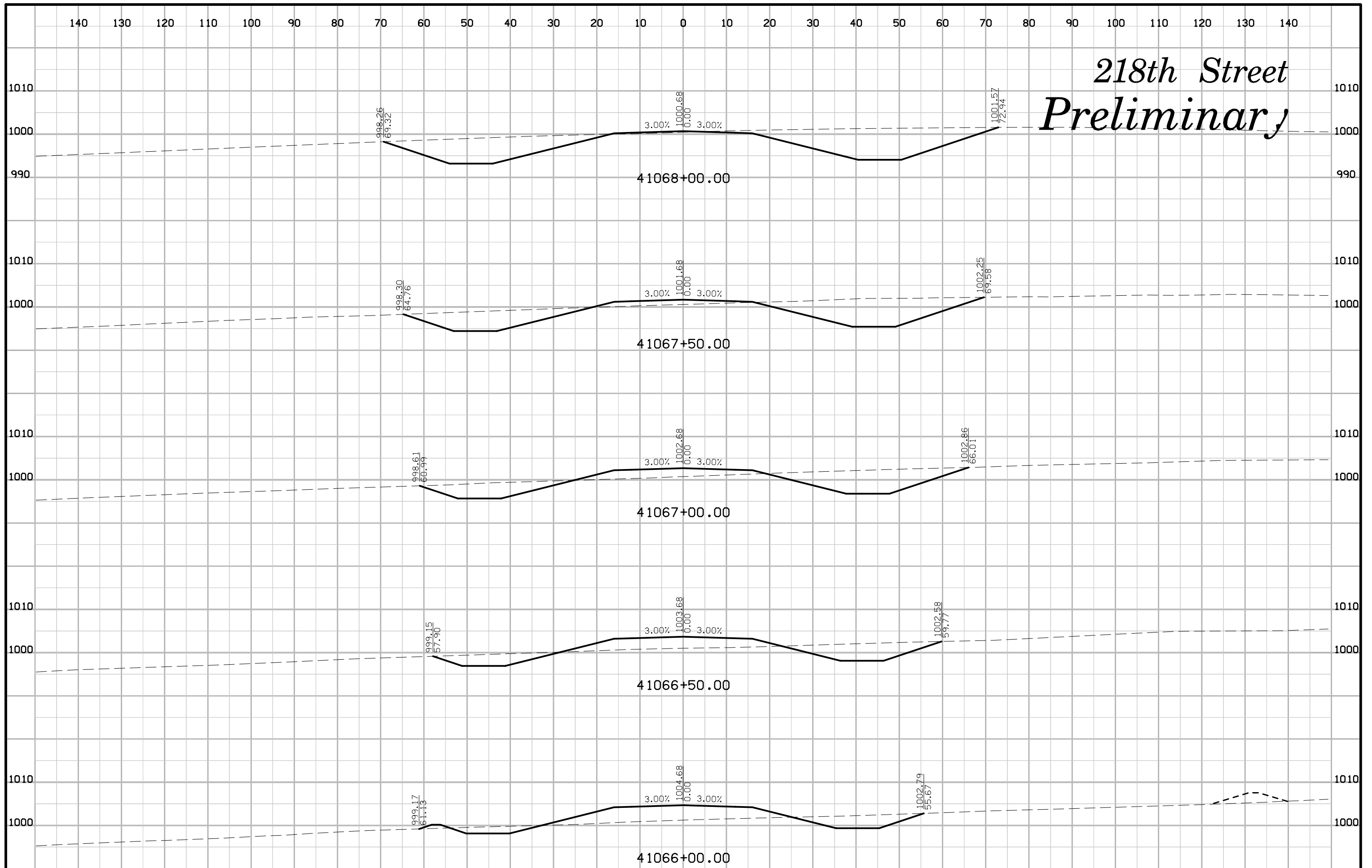
218th Street Preliminary



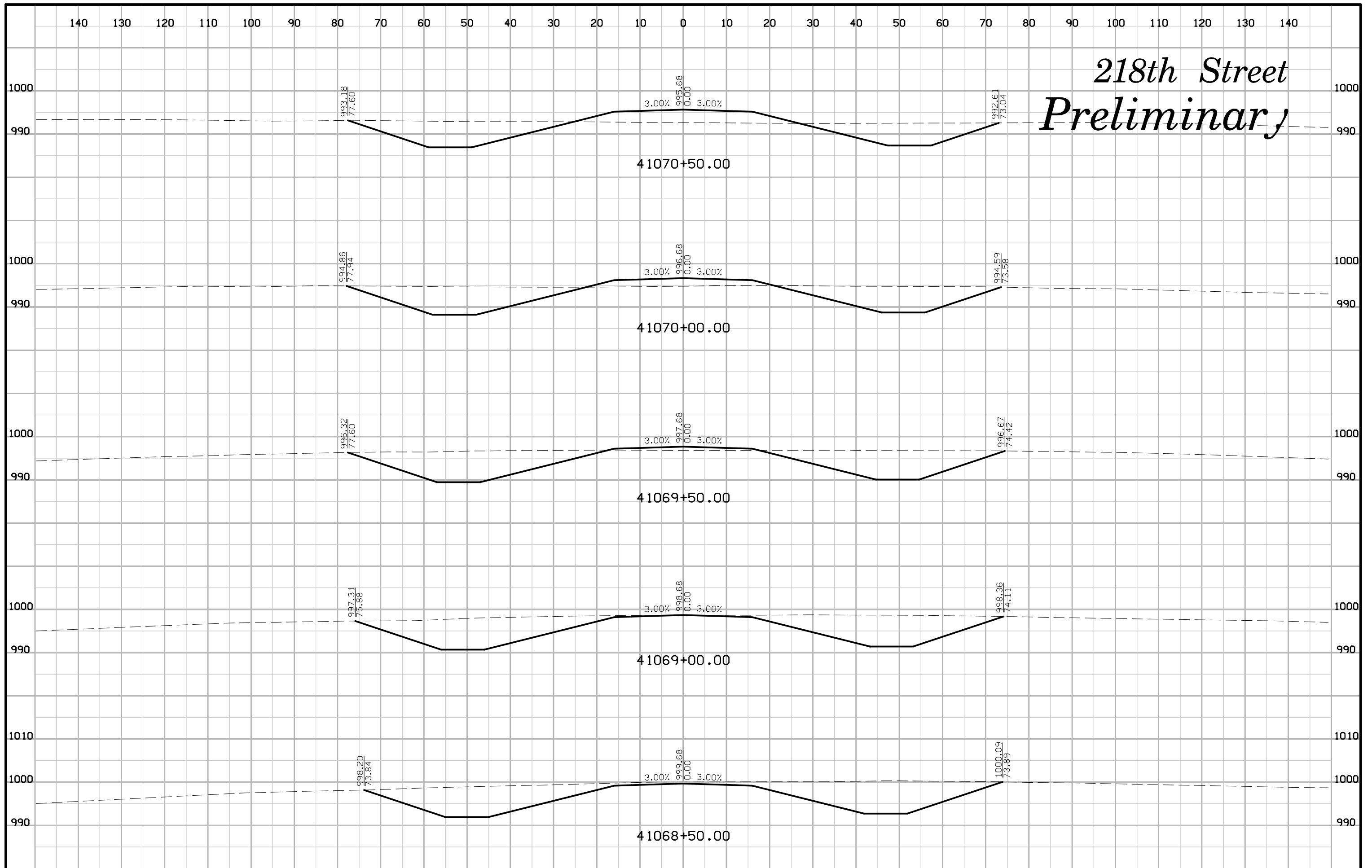
218th Street Preliminary



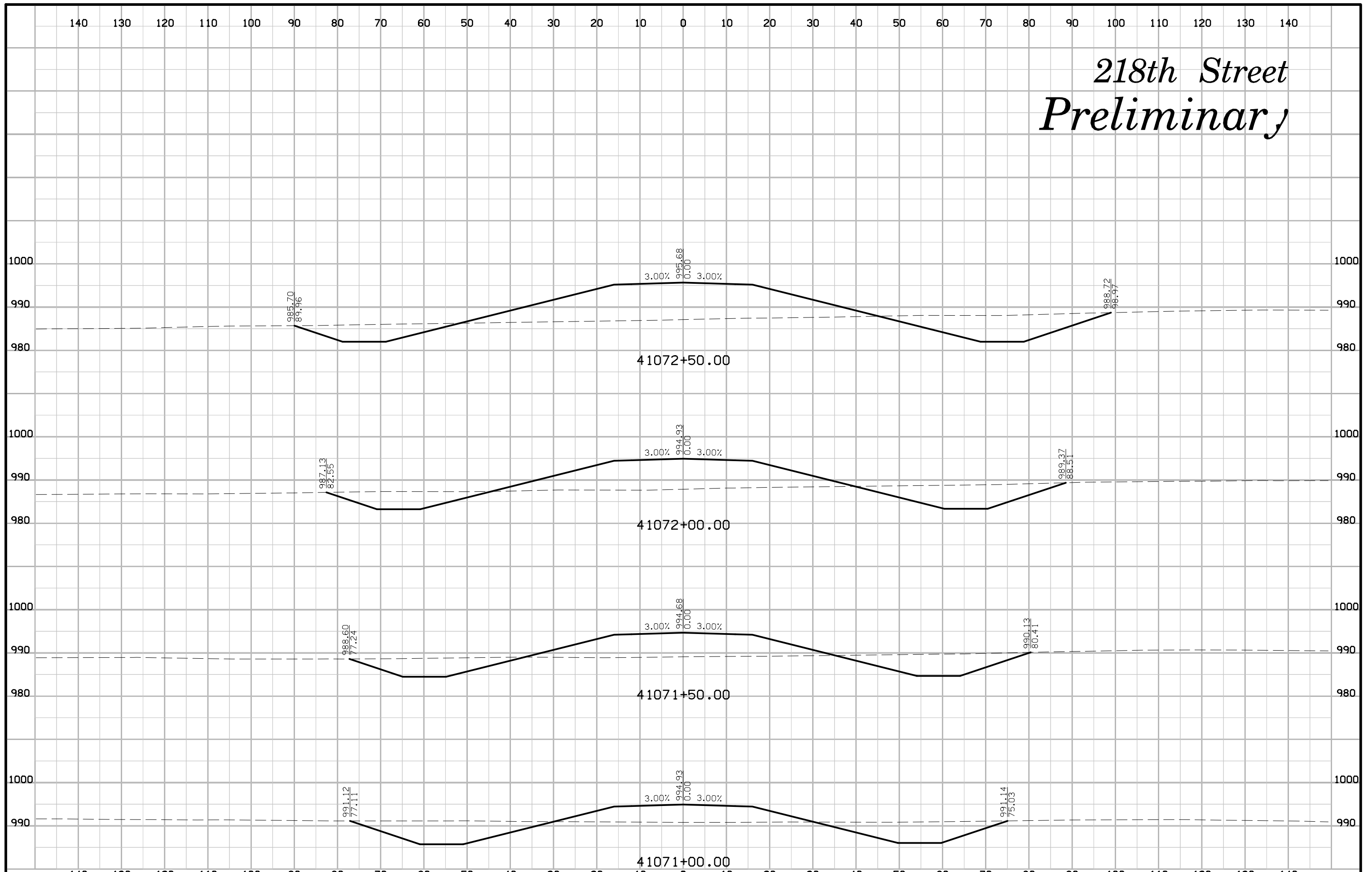
218th Street Preliminary



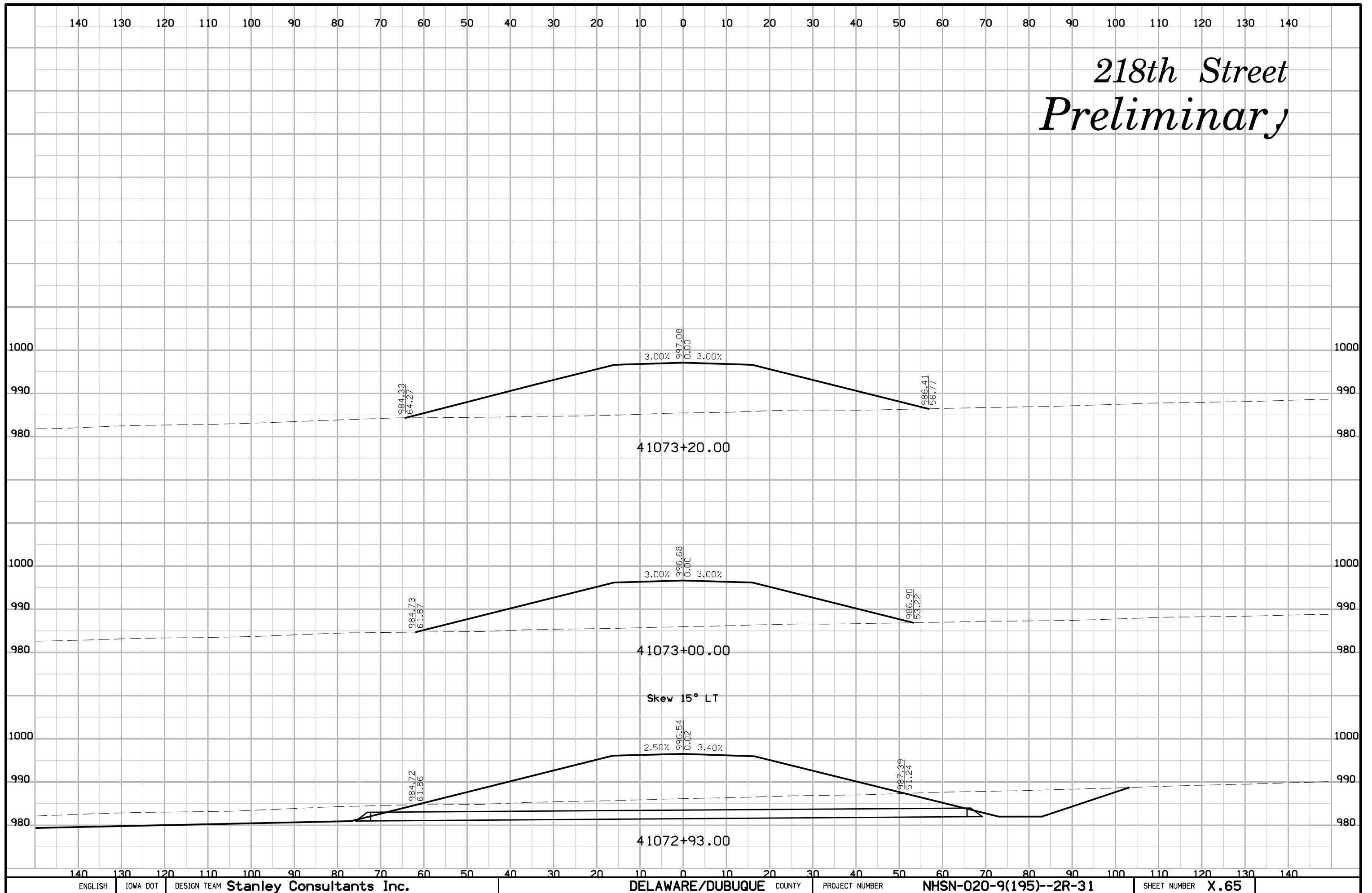
218th Street Preliminary



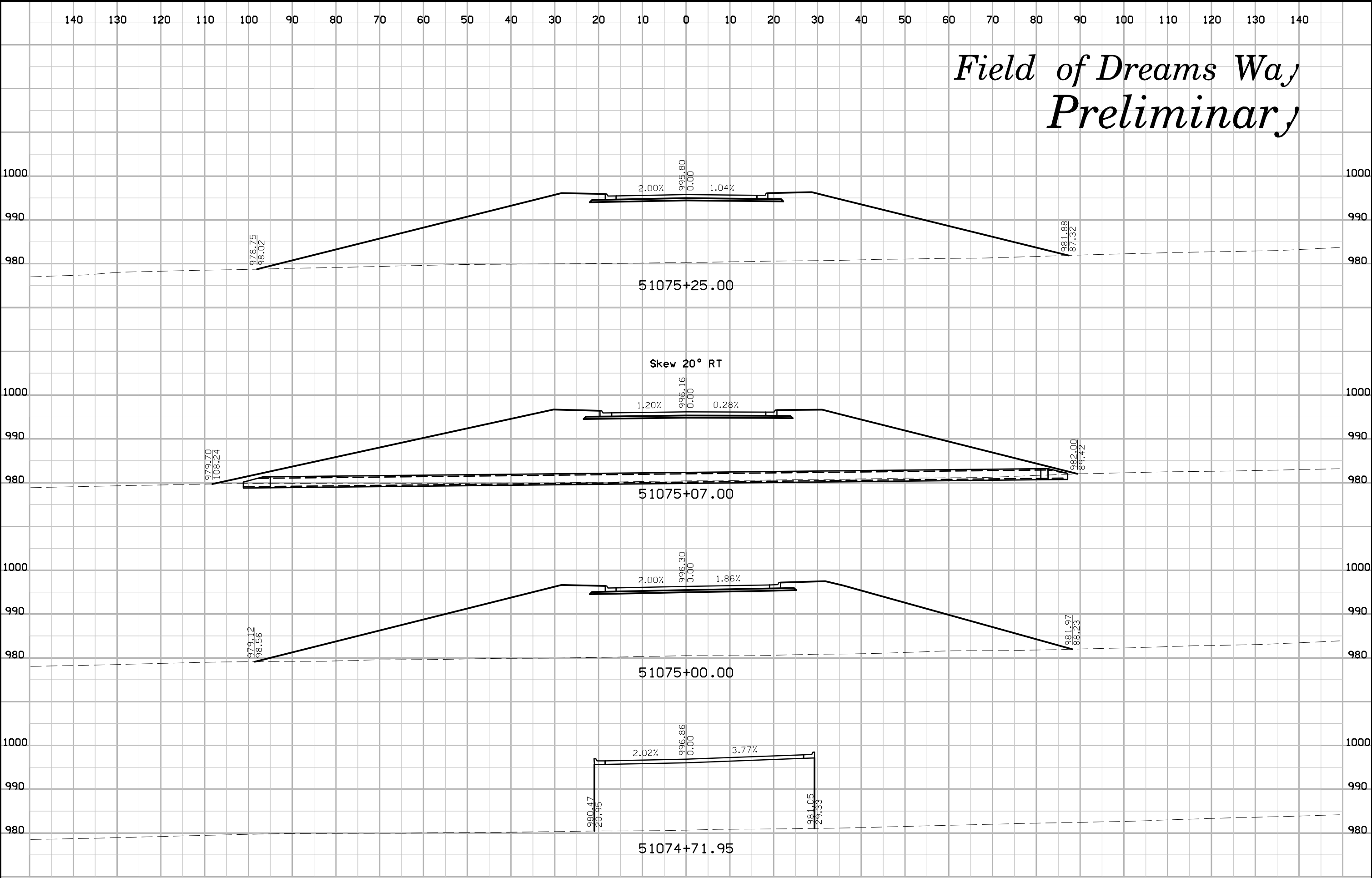
218th Street Preliminary



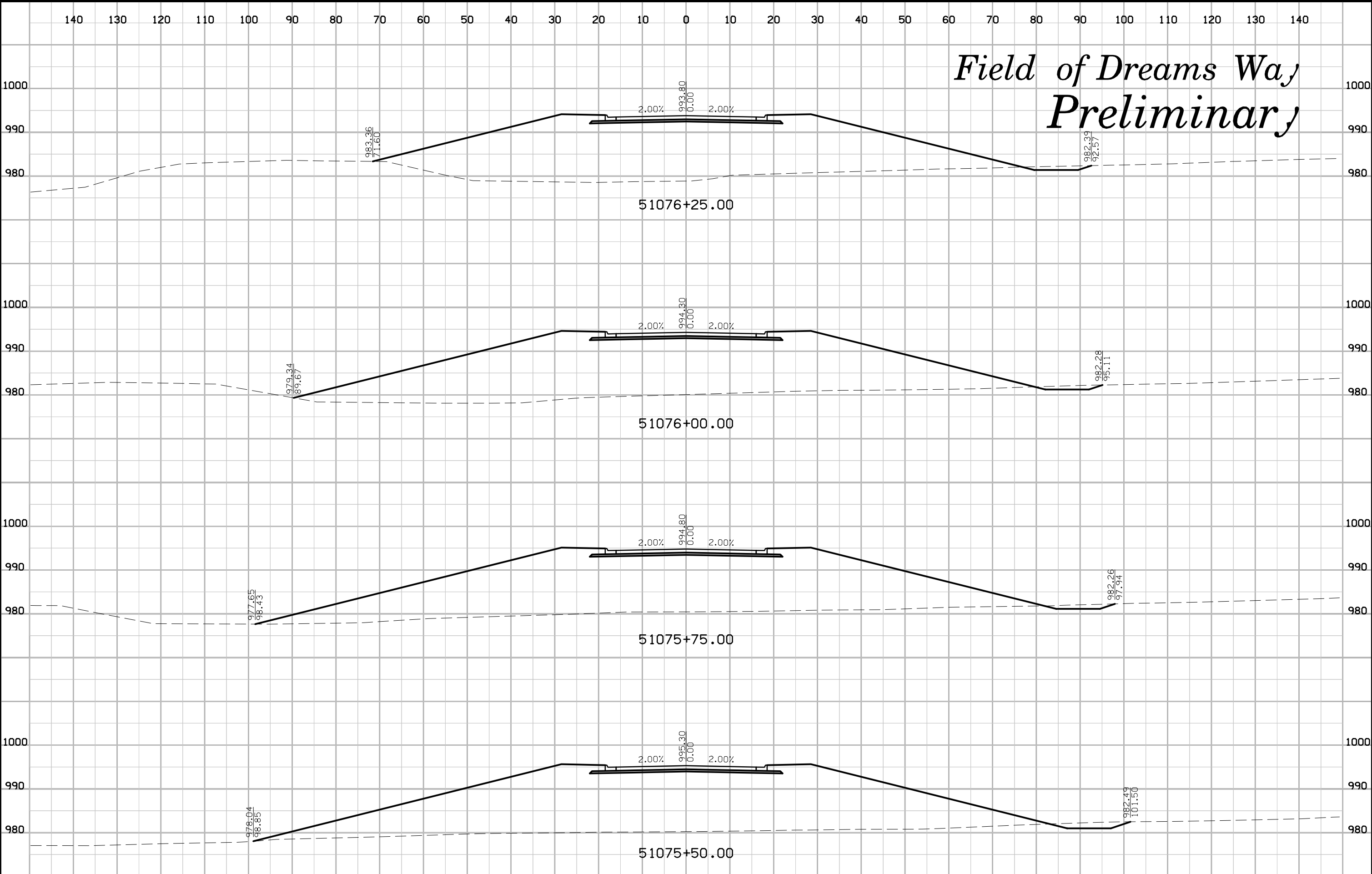
218th Street Preliminary

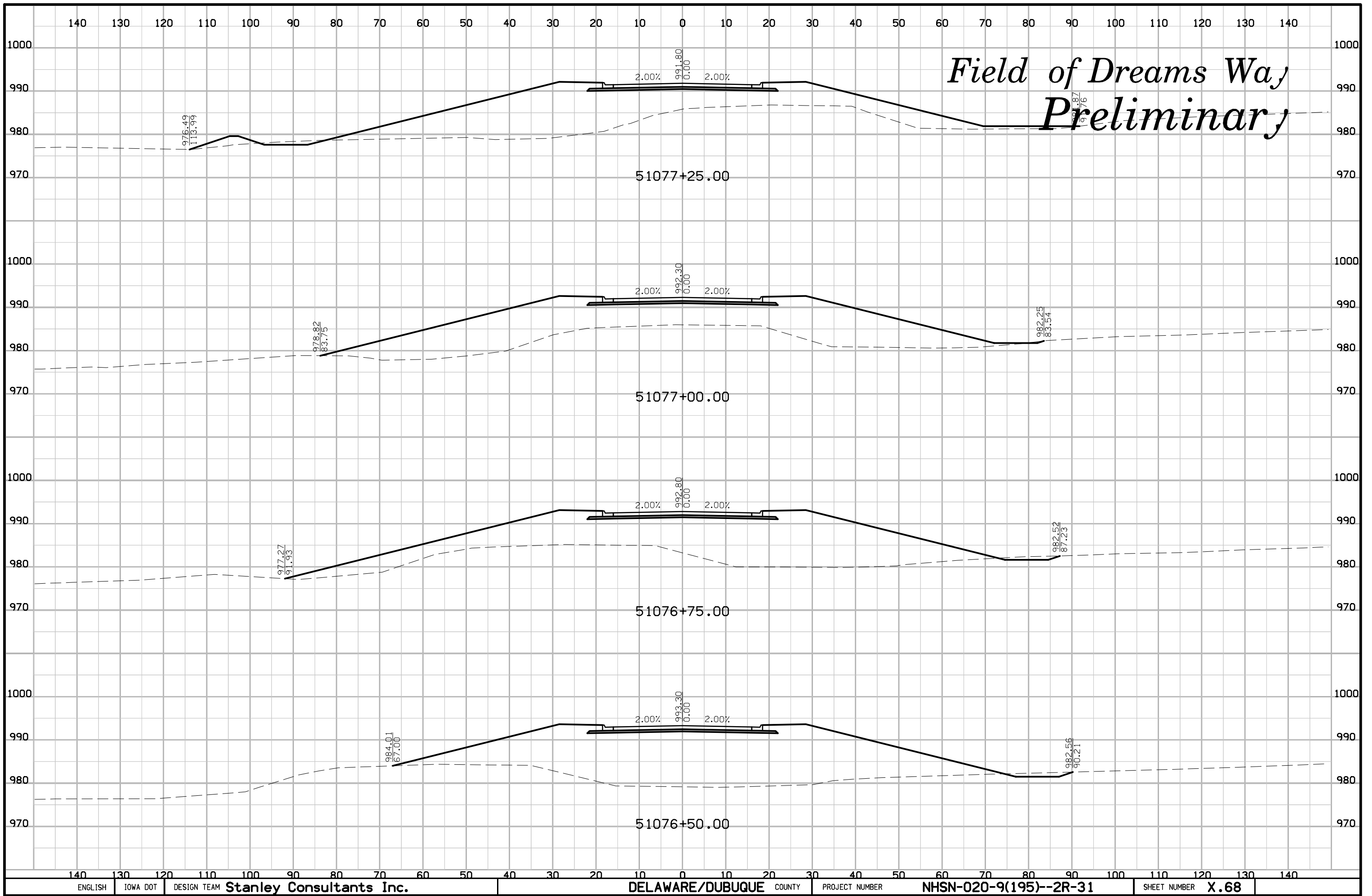


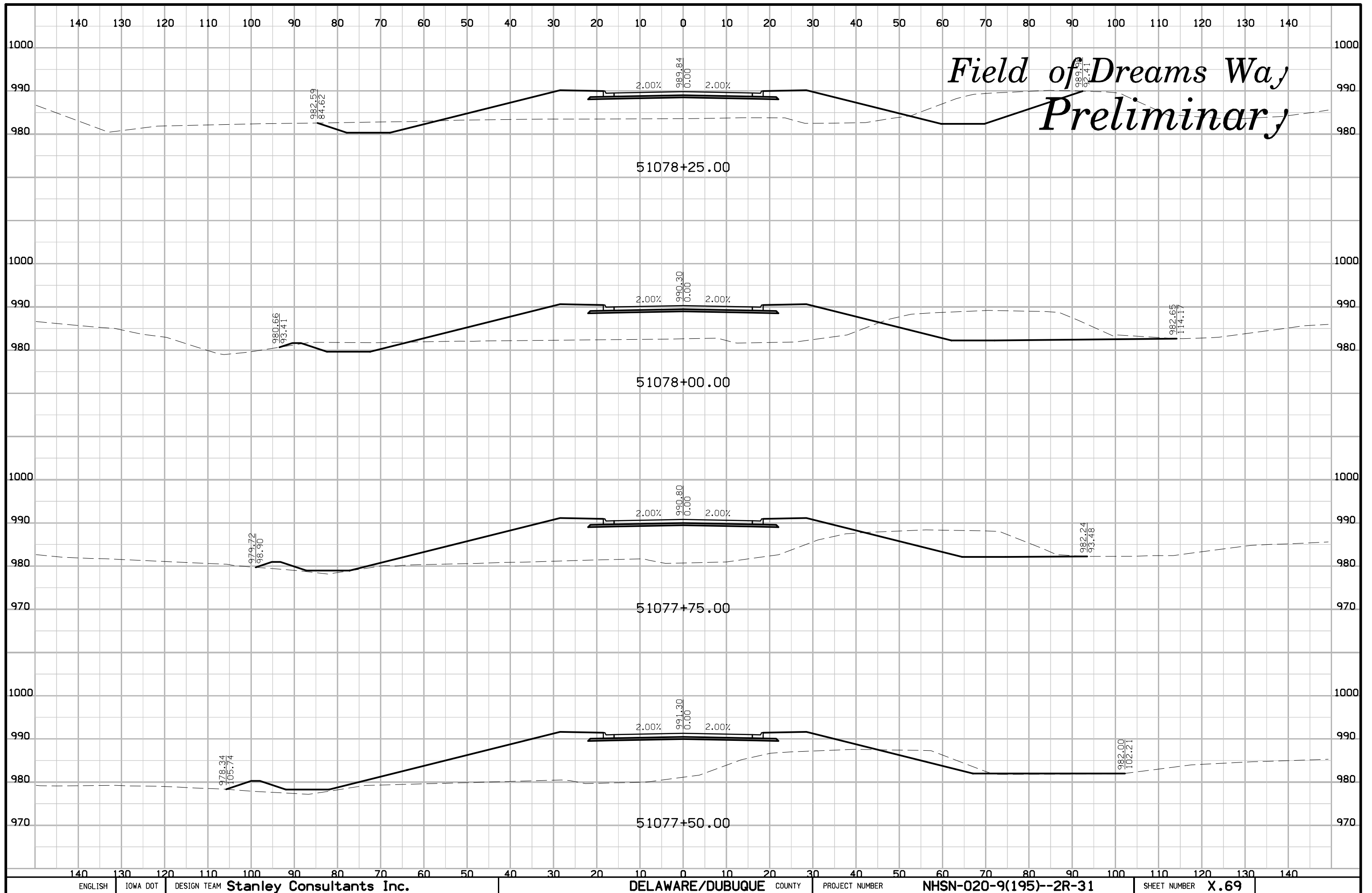
Field of Dreams Way Preliminary

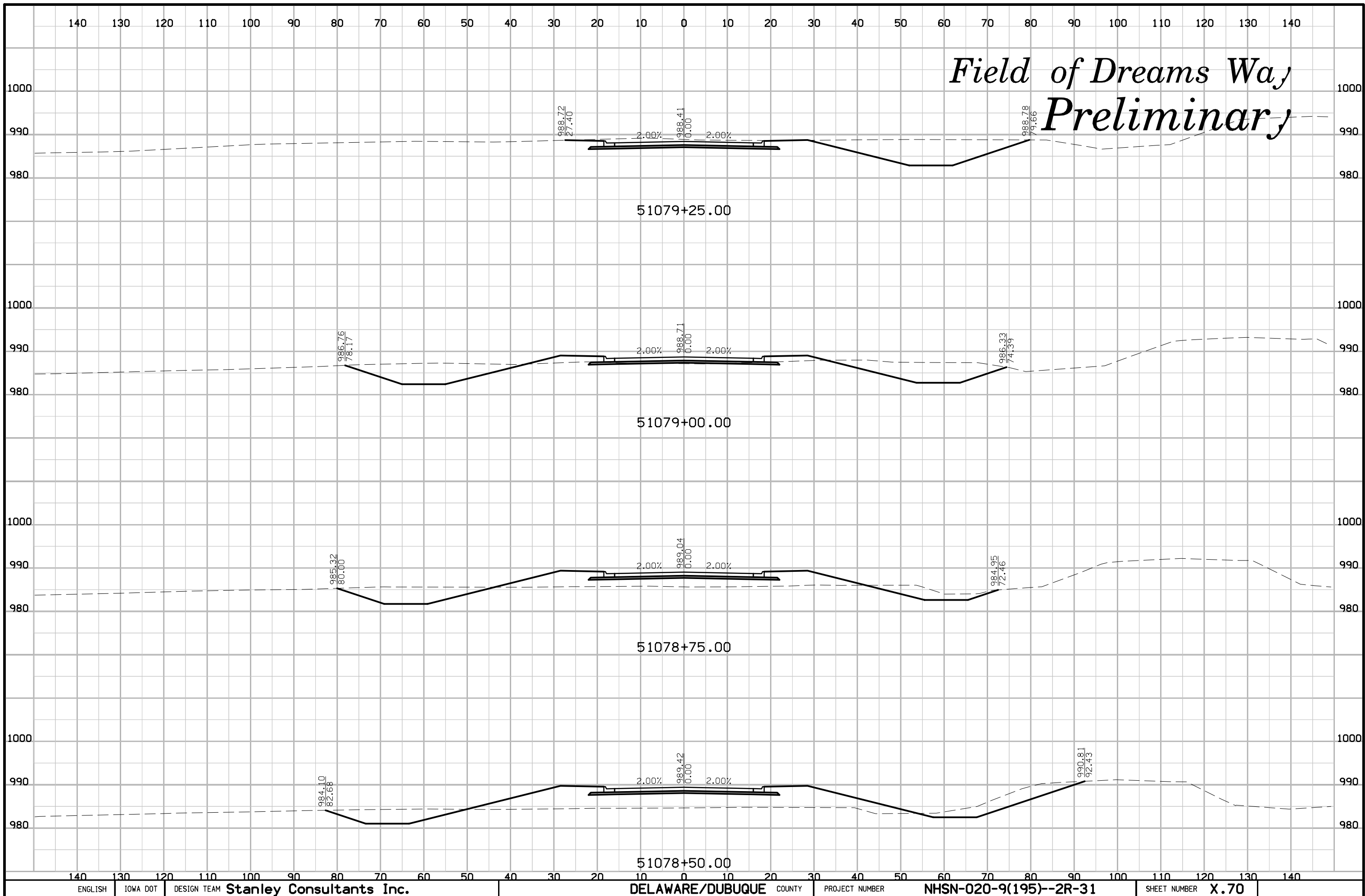


Field of Dreams Way Preliminary

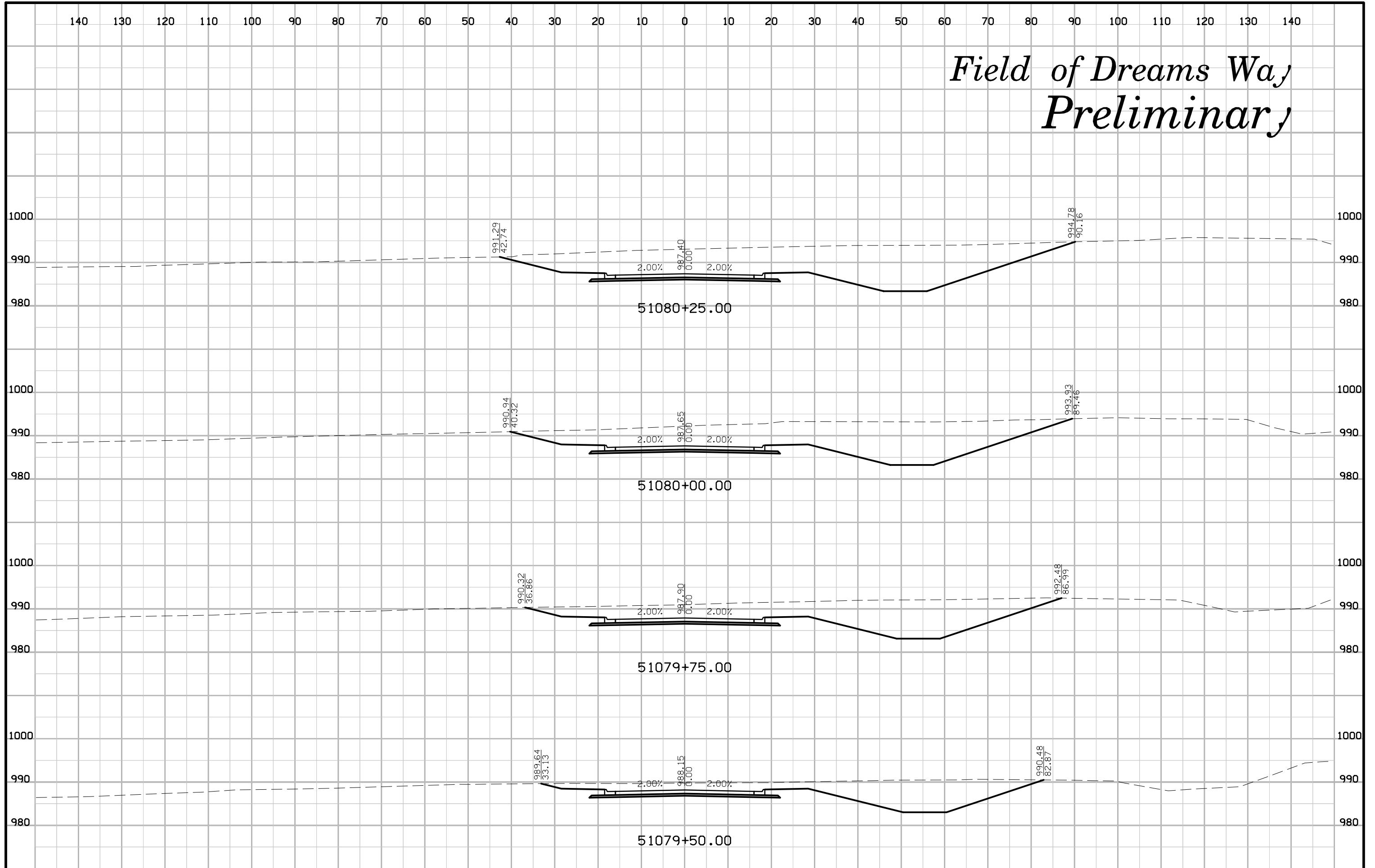


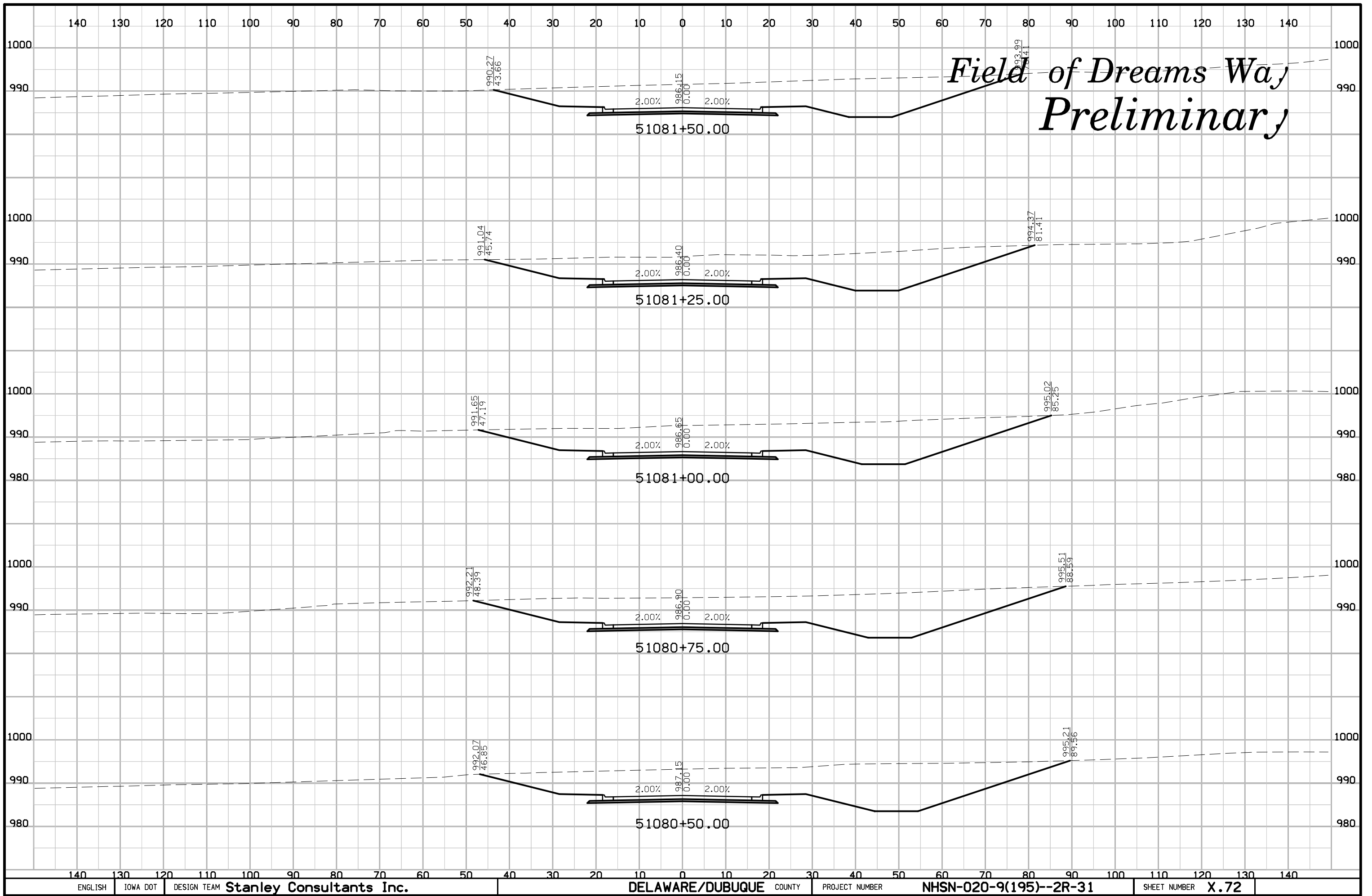


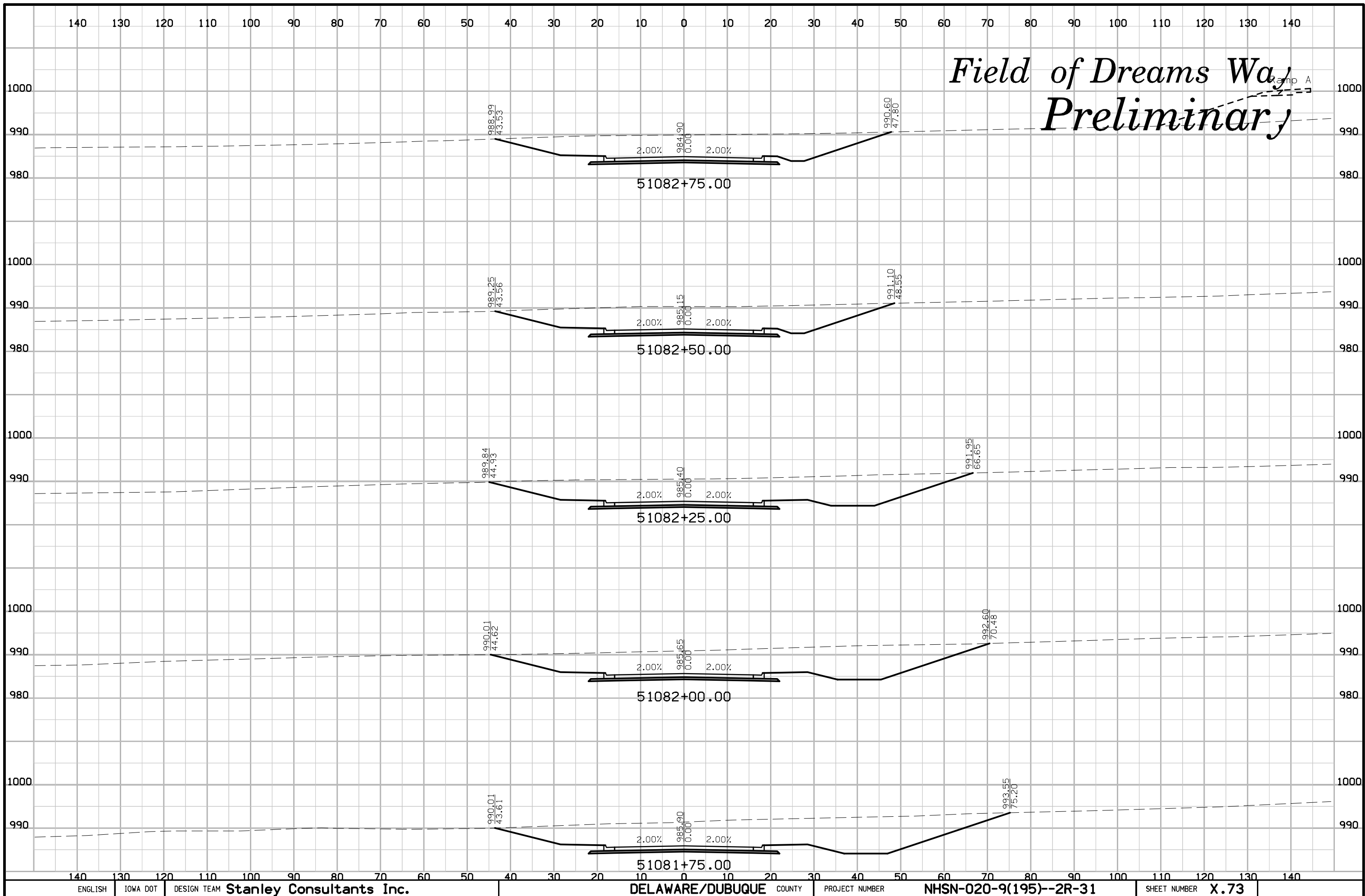


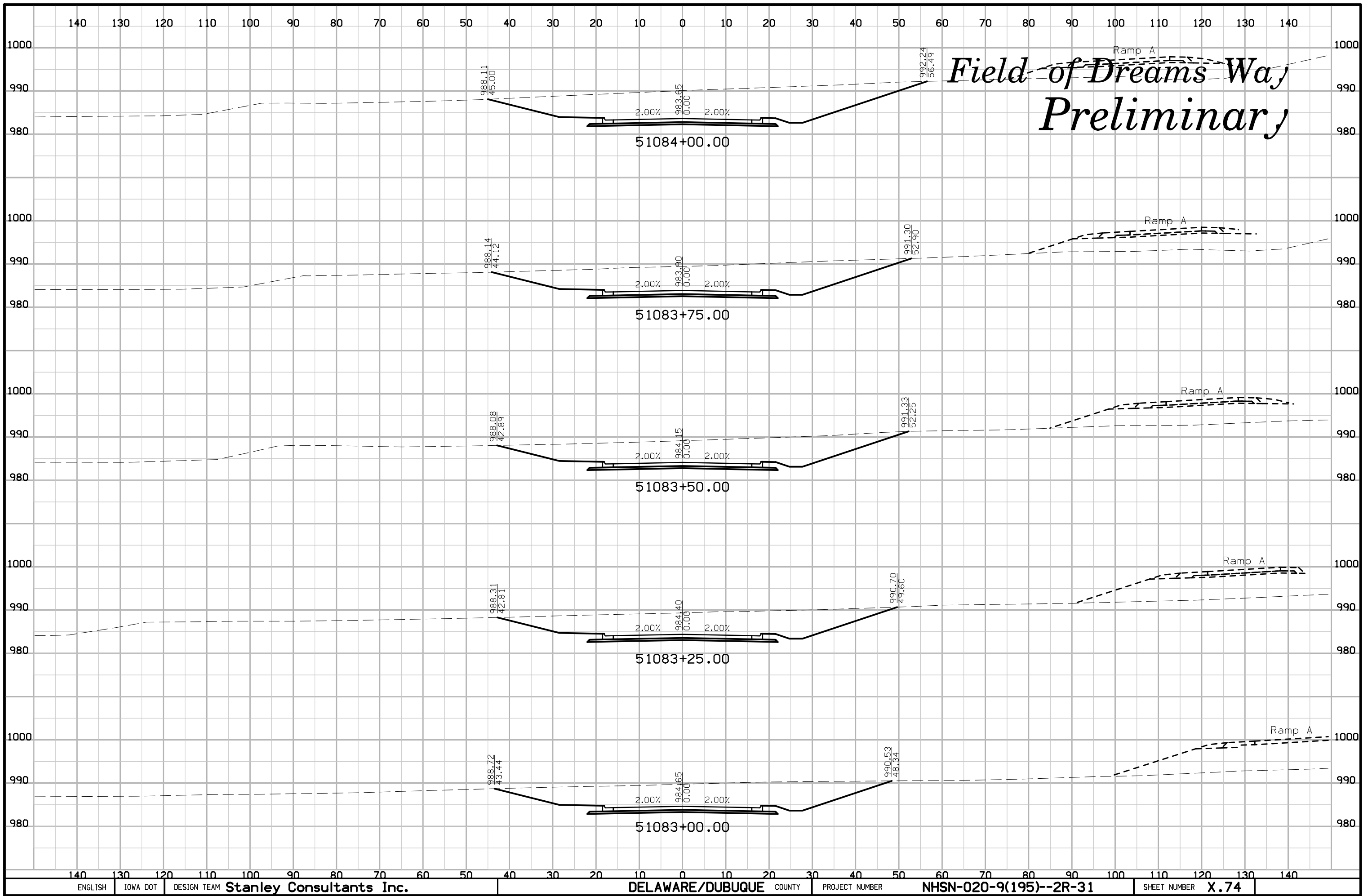


Field of Dreams Way Preliminary

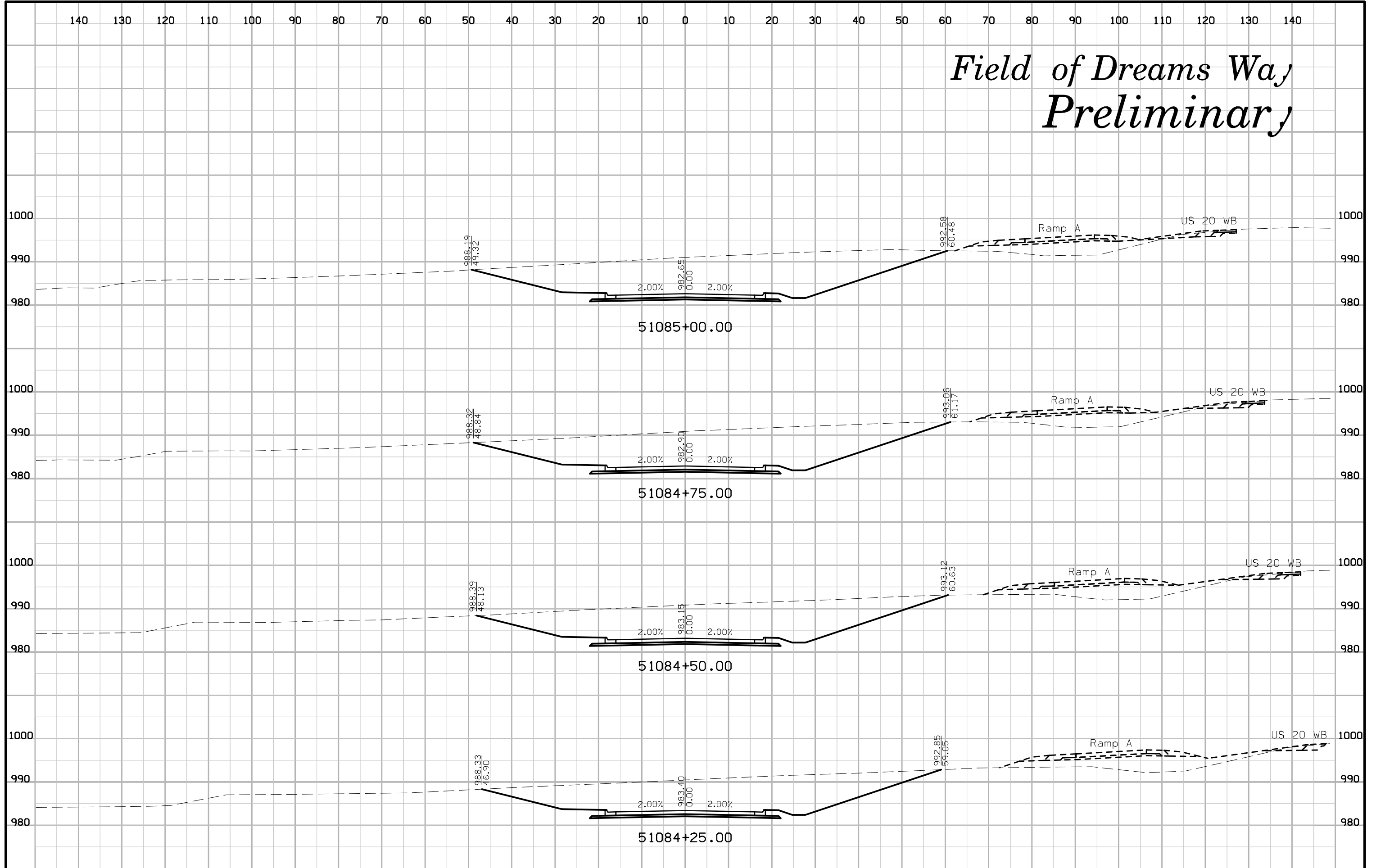


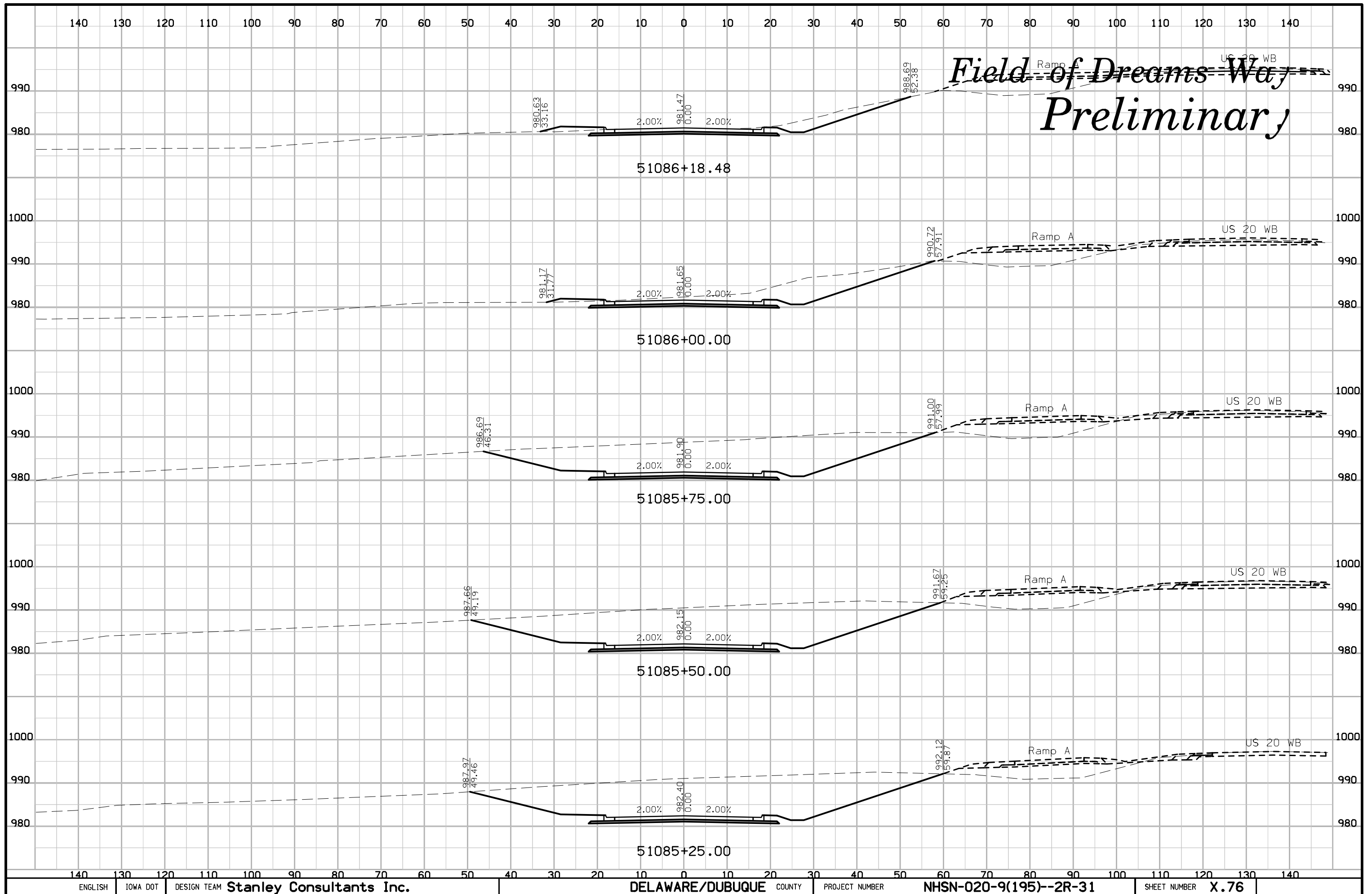




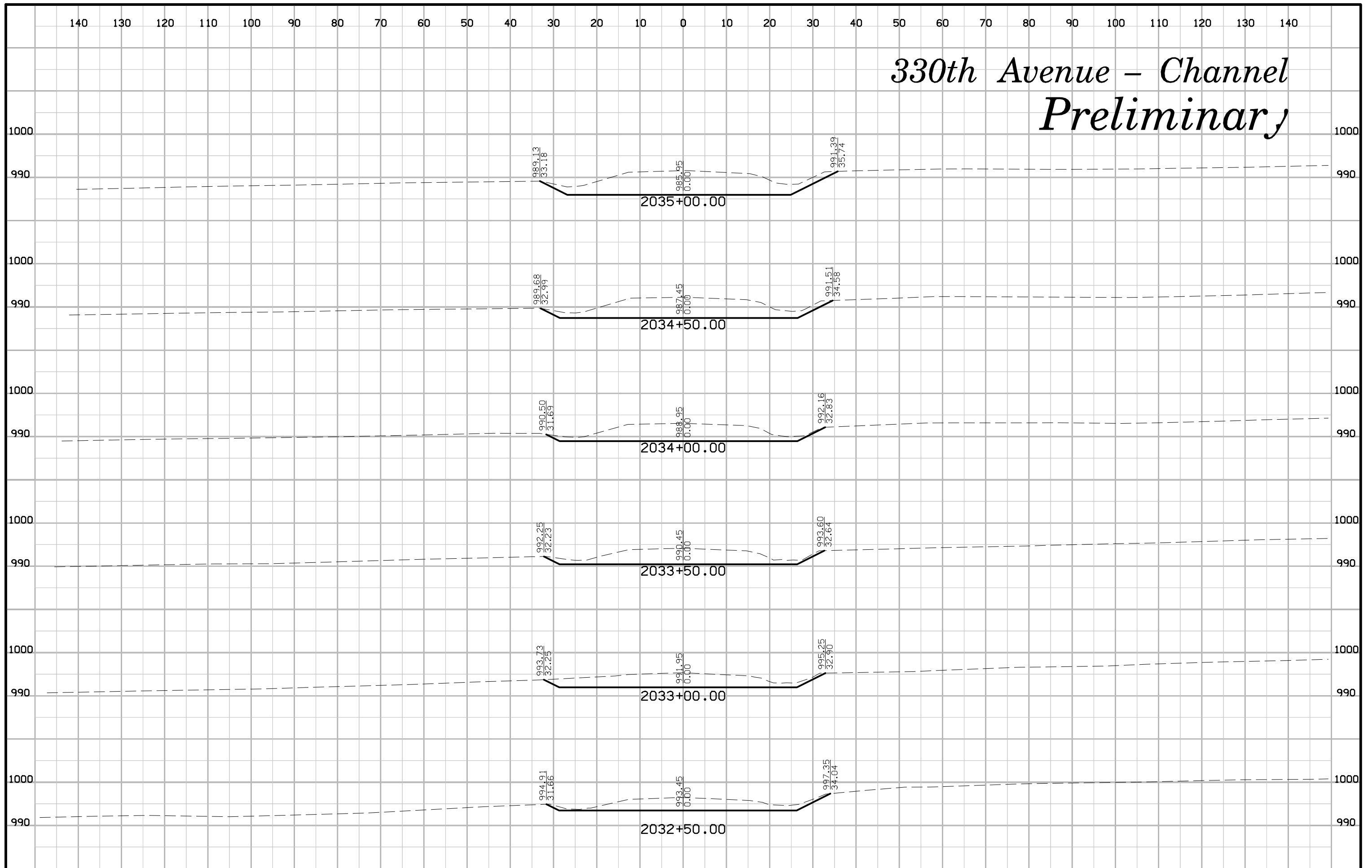


Field of Dreams Way Preliminary

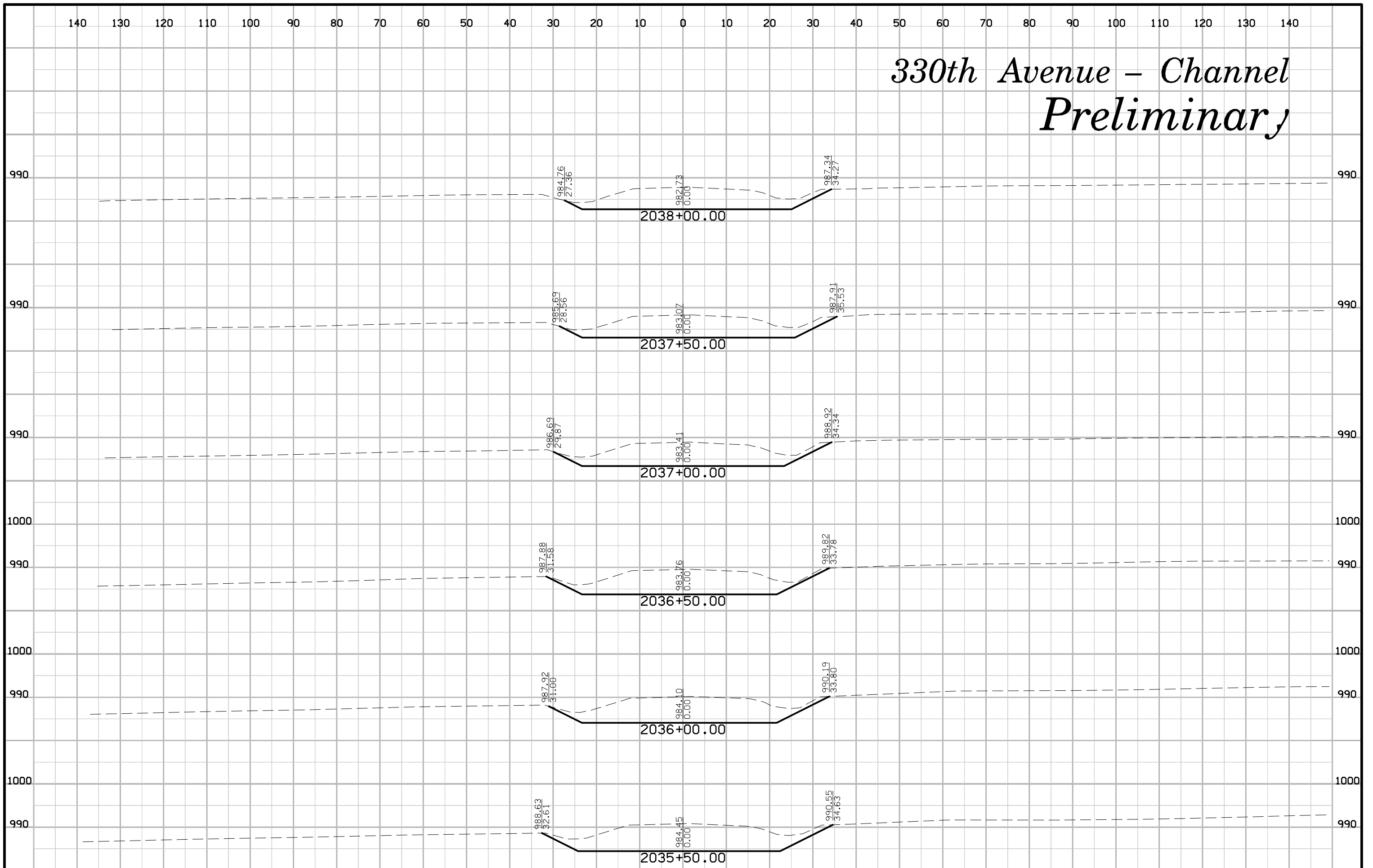




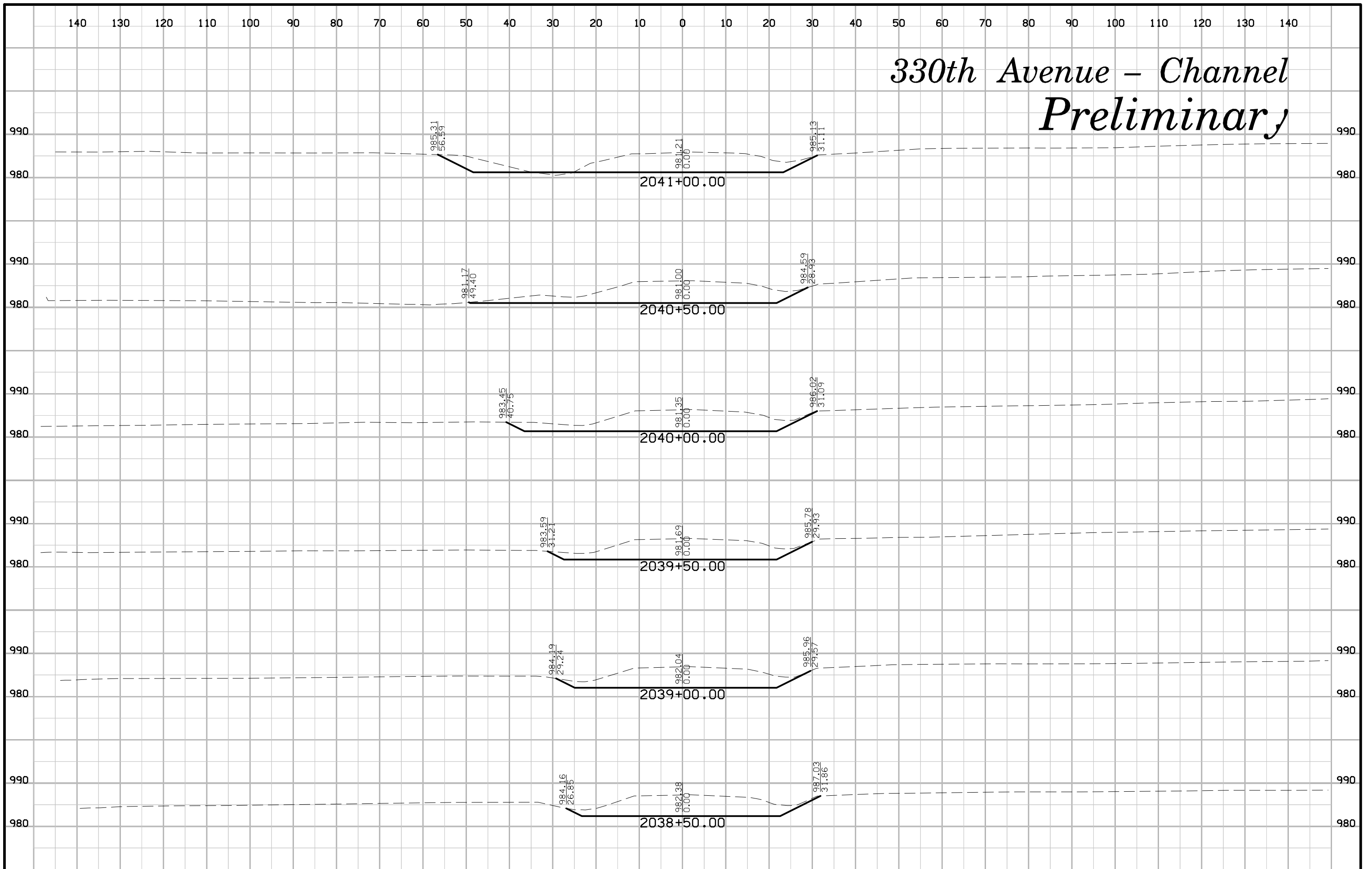
330th Avenue - Channel Preliminary



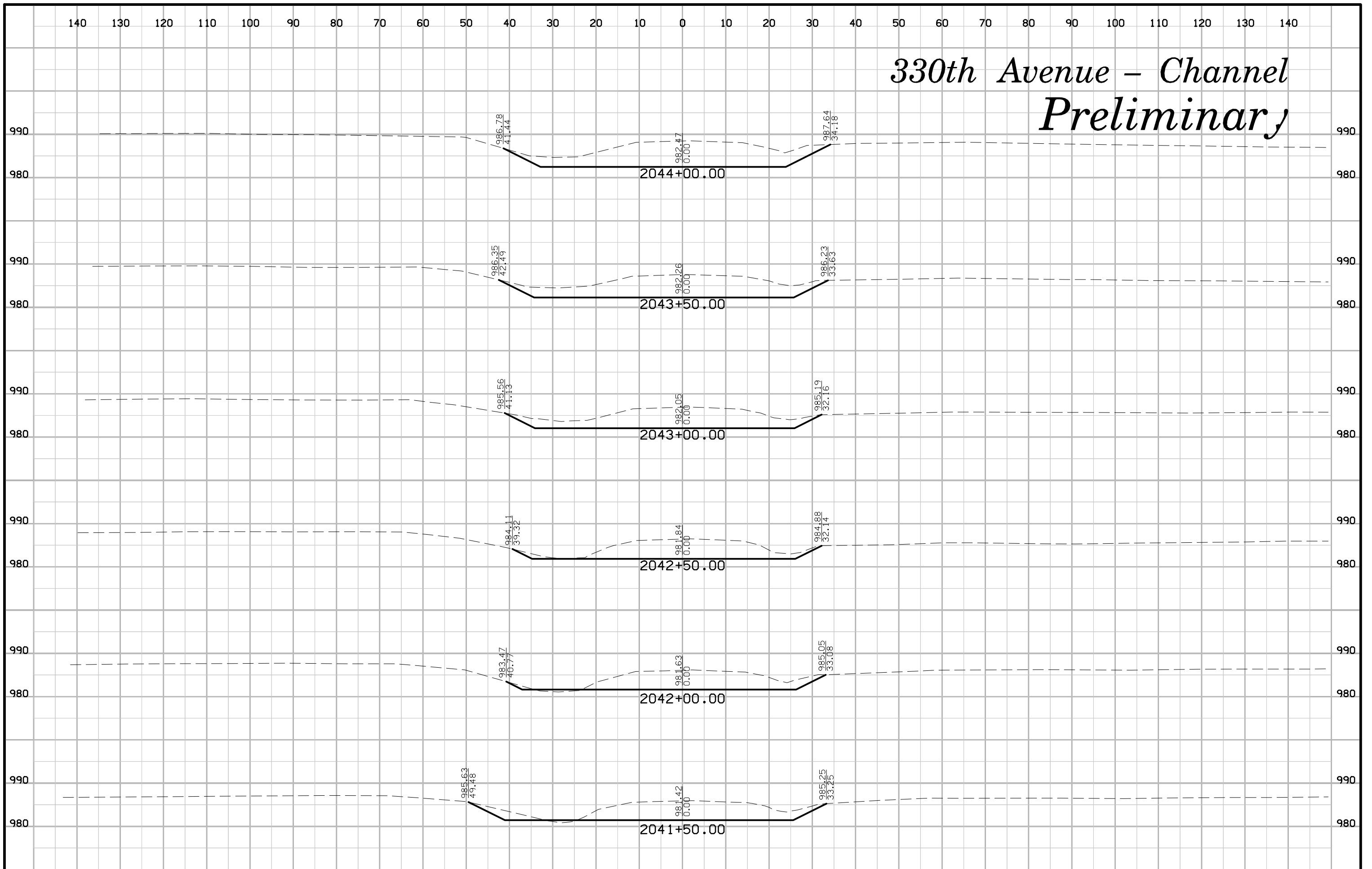
330th Avenue - Channel Preliminary



330th Avenue - Channel Preliminary

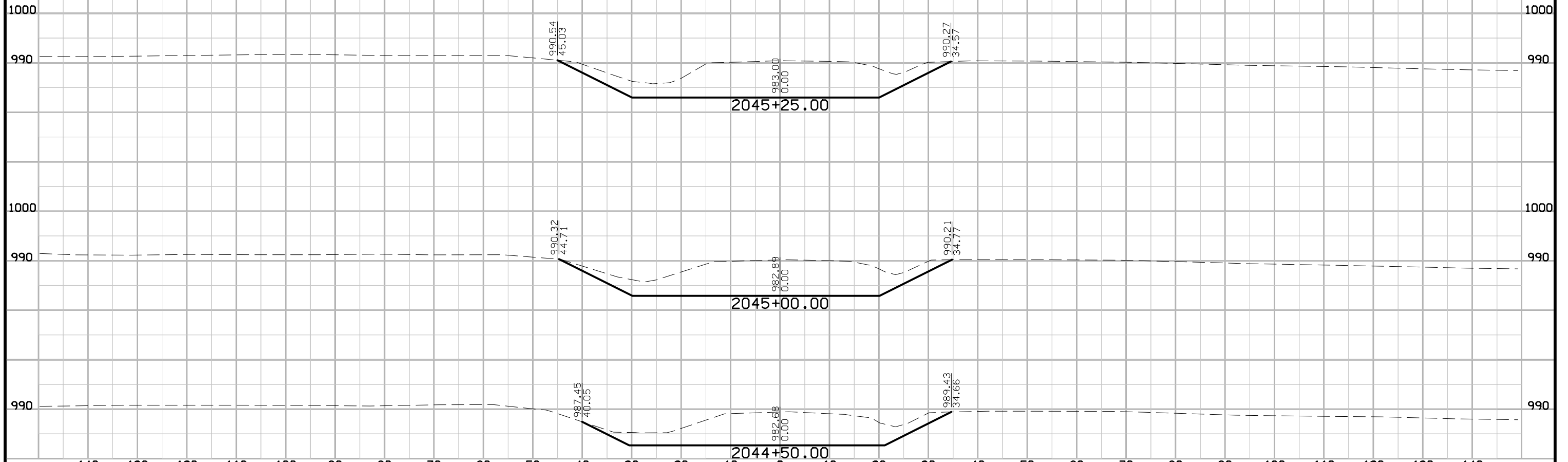


330th Avenue - Channel Preliminary

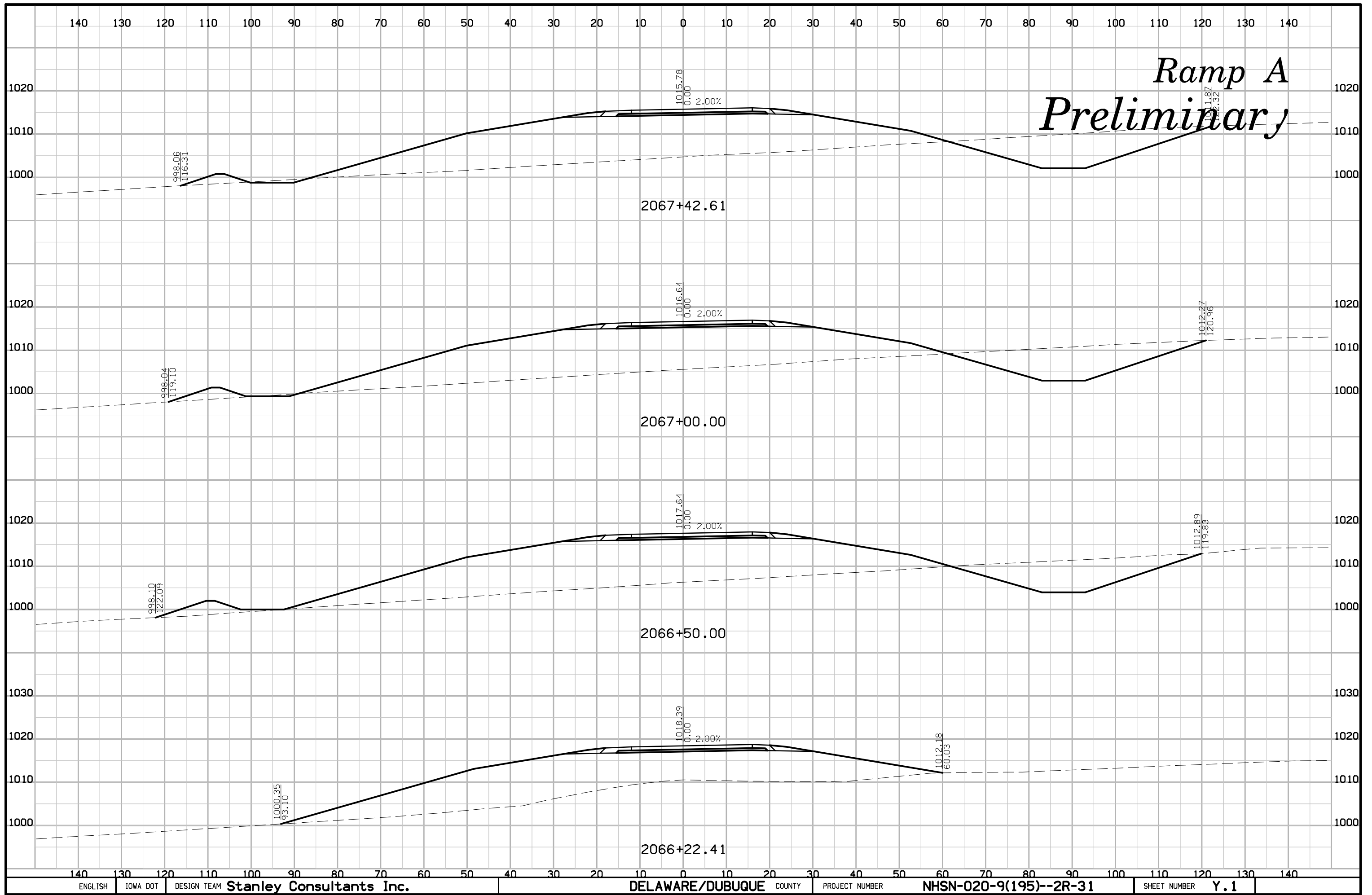


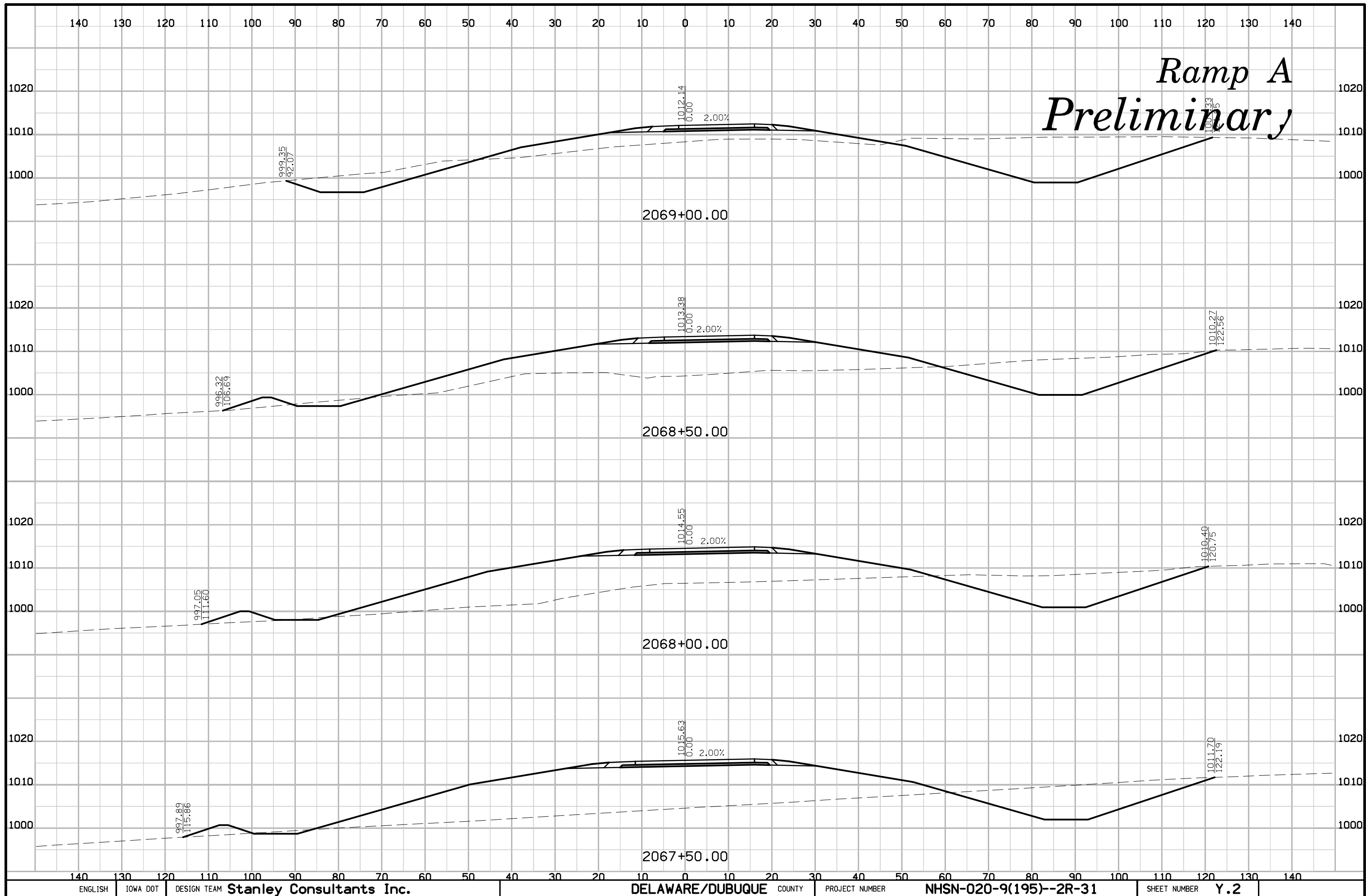
140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

330th Avenue - Channel Preliminary

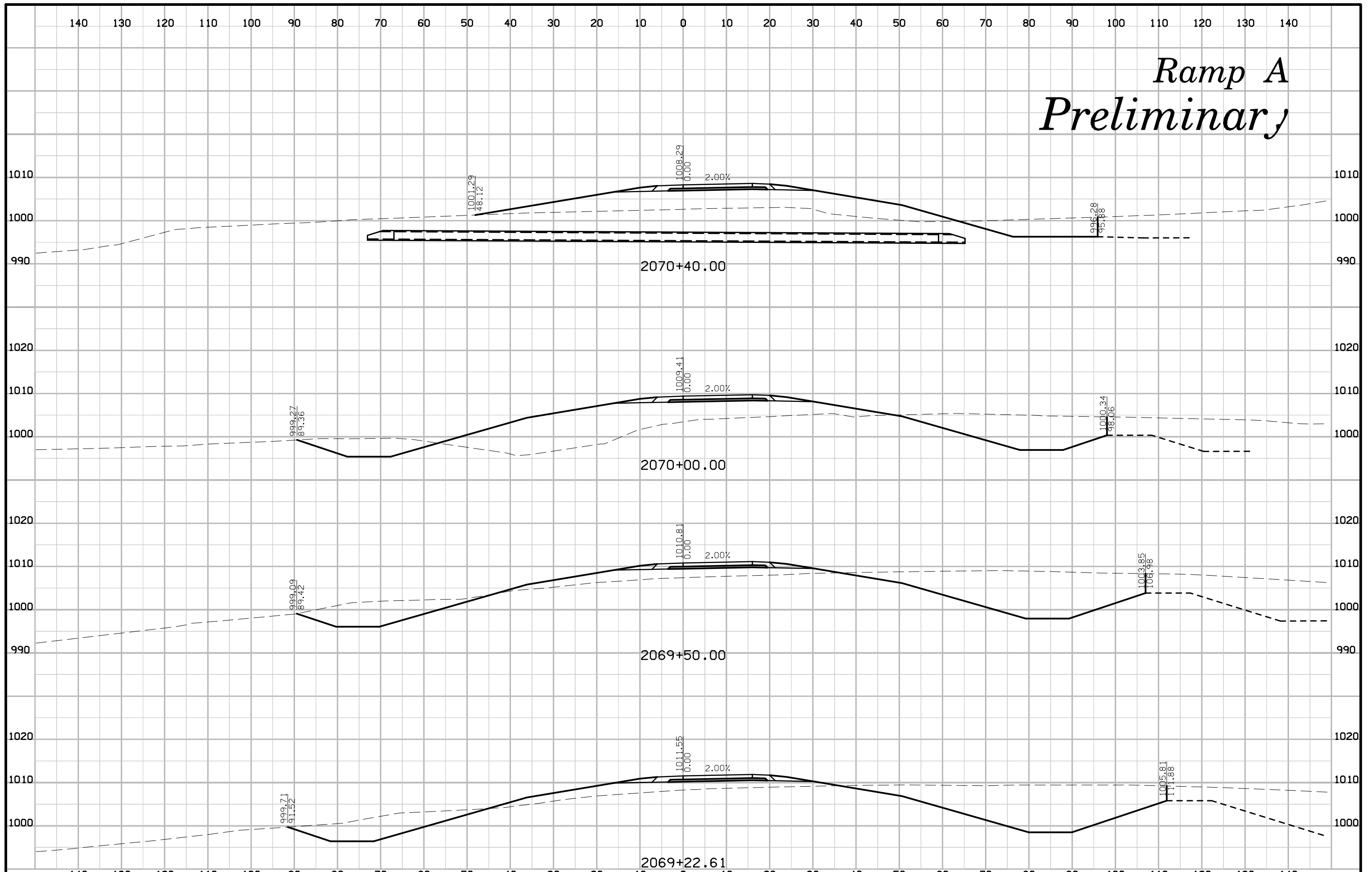


140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

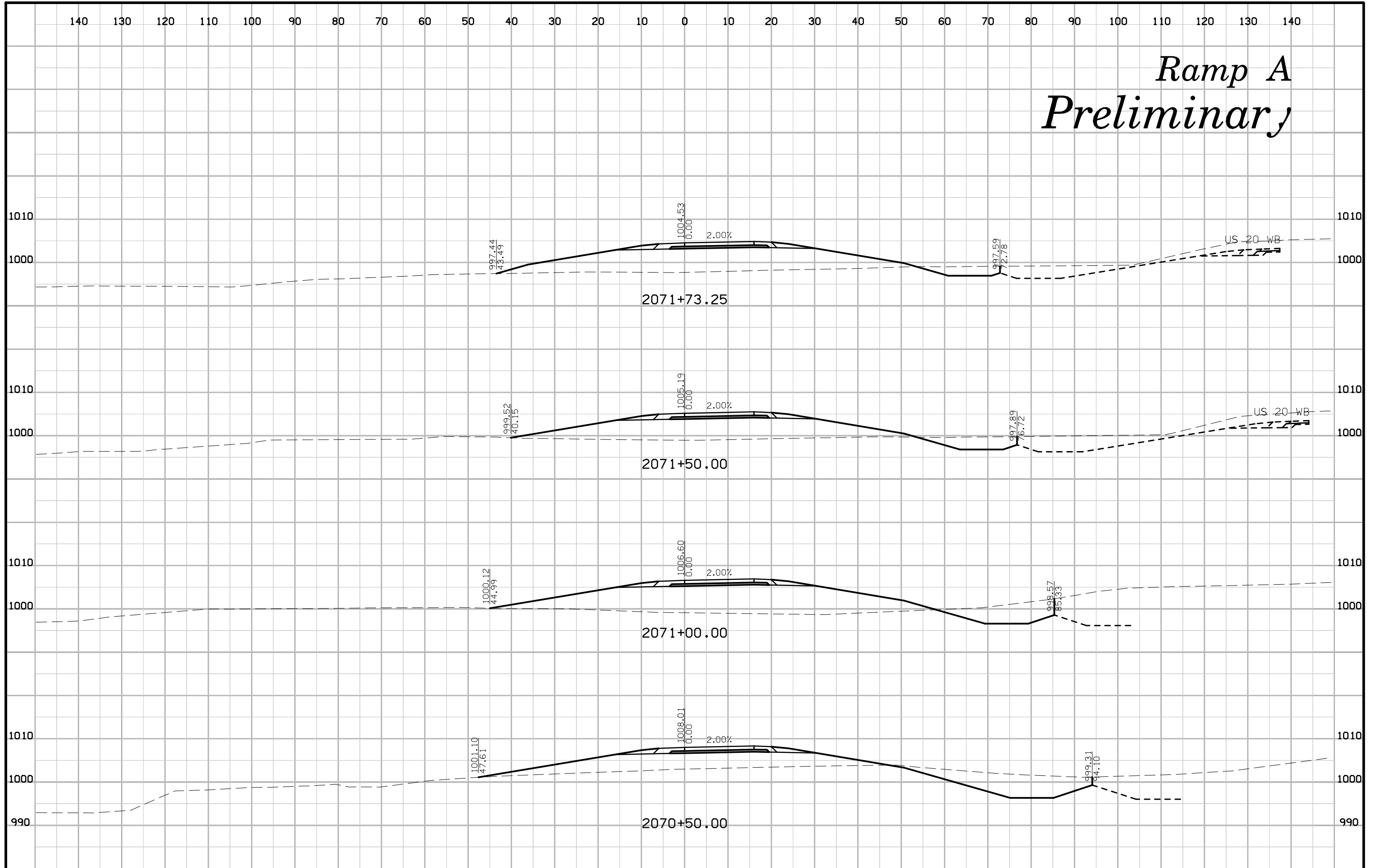




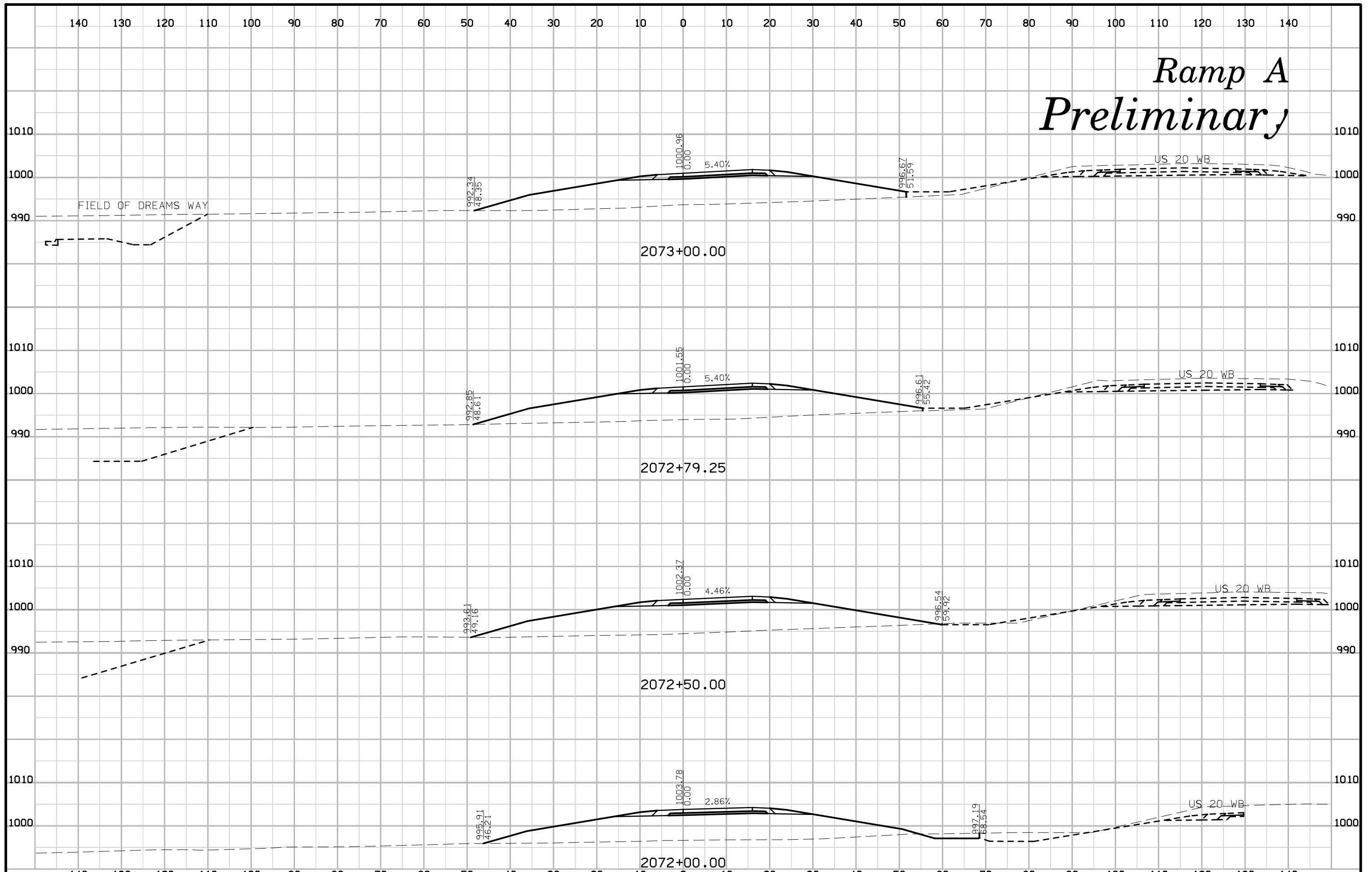
Ramp A Preliminary



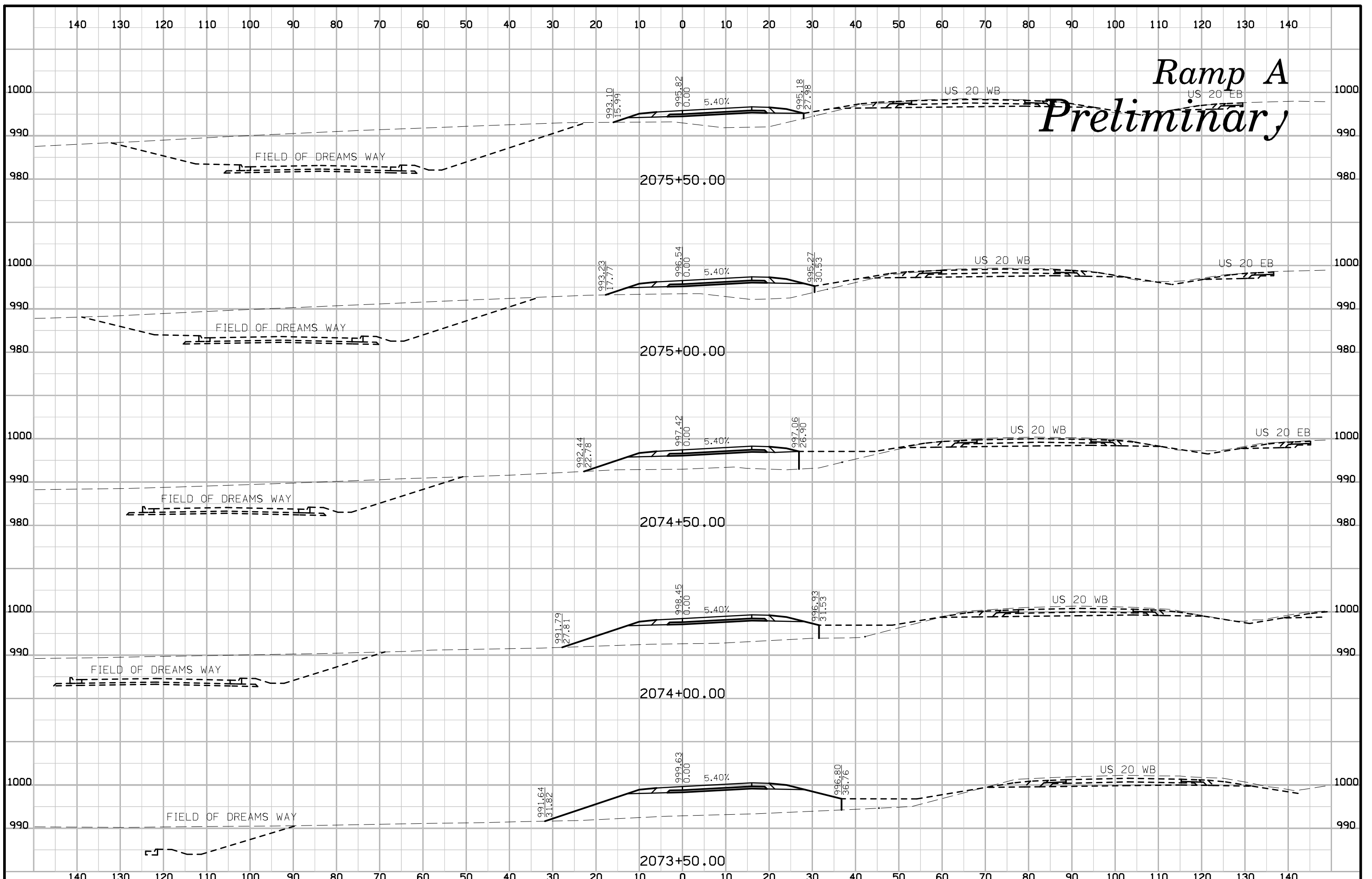
Ramp A Preliminary

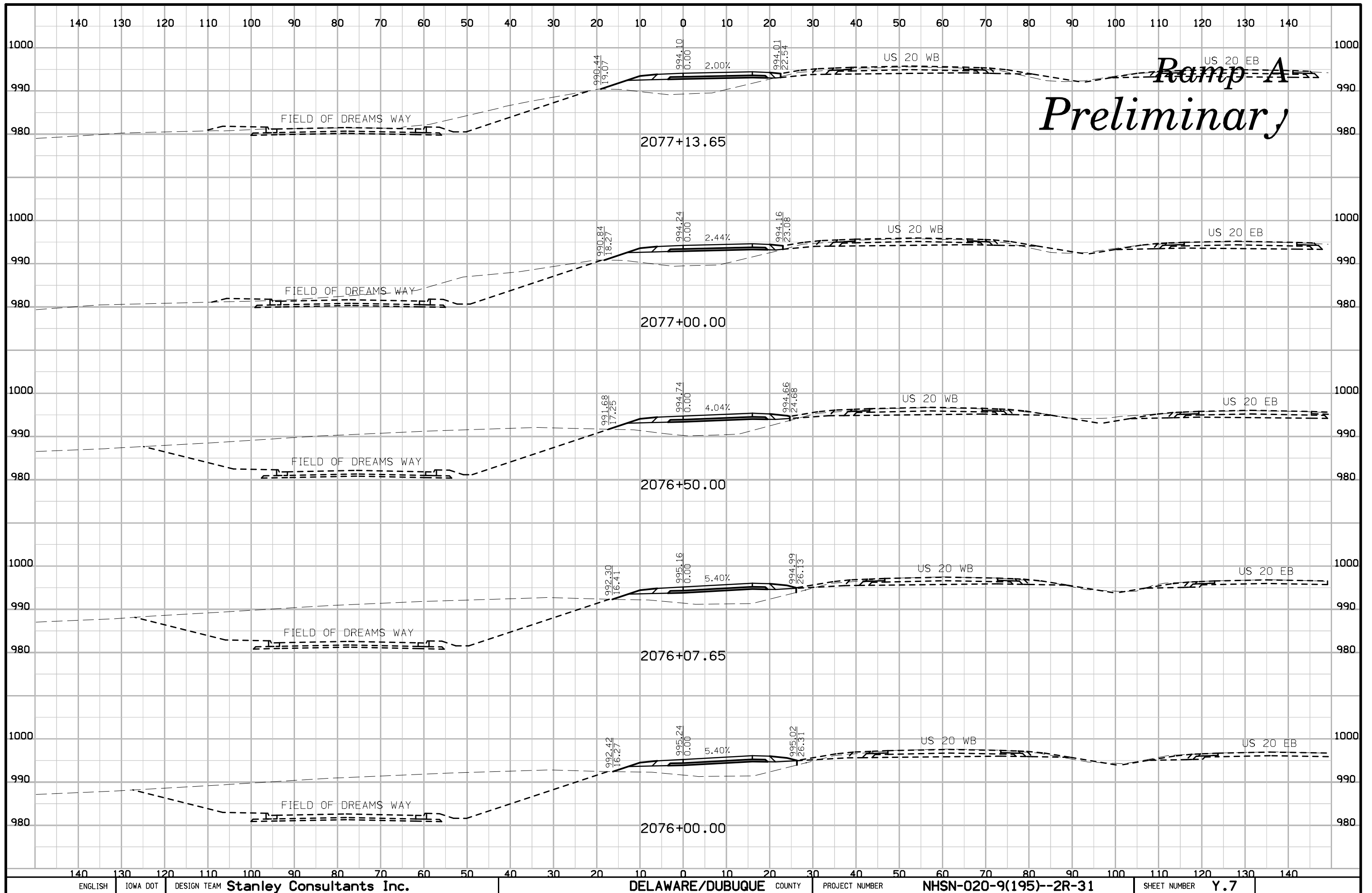


Ramp A Preliminary

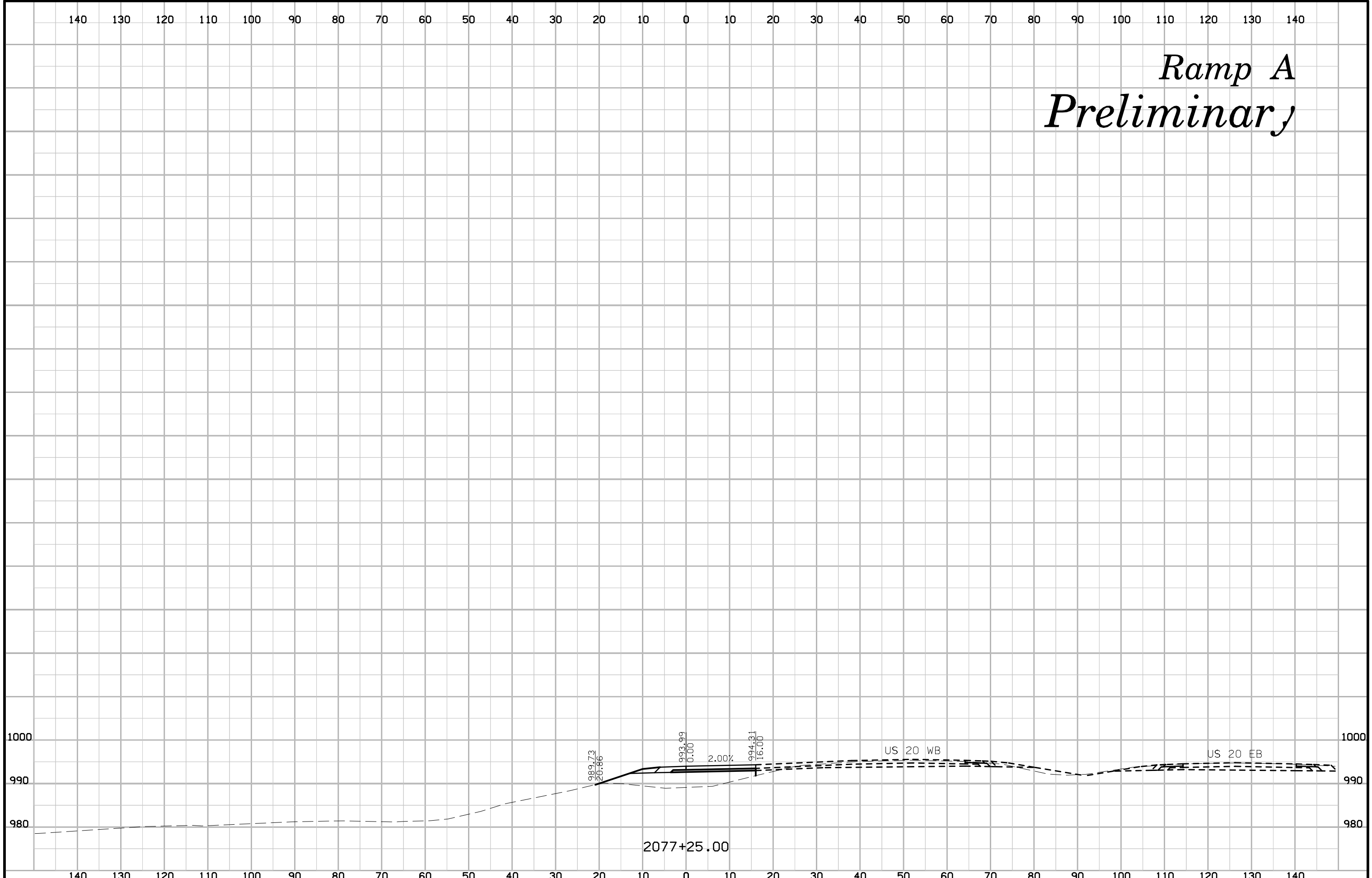


Ramp A Preliminary

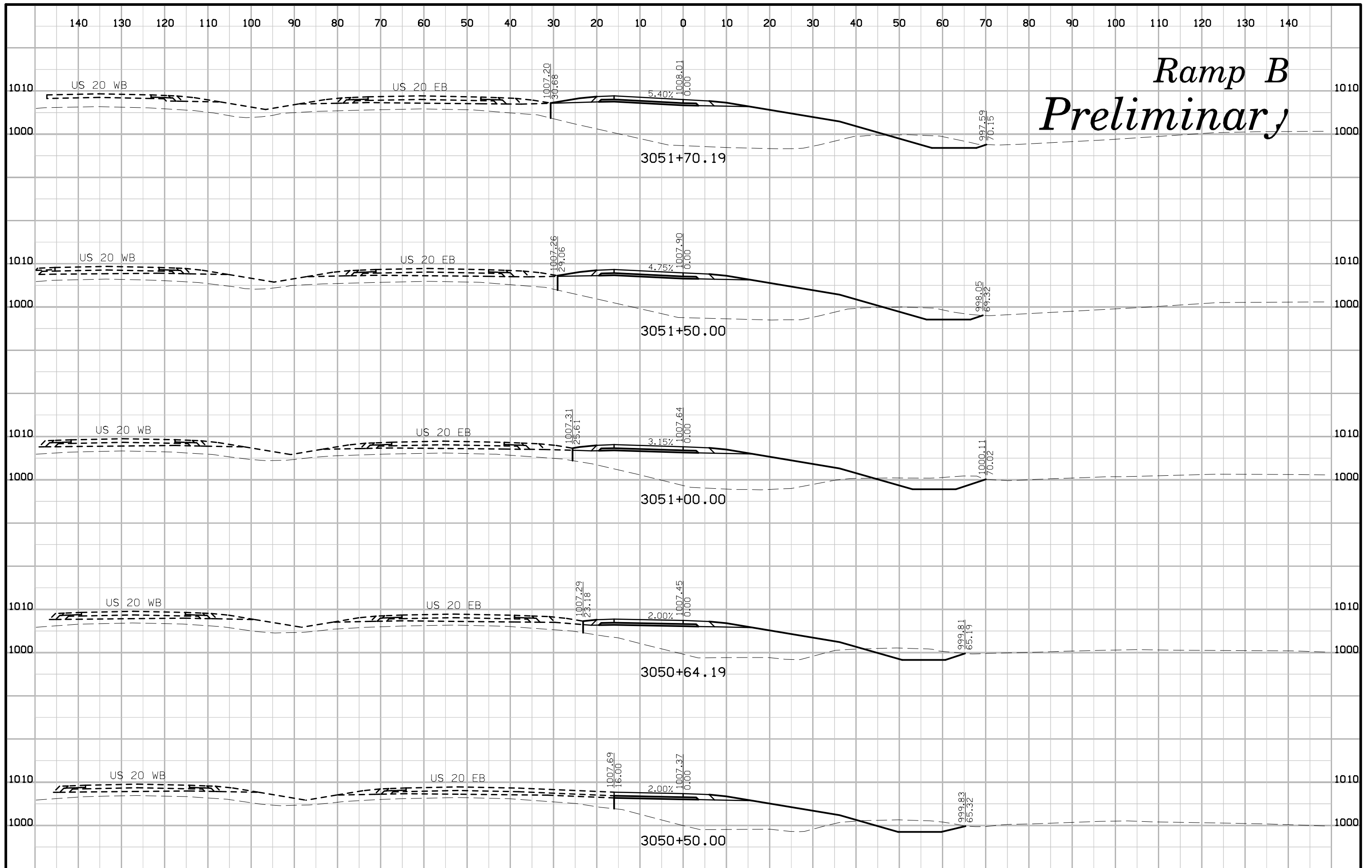




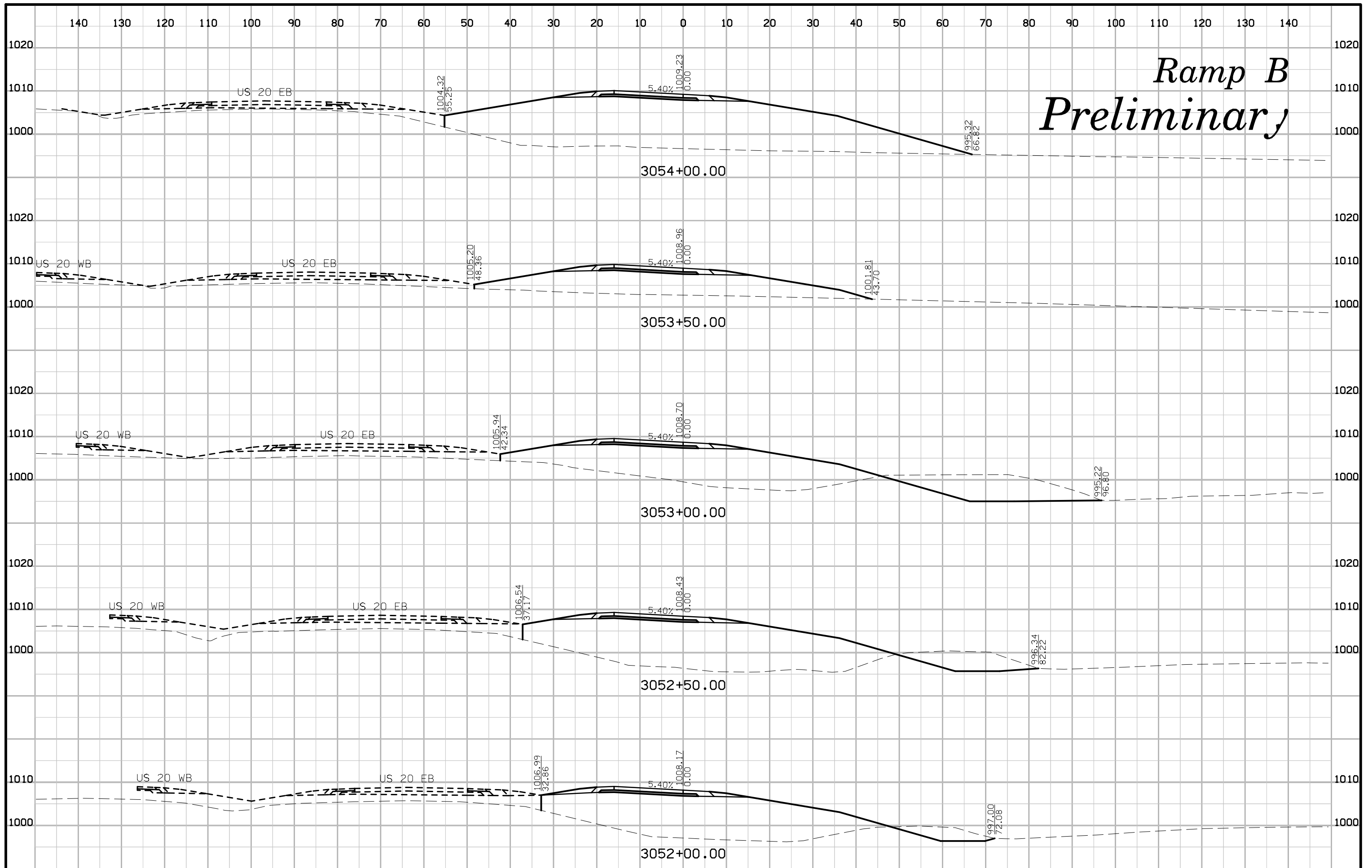
Ramp A Preliminary



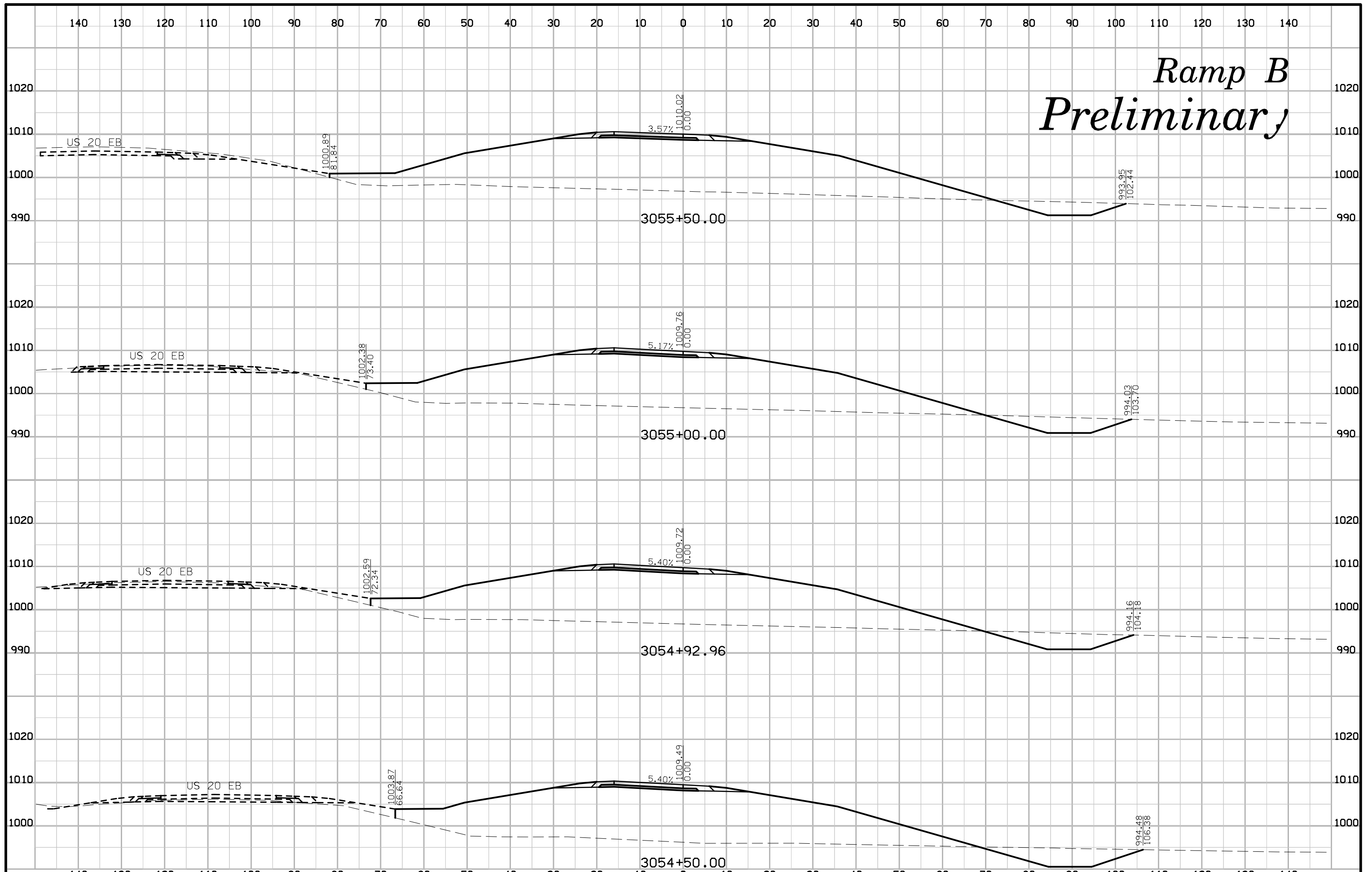
Ramp B Preliminary

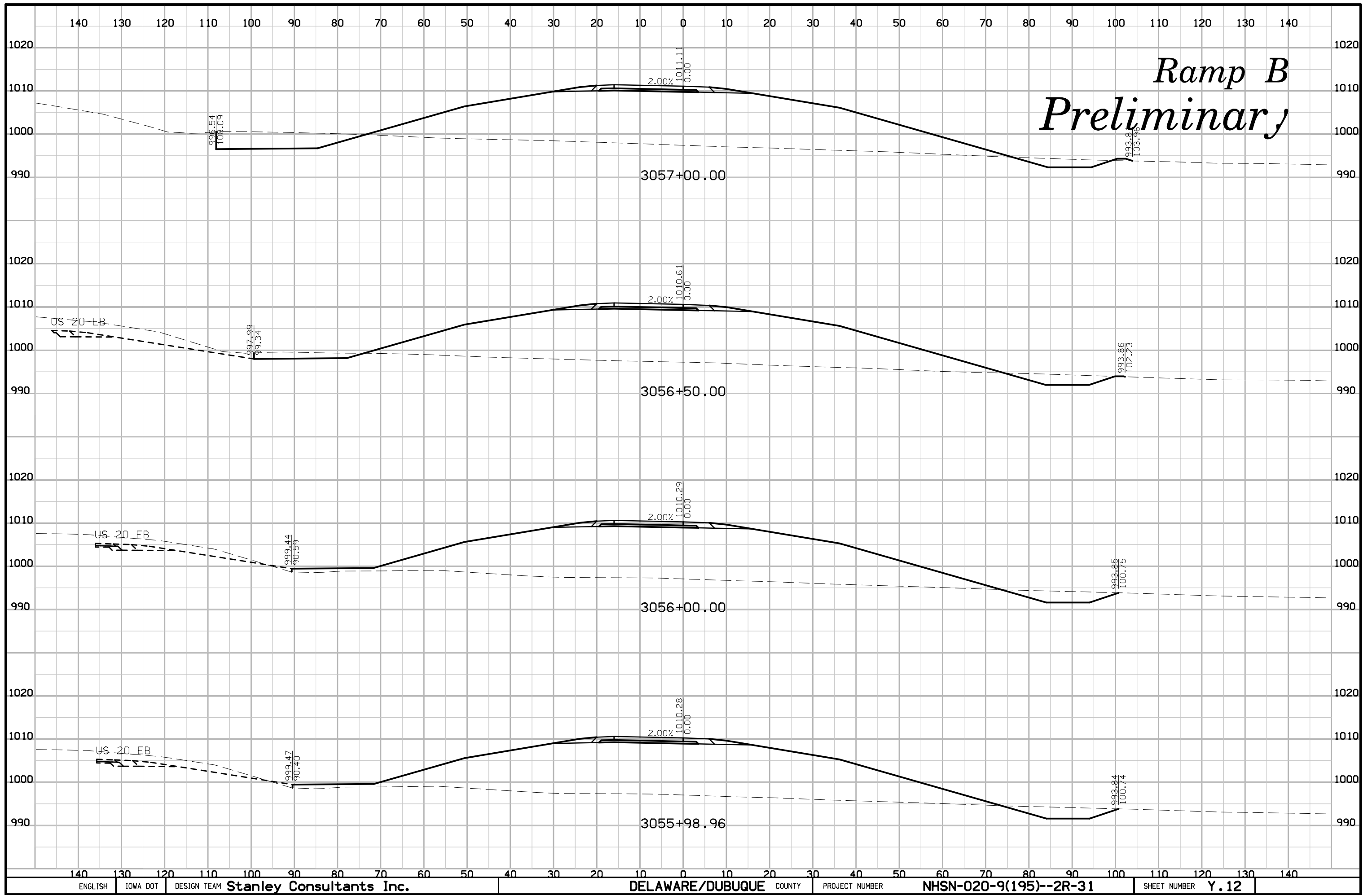


Ramp B Preliminary

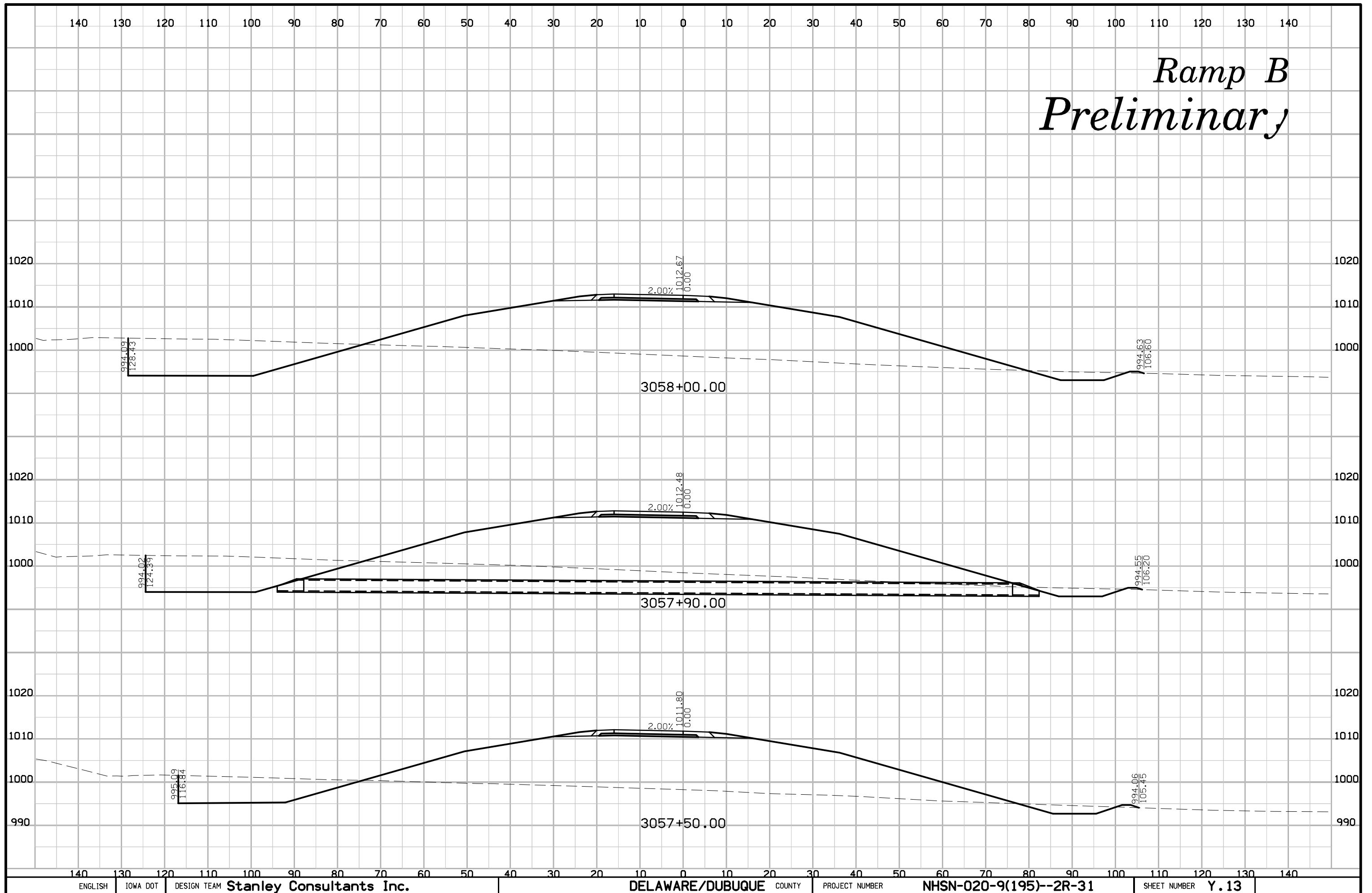


Ramp B Preliminary

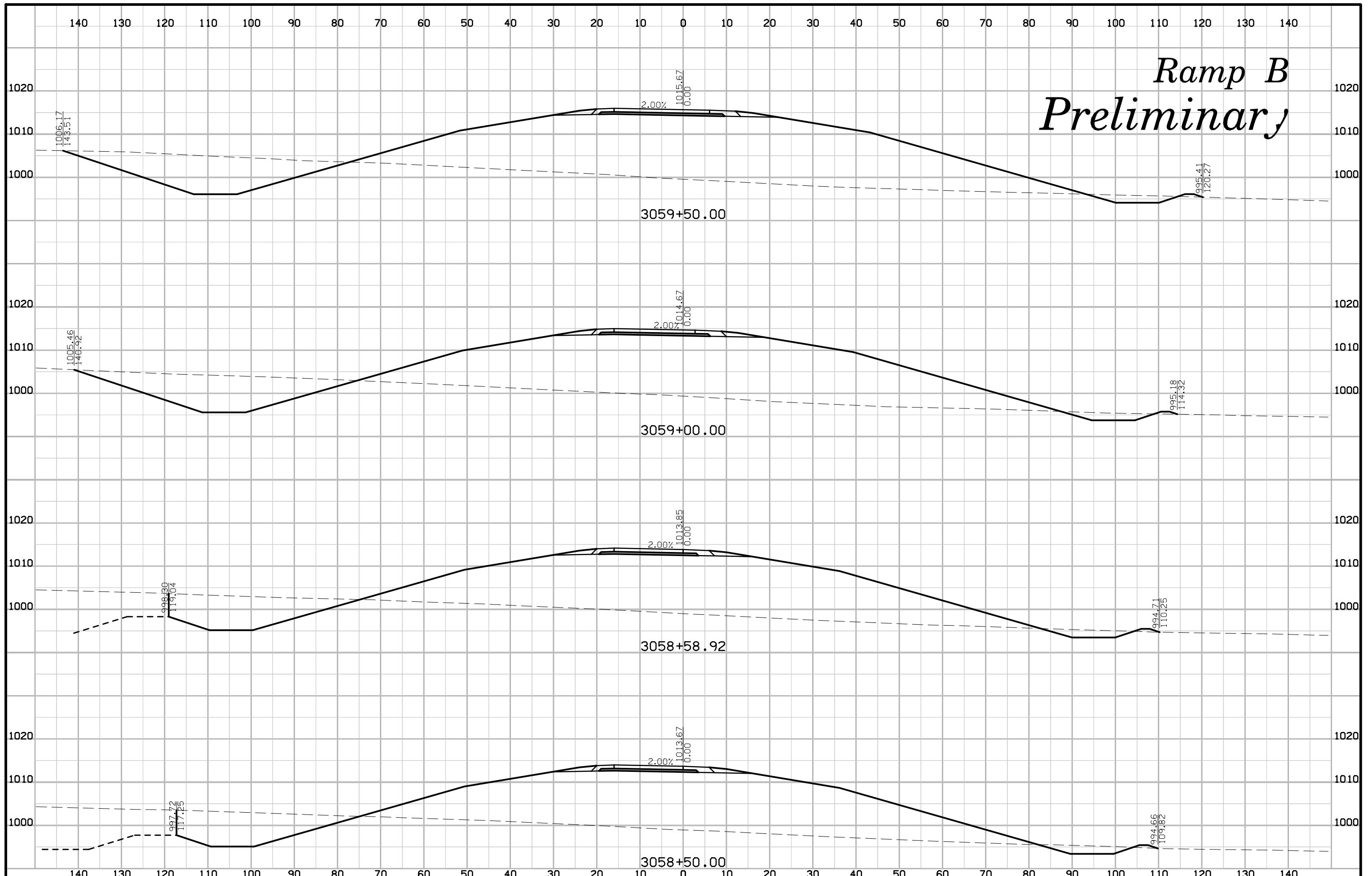


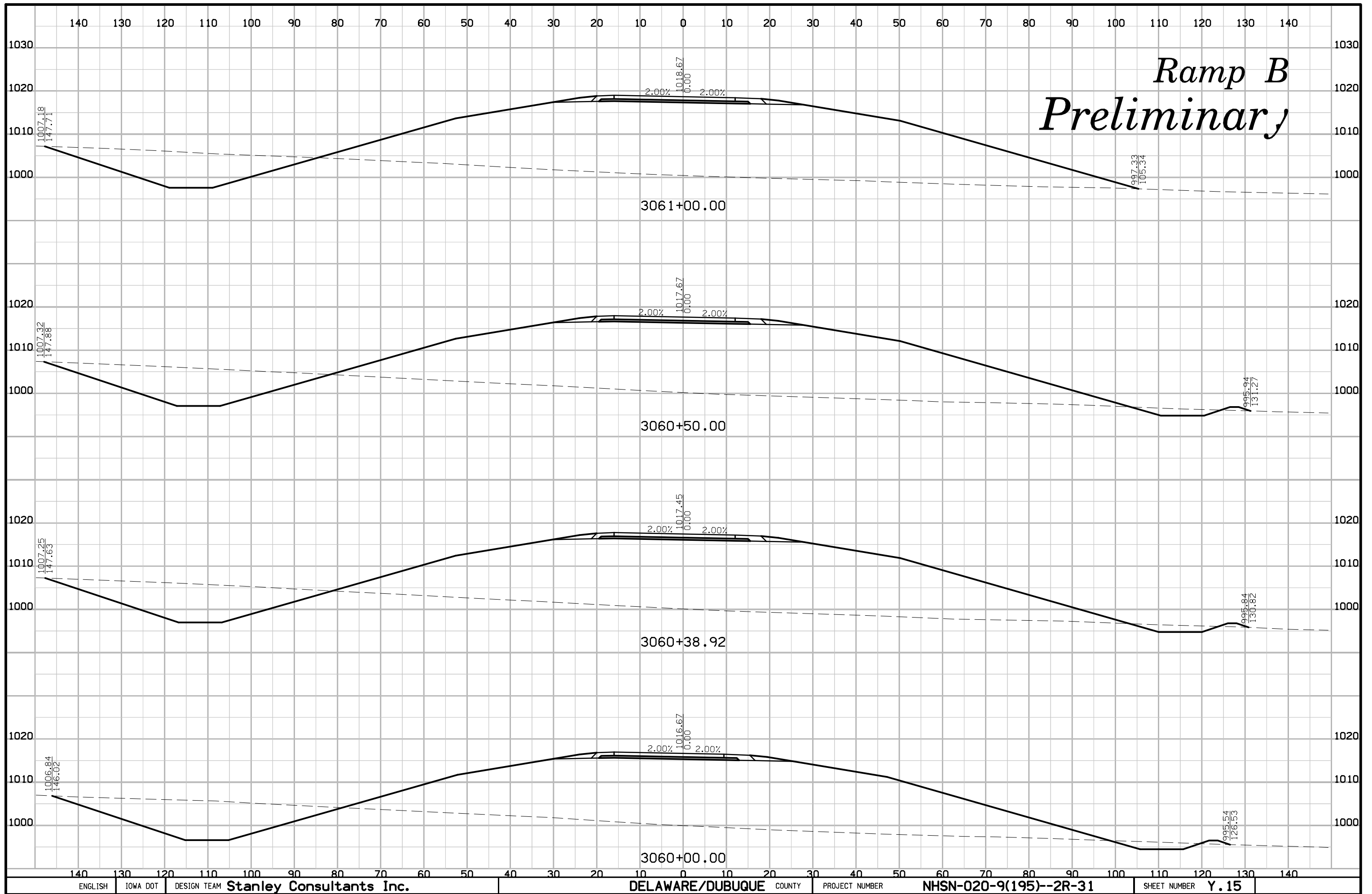


Ramp B Preliminary

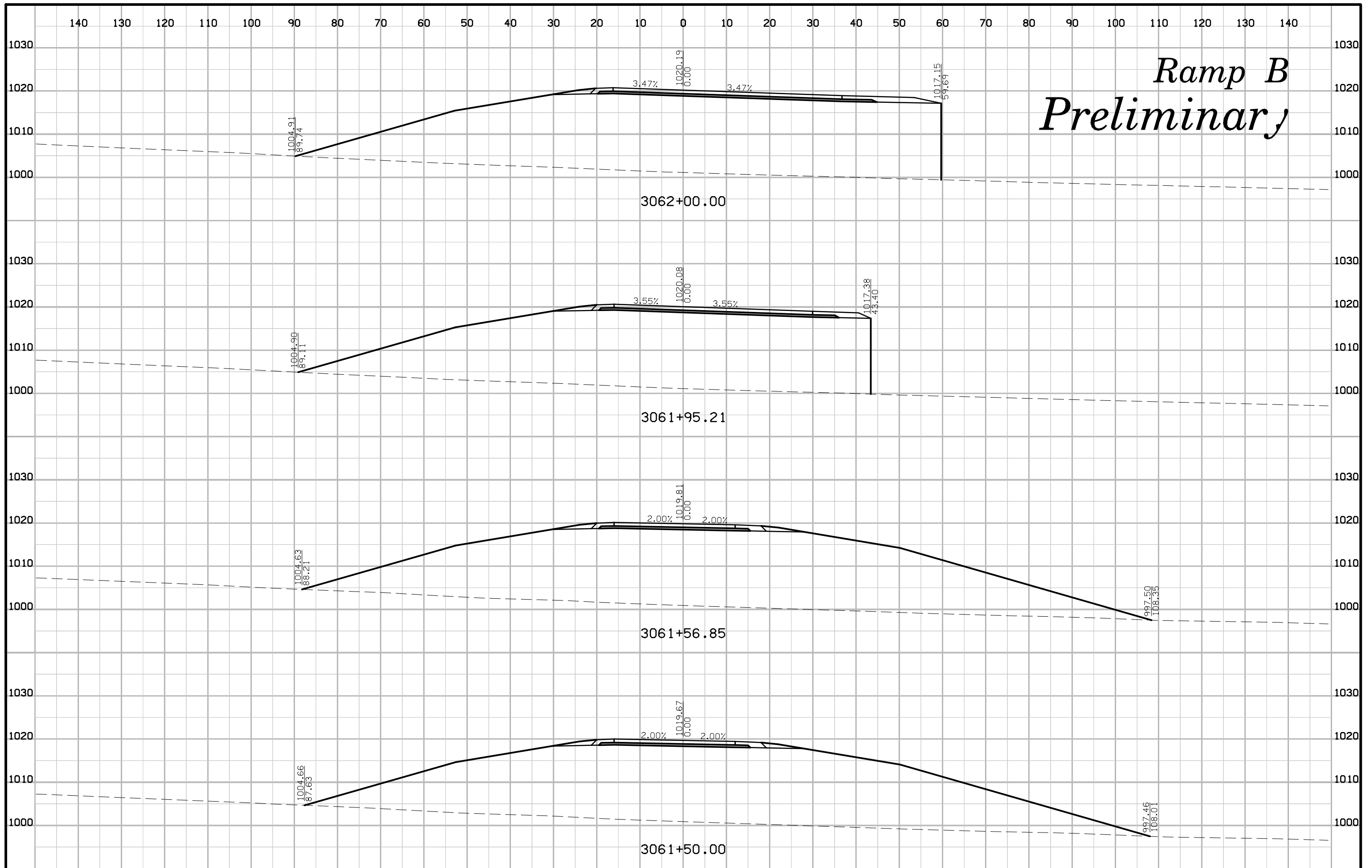


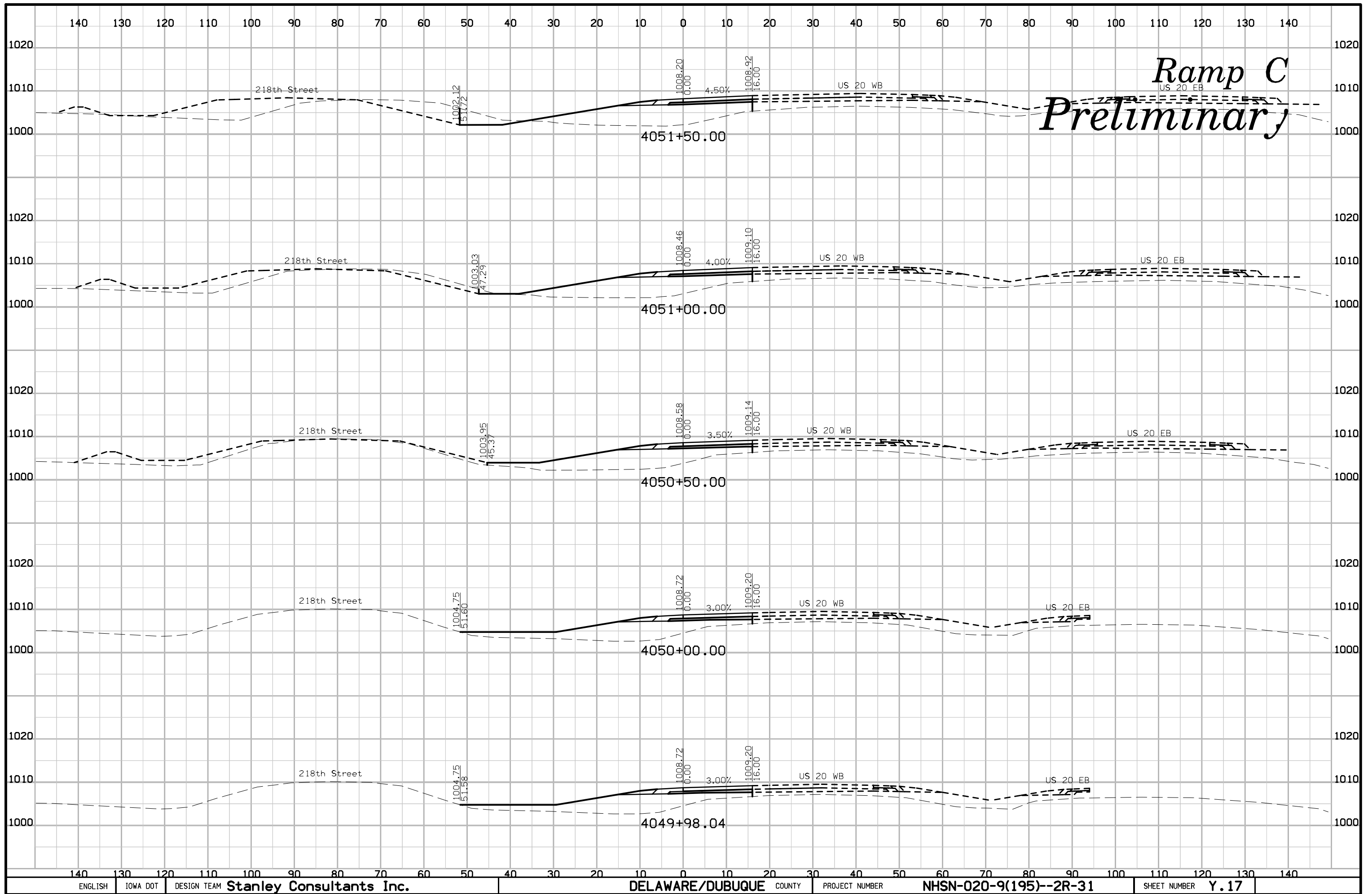
Ramp B Preliminary



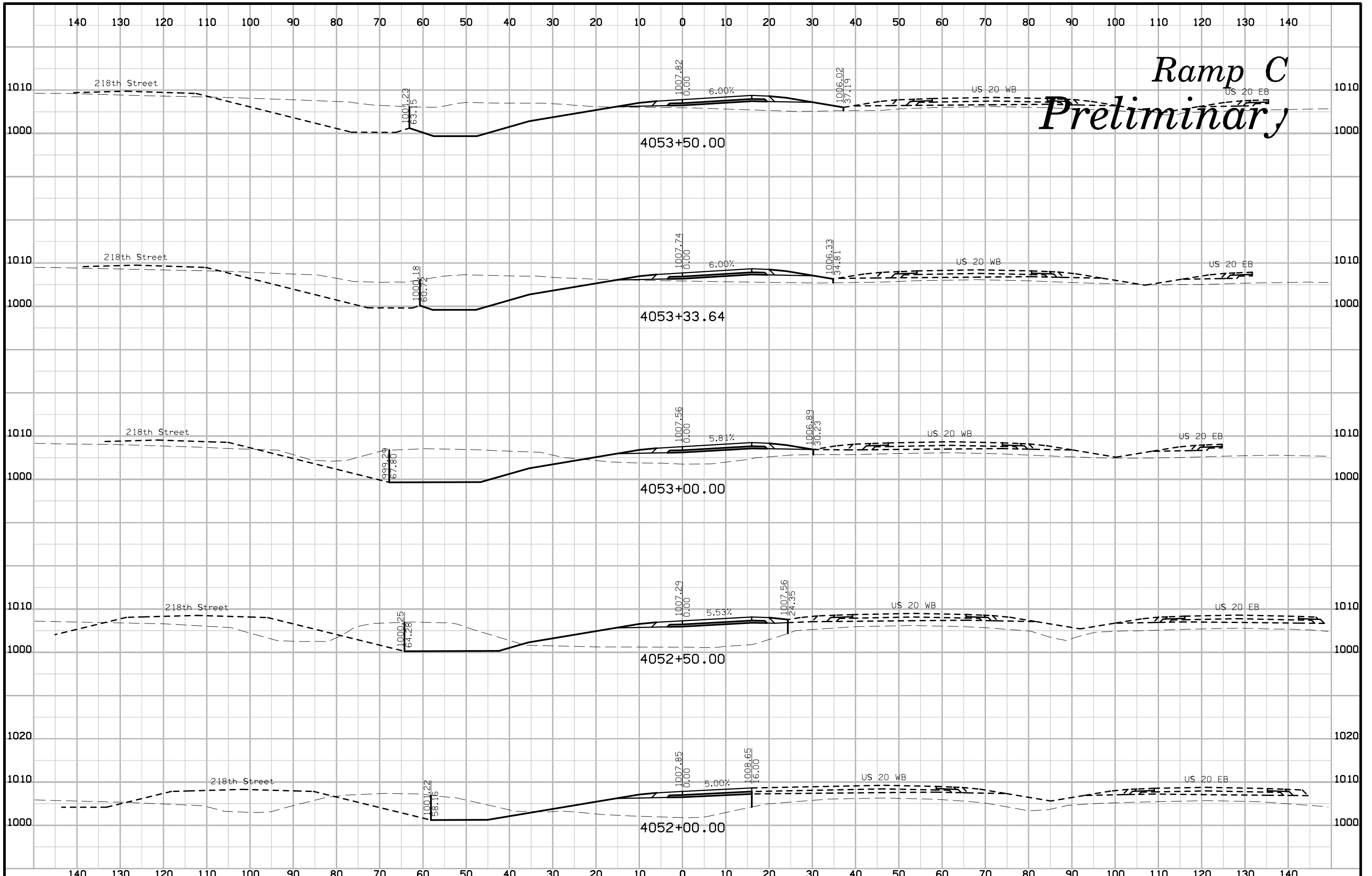


Ramp B Preliminary

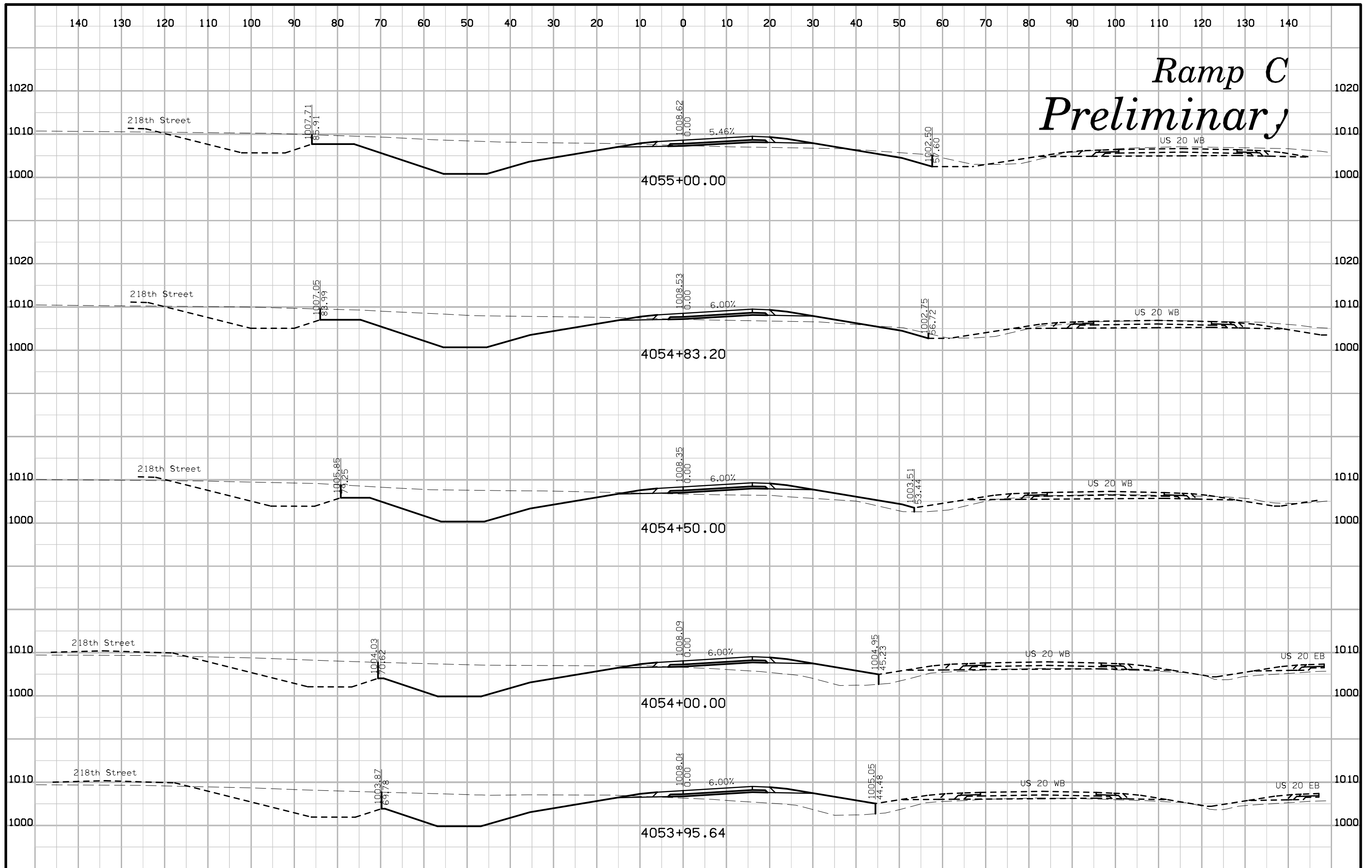




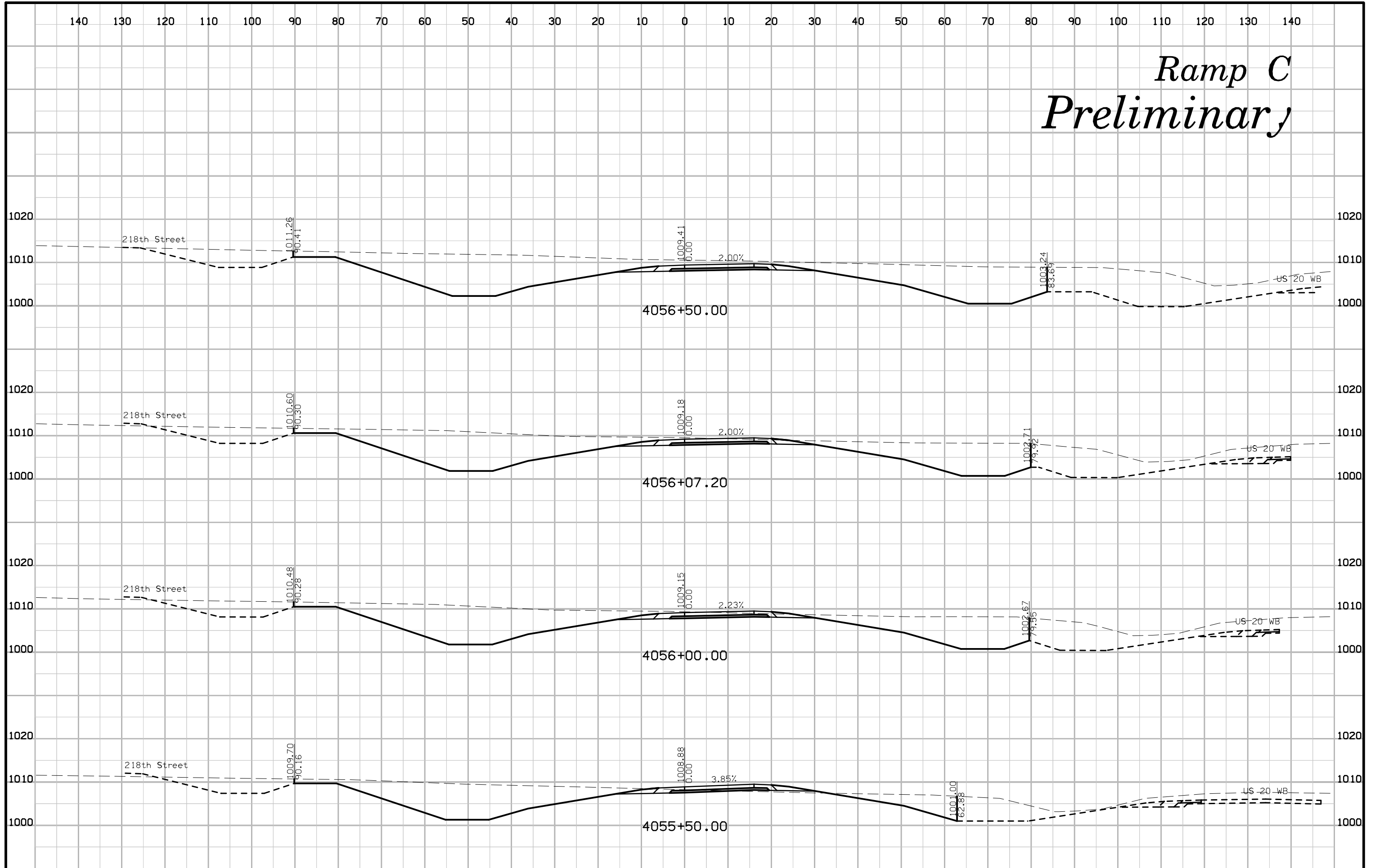
Ramp C Preliminary



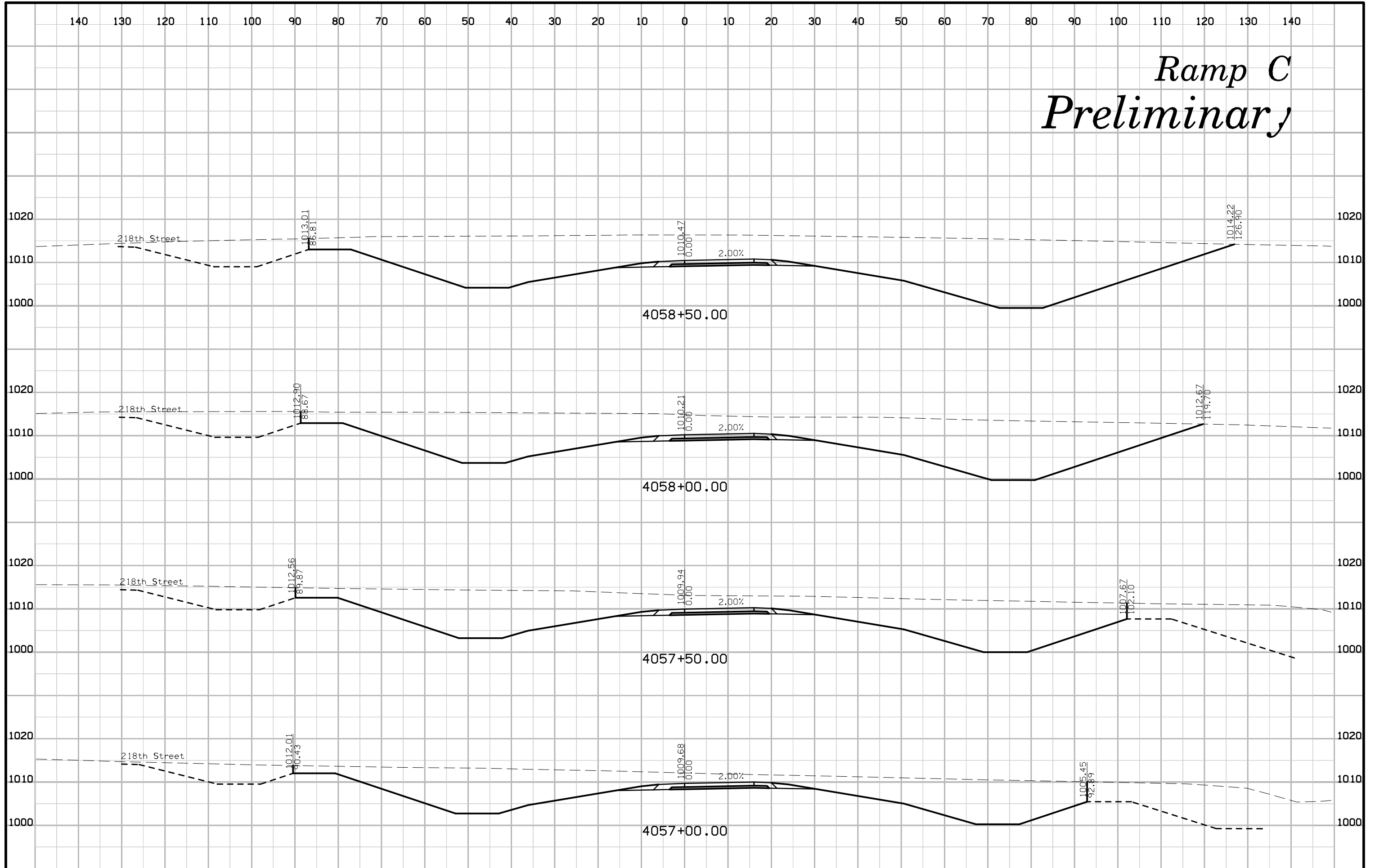
Ramp C Preliminary



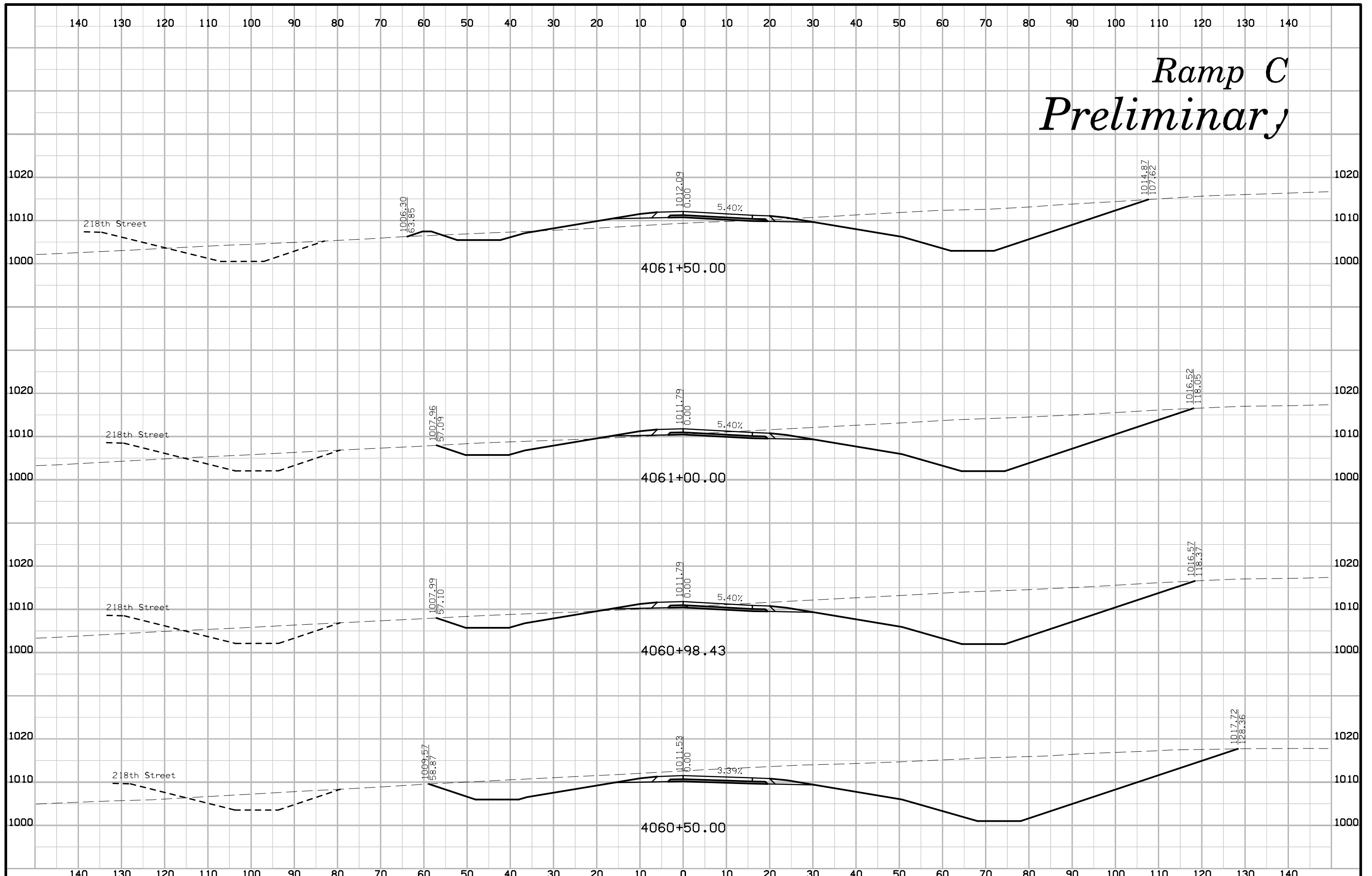
Ramp C Preliminary

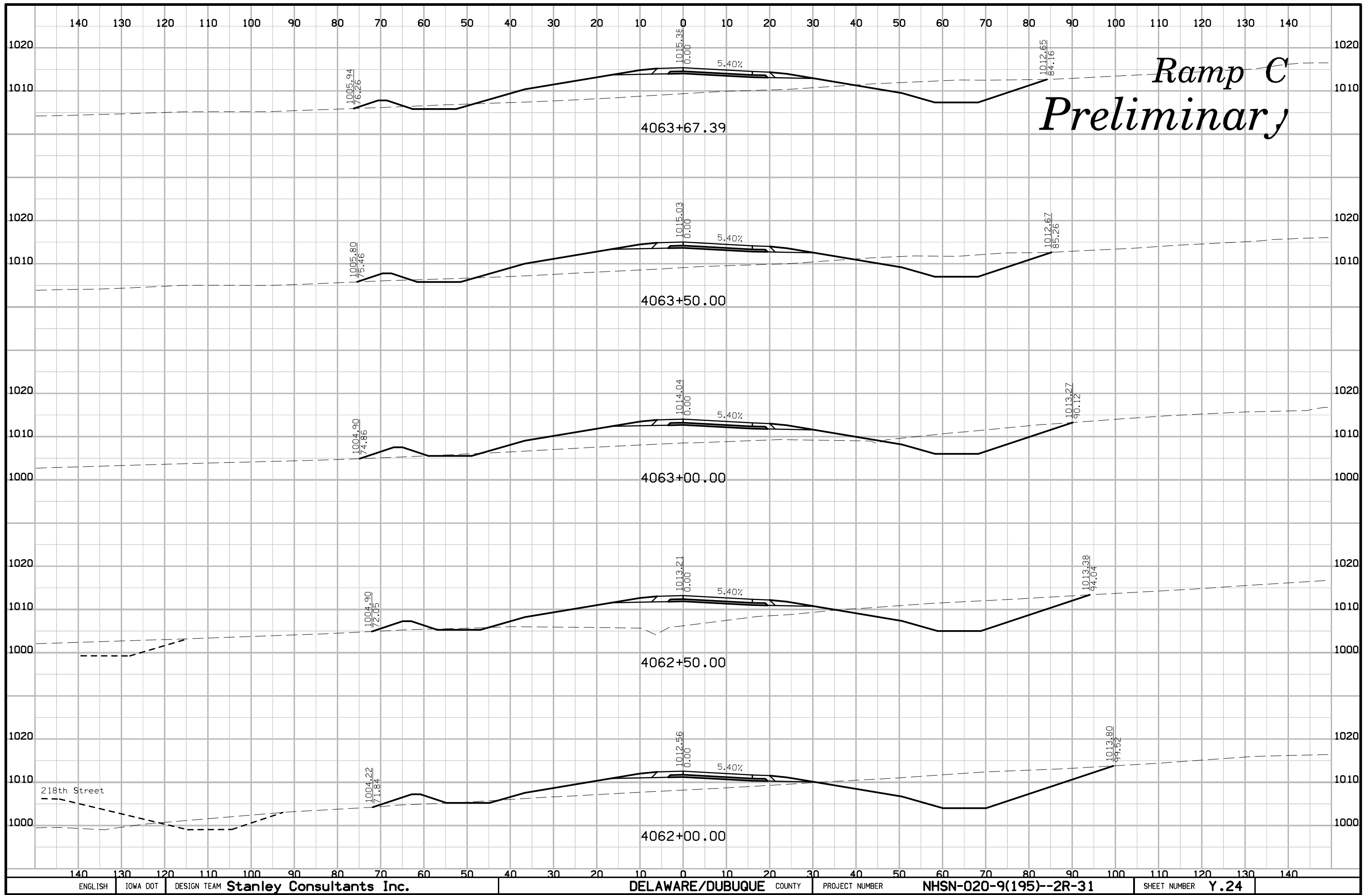


Ramp C Preliminary

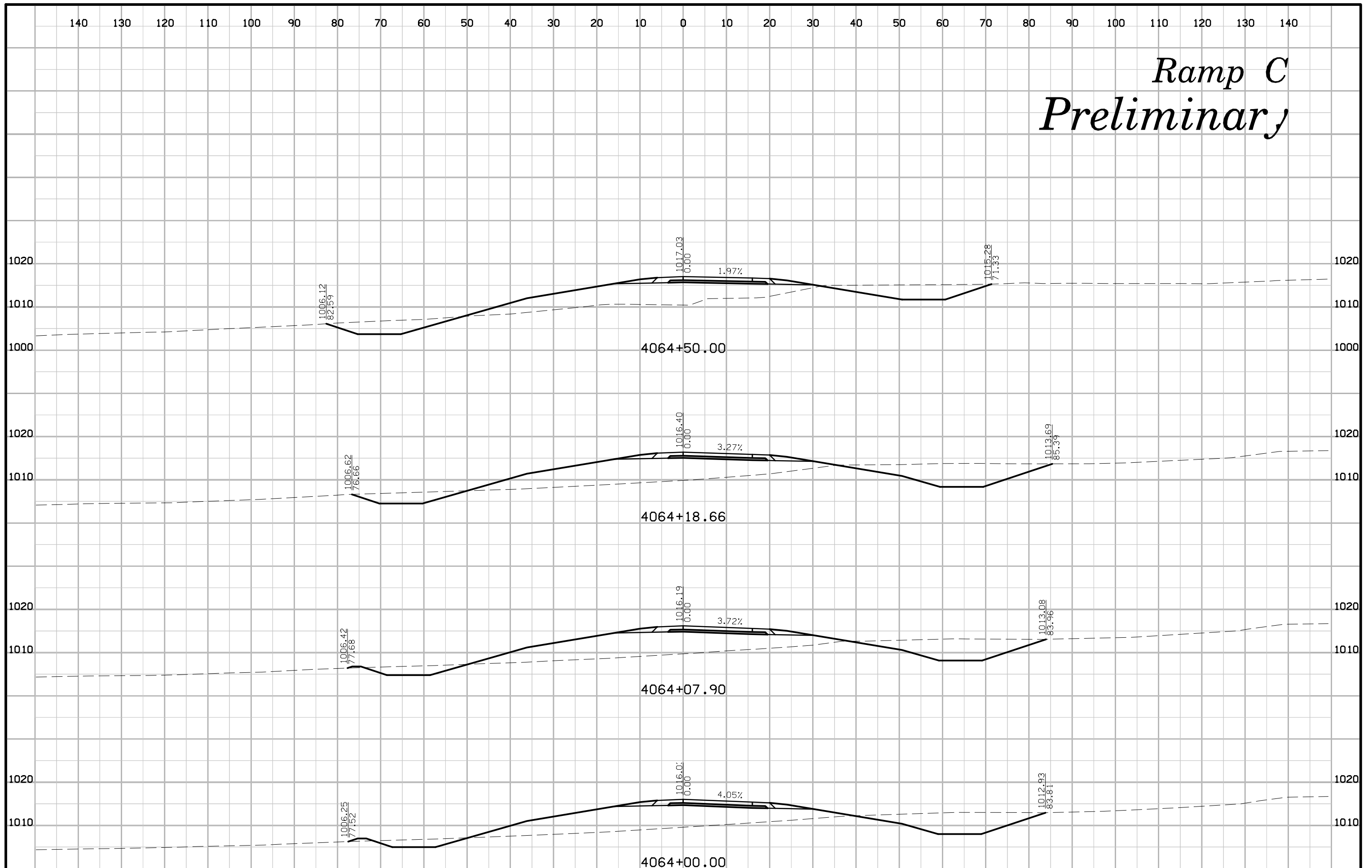


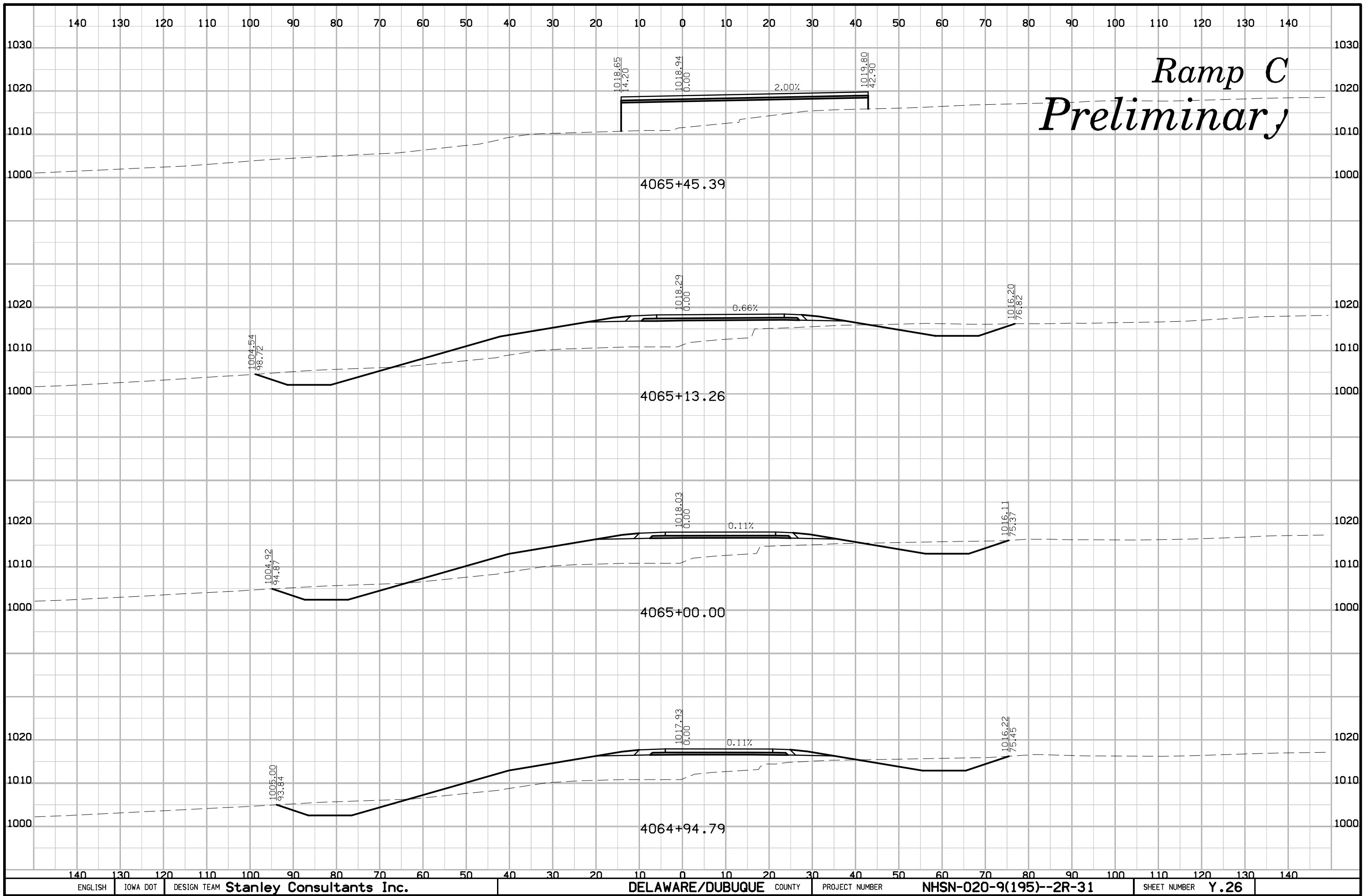
Ramp C Preliminary



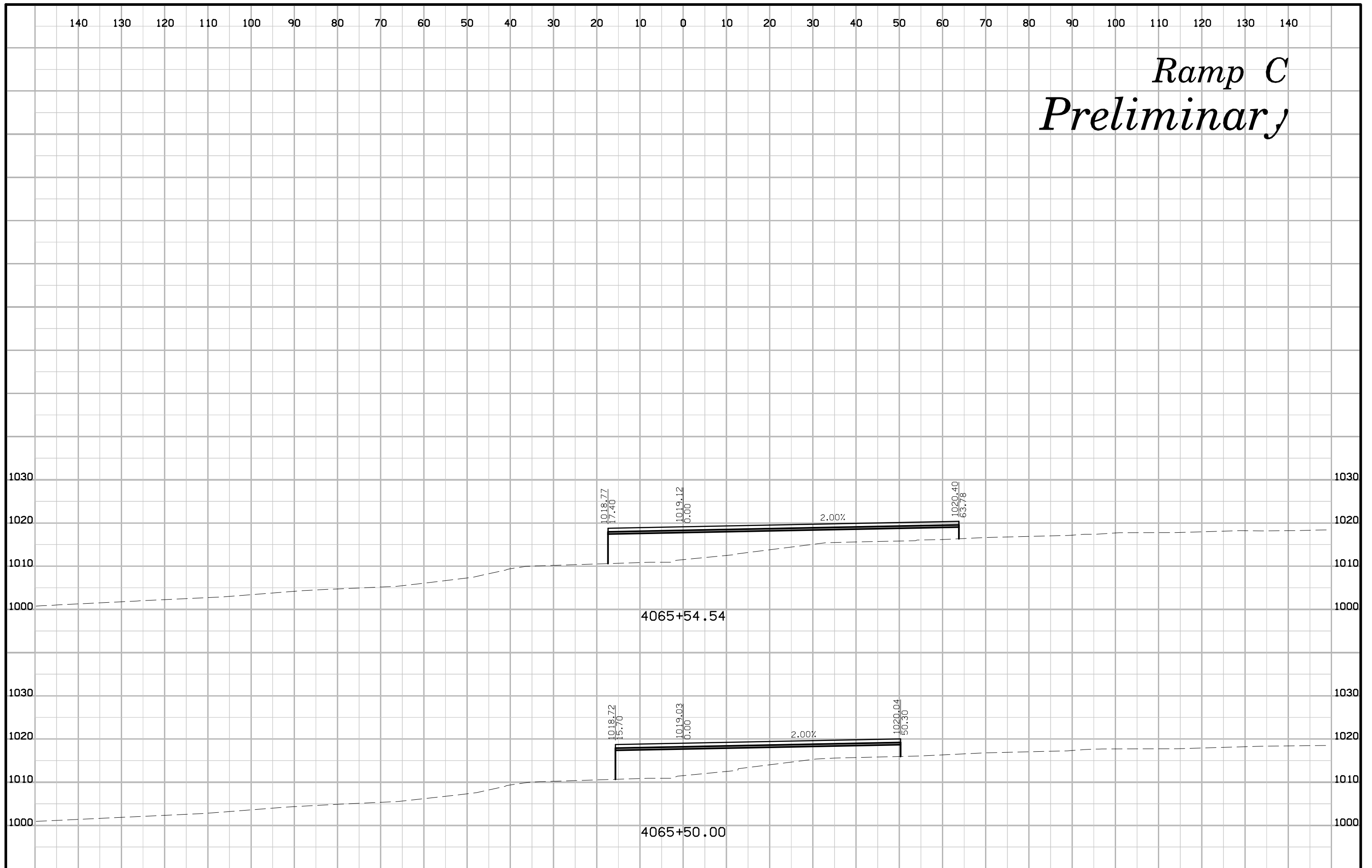


Ramp C Preliminary

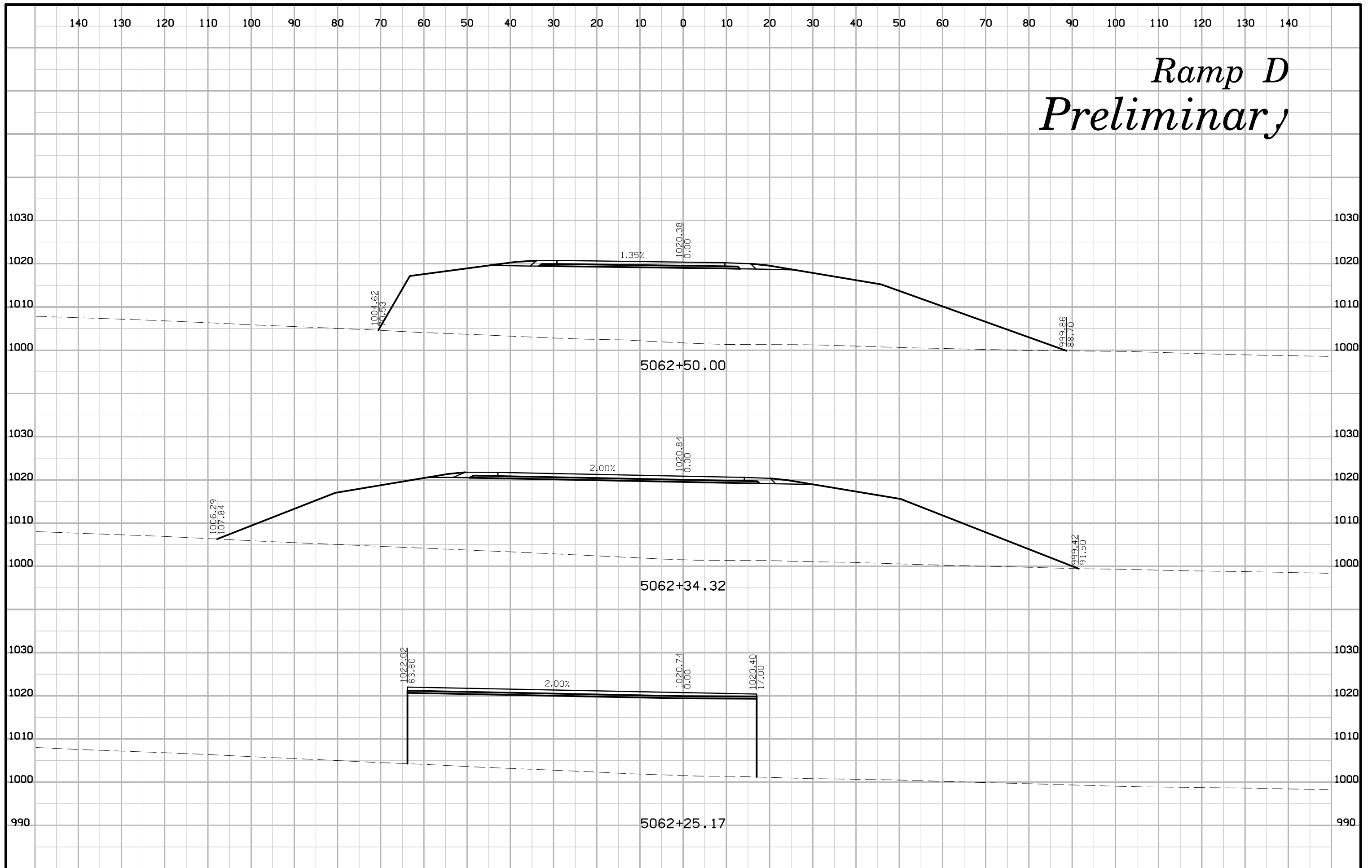




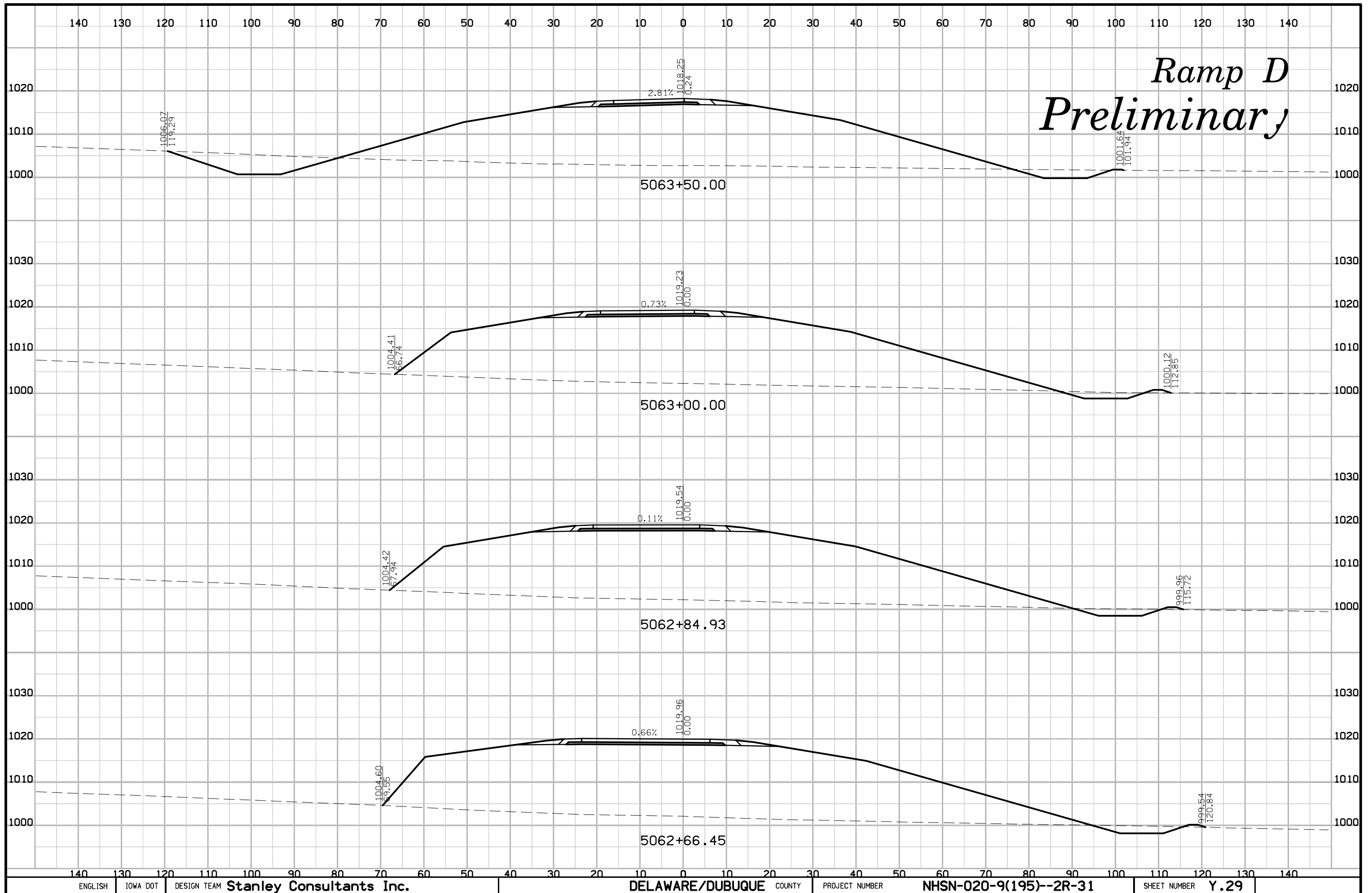
Ramp C Preliminary



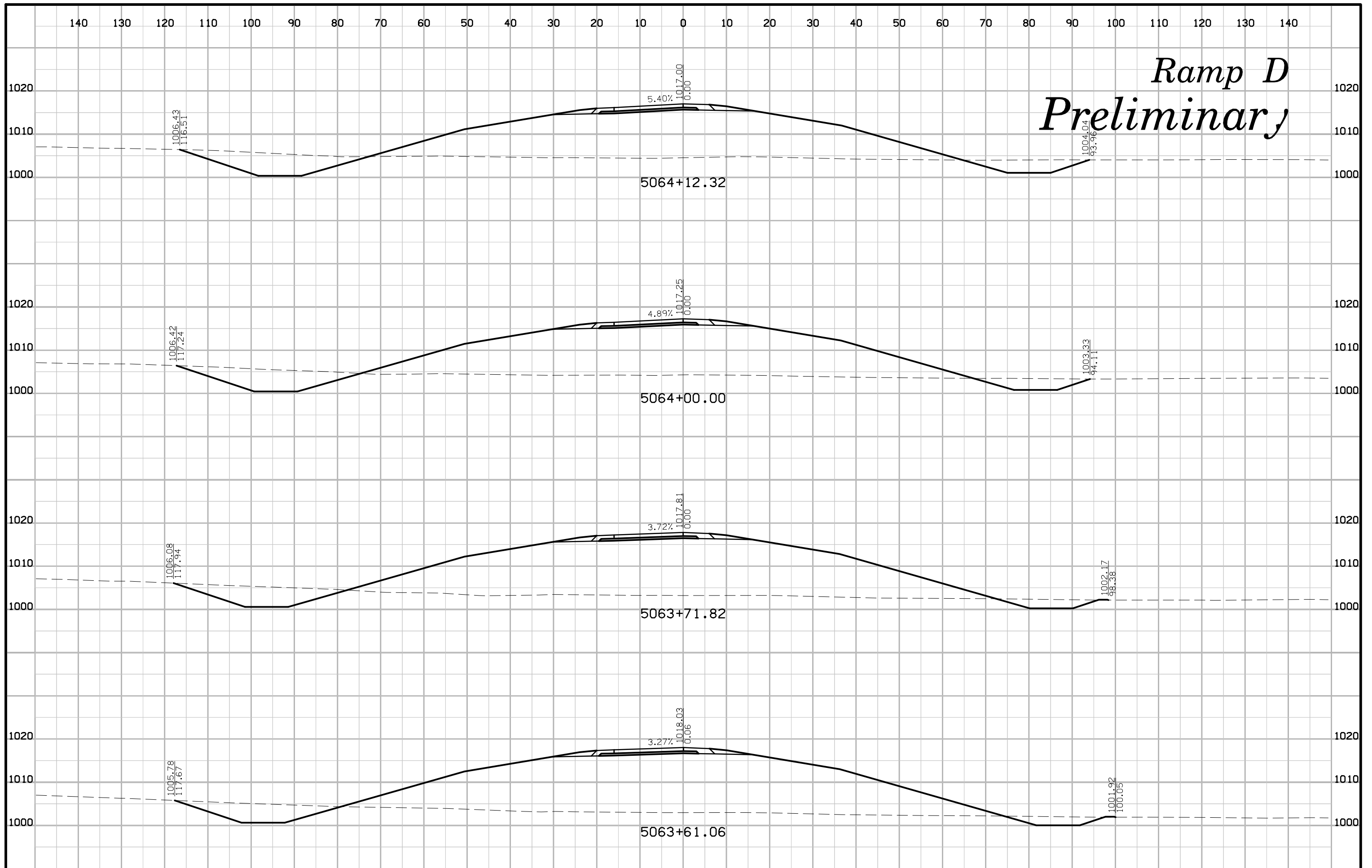
Ramp D Preliminary



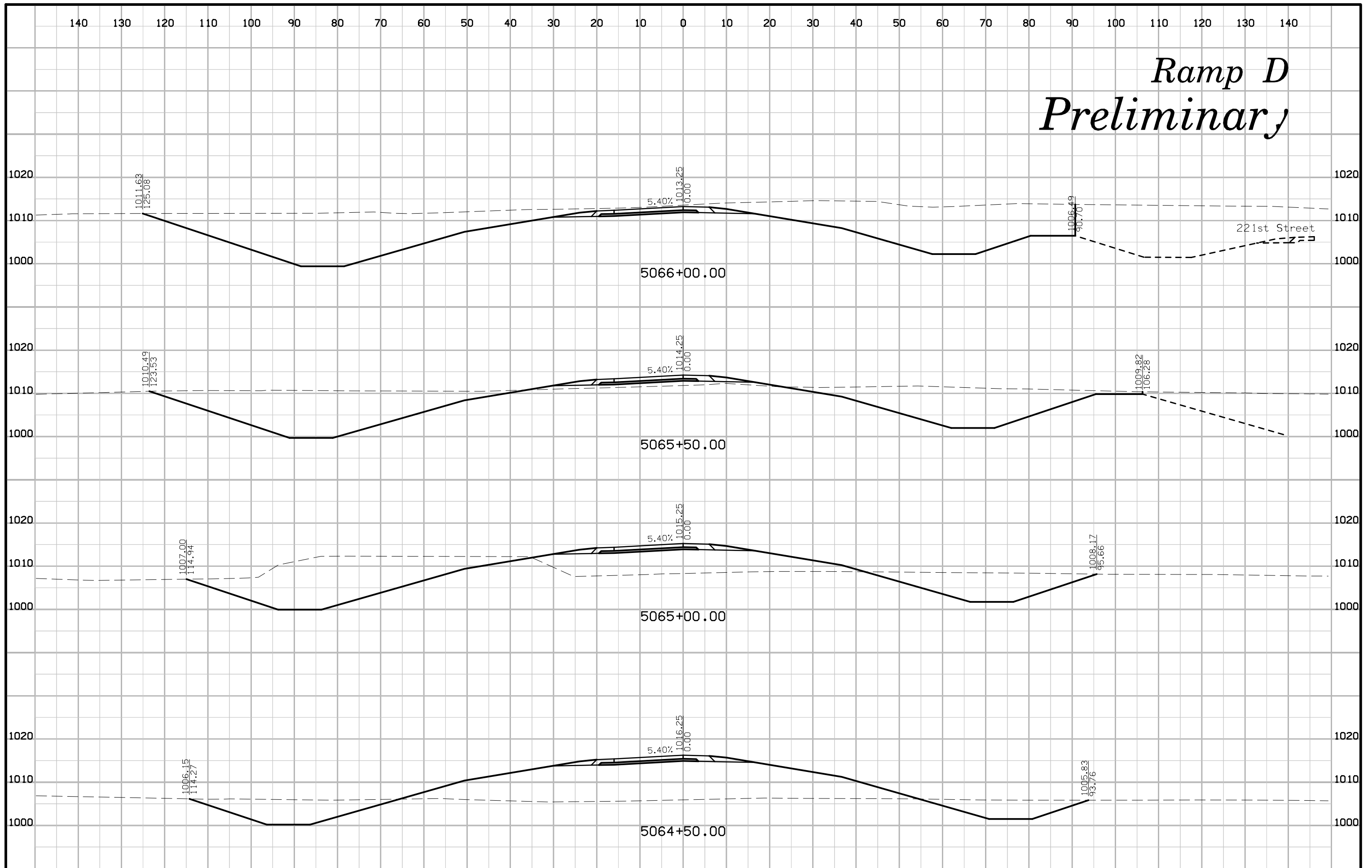
Ramp D Preliminary



Ramp D Preliminary

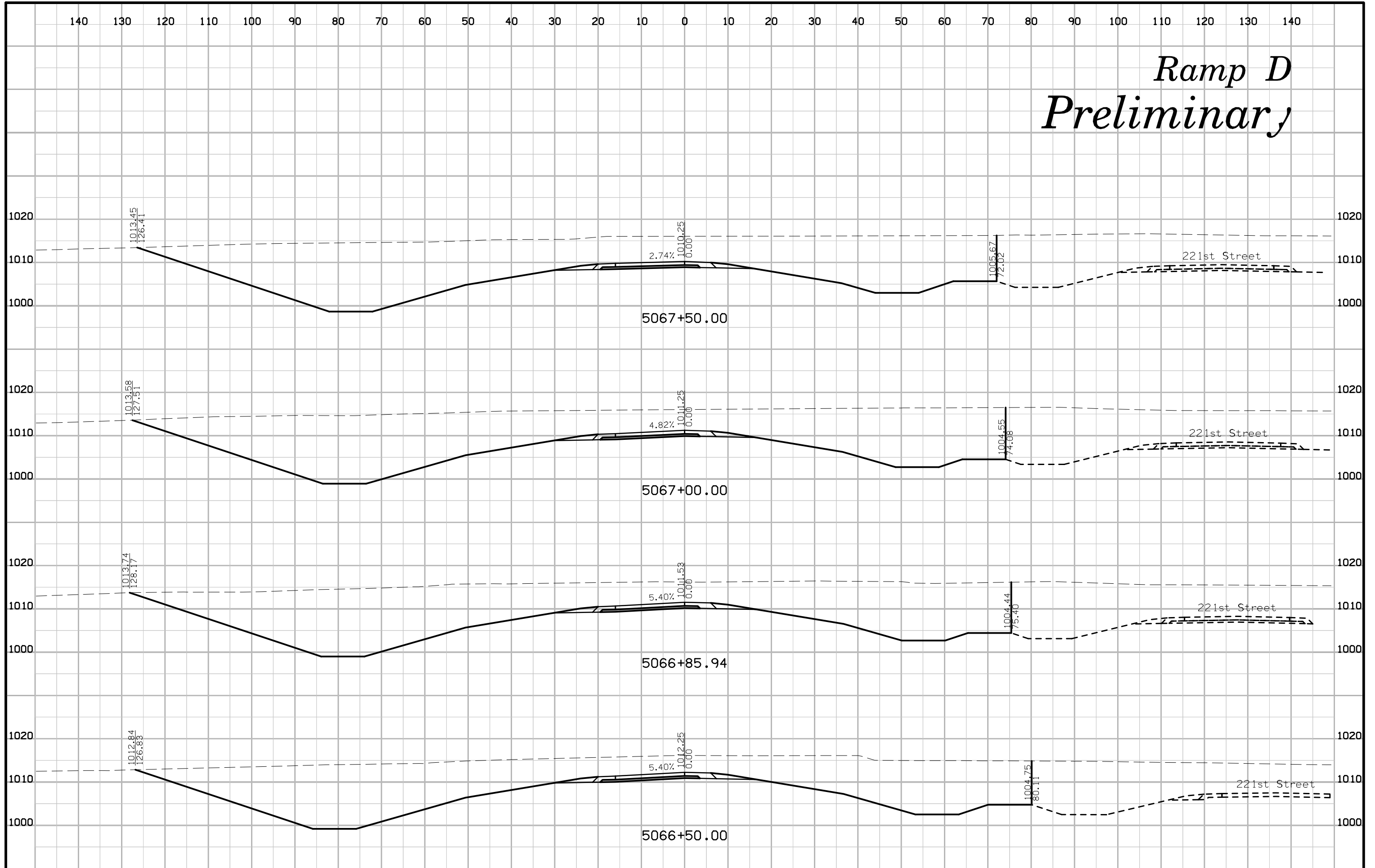


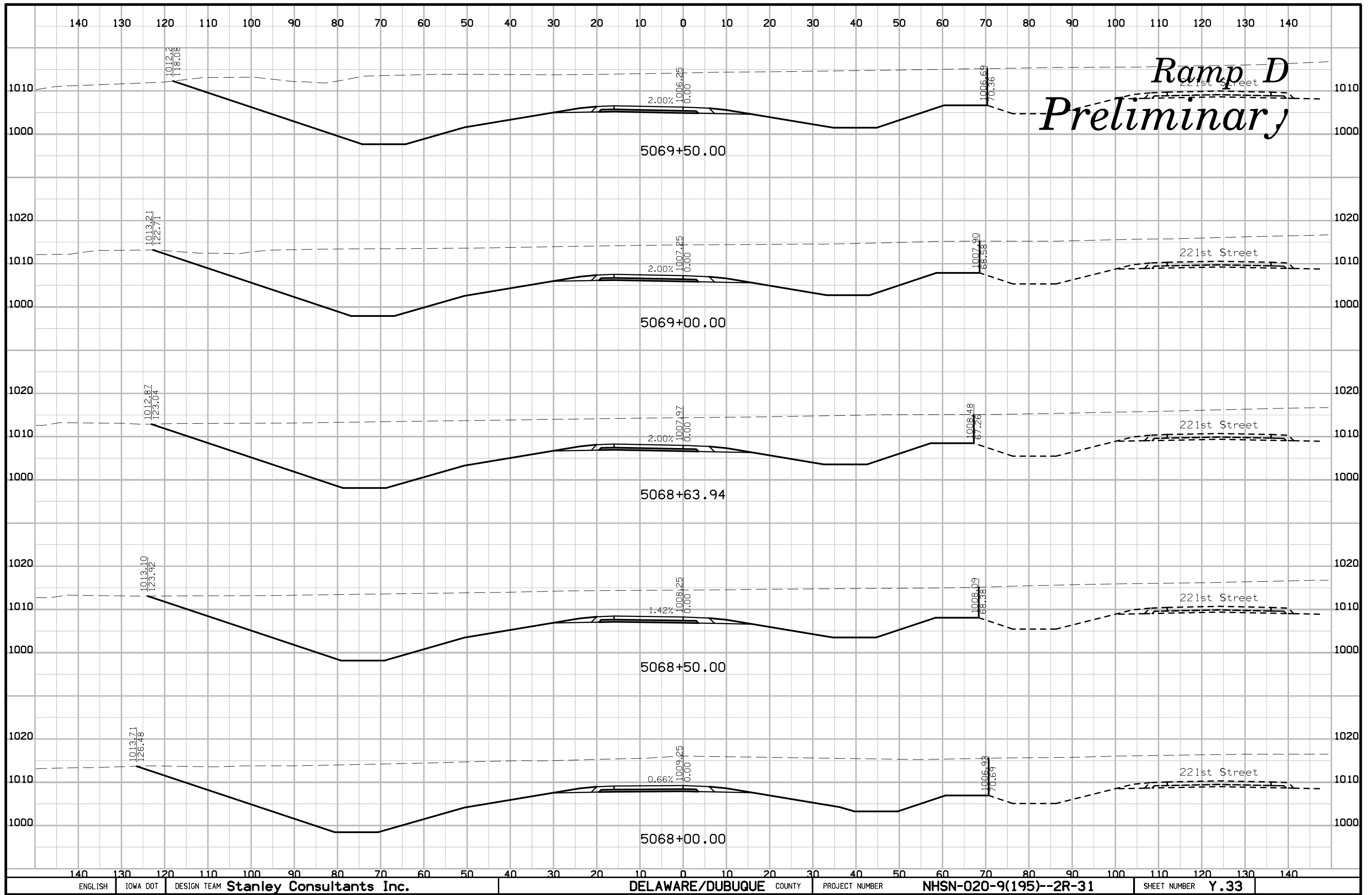
Ramp D Preliminary



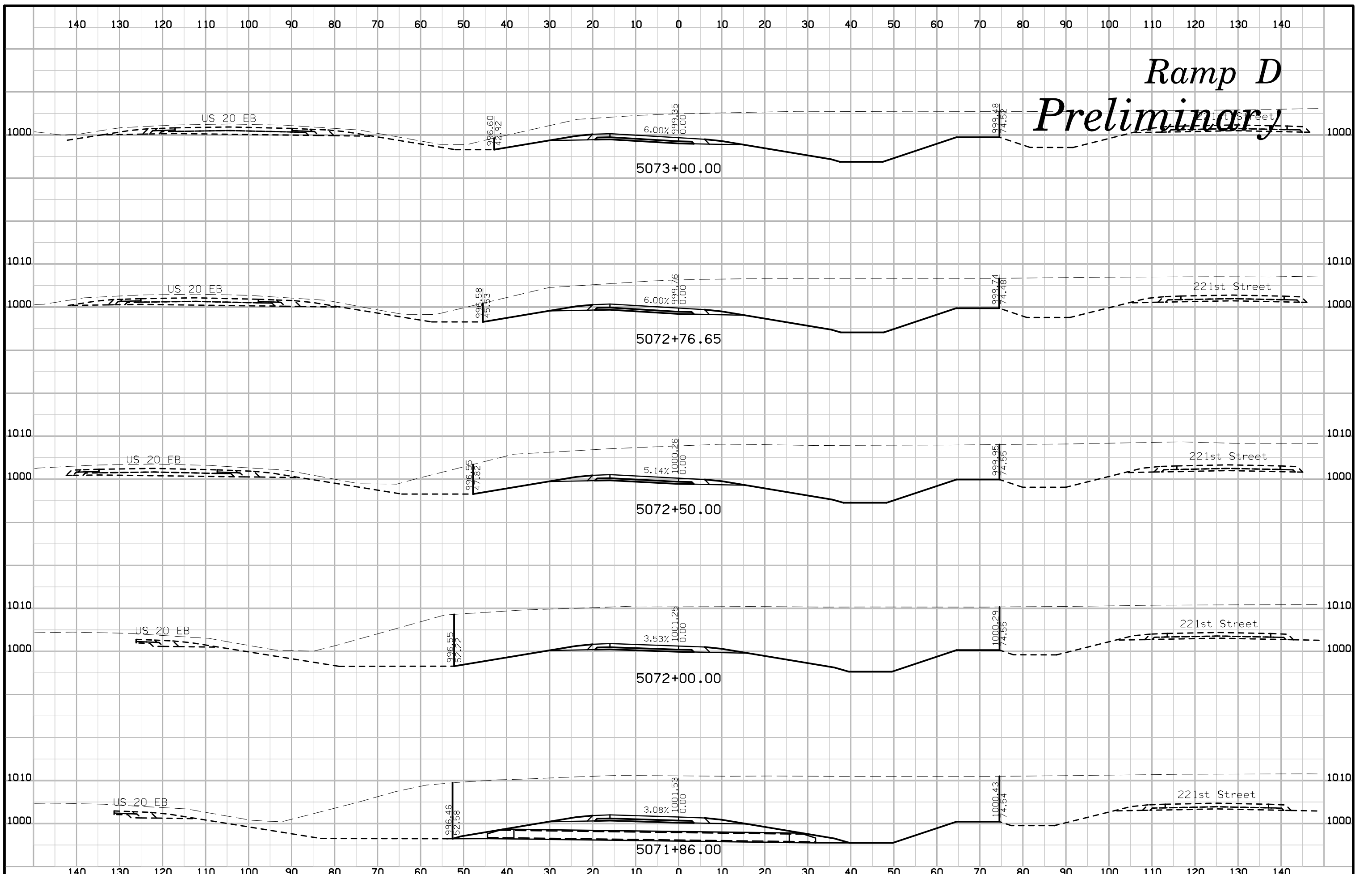
221st Street

Ramp D Preliminary

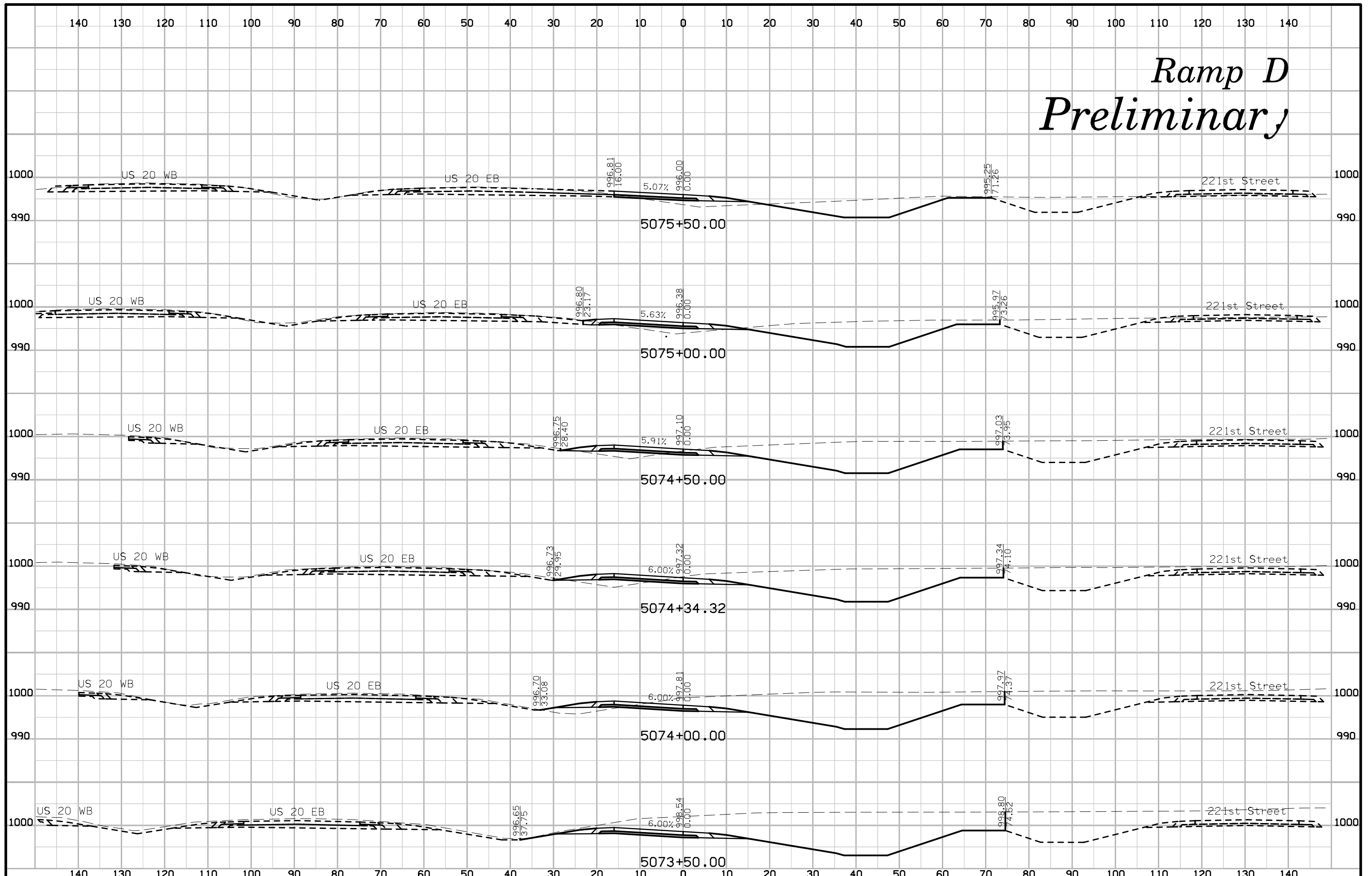




Ramp D Preliminary



Ramp D Preliminary



Ramp D Preliminary

