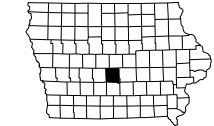


LOCATION MAP SCALE
NOT TO SCALE



Highway US 69/CO RD F22

Roadway	Highway US 69/CO RD F22		Submittal Date	12/20/24
PI Number	22-77-069-020			
Project Number	HSIPX-069-4(153)--3L-77			
District	District 1	Assistant District Engineer	Jeremey Vortherms	Approval Date
County	POLK	or		
Route	69	Office Director		
Location	Intersection of US 69/Co Rd F22 & NE 126th Avenue			
Work Type	Intersection Improvements			
Segment Manager	Snyder & Associates, Inc.			
Designer				

Rural Two-Lane Highways (Rural Arterials)		Preferred	Acceptable	Project Values
Design Element		60	50	50
Design speed (mph)		6%	8%	N/A
Maximum superelevation rate (Refer to Section 2A-2)		12	12	12
Design lane width (ft)		12	12	12
Full depth paved width (ft)		12	10	N/A
Right turn lane (ft)		12	12	N/A
Climbing Lane (ft)		12	10	N/A
Left turn lane (ft)		2%	1.5% minimum, 2% maximum	2%
Through lanes		3%	3% maximum	N/A
Auxiliary and turn lanes		4%	4% maximum	N/A
Crown break at centerline		4%	Shoulder cross-slope cannot be less than the adjacent lane, 6% max for paved or granular shoulders, 8% max for earth shoulders	4%
Shoulder cross-slope (on tangent sections)		6-inch sloped	6-inch standard	6-inch standard
Curb type (Refer to Section 3C-2)		Design speed = 50 or 55 mph	6-inch sloped	N/A
Foreslope		Design speed ≥ 60 mph	10:1 for 4' then 6:1	10:1 for 4' then 6:1
(For fill areas greater than 40 ft, contact the Soils Design Section for assistance)		Adjacent to shoulder	3:1	3:1
Beyond standard ditch depth and design clear zone		3:5:1	3:1	N/A
Curbed roadways		2%	not steeper than 3:1	N/A
Backslope (For cut areas greater than 25 feet, contact the Soils Design Section for assistance with backslope benches.)		3:1	2.5:1	3:1
Transverse Slopes		8:1	6:1	N/A
w/ drainage structures		10:1	6:1	N/A
w/o drainage structures		5 x 10	--	UAC
Ditches (Refer to Section 3G-1)		design lane widths + effective shoulder widths	design lane widths + effective shoulder widths	N/A
Outside ditch (depth x width) (ft)		design lane widths + effective shoulder widths	design lane width + 4' right and left of the design lane widths	N/A
Bridge length ≤ 200 ft		design lane widths + no less than 2 ft left and right	design lane widths + 2 ft. offset left and right	N/A
Bridge length > 200 ft		16.5	16	N/A
Over primary		16.5 at interchange locations, 15 at all other locations	14	N/A
Over non-primary		23.3	23.3	N/A
Over railroad		17.5	17	N/A
Over railroad tracks)		Contact Office of Bridges and Structures	Contact Office of Bridges and Structures	N/A
Structural Capacity		B	B	N/A
Level of Service				
*FHWA notification via email is required if acceptable criteria is not met on the NHS system (No formal design exception is required)				

Design year ADT = 6900

Design Manual Section 1C-1 Last Updated: 04-29-19	Effective Shoulder Width and Type for Two-Lane Highways		Acceptable (values shown in feet)		Project Values
	Rural Roadways	Urban Roadways	Rural Roadways	Urban Roadways	
Turn lanes with shoulders	6	6	6	0	N/A
Turn lanes with curbs	6	See Section 3C-2	6	0	N/A
Climbing Lanes	Effective Shoulder Width	Paved Width	Effective Shoulder Width	Paved Width	
Two-Lane Highways	6	4	4	0	N/A
Routes where bicycles are to be accommodated	Effective Shoulder Width	Paved Width	Effective Shoulder Width	Paved Width	
On roadways approaching urban areas (due to increased bike traffic)	10	10	10	0*	10' Paved Shoulder
On all curves with a superelevation rate of 7.0% or greater	10	10	10	0*	
On roadways with design year ADT > 5000	10	6	8	0*	
On all other NHS	10	6	6	0*	
On non-NHS routes with design year ADT > 3000	10	6	6	0*	
On non-NHS routes with design year ADT < 3000	8	0*	4	0*	

*Requires safety edge-Refer to Section 3C-6
Curbs should be located beyond the outer edge of the effective shoulder width in rural areas
Refer to Section 3C-2 for curb offsets in urban areas

Notes:

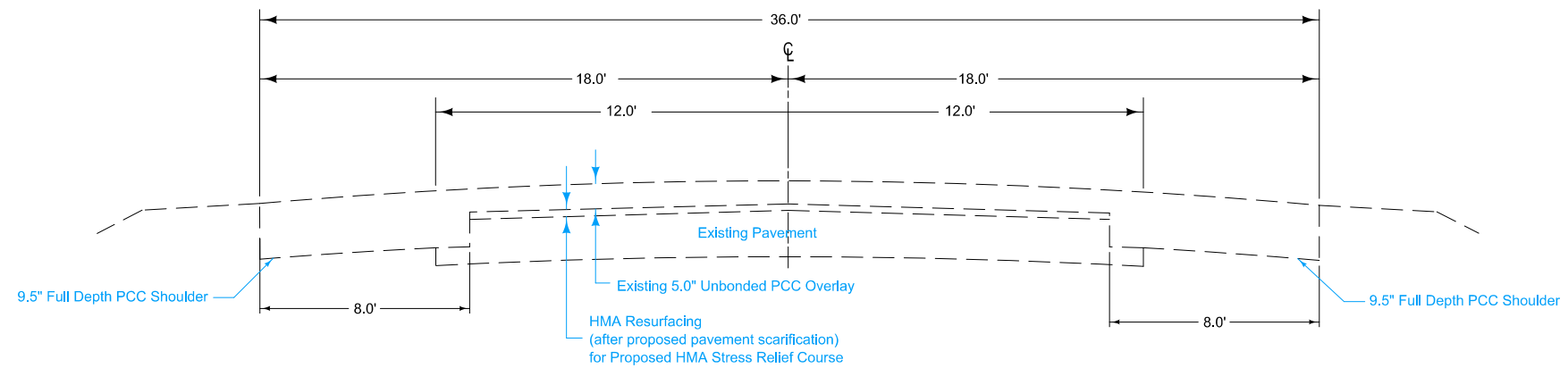
Roadway Design Speed (mph) = 55

Design Manual Section 1C-1 Last Updated: 04-29-19	Design Criteria		Design Criteria		Project Values
	Preferred Design Speed, mph	Acceptable Design Speed, mph	Preferred Design Speed, mph	Acceptable Design Speed, mph	
Stopping sight distance (ft) (Refer to Section 6D-1)	50	55	50	55	75
Minimum horizontal curve radius (ft) (Refer to Sections 2A-2 and 2A-3)	425	495	425	495	820
Minimum vertical curve length (ft) (Refer to Section 2B-1)	833	1060	833	1060	2500
Minimum rate of vertical curvature (K)	—	—	—	—	833
(Refer to Section 2B-1)	150	180	150	180	2210
crest vertical curves	84	114	84	114	150
sag vertical curves	96	115	96	115	84
roadways without fixed-source lighting	96	115	96	115	206
roadways with fixed-source lighting	96	115	96	115	96
(Refer to Section 2B-1)	0.5	0.5	0.5	0.5	54
Minimum gradient (%)	4	4	4	4	121
(Refer to Section 2B-1)	3	3	3	3	0.60
Maximum gradient (%)	4	4	4	4	2%
Clear zone	See "Preferred Clear Zone" table in Section 8A-2	See "Preferred Clear Zone" table in Section 8A-2	See "Preferred Clear Zone" table in Section 8A-2	See "Preferred Clear Zone" table in Section 8A-2	20

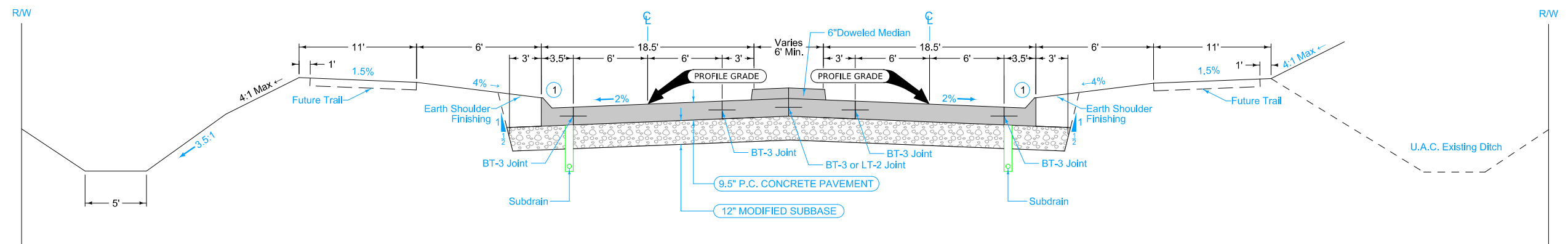
Roadway		NE 126th Avenue	
PIN Number	22-77-069-020	Submittal Date	12/20/24
Project Number	HSPX-069-4(153)--3L-77	Assistant District Engineer	Jeremey Vortherms
District	District 1	or	
County	POLK	Office Director	
Route	NE 126th Avenue		
Location	Intersection of US 69/Co Rd F22 & NE 126th Avenue		
Work Type	Intersection Improvements		
Segment Manager	Snyder & Associates, Inc.		
Designer	Snyder & Associates, Inc.		
Rural Two-Lane Highways (Rural Arterials)			
Design Element		Preferred	Acceptable
Design speed (mph)		60	50
Maximum superelevation rate (Refer to Section 2A-2)		6%	8%
Design lane width (ft)		12	12
Full depth paved width (ft)		12	12
Right turn lane (ft)		12	12
Climbing Lane (ft)		12	N/A
Left turn lane (ft)		12	N/A
Pavement cross-slope (on tangent sections)	Through lanes	2%	1.5% minimum, 2% maximum
	Auxiliary and turn lanes	3%	3% maximum
	Crown break at centerline	4%	4% maximum
Shoulder cross-slope (on tangent sections)		4%	Shoulder cross-slope cannot be less than the adjacent lane, 6% max for paved or granular shoulders, 8% max for earth shoulders
Curb type (Refer to Section 3C-2)	Design speed = 50 or 55 mph	6-inch sloped	6-inch standard
	Design speed ≥ 60 mph	4-inch sloped	6-inch sloped
Foreslope (For fill areas greater than 40 ft, contact the Soils Design Section for assistance)	Adjacent to shoulder	10:1 for 4' then 6:1	3:1
	Beyond standard ditch depth and design clear zone	3.5:1	3:1
	Curbed roadways	2%	not steeper than 3:1
Backslope (For cut areas greater than 25 feet, contact the Soils Design Section for assistance with backslope benches.)		3:1	2.5:1
Transverse Slopes	w/ drainage structures	8:1	6:1
	w/o drainage structures	10:1	6:1
Ditches (Refer to Section 3G-1)	Outside ditch (depth x width) (ft)	5 x 10	--
Bridge width—new*	Bridge length ≤ 200 ft	design lane widths + effective shoulder widths	design lane widths + effective shoulder widths
	Bridge length > 200 ft	design lane widths + no less than 2 ft left and right	design lane widths + 2 ft. offset left and right
Bridge width—existing*			
Vertical clearance (ft) (above lanes, shoulders and 25 feet left and right of the center of railroad tracks)	Over primary	16.5	16
	Over non-primary	16.5 at interchange locations, 15 at all other locations	14
	Over railroad	23.3	23.3
	Sign trusses and pedestrian bridges	17.5	17
Structural Capacity	Contact Office of Bridges and Structures		Contact Office of Bridges and Structures
Level of Service	B		B
*FHWA notification via email is required if acceptable criteria is not met on the NHS system (No formal design exception is required)			

Design year ADT = 2620		Effective Shoulder Width and Type for Two-Lane Highways	
Preferred (values shown in feet)		Acceptable (values shown in feet)	
	Rural Roadways	Urban Roadways	Rural Roadways
Turn lanes with shoulders	6	6	6
Turn lanes with curbs	6	See Section 3C-2	6
	Effective Shoulder Width	Paved Width	Effective Shoulder Width
	6	4	4
Two-Lane Highways	Effective Shoulder Width	Paved Width	Effective Shoulder Width
	10	10	8
Routes where bicycles are to be accommodated	10	10	8
On roadways approaching urban areas (due to increased bike traffic)	10	10	8
On all curves with a superelevation rate of 7.0% or greater	10	10	8
On roadways with design year ADT > 5000	10	6	6
On all other NHS	10	6	6
On non-NHS routes with design year ADT > 3000	10	6	6
On non-NHS routes with design year ADT < 3000	8	0*	4
*Requires safety edge—Refer to Section 3C-6			
Curbs should be located beyond the outer edge of the effective shoulder width in rural areas			
Refer to Section 3C-2 for curb offsets in urban areas			
Notes:			
The east leg of NE 126th Avenue will be curb and gutter to the existing bridge over Four Mile Creek.			

Roadway Design Speed (mph) = 45		Design Criteria for Low Speed Roadways											
Preferred Criteria		Design Speed, mph						Acceptable Criteria					
		50	55	60	65	70	75	50	55	60	65	70	75
Stopping sight distance (ft) (Refer to Section 6D-1)		425	495	570	645	730	820	425	495	570	645	730	820
Minimum horizontal curve radius (ft) (Refer to Sections 2A-2 and 2A-3)		833	1060	1330	1660	2040	2500	833	1060	1330	1660	2040	2500
Minimum vertical curve length (ft) (Refer to Section 2B-1)		--	--	--	--	--	--	758	960	1200	1480	1810	2210
Minimum rate of vertical curvature (K)		150	114	151	193	247	312	150	165	180	195	210	225
(Refer to Section 2B-1)		96	115	136	157	181	206	84	114	151	193	247	312
Minimum gradient (%)		96	115	136	157	181	206	96	115	136	157	181	206
Maximum gradient (%)		4	4	4	4	4	4	4	4	4	4	4	4
Clear zone		See "Preferred Clear Zone" table in Section 8A-2											

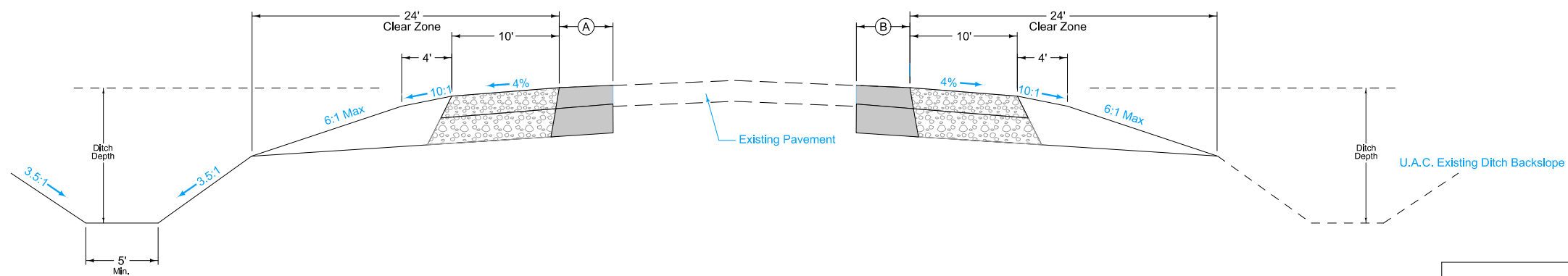


**TYPICAL SECTION
US 69 - EXISTING TYPICAL
FOR INFORMATION ONLY**



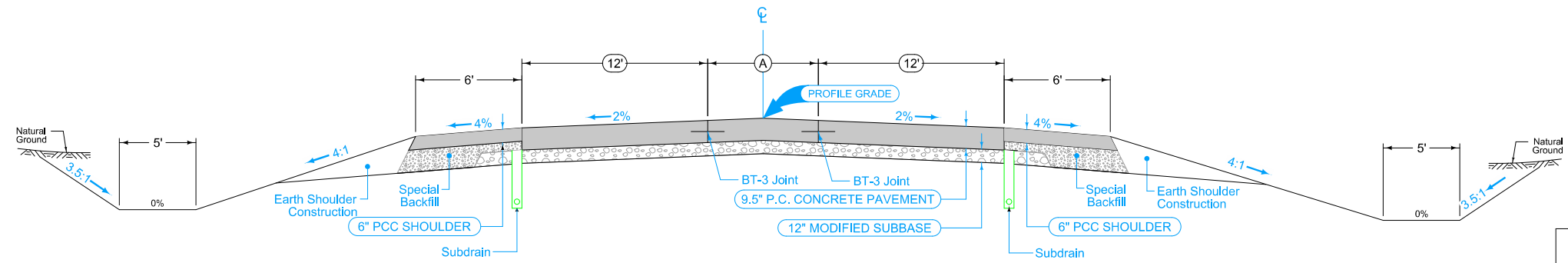
**TYPICAL SECTION
US 69/CO.RD F22 - RURAL SECTION
STA. 212+74.36 TO STA. 215+61.70
STA. 217+06.98 TO STA. 219+94.44**

① 6" standard curb



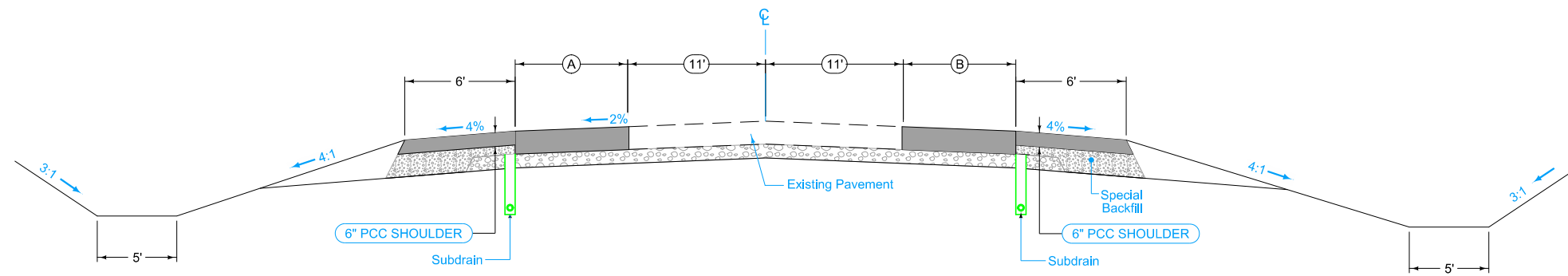
**TYPICAL SECTION
US 69/CO.RD F22 - RURAL SECTION
STA. 208+61.88 TO STA. 212+74.36
STA. 219+90.00 TO STA. 223+47.50**

STATION TO STATION		(A) Feet	(B) Feet
20+32.57	22+00.00	3'-4.7'	
20+32.57	22+00.00		3'-4.7'



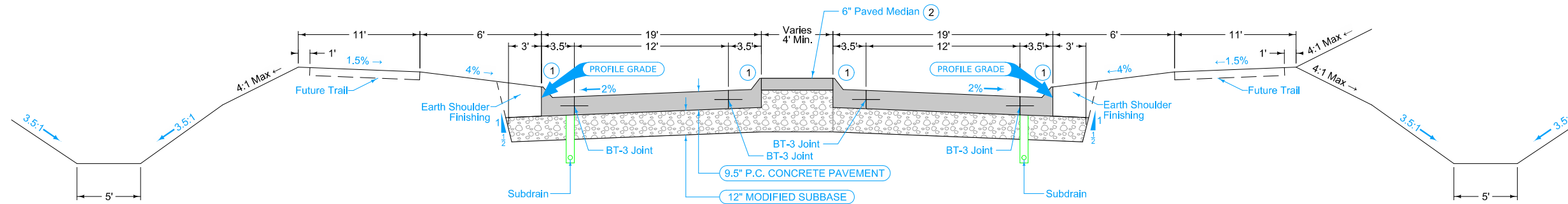
STATION TO STATION		(A) Feet
22+00.00	23+25.00	7,4'-13"

TYPICAL SECTION
NE 126TH AVENUE - RURAL SECTION
STA. 22+00.00 TO STA. 23+25.00



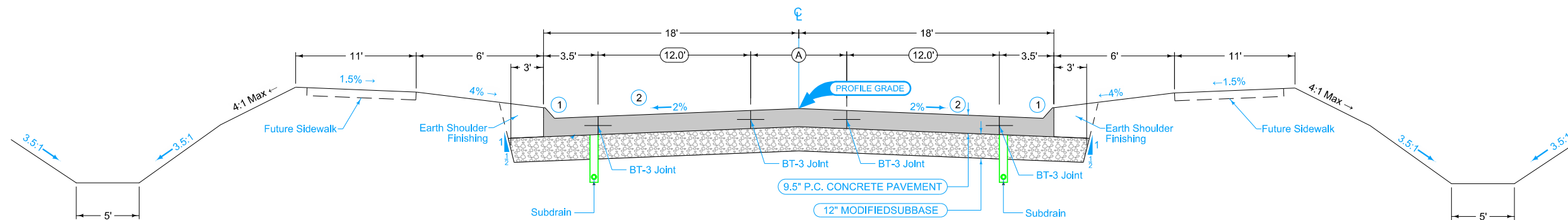
STATION TO STATION		(A) Feet	(B) Feet
20+32.57	22+00.00	3'-4.7"	
20+32.57	22+00.00		3'-4.7"

TYPICAL SECTION
NE 126TH AVENUE - RURAL SECTION
STA 20+32.57 TO STA 22+00.00



TYPICAL SECTION
NE 126TH AVENUE - URBAN SECTION
STA. 23+25.00 TO STA. 25+73.74

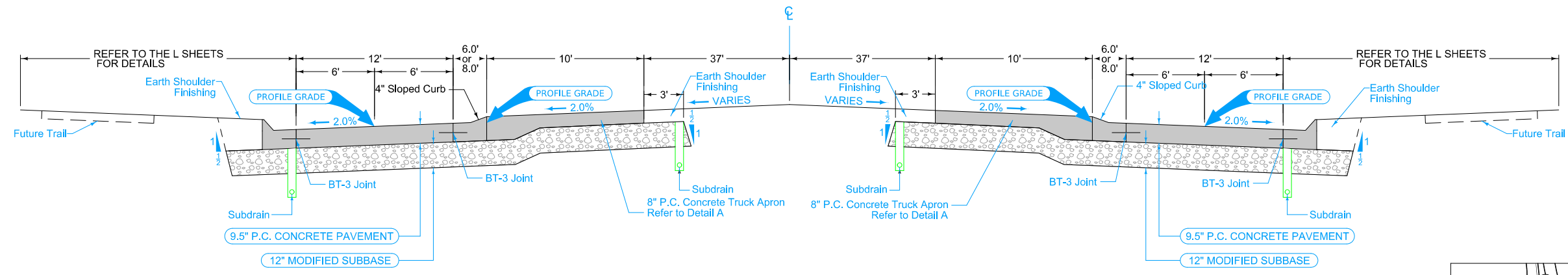
- ① 6" standard curb
- ② Refer to Standard Roap Plan PV-20 for Paved Median Details



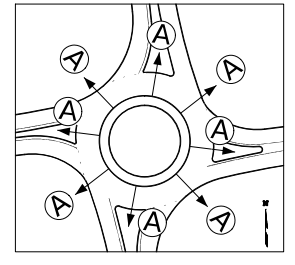
TYPICAL SECTION
NE 126TH AVENUE - URBAN SECTION
STA. 27+16.62 TO STA. 27+68.00

STATION TO STATION		(A) Feet
27+68.00	29+33.29	10.2'-3.2'

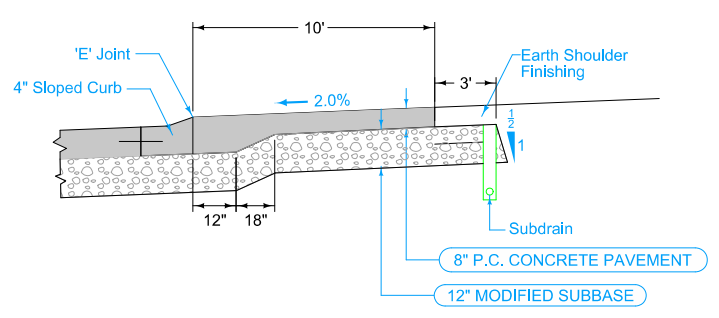
- ① 6" standard curb
- ② Refer to the L Sheets for superelevation cross slope information
- ③ Maximum transverse joint spacing shall be 17' with CD joints.



**TYPICAL SECTION
US69/CO RD F22 AND NE 126TH AVENUE
SINGLE LANE ROUNDABOUT
SECTION A-A**

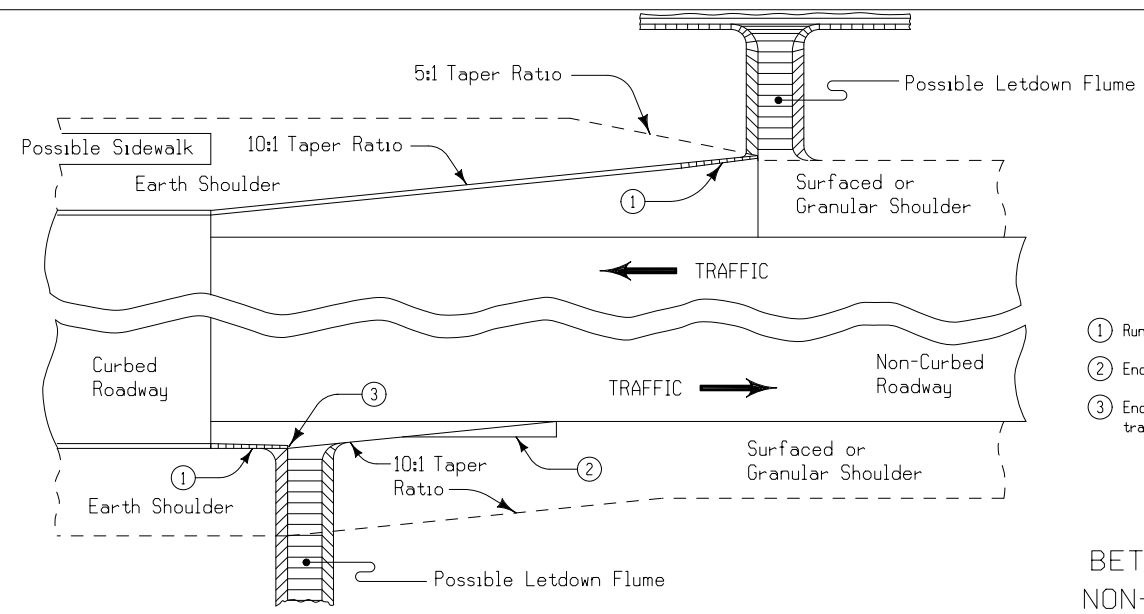


① Refer to the L Sheets for cross slope information



**'DETAIL A'
ROUNDABOUT TRUCK APRON**

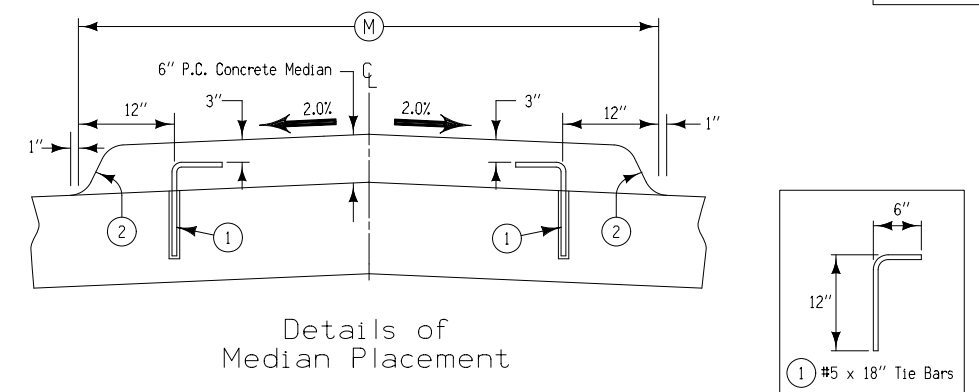
6147
10-20-15



- ① Runout curb according to PV-102
- ② End of Taper Details see Typical Detail 7101
- ③ End earth shoulder at the end of the curb transition when no flume is needed.

TRANSITION
BETWEEN CURBED AND
NON-CURBED ROADWAYS

6149 - MODIFIED
04-17-07



Details of
Median Placement

Notes:
This section may be appropriately modified in areas specifically designated by the Engineer.
Use 'C' joints in the doweled median and match the location of all transverse and longitudinal joints to the joints in the existing pavement.
Place tie bars at 24" C-C longitudinal spacing between joints in existing pavement. Drill $\frac{3}{8}$ " holes for tie bars and epoxy to new pavement. See Tabulation 112-5 for additional details. Epoxy material shall be as specified in Materials IM491.11, appendix C.

DOWELED MEDIAN
WITH STANDARD CURB

SURVEY SYMBOLS

- Interstate Highway Symbol
- U.S. Highway Symbol
- Iowa Highway Symbol
- County Road Highway Symbol
- Evergreen Tree
- Deciduous Tree
- Fruit Tree
- Shrub (Bushes)
- Timber
- Hedge
- Stump
- Swamp
- Rock Outcrop
- Broken Concrete
- Revetment (Rip Rap)
- Cemetery
- Grave
- Cave
- Sink Hole
- Board Fence
- Chain Link or Security Fence
- Wire Fence
- Terrace
- Earth Dam or Dike (Existing)
- Tile Outlet
- Edge of Water
- Existing Drainage
- Right of Way Rail or Lot Corner
- Concrete Monument
- Well
- Windmill
- Beehive Intake
- Existing Intake
- Existing Utility Access (Manhole)
- Fire Hydrant
- Water Hydrant (Rural)
- Septic Tank
- Cistern
- L.P. Gas Tank (No Footing)
- Underground Storage Tank
- Latrine
- Satellite TV Dish
- Water Hook Up
- Radio Tower
- Tower Anchor
- Guardrail (Beam or Cable)
- Guard Post (one or two)
- Guard Post (over two)
- Filler Pipe
- Gas Valve
- Water Valve
- Speed Limit Sign
- Mile Marker Post
- Sign
- Traffic Signal Control Box
- Rail Road Signal Control Box
- Telephone Switch Box
- Electric Box

UTILITY LEGEND

- (CTLIA01) CENTURYLINK
Contact Name: Sadie Hull
Contact Phone: 9785470147
Contact Email: sadie.hull@lumen.com
- (HYT) HUXLEY COMMUNICATIONS COOPERATIVE
Contact Name: Terry Furguson
Contact Phone: 5155972281
Contact Email: terry@huxleycommunications.net
- (M57E) MIDAMERI-ELEC
Contact Name: Jamie Neer
Contact Phone: 5152526972
Contact Email: MECDSMDESIGNLOCATES@MIDAMERICAN.com
- (PNL) BLACK HILLS ENERGY
Contact Name: Chuck Woods
Contact Phone: 5153432037
Contact Email: chuck.woods@blackhillscorp.com
- (PNL) BLACK HILLS ENERGY
Contact Name: Chuck Woods
Contact Phone: 5153432037
Contact Email: chuck.woods@blackhillscorp.com
- (XR2) XENIA RURAL WATER DISTRICT
Contact Name: Laird Van Dee
Contact Phone: 5156762117
Contact Email: lvandee@xenialwater.org

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.	Transparency
Pink, Dark	(13)		Temporary Pavement Shading
Yellow	(4)		Proposed Pavement Shading
Orange	(6)		Proposed Granular Shading
Orange	(70)		Proposed Shoulder Granular Shading
Yellow	(68)		Proposed Shoulder Paved Full Depth Shading
Yellow	(132)		Proposed Shoulder Paved Partial Depth Shading
Brown, Light	(236)		Grading Shading
Orange, Light	(134)		Proposed Granular Entrance Shading
Yellow	(220)		Proposed Paved Entrance Shading
Tan	(8)		Proposed Sidewalk Shading
Blue, Light	(230)		Proposed Sidewalk Landing Shading
Pink	(11)		Proposed Sidewalk Ramp Shading
Red	(3)		Proposed Structure Shading
Red	(3)		Delineates Restricted Areas

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(10)		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

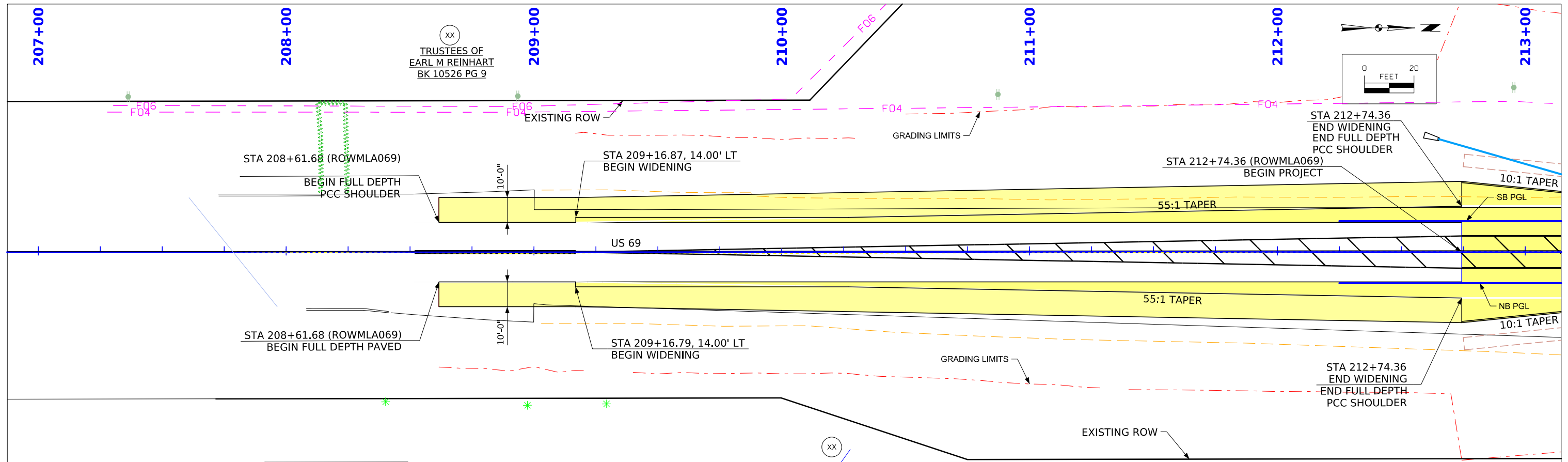
- Reference Point
- Station
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Trench Drain
- HighTension Cable Guardrail
- Sheet Pile
- Pavement Removal
- Clearing & Grubbing Area

RIGHT-OF-WAY LEGEND

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

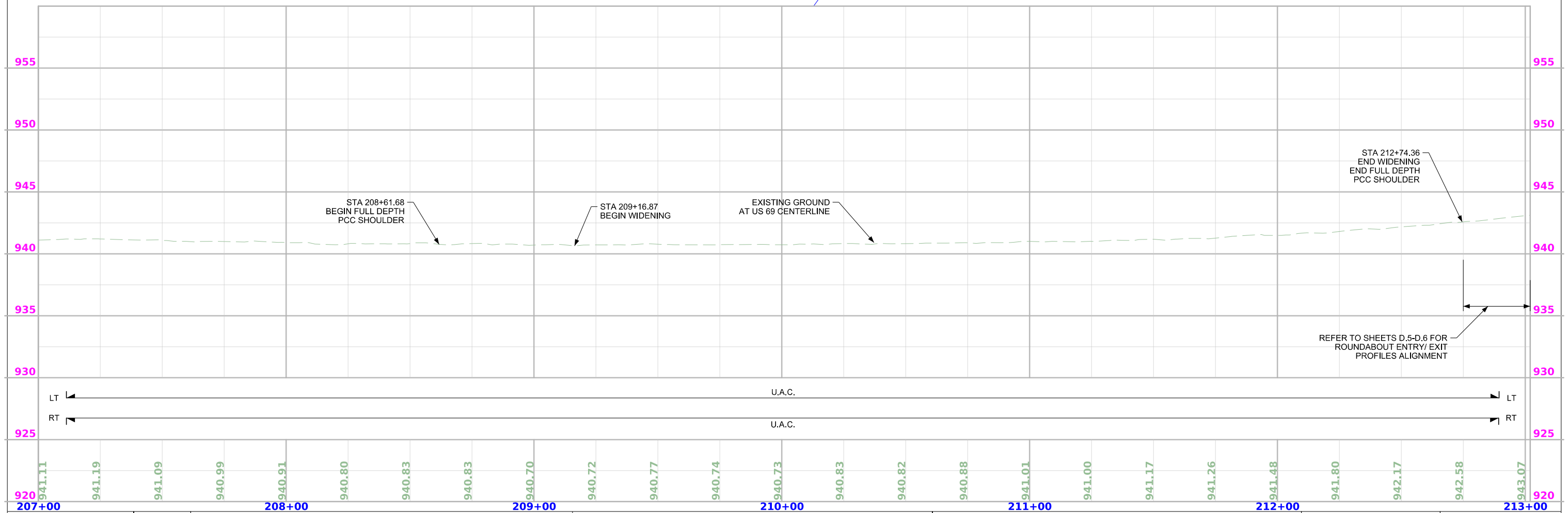
PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

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

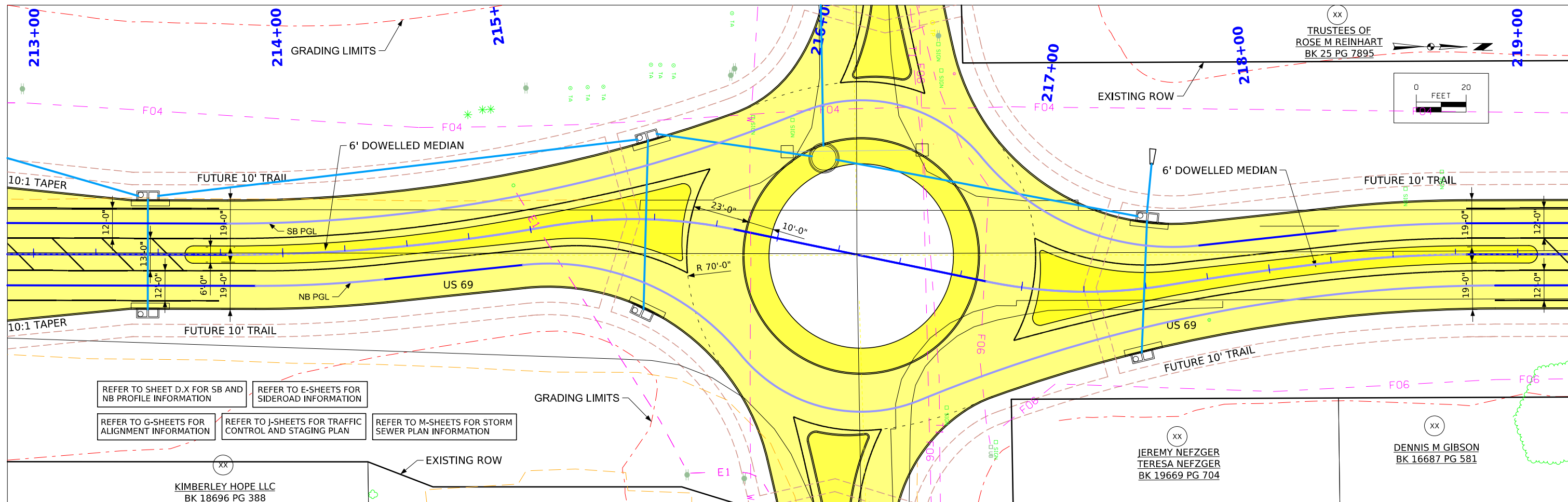


REFER TO E-SHEETS FOR SIDEROAD INFORMATION REFER TO G-SHEETS FOR ALIGNMENT INFORMATION REFER TO J-SHEETS FOR TRAFFIC CONTROL AND STAGING PLAN REFER TO M-SHEETS FOR STORM SEWER PLAN INFORMATION

XX
KIMBERLEY HOPE LLC
BK 18696 PG 388



FILE NO. 98765	ENGLISH	DESIGN TEAM Snyder & Associates, Inc.	POLK COUNTY	PROJECT NUMBER HSIPX-069-4(153)--3L-77	SHEET NUMBER D.2
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(XX)
 TRUSTEES OF
 ROSE M REINHART
 BK 25 PG 7895

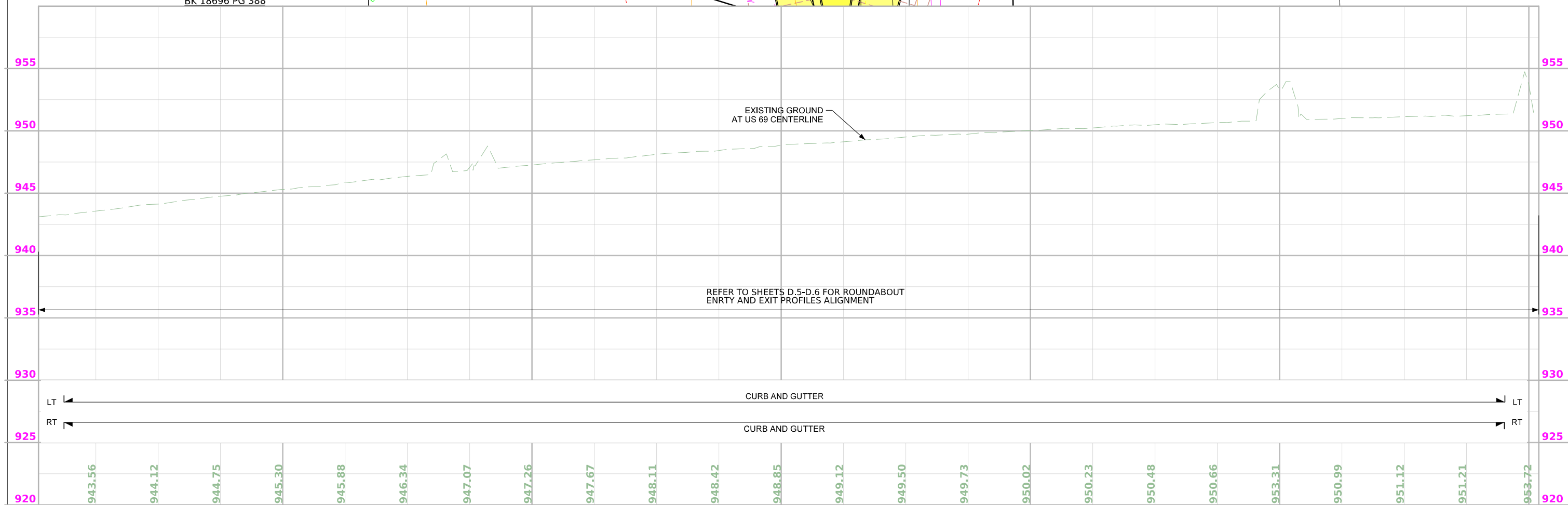
0 FEET 20
 1" = 20'

- REFER TO SHEET D.X FOR SB AND NB PROFILE INFORMATION
- REFER TO E-SHEETS FOR SIDEROAD INFORMATION
- REFER TO G-SHEETS FOR ALIGNMENT INFORMATION
- REFER TO J-SHEETS FOR TRAFFIC CONTROL AND STAGING PLAN
- REFER TO M-SHEETS FOR STORM SEWER PLAN INFORMATION

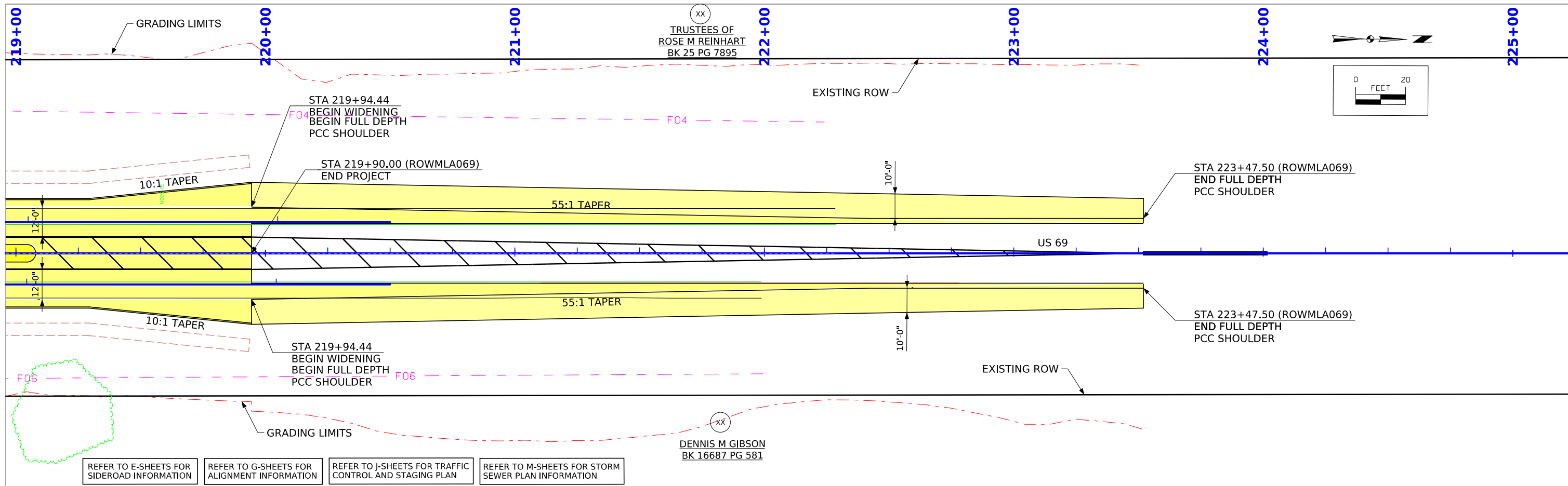
(XX)
KIMBERLEY HOPE LLC
BK 18696 PG 388

(XX)
JEREMY NEFZGER
TERESA NEFZGER
BK 19669 PG 704

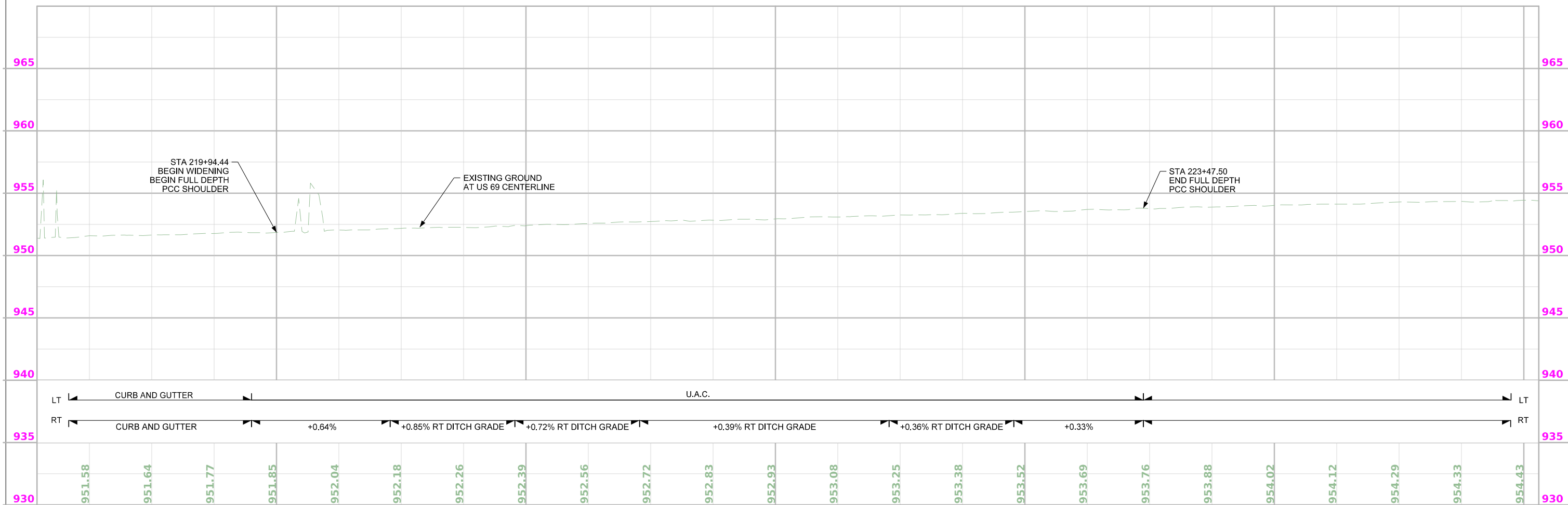
(XX)
DENNIS M GIBSON
BK 16687 PG 581



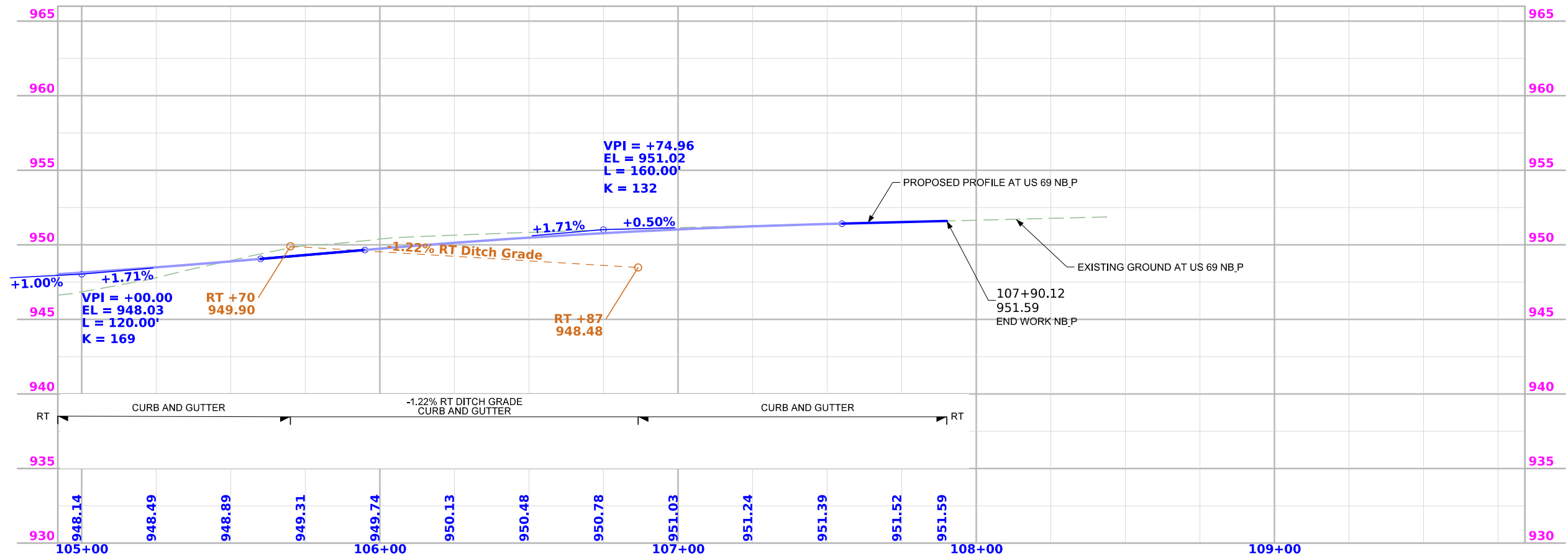
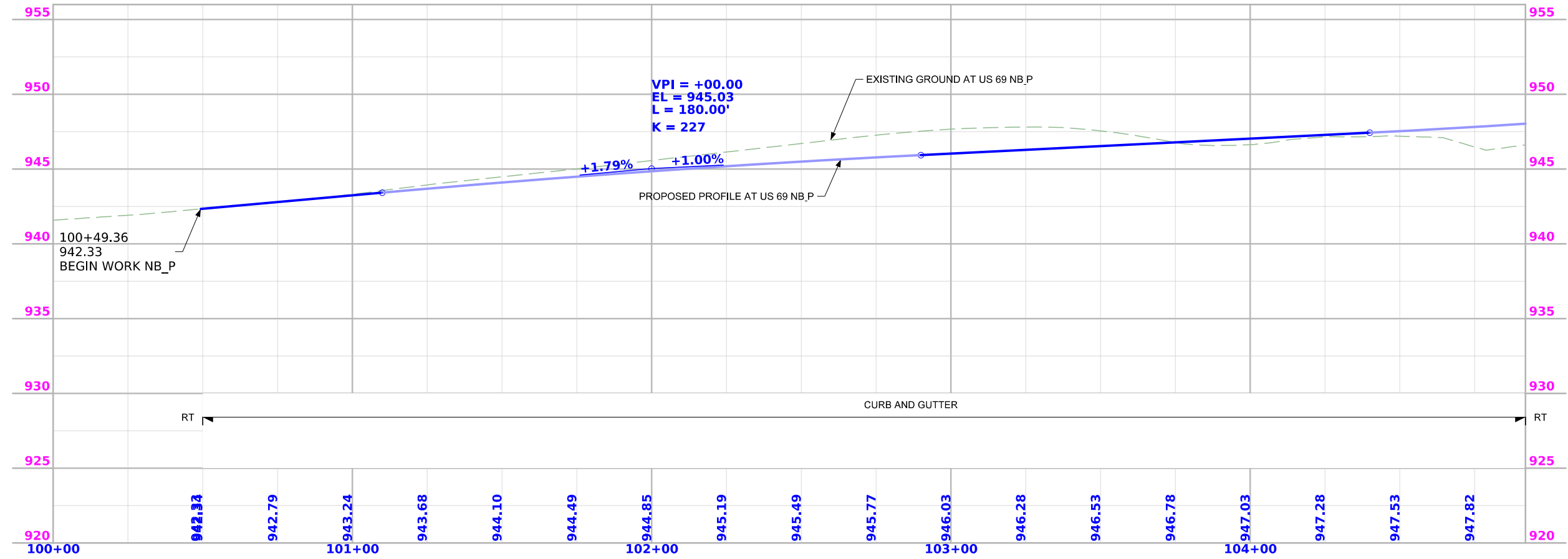
FILE NO. 98765	ENGLISH	DESIGN TEAM Snyder & Associates, Inc.	POLK COUNTY	PROJECT NUMBER HSIPX-069-4(153)--3L-77	SHEET NUMBER D.3
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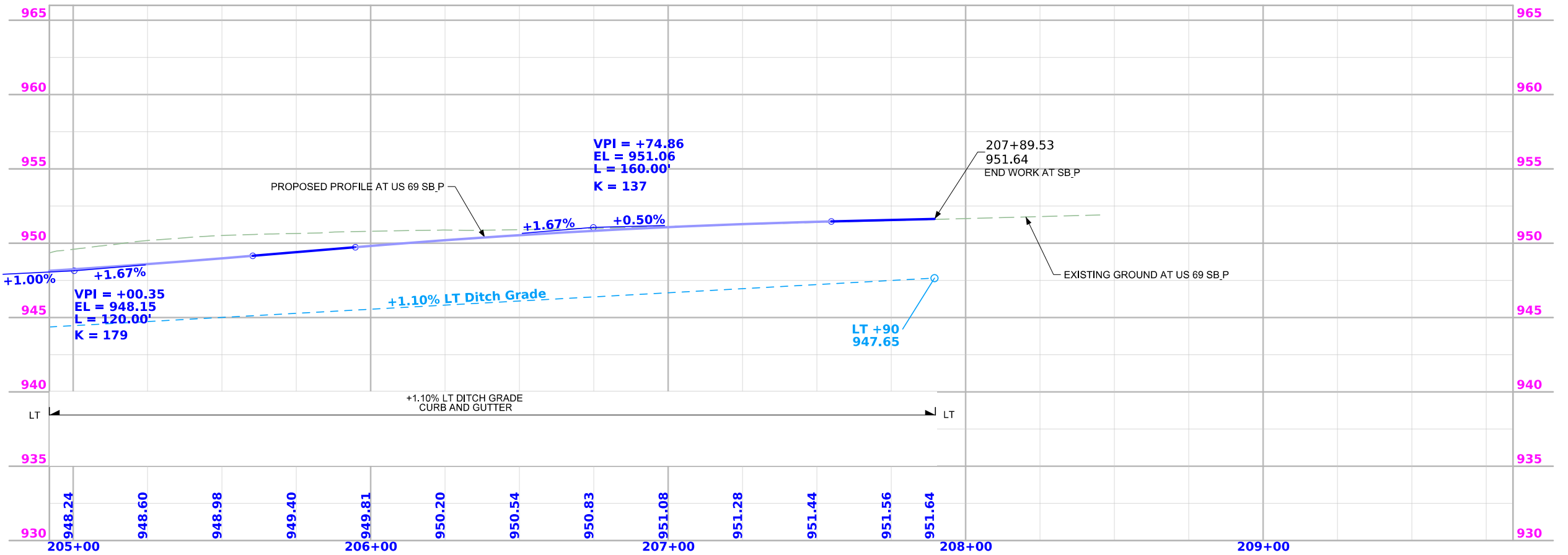
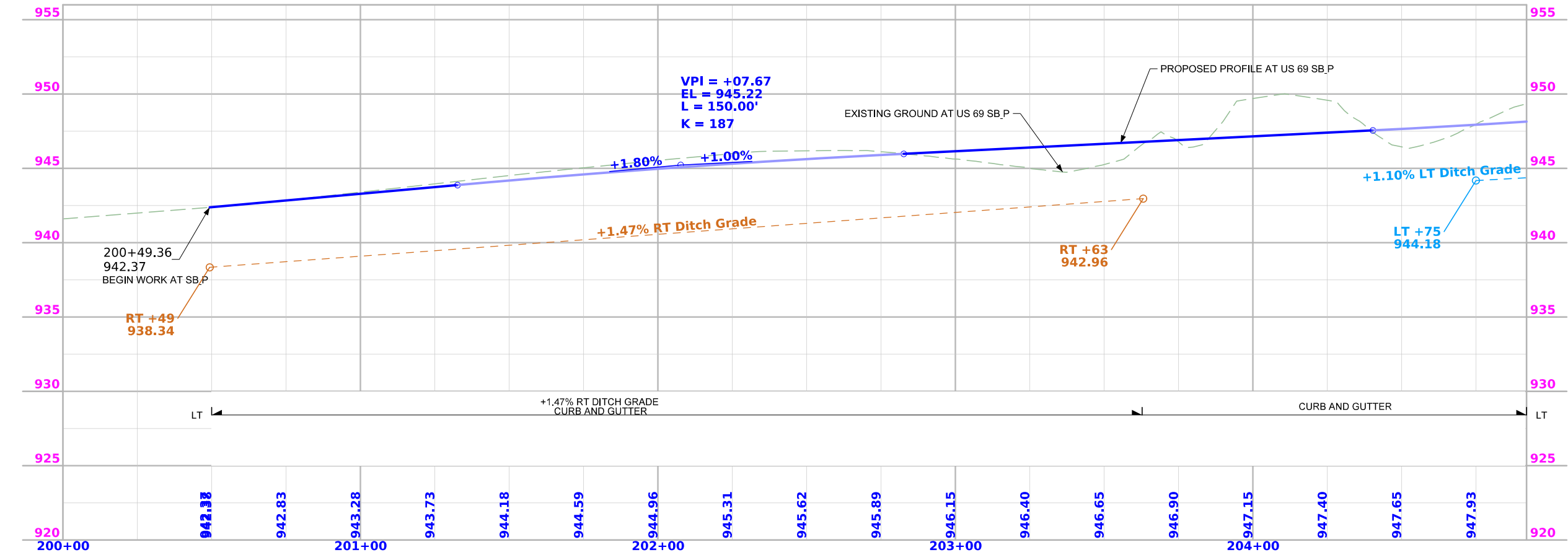


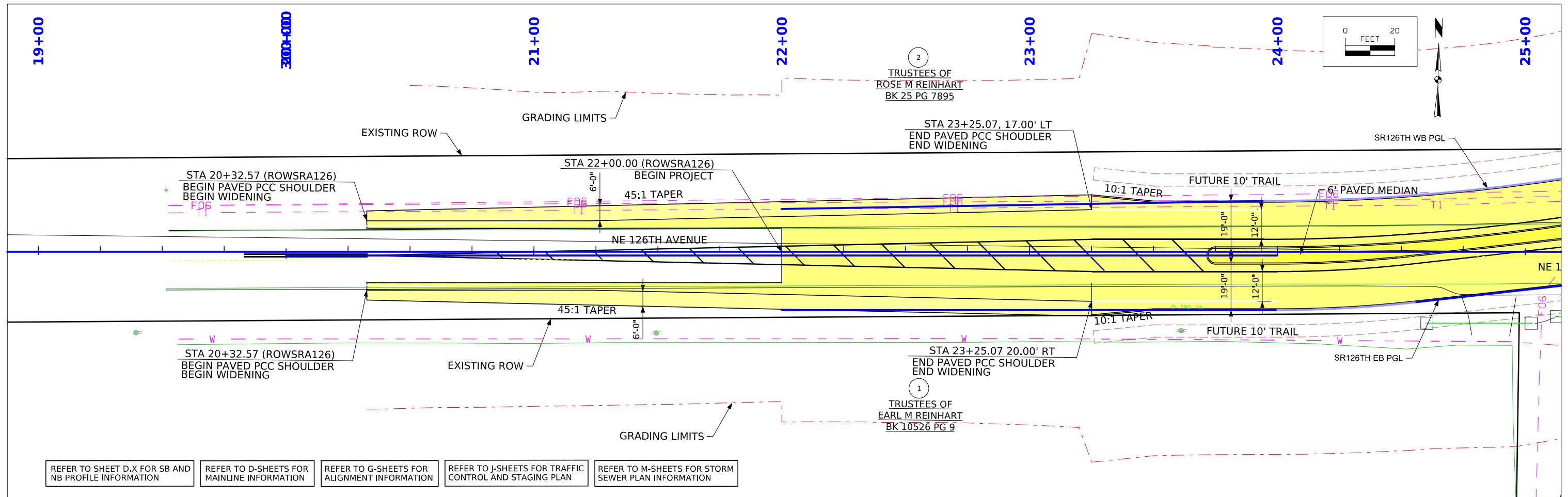
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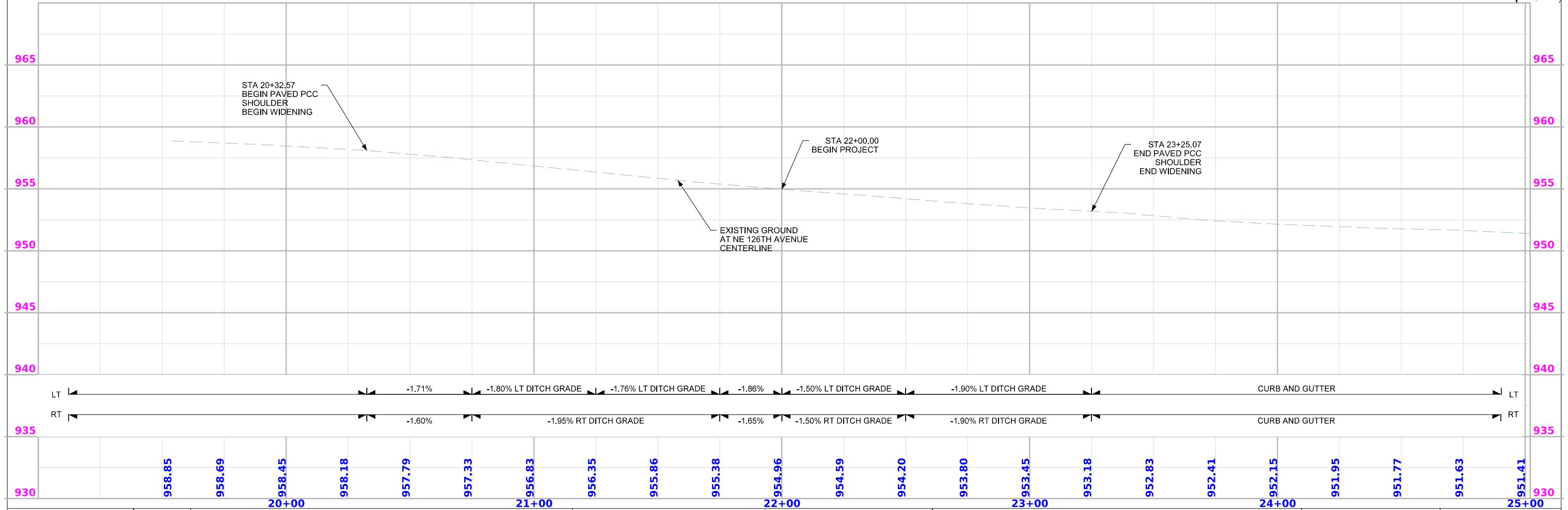
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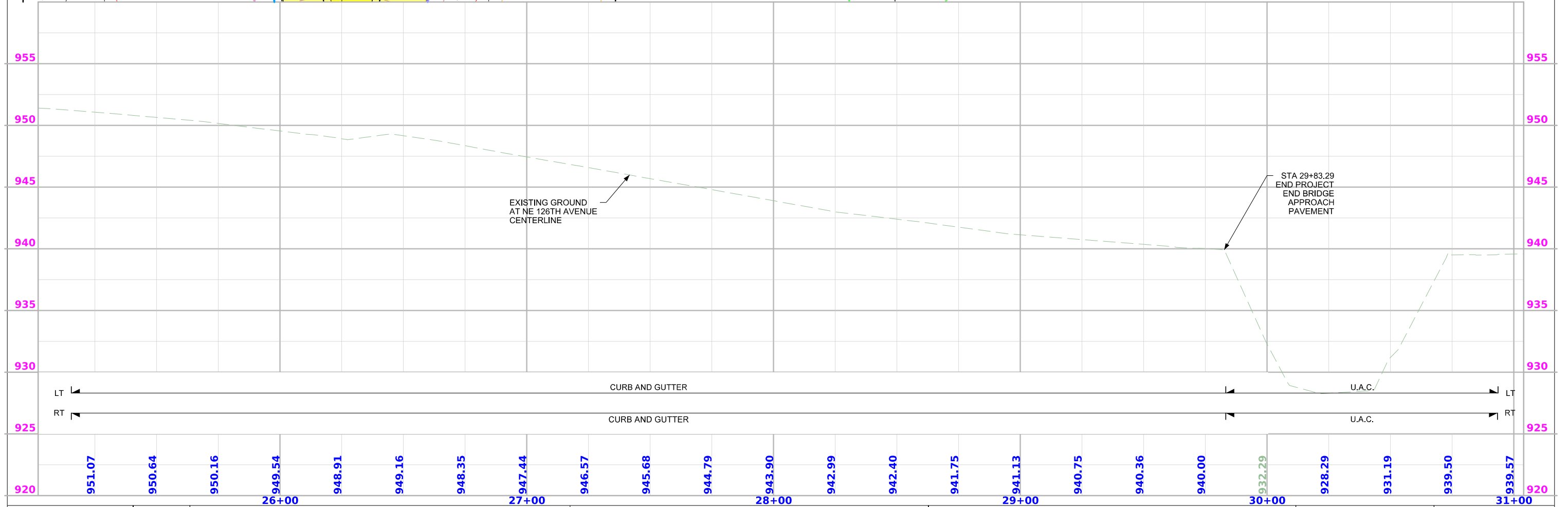
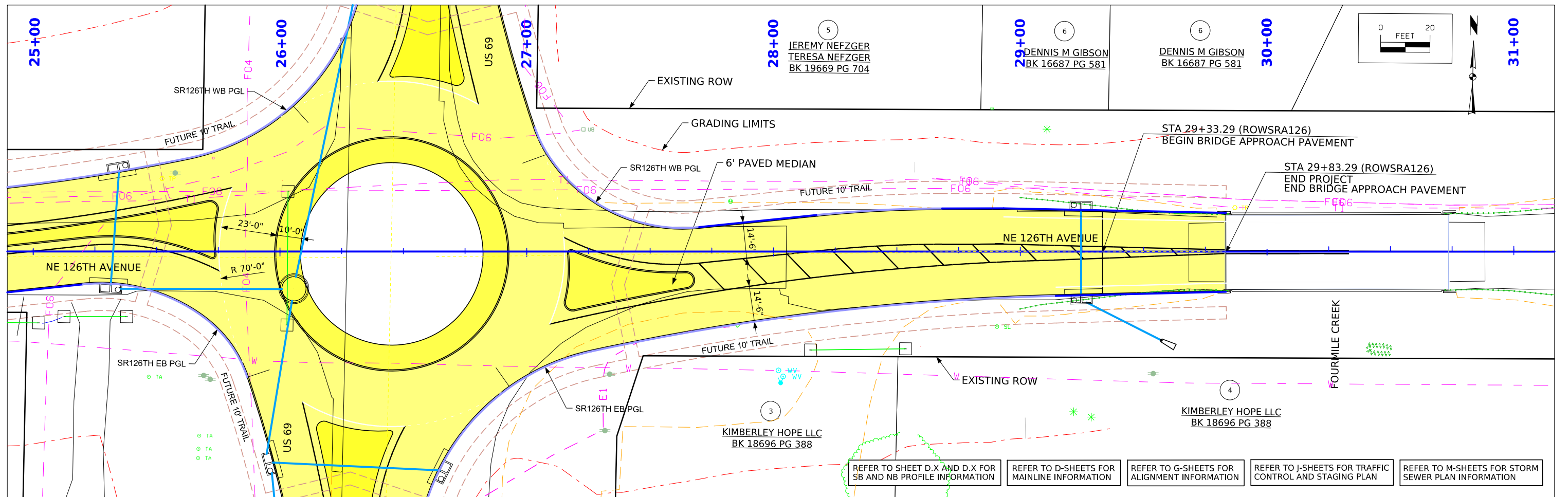


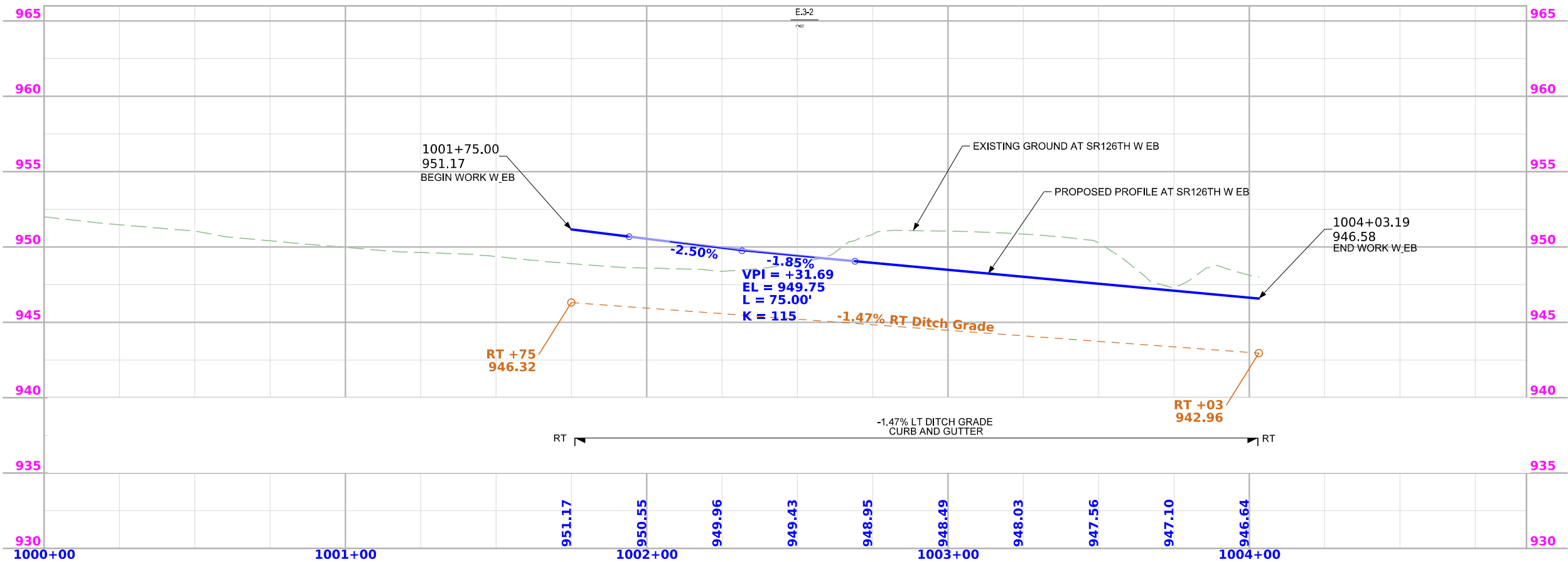
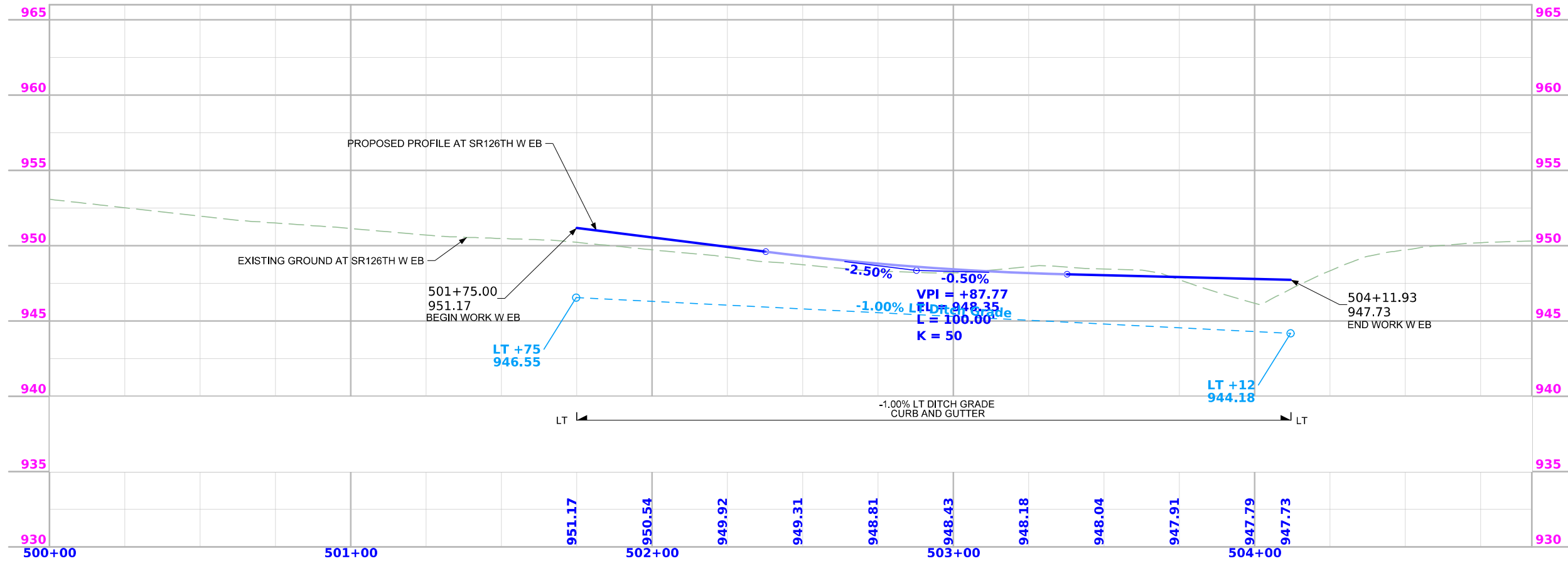


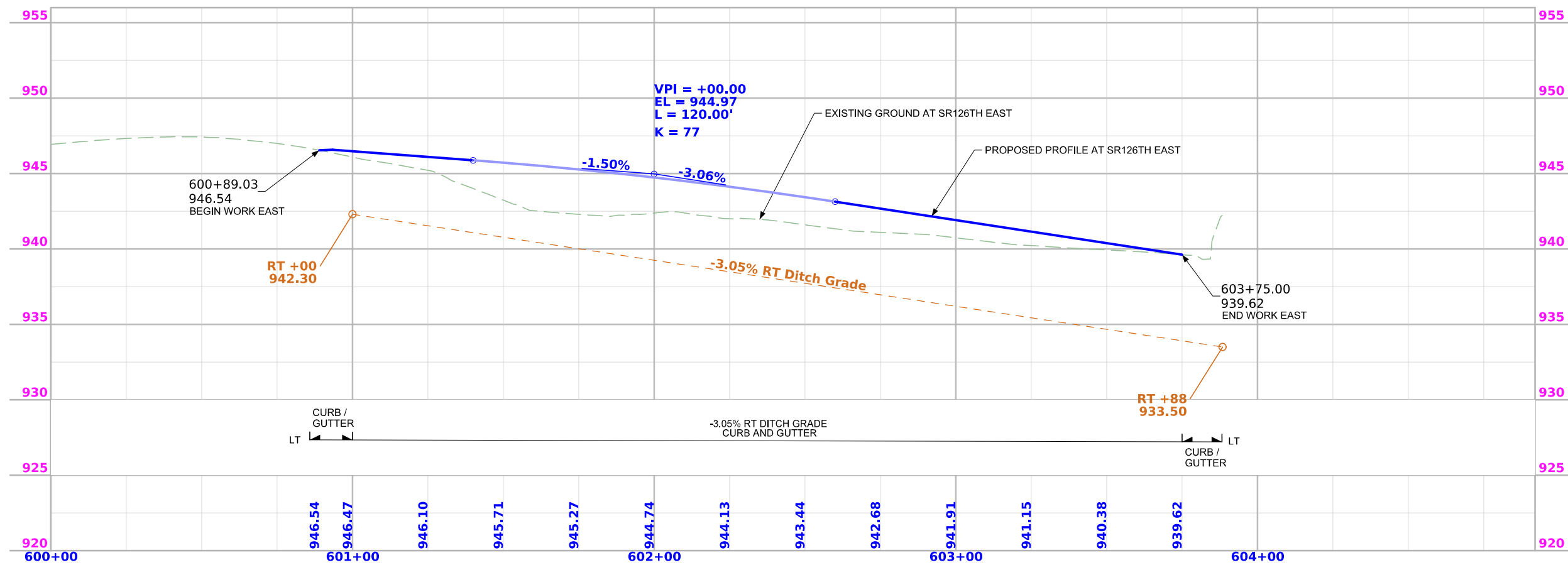
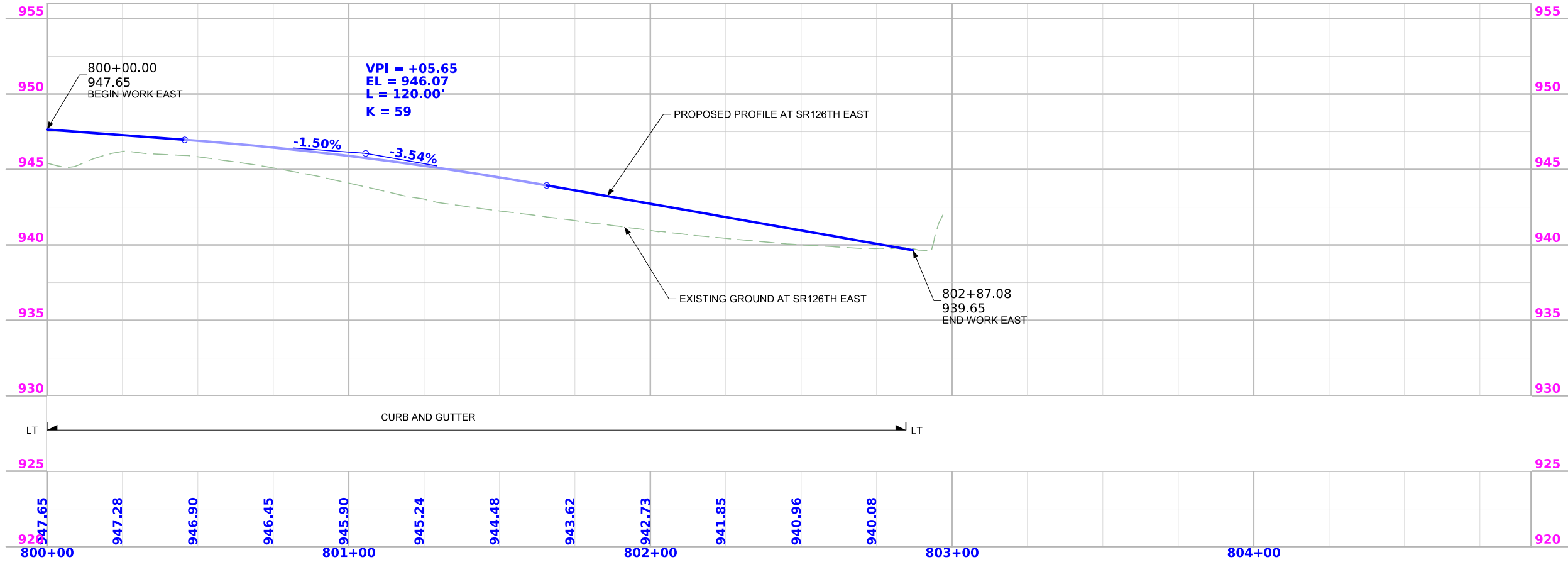


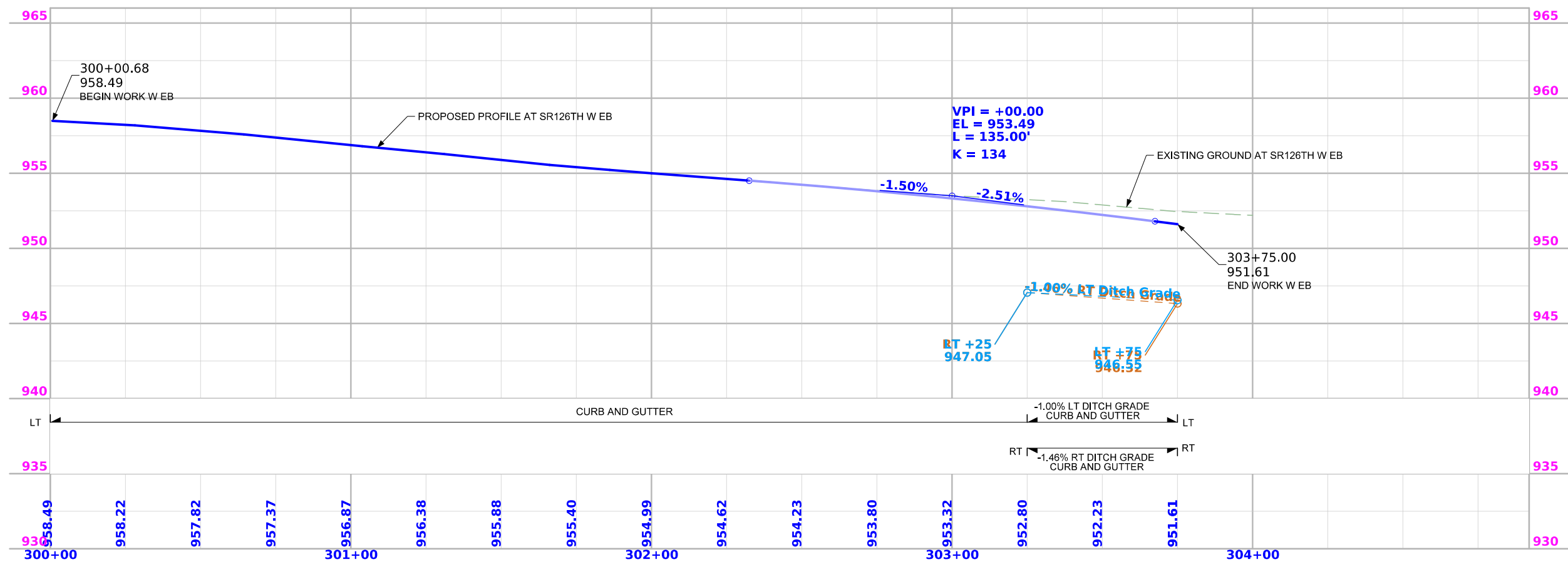
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 REFER TO D-SHEETS FOR MAINLINE INFORMATION
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 REFER TO J-SHEETS FOR TRAFFIC CONTROL AND STAGING PLAN
 REFER TO M-SHEETS FOR STORM SEWER PLAN INFORMATION

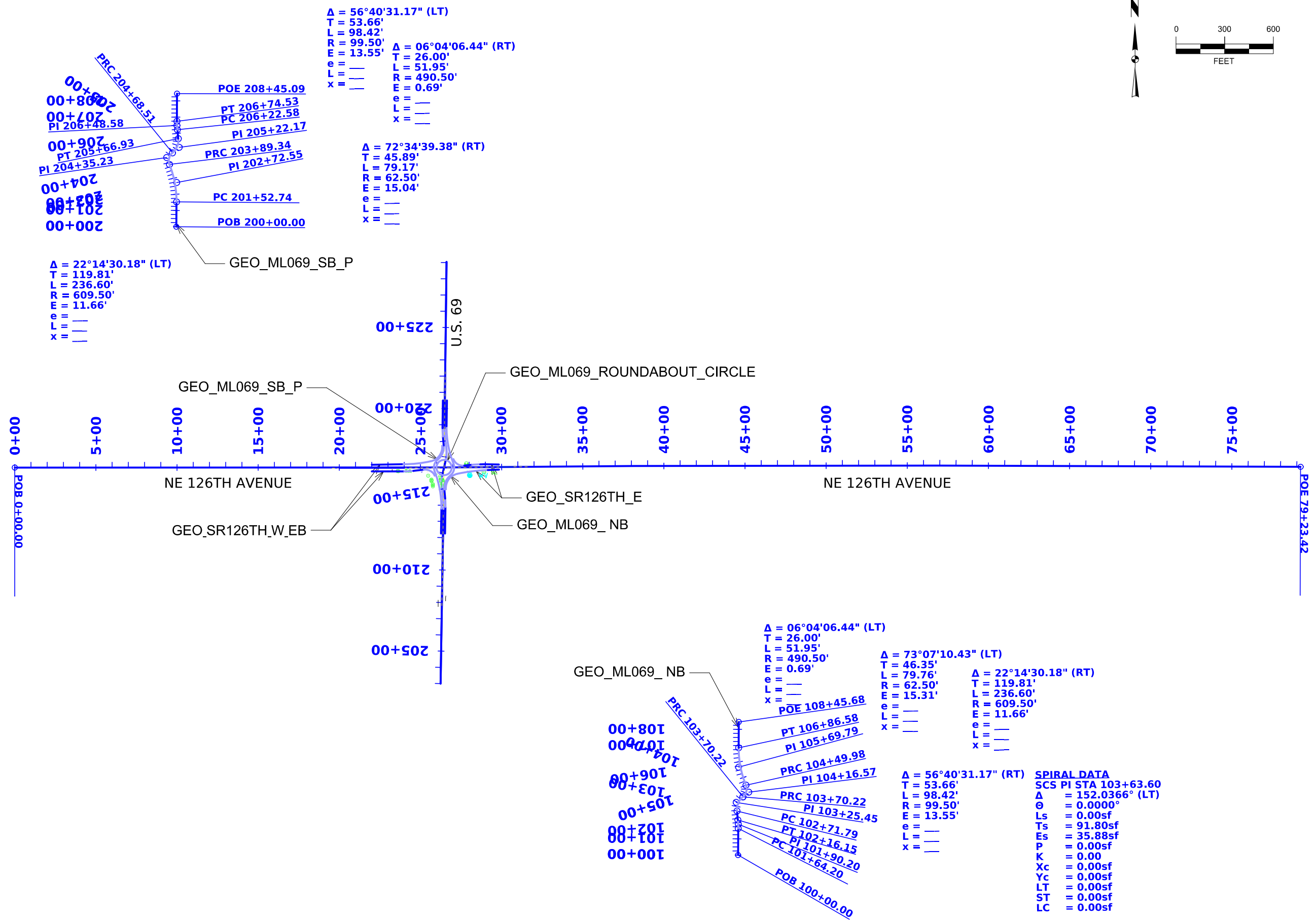
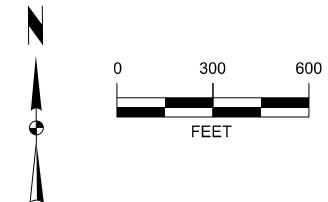












NE 126TH AVENUE

Alignment Name: ROWSRA126
 Alignment Description:
 Alignment Style: Alignment/Geom_Baseline
 Station Northing Easting

Element: Linear
 START (START) 0.000 R1 7561578.417 18529070.347
 HPI (HPI) 2645.304 R17561601.559 18531715.550
 Tangential Direction: N89.499°E
 Tangential Length: 2645.304

Element: Linear
 HPI (HPI) 2645.304 R17561601.559 18531715.550
 HPI (HPI) 3824.150 R17561621.383 18532894.229
 Tangential Direction: N89.036°E
 Tangential Length: 1178.846

Element: Linear
 HPI (HPI) 3824.150 R17561621.383 18532894.229
 HPI (HPI) 5686.463 R17561640.242 18534756.447
 Tangential Direction: N89.420°E
 Tangential Length: 1862.314

Element: Linear
 HPI (HPI) 5686.463 R17561640.242 18534756.447
 END (END) 7923.424 R17561652.007 18536993.377
 Tangential Direction: N89.699°E
 Tangential Length: 2236.961

ROUNDAABOUT CIRCLE

Alignment Name: RAB
 Alignment Description:
 Alignment Style: Alignment/Geom_Baseline
 Station Northing Easting

Element: Circular
 PC (PC) 70000.000 R1 7561601.559 18531762.550
 CC (CC) 7561601.559 18531715.550
 PT (PT) 70295.310 R1 7561601.559 18531762.550
 Radius: 47.000
 Delta: 0.000 Left
 Degree of Curvature (Arc): 121.906
 Length: 295.310
 Tangent: 0.000
 Chord: 0.000
 Middle Ordinate: 0.000
 External: 0.000
 Back Tangent Direction: N0.000°W
 Back Radial Direction: N90.000°E
 Chord Direction: N0.000°W
 Ahead Radial Direction: N90.000°E
 Ahead Tangent Direction: N0.000°W

U.S. 69

Alignment Name: ML_US069_P1
 Alignment Description:
 Alignment Style: Alignment/Geom_Baseline
 Station Northing Easting

Element: Linear
 START (START) 20300.000 R1 7560269.499 18531705.265
 PC (PC) 21377.738 R1 7561347.205 18531713.586
 Tangential Direction: N0.442°E
 Tangential Length: 1077.738

Element: Circular
 PC (PC) 21377.738 R1 7561347.205 18531713.586
 HPI (HPI) 21442.203 R1 7561411.668 18531714.084
 CC (CC) 7561352.767 18530993.224
 PRC (PRC) 21506.326 R1 7561475.195 18531703.128
 Radius: 720.384
 Delta: 10.227 Left
 Degree of Curvature (Arc): 7.954
 Length: 128.588
 Tangent: 64.465
 Chord: 128.417
 Middle Ordinate: 2.867
 External: 2.879
 Back Tangent Direction: N0.442°E
 Back Radial Direction: S89.558°E
 Chord Direction: N4.671°W
 Ahead Radial Direction: N80.215°E
 Ahead Tangent Direction: N9.785°W

Element: Circular
 PRC (PRC) 21506.326 R1 7561475.195 18531703.128
 HPI (HPI) 21544.794 R1 7561513.104 18531696.590
 CC (CC) 7561509.185 18531900.219
 PT (PT) 21582.335 R1 7561550.733 18531704.582
 Radius: 200.000
 Delta: 21.775 Right
 Degree of Curvature (Arc): 28.648
 Length: 76.009
 Tangent: 38.469
 Chord: 75.552
 Middle Ordinate: 3.600
 External: 3.666
 Back Tangent Direction: N9.785°W
 Back Radial Direction: N80.215°E
 Chord Direction: N1.103°E
 Ahead Radial Direction: S78.010°E
 Ahead Tangent Direction: N11.990°E

Element: Linear
 PT (PT) 21582.335 R1 7561550.733 18531704.582
 PC (PC) 21685.579 R1 7561651.726 18531726.030
 Tangential Direction: N11.990°E
 Tangential Length: 103.245

Element: Circular
 PC (PC) 21685.579 R1 7561651.726 18531726.030
 HPI (HPI) 21722.780 R1 7561688.115 18531733.758
 CC (CC) 7561693.274 18531530.393
 PRC (PRC) 21759.140 R1 7561724.849 18531727.885
 Radius: 200.000
 Delta: 21.074 Left
 Degree of Curvature (Arc): 28.648
 Length: 73.561
 Tangent: 37.201
 Chord: 73.147
 Middle Ordinate: 3.372
 External: 3.430
 Back Tangent Direction: N11.990°E
 Back Radial Direction: S78.010°E
 Chord Direction: N1.453°E
 Ahead Radial Direction: N80.916°E
 Ahead Tangent Direction: N9.084°W

Element: Circular
 PRC (PRC) 21759.140 R1 7561724.849 18531727.885
 HPI (HPI) 21793.985 R1 7561759.257 18531722.384
 CC (CC) 7561922.628 18532964.935
 PCC (PCC) 21828.812 R1 7561793.918 18531718.804
 Radius: 1252.760
 Delta: 3.186 Right
 Degree of Curvature (Arc): 4.574
 Length: 69.672
 Tangent: 34.845
 Chord: 69.663
 Middle Ordinate: 0.484
 External: 0.485
 Back Tangent Direction: N9.084°W
 Back Radial Direction: N80.916°E
 Chord Direction: N7.490°W
 Ahead Radial Direction: N84.103°E
 Ahead Tangent Direction: N5.897°W

U.S. 69 CONT.

Element: Circular
 PCC (PCC) 21828.812 R1 7561793.918 18531718.804
 HPI (HPI) 21854.149 R1 7561819.121 18531716.201
 CC (CC) 7561843.028 18532194.275
 PT (PT) 21879.439 R1 7561844.458 18531716.277
 Radius: 478.000
 Delta: 6.068 Right
 Degree of Curvature (Arc): 11.987
 Length: 50.627
 Tangent: 25.337
 Chord: 50.603
 Middle Ordinate: 0.670
 External: 0.671
 Back Tangent Direction: N5.897°W
 Back Radial Direction: N84.103°E
 Chord Direction: N2.863°W
 Ahead Radial Direction: S89.829°E
 Ahead Tangent Direction: N0.171°E

Element: Linear
 PT (PT) 21879.439 R1 7561844.458 18531716.277
 END (END) 22904.439 R1 7562869.453 18531719.343
 Tangential Direction: N0.171°E
 Tangential Length: 1025.000

US 69 SB

Alignment Name: US 69_SB_P
 Alignment Description:
 Alignment Style: Alignment/Geom_Baseline
 Station Northing Easting

Element: Linear
 START (START) 20000.000 R1 7561194.568 18531699.907
 PC (PC) 20152.738 R1 7561347.301 18531701.086
 Tangential Direction: N0.442°E
 Tangential Length: 152.738

Element: Circular
 PC (PC) 20152.738 R1 7561347.301 18531701.086
 HPI (HPI) 20272.548 R1 7561467.107 18531702.011
 CC (CC) 7561352.007 18531091.605
 PRC (PRC) 20389.341 R1 7561578.349 18531657.519
 Radius: 609.500
 Delta: 22.242 Left
 Degree of Curvature (Arc): 9.400
 Length: 236.603
 Tangent: 119.810
 Chord: 235.120
 Middle Ordinate: 11.445
 External: 11.664
 Back Tangent Direction: N0.442°E
 Back Radial Direction: S89.558°E
 Chord Direction: N10.678°W
 Ahead Radial Direction: N68.201°E
 Ahead Tangent Direction: N21.799°W

Element: Circular
 PRC (PRC) 20389.341 R1 7561578.349 18531657.519
 HPI (HPI) 20435.233 R1 7561620.959 18531640.477
 CC (CC) 7561601.559 18531715.550
 PRC (PRC) 20468.510 R1 7561649.978 18531676.030
 Radius: 62.500
 Delta: 72.578 Right
 Degree of Curvature (Arc): 91.673
 Length: 79.170
 Tangent: 45.892
 Chord: 73.982
 Middle Ordinate: 12.122
 External: 15.039
 Back Tangent Direction: N21.799°W
 Back Radial Direction: N68.201°E
 Chord Direction: N14.489°E
 Ahead Radial Direction: S39.222°E
 Ahead Tangent Direction: N50.778°E

Element: Circular
 PRC (PRC) 20468.510 R1 7561649.978 18531676.030
 HPI (HPI) 20522.170 R1 7561683.908 18531717.600
 CC (CC) 7561727.061 18531613.114
 PT (PT) 20566.933 R1 7561737.284 18531712.087
 Radius: 99.500
 Delta: 56.675 Left
 Degree of Curvature (Arc): 57.584
 Length: 98.423
 Tangent: 53.660
 Chord: 94.459
 Middle Ordinate: 11.924
 External: 13.547
 Back Tangent Direction: N50.778°E
 Back Radial Direction: S39.222°E
 Chord Direction: N22.441°E
 Ahead Radial Direction: N84.103°E
 Ahead Tangent Direction: N5.897°W

Element: Linear
 PT (PT) 20566.933 R1 7561737.284 18531712.087
 PC (PC) 20622.577 R1 7561792.633 18531706.370
 Tangential Direction: N5.897°W
 Tangential Length: 55.644

Element: Circular
 PC (PC) 20622.577 R1 7561792.633 18531706.370
 HPI (HPI) 20648.577 R1 7561818.496 18531703.699
 CC (CC) 7561843.028 18532194.275
 PT (PT) 20674.528 R1 7561844.495 18531703.777
 Radius: 490.500
 Delta: 6.068 Right
 Degree of Curvature (Arc): 11.681
 Length: 51.951
 Tangent: 26.000
 Chord: 51.927
 Middle Ordinate: 0.688
 External: 0.689
 Back Tangent Direction: N5.897°W
 Back Radial Direction: N84.103°E
 Chord Direction: N2.863°W
 Ahead Radial Direction: S89.829°E
 Ahead Tangent Direction: N0.171°E

Element: Linear
 PT (PT) 20674.528 R1 7561844.495 18531703.777
 END (END) 20845.089 R1 7562015.055 18531704.287
 Tangential Direction: N0.171°E
 Tangential Length: 170.561

NE 126TH AVENUE_E

SR126TH E
 Alignment Name: GeomBL
 Alignment Description:
 Alignment Style: Alignment/Geom_Baseline
 Station Northing Easting

Element: Circular
 PC (PC) 60000.000 R1 7561466.751 18531727.825
 HPI (HPI) 60078.940 R1 7561545.311 18531720.086
 CC (CC) 7561475.574 18531817.392
 PCC (PCC) 60129.605 R1 7561563.226 18531796.967
 Radius: 90.000
 Delta: 82.509 Right
 Degree of Curvature (Arc): 63.662
 Length: 129.605
 Tangent: 78.940
 Chord: 118.693
 Middle Ordinate: 22.339
 External: 29.715
 Back Tangent Direction: N5.626°W
 Back Radial Direction: N84.374°E
 Chord Direction: N35.628°E
 Ahead Radial Direction: S13.117°E
 Ahead Tangent Direction: N76.883°E

Element: Circular
 PCC (PCC) 60129.605 R1 7561563.226 18531796.967
 HPI (HPI) 60224.841 R1 7561584.838 18531889.718
 CC (CC) 7560589.317 18532023.907
 PT (PT) 60319.504 R1 7561588.555 18531984.881
 Radius: 1000.000
 Delta: 10.880 Right
 Degree of Curvature (Arc): 5.730
 Length: 189.899
 Tangent: 95.236
 Chord: 189.614
 Middle Ordinate: 4.504
 External: 4.525
 Back Tangent Direction: N76.883°E
 Back Radial Direction: S13.117°E
 Chord Direction: N82.323°E
 Ahead Radial Direction: S2.237°E
 Ahead Tangent Direction: N87.763°E

Element: Linear
 PT (PT) 60319.504 R1 7561588.555 18531984.881
 END (END) 60388.431 R1 7561591.245 18532053.756
 Tangential Direction: N87.763°E
 Tangential Length: 68.928

NE 126TH AVENUE_E

Alignment Name: GeomBL1
 Alignment Description:
 Alignment Style: Alignment/Geom_Baseline
 Station Northing Easting

Element: Circular
 PC (PC) 80000.000 R1 7561653.731 18531772.739
 HPI (HPI) 80006.070 R1 7561648.009 18531774.765
 CC (CC) 7561670.425 18531819.869
 PCC (PCC) 80012.082 R1 7561642.939 18531778.103
 Radius: 50.000
 Delta: 13.845 Left
 Degree of Curvature (Arc): 114.592
 Length: 12.082
 Tangent: 6.070
 Chord: 12.052
 Middle Ordinate: 0.364
 External: 0.367
 Back Tangent Direction: S19.504°E
 Back Radial Direction: S70.496°W
 Chord Direction: S26.427°E
 Ahead Radial Direction: S56.651°W
 Ahead Tangent Direction: S33.349°E

Element: Circular
 PCC (PCC) 80012.082 R1 7561642.938 18531778.102
 HPI (HPI) 80052.114 R1 7561609.550 18531800.189
 CC (CC) 7561678.800 18531832.314
 PT (PT) 80083.844 R1 7561614.250 18531839.944
 Radius: 65.000
 Delta: 63.256 Left
 Degree of Curvature (Arc): 88.147
 Length: 71.762
 Tangent: 40.032
 Chord: 68.173
 Middle Ordinate: 9.654
 External: 11.339
 Back Tangent Direction: S33.485°E
 Back Radial Direction: S56.515°W
 Chord Direction: S65.113°E
 Ahead Radial Direction: S6.742°E
 Ahead Tangent Direction: N83.258°E

Element: Linear
 PT (PT) 80083.844 R1 7561614.250 18531839.944
 PC (PC) 80132.147 R1 7561619.920 18531887.914
 Tangential Direction: N83.258°E
 Tangential Length: 48.303

Element: Circular
 PC (PC) 80132.147 R1 7561619.920 18531887.914
 HPI (HPI) 80157.380 R1 7561622.882 18531912.972
 CC (CC) 7561123.377 18531946.609
 PT (PT) 80182.569 R1 7561623.306 18531938.201
 Radius: 500.000
 Delta: 5.778 Right
 Degree of Curvature (Arc): 11.459
 Length: 50.422
 Tangent: 25.233
 Chord: 50.401
 Middle Ordinate: 0.635
 External: 0.636
 Back Tangent Direction: N83.258°E
 Back Radial Direction: S6.742°E
 Chord Direction: N86.147°E
 Ahead Radial Direction: S0.964°E
 Ahead Tangent Direction: N89.036°E

Element: Linear
 PT (PT) 80182.569 R1 7561623.306 18531938.201
 HPI (HPI) 80207.569 R1 7561623.727 18531963.197
 Tangential Direction: N89.036°E
 Tangential Length: 25.000

Element: Linear
 HPI (HPI) 80207.569 R1 7561623.727 18531963.197
 END (END) 80297.592 R1 7561623.241 18532053.218
 Tangential Direction: S89.691°E
 Tangential Length: 90.022

NE 126TH AVENUE_W_EB

Alignment Name: NE 126th_W_EB_P
 Alignment Description:
 Alignment Style: Alignment\Geom_Baseline
 Station Northing Easting

Element: Linear
 START (START) 10000.000 R1 7561574.164 18531270.468
 HPI (HPI) 100100.000 R1 7561575.039 18531370.465
 Tangential Direction: N89.499°E
 Tangential Length: 100.000

Element: Linear
 HPI (HPI) 100100.000 R1 7561575.039 18531370.465
 PC (PC) 100200.000 R1 7561575.914 18531470.461
 Tangential Direction: N89.499°E
 Tangential Length: 100.000

Element: Circular
 PC (PC) 100200.000 R1 7561575.914 18531470.461
 HPI (HPI) 100228.120 R1 7561576.160 18531498.580
 CC (CC) 7562075.895 18531466.087
 PT (PT) 100256.181 R1 7561579.557 18531526.494
 Radius: 500.000
 Delta: 6.438 Left
 Degree of Curvature (Arc): 11.459
 Length: 56.181
 Tangent: 28.120
 Chord: 56.151
 Middle Ordinate: 0.789
 External: 0.790
 Back Tangent Direction: N89.499°E
 Back Radial Direction: S0.501°E
 Chord Direction: N86.280°E
 Ahead Radial Direction: S6.939°E
 Ahead Tangent Direction: N83.061°E

Element: Linear
 PT (PT) 100256.181 R1 7561579.557 18531526.494
 PC (PC) 100320.664 R1 7561587.348 18531590.505
 Tangential Direction: N83.061°E
 Tangential Length: 64.484

Element: Circular
 PC (PC) 100320.664 R1 7561587.348 18531590.505
 HPI (HPI) 100347.828 R1 7561590.630 18531617.470
 CC (CC) 7561517.860 18531598.962
 PCC (PCC) 100372.488 R1 7561574.863 18531639.590
 Radius: 70.000
 Delta: 42.418 Right
 Degree of Curvature (Arc): 81.851
 Length: 51.824
 Tangent: 27.164
 Chord: 50.648
 Middle Ordinate: 4.741
 External: 5.086
 Back Tangent Direction: N83.061°E
 Back Radial Direction: S6.939°E
 Chord Direction: S75.730°E
 Ahead Radial Direction: S35.479°W
 Ahead Tangent Direction: S54.521°E

Element: Circular
 PCC (PCC) 100372.488 R1 7561574.863 18531639.590
 HPI (HPI) 100388.340 R1 7561565.663 18531652.499
 CC (CC) 7561534.147 18531610.570
 PT (PT) 100403.190 R1 7561550.705 18531657.749
 Radius: 50.000
 Delta: 35.181 Right
 Degree of Curvature (Arc): 114.592
 Length: 30.702
 Tangent: 15.852
 Chord: 30.222
 Middle Ordinate: 2.338
 External: 2.453
 Back Tangent Direction: S54.521°E
 Back Radial Direction: S35.479°W
 Chord Direction: S36.930°E
 Ahead Radial Direction: S70.661°W
 Ahead Tangent Direction: S19.339°E

NE 126TH AVENUE_W_WB

Alignment Name: NE 126th_W_WB_P
 Alignment Description:
 Alignment Style: Alignment\Geom_Baseline
 Station Northing Easting

Element: Linear
 START (START) 50000.000 R1 7561614.922 18531269.991
 PC (PC) 50194.731 R1 7561619.865 18531464.660
 Tangential Direction: N88.546°E
 Tangential Length: 194.731

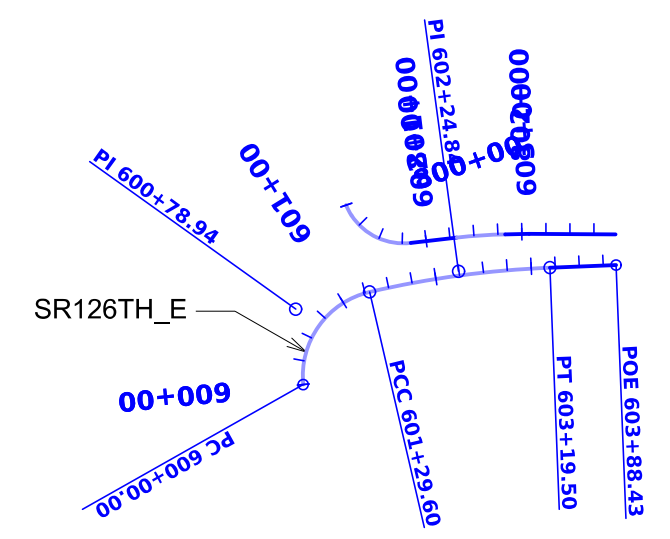
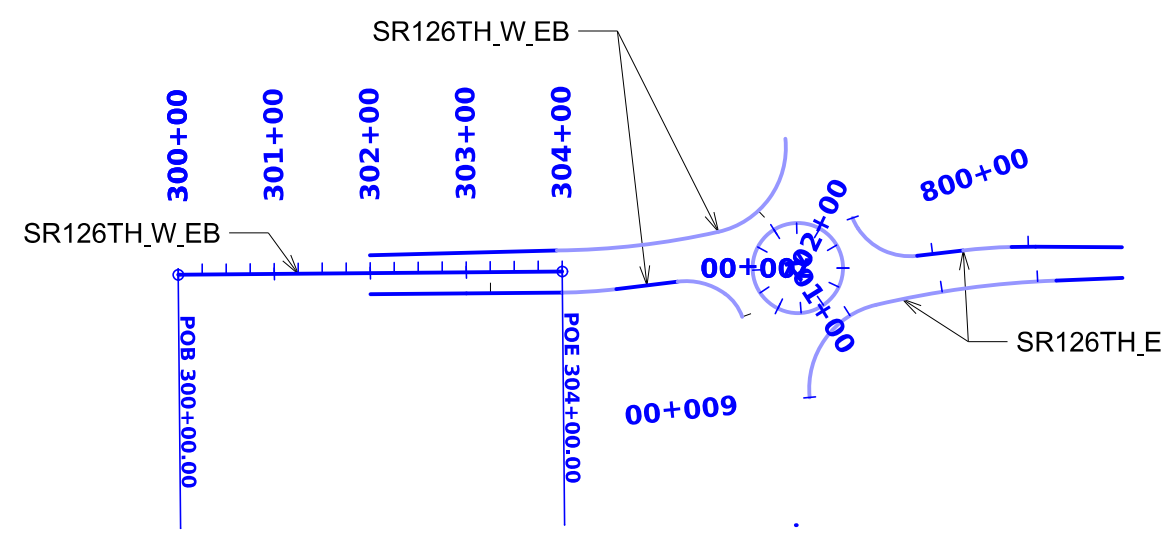
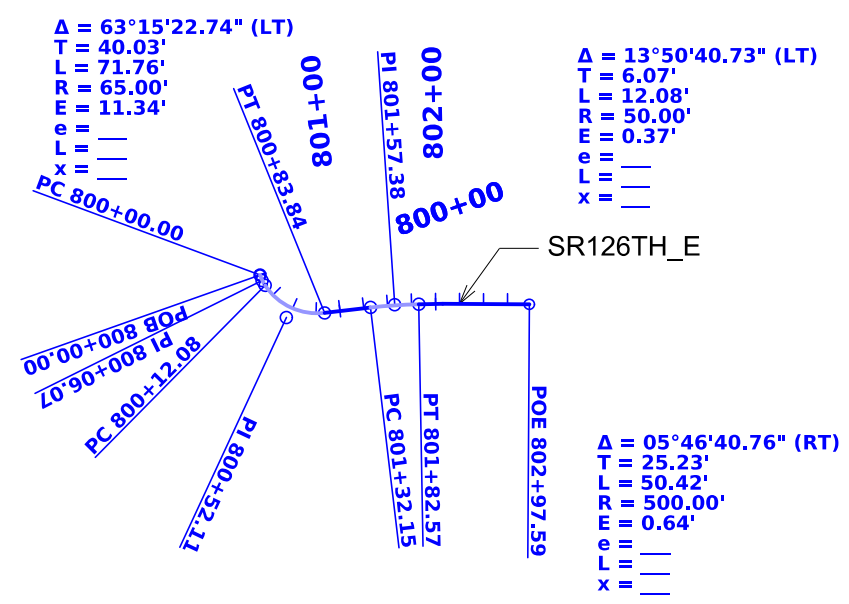
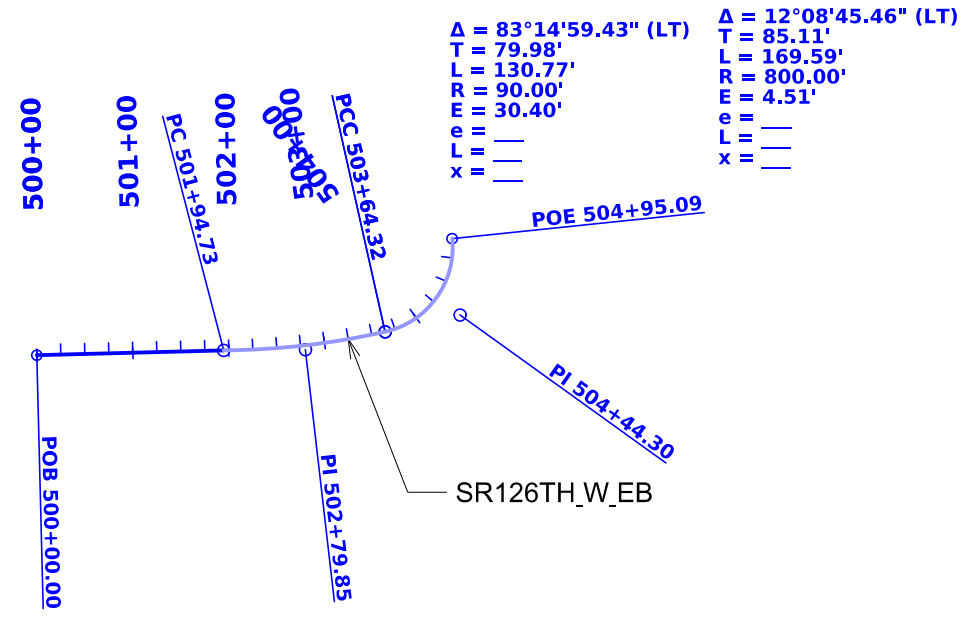
Element: Circular
 PC (PC) 50194.731 R1 7561619.865 18531464.660
 HPI (HPI) 50279.845 R1 7561620.609 18531549.770
 CC (CC) 7562419.834 18531457.661
 PCC (PCC) 50364.321 R1 7561639.245 18531632.819
 Radius: 800.000
 Delta: 12.146 Left
 Degree of Curvature (Arc): 7.162
 Length: 169.590
 Tangent: 85.114
 Chord: 169.272
 Middle Ordinate: 4.490
 External: 4.515
 Back Tangent Direction: N89.499°E
 Back Radial Direction: S0.501°E
 Chord Direction: N83.426°E
 Ahead Radial Direction: S12.647°E
 Ahead Tangent Direction: N77.353°E

Element: Circular
 PCC (PCC) 50364.321 R1 7561639.245 18531632.819
 HPI (HPI) 50444.297 R1 7561656.755 18531710.854
 CC (CC) 7561727.061 18531613.114
 PT (PT) 50495.089 R1 7561736.308 18531702.637
 Radius: 90.000
 Delta: 83.250 Left
 Degree of Curvature (Arc): 63.662
 Length: 130.769
 Tangent: 79.976
 Chord: 119.565
 Middle Ordinate: 22.724
 External: 30.400
 Back Tangent Direction: N77.353°E
 Back Radial Direction: S12.647°E
 Chord Direction: N35.728°E
 Ahead Radial Direction: N84.103°E
 Ahead Tangent Direction: N5.897°W

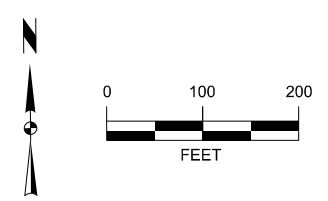
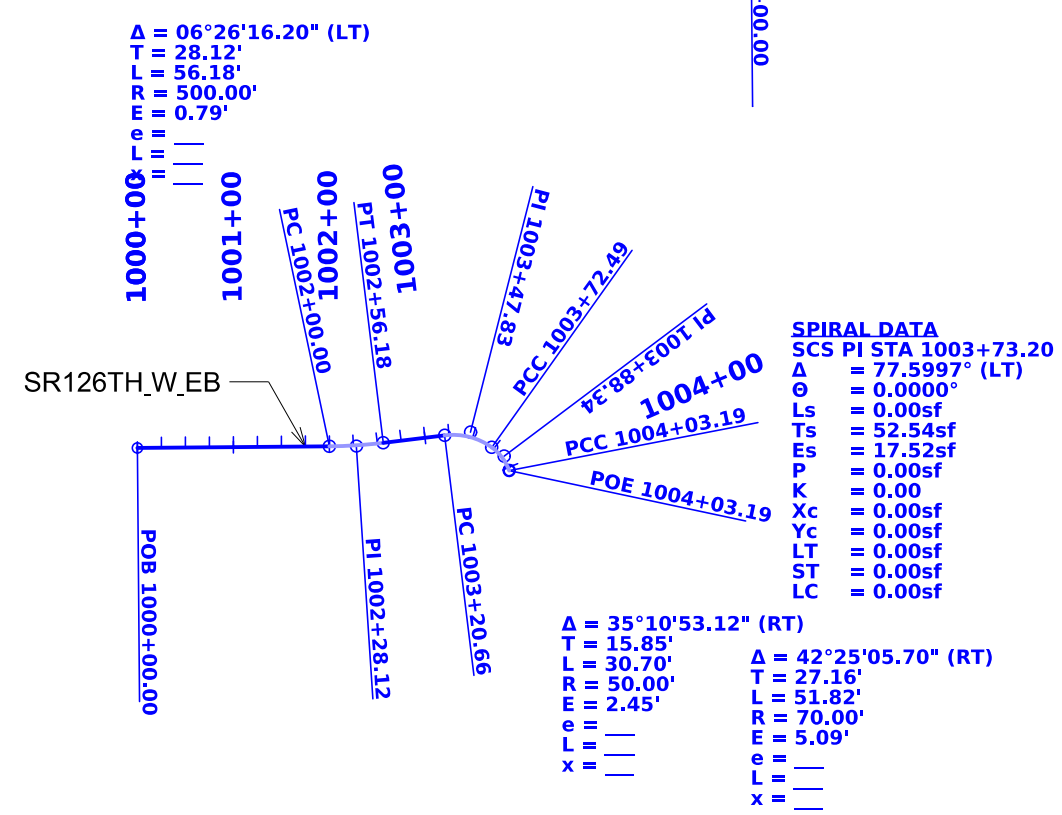
NE 126TH AVENUE_W

Alignment Name: NE_126TH_W_P1
 Alignment Description:
 Alignment Style: Alignment\Geom_Baseline
 Station Northing Easting

Element: Linear
 START (START) 30000.000 R1 7561594.414 18531070.284
 END (END) 30400.000 R1 7561597.913 18531470.268
 Tangential Direction: N89.499°E
 Tangential Length: 400.000

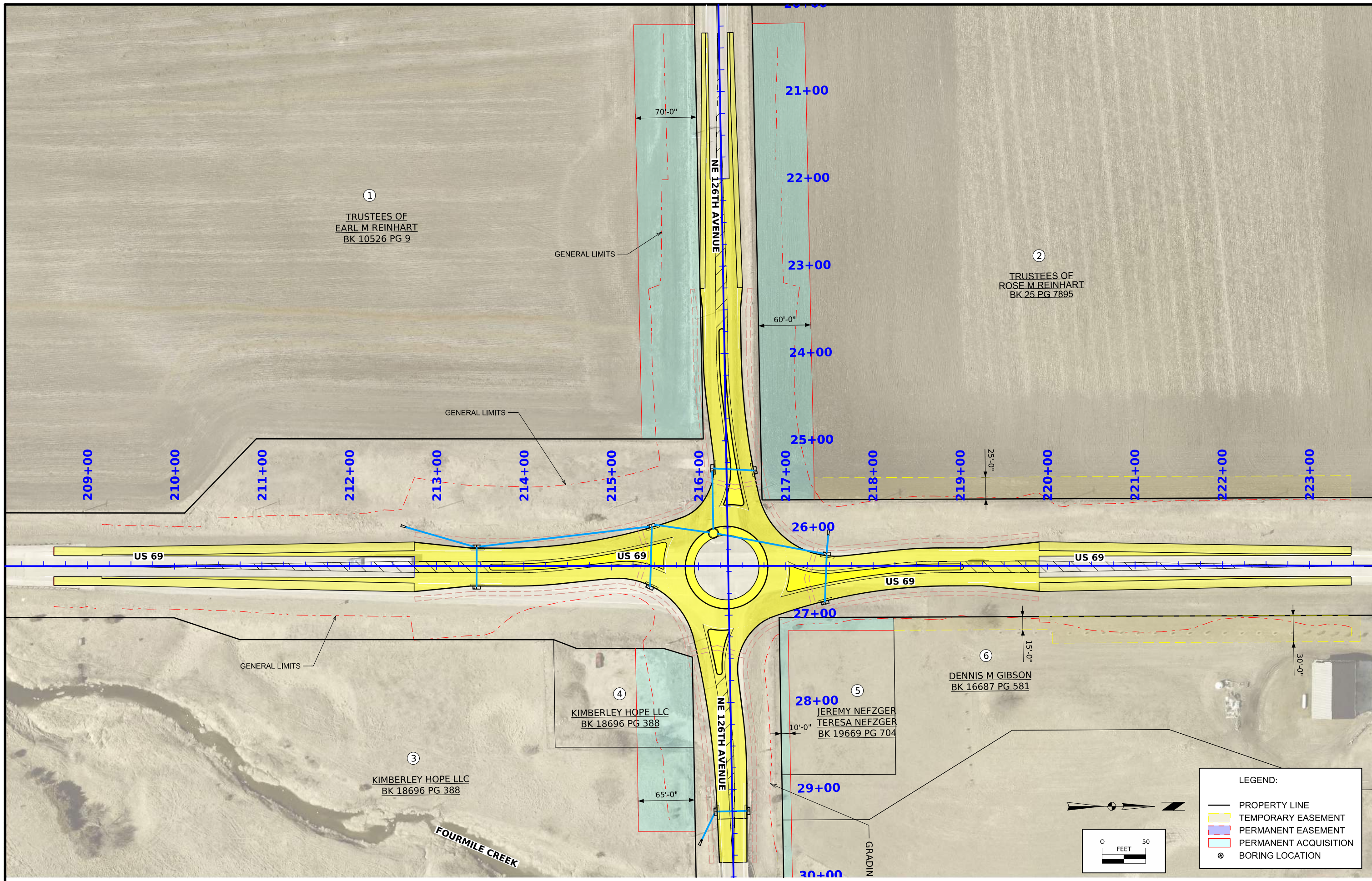


SPIRAL DATA
 SCS PI STA 601+11.88
 $\Delta = 93.3895^\circ$ (LT)
 $\theta = 0.0000^\circ$
 $L_s = 0.00sf$
 $T_s = 111.88sf$
 $E_s = 53.58sf$
 $P = 0.00sf$
 $K = 0.00$
 $X_c = 0.00sf$
 $Y_c = 0.00sf$
 $LT = 0.00sf$
 $ST = 0.00sf$
 $LC = 0.00sf$



HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING
 HORIZ. DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 Adjustment)
 Ia. Regional Coordinate System Zone 08 (U.S. Survey Foot)
 VERT. DATUM: NAVD88
 Geoid Model: 2012b

PointName	Northing	Easting	Elevation	
CP2	7561251.24	18531575.35	948.54	FENO 137.4FT W OF US69// 73FT W OF POWER POLE// 8FT E OF FENCE
CP3	7559009.9	18531645.04	935.08	FENO 50.5FT W OF US69// 86FT S OF POWER POLE// 43FT N OF CONCRETE CORNER POST
CP101	7561639.316	18531642.61	950.443	CP CONCRETE MONUMENT WITH 1/2IN REBAR IN NW QUAD OF US69/ 126TH INTERSECTION// 5FT N OF CONCRETE CORNER POST
8100	7561620.347	18531021.68	958.679	CP SET 1/2IN REBAR RED PLASTIC CAP// 700FT WEST OF US69// N SIDE OF ROAD, E SIDE OF FIELD ENTRANCE// 7FT S OF FENCE
8101	7561660.518	18532700.51	958.446	CP SET 1/2IN REBAR RED PLASTIC CAP// 500FT E OF BRIDGE ON N SIDE OF 126TH AVE// 4FT S OF FENCE// FRONT OF HOUSE #1558
8102	7564143.942	18531760.05	979.329	CP FND BRASS PLUG IN CONCRETE HEADWALL OF CULVERT// E SIDE OF US69// 100FT N OF DRIVE TO HOUSE #12971// 35FT E OF US69



TRAFFIC CONTROL PLAN

In order to minimize vehicle traffic congestion, the contractor shall comply with the following restrictions, for the limits of construction.

A minimum of a single lane of traffic in each direction shall be maintained at all times along US 69 during construction unless a flagger is needed during any of the stages. When a flagger is needed, this work shall be performed during the hours of 10:00 a.m. to 3:00 p.m. During Stage 4, the Contractor may choose to utilize Standard Road Plan TC-215 during the hours of 10:00 a.m. to 3:00 p.m. to construct the doweled median, or may close US 69 to traffic and utilize a temporary detour during night time hours only. Coordinate with the Iowa DOT prior to traffic control changes.

Shoulder and lane closures (per Standard Road Plans TC-202, TC-252, TC-402, & TC-418) will be necessary for construction. If any roads need to be closed during construction, notify any residents that are affected at least two (2) weeks prior to temporary road closures and changes in traffic pattern during construction.

During the road closures of the east and west legs of NW 126TH Avenue, traffic will be detoured (see Staging Notes).

The Contractor shall coordinate traffic control with other projects within the area.

Traffic control on this project shall be in accordance with the TC Series Standard Road Plans listed elsewhere in these plans. For additional complementary information, refer to part 6 of the Manual on Uniform Traffic Control Devices for streets and highways, as adopted by the Department per 761 of the Iowa Administrative Code (IAC), Chapter 130 and the current standard specifications.

Where possible, all post-mounted signs shall be placed at least 2 feet beyond the curb or edge of shoulder. All signs to be in place longer than three days must be post mounted.

The location for storage of equipment by the Contractor during non-working hours shall be as approved by the Engineer in charge of construction. The Contractor will be responsible for securing a safe storage area for equipment and materials to be used on the project.

Access for garbage and postal services must be maintained at all times unless arranged otherwise by agreement among the Contractor, property owner, trash collection service, and US Postal Service.

Portable Dynamic Message Signs (PDMS) shall be in accordance with Section 4188.07, and will be necessary throughout construction to provide advanced warnings.

STAGING NOTES

GENERAL STAGING NOTES:

Do not start any work until after traffic control is in place and approved by the Engineer.

Contractor is allowed to submit a revised staging plan to the Engineer prior to construction.

Coordinate all construction with utility companies and their relocations and services.

Stage 2 and Stage 3 cannot happen at the same time.

US 69 is a high volume roadway, so construction activity in the area will disrupt traffic on US 69 and its side streets. Therefore, it is advisable to adopt a construction sequence that directs activities in an orderly manner and minimizes disruptions to traffic as much as possible.

It is recognized that as the various activities related to construction progress, certain situations may arise which will preclude adhering to the original construction sequence or which, in the opinion of the Contractor, should result in more efficient staging operations. Should the Contractor desire to deviate from the original plan, they shall submit a written alternate plan to the Resident Construction Engineer for approval.

STAGE 1 - TEMPORARY PAVEMENT

- Install traffic control along US 69 per Standard Road Plan TC-202 to install temporary pavement. Traffic Control shall be installed for the temporary pavement widening along US 69.
- A flagger may be used during the paving of the temporary widening along US 69. Install traffic control per Standard Road Plan TC-251. The use of a flagger shall be limited to the hours of 10:00 a.m. to 3:00 p.m.

STAGE 2 - PERMANENT SB US 69 PAVEMENT

- Install traffic control along US 69 per Standard Road Plan TC-253 to shift traffic head to head on the existing NB lanes. Minimum 11' lanes shall be maintained at all times.
- Thru traffic on US 69 and east leg of NE 126TH Avenue shall remain open during this stage. Refer to the detour route sheets for NE 126TH Avenue detour route.
- Intersection of US 69 and NE 126TH Avenue will maintain a 3-Way Stop.
- Do not construct the medians along US 69. Medians will be doweled on in future stage.
- Remove existing markings, install new temporary pavement markings. Install TBR to separate traffic from construction.
- Install Temporary Floodlighting Luminaire at the intersection of IA US 69 and NW 126TH Avenue and maintain through Stage 3.

STAGE 3 - PERMANENT NB US 69 PAVEMENT

- Install traffic control along US 69 per Standard Road Plan TC-253 to shift traffic head to head to the previously constructed SB US 69 lanes. Minimum 11' lanes shall be maintained at all times.
- Install full road closure on west leg of NE 126TH Avenue for the duration of this stage.
- Contractor may construct half of the truck apron in this stage, with the rest to be constructed in Stage 4.
- Remove temporary markings installed in previous stages, install new temporary pavement markings.
- Remove TBR and crash cushions installed in previous stages; install new TBR and crash cushions.
- Contractor shall remove temporary widening pavement along US 69 in this stage.

STAGE 4 - MEDIAN AND TRUCK APRON ALONG US 69

- Install traffic control per the J-Sheets along US 69 to narrow drive lanes to maintain a minimum 12' lanes.
- Contractor shall construct truck apron first. Contractor may construct half of the truck apron in Stage 3, with the rest to be constructed in this stage.
- Install traffic control per the J-Sheets along the roundabout circle to construct the truck apron.
- Construct doweled on medians along US 69.
- Contractor can elect to close US 69 and construct the medians at night with temporary detour route.
- Contractor can elect to use temporary signals to construct medians along US 69 from 10:00AM to 3:00PM.
- Truck apron and doweled on median work cannot be done at the same time.

**CROSS SECTION VIEW COLOR LEGEND
OF TRAFFIC CONTROL AND STAGING SHEETS**

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

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

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

PLAN VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Magenta	(5)	Pavement Marking Call Outs
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Yellow	(4)	Pavement Markings, Yellow
Off White	(254)	Pavement Markings, White
Violet	(15)	Temporary barrier rail, Unpinned
Flush Orange	(228)	Temporary barrier rail, Pinned

SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(6)	Proposed Granular Surface Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Pink, Dark	(13)	Temporary Pavement Shading
Brown, Light	(236)	Proposed Grading Limits Shading
Cyan	(7)	Proposed MSE or CIP Wall Shading
Red	(3)	Proposed Bridge Shading and Sign Trusses
Black w/Gray, Light Fill	(0,48)	Previously Constructed Structure

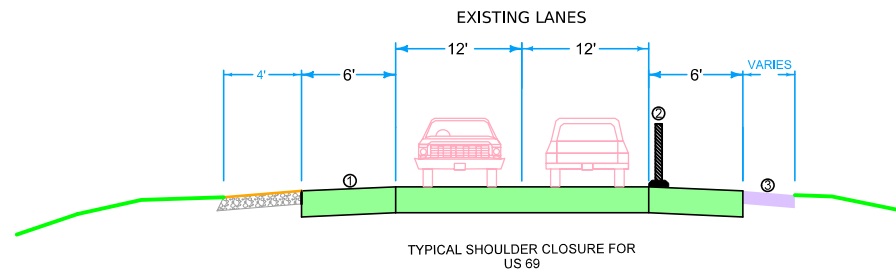
**PLAN VIEW PATTERN AND SYMBOL LEGEND
OF TRAFFIC CONTROL AND STAGING SHEETS**

	Channelizing Device		Crash Cushion (Temp or Perm)
	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		Safety Closure
	Sand Barrel Layout		Lane Identification

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

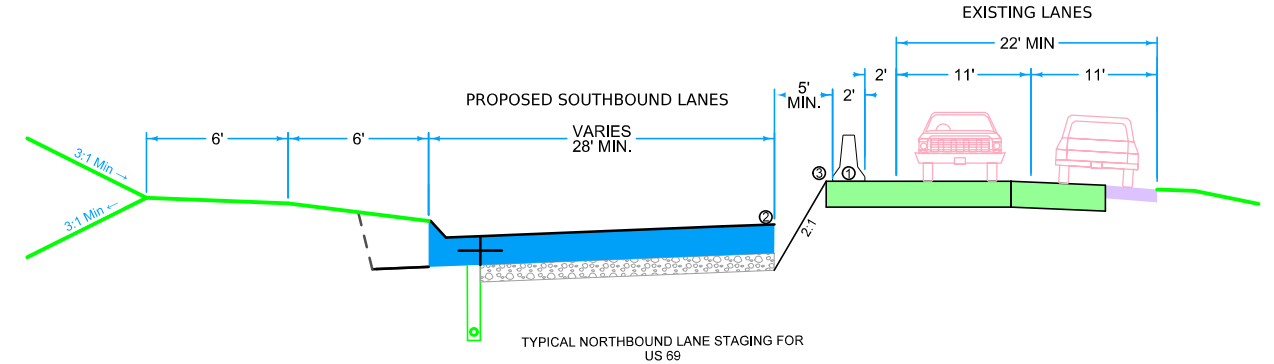
**TRAFFIC CONTROL
AND
STAGING
LEGEND AND SYMBOL
INFORMATION SHEET**

(COVERS SHEET SERIES J)



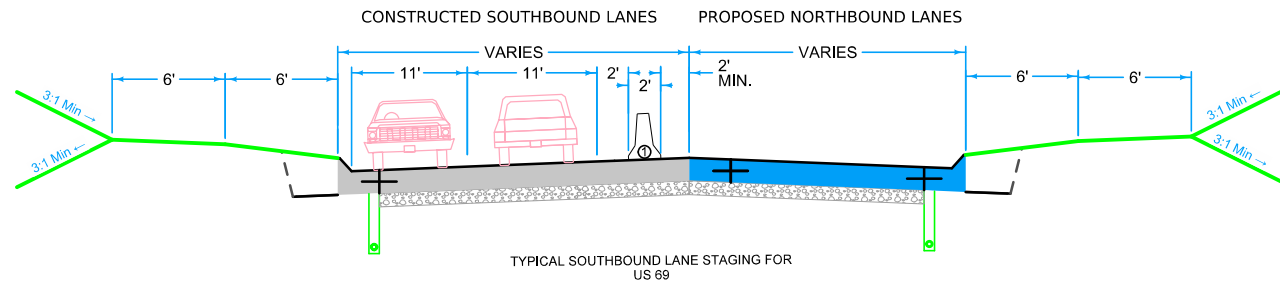
STAGE 1

- NOTES:
 ① FULL DEPTH PCC SHOULDER
 ② CHANNELIZER
 ③ TEMPORARY PAVEMENT SHALL BE CONSTRUCTED FOR ADDITIONAL SPACE TO ALLOW FOR HEAD-TO-HEAD TRAFFIC IN FUTURE STAGES.



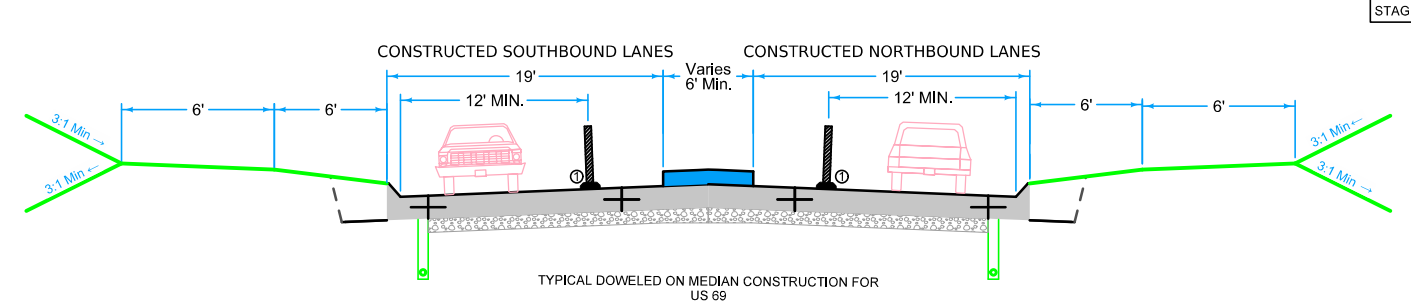
STAGE 2

- NOTES:
 ① TEMPORARY BARRIER RAIL (PINNED)
 ② DOWELED ON MEDIAN TO BE CONSTRUCTED IN STAGE 4 TO ALLOW HEAD-TO-HEAD TRAFFIC ALONG US 69 DURING STAGES 2 AND 3.
 ③ TEMPORARY BARRIER RAIL SHALL BE AT LEAST 6 INCHES FROM EDGE OF PAVEMENT WHEN PINNED. REFER TO IOWA DOT STANDARD ROAD PLAN BA-401 FOR ADDITIONAL INFORMATION.



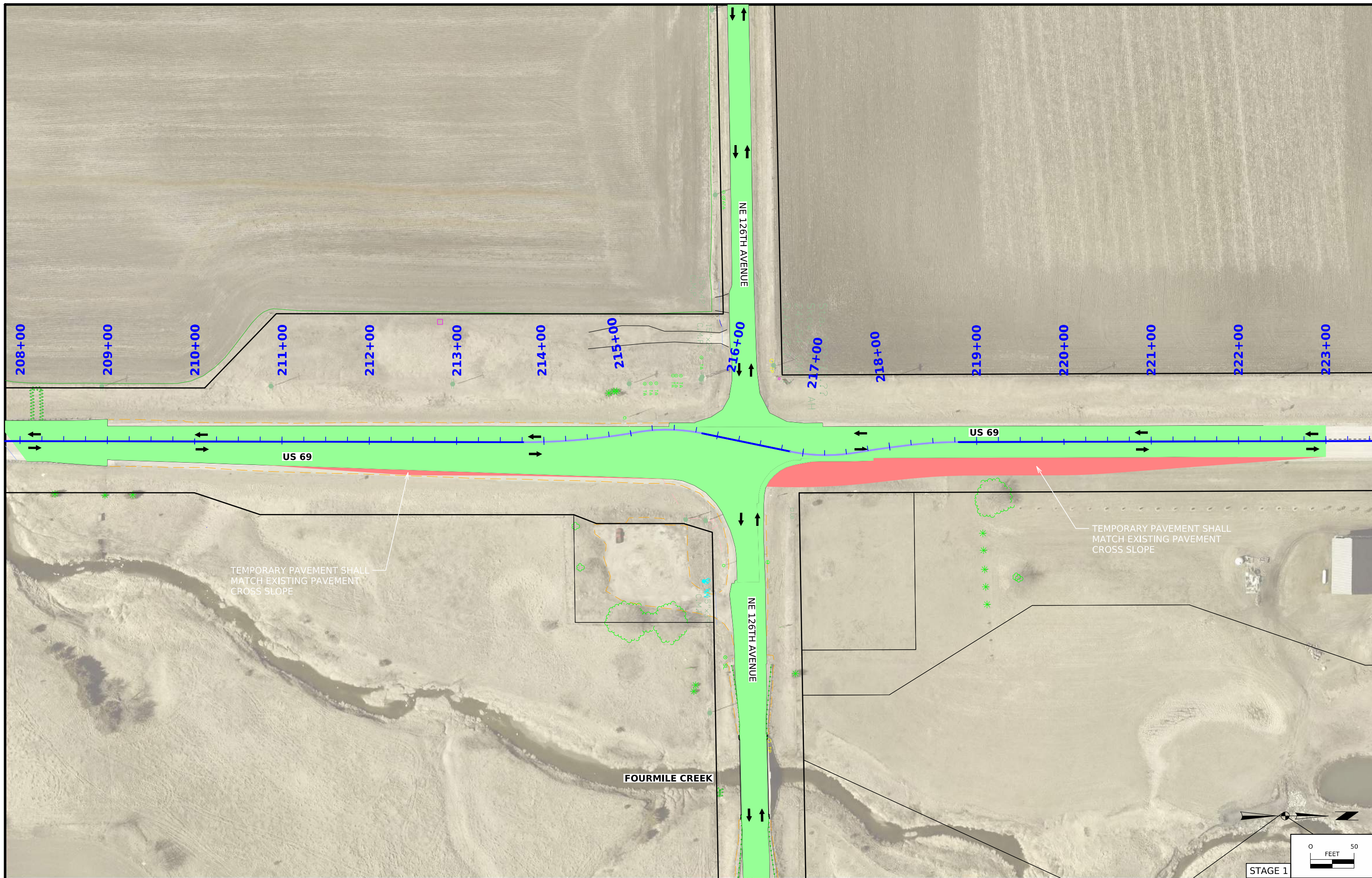
STAGE 3

- NOTES:
 ① TEMPORARY BARRIER RAIL (NOT PINNED)



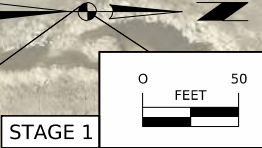
STAGE 4

- NOTES:
 ① 42" CHANNELIZER
 ② FLAGGERS WILL BE USED DURING CONSTRUCTION OF PAVED SPLITTER ISLANDS AND TRUCK APRON, ALLOWING TRAFFIC TO FLOW IN 15 MINUTE INTERVALS*

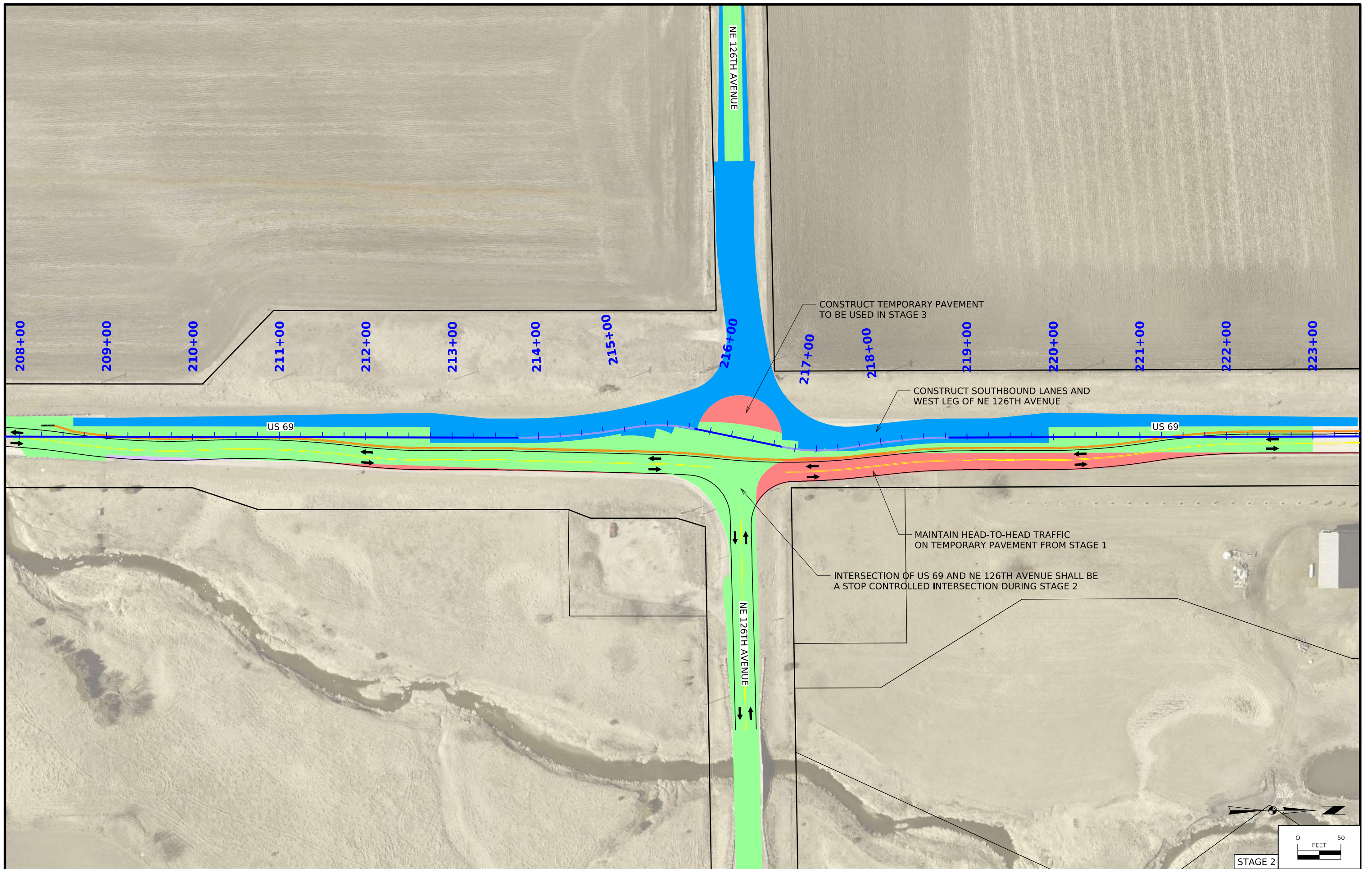


TEMPORARY PAVEMENT SHALL MATCH EXISTING PAVEMENT CROSS SLOPE

TEMPORARY PAVEMENT SHALL MATCH EXISTING PAVEMENT CROSS SLOPE



STAGE 1





223+00

224+00

225+00

226+00

227+00

228+00

229+00

US 69

STAGE 2

0 50
FEET

FILE NO. 98765

ENGLISH

DESIGN TEAM Snyder & Associates, Inc.

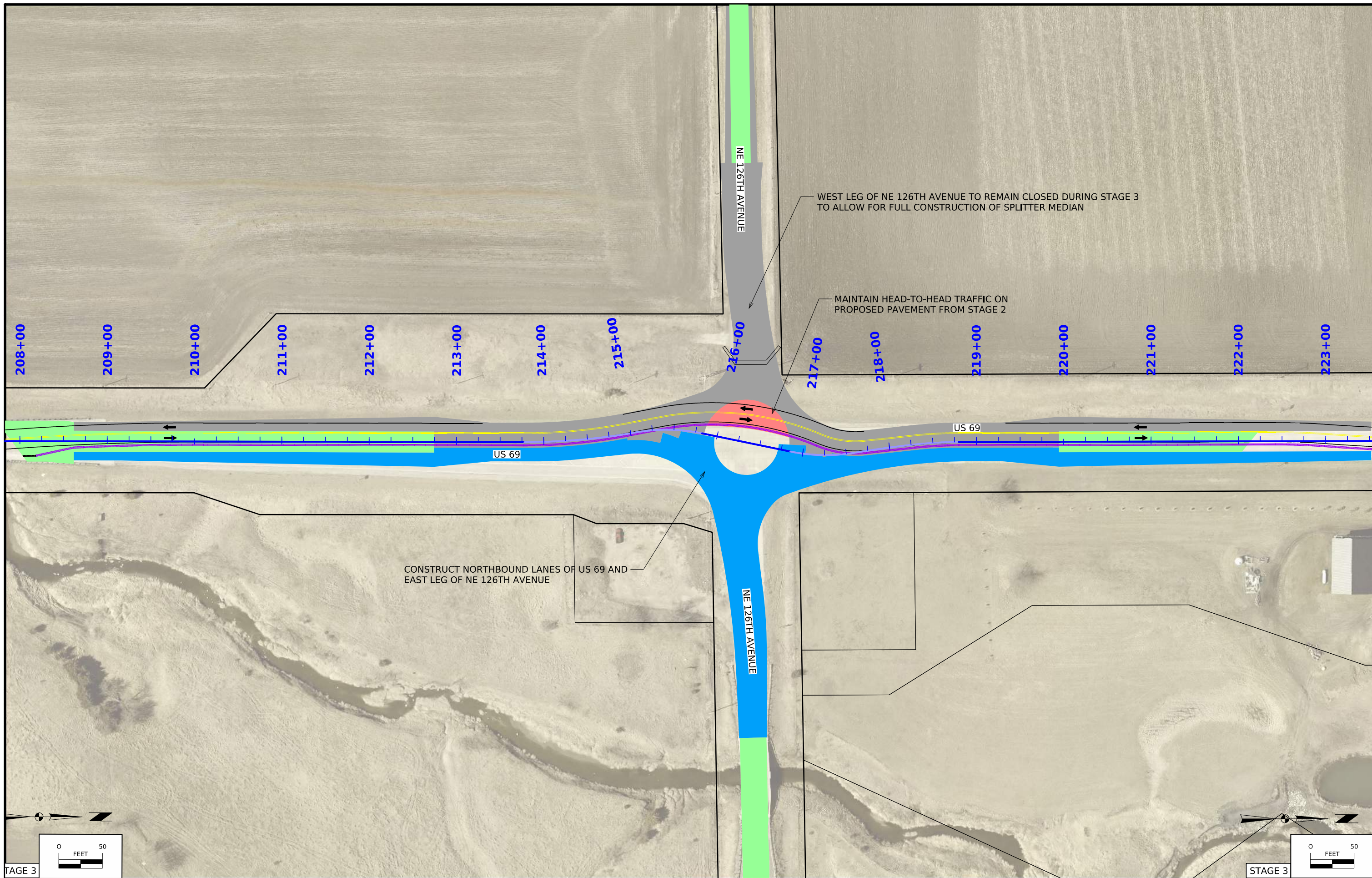
POLK COUNTY

PROJECT NUMBER HSIPX-069-4(153)--3L-77

SHEET NUMBER J.6

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PAGE 3

STAGE 3

FILE NO. **98765**

ENGLISH

DESIGN TEAM **Snyder & Associates, Inc.**

POLK COUNTY

PROJECT NUMBER **HSIPX-069-4(153)--3L-77**

SHEET NUMBER **J.8**



STAGE 3



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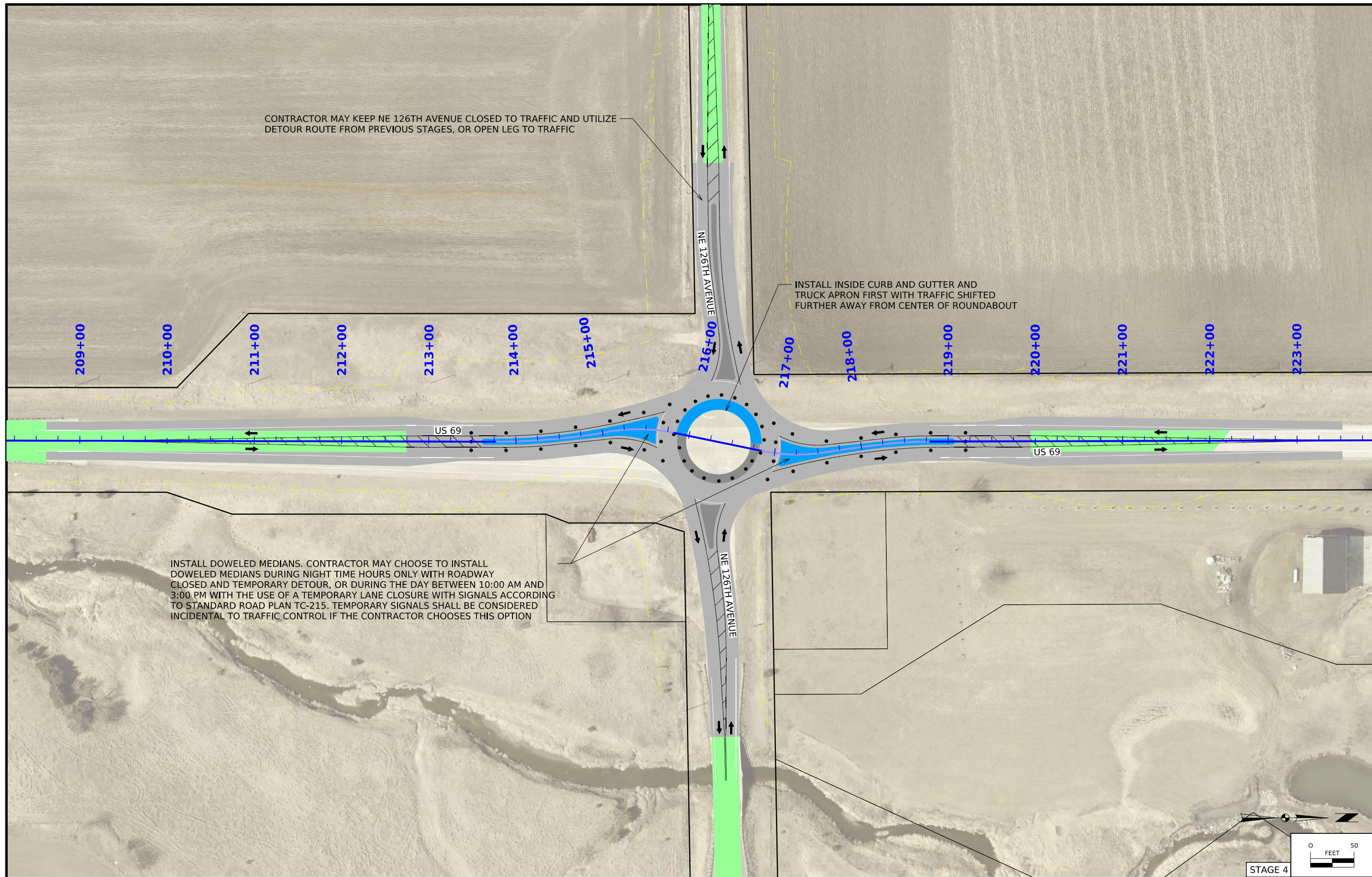
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DESIGN TEAM Snyder & Associates, Inc.

POLK COUNTY

PROJECT NUMBER HSIPX-069-4(153)--3L-77

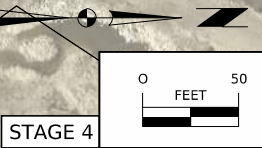
SHEET NUMBER J.9



CONTRACTOR MAY KEEP NE 126TH AVENUE CLOSED TO TRAFFIC AND UTILIZE DETOUR ROUTE FROM PREVIOUS STAGES, OR OPEN LEG TO TRAFFIC

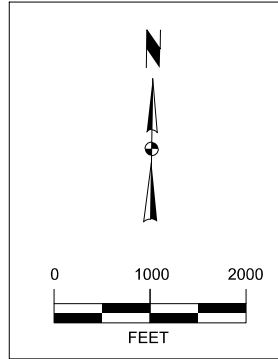
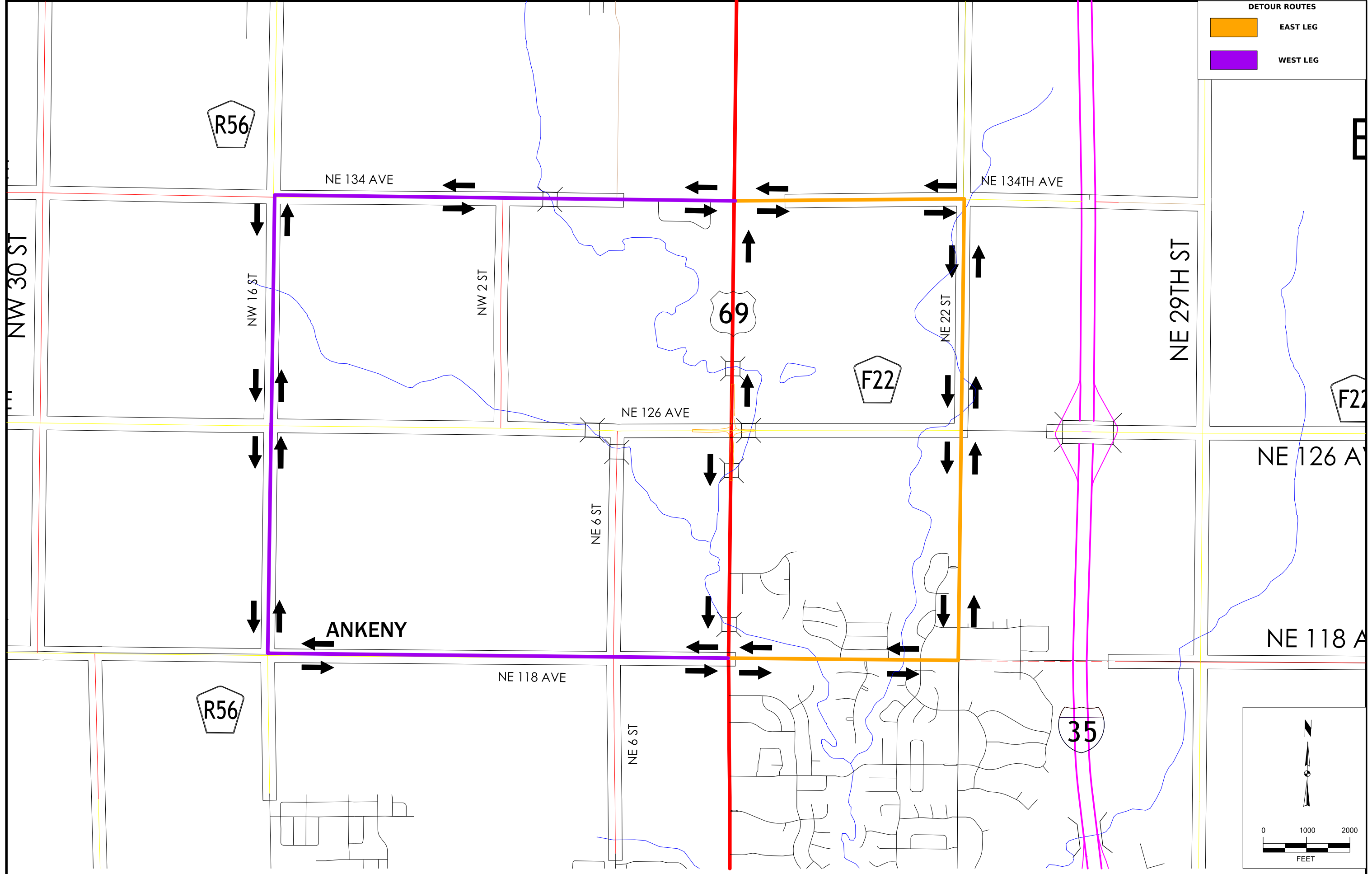
INSTALL INSIDE CURB AND GUTTER AND TRUCK APRON FIRST WITH TRAFFIC SHIFTED FURTHER AWAY FROM CENTER OF ROUNDABOUT

INSTALL DOWELED MEDIANS. CONTRACTOR MAY CHOOSE TO INSTALL DOWELED MEDIANS DURING NIGHT TIME HOURS ONLY WITH ROADWAY CLOSED AND TEMPORARY DETOUR, OR DURING THE DAY BETWEEN 10:00 AM AND 3:00 PM WITH THE USE OF A TEMPORARY LANE CLOSURE WITH SIGNALS ACCORDING TO STANDARD ROAD PLAN TC-215. TEMPORARY SIGNALS SHALL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL IF THE CONTRACTOR CHOOSES THIS OPTION



DETOUR ROUTES

- EAST LEG
- WEST LEG



SURVEY SYMBOLS

- Interstate Highway Symbol
- U.S. Highway Symbol
- Iowa Highway Symbol
- County Road Highway Symbol
- Evergreen Tree
- Deciduous Tree
- Fruit Tree
- Shrub (Bushes)
- Timber
- Hedge
- Stump
- Swamp
- Rock Outcrop
- Broken Concrete
- Revetment (Rip Rap)
- Cemetery
- Grave
- Cave
- Sink Hole
- Board Fence
- Chain Link or Security Fence
- Wire Fence
- Terrace
- Earth Dam or Dike (Existing)
- Tile Outlet
- Edge of Water
- Existing Drainage
- Right of Way Rail or Lot Corner
- Concrete Monument
- Well
- Windmill
- Beehive Intake
- Existing Intake
- Existing Utility Access (Manhole)
- Fire Hydrant
- Water Hydrant (Rural)
- Septic Tank
- Cistern
- L.P. Gas Tank (No Footing)
- Underground Storage Tank
- Latrine
- Satellite TV Dish
- Water Hook Up
- Radio Tower
- Tower Anchor
- Guardrail (Beam or Cable)
- Guard Post (one or two)
- Guard Post (over two)
- Filler Pipe
- Gas Valve
- Water Valve
- Speed Limit Sign
- Mile Marker Post
- Sign
- Traffic Signal Control Box
- Rail Road Signal Control Box
- Telephone Switch Box
- Electric Box

UTILITY LEGEND

PLAN VIEW COLOR LEGEND OF STORM SEWER SHEETS

LINEWORK		Design Color No.	
Green	(2)		Existing Topographic Features, and Labels
Magenta	(5)		Existing Utilities
Blue, Dark	(1)		Proposed Storm Sewer Pipes, Alignment, Stationing, and Tic Marks
Blue, Light	(230)		Proposed Storm Sewer Intakes or Structures
SHADING		Design Color No.	
Lavender	(9)		Temporary Pavement Shading
Gray, Light	(48)		Proposed Pavement Shading
Gray, Medium	(80)		Proposed Granular Shading
Tan	(8)		Proposed Sidewalk Shading

PROFILE VIEW COLOR LEGEND OF STORM SEWER SHEETS

LINEWORK		Design Color No.	
Green	(2)		Existing Ground Line Profile
Magenta	(5)		Existing Utilities Information
Blue, Dark	(1)		Proposed Pipes
Blue, Light	(230)		Proposed Intakes or Structures

PLAN VIEW LINE STYLE LEGEND OF STORM SEWER SHEETS

- Plug and Abandon Existing Pipe or Structure
- Removal of Existing Pipe or Structure
- Previously Constructed Pipe or Structure
- Direction of Pipe Flow

PROFILE VIEW LINE STYLE LEGEND OF STORM SEWER SHEETS

- Existing Ground
- Proposed Ground
- Previously Constructed Pipe or Structure
- Proposed Pipe
- Proposed Structure

Reference Point

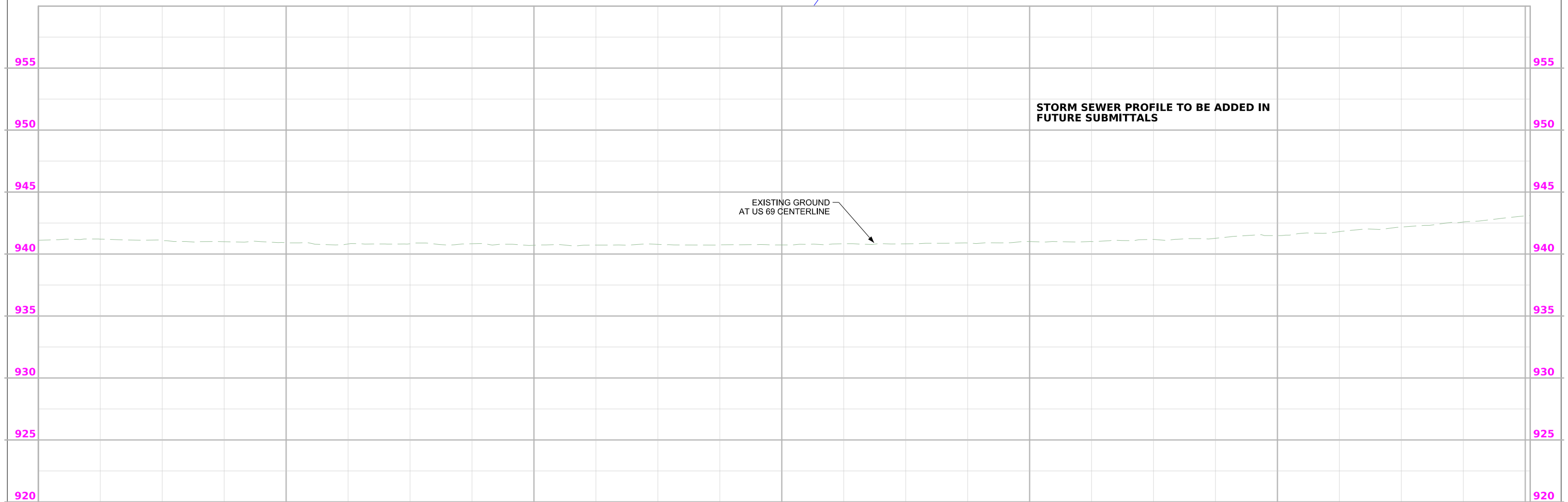
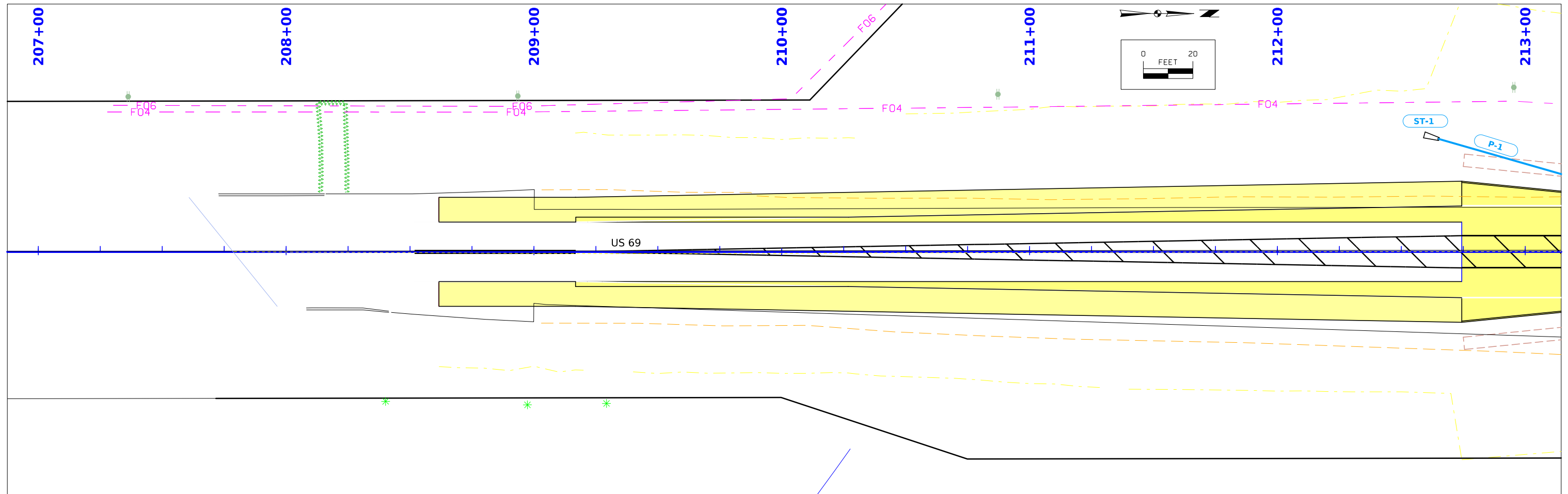
- Station
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Clearing & Grubbing Area
- Pavement Removal

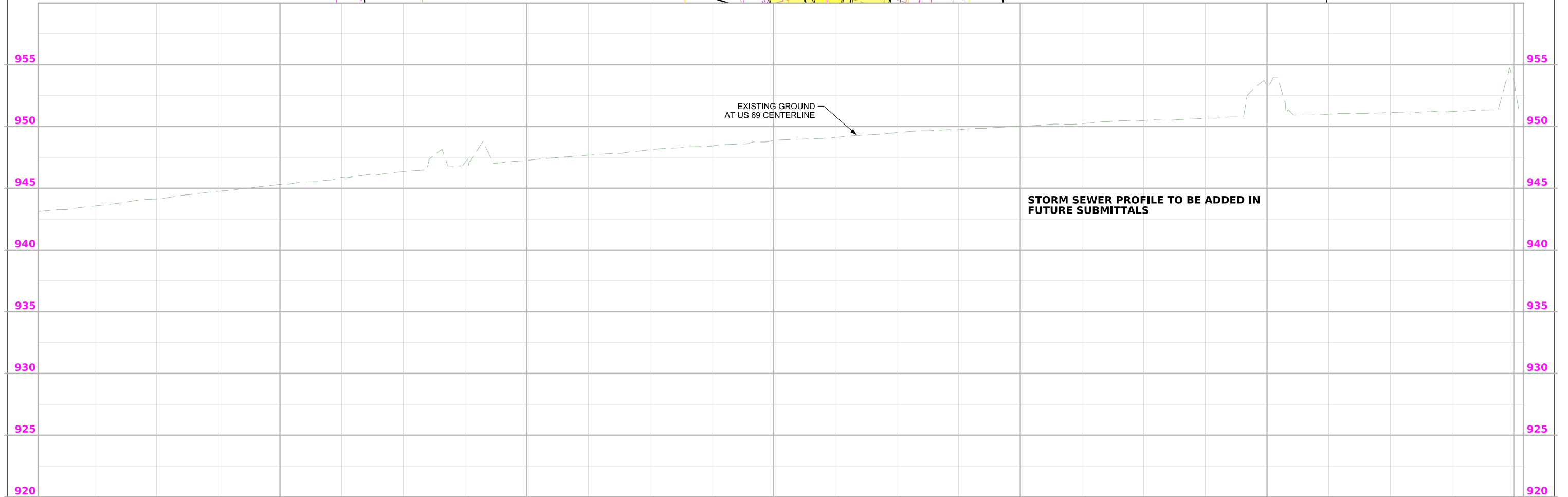
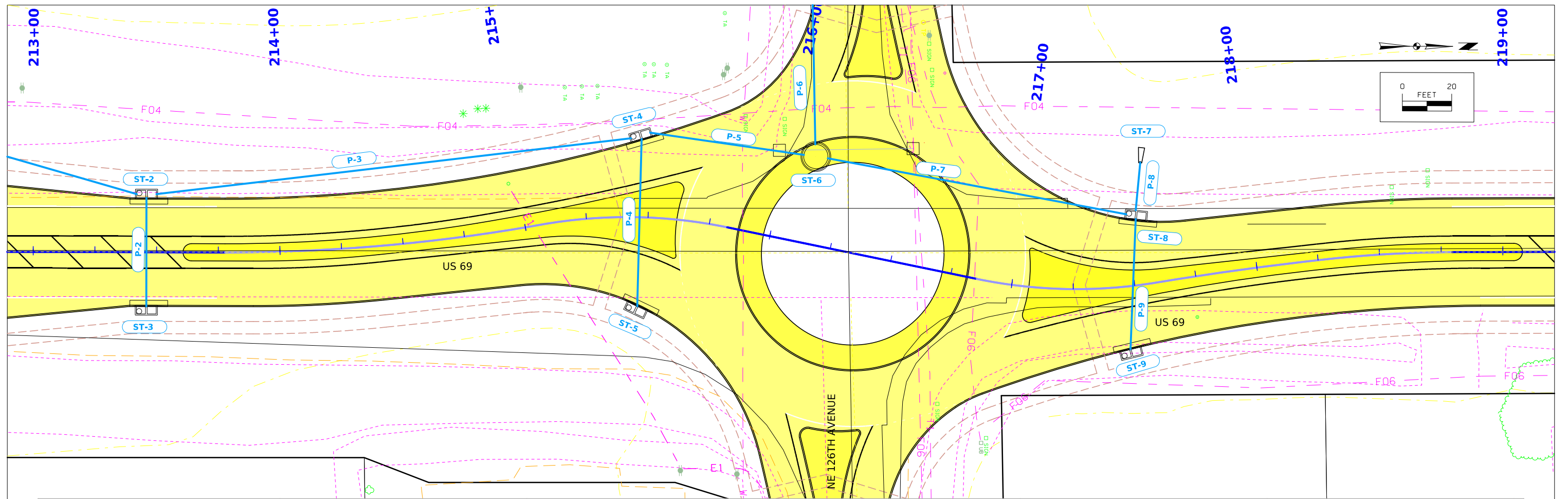
RIGHT-OF-WAY LEGEND

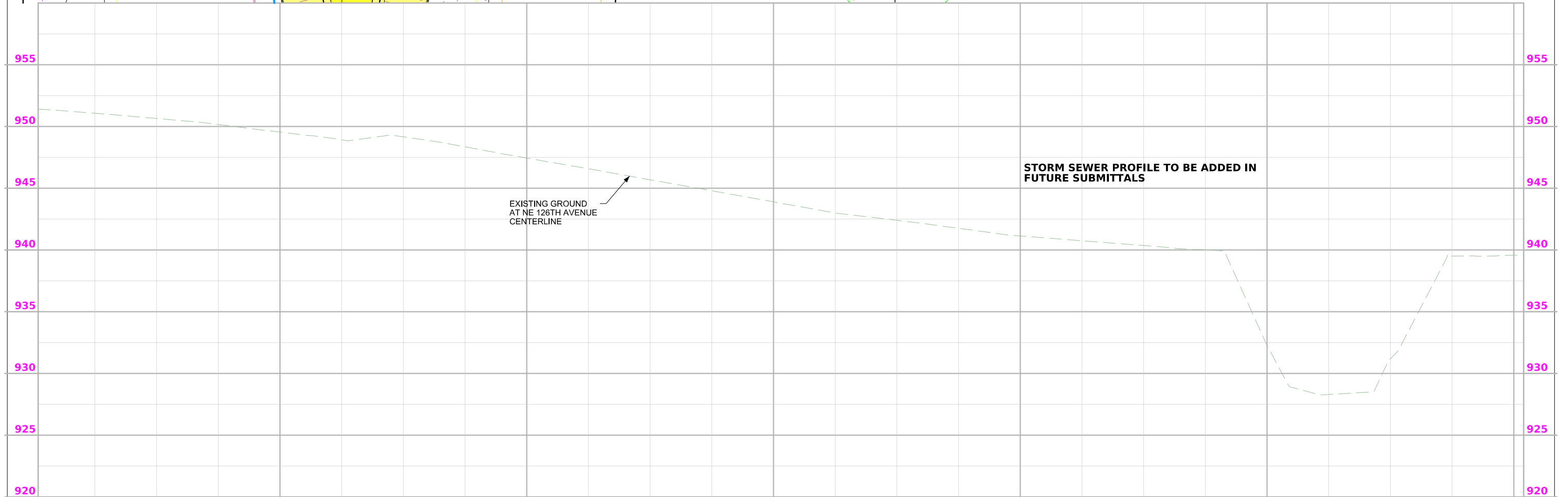
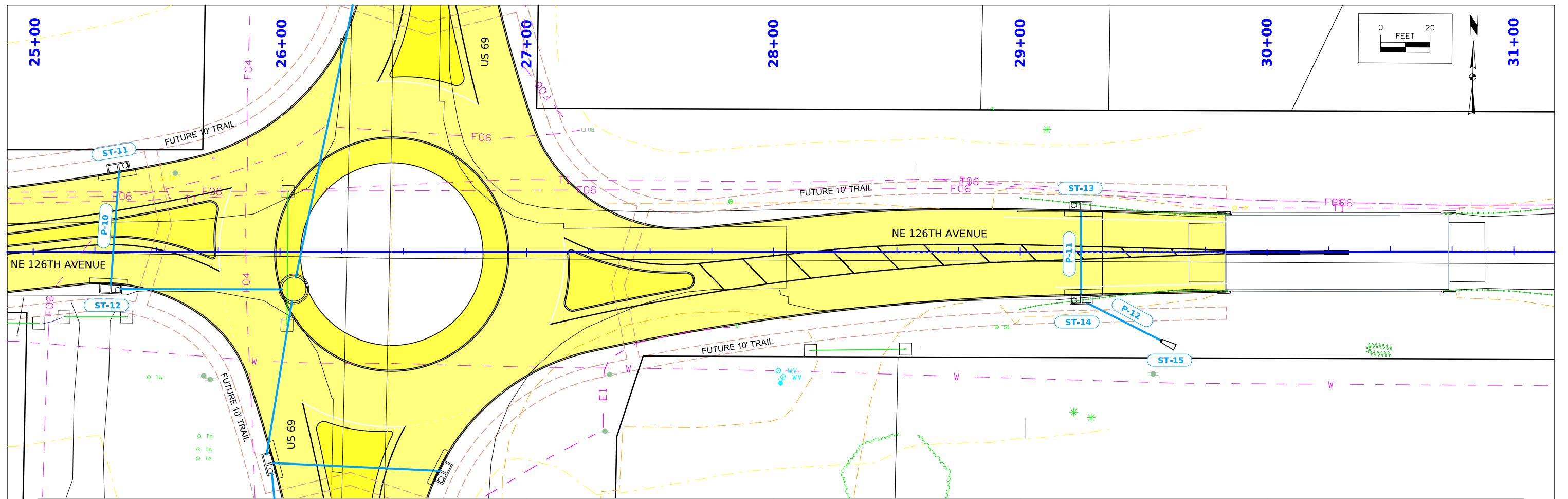
- Proposed Right-of-Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Borrow
- Easement (Temporary)
- Easement
- Excess
- Access Control

**STORM SEWER
LEGEND AND SYMBOL
INFORMATION SHEET**

(COVERS SHEET SERIES M)







CROSS SECTION VIEW COLOR LEGEND

Design Color No.	Feature	Design Color No.	Feature
Aggregate			
(64)	Choke Stone	(8)	Behind Curb Cut
(42)	Engineering Fabric	(6)	Granular
(8)	Flooded Backfill	(13)	Granular Back Fill
(92)	Macadam Stone	(48)	Rock Undercut
(20)	Modified	(8)	Shoulder Earth Fill
(12)	Plowing Shaping	(2)	Side Slopes
(14)	Porous Backfill	(226)	Side Slopes Dressing
Grading			
(8)	Revetment Class A	(128)	Boulder
(6)	Revetment Class B	(209)	Boulder Removed
(62)	Revetment Class C	(48)	Broken Weathered
(188)	Revetment Class D	(210)	Broken Weathered Removed
(28)	Revetment Class E	(3)	Core Out
(12)	Shoulder Special Backfill	(115)	Core Out Remove Only
(12)	Special Backfill	(195)	Core Out Remove and Replace
(20)	Subbase	(203)	Existing Pavement
(20)	Subbase Lower	(184)	Existing Pavement Remove Only
(20)	Subbase Upper	(200)	Existing Pavement Remove and Replace
(118)	Subgrade Treatment	(6)	Loam
Substrata			
(207)	HMA Base Course	(211)	Loam Removed
(207)	HMA Interim Course	(80)	Rock
(207)	HMA Surface Course	(212)	Rock Removed
(0)	Bridge	(4)	Select Sand
(0)	Barrier Concrete	(214)	Select Sand Removed
(0)	Barrier Concrete Footing	(3)	Shale
(0)	Curb Gutter	(215)	Shale Removed
(48)	Flowable Mortar	(10)	Topsoil
(0)	Median Concrete	(2)	Topsoil Remove Only
(0)	PCC Pavement	(4)	Topsoil Remove and Replace
(0)	Sidewalk	Unsuitable / Waste	
(0)	Existing Pavement	(3)	Unsuitable Type A
(209)	Shoulder HMA	(216)	Unsuitable Type A Removed
(0)	Shoulder PCC	(13)	Unsuitable Type B
(6)	Shoulder Granular	(217)	Unsuitable Type B Removed
(112)	Noise Wall	(11)	Unsuitable Type C
(112)	Noise Wall Footing	(218)	Unsuitable Type C Removed
(112)	Retaining Wall Back	(3)	Waste
(112)	Retaining Wall Back Excavate	(219)	Waste Removed
(112)	Retaining Wall Face		
(112)	Retaining Wall Front Excavate		
(112)	Retaining Wall Front Footing		
(112)	Retaining Wall MSE Gutter		
(112)	Retaining Wall Reinforced Earth		
Asphalt			
Concrete			
Existing			
Shoulder			
Structural			

NOTES:

Text

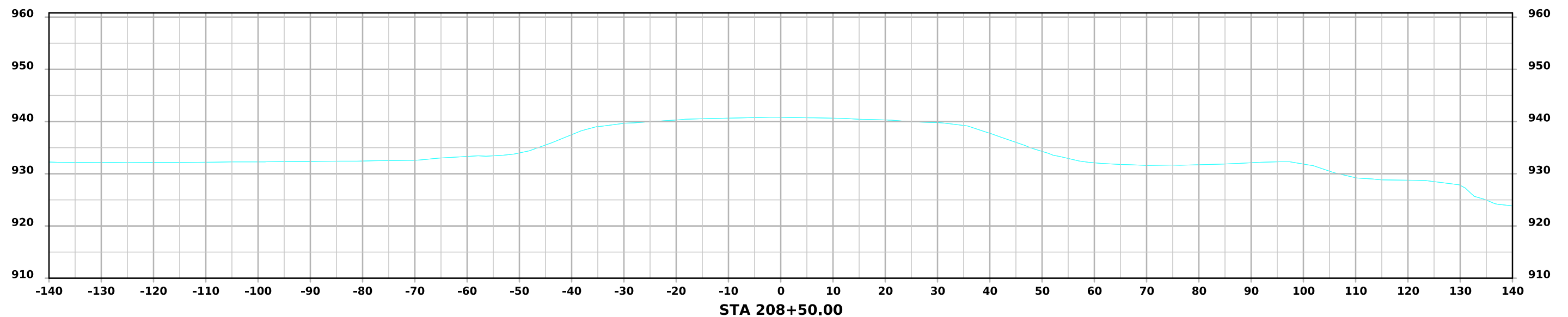
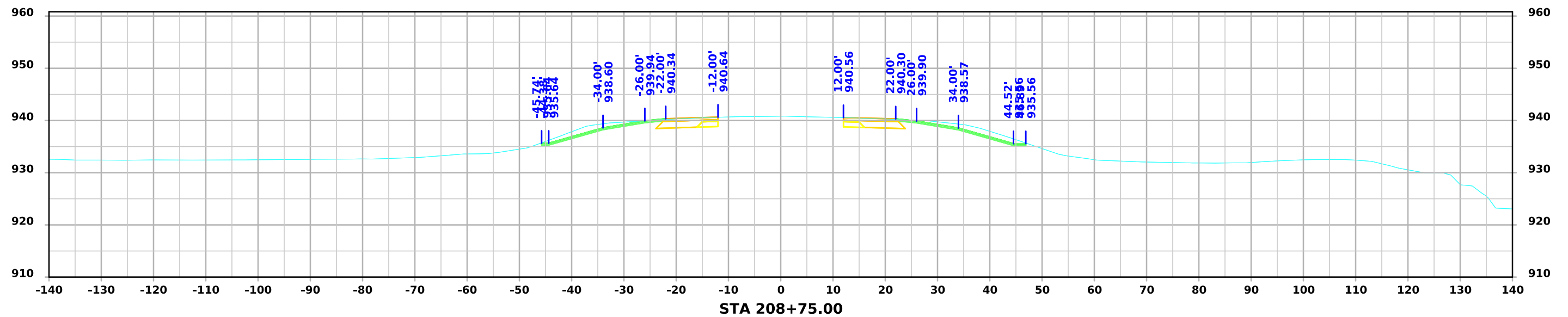
NOTES:

Text

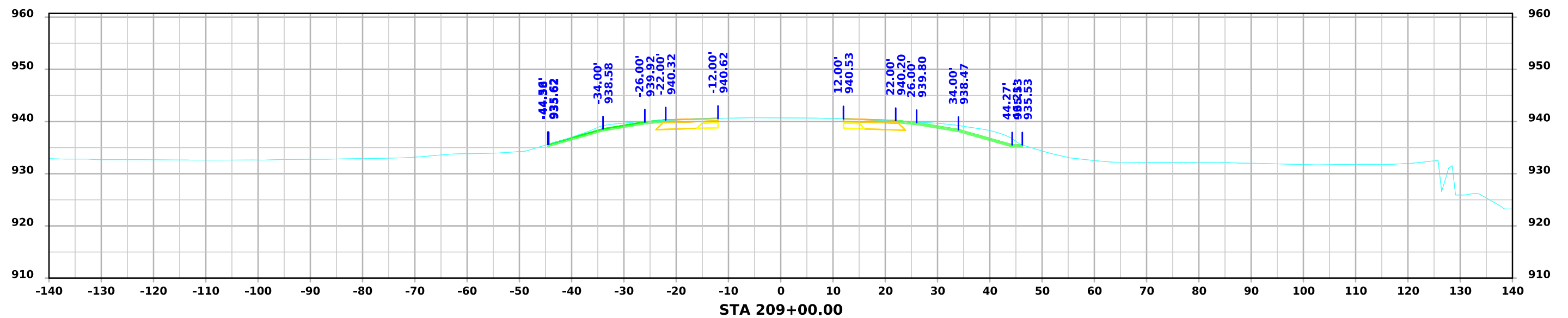
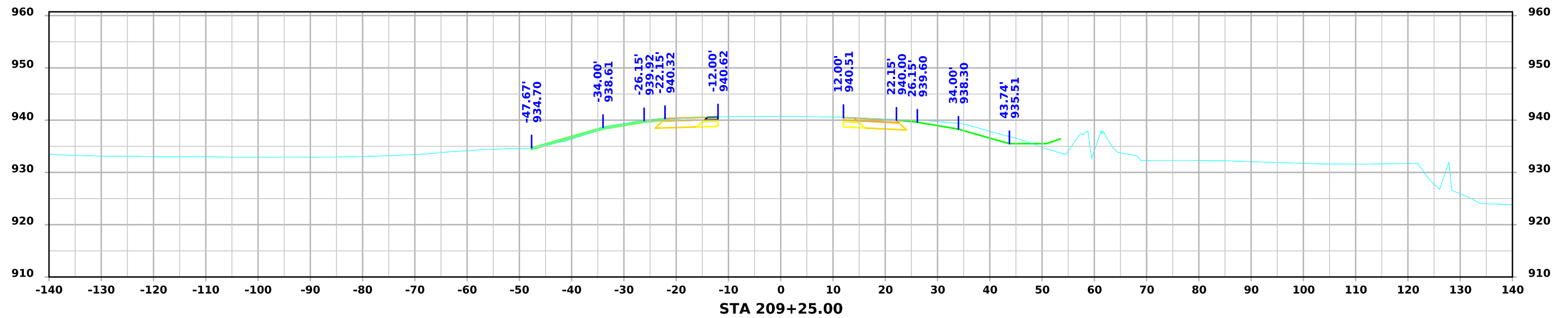
CROSS SECTIONS LEGEND AND INFORMATION SHEET

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

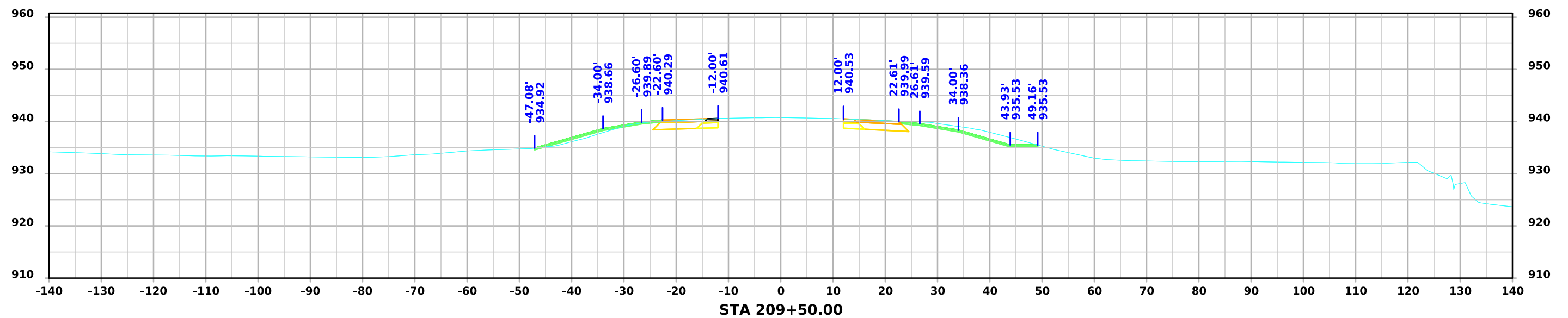
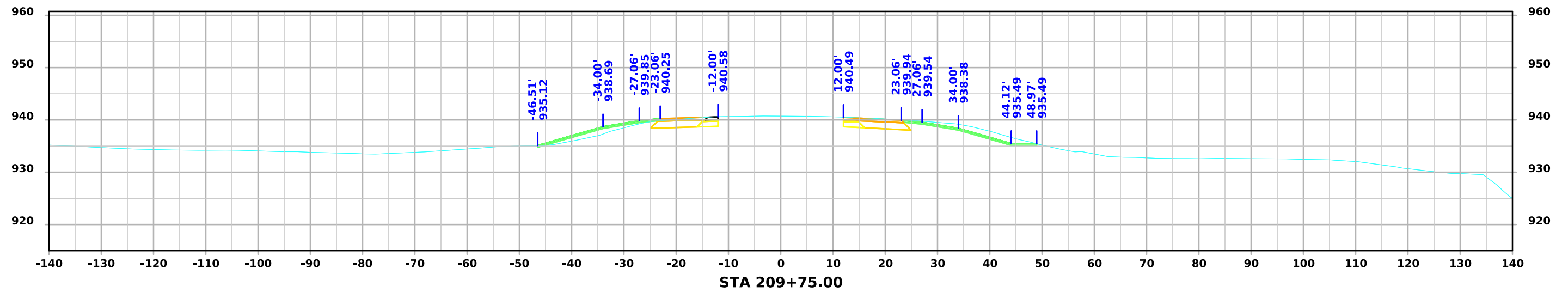
ML - US69



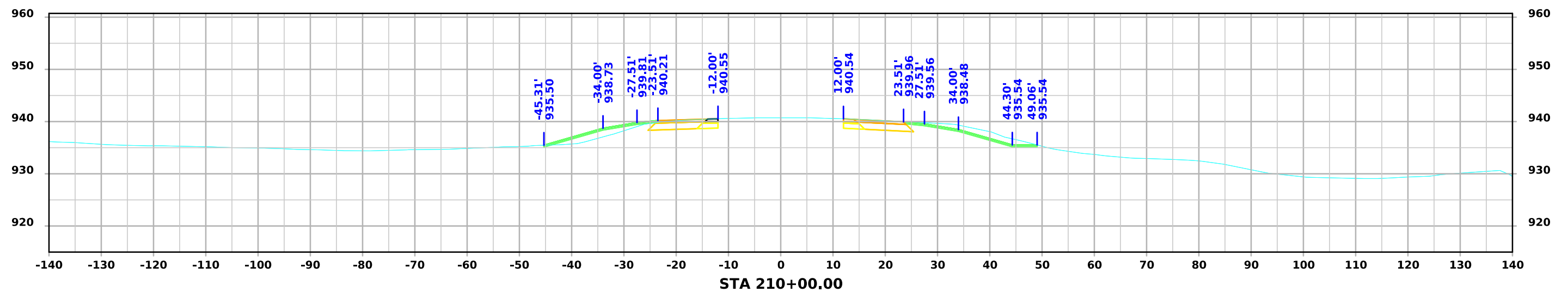
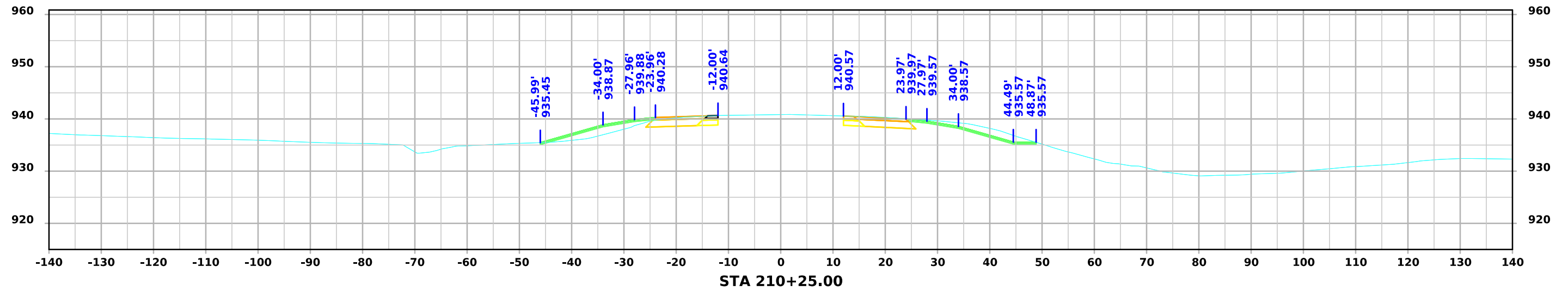
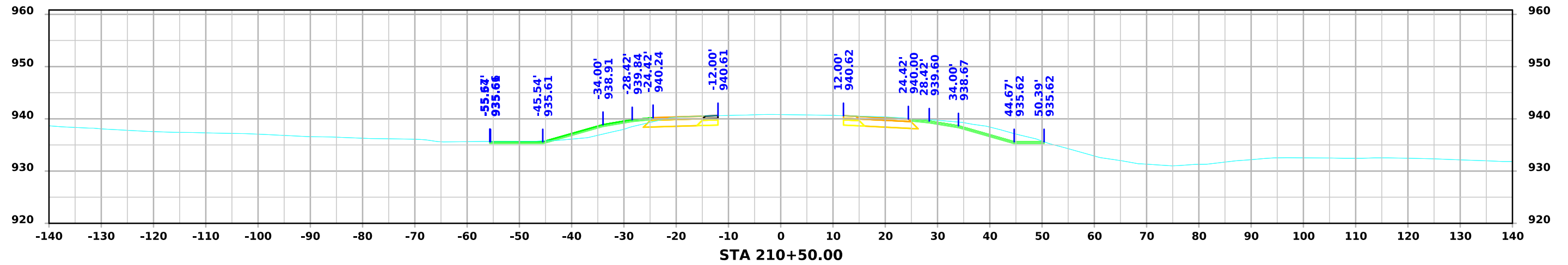
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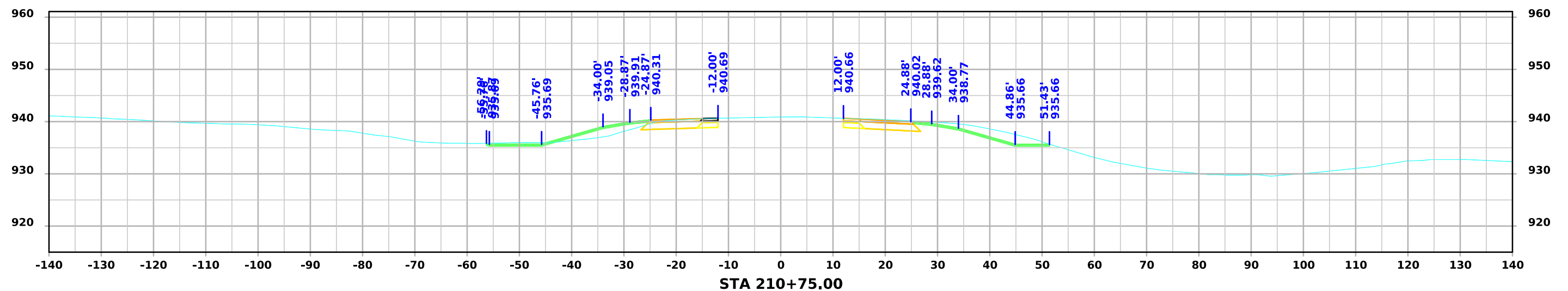
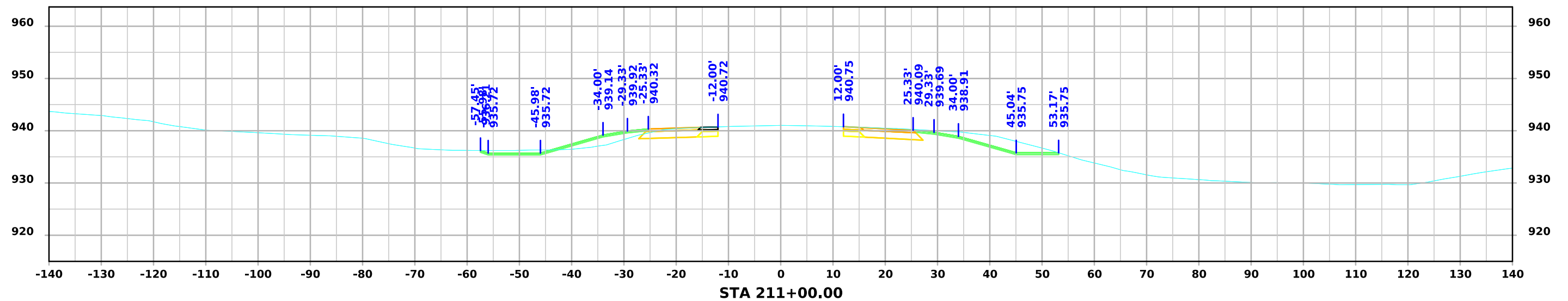
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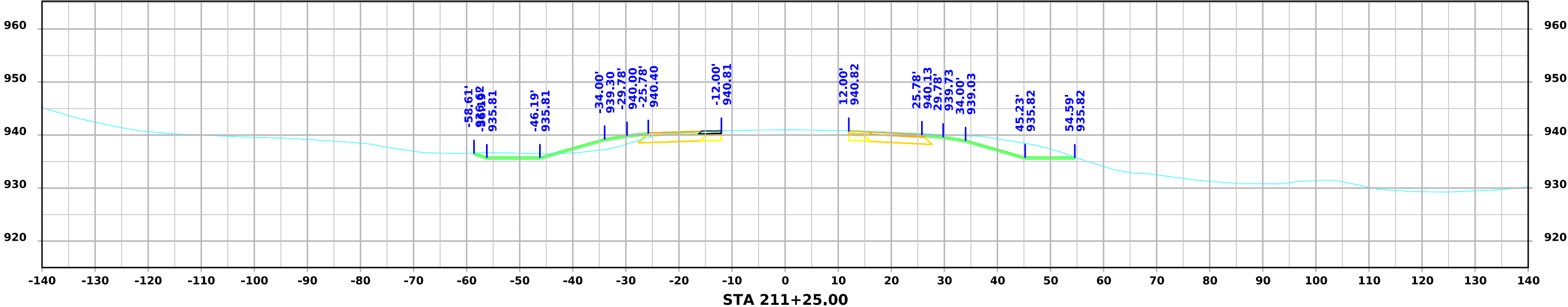
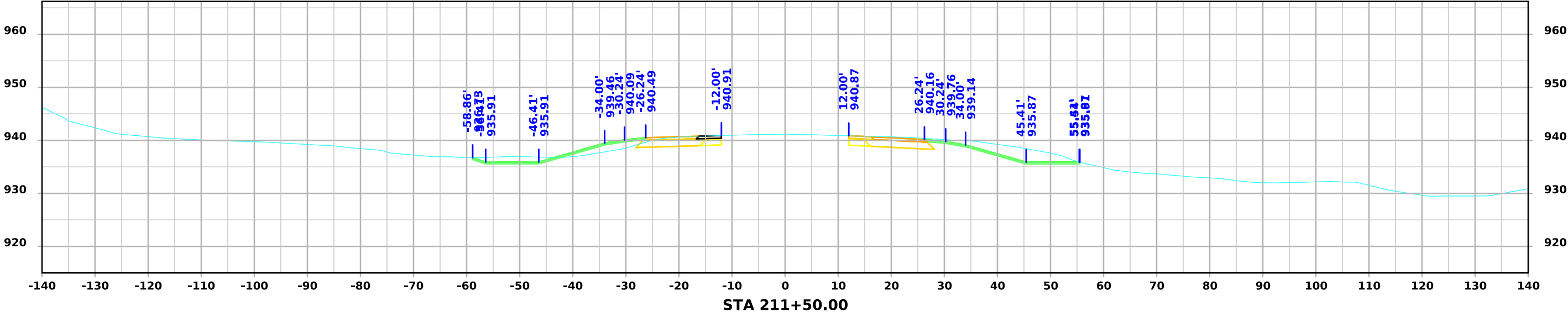
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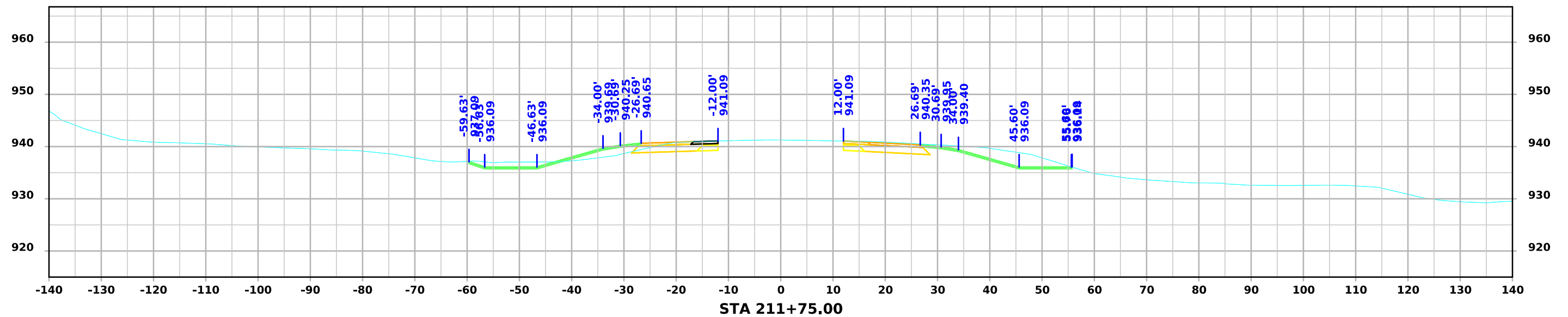
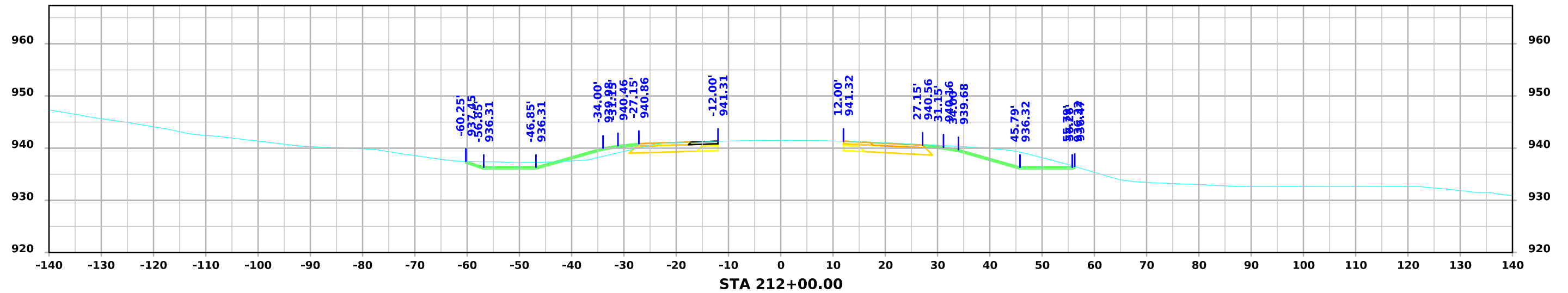
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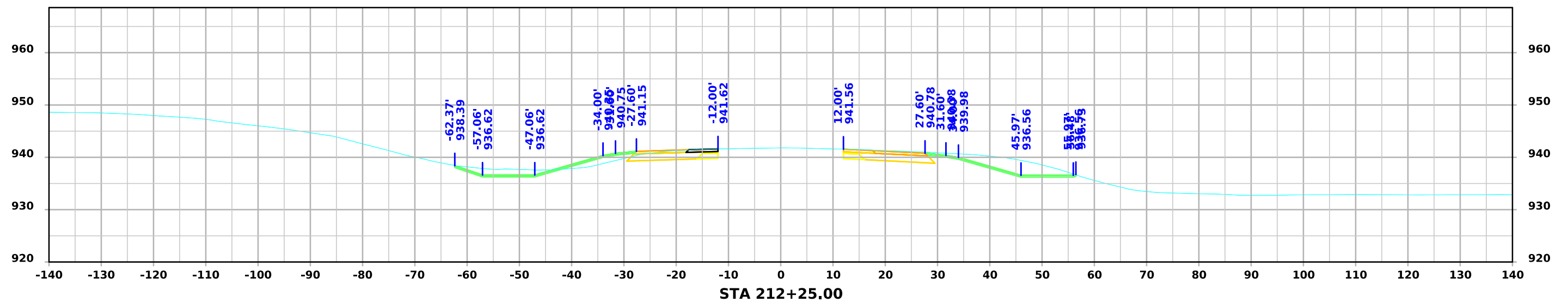
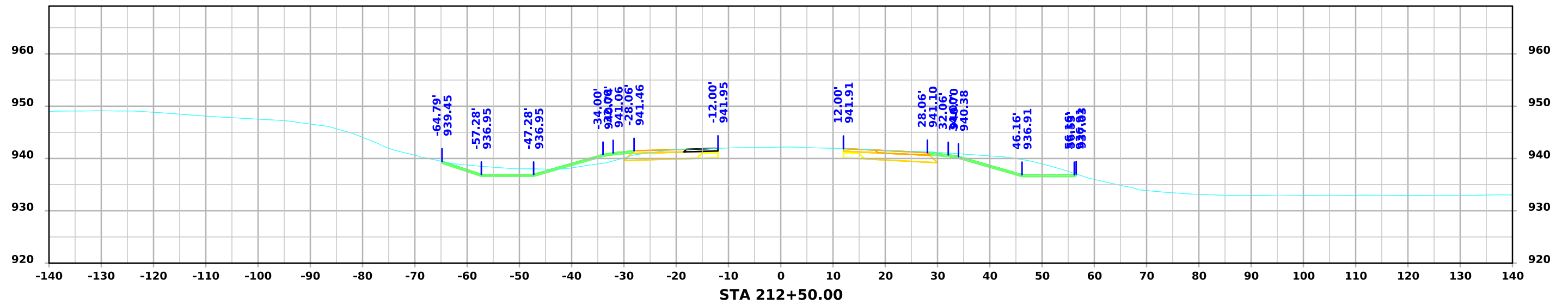
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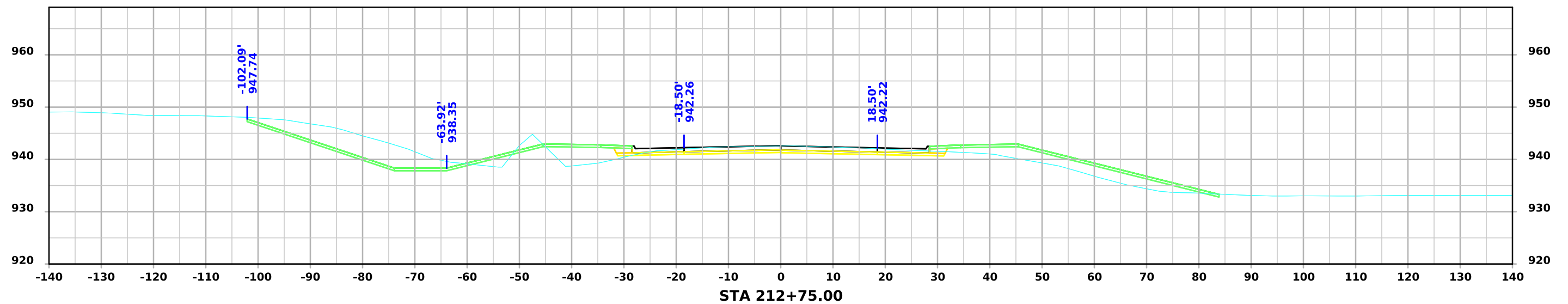
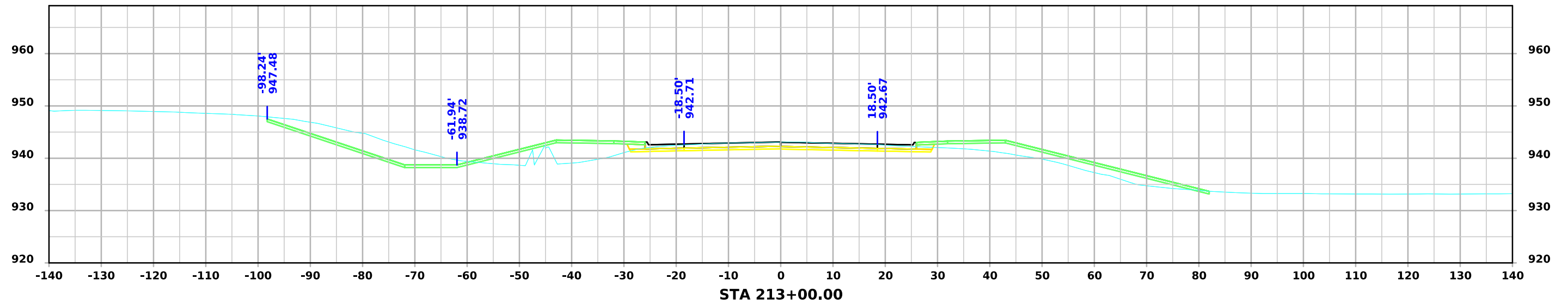
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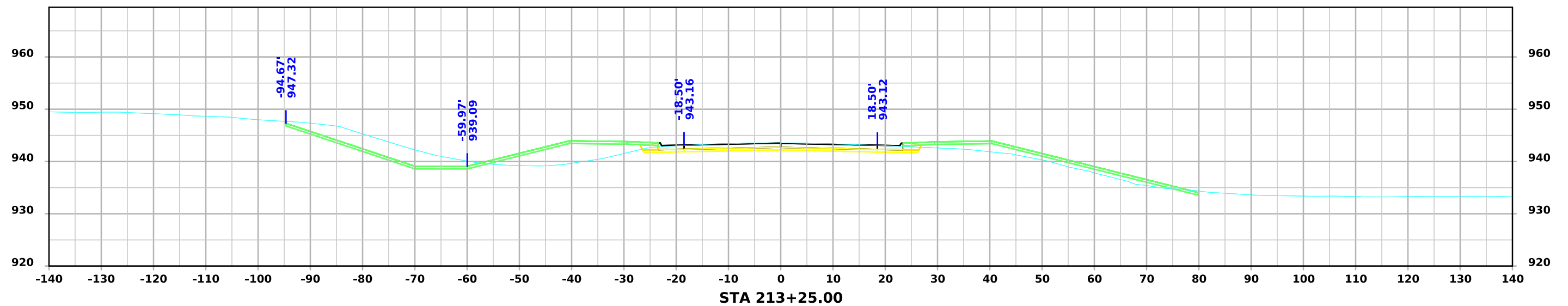
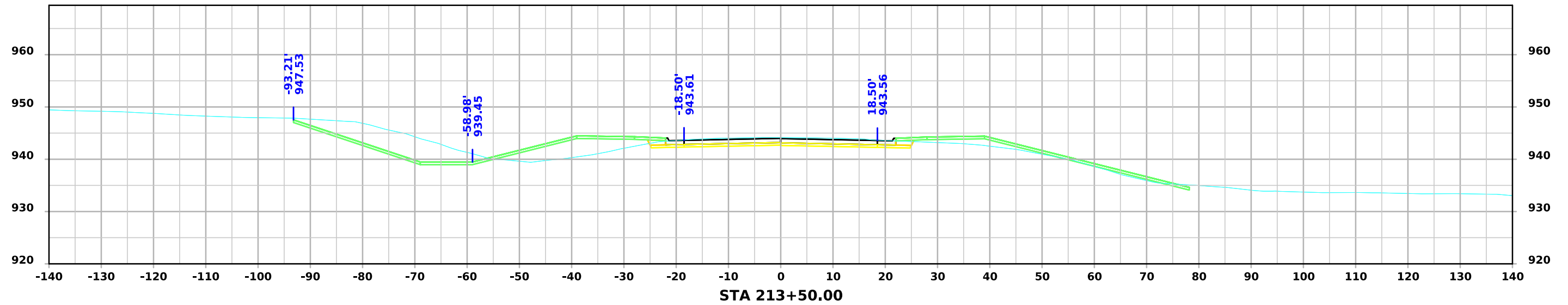
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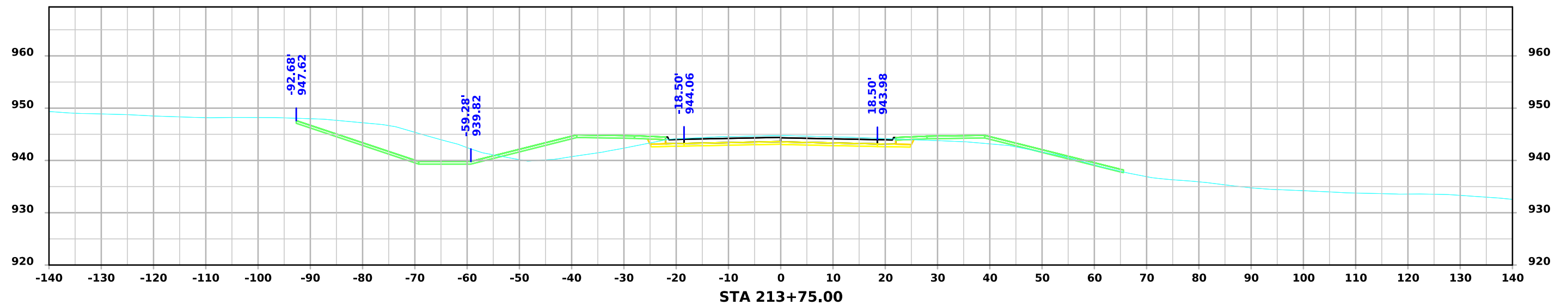
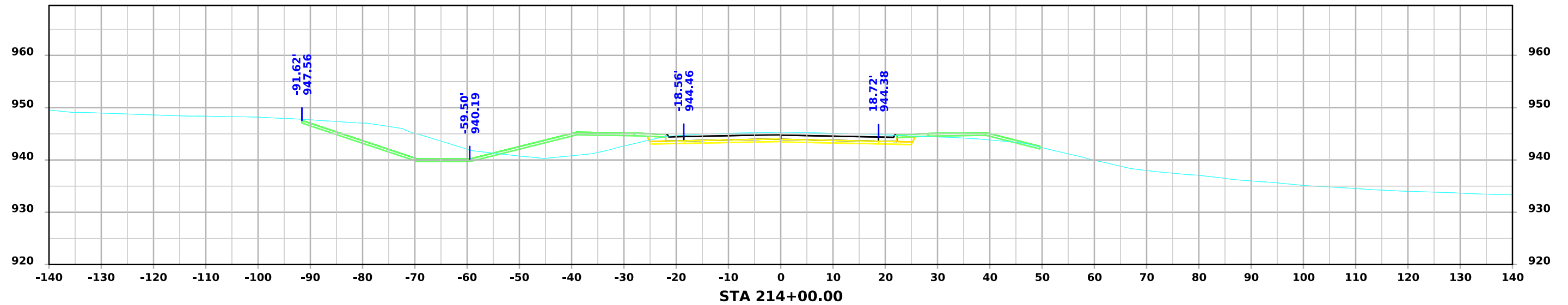
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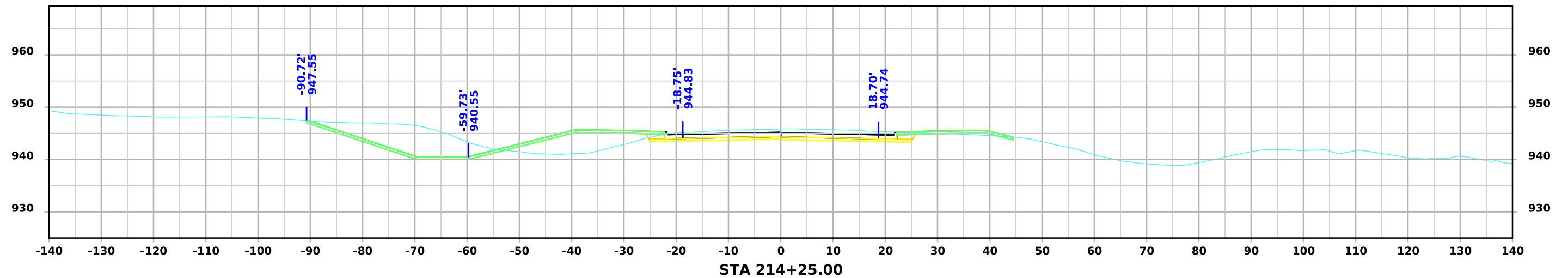
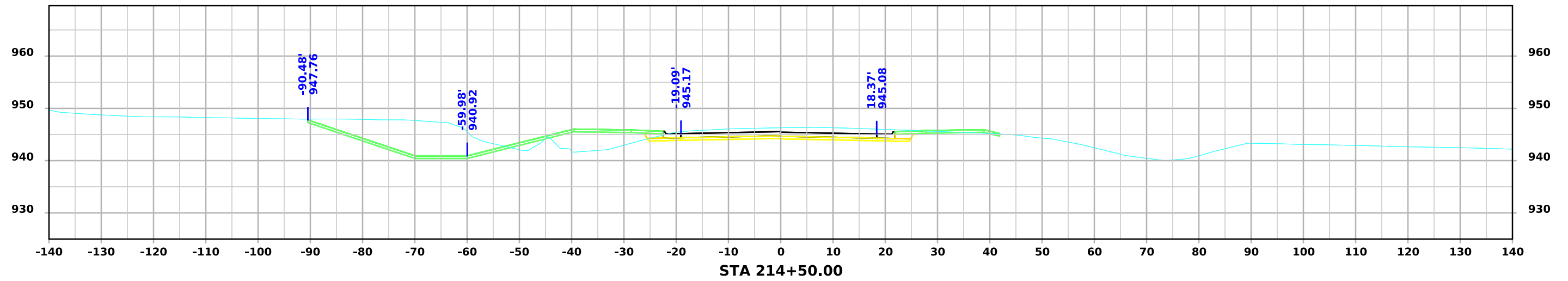
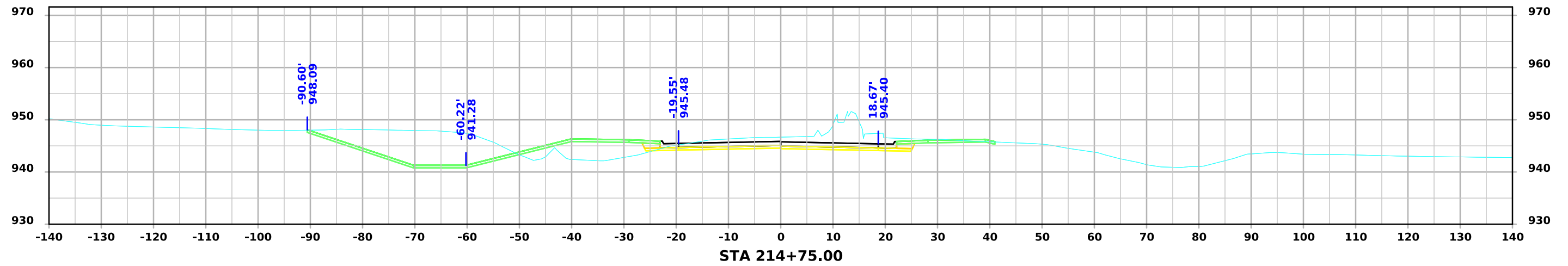
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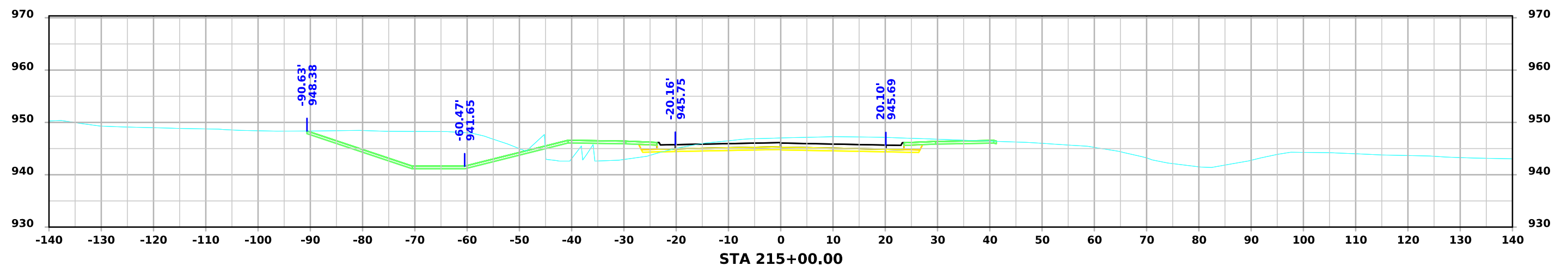
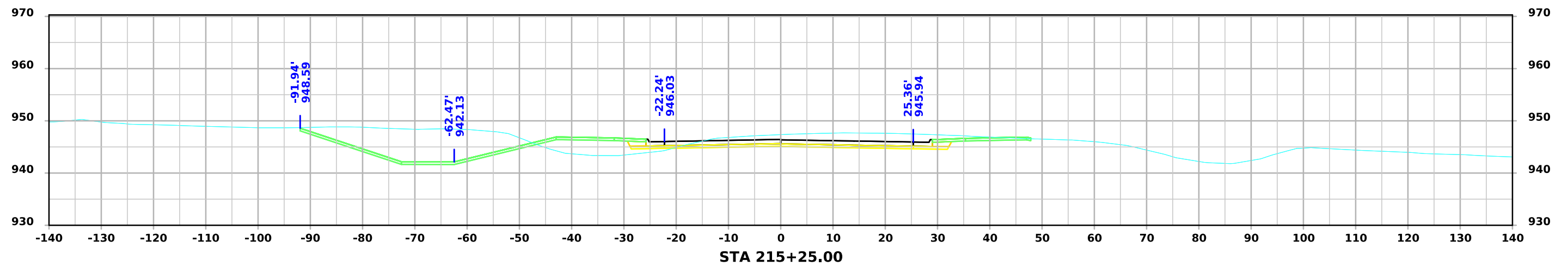
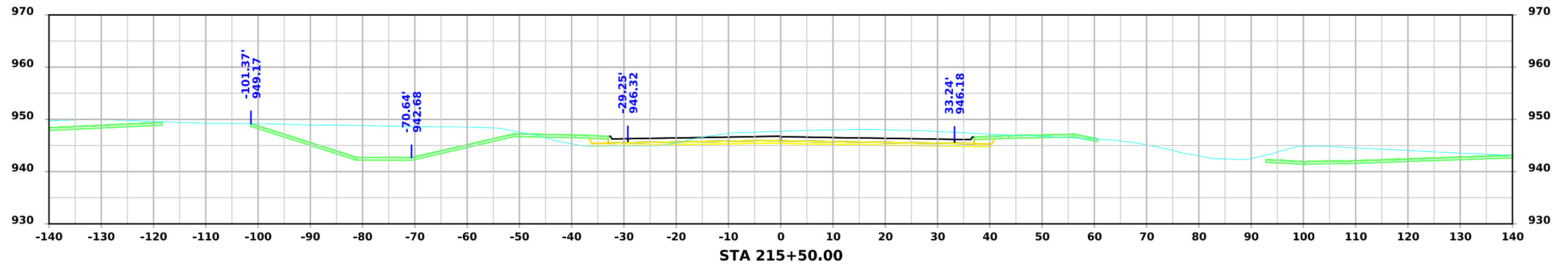
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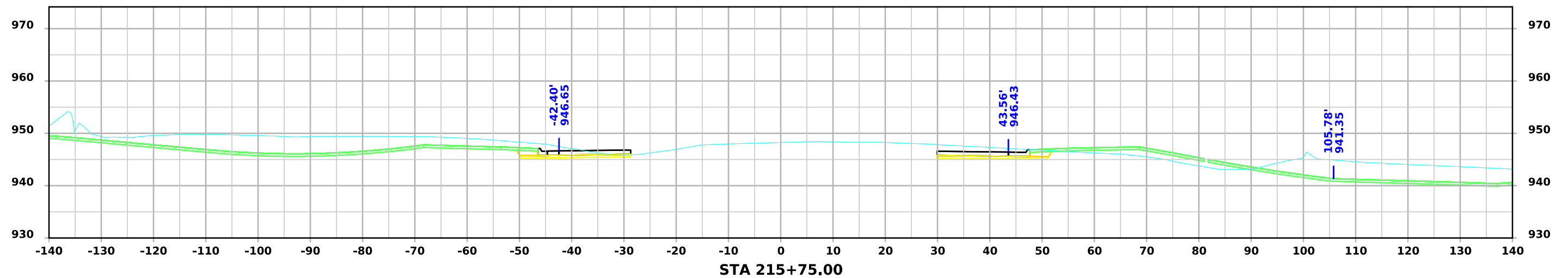
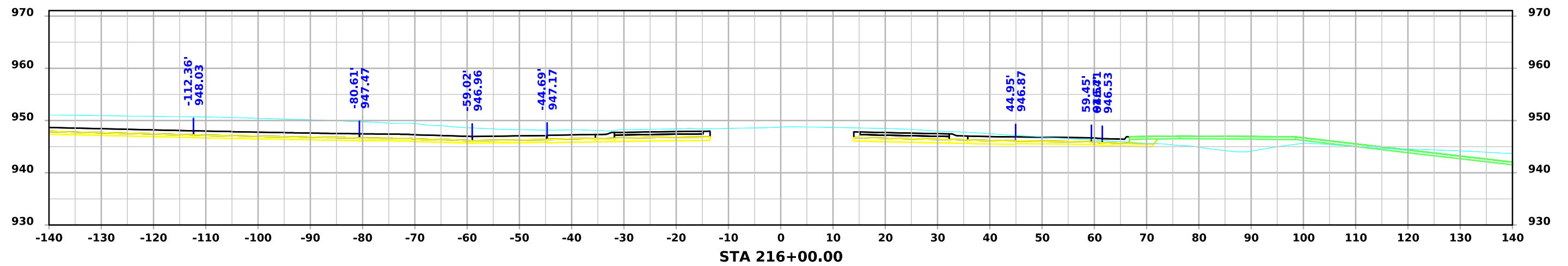
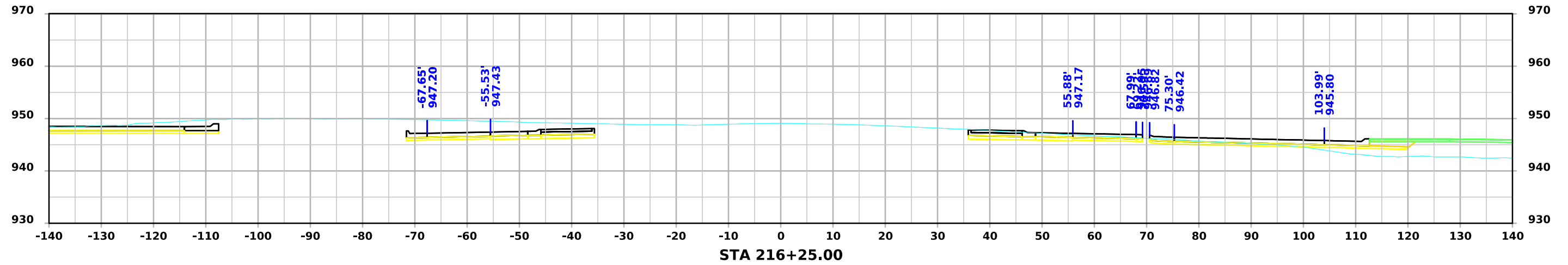
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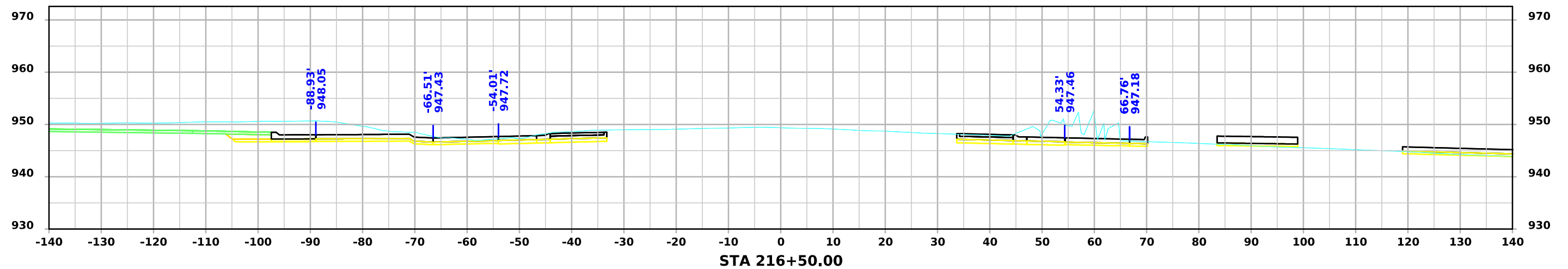
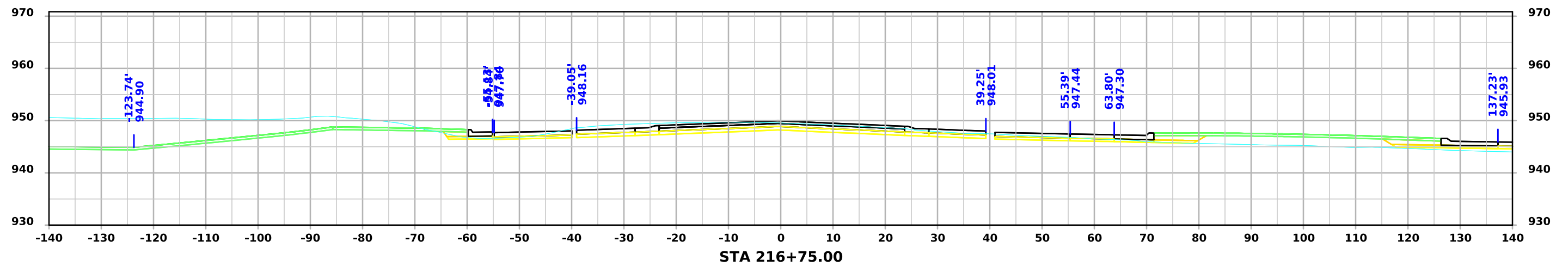
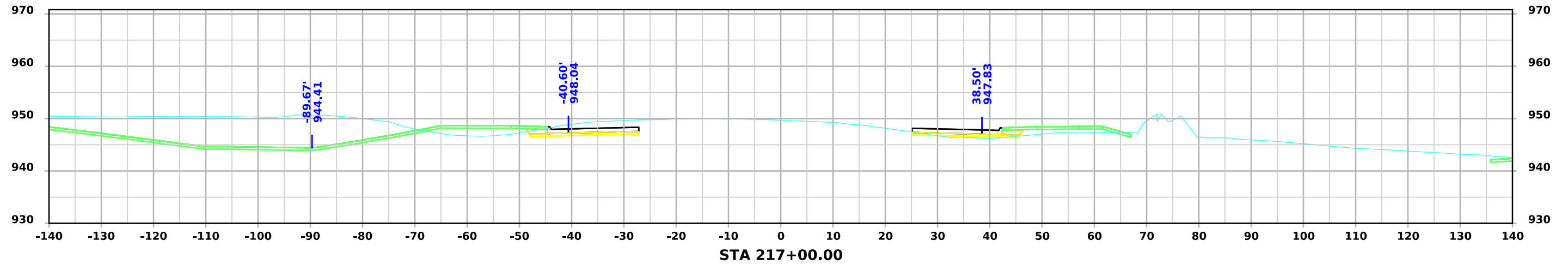
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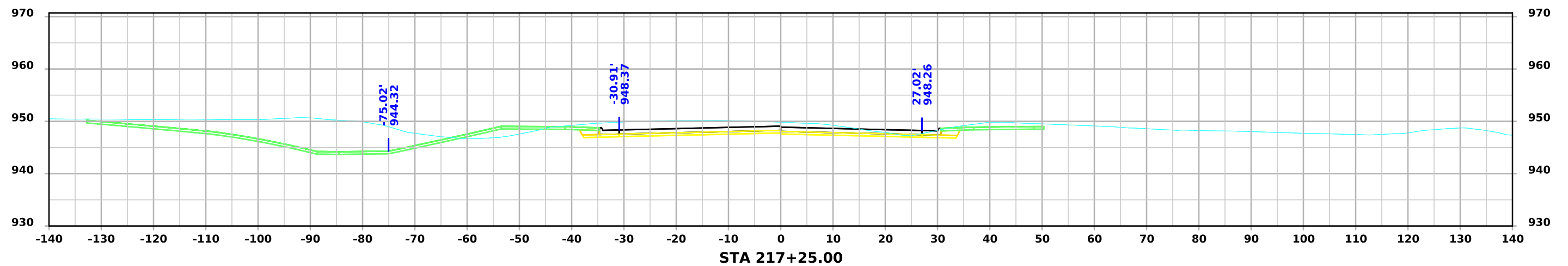
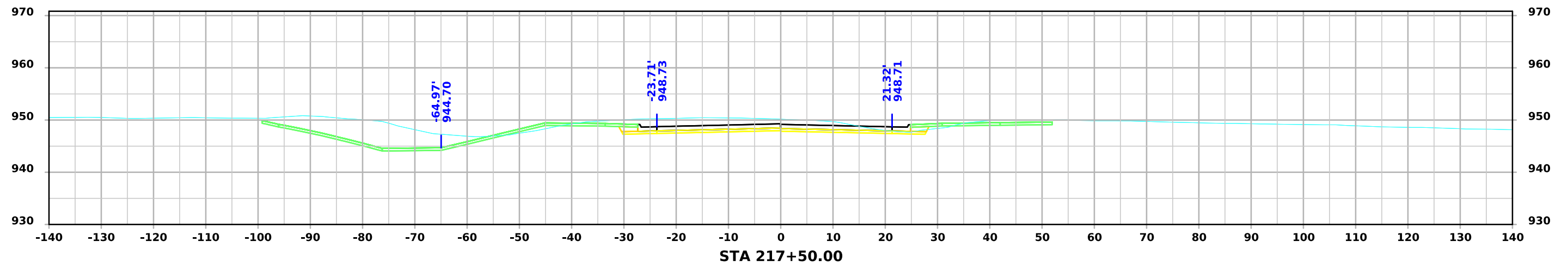
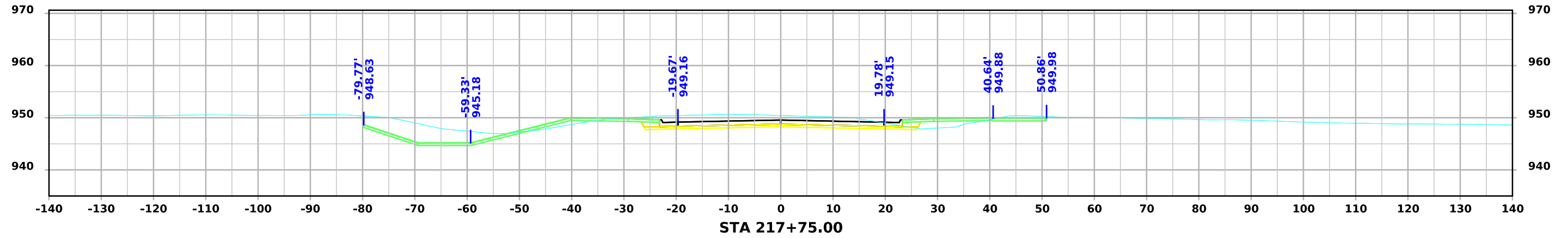
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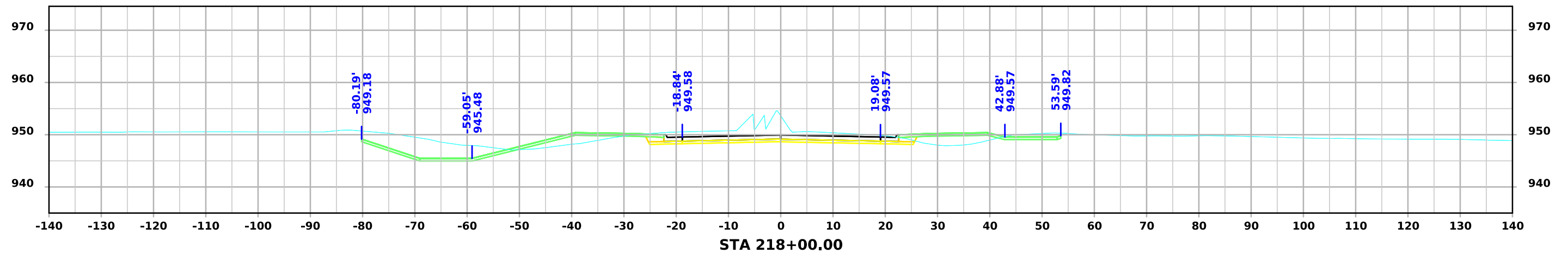
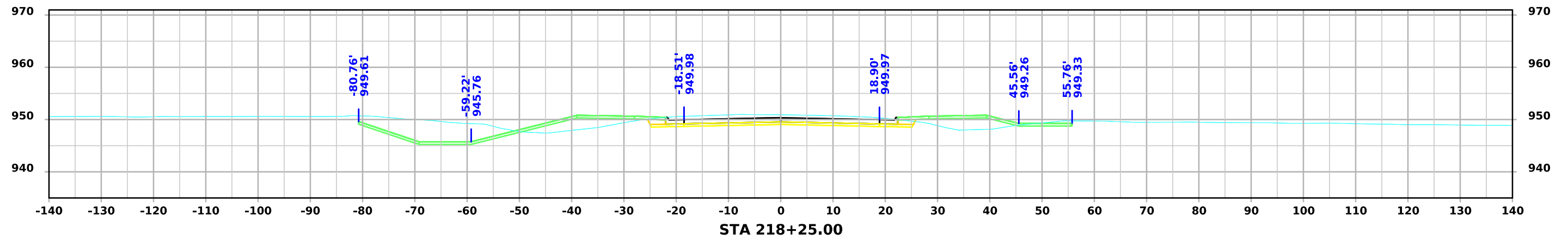
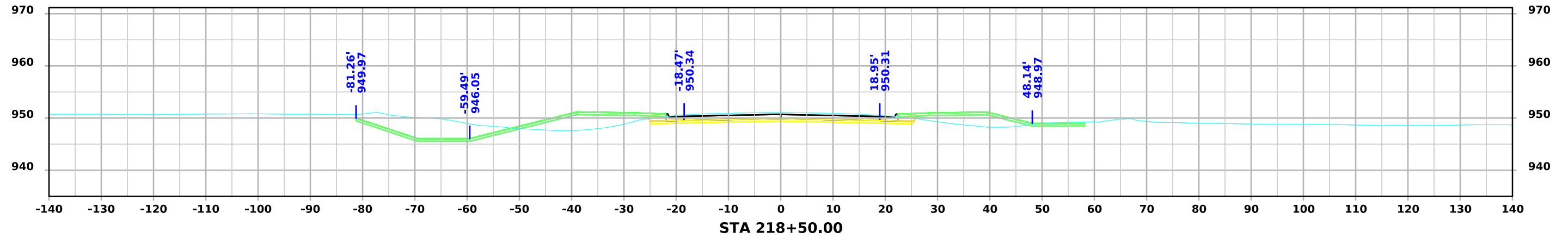
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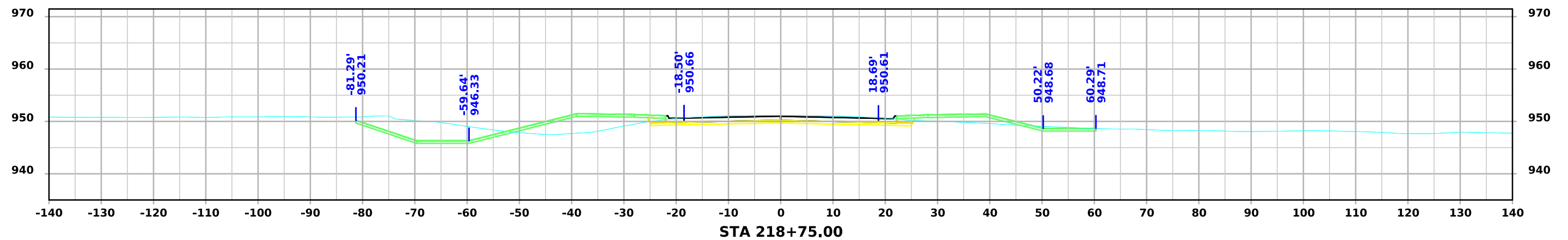
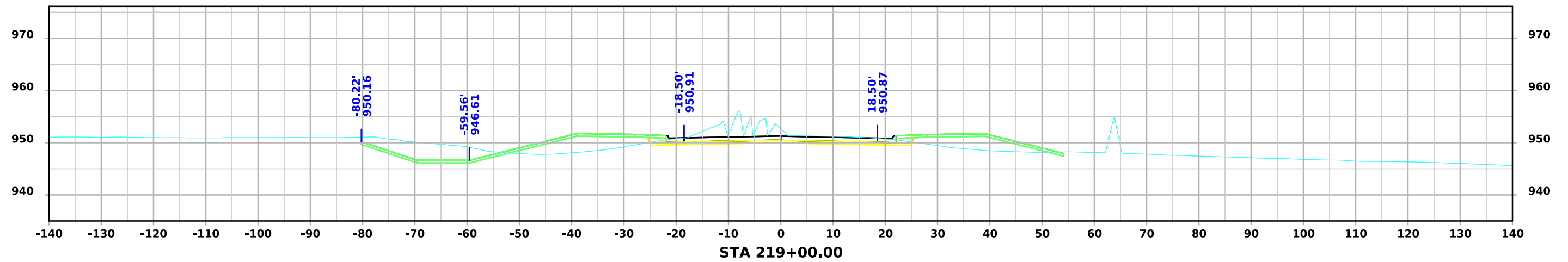
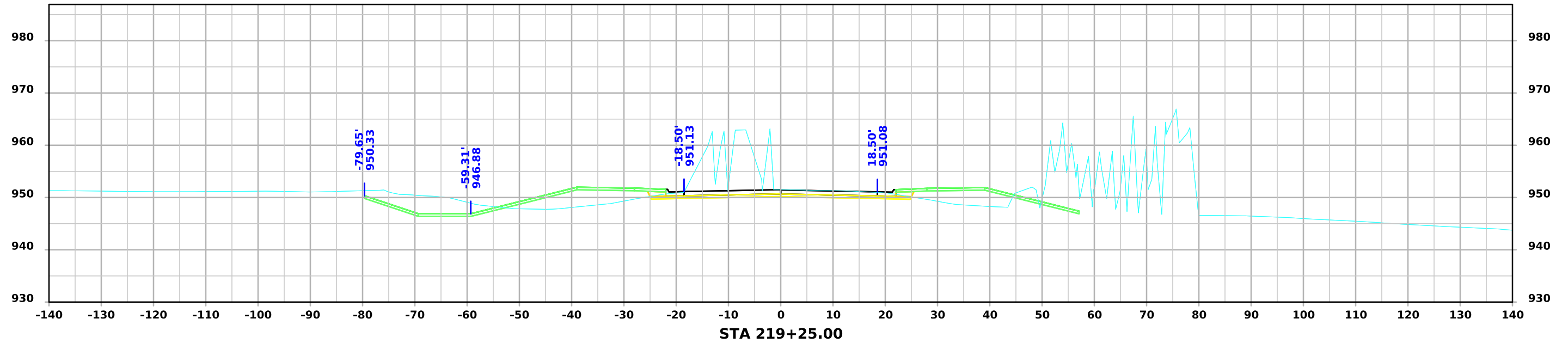
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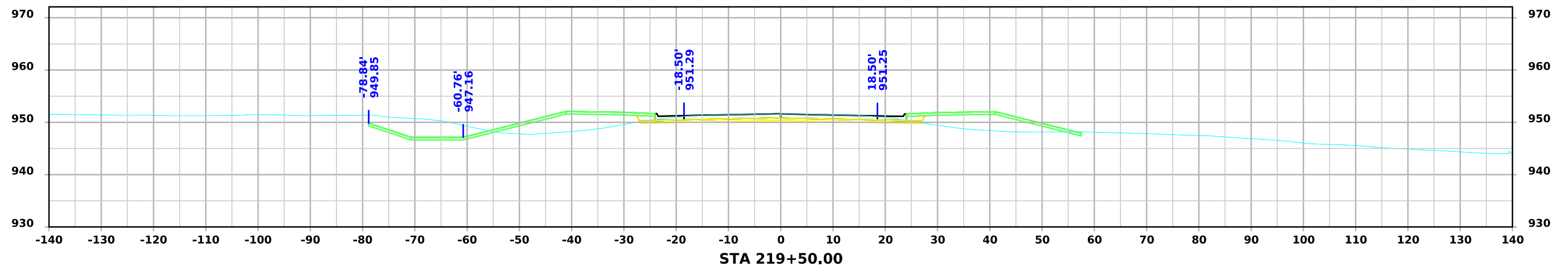
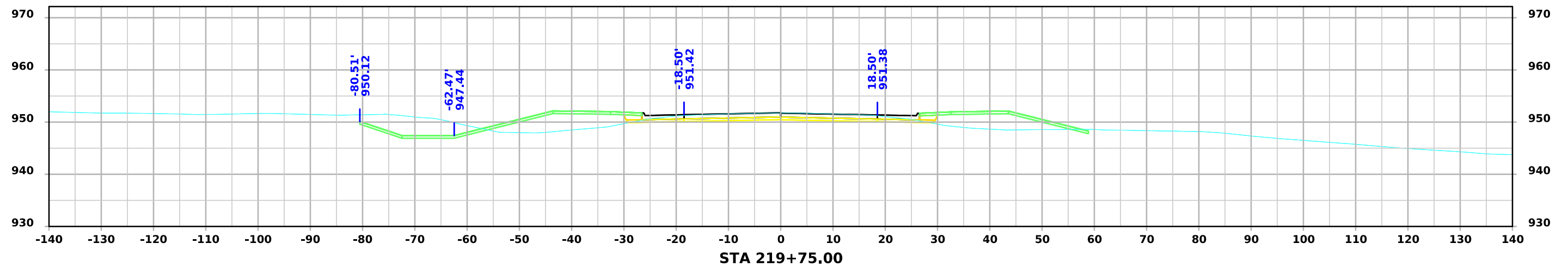
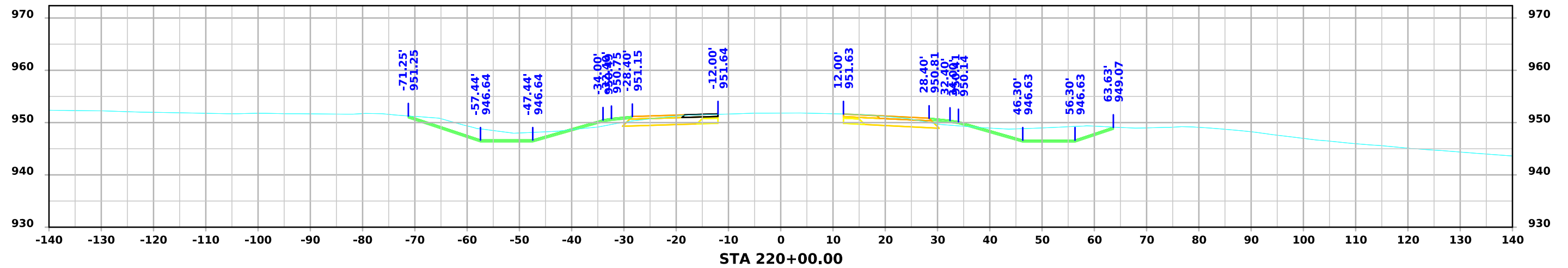
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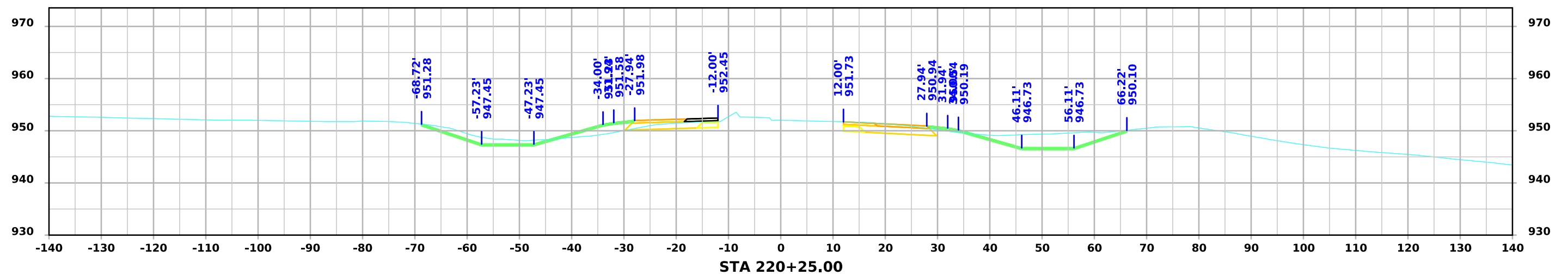
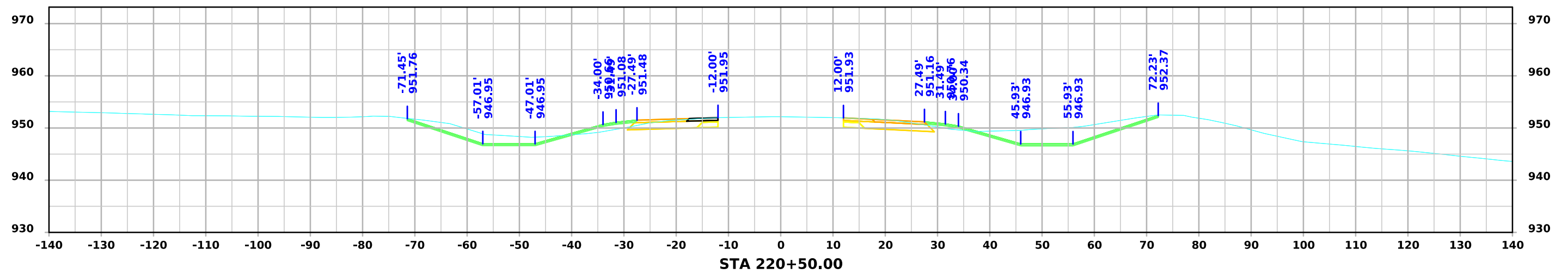
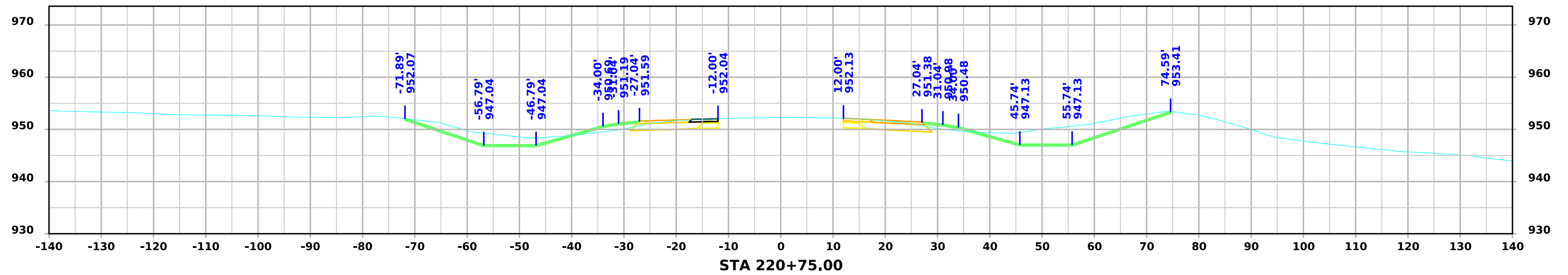
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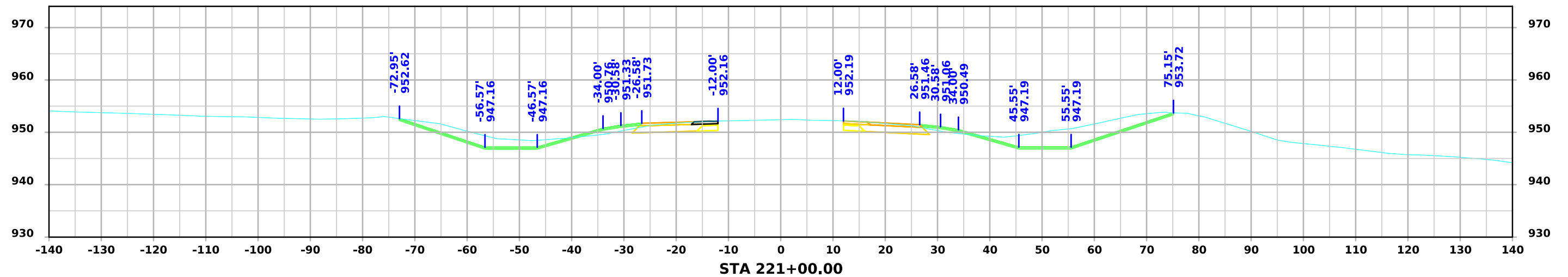
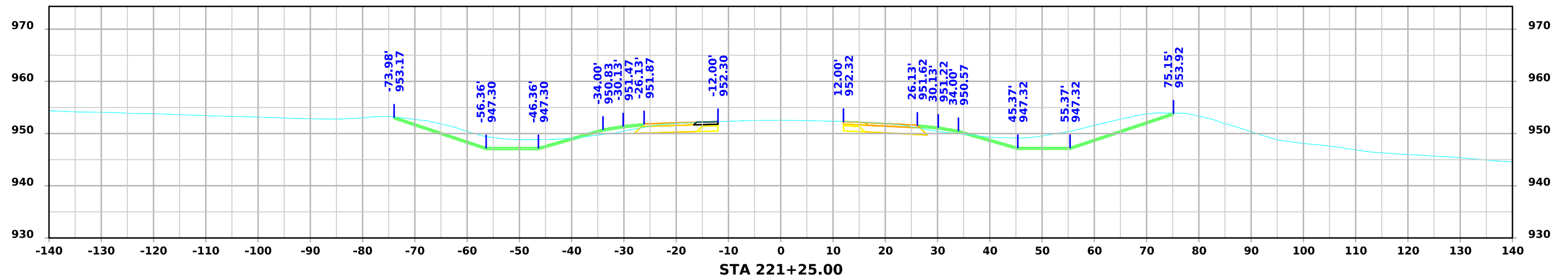
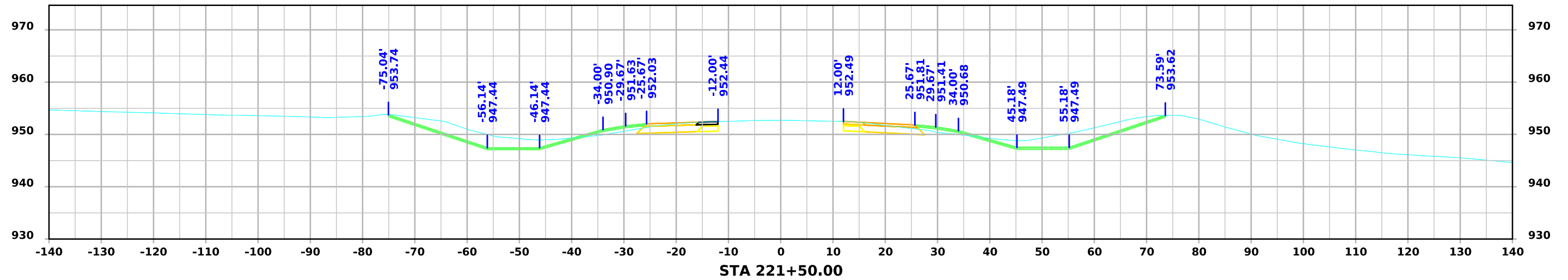
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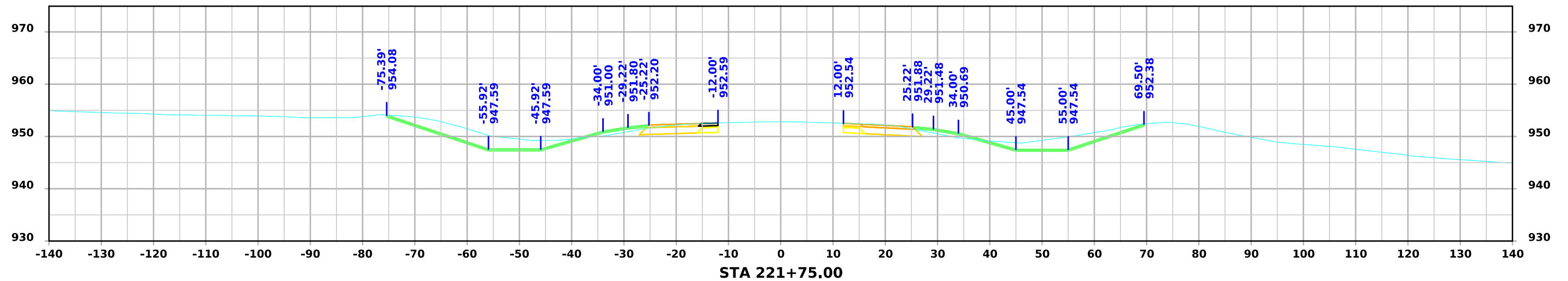
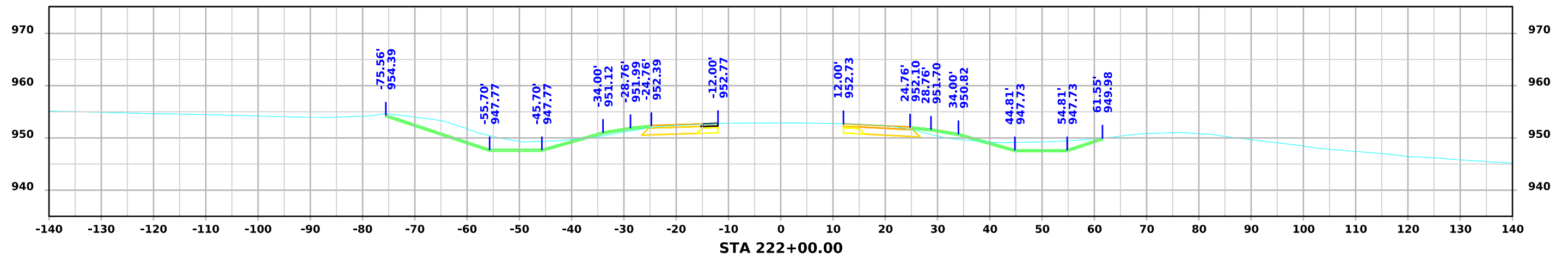
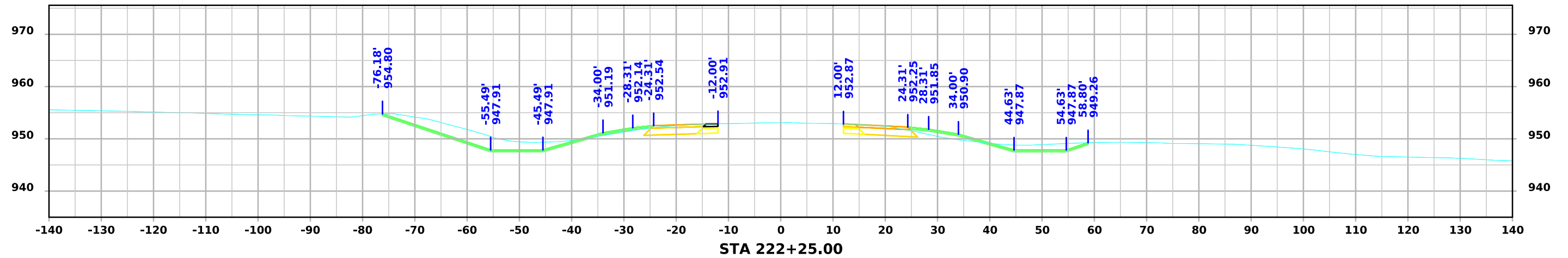
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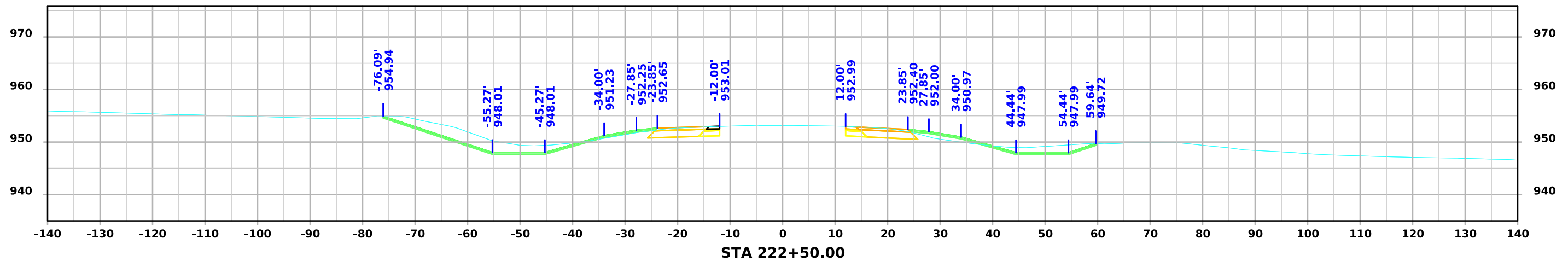
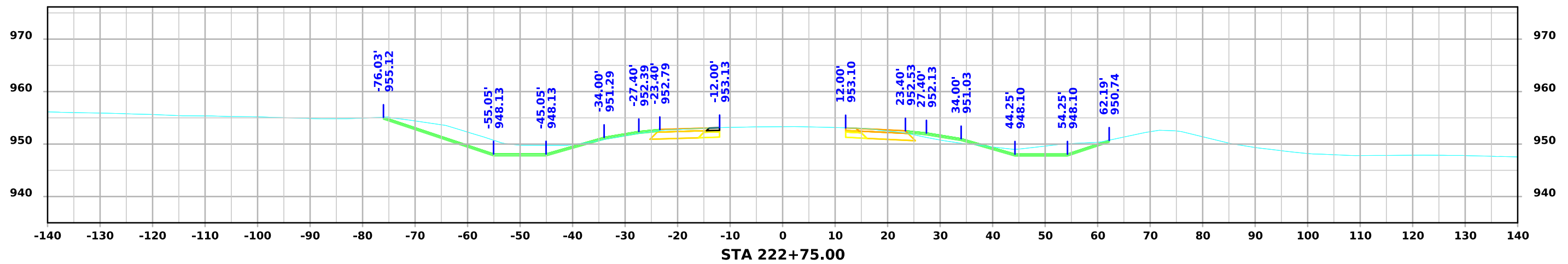
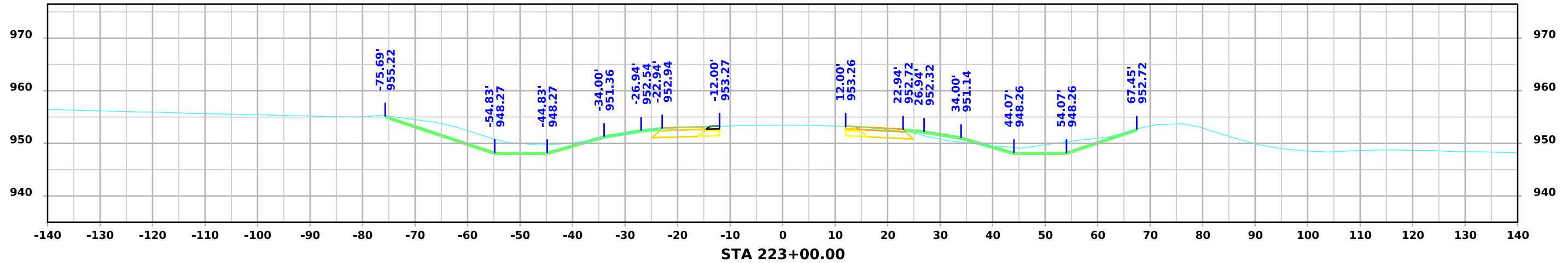
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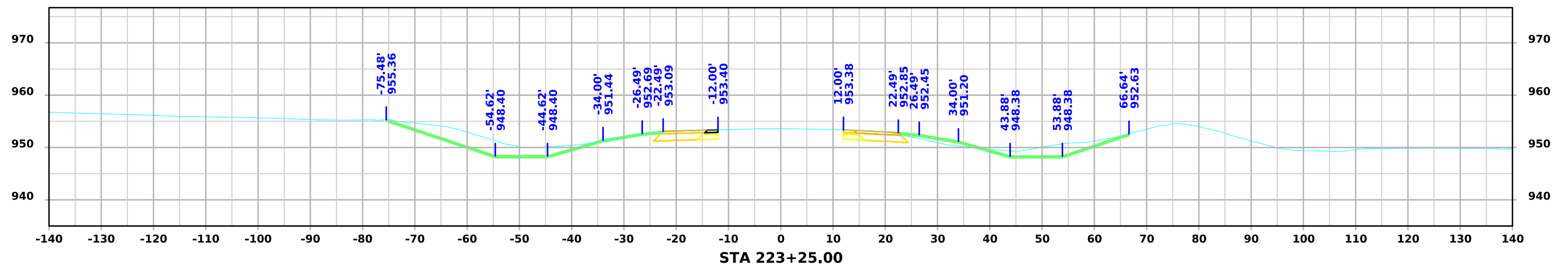
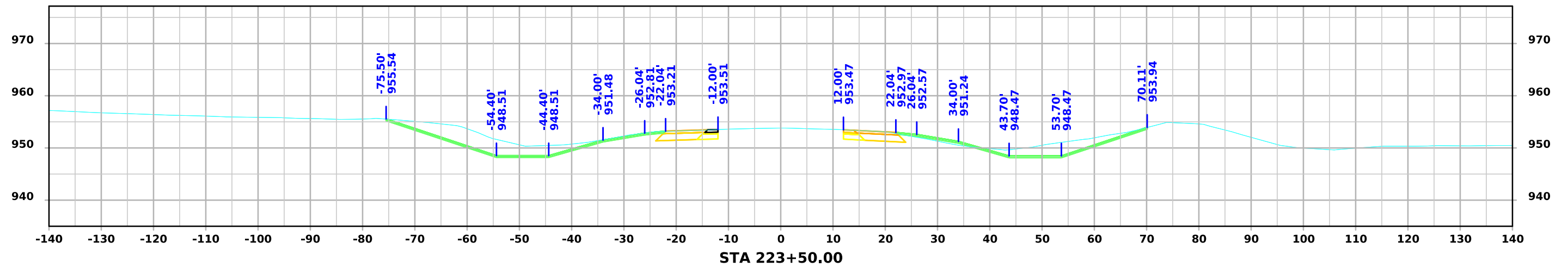
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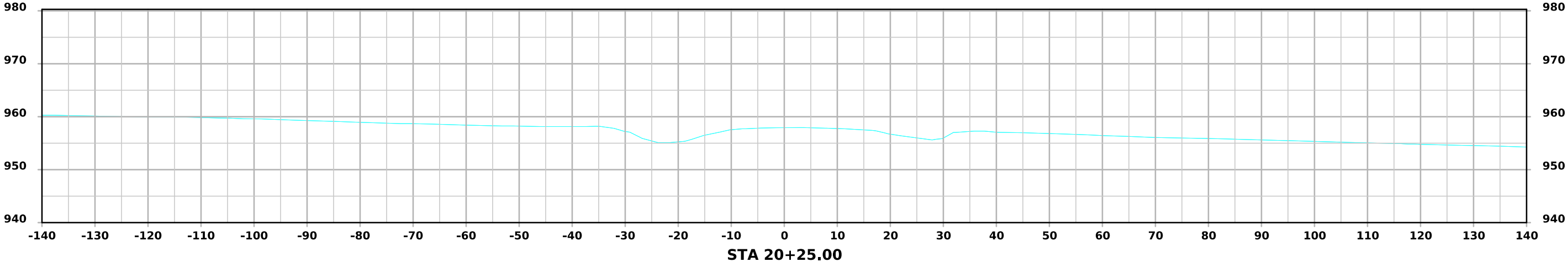
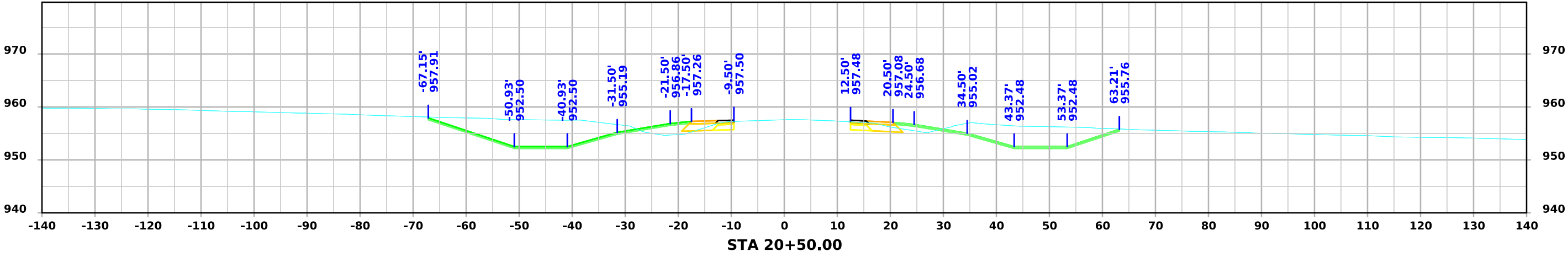
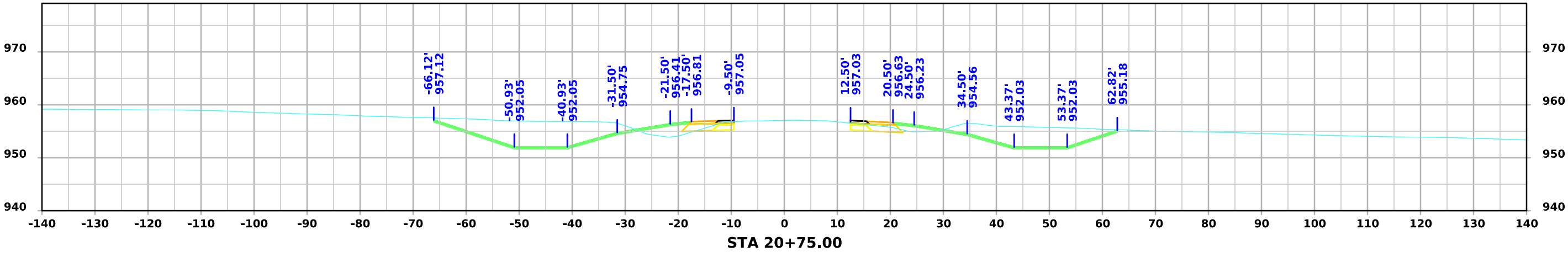
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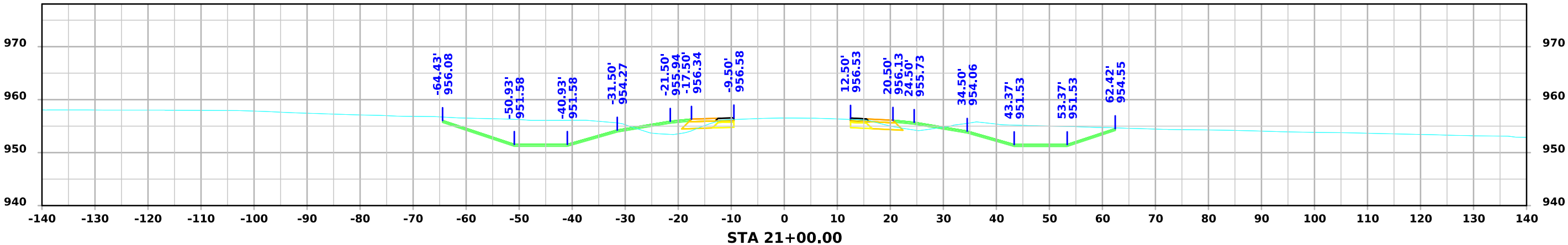
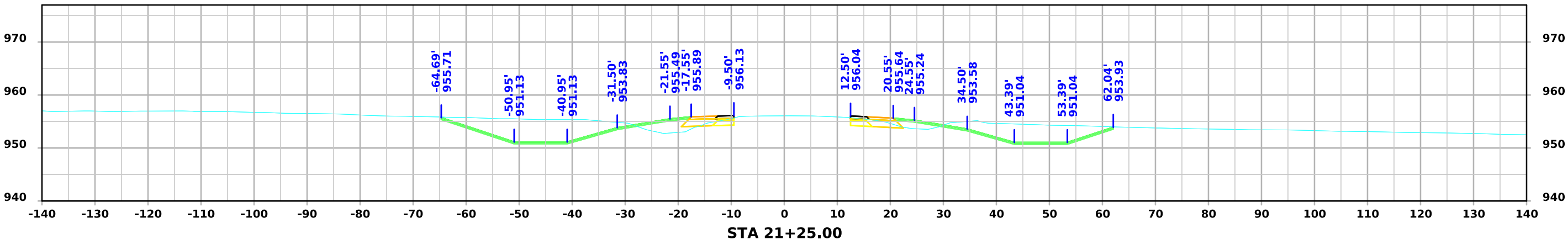
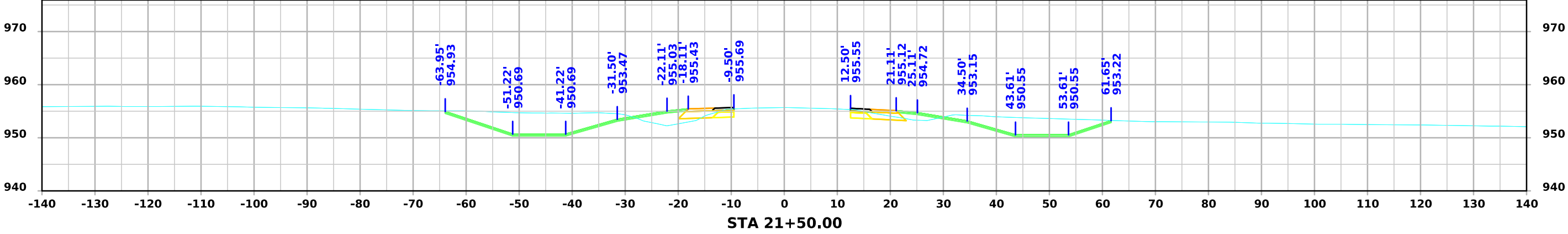
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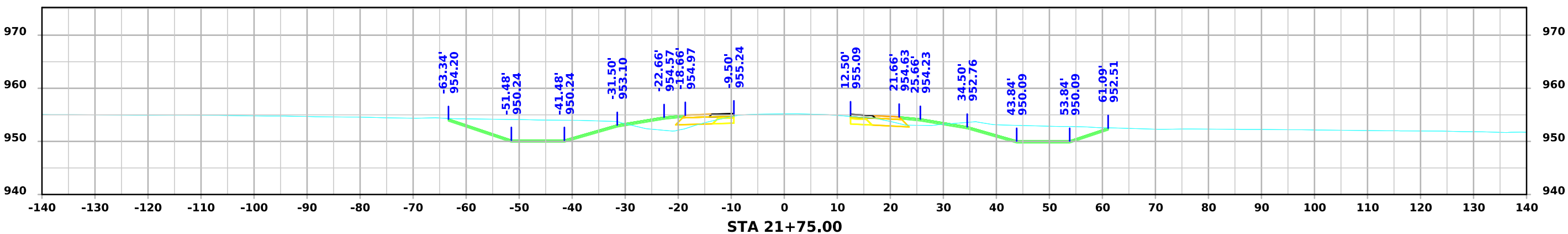
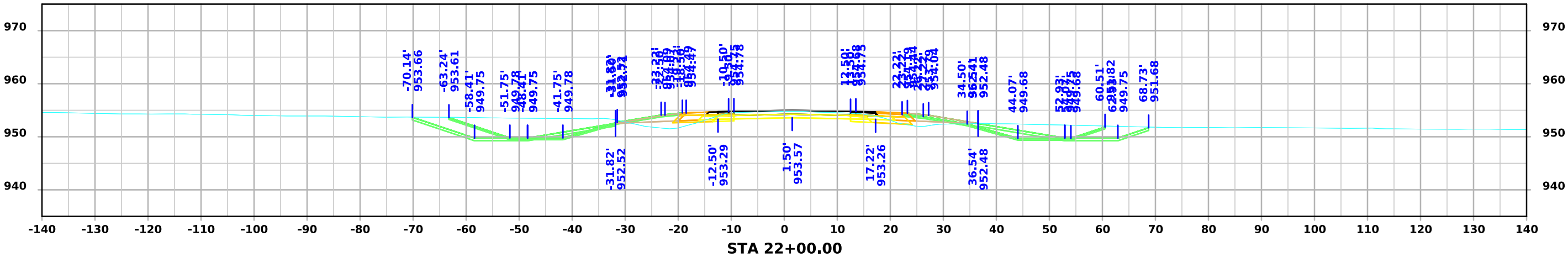
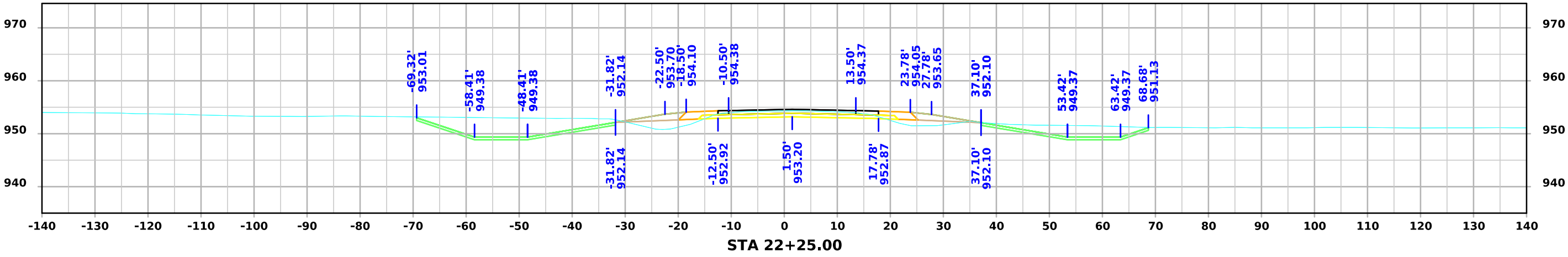
SR - NE 126TH AVENUE



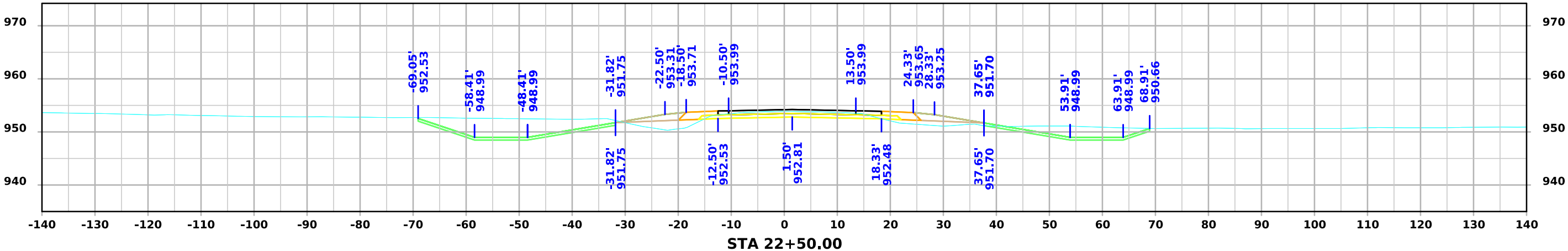
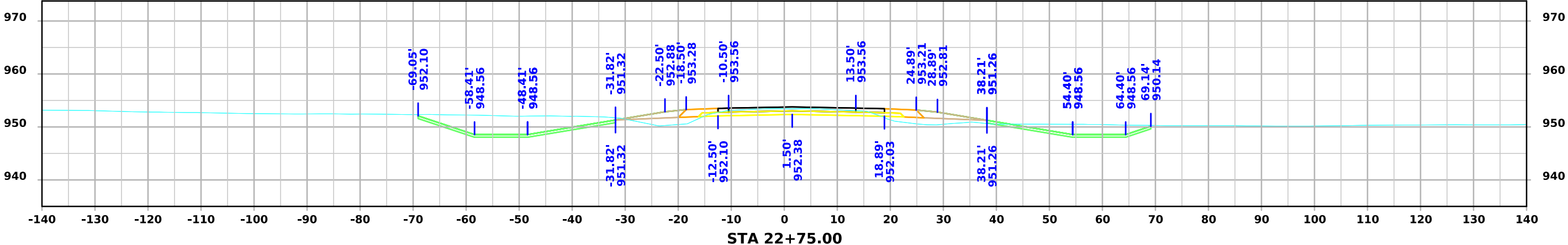
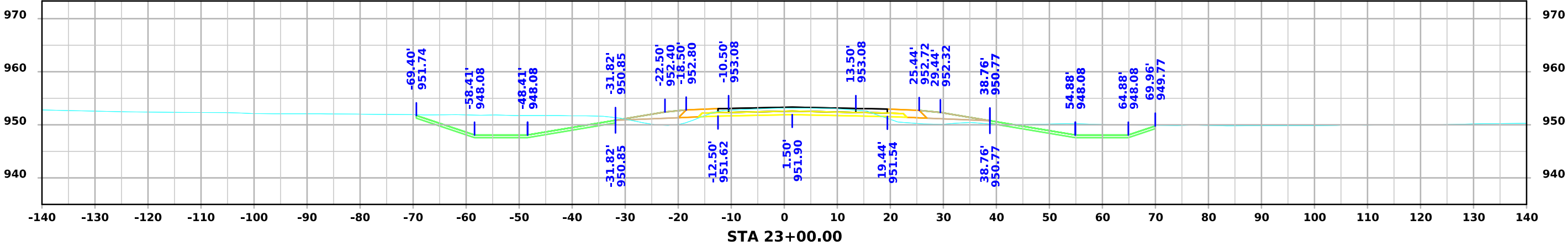
SR - NE 126TH AVENUE



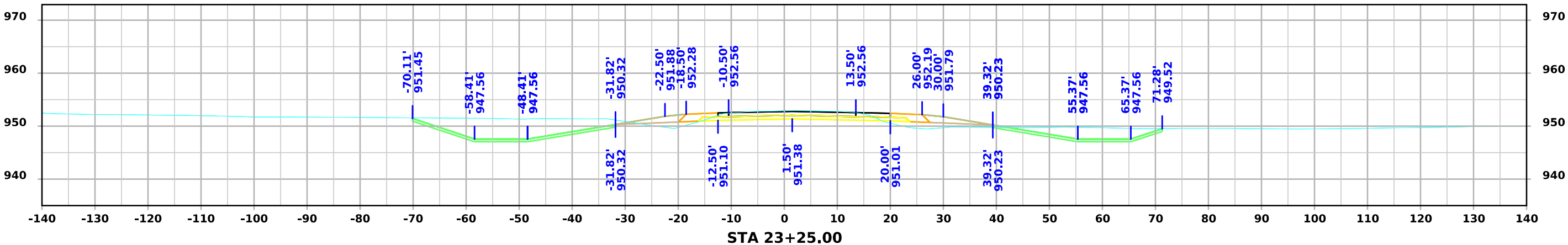
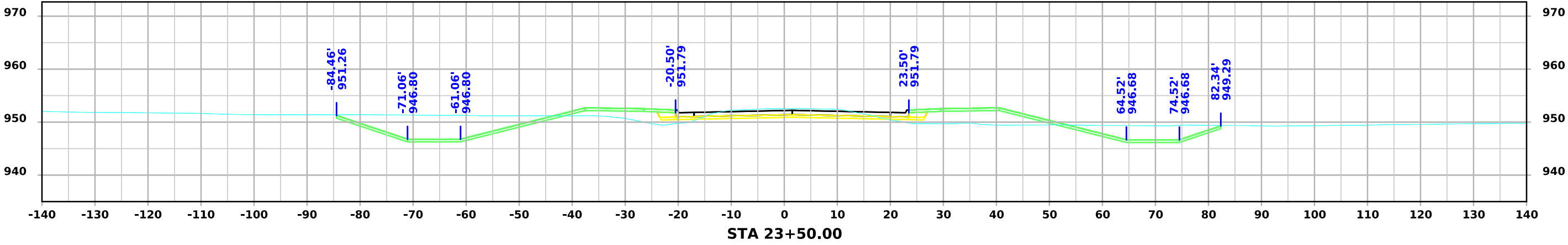
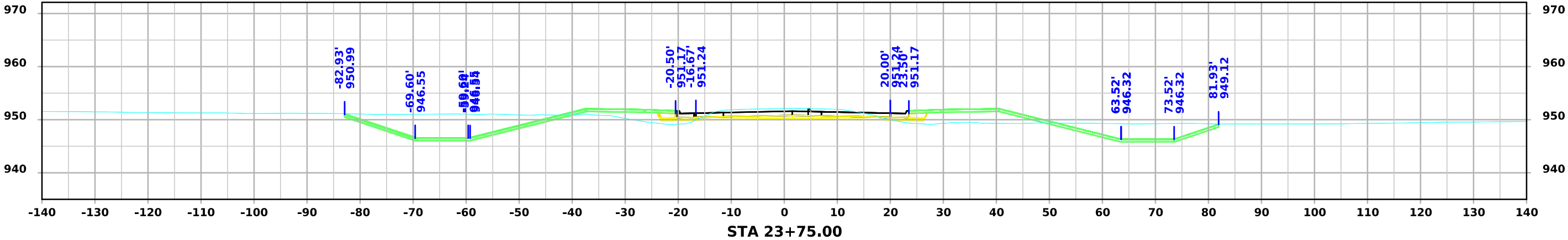
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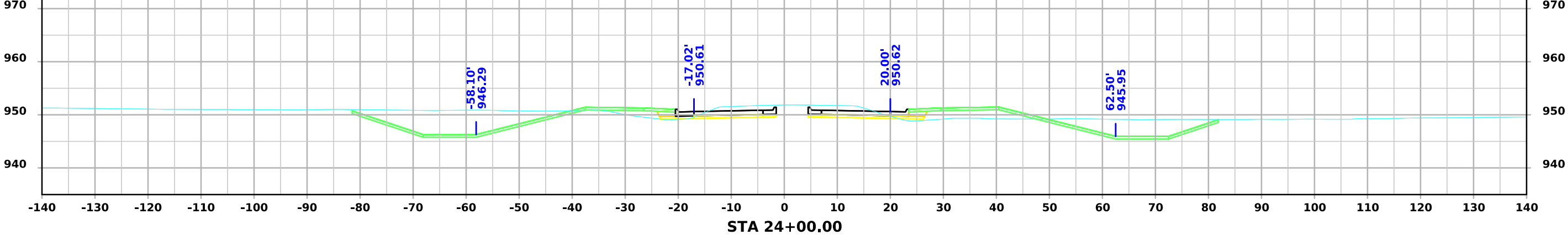
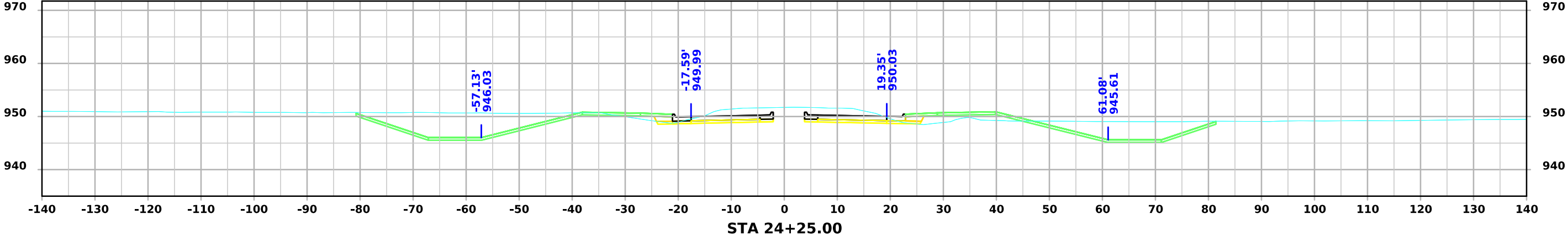
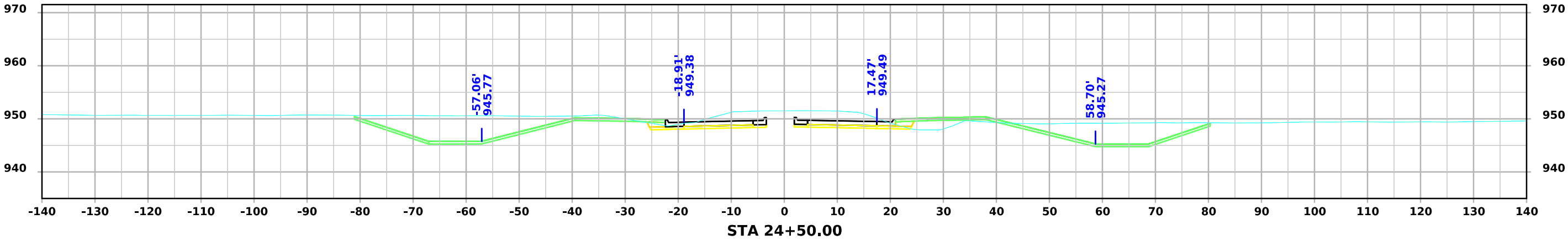
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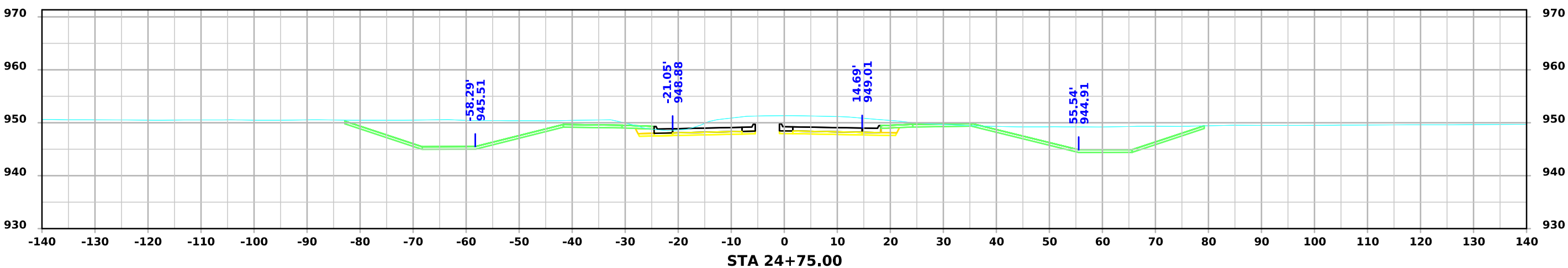
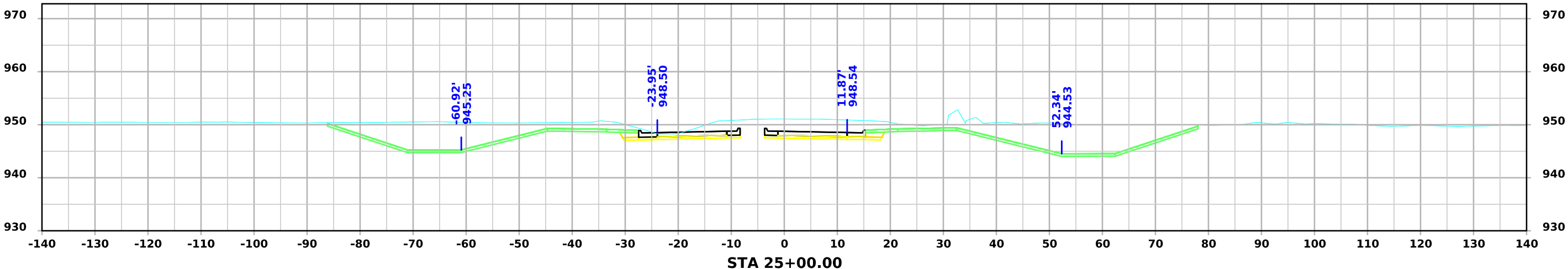
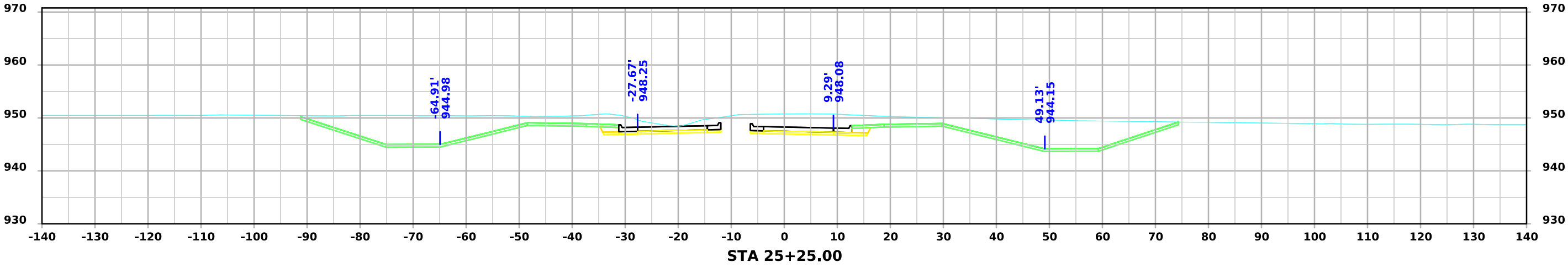
SR - NE 126TH AVENUE



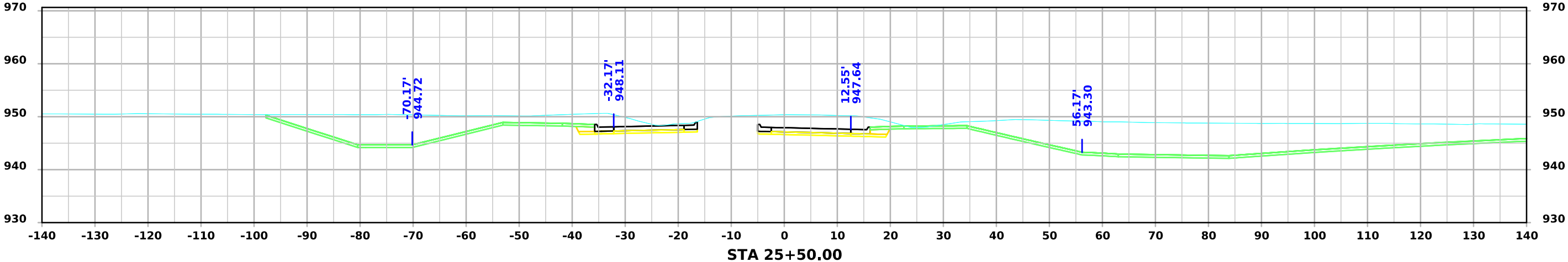
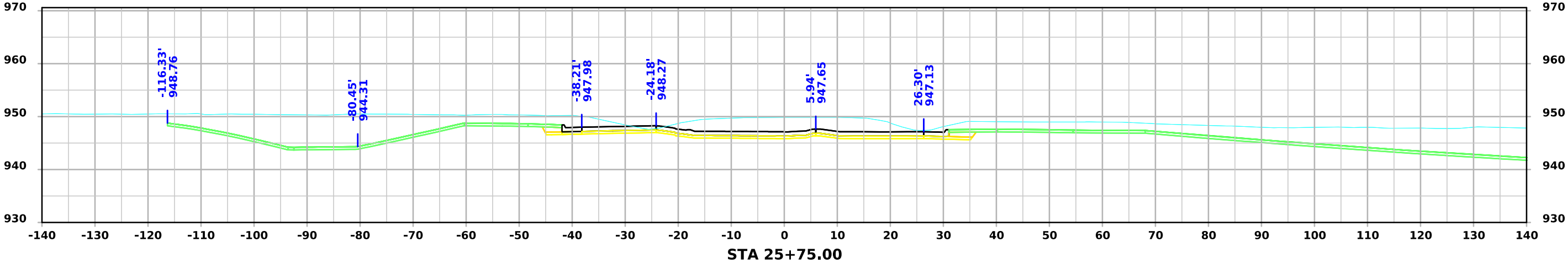
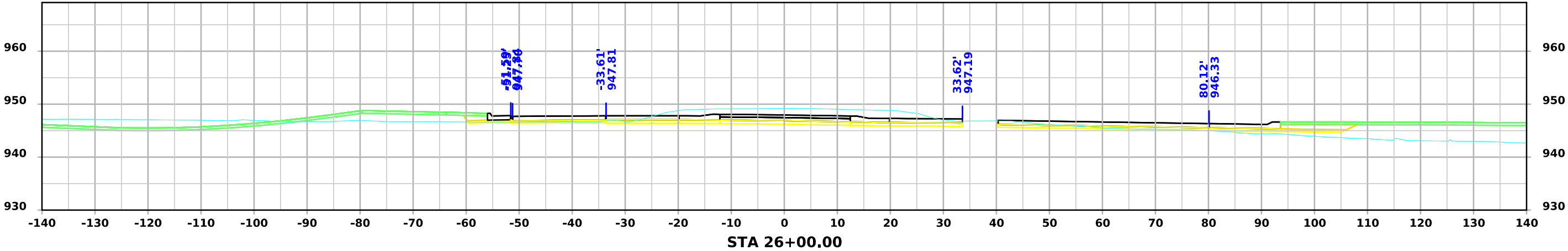
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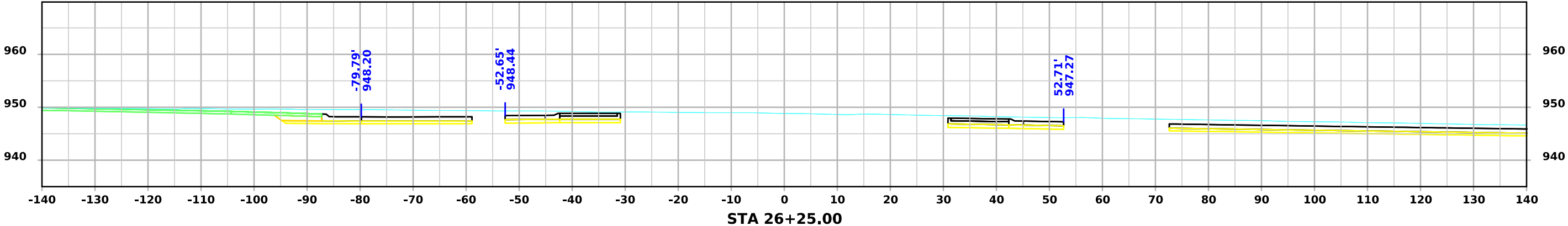
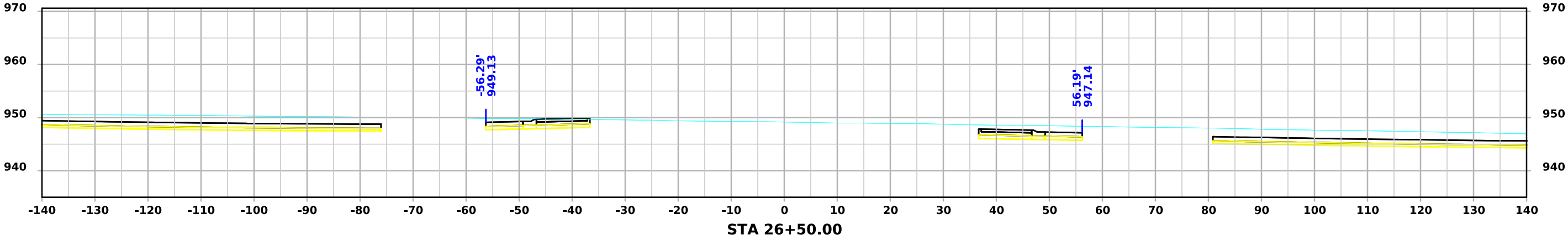
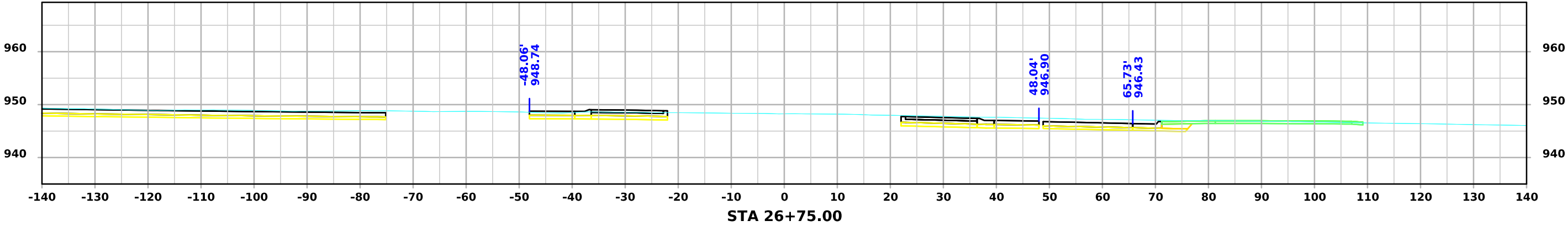
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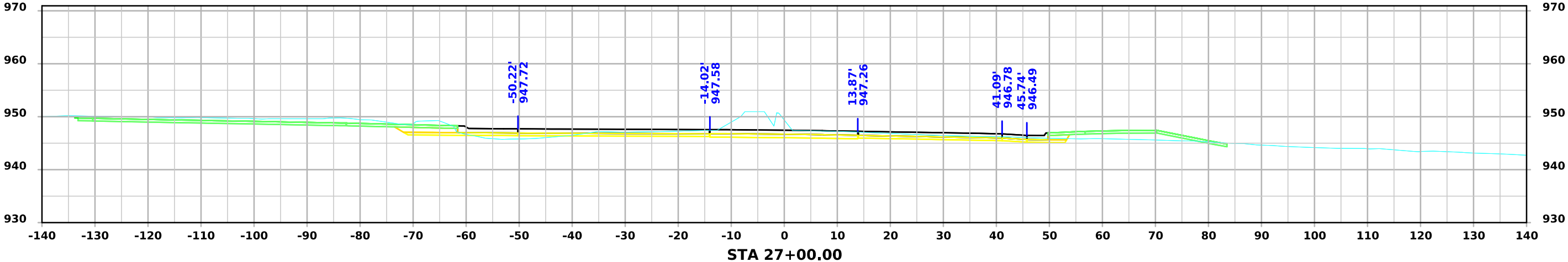
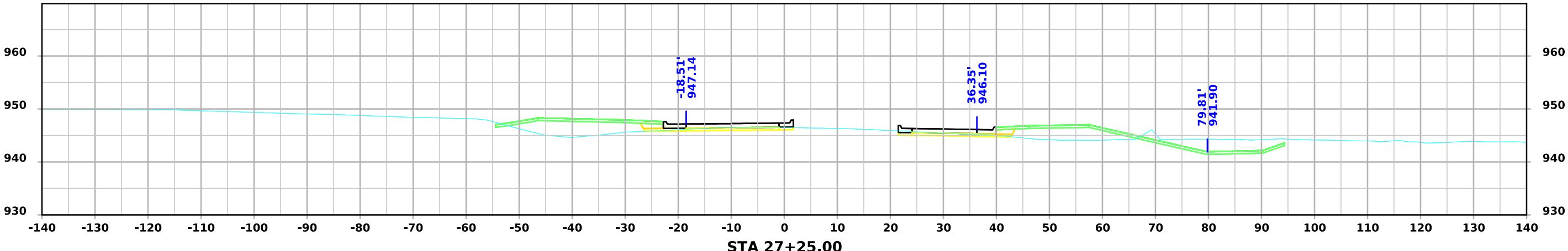
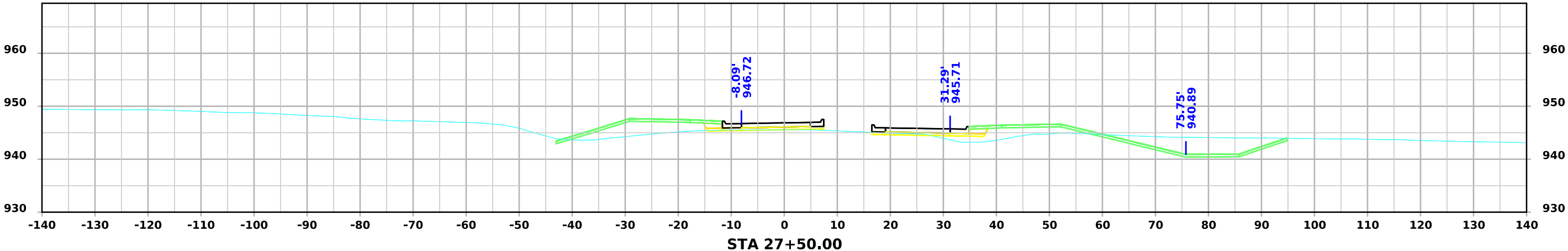
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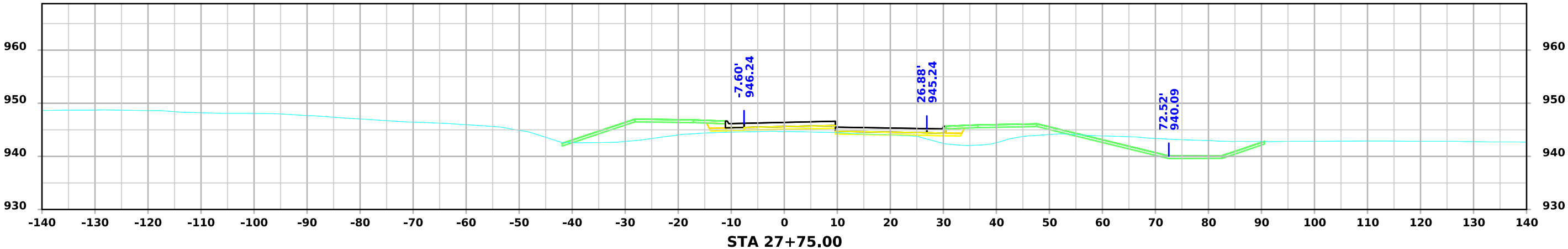
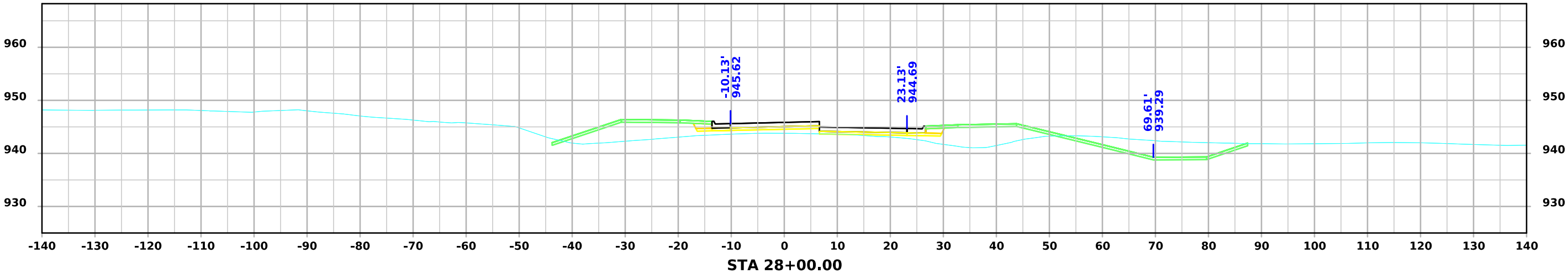
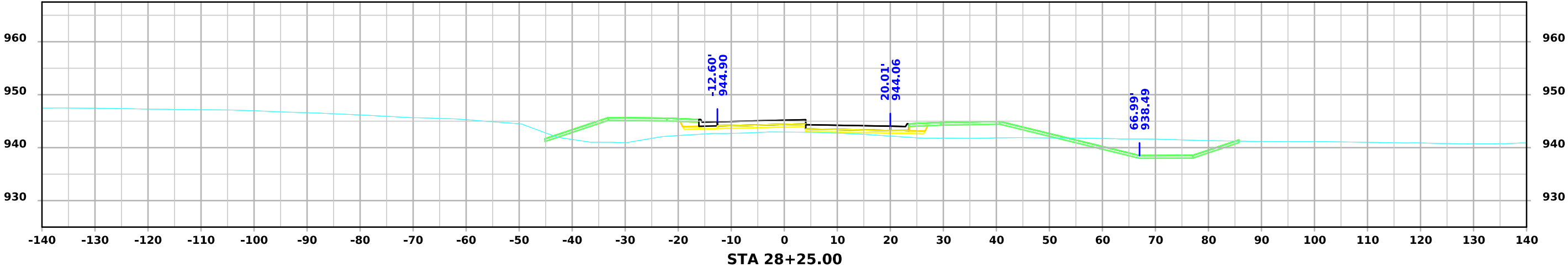
SR - NE 126TH AVENUE



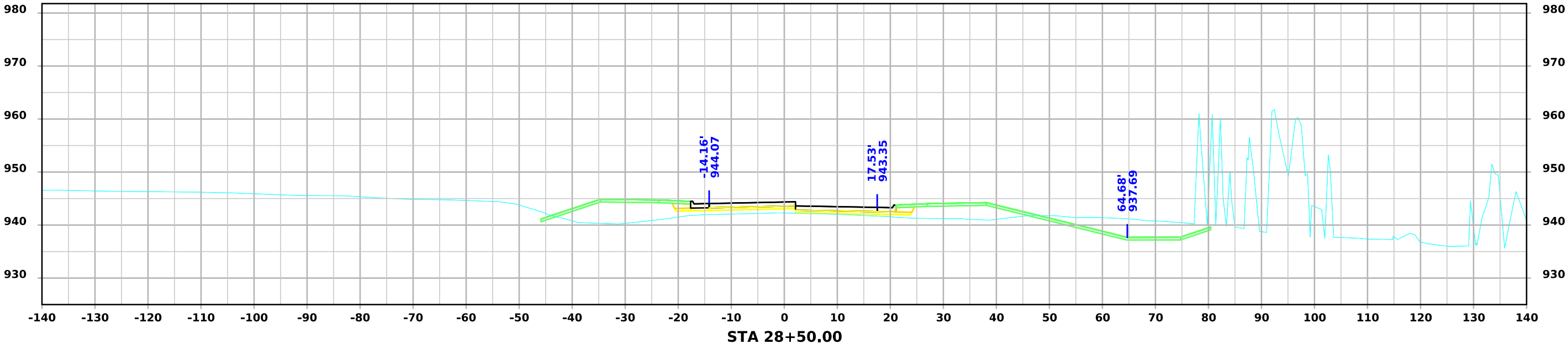
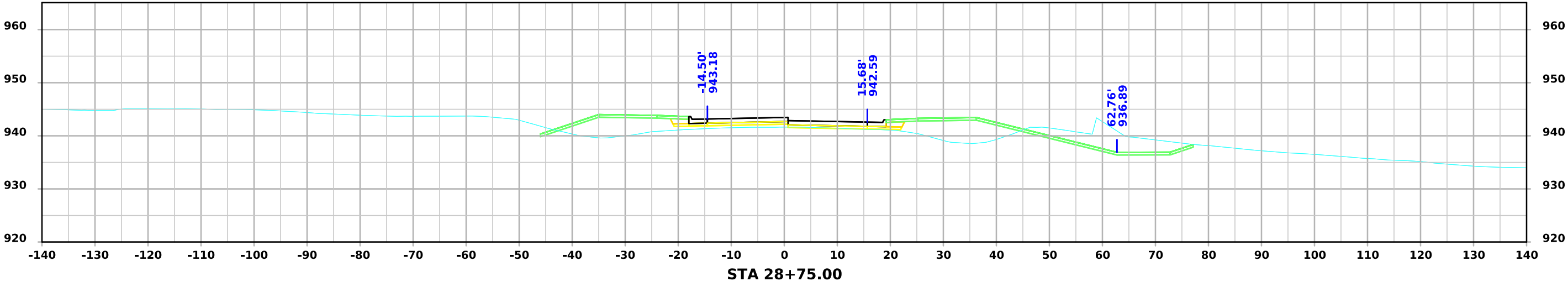
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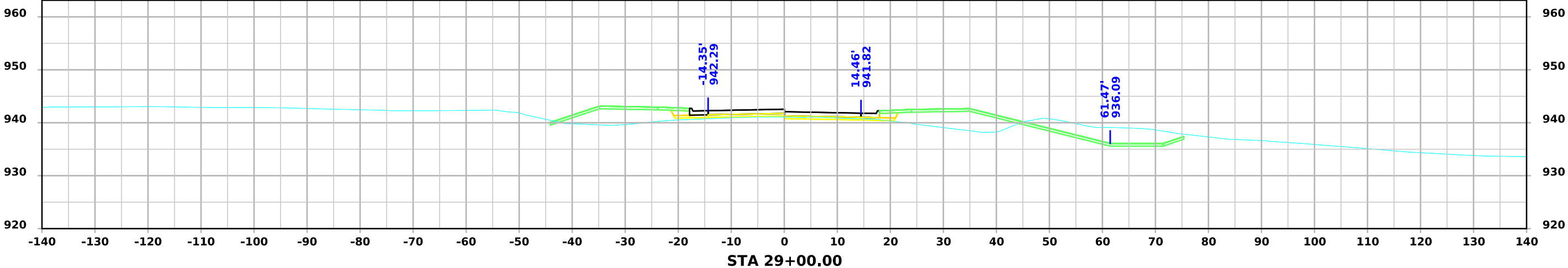
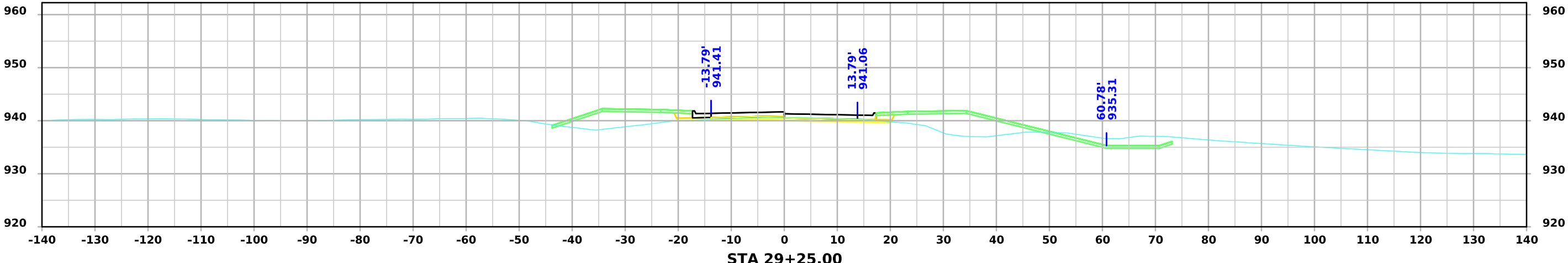
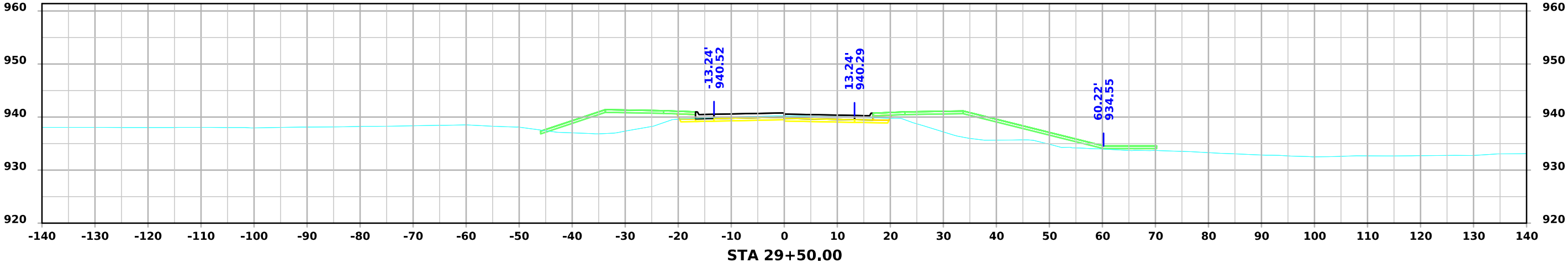
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