LETTING DATE
Dec 21, 2027

Bridge - Unspecified

BRF-151-4(134)--38-53

JONES COUNTY

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 - 4	Typical Cross Sections and Details
D Sheets	**Mainline Plan and Profile Sheets**
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2	US 151 Plan
* D.3	US 151 Profile
F Sheets	**Detour or Temporary Pavement Sheets**
* F.1	DET234 Plan and Profile Sheets
* F.2	DET310 Plan and Profile Sheets
G Sheets	**Survey Sheets**
G.1 - 3	Reference Ties and Bench Marks
J Sheets	**Traffic Control and Staging Sheets**
J.1	Traffic Control Plan
* J.2	Traffic Control Plan Legend & Symbol Information Sheet
* J.3 - 9	Traffic Control Layouts
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 - 26	US 151 SB Cross Sections
	* Color Plan Sheets

IOWA DOT

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM

JONES COUNTY

Bridge - Unspecified

Wapsipinicon River 1.4 miles S of IA 64 (SB)

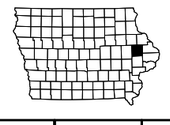
SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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

REVISIONS

TOTAL
56
PROJECT IDENTIFICATION NUMBER
22-53-151-020
PROJECT NUMBER
BRF-151-4(134)--38-53
R.O.W. PROJECT NUMBER
NHSN-151-4(135)--2R-53
-
-



DESIGN DATA RURAL			
2026	AADT	7,800	V.P.D.
2046	AADT	10,400	V.P.D.
20 –	DHV	--	V.P.H.
TRUCKS		12	%
Total Design ESALs		--	

INDEX OF SEALS			
SHEET NO.	NAME	TYPE	BID QUANTITY SHEETS
A.1	Kelly C. Bell	Primary Signature Block	X
X	X	X	X

PRELIMINARY PLANS

Subject to change by final design.

D5 PLAN-Date: 12/19/2024

FILE NO.	ENGLISH	DESIGN TEAM **Flattery\Bell\Schinstock**	**JONES** COUNTY	PROJECT NUMBER **BRF-151-4(134)--38-53**	SHEET NUMBER **A.1**

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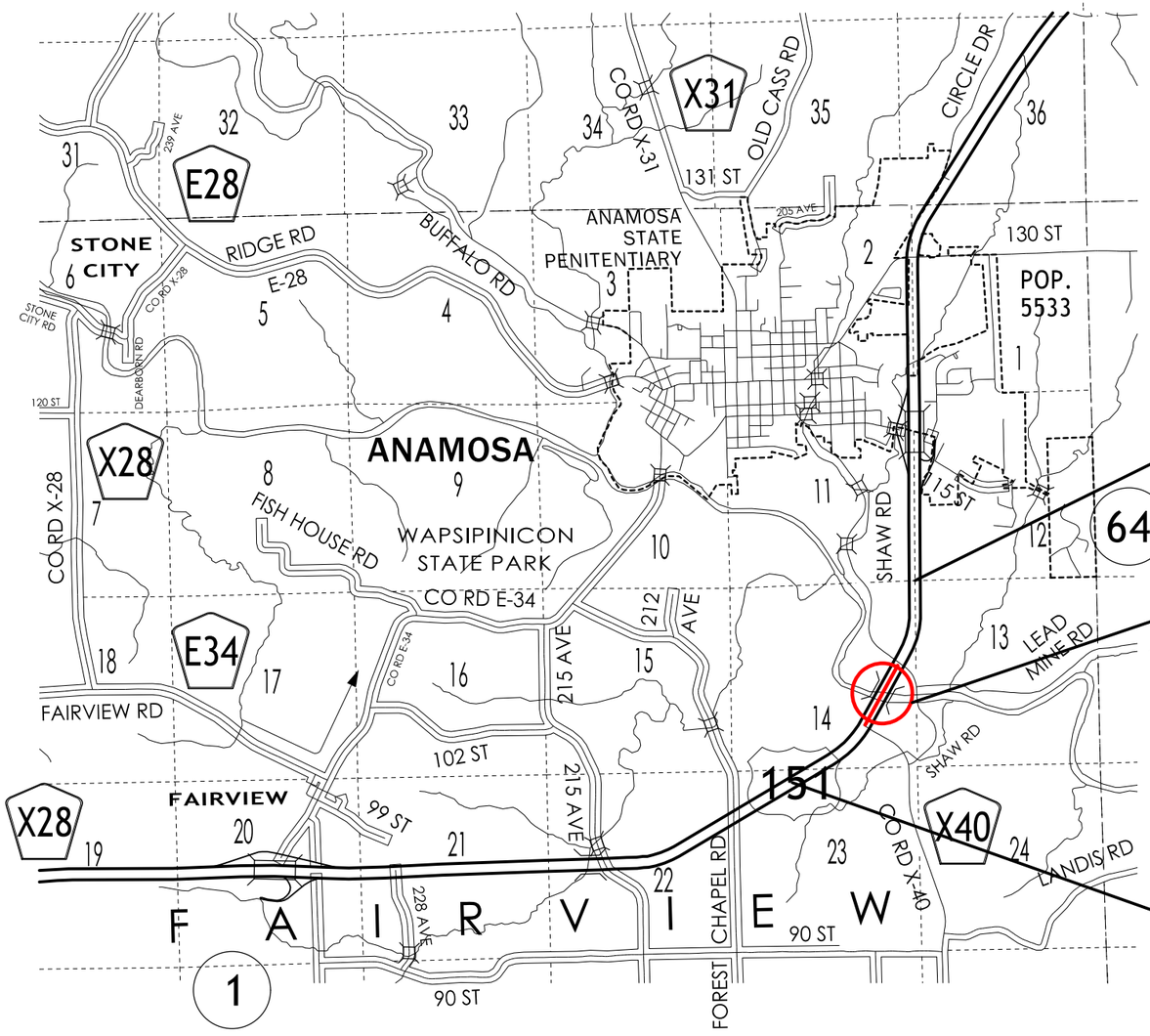

LOCATION MAP SCALE
0 0.5 1
Miles

FILE NO.	ENGLISH	DESIGN TEAM **Flattery\Bell\Schinstock**	**JONES** COUNTY	PROJECT NUMBER **BRF-151-4(134)--38-53**	SHEET NUMBER **A.2**

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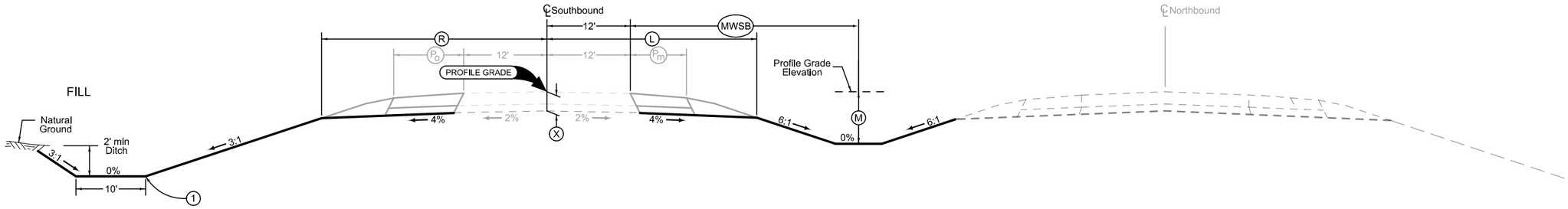
G_4D_Grade_Aux
MODIFIED



4 LANE GRADING

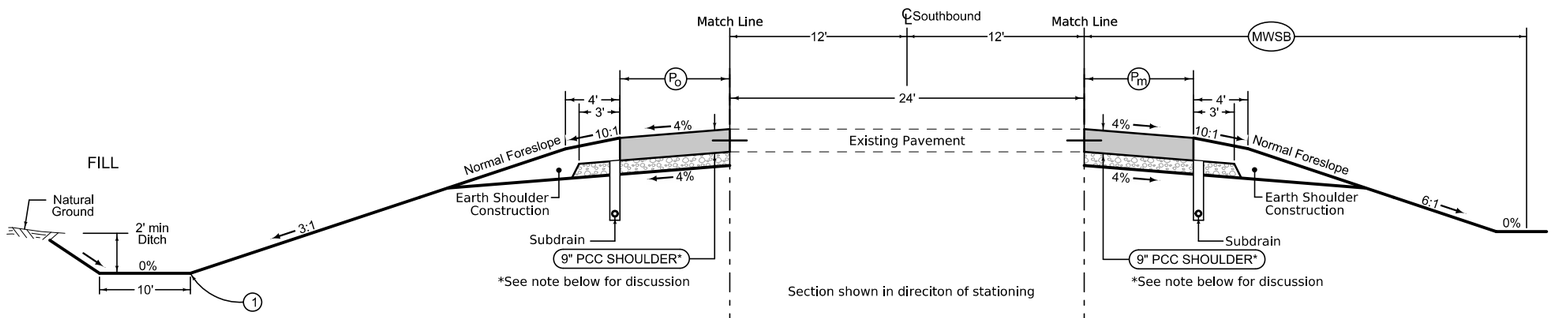
LOCATION			DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION		(L) Feet	(R) Feet	(X) Inches	(MWSB) Feet	(M) Feet
US 151	269+95.00	272+96.74	32.5'-40.3'	34.5-40.4	9	34'	3.5'
Bridge & Approaches							
US 151	280+29.81	283+30.00	33.1'	32.3'-40.2'	9	34'	3.5'

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.

4E_
10-19-10



Full Depth PCC Shoulder

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

4_P_FullPCC_
04-20-21

Direction of Travel	BEGIN STATION	END STATION	P_o Feet
SB	269+95.00	272+96.72	10'
Bridge & Approaches			
SB	280+29.80	283+30.00	10'

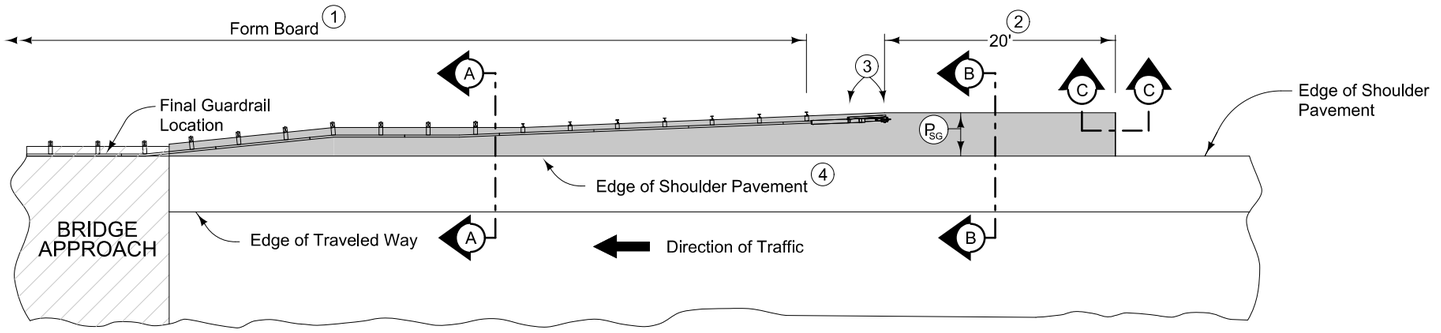
Full Depth PCC Shoulder

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

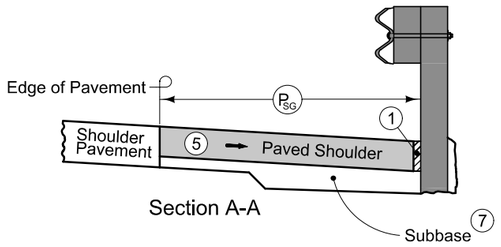
4_P_FullPCC_
04-20-21

Direction of Travel	BEGIN STATION	END STATION	MWSB Feet	P_m Feet
SB	269+95.00	272+96.72	34'	6'
Bridge & Bridge Approaches				
SB	280+29.80	283+30.00	34'	6'

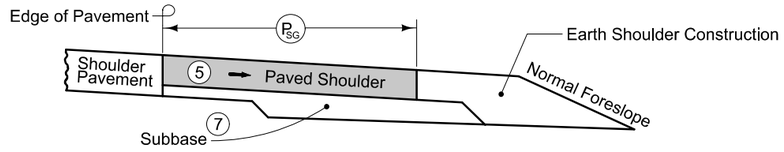
7158B
MODIFIED



PLAN VIEW

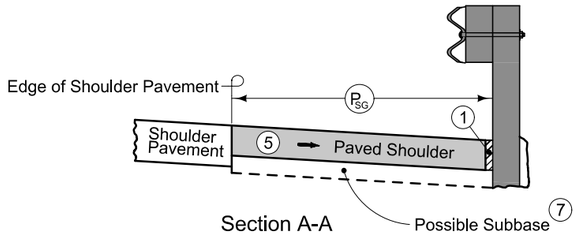


Section A-A

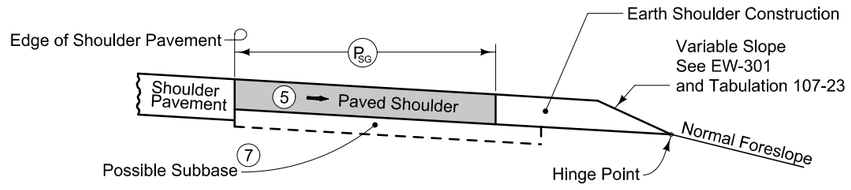


Section B-B

NEW CONSTRUCTION 6



Section A-A



Section B-B

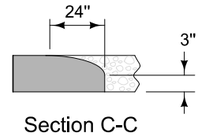
EXISTING SHOULDER

8" PCC Paved Shoulder at guardrail with the following jointing layout:

Match mainline pavement joint spacing. When mainline pavement is 8" or greater in thickness, place additional transverse 'C' joints in shoulder at mid-panel of the mainline pavement. Place longitudinal 'C' joint at P/2 from edge of mainline pavement when P is greater than 10' wide. Terminate longitudinal joint at transverse joint less than 10' in length.

Refer to Tabulation 112-9 for shoulder quantities.

1. When guardrail posts are installed prior to construction of PCC paved shoulder, fasten form board to the face of guardrail posts for the length shown.
2. Continue paved shoulder 20 feet beyond the center of the first post.
3. Shoulder may be notched for first 2 posts or post sleeves may be installed through pavement. Do not drive posts through pavement.
4. 'KT' joint (per PV-101) for PCC shoulder.
5. Match shoulder slope.
6. The Contractor has the option to pave the paved shoulder at guardrail and the partial width paved shoulder as one operation.
7. Refer to other details in the plan.



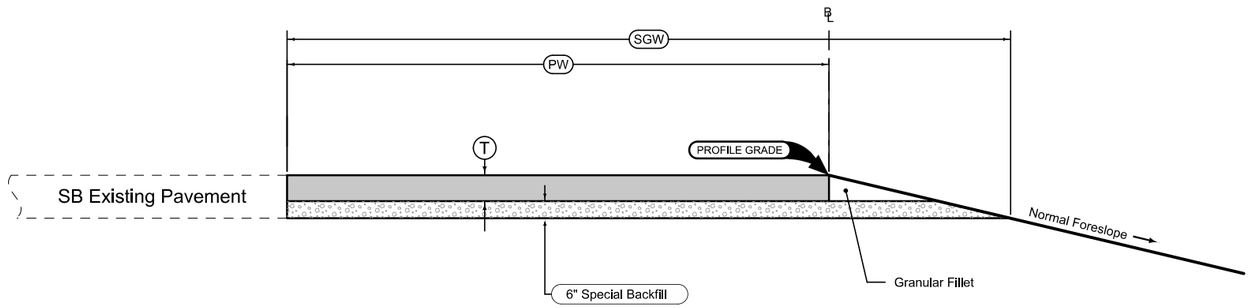
Section C-C
Roll down at granular shoulder or earth.

PAVED SHOULDER AT GUARDRAIL
(ADJACENT TO FULL WIDTH PAVED SHOULDER)

LOCATION			DIMENSIONS					
CHAIN	STATION TO STATION		HMA			PCC		
			(PW) Feet	(T) Inches	(SGW) Feet	(PW) Feet	(T) Inches	(SGW) Feet
	STAGE 1							
ML151 (DET234)	234+00.00	235+67.28	6	12	X	6	9	X
	235+67.28	237+55.32	6-20.1	12	X	6-20.1	9	X
ML151 (DET310)	317+01.74	318+98.78	20.1-6	12	X	20.1-6	9	X
	318+98.78	320+66.06	6	12	X	6	9	X

PCC Detour Pavement Jointing:
Longitudinal joints adjacent to mainline pavement:
KT-2 or L-2 if mainline pavement is new. Bend bars out.
BT-3 if mainline pavement is existing.
Transverse joints:
Match existing roadway joints. C joints at 15' max. spacing

HMA Detour Pavement Jointing:
Longitudinal joints: B



LOCATION			DIMENSIONS					
CHAIN	STATION TO STATION		HMA			PCC		
			(PW) Feet	(T) Inches	(SGW) Feet	(PW) Feet	(T) Inches	(SGW) Feet
	STAGE 1							
ML151 (DET234)	237+55.32	241+31.05	16	12	X	16	9	X
ML151 (DET310)	313+33.03	317+01.74	16	12	X	16	9	X

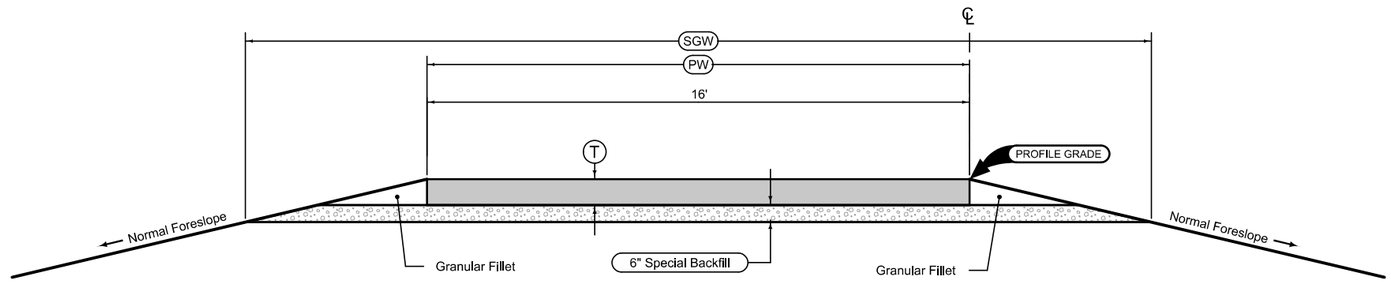
PCC Detour Pavement Jointing:
Longitudinal joints adjacent to mainline pavement:
KT-2 or L-2 if mainline pavement is new. Bend bars out.
BT-3 if mainline pavement is existing.
Transverse joints:
Match existing roadway joints. CD joints are required.

HMA Detour Pavement Jointing:
Longitudinal joints: B

Quantity calculations based on vertical pavement edges and PCC Option.

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

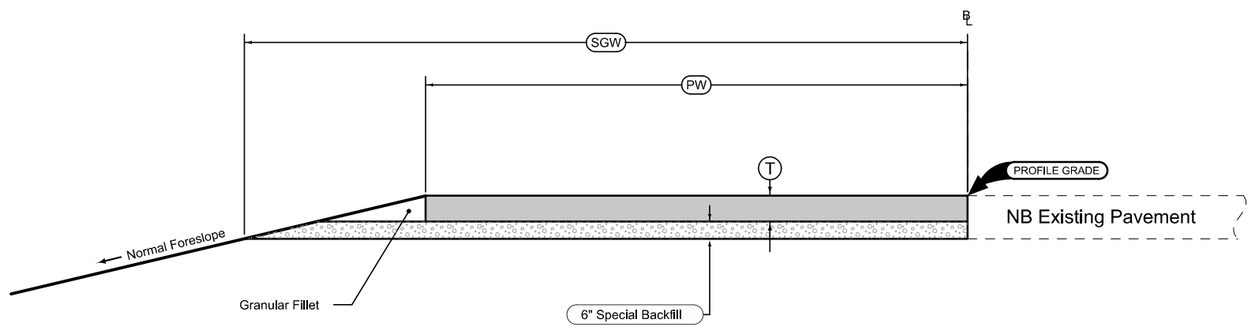
See Tab. 100-24M and Tab. 112-9M for Quantities



LOCATION			DIMENSIONS					
CHAIN	STATION TO STATION		HMA			PCC		
			(PW) Feet	(T) Inches	(SGW) Feet	(PW) Feet	(T) Inches	(SGW) Feet
	STAGE 1							
ML151 (DET234)	241+31.05	243+46.26	20.1-6	12	X	20.1-6	9	X
	243+46.26	244+66.05	6	12	X	6	9	X
ML151 (DET310)	310+00.00	311+18.03	6	12	X	6	9	X
	311+18.03	313+33.03	6-20.1	12	X	6-20.1	9	X

PCC Detour Pavement Jointing:
Longitudinal joints adjacent to mainline pavement:
KT-2 or L-2 if mainline pavement is new. Bend bars out.
BT-3 if mainline pavement is existing.
Transverse joints:
Match existing roadway joints. C joints at 15' max. spacing

HMA Detour Pavement Jointing:
Longitudinal joints: B



CROSSOVER PAVEMENT

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
- WH Water Hydrant (Rural)
- ST Septic Tank
- C Cistern
- LP L.P. Gas Tank (No Footing)
- UST Underground Storage Tank
- Latrine
- Satellite TV Dish
- WHU Water Hook Up
- RT Radio Tower
- TA Tower Anchor
- Guardrail (Beam or Cable)
- GP Guard Post (one or two)
- Guard Post (over two)
- FP Filler Pipe
- GV Gas Valve
- WV Water Valve
- SL Speed Limit Sign
- MM Mile Marker Post
- SIGN Sign
- TCB Traffic Signal Control Box
- RRB Rail Road Signal Control Box
- TSB Telephone Switch Box
- EB Electric Box

UTILITY LEGEND

- ***FO1D, Fiber Optic CenturyLink- Quality D***
- ***FO2D, Fiber Optic Iowa Communication Network - Quality D***

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 — 50%
Yellow	(4)		Proposed Pavement Shading — 50%
Orange	(6)		Proposed Granular Shading — 50%
Orange	(70)		Proposed Shoulder Granular Shading — 50%
Yellow	(68)		Proposed Shoulder Paved Full Depth Shading — 50%
Yellow	(132)		Proposed Shoulder Paved Partial Depth Shading — 50%
Brown, Light	(236)		Grading Shading — 50%
Orange, Light	(134)		Proposed Granular Entrance Shading — 50%
Yellow	(220)		Proposed Paved Entrance Shading — 50%
Tan	(8)		Proposed Sidewalk Shading — 50%
Blue, Light	(230)		Proposed Sidewalk Landing Shading — 50%
Pink	(11)		Proposed Sidewalk Ramp Shading — 50%
Red	(3)		Proposed Structure Shading — 50%
Red	(3)		Delineates Restricted Areas — 0%

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 — Survey Line
- 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)

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER D.1

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FAIRVIEW TWP.
T-84N R-4W
SEC. 14

REMOVE
Sta. 276+63.7 LT 45.9'
Skew 20° RT AH
427.0'x30.0'
Continuous Welded Girder Bridge
D.A.= 1586 SQ. MI. (plans)

BUILD
Sta. 276+64.00 LT XX'
Skew 20° RT AH
580'-0"x40'-0"
CWPG Bridge

Wapsipinicon River

STA 269+95.00 (ML151SB)
Begin Outside Shoulder Construction

STA 272+96.74 (ML151SB)
Begin Bridge Approach

STA 280+29.81 (ML151SB)
End Bridge Approach

STA 283+30.00 (ML151SB)
End Outside Shoulder Construction

270+00
275+00
280+00

ST 269+17.58

FO
FO2

Ex SB Lanes
Ex NB Lanes

151

STA 269+95.00 (ML151SB)
Begin Median Shoulder Construction

STA 283+30.00 (ML151SB)
End Median Shoulder Construciton

UAC
Sta. 272+17.3 RT 19.1'
24"x58' RCP W/24"x48' HDPE
D.A.= MEDIAN

UAC?
Sta. 272+46.0 MED
Median Dike

UAC
Sta. 276+97.1 RT 47.9'
Skew 20° RT AH
436.4'x39.4'
Continous Welded Plate Girder Bridge
D.A.= 1586 SQ. MI. (plans)

UAC
Sta. 282+17.2 RT 18.9'
24"x58' RCP W/24"x34.2' HDPE
D.A.= MEDIAN

0 50
FEET

Sect. No. 14

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER D.2

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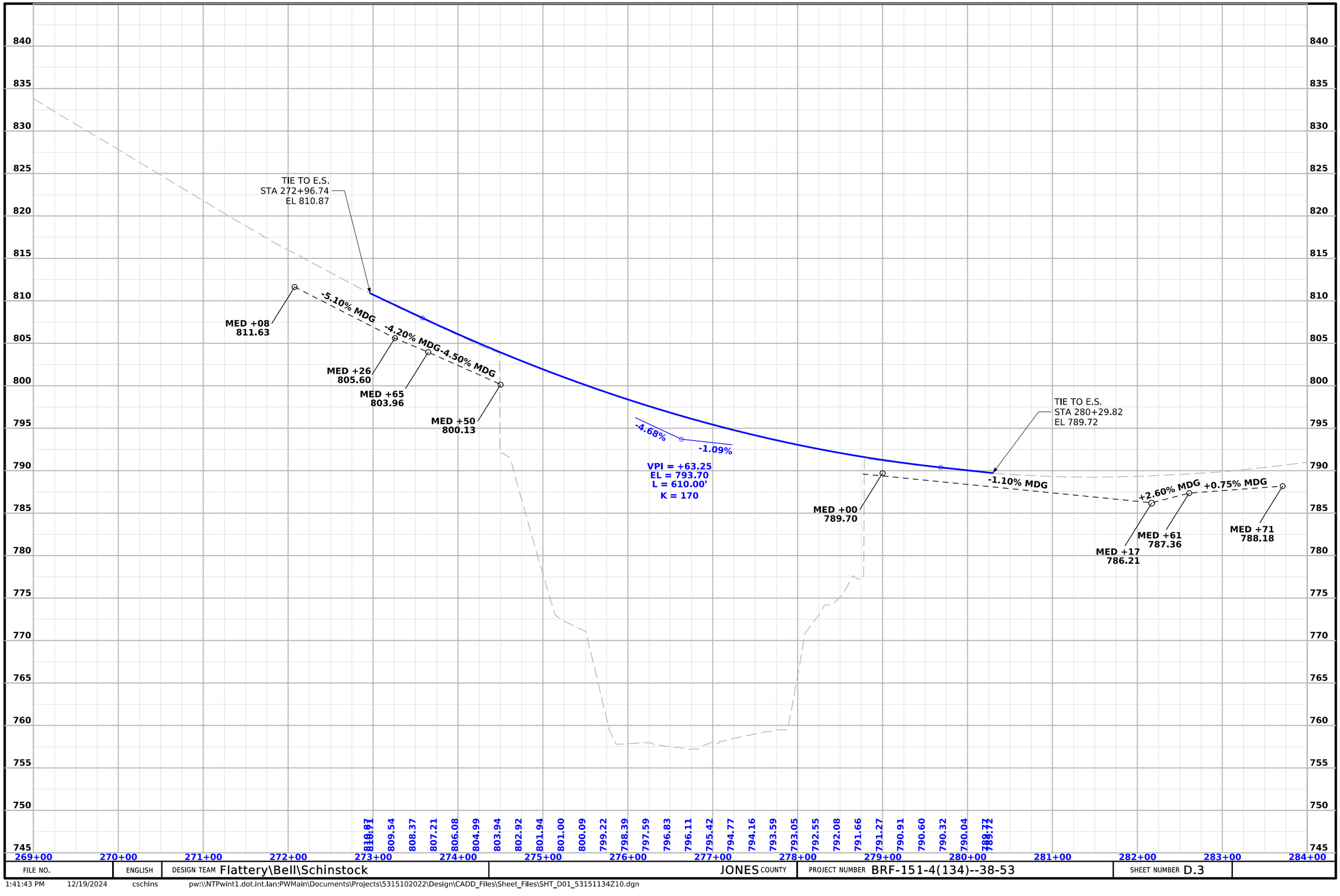

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER D.3

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Sect. No. 23

BEGIN CONSTRUCTION
STA. 234+00.00 (ML151CL)
=STA. 1234+00.00 (DET234)

STA: 234+00.00 (ML151CL)
OFF: 34.12' LT

STA: 234+00.00 (ML151CL)
OFF: 28.12' LT

1235+00

PI 1236+13.86

1240+00

PCC 1240+29.60

Δ = 06°59'35.00" (LT)
T = 213.86'
L = 427.18'
R = 3500.00'
E = 6.53'
e = ___
L = ___
x = ___

Sta. 245+26.5 RT 18.6'
24"x58' RCP W/24"x45' HDPE
D.A.= MEDIAN

Ex SB Lanes

151

Ex NB Lanes

PC 1234+00.00

PT 1238+27.18

PI 1242+56.45

PCC 1244+70.00

245+00

240+00

235+00

Δ = 06°59'35.00" (RT)
T = 213.86'
L = 427.18'
R = 3500.00'
E = 6.53'
e = ___
L = ___
x = ___

STA: 244+66.05 (ML151CL)
OFF: 28.12' RT

STA: 244+66.05 (ML151CL)
OFF: 34.12' RT

END CONSTRUCTION
STA. 244+65.07 (ML151CL)
= STA. 1244+70.00 (DET234S)

0 50
FEET

Stage 1:
US 151 Median Crossover (DET234)

TIE TO E.S.
STA 1237+55.94
EL 941.04

VPI = +09.76
EL = 941.50
L = 150.00'
K = 198

TIE TO E.S.
STA 1241+58.75
EL 941.12

-0.36%

+0.50%

+0.50%

-0.26%

VPI = +49.76
EL = 940.70
L = 140.00'
K = 163

955 950 945 940 935 930 925 920 915 910

941.04 940.97 940.89 940.85 940.85 940.89 940.96 941.08 941.20 941.29 941.34 941.37 941.37 941.33 941.27 941.20 941.14 941.12

1233+00 1234+00 1235+00 1236+00 1237+00 1238+00 1239+00 1240+00 1241+00 1242+00 1243+00 1244+00 1245+00 1246+00

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER F.1

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BEGIN CONSTRUCTION
STA. 310+00.00 (ML151CL)
=STA. 2310+00 (DET310)

STA: 310+00.00 (ML151CL)
OFF: 28.00' RT

STA: 310+00.00 (ML151CL)
OFF: 34.12' RT

PC 2310+00.00

2310+00

310+00

Ex NB Lanes

151

Sect. No. 11

Δ = 06°56'45.10" (LT)
T = 212.41'
L = 424.30'
R = 3500.00'
E = 6.44'
e = ___
L = ___
x = ___

PT 2314+24.30

2315+00

PI 2312+12.41

Sta. 311+03.3 RT 10.6'
Skew 60° RT AH
24"x214.6' RCP
D.A.= MEDIAN

315+00

Sect. No. 12

Ex SB Lanes

PC 2316+45.47

PI 2318+57.87

Ex NB Lanes

Δ = 06°56'45.10" (RT)
T = 212.41'
L = 424.30'
R = 3500.00'
E = 6.44'
e = ___
L = ___
x = ___

151

2320+00

320+00

Sta. 320+06.2 RT 17.7'
24"x67' RCP
D.A.= MEDIAN

END CONSTRUCTION
STA. 320+66.06 (ML151CL)
=STA. 2320+70.00 (DET310)

STA: 320+66.06 (ML151CL)
OFF: 34.12' LT

PCC 2320+69.76

STA: 320+66.06 (ML151CL)
OFF: 28.12' LT

0 50
FEET

**Stage 1:
US 151 Median
Crossover (DET310)**

TIE TO E.S.
STA 2313+34.80
EL 898.81

+1.46%

+2.00%

VPI = +50.00
EL = 900.50
L = 175.00'
K = 326

+2.00%

+0.88%

VPI = +10.00
EL = 903.70
L = 140.00'
K = 125

TIE TO E.S.
STA 2316+86.82
EL 904.38

915 910 905 900 895 890 885 880 875 870

898.81 899.04 899.40 899.79 900.19 900.62 901.06 901.52 902.00 902.50 902.95 903.36 903.71 904.02 904.27 904.38

2308+00 2309+00 2310+00 2311+00 2312+00 2313+00 2314+00 2315+00 2316+00 2317+00 2318+00 2319+00 2320+00 2321+00 2322+00

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER F.2

8:40:10 AM 8/20/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Sheet_Files\SHT_F03_53151134Z10.dgn

SURVEY INDEX

Jones County
BRF-151-4(134)--38-53
Wapsipinicon River 1.4 mi S of IA 64 (SB)
PIN: 22-53-151-020
Type of Work: Bridge Replacement
Project Directory: 5315102022

Survey Personnel

John Hahn-Survey Party Chief
Paul Harry-Survey Party Chief
Jason Page- Engineering Technician Senior
Kokou Allade- Assistant Survey Party Chief

Date(s) of Survey

Begin Date	10/11/2023
End Date	05/30/2024

General Information

This survey is for the replacement of a bridge on US Hwy 151 (SB) over the Wapsipinicon River, 1.4 miles south of Iowa Highway 64. This project is a Full Field DTM survey.

Utility Information

For logging data and other utility details see Utility Survey and Ownership Report in the Utility folder of the PrelimSurvey project directory.

Project Control

Coordinates were determined for primary project control points by conducting concurrent six-hour static observations. Post processing is constrained to nearby Iowa Real Time Network reference stations. For additional details of the control survey, contact the Preliminary Survey department.

PROJECT DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 ADJUSTMENT)
COORDINATE SYSTEM: IOWA REGIONAL COORDINATE SYSTEM ZONE 10 (U.S. SURVEY FOOT)
VERTICAL DATUM: NAVD88
GEOID MODEL: 2018u3

Alignment Information

SURSB151
The horizontal alignment for the south bound lanes of U.S. Hwy 151 is a retrace of As-built Plans No. F-1126(1) and was provided by District 6 Land Survey. English stationing was equated at ST equation station 262+33.29 back = 268+83.00 ahead.

SURMLA151
The horizontal alignment for main line U.S. Hwy 151 this survey is a retrace of Metric As-built Plans No. NHSX-151-3(112)—3H-57. Survey stationing was equated to the plan ST at metric Sta. 132+28.829. Metric stationing was converted to English stationing using the south bound alignment chain at said metric Sta. 132+28.829 and carried back and ahead without equation throughout the survey.

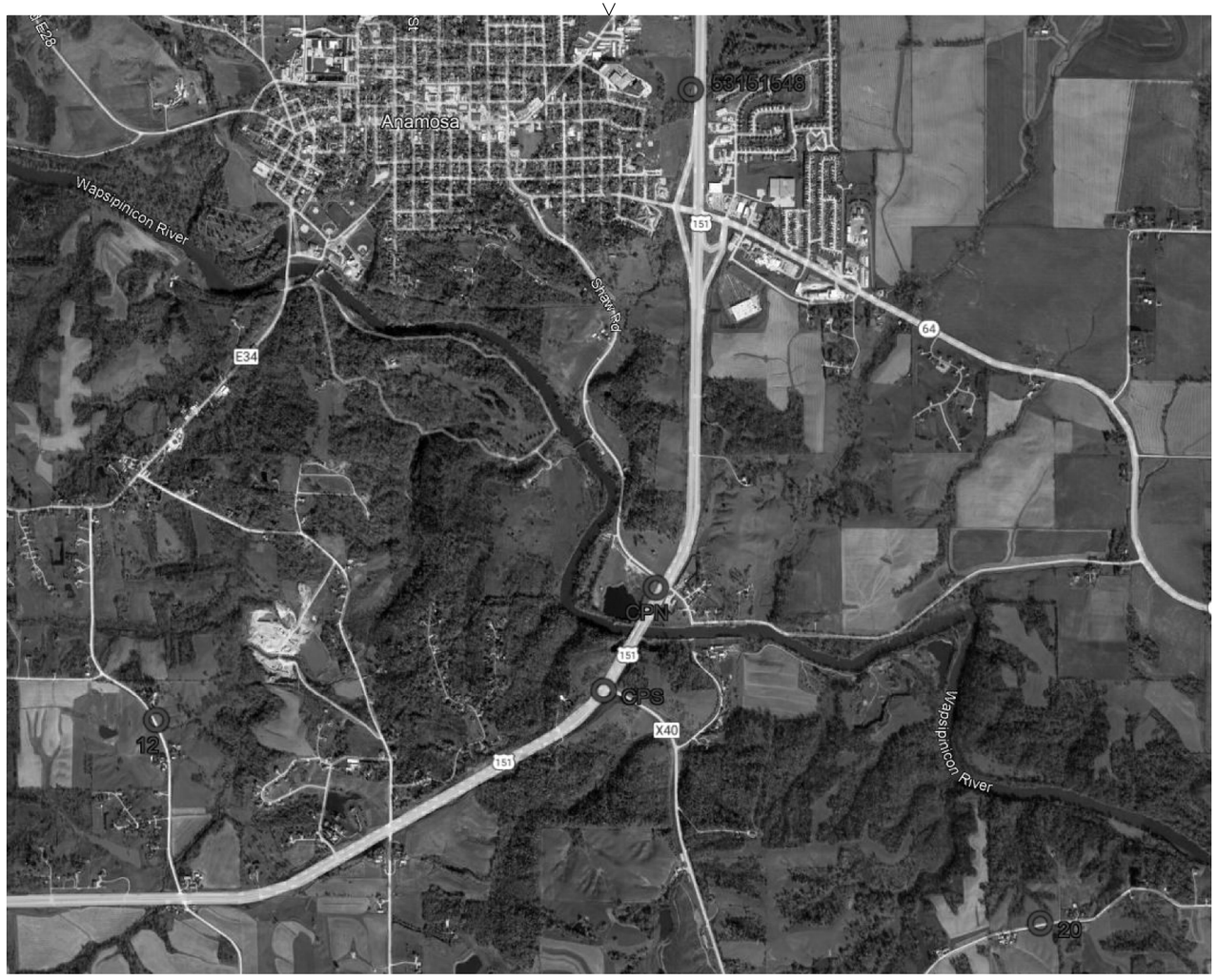
Survey stationing relates to as built plan stationing as follows:

ST Sta. 132+28.829 Metric As-built Plans Project No. NHSX-151-3(112)—3H-57
=Survey ST Sta. 132+28.829 Metric
=Survey ST Sta. 269+17.58 English

TS Sta. 138+36.559 Metric As-built Plans Project No. NHSX-151-3(112)—3H-57
=Survey TS Sta. 138+36.498 Metric
=Survey ST Sta. 289+11.24 English

CONTROL POINT VICINITY MAP

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



HORIZ. DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 Adjustment) - Iowa RCS Zone 10 (U.S. Survey Foot)

VERT. DATUM: NAVD88 - Geoid Model: 2018u3

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

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING
HORIZ. DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 Adjustment)
Ia. Regional Coordinate System Zone 10 (U.S. Survey Foot)
VERT. DATUM: NAVD88
Geoid Model: 2018u3

Point Name	Northing	Easting	Elevation	Code/Description
12	8089888.069	20598910.127	916.334	CP FND JONES CO GPS MON AS DESCRIBED IN GOOD CONDITION
20	8086286.118	20614516.333	884.501	CP FND JONES CO GPS MON AS DESCRIBED IN GOOD CONDITION
53151548	8101003.194	20608351.619	810.671	CP FND FENO MON 0.6MILES NORTH ALONG HWY 151 FROM THE INTERSECTION OF HWY 151 AND HARLEY AVE MONUMENT IS 117FT WEST OF WEST EDGE HMA PAVED SHOULDER AND 16FT EAST OF ROW FENCE
CPN	8092241.720	20607711.012	789.197	CP FND FENO MON 65FT NW OF CL OF SB HWY151 156FT SW OF CL SHAW RD 8FT SE OF LOW STONE WALL
CPS	8090427.362	20606797.636	854.453	CP SET FENO MON 29ft NW OF CL OF NB HWY151 64FT SE OF CL OF SB HWY151 105FT SW OF CROSSOVER CL

108-23A
08-01-08

TRAFFIC CONTROL PLAN

Traffic on US 61 shall be maintained at all times.
Traffic on 180th St and 346th Ave shall have right-in/right-out access while NB traffic is TLTW on the SB lanes via TC-61.

111-01
04-17-12

COORDINATED OPERATIONS

Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.

Project	Type of Work
None Provided.	

108-26A
08-01-08

STAGING NOTES

Stage 1:
Traffic in normal lanes.
Build crossovers at Sta. 234+00.00 to Sta. 244+66.06 (ML151CL) & Sta. 310+00.00 to Sta. 320+66.06 (ML151CL).

Stage 2:
NB Traffic on SB lanes via TC-61.
Remove and reconstruct bridge at Sta. NB over Lost Creek.

Stage 3:
Traffic in normal lanes.
Remove crossovers at Sta. 239+00.00 to Sta. 244+66.06 (ML151CL) & Sta. 310+00.00 to Sta. 320+66.06 (ML151CL).

108-25
10-21-14

511 TRAVEL RESTRICTIONS

Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No., Structure ID, or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
			None Provided.									

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

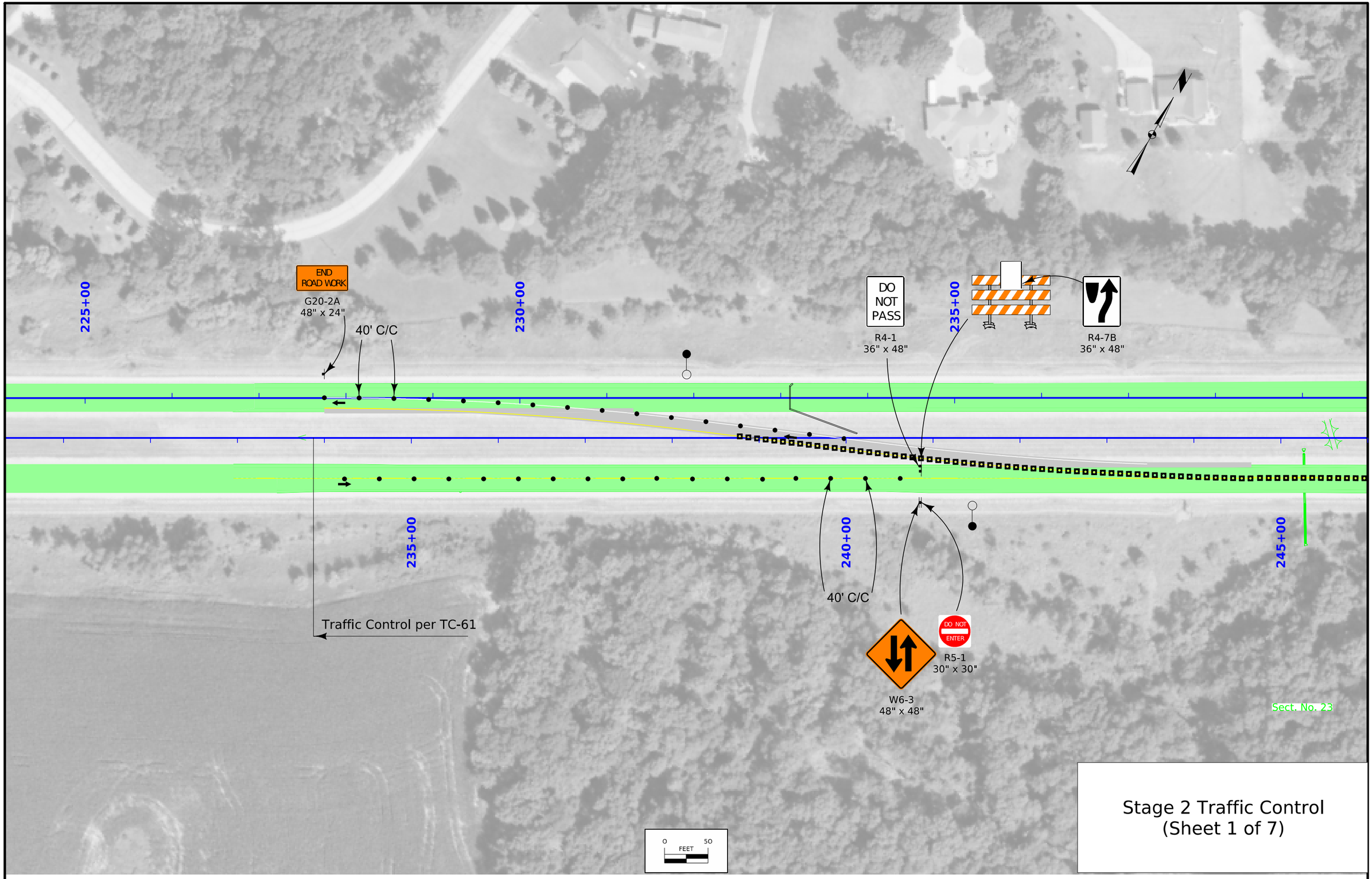
PLAN VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

●	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
ς	Delineator		Type A Warning Light
	Temporary Barrier Rail		Direction of Traffic
	Pavement Removal		Safety Closure
	Sand Barrel Layout	1	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 2 Traffic Control
(Sheet 1 of 7)

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER J.3	

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240+00

245+00

250+00

151

245+00

250+00

255+00

260+00

80' C/C

80' C/C

W1-4R
48" x 48"

Sect. No. 23

0 50
FEET

Stage 2 Traffic Control
(Sheet 2 of 7)

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER J.4

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FAIRVIEW TWP.
T-84N R-4W
SEC. 14

255+00

260+00

270+00

Intersection Signing per TC-61

SPEED LIMIT 55
R2-1
48" x 60"

W6-3
48" x 48"

NEXT # MI
W7-3aP
24" x 18"

W6-3
48" x 48"

151

260+00

265+00

270+00

80' C/C

SPEED LIMIT 55
R2-1
48" x 60"

Co. Rd. X40

DO NOT PASS
R4-1
36" x 48"

0 50
FEET

Stage 2 Traffic Control
(Sheet 3 of 7)

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER J.5	

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Wapsipinicon River

275+00

280+00

285+00

Intersection Signing per TC-61

SPEED LIMIT 55

R2-1
48" x 60"

151

Shaw Rd

0 50
FEET

Stage 2 Traffic Control
(Sheet 4 of 7)

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER J.6	

11:48:53 AM 8/21/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Sheet_Files\SHT_J02_53151134Z10.dgn

SPEED LIMIT 55

R2-1
48" x 60"

DO NOT PASS

R4-1
36" x 48"

TWO WAY TRAFFIC
NEXT XX MILES

G20_21
144" x 42"

G20_21A
14" x 14"

151

Sect. No. 14

RT 12.1'

290+00

80' C/C

295+00

300+00

80' C/C

W6-3
48" x 48"

NEXT
MI

W7-3aP
24" x 18"

W6-3
48" x 48"

0 50
FEET

Stage 2 Traffic Control
(Sheet 5 of 7)

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER J.7

11:49:13 AM 8/21/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Sheet_Files\SHT_J02_53151134Z10.dgn

Stage 2 Traffic Control
(Sheet 6 of 7)

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER J.8	

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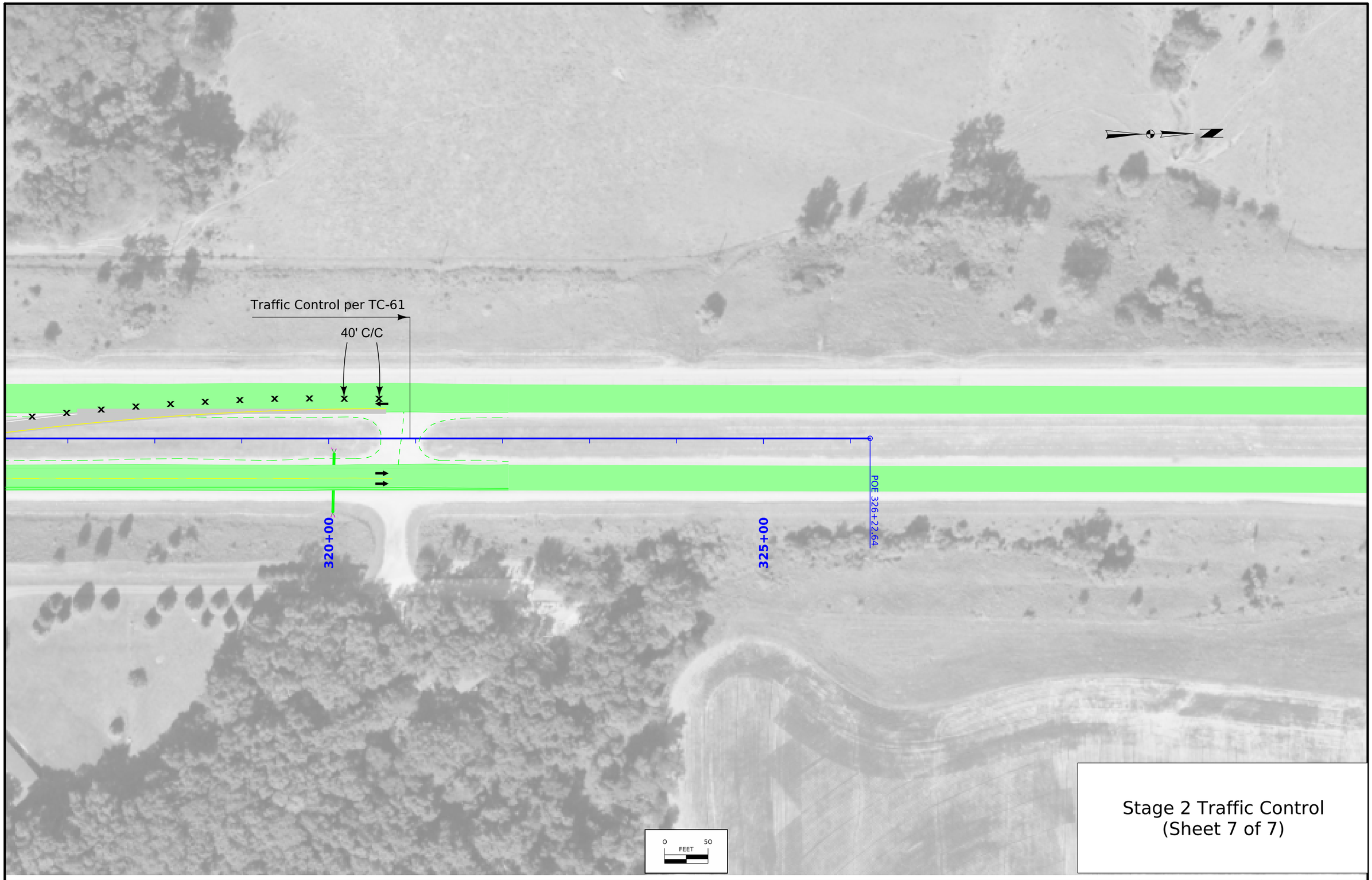

Stage 2 Traffic Control
(Sheet 7 of 7)

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER J.9	

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Control Point: CPN, N 8092241.720, E 20607711.012 ,CP FND FENO MON 65FT NW OF ℄ SB HWY151 156FT SW OF ℄ SHAW RD 8FT SE OF LOW STONE WALL, Elev. = 789.197

General Notes:
This Design Is for the Replacement of the Existing 427' x 30' Continuous Welded Plate Girder Bridge, Jones Design No. 0162, FHWA No. 032220, Maint. No. 5352.9L151.

The Project Will Impact United States Geological Survey (USGS) Stream Gage 05421740, Wapsipinicon River at Anamosa IA. Contact the USGS 30 Days Prior to Construction That Will Impact the Gage. USGS Contact: Brian McCallum, 678-924-6672.

Top of Bridge Deck at ℄ Roadway is 0.03' Below the Profile Grade to Account for Deck Cross Slope and Parabolic Crown.

Design Notes:
TL-4 Single Slope Bridge Railing Proposed.

Pier Type - T-Pier with an Assumed Cap Width of 4'-6".

Non-Standard Abutment Wing Wall.

Provide Vent Hole in Beam.

Class E Revetment Stone Is Embedded.

An Iowa DNR Sovereign Lands Permit is Required.

As This Project Requires a Sovereign Lands Permit, Bid Item Reference Notes Shall Restrict Broken Concrete as a Substitute for Revetment. [BDM 3.7.3.5]

An Iowa DNR Flood Plain Permit is Required. Preliminary Design Will Submit the Application and Place the Permit in the PW Regulatory_Permits Subdirectory Folder Upon Receipt.

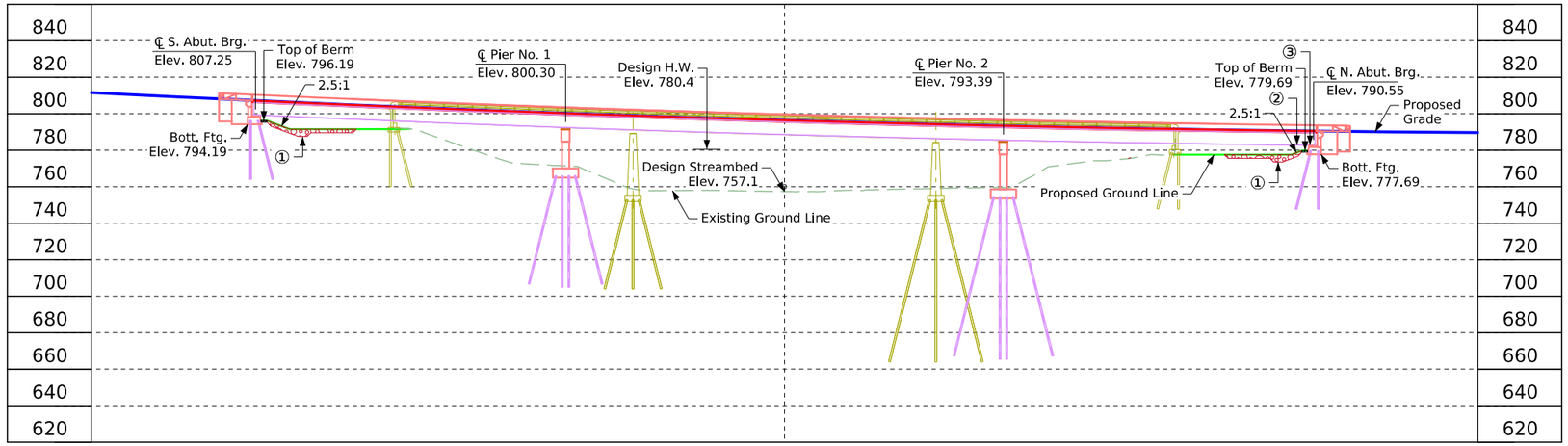
Requirements for a State Water Trail or Paddling Route Are Applicable. Signage, Plan Notes, and Bid Items Shall Be Addressed by the Design Bureau and Included in the Road Plans. [BDM 3.2.2.11]

The Bridge Does Not Meet Iowa DOT's Desired Operational and Channel Freeboard per BDM 3.2.2.4 Due to the Proposed Deep Girder and Sag Curve Profile. Final Design Aspects in the BDM Related to Inundation Are Required.

A 7'-0" Deep Girder Is Used for the B01 TSL Phase to Estimate Freeboard. The Alternative of Having One More Beam Line, a Shallower Girder Depth, and Tighter Girder Spacing May Be Investigated at the B03 Final Design Phase to Increase the Freeboard.

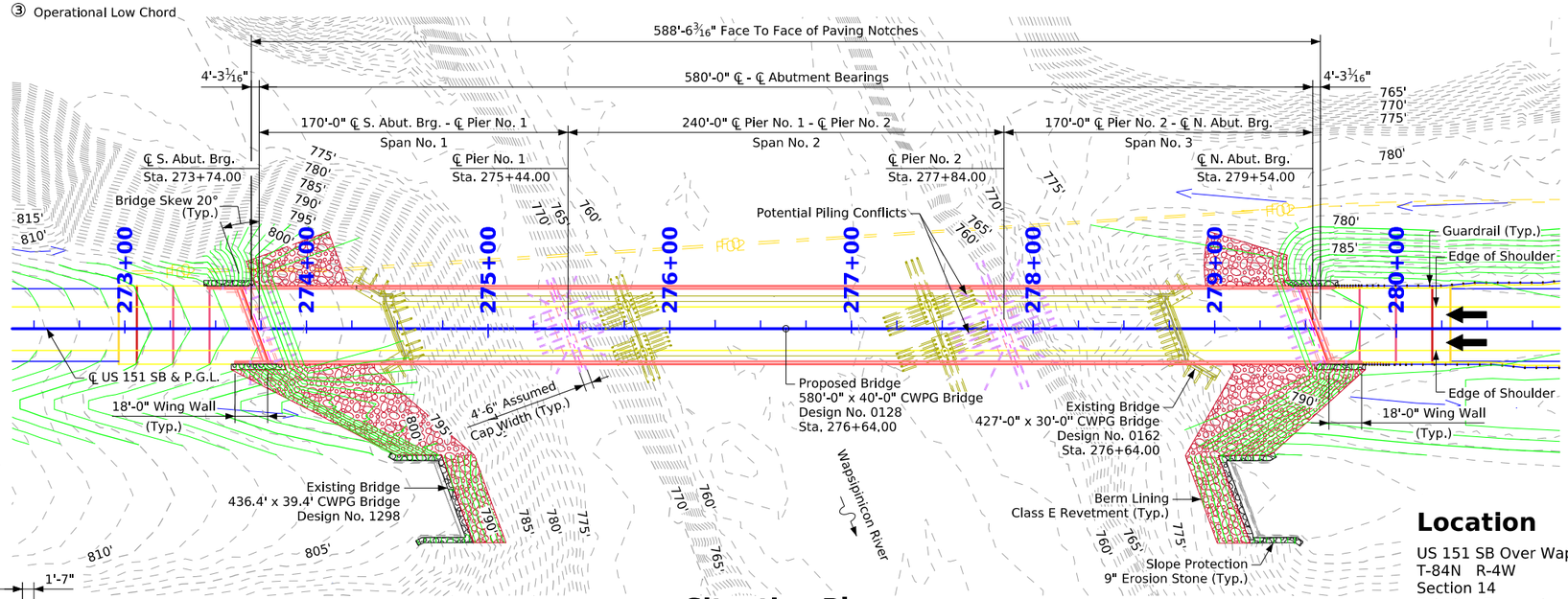
The Bridge Will Be Designed to Withstand the Applicable Effects of Ice and the Horizontal Stream Loads and Uplift Forces Associated With the Q100 [BDM 3.2.2.4]. For the B03 Final Design Phase, Girders May Be Designed to Have Vent Holes in Beam Webs to Prevent Uplift.

There Is a Potential for Conflicts With Existing Foundations Near Pier 2. Final Pier Pile Layout and Foundation Type to Be Determined in the B03 Phase. Using Vertical Piles for Pier 2 or Using Drilled Shafts for Both Piers May Be Investigated at the B03 Phase to Reduce the Potential for Conflicts.

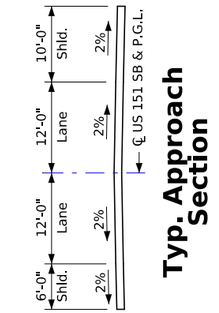


Note: Slope Normal to ℄ Abut./Grading Control Line
① Class E Revetment (Embedded)
② Channel Low Chord
③ Operational Low Chord

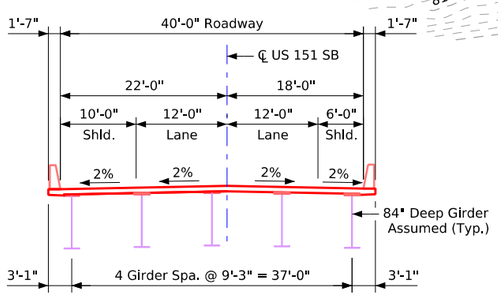
Longitudinal Section Along ℄ US 151 SB



Situation Plan



Typ. Approach Section



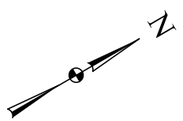
Typical Bridge Section
(Looking North)

Hydraulic Design

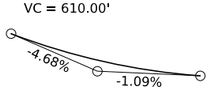
LICENSED PROFESSIONAL ENGINEER
Spencer Kelly P29157
IOWA

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa,

12-18-2024
Signature — Date
Spencer Kelly
Printed or Typed Name
My license renewal date is December 31, 2025
Pages or sheets covered by this seal: Sheets V.1 and V.2



VPI Sta. = 276+63.25
VPI Elev. = 793.70
VC = 610.00'



VPC Sta. = 273+58.25
VPC Elev. = 807.99
VPT Sta. = 279+68.25
VPT Elev. = 790.39

Profile Grade on ℄ US 151 SB & P.G.L.

Hydraulic Data

RIDB: "WapsipiniconR_92.88"
Drainage Area = 1,580 Sq. Mi.
Stream Slope (HGL) = 7.9 Ft./Mi.
Avg. Low Water Stage = Elev. 759.2

Q_{50} = 40,250 cfs
Stage = Elev. 780.4
Operational Freeboard = 1.9 Ft.
Channel Low Beam = Elev. 783.7
Avg. Bridge Velocity = 7.7 fps

Q_{100} = 45,650 cfs
Stage = Elev. 781.7
Operational Low Beam = Elev. 782.3
Backwater = -0.08 Ft.
Avg. Bridge Velocity = 8.2 fps

Q_{200} = 51,450 cfs
Stage = Elev. 783.1
Calculated Design Scour = Elev. 750.2

Q_{500} = 58,700 cfs
Stage = Elev. 784.8
Avg. Bridge Velocity = 9.3 fps
Calculated Check Scour = Elev. 749.3

Location

US 151 SB Over Wapsipinicon River
T-84N R-4W
Section 14
Fairview Township
Jones County
FHWA No. 032221
Bridge Maint. No. 5352.9L151
Latitude 42.084192°
Longitude -91.270790°

Design For 20° Skew (RA)
580'-0" x 40'-0" Continuous Welded Girder Bridge
170'-0" End Spans — 240'-0" Interior Span
Situation Plan
STA. 276+64.00 (US 151 SB) — December 2024
Jones County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. 0128 — Design Sheet No. 1 of 2 — FHWA No. 032221

FILE NO. 32675	ENGLISH	DESIGN TEAM Jacobs	Jones COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER V.1

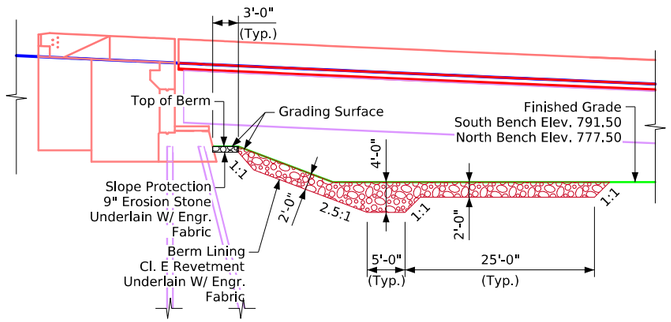
9:49:02 AM 12/16/2024 saaveddj pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\5315102022\Bridge\(134)_Bridge-Unspecified\SHT_53151134_JACOBS_0128_032221_Z10.dgn

Control Point: CPN, N 8092241.720, E 20607711.012 ,CP FND FENO MON 65FT NW OF ℄ SB HWY151 156FT SW OF ℄ SHAW RD 8FT SE OF LOW STONE WALL, Elev. = 789.197

Berm Slope Location Table

Prop. SB Bridge - Design No. 0128						
Points	South Abutment			North Abutment		
	Station	Offset	Elev.	Station	Offset	Elev.
A1	273+82.96	26.58' Lt.	791.50	279+32.23	26.58' Lt.	777.50
A2	274+00.68	22.58' Rt.	791.50	279+50.10	22.58' Rt.	777.50
B1	273+70.72	26.58' Lt.	796.19	279+37.93	26.58' Lt.	779.69
B2	273+88.62	22.58' Rt.	796.19	279+55.82	22.58' Rt.	779.69
W1	273+45.59	26.58' Lt.	807.99	279+65.85	26.58' Lt.	789.82
W2	273+60.70	22.58' Rt.	807.36	279+80.95	22.58' Rt.	789.74
Exist. NB Bridge - Design No. 1298						
Points	South Abutment			North Abutment		
	Station	Offset	Elev.	Station	Offset	Elev.
B1	274+74.42	69.69' Rt.	794.40	279+02.06	69.87' Rt.	783.80
B2	274+91.91	117.87' Rt.	793.40	279+19.64	118.08' Rt.	783.60
W1	274+48.35	69.02' Rt.	803.60	279+30.84	69.11' Rt.	791.75
W2	274+63.34	118.53' Rt.	802.66	279+45.40	118.62' Rt.	790.38

Berm slope elevations reflect the grading surface.



Section Through Berm Lining (Embedded) (For Prop. SB Bridge)

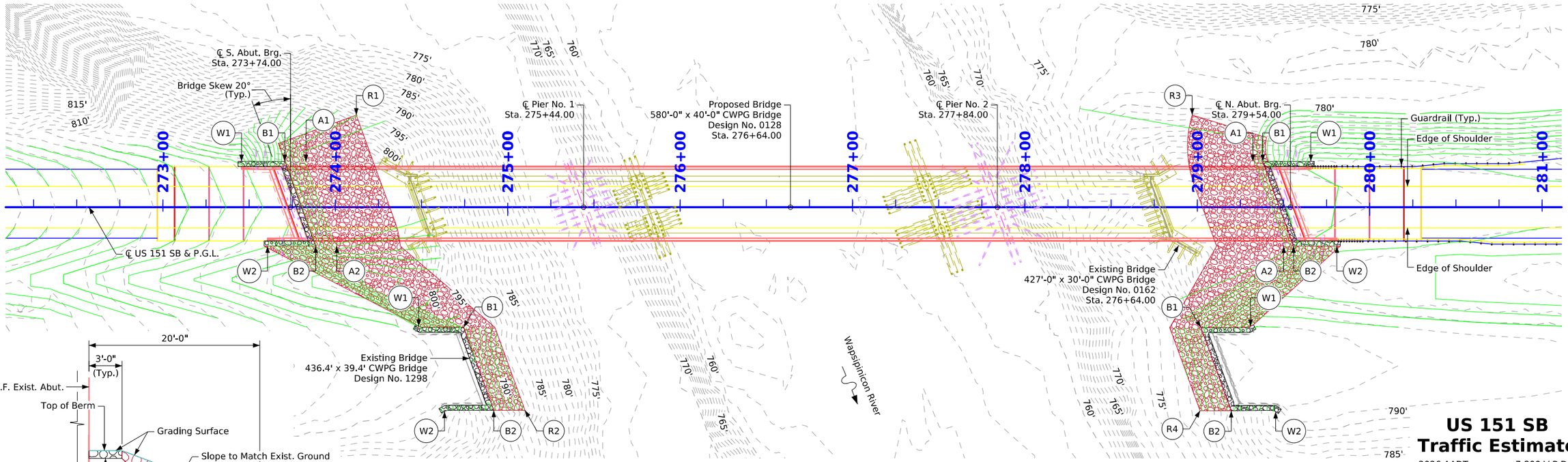
Note: Slope Normal to ℄ Abut./Grading Control Line

Revetment Quantities

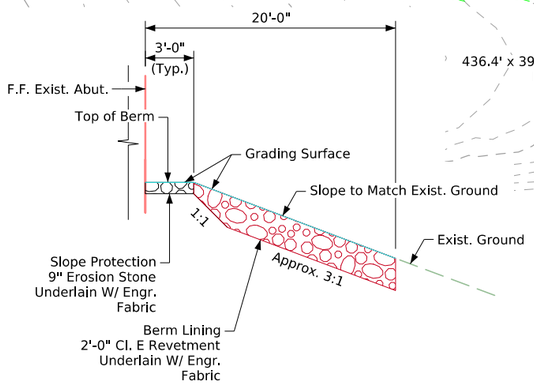
Location	Revetment CL. E (Ton)	Erosion Stone (Ton)	Engineering Fabric (SY)	CL. 10 Channel Excavation (CY)
SB Bridge:				
Berm Lining - South	878.7	-	733.9	549.2
Berm Lining - North	827.9	-	685.2	517.4
Stone Protection - South	-	14.7	36.6	9.2
Stone Protection - North	-	14.7	36.6	9.2
NB Bridge:				
Berm Lining - South	109.4	-	102.5	68.4
Berm Lining - North	109.1	-	102.3	68.2
Stone Protection - South	-	14.2	35.4	8.9
Stone Protection - North	-	14.2	35.4	8.9
Totals	1925.1	57.8	1767.9	1239.3

Excavation quantity calculated from grading surface. Excavation quantity is for embedded revetment core out only, and does not include excavation to the grading surface. Excavation quantity to the grading surface is determined by Road Design and included in the Road Plans.

Revetment and erosion stone estimated at 1.6 Ton/CY.



Site Plan



Section Through Berm Lining (Embedded) (For Exist. NB Bridge)

Note: Slope Normal to ℄ Abut./Grading Control Line

Revetment Layout:

R1 - Sta. 274+12.15, 53.45' Lt., West End Berm Lining

R2 - Sta. 275+09.99, 117.87' Rt., East End Berm Lining

R3 - Sta. 278+97.01, 53.45' Lt., West End Berm Lining

R4 - Sta. 279+01.54, 118.08' Rt., East End Berm Lining

N

0 30
Scale In Feet

Utilities Note:

Utilities shown on this sheet are for information only. See Road Design sheets for utility information.

Utility Legend:

FO - Buried Fiber Optic, Century Link
FO2 - Buried Fiber Optic, ICN

US 151 SB Traffic Estimate

2026 AADT	7,800 V.P.D.
2046 AADT	10,400 V.P.D.
2046 DHV	1,080 V.P.H.
Trucks	12%
Total Design ESALs	???

Design For 20° Skew (RA)

580'-0" x 40'-0" Continuous Welded Girder Bridge

170'-0" End Spans 240'-0" Interior Span

Site Plan

STA. 276+64.00 (US 151 SB) December 2024

Jones County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 0128 Design Sheet No. 2 of 2 FHWA No. 032221

FILE NO. 32675	ENGLISH	DESIGN TEAM Jacobs	Jones COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER V.2

9:49:05 AM 12/16/2024 saaveddj pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\5315102022\Bridge\(134)_Bridge-Unspecified\SHT_53151134_JACOBS_0128_032221_Z10.dgn

CROSS SECTION VIEW COLOR LEGEND

Design Color No.	Feature
Aggregate	
(64)	Choke Stone
(42)	Engineering Fabric
(8)	Flooded Backfill
(92)	Macadam Stone
(20)	Modified
(12)	Plowing Shaping
(14)	Porous Backfill
(8)	Revetment Class A
(6)	Revetment Class B
(62)	Revetment Class C
(188)	Revetment Class D
(28)	Revetment Class E
(12)	Shoulder Special Backfill
(12)	Special Backfill
(20)	Subbase
(20)	Subbase Lower
(20)	Subbase Upper
(118)	Subgrade Treatment
Asphalt	
(207)	HMA Base Course
(207)	HMA Interim Course
(207)	HMA Surface Course
Bridge	
(0)	Bridge
Concrete	
(0)	Barrier Concrete
(0)	Barrier Concrete Footing
(0)	Curb Gutter
(48)	Flowable Mortar
(0)	Median Concrete
(0)	PCC Pavement
(0)	Sidewalk
Existing	
(0)	Existing Pavement
Shoulder	
(209)	Shoulder HMA
(0)	Shoulder PCC
(6)	Shoulder Granular
Structural	
(112)	Noise Wall
(112)	Noise Wall Footing
(112)	Retaining Wall Back
(112)	Retaining Wall Back Excavate
(112)	Retaining Wall Face
(112)	Retaining Wall Front Excavate
(112)	Retaining Wall Front Footing
(112)	Retaining Wall MSE Gutter
(112)	Retaining Wall Reinforced Earth

Design Color No.	Feature
Grading	
(8)	Behind Curb Cut
(6)	Granular
(13)	Granular Back Fill
(48)	Rock Undercut
(8)	Shoulder Earth Fill
(2)	Side Slopes
(226)	Side Slopes Dressing
Substrata	
(128)	Boulder
(209)	Boulder Removed
(48)	Broken Weathered
(210)	Broken Weathered Removed
(3)	Core Out
(115)	Core Out Remove Only
(195)	Core Out Remove and Replace
(203)	Existing Pavement
(184)	Existing Pavement Remove Only
(200)	Existing Pavement Remove and Replace
(6)	Loam
(211)	Loam Removed
(80)	Rock
(212)	Rock Removed
(4)	Select Sand
(214)	Select Sand Removed
(3)	Shale
(215)	Shale Removed
(10)	Topsoil
(2)	Topsoil Remove Only
(4)	Topsoil Remove and Replace
Unsuitable / Waste	
(3)	Unsuitable Type A
(216)	Unsuitable Type A Removed
(13)	Unsuitable Type B
(217)	Unsuitable Type B Removed
(11)	Unsuitable Type C
(218)	Unsuitable Type C Removed
(3)	Waste
(219)	Waste Removed

NOTES:

Text

NOTES:

Text

CROSS SECTIONS
LEGEND AND INFORMATION SHEET

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

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER W.1

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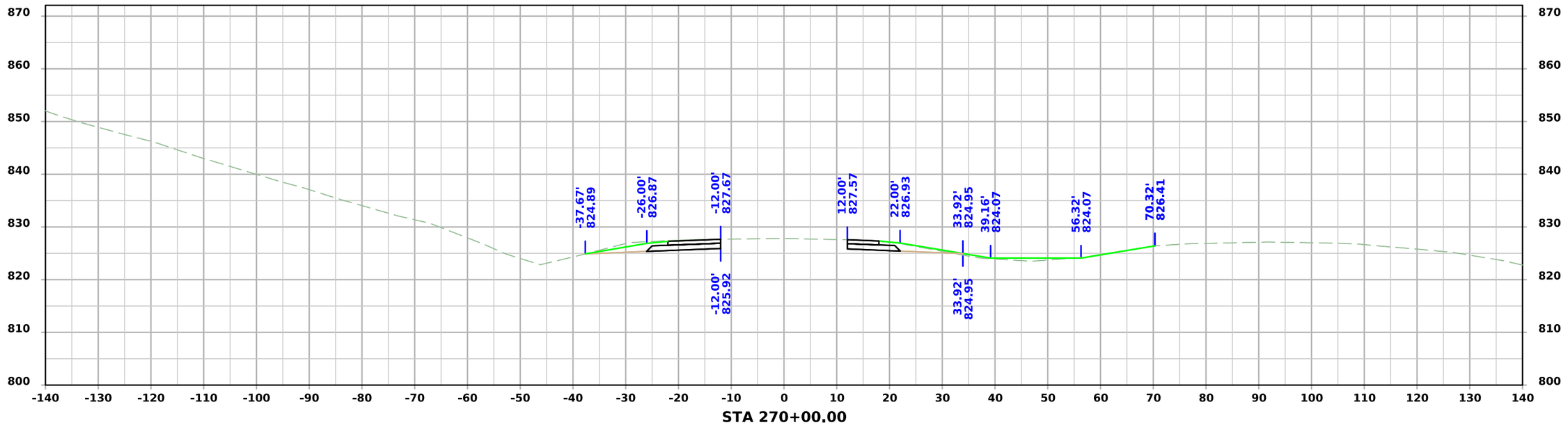
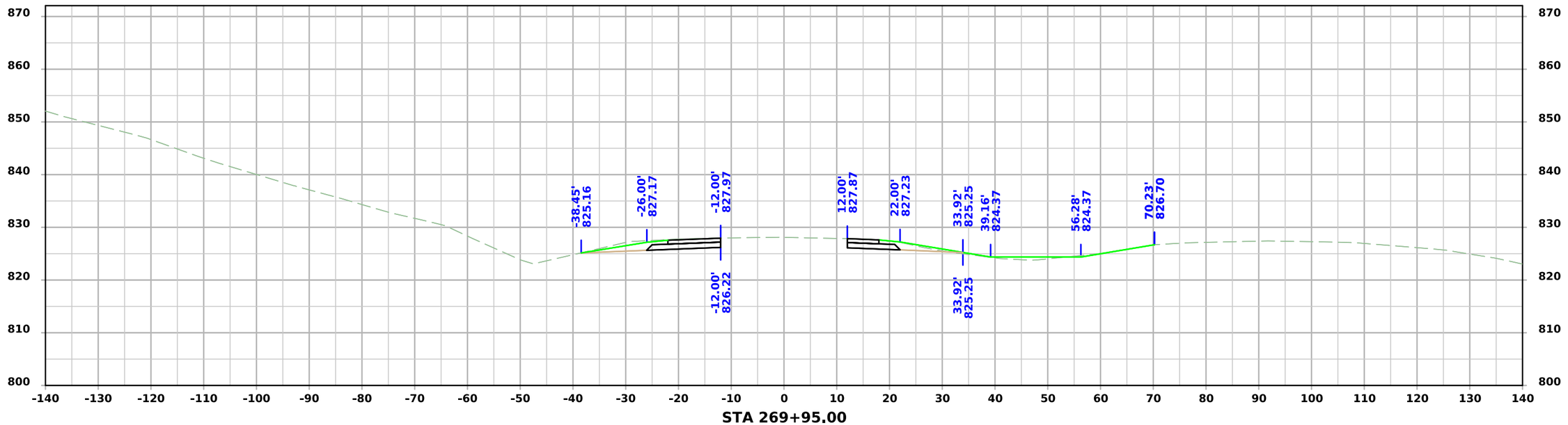
US 151 SB



STA 270+00.00



STA 269+95.00

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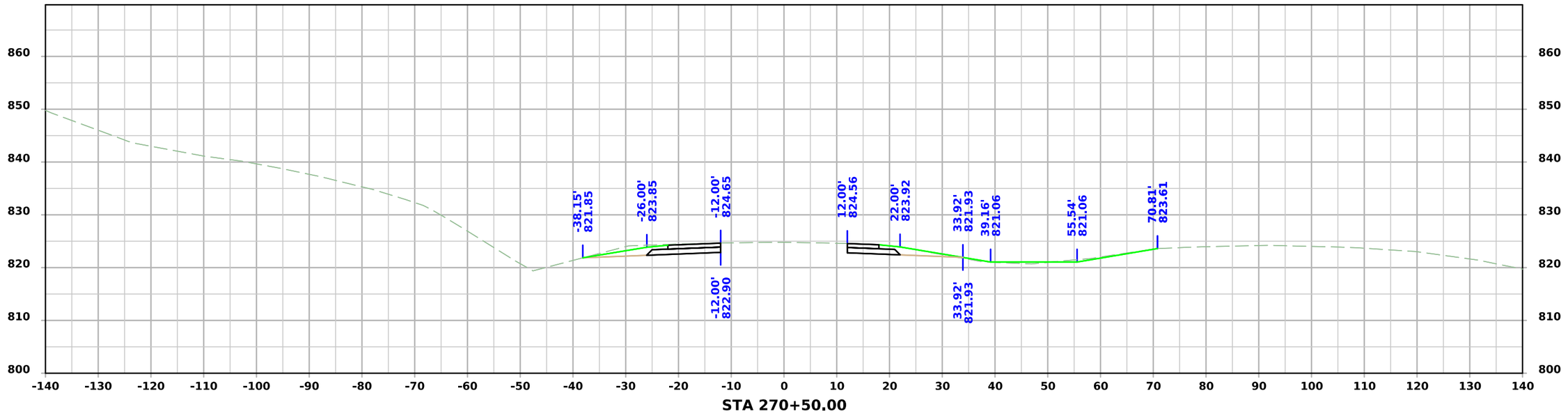
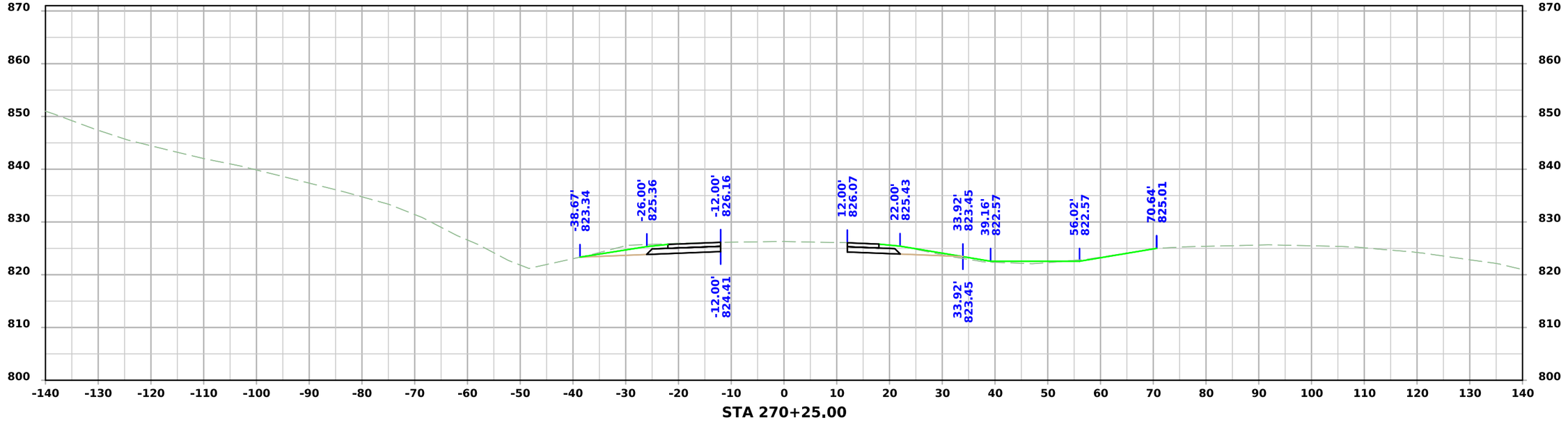
US 151 SB



STA 270+50.00



STA 270+25.00

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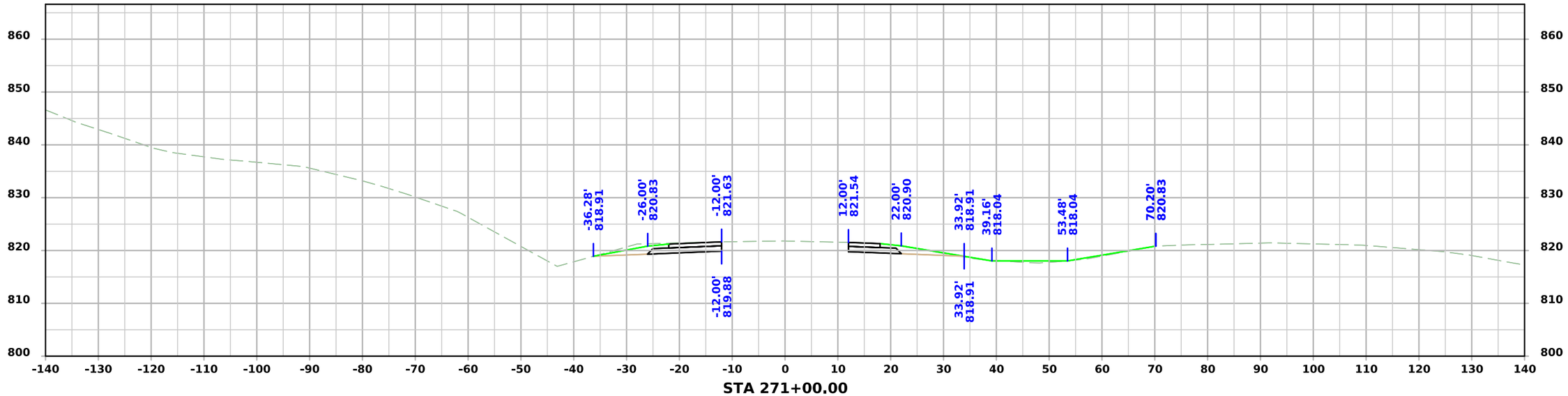
US 151 SB



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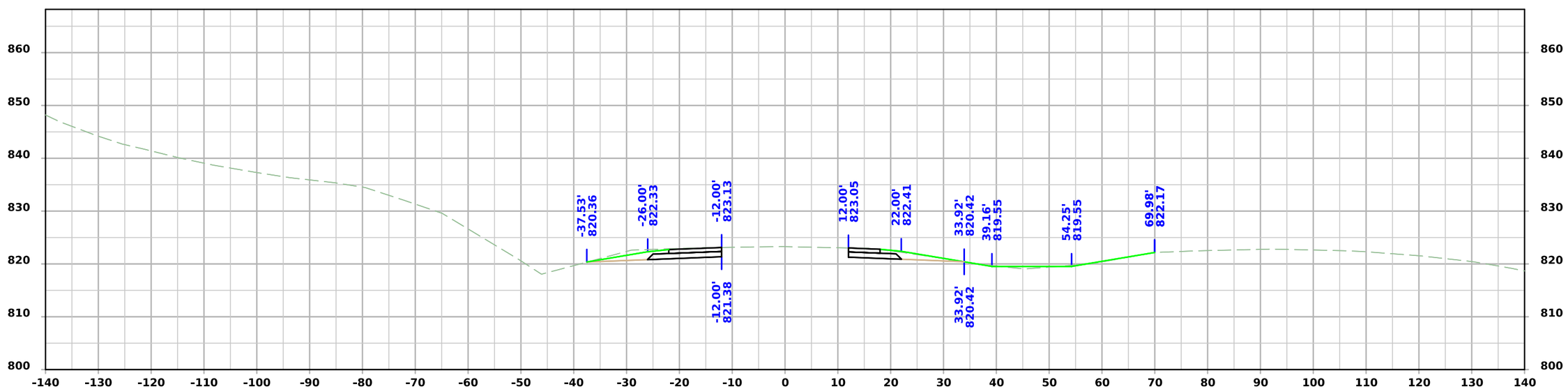

STA 270+75.00

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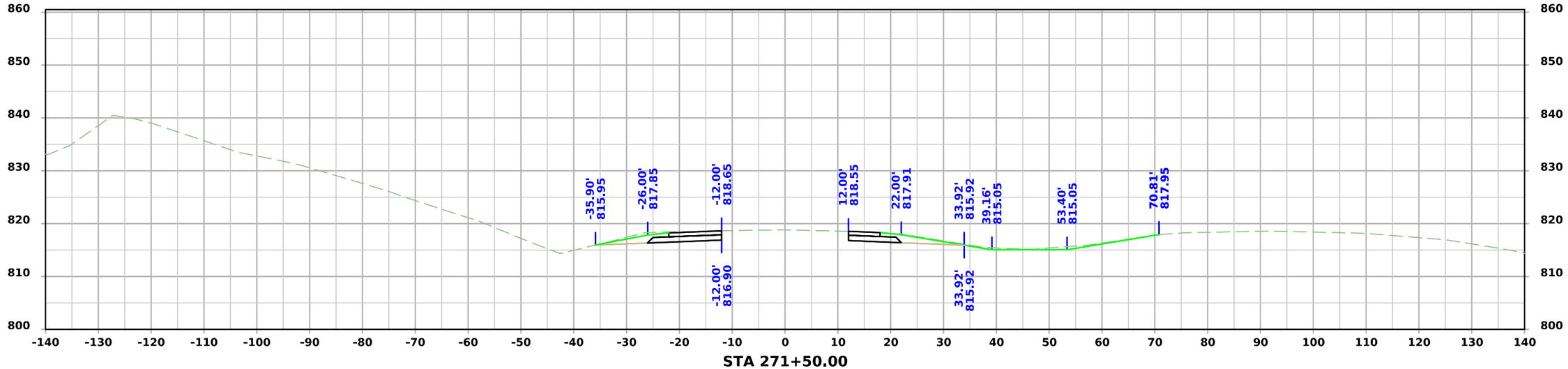
US 151 SB



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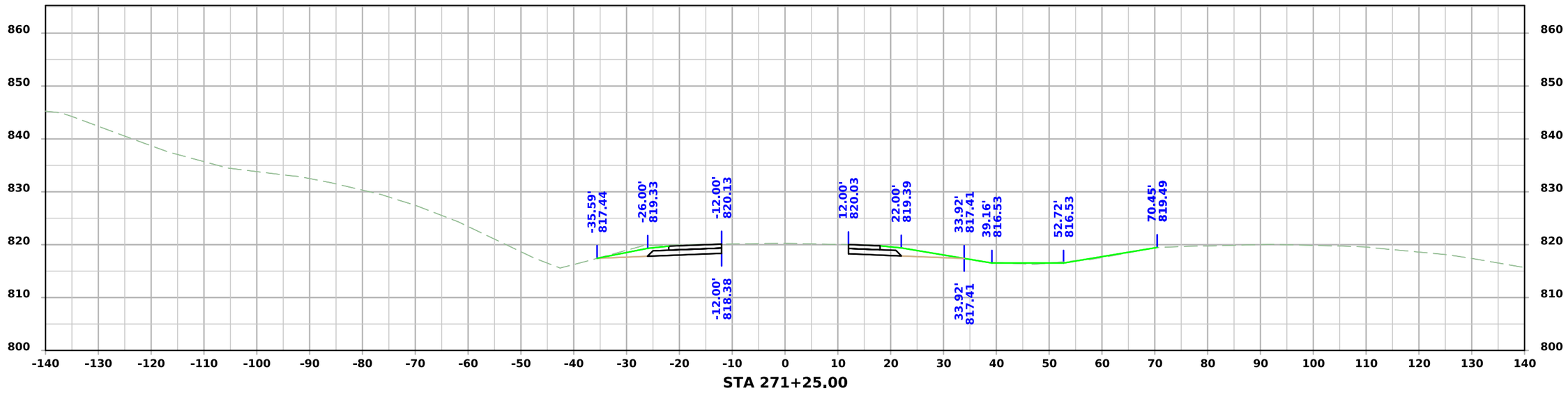

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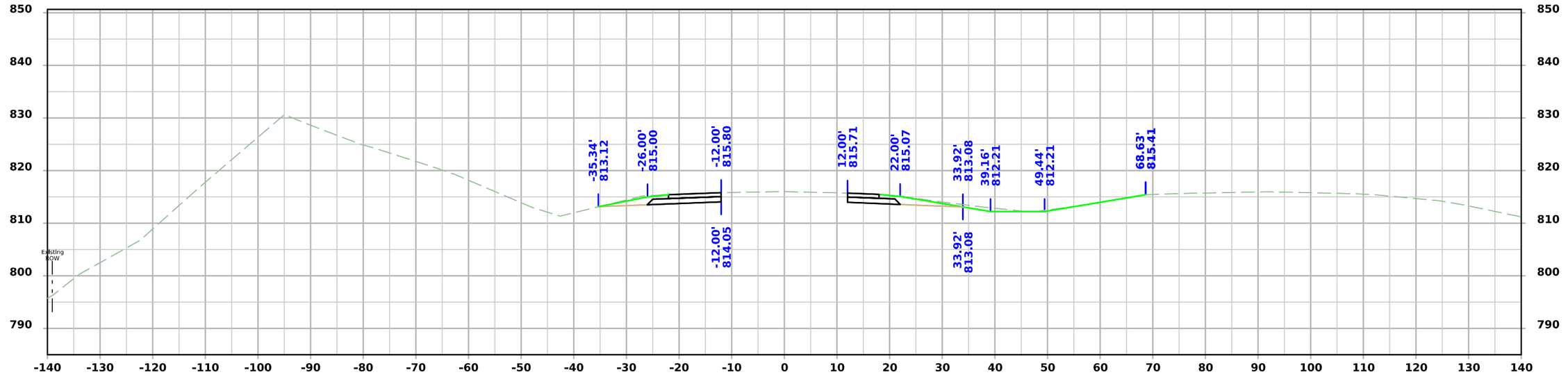
US 151 SB



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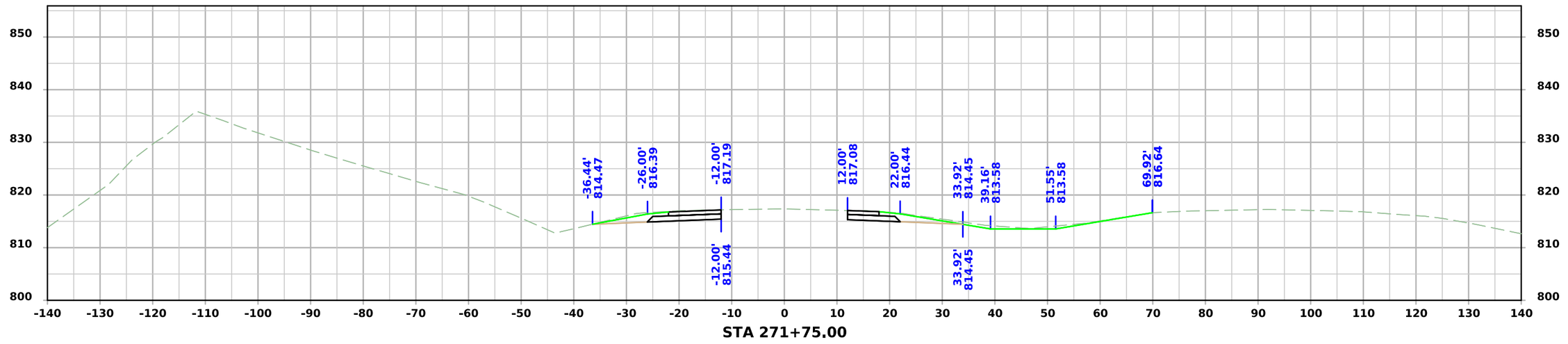

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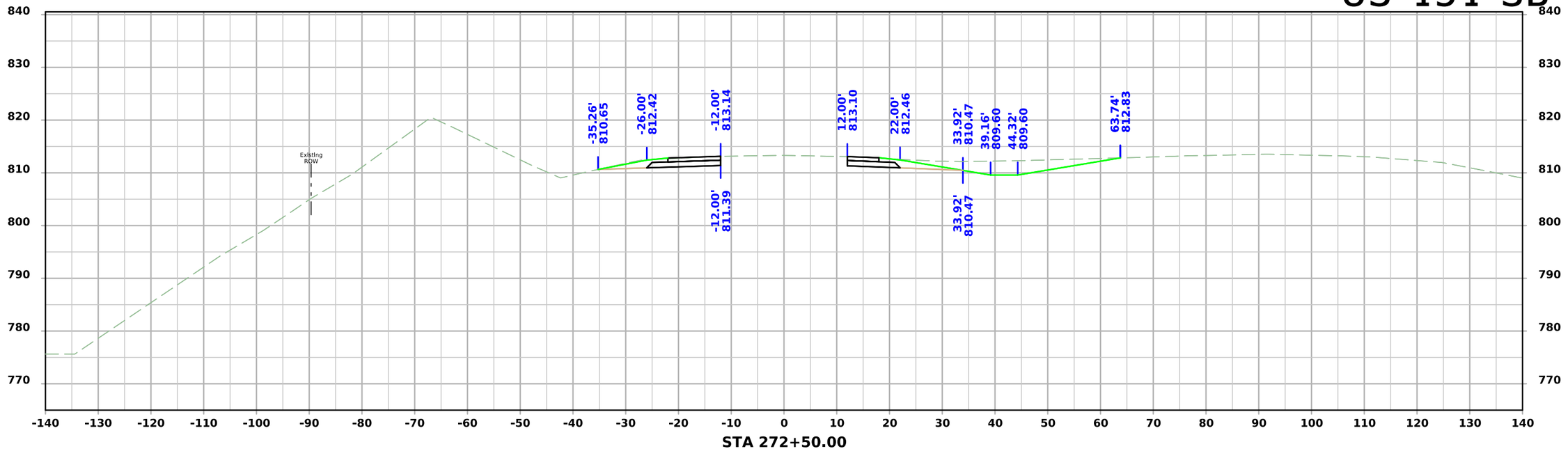
US 151 SB



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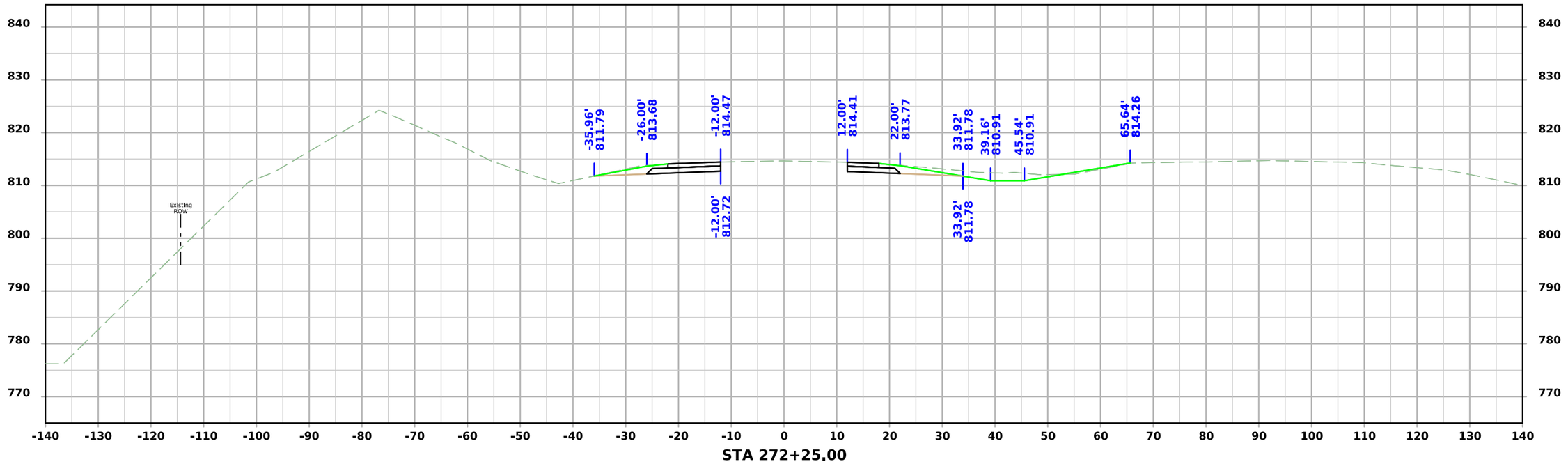

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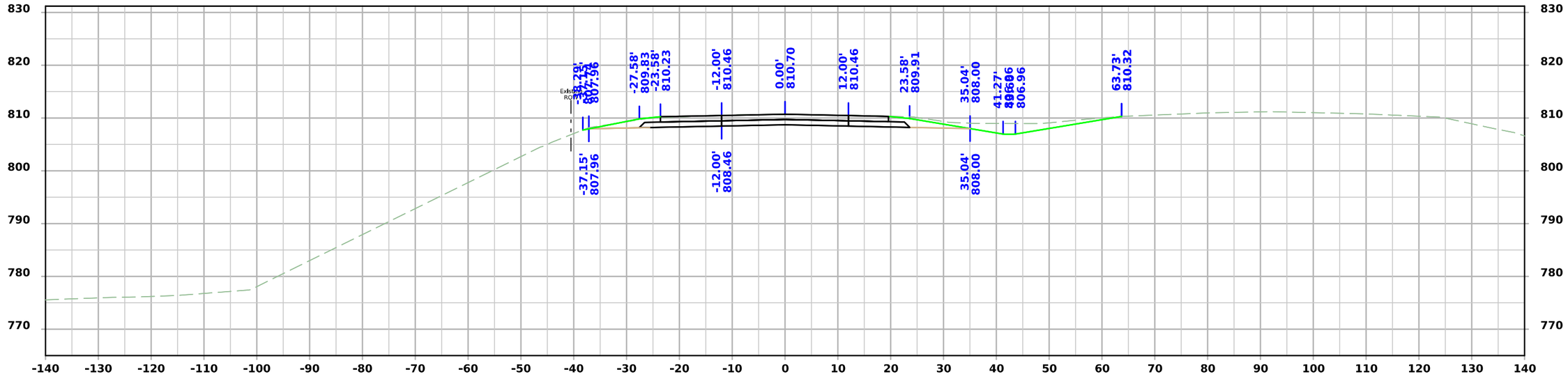
US 151 SB



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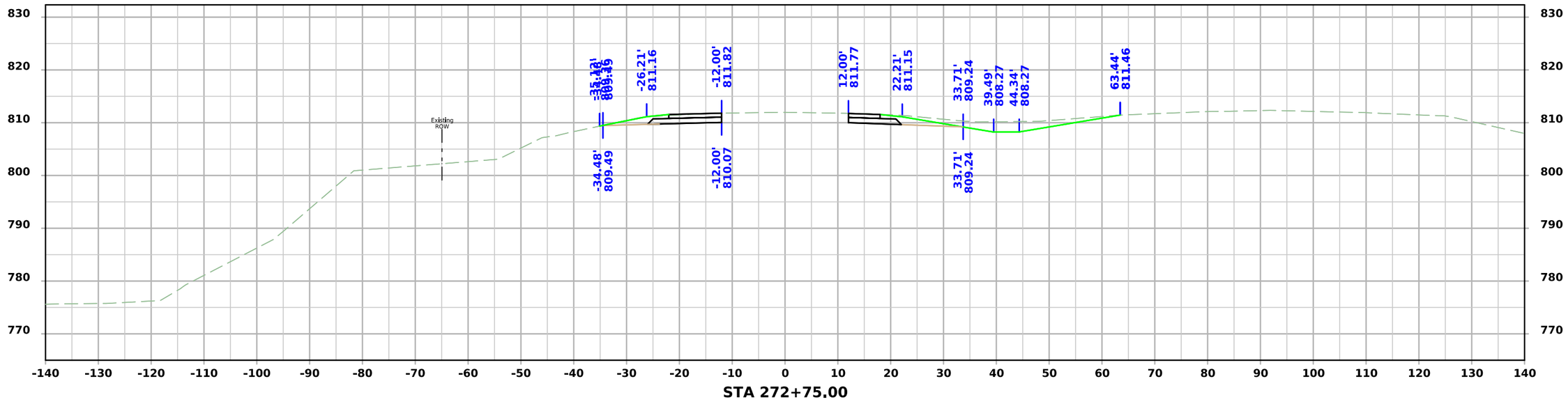

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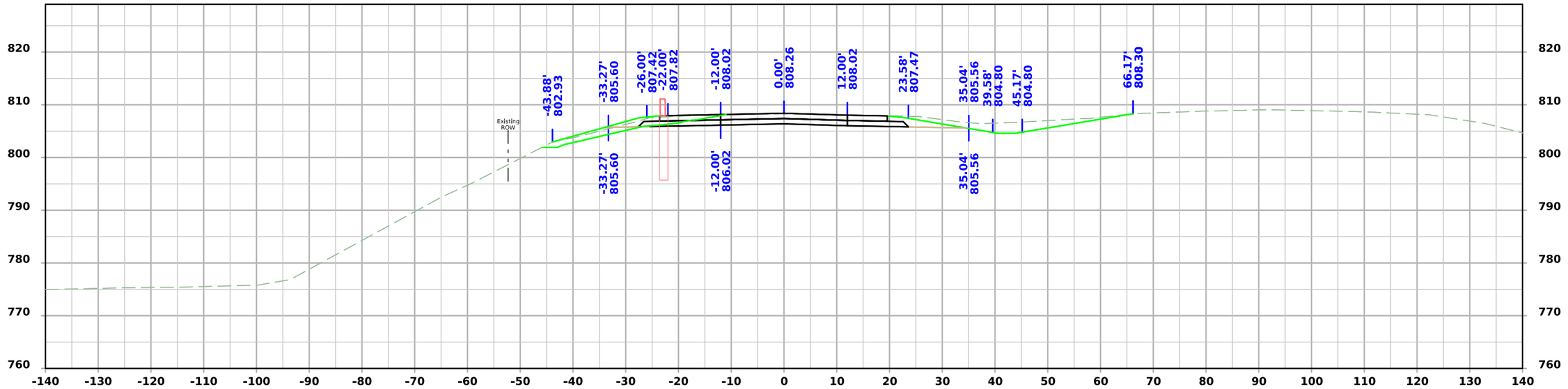
US 151 SB



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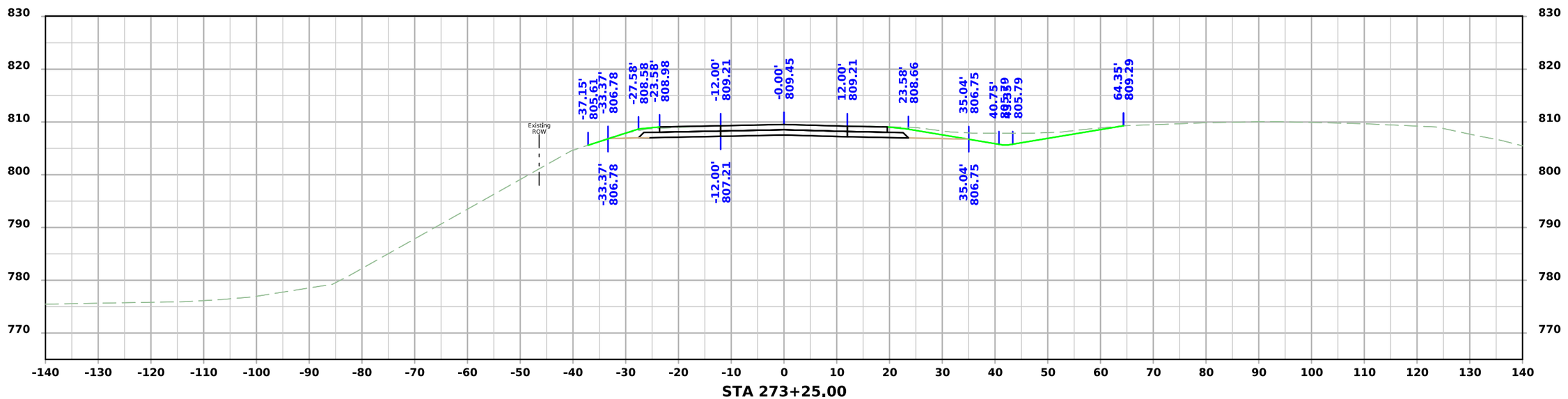

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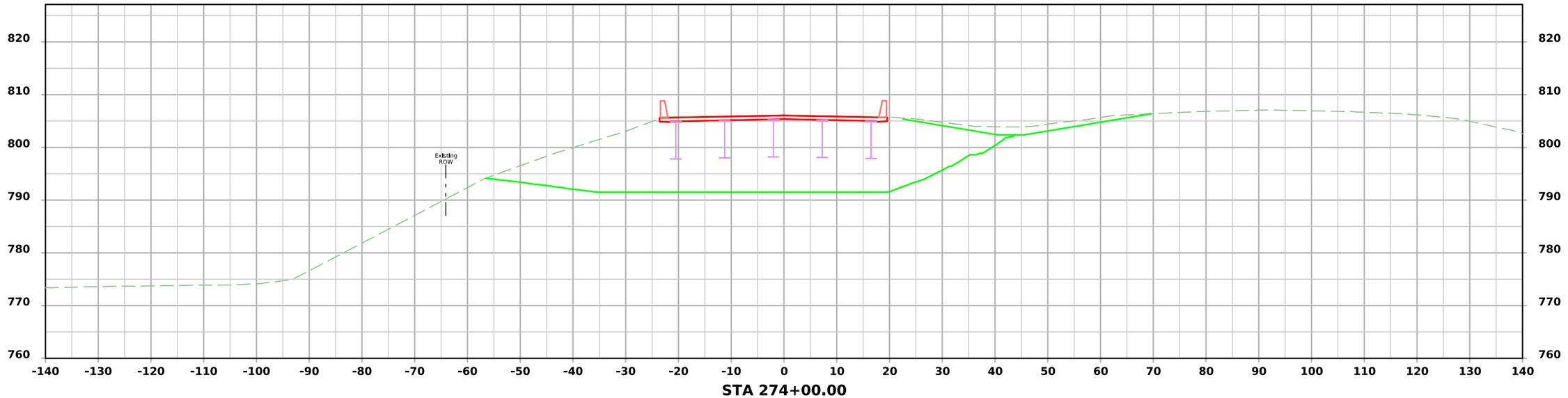
US 151 SB



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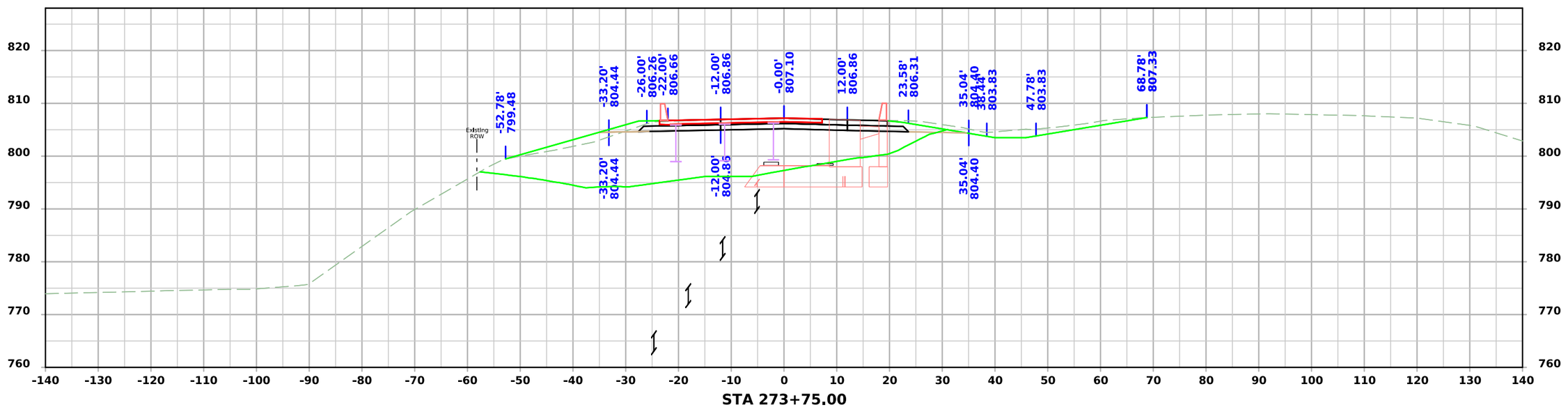

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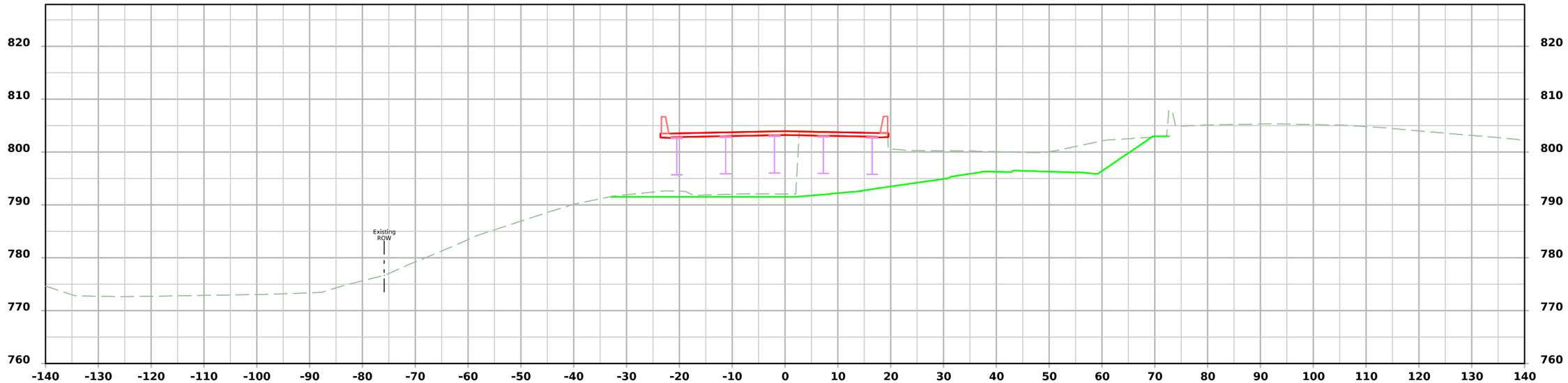
US 151 SB



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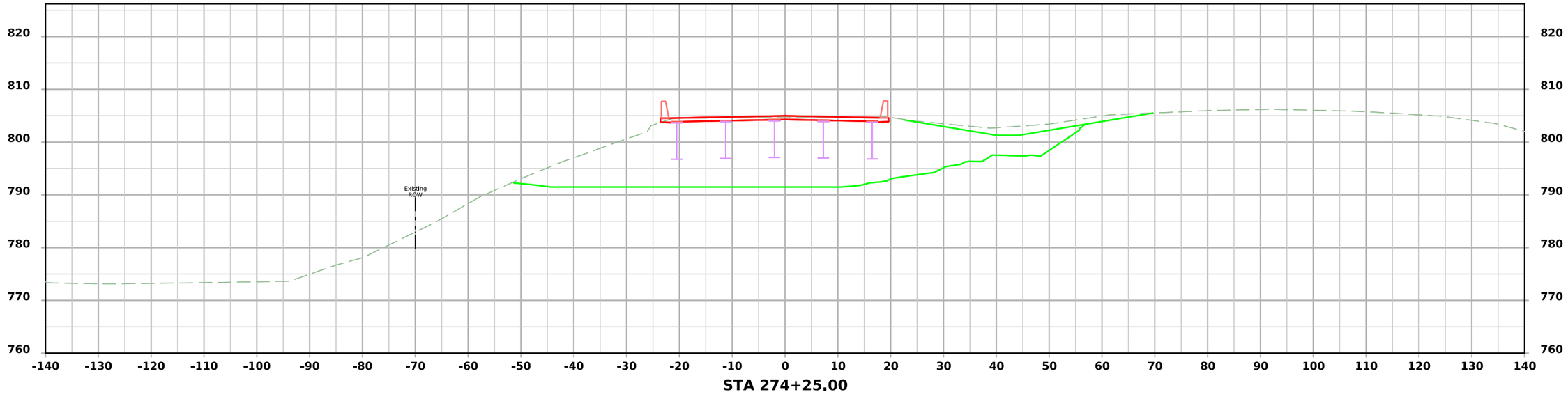

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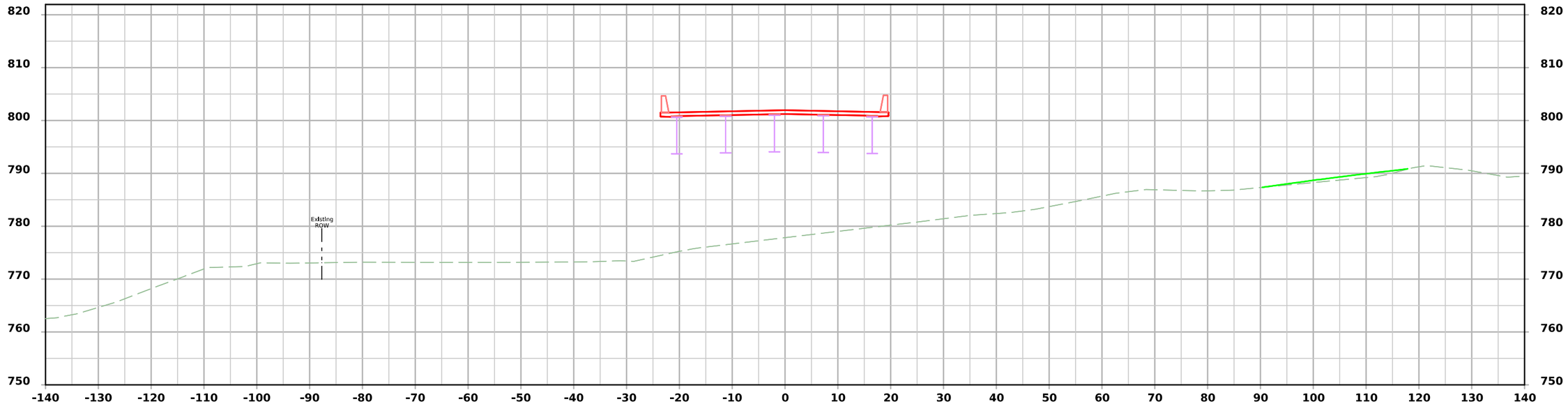
US 151 SB



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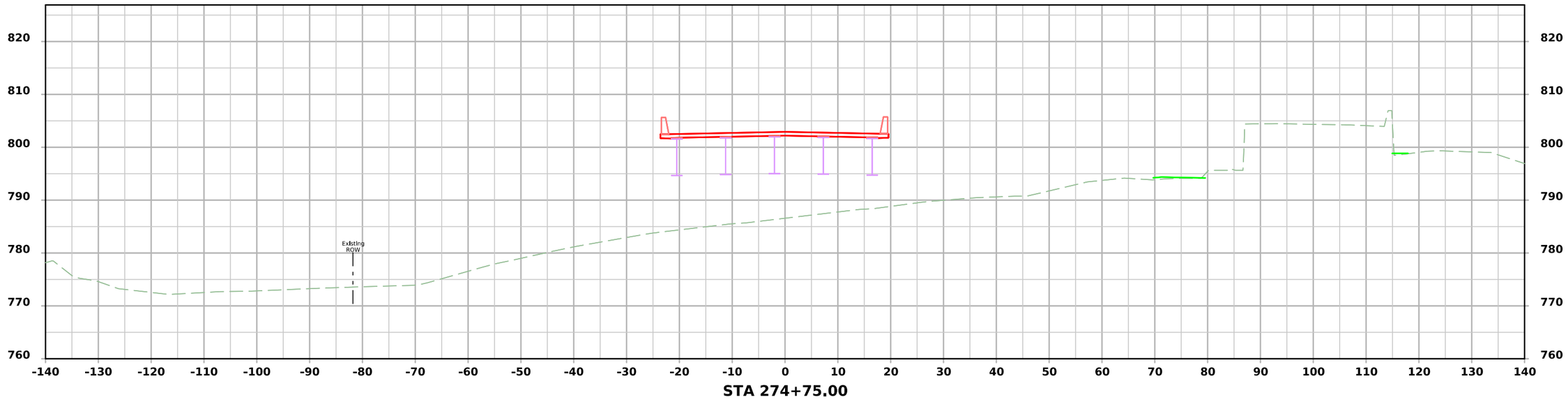

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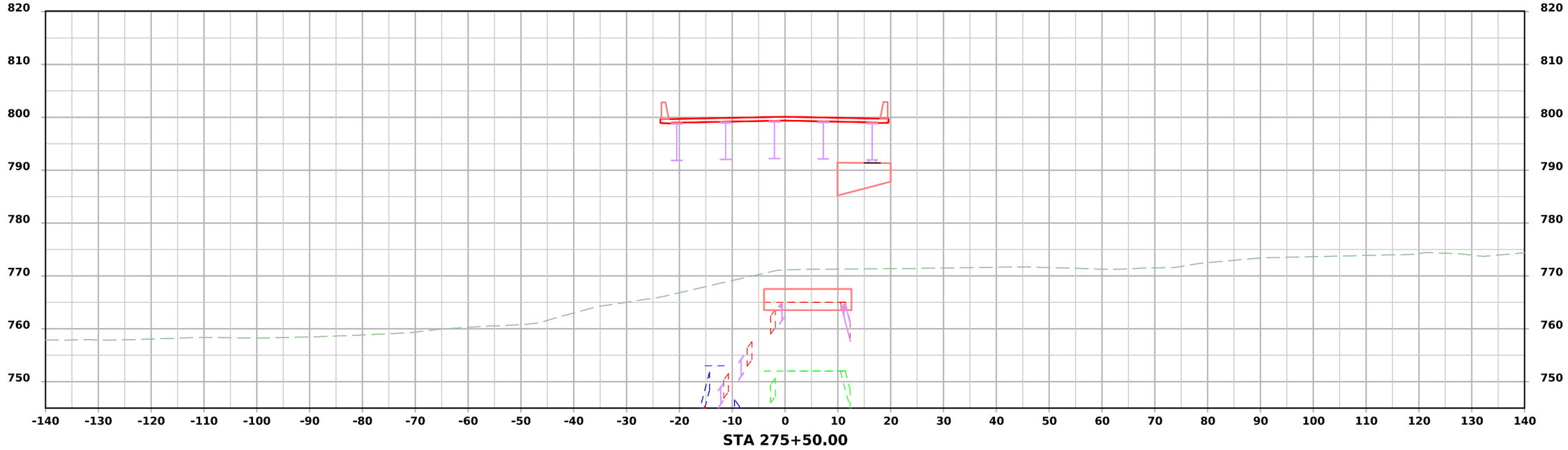
US 151 SB



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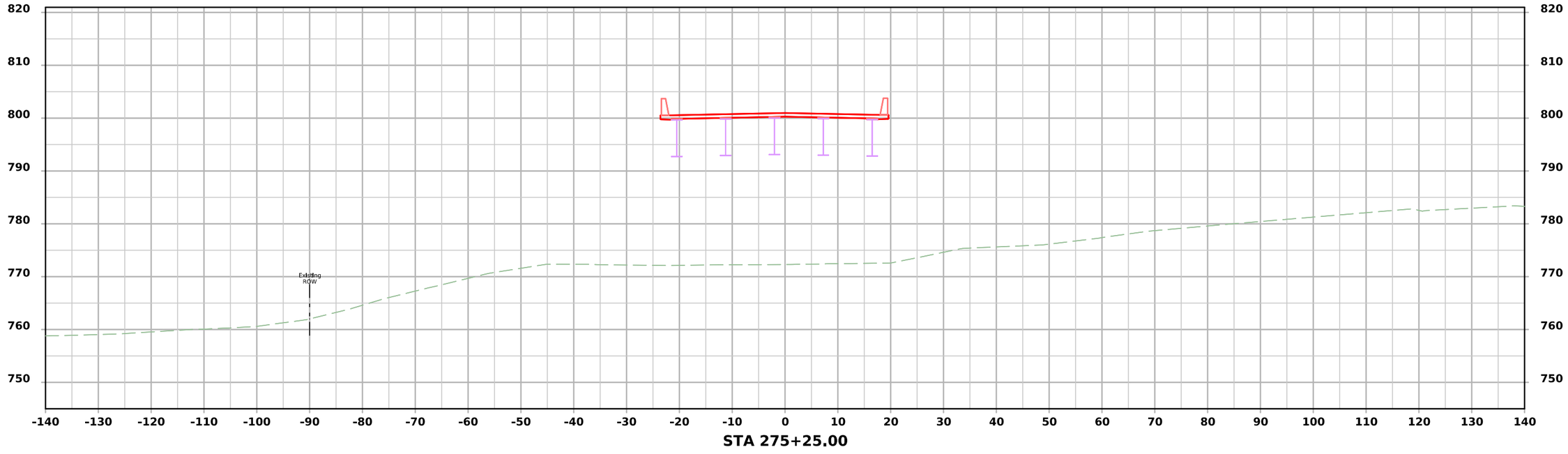

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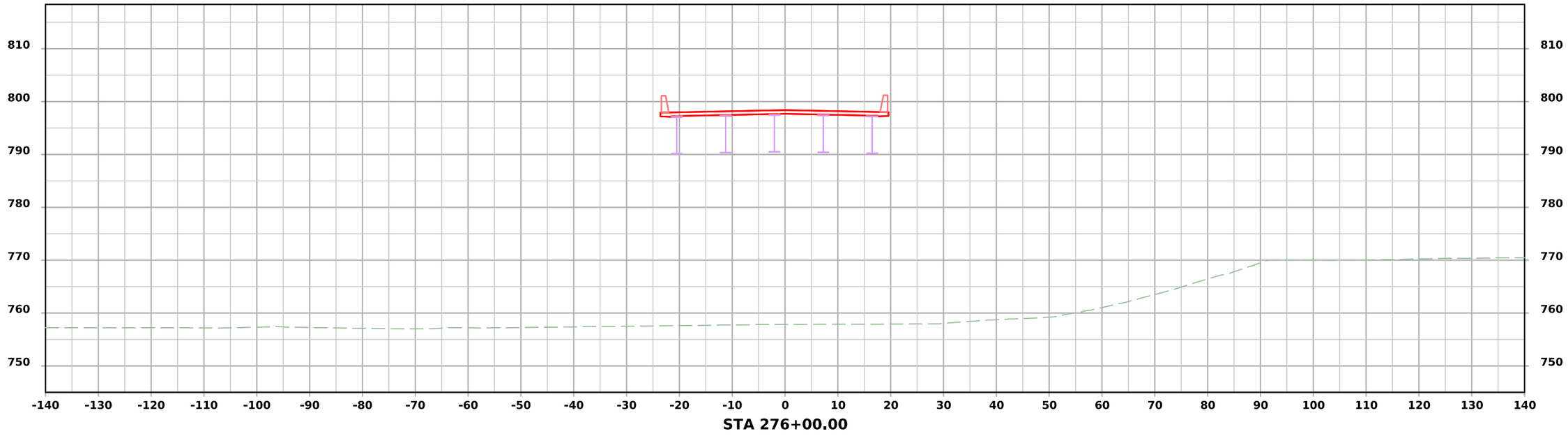
US 151 SB



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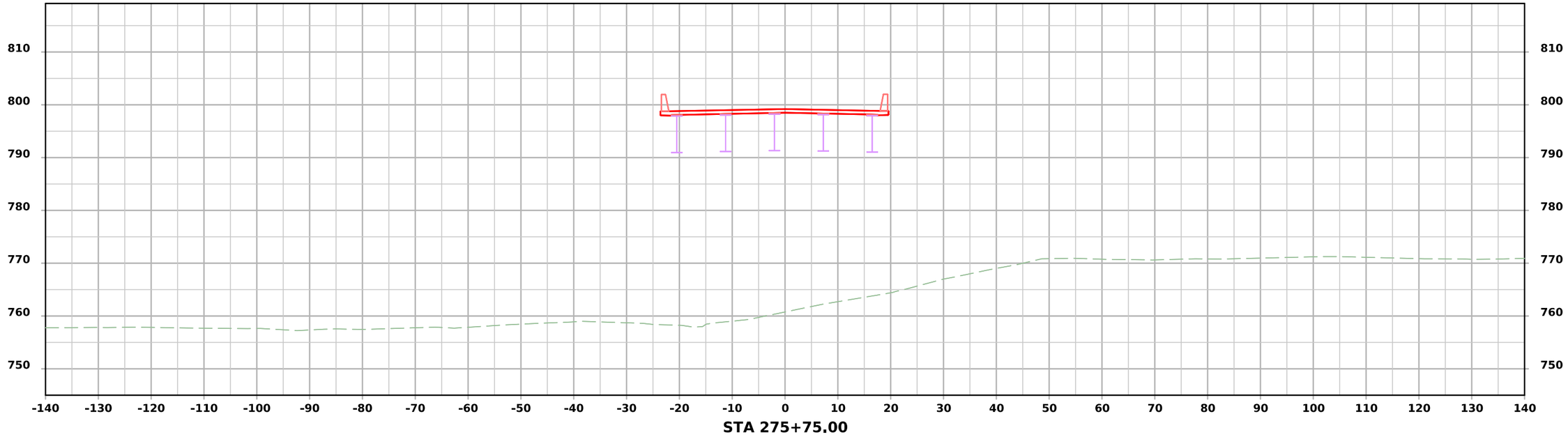

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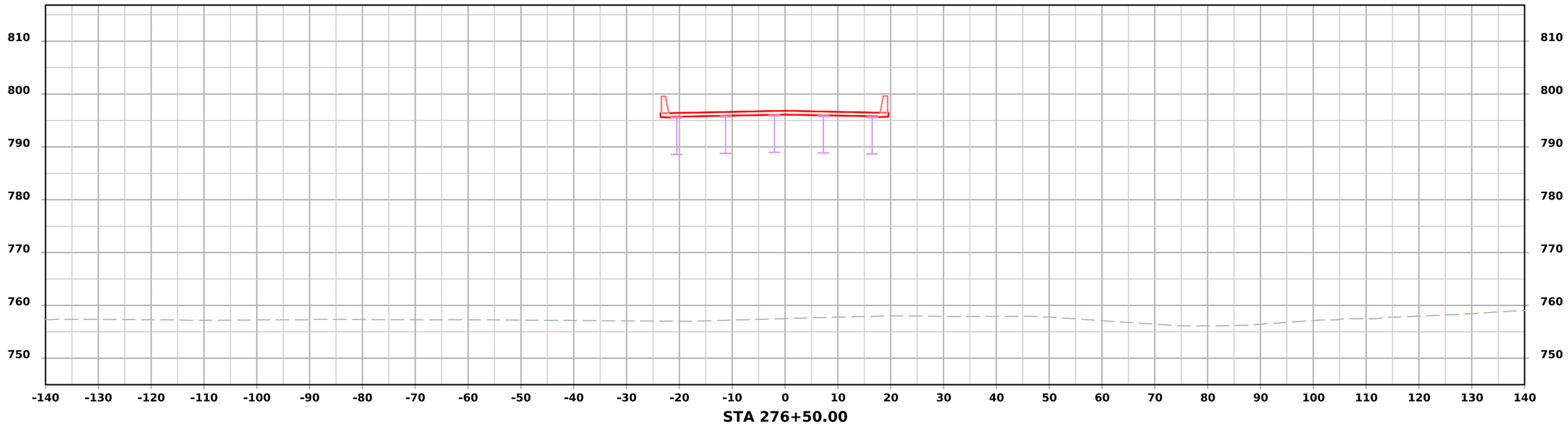
US 151 SB



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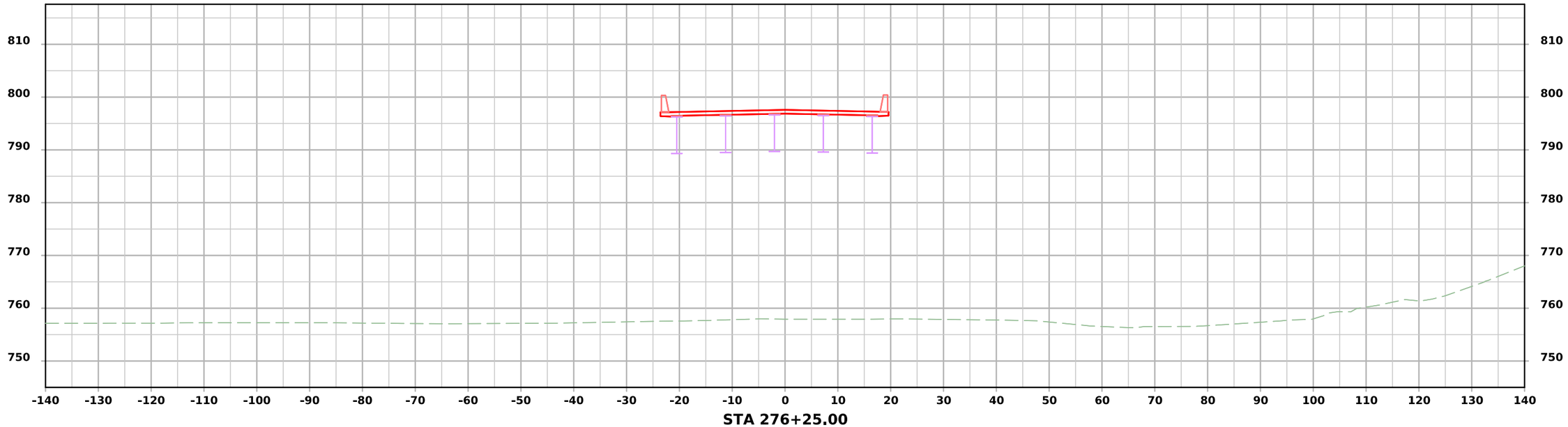

STA 276+25.00

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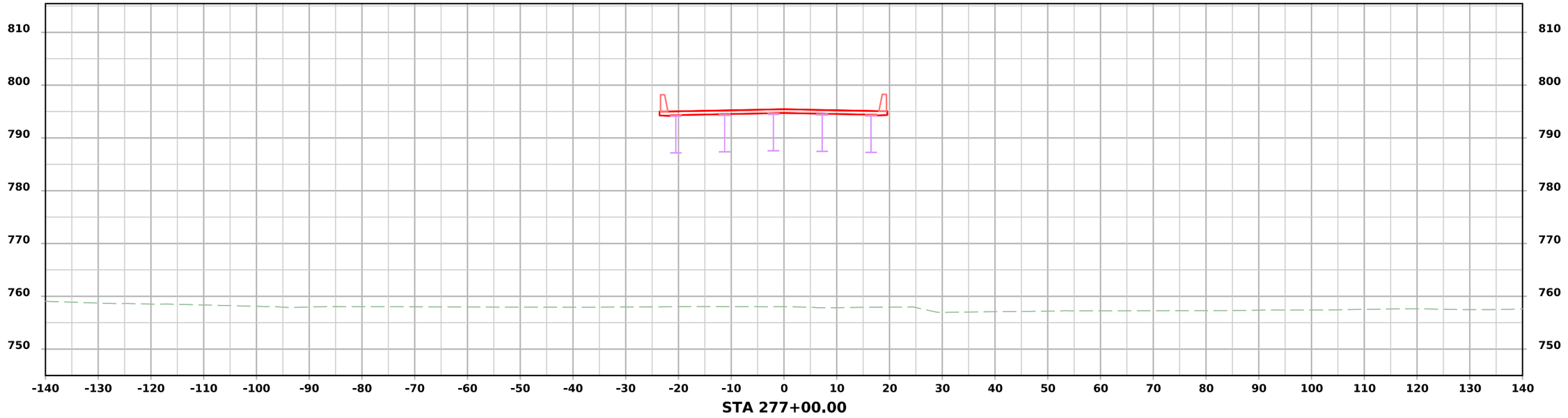
US 151 SB



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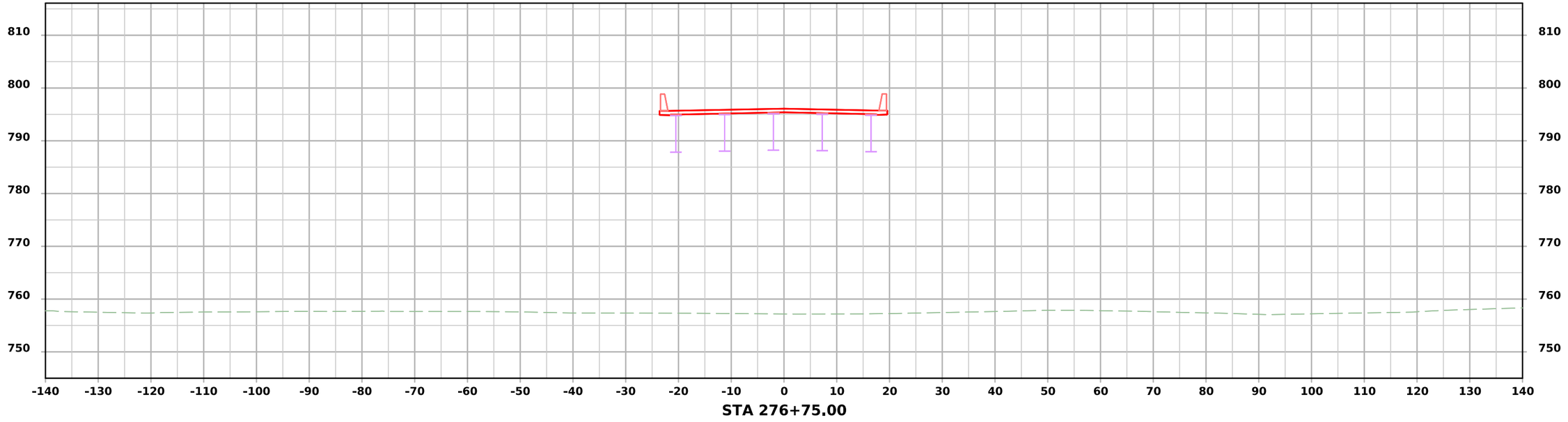

STA 276+75.00

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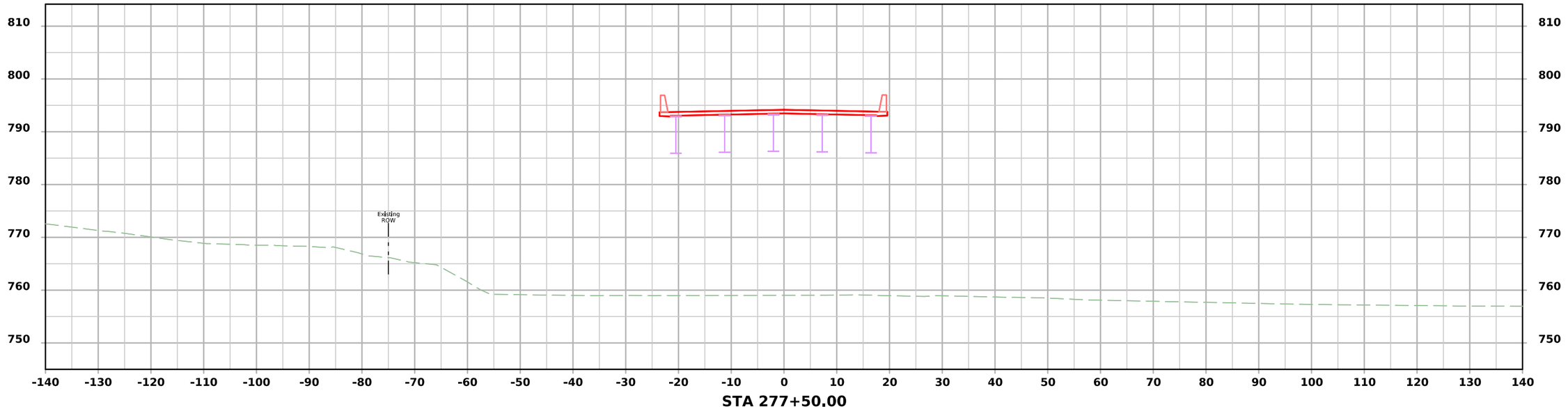
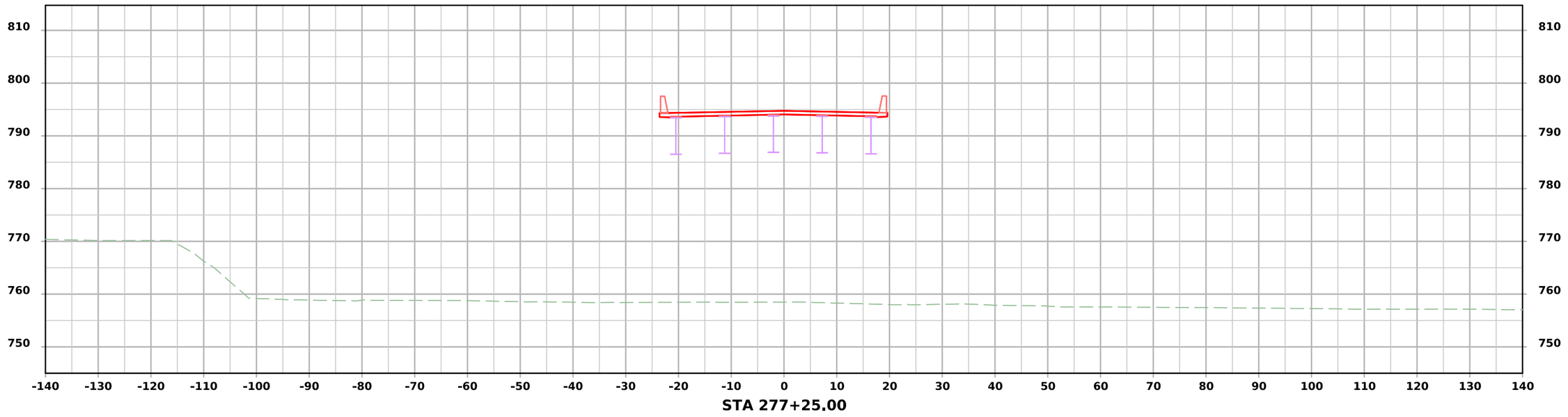
US 151 SB



STA 277+50.00

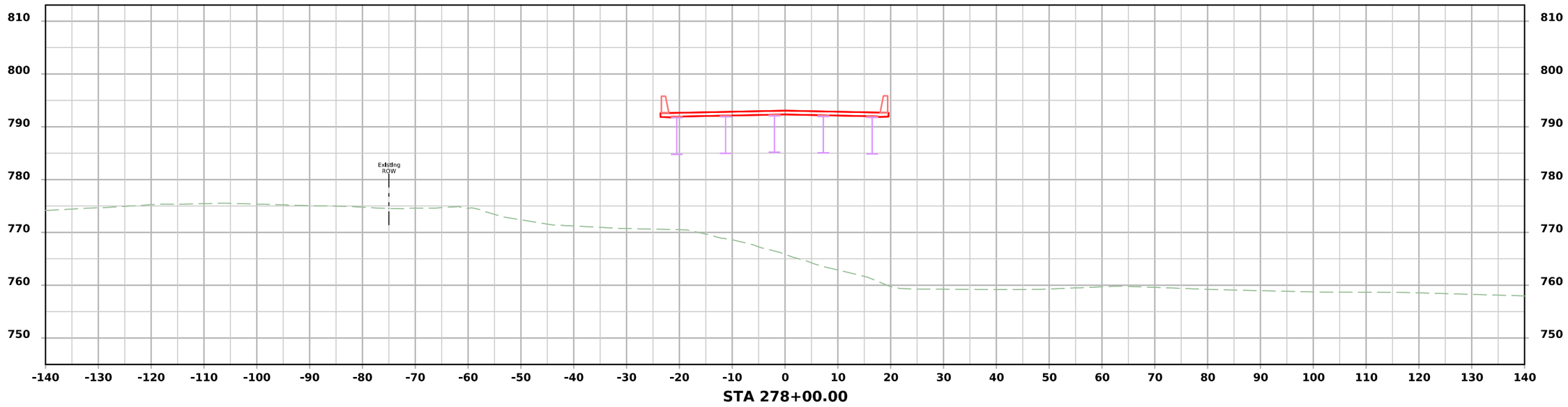


STA 277+25.00

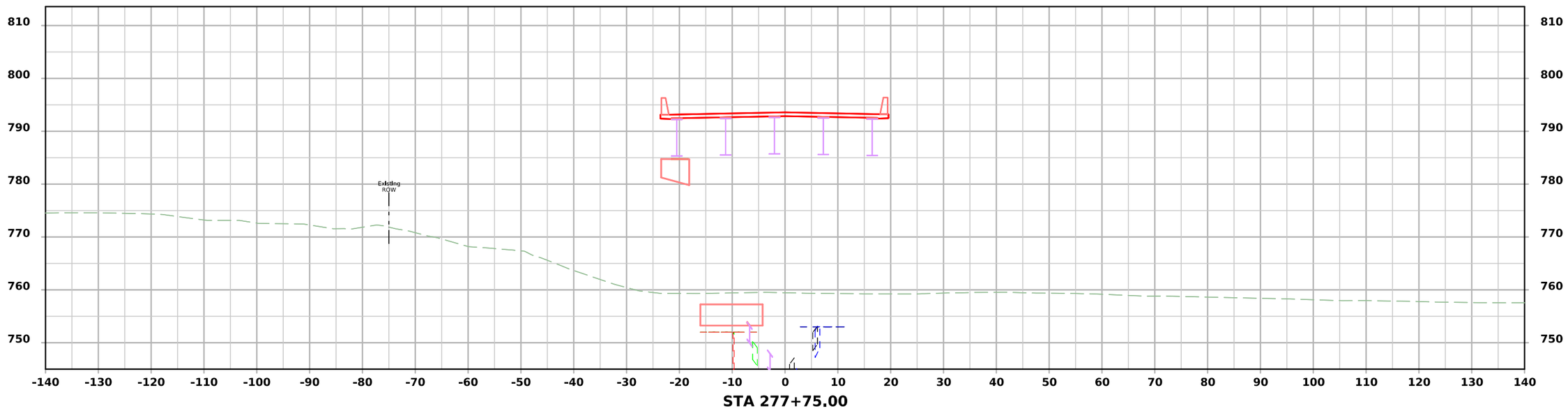
FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER W.17

10:50:44 AM 12/19/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Cross_Sections\XS_ML151N_53151134Z10.dgn

US 151 SB



STA 278+00.00

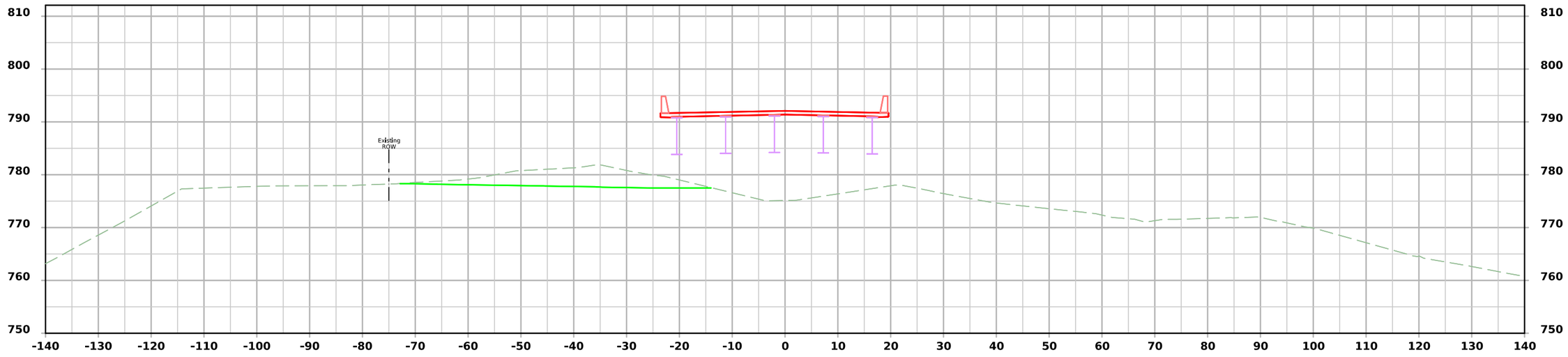


STA 277+75.00

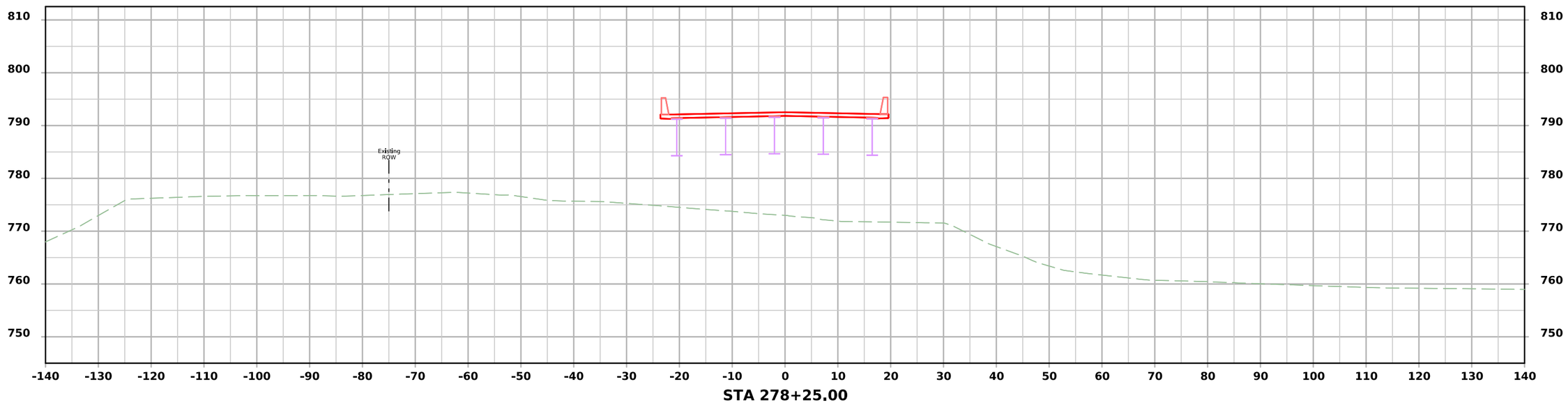
FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER W.18

10:50:46 AM 12/19/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Cross_Sections\XS_ML151N_53151134Z10.dgn

US 151 SB



STA 278+50.00

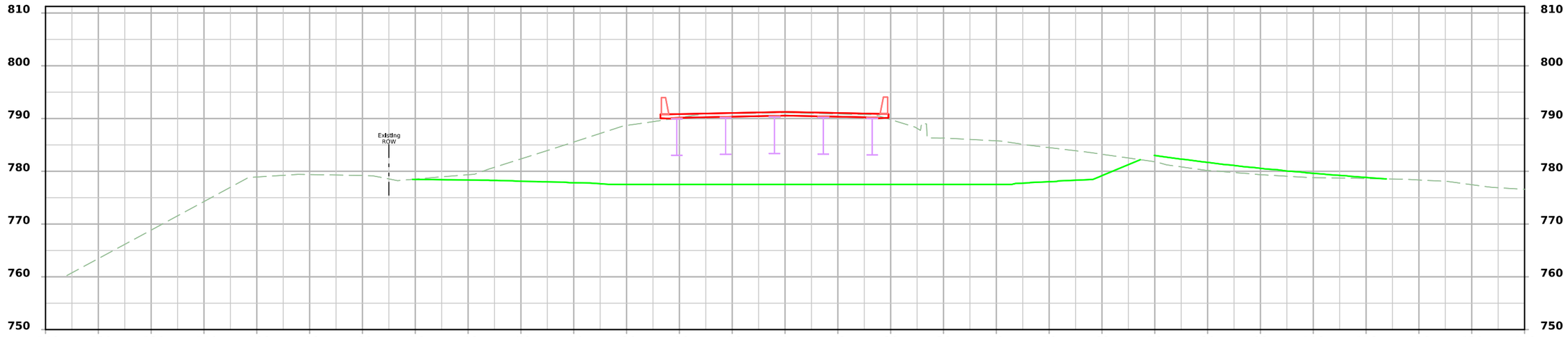


STA 278+25.00

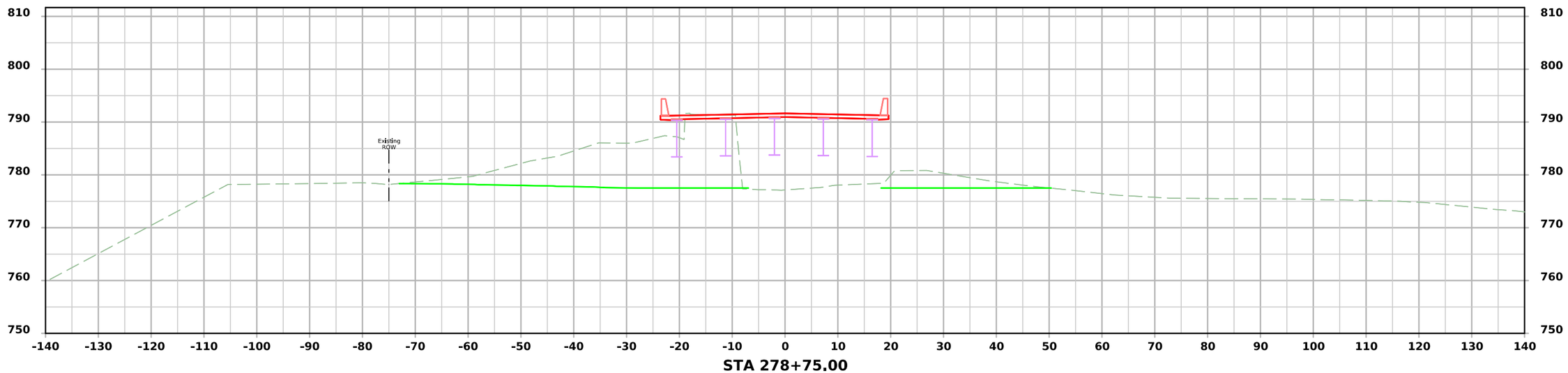
FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER W.19

10:50:48 AM 12/19/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Cross_Sections\XS_ML151N_53151134Z10.dgn

US 151 SB



STA 279+00.00

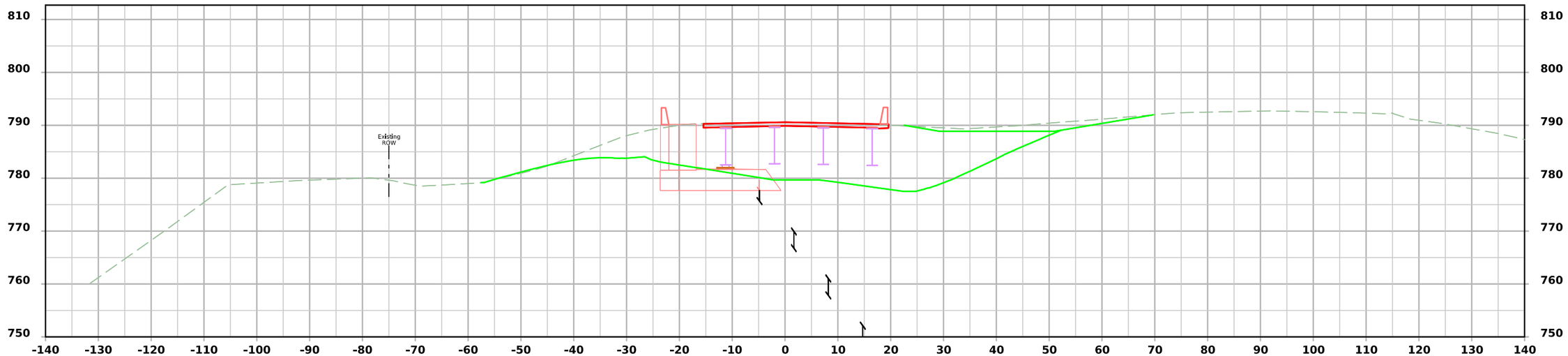


STA 278+75.00

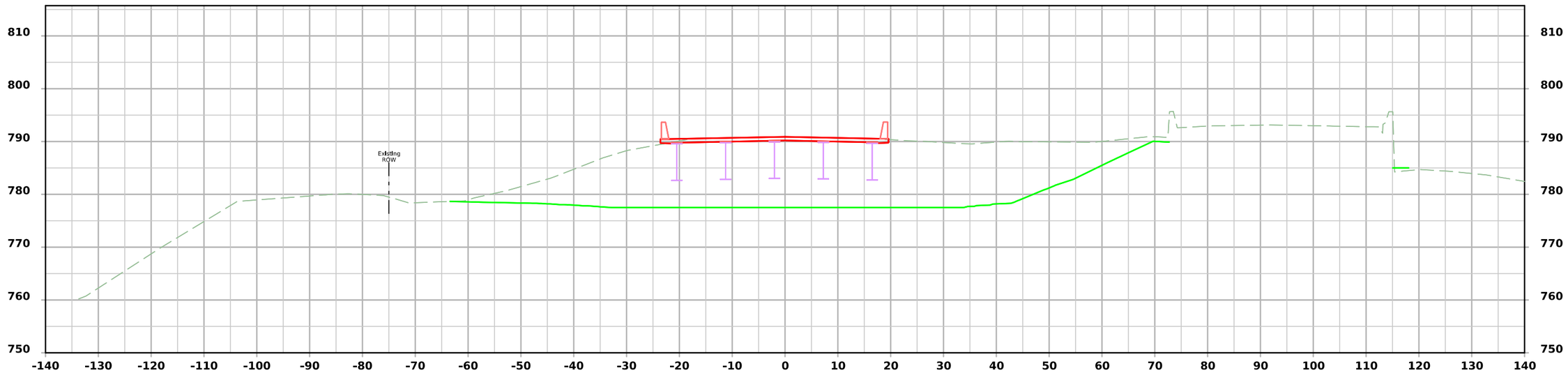
FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER W.20

10:50:50 AM 12/19/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Cross_Sections\XS_ML151N_53151134Z10.dgn

US 151 SB



STA 279+50.00

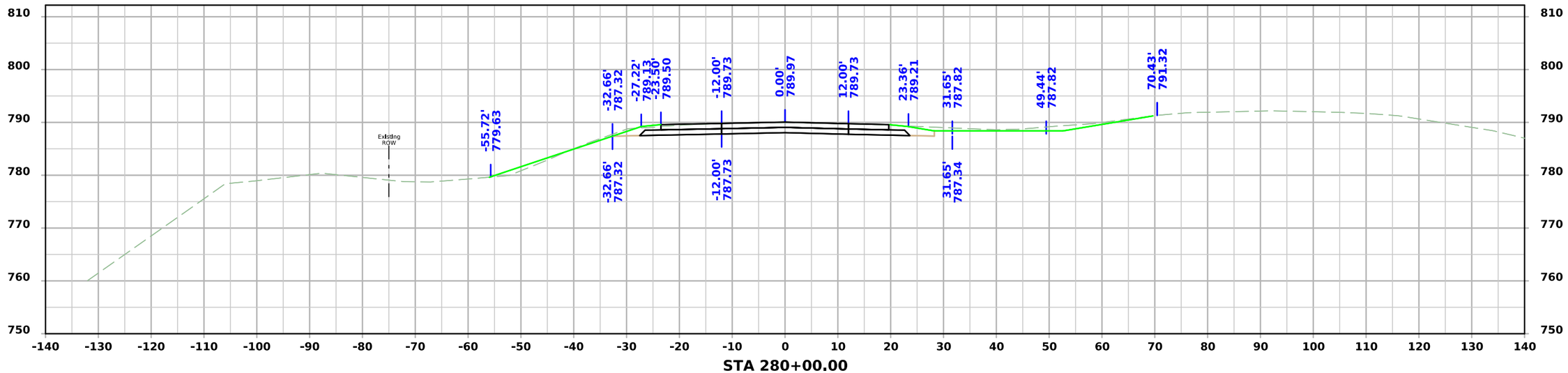


STA 279+25.00

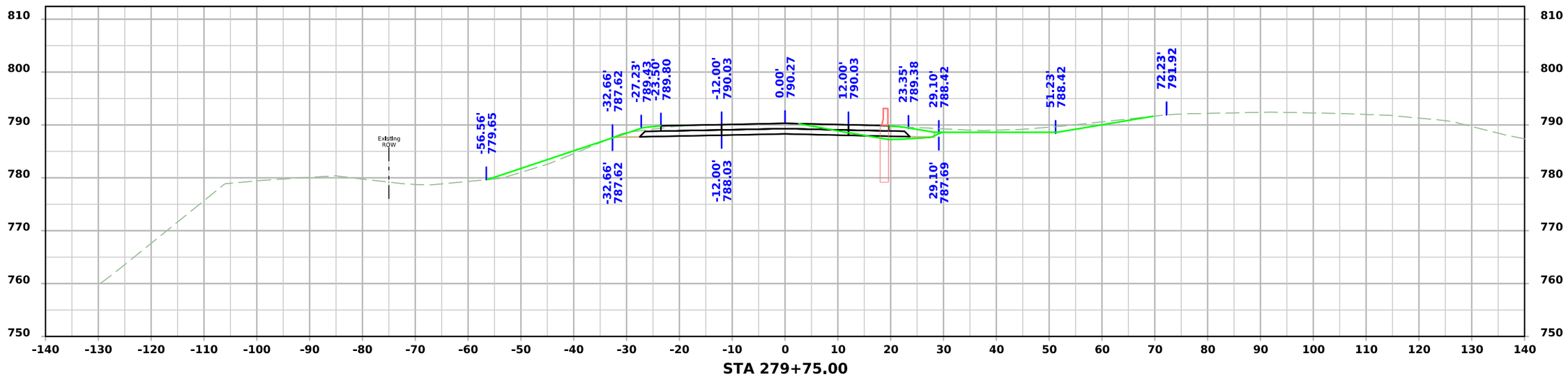
FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER W.21

10:50:52 AM 12/19/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Cross_Sections\XS_ML151N_53151134Z10.dgn

US 151 SB



STA 280+00.00

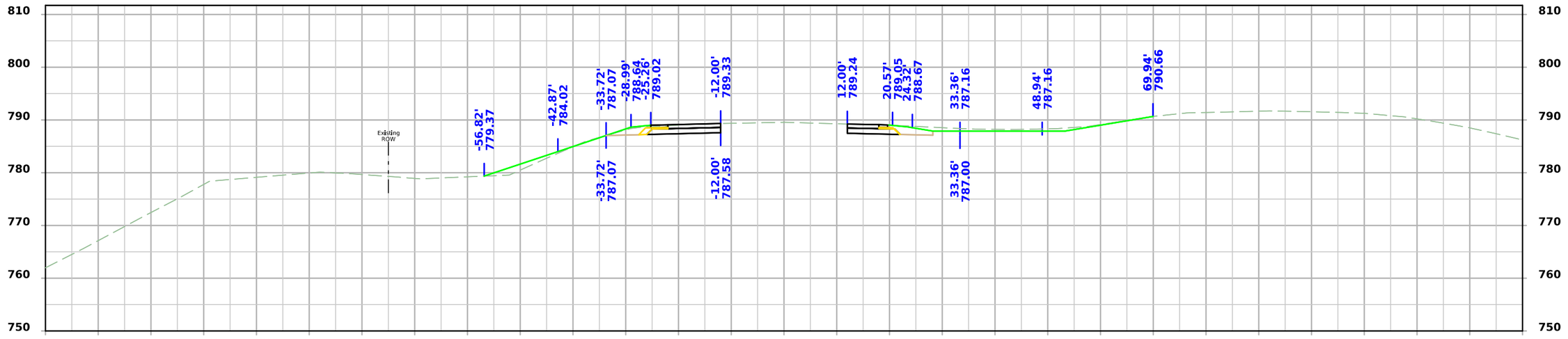


STA 279+75.00

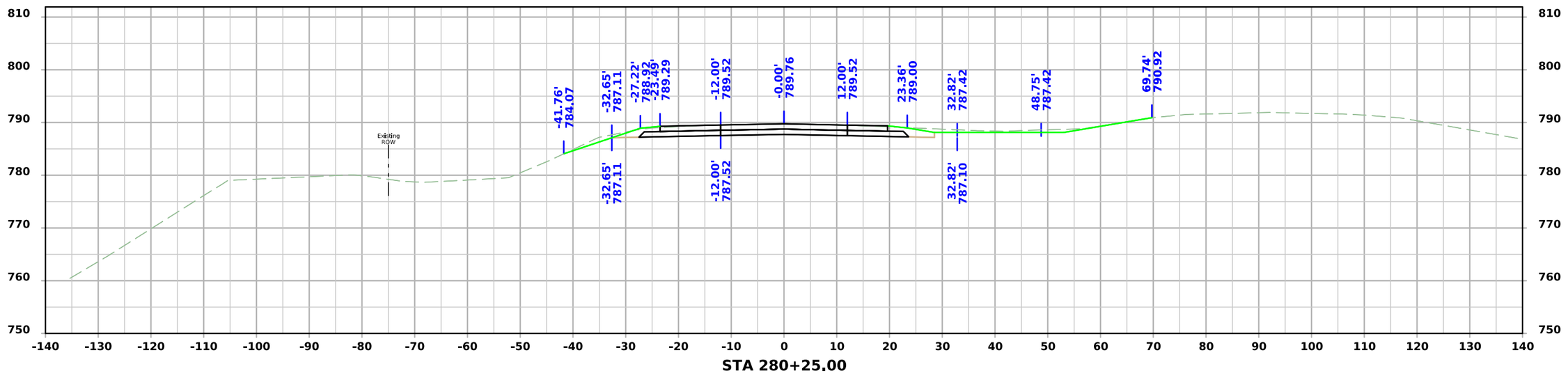
FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER W.22

10:50:53 AM 12/19/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Cross_Sections\XS_ML151N_53151134Z10.dgn

US 151 SB



STA 280+50.00

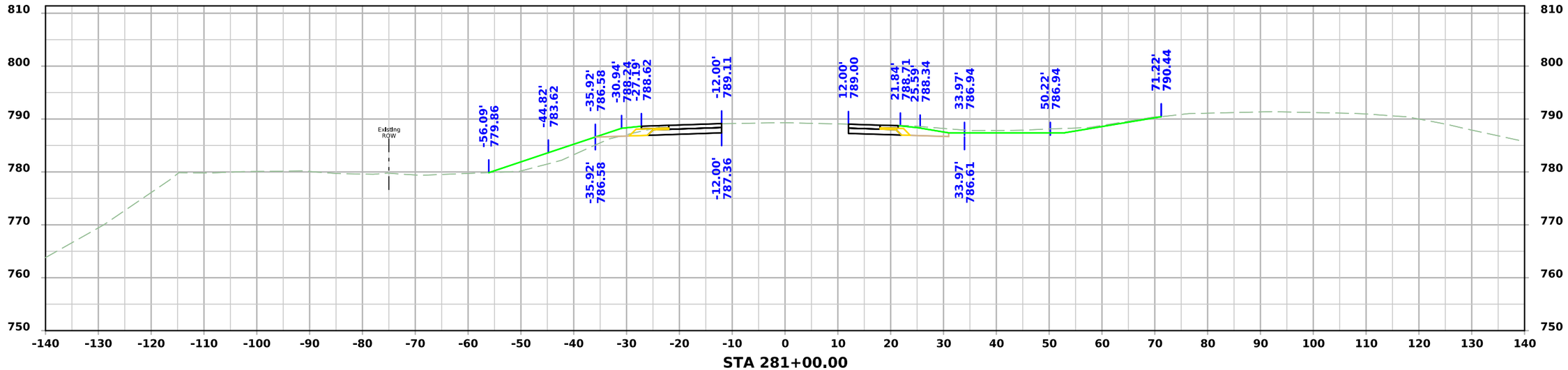


STA 280+25.00

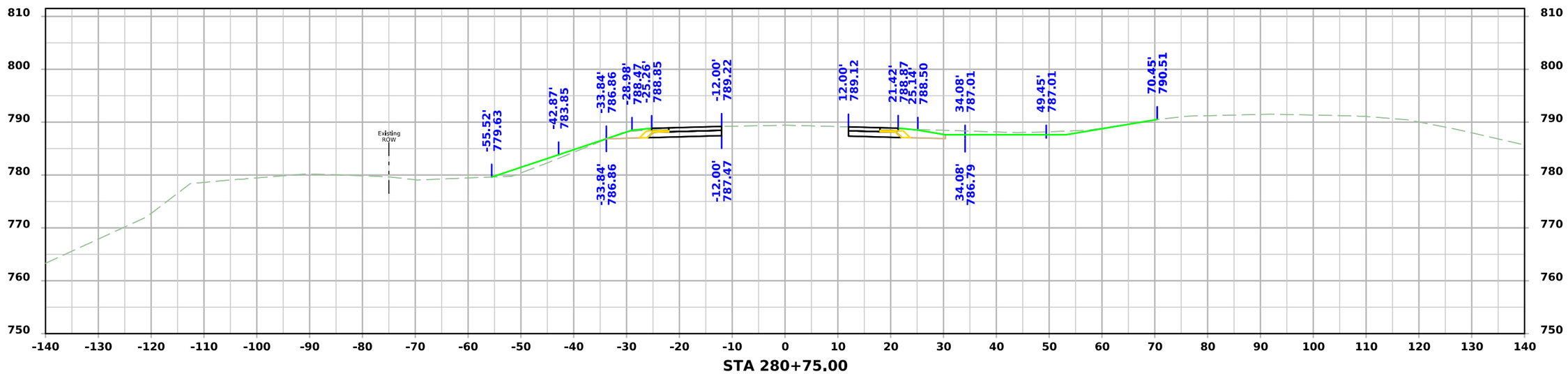
FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER W.23

10:50:54 AM 12/19/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Cross_Sections\XS_ML151N_53151134Z10.dgn

US 151 SB



STA 281+00.00

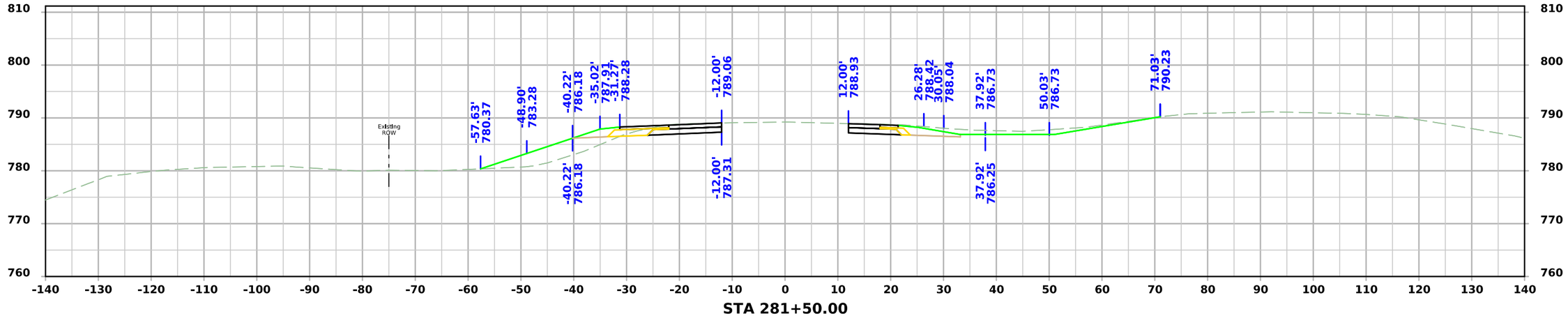


STA 280+75.00

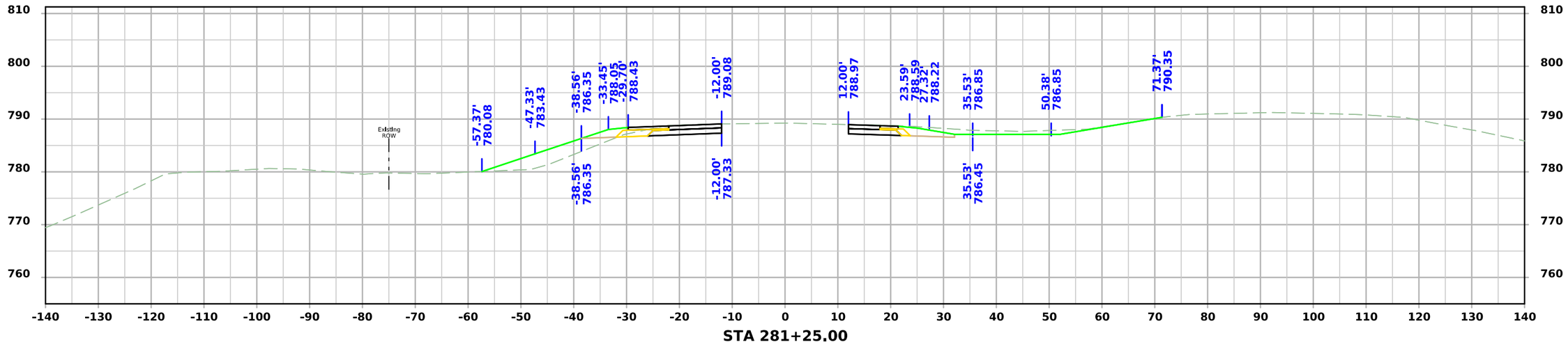
FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER W.24

10:50:55 AM 12/19/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Cross_Sections\XS_ML151N_53151134Z10.dgn

US 151 SB



STA 281+50.00

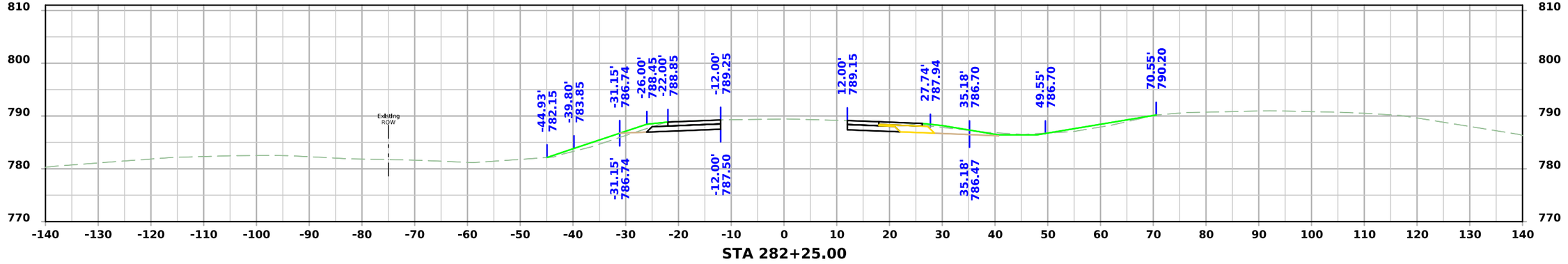


STA 281+25.00

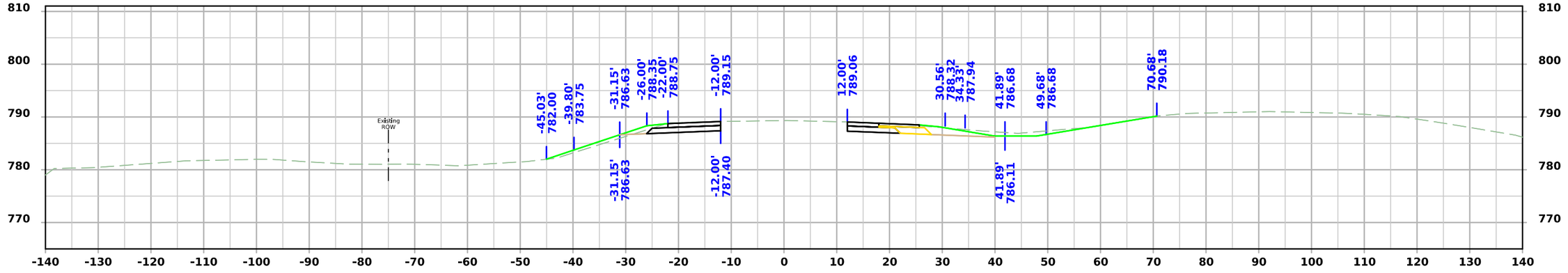
FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER W.25

10:50:56 AM 12/19/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Cross_Sections\XS_ML151N_53151134Z10.dgn

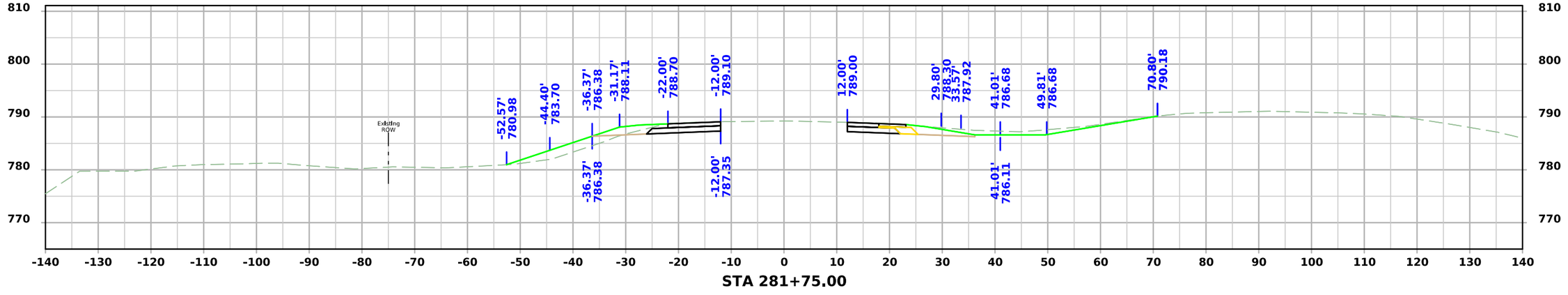
US 151 SB



STA 282+25.00



STA 282+00.00

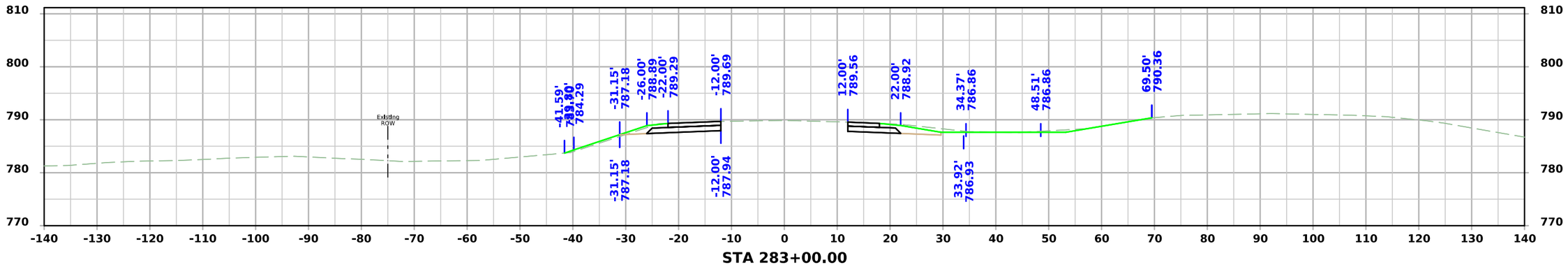


STA 281+75.00

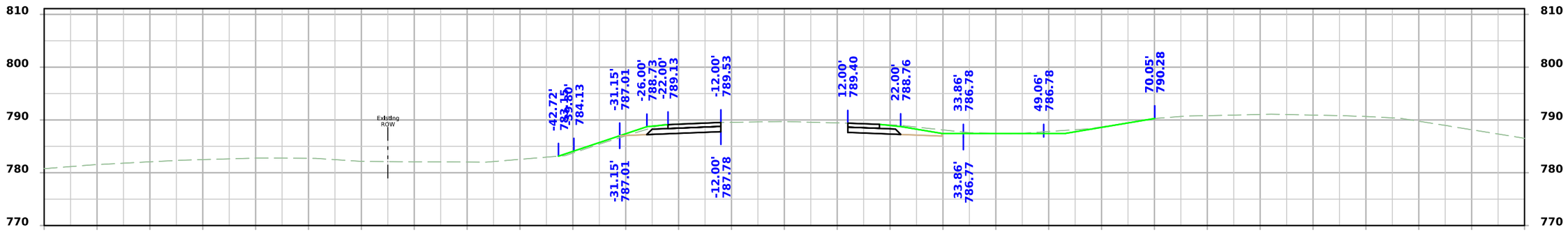
FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER W.26

10:50:57 AM 12/19/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Cross_Sections\XS_ML151N_53151134Z10.dgn

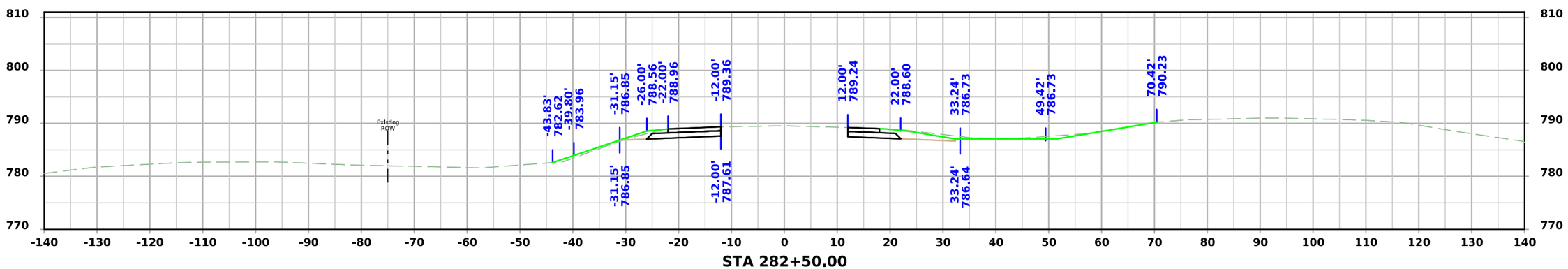
US 151 SB



STA 283+00.00



STA 282+75.00

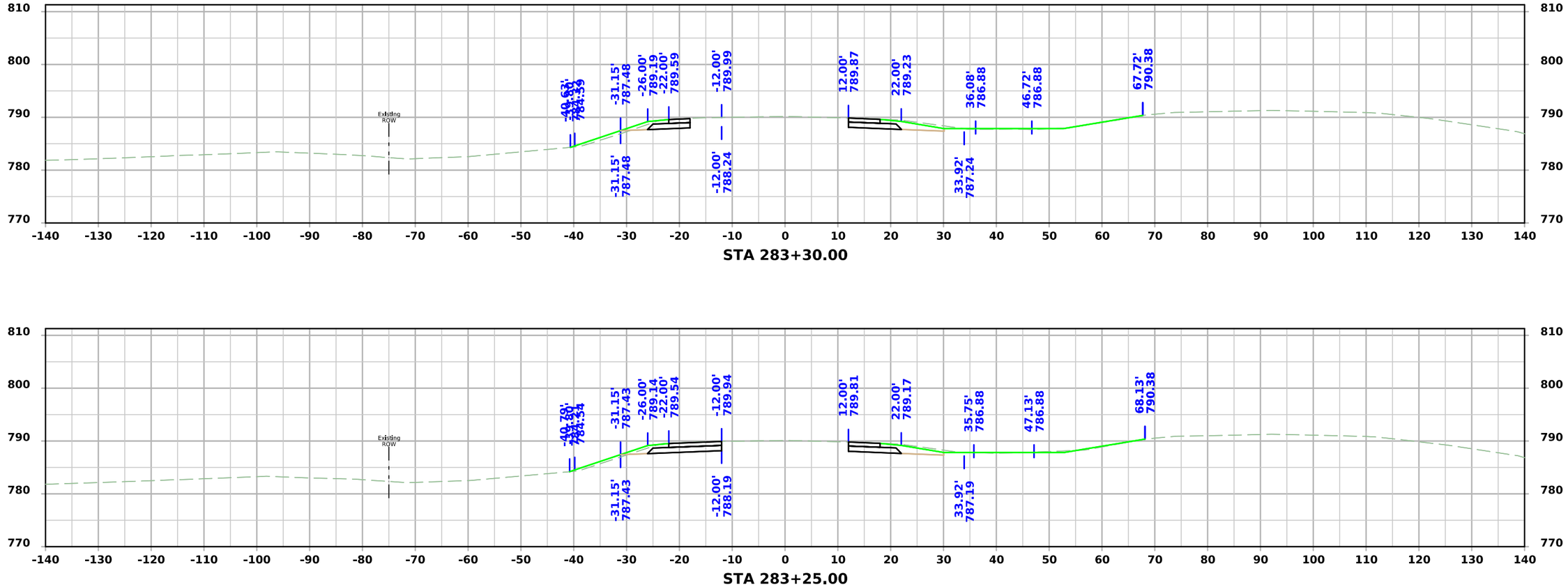


STA 282+50.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER W.27

10:50:58 AM 12/19/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Cross_Sections\XS_ML151N_53151134Z10.dgn

US 151 SB



STA 283+30.00

STA 283+25.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery\Bell\Schinstock	JONES COUNTY	PROJECT NUMBER BRF-151-4(134)--38-53	SHEET NUMBER W.28

10:50:59 AM 12/19/2024 cschins pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5315102022\Design\CADD_Files\Cross_Sections\XS_ML151N_53151134Z10.dgn