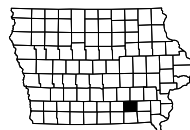


**WAPELLO COUNTY**

PCC Pavement - Grade and New  
BRF-063-2(172)--38-90

LETTING DATE  
12-16-2025



INDEX OF SHEETS	
No.	DESCRIPTION
<b>A Sheets</b>	<b>Title Sheets</b>
A.1	Title Sheet
A.2	Location Map Sheet
<b>B Sheets</b>	<b>Typical Cross Sections and Details</b>
B.1 - 3	Typical Cross Sections and Details
<b>D Sheets</b>	<b>Mainline Plan and Profile Sheets</b>
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2 - 3	US 63
<b>G Sheets</b>	<b>Survey Sheets</b>
G.1	Reference Ties and Bench Marks
G.2 - 3	Horizontal Control Tab. & Super for all Alignments
<b>J Sheets</b>	<b>Traffic Control and Staging Sheets</b>
J.1	Traffic Control Plan
<b>W Sheets</b>	<b>Mainline Cross Sections</b>
* W.1	Cross Sections Legend & Symbol Information Sheet
* W.2 - 8	Mainline Cross Sections
	* Color Plan Sheets



PLANS OF PROPOSED IMPROVEMENT ON THE  
**PRIMARY ROAD SYSTEM**  
**WAPELLO COUNTY**  
PCC Pavement - Grade and New  
Abandoned RR 4.8 mi N of Co Rd J15  
(Bridge Removal)

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
20
PROJECT IDENTIFICATION NUMBER
21-90-063-010
PROJECT NUMBER
BRF-063-2(172)--38-90
R.O.W. PROJECT NUMBER
NHSN-063-2(173)--2R-90

**Earthwork Summary**

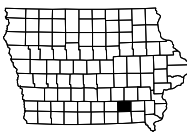
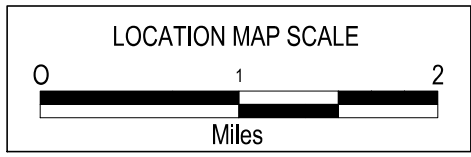
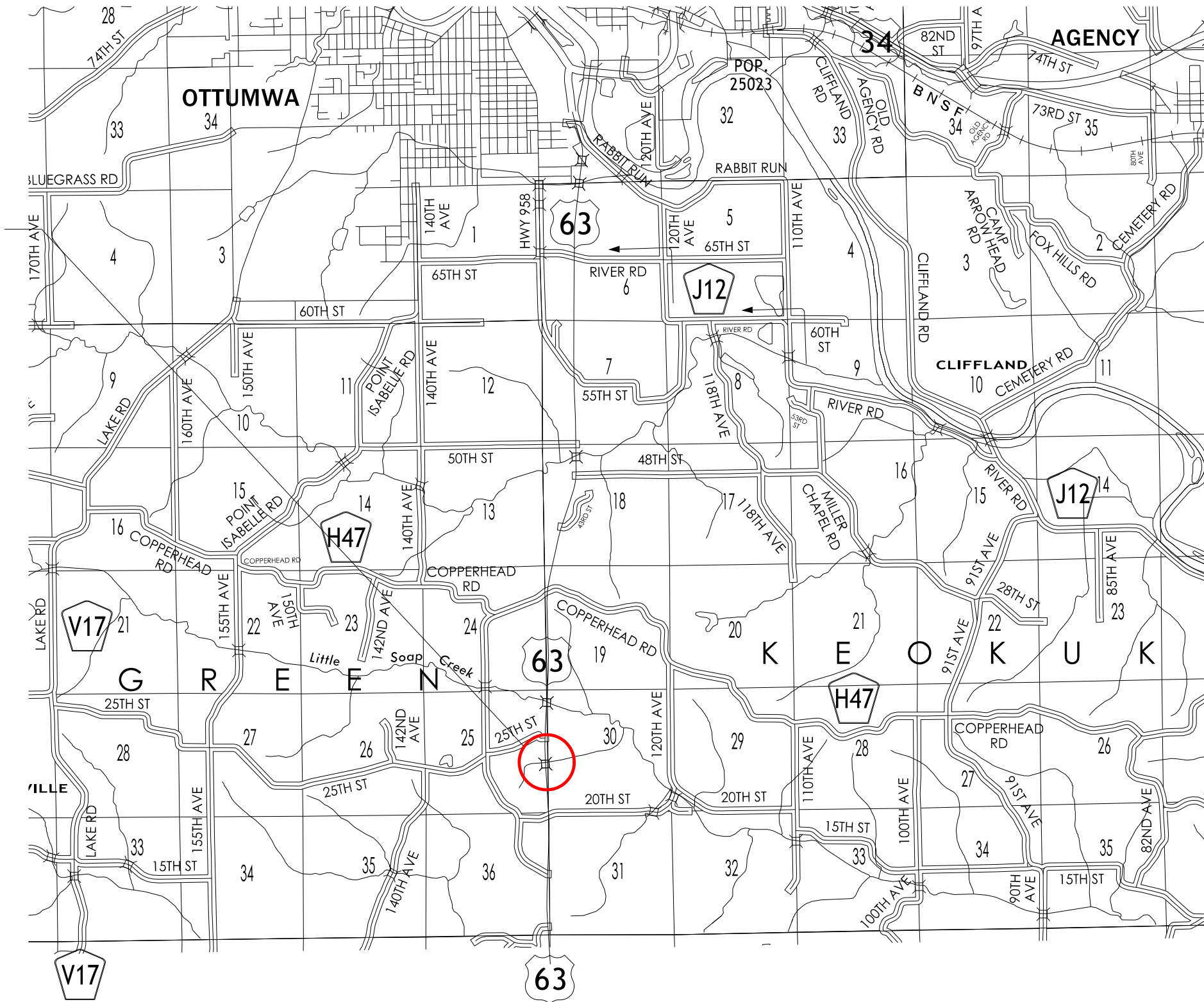
<b>Fill (Shrink 30%)</b>	<b>23,661 CY</b>
<b>Cut</b>	<b>3,204 CY</b>
<b>Need</b>	<b>20,457 CY</b>

PRELIMINARY PLANS

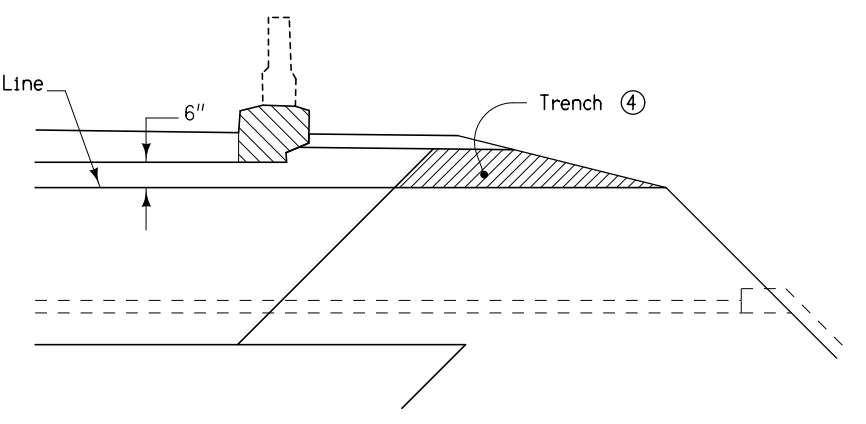
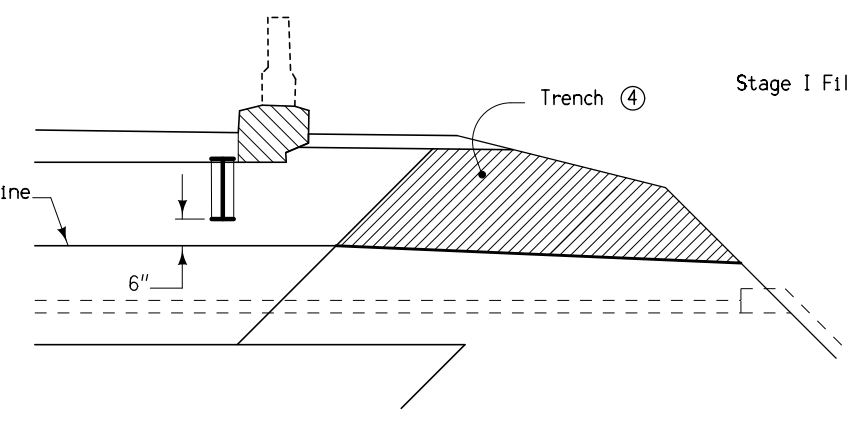
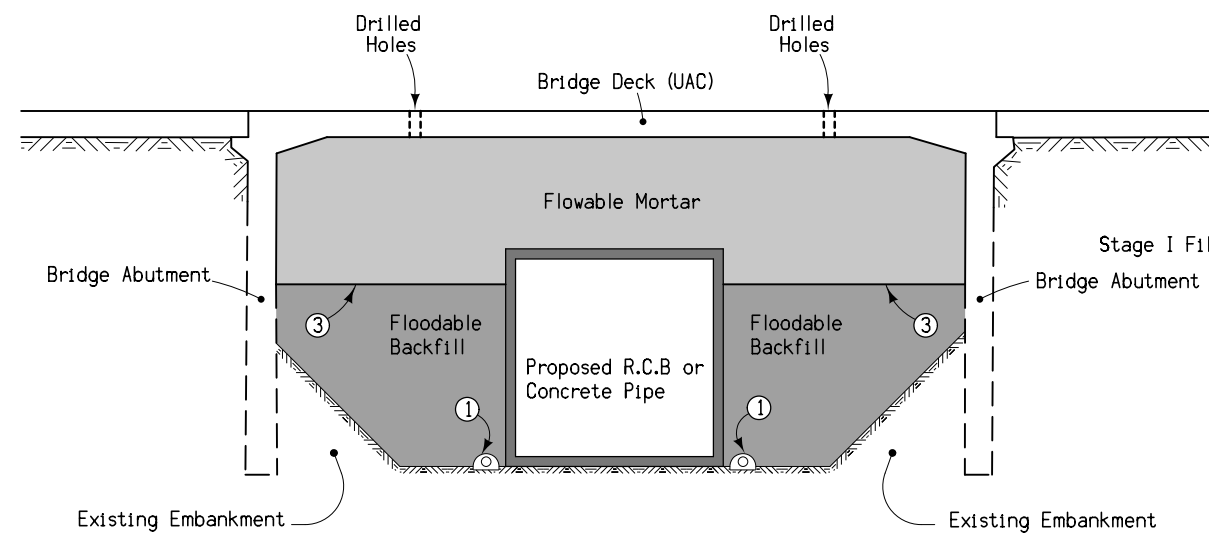
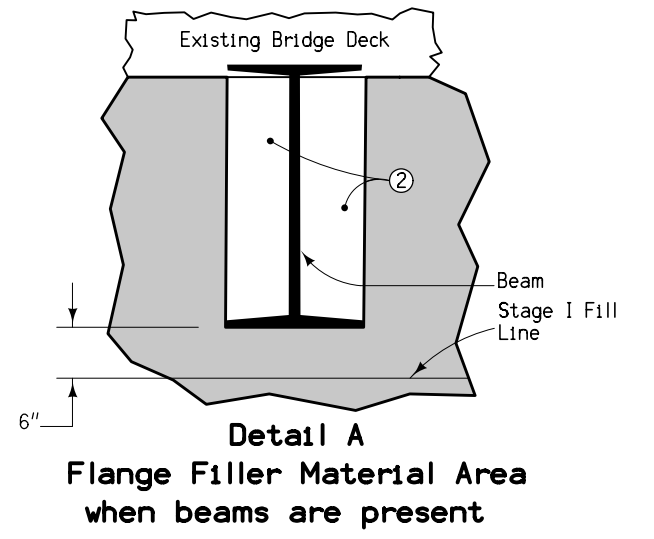
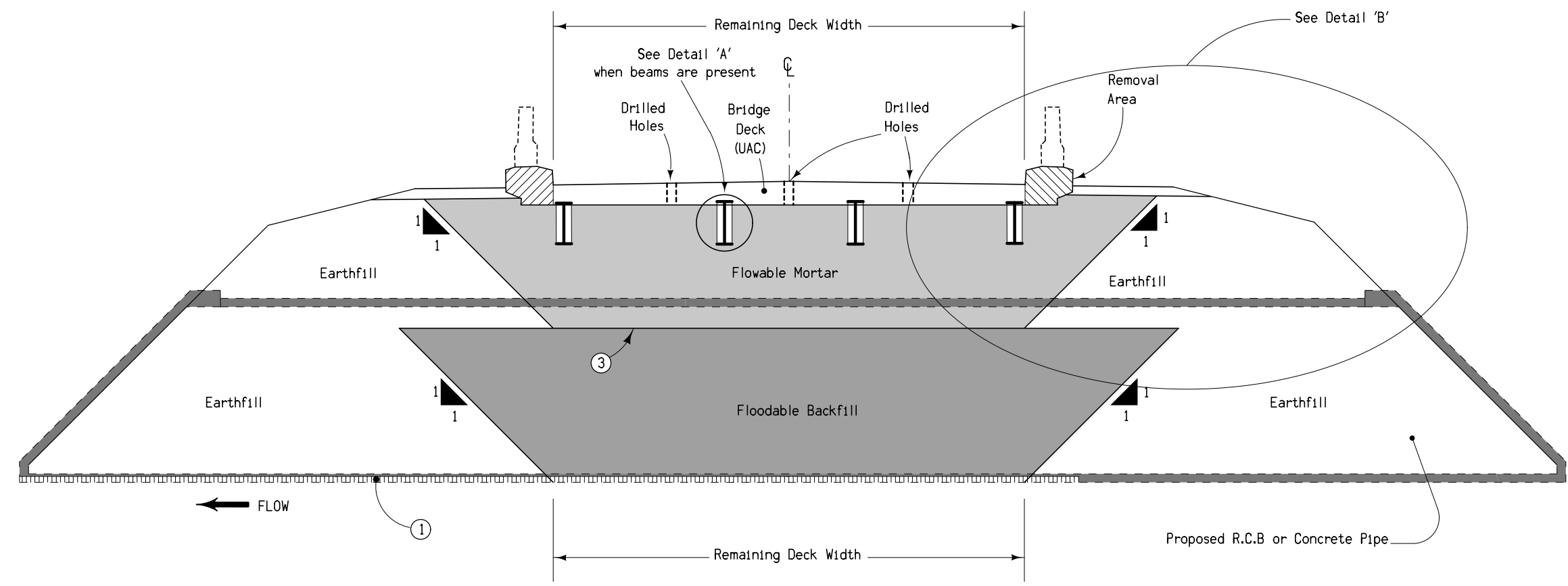
Subject to change by final design.

**D5 PLAN - Date: 07-03-2024**

Project Location:  
 STA 72+52.39  
 FHWA 50590  
 MAINT. NO. 9028.1S063



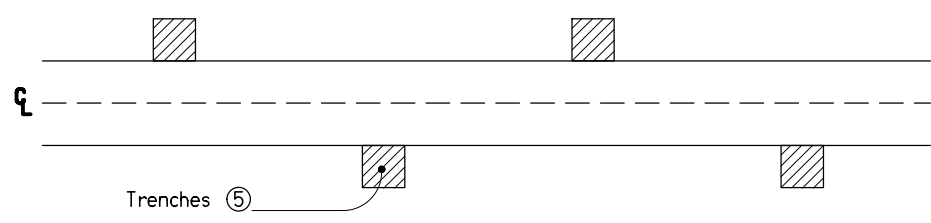




Section along Centerline

Detail B (Beam Bridge)

Detail B (Slab Bridge)

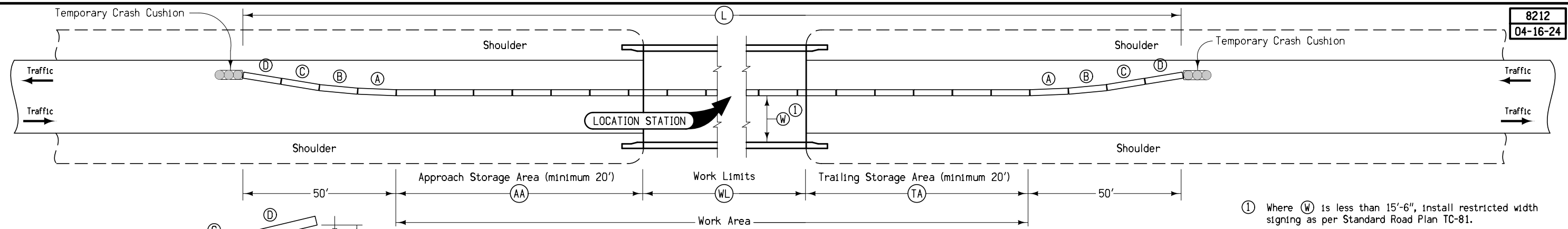


Trench Layout

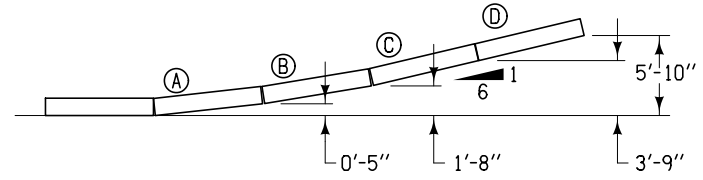
Denotes pay limits for flowable mortar  
 Denotes pay limits for flooded backfill

- ① 4" Subdrain at flowline elevation of culvert with 4" cover of porous backfill.
- ② Place Flange Filler Material to fill pocket area between flanges to prevent flowable mortar from building up. Flange Filler Material is incidental to flowable mortar.
- ③ Fill void with the maximum amount of Floodable Backfill possible. Distance from Floodable Backfill to bridge beams (when present) or bridge deck shall not exceed 5'.
- ④ Cut trenches in the soil plug to provide drainage for the flowable mortar. Backfill the trenches with open graded crushed stone, gravel, or recycled PCC to allow water to drain. Backfill material is incidental to flowable mortar.
- ⑤ Place trenches at 20' spacing with a minimum of two trenches on each side of the roadway.

**FILL FOR CULVERT USED IN BRIDGE REPLACEMENTS**



① Where (W) is less than 15'-6", install restricted width signing as per Standard Road Plan TC-81.



**BARRIER OFFSETS FOR FLARE SECTIONS**

Station	Side	(AA)	(WL)	(TA)	(L)	Anchored X	(W) ①	Remarks
		Feet	Feet	Feet	Feet		Ft-Inches	

**TEMPORARY CONCRETE BARRIER LAYOUT  
for Two-Way Traffic**

### SURVEY SYMBOLS

	Interstate Highway Symbol		Septic Tank
	U.S. Highway Symbol		Cistern
	Iowa Highway Symbol		L.P. Gas Tank (No Footing)
	County Road Highway Symbol		Underground Storage Tank
	Evergreen Tree		Latrine
	Deciduous Tree		Satellite TV Dish
	Fruit Tree		Water Hook Up
	Shrub (Bushes)		Radio Tower
	Timber		Tower Anchor
	Hedge		Guardrail (Beam or Cable)
	Stump		Guard Post (one or two)
	Swamp		Guard Post (over two)
	Rock Outcrop		Filler Pipe
	Broken Concrete		Gas Valve
	Revetment (Rip Rap)		Water Valve
	Cemetery		Speed Limit Sign
	Grave		Mile Marker Post
	Cave		Sign
	Sink Hole		Traffic Signal Control Box
	Board Fence		Rail Road Signal Control Box
	Chain Link or Security Fence		Telephone Switch Box
	Wire Fence		Electric Box
	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)		

### UTILITY LEGEND

Sub-Surface Utility Mapping Quality Level is in accordance with CI/ASCE 38-02 Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data.

Remark Abbreviations  
 QLA Quality Level A Highest guideline quality level  
 QLD Quality Level D Lowest guideline quality level

	FO1D, IOWA COMMUNICATIONS NETWORK - Quality D
	FO2D, CENTURYLINK - Quality D
	WL1D, WAPELLO RURAL WATER - 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.	
Lavender	(9)		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
Gray, Dark	(112)		Proposed Grade and Pave Shading "In conjunction with a paving project"
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
Green, Light	(225)		Existing Pavement 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

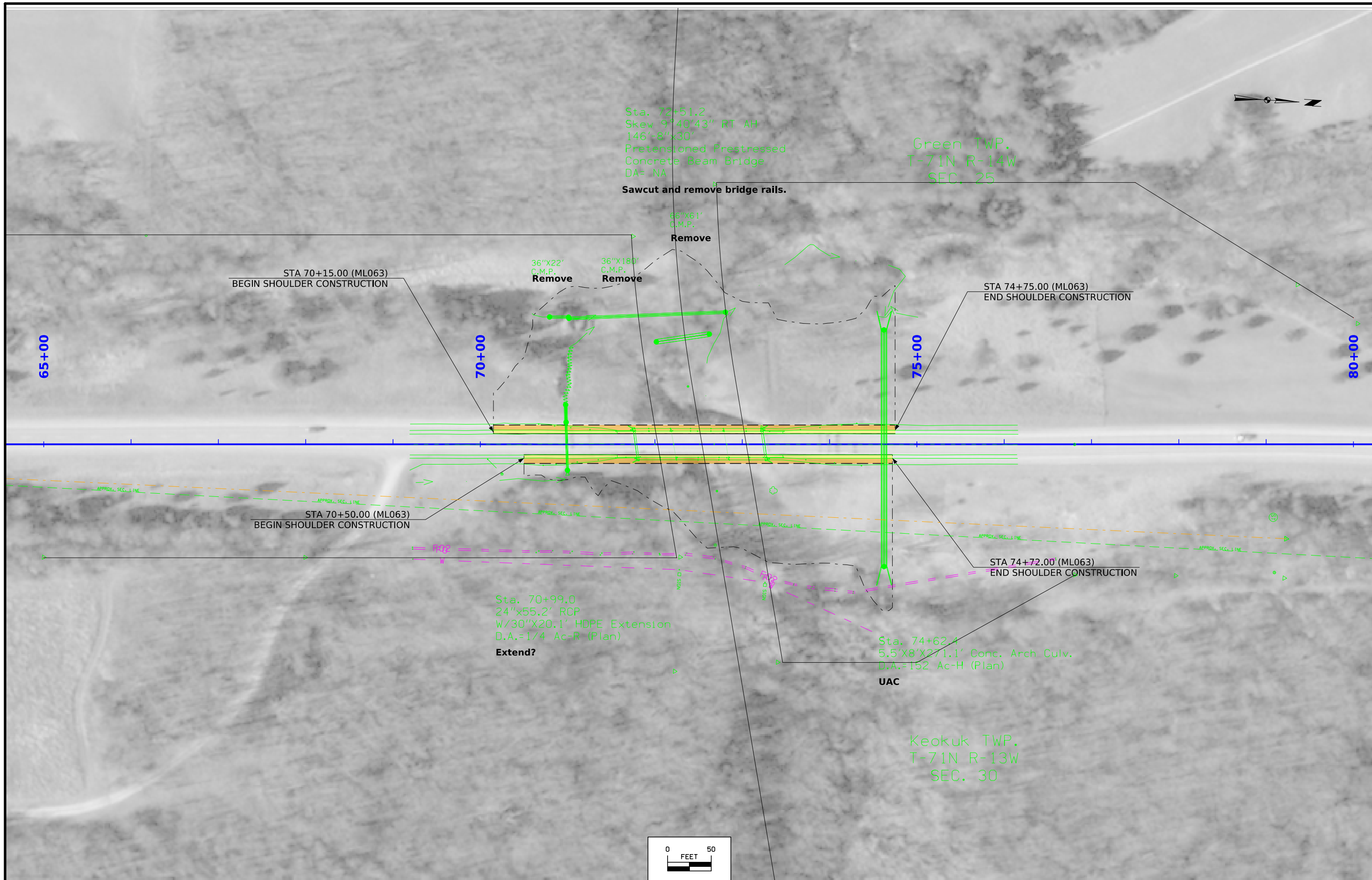
	Reference Point		Survey Line
	Station		Section Corner
	Ground Line Intercept		Saw Cut
	Guardrail		Trench Drain
	HighTension Cable Guardrail		Sheet Pile
	Pavement Removal		Clearing & Grubbing Area

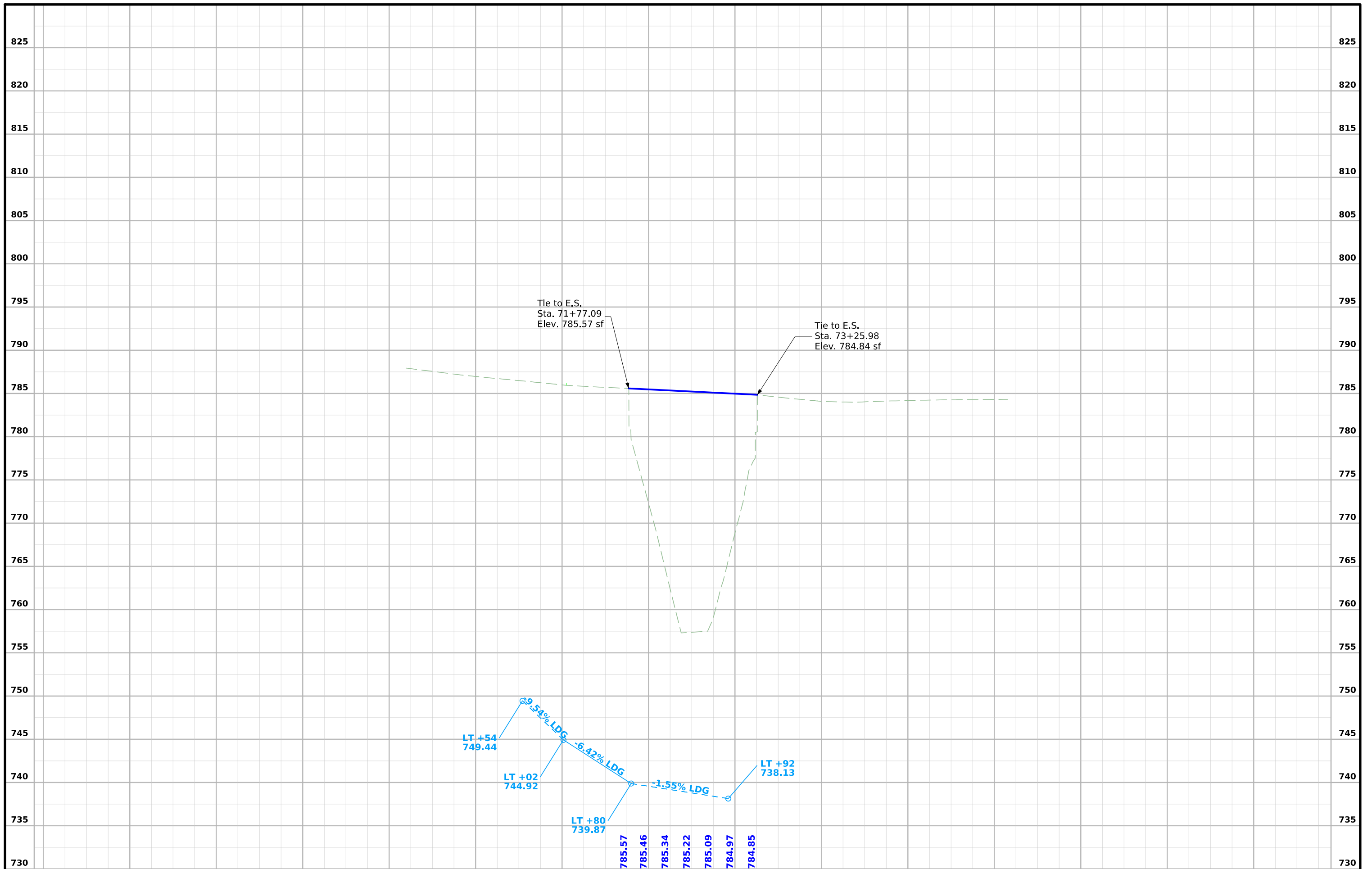
### RIGHT-OF-WAY LEGEND

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

## PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

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







## Survey Information

### SURVEY INDEX

County: Wapello

PIN: 21-90-063-010

Project Number: BRF-063-2(172)--38-90

Location: Abandoned RR 4.8 mi N of Co Rd J15 (Bridge Removal)

Type of Work: PCC Pavement - Grade and New

Project Directory: 9006301021

PI Sta. 47+10.00 As-built Plans Project No. F-42(7).  
Survey PI Sta. 47+10.00.

PI Sta. 80+98.63 As-built Plans Project No. F-42(7).  
Survey PI Sta. 80+97.48.

### Survey Personnel

Nels Sutherland – Survey Party Chief

Myron Fox – Survey Party Chief

Sam Schilb – Assistant Survey Party Chief

### Date(s) of Survey

Begin Date 01/25/2023

End Date 03/21/2023

### General Information

This survey is for the removal of the US 63 bridge (FWA 50590, Maint No. 9028.1S063) on the abandoned R.R. 4.8 miles north of County Road J15. This survey request was for the US 63 corridor only. 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 12**

**(U.S. SURVEY FOOT)**

**VERTICAL DATUM: NAVD88**

**GEOID MODEL: 2018u3**

### Alignment Information

The horizontal alignment for U.S. Hwy 63 is a retrace of As-built Plans No. F-42(7). Survey stationing was equated to the plan PI at Sta. 47+10.0 and ran ahead without equation.

Survey stationing relates to as built plan stationing as follows:

## 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 12 (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 12 (U.S. Survey Foot)

VERT. DATUM: NAVD88

Geoid Model: 2018u3

Point Name	Northing	Easting	Elevation	Code Description
300	6201692.39	22870621.32	816.89	CP 5/8th" x 42" Rebar set 4" below surface from the intersection of Hwy 63 and 20th St proceed N along Hwy 63 100' point is 100' E of CL Hwy 63 and 64' N of CL 20th St
32	6213025.93	22870859.74	803.82	CP Wapello Co Pt found as described
301	6204938.47	22870491.21	794.26	CP 5/8th" x 42" Rebar set 4" below surface from the intersection of Hwy 63 and 25th St proceed N 28' along Hwy 63 point is 133' E of CL Hwy 63 and 40' N of CL drive
31	6196507.93	22870576.12	808.38	CP Wapello Co Pt found as described

<b>108-23A</b> 08-01-08	<h3>TRAFFIC CONTROL PLAN</h3>
<p>Traffic on US 63 shall be maintained at all times.</p> <p>One lane of traffic shall be maintained at all times via the use of TC-217 with TBR and Signals during the removal of bridge rail and guardrail, and installation of flowable mortar and geofoam.</p>	

<b>111-01</b> 04-17-12	<h3>COORDINATED OPERATIONS</h3>
<p>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.</p>	
Project	Type of Work
None Provided	

<b>108-25</b> 10-21-14	<h3>511 TRAVEL RESTRICTIONS</h3>
---------------------------	----------------------------------

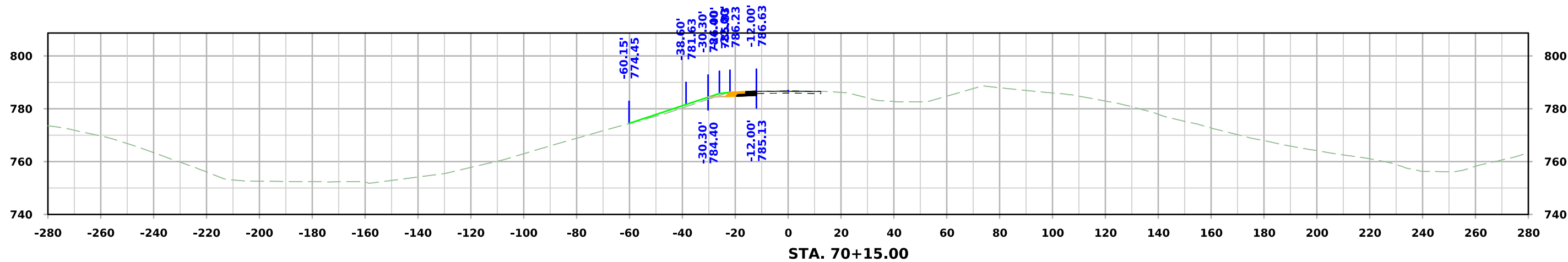
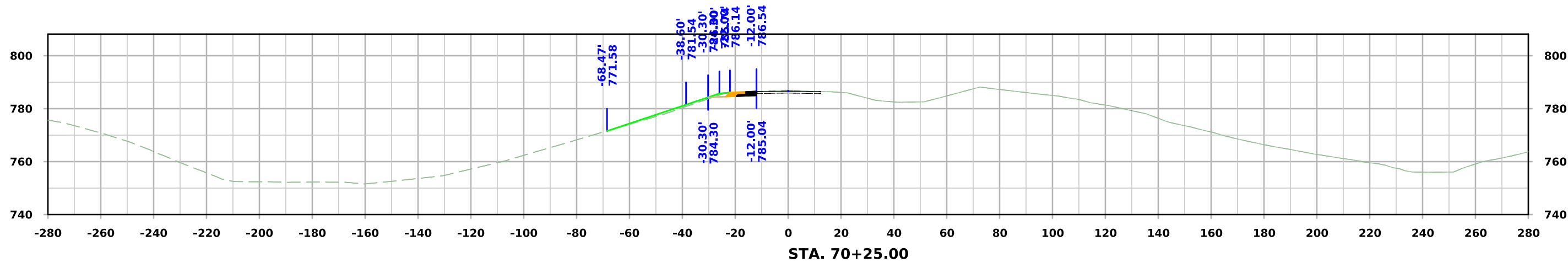
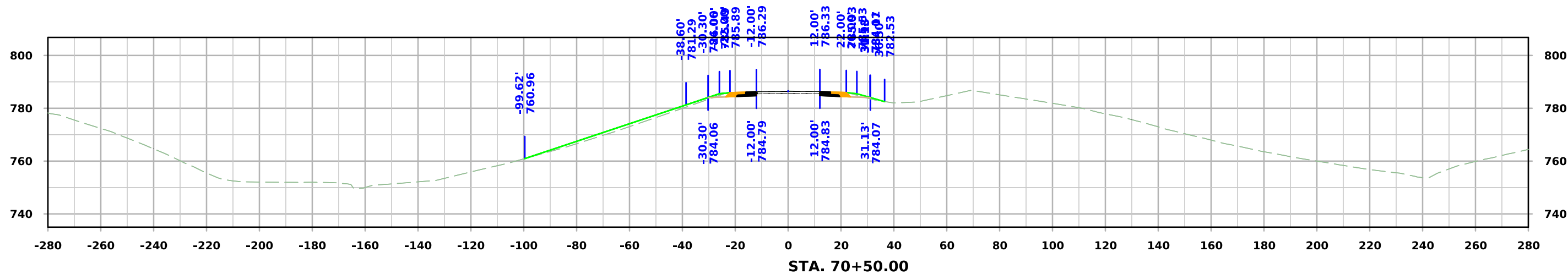
Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No., Structure ID, or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
			No Travel Restrictions Expected									

## CROSS SECTION VIEW COLOR LEGEND

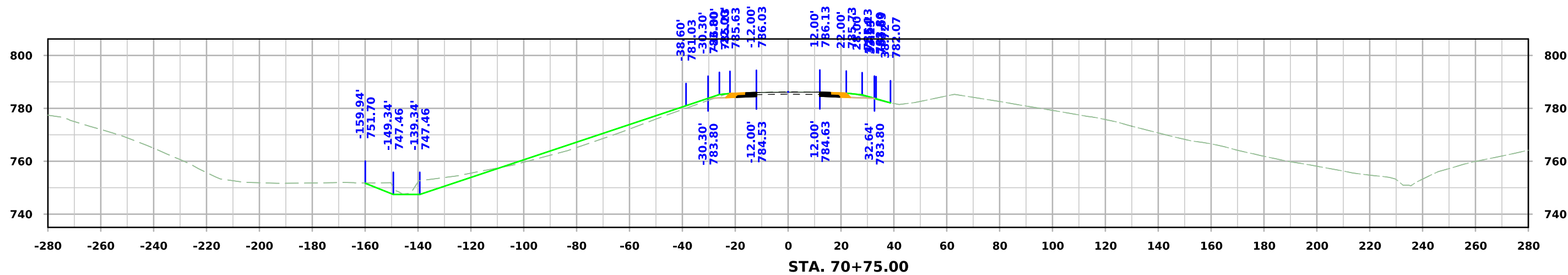
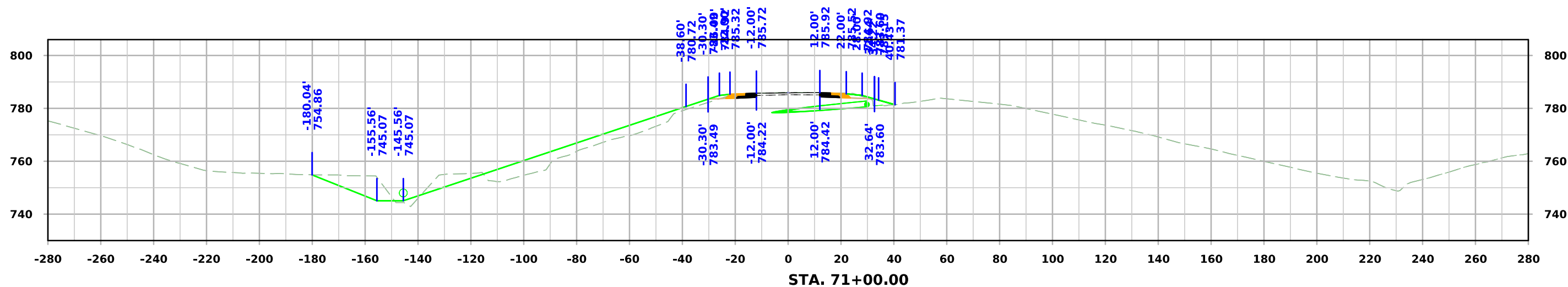
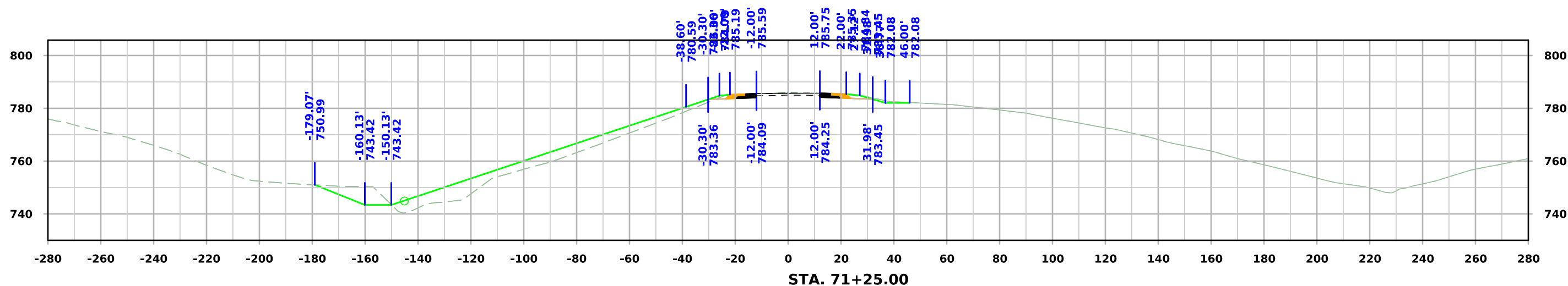
Design Color No.	Feature	Design Color No.	Feature
<b>Aggregate</b>			
(64)	Choke Stone	(112)	Noise Wall
(42)	Engineering Fabric	(112)	Noise Wall Footing
(8)	Flooded Backfill	(112)	Retaining Wall Back
(92)	Macadam Stone	(112)	Retaining Wall Back Excavate
(20)	Modified	(112)	Retaining Wall Face
(12)	Plowing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

# CROSS SECTIONS LEGEND AND INFORMATION SHEET

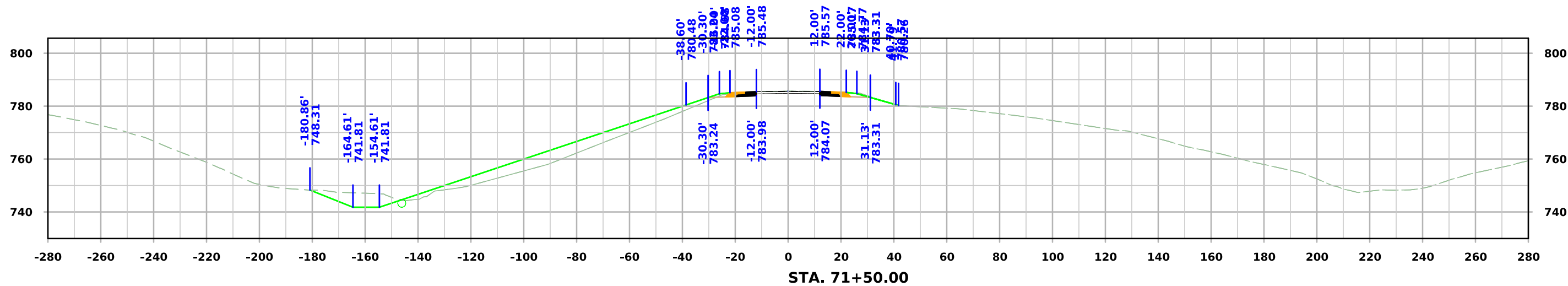
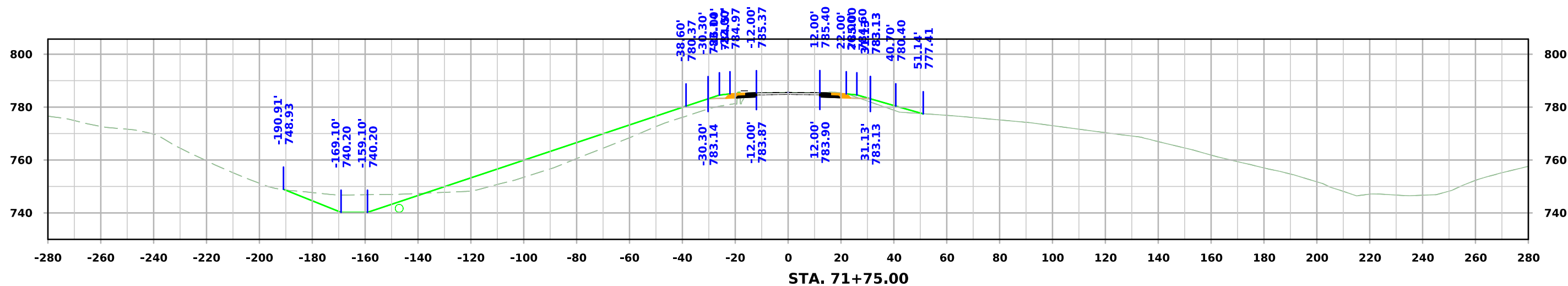
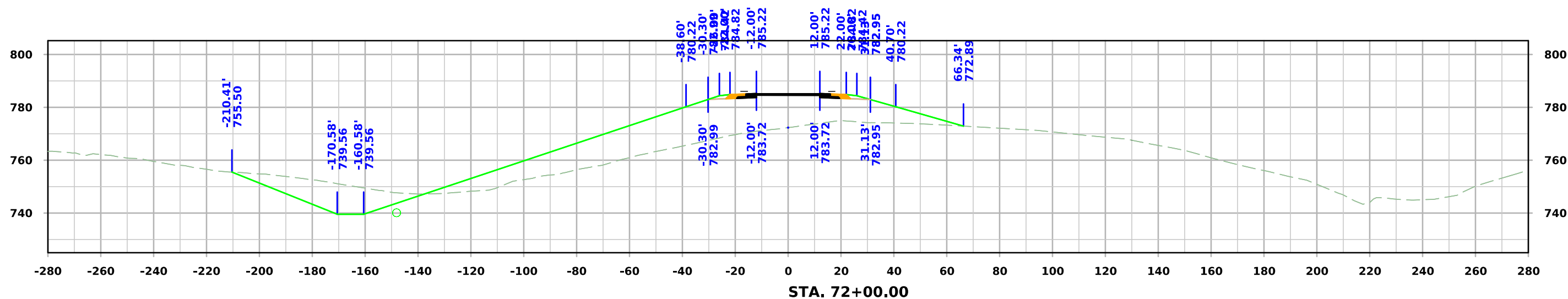
(COVERS SHEET SERIES W, X, Y, & Z)



# US 63

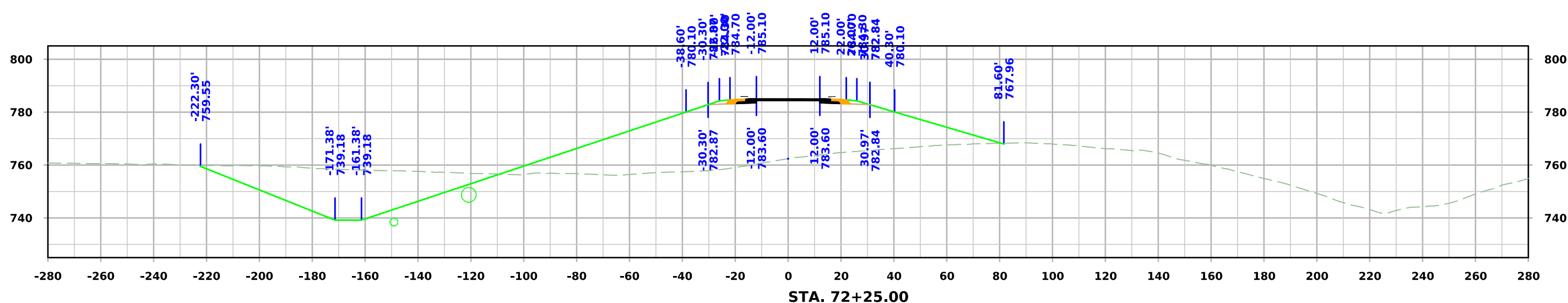
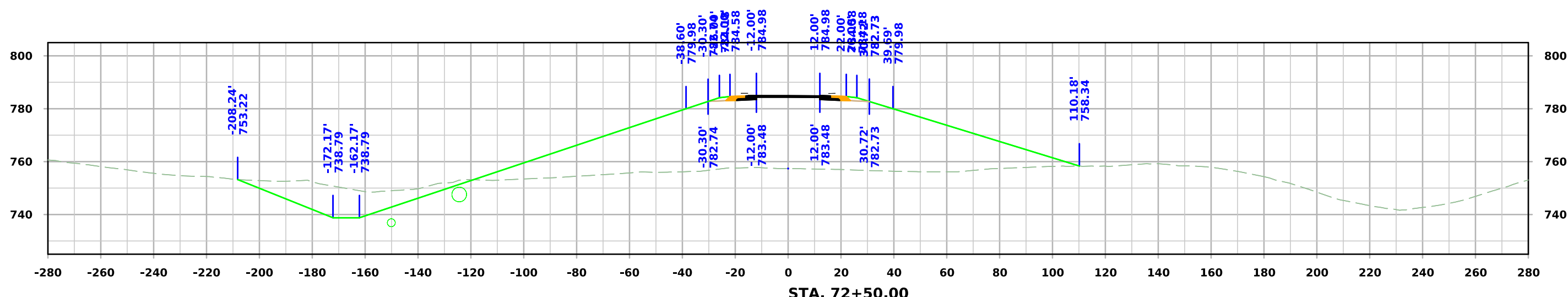
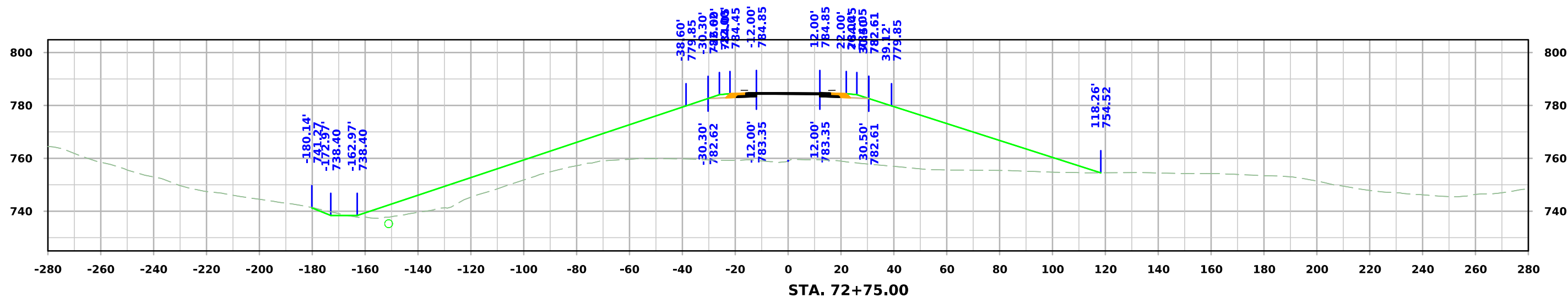


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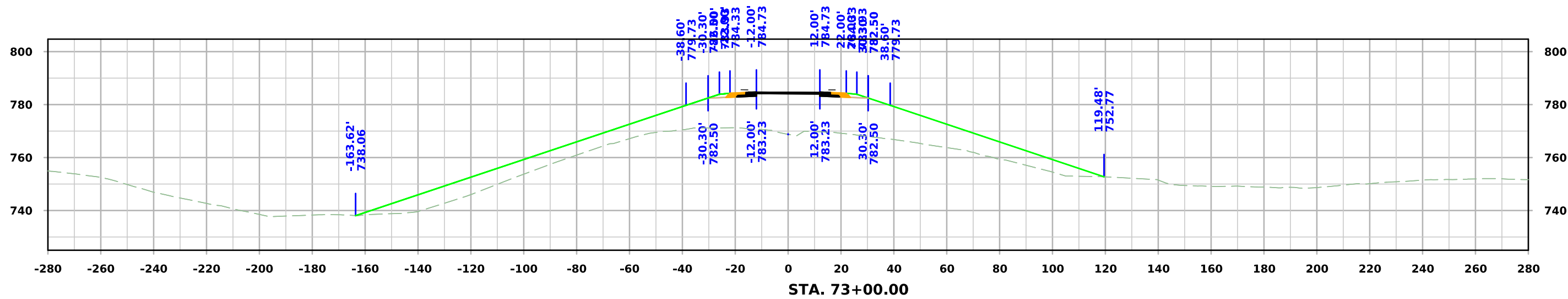
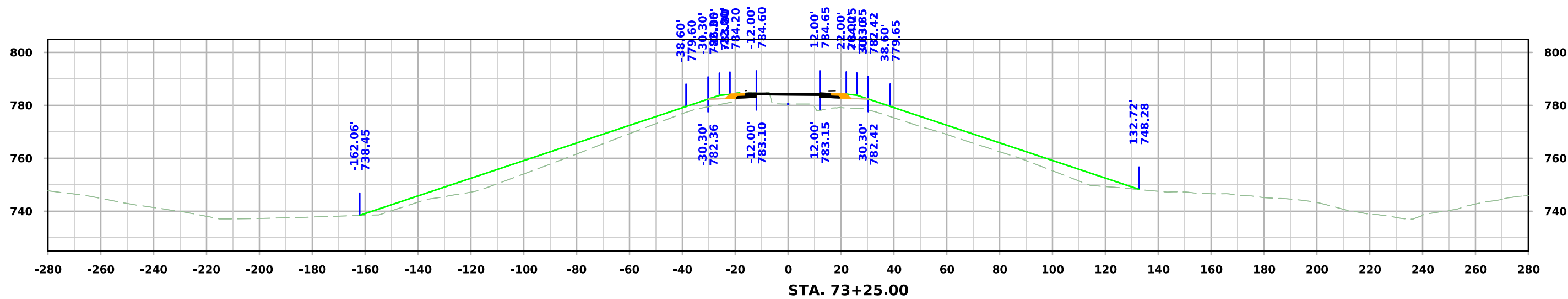
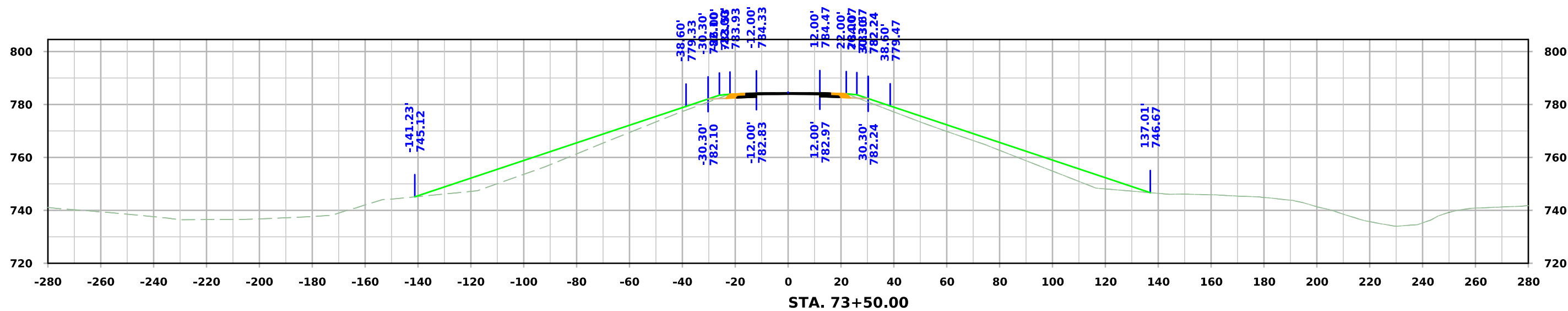




# US 63



# US 63



# US 63

