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PLANS OF PROPOSED IMPROVEMENT ON THE
PRIMARY ROAD SYSTEM
POWESHIEK COUNTY
RCB Culvert-Unspecified
Stream 4.4 mi N of Co Rd G17

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
	..
PROJECT IDENTIFICATION NUMBER	
22-79-063-010	
PROJECT NUMBER	
BRF-063-4(058)--38-79	
R.O.W. PROJECT NUMBER	

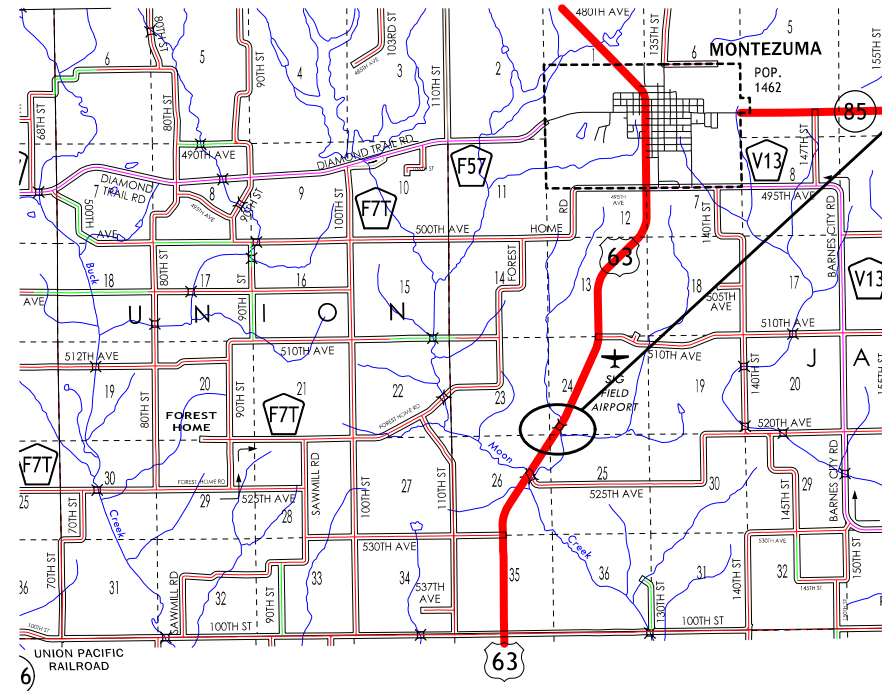
DESIGN DATA RURAL			
2027	AADT	1,700	V.P.D.
2047	AADT	2,000	V.P.D.
20	DHV	-	V.P.H.
	TRUCKS	24	%
	Total		
	Design ESALs	-	

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

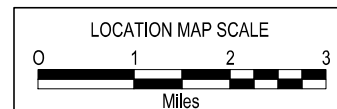
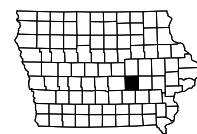
PRELIMINARY PLANS

Subject to change by final design.

D2 PLAN - Date: 3/14/2024



PROJECT LOCATION
 Ref. Loc. 85.1
 FHWA # 700650



IOWA DEPARTMENT OF TRANSPORTATION

TO OFFICE: District 1
ATTENTION: Allison Smyth
FROM: John E. Bartholomew
OFFICE: Design
SUBJECT: Project Concept Statement; (Final, D0)

DATE: February 14, 2024
PROJECT: Poweshiek County
BRF-063-4(058)--38-79
PIN: 22-79-063-010

JEB:jaa
Attach.
cc:

C. Purcell
M. Dell
M. A. Swenson
S. Majors
D. L. Newell
W. A. Sorenson
A. A. Welch
B. Hofer
S. J. Gent
T. Jerman
M. Todsen
T. Lovan
R. Meyer
M. E. Khoda
J. Ellis
J. Vortherms
J. Garton
S. Nixon

M. J. Kennerly
J. S. Nelson
R. A. Younie
A. Poole
B. Bradley
E. C. Wright
J. Harris
G. Karssen
S. Anderson
K. K. Patel
M. Van Dyke
C. Brakke
J. Hauber
K. Olson
S. Seivert
A. Loonan
S. Passick
S. Ebel

K. D. Nicholson
M. Nop
D. E. Sprengeler
K. Brink
J. W. Laaser-Webb
M. E. Ross
C. C. Poole
B. E. Azeltine
D. Stokes
R. Harris
B. Dolan
B. Hucker
S. Sersland
S. Neubauer
B. Beavers
J. Becker
R. Ellis
FHWA

This project involves the replacement of the US 63 bridge (7985.1S063) over a stream.

A concept review was held on December 21, 2023. Those present included Jeremy Vortherms, Sean Passick, Scott Nixon, Ben Adey and Mohamed Mohamed from the District 1 Office; Jim Ellis from the Office of Bridges and Structures; Scott Ingersoll, Tim Sheets and Blair Spots from Foth; and Kevin Patel, John Bartholomew and Joe Adams from the Office of Design.

The two alternatives considered were:

1. Replace the existing 17' x 10' RCB with a 16' x 9' x 144' Single Reinforced Concrete Box Culvert (RCB).
2. Replace the existing 17' x 10' RCB with a 90' x 40' Single Span Pretensioned Prestressed Concrete Beam Bridge (PPCB).

Alternative 1 is the preferred alternative due to lower maintenance cost (see attached concept for details). Additional right of way will be required. Traffic will be maintained by an offsite detour.

The Draft Project Concept Statement was sent out for review and comment with concerns to be resolved by Monday, February 12, 2024. Comments received during the review period have been considered and resolved.

FINAL PROJECT CONCEPT STATEMENT

US 63 Bridge over Stream 4.4 mi N of Co Rd G17

Poweshiek County
BRF-063-4(058)--38-79
PIN: 22-79-063-010
Stream 4.4 mi N of Co Rd G17
Maint. No. 7985.1S063
FHWA 700650

Highway Division
Office of Design

John Bartholomew, P.E.
515-239-1540

February 14, 2024

Poweshiek County
BRF-063-4(058)--38-79
PIN: 22-79-063-010
Page 2



With Route



Against Route



Left Profile



Right Profile

I. STUDY AREA

A. Project Description

This project involves the replacement of the US 63 bridge (Maint. No 7985.1S063) over a stream.

The two alternatives considered were:

1. Replace the existing 17' x 10' RCB with a 16' x 9' x 144' Single Reinforced Concrete Box Culvert (RCB).
2. Replace the existing 17' x 10' RCB with a 90' x 40' Single Span Pretensioned Prestressed Concrete Beam Bridge (PPCB).

Alternative 1 is the preferred due to lower maintenance cost.

B. Need for Project

Bridge was originally built in 1922 as a high abutment girder bridge with a concrete floor. In 1938 the superstructure was replaced with a slab and bridge was converted to a culvert using the existing backwalls and widened. The culvert now has more fill than originally designed allowed. Due to the condition of the overall structure, it is recommended the culvert be replaced.

C. Present Facility

The existing structure is a 17' x 10' slab culvert constructed in 1938.

US 63 in the project area is 24' wide HMA pavement with 4' wide HMA shoulders, 4' wide granular shoulders and 3:1 foreslopes, constructed in 1939. HMA resurfacing and widening in 1988 and HMA resurfacing and widening was accomplished in 2017.

D. Traffic Estimates

The 2027 construction year and 2047 design year average daily traffic estimates are 1700 ADT with 24 % trucks and 2000 ADT with 24 % trucks, respectively.

E. Sufficiency Ratings

US 63 is classified as an commercial and industrial route and is a maintenance service level "C" roadway. The federal bridge sufficiency rating is 74.9.

F. Access Control

Access rights will not be acquired for this project.

G. Crash History

During the five-year study period from January 1, 2018 through December 31, 2022, there was 1 crash, including, 0 fatal crashes, 0 personal injury crashes, and 1 personal property crash.

II. PROJECT CONCEPT

A. Feasible Alternatives

Alternative #1

A 16' x 9' x 144' precast reinforced concrete box (RCB), will be constructed, the existing culvert will need to be removed due to the skew being changed and reshaping required for the ditch.

Once the new embankment for the shoulders and 6:1/3:1 foreslope on the right and the 8:1 foreslope on the left have been placed adjacent to the RCB, the existing RCB, and guardrail can be removed. The new 8' wide shoulders (4' granular and 4' paved) can then be constructed. The flow line of the box will be buried 2' below the existing flow line in the channel. This will allow the bottom of the box to silt in and provide a natural bottom for fish passage. The existing ditches will need to be shaped to meet the inlet and outlet flowlines of the new RCB. Class E revetment will be placed at the ends of the RCB.

Apply erosion control and rural seeding and fertilizing to all disturbed areas.

Right of will be required for this project.

An off site detour will be required for this project.

Bridge Items

	<u>Estimated Cost</u>
New Culvert	\$339,000
Removal of existing RCB	8,000
Revetment	8,000
Mobilization - 10%	36,000
M & C - 20%	<u>78,000</u>
Bridge Total	\$ 469,000

Roadway Items

Clear & Grubb	\$ 8,700
Embankment in place, contractor furnished	1,000
Excavation, Class 13 waste	12,400
Topsoil, Strip, Salvage & Spread	400
Modified Subbase	21,700
Granular Shoulders	1,100
Pavement PCC 9.5"	75,900
Subdrain, Longitudinal 4"	13,200
Subdrain Outlet, DR-306	2,400
Removal of Steel Guardrail	3,000
Removal of Pavement	16,600
Erosion Control	50,000
Wetland Mitigation	50,000
Stream Mitigation	20,000
Seed & Fertilize	3,000
Pavement Markings	2,600
Traffic Control @ 5%	20,100
Mobilization @ 5%	20,100
M&C @ 30%	<u>80,500</u>
Roadway Total	\$ 402,700

Right of Way

\$ 12,000

Project Total

\$ 883,700

B. Detour Analysis

There will be an off-site detour. US 63 will be closed and an offsite detour will be utilized. It is anticipated the detour will be in place for approximately 180 days. The detour from the Junction of US 63 and Co Rd F57 go west for 7.0 miles to the junction of Co Rd F57 & IA 146, go south on IA 146 for 7.27 miles to the junction of IA 146 and US 63. Out of distance travel is 1.61 miles. The total distance user cost is anticipated to be \$136,713. The cost for county road maintenance will be \$20,430 as calculated by the Gas Tax Method. The cost for city road maintenance will be \$3,405 as calculated by the Gas Tax Method.

POWESHIEK COUNTY

C. Recommendations

It is recommended that the present structure be replaced, as described in Alternative No. 1.

D. Construction Sequence

It is anticipated that all work on this project will be awarded to one prime contractor. The Office of Bridges and Structures will coordinate the plan preparation with assistance from the Office of Design.

E. ADA Accommodations

There are no bike paths or sidewalks adjacent to US 63; therefore, no ADA accommodations are planned in conjunction with this project.

F. Special Considerations

This will not be a traffic critical project.

The ABC Rating Score of 30 is less than the first stage filter threshold of 50, therefore this bridge was not considered for accelerated construction.

No bike path or sidewalk will be required as part of this project.

Right of Way will be required for this project.

This project is not on a paddling route.

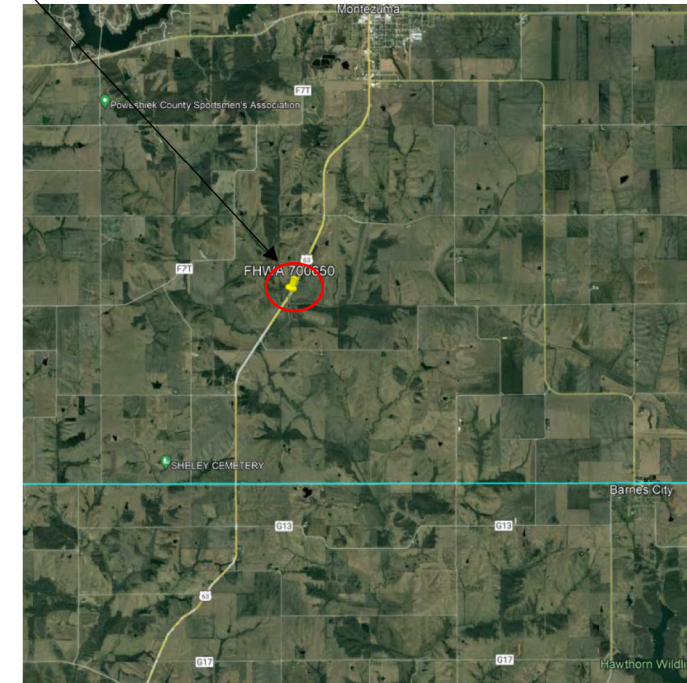
The proposed project will require a Section 404 Permit as the Drainage Ditch is considered a jurisdictional Water under guidance of the U.S. by the Army Corps of Engineers. We expect the project to authorized under Nationwide Permit #14 which is a routine process. Stream mitigation will be required under the terms of the new Nationwide Permits taking effect in March 2022.

G. Program Status

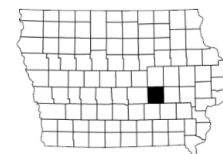
Site data has been developed by the Office of Design. This project is listed in the 2024-2028 Iowa Transportation Improvement Program, with \$12,000 programmed for right of way in FY 2027, and \$1,558,000 for replacement in FY 2027. Costs for this project may be eligible for bridge replacement funds. A schedule of events will be developed following approval of the Project Concept.

JEB:jaa

PROJECT LOC



ON US 63, STREAM 4.4 MI N OF CO RD G17
BRF-063-4(058)--38-79
PIN: 22-79-063-010



Project Location

Bridge Bureau Attachment for Concept Statement

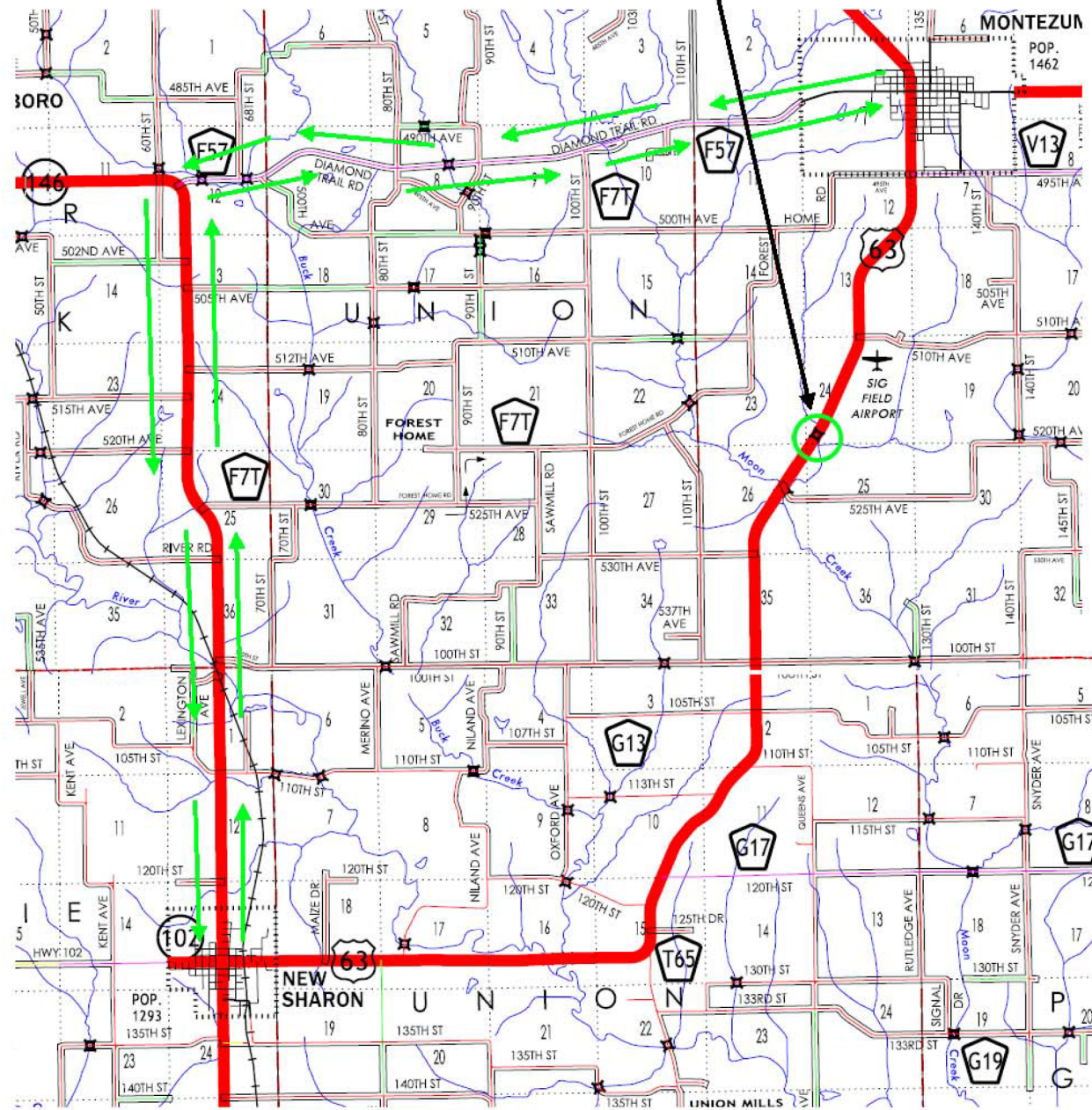
Date: October 11, 2023
By: Foth IE
Location: US 63 Culvert over Stream 4.4 mi N of Co Rd G17

County: Poweshiek County
 Phase No.: BRF-063-4(058)--38-79
 Project Code: 22-79-063-010

1. Regulatory/Coordination
 - a. Iowa DNR Flood Plain permit = No
 - b. Iowa DNR Sovereign Lands permit = No
 - c. Local Record of Coordination = Yes
 - d. Flood Insurance Study = Yes, Zone A, Panel 19157C0325B, 05/19/2014
 - e. Drainage District = No
 - f. Corps of Engineers Section 408 = No
 - g. State Water Trail or Paddling Route = No
 - h. Historic Structure = No
 - i. Federally owned land in vicinity = No
 - j. USGS or Iowa Flood Center (IFC) gage or sensor impacted? No
2. Hydrologic/Hydraulic Analysis/RIDB Dataset
 - a. Design discharges determined = Yes. Iowa Runoff Chart.
 - b. Hydraulic analysis done = Yes. Iowa Culvert Program.
 - c. Riverine Infrastructure Database (RIDB) = No. D.A. < 10 sq. mi.
3. Structure/Roadway Layout Considerations
 - a. Roadway profile grade raise is not anticipated.
4. Special construction issues
 - a. 45-degree standard headwalls are proposed but rotated an additional 5-degrees for a 50-degree L.A. skewed structure.
5. Special survey = No
6. Aesthetic enhancements = No
7. Other
 - a. Maintenance of Traffic - Off site detour

Special Survey:

None

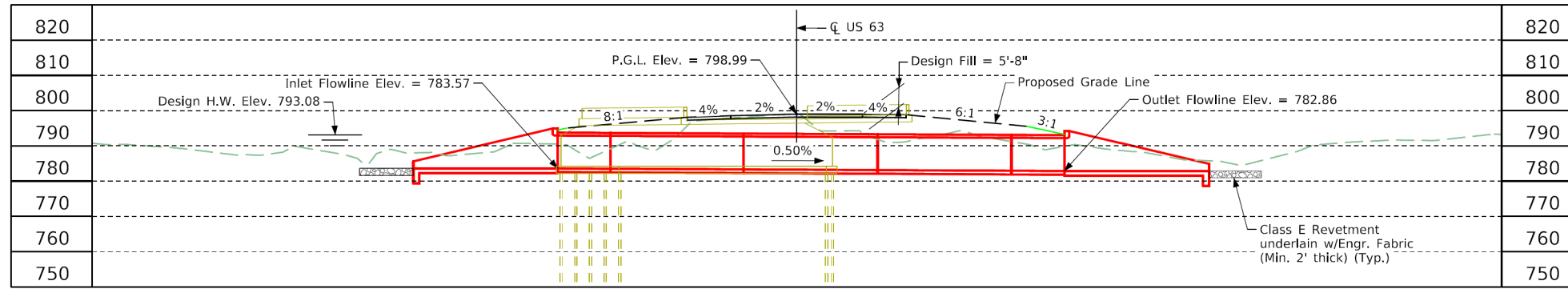


← DETOUR

Poweshiek County
 Stream 4.4 mi North of County Road G17
 BRF-063-4(058)--38-79
 PIN:: 22-79-063-010



Control Point:



Longitudinal Section Along \bar{C} Culvert
Anticipated Settlement = x'-x"; Design Fill = 5'-8"

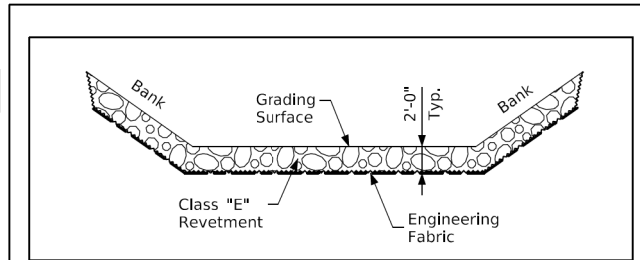
Note:
Flowline of culvert has been set 1'
below streambed.

Hydraulic Data

RIDB: Not Applicable
Drainage Area = 1178 Acres
 $Q_{50} = 1075$ cfs
HW Elev. = 793.08
Exit Velocity = 15.9 fps
Stream Slope = 29.6 Ft./Mi.

Traffic Estimate

20?? AADT ??? V.P.D.
2047 AADT 1700 V.P.D.
20?? DHV ??? V.P.H.
TRUCKS ?? %
Total
Design ESALs ???

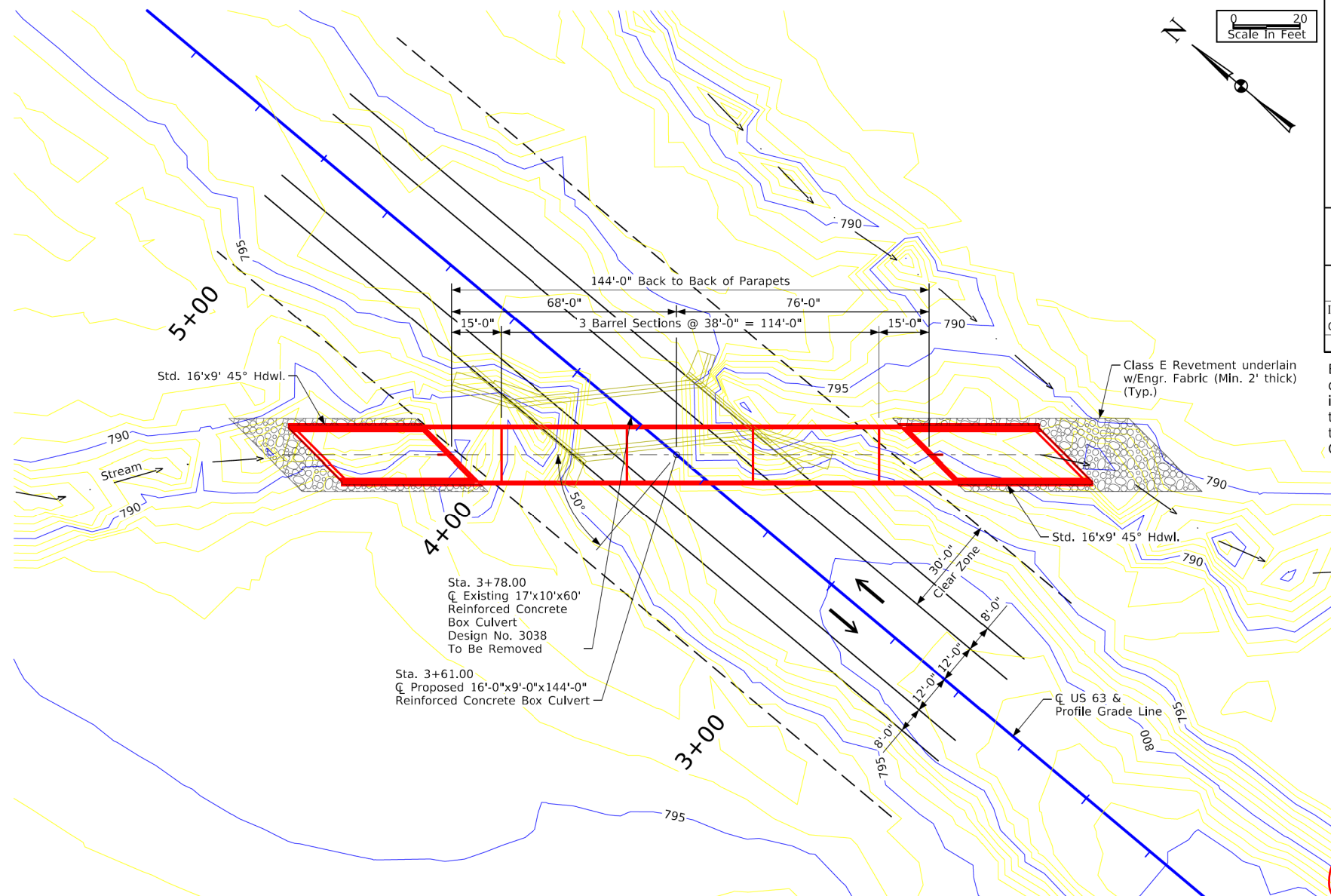


Typical Channel Protection

Estimated Revetment Quantities Included With Road Plans

Location	Revetment Class "E" (Ton)	Engineering Fabric (SY)	CL. 10 Channel Excavation (CY)
Inlet	65	60	40
Outlet	100	95	65
Totals	165	155	105

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.
Quantities shown for information only. See Road Sheets.



Situation Plan

Location

US 63 over Small Stream
T-78N R-15W
Section 24
Jackson Township
Poweshiek County
FHWA No. 700651
Bridge Maint. No. 7985.15063
Latitude 41.539547°
Longitude -92.544628°

Design For 50 Degree LA
16'-0" x 9'-0" x 144'-0"
Reinforced Concrete Box Culvert
Situation Plan
STA. 3+61.00 (\bar{C} US 63) Turn-in Date: Oct 2023
Poweshiek County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. ??? Design Sheet No. 1 of 1 FHWA/Asset 700651

FILE NO. TBD	ENGLISH	DESIGN TEAM TA/TAP	POWESHIEK COUNTY	PROJECT NUMBER BRF-063-4(058)--38-79	SHEET NUMBER V.1
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4:11:26 PM 10/10/2023 JAE pw:\projectwise.dot.int.lan:PWMain\Documents\Projects\7906301022\Bridge(58)_RCB Culvert-Unspecified\SHT_79063058_DDD_700650_Z09.dgn

Utilities

Poweshiek Water Association
Chad Coburn (Water)
chad@poweshiekwater.com

MidAmerican Energy Company
Matt Novy (Electrical)
mdnovy@midamerican.com
515.242.4224

D2 QUESTIONNAIRE

1. Are any of the following needed?
2. Contractor or designated Borrow area adjacent to the site?
3. Field Laboratory?
4. Construction Survey?
5. Removal and Reinstall Signs? Does the district maintenance crew want to handle this? Or do they prefer the Contractor handle it?
6. Clearing and Grubbing by area or by unit? If by unit, I need District to provide count.
7. Duration of the project?
8. Do the shoulders within the construction limits or beyond need to be reconstructed or resurfaced?
9. Are there existing drainage problems?
10. Are rumble strips going to be placed with these projects or a separate project?
11. Are there areas adjacent to the project where additional ditching needs done?
12. Are there any special events which need to be noted in the plan? Or is there a contact person who could provide this information closer to letting the project?
13. Is special erosion control needed (riprap, silt ditches, silt dikes, etc.)?
14. Tile lines? Location?
15. Speed Limit during construction?
16. Note existing subdrain outlets for Soils Design.
17. Are there any entrances within the project limits that have not been previously identified?
18. Note any special features not shown on plan.
19. Note condition of existing culverts.

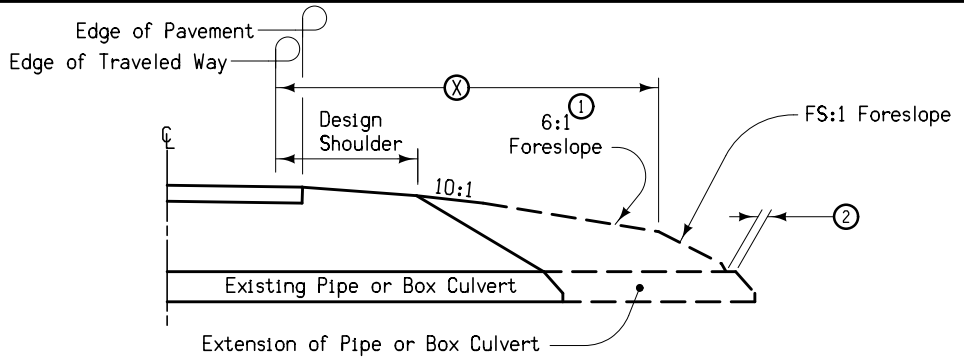
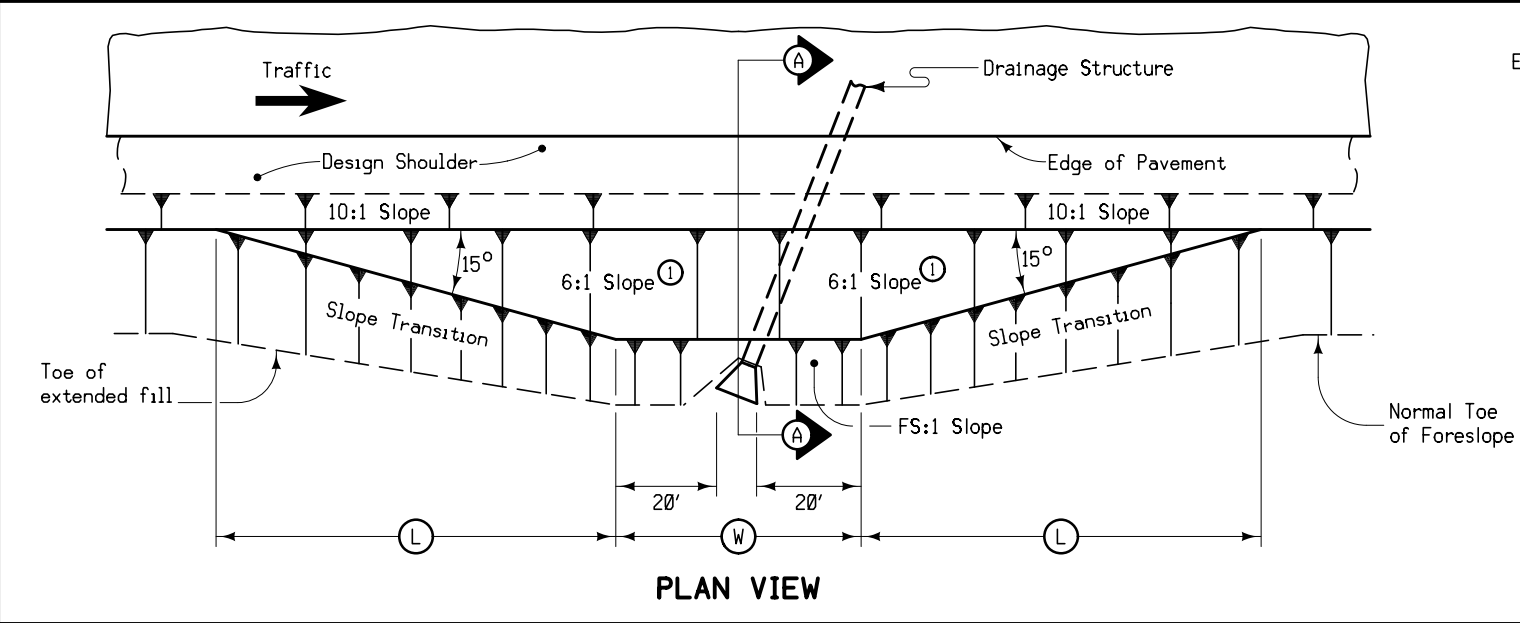
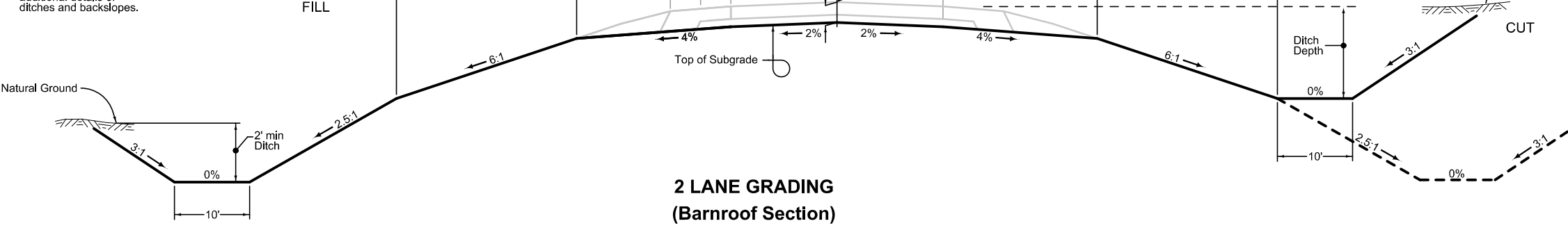
D2 QUESTIONNAIRE

20. Note existing G-Rail lengths and number of posts. Do any of the utilities need relocated (power/telephone poles) either permanently or temporarily for construction?
21. Speed limit
22. Is sight distance a problem?
23. Disposition of existing structure, guardrail, signs, etc. (213-1 or the District office)?
24. Any patching need done in the area or do the construction limits need extended? Is the District going to provide locations of patches by milepost?
25. Are there any historical items within the project?
26. Are there any endangered species within the area?
27. Are there any Wetland Impacts or any other Environmental issues?

ROAD IDENTIFICATION	LOCATION		DIMENSIONS			
	STATION TO STATION		Ⓛ Feet	Ⓡ Feet	ⓧ Inches	Ⓟ Feet
US 63	117+85.44	118+74.50	UAC	27-36.5	UAC	0-6
US 63	118+74.50	119+05.00	27-30.5	36.5	UAC	Var.
US 63	119+05.00	120+31.85	30.5-36.5	36.5-29	21.5	Var.
US 63	120+31.85	120+89.61	36.5-38.5	29-32	UAC	Var.
US 63	120+89.61	121+68.64	38.5-31.5	UAC	UAC	17-0

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.



DESIGNER INFO
4312
10-15-19

At locations where an extended or newly constructed drainage structure extends beyond the normal foreslope cover, flatten as indicated so as to cover the structure. Minimum earth cover is 6 inches.

- ① Slope may be flatter than 6:1.
- ② 6 inch minimum for pipe installations or to top of headwall on RCB.
- ③ At ℄ of roadway.
- Ⓟ = Pipe or RCB opening width plus 20 feet each side.

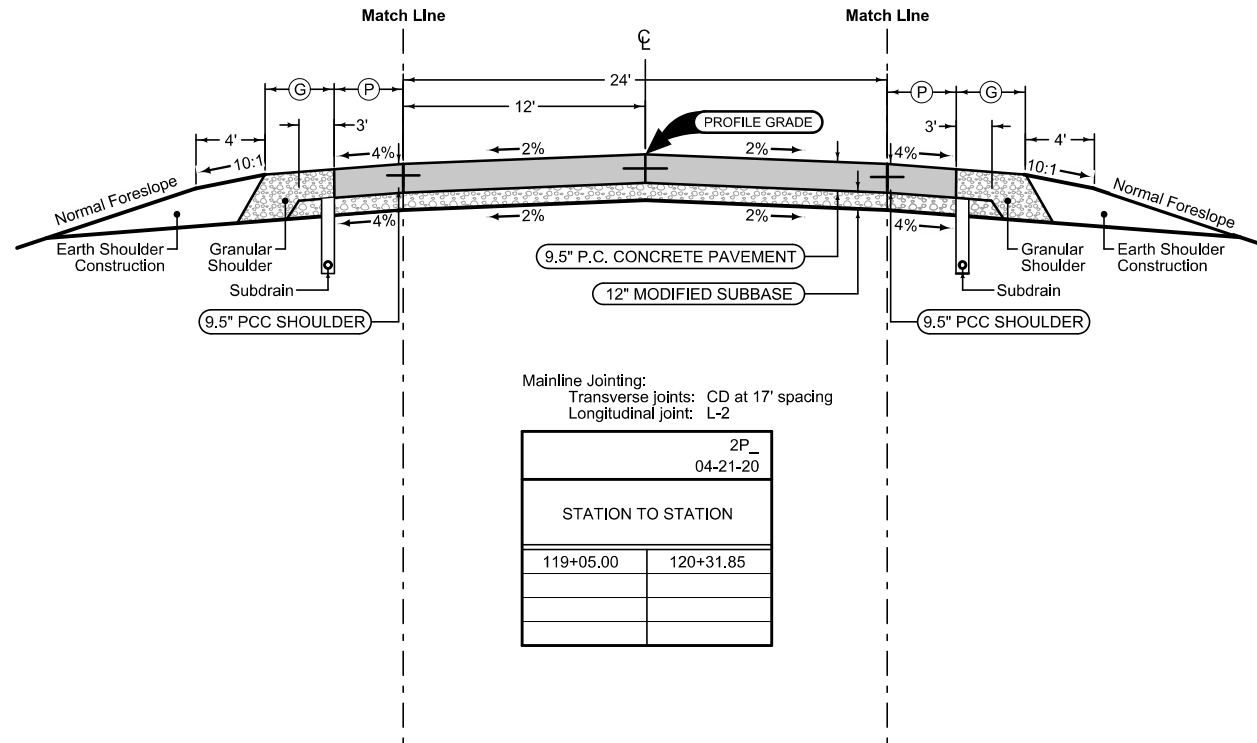
STRUCTURE LOCATION		Ⓟ Feet	Ⓛ Feet	ⓧ Feet	Ⓟ Feet
STATION ③	SIDE				
119+62.53	RT	65.7	50	30	2.5
119+62.53	LT	65.7	50	30	2.5

BARNROOF FORESLOPE AT SKEWED DRAINAGE STRUCTURE

Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

2_C_04-21-20			
STATION TO STATION		(P) Feet	(G) Feet
119+05.00	120+31.85	4	4



Mainline Jointing:
Transverse joints: CD at 17' spacing
Longitudinal joint: L-2

2P_04-21-20	
STATION TO STATION	
119+05.00	120+31.85

Combination Shoulder

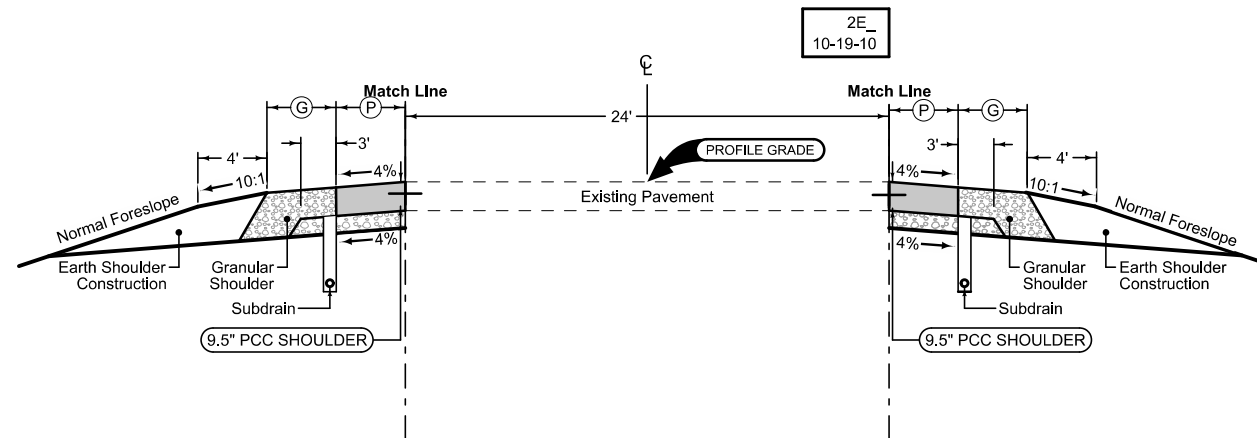
Shoulder Jointing:
Longitudinal joint: B

2_C_04-21-20			
STATION TO STATION		(P) Feet	(G) Feet
119+05.00	120+31.85	4	4

Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

2_C_04-21-20			
STATION TO STATION		(P) Feet	(G) Feet
118+74.50	119+05.00	4	4
120+31.85	120+89.61	4	4
120+89.61	121+68.64	4	4



2E_10-19-10

Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

2_C_04-21-20			
STATION TO STATION		(P) Feet	(G) Feet
117+85.44	118+74.50	4	4
118+74.50	119+05.00	4	4
120+31.85	120+89.61	4	4

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

Poweshiek Water Association
Chad Coburn (Water)
chad@poweshiekwater.com

MidAmerican Energy Company
Matt Novy (Electrical)
mdnovy@midamerican.com
515.242.4224

Note: All utilities are outside of disturbed areas.

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

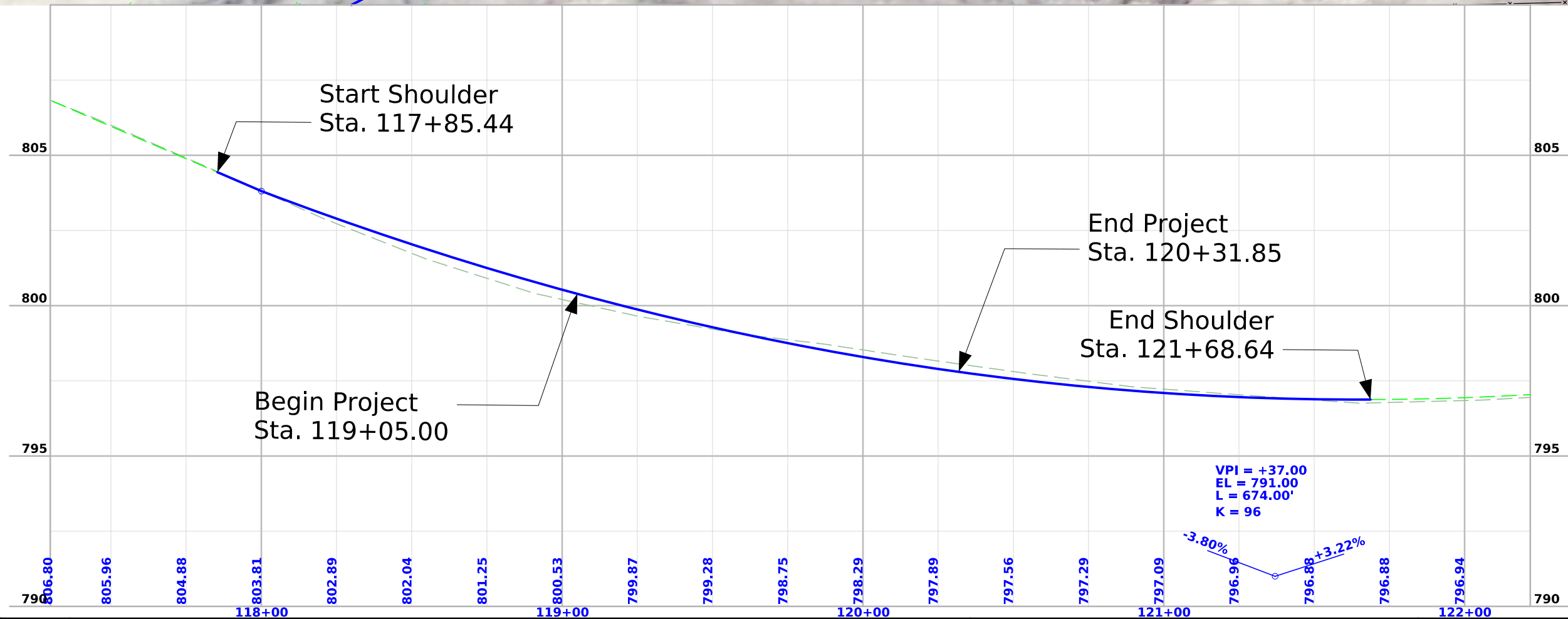
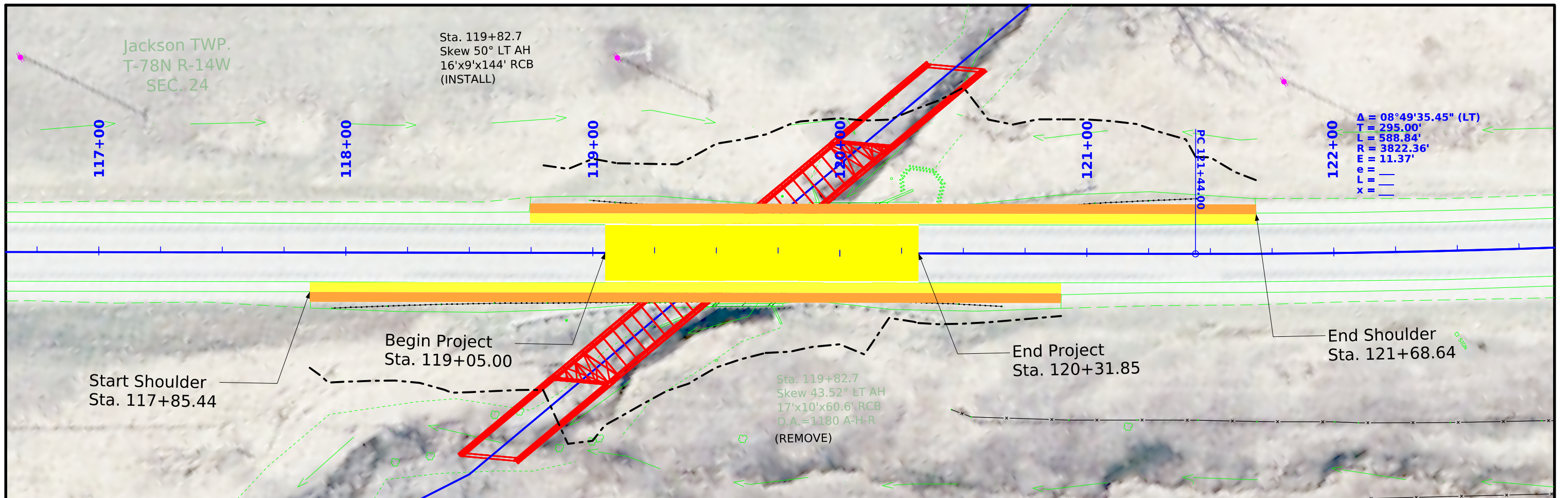
- Reference Point
- Station
- Survey Line
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Trench Drain
- HighTension Cable Guardrail
- Sheet Pile
- Pavement Removal
- Clearing & Grubbing Area

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)



Survey Information

SURVEY INDEX

County : Poweshiek
Project Code : 22-79-063-010
Phase Number : BRF-063-4(058)--38-79
Location : Stream 4.4 mi N of Co Rd G17
Work Code : 3001-RCB Culvert-Unspecified
Project Directory : 7906301022

Survey Personnel

Samuel Schilb – Assistant Survey Party Chief

Date(s) of Survey

Begin Date 11/13/2024
End Date 12/12/2024

General Information

This survey is for the replacement of the existing 17' x 10' RCB with a 16' x 9' x 144' Single Reinforced Concrete Box Culvert (RCB). This survey request was for the US Hwy 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.

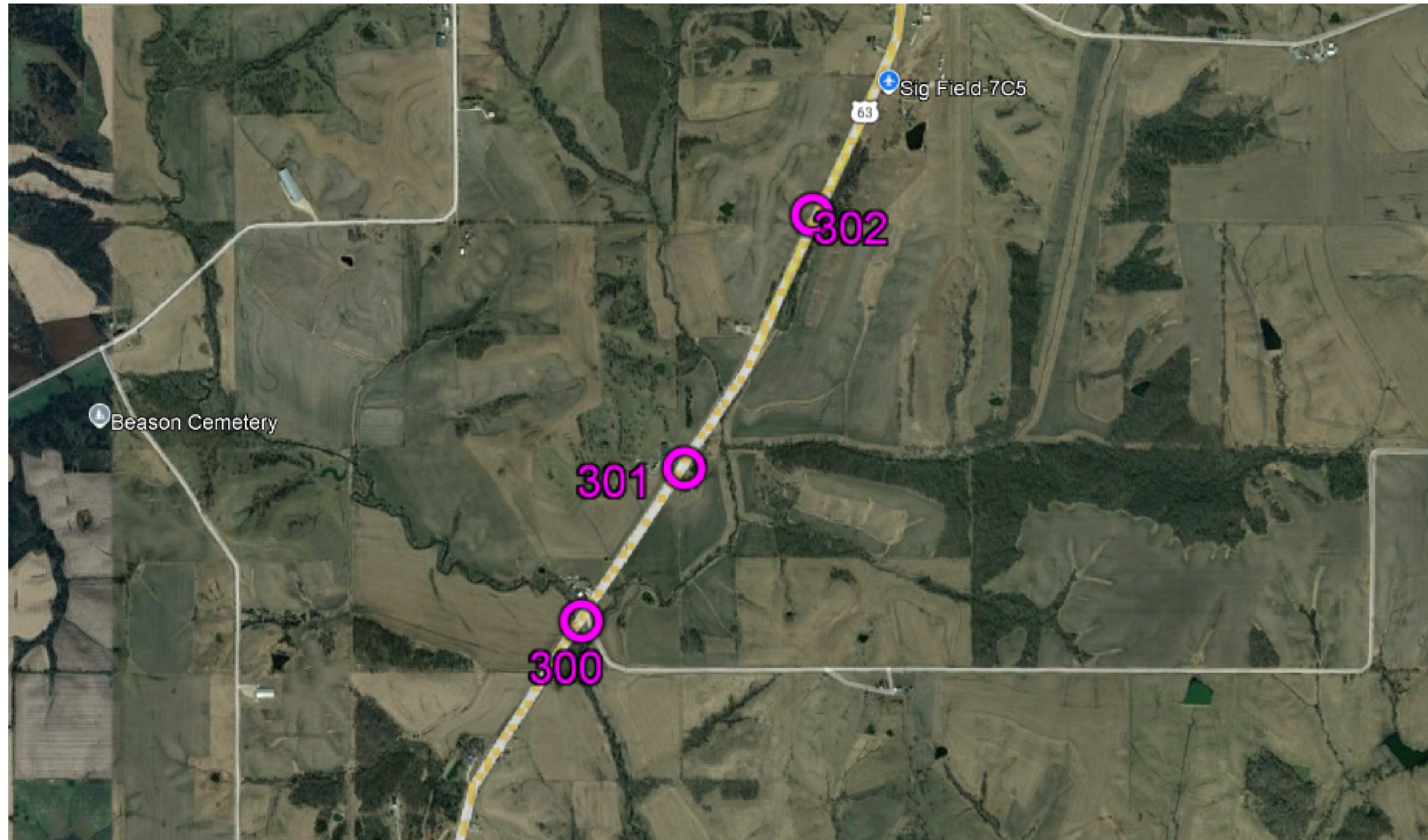
PROJECT DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 ADJUSTMENT)
COORDINATE SYSTEM: IOWA REGIONAL COORDINATE SYSTEM ZONE 09
(U.S. SURVEY FOOT)
VERTICAL DATUM: NAVD88
GEOID MODEL: 2018u3

Alignment Information

Provided by District 1 Right of Way Survey Crew.

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 09 (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 09 (U.S. Survey Foot)
 VERT. DATUM: NAVD88
 Geoid Model: 2018u3

Point Name	Northing	Eastings	Elevation	Code Description
302	7672181.56	19575539.98	843.55	CP Set IDOT FENO Monument 4" Below Surface
300	7667405.11	19572844.87	788.03	CP Set IDOT FENO Monument 4" Below Surface
301	7669181.72	19574005.94	816.96	CP Set IDOT FENO Monument 4" Below Surface

108_23A
8/15/22

TRAFFIC CONTROL PLAN

Traffic on US 63 shall be maintained at all times using an off-site detour throughout construction.
Refer to following J sheet for detour route and detour signing information.

511 TRAVEL RESTRICTIONS

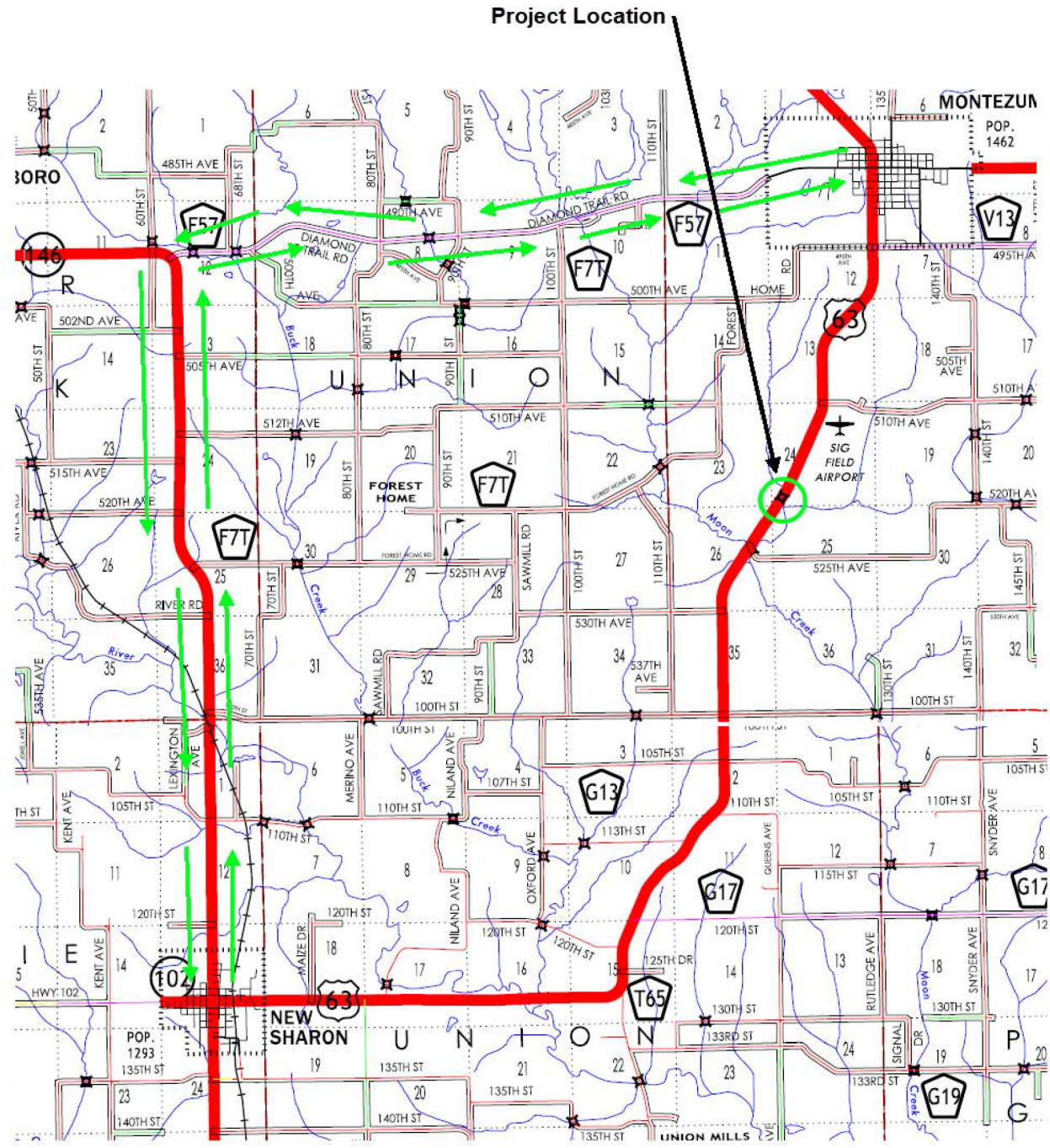
Line No.	Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No. or Structure ID or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
1.0	US 63	Both	Poweshiek	US 63 over Stream 4.4 mi N of Co Rd G17		Traffic Control Device		Horizontal	24				Road Closure

111_01
10/14/22

COORDINATED OPERATIONS

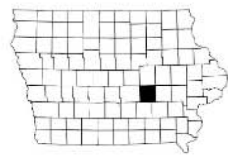
Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.

Project	Type of Work
None Provided	



← DETOUR

Detour map with signing to be provided by District at a later date



Poweshiek County
 Stream 4.4 mi North of County Road G17
 BRF-063-4(058)--38-79
 PIN:: 22-79-063-010



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		
Concrete			
Asphalt			
Bridge			
Shoulder			
Structural			

NOTES:

Text

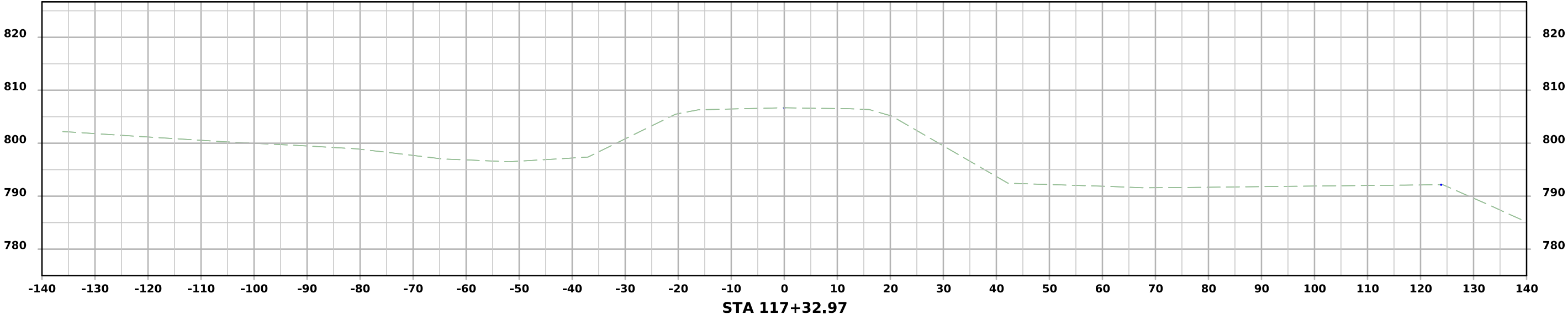
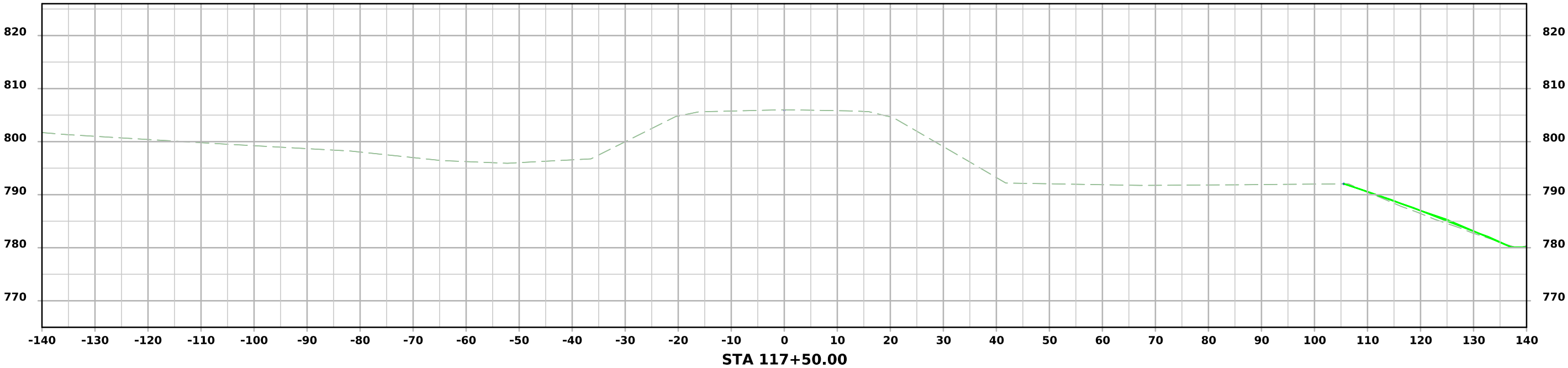
NOTES:

Text

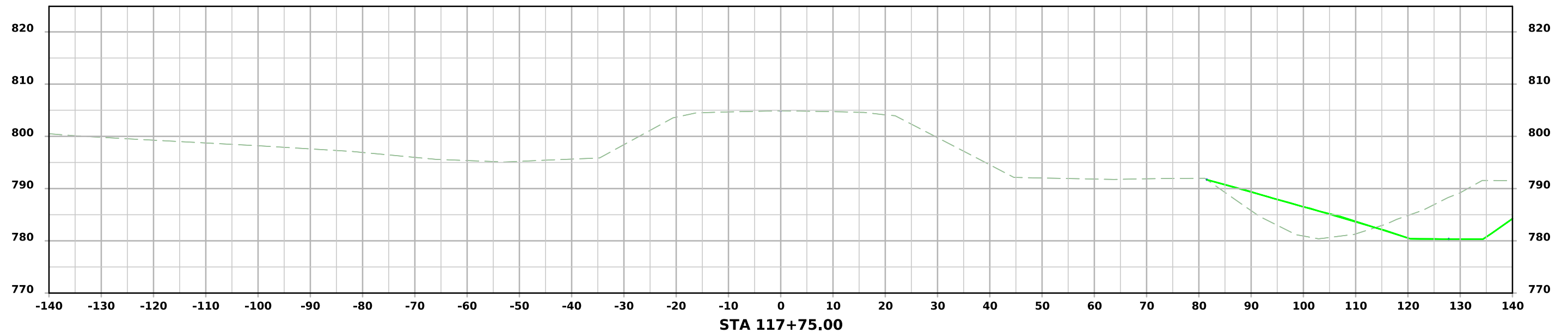
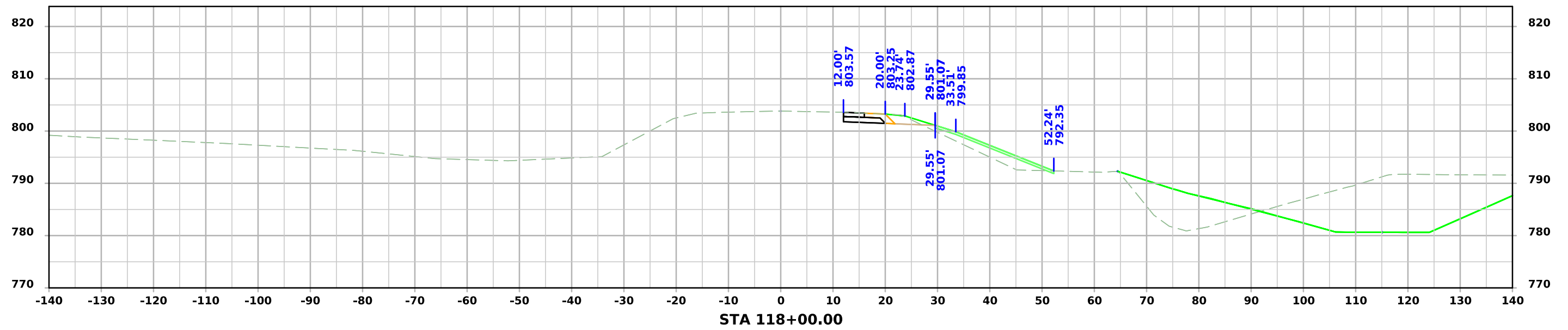
CROSS SECTIONS LEGEND AND INFORMATION SHEET

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

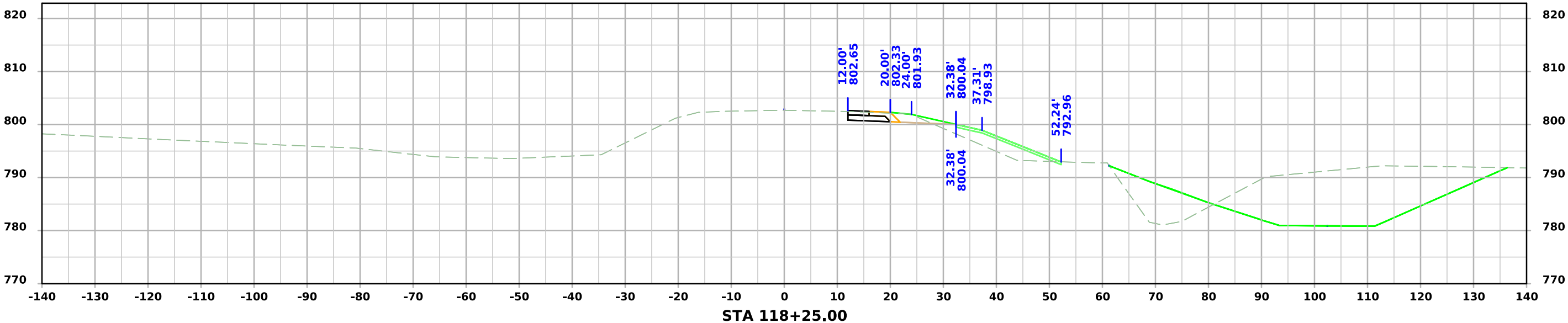
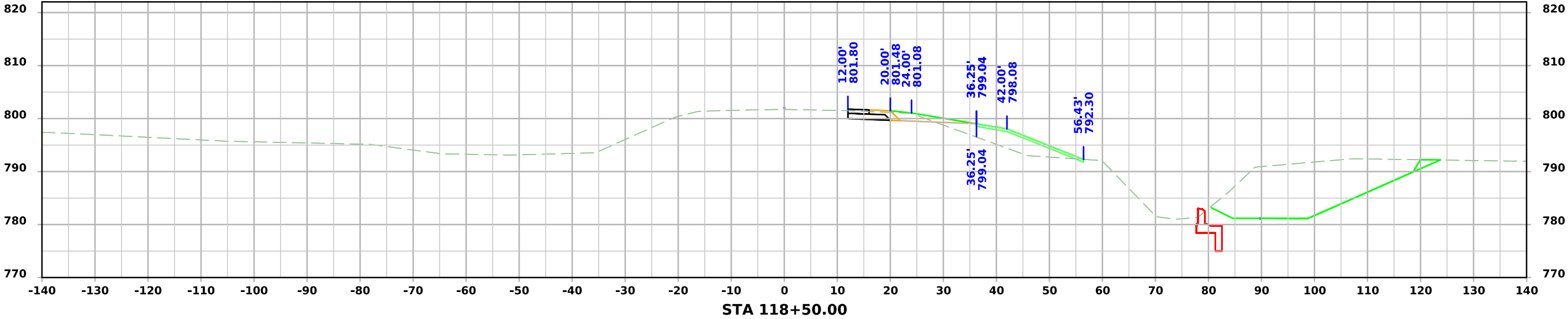
ML - US63



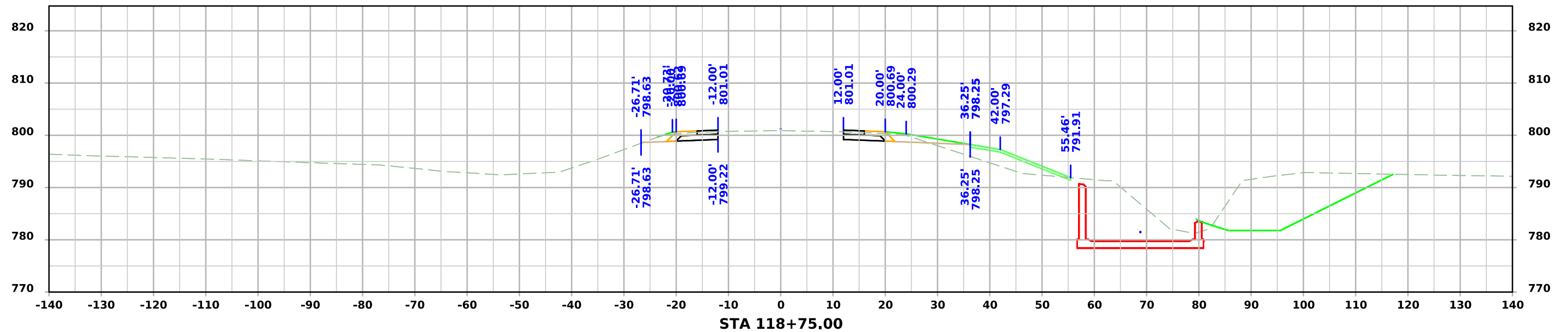
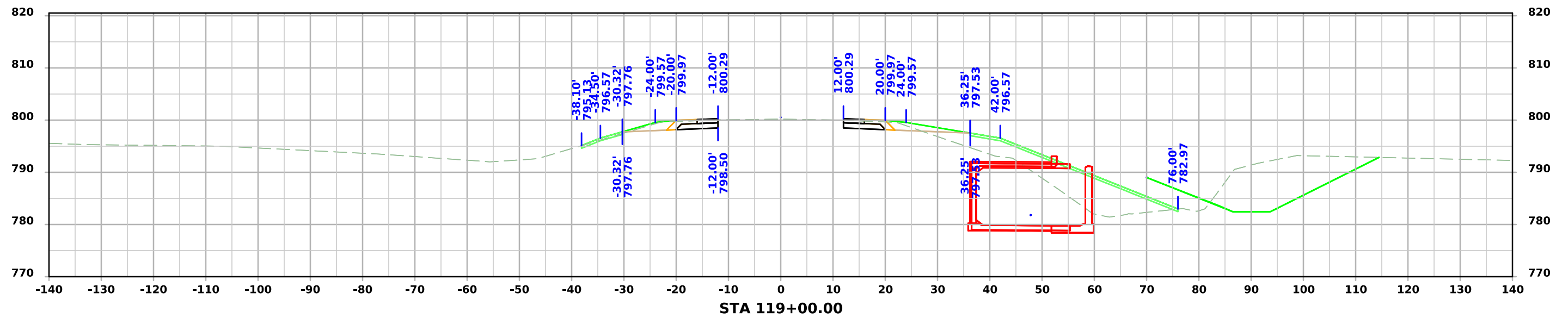
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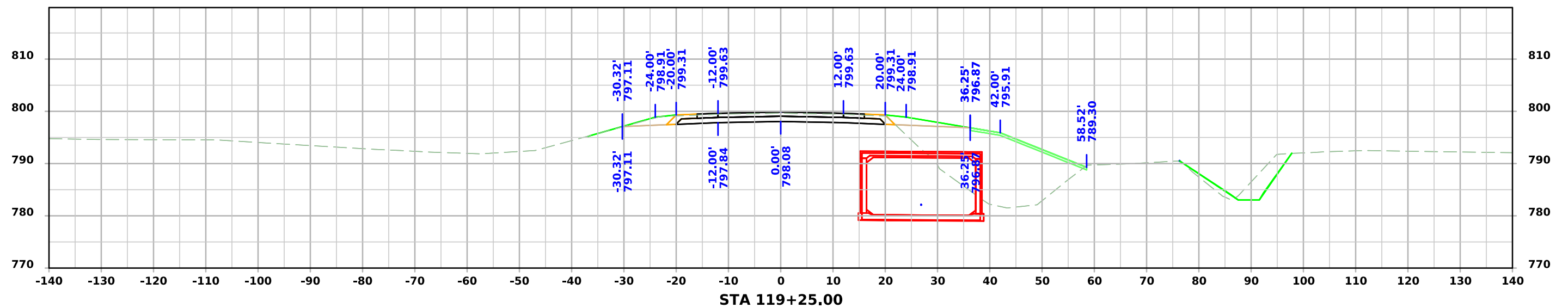
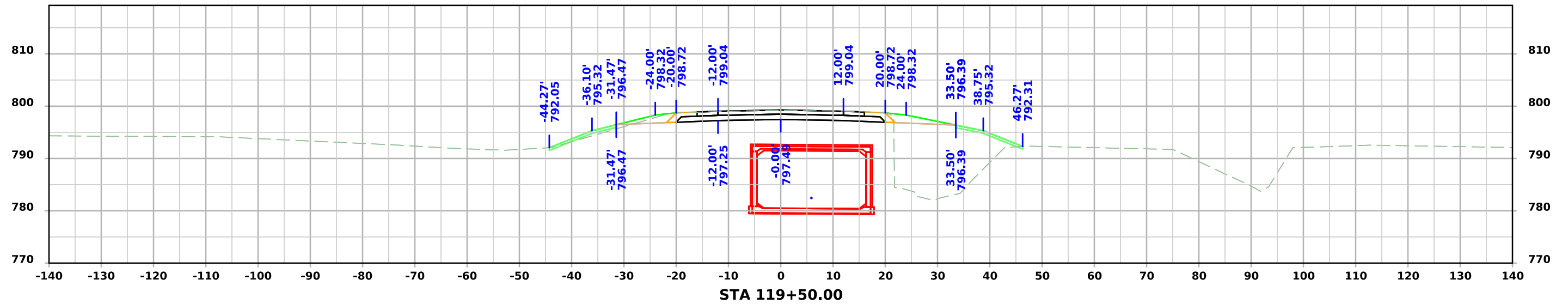


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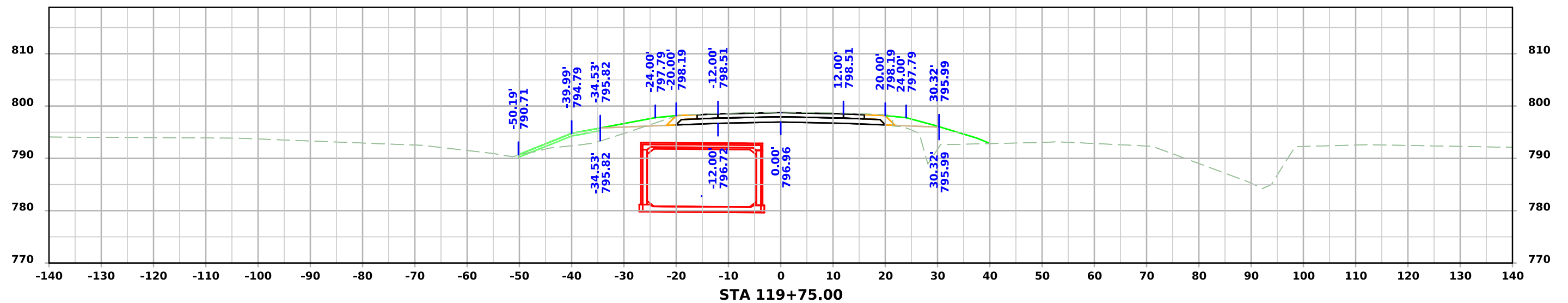
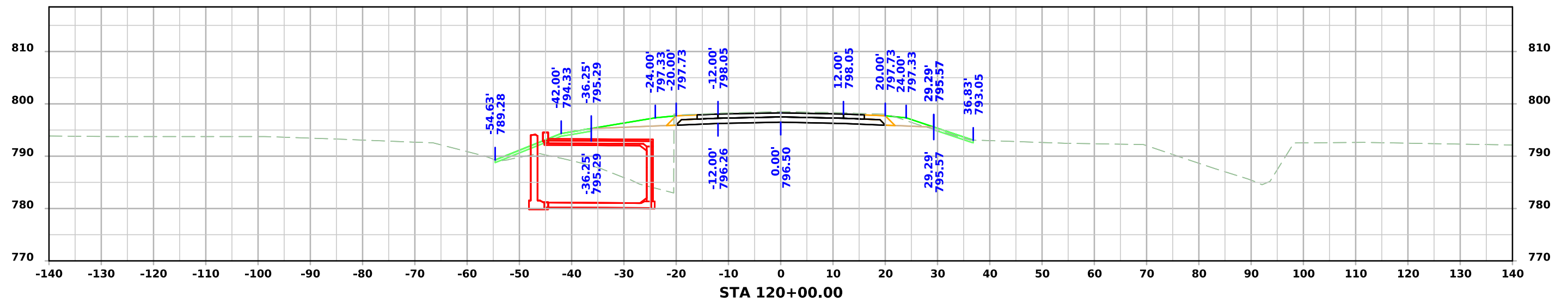


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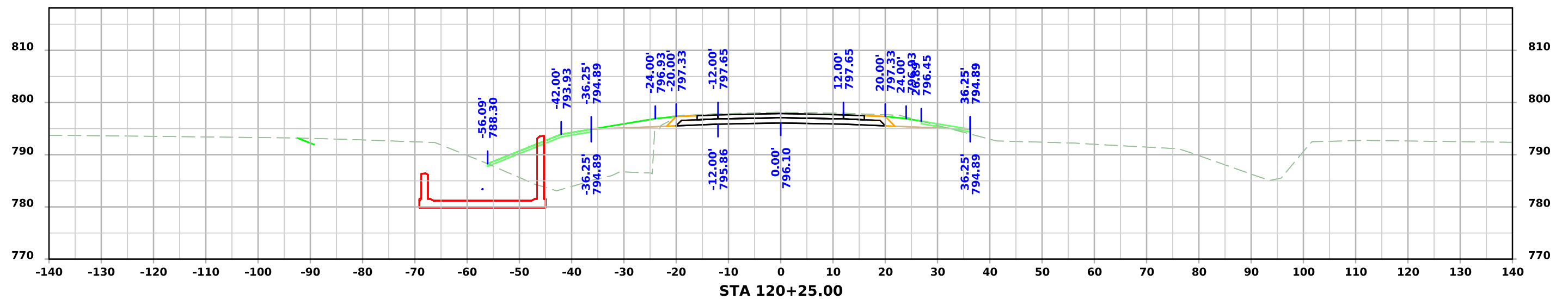
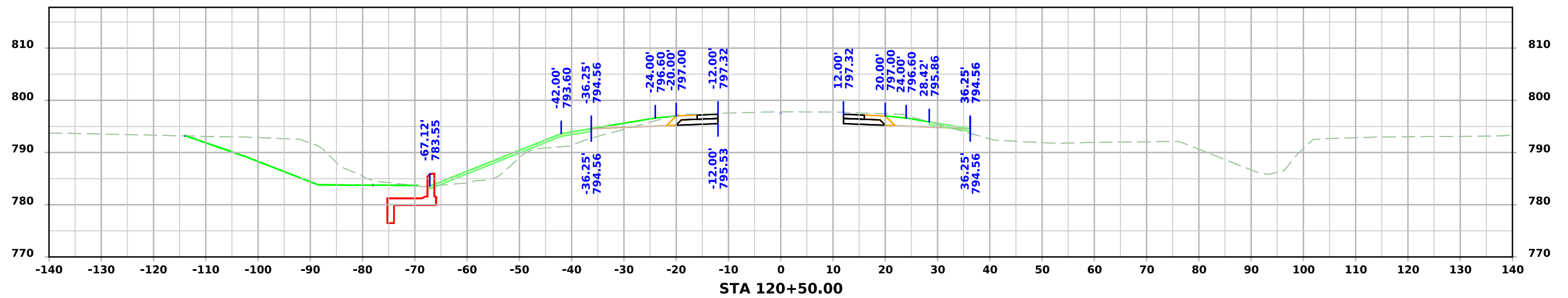




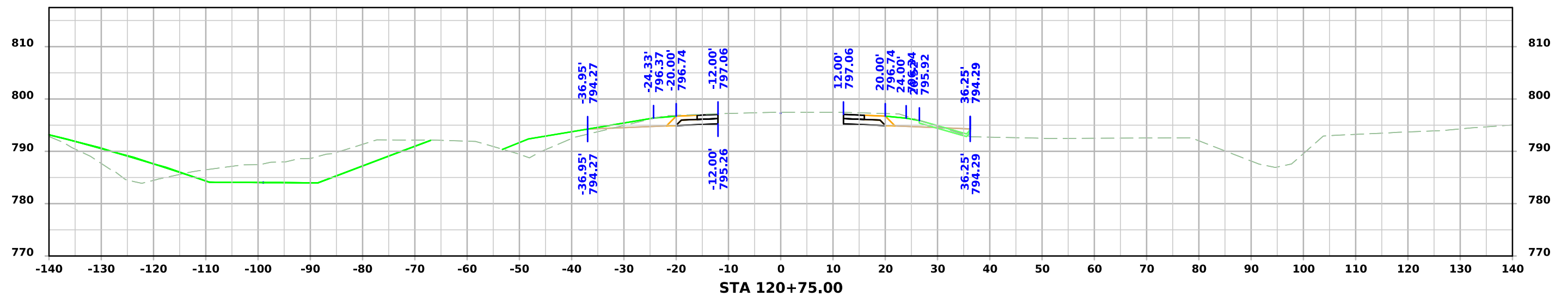
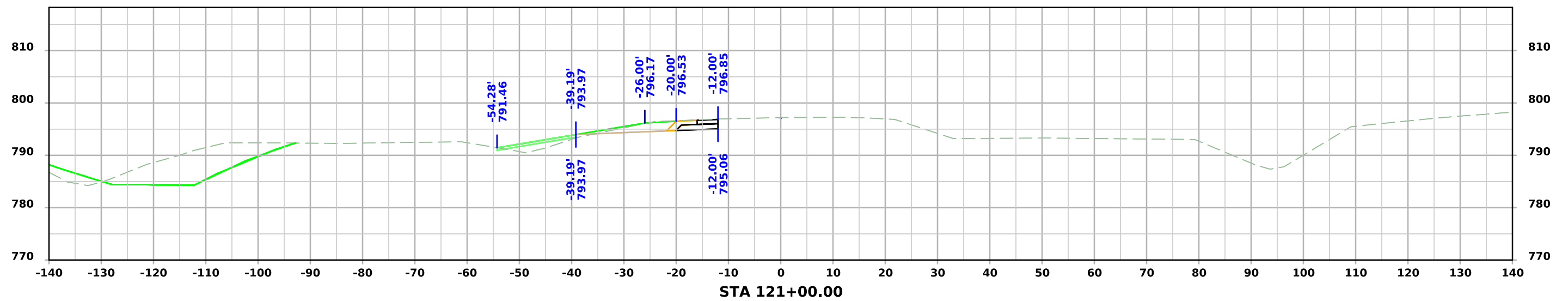
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