LETTING DATE

PRELIMINARY ENGINEERING
NHSX-061-3(61)--3H-58

LOUISA COUNTY

INDEX OF SHEETS

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E.3	Co Rd H16 (W)
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E.5	65th St/Bus 61 Alt 1
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X.400 - 402	Co Rd H16 (E)
X.500 - XXX	Co Rd G65 (Not Available)
X.600 - XXX	Bus 61 (Not Available)
X.700 - 706	K Ave
X.800 - XXX	70 th St (Not Available)
X.900 - 924	Co Rd G62
X.1000 - 1001	K Ave North
X.1100 - 1101	112th St
X.1200 - XXXX	Frontage 61 (Not Available)
X.1300 - 1301	Co Rd G56
X.1400 - 1402	J Ave
X.1500 - 1502	130th St (W)
X.1600 - 1601	130th St (E)



IOWA DOT

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM
LOUISA COUNTY
PRELIMINARY ENGINEERING
0.5 mi N of IA 78 to 130th St 2 mi S of IA 92

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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

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REVISIONS

TOTAL 454
PROJECT IDENTIFICATION NUMBER
11-58-061-010
PROJECT NUMBER
NHSX-061-3(61)--3H-58
R.O.W. PROJECT NUMBER
NHSX-061-3(62)--2R-58

INDEX OF SHEETS

No.	DESCRIPTION
Y Sheets	**Ramp Cross Sections**
Y.100 - 112	Ramp G62A
Y.200 - 211	Ramp G62B
Y.300 - 311	Ramp G62C
Y.400 - 410	Ramp G62D

SCHEDULE:

D3 6-2-2023
D5 11-3-2023

EARTHWORK:

CUT: 277,700 CY
FILL(30%): 5,241,710 CY

US 61 DESIGN DATA RURAL			
2020	AADT	4600	V.P.D.
2040	AADT	6000	V.P.D.
20 --	DHV	--	V.P.H.
TRUCKS		16	%
Total Design ESALs		--	

INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.1	Paul W. Flattery	Primary Signature Block

PRELIMINARY PLANS

Subject to change by final design.

D2 PLAN – Date: May 25, 2023

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER A.1

3:07:47 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_A01.dgn

NB: STA 1667+50.00 NB_ML061, 32' RT
= STA. 2667+ 50.00 ML061
SB: STA. 3667+50.00 SB-ML061, 32' LT
=STA 2667+50.00 ML061

Iowa River Bridge (SB)
Asset ID/FHWA #TBD (NEW)

Muskrat Lake Dual Bridges
Asset ID/FHWA #TBD (NEW)

Iowa River Overflow Dual Bridges
Asset ID/FHWA #TBD (NEW)

Mills Race Creek Dual Bridges
Asset ID/FHWA #TBD (NEW)

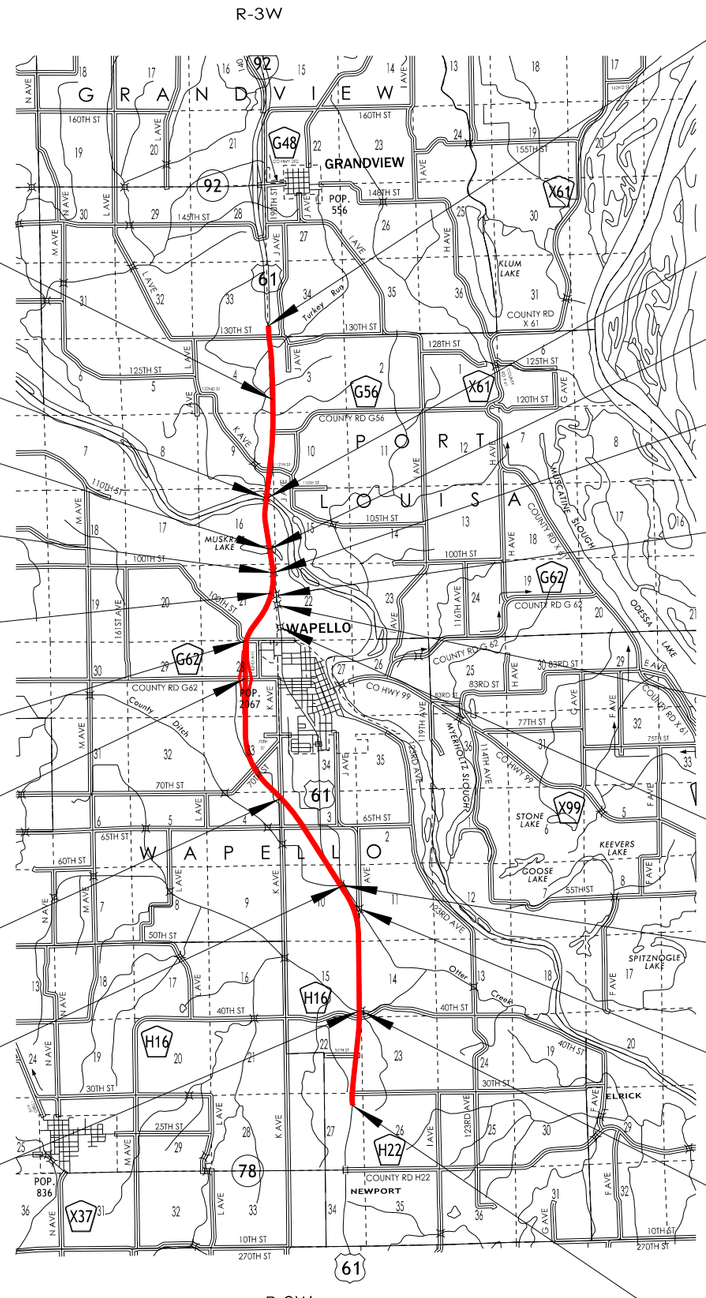
100th St. Dual Bridges
Asset ID/FHWA #TBD (NEW)

Co. Rd. G62 Dual Bridges
Asset ID/FHWA #TBD (NEW)

K Ave. Dual Bridges
Asset ID/FHWA #TBD (NEW)

Otter Creek Dual Bridges
Asset ID/FHWA #TBD (NEW)

Honey Creek Dual Bridges
Asset ID/FHWA #TBD (NEW)



LOCATION MAP SCALE
0 1 2 3
Miles

END CONSTRUCTION
NB: STA. 1705+44.44 NB_ML061, 41' RT
= STA. 2705+45.85 MLO61
SB: STA 3700+43.56 SB_ML061, 41' LT
= STA. 2700+42.15 ML061

Iowa River Bridge (UAC)
Asset ID/FHWA #34011 (Exst)

Muskrat Lake Bridge (Remove)
Asset ID/FHWA #34001 (Exst)

Bridge (Remove)
Asset ID/FHWA #33991 (Exst)

Bridge (Remove)
Asset ID/FHWA #33981 (Exst)

Bridge (UAC)
Asset ID/FHWA #33971 (Exst)

Bridge (UAC)
Asset ID/FHWA #33961 (Exst)

Otter Creek Bridge (Remove)
Asset ID/FHWA #33951 (Exst)

Bridge (UAC)
Asset ID/FHWA #??? (Exst)

Honey Creek Bridge (Remove)
Asset ID/FHWA #33941 (Exst)

BEGIN CONSTRUCTION
STA. 2121+75.00 ML061 (NB)
STA. 2121+25.00 ML061 (SB)

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER A.2

3:07:53 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_A01.dgn

P00 Planning Concept Statement (FINAL)

Project Description

Louisa County
Project No.: NHSX-061-3(61)--3H-58
PIN: 11-58-061-010

Date: August 2021

I. PROJECT DESCRIPTION AND HISTORY

A. Project Description: The Iowa Department of Transportation (Iowa DOT) is proposing to improve the U.S. 61 corridor from ½ mile north of Iowa 78 to just north of 130th Street (Fig. 1). Improvements will include an interchange at County Road G-62 just west of the City of Wapello for a better connection into town to existing US 61, and the addition of a J-turn intersection with 65th Street and U.S. 61 south of town.

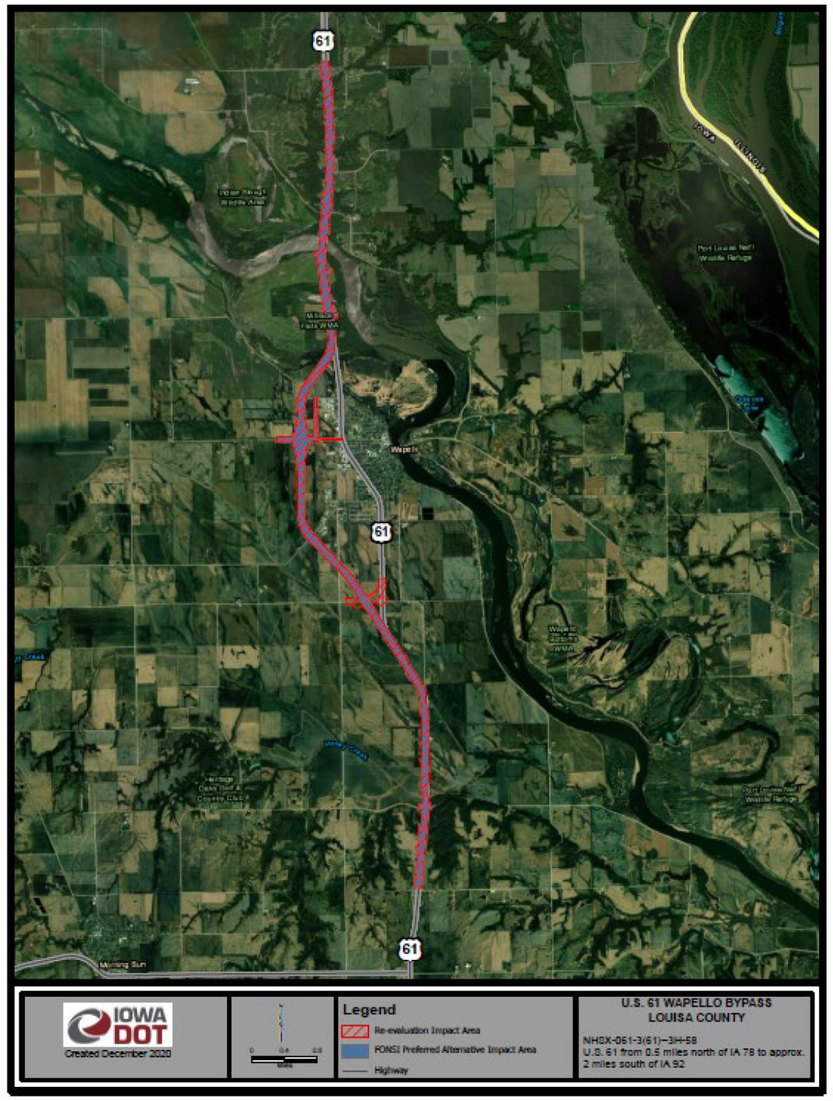


Figure 1 – Project Study Area

B. Project History

Links to Project History documents:
2012_10_18 Louisa Summary Booklet.pdf
2014-4-24PIM_SummaryBooklet.pdf
HEARING_SUMMARY_BOOKLET_FINAL_2018-08-27.pdf

In 1988, the Iowa DOT's Transportation Commission identified U.S. 61 as part of the State's Commercial and Industrial Network (CIN) and approved the development of U.S. 61 as a four-lane highway. As part of the CIN, other segments of U.S. 61 in the State of Iowa have been developed as four-lane expressway or freeway facilities with posted speed limits of 65 mph in rural areas. Approximately 35 miles of U.S. 61 is constructed as a two-lane highway in Louisa County and adjacent Des Moines County, Iowa, with a posted speed limit of 55 mph in rural areas.

Existing U. S. 61 in Louisa County is a two-lane highway. It was originally constructed 18 feet wide in 1932 and was widened to 21 feet in 1955. In 1996 the roadway was reconstructed 24 feet wide from the Des Moines County line north through Wapello. Various segments of the roadway were resurfaced in 1957, 1958, 1983, and 1994. The 2018 traffic on this section of U.S. 61 through Wapello was 5300 to 6000 vehicles per day.

The Iowa DOT initiated location and environmental studies in 2000 for roadway improvements along U.S. 61 from Iowa 78 north to the Muscatine/Louisa county line. However, the project was put on hold prior to any information being presented for public review. The intent of these studies was to evaluate impacts associated with upgrading the two-lane highway to a four-lane rural type facility with a potential bypass of Wapello.

Public Hearing Date and Summary

A public hearing was held on May 8, 2018 from 5:00 p.m. to 7:00 p.m. at the Charles Briggs Civic Center in Wapello, Iowa. The purpose of this meeting was to present the preferred alignment and the Environmental Assessment (EA), for the proposed four-lane improvement to U.S. 61 in Louisa County from Iowa 78 north to 130th Street (Fig. 1) and to gather feedback from the public. The hearing was conducted using a combined open forum and formal presentation format. The hearing began with an open session during which attendees could express their views and ask questions in an informal setting.

A formal presentation, followed by a question and answer session, was held after the open forum session. Approximately 174 people attended the public hearing. Overall, there was general support for the project, however, there were several comments related to access locations, property impacts, and the ROW/acquisition process. Other comments received related to safety concerns and emergency response time. A transcript of this hearing is available at the following link: Transcript_2018-05-08 Louisa County Presentation_FINAL.pdf

Post Public Hearing Discussion

Subsequent to publication of the EA, design modifications have occurred as a result of comments received at the public hearing and comments received from a local coalition representing Louisa County, City of Wapello, Wapello Fire and Ambulance, Wapello School District, and local businesses. The Study Area and Impact Area were adjusted in some areas where the Preferred Alternative has been modified.

The Iowa DOT has agreed to the following modifications to the Preferred Alternative:

- To improve County Road G-62 and remove the S-curve just to the west of existing U.S. 61 due to potential traffic safety and vehicle operation concerns. The installation of storm sewers along County Road G-62 into the City of Wapello would involve a partnership between the State and the City if final design required these improvements to mitigate ROW impacts (E. of 142nd Ave.). A tight diamond interchange type was chosen to bring the ramps in and allow for safe operations at the first side road (142nd Ave). Iowa Primary Highway Access Management Policy; Section 11, 112.11(5) 600 feet from the point of ramp bifurcation in a rural or fringe area was used for the first access from the interchange (142nd Ave.)

- To maintain access continuity of K-Avenue by constructing mainline bridges on proposed U.S. 61 over K-Avenue. This would better accommodate oversize loads traveling on the proposed corridor.

- To remove the proposed mainline bridges over 70th Street and maintain access continuity of K-Avenue. The preferred alignment will show 70th Street closed off from proposed U.S. 61.

- To add a new J-Turn intersection at 65th Street and U.S. 61. The J-Turn connections to proposed US 61 shall be designed to county standards (IM 3210).

- To include an impact analysis of paving 142nd Avenue in our environmental document and agree to accommodate it during the final design phase of the proposed interchange. Construction of 142nd Avenue improvements would be locally funded.

- To study turning movements along the project corridor during the final design phase to ensure current design standards are met and additional turn lanes are warranted. The Iowa DOT typically plans for left turn lanes on 4-lane expressways.

- Project is adjacent to previous projects, US 61 by Grandview PIN: 09-58-061-030 and US 61 Mediapolis PIN: 97-29-061-010. NEPA Clearances for all three projects are adjacent to or overlap one another.

C. Need for Project

The purpose of the proposed project is to upgrade and modernize the existing two-lane section of U.S. 61 to provide better continuity and a more efficient element of Iowa's Commercial and Industrial Network (CIN).

Need for the Proposed Action

The need for the proposed action is based on a combination of factors, as follows:

- Legislation/Economic Development – Designated as part of the Avenue of the Saints Expressway, traffic volume has more than doubled since the four-lane facility was opened in 2000.

U.S. 61 is included as part of the CIN and has been approved by the Iowa DOT Transportation Commission for development as a four-lane highway. Associated with this, one of the Highway 61 Coalition's goals is to promote new U.S. 61 infrastructure to attract economic growth. This is the primary north-south transportation corridor along the Mississippi River connecting major population and employment centers in the eastern part of Iowa. Lack of four-lane connectivity along U.S. 61 hinders efficient travel and transport opportunities throughout the region, making this area less attractive for future growth potential.

- System Continuity – This corridor has numerous at-grade entrances, private driveways, and median openings.

There is a need to improve system continuity on U.S. 61 between the four-lane divided sections and the existing two-lane section in the project study area. U.S. 61 enters Iowa near Keokuk and travels north for 196 miles where it crosses the Mississippi River into Wisconsin. Of the 196 miles, only 39 miles exist as a two-lane highway, 11 miles of which are in the study area.

Contiguous to this project, planning studies and design plans are underway to improve the 18 miles of two-lane roadway south to the City of Burlington and the 6 miles of two-lane roadway north to the Muscatine/Louisa county line, leaving only 4 miles of two-lane U.S. 61 from Keokuk to the Missouri border.

D. Environmental Status

Following are links for the completed NEPA product and the approved Decision Document.
Link to Environmental document: 20171206_Louisa_61_Combined EA_ No FONSI.pdf
Link to the FONSI document: 20190917_Signed FONSI.pdf
Link to the Reevaluation document: 20201214_024_Reevaluation.pdf

Dates for when each piece of the NEPA/404 Concurrence process was completed:

December 7, 2011. NEPA/404 Concurrence Points (CP) 1 and 2 Meeting.
October 9, 2012, NEPA/404 Concurrence Point (CP) 3 Meeting.
* Due to the lack of comments and concerns noted after CP3 that point, it was determined that the CP 4 process was not needed for this project. (Shelby Ebel 2/17/2017 email)

The NEPA/404 Concurrence process presented the corridor study area that was used to investigate all of the environmental resources (i.e. wetlands, streams, cultural, etc.). All resources within the corridor study area were documented.

For each alternative within the corridor study area, an impact area was established. The impact area for each alternative was developed based on the estimated intercept line with a buffer added to account for modifications due to further design refinements. The intent of the impact area is that any/all refinements/modifications made to an alignment will stay within the impact area. The impact area is what is cleared through the environmental document. A link to the impact area for the preferred alternative is identified below in the Recommended Alternative Section.

E. Public Involvement Summary

The following is a summary of the public involvement activities that took place for the project.

Links to all Public Information meeting and Public Hearing summaries:
Oct 18, 2012 Louisa Summary Booklet.pdf
April 24, 2014 2014-4-24PIM_SummaryBooklet.pdf
May 8, 2018 PIM HEARING_SUMMARY_BOOKLET_FINAL_2018-08-27.pdf

II. EXISTING CONDITIONS

A. Present Facility

The highway corridor just north and south of the City of Wapello is a two-lane highway with Priority 3 access control. The adjacent land uses in this area includes a number of individual acreages and farms and also commercial businesses through the city limits of Wapello. These properties rely on the highway for access and as such, there are at-grade intersections with every public roadway at less than Priority 3 access through town.

B. Traffic Estimates

The study corridor has become a significant route for local and through vehicles alike. The latest traffic data from 2018 showed approximately 4300 AADT with 15 percent trucks in

the corridor and 5300 to 6000 AADT within the city limits of Wapello.
Wapello 2018 Traffic.pdf

C. Capacity and Traffic Analysis

Traffic projections were forecasted for program year 2020 and design year 2040. Based on those forecasts, the 2020 AADT was 4600 vehicles with 15 percent trucks and the 2040 AADT was 6000 vehicles with 16 percent trucks. Howard R Green will be tasked with completing the Interchange Operation Report (IOR) by December 1, 2021 and updating the traffic forecast and model to reflect the current program year 2025 and design year 2045. Link to currently available data: Iowa Traffic Data (arcgis.com)

D. Bridge Conditions

There are nine (8) bridge structures along the U.S. 61 corridor, in order of south to north:

FHWA Number 33941 (Built 1997)
Bridge Condition Index – 78
Sufficiency Rating – 94

FHWA Number 33951 (Built 1985)
Bridge Condition Index – 67
Sufficiency Rating – 97

FHWA Number 33961 (Built 1985)
Bridge Condition Index – 75
Sufficiency Rating – 95

FHWA Number 33971 (Built 1985)
Bridge Condition Index – 71
Sufficiency Rating – 95

FHWA Number 33981 (Built 1985)
Bridge Condition Index – 65
Sufficiency Rating – 95

FHWA Number 33991 (Built 1985)
Bridge Condition Index – 74
Sufficiency Rating – 95

FHWA Number 34001 (Built 1985)
Bridge Condition Index – 74
Sufficiency Rating – 95

FHWA Number 34001 (Built 1980)
Bridge Condition Index – 68
Sufficiency Rating – 95

E. Access Control

Many highway improvement projects require the acquisition of additional access rights. As numbers of access points increase, crashes also increase while generally the mobility of a highway decreases. Therefore, it is essential that careful consideration and public input be gathered in determining both the level and the limits of access control.

It is desirable to place an interchange at a location where existing or anticipated traffic patterns benefit the most from an interchange. For this reason, the proposed interchange west of Wapello would utilize Louisa County Road G62 to connect with realigned U.S. 61. This should facilitate traffic through town to key points like schools, city hall, community services and fire rescue, and also connect with points east of the Iowa River continuing on county road G62.

The Proposed Alternative includes the development of Priority I access control along the project corridor just north of the proposed J-Turn at 65th Street and US 61 south of Wapello, through the proposed interchange at County Road G62, and to north of Wapello where U.S. 61 joins back with the current alignment. The rest of the corridor will transition to Priority II and III north and south of Wapello.

Median turnarounds are planned at half mile spacing within the proposed improvements (excluding the priority 1 sections). Discussions were had to place a deceleration lane for the first median turnaround south of the proposed J-turns to accommodate emergency services.

No median turnaround will be placed between 40th St. and the first turnaround south of J-Ave. Commuters can use the 40th St. and US 61 intersection as a median turnaround. This was decided after the US 61 Public Hearing by District staff.

The existing frontage road south of 130th St and west of US 61 currently gives access to three residential properties that will not be reconstructed.

1. The south property will have its drive extended south to a proposed US 61 median cross-over opposite J Ave.
2. The north properties will have a joint entrance connecting directly to proposed US 61. This will be a right in/right out joint entrance.

The two type C entrances proposed meet the 1000 ft. minimum distance between accesses. Also, the distance between the north joint Type C entrance and 130th St. meet the 1000 ft. minimum distance between accesses.

F. Crash History

Along the project corridor, a five-year period of crash data was studied from 2016 through 2020 (see Figure 2). There were 64 total crashes comprised of 17 personal injury crashes and 47 property damage only crashes. There were a total of 20 injuries on this road segment during this study period with one (1) fatality.
US 61 Crash Summary_Wapello.pdf

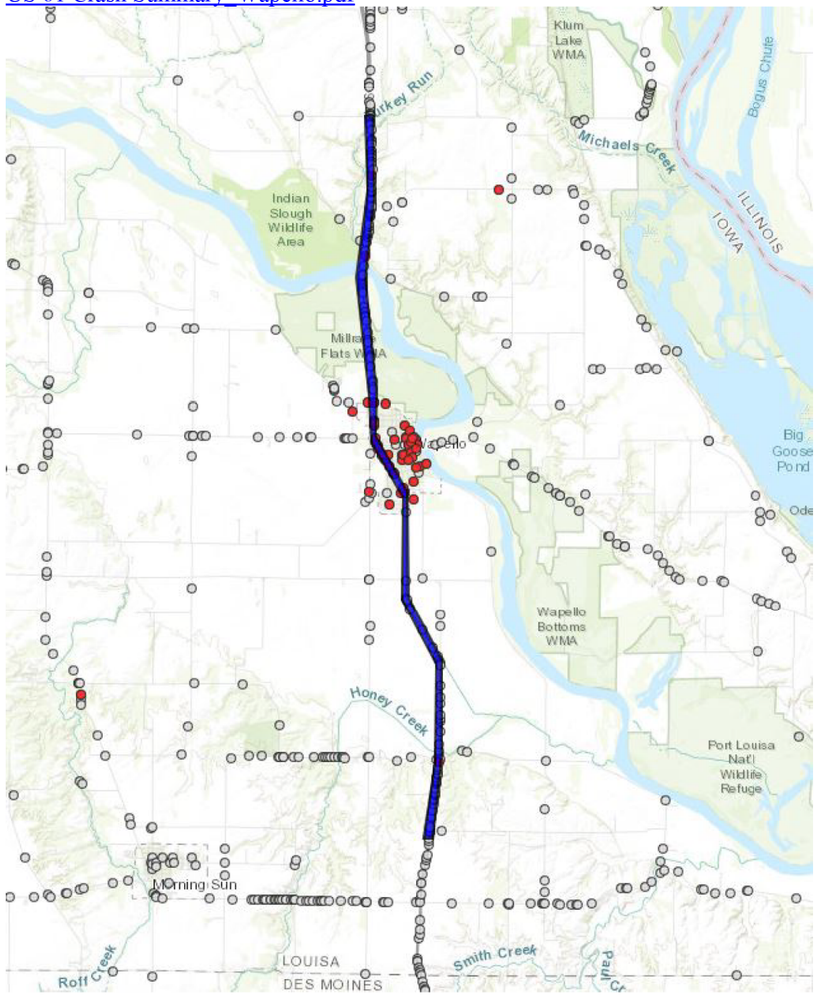


Figure 2

III. ALTERNATIVES ANALYSIS

A. Range of Alternatives Considered
US_61_ALL_ALTERNATIVES_032614.pdf

Links to the Project Design Criteria Worksheets:
pw://ntPwInt1.dot.int.lan:PWMain/Documents/Projects/5806101011/OLE/Location/LocationDesign/ProjectDesignCriteriaworksheet.xlsm

No Build Alternative

Under the No Build Alternative, the new four-lane divided roadway along U.S. 61 and west of the City of Wapello would not be constructed nor the proposed interchange at the relocated U.S. 61 and County Road G-62. The road networks would continue to be used in their existing configurations. All of the at-grade intersections in the project corridor would remain in place. This alternative would not meet the needs for continued economic development along the highway corridor and it would not improve system continuity for more efficient traffic flow. Although it does not meet the purpose and need, the No-Build Alternative was carried forward for detailed study because it provides a baseline for comparing the potential impacts of other alternatives and consideration of a no action alternative is required by the Council on Environmental Quality regulations for implementing NEPA (40 CFR 1500-1508).

Alternatives Considered but Dismissed

There were several different types of alternatives considered for development along this highway corridor that were examined through the course of this analysis and previous studies. These alternatives included:

- 2 alternatives crossing on the east side of the Iowa River
- 3 alternatives traversing through the City of Wapello
- 3 alternatives traversing to the west of the City of Wapello
- 2 alternatives adding new lanes to either the east or west side of existing U.S. 61

Based on the potential for significant environmental impacts, the two alternatives crossing on the east side of the Iowa River and one alternative located to the west of the City of Wapello were considered early in the planning process (Figure 3).

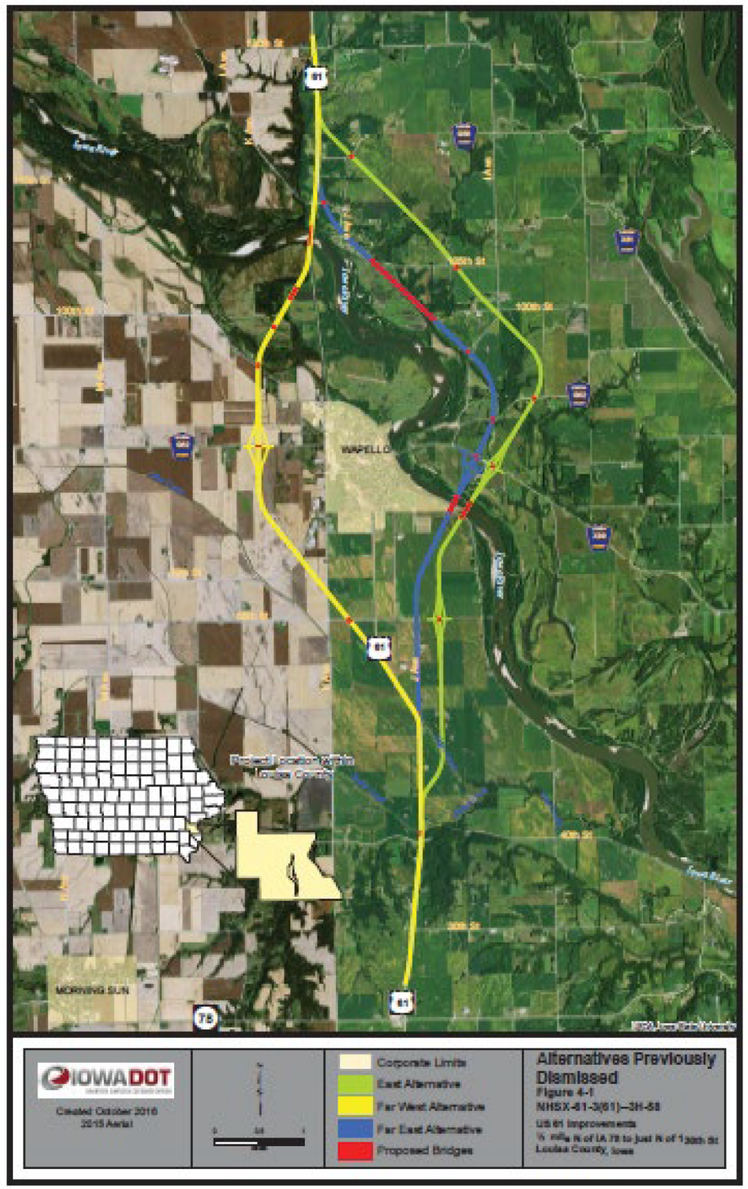


Figure 3

As stated, the two alternatives on the east side of the Iowa River were dismissed from consideration early in the planning process due to the potential for significant environmental impacts. Both these alternatives shared a similar alignment south and north of Wapello. Directly east of Wapello and the Iowa River, they diverged to present a couple of options for a proposed interchange with the relocated U.S. 61 and County Road X-99. However, both alternatives would have placed the proposed interchange specifically in a wetland/floodplain area of the Iowa River.

Other reasons for dismissing these two alternatives were concerns by local officials that a relocated expressway on the east side of the Iowa River and town would pull traffic away from the City of Wapello and result in less economic activity for the city. These alignments would also not utilize the existing bridges on U.S. 61 north of town which are all currently rated in excellent condition. Finally, the entire four-lane highway improvement east of the City of Wapello would impact hundreds more acres of natural resources due to the roadway being on all new alignment.

The one alternative to the west of the City of Wapello that was dismissed from consideration early in the planning process was located farther west than the other two alternatives addressed in this study. This alternative would have had greater impacts to wetlands and the floodplain area of the Iowa River. Also, similarly with the alternatives to the east of the Iowa River, this alternative would not have utilized all the existing bridges on U.S. 61 which are rated in excellent condition.

B. Design Aspects NOT Considered in the Alternatives Analysis

List of any areas of design that were not reviewed:

1. Profiles for access locations (entrances)
2. Detailed drainage design

C. Aesthetics Review

No aesthetics aspects were considered with the project.

IV. RECOMMENDED ALTERNATIVE

A. Preferred Alternative

After reviewing the reasonable alternatives under consideration, the Iowa DOT has identified the Western Bypass with the additional lanes on the west side of U.S. 61 as the Proposed Alternative. This alternative is considered preferred because it best meets the project purpose and need while minimizing overall impacts. This alternative consists of constructing a new four-lane rural highway segment to the west of the City of Wapello and a new interchange at the relocated U.S. 61 and County Road G-62. The Iowa DOT will develop a final preferred construction scenario during the design process.

Western Bypass

Two new lanes would be constructed along the west side of existing U.S. 61 south of 35th Street to just south of 65th Street where it proceeds on new four-lane divided rural design alignment diagonally west of the City of Wapello. It turns directly north at 70th Street and a new tight diamond interchange is proposed approximately ½ mile west of the City of Wapello at County Road G-62. It continues north easterly across Cemetery Road and reconnects with existing U.S. 61 approximately 1 mile north of Cemetery Road. Two new lanes would be constructed along the west side of U.S. 61 to the end of the project at 130th Street.

A major consideration in the layout of these alternatives is the rich environment for eligible and potentially eligible archaeological sites in the corridor, primarily to the north and south of the City of Wapello. With this in mind, the addition of new highway lanes was purposely chosen to the west of existing U.S. 61 to reduce impacts to known archaeological sites. Also, there is an existing Section 4(f) resource (public boat ramp) north of Wapello and east of U.S. 61 that the Iowa DOT wishes to avoid.

After lengthy discussions with Louisa County and City of Wapello officials since May 2018, the Iowa DOT agreed to construct a J-Turn intersection at 65th Street and the new U.S. 61 alignment (Figure 4).

Additionally, great effort was made to reduce overall impacts to resources and properties by keeping the proposed new lanes as close to and parallel with the existing alignment where possible and implementing a smaller 64-foot wide median. The northern terminus of this project may need to be extended due to the limits of construction of the adjacent project (US 61 Grandview) to the north terminating sooner than expected. However, NEPA Clearances do overlap one another.

There are 4 overflow bridges that we plan to "use as constructed," (UAC) on existing alignment. Maintaining bridges during construction might not be needed. We will design at a 100 year flood stage; currently, the bridges are at a 25 year flood stage level. This was confirmed by Dave Claman to District 5 at the June 09, 2015 PMT Meeting.

It's estimated from the concepted impact area that five total takes, and six properties may require relocations(homes).
pw://ntPwInt1.dot.int.lan:PWMain/Documents/Projects/5806101011/OLE/Location/Documents/P00/Impacted&space;Homes.pdf

Link to the VE Study Project Review decisions:
2-5-16 Project Review Minutes docx.docx

Links to corridor study area file:
Study Area figure:
pw://ntPwInt1.dot.int.lan:PWMain/Documents/Projects/5806101011/OLE/Location/LocationDesign/58061061POSTFONSI.loc

Model: Study Area_No_East

Design Links:
pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\5806101011\OLE\Location\LocationDesign\Project Documentation Shell V8.xlsm

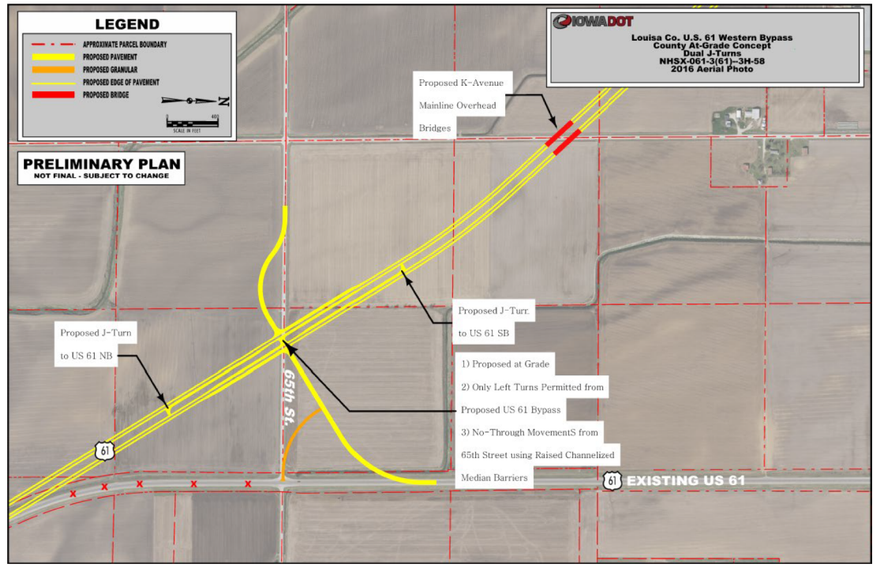


Figure 4

B. Cost Estimate

Links to project preferred alternative cost estimate:
Construction Cost Estimate: Page from 2022-2026 5yr Program.JPG

This project is currently included in the approved 2022-2026 Transportation Improvement Program. The funding is broken down as follows: 2025: $5.8M Right-of-Way; 2026: $18.5M New Culvert; $22.6M Grading.

C. Design Decisions

Link to the Design Decisions document:
pw://ntPwInt1.dot.int.lan:PWMain/Documents/Projects/5806101011/OLE/Location/LocationDesign/ProjectDesignCriteriaworksheet.xlsm

D. Project File Documentation

Link to project file documentation file:
pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\5806101011\OLE\Location\LocationDesign\Project Documentation Shell V8.xlsm

E. Staging / Construction Sequence

TBD.

F. Special Considerations

The following conditions were identified for approval and will be implemented during the design process prior to construction:

Right-of-way requirements will be minimized to the extent possible during final design. Relocations will be conducted in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Iowa Code 316, the "Relocation Assistance Law". Relocations will be made available to all affected persons without discrimination.

A Section 401 Water Quality Certification from the Iowa DNR will be required for any unavoidable stream impacts.

A Section 404 permit from USACE will be required for stream and wetland impacts. A permit application and a wetland mitigation plan will be submitted to USACE for approval.

An Iowa DNR Floodplain Development Permit will be required and applied for during final design.

A National Pollutant Discharge Elimination System (NPDES) general stormwater discharge permit for construction will be required from the DNR. Iowa DOT will require the contractor to comply with measures outlined in the Stormwater Pollution Prevention Plan (SWPPP).

Trees will be cut after October 1 and before March 31 per Iowa DOT Specifications. And impacted woodlands will be mitigated.

Temporary easement of the boat ramp access just south of the Iowa River on the east side of the existing US 61 will be permitted.

Construction activities will be coordinated with public utilities to avoid potential conflicts and to minimize planned interruptions of service.
Access will be provided during construction.

This evaluation of cultural resource impacts (NHPA) and the corresponding clearance is based on information provided in the design plans, proposed limits of construction provided on 04/06/2016. Linked is the concurrence letter submitted to the State Historic Preservation Officer (SHPO). Cultural Resources Clearance NHSX-061-3(61)--3H-58.pdf

This clearance is contingent on the following conditions:

- **Sites 13LA401, 13LA750, 13LA779, 13LA838, 13LA843, 13LA940, 13LA956 will be identified as "Restricted Area" on project plans and fencing will be placed on the current back slope to limit activity near these sites.**
  US 61 (61) DOE Maps.pdf. Site 13LA750, urban sections for SB lanes were discussed of being utilized at PMT's to avoid the site if needed. **Site 13LA401** was decided to keep reconstruction of NB lanes within existing ROW to avoid disturbance to the site. SB bridge extension was discussed to mitigate impacts to the **Site 13LA838** if needed.

- **Check plans will be provided to OLE and SHPO for their review.**
- **Final plans will be provided to OLE and SHPO for their records.**

G. Program Status

This project is currently included in the approved 2022-2026 Transportation Improvement Program.

H. Project Management Team Membership

Steve McElmeel, District 5
Hector Torres-Cacho, District 5
Dave Claman, Bridges & Structures
Elijah Gansen, Design
Nathan Thede, Project Management
Michael Cain, FHWA Iowa Division
Nicole Cuva, Right of Way
Willie Sorenson, Traffic & Safety
Gary Harris, Location & Environment
DeeAnn Newell, Location & Environment
Tom Lovan, Location & Environment
Jon Rees, Location & Environment

FILE NO.
ENGLISH
DESIGN TEAM Flattery \ Crystal
LOUISA COUNTY
PROJECT NUMBER NHSX-061-3(61)--3H-58
SHEET NUMBER A.11
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Roadway				
PIN Number	NHSX-061-3(61)--3H-58		**Submittal Date**	
Project Number	11-58-061-010			**Approval Date**
District	District 5	**Assistant District Engineer**	Steve McElmeel	
County	WAPELLO	**or**		
Route	US 61	**Office Director**	Angela Poole	
Location	US 61 corridor - 1/2 Mile North of Iowa 78 to Just North of 130th Street			
Work Type	Location and Environment Bureau			
Segment Manager	Gary Harris			
Designer	Harris/Lovan			

Design Manual Section 1C-1
Last Updated: 04-29-19

Rural Expressways (Rural Arterials)

Design Element		Preferred	Acceptable Criteria	Project Values
Design speed (mph)		70	50	70
Maximum superelevation rate (Refer to Section 2A-2)		6%	8%	6%
Design lane width (ft)		12	12	12
Full depth paved width (ft)	Outside lane	12'	12	14 w/ 2 part of outside shoulder
	Inside lane(s)	12	12	12
Right turn lane or an auxiliary lane (ft)		12	10	n/a
Left turn lane (ft)		12	10	n/a
Pavement cross-slope (on tangent sections)	Through lanes	2%, However, when adjacent lanes slope in the same direction, increase slope by 0.5% per lane up to 3%	1.5% minimum, 3% maximum	2%
	Auxiliary and turn lanes	3%	3% maximum	n/a
	Crown break at centerline	4%	4% maximum	n/a
Shoulder cross-slope (on tangent sections)		4%	Shoulder cross-slope cannot be less than the adjacent lane, 6% max for paved or granular shoulders, 8% max for earth shoulders	4%
Curb type (Refer to Section 3C-2)	Design speed = 50 or 55 mph	6-inch sloped	6-inch standard	n/a
	Design speed ≥ 60 mph	4-inch sloped	6-inch sloped	n/a
Foreslope (For fill areas greater than 40 ft, contact the Soils Design Section for assistance)	Adjacent to shoulder	10:1 for 4' then 6:1	3:1	10:1 for 4' then 6:1
	Beyond standard ditch depth and design clear zone	3.5:1	3:1	n/a
	Curbed roadways	2%	not steeper than 3:1	n/a
Backslope (For cut areas greater than 25 feet, contact the Soils Design Section for assistance with backslope benches.)		3:1	2.5:1	n/a
Transverse Slopes	w/ drainage structures	8:1	6:1	n/a
	w/o drainage structures	10:1	6:1	n/a
Ditches (Refer to Section 3G-1)	Outside ditch (depth x width) (ft)	5 x 10	--	5x10
	Median ditch depth (ft)	4	2	4
Median width (ft) (Refer to Section 3E-1)		64	50	64
Bridge width—new*	Bridge length ≤ 200 ft	design lane widths + effective shoulder widths	design lane widths + effective shoulder widths	40'
	Bridge length > 200 ft	design lane widths + effective shoulder widths	design lane width + 4' right and left of the design lane widths	40;
Bridge width—existing*		design lane widths + no less than 2 ft left and right	design lane widths + 2 ft left and right of the design lane widths	40'
Vertical clearance (ft) (above lanes, shoulders and 25 feet left and right of the center of railroad tracks)	Over primary	16.5	16	23.5
	Over non-primary	16.5 at interchange locations, 15 at all other locations	14	23.5
	Over railroad	23.3	23.3	23.5
	Sign trusses and pedestrian crossings	17.5	17	n/a
Structural Capacity		Contact Office of Bridges and Structures	Contact Office of Bridges and Structures	
Level of Service		B	B	

*FHWA notification via email is required if acceptable criteria is not met on the NHS system (No formal design exception required)

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Design year ADT =

Design Manual Section 1C-1
Last Updated: 04-29-19

Effective Shoulder Width and Type for Multilane Arterials

Preferred (Values shown in feet)					Acceptable (Values shown in feet)					Project Values
	Rural Roadways		Urban Roadways			Rural Roadways		Urban Roadways		
Auxiliary lanes or turn lanes with shoulders	6		6		Auxiliary lanes or turn lanes with shoulders	6		0		n/a
Turn lanes with curbs	6		See Section 3C-2			6		0		n/a
Expressways	Outside		Median Side		Expressways	Outside		Median Side		
	Effective Shoulder Width	Paved Width	Effective Shoulder Width	Paved Width		Effective Shoulder Width	Paved Width	Effective Shoulder Width	Paved Width	
Routes where bicycles are to be accommodated	10	10	6	6						
On roadways approaching urban areas (due to increased bike traffic)	10	10	6	6	Routes where bicycles are to be accommodated	8	4	4	4	10' outside, 6' inside
On all curves with a superelevation rate of 7.0% or greater	10	10	6	6						
On roadways with design year ADT > 6500 vpd	10	6	6	6	On all other Expressways (Multilane Arterials)	8	0*	4	4	
On all other Expressways (Multilane Arterials)	10	6	6	6						

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

Notes:

8' paved shoulder with 2' from outside driving lane. Totals 10' outside shoulder; Route is a part of Louisa County's Trails Master Plan of 2012 which calls for cooperation with Iowa DOT officials for a shared bicycle vehicle use facility.
6 ft paved shoulder on inside lane

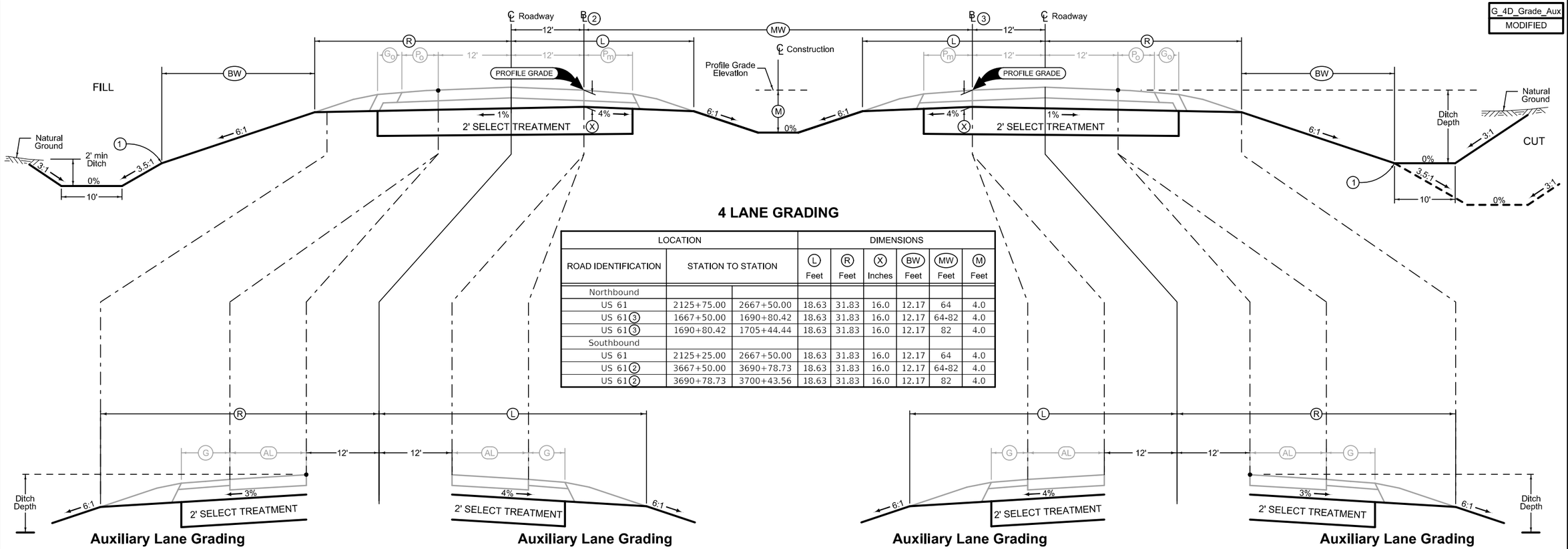
Roadway Design Speed (mph) =

Design Manual Section 1C-1
Last Updated: 04-29-19

Design Criteria for High Speed Roadways

Design Element			Preferred Criteria, Design Speed, mph						Acceptable Criteria, Design Speed, mph						Project Values
			50	55	60	65	70	75	50	55	60	65	70	75	
Stopping sight distance (ft) (Refer to Section 6D-1)			425	495	570	645	730	820	425	495	570	645	730	820	730
Minimum horizontal curve radius (ft) (Refer to Sections 2A-2 and 2A-3)	Method 5 superelevation and side friction distribution	e_{max} = 6%	833	1060	1330	1660	2040	2500	833	1060	1330	1660	2040	2500	2500
		e_{max} = 8%	--	--	--	--	--	--	758	960	1200	1480	1810	2210	
Minimum vertical curve length (ft) (Refer to Section 2B-1)			150	165	180	195	210	225	150	165	180	195	210	225	210
Minimum rate of vertical curvature (K) (Refer to Section 2B-1)	crest vertical curves		84	114	151	193	247	312	84	114	151	193	247	312	401
	sag vertical curves	roadways without fixed source lighting	96	115	136	157	181	206	96	115	136	157	181	206	181
		roadways with fixed-source lighting	96	115	136	157	181	206	54	66	78	91	106	121	181
Minimum gradient (%)	(Refer to Section 2B-1)		0.5						0.3% with a curb, 0.0% without a curb						0.4
Maximum gradient (%) (Refer to Section 2B-1)		Urban roadways	4		3				7	6	6	--	--	--	n/a
		Rural roadways							5	5	4	4	4	4	4
		Interstates							5	5	4	4	4	4	n/a
Clear zone			See "Preferred Clear Zone" table in Section 8A-2						See "Acceptable Clear Zone" table in Section 8A-2						

G_4D_Grade_Aux
MODIFIED



4 LANE GRADING

LOCATION			DIMENSIONS					
ROAD IDENTIFICATION	STATION TO STATION		(L) Feet	(R) Feet	(X) Inches	(BW) Feet	(MW) Feet	(M) Feet
Northbound								
US 61	2125+75.00	2667+50.00	18.63	31.83	16.0	12.17	64	4.0
US 61 (3)	1667+50.00	1690+80.42	18.63	31.83	16.0	12.17	64-82	4.0
US 61 (3)	1690+80.42	1705+44.44	18.63	31.83	16.0	12.17	82	4.0
Southbound								
US 61	2125+25.00	2667+50.00	18.63	31.83	16.0	12.17	64	4.0
US 61 (2)	3667+50.00	3690+78.73	18.63	31.83	16.0	12.17	64-82	4.0
US 61 (2)	3690+78.73	3700+43.56	18.63	31.83	16.0	12.17	82	4.0

Auxiliary Lane Grading

LOCATION			(R) Feet
ROAD IDENTIFICATION	STATION TO STATION		
US 61/65th St	TBD	TBD	

Auxiliary Lane Grading

LOCATION			(L) Feet
ROAD IDENTIFICATION	STATION TO STATION		
US 61/30th St	TBD	TBD	
US 61/35th St	TBD	TBD	
US 61/Co Rd H16 (W)	TBD	TBD	
US 61/J Turn	TBD	TBD	
US 61/K Ave N	TBD	TBD	
US 61/Co Rd G56	TBD	TBD	
US 61/J Ave	TBD	TBD	
US 61/130th St (2)	TBD	TBD	

Auxiliary Lane Grading

LOCATION			(L) Feet
ROAD IDENTIFICATION	STATION TO STATION		
US 61/30th St	TBD	TBD	
US 61/35th St	TBD	TBD	
US 61/Co Rd H16 (E)	TBD	TBD	
US 61/J Turn	TBD	TBD	
US 61/112th St	TBD	TBD	
US 61/Co Rd G56	TBD	TBD	
US 61/J Ave	TBD	TBD	
US 61/130th St (3)	TBD	TBD	

Auxiliary Lane Grading

LOCATION			(R) Feet
ROAD IDENTIFICATION	STATION TO STATION		
US 61/BUS 61	TBD	TBD	

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.

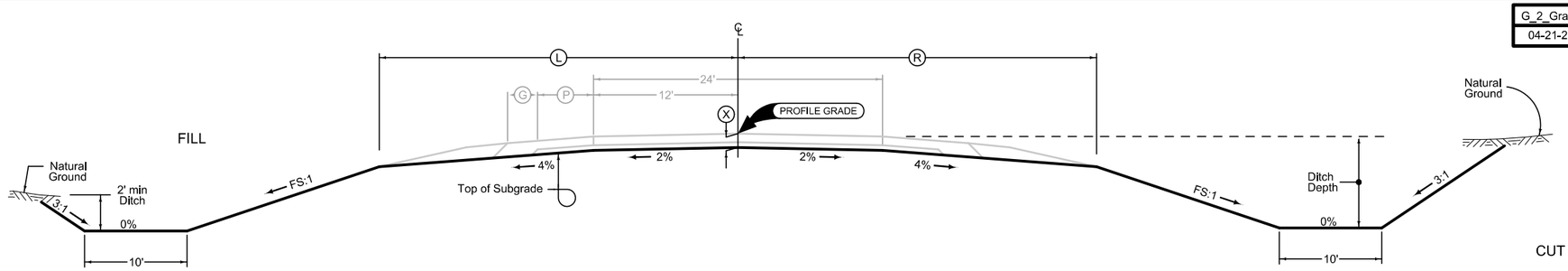
(1) Refer to project plan and cross sections for specific location of foreslope change.

(2) Baseline for chain SB_ML061

(3) Baseline for chain NB_ML061

G_2_Grade
04-21-20

LOCATION			DIMENSIONS			
ROAD IDENTIFICATION	STATION TO STATION		(L) Feet	(R) Feet	(X) Inches	FS
Co Rd H16 (W)	382+00.00	388+87.00	24.25	24.25	22	3
BUS 61	425+88.00	439+86.00	TBD	TBD	TBD	TBD
Co Rd G56	827+86.84	829+55.00	24.25	24.25	22	3



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

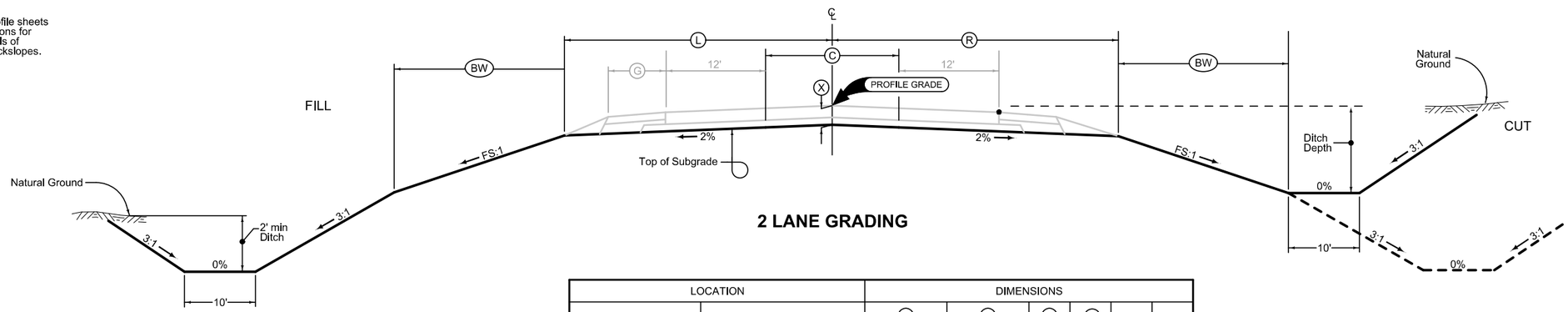
See plan & profile sheets and cross sections for additional details of ditches and backslopes.

2 LANE GRADING

G_2Lane

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

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

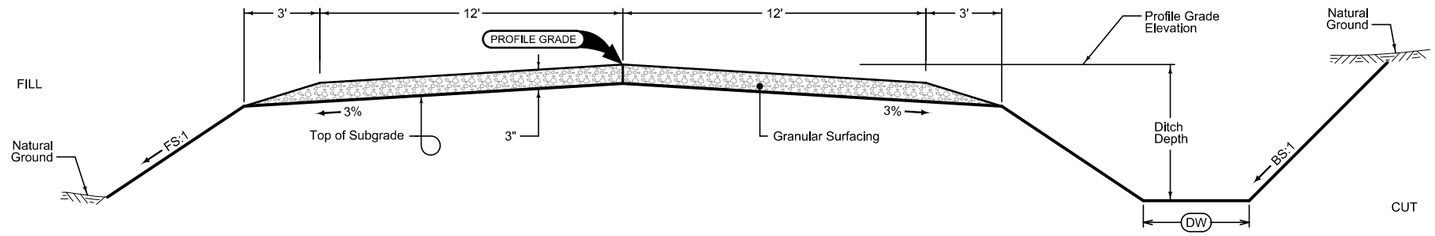


2 LANE GRADING

LOCATION			DIMENSIONS					
ROAD IDENTIFICATION	STATION TO STATION		(L) Feet	(R) Feet	(X) Inches	(C) Feet	(BW)	FS
Co Rd G62	539+75.00	539+75.50	28.25	28.25	22	0	7.55	3
Co Rd G62	539+75.50	545+15.96	28.25-44.47	28.25-44.47	22	0-16	7.55	3
Co Rd G62	545+15.96	555+05.00	44.47	44.47	22	16	13.12	6
Co Rd G62	555+05.00	560+45.46	44.47-28.25	44.47-28.25	22	16-0	7.55	3
Co Rd G62	560+45.46	576+45.77	28.25	28.25	22	0	7.55	3

LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		FS	BS	(DW) Feet
30th St	136+99.17	139+60.00	3	3	10
35th St	260+50.00	262+49.00	3	3	10
Co Rd H16 (E)	389+98.16	392+00.00	3	3	10
65th St (connection)	398+87.74	424+76.00	3	3	10
K Ave	5353+00.00	5363+00.00	3	3	10
K Ave North (west)	669+05.00	700+26.23	3	3	10
112th St (east)	701+39.06	703+25.00	3	3	10
Frontage 61	TBD	TBD			
J Ave	967+80.22	969+75.00	3	3	10
130th St	4689+50.00	4692+93.09	3	3	10
130th St	4694+23.55	4695+75.00	3	3	10

G_2_GradeGran
10-17-17



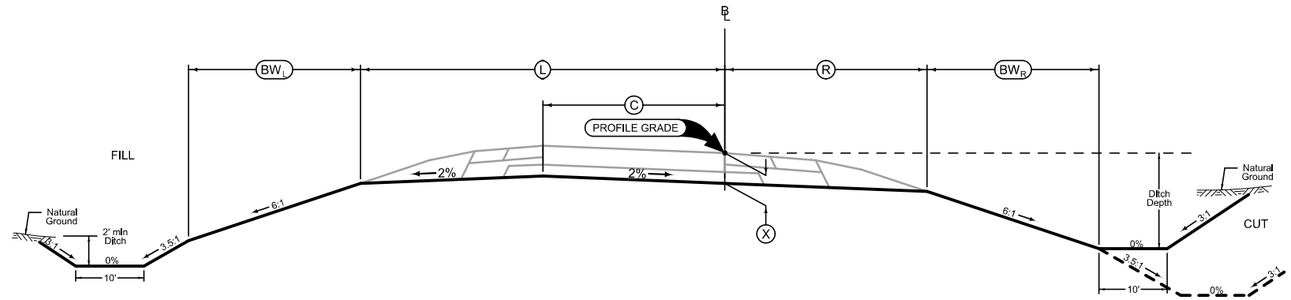
Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

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

GRADING AND GRANULAR SURFACING

LOCATION				DIMENSIONS					
INTERCHANGE	RAMP	STATION TO STATION		(L) Feet	(R) Feet	(C) Feet	(X) Inches	(BW_L) Feet	(BW_R) Feet
US 61 at G62	A	11550+01.51	11564+00.00	36.58	22.58	16	22	9.42	7.42
US 61 at G62	B	22536+75.00	22550+12.31	36.57	22.58	16	22	9.43	7.42
US 61 at G62	C	33537+78.67	33550+12.76	36.57	22.58	16	22	9.43	7.42
US 61 at G62	D	44550+00.14	44562+46.34	36.57	22.58	16	22	9.43	7.42

G_1R_Grade
04-15-14



Section view is in direction of traffic.

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

RAMP GRADING

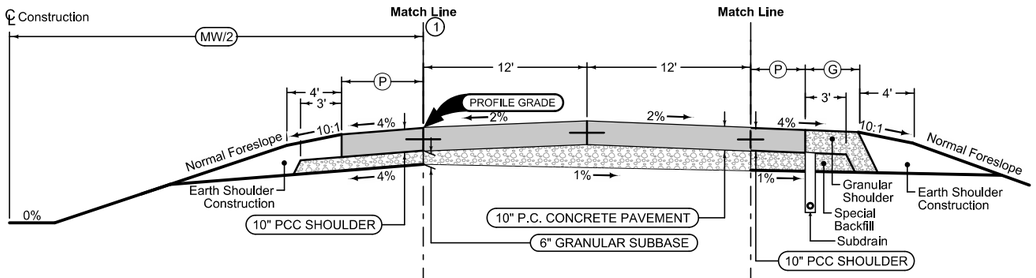
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER B.3

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Full Depth PCC Shoulder

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

4_P_FullPCC_ Modified			
ROAD ID	BEGIN STATION	END STATION	(P) Feet
US 61	2125+75.00	2667+50.00	6
US 61 (1)	1667+50.00	1705+44.44	6



Section shown in the direction of traffic.

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

4DP_ Modified			
ROAD ID	BEGIN STATION	END STATION	(MW) Feet
US 61	2125+75.00	2667+50.00	64
US 61 (1)	1667+50.00	1705+44.44	64-82

Full Depth PCC Combination Shoulder

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

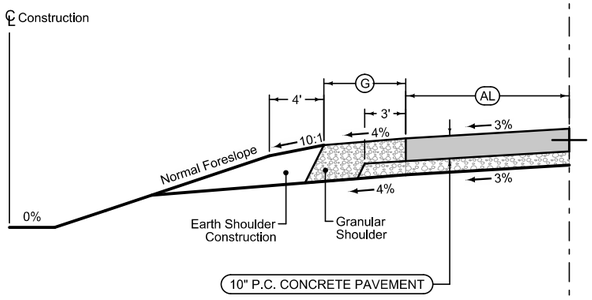
4_C_FullPCC_ Modified				
ROAD ID	BEGIN STATION	END STATION	(P) Feet	(G) Feet
US 61	2125+75.00	2667+50.00	6	4
US 61 (1)	1667+50.00	1705+44.44	6	4

Auxiliary Lane

Longitudinal joint: L or KT
Transverse joint: Match Mainline

Auxiliary Lane Granular Shoulder

4_AuxLane_PCC_ Modified				4_AL_Shldr_G_ 04-21-20
ROAD ID	BEGIN STATION	END STATION	(AL) Feet	(G) Feet
US 61	TBD	TBD		

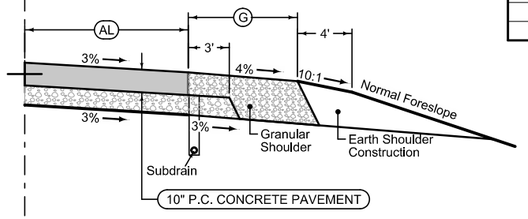


Auxiliary Lane

Longitudinal joint: L or KT
Transverse joint: Match Mainline

Auxiliary Lane Granular Shoulder

4_AuxLane_PCC_ Modified				4_AL_Shldr_G_ 04-21-20
ROAD ID	BEGIN STATION	END STATION	(AL) Feet	(G) Feet
US 61	TBD	TBD		



(1) Baseline for chain NB_ML061

See Tab 100-24 for pavement quantities.

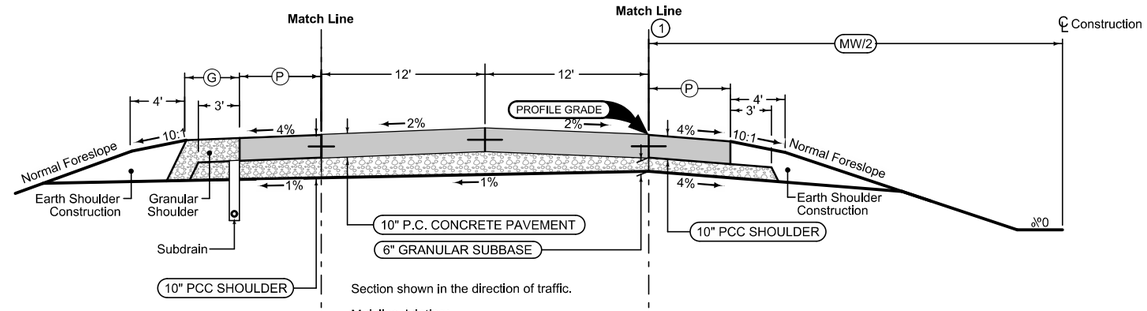
See Tab 112-9 for shoulder quantities.

US 61 NB

Full Depth PCC Combination Shoulder

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

4_C_FullPCC_ Modified				
ROAD ID	BEGIN STATION	END STATION	(P) Feet	(G) Feet
US 61	2125+25.00	2667+50.00	6	4
US 61 (1)	3667+50.00	3700+43.56	6	4



Section shown in the direction of traffic.

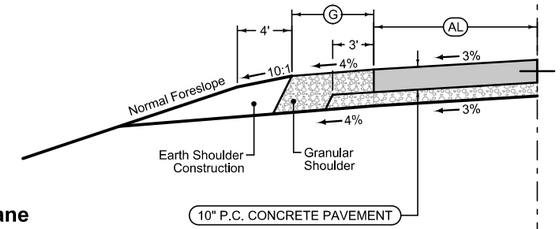
Mainline Jointing:
Transverse joints: CD at 17' spacing
Longitudinal joint: L-2

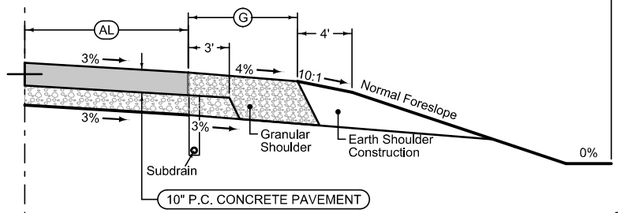
4DP_ Modified			
ROAD ID	BEGIN STATION	END STATION	(MW) Feet
US 61	2125+25.00	2667+50.00	64
US 61 (1)	3667+50.00	3700+43.56	64-82

Full Depth PCC Shoulder

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

4_P_FullPCC_ Modified			
ROAD ID	BEGIN STATION	END STATION	(P) Feet
US 61	2125+25.00	2667+50.00	6
US 61 (1)	3667+50.00	3700+43.56	6





Auxiliary Lane

Longitudinal joint: L or KT
Transverse joint: Match Mainline

Auxiliary Lane Granular Shoulder

4_AuxLane_PCC_ Modified				4_AL_Shldr_G_ 04-21-20
ROAD ID	BEGIN STATION	END STATION	(AL) Feet	(G) Feet
	TBD	TBD		

Auxiliary Lane

Longitudinal joint: L or KT
Transverse joint: Match Mainline

Auxiliary Lane Granular Shoulder

4_AuxLane_PCC_ Modified				4_AL_Shldr_G_ 04-21-20
ROAD ID	BEGIN STATION	END STATION	(AL) Feet	(G) Feet
	TBD	TBD		

(1) Baseline for chain SB_ML061

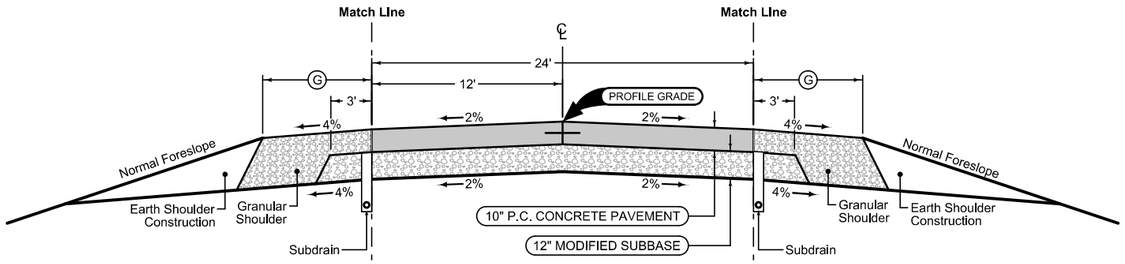
See Tab 100-24 for pavement quantities.

See Tab 112-9 for shoulder quantities.

US 61 SB

Granular Shoulder

2_G_SR_ 04-21-20			
ROAD IDENTIFICATION	STATION TO STATION		(G) Feet
Co Rd H16 (W)	382+00.00	388+87.00	6
BUS 61/65th St	TBD	TBD	
Co Rd G56	827+86.84	829+55.00	6



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

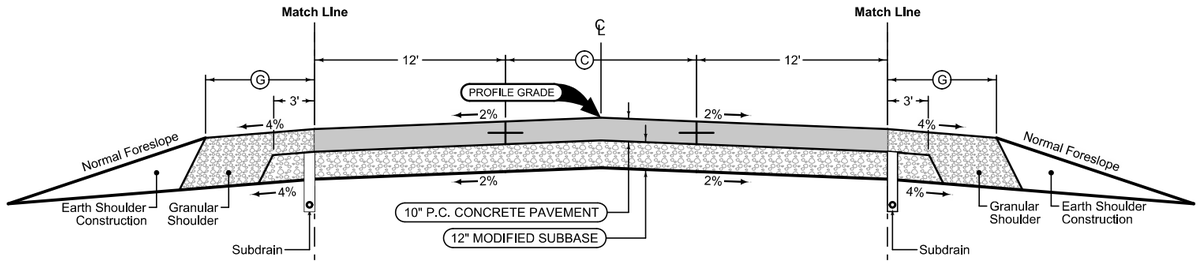
2P_ 04-21-20		
ROAD IDENTIFICATION	STATION TO STATION	
H16/40th St (west)	382+00.00	388+87.00
BUS 61/65th St	TBD	TBD
Co Rd G56	827+86.84	829+55.00

Granular Shoulder

2_G_SR_ 04-21-20			
ROAD IDENTIFICATION	STATION TO STATION		(G) Feet
Co Rd H16 (W)	382+00.00	388+87.00	6
BUS 61/65th St	TBD	TBD	
Co Rd G56	827+86.84	829+55.00	6

Granular Shoulder

2_G_SR_ 04-21-20			
ROAD IDENTIFICATION	STATION TO STATION		(G) Feet
Co Rd G62	539+75.00	576+45.77	10



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

2P_TWLTL_ 04-21-20			
ROAD IDENTIFICATION	STATION TO STATION		(C) Feet
Co Rd G62	539+75.00	539+75.50	0
Co Rd G62	539+75.50	545+45.96	0-16
Co Rd G62	545+45.96	555+05.00	16
Co Rd G62	555+05.00	560+45.46	16-0
Co Rd G62	560+45.46	576+45.77	0

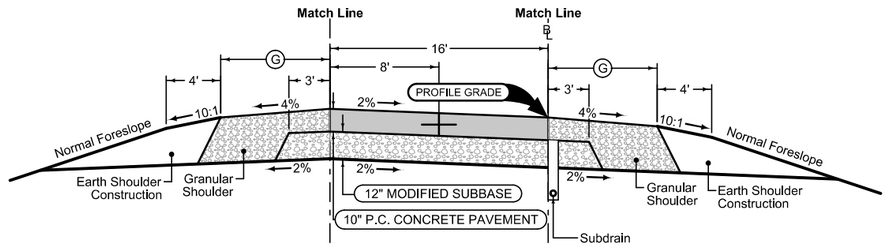
Granular Shoulder

2_G_SR_ 04-21-20			
ROAD IDENTIFICATION	STATION TO STATION		(G) Feet
Co Rd G62	539+75.00	576+45.77	10

See Tab 100-24 for pavement quantities.

See Tab 112-9 for shoulder quantities.

PAVED SIDE ROADS



Section shown in the direction of traffic.

Ramp Jointing:
Transverse joints: CD at 15' spacing.
Longitudinal joints: L-2

Granular Shoulder

				1R_G_ Modified
INTERCHANGE	RAMP	BEGIN STATION	END STATION	(G) Feet
US 61 at G62	A	11550+01.51	11564+00.00	4
US 61 at G62	B	22536+75.00	22550+12.31	4
US 61 at G62	C	33537+78.67	33550+12.76	4
US 61 at G62	D	44550+00.14	44562+46.34	4

				1RP_ Modified
INTERCHANGE	RAMP	BEGIN STATION	END STATION	
US 61 at G62	A	11550+01.51	11564+00.00	
US 61 at G62	B	22536+75.00	22550+12.31	
US 61 at G62	C	33537+78.67	33550+12.76	
US 61 at G62	D	44550+00.14	44562+46.34	

Granular Shoulder

				1R_G_ Modified
INTERCHANGE	RAMP	BEGIN STATION	END STATION	(G) Feet
US 61 at G62	A	11550+01.51	11564+00.00	6
US 61 at G62	B	22536+75.00	22550+12.31	6
US 61 at G62	C	33537+78.67	33550+12.76	6
US 61 at G62	D	44550+00.14	44562+46.34	6

See Tab 100-24 for pavement quantities.

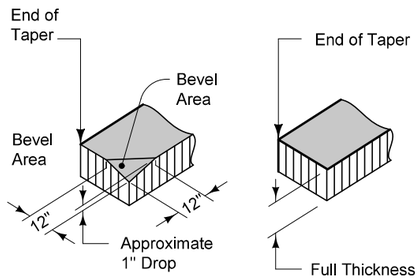
See Tab 112-9 for shoulder quantities.

US 61 at CO RD G62 Ramps

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER B.7	

1:12:04 PM 5/19/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_B01.dgn

7101
10-19-10



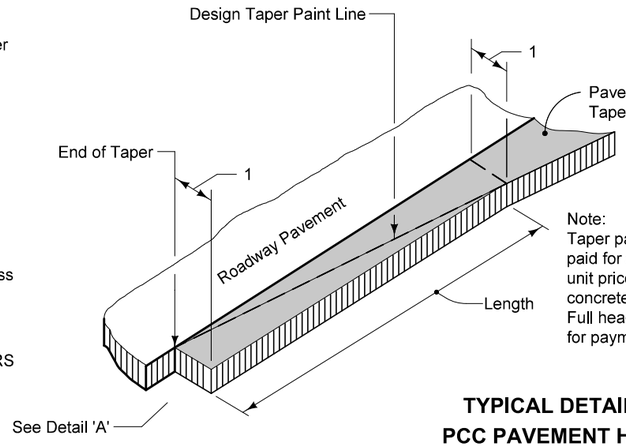
DETAIL 'A'

FOR
GRANULAR SHOULDERS

DETAIL 'A'

FOR
PAVED SHOULDERS

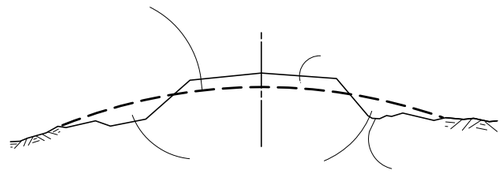
1 Normal width is 2'-0". Construct 4'-0" width when butting into 4' wide HMA shoulders (See Typical 7154A).



Note:
Taper pavement to be paid for at the contract unit price for P.C. concrete pavement. Full header is included for payment.

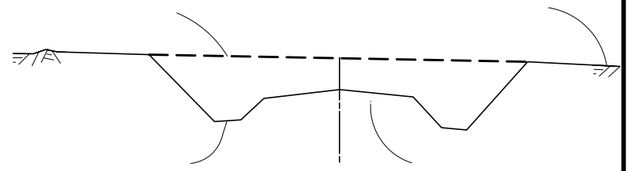
TYPICAL DETAILS OF PCC PAVEMENT HEADER

4302
04-03-01



Fill Section

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



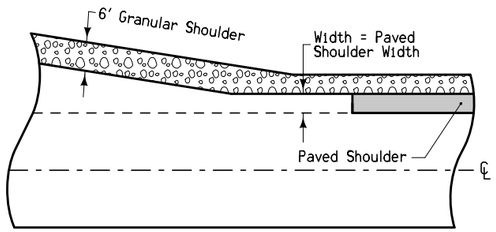
Cut Section

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

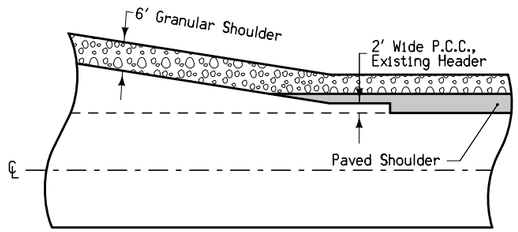
Note:
The work of obliterating or reshaping old roadbeds shall be done at the direction of the Engineer.

TYPICAL DETAILS FOR OBLITERATION EXISTING ROADBED

7154A
10-20-09



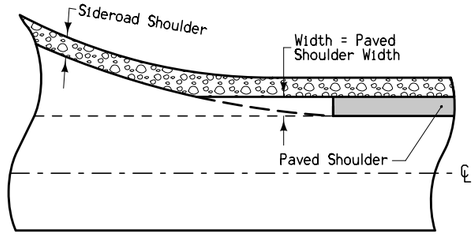
With Newly Constructed Turn Lanes



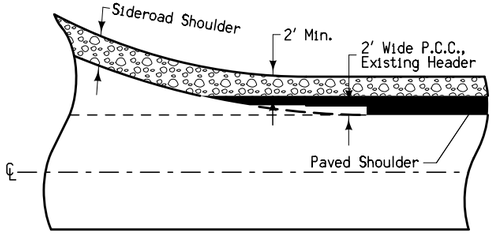
At UAC Turn Lanes

PAVED SHOULDER DETAIL AT TURN LANES

7154B
10-19-21



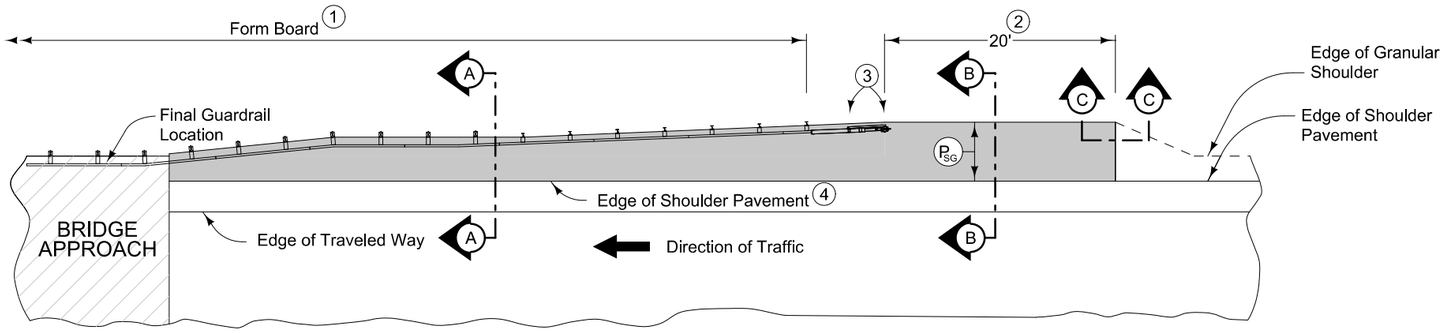
With Newly Constructed Returns



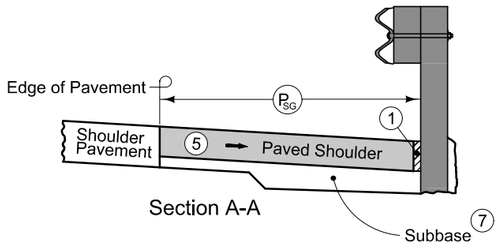
At UAC Returns

PAVED SHOULDER DETAIL AT RETURNS

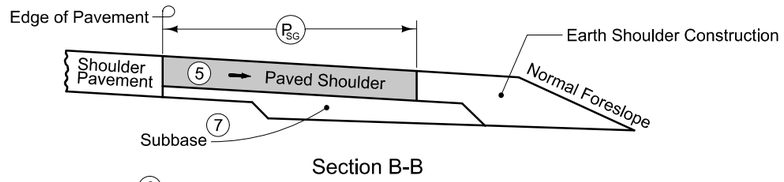
7157B
MODIFIED



PLAN VIEW

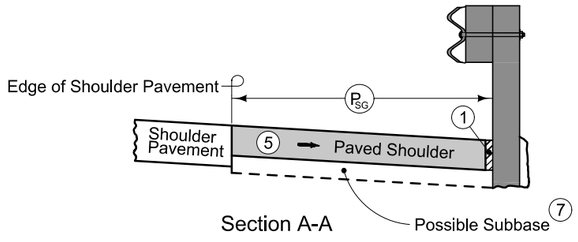


Section A-A

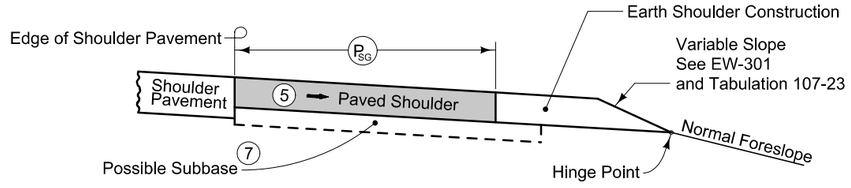


Section B-B

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.

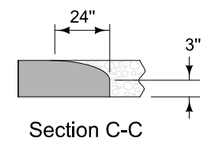
(3) Shoulder may be notched for first 2 posts or post sleeves may be installed through pavement. Do not drive posts through pavement.

(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.

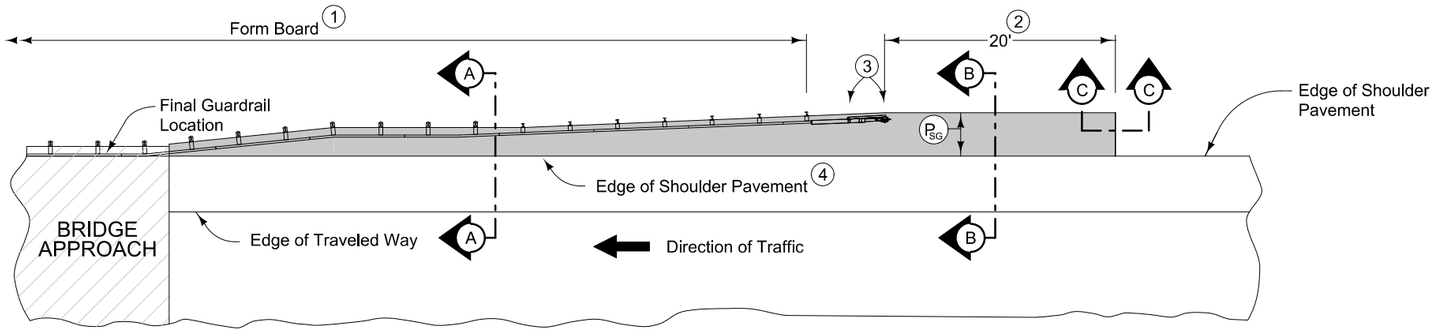
(7) Refer to other details in the plan.



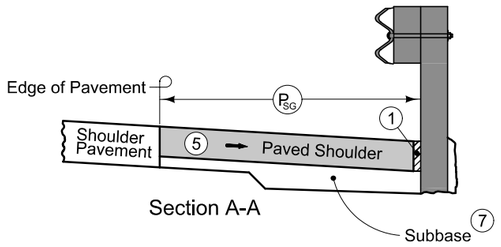
Section C-C
Roll down at granular shoulder or earth.

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

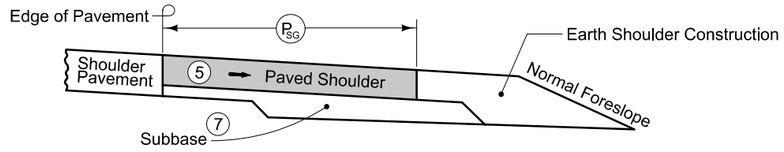
7158B
MODIFIED



PLAN VIEW

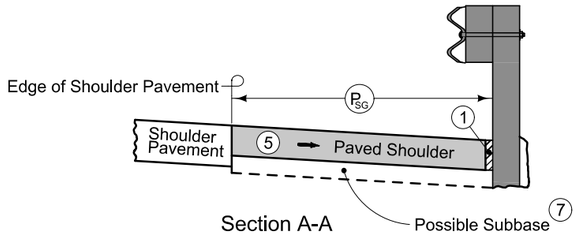


Section A-A

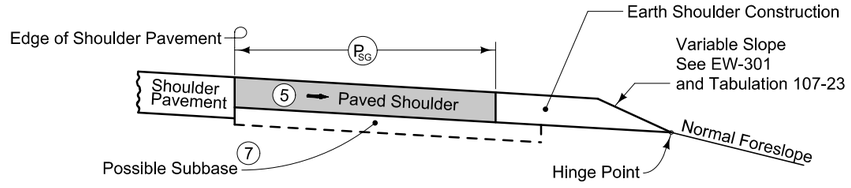


Section B-B

NEW CONSTRUCTION 6



Section A-A



Section B-B

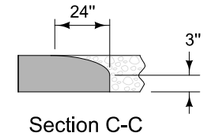
EXISTING SHOULDER

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)

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)
- Septic Tank
- Cistern
- L.P. Gas Tank (No Footing)
- 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

SURVEYED UTILITY OWNER SYMBOLS

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

SECTION A

- FO2 — FO2D - Windstream Communications - Quality D
- FO3 — FO3D - Mutual Telephone Co of Morning Sun - Quality D
- T2 — TL2D - Mutual Telephone Co of Morning Sun - Quality D
- T3 — TL3D - Windstream Communications - Quality D
- E1 — EL1D - Eastern Iowa Light & Power - Quality D
- \+ PPA - Eastern Iowa Light & Power

SECTION B

- E1 — EL1D, Electric Line Eastern Iowa Light & Power - Quality D
- FO — FO1D, Fiber Optic Iowa Communications Network - Quality D
- FO2 — FO2D, Fiber Optic Windstream Communications - Quality D
- FO3 — FO3D, Fiber Optic Mutual Telephone Co of Morning Sun - Quality D
- FO4 — FO4D, Fiber Optic Aureon Network Services - Quality D
- G — GL1D, Gas Line Alliant Energy - Quality D
- PPA, Power Pole Alliant Energy
- PPB, Power Pole Eastern Iowa Light & Power
- T1 — TL1D, Telephone Line CenturyLink - Quality D
- T2 — TL2D, Telephone Line Co. 2 - Quality D
- T3 — TL3D, Telephone Line Windstream Communications - Quality D
- TV — TV1D, TV Cable Mediacom - Quality D

SECTION C

- T1 — TL1D Windstream Communications - Quality D
- PPA Eastern Iowa Light & Power
- FO — FO1D CenturyLink - 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 / 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
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Easement (Temporary)
- Easement
- C/A Access Control
- Property Line

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

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

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.1

3:45:29 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_LGD.dgn

Sta. 2125+25.00 (ML061)
Begin SB Construction

18" X 42.5'
C.M.P.

POB 2106+18.85

PC 2106+19.88

2110+00

2115+00

2120+00

2125+00

2130+00

2135+00

PT 2117+29.28

PI 2111+76.86

PI 2131+86.02

61

PC 2126+04.60

POT Sta. 2136+42.97 (ML061)
= POT Sta. 136+42.97 (SR30)

Δ = 18°51'48.63" (RT)
T = 581.41
L = 1152.31
R = 3500.00
E = 47.96
e = 5.0%
L = 225
x = 90

Sect. No. 27

30th St

Sect. No. 26

Sect.

For additional information, refer to Des Moines/Louisa County Grading US 61
NHSX-061-2(66)--3H-29
Letting Date July 18, 2023

Sta. 2121+75.00 (ML061)
Begin Construction

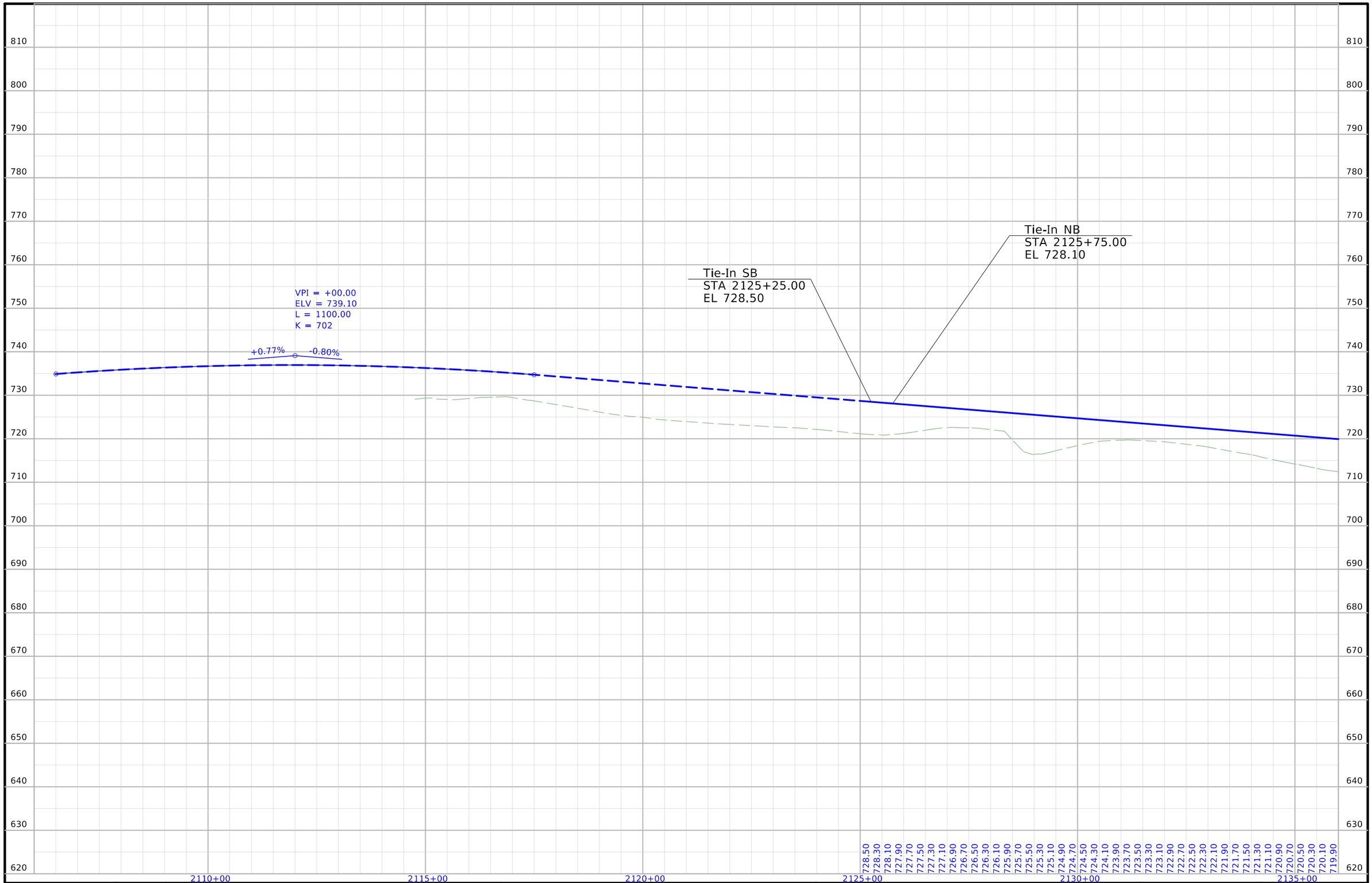
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US 61

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.2	

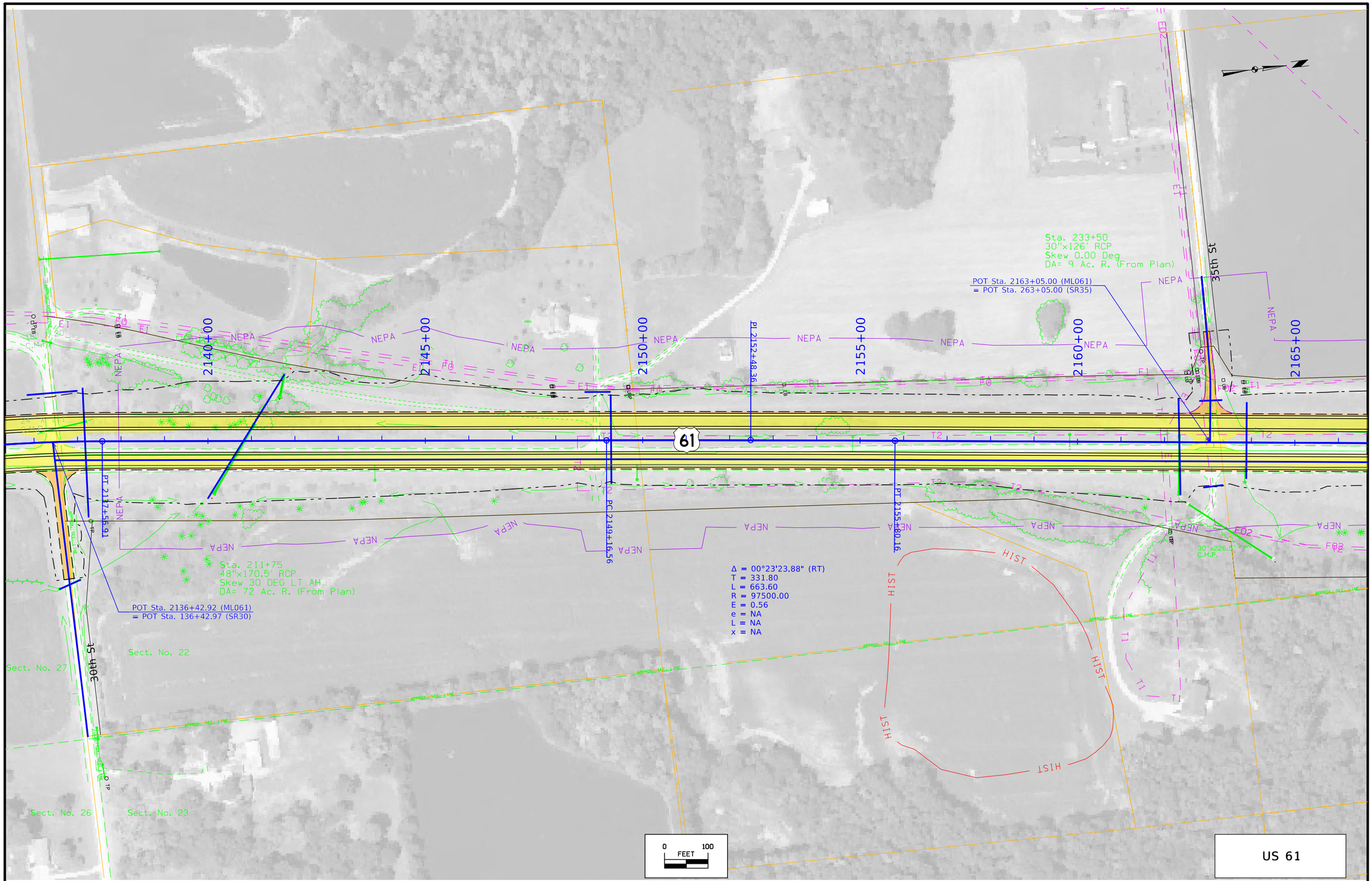
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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.3	

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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.4	

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790
780
770
760
750
740
730
720
710
700
690
680
670
660
650
640
630
620
610
600

30th St

35th St

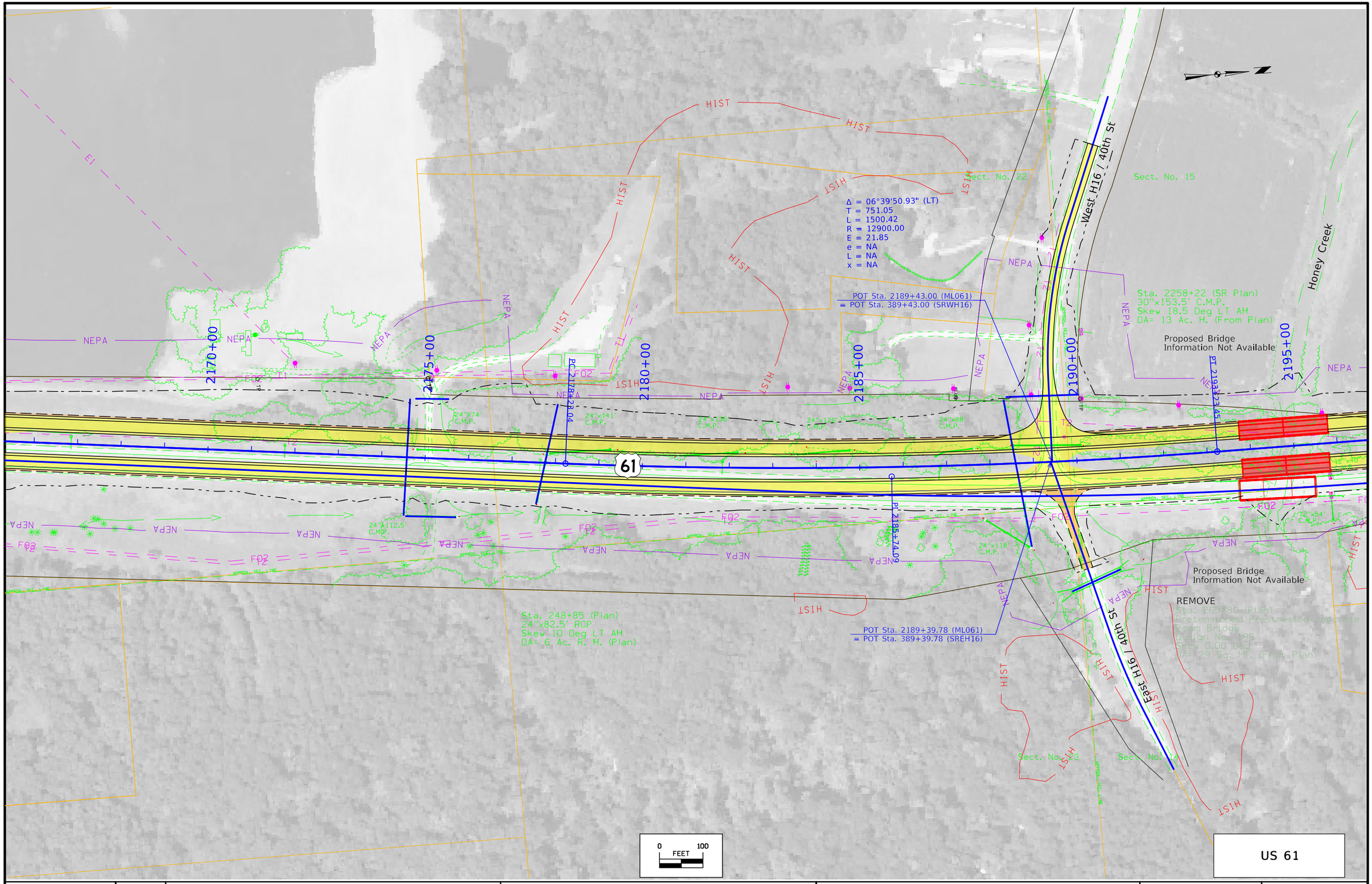
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2140+00 2145+00 2150+00 2155+00 2160+00 2165+00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.5	

3:46:22 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

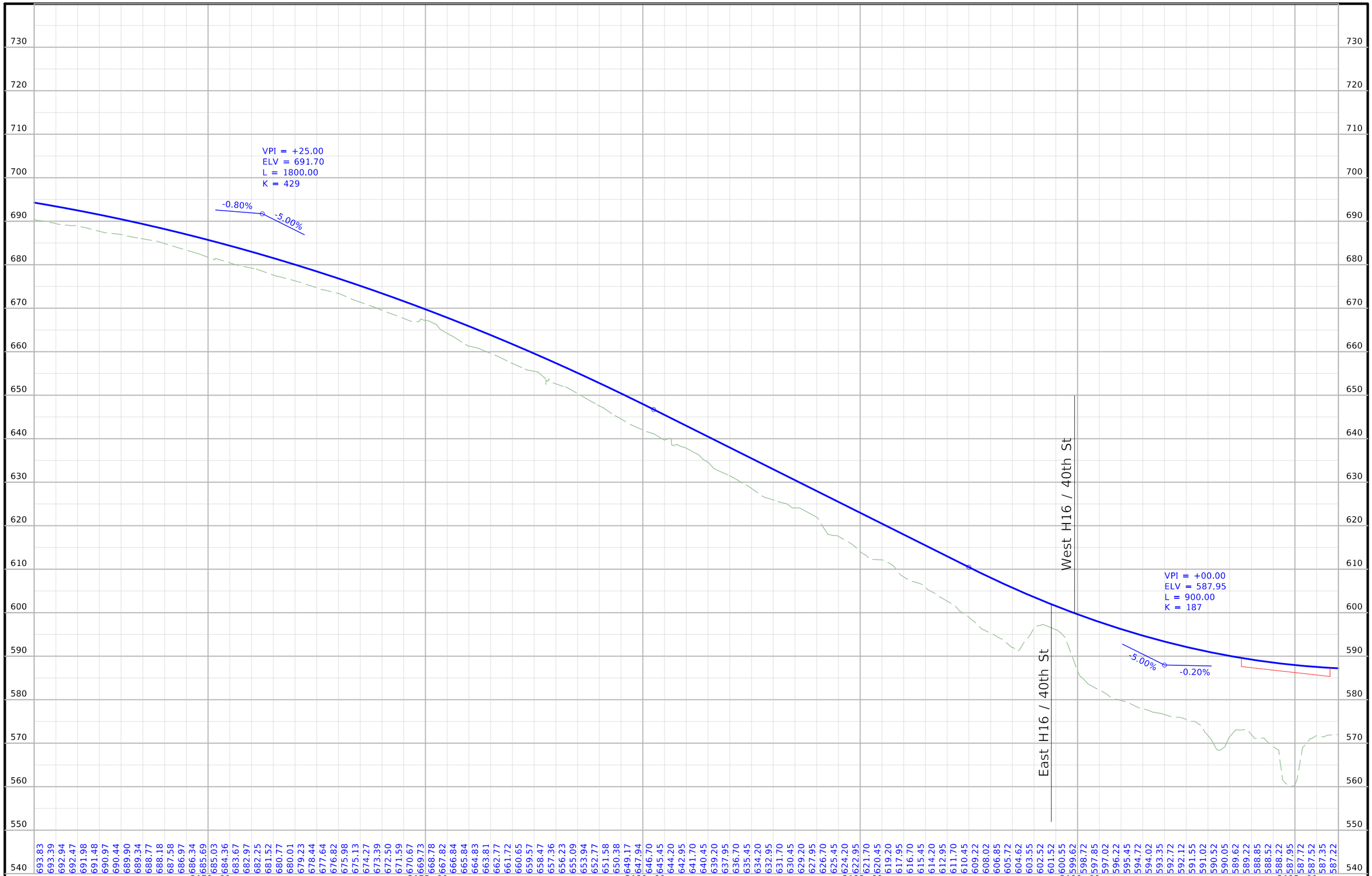


US 61

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.6	

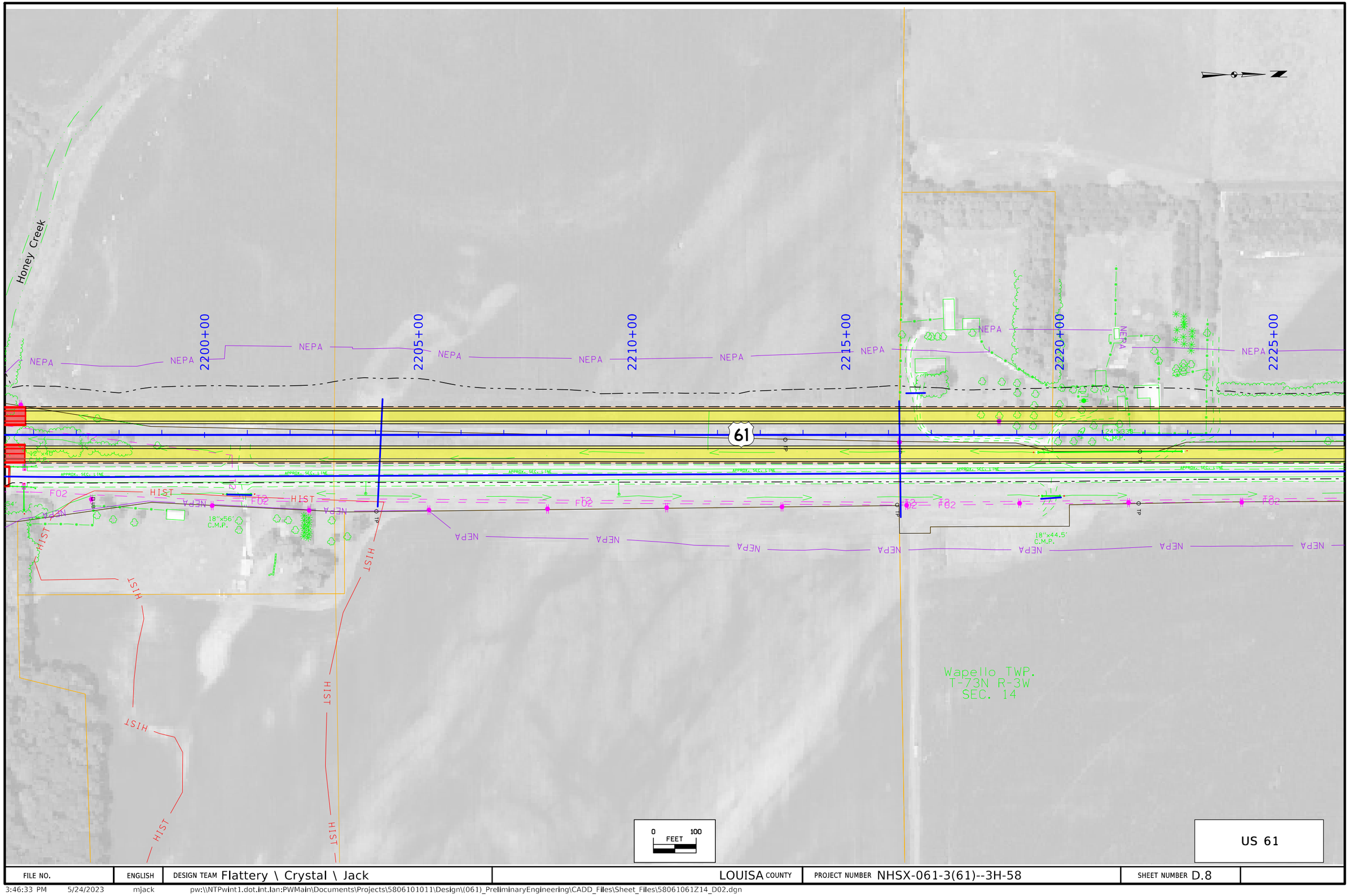
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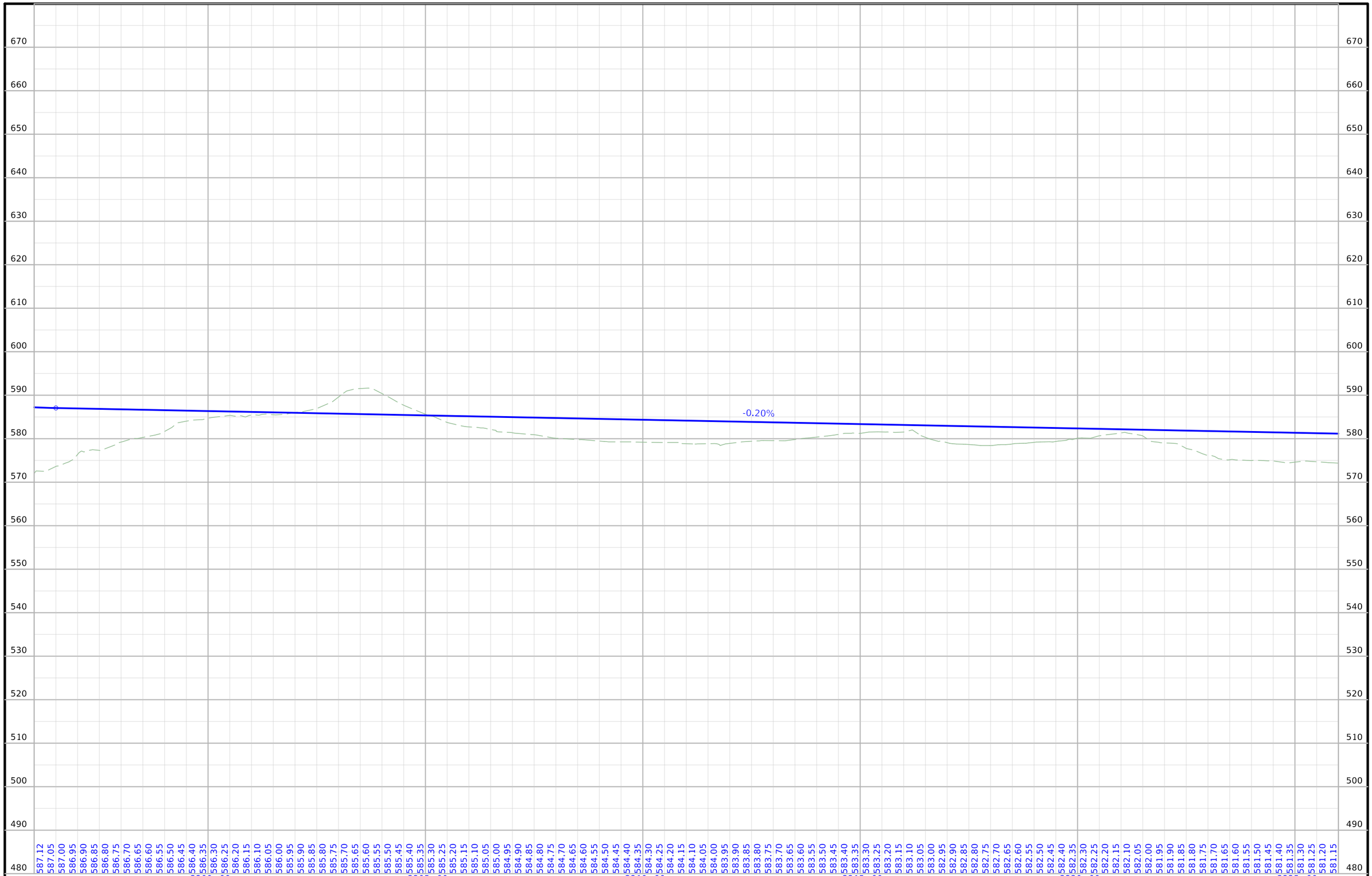
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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.8	

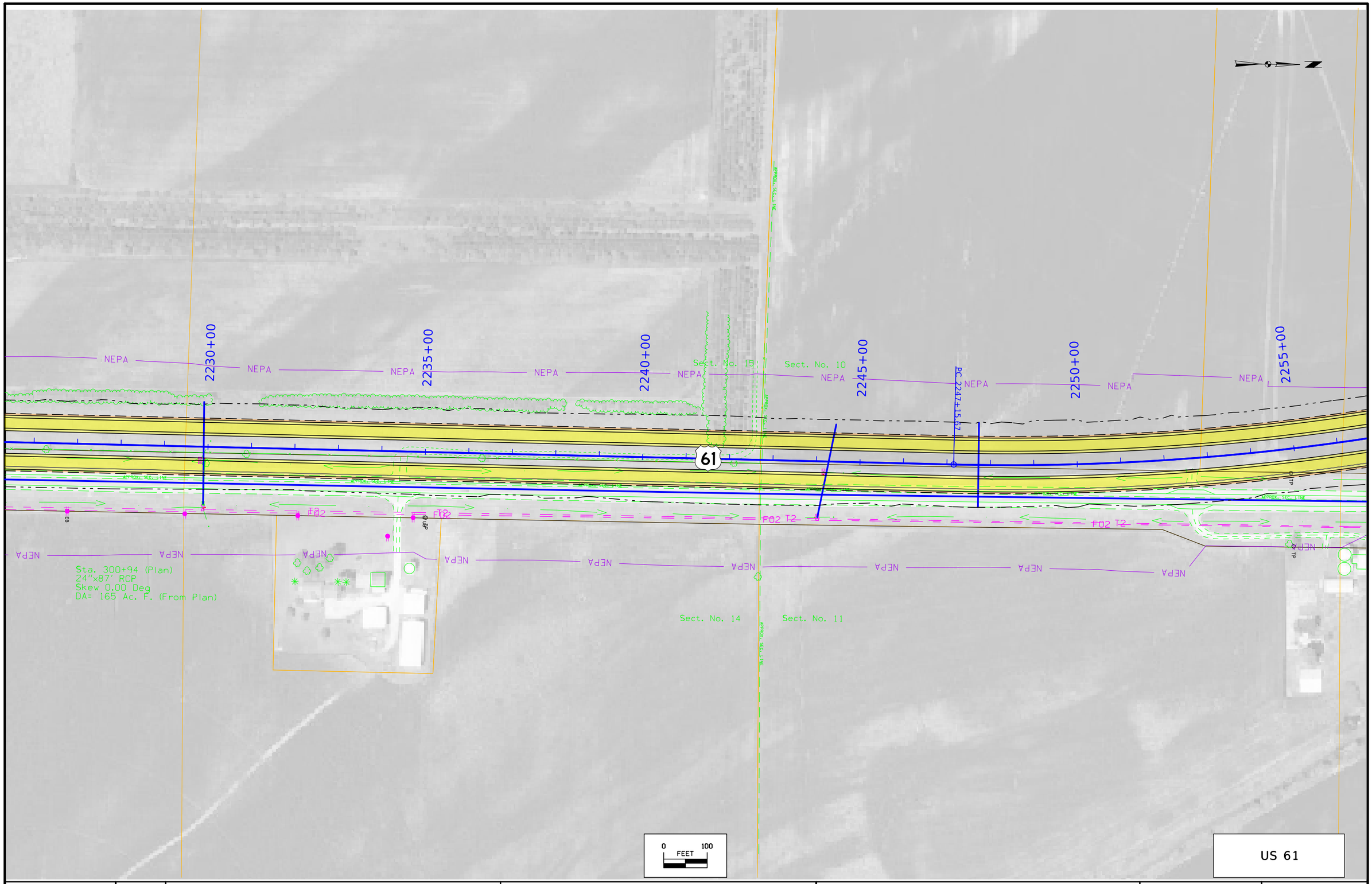
3:46:33 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.9	

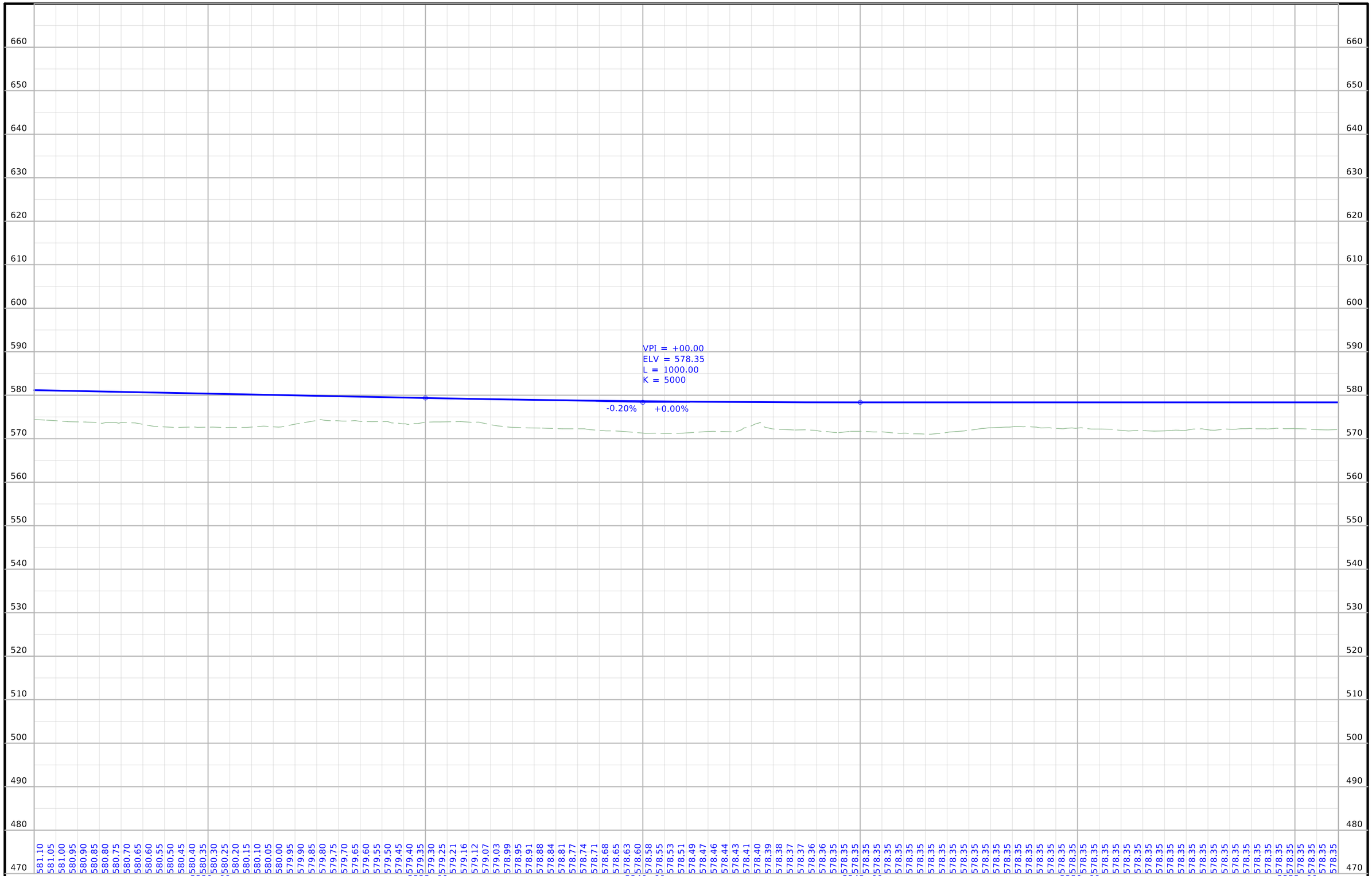
3:46:36 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.10	

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660
650
640
630
620
610
600
590
580
570
560
550
540
530
520
510
500
490
480
470
VPI = +00.00
ELV = 578.35
L = 1000.00
K = 5000
-0.20%
+0.00%
581.10 581.05 581.00 580.95 580.90 580.85 580.80 580.75 580.70 580.65 580.60 580.55 580.50 580.45 580.40 580.35
580.30 580.25 580.20 580.15 580.10 580.05 580.00 579.95 579.90 579.85 579.80 579.75 579.70 579.65 579.60 579.55 579.50 579.45 579.40 579.35
579.30 579.25 579.21 579.16 579.12 579.07 579.03 578.99 578.95 578.91 578.88 578.84 578.81 578.77 578.74 578.71 578.68 578.65 578.63 578.60
578.58 578.55 578.53 578.51 578.49 578.47 578.46 578.44 578.43 578.41 578.40 578.39 578.38 578.37 578.36 578.36 578.35 578.35 578.35 578.35
578.35 578.35 578.35 578.35 578.35 578.35 578.35 578.35 578.35 578.35 578.35 578.35 578.35 578.35 578.35 578.35

Δ = 31°57'33.22" (LT)
T = 1574.98
L = 3067.87
R = 5500.00
E = 221.06
e = 3.6%
L = 162
x = 90

2255+00
2260+00
2265+00
2270+00
2275+00
2280+00
2285+00

NEPA

61

Otter Creek

Otter Creek Count

Proposed Bridge
Information Not Available

Proposed Bridge
Information Not Available

Sta. 355+64.15 (Plan)
123.5'x44' Concrete
Slab Bridge
Skew 0.00° Deg
DA= 24 Sq. Mi. (From Plan)

Sta. 338+00
30"x121' RCP
Skew 0.00 Deg
DA= 46 Ac. F. (From Plan)

Pl 2262+90.65

Pl 2271+83.53

APPROX. SEC. LINE

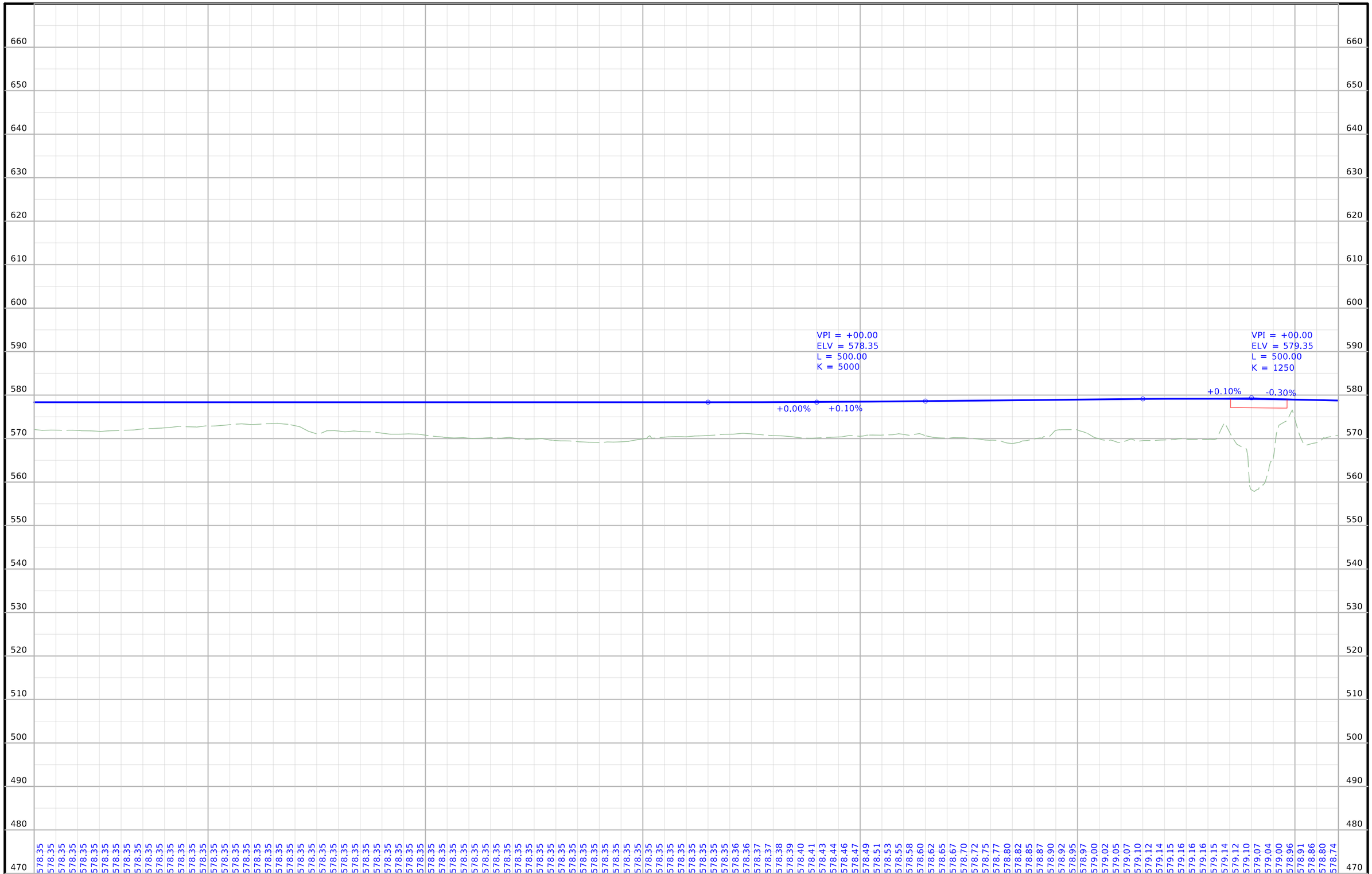
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US 61

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.12	

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VPI = +00.00
ELV = 578.35
L = 500.00
K = 5000
+0.00%
+0.10%
VPI = +00.00
ELV = 579.35
L = 500.00
K = 1250
+0.10%
-0.30%
660
650
640
630
620
610
600
590
580
570
560
550
540
530
520
510
500
490
480
470
578.35 578.35 578.35

Otter Creek County Ditch

2290+00 2295+00 2300+00 2305+00 2310+00 2315+00

NEPA

24"x54' C.M.P.

18"x76' C.M.P.

24"x42' C.M.P.

36"x53' C.M.P.

61

OBLITERATA

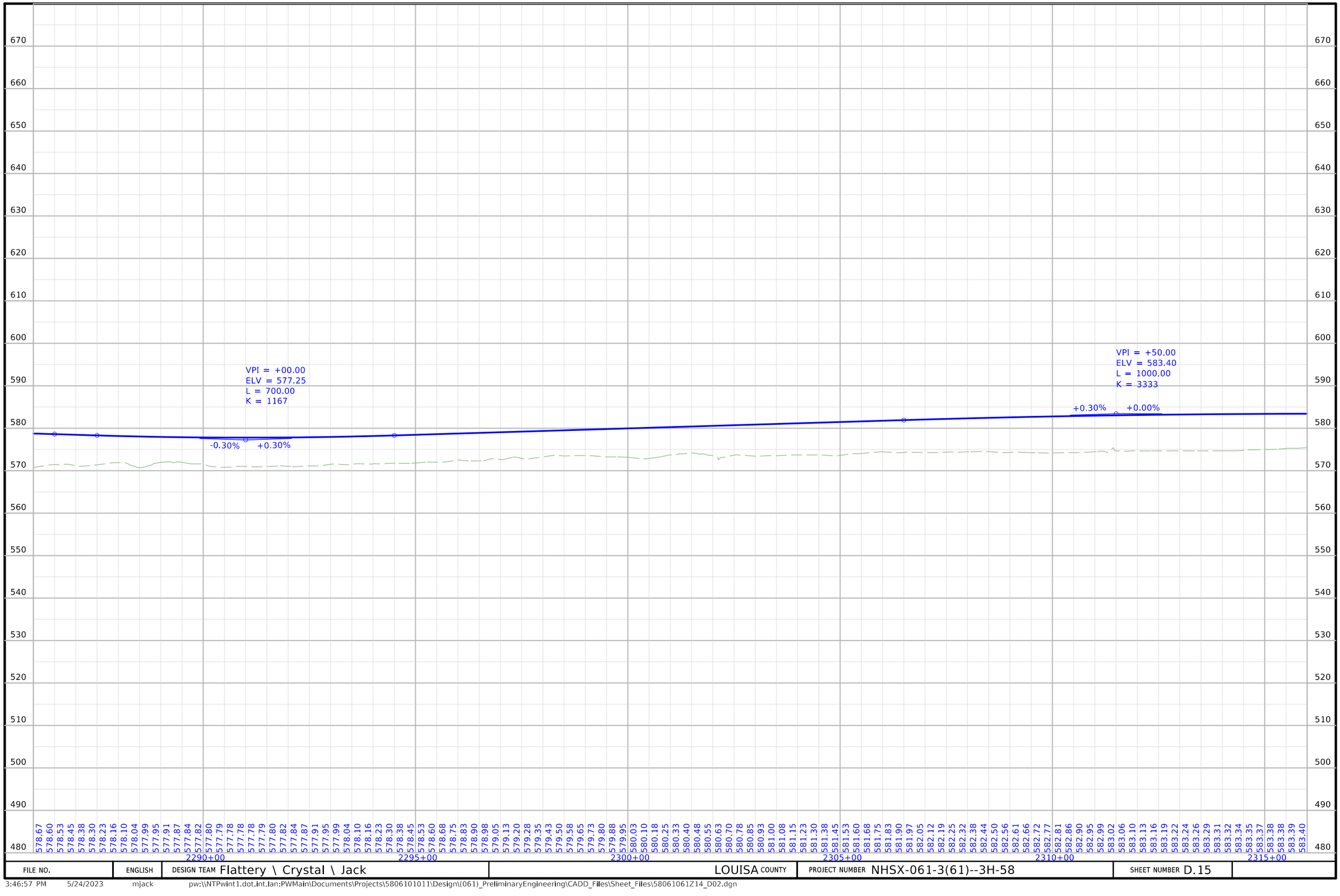
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US 61

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.14	

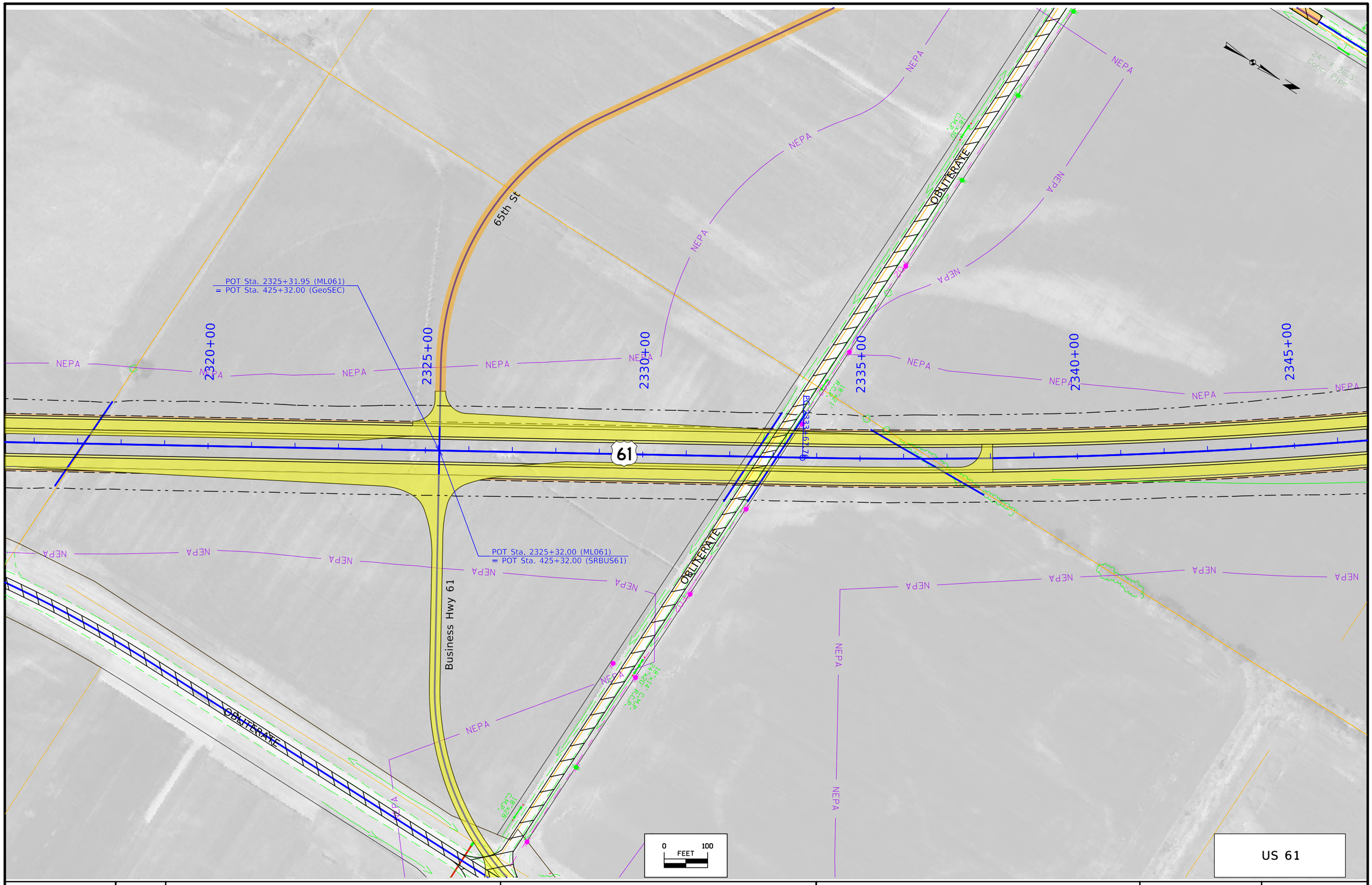
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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.15

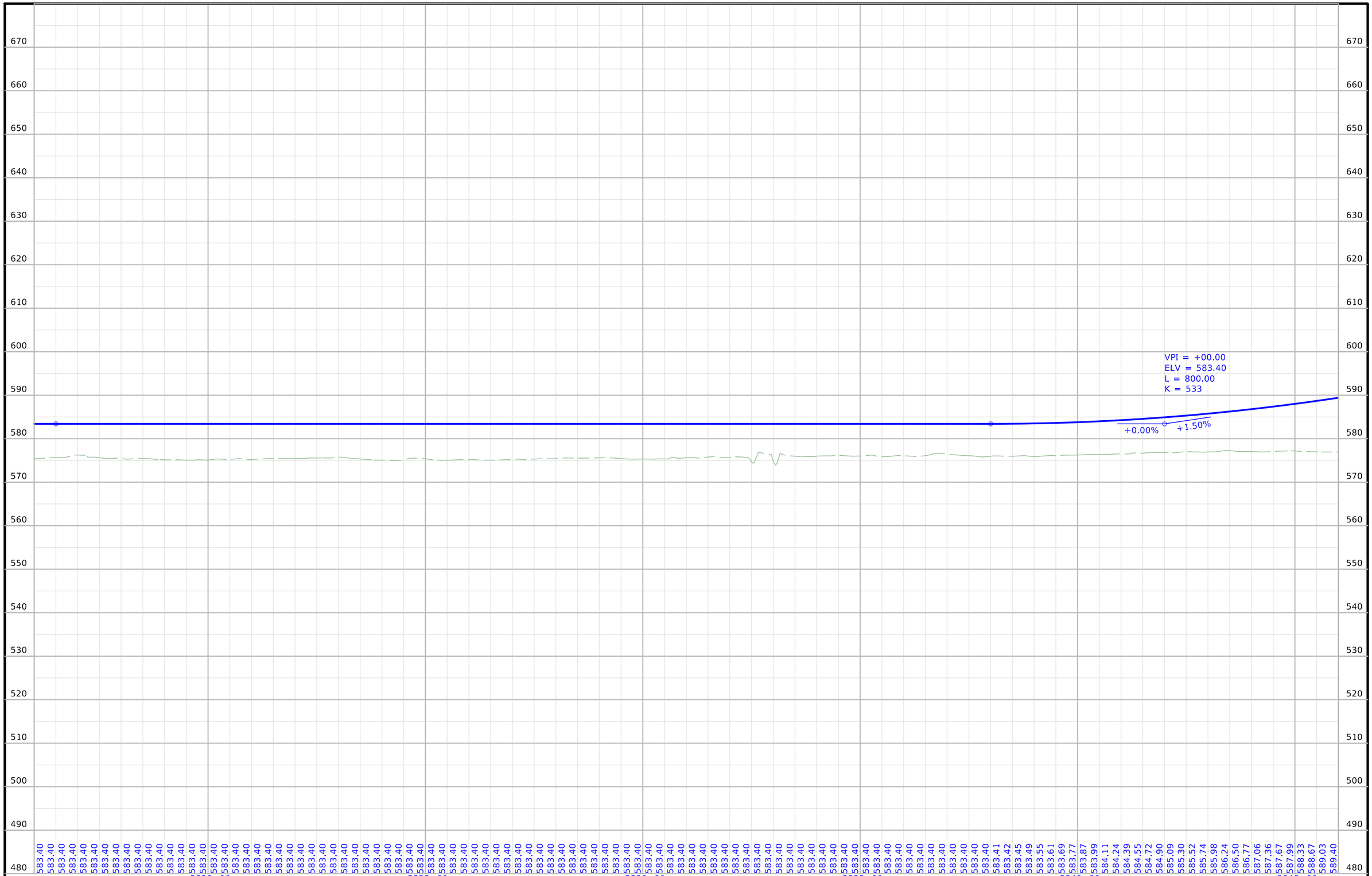
3:46:57 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

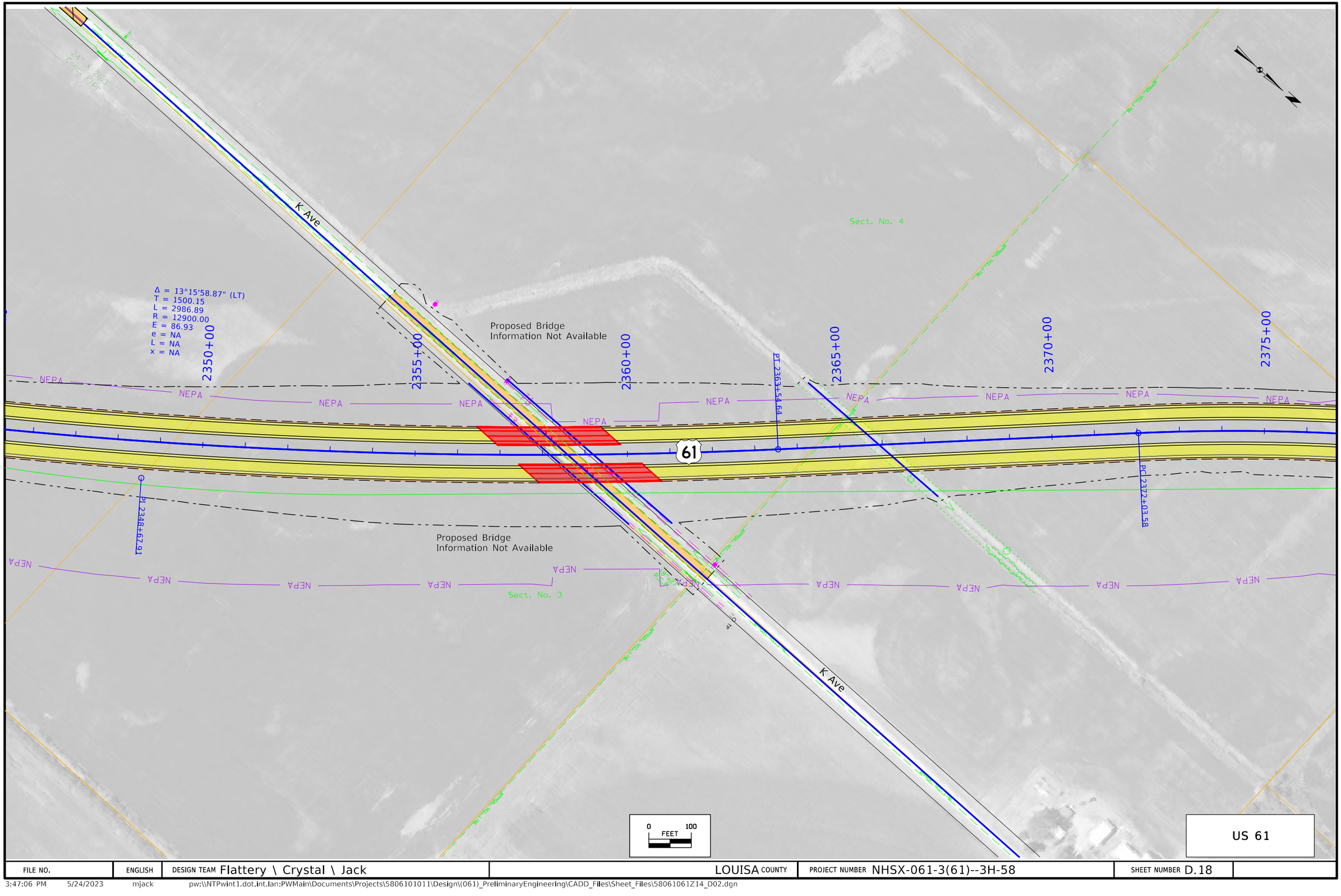


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.16	

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VPI = +00.00
ELV = 583.40
L = 800.00
K = 533
+0.00%
+1.50%
670
660
650
640
630
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583.40
583.40

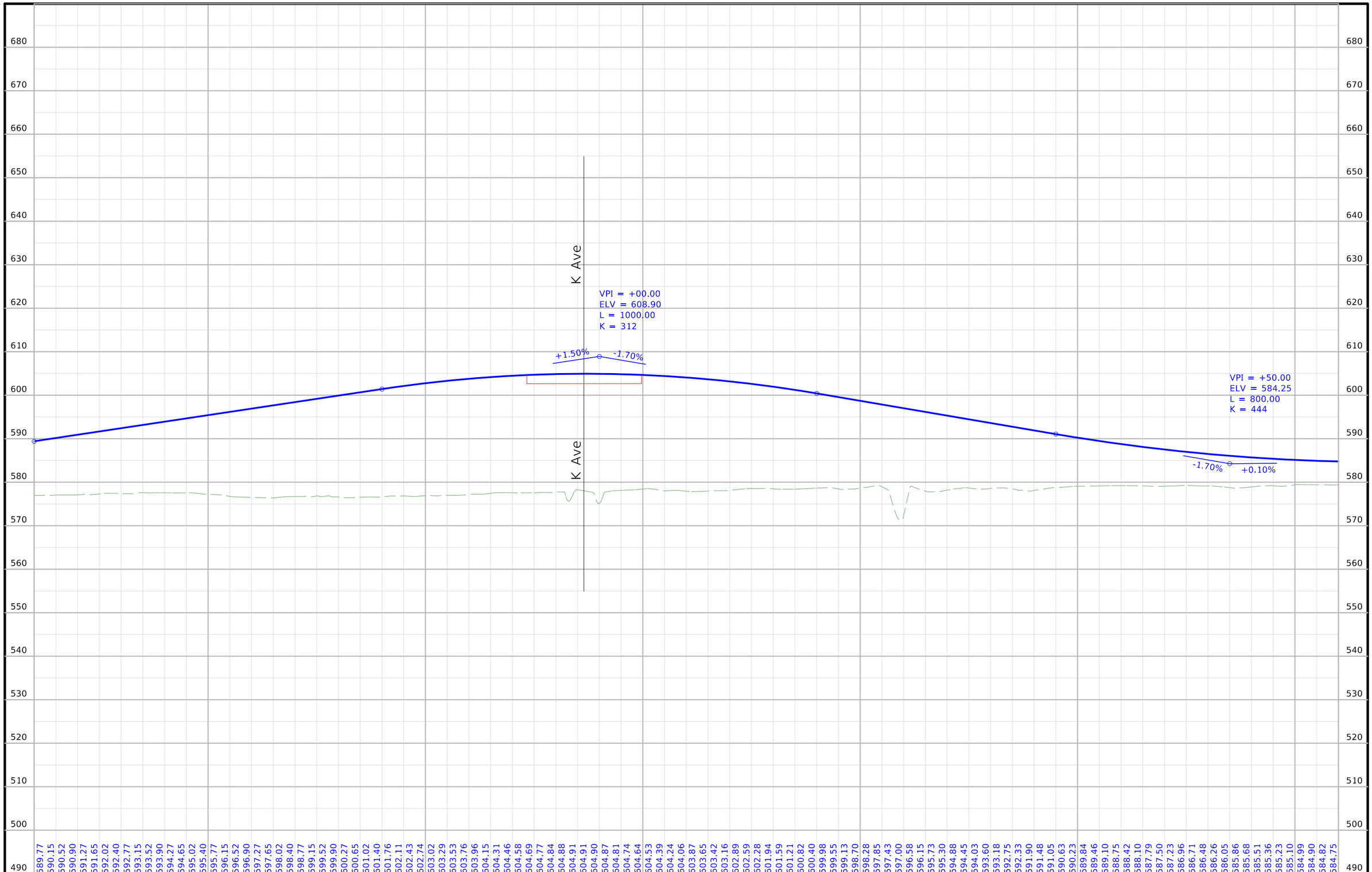


US 61

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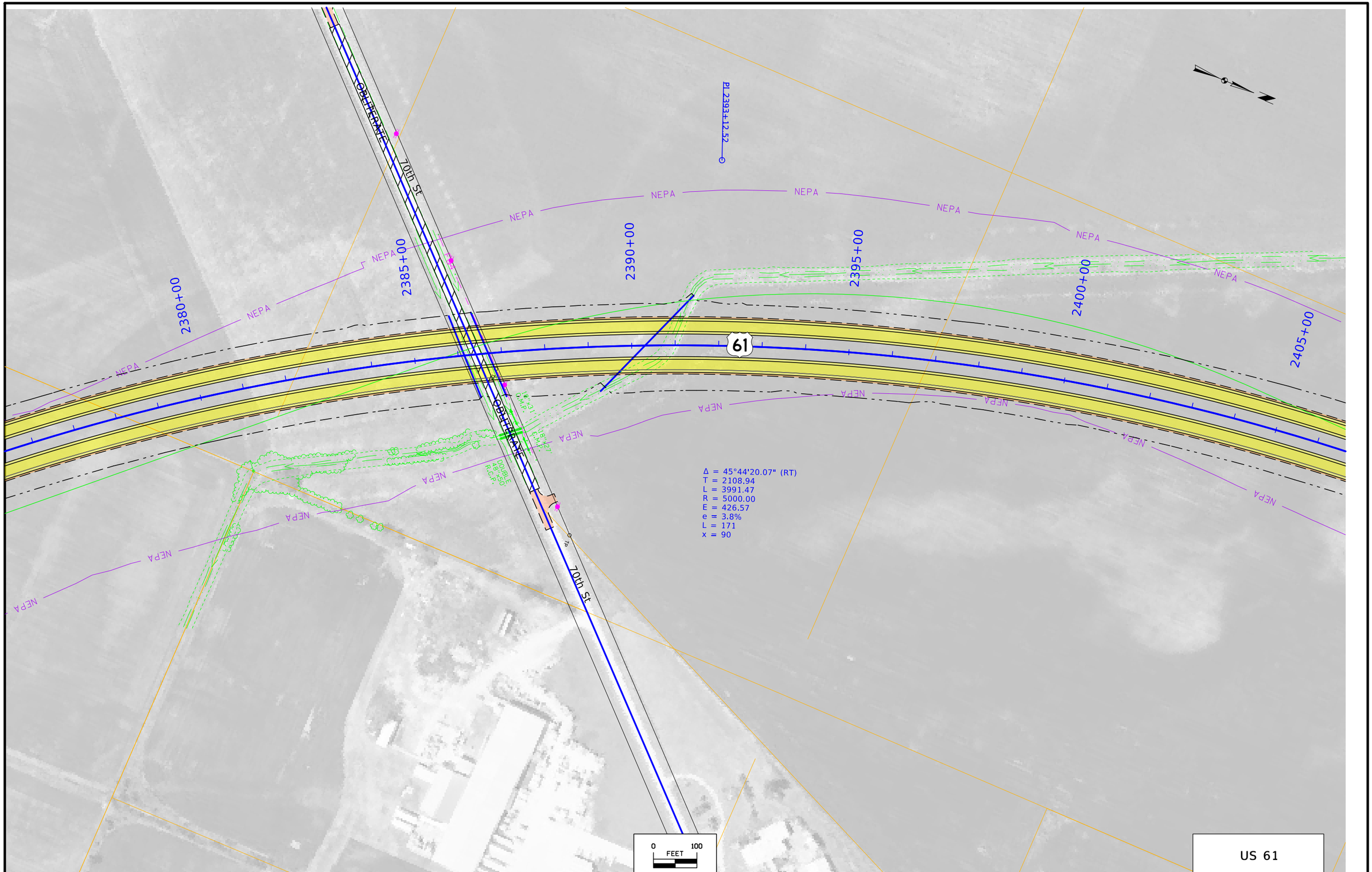
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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.19

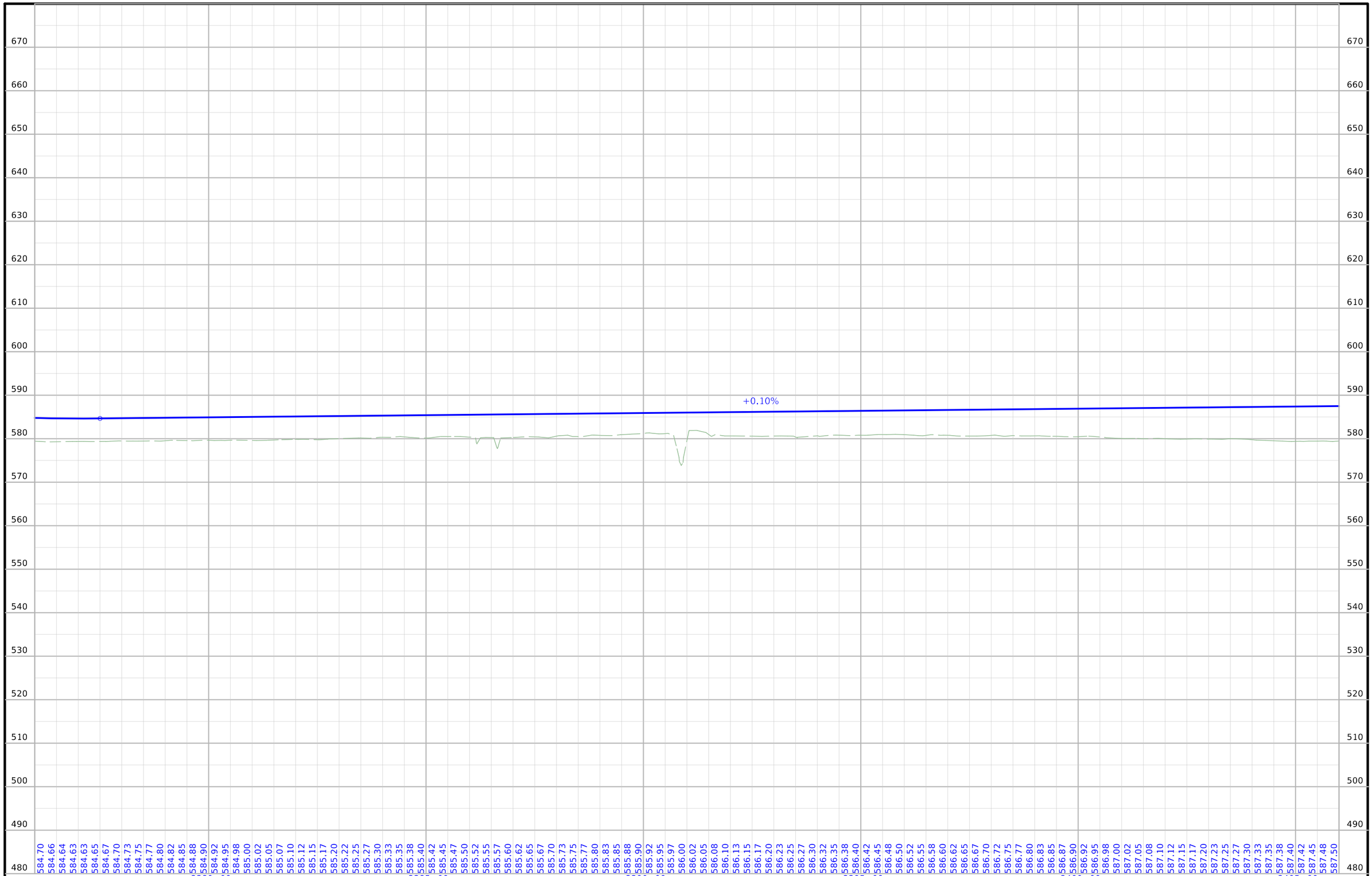
3:47:11 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.20	

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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.21	

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Δ = 45°44'20.07" (RT)
T = 2108.94
L = 3991.47
R = 5000.00
E = 426.57
e = 3.8%
L = 171
x = 90

NEPA NEPA NEPA NEPA NEPA NEPA NEPA NEPA NEPA NEPA

2410+00 2415+00 2420+00 2425+00 2430+00 2435+00

61

PT 2411+95.05

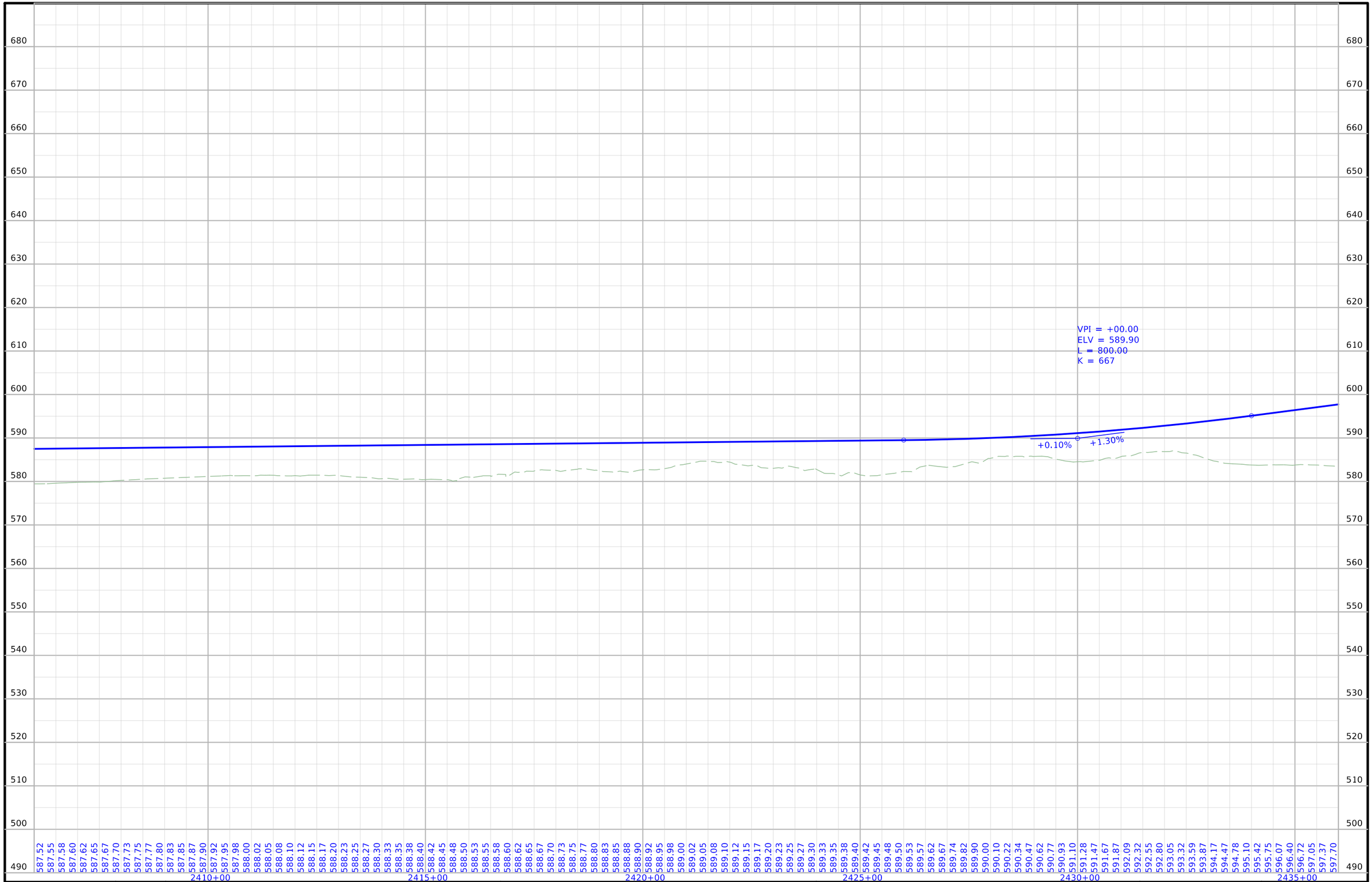
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US 61

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.22	

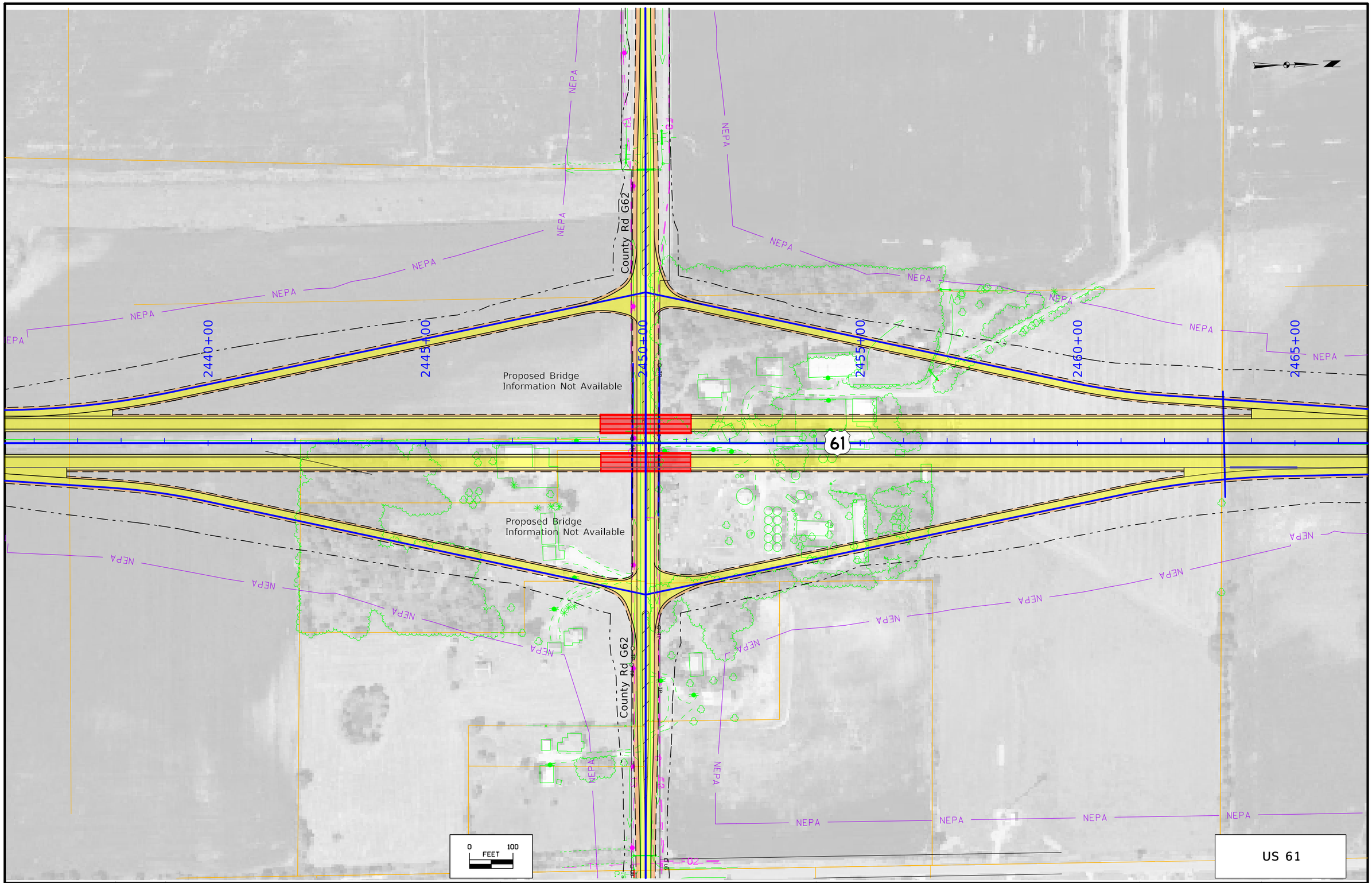
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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.23	

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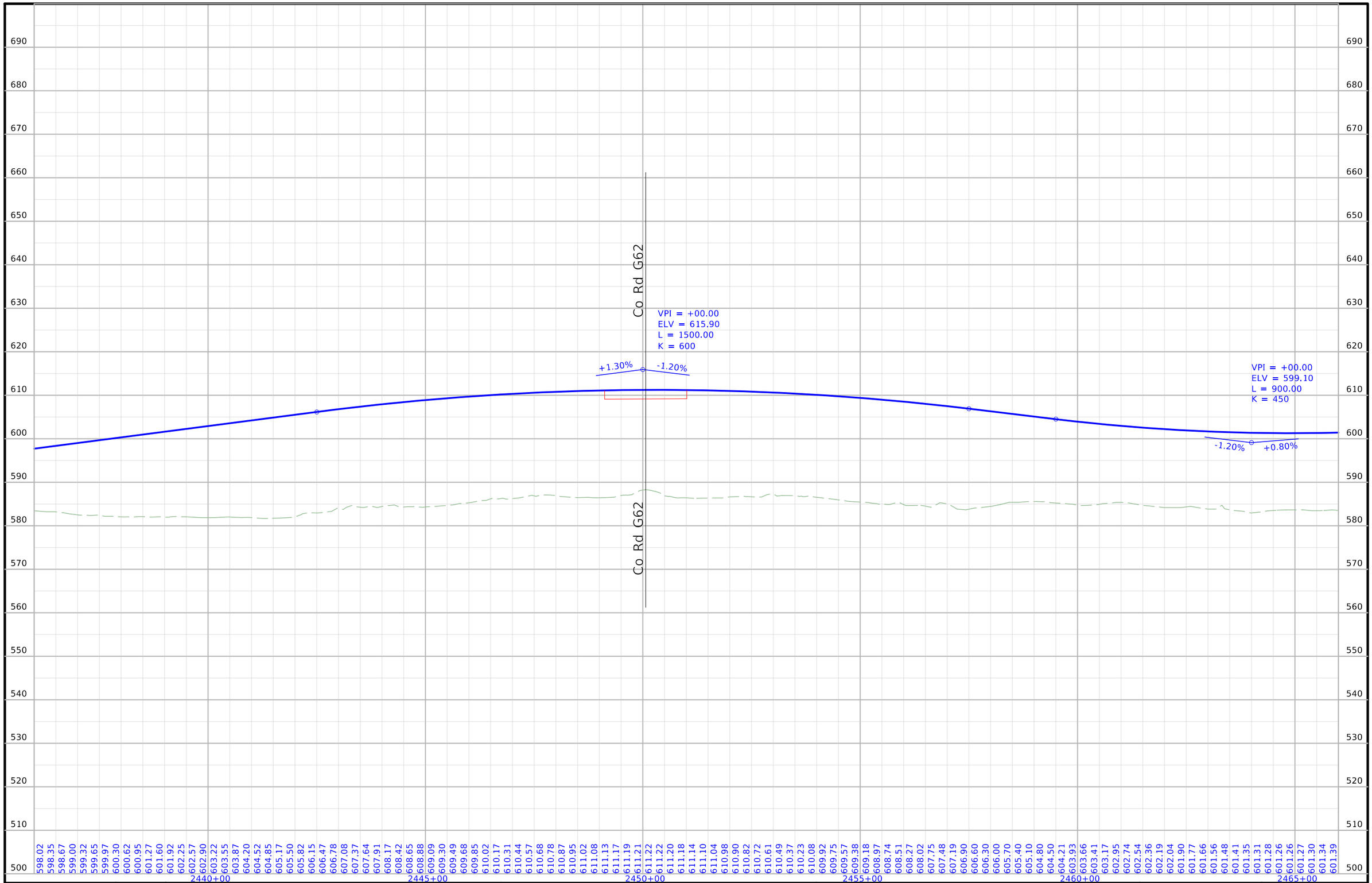


US 61

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.24

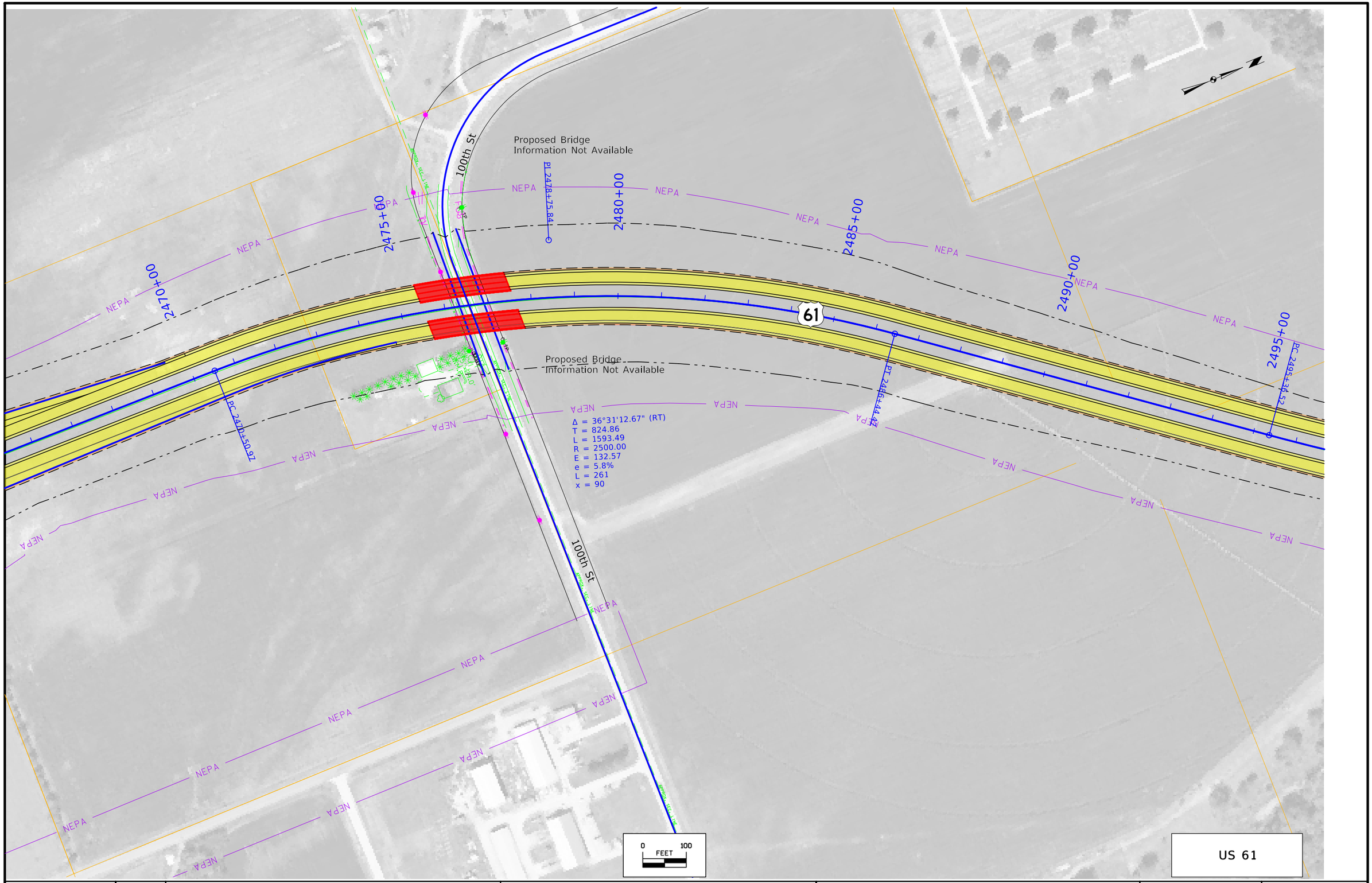
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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.25

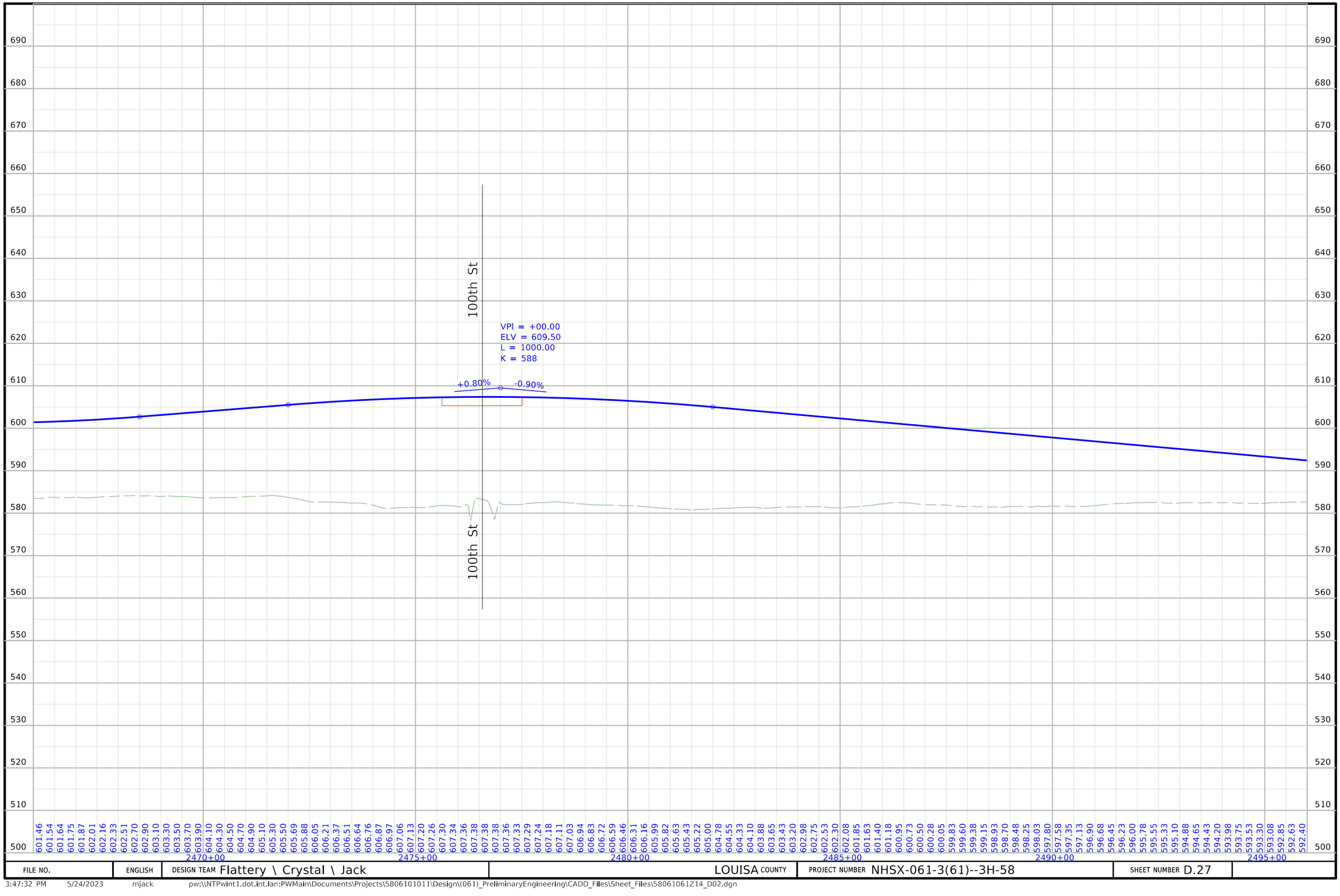
3:47:26 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.26	

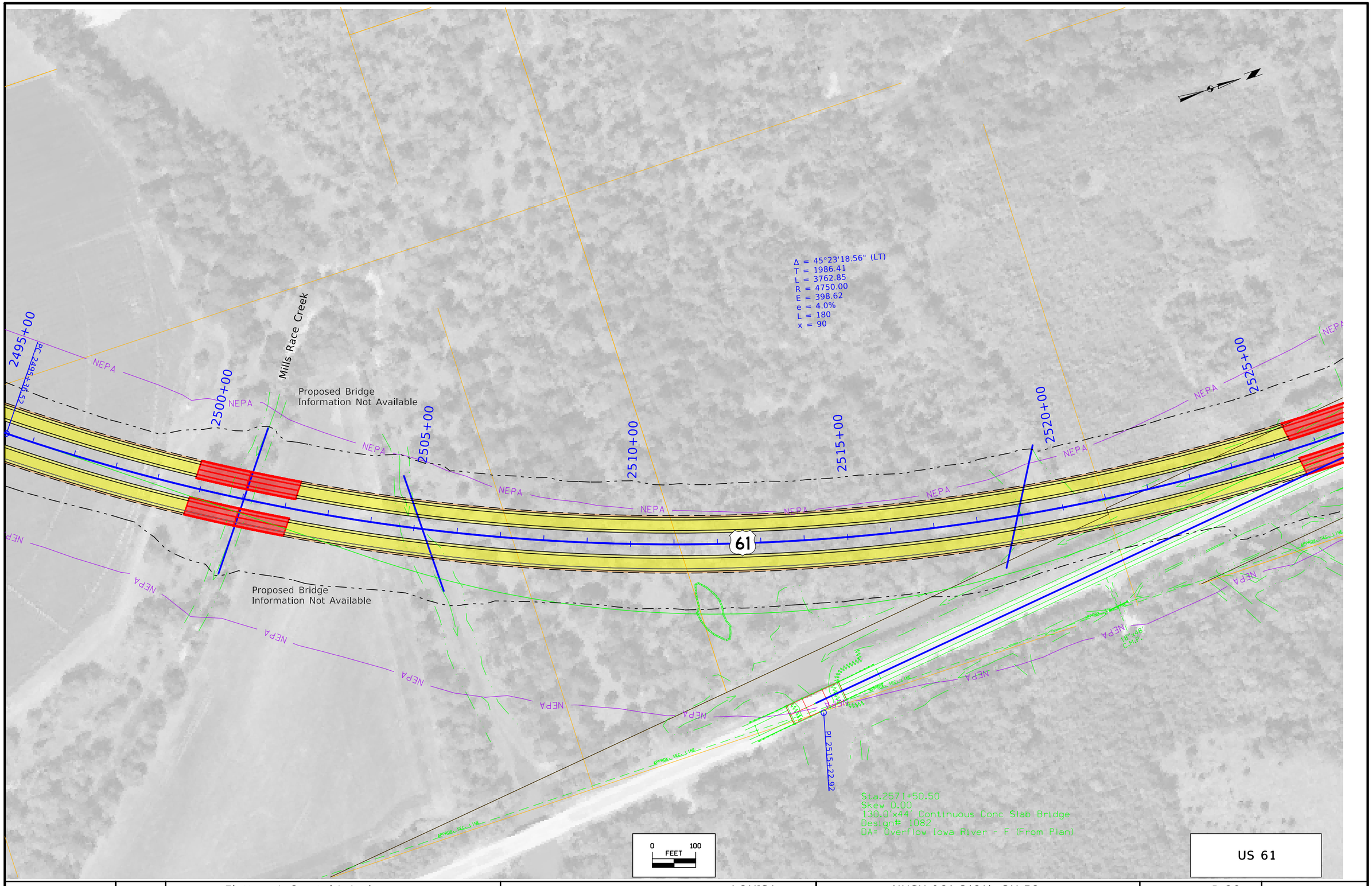
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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.27

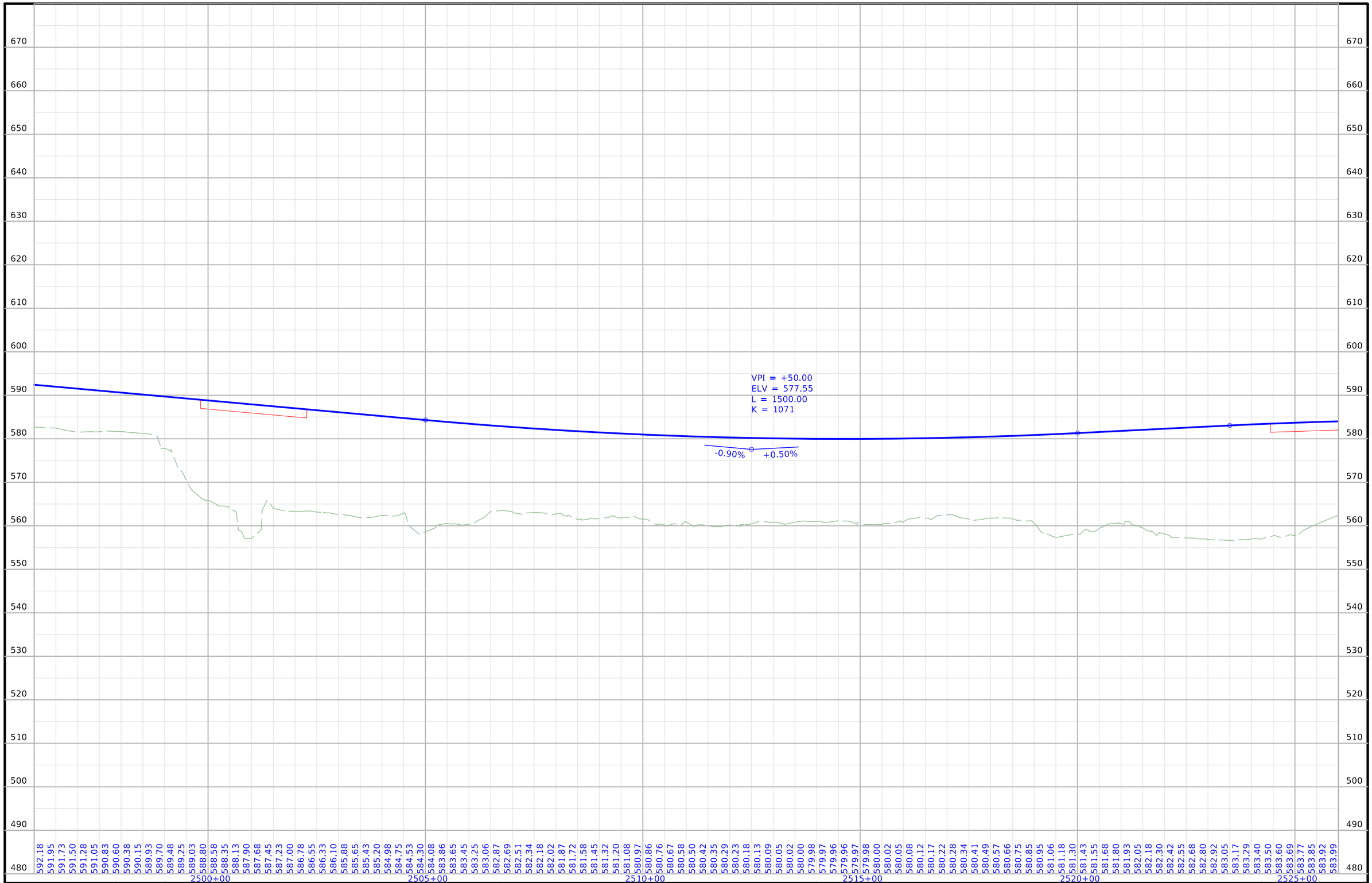
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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.28	

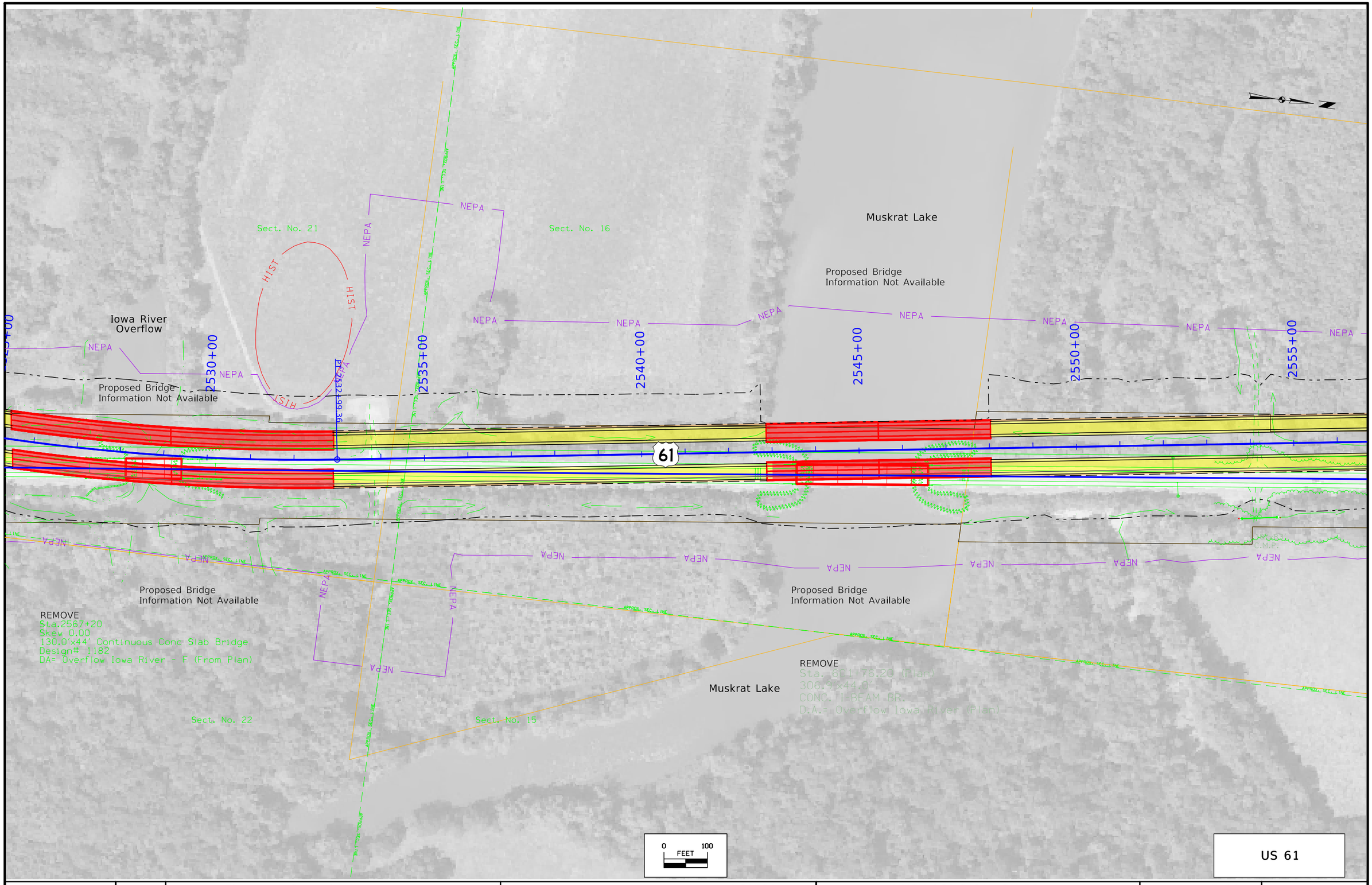
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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.29

3:47:38 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn



US 61

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.30

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Begin NB Profile
Sta. 2541+50.00
Elev. 583.05

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ELV = 585.55
L = 1000.00
K = 1000

+0.50% -0.50%

-0.50% +0.50%
VPI = +50.00
ELV = 581.05
L = 500.00
K = 500

VPI = +50.00
ELV = 585.05
L = 800.00
K = 995

+0.50% -0.30%

VPI = +50.00
ELV = 585.05
L = 800.00
K = 990

+0.50% -0.31%

Begin SB Profile
STA 2541+50.00
EL 583.05

Stop NB/SB Profile
STA 2541+50.00
EL 583.05

660 650 640 630 620 610 600 590 580 570 560 550 540 530 520 510 500 490 480 470

2530+00 2535+00 2540+00 2545+00 2550+00 2555+00

NB

584.05 584.10 584.15 584.19 584.22 584.25 584.27 584.29 584.30 584.30 584.29 584.27 584.25 584.22 584.19 584.15 584.10 584.05 583.99 583.92 583.85 583.77 583.69 583.60 583.50 583.40 583.29 583.17 583.05 582.93 582.80 582.67 582.55 582.43 582.30 582.18 582.08 581.98 581.90 581.83 581.77 581.73 581.70 581.68 581.67 581.68 581.70 581.73 581.77 581.83 581.90 581.98 582.08 582.18 582.30 582.42 582.55 582.67 582.80 582.92 583.05 583.17 583.29 583.40 583.50 583.60 583.69 583.77 583.85 583.92 583.98 584.04 584.10 584.14 584.18 584.21 584.24 584.26 584.28 584.29 584.29 584.28 584.27 584.26 584.24 584.23 584.20 584.17 584.12 584.08 584.02 583.96 583.89 583.82 583.74 583.66 583.59 583.51 583.43 583.36 583.28 583.20 583.13 583.05 582.97 582.89 582.82 582.74 582.66 582.59 582.51 582.43 582.36 582.28 582.20 582.12 582.05 581.97 581.89 581.82

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.31

3:47:44 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

Sect. No. 16

Sect. No. 15

Iowa River

Proposed Bridge
Information Not Available

2560+00
2565+00
2570+00
2575+00
2580+00
2585+00

NEPA

61

PI 2564+85.58

PI 2572+41.95

Δ = 15°12'28.42" (RT)
T = 380.47
L = 756.47
R = 2850.00
E = 25.28
e = 5.6%
L = 252
x = 90

UAC
Sta. 2640+56 (Plan)
4-40'x20' I-Beam Approach Spans
Conc. Floor Conc. & Masonry Substructure Bridge
Design# 680
D.A.= 12,499 Sq. M. (Plan)

Iowa River

APPROX. SEC. LINE

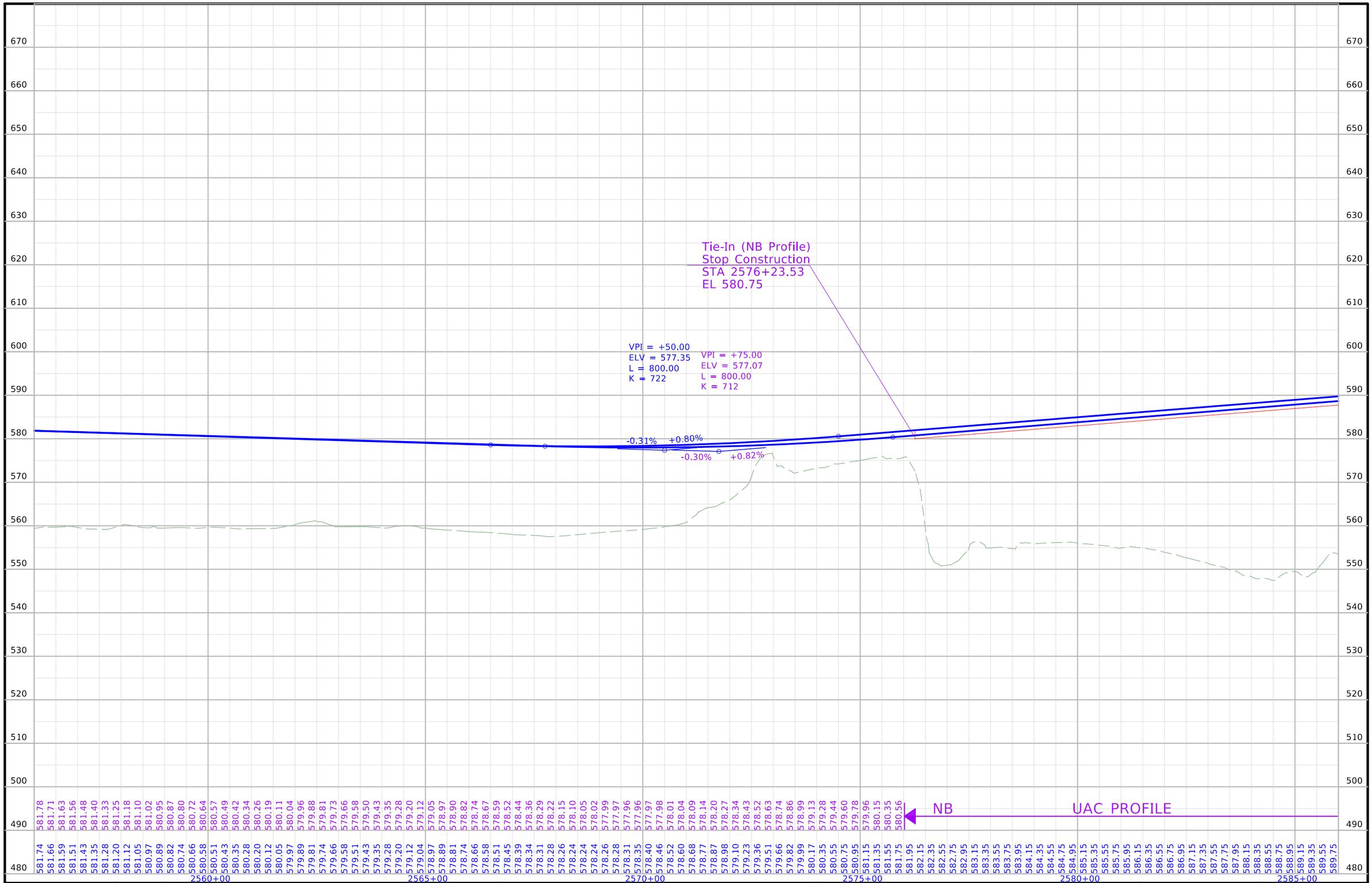
0 100
FEET

US 61

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.32	

3:47:45 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.33

3:47:49 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

Post Louisa TWP.
T.74N. R.3W.
SEC. 9

K Ave North

Sta. 652+55 (Plan)
24"x65.5' RCP
D.A.= Ditch Water

Sta. 653+94
Skew 45° LT. AH
30"x78' RCP
D.A.= 9 A.C.

Sta. 663+74 (Plan)
6'x6'x35' RCB
D.A.= 269 A-R (Plan)

24"x170'
C.M.P.

18"x59'
H.D.P.E.

24"x46'
C.M.P.

POT Sta. 2600+82.59 (ML061)
= POT Sta. 700+82.64 (SRKNorth)

POT Sta. 2600+82.64 (ML061)
= POT Sta. 700+82.64 (SR112)

Pvt 2610+82.80

Frontage 61

112th St

61

2590+00
2595+00
2600+00
2605+00
2610+00
2615+00

NEPA

APPROX. SEC. LINE

Sta. 652+64 103' RT (Plan)
2'x2'x72.2' RCB
D.A.= Ditch Water

0 100
FEET

US 61

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.34	

3:47:51 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

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Tie-In (NB Profile)
Resume Construction
STA 2586+65.07
EL 589.19

VPI = +25.00
ELV = 592.14
L = 650.00
K = 264

VPI = +75.00
ELV = 593.55
L = 650.00
K = 260

+0.82%
+0.80%
+3.28%
+3.30%

K Ave N

112th St

VPI = +50.00
ELV = 629.03
L = 1000.00
K = 272

VPI = +50.00
ELV = 629.03
L = 1000.00
K = 270

+3.28%
+3.30%
-0.40%
-0.40%

END NB Profile
STA 2606+50.00
EL 627.03

-0.40%

Begin NB/SB Profile
STA 2606+50.00
EL 627.03

End SB Profile
STA 2606+50.00
EL 627.03

NB

589.27	589.48	589.70	589.94	590.20	590.49
590.80	591.13	591.49	591.88	592.28	592.71
593.16	593.64	594.14	594.67	595.21	595.78
596.38	597.00	597.64	598.31	599.00	599.71
600.45	601.21	601.99	602.80	603.62	604.44
605.26	606.08	606.90	607.72	608.54	609.35
610.17	610.99	611.81	612.63	613.44	614.23
614.99	615.73	616.44	617.14	617.81	618.45
619.08	619.68	620.26	620.81	621.35	621.85
622.34	622.80	623.24	623.66	624.06	624.43
624.78	625.10	625.40	625.68	625.94	626.17
626.38	626.57	626.73	626.88	626.99	627.09
627.16	627.21	627.24	627.24	627.22	627.18
627.11	627.03	626.93	626.83	626.73	626.63
626.53	626.43	626.33	626.23	626.13	626.03
625.93	625.83	625.73	625.63	625.53	625.43
625.33	625.23	625.13	625.03	624.93	624.83
624.73	624.63	624.53	624.43	624.33	624.23
624.13	624.03	623.93	623.83	623.73	623.63
623.53	623.43	623.33	623.25		

2590+00 2595+00 2600+00 2605+00 2610+00 2615+00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.35

3:47:58 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

Port Louisa TWP.
T.74N. R.3W.
SEC. 9

Δ = 06°39'32.01" (LT)
T = 1338.03
L = 2673.05
R = 23000.00
E = 38.89
e = NA
L = NA
x = NA

Sta. 606+55 (Plan)
Skew 29° LT AH
6'x8'x28' RCB
D.A.-395 A-H&R (Plan)

2620+00
2625+00
2630+00
2635+00
2640+00
2645+00

NEPA

61

Pt. 2624+20.11

Sta. 608+44.75 (Plan)
24"x104' RCP
D.A.= 1 A-F

Sect. No. 10

Sta. 627+55.13 PT

Sta. 630+10 (Plan)
Skew 10°LT AH
48"x20' RCP
D.A.=34 A-H (Plan)

24"x54' C.M.P.

24"x117' C.M.P.

2627+30.76 (ML061)
827+30.76 (SRG56)

County Rd G56

APPROX. SEC. LINE

0 FEET 100

US 61

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.36	

3:47:59 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

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VPI = +00.00
ELV = 622.42
L = 500.00
K = 625

-0.40%

+0.40%

VPI = +50.00
ELV = 626.23
L = 800.00
K = 571

+0.40%

-1.00%

VPI = +00.00
ELV = 613.72
L = 500.00
K = 313

-1.00%

+0.60%

Co Rd G56

710 700 690 680 670 660 650 640 630 620 610 600 590 580 570 560 550 540 530 520

623.17 623.11 623.05 623.01 622.97 622.95 622.93 622.92 622.93 622.94 622.97 623.00 623.05 623.10 623.17 623.24 623.33 623.42 623.52 623.62 623.72 623.82 623.92 624.02 624.12 624.22 624.32 624.42 624.52 624.62 624.72 624.80 624.88 624.94 624.99 625.03 625.06 625.07 625.08 625.08 625.06 625.04 625.00 624.95 624.89 624.83 624.74 624.65 624.55 624.44 624.31 624.18 624.03 623.88 623.71 623.53 623.34 623.14 622.93 622.70 622.47 622.23 621.98 621.73 621.48 621.23 620.98 620.73 620.48 620.23 619.98 619.73 619.48 619.23 618.98 618.73 618.48 618.23 617.98 617.73 617.48 617.23 616.98 616.73 616.48 616.23 615.99 615.77 615.57 615.39 615.23 615.09 614.97 614.87 614.79 614.73 614.69 614.66 614.66 614.68 614.72 614.78 614.86 614.96 615.08 615.22 615.37 615.52 615.67 615.82 615.97 616.12 616.27 616.42 616.57 616.72 616.87 617.02 617.17 617.32

2620+00 2625+00 2630+00 2635+00 2640+00 2645+00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.37	

3:48:08 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

EQUATION:
Sta. 3667+50.00 SB_ML061 (AH)
= Sta. 2667+50.00 ML061 (BK)

Δ = 02°27'24.08" (LT)
T = 493.16
L = 986.18
R = 23000.00
E = 5.29
e = N/A
L = N/A
x = N/A

Sect. No. 4

Sta. 716+22 (Plan)
Skew 15° RT AH
5'x6'x227' RCB
D.A.=163 A-H (Plan)

Sta. 721+55 (Plan)
Skew 30° RT AH
42"x246' RCP
D.A.=25 A-H (Plan)

5'x6'x38'
D.A.= (Plan)

2650+00
2655+00
2660+00
2665+00
3665+00
3670+00
3675+00

POB 2664+19.17 LT

PC 2654+32.99

PT 2659+26.16

POB 1664+19.17

1665+00
1670+00
1675+00

NEPA

61

18"x117'
C.M.P.

30"x22'
C.M.P.

Sta. 730+00
24"x81' RCP
D.A.= Ditch Water

J Ave

POT Sta. 2667+24.21 (ML061)
= POT Sta. 967+24.21 (SRJAVE)

EQUATION:
Sta. 1667+50.00 NB_ML061 (AH)
= Sta. 2667+50.00 ML061 (BK)

Sect. No. 3

0 100
FEET

US 61

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.38	

3:48:09 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

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NB/SB 61

ML061 STA 2667+50.00
EL 630.23

+0.60%

J Ave

710 700 690 680 670 660 650 640 630 620 610 600 590 580 570 560 550 540 530 520

617.47 617.62 617.77 617.92 618.07 618.22 618.37 618.52 618.67 618.82 618.97 619.12 619.27 619.42 619.57 619.72 619.87 620.02 620.17 620.32 620.47 620.62 620.77 620.92 621.07 621.22 621.37 621.52 621.67 621.82 621.97 622.12 622.27 622.42 622.57 622.72 622.87 623.02 623.17 623.32 623.47 623.62 623.77 623.92 624.07 624.22 624.37 624.52 624.67 624.82 624.97 625.12 625.27 625.42 625.57 625.72 625.87 626.02 626.17 626.32 626.47 626.62 626.77 626.92 627.07 627.22 627.37 627.52 627.67 627.82 627.97 628.12 628.27 628.42 628.57 628.72 628.87 629.02 629.17 629.32 629.47 629.62 629.77 629.92 630.07 630.22

2650+00 2655+00 2660+00 2665+00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.39

3:48:15 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

NB 61

STA 1667+50.00, NB_ML061, 32' RT
=STA 2667+50.00 ML061
EL 630.23

VPI = +00.00
ELV = 632.33
L = 700.00
K = 454

+0.60%
-0.94%

710
700
690
680
670
660
650
640
630
620
610
600
590
580
570
560
550
540
530
520

630.23 630.37 630.50 630.61 630.71 630.80 630.88 630.94 630.98 631.02 631.04 631.04 631.03 631.01 630.98 630.93 630.86 630.79 630.69 630.59 630.47 630.34 630.19 630.03 629.86 629.67 629.47 629.26 629.03 628.79 628.56 628.32 628.08 627.85 627.61

1650+00 1655+00 1660+00 1665+00 1670+00 1675+00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.40	

3:48:16 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

SB 61

STA 3667+50.00 SB_ML061, 32' LT
= STA 2667+50.00 ML061
EL 630.23

VPI = +00.00
ELV = 632.33
L = 700.00
K = 451

+0.60%
-0.95%

710 700 690 680 670 660 650 640 630 620 610 600 590 580 570 560 550 540 530 520

630.23 630.37 630.50 630.61 630.71 630.80 630.88 630.94 630.98 631.01 631.03 631.04 631.03 631.00 630.97 630.92 630.85 630.77 630.68 630.57 630.45 630.32 630.17 630.01 629.84 629.65 629.44 629.23 629.00 628.76 628.52 628.28 628.04 627.81 627.57

3650+00 3655+00 3660+00 3665+00 3670+00 3675+00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.41	

3:48:17 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

Curve Data (SB)
Δ = 04°51'49.17" (LT)
T = 265.43
L = 530.54
R = 6250.00
E = 5.63
e = 3.2%
L = 144
x = 90

POT Sta. 3693+60.05 (SB ML061)
= POT Sta. 4693+17.20 (SR130)

130th St

EQUATION:
Sta. 3700+43.56 SB ML061
= Sta. 2700+42.15 ML061
END SB CONSTRUCTION

Curve Data (SB)
Δ = 06°17'47.82" (RT)
T = 343.77
L = 686.85
R = 6250.00
E = 9.45
e = 3.2%
L = 144
x = 90

Sect. No. 33

Sta. 3746+00 (Plan)
24"x78' RCP
D.A.=Ditch Water (Plan)

3680+00 3685+00 3690+00 3695+00 3700+00 3705+00

1680+00 1685+00 1690+00 1695+00 1700+00 1705+00

NEPA

PC 3679+11.46
PC 1681+26.48
PT 1681+76.89
PT 3684+42.00
PT 1683+19.01
PT 1688+57.07
PC 3690+78.73
PC 1690+80.42
PT 1691+30.83
PT 1694+22.50
PC 1694+72.15
PT 3697+65.58
PT 1697+67.22

24"x155' C.M.P.
48"x125' C.M.P.
18" x 381.5' C.M.P.

61

Curve Data (NB)
Δ = 04°51'49.17" (LT)
T = 265.43
L = 530.54
R = 6250.00
E = 5.63
e = 3.2%
L = 144
x = 90

POT Sta. 1693+56.61 (NB ML061)
= POT Sta. 4693+99.54 (SR130)

Sta. 741+73 (Plan)
Skew 15° RT AH
8'x10'x197' TWIN RCB
D.A.=1675 A-H&E (Plan)

Curve Data (NB)
Δ = 06°17'47.82" (RT)
T = 343.77
L = 686.85
R = 6250.00
E = 9.45
e = 3.2%
L = 144
x = 90

Sect. No. 34

EQUATION:
Sta. 1705+44.44 NB ML061
= Sta. 2705+45.85 ML061
END NB CONSTRUCTION

0 100
FEET

US 61

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.42	

3:48:19 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

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NB 61

STA 1705+44.44 NB_ML061, 41' RT
= STA 2705+45.85 ML061
EL 649.06

-0.94%
+1.52%
VPI = +50.00
ELV = 618.66
L = 500.00
K = 203

130th St

720 710 700 690 680 670 660 650 640 630 620 610 600 590 580 570 560 550 540 530

627.61 627.38 627.14 626.91 626.67 626.44 626.20 625.96 625.73 625.49 625.26 625.02 624.79 624.55 624.32 624.08 623.84 623.61 623.37 623.14 622.90 622.67 622.43 622.19 621.96 621.72 621.49 621.25 621.02 620.80 620.61 620.45 620.32 620.22 620.16 620.12 620.12 620.15 620.20 620.29 620.41 620.56 620.74 620.95 621.19 621.47 621.77 622.11 622.47 622.85 623.23 623.61 624.00 624.38 624.76 625.14 625.52 625.90 626.28 626.66 627.04 627.42 627.81 628.19 628.57 628.95 629.33 629.71 630.09 630.47 630.85 631.23 631.62 632.00 632.38 632.76 633.14 633.52 633.90 634.28 634.66 635.04 635.43 635.81 636.19 636.57 636.95 637.33 637.71 638.09 638.47 638.85 639.24 639.62 640.00 640.38 640.76 641.14 641.52 641.90 642.28 642.66 643.05 643.43 643.81 644.19 644.57 644.95 645.33 645.71 646.09 646.47 646.86 647.24 647.62 648.00 648.38 648.76 649.06

1680+00 1685+00 1690+00 1695+00 1700+00 1705+00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER D.43

3:48:24 PM 5/24/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_D02.dgn

SB 61

STA 3700+43.56 SB_ML061, 41' LT
= STA 2700+42.15 ML061
EL 641.29

130th St

VPI = +50.00
ELV = 618.53
L = 500.00
K = 202

-0.95%
+1.52%

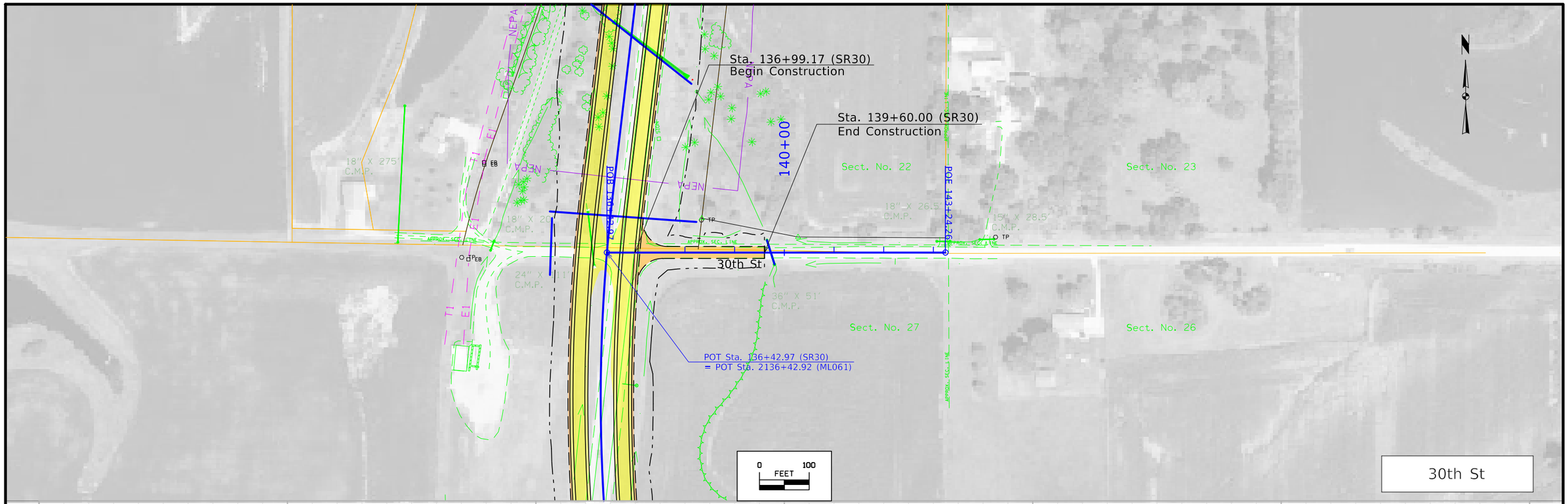
720 710 700 690 680 670 660 650 640 630 620 610 600 590 580 570 560 550 540 530

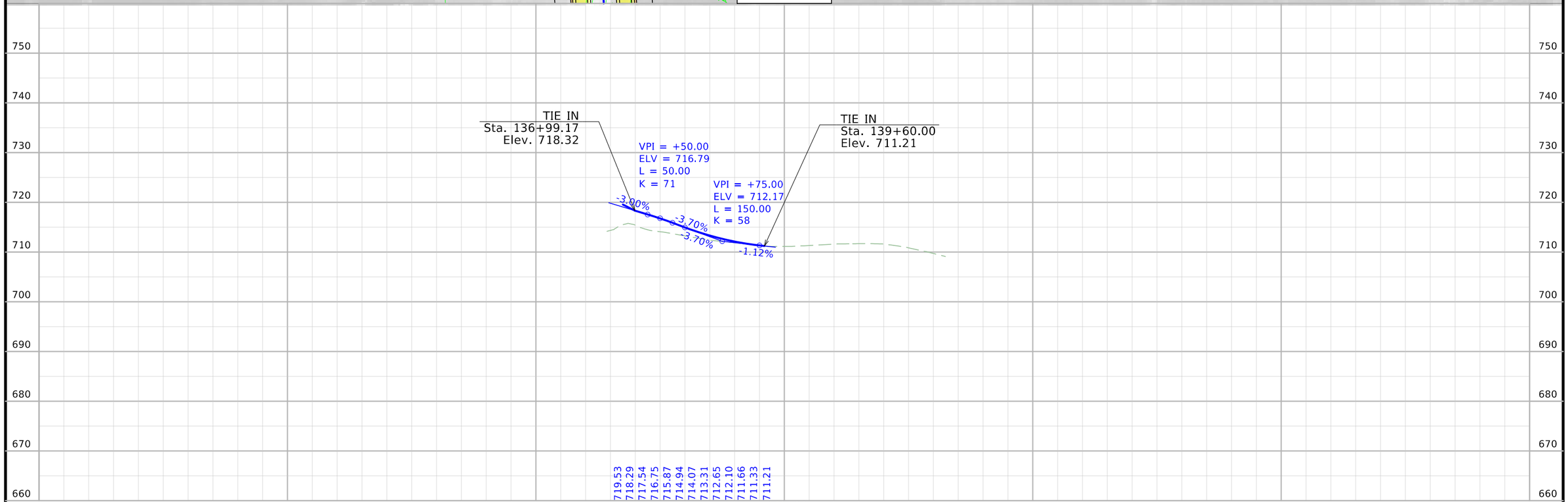
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3680+00 3685+00 3690+00 3695+00 3700+00

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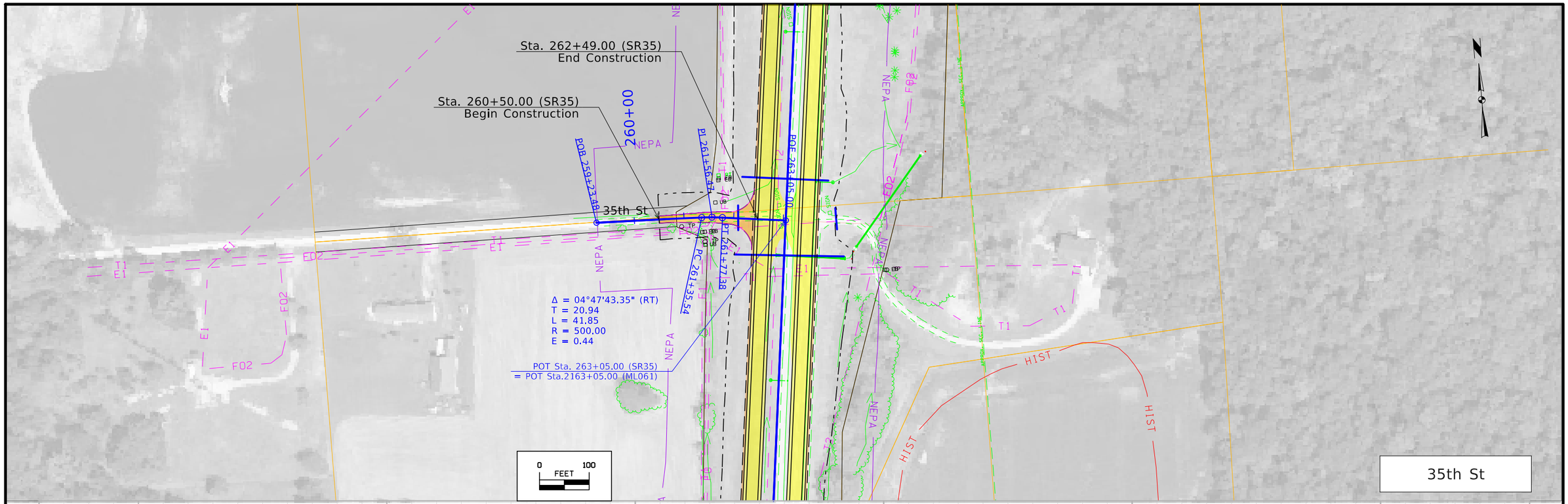


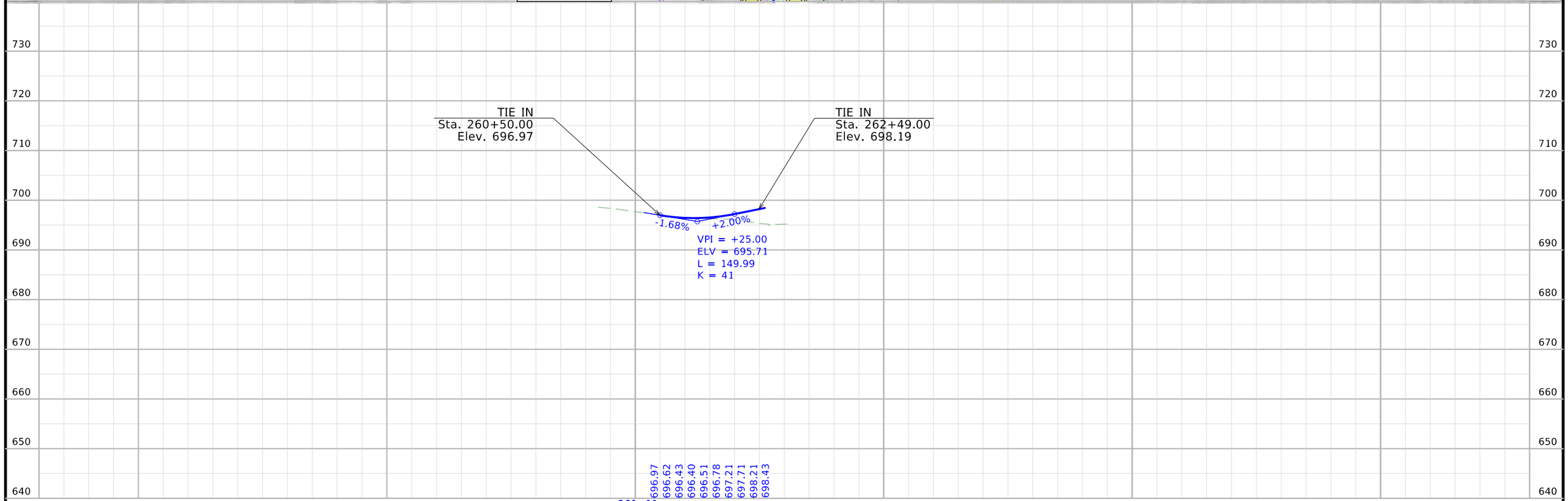


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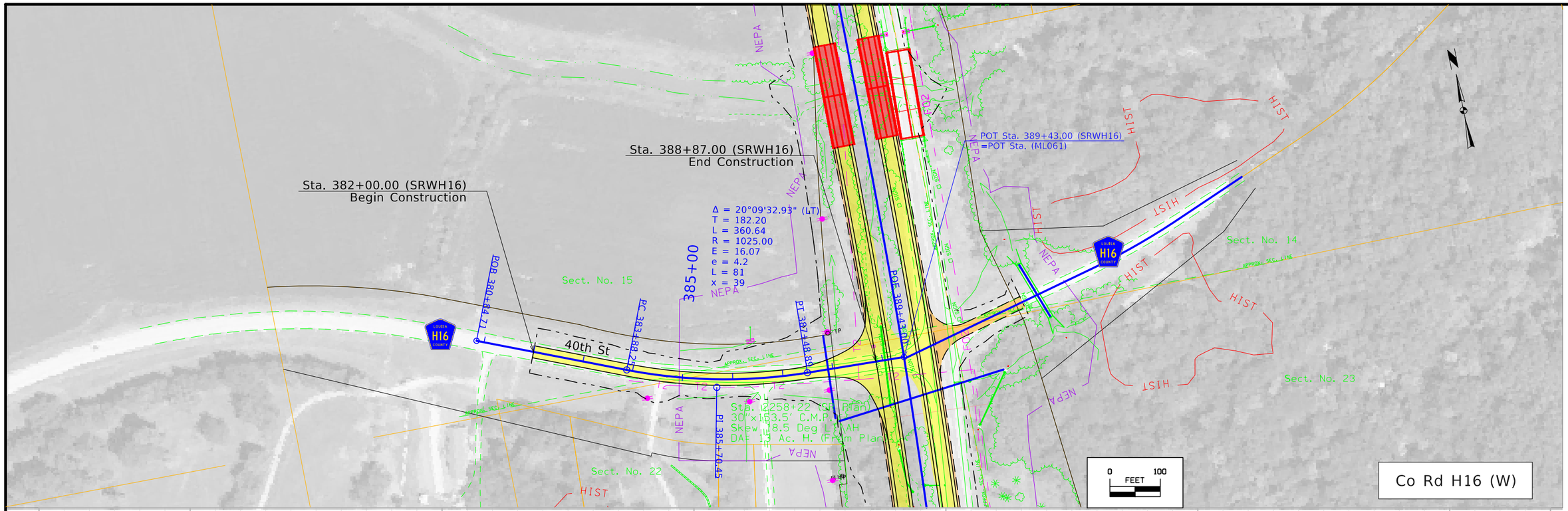


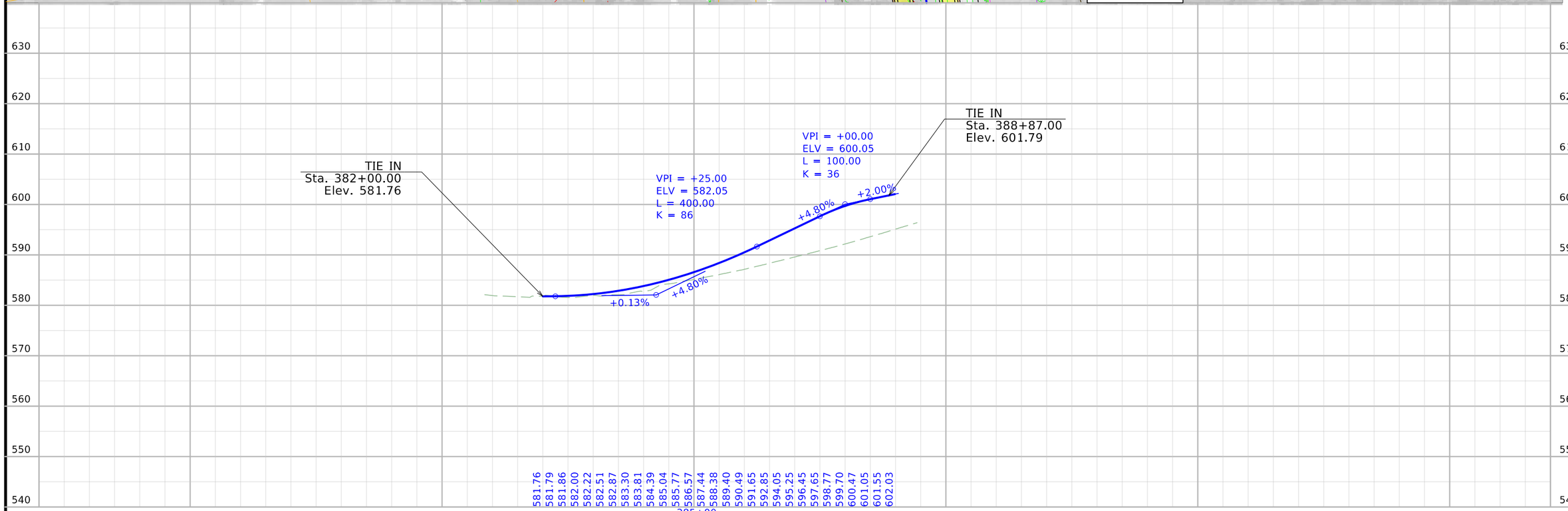


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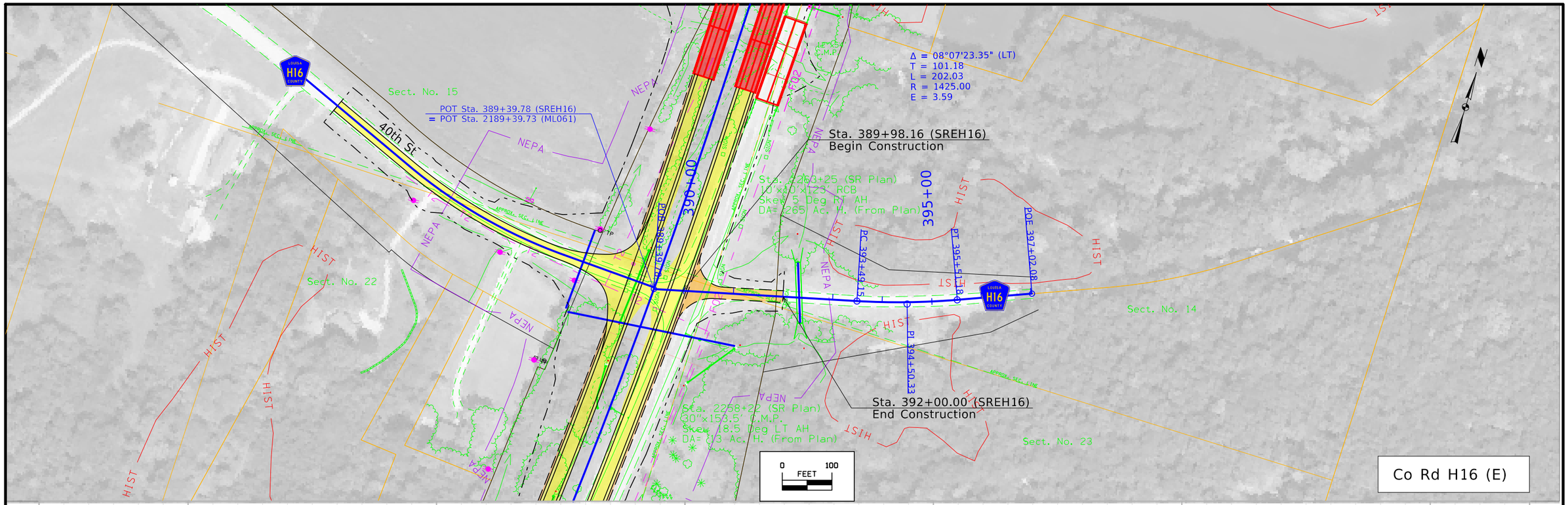




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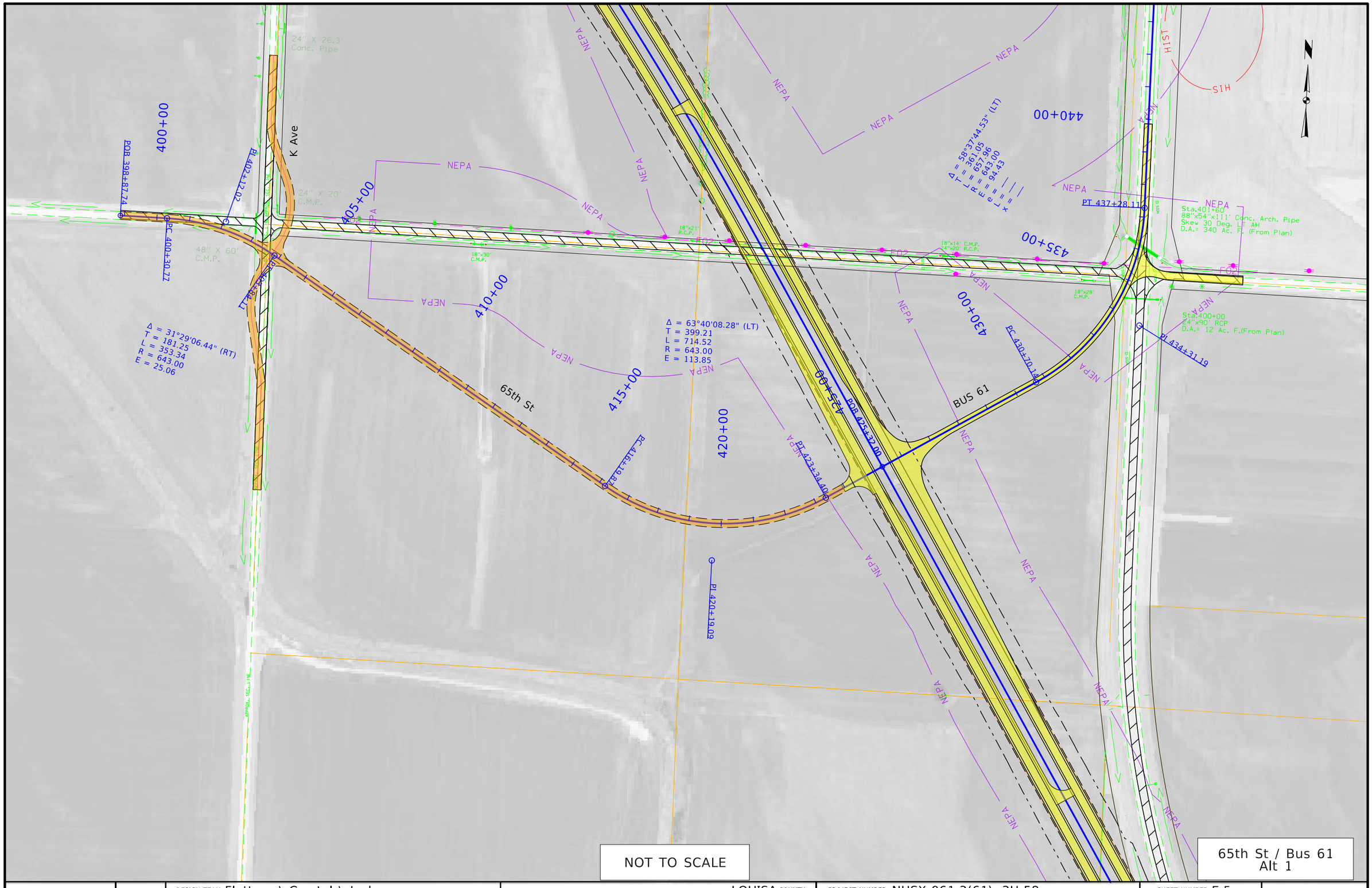
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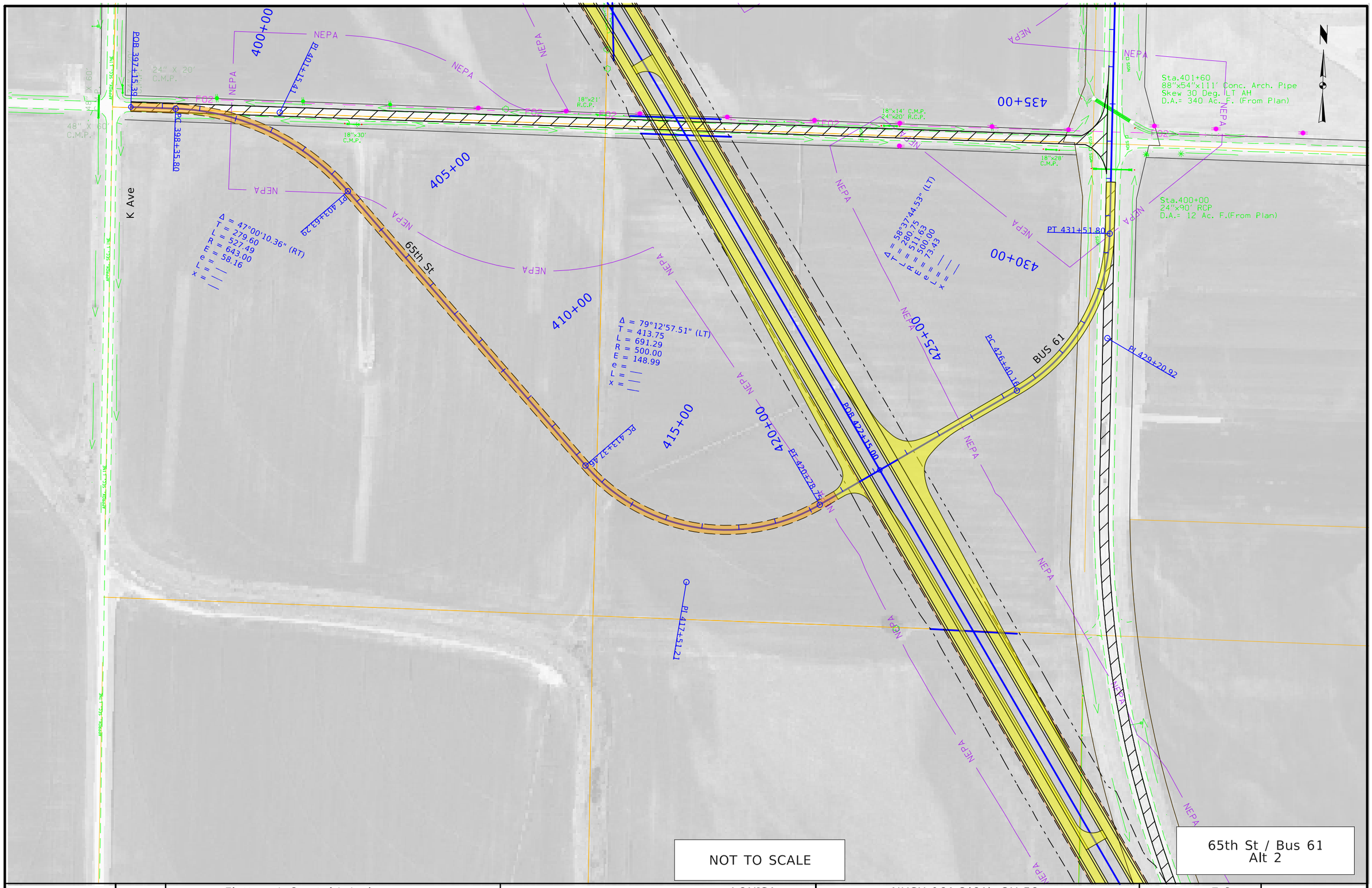
NOT TO SCALE

65th St / Bus 61
Alt 1

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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER E.6

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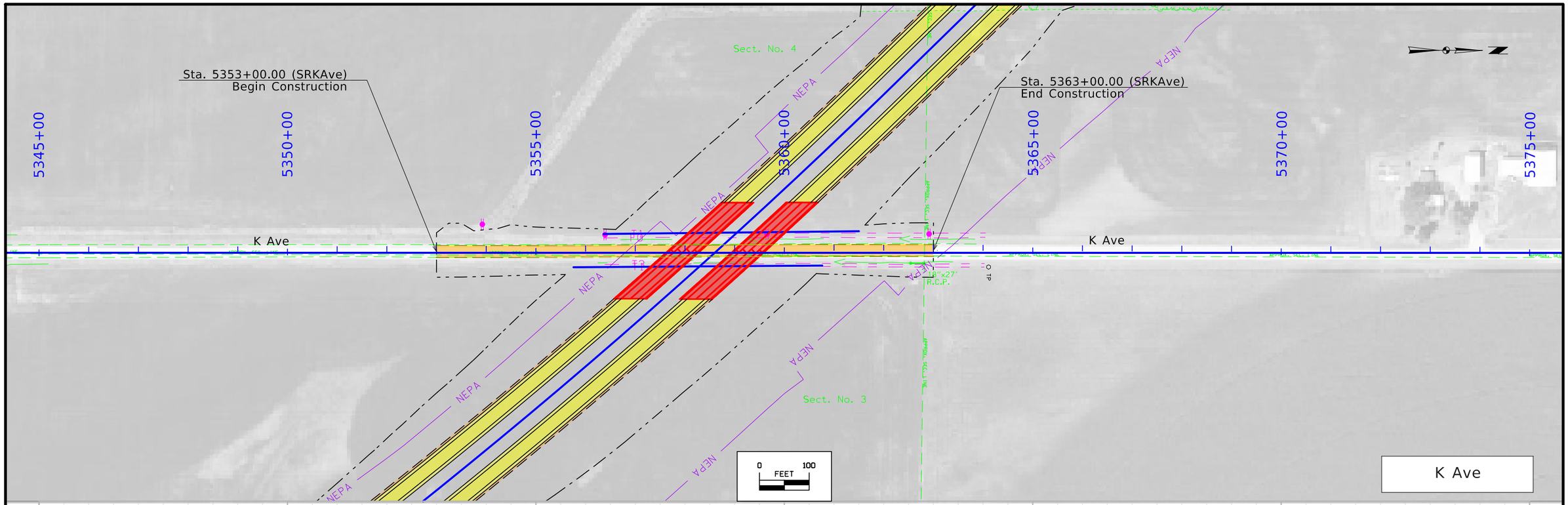
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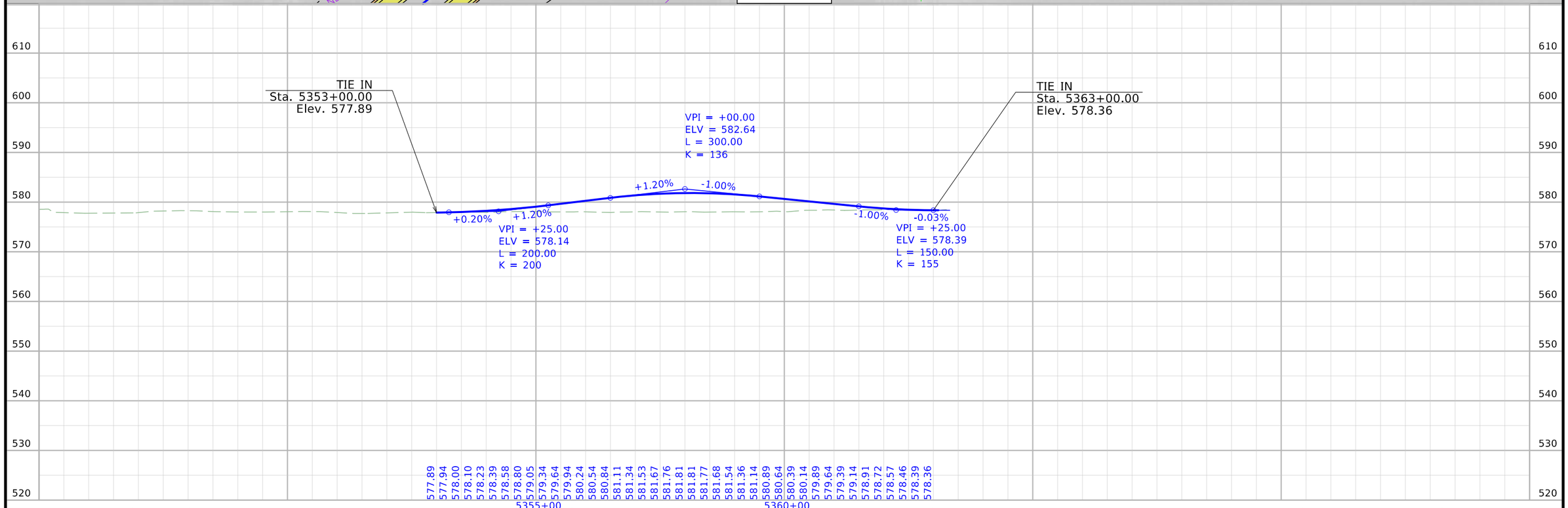


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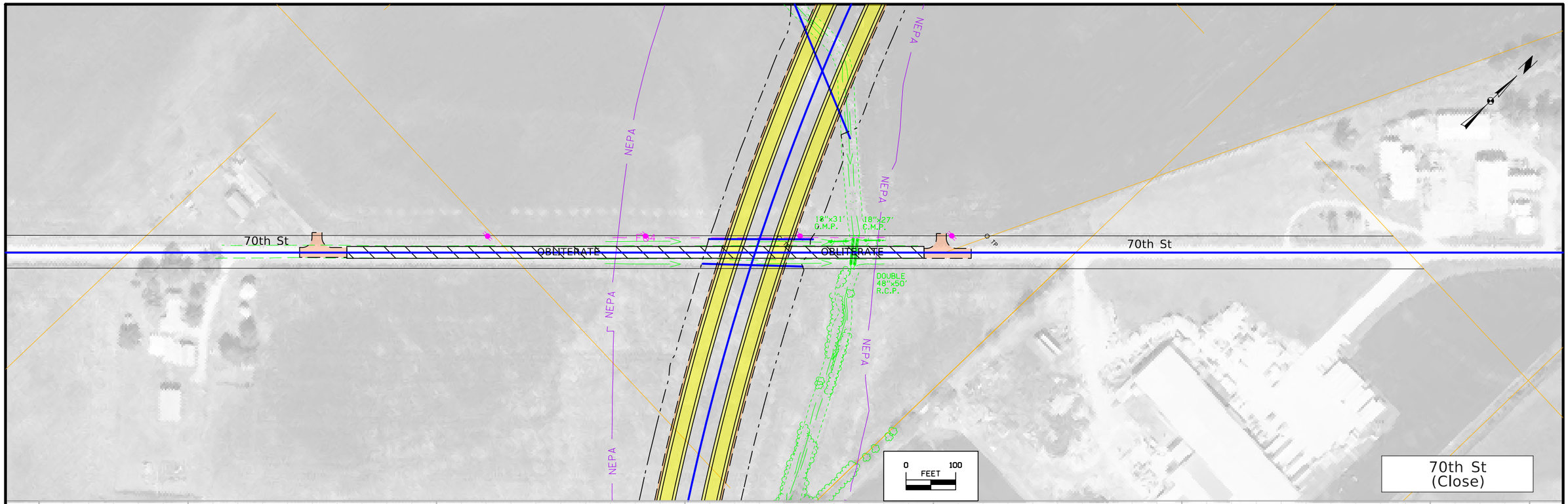




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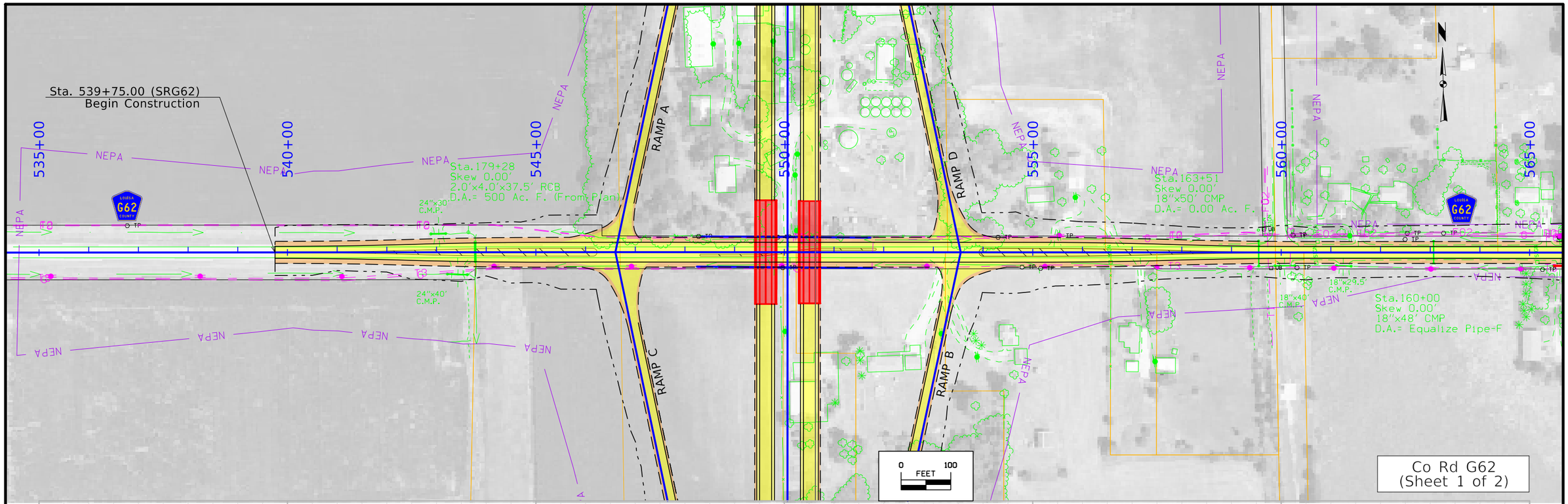
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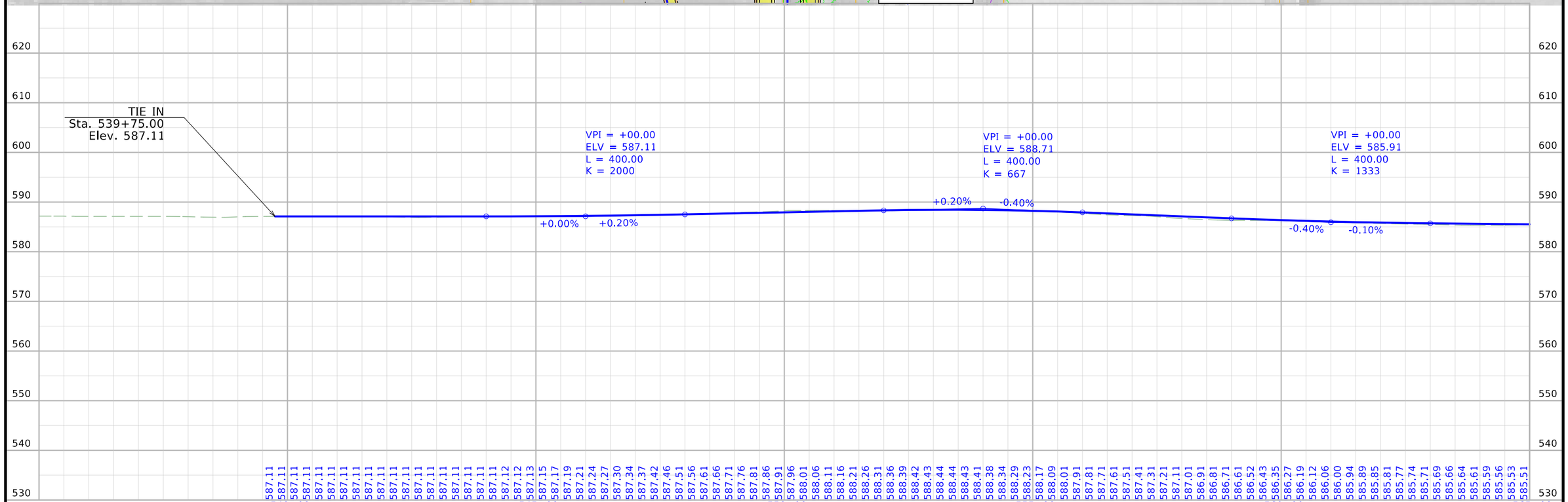
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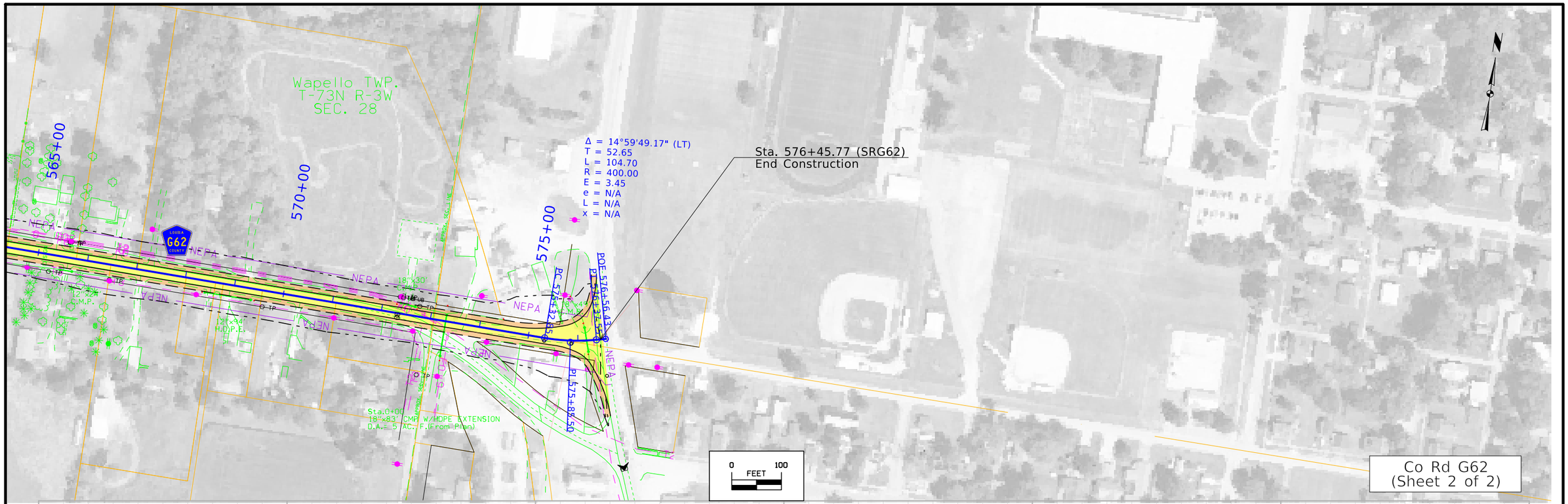




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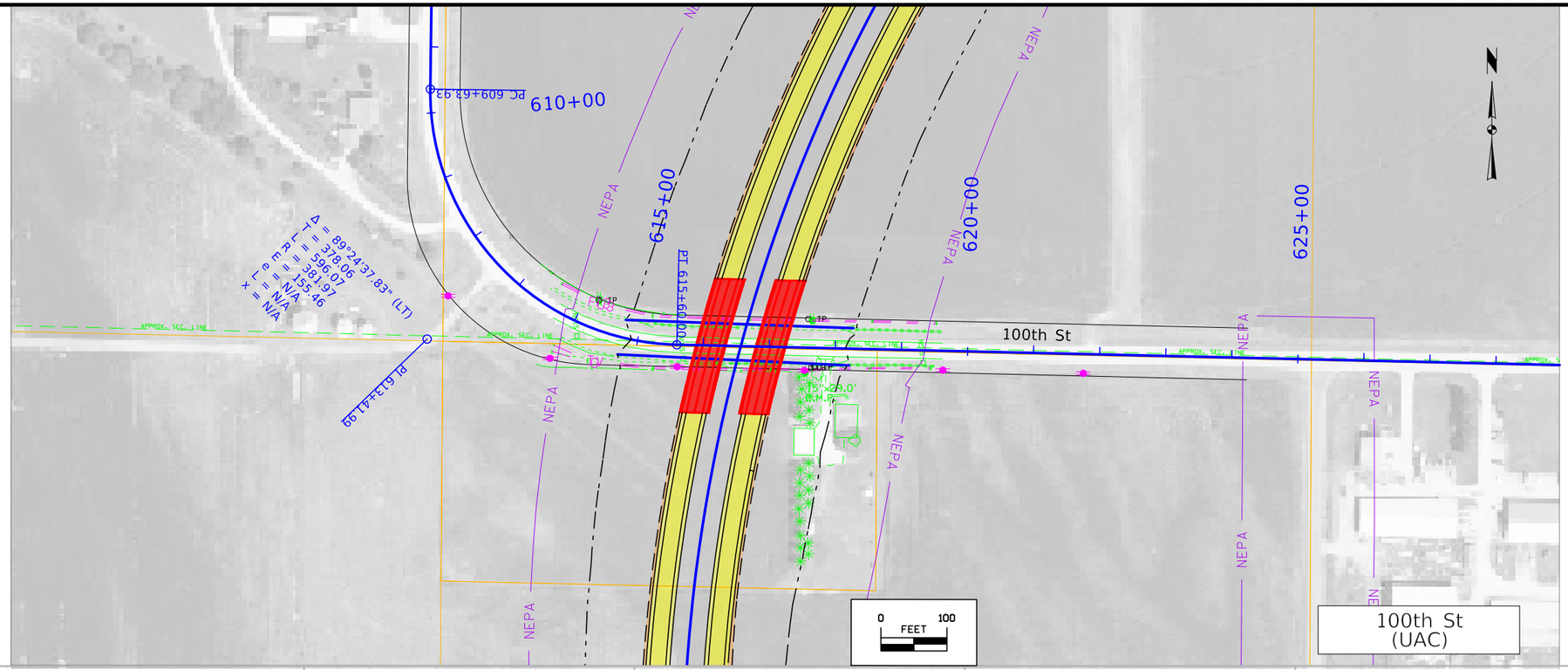
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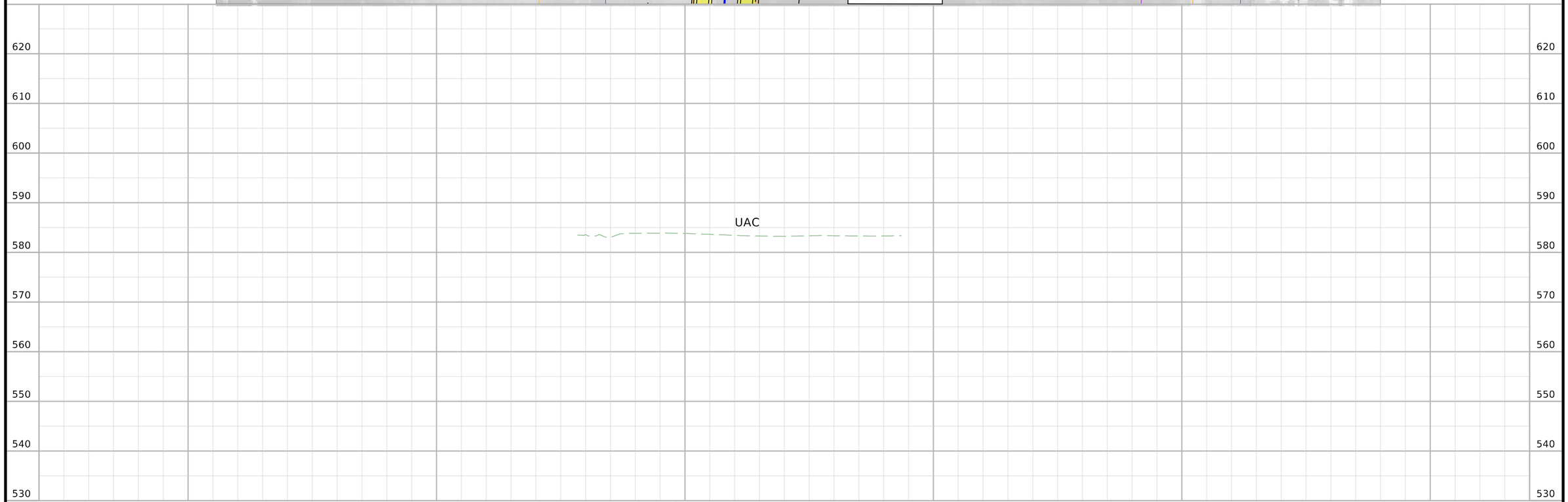


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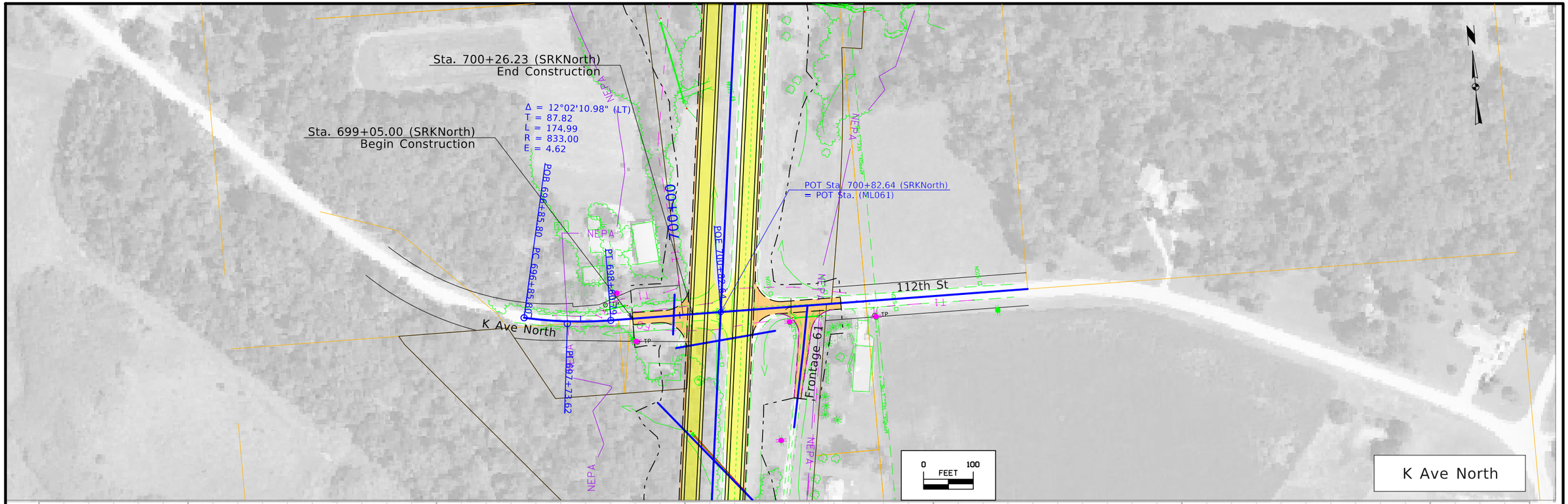


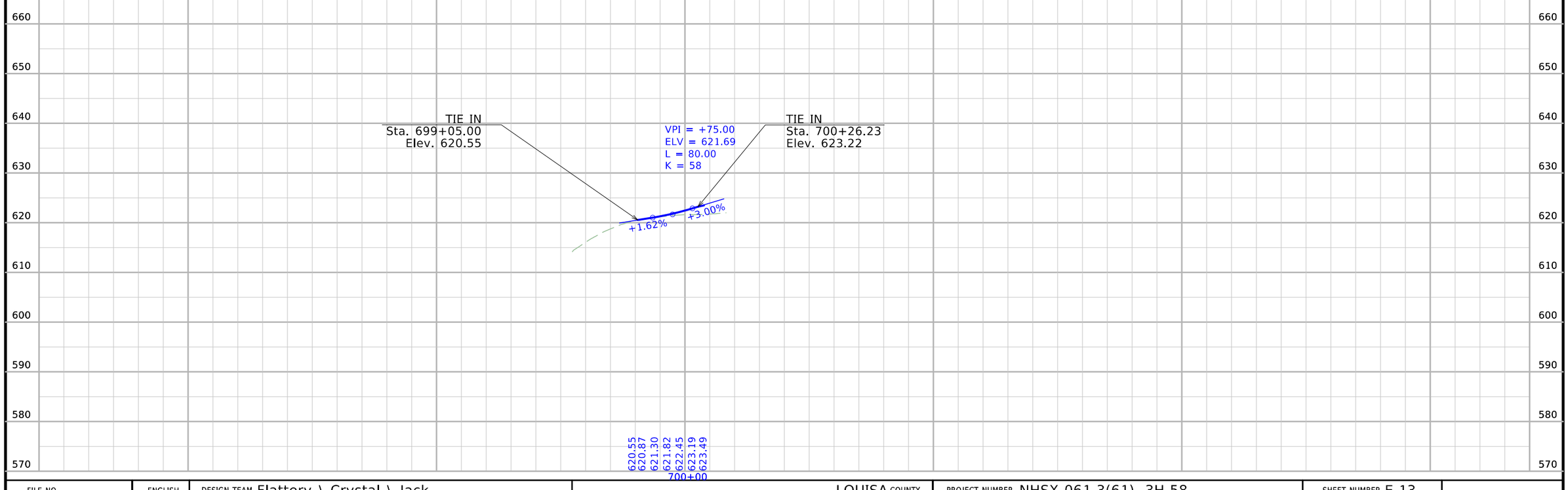


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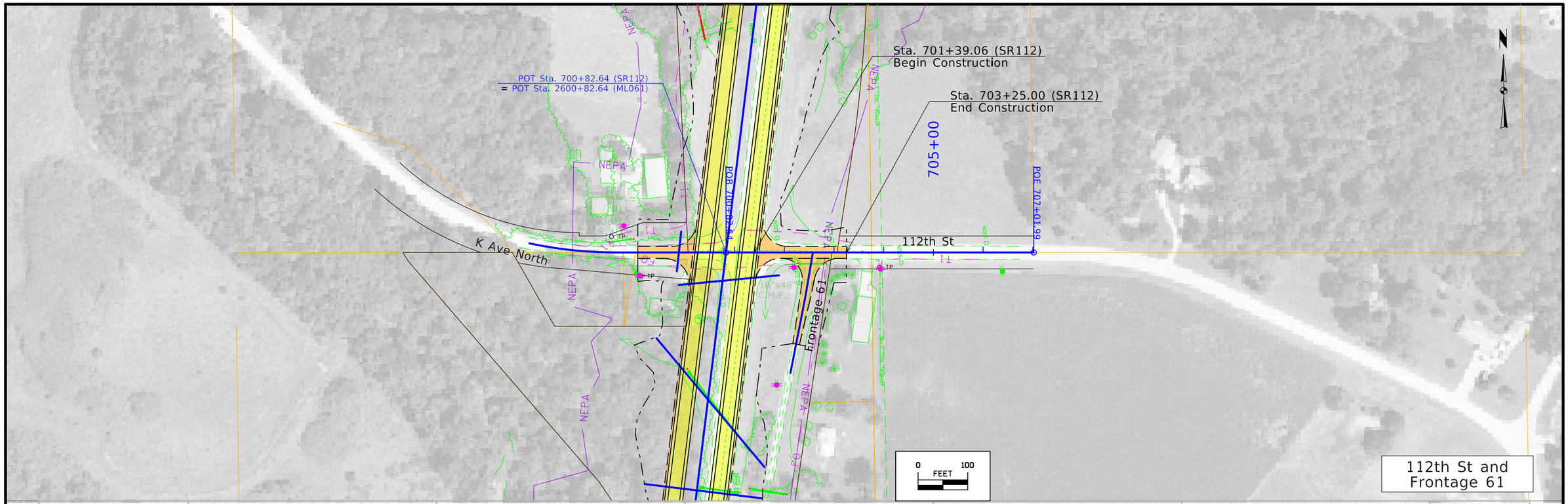


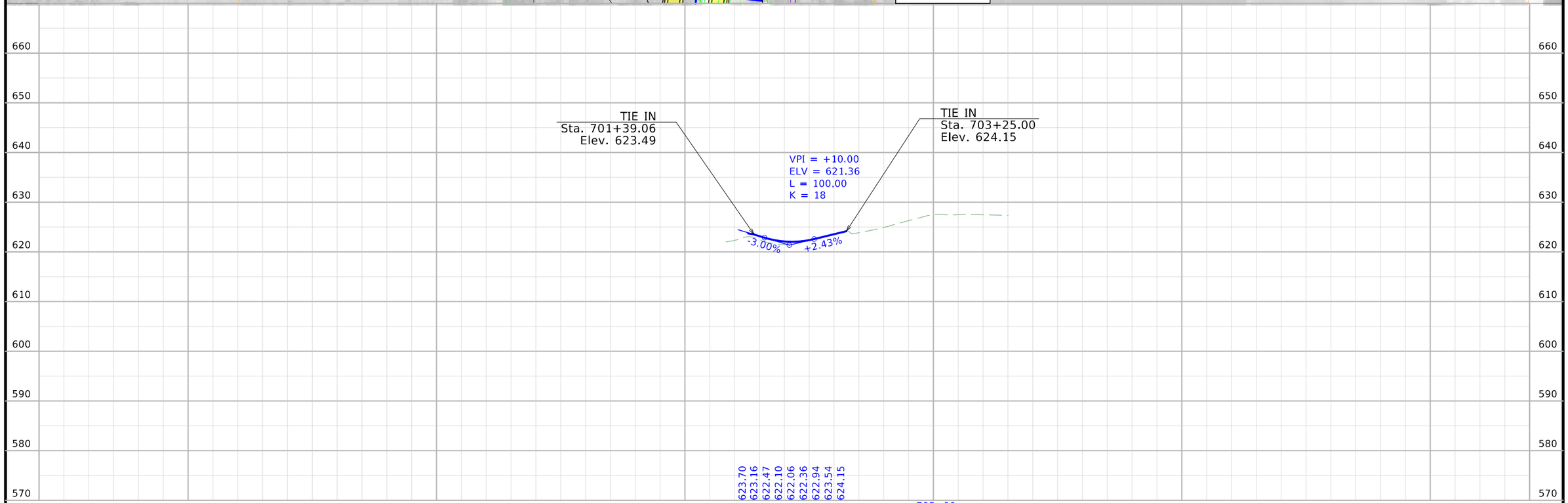


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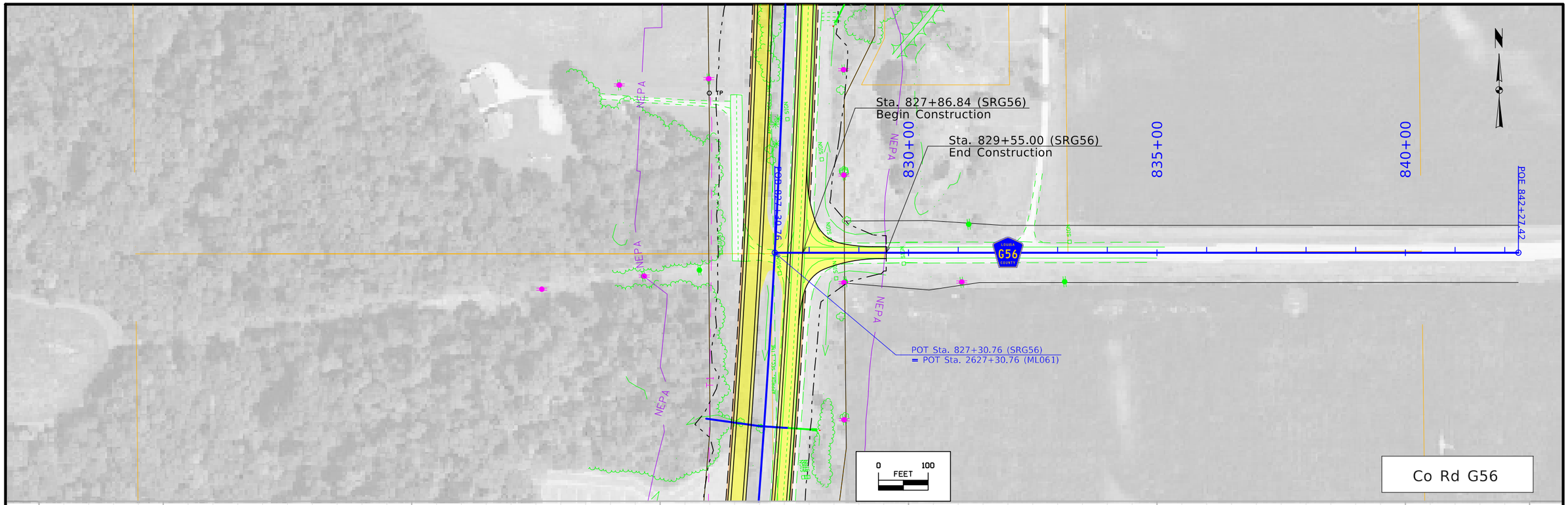




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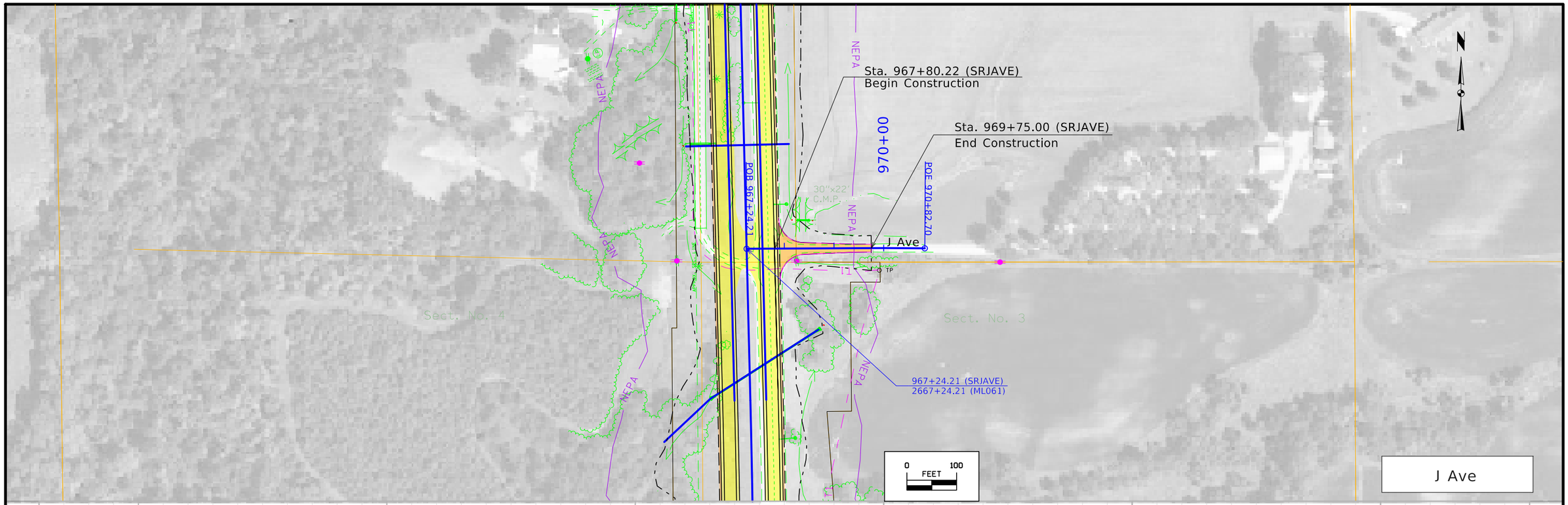
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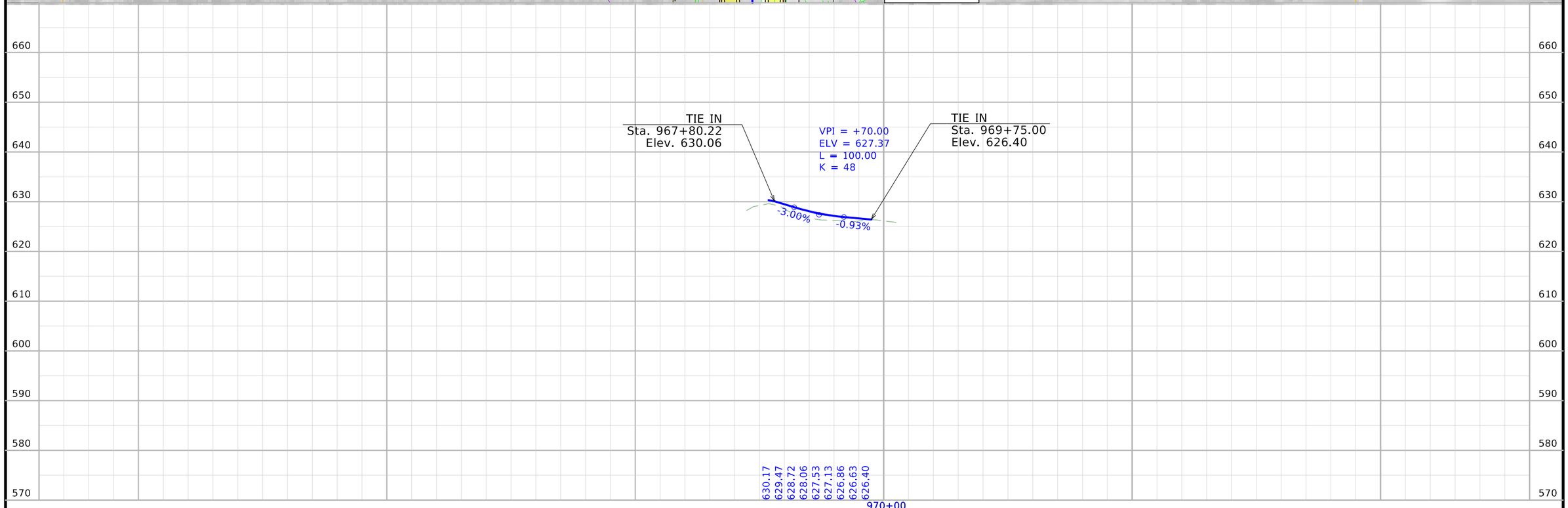


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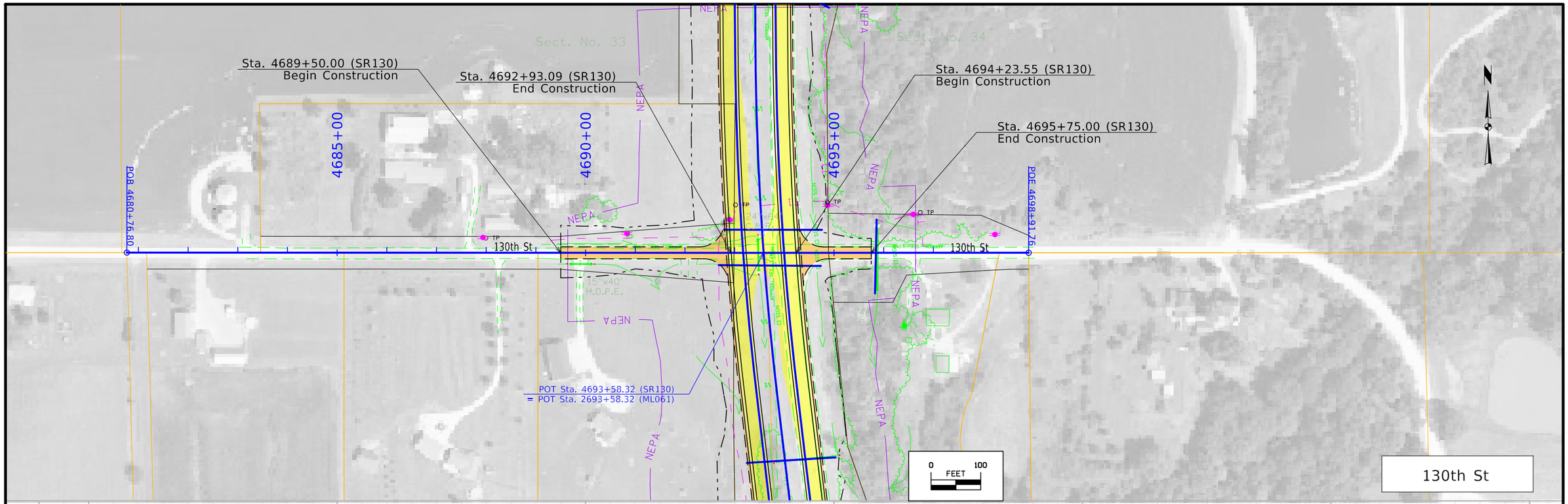


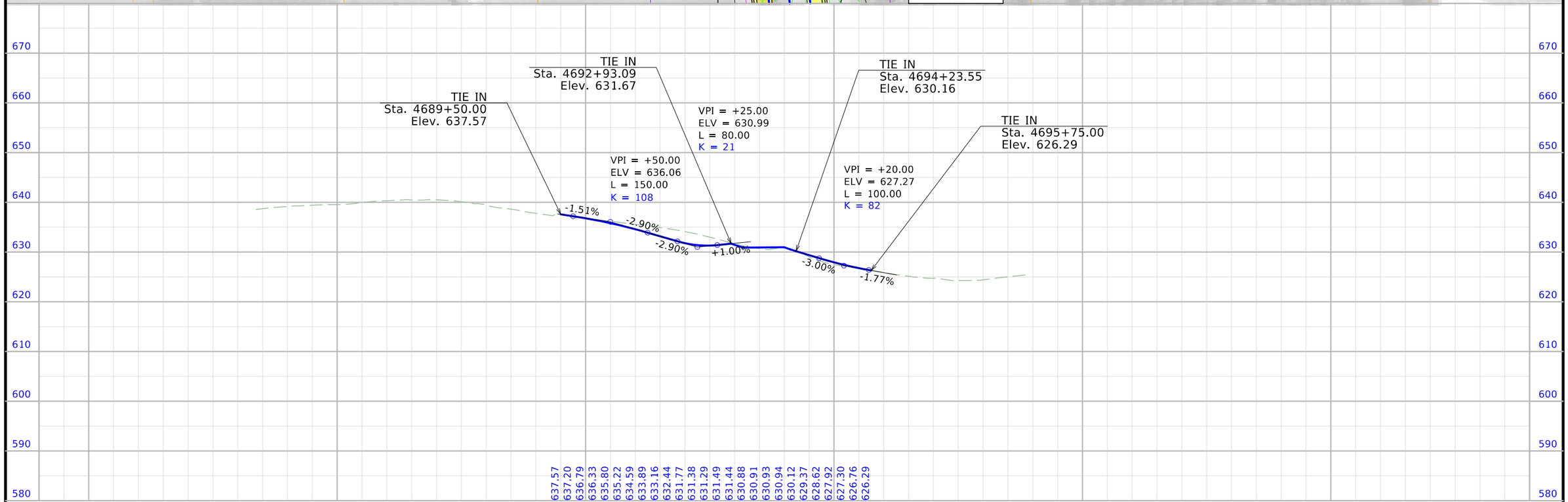


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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER E.17	

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Survey Information

Louisa County
SAP
PIN: 11-58-061-010
Project Number: NHSX-061-3(61)--3H-58
Location: 0.5 mi N of IA 78 to 130th St 2 mi S of IA 92
Project Directory: 5806101011
Relocation Survey Section A

Party Personnel
Nels Sutherland - Party Chief
Myron Fox – Assistant Party Chief

Date(s) of Survey
Begin Date 02/20/2020
End Date 09/24/2020

General Information
Measurement units for this survey are US survey feet. The cleared NEPA area limits were used as survey limits.

Vertical Control
Project control was surveyed using static post processing methods in 2014. Vertical datum for this survey is relative to NAVD88 (GEOID12B). Louisa County Control Marks were used as primary project control marks. In 2020 Primary control was added by static post processing to densify the control network holding the 2014 survey control.

Des Moines Co. GPS Control Point 244 was checked for vertical tolerance. The difference was less than 0.10ft.
Louisa Co. GPS Control Point 16 was checked for vertical tolerance. The difference was less than 0.10ft.

Horizontal Control
Project control was surveyed using static post processing methods in 2014
Project datum and control established using NAD83 (2011).
The project coordinate system is Iowa Regional Coordinate System Zone 14.
Louisa County Control Marks were used as primary project control marks. In 2020 Primary control was added by static post processing to densify the control network holding the 2014 survey control.

Des Moines Co. GPS Control Point 244 was checked for horizontal tolerance. The difference was less than 0.10ft.
Louisa Co. GPS Control Point 16 was checked for horizontal tolerance. The difference was less than 0.10ft.

Relocation Survey Alignment
A preferred planning alignment as of Jan. 2018 was used to create a survey alignment. It is unknown as of this writing if this survey alignment will be used as construction (design) alignment from which ROW will be purchased and the roadway constructed.

This alignment is known as ML_0100_ML061_7 to the Location and Environment Bureau for this project. The PI's from the planning alignment that were in the Iowa State Plane South coordinate system were transformed to Iowa Regional Zone 14 coordinates. Survey alignment connects these PI's and uses the curve radii from the planning alignment noted above. The stationing from the planning alignment is approximately the same as survey stationing but not exact due to the difference between grid scale factors in Iowa State Plane South and RCS Zone 14 coordinate systems. Zone 14 alignment models true length more accurately than State Plane.

Utility Information
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

A One-call Design Information Request, (Ticket# 552001634), was made on 03/02/2020 by the District 5 Utility Coordinator. The following Companies were listed:

Following are the list of contacts made in the order they were received:

EASTERN IOWA LIGHT & POWER
Contact Name : Mark Elder
Contact Phone: 563-732-7360
Contact Email: mark.elder@easterniowa.com
On 03/02/2020 received an email from the District 5 Utility Coordinator. Attached was a map, provided by Richard VanErsvelde of Eastern Iowa Light & Power, showing an underground electric line running on the west side of hwy61 starting at just south of 30th St to just north of 35th St. After 35th St the electric line is overhead running along the west side of hwy61 then crossing over hwy61 to the east side north of 40th St and continuing north through the project.

MUTUAL TELE CO OF MORNING SUN
Contact Name : Mike Pugh
Contact Phone: 319-868-7636
Contact Email: custserv@mutel.com
On 03/09/2020 received an email from the District 5 Utility Coordinator. Attached was a map, provided by Dave Connolly of Mutual Tele Co of Morning Sun, showing a buried Telephone line running along the west side of hwy61 from the beginning of the project to approximately 1475ft north of 35th St. There is also a buried Fiber Optic line that runs alongside the Telephone line that ends at 35th St.

WINDSTREAM COMMUNICATIONS
Contact Name : LOCATE DESK
Contact Phone: 800-289-1901
Contact Email: LOCATE.DESK@WINDSTREAM.COM
On 03/02/2020 received an email from the District 5 Utility Coordinator. Attached was a map, provided by Lisa Zingula of Windstream, showing an buried Telephone line starting approximately 1300ft north of 35th St running south along the west side of hwy61 for approximately 2750ft. Crossing to the east side of hwy61 the utility runs north along hwy61 to the south side of H16 where it crosses hwy61 and runs west along the south side of H16. The utility also continues north from H16 along the west side of hwy61 for approximately 1200ft where it crosses hwy61 and continues north on the east side. The utility reaches J Ave and crosses hwy61 then runs along the west side to approximately 1000ft short of the north end of the project.

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) EPOCH 2010.00
VERT. DATUM: NAVD88
Ia. Regional Coordinate System Zone 14

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

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER G.2	

8:02:05 AM 5/5/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_G01.dgn

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

Ia. Regional Coordinate System Zone 14

Point Name	North	East	Height	Code Description
82301	6505277.908	24514639.603	734.414	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF HWY78 AND K AVE E 230FT S OF CL HWY78 23FT 4IN BELOW THE SURFACE
82302	6509798.282	24514476.822	695.707	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF HWY78 AND K AVE N 4484FT E OF CL HWY78 25FT 4IN BELOW SURFACE
82303	6513658.223	24514470.275	677.219	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF HWY78 AND K AVE N 8348FT W OF CL K AVE 31FT 4IN BELOW SURFACE
82304	6521283.246	24514591.535	588.416	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF H16 AND K AVE N 5330FT E OF CL K AVE 32FT 4IN BELOW SURFACE
82305	6526987.155	24514560.752	582.209	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF 65TH ST AND K AVE S 2238FT W OF CL K AVE 35FT 4IN BELOW SURFACE
82306	6535656.212	24513738.110	580.297	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF LOCUST ST AND K AVE W 850FT S OF CL LOCUST ST 22FT 4IN BELOW SURFACE
82307	6539702.46	24513255.386	582.039	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF G62 AND 142ND AVE N 46FT W OF CL 142ND AVE 42FT 4IN BELOW SURFACE
82308	6542474.066	24512101.562	581.49	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF 142ND AVE AND 100TH ST W ALONG 100TH ST 1277FT NW OF CL 100TH ST 42FT 4IN BELOW SURFACE
82309	6552828.28	24514227.443	588.609	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF HWY61 AND 112TH ST S 1385FT ALONG HWY61 27FT E OF CL HWY61 4IN BELOW SURFACE
82310	6558546.753	24514811.375	617.493	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF HWY61 AND 112TH ST N 1745FT ALONG HWY61 87FT E OF CL HWY61 4IN BELOW SURFACE
244	6499964.194	24514319.063	747.477	FOUND DES MOINES CO GPS CONTROL POINT DESIGNATION 99-244
34	6516121.606	24514579.142	630.907	FOUND LOUISA CO GPS CONTROL POINT DESIGNATION 2006-034
26	6532007.972	24514551.339	579.891	FOUND LOUISA CO GPS CONTROL POINT DESIGNATION 2006-026
19	6547527.157	24514296.966	562.818	FOUND LOUISA CO GPS CONTROL POINT DESIGNATION 2006-019
16	6563455.827	24514264.869	634.448	FOUND LOUISA CO GPS CONTROL POINT DESIGNATION 2006-016

Louisa County
SAP
PIN: 11-58-061-010
Project Number: NHSX-061-3(61)--3H-58
Location: 0.5 mi N of IA 78 to 130th St 2 mi S of IA 92
Project Directory: 5806101011
Relocation Survey Section B

Party Personnel
Nels Sutherland - Party Chief
Myron Fox – Assistant Party Chief

Date(s) of Survey
Begin Date 01/13/2020
End Date

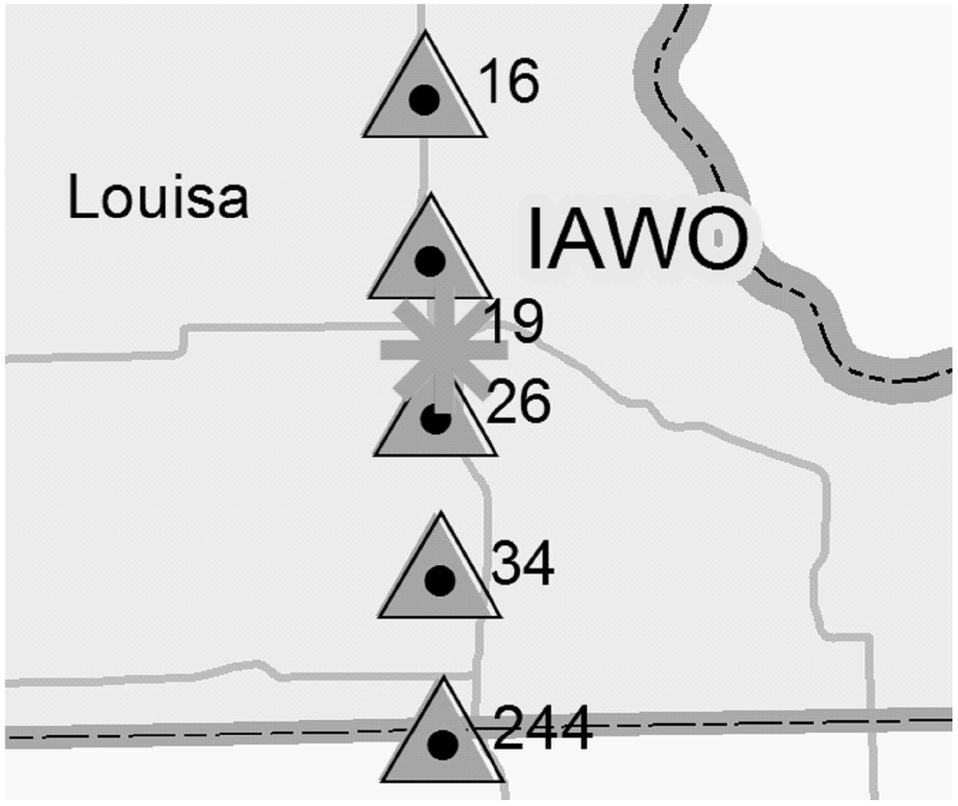
General Information
Measurement units for this survey are US survey feet. The cleared NEPA area limits were used as survey limits.

Vertical Control
Project control was surveyed using static post processing methods in 2014. Vertical datum for this survey is relative to NAVD88 (GEOID12B). Louisa County Control Marks were used as primary project control marks. In 2020 Primary control was added by static post processing to densify the control network holding the 2014 survey control.

Des Moines Co. GPS Control Point 244 was checked for vertical tolerance. The difference was less than 0.10ft.
Louisa Co. GPS Control Point 16 was checked for vertical tolerance. The difference was less than 0.10ft.

Horizontal Control
Project control was surveyed using static post processing methods in 2014
Project datum and control established using NAD83 (2011).
The project coordinate system is Iowa Regional Coordinate System Zone 14.
Louisa County Control Marks were used as primary project control marks. In 2020 Primary control was added by static post processing to densify the control network holding the 2014 survey control.

Des Moines Co. GPS Control Point 244 was checked for horizontal tolerance. The difference was less than 0.10ft.
Louisa Co. GPS Control Point 16 was checked for horizontal tolerance. The difference was less than 0.10ft.



Relocation Survey Alignment
A preferred planning alignment as of Jan. 2018 was used to create a survey alignment. It is unknown as of this writing if this survey alignment will be used as construction (design) alignment from which ROW will be purchased and the roadway constructed.

This alignment is known as ML_0100_ML061_7 to the Location and Environment Bureau for this project. The PI's from the planning alignment that were in the Iowa State Plane South coordinate system were transformed to Iowa Regional Zone 14 coordinates. Survey alignment connects these PI's and uses the curve radii from the planning alignment noted above. The stationing from the planning alignment is approximately the same as survey stationing but not exact due to the difference between grid scale factors in Iowa State Plane South and RCS Zone 14 coordinate systems. Zone 14 alignment models true length more accurately than State Plane.

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) EPOCH 2010.00
VERT. DATUM: NAVD88
Ia. Regional Coordinate System Zone 14

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

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER G.5	

8:02:16 AM 5/5/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_G01.dgn

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

Ia. Regional Coordinate System Zone 14

Point Name	North	East	Height	Code Description
82301	6505277.908	24514639.603	734.414	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF HWY78 AND K AVE E 230FT S OF CL HWY78 23FT 4IN BELOW THE SURFACE
82302	6509798.282	24514476.822	695.707	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF HWY78 AND K AVE N 4484FT E OF CL HWY78 25FT 4IN BELOW SURFACE
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82307	6539702.46	24513255.386	582.039	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF G62 AND 142ND AVE N 46FT W OF CL 142ND AVE 42FT 4IN BELOW SURFACE
82308	6542474.066	24512101.562	581.49	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF 142ND AVE AND 100TH ST W ALONG 100TH ST 1277FT NW OF CL 100TH ST 42FT 4IN BELOW SURFACE
82309	6552828.28	24514227.443	588.609	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF HWY61 AND 112TH ST S 1385FT ALONG HWY61 27FT E OF CL HWY61 4IN BELOW SURFACE
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16	6563455.827	24514264.869	634.448	FOUND LOUISA CO GPS CONTROL POINT DESIGNATION 2006-016

Louisa County
SAP 0823
PIN: 11-58-061-010
Project Number: NHSX-061-3(61)--3H-58
Location: 0.5 mi N of IA 78 to 130th St 2 mi S of IA 92
Project Directory: 5806101011
Relocation Survey Section C

Party Personnel
Nels Sutherland - Party Chief
Myron Fox – Assistant Party Chief

Date(s) of Survey
Begin Date 10/20/2020
End Date 09/13/2021

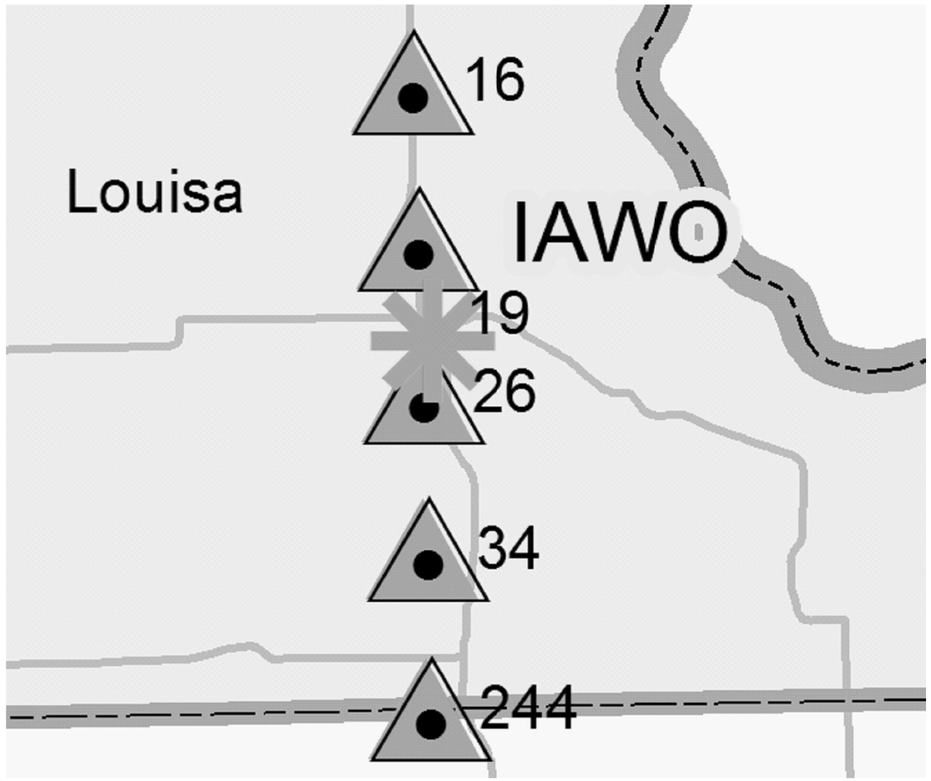
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Measurement units for this survey are US survey feet. The cleared NEPA area limits were used as survey limits.

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HORIZ. DATUM: NAD83(2011) EPOCH 2010.00
VERT. DATUM: NAVD88
Ia. Regional Coordinate System Zone 14

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

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER G.8

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HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

Ia. Regional Coordinate System Zone 14

Point Name	North	East	Height	Code Description
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82307	6539702.46	24513255.386	582.039	CP FENO MON WITH IDOT BRASS DISC FROM INTERSECTION OF G62 AND 142ND AVE N 46FT W OF CL 142ND AVE 42FT 4IN BELOW SURFACE
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34	6516121.606	24514579.142	630.907	FOUND LOUISA CO GPS CONTROL POINT DESIGNATION 2006-034
26	6532007.972	24514551.339	579.891	FOUND LOUISA CO GPS CONTROL POINT DESIGNATION 2006-026
19	6547527.157	24514296.966	562.818	FOUND LOUISA CO GPS CONTROL POINT DESIGNATION 2006-019
16	6563455.827	24514264.869	634.448	FOUND LOUISA CO GPS CONTROL POINT DESIGNATION 2006-016

108-23A
08-01-08

TRAFFIC CONTROL PLAN

Traffic on US 61 shall be maintained at all times.

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
			No Travel Restrictions Expected.									

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	

Sta. 33537+78.67 (RMPG62C)
Begin Construction

Δ = 10°44'27.55" (LT)
T = 188.02
L = 374.93
R = 2000.00
E = 8.82
e = 5.4%
Ls = 168
x = 62

POT Sta. 33550+33.20 (RMPG62C)
= POT Sta. 546+60.00 (SRG62)

Sta. 33550+12.76 (RMPG62C)
End Construction

33530+00
33535+00
33540+00
33545+00
33550+00
2425+00
2430+00
2435+00
2440+00
2445+00
2450+00

POB 33525+41.28
POB 22525+74.20
PC 33535+50.00
PT 33539+24.93
PI 33537+38.67
PC 22537+76.73
PT 22539+95.32
PC 22539+86.71
POB 47549+12.10

RAMP C
RAMP B

61
G62

Sta. 22536+75.00 (RMPG62B)
Begin Construction

Δ = 08°11'09.33" (RT)
T = 109.48
L = 218.59
R = 1530.00
E = 3.91
e = 6.0%
Ls = 186
x = 62

22535+00
22540+00
22545+00
22550+00

Sta. 22550+12.31 (RMPG62B)
End Construction

POT Sta. 22550+32.75 (RMPG62B)
= POT Sta. 553+55.00 (SRG62)

0 FEET 100

US 61 & CO RD G62
Interchange Details (Sheet 1 of 2)

142nd St

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER K.1	

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POT Sta. 11549+81.06 (RMPG62A)
= POT Sta. 546+60.00 (SRG62)

Sta. 11550+01.51 (RMPG62A)
Begin Construction

Δ = 08°08'10.60" (LT)
T = 108.82
L = 217.27
R = 1530.00
E = 3.86
e = 6.0%
L = 186
x = 62

Sta. 11564+00.00 (RMPG62A)
End Construction

RAMP A

RAMP D

Sta. 44562+46.34 (RMPG62D)
End Construction

Δ = 10°41'59.70" (RT)
T = 187.29
L = 373.50
R = 2000.00
E = 8.75
e = 5.4%
L = 168
x = 62

Sta. 44550+00.14 (RMPG62D)
Begin Construction

POT Sta. 44549+79.70 (RMPG62D)
= POT Sta. 553+55.00 (SRG62)

100th St

142nd St

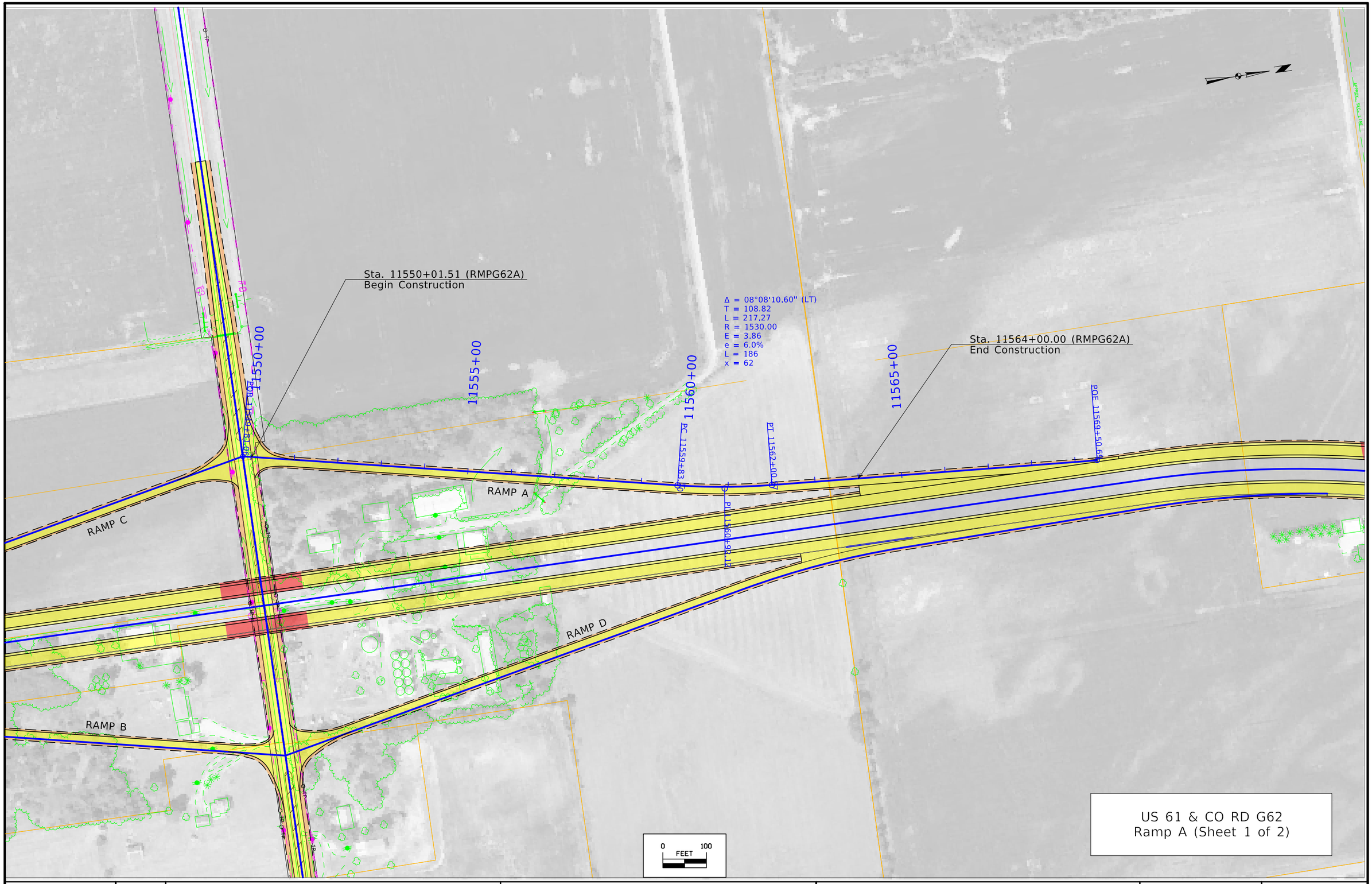
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US 61 & CO RD G62
Interchange Details (Sheet 2 of 2)

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER K.2

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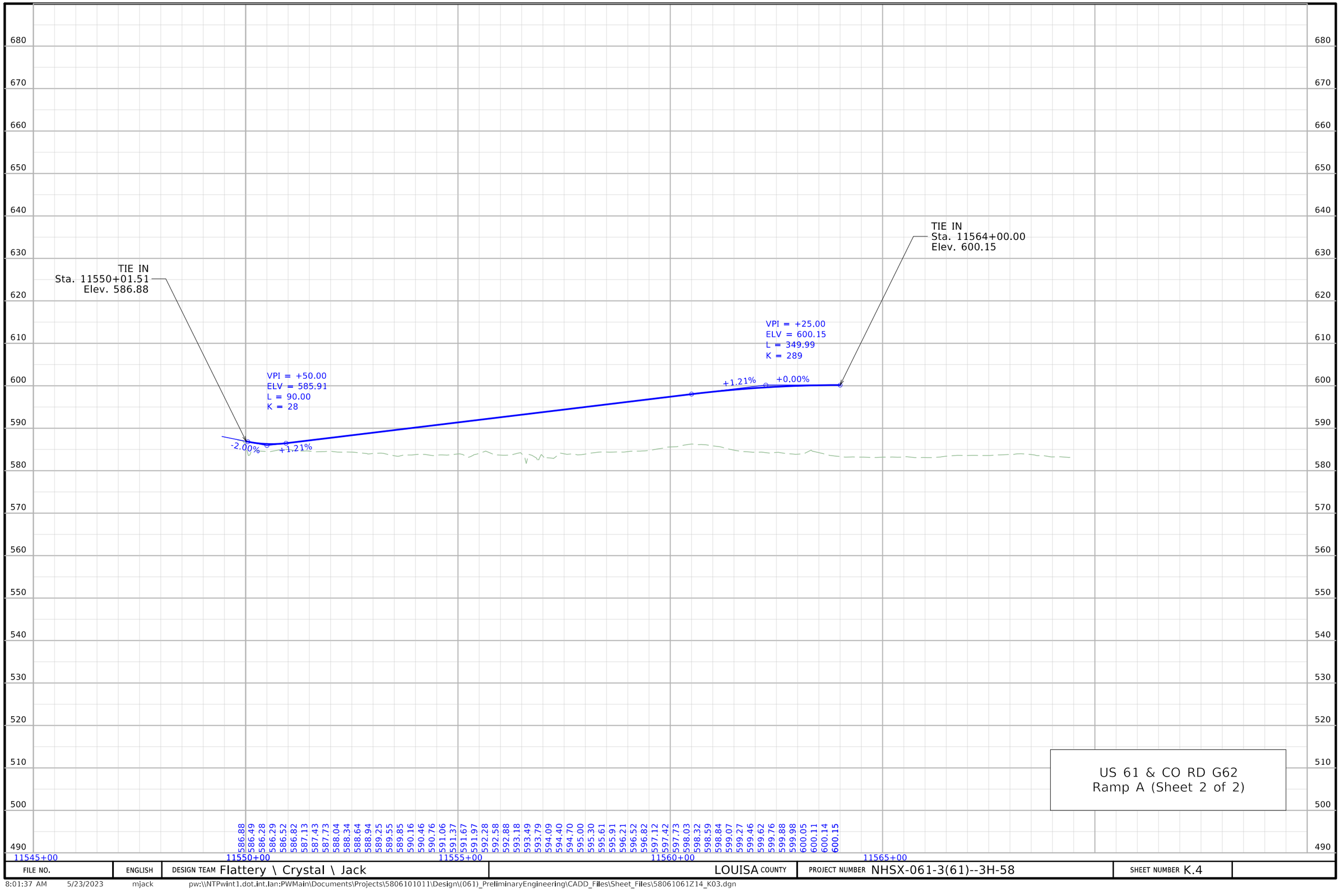
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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER K.3	

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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER K.4	

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RAMP A

RAMP C

RAMP B

RAMP D

61

G62

POB 22518+86.71 C

POB 22537+76.73

POB 22539+95.32

POB 22550+12.31

22535+00

22540+00

22545+00

22550+00

Sta. 22536+75.00 (RMPG62B)
Begin Construction

Δ = 08°11'09.33" (RT)
T = 109.48
L = 218.59
R = 1530.00
E = 3.91
e = 6.0%
L = 186
x = 62

Sta. 22550+12.31 (RMPG62B)
End Construction

0 FEET 100

US 61 & CO RD G62
Ramp B (Sheet 1 of 2)

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER K.5	

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US 61 & CO RD G62
Ramp B (Sheet 2 of 2)

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER K.6	

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Sta. 33537+78.67 (RMPG62C)
Begin Construction

Sta. 33550+12.76 (RMPG62C)
End Construction

Δ = 10°44'27.55" (LT)
T = 188.02
L = 374.93
R = 2000.00
E = 8.82
e = 5.4%
L = 168
x = 62

33530+00
33535+00
33540+00
33545+00
33550+00

POB 33525+41.28

PC 33535+50.00

PT 33539+24.93

PI 33537+38.02

61

RAMP C
RAMP A
RAMP B
RAMP D

G62

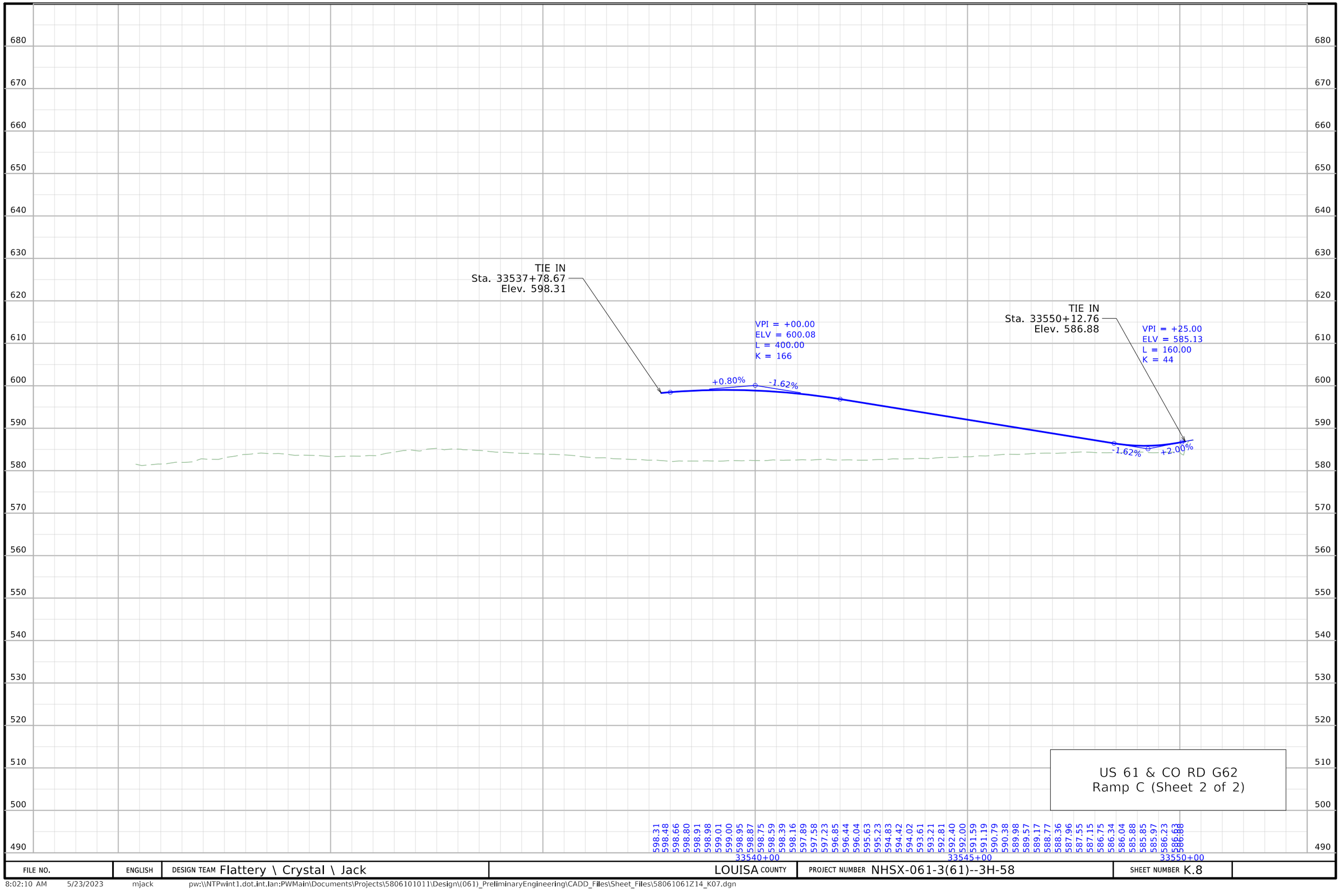
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US 61 & CO RD G62
Ramp C (Sheet 1 of 2)

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER K.7

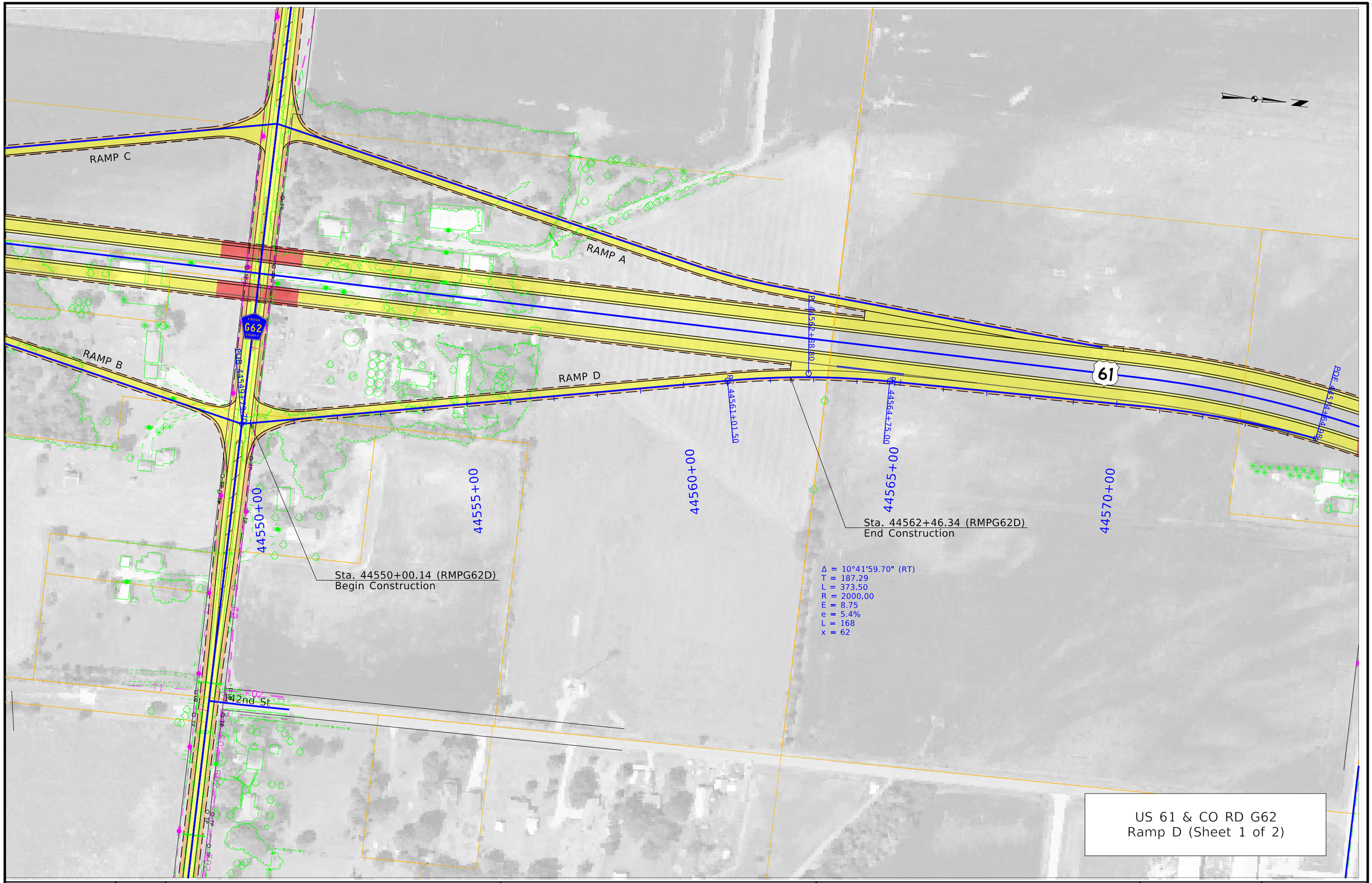
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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER K.8	

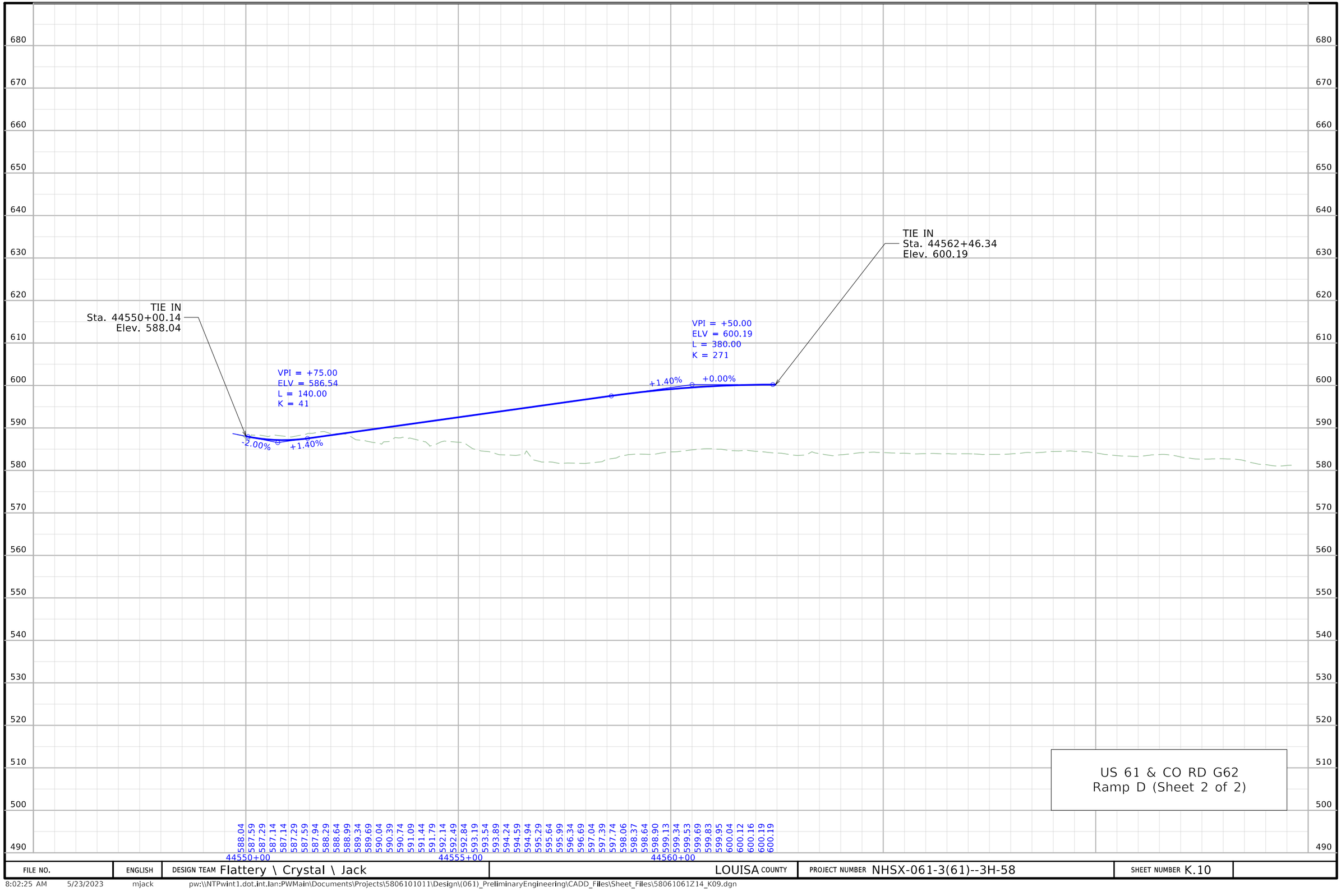
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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER K.9	

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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER K.10	

8:02:25 AM 5/23/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Sheet_Files\58061061Z14_K09.dgn

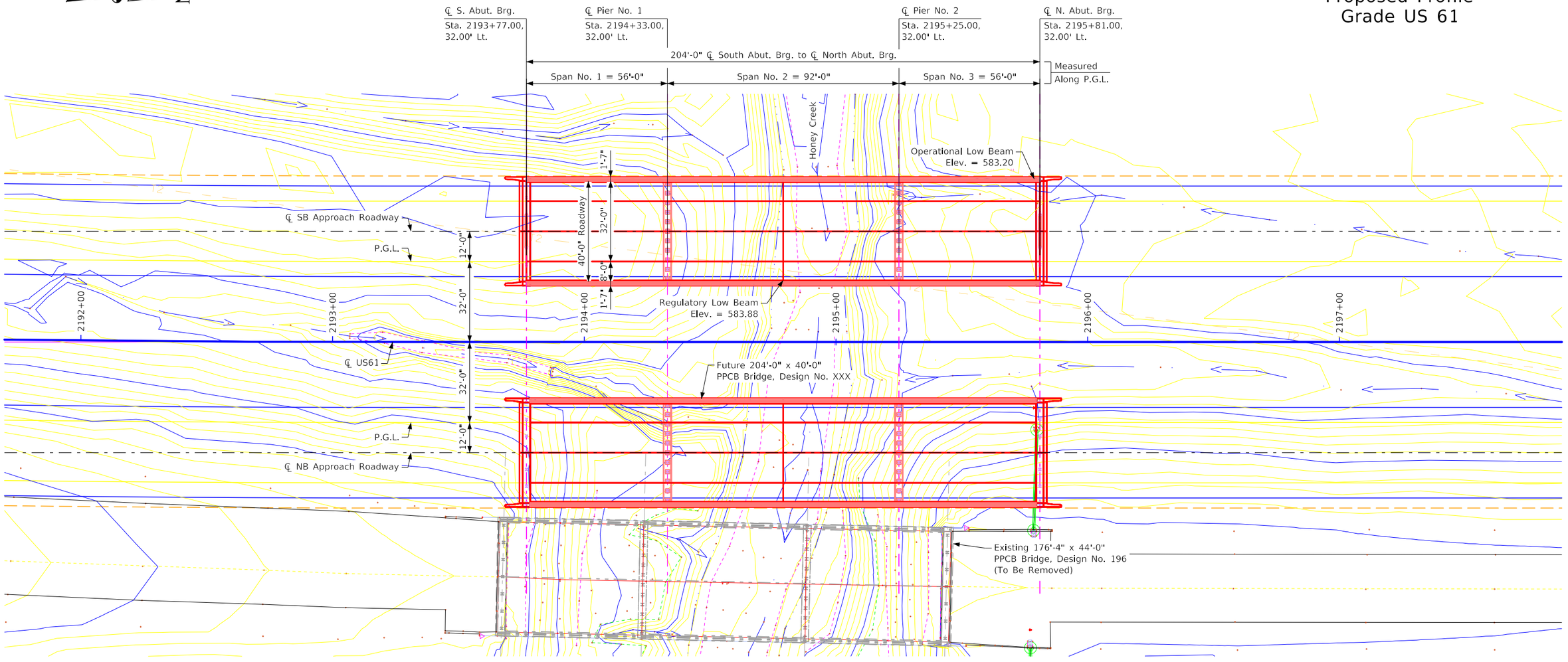
Control Point:

G1 = -5.0%
G2 = -0.2%

VPI Sta. = 2192+00
VPI Elev. = 587.95
VC = 900'

N

Proposed Profile Grade US 61



Honey Creek Hydraulic Data

TOS at Regulatory Low Beam = 587.88 (Sta. 2194+95, 25.92' Rt.)
Depth of Superstructure = 4.00'
Regulatory Low Beam = 583.88
Q_{50} Stage = 578.5 *
Freeboard = 5.38'

TOS at Operational Low Beam = 587.20 (Sta. 2195+79.50, 25.92' Rt.)
Depth of Superstructure = 4.00'
Operational Low Beam = 583.20
Q_{100} Stage = 578.5
Freeboard = 4.70'

* Q_{100} Stage is reported as a placeholder as Q_{50} data is not available.

Bridge Plan - US 61 Southbound over Honey Creek

Note:
All units are in feet unless noted otherwise.

Notes to Designers:
Superstructures to be PPCB "BTB" Beams. Substructure to be integral abutments and P10L pile bents.
Hydraulic data based on an assumed pier width of 2'-6".
TL-4 bridge railing proposed.

Preliminary
Not For Construction

0 20
Scale In Feet

Design For 0° Skew
204'-0" X 40'-0"
PPCB Bridge
56'-0" End Spans 92'-0" Interior Span
3 Span over Honey Creek
STA. 2194+79.00 (℄ US 61) Turn-in Date: May 2023
LOUISA County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX of XX FHWA No. TBD

FILE NO. XXXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.1

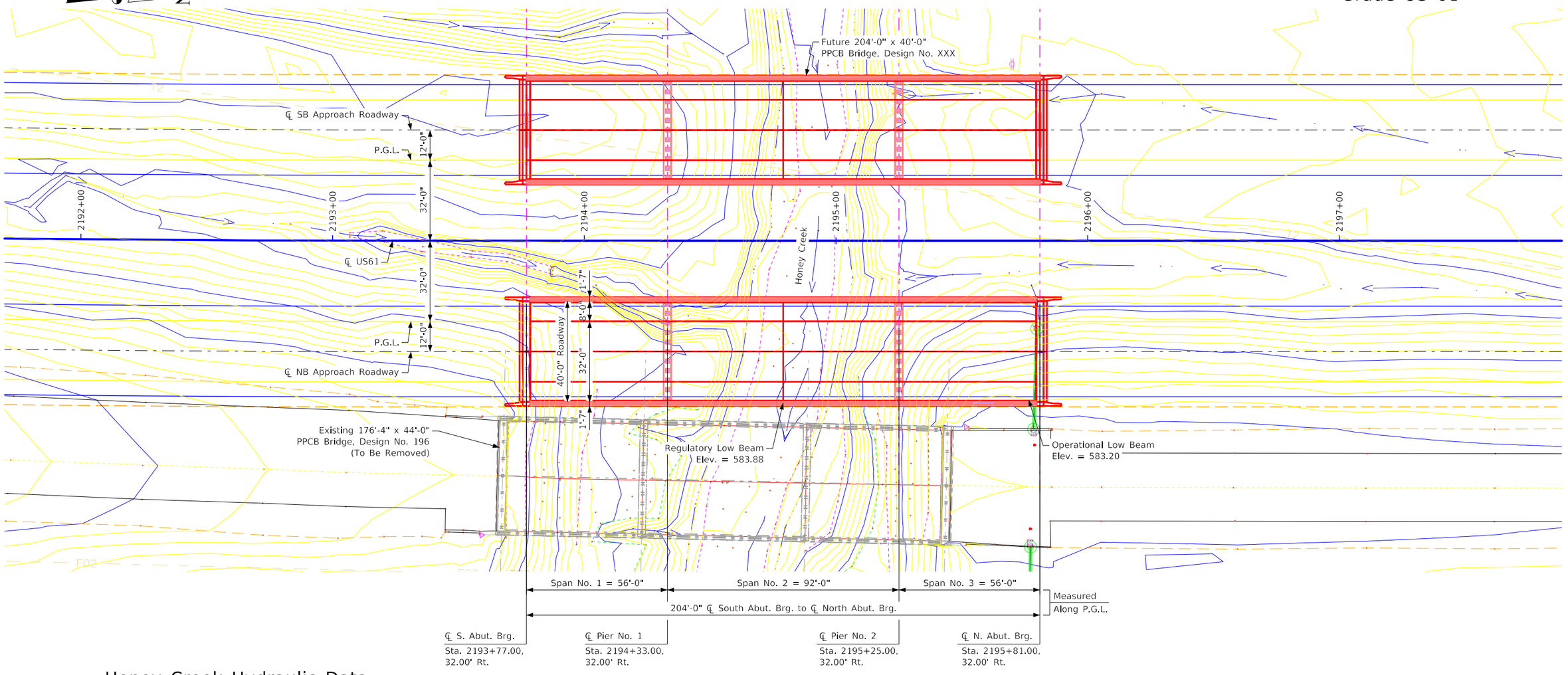
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Control Point:

G1 = -5.0% G2 = -0.2%

VPI Sta. = 2192+00
VPI Elev. = 587.95
VC = 900'

Proposed Profile Grade US 61



Honey Creek Hydraulic Data

TOS at Regulatory Low Beam = 587.88 (Sta. 2194+95, 25.92' Rt.)
Depth of Superstructure = 4.00'
Regulatory Low Beam = 583.88
Q_{50} Stage = 578.5 *
Freeboard = 5.38'

TOS at Operational Low Beam = 587.20 (Sta. 2195+79.50, 25.92' Rt.)
Depth of Superstructure = 4.00'
Operational Low Beam = 583.20
Q_{100} Stage = 578.5
Freeboard = 4.70'

* Q_{100} Stage is reported as a placeholder as Q_{50} data is not available.

Bridge Plan - US 61 Northbound over Honey Creek

Note:
All units are in feet unless noted otherwise.

Notes to Designers:
Superstructures to be PPCB "BTB" Beams. Substructure to be integral abutments and P10L pile bents.
Hydraulic data based on an assumed pier width of 2'-6".
TL-4 bridge railing proposed.

Preliminary
Not For Construction

0 20
Scale In Feet

Design For 0° Skew
204'-0" X 40'-0"
PPCB Bridge
56'-0" End Spans 92'-0" Interior Span
3 Span over Honey Creek
STA. 2194+79.00 (℄ US 61) Turn-in Date: May 2023
LOUISA County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX of XX FHWA No. TBD

FILE NO. XXXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.2

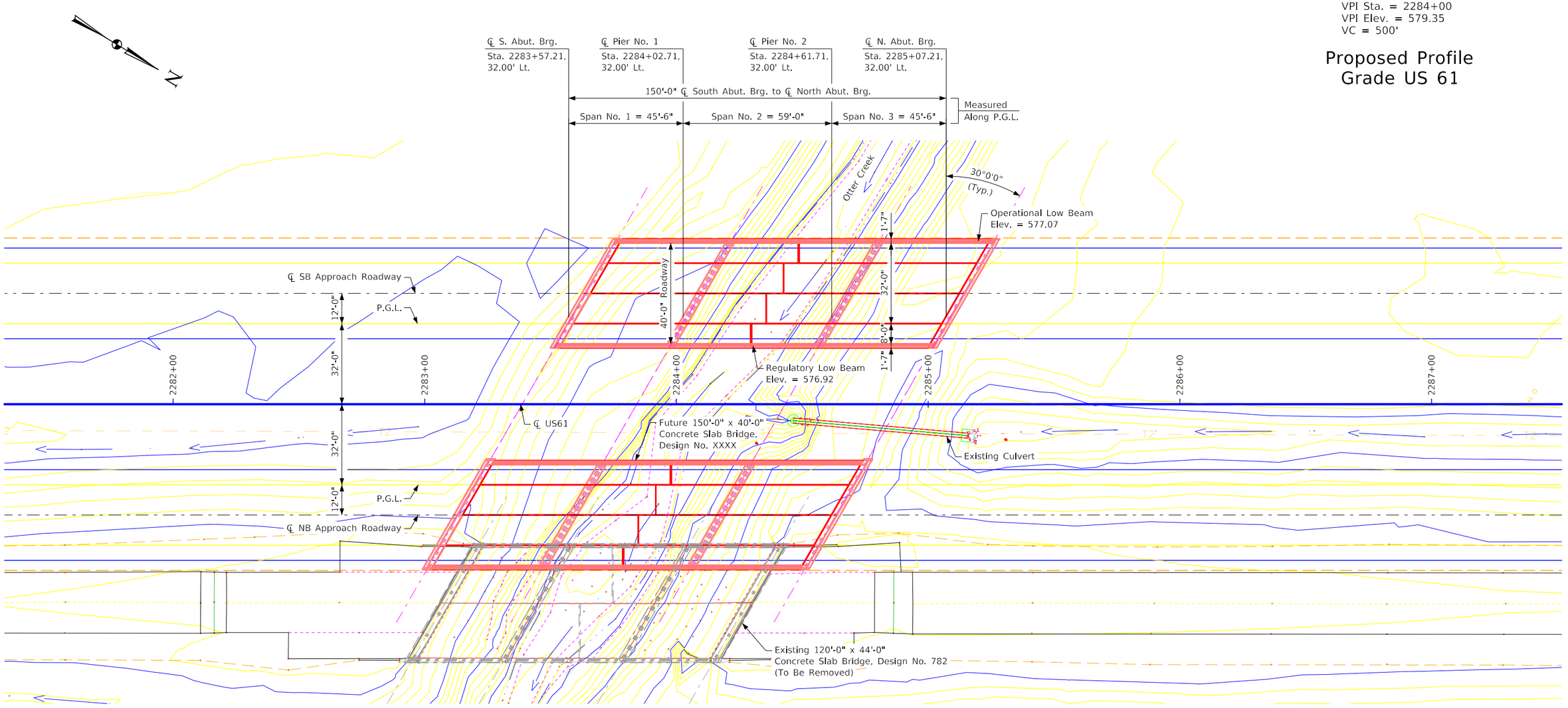
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Control Point:

G1 = 0.1% G2 = -0.3%

VPI Sta. = 2284+00
VPI Elev. = 579.35
VC = 500'

Proposed Profile Grade US 61



Otter Creek Hydraulic Data

TOS at Regulatory Low Beam = 578.92 (Sta. 2284+17, 24.00' Lt.)
Depth of Superstructure = 2.0'
Regulatory Low Beam = 576.92
Q_{50} Stage = 575.0 *
Freeboard = 1.92'

TOS at Operational Low Beam = 578.75 (Sta. 2285+24.19, 64.00' Lt.)
Depth of Superstructure = 2.0'
Operational Low Beam = 576.75
Q_{100} Stage = 575.0
Freeboard = 1.75'

* Q_{100} Stage is reported as a placeholder as Q_{50} data is not available.

Bridge Plan - US 61 Southbound over Otter Creek

Note:
All units are in feet unless noted otherwise.

Notes to Designers:
Superstructures to be continuous concrete slabs.
Substructure to be integral abutments and P10L pile bents.
Hydraulic data based on assumed pier width of 2'-6".
TL-4 bridge railing proposed.

Preliminary
Not For Construction

0 20
Scale In Feet

Design For 30° Skew (LA)
150'-0" X 40'-0"
Continuous Concrete Slab Bridge
45'-6" End Spans 59'-0" Interior Span
3 Span over Otter Creek
STA. 2284+32.21 (℄ US61) Turn-in Date: May 2023
Louisa County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.3

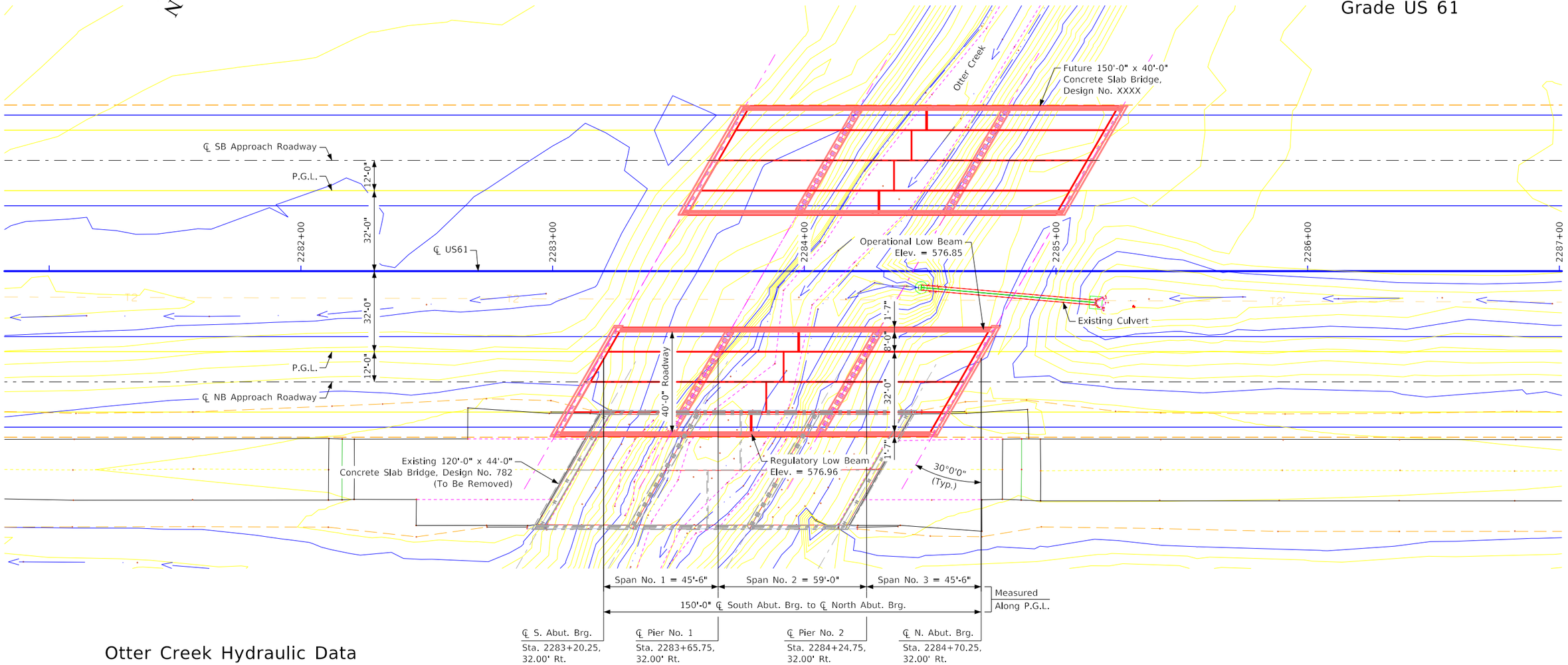
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Control Point:

G1 = 0.1% G2 = -0.3%

VPI Sta. = 2284+00
VPI Elev. = 579.35
VC = 500'

Proposed Profile Grade US 61



Bridge Plan - US 61 Northbound over Otter Creek

Otter Creek Hydraulic Data

TOS at Regulatory Low Beam = 578.96 (Sta. 2283+80.00, 24.00' Rt.)
Depth of Superstructure = 2.0'
Regulatory Low Beam = 576.96
Q_{50} Stage = 575.0 *
Freeboard = 1.96'

TOS at Operational Low Beam = 578.85 (Sta. 2284+73.37, 24.00' Rt.)
Depth of Superstructure = 2.0'
Operational Low Beam = 576.85
Q_{100} Stage = 575.0
Freeboard = 1.85'

* Q_{100} Stage is reported as a placeholder as Q_{50} data is not available.

Note:
All units are in feet unless noted otherwise.

Notes to Designers:
Superstructures to be continuous concrete slabs.
Substructure to be integral abutments and P10L pile bents.
Hydraulic data based on an assumed pier width of 2'-6".
TL-4 bridge railing proposed.

Preliminary
Not For Construction

0 20
Scale In Feet

Design For 30° Skew (LA)
150'-0" X 40'-0"
Continuous Concrete Slab Bridge
45'-6" End Spans 59'-0" Interior Span
3 Span over Otter Creek
STA. 2283+95.26 (℄ US61) Turn-in Date: May 2023
Louisa County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.4	

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Control Point:

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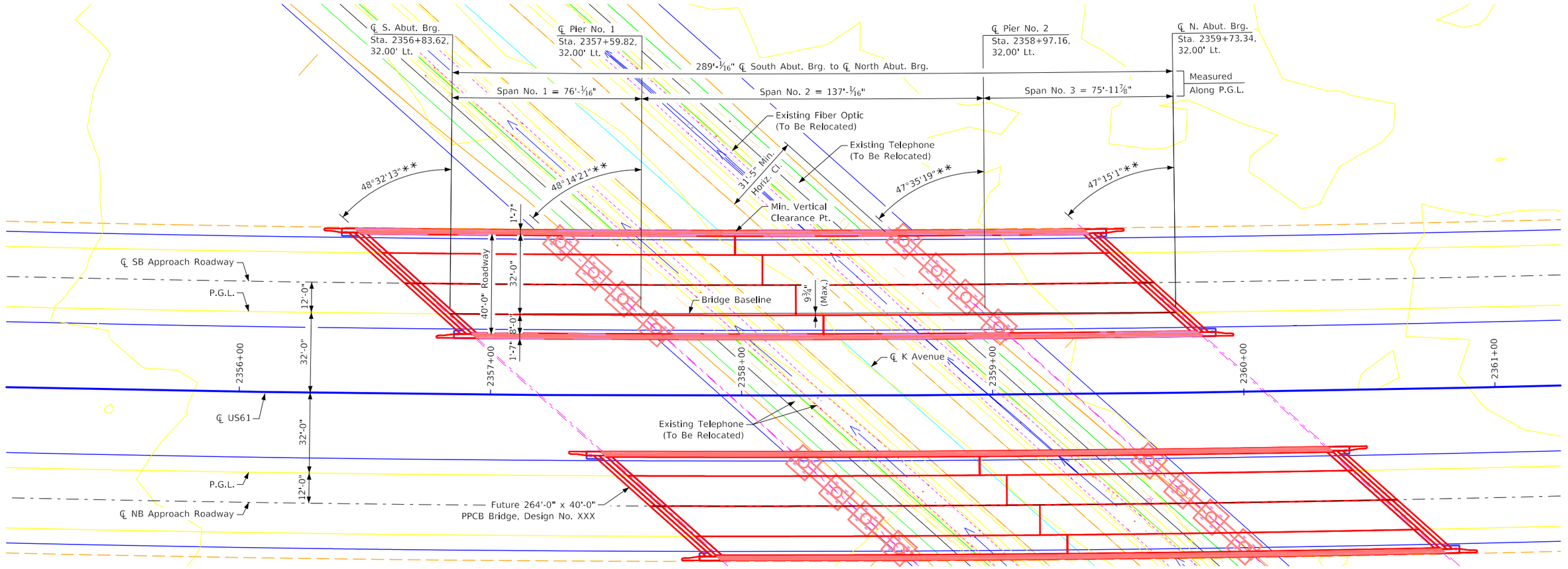
US 61 Curve Data

PI Sta. 2348+67.91
D = 13.266° (Lt.)
T = 1500.150 ft.
L = 2986.89 ft.
E = 86.93 ft.
R = 12900 ft.
PC Sta. = 2333+67.76
PT Sta. = 2363+54.64

G1 = 1.5% G2 = -1.7%

VPI Sta. = 2359+00
VPI Elev. = 608.90
VC = 1000'

Proposed Profile Grade US 61



Bridge Plan - US 61 Southbound over K Avenue

Notes:
All units are in feet unless noted otherwise.
** Measured perpendicular to local tangent of P.G.L.

Notes to Designers:
Superstructures to be PPCB "BTD" beams. Substructure to be integral abutments and multi-column piers.
"BTD" beams are chorded at standard beam span lengths of 75', 135', and 75'.
Horizontal clearance to pier based on assumed column width of 4'.
TL-4 bridge railing proposed.

Minimum Vertical Clearance Pt.

Overhead Station = 2357+90.00, 62.08' Lt.
Overhead Elevation = 604.69
Depth of Superstructure = 5.50'
Existing Underpass Elevation = 578.2
Proposed Underpass Elevation
(100 year water surface elev. +0.50') = 582.0
Minimum Vertical Clearance (Exist.) = 20.99'
Minimum Vertical Clearance (Prop.) = 17.19'

Preliminary
Not For Construction

0 20
Scale In Feet

Design For Variable Skew (RA), Radius = 12,900'
289'-0 1/16" X 40'-0"
PPCB Bridges
76'-0 13/16" & 75'-11 7/8" End Spans 136'-11 5/16" Interior Span
3 Span over K Avenue
STA. 2358+52 (℄ US61) Turn-in Date: May 2023
LOUISA County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX FHWA No. XXX

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.5	

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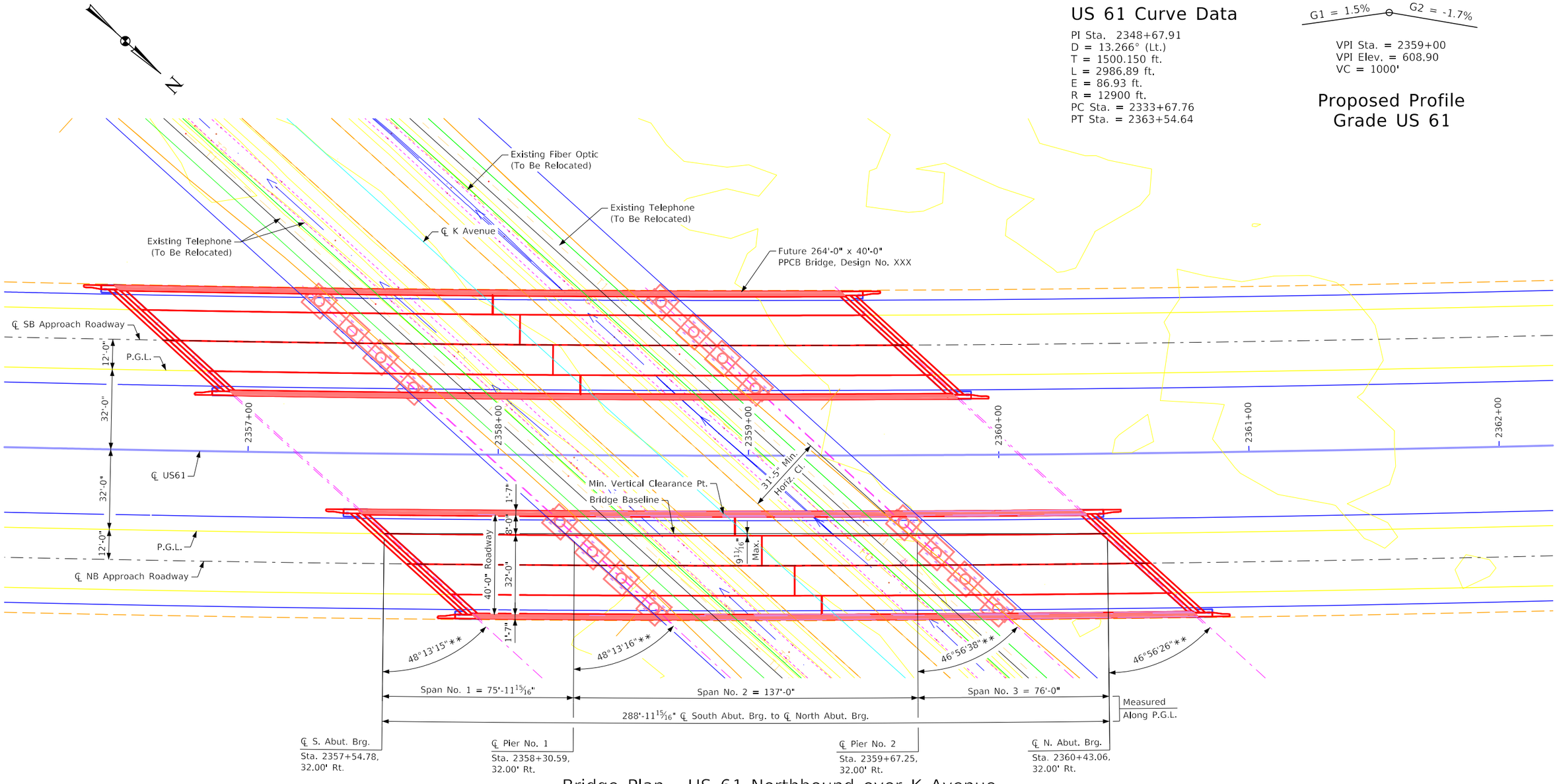
US 61 Curve Data

PI Sta. 2348+67.91
D = 13.266° (Lt.)
T = 1500.150 ft.
L = 2986.89 ft.
E = 86.93 ft.
R = 12900 ft.
PC Sta. = 2333+67.76
PT Sta. = 2363+54.64

G1 = 1.5% G2 = -1.7%

VPI Sta. = 2359+00
VPI Elev. = 608.90
VC = 1000'

Proposed Profile Grade US 61



Bridge Plan - US 61 Northbound over K Avenue

Notes:
All units are in feet unless noted otherwise.
** Measured perpendicular to local tangent of P.G.L.

Notes to Designers:
Superstructures to be PPCB "BTD" beams. Substructure to be integral abutments and multi-column piers.
"BTD" beams are chorded at standard span lengths of 75', 135', and 75'.
Horizontal clearance to pier based on assumed column width of 4'.
TL-4 bridge railing proposed.

Minimum Vertical Clearance Pt.

Overhead Station = 2358+90.00, 25.92' Lt.
Overhead Elevation = 604.79
Depth of Superstructure = 5.50'
Existing Underpass Elevation = 578.4
Proposed Underpass Elevation
(100 year water surface elev. +0.50') = 582.0
Minimum Vertical Clearance (Exist.) = 20.89'
Minimum Vertical Clearance (Prop.) = 17.29'

Preliminary
Not For Construction

0 20
Scale In Feet

Design For Variable Skew (RA), Radius = 12,900'
288'-11 15/16" X 40'-0"
PPCB Bridge
75'-11 15/16" & 76'-0" End Spans
137'-0" Interior Span
3 Span over K Avenue
STA. 2358+93.92 (℄ US61)
Turn-in Date: May 2023
LOUISA County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX FHWA No. XXX

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.6

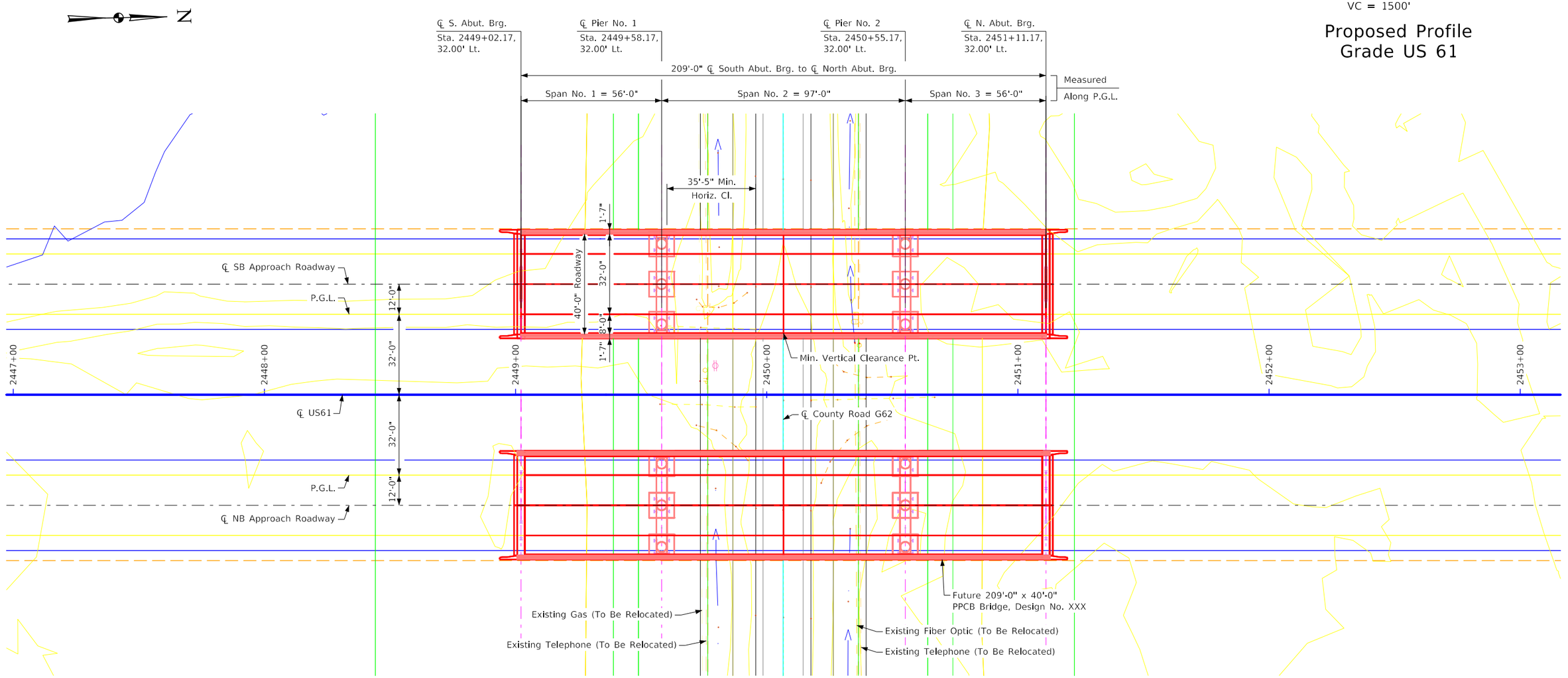
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Control Point:

G1 = 1.3% G2 = -1.2%

VPI Sta. = 2450+00
VPI Elev. = 615.90
VC = 1500'

Proposed Profile Grade US 61



Bridge Plan - US 61 Southbound over County Road G62

Note:
All units are in feet unless noted otherwise.

Notes to Designers:
Superstructures to be PPCB "BTB" beams. Substructure to be integral abutments and multi-column piers.
Horizontal clearance to pier based on assumed column width of 4'.
TL-4 bridge railing proposed.

Minimum Vertical Clearance Pt.

Overhead Station = 2450+06.67, 25.92' Lt.
Overhead Elevation = 611.09
Depth of Superstructure = 4.00'
Existing Underpass Elevation = 588.10
Minimum Vertical Clearance = 18.99'

Preliminary
Not For Construction

0 20
Scale In Feet

Design For 0° Skew
209'-0 X 40'-0
PPCB Bridge
56'-0" End Spans 97'-0" Interior Span
3 Span over County Road G62
STA. 2450+06.67 (℄ US61) Turn-in Date: May 2023
Louisa County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX FHWA No. TBD

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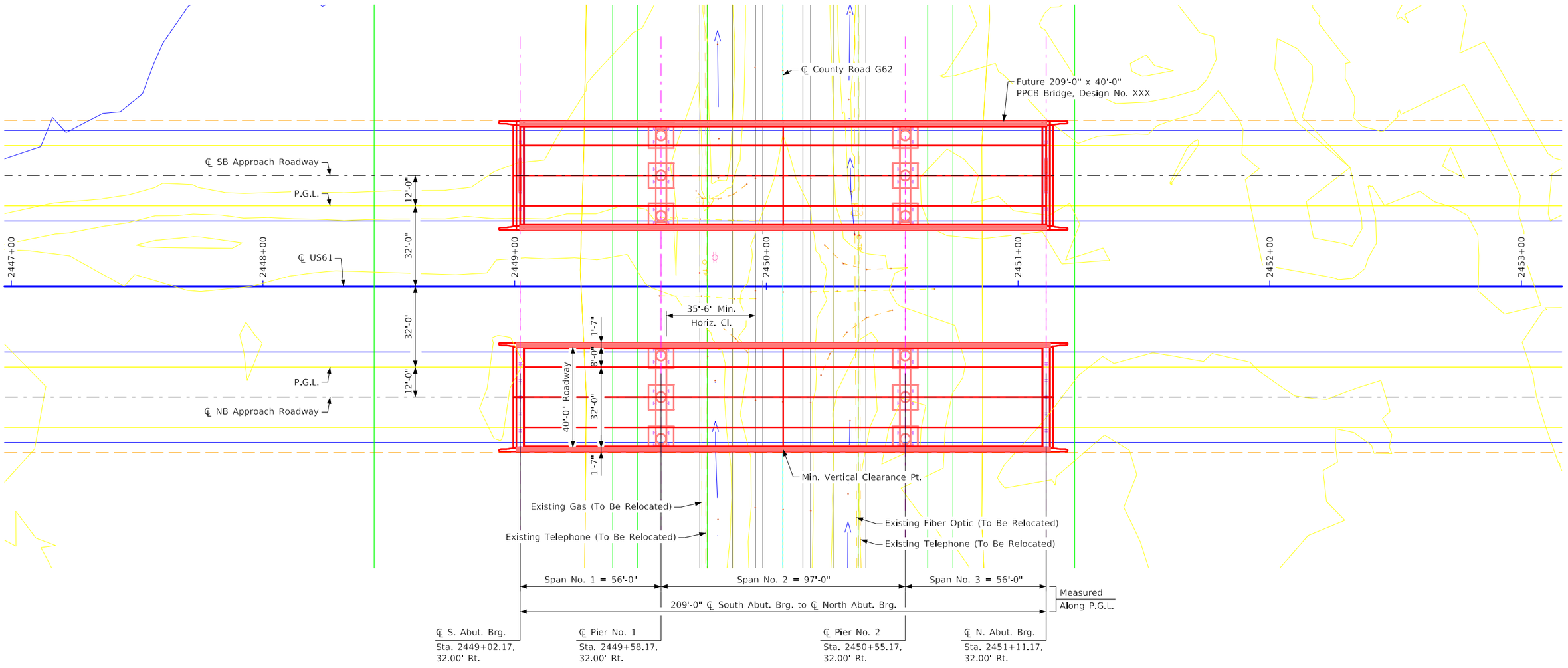
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Control Point:

G1 = 1.3% G2 = -1.2%

VPI Sta. = 2450+00
VPI Elev. = 615.90
VC = 1500'

Proposed Profile Grade US 61



Bridge Plan - US 61 Northbound over County Road G62

Note:
All units are in feet unless noted otherwise.

Notes to Designers:
Superstructures to be PPCB "BTB" beams. Substructure to be integral abutments and multi-column piers.
Horizontal clearance to pier based on assumed column width of 4'.
TL-4 bridge railing proposed.

Minimum Vertical Clearance Pt.

Overhead Station = 2450+06.67, 25.92' Rt.
Overhead Elevation = 611.09
Depth of Superstructure = 4.00'
Existing Underpass Elevation = 588.30
Minimum Vertical Clearance = 18.79'

Preliminary
Not For Construction

0 20
Scale In Feet

Design For 0° Skew
Dual 209'-0 X 40'-0
PPCB Bridge
56'-0" End Spans 97'-0" Interior Span
3 Span over County Road G62
STA. 2450+06.67 (℄ US61) Turn-in Date: May 2023
Louisa County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.8

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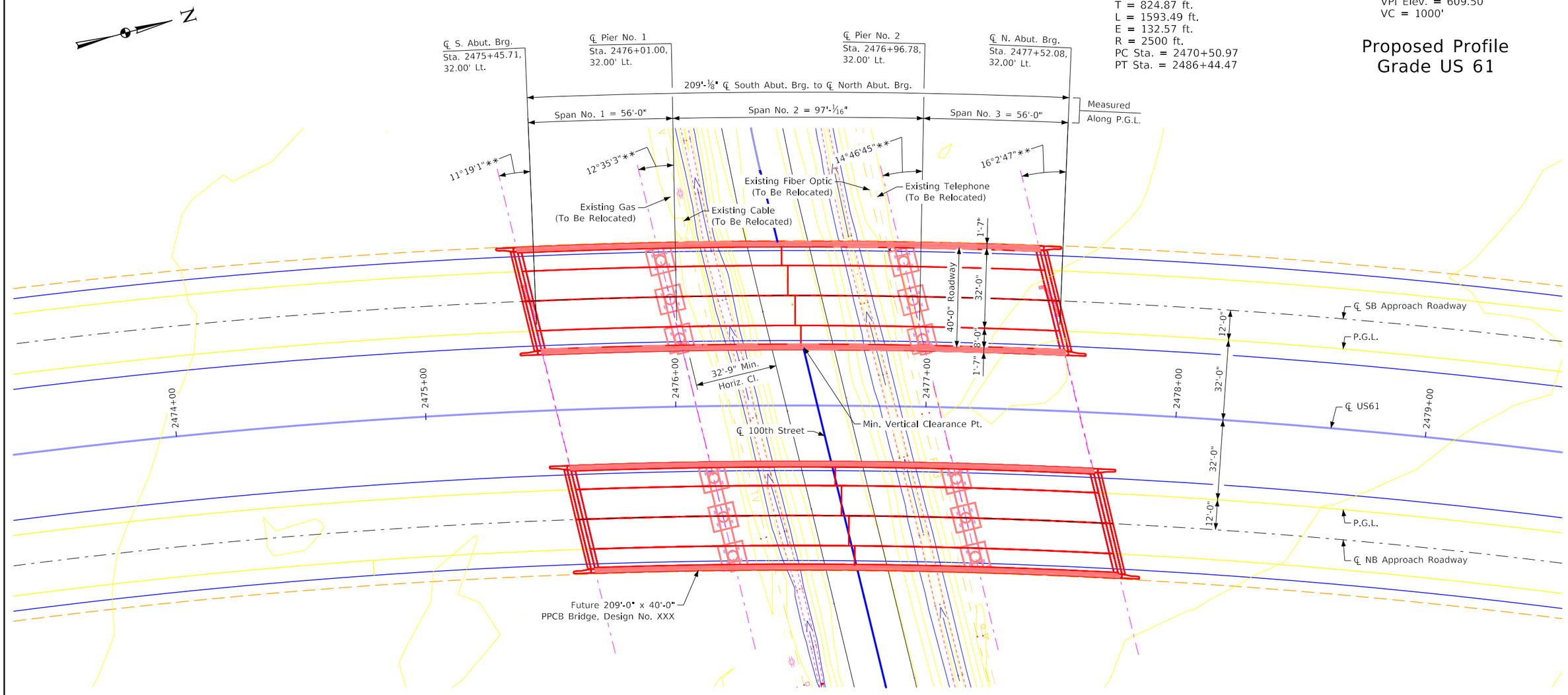
US 61 Curve Data

PI Sta. 2478+75.84
D = 36.52° (Rt.)
T = 824.87 ft.
L = 1593.49 ft.
E = 132.57 ft.
R = 2500 ft.
PC Sta. = 2470+50.97
PT Sta. = 2486+44.47

G1 = 0.8% G2 = -0.9%

VPI Sta. = 2477+00
VPI Elev. = 609.50
VC = 1000'

Proposed Profile Grade US 61



Bridge Plan - US 61 Southbound over 100th Street

Notes:
All units are in feet unless noted otherwise.
** Measured perpendicular to local tangent of P.G.L.

Notes to Designers:
Superstructures to be PPCB "BTB" beams. Substructure to be integral abutments and multi-column piers.
"BTB" beams are chorded at standard beam span lengths of 55', 95', and 55'.
Horizontal clearance to pier based on assumed column width of 4'.
TL-4 bridge railing proposed.

Minimum Vertical Clearance Pt.

Overhead Station = 2476+50.00, 25.92' Lt.
Overhead Elevation = 607.03
Depth of Superstructure = 4.00'
Existing Underpass Elevation = 583.30
Minimum Vertical Clearance = 19.73'

Preliminary
Not For Construction

0 20
Scale In Feet

Design For Variable Skew, Radius = 2,500'
209'-0⅛" X 40'-0"
PPCB Bridge
56'-0" End Spans 97'-0" Interior Spans
3 Span over 100th Street
STA. 2476+56.68 (℄ US61) Turn-in Date: May 2023
Louisa County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.9	

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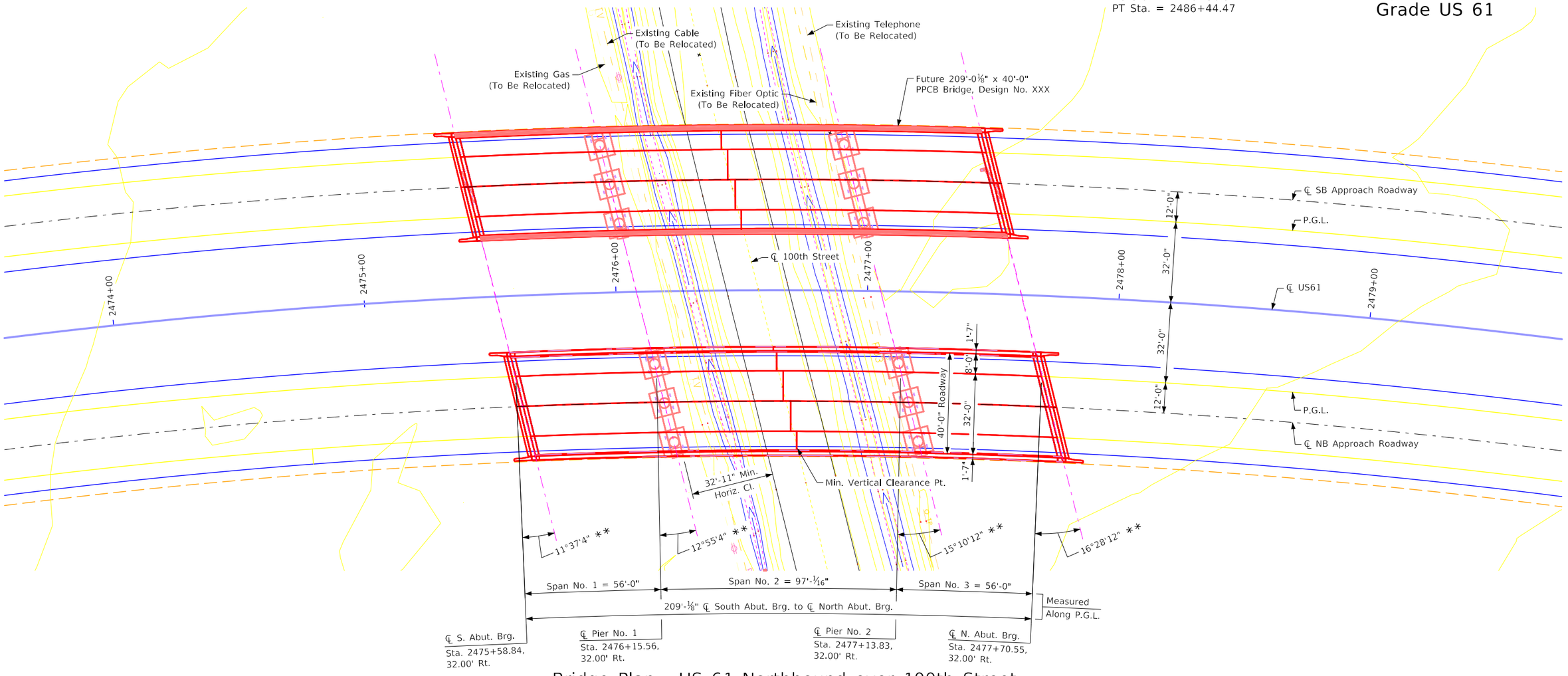
US 61 Curve Data

PI Sta. 2478+75.84
D = 36.52° (Rt.)
T = 824.87 ft.
L = 1593.49 ft.
E = 132.57 ft.
R = 2500 ft.
PC Sta. = 2470+50.97
PT Sta. = 2486+44.47

G1 = 0.8% G2 = -0.9%

VPI Sta. = 2477+00
VPI Elev. = 609.50
VC = 1000'

Proposed Profile Grade US 61



Bridge Plan - US 61 Northbound over 100th Street

Note:
All units are in feet unless noted otherwise.
** Measured perpendicular to local tangent of P.G.L.

Notes to Designers:
Superstructures to be PPCB "BTB" beams. Substructure to be integral abutments and multi-column piers.
"BTB" beams are chorded at standard beam span lengths of 55', 95', and 55'.
Horizontal clearance to pier based on assumed column width of 4'.
TL-4 bridge railing proposed.

Minimum Vertical Clearance Pt.

Overhead Station = 2476+60.00, 62.08' Rt.
Overhead Elevation = 605.64
Depth of Superstructure = 4.00'
Existing Underpass Elevation = 583.30
Minimum Vertical Clearance = 18.34'

Preliminary
Not For Construction

0 20
Scale In Feet

Design For Variable Skew, Radius = 2,500'
209'-0⅛" X 40'-0"
PPCB Bridge
56'-0" End Spans 97'-0" Interior Spans
3 Span over 100th Street
STA. 2476+56.68 (℄ US61) Turn-in Date: May 2023
Louisa County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.10	

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Control Point:

US 61 Curve Data

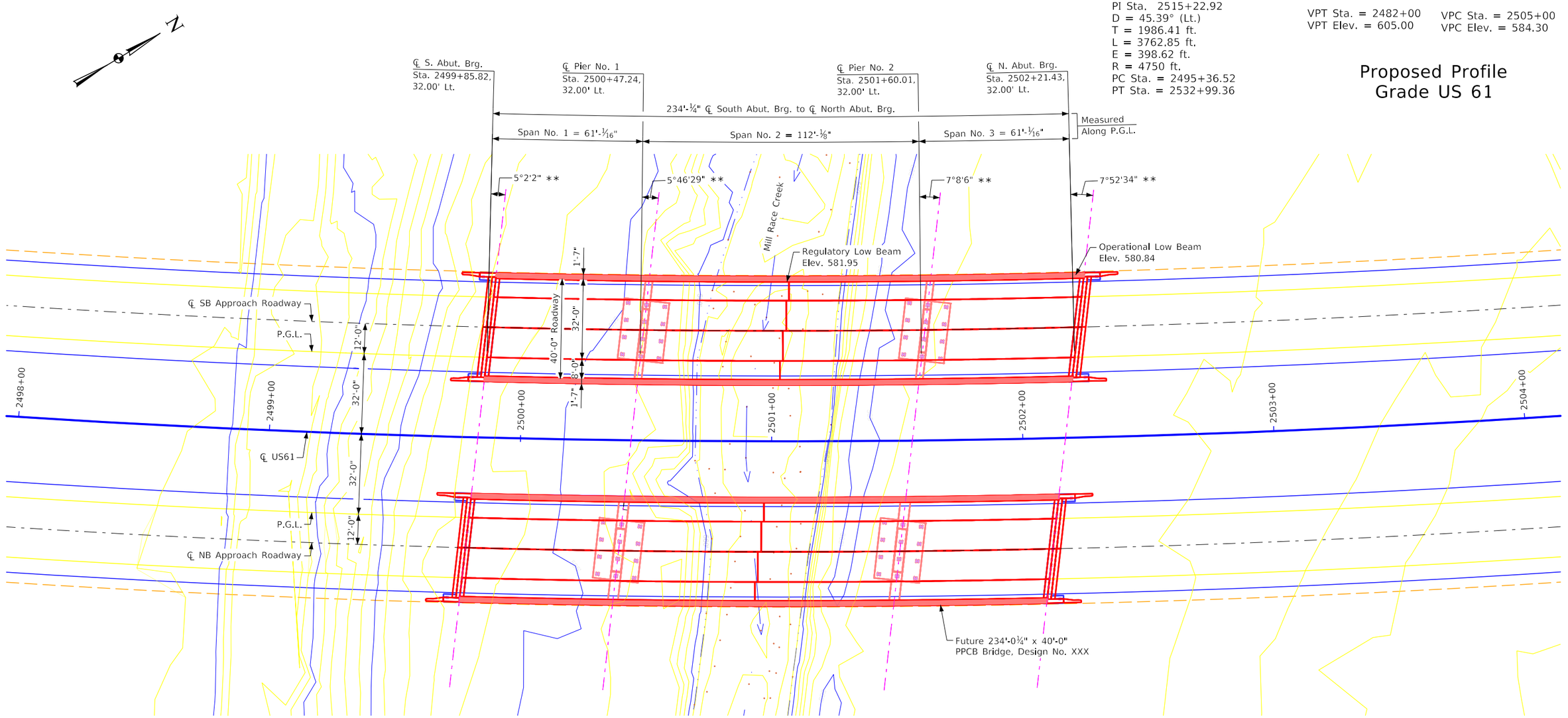
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D = 45.39° (Lt.)
T = 1986.41 ft.
L = 3762.85 ft.
E = 398.62 ft.
R = 4750 ft.
PC Sta. = 2495+36.52
PT Sta. = 2532+99.36

G1 = -0.9%

VPT Sta. = 2482+00
VPT Elev. = 605.00

VPC Sta. = 2505+00
VPC Elev. = 584.30

Proposed Profile Grade US 61



Mill Race Creek Hydraulic Data

TOS at Regulatory Low Beam = 586.70 (Sta. 2501+00.00, 62.08' Lt.)
Depth of Superstructure = 4.75'
Regulatory Low Beam = 581.95
Q_{50} Stage = 574.0 *
Freeboard = 7.95'

TOS at Operational Low Beam = 585.59 (Sta. 2502+23.37, 62.08' Lt.)
Depth of Superstructure = 4.75'
Operational Low Beam = 580.84
Q_{100} Stage = 574.0
Freeboard = 6.84'

* Q_{100} Stage is reported as a placeholder as Q_{50} data is not available.

Bridge Plan - US 61 Southbound over Mill Race Creek

Notes:
All units are in feet unless noted otherwise.
** Measured perpendicular to local tangent of P.G.L.

Notes to Designers:
Superstructures to be PPCB "BTC" beams. Substructure to be integral abutments and hammerhead piers.
"BTC" beams are chorded at standard beam span lengths of 60', 110', and 60'
Hydraulic data based on an assumed pier width of 4'.
TL-4 bridge railing proposed.

Preliminary
Not For Construction

0 20
Scale In Feet

Design For Variable Skew, Radius = 4,750'
234'-0¼" X 40'-0"
PPCB Bridge
61'-0 1/16" End Spans
112'-0⅛" Interior Span
3 Span over Mill Race Creek
STA. 2501+00.01 (℄ US61)
Turn-in Date: May 2023
Louisa County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.11	

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Control Point:

US 61 Curve Data

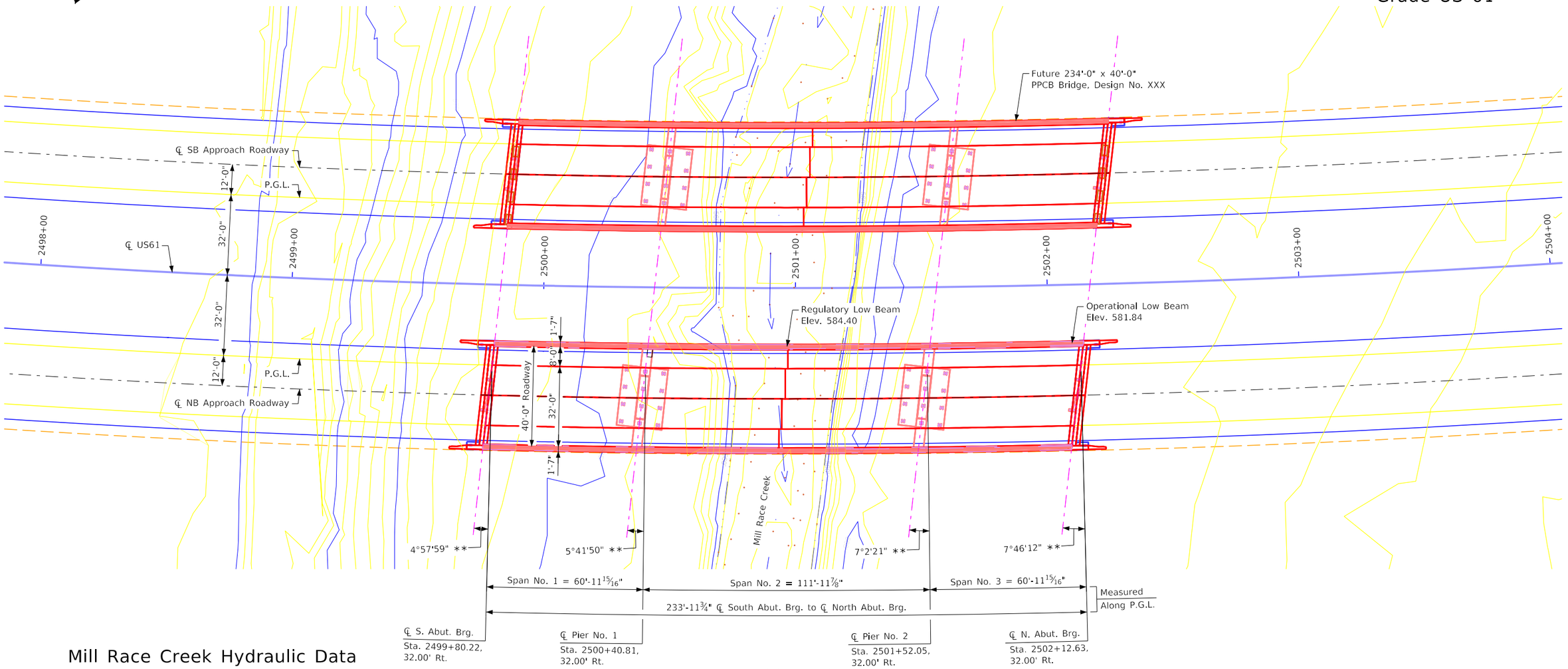
PI Sta. 2515+22.92
D = 45.39° (Lt.)
T = 1986.41 ft.
L = 3762.85 ft.
E = 398.62 ft.
R = 4750 ft.
PC Sta. = 2495+36.52
PT Sta. = 2532+99.36

G1 = -0.9%

VPT Sta. = 2482+00
VPT Elev. = 605.00

VPC Sta. = 2505+00
VPC Elev. = 584.30

Proposed Profile Grade US 61



Bridge Plan - US 61 Northbound over Mill Race Creek

Mill Race Creek Hydraulic Data

TOS at Regulatory Low Beam = 587.70 (Sta. 2500+95, 25.92' Rt.)
Depth of Superstructure = 4.75'
Regulatory Low Beam = 582.95
Q_{50} Stage = 574.0 *
Freeboard = 8.95'

TOS at Operational Low Beam = 586.59 (Sta. 2502+18.00, 25.92' Rt.)
Depth of Superstructure = 4.75'
Operational Low Beam = 581.84
Q_{100} Stage = 574.00
Freeboard = 7.84'

* Q_{100} Stage is reported as a placeholder as Q_{50} data is not available.

Notes:
All units are in feet unless noted otherwise.
** Measured perpendicular to local tangent of P.G.L.

Notes to Designers:
Superstructures to be PPCB "BTC" beams. Substructure to be integral abutments and hammerhead piers.
"BTC" beams are chorded at standard beam span lengths of 60', 110', and 60'.
Hydraulic data based on an assumed pier width of 4'.
TL-4 bridge railing proposed.

Preliminary
Not For Construction

0 20
Scale In Feet

Design For Variable Skew, Radius = 4,750'
233'-11 3/4" X 40'-0"
PPCB Bridge
60'-11 15/16" End Spans
111'-11 7/8" Interior Span
3 Span over Mill Race Creek
STA. 2501+00.01 (℄ US61)
Turn-in Date: May 2023
Louisa County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.12

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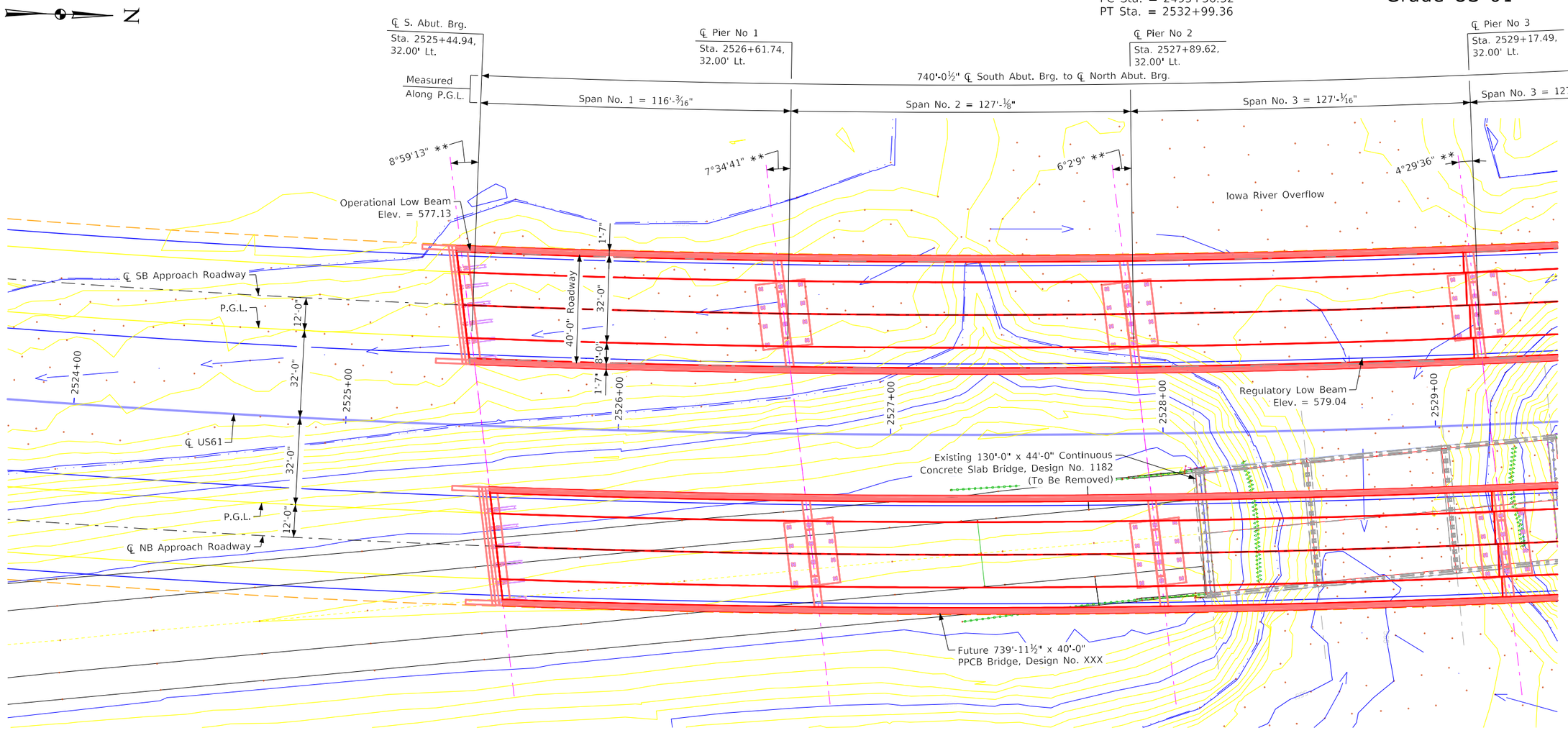
US 61 Curve Data

PI Sta. 2515+22.92
D = 45.39° (Lt.)
T = 1986.41 ft.
L = 3762.85 ft.
E = 398.62 ft.
R = 4750 ft.
PC Sta. = 2495+36.52
PT Sta. = 2532+99.36

G1 = 0.5% G2 = -0.5%

VPI Sta. = 2528+50.00
VPI Elev. = 585.55
VC = 1000'

Proposed Profile Grade US 61



Iowa River Overflow Hydraulic Data

TOS at Regulatory Low Beam = 584.54 (Sta. 2528+77.50, 25.92' Lt.)
Depth of Superstructure = 5.50'
Regulatory Low Beam = 579.04
Q_{50} Stage = 574.00 *
Freeboard = 5.04'

TOS at Operational Low Beam = 582.63 (Sta. 2525+44.00, 62.08' Lt.)
Depth of Superstructure = 5.50'
Operational Low Beam = 577.13
Q_{100} Stage = 574.00
Freeboard = 3.13'

* Q_{100} Stage is reported as a placeholder as Q_{50} data is not available.

Bridge Plan - US61 Southbound over Iowa River Overflow

Notes:
All units are in feet unless noted otherwise.
** Measured perpendicular to local tangent of P.G.L.

Notes to Designers:
Superstructures to be PPCB "BTD" beams. Substructure to be stub abutments and hammerhead piers.
"BTD" beams are chorded at standard beam span lengths of 115' (end spans) and 125' (interior spans).
Hydraulic data based on an assumed pier width of 4'.
TL-4 bridge railing proposed.

Preliminary
Not For Construction

0 20
Scale In Feet

Design For Variable Skew, Radius = 4,750'

740'-0½" X 40'-0" PPCB Bridge

116'-0⅜" & 116'-0" End Spans

127'-0⅛", 127'-0 1/16" & 127'-0" Interior Spans

6 Span over Iowa River Overflow

STA. 2529+20.00 (℄ US61)

Turn-in Date: May 2023

Louisa County

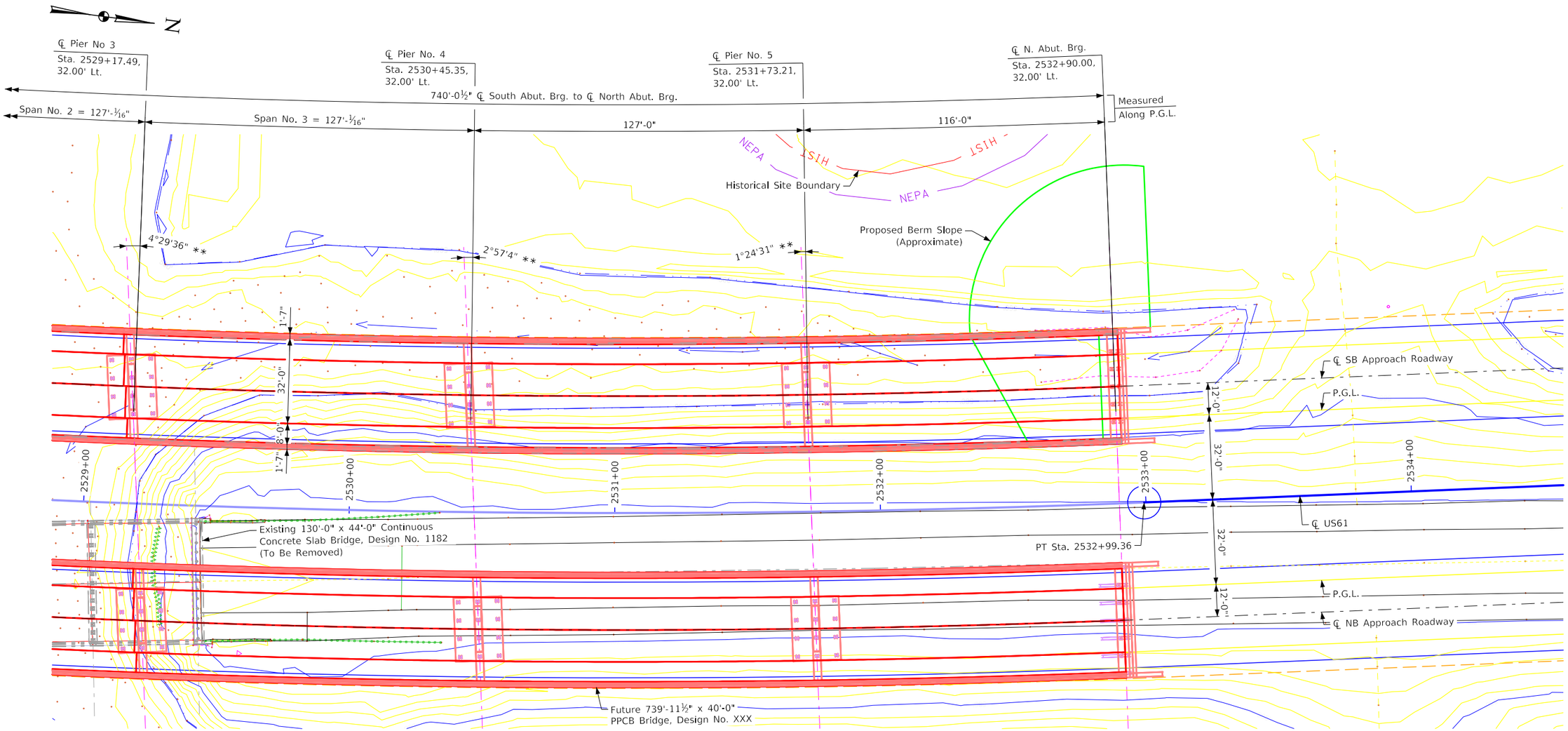
IOWA DEPARTMENT OF TRANSPORTATION

Design No. TBD Design Sheet No. XX FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.13

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Control Point:



Bridge Plan - US61 Southbound over Iowa River Overflow

Note:
For Notes, Hydraulic Data, and Notes to Designers, see Sheet V.13

Preliminary
Not For Construction

Design For Variable Skew, Radius = 4,750'

740'-0½" X 40'-0" PPCB Bridges

116'-0 3/16" & 116'-0" End Spans

127'-0⅛", 127'-0 1/16" & 127'-0" Interior Spans

6 Span over Iowa River Overflow

STA. 2529+20.00 (℄ US61)

Turn-in Date: May 2023

Louisa County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. TBD | Design Sheet No. XX | FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.14

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Control Point:

US 61 Curve Data

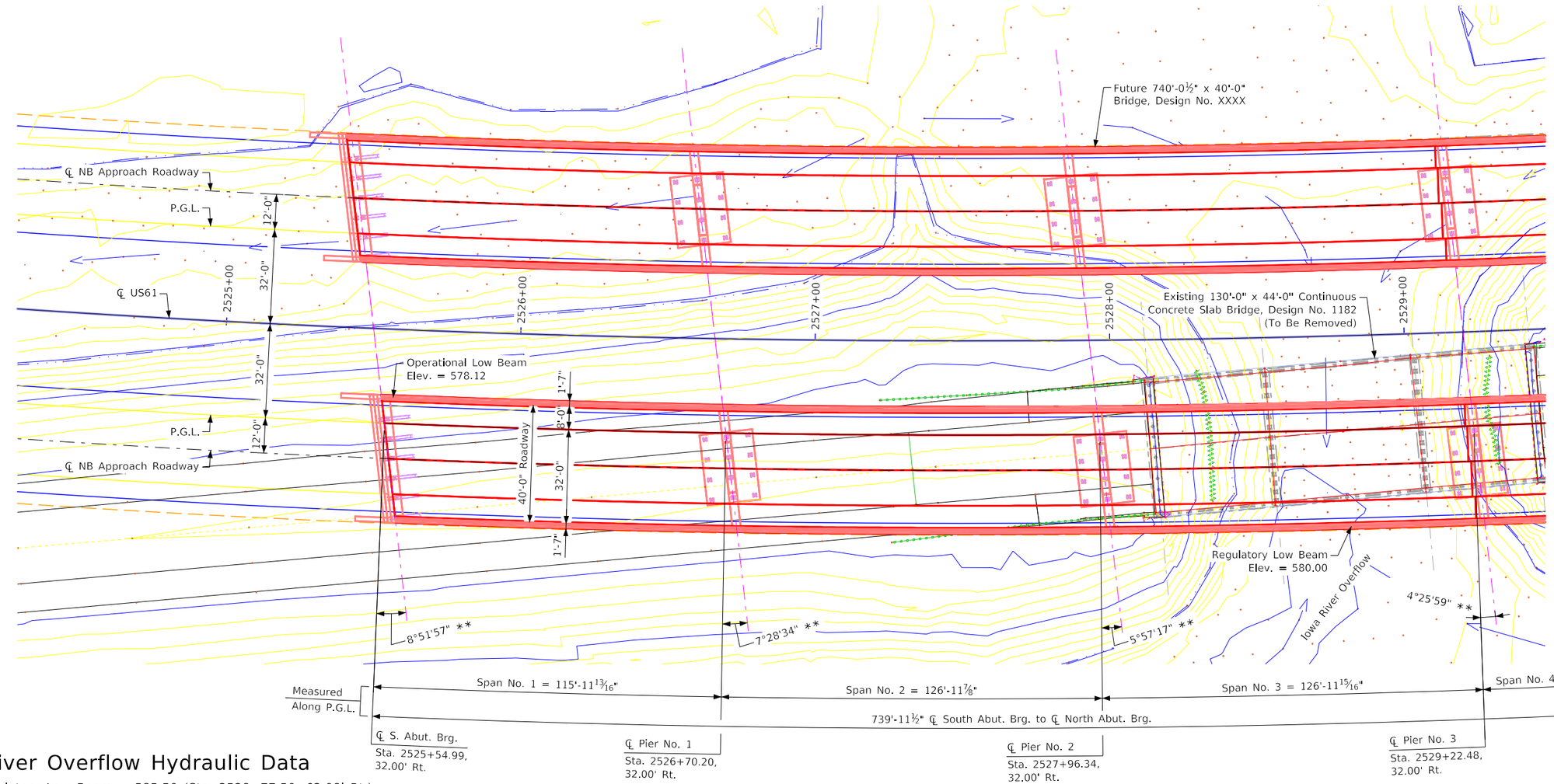
PI Sta. 2515+22.92
D = 45.39° (Lt.)
T = 1986.41 ft.
L = 3762.85 ft.
E = 398.62 ft.
R = 4750 ft.
PC Sta. = 2495+36.52
PT Sta. = 2532+99.36

G1 = 0.5% G2 = -0.5%

VPI Sta. = 2528+50.00
VPI Elev. = 585.55
VC = 1000'

Proposed Profile Grade US 61

N



Iowa River Overflow Hydraulic Data

TOS at Regulatory Low Beam = 585.50 (Sta. 2528+77.50, 62.08' Rt.)
Depth of Superstructure = 5.50'
Regulatory Low Beam = 580.00
Q_{50} Stage = 574.00 *
Freeboard = 6.00'

TOS at Operational Low Beam = 583.62 (Sta. 2525+55.00, 25.92' Rt.)
Depth of Superstructure = 5.50'
Operational Low Beam = 578.12
Q_{100} Stage = 574.00
Freeboard = 4.12'

* Q_{100} Stage is reported as a placeholder as Q_{50} data is not available.

Bridge Plan - US 61 Northbound over Iowa River Overflow

Notes:
All units are in feet unless noted otherwise.
** Measured perpendicular to local tangent of P.G.L.

Notes to Designers:
Superstructures to be PPCB "BTD" beams. Substructure to be stub abutments and hammerhead piers.
"BTD" beams are chorded at standard beam span lengths of 115' (end spans) and 125' (interior spans).
Hydraulic data based on an assumed pier width of 4'.
TL-4 bridge railing proposed.

Preliminary
Not For Construction

0 20
Scale In Feet

Design For Variable Skew, Radius = 4,750'

739'-11½" X 40'-0" PPCB Bridge

115'-11 3/16" & 116'-0" End Spans
126'-11 7/8", 126'-11 15/16" & 127'-0" Interior Spans

6 Span over Iowa River Overflow

STA. 2529+20.00 (℄ US61)
Turn-in Date: May 2023

Louisa County

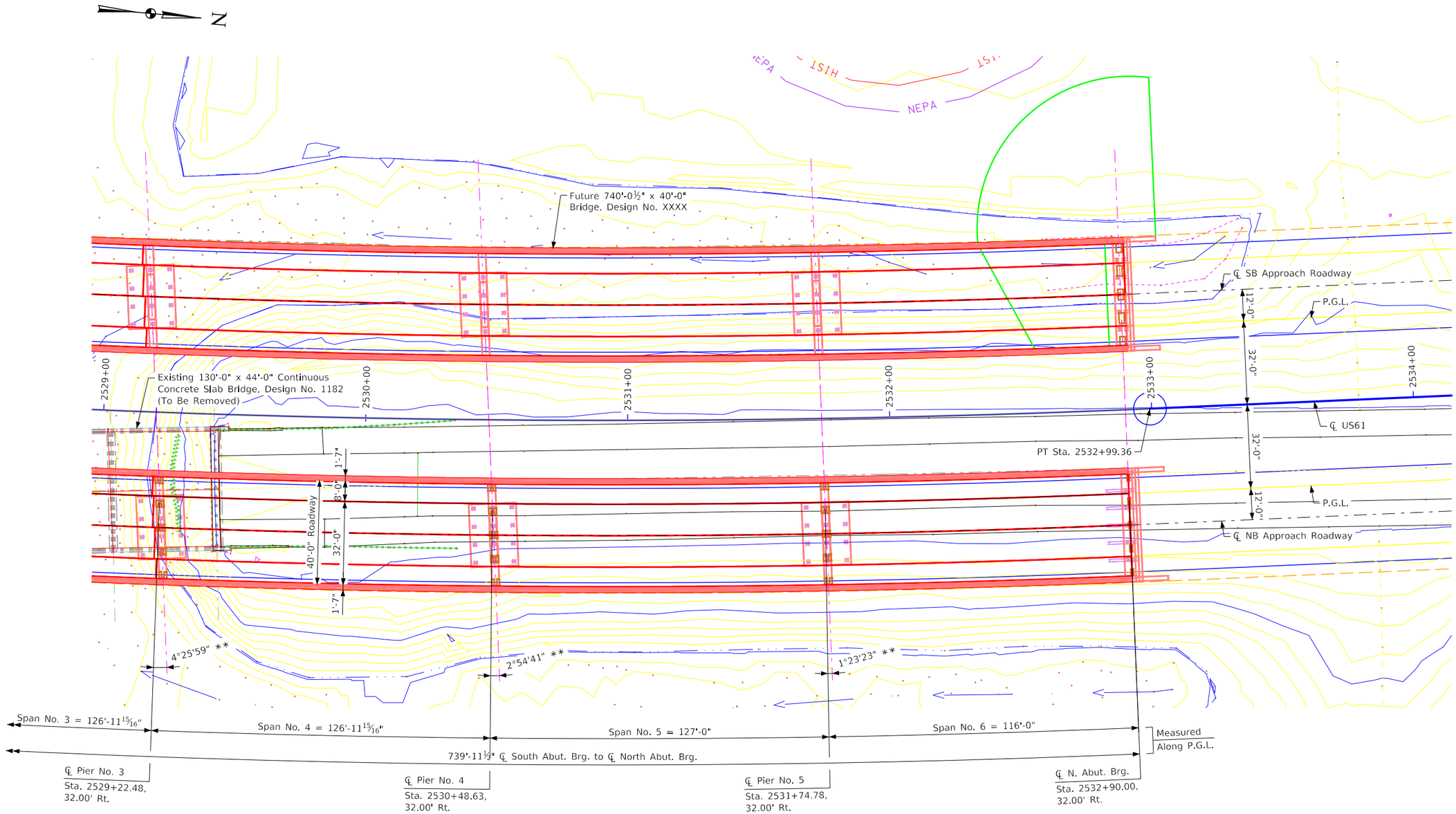
IOWA DEPARTMENT OF TRANSPORTATION

Design No. TBD Design Sheet No. XX FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.15	

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Control Point:



Bridge Plan - US 61 Northbound over Iowa River Overflow

Note:
For Notes, Notes to Designers, and Hydraulic Data, see Sheet V.15.

Preliminary
Not For Construction

0 20
Scale In Feet

Design For Variable Skew, Radius = 4,750'

739'-11½" X 40'-0" PPCB Bridge

115'-11 13/16" & 116'-0" End Spans

126'-11 7/8", 126'-11 15/16" & 127'-0" Interior Spans

6 Span over Iowa River Overflow

STA. 2529+20.00 (℄ US61)

Turn-in Date: May 2023

Louisa County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. TBD Design Sheet No. XX FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.16

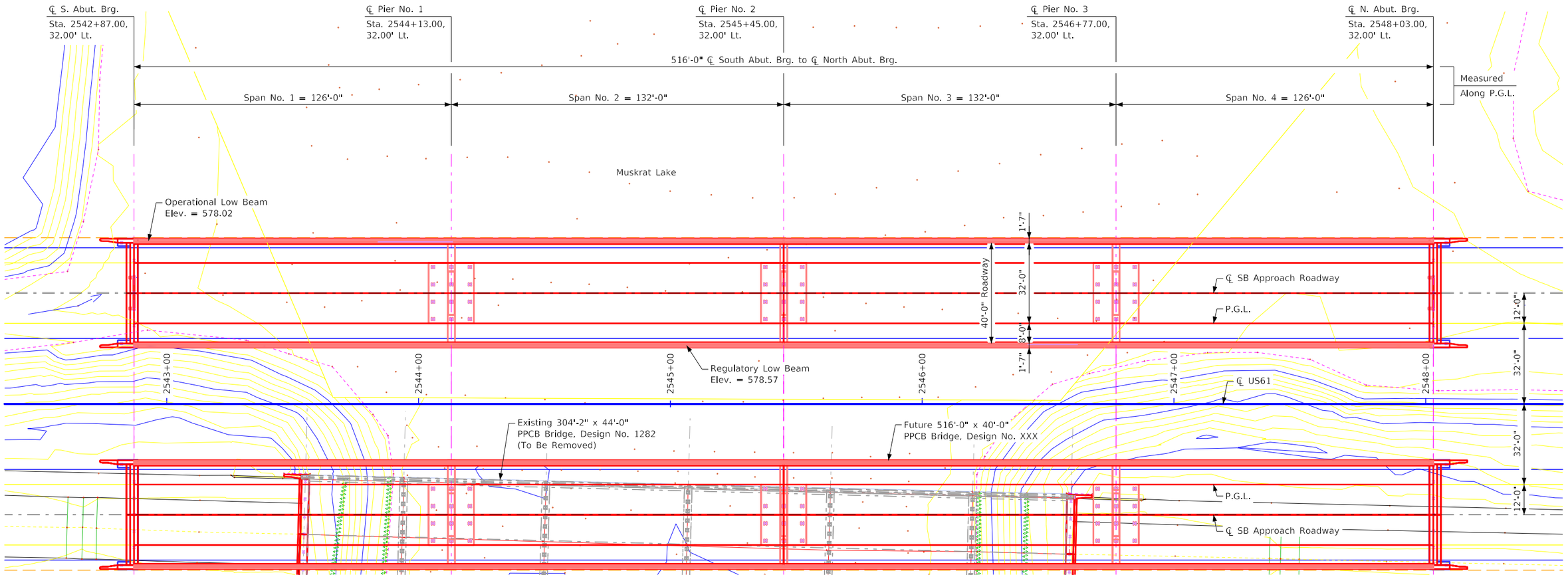
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Control Point:

G1 = 0.5% G2 = -0.3%

VPI Sta. = 2545+50.00
VPI Elev. = 585.05
VC = 800'

Proposed Profile Grade US 61



Muskrat Lake Hydraulic Data

TOS at Regulatory Low Beam = 584.07 (Sta. 2545+05.00, 25.92' Lt.)
Depth of Superstructure = 5.50'
Regulatory Low Beam = 578.57
Q_{50} Stage = 574.0 *
Freeboard = 4.57'

TOS at Operational Low Beam = 583.52 (Sta. 2542+88.50, 62.08' Lt.)
Depth of Superstructure = 5.50'
Operational Low Beam = 578.02
Q_{100} Stage = 574.0
Freeboard = 4.02'

* Q_{100} Stage is reported as a placeholder as Q_{50} data is not available.

Bridge Plan - US 61 Southbound over Muskrat Lake

Note:
All units are in feet unless noted otherwise.

Notes to Designers:
Superstructures to be PPCB "BTD" Beams. Substructure to be integral abutments and hammerhead piers.
Hydraulic data based on an assumed pier width of 4'.
TL-4 bridge railing proposed.

Preliminary
Not For Construction

0 20
Scale In Feet

Design For 0° Skew
516'-0" X 40'-0"
PPCB Bridge
126'-0" End Spans 132'-0" Interior Spans
4 Span over Muskrat Lake
STA. 2545+45.00 (℄ US61) Turn-in Date: May 2023
Louisa County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.17	

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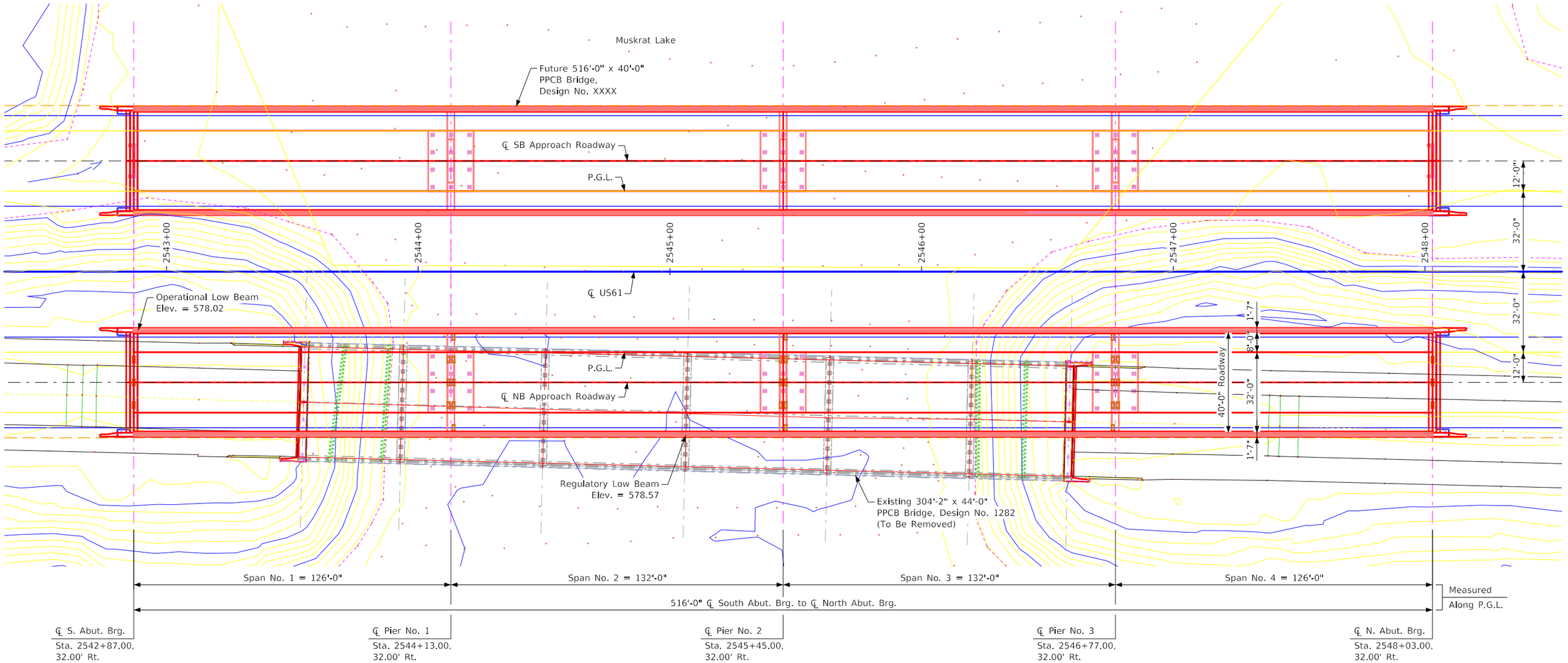
Control Point:

G1 = 0.5% G2 = -0.3%

VPI Sta. = 2545+50.00
VPI Elev. = 585.05
VC = 800'

Proposed Profile Grade US 61

N



Muskrat Lake Hydraulic Data

TOS at Regulatory Low Beam = 584.07 (Sta. 2545+05.00, 62.08' Rt.)
Depth of Superstructure = 5.50'
Regulatory Low Beam = 578.57
Q_{50} Stage = 574.0 *
Freeboard = 4.57'

TOS at Operational Low Beam = 583.52 (Sta. 2542+88.50, 25.92' Rt.)
Depth of Superstructure = 5.50'
Operational Low Beam = 578.02
Q_{100} Stage = 574.0
Freeboard = 4.02

* Q_{100} Stage is reported as a placeholder as Q_{50} data is not available.

Bridge Plan - US 61 Northbound over Muskrat Lake

Note:
All units are in feet unless noted otherwise.

Notes to Designers:
Superstructures to be PPCB "BTD" Beams. Substructure to be integral abutments and hammerhead piers.
Hydraulic data based on an assumed pier width of 4'.
TL-4 bridge railing proposed.

Preliminary
Not For Construction

0 20
Scale In Feet

Design For 0° Skew
516'-0" X 40'-0"
PPCB Bridge
126'-0" End Spans 132'-0" Interior Spans
4 Span over Muskrat Lake
STA. 2545+45.00 (℄ US61) Turn-in Date: May 2023
Louisa County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.18

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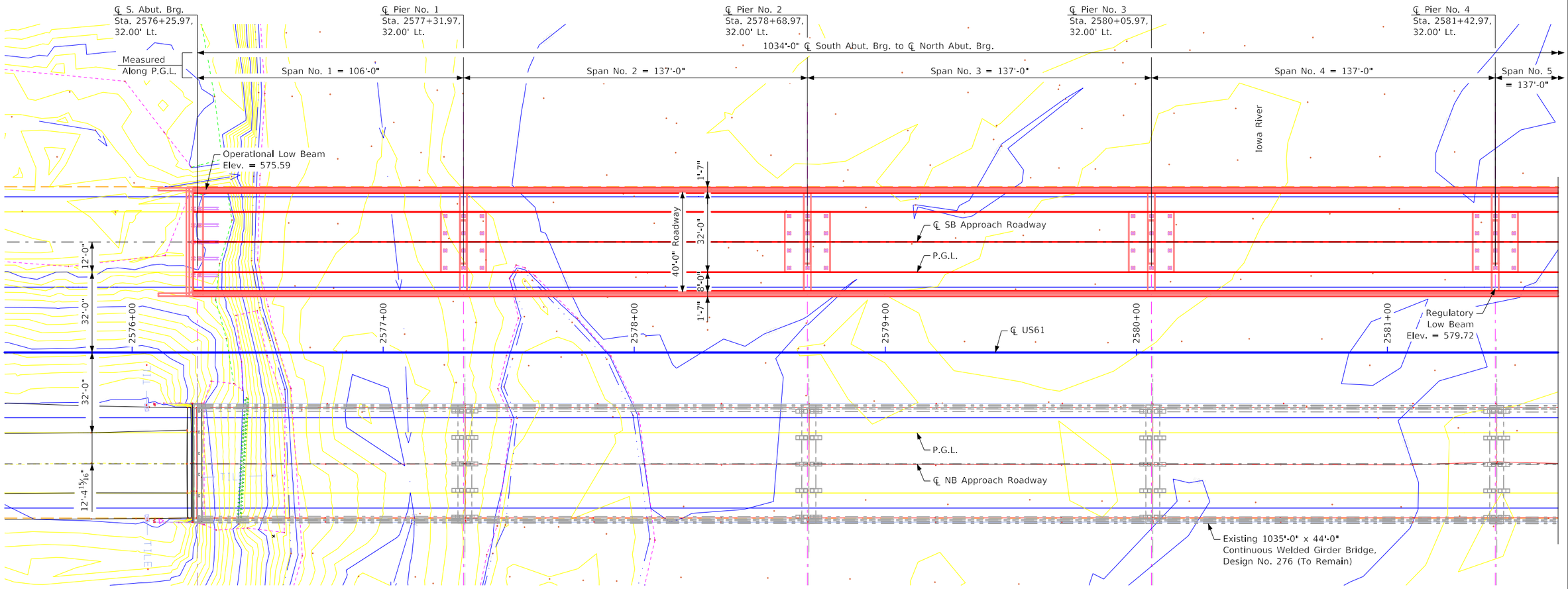
G1 = 0.8%

VPT Sta. = 2574+50
VPT Elev. = 580.55

VPC Sta. = 2587+50
VPC Elev. = 590.95

N

Proposed Profile
Grade US 61



Iowa River Hydraulic Data

TOS at Regulatory Low Beam = 585.97 (Sta. 2581+42.97)
Depth of Superstructure = 6.25'
Regulatory Low Beam = 579.72
Q_{50} Stage = 574.20 *
Freeboard = 5.52'

TOS at Operational Low Beam = 581.84 (Sta. 2576+25.97)
Depth of Superstructure = 6.25'
Operational Low Beam = 575.59
Q_{100} Stage = 574.20
Freeboard = 1.39'

* Q_{100} Stage is reported as a placeholder as Q_{50} data is not available.

Bridge Plan - US 61 over Iowa River

Note:
All units are in feet unless noted otherwise.

Notes to Designers:
Superstructures to be PPCB "BTE" beams. Substructure to be stub abutments and hammerhead piers.
Hydraulic data based on an assumed pier width of 4'.
TL-4 bridge railing proposed.

Preliminary
Not For Construction

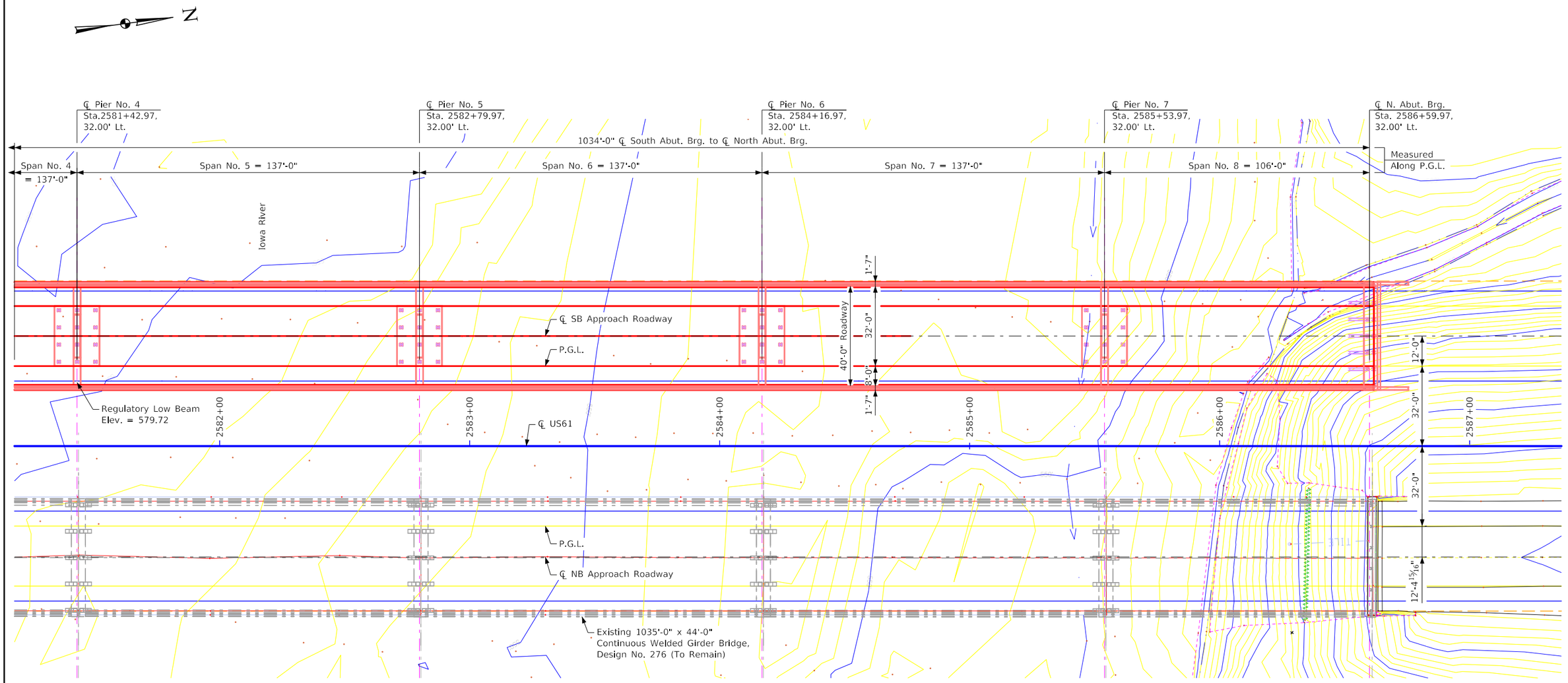
0 20
Scale In Feet

Design For 0° Skew
1034'-0" X 40'-0"
PPCB Bridge
106'-0" End Spans 137'-0" Interior Spans
8 Span over Iowa River
STA. 2581+42.97 (℄ US61) Turn-in Date: May 2023
Louisa County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.19

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Control Point:



Bridge Plan - US 61 over Iowa River

Note:
For notes, hydraulic data, and structure details, see Sheet V.19.

Preliminary
Not For Construction

0 20
Scale In Feet

Design For 0° Skew
1034'-0" X 40'-0"
PPCB Bridge
106'-0" End Spans 137'-0" Interior Span
8 Span over Iowa River
STA. 2581+42.97 (℄ US61) Turn-in Date: May 2023
Louisa County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. TBD Design Sheet No. XX FHWA No. TBD

FILE NO. XXXX	ENGLISH	DESIGN TEAM HDR	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER V.20

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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
Concrete	
(0)	Barrier Concrete
(0)	Barrier Concrete Footing
(0)	Curb Gutter
(48)	Flowable Mortar
(0)	Median Concrete
(0)	PCC Pavement
(0)	Sidewalk
Shoulder	
(209)	Shoulder HMA
(0)	Shoulder PCC
(6)	Shoulder Granular
Existing	
(0)	Existing Pavement
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
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 Substrata
(48)	Broken Weathered Substrata
(3)	Core Out Substrata
(203)	Existing Pavement Substrata
(6)	Loam Substrata
(80)	Rock Substrata
(4)	Select Sand Substrata
(3)	Shale Substrata
(10)	Topsoil Substrata
Unsuitable / Waste	
(3)	Unsuitable Type A
(13)	Unsuitable Type B
(11)	Unsuitable Type C
(3)	Waste

NOTES:

Text

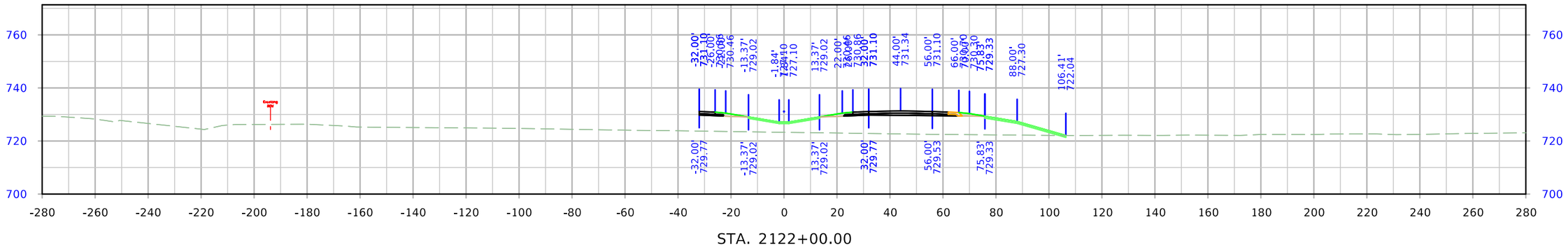
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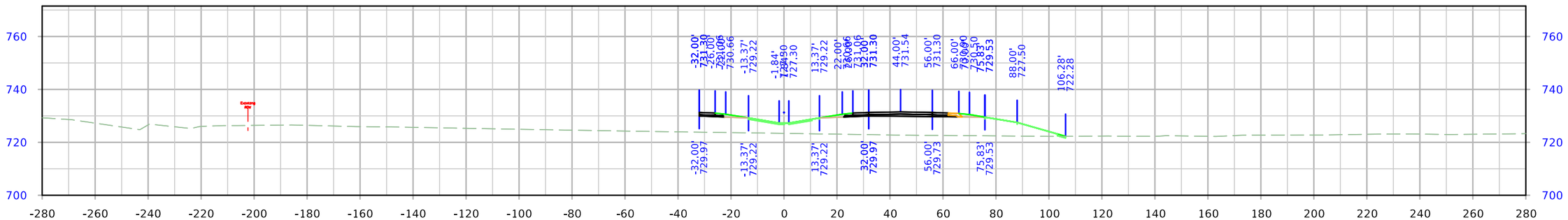
CROSS SECTIONS
LEGEND AND INFORMATION SHEET

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

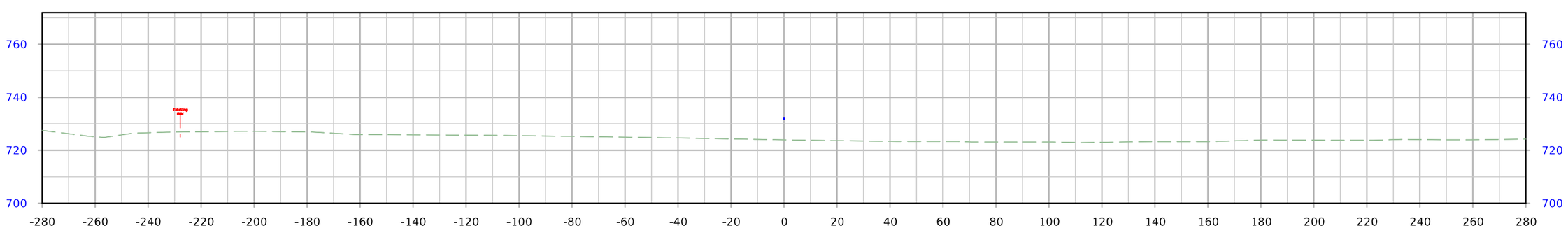
ML - US61



STA. 2122+00.00



STA. 2121+75.00

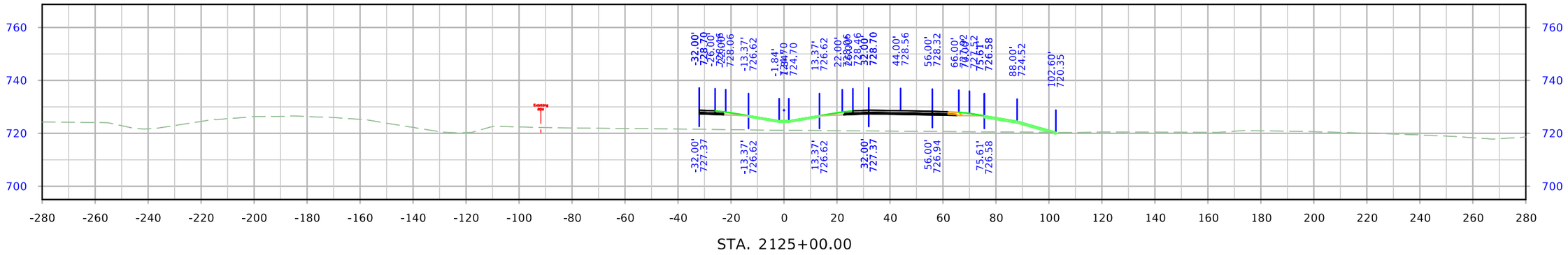


STA. 2121+00.00

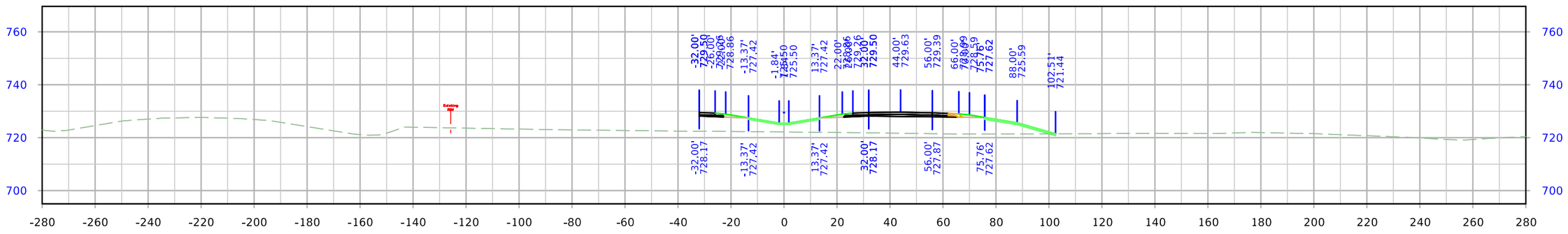
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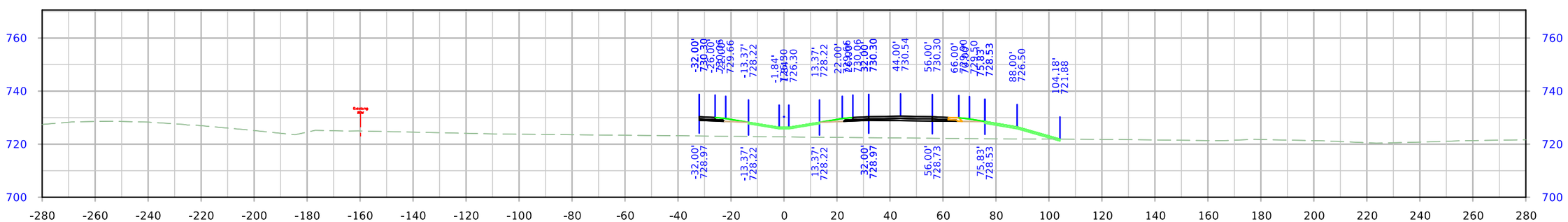
ML - US61



STA. 2125+00.00



STA. 2124+00.00

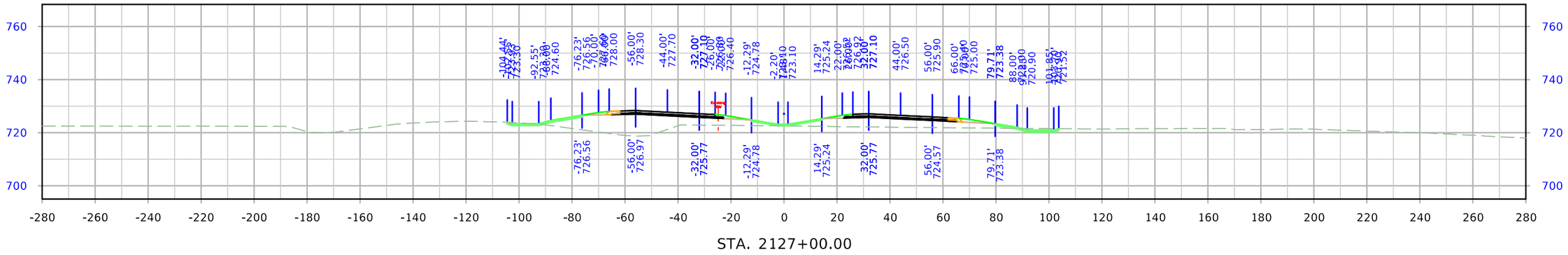


STA. 2123+00.00

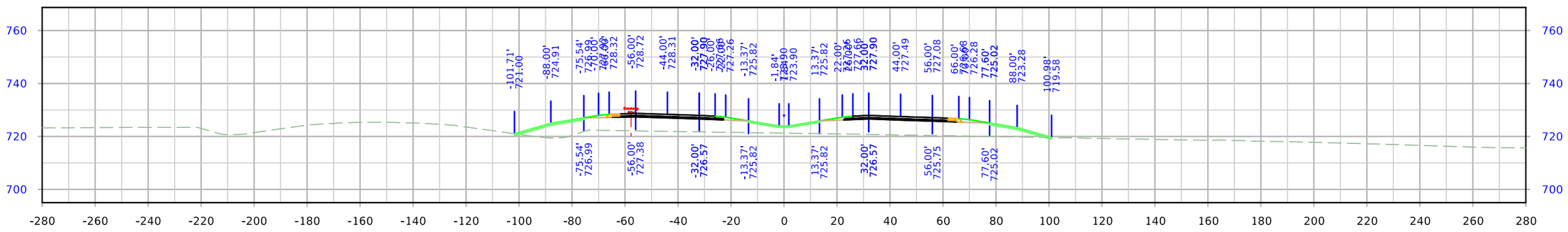
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.3	

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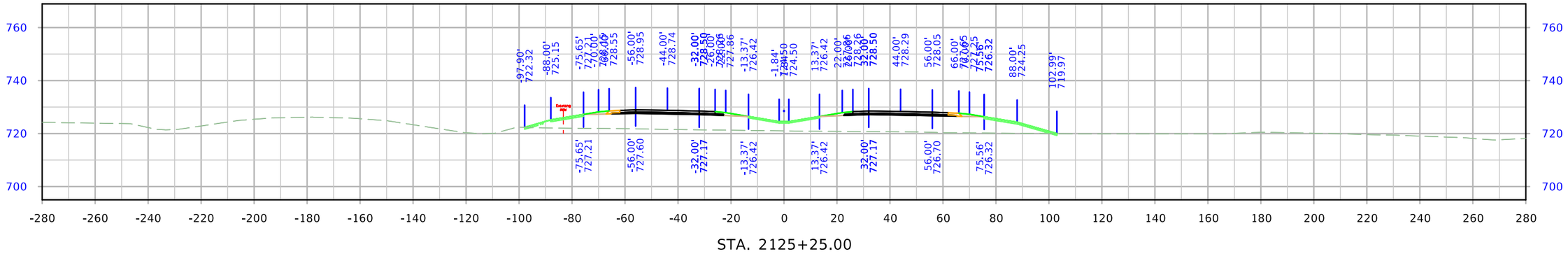
ML - US61



STA. 2127+00.00



STA. 2126+00.00

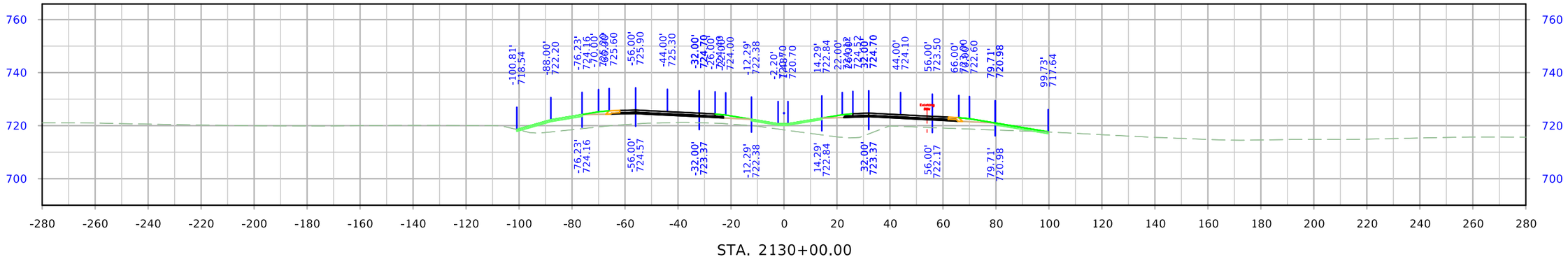


STA. 2125+25.00

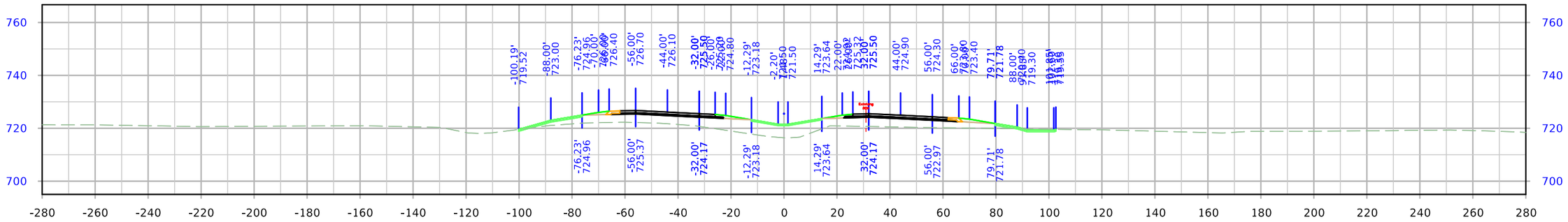
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.4

3:42:42 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

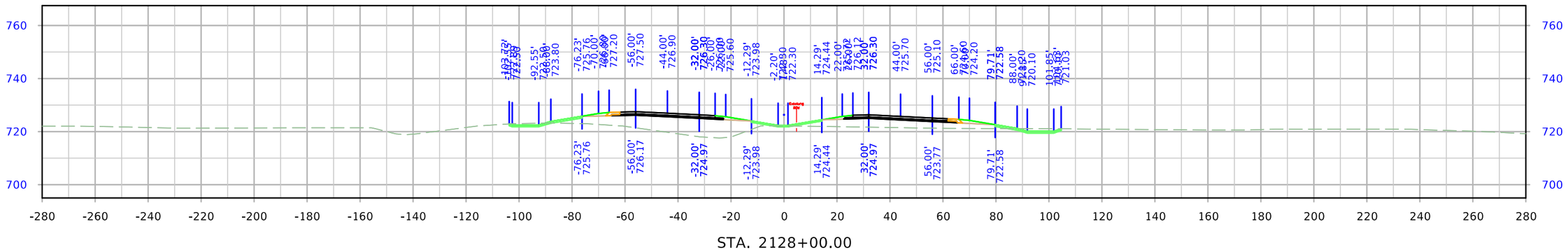
ML - US61



STA. 2130+00.00



STA. 2129+00.00

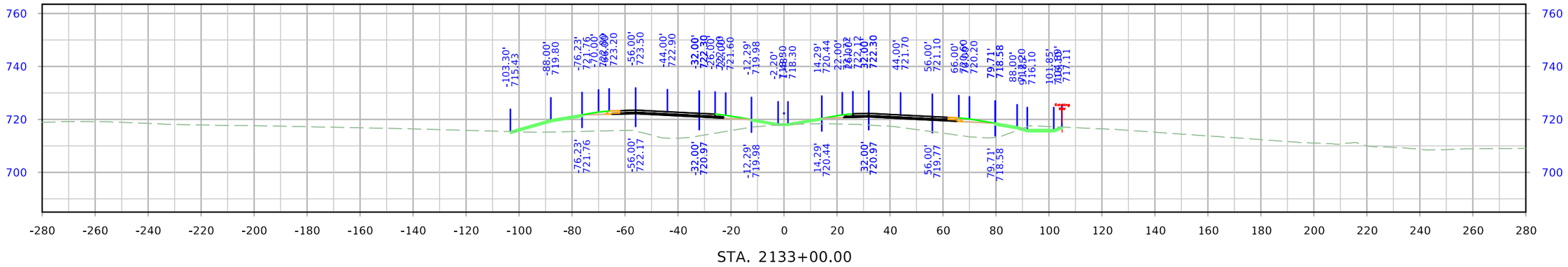


STA. 2128+00.00

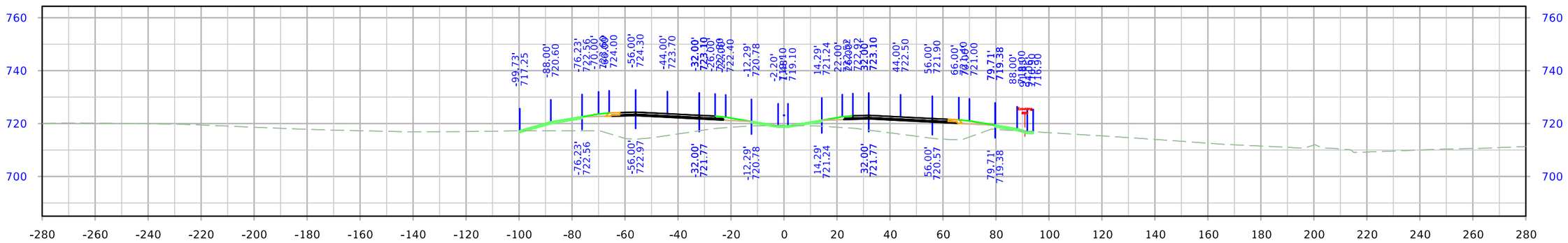
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.5

3:42:47 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

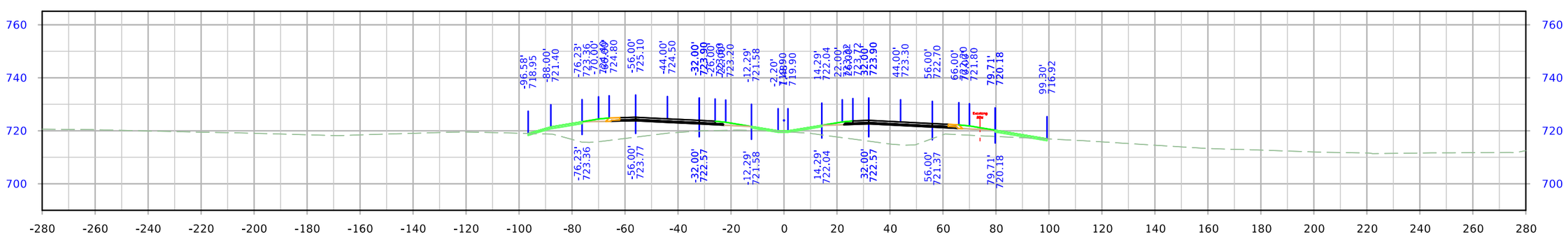
ML - US61



STA. 2133+00.00



STA. 2132+00.00

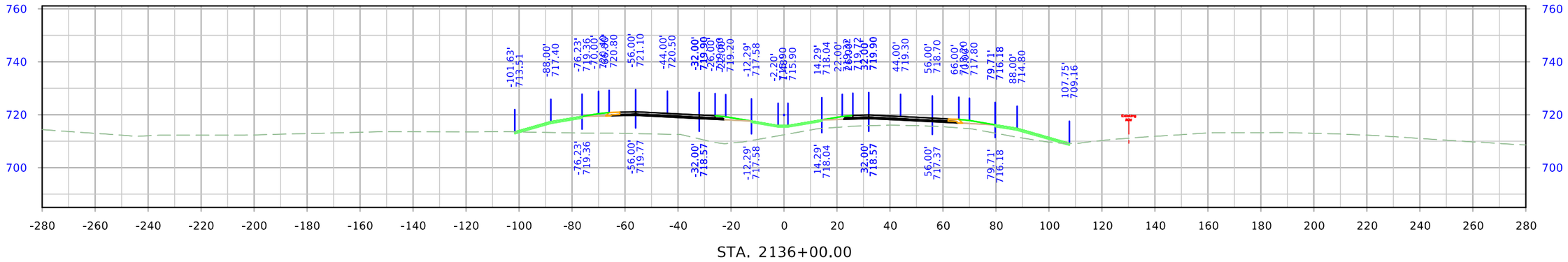


STA. 2131+00.00

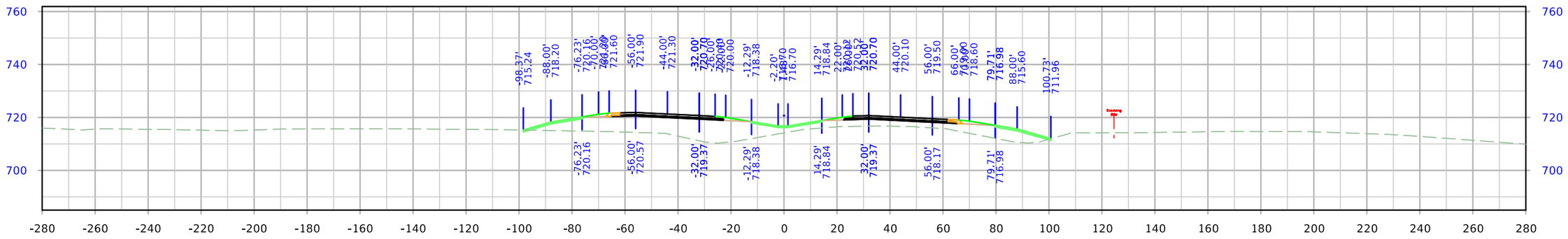
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.6

3:42:51 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

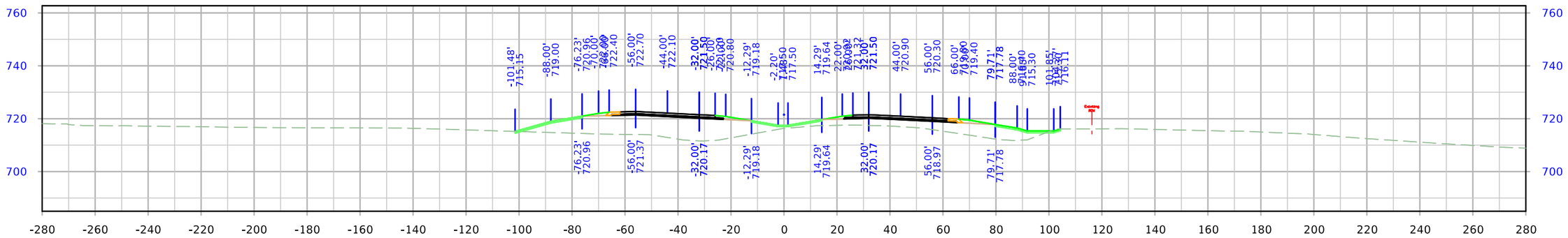
ML - US61



STA. 2136+00.00



STA. 2135+00.00

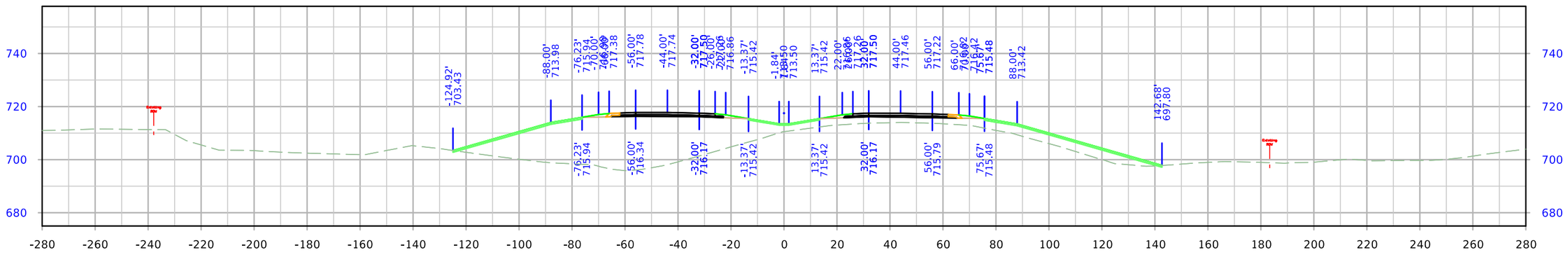


STA. 2134+00.00

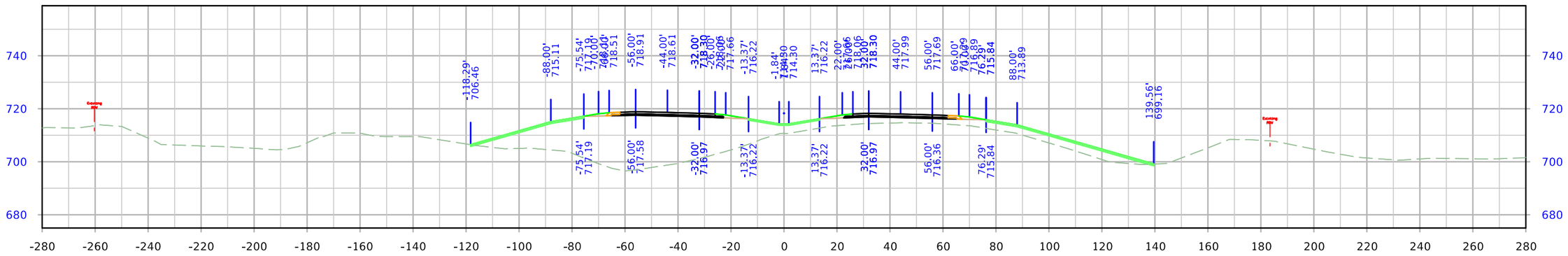
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.7

3:42:56 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

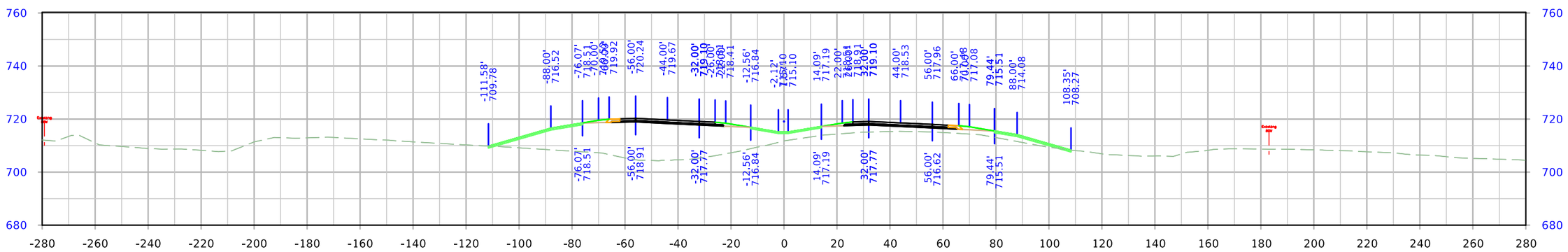
ML - US61



STA. 2139+00.00



STA. 2138+00.00

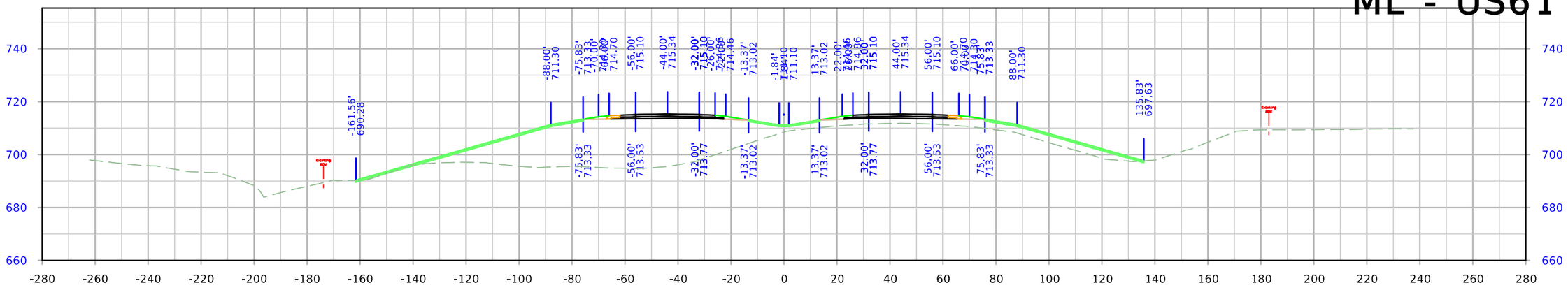


STA. 2137+00.00

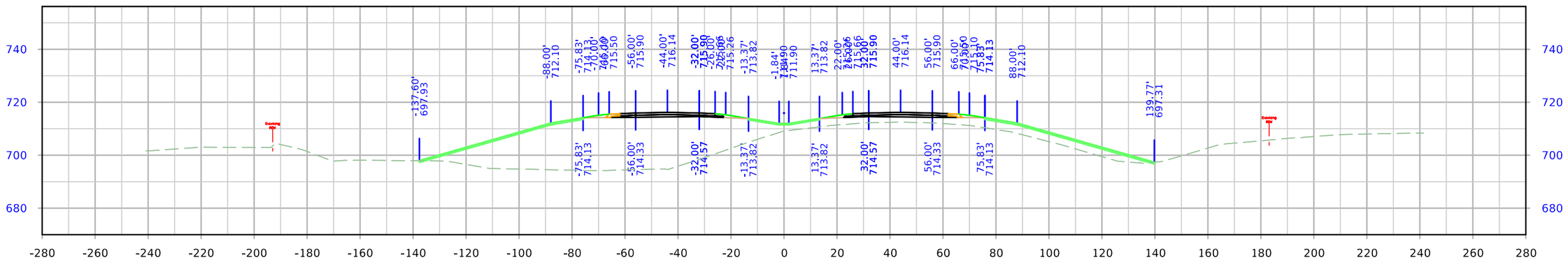
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.8

3:43:01 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

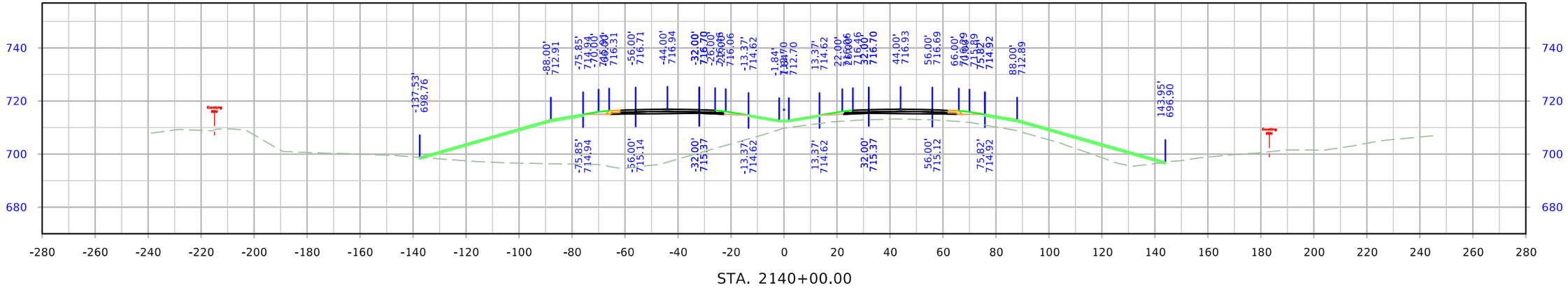
ML - US61



STA. 2142+00.00



STA. 2141+00.00

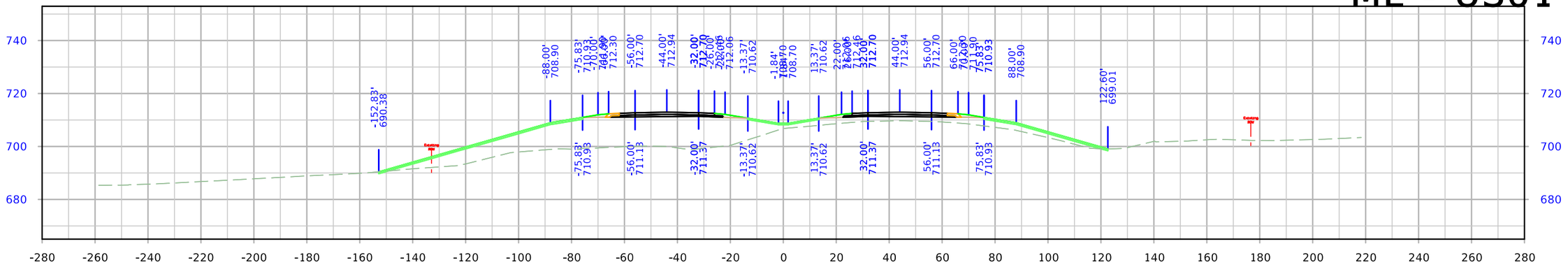


STA. 2140+00.00

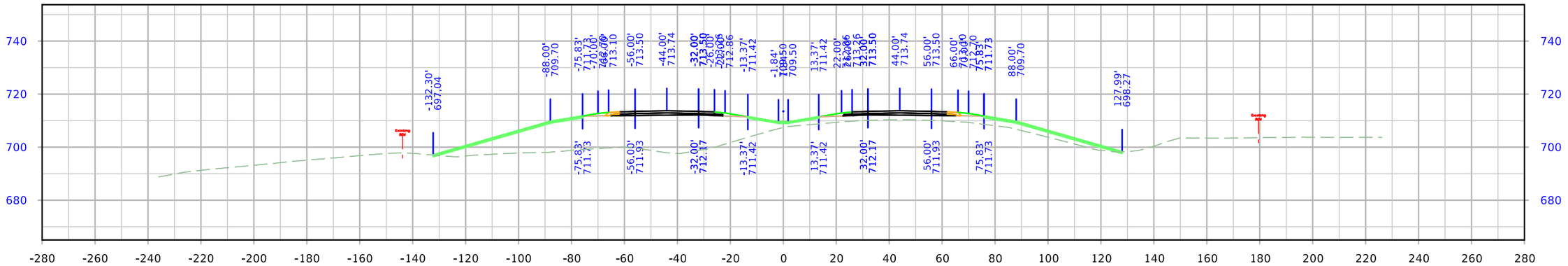
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.9	

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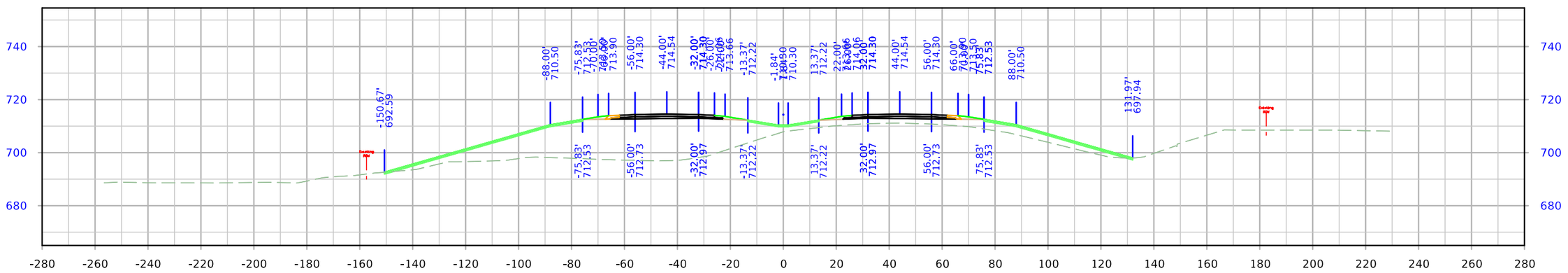
ML - US61



STA. 2145+00.00



STA. 2144+00.00

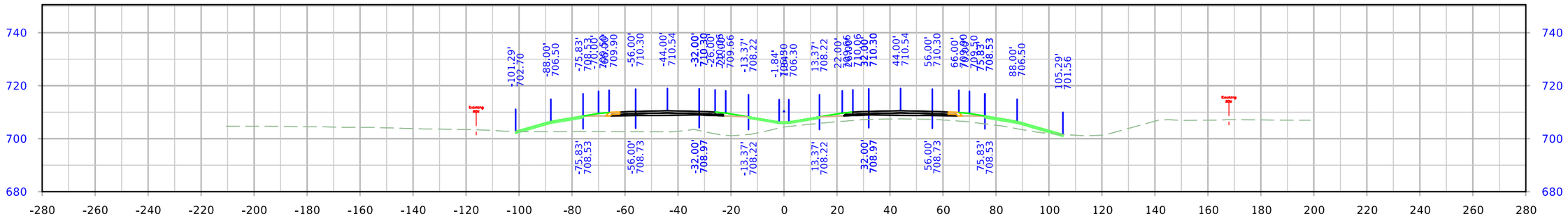


STA. 2143+00.00

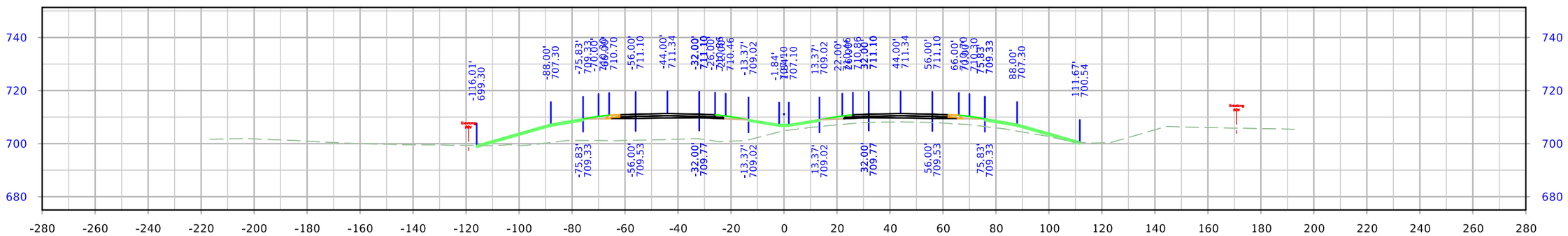
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.10

3:43:10 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

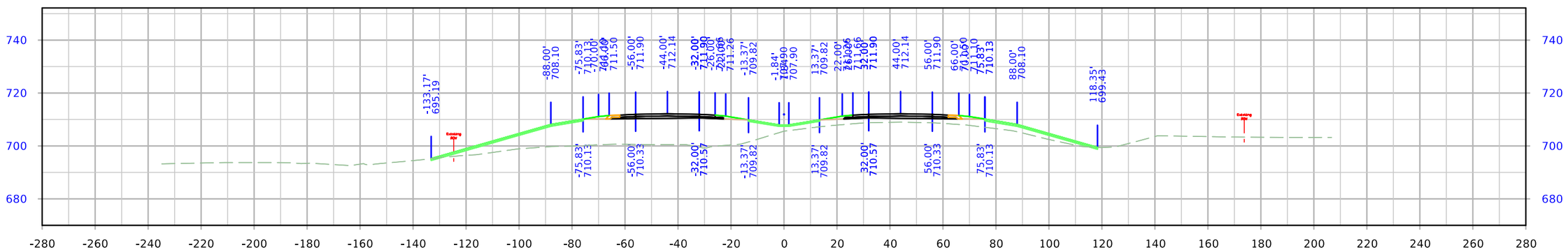
ML - US61



STA. 2148+00.00



STA. 2147+00.00

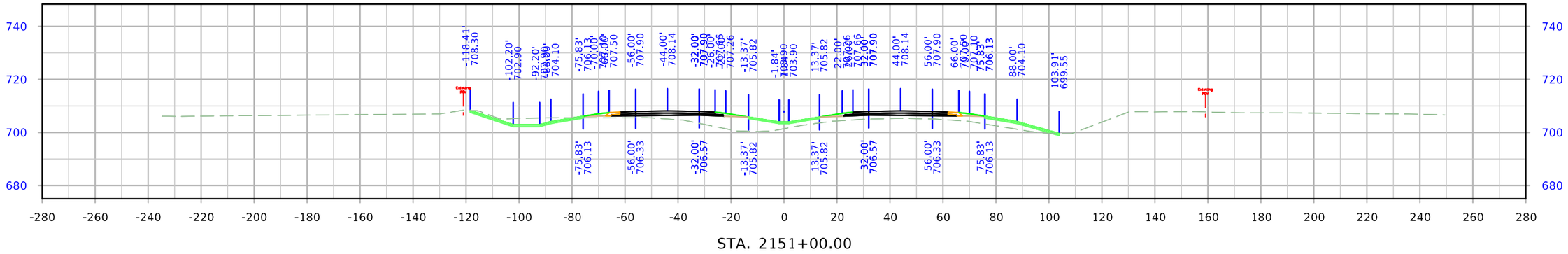


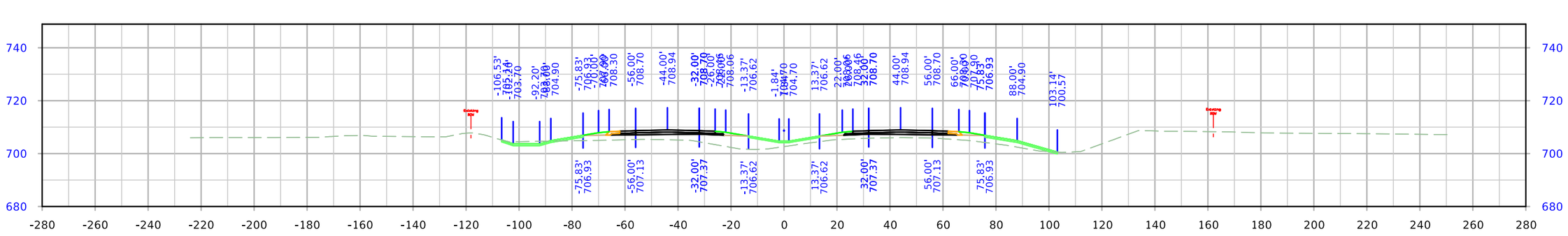
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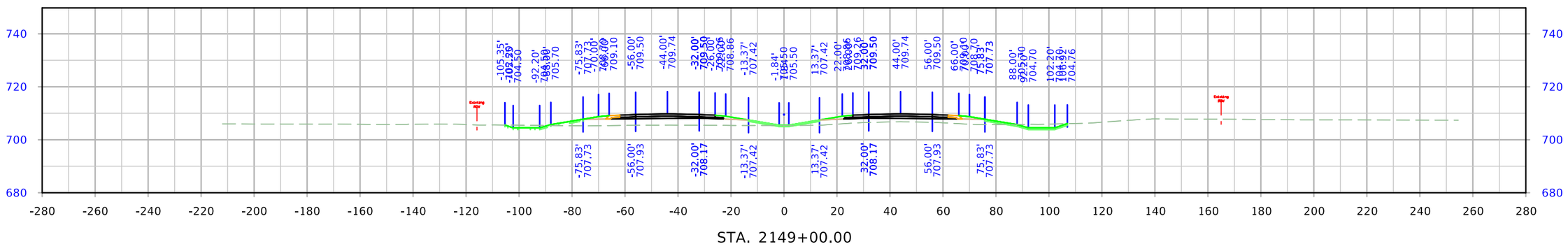
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.11

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ML - US61



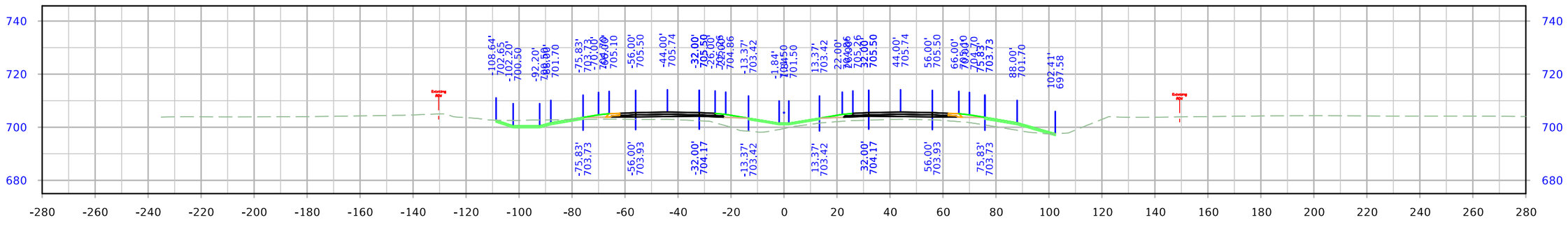




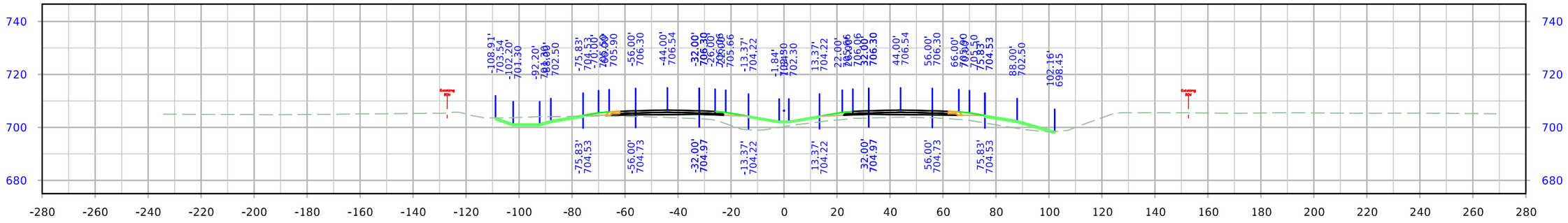
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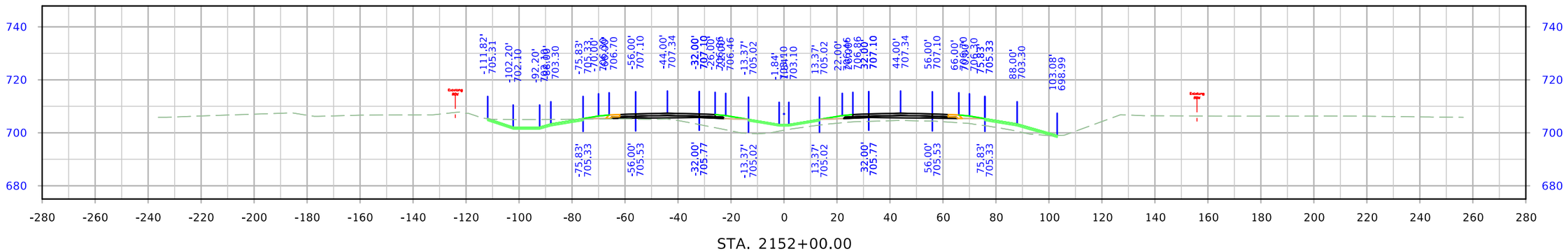
ML - US61



STA. 2154+00.00



STA. 2153+00.00

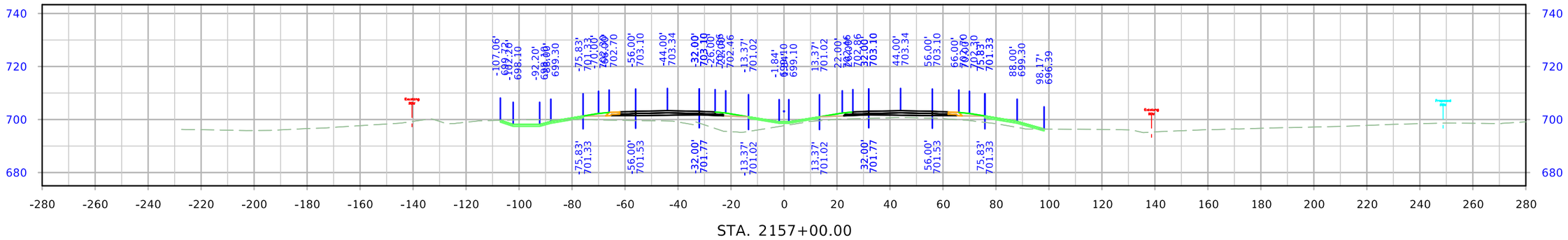


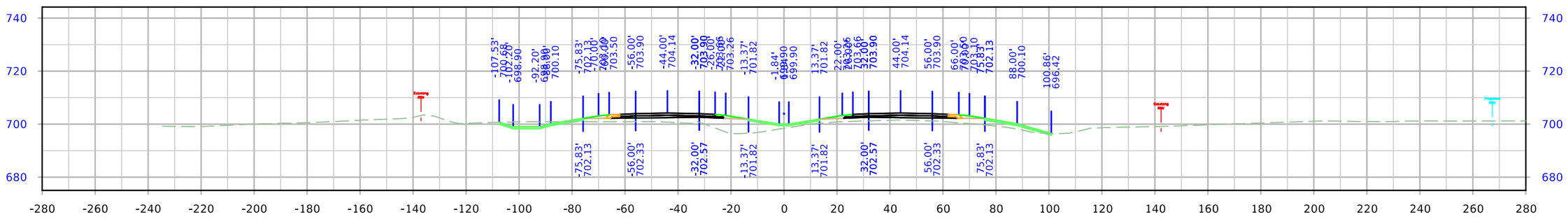
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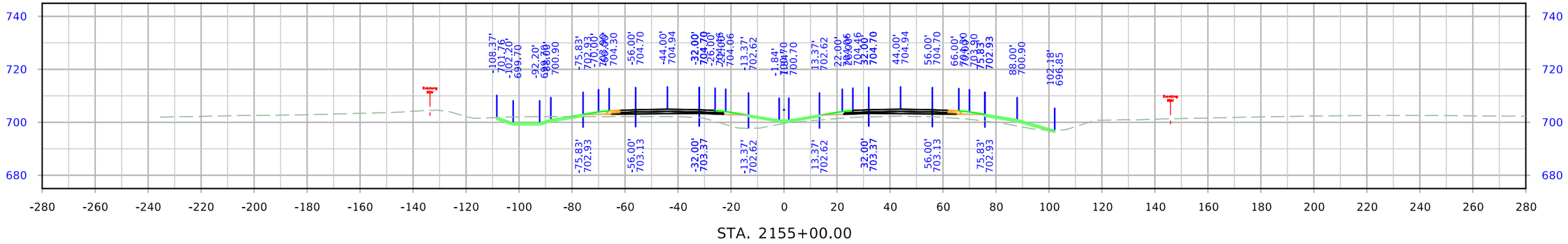
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.13

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ML - US61



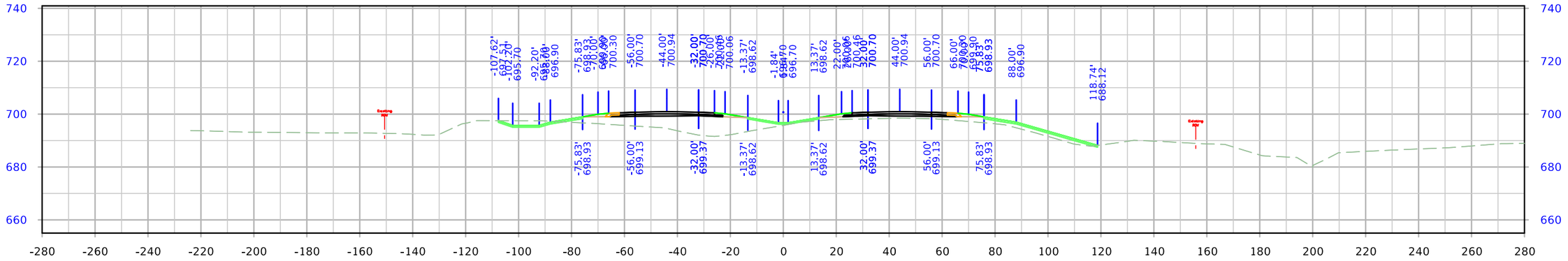


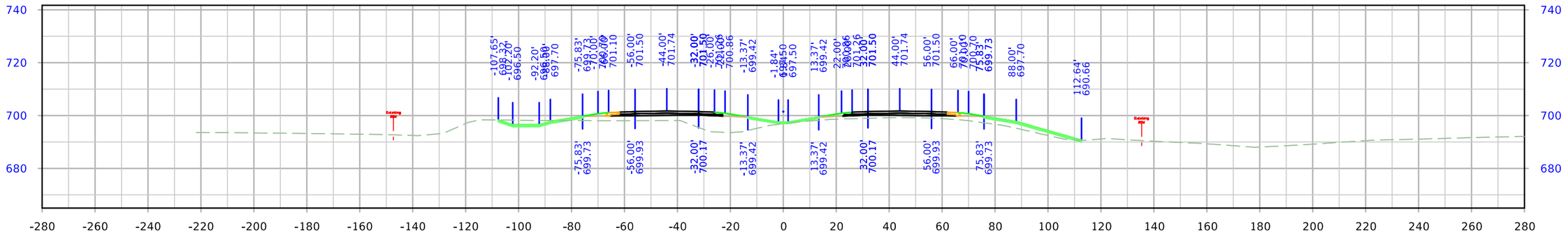


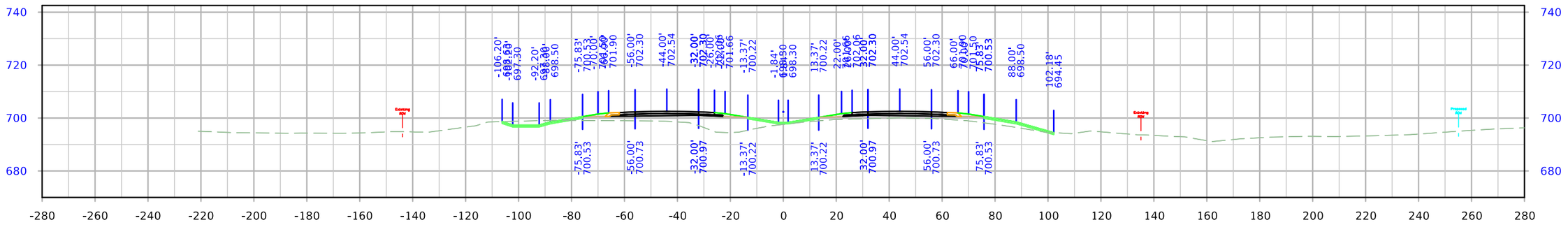
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.14

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ML - US61



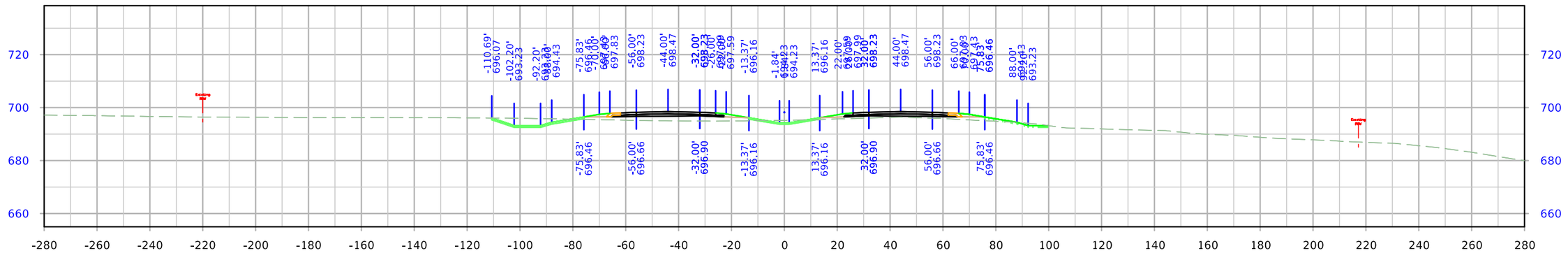




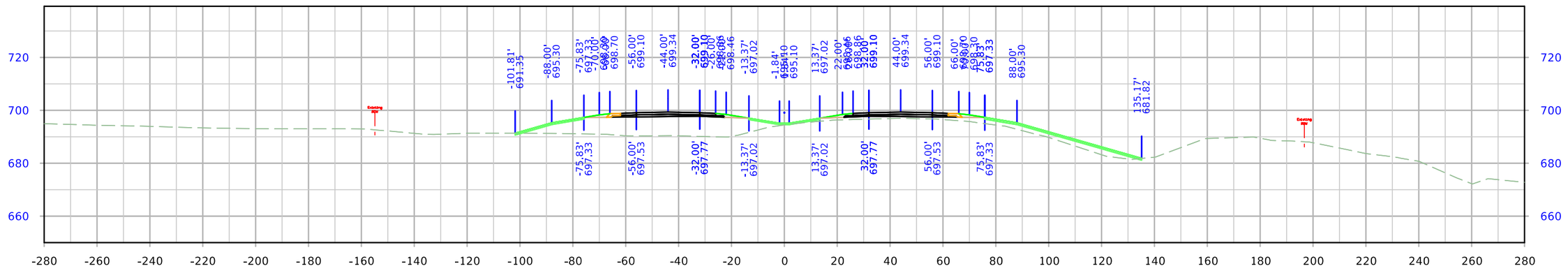
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.15

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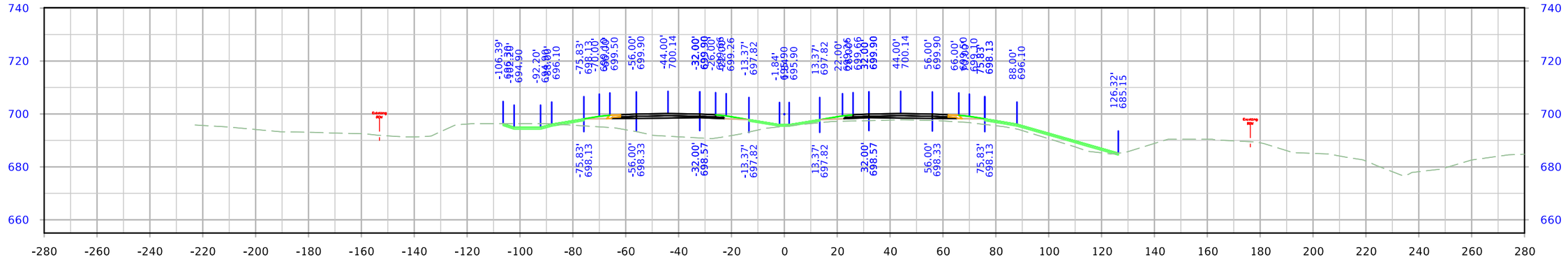
ML - US61



STA. 2163+00.00



STA. 2162+00.00

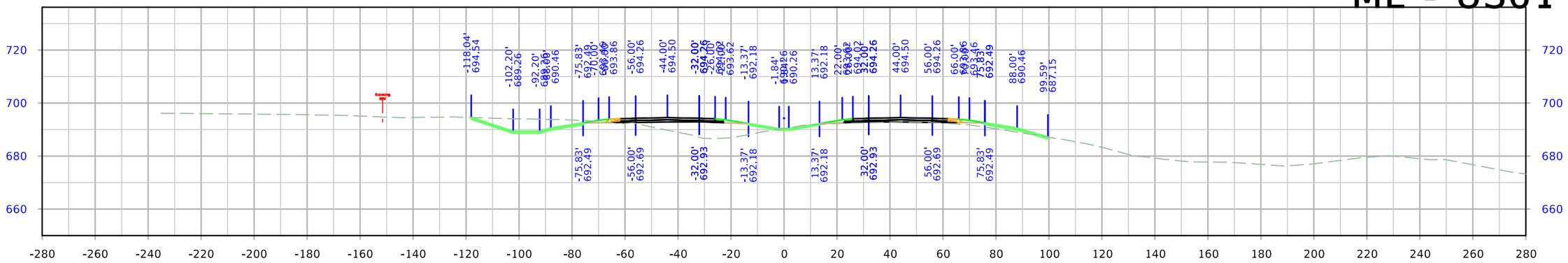


STA. 2161+00.00

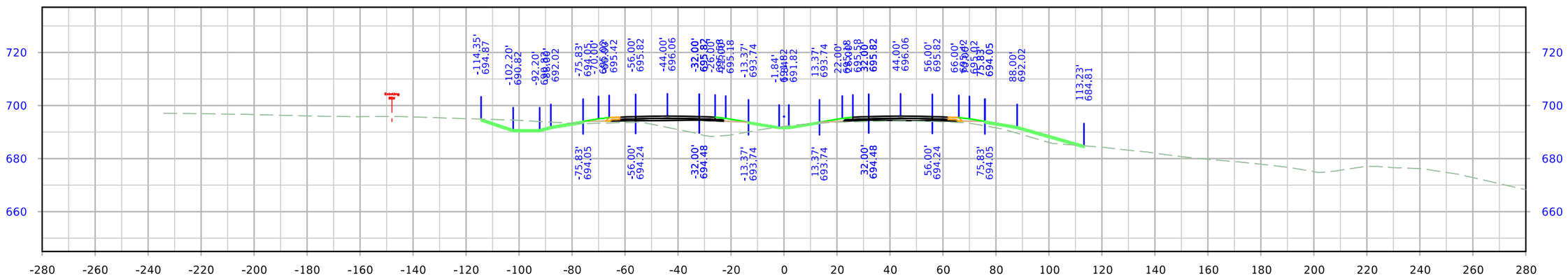
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.16

3:43:39 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

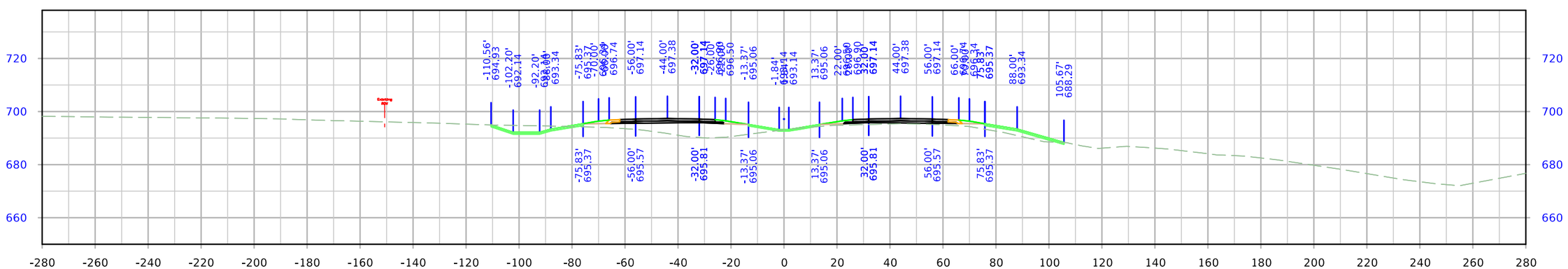
ML - US61



STA. 2166+00.00



STA. 2165+00.00

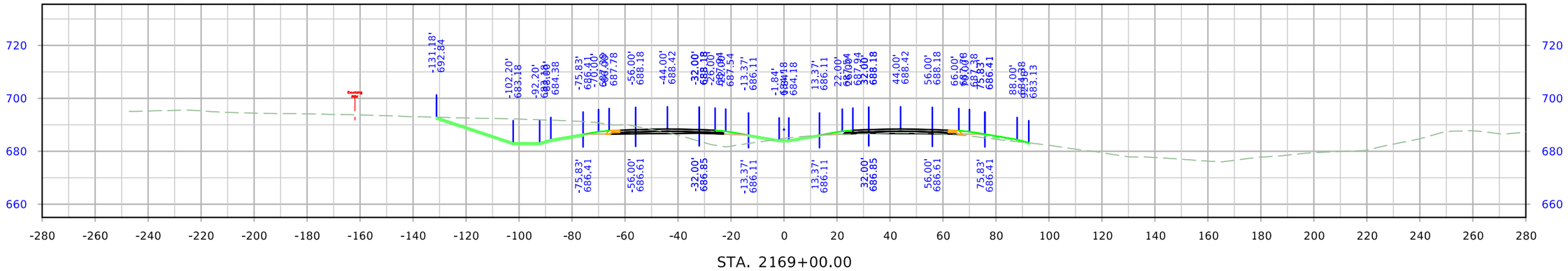


STA. 2164+00.00

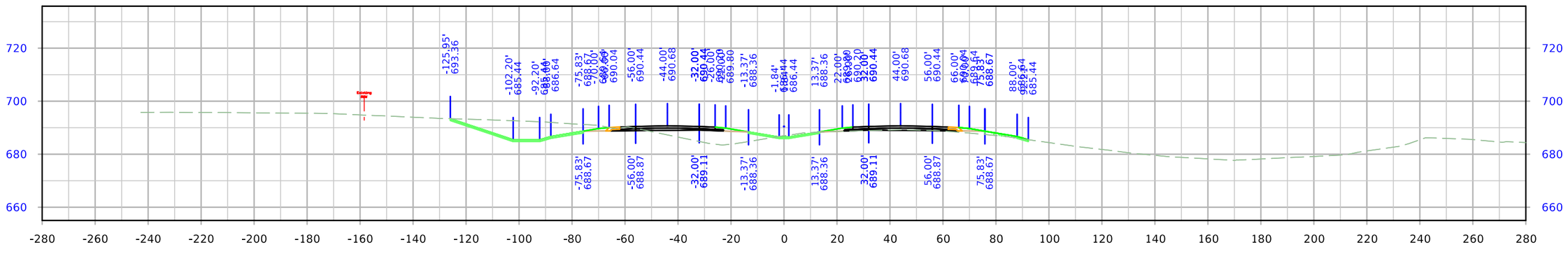
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.17

3:43:44 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

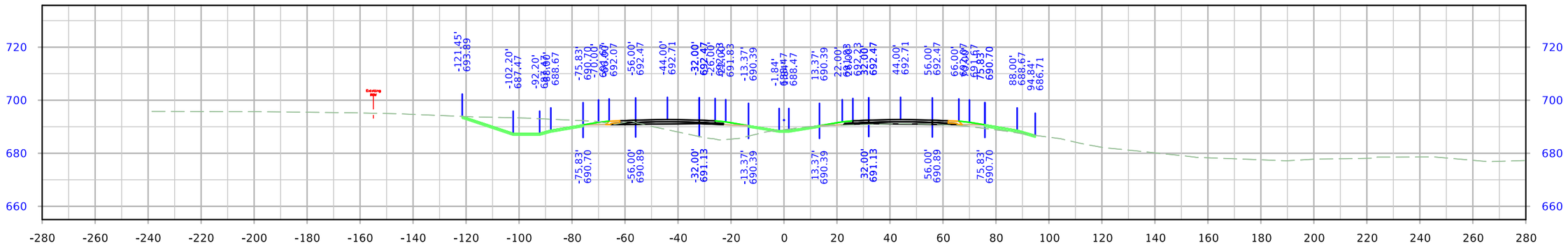
ML - US61



STA. 2169+00.00



STA. 2168+00.00

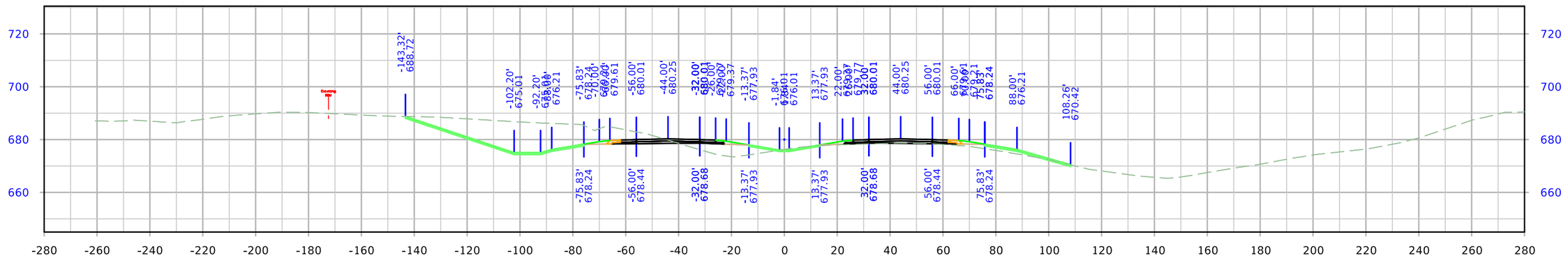


STA. 2167+00.00

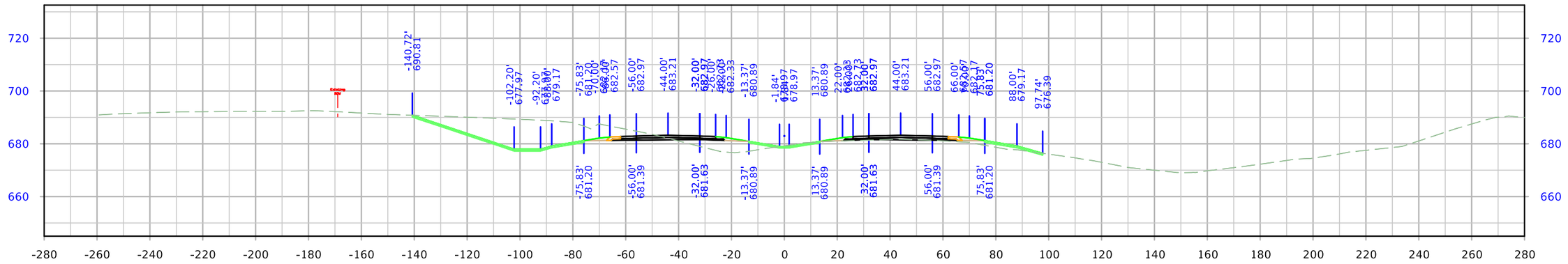
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.18

3:43:48 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

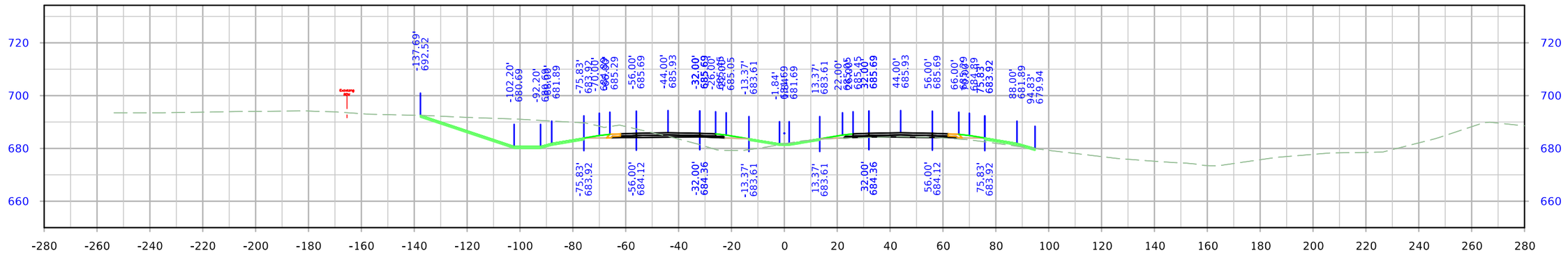
ML - US61



STA. 2172+00.00



STA. 2171+00.00

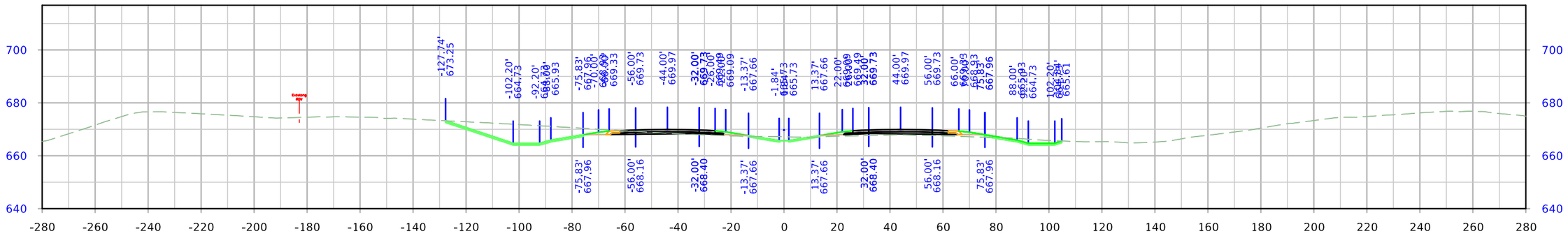


STA. 2170+00.00

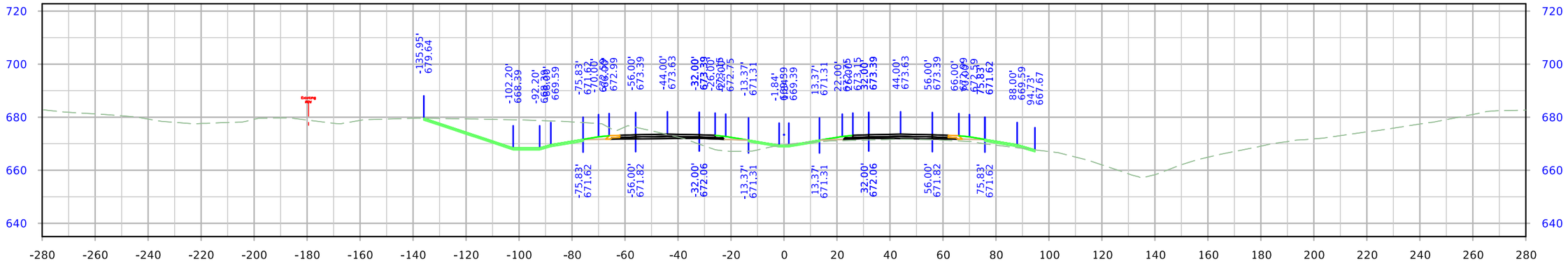
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.19

3:43:53 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

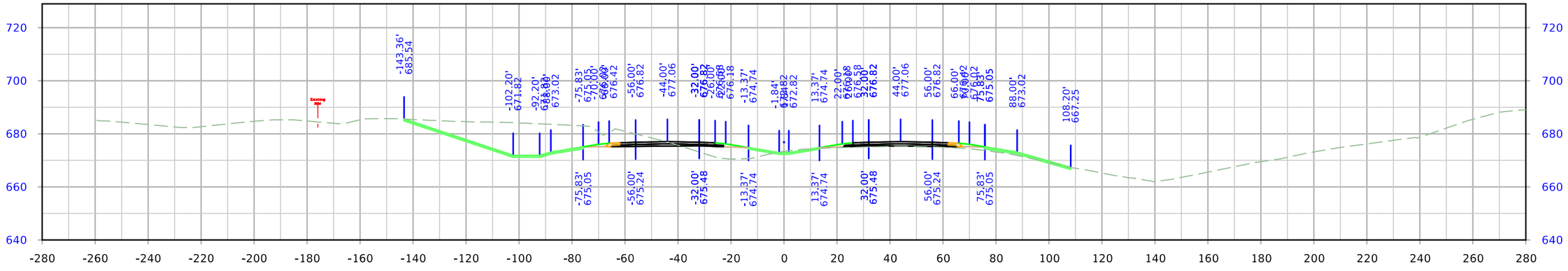
ML - US61



STA. 2175+00.00



STA. 2174+00.00

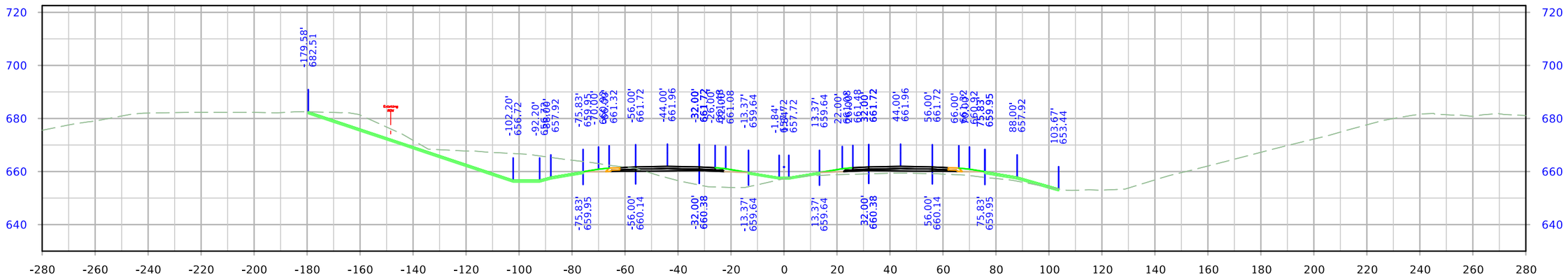


STA. 2173+00.00

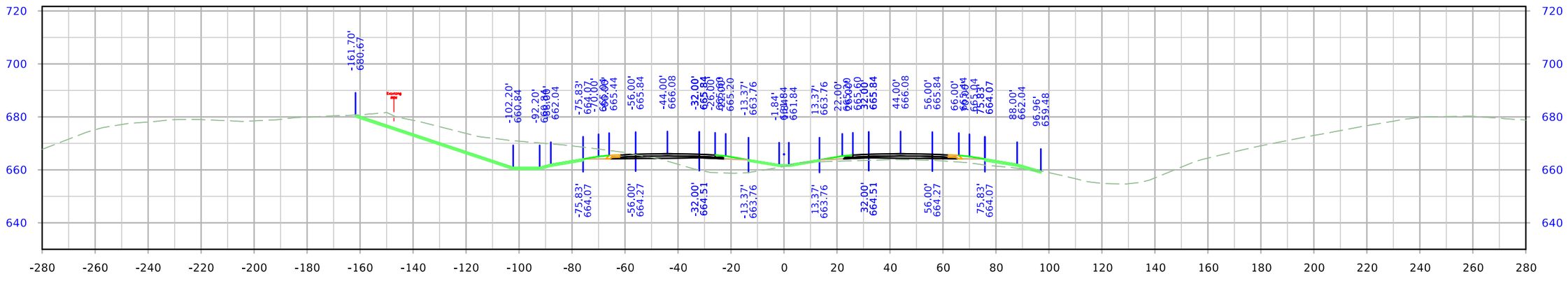
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.20

3:43:59 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2177+00.00

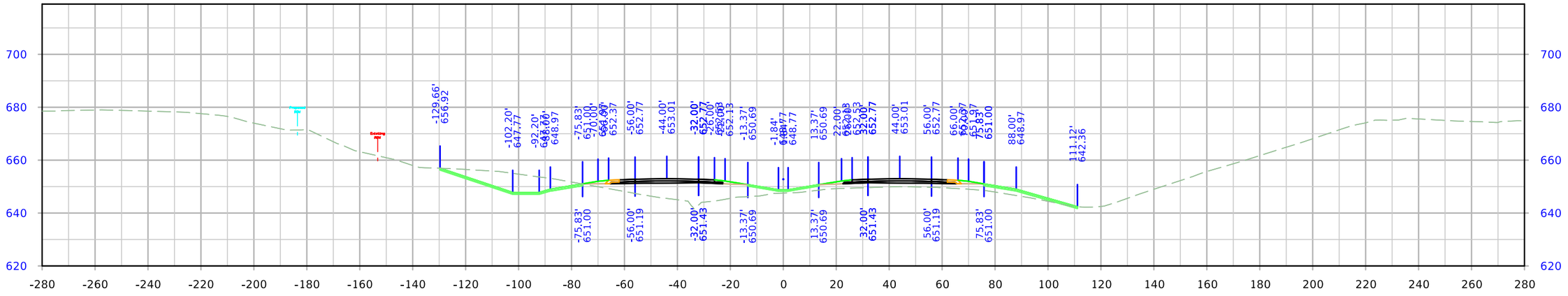


STA. 2176+00.00

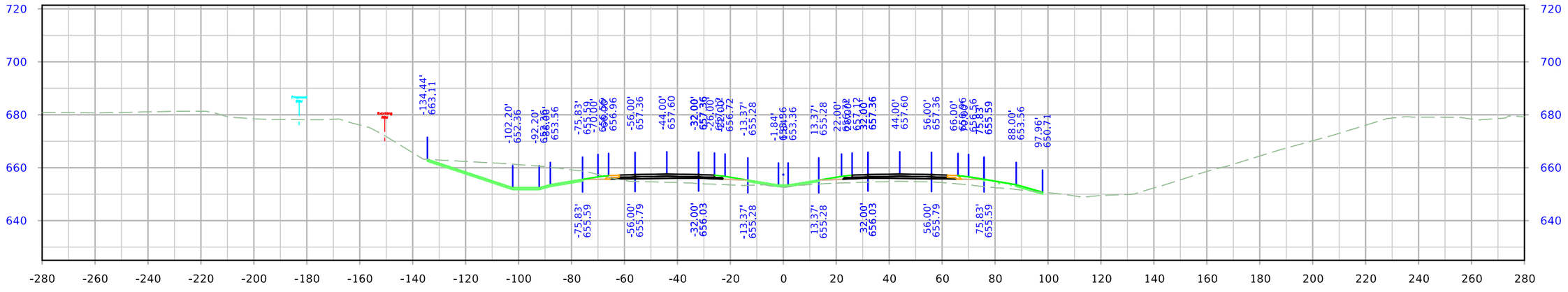
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.21

3:44:03 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2179+00.00

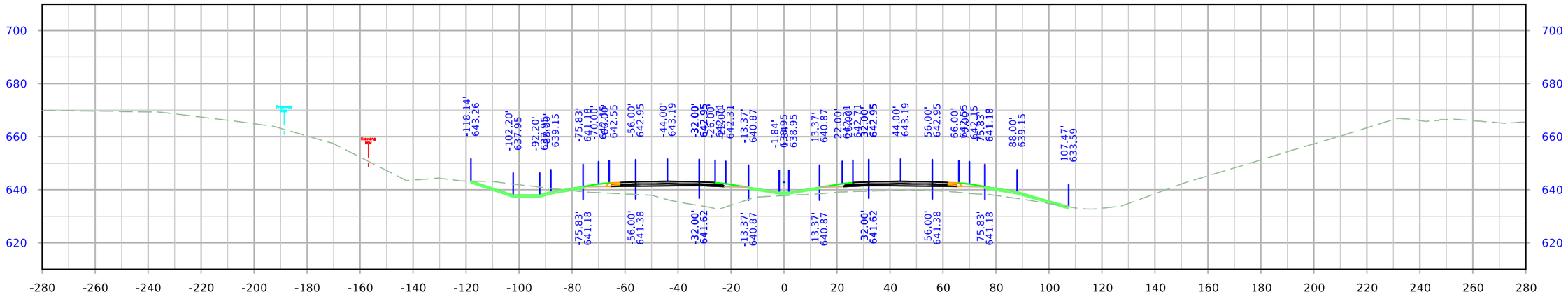


STA. 2178+00.00

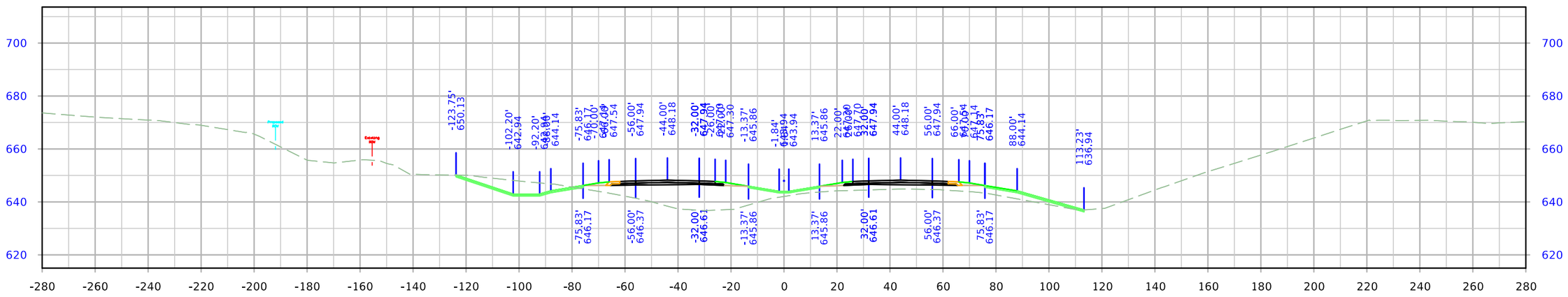
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.22

3:44:07 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2181+00.00

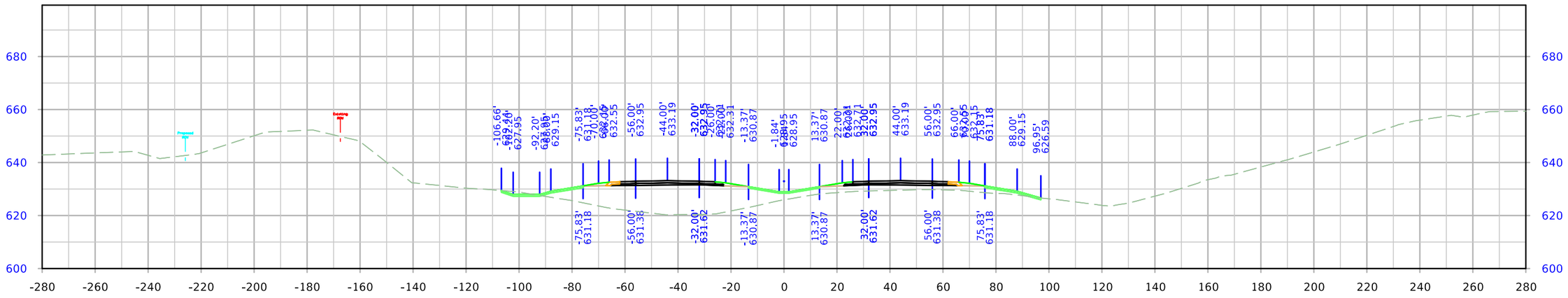


STA. 2180+00.00

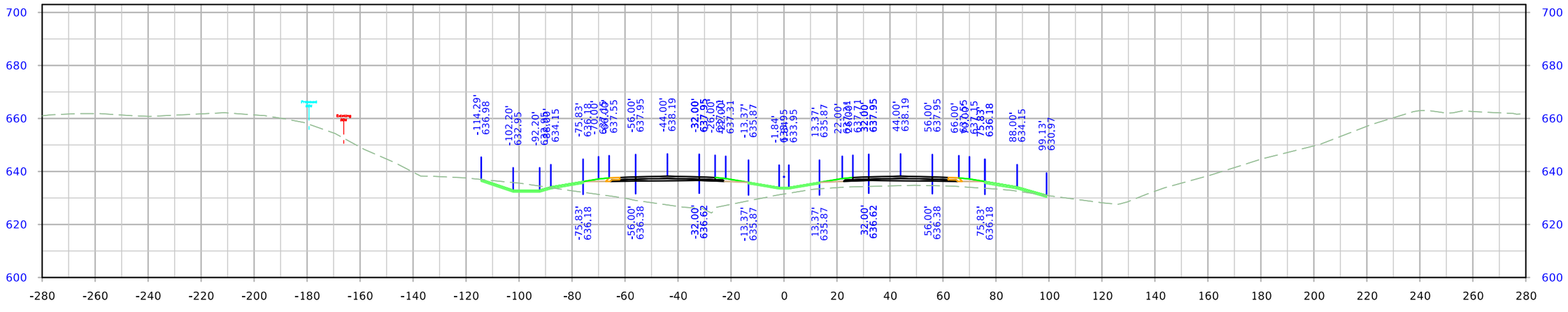
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.23

3:44:11 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2183+00.00

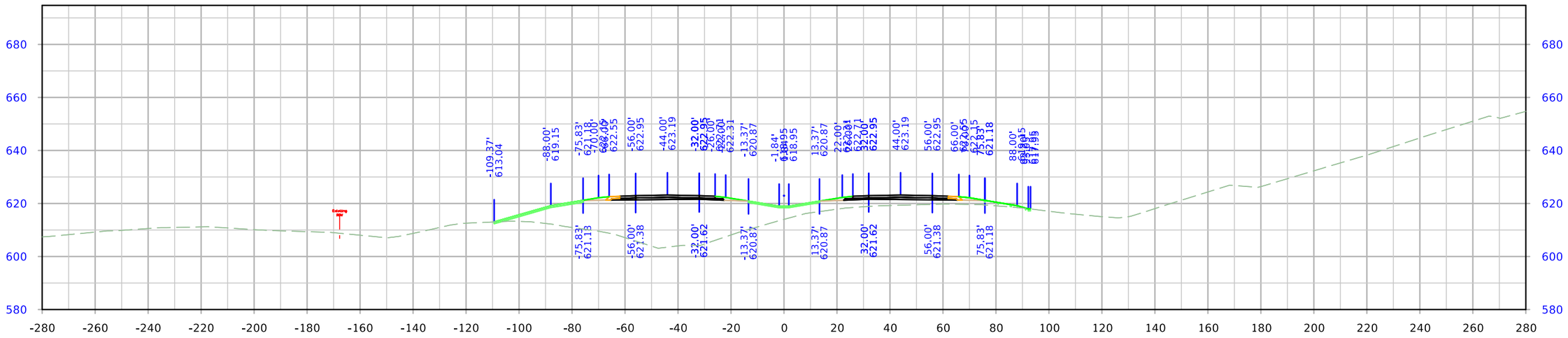


STA. 2182+00.00

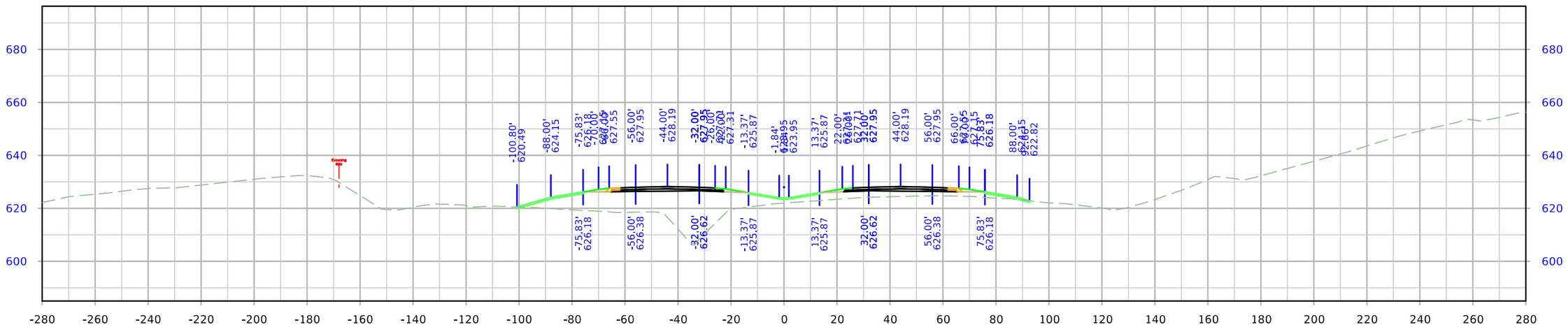
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.24

3:44:15 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2185+00.00

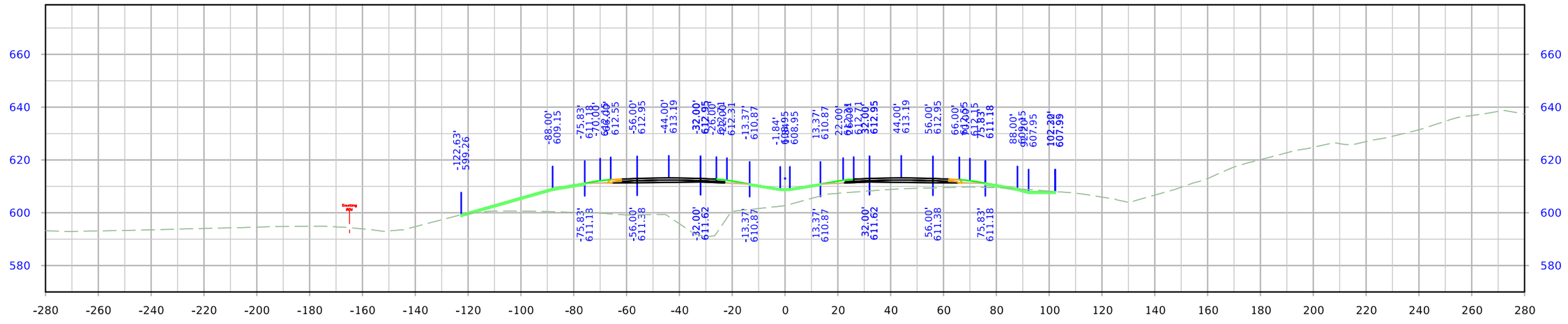


STA. 2184+00.00

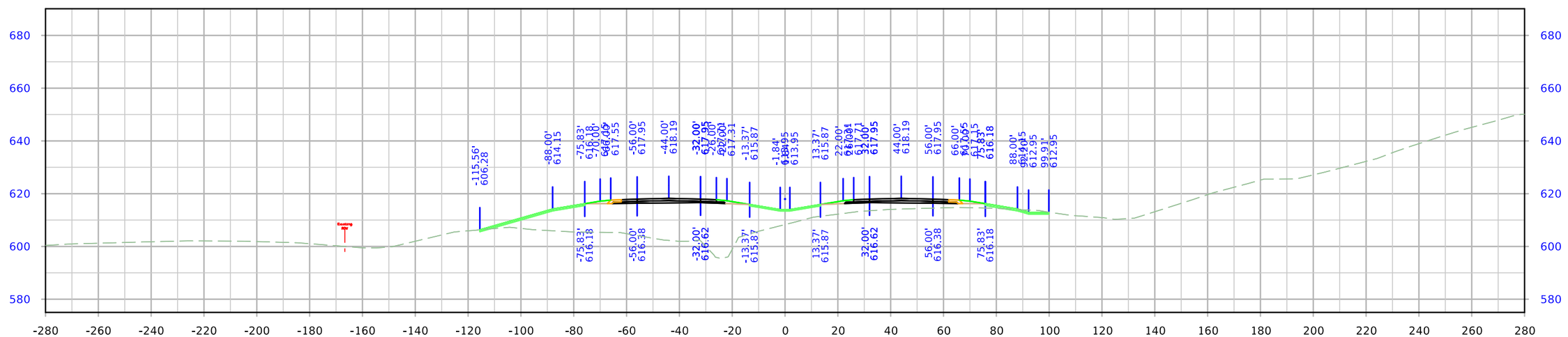
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.25

3:44:19 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2187+00.00

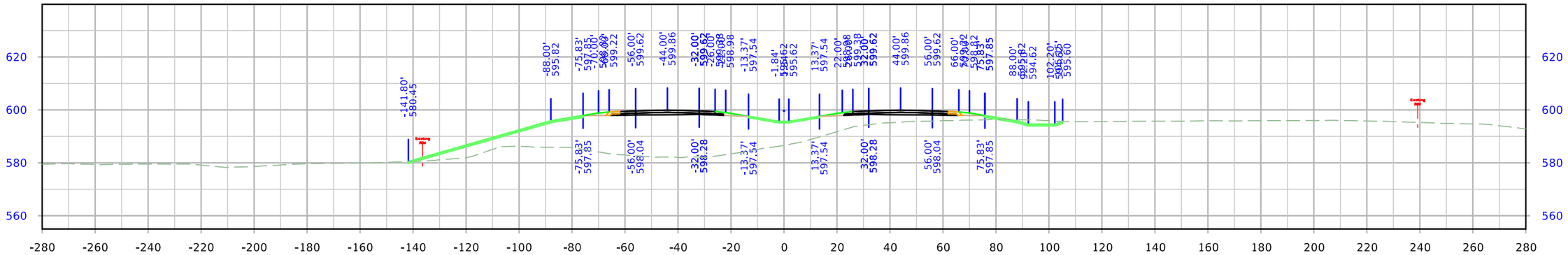


STA. 2186+00.00

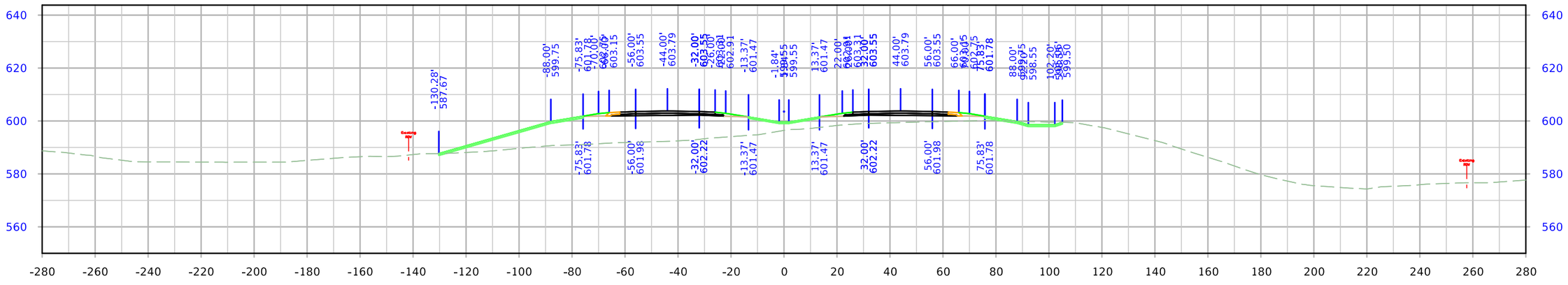
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.26

3:44:23 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

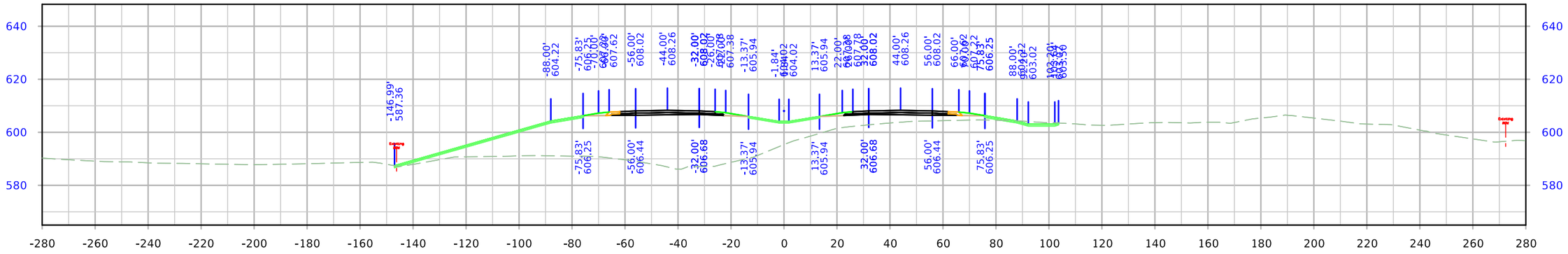
ML - US61



STA. 2190+00.00



STA. 2189+00.00

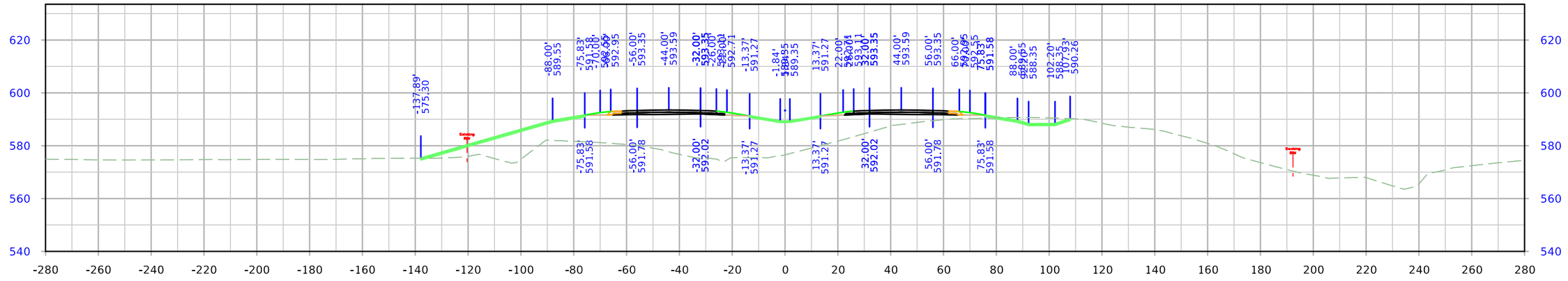


STA. 2188+00.00

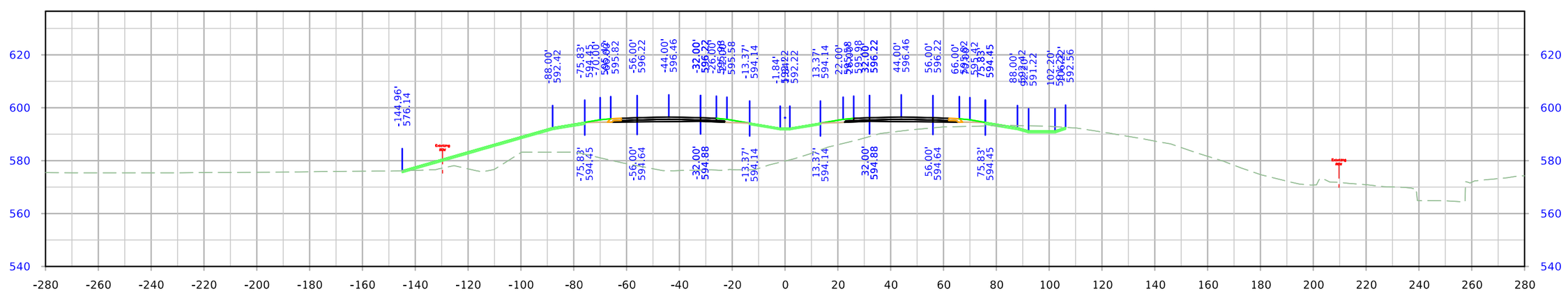
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.27

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ML - US61



STA. 2192+00.00

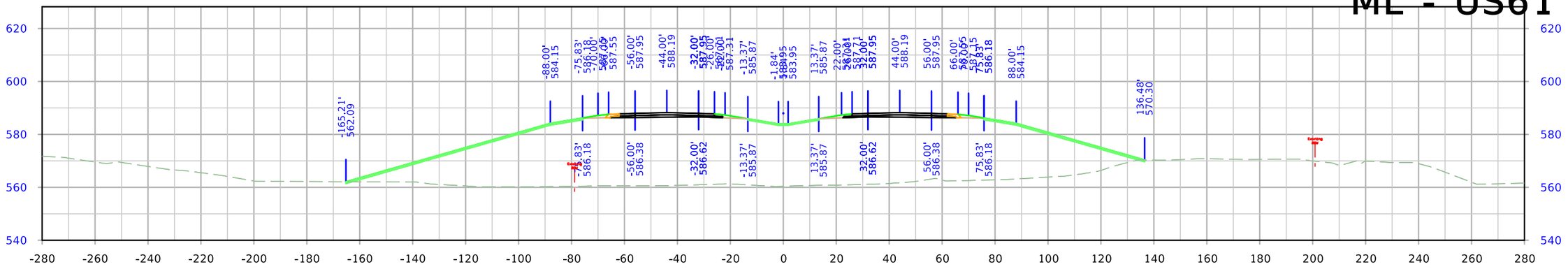


STA. 2191+00.00

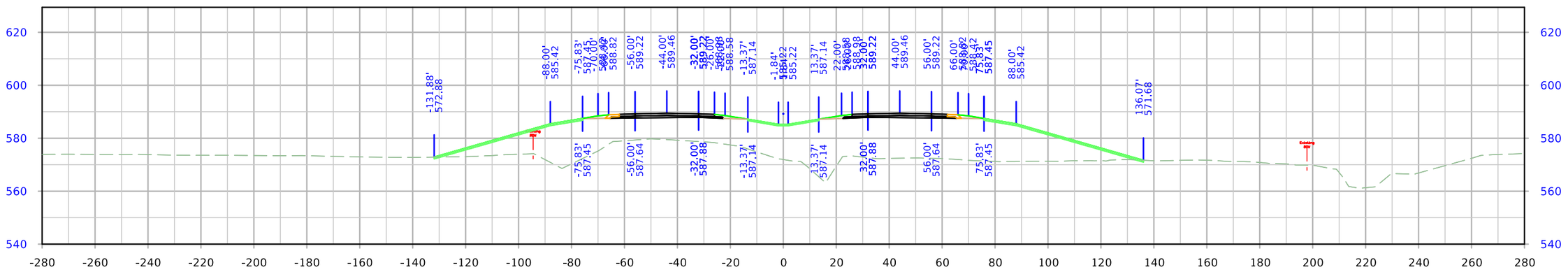
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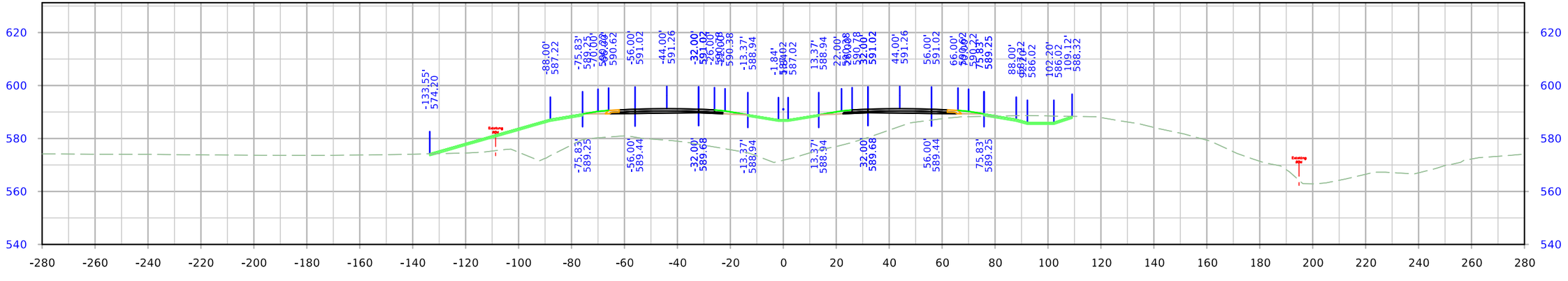
ML - US61



STA. 2195+00.00



STA. 2194+00.00

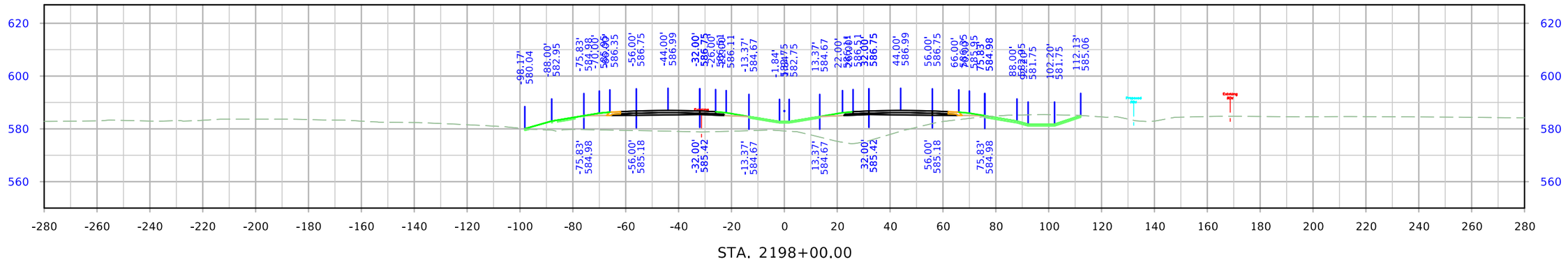


STA. 2193+00.00

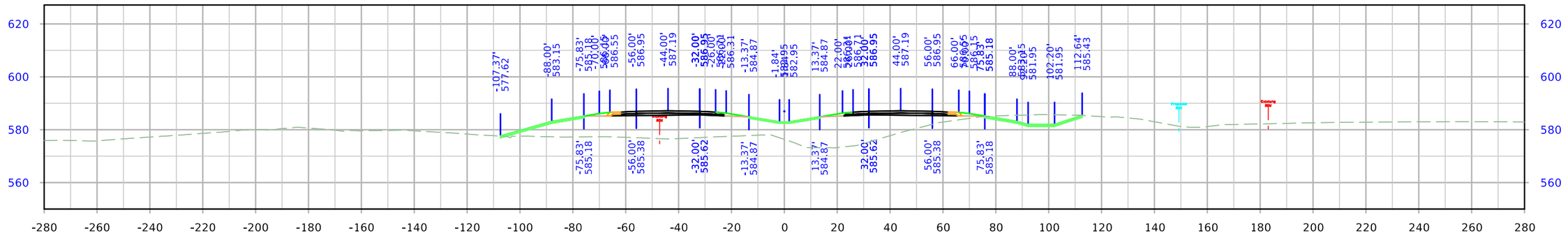
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.29	

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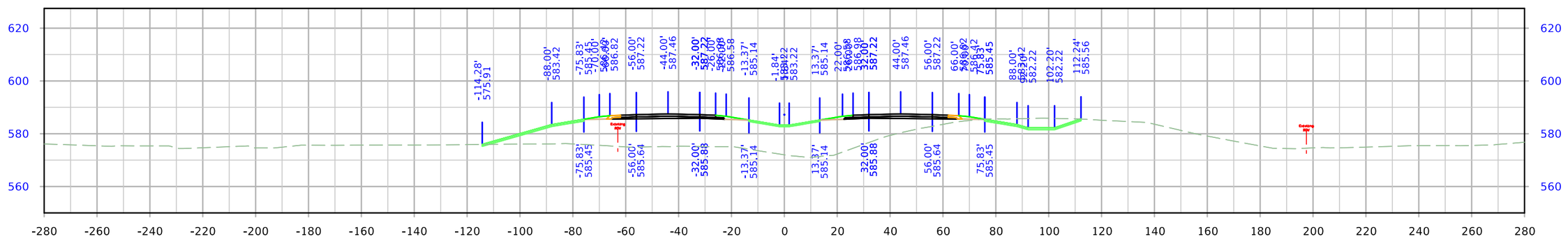
ML - US61



STA. 2198+00.00



STA. 2197+00.00

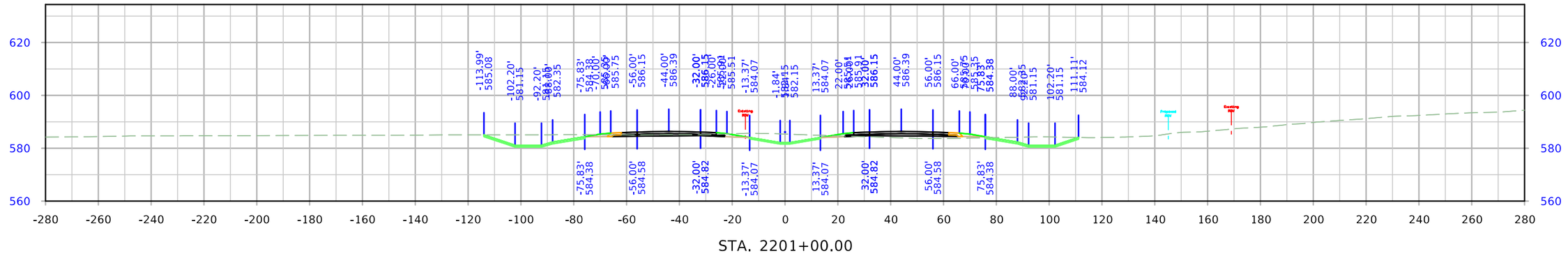


STA. 2196+00.00

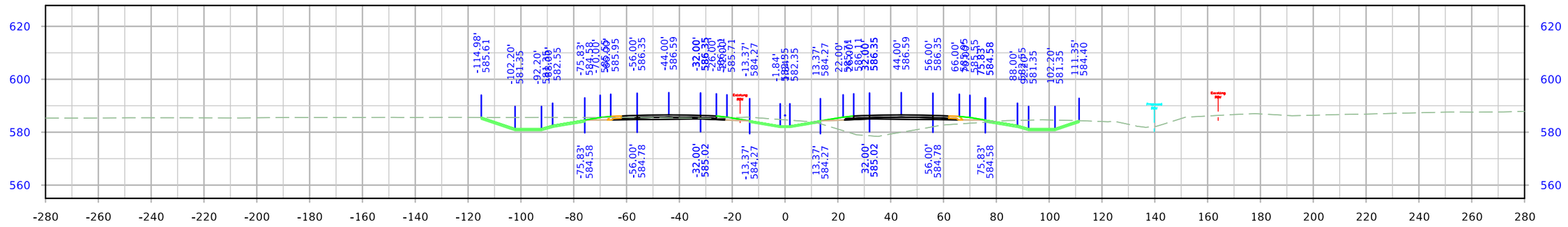
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.30	

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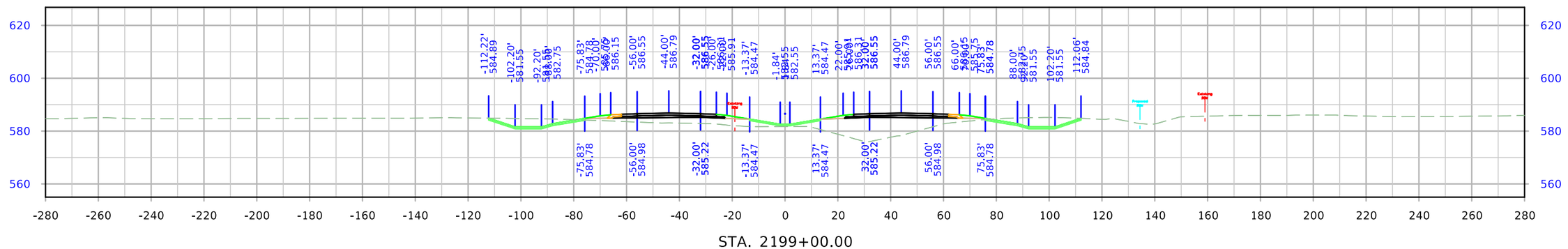
ML - US61



STA. 2201+00.00



STA. 2200+00.00

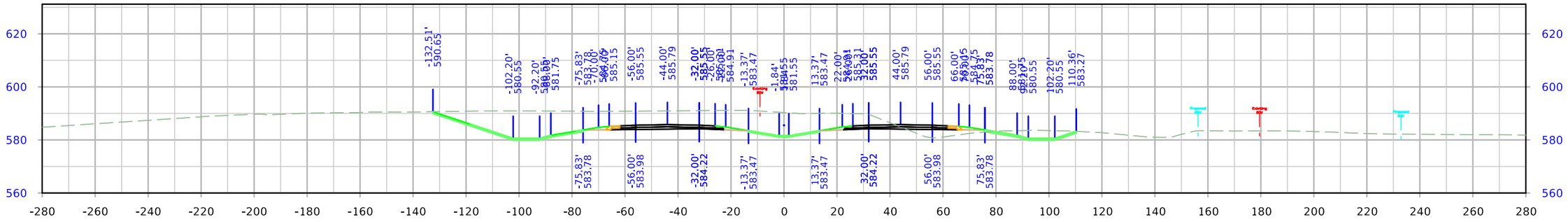


STA. 2199+00.00

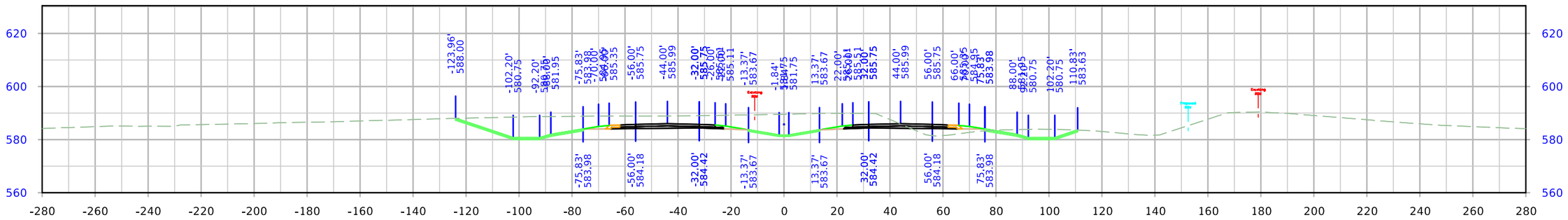
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.31

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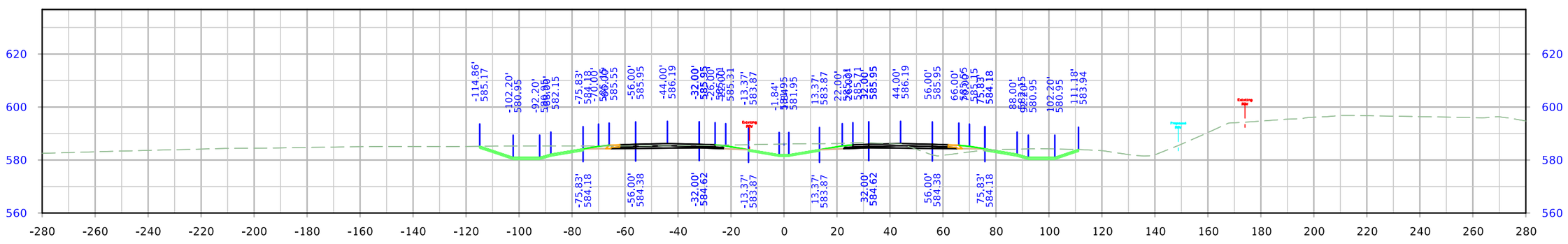
ML - US61



STA. 2204+00.00



STA. 2203+00.00

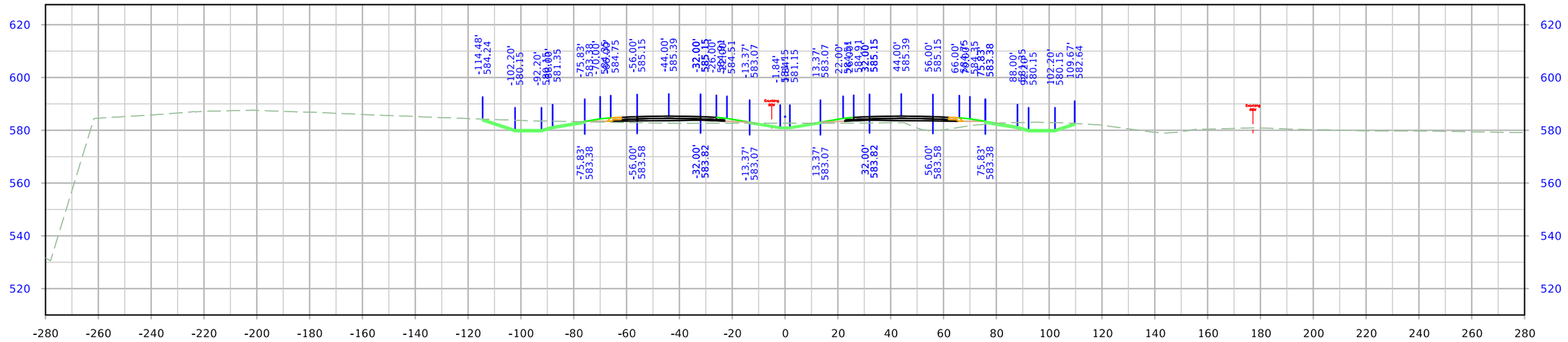


STA. 2202+00.00

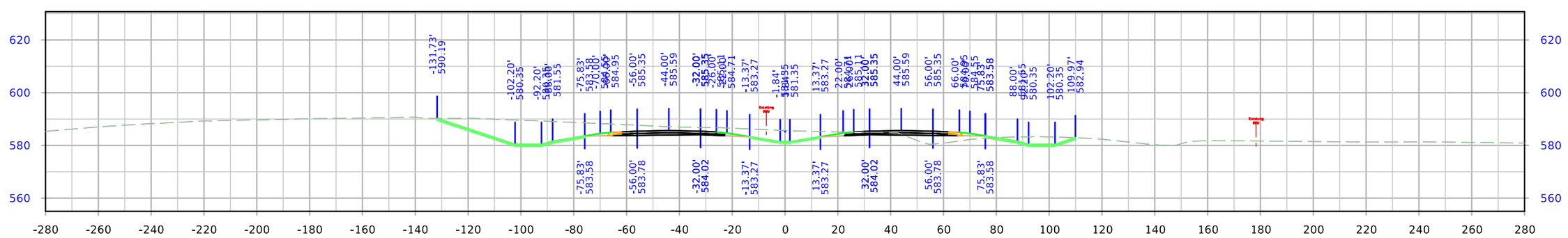
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.32

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ML - US61



STA. 2206+00.00

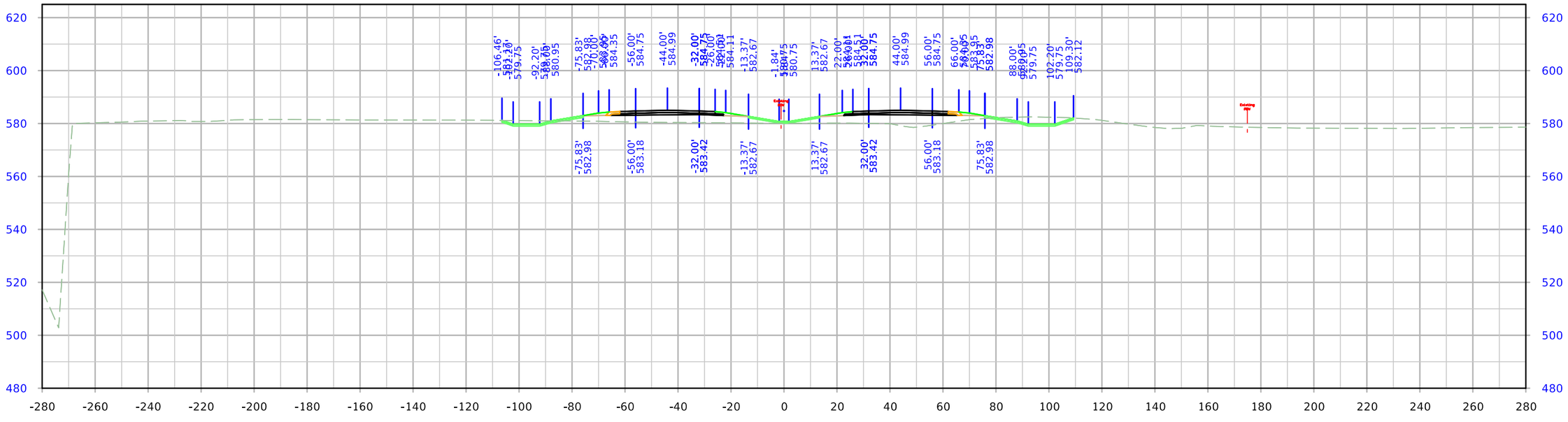


STA. 2205+00.00

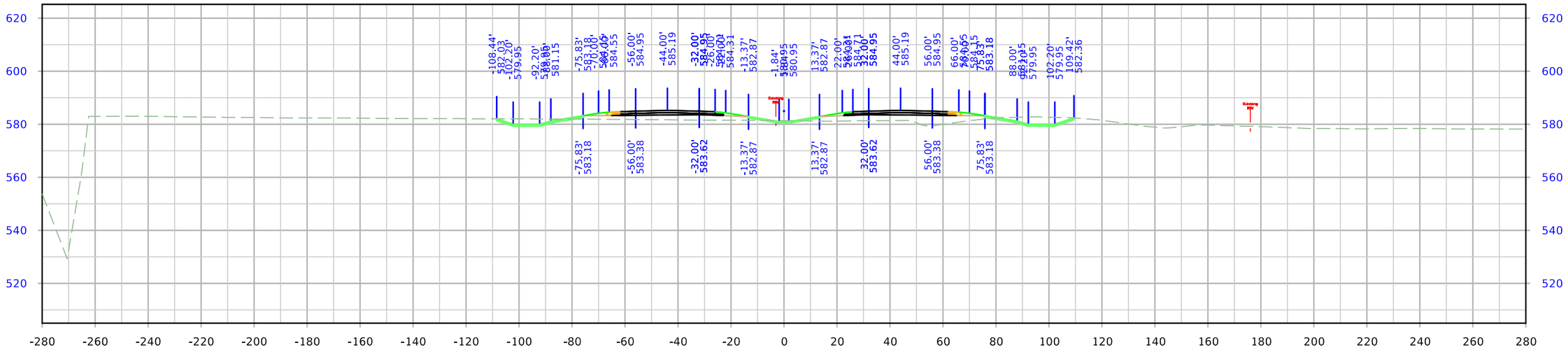
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.33

3:44:52 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2208+00.00

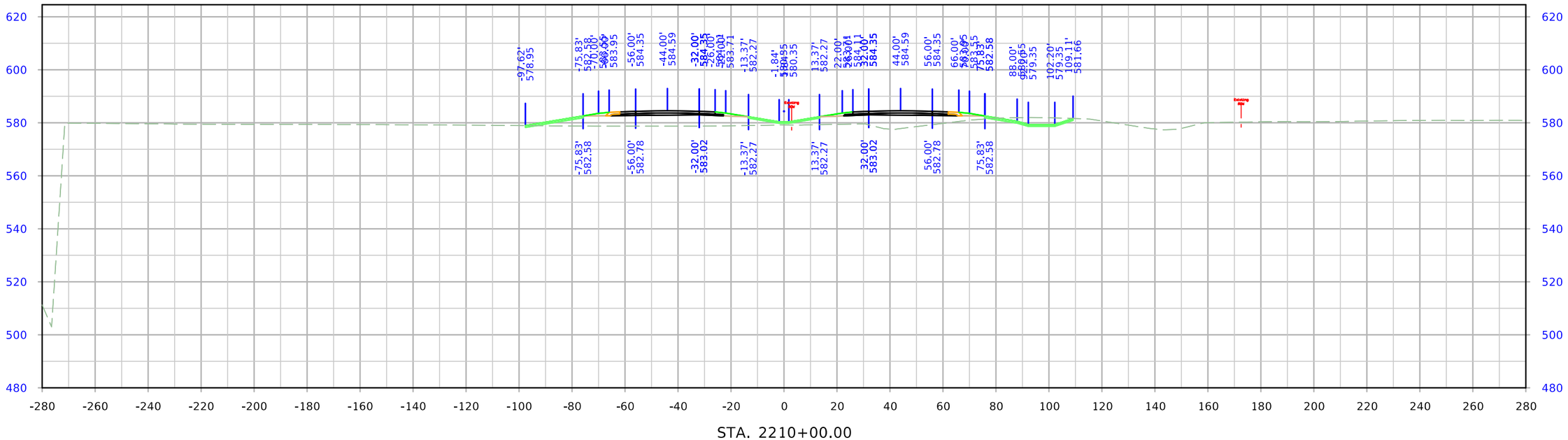


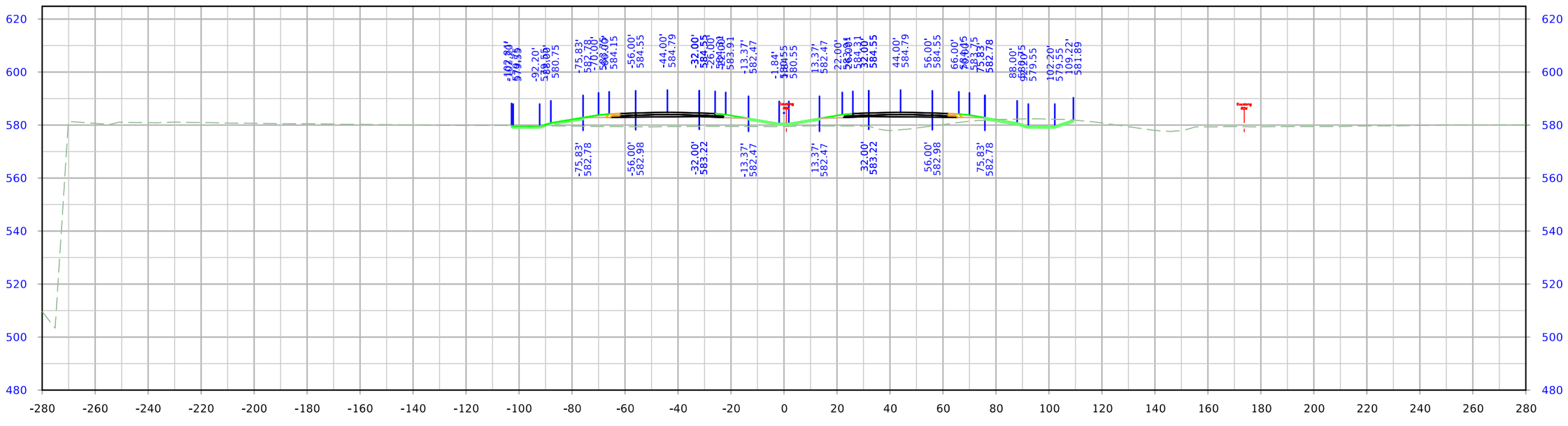
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FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.34

3:44:55 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61

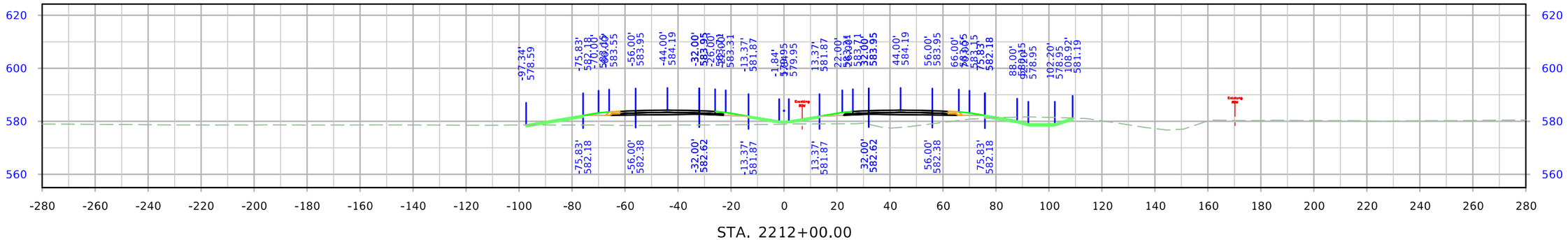




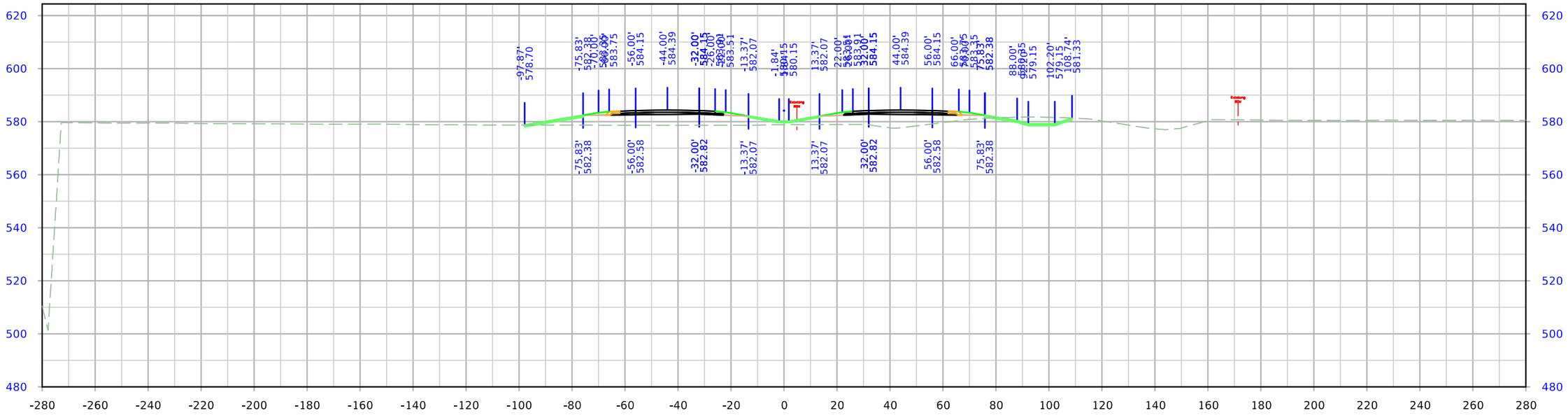
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3:44:58 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2212+00.00

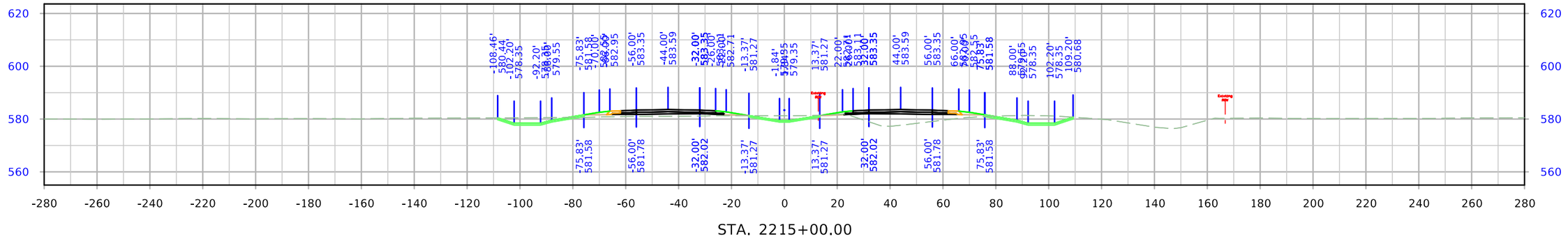


STA. 2211+00.00

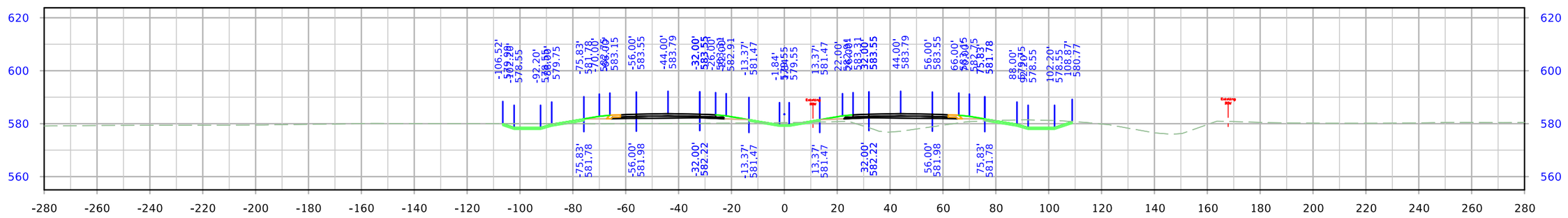
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.36

3:45:01 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

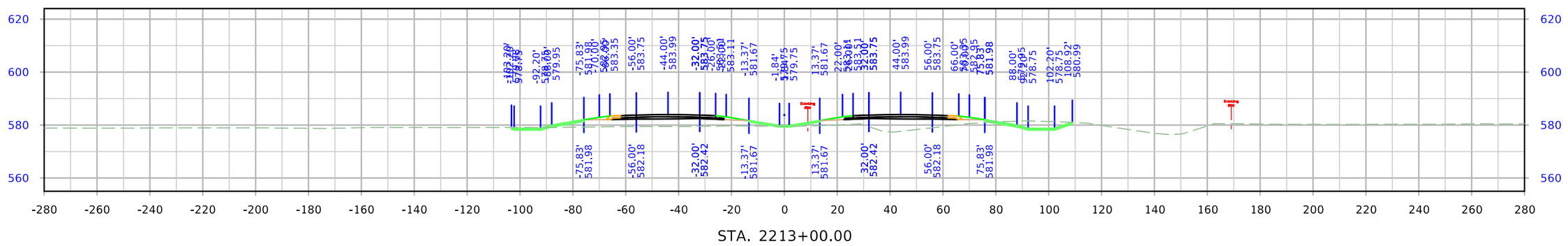
ML - US61



STA. 2215+00.00



STA. 2214+00.00

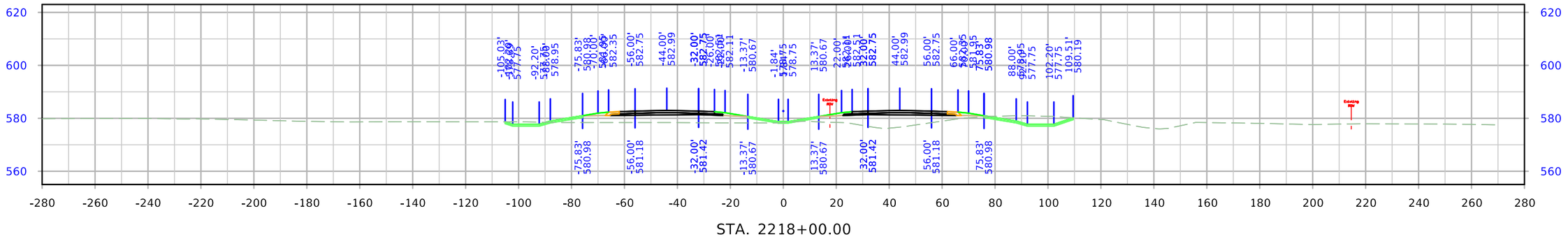


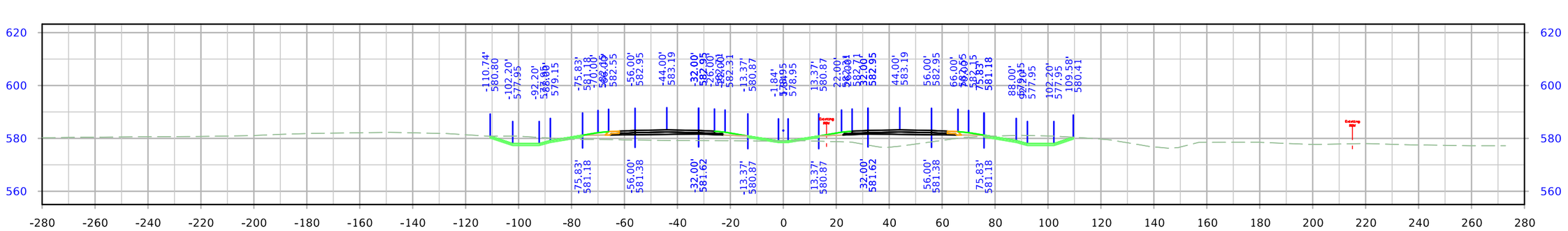
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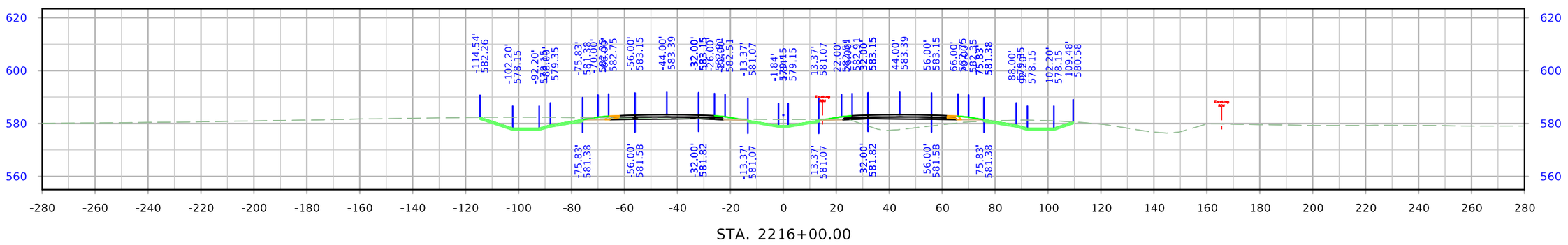
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.37

3:45:06 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



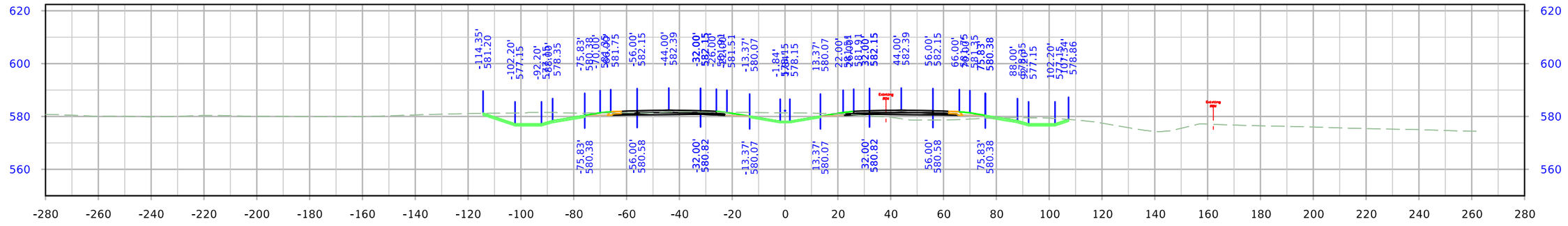




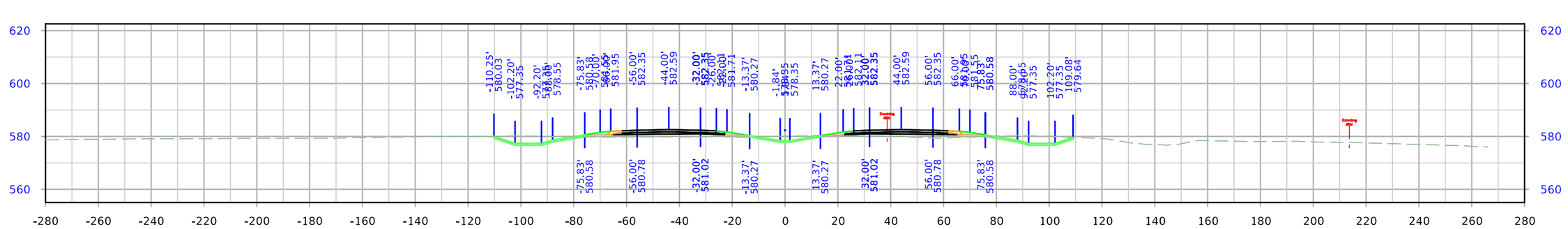
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.38

3:45:10 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

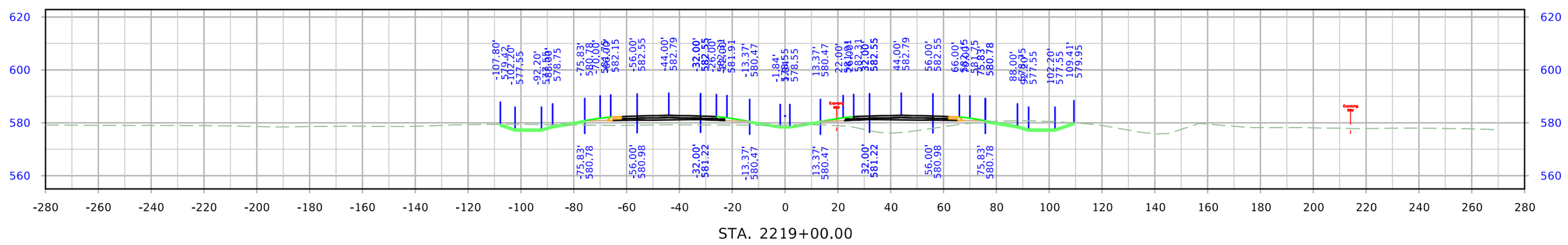
ML - US61



STA. 2221+00.00



STA. 2220+00.00

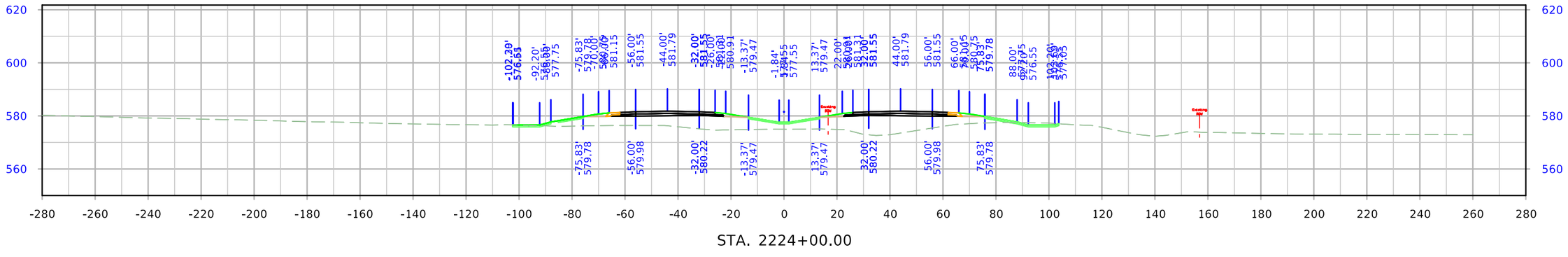


STA. 2219+00.00

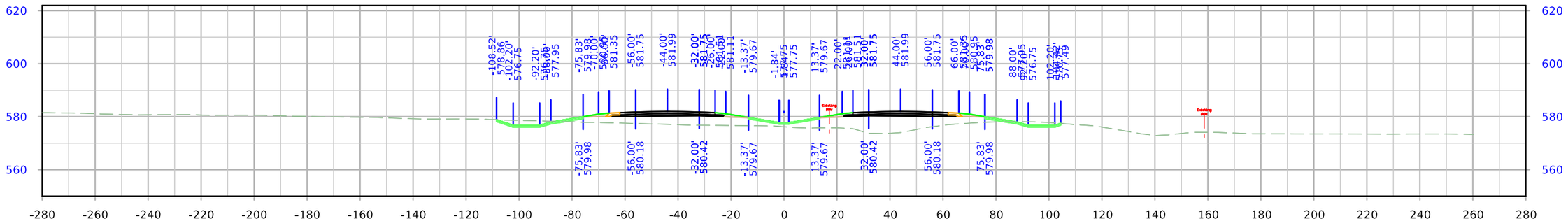
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.39

3:45:14 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

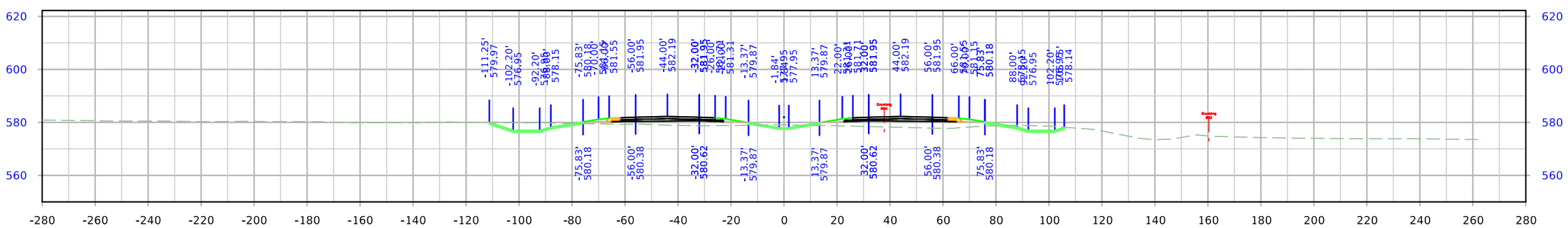
ML - US61



STA. 2224+00.00



STA. 2223+00.00

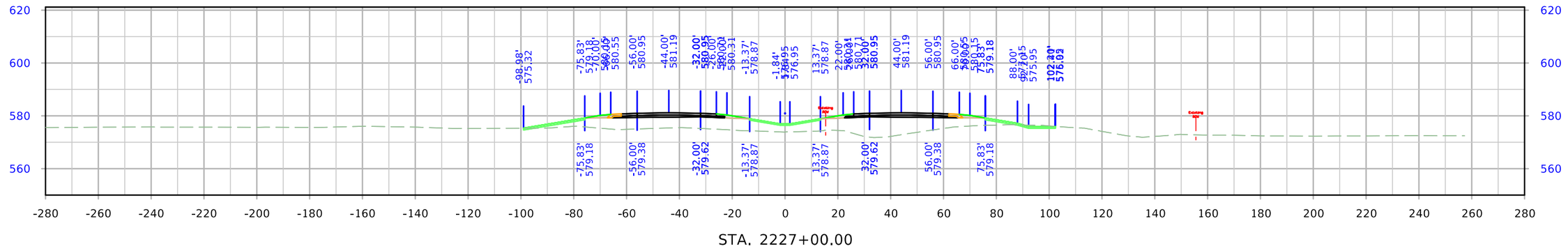


STA. 2222+00.00

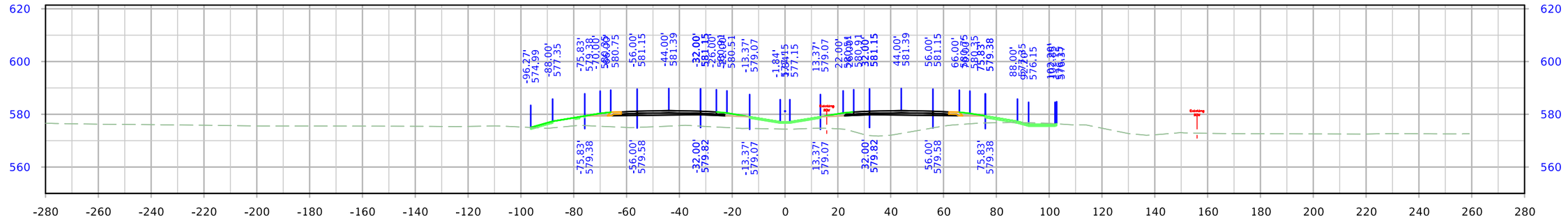
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.40

3:45:19 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

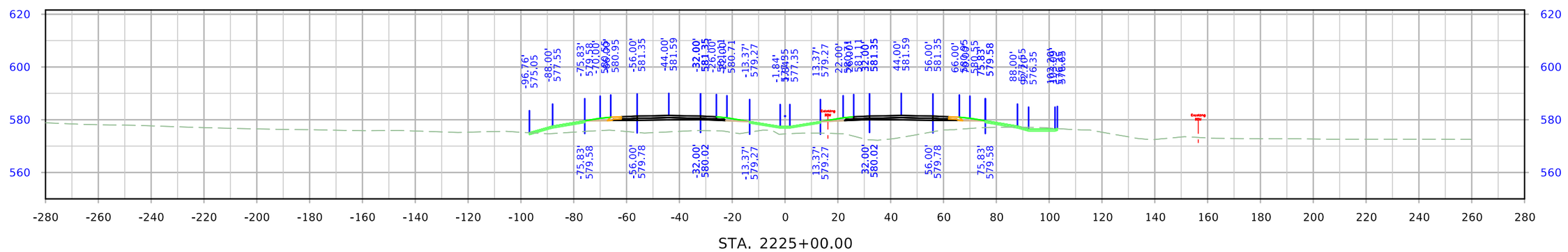
ML - US61



STA. 2227+00.00



STA. 2226+00.00

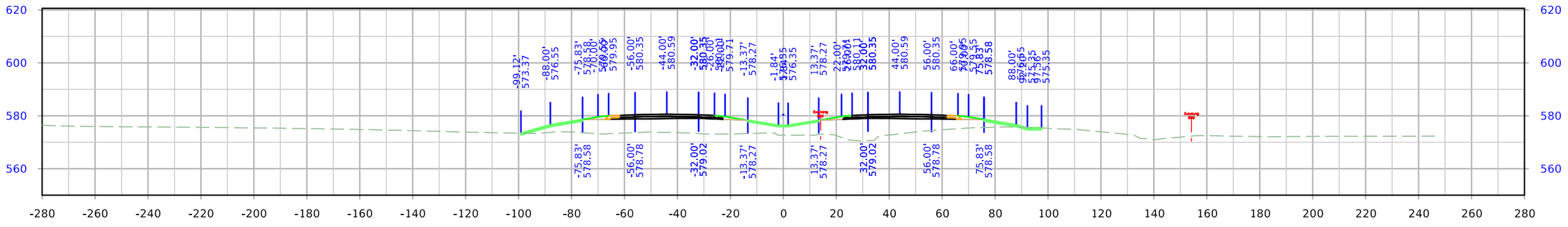


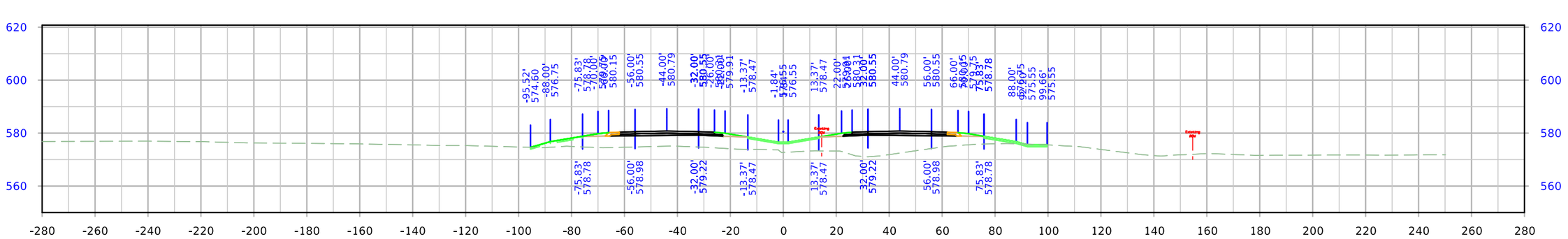
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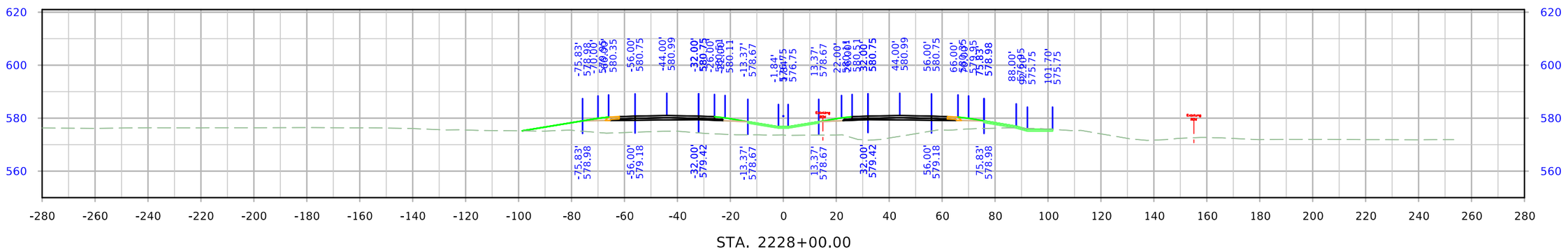
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.41

3:45:23 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



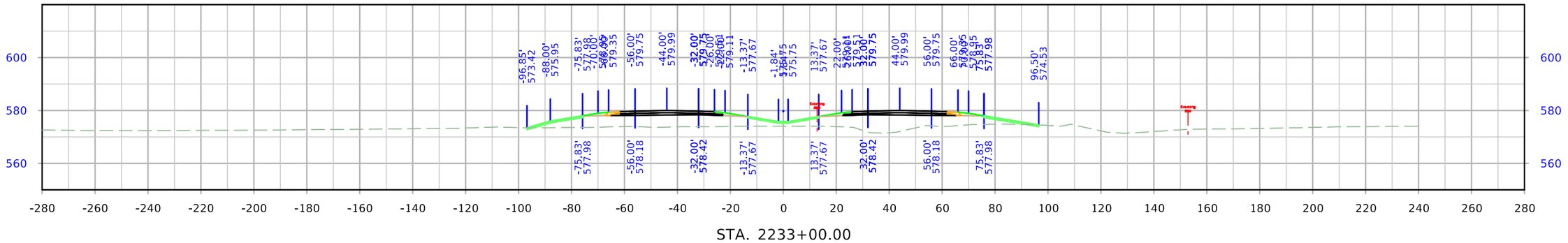




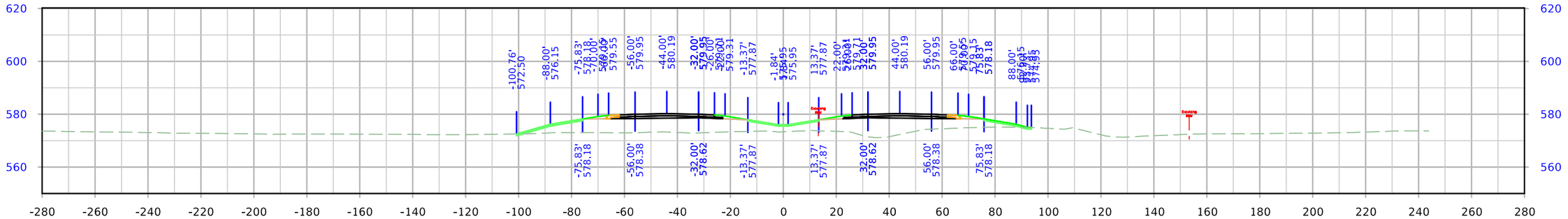
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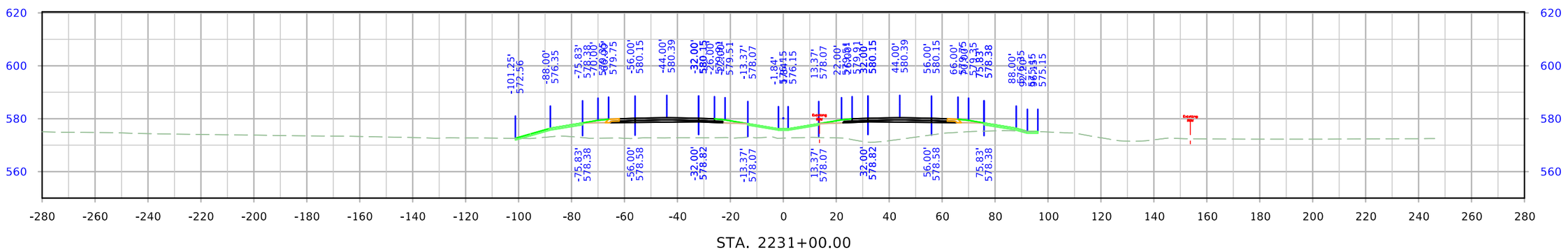
ML - US61



STA. 2233+00.00



STA. 2232+00.00

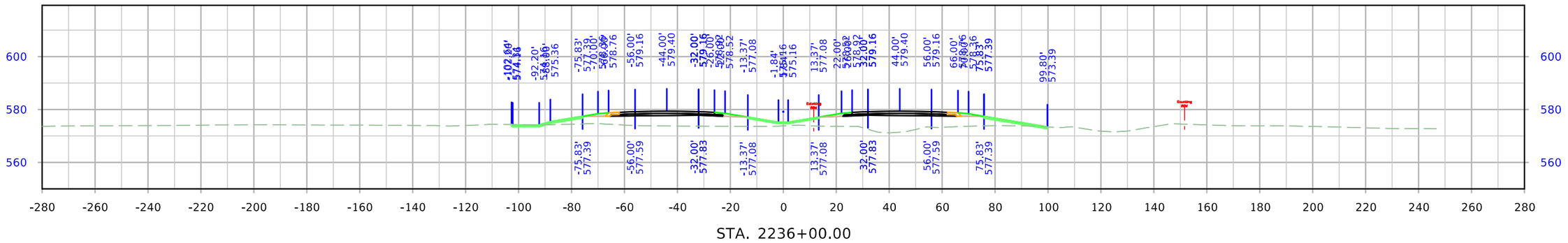


STA. 2231+00.00

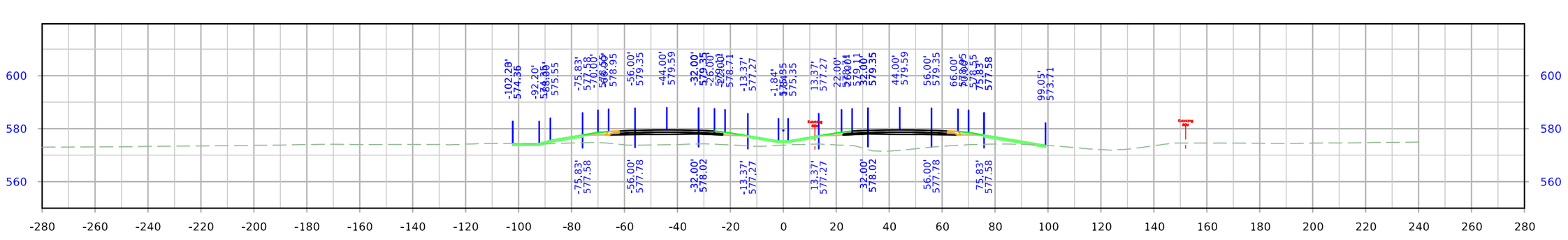
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.43

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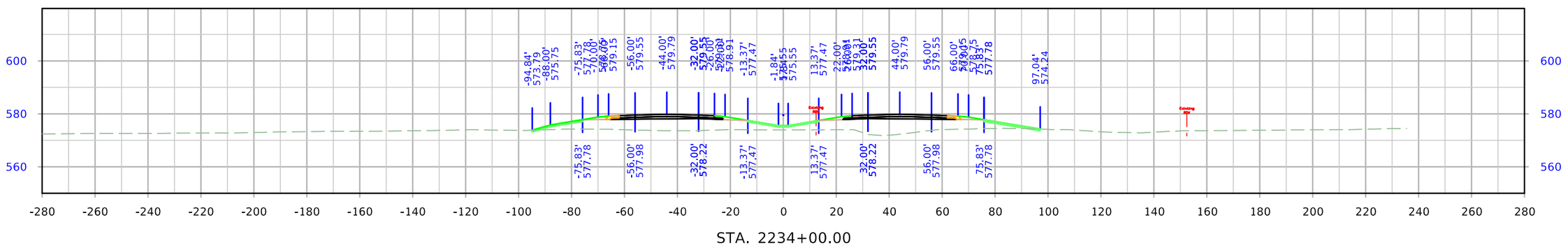
ML - US61



STA. 2236+00.00



STA. 2235+00.00

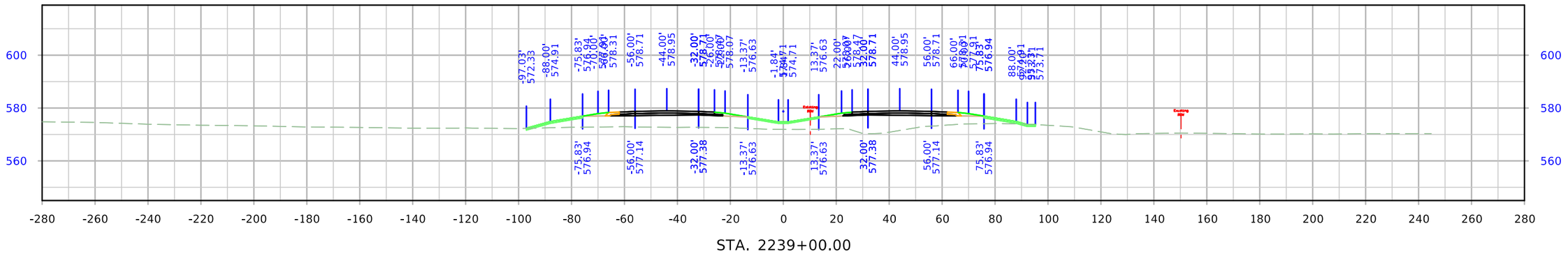


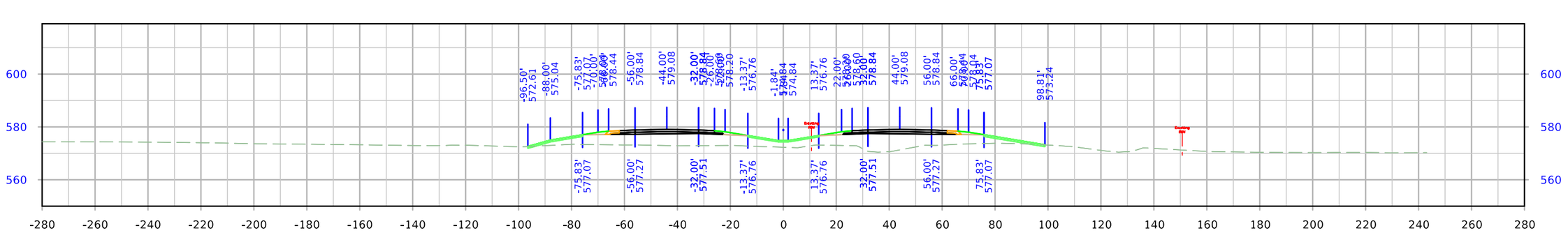
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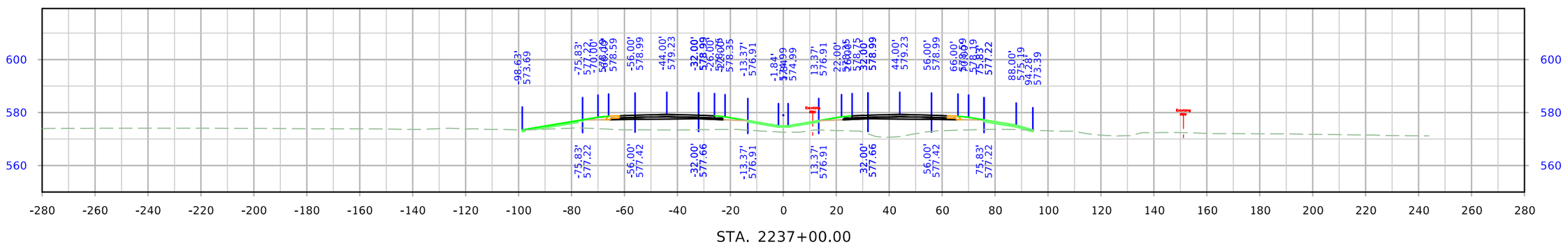
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.44

3:45:36 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



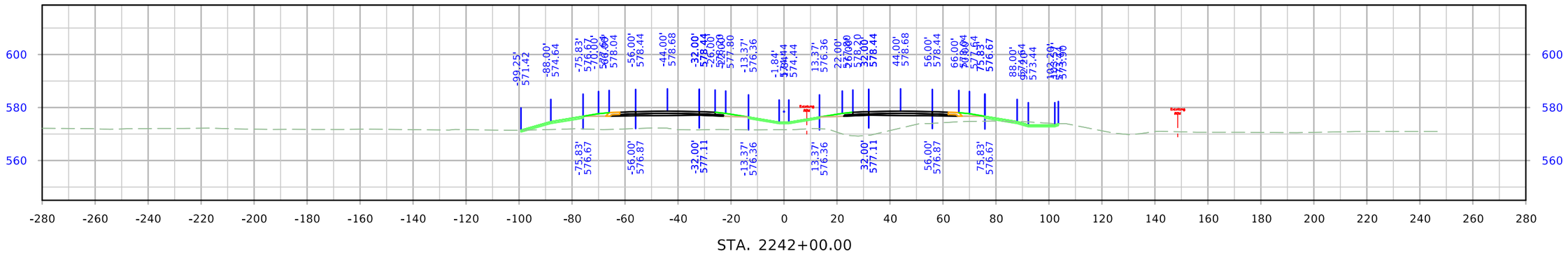




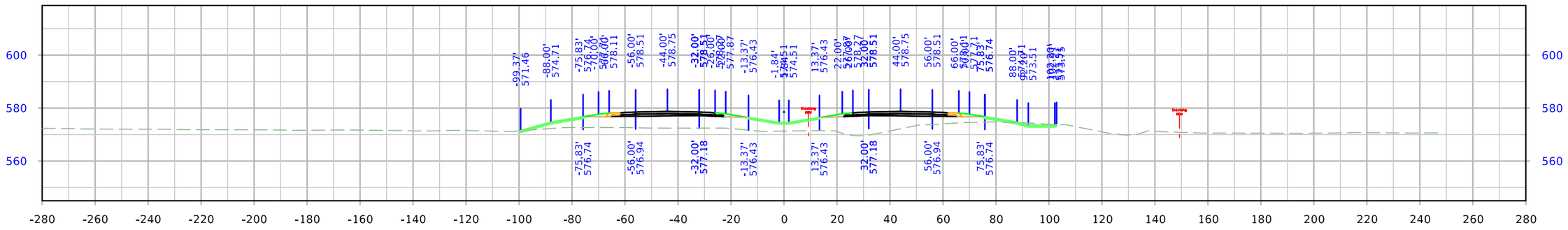
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.45

3:45:41 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

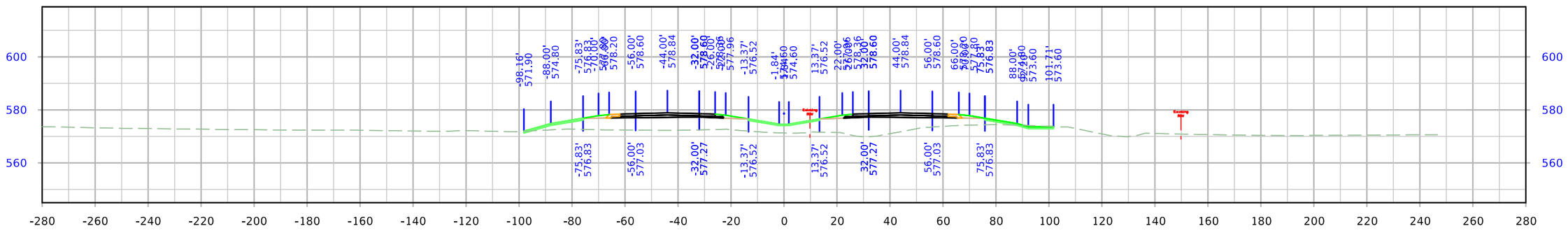
ML - US61



STA. 2242+00.00



STA. 2241+00.00

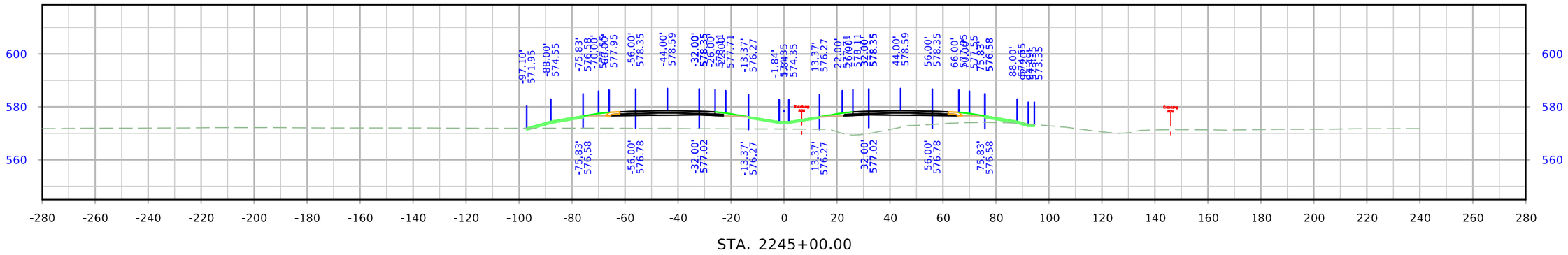


STA. 2240+00.00

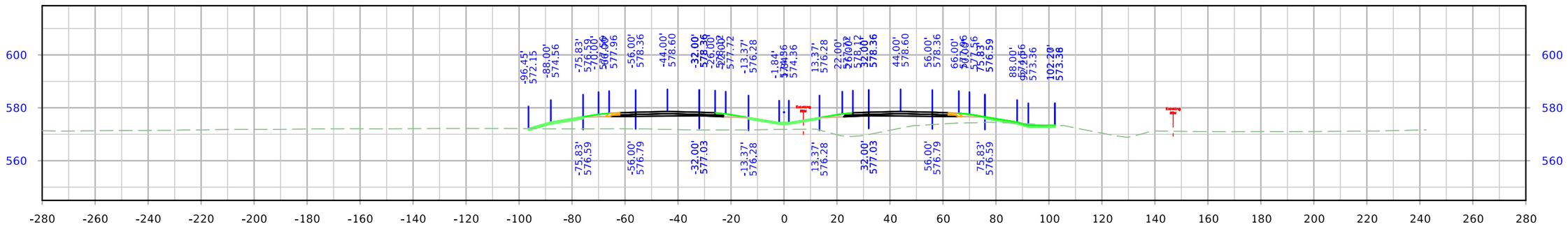
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.46

3:45:45 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

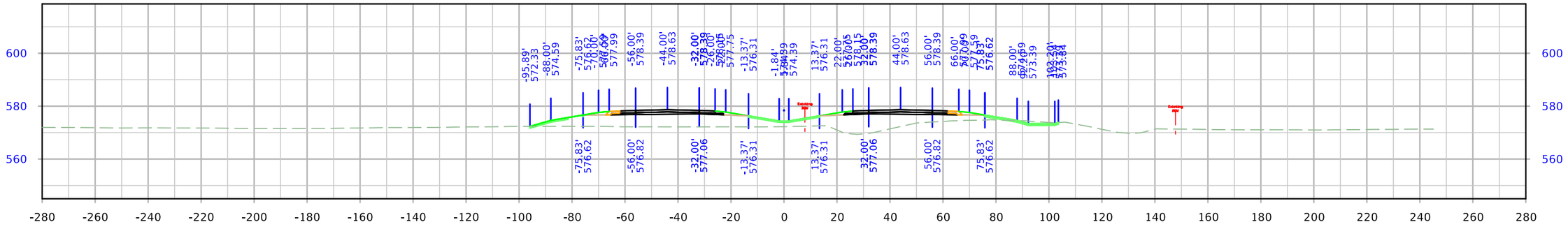
ML - US61



STA. 2245+00.00



STA. 2244+00.00

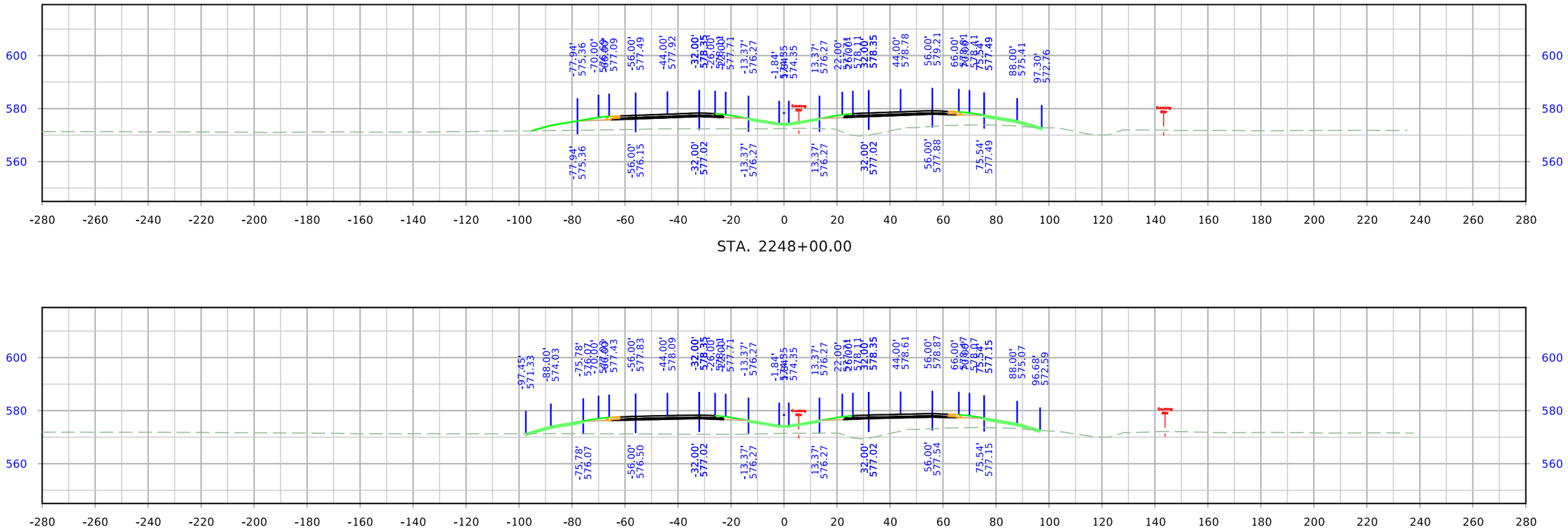


STA. 2243+00.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.47

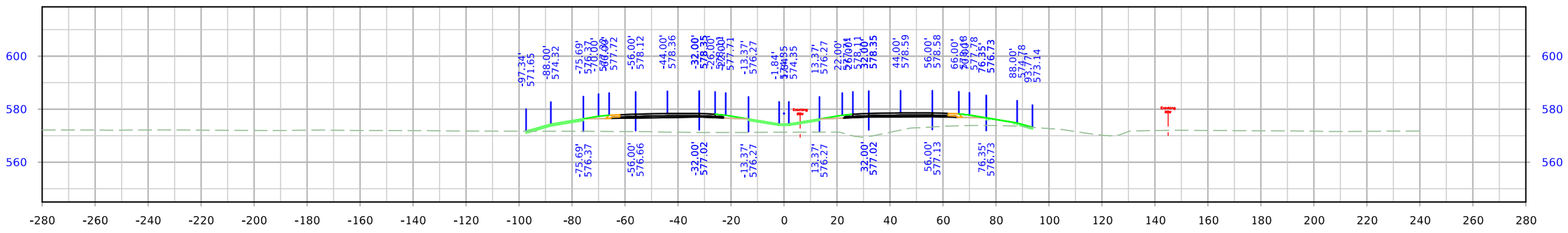
3:45:50 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2248+00.00

STA. 2247+00.00

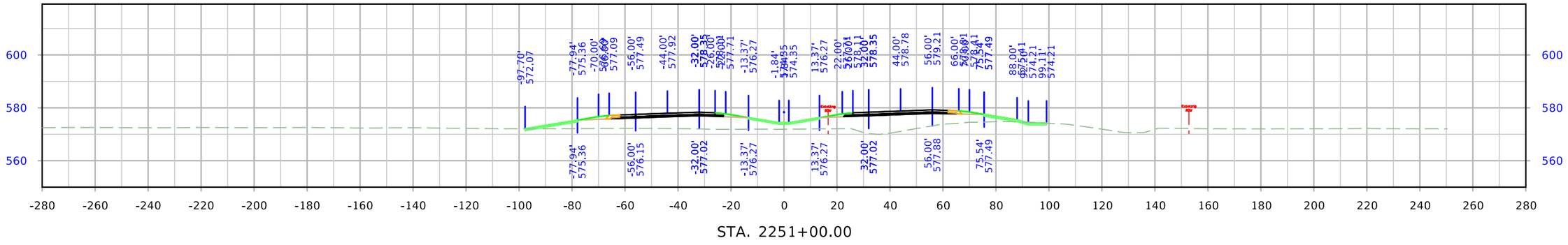


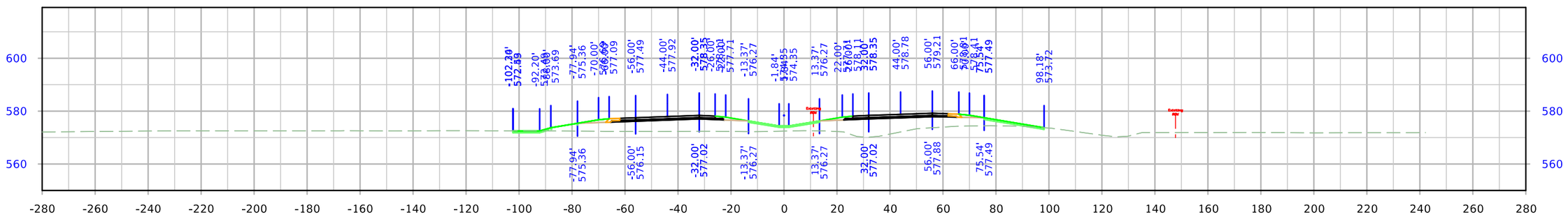
STA. 2246+00.00

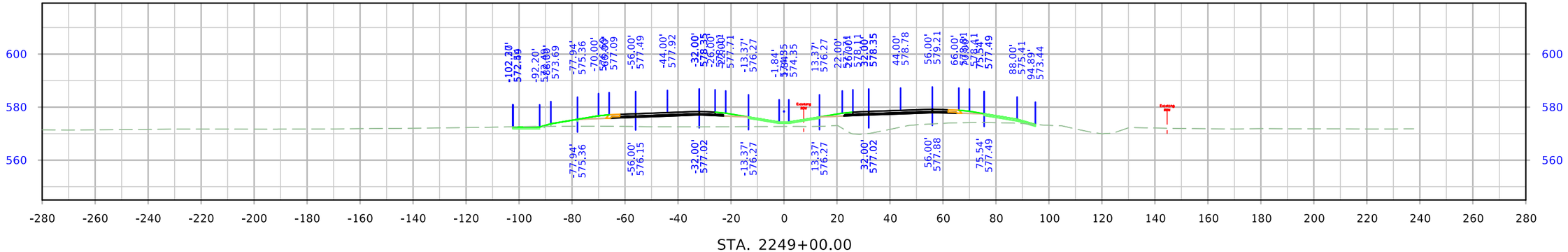
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ML - US61



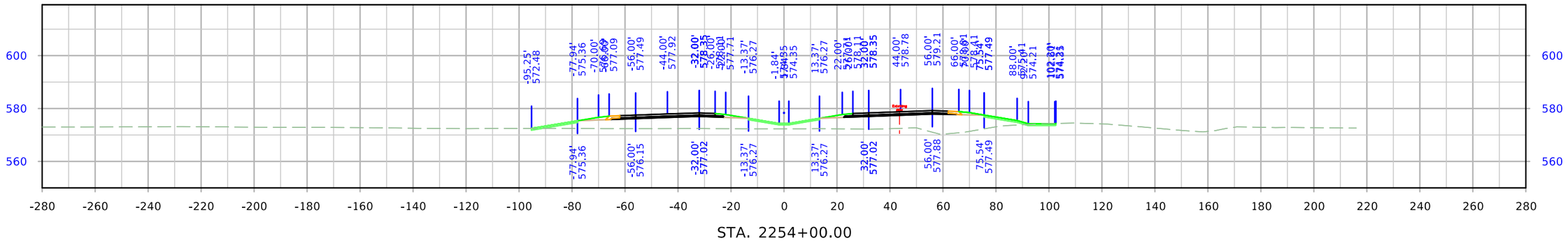




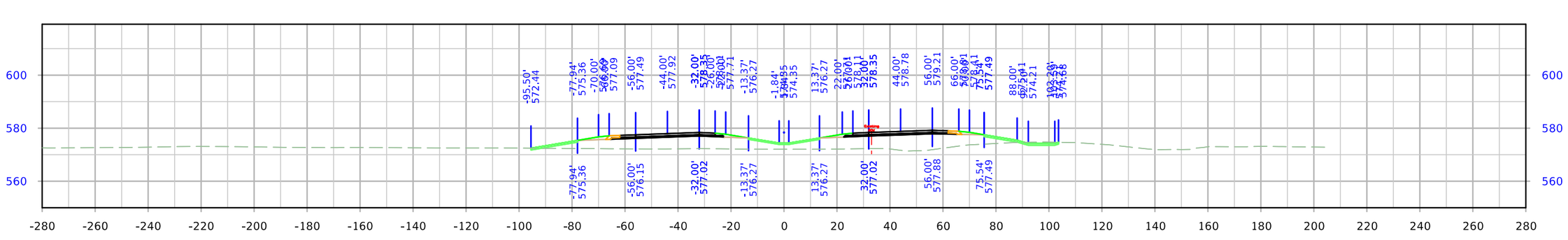
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.49

3:45:59 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

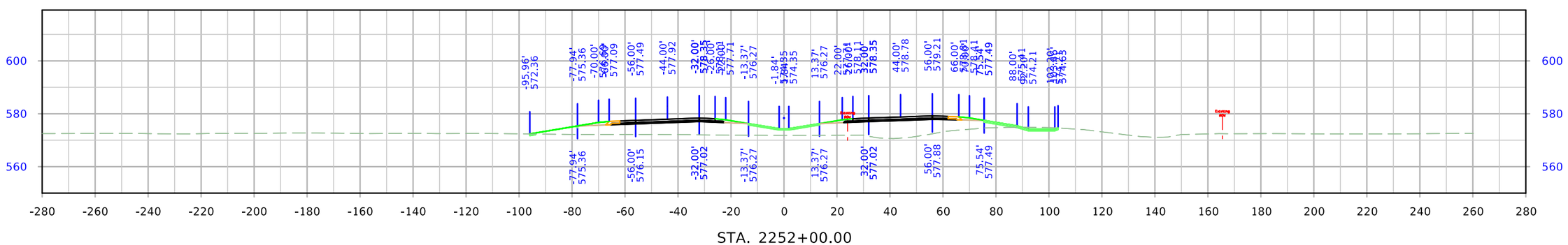
ML - US61



STA. 2254+00.00



STA. 2253+00.00

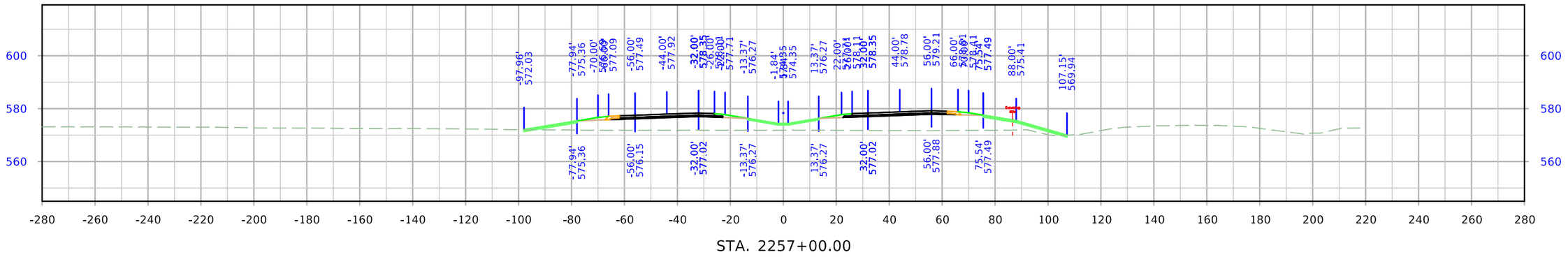


STA. 2252+00.00

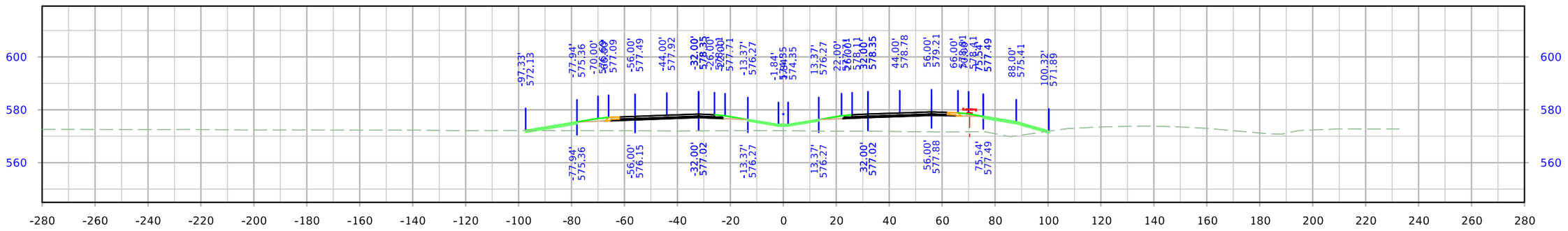
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.50

3:46:04 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

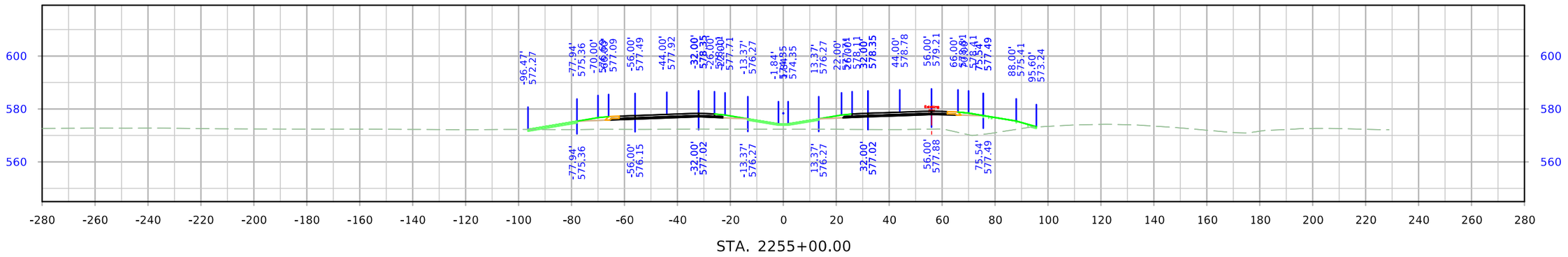
ML - US61



STA. 2257+00.00



STA. 2256+00.00

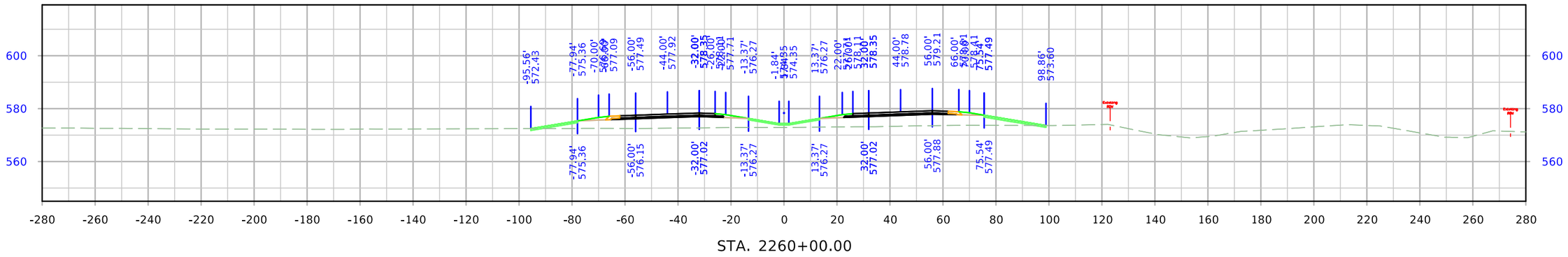


STA. 2255+00.00

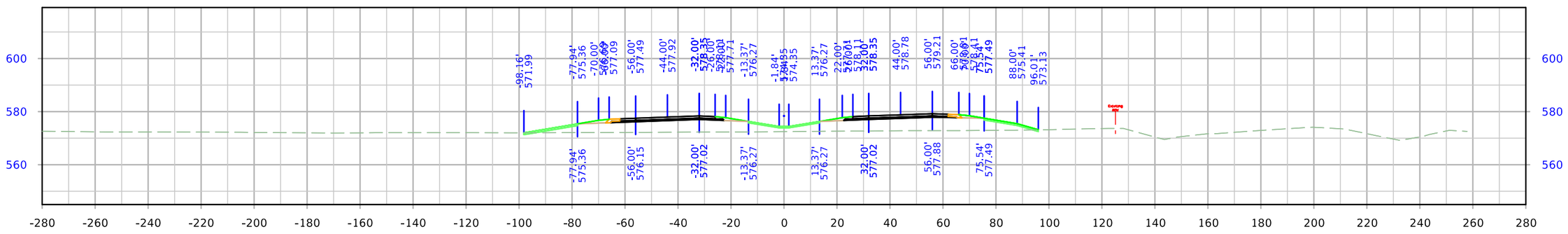
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.51

3:46:09 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

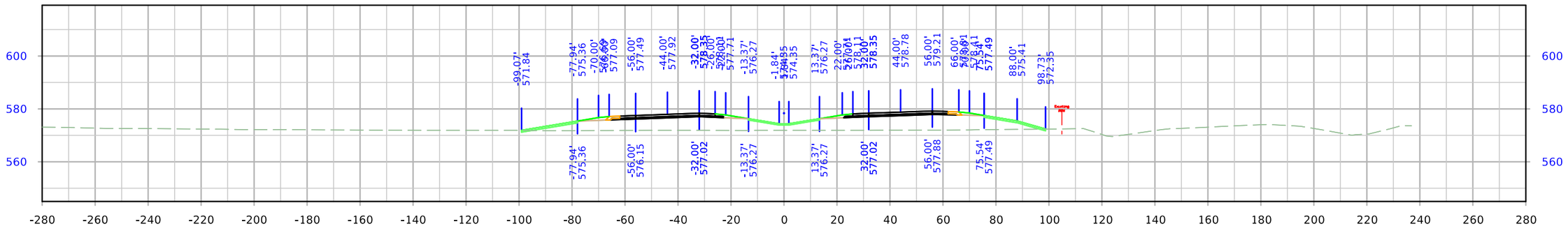
ML - US61



STA. 2260+00.00



STA. 2259+00.00

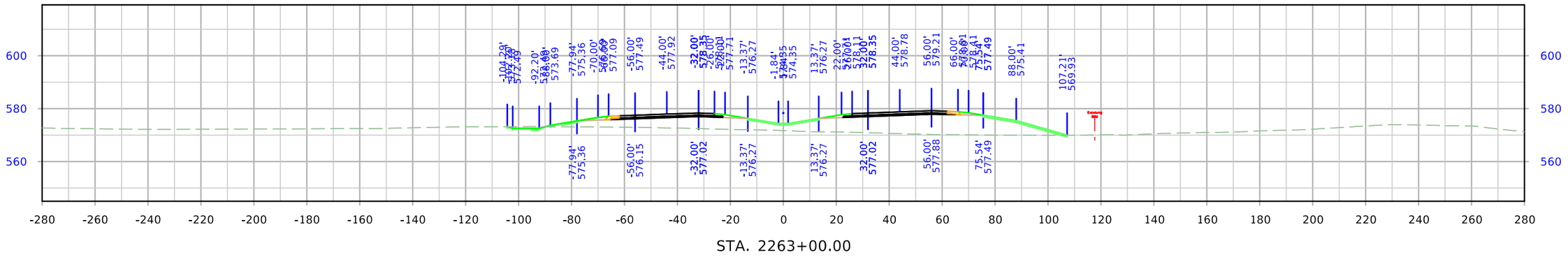


STA. 2258+00.00

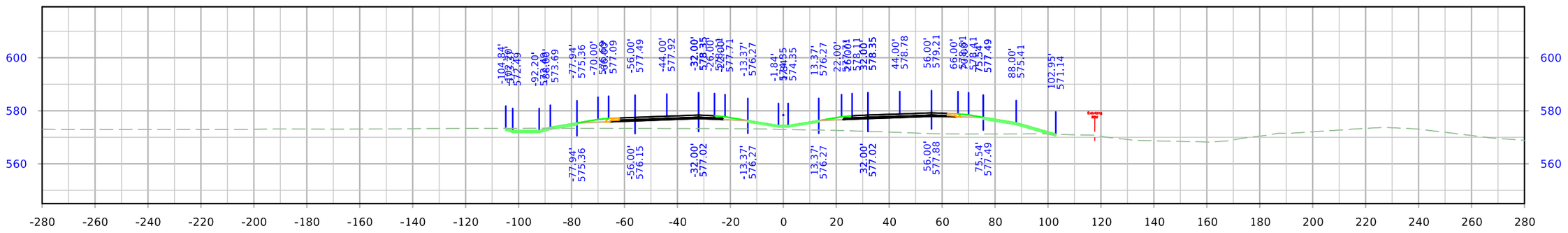
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.52	

3:46:14 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

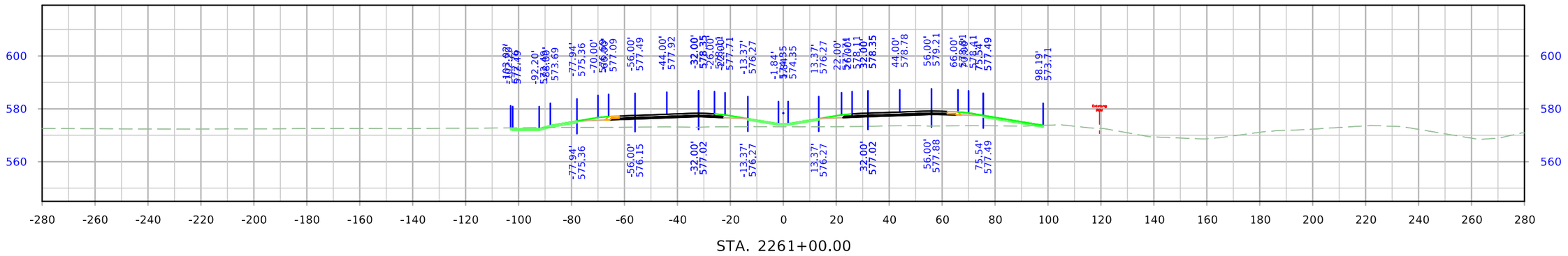
ML - US61



STA. 2263+00.00



STA. 2262+00.00

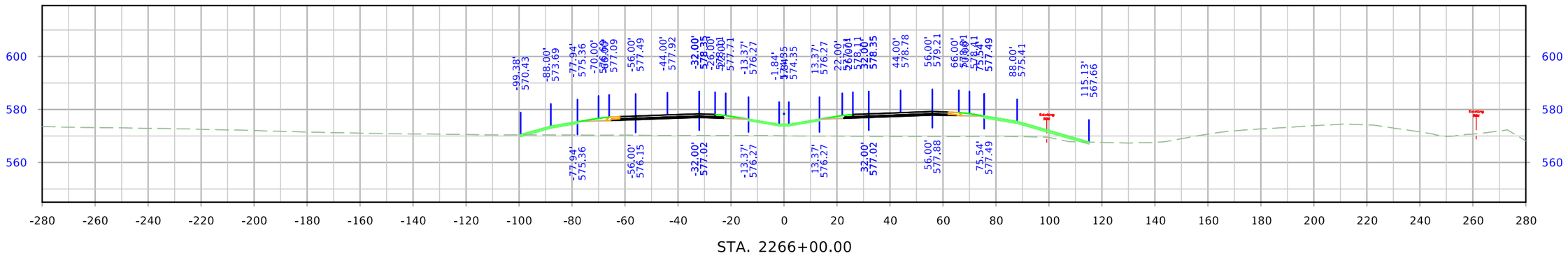


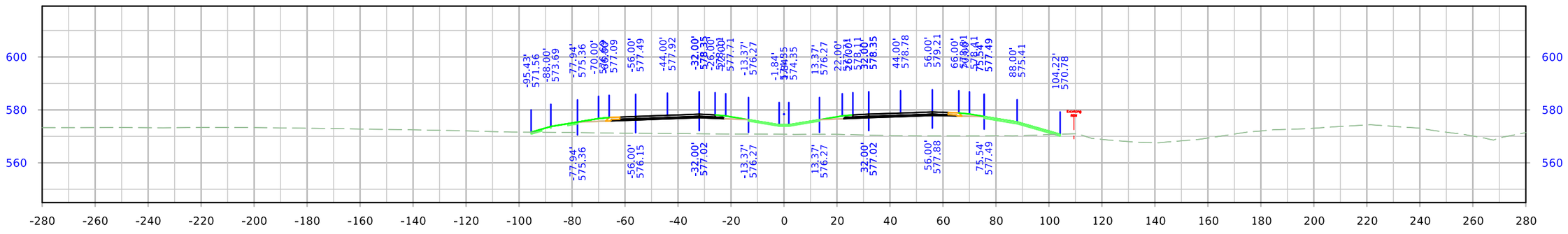
STA. 2261+00.00

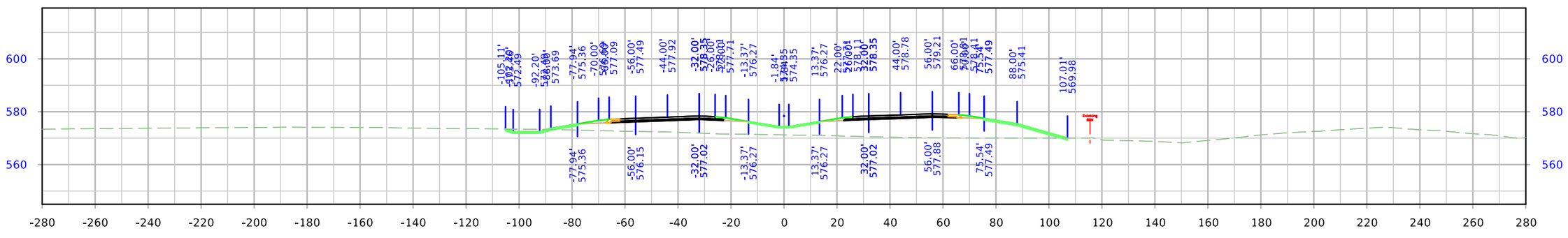
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.53

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ML - US61



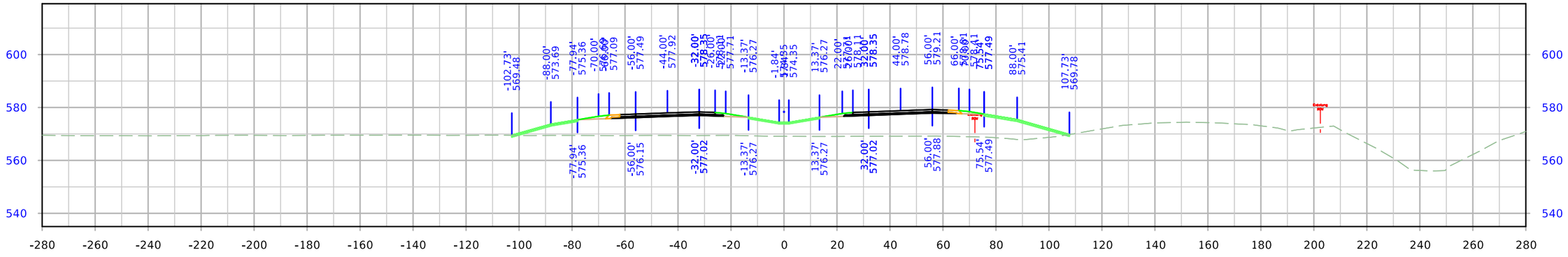




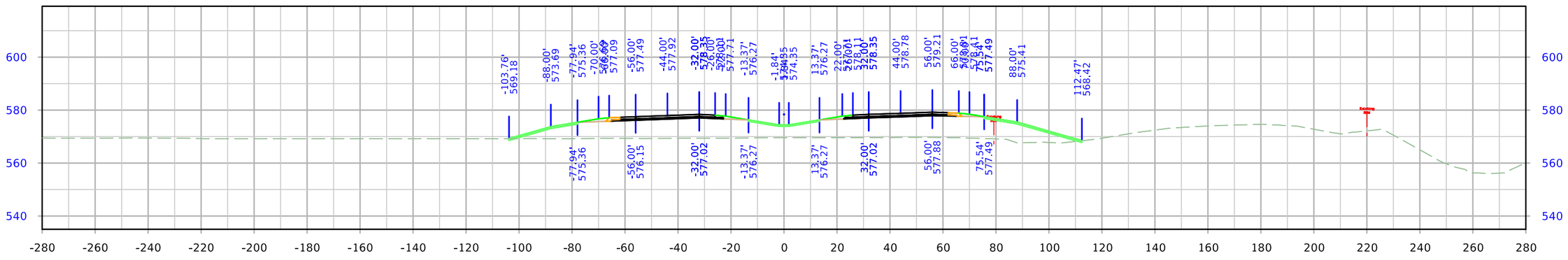
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.54

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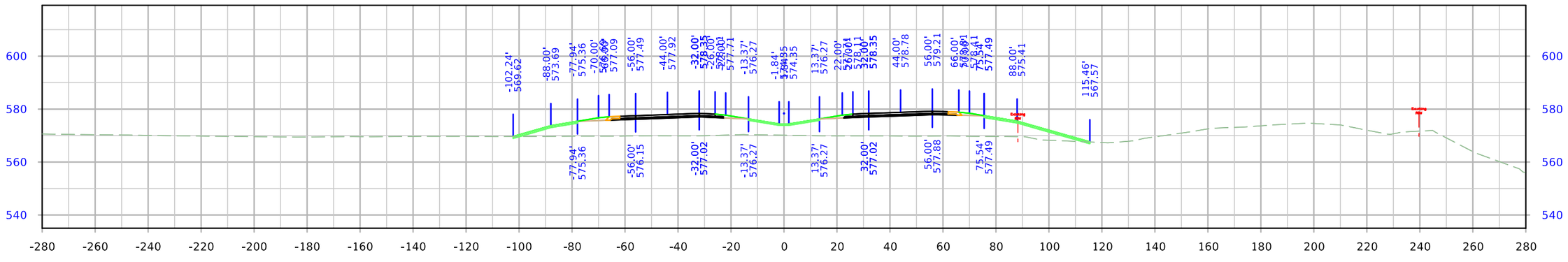
ML - US61



STA. 2269+00.00



STA. 2268+00.00

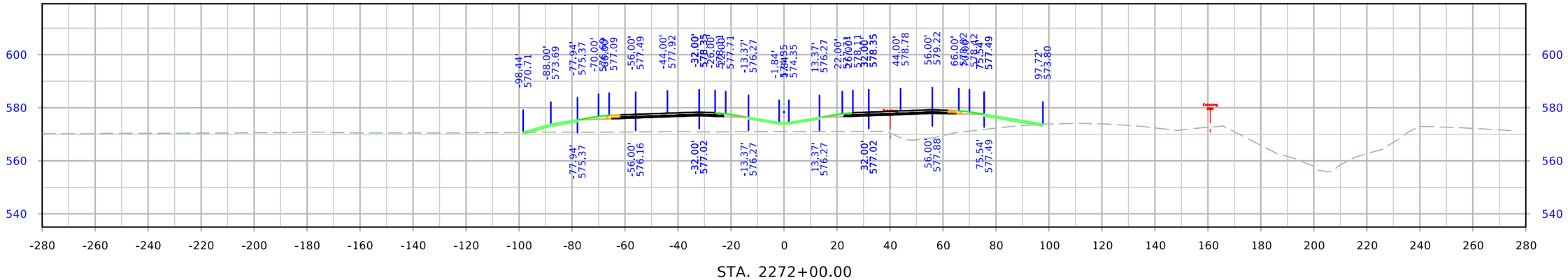


STA. 2267+00.00

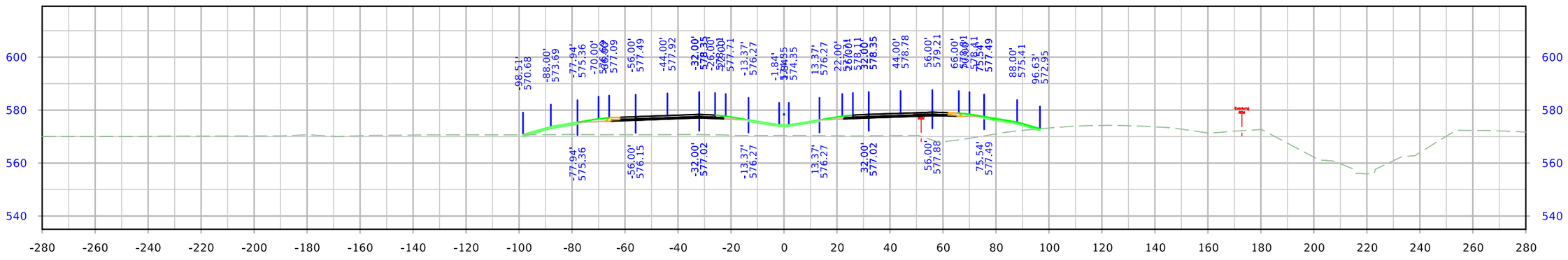
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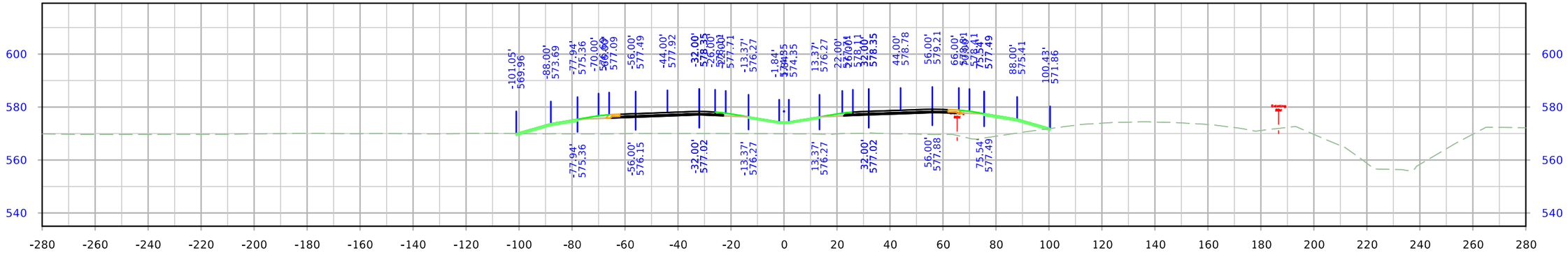
ML - US61



STA. 2272+00.00



STA. 2271+00.00

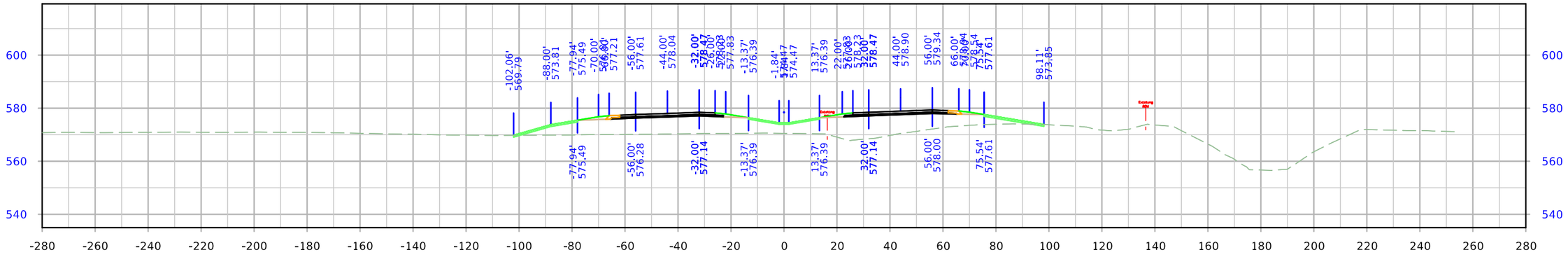


STA. 2270+00.00

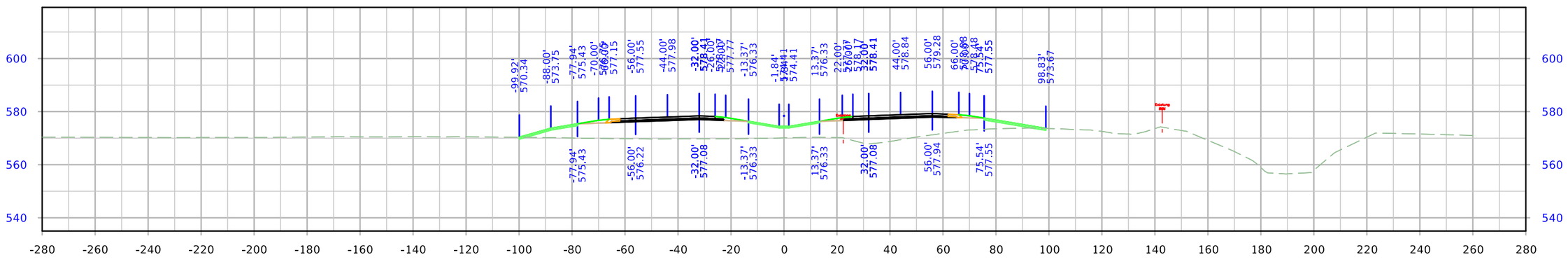
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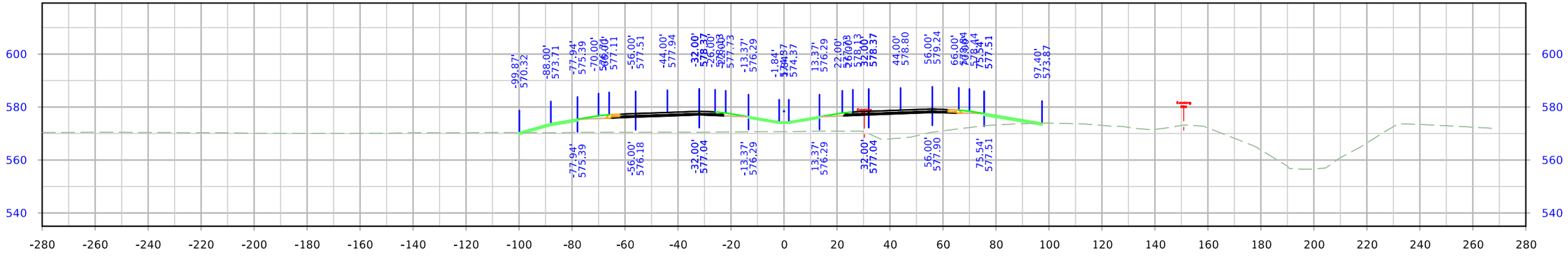
ML - US61



STA. 2275+00.00



STA. 2274+00.00

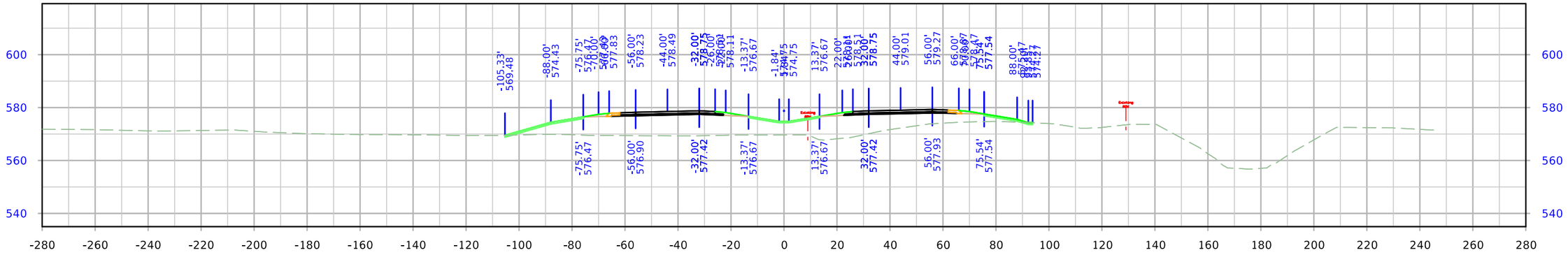


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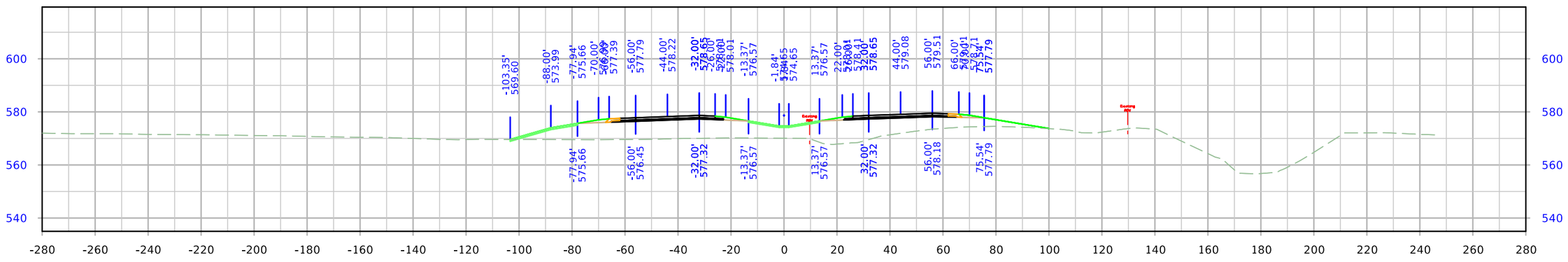
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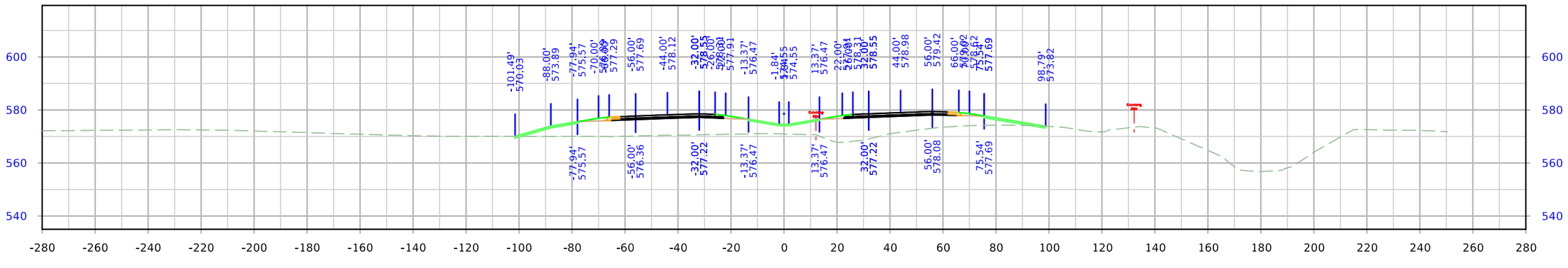
ML - US61



STA. 2278+00.00



STA. 2277+00.00

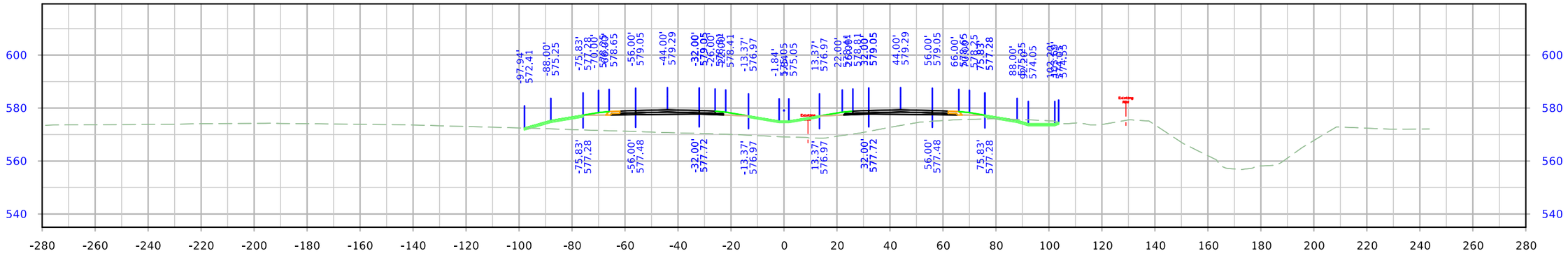


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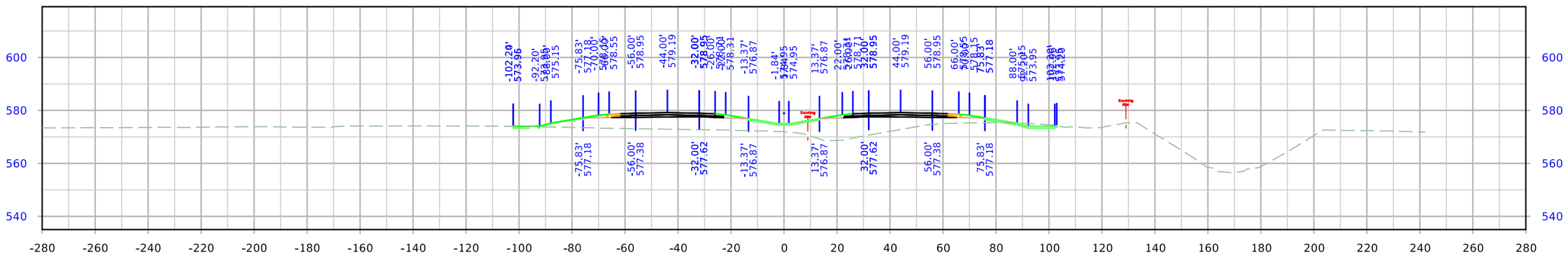
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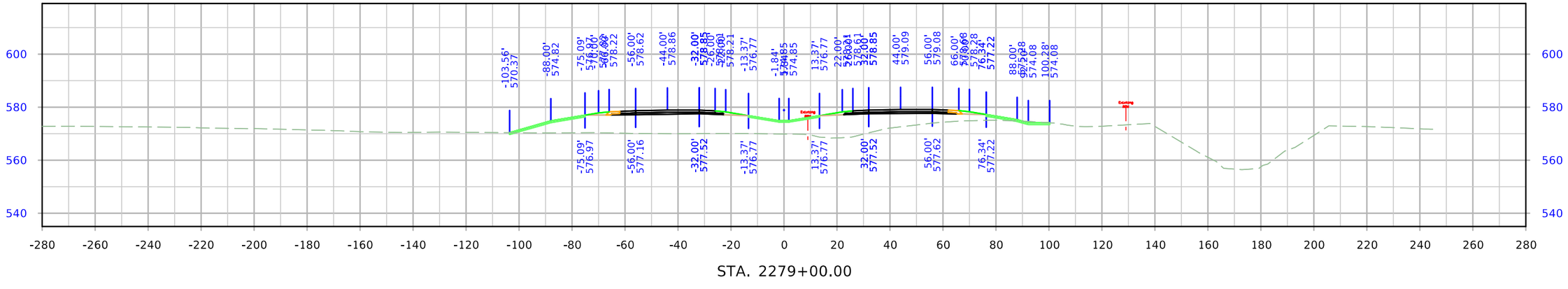
ML - US61



STA. 2281+00.00



STA. 2280+00.00

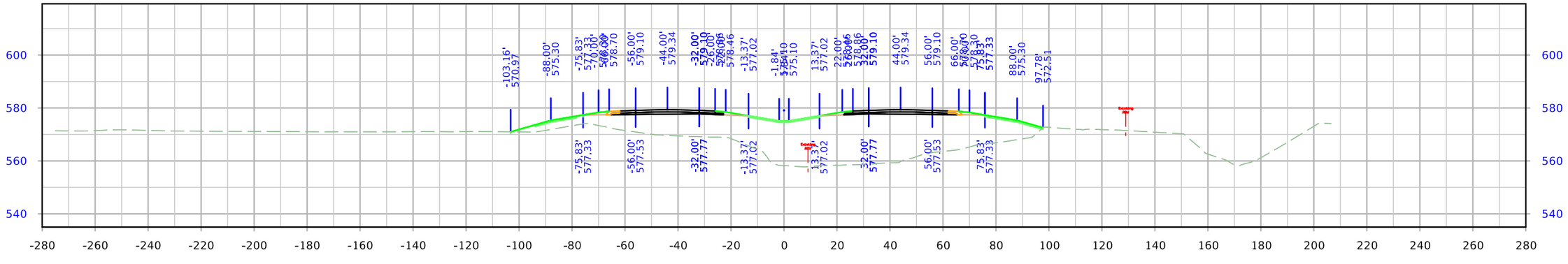


STA. 2279+00.00

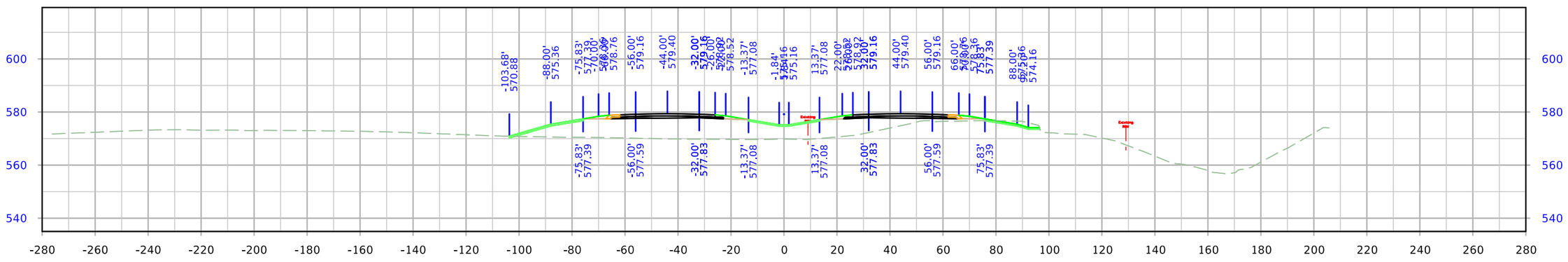
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.59

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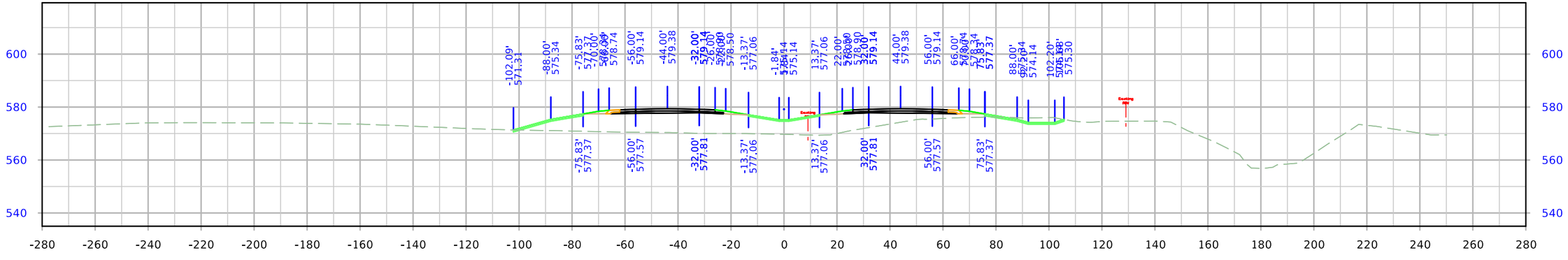
ML - US61



STA. 2284+00.00



STA. 2283+00.00

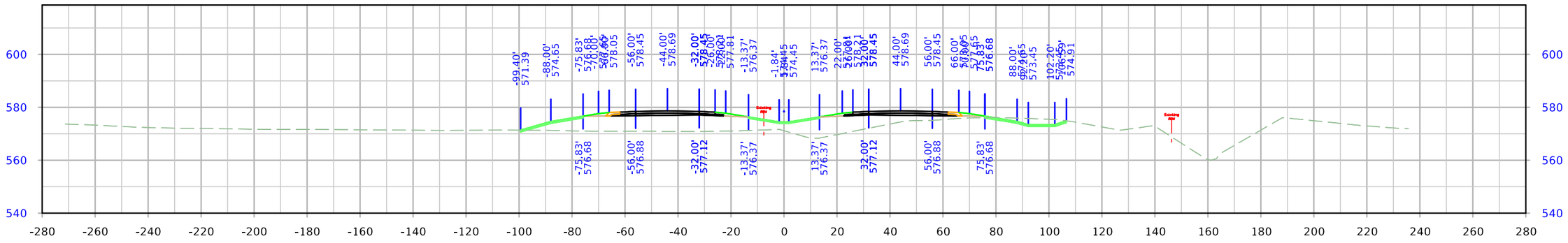


STA. 2282+00.00

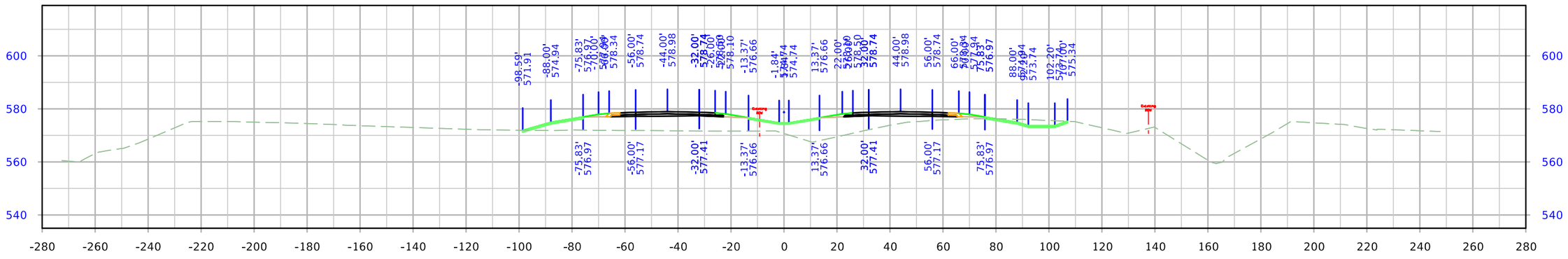
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.60	

3:46:54 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

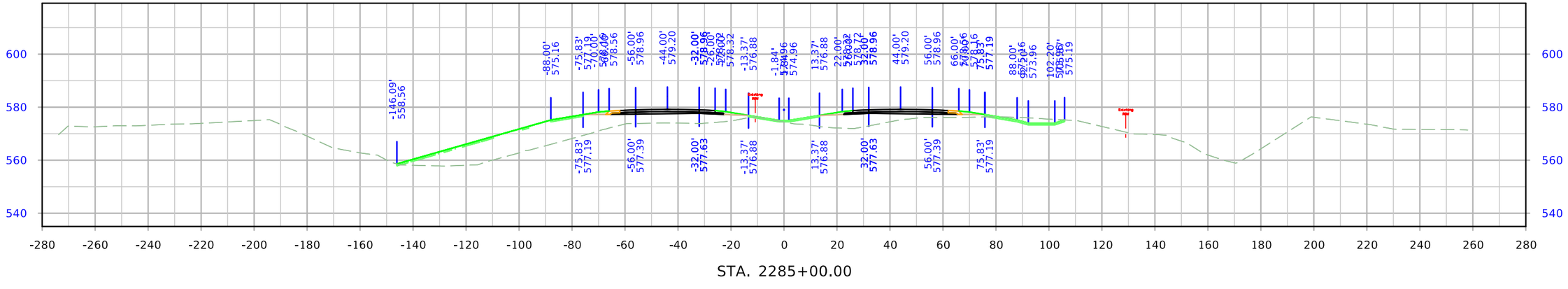
ML - US61



STA. 2287+00.00



STA. 2286+00.00

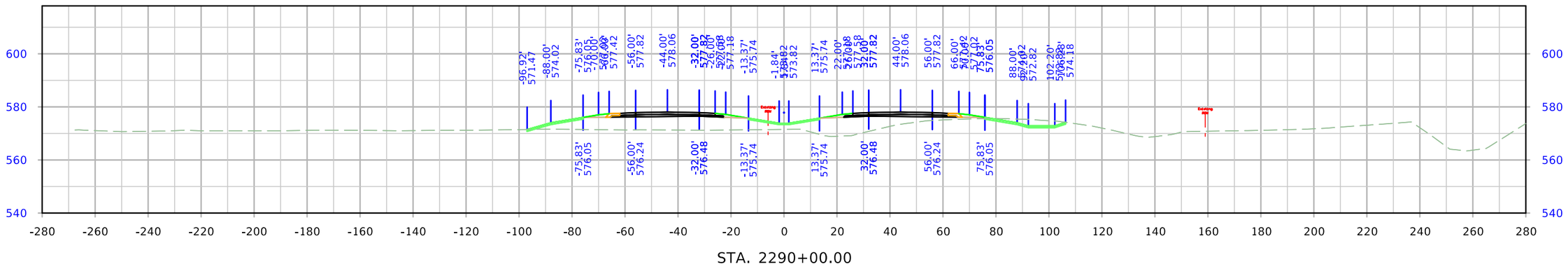


STA. 2285+00.00

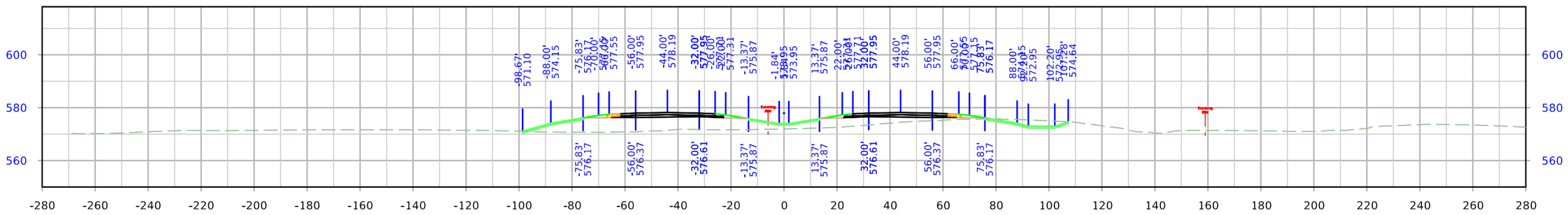
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.61

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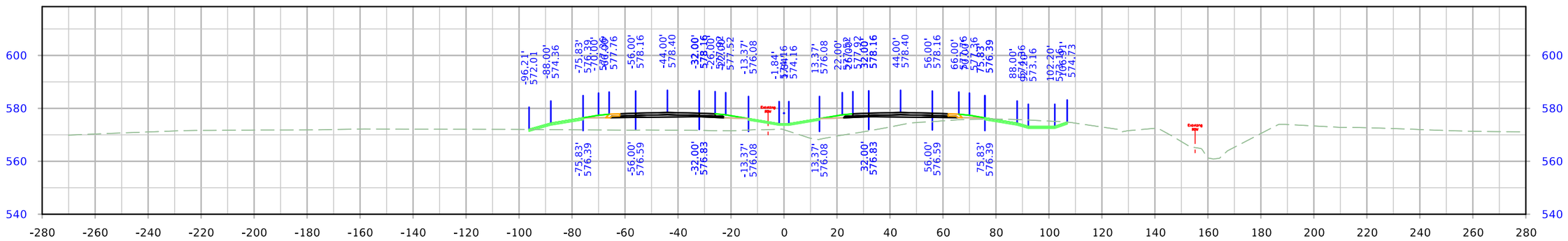
ML - US61



STA. 2290+00.00



STA. 2289+00.00

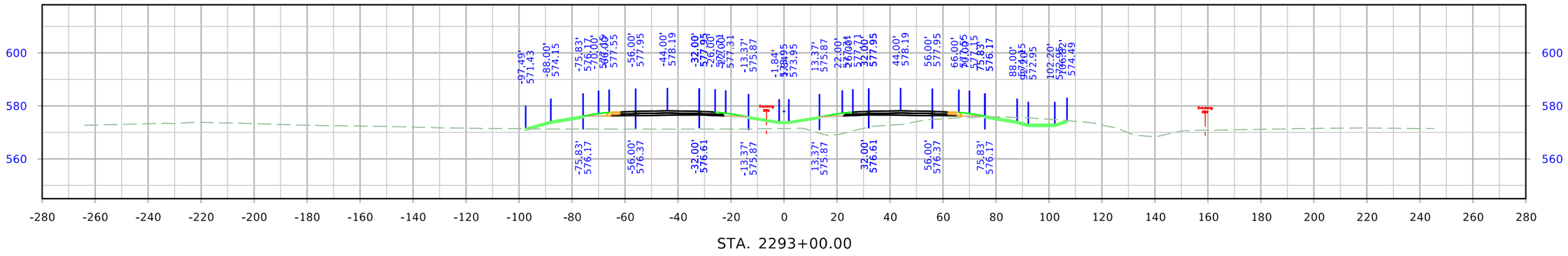


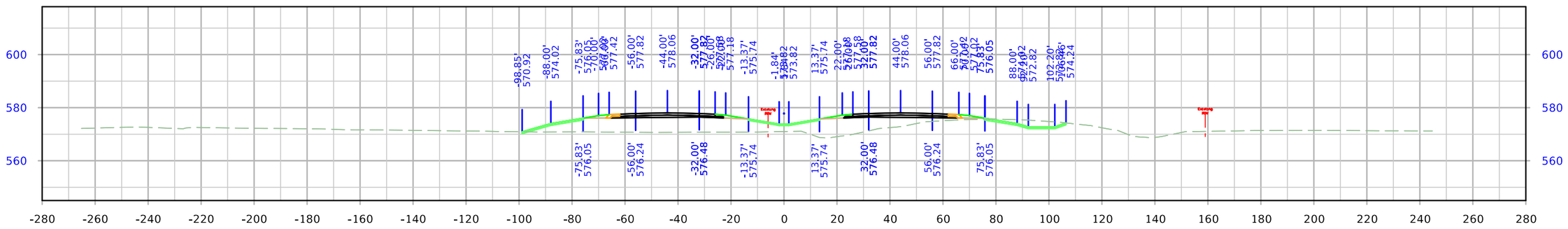
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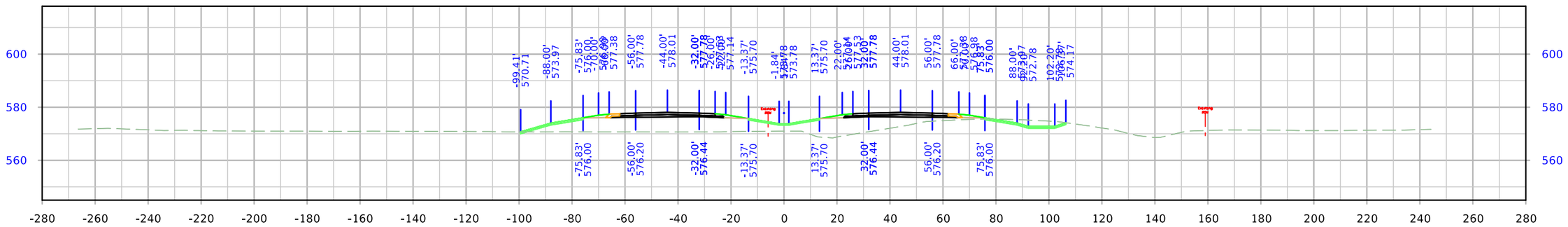
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.62	

3:47:04 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



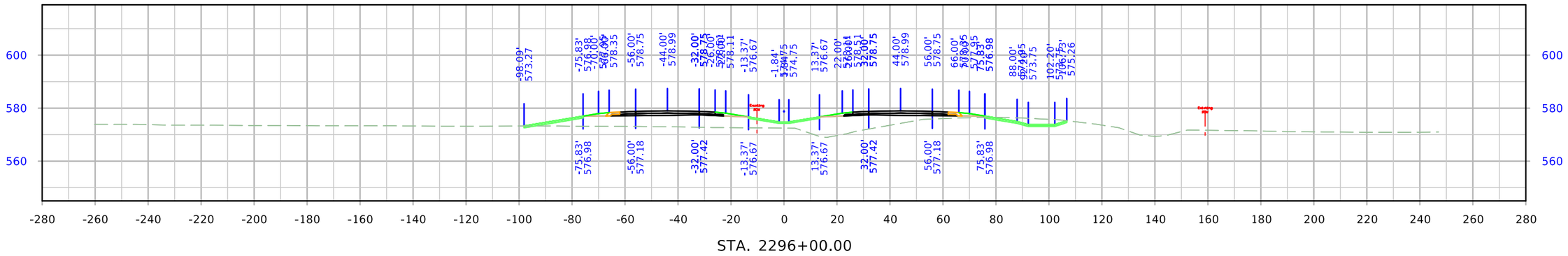




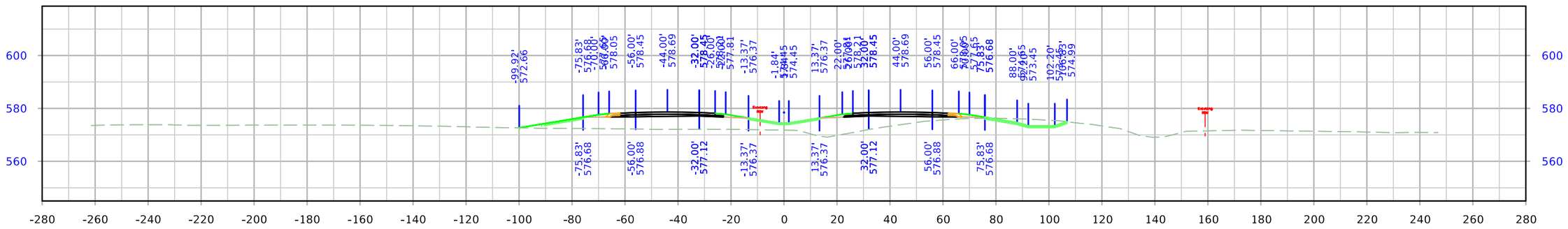
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.63	

3:47:09 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

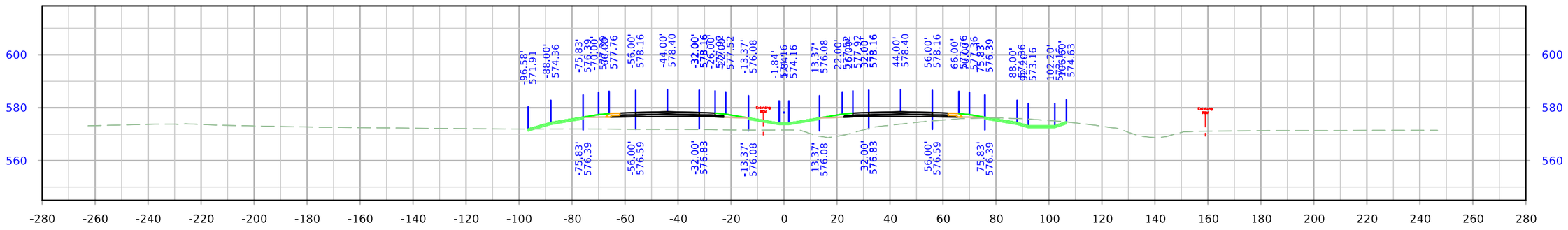
ML - US61



STA. 2296+00.00



STA. 2295+00.00

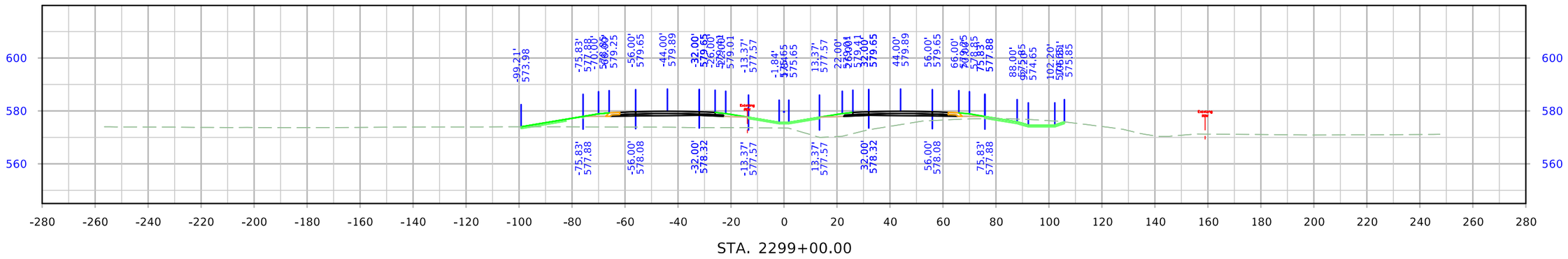


STA. 2294+00.00

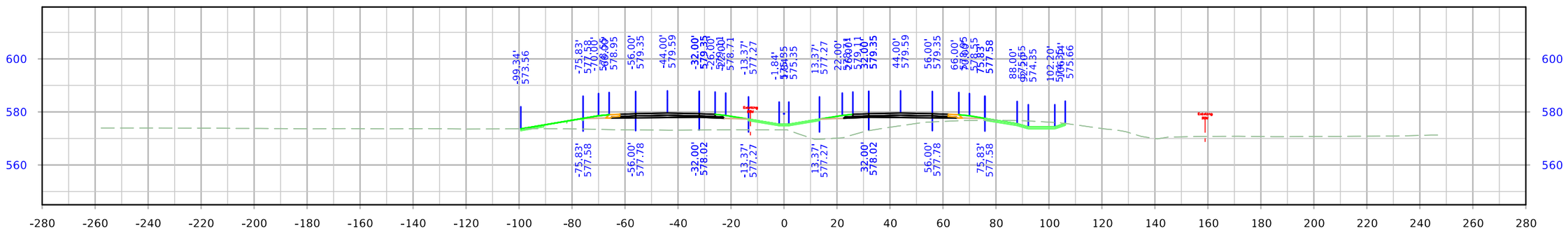
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.64

3:47:14 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

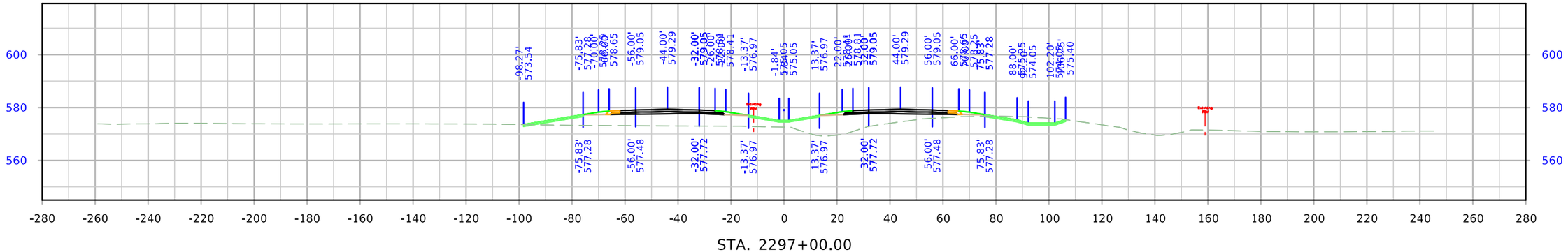
ML - US61



STA. 2299+00.00



STA. 2298+00.00

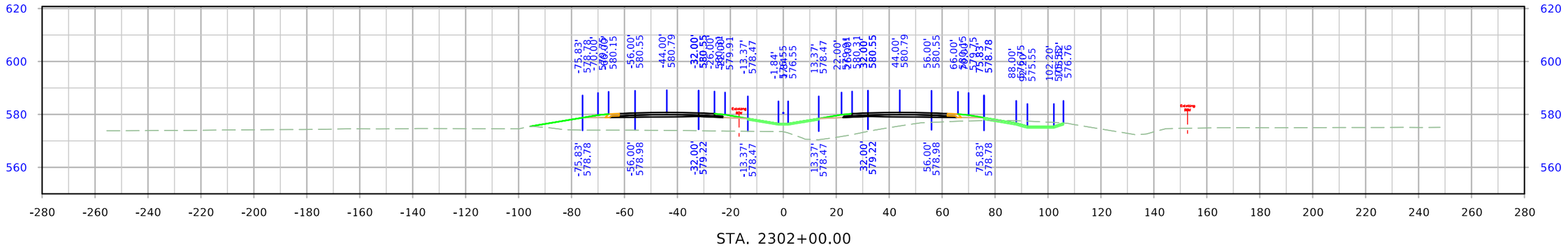


STA. 2297+00.00

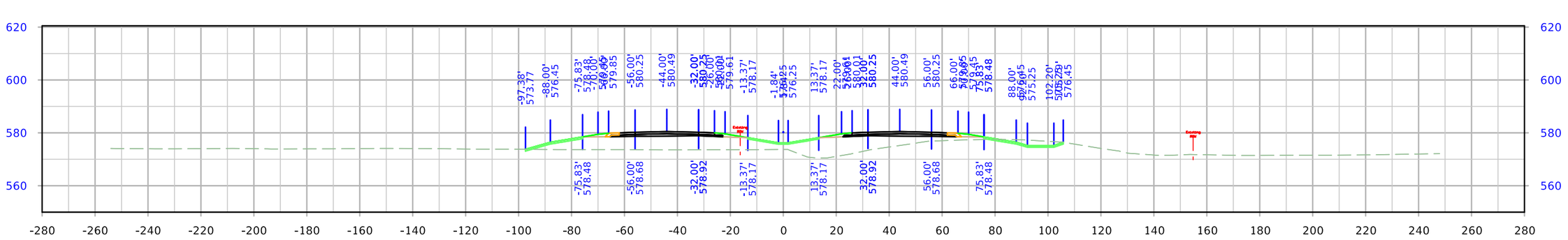
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.65	

3:47:19 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

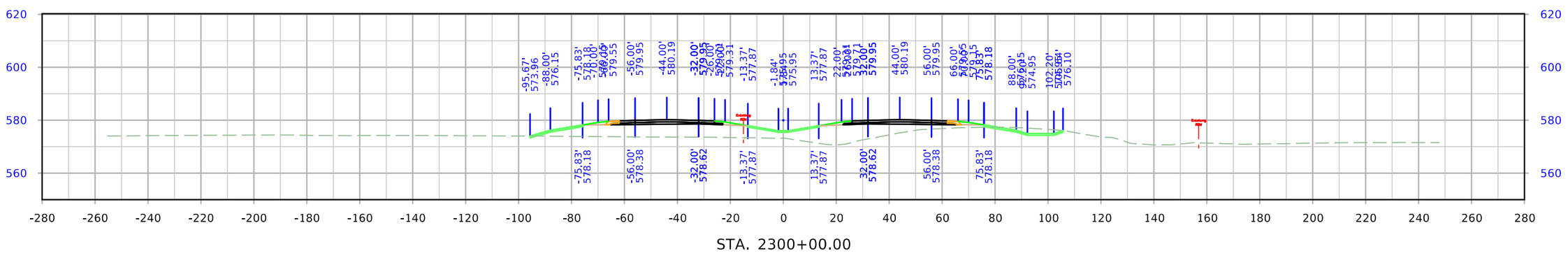
ML - US61



STA. 2302+00.00



STA. 2301+00.00

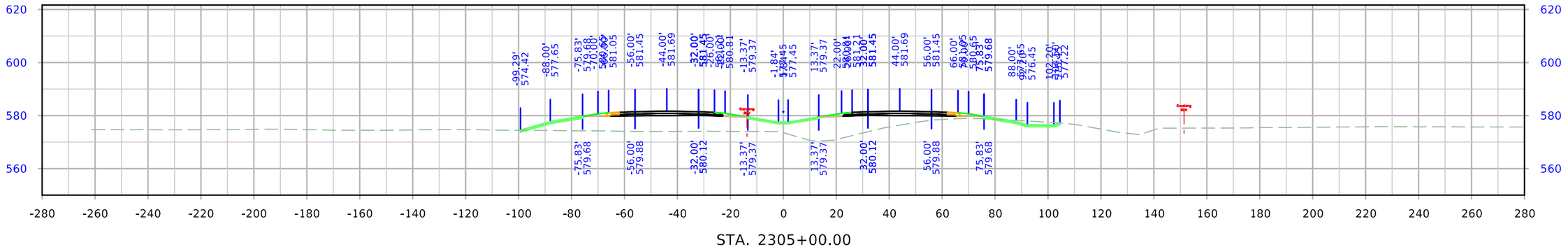


STA. 2300+00.00

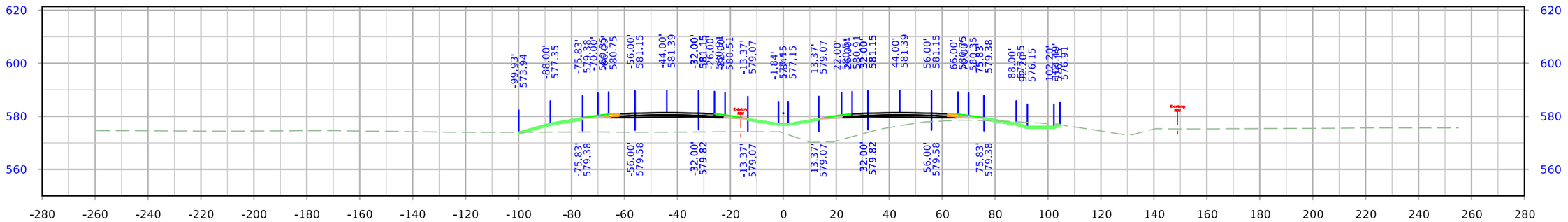
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.66

3:47:24 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

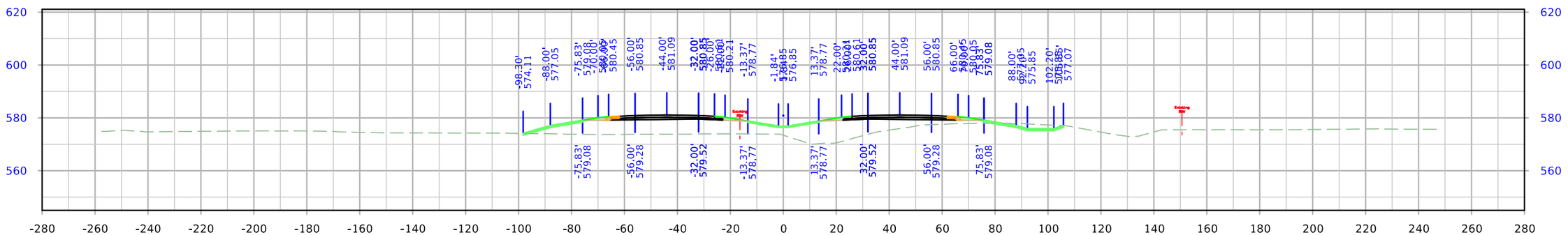
ML - US61



STA. 2305+00.00



STA. 2304+00.00

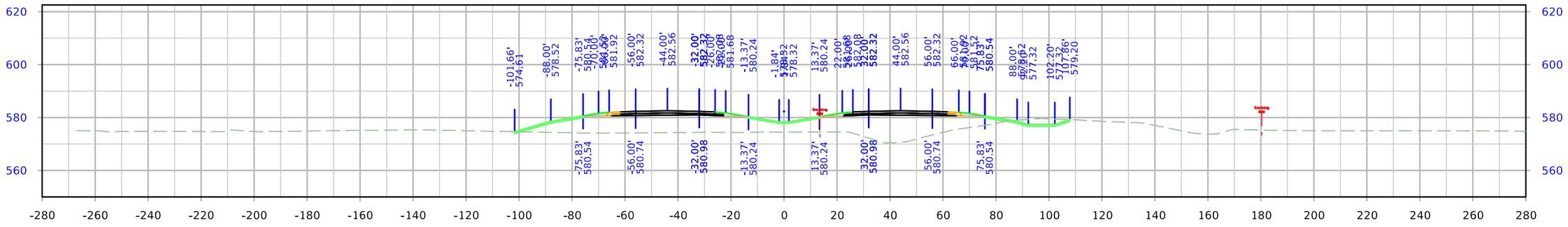


STA. 2303+00.00

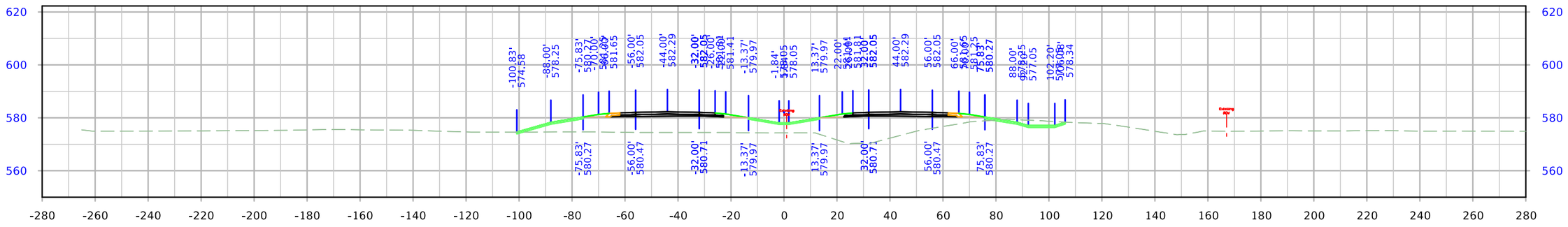
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.67

3:47:29 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

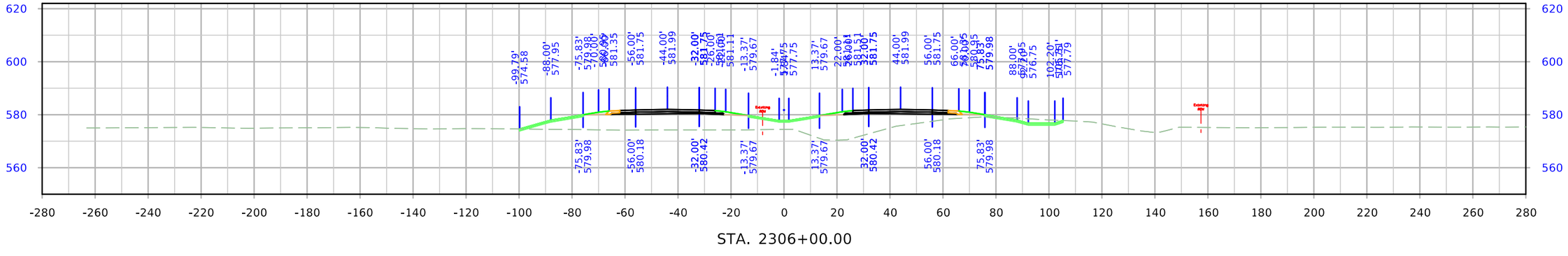
ML - US61



STA. 2308+00.00



STA. 2307+00.00

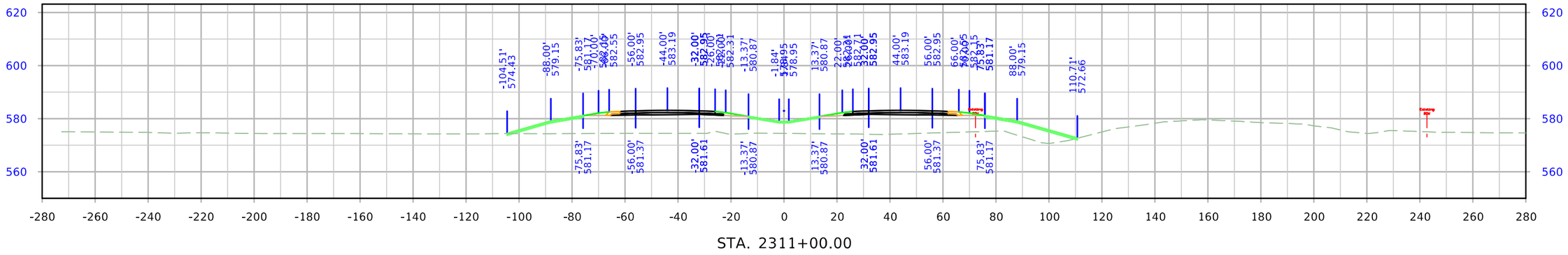


STA. 2306+00.00

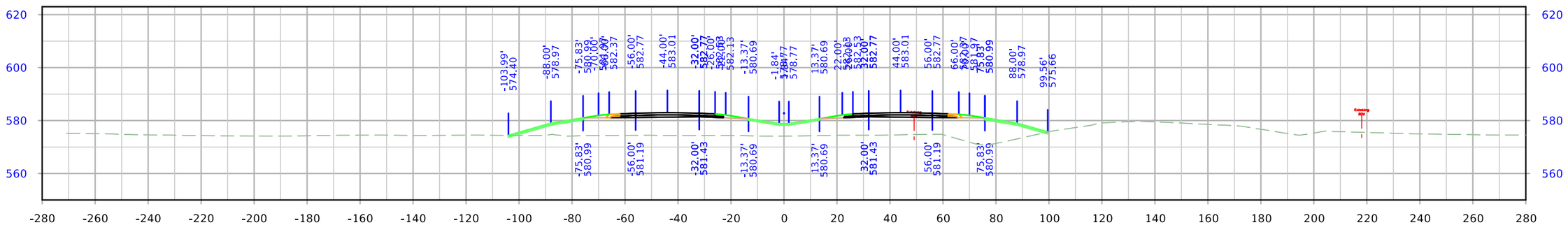
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.68	

3:47:35 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

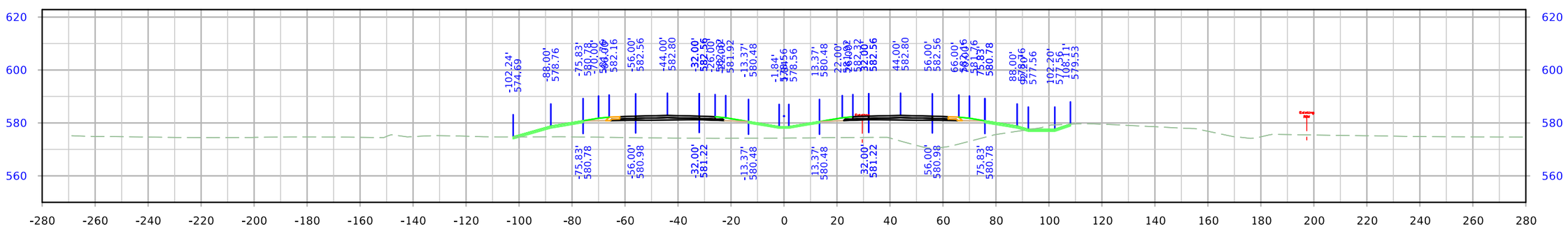
ML - US61



STA. 2311+00.00



STA. 2310+00.00

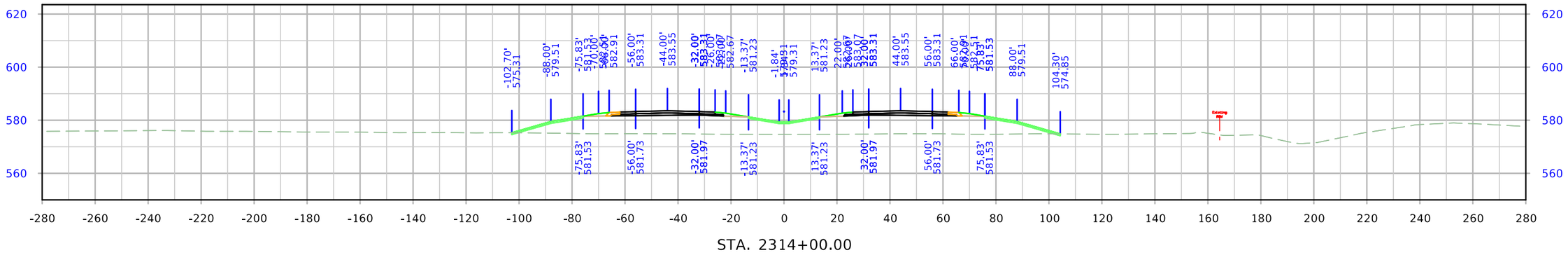


STA. 2309+00.00

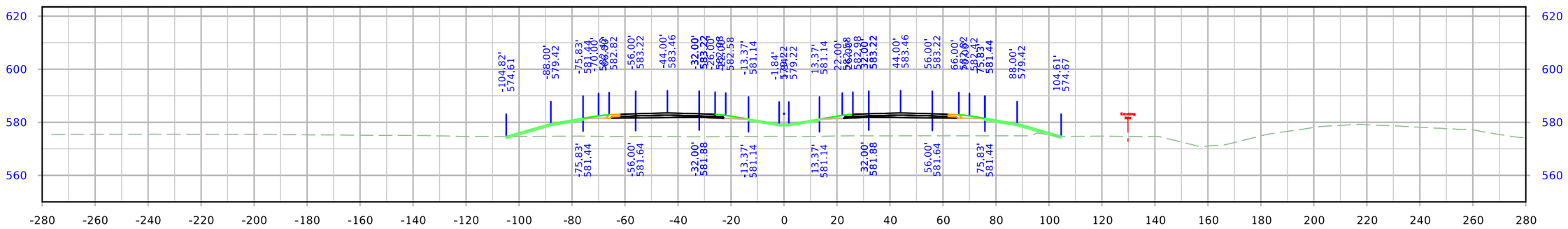
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.69

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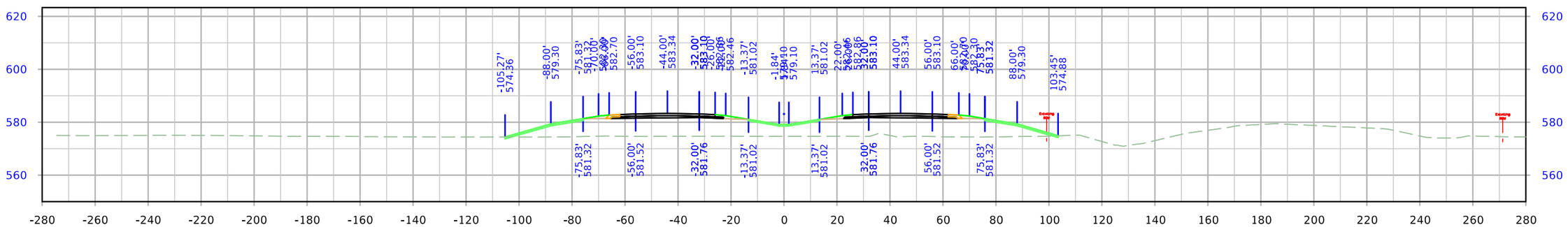
ML - US61



STA. 2314+00.00



STA. 2313+00.00

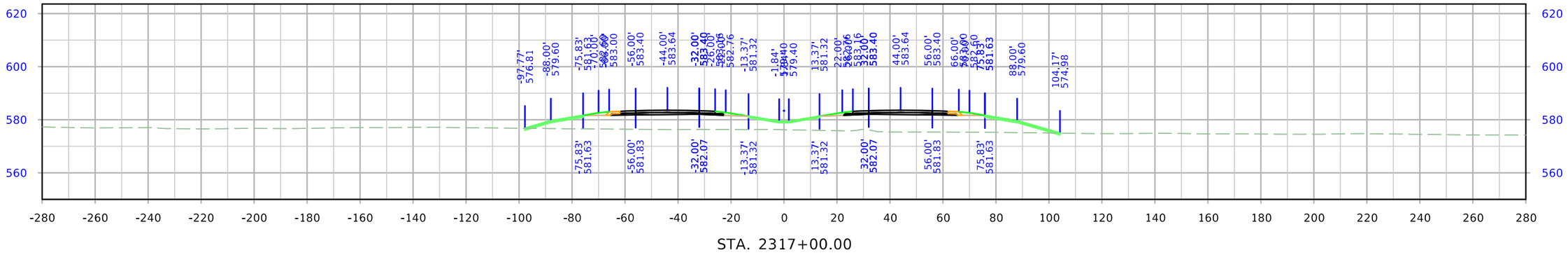


STA. 2312+00.00

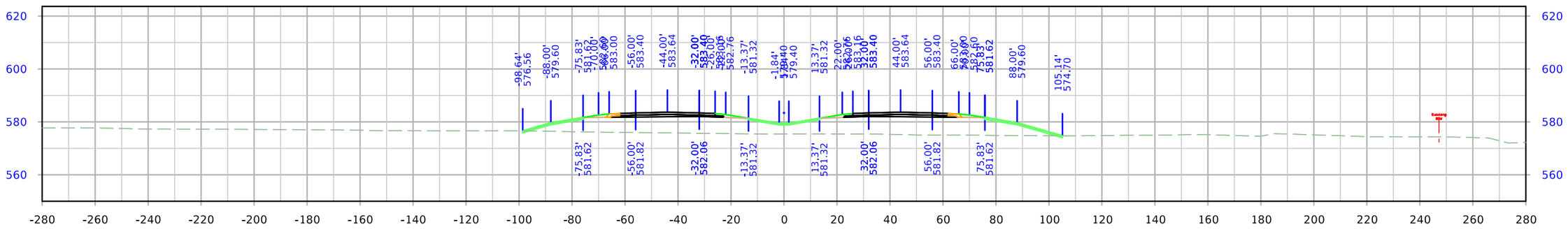
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.70

3:47:45 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

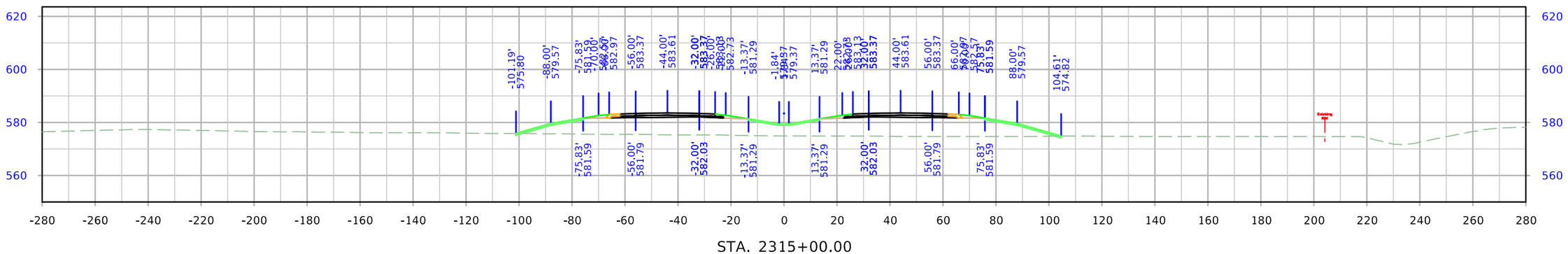
ML - US61



STA. 2317+00.00



STA. 2316+00.00

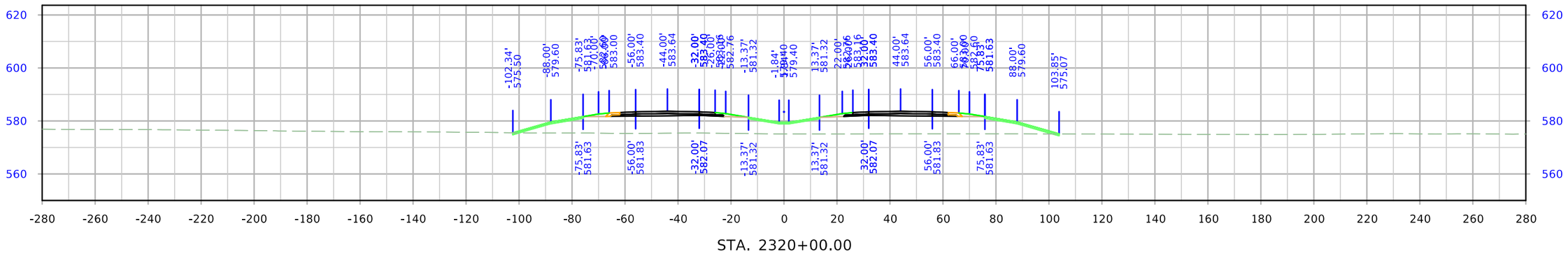


STA. 2315+00.00

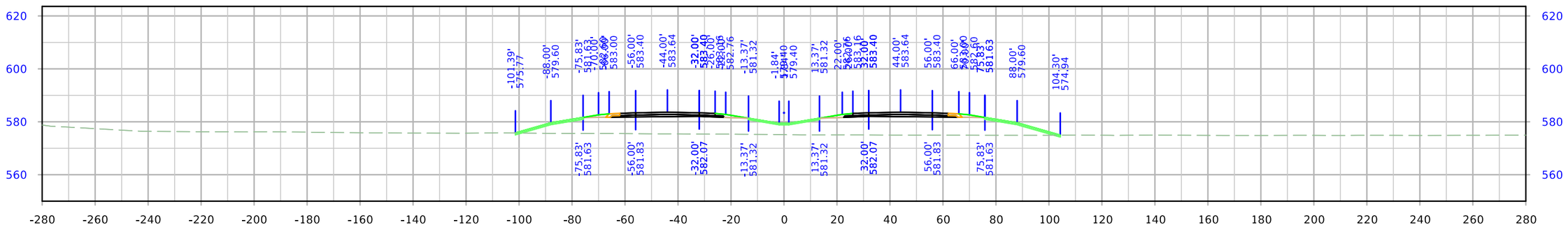
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3:47:51 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

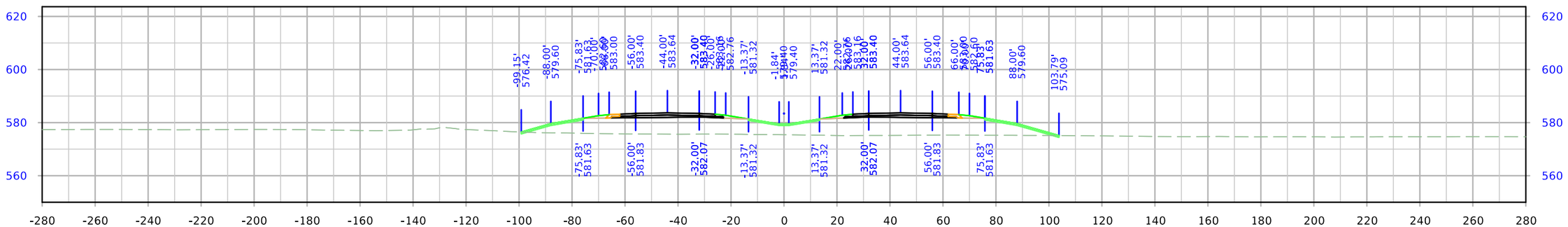
ML - US61



STA. 2320+00.00



STA. 2319+00.00

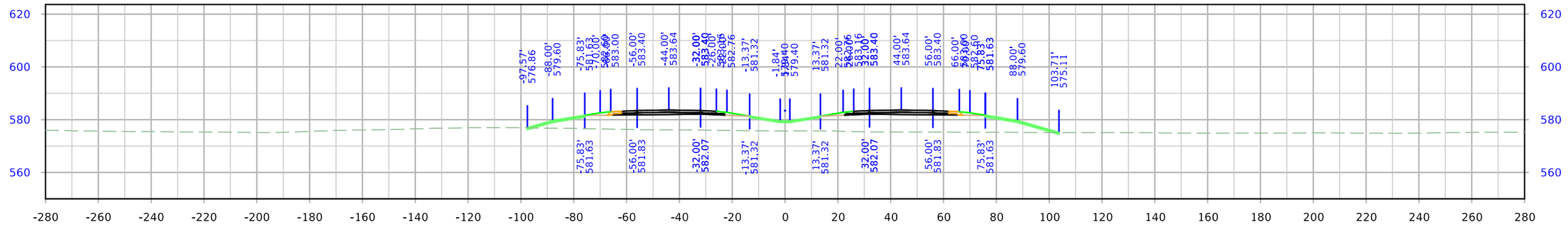


STA. 2318+00.00

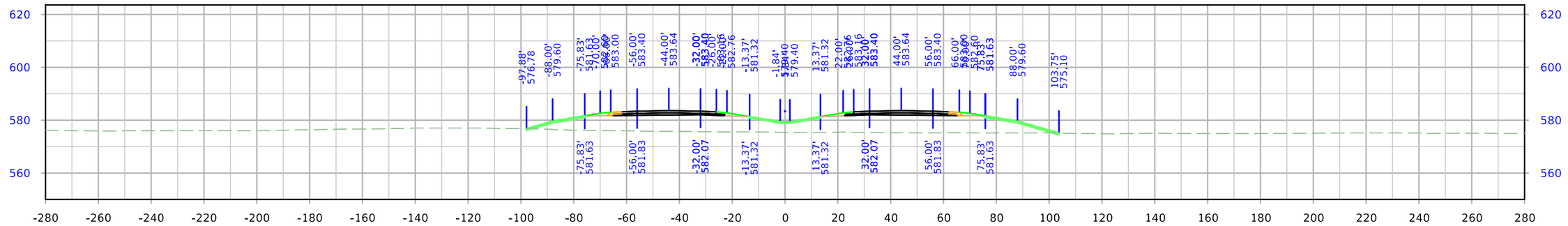
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.72

3:47:56 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

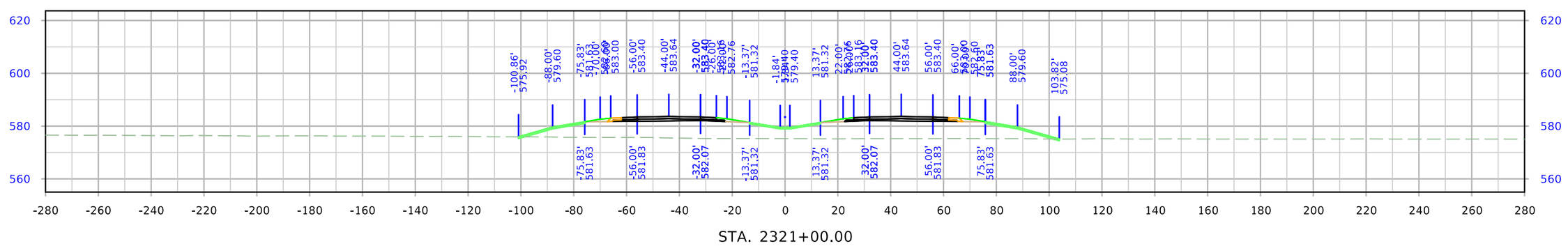
ML - US61



STA. 2323+00.00



STA. 2322+00.00

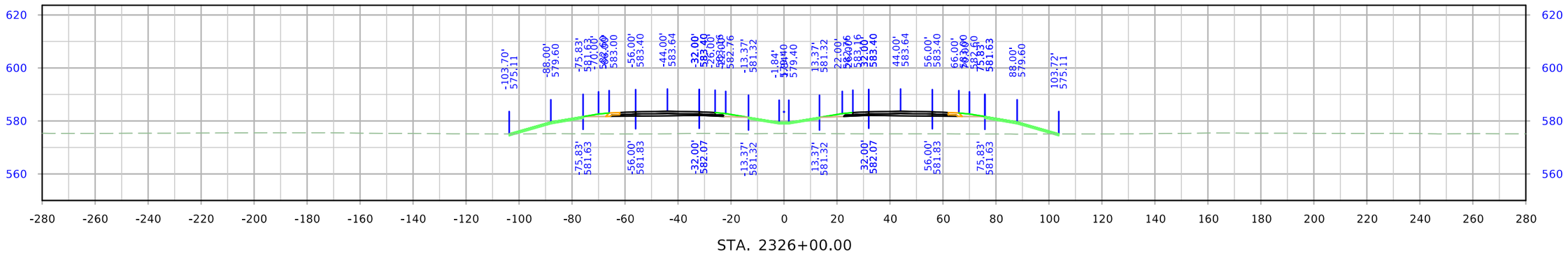


STA. 2321+00.00

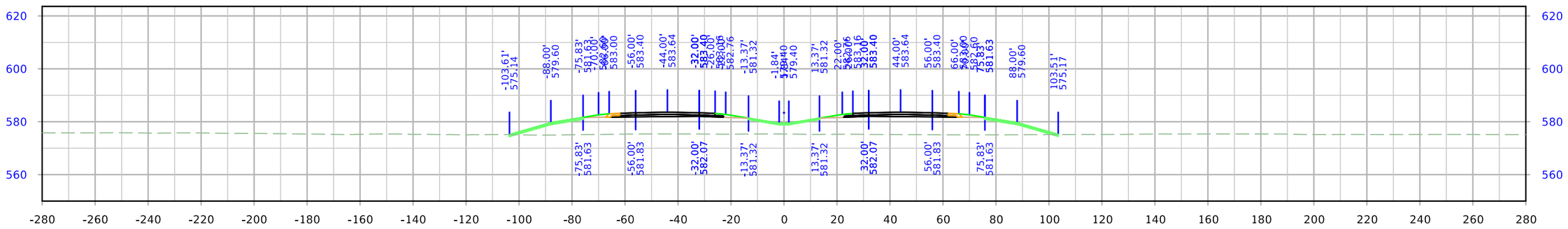
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.73

3:48:01 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

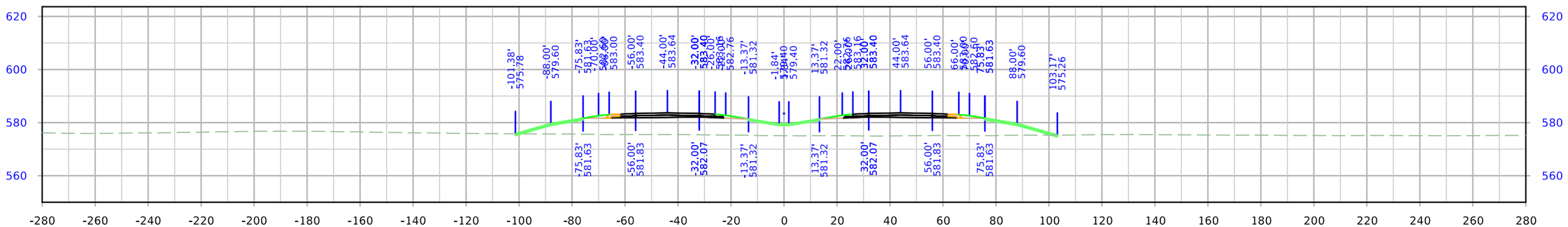
ML - US61



STA. 2326+00.00



STA. 2325+00.00

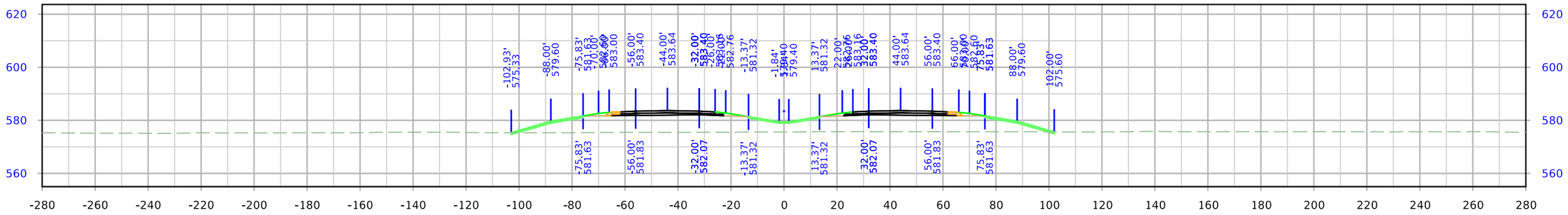


STA. 2324+00.00

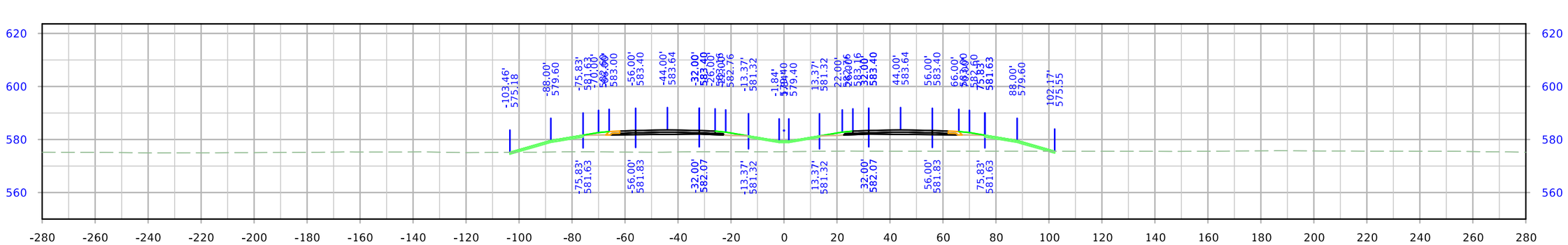
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.74

3:48:06 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

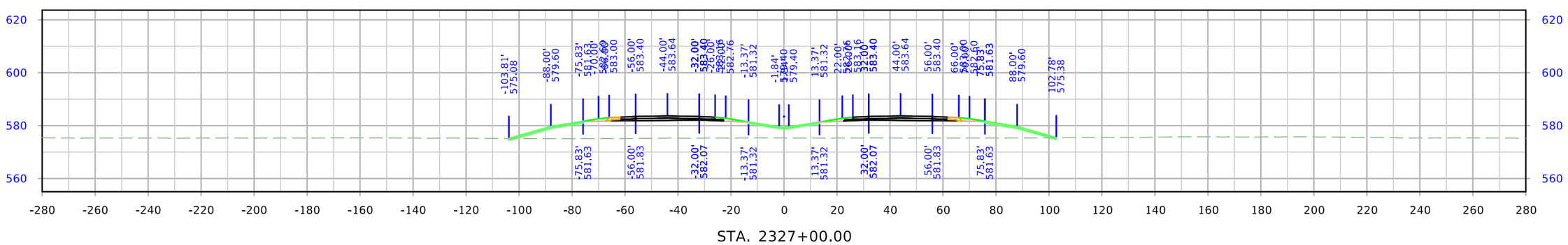
ML - US61



STA. 2329+00.00



STA. 2328+00.00

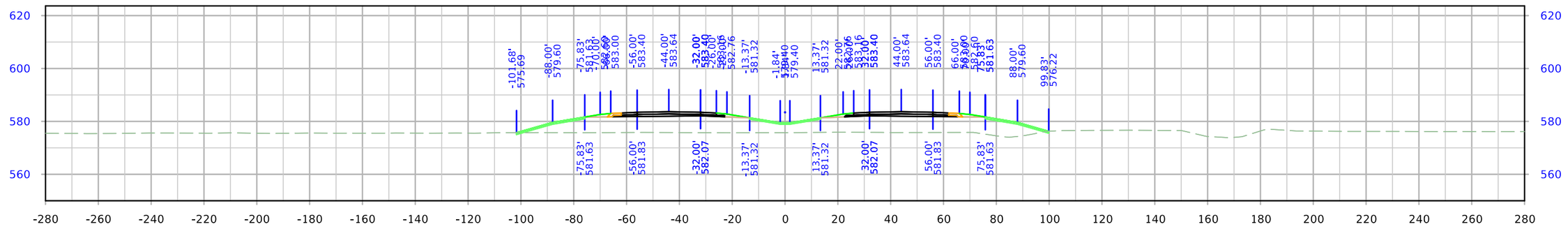


STA. 2327+00.00

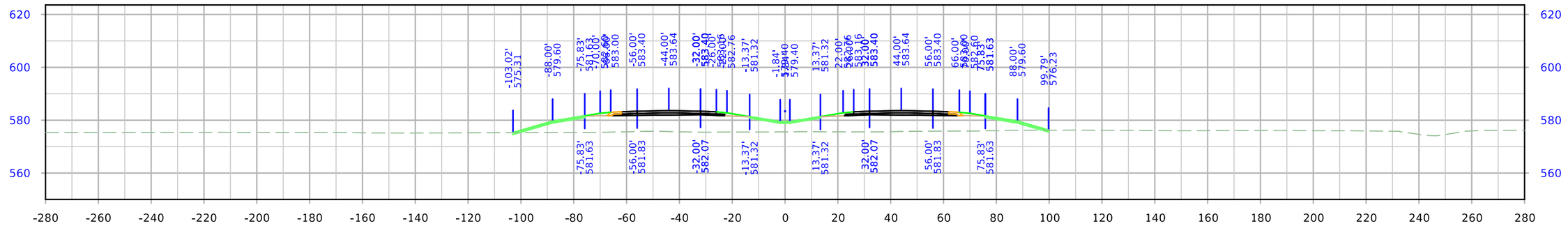
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.75

3:48:11 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

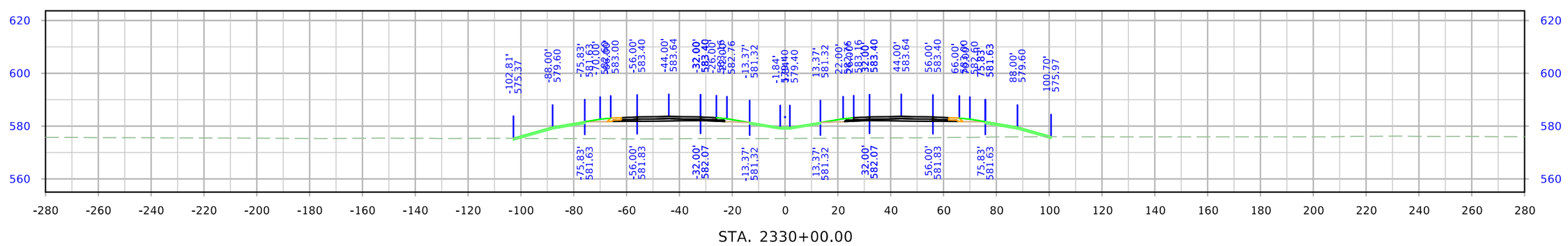
ML - US61



STA. 2332+00.00



STA. 2331+00.00

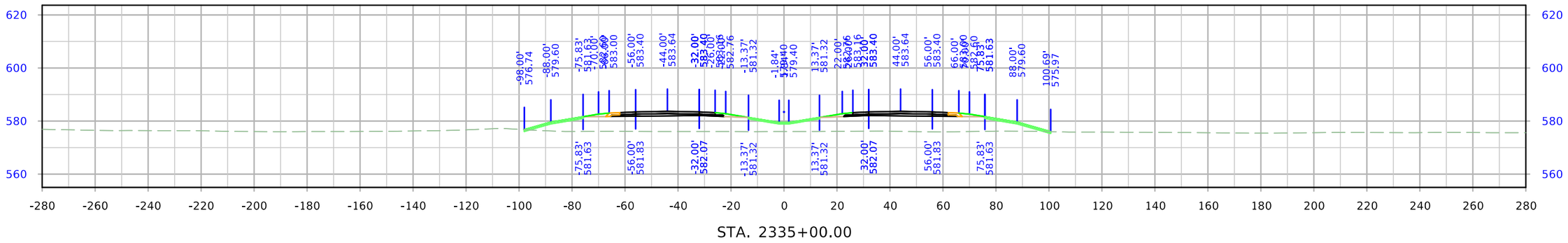


STA. 2330+00.00

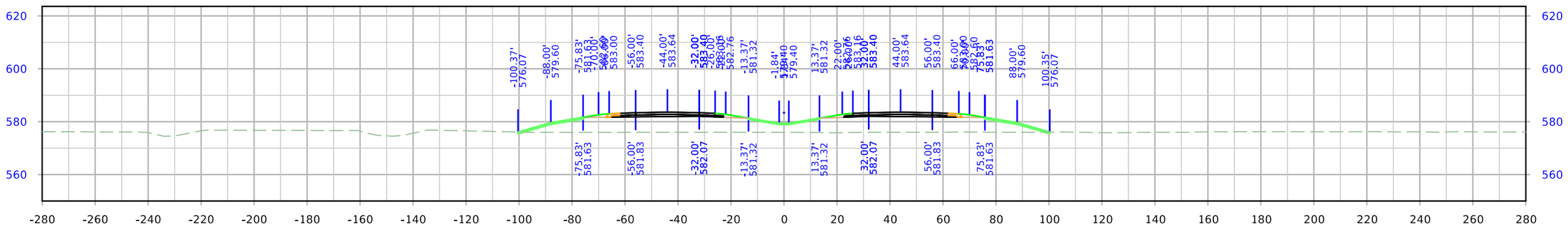
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.76

3:48:16 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

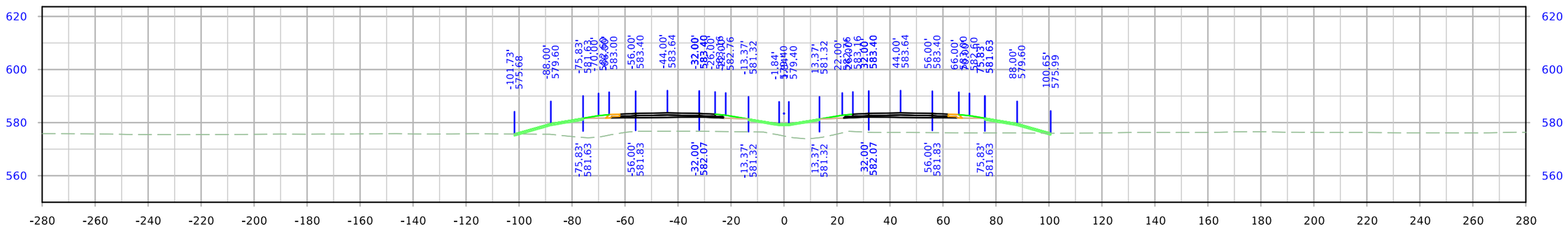
ML - US61



STA. 2335+00.00



STA. 2334+00.00

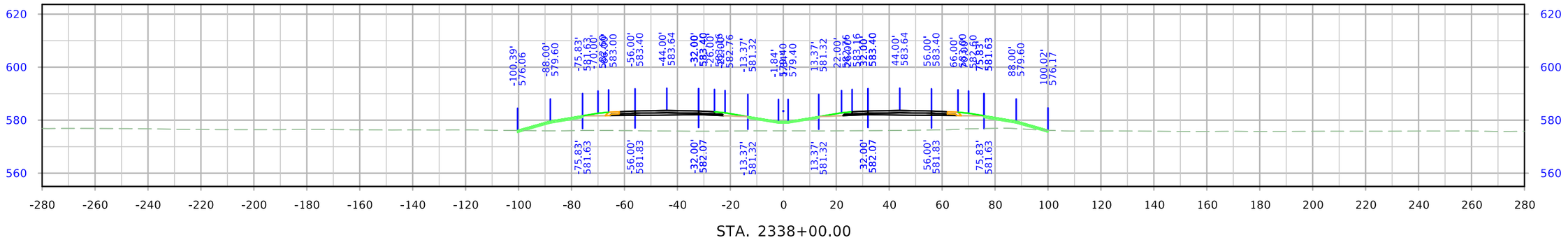


STA. 2333+00.00

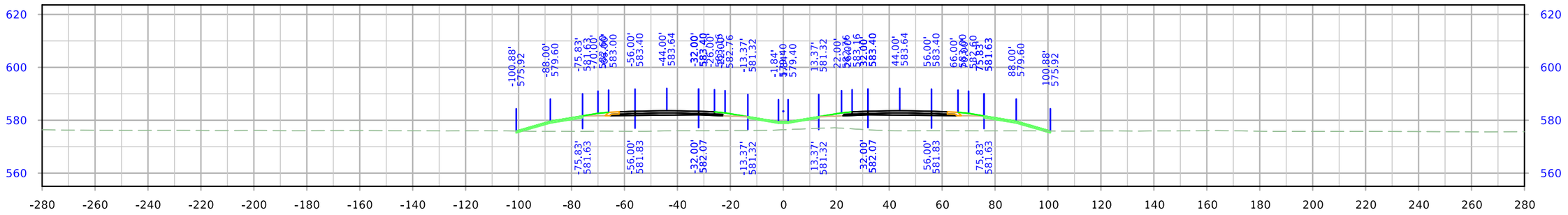
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.77

3:48:22 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

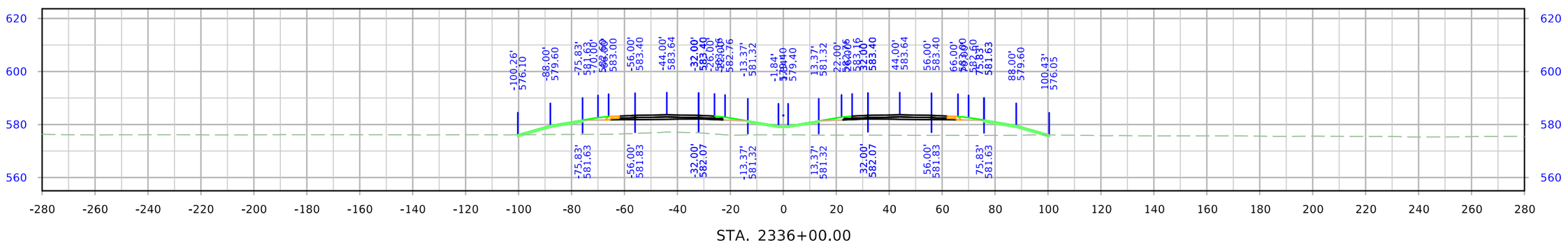
ML - US61



STA. 2338+00.00



STA. 2337+00.00

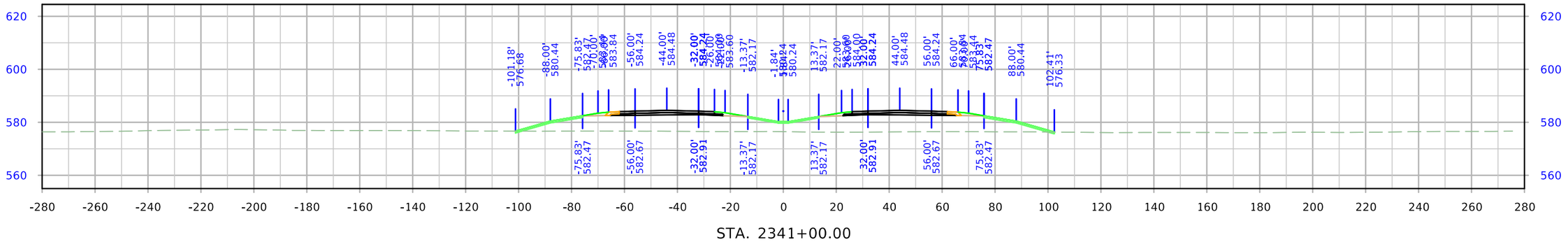


STA. 2336+00.00

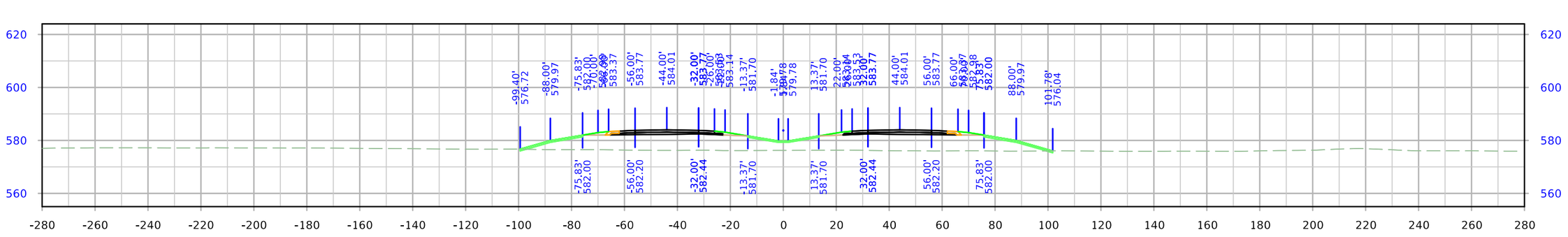
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.78

3:48:27 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

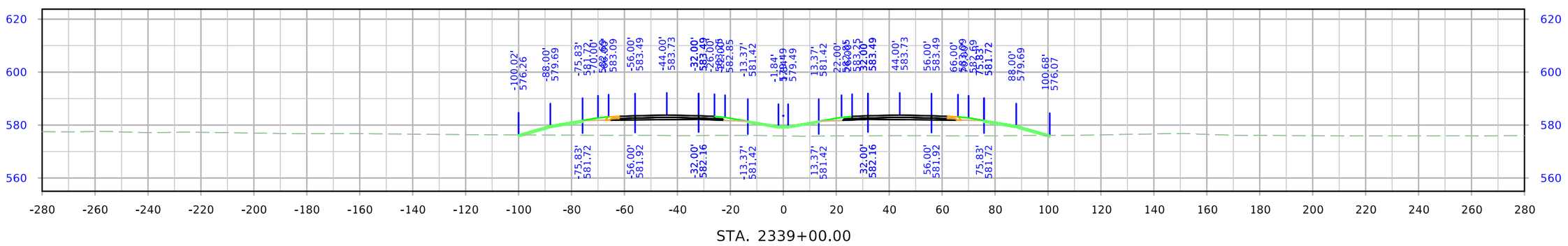
ML - US61



STA. 2341+00.00



STA. 2340+00.00

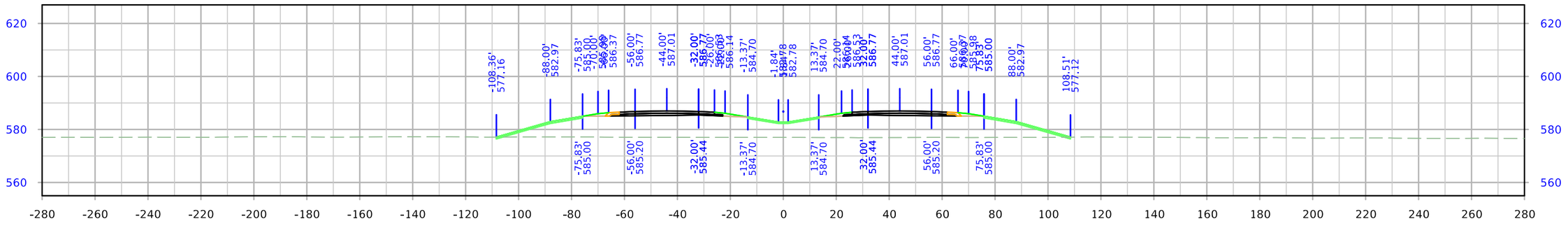


STA. 2339+00.00

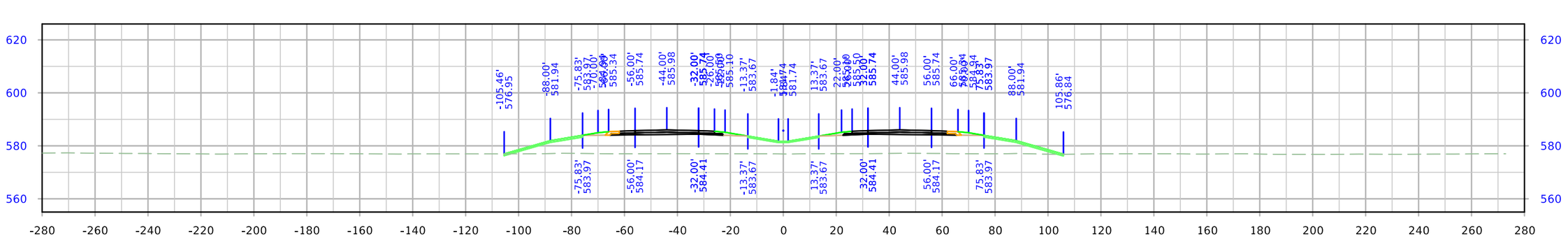
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.79	

3:48:32 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

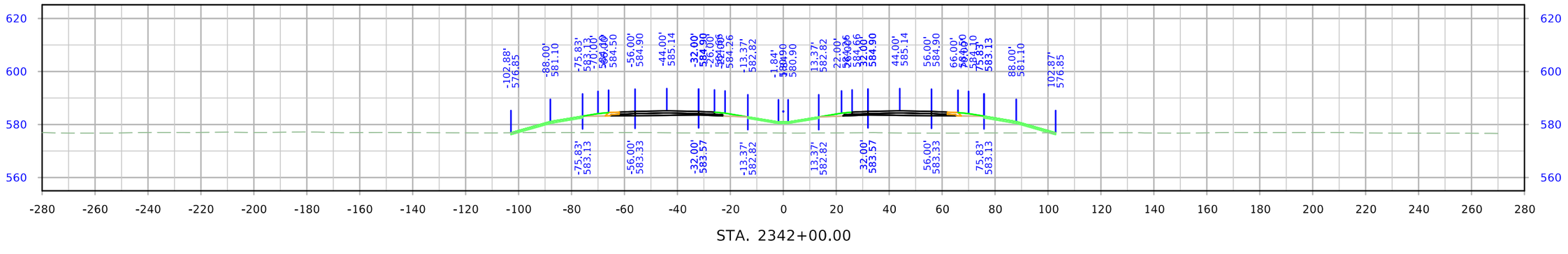
ML - US61



STA. 2344+00.00



STA. 2343+00.00

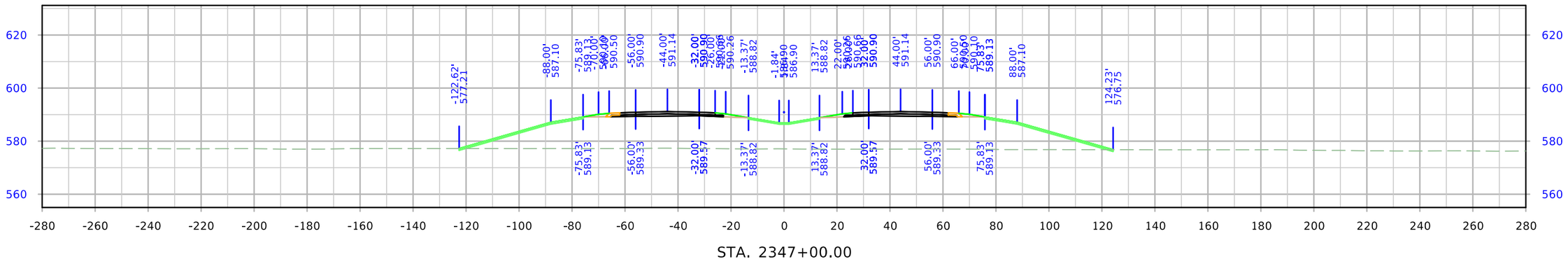


STA. 2342+00.00

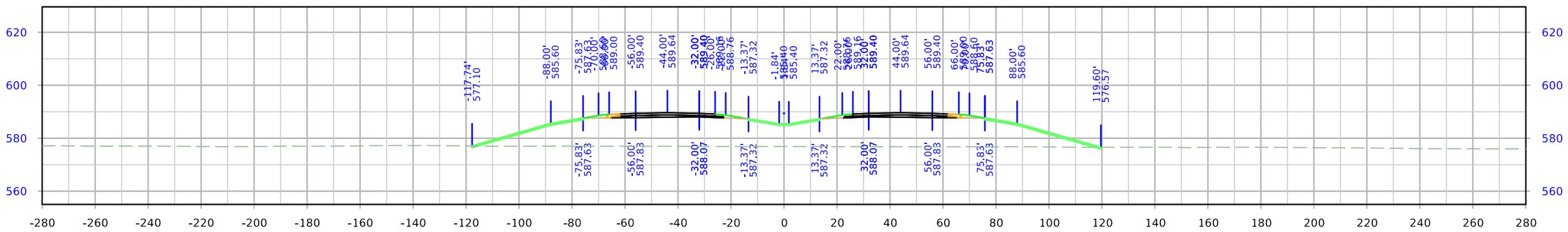
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.80	

3:48:38 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

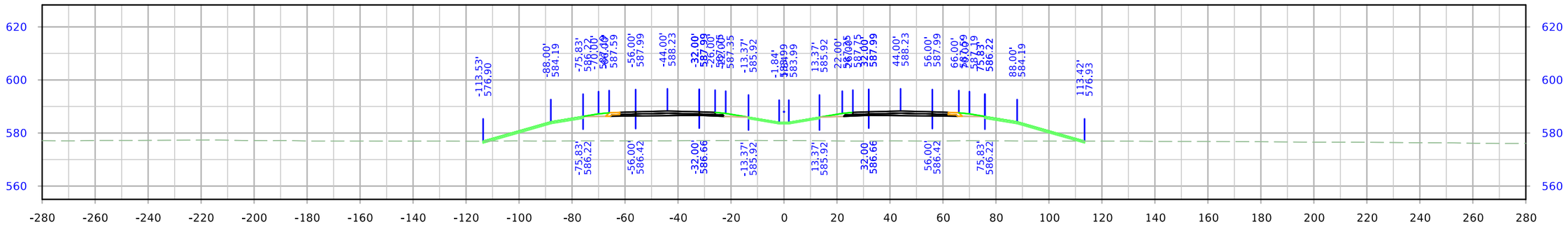
ML - US61



STA. 2347+00.00



STA. 2346+00.00

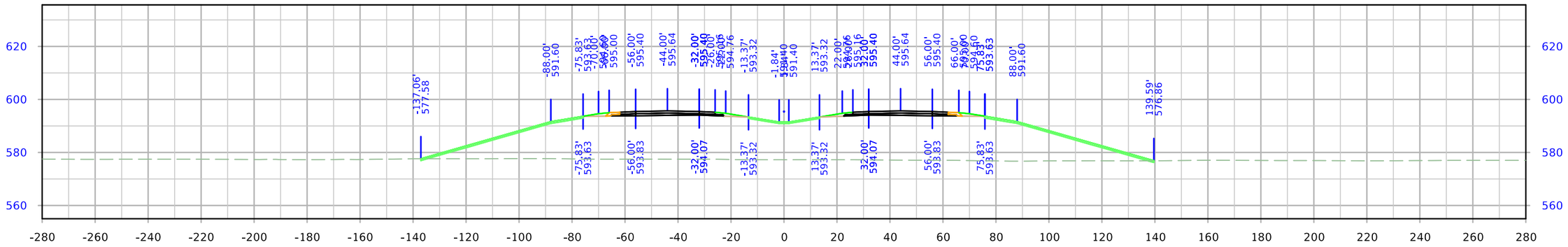


STA. 2345+00.00

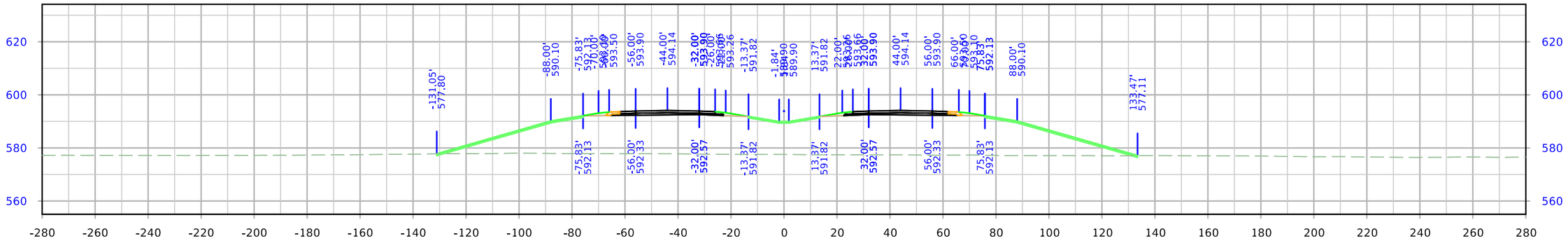
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.81	

3:48:43 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

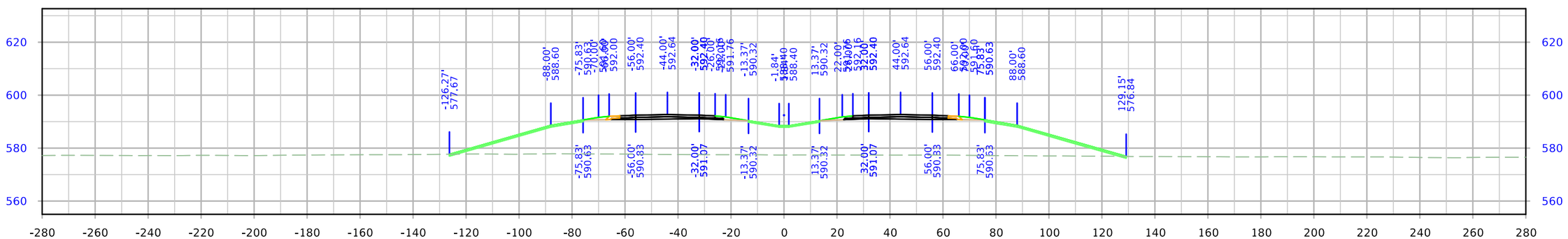
ML - US61



STA. 2350+00.00



STA. 2349+00.00

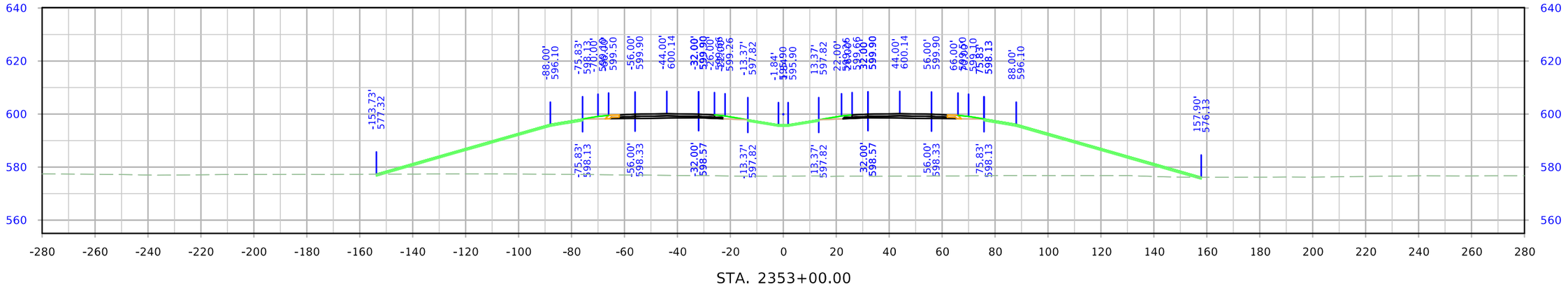


STA. 2348+00.00

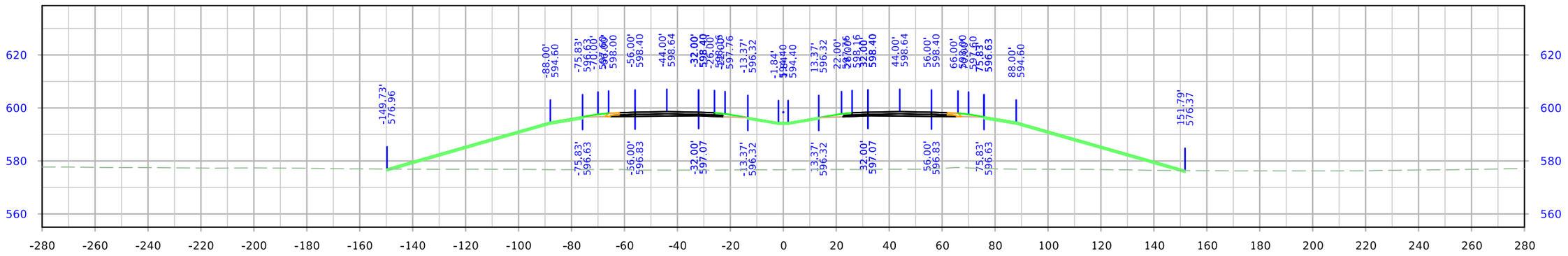
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.82

3:48:48 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

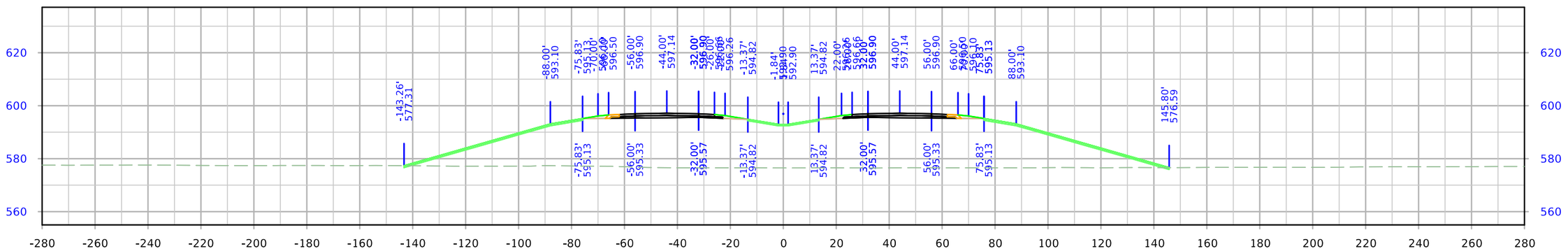
ML - US61



STA. 2353+00.00



STA. 2352+00.00

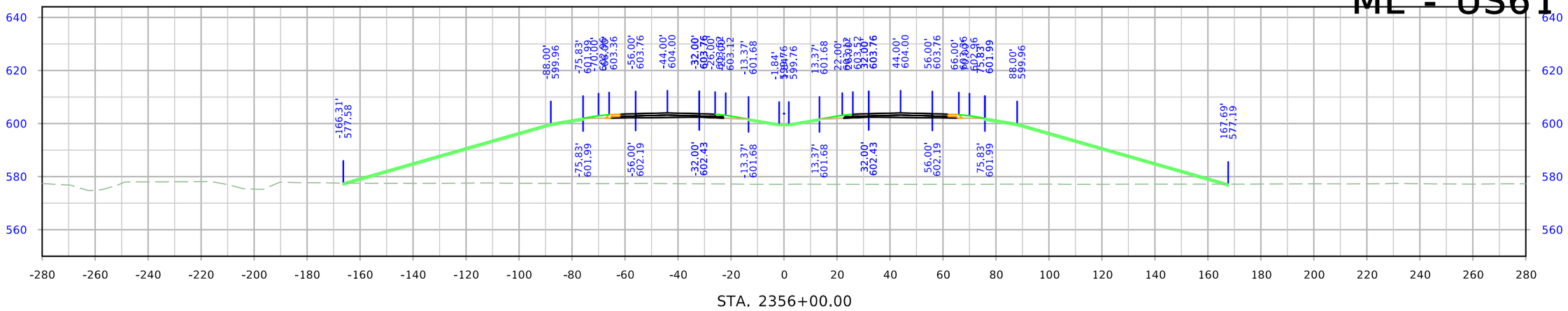


STA. 2351+00.00

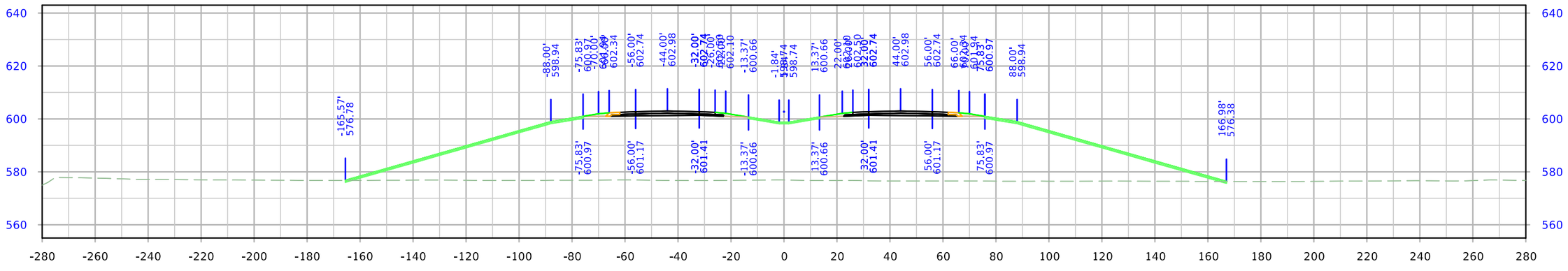
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.83

3:48:53 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

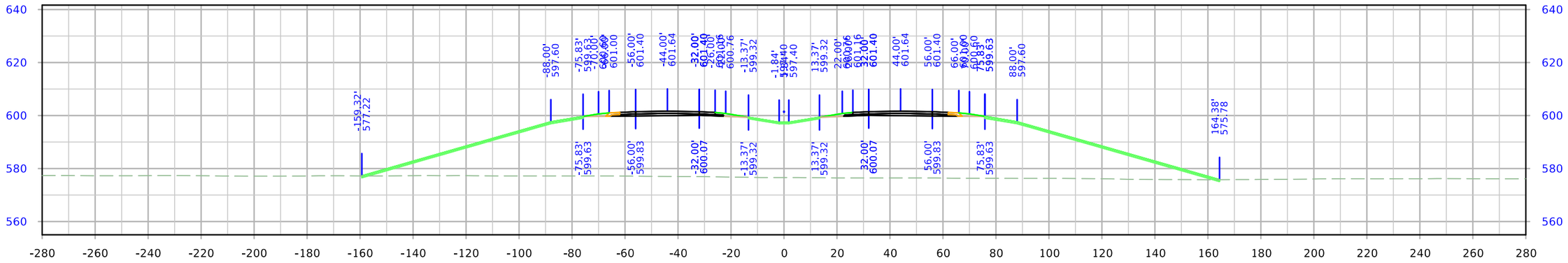
ML - US61



STA. 2356+00.00



STA. 2355+00.00

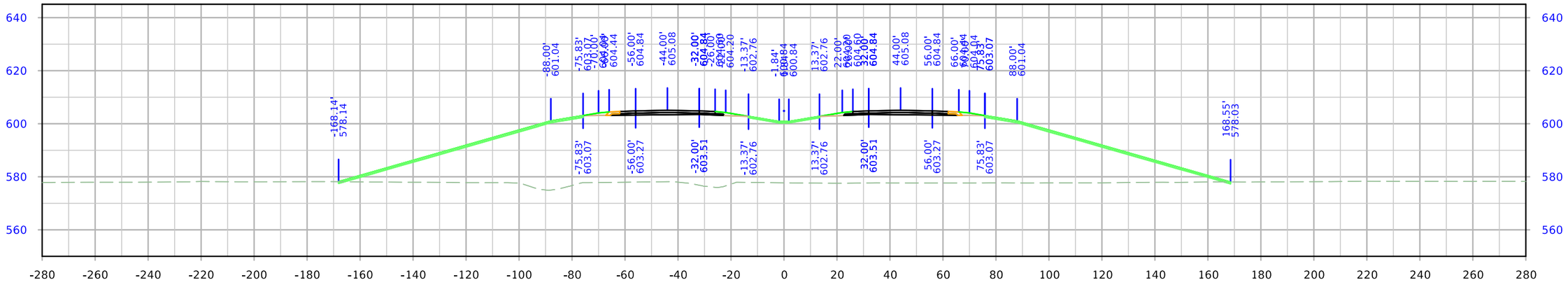


STA. 2354+00.00

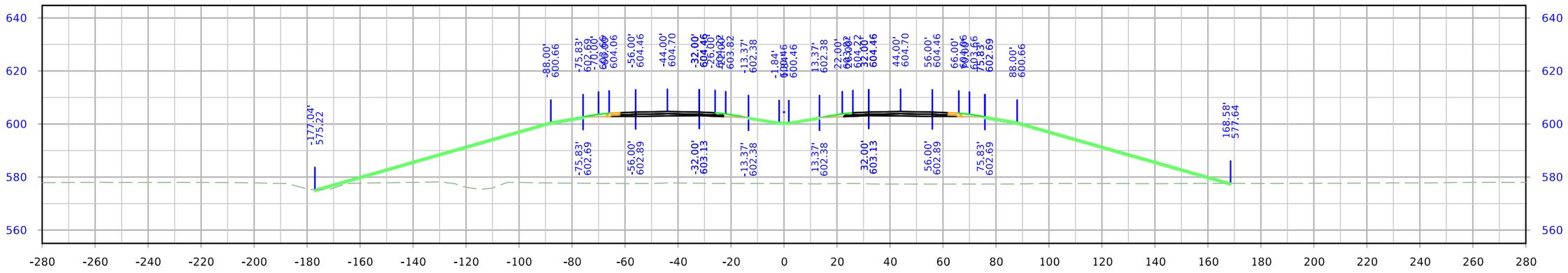
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.84	

3:48:58 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2358+00.00

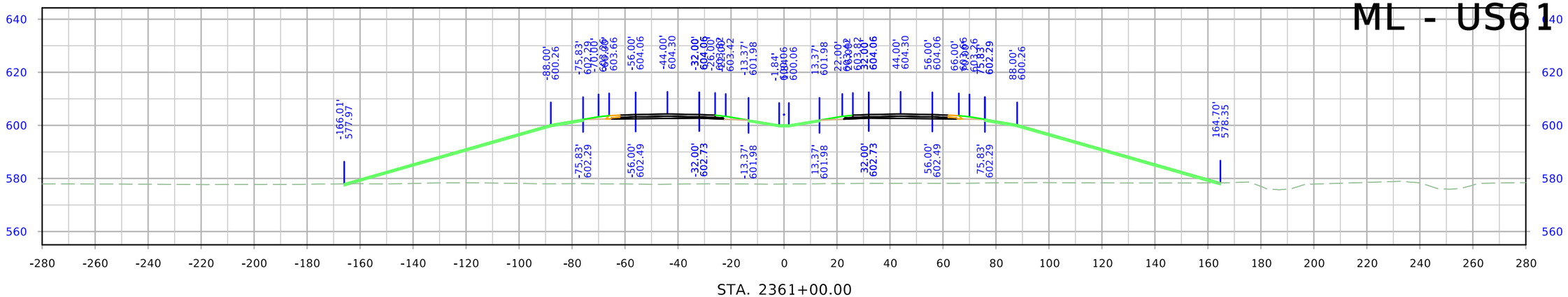


STA. 2357+00.00

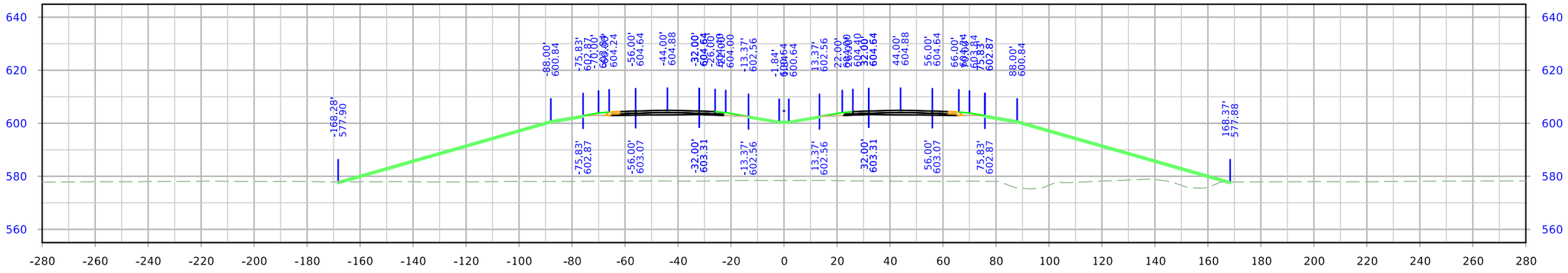
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.85	

3:49:02 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

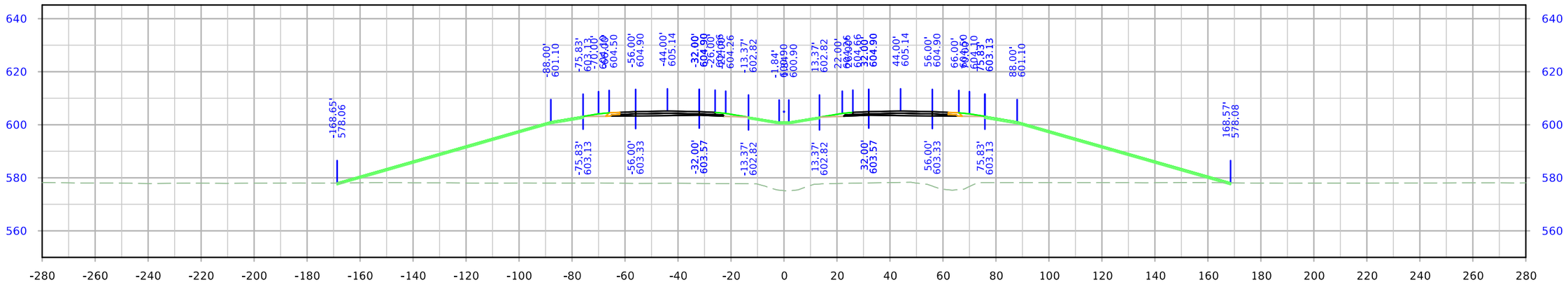
ML - US61



STA. 2361+00.00



STA. 2360+00.00

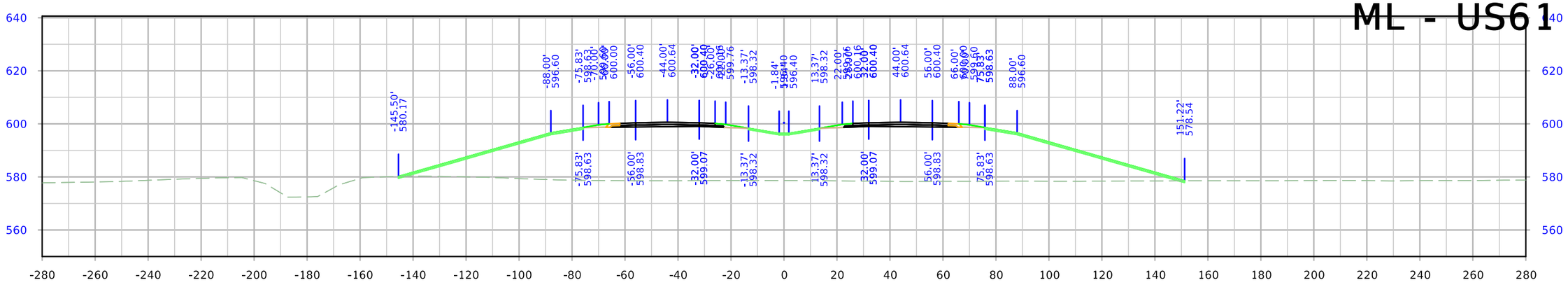


STA. 2359+00.00

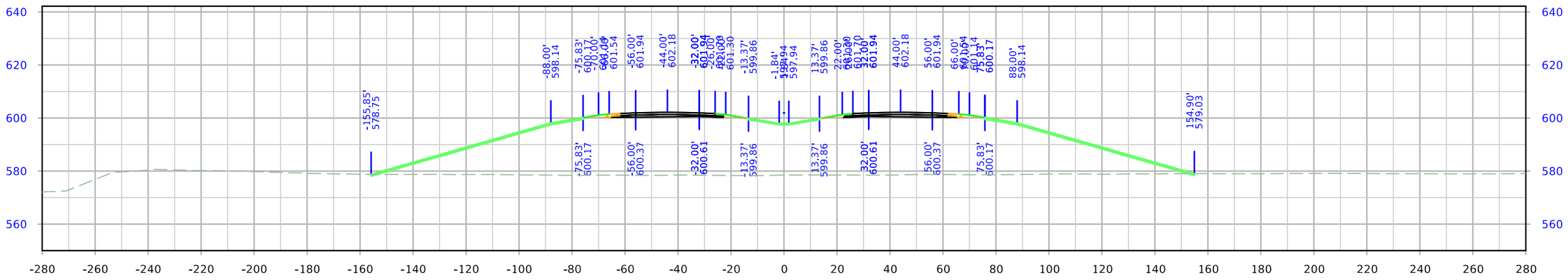
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.86

3:49:07 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

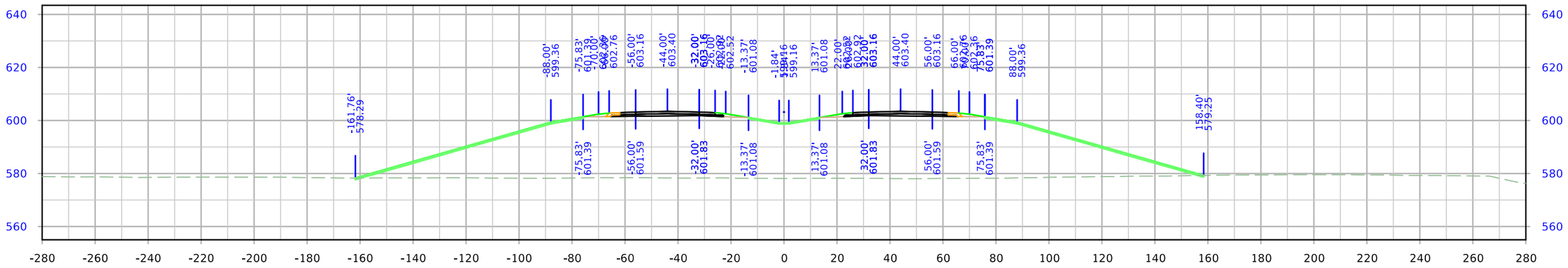
ML - US61



STA. 2364+00.00



STA. 2363+00.00

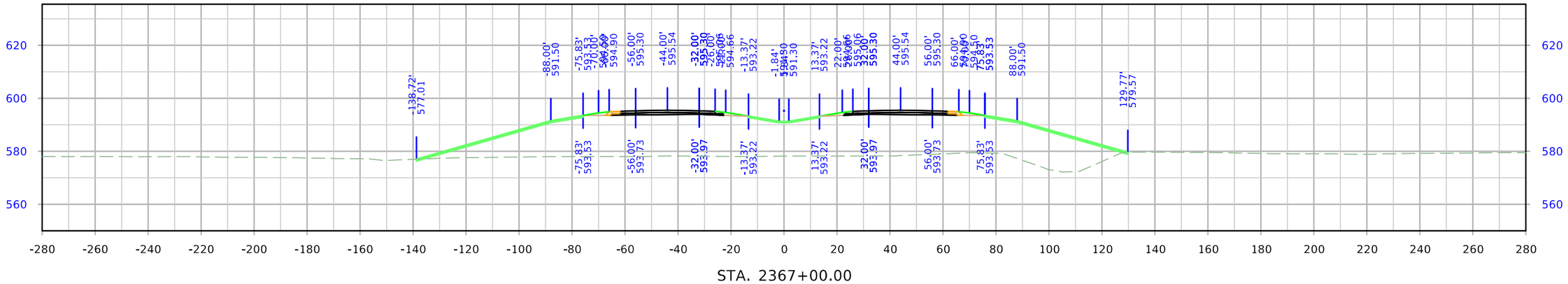


STA. 2362+00.00

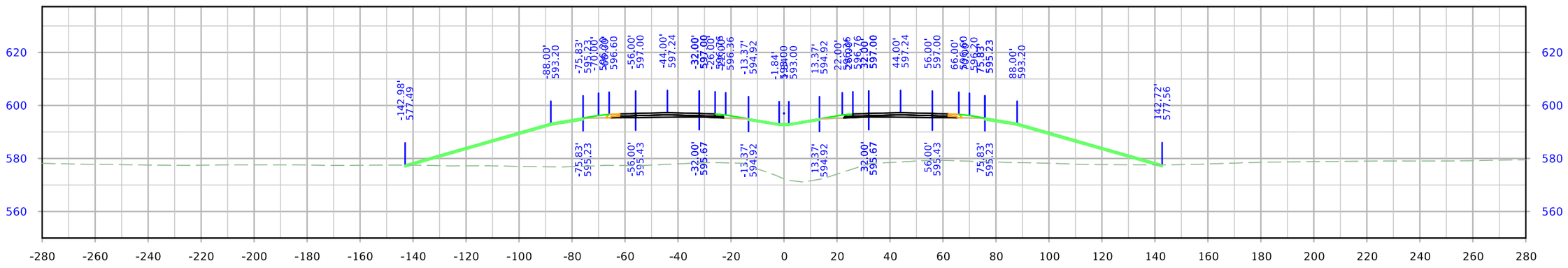
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.87

3:49:12 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

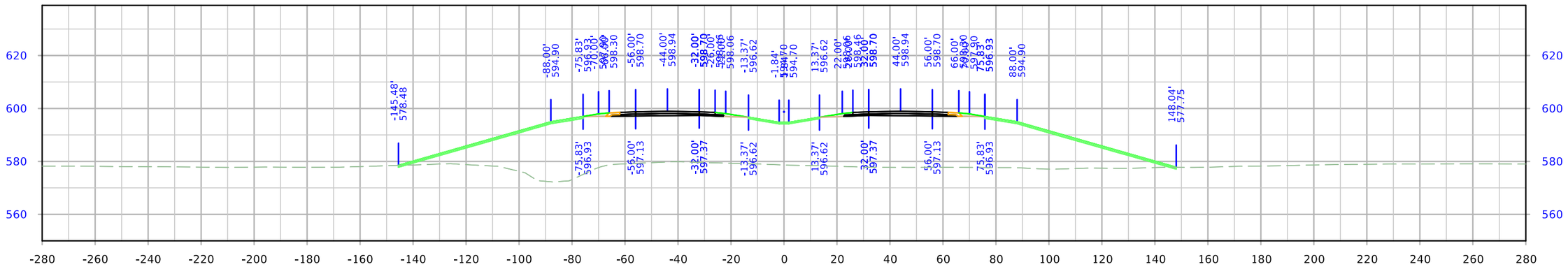
ML - US61



STA. 2367+00.00



STA. 2366+00.00

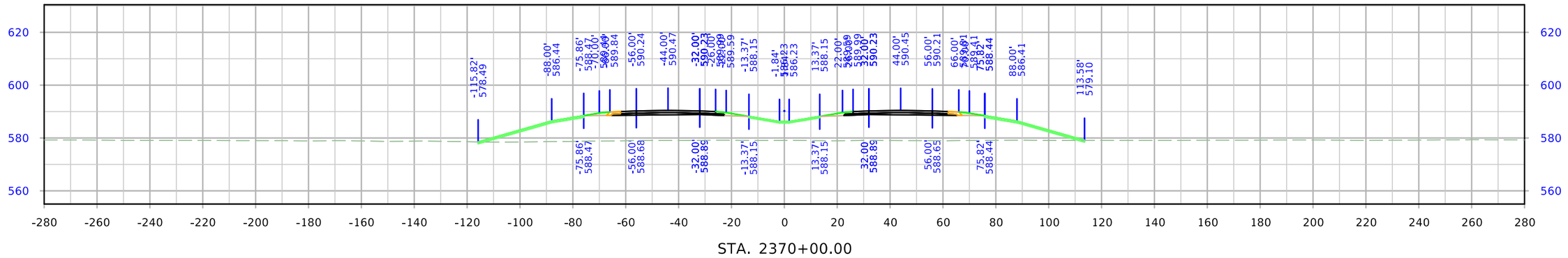


STA. 2365+00.00

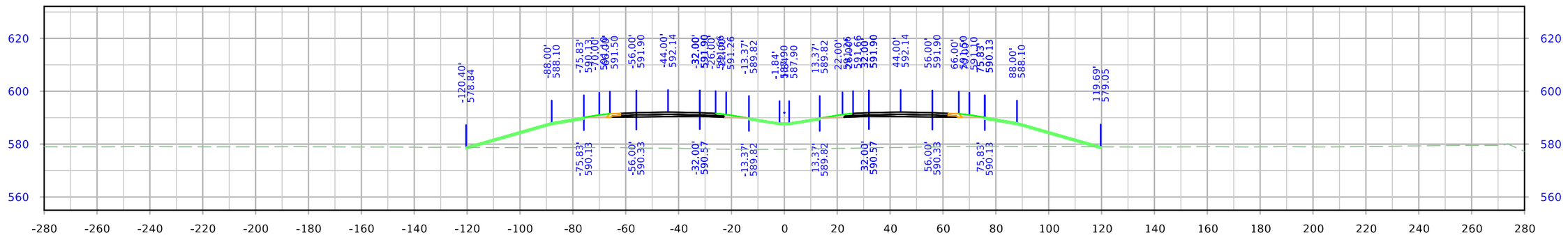
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.88	

3:49:17 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

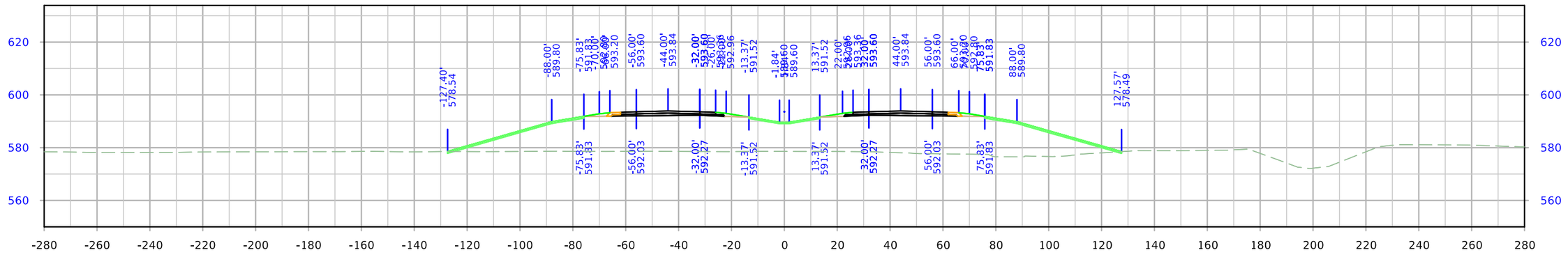
ML - US61



STA. 2370+00.00



STA. 2369+00.00

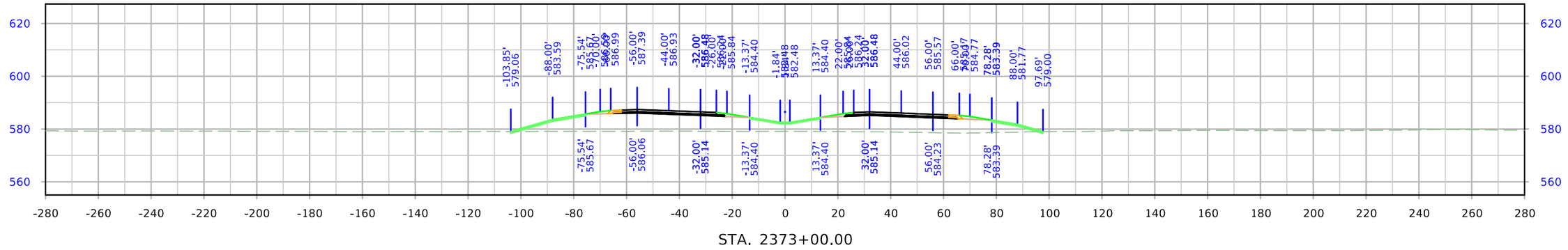


STA. 2368+00.00

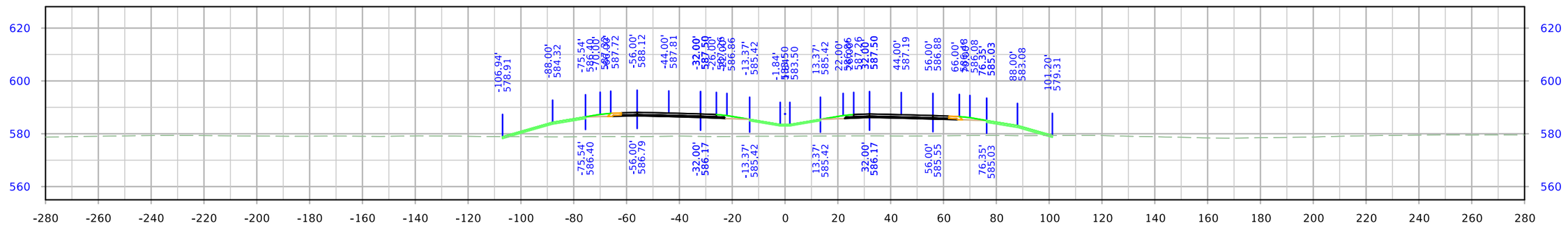
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.89

3:49:22 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

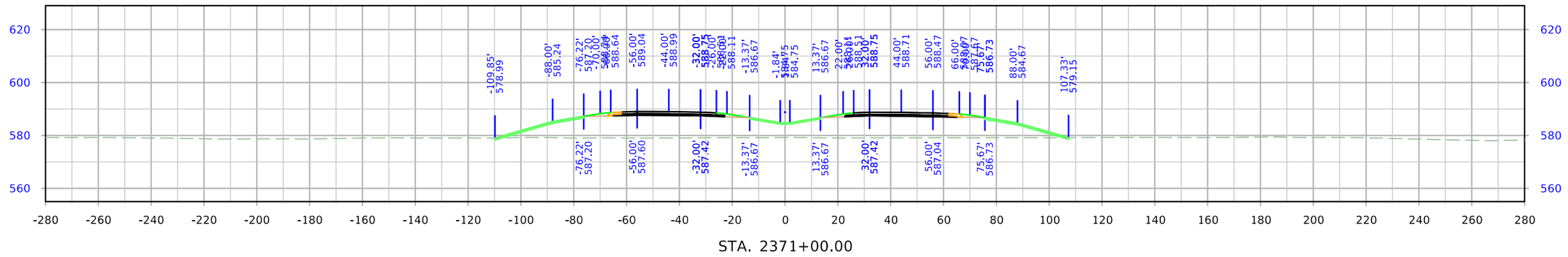
ML - US61



STA. 2373+00.00



STA. 2372+00.00

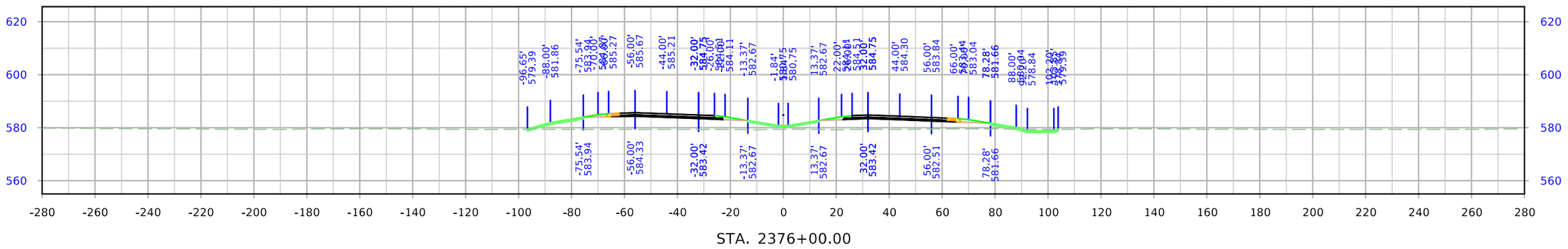


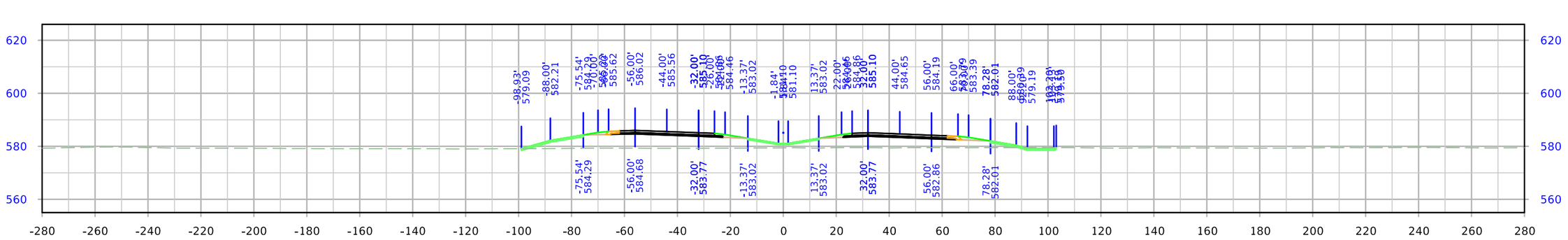
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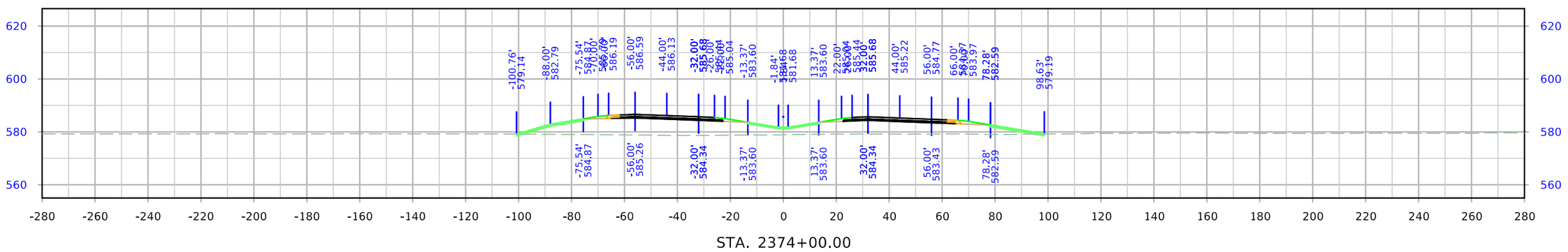
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.90

3:49:27 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



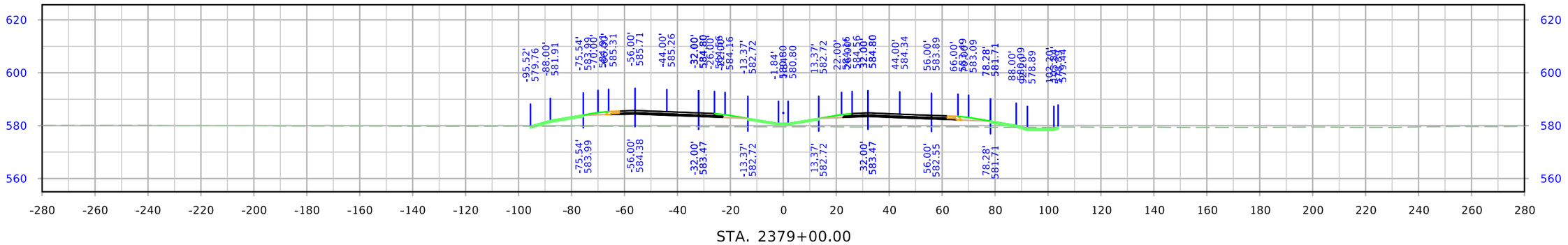




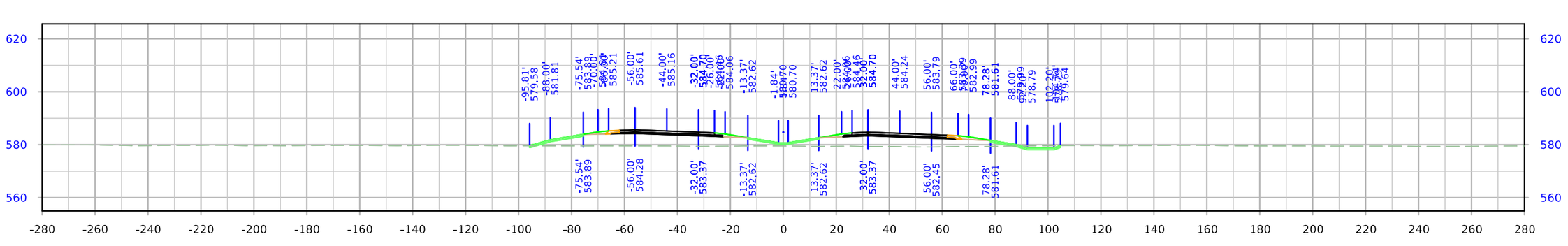
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.91

3:49:33 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

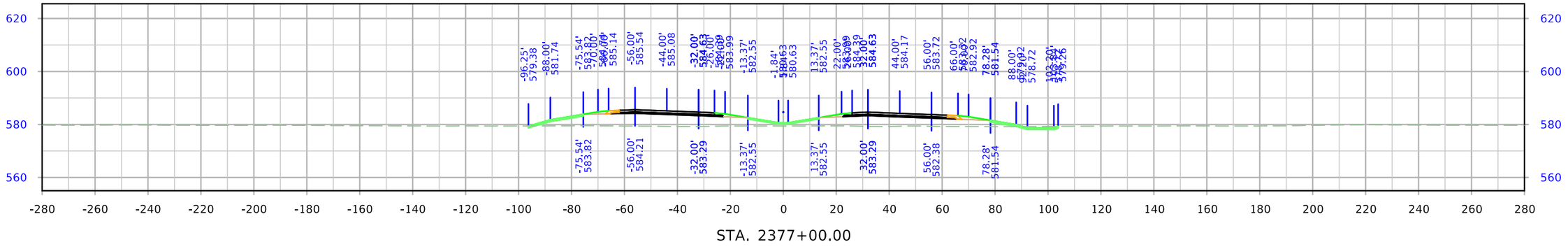
ML - US61



STA. 2379+00.00



STA. 2378+00.00

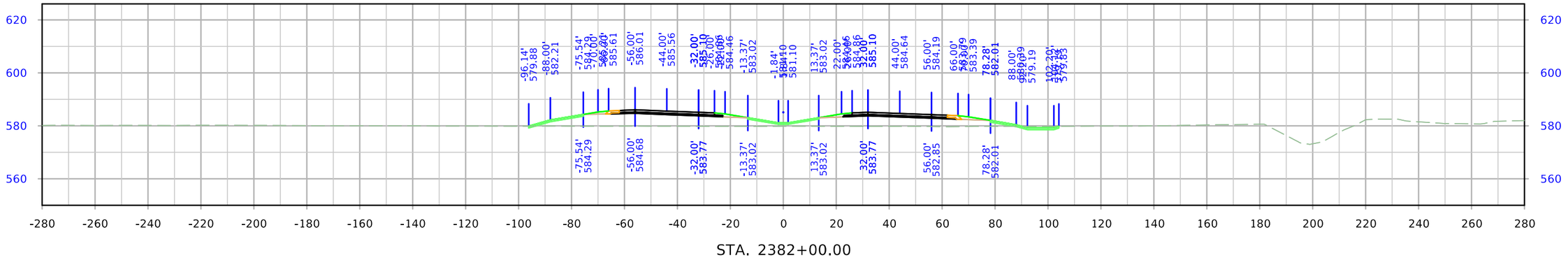


STA. 2377+00.00

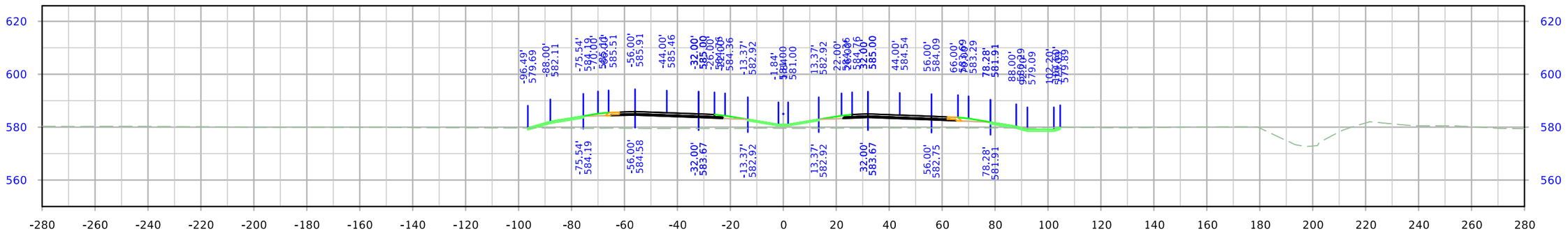
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.92	

3:49:38 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

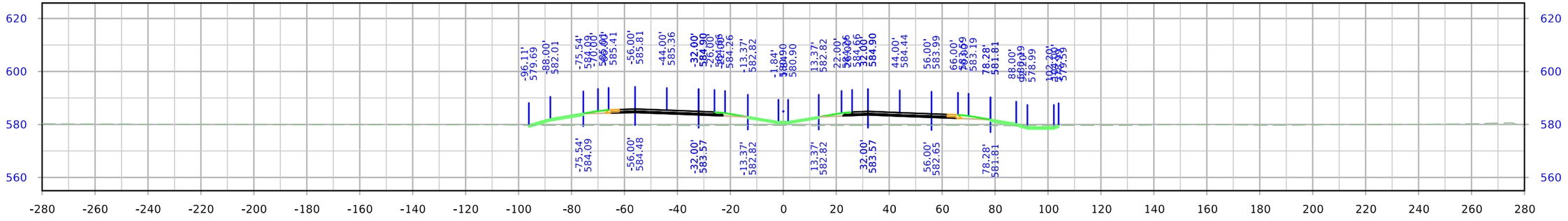
ML - US61



STA. 2382+00.00



STA. 2381+00.00

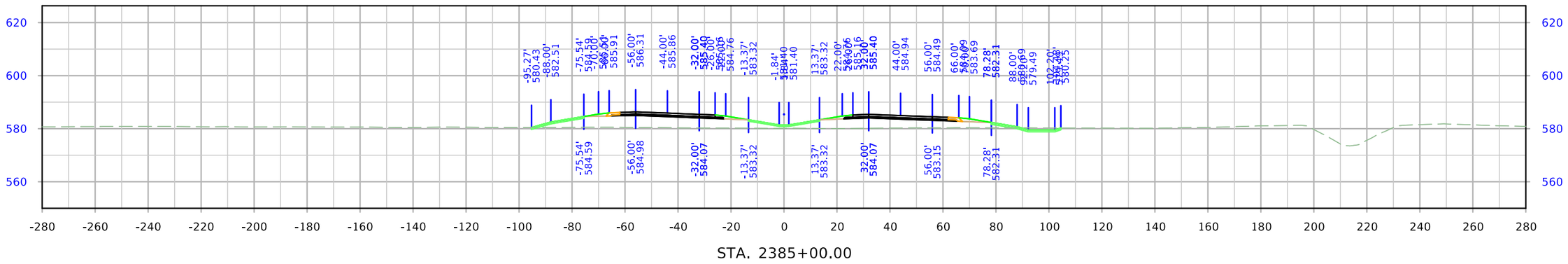


STA. 2380+00.00

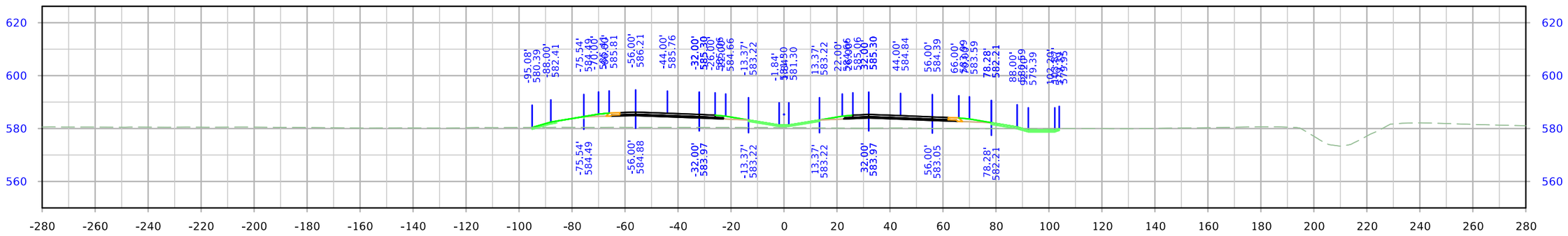
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.93

3:49:44 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

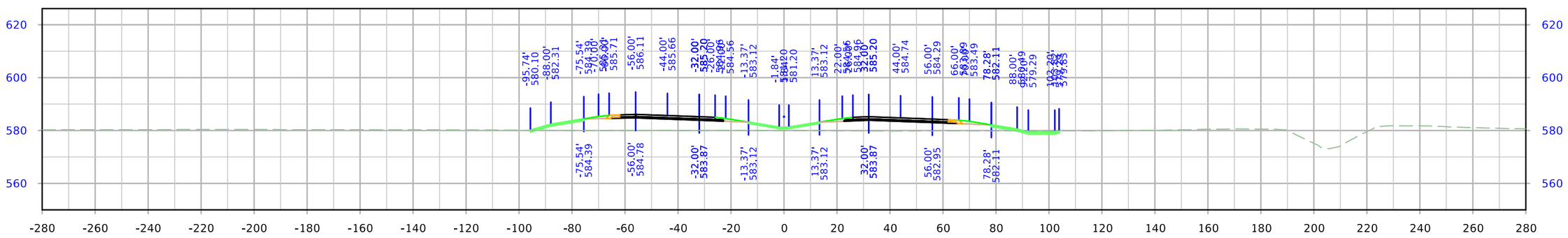
ML - US61



STA. 2385+00.00



STA. 2384+00.00

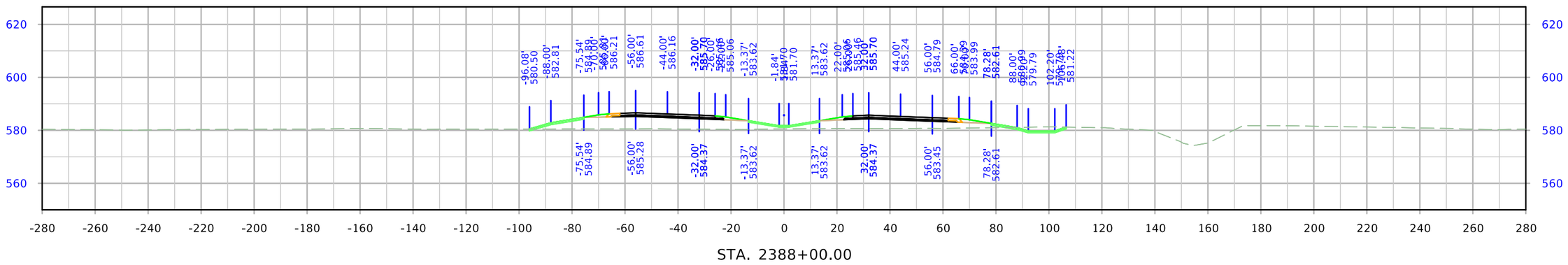


STA. 2383+00.00

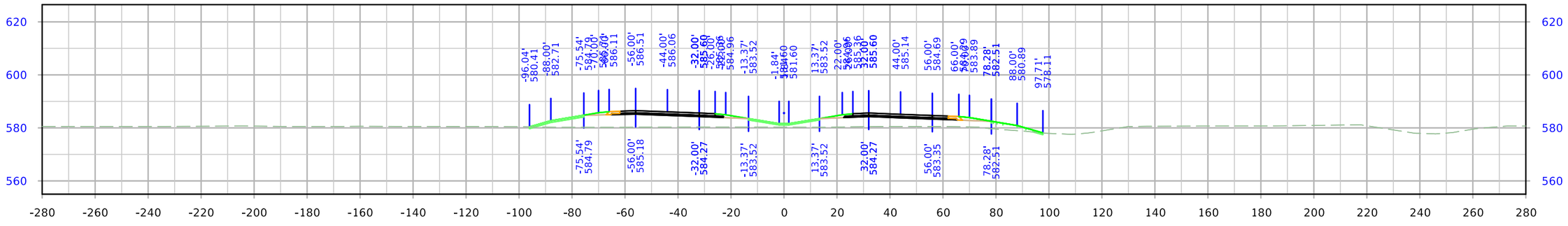
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.94

3:49:49 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

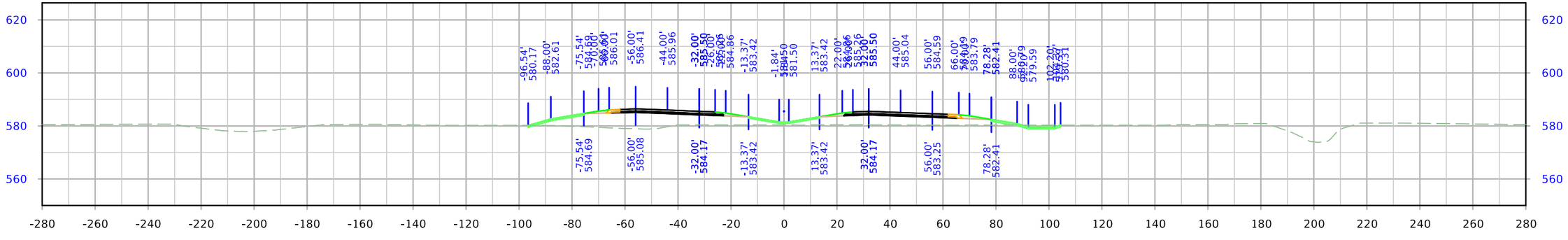
ML - US61



STA. 2388+00.00



STA. 2387+00.00

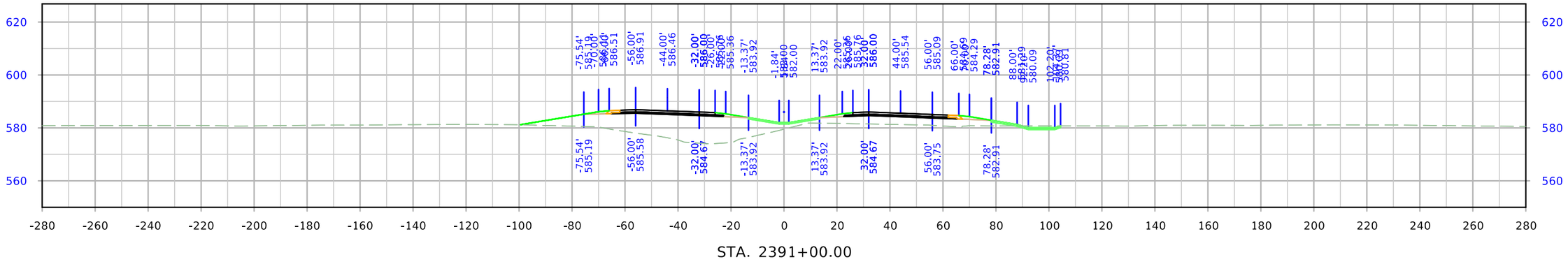


STA. 2386+00.00

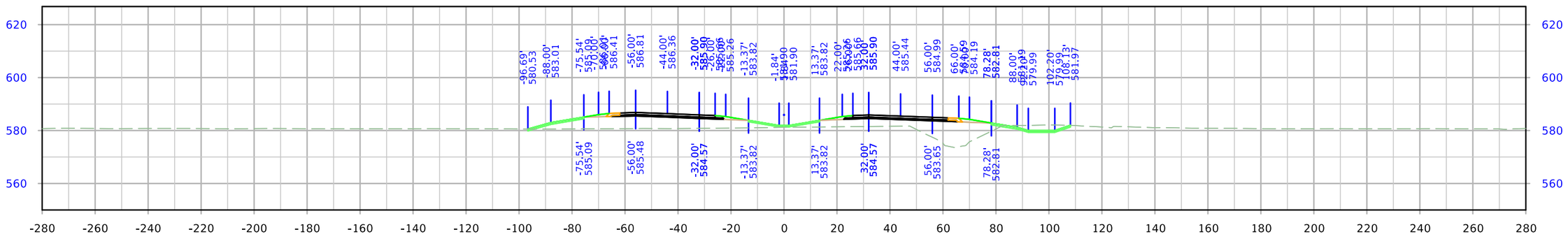
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.95

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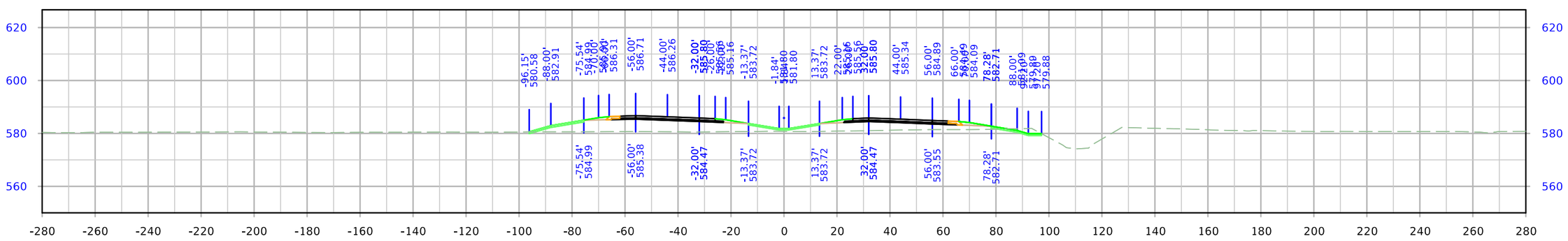
ML - US61



STA. 2391+00.00



STA. 2390+00.00

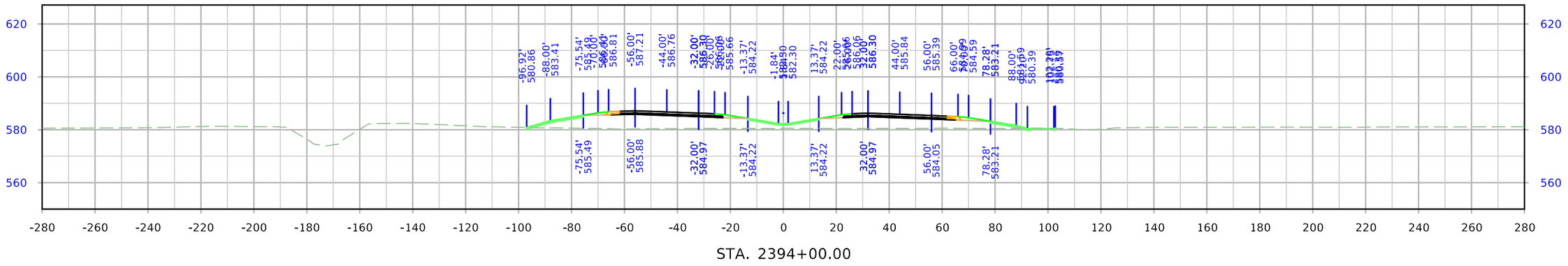


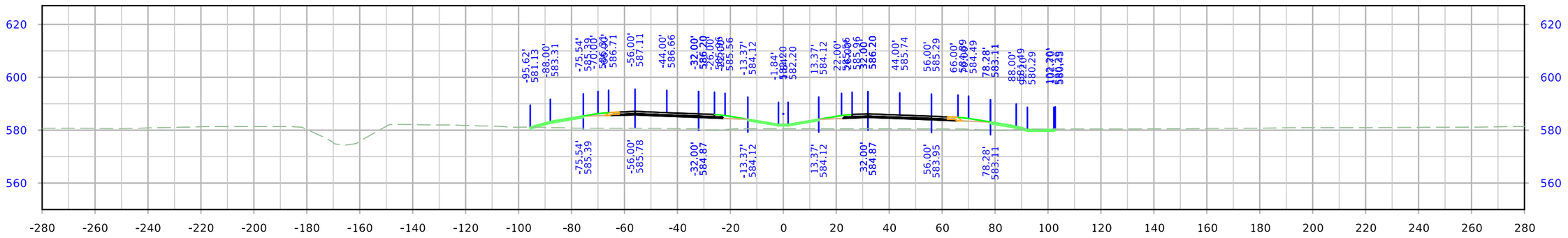
STA. 2389+00.00

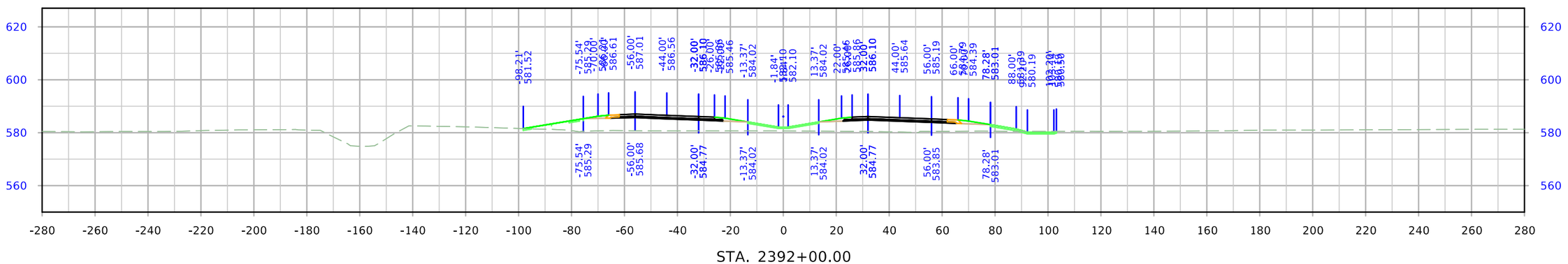
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.96	

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ML - US61



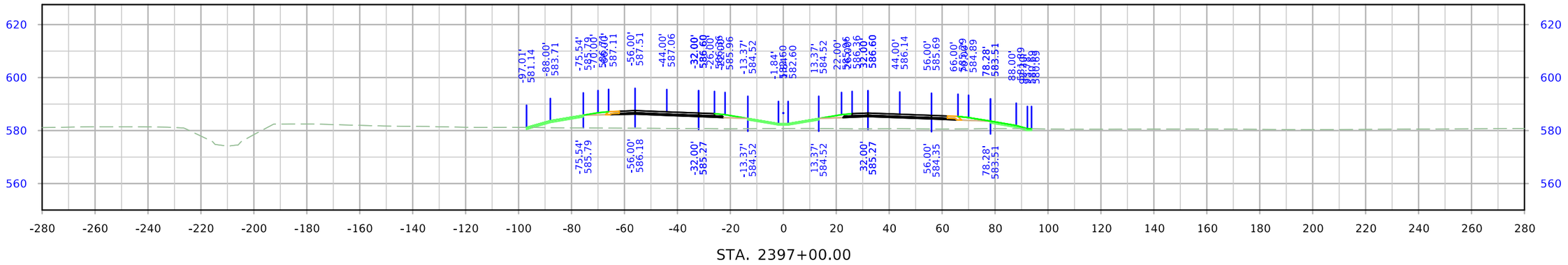




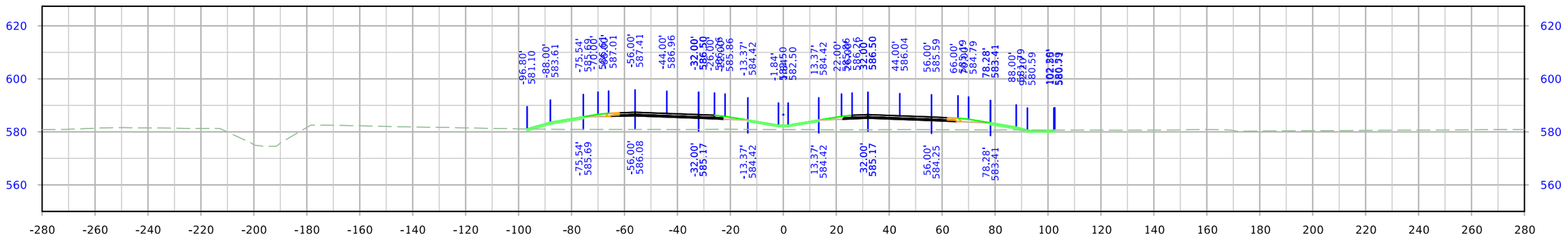
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.97

3:50:04 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

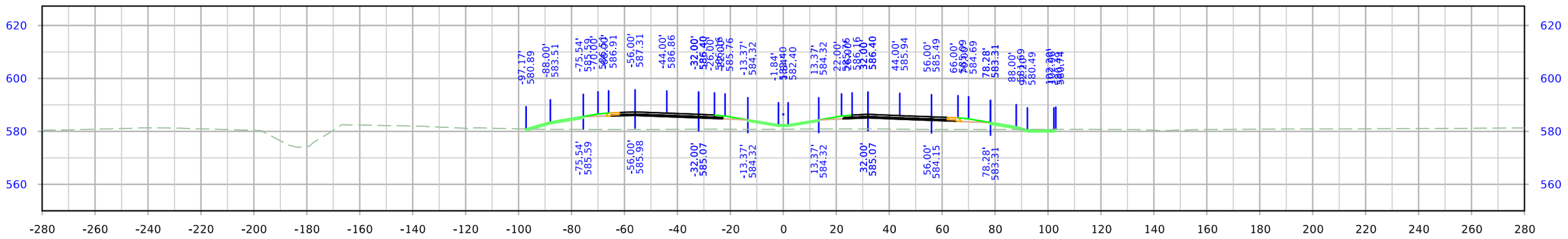
ML - US61



STA. 2397+00.00



STA. 2396+00.00

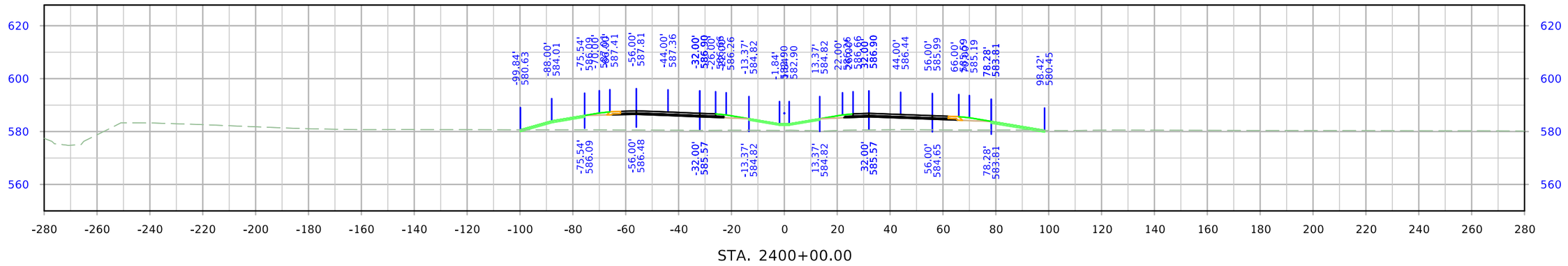


STA. 2395+00.00

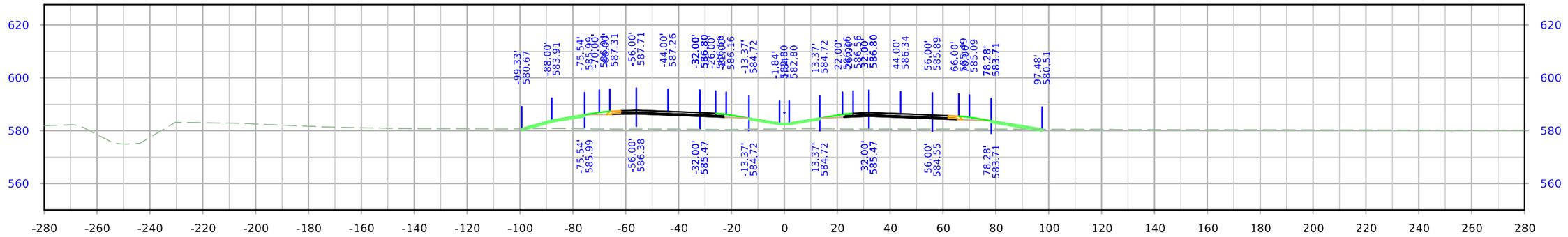
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.98

3:50:10 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

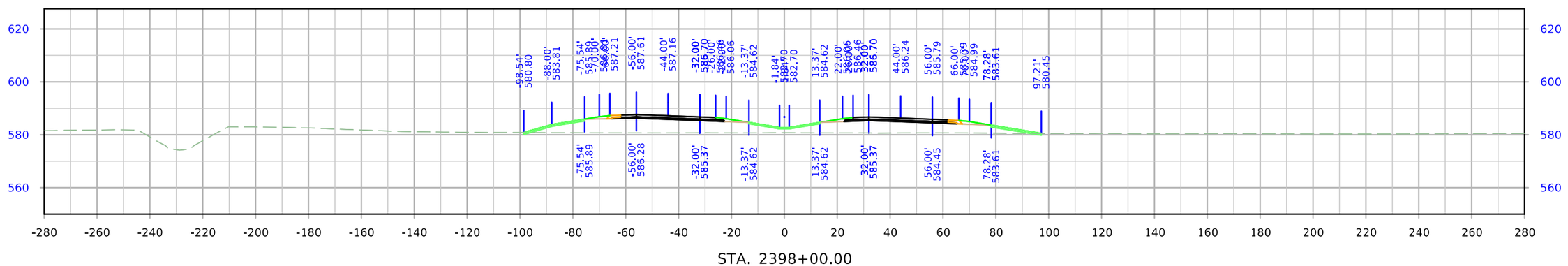
ML - US61



STA. 2400+00.00



STA. 2399+00.00

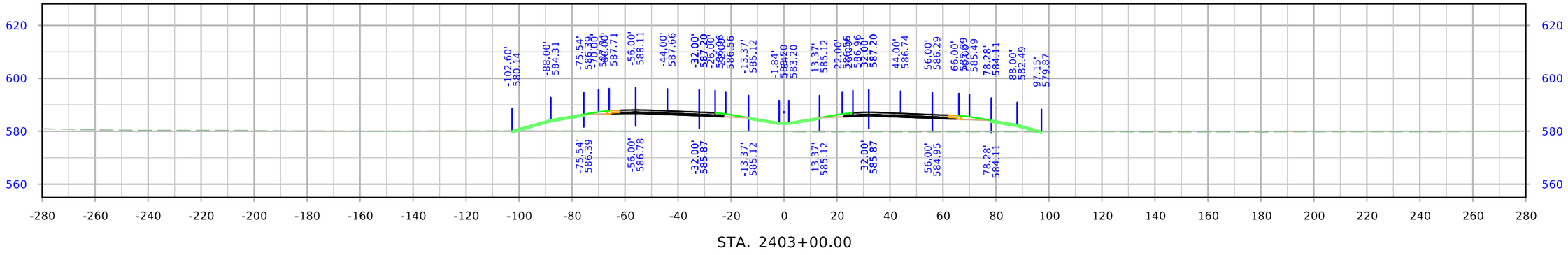


STA. 2398+00.00

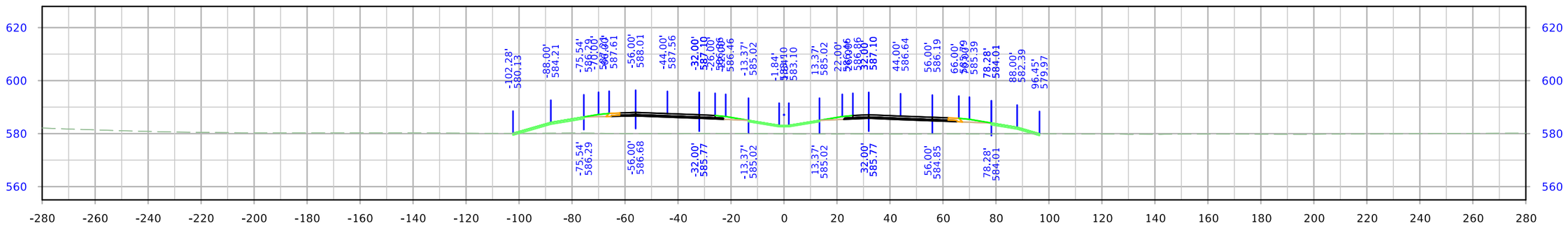
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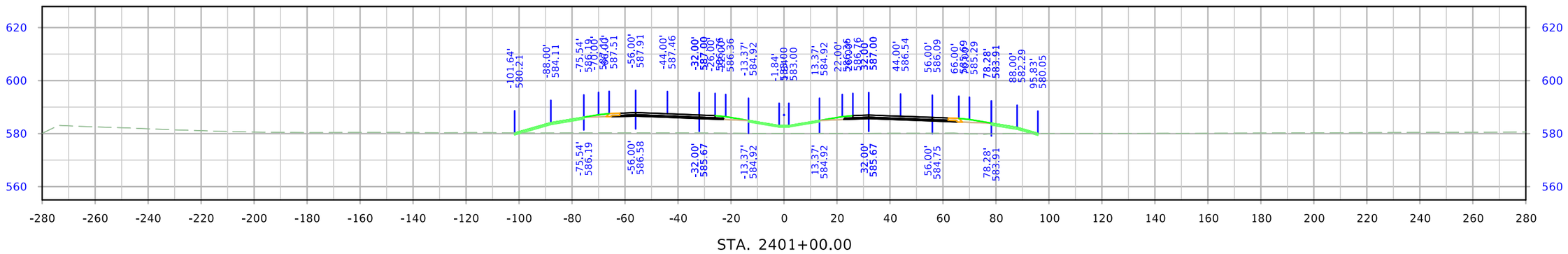
ML - US61



STA. 2403+00.00



STA. 2402+00.00

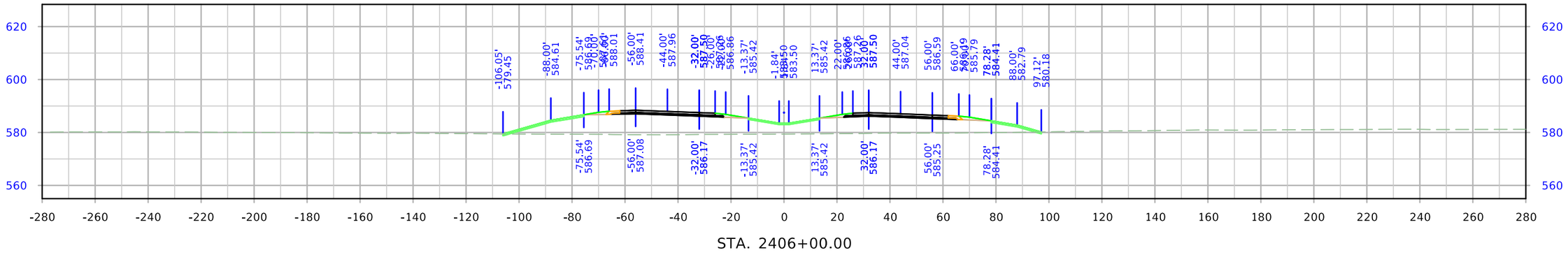


STA. 2401+00.00

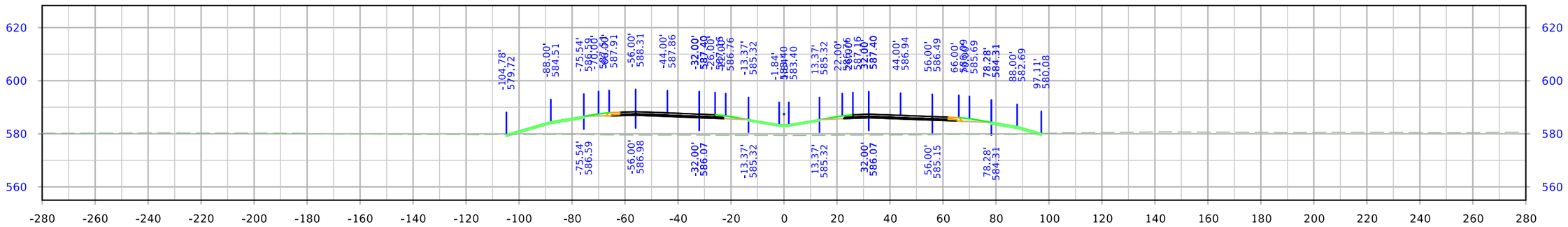
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.100

3:50:20 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

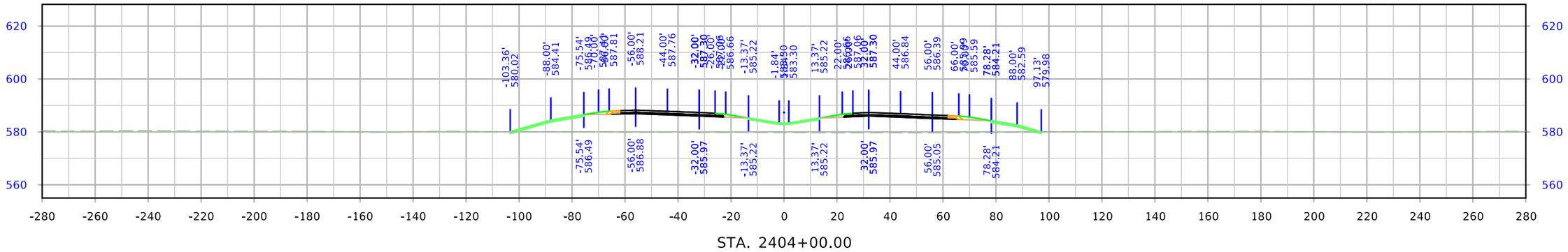
ML - US61



STA. 2406+00.00



STA. 2405+00.00

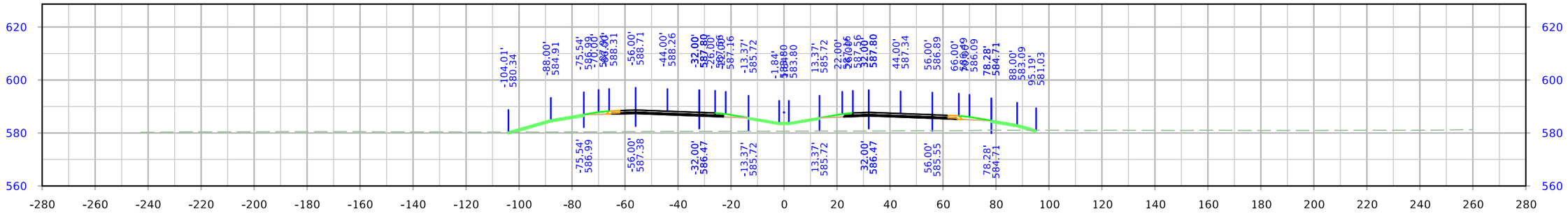


STA. 2404+00.00

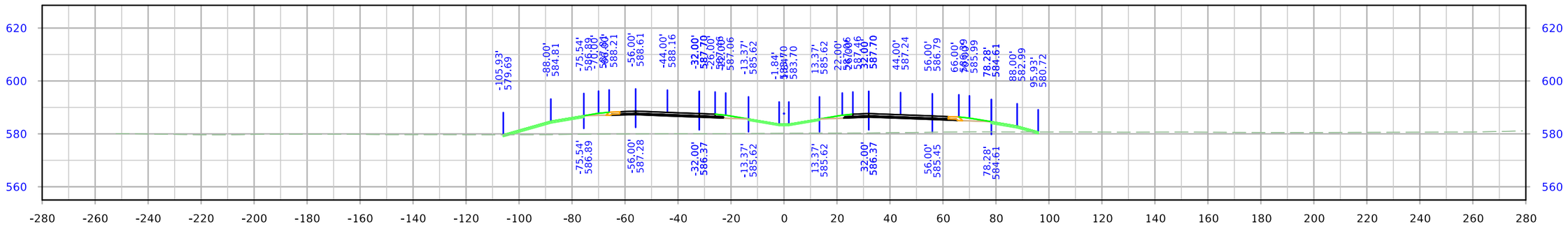
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.101

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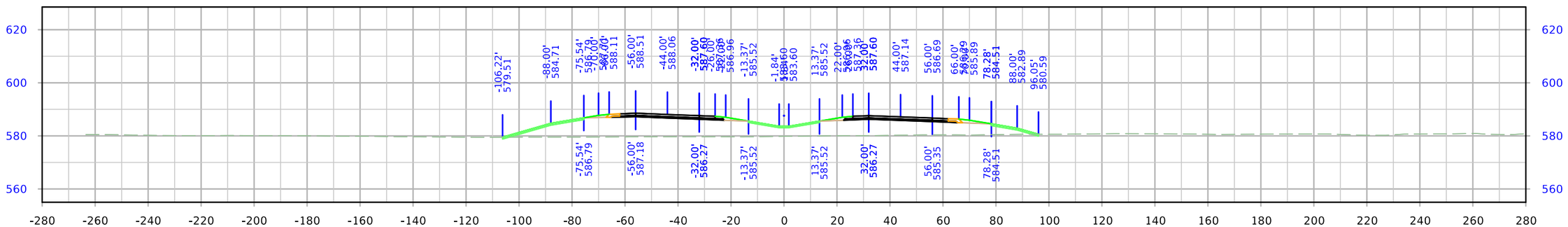
ML - US61



STA. 2409+00.00



STA. 2408+00.00

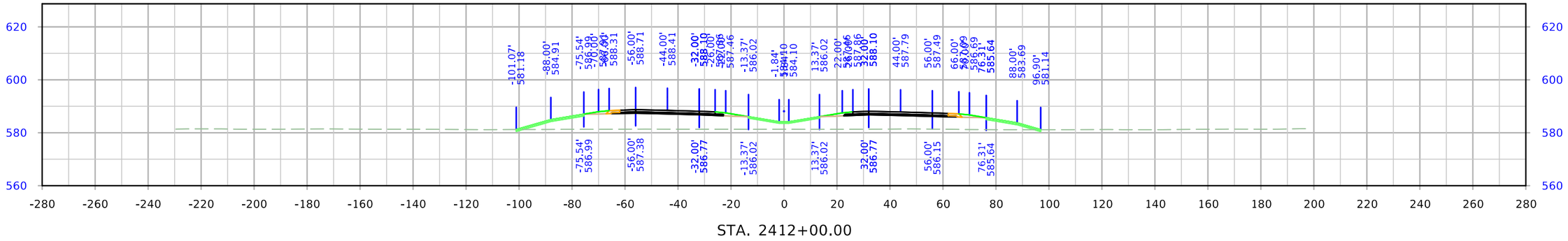


STA. 2407+00.00

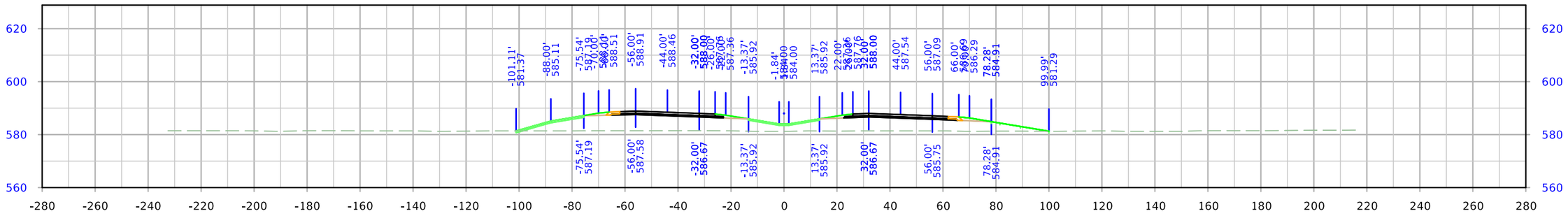
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.102

3:50:30 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

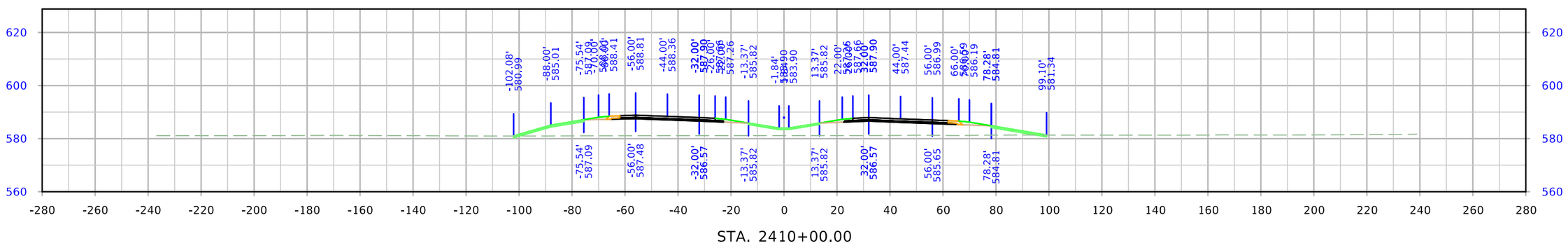
ML - US61



STA. 2412+00.00



STA. 2411+00.00

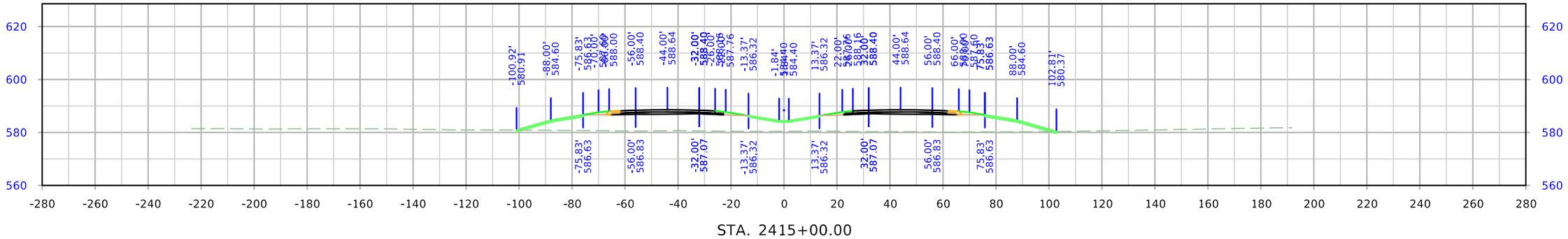


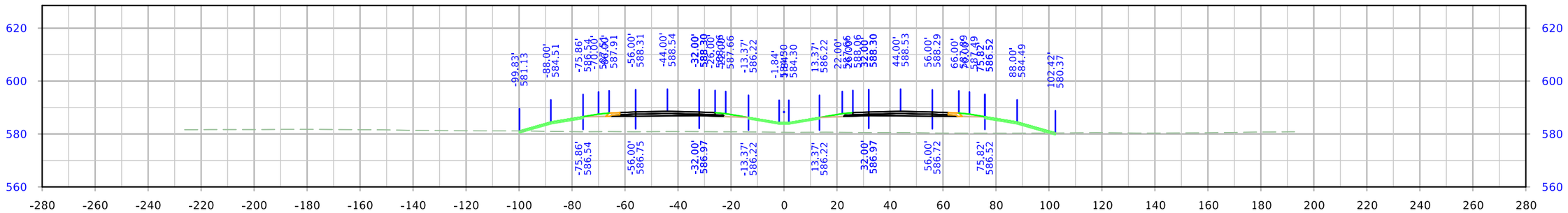
STA. 2410+00.00

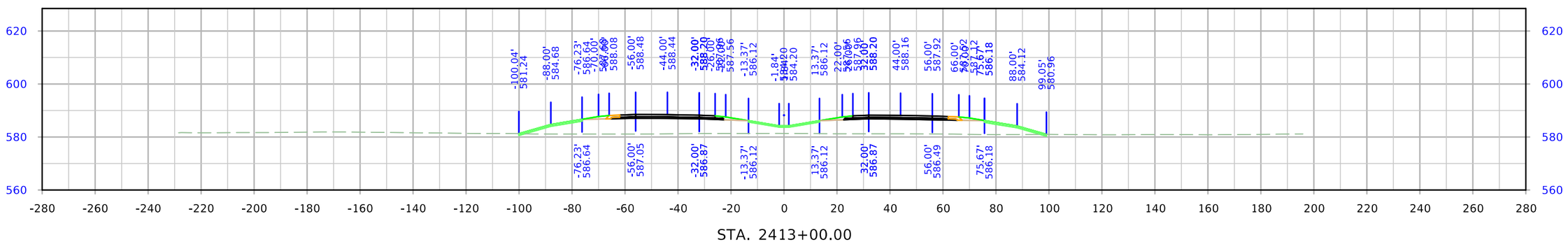
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.103

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ML - US61



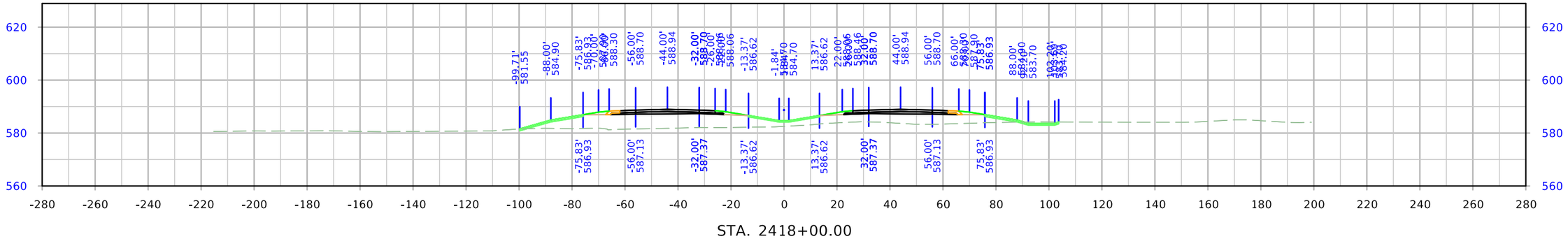




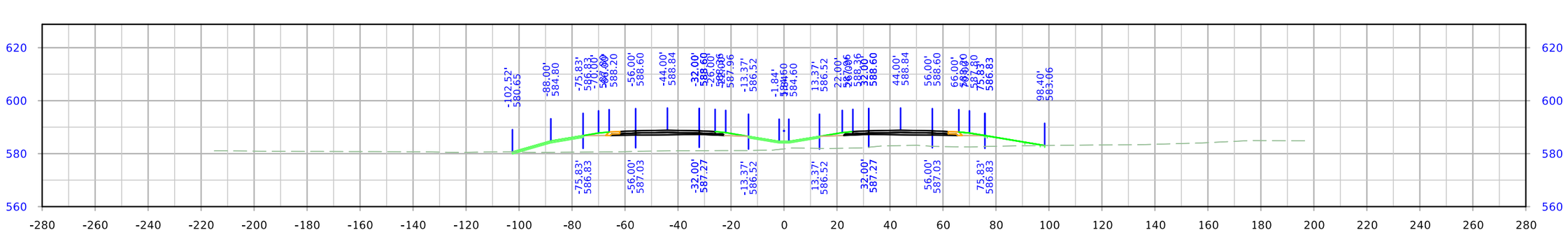
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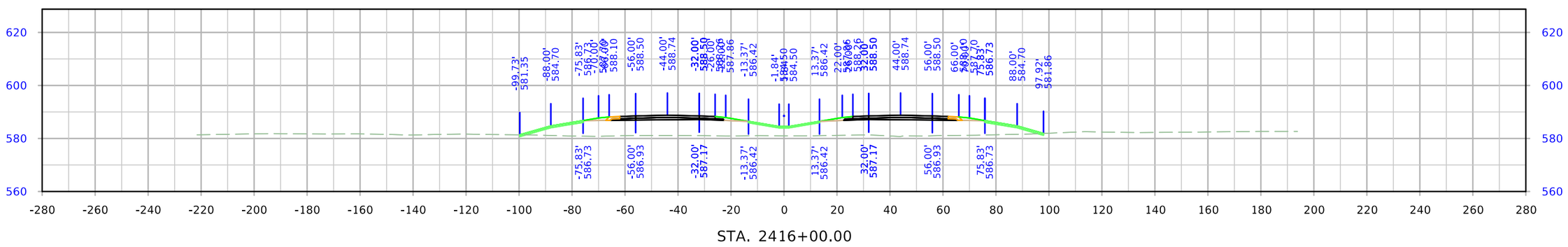
ML - US61



STA. 2418+00.00



STA. 2417+00.00

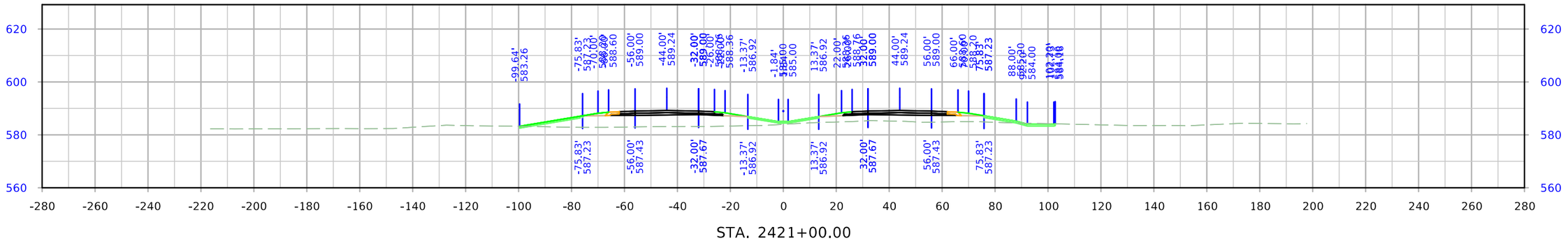


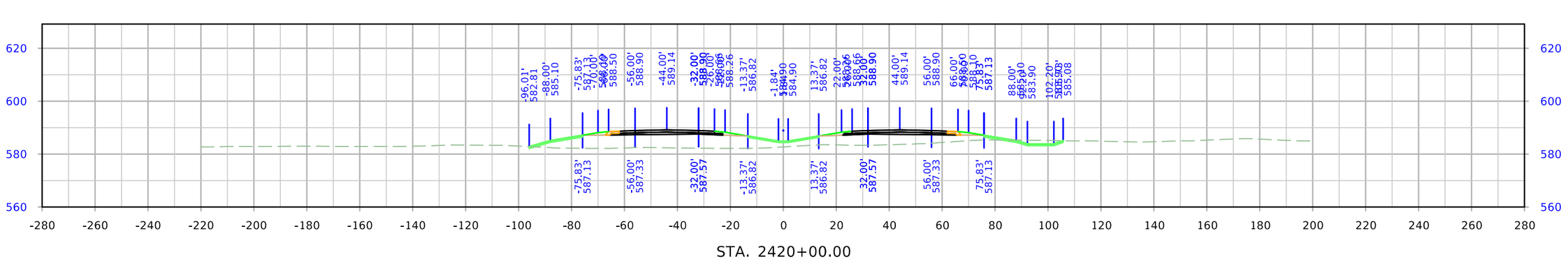
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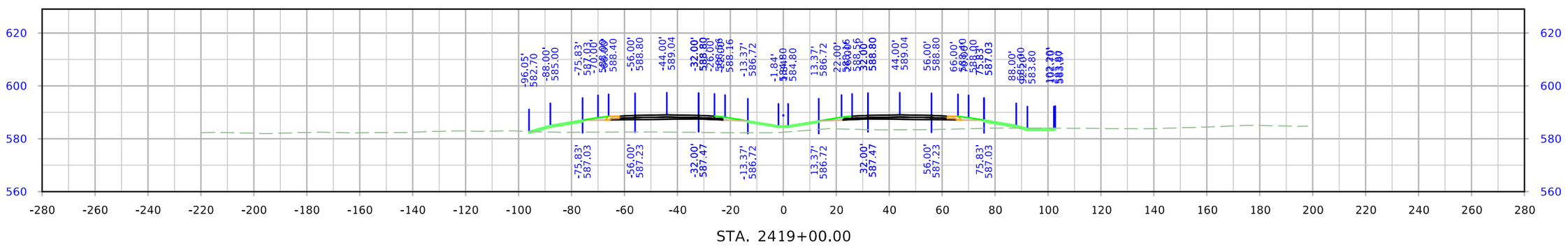
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.105

3:50:46 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



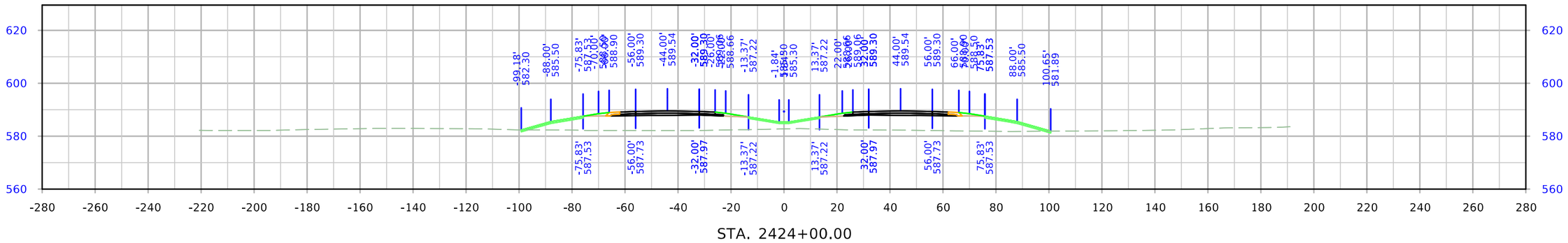


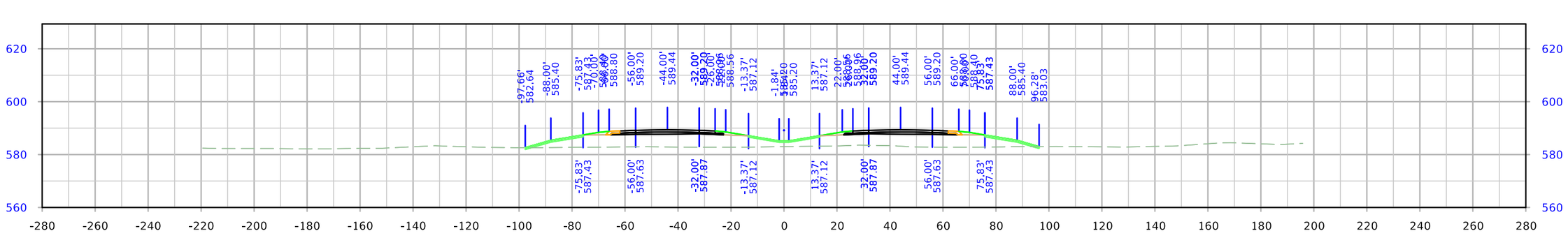


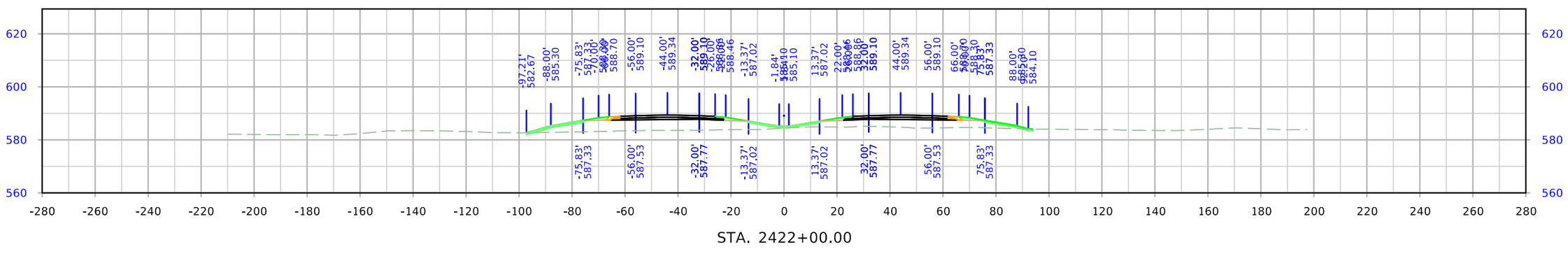
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3:50:51 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



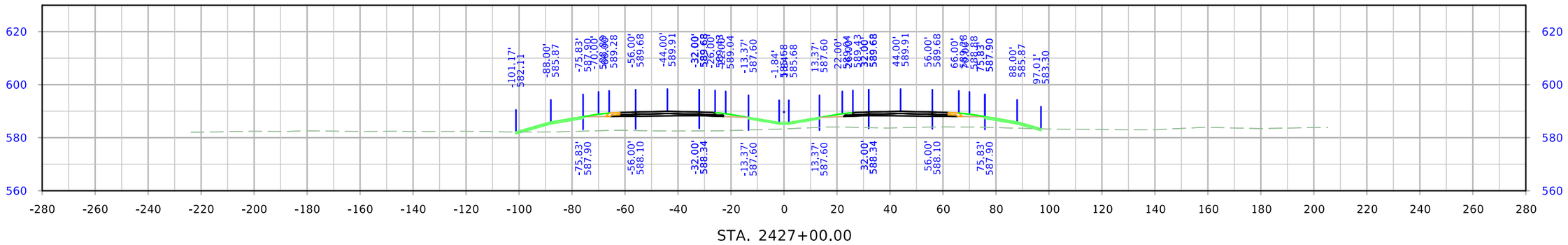


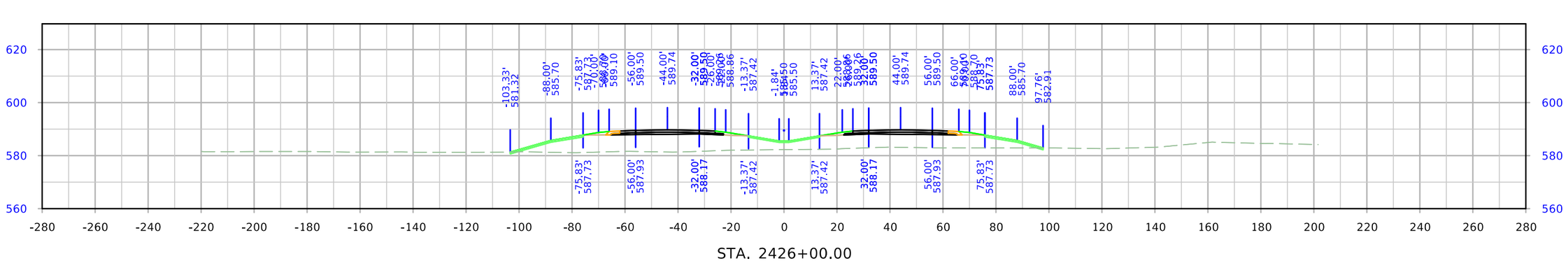


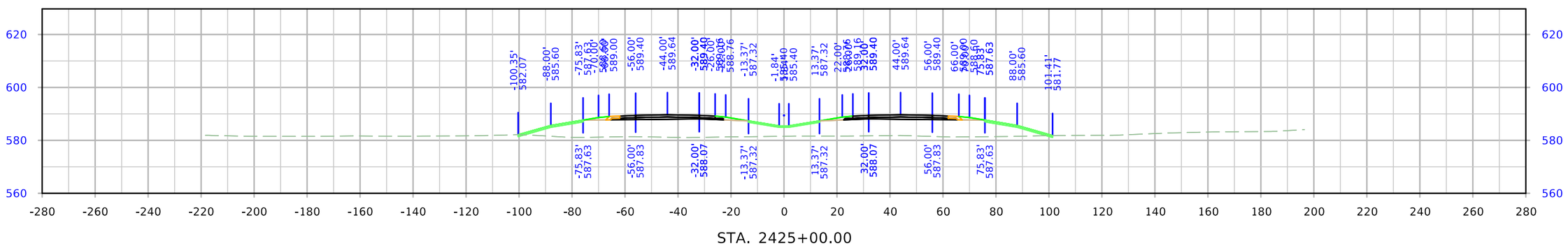
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3:50:57 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



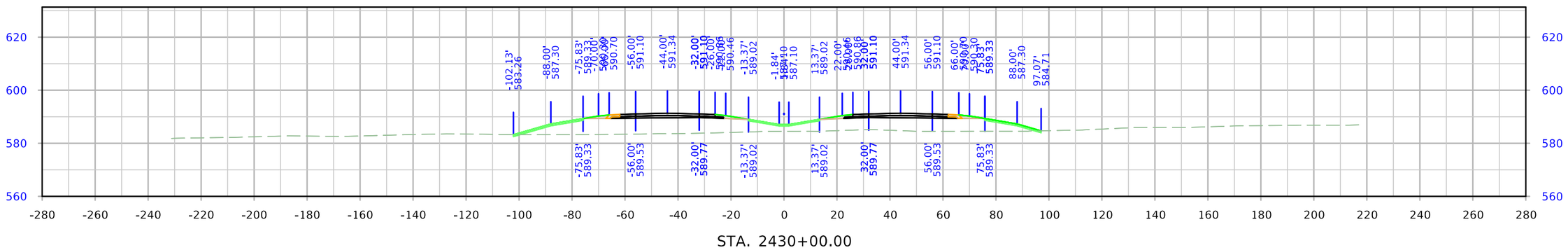




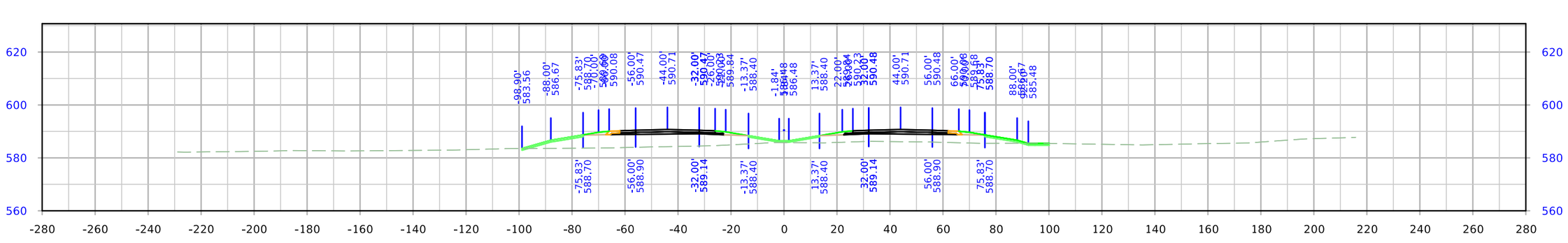
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.108

3:51:02 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

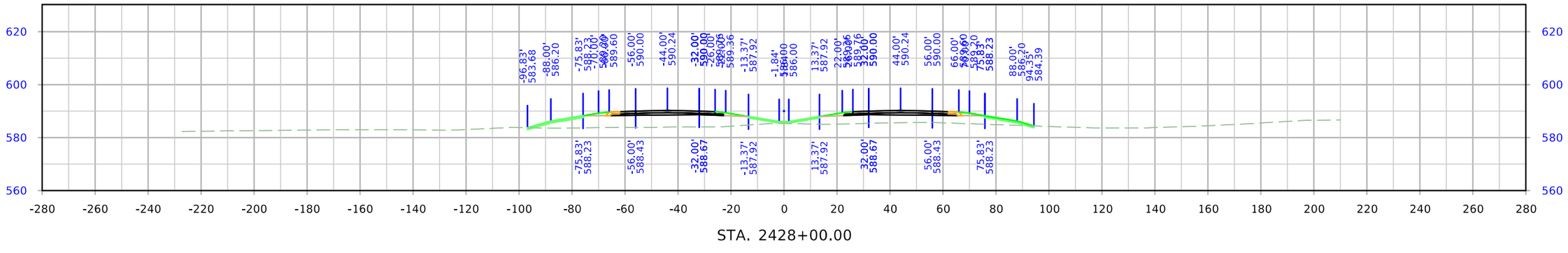
ML - US61



STA. 2430+00.00



STA. 2429+00.00

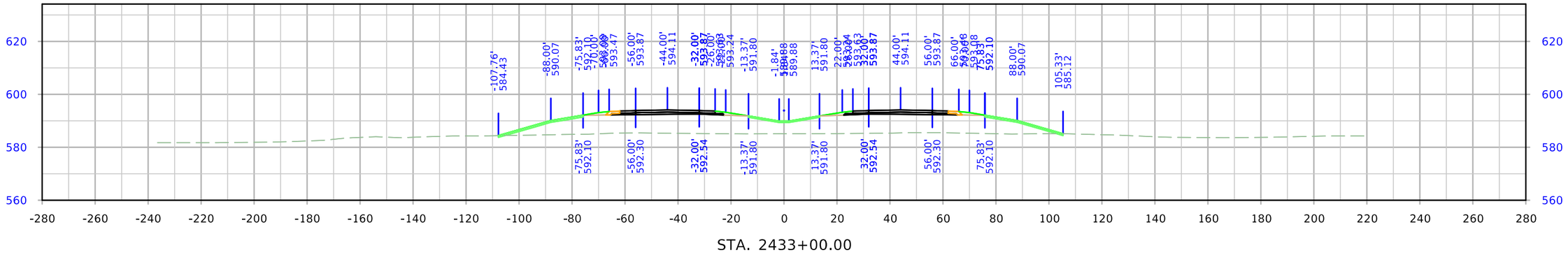


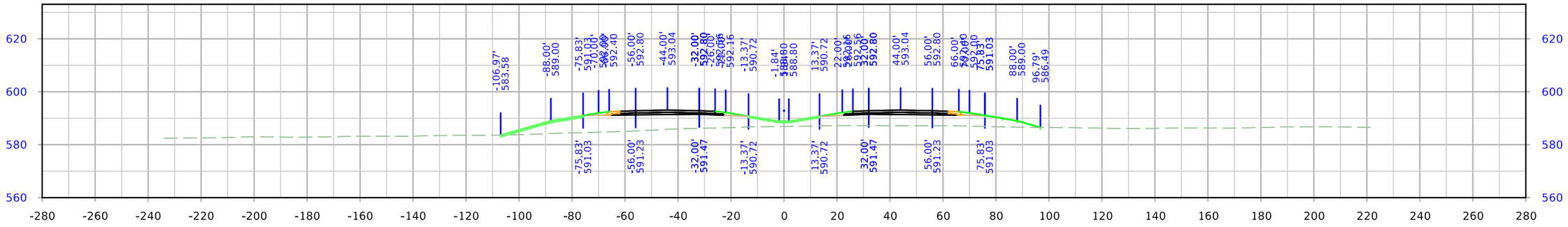
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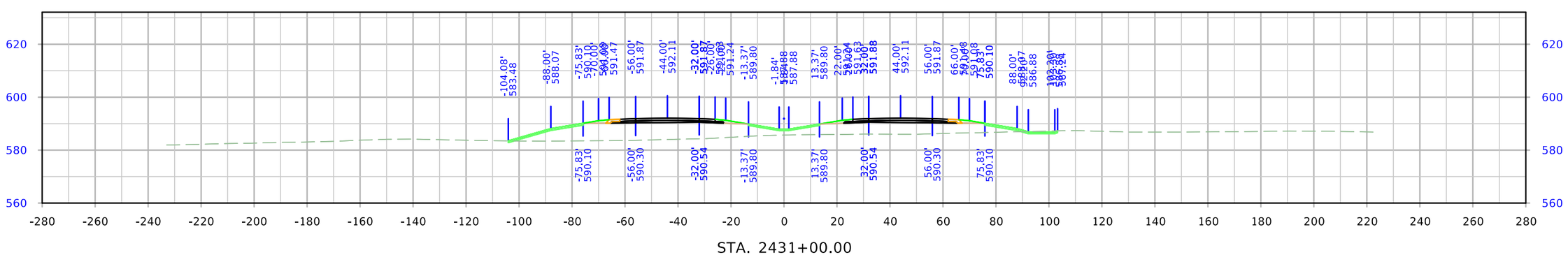
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.109

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ML - US61



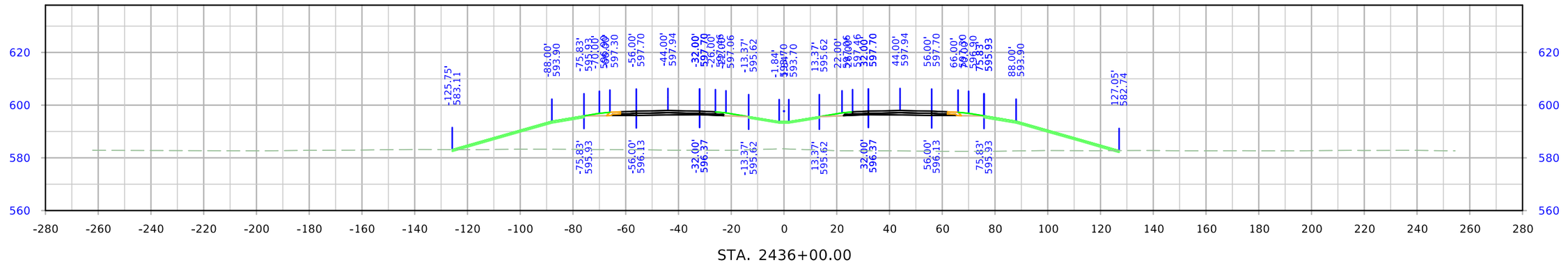




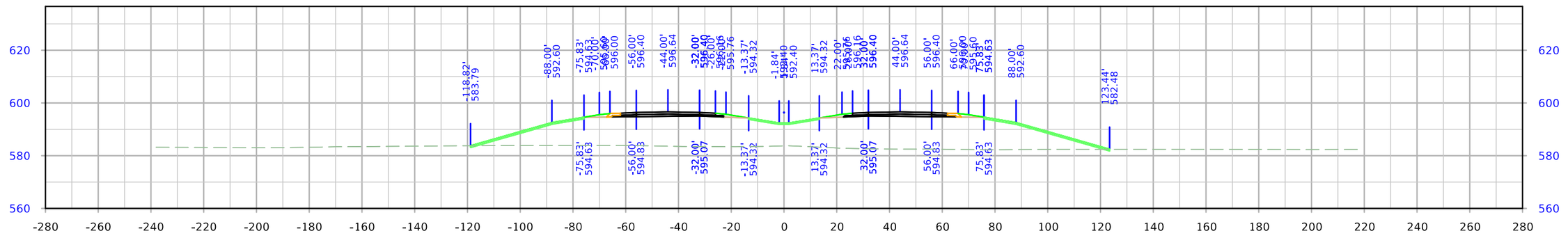
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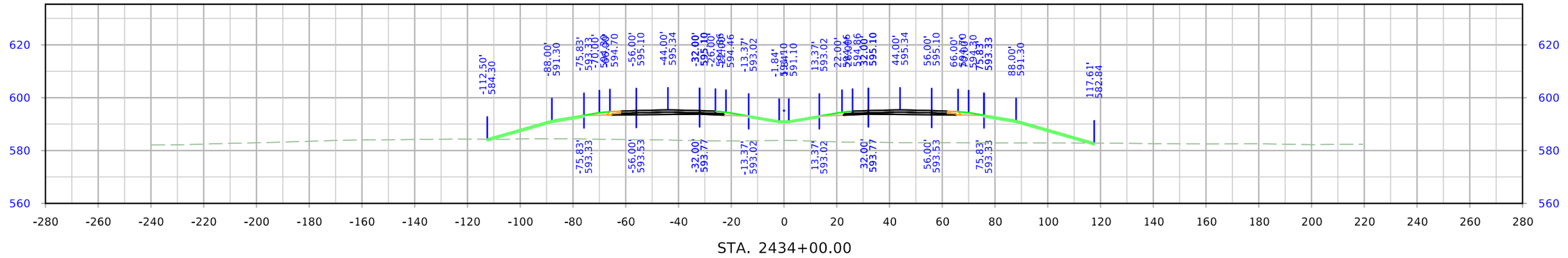
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STA. 2436+00.00



STA. 2435+00.00

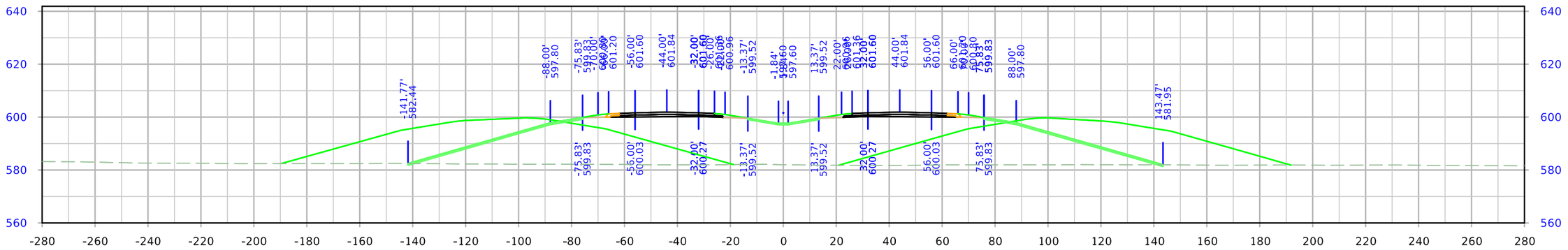


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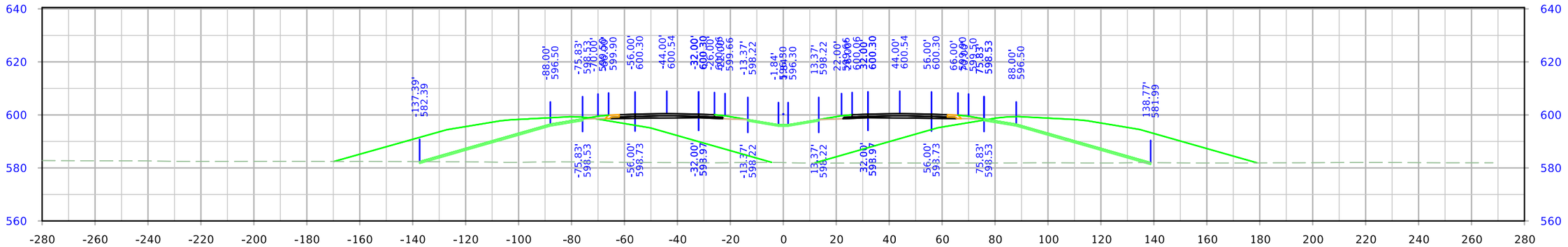
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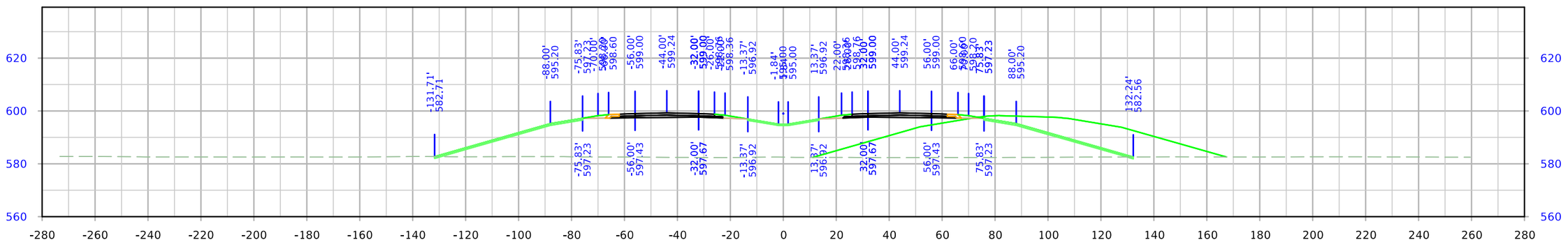
ML - US61



STA. 2439+00.00



STA. 2438+00.00

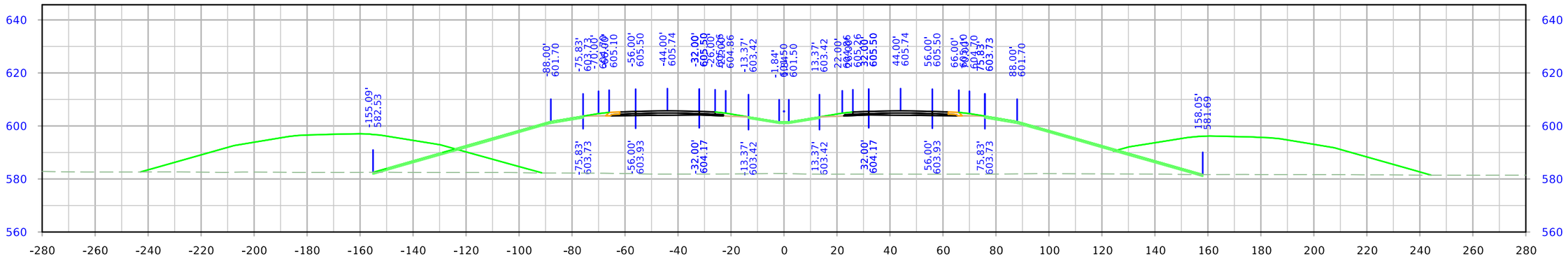


STA. 2437+00.00

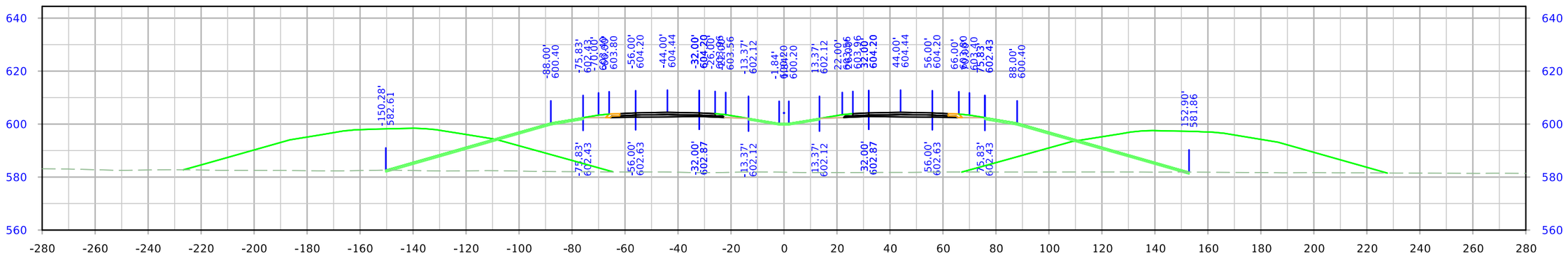
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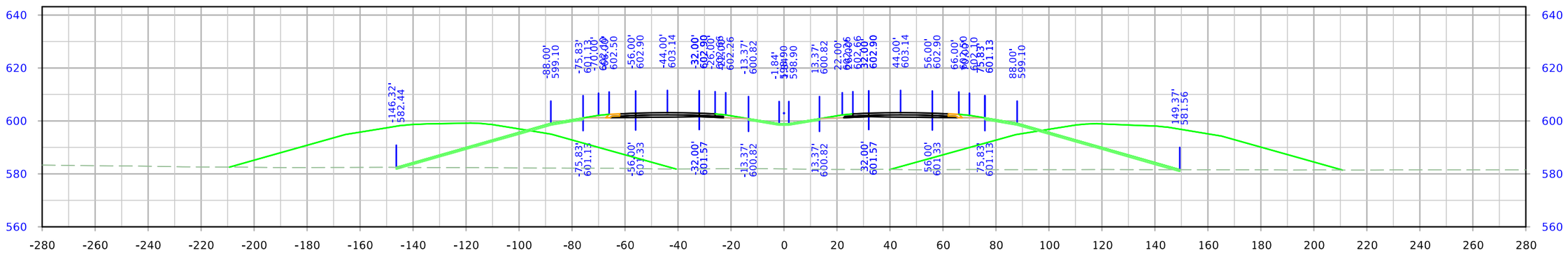
ML - US61



STA. 2442+00.00



STA. 2441+00.00

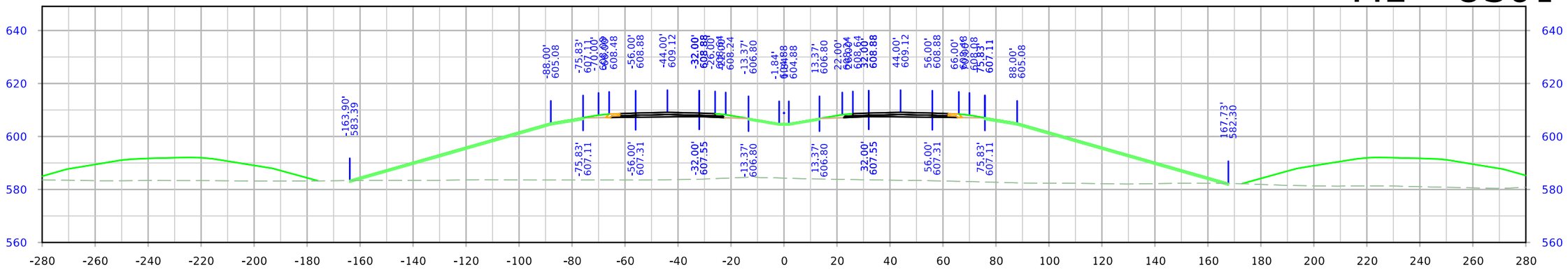


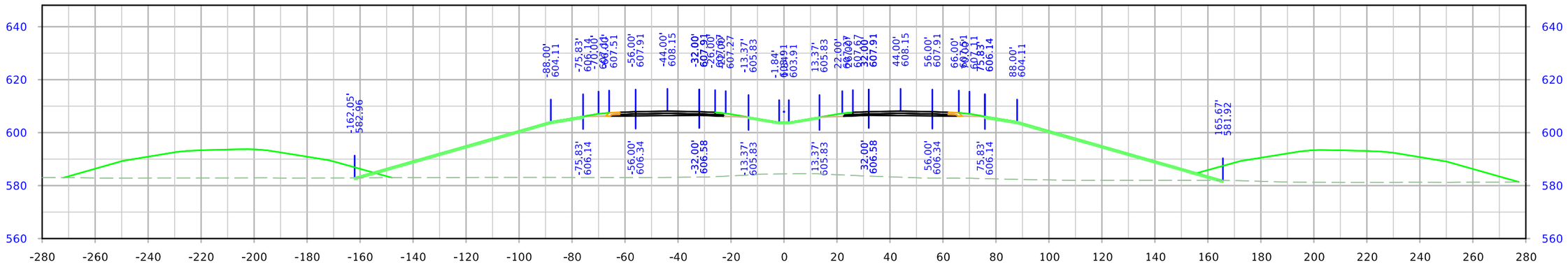
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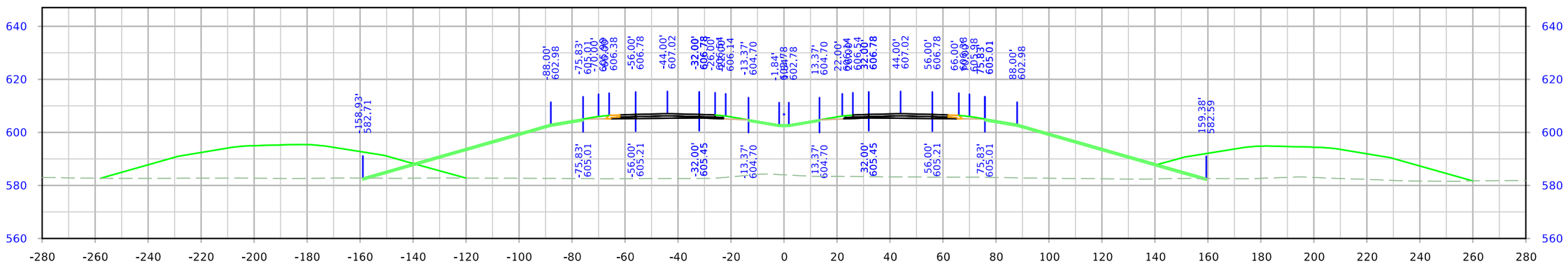
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.113

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ML - US61



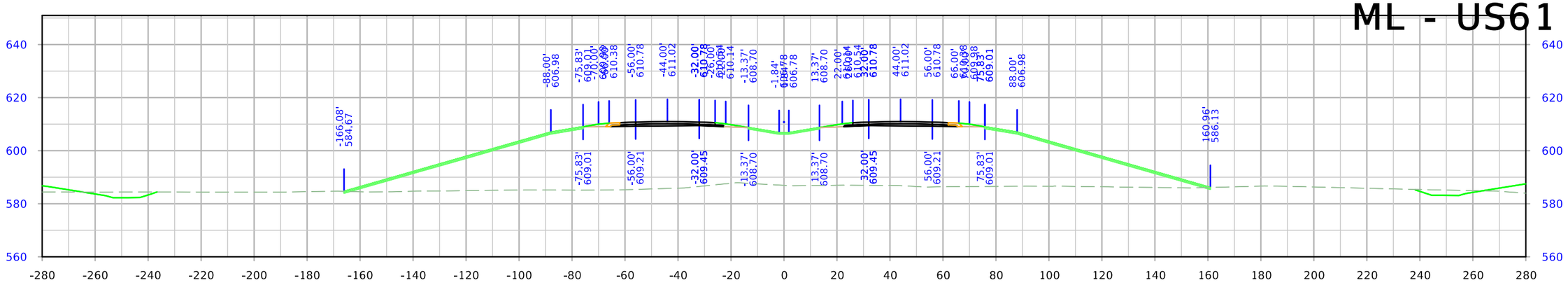




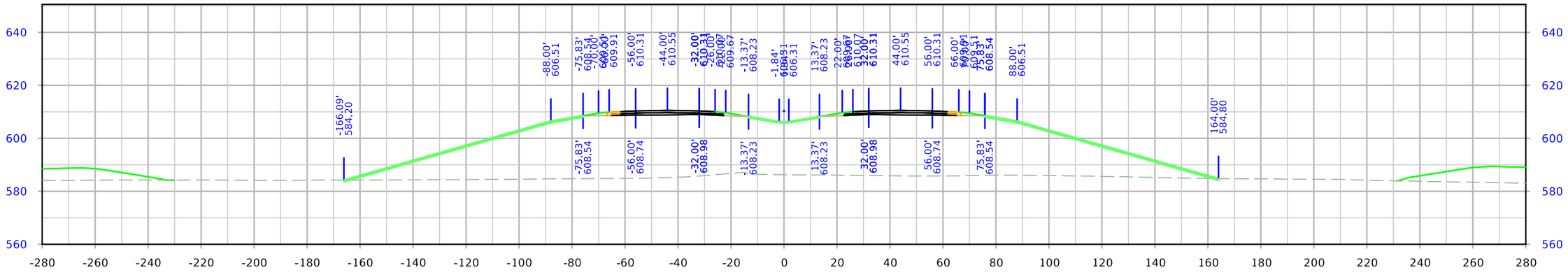
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.114

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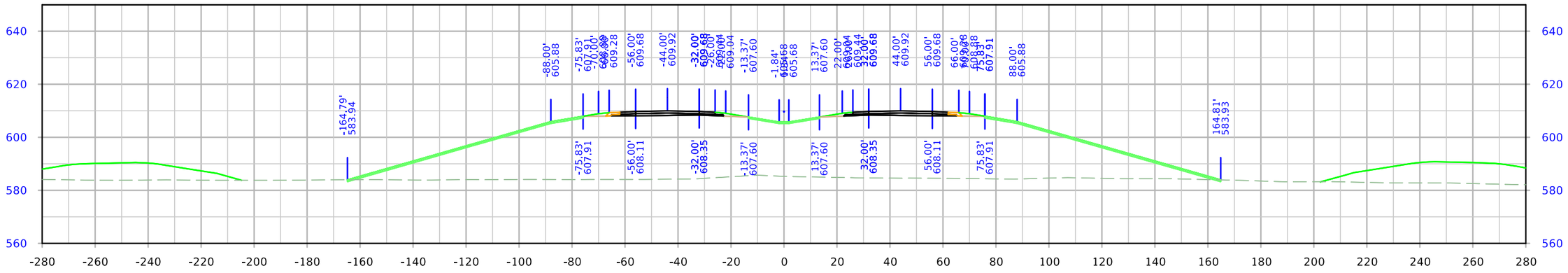
ML - US61



STA. 2448+00.00



STA. 2447+00.00

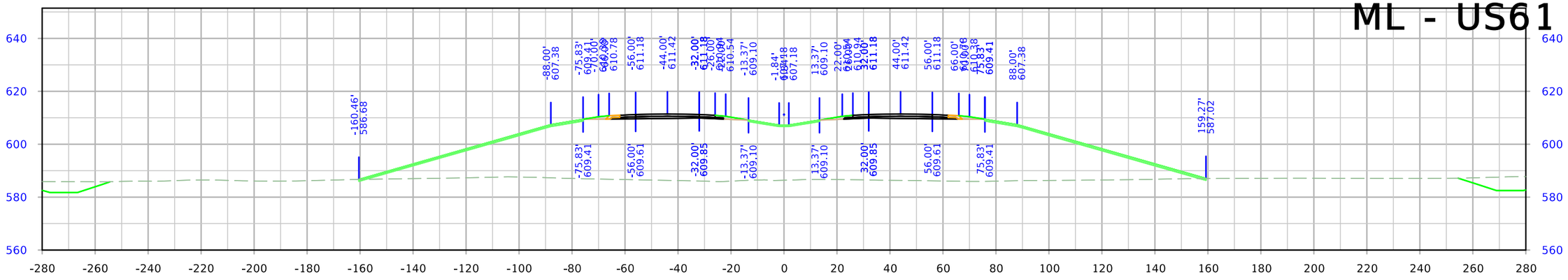


STA. 2446+00.00

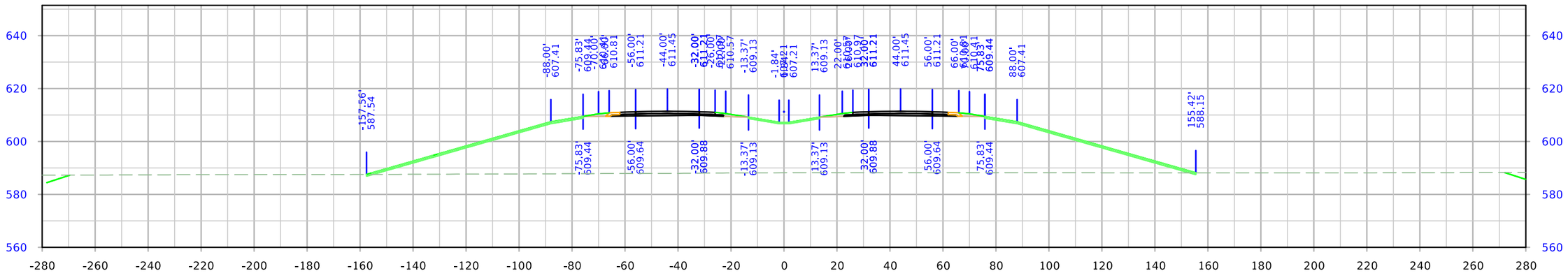
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.115

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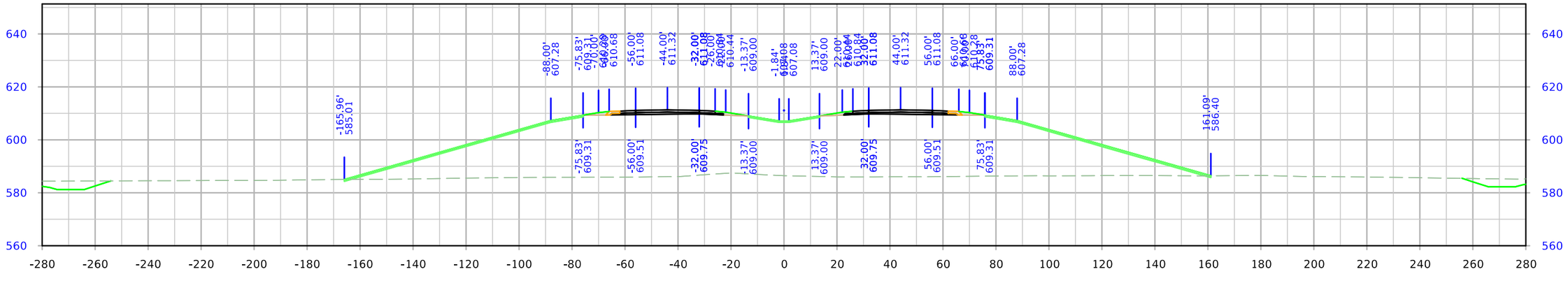
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STA. 2451+00.00



STA. 2450+00.00

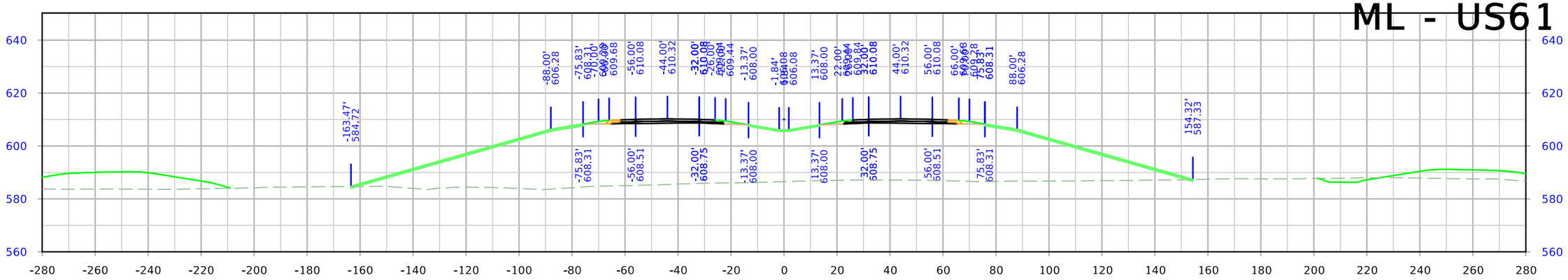


STA. 2449+00.00

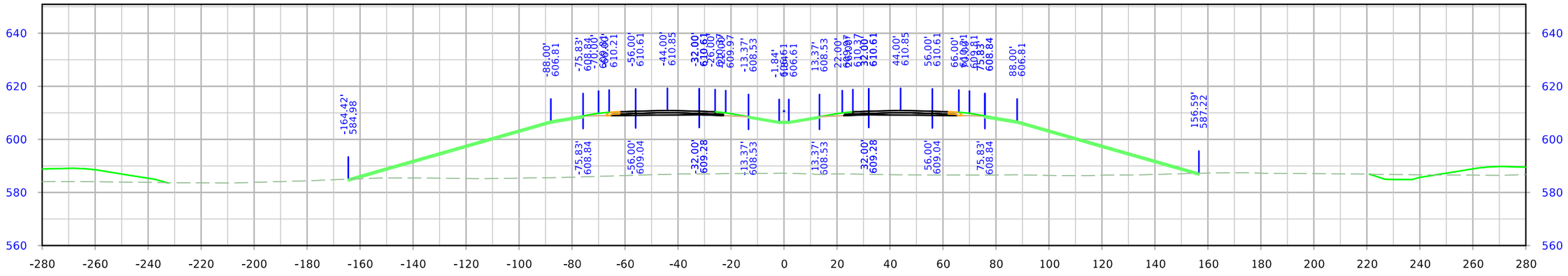
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.116

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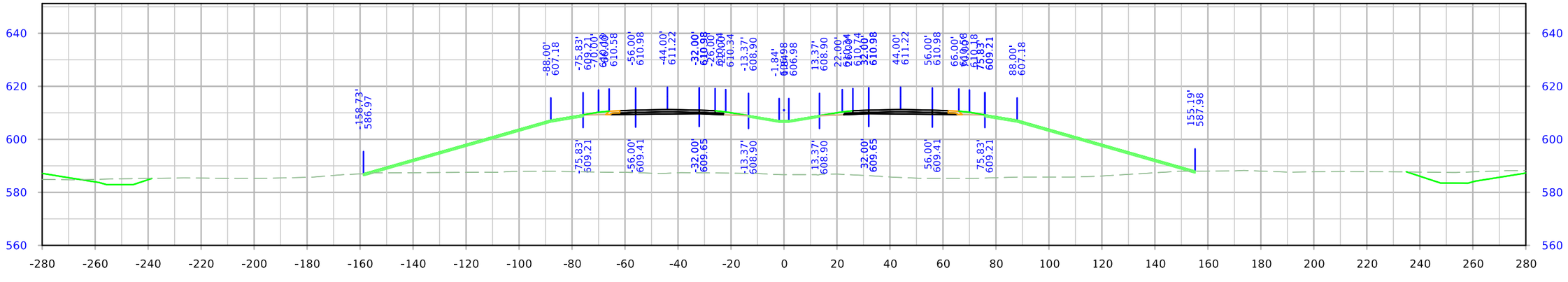
ML - US61



STA. 2454+00.00



STA. 2453+00.00

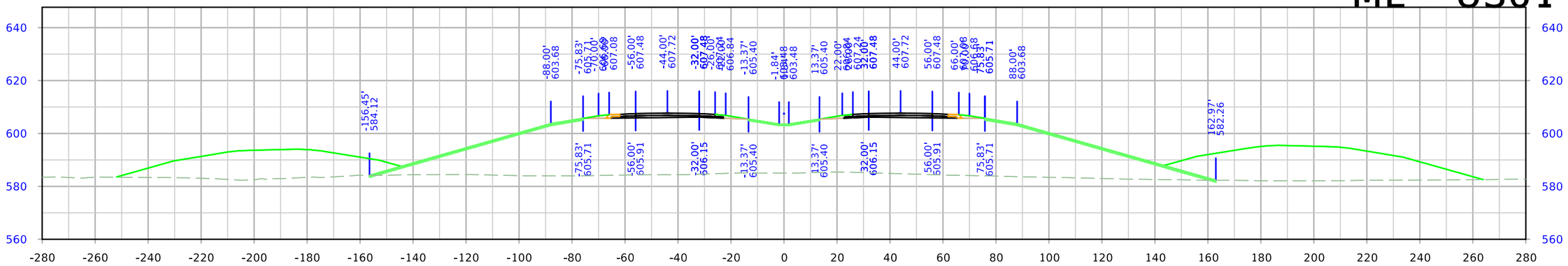


STA. 2452+00.00

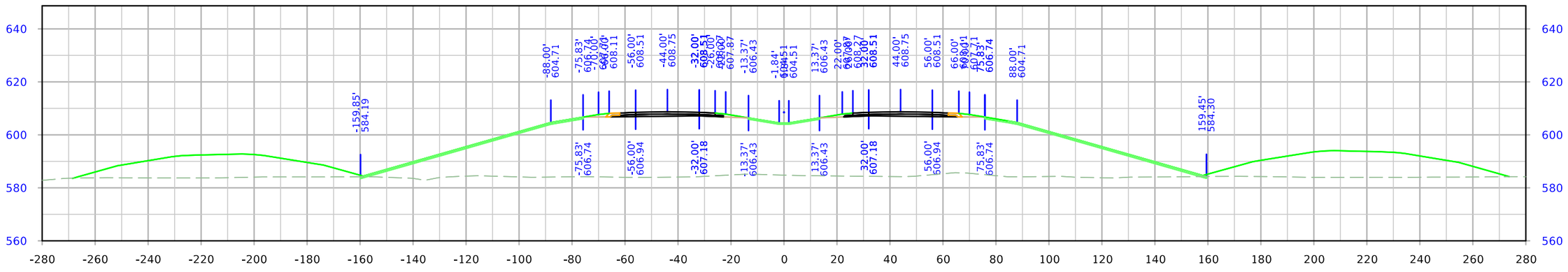
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.117

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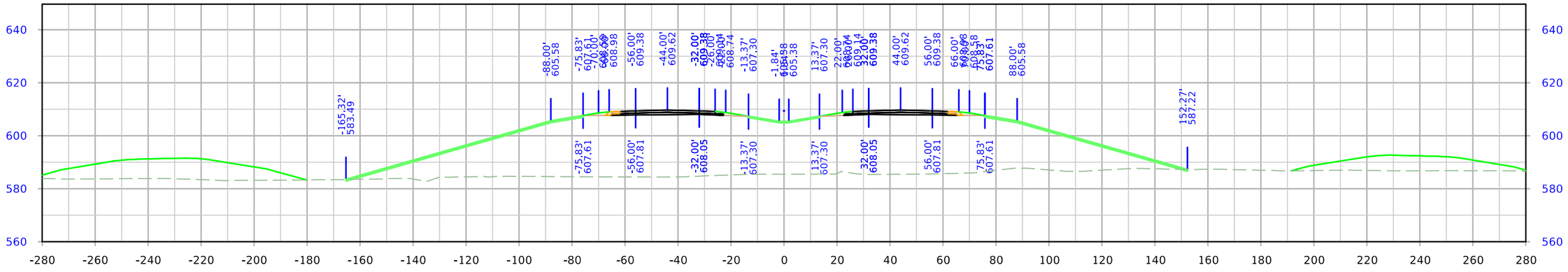
ML - US61



STA. 2457+00.00



STA. 2456+00.00

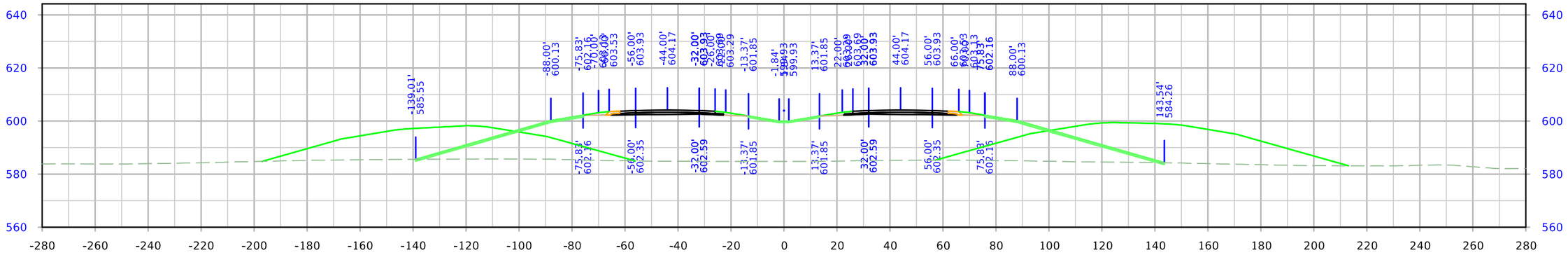


STA. 2455+00.00

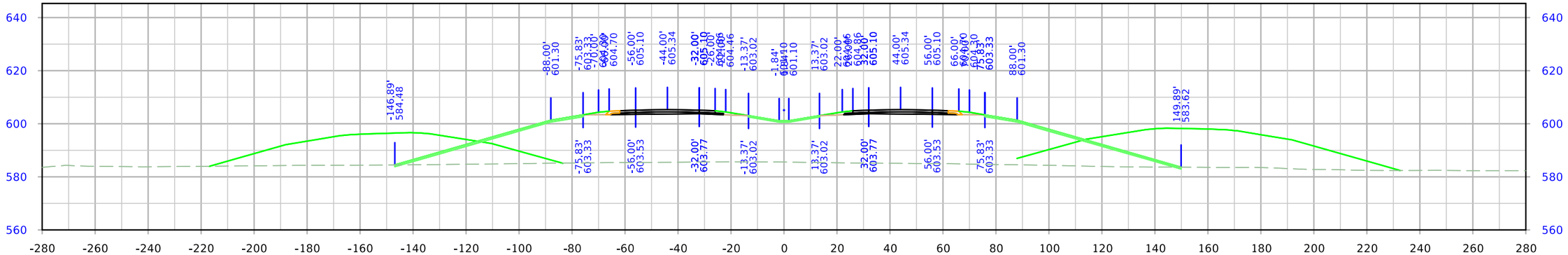
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.118

3:51:56 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

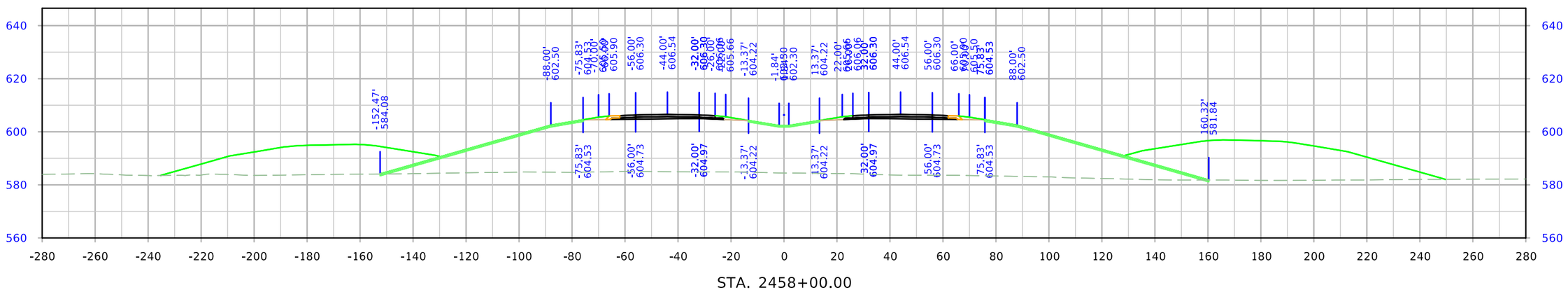
ML - US61



STA. 2460+00.00



STA. 2459+00.00

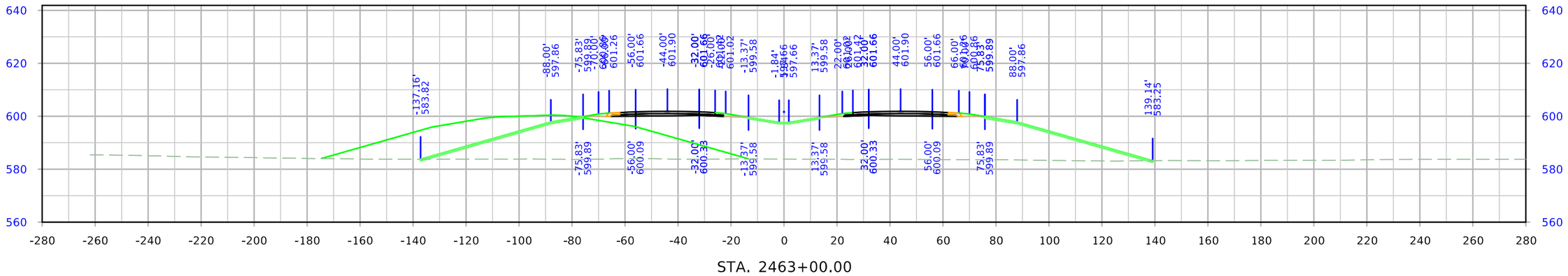


STA. 2458+00.00

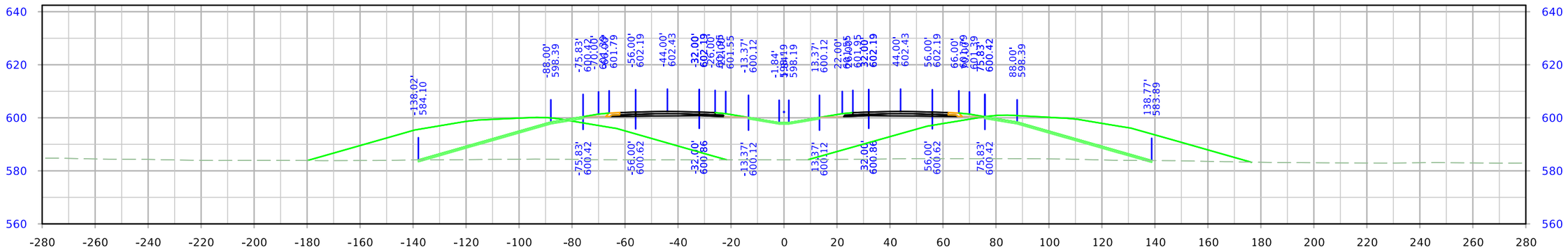
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.119	

3:52:01 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

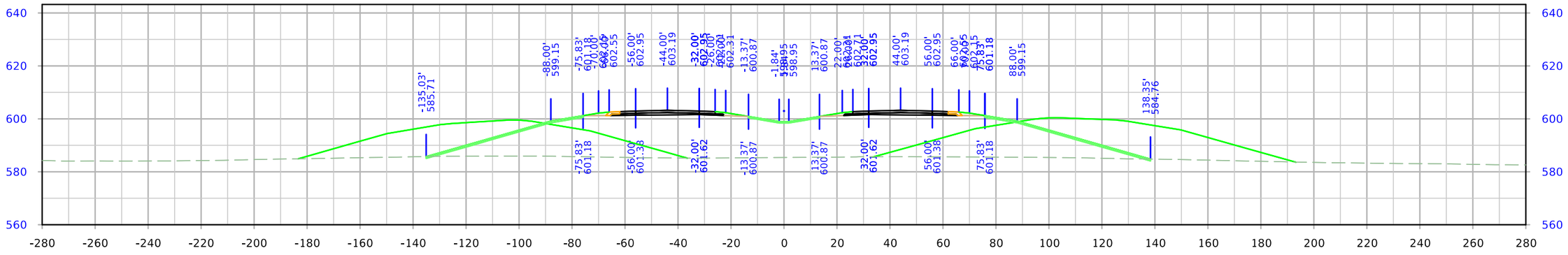
ML - US61



STA. 2463+00.00



STA. 2462+00.00

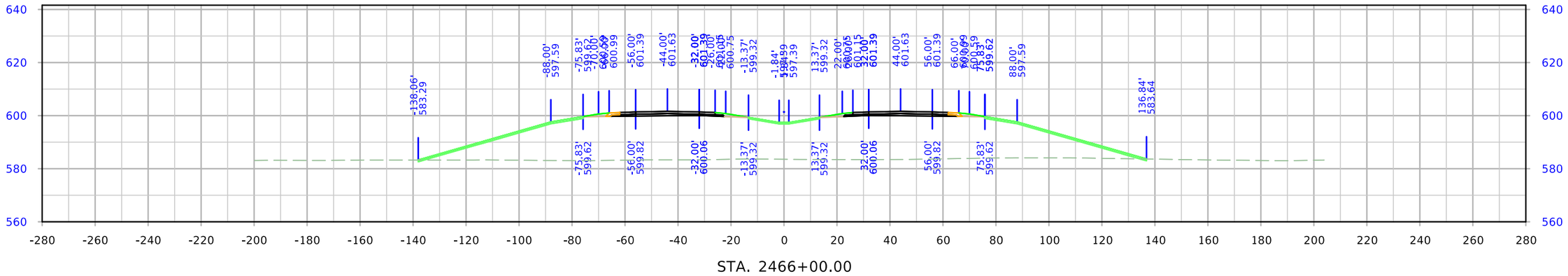


STA. 2461+00.00

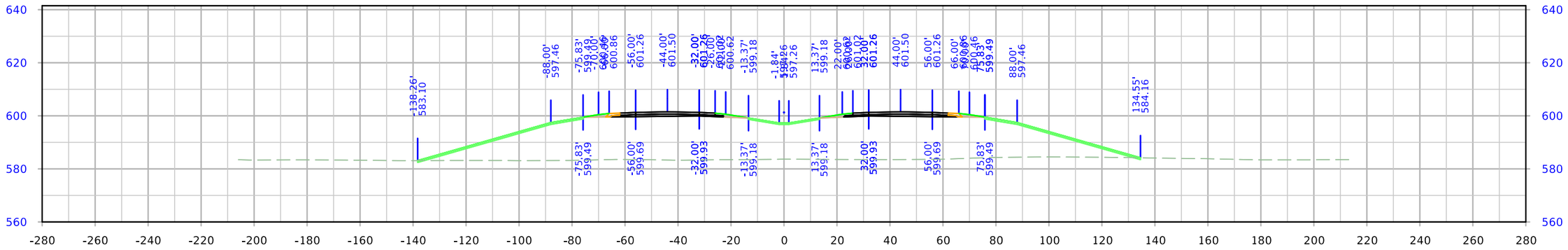
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.120

3:52:06 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

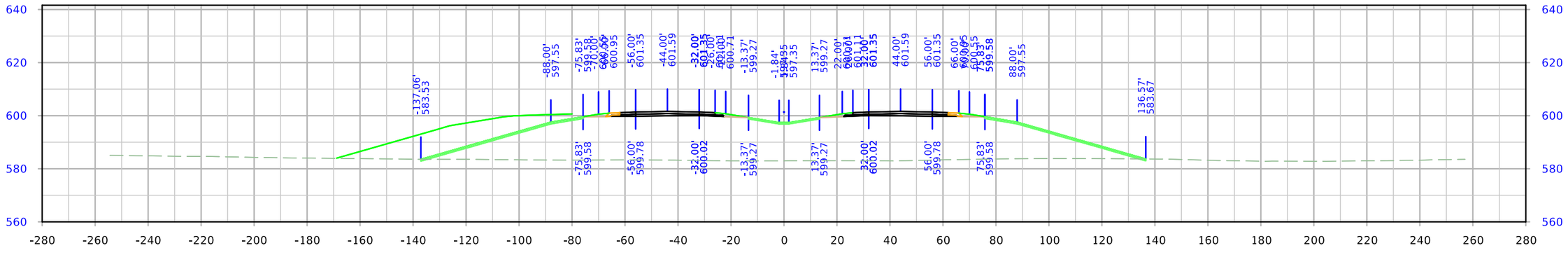
ML - US61



STA. 2466+00.00



STA. 2465+00.00

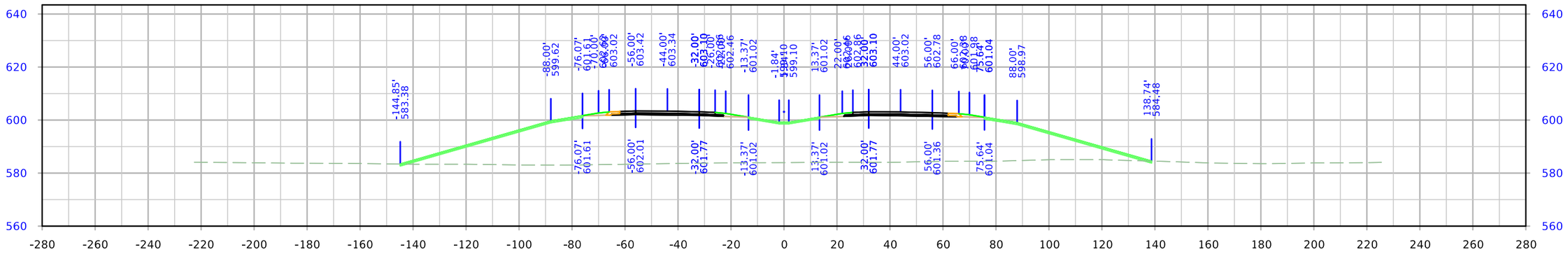


STA. 2464+00.00

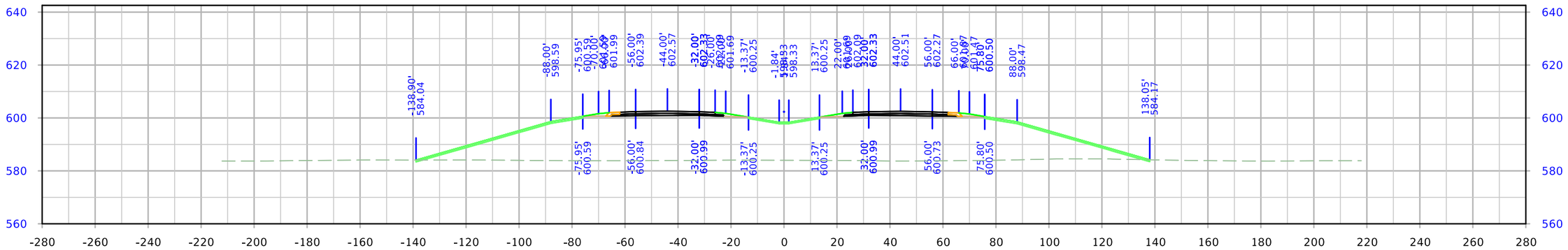
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.121

3:52:12 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

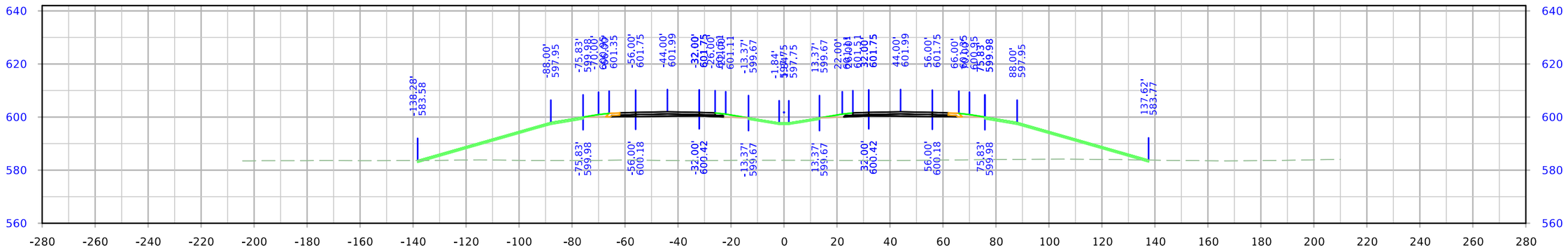
ML - US61



STA. 2469+00.00



STA. 2468+00.00

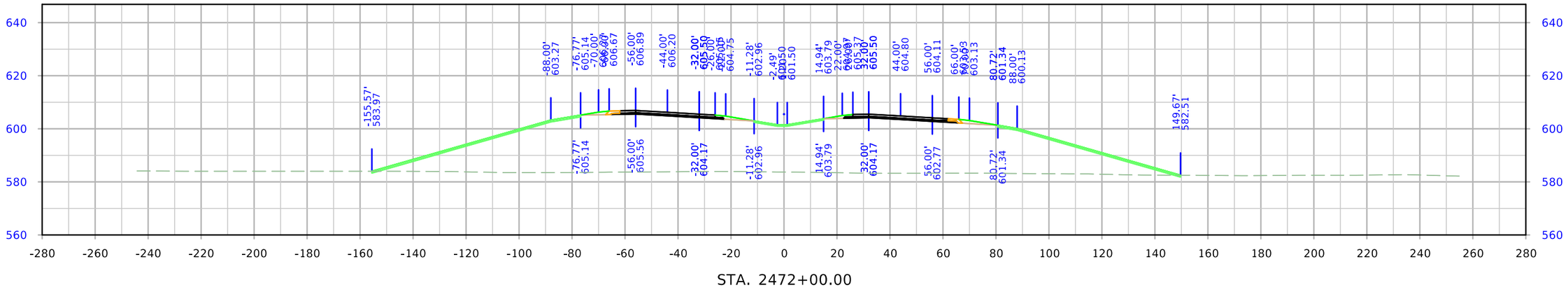


STA. 2467+00.00

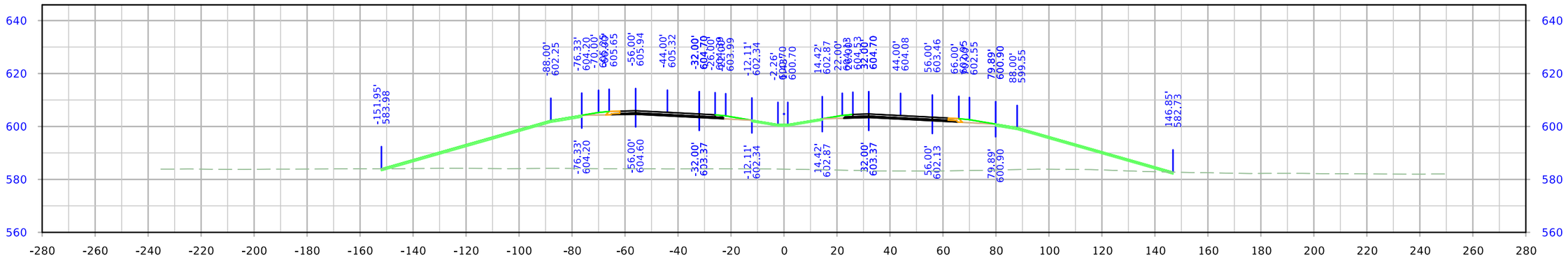
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.122

3:52:17 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

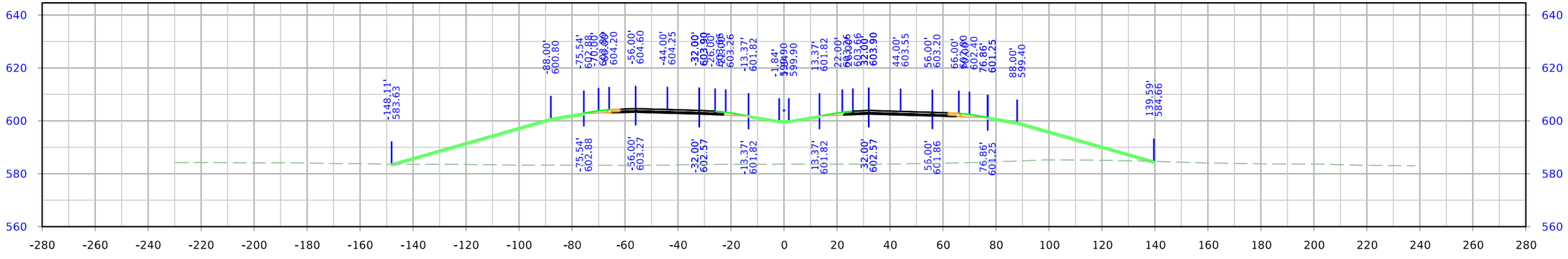
ML - US61



STA. 2472+00.00



STA. 2471+00.00

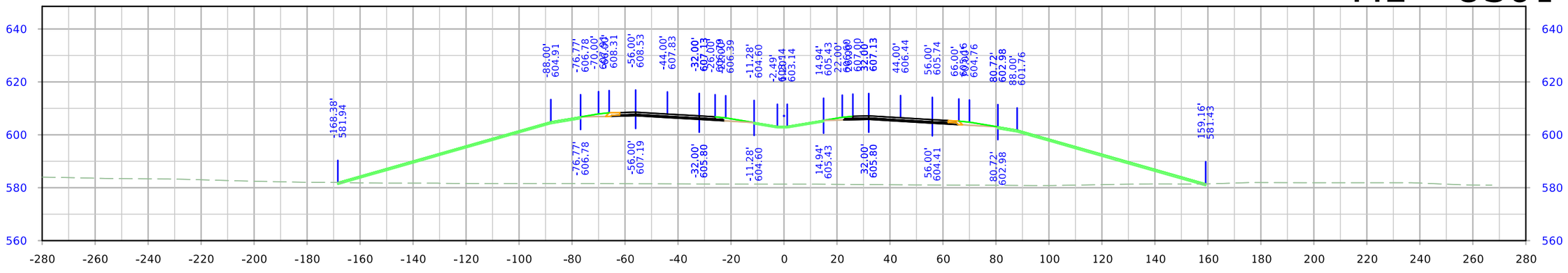


STA. 2470+00.00

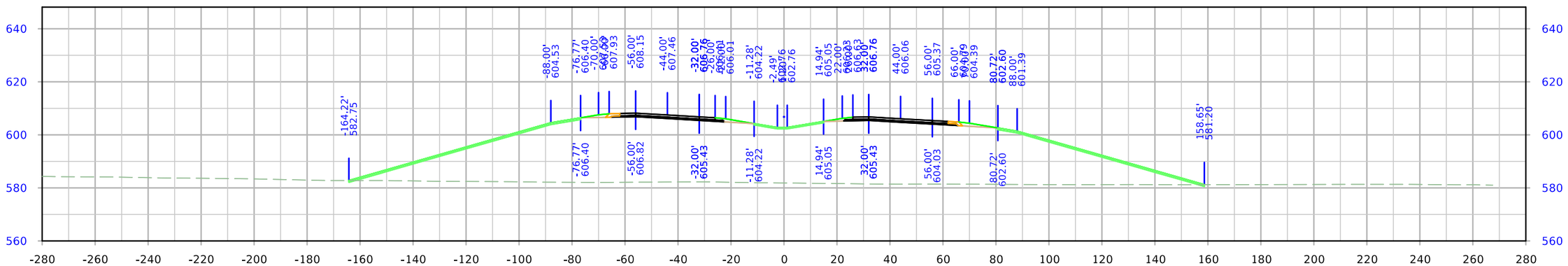
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.123

3:52:22 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

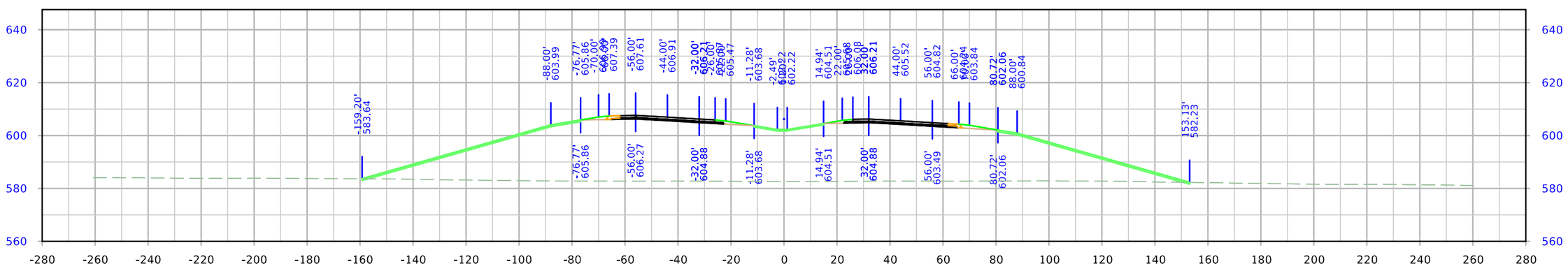
ML - US61



STA. 2475+00.00



STA. 2474+00.00

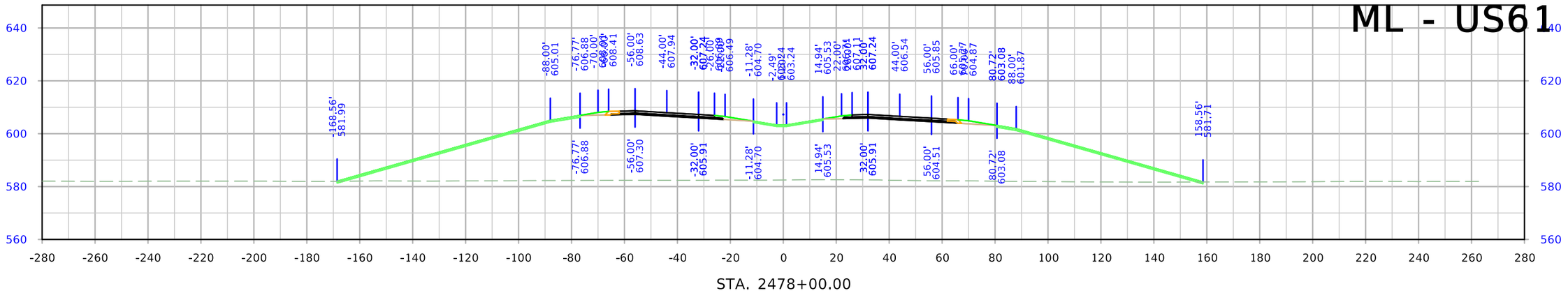


STA. 2473+00.00

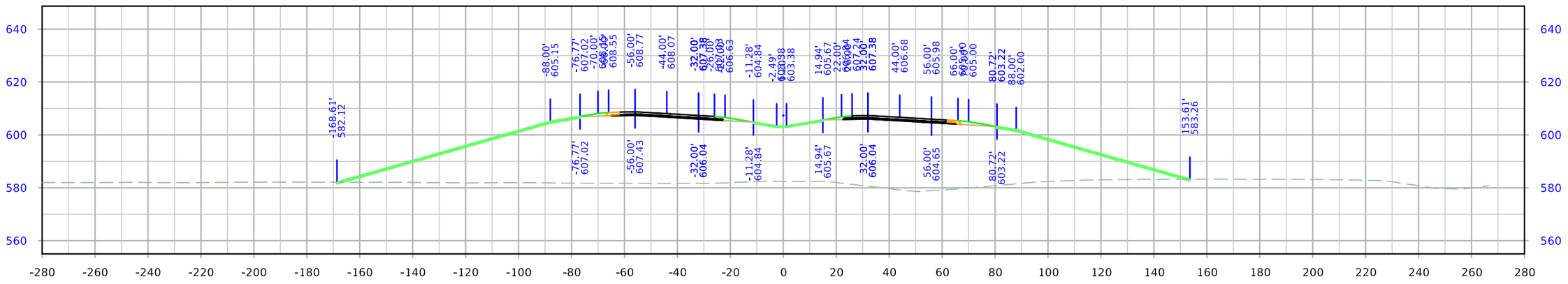
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.124

3:52:28 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

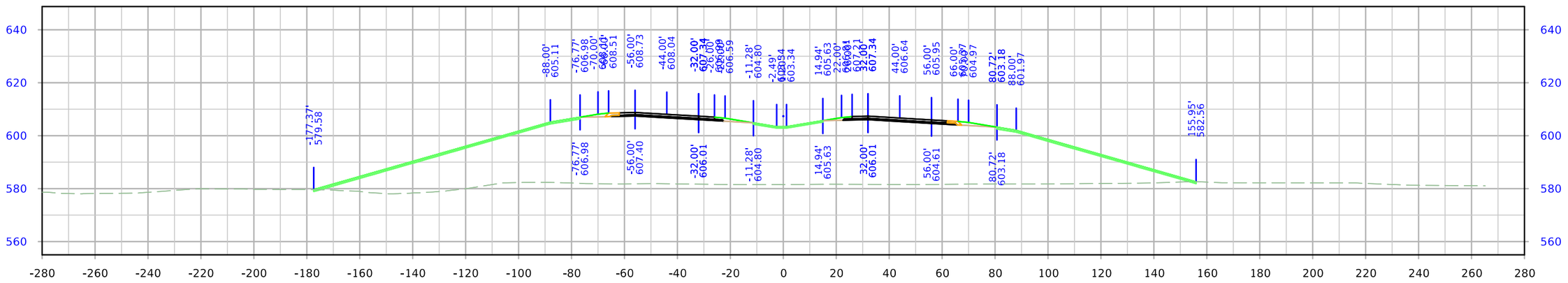
ML - US61



STA. 2478+00.00



STA. 2477+00.00

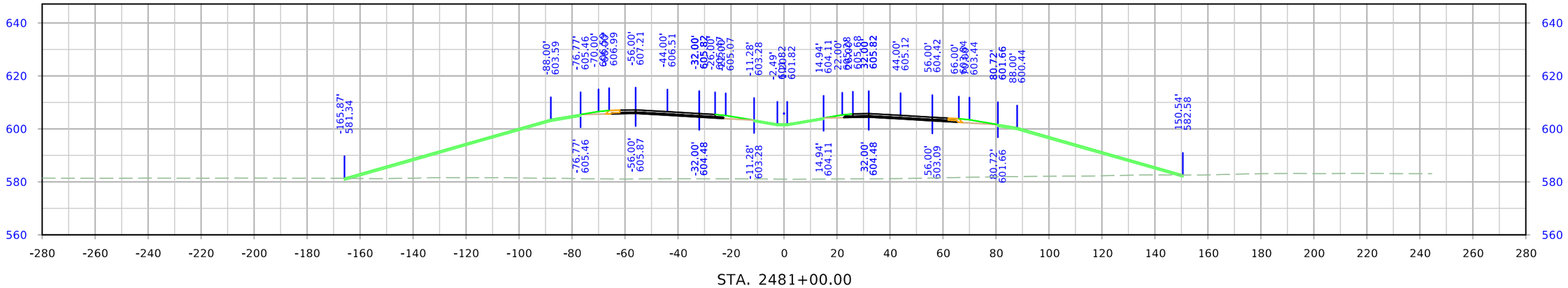


STA. 2476+00.00

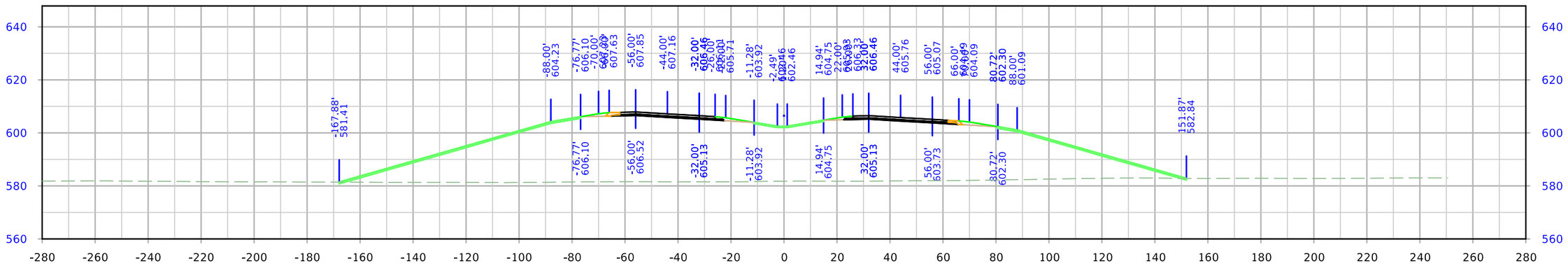
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.125

3:52:33 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

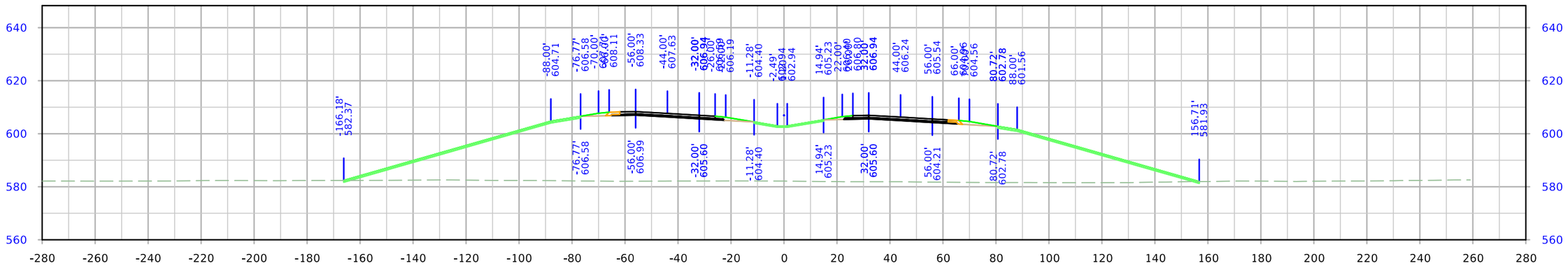
ML - US61



STA. 2481+00.00



STA. 2480+00.00

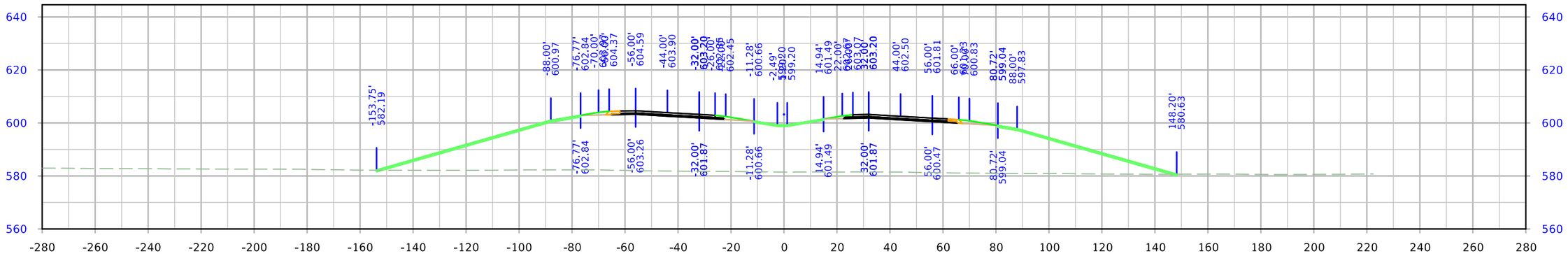


STA. 2479+00.00

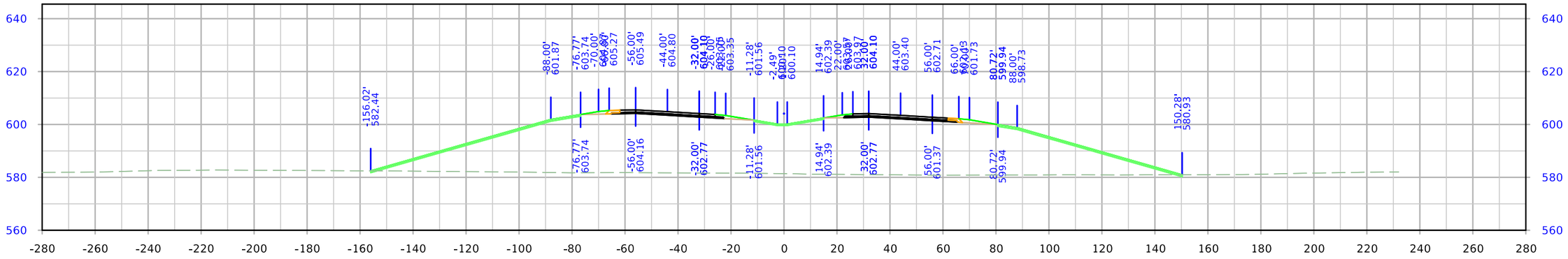
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.126

3:52:39 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

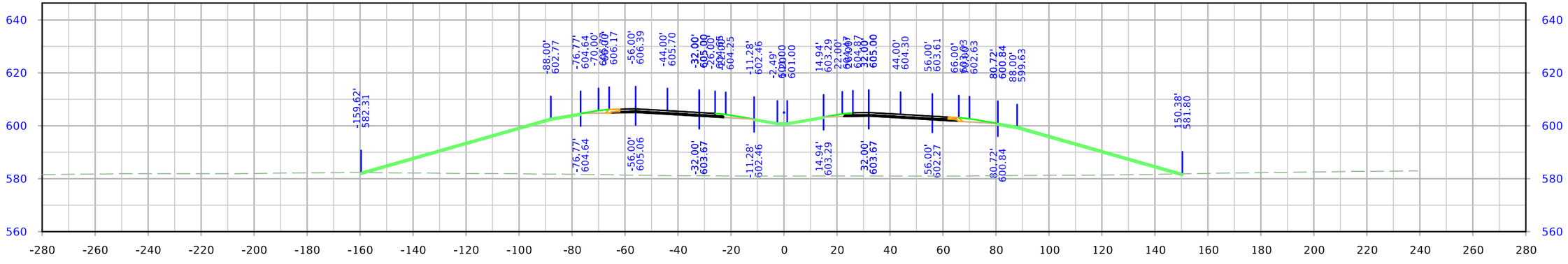
ML - US61



STA. 2484+00.00



STA. 2483+00.00

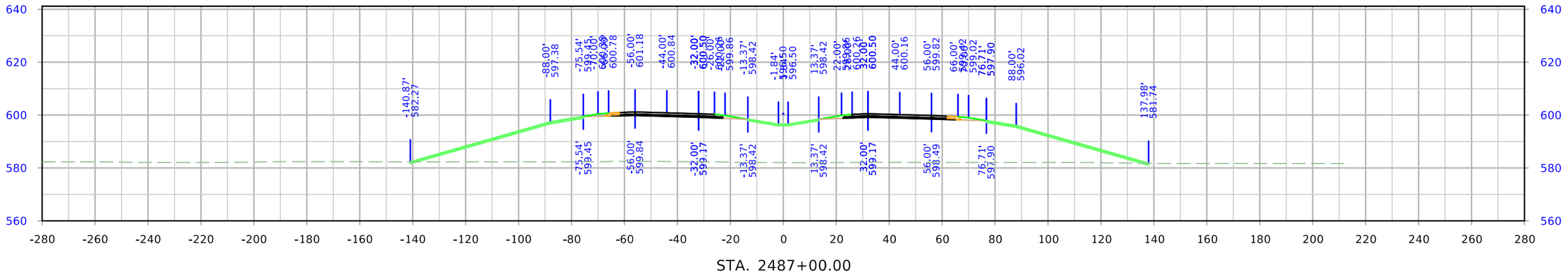


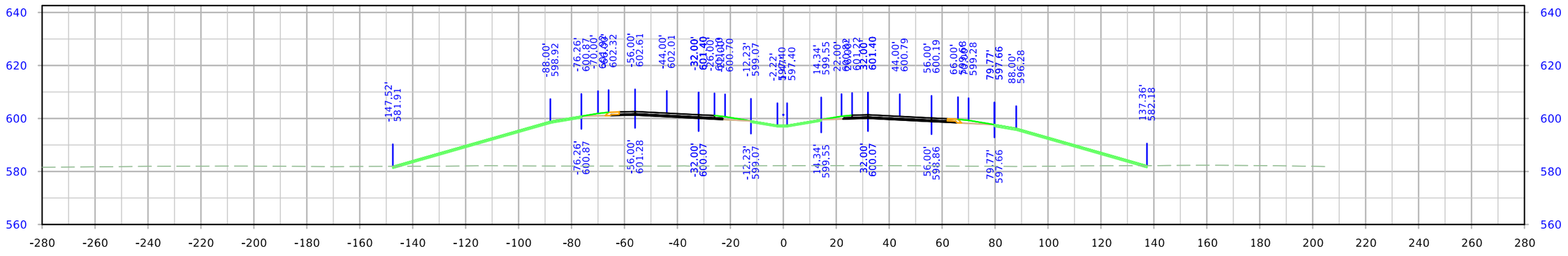
STA. 2482+00.00

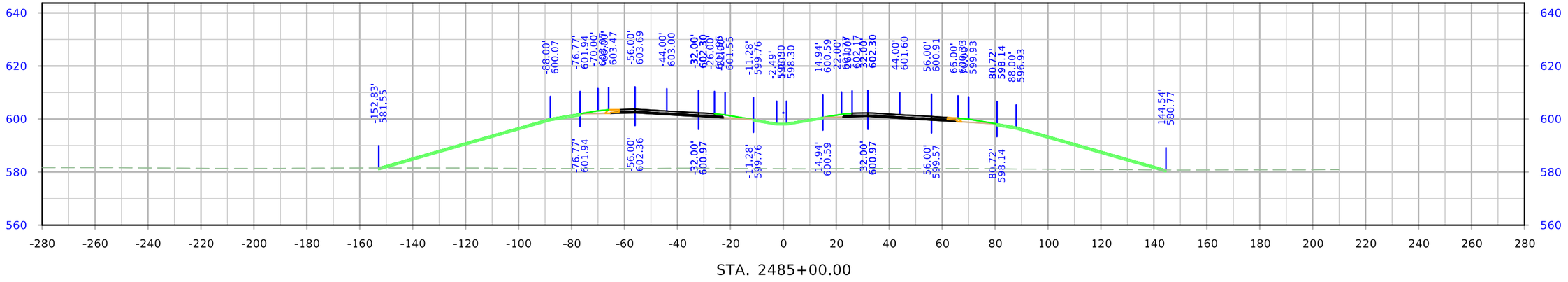
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.127

3:52:44 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



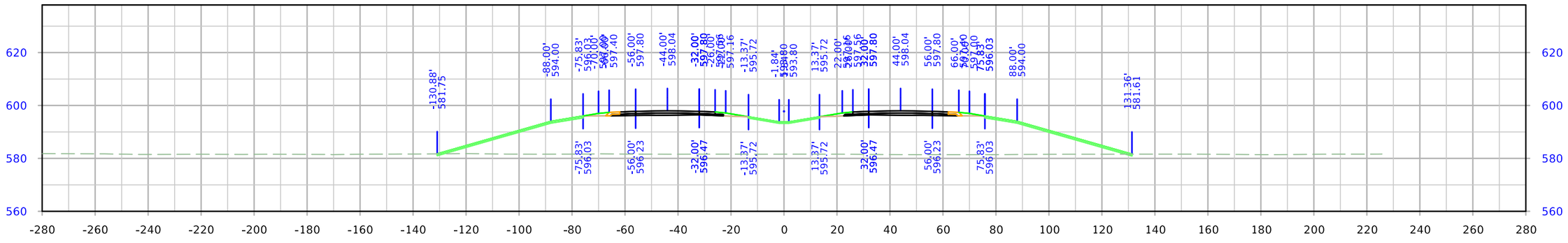




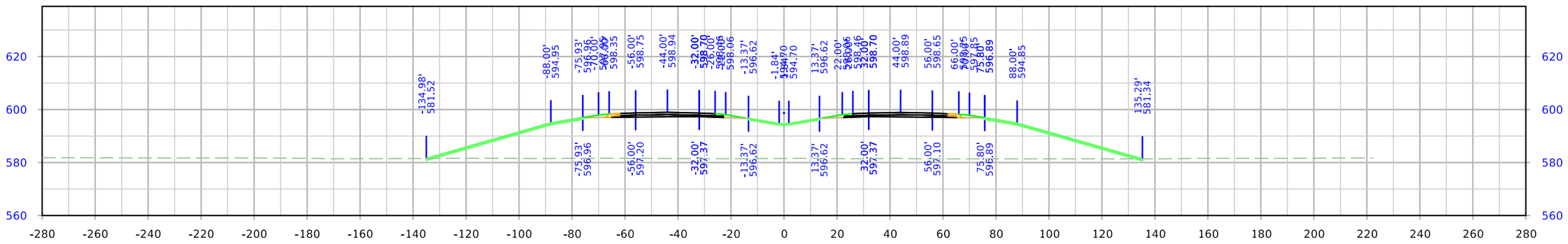
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.128

3:52:49 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

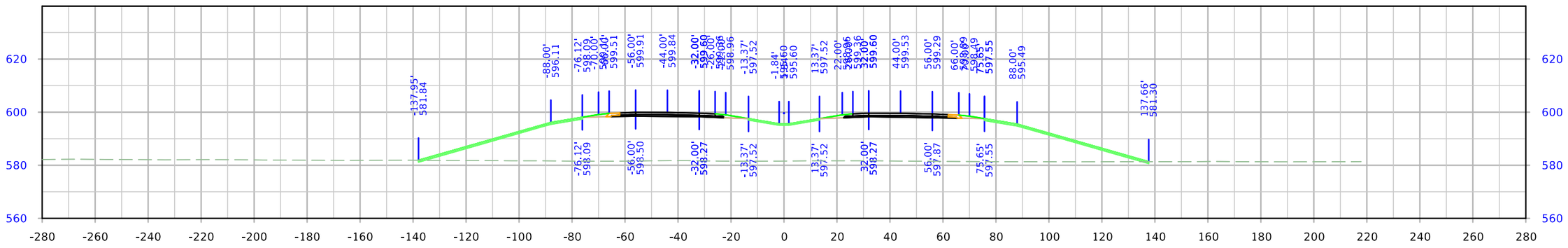
ML - US61



STA. 2490+00.00



STA. 2489+00.00

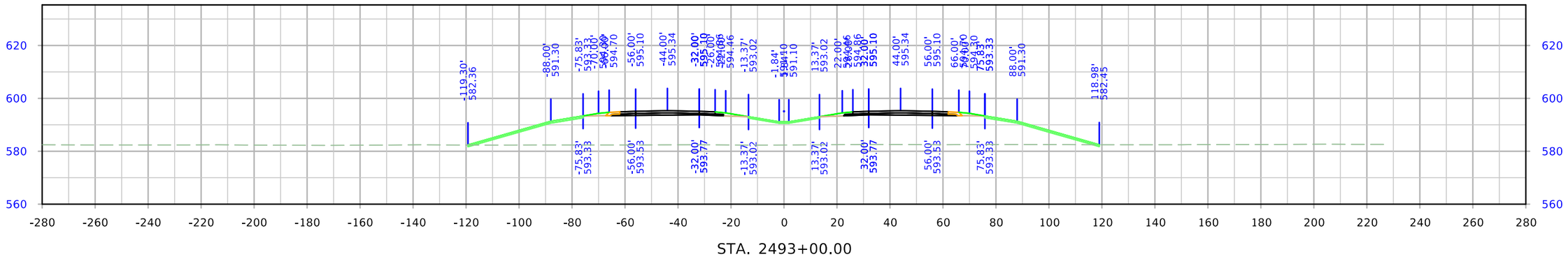


STA. 2488+00.00

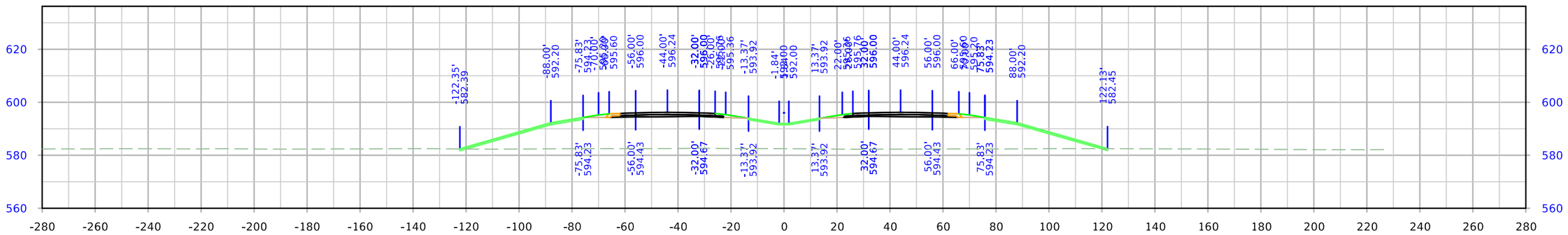
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.129

3:52:55 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

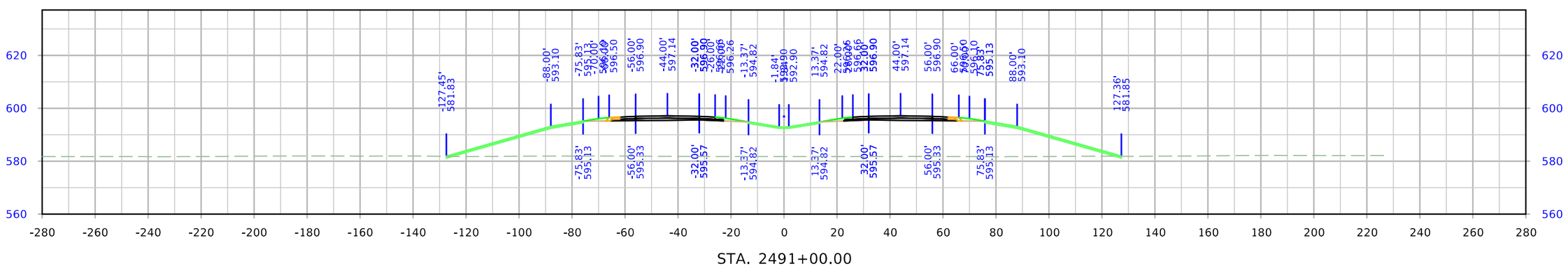
ML - US61



STA. 2493+00.00



STA. 2492+00.00

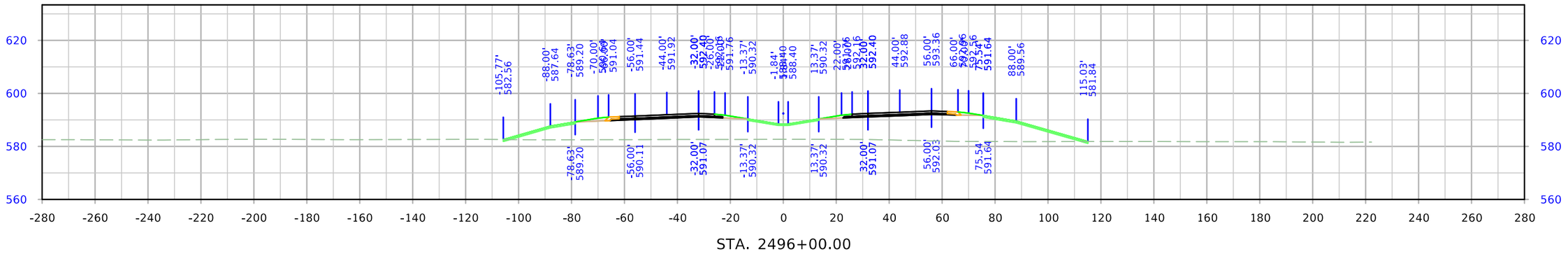


STA. 2491+00.00

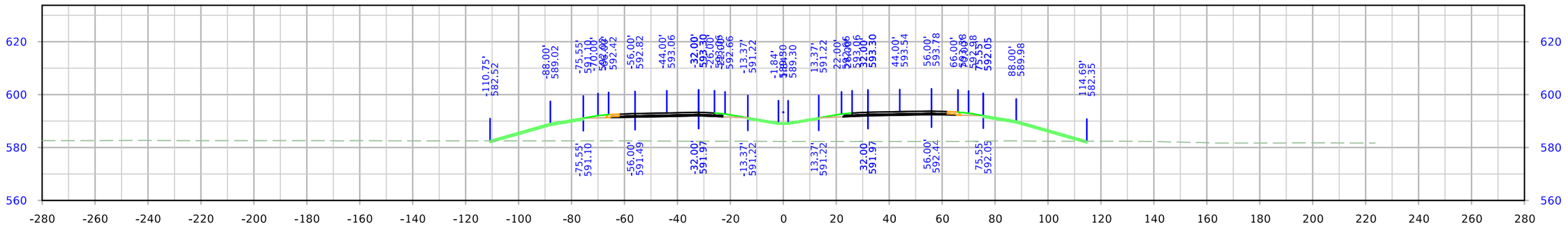
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.130

3:53:00 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

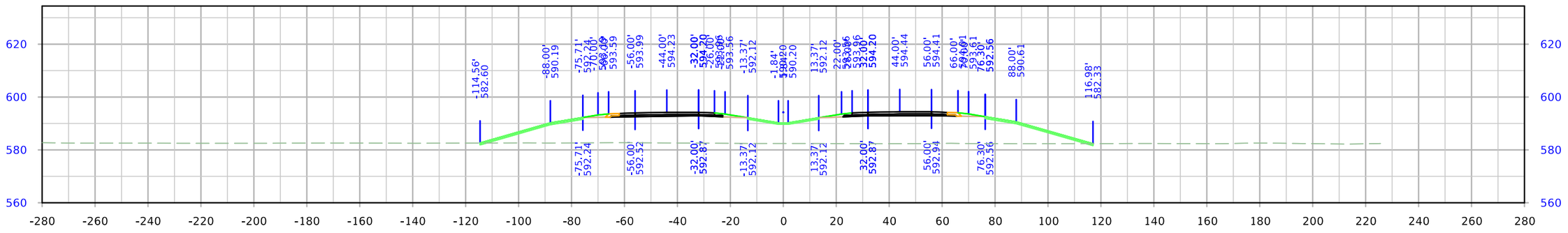
ML - US61



STA. 2496+00.00



STA. 2495+00.00

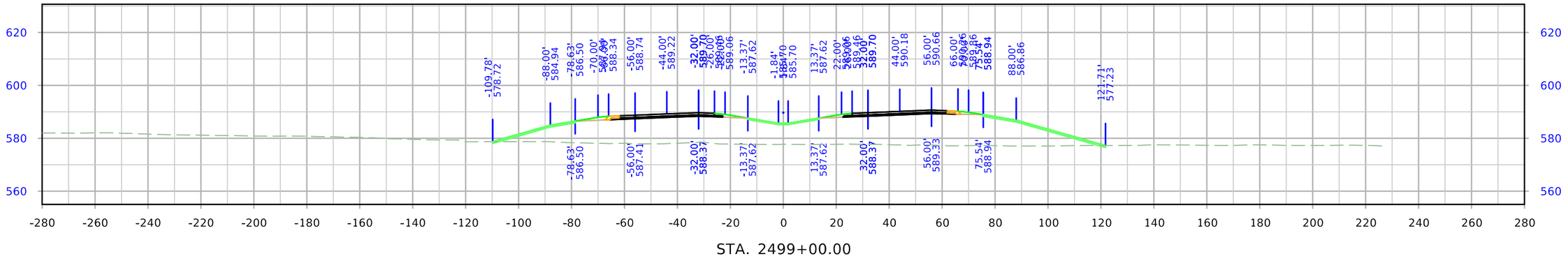


STA. 2494+00.00

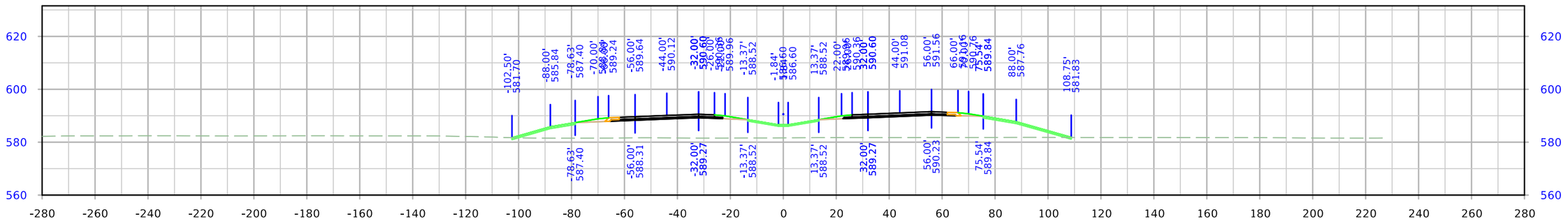
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.131

3:53:05 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

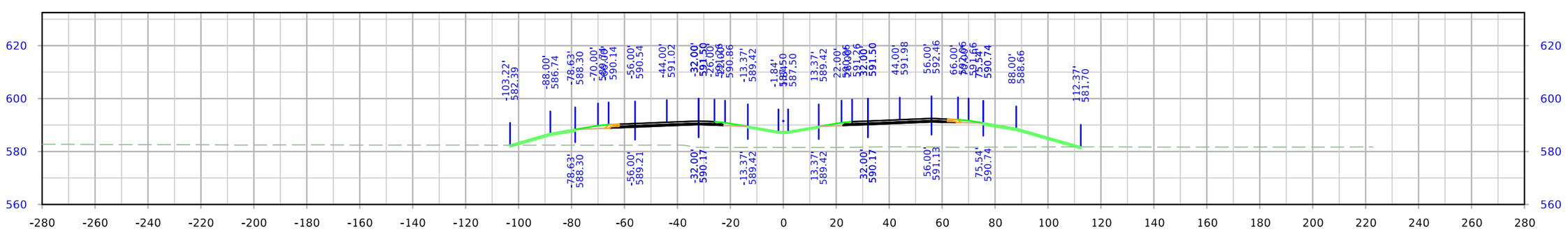
ML - US61



STA. 2499+00.00



STA. 2498+00.00

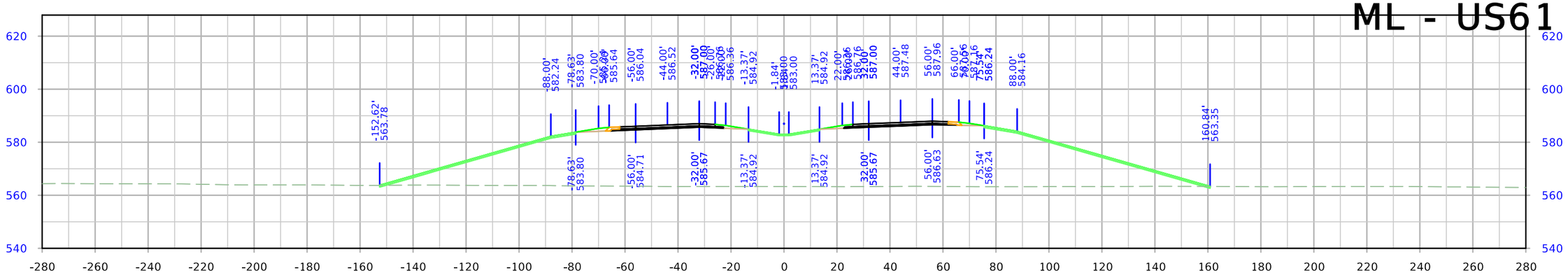


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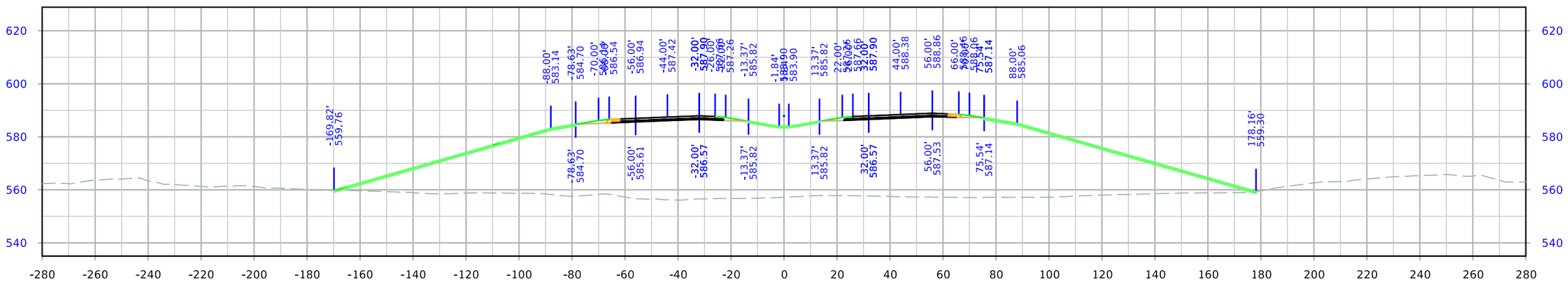
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.132

3:53:10 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

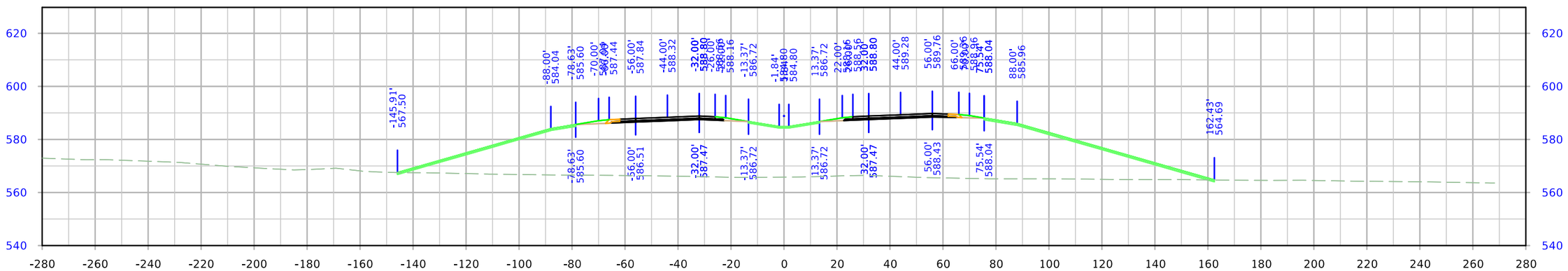
ML - US61



STA. 2502+00.00



STA. 2501+00.00

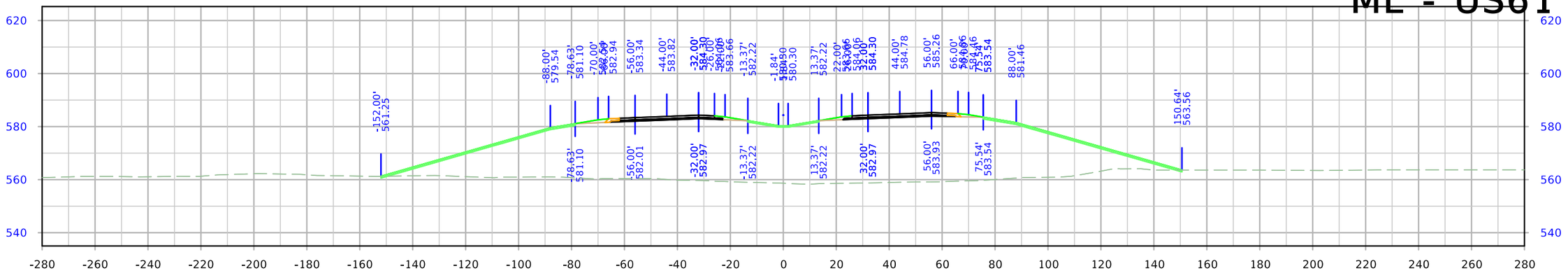


STA. 2500+00.00

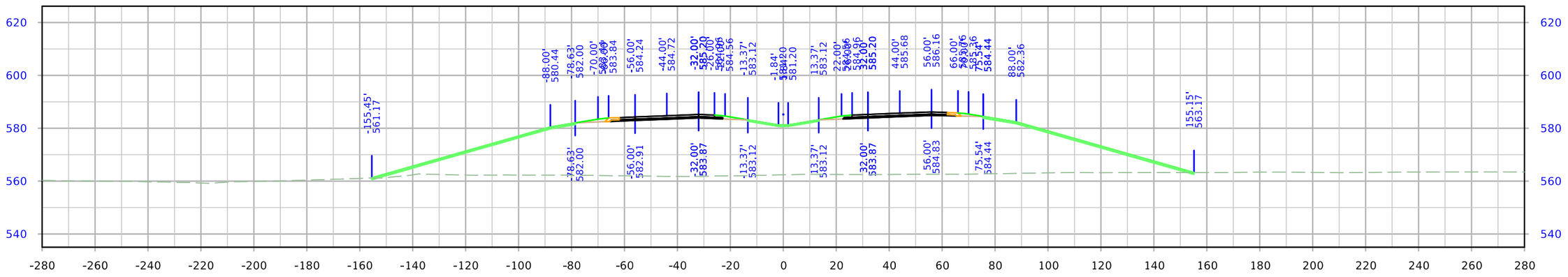
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.133

3:53:16 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

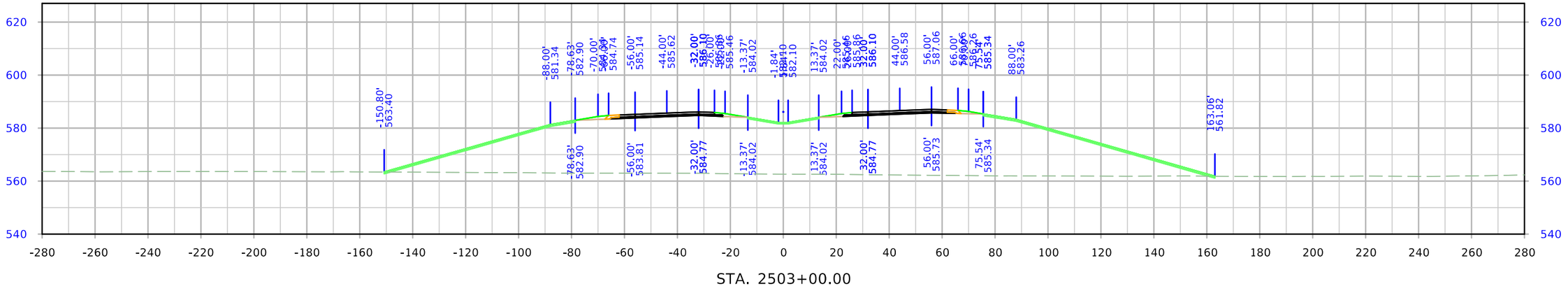
ML - US61



STA. 2505+00.00



STA. 2504+00.00

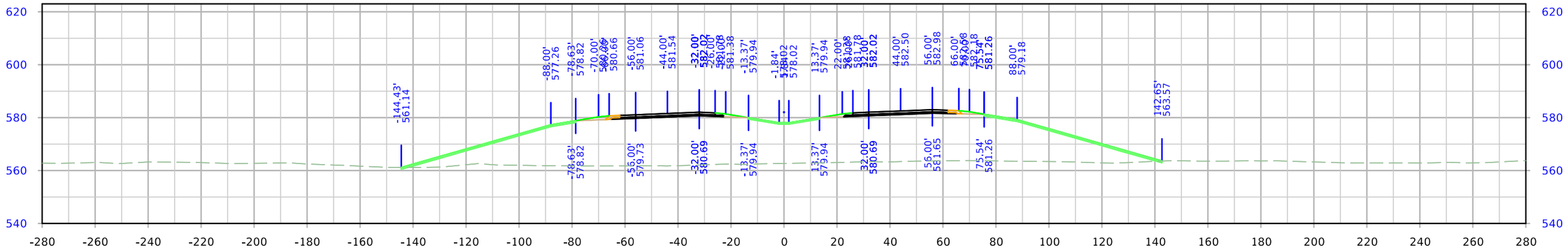


STA. 2503+00.00

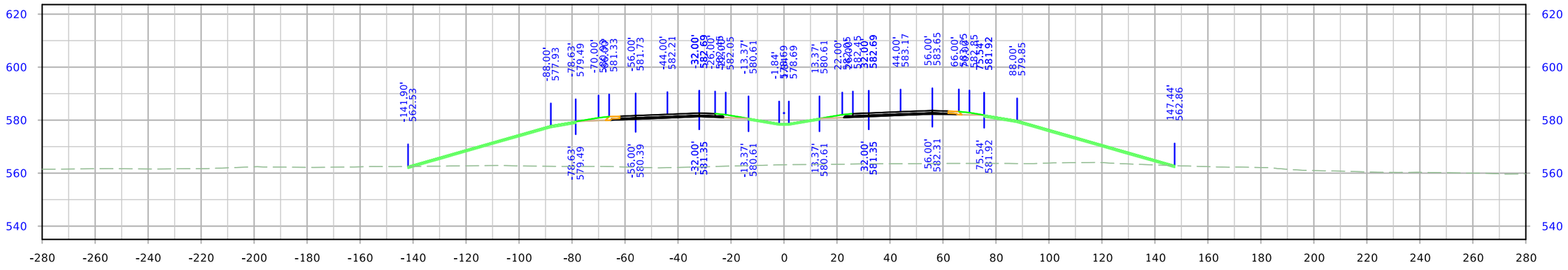
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.134

3:53:21 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

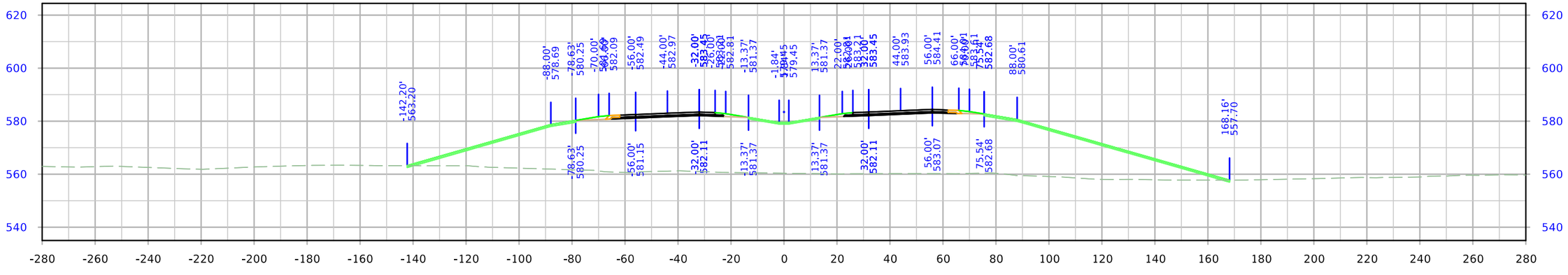
ML - US61



STA. 2508+00.00



STA. 2507+00.00

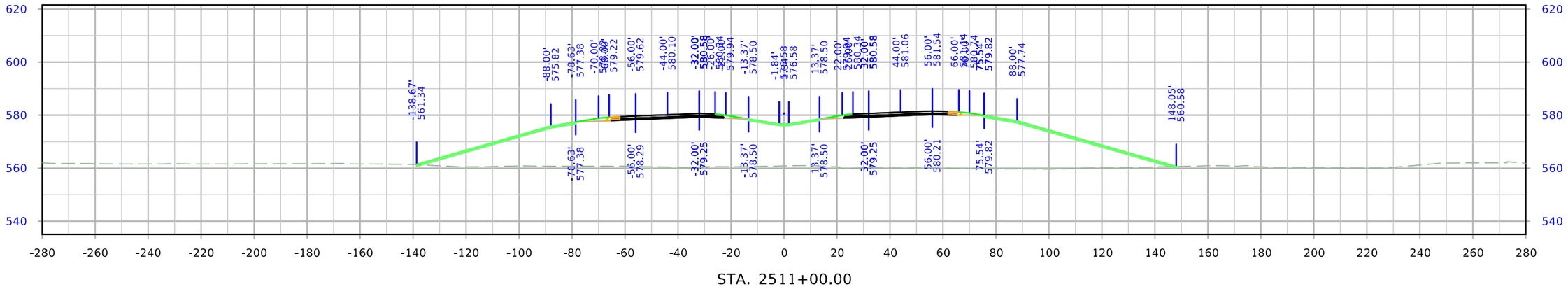


STA. 2506+00.00

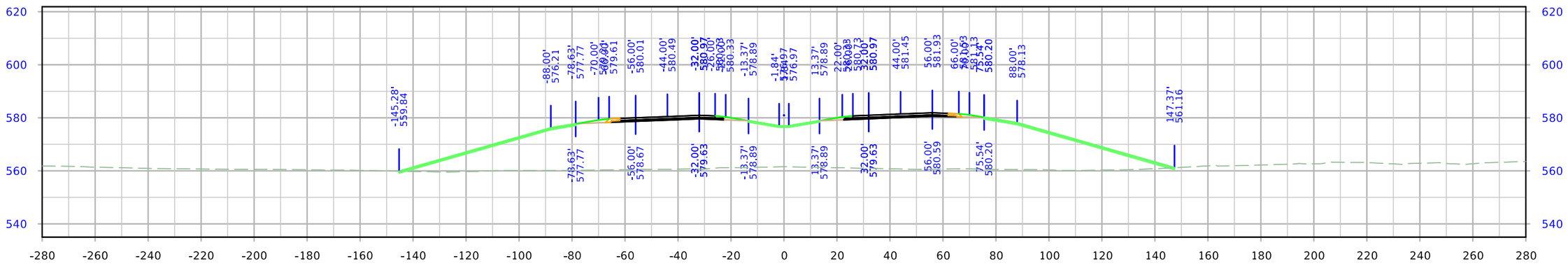
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.135

3:53:26 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

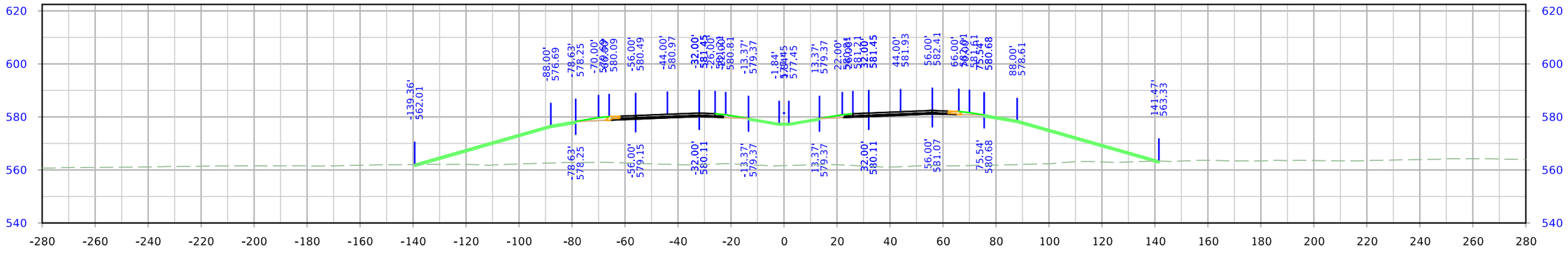
ML - US61



STA. 2511+00.00



STA. 2510+00.00

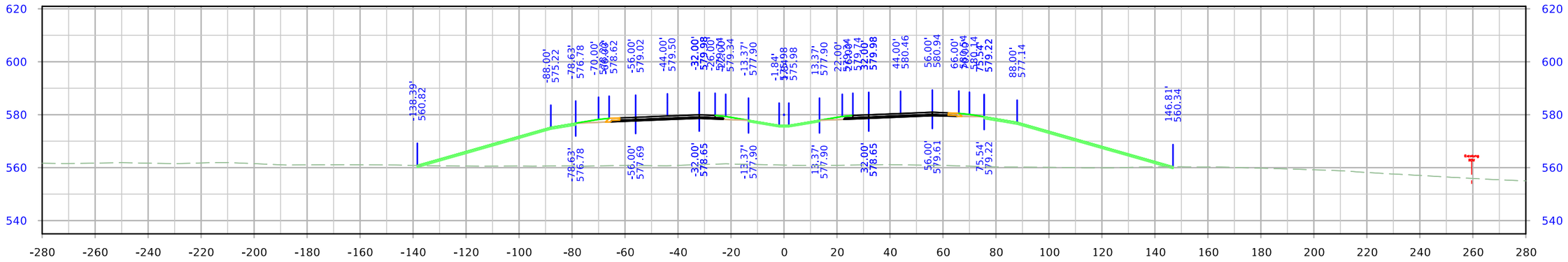


STA. 2509+00.00

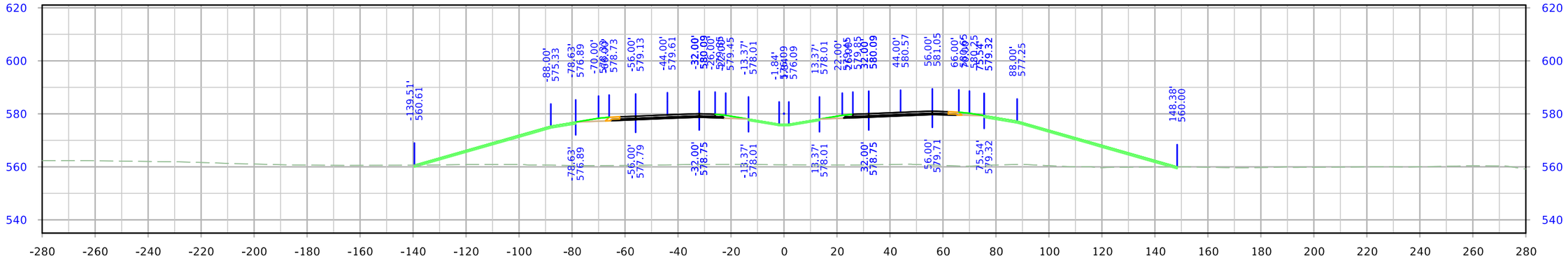
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.136

3:53:31 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

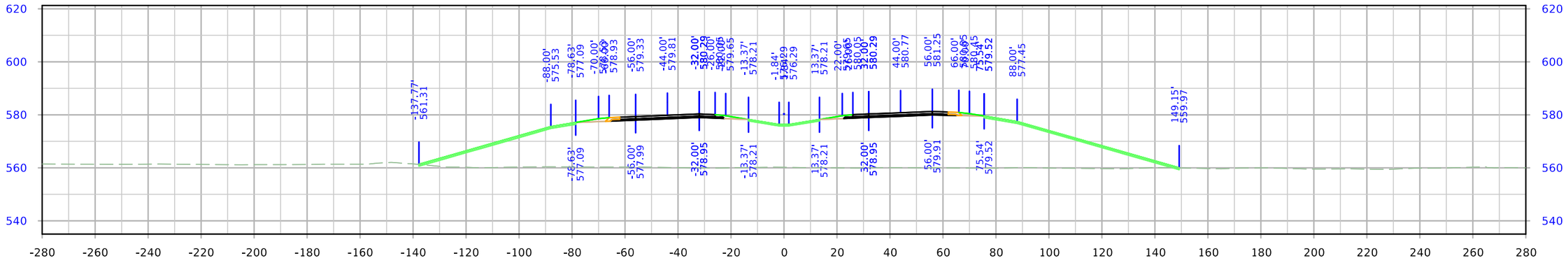
ML - US61



STA. 2514+00.00



STA. 2513+00.00

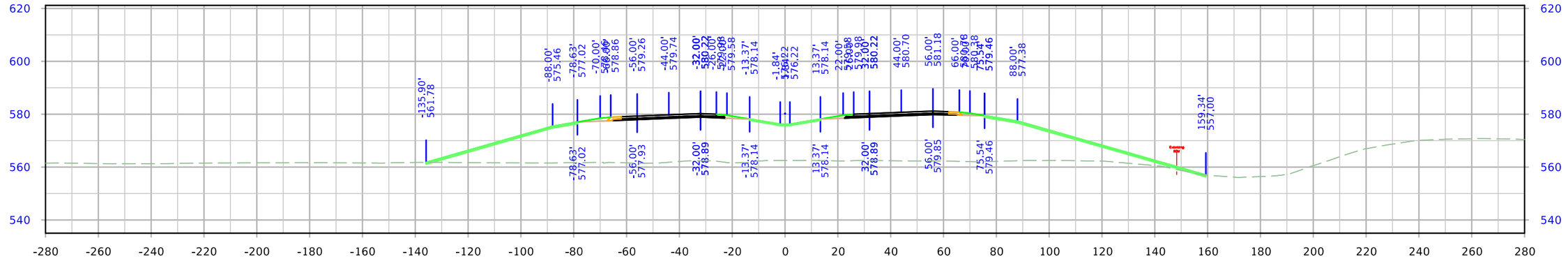


STA. 2512+00.00

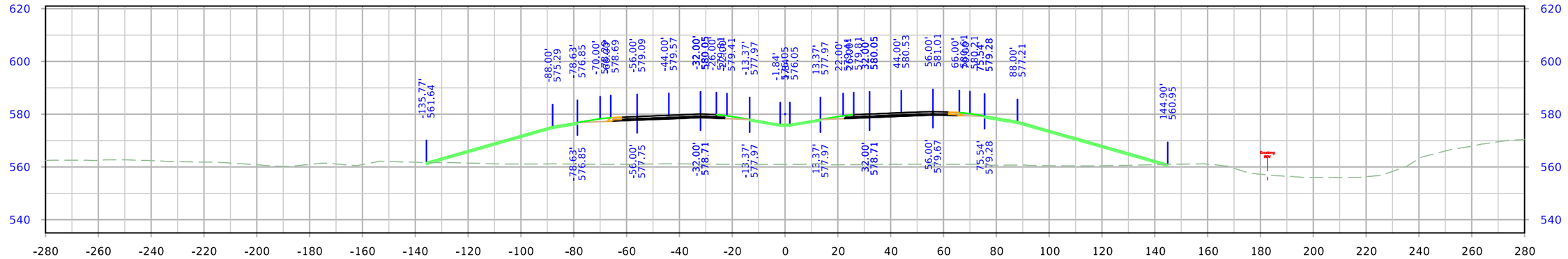
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.137

3:53:37 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

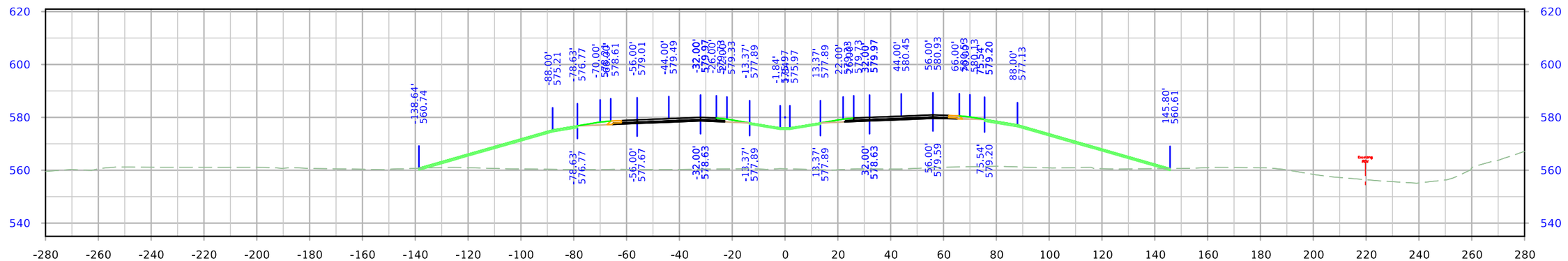
ML - US61



STA. 2517+00.00



STA. 2516+00.00

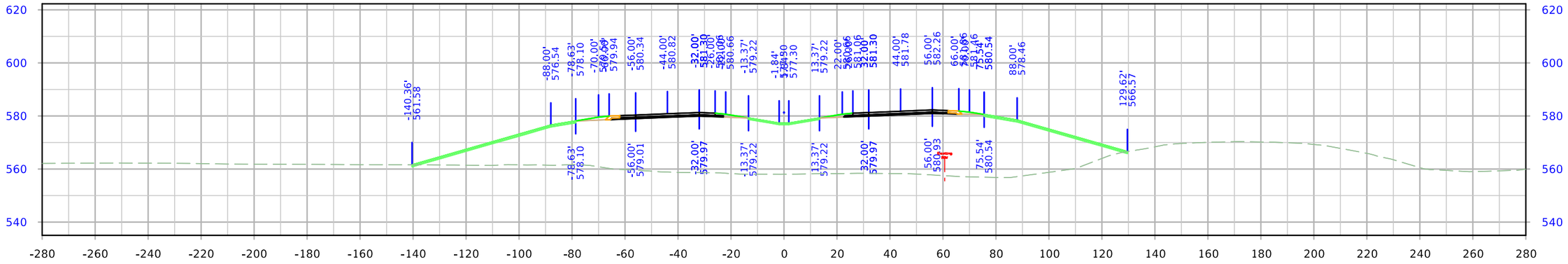


STA. 2515+00.00

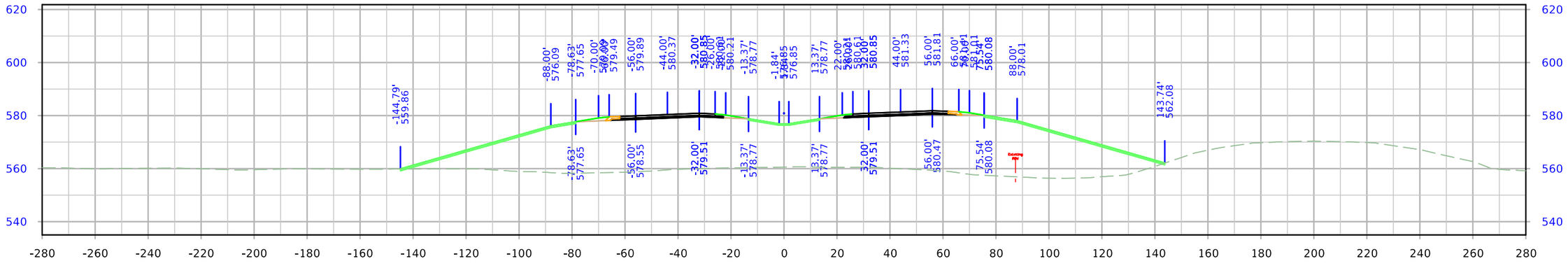
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.138

3:53:42 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

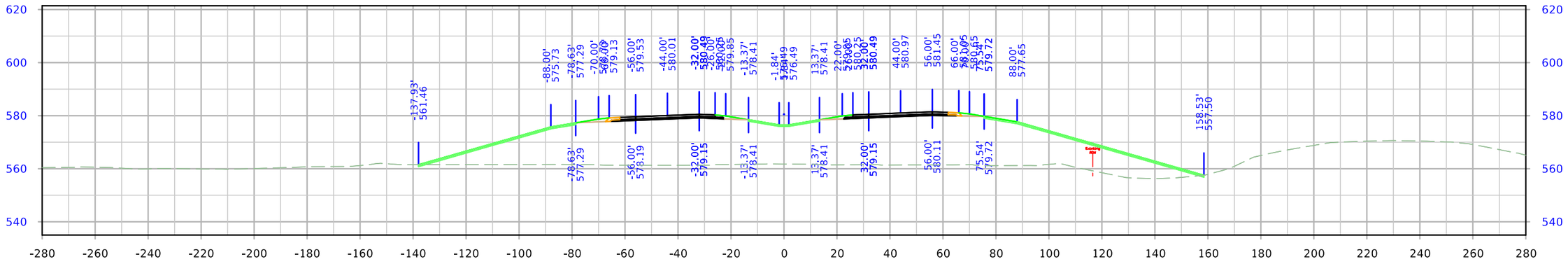
ML - US61



STA. 2520+00.00



STA. 2519+00.00

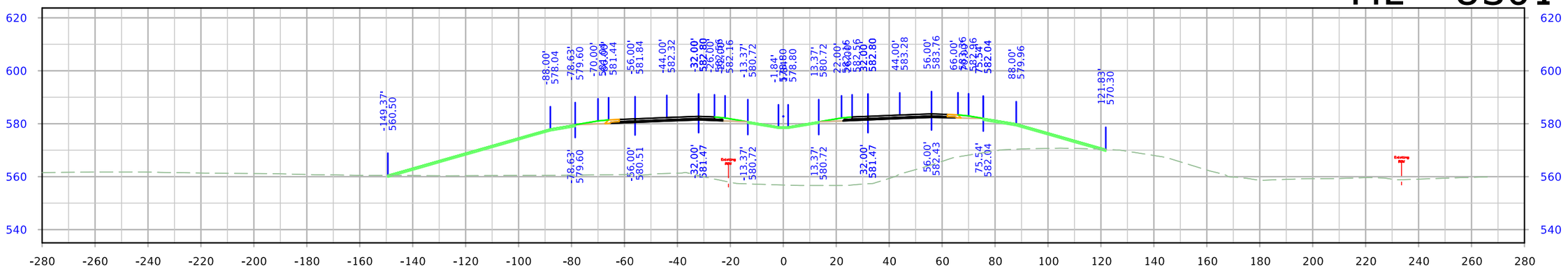


STA. 2518+00.00

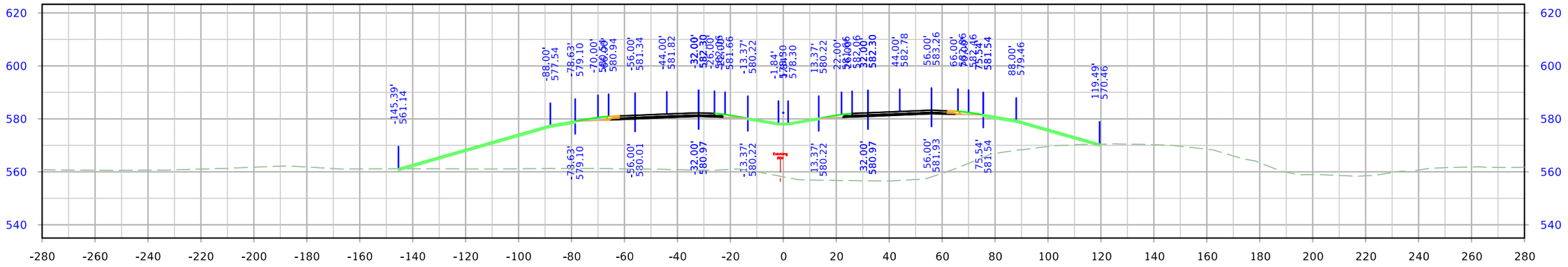
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.139

3:53:48 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

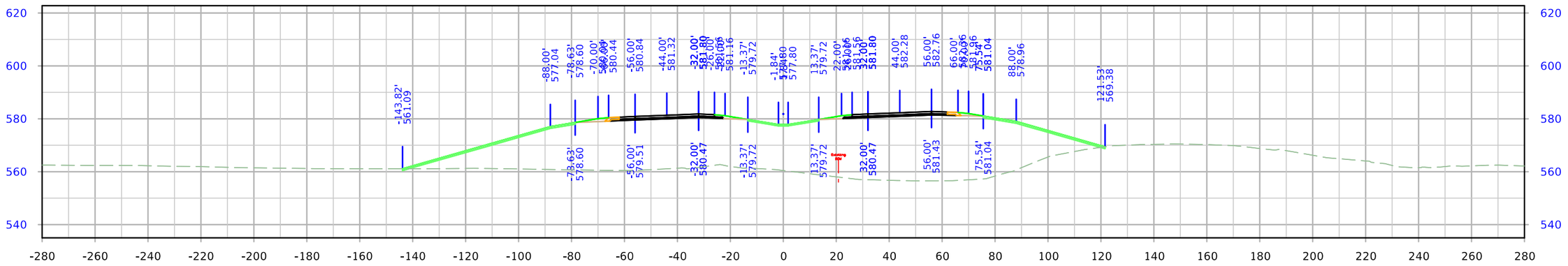
ML - US61



STA. 2523+00.00



STA. 2522+00.00

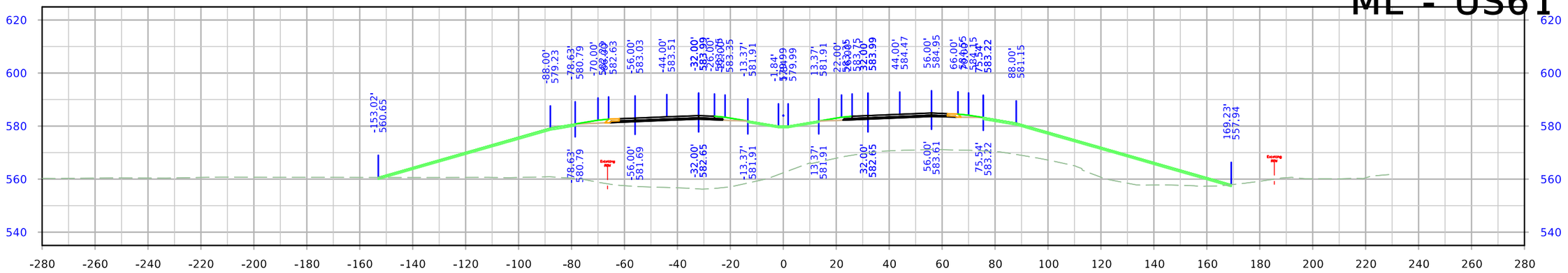


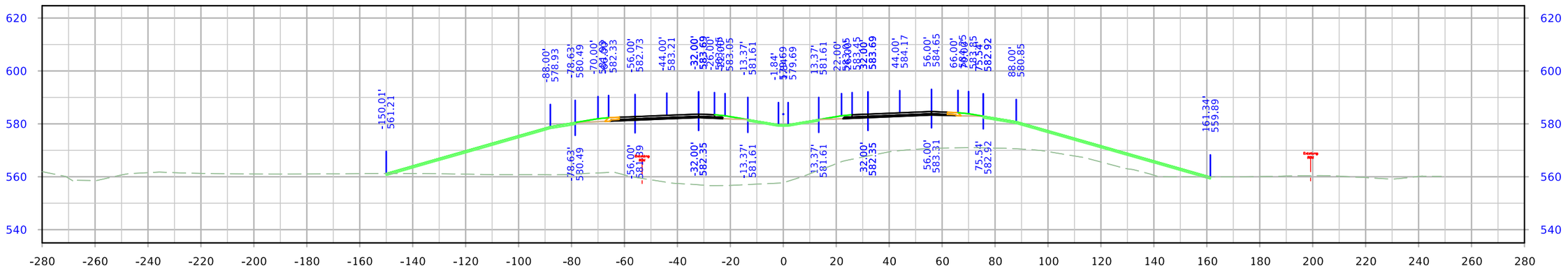
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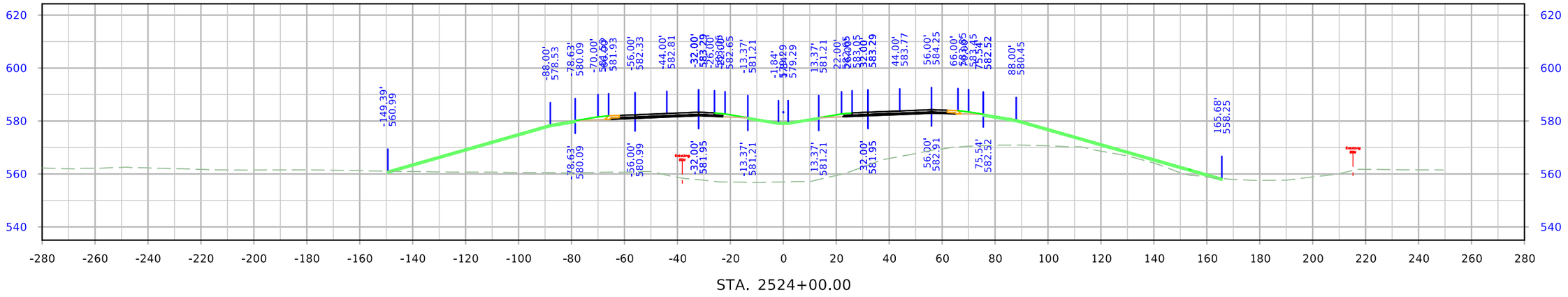
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.140

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ML - US61



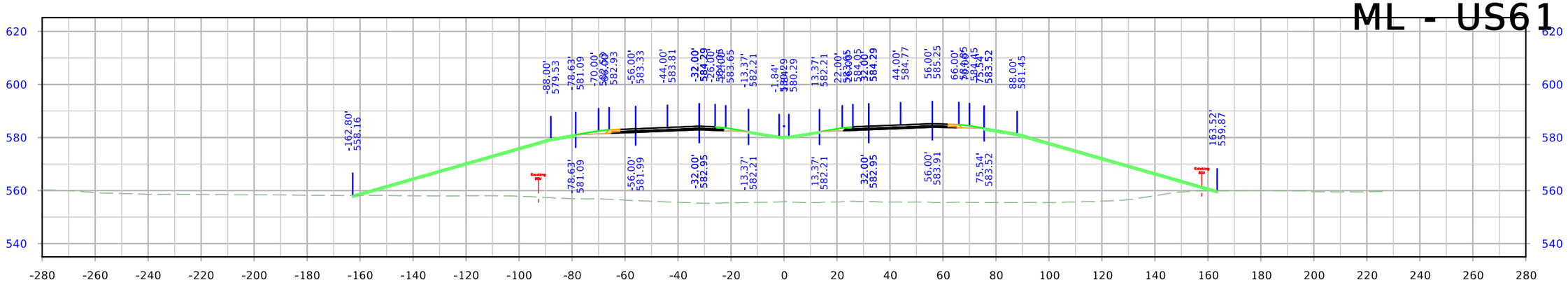




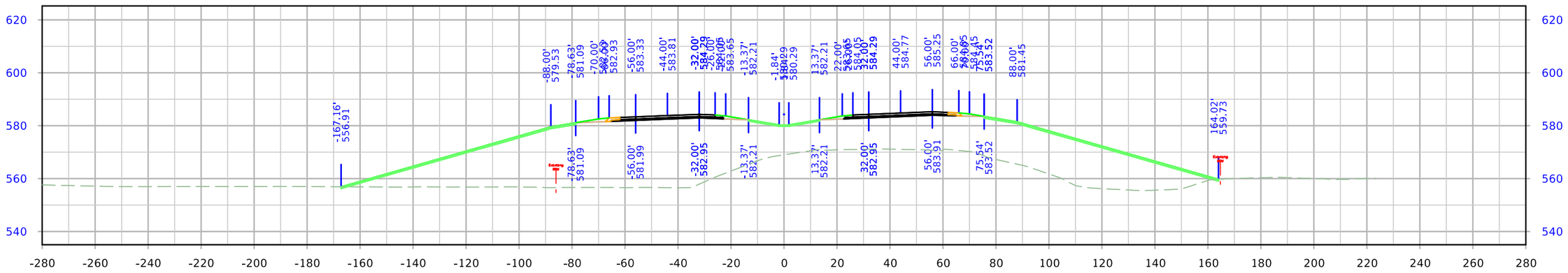
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.141

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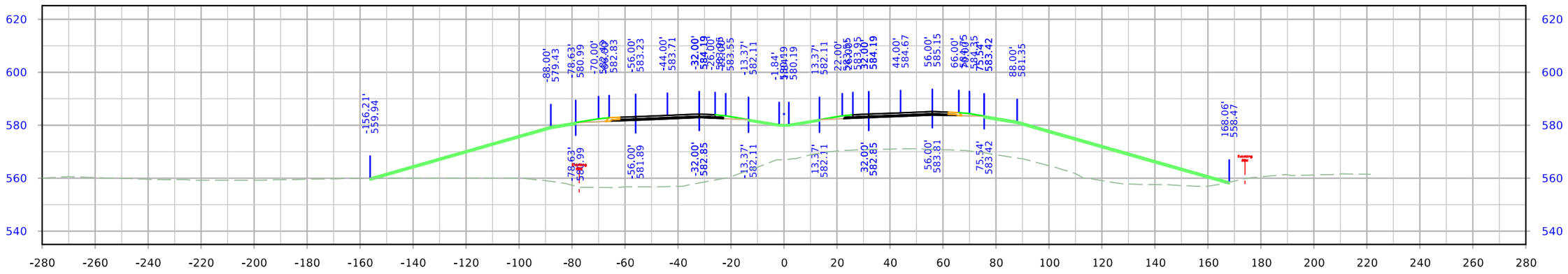
ML - US61



STA. 2529+00.00



STA. 2528+00.00

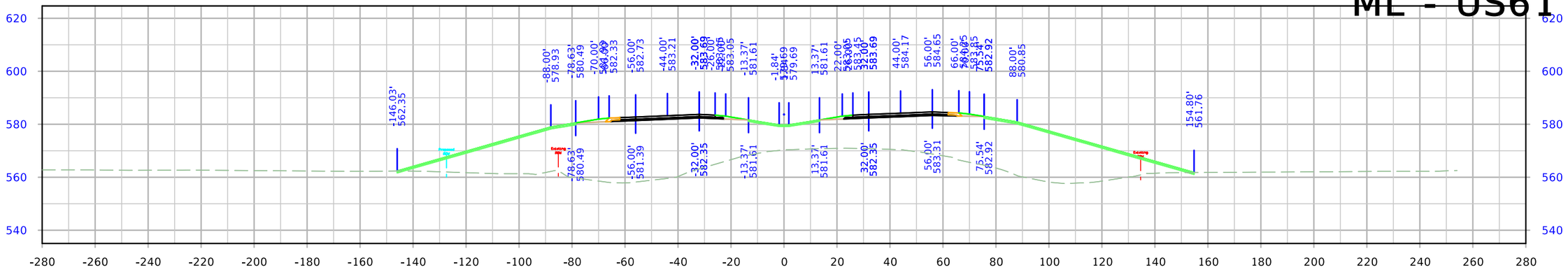


STA. 2527+00.00

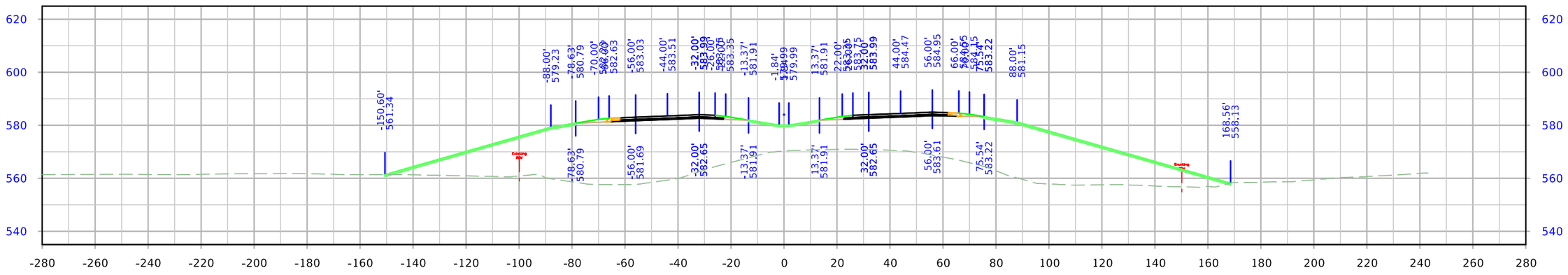
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.142

3:54:04 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

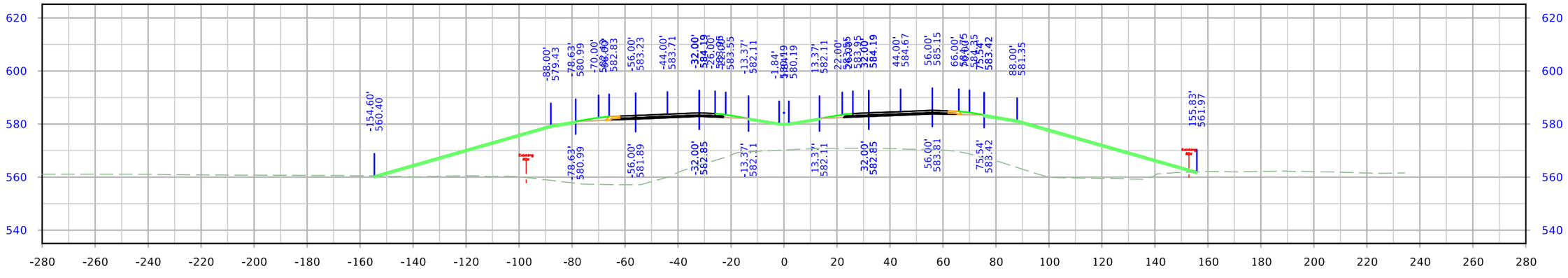
ML - US61



STA. 2532+00.00



STA. 2531+00.00

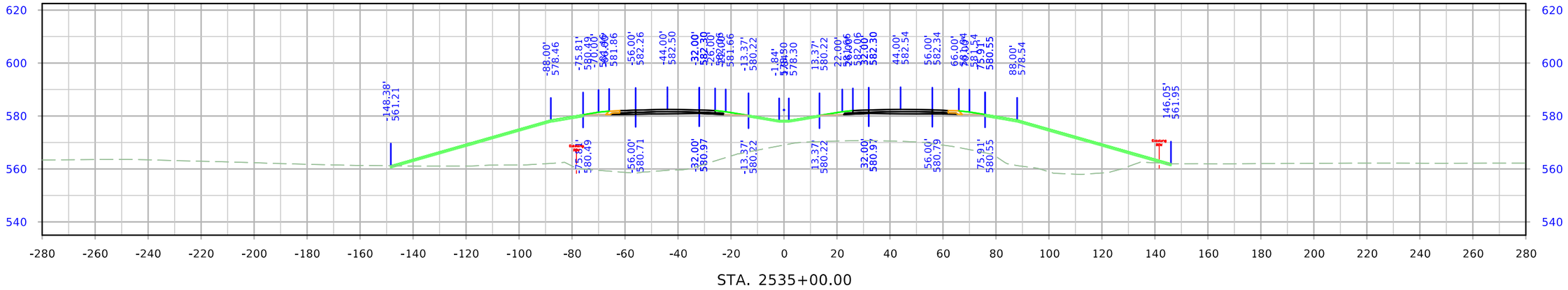


STA. 2530+00.00

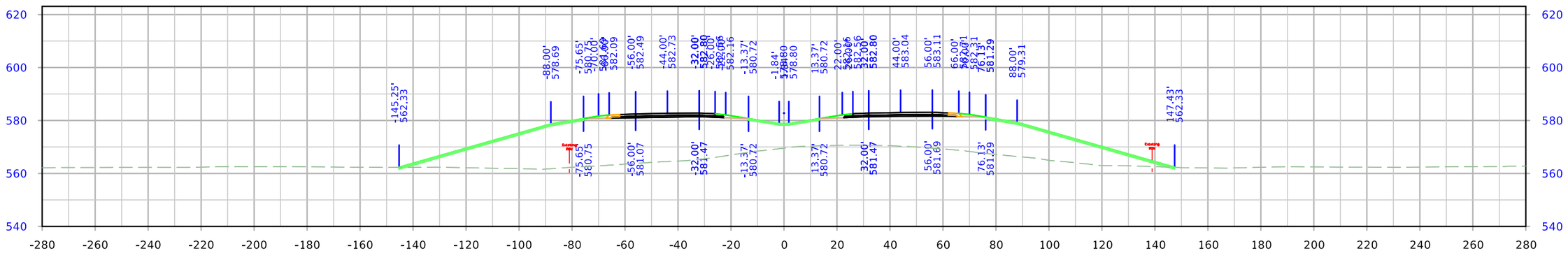
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.143

3:54:09 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

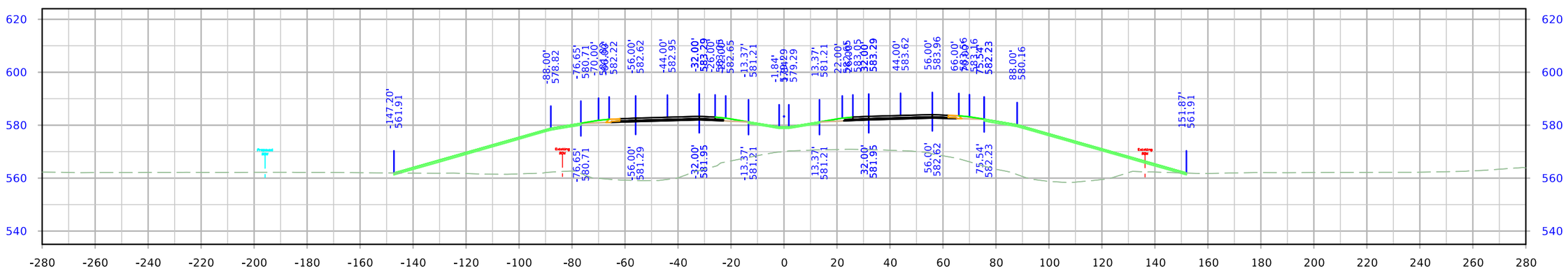
ML - US61



STA. 2535+00.00



STA. 2534+00.00

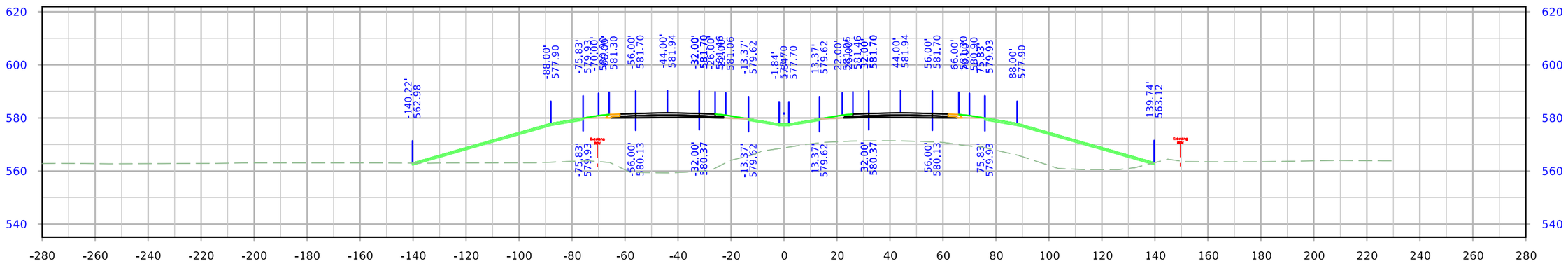


STA. 2533+00.00

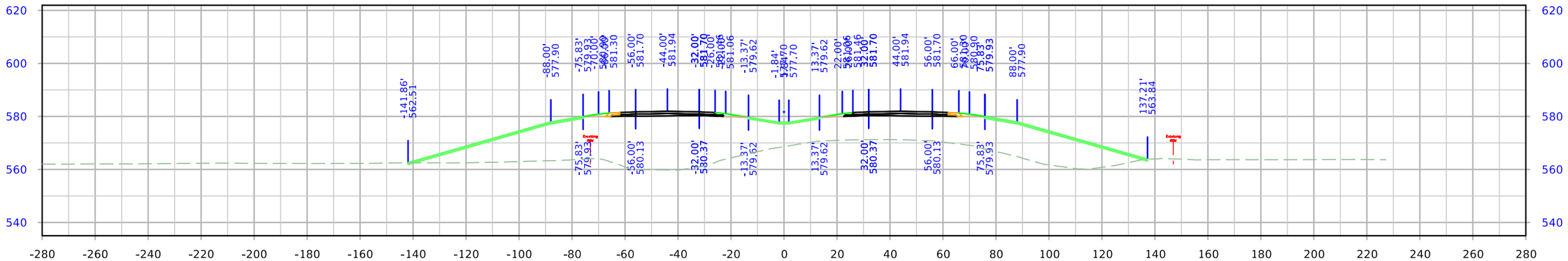
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.144

3:54:14 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

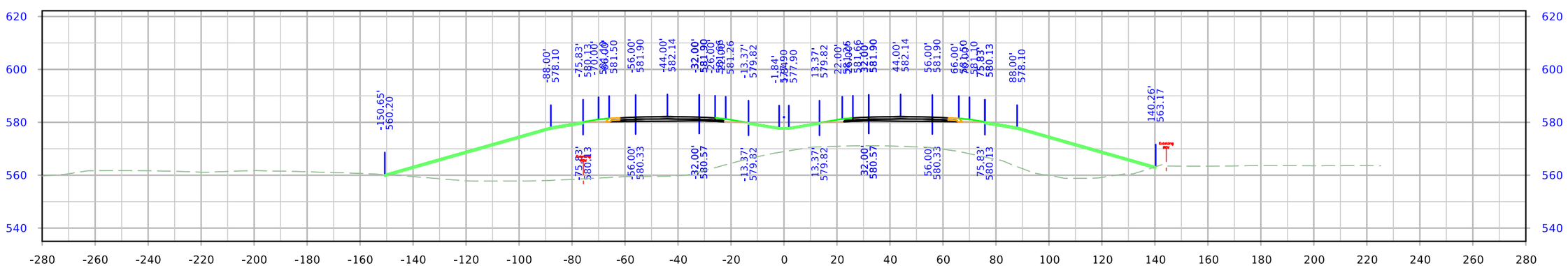
ML - US61



STA. 2538+00.00



STA. 2537+00.00

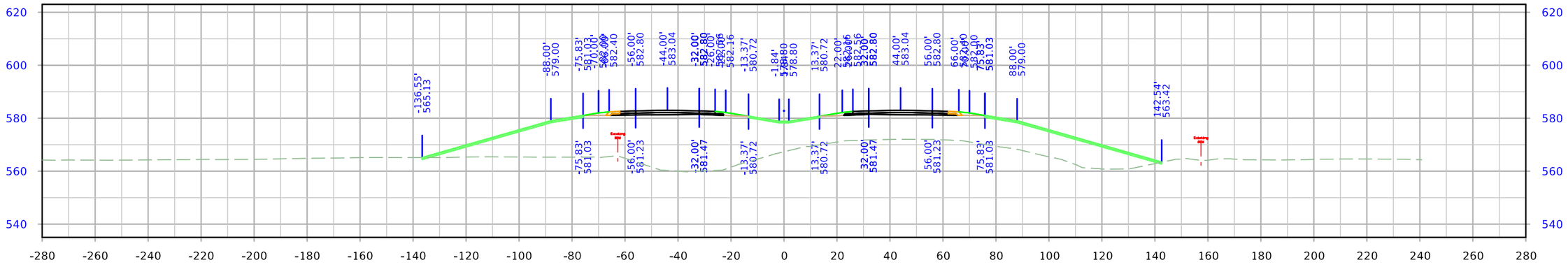


STA. 2536+00.00

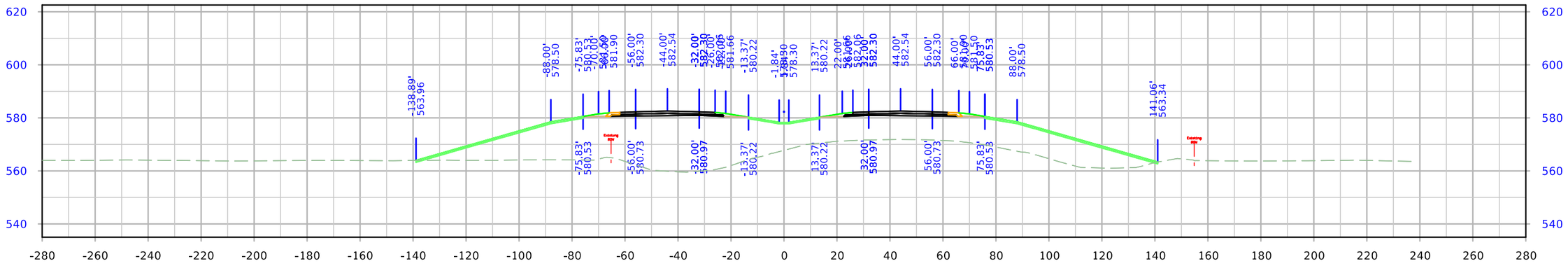
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.145

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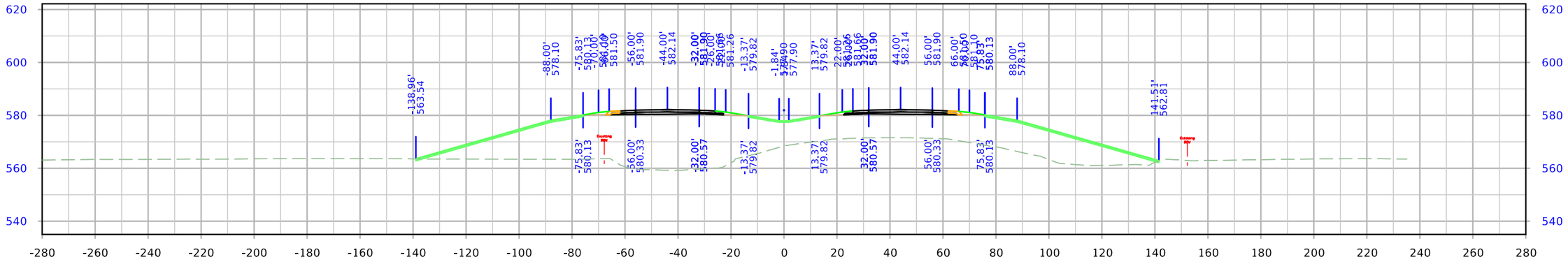
ML - US61



STA. 2541+00.00



STA. 2540+00.00

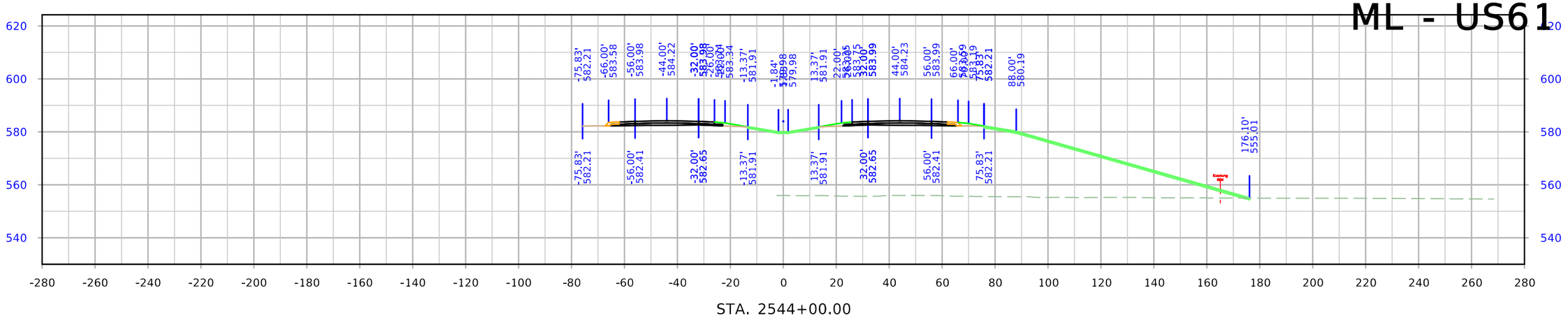


STA. 2539+00.00

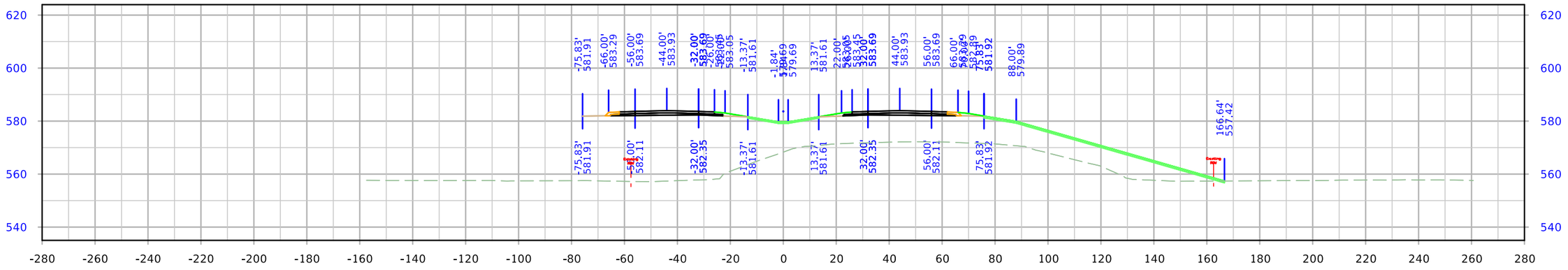
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.146

3:54:25 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

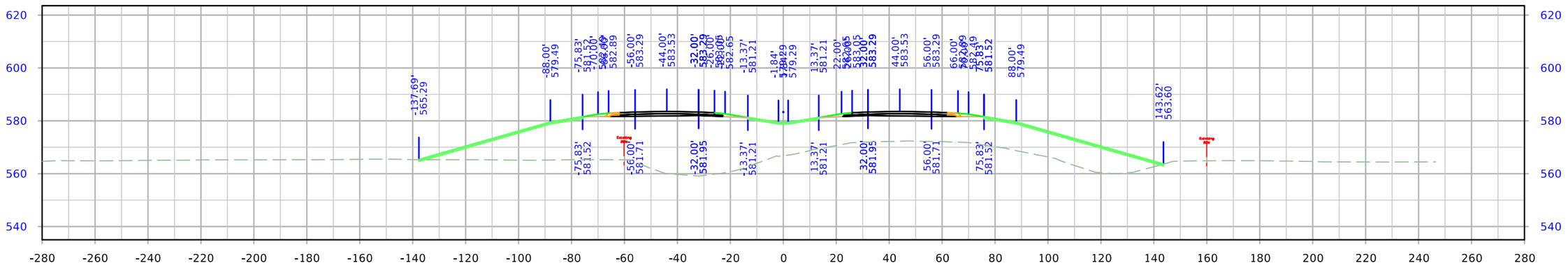
ML - US61



STA. 2544+00.00



STA. 2543+00.00

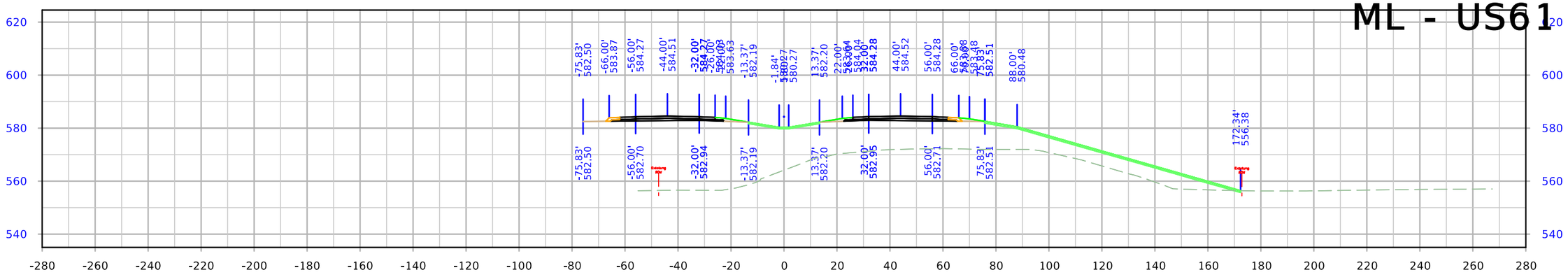


STA. 2542+00.00

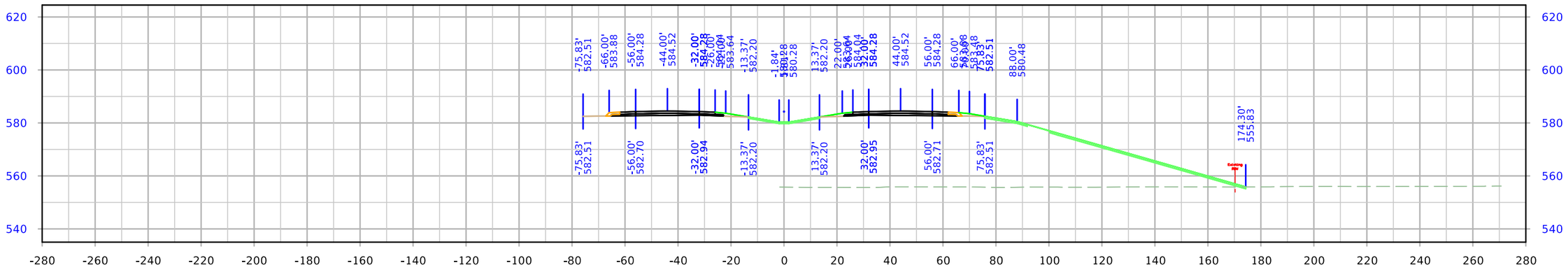
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.147	

3:54:31 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

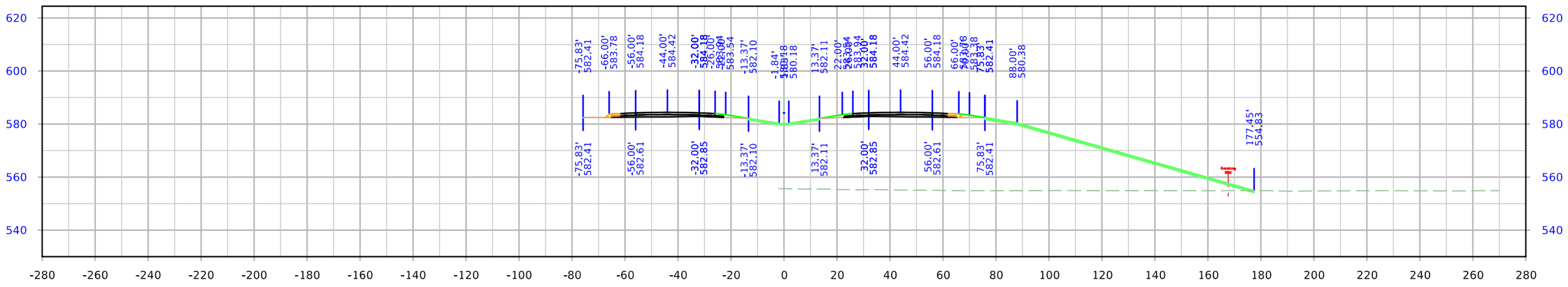
ML - US61



STA. 2547+00.00



STA. 2546+00.00

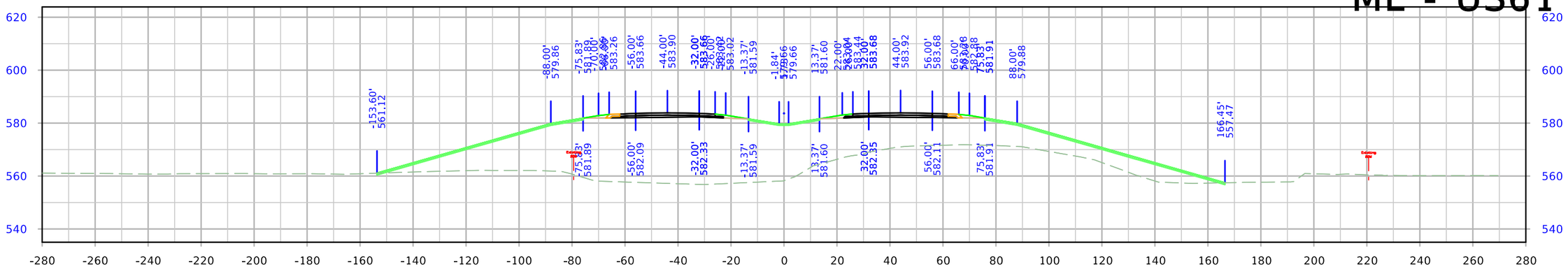


STA. 2545+00.00

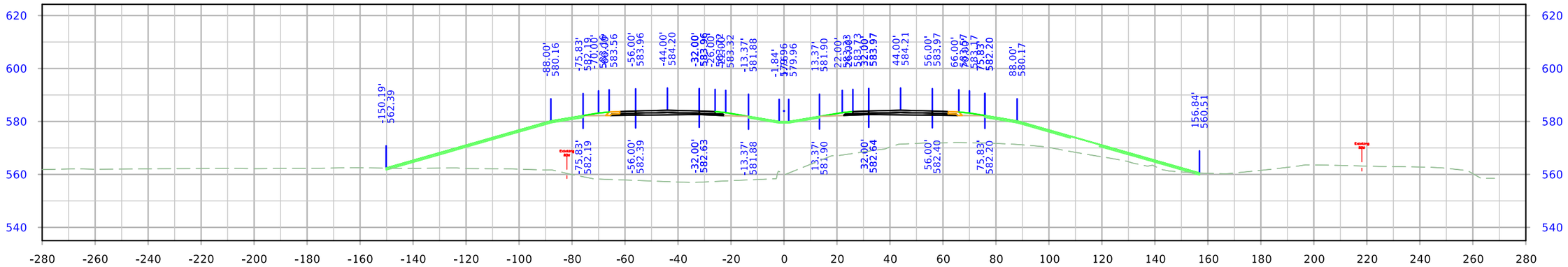
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.148

3:54:36 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

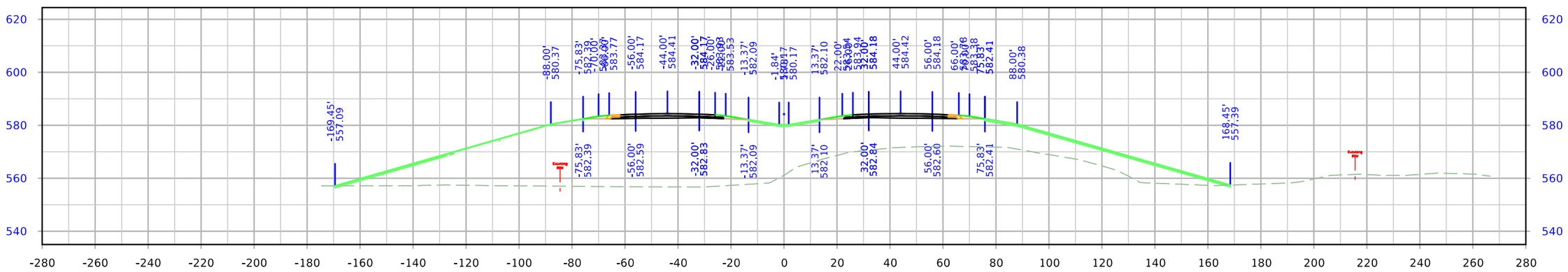
ML - US61



STA. 2550+00.00



STA. 2549+00.00

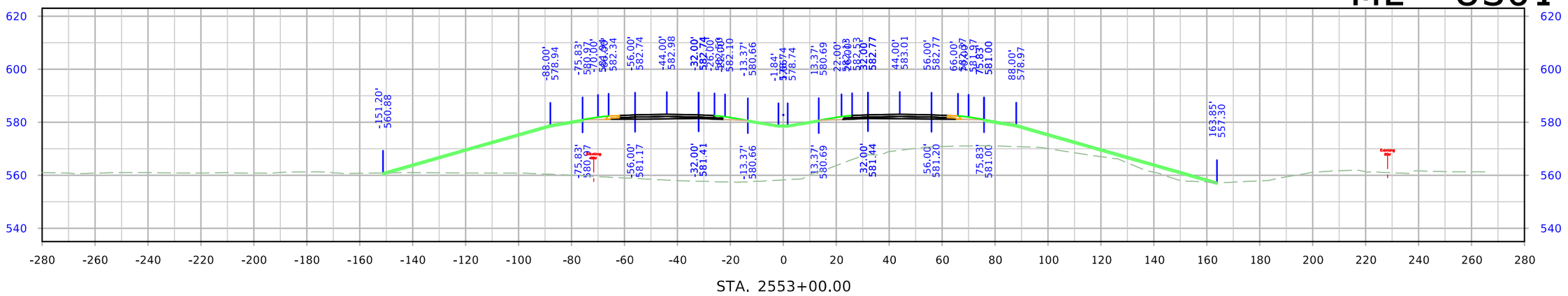


STA. 2548+00.00

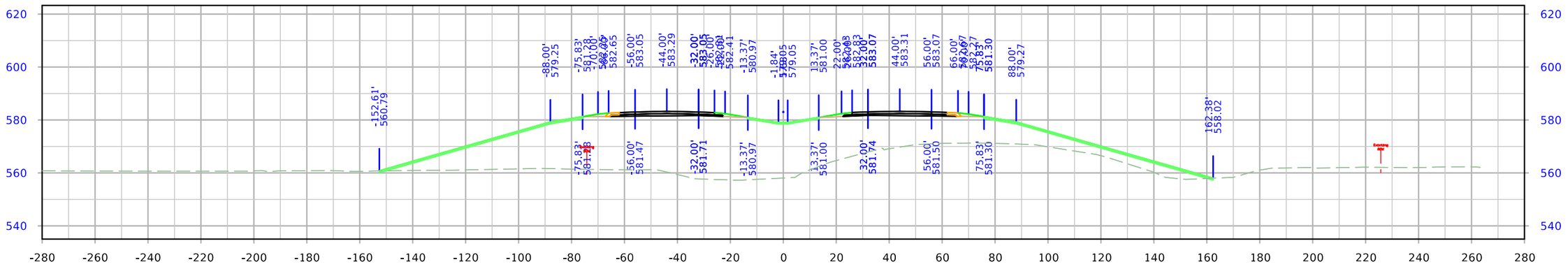
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.149

3:54:41 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

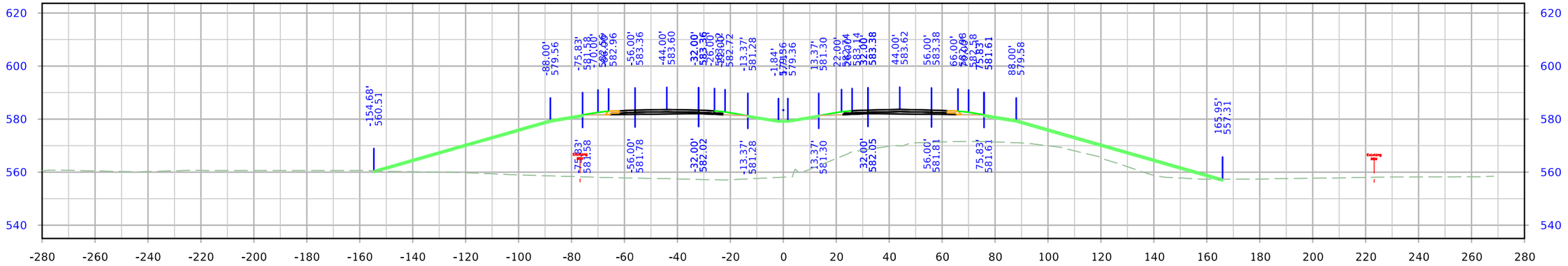
ML - US61



STA. 2553+00.00



STA. 2552+00.00

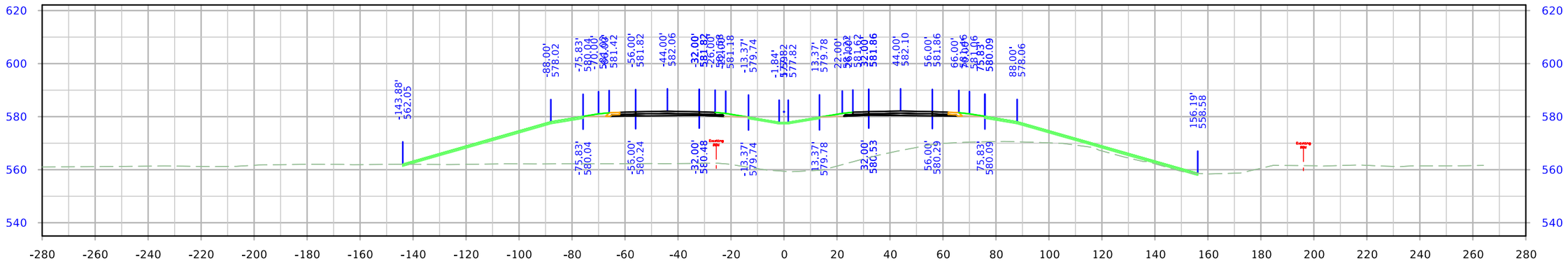


STA. 2551+00.00

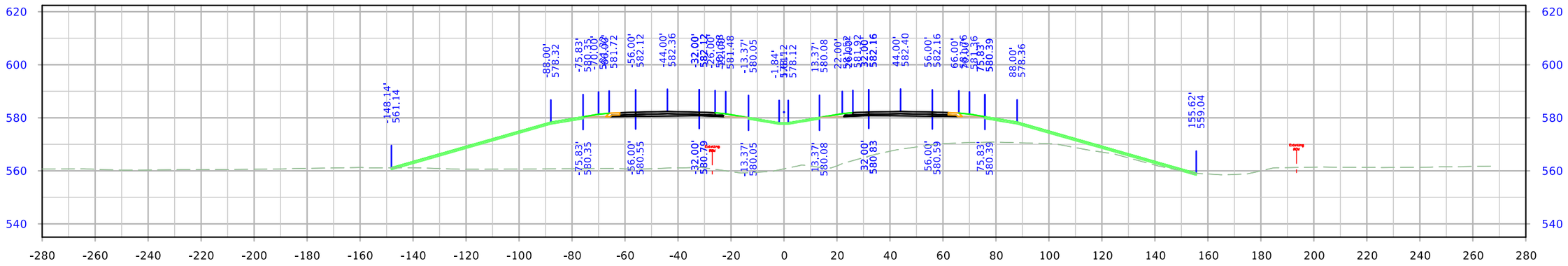
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.150

3:54:47 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

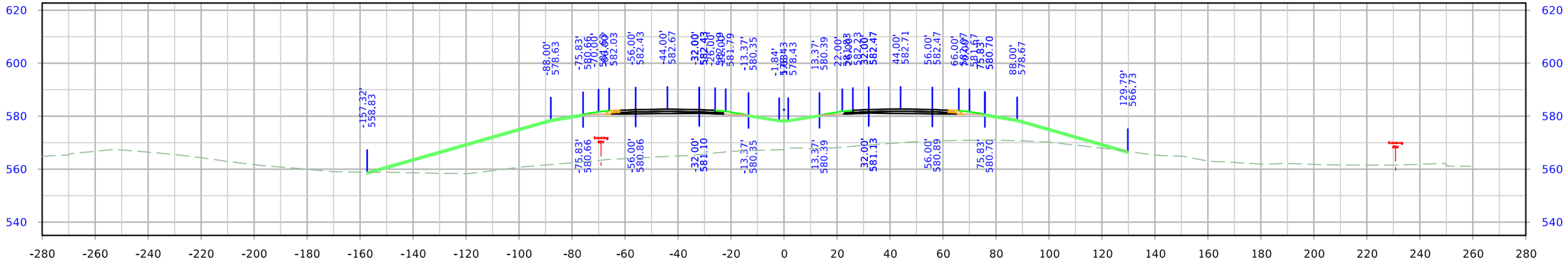
ML - US61



STA. 2556+00.00



STA. 2555+00.00

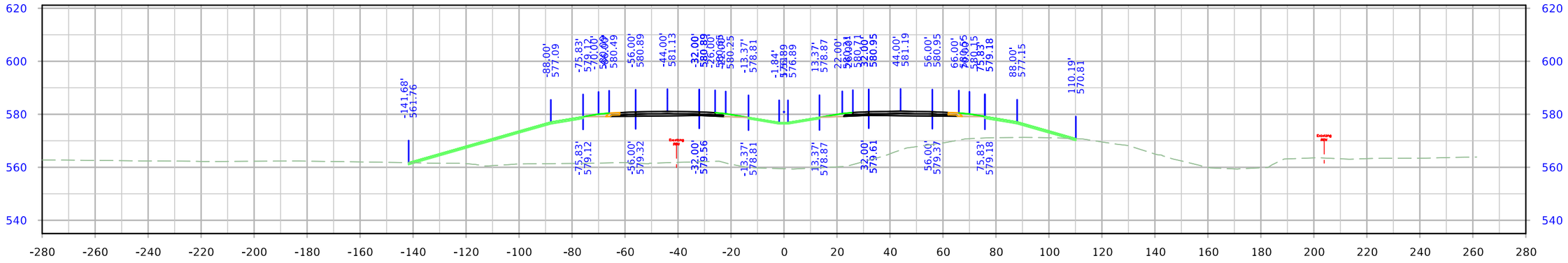


STA. 2554+00.00

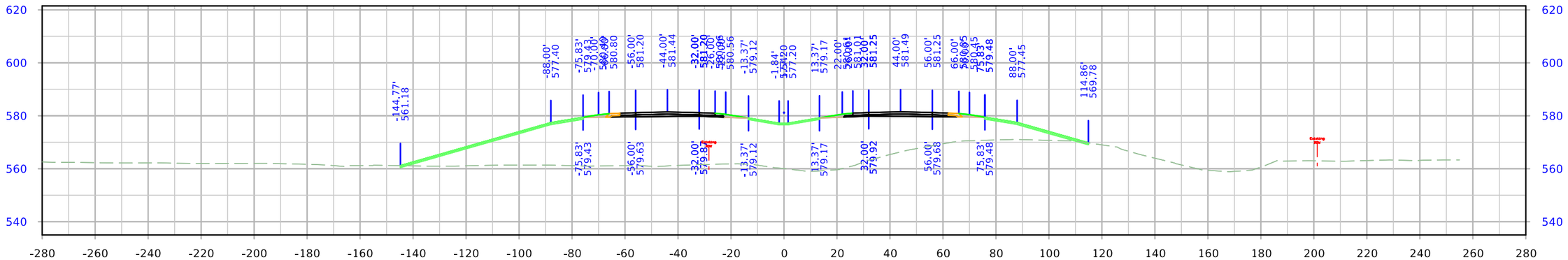
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.151

3:54:52 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

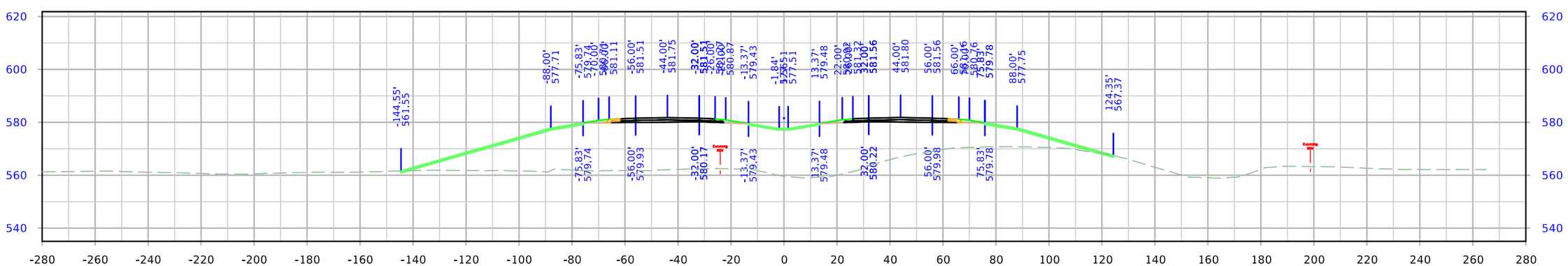
ML - US61



STA. 2559+00.00



STA. 2558+00.00

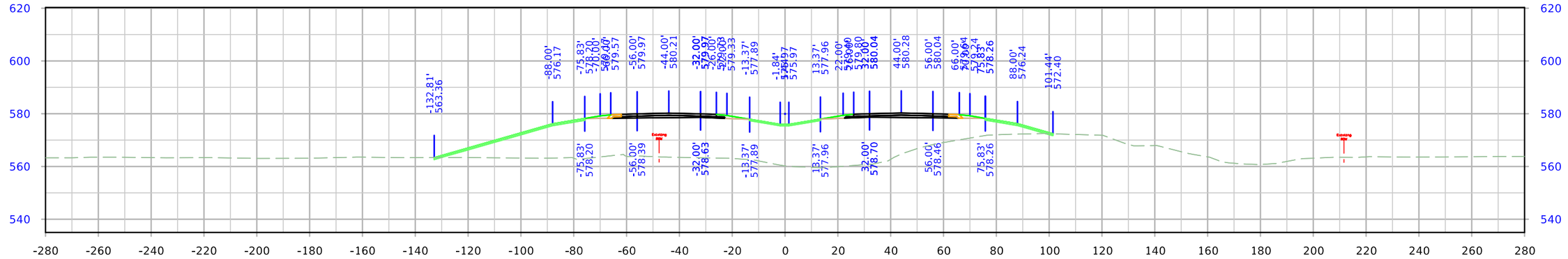


STA. 2557+00.00

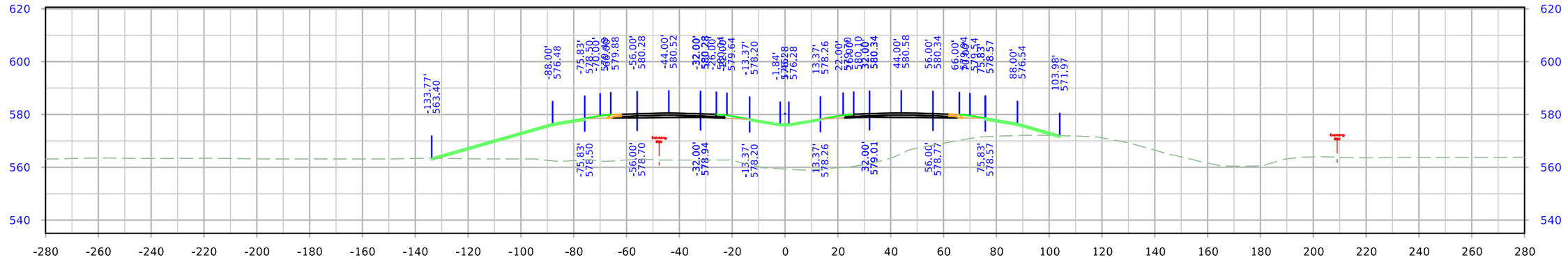
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.152

3:54:57 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

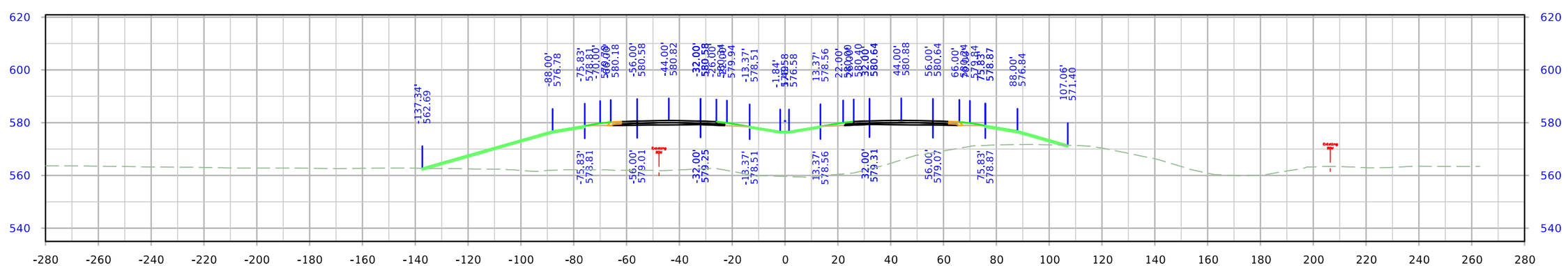
ML - US61



STA. 2562+00.00



STA. 2561+00.00

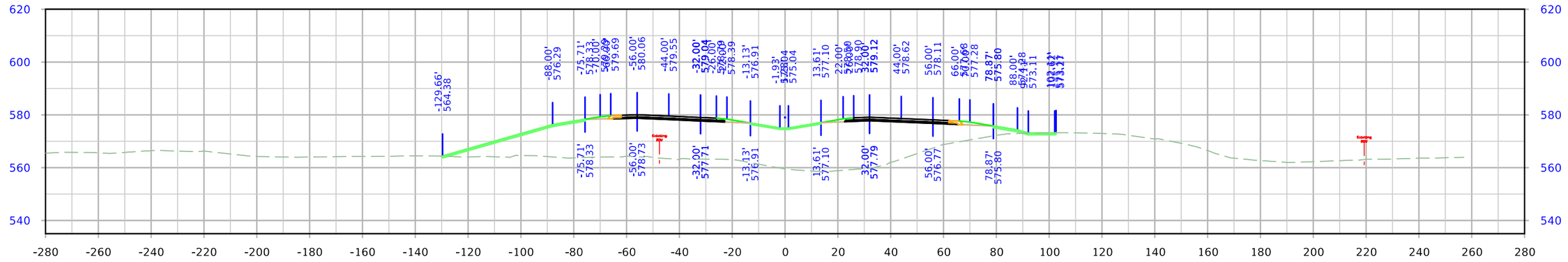


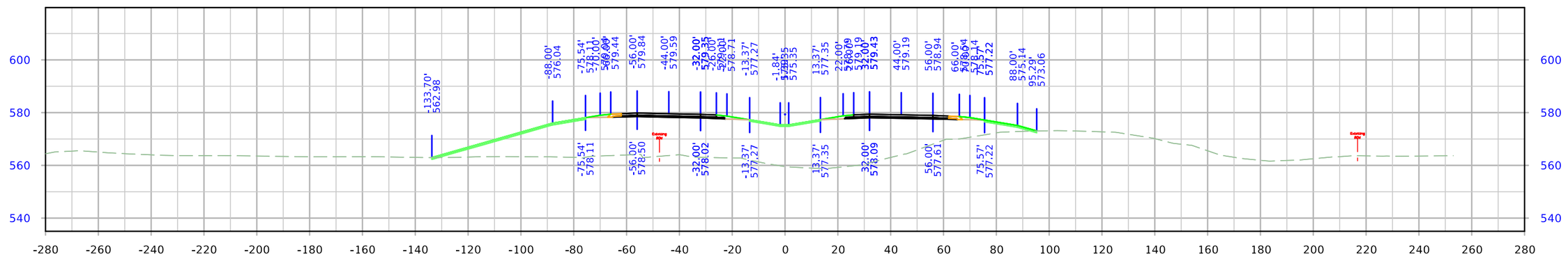
STA. 2560+00.00

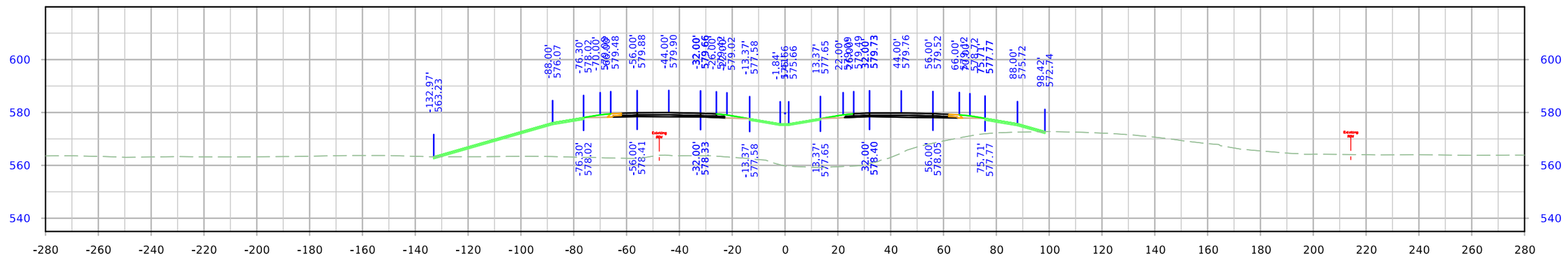
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.153

3:55:02 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



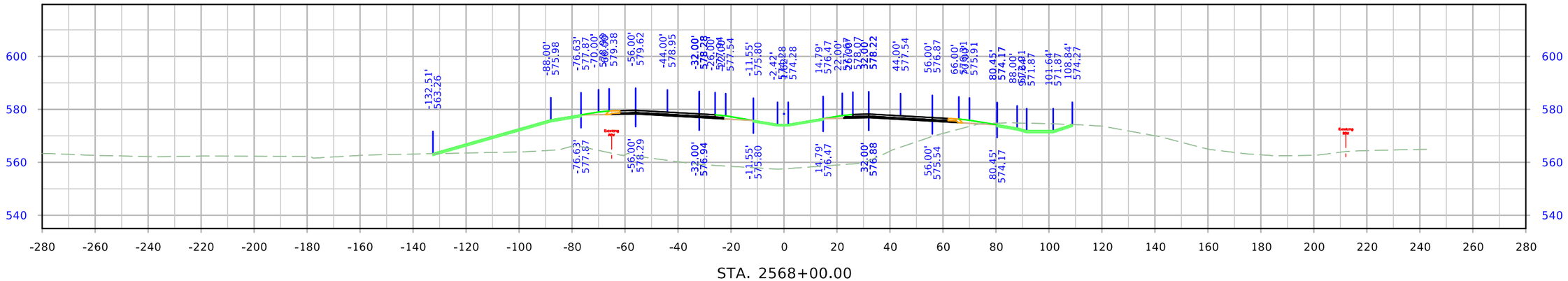




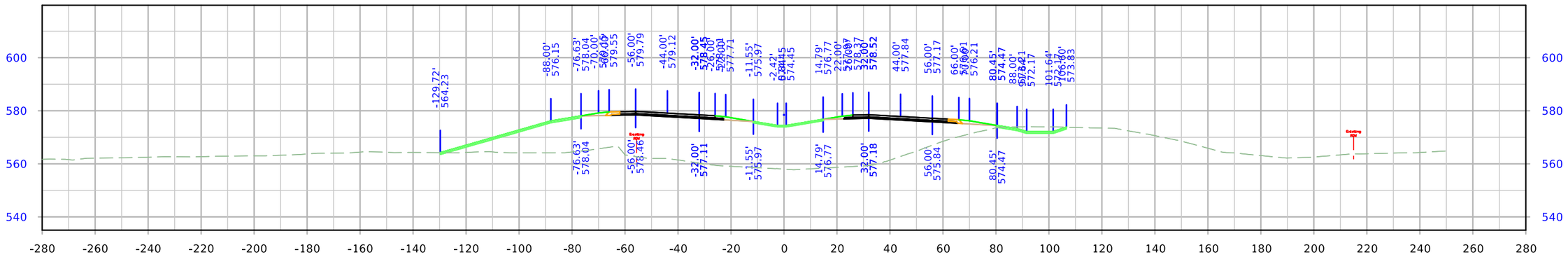
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.154

3:55:08 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

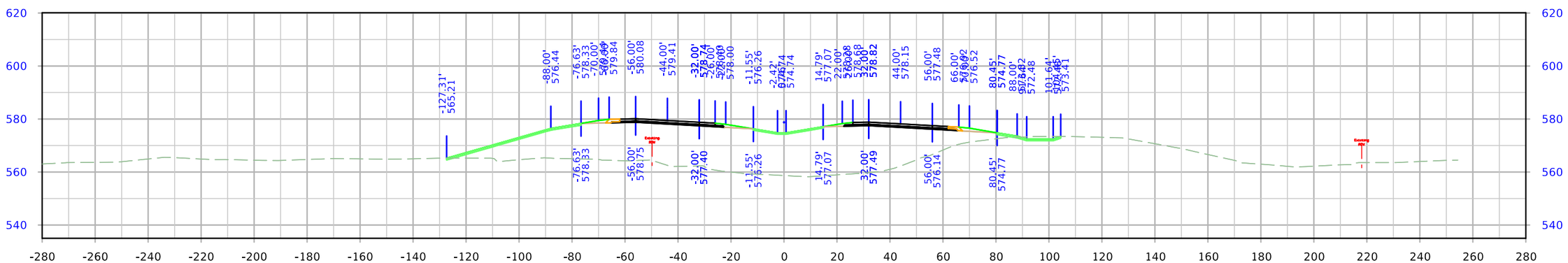
ML - US61



STA. 2568+00.00



STA. 2567+00.00

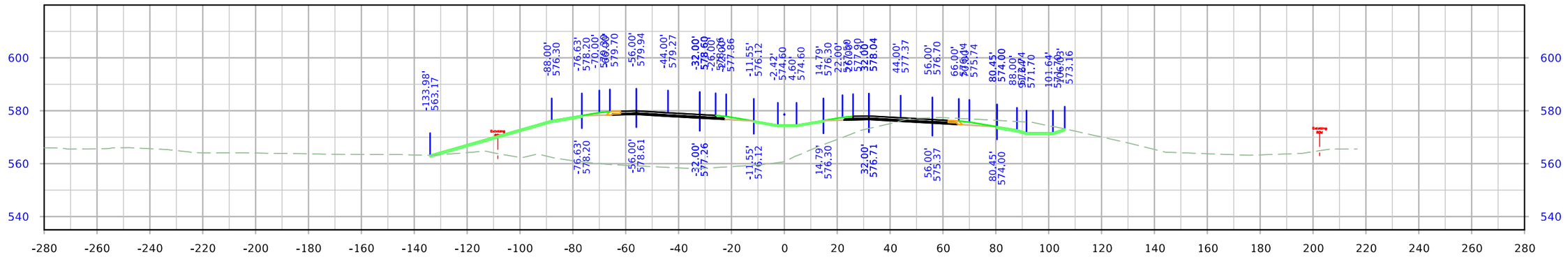


STA. 2566+00.00

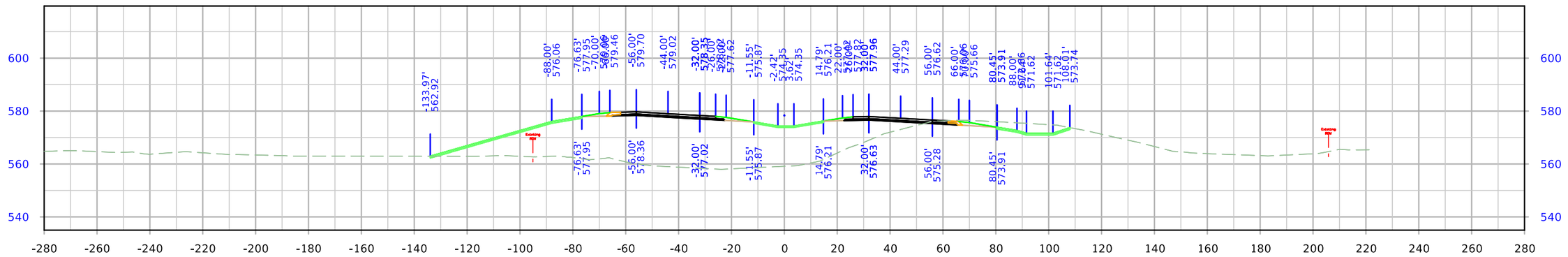
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.155

3:55:13 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

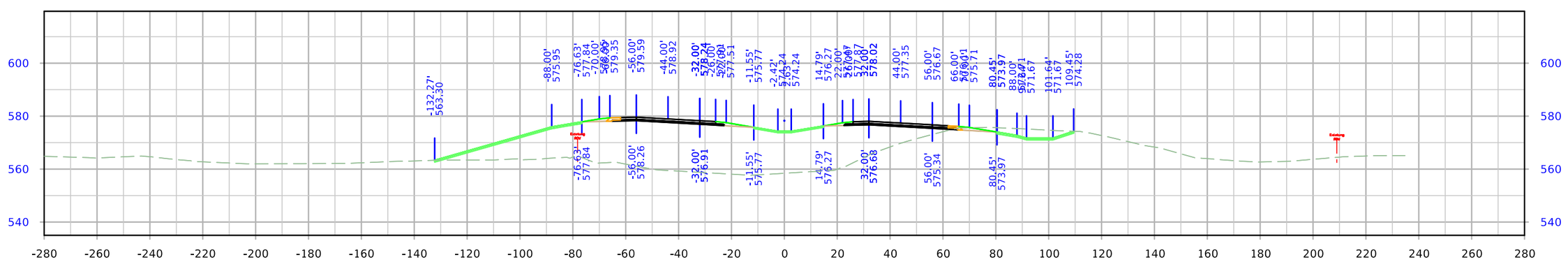
ML - US61



STA. 2571+00.00



STA. 2570+00.00

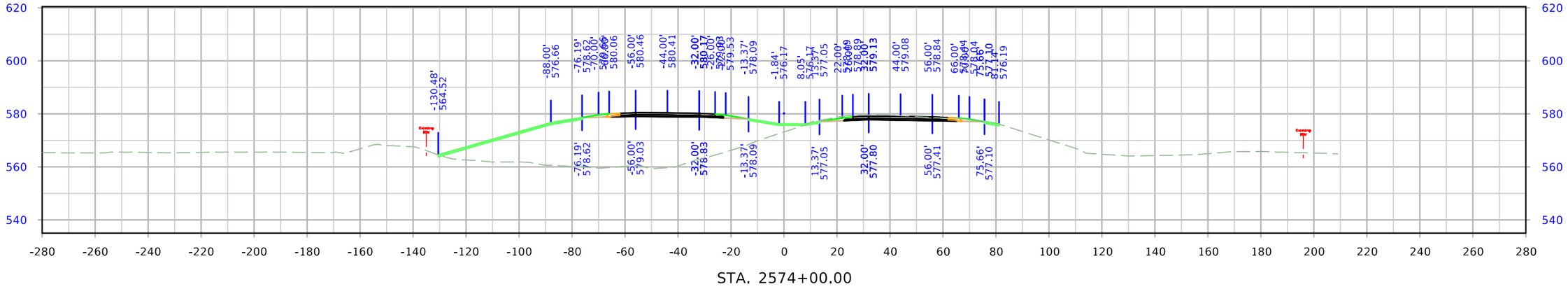


STA. 2569+00.00

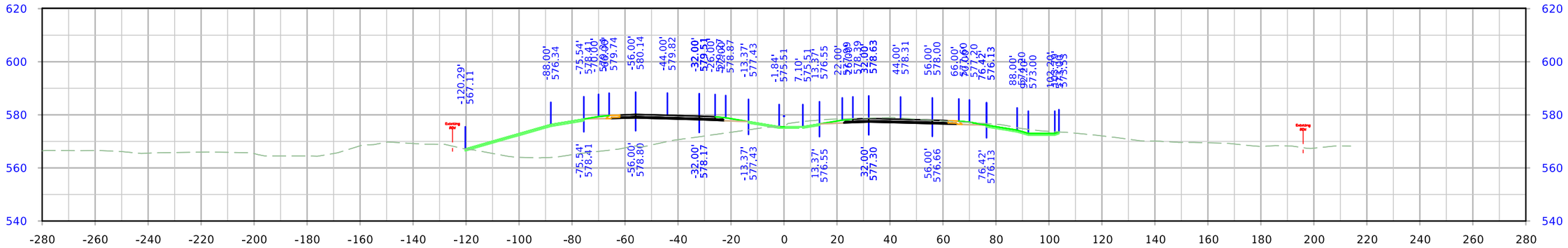
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.156

3:55:18 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

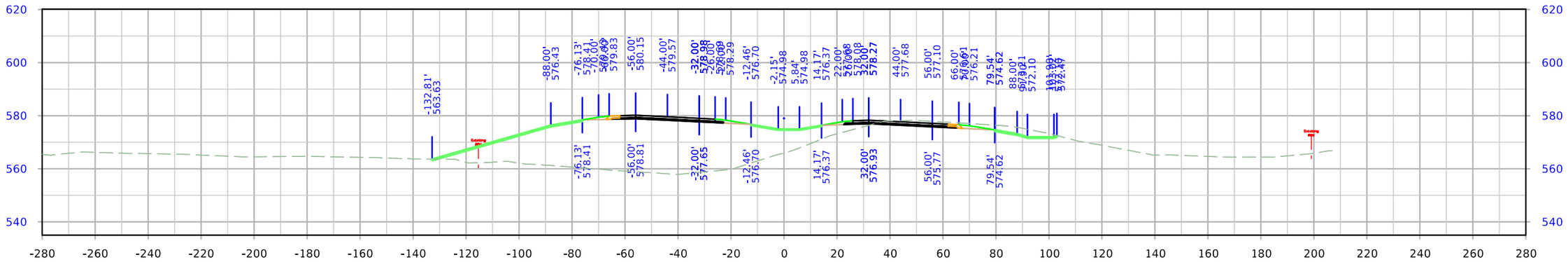
ML - US61



STA. 2574+00.00



STA. 2573+00.00

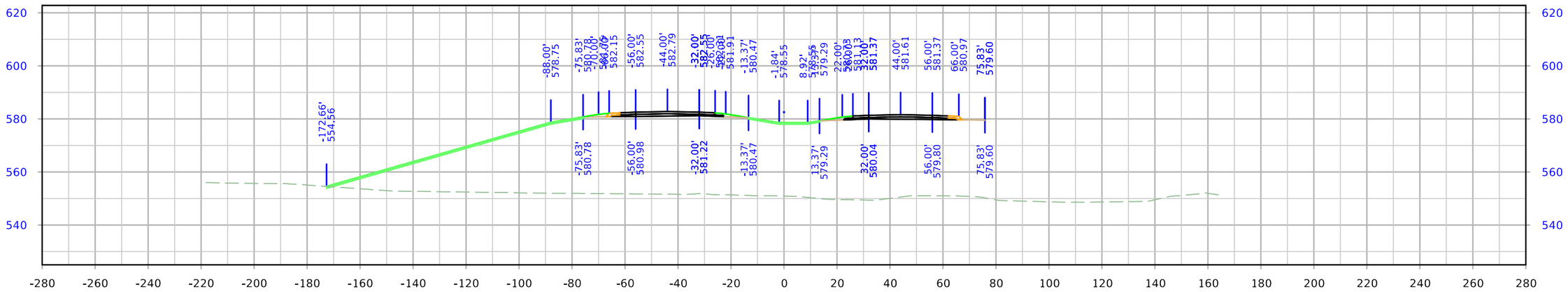


STA. 2572+00.00

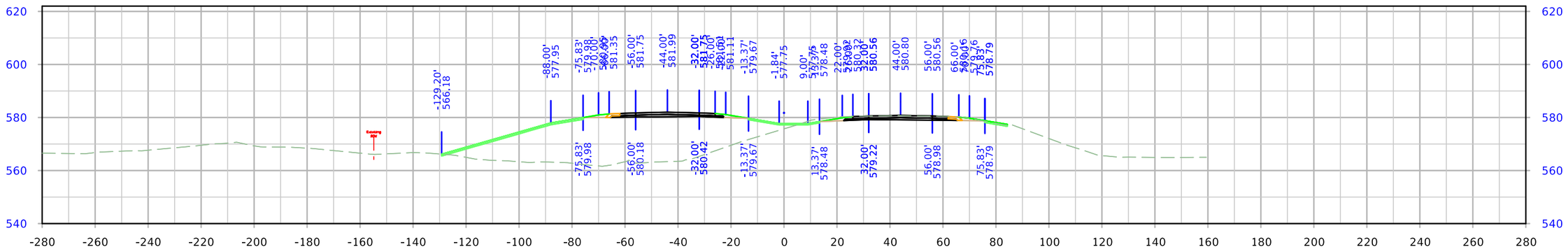
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.157

3:55:23 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

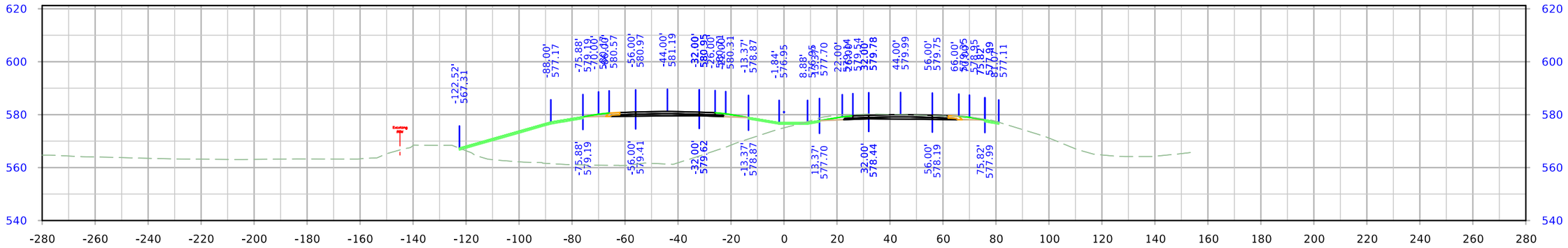
ML - US61



STA. 2577+00.00



STA. 2576+00.00

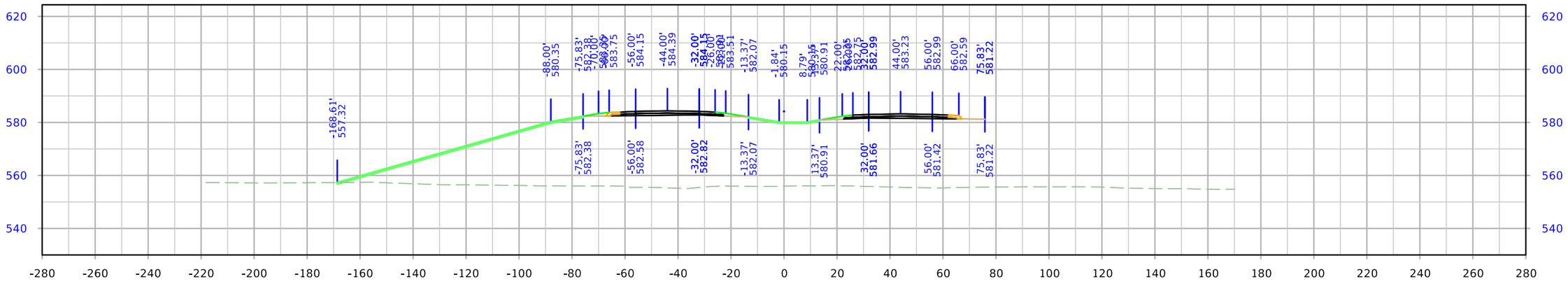


STA. 2575+00.00

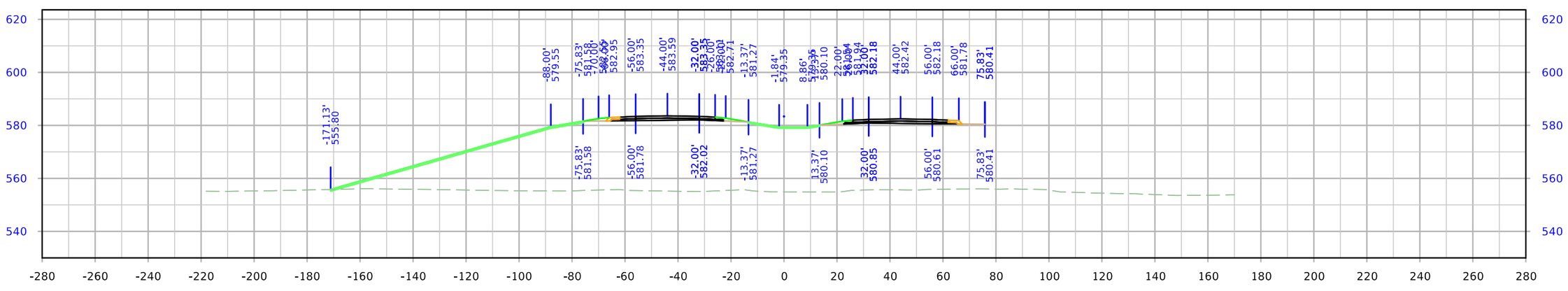
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.158

3:55:28 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2579+00.00

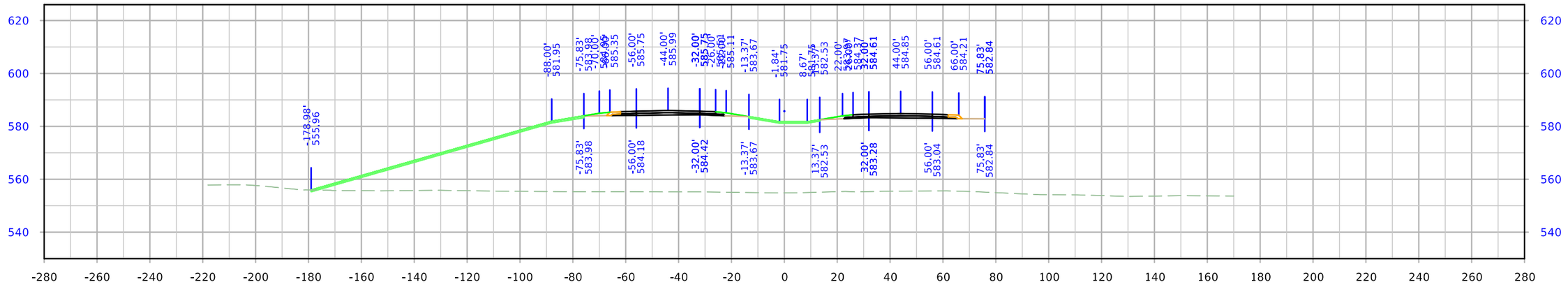


STA. 2578+00.00

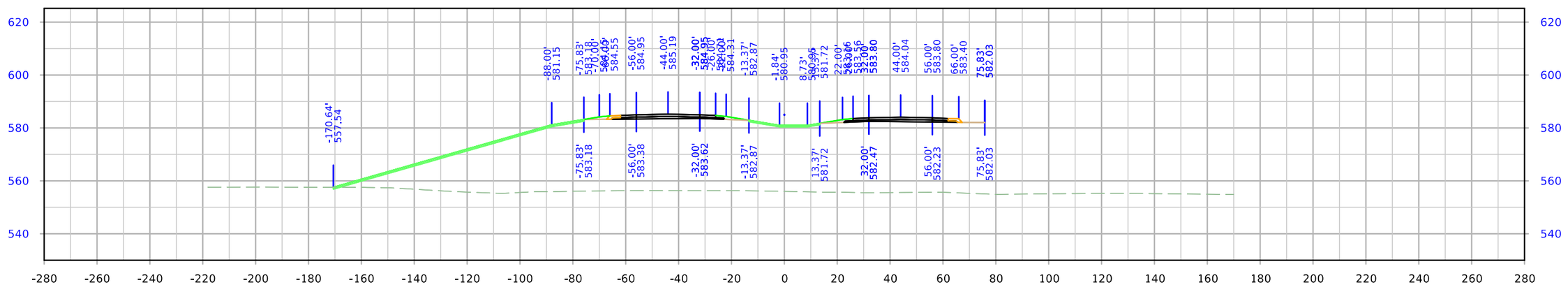
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.159

3:55:33 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2581+00.00

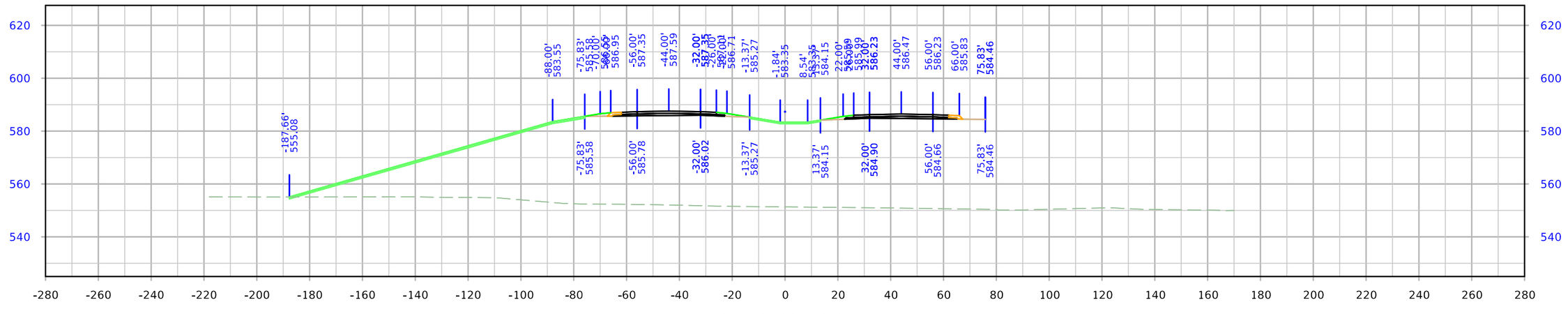


STA. 2580+00.00

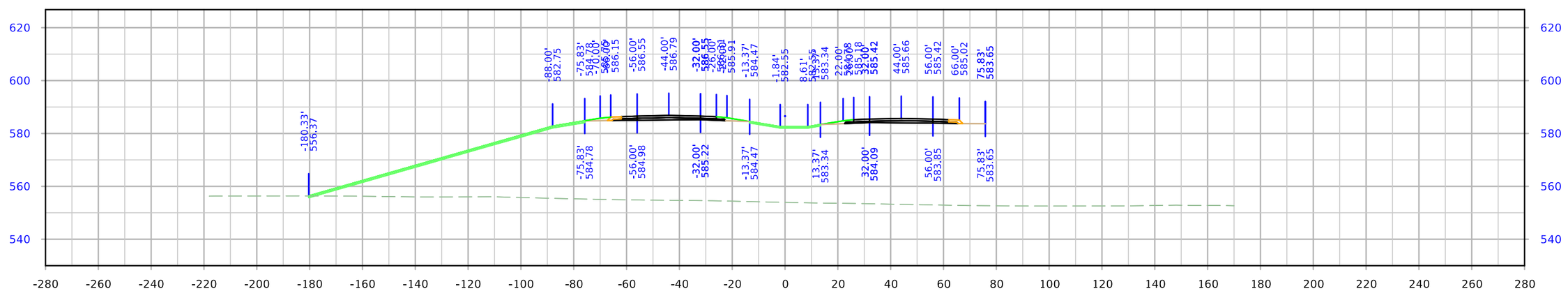
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.160

3:55:37 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2583+00.00

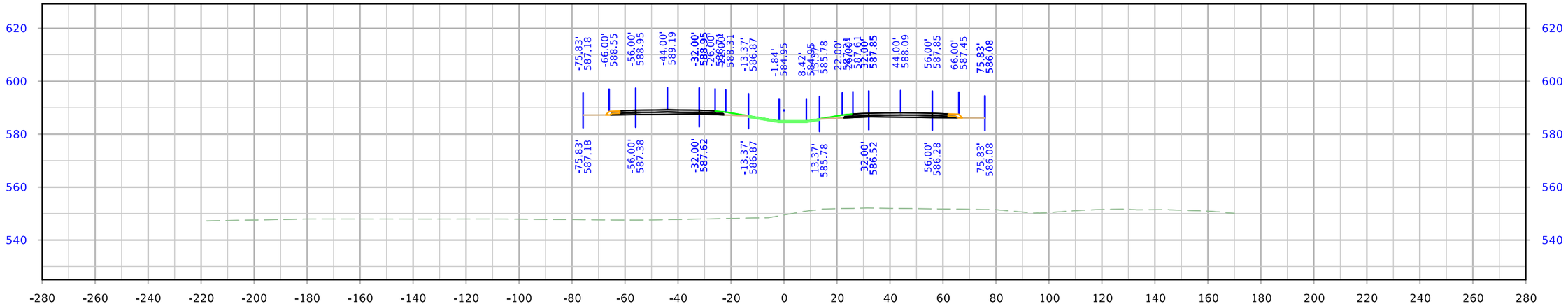


STA. 2582+00.00

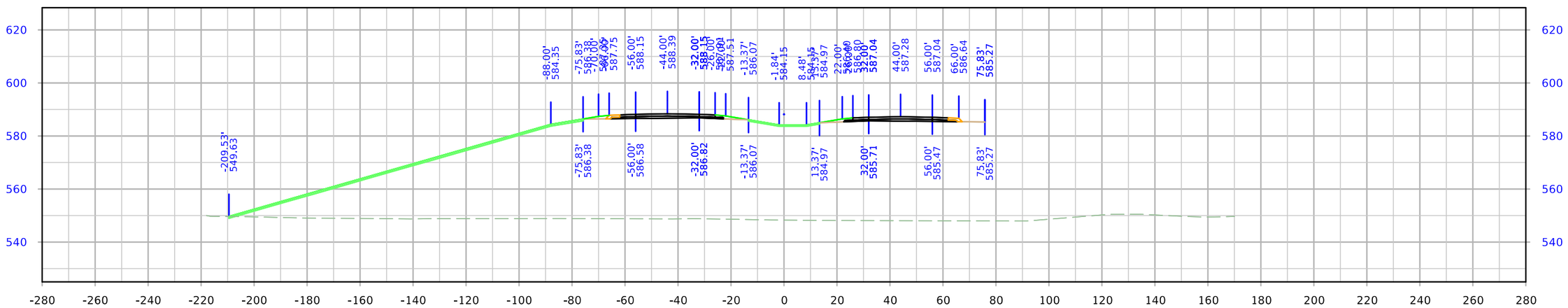
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.161

3:55:41 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2585+00.00

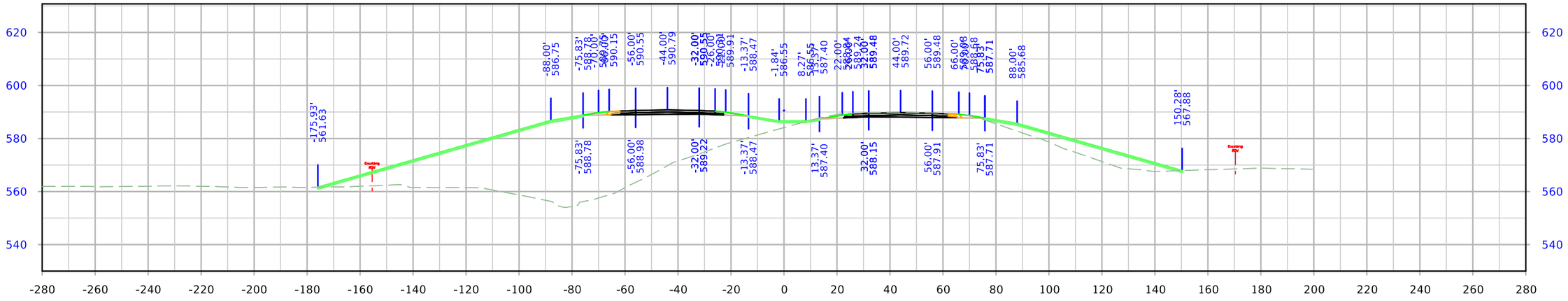


STA. 2584+00.00

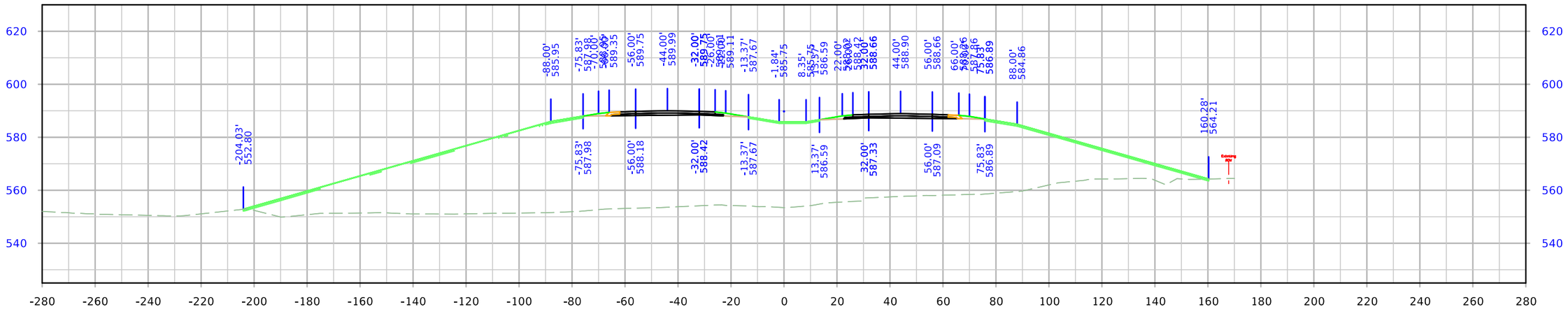
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.162

3:55:45 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2587+00.00

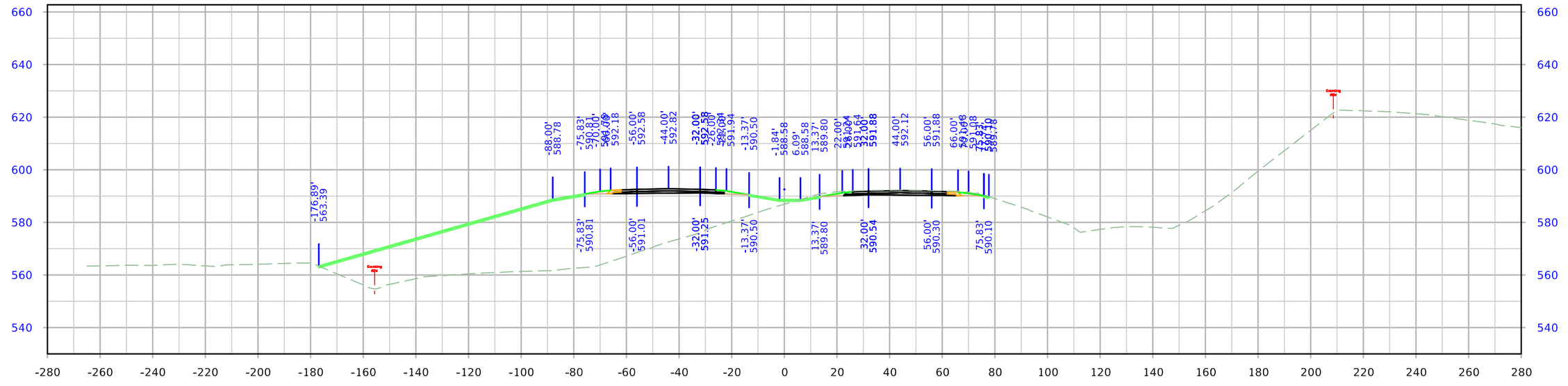


STA. 2586+00.00

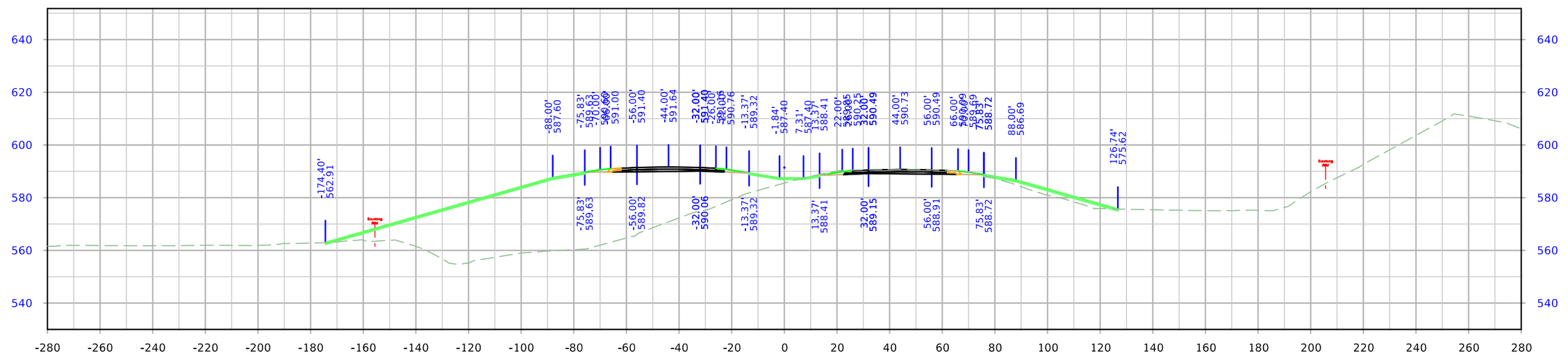
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.163

3:55:49 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2589+00.00

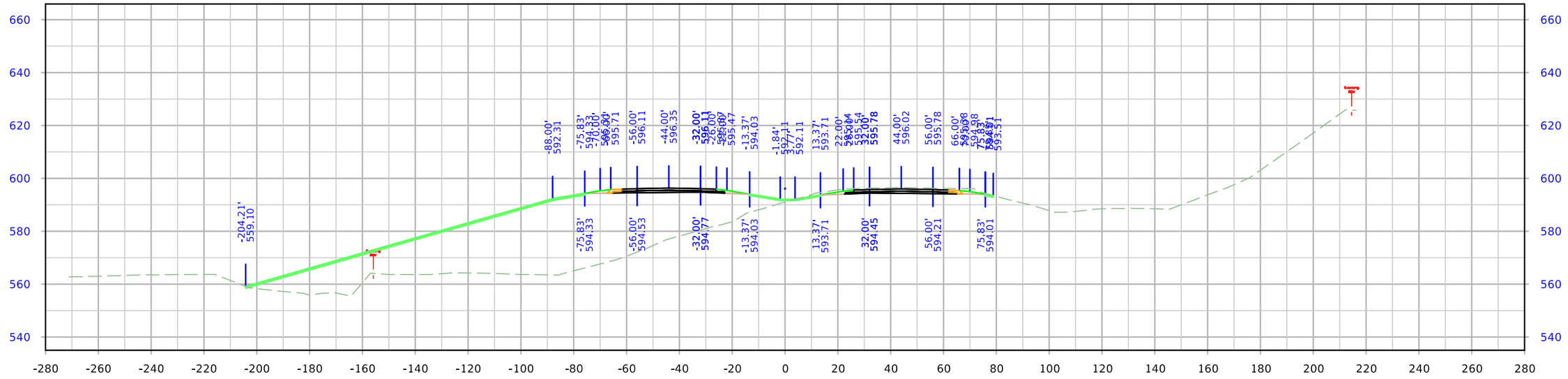


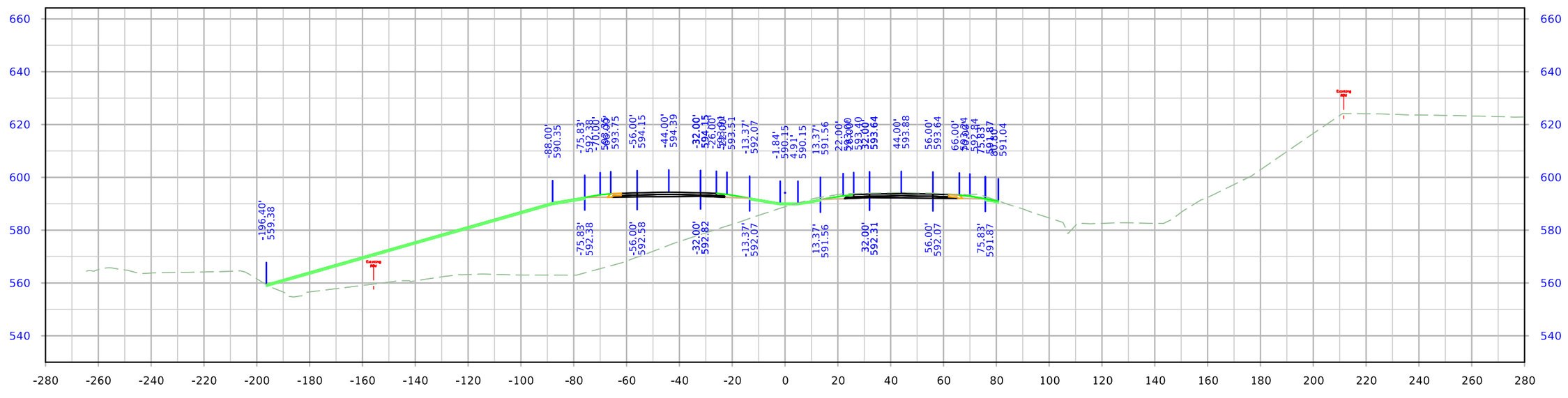
STA. 2588+00.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.164

3:55:53 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61

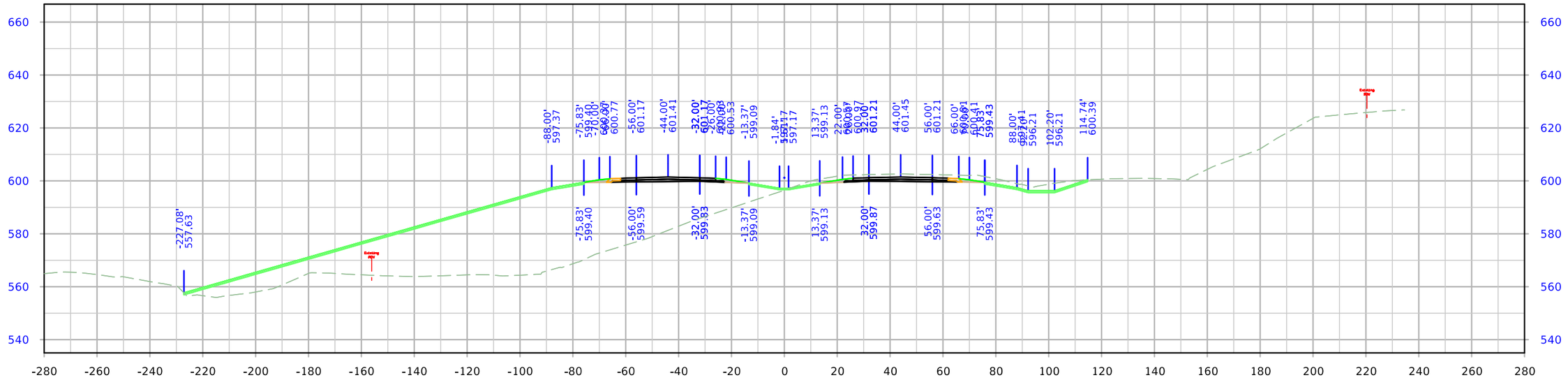




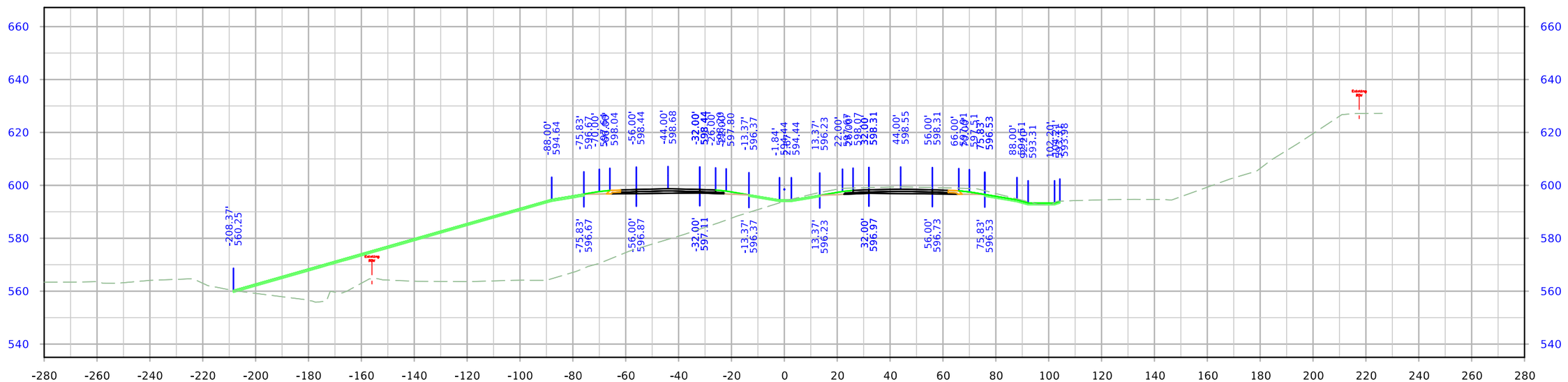
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.165

3:55:57 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2593+00.00

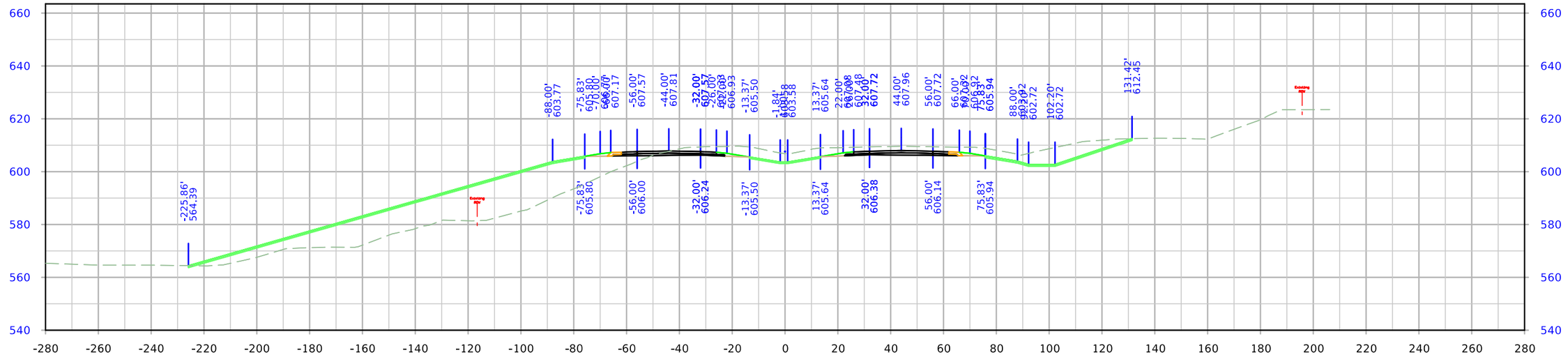


STA. 2592+00.00

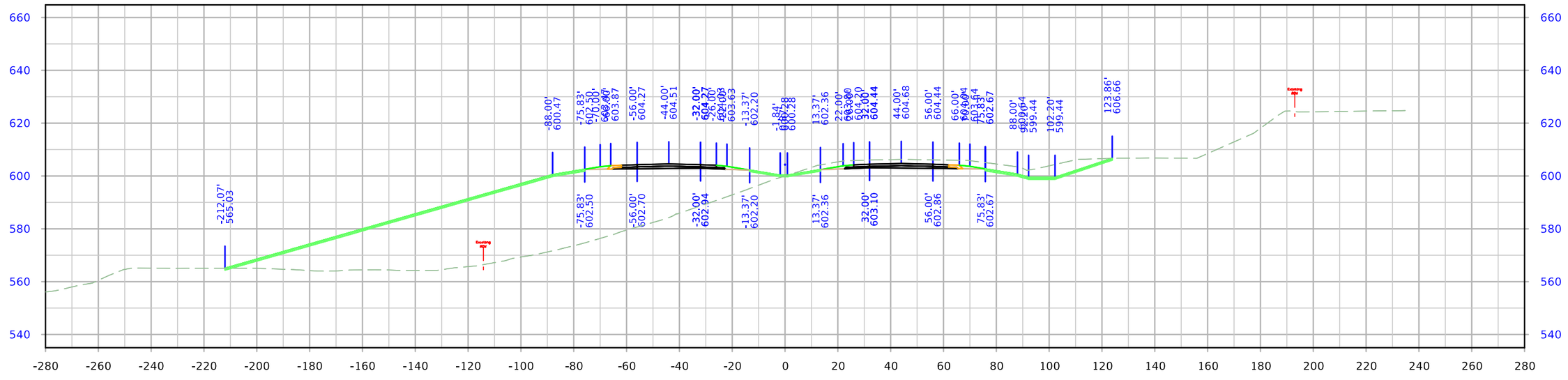
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.166

3:56:02 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2595+00.00

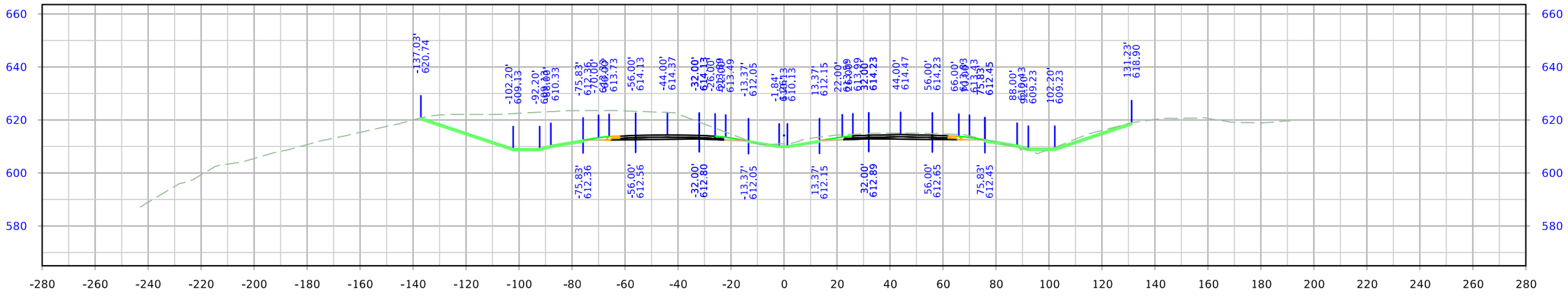


STA. 2594+00.00

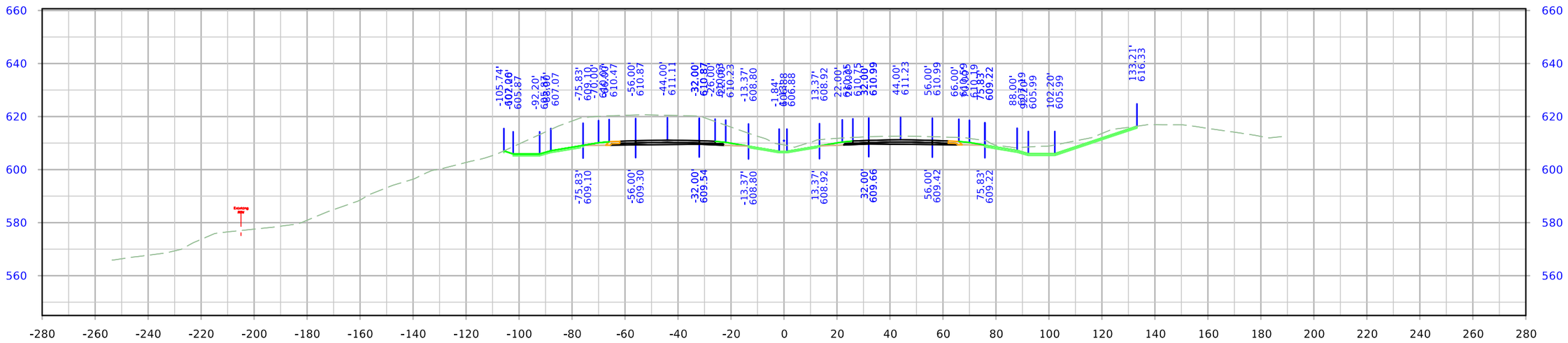
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.167

3:56:06 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2597+00.00

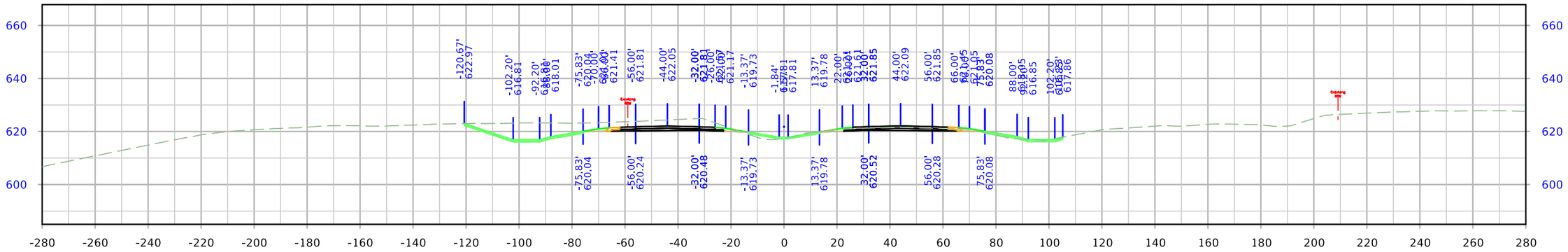


STA. 2596+00.00

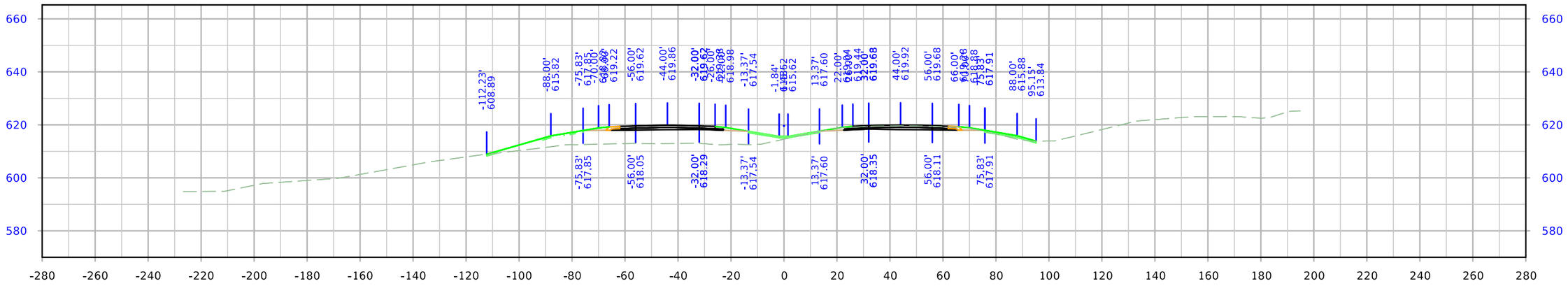
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.168

3:56:10 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

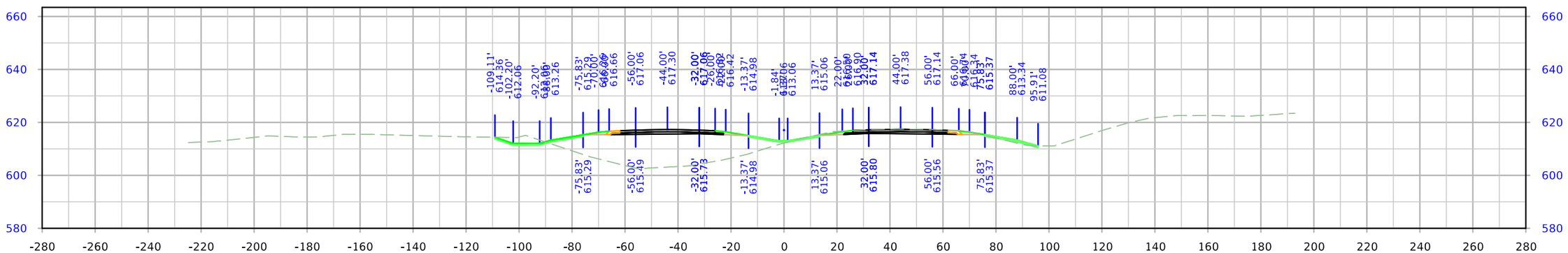
ML - US61



STA. 2600+00.00



STA. 2599+00.00

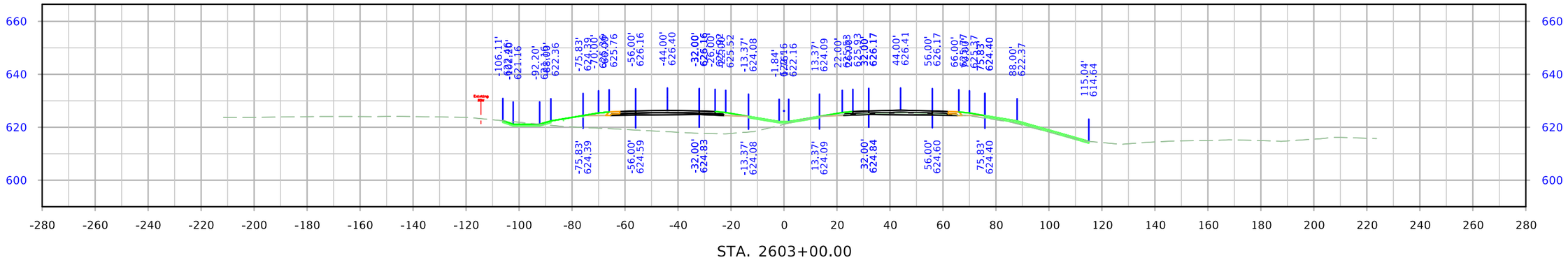


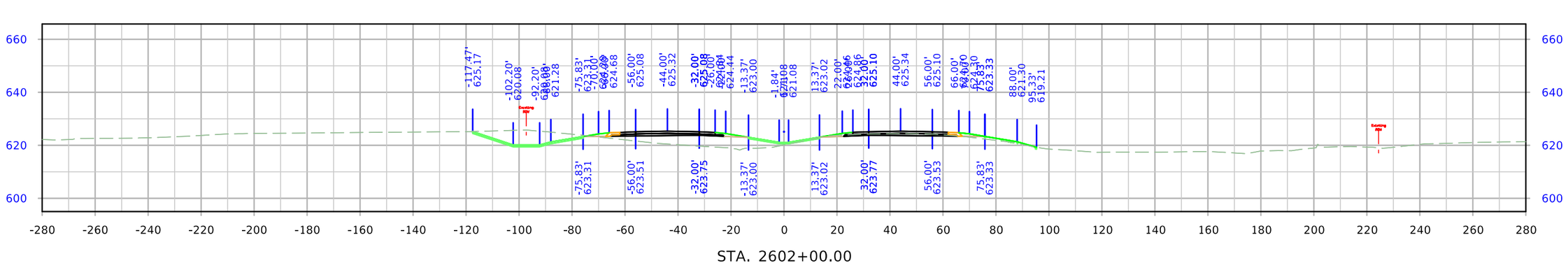
STA. 2598+00.00

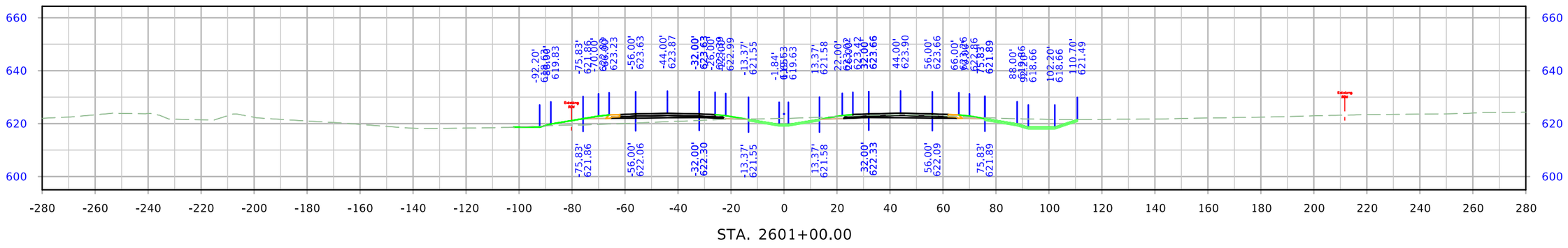
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.169

3:56:16 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



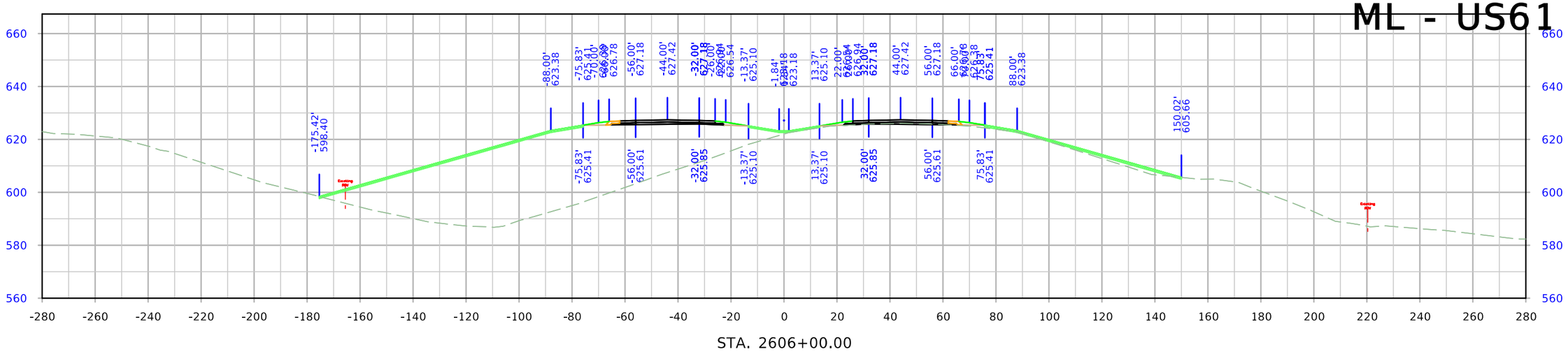


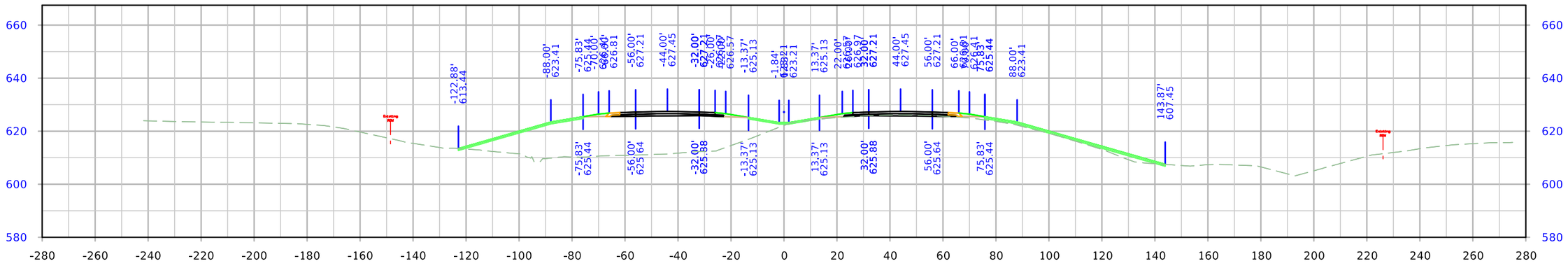


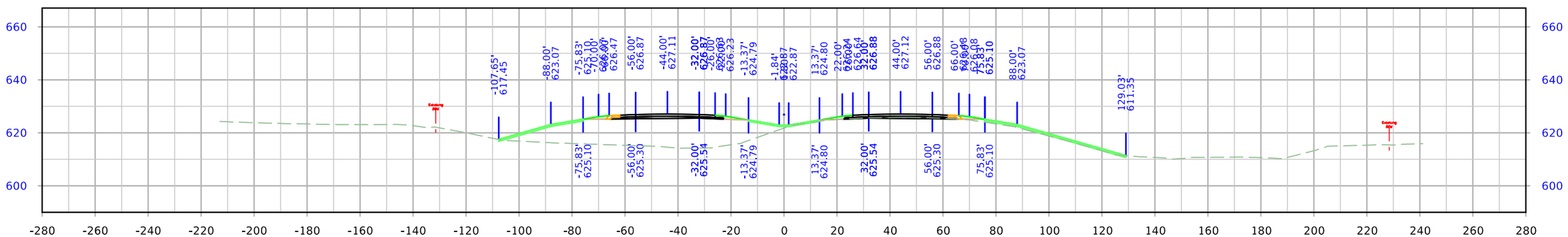
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.170

3:56:22 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



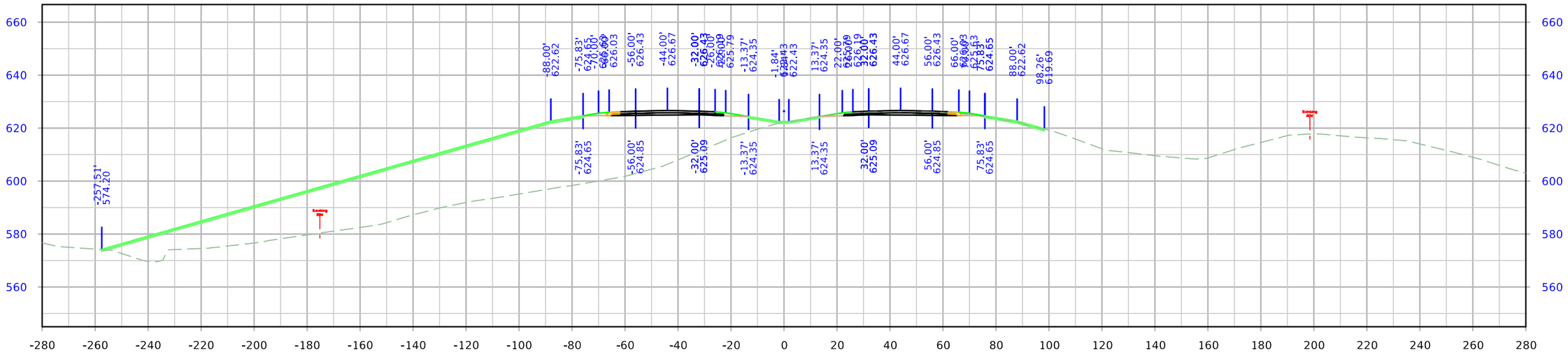




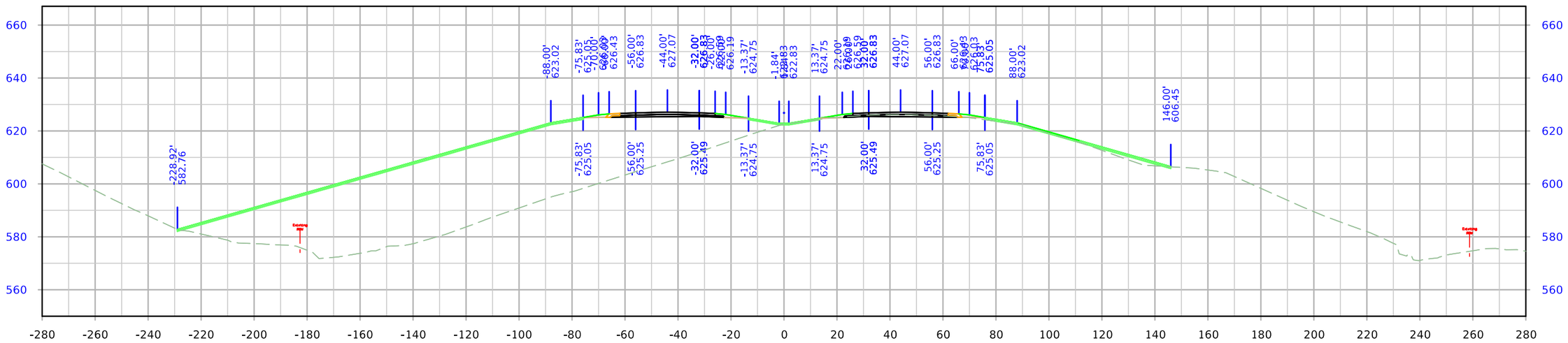
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.171

3:56:28 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2608+00.00

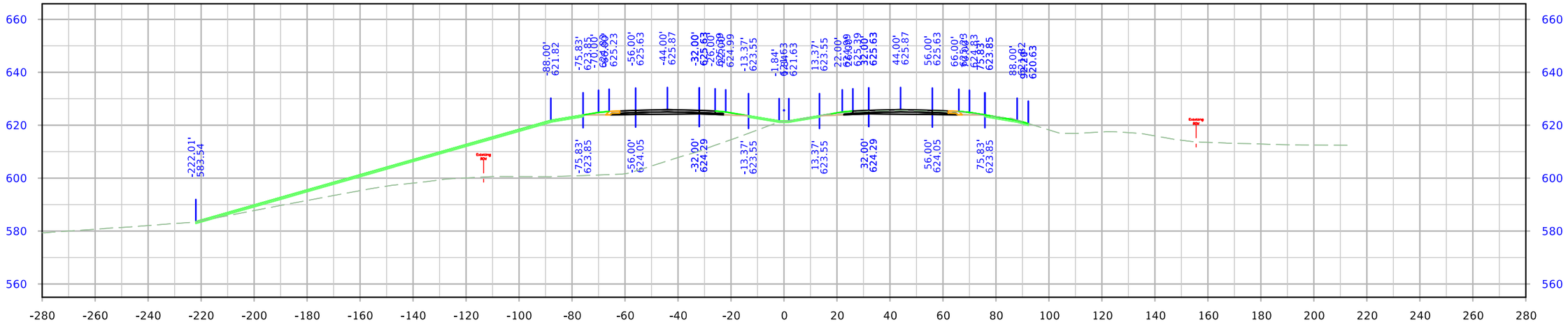


STA. 2607+00.00

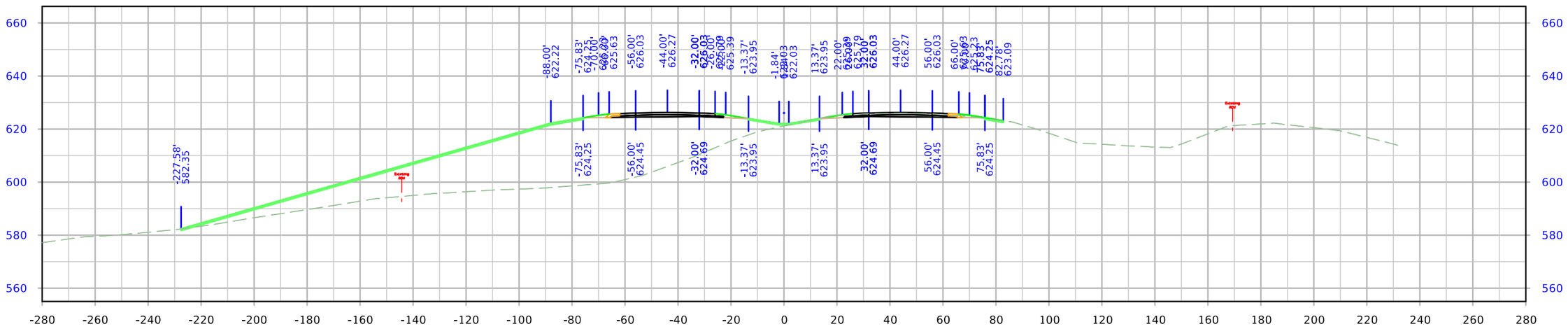
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.172

3:56:32 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2610+00.00

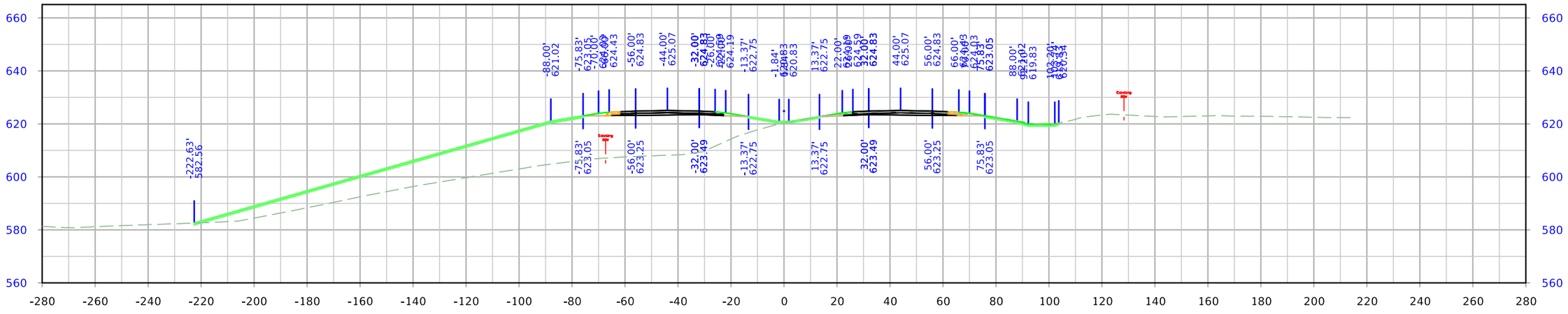


STA. 2609+00.00

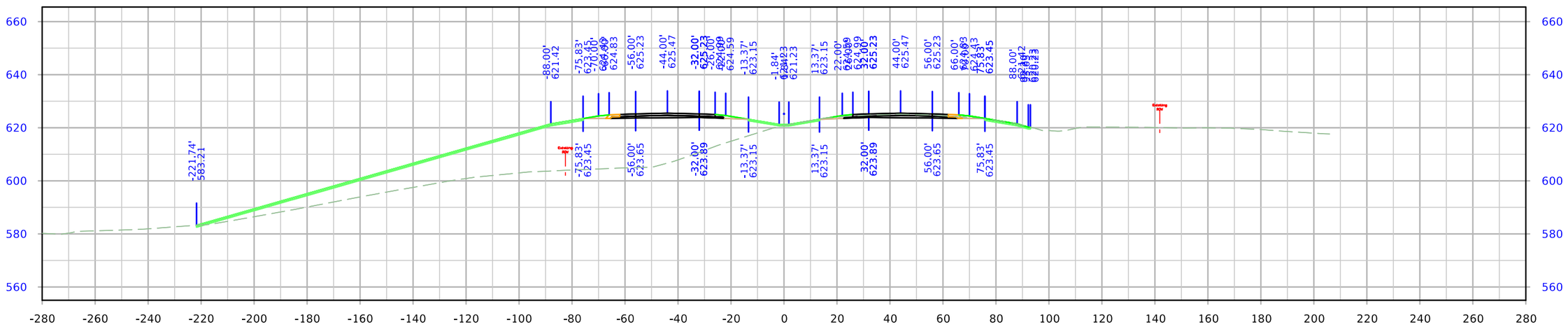
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.173

3:56:36 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2612+00.00

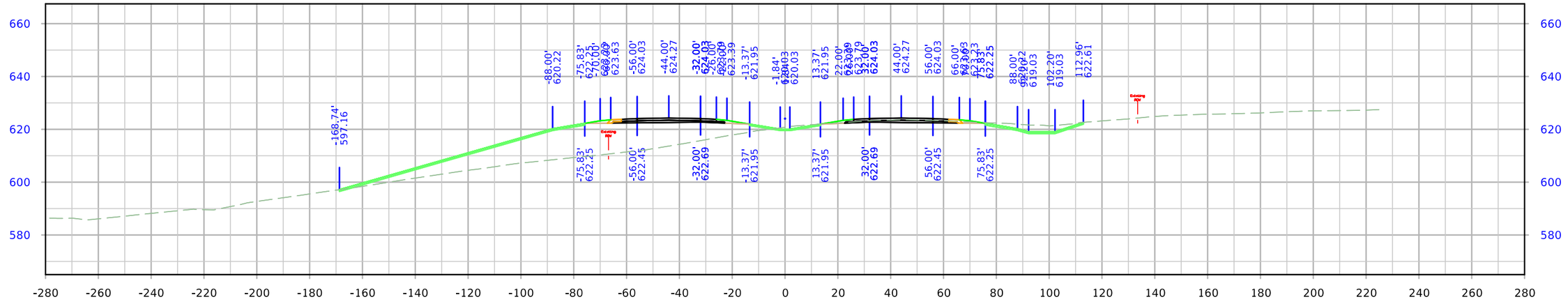


STA. 2611+00.00

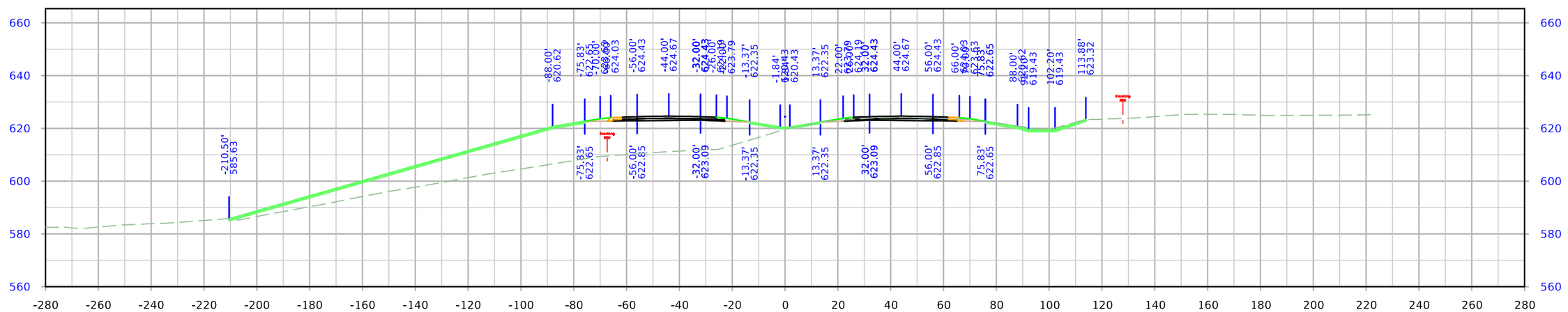
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.174

3:56:40 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2614+00.00

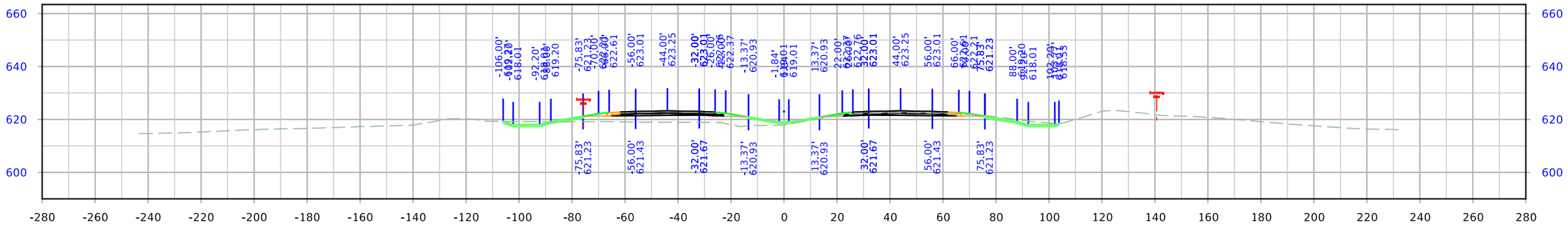


STA. 2613+00.00

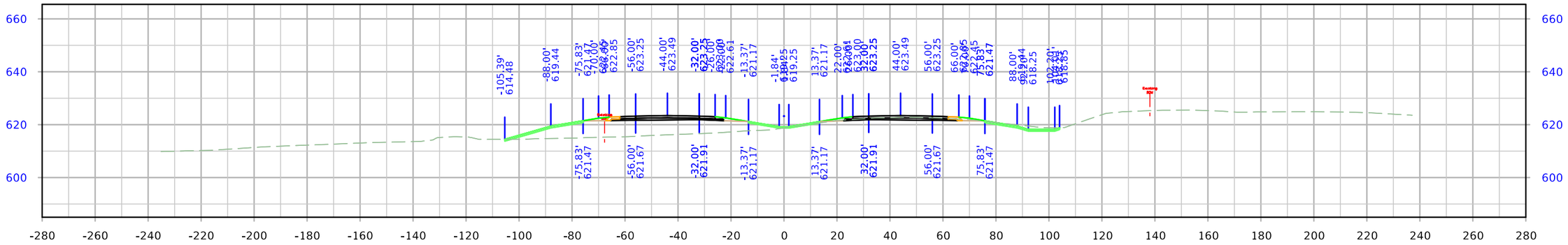
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.175

3:56:44 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

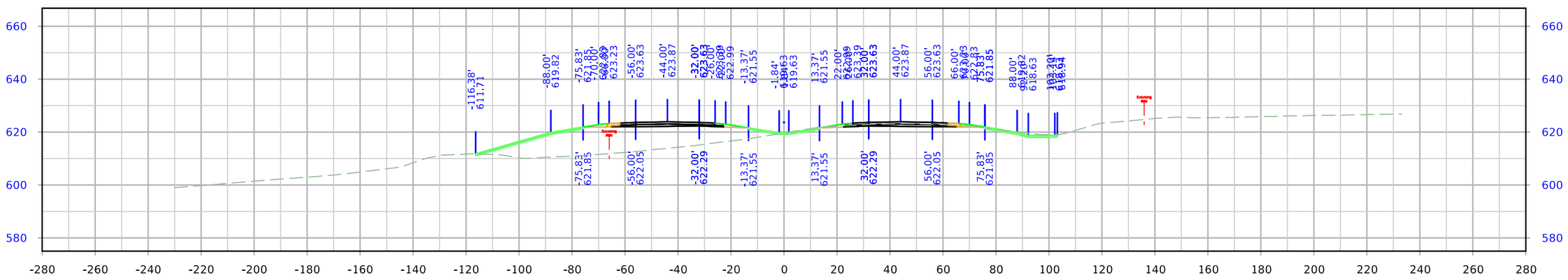
ML - US61



STA. 2617+00.00



STA. 2616+00.00

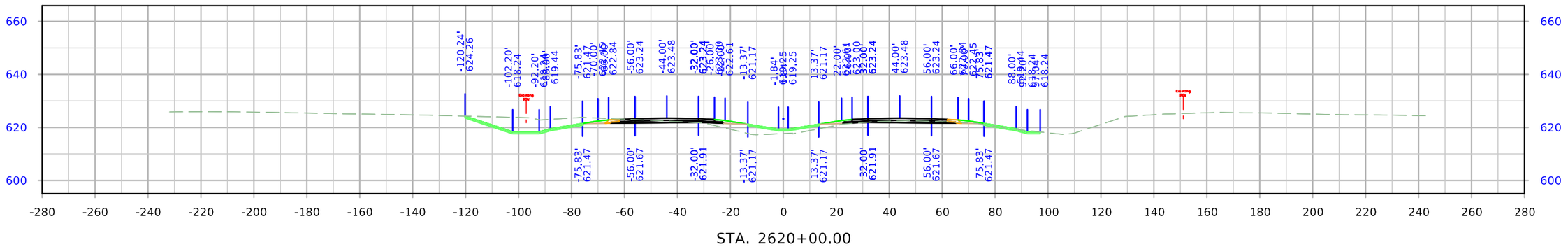


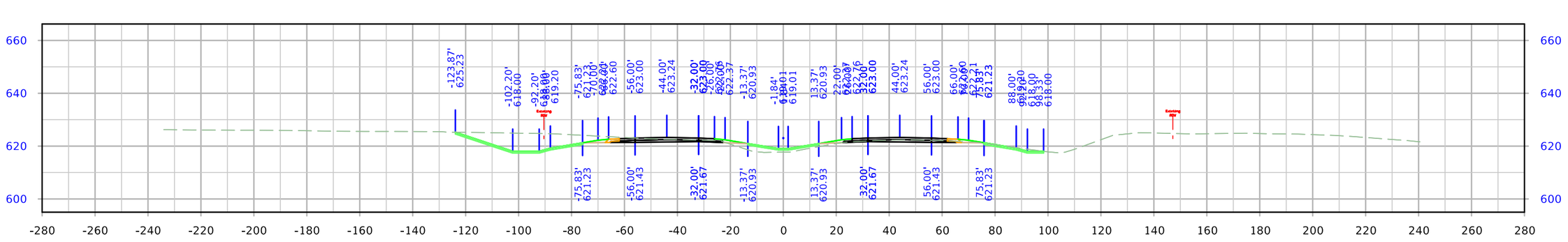
STA. 2615+00.00

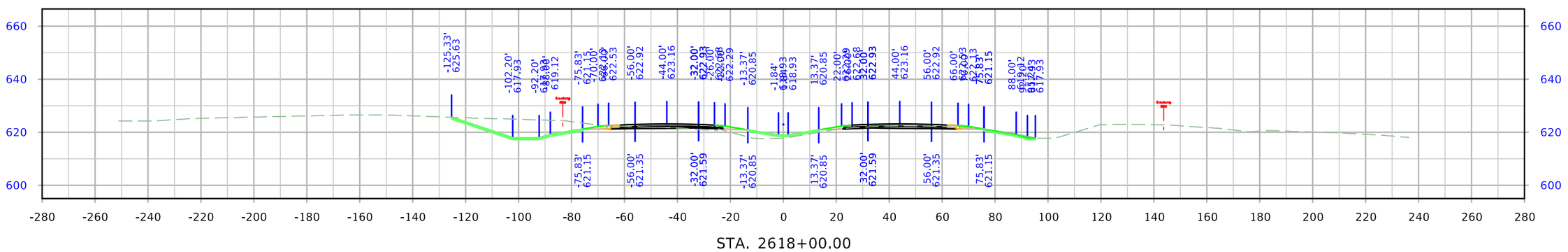
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.176

3:56:50 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



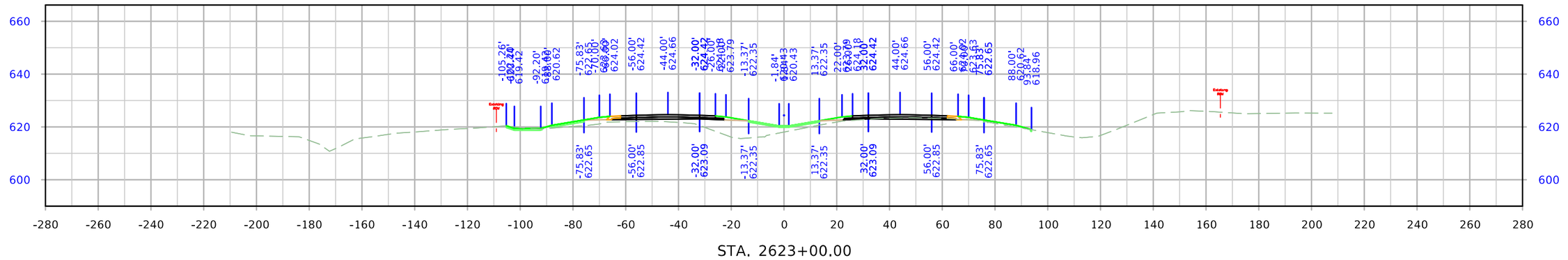




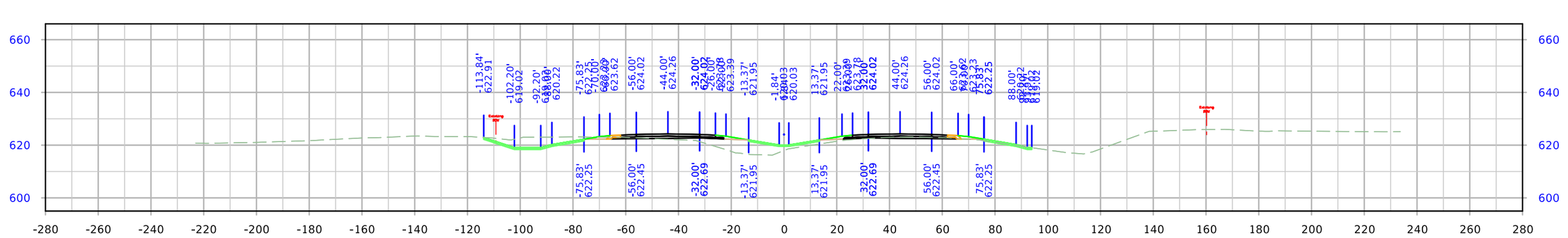
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.177

3:56:56 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

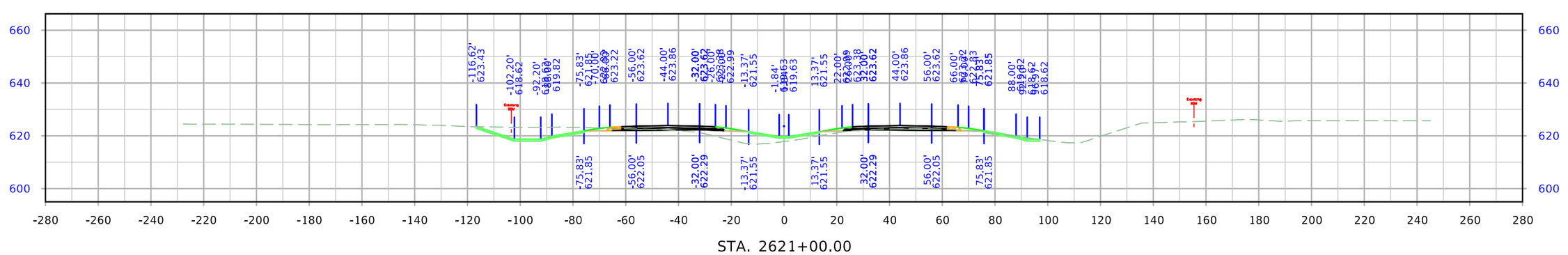
ML - US61



STA. 2623+00.00



STA. 2622+00.00

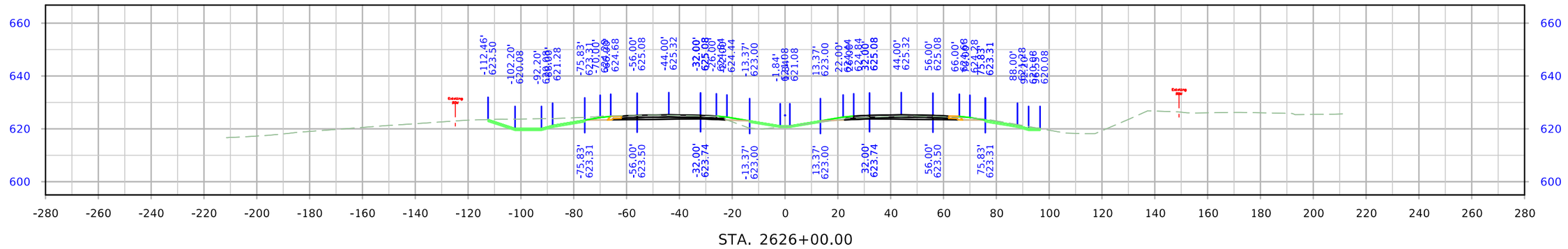


STA. 2621+00.00

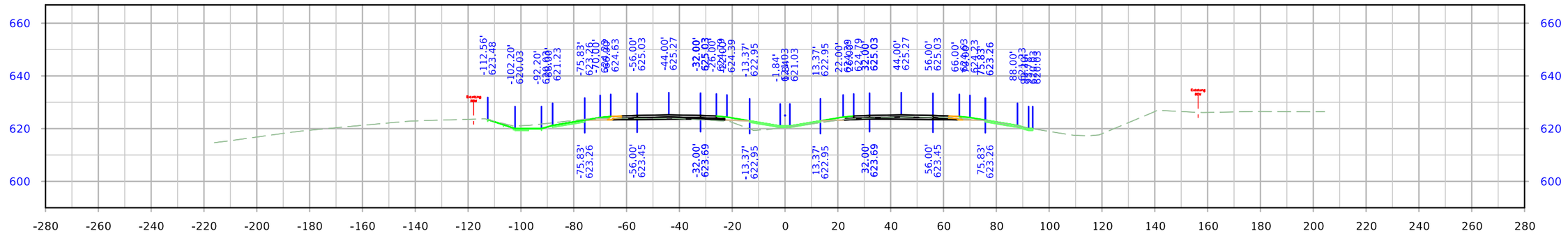
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.178

3:57:02 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

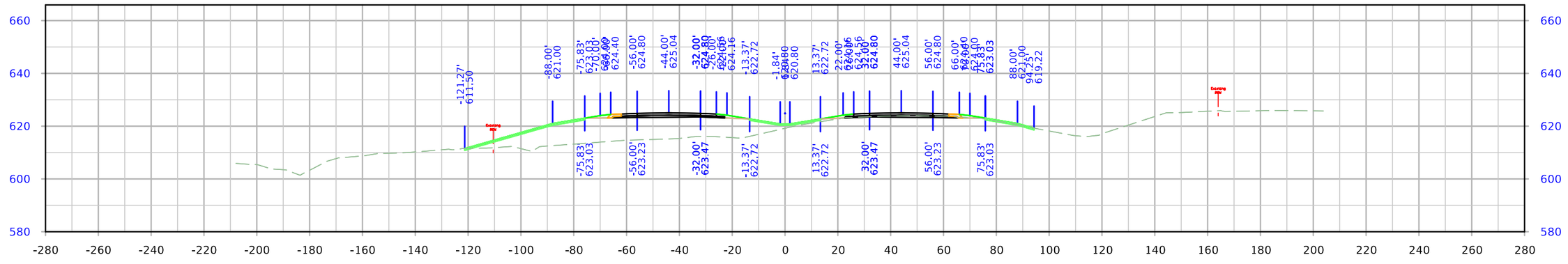
ML - US61



STA. 2626+00.00



STA. 2625+00.00

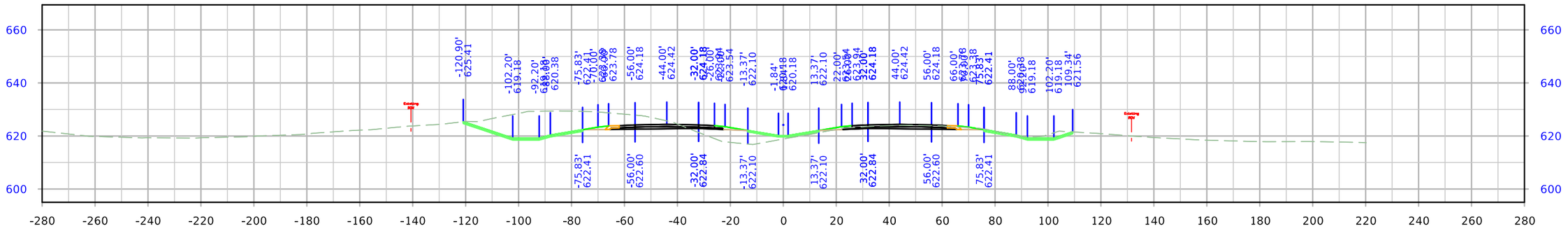


STA. 2624+00.00

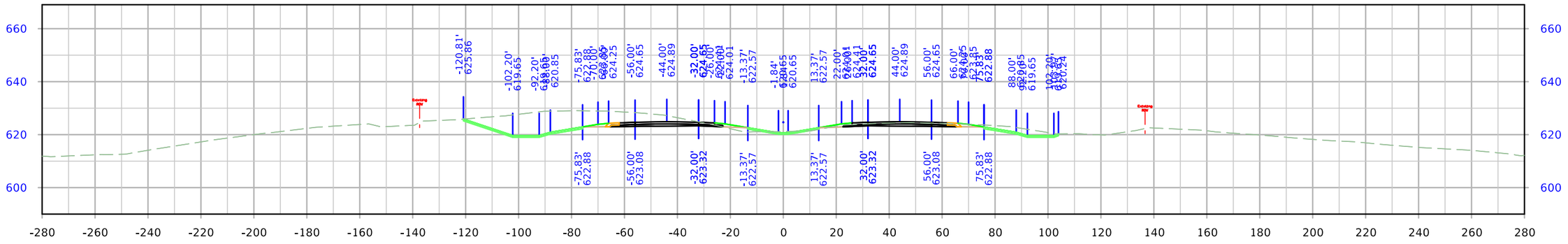
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.179

3:57:08 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

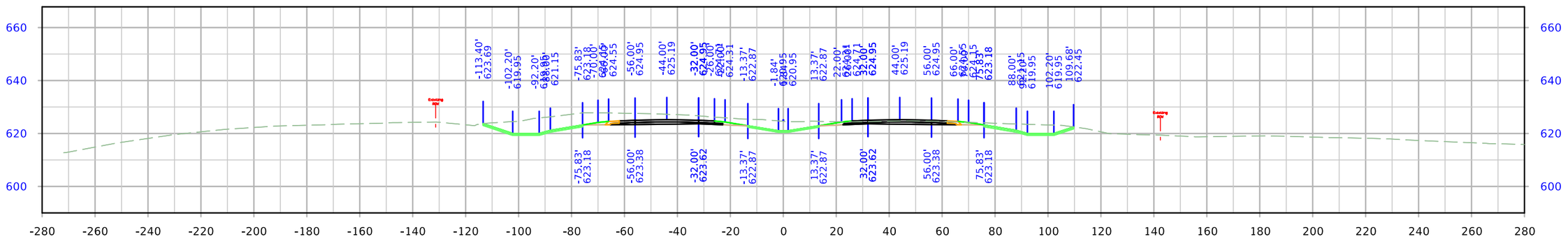
ML - US61



STA. 2629+00.00



STA. 2628+00.00

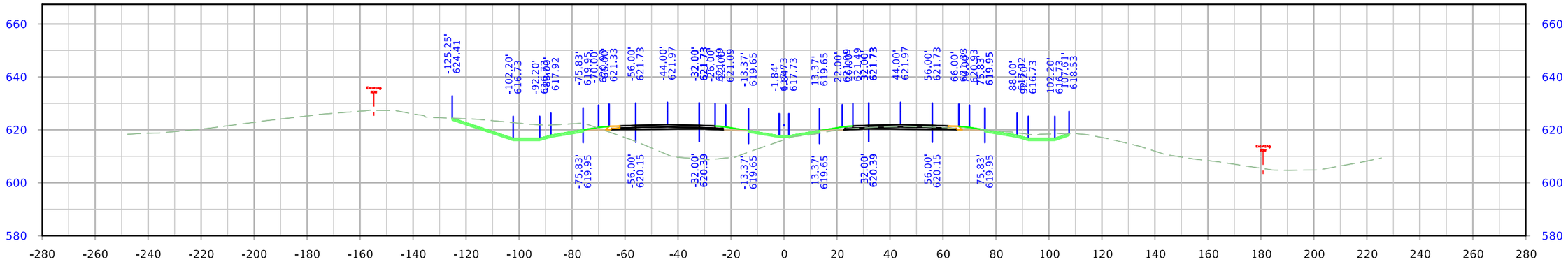


STA. 2627+00.00

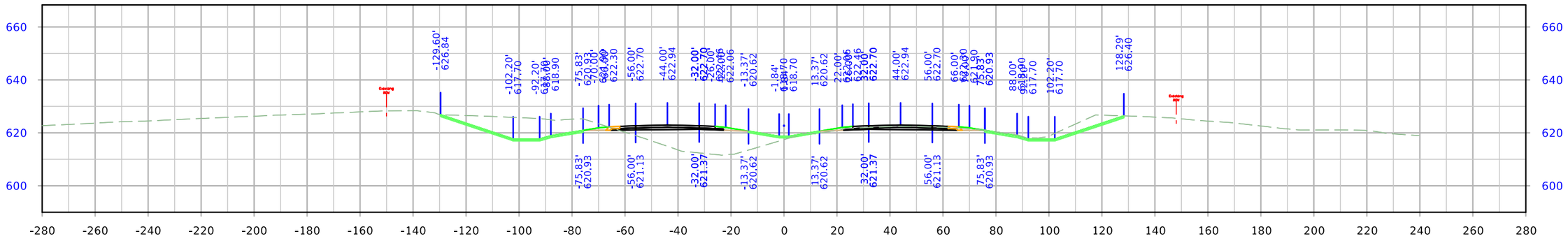
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.180

3:57:14 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

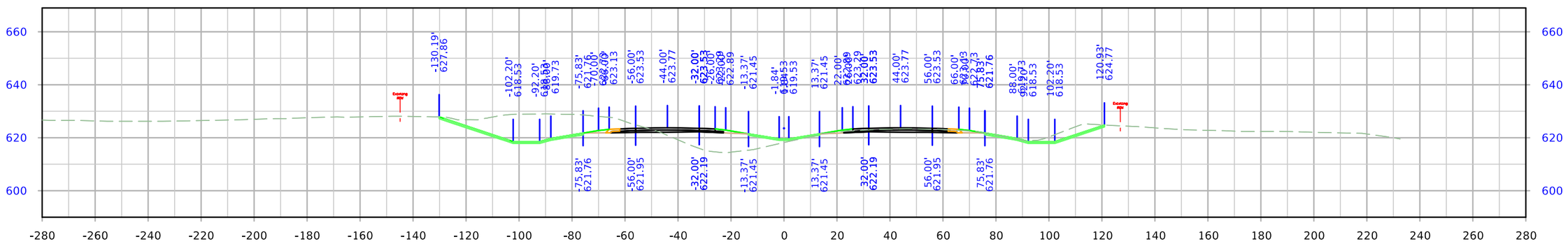
ML - US61



STA. 2632+00.00



STA. 2631+00.00

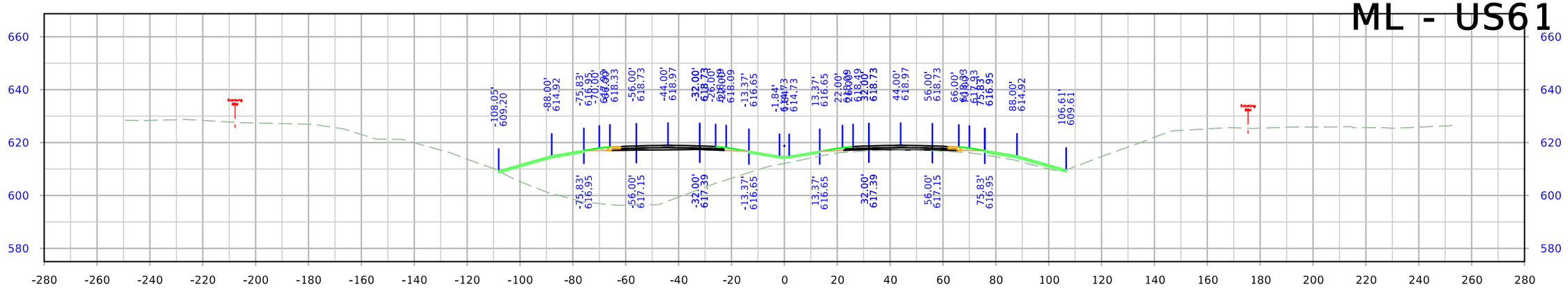


STA. 2630+00.00

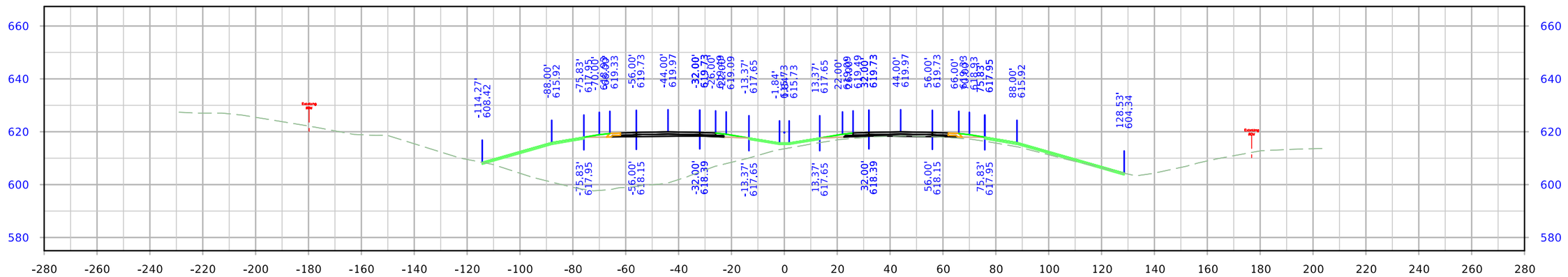
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.181

3:57:20 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

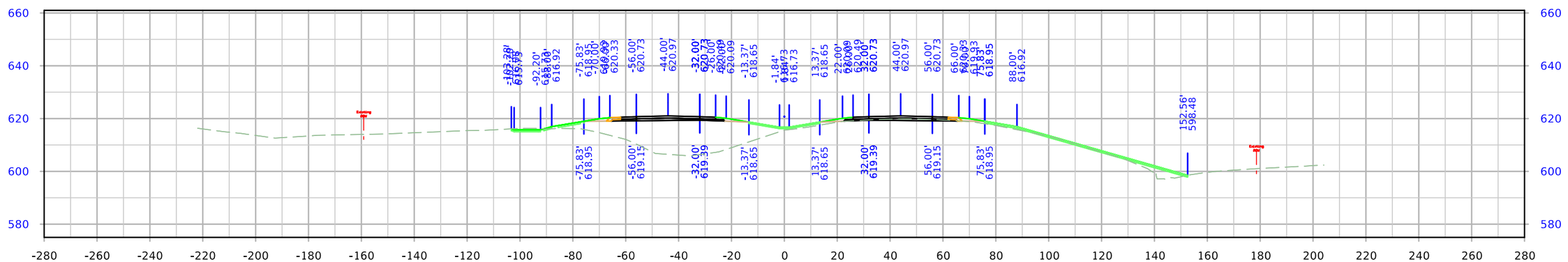
ML - US61



STA. 2635+00.00



STA. 2634+00.00

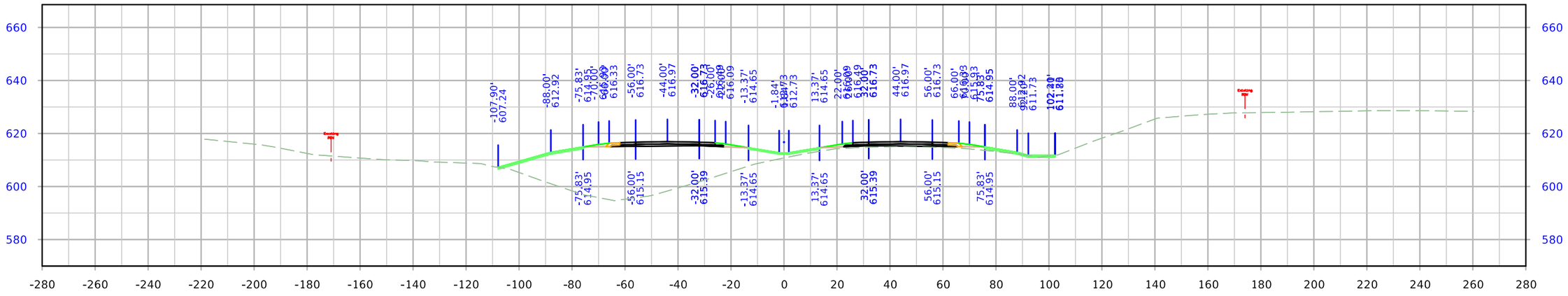


STA. 2633+00.00

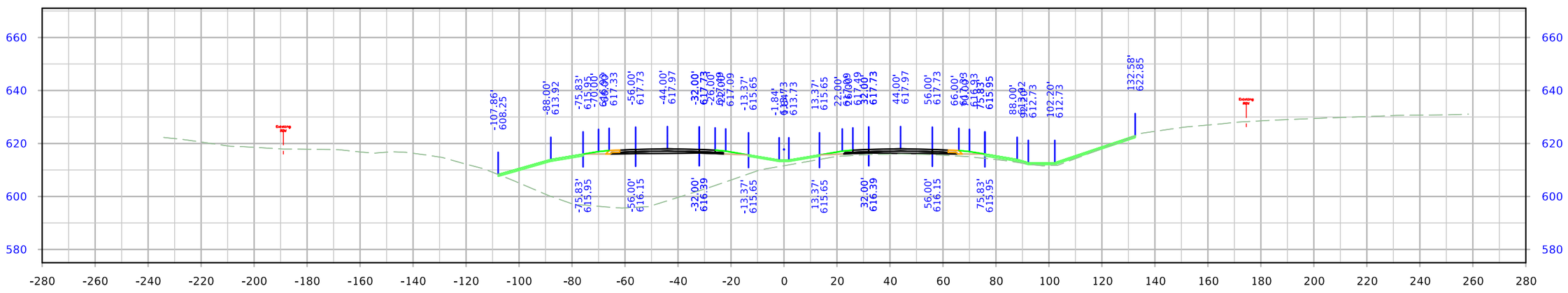
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.182

3:57:26 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2637+00.00

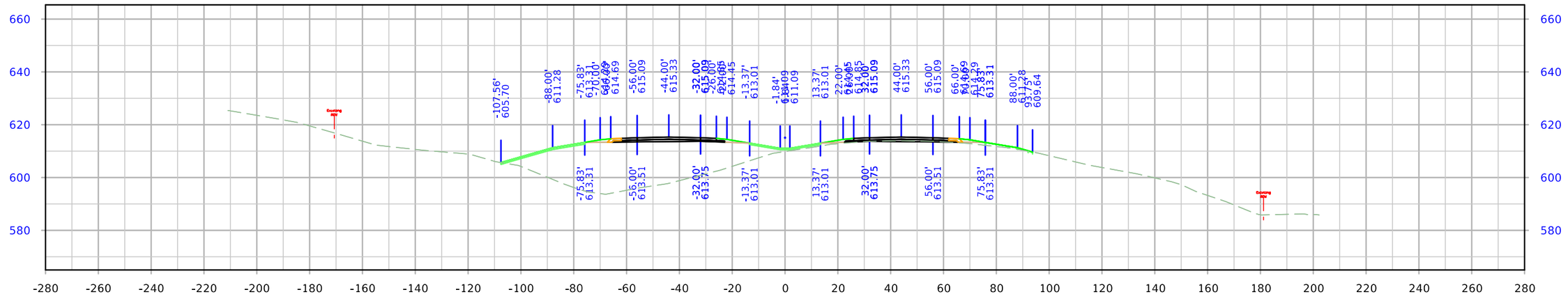


STA. 2636+00.00

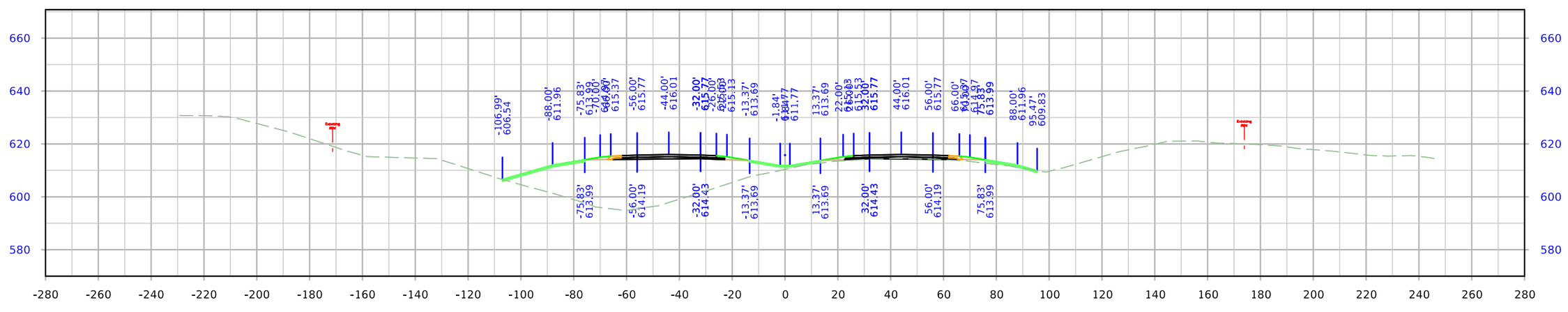
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.183

3:57:30 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2639+00.00

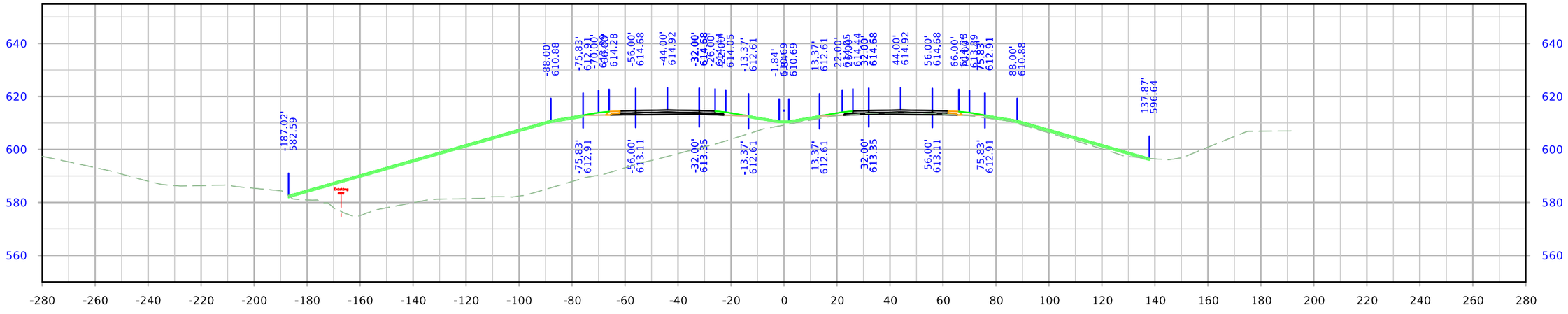


STA. 2638+00.00

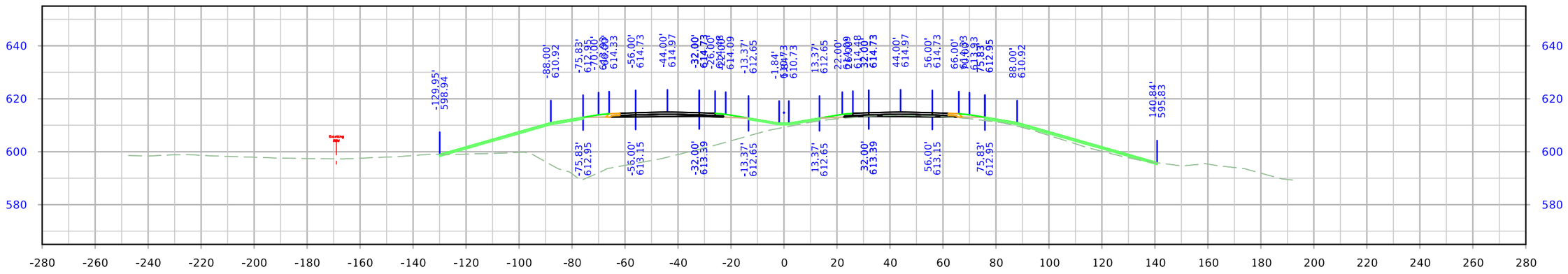
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.184

3:57:35 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2641+00.00

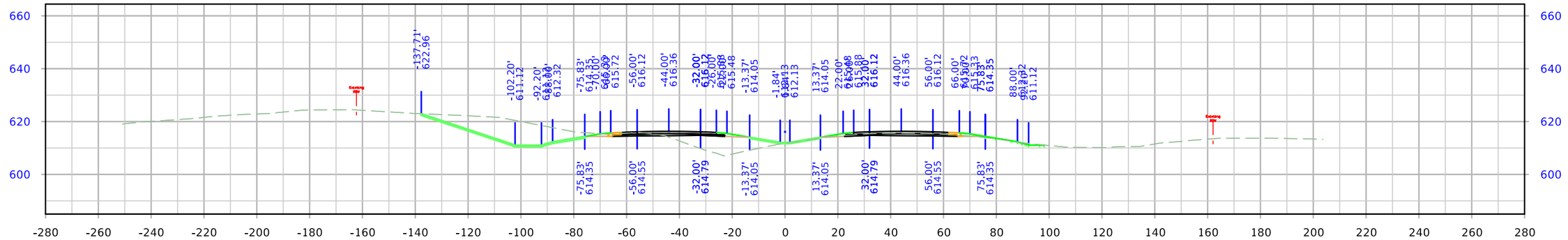


STA. 2640+00.00

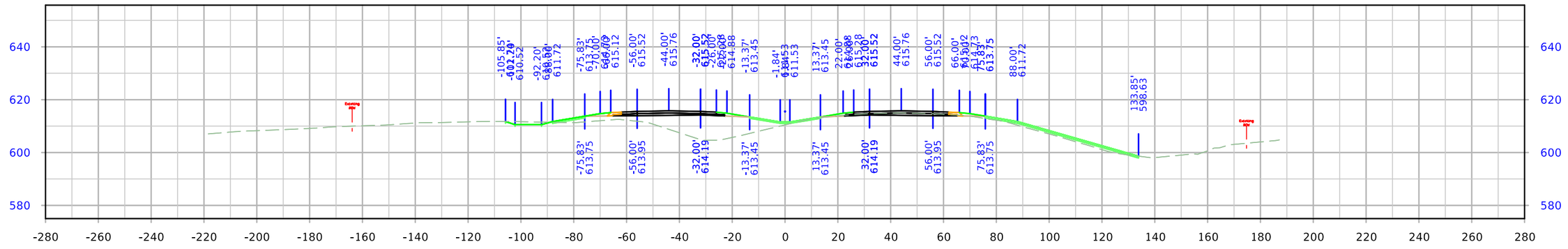
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.185

3:57:39 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

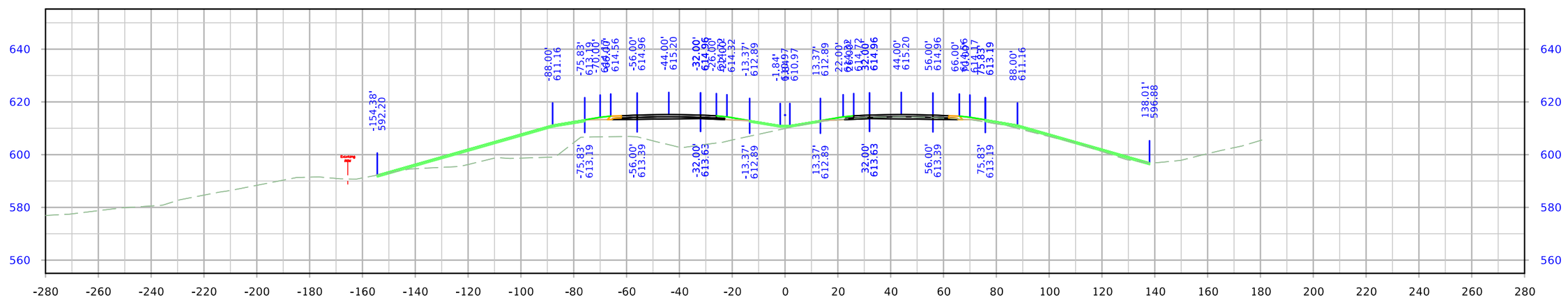
ML - US61



STA. 2644+00.00



STA. 2643+00.00

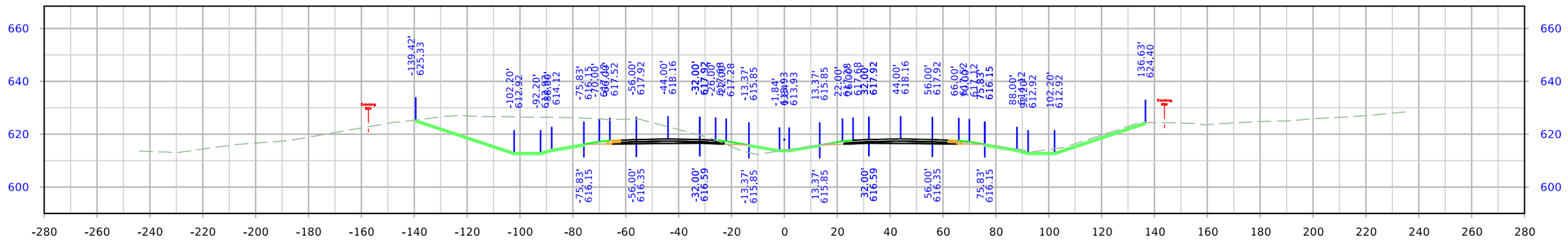


STA. 2642+00.00

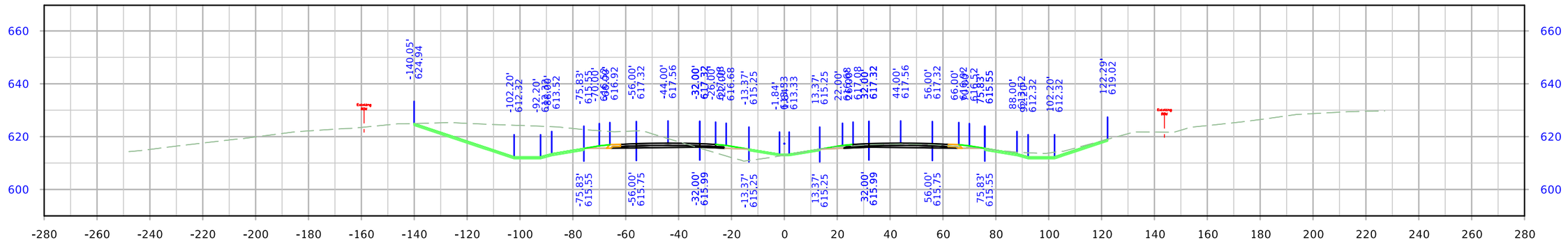
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.186

3:57:45 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

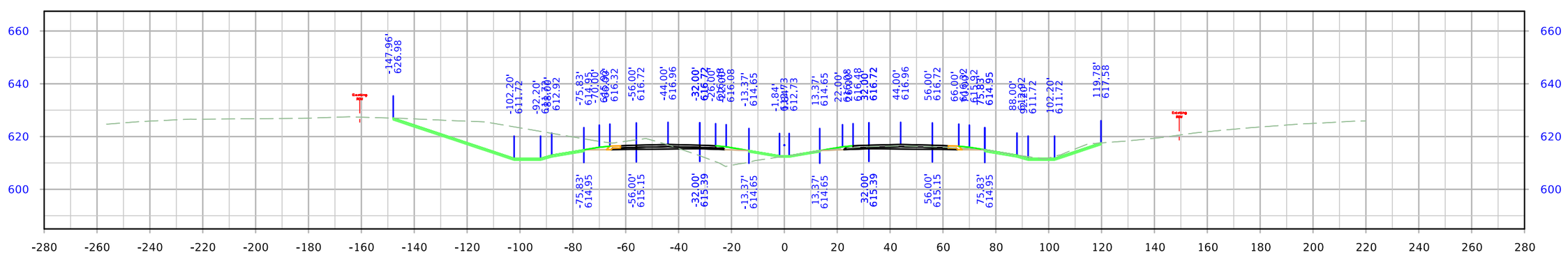
ML - US61



STA. 2647+00.00



STA. 2646+00.00

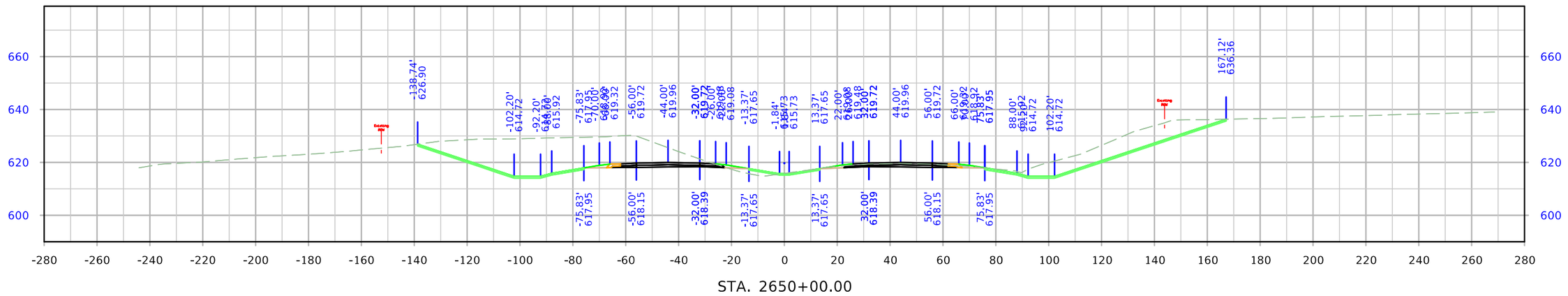


STA. 2645+00.00

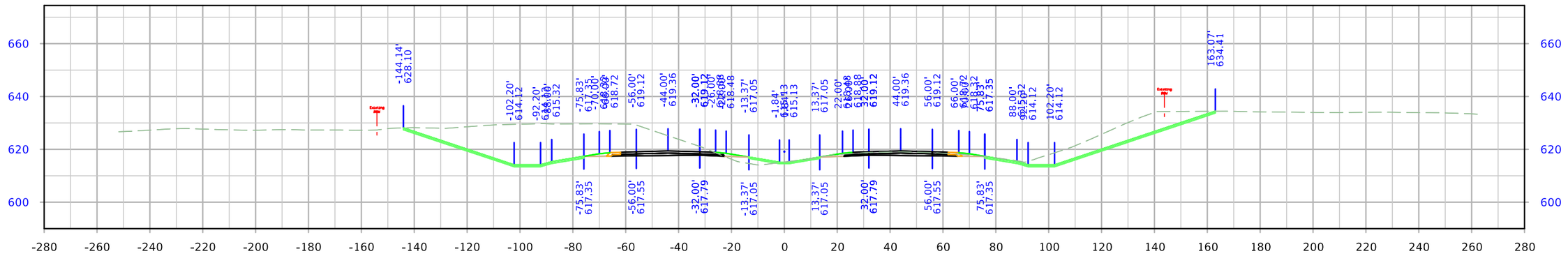
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.187

3:57:51 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

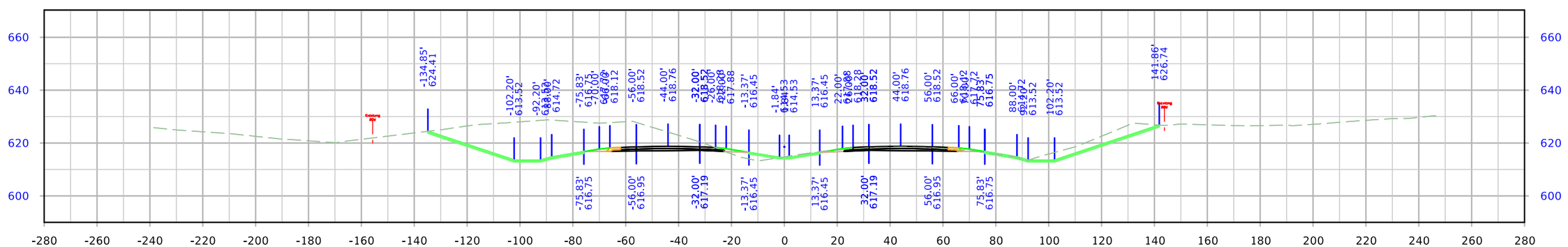
ML - US61



STA. 2650+00.00



STA. 2649+00.00

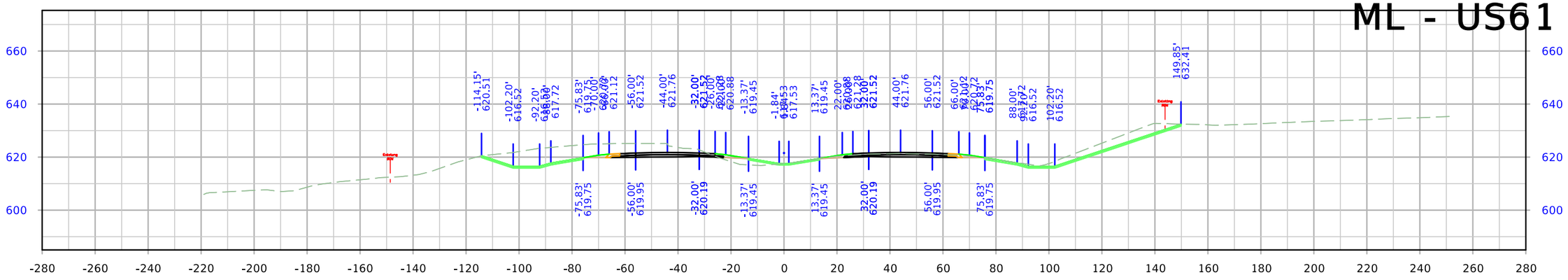


STA. 2648+00.00

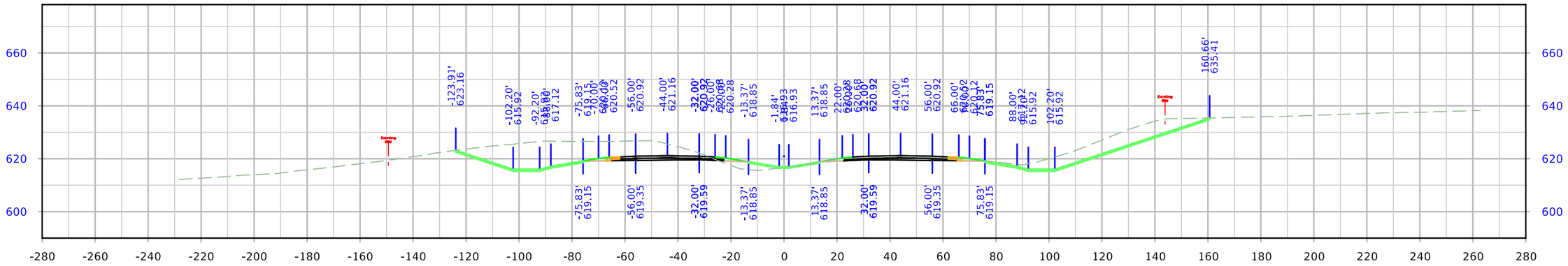
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.188

3:57:57 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

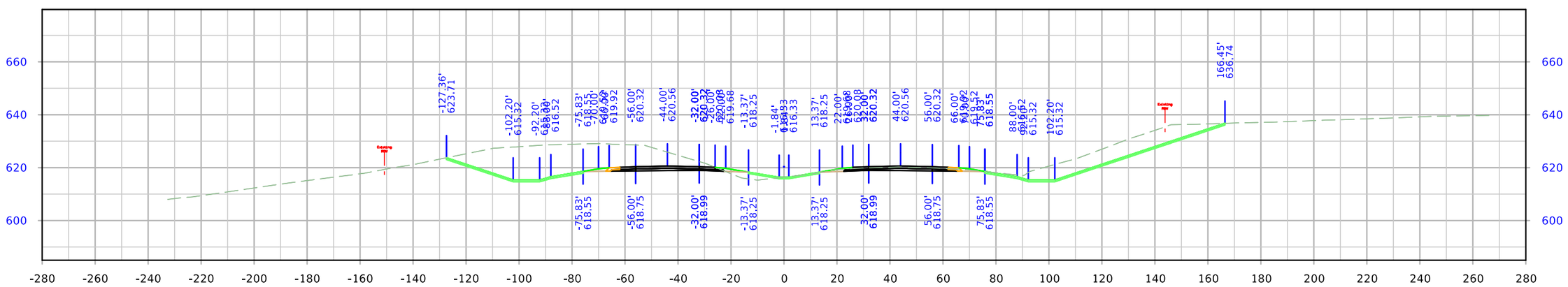
ML - US61



STA. 2653+00.00



STA. 2652+00.00

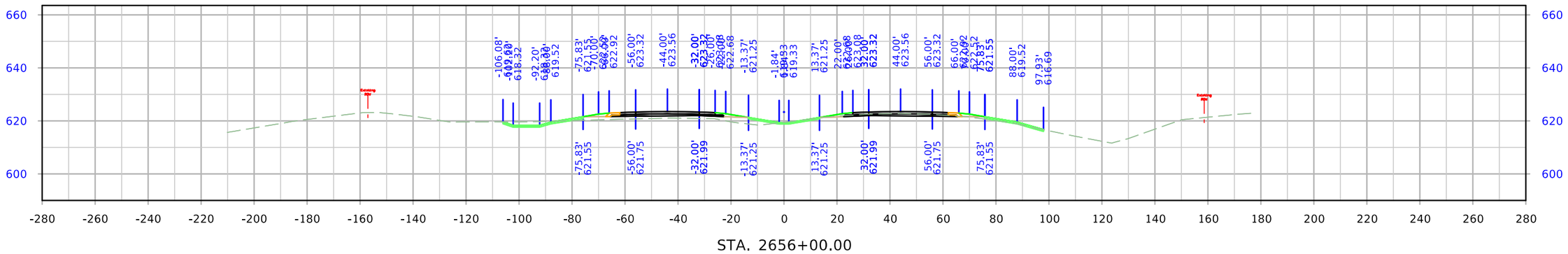


STA. 2651+00.00

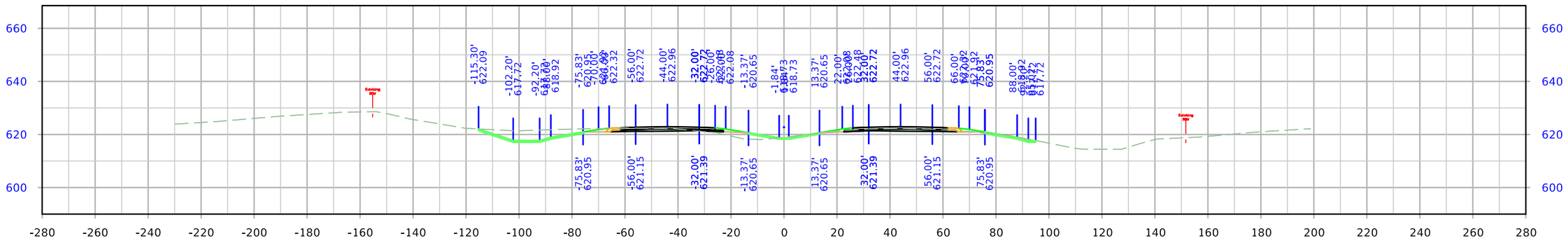
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.189

3:58:03 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

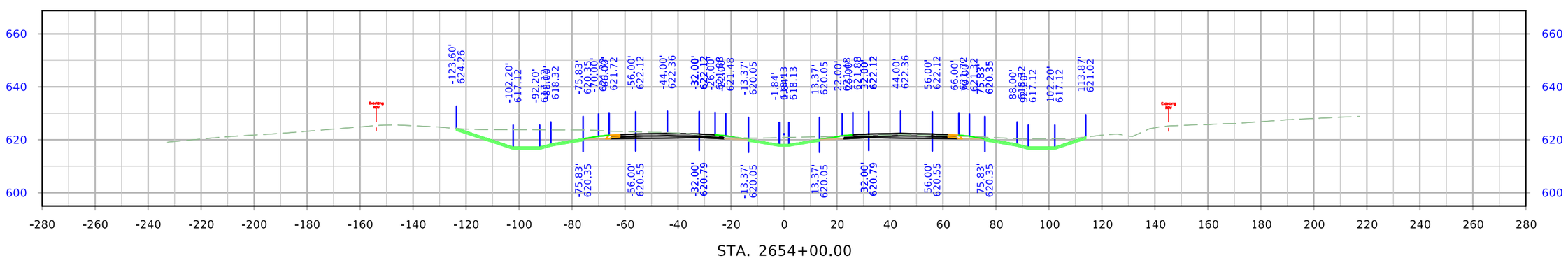
ML - US61



STA. 2656+00.00



STA. 2655+00.00

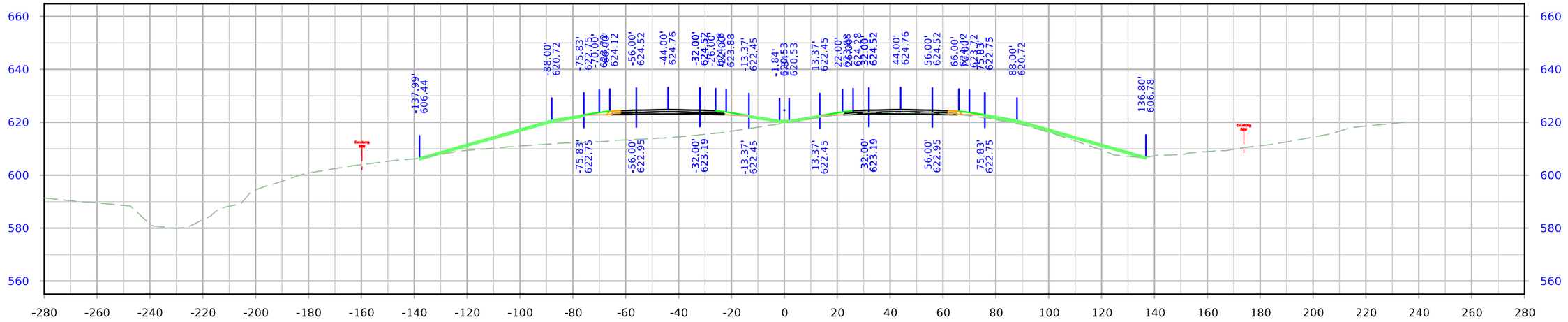


STA. 2654+00.00

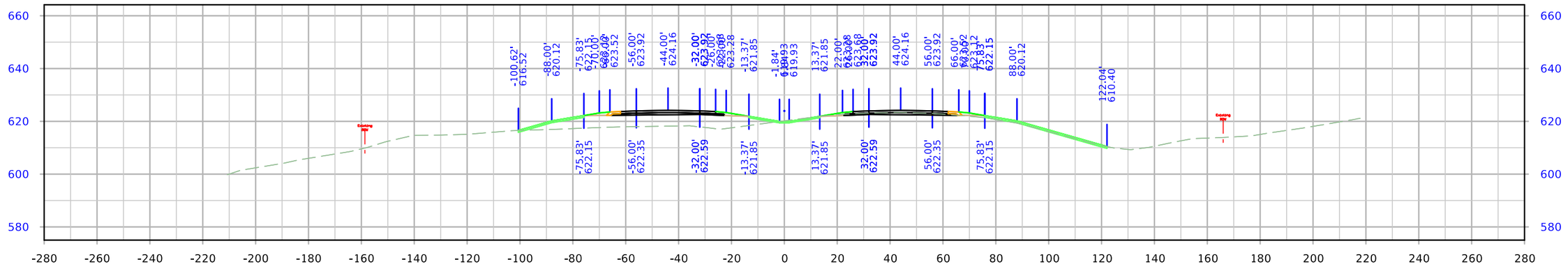
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.190

3:58:09 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2658+00.00

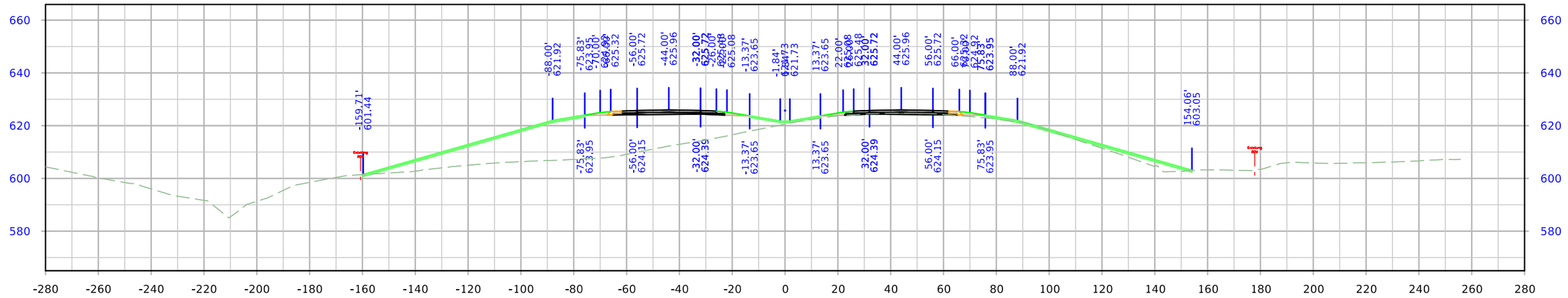


STA. 2657+00.00

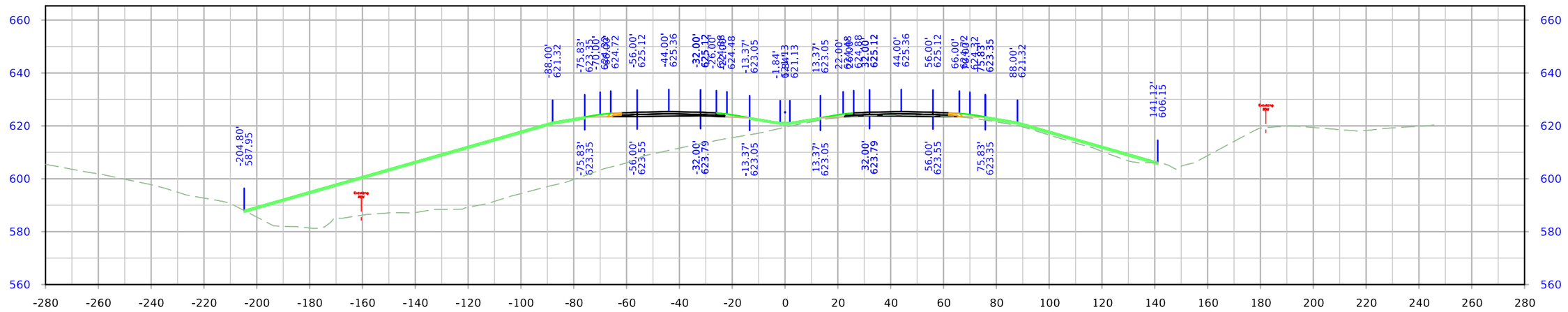
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.191

3:58:14 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2660+00.00

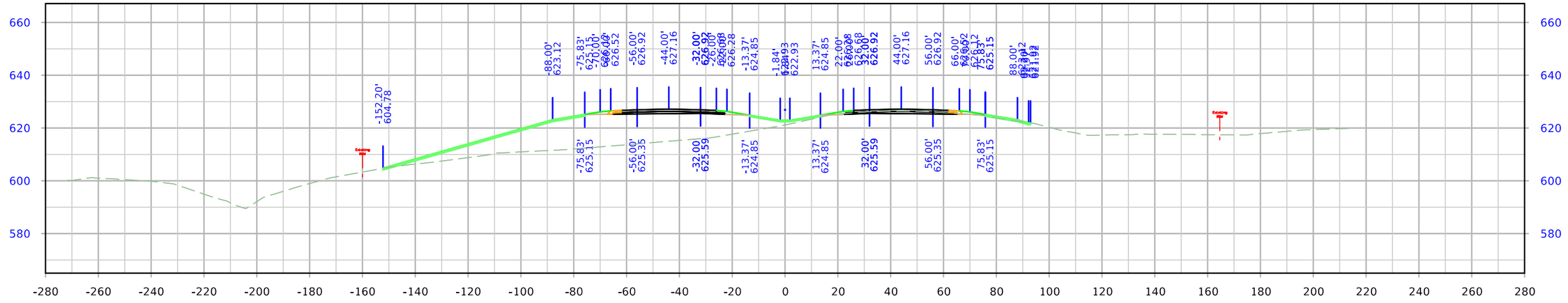


STA. 2659+00.00

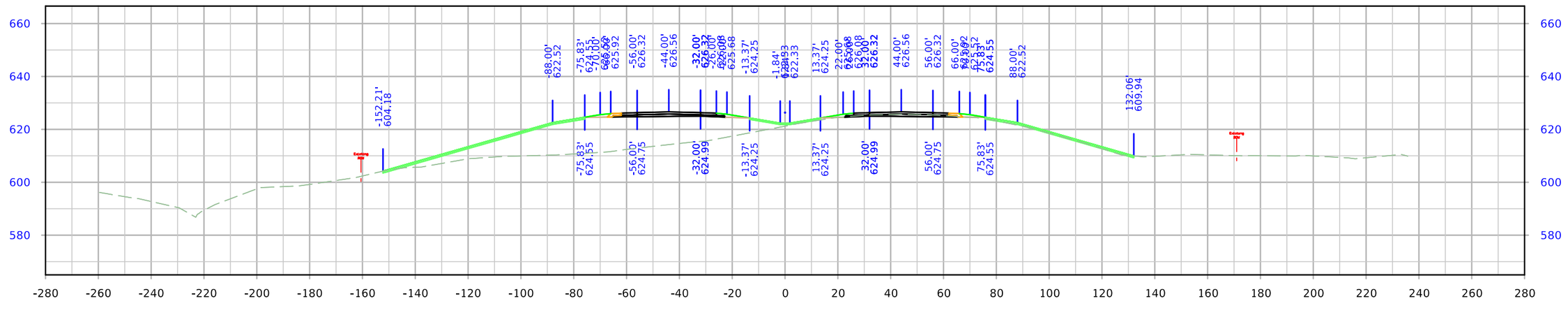
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.192

3:58:18 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61



STA. 2662+00.00

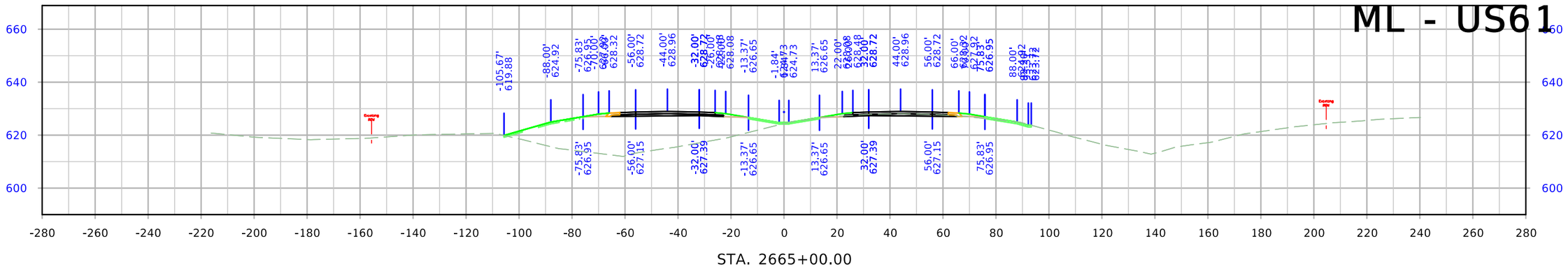


STA. 2661+00.00

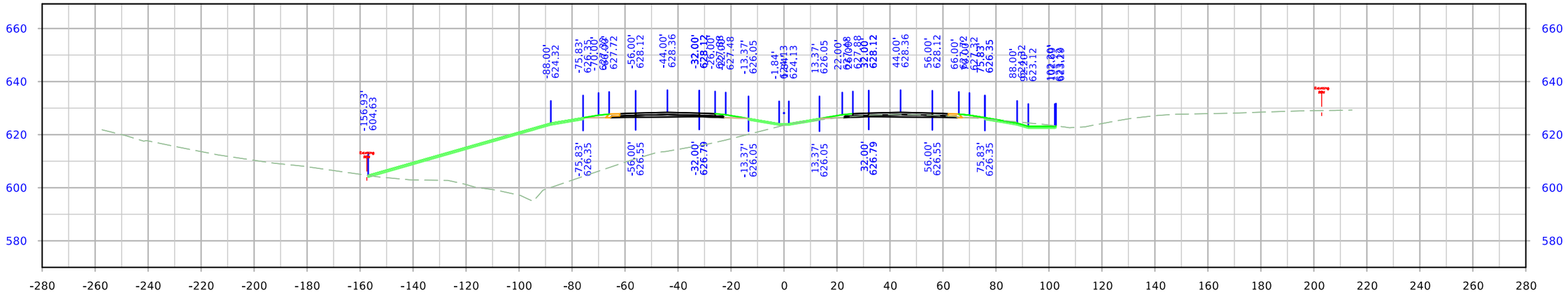
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.193

3:58:22 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

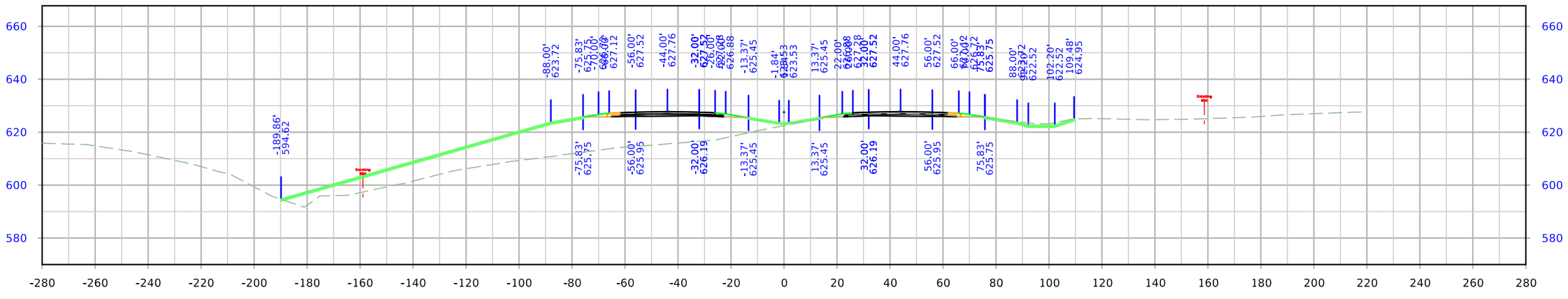
ML - US61



STA. 2665+00.00



STA. 2664+00.00

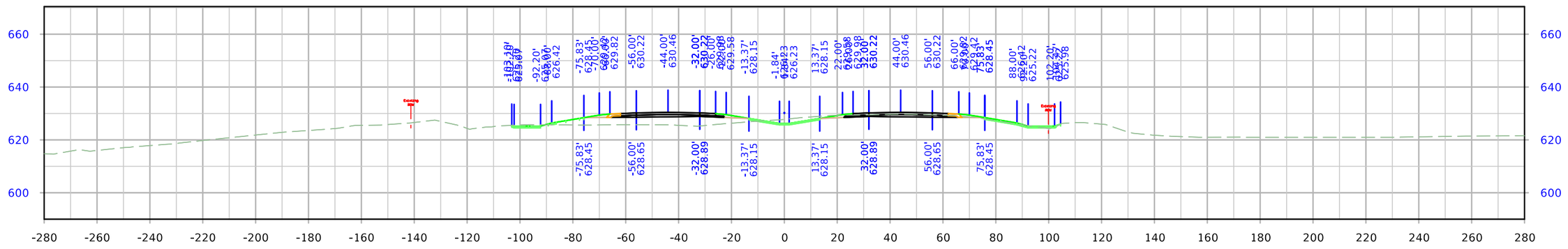


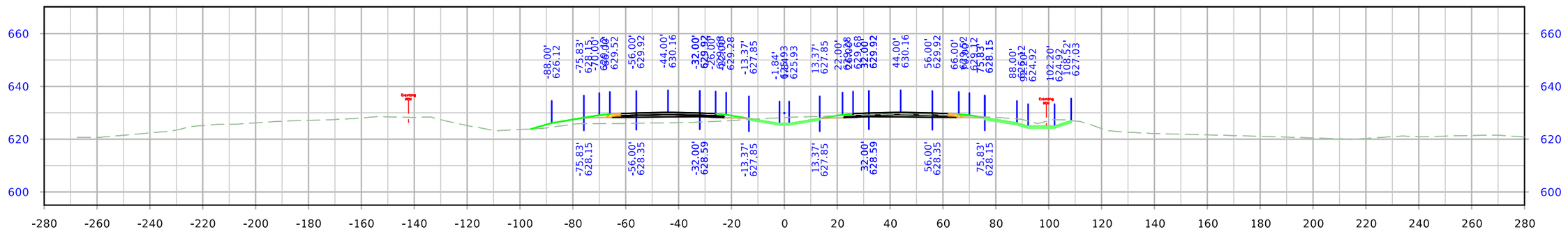
STA. 2663+00.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER W.194

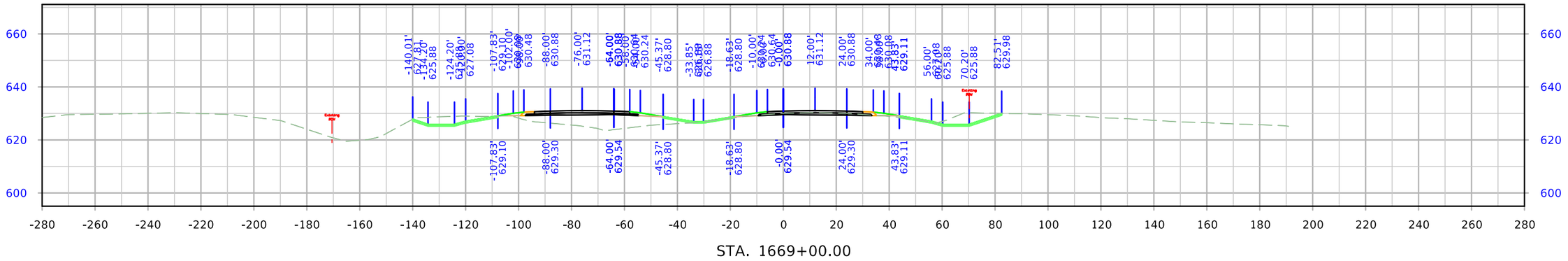
3:58:28 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_W1_ML061_58061061Z14.dgn

ML - US61

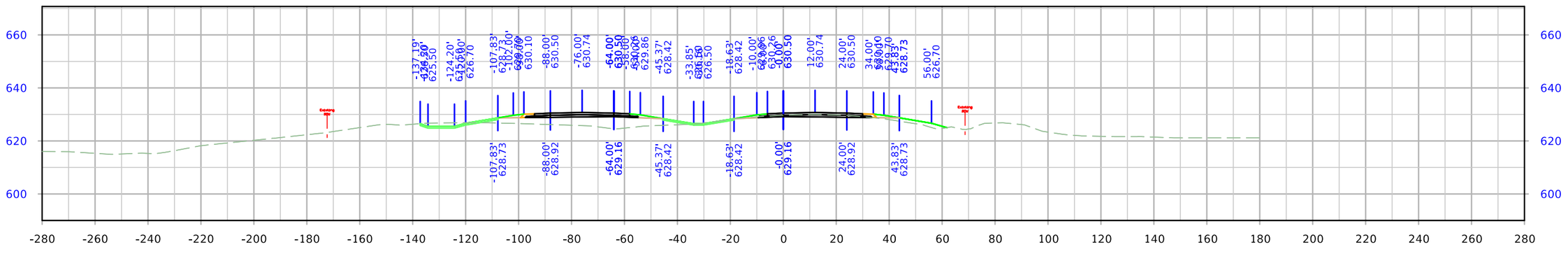

660
640
620
600
-280 -260 -240 -220 -200 -180 -160 -140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280
-114.10' 628.29
-102.20' 624.32
-92.20' 625.52
-75.83' 628.45
-70.00' 628.92
-56.00' 629.32
-44.00' 629.56
-32.00' 629.32
-26.00' 628.68
-13.37' 627.25
-1.84' 625.33
13.37' 627.25
22.00' 628.08
26.00' 629.08
32.00' 629.32
44.00' 629.56
56.00' 629.32
66.00' 628.52
75.83' 627.55
88.00' 625.52
137.57' 611.36
-75.83' 627.55
-56.00' 627.75
-32.00' 627.99
-13.37' 627.25
13.37' 627.25
32.00' 627.99
56.00' 627.75
75.83' 627.55
Existing ditch
STA. 2666+00.00


660
640
620
600
-280 -260 -240 -220 -200 -180 -160 -140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280
-88.00' 626.12
-75.83' 628.15
-70.00' 628.52
-56.00' 629.52
-44.00' 630.16
-32.00' 629.92
-26.00' 629.08
-13.37' 627.85
-1.84' 626.93
13.37' 627.85
22.00' 628.68
26.00' 629.68
32.00' 629.92
44.00' 630.16
56.00' 629.92
66.00' 629.12
75.83' 628.15
88.00' 625.92
102.20' 624.92
-75.83' 628.15
-56.00' 628.35
-32.00' 628.59
-13.37' 627.85
13.37' 627.85
32.00' 628.59
56.00' 628.35
75.83' 628.15
Existing ditch
STA. 2667+00.00

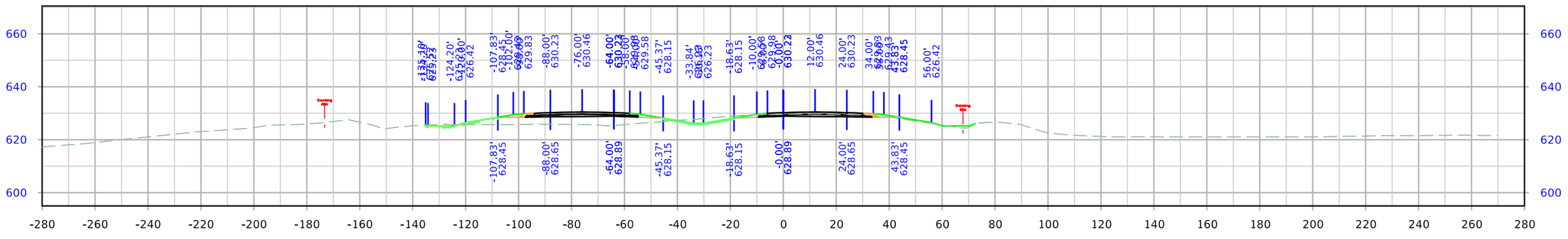
US 61 NB



STA. 1669+00.00



STA. 1668+00.00

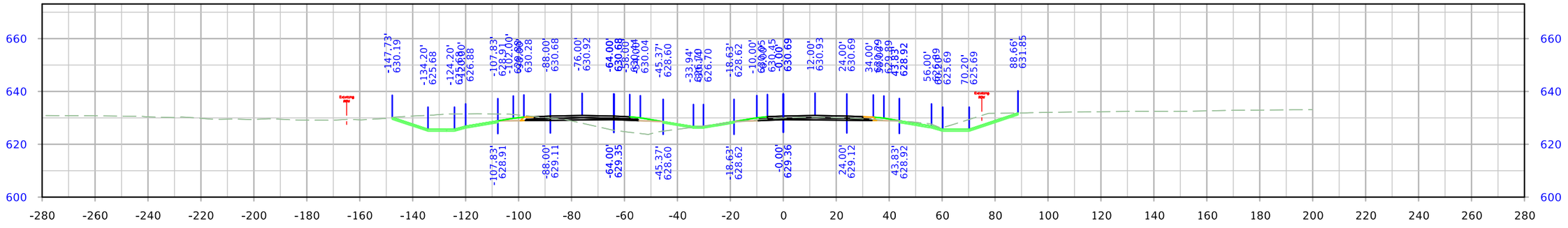


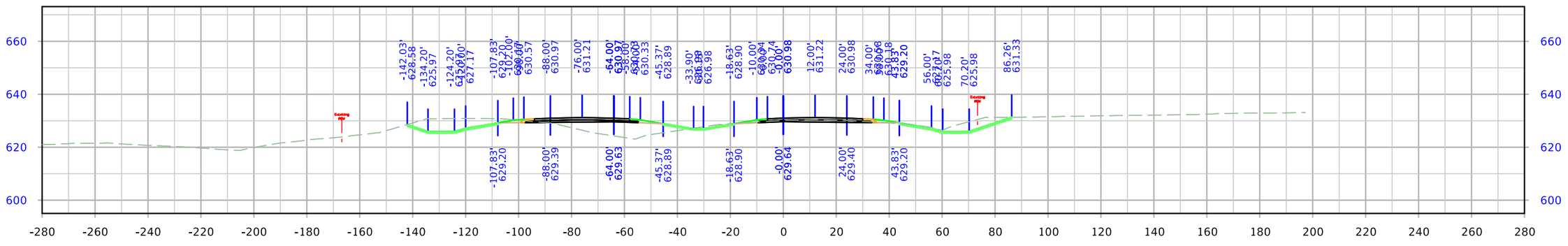
STA. 1667+50.00

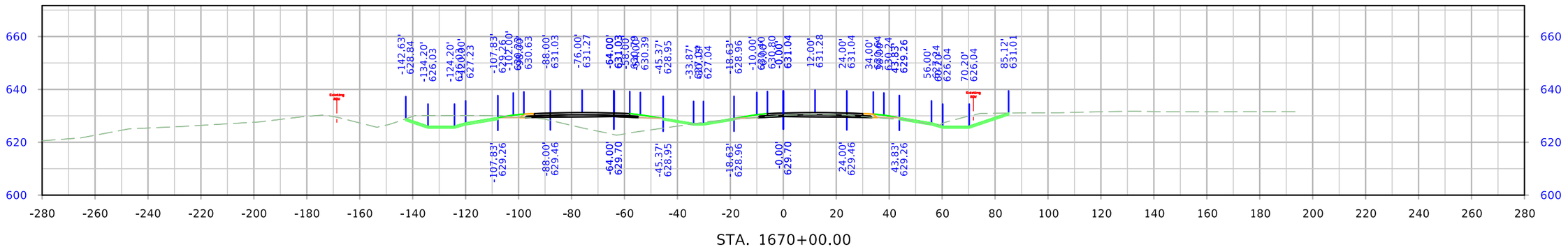
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WN.1

3:22:48 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

US 61 NB



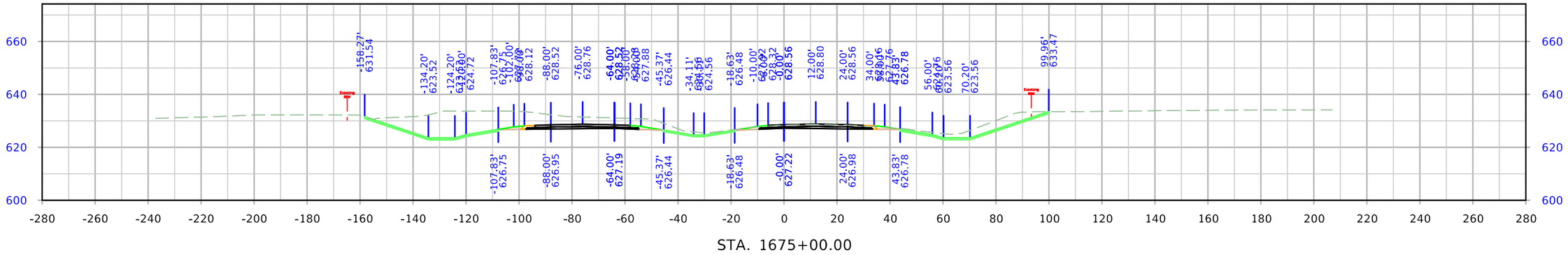




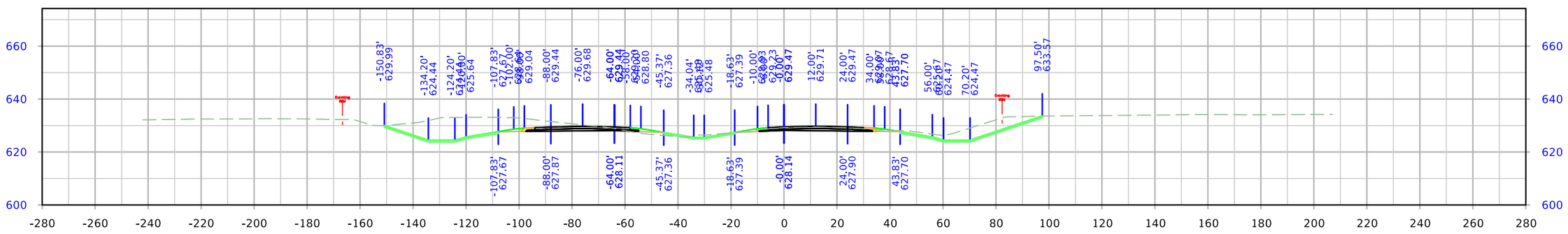
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WN.2

3:22:51 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

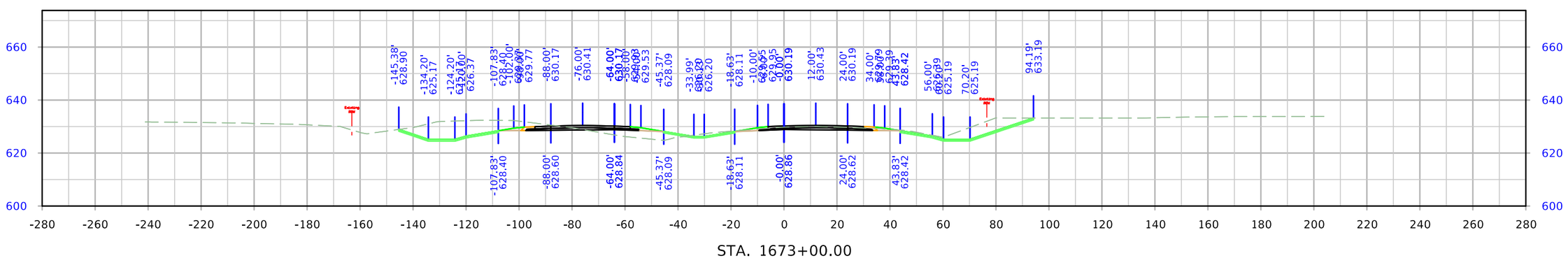
US 61 NB



STA. 1675+00.00



STA. 1674+00.00

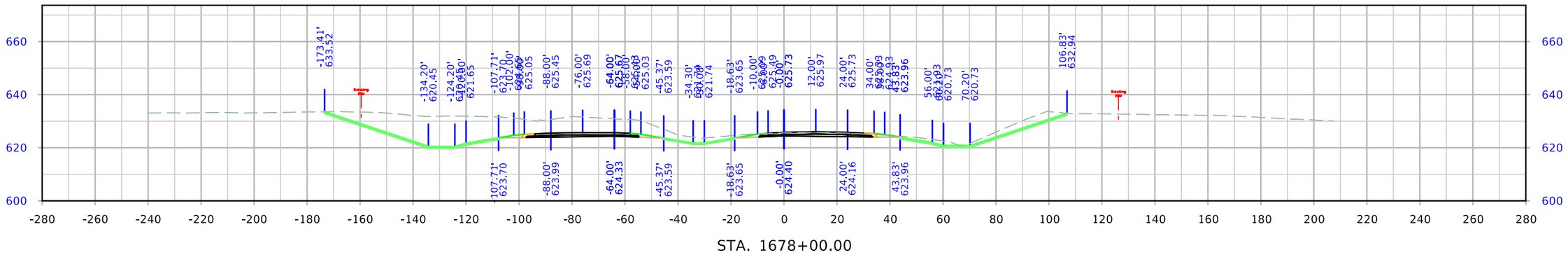


STA. 1673+00.00

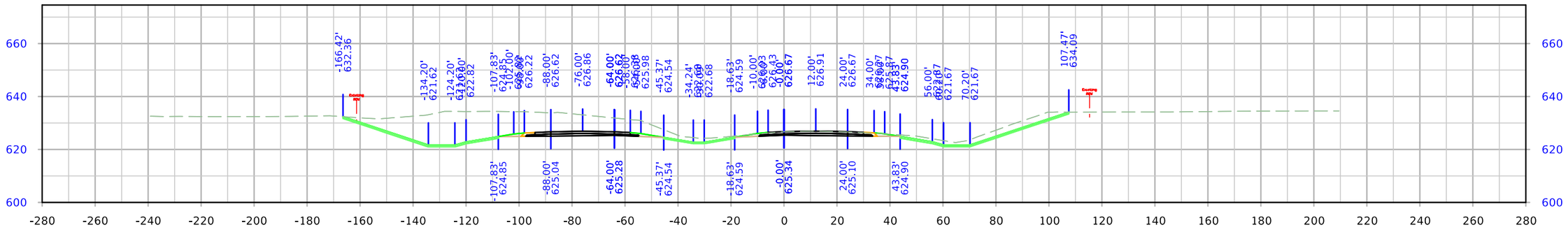
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WN.3

3:22:53 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

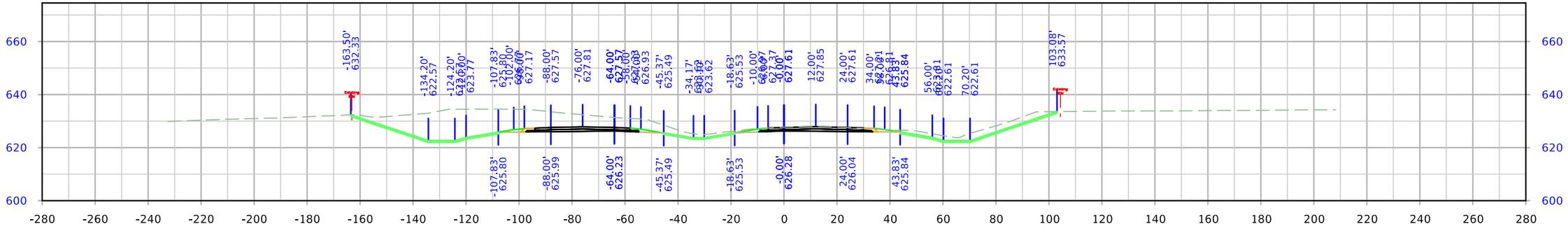
US 61 NB



STA. 1678+00.00



STA. 1677+00.00

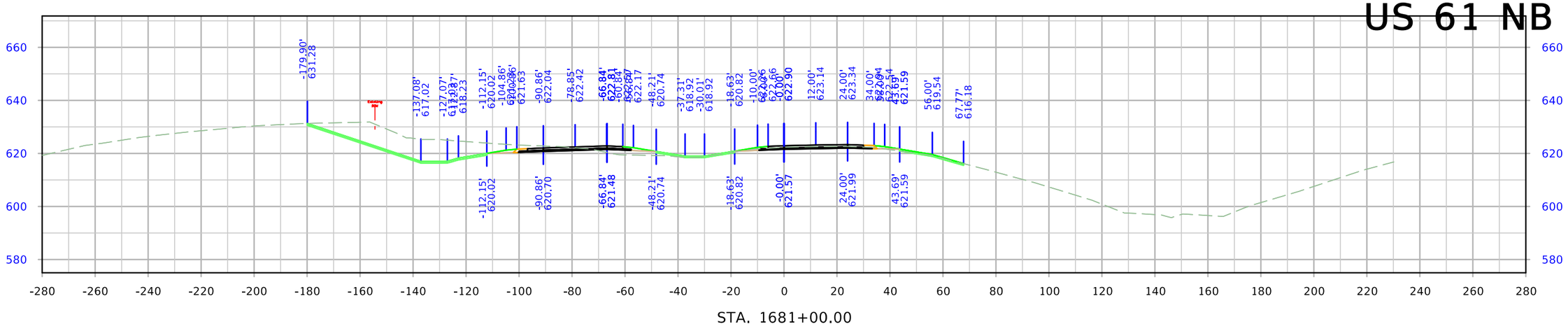


STA. 1676+00.00

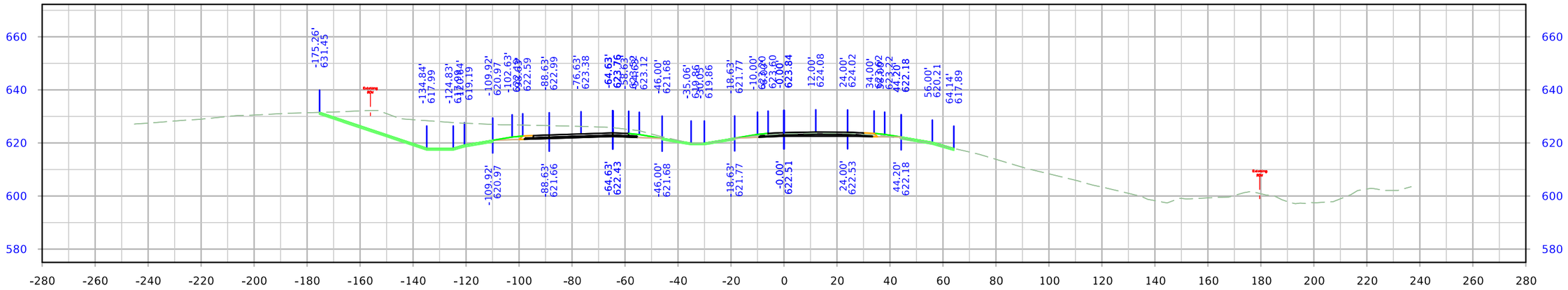
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WN.4

3:22:56 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

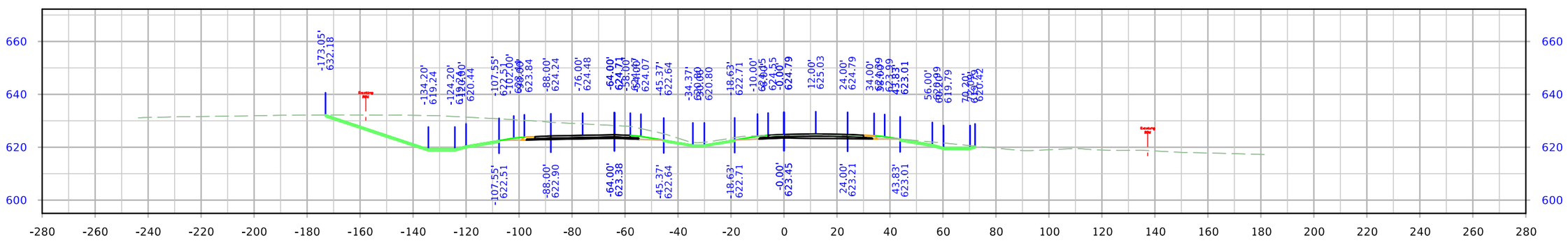
US 61 NB



STA. 1681+00.00



STA. 1680+00.00

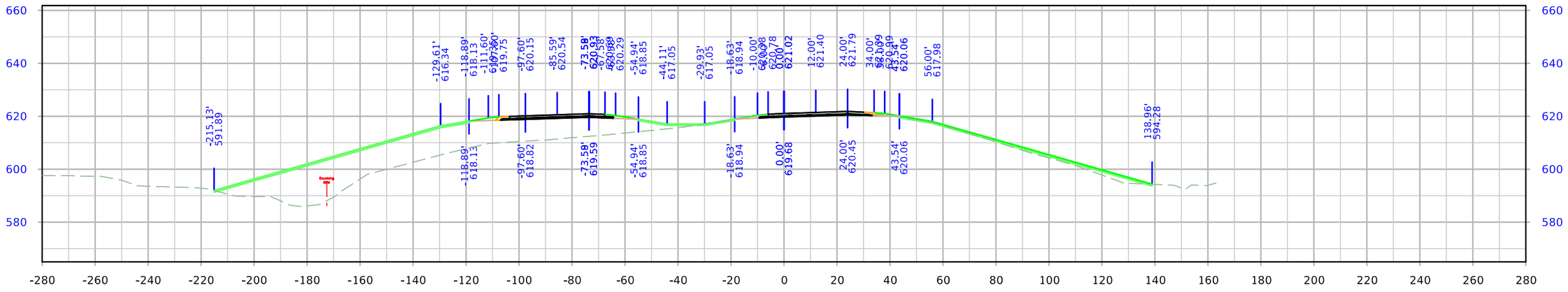


STA. 1679+00.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WN.5

3:22:58 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

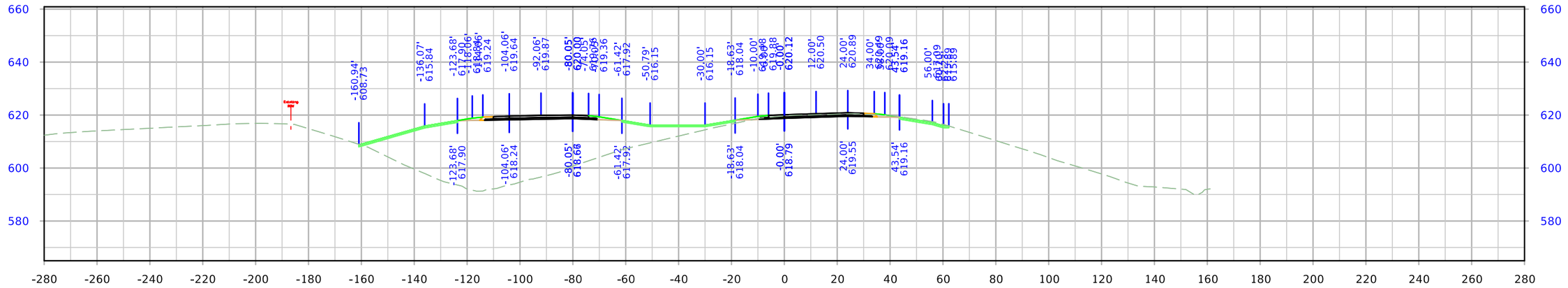
US 61 NB



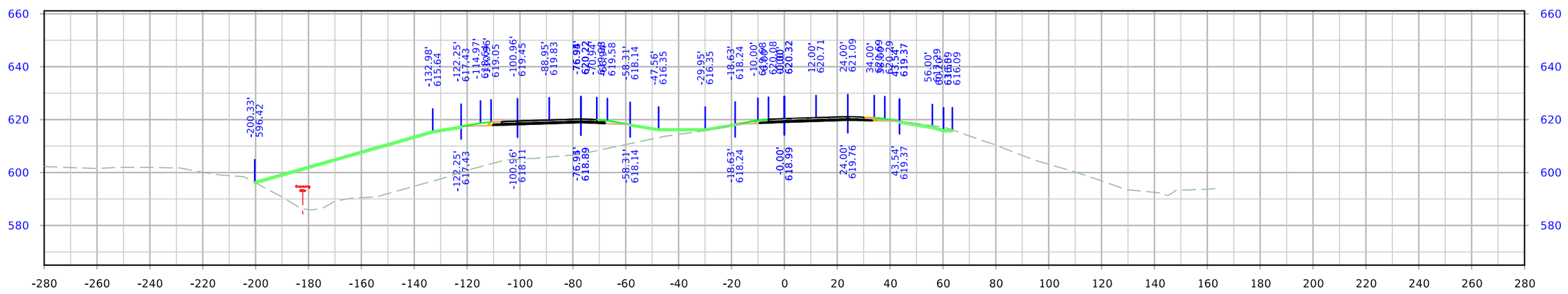
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3:23:00 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

US 61 NB



STA. 1685+00.00

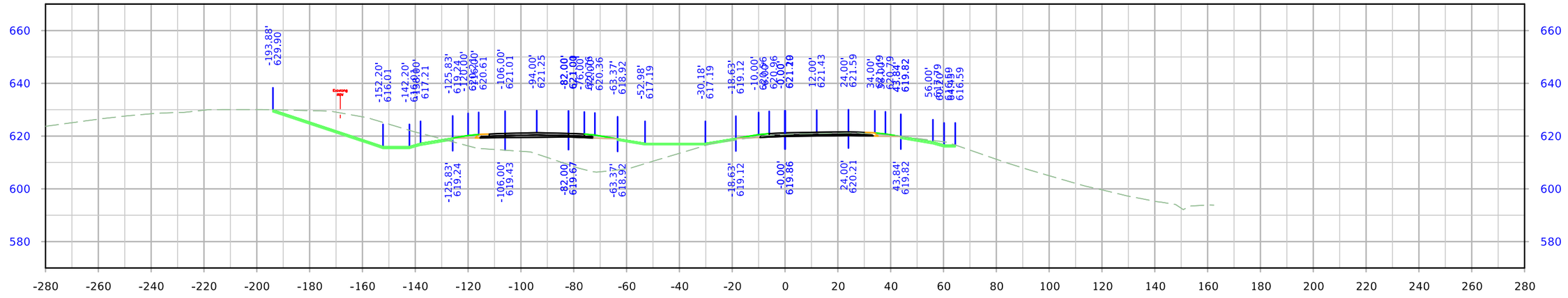


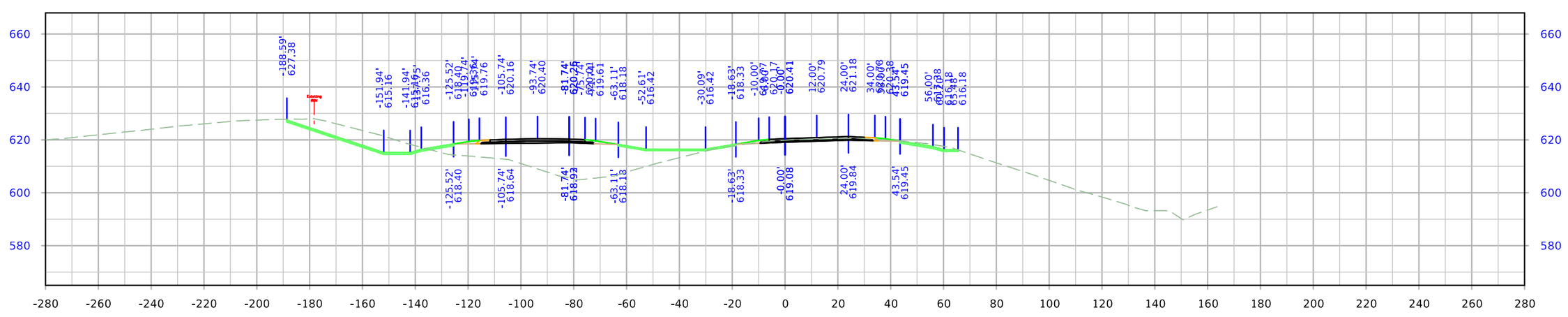
STA. 1684+00.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WN.7

3:23:02 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

US 61 NB

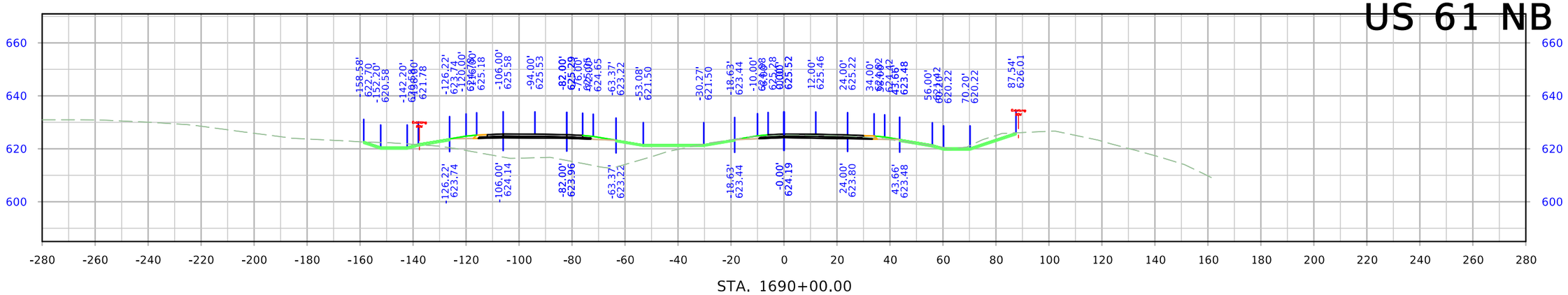




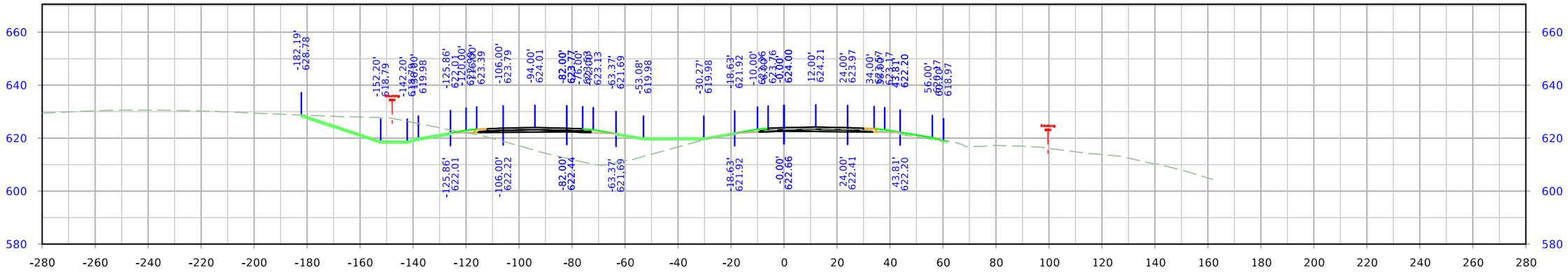
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WN.8

3:23:03 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

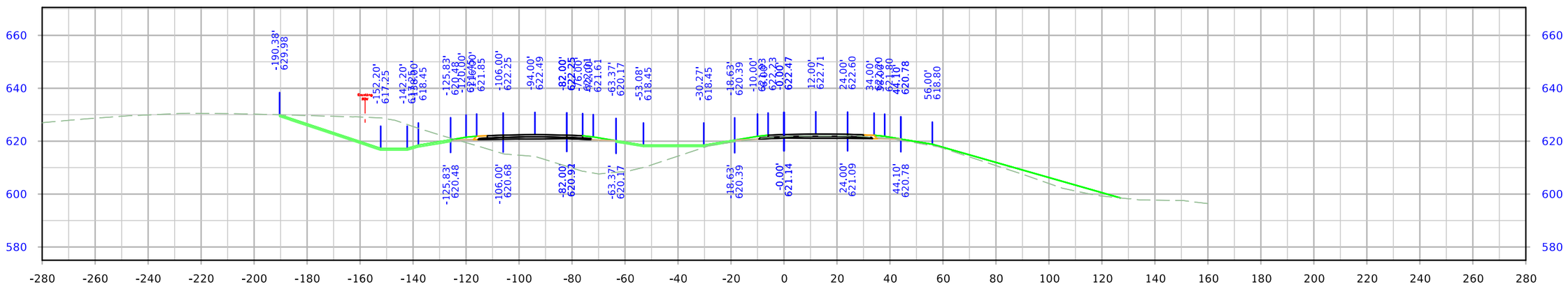
US 61 NB



STA. 1690+00.00



STA. 1689+00.00

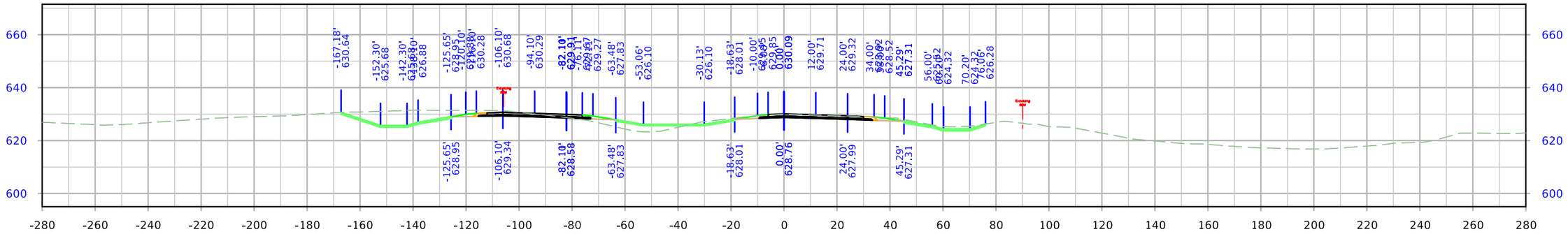


STA. 1688+00.00

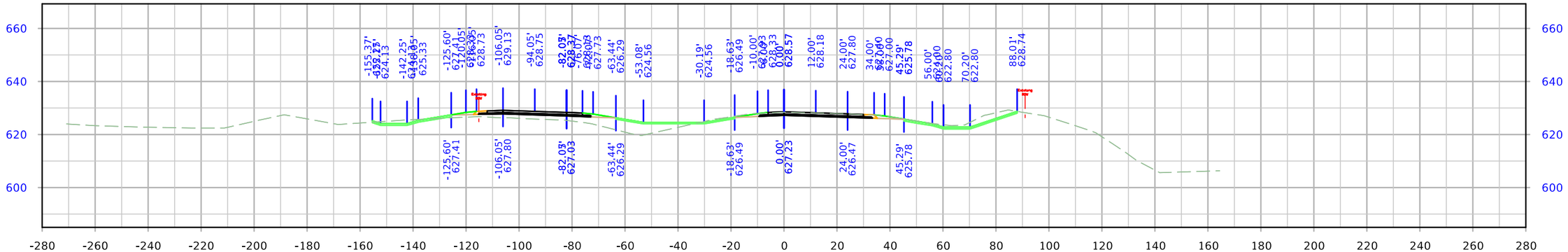
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WN.9

3:23:06 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

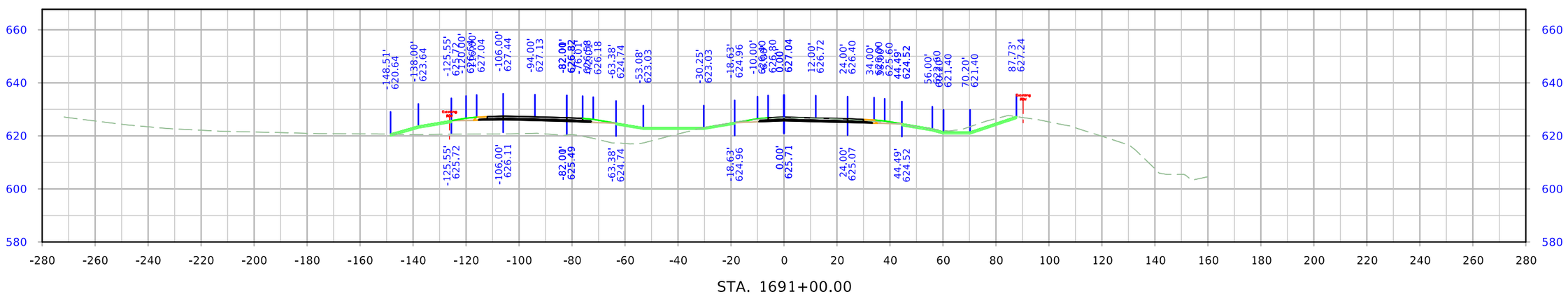
US 61 NB



STA. 1693+00.00



STA. 1692+00.00

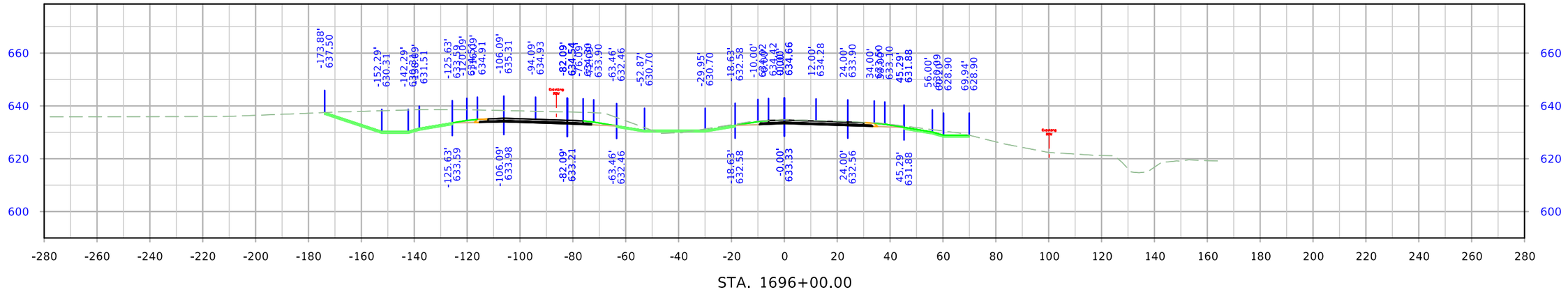


STA. 1691+00.00

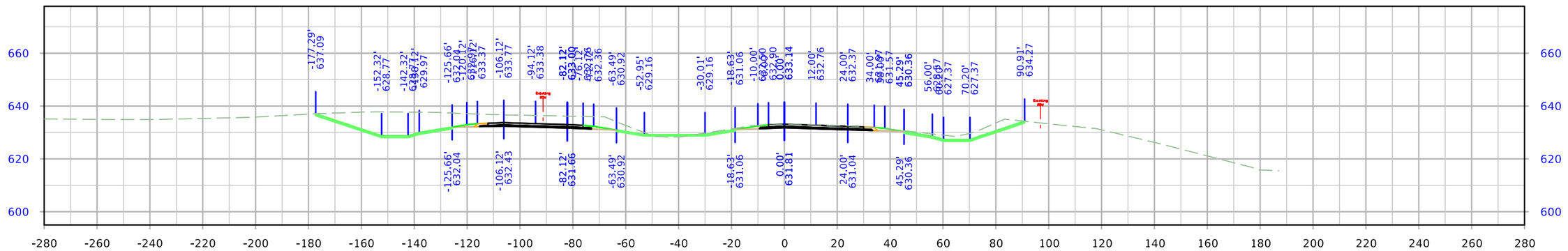
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WN.10

3:23:08 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

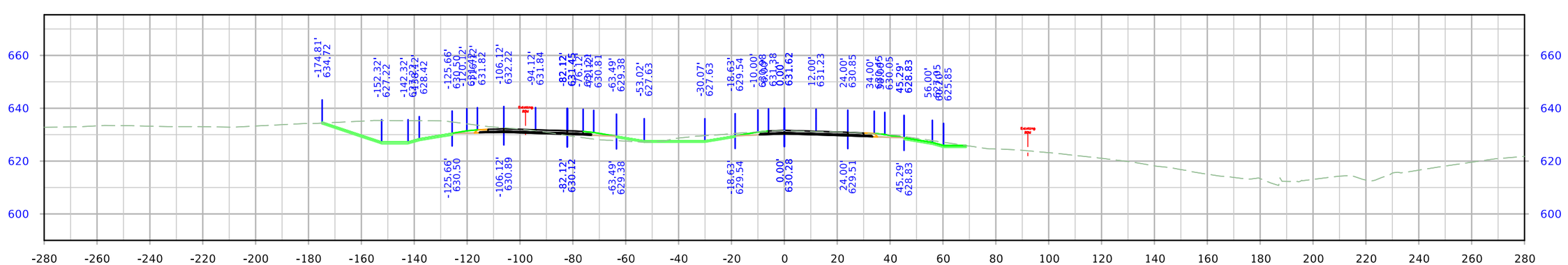
US 61 NB



STA. 1696+00.00



STA. 1695+00.00

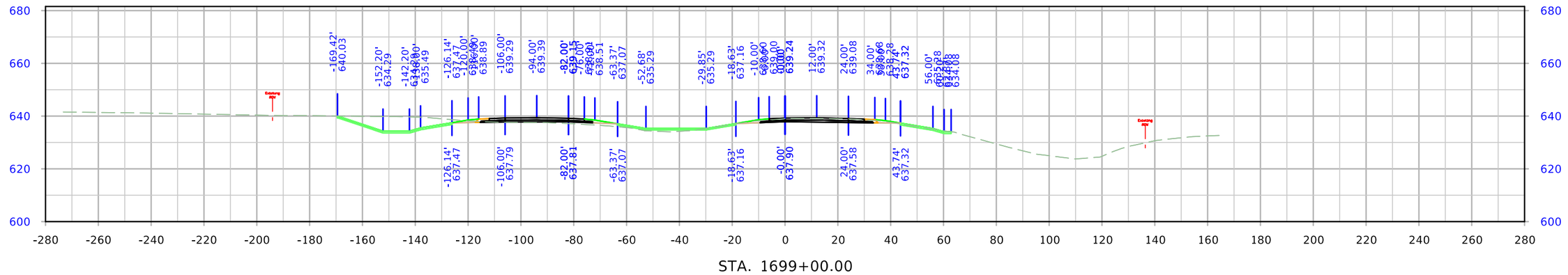


STA. 1694+00.00

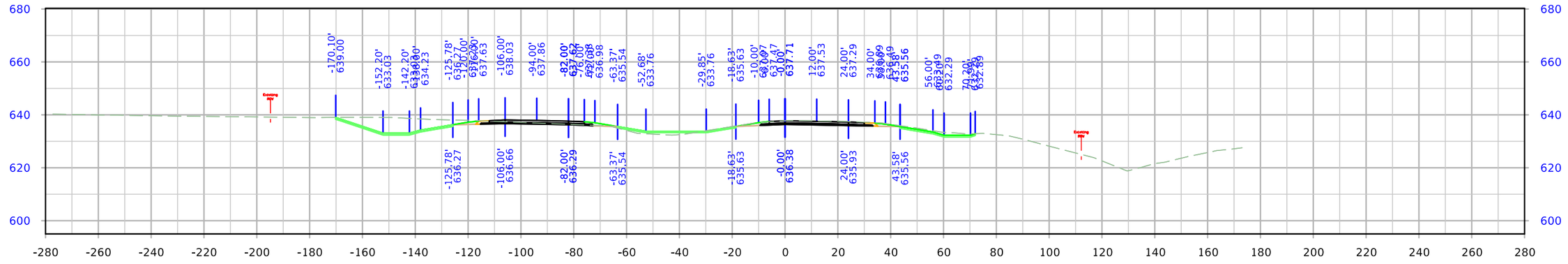
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WN.11

3:23:11 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

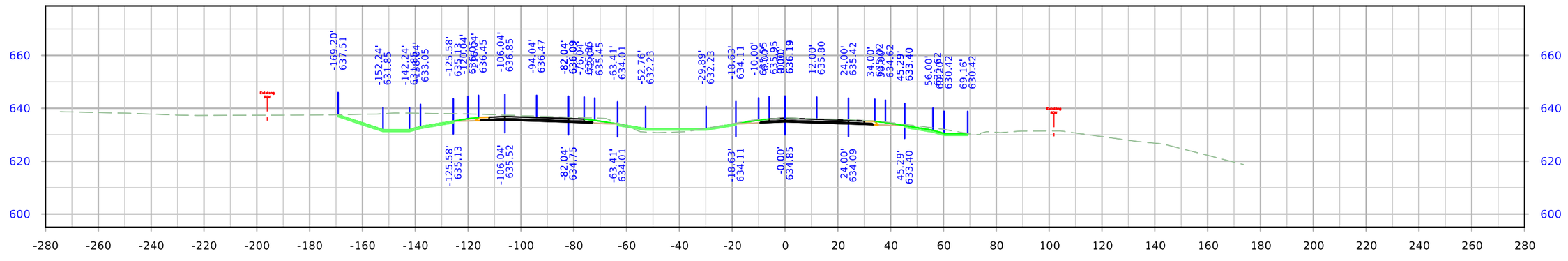
US 61 NB



STA. 1699+00.00



STA. 1698+00.00

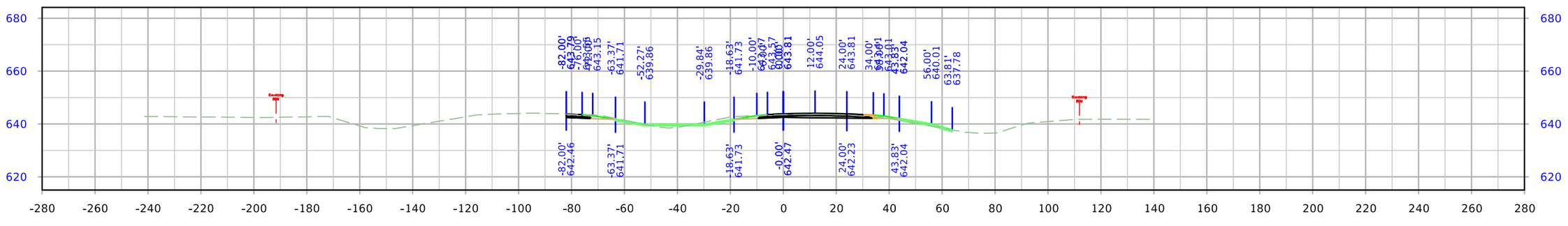


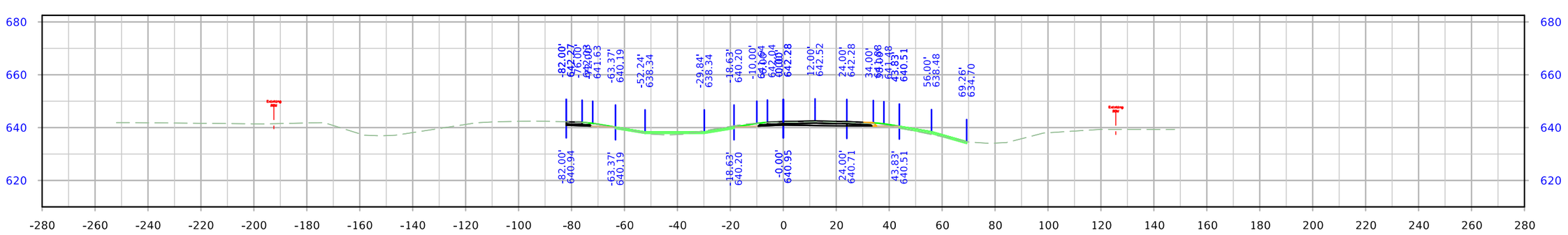
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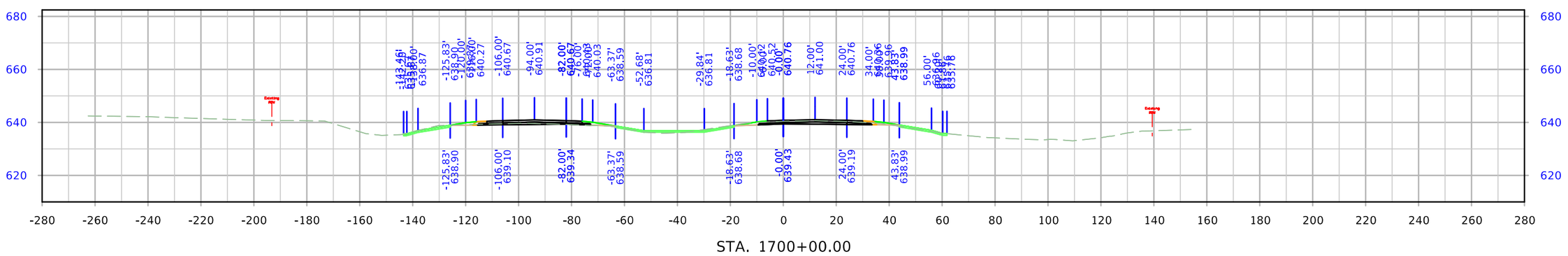
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WN.12

3:23:13 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

US 61 NB



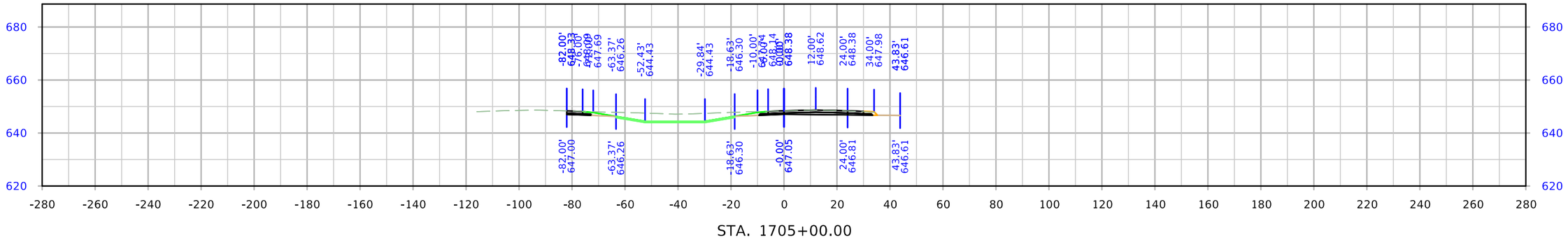




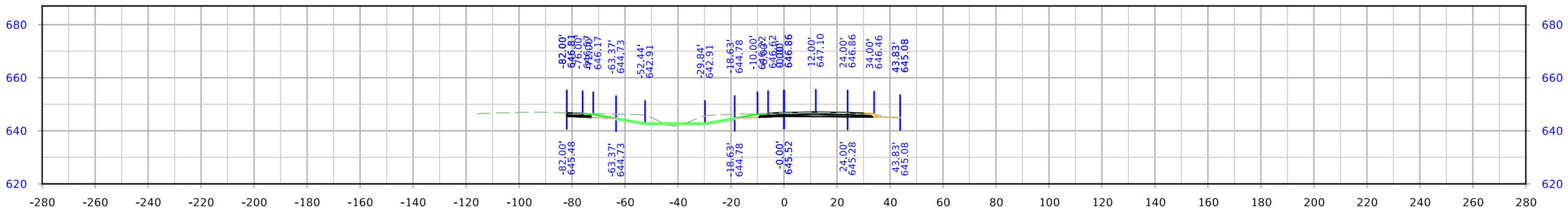
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WN.13

3:23:16 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

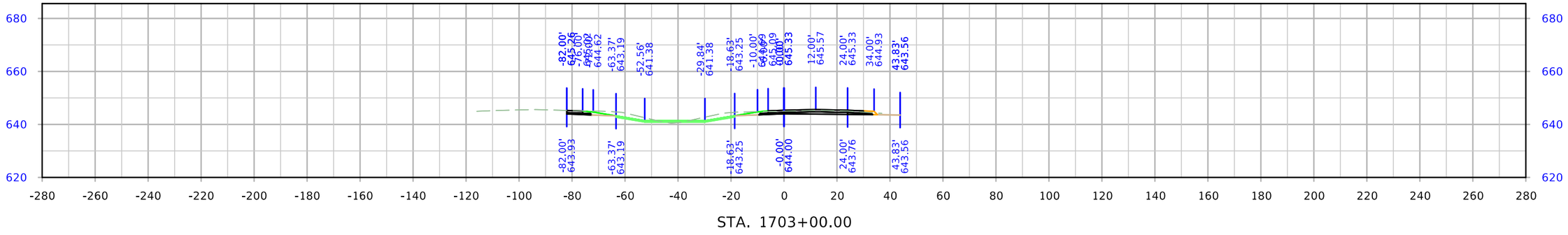
US 61 NB



STA. 1705+00.00



STA. 1704+00.00

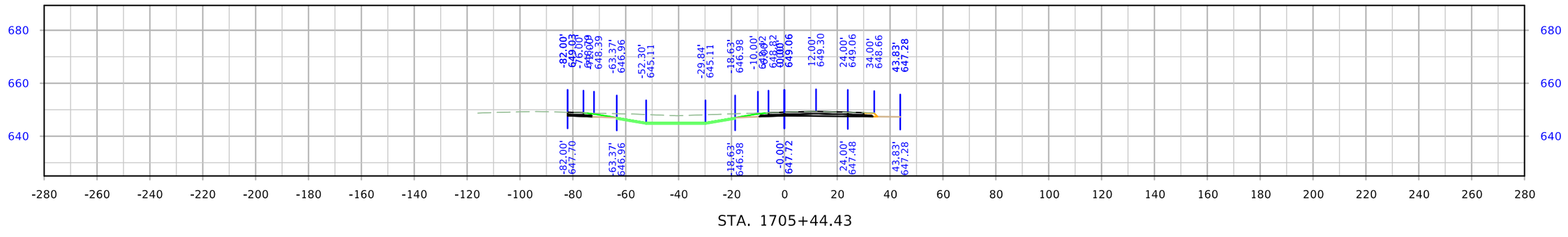


STA. 1703+00.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WN.14

3:23:18 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

US 61 NB

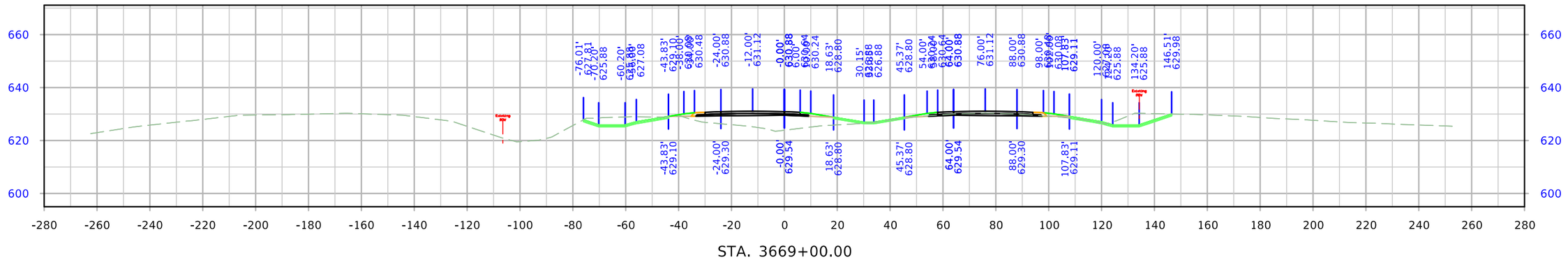


STA. 1705+44.43

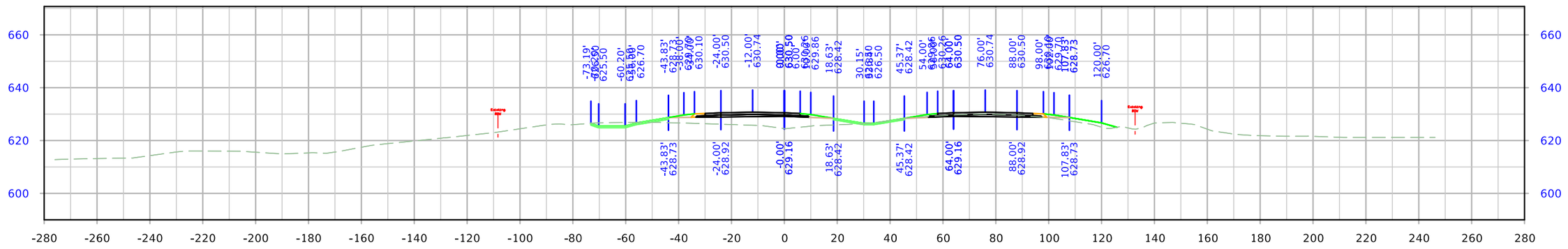
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3:23:19 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WN1_ML061NBConn_58061061Z14.dgn

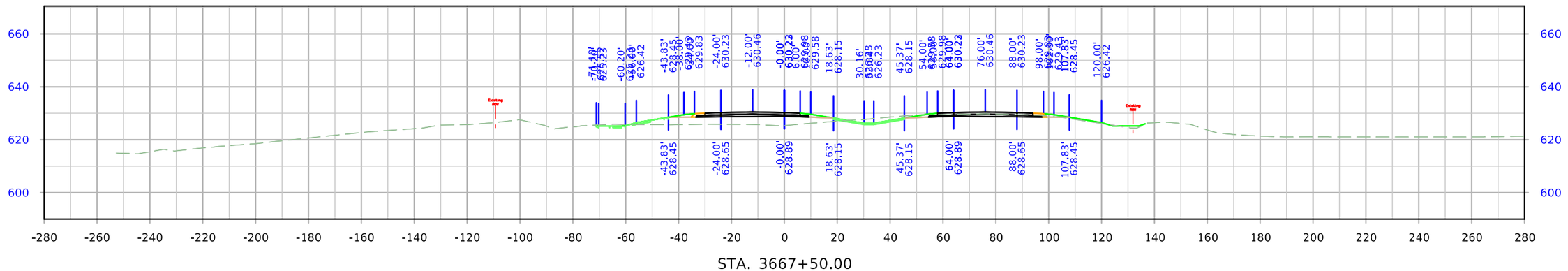
US 61 SB



STA. 3669+00.00



STA. 3668+00.00

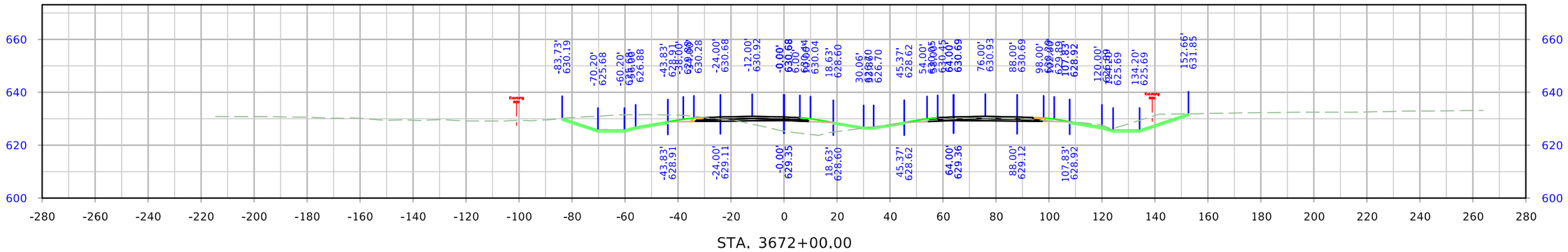


STA. 3667+50.00

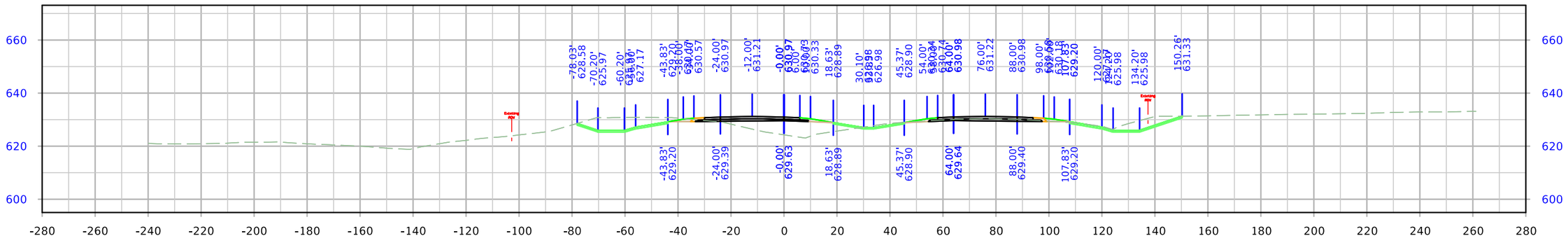
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WS.1

3:29:22 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WS1_ML061SBConn_58061061Z14.dgn

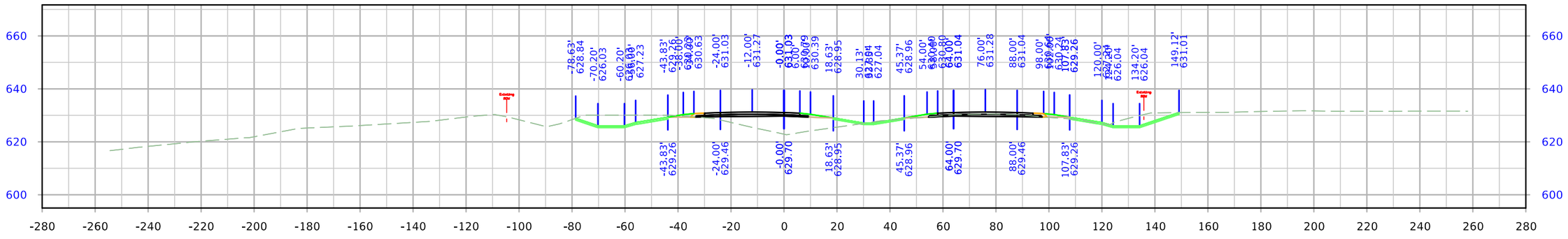
US 61 SB



STA. 3672+00.00



STA. 3671+00.00

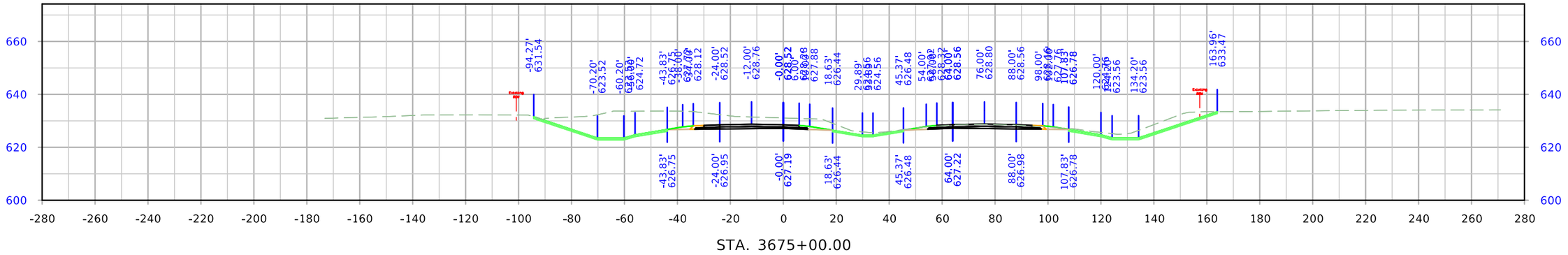


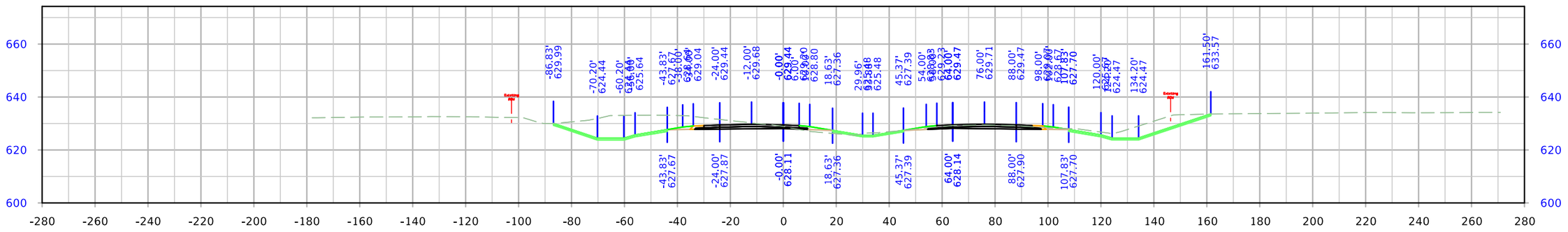
STA. 3670+00.00

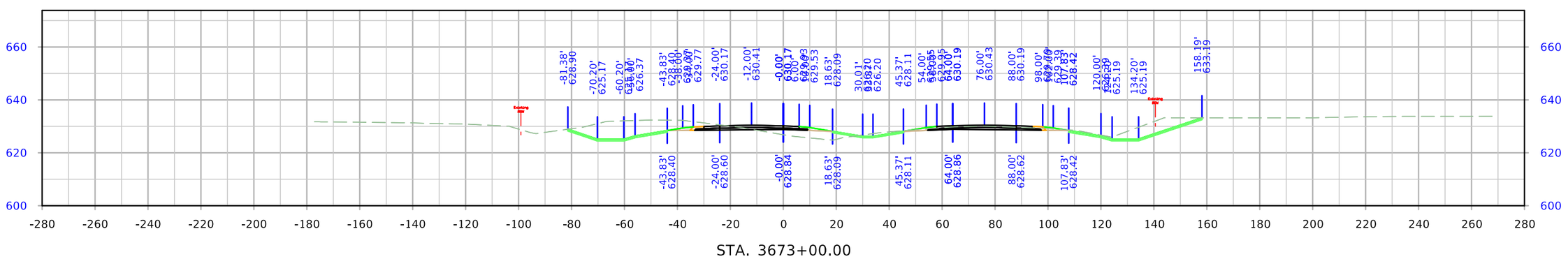
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WS.2

3:29:25 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WS1_ML061SBConn_58061061Z14.dgn

US 61 SB



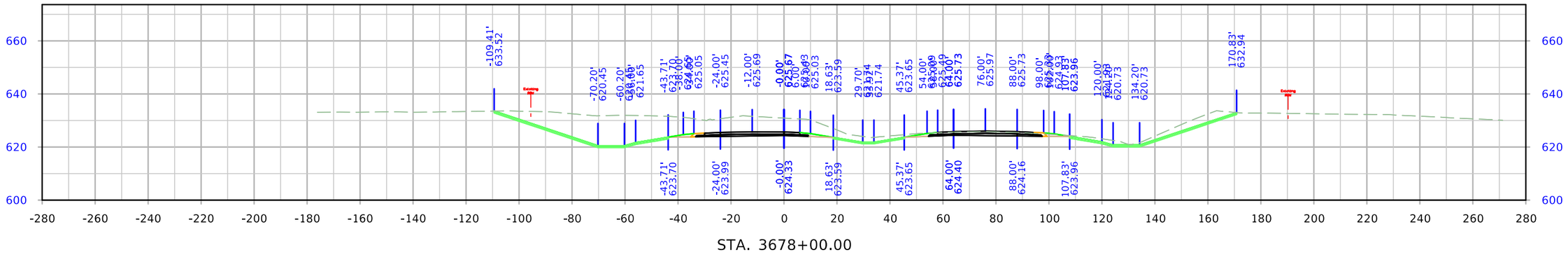




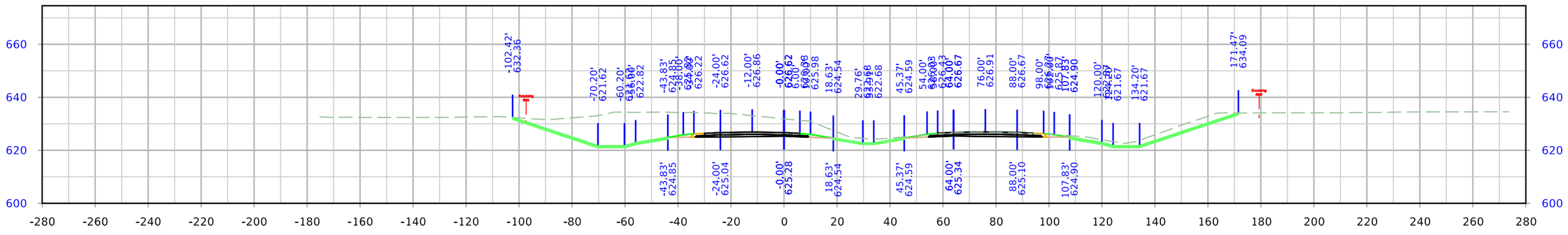
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3:29:27 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WS1_ML061SBConn_58061061Z14.dgn

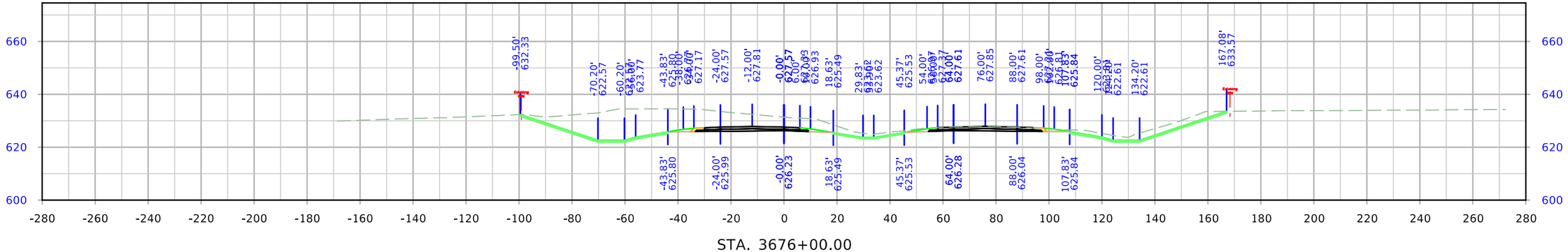
US 61 SB



STA. 3678+00.00



STA. 3677+00.00

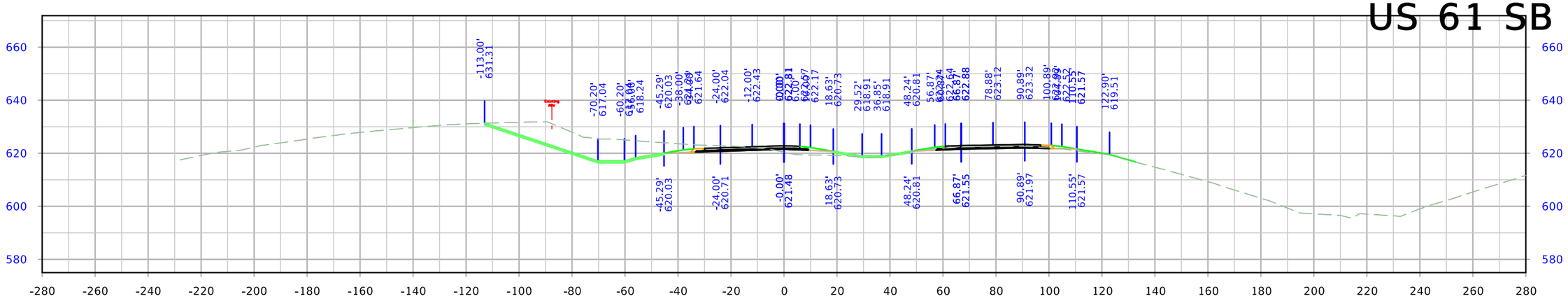


STA. 3676+00.00

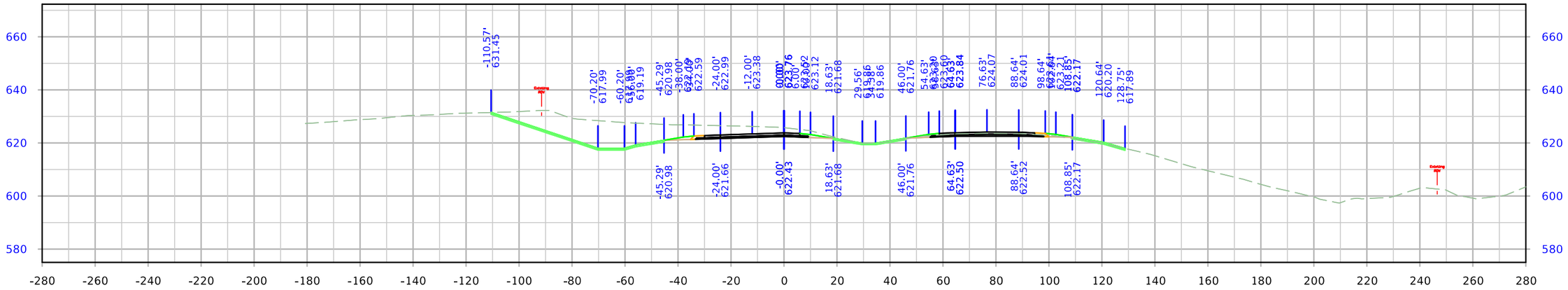
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WS.4	

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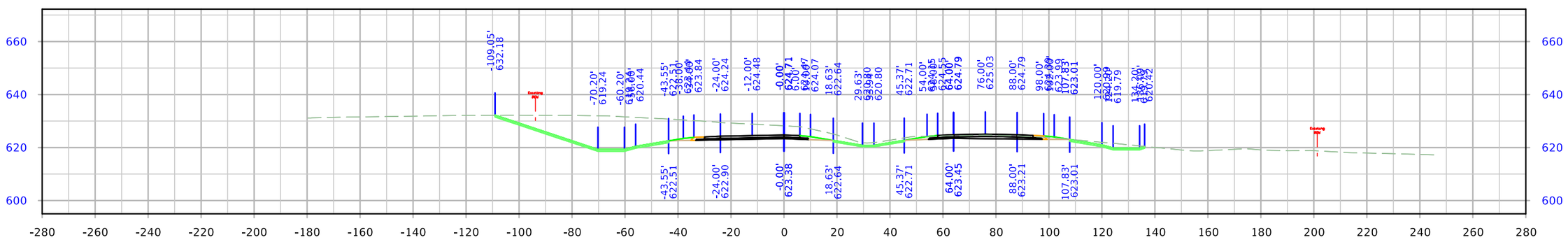
US 61 SB



STA. 3681+00.00



STA. 3680+00.00

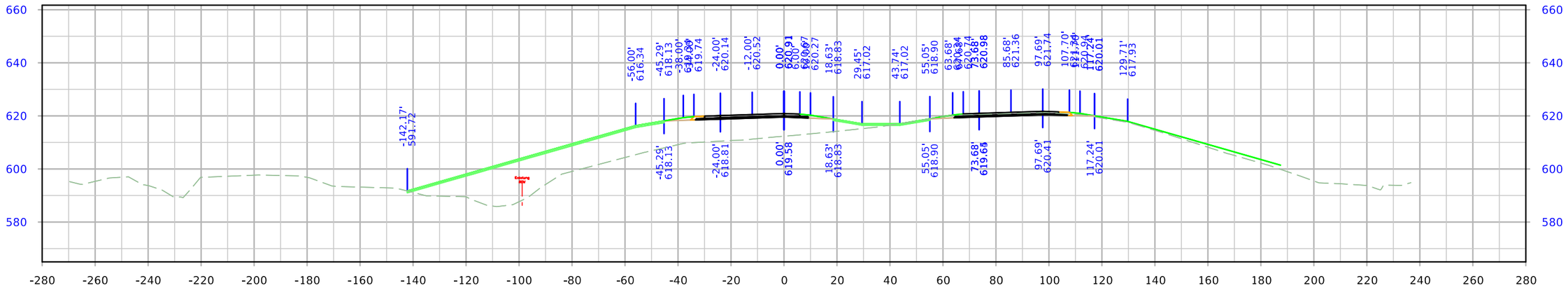


STA. 3679+00.00

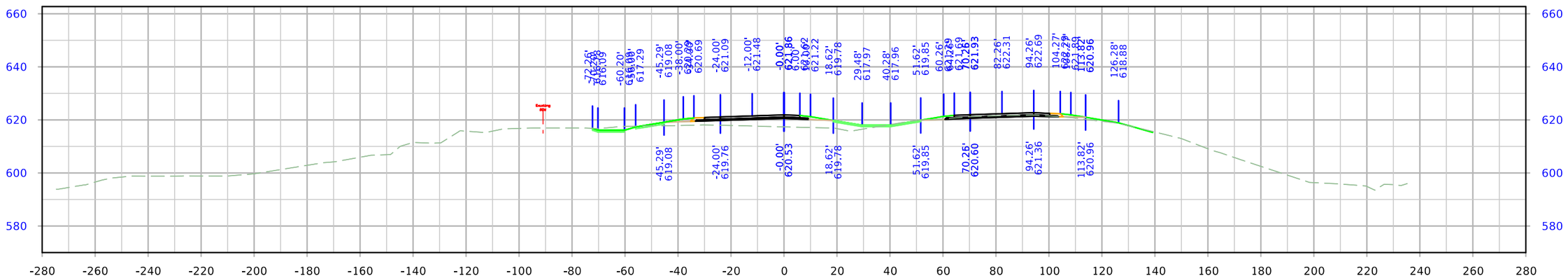
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US 61 SB



STA. 3683+00.00

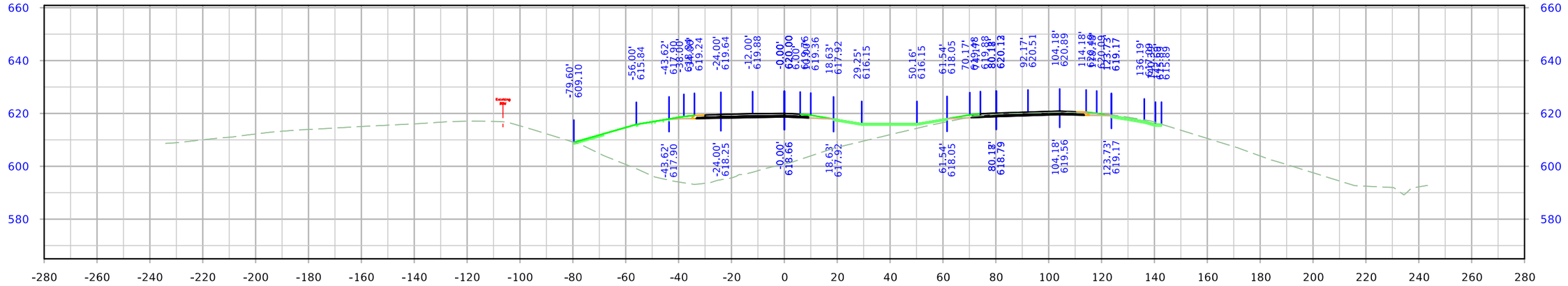


STA. 3682+00.00

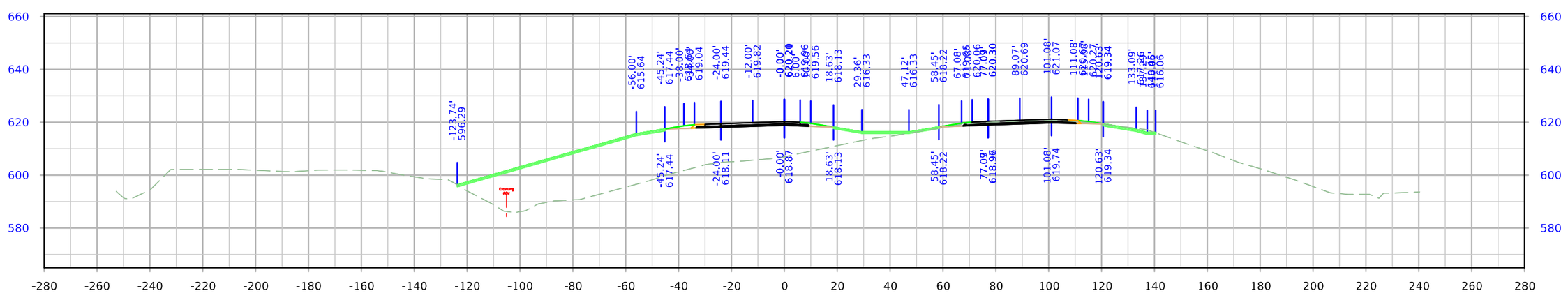
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US 61 SB



STA. 3685+00.00

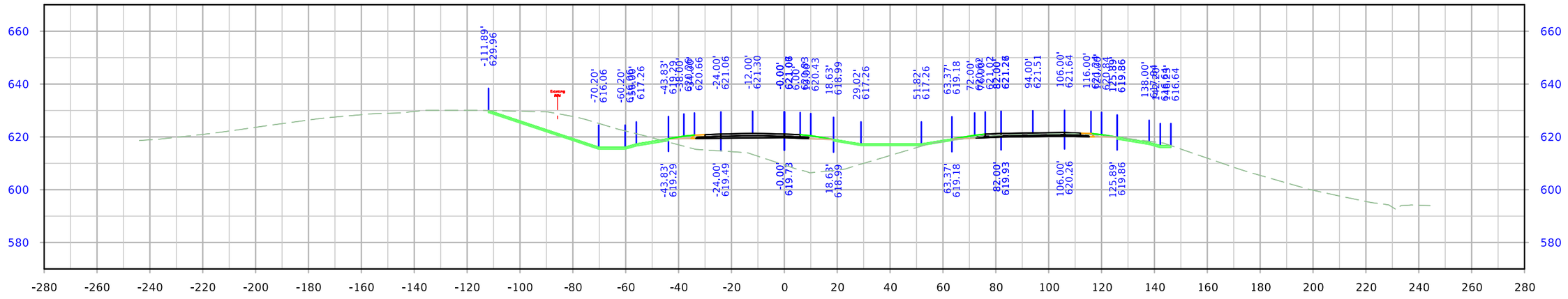


STA. 3684+00.00

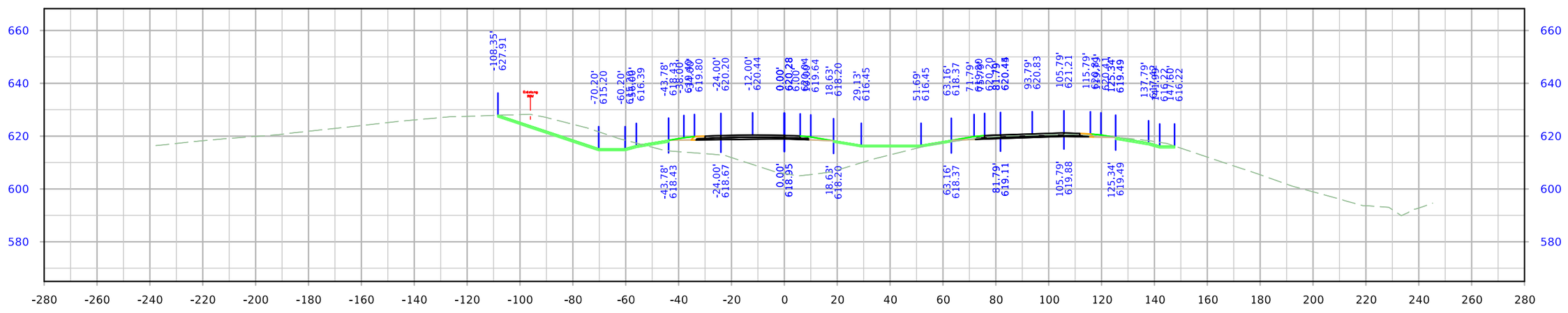
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WS.7

3:29:36 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WS1_ML061SBConn_58061061Z14.dgn

US 61 SB



STA. 3687+00.00

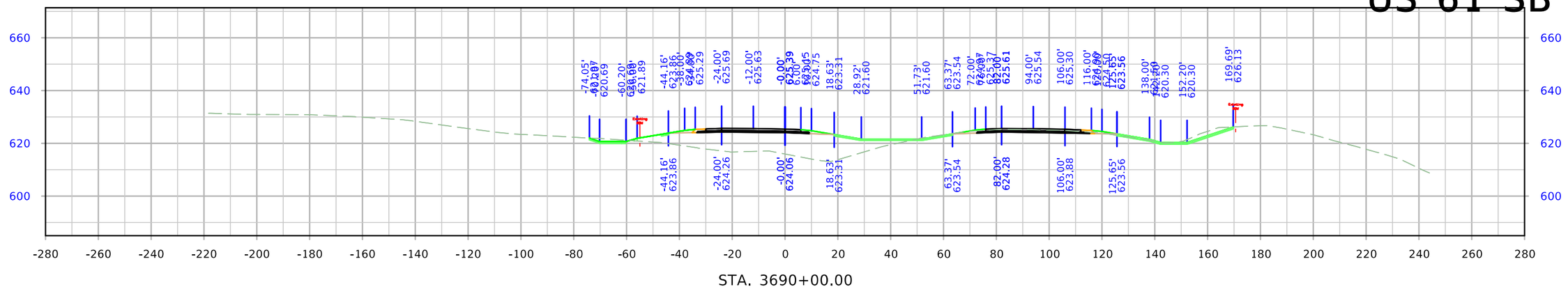


STA. 3686+00.00

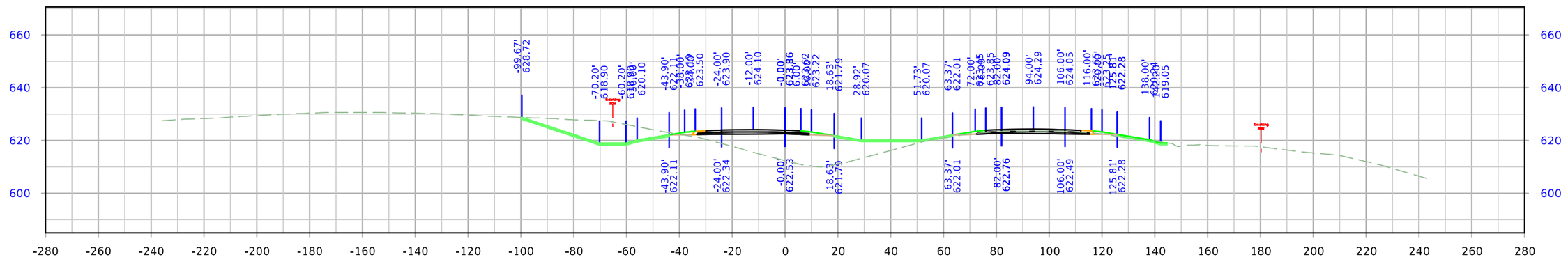
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WS.8

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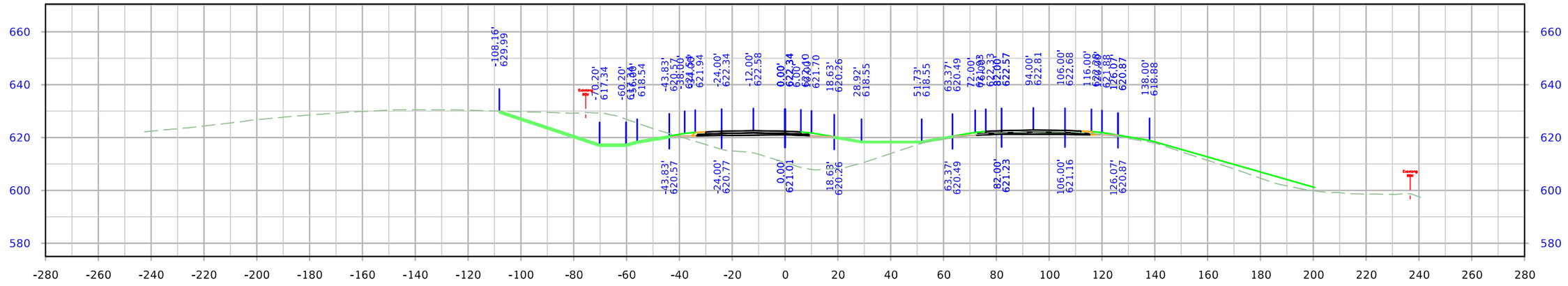
US 61 SB



STA. 3690+00.00



STA. 3689+00.00

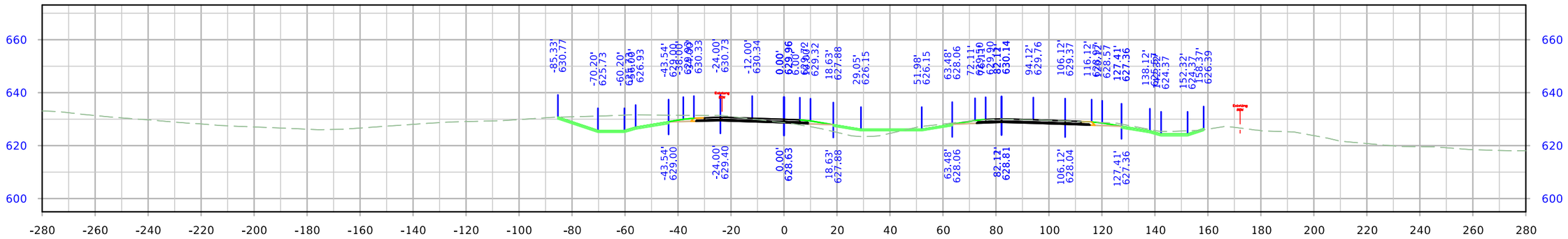


STA. 3688+00.00

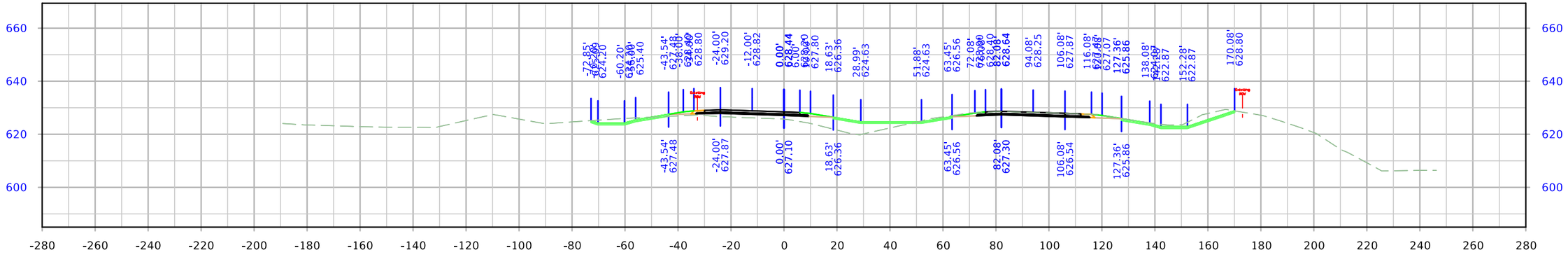
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WS.9

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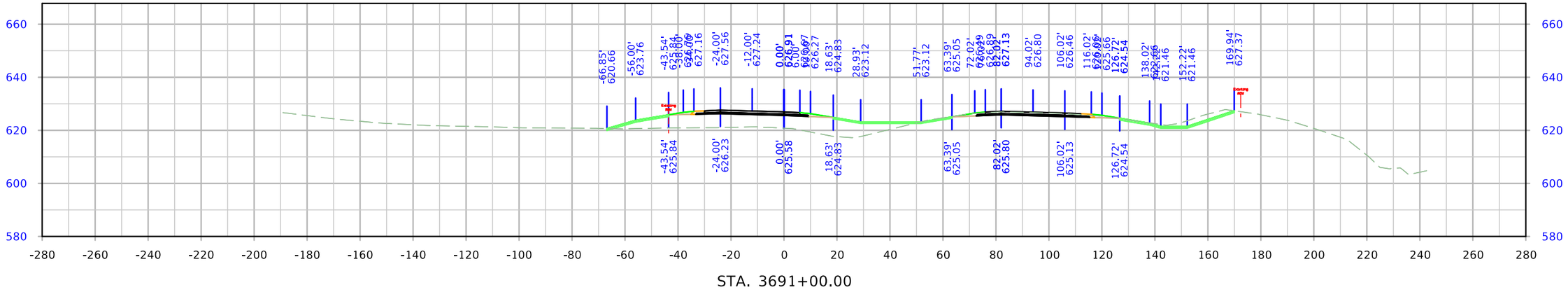
US 61 SB



STA. 3693+00.00



STA. 3692+00.00

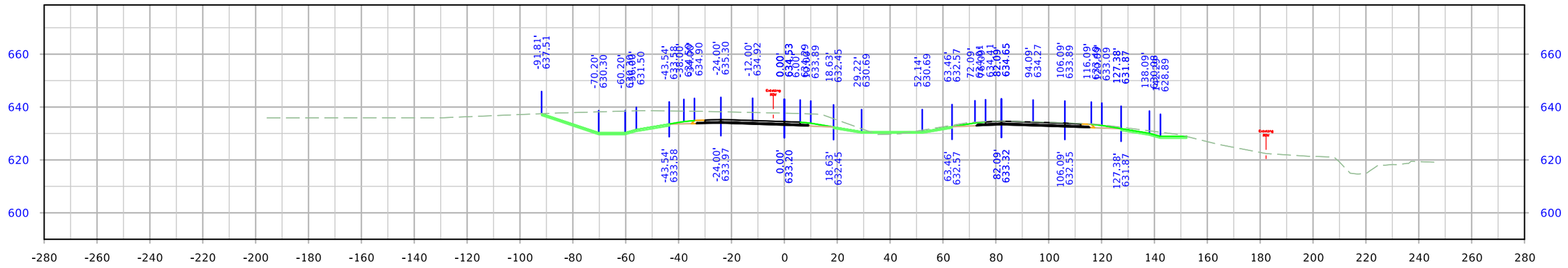


STA. 3691+00.00

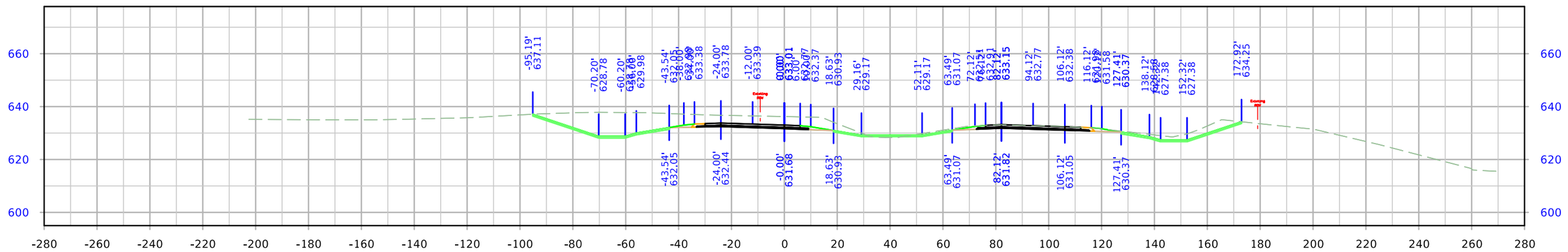
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WS.10

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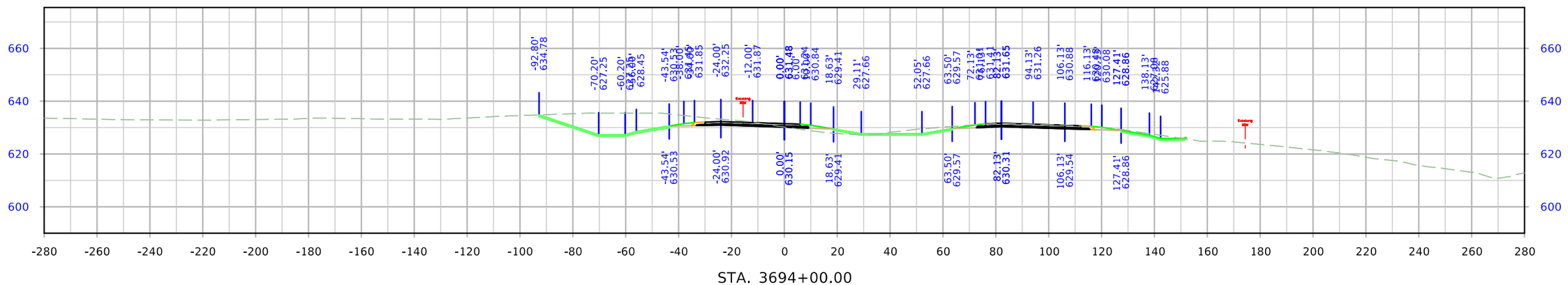
US 61 SB



STA. 3696+00.00



STA. 3695+00.00

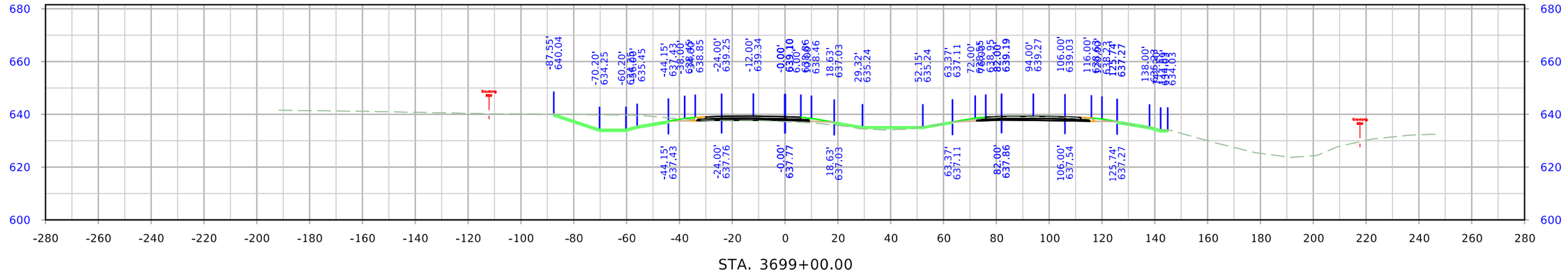


STA. 3694+00.00

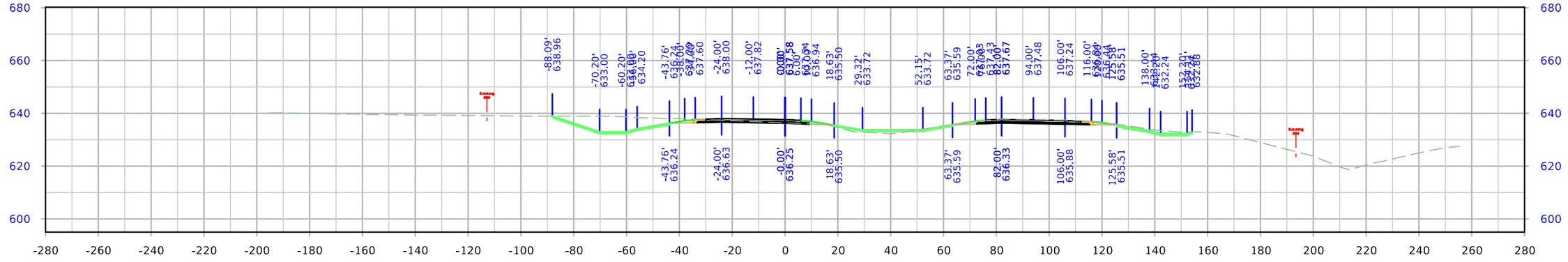
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WS.11

3:29:45 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WS1_ML061SBConn_58061061Z14.dgn

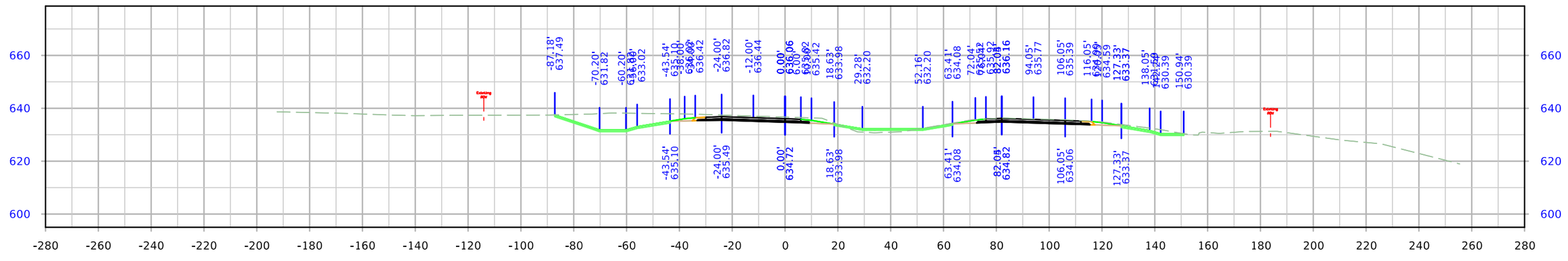
US 61 SB



STA. 3699+00.00



STA. 3698+00.00

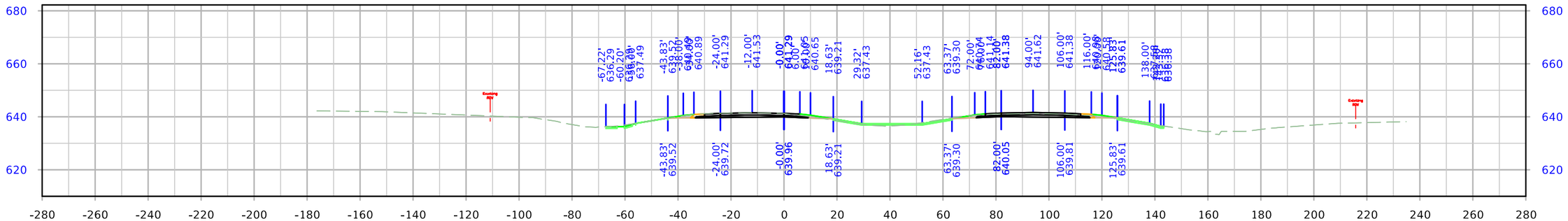


STA. 3697+00.00

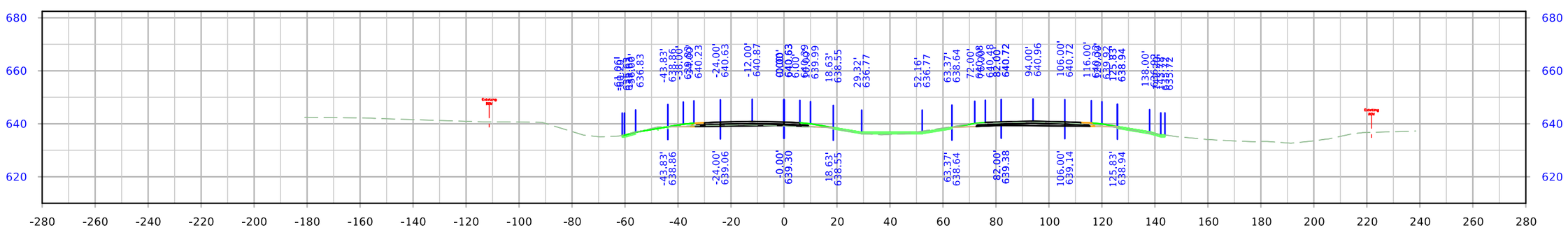
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WS.12

3:29:48 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WS1_ML061SBConn_58061061Z14.dgn

US 61 SB



STA. 3700+43.56

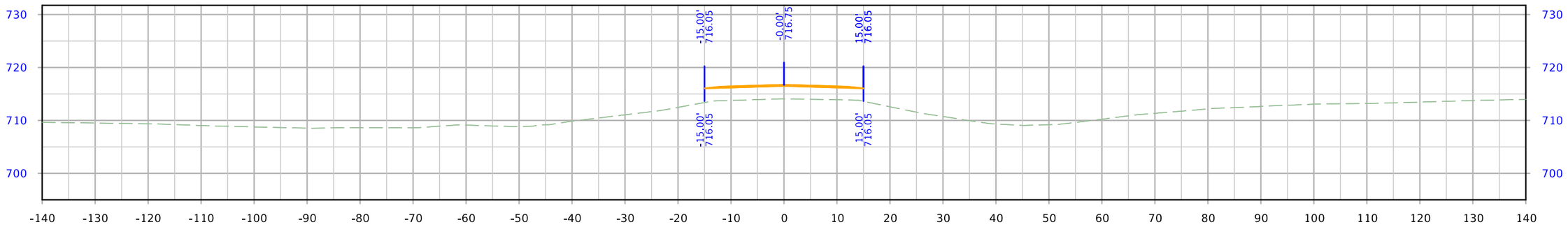


STA. 3700+00.00

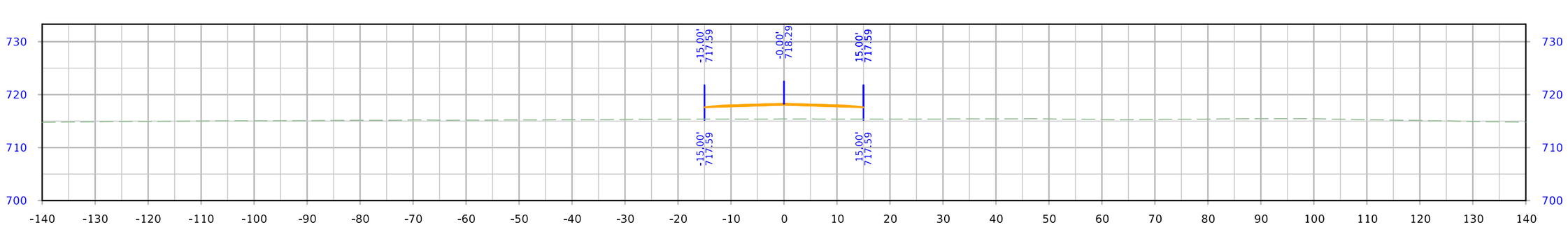
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER WS.13

3:29:50 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_WS1_ML061SBConn_58061061Z14.dgn

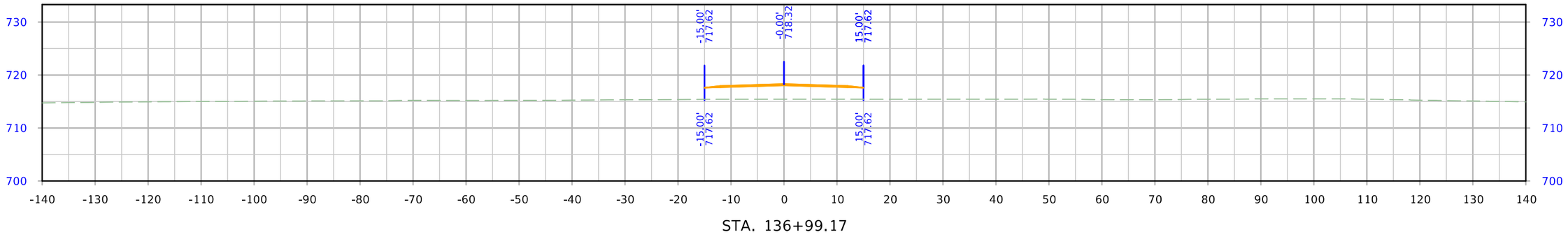
30th St



STA. 137+50.00



STA. 137+00.00

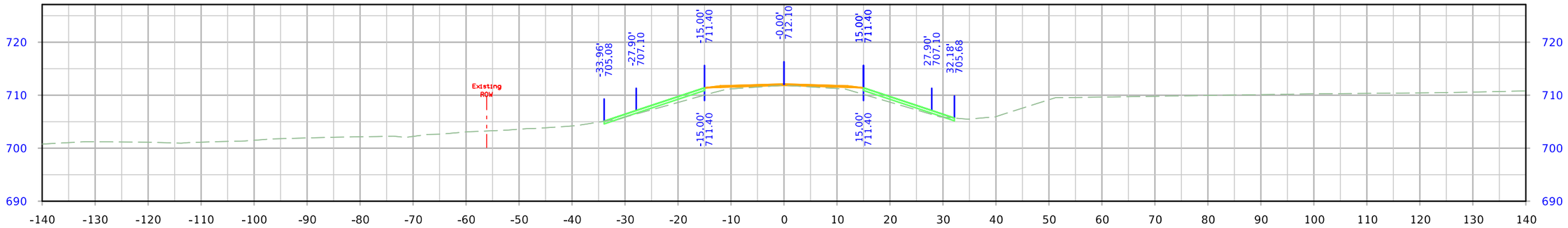


STA. 136+99.17

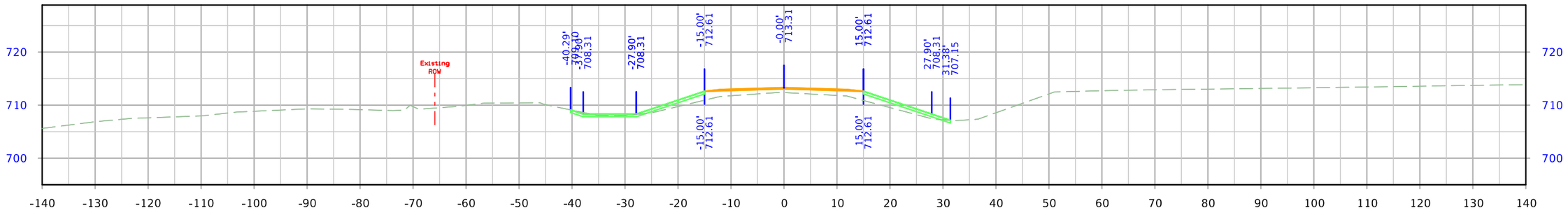
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.100	

3:31:14 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X100_SR30_58061061Z14.dgn

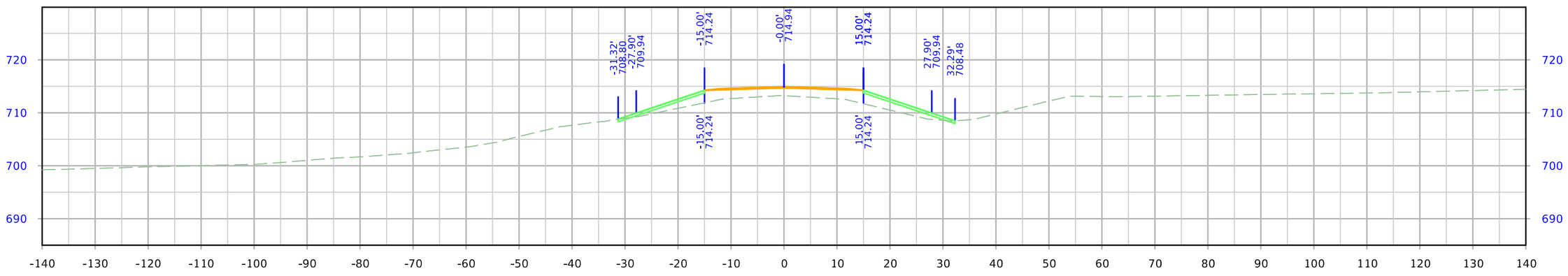
30th St



STA. 139+00.00



STA. 138+50.00

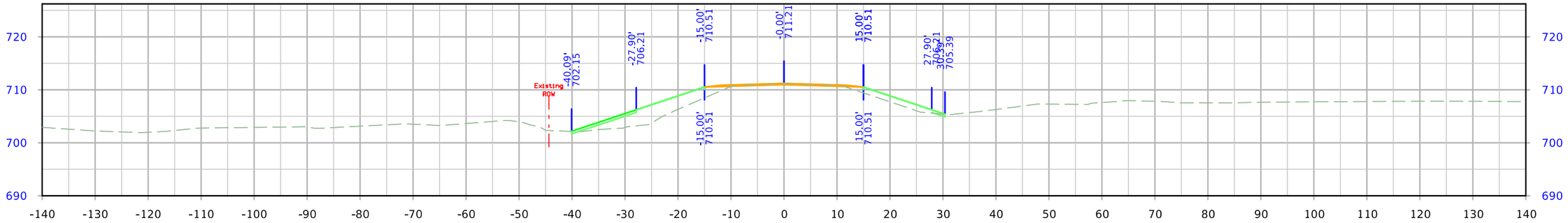


STA. 138+00.00

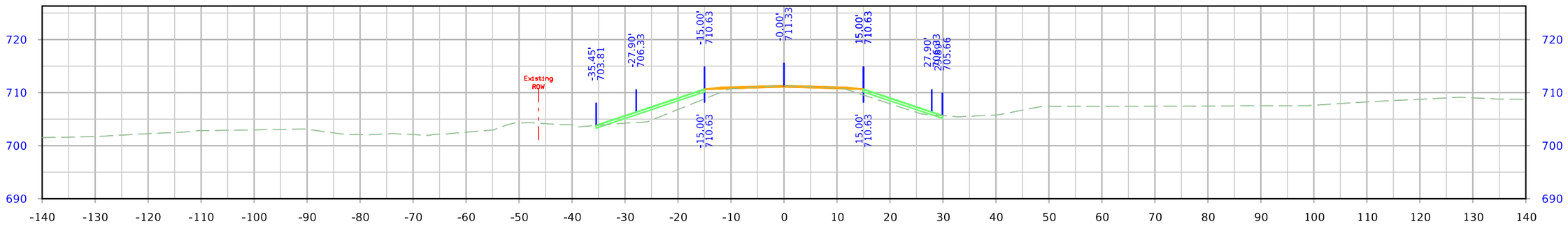
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.101

3:31:14 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X100_SR30_58061061Z14.dgn

30th St



STA. 139+60.00

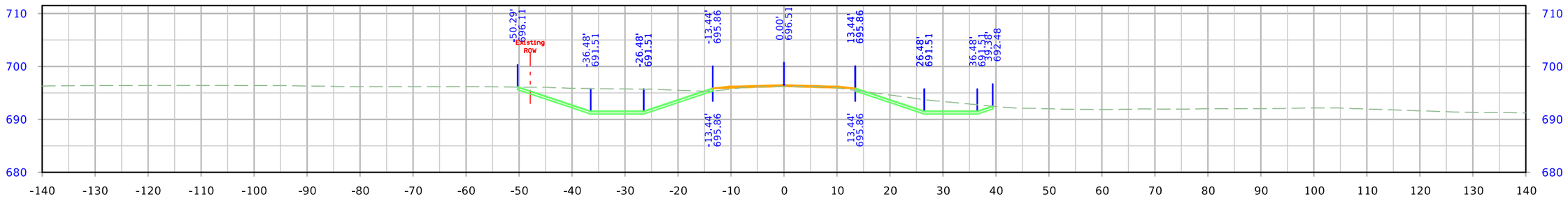


STA. 139+50.00

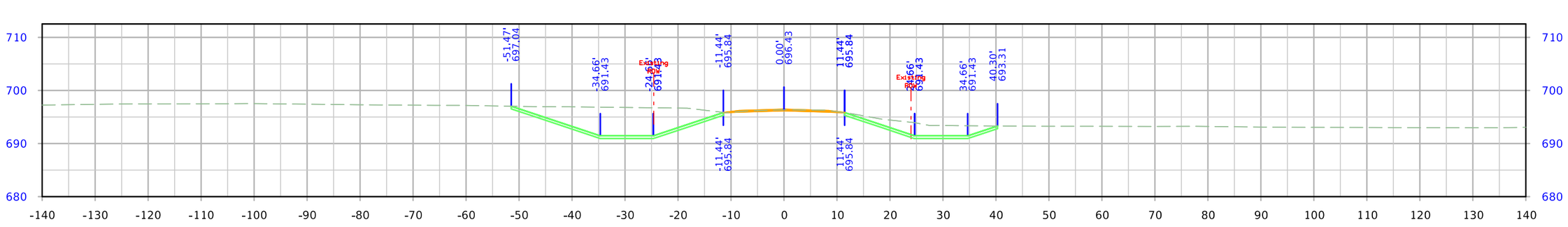
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.102

3:31:15 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X100_SR30_58061061Z14.dgn

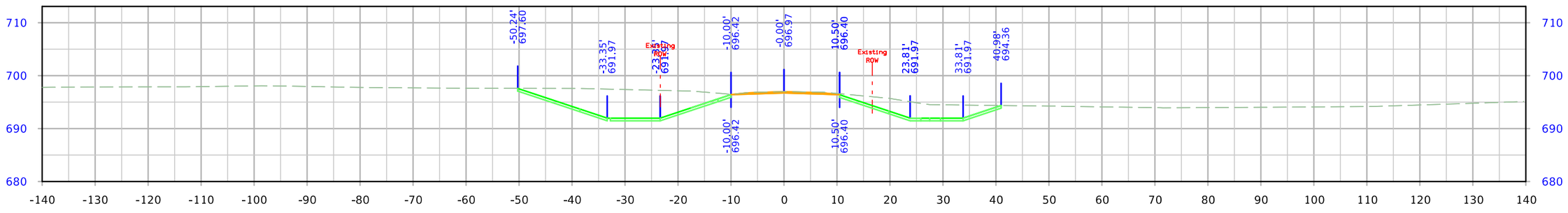
35th St



STA. 261+50.00



STA. 261+00.00

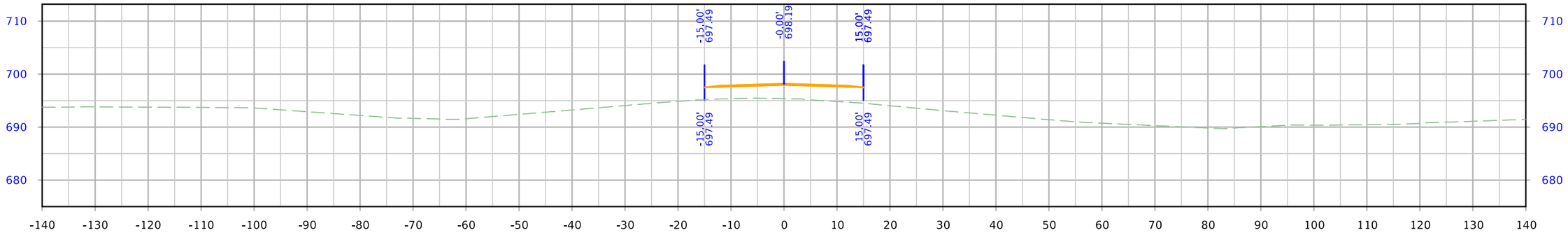


STA. 260+50.00

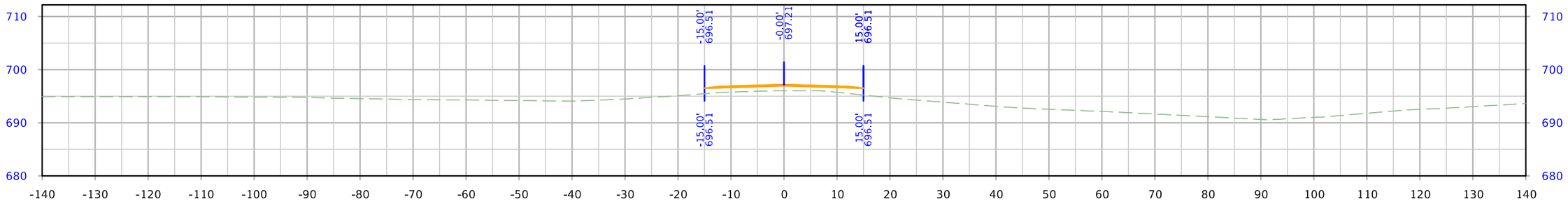
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.200

3:31:27 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X200_SR35_58061061Z14.dgn

35th St



STA. 262+49.00

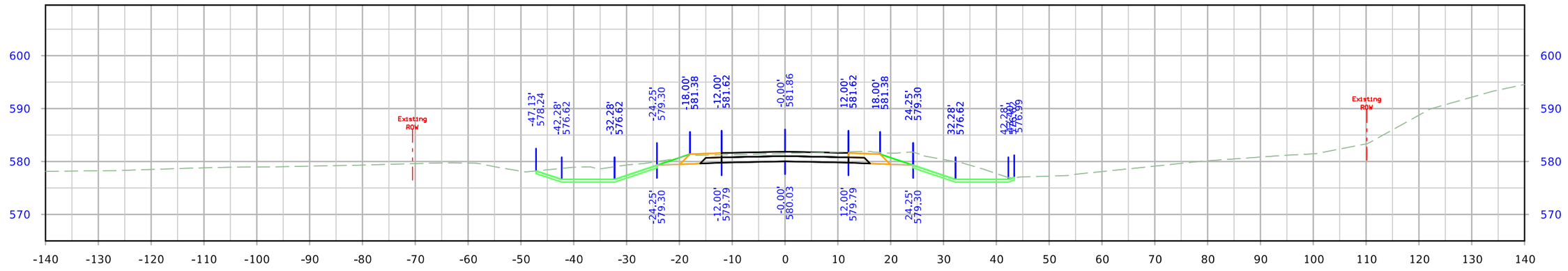


STA. 262+00.00

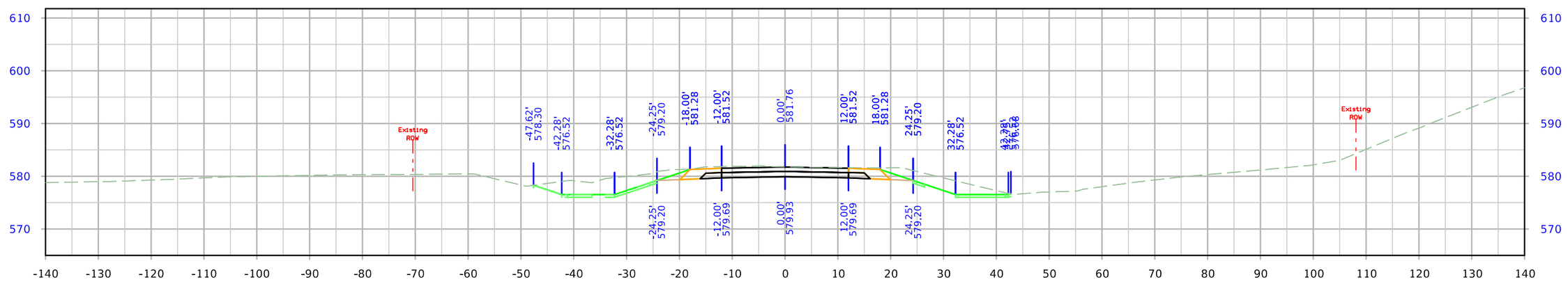
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.201

3:31:28 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X200_SR35_58061061Z14.dgn

Co Rd H16 (West)



STA. 382+50.00

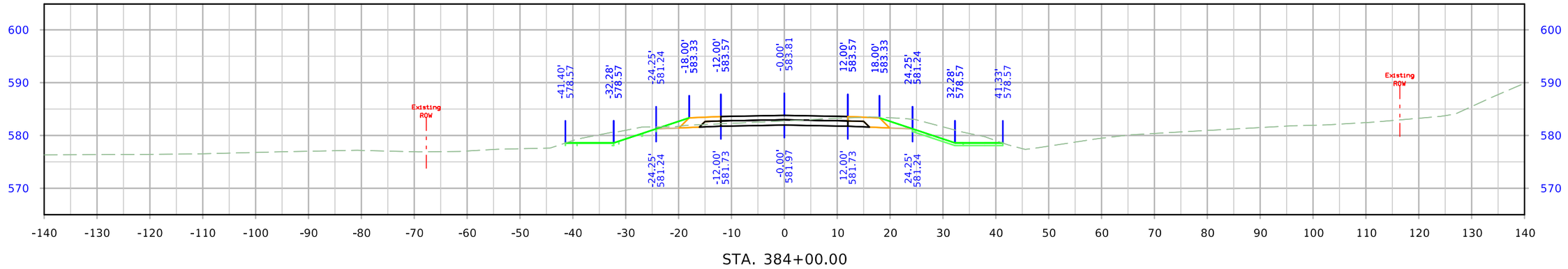


STA. 382+00.00

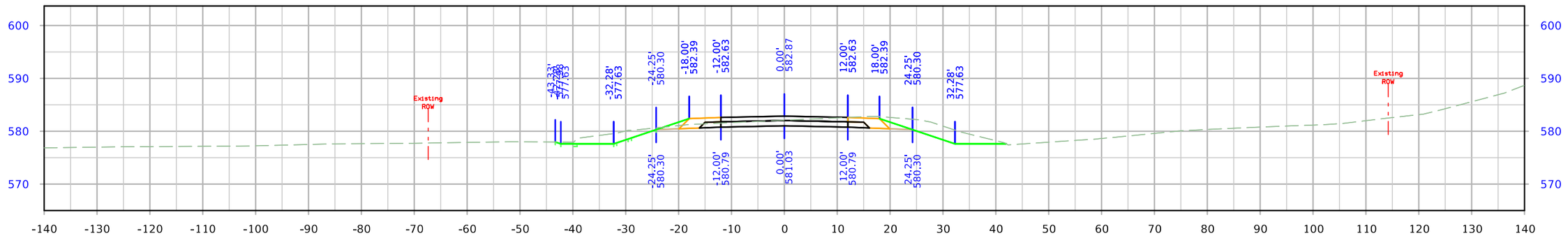
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.300

3:31:41 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X300_SRH16W_58061061Z14.dgn

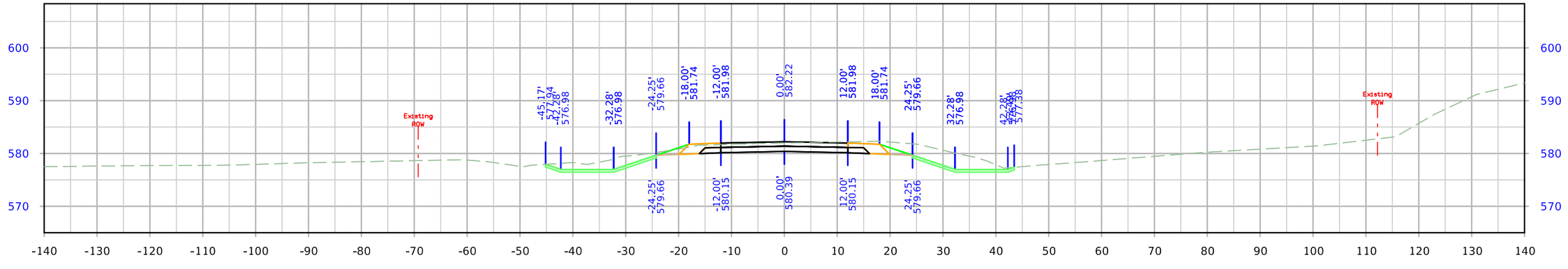
Co Rd H16 (West)



STA. 384+00.00



STA. 383+50.00

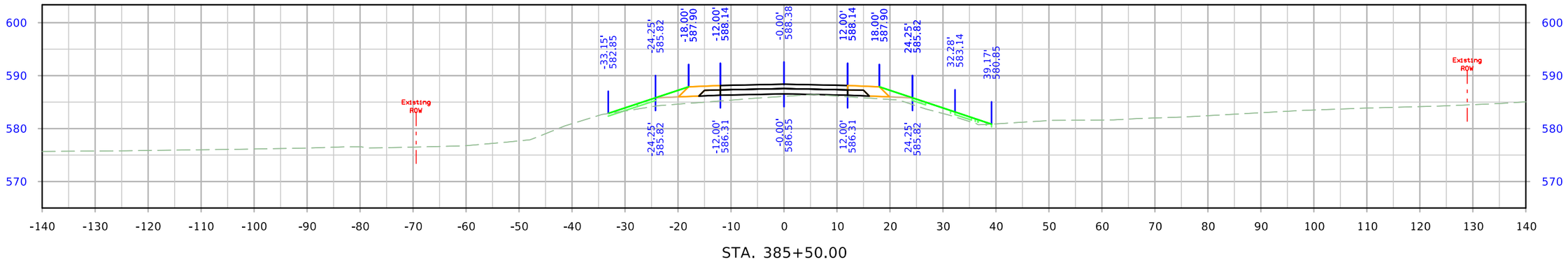


STA. 383+00.00

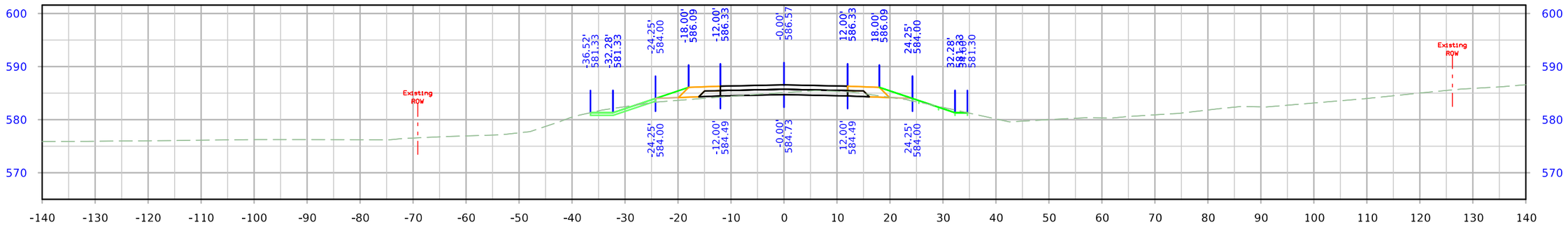
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.301

3:31:42 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X300_SRH16W_58061061Z14.dgn

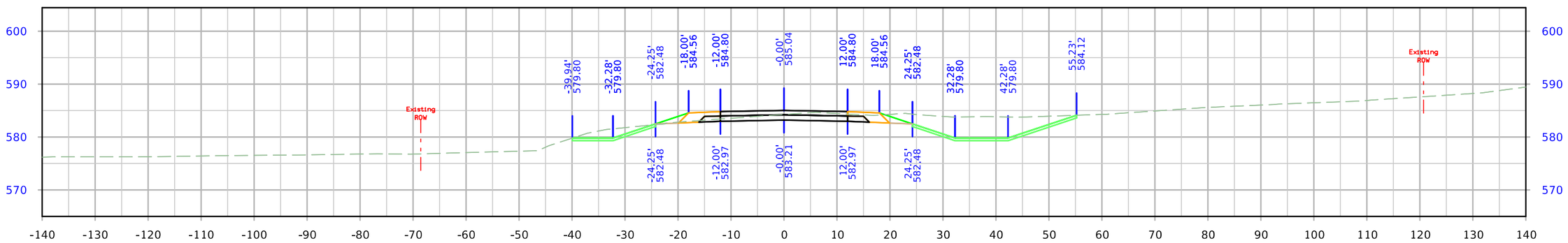
Co Rd H16 (West)



STA. 385+50.00



STA. 385+00.00

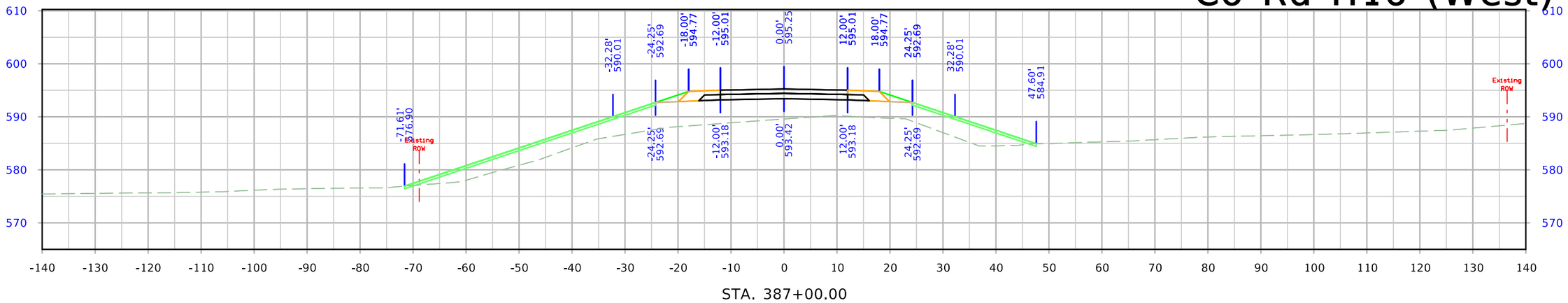


STA. 384+50.00

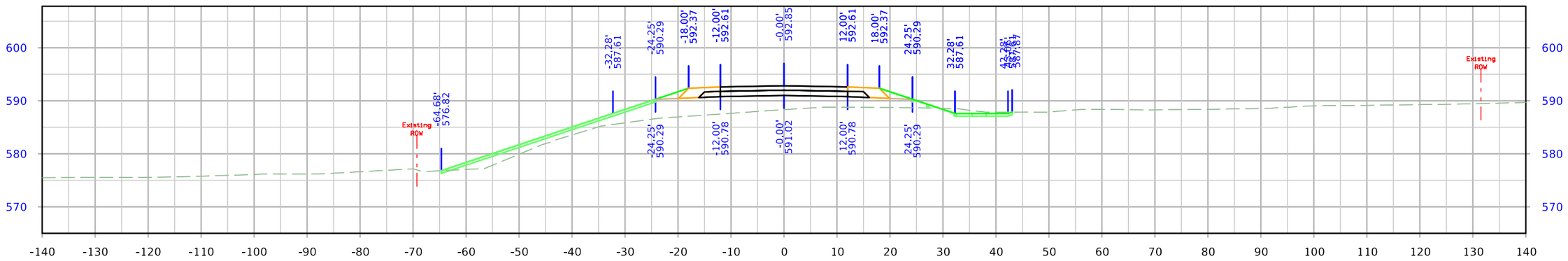
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.302

3:31:43 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X300_SRH16W_58061061Z14.dgn

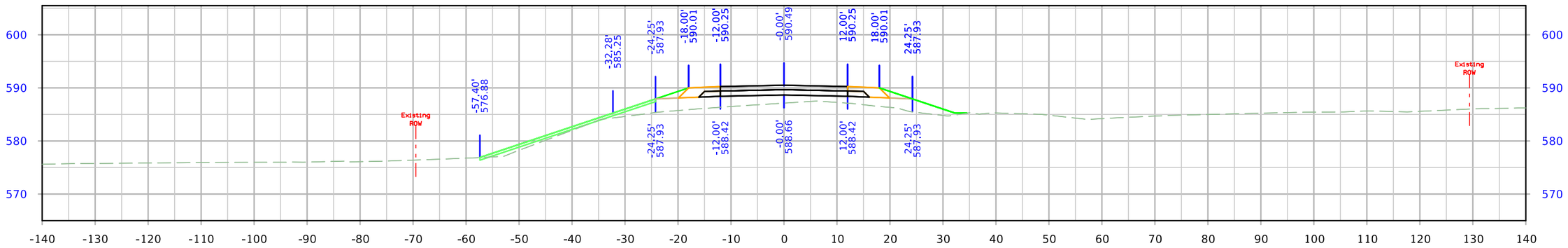
Co Rd H16 (West)



STA. 387+00.00



STA. 386+50.00

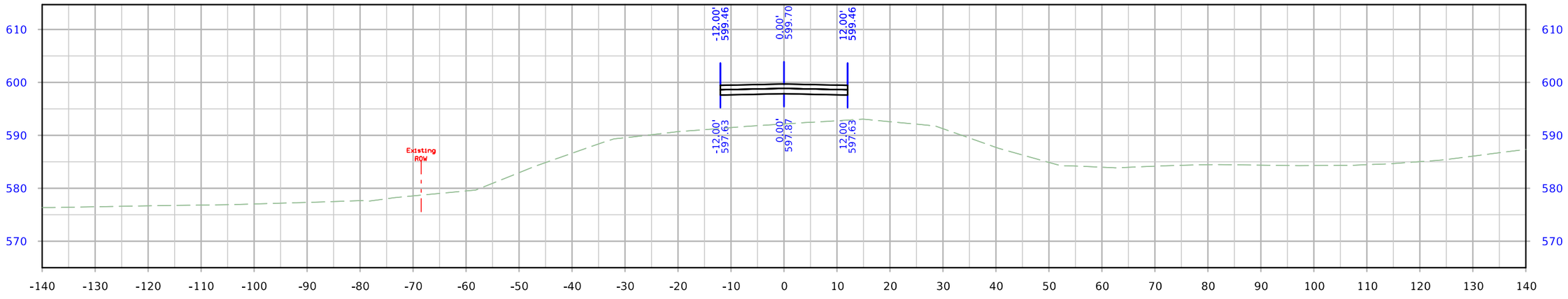


STA. 386+00.00

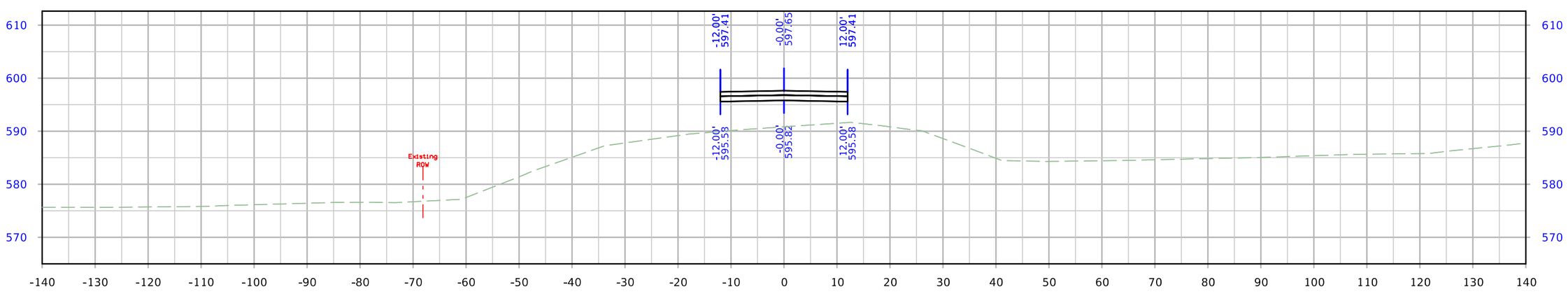
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.303

3:31:44 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X300_SRH16W_58061061Z14.dgn

Co Rd H16 (West)



STA. 388+00.00

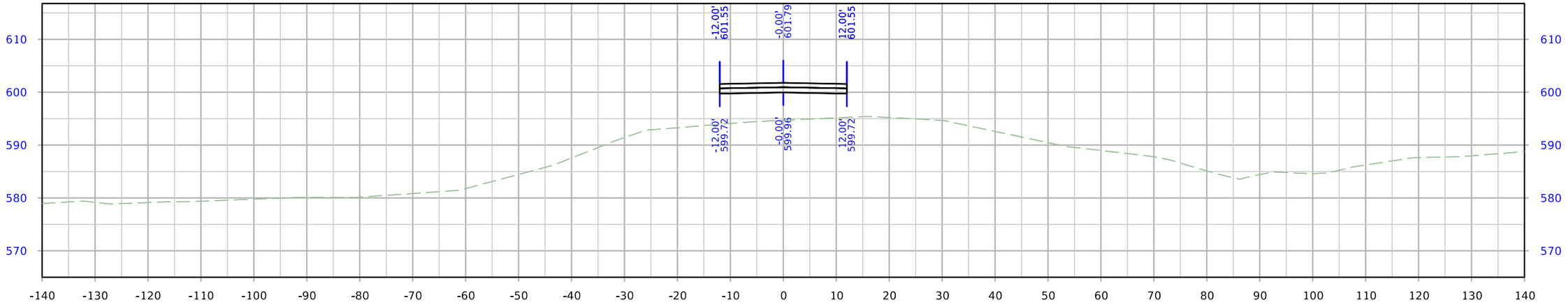


STA. 387+50.00

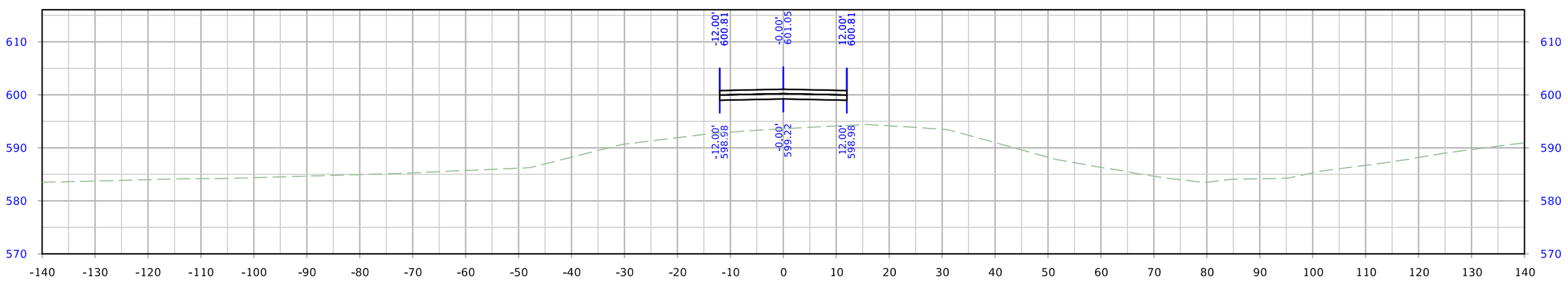
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.304

3:31:44 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X300_SRH16W_58061061Z14.dgn

Co Rd H16 (West)



STA. 388+87.00

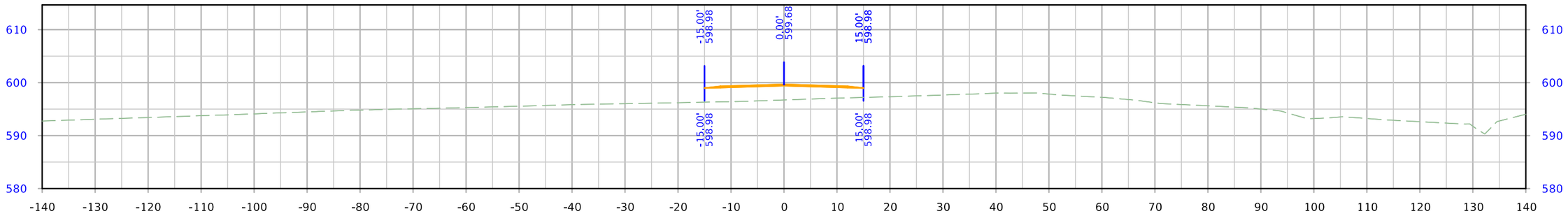


STA. 388+50.00

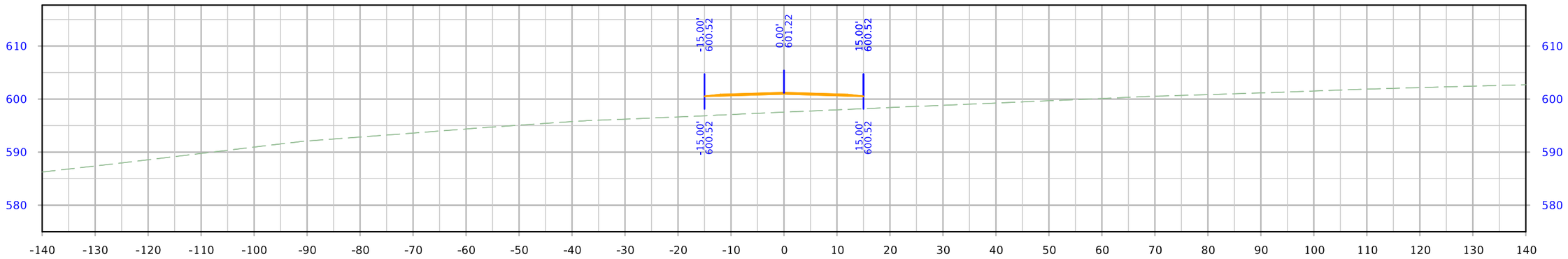
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.305	

3:31:45 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X300_SRH16W_58061061Z14.dgn

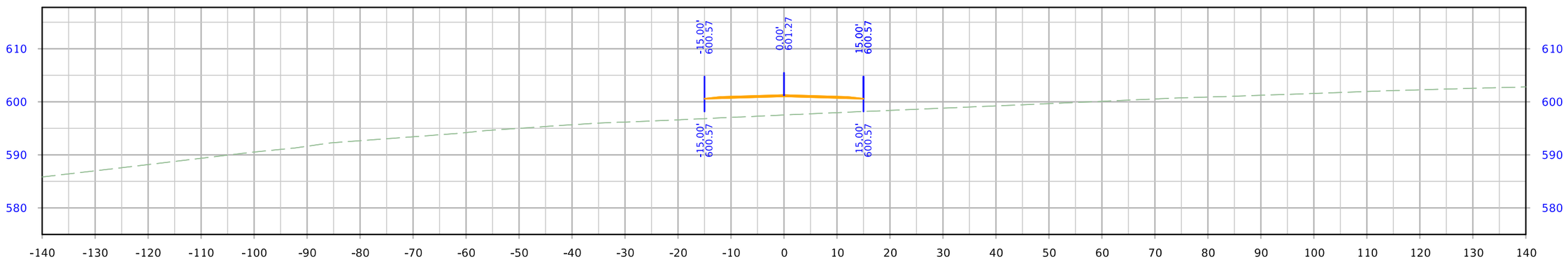
Co Rd H16 (East)



STA. 390+50.00



STA. 390+00.00

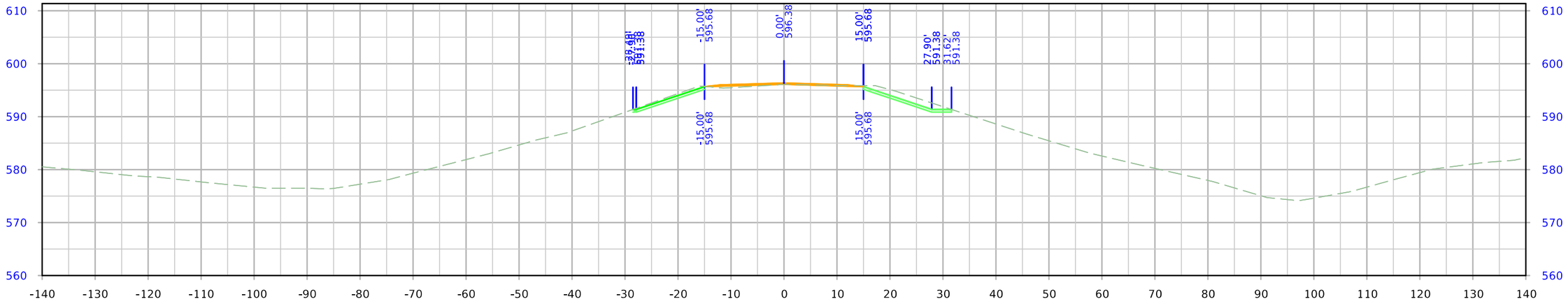


STA. 389+98.16

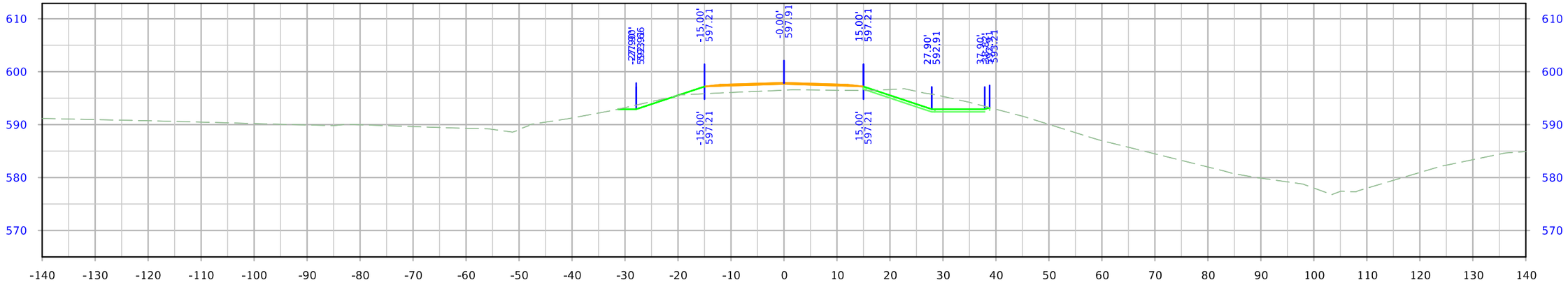
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.400	

3:31:58 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X400_SRH16E_58061061Z14.dgn

Co Rd H16 (East)



STA. 391+50.00

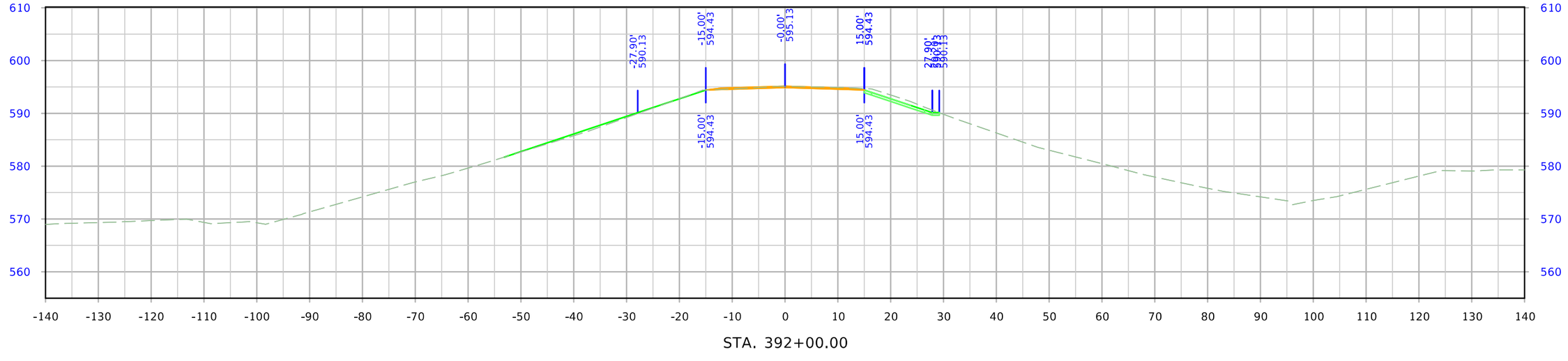


STA. 391+00.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.401

3:31:58 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X400_SRH16E_58061061Z14.dgn

Co Rd H16 (East)

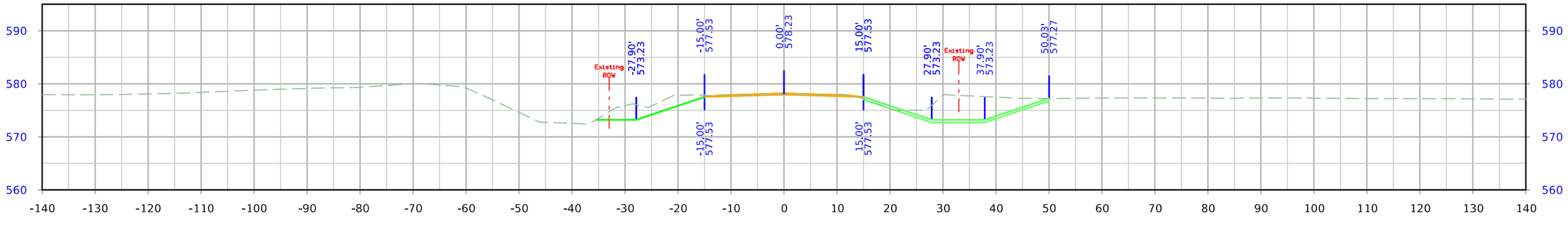


STA. 392+00.00

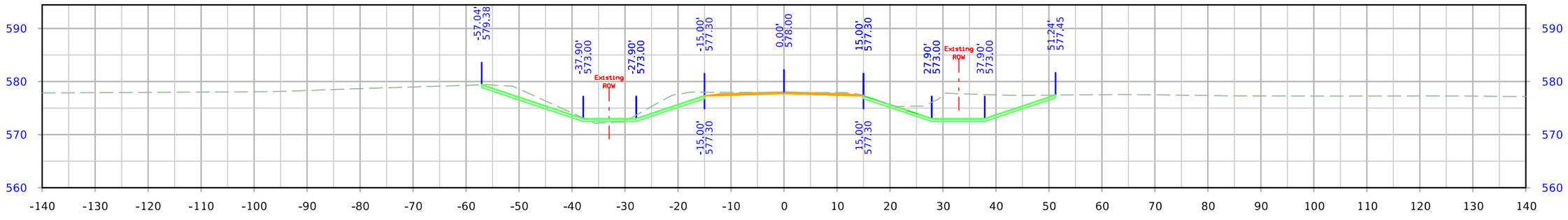
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.402

3:31:59 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X400_SRH16E_58061061Z14.dgn

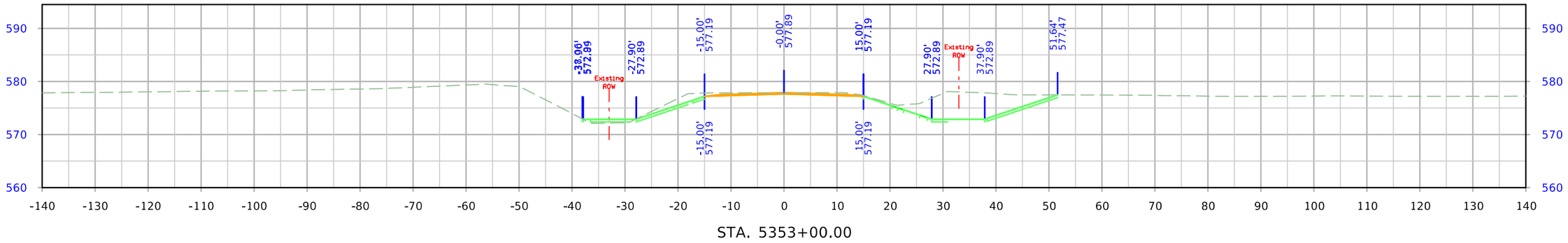
K Ave



STA. 5354+00.00



STA. 5353+50.00

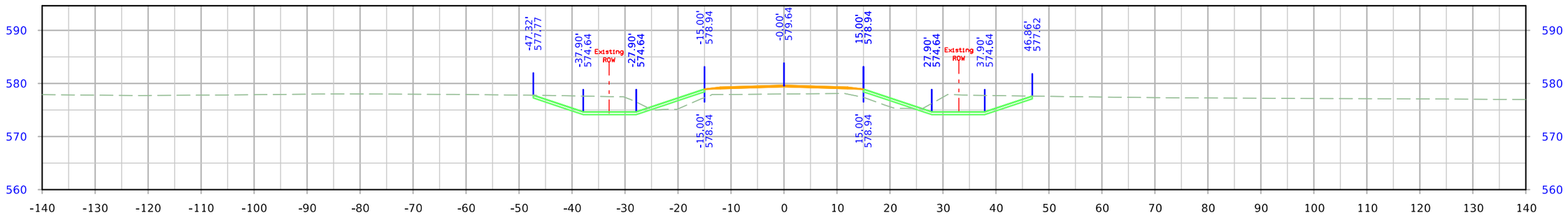


STA. 5353+00.00

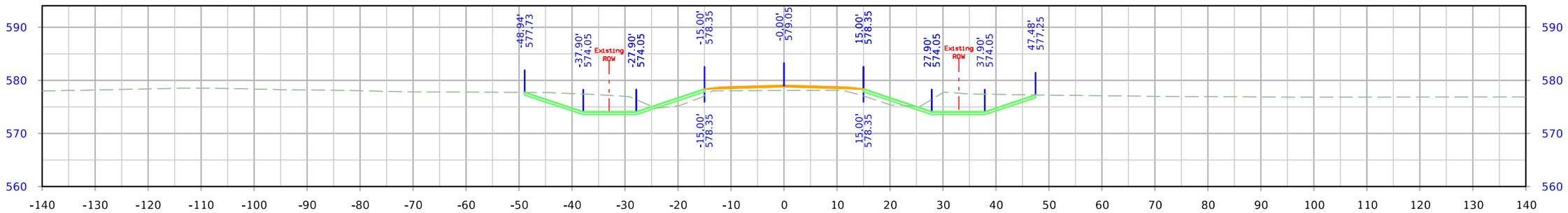
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.700

3:32:12 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X700_SRKAve_58061061Z14.dgn

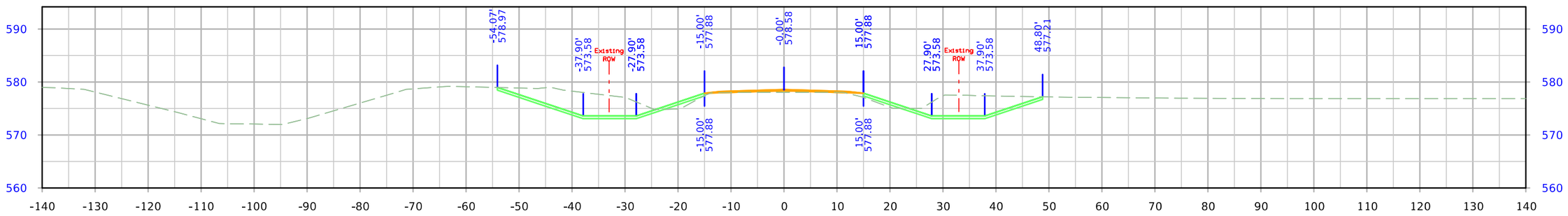
K Ave



STA. 5355+50.00



STA. 5355+00.00

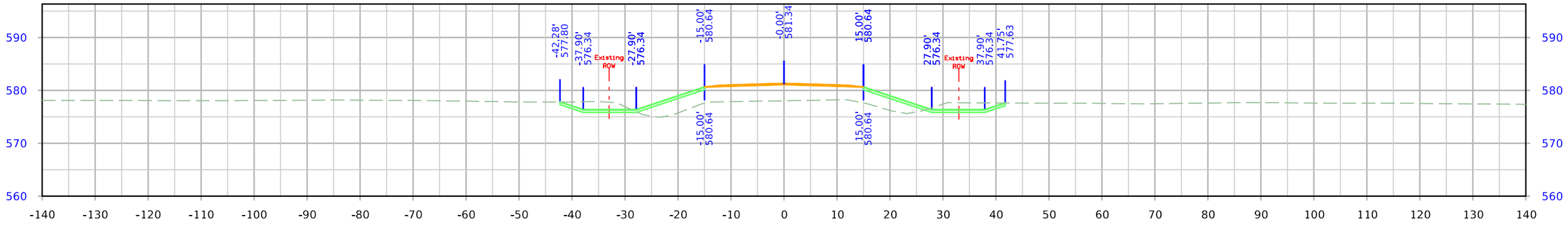


STA. 5354+50.00

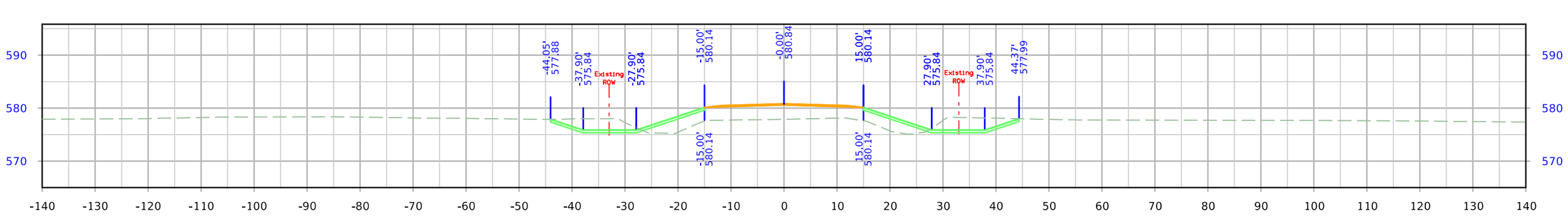
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.701

3:32:12 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X700_SRKAve_58061061Z14.dgn

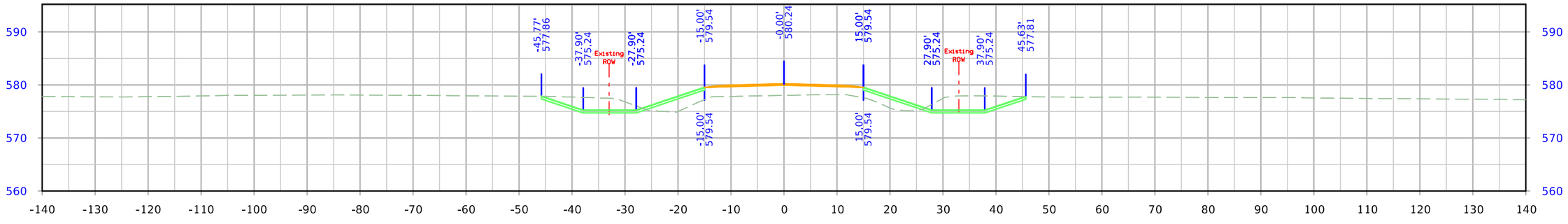
K Ave



STA. 5357+00.00



STA. 5356+50.00

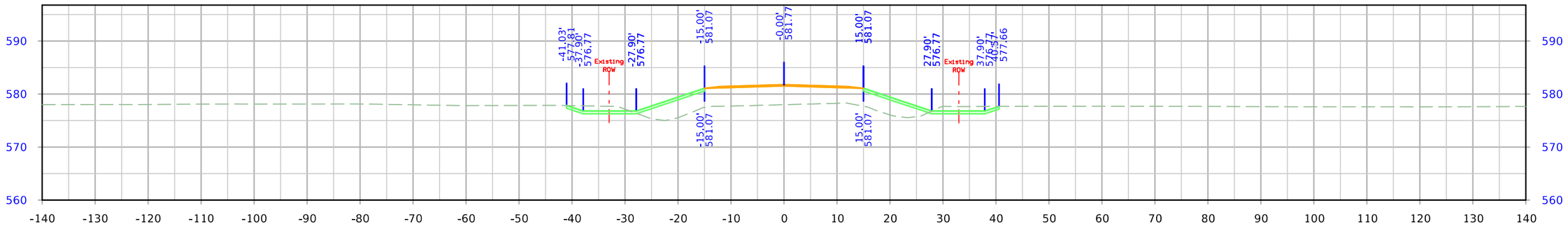


STA. 5356+00.00

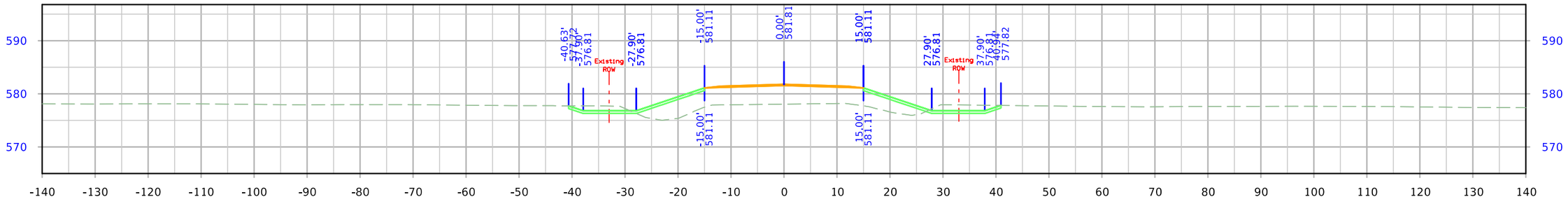
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.702

3:32:13 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X700_SRKAve_58061061Z14.dgn

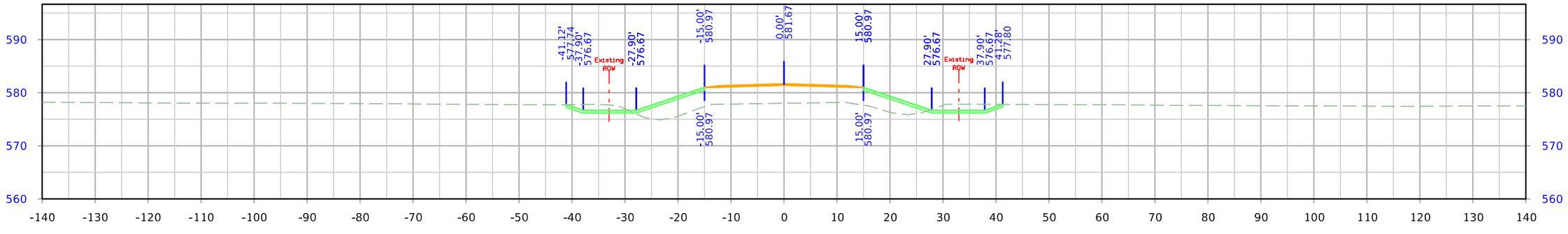
K Ave



STA. 5358+50.00



STA. 5358+00.00

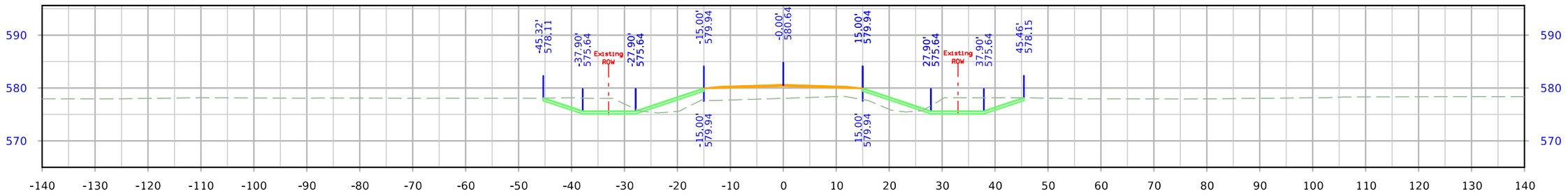


STA. 5357+50.00

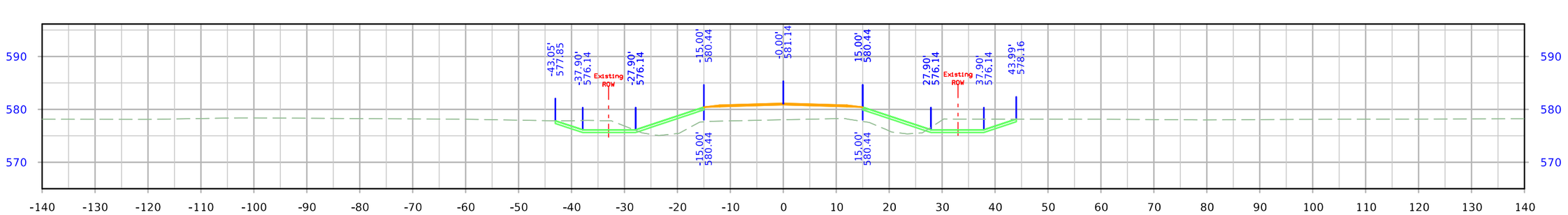
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.703

3:32:14 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X700_SRKAve_58061061Z14.dgn

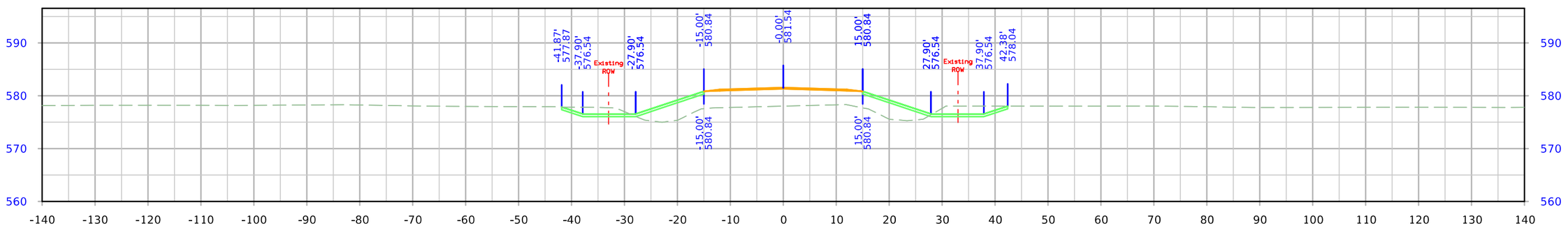
K Ave



STA. 5360+00.00



STA. 5359+50.00

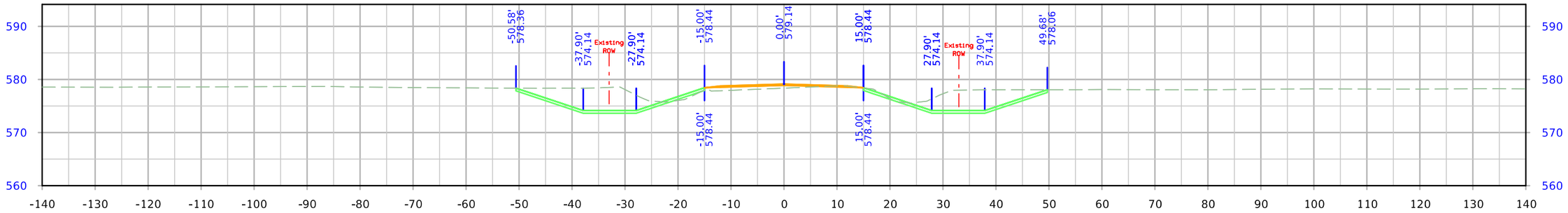


STA. 5359+00.00

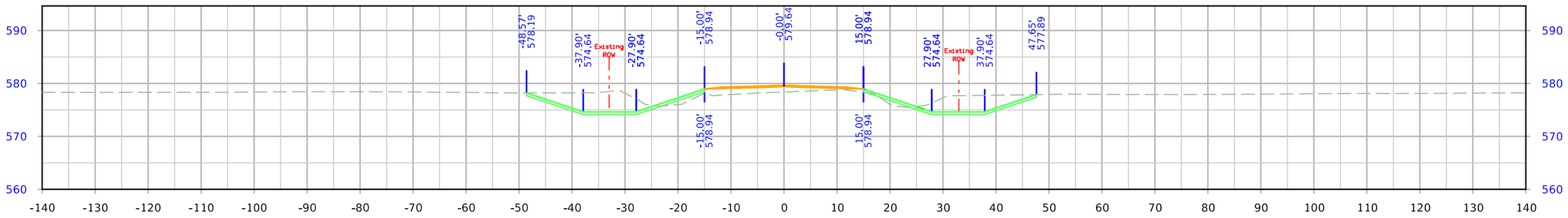
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.704

3:32:14 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X700_SRKAve_58061061Z14.dgn

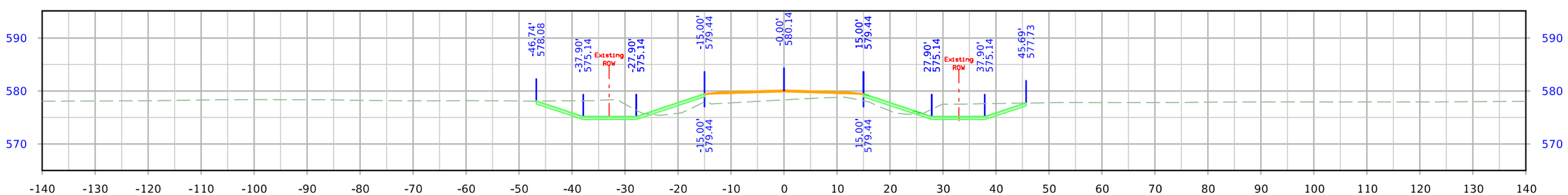
K Ave



STA. 5361+50.00



STA. 5361+00.00

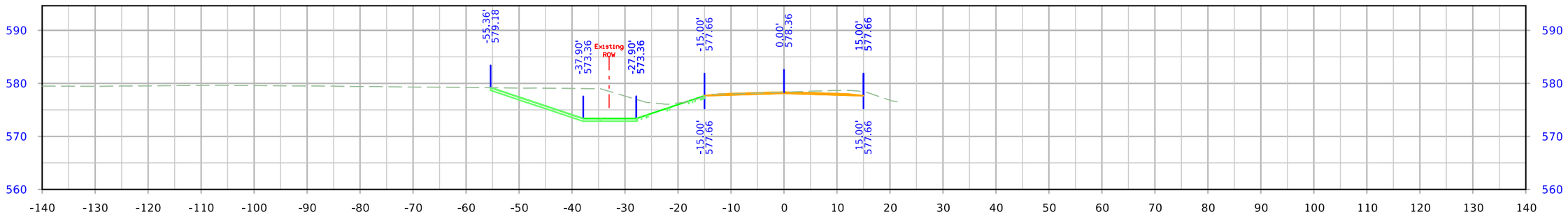


STA. 5360+50.00

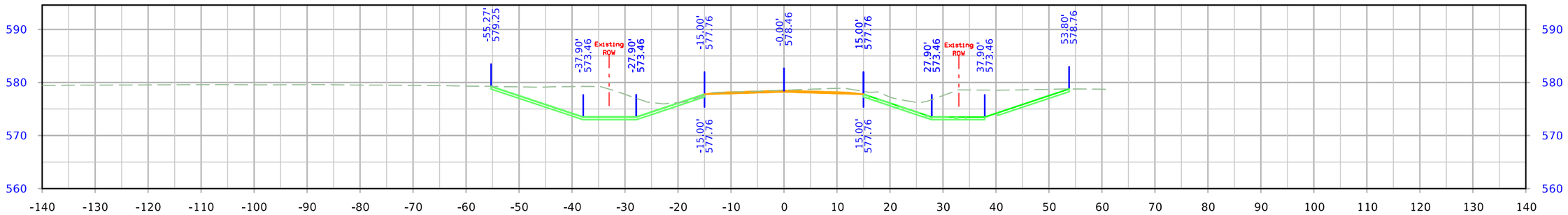
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.705

3:32:15 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X700_SRKAve_58061061Z14.dgn

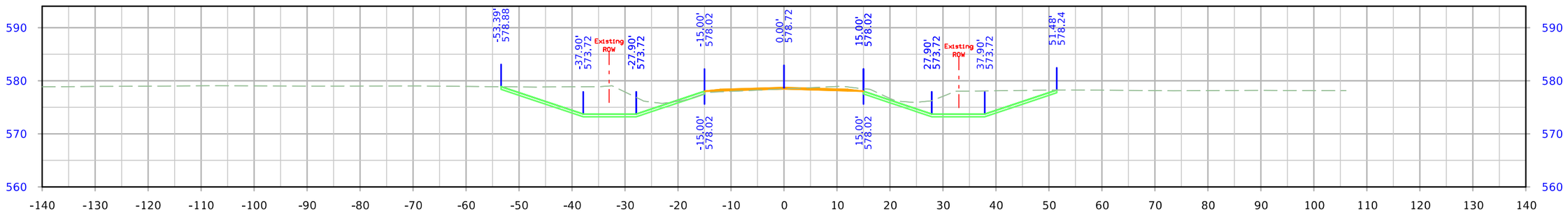
K Ave



STA. 5363+00.00



STA. 5362+50.00

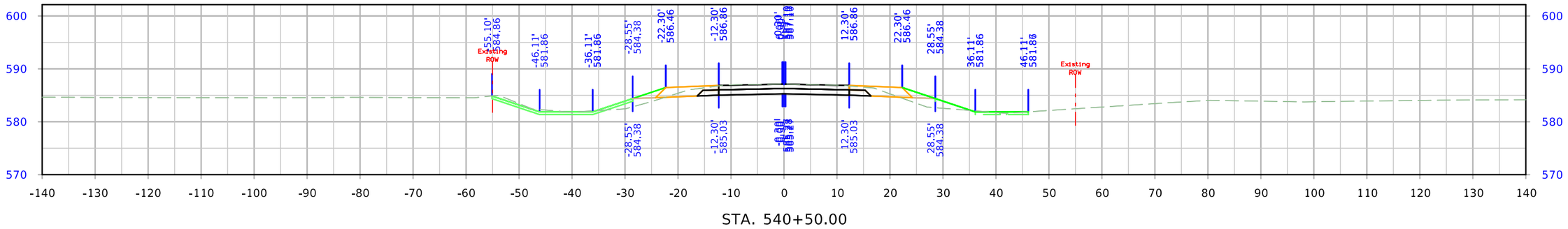


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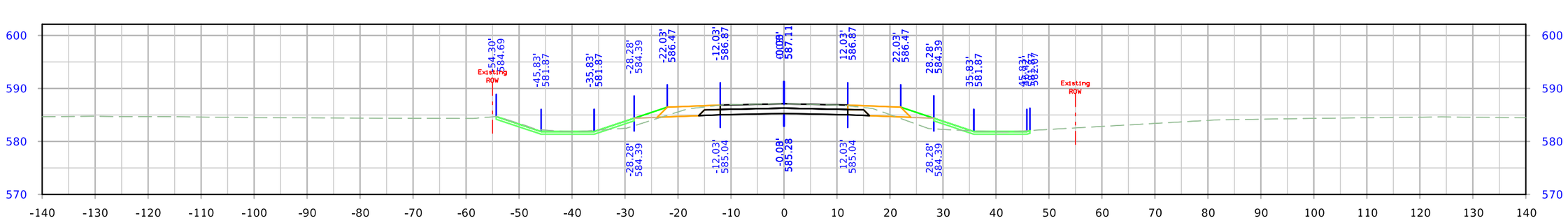
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.706

3:32:16 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X700_SRKAve_58061061Z14.dgn

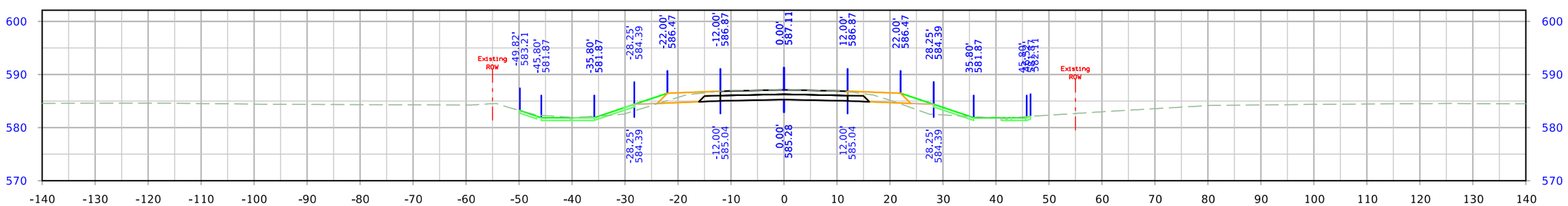
Co Rd G62



STA. 540+50.00



STA. 540+00.00

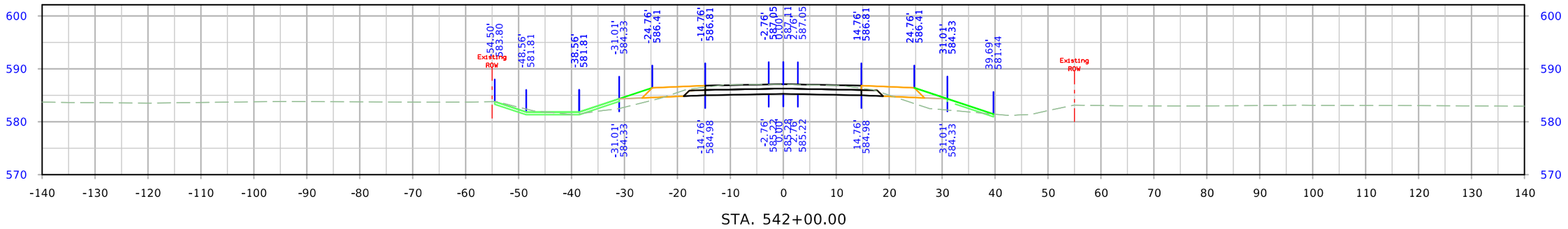


STA. 539+75.00

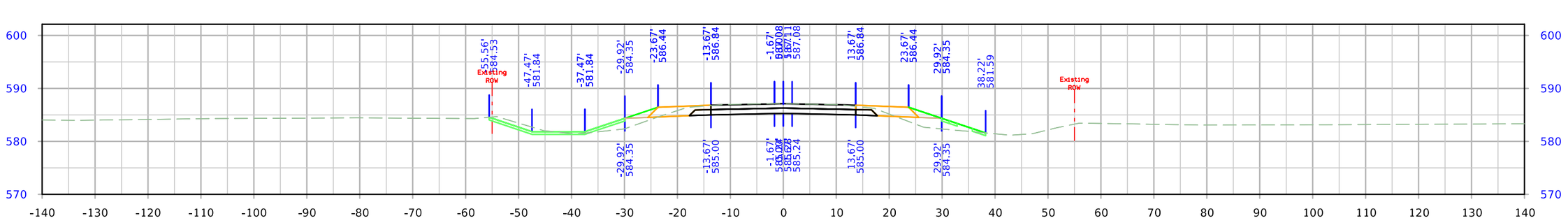
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.900

3:32:29 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

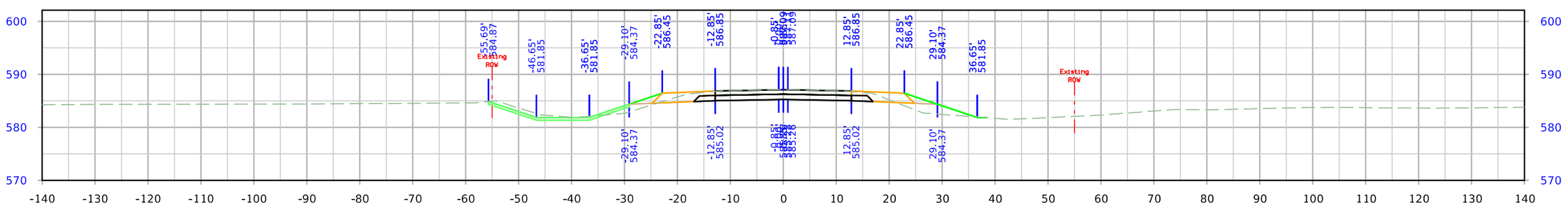
Co Rd G62



STA. 542+00.00



STA. 541+50.00

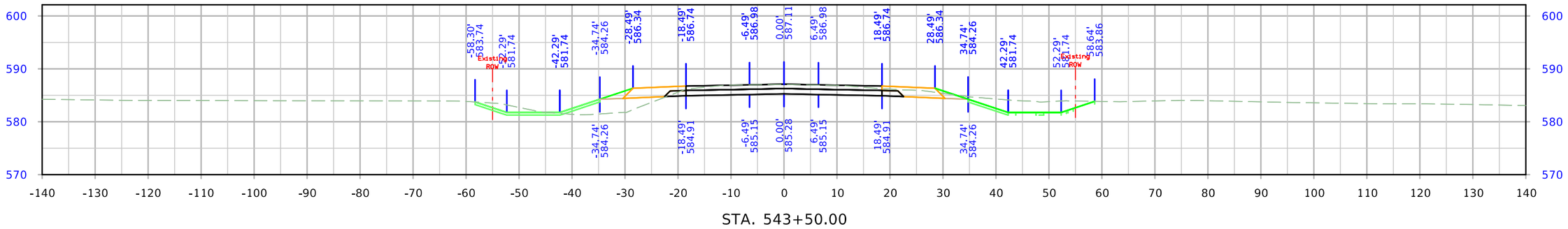


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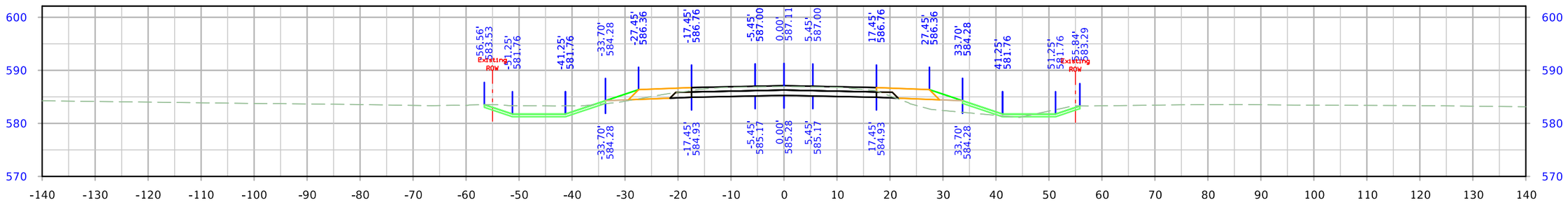
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3:32:30 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

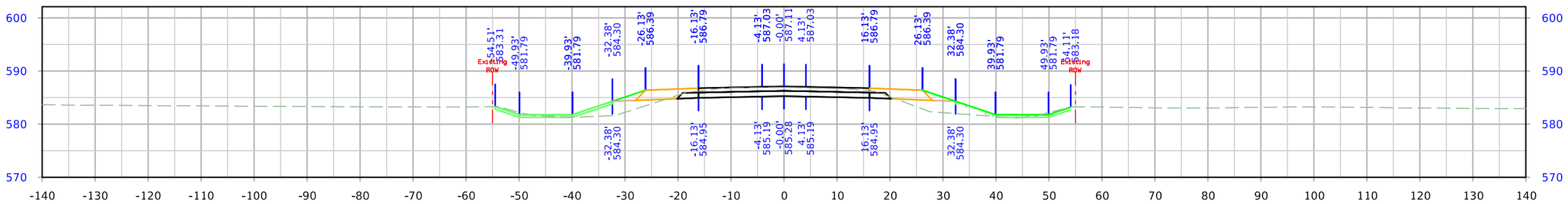
Co Rd G62



STA. 543+50.00



STA. 543+00.00

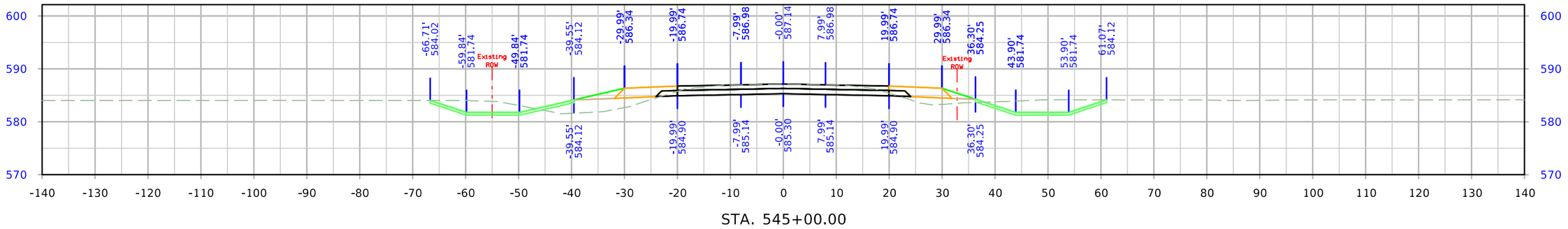


STA. 542+50.00

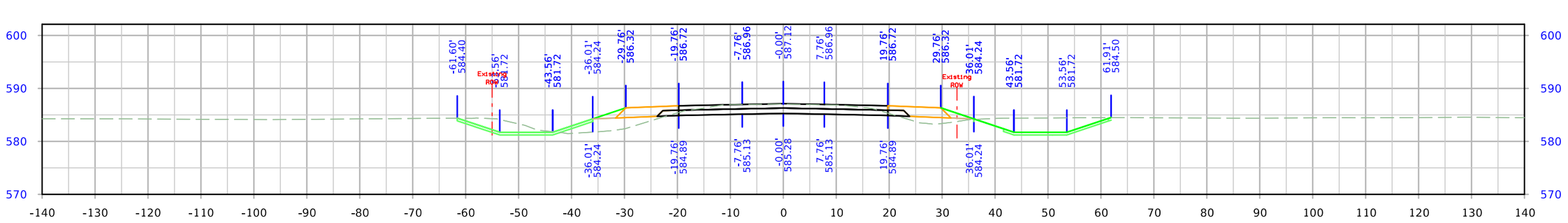
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.902

3:32:31 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

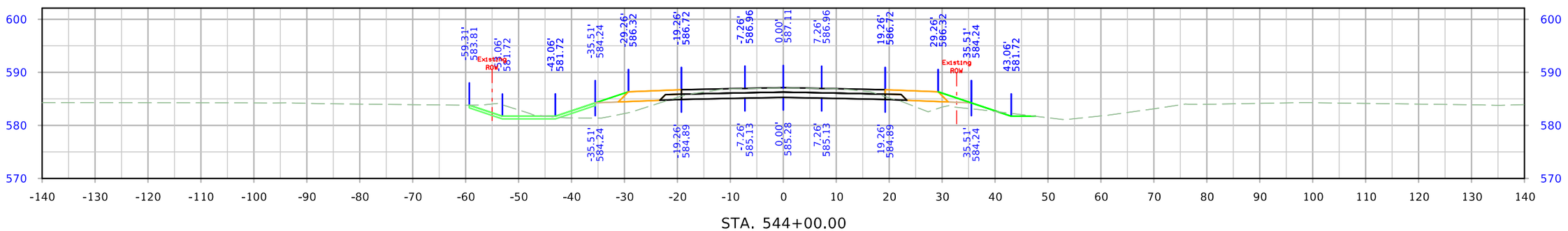
Co Rd G62



STA. 545+00.00



STA. 544+50.00

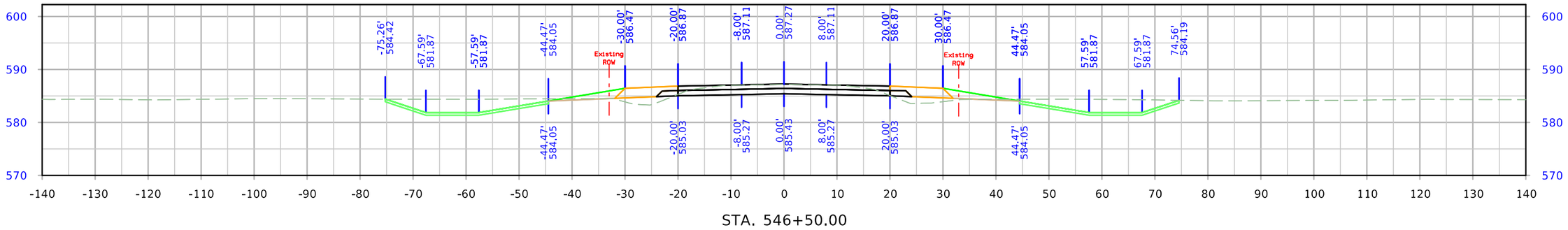


STA. 544+00.00

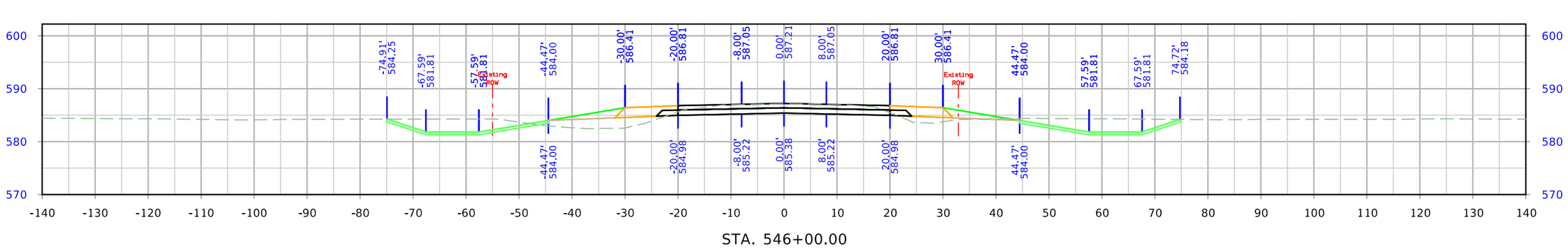
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.903

3:32:32 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

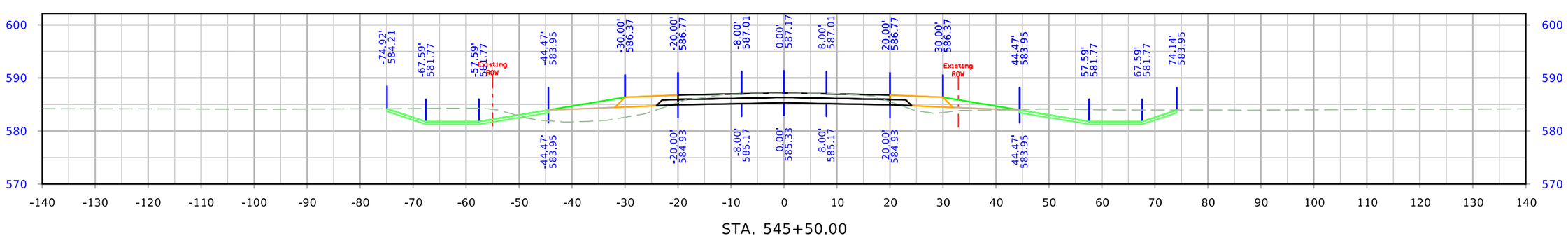
Co Rd G62



STA. 546+50.00



STA. 546+00.00

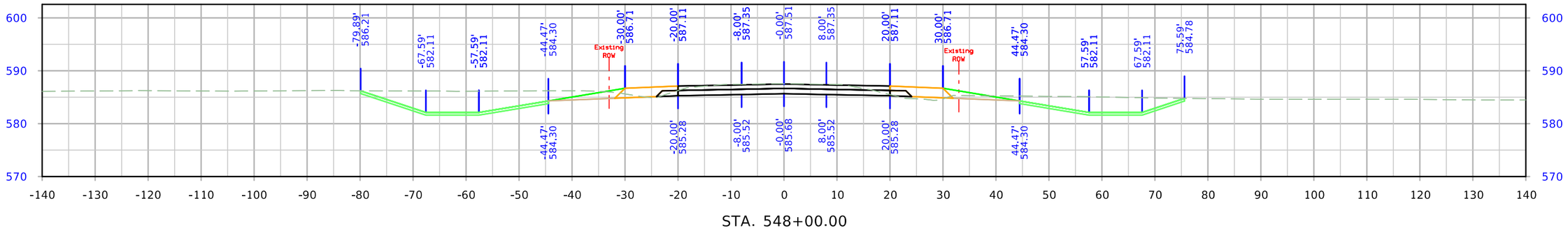


STA. 545+50.00

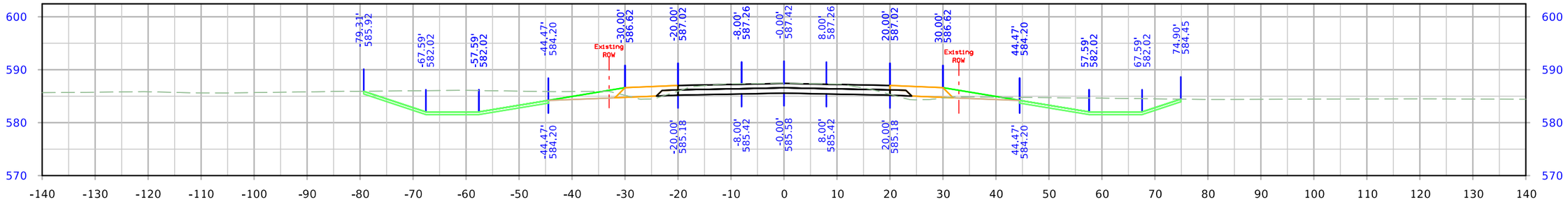
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.904

3:32:33 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

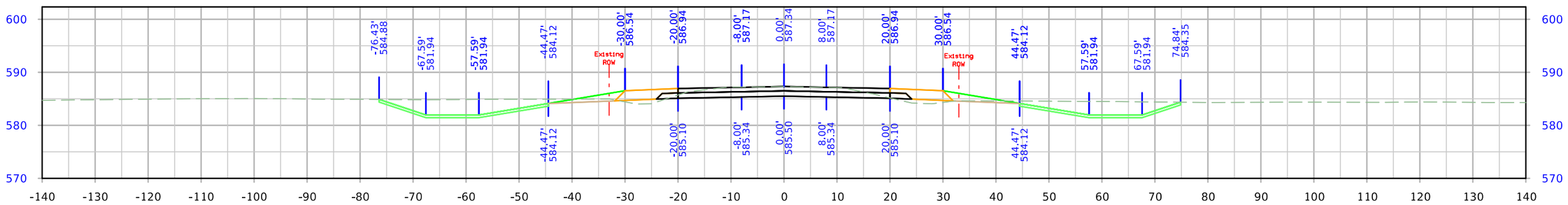
Co Rd G62



STA. 548+00.00



STA. 547+50.00

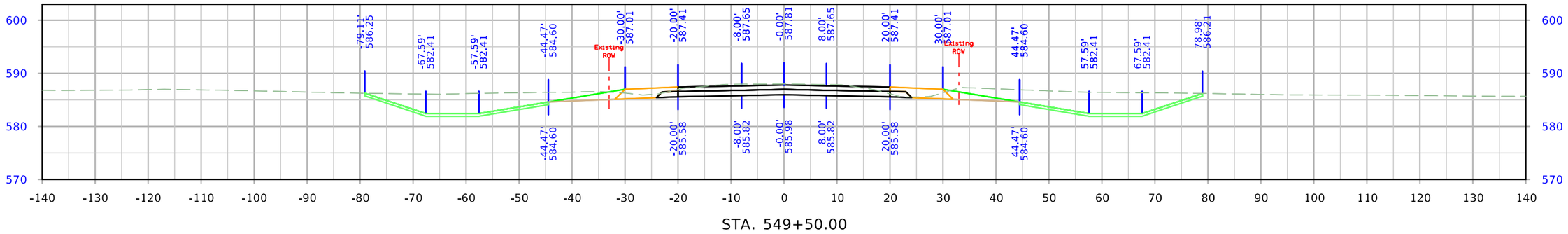


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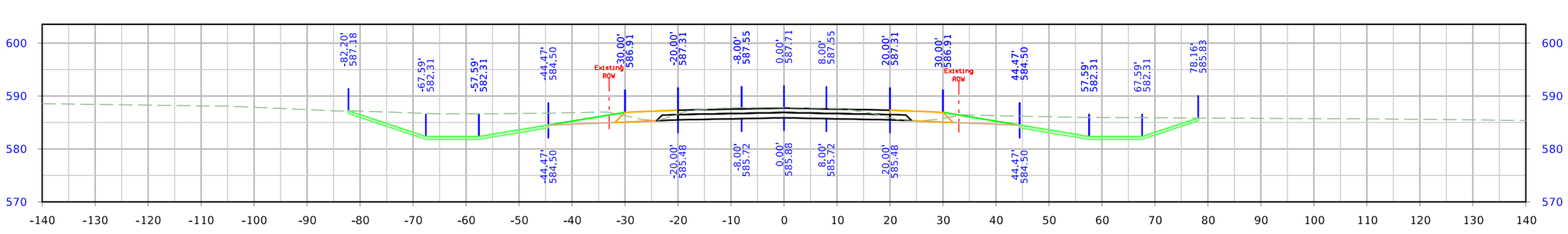
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.905

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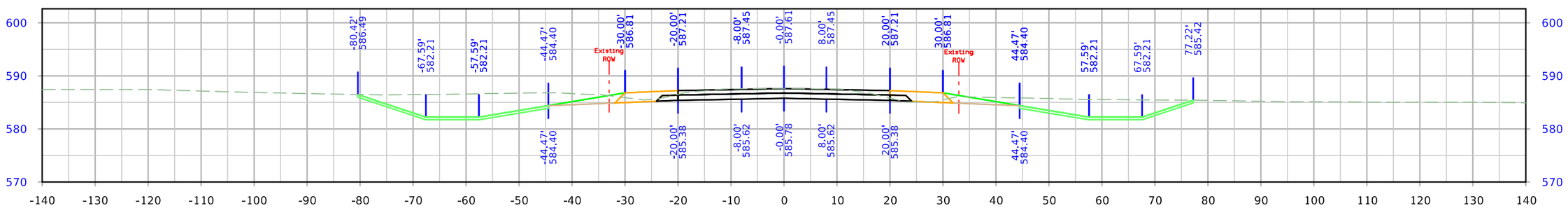
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STA. 549+50.00



STA. 549+00.00

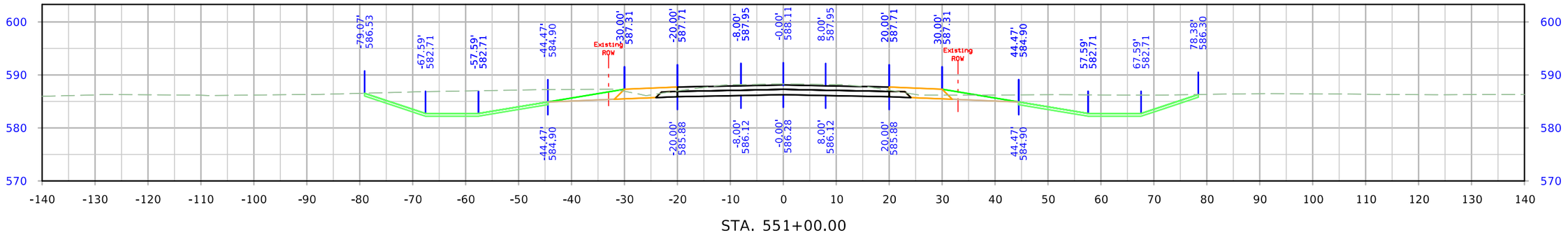


STA. 548+50.00

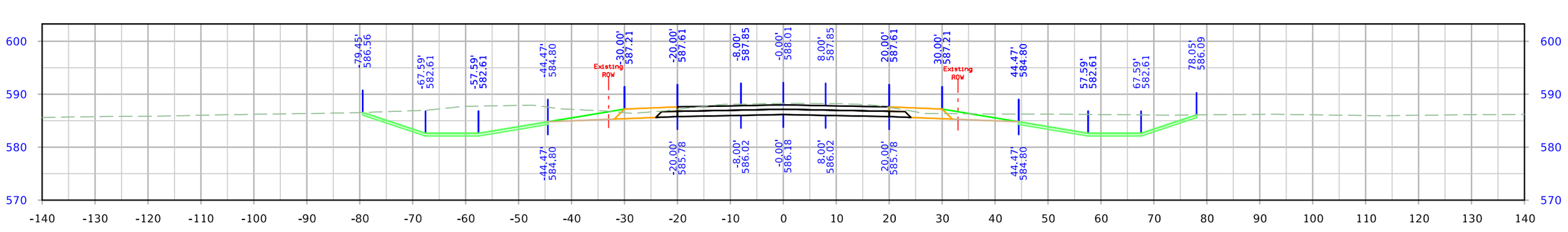
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.906

3:32:34 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

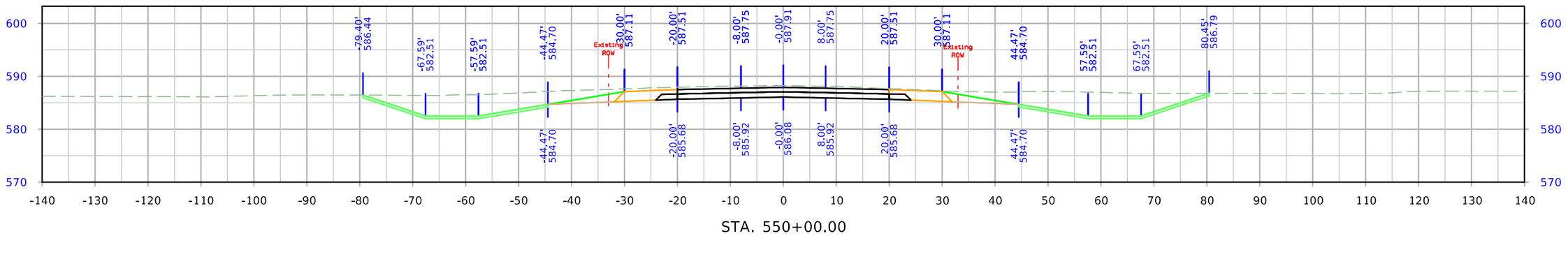
Co Rd G62



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STA. 550+50.00

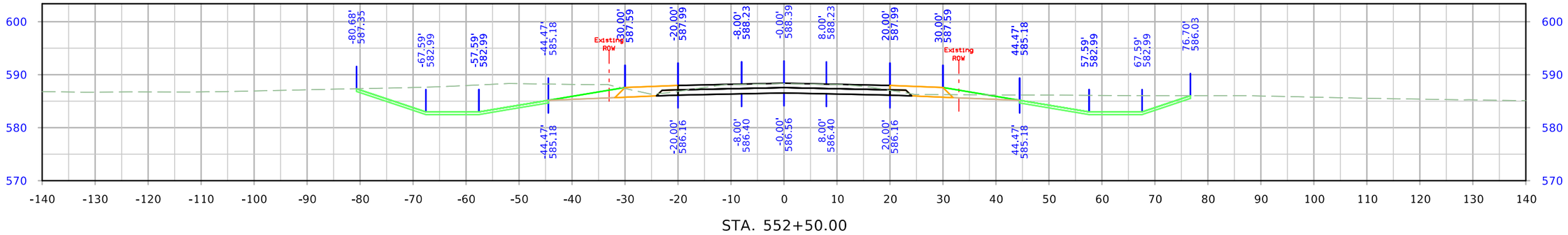


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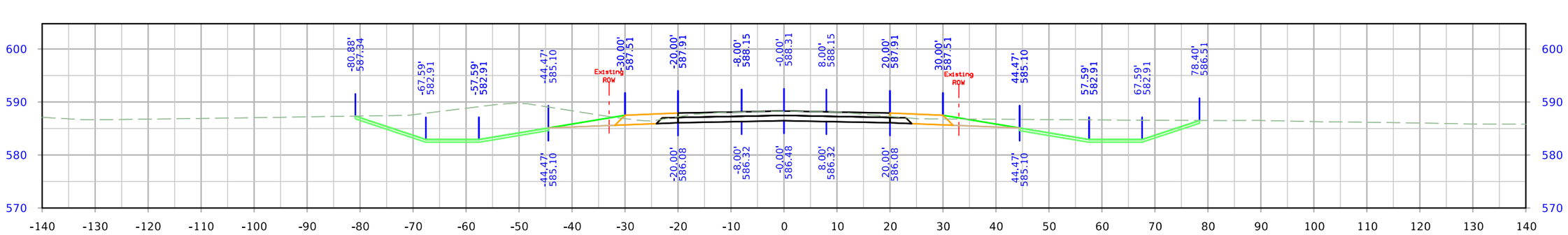
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.907

3:32:35 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

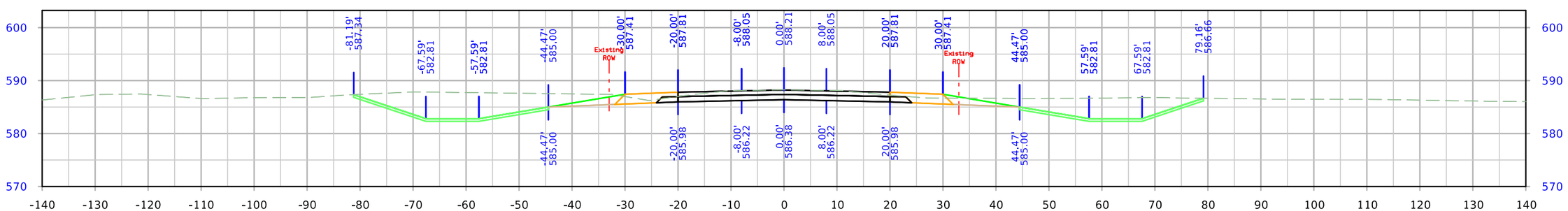
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STA. 552+50.00



STA. 552+00.00

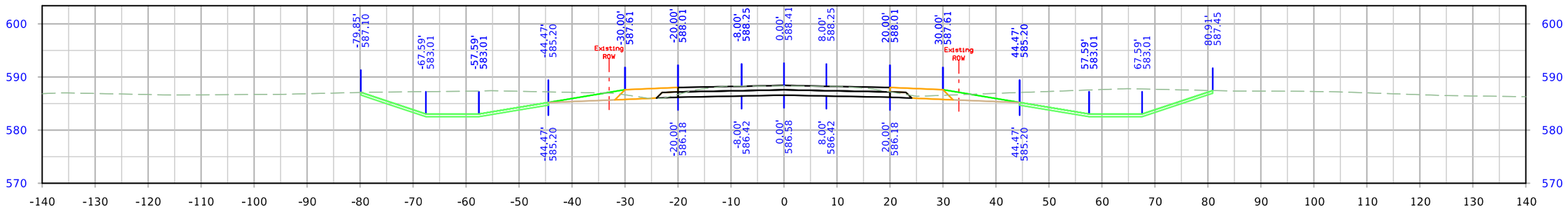


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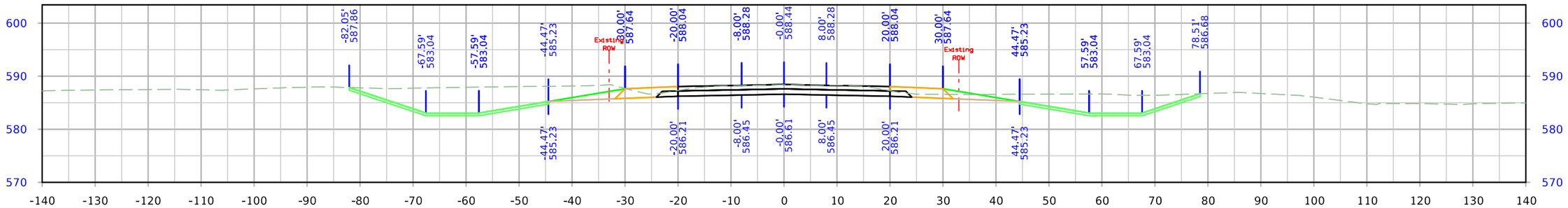
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3:32:36 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

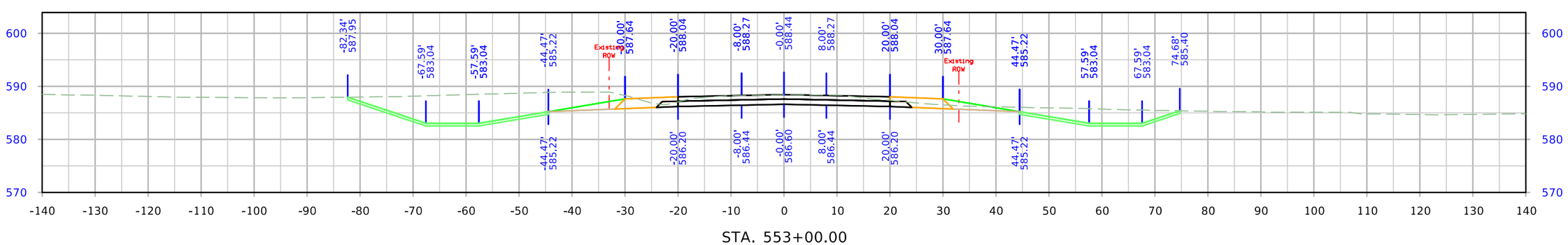
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STA. 554+00.00



STA. 553+50.00

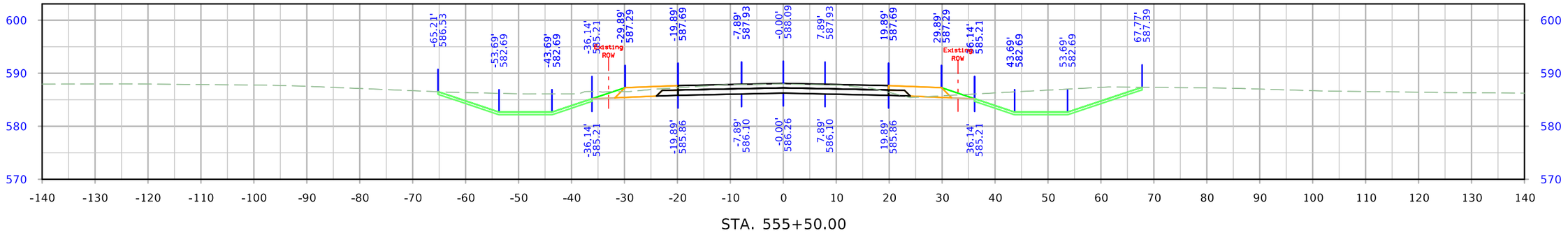


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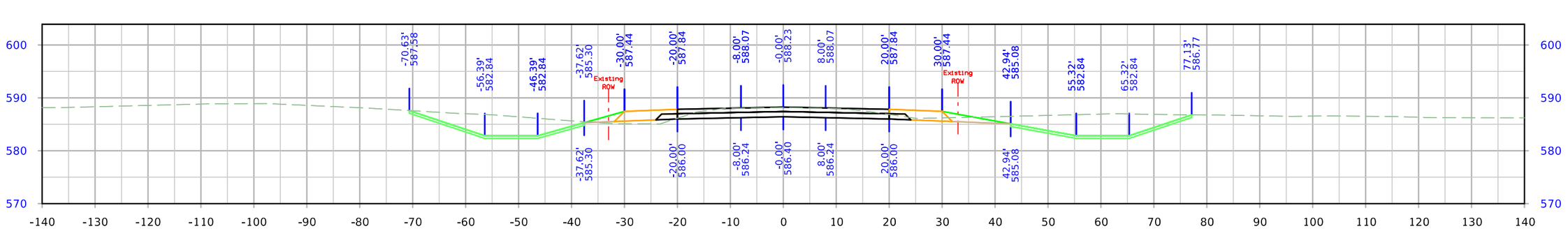
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.909

3:32:37 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

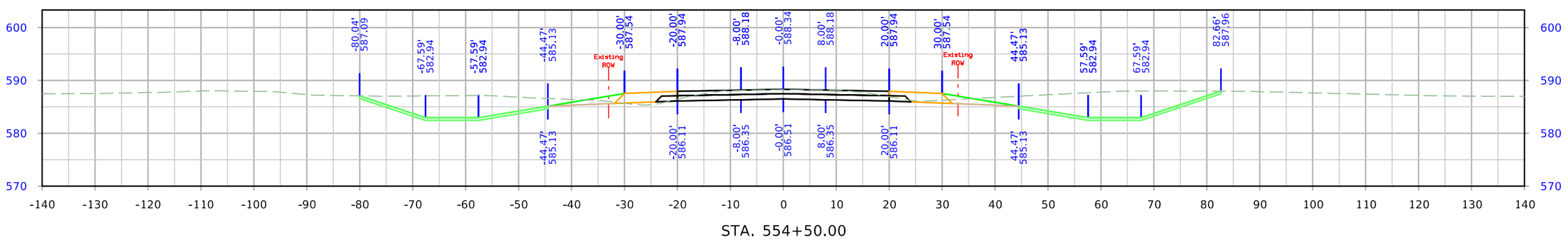
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STA. 555+50.00



STA. 555+00.00

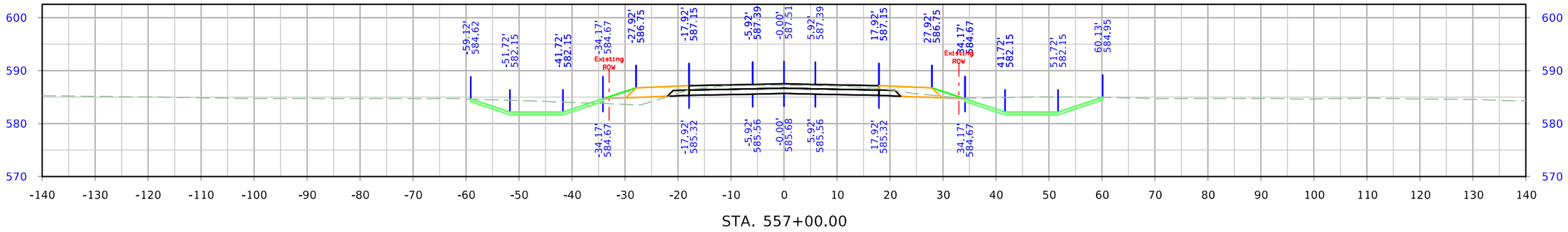


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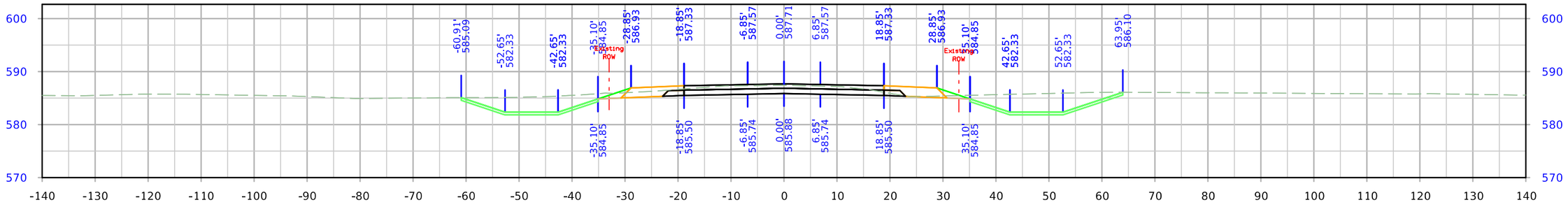
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3:32:38 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

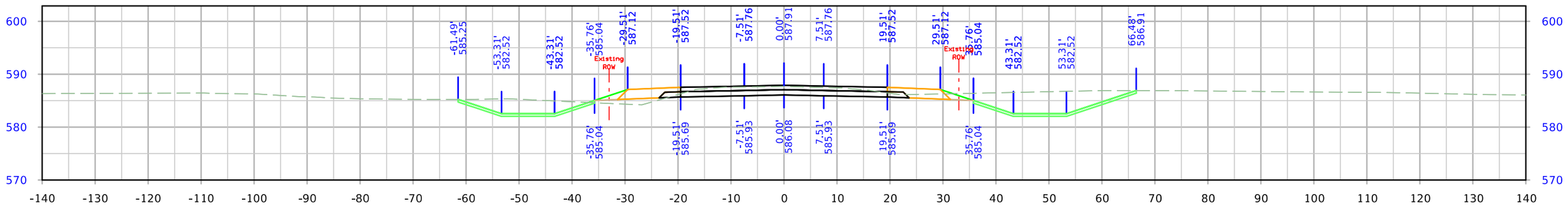
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STA. 557+00.00



STA. 556+50.00

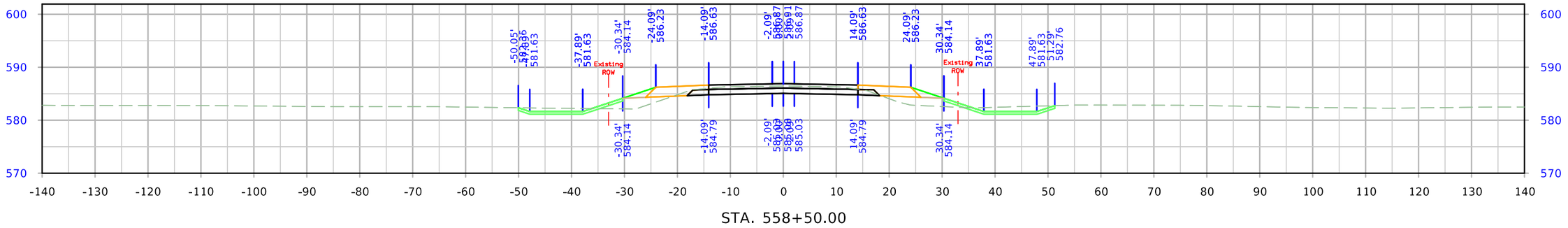


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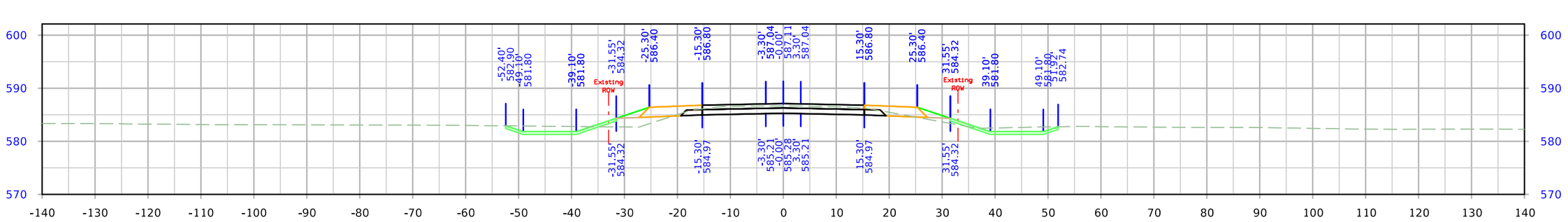
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.911

3:32:39 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

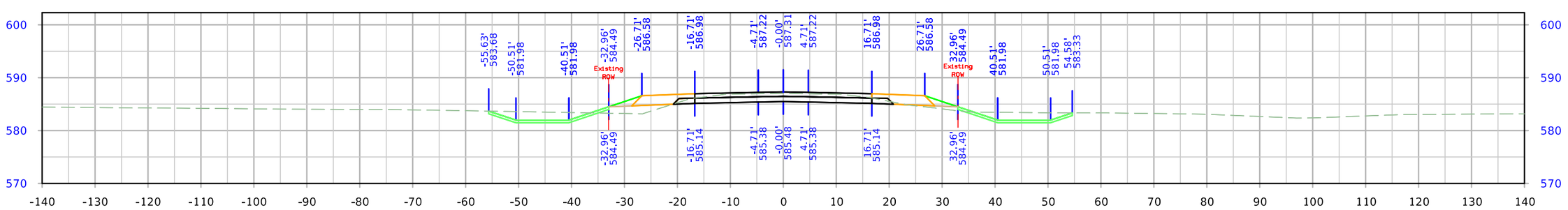
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STA. 558+50.00



STA. 558+00.00

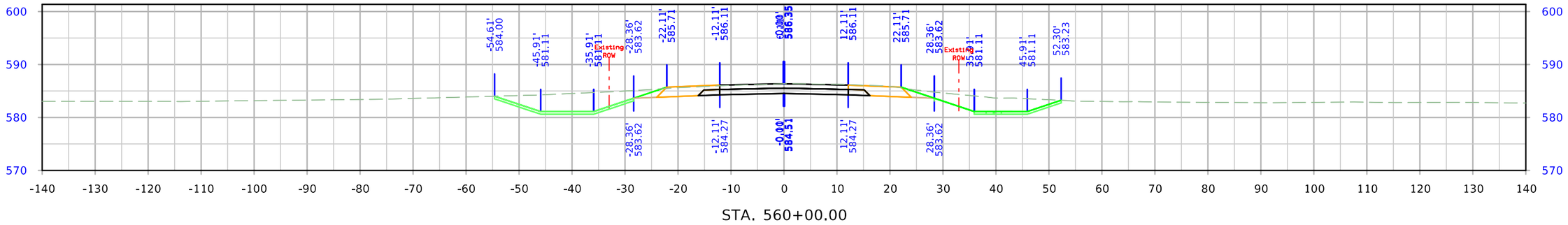


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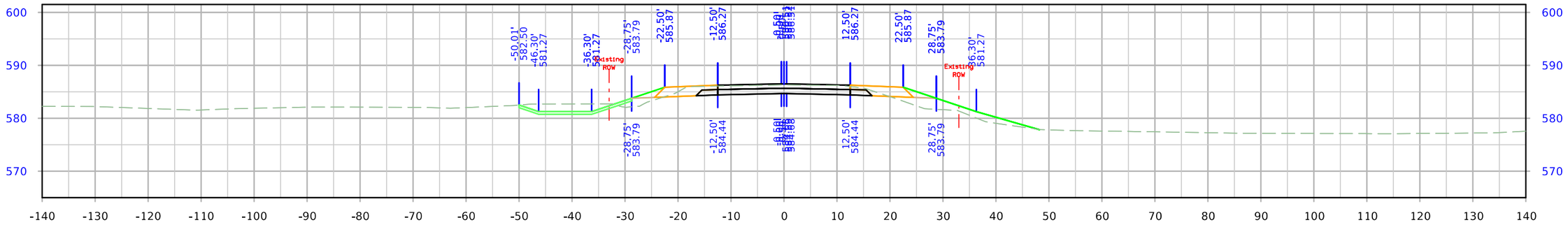
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.912

3:32:40 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

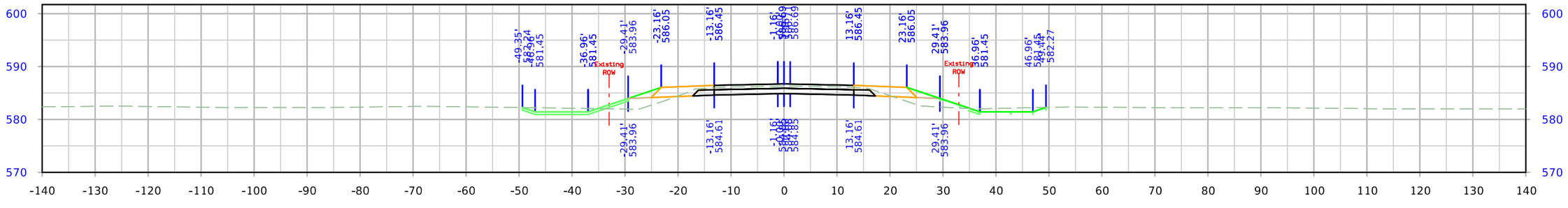
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STA. 560+00.00



STA. 559+50.00

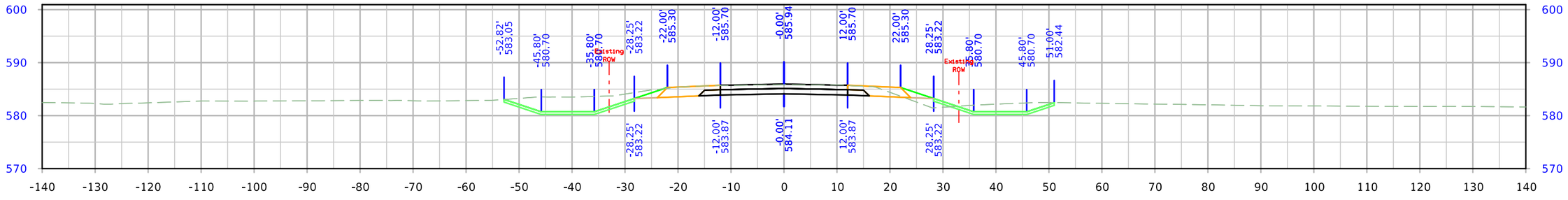


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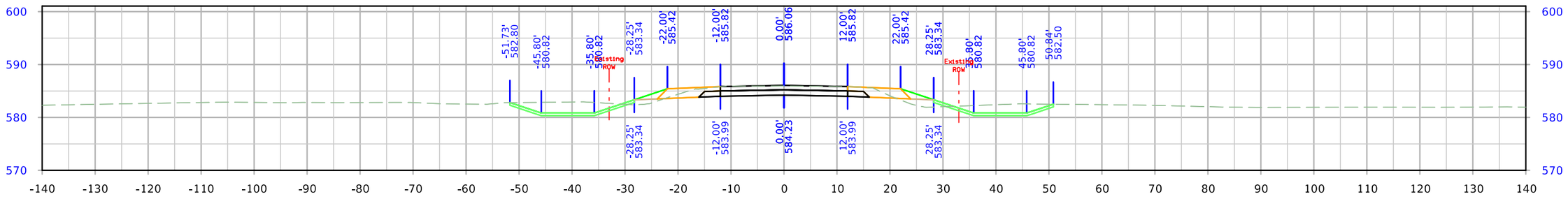
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.913

3:32:41 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

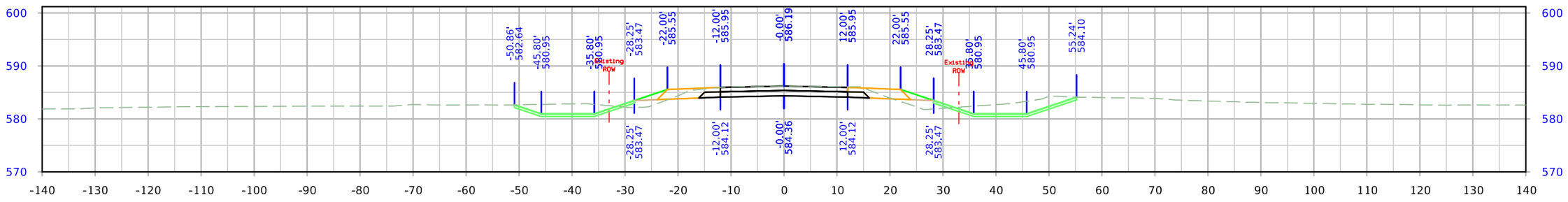
Co Rd G62



STA. 561+50.00



STA. 561+00.00

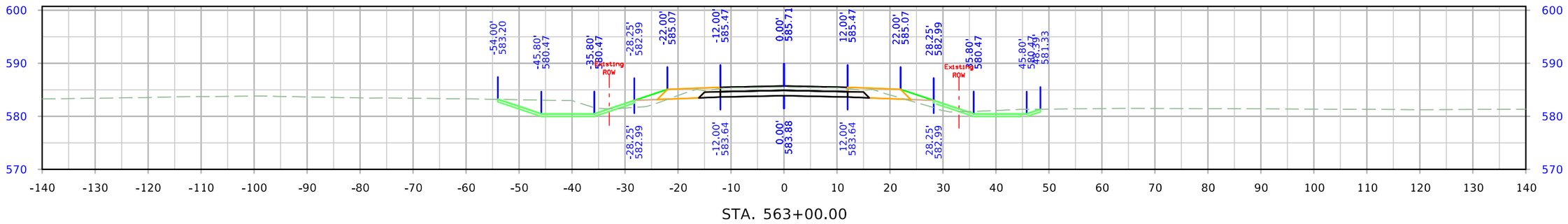


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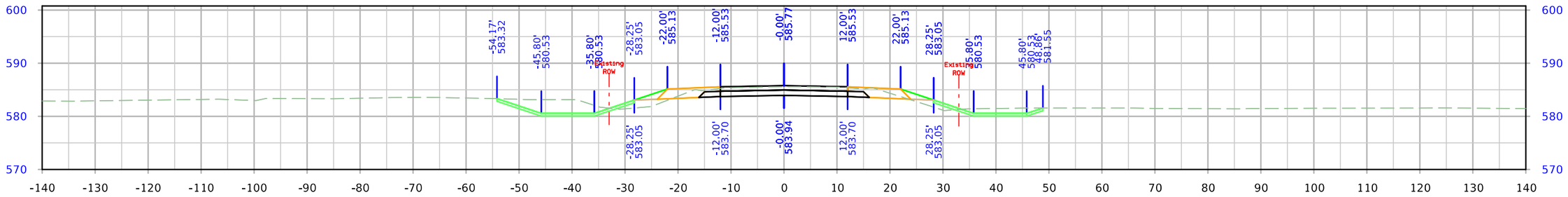
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.914

3:32:42 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

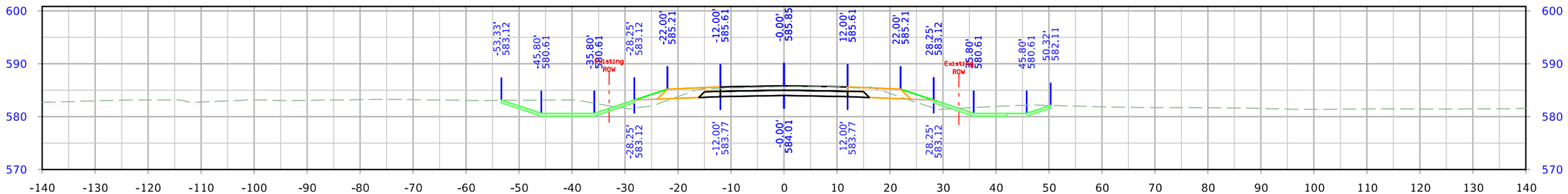
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STA. 563+00.00



STA. 562+50.00

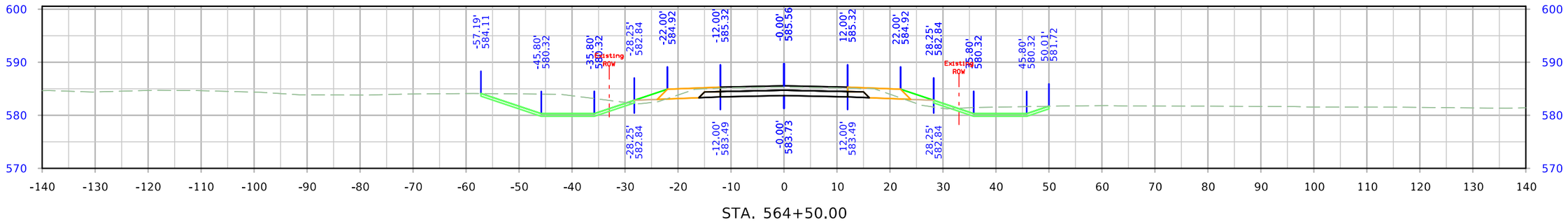


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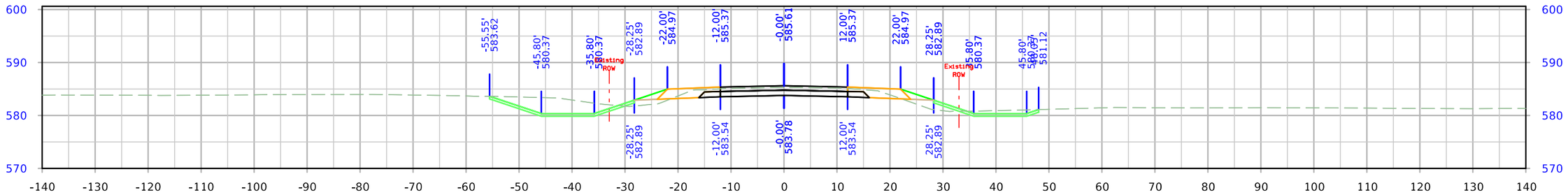
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3:32:43 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

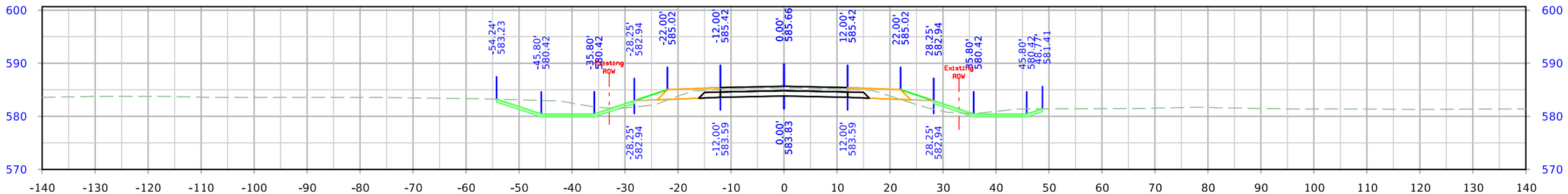
Co Rd G62



STA. 564+50.00



STA. 564+00.00

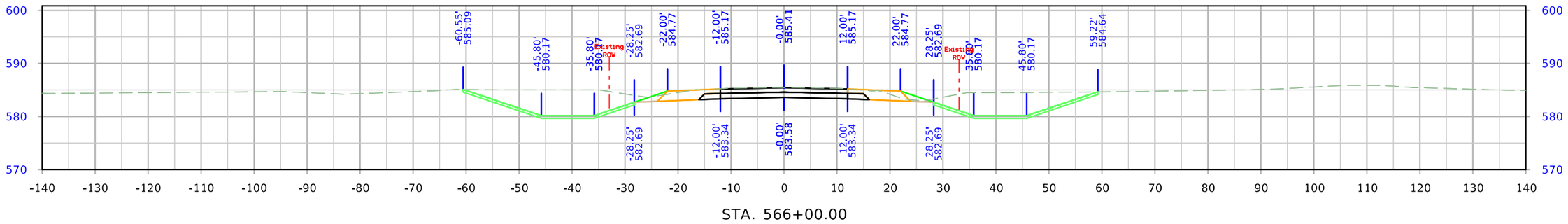


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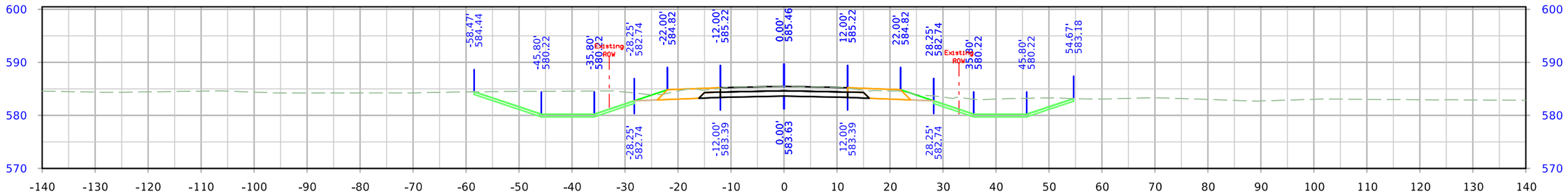
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.916

3:32:44 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

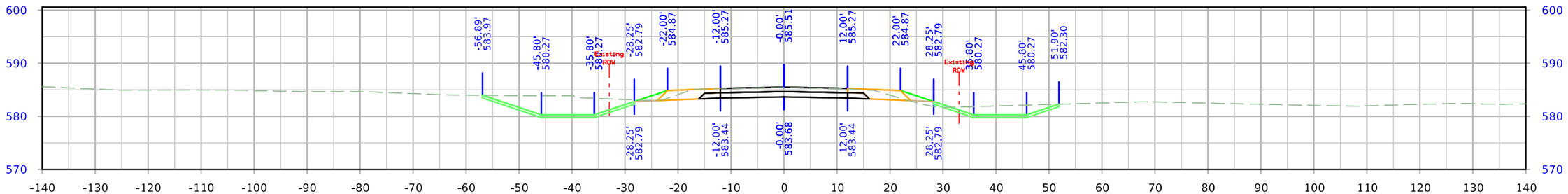
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STA. 566+00.00



STA. 565+50.00

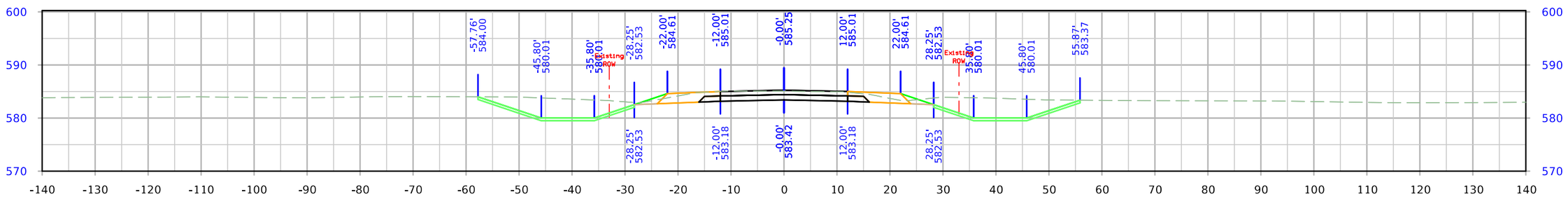


STA. 565+00.00

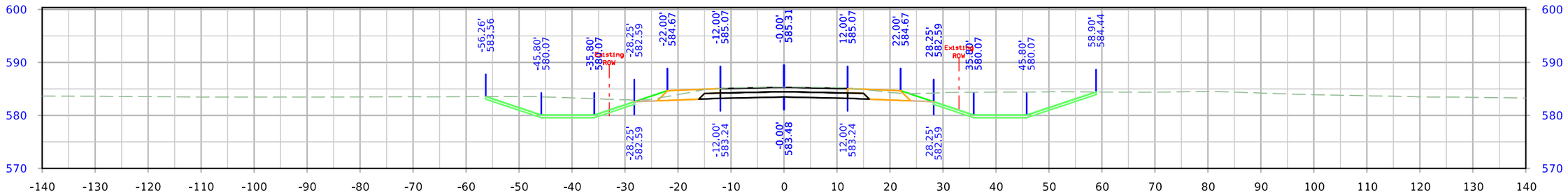
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.917

3:32:45 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

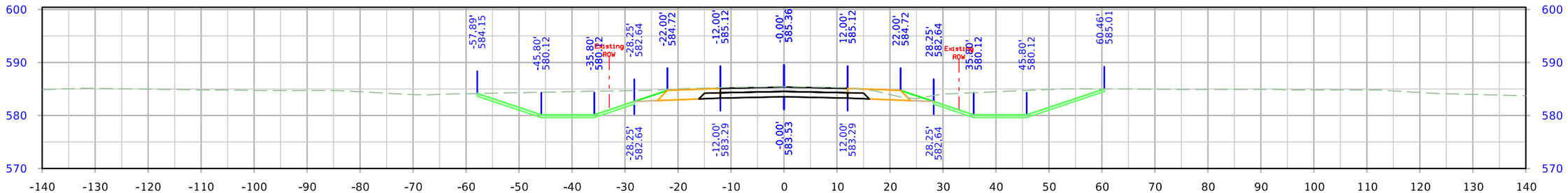
Co Rd G62



STA. 567+50.00



STA. 567+00.00

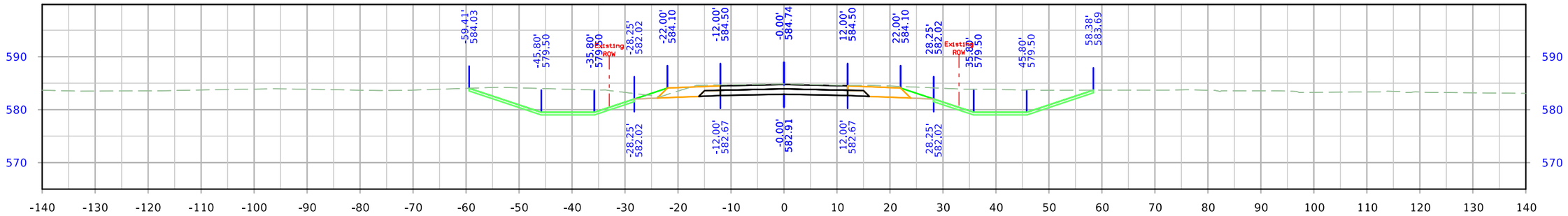


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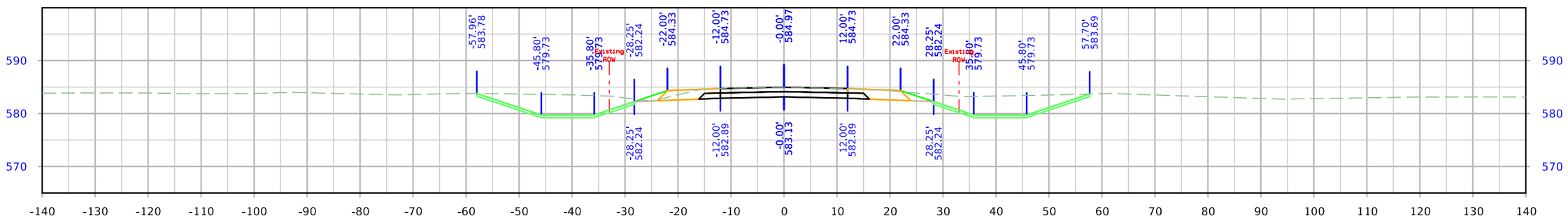
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.918

3:32:46 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

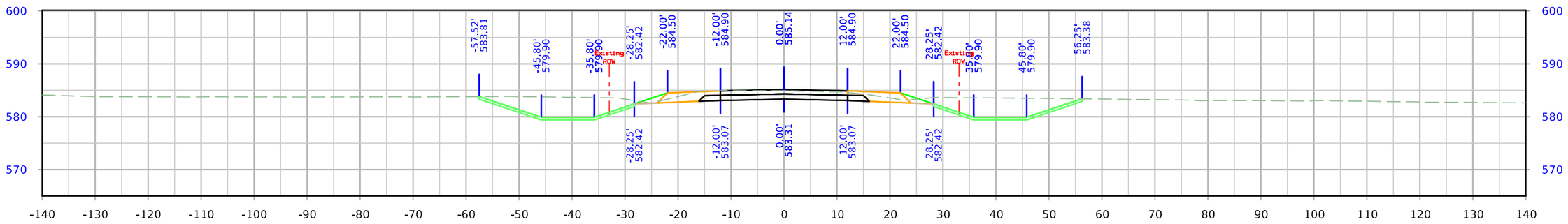
Co Rd G62



STA. 569+00.00



STA. 568+50.00

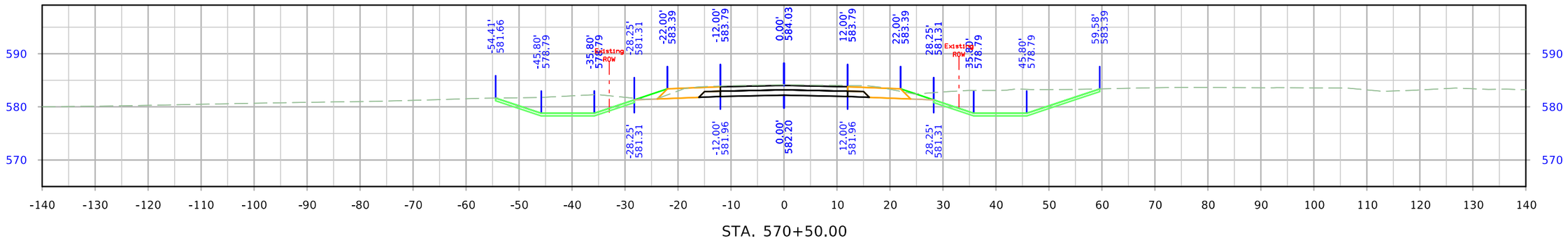


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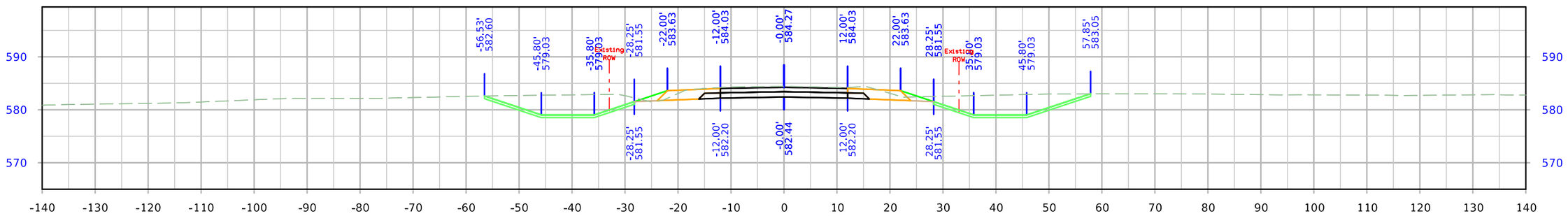
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.919

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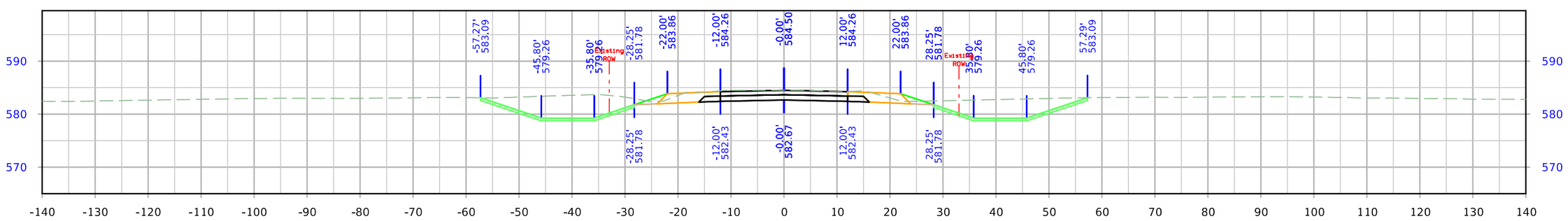
Co Rd G62



STA. 570+50.00



STA. 570+00.00

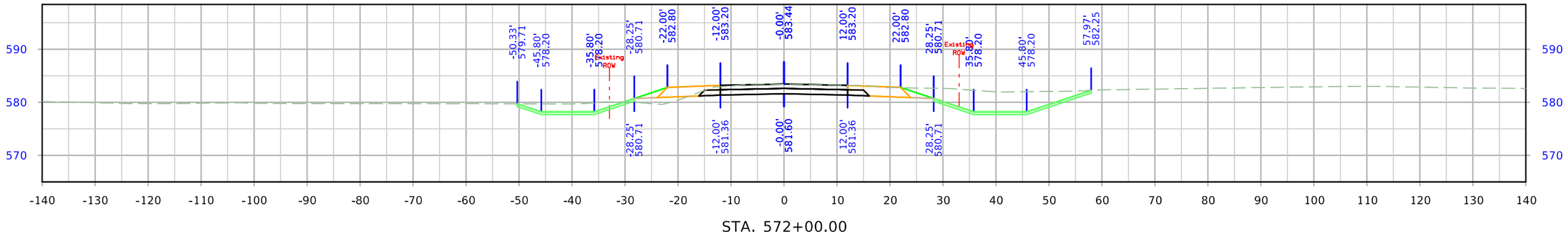


STA. 569+50.00

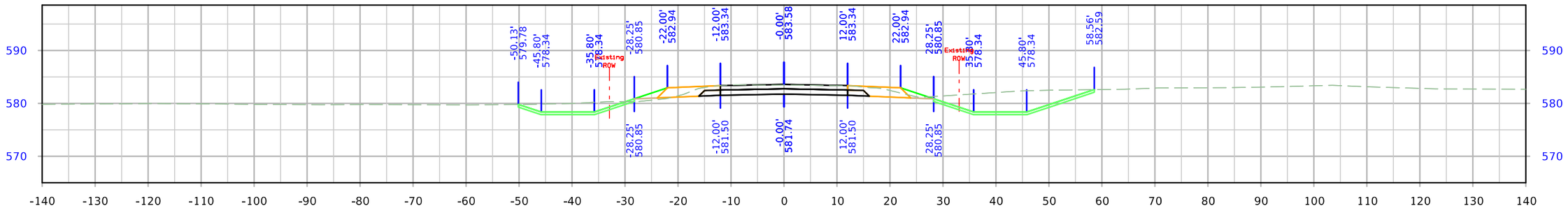
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.920

3:32:48 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

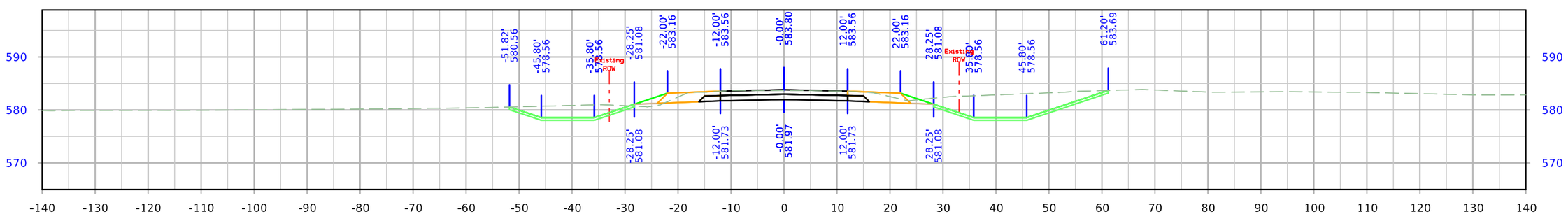
Co Rd G62



STA. 572+00.00



STA. 571+50.00

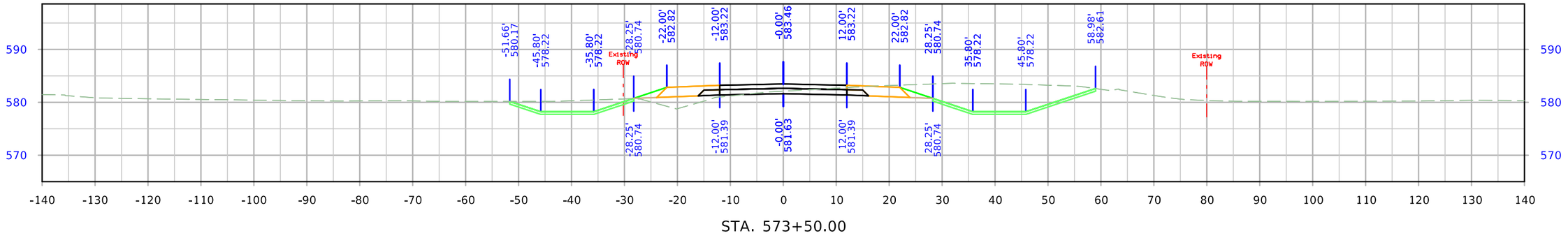


STA. 571+00.00

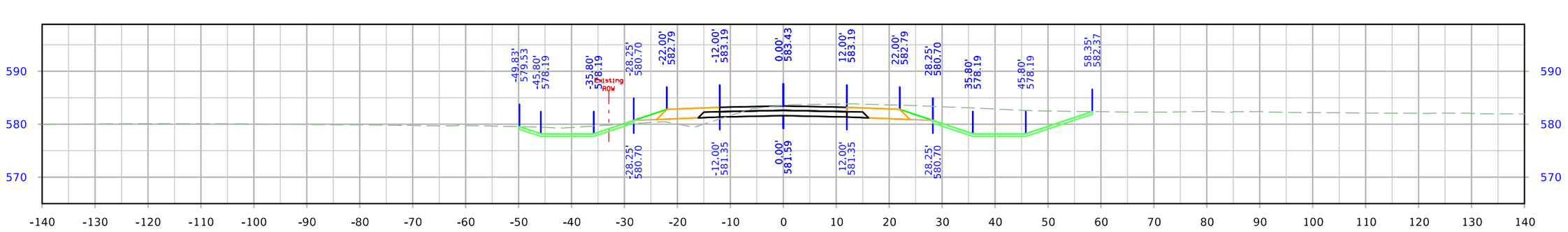
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.921

3:32:49 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

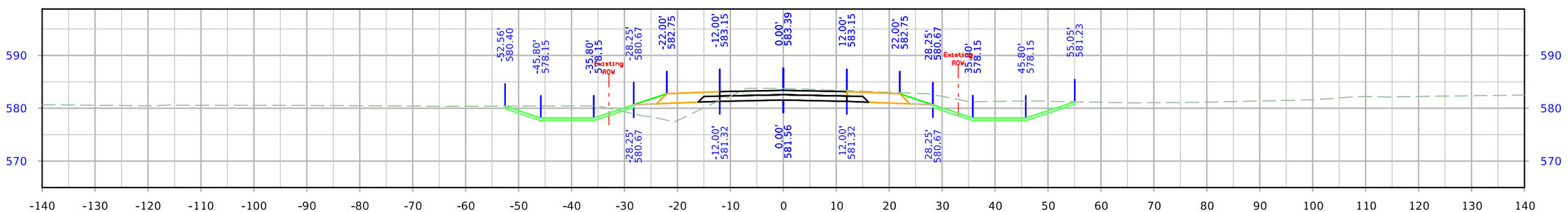
Co Rd G62



STA. 573+50.00



STA. 573+00.00

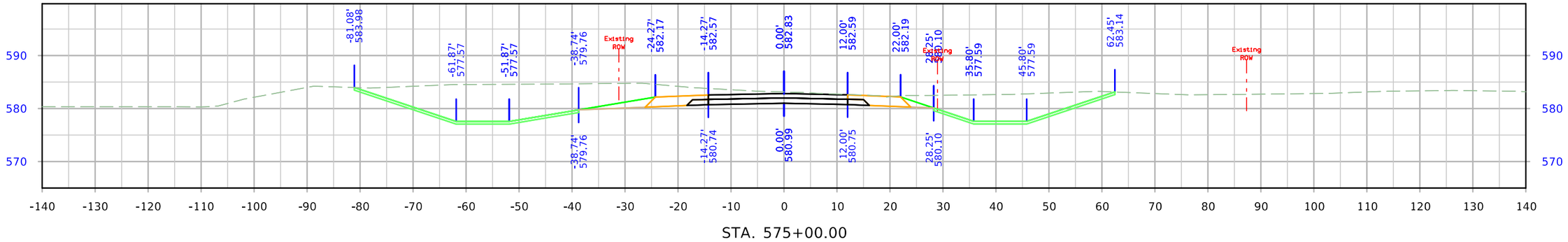


STA. 572+50.00

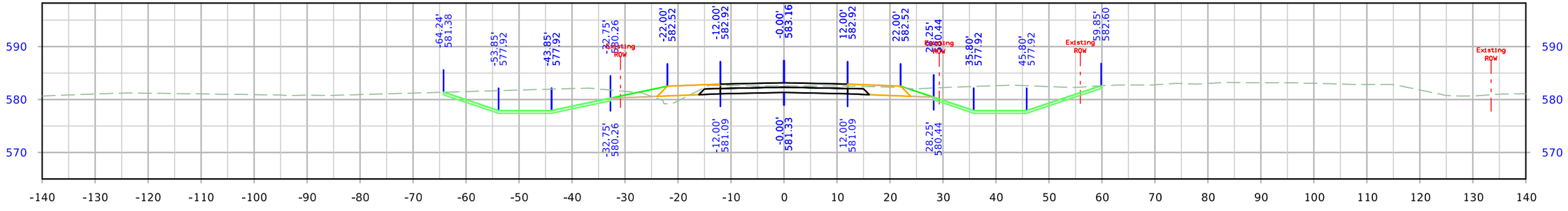
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.922

3:32:50 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

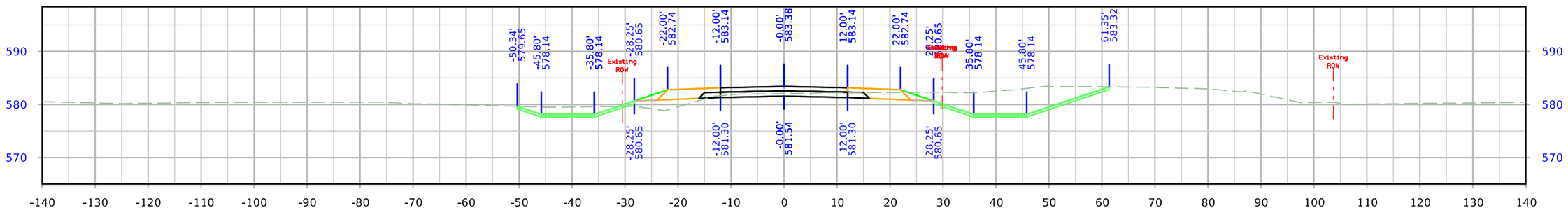
Co Rd G62



STA. 575+00.00



STA. 574+50.00

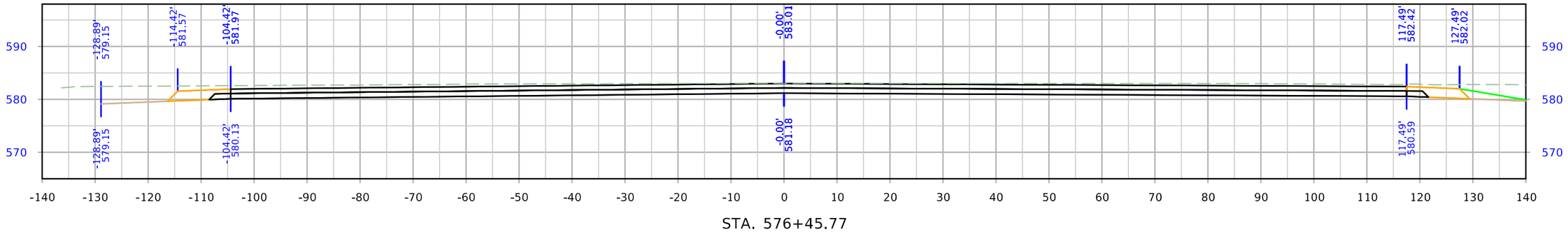


STA. 574+00.00

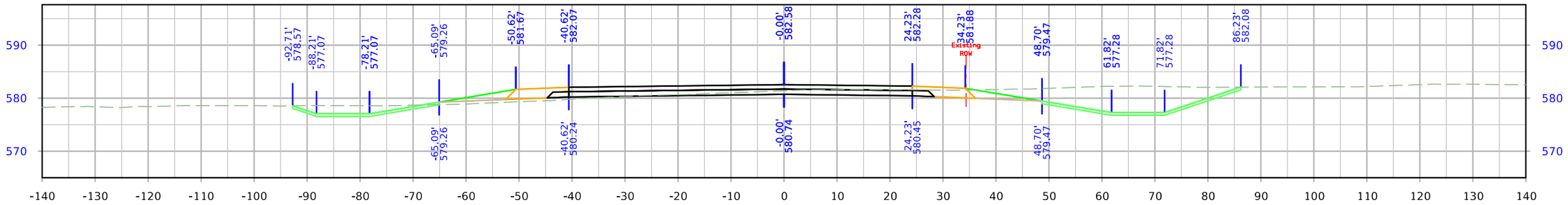
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.923

3:32:51 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

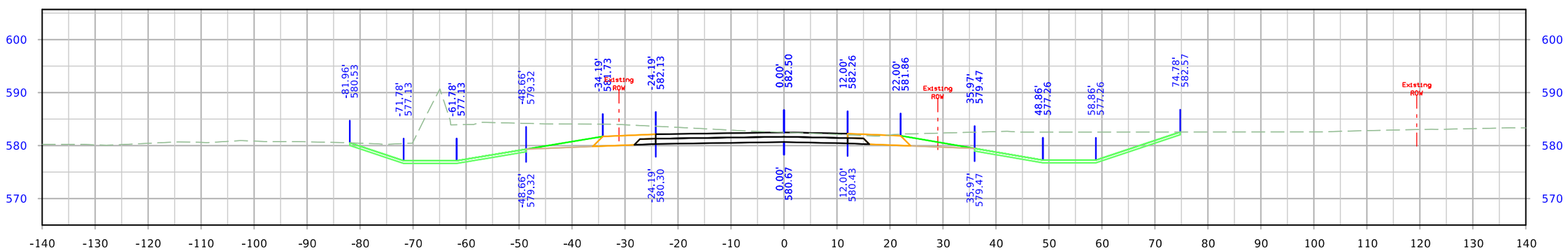
Co Rd G62



STA. 576+45.77



STA. 576+00.00

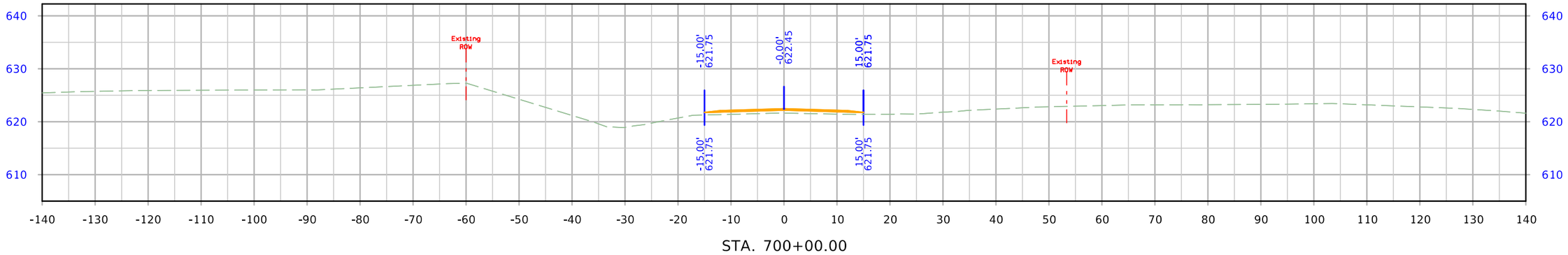


STA. 575+50.00

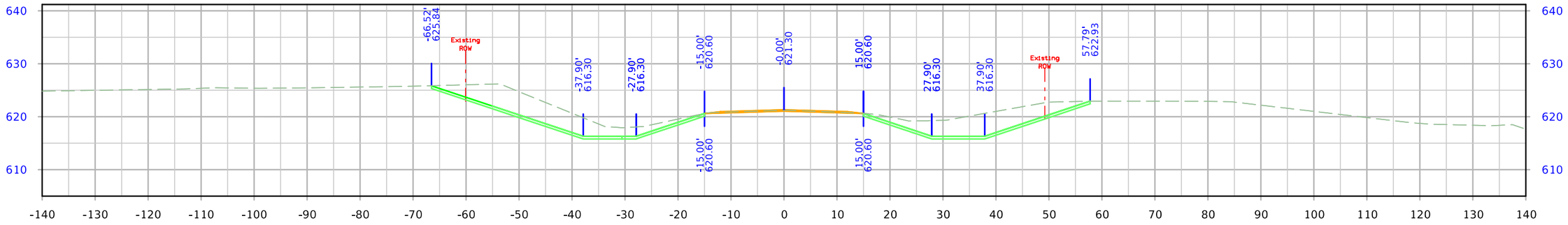
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.924

3:32:52 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X900_SRG62_58061061Z14.dgn

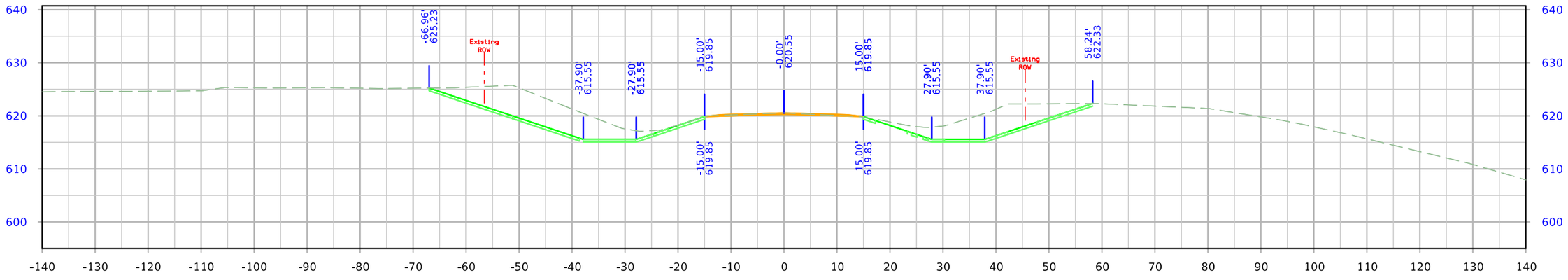
K Ave North



STA. 700+00.00



STA. 699+50.00

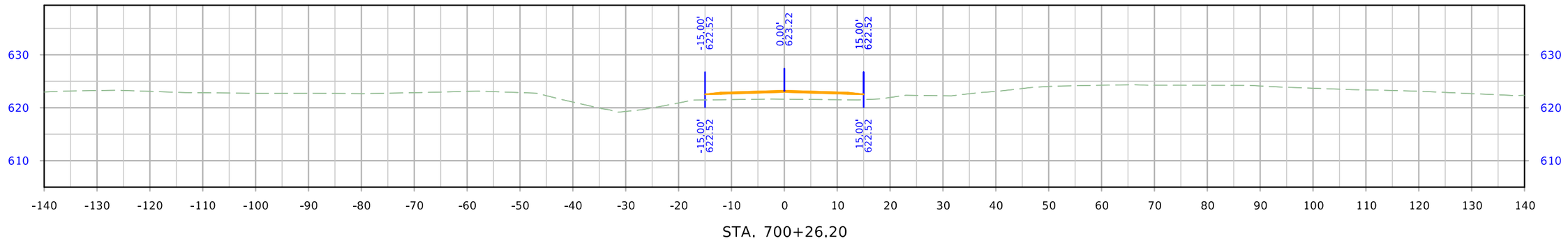


STA. 699+05.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.1000

3:33:04 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X1000_SRKAveNorth_58061061Z14.dgn

K Ave North

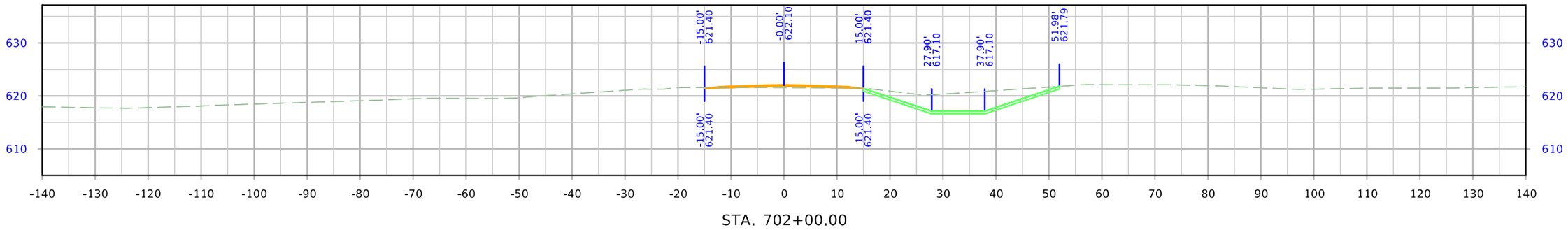


STA. 700+26.20

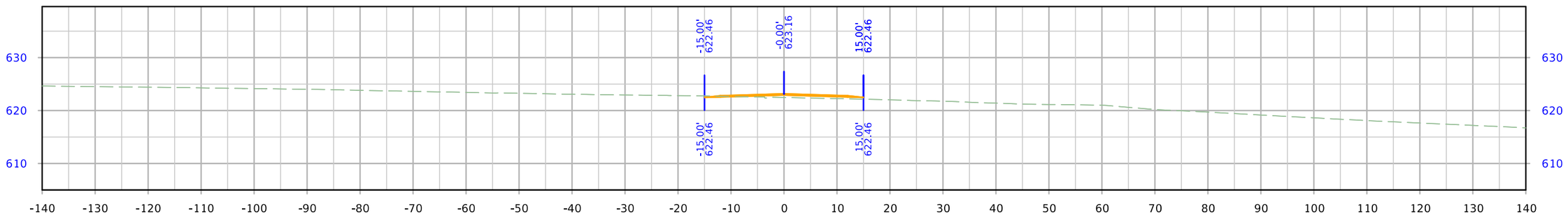
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.1001

3:33:05 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X1000_SRKAveNorth_58061061Z14.dgn

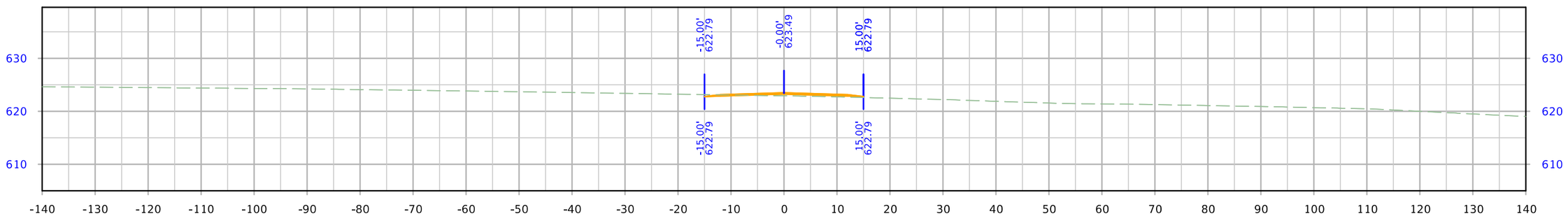
112th St



STA. 702+00.00



STA. 701+50.00

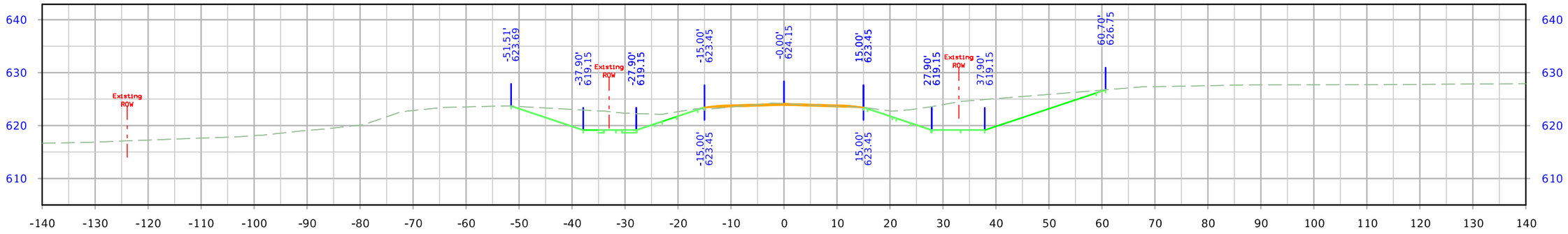


STA. 701+39.06

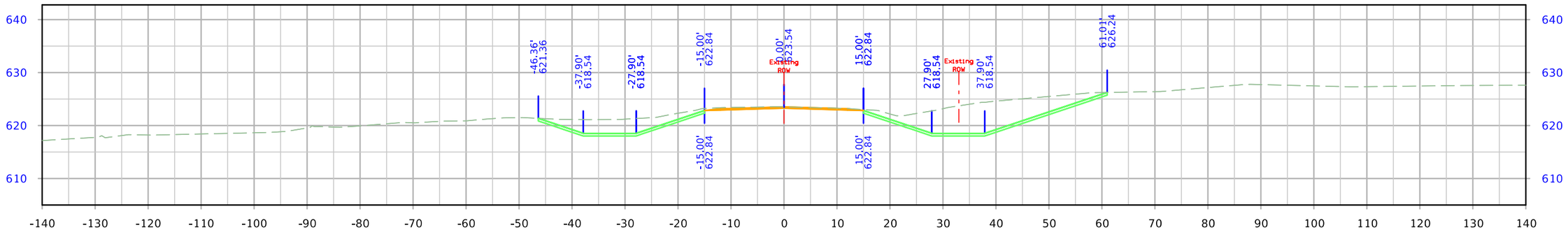
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.1100

3:33:17 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X1100_SR112_58061061Z14.dgn

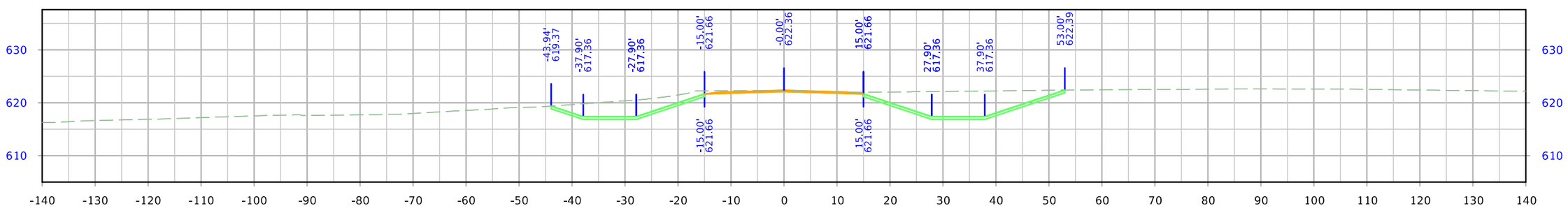
112th St



STA. 703+25.00



STA. 703+00.00

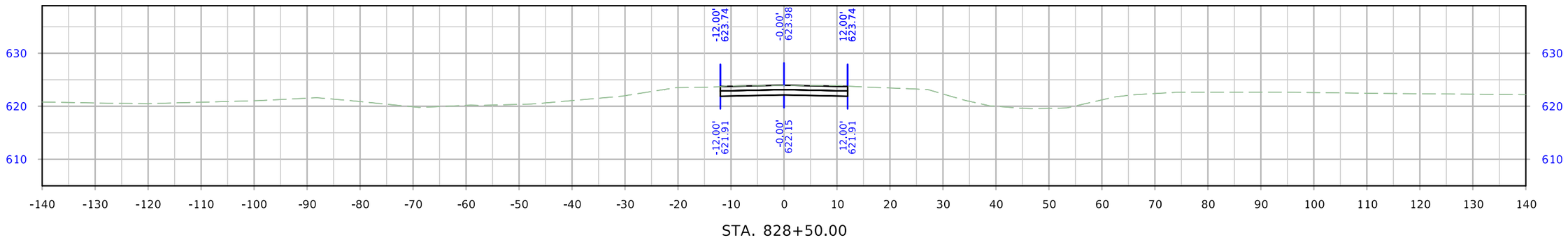


STA. 702+50.00

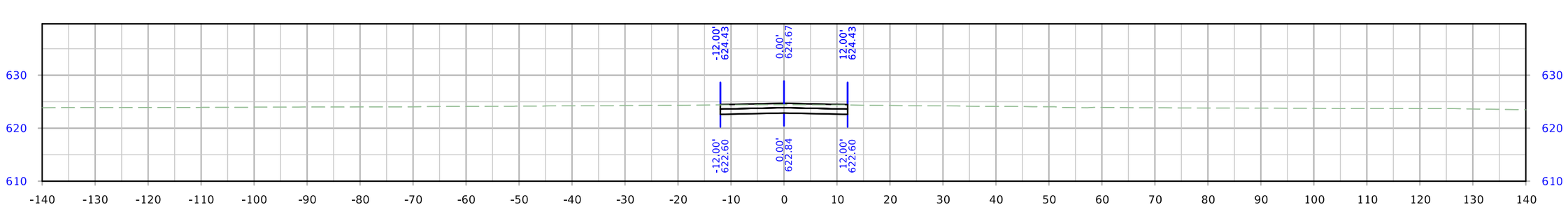
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.1101

3:33:18 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X1100_SR112_58061061Z14.dgn

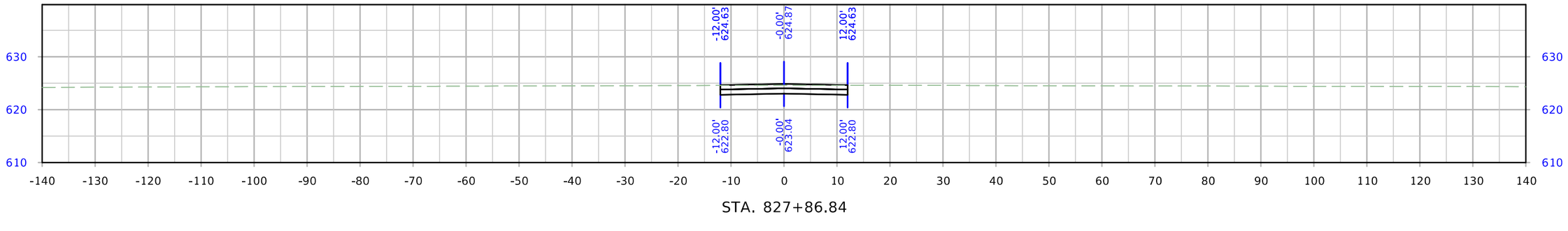
Co Rd G56



STA. 828+50.00



STA. 828+00.00

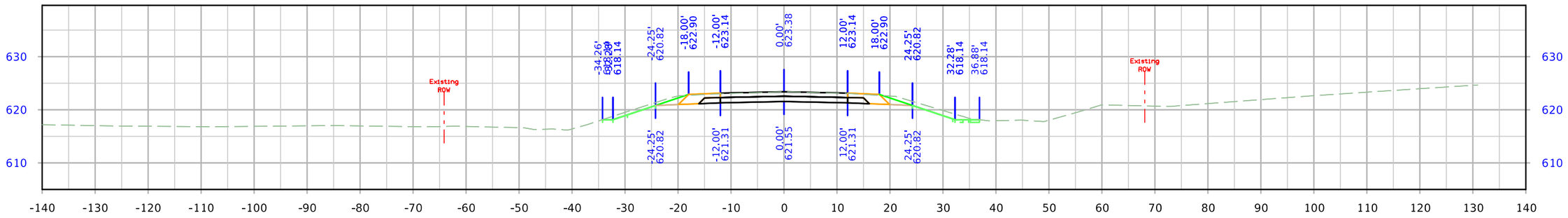


STA. 827+86.84

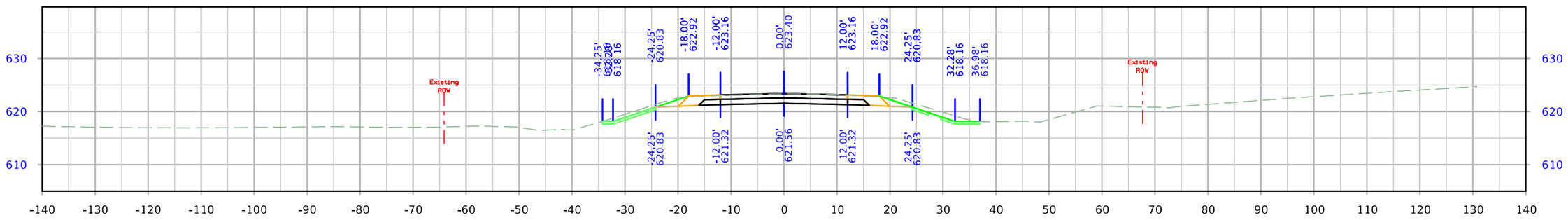
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.1300	

3:33:31 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X1300_SRG56_58061061Z14.dgn

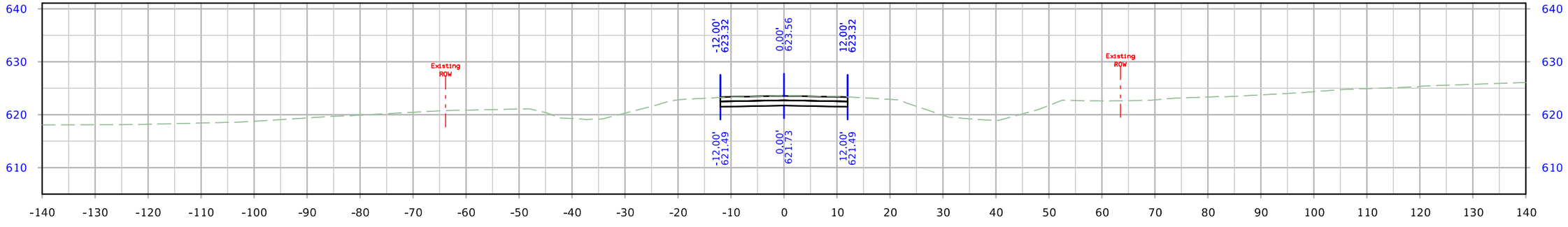
Co Rd G56



STA. 829+55.00



STA. 829+50.00

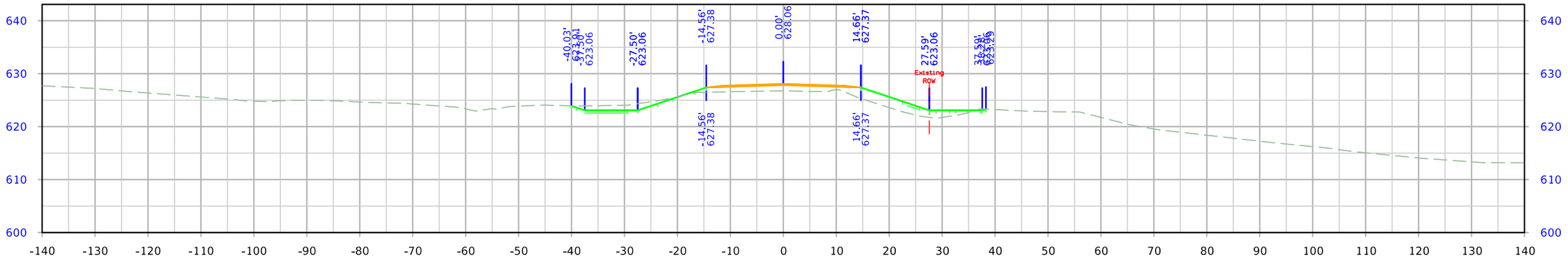


STA. 829+00.00

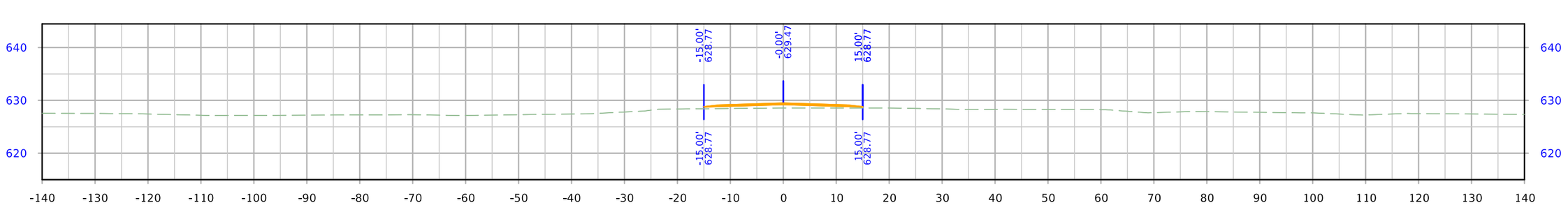
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.1301

3:33:32 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X1300_SRG56_58061061Z14.dgn

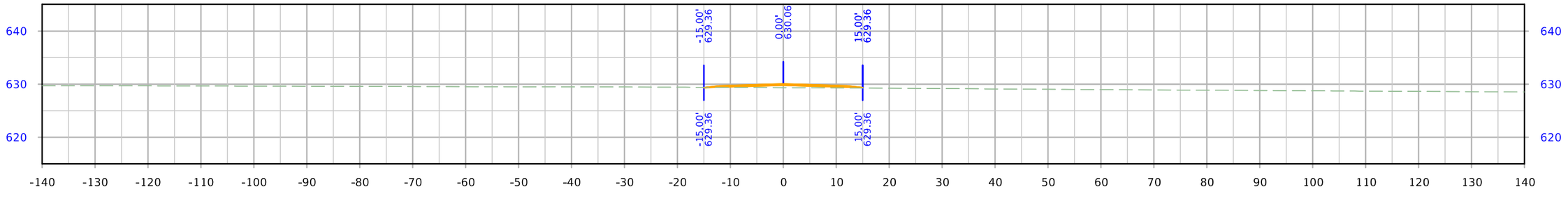
J Ave



STA. 968+50.00



STA. 968+00.00

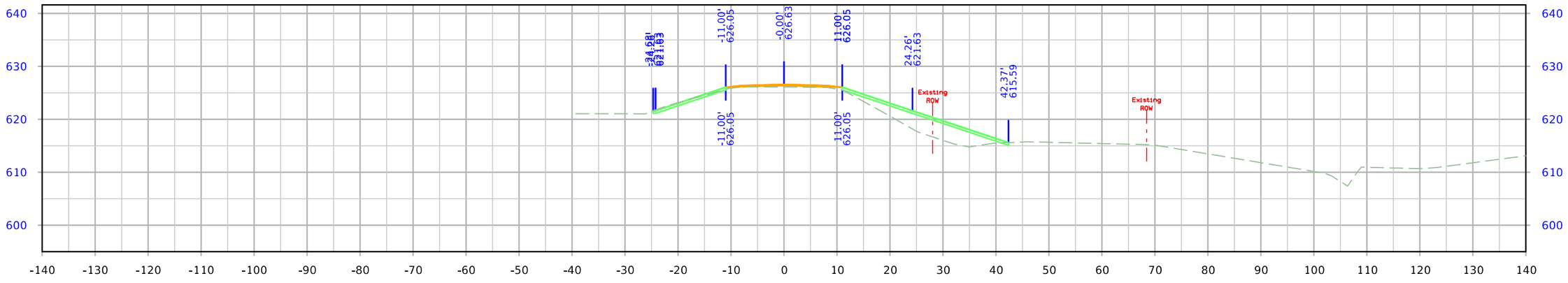


STA. 967+80.22

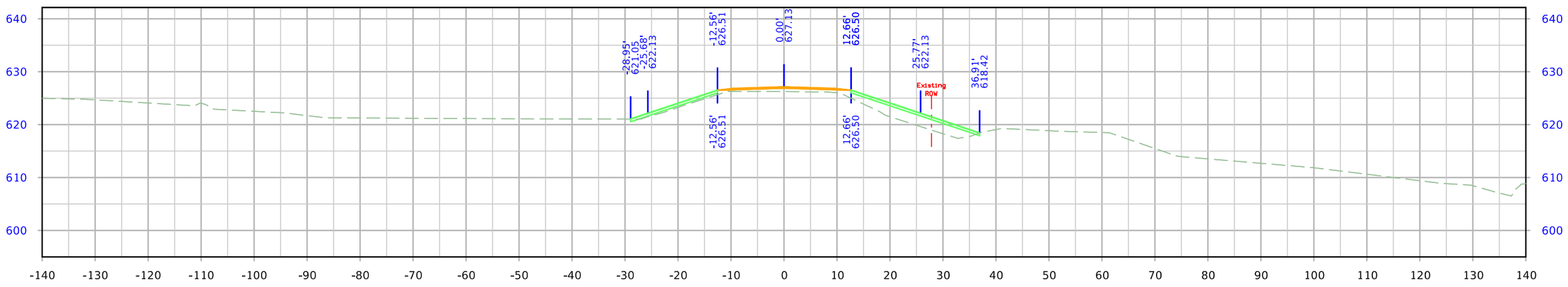
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.1400

3:33:45 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X1400_SRJAve_58061061Z14.dgn

J Ave



STA. 969+50.00

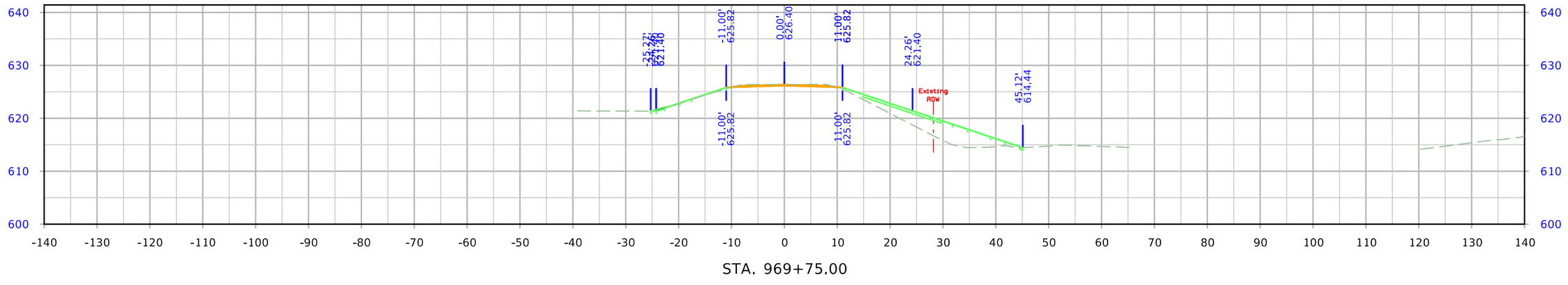


STA. 969+00.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.1401

3:33:45 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X1400_SRJAve_58061061Z14.dgn

J Ave

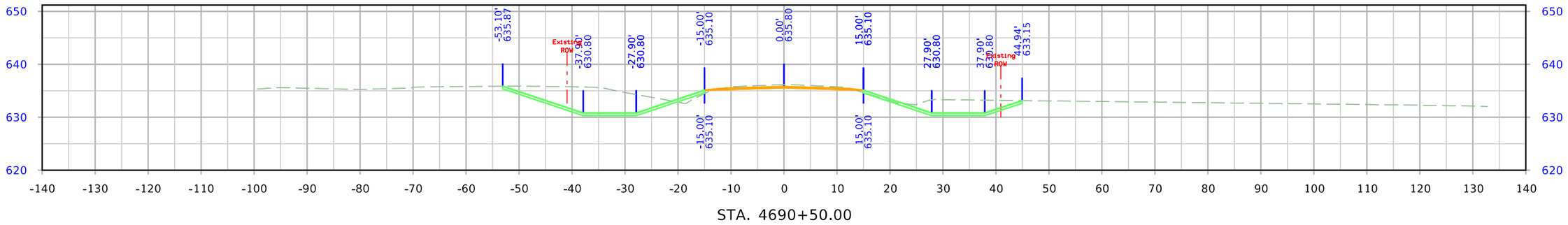


STA. 969+75.00

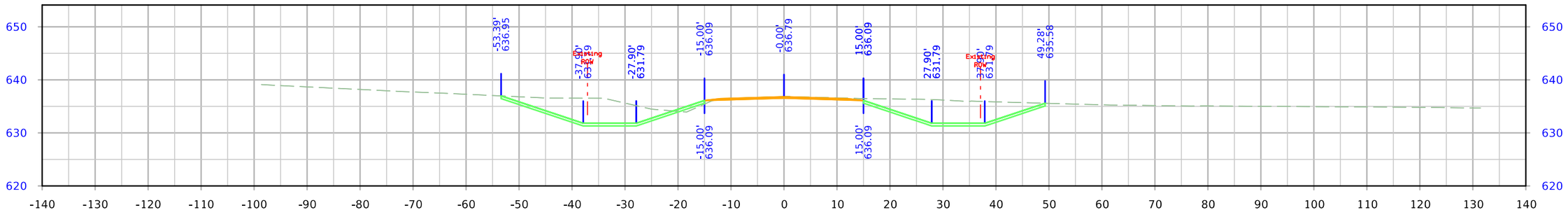
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.1402

3:33:46 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X1400_SRJAve_58061061Z14.dgn

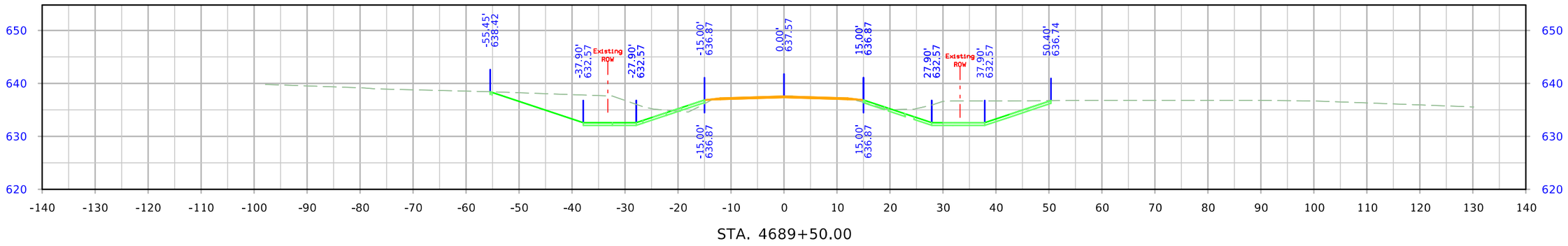
130th St (West)



STA. 4690+50.00



STA. 4690+00.00

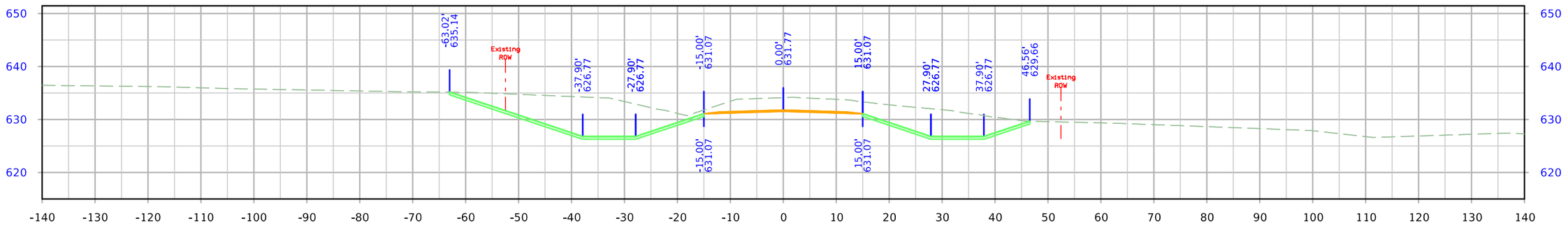


STA. 4689+50.00

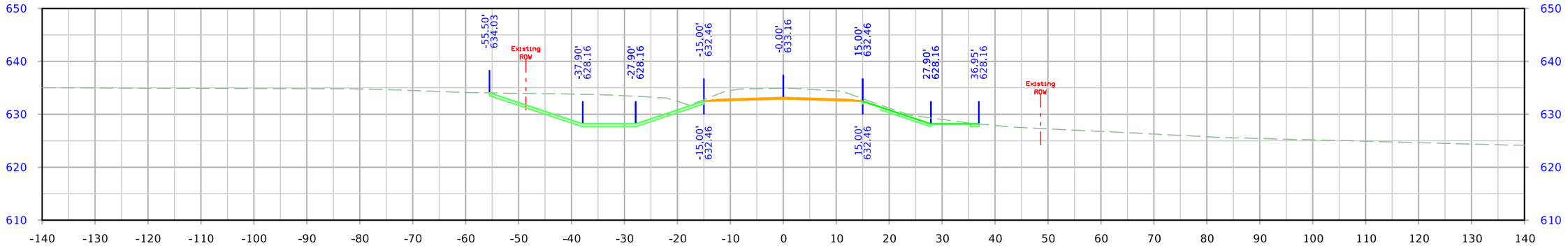
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.1500

3:33:59 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X1500_SR130W_58061061Z14.dgn

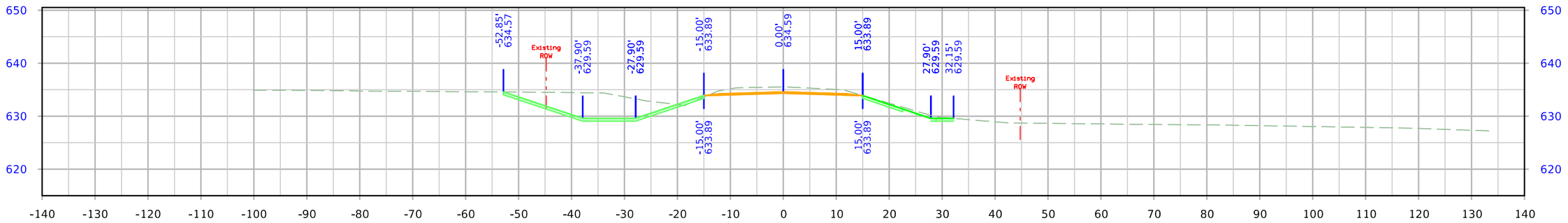
130th St (West)



STA. 4692+00.00



STA. 4691+50.00

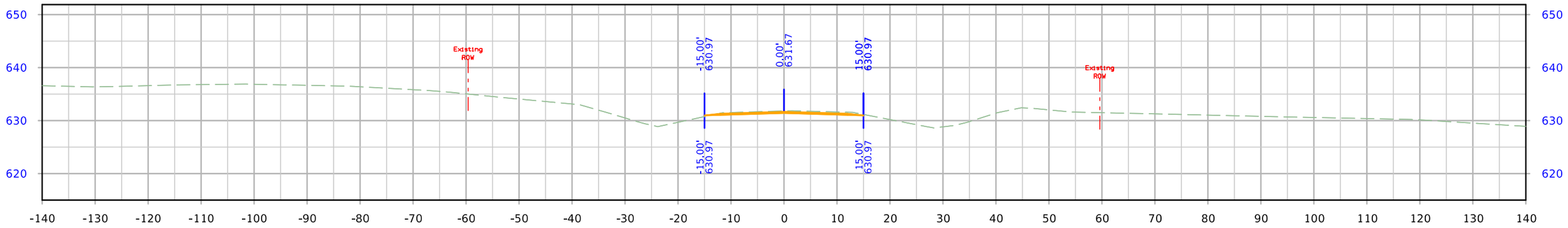


STA. 4691+00.00

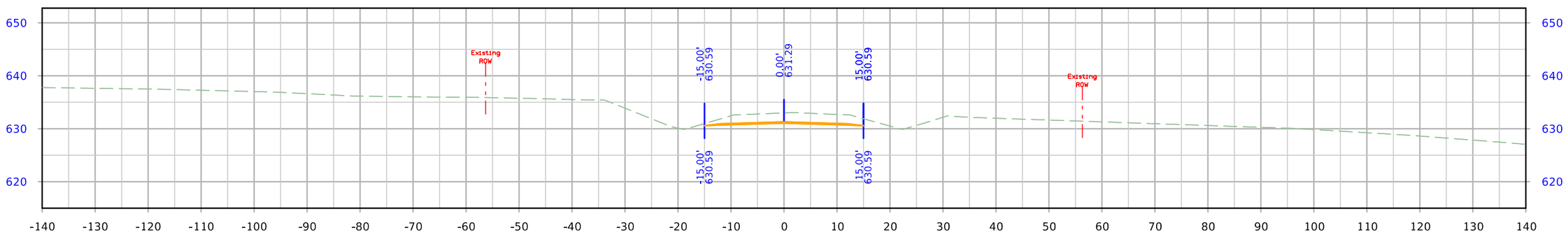
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.1501

3:34:00 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X1500_SR130W_58061061Z14.dgn

130th St (West)



STA. 4692+93.09

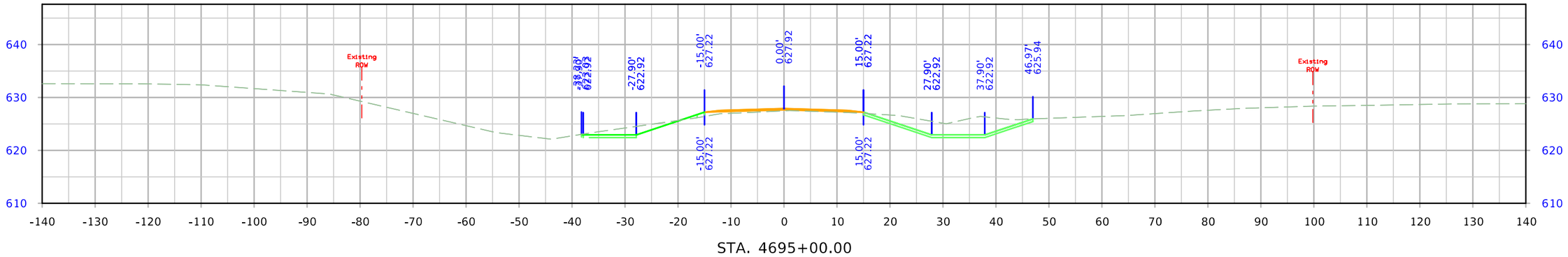


STA. 4692+50.00

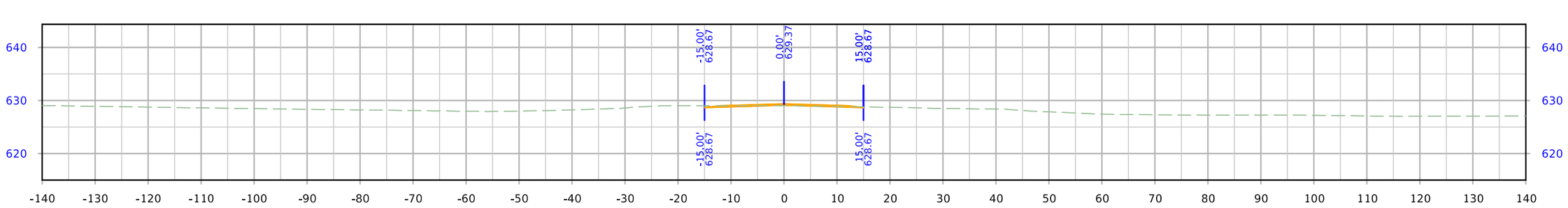
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.1502

3:34:00 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X1500_SR130W_58061061Z14.dgn

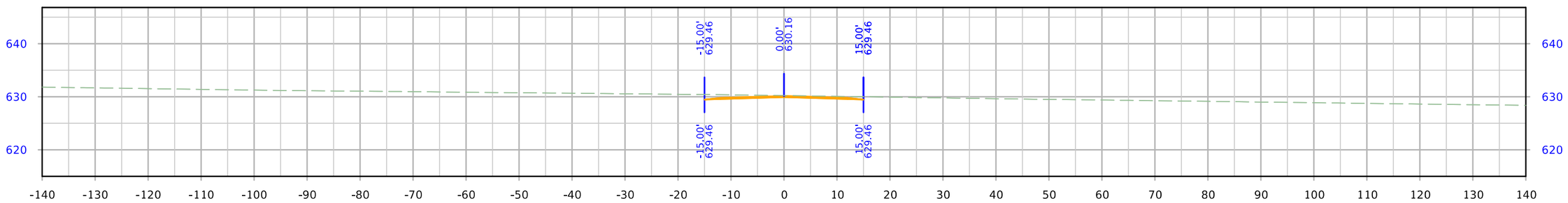
130th St (East)



STA. 4695+00.00



STA. 4694+50.00

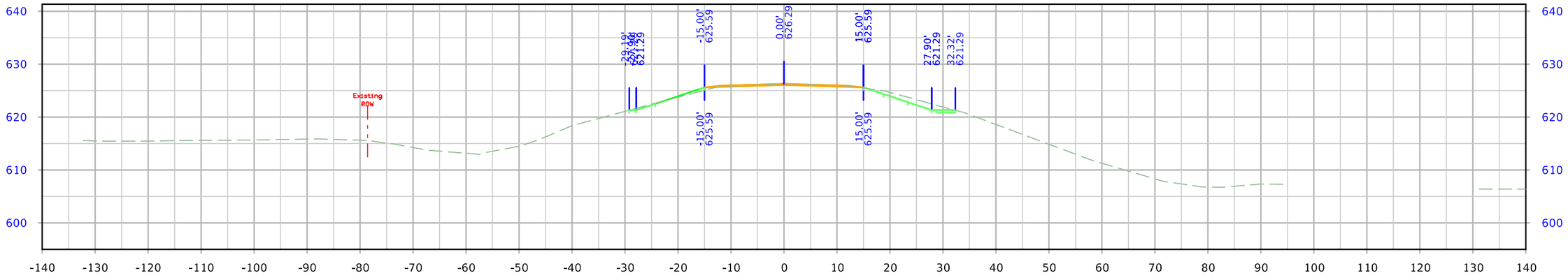


STA. 4694+23.55

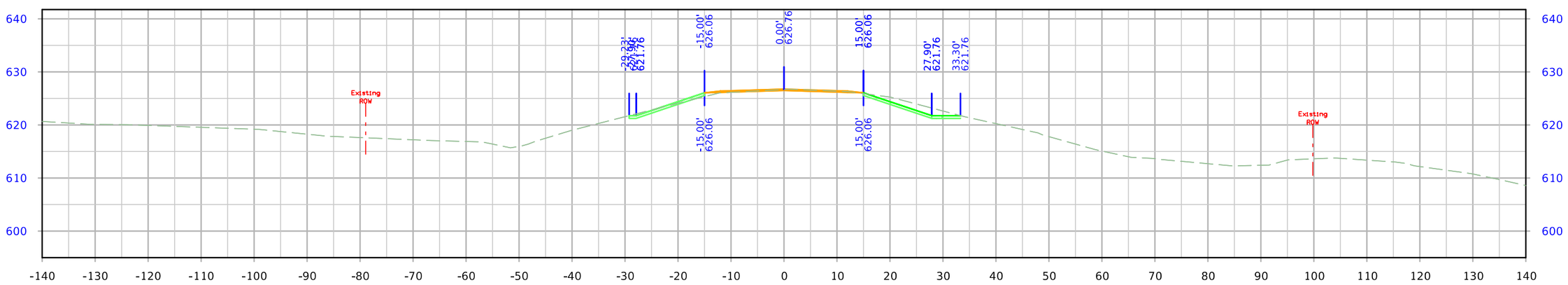
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.1600

3:34:14 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X1600_SR130E_58061061Z14.dgn

130th St (East)



STA. 4695+75.00

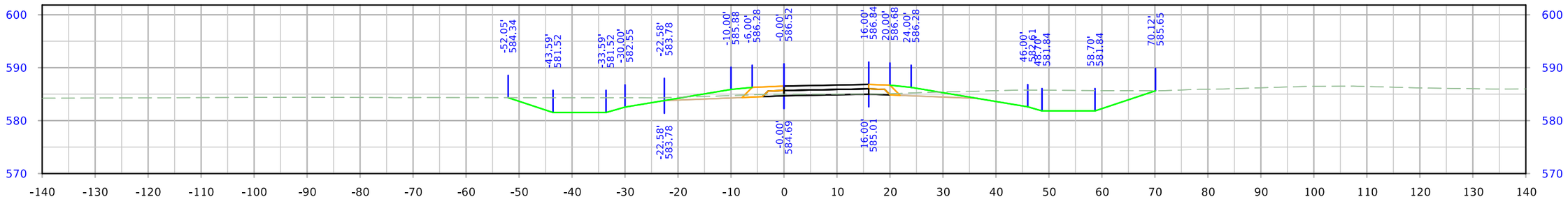


STA. 4695+50.00

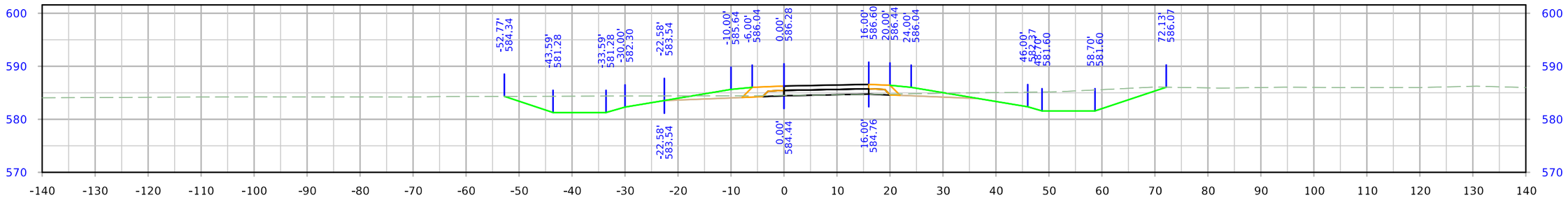
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER X.1601

3:34:14 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_X1600_SR130E_58061061Z14.dgn

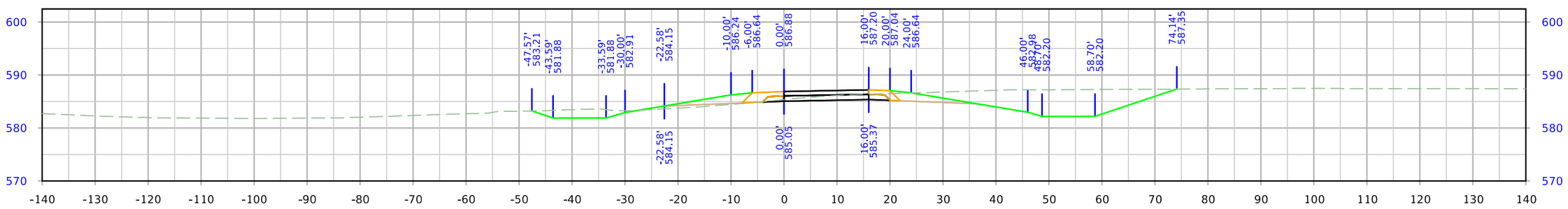
Ramp G62A



STA. 11551+00.00



STA. 11550+50.00

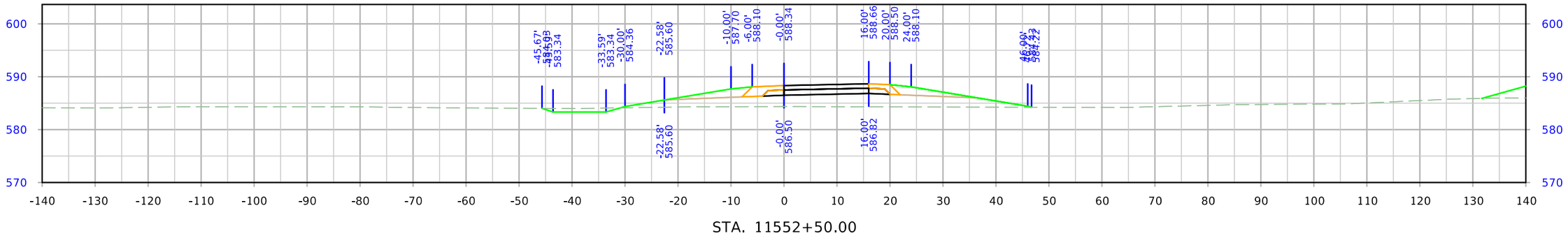


STA. 11550+01.51

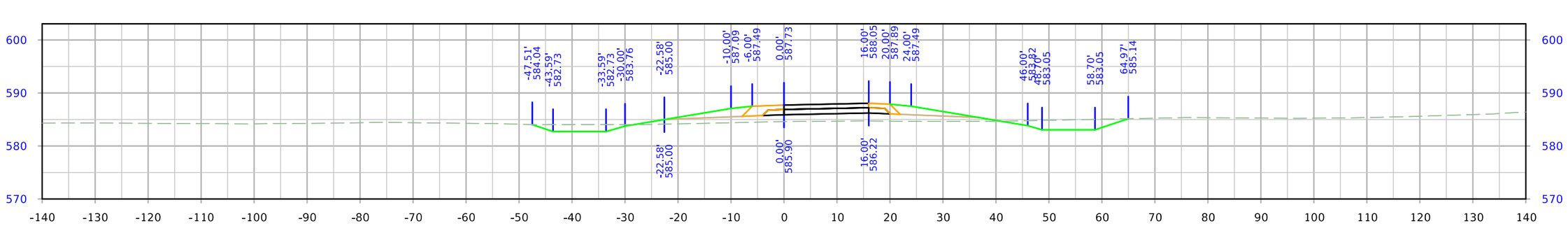
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.100

3:37:27 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y100_RMPG62A_58061061Z14.dgn

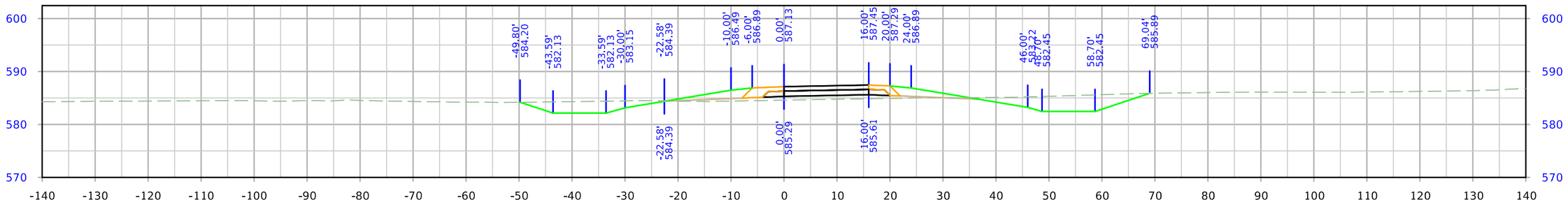
Ramp G62A



STA. 11552+50.00



STA. 11552+00.00

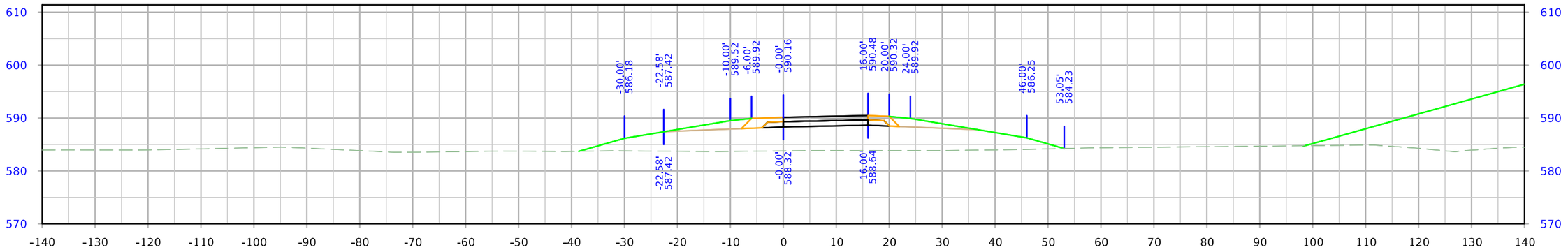


STA. 11551+50.00

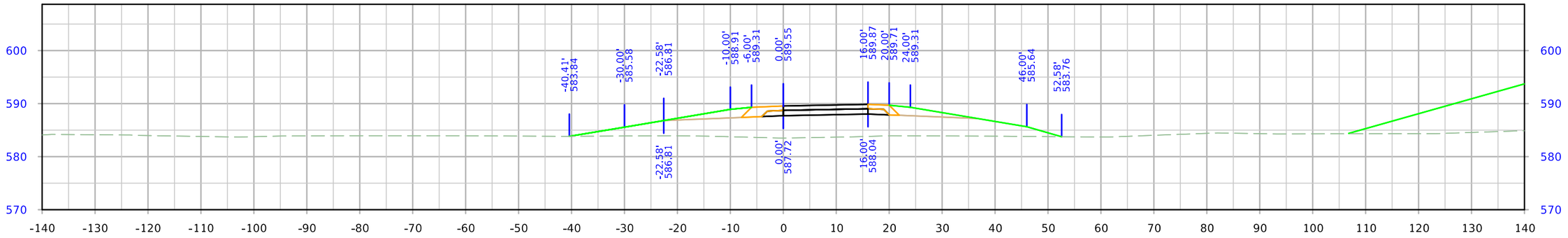
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.101

3:37:28 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y100_RMPG62A_58061061Z14.dgn

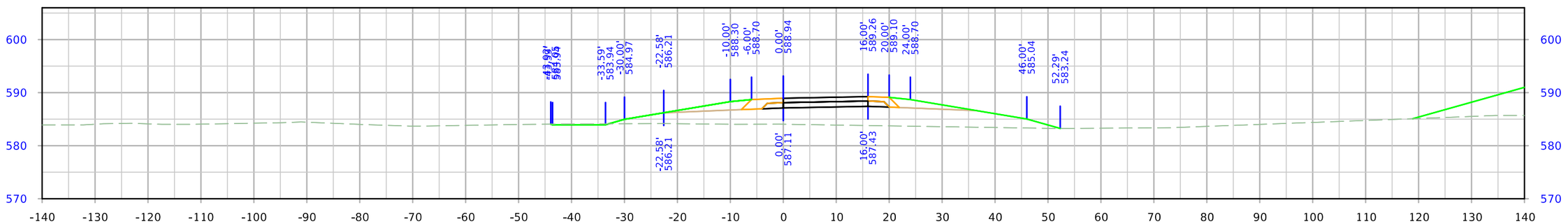
Ramp G62A



STA. 11554+00.00



STA. 11553+50.00

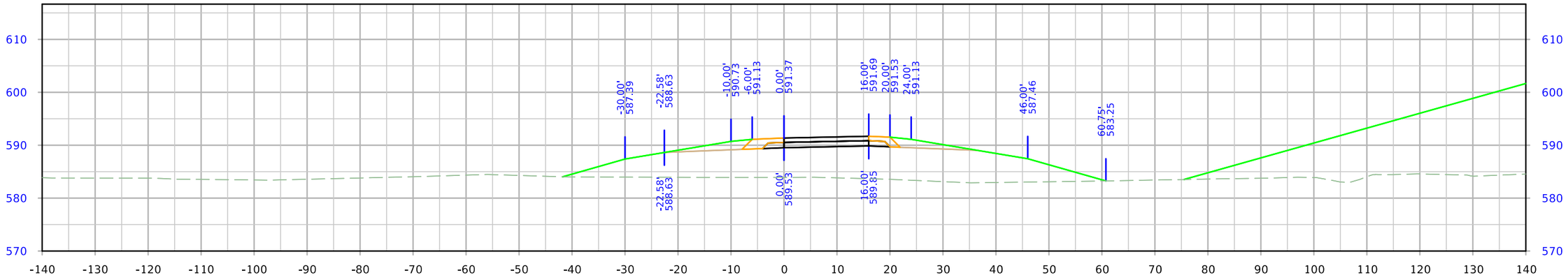


STA. 11553+00.00

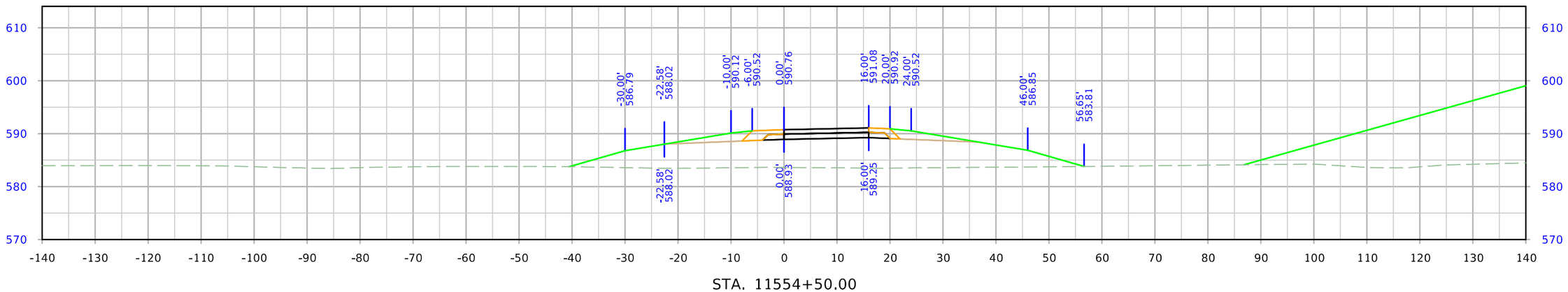
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.102

3:37:29 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y100_RMPG62A_58061061Z14.dgn

Ramp G62A



STA. 11555+00.00

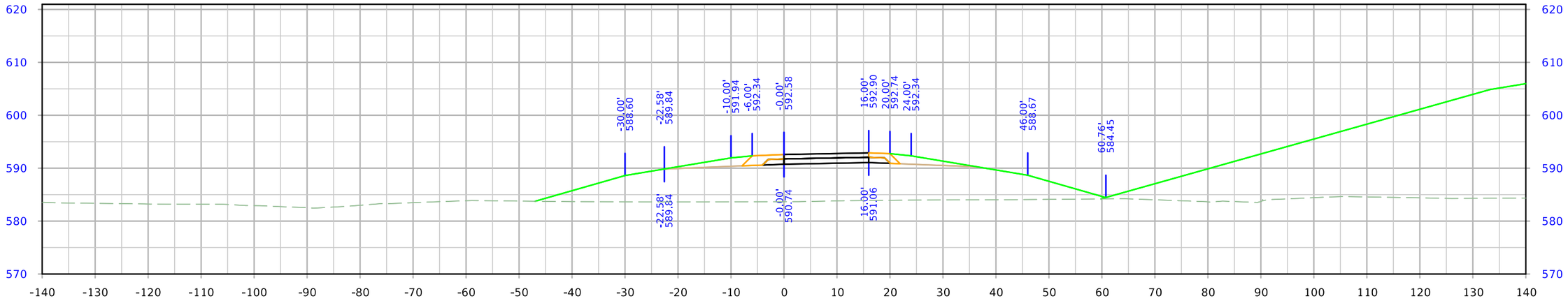


STA. 11554+50.00

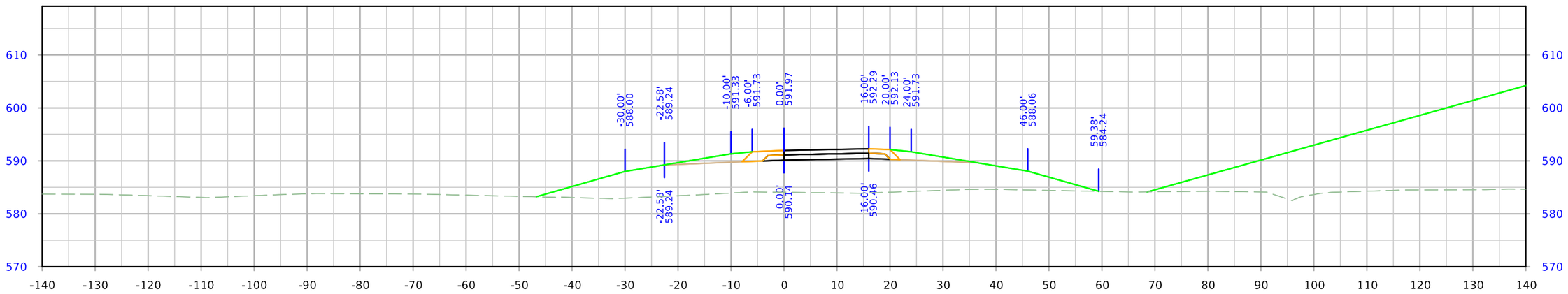
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.103

3:37:30 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y100_RMPG62A_58061061Z14.dgn

Ramp G62A



STA. 11556+00.00

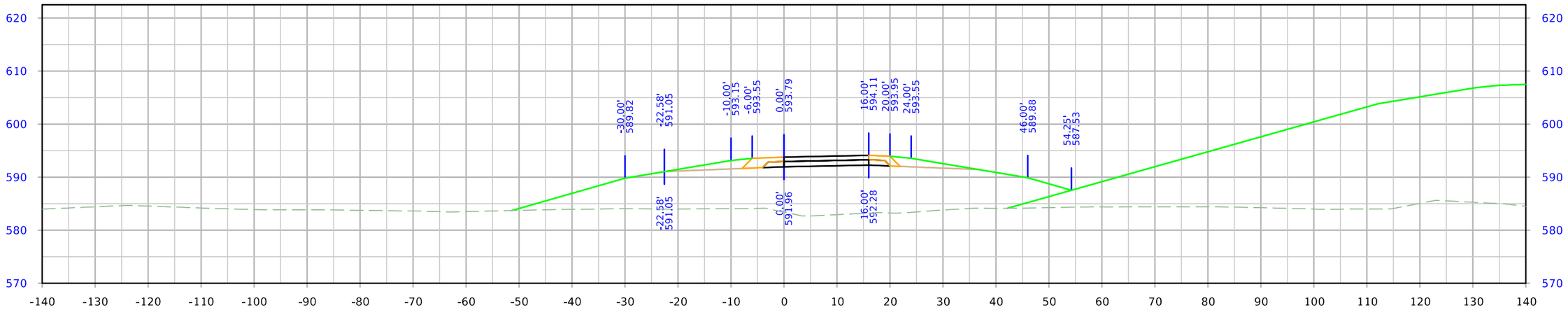


STA. 11555+50.00

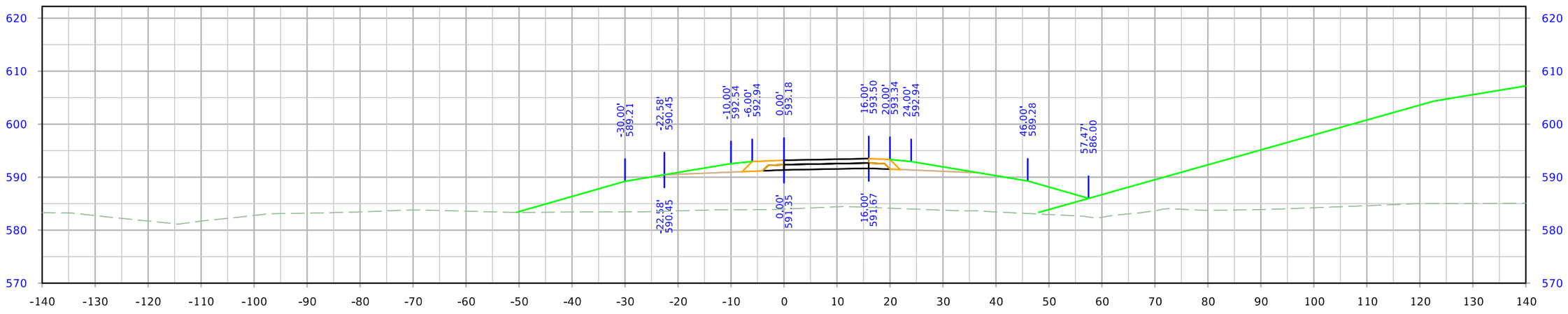
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.104

3:37:30 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y100_RMPG62A_58061061Z14.dgn

Ramp G62A



STA. 11557+00.00

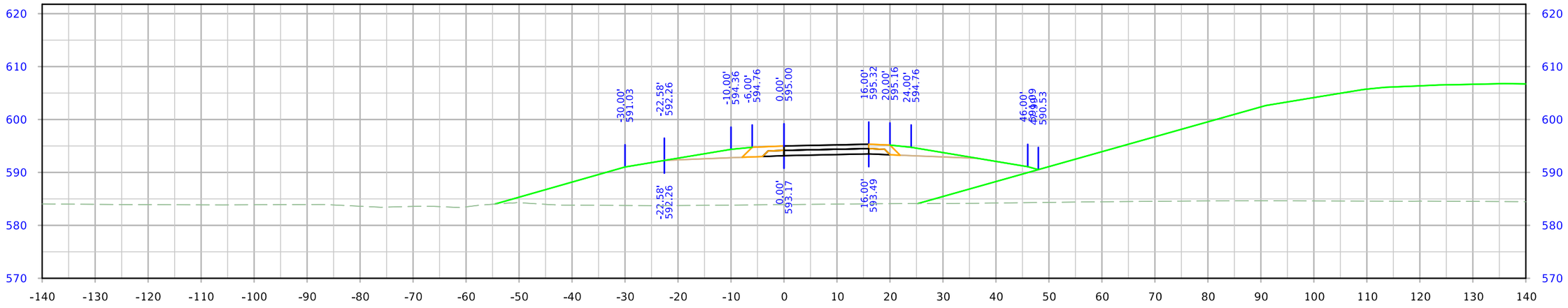


STA. 11556+50.00

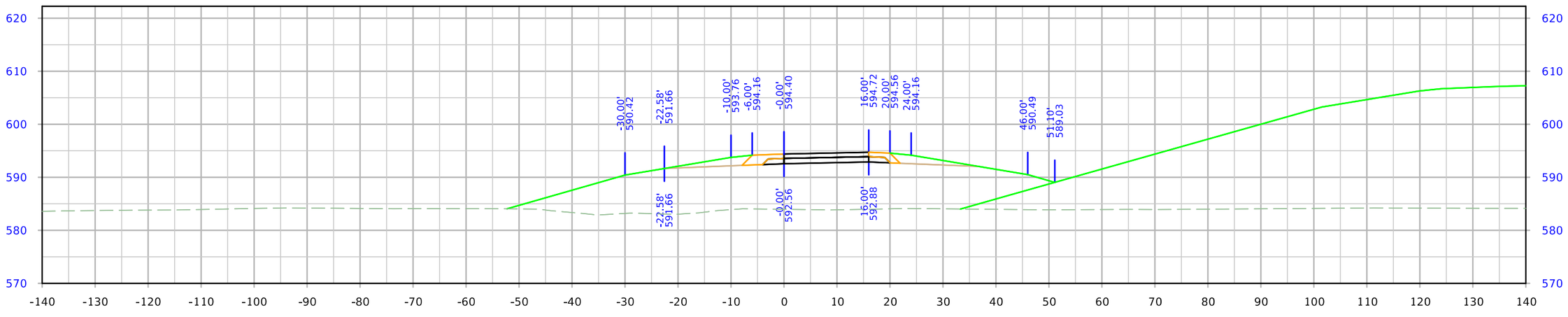
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.105

3:37:31 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y100_RMPG62A_58061061Z14.dgn

Ramp G62A



STA. 11558+00.00

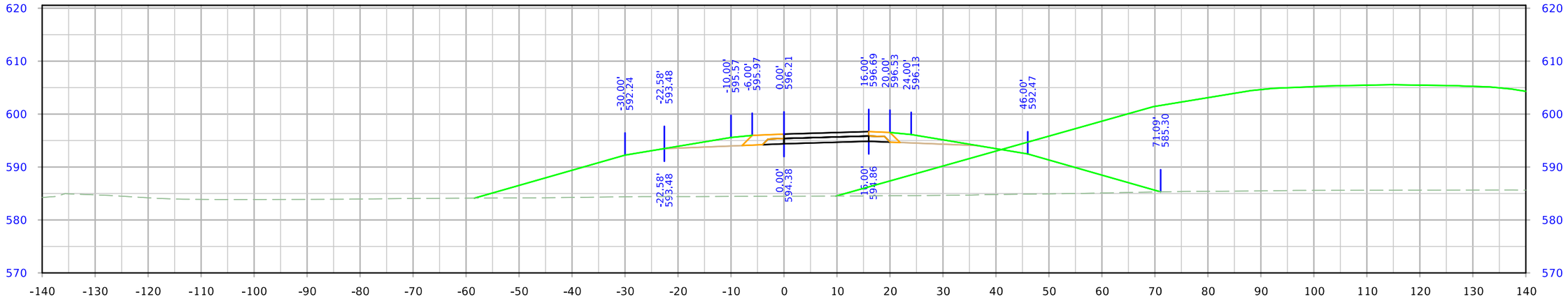


STA. 11557+50.00

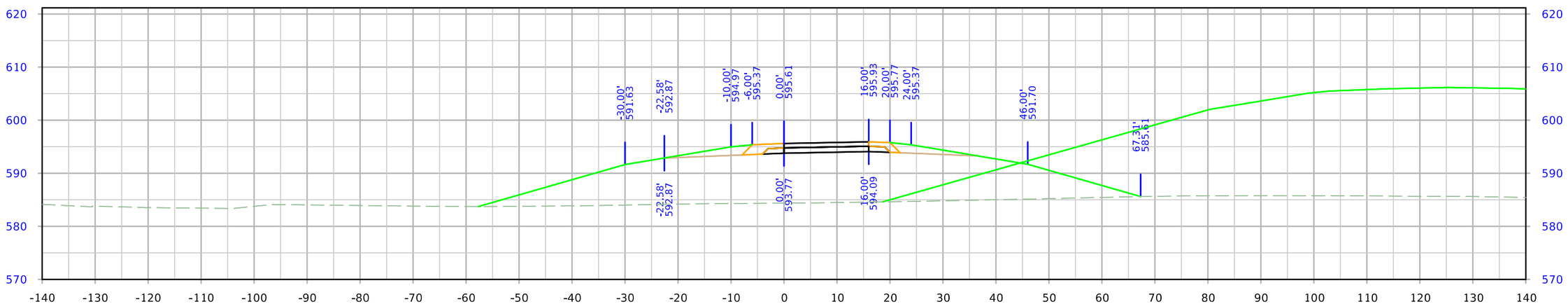
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.106

3:37:32 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y100_RMPG62A_58061061Z14.dgn

Ramp G62A



STA. 11559+00.00

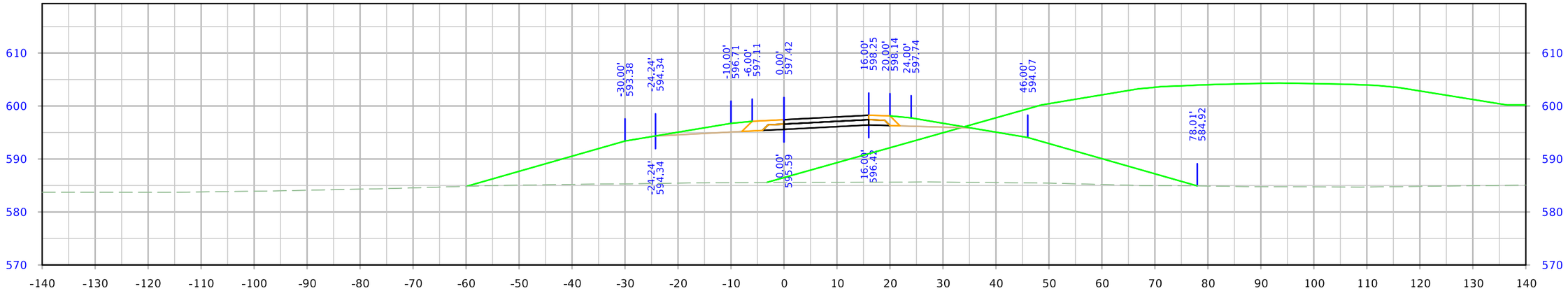


STA. 11558+50.00

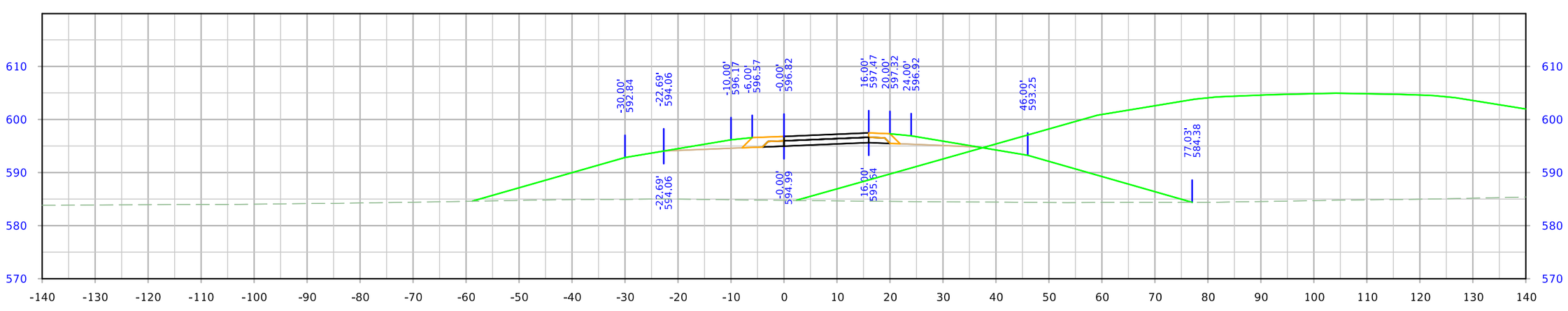
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.107

3:37:32 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y100_RMPG62A_58061061Z14.dgn

Ramp G62A



STA. 11560+00.00

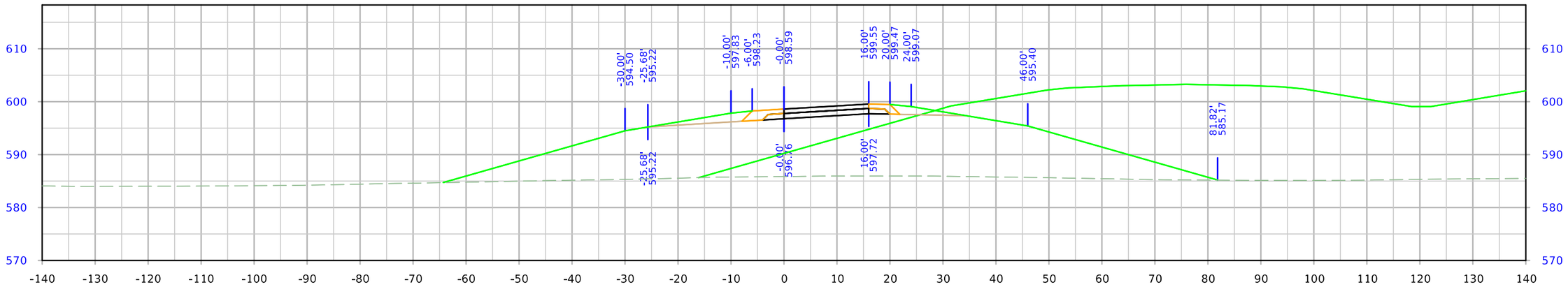


STA. 11559+50.00

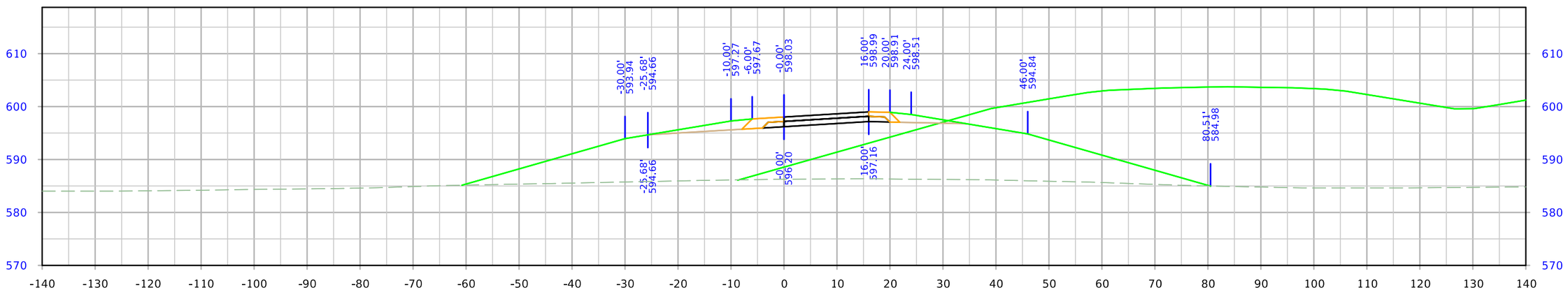
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.108

3:37:33 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y100_RMPG62A_58061061Z14.dgn

Ramp G62A



STA. 11561+00.00

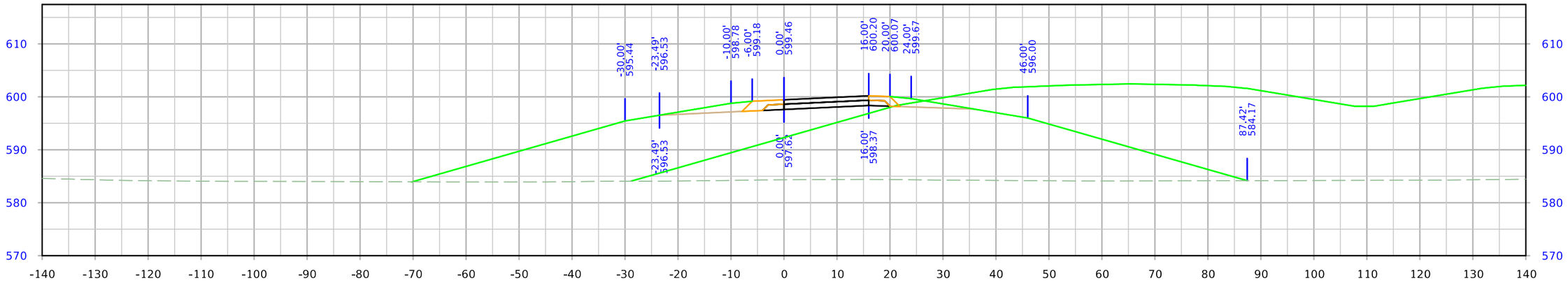


STA. 11560+50.00

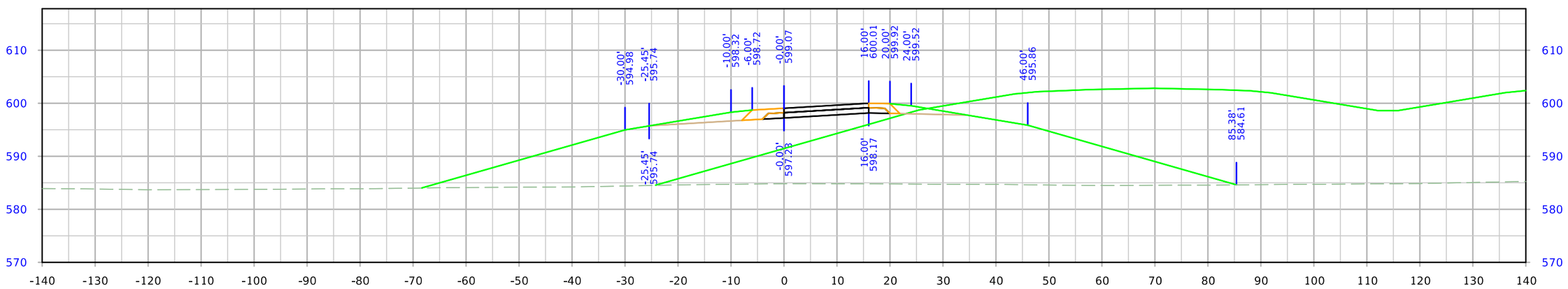
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.109

3:37:34 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y100_RMPG62A_58061061Z14.dgn

Ramp G62A



STA. 11562+00.00

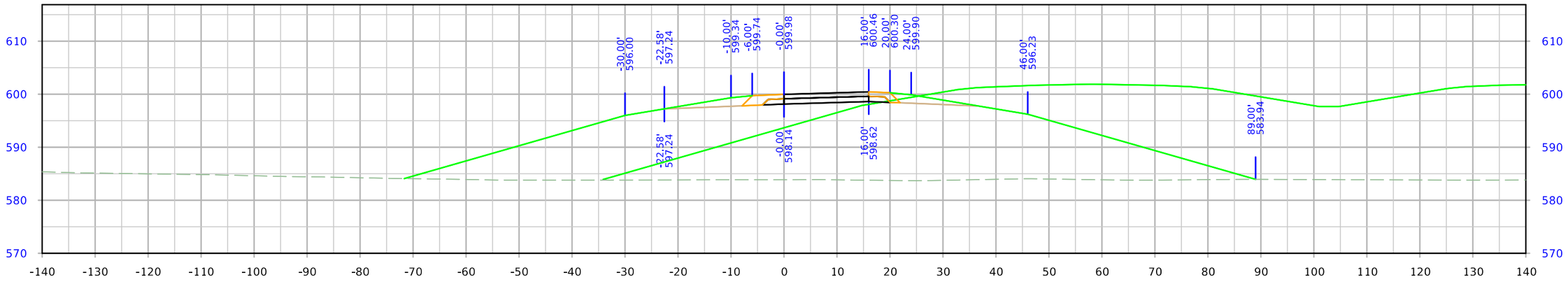


STA. 11561+50.00

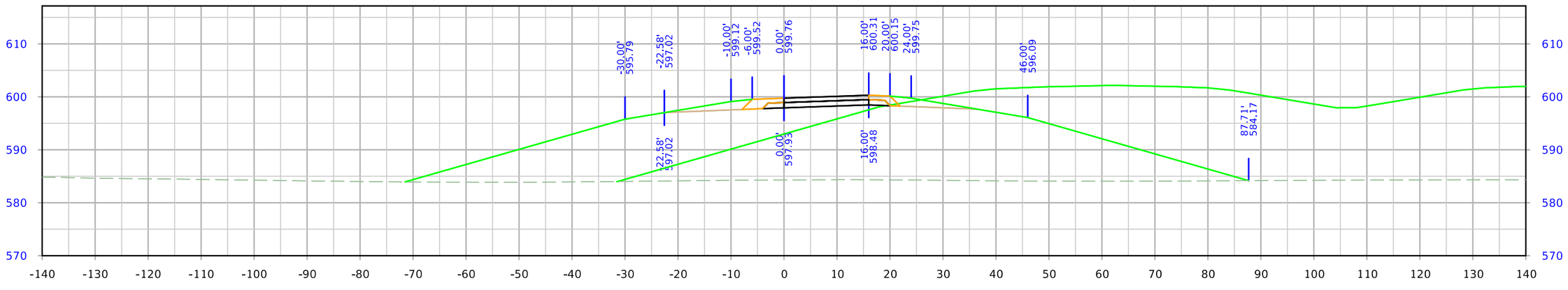
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.110

3:37:35 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y100_RMPG62A_58061061Z14.dgn

Ramp G62A



STA. 11563+00.00

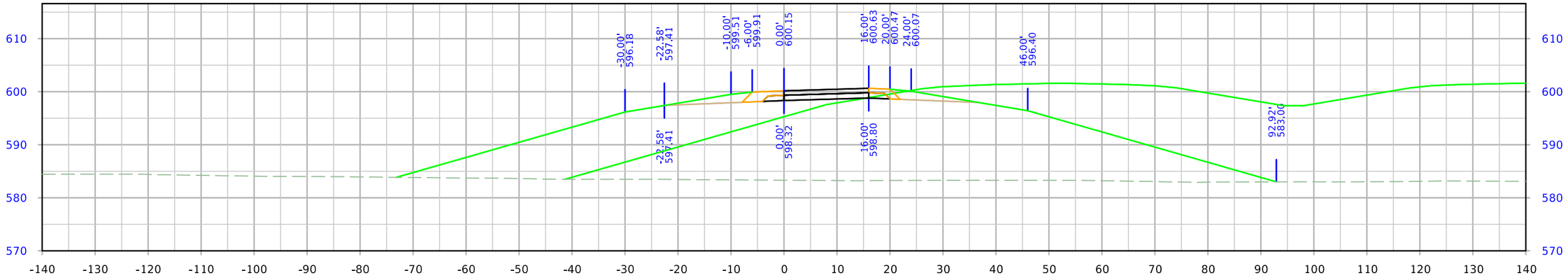


STA. 11562+50.00

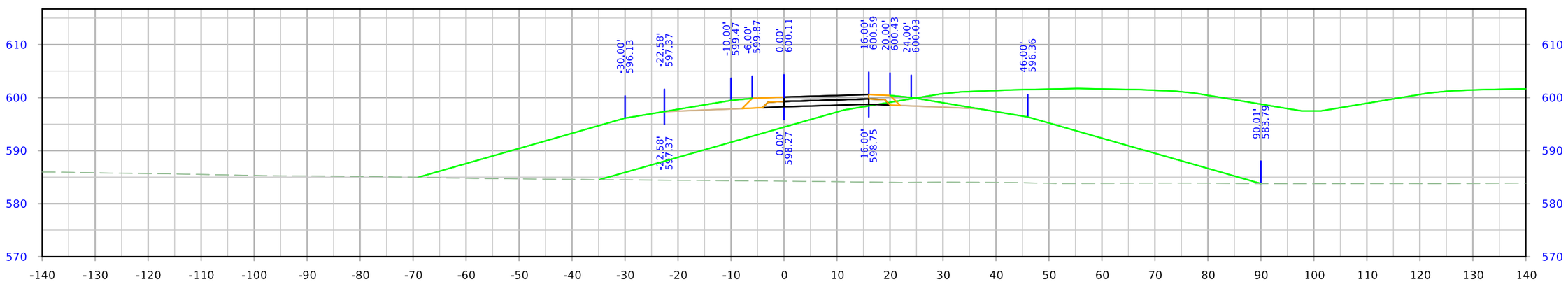
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.111

3:37:35 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y100_RMPG62A_58061061Z14.dgn

Ramp G62A



STA. 11564+00.00

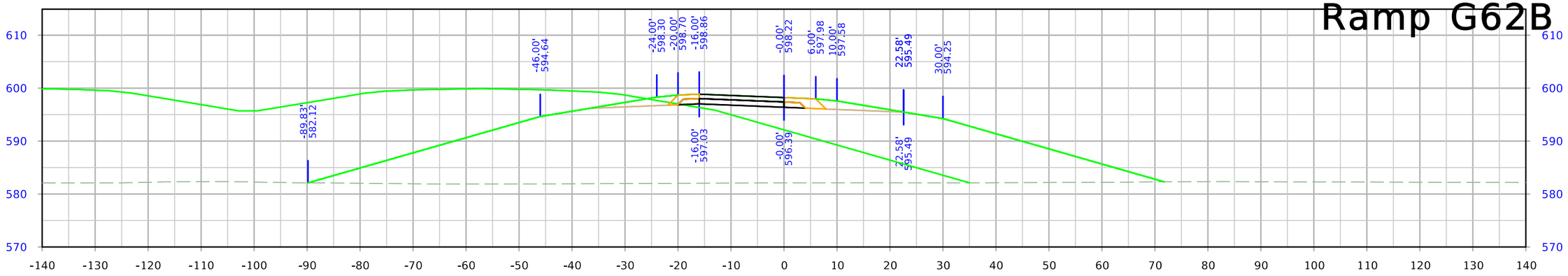


STA. 11563+50.00

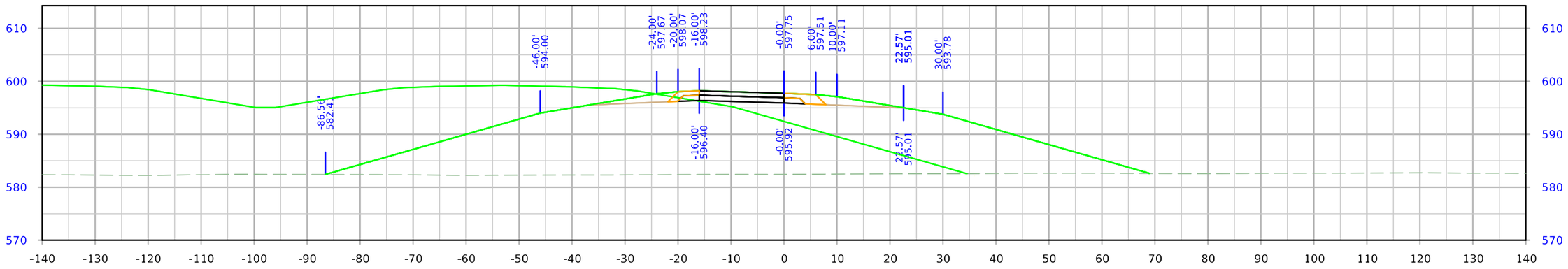
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.112

3:37:36 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y100_RMPG62A_58061061Z14.dgn

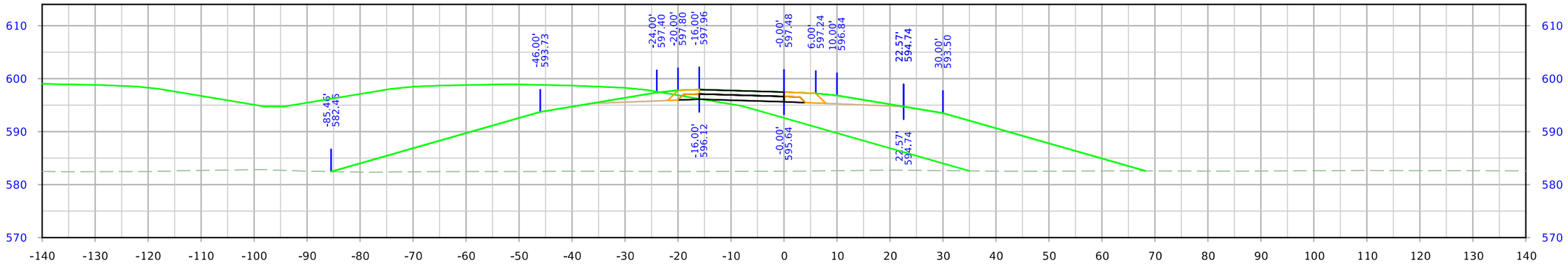
Ramp G62B



STA. 22537+50.00



STA. 22537+00.00

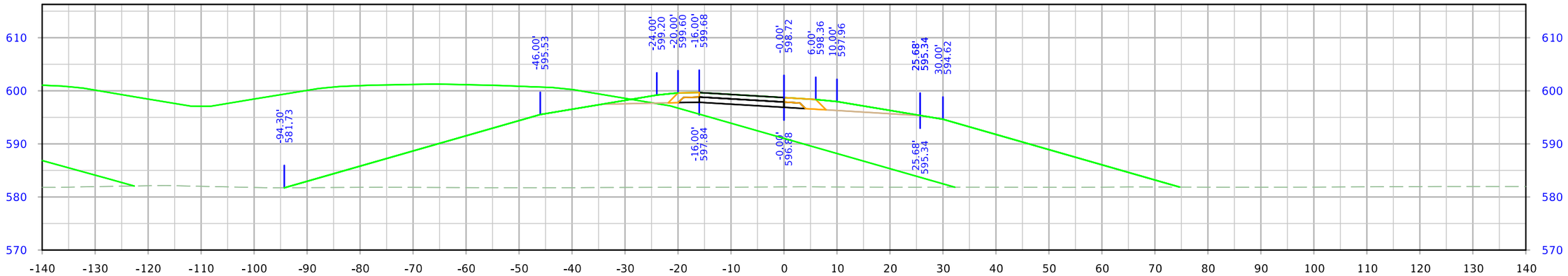


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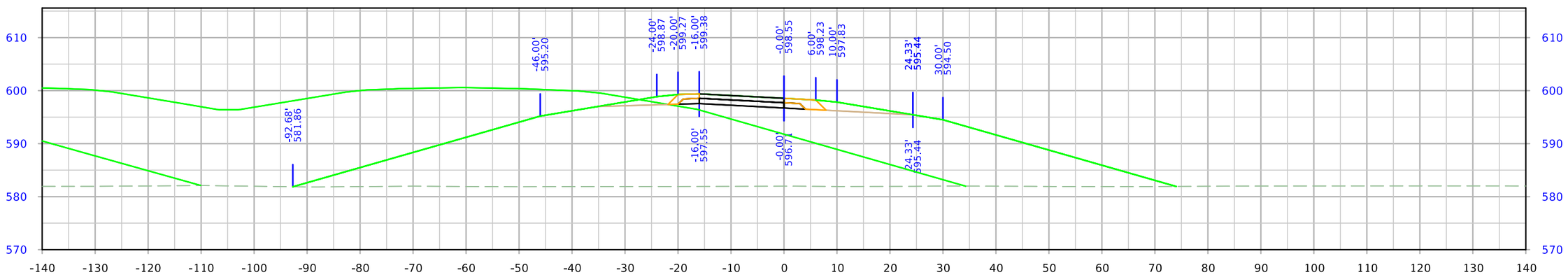
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3:37:49 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y200_RMPG62B_58061061Z14.dgn

Ramp G62B



STA. 22538+50.00

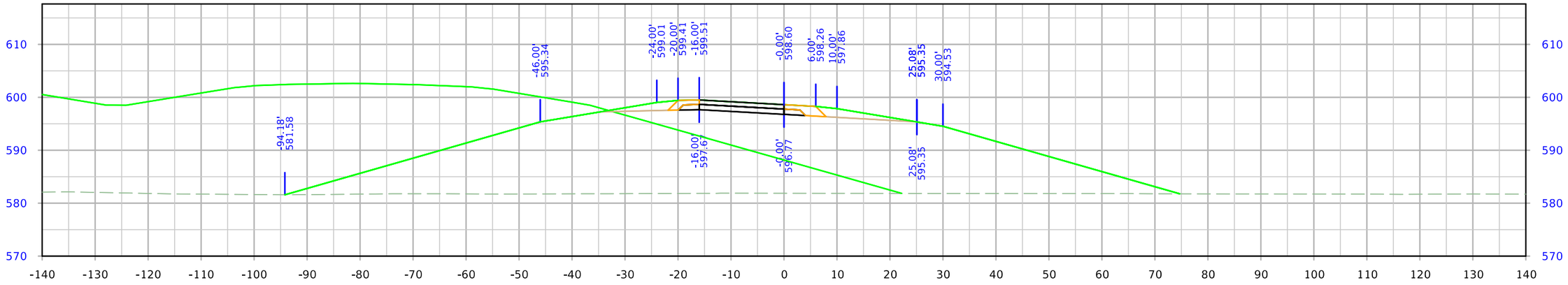


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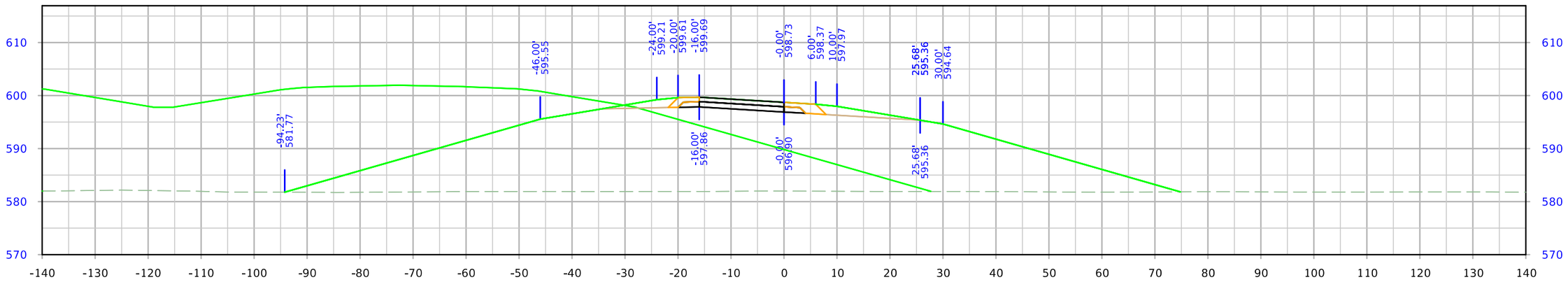
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.201

3:37:50 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y200_RMPG62B_58061061Z14.dgn

Ramp G62B



STA. 22539+50.00

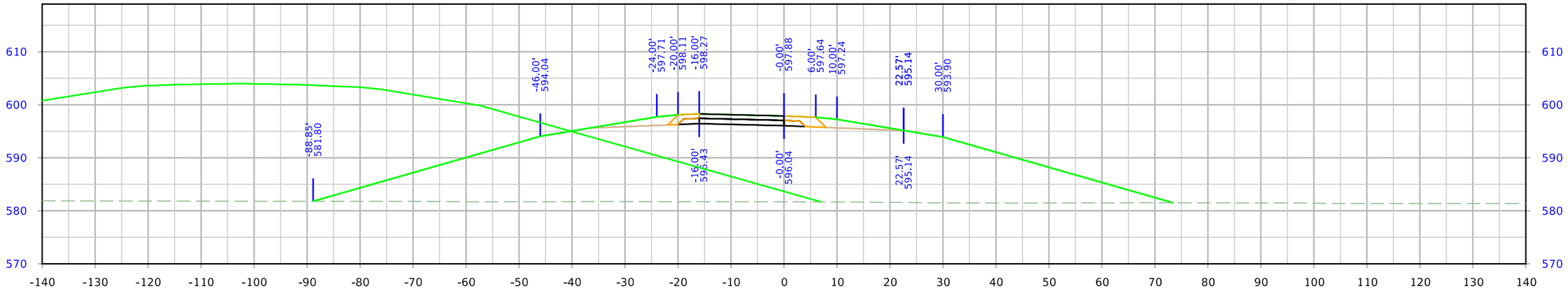


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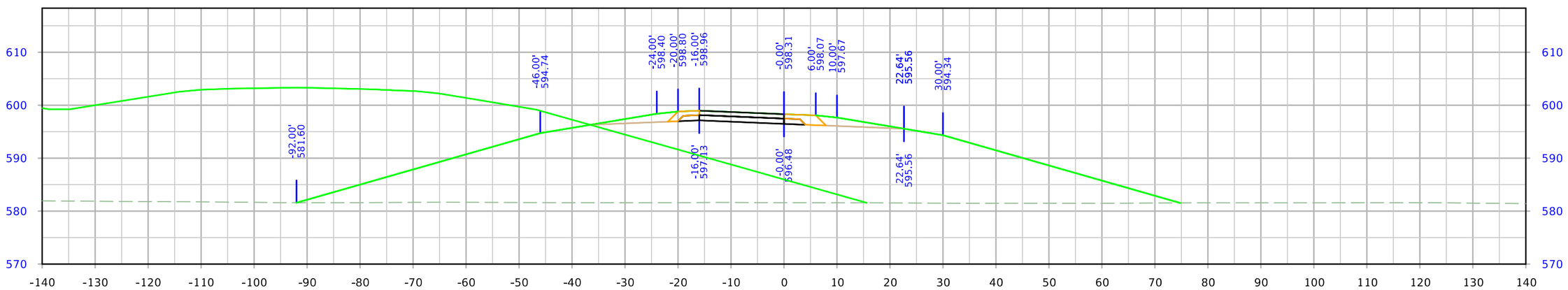
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3:37:50 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y200_RMPG62B_58061061Z14.dgn

Ramp G62B



STA. 22540+50.00

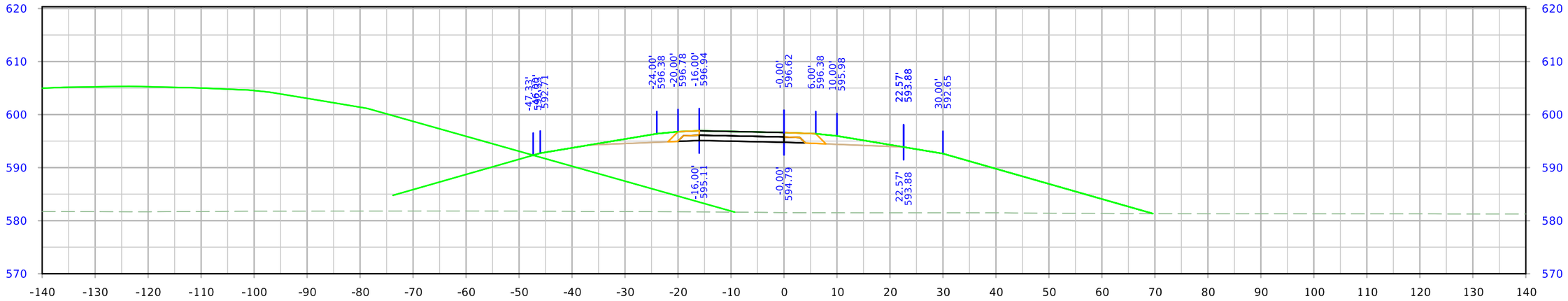


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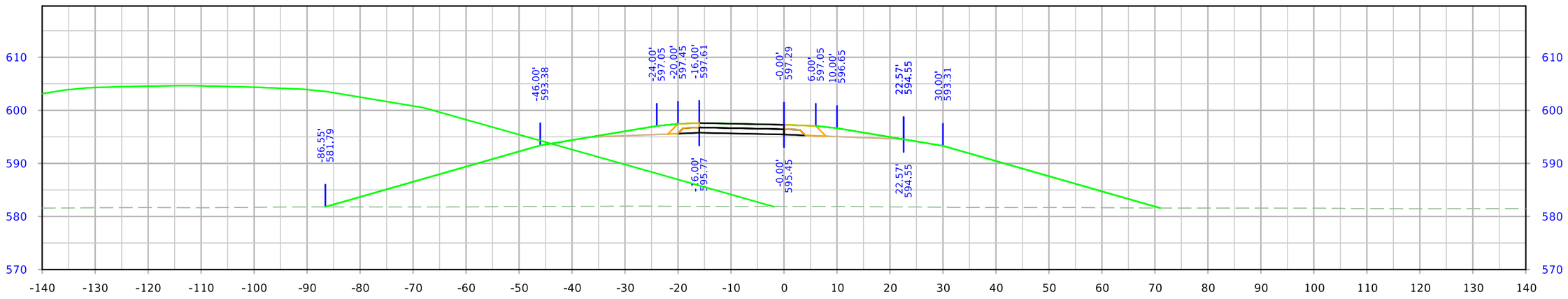
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3:37:51 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y200_RMPG62B_58061061Z14.dgn

Ramp G62B



STA. 22541+50.00

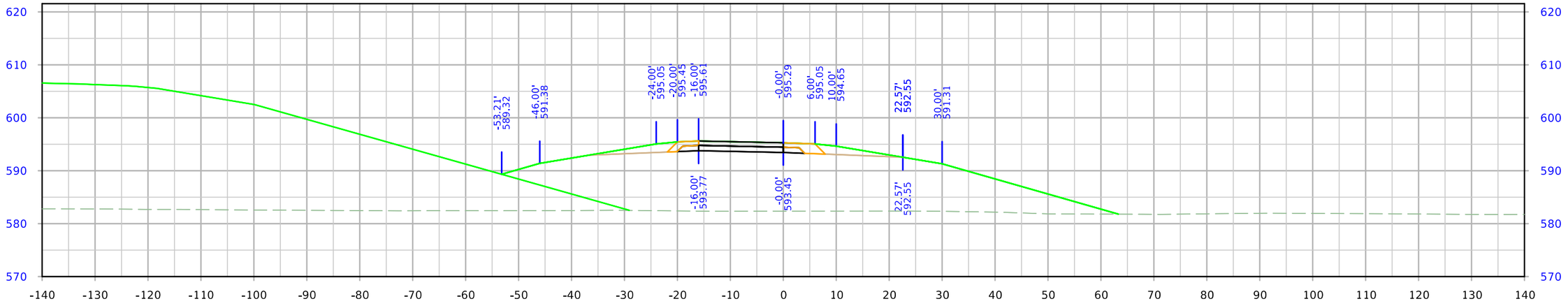


STA. 22541+00.00

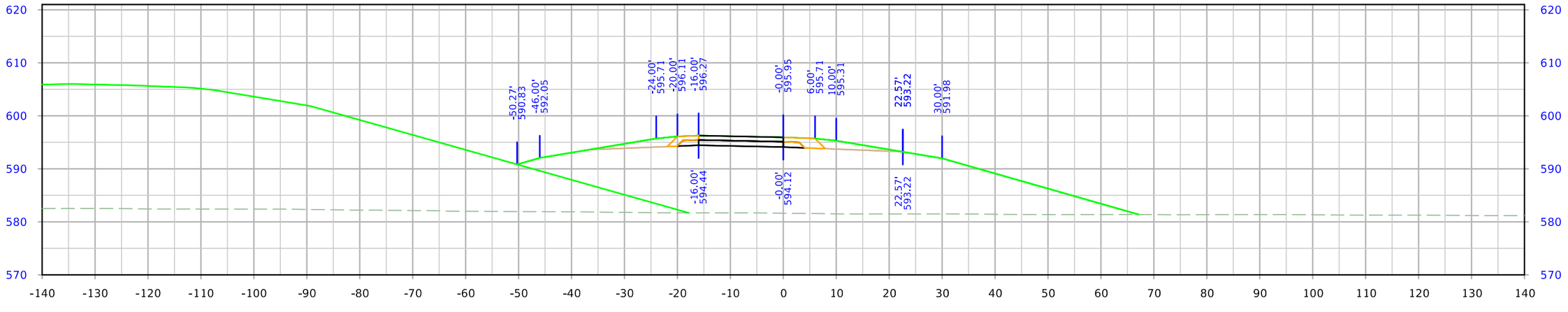
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3:37:52 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y200_RMPG62B_58061061Z14.dgn

Ramp G62B



STA. 22542+50.00

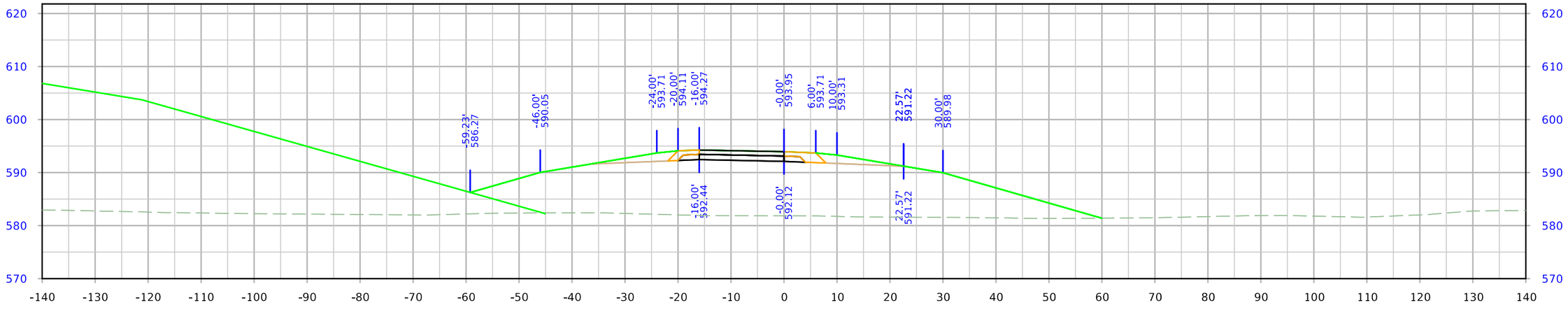


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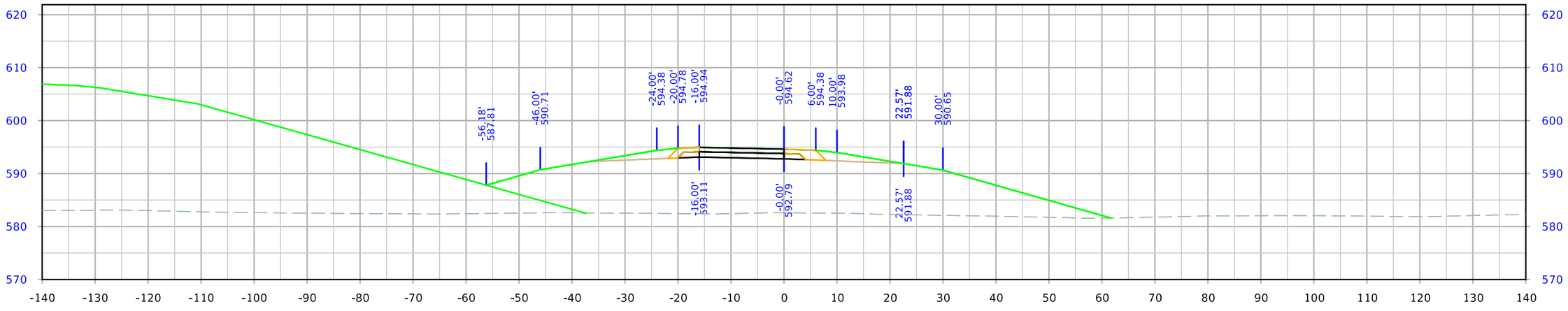
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.205

3:37:53 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y200_RMPG62B_58061061Z14.dgn

Ramp G62B



STA. 22543+50.00

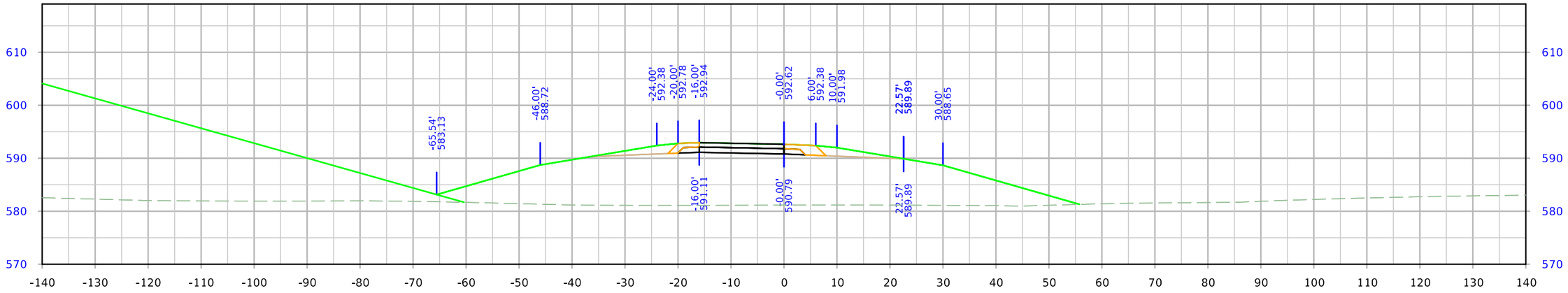


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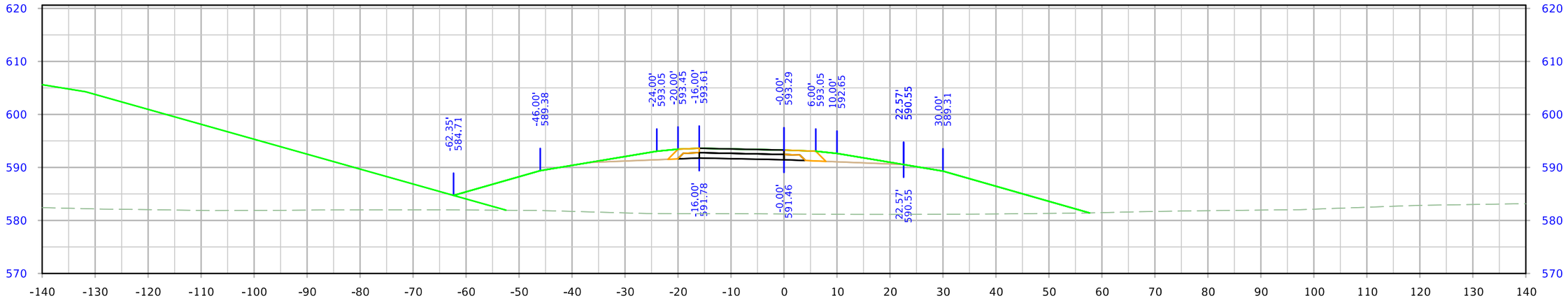
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.206

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Ramp G62B



STA. 22544+50.00

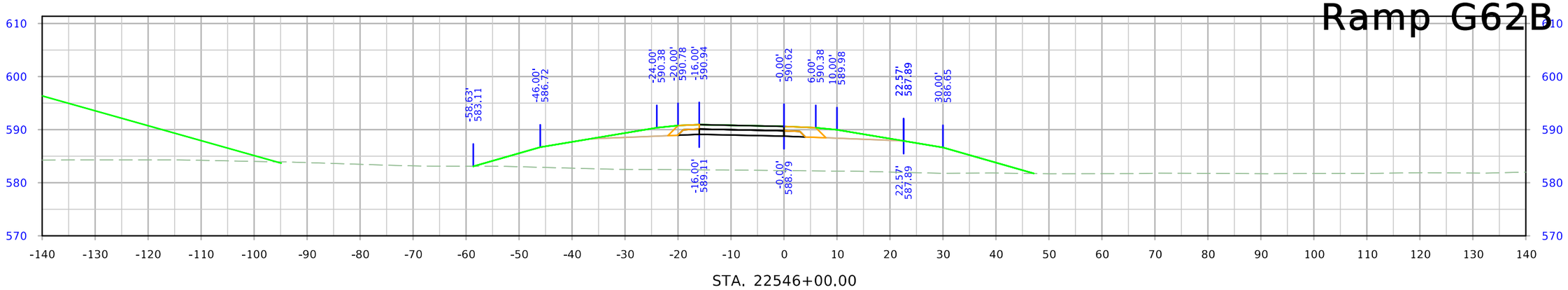


STA. 22544+00.00

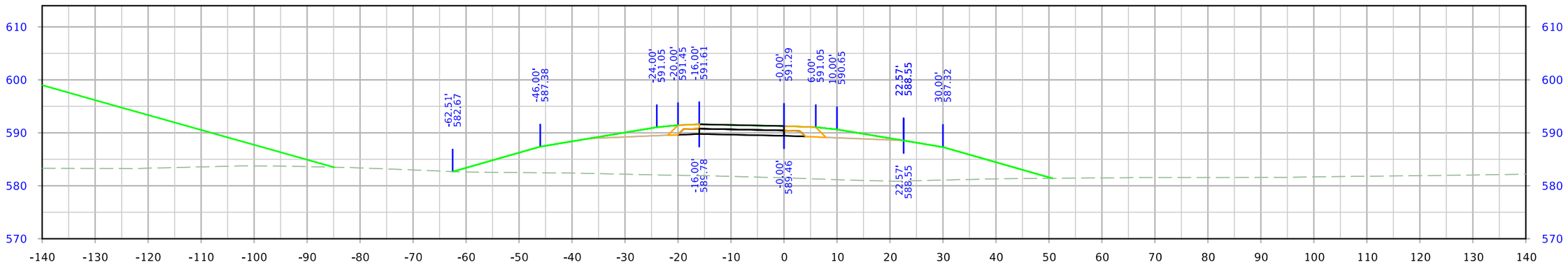
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.207

3:37:54 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y200_RMPG62B_58061061Z14.dgn

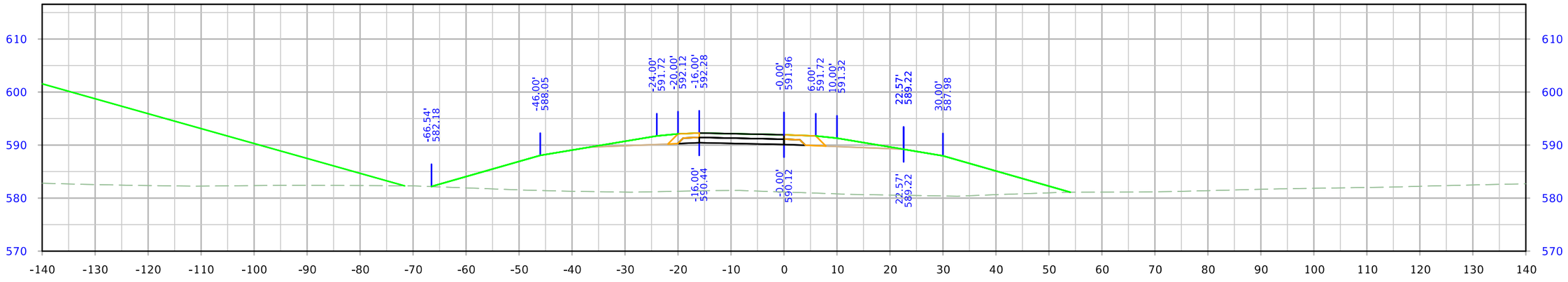
Ramp G62B



STA. 22546+00.00



STA. 22545+50.00

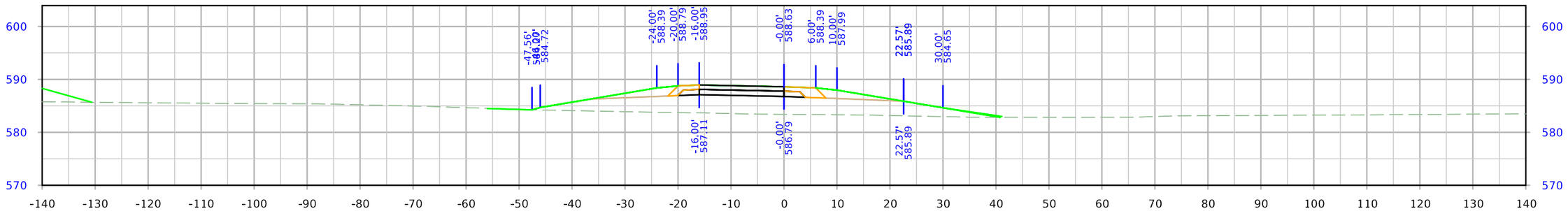


STA. 22545+00.00

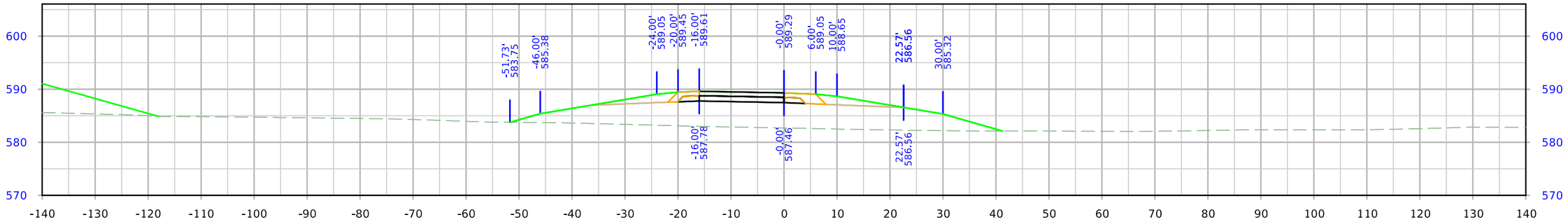
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.208

3:37:55 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y200_RMPG62B_58061061Z14.dgn

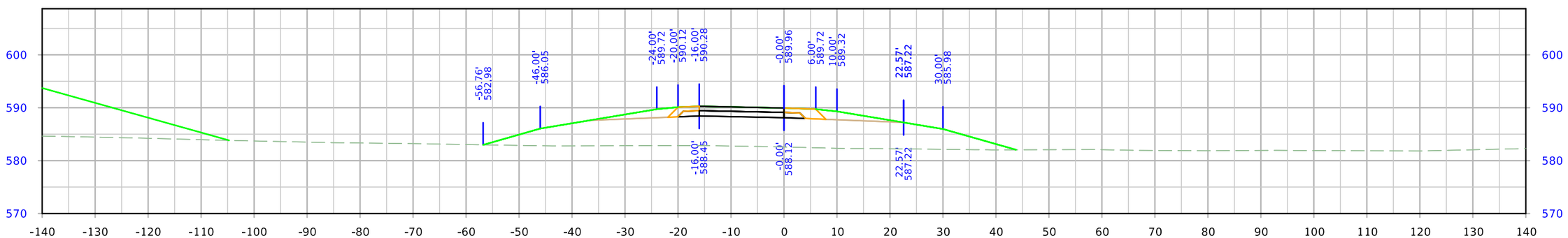
Ramp G62B



STA. 22547+50.00



STA. 22547+00.00

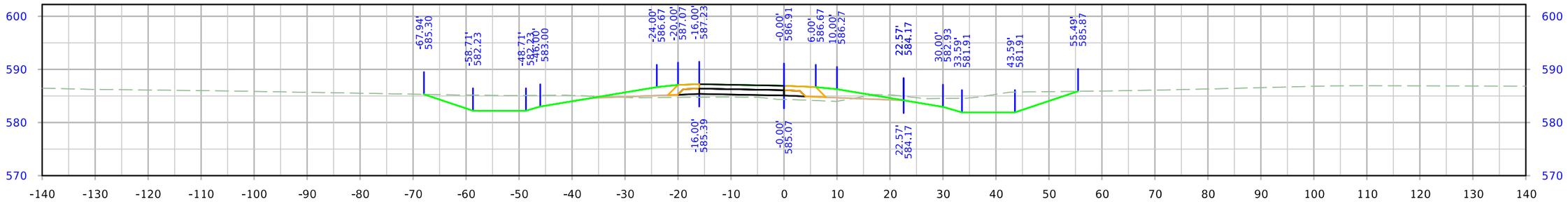


STA. 22546+50.00

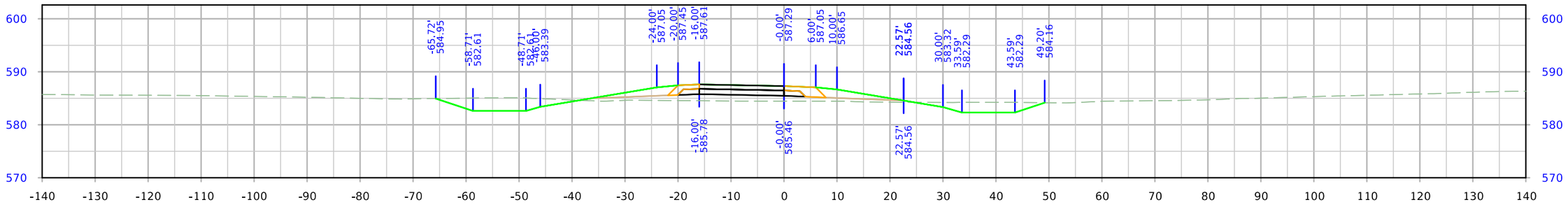
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.209

3:37:56 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y200_RMPG62B_58061061Z14.dgn

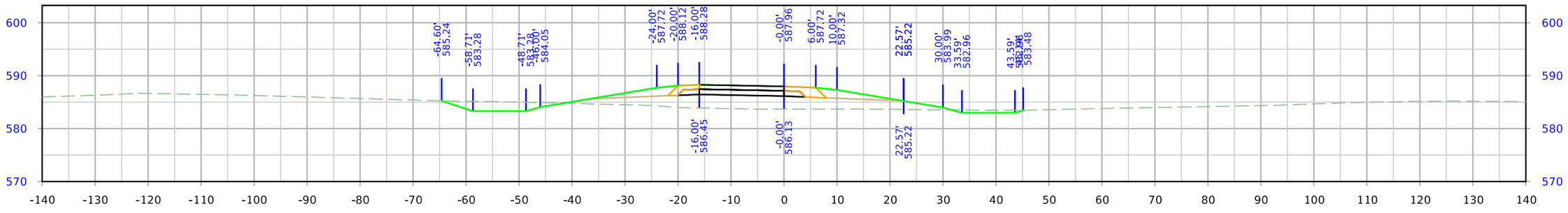
Ramp G62B



STA. 22549+00.00



STA. 22548+50.00

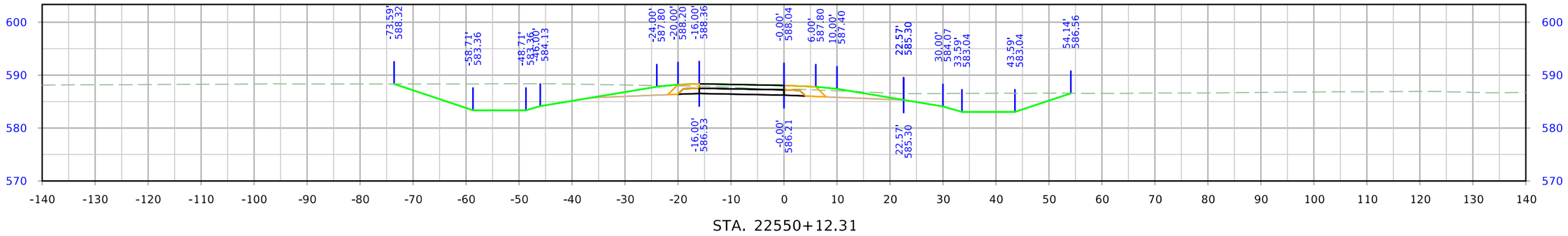


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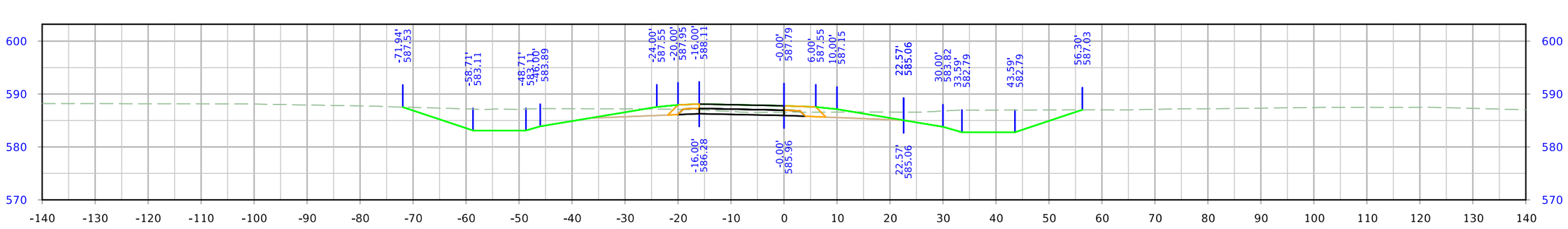
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.210

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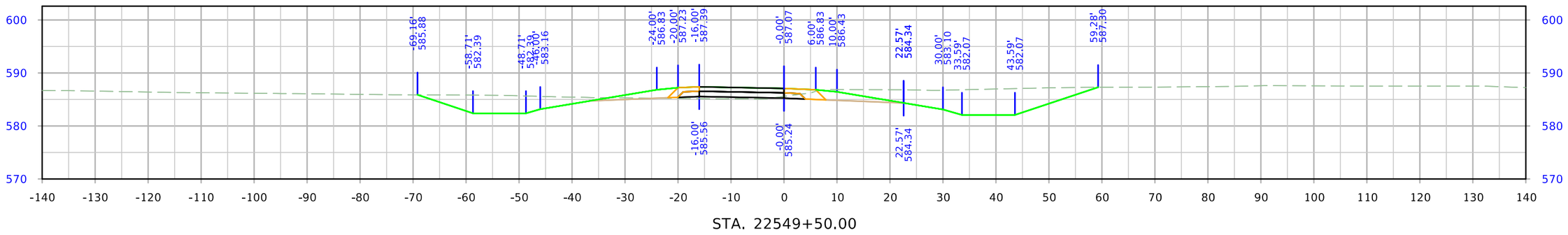
Ramp G62B



STA. 22550+12.31



STA. 22550+00.00

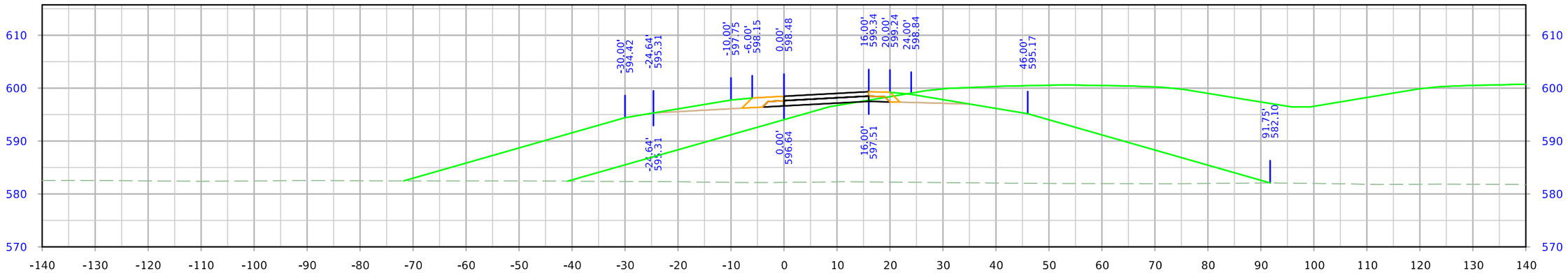


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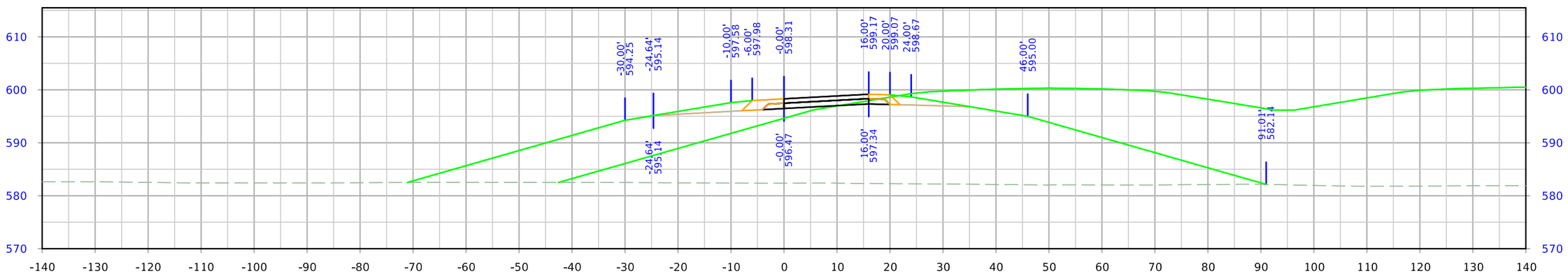
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.211

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Ramp G62C



STA. 33538+00.00

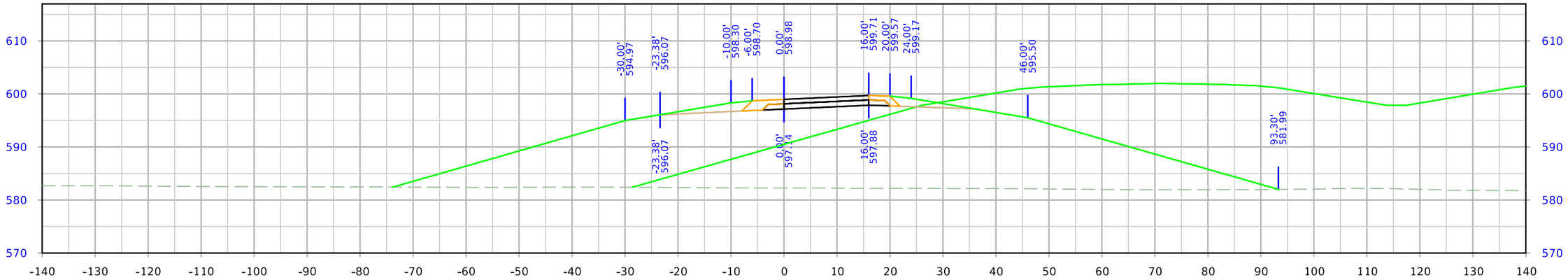


STA. 33537+78.68

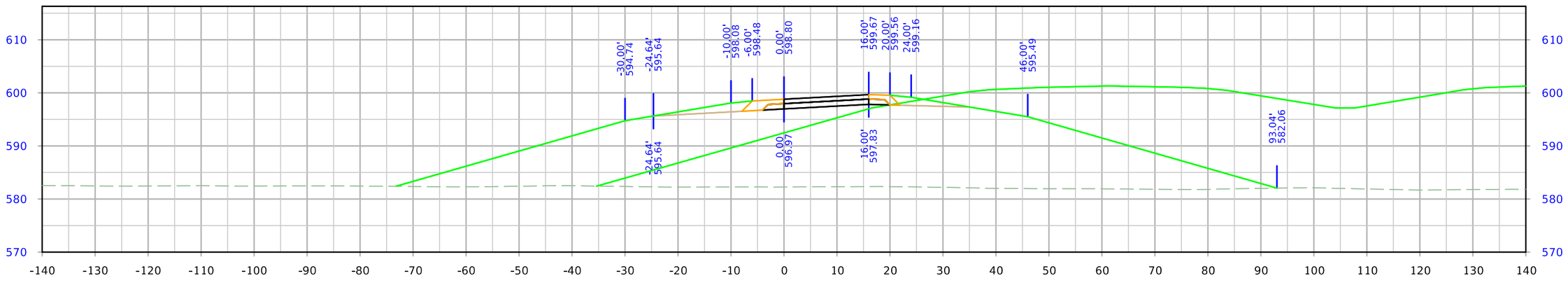
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.300

3:38:10 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y300_RMPG62C_58061061Z14.dgn

Ramp G62C



STA. 33539+00.00

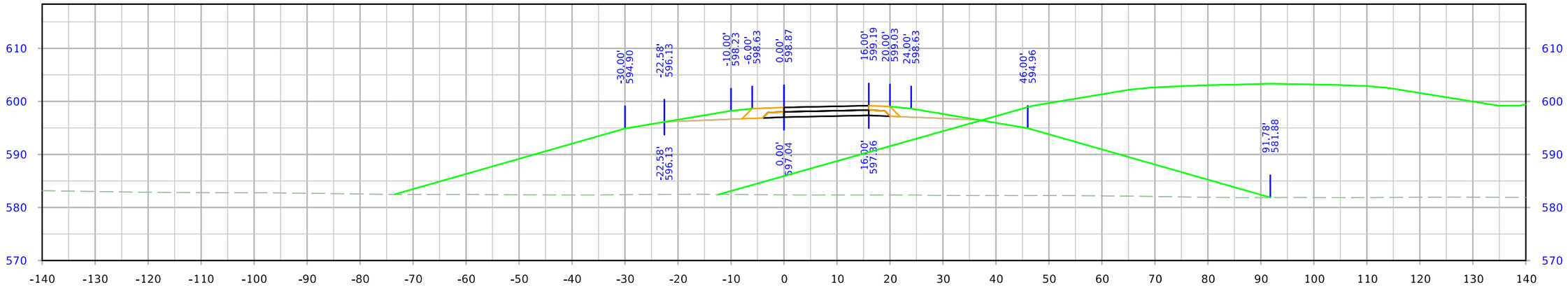


STA. 33538+50.00

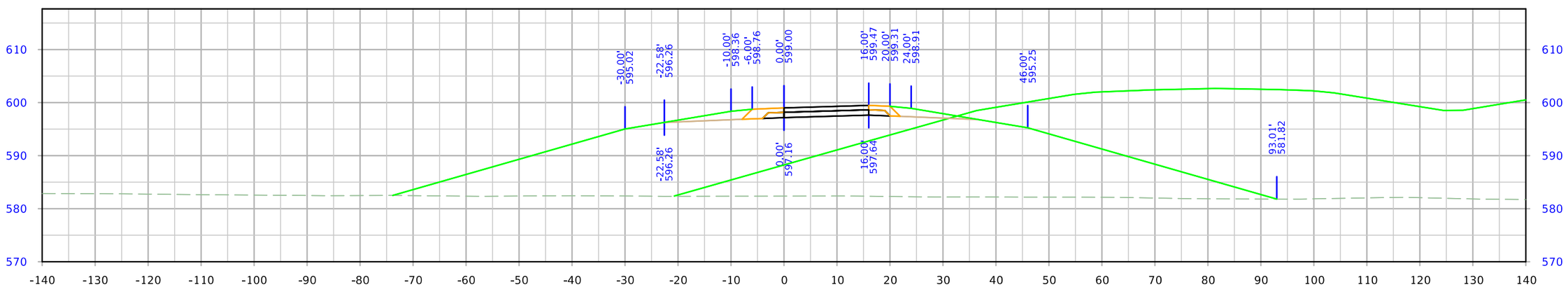
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.301

3:38:11 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y300_RMPG62C_58061061Z14.dgn

Ramp G62C



STA. 33540+00.00

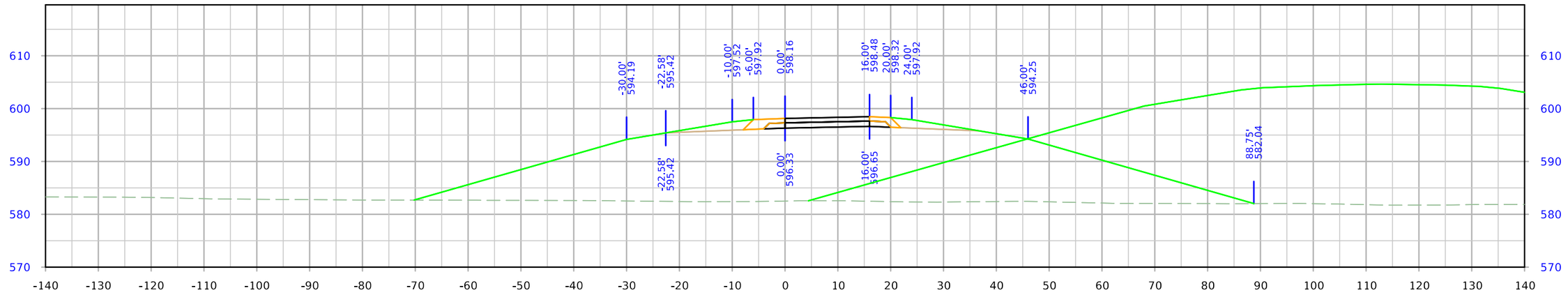


STA. 33539+50.00

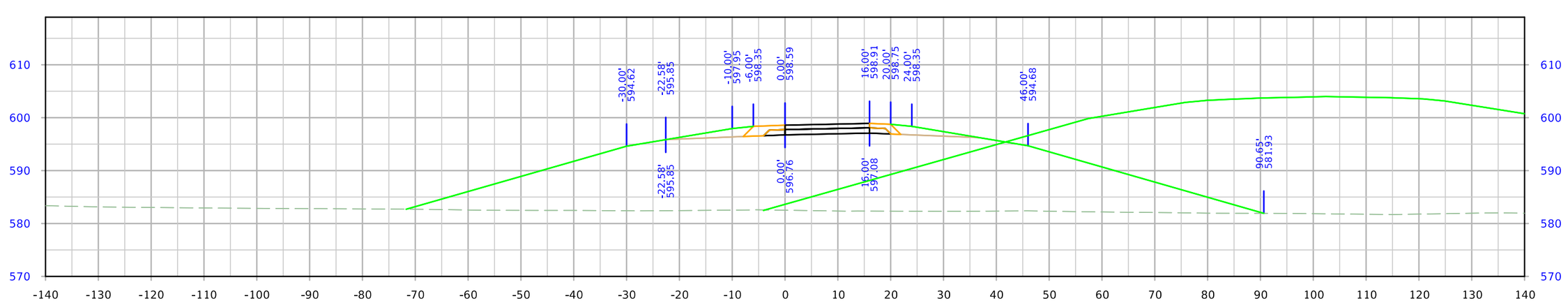
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.302

3:38:12 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y300_RMPG62C_58061061Z14.dgn

Ramp G62C



STA. 33541+00.00

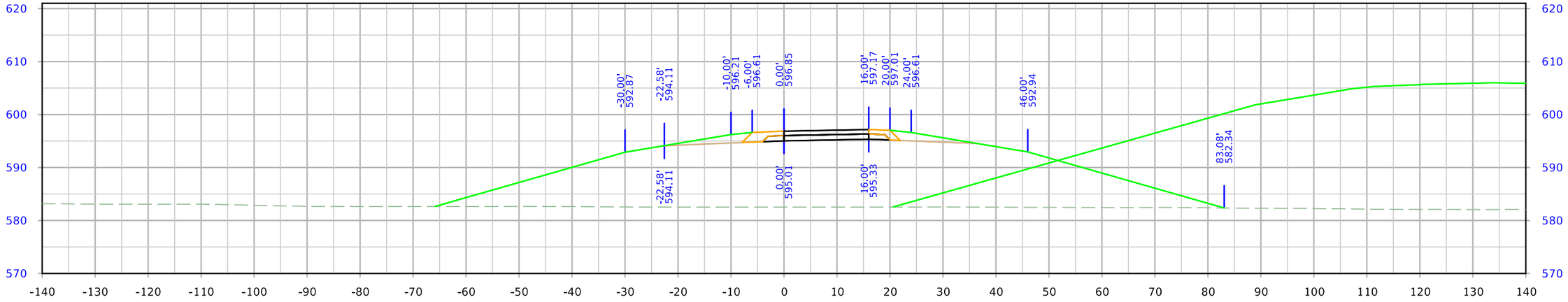


STA. 33540+50.00

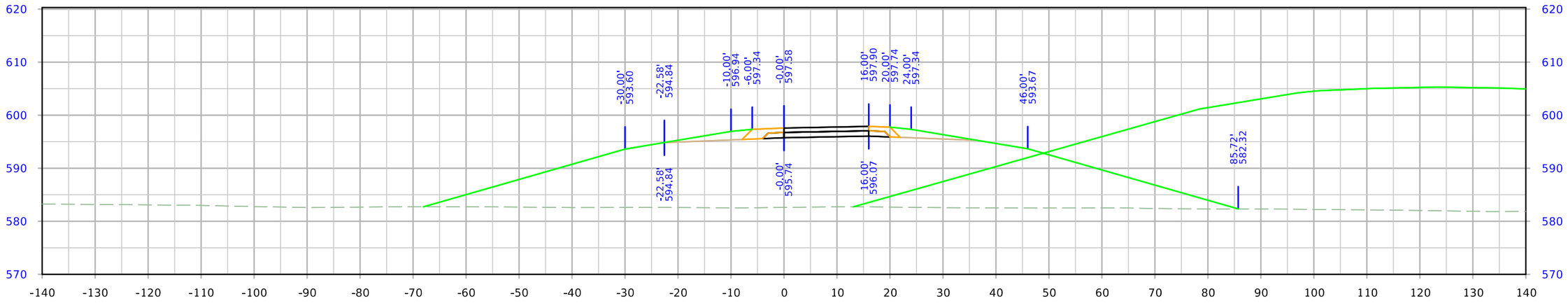
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.303

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Ramp G62C



STA. 33542+00.00

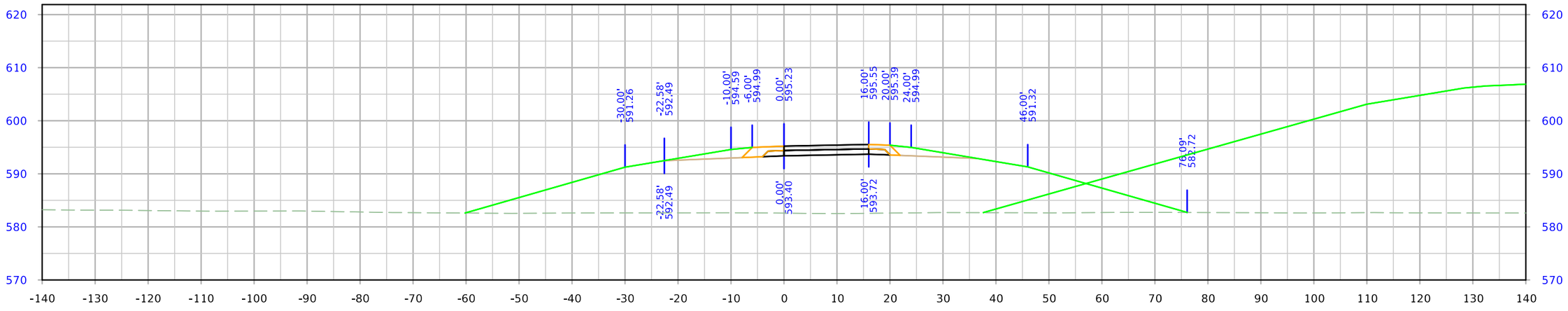


STA. 33541+50.00

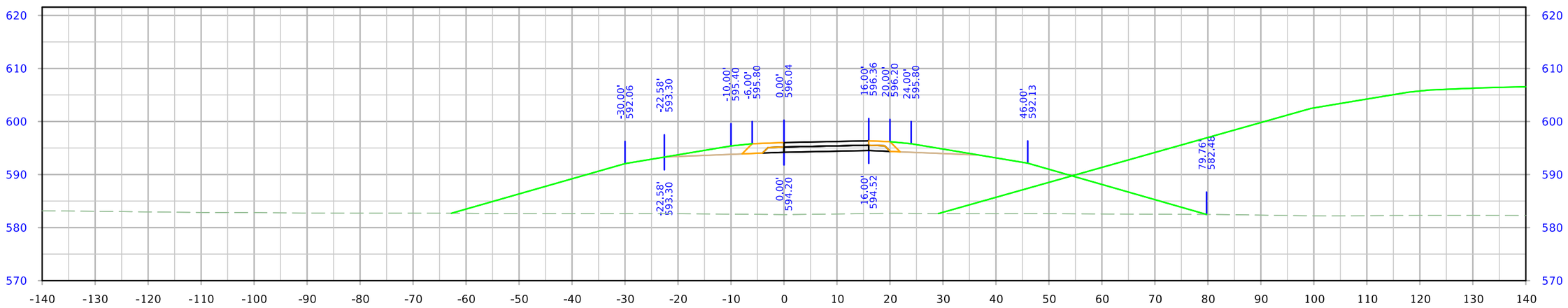
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.304

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Ramp G62C



STA. 33543+00.00

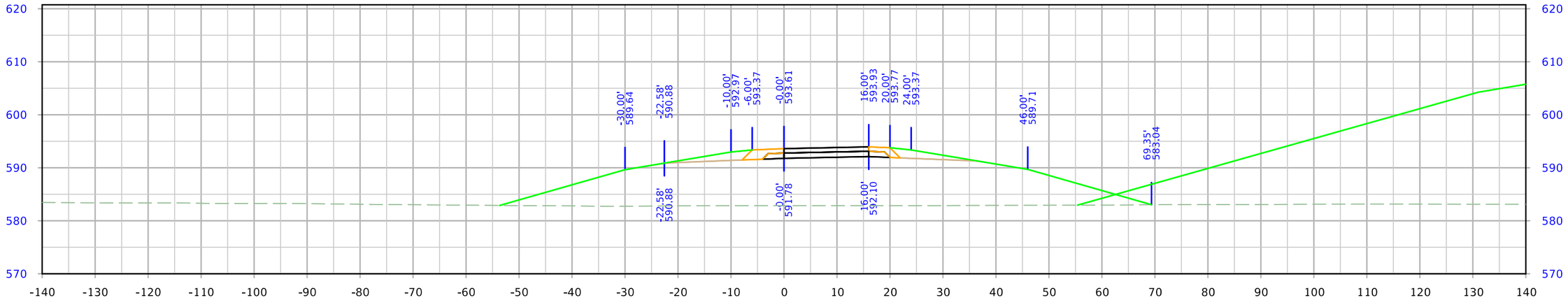


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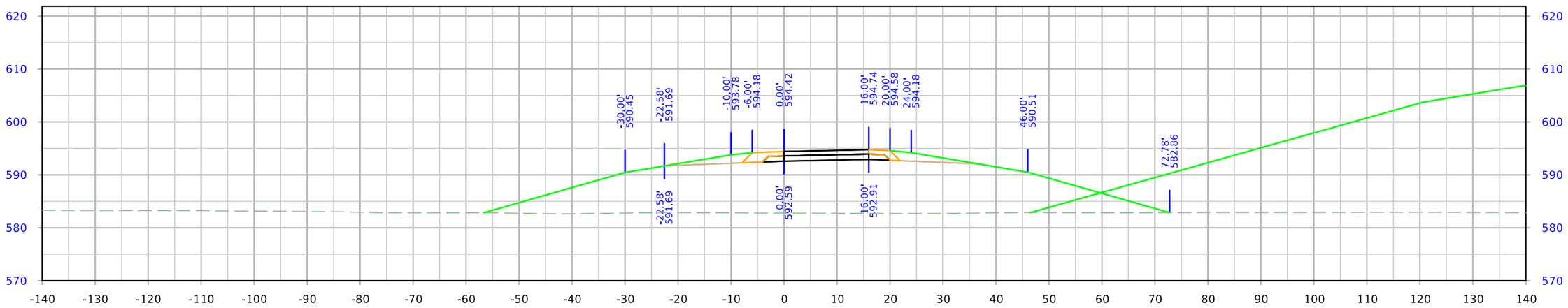
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.305

3:38:14 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y300_RMPG62C_58061061Z14.dgn

Ramp G62C



STA. 33544+00.00

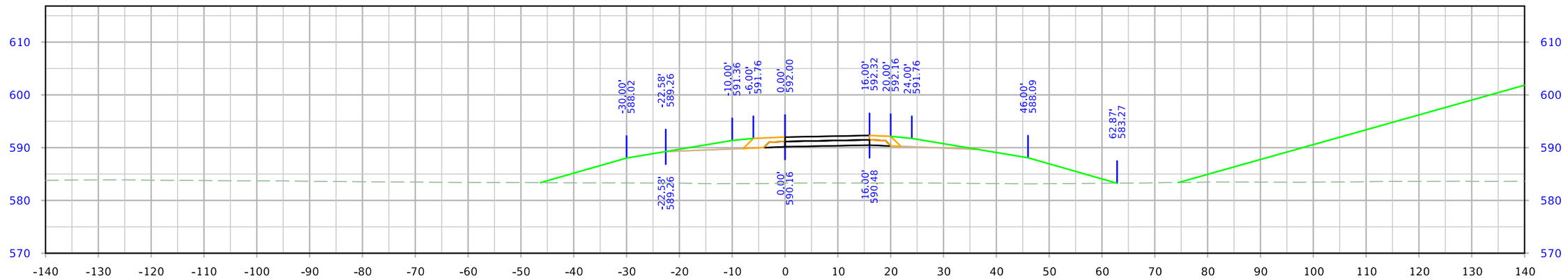


STA. 33543+50.00

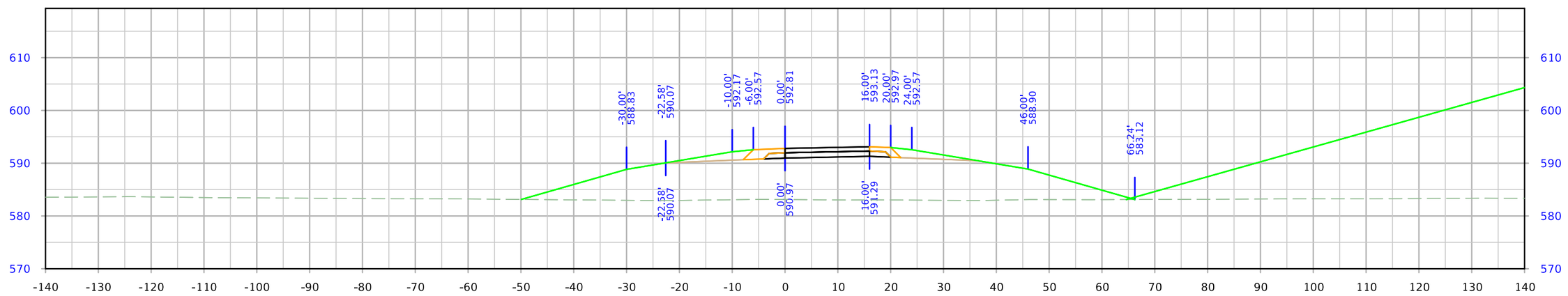
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.306

3:38:14 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y300_RMPG62C_58061061Z14.dgn

Ramp G62C



STA. 33545+00.00

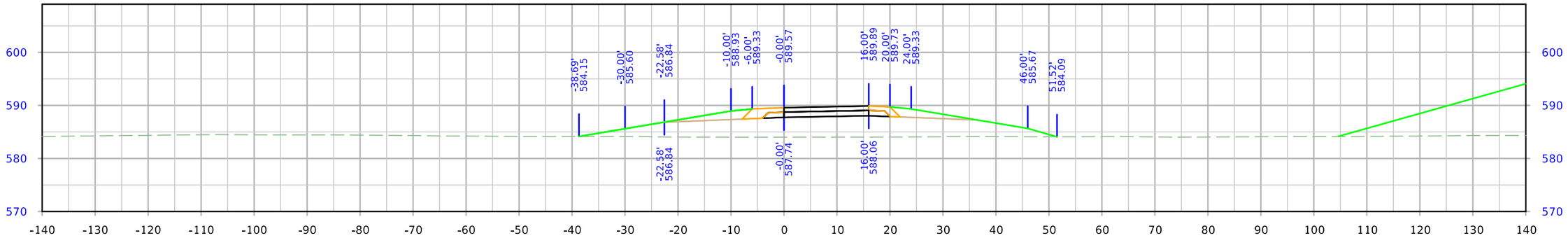


STA. 33544+50.00

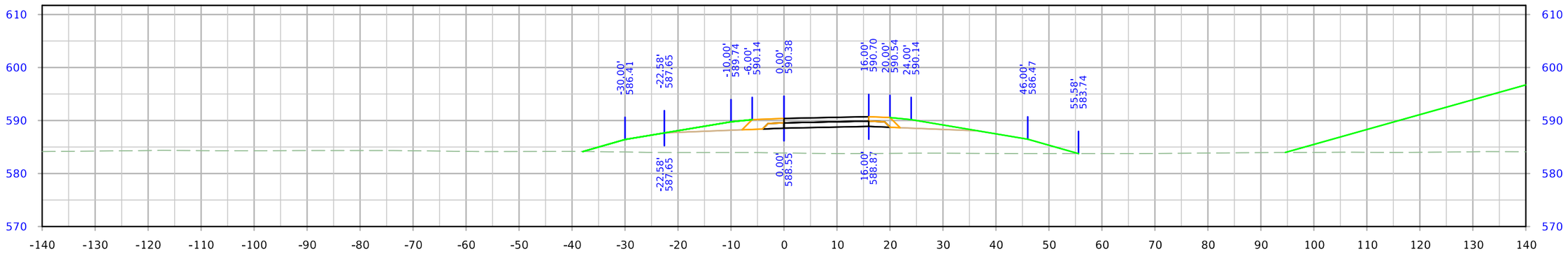
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.307

3:38:15 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y300_RMPG62C_58061061Z14.dgn

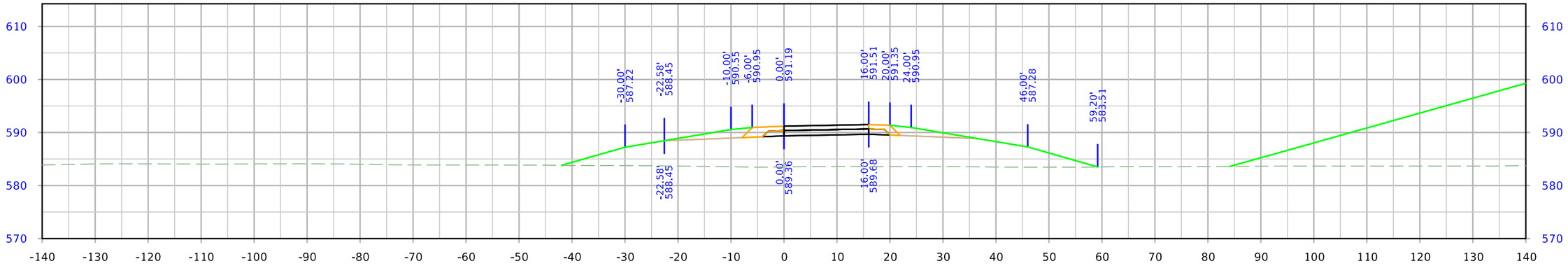
Ramp G62C



STA. 33546+50.00



STA. 33546+00.00

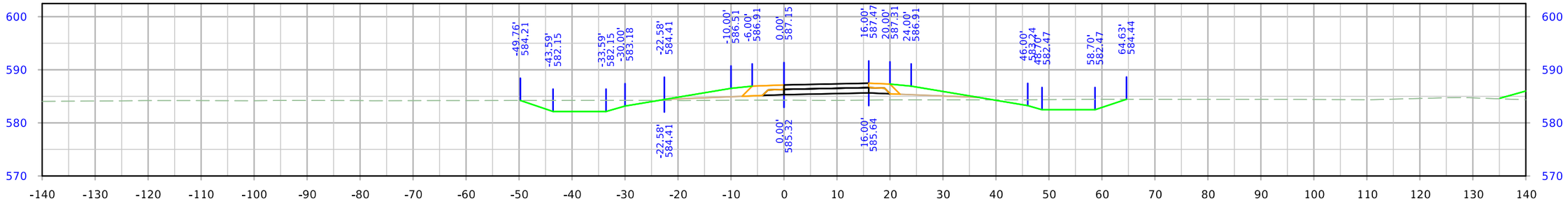


STA. 33545+50.00

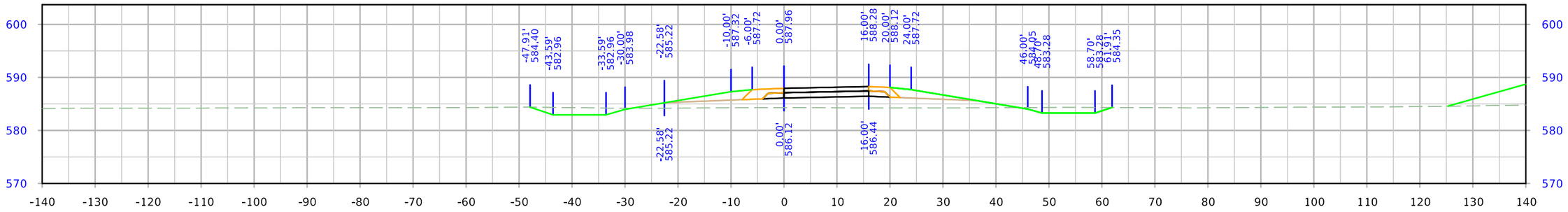
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3:38:16 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y300_RMPG62C_58061061Z14.dgn

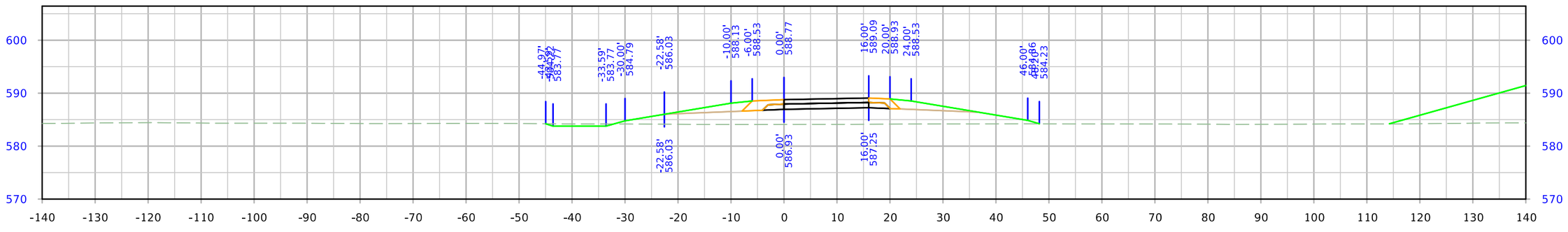
Ramp G62C



STA. 33548+00.00



STA. 33547+50.00

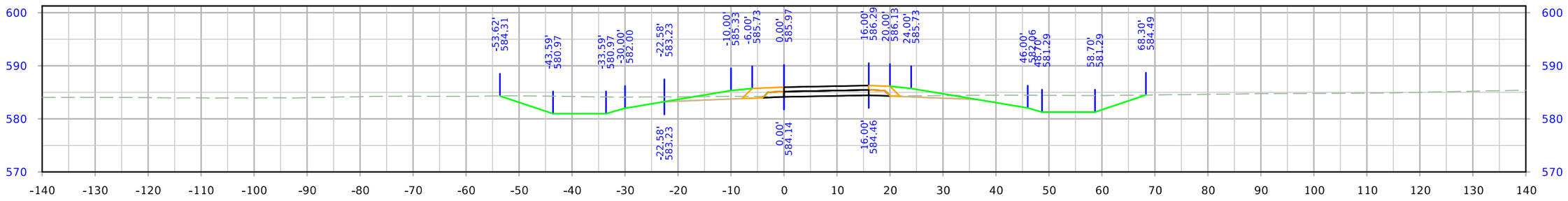


STA. 33547+00.00

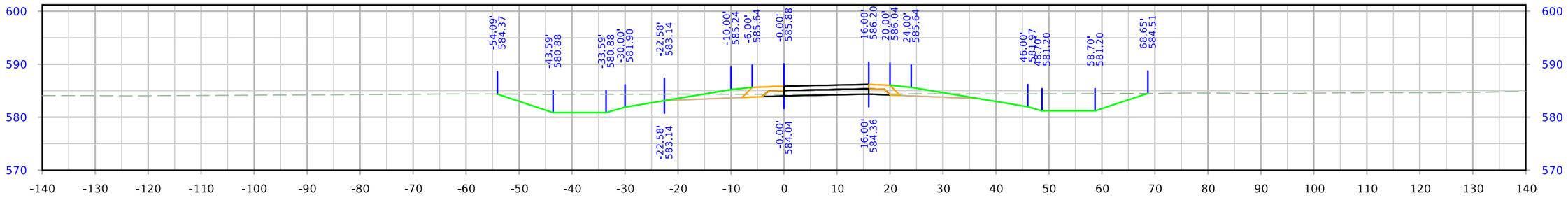
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.309

3:38:17 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y300_RMPG62C_58061061Z14.dgn

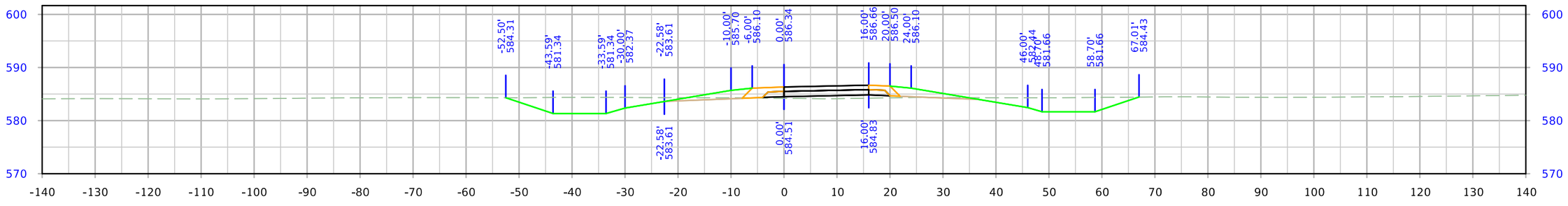
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STA. 33549+50.00



STA. 33549+00.00

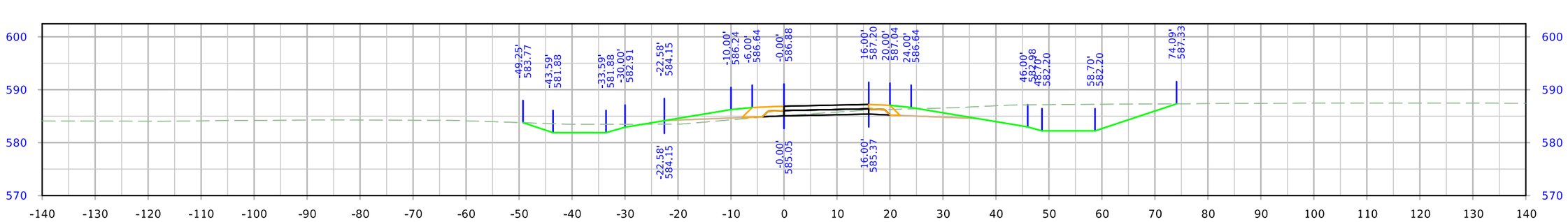


STA. 33548+50.00

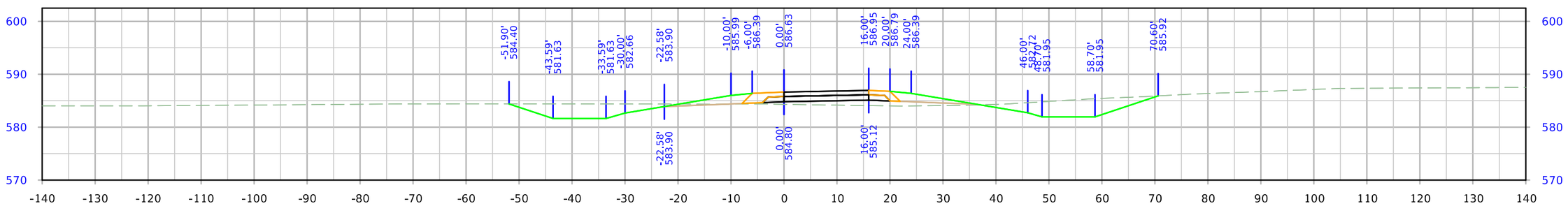
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.310

3:38:18 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y300_RMPG62C_58061061Z14.dgn

Ramp G62C



STA. 33550+12.76

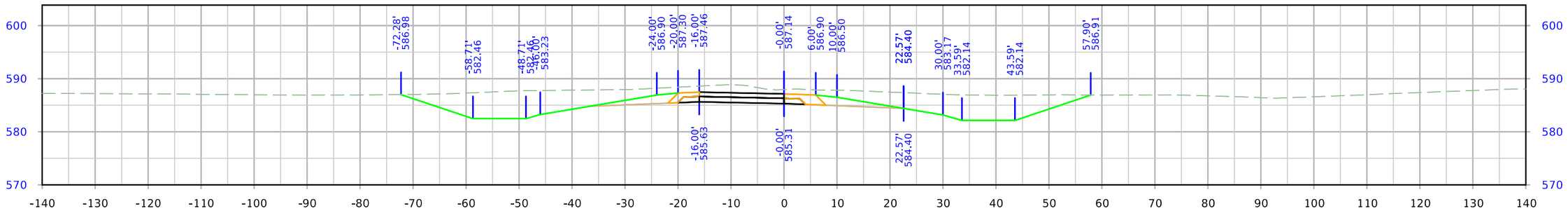


STA. 33550+00.00

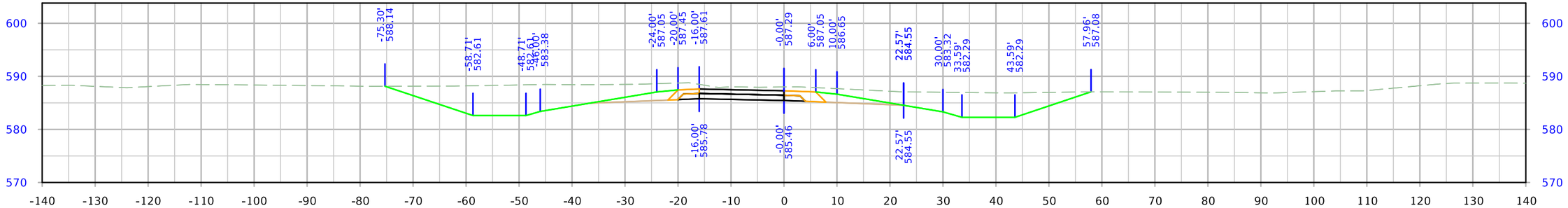
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.311

3:38:19 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y300_RMPG62C_58061061Z14.dgn

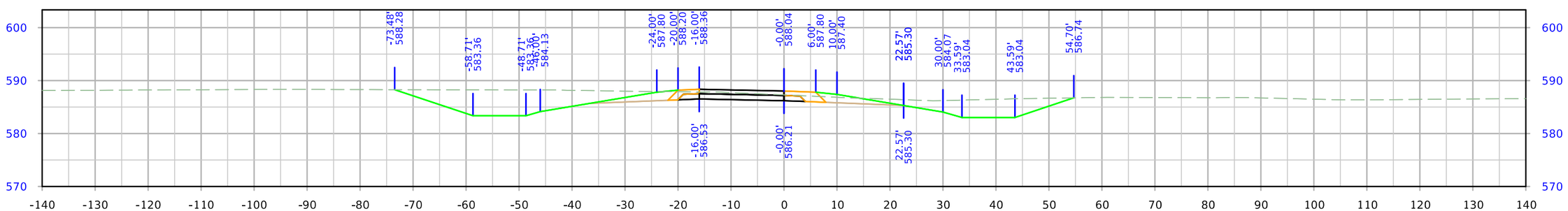
Ramp G62D



STA. 44551+00.00



STA. 44550+50.00

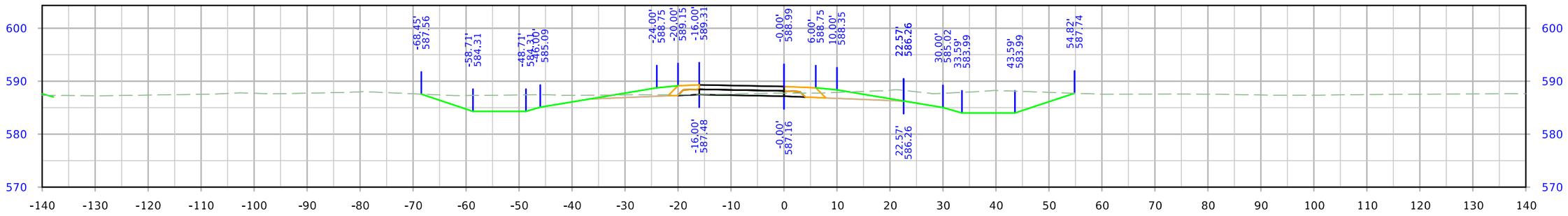


STA. 44550+00.14

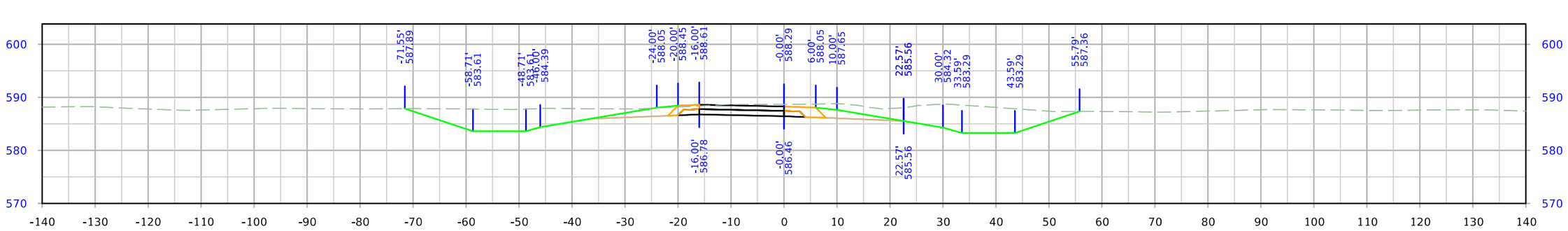
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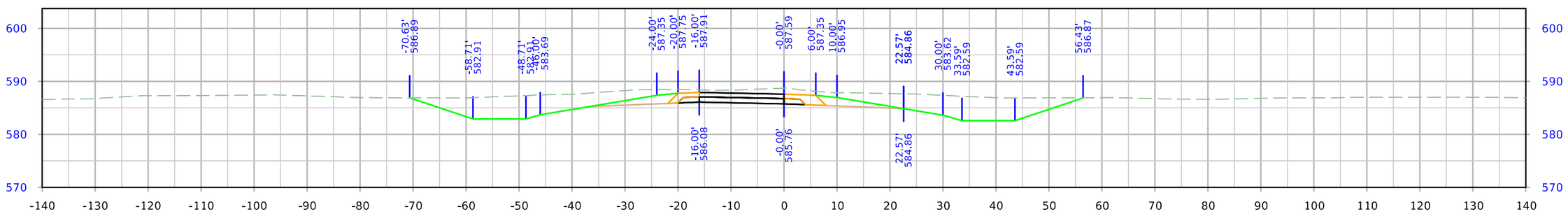
Ramp G62D



STA. 44552+50.00



STA. 44552+00.00

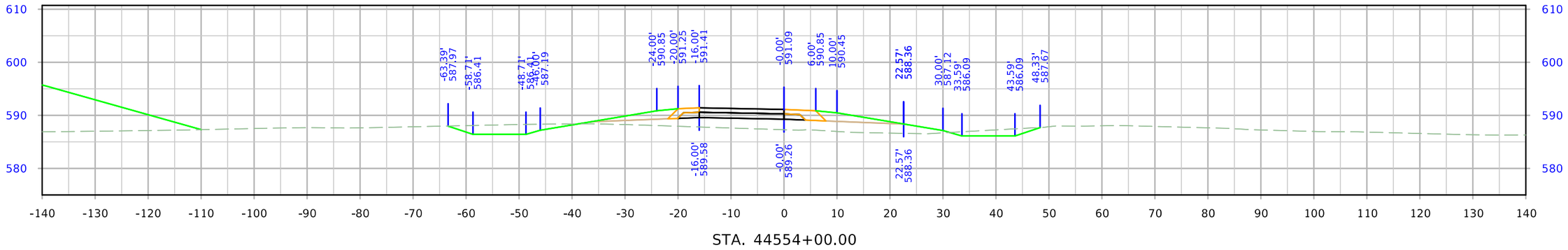


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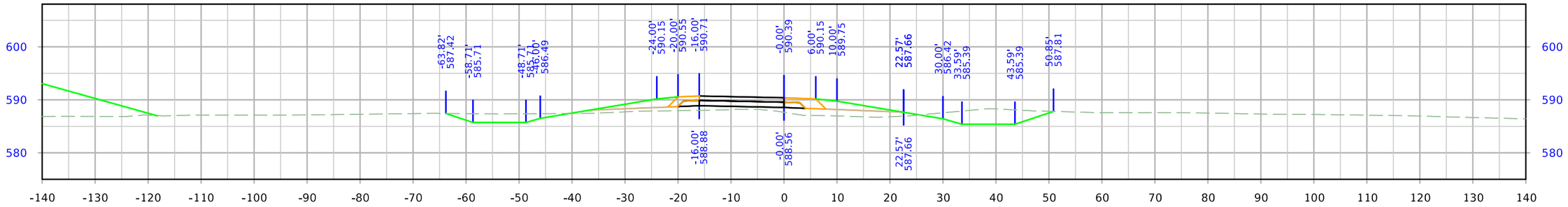
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.401

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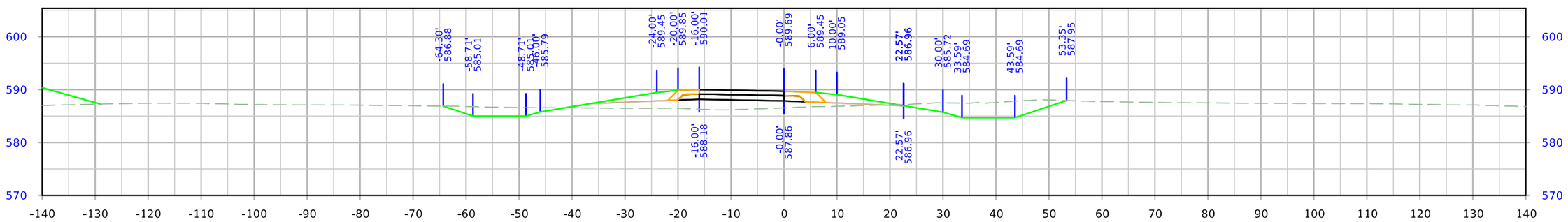
Ramp G62D



STA. 44554+00.00



STA. 44553+50.00

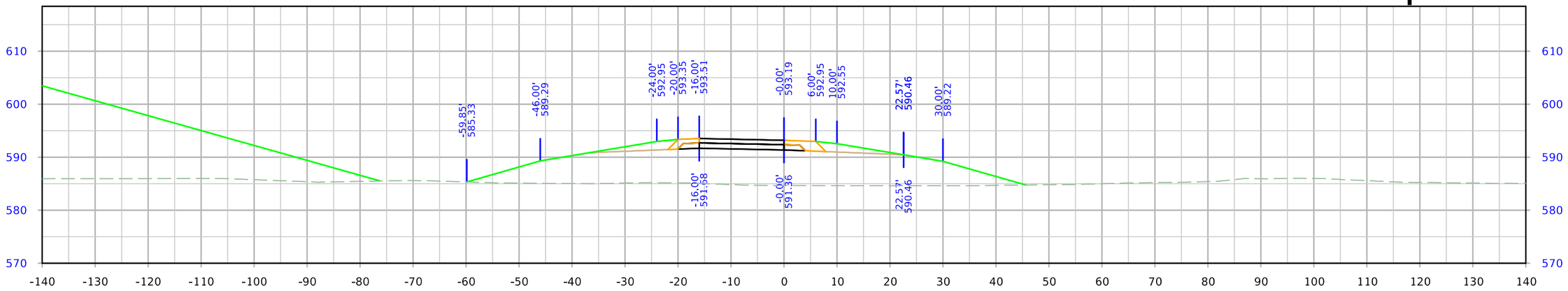


STA. 44553+00.00

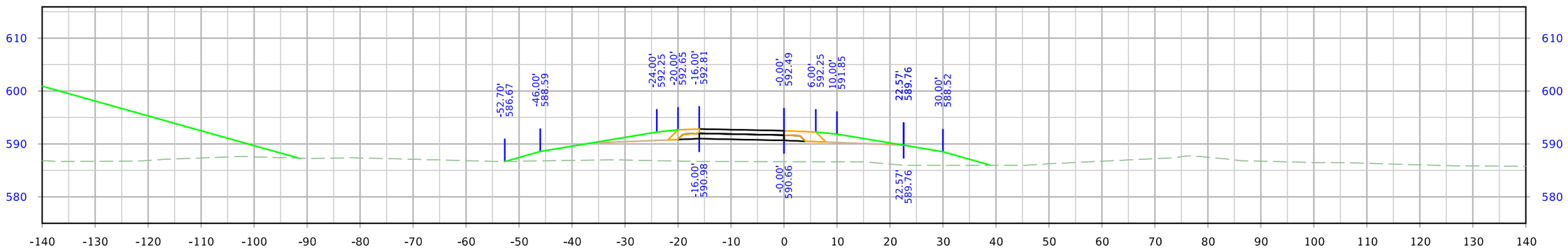
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.402

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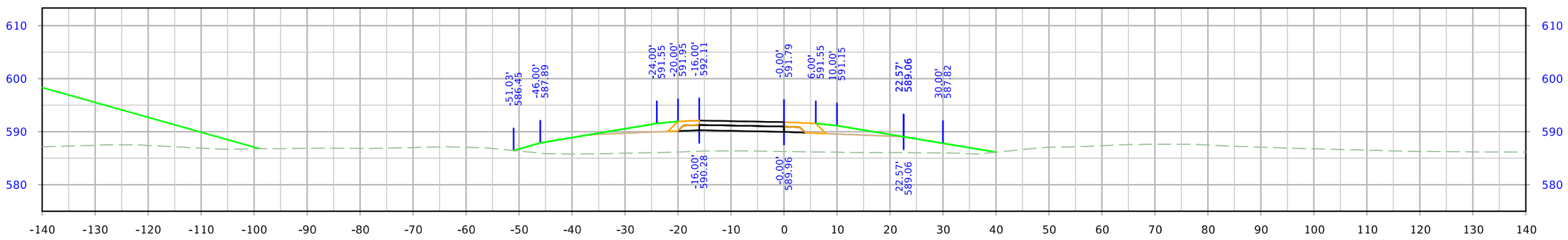
Ramp G62D



STA. 44555+50.00



STA. 44555+00.00

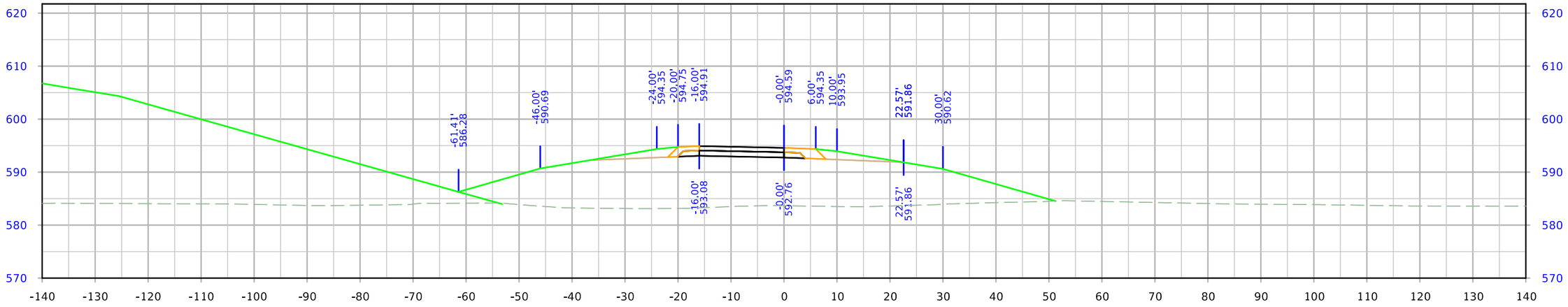


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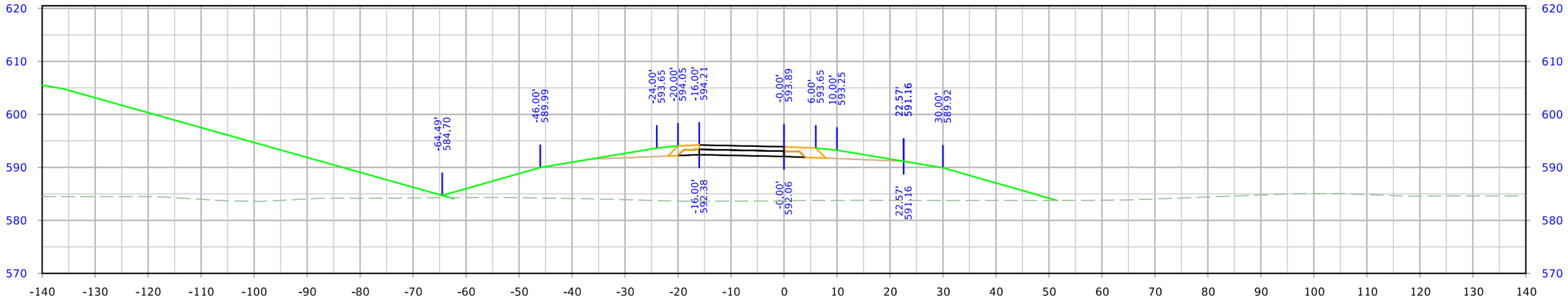
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.403

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Ramp G62D



STA. 44556+50.00

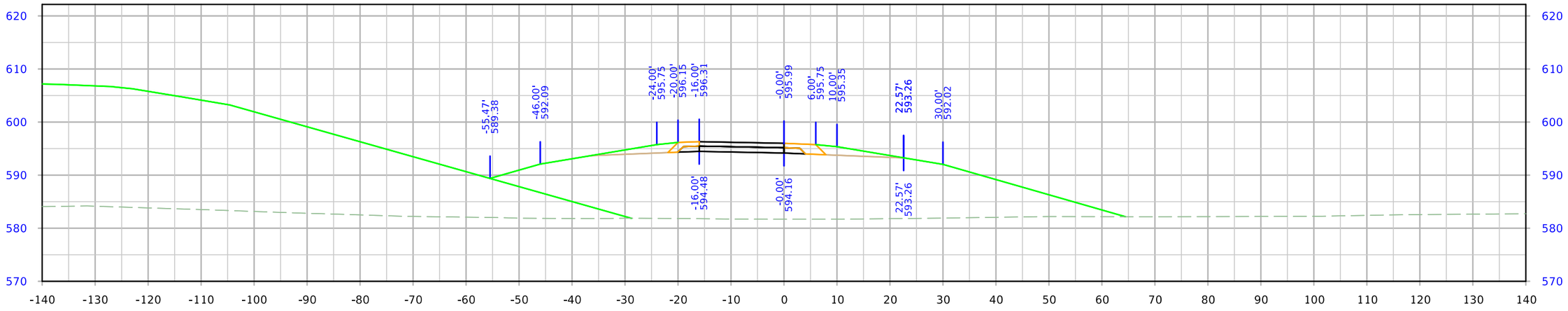


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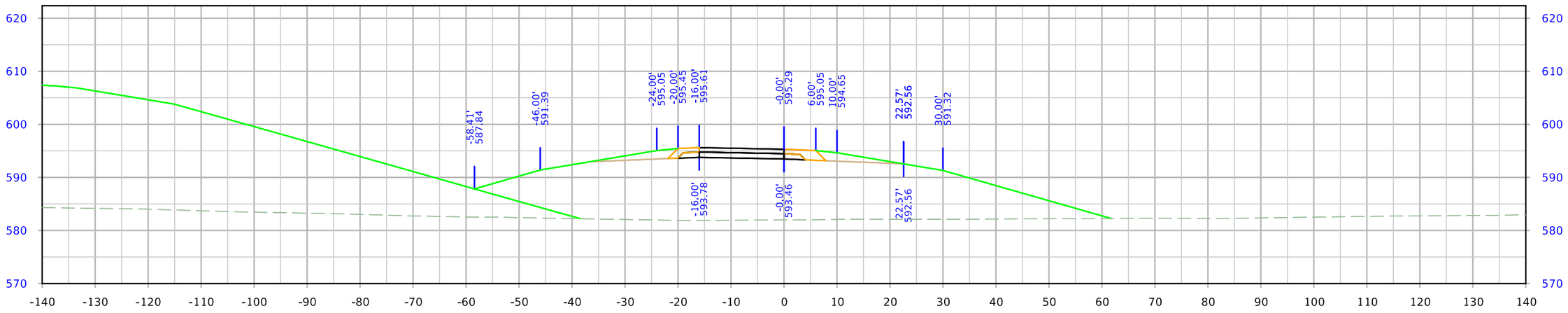
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.404

3:38:35 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y400_RMPG62D_58061061Z14.dgn

Ramp G62D



STA. 44557+50.00

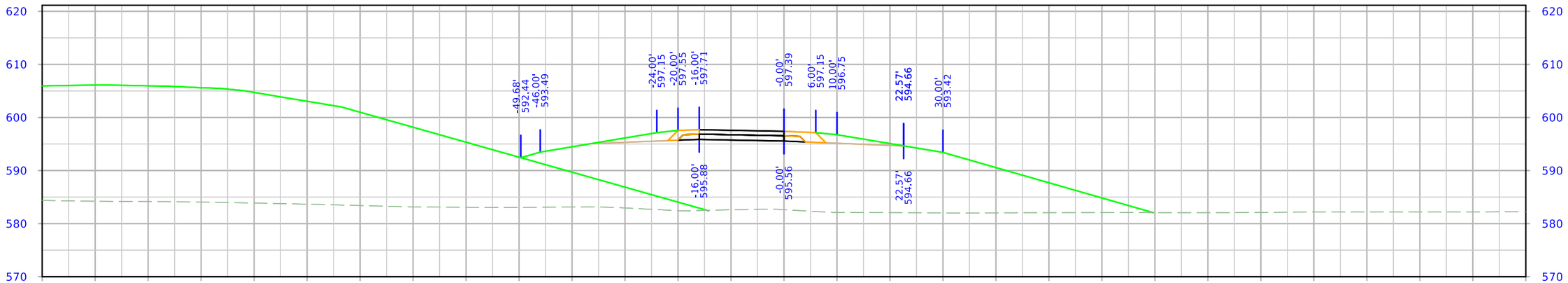


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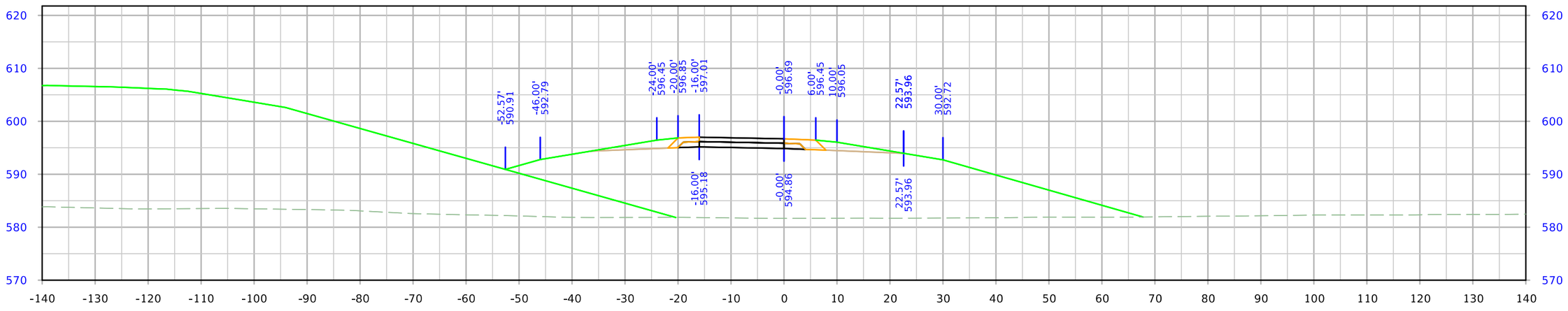
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3:38:35 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y400_RMPG62D_58061061Z14.dgn

Ramp G62D



STA. 44558+50.00

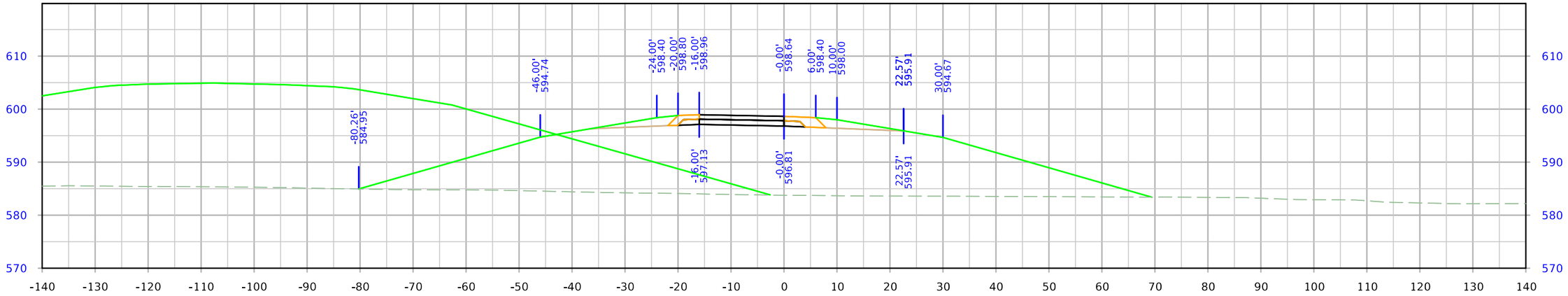


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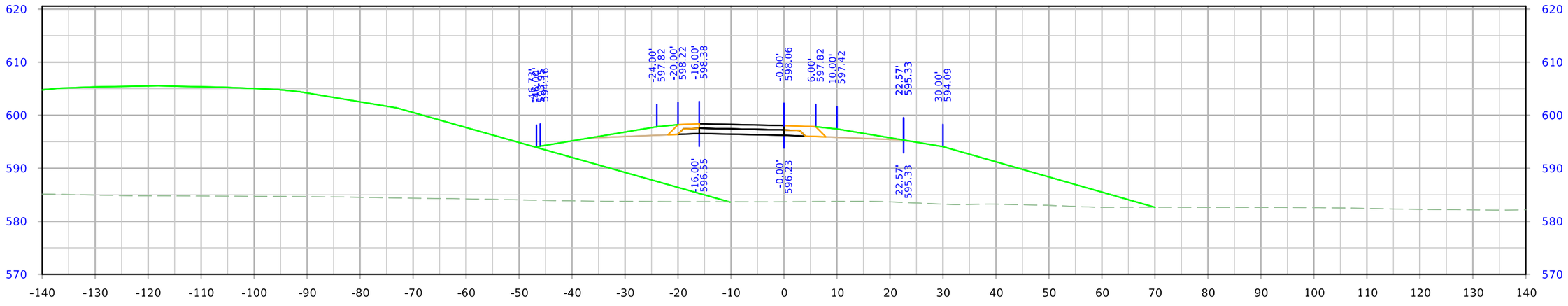
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.406

3:38:36 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y400_RMPG62D_58061061Z14.dgn

Ramp G62D



STA. 44559+50.00

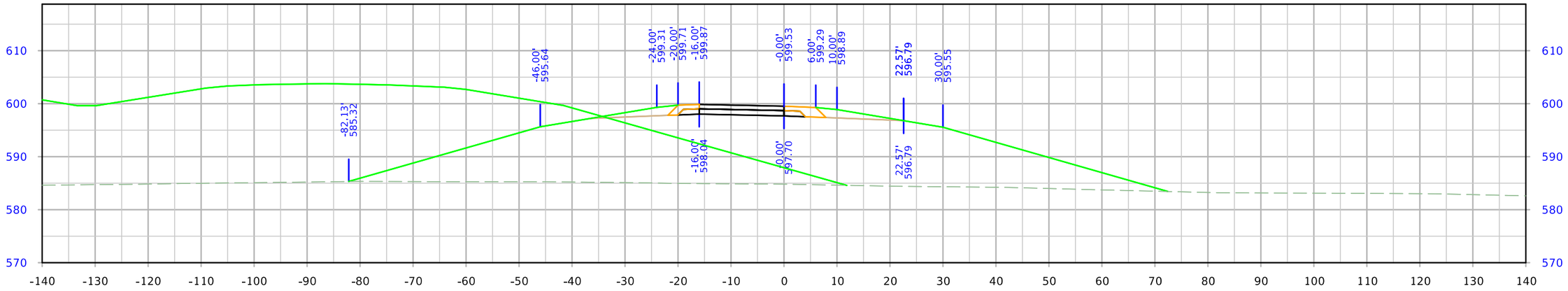


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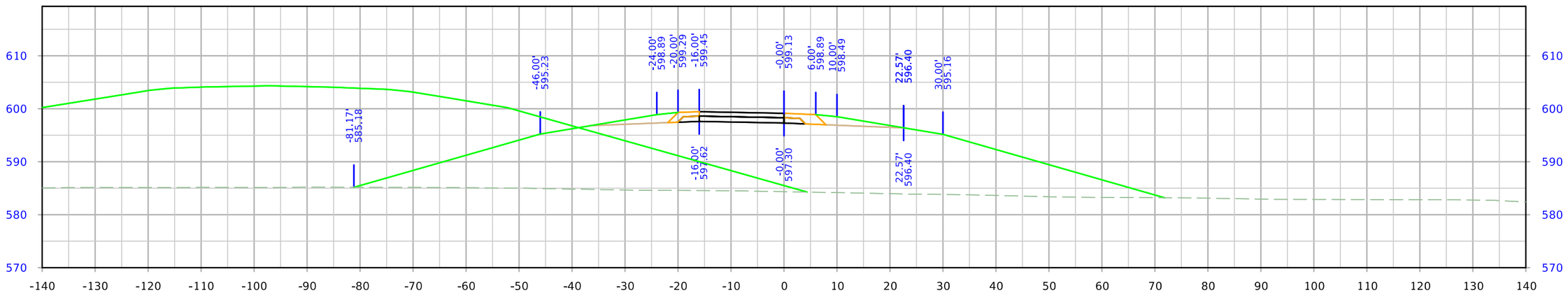
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.407

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Ramp G62D



STA. 44560+50.00

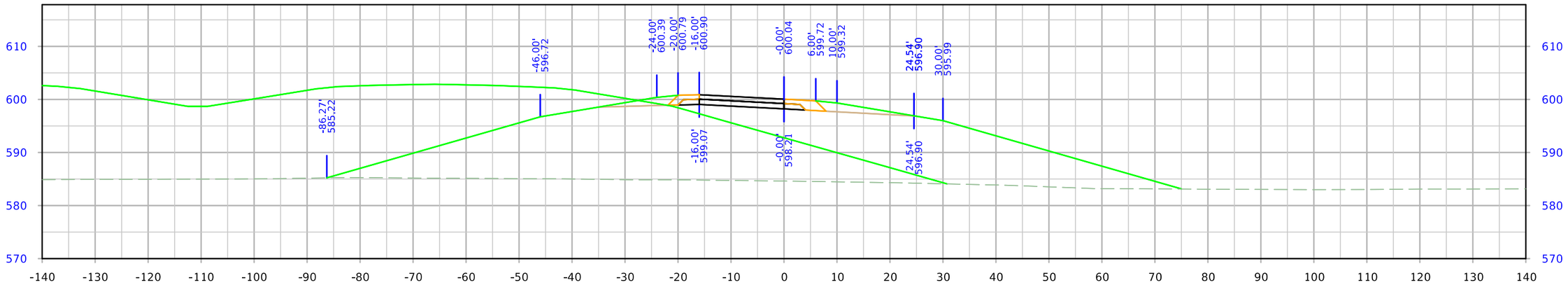


STA. 44560+00.00

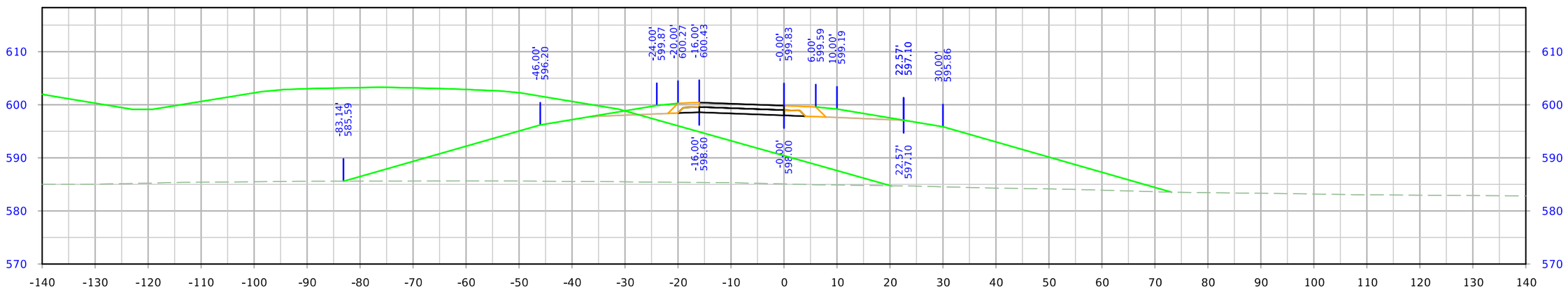
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.408

3:38:38 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y400_RMPG62D_58061061Z14.dgn

Ramp G62D



STA. 44561+50.00

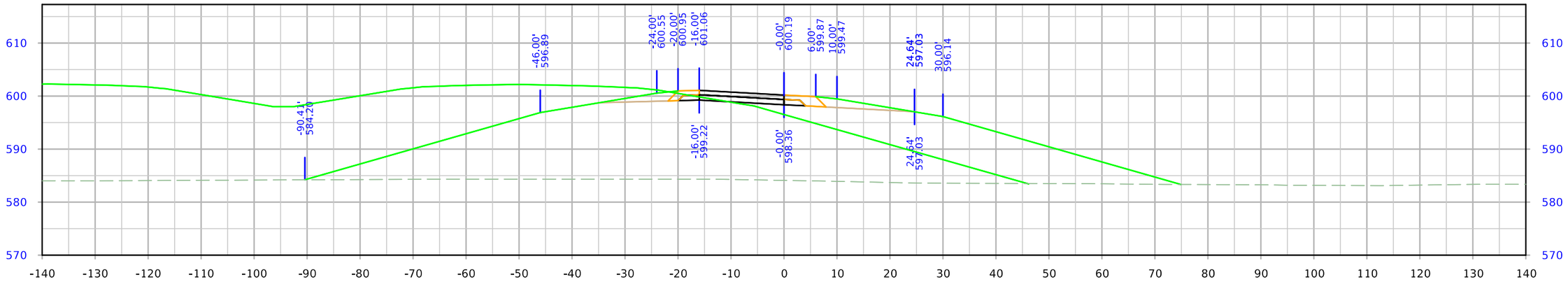


STA. 44561+00.00

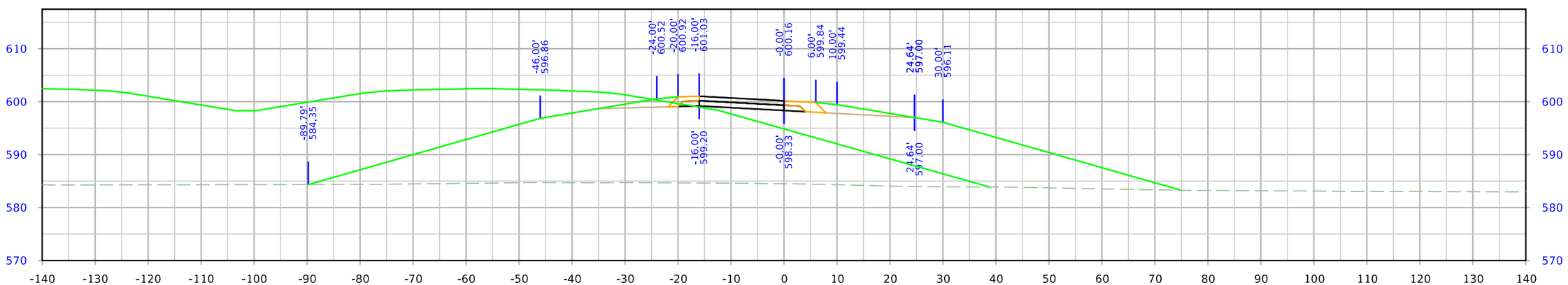
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.409

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Ramp G62D



STA. 44562+46.34



STA. 44562+00.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Crystal \ Jack	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(61)--3H-58	SHEET NUMBER Y.410

3:38:39 PM 5/25/2023 mjack pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\5806101011\Design\(061)_PreliminaryEngineering\CADD_Files\Cross_Sections\XS_Y400_RMPG62D_58061061Z14.dgn