LETTING DATE
11-21-2023

Pipe Culverts
NHSN-169-6(94)--2R-94

WEBSTER COUNTY

IOWA DOT

REVISIONS

TOTAL
--
PROJECT IDENTIFICATION NUMBER
22-94-169-030
PROJECT NUMBER
NHSN-169-6(94)--2R-94
R.O.W. PROJECT NUMBER
NHSN-169-6(95)--2R-94

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM
WEBSTER COUNTY
Pipe Culverts
At Co Rd D68 and 1.3 mi W of E Jct IA 175 (2 Locations)

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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

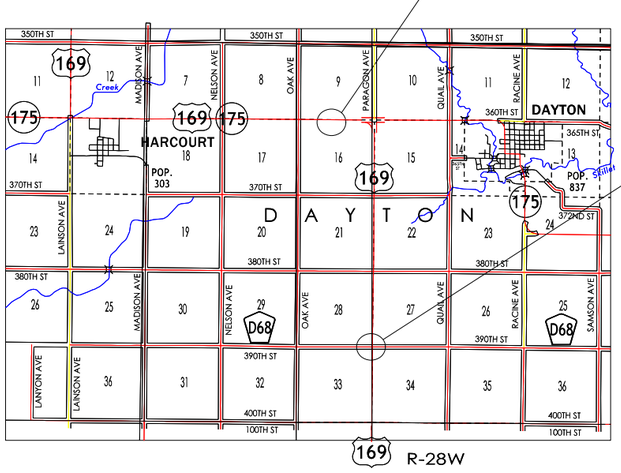
IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.

INDEX OF SHEETS

No.	DESCRIPTION
A Sheets	**Title Sheets**
A.1	Title Sheet/Location Map Sheet
B Sheets	**Typical Cross Sections and Details**
B.1	Typical Cross Sections and Details
D Sheets	**Mainline Plan and Profile Sheets**
* D.1	Culvert location Sta. 752+10 - U.S. 169
* D.2	Culvert location Sta. 276+87 - U.S. 169
J Sheets	**Traffic Control and Staging Sheets**
* J.1	Traffic Control Plan
U Sheets	**500 Series, Mod.Stds. and Detail Sheets**
U.1	Proposed Culvert Configuration - Co.Rd. D-68/US169
W Sheets	**Mainline Cross Sections**
W.1 - 3	Culvert location Sta. 752+10 - U.S. 169
W.4	Culvert location Sta. 276+87 - U.S. 169
X Sheets	**Side Road Cross Sections**
X.1	Proposed Culvert Locations
	* Color Plan Sheets

PIPE CULVERT
STA. 276+87

PIPE CULVERT
STA. 752+10



LOCATION MAP SCALE
0 1 2 3
Miles



INDEX OF SEALS

SHEET NO.	NAME	TYPE	BID QUANTITY SHEETS
A.1	Allison Smyth	Primary Signature Block	C.1

D5 PLAN – Date: 08/08/2023
D7 PLAN – Date: 03/05/2024
Letting Date: 05/21/2024

ROADWAY DESIGN

LICENSED PROFESSIONAL ENGINEER
Allison L. P. Smyth
22584
IOWA

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

Allison L P Smyth
Signature — XX-XX-XXXX Date
Allison L. P. Smyth
Printed or Typed Name

My license renewal date is December 31, 2024

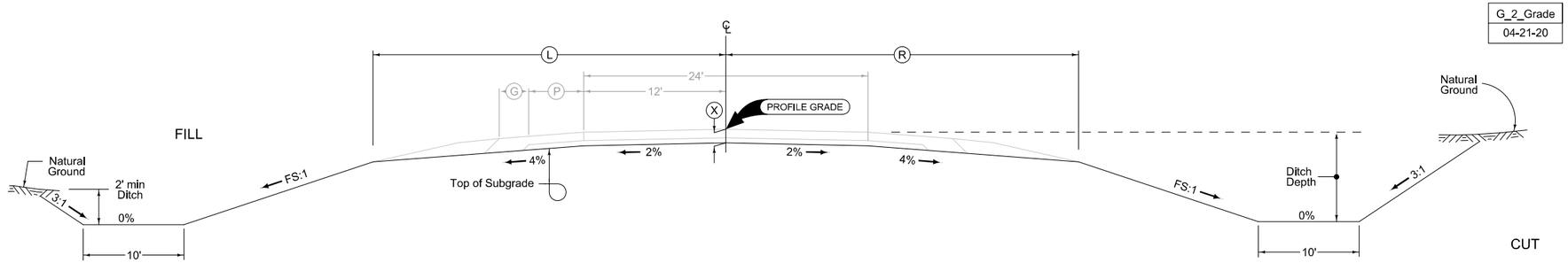
Pages or sheets covered by this seal:
A.1, B.1, D.1-D.2, G.1-G.3, J.1-J.2, W.1-W.4, & X.1

FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER A.1

5:47:41 AM 8/8/2023 rringge pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\DistrictDesign\941696094_A01.dgn

LOCATION			DIMENSIONS			
ROAD IDENTIFICATION	STATION TO STATION		(L) Feet	(R) Feet	(X) Inches	FS
ML 169	751+90.00	753+10.00	Var i.	Var i.	22	6

G_2_Grade
04-21-20



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

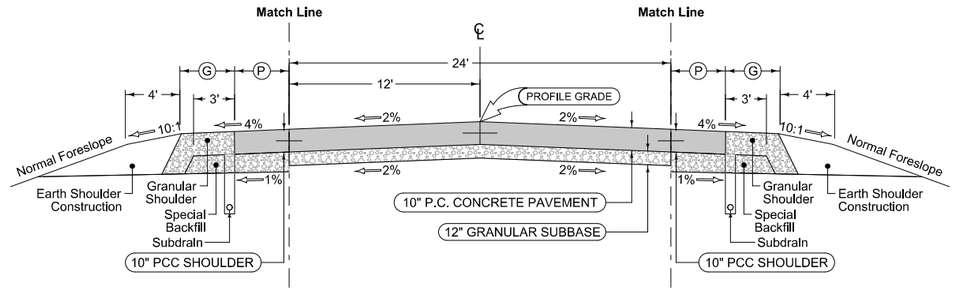
See plan & profile sheets and cross sections for additional details of ditches and backslopes.

2 LANE GRADING

Full Depth PCC Combination Shoulder

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

			4_C_FullPCC_ 10-20-20	
Direction of Travel	BEGIN STATION	END STATION	(P) Feet	(G) Feet
N/S	751+90.00	753+10.00	6	4



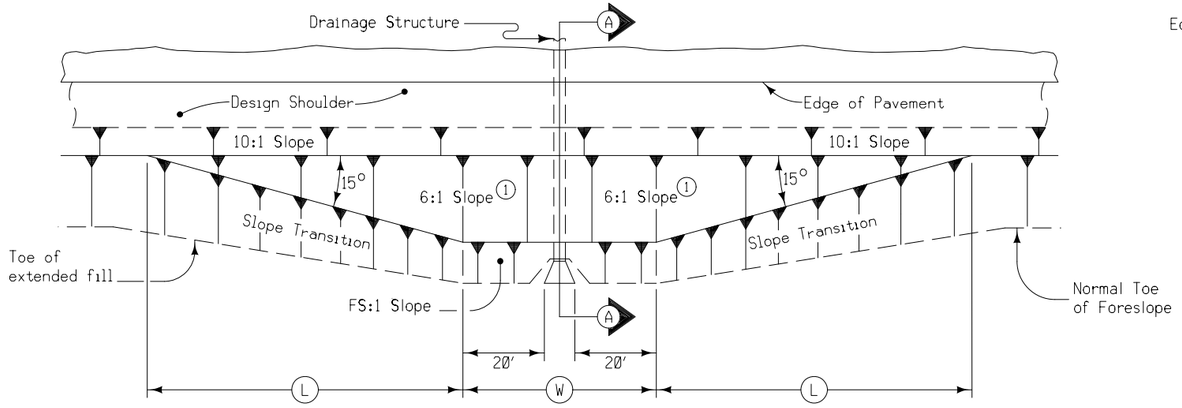
Mainline Jointing:
Transverse joints: CD at 17' spacing
Longitudinal joint: L-2

2P_ 04-21-20	
STATION TO STATION	
751+90.00	753+10.00

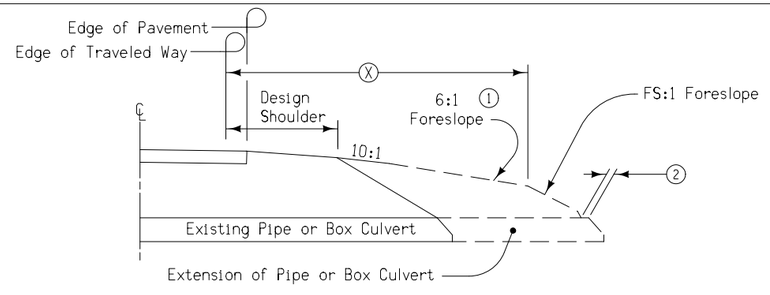
Full Depth PCC Combination Shoulder

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

			4_C_FullPCC_ 10-20-20	
Direction of Travel	BEGIN STATION	END STATION	(P) Feet	(G) Feet
N/S	751+90.00	753+10.00	6	4



PLAN VIEW



SECTION A-A

STRUCTURE LOCATION		(W)	(L)	(X)	(FS)
STATION	SIDE	Feet	Feet	Feet	

Notes:

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

(1) Slope may be flatter than 6:1.

(2) 6" Minimum for pipe installations or to top of headwall on R.C.B.

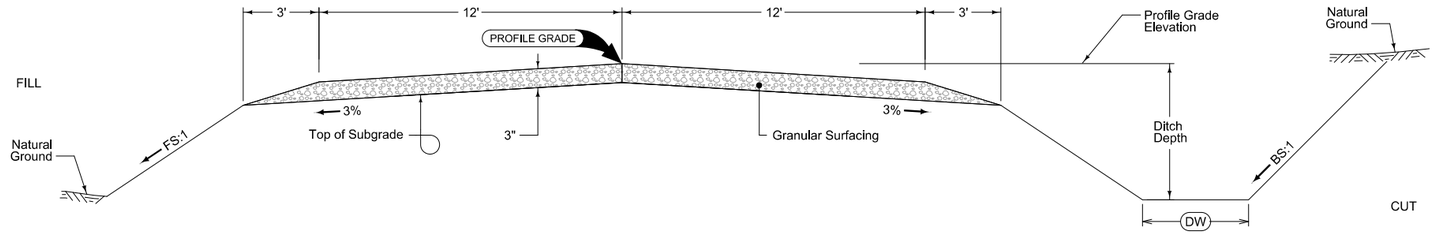
(W) = Pipe or R.C.B. opening width plus 20 feet each side.

BARNROOF FORESLOPE AT DRAINAGE STRUCTURE

DESIGNER INFO

4311
04-18-17

LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		FS	BS	(DW) Feet



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

G_2_GradeGran
10-17-17

DESIGNER INFO

SURVEY SYMBOLS

- AST, Above Ground Storage Tank
- BB, Billboard
- BBB, Bottom of Bridge Beam
- BCL, Bridge Centerline
- BD, Bridge Deck
- BIN, Grain Bin
- BL, Topo Breakline
- BLD, Building or Foundation
- BLS, Bridge Low Steel
- BM, Bench Mark
- BNK, Stream Bank
- BRG, Bridge
- C, Centerline BL of Road -ML or SR
- CAV, Cave
- CEL, Cell Phone Tower
- CIS, Cistern
- CON, Concrete or A/C Slab
- CP, Control Point
- CRP, Corporation Line
- CS, Curve Point
- CU, Back of Curb
- CUL, Culvert
- D, Centerline Draw or Stream -Down
- DAB, Drainage Area Boundary
- DIK, Centerline of Dike or Dam
- DTM, Photogrammetry Elv Control Check
- DU, Centerline Draw or Stream -Up
- EB, Electrical Box
- EG, Edge of Gravel Road
- ENP, Edge Paved Entrance and Park Lot
- ENT, Centerline BL of Entrance
- ENU, Edge Unpaved Entrance and Parking
- EP, Edge of Paved Roads -ML or SR
- EW, Edge of Water
- FCL, Chain Link and Security Fence
- FENO, FENO Monument
- FHD, Fire Hydrants
- FLG, Flag Poles
- FP, Filler Pipe
- FW, Wire Fence
- FWD, Wood Fence
- GDC, Guard Rail Cable
- GDL, Guard Rail Steel
- GP, Guard Post -Less Than 4 Posts
- GPR, Guard Post -4 or More Posts
- GR, Ground Shot
- GRV, Grave
- GU, Gutter In Front of Curb
- GV, Gas Valve
- HDG, Hedge Row
- HS, Hydric Soil -Wetlands
- HT, Electrical Highline Tower
- IN, Storm Sewer Intake
- INB, Storm Sewer Beehive Intake
- LC, Lot Corner
- LIN, Miscellaneous Line
- LP, L.P. Tank
- LUM, Luminaire
- MH, Utility Access -Manhole
- MIS, Miscellaneous
- MM, Mile Marker Post
- OUT, Tile Outlet
- PC, Curve Point
- PCP, Photo Control Point
- PCT, Photo Control Target
- PI, Tangent Point
- PIP, Pipe Culvert
- PL, Location of Photo -Wetlands
- PLG, Location of General Photo
- POC, Curve Point
- POST, Spiral Point
- PR, Electic Riser Pole
- PRO, Profile Shot
- PT, Curve Point
- REF, Reference Tie Point
- RET, Retaining Walls
- RIP, Rip-Rap
- ROC, Rock Outcropping
- ROW, Right of Way Mark
- RR, Centerline of Railroad Tracks
- RRB, Railroad Signal Box
- RRF, Railroad Frog
- RRR, Railroad Rail
- RRS, Railroad Signal
- RRW, Railroad Switch
- RT, Radio Tower
- S, Soil Sampling Site -Wetlands
- SBR, Size of Bridge
- SC, Spiral Point
- SCR, Section Corner
- SEP, Septic Tank
- SF, Silt Fence -Wetlands
- SG, Staff Gauge -Wetlands
- SH, Paved Shoulder
- SHR, Shrub
- SI, Sign
- SL, Speed Limit Sign
- SLN, Section Line
- SLO, Silo
- SNK, Sink Hole
- SNP, Unpaved Shoulder
- SP, Stream Profile
- STP, Stump
- SWK, Sidewalk
- SWP, Swamp or Marsh
- TA, Tower Anchor
- TBO, Telephone Booth
- TCB, Traffic Signal Box
- TDC, Tree Deciduous
- TDL, Trafic Detection Loop
- TER, Terrace
- TEV, Evergeen Tree
- TFR, Tree Fruit
- TGP, Telegraph Pole
- TIL, Tile Line
- TLNL, Tree Line Left
- TLNR, Tree Line Right
- TOP, Top of Bridge Pier
- TPA, Telephone Pole Co. 1
- TPB, Telephone Pole Co. 2
- TPC, Telephone Pole Co. 3
- TR, Telephone Riser Pole
- TRL, Trail
- TS, Spiral Point
- TSB, Telephone Switch Box
- TSG, Traffic Signal
- TSL, Traffic Signal and Luminare
- TV, Satelite TV Dish
- TVP, TV Pedestal
- TW, Top of Water
- UB, Utility Box
- UE, Utility Elevation
- UPH, Utility Pot Hole - Quality A
- UST, Underground Tank
- UV, Underground Utility Vault
- VS, Channel Cross Section
- WC, Wild Card -Misc. Field Shot
- WEL, Well
- WHD, Water Hydrant
- WHU, RV Water Hook Up
- WM, Wind Mill
- WND, Wind Turbine
- WV, Water Valve

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

- FOID, Lehigh Valley Telephone- Quality D
- PPA, Alliant Energy

UTILITY LEGEND

- FOID, Lehigh Valley Telephone- Quality D
- PPA, Alliant Energy

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 Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER D.1

6:01:36 AM 8/8/2023 rringge pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\DistrictDesign\941696094_D01.dgn

Sta. 752+10.5
3'x2'x46.6' RCB
D.A.=65 A-F (from plans)

Sect. No. 33

EXISTING ROW

Sta. 752+60.8
Skew 42° LT AH
6'x3'x77.6' RCB
D.A.=940 A-F (from plans)

Sect. No. 28

750+00 751+00 752+00 8752+00 753+00 754+00 755+00

169

TILE

TILE

8753+00

TILE

Sect. No. 34

EXISTING ROW

EXISTING ROW

0 FEET 20

Dayton TWP.
T-86N R-28W
SEC. 27

18"x57' CMP

1160 1155 1150 1145 1140 1135 1130 1125

750+00 751+00 752+00 753+00 754+00 755+00

FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER D.2	

6:02:28 AM 8/8/2023 rringge pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\DistrictDesign\CADD Files\COR_941696094_ROWMLA169.dgn

274+00 275+00 276+00 277+00 278+00 279+00

Dayton TWP.
T-86N R-28W
SEC. 17

169 175

N

Sta. 276+87.0
2'x2'x34' RCB W/ 30" RCP Extensions
D.A.=55 A-F (from plans)

FO FO

0 FEET 20

Sect. No. 8

1175 1170 1165 1160 1155 1150 1145 1140

274+00 275+00 276+00 277+00 278+00 279+00

FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER D.3	

6:02:39 AM 8/8/2023 rringge pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\DistrictDesign\CADD Files\COR_941696094_ROWMLB169.dgn

EXISTING ROW

WEBSTER
D68
COUNTY

TILE

TILE

TILE

EXISTING ROW

0 FEET 10

FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER E.1	

6:06:22 AM 8/8/2023 rringge pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\DistrictDesign\CADD Files\COR_941696094_ROWMLA169.dgn

EXISTING ROW

WEBSTER
D68
COUNTY

EXISTING ROW

EXISTING ROW

0 FEET 10

FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER E.2	

6:06:23 AM 8/8/2023 rringge pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\DistrictDesign\CADD Files\COR_941696094_ROWMLA169.dgn

SURVEY INDEX

County: Webster
PIN: 22-94-169-030
Project Number: NHSN-169-6(094)--2R-94
Location: At Co Rd D68 and 1.3 mi W of E Jct IA 175 (2 Locations)
Type of Work: Culvert
Project Directory: 9416903022

Survey Personnel

Clayton Henningsen – Survey Party Chief
Robert Fredrickson – Assistant Survey Party Chief

Date(s) of Survey

Begin Date	06/30/2022
End Date	08/23/2022

General Information

Project datum and control information is provided by the Design Survey Office. Measurement units for this survey are US survey feet. This survey is for US Hwy 169 culverts at Co Rd D68 and 1.3 mi W of E Jct IA 175 (2 Locations). This survey request was for the US Hwy 169 corridor only. This project is a Full Field DTM survey.

Project Control

Nearby Iowa Real Time Network reference stations were utilized to obtain horizontal and vertical control on primary project control points. Two five-minute observations were taken with appropriate time spans between and used in a weighted average to obtain final coordinate values. For additional details of the control survey, contact the Preliminary Survey department.

PROJECT DATUM: NAD83(2011) EPOCH 2010.00
VERTICAL DATUM: NAVD88
COORDINATE SYSTEM: IOWA REGIONAL COORDINATE SYSTEM ZONE 4
GEOID MODEL: 2012bu3

Alignment Information

ALIGNMENT ROWMLB169
The U.S. 169 alignment in this area was developed using as built plan F-169-6(25)--20-94. Stationing was held at P.I. 259+66.39 (also being the NE corner of Section 17-86N-28W) and ran ahead without equation. The relationship between plan and field measurement data is shown below…

P.I. Sta. 259+66.39 (Proj. F-169-6(25)--20-94) = P.I. Sta. 259+66.39 (this survey)
Found an I.D.O.T. aluminum monument
P.I. Sta. 286+08.99 (Proj. F-169-6(25)--20-94) = P.I. Sta. 286+09.02 (this survey)
Found an I.D.O.T. aluminum monument

ALIGNMENT ROWMLA169
The U.S. 169 alignment in this area was developed using an unlet plan for project F-169-5(13)--20-08 because the latest acquisition documents in this area used this stationing. Stationing was held at P.I. 752+60.35 (also being the NE corner of Section 33-86N-28W) and ran ahead and back without equation. The relationship between plan and field measurement data is shown below…

P.I. Sta. 726+23.44 (Proj. F-169-5(13)--20-08) = P.I. Sta. 726+23.52 (this survey)
Found MAG nail
P.I. Sta. 752+60.35 (Proj. F-169-5(13)--20-08) = P.I. Sta. 752+60.35 (this survey)
Found MAG nail
P.I. Sta. 778+98.81 (Proj. F-169-5(13)--20-08) = P.I. Sta. 778+99.00 (this survey)
Found MAG nail

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 - Ia. RCS Zone 4
VERT. DATUM: NAVD88 - Geoid Model 2012bu3

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

FILE NO.	ENGLISH	DESIGN TEAM	COUNTY	PROJECT NUMBER	SHEET NUMBER G.2	

6:11:52 AM 8/8/2023 rringge pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\DistrictDesign\941696094_G01.dgn

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00
Ia. Regional Coordinate System Zone 4

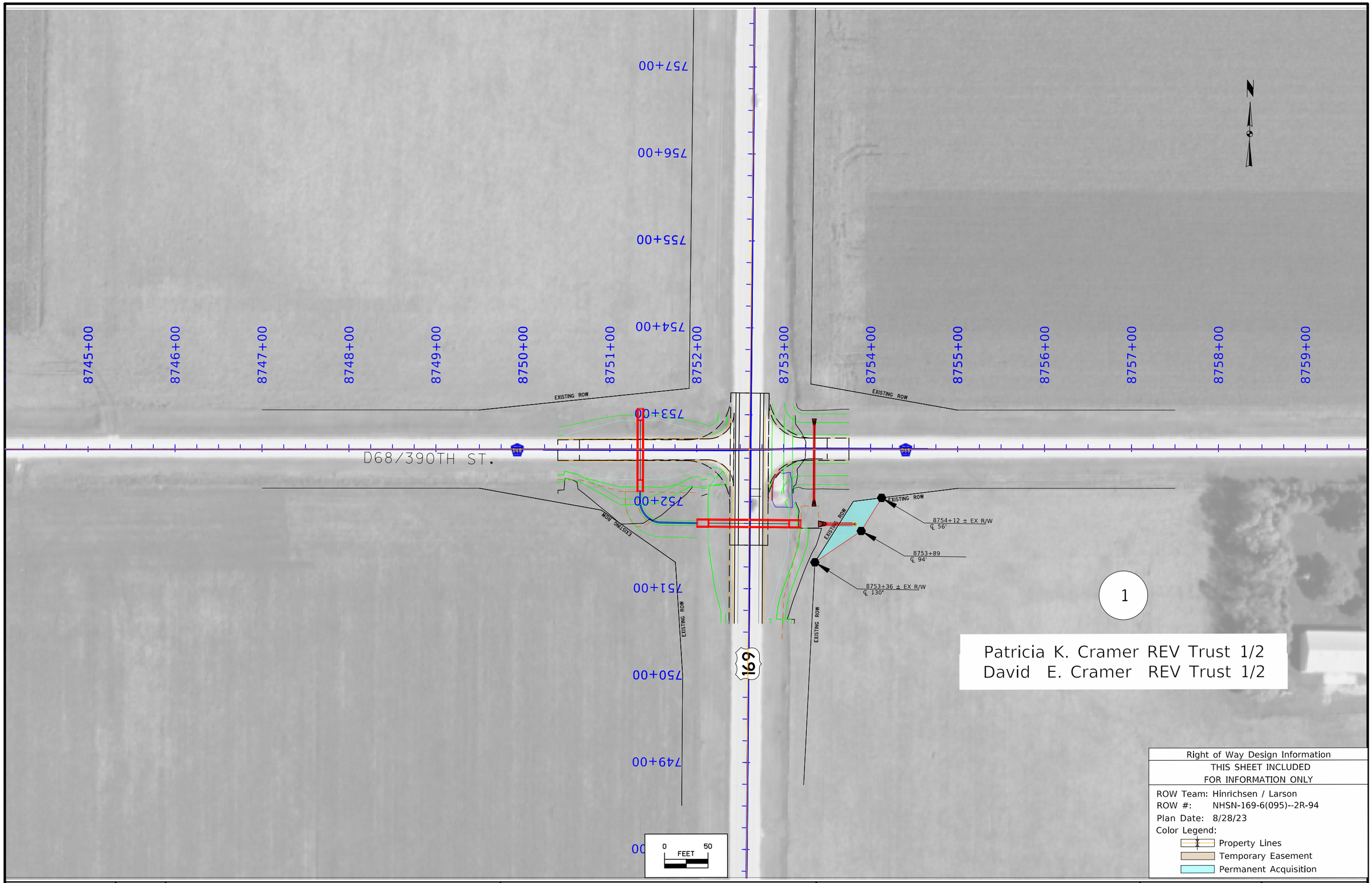
VERT. DATUM: NAVD88
Geoid Model 2012bu3
Project Control Marks are Bench Marks

Point Number	Northing	Easting	Elevation	Description
D3	8488585.570	14712748.880	1134.202	CP FOUND NGS CONCRETE MONUMENT DISK AS DESCRIBED IN GOOD CONDITION
941691344	8488330.109	14697027.850	1143.889	CP CONC MONUMENT IN NE QUAD INTERSECTION US 169& 390TH ST. 50 FT EAST OF CL US 169. 57 FT NORTH OF CL 390TH ST. 28 FT NORTH OF NORTH END 18 " CMP UNDER 390TH ST.
6101	8485839.568	14696952.110	1157.154	CP WEBSTER CO CONTROL MON 2016-6101 IS NEAR THE NE CORNER OF A SMALL CEMETARY 0.5 MILE SOUTH OF INTERSECTION US 169 & CO RD D68. 47.4 FT WEST OF CL US 169. 90 FT SOUTH OF POWER POLE. 5 FT WEST OF NORTH END CMP ENTRANCE PIPE.
6083	8498386.740	14696897.140	1155.654	CP WEBSTER CO CONTROL MON 6083 FROM THE INTERSECTION US 169 & 379TH ST GO SOUTH 410 FT TO MARK IN WEST ROW OF US 169. 48.6 FT WEST OF CL US 169. 10.8 FT SOUTH OF THE FACE OF DEKALB RESEARCH SIGN. 1.8 FT EAST WITNESS POST IN FENCE.
941691381	8503984.685	14692914.590	1161.972	CP IOWA DOT ROW DISK IN SOUTH ROW 0.5 MI WEST OF US 169 & IA 175 INTERSECTION. AT A FIELD ENTRANCE TO THE SOUTH. THE SOTHERNMOST OF 2 ROW MARKERS. 80 FT SOUTH OF CL US 169. 14 FT SOUTH OF ROW POST.
941691385	8504009.252	14690972.980	1160.471	CP X ON INLET APRON RCP ON SOTH SIDE US 169 BETWEEN THE HIGHWAY AND A FARM ENTRANCE THAT PARALLELS THE HIGHWAY. 0.1 MI WEST OF INTERSECTION US 169 & OAK AVE. 41 FT SOUTH OF CL US 169. 42 FT NE OF A BEEHIVE INTAKE.
941691388	8504070.210	14689237.710	1161.090	CP FENO MONUMENT AT FIELD ENTRANCE ON NORTH SIDE US 168/ IA175 0.5 MILE EAST OF INTERSECTION US 169 & NELSON AVE. 31.5 FT NORTH OF CL HWY. 47 FT SE OF POWER POLE. 16 FT SOUTH OF INLET 24" CMP ENTRANCE PIPE

NOTE:
The first two digits in the control point name refer to the county number.
The next 3 digits refer to the highway number.
The next 3 digits refer to the highway milepost.
The last digit refers to the distance from the referenced milepost to the nearest tenth of a mile.

NO ACCESS RIGHTS ARE TO BE ACQUIRED ON THIS PROJECT.

FILE NO.	ENGLISH	DESIGN TEAM	IOWA DOT * OFFICE OF ROW	COUNTY	PROJECT NUMBER	SHEET NUMBER	



FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	Webster COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER H1	

2:01:29 PM 8/22/2023 thinric pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\ROW\ROW_94169095.dgn

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108-23A
08-01-08

TRAFFIC CONTROL PLAN

Traffic on U.S. 169 and IA 175 shall be maintained via detours. Refer to J.2 for detour map.
Contractor shall sign and maintain detour.

108-25
10-21-14

511 TRAVEL RESTRICTIONS

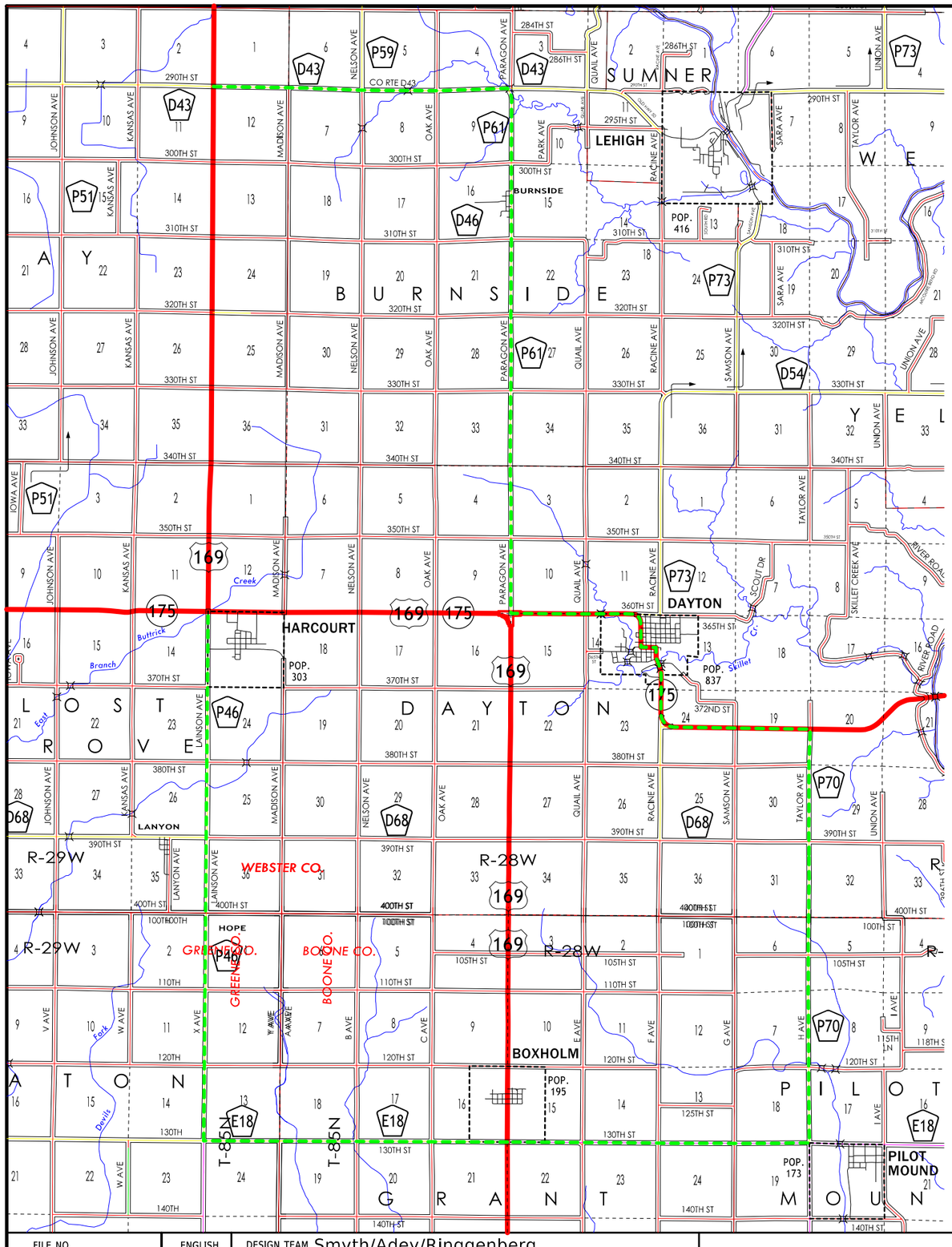
Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No., Structure ID, or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
US 169	N/S	Webster										
IA 175	E/W	Webster										

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
Provided at final design	



Detour Route

Detour Map
Boone and Webster Counties
NHSN-169-6(94)--2R-94

FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER J.2

6:14:36 AM 8/8/2023 rringge pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\DistrictDesign\941696094_J02.dgn

Removals

Installations

REMOVALS BY ROAD CONTRACTOR

1. REMOVE PAVEMENT, INCLUDING A.C. CONC. APRONS
2. REMOVE 6'x3'x76.6' RCB.
3. REMOVE 3'x2'x44.6' RCB.
4. REMOVE 38'x9' CONCRETE HEADWALL.
5. REMOVE 44'x22' CONCRETE SLOPE PAVING.
6. REMOVE 30' LONG CONCRETE HEADWALL INCLUDING TIMBER PLANKS, AND CUT OFF SEVEN TIMBER PILES TO ELEV. 1141.5.
7. REMOVE TWO 22" TILE AND 24" CONC. PIPE DRAINS
8. REMOVE INTAKES
9. REMOVE 18"x45' CMP.
10. REMOVE 6" CMP SUBDRAIN OUTLET AND PORTION OF 4" PLASTIC SUBDRAINS AS DIRECTED BY THE ENGINEER
11. REMOVE 60 FT. OF 36" CONCRETE DRAIN TILE
12. REMOVE EXISTING TILE LINES AS REQUIRED OR AS DIRECTED BY THE ENGINEER
13. REMOVE SHORT PIECE OF DAMAGED CMP.

CONSTRUCTION BY ROAD CONTRACTOR

23. INSTALL 24" CORR. METAL ROAD. PIPE CULV. AT STA. 8753+35
24. INSTALL 24" CONC. PIPE SUBDRAIN, 20000, AT 0.20% LINE NO. C-76. REQUIRES: FOUR 7'30" D-SECTIONS
25. INSTALL SUBDRAIN LINE NO. C-80 (24"x12', CLASS 20000)
26. INSTALL LONGITUDINAL SUBDRAIN LINE NOS. C-78 AND C-79
27. OTHER SUBDRAINS, NOT SHOWN, AS DIRECTED BY THE ENGINEER
28. PLACE REVETMENT, CLASS E RIPRAP, 18" THICK AS SHOWN
29. INSTALL CONCRETE PIPE ROADWAY CULVERT, 20000, RIGHT OF STA. 751+75. REQUIRES: TWO 36"x4 FT. SECTIONS, WITH TIED JOINTS AND DOUBLE BEVEL D-SECTIONS ONE 42" CONCRETE APRON ONE 42" TO 36" CONC. PIPE REDUCER, 4 FT. LONG
30. BACKFILL, SUBGRADE TREATMENT, PAVEMENT AND FINISH THE INTERSECTION
31. SUBDRAIN OUTLET NO. R-15
32. EXTEND EXISTING SUBDRAIN OUTLET, LINE NO. E-71.

WORK BY CULVERT CONTRACTOR

20. CONSTRUCT 6'x4'x44' RCB AT STA. 8751+35, INCLUDING: CONCRETE END WALL ON INLET APRON AND ONE 6 FT. SECTION OF 24" CONCRETE PIPE SUBDRAIN, 20000
21. CONSTRUCT 8'x4'x92' RCB AT STA. 751+75, INCLUDING: ONE 6 FT. SECTION OF 24" CONCRETE PIPE SUBDRAIN, 20000, AND FOUR 6 FT. SECTIONS OF 10" CMP, 14 GAGE

NOTES:
1. ROAD CONTRACTOR TO VERIFY LOCATION, DEPTH AND SIZE OF ALL EXISTING TILE LINES.
2. FOR SUBDRAINS REFER TO TABULATIONS 104-SC AND 104-S.
3. GRANULAR BACKFILL MATERIAL IS INCLUDED IN THE PROJECT QUANTITIES AS PER TABULATION 100-21.

DRAINAGE STRUCTURES
STA. 751+00 TO STA. 753+00
Scale: 1" = 20'

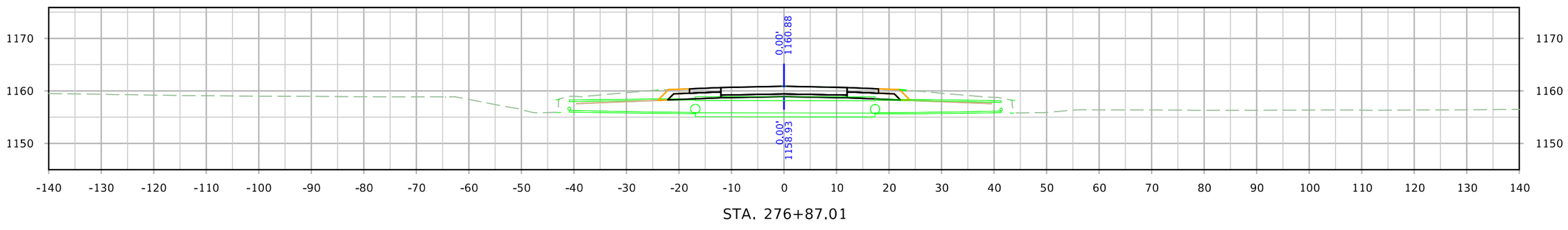
PROPOSED CULVERT DESIGN

PROJECT NUMBER	STATE	FHWA Index	FISCAL YEAR	SHEET NO.	TOTAL SHEETS

FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER U.1	

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ML - US169

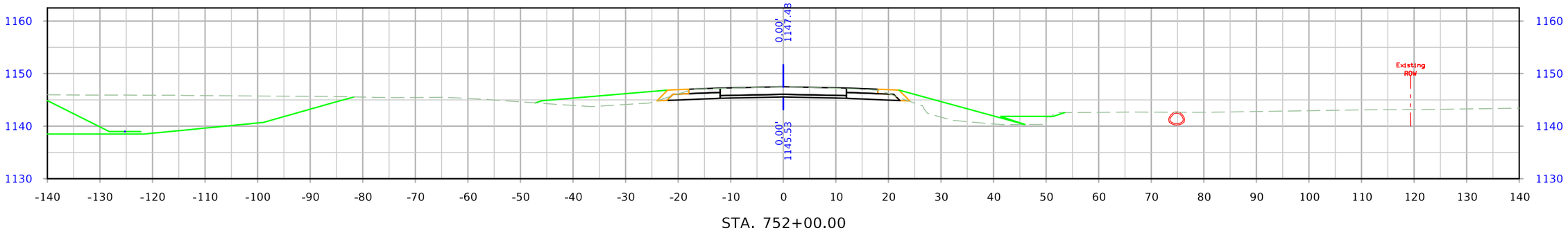


STA. 276+87.01

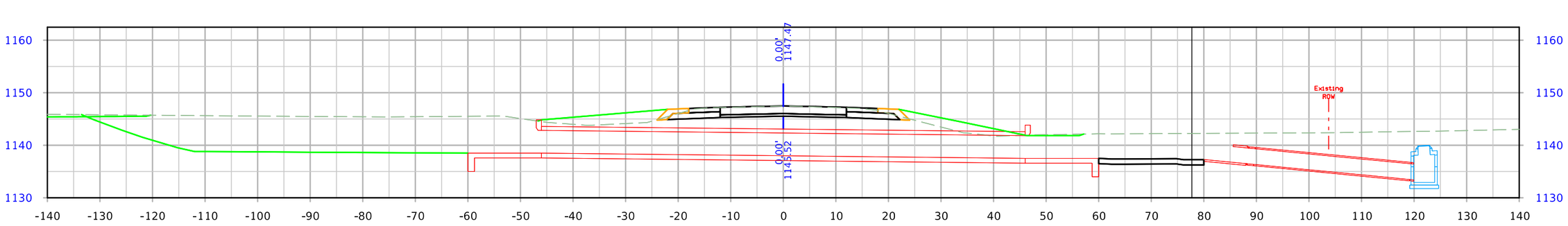
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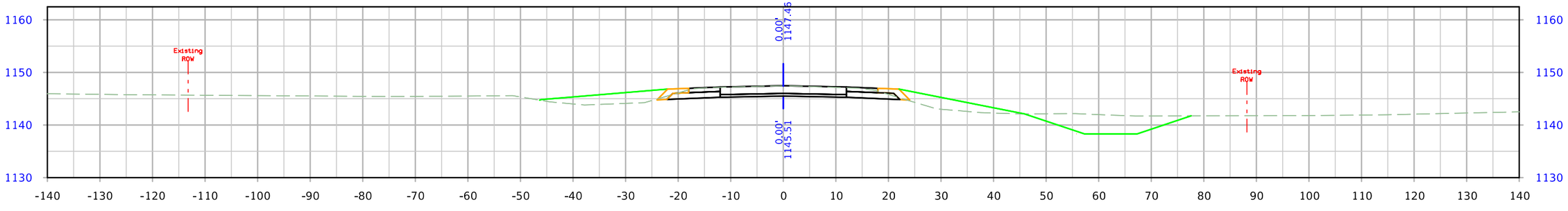
ML - US169



STA. 752+00.00



STA. 751+75.00

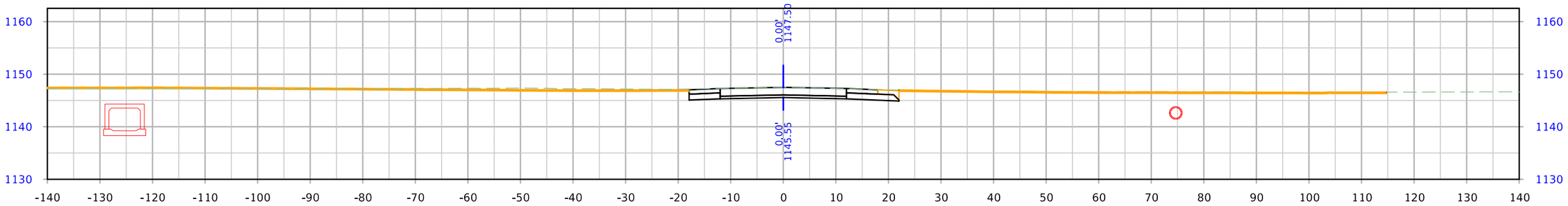


STA. 751+50.00

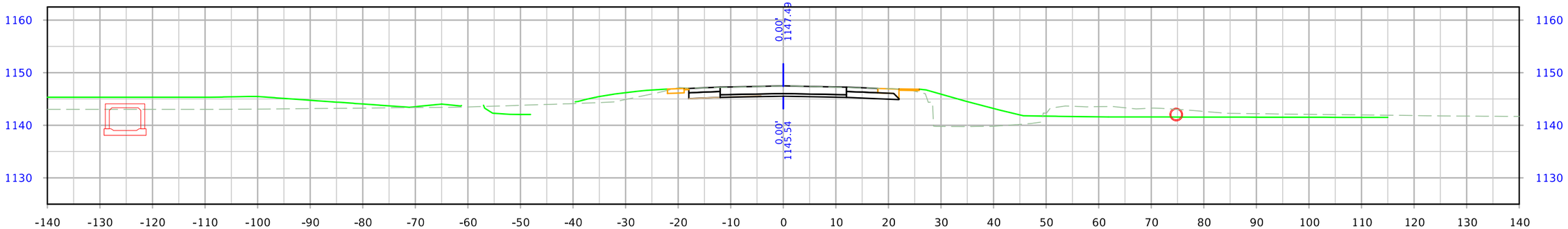
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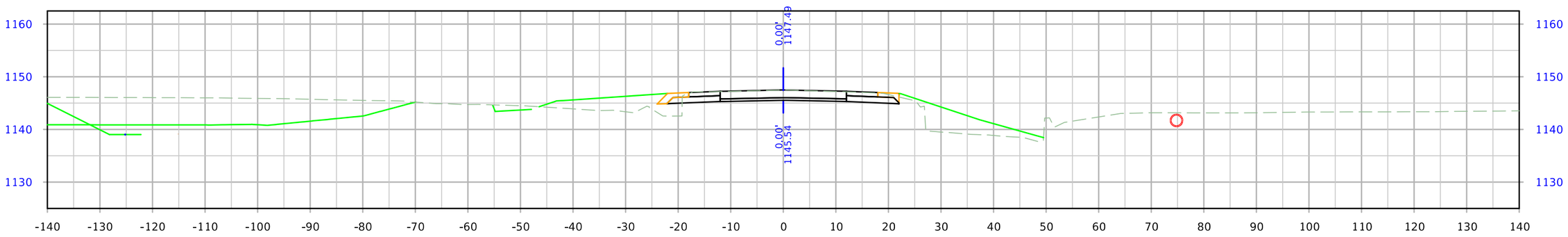
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STA. 752+50.00



STA. 752+25.00

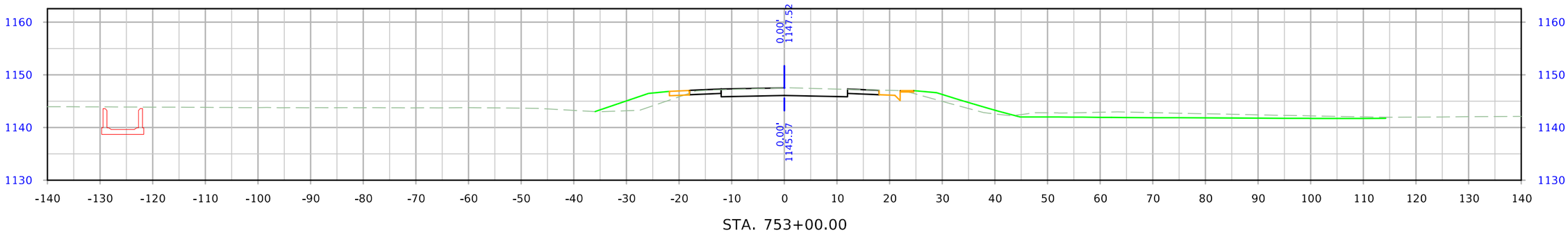


STA. 752+10.50

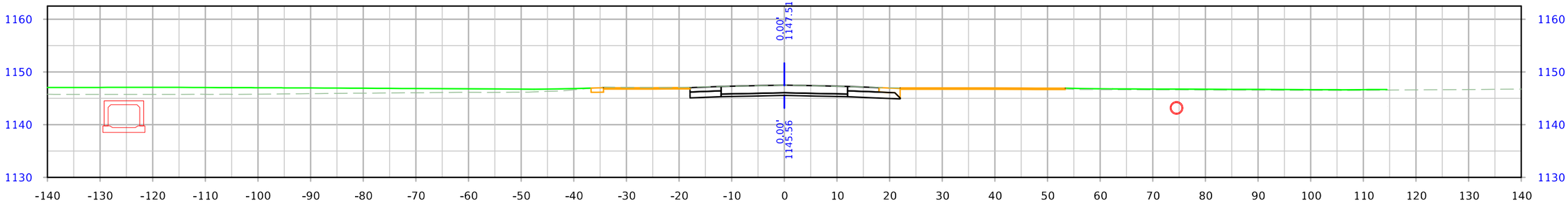
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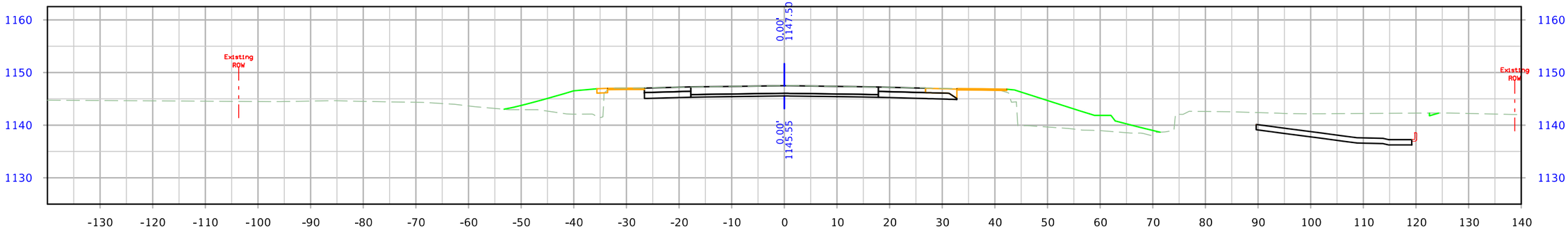
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STA. 753+00.00



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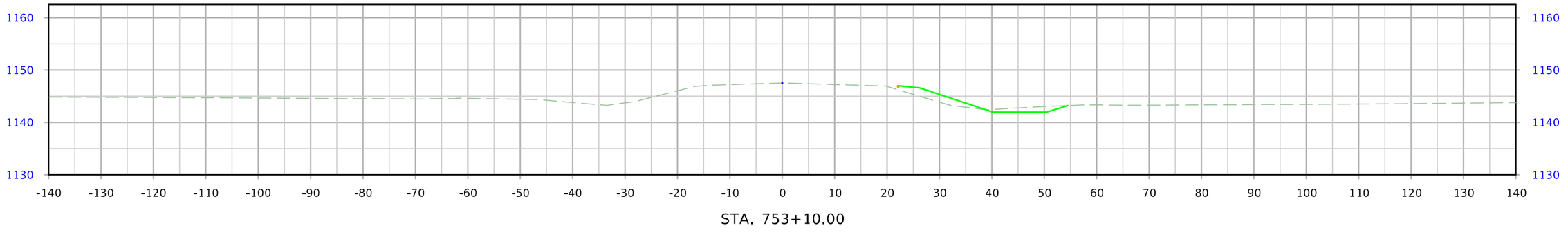


STA. 752+60.84

FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER W.4

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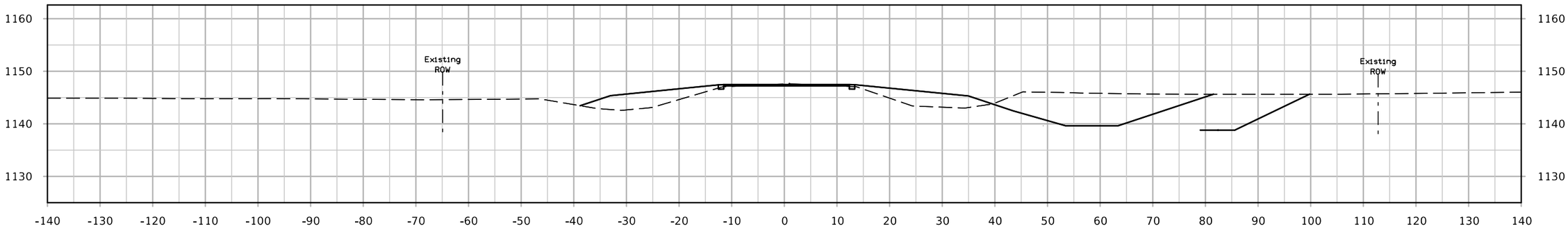


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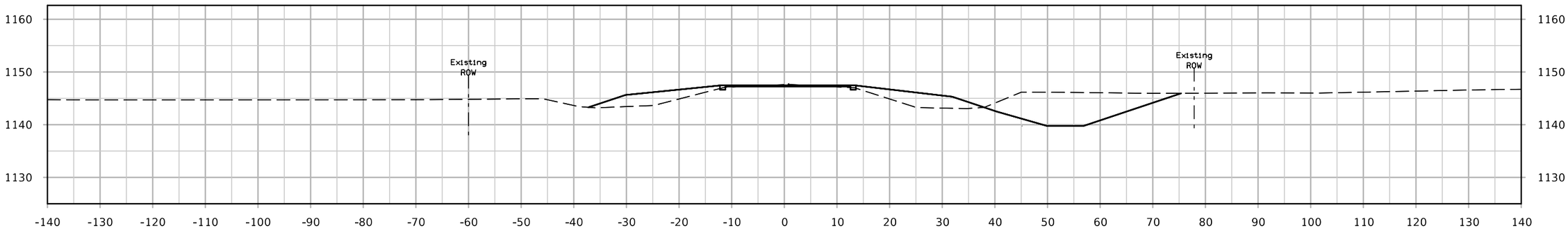
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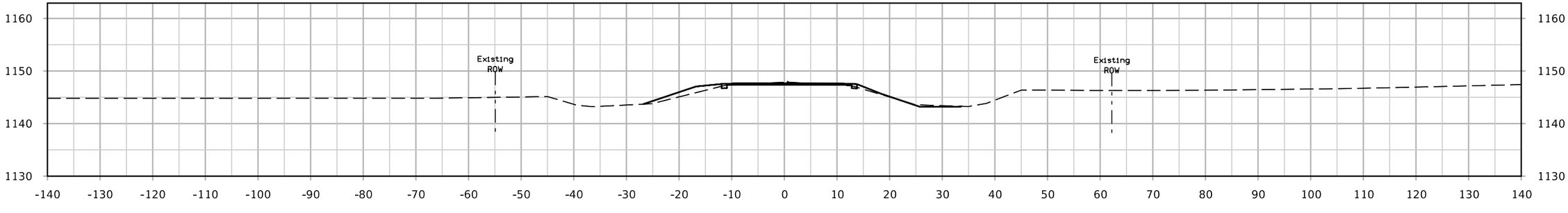
Co.Rd. D-68



STA. 8751+50.00



STA. 8751+00.00

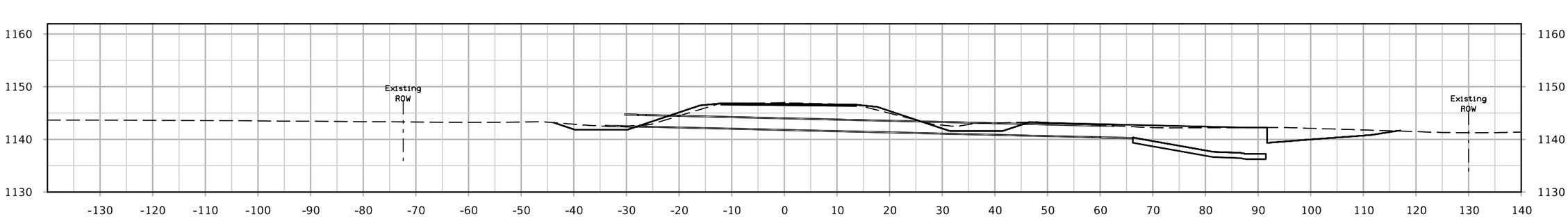


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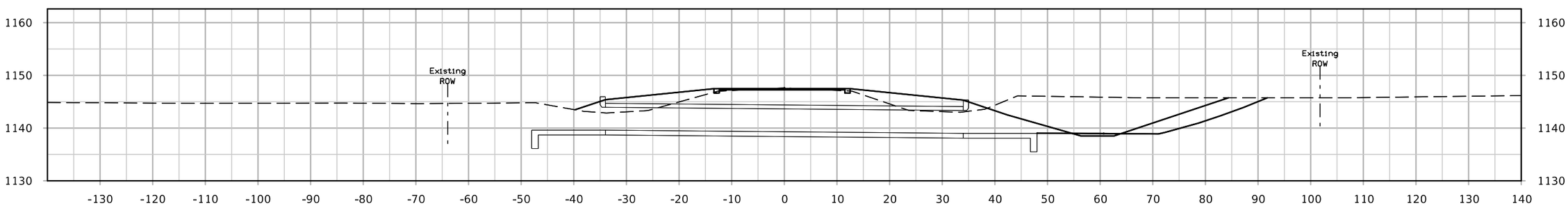
FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER X.1

7:04:47 AM 8/8/2023 rringge pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\DistrictDesign\CADD Files\COR_941696094_SRD68.dgn

Co.Rd. D-68
PROPOSED
CULVERT LOCATIONS



STA. 8753+35.02

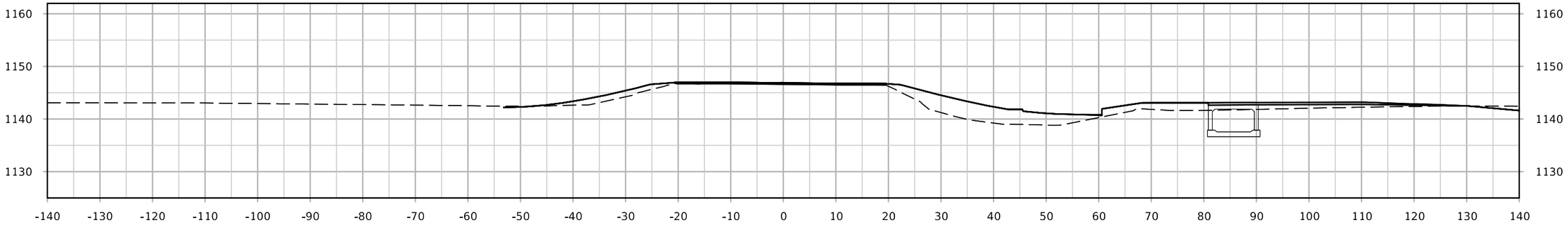


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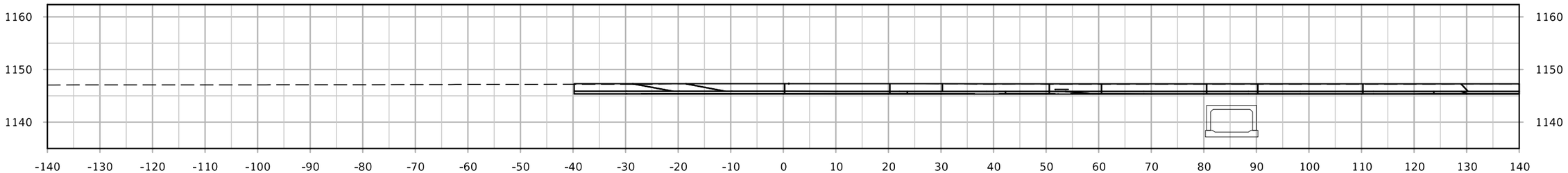
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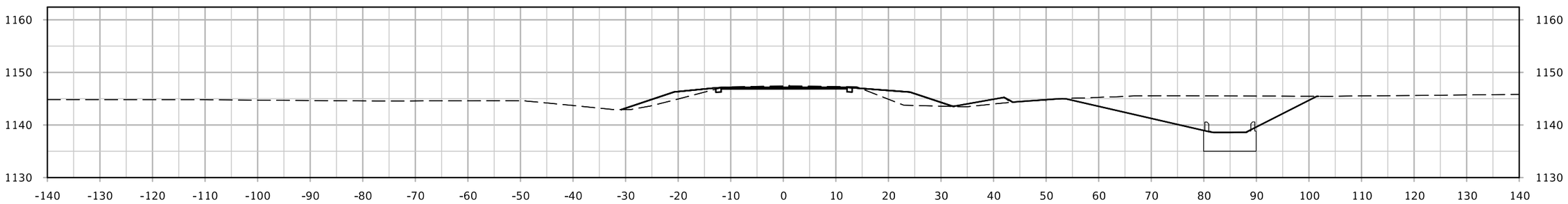
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STA. 8752+50.00

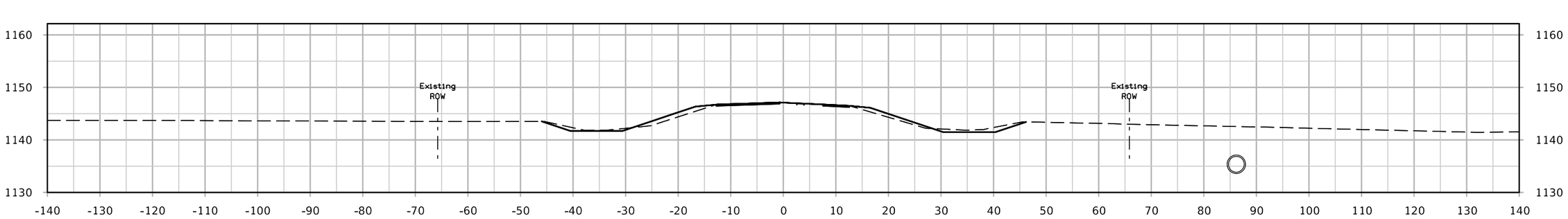


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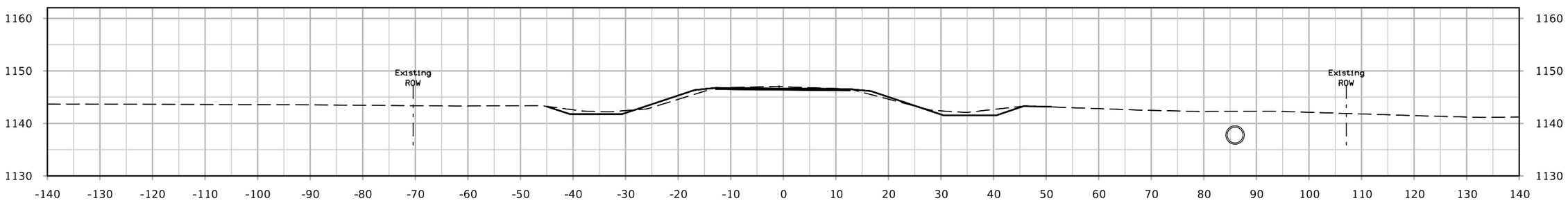
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Co.Rd. D-68



STA. 8753+75.00

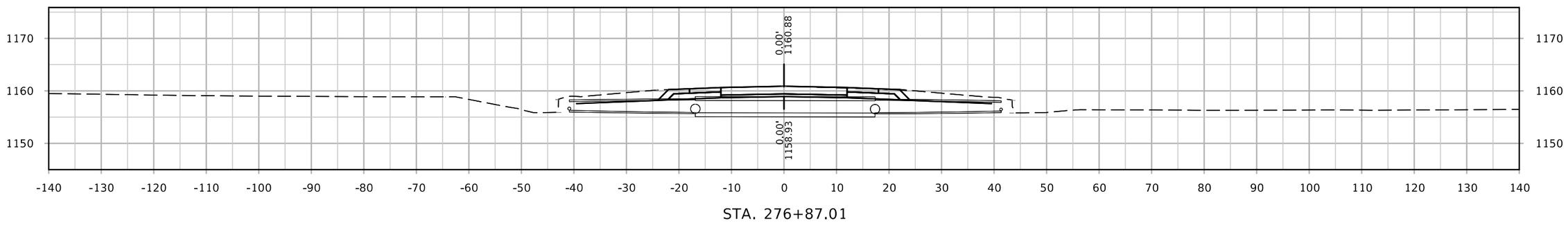


STA. 8753+50.00

FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER X.4

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ML - US169

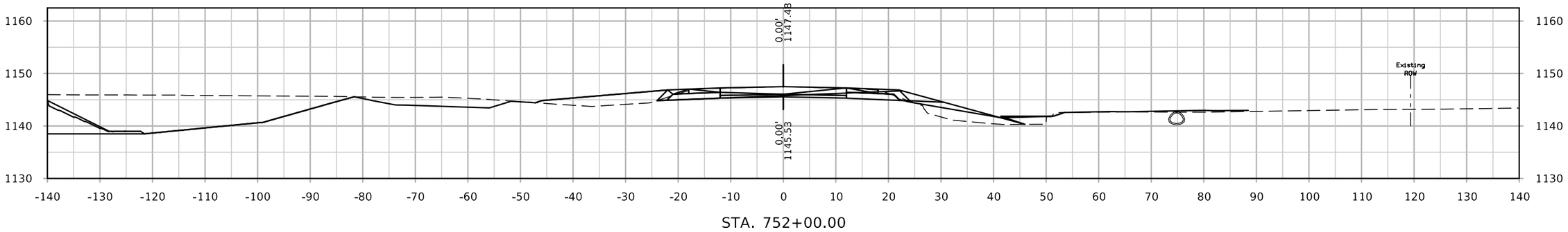


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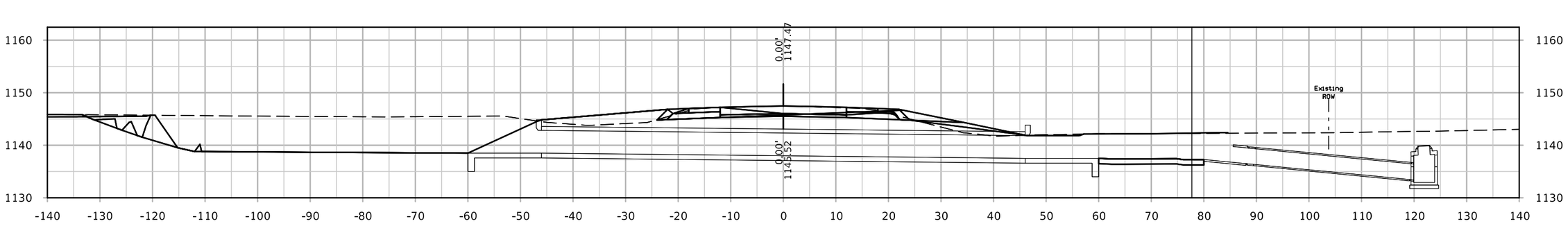
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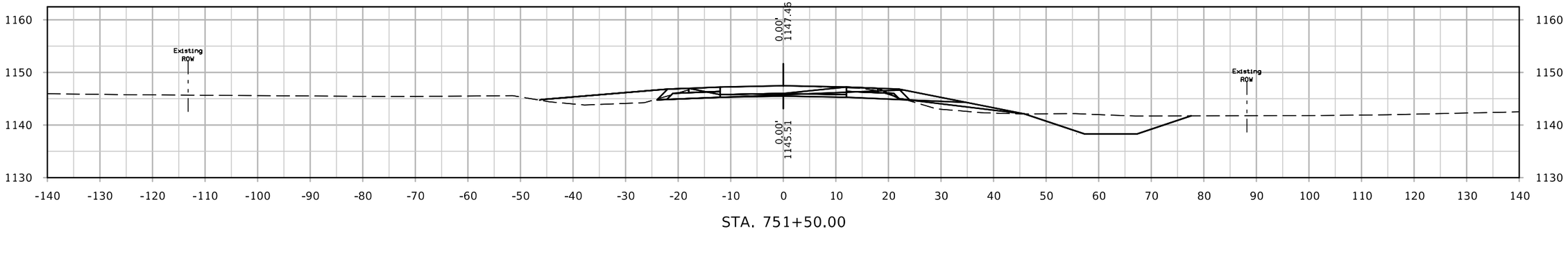
ML - US169



STA. 752+00.00



STA. 751+75.00

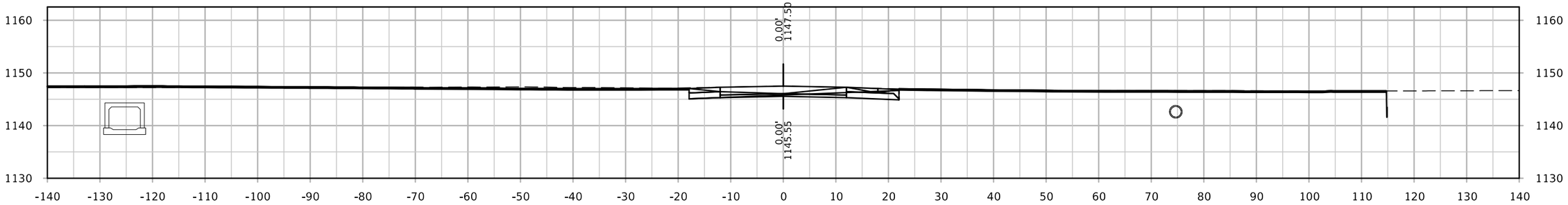


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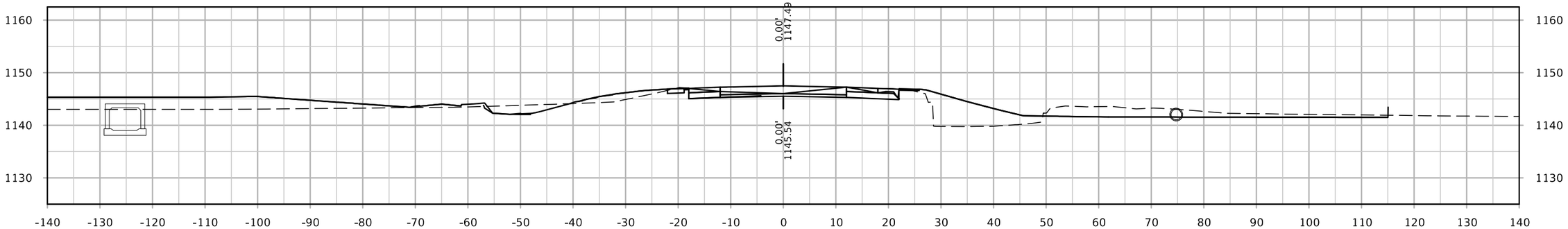
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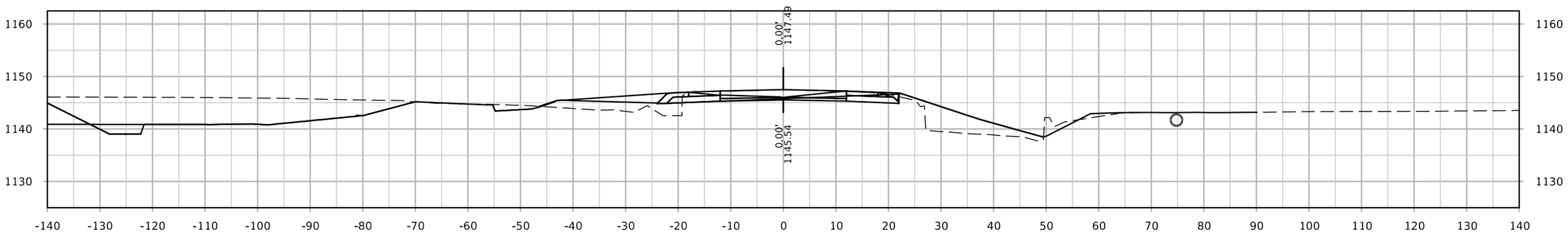
ML - US169



STA. 752+50.00



STA. 752+25.00

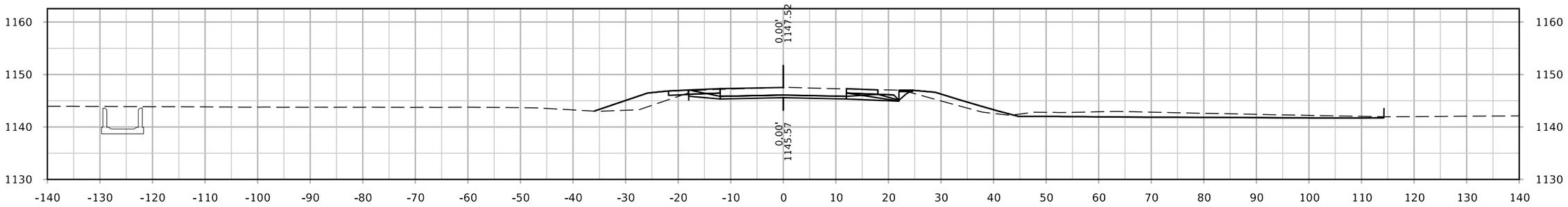


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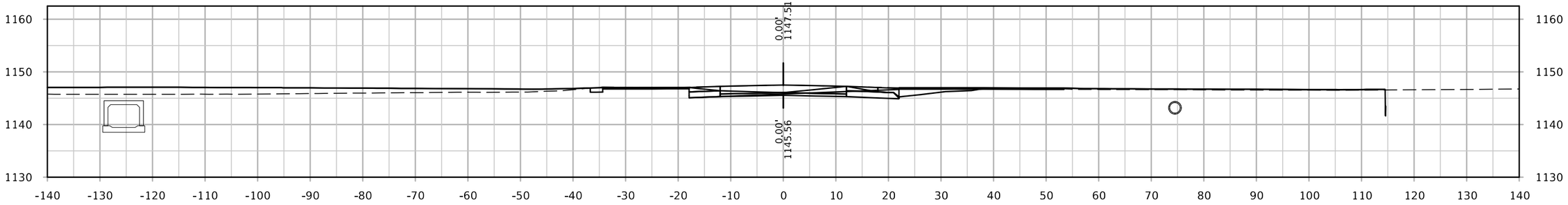
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6:18:59 AM 8/8/2023 rringge pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\DistrictDesign\CADD Files\COR_941696094_ROWMLA169.dgn

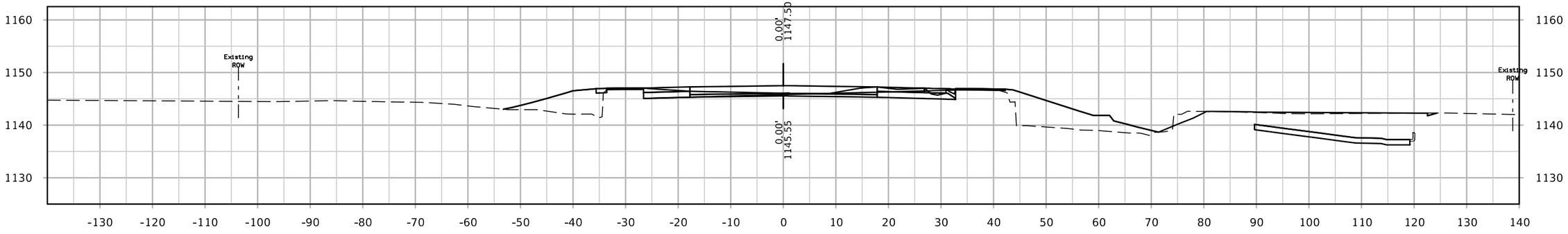
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STA. 753+00.00



STA. 752+75.00

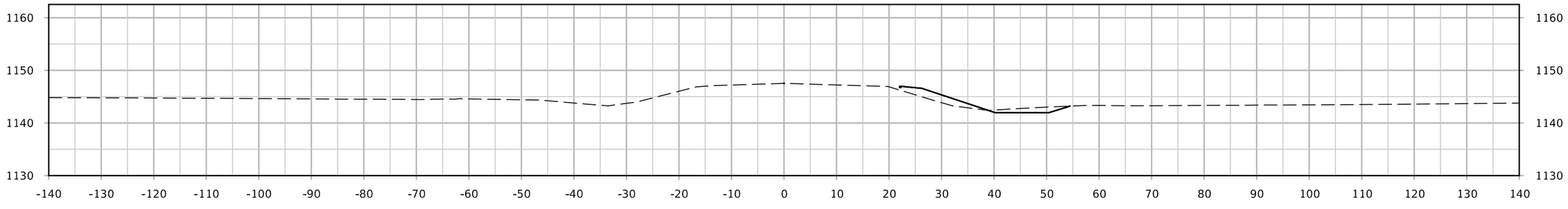


STA. 752+60.84

FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER W.4

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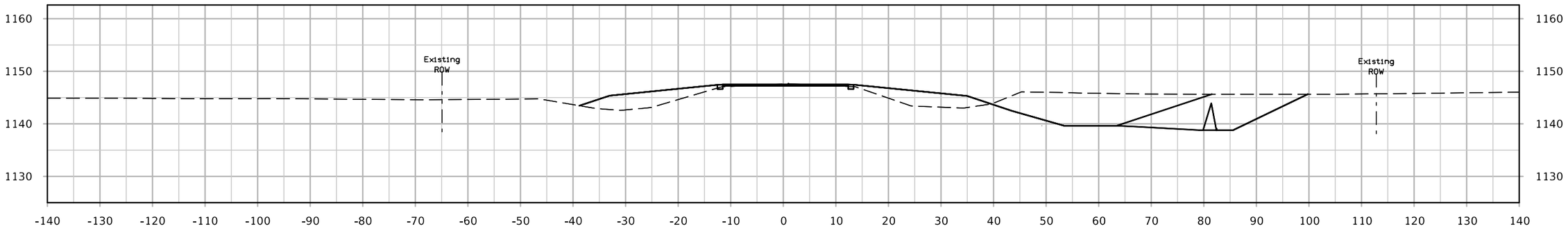


STA. 753+10.00

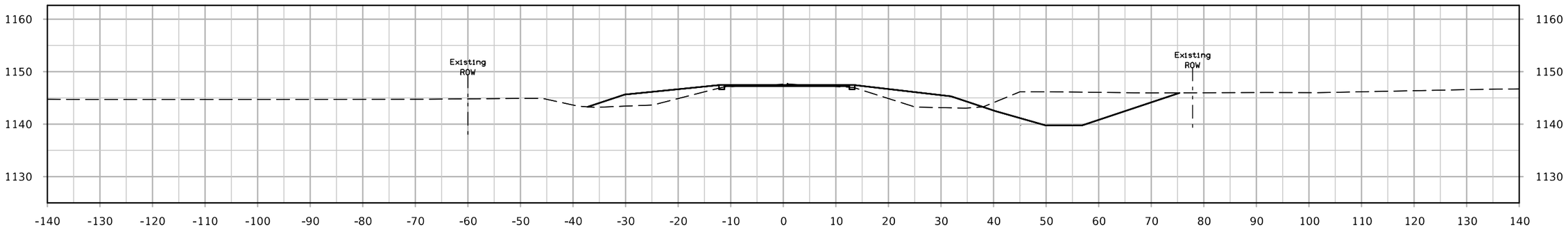
FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER W.5

6:19:00 AM 8/8/2023 rringge pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\DistrictDesign\CADD Files\COR_941696094_ROWMLA169.dgn

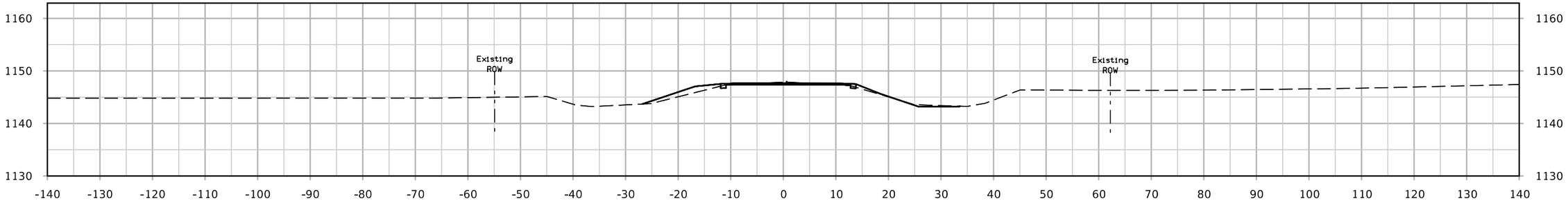
Co.Rd. D-68



STA. 8751+50.00



STA. 8751+00.00

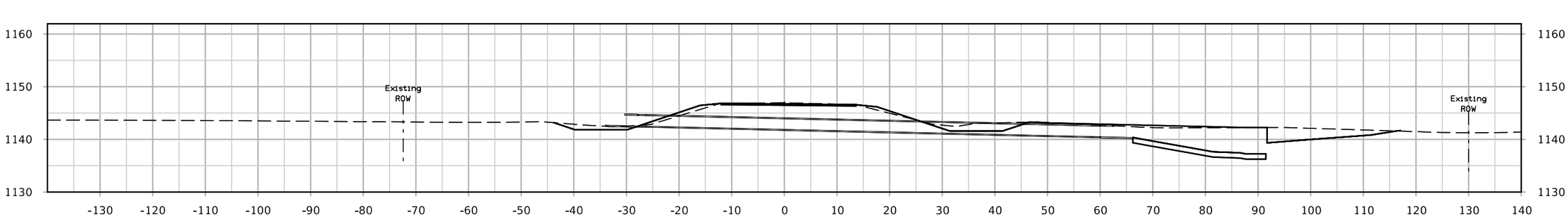


STA. 8750+50.00

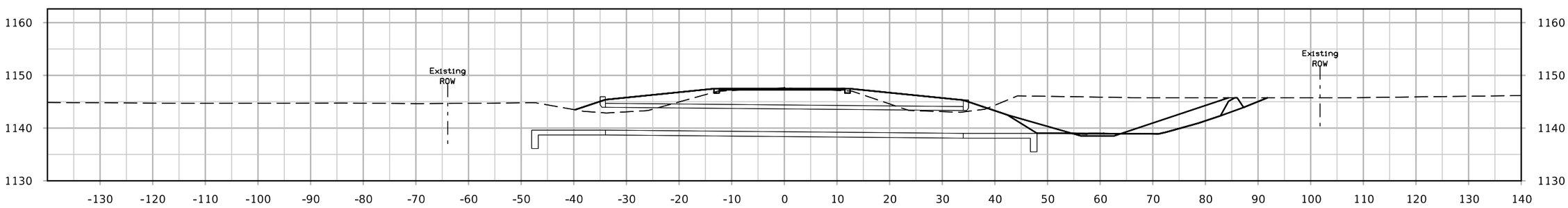
FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER X.1

6:19:12 AM 8/8/2023 rringge pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\DistrictDesign\CADD Files\COR_941696094_SRD68.dgn

Co.Rd. D-68
PROPOSED
CULVERT LOCATIONS



STA. 8753+35.02

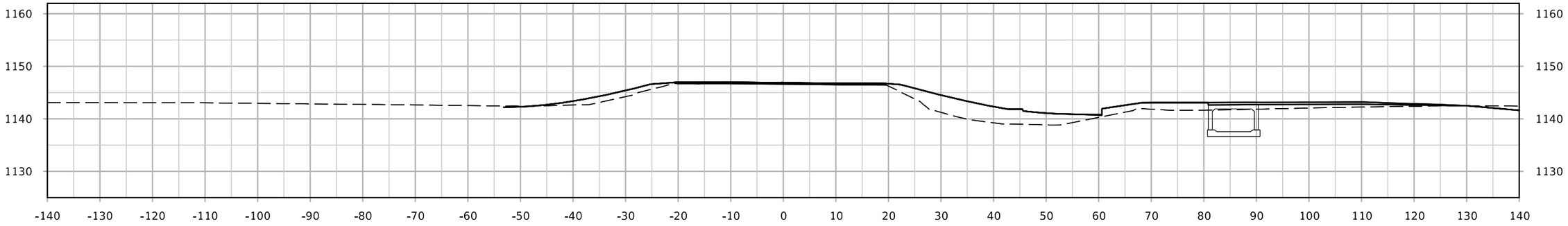


STA. 8751+35.00

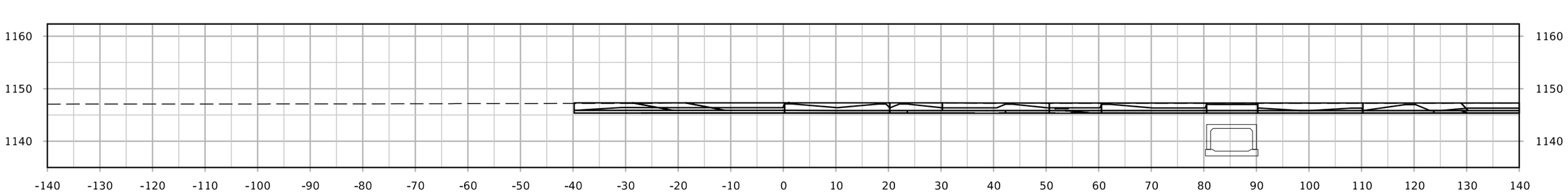
FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER X.2	

6:19:13 AM 8/8/2023 rringge pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\DistrictDesign\CADD Files\COR_941696094_SRD68.dgn

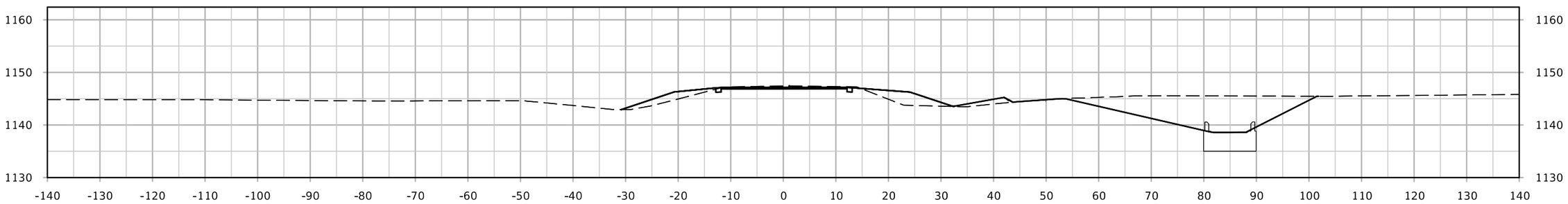
Co.Rd. D-68



STA. 8753+00.00



STA. 8752+50.00

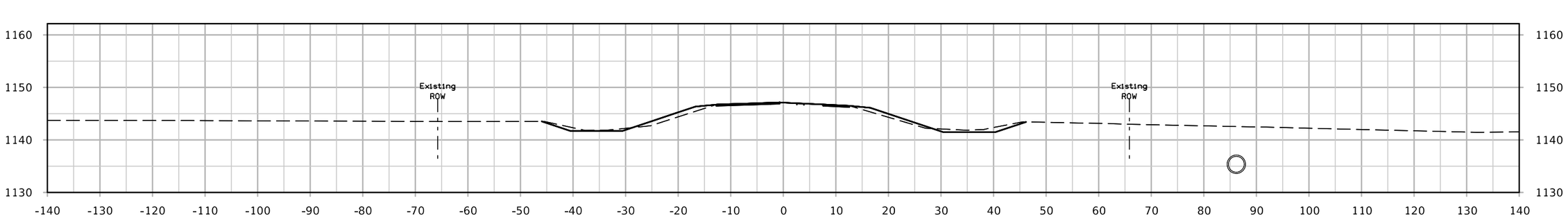


STA. 8752+00.00

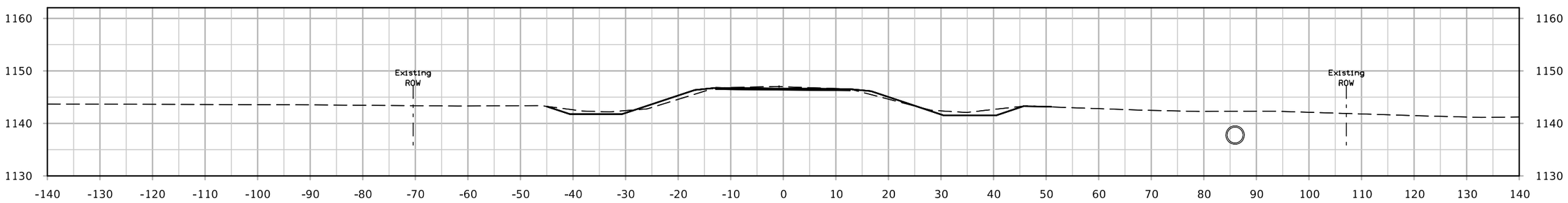
FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER X.3	

6:19:14 AM 8/8/2023 rringge pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\9416903022\DistrictDesign\CADD Files\COR_941696094_SRD68.dgn

Co.Rd. D-68



STA. 8753+75.00



STA. 8753+50.00

FILE NO.	ENGLISH	DESIGN TEAM Smyth/Adey/Ringgenberg	WEBSTER COUNTY	PROJECT NUMBER NHSN-169-6(94)--2R-94	SHEET NUMBER X.4

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