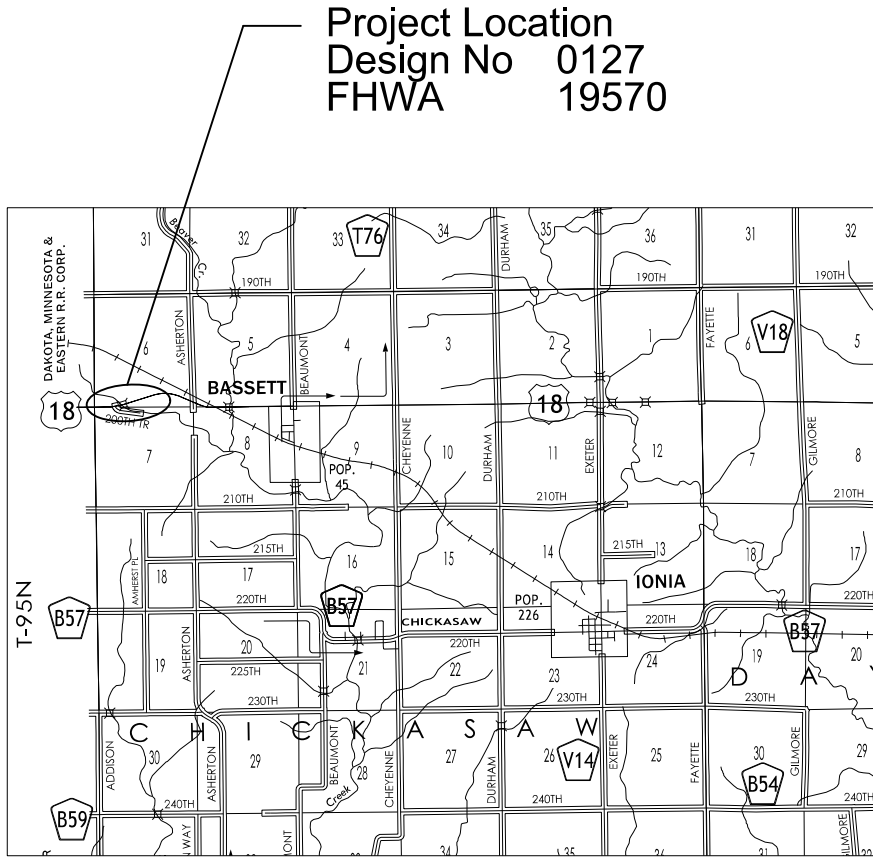




Project Location
Design No 0127
FHWA 19570

LEGEND	
INTERSTATE HIGHWAY	
PRIMARY HIGHWAY-DIVIDED	
PRIMARY HIGHWAY	
PORTLAND CEMENT CONCRETE ROAD	
ASPHALT ROAD	
BITUMINOUS ROAD	
GRAVEL ROAD	
EARTHEN ROAD	
INTERSTATE HIGHWAY	
UNITED STATES HIGHWAY	
STATE HIGHWAY	
COUNTY HIGHWAY	
RAILROAD	
PIPELINE	
AIRPORT	
HYDROLOGY	
BRIDGE	
STATE BOUNDARY	
COUNTY BOUNDARY	
CORPORATE BOUNDARY	
TOWNSHIP LINE	
SECTION LINE	
ROAD NAMES	
UNINCORPORATED PLACE	



PLANS OF PROPOSED IMPROVEMENT ON THE
PRIMARY ROAD SYSTEM
CHICKASAW COUNTY

Bridge Replacement
US 18 over Little Cedar River
1.0 Miles East of Co Rd T74

SCALES: As Noted

- Refer to the Proposal Form for list of applicable specifications.
- Value Engineering Saves. Refer to Article 1105.14 of the Specifications.
- The Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series 2015, plus applicable General Supplemental Specifications, Developmental Specifications, Supplemental Specifactions, and Special Provisions shall apply to the construction work on this project.



DESIGN DATA RURAL			
2026	AADT	2600	V.P.D.
	TRUCKS	15	%
2046	AADT	2960	V.P.D.
	TRUCKS	15	%

INDEX OF SEALS		
SHEET NO.	NAME	TYPE
1	Daniel Kimball	Hydraulic Design
X	X	X

REVISIONS

TOTAL
..
PROJECT IDENTIFICATION NUMBER
21-19-018-010
PROJECT NUMBER
BRF-018-7(71)--38-19
R.O.W. PROJECT NUMBER
PROJECTWISE DIRECTORY
1901801021

INDEX OF SHEETS	
NO.	DESCRIPTION
1	TITLE SHEET
2-4	DESIGN 0127

ENGLISH STANDARD BRIDGE PLANS		
STANDARD	ISSUED	REVISED

HYDRAULIC DESIGN

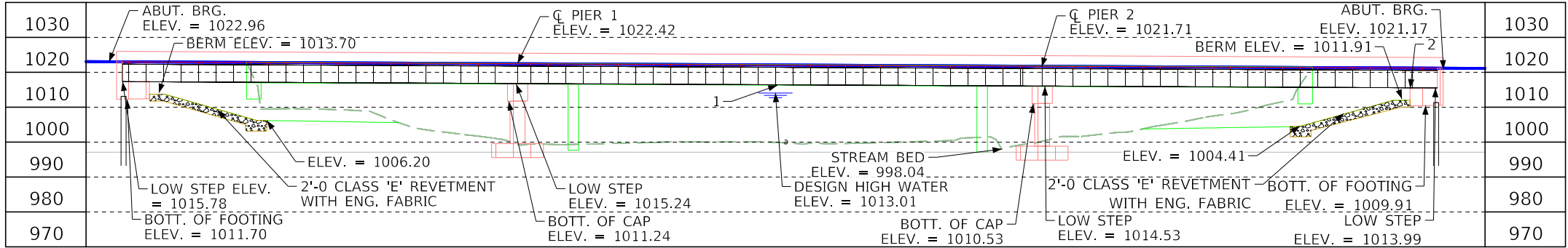
I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Signature **Daniel D. Kimball** Date

Printed or Typed Name

My license renewal date is December 31, 2023

Pages or sheets covered by this seal: HYDRAULICS

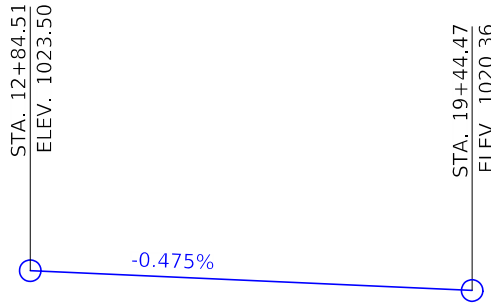


LONGITUDINAL SECTION ALONG CL IA18

- 1 REGULATORY LOW SUPERSTRUCTURE ELEV. = 1015.40
- 2 OPERATIONAL LOW SUPERSTRUCTURE ELEV. = 1014.50

CONTROL POINT: A STANDARD BENCH DISK SET IN TOP OF A CONCRETE POST 0.5 MILES SOUTH OF INTERSECTION OF 210TH ST. AND DURHAM AVE. ELEV. = 1123.73

PROPOSED PROFILE US 18 OVER LITTLE CEDAR RIVER



HYDRAULIC DATA

DRAINAGE AREA = 269 SQ.MI.
STREAM SLOPE = 3.7 FT./MI.
AVG. LOW WATER STAGE = 1001

Q25 = 12,800 CFS
STAGE = 1012.10

Q50 = 15,500 CFS
STAGE = 1013.01
BACKWATER = 1.09 FT.
AVG. BRIDGE VELOCITY = 3.75 FPS

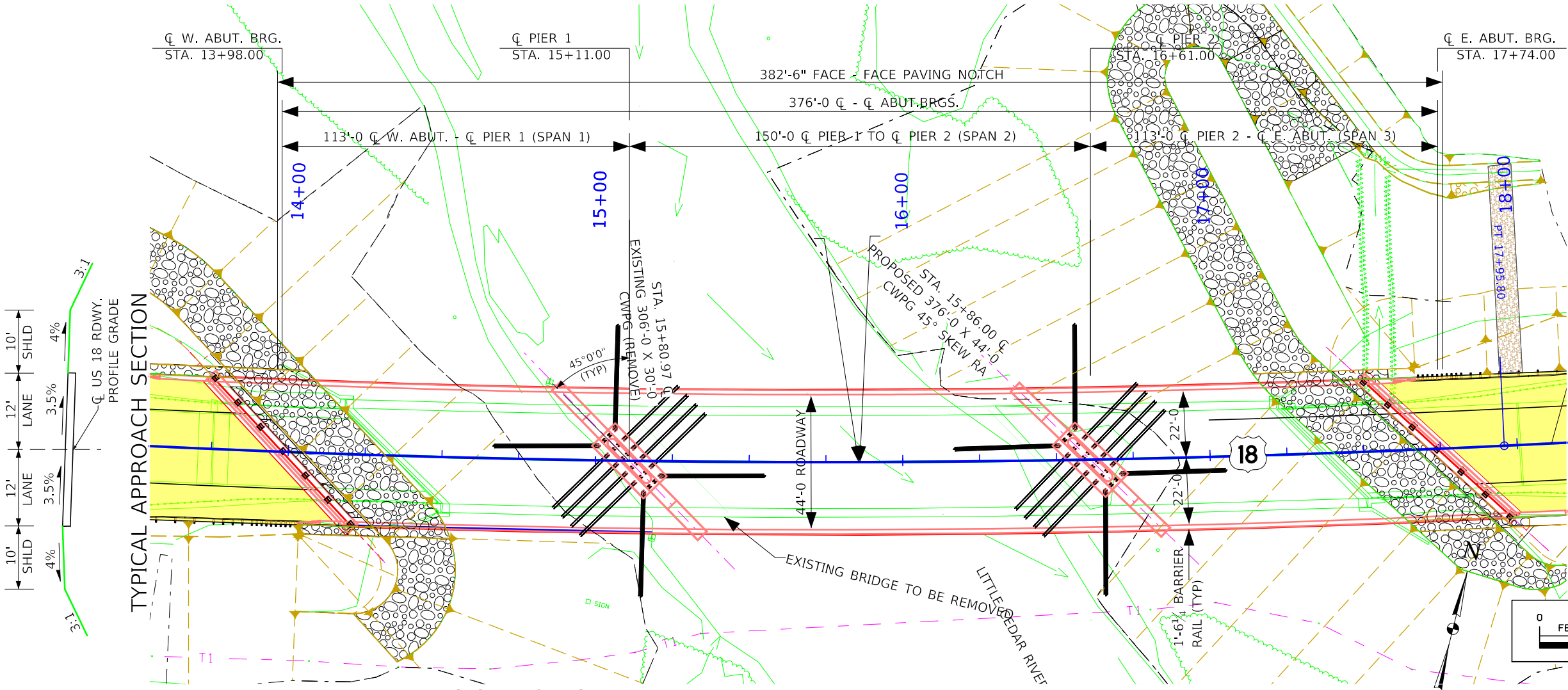
Q100 = 18,200 CFS
STAGE = 1013.83
BACKWATER = 1.21 FT.
AVG. BRIDGE VELOCITY = 4.10 FPS

Q200 = 22,300 CFS
STAGE = 1014.05

Q500 = 24,900 CFS
STAGE = 1015.07

LOCATION

IA18 OVER LITTLE CEDAR RIVER
T-95N R-14W
SECTION 6
CHICKASAW TOWNSHIP
CHICKASAW COUNTY
FHWA NO. 19570
BRIDGE MAINT. NO. 1919.35018
LATITUDE 43.067340
LONGITUDE -92.548603



DESIGN NOTES

SITUATION PLAN

GENERAL NOTES

THE DESIGN IS FOR THE REPLACEMENT OF EXISTING 306'X30' CWPG BRIDGE, DESIGN NO. 160, FHWA NO. 19570, MAINT. NO. 1919.35018

CLASS 'E' REVETMENT IS EMBEDDED.

ALL DIMENSIONS ARE HORIZONTAL UNLESS OTHERWISE NOTED.

ALL UNITS ARE IN FEET UNLESS OTHERWISE NOTED.

TSS TL-4 BRIDGE RAILING
NON-STANDARD ABUTMENT WING WALL
PROPOSED BEAM TYPE - CWPG
PIER TYPE - T-PIER

AS THIS PROJECT REQUIRES SOVEREIGN LANDS PERMIT, BID ITEM REFERENCE NOTES SHALL RESTRICT BROKEN CONCRETE AS A SUBSTITUTE FOR REVETMENT. [BDM 3.2.7.3.5]

AN IOWA DNR SOVEREIGN LANDS PERMIT IS REQUIRED

BERM SLOPES TO BE CONFIRMED DURING FINAL DESIGN

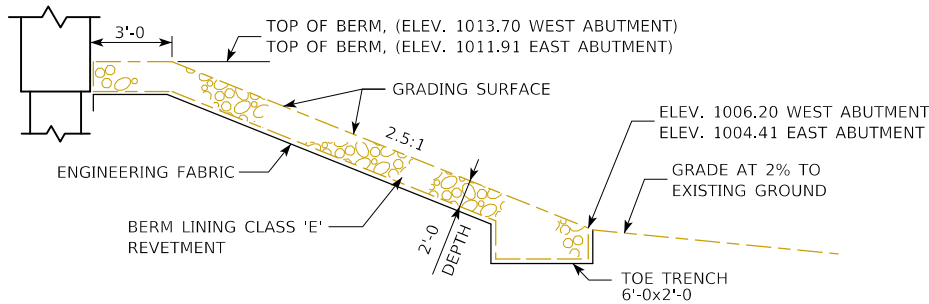
AN IOWA DNR FLOOD PLAIN PERMIT IS REQUIRED

TRAFFIC ESTIMATES

UTILITY LEGEND

- T1 CENTURYLINK
- F0 IOWA COMMUNICATIONS NETWORK
- 2026 DHV
- 2046 DHV
- 2600 V.P.D.
- 2960 V.P.D.
- TRUCKS
- 15%

DESIGN FOR 45 DEGREE RA
376'-0 X 44'-0 CONTINUOUS WELDED STEEL GIRDER BRIDGE
113'-0" END SPANS RADIUS = 9148.93' 150'-0" INTERIOR SPAN
SITUATION PLAN
STA. 15+86.00 (US 18) TURN-IN DATE: JAN 2025
CHICKASAW COUNTY
IOWA DEPARTMENT OF TRANSPORTATION
DESIGN NO. 0127 DESIGN SHEET NO. 2 of 4 FHWA NO. 19570



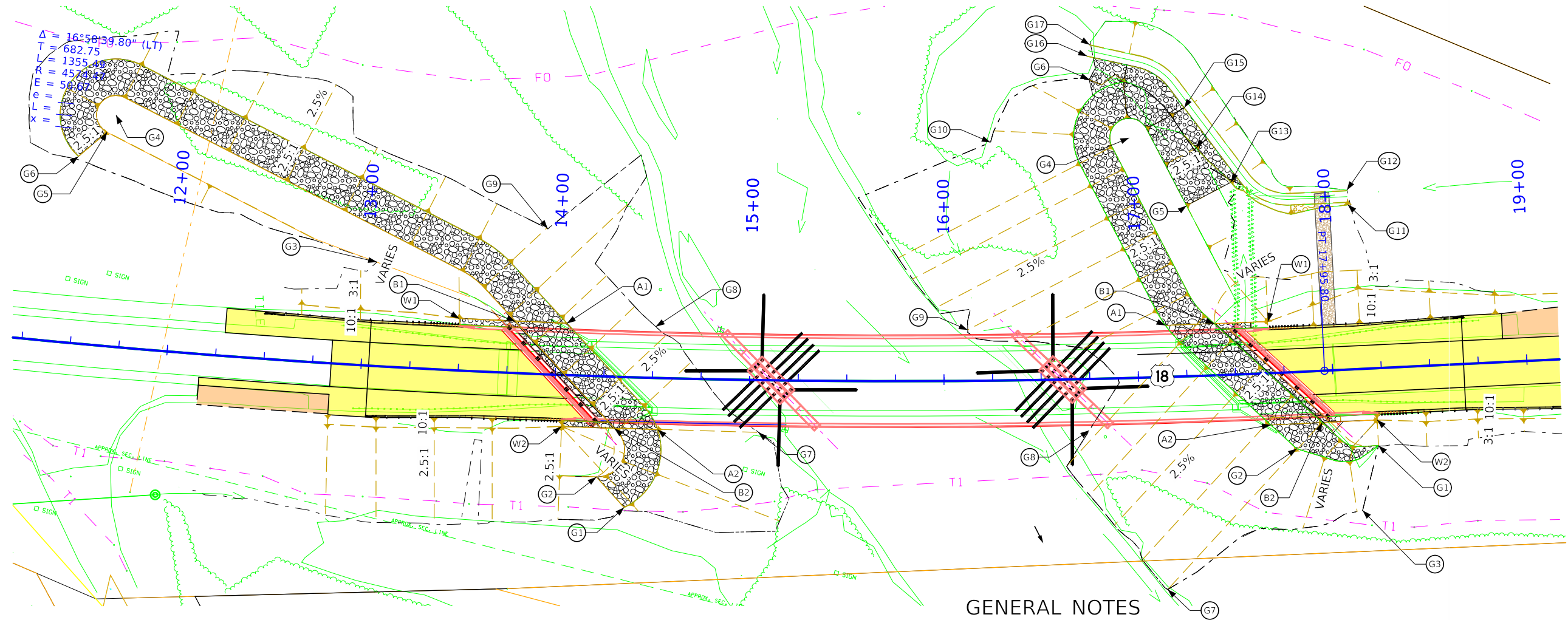
TYP. EMBEDDED RIPRAP
AT ABUTMENT

BERM SLOPE LOCATION TABLE			
POINTS	WEST ABUTMENT		
	STATION	OFFSET	ELEV.
A1	14+05.04	26.58 LT	1006.20
A2	14+53.29	26.58 RT	1006.20
B1	13+77.65	26.58 LT	1013.70
B2	14+31.38	26.58 RT	1013.70
W1	13+49.94	26.58 LT	1022.38
W2	14+04.08	26.58 RT	1023.81

BERM SLOPE LOCATION TABLE			
POINTS	EAST ABUTMENT		
	STATION	OFFSET	ELEV.
A1	17+14.76	26.58 LT	1004.41
A2	17+66.97	26.58 RT	1004.41
B1	17+40.02	26.58 LT	1011.91
B2	17+93.36	26.58 RT	1011.91
W1	17+67.77	26.58 LT	1020.41
W2	18+21.66	26.58 RT	1021.59

GRADING/REVTMENT LIMITS						
POINTS	WEST ABUTMENT			EAST ABUTMENT		
	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
G1	14+37.43	67.13 RT	1006.20	18+21.65	39.82 RT	1017.17
G2	14+22.87	37.87 RT	1013.70	17+79.79	39.44 RT	1004.41
G3	13+05.00	53.48 LT	1013.70	18+11.93	72.74 RT	1009.68
G4	11+62.85	118.74 LT	1013.70	16+98.66	123.62 LT	1011.91
G5	11+56.70	111.07 LT	1013.70	17+22.63	98.21 LT	1011.91
G6	11+45.16	95.96 LT	1006.20	16+84.77	151.19 LT	1004.41
G7	15+04.38	26.58 RT	1005.72	17+11.85	44.97 LT	1003.43
G8	14+50.86	26.58 LT	1005.55	16+73.92	26.58 RT	1003.13
G9	13+93.18	74.94 LT	1005.68	16+12.39	26.58 LT	1002.78
G10				16+25.26	122.60 LT	1003.56
G11				18+11.83	84.63 LT	1004.23
G12				18+11.84	92.29 LT	1003.79
G13				17+48.34	110.13 LT	1004.25
G14				17+39.51	122.42 LT	1005.58
G15				17+27.66	138.78 LT	1005.60
G16				16+77.30	165.98 LT	1000.00
G17				16+78.77	171.81 LT	1000.00

Situation Plan



GENERAL NOTES

THE DESIGN IS FOR THE REPLACEMENT OF EXISTING 306'X30' CWPB BRIDGE, DESIGN NO. 160, FHWA NO. 19570, MAINT. No. 1919.35018

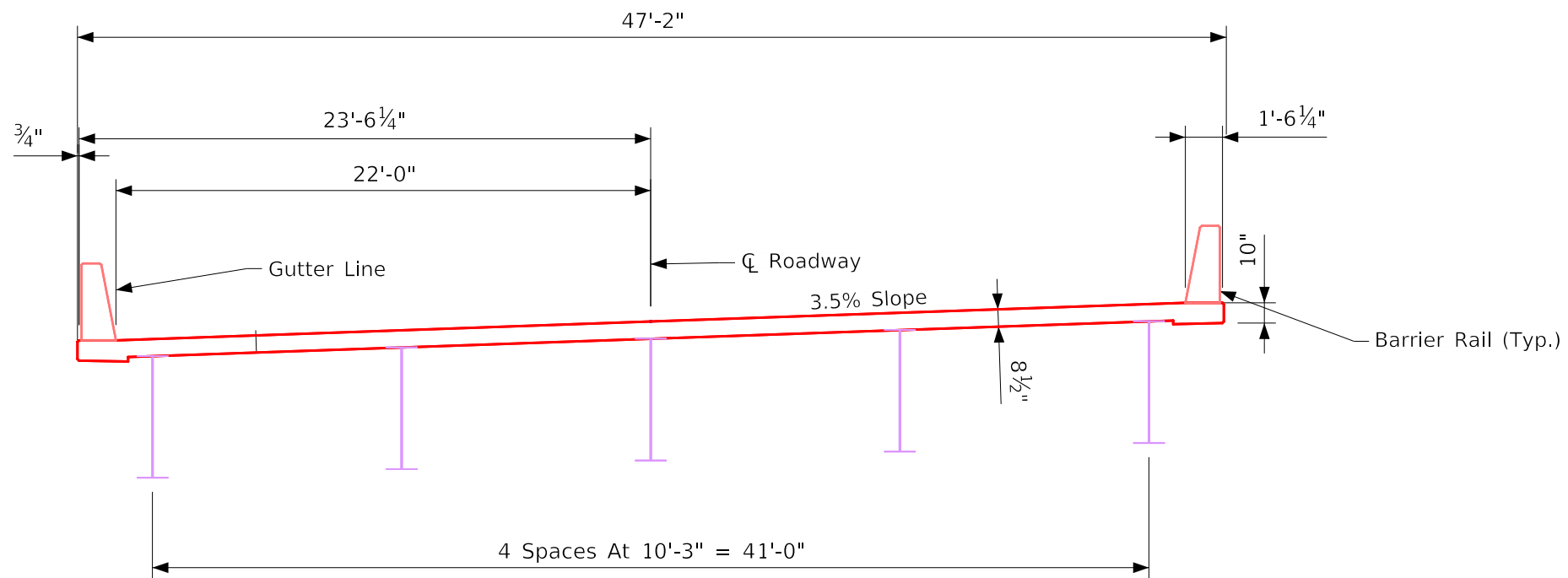
CLASS 'E' REVETMENT IS EMBEDDED.

ALL DIMENSIONS ARE HORIZONTAL UNLESS OTHERWISE NOTED.

ALL UNITS ARE IN FEET UNLESS OTHERWISE NOTED.

ESTIMATED BERM ARMORING QUANTITIES				
LOCATION	REVTMENT CL. E (TON)	EROSION STONE (TON)	ENGINEERING FABRIC (SY)	EXCAVATION (CY)
BERM LINING - W. ABUT.	993	-	1040	700
BERM LINING - E. ABUT.	807	-	807	569
TOTALS	1800	-	1847	1269

DESIGN FOR 45 DEGREE RA
376'-0 X 44'-0 CONTINUOUS WELDED STEEL GIRDER BRIDGE
113'-0" END SPANS RADIUS = 9148.93' 150'-0" INTERIOR SPAN
SITUATION PLAN
STA. 15+86.00 (US 18) TURN-IN DATE: JAN 2025
CHICKASAW COUNTY
IOWA DEPARTMENT OF TRANSPORTATION
DESIGN NO. 0127 DESIGN SHEET NO. 3 of 4 FHWA NO. 19570



Longitudinal Section Along CL IA18

DESIGN FOR 45 DEGREE RA

376'-0 X 44'-0 CONTINUOUS WELDED STEEL GIRDER BRIDGE

113'-0" End Spans 150'-0" Interior Span

SITUATION PLAN

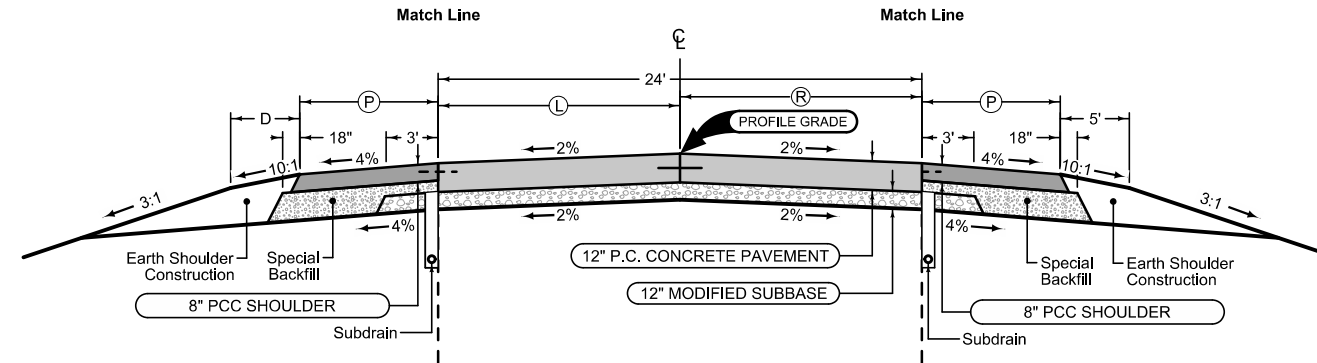
STA. 15+86.00 (US18) RADIUS = 9148.93' Turn-in Date: Jan 2025

CHICKASAW COUNTY

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 0127 Design Sheet No. 4 of 4 FHWA No. 19570

U.S. 18 Typical Section - Normal Crown



Paved Shoulder at Guardrail

PCC Shoulder Jointing:	Longitudinal joint:	BT-1 or BT-5
	Transverse joints:	C at mainline spacing
HMA Shoulder Jointing:	Longitudinal joint:	B

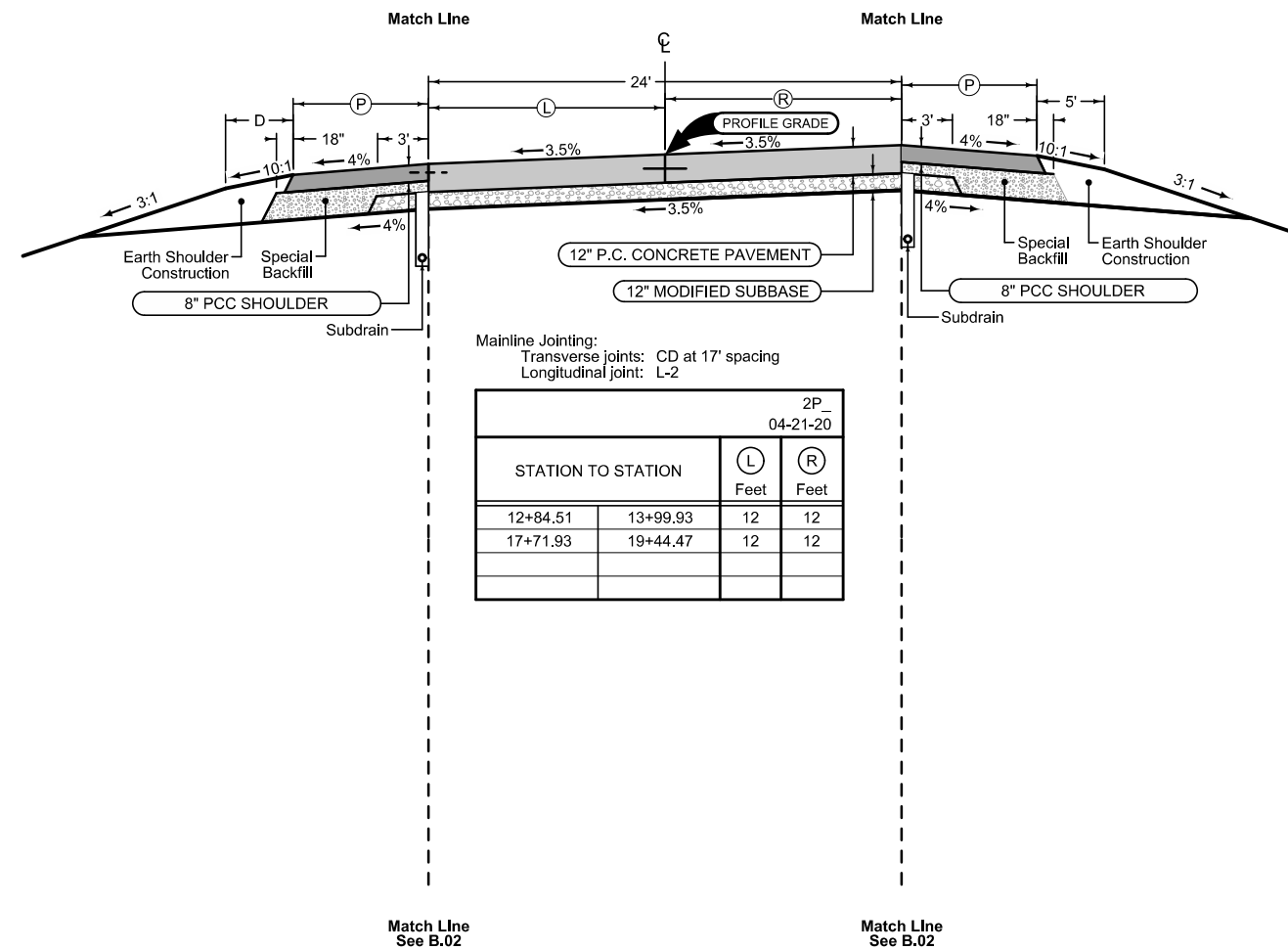
2_P_Guard_04-21-20				
STATION TO STATION		(P) Feet	(D) Feet	
12+84.51	12+98.08	11.7-11.6	5	
12+98.08	13+99.93	11.6	5	
17+71.93	18+19.21	11.6	10-18	
18+19.21	18+71.87	11.6-13.5		
18+71.87	18+88.11	13.5	18-10	

Paved Shoulder at Guardrail

PCC Shoulder Jointing:
 Longitudinal joint: BT-1 or BT-5
 Transverse joints: C at mainline spacing
 HMA Shoulder Jointing:
 Longitudinal joint: B

			2_P_Guard_04-21-20
STATION TO STATION			(P) Feet
12+84.51	13+09.49	14	
13+09.49	13+52.74	14-11.6	
13+52.74	13+99.93	11.6	
17+71.93	18+65.78	11.6	
18+65.78	19+20.57	11.6-13.5	
19+20.57	19+44.47	13.5	

U.S. 18 Typical Section - Full Superelevation



		2P_	
		04-21-20	
STATION TO STATION		(L) Feet	(R) Feet
12+84.51	13+99.93	12	12
17+71.93	19+44.47	12	12

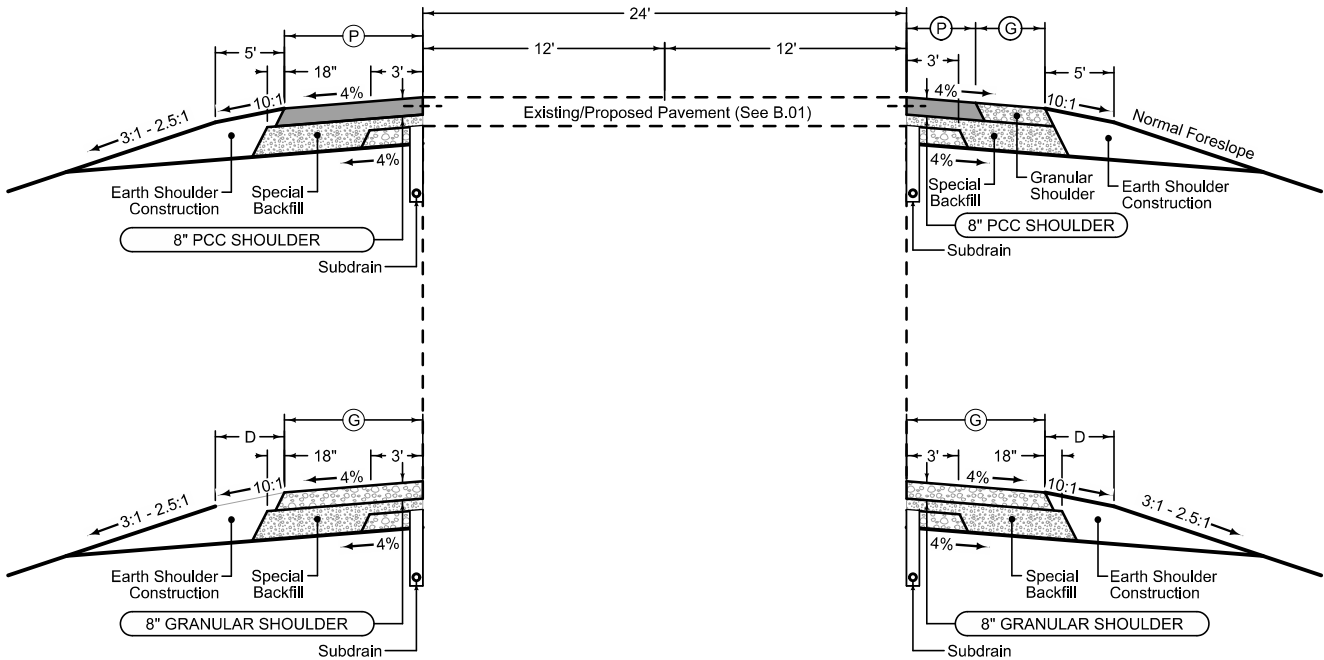
Paved Shoulder at Guardrail

PCC Shoulder Jointing:
Longitudinal joint: BT-1 or BT-5
Transverse joints: C at mainline spacing
HMA Shoulder Jointing:
Longitudinal joint: B

2_P_Guard_ 04-21-20		
STATION TO STATION		(P) Feet
12+29.06	12+36.87	13
12+36.87	12+84.51	13-11.7

Granular Shoulder

2_G_ 04-21-20			
STATION TO STATION		(G) Feet	(D) Feet
18+79.30	19+44.47	13.5-16.5	10-4



Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

2_C_ 04-21-20			
STATION TO STATION		(P) Feet	(G) Feet
12+17.26	12+84.51	4	Tie to Exist.

Granular Shoulder

2_G_ 04-21-20			
STATION TO STATION		(G) Feet	(D) Feet
19+44.47	19+58.08	13.5-16.2	5

	Interstate Highway Symbol
	U.S. Highway Symbol
	Iowa Highway Symbol
	County Road Highway Symbol
	Evergreen Tree
	Deciduous Tree
	Fruit Tree
	Shrub (Bushes)
	Timber
	Hedge
	Stump
	Swamp
	Rock Outcrop
	Broken Concrete
	Revetment (Rip Rap)
	Cemetery
	Grave
	Cave
	Sink Hole
	Board Fence
	Chain Link or Security Fence
	Wire Fence
	Terrace
	Earth Dam or Dike (Existing)
	Tile Outlet
	Edge of Water
	Existing Drainage
	Right of Way Rail or Lot Corner
	Concrete Monument
	Well
	Windmill
	Beehive Intake
	Existing Intake
	Existing Utility Access (Manhole)
	Fire Hydrant
	Water Hydrant (Rural)

	Septic Tank
	Cistern
	L.P. Gas Tank (No Footing)
	Underground Storage Tank
	Latrine
	Satellite TV Dish
	Water Hook Up
	Radio Tower
	Tower Anchor
	Guardrail (Beam or Cable)
	Guard Post (one or two)
	Guard Post (over two)
	Filler Pipe
	Gas Valve
	Water Valve
	Speed Limit Sign
	Mile Marker Post
	Sign
	Traffic Signal Control Box
	Rail Road Signal Control Box
	Telephone Switch Box
	Electric Box

— T1 — CenturyLink

Contact: Sadie Hull
Phone: 9185470147
Email: sadie.hull@lumen.com

— F0 — Iowa Communications Network

Contact: Shannon Marlow
Phone: 8005723940
Email: icnoutsideplantowaonecall@iowa.gov

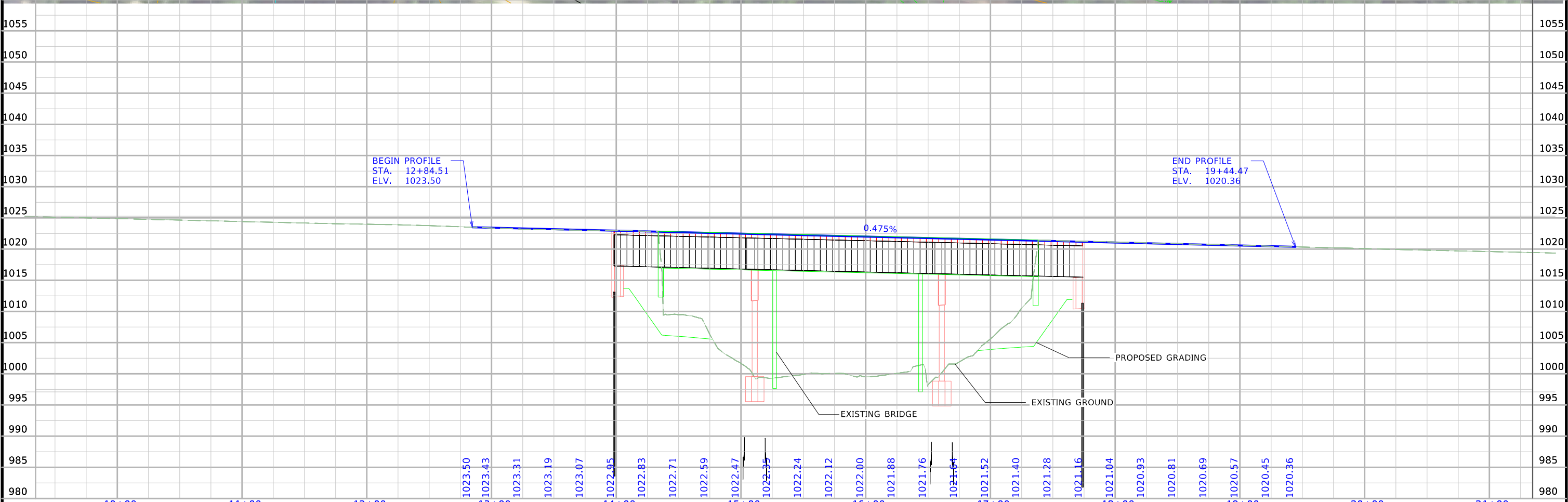
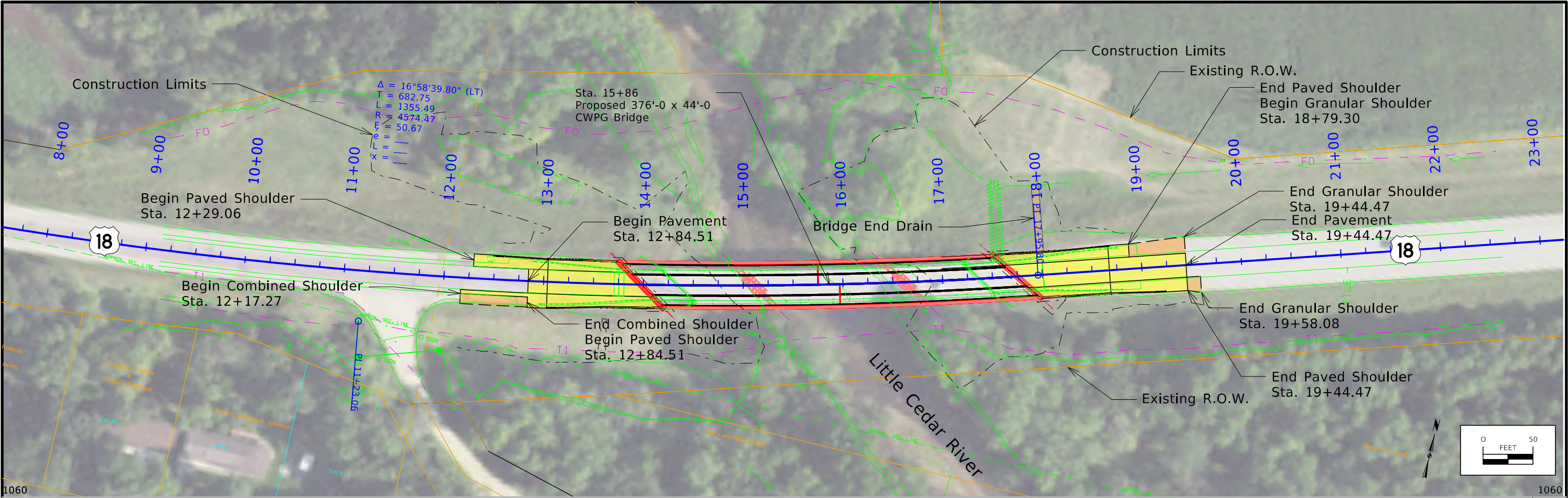
LINEWORK		Design Color No.
Green	(2)	Existing Topographic Features and Labels
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)	Existing Utilities
SHADING		Design Color No.
Lavender	(9)	Temporary Pavement Shading
Yellow	(4)	Proposed Pavement Shading
Orange	(6)	Proposed 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

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

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

	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

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



FILE NO.	ENGLISH	DESIGN TEAM AECOM	CHICKASAW COUNTY	PROJECT NUMBER BRF-018-7(71)--38-19	SHEET NUMBER D.2
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SURVEY INDEX

County: Chickasaw
PIN: 21-19-018-010
Project Number: BRF-018-7(71)--38-19
Location: Little Cedar River 0.3 mi E of Floyd Co Line
Type of Work: Bridge-Unspecified
Project Directory: 1901801021

Survey Personnel

John Hahn – Survey Party Chief
Robert Frederickson– Assistant Survey Party Chief

Date(s) of Survey

Begin Date 04/14/2022
End Date 10/05/2022

General Information

Measurement units for this survey are US survey feet. This is a full DTM survey for US Hwy 18 Bridge Replacement 0.3 mi East of Floyd County Line.

Project Control

Nearby Iowa Real Time Network reference stations were utilized to obtain horizontal and vertical control on primary project control points. Five five-minute observations were taken with appropriate time spans between and used in a weighted average to obtain final coordinate values for Control Point 190182186. Three additional control points were established with a Base-Rover setup relative to point 190182186. Three 2-minute observations with appropriate time spans between were collected and used in a weighted average. For additional details of the control survey, contact the Preliminary Survey department.

PROJECT DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 adjustment)
COORDINATE SYSTEM: IOWA REGIONAL COORDINATE SYSTEM ZONE 02
(U.S. survey foot)
VERTICAL DATUM: NAVD88
GEOID MODEL: 2012bu3

Alignment Information

The horizontal alignment for this survey is a retrace of As-built Plans Project No. F-160(4). Survey stationing was equated to the plan Section Corner & PI at Sta. 0+68.5 and run ahead without equation.

Survey stationing relates to As-built plan stationing as follows:

PI Sta. 0+68.5 As-built Plans Project No. F-160(4)
= Survey PI Sta. 0+68.5

PC Sta. 4+40.56 As-built Plans Project No. F-160(4)
= Survey PC Sta. 4+40.31

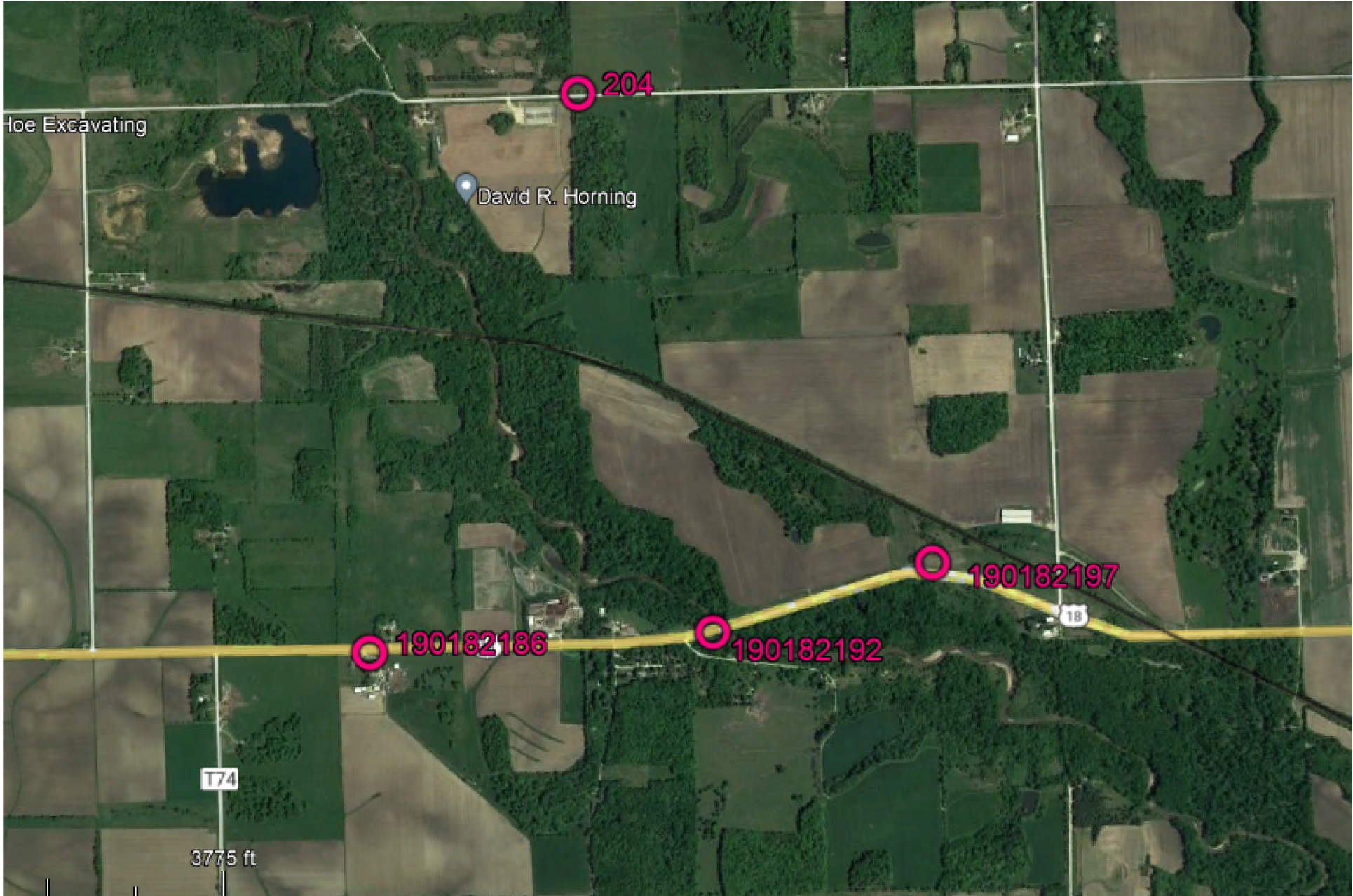
PT Sta. 17+96.0 As-built Plans Project No. F-160(4)
=Survey PT Sta. 17+95.80

Utility Information

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

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 02
VERT. DATUM: NAVD88 - Geoid Model g2012bu3

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

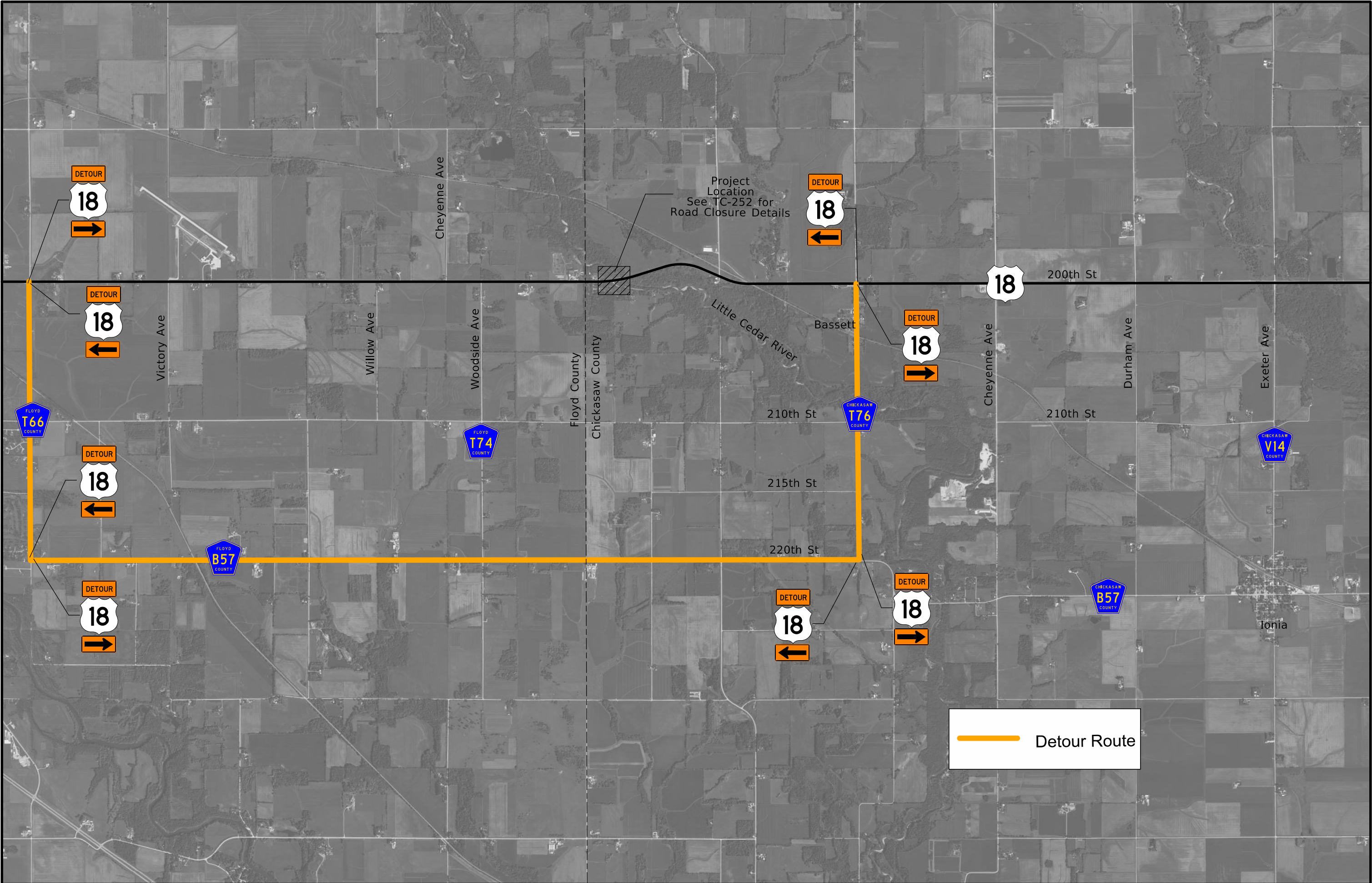
HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00
1a. Regional Coordinate System Zone 02

VERT. DATUM: NAVD88
Geoid Model g2012bu3
Project Control Marks are Bench Marks

Point Name	Northing	Easting	Elevation	Code/Description
190182186	9763683.28	12550013.61	1101.92	CP SET 5/8X40 REBAR 387 FEET EAST OF CL OF RESIDENTIAL DRIVEWAY ON SOUTH SIDE OF 18- 126 FEET ESE OF RESIDENTIAL DRIVEWAY ON NORTH SIDE OF 18- 1408 FEET WEST OF NEXT DRIVEWAY ON NORTH SIDE OF HWY 18
190182192	9763805.58	12553692.88	1024.18	SET CUT X 24.5 FEET SE OF CL OF HWY18- 300 FEET EAST OF CL OF 200TH TRAIL- 1132 FEET ENE OF CL OF FILED ENTRANCE ON NORTH SIDE OF HWY 18
190182197	9764497.94	12556076.00	1013.79	CP SET FENO 100 FEET NORTH OF CL OF HWY 18- 426 FEET SW OF SOUTH RAIL OF RR- 1475 FEET SW OF INTERSECTION OF HWY 18 AND ASHERTON AVENUE
204	9769610.12	12552388.76	1095.79	CP FND CHICKASAW COUNTY GPS CONTROL AS DESCRIBED IN GOOD CONDITION

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.



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

NOTES:

Text

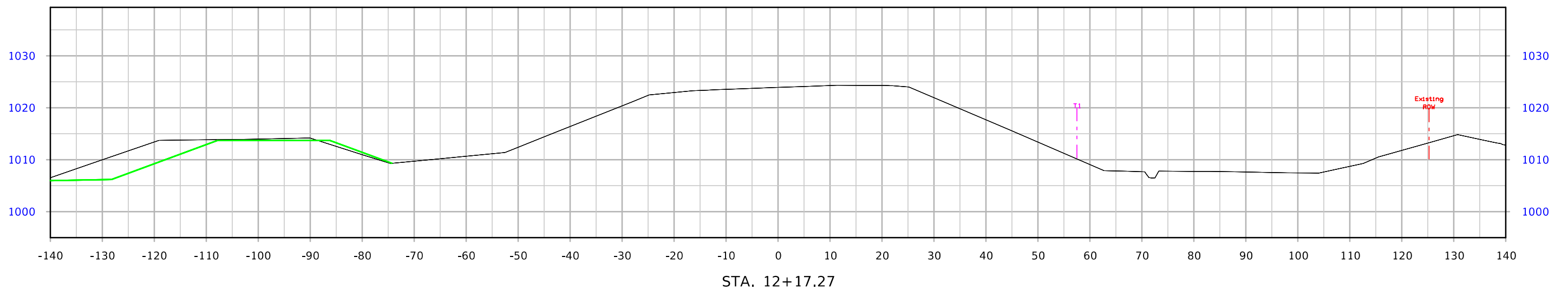
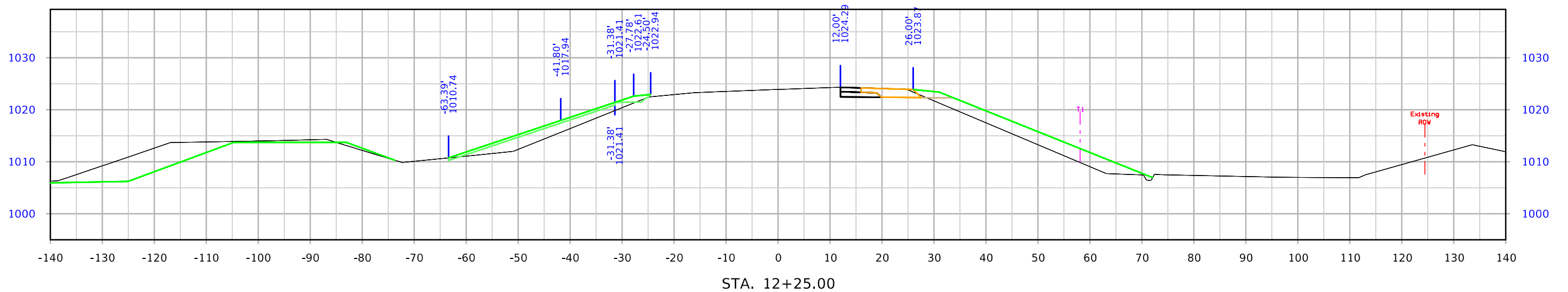
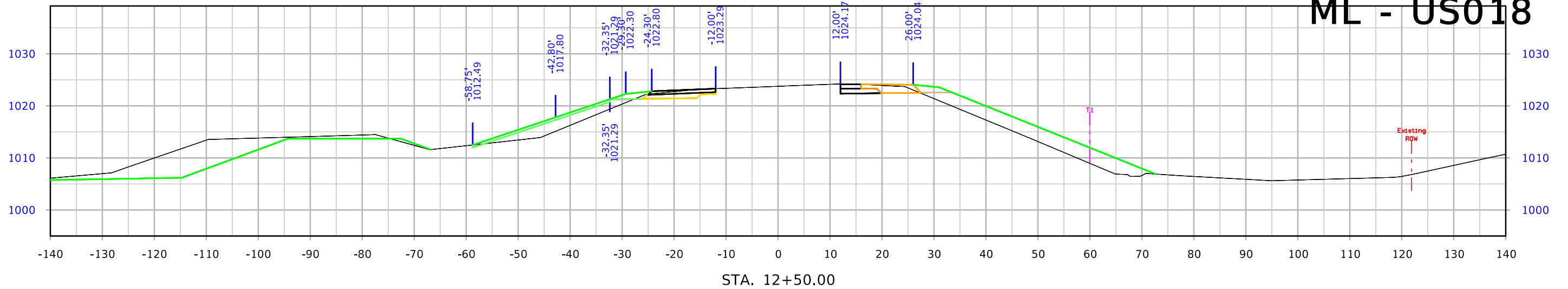
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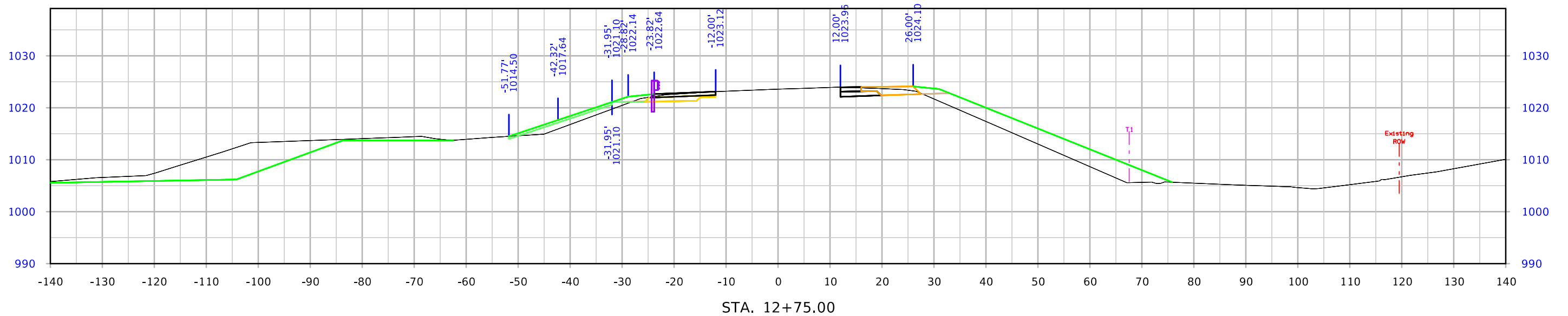
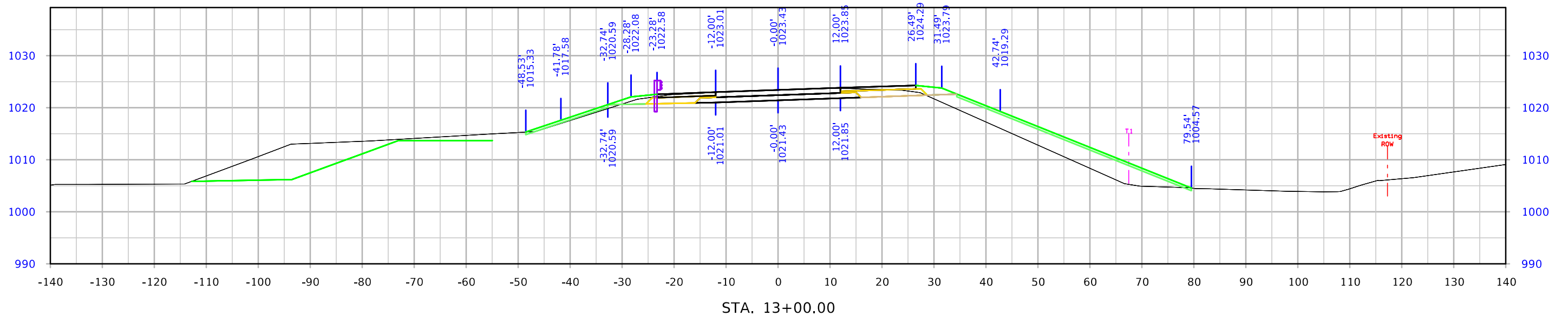
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LEGEND AND INFORMATION SHEET

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

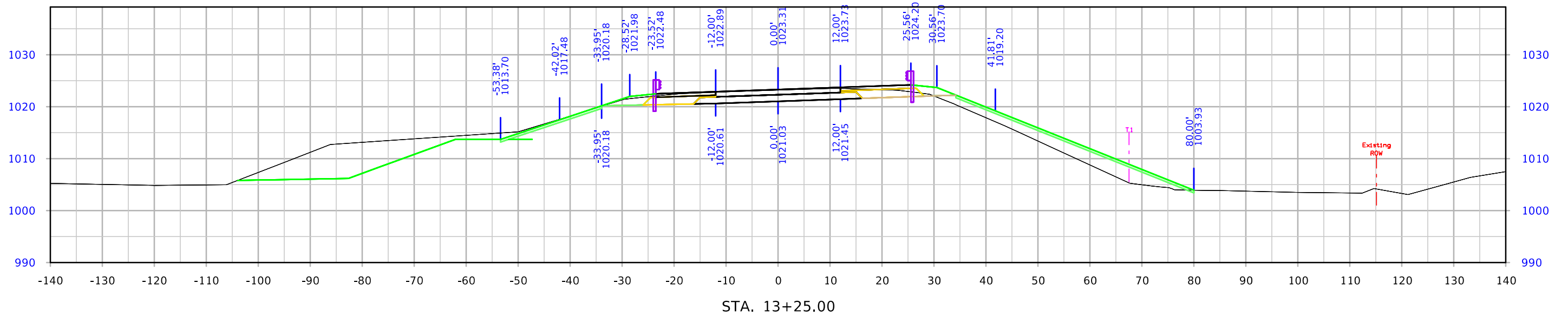
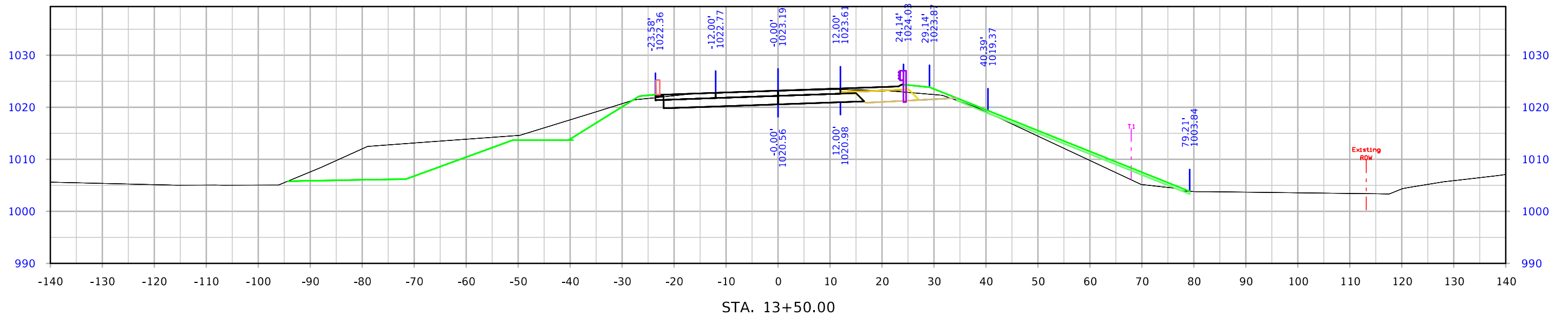
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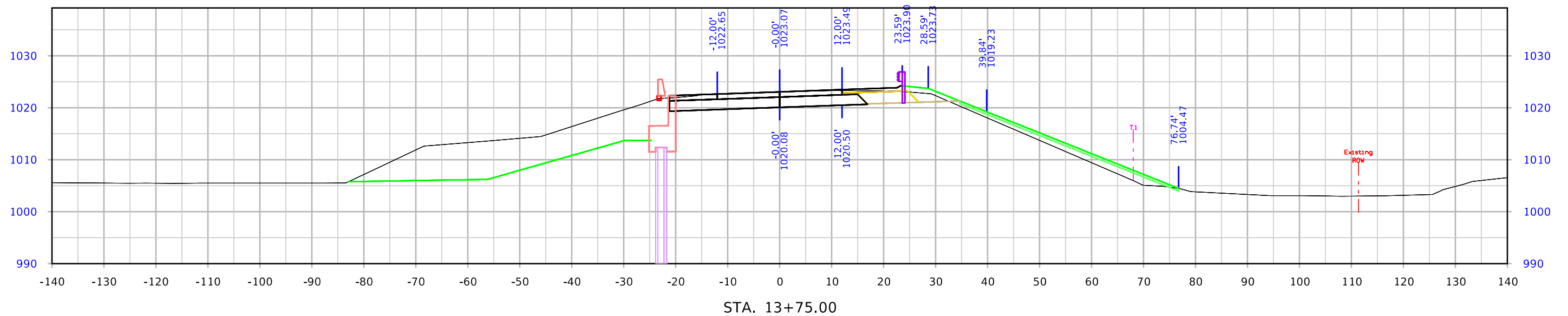
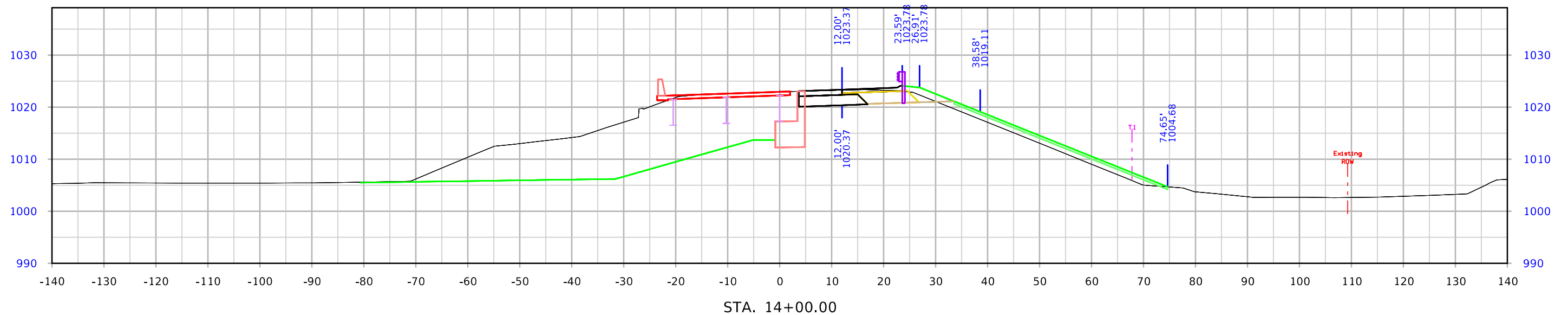
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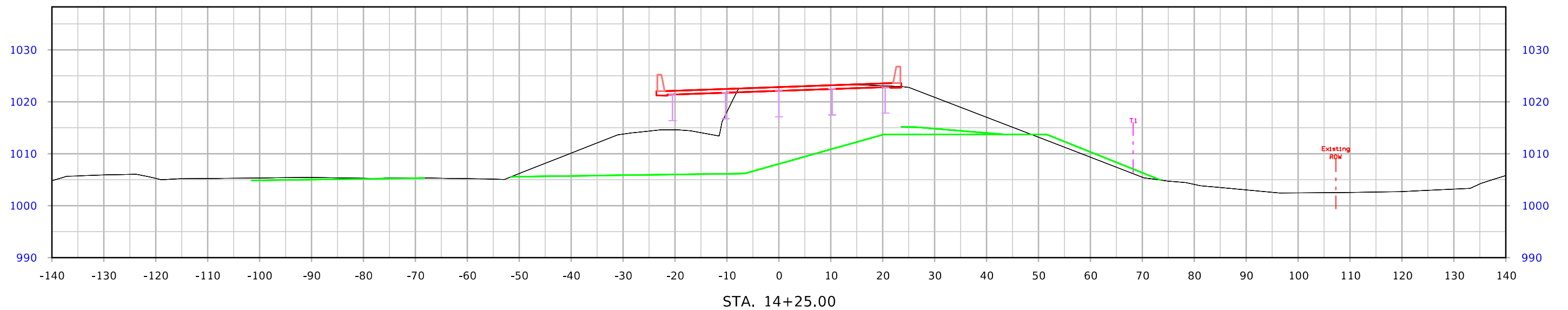
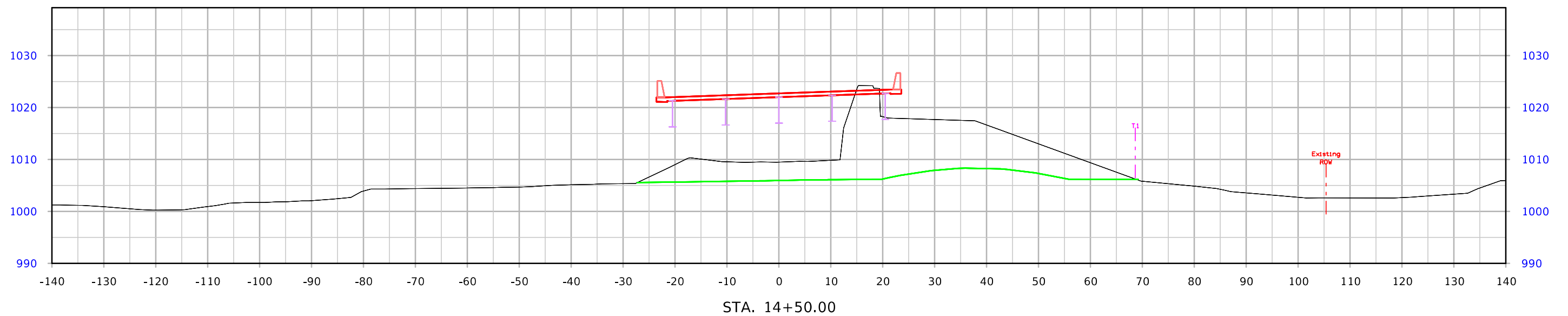
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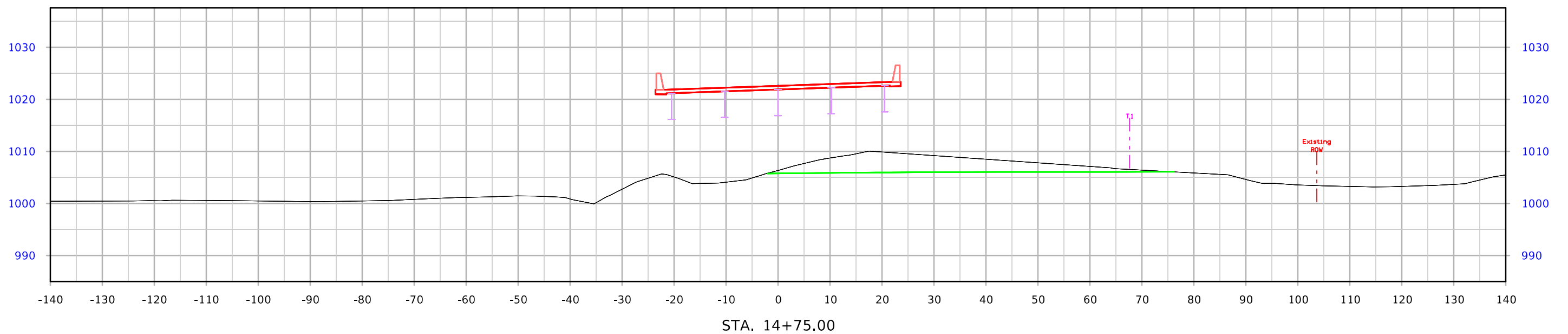
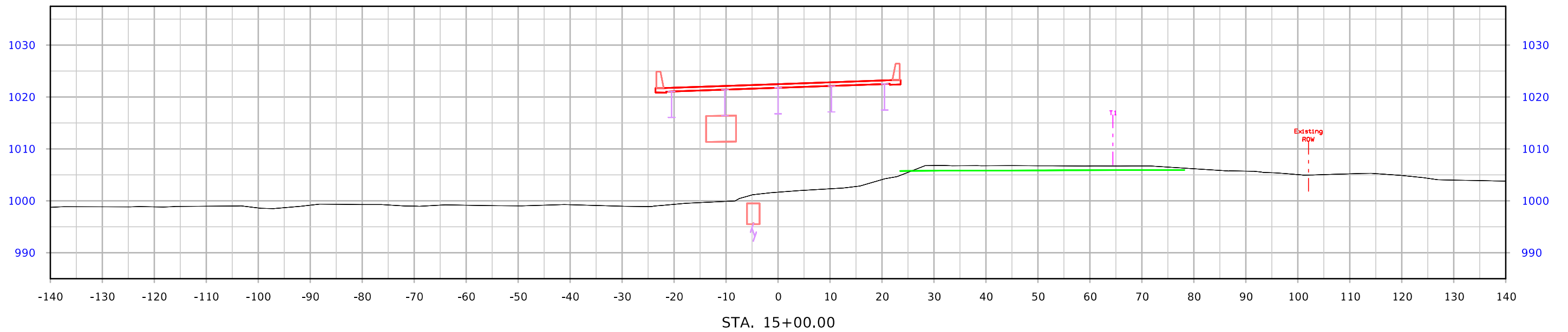
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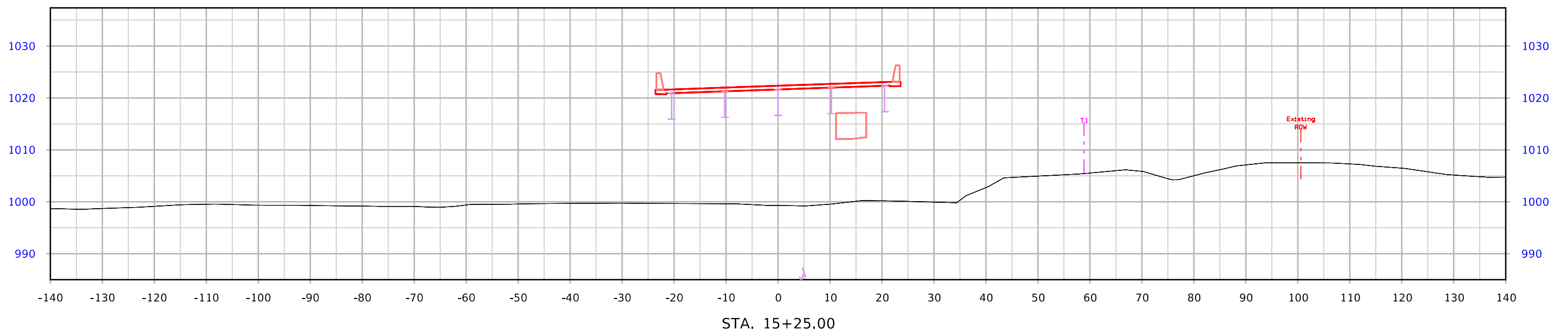
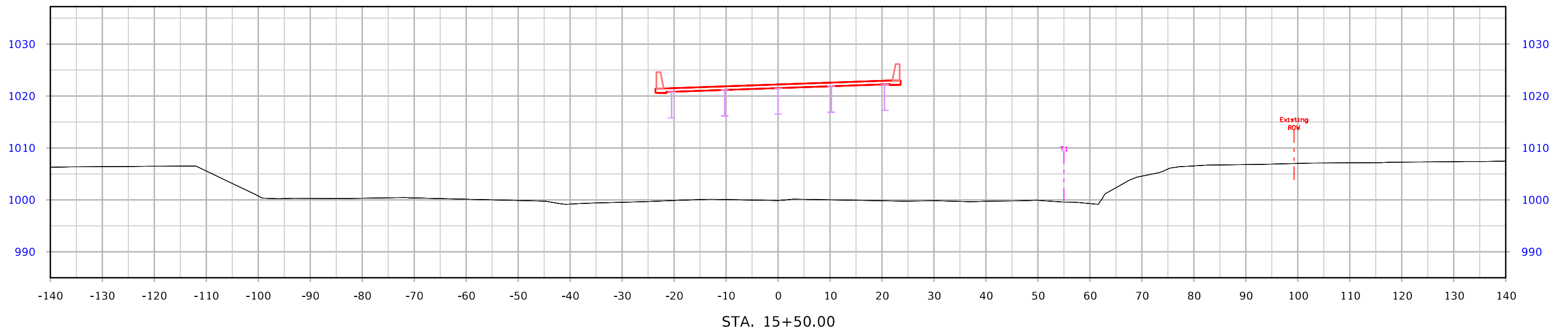
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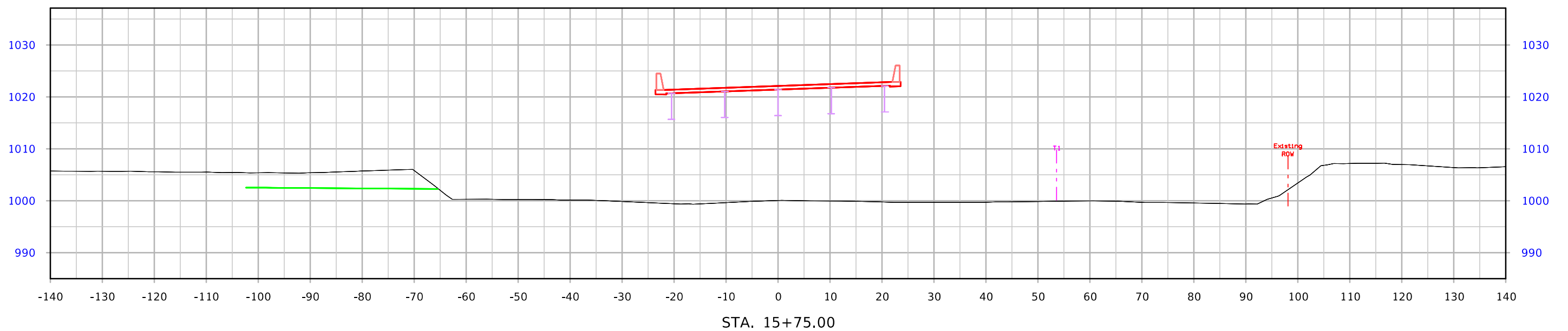
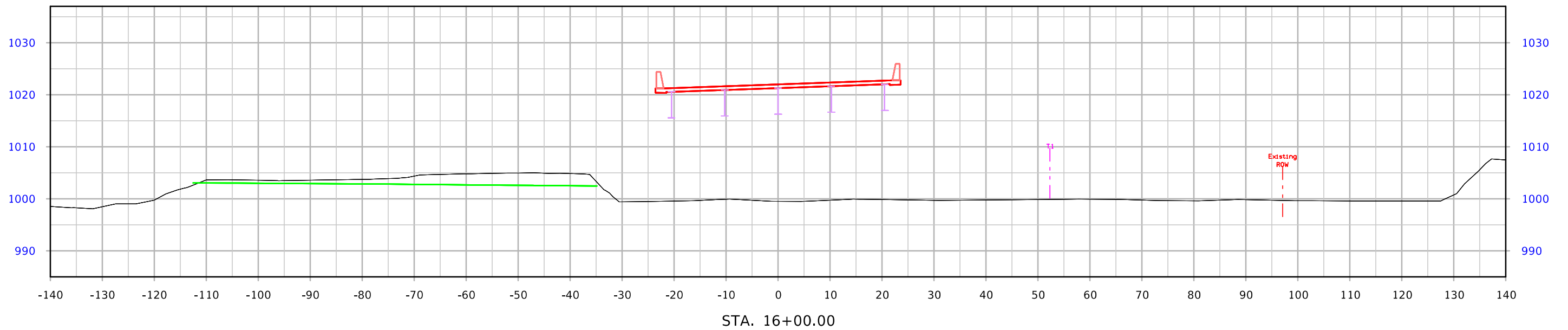
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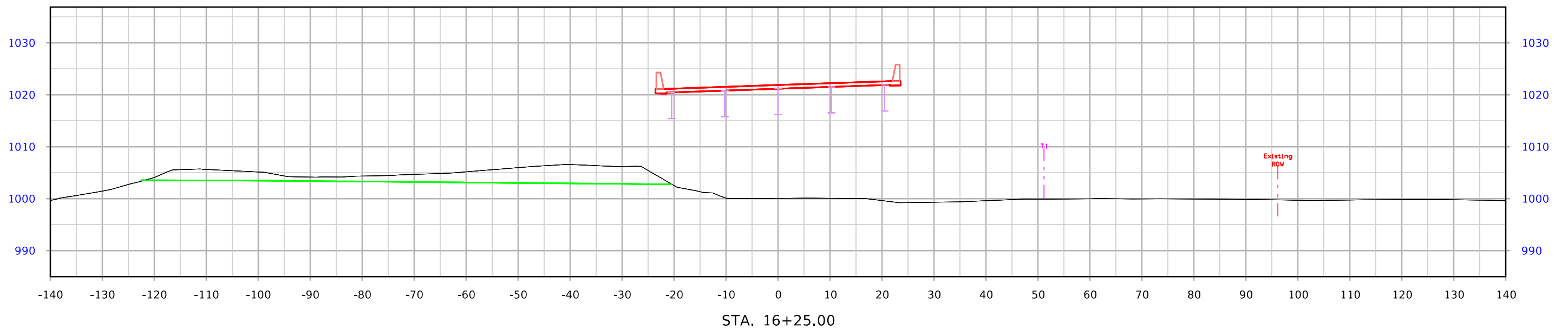
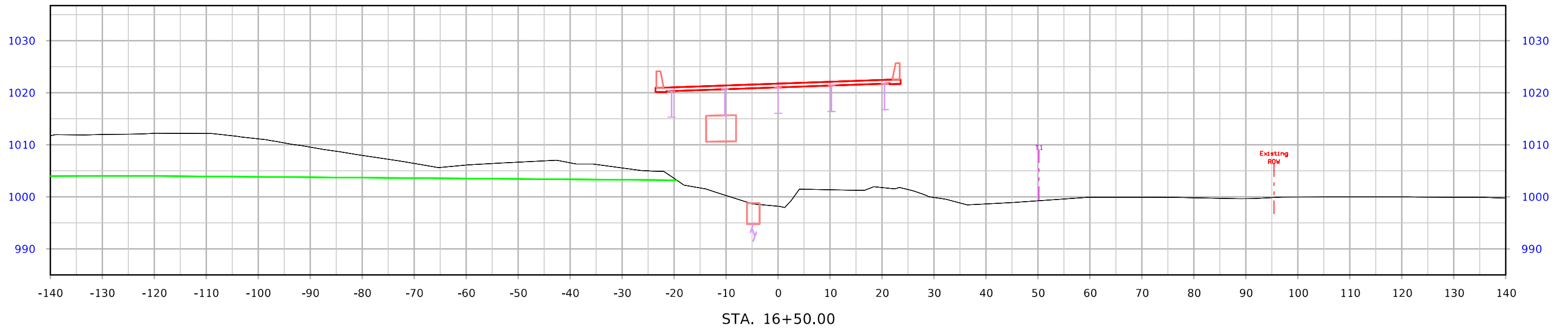
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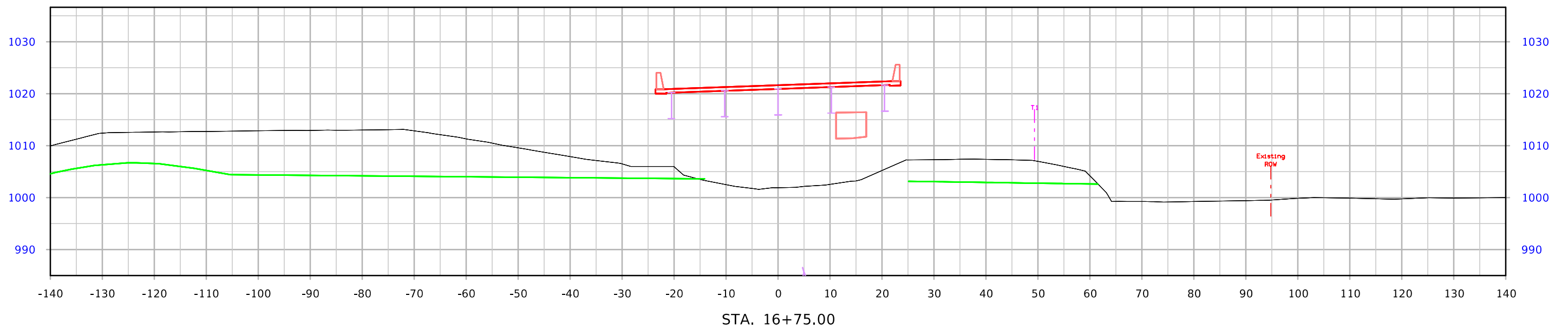
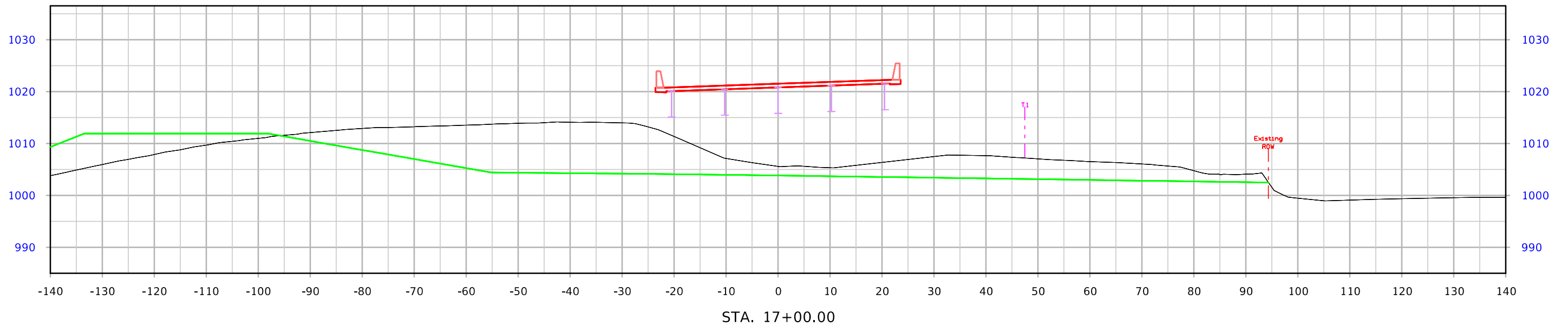
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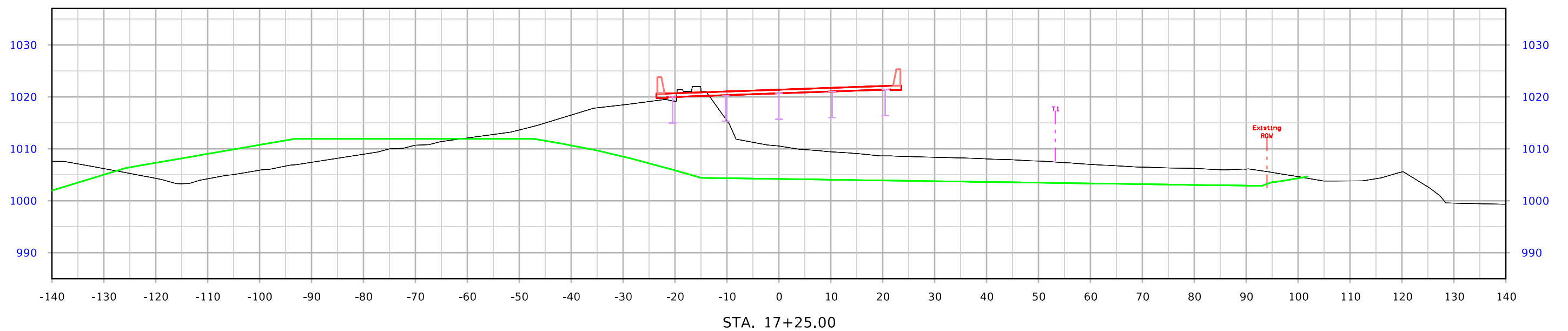
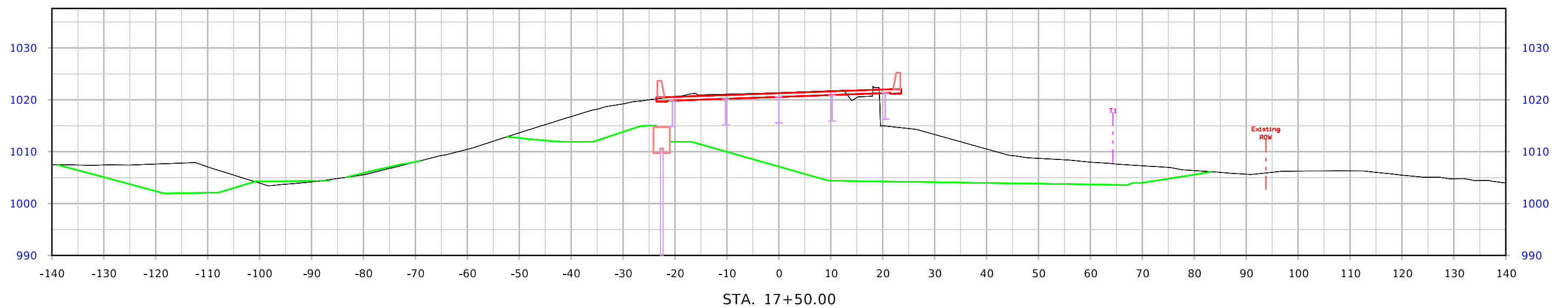
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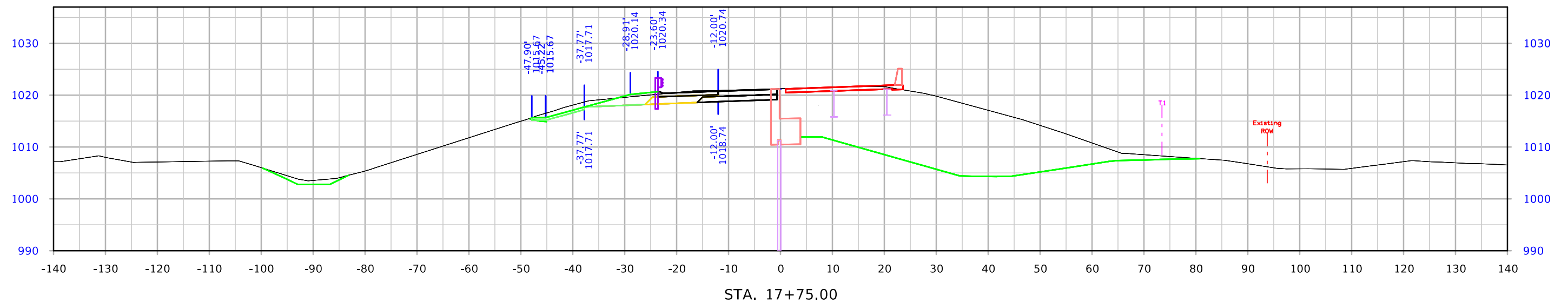
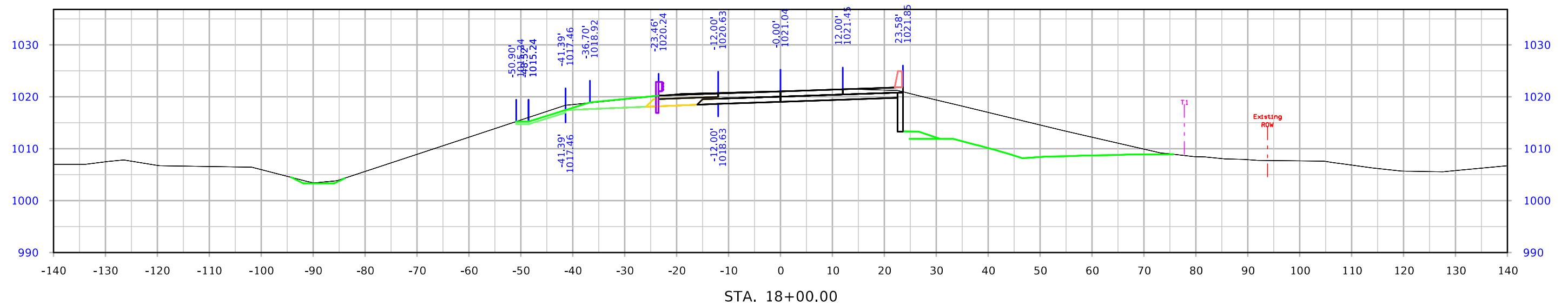
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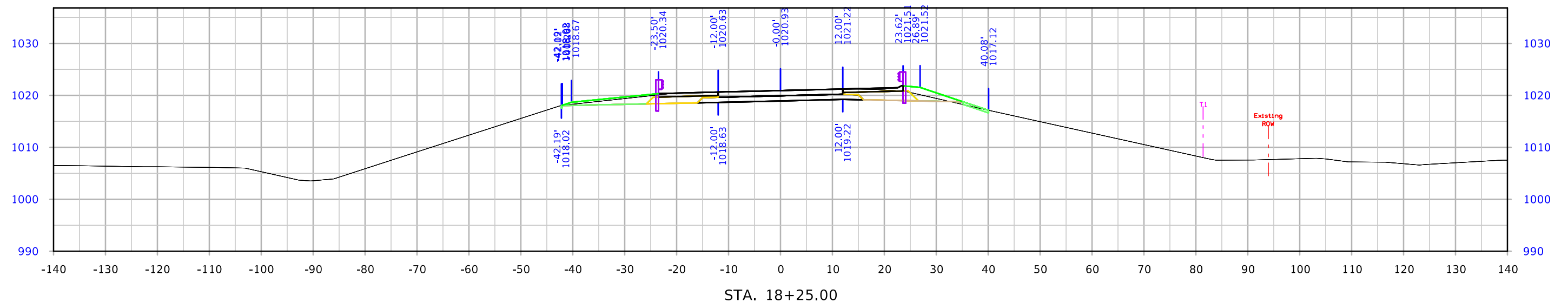
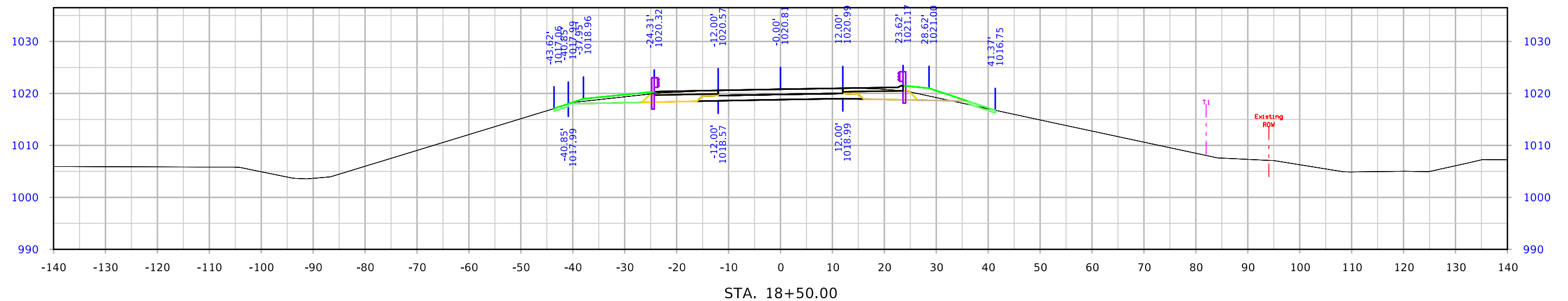
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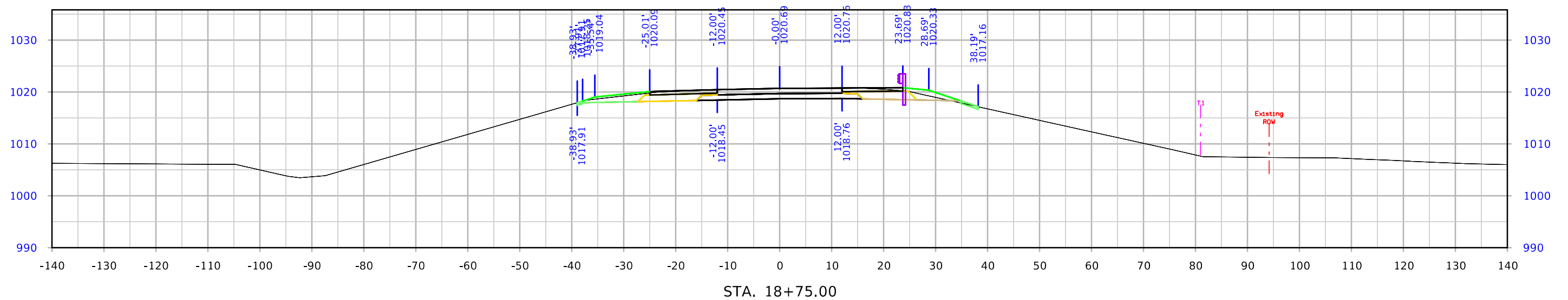
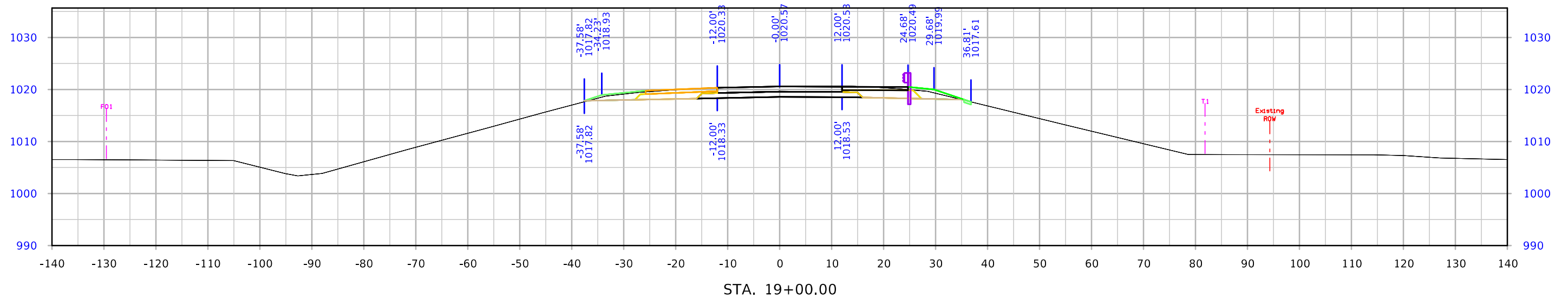
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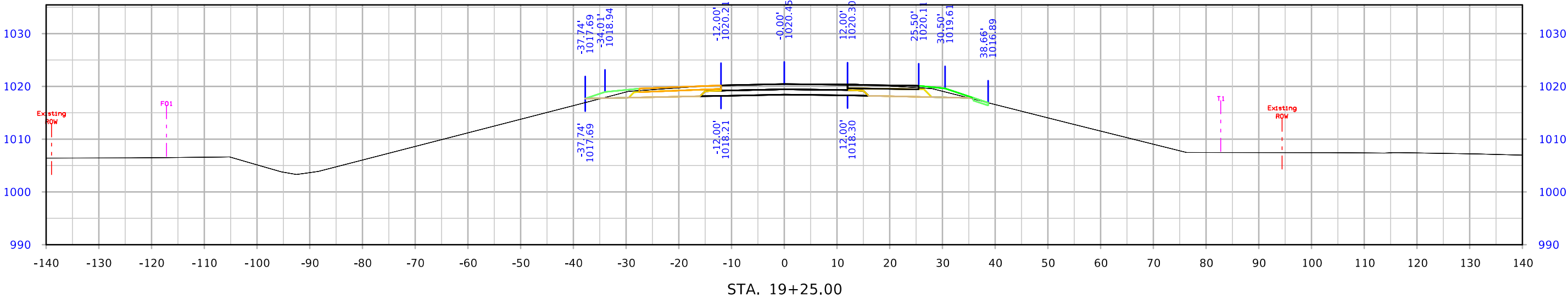
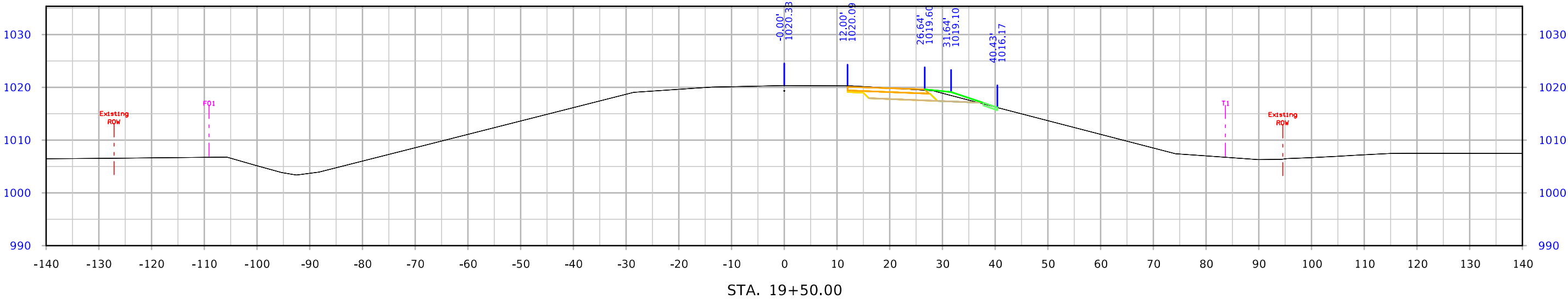
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