

DECATUR CO.

DITCH IMPROVEMENT
STPN-069-1(52)--2J-27

LETTING DATE
03-16-2021



Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

**PRIMARY ROAD SYSTEM
DECATUR COUNTY
DITCH IMPROVEMENT**

1.8 mi S of Co Rd J66

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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



REVISIONS

TOTAL

26

PROJECT IDENTIFICATION NUMBER

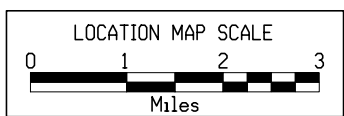
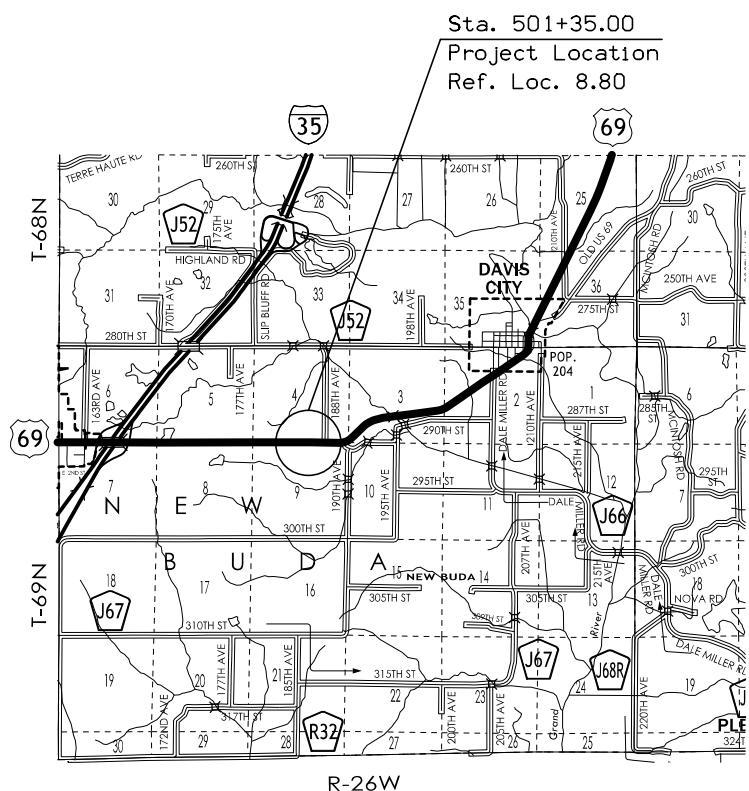
18-27-069-020

PROJECT NUMBER

STPN-069-1(52)--2J-27

R.O.W. PROJECT NUMBER

STPN-069-1(53)--2J-27



DESIGN DATA RURAL			
2017	AADT	1140	V.P.D.
20--	AADT	--	V.P.D.
20--	DHV	--	V.P.H.
	TRUCKS	8	%
	Total		
	Design ESALs	--	

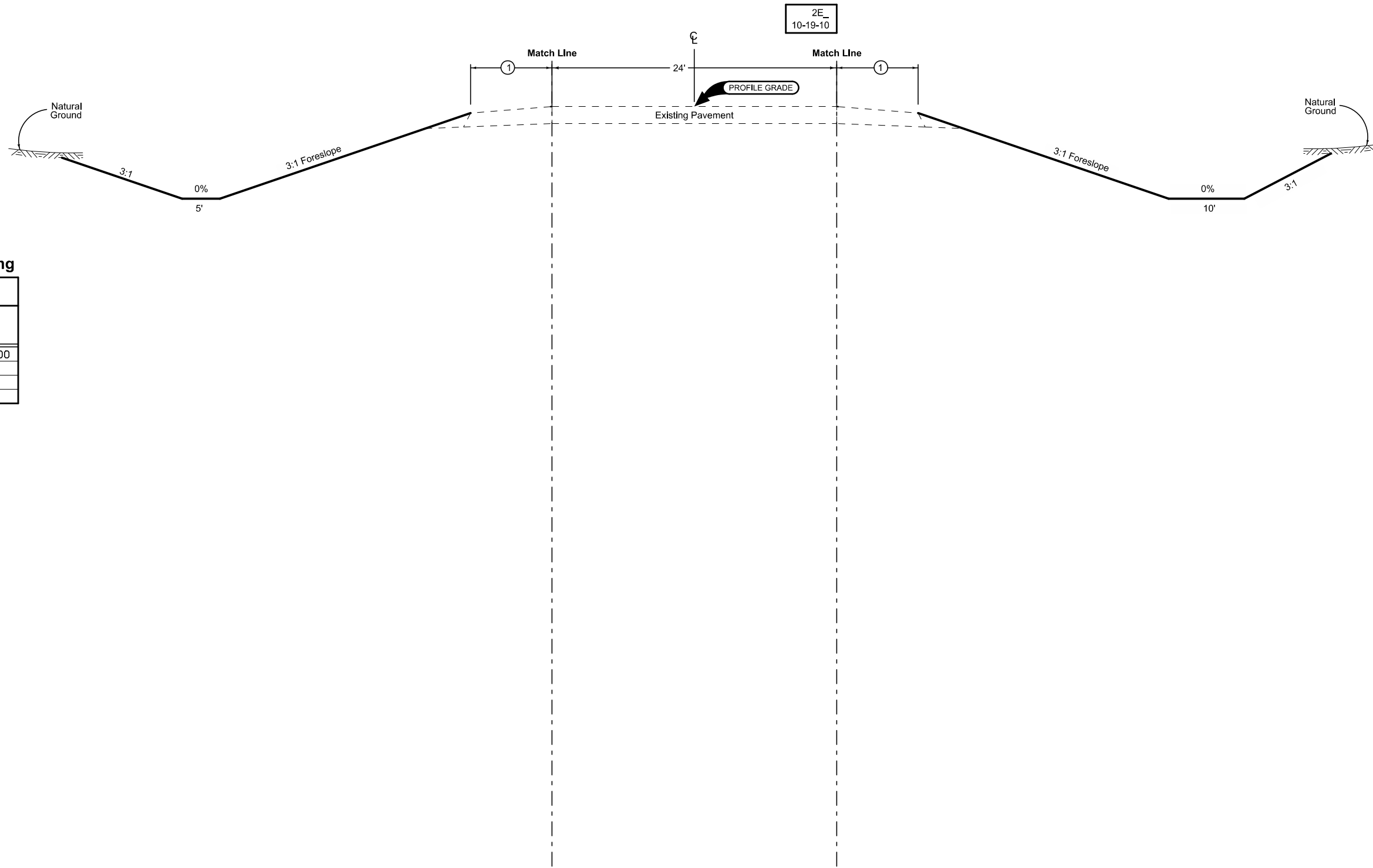
INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	X	Primary Signature Block
X	X	X

No.	DESCRIPTION
A Sheets	Title Sheets
A.1	Title Sheet
A.1	Location Map Sheet
B Sheets	Typical Cross Sections and Details
B.1 - 2	Typical Cross Sections and Details
D Sheets	Mainline Plan and Profile Sheets
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2	U.S. 69
E Sheets	Side Road Plan and Profile Sheets
* E.1	Unnamed Side Road
G Sheets	Survey Sheets
G.1	Reference Ties and Bench Marks
G.2	Control Point Vicinity Map
G.3	Horizontal Control Tab. & Super for all Alignments
J Sheets	Traffic Control and Staging Sheets
J.1	Traffic Control Plan
J.1	511 Travel Restrictons
J.1	Coordinate Operations
W Sheets	Mainline Cross Sections
W.1 - 15	Mainline Cross Sections
X Sheets	Side Road Cross Sections
X.1	Side Road Cross Sections
	* Color Plan Sheets

PRELIMINARY PLANS

Subject to change by final design.

D5 PLAN - Date: 5-7-20



Foreslope/Ditching

2_G_ 10-21-14	
STATION TO STATION	
497+80.00	505+40.00

① Existing Shoulder

Foreslope/Ditching

2_G_ 10-21-14	
STATION TO STATION	
500+30.00	508+99.00

① Existing Shoulder

U.S. 69

SURVEY SYMBOLS

- BNK Stream Bank
- D Centerline Draw or Stream (Down)
- BL Topo Breakline
- EW Edge of Water
- DU Centerline Draw or Stream (Up)
- CON Concrete or A/C Slab
- CP Control Point
- PRO Profile Shot
- PIP Pipe Culvert
- PLG Location of General Photo
- SOP Size of Pipe or Culvert
- ENU Edge Unpaved Entrance & Parking
- ENT Centerline BL of Entrance
- UE Utility Elevation
- SIGN SI Sign
- TA Tower Anchor
- OUT Tile Outlet
- TILE TIL Tile Line
- FW Wire Fence
- MIS Miscellaneous
- PPA Power Pole Co. 1
- GU Gutter In Front of Curb
- CU Back of Curb
- TLNL Tree Line Left
- WL1D Water Line Co. 1 - Quality D
- FENO FENO Monument
- BM Bench Mark
- TLNR Tree Line Right
- FO1D Fiber Optic Co. 1 - Quality D
- TPD Telephone Pedestal

UTILITY LEGEND

- Southern Iowa Rural Water Associates
Chad Mahan
1391 190th Street
Creston, Iowa 50801
(641) 782-5744
- Grand River Mutual Telephone
Mike Noe
1001 Kentucky
Princeton, MO 64673
(660) 748-3631
- Southwest Iowa Rural Electric Cooperative
Duane Schafer
1502 West South Street
Mt Ayr, IA 50801
(641) 782-5744

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.	
Yellow	(4)	Highlight for Critical Notes or Features
Red	(3)	Delineates Restricted Areas
Lavender	(9)	Temporary Pavement Shading
Gray, Light	(48)	Proposed Pavement Shading
Gray, Med	(80)	Proposed Granular Shading
Gray, Dark	(112)	Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)	Grading Shading
Tan	(8)	Proposed Sidewalk Shading
Blue, Light	(230)	Proposed Sidewalk Landing Shading
Pink	(11)	Proposed Sidewalk Ramp Shading

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
Green	(2)	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

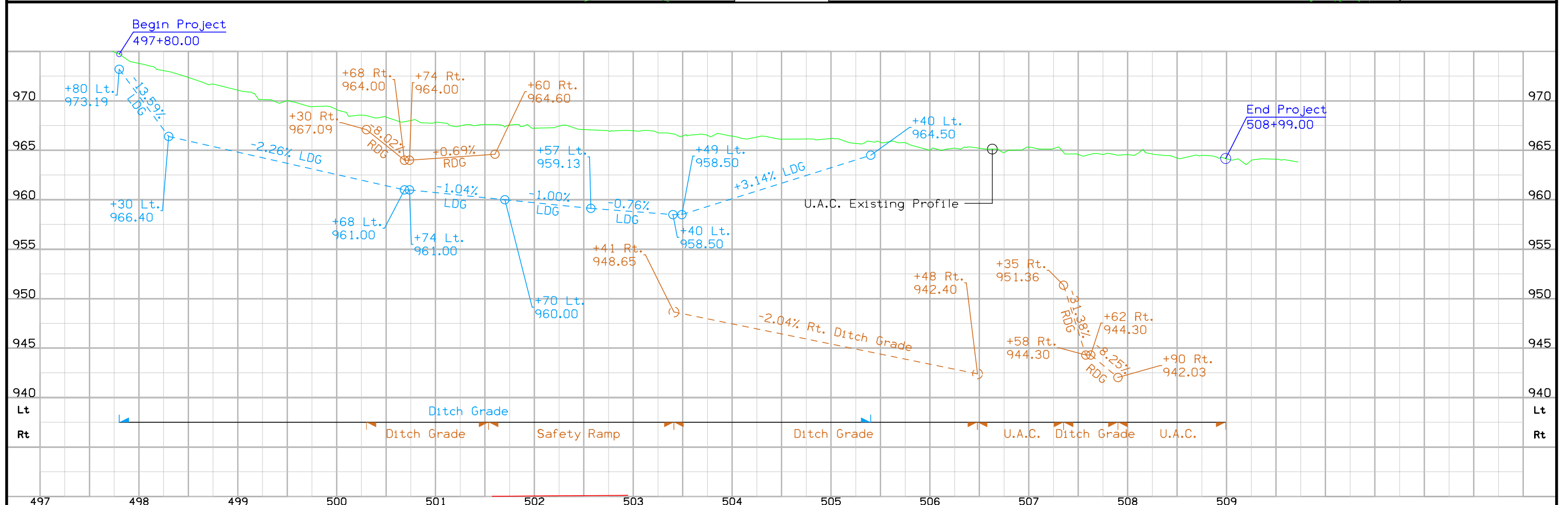
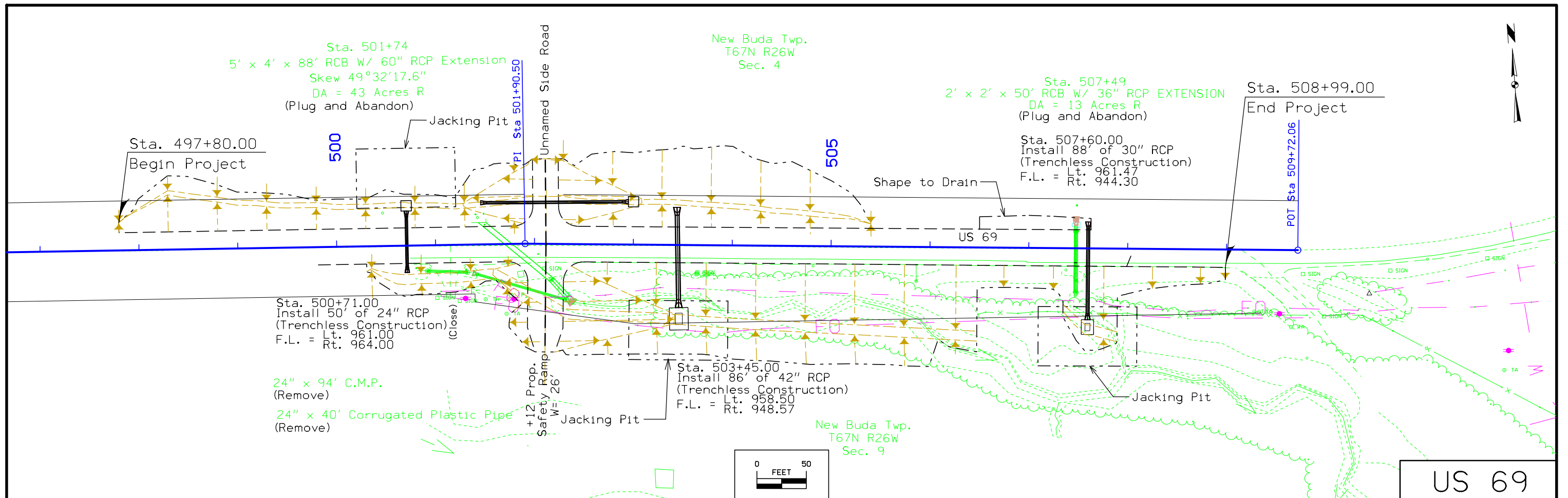
- Reference Point
- Station
- Survey Line
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Trench Drain
- HighTension Cable Guardrail
- Sheet Pile
- Pavement Removal
- Clearing & Grubbing Area

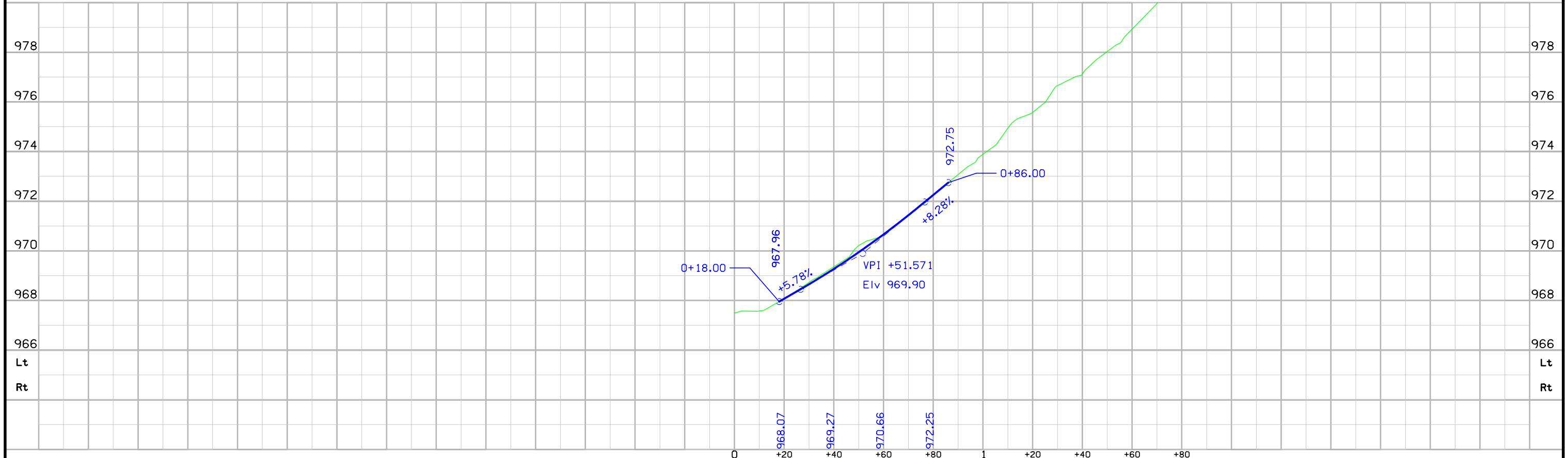
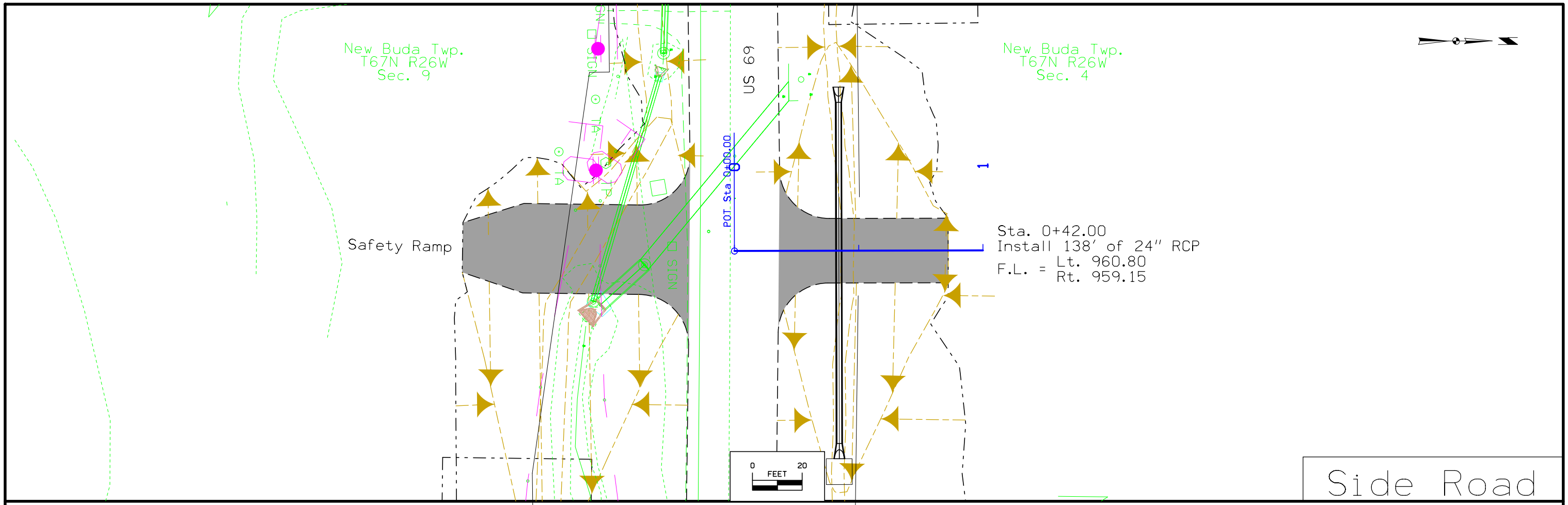
RIGHT-OF-WAY LEGEND

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

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

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





Survey Information

Decatur County
STPN-069-1(52)--2J-27
1.8 mi S of Co Rd J66
Ditch Improvement
PIN 18-27-069-020
Sap-0816

General Information

Measurement units for this survey are US survey feet. This survey is for ditch improvement, 1.8 mi S of Co Rd J66 on US Hwy. 69 in Decatur County. Project datum and control information is provided by Design Survey Office. This project is a full field survey.

Vertical Control

Vertical Control was established on 2 feno monuments on this project by six hour static sessions. Vertical datum for this survey is NAVD88 (Computed using Geoid12b). GRS80 Ellipsoidal Height was computed at project Pts. Feno 5 & Feno 6. Vertical control was verified with Pt. # Feno 3 from Project No. IMX-035-1(158)6- -02-27. Vertical control was checked with IARTN checks.

This survey observed 1 As-Built plan bench marks to compare to local ground control:

BM 42 Project P 588 Elev. 1017.30
Survey Elev. = 1019.89

Horizontal Control

The project coordinate system for this survey is Iowa RCS Zone 12 (U.S. Survey Feet). This survey control is relative to IARTN reference stations. IARTN Reference Station coordinates are relative to the National Reference Station network datum: NAD83 (2011). Coordinates were determined by conducting a six hour static observations. Horizontal control was verified with Pt. # Feno 3 from Project No. IMX-035-1(158)6- -02-27. Horizontal control was checked with IARTN checks.

Point Name	Northing	Easting	Elevation	Description
Feno 3	6104352.63	22470865.35	970.50	FENO
Feno 5	6093271.30	22472642.87	964.92	FENO
Feno 6	6093328.87	22473834.01	962.23	FENO

Alignment Information

The horizontal alignment for this survey is a retrace of As-built Plans No. P 588. Survey stationing was equated to the plan PI at Sta. 53+73.8 and run back and ahead with an equation throughout the survey.

Survey stationing relates to as built plan stationing as follows:

PI Sta. 488+77.5 As-built Plans Project No. P 588 =
Survey PI Sta. 488+76.06

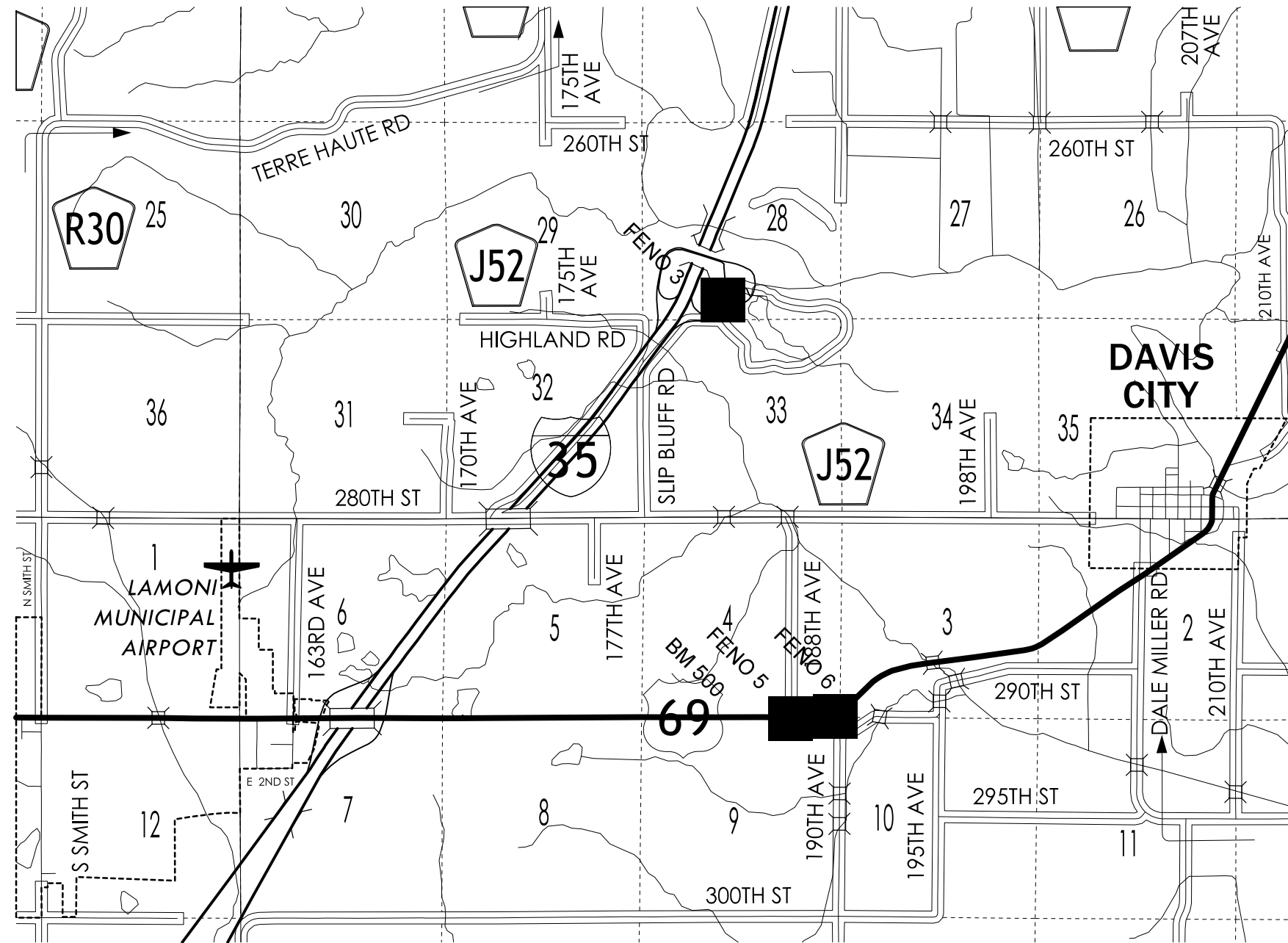
PI Sta. 501+90.5 Project No. P 588 =
Survey PI Sta. 501+91.50

PI Sta. 513+73.8 Project No. P 588 =
Survey PI Sta. 513+73.8

PT Sta. 517+034.11 Back =
Sta. 515+66.70 Ahead

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

1a. Regional Coordinate System Zone 12

Coordinate listing from next sheet will be used with 1aRTN for monument recovery. No other reference ties are given.

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

Ia. Regional Coordinate System Zone 12

Point Name	Y	X	Z	Feature Definition-Description
FENO 3	6104352.627	22470865.35	970.5	FENO SET FENO MONU_AT REST AREA_85.5' WEST INLET APRON_123' SOUTHWEST TOP OUTLET PIPE_89' SOUTHEAST I-BEAM SIGN POST_69' SOUTH OF CENTER RAMP C
FENO 5	6093271.299	22472642.87	964.924	FENO SET FENO MONUMENT_2.18 MILES E OF INTERS. NB I-35 & US HWY 69_71? ENTRANCE COUNTY ACCESS TO HUNTING_67' SE OF CENTER FACE HDWL 5' X 4' RCB_29' S OF US HWY 69
FENO 6	6093328.869	22473834.01	962.226	FENO SET FENO MONUMENT_2.41 MILES E OF INTERS. NB I-35 & US HWY 69_95' E OF INTERS. US HWY 69 & 190TH AVE_57' NW OF POWER POLE_29' S OF US HWY 69
500	6093284.886	22471348.94	1019.89	BM FD X HDWL 18" CAST IRON PIPE_BM 42 AB PLANS PROJECT # P 588

Decatur	ROW: STPN-069-1(53)--2J-27					PIN 18-27-069-020													
	1.8 mi S of Co Rd J66																		
			STATE		COUNTY		CITY			TEMP EASE		BORROW							
PARCEL NO.	OWNER NAME	FEE	EASE	FEE	EASE	FEE	EASE	EXCESS			FEE	T.E.	MITIGATION	OTHER	HOUSE	BUILDING(S)	A/C ONLY	TOTAL ACQ.	
1	Barbara D. Miller - Fee Dennis J. Gingerich - Fee		0.19 AC							0.1 AC									
2	Eli H. Yoder - Fee		0.36 AC																
3	Michael R. Rasmussen - Fee		0.72 AC							0.03 AC									
3 Parcels	"TOTALS	0 AC	1.27 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0.13 AC	0 AC	0 AC	0 AC						
		0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF						

NO ACCESS RIGHTS ARE TO BE ACQUIRED ON THIS PROJECT.



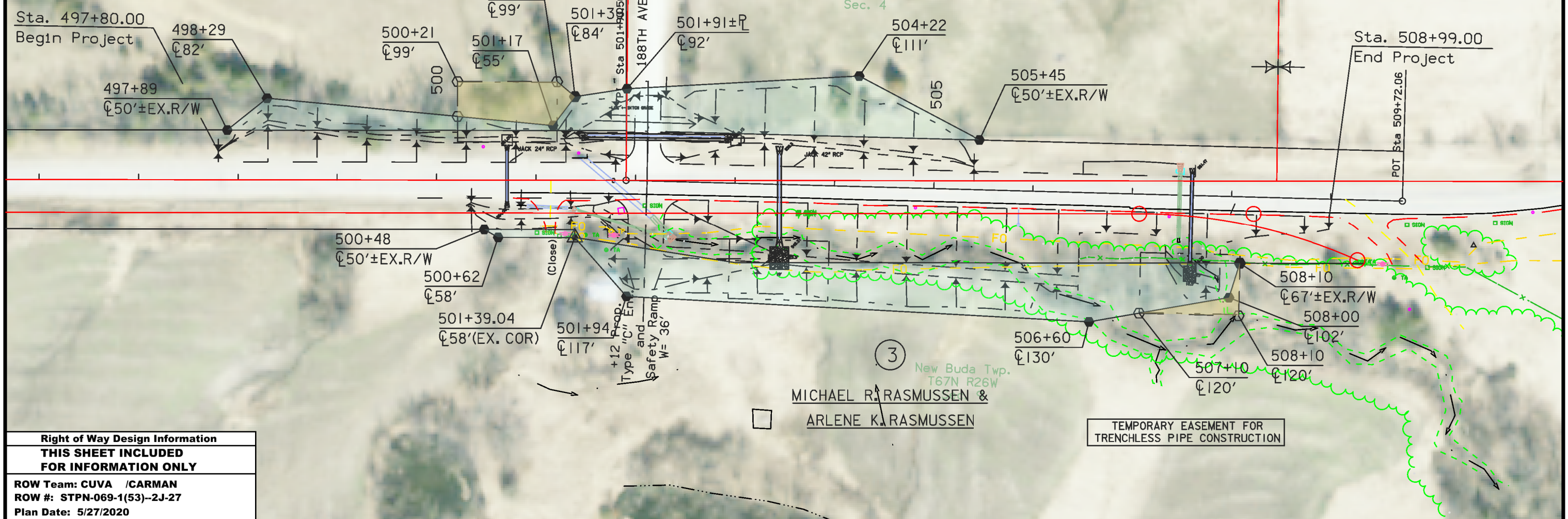
1

TEMPORARY EASEMENT FOR TRENCHLESS PIPE CONSTRUCTION

BARBARA D. MILLER,
DENNIS J. & FANNIE D. GINGERICH

2

ELI H. YODER &
SALOMA E. YODER



3

MICHAEL R. RASMUSSEN &
ARLENE K. RASMUSSEN

TEMPORARY EASEMENT FOR TRENCHLESS PIPE CONSTRUCTION

Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: CUVA /CARMAN	
ROW #: STPN-069-1(53)--2J-27	
Plan Date: 5/27/2020	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

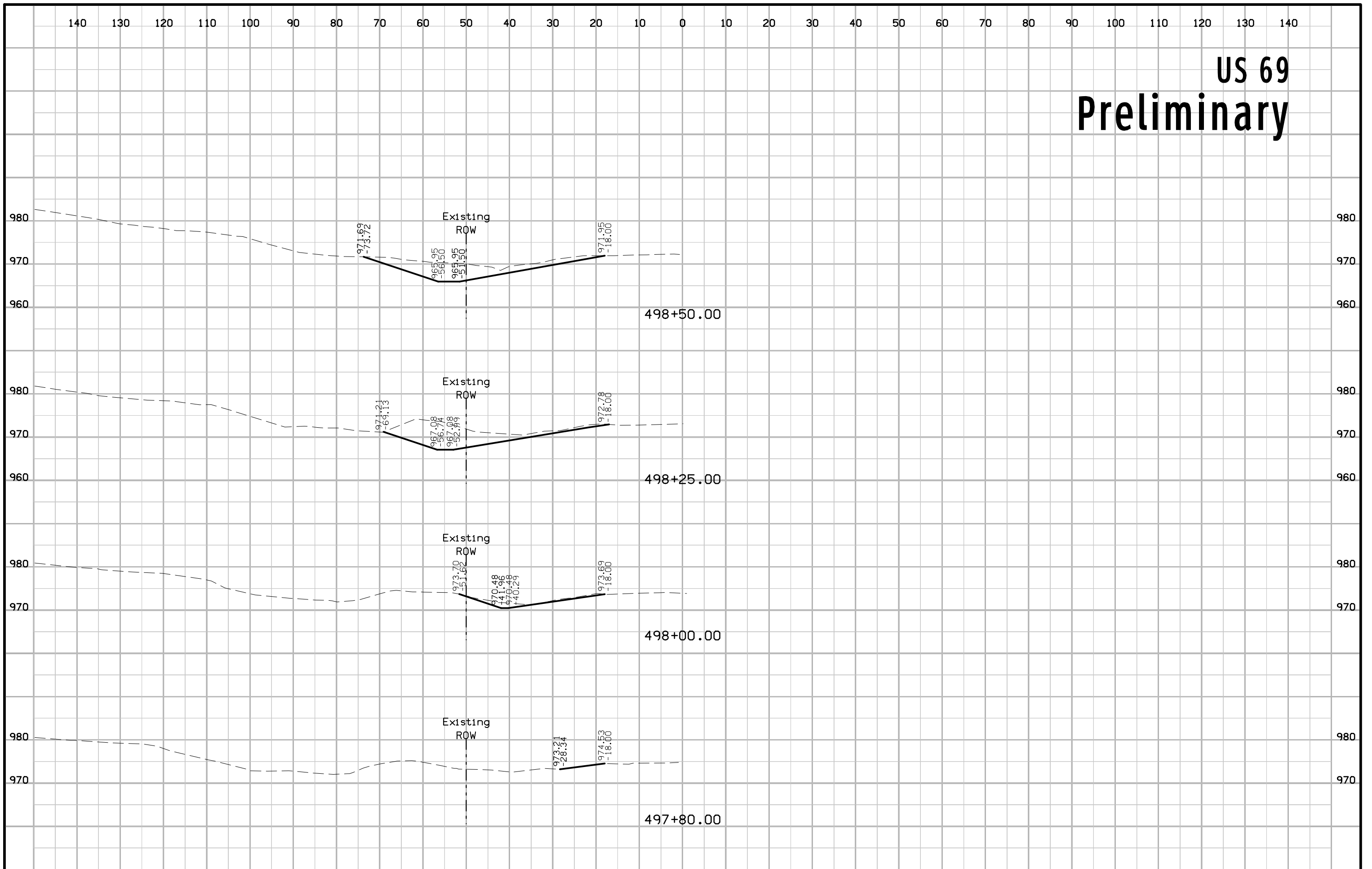


108-23A 08-01-08
TRAFFIC CONTROL PLAN
US 69 traffic shall be maintained at all times.

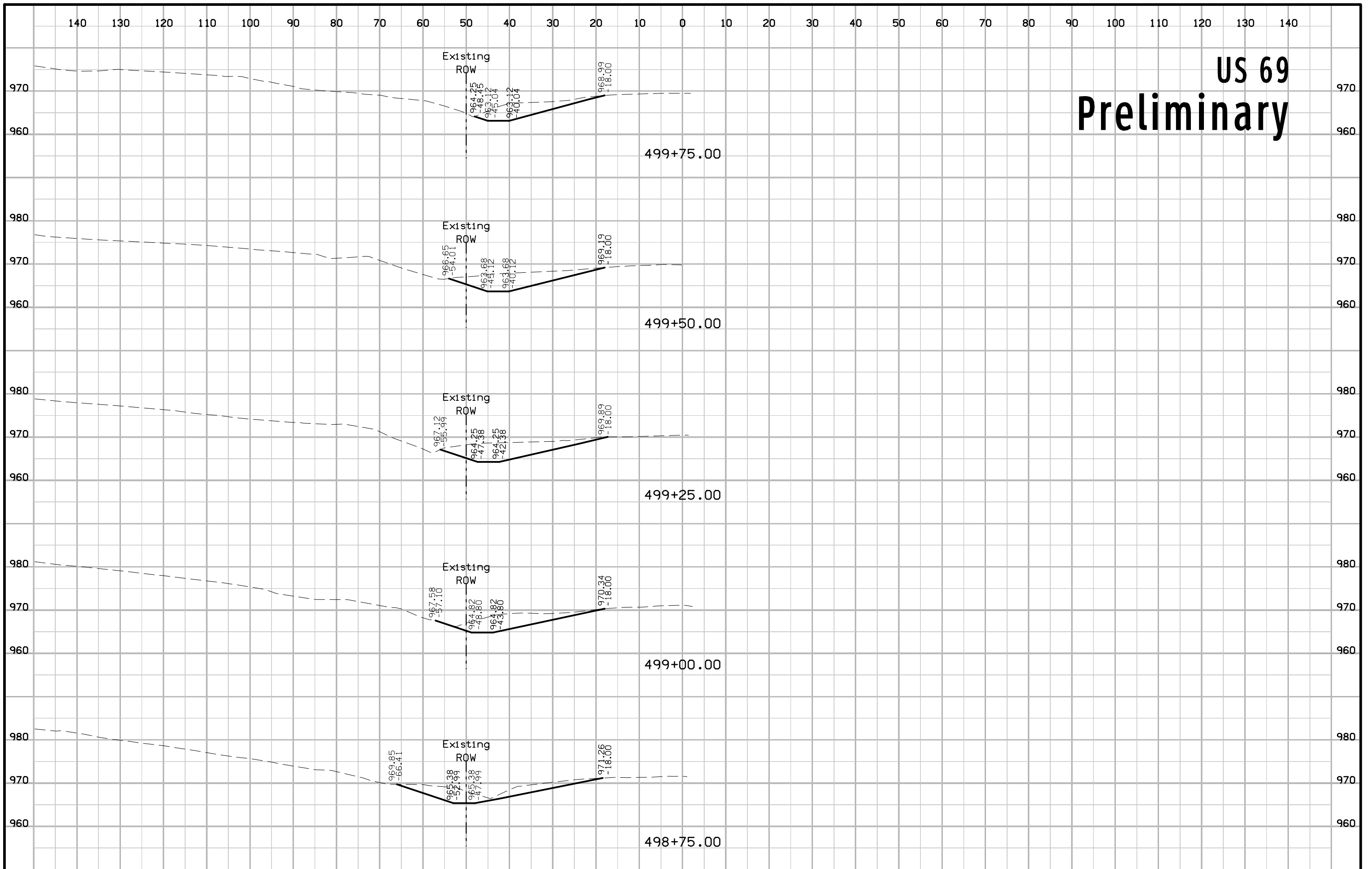
111-01 04-17-12						
COORDINATED OPERATIONS						
Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.						
<table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 50%;">Project</th> <th style="width: 50%;">Type of Work</th> </tr> </thead> <tbody> <tr> <td>STPN-069-1(50)--2J-27</td> <td>Revetment</td> </tr> <tr> <td>STPN-069-1(54)--2J-27</td> <td>Pipe Culverts</td> </tr> </tbody> </table>	Project	Type of Work	STPN-069-1(50)--2J-27	Revetment	STPN-069-1(54)--2J-27	Pipe Culverts
Project	Type of Work					
STPN-069-1(50)--2J-27	Revetment					
STPN-069-1(54)--2J-27	Pipe Culverts					

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.									

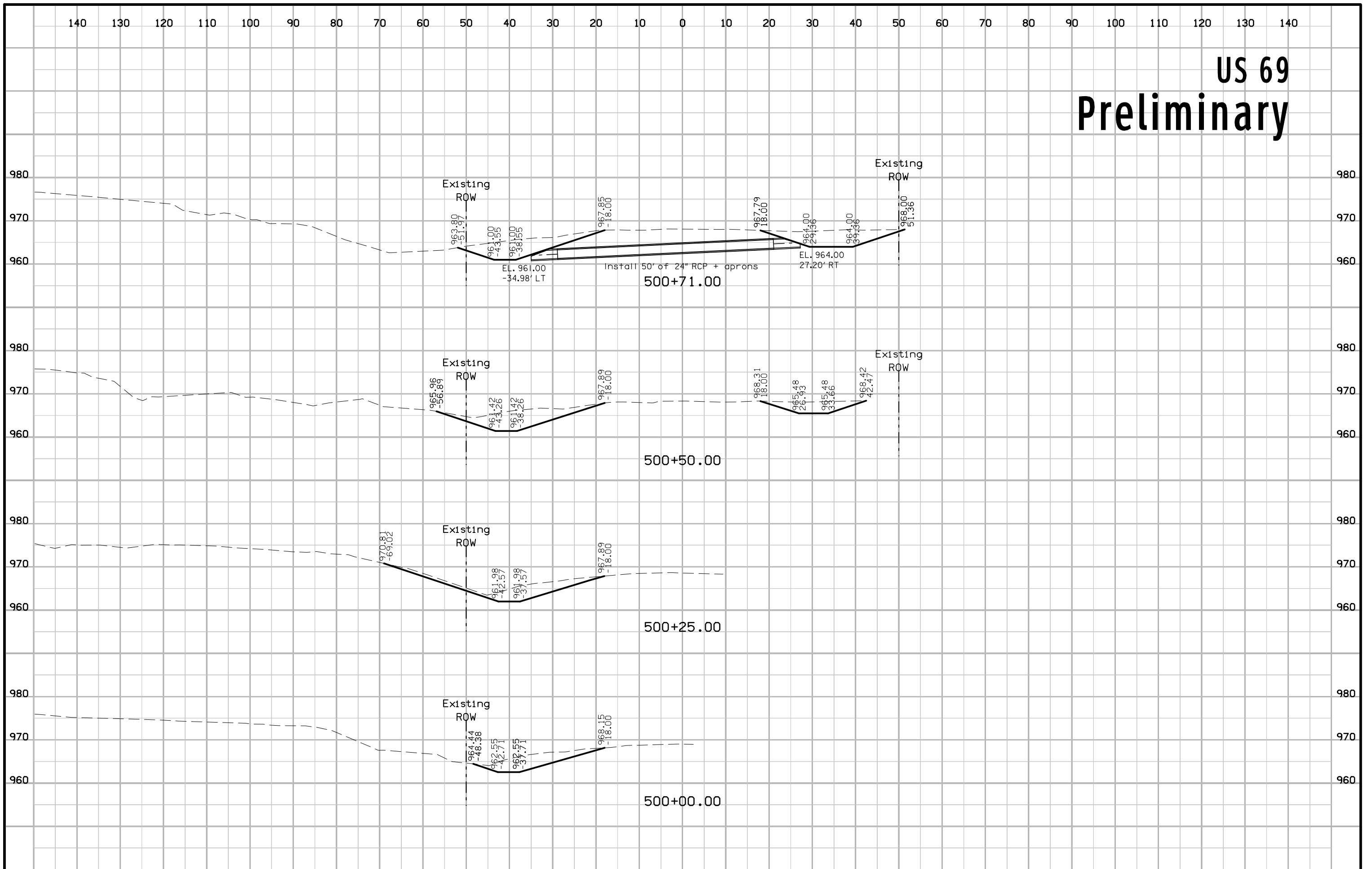
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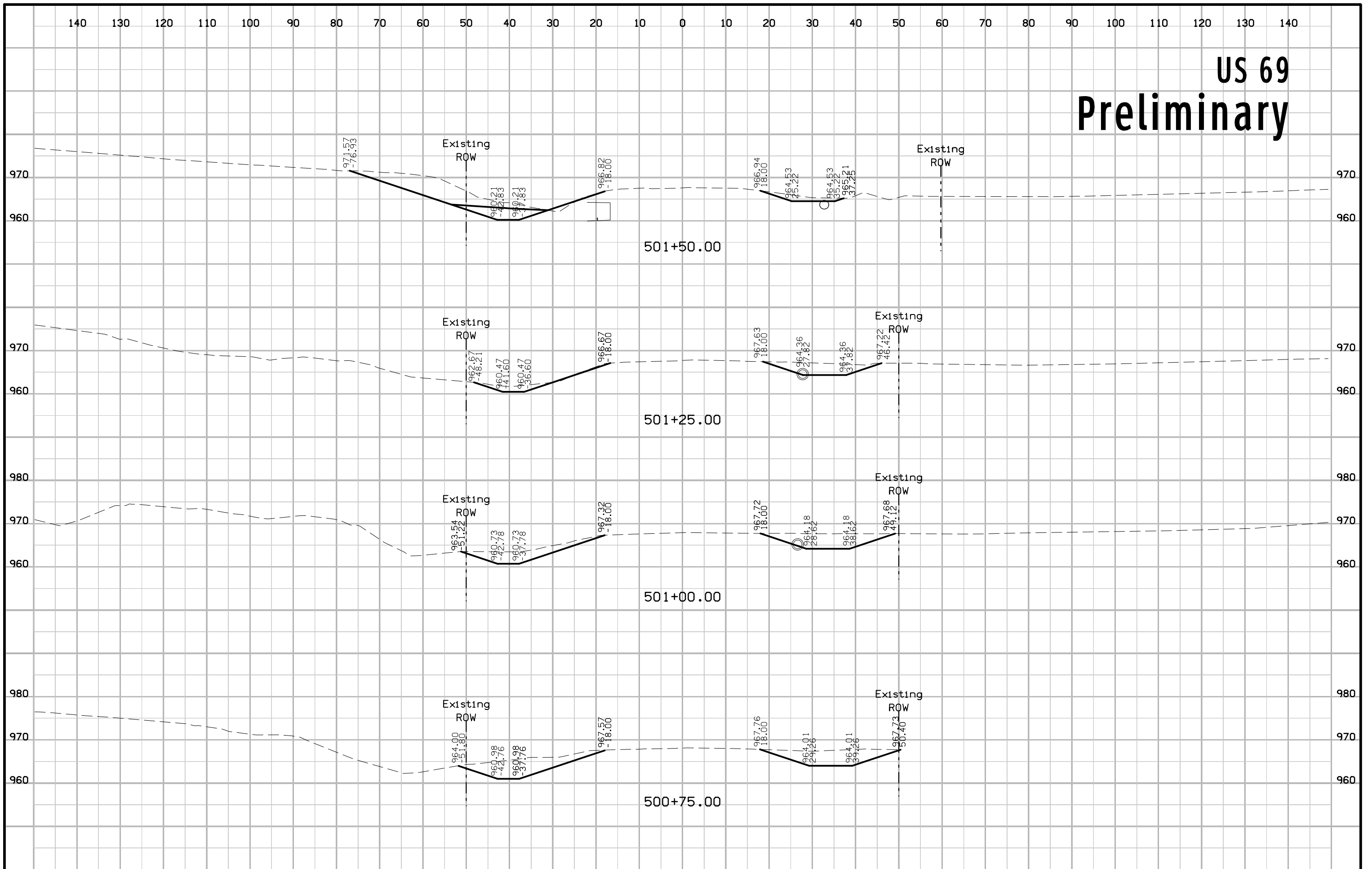
US 69 Preliminary



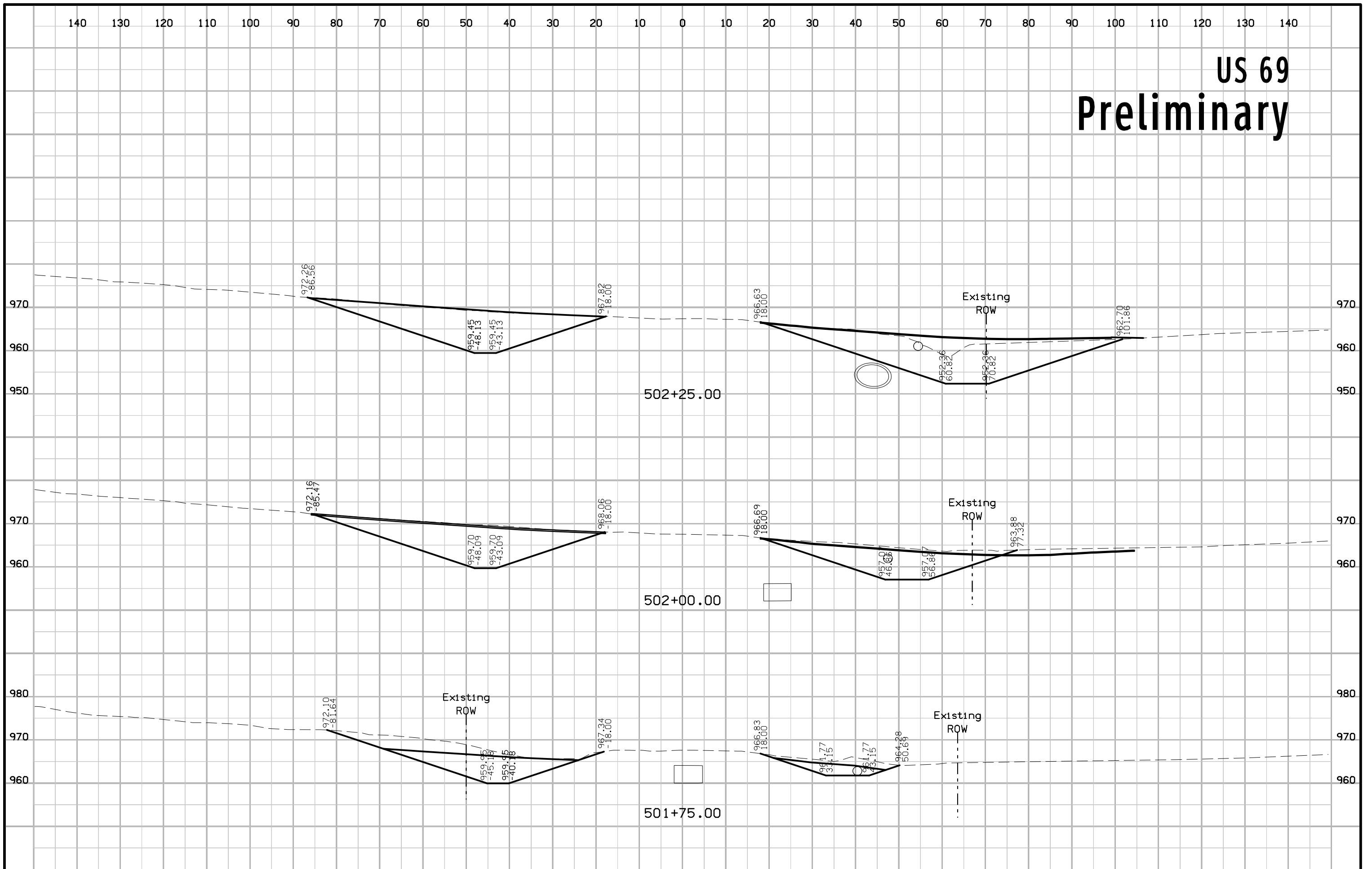
US 69 Preliminary



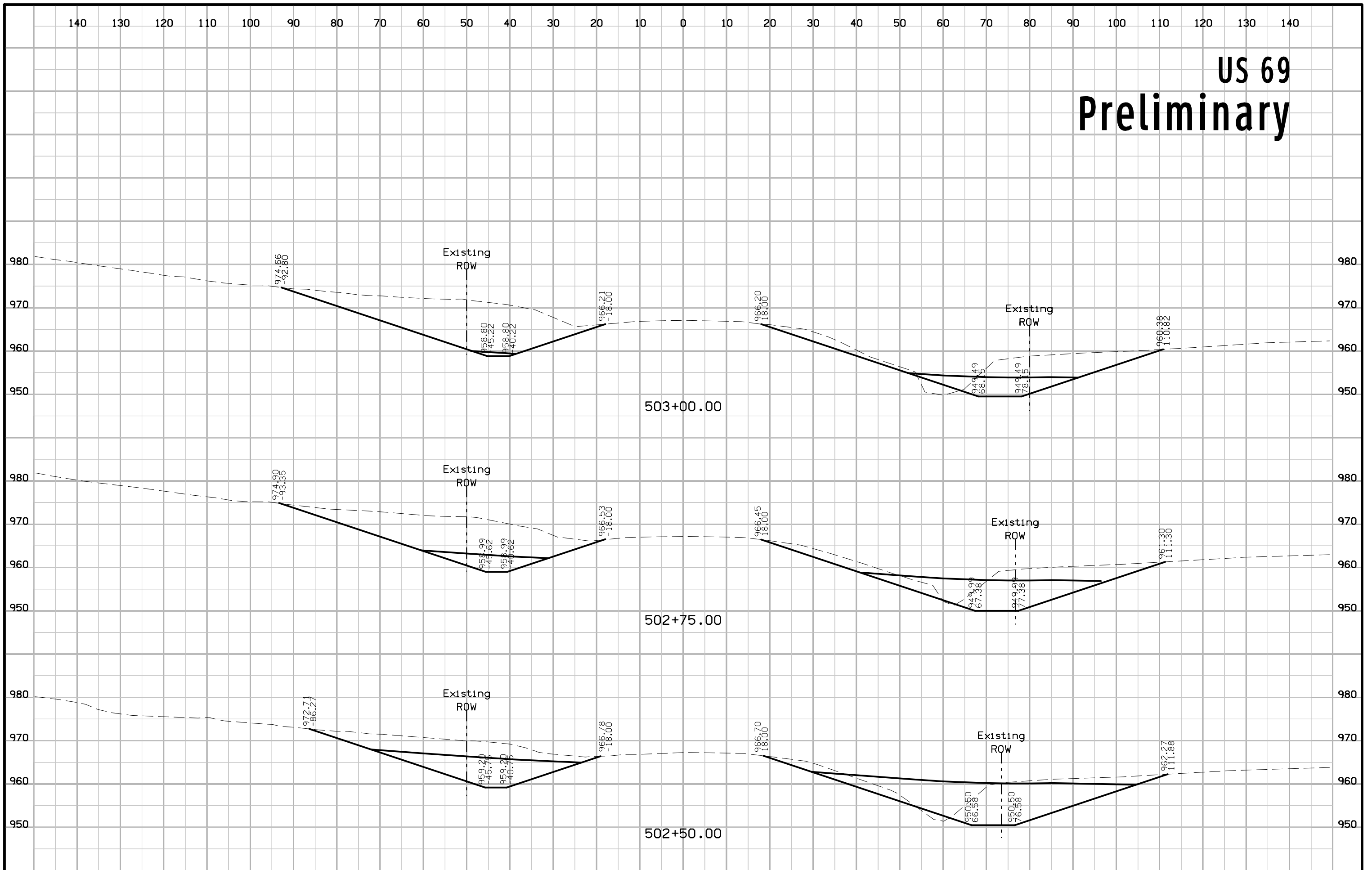
US 69 Preliminary



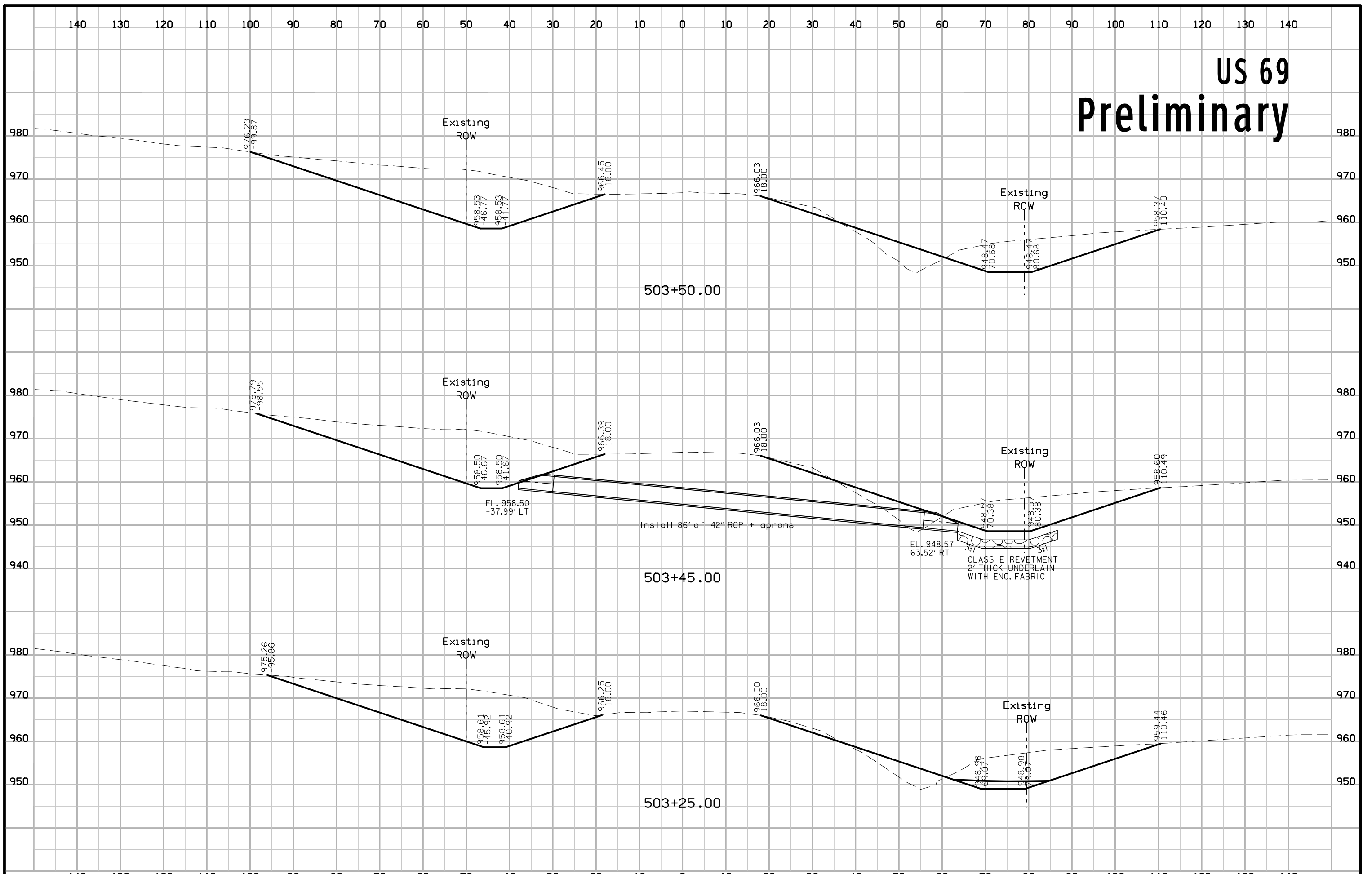
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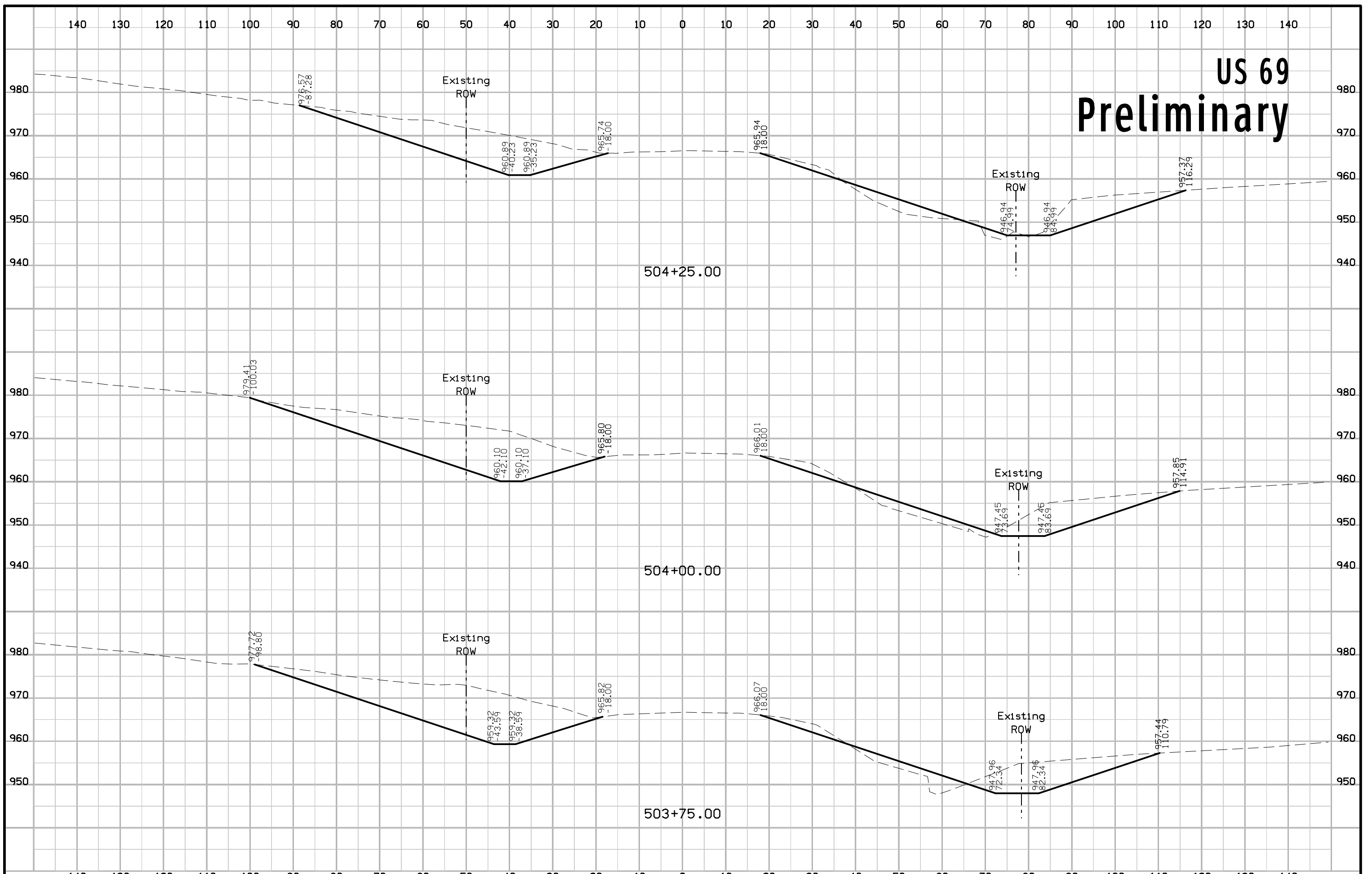
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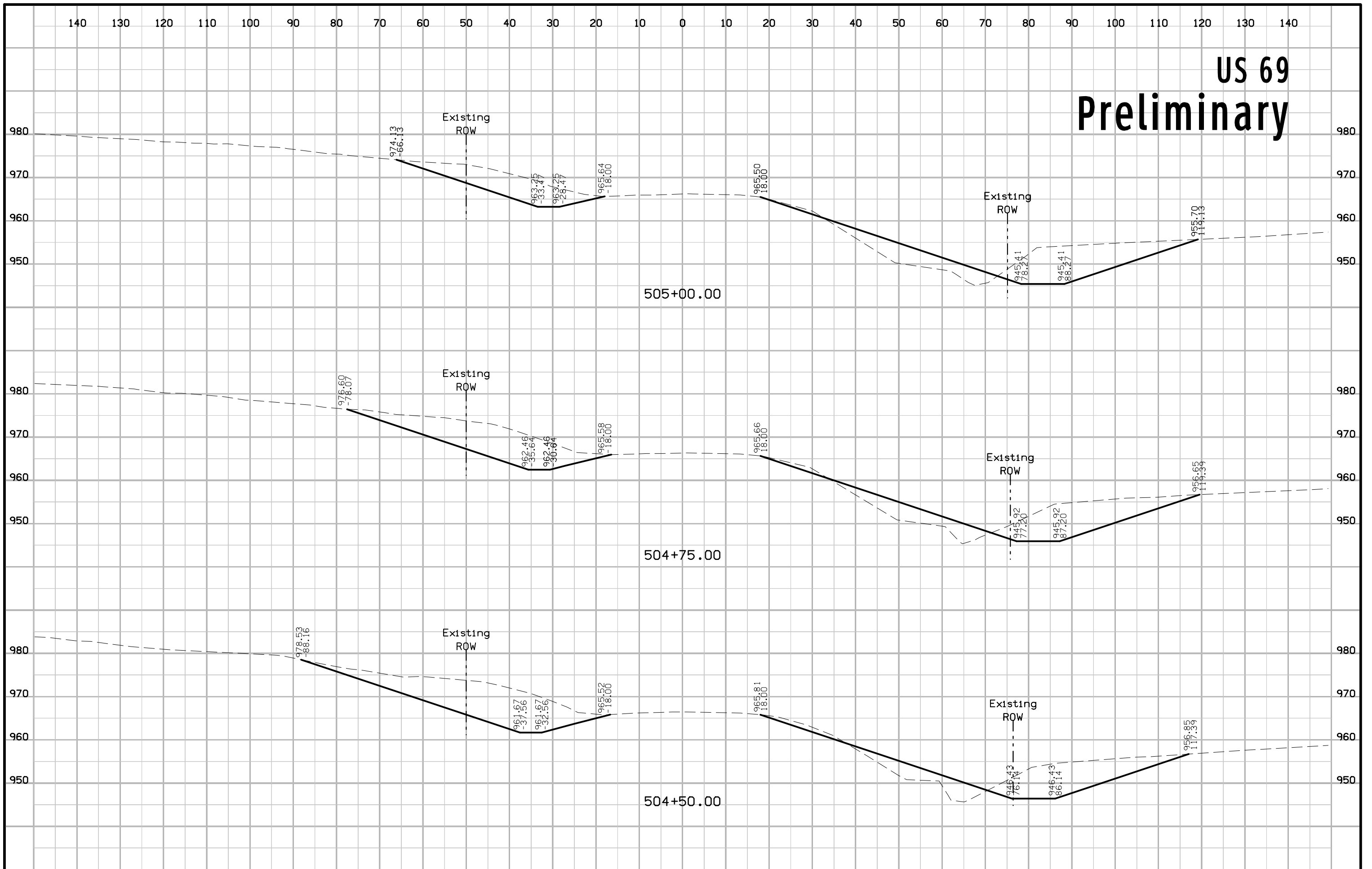
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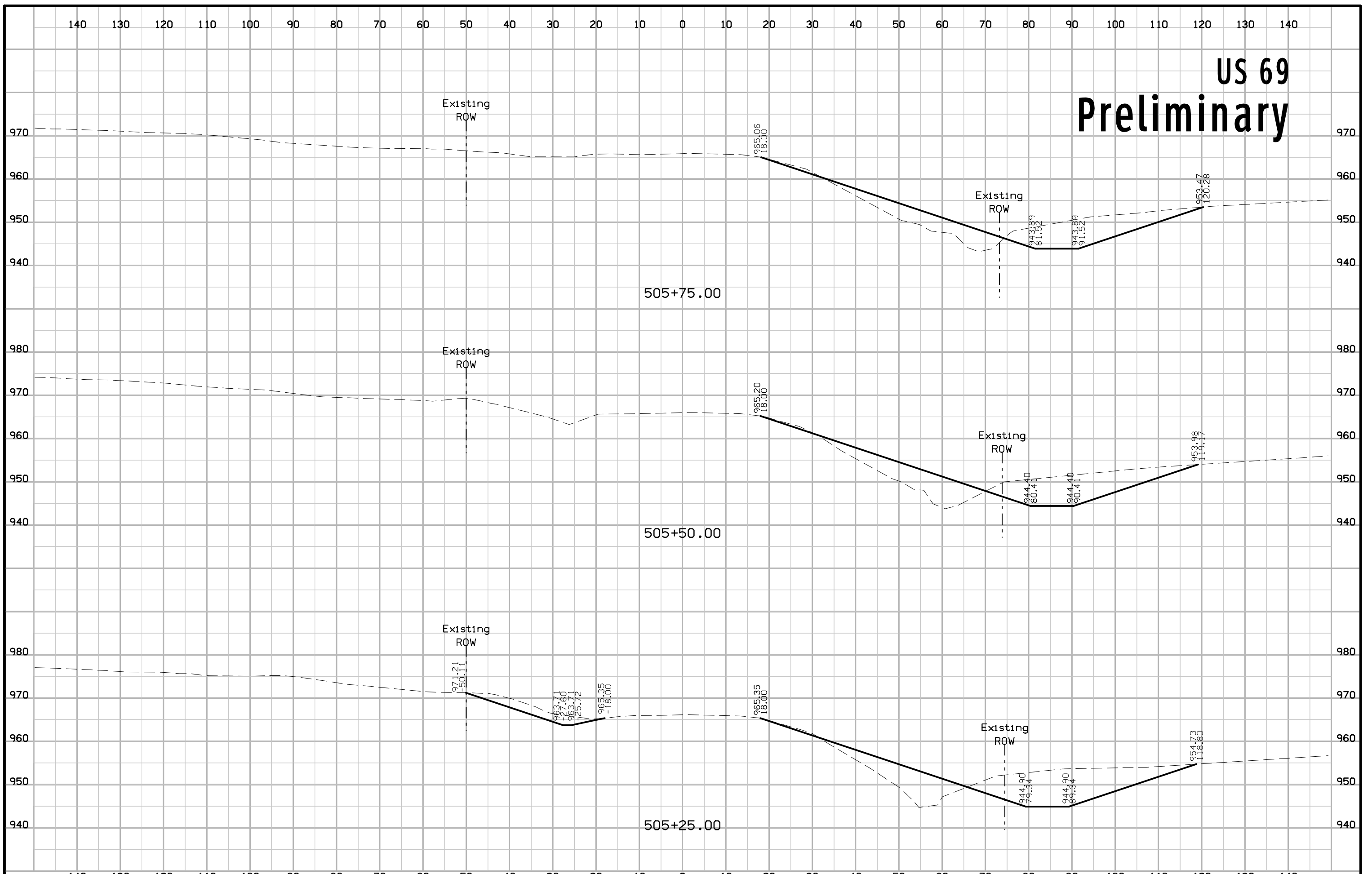
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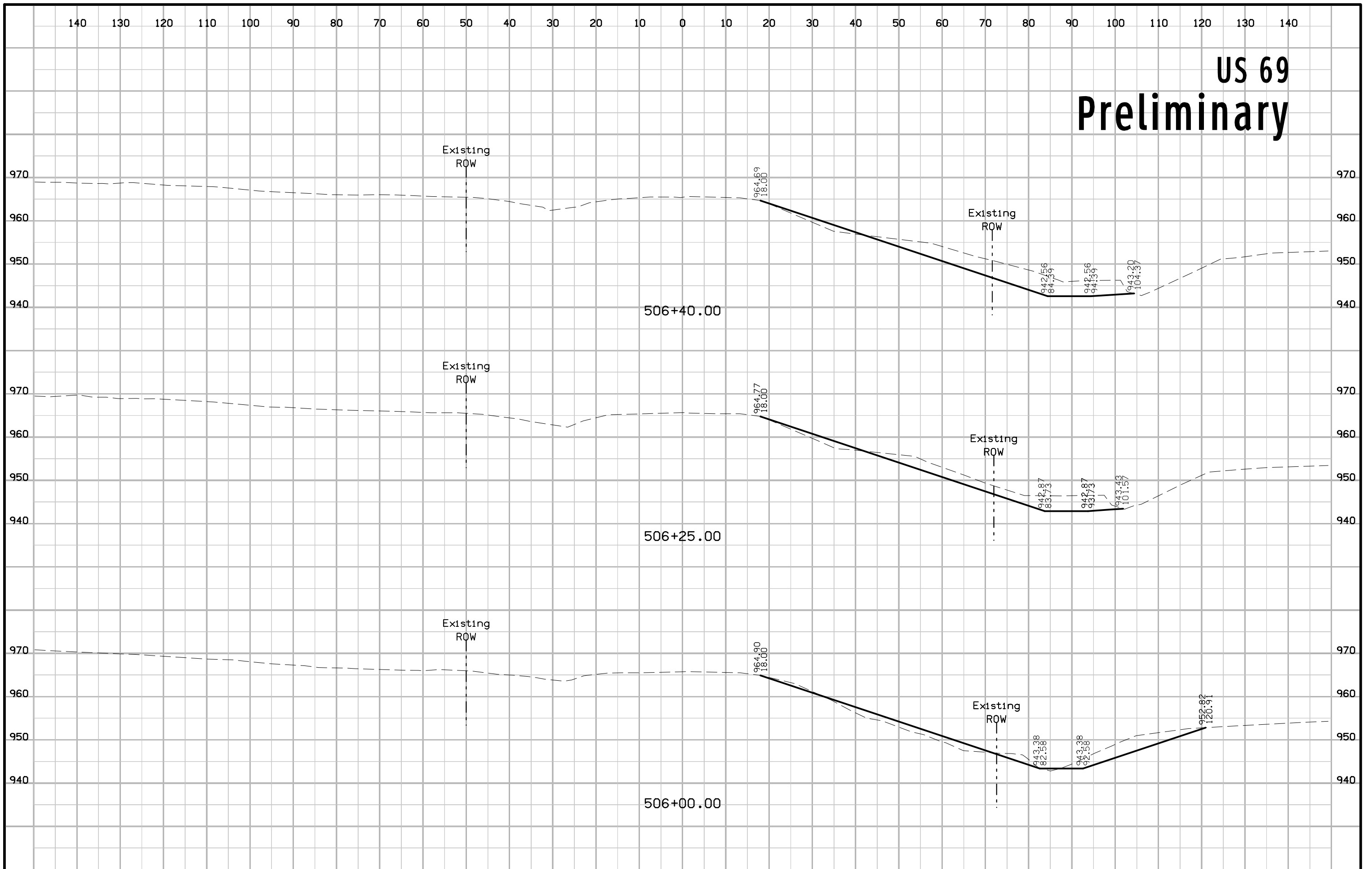
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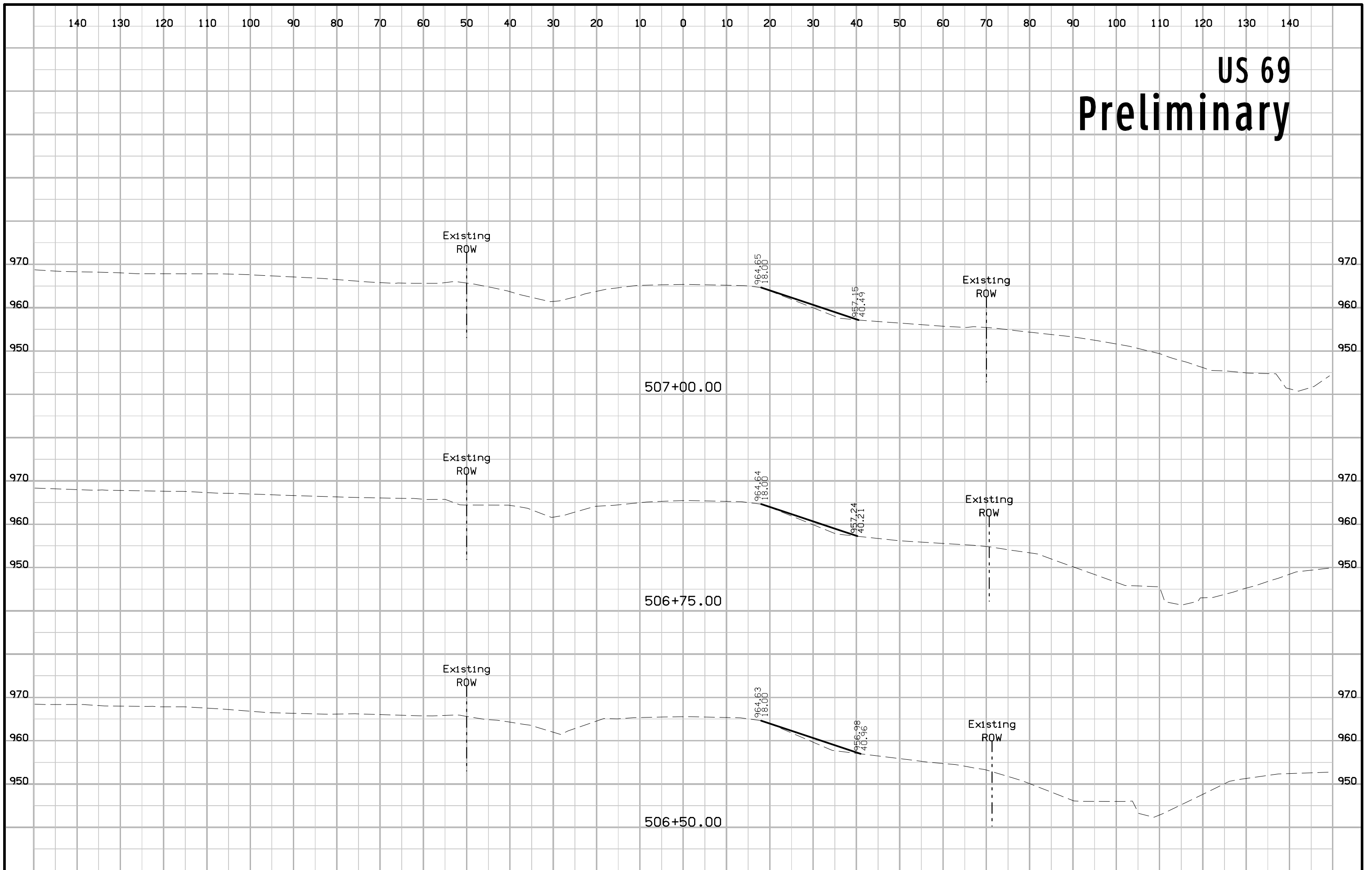
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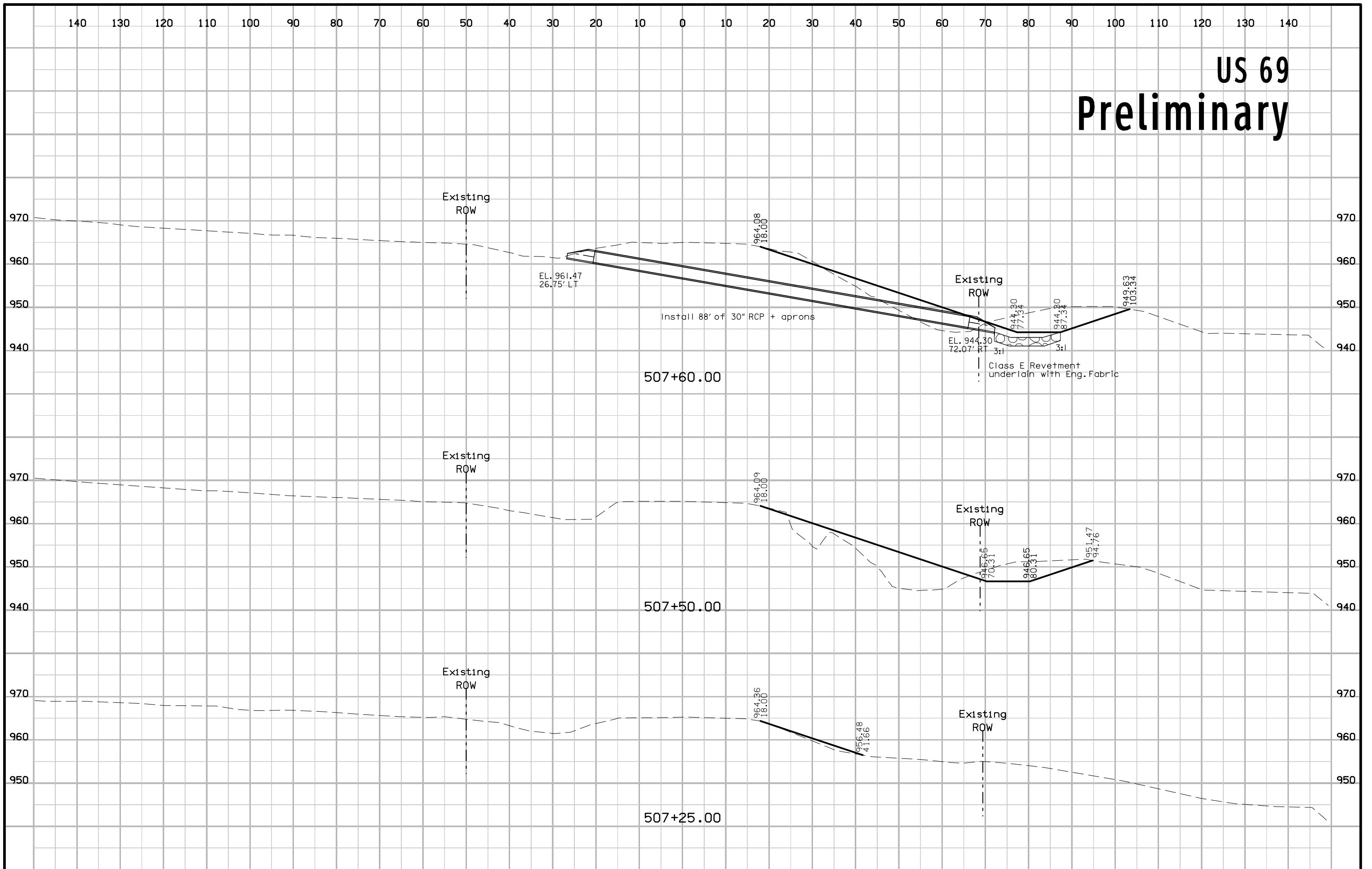
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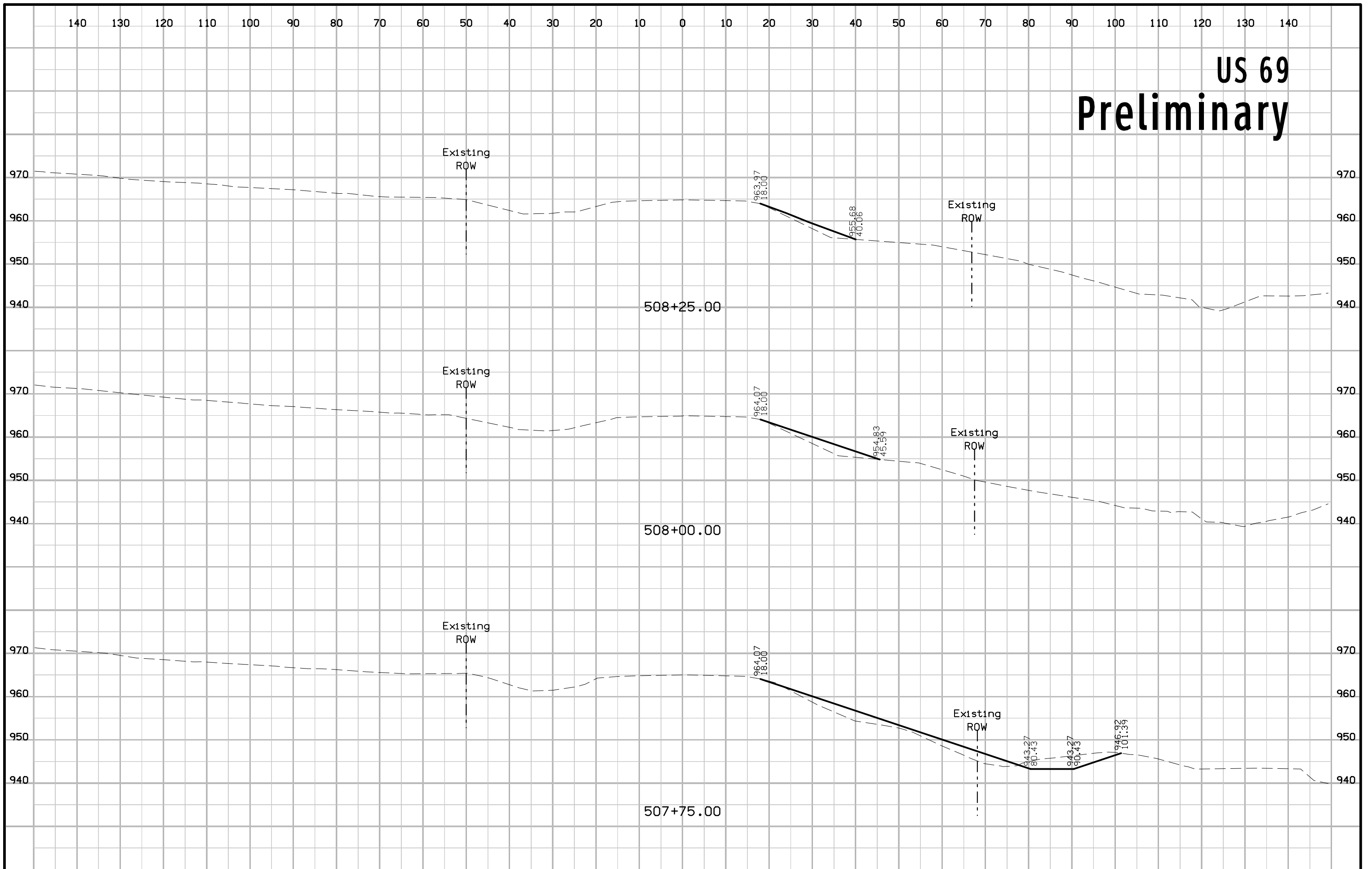
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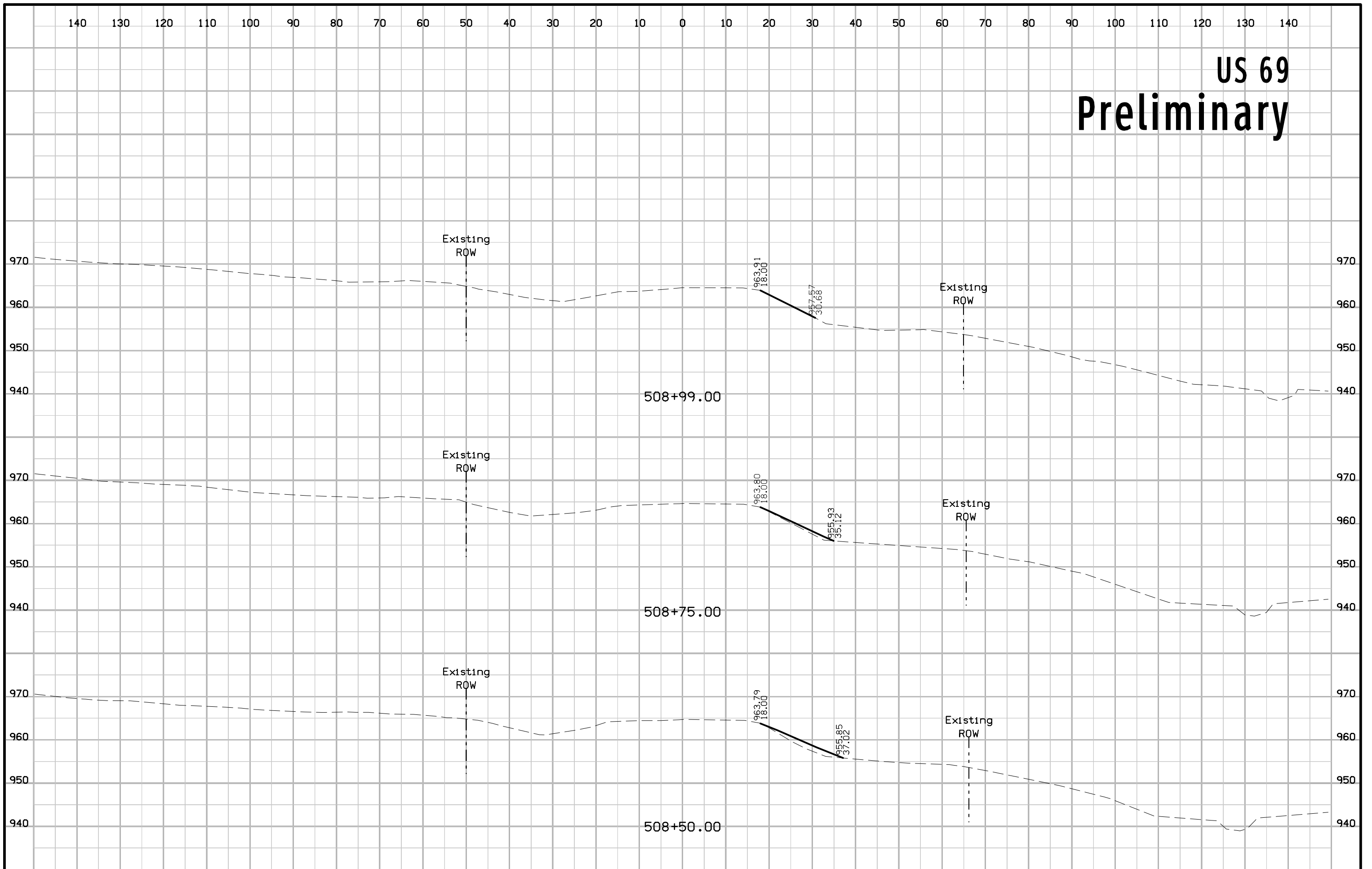
US 69 Preliminary



US 69 Preliminary



US 69 Preliminary



Side Road Preliminary

