

DES MOINES CO.

PIPE CULVERTS
NHSN-061-2(116)--2R-29

LETTING DATE
4-17-2018



Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM
DES MOINES COUNTY
PIPE CULVERTS

Approx 2.5 mi S of IA 78

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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



REVISIONS

TOTAL

PROJECT IDENTIFICATION NUMBER

17-29-061-010

PROJECT NUMBER

NHSN-061-2(116)--2R-29

R.O.W. PROJECT NUMBER

NHSN-061-2(117)--2R-29

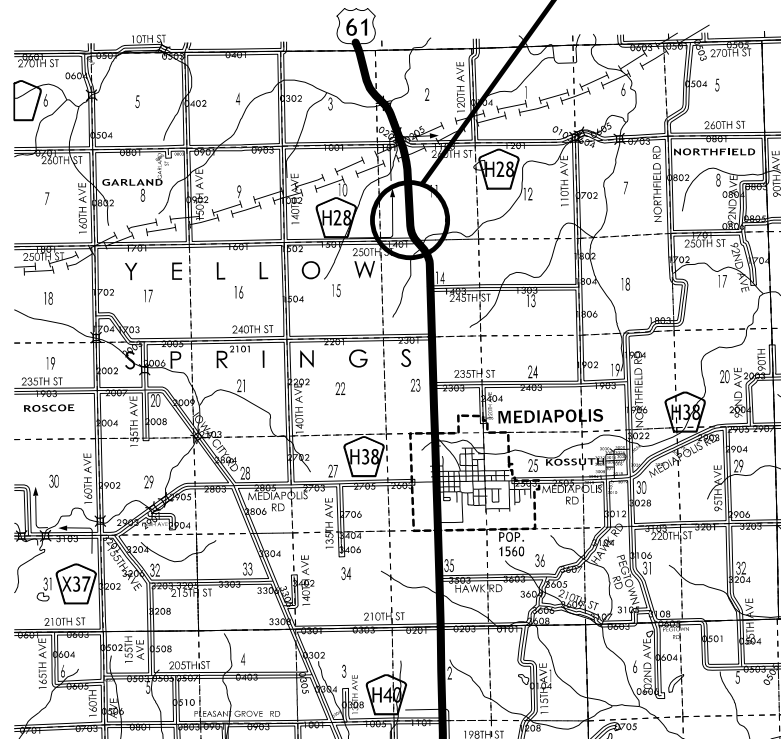
INDEX OF SHEETS

No.	DESCRIPTION
A Sheets	Title Sheet
A.1	Title Sheet
B Sheets	Typical Cross Section and Details
B.1	Details
D Sheets	Mainline Plan and Profile Sheet
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2	Plan & Profile Sheet
V Sheets	Bridge and Culvert Situation Plans
V.1	Bridge and Culvert Situation Plans
W Sheets	Mainline Cross Sections
W.1 - 4	Mainline Cross Section at Proposed RCP
X Sheets	Parallel Ditch Cross Section
X.1	Ditch Cross Section Parallel to Mainline
	* Color Plan Sheets

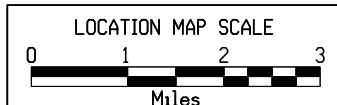
PROJECT LOCATION

Sta. 829+72.6

Ref. Location 58.2



R-3W



DESIGN DATA BBAN

2014 AADT	4840	V.P.D.
20-- AADT	--	V.P.D.
20-- DHV	--	V.P.H.
TRUCKS	13	%
Total Design ESALs	--	

INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.1	X	Primary Signature Block
X	X	X

PRELIMINARY PLANS

Subject to change by final design.

D5 PLAN - Date: 9-07-2017

FILE NO.

ENGLISH

DESIGN TEAM **HOLST \ MAACH \ CAMPBELL**

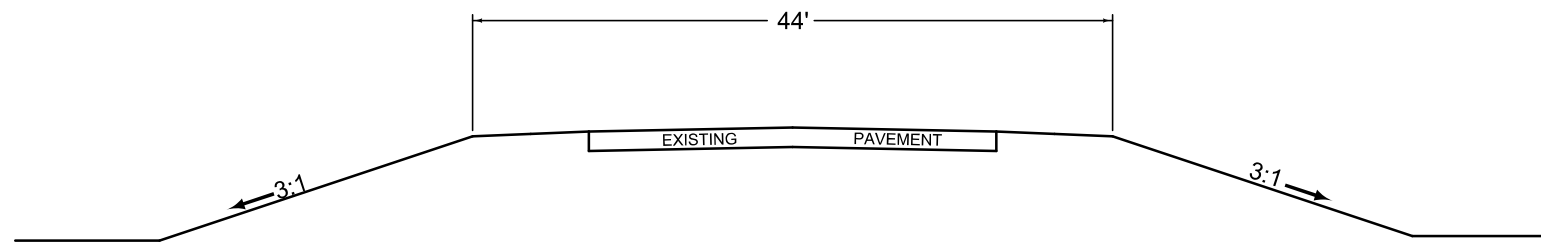
DES MOINES COUNTY

PROJECT NUMBER

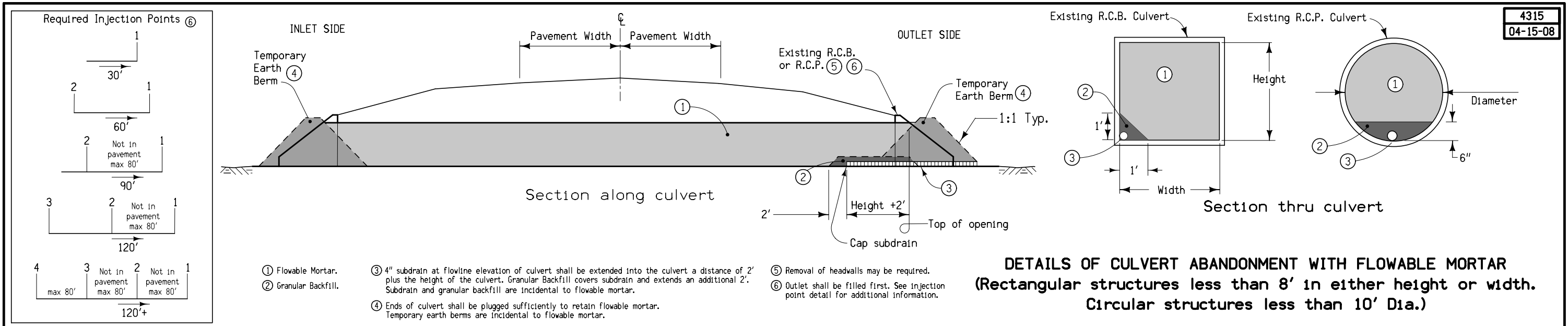
NHSN-061-2(116)--2R-29

SHEET NUMBER

A.1














TYPICAL SECTION






4315
04-15-08

DETAILS OF CULVERT ABANDONMENT WITH FLOWABLE MORTAR
(Rectangular structures less than 8' in either height or width.
Circular structures less than 10' Dia.)














SURVEY SYMBOLS

-  MH Utility Access (Manhole)
-  OUT Tile Outlet
-  GV Gas Valve
-  TPD Telephone Pedestal
-  PPA Power Pole Co. 1
-  D Centerline Draw or Stream (Down)
-  DU Centerline Draw or Stream (Up)
-  SNP Unpaved Shoulder
-  EP Edge of Paved Roads (ML or SR)
-  W WL1D Water Line Co. 1 - Quality D
-  T1 TL1D Telephone Line Co. 1 - Quality D







UTILITY LEGEND













-  W - Rathbun Regional Rural Water
Bill Benjamin
16166 Hwy J-29
Centerville, IA 52544
Business 641-647-2416
Mobile 641-777-9486
bbenjamin@rrwa.net
-  T1 - Mediapolis Telephone Co.
Marc Carlson - General Manager
652 Main Street
Mediapolis, IA 52637
Business 319-394-3456
Fax 319-394-9155
Mobile 319-768-6321
mcarlson@mtctech.net
-  Alliant Energy
Mark Wills
Real Estate and ROW
200 1st St. SE
Cedar Rapids, IA 52401
Business 319-786-8196
Markwills@alliantenergy.com









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

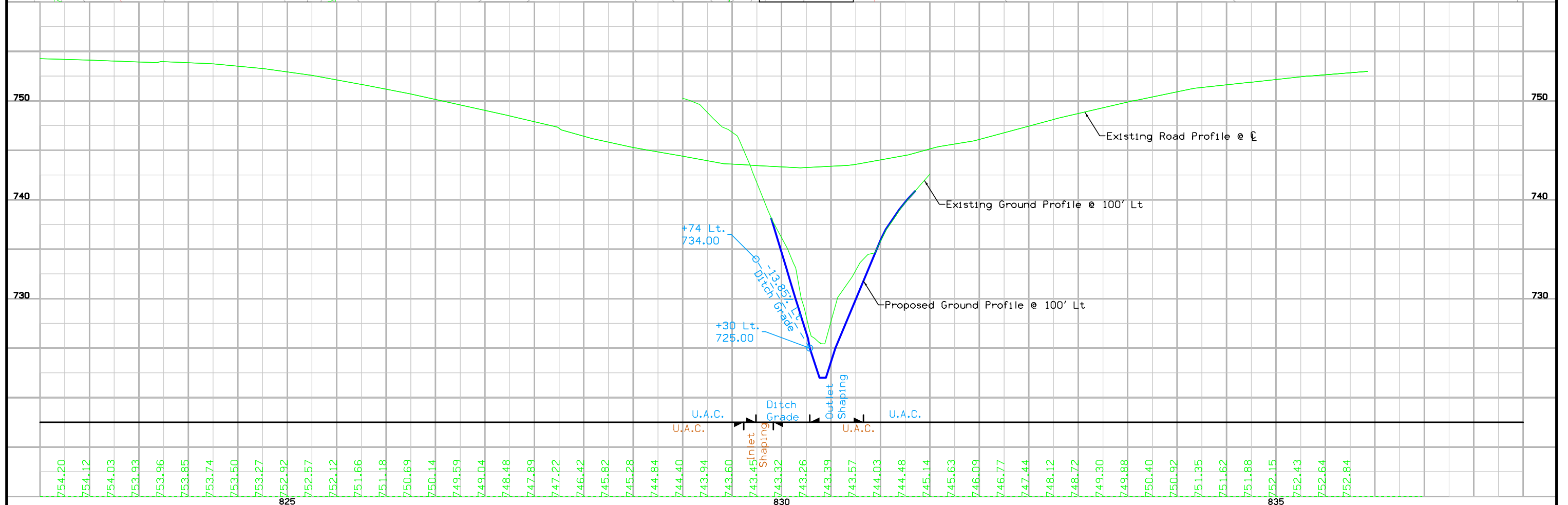
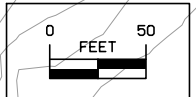
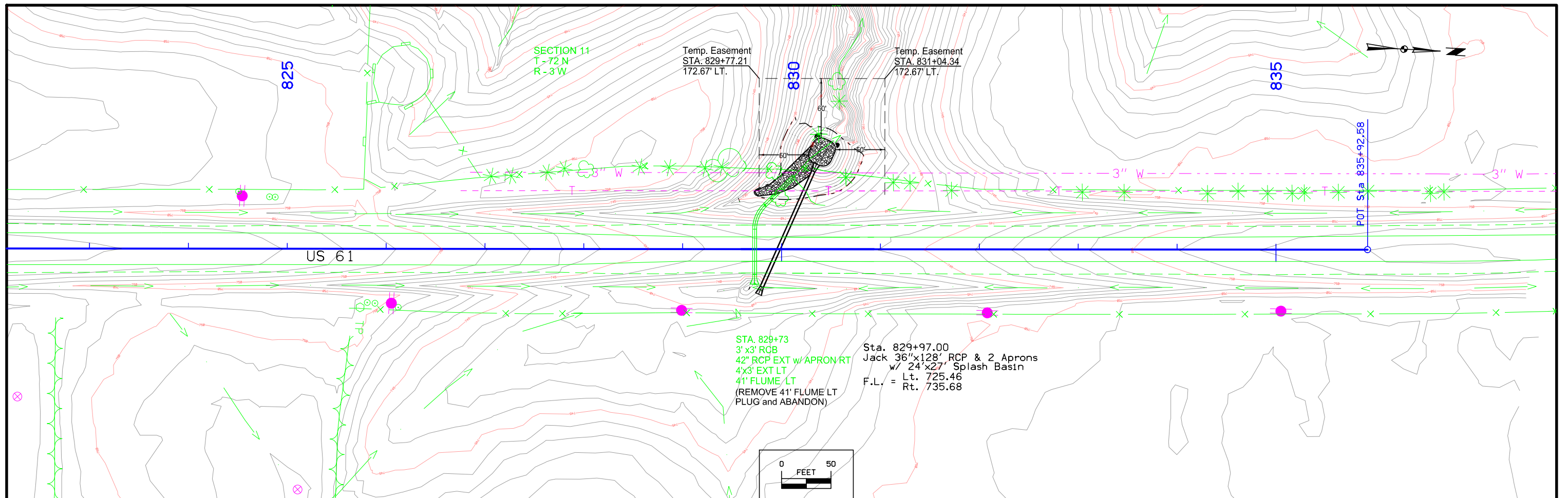
LINEWORK	Design Color No.	
Green	(2)	 Existing Ground Line Profile
Blue	(1)	 Proposed Profile and Annotation
Magenta	(5)	 Existing Utilities
Blue, Light	(230)	 Proposed Ditch Grades, Left
Black	(0)	 Proposed Ditch Grades, Median
Rust	(14)	 Proposed Ditch Grades, Right

-  Reference Point
-  Station
-  Survey Line
-  Section Corner
-  Ground Line Intercept
-  Saw Cut
-  Guardrail
-  Trench Drain
-  High Tension 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)

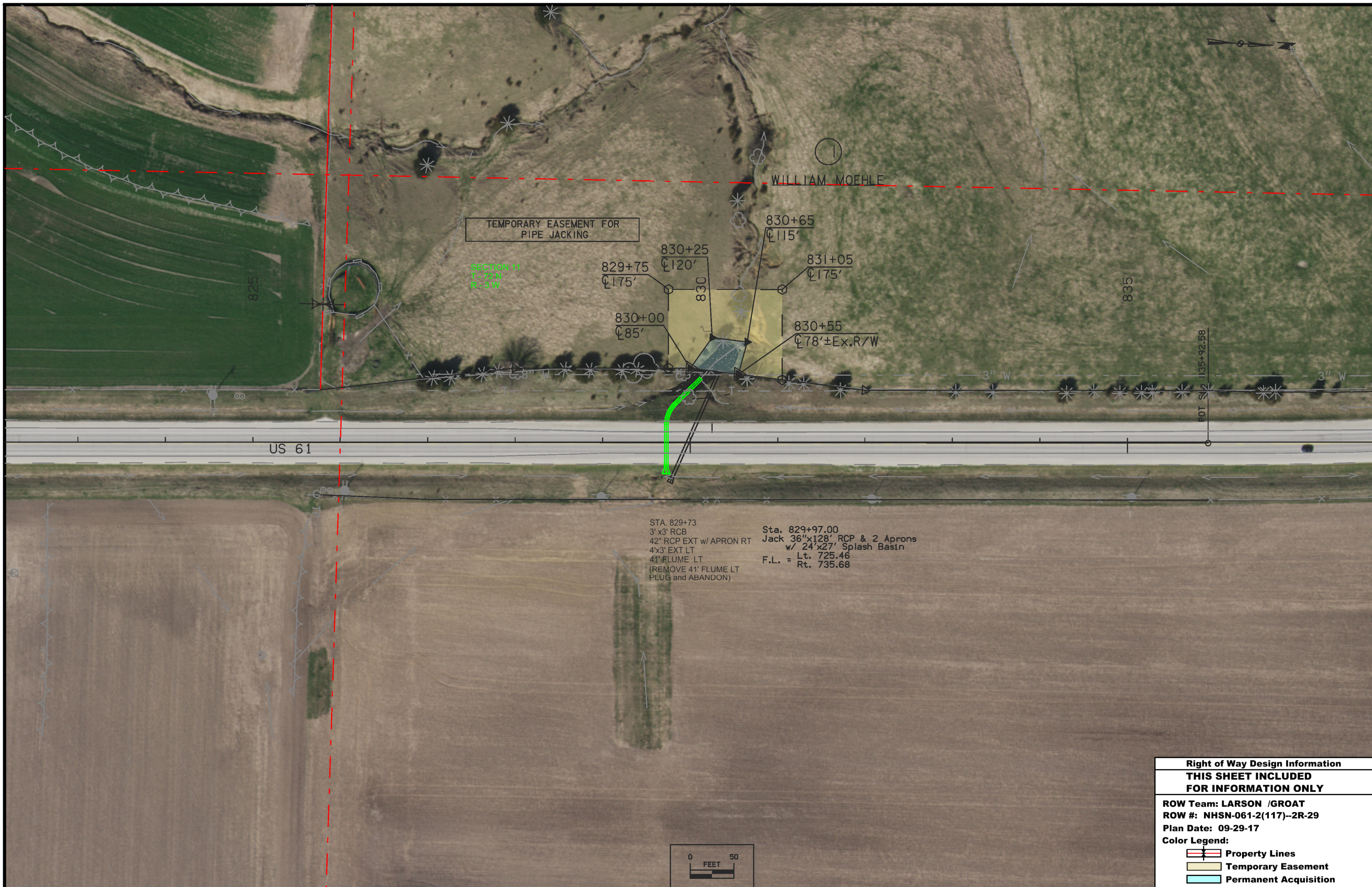


754.20	754.12	754.03	753.93	753.96	753.85	753.74	753.50	753.27	752.92	752.57	752.12	751.66	751.18	750.69	750.14	749.59	749.04	748.48	747.89	747.22	746.42	745.82	745.28	744.84	744.40	743.94	743.60	743.45 Inlet Shaping	743.32	743.26	743.39	743.57	744.03	744.48	745.14	745.63	746.09	746.77	747.44	748.12	748.72	749.30	749.88	750.40	750.92	751.35	751.62	751.88	752.15	752.43	752.64	752.84
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Des Moines ROW: NHSN-061-2(117)--2R-29
Approx 2.5 mi S of IA 78

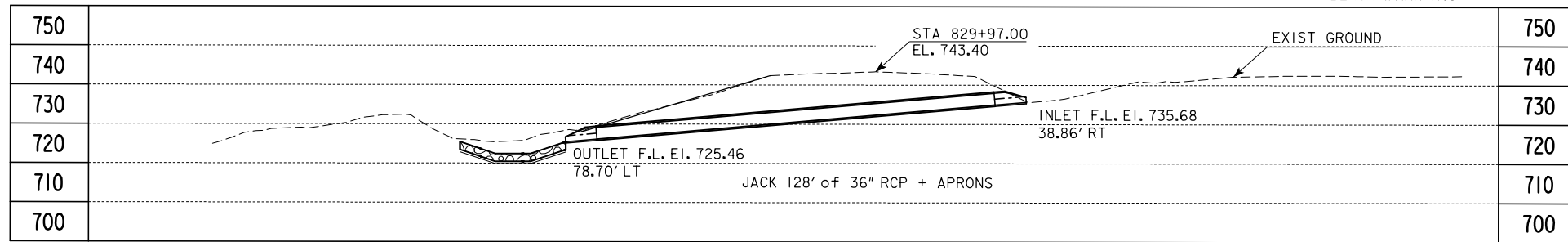
PIN 17-29-061-010

PARCEL NO.	OWNER NAME	STATE		COUNTY		CITY		EXCESS	TEMP EASE	BORROW		OTHER HOUSE	BUILDING(S)	A/C ONLY	TOTAL ACQ.
		FEE	EASE	FEE	EASE	FEE	EASE			FEE	T.E.				
1	William Moehle - Fee	.04 AC							10581 SF						
1 Parcel	"TOTALS	0.04 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC			0 AC	
		0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	0 SF	10581 SF						



STA. 829+73
 3' x3' RCB
 42" RCP EXT w/ APRON RT
 4'x3' EXT LT
 41" FLUME LT
 (REMOVE 41" FLUME LT
 PLUG and ABANDON)
 Sta. 829+97.00
 Jack 36"x128' RCP & 2 Aprons
 w/ 24'x27' Splash Basin
 F.L. = Lt. 725.46
 Rt. 735.68

Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: LARSON /GROAT	
ROW #: NHSN-061-2(117)--2R-29	
Plan Date: 09-29-17	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition



LONGITUDINAL SECTION ALONG ϕ CULVERT



LOCATION

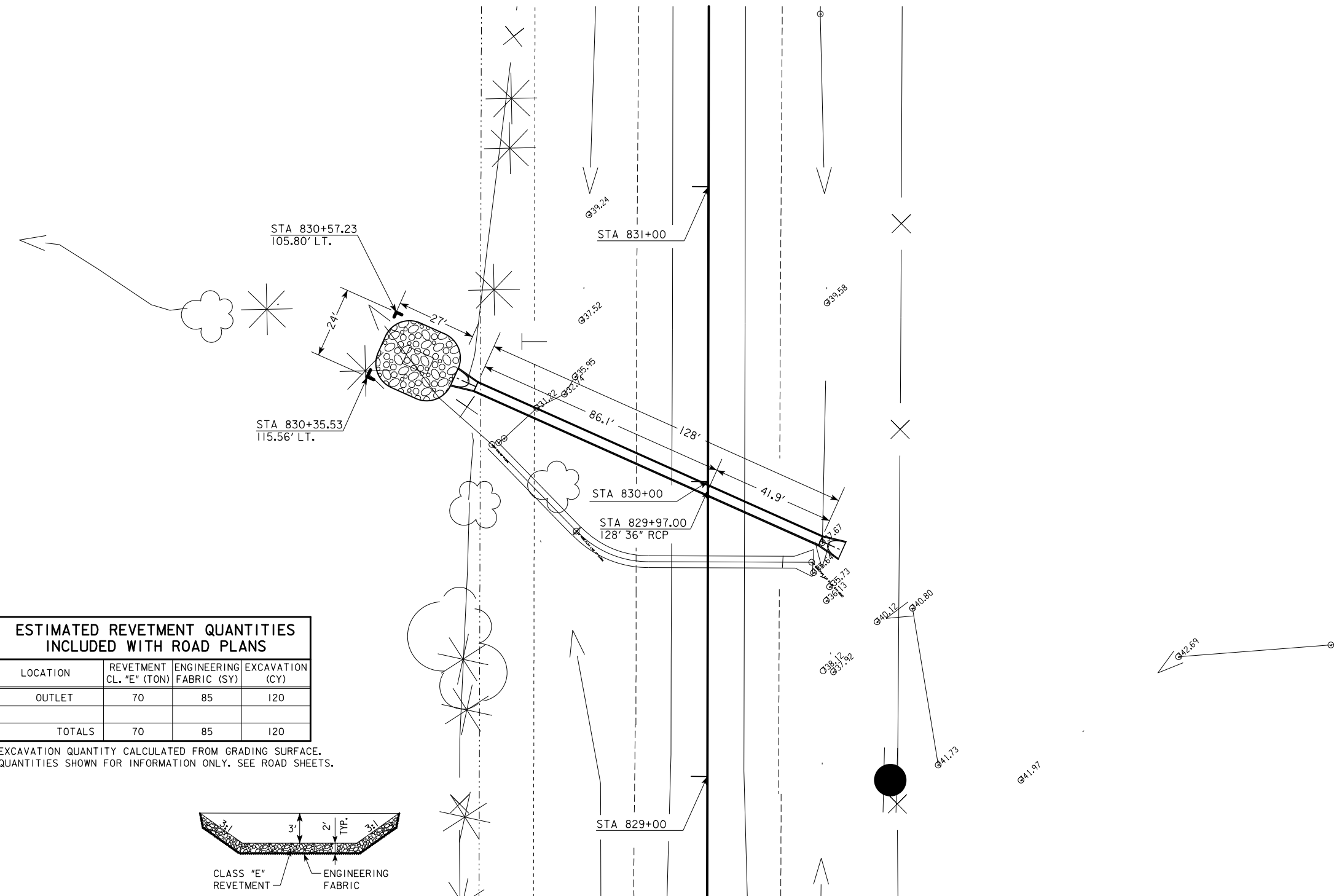
T-72N R-3W
SECTION 11
YELLOW SPRING TOWNSHIP
DES MOINES COUNTY
LATITUDE 41.0528286°
LONGITUDE -91.1741242°

HYDRAULIC DATA

DRAINAGE AREA = 45 ACRES
Q₅₀ = 54 CFS

UTILITIES LEGEND:

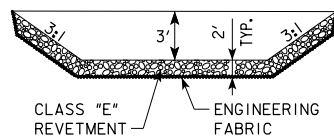
NO KNOWN UTILITIES



ESTIMATED REVETMENT QUANTITIES INCLUDED WITH ROAD PLANS

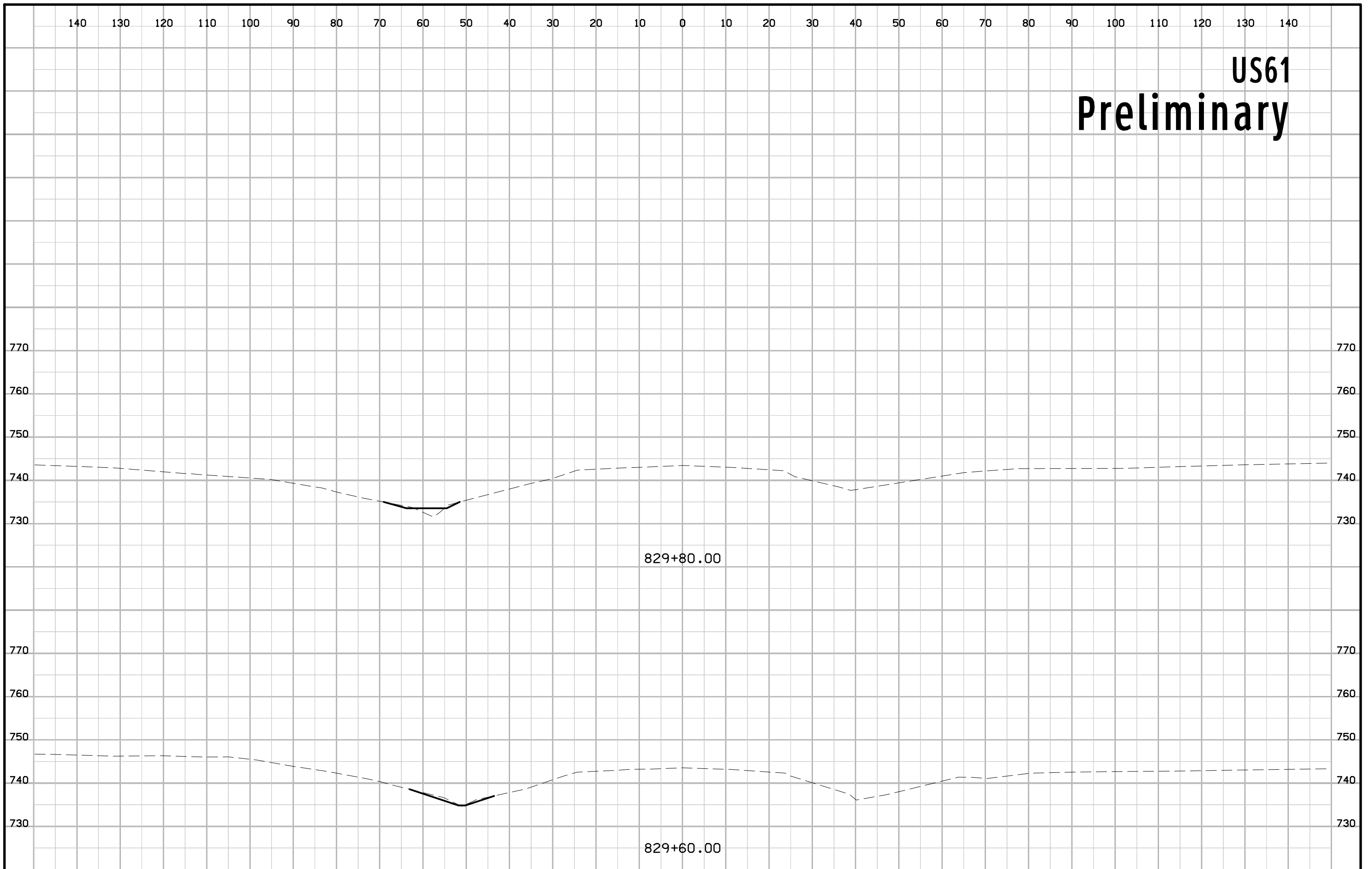
LOCATION	REVETMENT CL. "E" (TON)	ENGINEERING FABRIC (SY)	EXCAVATION (CY)
OUTLET	70	85	120
TOTALS	70	85	120

EXCAVATION QUANTITY CALCULATED FROM GRADING SURFACE.
QUANTITIES SHOWN FOR INFORMATION ONLY. SEE ROAD SHEETS.

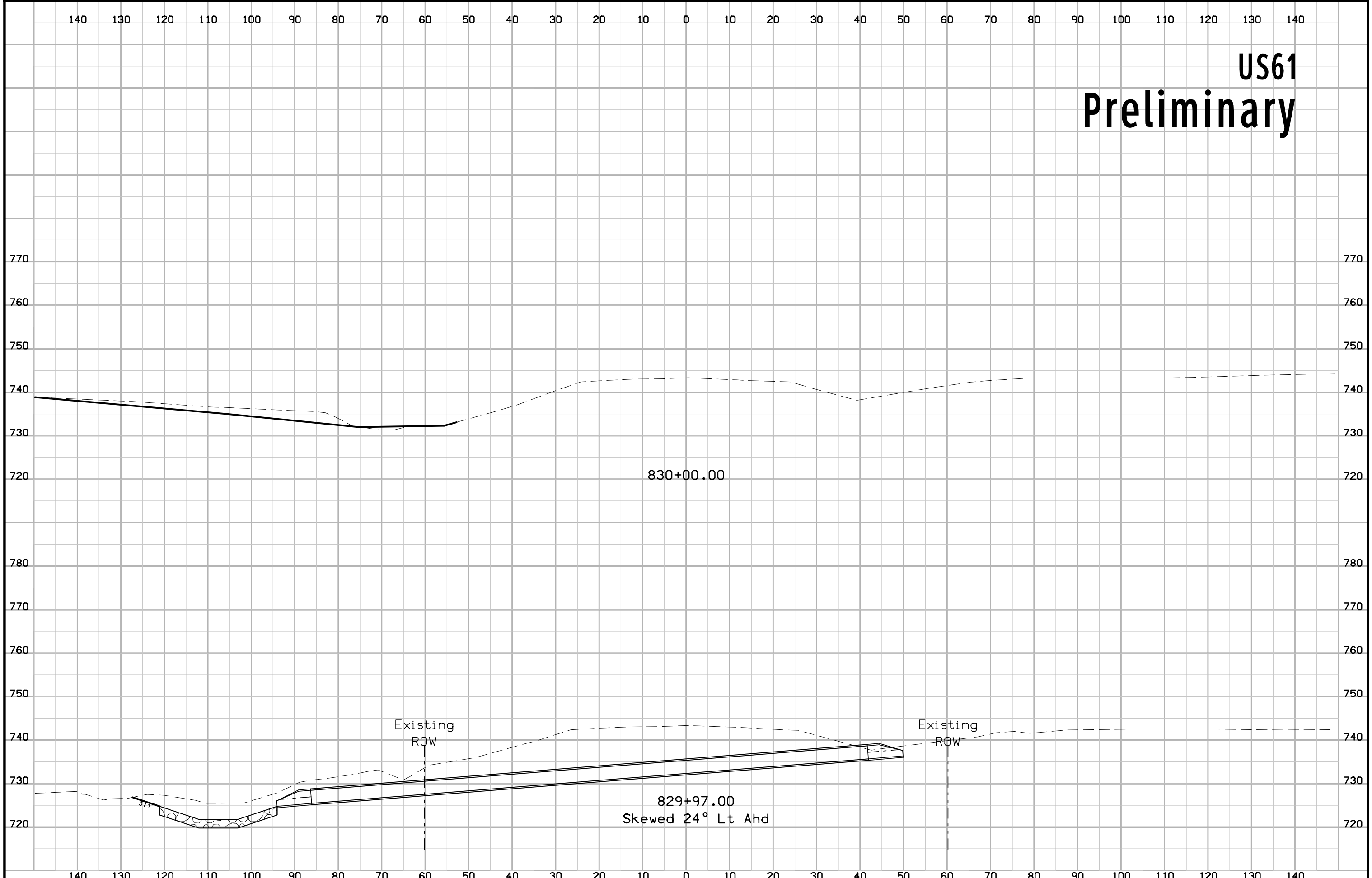


DESIGN FOR 2° SKEW
36" RCP W/ 24'x27' SPLASH BASIN
SITUATION PLAN
STATION 829+97
DES MOINES COUNTY

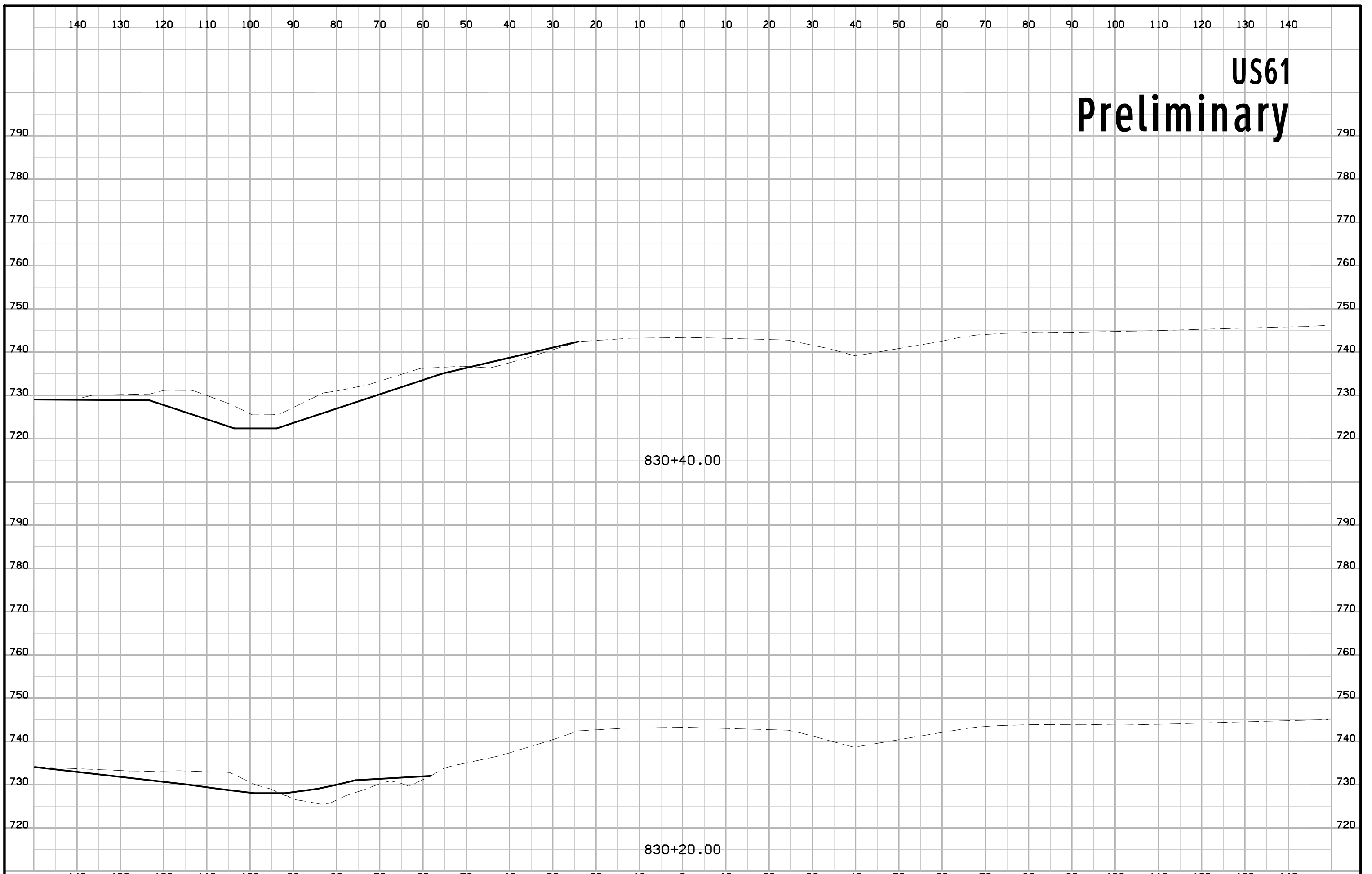
US61 Preliminary



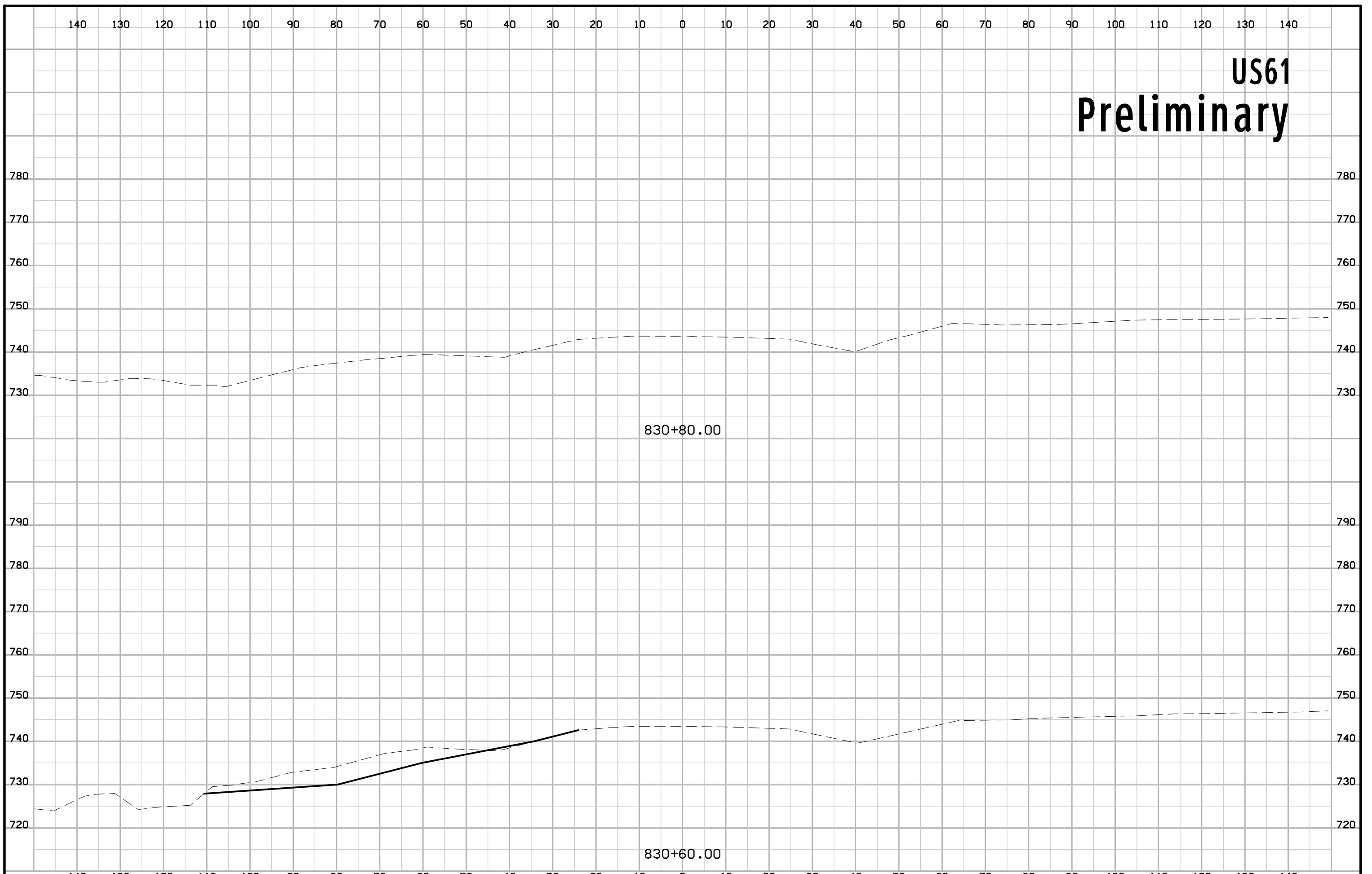
US61 Preliminary



US61 Preliminary



US61 Preliminary



Ditch Lt

