

BRIDGE REPLACEMENT - PPCB  
BRF-065-7(35)--38-35

FRANKLIN COUNTY - DESIGN NO. --

**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 IMPROVEMENTS ON THE  
**PRIMARY ROAD SYSTEM**  
FRANKLIN COUNTY  
BRIDGE REPLACEMENT - PPCB  
**US 65 OVER SPRING CREEK**  
1.3 MILES NORTH OF IA 3

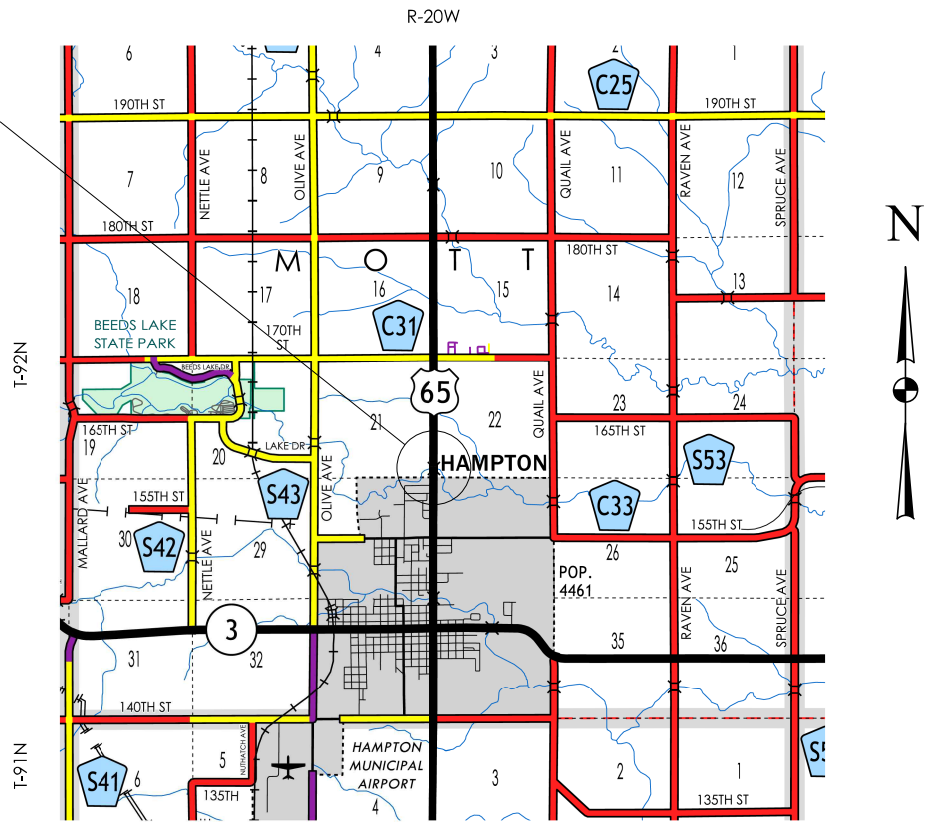
THE IOWA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SERIES 2015, PLUS APPLICABLE GENERAL SUPPLEMENTAL SPECIFICATIONS, DEVELOPMENTAL SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS SHALL APPLY TO CONSTRUCTION WORK ON THIS PROJECT.

ENGLISH STANDARD BRIDGE PLANS		
STANDARD	ISSUED	REVISED
PI0L	01-09	11-15

TOTAL SHEETS	16
PROJECT NUMBER	BRF-065-7(35)--38-35
R.O.W. PROJECT NUMBER	
PROJECT IDENTIFICATION NUMBER	14-35-065-010

INDEX OF SHEETS	
NO.	DESCRIPTION
1	TITLE SHEET
2-4	DESIGN NO. --
D.1-W.7	ROADWAY SHEETS

REVISIONS



DESIGN NO. --

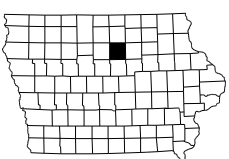
**PRELIMINARY  
NOT FOR CONSTRUCTION**

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

STANDARD ROAD PLANS
STANDARD ROAD PLANS ARE LISTED ON SHEET NUMBER

DESIGN DATA RURAL
2019 AADT 3700 V.P.D.
2039 AADT 4000 V.P.D.
2039 DHV - V.P.H.
TRUCKS 10 %
Total Design ESALs -

INDEX OF SEALS		
SHEET NO.	NAME	TYPE
1	MICHAEL P. CAVEN	STRUCTURAL DESIGN
1	DANIEL D. KIMBALL	HYDRAULIC DESIGN
BRIDGE STANDARDS	NORMAN L. McDONALD	STRUCTURAL DESIGN



PROJECT DIRECTORY NAME: --

**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: Daniel D. Kimball

My license renewal date is December 31, 2017

Pages or sheets covered by this seal: \_\_\_\_\_

**STRUCTURAL 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: Michael P Caven Date: \_\_\_\_\_

Printed or Typed Name: Michael P Caven

My license renewal date is December 31, 2016

Pages or sheets covered by this seal: \_\_\_\_\_



1100	CL S. ABUT. BRG. GR. ELEV. = 1089.53	CL S. PIER GR. ELEV. = 1091.29	CL BRIDGE GR. ELEV. = 1092.36	CL N. PIER GR. ELEV. = 1094.44	CL N. ABUT. BRG. GR. ELEV. = 1095.83	1100
1100	LOW STEP ELEV. = 1083.57	LOW STEP ELEV. = 1085.50	DESIGN H.W. ELEV. = 1081.12	LOW STEP ELEV. = 1088.65	LOW STEP ELEV. = 1089.87	1100
1090		BERM ELEV. = 1082.07	BOTTOM OF CAP, ELEV. = 1082.50		BOTTOM OF FOOTING ELEV. = 1086.37	1090
1080					BERM ELEV. = 1088.37	1080
1070	BOTTOM OF FOOTING ELEV. = 1080.07	EXISTING GROUNDLINE	BOTTOM OF CAP, ELEV. = 1085.65		BOTTOM OF PREBORED HOLES ELEV. = 1076.37	1070
1060	BOTTOM OF PREBORED HOLES ELEV. = 1070.07	PROPOSED GROUNDLINE	STREAMBED ELEV. = 1070.50		--' HP 10X57 STEEL BRG. PILES (TYP. EACH ABUT.)	1060
1050	2'-0 CLASS 'E' REVETMENT WITH ENGINEERING FABRIC (TYP.)	BOTTOM OF ENCASUREMENT ELEV. = 1067.50	--' HP 12X53 STEEL BRG. PILES (TYP. EACH PIER)	DESIGN SCOUR ELEV. = 1065.90	BOTTOM OF ENCASUREMENT ELEV. = 1066.65	1050

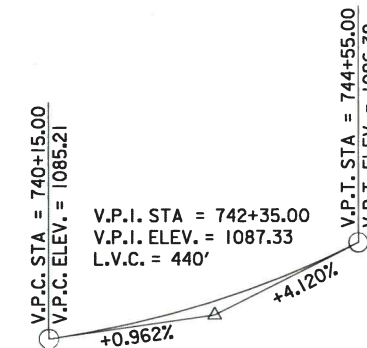
NOTE: TOP OF BRIDGE DECK CROWN IS 0.03' BELOW PROFILE GRADE

### LONGITUDINAL SECTION ALONG CL ROADWAY

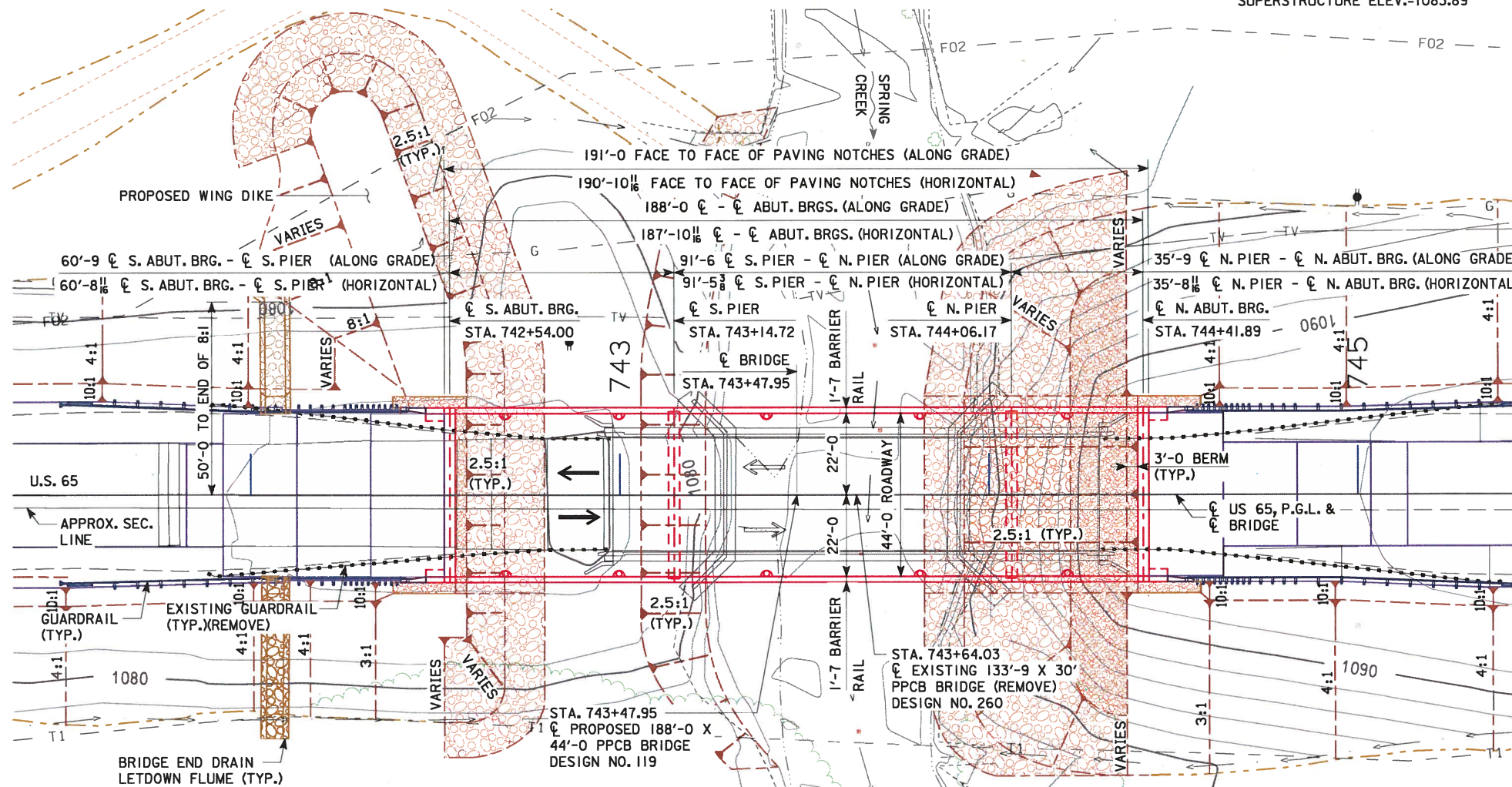
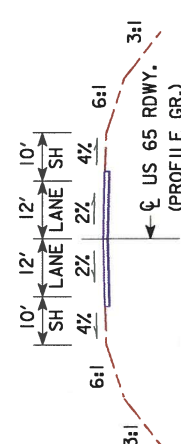
- ① REGULATORY LOW SUPERSTRUCTURE ELEV.=1086.76
- ② OPERATIONAL LOW SUPERSTRUCTURE ELEV.=1083.89

BENCH MARK NO. NO. 502 - 60d SPIKE IN LIGHT POLE ON WEST SIDE OF HWY 65 - 200 FT NORTH OF BRIDGE AT ENTRANCE TO HOUSE NOS. 1518A & 1518B STA. 747+29.35, OFFSET 86.980' LT. ELEV. = 1106.24

### PROPOSED PROFILE GRADE US 65 OVER SPRING CREEK



### TYPICAL APPROACH SECTION



### HYDRAULIC DATA

DRAINAGE AREA = 33.9 SQ. MI.  
STREAM SLOPE = 7.97 FT./MI.  
AVG. LOW WATER STAGE = 1073.25

Q<sub>50</sub> = 2,550 CFS  
STAGE = 1081.12  
BACKWATER = 0.64 FT.  
AVG. BRIDGE VELOCITY = 3.0 FPS

Q<sub>100</sub> = 3,070 CFS  
STAGE = 1081.64  
BACKWATER = 0.80 FT.

Q<sub>200</sub> = 3,630 CFS  
STAGE = 1082.15  
CALCULATED DESIGN SCOUR = 1065.90\*

Q<sub>500</sub> = 4,260 CFS  
STAGE = 1082.67  
CALCULATED CHECK SCOUR = 1065.90\*

ROADWAY OVERTOP 1083.80  
STA. 738+38.00

### LOCATION

US 65 OVER SPRING CREEK  
T-92N R-20W  
SECTION 21 & 22  
MOTT TOWNSHIP  
FRANKLIN COUNTY  
FHWA NO. 25121  
BRIDGE MAINT. NO. 3569.4S065  
LATITUDE 42.760954°  
LONGITUDE -93.202338°

### NOTES

- TL-4 BRIDGE RAILING PROPOSED
- PIER TYPE - PIOL PILE BENT
- PIER SUBSTRUCTURE TO BE VERIFIED DURING FINAL DESIGN
- BEAM TYPE - AASHTO D
- CLASS 'E' REVETMENT STONE IS EMBEDDED
- ALL DIMENSIONS HORIZONTAL UNLESS OTHERWISE NOTED
- \* ACTUAL SCOUR WILL BE DEPENDENT UPON SOILS REVIEW OF THE ELEVATION TO COMPETENT ROCK.

### TRAFFIC ESTIMATE

2019 AADT	3700	V.P.D.
2039 AADT	4000	V.P.D.
2039 DHV	-	V.P.H.
TRUCKS	10 %	
TOTAL DESIGN ESALs	-	

### HYDRAULIC DESIGN

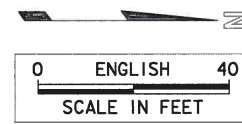
I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Signature: *Daniel D. Kimball* Date: 9/14/16  
Printed or Typed Name: Daniel D. Kimball

My license renewal date is December 31, 2017

Pages or sheets covered by this seal: \_\_\_\_\_

### SITUATION PLAN



### UTILITIES LEGEND

- G - MIDAMERICAN-GAS
- M - MIDAMERICAN-ELEC
- TV - MEDIACOM
- T1 - IOWA COMMUNICATIONS NETWORK
- F02 - WINSTREAM MCLEOD

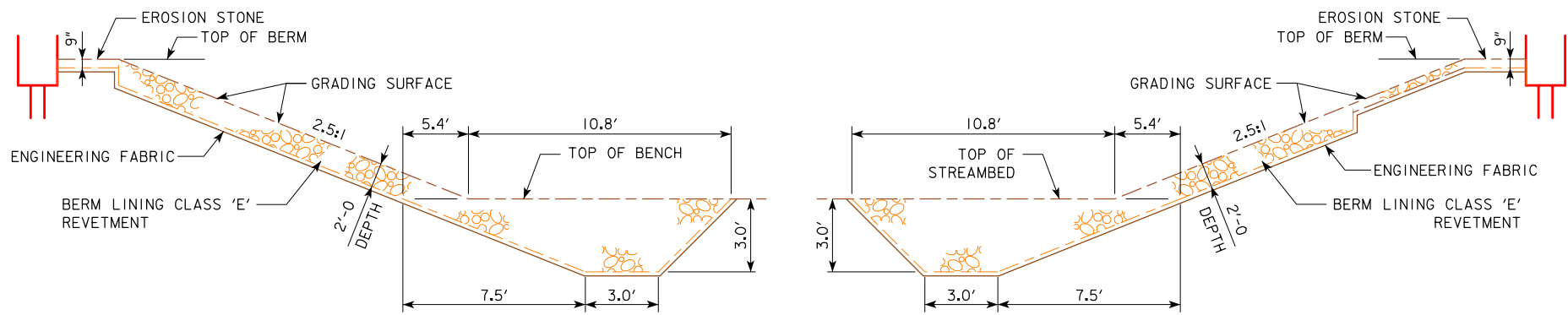
PRELIMINARY

DESIGN FOR 0° SKEW  
**188'-0 X 44'-0 PRETENSIONED  
PRESTRESSED CONC. BEAM BRIDGE**  
(D BEAM TYPE) 91'-6 INTERIOR SPAN  
60'-9 SOUTH SPAN  
35'-9 NORTH SPAN

### SITUATION PLAN

STA. 743+47.95 (US 65) AUGUST 2016  
**FRANKLIN COUNTY**  
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
DESIGN SHEET NO. 1 OF 3 FILE NO. 31362 DESIGN NO. 119





SECTION THRU EMBEDDED REVETMENT BERM  
(SOUTH ABUTMENT)

SECTION THRU EMBEDDED REVETMENT BERM  
(NORTH ABUTMENT)

BENCH MARK NO. NO. 502 - 60d SPIKE IN LIGHT POLE ON WEST SIDE OF HWY 65 - 200 FT NORTH OF BRIDGE AT ENTRANCE TO HOUSE NOS. 1518A & 1518B  
STA. 747+29.35, OFFSET 86.980' LT.  
ELEV. = 1106.24

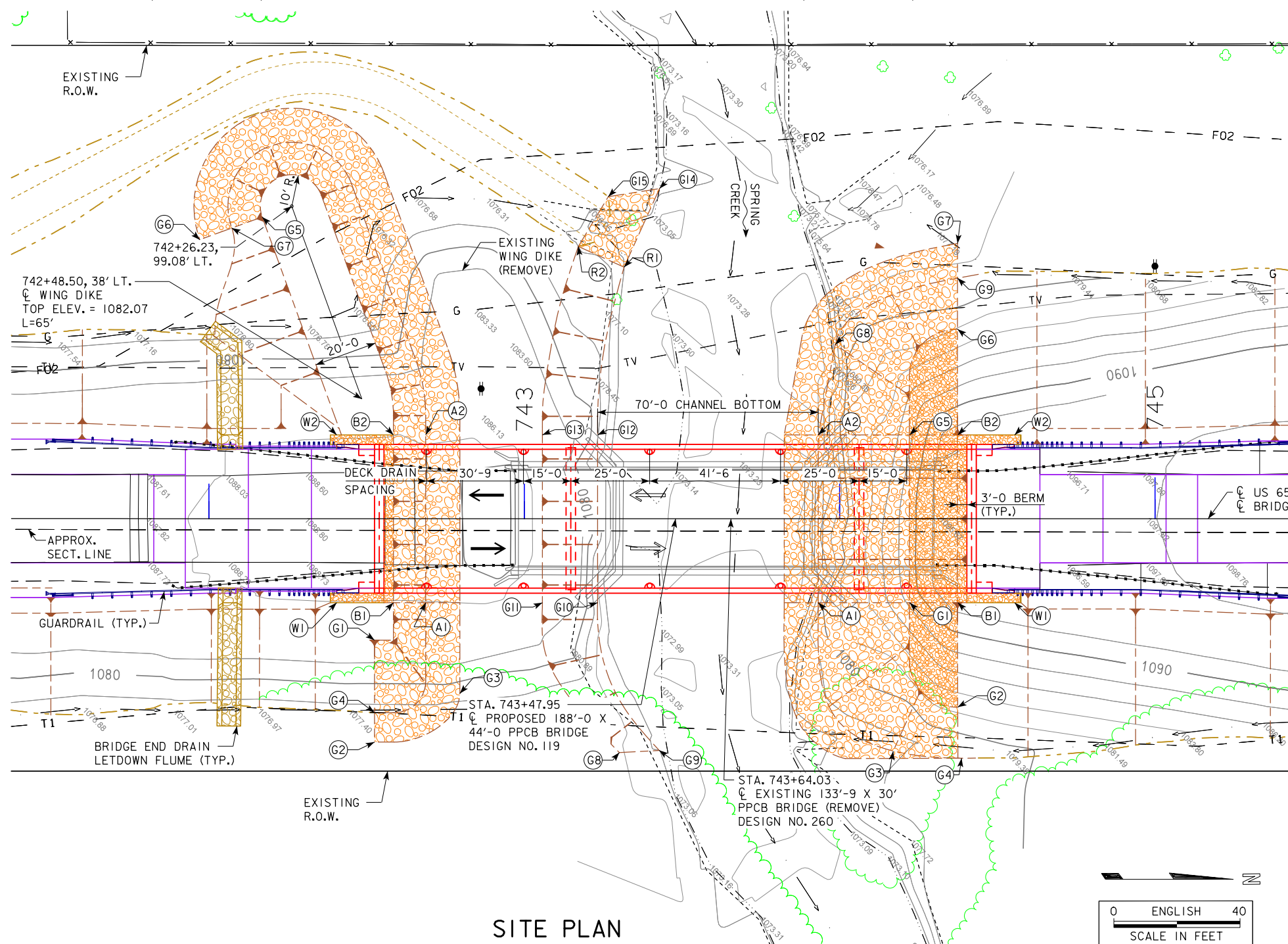
POINTS	SOUTH ABUTMENT			NORTH ABUTMENT		
	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
A1	742+68.75	26.58' RT	1077.97	743+92.71	26.58' RT	1070.50
A2	742+68.75	26.58' LT	1077.97	743+92.71	26.58' LT	1070.50
B1	742+58.50	26.58' RT	1082.07	744+37.39	26.58' RT	1088.37
B2	742+58.50	26.58' LT	1082.07	744+37.39	26.58' LT	1088.37
W1	742+40.50	26.58' RT	1088.42	744+55.39	26.58' RT	1095.62
W2	742+40.50	26.58' LT	1088.42	744+55.39	26.58' LT	1095.62

BERM SLOPE ELEVATIONS REFLECT THE GRADING SURFACE

POINTS	SOUTH ABUTMENT			NORTH ABUTMENT		
	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
G1	742+52.50	38.47' RT.	1082.07	744+21.64	26.58' RT.	1082.07
G2	742+52.50	70.78' RT.	1077.97	744+37.39	59.72' RT.	1082.07
G3	742+79.55	55.38' RT.	1077.97	744+17.01	73.63' RT.	1075.00
G4	742+52.50	61.51' RT.	1077.97	744+37.39	75.88' RT.	1079.00
G5	742+16.82	95.65' LT.	1082.07	744+21.64	26.58' LT.	1082.07
G6	741+97.03	88.46' LT.	1077.97	744+37.39	60.09' LT.	1082.07
G7	742+07.18	92.14' LT.	1077.97	744+37.39	87.49' LT.	1079.00
G8	743+30.14	74.09' RT.	1077.50	743+98.58	55.27' LT.	1070.50
G9	743+42.78	73.45' RT.	1070.50	744+37.39	76.51' LT.	1079.00
G10	743+23.23	26.58' RT.	1070.50	--	--	--
G11	743+05.73	26.58' RT.	1077.50	--	--	--
G12	743+23.23	26.58' LT.	1070.50	--	--	--
G13	743+05.73	26.58' LT.	1077.50	--	--	--
G14	743+42.88	104.66' LT.	1070.50	--	--	--
G15	743+26.64	102.10' LT.	1077.50	--	--	--
R1	743+31.64	79.78' LT.	1070.50	--	--	--
R2	743+17.15	86.31' LT.	1077.50	--	--	--

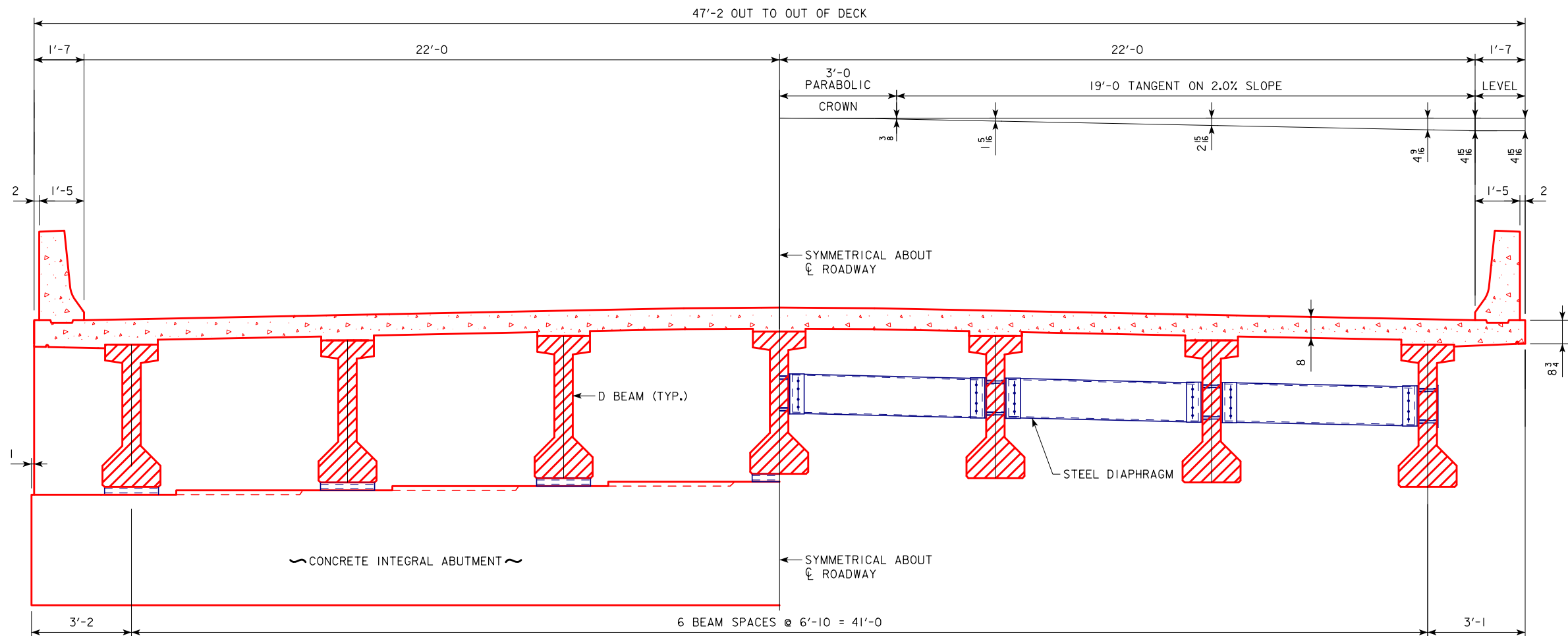
EST. BERM ARMORING QUANTITIES				
LOCATION	REVTMENT CL. 'E' (TON)	EROSION STONE (TON)	ENGINEERING FABRIC (SY)	EXCAVATION (CY)
BERM LINING - N. ABUT.	830	105	1,000	600
BERM LINING - S. ABUT.	815	7	790	510
TOTALS	1,645	112	1,790	1,110

EXCAVATION QUANTITY CALCULATED FROM GRADING SURFACE.



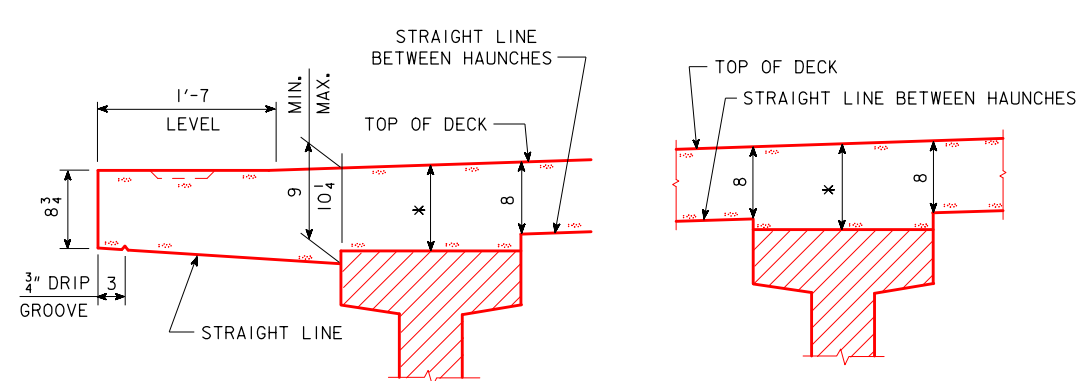
SITE PLAN

PRELIMINARY  
DESIGN FOR 0° SKEW  
**188'-0 X 44'-0 PRETENSIONED  
PRESTRESSED CONC. BEAM BRIDGE**  
60'-9 SOUTH SPAN (D BEAM TYPE) 91'-6 INTERIOR SPAN  
35'-9 NORTH SPAN  
**SITE PLAN**  
STA. 743+47.95 (US 65) AUGUST 2016  
**FRANKLIN COUNTY**  
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
DESIGN SHEET NO. 2 OF 3 FILE NO. 31362 DESIGN NO. 119



HALF SECTION NEAR ABUTMENT

HALF SECTION NEAR MID SPAN

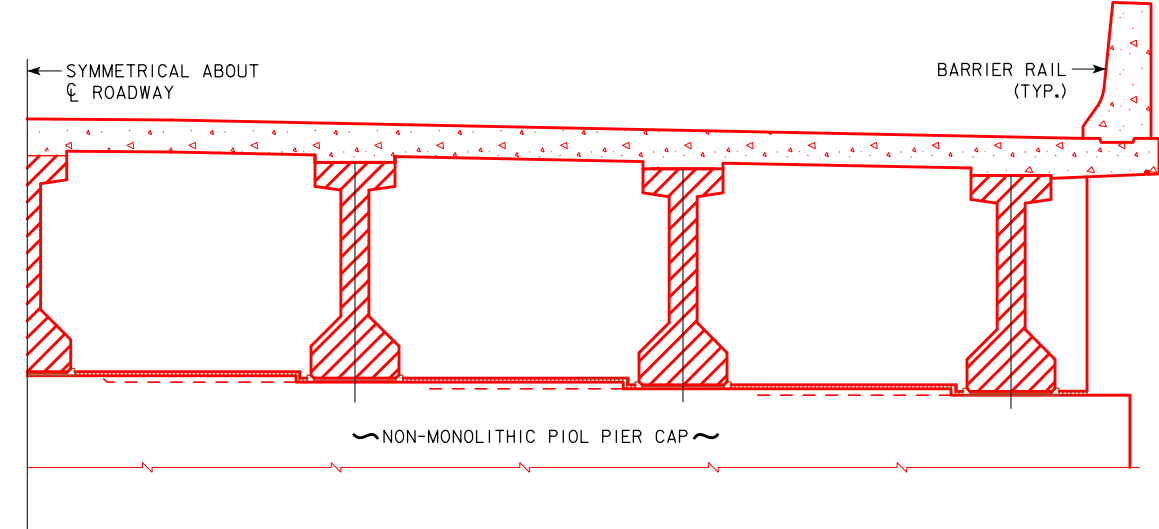


EXTERIOR BEAMS

INTERIOR BEAMS

TYPICAL DECK AND HAUNCH DETAIL

\* FOR DECK THICKNESS OVER BEAMS SEE "DECK THICKNESS DETAILS" ON DESIGN SHEET NO. ----



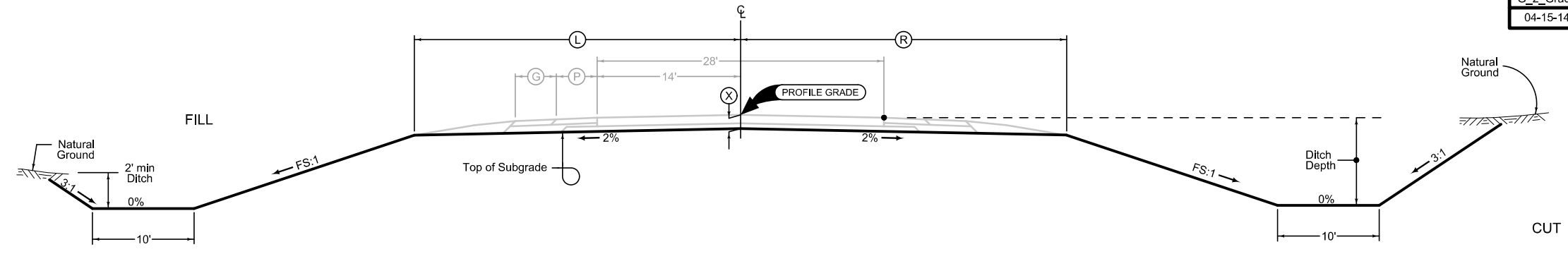
SECTION NEAR PIER

PRELIMINARY  
 DESIGN FOR 0° SKEW  
**188'-0 X 44'-0 PRETENSIONED  
 PRESTRESSED CONC. BEAM BRIDGE**  
 60'-9 SOUTH SPAN (D BEAM TYPE) 91'-6 INTERIOR SPAN  
 35'-9 NORTH SPAN  
**TRANSVERSE SECTION**  
 STA. 743+47.95 (US 65) AUGUST 2016  
**FRANKLIN COUNTY**  
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
 DESIGN SHEET NO. 3 OF 3 FILE NO. 31362 DESIGN NO. 119



LOCATION		DIMENSIONS			
ROAD IDENTIFICATION	STATION TO STATION	Ⓛ Feet	Ⓡ Feet	ⓧ Inches	FS
US 65		29.7	29.7	16	4:1

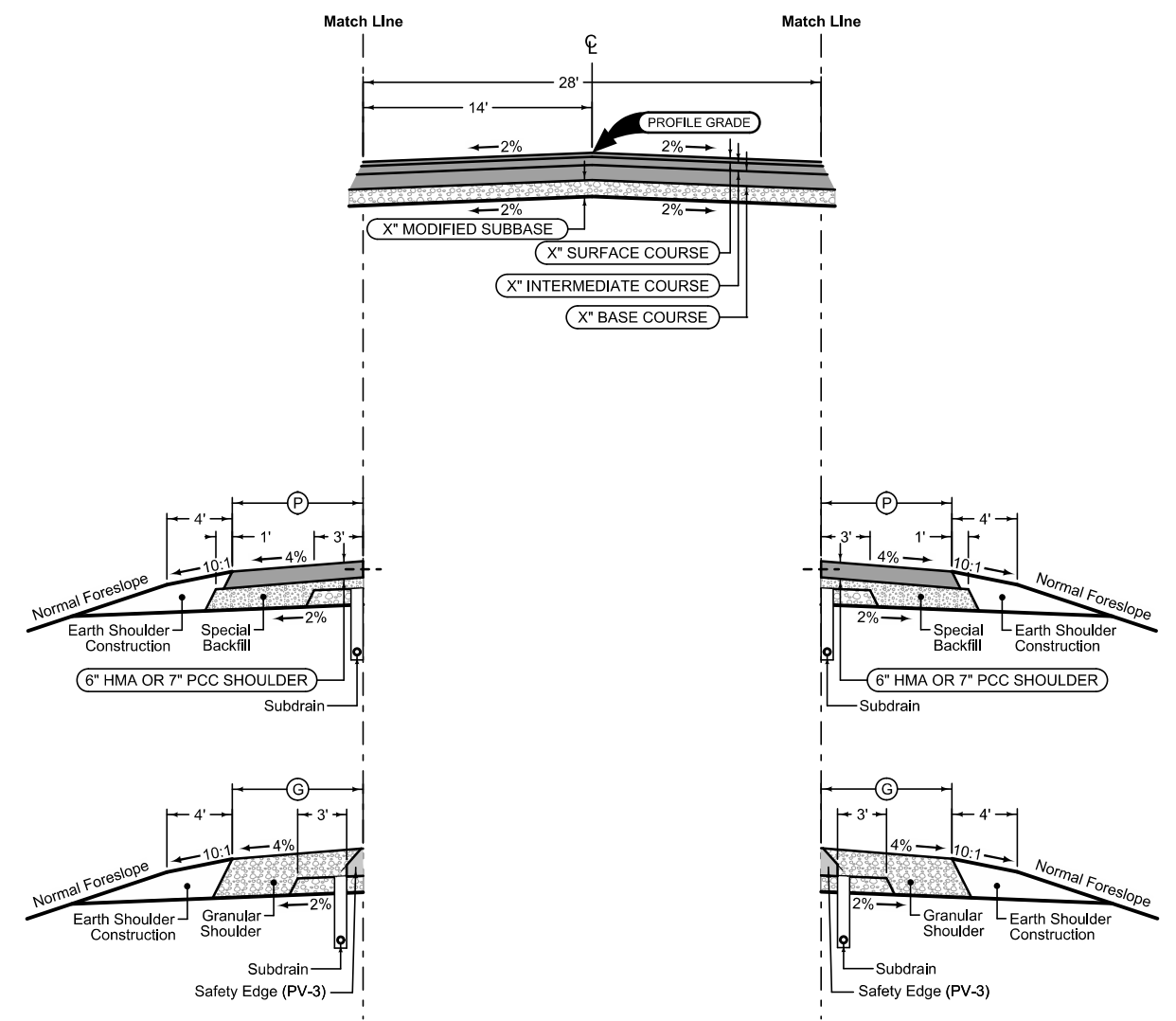
G\_2\_Grade  
04-15-14



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



2H_	
10-19-10	
STATION TO STATION	
557+20.00	559+42.58
562+49.42	566+65.00

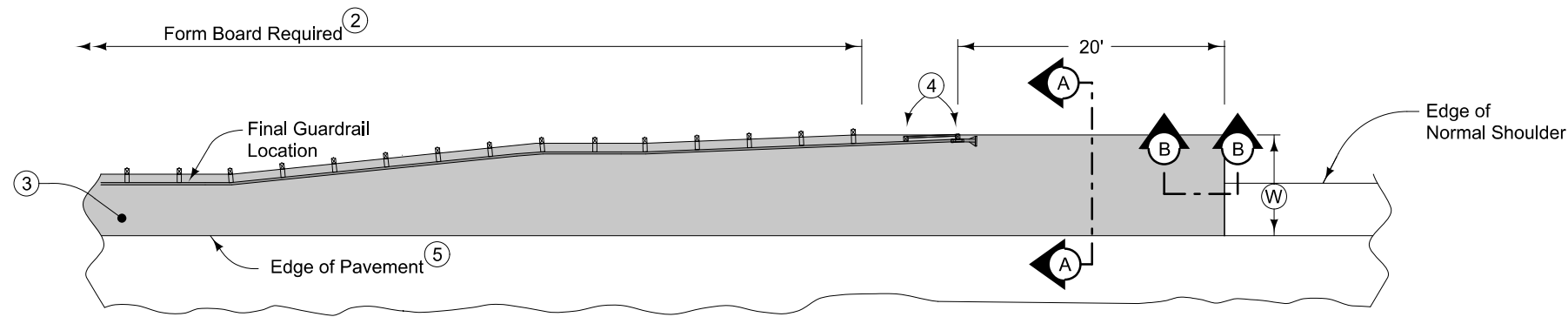
Paved Shoulder at Guardrail

PCC Shoulder Jointing:  
Longitudinal joint: BT-1 or BT-5  
Transverse joints: C at 20' spacing  
HMA Shoulder Jointing:  
Longitudinal joint: B

2_P_Guard_		
10-21-14		
STATION TO STATION		Ⓟ Feet
559+08.13	559+31.87	13.27
559+31.87	559+65.59	Var.
559+65.59	559+72.58	9.63
562+19.42	562+26.41	9.63
562+60.13	562+83.87	13.27

Granular Shoulder with Safety Edge

2_G_		
10-21-14		
STATION TO STATION		Ⓞ Feet
557+20.00	559+08.13	8.0
562+83.87	566+65.00	8.0

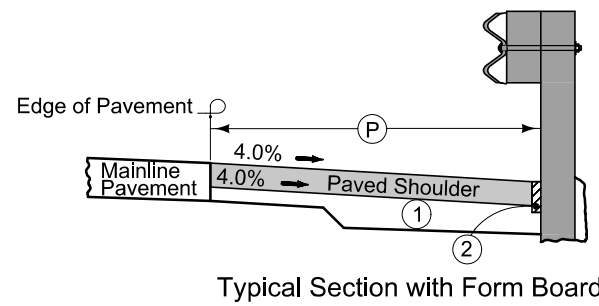


6" HMA Paved Shoulder at guardrail. 7" PCC may be substituted with the following jointing layout:

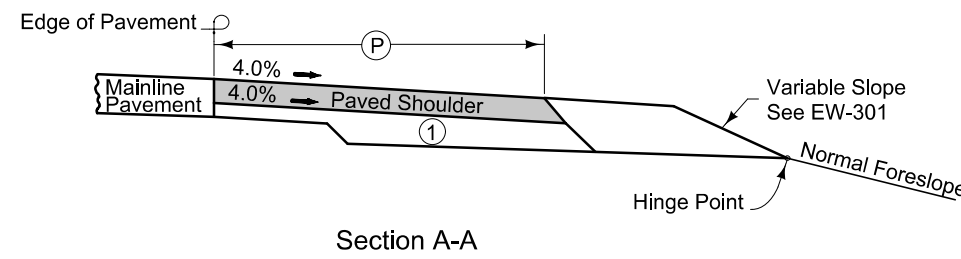
Match mainline pavement joint spacing. When mainline pavement is 8" or greater in thickness, place additional transverse 'C' joints in shoulder at mid-panel of the mainline pavement. Place longitudinal 'C' joint at W/2 from edge of mainline pavement when W is greater than 10' wide. Terminate longitudinal joint at transverse joint less than 10' in length.

Compaction of HMA is required to face of guardrail post. Hand compaction will be allowed under guardrail. Removal & reinstallation of guardrail will be allowed with no additional payment.

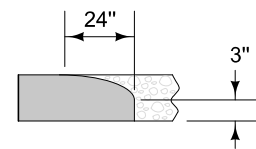
Refer to Shoulder tabulation (112-9) for quantities.



Typical Section with Form Board



Section A-A



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

- ① 6" subgrade treatment.
- ② When guardrail posts are installed prior to construction of paved shoulder, nail 1" x 6" untreated form boards along the face of guardrail posts for the length shown. This board is to prevent shoulder material from contacting the sides of the posts and altering the function of the guardrail. Form board not required for final 2 posts.
- ③ Continue paved shoulder to existing paved shoulder or 20' beyond the end of guardrail.
- ④ Shoulder may be notched for final 2 posts or post sleeves may be installed through pavement.
- ⑤ 'KT-1' joint for PCC shoulder.  
'B' joint for HMA shoulder.

PAVED SHOULDER AT GUARDRAIL



### SURVEY SYMBOLS

- IN Storm Sewer Intake
- MH Utility Access (Manhole)
- LIN Miscellaneous Line
- BRG Bridge
- PPA Power Pole Co. 1
- TVP TV Pedestal
- SI Sign
- MIS Miscellaneous
- TPD Telephone Pedestal
- PIP Pipe Culvert
- OUT Tile Outlet
- GDL Guard Rail Steel
- FW Wire Fence
- PLG Location of General Photo
- EP Edge of Paved Roads (ML or SR)
- CON Concrete or A/C Slab
- SNP Unpaved Shoulder
- CU Back of Curb
- GU Gutter In Front of Curb
- ENP Edge Paved Entrance & Park Lot
- ENT Centerline BL of Entrance
- ENU Edge Unpaved Entrance & Parking
- DU Centerline Draw or Stream (Up)
- DIK Centerline of Dike or Dam
- D Centerline Draw or Stream (Down)
- BNK Stream Bank
- EW Edge of Water
- SP Stream Profile
- BLD Building or Foundation
- RET Retaining Walls
- TDC Tree Deciduous
- TEV Evergreen Tree
- SHR Shrub
- SWK Sidewalk
- FWD Wood Fence
- HDG Hedge Row
- LUM Luminaire
- STP Stump
- LP L.P. Tank
- ST1D Storm Sewer Co. 1 - Quality D
- T1 Telephone Line Co. 1 - Quality D
- G Gas Line Co. 1 - Quality D
- W Water Line Co. 1 - Quality D
- TV TV1D TV Cable Co. 1 - Quality D
- FO FO1D Fiber Optic Co. 1 - Quality D
- FO2 FO2D Fiber Optic Co. 2 - Quality D
- San SA1D Sanitary Sewer Co. 1- Quality D

### UTILITY LEGEND

- MIDAMERICAN-GAS  
Contact Name : jeremy.sorensen  
Contact Phone: 319-291-4728  
Contact Email: JJSorensen@midamerican.com
- MIDAMERICAN-ELEC  
Contact Name : Adam Streeter  
Contact Phone: 319-291-4742  
Contact Email: astreeter@midamerican.com
- TV  
 TVP  
MEDIACOM  
Contact Name : Bob Stalker  
Contact Phone: 641-430-0748  
Contact Email: rstalker@mediacomcc.com
- T1  
 TP  
IOWA COMMUNICATIONS NETWORK  
Contact Name : Doug Ebelsheiser  
Contact Phone: 515-725-4742  
Contact Email: doug.ebelsheiser@iowa.gov
- F0  
 F02  
WINSTREAM MCLEOD  
Contact Name : Joe Green  
Contact Phone: 319-790-7510  
Contact Email: joseph.green@windstream.com
- St.S.  
 W  
 San.  
CITY OF HAMPTON  
Contact Name : Trev Murphy  
Contact Phone: 641-456-2124  
Contact Email:

### 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

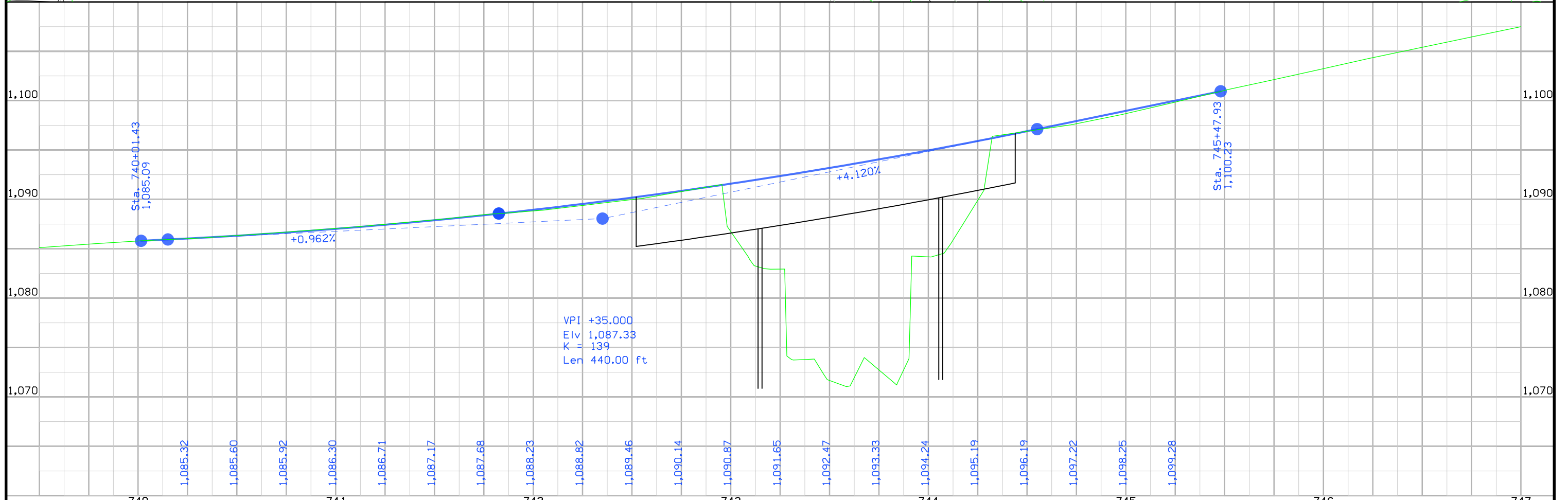
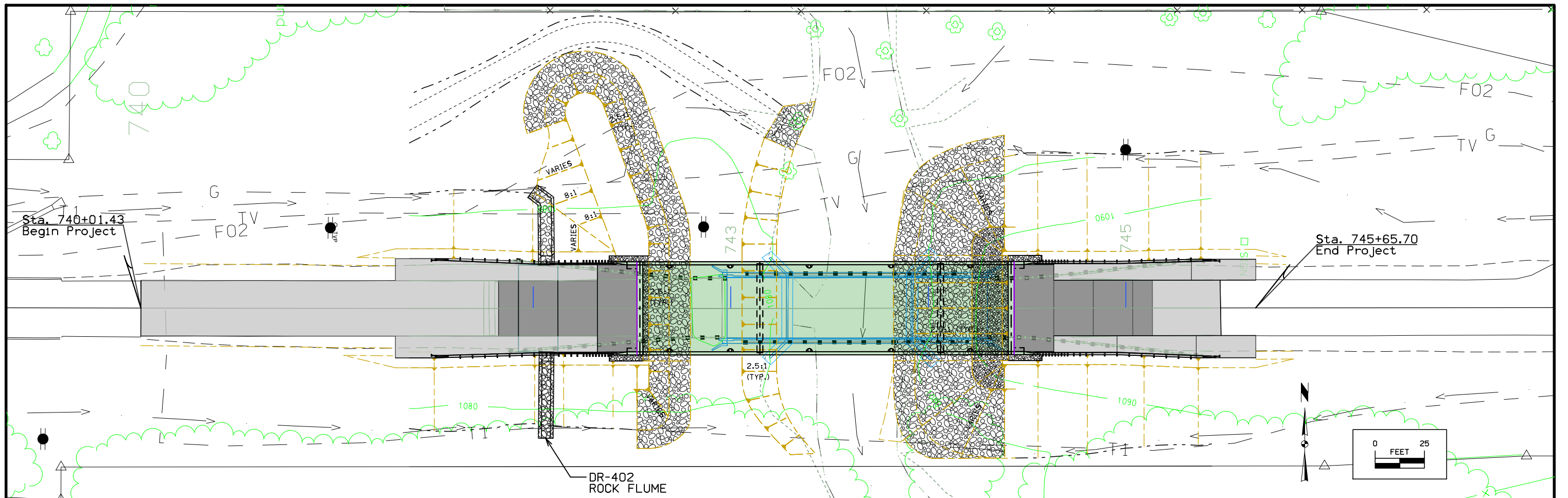
### RIGHT-OF-WAY LEGEND

- 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

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





# Survey Information

## General Information

Measurement units for this survey are US survey feet. This survey is for replacement of the US 65 Bridge (Maint. No. 3569.4S065) on US Hwy. 65 – 1.3 miles North of IA Hwy. 3.

## Vertical Control

Vertical datum for this survey is NAVD88 (Computed using Geoid 12B). The Ellipsoidal Height was computed at control point SC11 by performing a static GPS survey with an NGS OPUS Solution. Addition benchmark and elevations on control points were then established using differential leveling.

## Horizontal Control

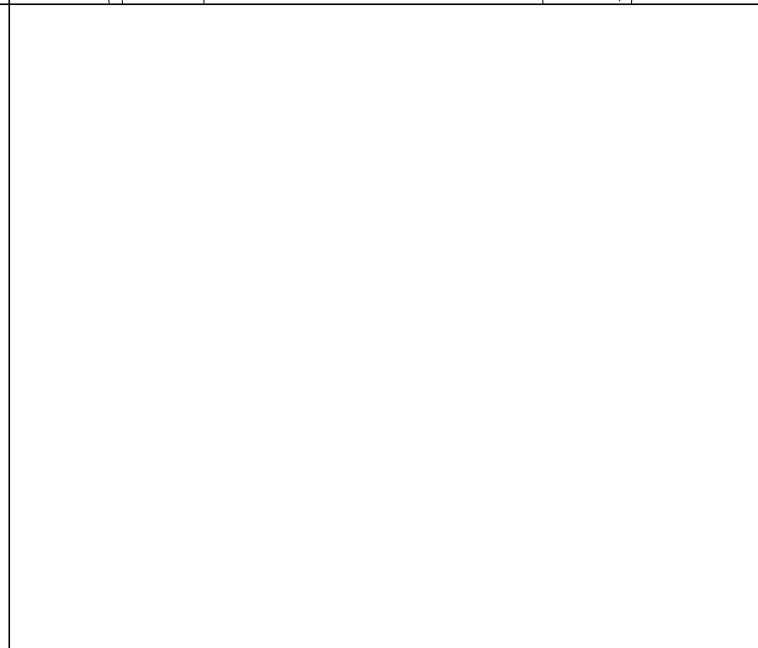
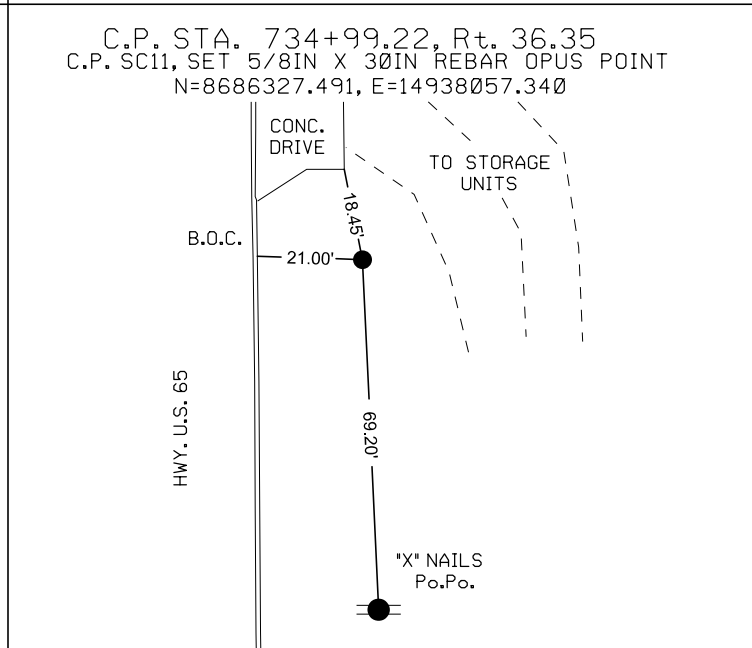
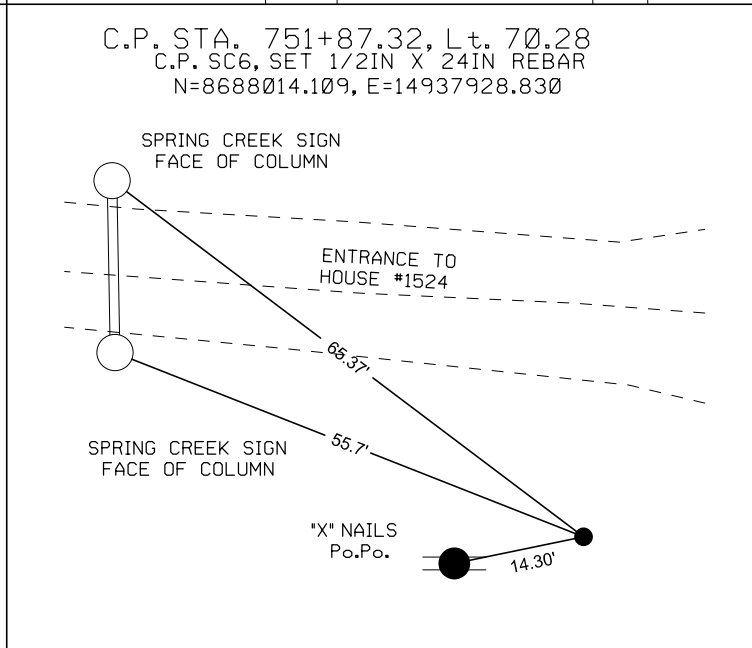
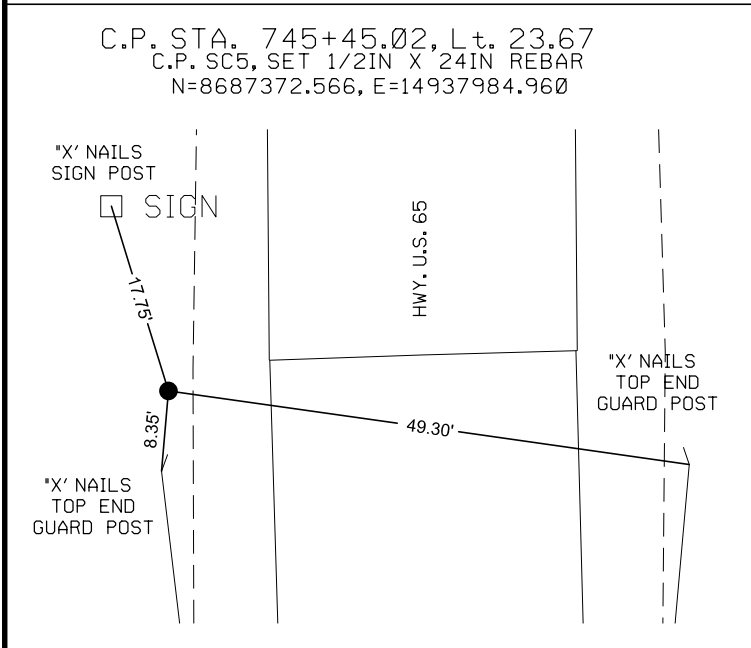
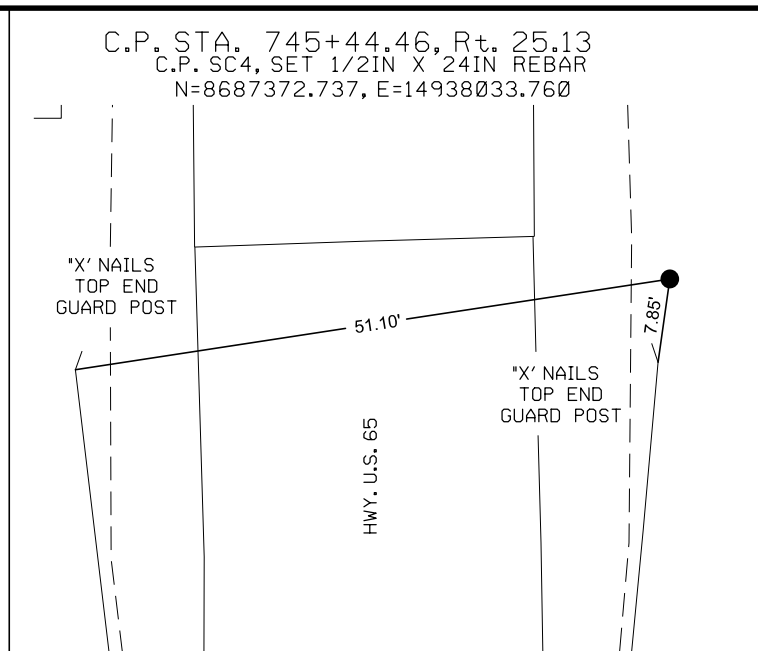
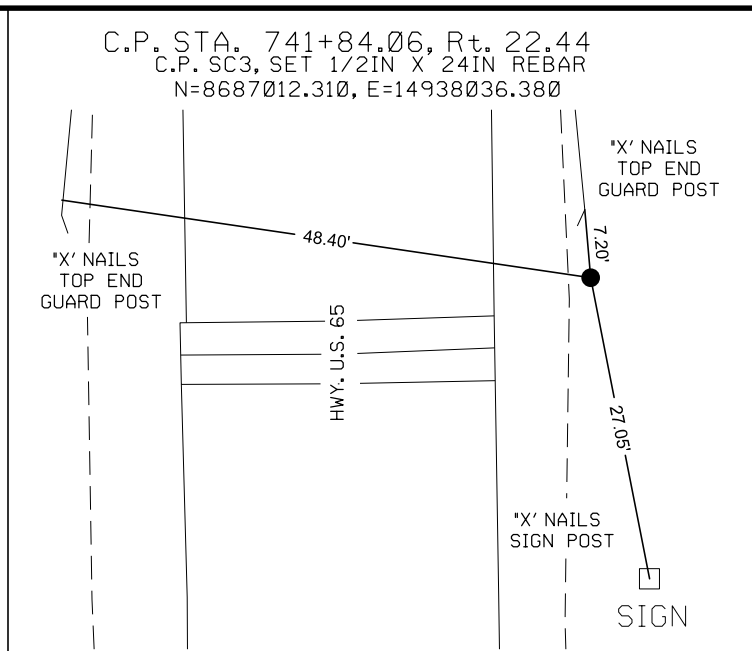
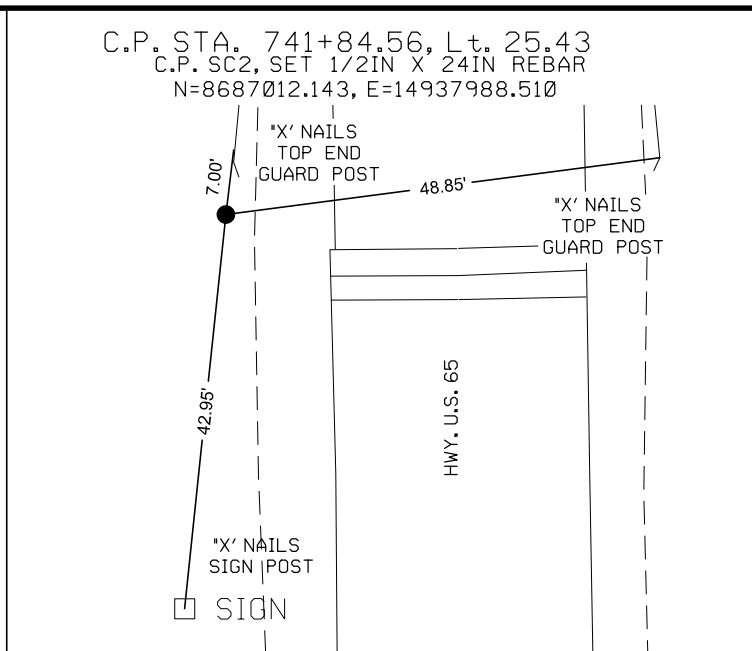
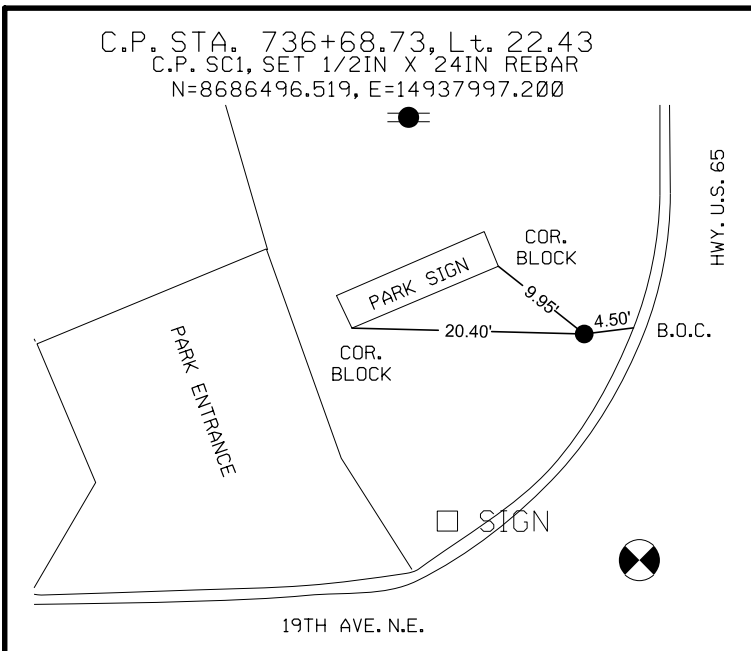
The project coordinate system for this survey is the Iowa Regional Coordinate System (IaRCS) Zone 04 (U.S. Survey Feet). Iowa State Plane Coordinates (Ia North 1401) were established on control point SC11 by performing a static GPS survey with an NGS OPUS Solution, the base stations used in the solution were IAHT IADT, IAAL and IAAL. The Iowa state plane coordinates were converted to Iowa Regional Coordinate (Zone 4 U.S. Survey Feet). Then coordinates were established on the remaining project control points.

## Alignment Information

The horizontal alignment for this survey is a retrace of as-built Plans Franklin County Project Number FN-212 1961 Grading and Paving. PI station 739+61.2 was used for stationing.

## VERTICAL CONTROL

Point	North	East	Elevation	Station	Offset	Feature	Description
500	8686735.809	14937977.500	1082.604	739+08.28	-39.861	BM	60D SPIKE IN POWER POLE ON WEST SIDE OF HWY 65 - 300 FT SOUTH OF BRIDGE (2ND POWER POLE NORTH OF 1
501	8687121.702	14937995.940	1093.684	742+94.02	-16.407	BM	CUT X TOP OF SOURHTWEST CONCRETE BARRIER WING OF HWY 65 BRIDGE OVER SPRING CREEK
502	8687555.945	14937918.920	1106.244	747+29.35	-86.980	BM	60D SPIKE IN LIGHT POLE ON WEST SIDE OF HWY 65 - 200 FT NORTH OF BRIDGE AT ENTRANCE TO HOUSE NOS. 1





ALIGNMENT COORDINATES

101-16  
10-20-09

Name	Location	Point on Tangent			Begin Spiral			Begin Curve			Simple Curve PI or Master PI of SCS			End Curve			End Spiral		
		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates	
			Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)
101		732+00.00	8,686,027.99	14,938,023.39															
102							736+61.20	8,686,489.17	14,938,019.69	739+61.20	8,686,789.16	14,938,017.28	742+61.20	8,687,089.13	14,938,012.83				
103		755+83.72	8,688,411.50	14,937,993.22															

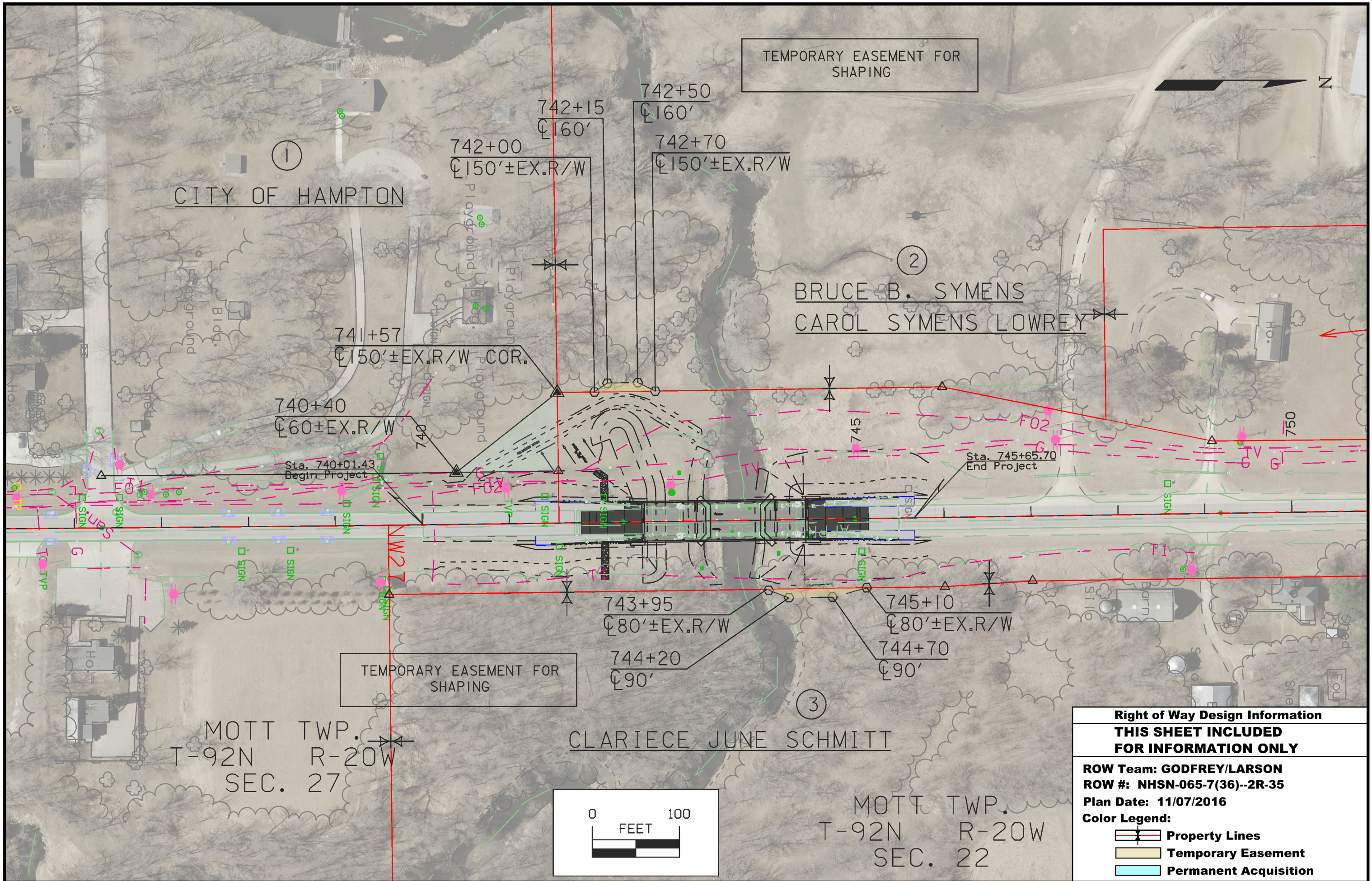
SPIRAL OR CIRCULAR CURVE DATA

101-17  
04-19-11

Name	Location	Δ <sub>scs</sub>	Horizontal Alignment Data												Remarks					
			Spiral Data						Curve Data											
			θs	Ls	Ts	Es	Xc	Yc	L.T.	S.T.	Δ <sub>c</sub>	T	L	R		E				
102															0° 23' 22.76" LT	300.00'	600.00'	88,225.39'	0.51'	







<b>Right of Way Design Information</b>	
<b>THIS SHEET INCLUDED FOR INFORMATION ONLY</b>	
ROW Team: GODFREY/LARSON	
ROW #: NHSN-065-7(36)--2R-35	
Plan Date: 11/07/2016	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition



**LINE STYLE LEGEND OF CROSS SECTION SHEETS (ROAD)**

- - - - - - Existing Ground Line
- Proposed Template
- Proposed Topsoil Placement
- - - - - - Additional Topsoil Removal
- Subgrade Treatment
- - - - - Granular Shoulder
- Pavement
- - - - - - Existing Pipe\RCB
- Proposed Pipe\RCB
- Proposed Dike
- All Elements Associated with Proposed Entrances

**LINE STYLE LEGEND OF CROSS SECTION SHEETS (SOILS)**

- TS————— Topsoil (Class 10)
- Slope Dressing Only
- CL 10————— Class 10 Materials
- SEL L0————— Select Loams And Clay-Loams
- SEL SA————— Select Sand
- UNS A————— Unsuitable Type A Disposal
- UNS B————— Unsuitable Type B Disposal
- UNS C————— Unsuitable Type C Disposal
- SHALE————— Shale
- WASTE————— Waste
- B&W LS————— Broken and Weathered Rock
- ROCK————— Solid Rock
- BLDRS————— Boulders

Note: All layer lines and descriptions identify layers above the line.

Note: Vertical or near vertical lines connecting soil layers at edges of cross sections are only for the purpose of calculating template quantities and do not depict soil stratification.

**SYMBOL LEGEND OF CROSS SECTION SHEETS**

- Existing  
ROW  
|  
Existing Right-of-Way Limit
- Proposed  
ROW  
|  
Proposed Right-of-Way Limit
- Temporary  
ROW  
|  
Temporary Right-of-Way Limit

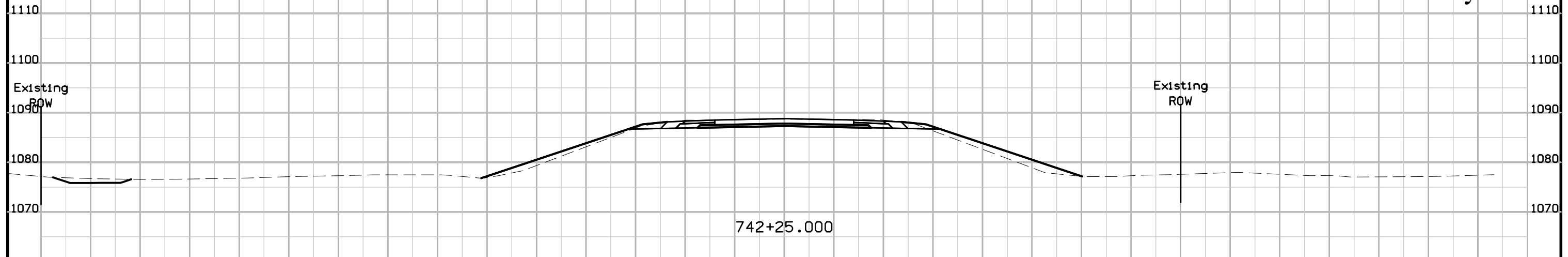
**CROSS SECTION  
LEGEND AND SYMBOL  
INFORMATION SHEET**

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

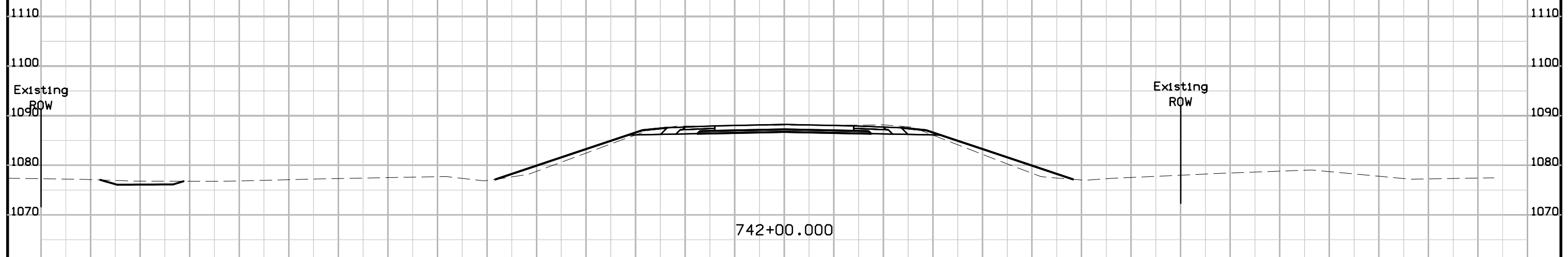
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US 65

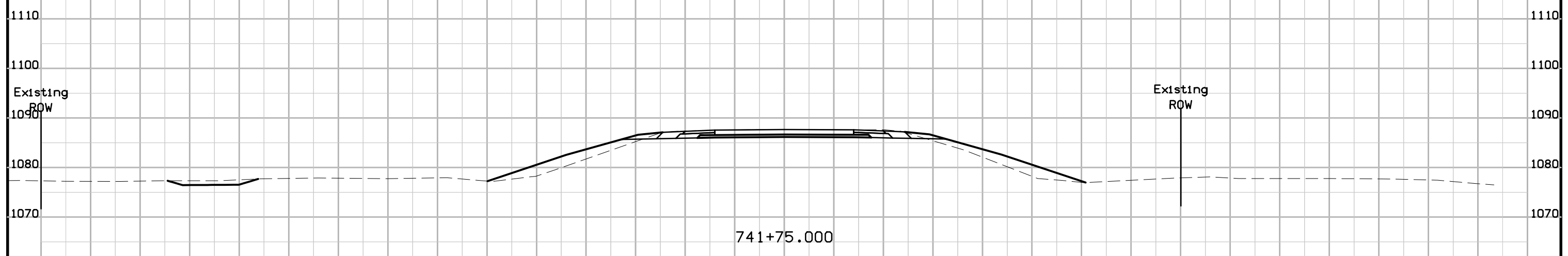
Preliminary



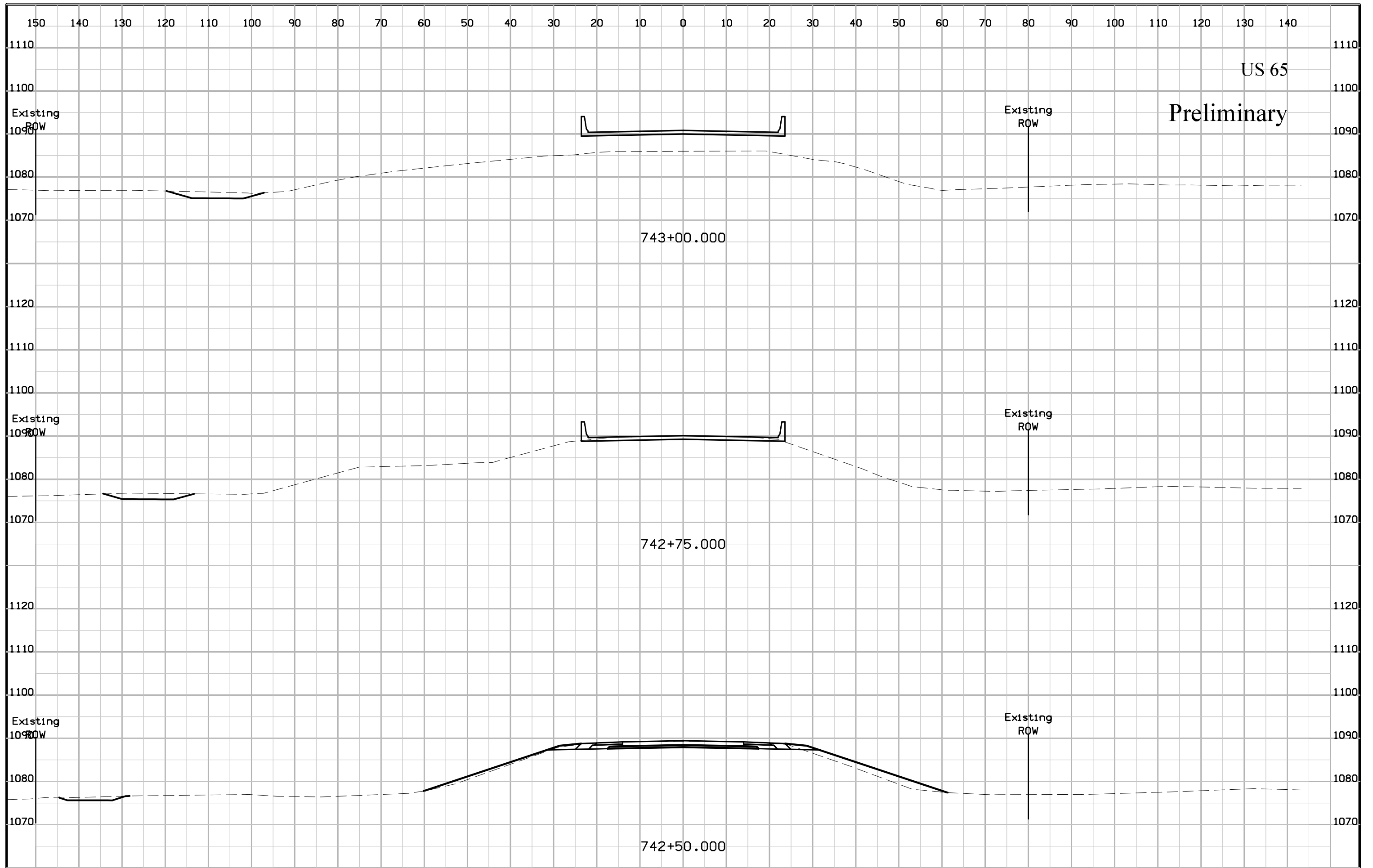
742+25.000



742+00.000



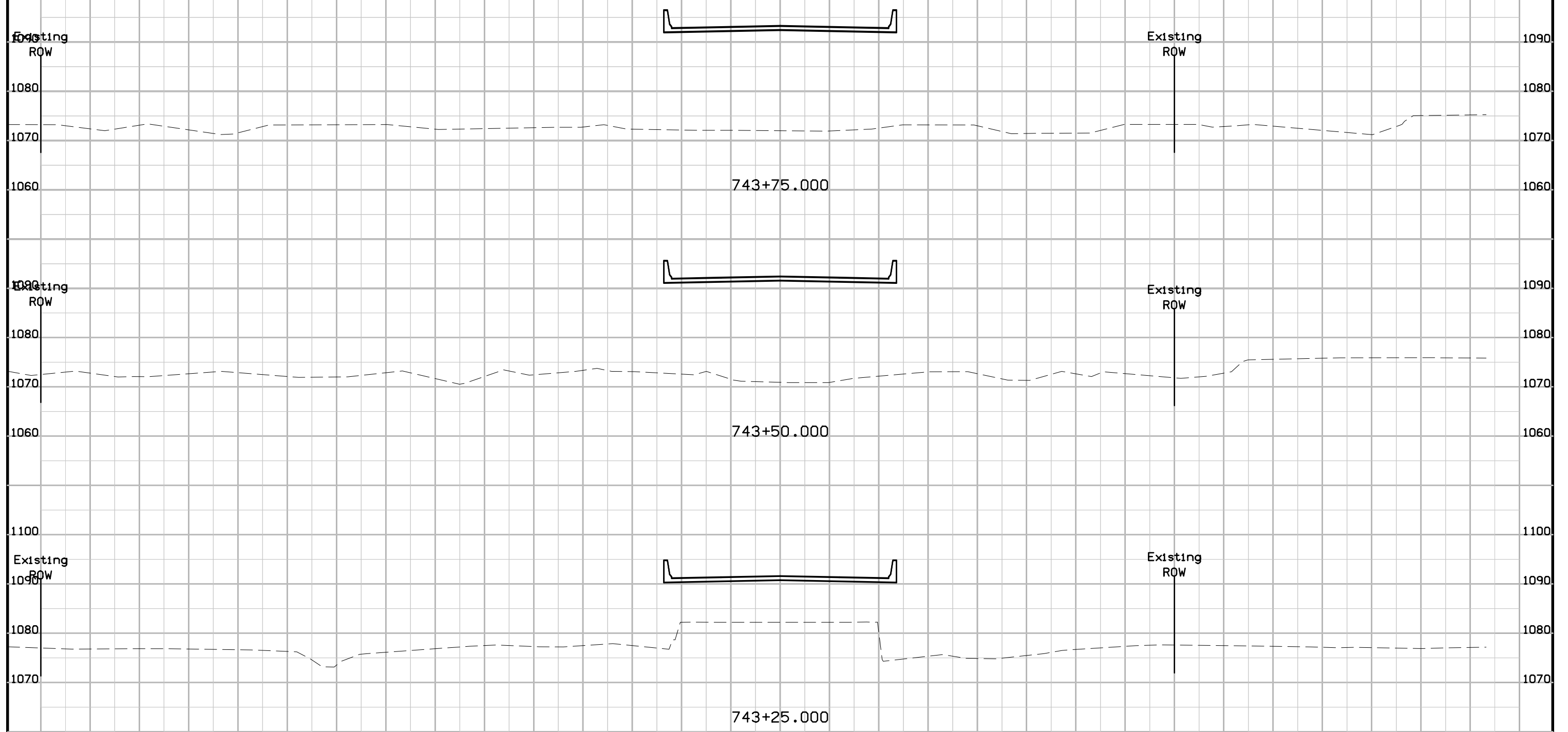
741+75.000





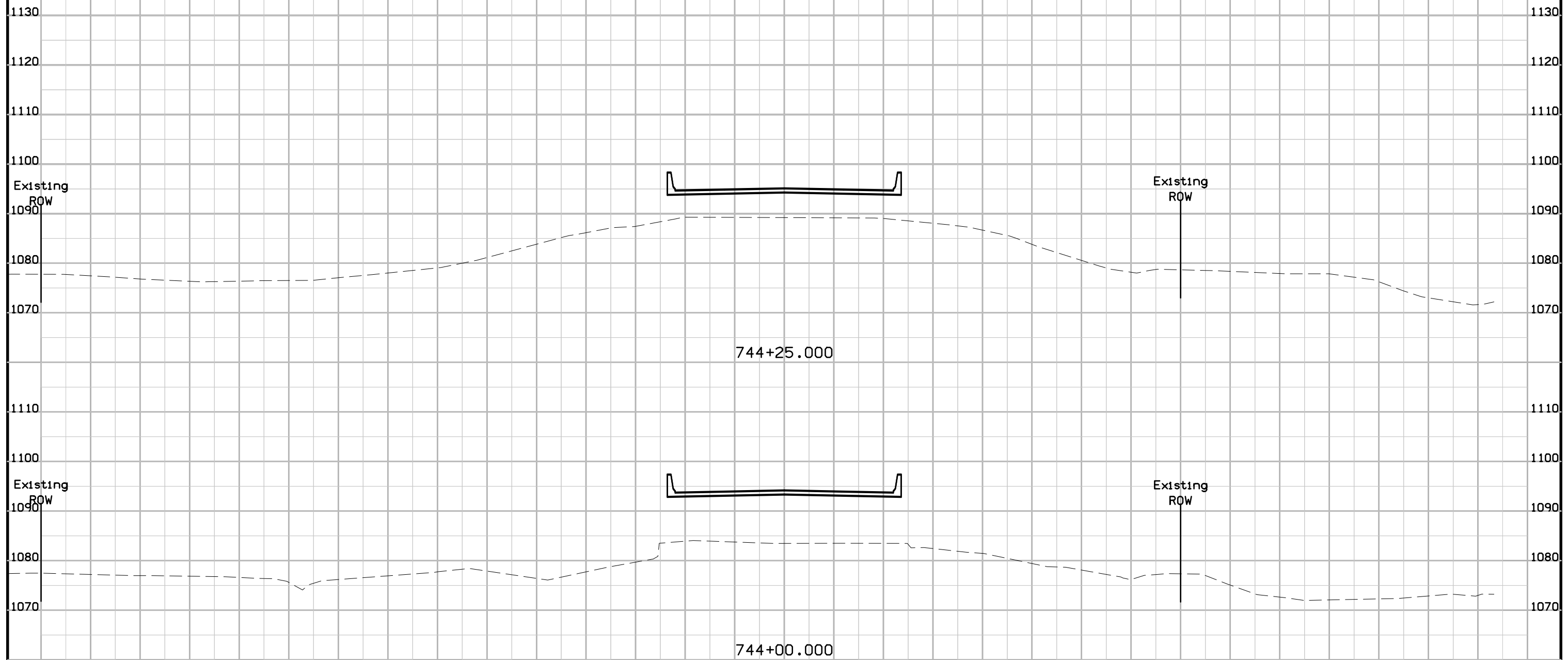
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# US 65 Preliminary

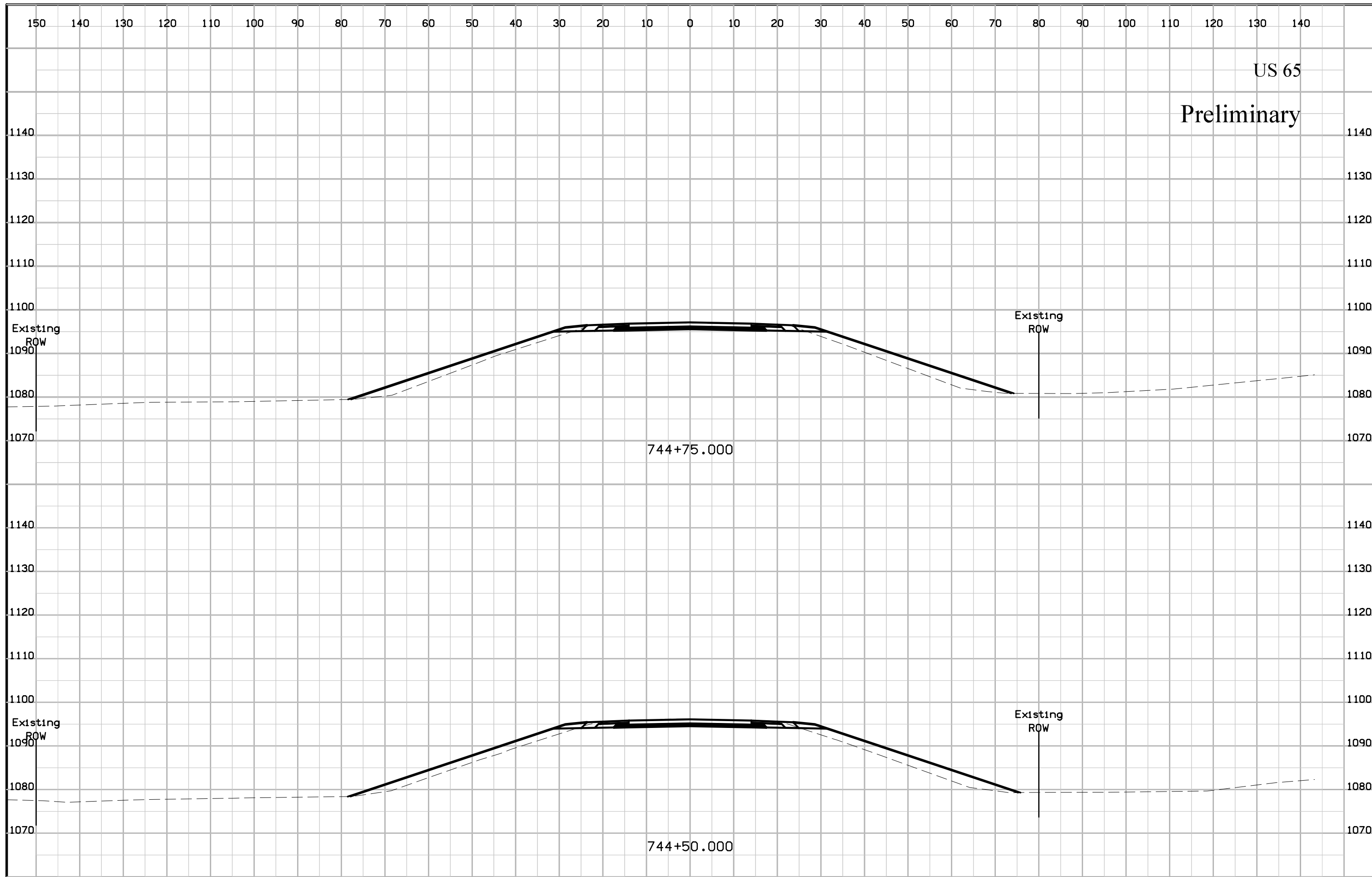


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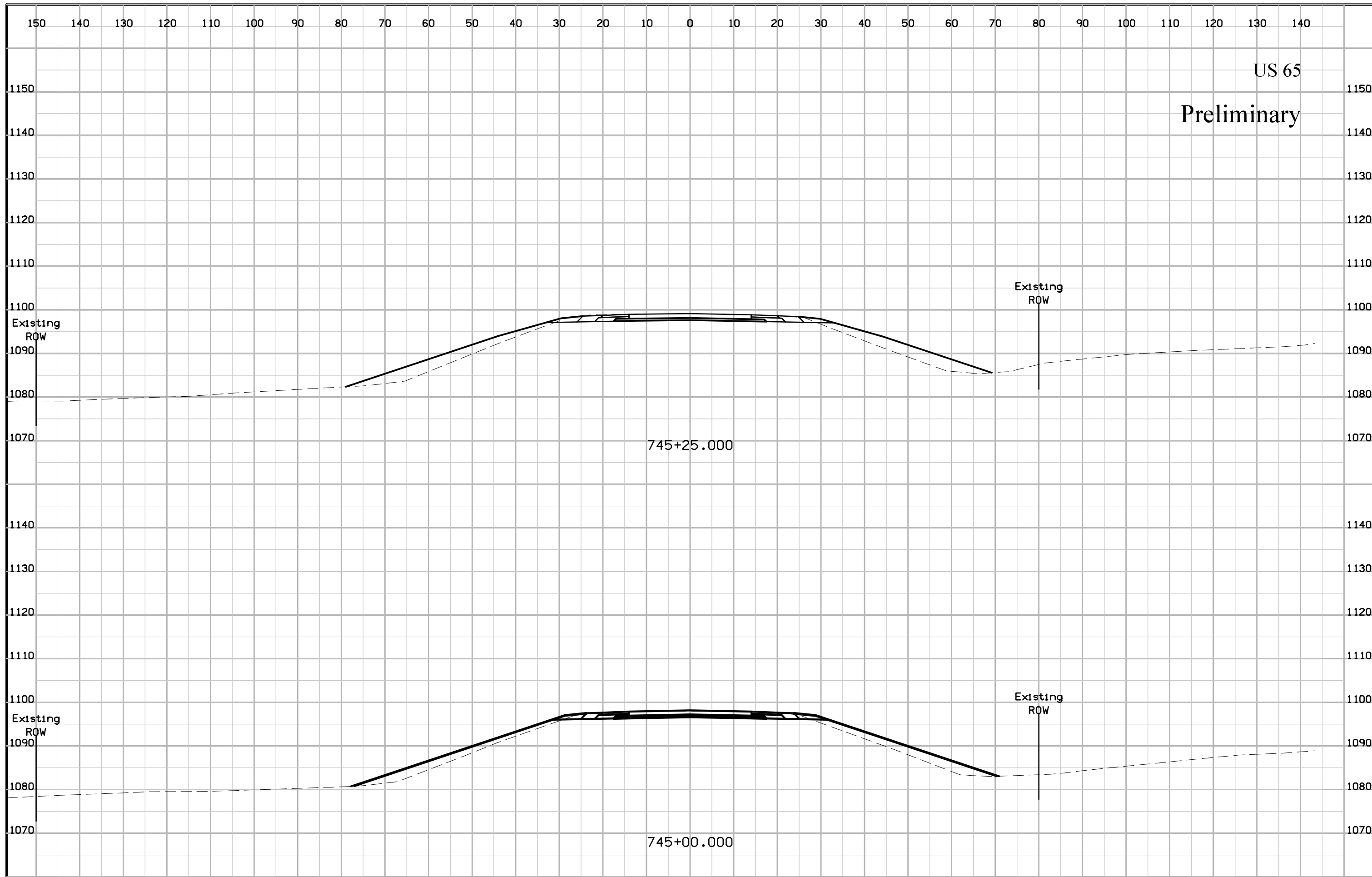
# US 65 Preliminary



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US 65  
Preliminary



US 65  
Preliminary