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A Sheets	Title Sheets
A.1	Title Sheet
A.2	Location Map Sheet
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B.1 - 2	Typical Cross Sections and Details
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D.2*	US 218
G Sheets	Survey Sheets
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G.3	Horizontal Control Tab. For Mainline and Crossovers
J Sheets	Traffic Control and Staging Sheets
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J.1	Staging Notes
J.2 - 3*	South Crossover Plan and Profile
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\*Color Plan Sheets



PLANS OF PROPOSED IMPROVEMENT ON THE  
**PRIMARY ROAD SYSTEM**  
**HENRY COUNTY**  
**BRIDGE REPLACEMENT**  
 US-218 NB Bridge over the Skunk River  
 4.7 Miles South of the South Junction of U.S. 34

SCALES: As Noted

The Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, series 2001, plus General Supplemental Specifications; and applicable Supplemental Specifications, Developmental Specifications, and Special Provisions, shall apply to construction on this project.

Value Engineering Saves. Refer to Article 1105.15 of the Specifications.

**NO MILEAGE SUMMARY**

For Project Location Map  
Refer to Sheet A.2

REVISIONS

TOTAL
22
PROJECT IDENTIFICATION NUMBER
13-44-218-010
PROJECT NUMBER
BRF-218-2(142)--38-44
R.O.W. PROJECT NUMBER
--

DESIGN DATA RURAL			
2018	AADT	9000	V.P.D.
2038	AADT	12000	V.P.D.
20	DHV	-	V.P.H.
TRUCKS		23	%
Total			
Design	ESALs		

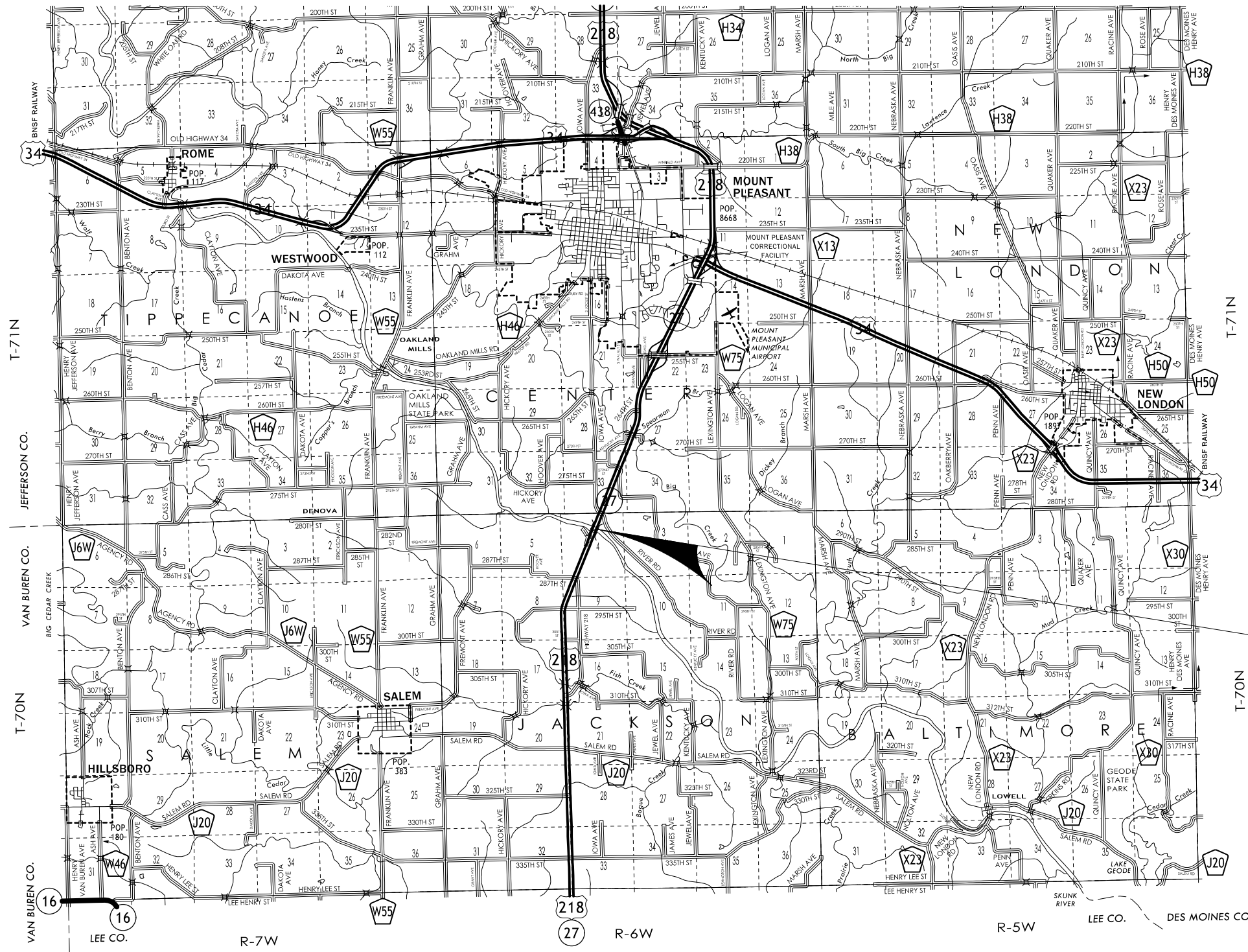
INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	Project Manager	Primary Signature Block
V.1	Bridge Project Manager	Bridge Signature Block

**PRELIMINARY PLANS**

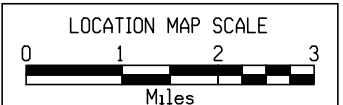
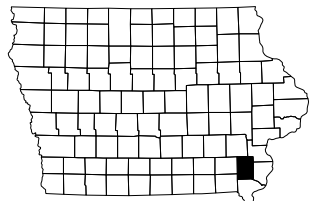
Subject to change by final design.

D2 PLANS - DATE: JUNE 1, 2015  
 D3 PLANS - DATE: JUNE 15, 2015  
 D5 PLANS - DATE: AUG 31, 2015

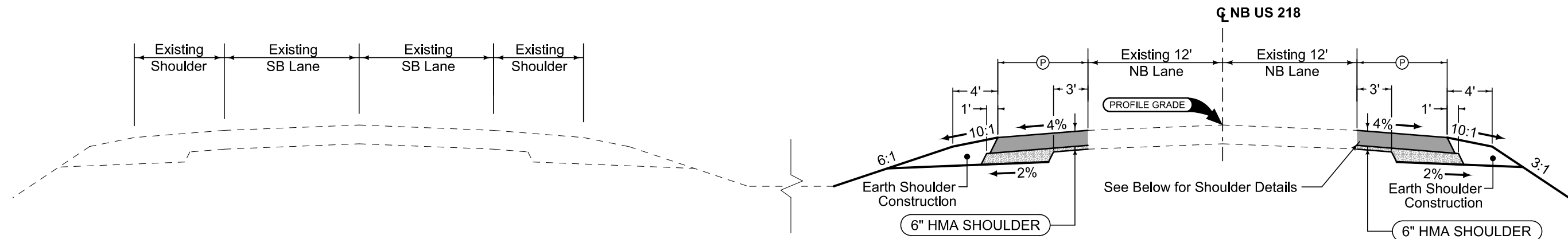
# HENRY COUNTY



STA. 310+88.00 (PROPOSED)  
 STA. 310+85.00 (EXISTING)  
 FHWA 28470  
 MAINT. NO. 4437.4R218  
 DESIGN 361



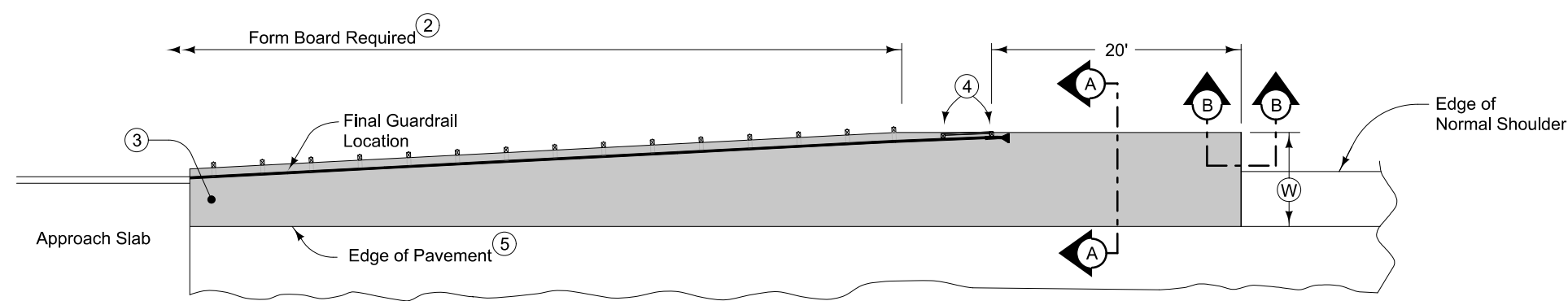
## LOCATION MAP



US 218  
Sta. 305+40.00 to Sta. 307+06.00

For Bridge Approach Details, See BR-203.  
South Approach - Sta. 307+06.00 to Sta. 307+76.00  
North Approach - Sta. 314+00.00 to Sta. 314+70.00

7156  
04-16-13



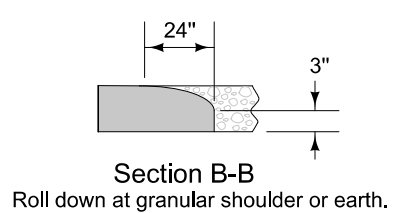
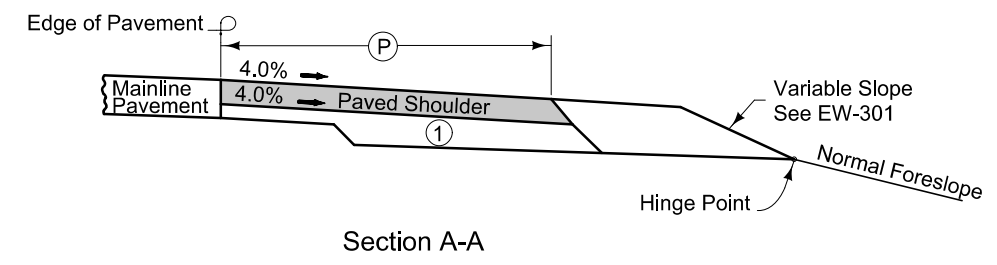
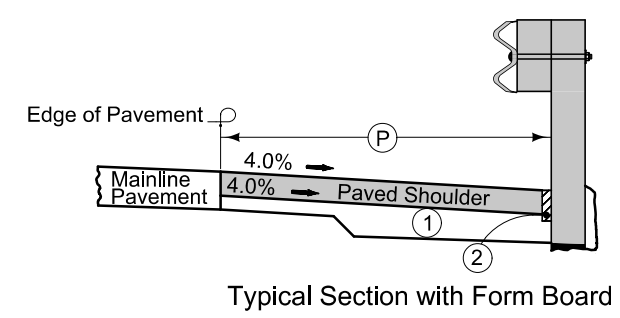
6" HMA Paved Shoulder at guardrail. 7" PCC may be substituted with the following jointing layout:

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.

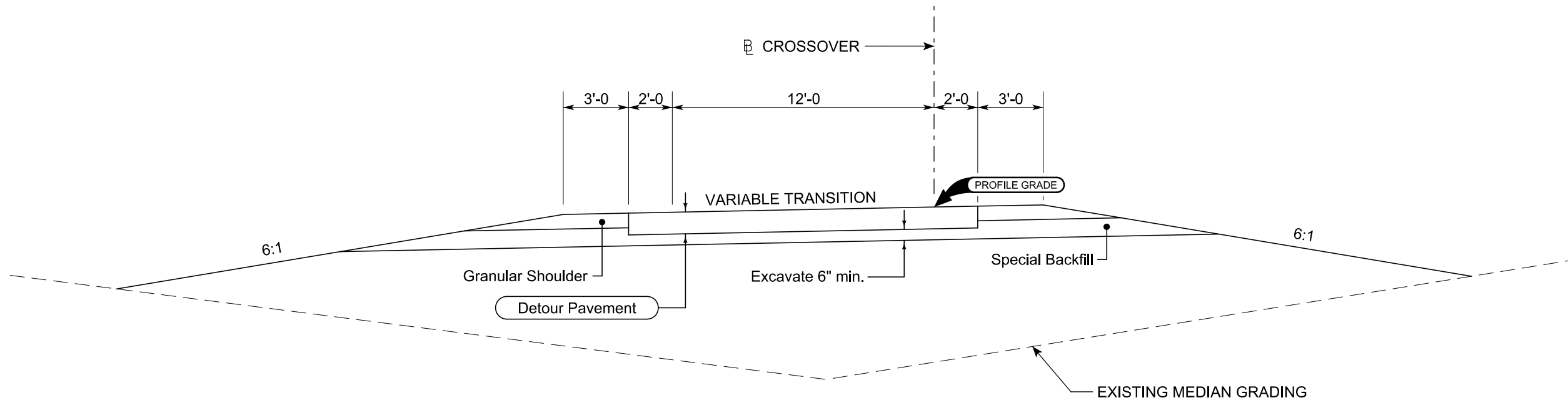
Compaction of HMA is required to face of guardrail post. Hand compaction will be allowed under guardrail. Removal & reinstallation of guardrail will be allowed with no additional payment.

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

- (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.

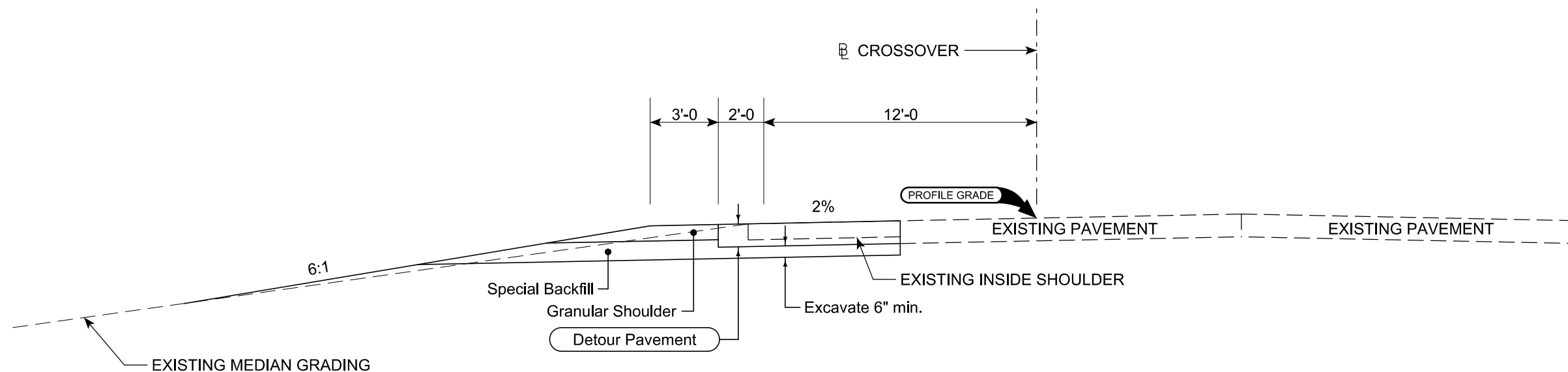


PAVED SHOULDER AT GUARDRAIL



### CROSSOVER - FULL SECTION

(LOOKING NORTH)  
 SOUTH CROSSOVER - STA. 13+55.72 to STA. 19+41.49  
 NORTH CROSSOVER - STA. 23+54.51 to STA. 29+57.28



### CROSSOVER - WIDENING SECTION

(LOOKING NORTH)  
 SOUTH CROSSOVER - STA. 10+00.00 to STA. 13+55.72  
 SOUTH CROSSOVER - STA. 19+41.49 to STA. 22+96.00  
 NORTH CROSSOVER - STA. 20+00.00 to STA. 23+54.51  
 NORTH CROSSOVER - STA. 29+57.28 to STA. 33+13.00

For Crossover Details, See Sheets J.2 - J.5 and Standard PV-513.

### SURVEY SYMBOLS

	Interstate Highway Symbol		Septic Tank		Guardrail (Beam or Cable)
	U.S. Highway Symbol		Cistern		Guard Post (one or two)
	Iowa Highway Symbol		L.P. Gas Tank (No Footing)		Guard Post (over two)
	County Road Highway Symbol		Underground Storage Tank		Filler Pipe
	Evergreen Tree		Latrine		Gas Valve
	Deciduous Tree		Luminaire		Water Valve
	Fruit Tree		Traffic Signal		Speed Limit Sign
	Shrub (Bushes)		Traffic Signal with Luminaire		Mile Marker Post
	Timber		Telephone Pedestal		Sign
	Hedge		Television Pedestal		Water Hook Up
	Stump		Telephone Pole		Radio Tower
	Swamp		Telephone Pole (Second Company)		Tower Anchor
	Rock Outcrop		Telephone Pole (Third Company)		Electric Box
	Broken Concrete		Telephone Pole (Fourth Company)		Traffic Signal Control Box
	Revetment (Rip Rap)		Telephone Pole (Fifth Company)		Rail Road Signal Control Box
	Cemetery		Power Pole		Telephone Switch Box
	Grave		Power Pole (Second Company)		
	Cave		Power Pole (Third Company)		
	Sink Hole		Power Pole (Fourth Company)		
	Board Fence		Power Pole (Fifth Company)		
	Chain Link or Security Fence		Electrical Highline Tower (Metal or Concrete)		
	Wire Fence		Telephone Riser Pole		
	Terrace		Power Riser Pole		
	Earth Dam or Dike (Existing)		Telegraph Pole		
	Earth Dam or Dike (Proposed)		Satellite TV Dish		
	Tile Outlet		Existing Water Line		
	Edge of Water		Existing Water Line (Second Company)		
	Existing Drainage		Existing Sanitary Sewer Line		
	Proposed Drainage		Existing Telephone Line		
	Right of Way Rail or Lot Corner		Existing Telephone Line (Second Company)		
	Concrete Monument		Existing Fiber Optics Telephone Line		
	Well		Existing Storm Sewer Line		
	Windmill		Existing Gas Line		
	Beehive Intake		Existing High Pressure Gas Line		
	Existing Intake		Existing Gas Line (Second Company)		
	Proposed Intake		Existing High Pressure Gas Line (Second Company)		
	Existing Utility Access (Manhole)		Existing Power Line		
	Proposed Utility Access (Manhole)		Existing Power Line (Second Company)		
	Fire Hydrant		Cable Television Line		
	Water Hydrant (Rural)				

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
Gray, Light	(48)		Proposed Shoulder Pavement 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

#### UTILITY LEGEND

Access Energy Cooperative  
 Mark Fulton  
 907 E. Washington  
 Mt. Pleasant, IA 52641  
 319-385-1577  
 mfulton@accessenergycoop.com

Windstream  
 Kelly Eggers  
 101 West Madison  
 Mt. Pleasant, IA 52641  
 319-385-5004  
 kelly.a.eggert@windstream.com

Rathbun Regional Water Association  
 Mike Stevens  
 16166 Hwy J-29  
 Centerville, IA 52544  
 641-647-2416  
 mstevens@rrwa.net

#### RIGHT-OF-WAY LEGEND

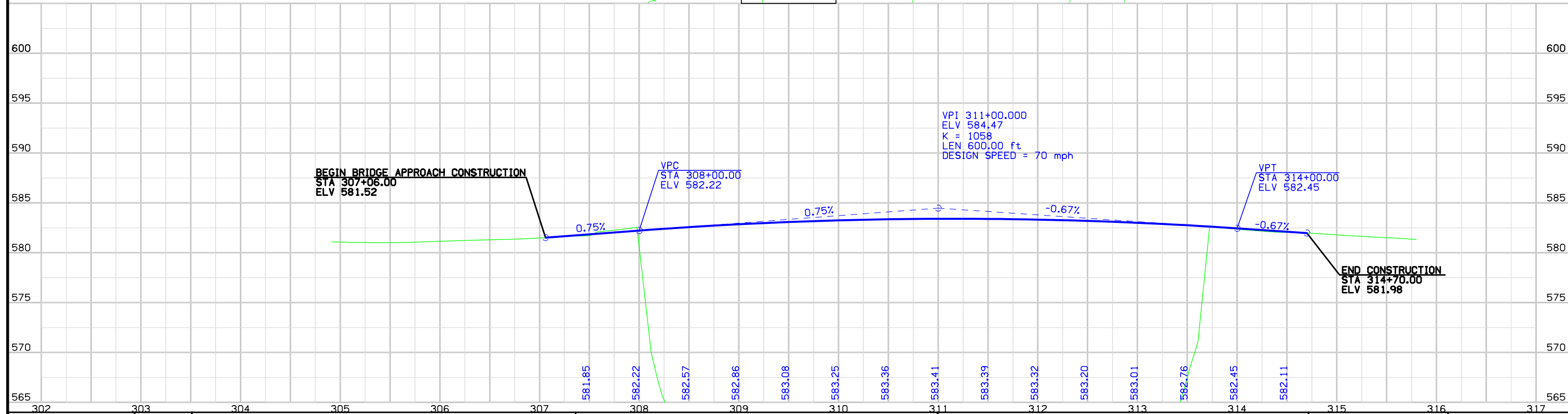
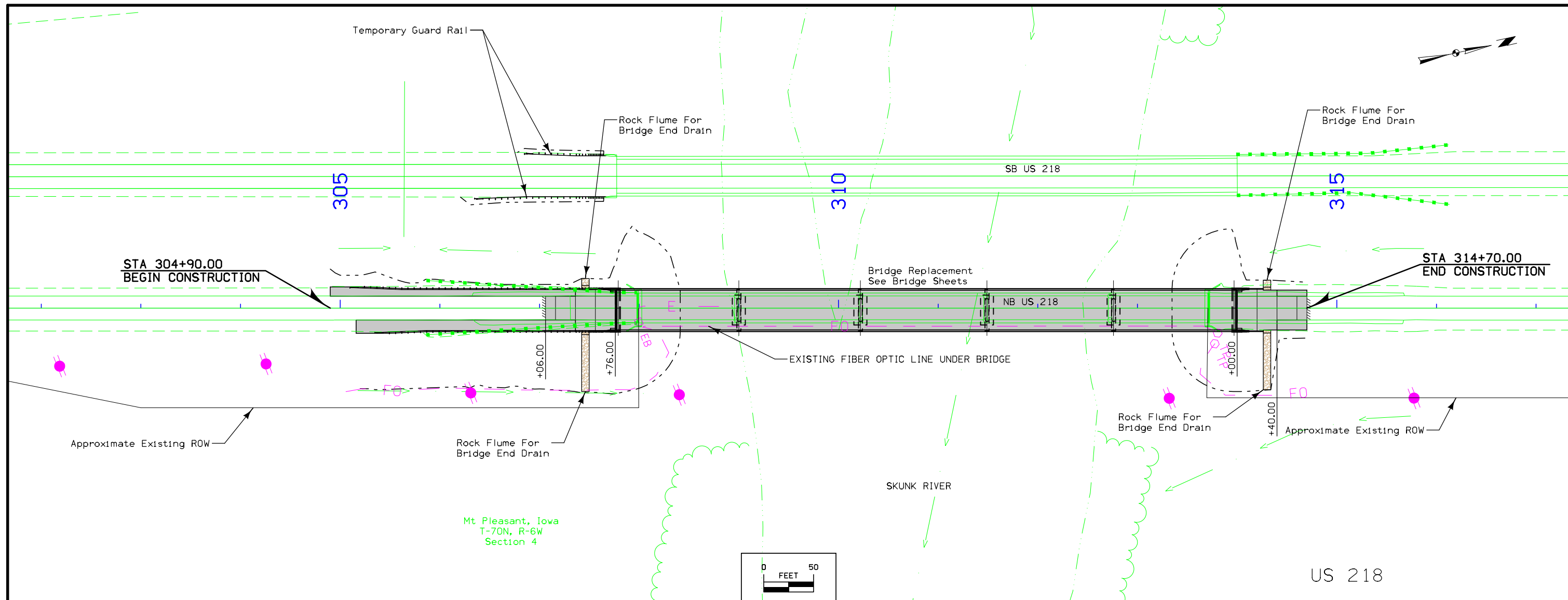
- Proposed Right of Way
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Borrow
- Easement (Temporary)
- Easement
- Excess
- Property Line
- A/C Access Control

#### CONVENTIONAL SIGNS

- Survey Line
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Rock Flume

# PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES D & J)



# Survey Information

## General Information

Measurement units for this survey are US Survey Feet. The survey consists of a topography survey for structure and roadway improvements at US 218 over the Skunk River in Henry County (south of the City of Mount Pleasant).

## Horizontal Control

The control for this project is the state plane coordinate system using the Iowa South Zone. A 1 minute observation was made on both control points 714 and 724 based on a 1.0000000 scale factor.

## Vertical Control

Vertical control is relative to the NAVD88 datum. Bench elevations on this survey relate to previous plans as follows:

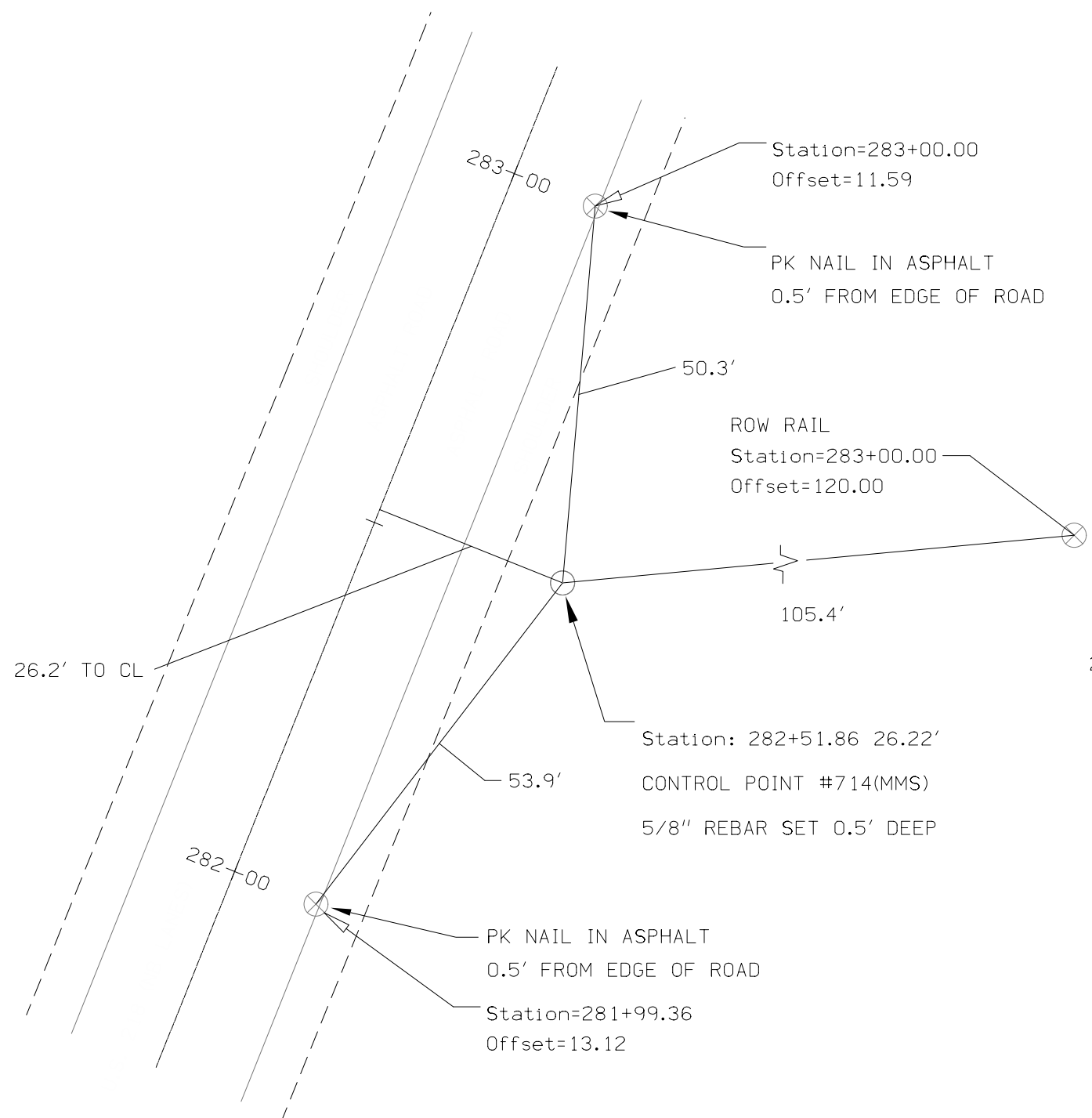
BM 22B (MMS Pnt#706) Found IHC in Northwest wing wall of bridge Elev=582.73  
 BM (MMS Pnt#707) Found IHC in Southbound bridge wing wall of bridge Elev=586.39

## Horizontal Alignment Information

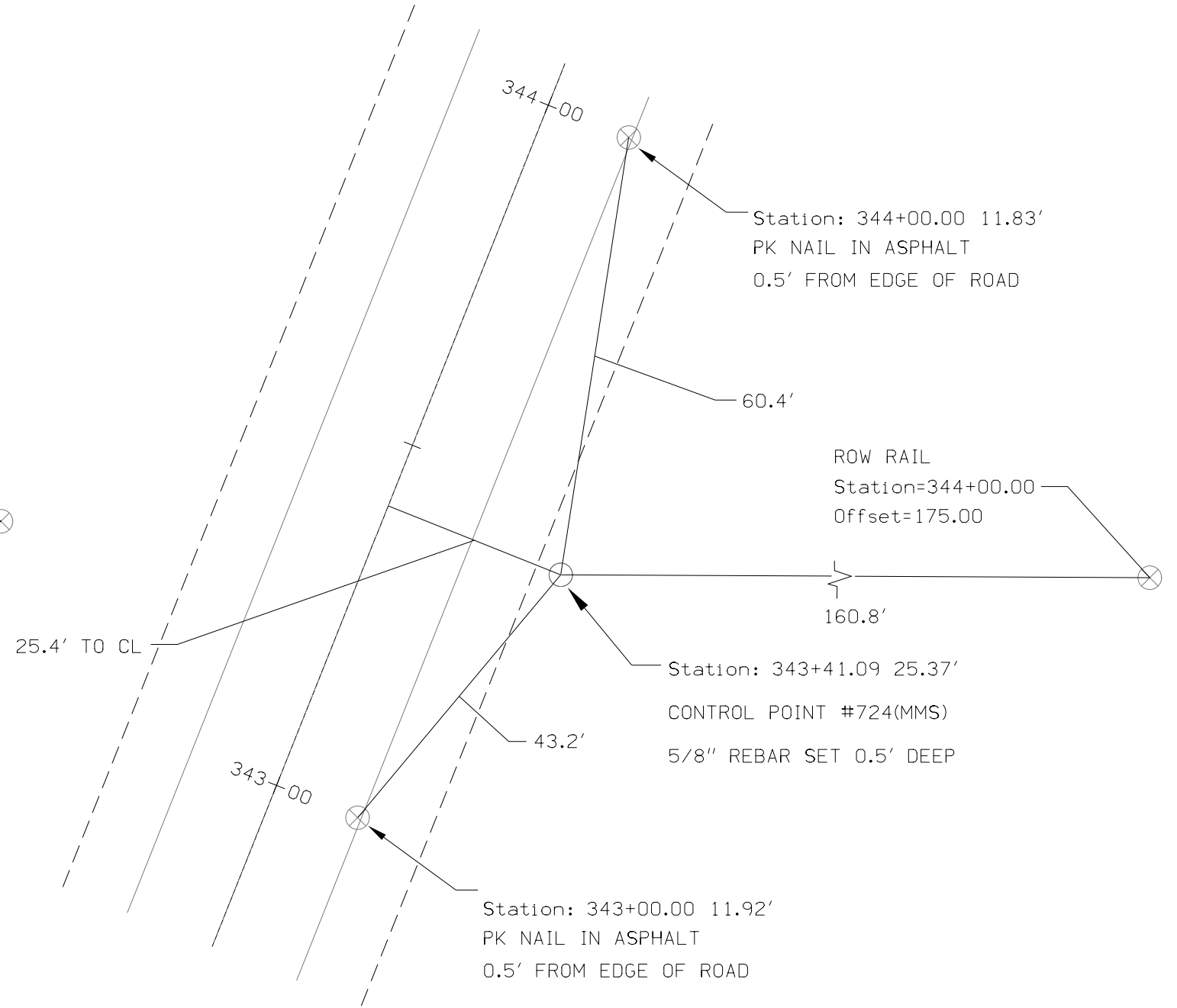
The horizontal alignment for this project was created by using the centerline joint shots of both North and South crossovers and extending them to the center of the bridge. A best fit of the crossover centerline shots was used to set stationing for the center of the bridge to be Station 310+85.00. That centerline was extended out to the PI Station of 335+54.51 and then extended past the end of the project. This stationing is from the Henry County FN Project No. 219 (1962) and Bridge Design No. 361 Henry County (1962).

## VERTICAL CONTROL

Point	North	East	Elevation	Station	Offset	Feature	Description
706	333285.13	2178268.71	582.73	313+74.17	18.38'	BM	Found IHC in Northwest wingwall of Northbound bridge
707	332771.60	2177915.56	586.39	307+66.10	155.07'	BM	Found IHC in Southbound bridge wingwall



CP #714  
5/8" REBAR  
N=330370.46, E=2177148.22



CP #724  
5/8" REBAR  
N=336023.11, E=2179412.45



**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)
US 218 - NB																			
1		275+00.00	329682.35	2176844.09															
2		335+54.51	335302.04	2179097.13															
3		360+00.00	337573.08	2180004.21															
SOUTH CROSSOVER																			
1							10+00.00	330391.77	2177128.51										
2										13+25.58	330693.96	2177249.67							
3													16+49.30	331013.27	2177313.24				
4							16+49.30	331013.27	2177313.24										
5										19+73.57	331331.30	2177376.56							
6													22+96.00	331632.30	2177497.19				
NORTH CROSSOVER																			
1							20+00.00	334693.20	2178721.70										
2										23+28.23	334997.95	2178843.59							
3													26+54.55	335274.75	2179019.99				
4							26+54.55	335274.75	2179019.99										
5										29+84.74	335553.21	2179197.45							
6													33+13.00	335859.85	2179319.92				

TRAFFIC CONTROL PLAN

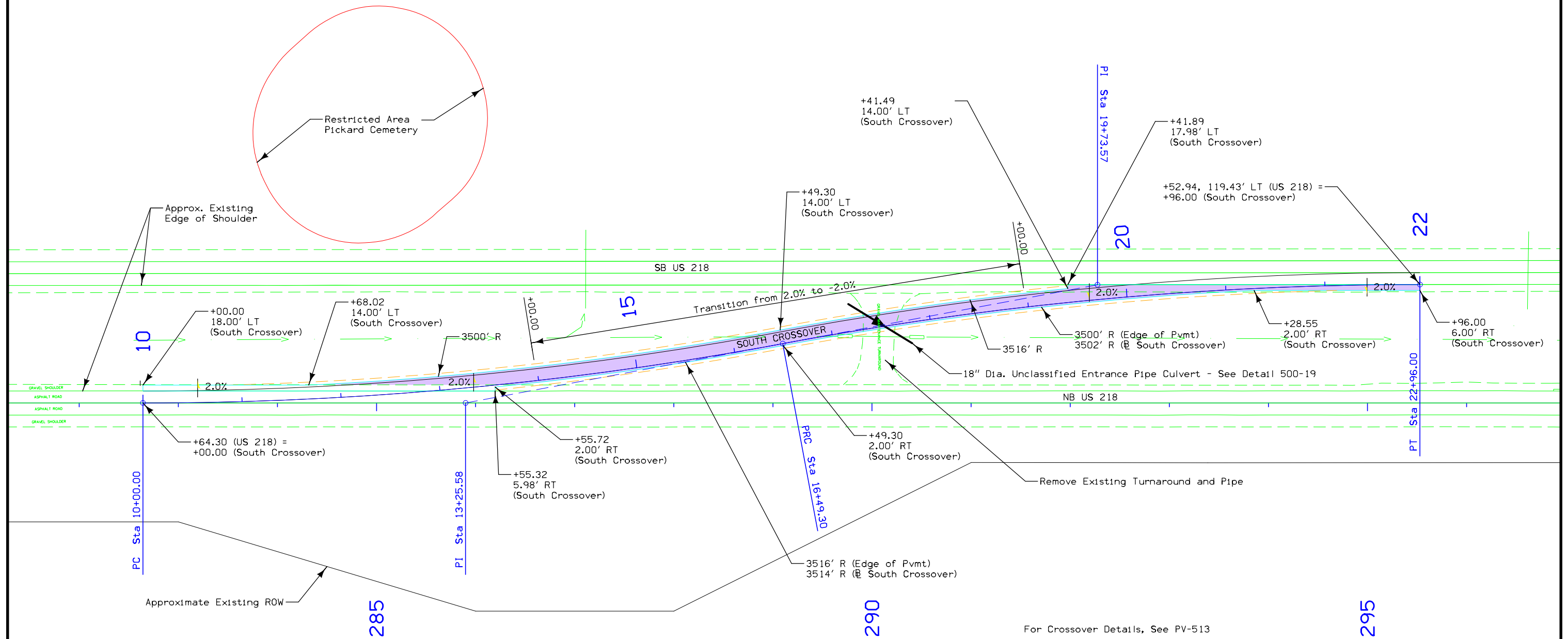
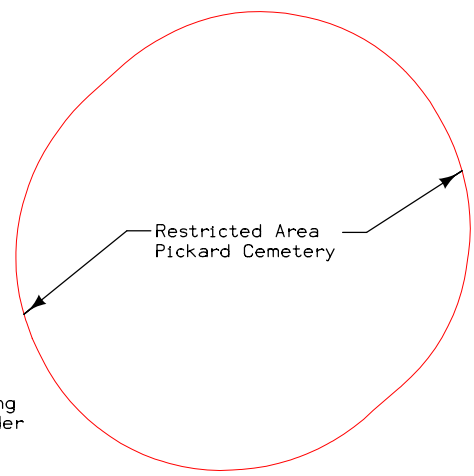
108-23A  
08-01-08

1. Traffic will be maintained on US 218 at all times.
2. Left-turn access to sideroads and driveways within the project limits will be prohibited due to the use of a temporary lane separator system. No left turn signage will be installed to prohibit left turns within the project limits and additional signage will be installed to guide traffic to the J-turn maneuvers past the project limits.
3. Traffic control on this project shall be found in accordance with the TC series of Standard Road Plans. For additional complementary information, refer to Part 6 of the Manual on Uniform Traffic Control devices and the current Standard Specifications.

STAGING NOTES

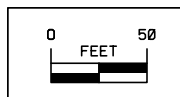
108-26A  
10-29-02

- Stage 1**  
Close the inside lane in both directions on US 218 in the crossover locations north and south of the bridge by using TC-418.  
Remove the existing NB and SB inside shoulders in the crossover locations.  
Remove the maintenance turnaround along with the drainage pipe at the south crossover.  
Construct the south and north crossover pavement as shown on Sheets J.2 through J.5 and PV-513.  
Construct temporary guardrail on the south side of the SB bridge to protect the NB traffic in Stage 2.
- Stage 2**  
Close the NB US 218 bridge by using TC-61.  
Move the NB traffic over to the SB lanes to be head to head with SB traffic by utilizing the south crossover.  
Implement detour signing for left-turning movements to and from sideroads Iowa Avenue, Iowa Road, and River Road. See Sheets J.6 and J.7.  
Remove the existing NB bridge. See Bridge plans for details.  
Construct the new NB bridge. See Bridge plans for details.  
Remove existing approach slabs, shoulders, guardrail, and inlets on both sides of the NB bridge.  
Construct new approach slabs, shoulders, guardrail, and flumes adjacent to the NB bridge.
- Stage 3**  
Close the inside lane in the same locations as Stage 1 by using TC-418.  
Remove all crossover pavement and temporary guardrail when the project is complete.  
Maintenance to salvage all guardrail and posts after construction.  
Construct gravel inside shoulders where crossover pavement was removed.  
Grade the medians and reconstruct the maintenance turnaround. See Detail 8101.



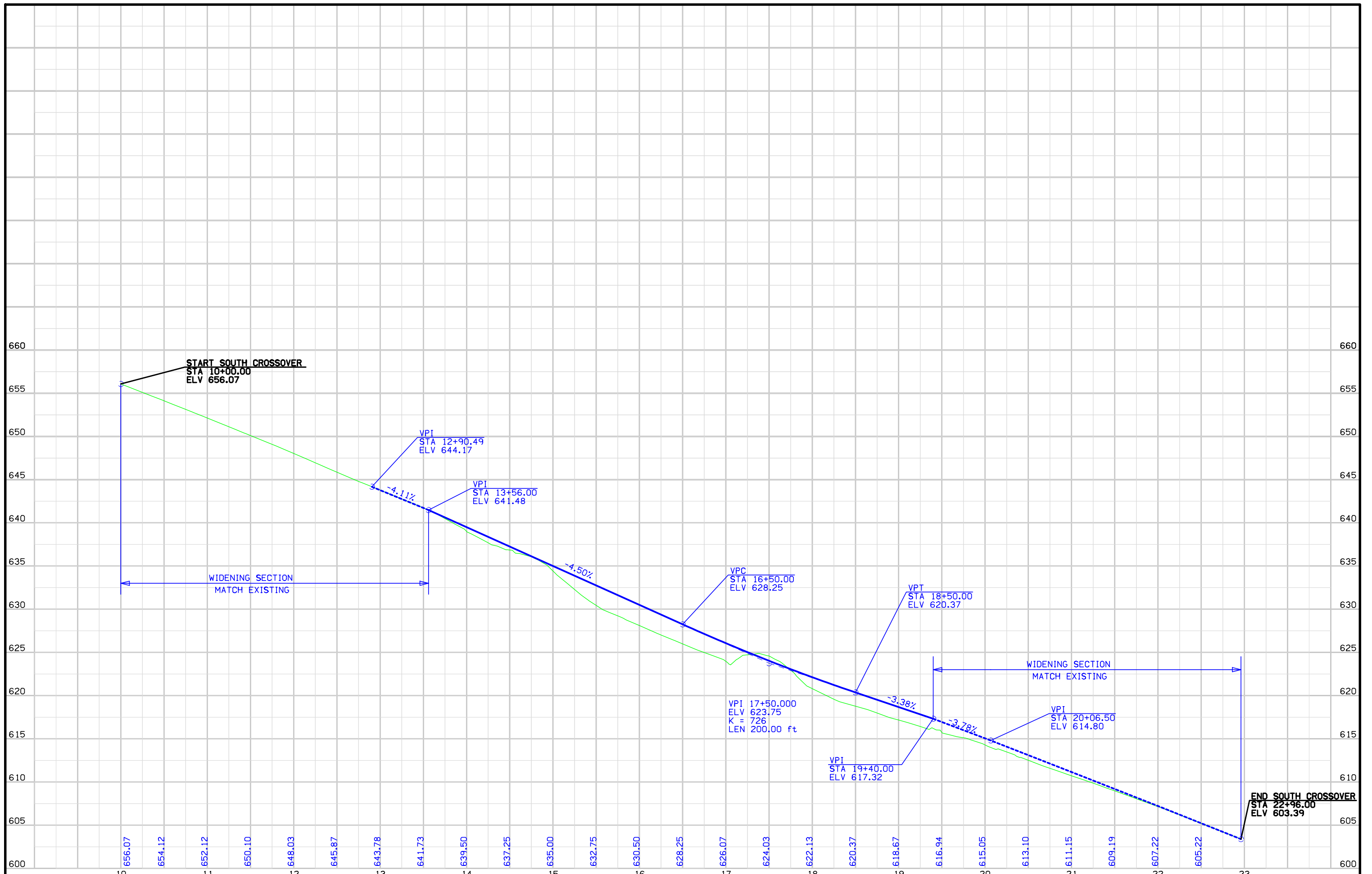
- Shading Paved Shoulder
- Shading Bridge Approach
- Shading Bridge Replacement
- Rock Flume
- Shading Crossover Pavement

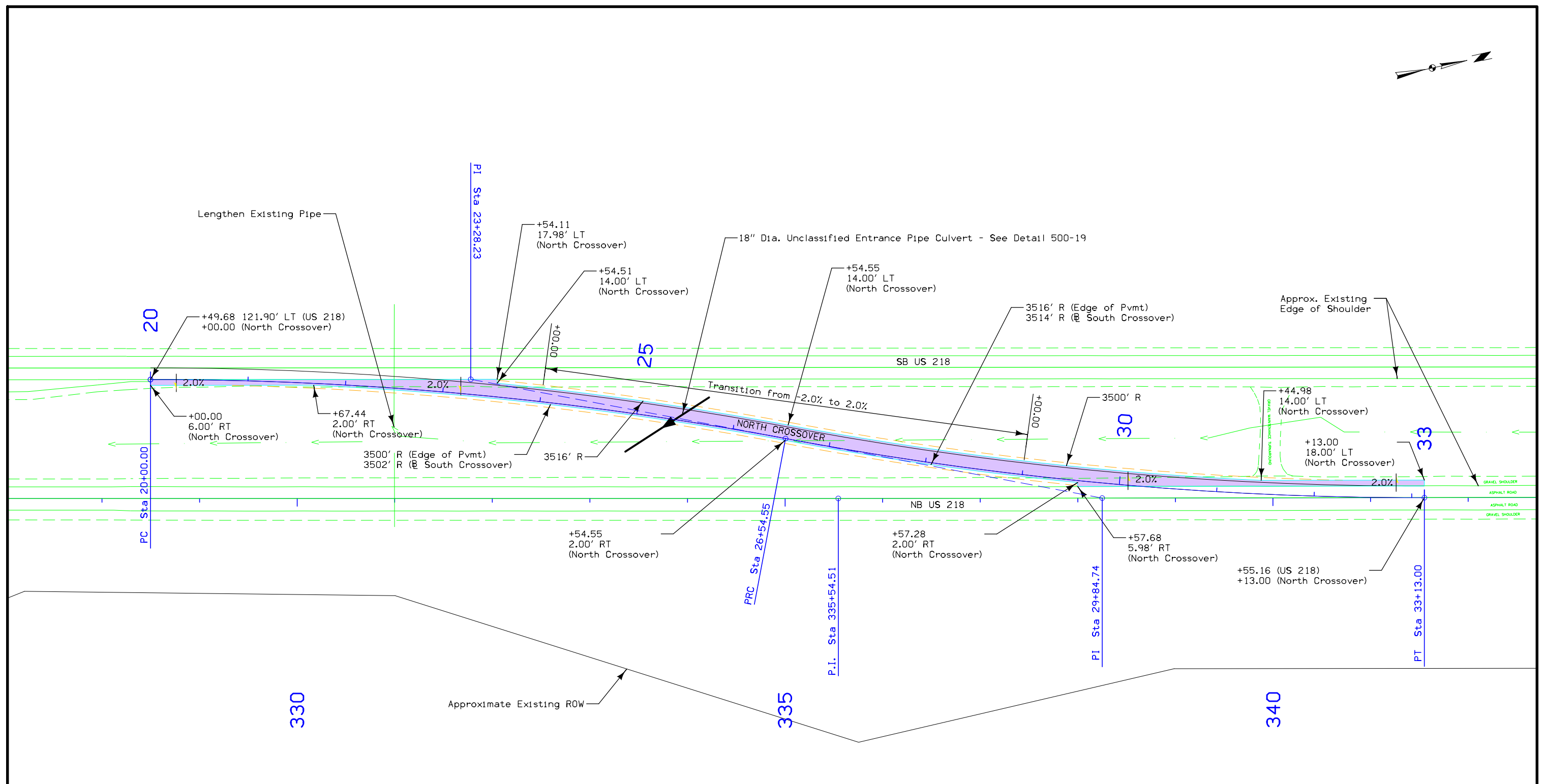
Mt Pleasant, Iowa  
T-70N, R-6W  
Section 4



For Crossover Details, See PV-513

## SOUTH CROSSOVER

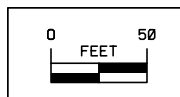




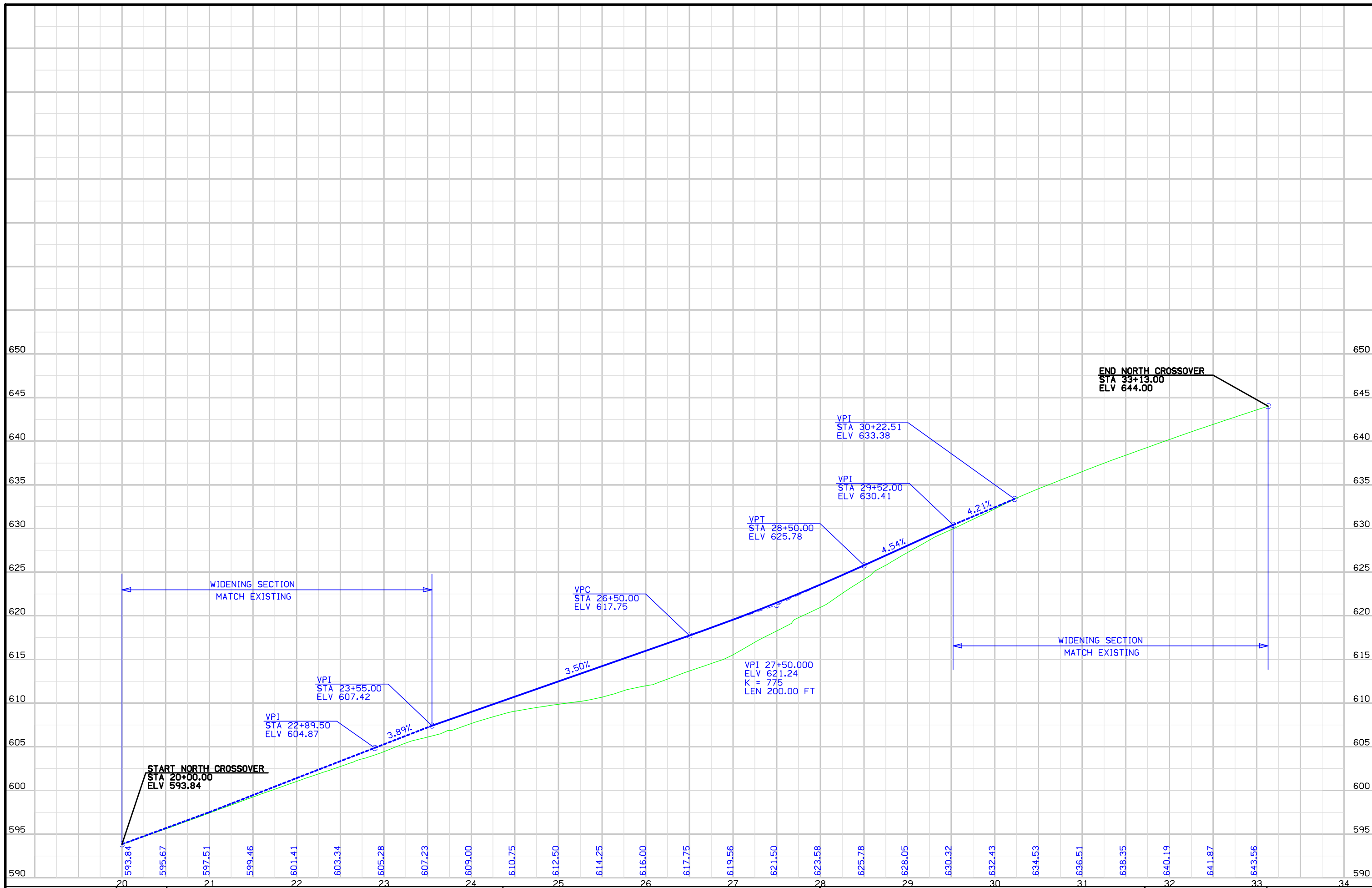
For Crossover Details, See PV-513

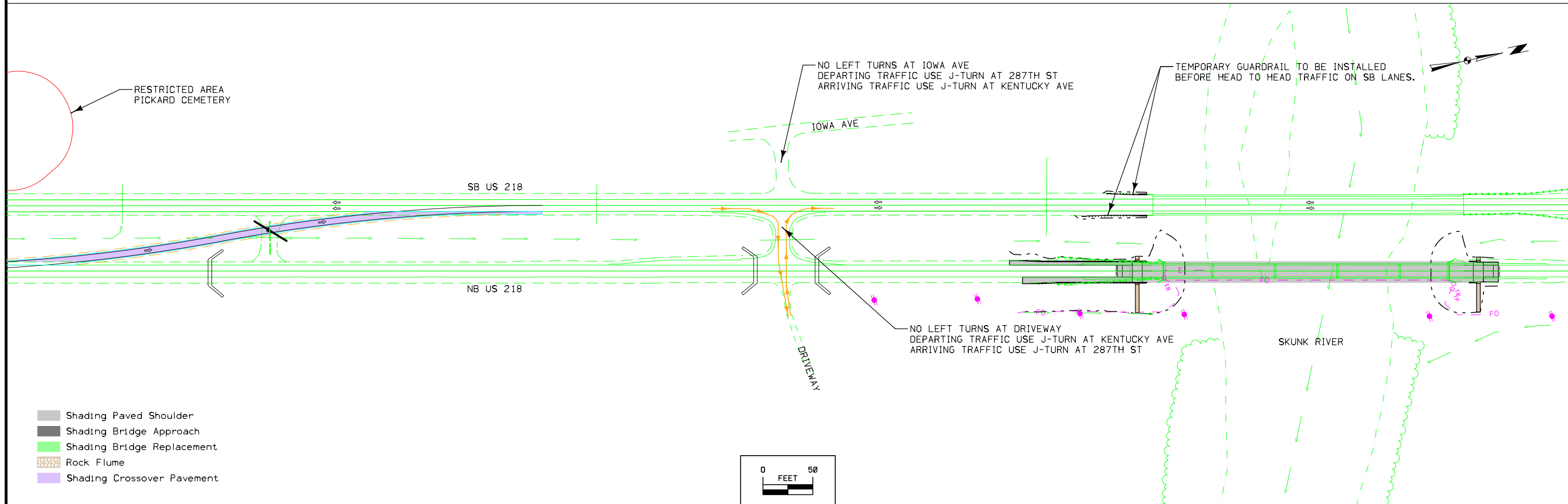
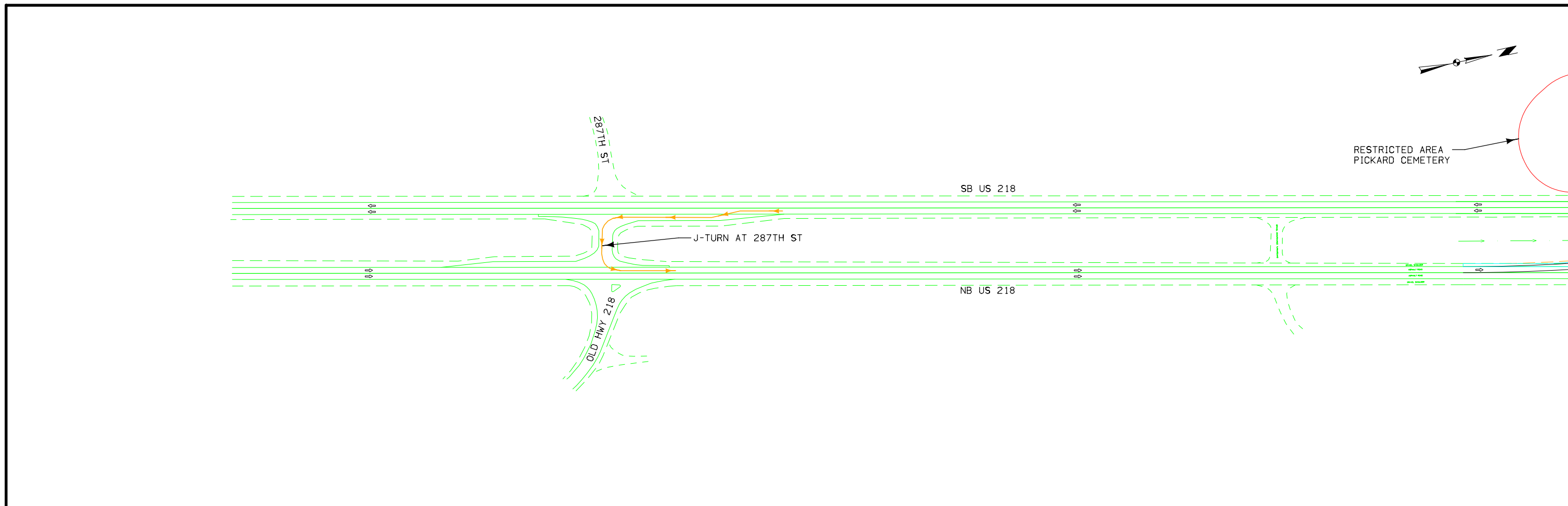
- Shading Paved Shoulder
- Shading Bridge Approach
- Shading Bridge Replacement
- Rock Flume
- Shading Crossover Pavement

Mt Pleasant, Iowa  
T-70N, R-6W  
Section 4

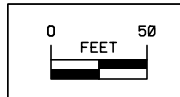


# NORTH CROSSOVER





- Shading Paved Shoulder
- Shading Bridge Approach
- Shading Bridge Replacement
- Rock Flume
- Shading Crossover Pavement





RESTRICTED AREA

NO LEFT TURNS AT IOWA AVE  
DEPARTING TRAFFIC USE J-TURN AT 287TH ST  
ARRIVING TRAFFIC USE J-TURN AT KENTUCKY AVE

SB US 218

NB US 218

NO LEFT TURNS AT RIVER RD  
DEPARTING TRAFFIC USE J-TURN AT KENTUCKY AVE  
ARRIVING TRAFFIC USE J-TURN AT 287TH ST

IOWA AVE  
RIVER RD








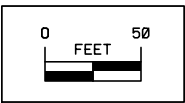
SB US 218

J-TURN AT KENTUCKY AVE

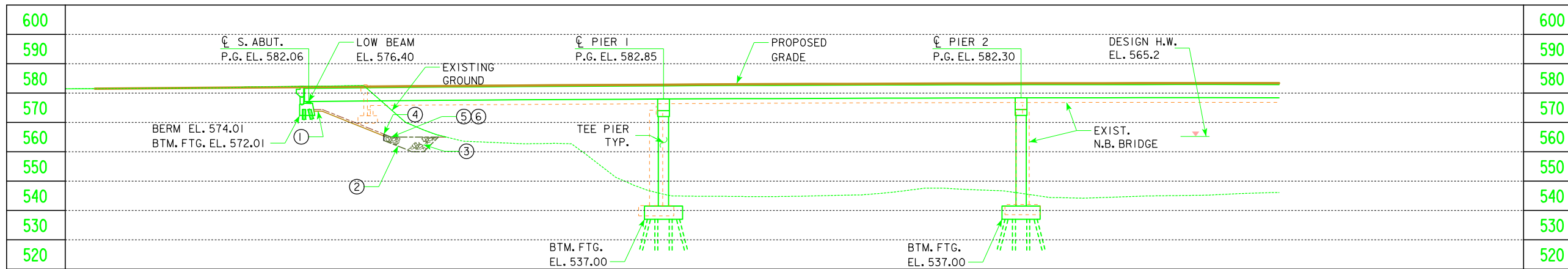
NB US 218

KENTUCKY AVE  
KENTUCKY AVE

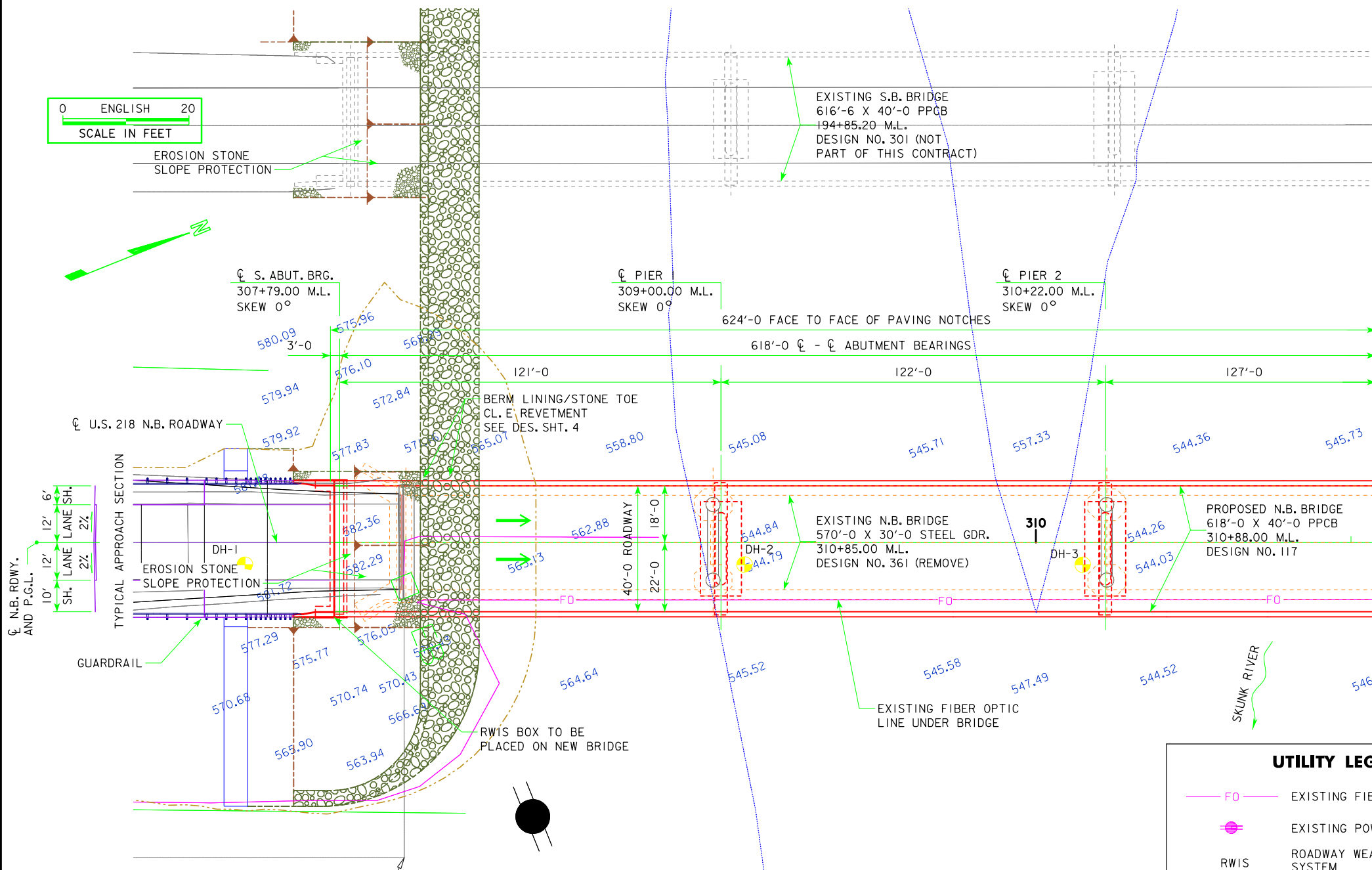
-  Shading Paved Shoulder
-  Shading Bridge Approach
-  Shading Bridge Replacement
-  Rock Flume
-  Shading Crossover Pavement



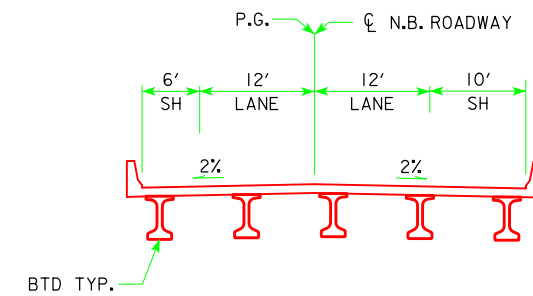




LONGITUDINAL SECTION ALONG C N.B. ROADWAY



SITUATION PLAN - NORTHBOUND



TYPICAL BRIDGE SECTION

- ① EROSION STONE SLOPE PROTECTION
  - ② BERM LINING
  - ③ STONE TOE
  - ④ TOP BERM LINING EL. 566.0
  - ⑤ GRADING SURFACE
  - ⑥ 2.5:1 BERM SLOPE NORMAL TO C ABUT.
- ⊕ INDICATES DRILL HOLE.

UTILITY LEGEND	
FO	EXISTING FIBER OPTIC LINE
⊕	EXISTING POWER LINE
RWIS	ROADWAY WEATHER INFORMATION SYSTEM

PRELIMINARY

DESIGN FOR 0° SKEW

**618'-0" X 40'-0" PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE**

122'-0" END SPANS BTD BEAMS 122'-0", 127'-0" INTERIOR SPANS

**SITUATION PLAN**

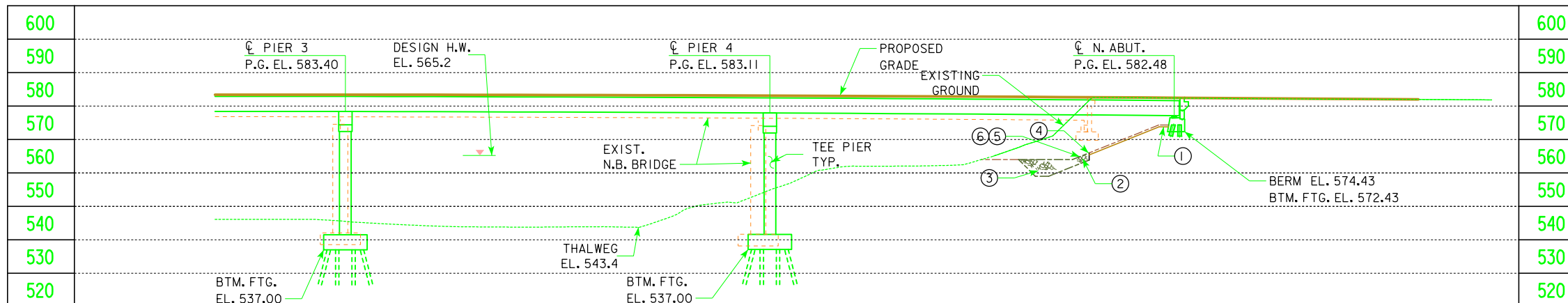
STATION: 310+88.00 M.L. (N.B.)

JUNE 2015

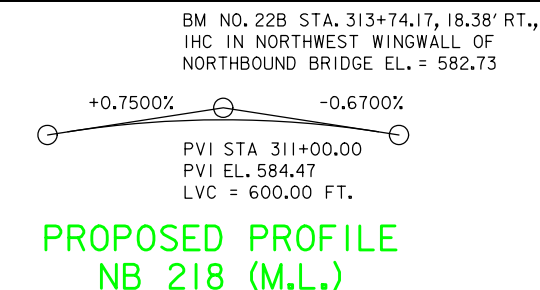
**HENRY COUNTY**

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 1 OF 4 FILE NO. 31238 DESIGN NO. 117



LONGITUDINAL SECTION ALONG  $\text{CL}$  N.B. ROADWAY



- NOTES:
- TOP OF BRIDGE DECK AT CROWN IS 0.03 FT. BELOW THE PROFILE GRADE.
  - TL - 4 BRIDGE RAILING PROPOSED.
  - PIER TYPE - TEE.
  - BEAM TYPE - BTD.
  - ALL ABUTMENTS AND PIERS 90° TO  $\text{CL}$  BRIDGE.
  - CLASS E REVETMENT STONE IS EMBEDDED.
  - NOTE TO FINAL DESIGN: AS THIS PROJECT REQUIRES A SOVEREIGN LANDS PERMIT, BID ITEM REFERENCE NOTES SHALL RESTRICT BROKEN CONCRETE AS A SUBSTITUTE FOR REVETMENT.

TRAFFIC ESTIMATE

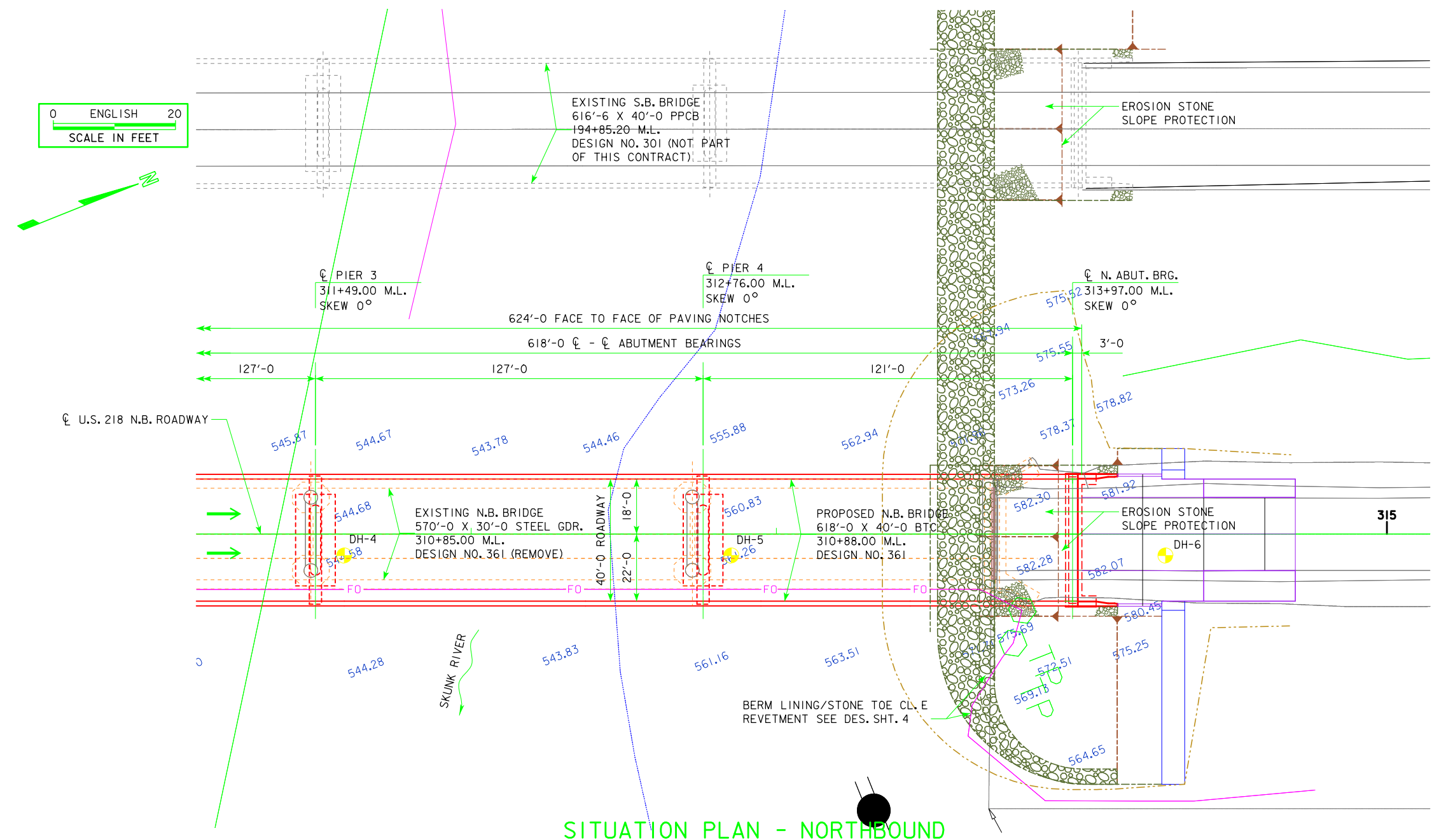
2018 AADT 9,000 V.P.D.  
 2038 AADT 12,000 V.P.D.  
 20-- DHV ---- V.P.H.  
 TRUCKS 23%  
 TOTAL DESIGN ESALs ---

LOCATION

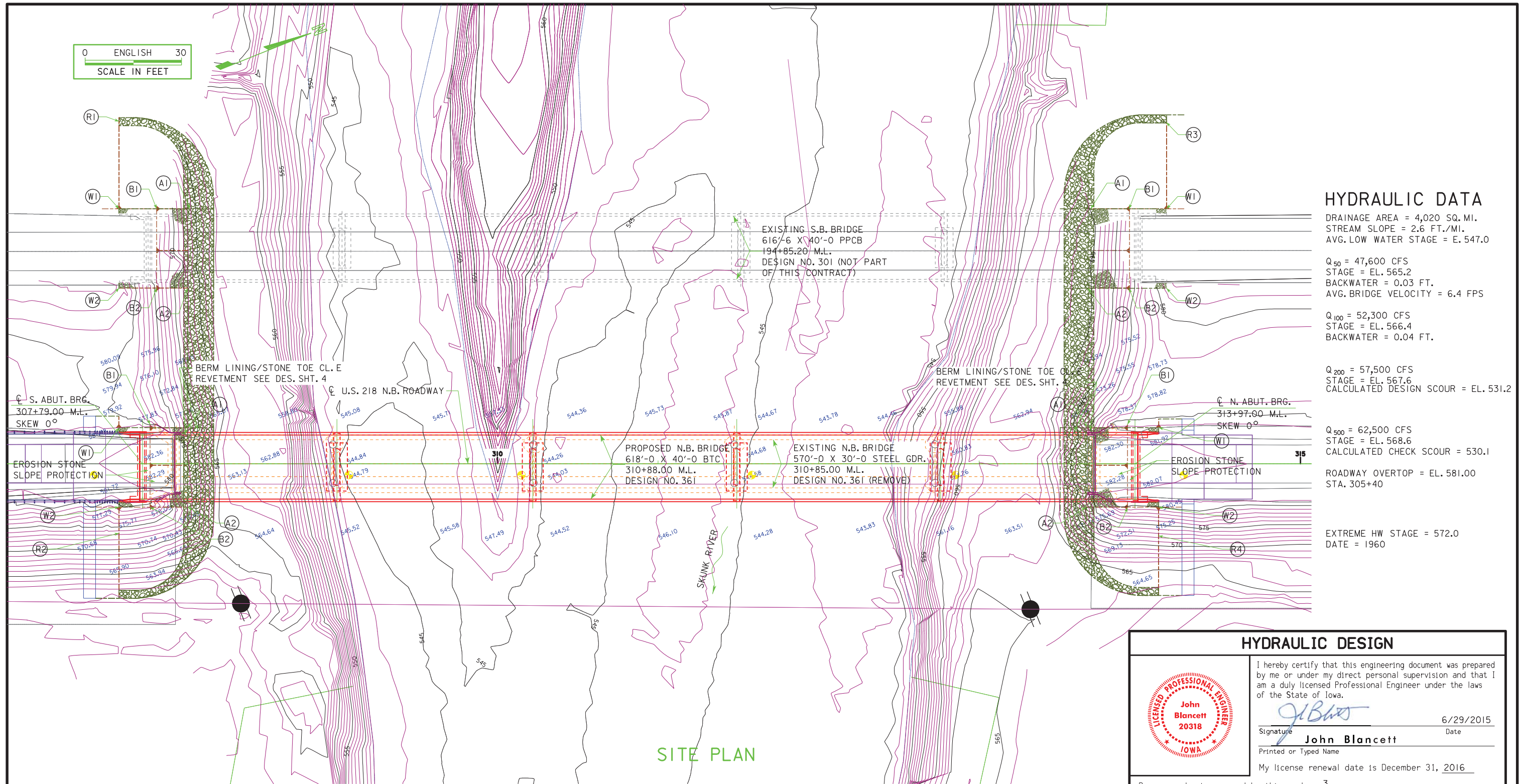
US-218(N.B.) OVER SKUNK RIVER  
 T 70 N R 6 W  
 SECTION 4  
 JACKSON TOWNSHIP  
 HENRY COUNTY  
 FHWA NO. 028471  
 BRIDGE MAINT. NO. 4437.4R218  
 STA. 310+88.00 M.L.  
 LATITUDE 33.0526° N  
 LONGITUDE 102.3492° W

PRELIMINARY

DESIGN FOR 0° SKEW  
**618'-0" X 40'-0" PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE**  
 121'-0" END SPANS BTD BEAMS 122'-0", 127'-0" INTERIOR SPANS  
**SITUATION PLAN**  
 STATION: 310+88.00 M.L. (N.B.) JUNE 2015  
**HENRY COUNTY**  
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
 DESIGN SHEET NO. 2 OF 4 FILE NO. 31238 DESIGN NO. 117



SITUATION PLAN - NORTHBOUND



**HYDRAULIC DATA**

DRAINAGE AREA = 4,020 SQ. MI.  
 STREAM SLOPE = 2.6 FT./MI.  
 AVG. LOW WATER STAGE = E. 547.0

Q<sub>50</sub> = 47,600 CFS  
 STAGE = EL. 565.2  
 BACKWATER = 0.03 FT.  
 AVG. BRIDGE VELOCITY = 6.4 FPS

Q<sub>100</sub> = 52,300 CFS  
 STAGE = EL. 566.4  
 BACKWATER = 0.04 FT.

Q<sub>200</sub> = 57,500 CFS  
 STAGE = EL. 567.6  
 CALCULATED DESIGN SCOUR = EL. 531.2

Q<sub>500</sub> = 62,500 CFS  
 STAGE = EL. 568.6  
 CALCULATED CHECK SCOUR = 530.1

ROADWAY OVERTOP = EL. 581.00  
 STA. 305+40

EXTREME HW STAGE = 572.0  
 DATE = 1960

**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.

*John Blancett* 6/29/2015  
 Signature Date

**John Blancett**  
 Printed or Typed Name

My license renewal date is December 31, 2016

Pages or sheets covered by this seal: 3

**SITE PLAN**

**NB BERM SLOPE LOCATION TABLE**

POINTS	SOUTH ABUTMENT			NORTH ABUTMENT		
	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
A1	308+07.52	22.58' LT.	565.00	313+65.91	22.58' RT.	564.00
A2	308+07.52	26.58' RT.	565.00	313+65.91	26.58' LT.	564.00
B1	307+84.25	22.58' LT.	574.31	313+91.75	22.58' RT.	574.33
B2	307+84.25	26.58' RT.	574.31	313+91.75	26.58' LT.	574.33
W1	307+64.25	22.58' RT.	582.01	314+11.75	22.58' RT.	580.79
W2	307+64.25	26.58' RT.	581.93	314+11.75	26.58' LT.	581.40

**SB BERM SLOPE LOCATION TABLE**

POINTS	SOUTH ABUTMENT			NORTH ABUTMENT		
	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
A1	308+07.11	158.53' LT.	565.00	313+66.50	159.00' LT.	564.00
A2	308+07.11	110.01' LT.	565.00	313+66.50	110.43' LT.	564.00
B1	307+87.75	158.53' LT.	574.31	313+93.60	159.00' LT.	573.13
B2	307+87.75	110.01' LT.	574.43	313+93.60	110.46' LT.	573.93
W1	307+64.64	158.53' LT.	583.47	314+16.74	159.00' LT.	582.17
W2	307+64.64	110.01' LT.	582.69	314+16.74	110.46' LT.	581.40

- REVELMENT LAYOUT:
- (R1) 307+64.60 M.L., LT., END BERM LINING/STONE TOE.
  - (R2) 307+64.30 M.L., RT., END BERM LINING/STONE TOE.
  - (R3) 314+16.80 M.L., LT. M.L., END BERM LINING/STONE TOE.
  - (R4) 314+11.80 M.L., RT., END BERM LINING/STONE TOE.

BERM SLOPE ELEVATIONS REFLECT THE GRADING SURFACE

PRELIMINARY  
 DESIGN FOR 0° SKEW

**618'-0" X 40'-0" PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE**

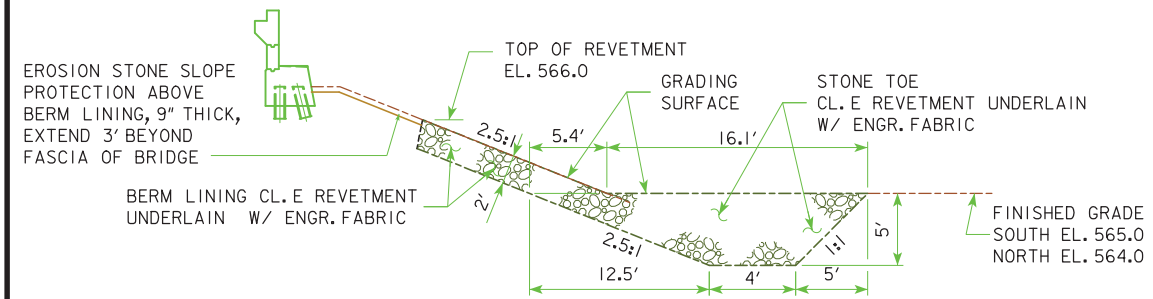
121'-0" END SPANS BTD BEAMS 122'-0", 127'-0" INTERIOR SPANS

**SITUATION PLAN - SITE**

STATION: 310+88.00 M.L. (N.B.) JUNE 2015

**HENRY COUNTY**

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
 DESIGN SHEET NO. 3 OF 4 FILE NO. 31238 DESIGN NO. 117



SECTION THROUGH STONE TOE AND BERM LINING

REVETMENT QUANTITIES				
REVETMENT TYPE - LOCATION	REVETMENT CL. E (TON)	EROSION STONE (TON)	ENGINEERING FABRIC (SY)	EXCAVATION (CY)
BERM LINING\STONE TOE - SOUTH	1110	-	666	693
BERM LINING\STONE TOE - NORTH	1110	-	666	693
SLOPE PROTECTION - SOUTH	-	121	302	75
SLOPE PROTECTION - NORTH	-	121	302	75
TOTALS	2220	242	1936	1536

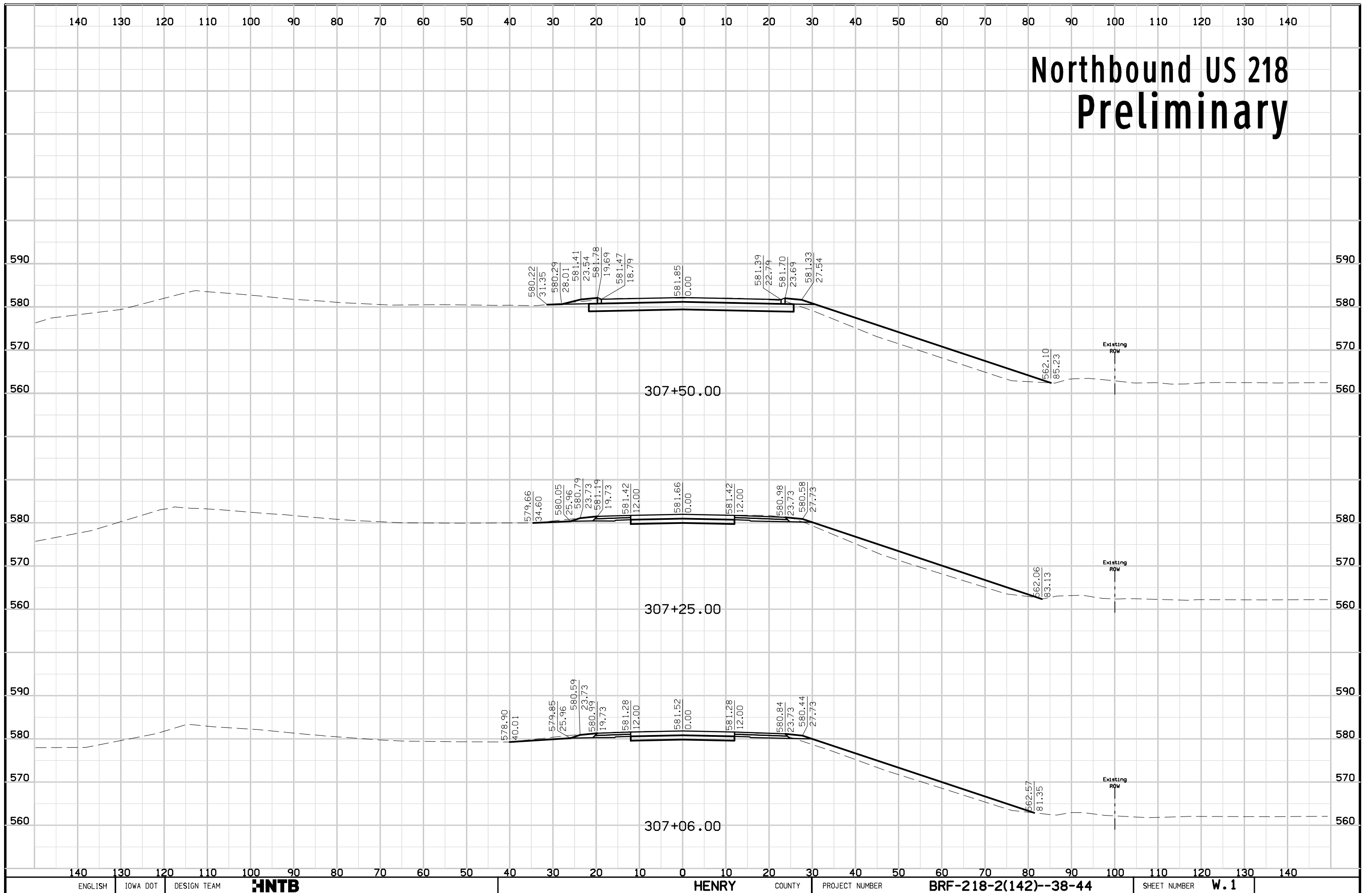
REVETMENT EXCAVATION QUANTITY CALCULATED FROM GRADING SURFACE.

REVETMENT AND EROSION STONE ESTIMATED AT 1.6 TON/CY

PRELIMINARY

DESIGN FOR 0° SKEW  
**618'-0 X 40'-0 PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE**  
 121'-0 END SPANS BTD BEAMS 122'-0,127'-0 INTERIOR SPANS  
**SITUATION PLAN - MISCELLAEIOUS**  
 STATION: 310+88.00 M.L. (N.B.) JUNE 2015  
**HENRY COUNTY**  
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
 DESIGN SHEET NO. 4 OF 4 FILE NO. 31238 DESIGN NO. 117

# Northbound US 218 Preliminary



# Northbound US 218 Preliminary

