

# A d d e n d u m

Iowa Department of Transportation  
Office of Contracts                      Date

Date of Letting: December 20, 2016  
of Addendum: December 2, 2016

<b>B.O.</b>	<b>Proposal ID</b>	<b>Proposal Work Type</b>	<b>County</b>	<b>Project Number</b>	<b>Addendum</b>
004	13-C013-090	BRIDGE DECK OVERLAY	CALHOUN	BHS-C013(90)--63-13	20DEC004A01

Make the following changes to the PROPOSAL SCHEDULE OF PRICES:

Add Proposal Line No. 0160 2599-9999005 ('EACH' ITEM) RETROFIT BRIDGE END  
RAIL/CURB: 4.000 EACH

If the above changes are not made, they will be made as shown here.

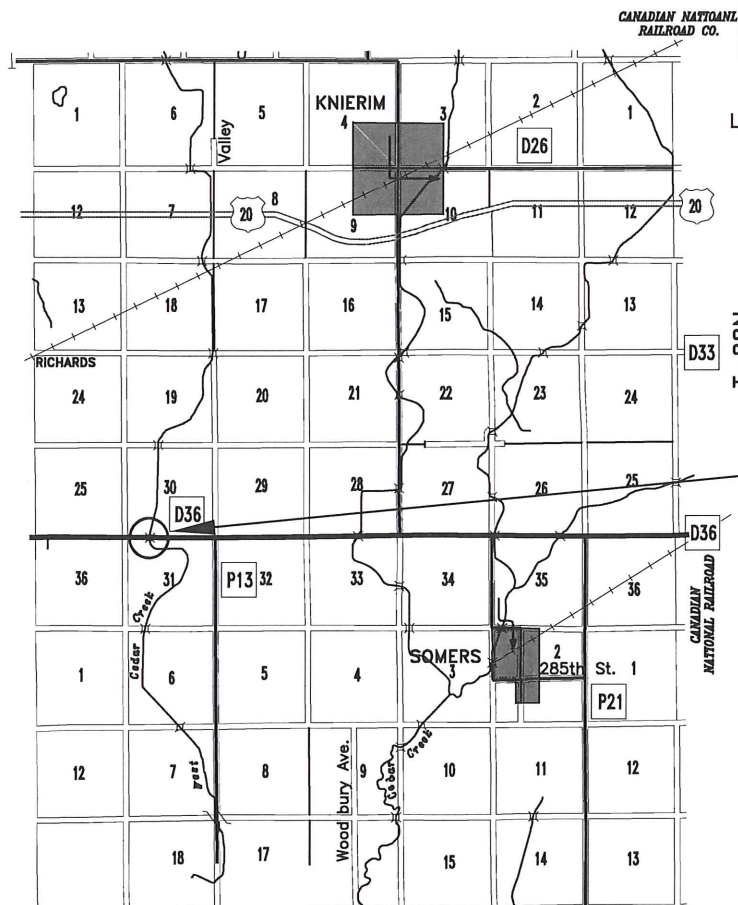
Replace the plans with the attached set of plans.

December 20, 2016

Letting Date

CALHOUN COUNTY BRIDGE DECK OVERLAY

PROJECT NO. BHS-C013(90)--63-13



IOWA  
DEPARTMENT OF TRANSPORTATION  
HIGHWAY DIVISION  
PLANS OF PROPOSED IMPROVEMENT ON THE  
FARM TO MARKET SYSTEM  
CALHOUN COUNTY  
BRIDGE DECK OVERLAY

The Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, series of 2015, plus applicable General Supplemental Specifications, Developmental Specifications, Supplemental Specifications, and Special Provisions, shall apply to construction work on this project.

Scales: As Noted

Location: On D36 270th Street, over West Cedar Creek, from NW Corner Sec. 31 T88N-R31W East 0.3 Miles.

PROJECT TRAFFIC CONTROL PLAN

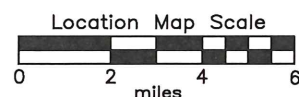
THIS ROAD WILL BE CLOSED TO THROUGH TRAFFIC DURING CONSTRUCTION. LOCAL TRAFFIC TO ADJACENT PROPERTIES WILL BE MAINTAINED AS PROVIDED FOR IN ARTICLE 1107.08 OF THE CURRENT STANDARD SPECIFICATIONS. TRAFFIC CONTROL DEVICES, SIGNING OR PAVEMENT MARKINGS INSTALLED WITHIN THE LIMITS OF THIS PROJECT SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" PER 761 IAC CHAPTER 130. CALHOUN COUNTY WILL ESTABLISH AND MAINTAIN DETOUR.

Project No. BHS-C013(90)--63-13  
FHWA# 016860 3130 GR

UTILITIES

POWER:  
Mid American Energy  
Rockwell City, Ia 50579  
1-888-427-5632

NOTIFICATION SHALL BE MADE TO IOWA ONE-CALL AT 1-800-292-8989 TO IDENTIFY THE LOCATION OF ALL UNDERGROUND UTILITY FACILITIES WITHIN A CONSTRUCTION AREA AS PER ARTICLE 1107.15



2015 AADT 780 V.P.D.

Calhoun County

Project No. BHS-C013(90)--63-13

INDEX OF SHEETS

No.	Description
1.	TITLE SHEET
2.	ESTIMATE OF QUANTITIES & GENERAL NOTES
3.	TABULATIONS
4.	RETROFIT BRIDGE END RAIL/CURB

MILEAGE SUMMARY

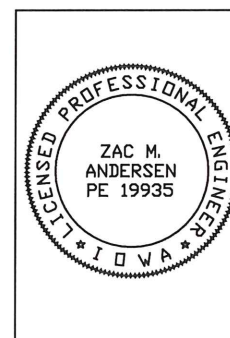
Div	Location	Miles
	¢ OF BRIDGE STA. 322+04.8	

ROAD STANDARD PLANS

The following Standard Plans shall be considered applicable to construction work on this project.

Identification	Date	Identification	Date	Identification	Date
TC-252	04-19-16	BA-205	04-19-16		
BR-112	04-21-15				
BA-200	10-18-16				
BA-201	10-18-16				
BA-202	10-20-15				

CALHOUN  
COUNTY



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

*Zac M. Andersen* 11-29-16  
Zac M. Andersen (date)

My license renewal date is December 31, 2017.

Pages or sheets covered by this seal:

Sheets 1-4

*Mike Cooper*  
*Sam Nickelson*  
*Scott Davis*  
Approved Calhoun County  
Board of Supervisors

Project No. BHS-C013(90)--63-13

Sheet No. 1 of 4

GENERAL NOTES

THIS DESIGN IS FOR REPAIRS TO THE EXISTING 70'-0 X 30' CONTINUOUS CONCRETE SLAB BRIDGE. BRIDGE IS ON COUNTY ROAD D-36 OVER WEST CEDAR CREEK. COPIES OF THE ORIGINAL DESIGN AND PLANS WILL BE MADE AVAILABLE TO THE CONTRACTOR. CONTACT THE OFFICE OF CONTRACTS-IOWA D.O.T. - AMES, IA.

REPAIRS SHALL CONSIST OF:

- 1. BRIDGE FLOOR REPAIR, CLASS "A"
- 2. BRIDGE FLOOR OVERLAY
- 3. INSTALLATION OF REINFORCED BRIDGE APPROACHES
- 4. REPAIR BRIDGE CURB
- 5. INSTALLATION OF GURADRAIL

BRIDGE FLOOR OVERLAY SHALL CONSIST OF REMOVING THE FLOOR CONCRETE TO A DEPTH OF 1 1/2" BELOW THE EXISTING SURFACE. TRANSPORTING THE CONCRETE REMOVED AND DISPOSING OF THE CONCRETE REMOVED FROM THE PROJECT, AND OVERLAYING WITH 1 1/2" OF PCC.

PRESENT FLOOR THICKNESS IS ABOUT 14". THE CONTRACTOR SHALL EXERCISE CARE IN ORDER TO PREVENT UNNECESSARY REMOVAL OF CONCRETE BELOW THE TOP OF THE TOP LAYER OF REINFORCING. THE ENERGY OF HAND TOOLS SHALL BE RESTRICTED NEAR THE BOTTOM OF THE OF THE DESIGNATED REPAIR AREAS IN ORDER TO PREVENT UNBONDING OF REINFORCING. NO CONCRETE SHALL BE REMOVED BELOW THE TOP OF THE TOP LONGITUDINAL REINFORCING WITHOUT PRIOR PERMISSION FROM THE COUNTY ENGINEER.

PLAN QUANTITY OF FLOOR REPAIR IS BASED ON THE "PLOT OF BRIDGE DECK DELAMINATIONS" AS SHOWN IN THESE PLANS. ACTUAL SPALLED AND HOLLOW AREAS, AS DETERMINED BY THE ENGINEER AT THE TIME OF OF CONSTRUCTION SHALL BE REPAIRED.

BID ITEM NOTES

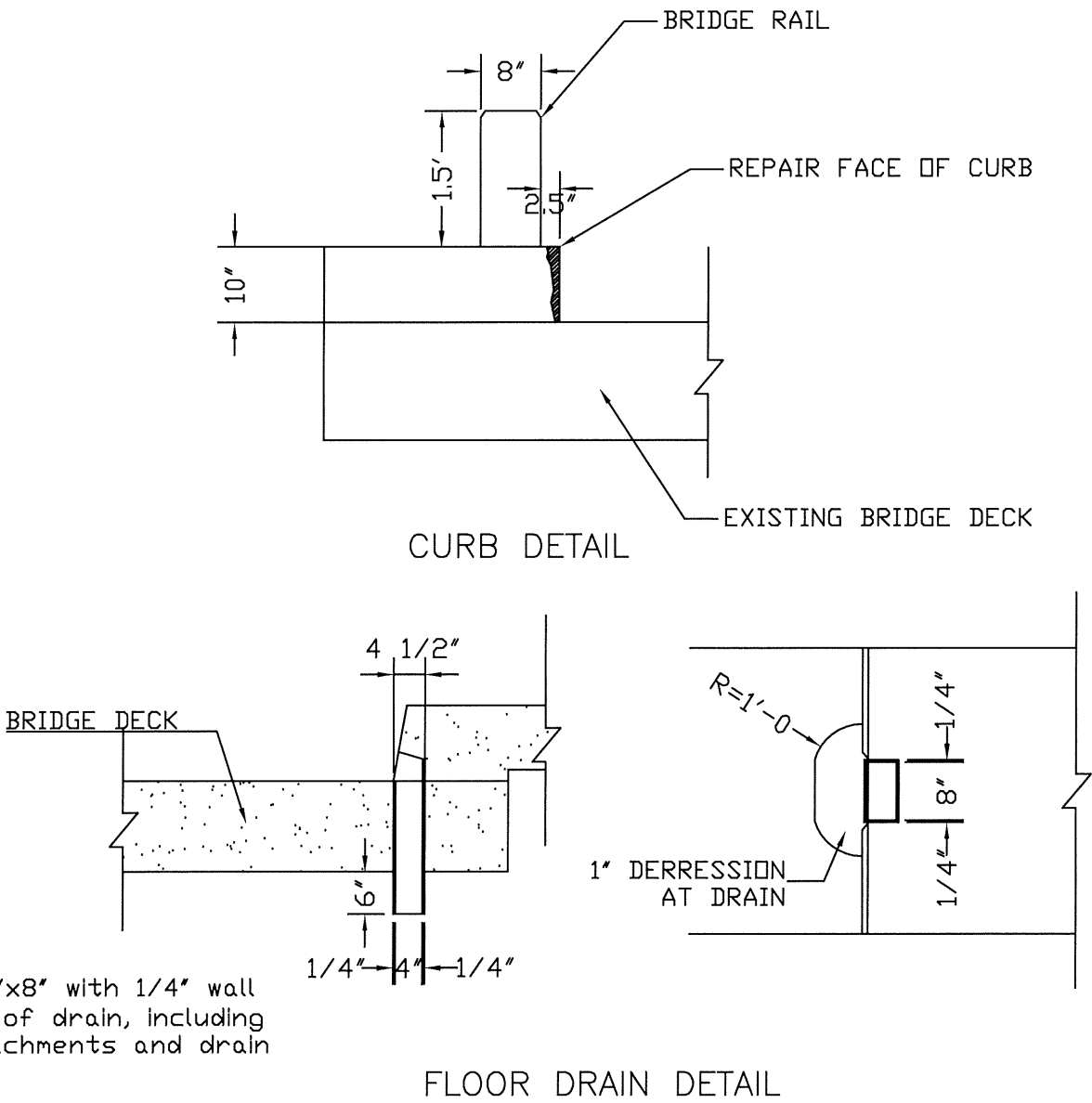
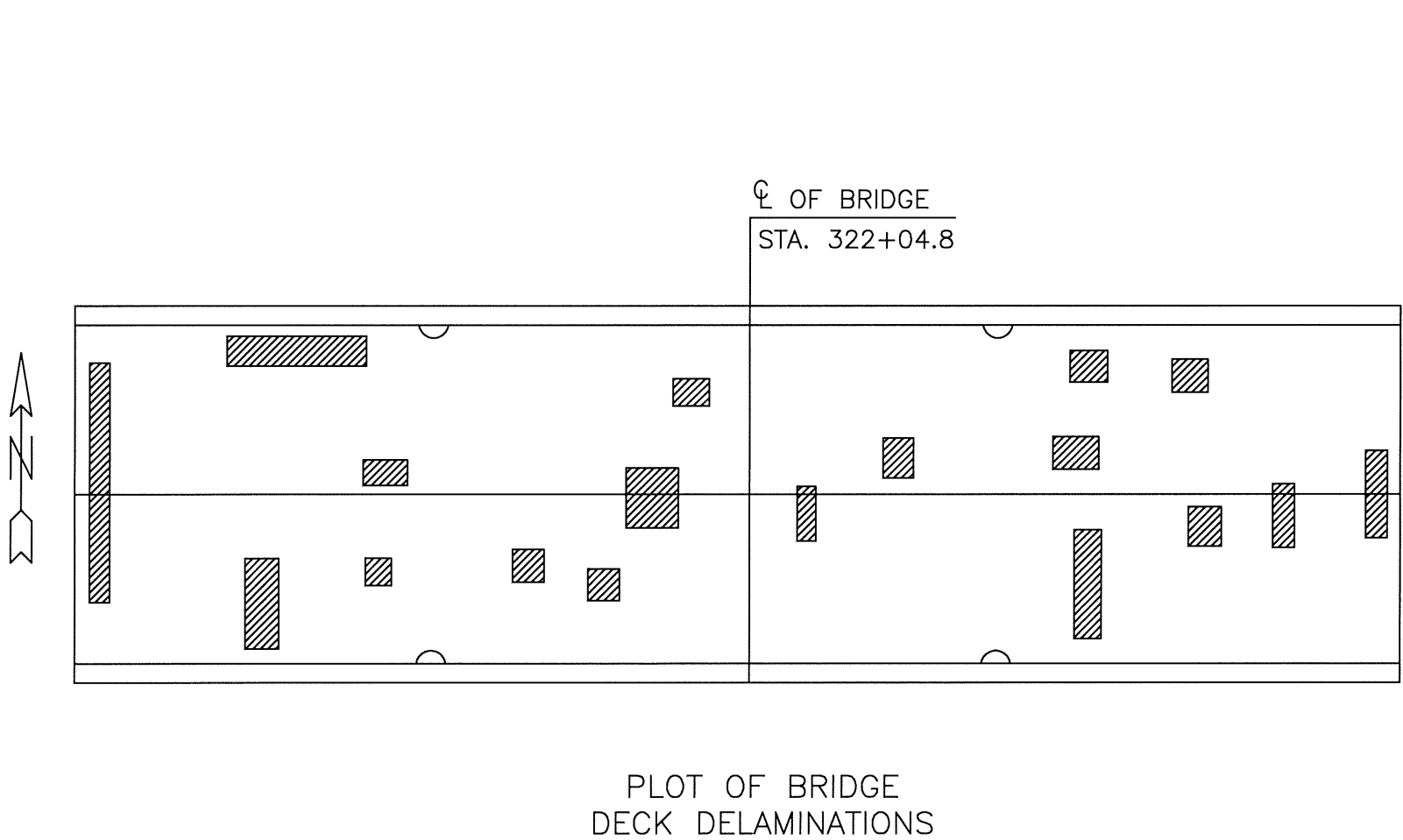
- 1. REFER TO THE TABULATION BELOW FOR THE STANDARD BR-112 BRIDGE APPROACH SECTIONS.
- 2. CONTRACTOR TO REMOVE AND DISPOSE OF EXISTING ALUMINUM HANDRAIL AND CONCRETE END POSTS ADJACENT TO HANDRAIL.
- 3. CERTIFIED PLANT INSPECTION IS REQUIRED.
- 5. CONCRETE REPAIR IS FOR THE REPAIR OF THE BRIDGE CURB. REPAIR TO BE DONE AS PER SPEC. 2426.01. SEE DETAIL ON SHEET NO. 3.
- 6. CONTRACTOR TO REMOVE THE EXISTING GUARDRAIL. THE GUARDRAIL TO BECOME PROPERTY OF THE CONTRACTOR.
- 7-9. REFER TO THE TABULATION ON SHEET NO. 3 FOR GUARDRAIL INSTALLATION.
- 10.&14. THE BROKEN CONCRETE REMOVED FROM THE BRIDGE APPROACHES SHALL BE STOCKPILED AT THE CALHOUN COUNTY MAINTENANCE YARD LOCATED IN ROCKWELL CITY.
- 15. THIS ITEM INCLUDES ALL LABOR AND MATERIAL TO REPLACE THE BRIDGE DRAIN AS SHOWN IN THE DETAIL ON SHEET 3.
- 16. THIS ITEM INCLUDES ALL LABOR AND MATERIALS TO REMOVE THE SECTION OF CONCRETE END RAIL AND CURB AS SHOWN IN THE DETAILS ON SHEET 4. THIS INCLUDES, BUT IS NOT LIMITED TO, SAWING, CHIPPING, PROTECTING AND TYING INTO THE EXISTING REINFORCING STEEL AS REQUIRED. THIS ALSO INCLUDES PROVIDING THE NECESSARY BOLT HOLES AND ANY OTHER MISCELLANEOUS ITEMS TO ALLOW CONNECTION TO THE NEW GUARDRAIL END CONNECTION(BA-202) TO BE MADE.

GREENFIELD TWP. SEC. 30/31		DESIGN FOR 70' X 30' BRIDGE DECK OVERLAY		STATION 322+04.8 0° SKEW FHWA NO. 016860	
ESTIMATE OF QUANTITIES				PART.	NON PART.
ITEM CODE	NO.	ITEM	UNIT	TOTAL	
2301-0685550	1	BRIDGE APPROACH PAVEMENT, AS PER PLAN	S.Y.	266.6	
2401-6745636	2	REMOVAL OF EXISTING HANDRAIL AND END POSTS	L.S.	1	
2413-0698067	3	BRIDGE FLOOR OVERLAY (CLASS HPC-O PCC)	S.Y.	233.3	
2413-0698074	4	BRIDGE FLOOR REPAIR, CLASS A	S.Y.	57	
2426-6772016	5	CONCRETE REPAIR	S.F.	116.6	
2505-4008120	6	REMOVAL OF STEEL BEAM GUARDRAIL	L.F.	260	
2505-4008410	7	STEEL BEAM GUARDRAIL BARRIER TRANSITION SECTION, BA-201	EACH	4	
2505-4021010	8	STEEL BEAM GURADRAIL END ANCHOR, BOLTED	EACH	4	
2505-4021720	9	STEEL BEAM GUARDRAIL END TERMINAL, BA-205	EACH	4	
2510-6745850	10	REMOVAL OF PAVEMENT	S.Y.	266.6	
2518-6910000	11	SAFETY CLOSURE	EACH	2	
2528-8445110	12	TRAFFIC CONTROL	L.S.	1	
2533-4980005	13	MOBILIZATION	L.S.	1	
2555-0000010	14	DELIVER & STOCKPILE SALVAGED MATERIAL	L.S.		1
2599-9999005	15	BRIDGE DRAIN REPLACEMENT	EACH	4	
2599-9999005	16	RETROFIT BRIDGE END RAIL/CURB	EACH	4	
	17				

TABULATION OF SAFETY CLOSURES			
Refer to Section 2518 of the Standard Specifications			
STATION	CLOSURE TYPE		REMARKS
	Road Qty.	Hazard Qty.	
317+04	1		
327+04	1		

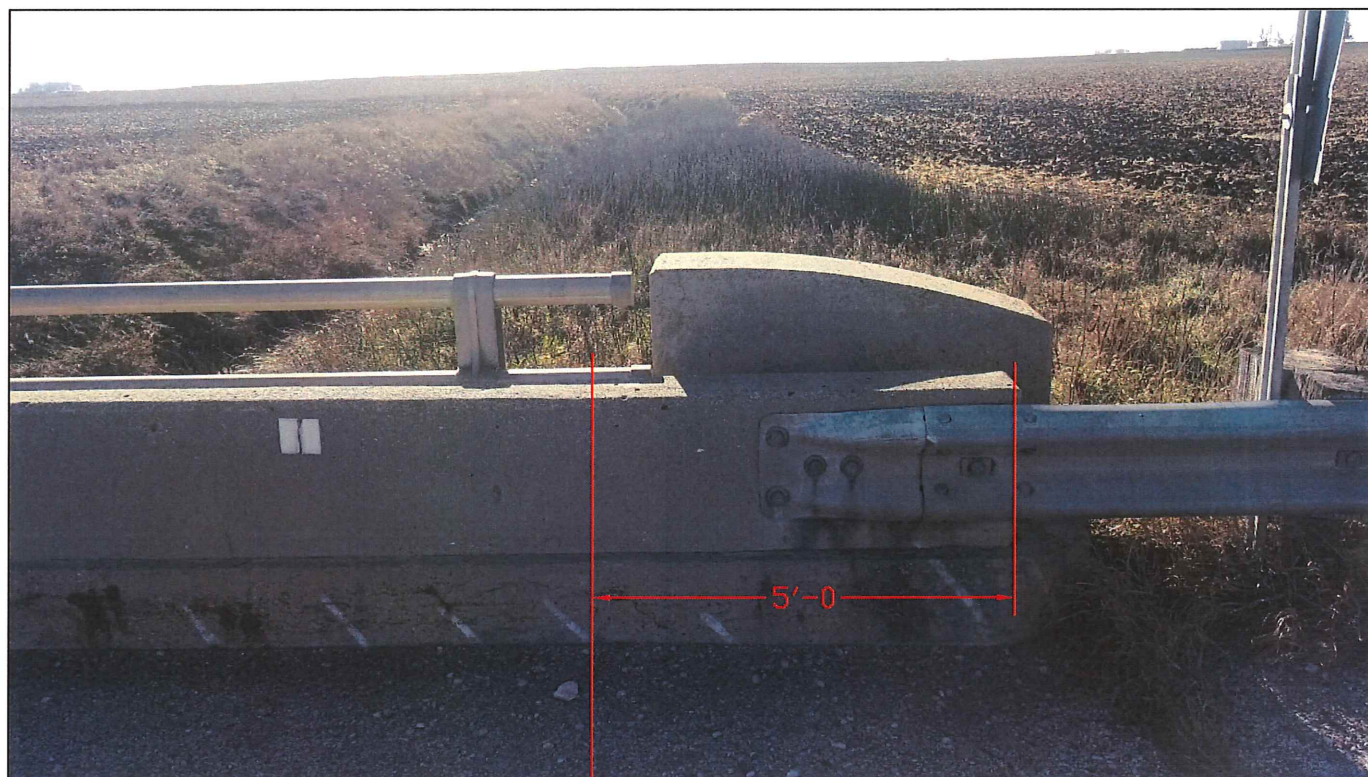
BRIDGE APPROACH SECTION															
Refer to the BR-Series Standard Road Plans.															
Location		Approach Pavement					Subdrain							Remarks	
Bridge Station	End	Ⓣ Thickness Inches	Pay Length Feet	Non-Reinf. Pavement Area Sq. Yds.	Single- Reinf. Pavement Area Sq. Yds.	Double- Reinf. Pavement Area Sq. Yds.	Fixed or Movable Abutment F or M	* Perforated Subdrain 4" Lin. Ft.	* Subdrain Outlet		* Porous Backfill Cu. Yds.	* Class 'A'* Crushed Stone Backfill Cu. Yds.	* Modified Subbase Tons		* Polymer Grid Sq. Yds.
									Station	Side					
321+69	East	10'	50'		133.3		F								BR-112
322+34	West	10'	50'		133.3		F								BR-112

STEEL BEAM GUARDRAIL AT CONCRETE BARRIER OR BRIDGE END POST																	108-8A	
Refer to BA-200, BA-201, BA-202, BA-205, BA-250, SI-172, SI-173 and SI-211.																		
Location Station			Layout Lengths				Delineators and Object Markers				Bld Items①						① See Standards for list of materials.	
			VT1	VF	VT2	ET Terminal	Type	Delineator	Object Marker			End Anchor Bolted	Barrier Transition Section	Steel Beam Guardrail	End Terminal			Adapter
								Type 1	Type 2	Type 3	Standard				Flared for Cable Connection			
										White No.					No.	DM-3L No.		
No.	Station	Offset	LF	LF	LF	LF		No.	No.	No.	No.	Type	No.	LF	No.	No.	No.	Remarks
1	320+84.6		37'-6"			47'-8"			2	1	1	C	1		1			
2	320+84.6		37'-6"			47'-8"			2	1	1	C	1		1			
3	322+39.8		37'-6"			47'-8"			2	1	1	C	1		1			
4	322+39.8		37'-6"			47'-8"			2	1	1	C	1		1			



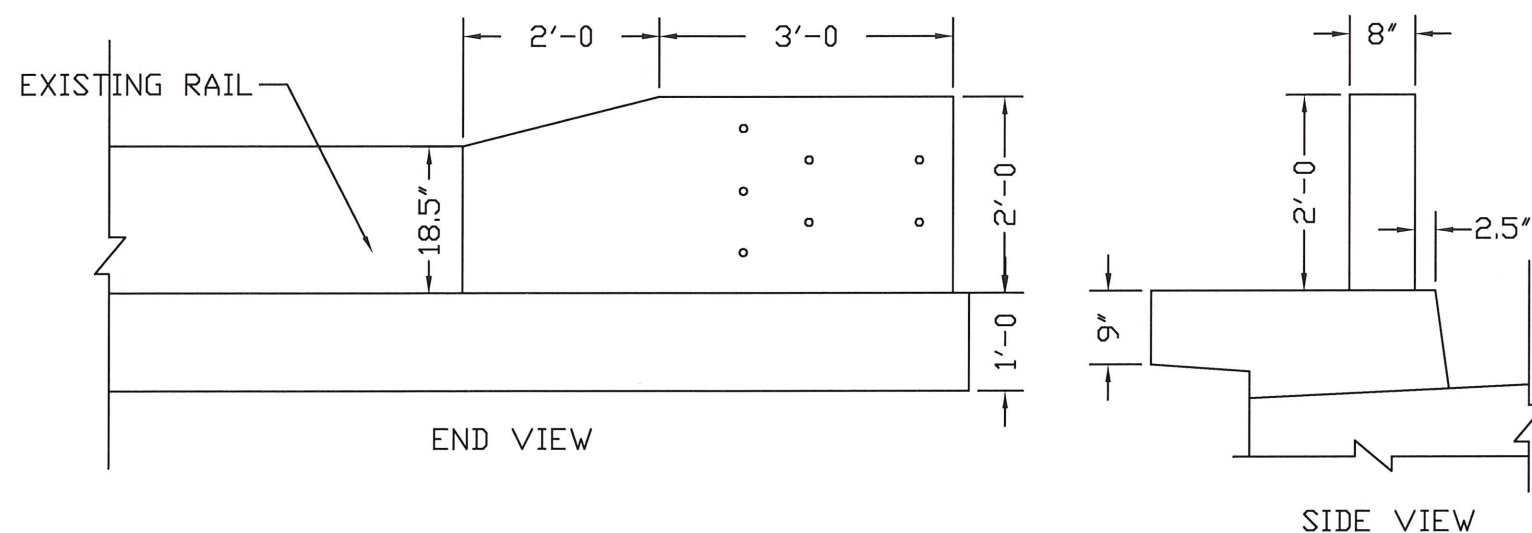
Note: Floor drain to be 4"x8" with 1/4" wall thickness. All parts of drain, including bolts, anchors, attachments and drain shall be galvanized.





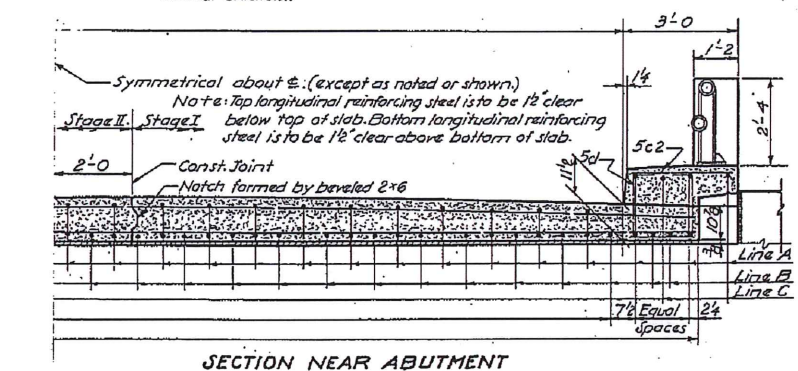
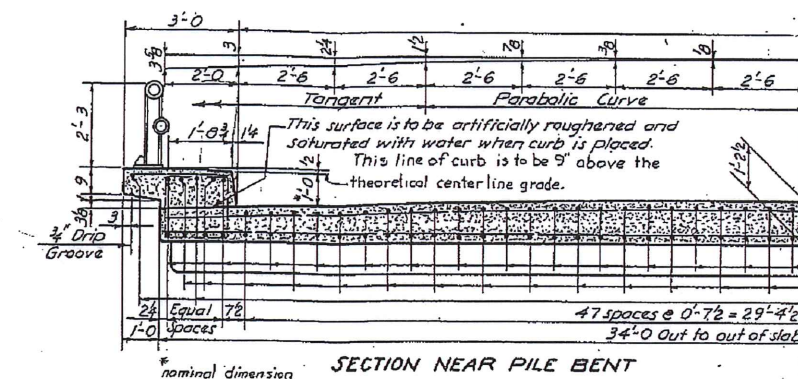
REMOVAL LINE

EXISTING BRIDGE RAIL/CURB REMOVAL DETAIL



BRIDGE RAIL RETROFIT DETAIL

## ORIGINAL CONSTRUCTION PLANS



Bar	Location	Shape	Nº	Length	Weight
9a1	Slab & Curb Longit. Bot.	56	24-2	3613	
9a2	" " " " "	28	25-4	1894	
9a3	" " " " "	56	18-2	2716	
9a4	" " " " "	28	25-4	2412	
9b1	" " " " Top	112	11-10	4506	
9b2	" " " " "	28	19-4	564	
9b3	" " " " "	28	18-6	540	
9b4	" " " " "	28	16-2	472	
9b5	Curb Longit. Top	8	14-0	117	
9b6	" " " " "	8	19-4	161	
9b7	" " " " "	4	11-0	46	
5c1	Curb Vertical	94	5-9	564	
5c2	Transverse	94	2-10	278	
5d1	Slab Sta. I " Top	24	16-3	407	
5d2	" Sta. II " "	24	18-8	467	
6e1	" Sta. I " Bot.	49	16-3	1241	
6e2	" Sta. II " "	49	18-8	1329	
9f1	Pile Bent Longit. Sta. I	8	15-5	420	
9f2	" " " Sta. II	8	17-7	478	
9f3	" " " Ends	4	7-6	102	
5g1	" " " Stirrups	44	5-1	233	
6h1	Roll Post Anchors	18	5-6	182	
4m1	End Post Vert.	32	2-10	61	
4n1	" " Horiz.	16	3-8	39	
				Total	21794

Rad. to c. of bar. 9f3 Dimensions are out to out of bar