CODE No.	ITEM	UNIT	CONSTRUCTION TYPE CODE				
			TOTAL QUANTITY	URBAN BRIDGE SN-090-0044 0013	URBAN BRIDGE SN 090-0046 0013	URBAN BRIDGE SN 090-0120 0013	URBAN ROADWAY 0006
20800150	TRENCH BACKFILL	CU YD	1				1
44000100	PAVEMENT REMOVAL	SQ YD	56				56
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	246				246
50102400	CONCRETE REMOVAL	CU YD	135.2	45.3	60.1	29.8	
50300225	CONCRETE STRUCTURES	CU YD	70.2		70.2		
50300255	CONCRETE SUPERSTRUCTURES	CU YD	29.8			29.8	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	8080	4420	3660		
50606701	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 1	L SUM	1	1			
50606702	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 2	L SUM	1		1		
50606703	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 3	L SUM	1			1	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	15290		10590	4700	
50800515	BAR SPLICERS	EACH	24			24	
~~50900105~~	~~ALUMINUM RAILING, TYPE L~~	~~FOOT~~	~~9~~			~~9~~	△2
52000110	PREFORMED JOINT STRIP SEAL	FOOT	233			233	
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE 1	EACH	10		10		
52100510	ANCHOR BOLTS, 3/4"	EACH	80		80		
52100520	ANCHOR BOLTS, 1"	EACH	54	54			
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	7				7
60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	1				1
60255500	MANHOLES TO BE ADJUSTED	EACH	1				1
60260100	INLETS TO BE ADJUSTED	EACH	2				2
63302400	REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	1			1	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	4	2	2	
67100100	MOBILIZATION	L SUM	1	0.34	0.33	0.33	

MODEL: Summary of Quantities
FILE NAME: P:\09-0006.22 IDOT D4 MOT Plans\10 CADICADD Sheets\D468D59 sht003 MOT SummaryOfQuantities.dgn

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	DRAWN - GDC	REVISED -
PLOT SCALE = 1:1	CHECKED - LDC	REVISED -
PLOT DATE = 11/21/2018	DATE - 10/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR; 12[(HVB,HB)BR]BR	TAZEWELL	61	3
		CONTRACT NO.68D59		
	ILLINOIS FED. AID PROJECT			

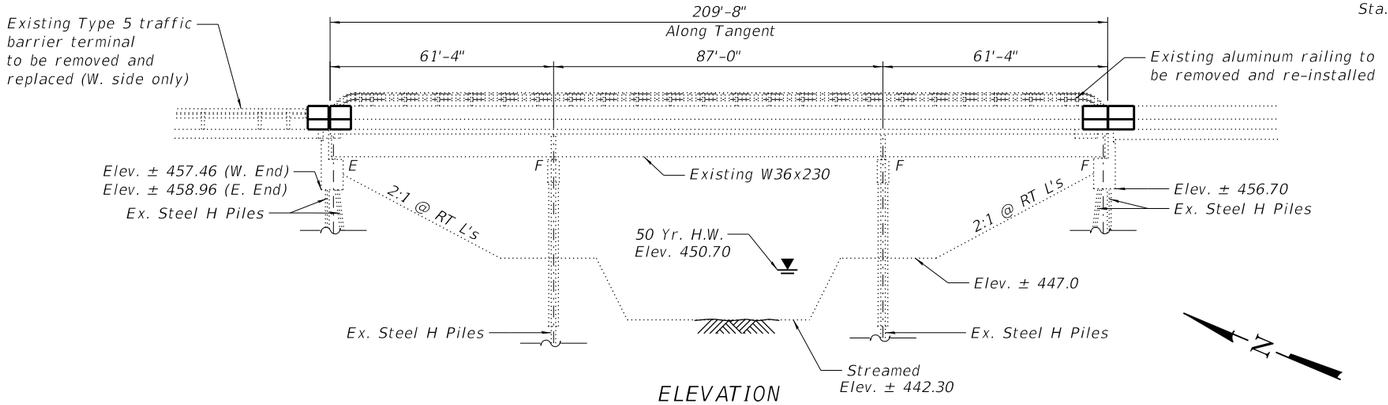
△2 REV 1/9/19

REV. 11/30/18 REV. 11/30/18

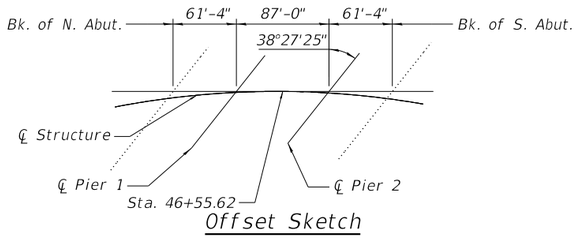
Bench Mark: Chiseled cross on guard rail bolt. Station 13+35 ± 45-ft right along Existing F.A.U. Rte. 6712 centerline. Elevation 484.47

Existing Structure: SN 090-0120 originally built in 1993 as F.A.U. 6707 Section (50B-4, 50-4) as a three span steel I-beam bridge having spans of 61'-4", 87'-0", an 61'-4" with a back to back abutment length of 209'-8", measured along the tangent to the horizontal curved roadway. The bridge is skewed 38°-27'-25", left advance. The out-to-out width varies from 121'-7⅞" at the north abutment to 116'-5" at the south abutment. There is a 1'-0" wide parapet with aluminum railing and a 5'-0" sidewalk on the west side of the bridge. There is a 1'-7" wide parapet on the east side of the bridge. The bridge is supported by reinforced concrete pile supported abutments and solid wall piers.

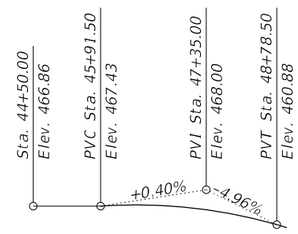
Salvage: The ends of the aluminum railings shall be removed and reinstalled, typical each end. This work shall be included in the cost of the pay items to replace the joints at each abutment. (2)



ELEVATION

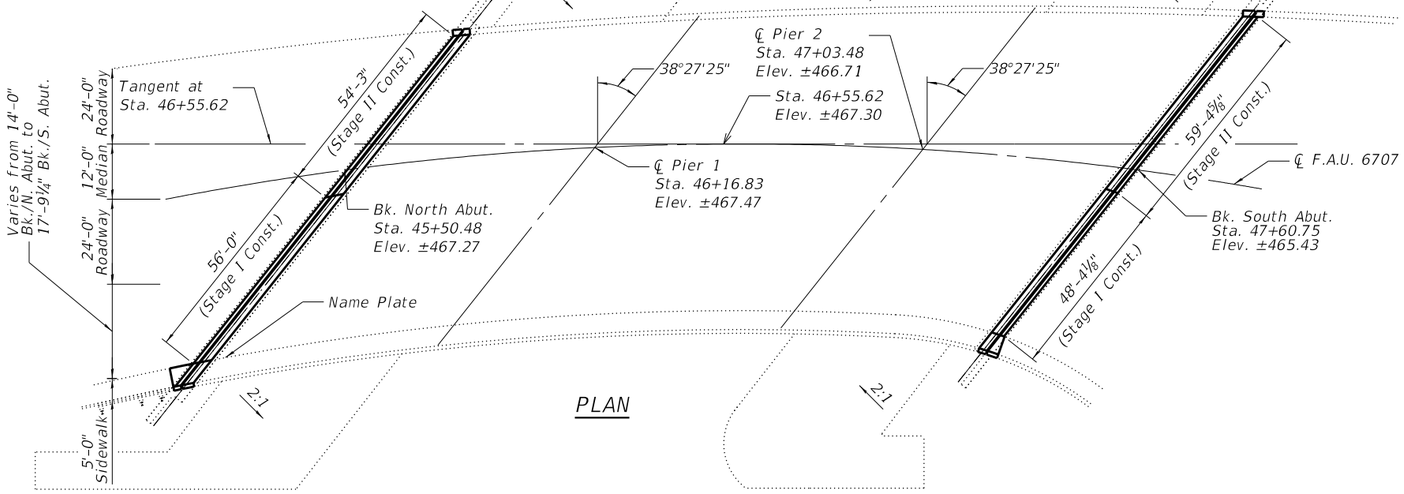


Offset Sketch



Profile Grade

Along ℄ F.A.U. Rte. 6707 (Washington St.)



PLAN

INDEX OF SHEETS

SCOPE OF WORK

To be completed under stage construction.

1. Replace joints at both abutments.
2. Clean and paint structural steel at designated locations.

DESIGN STRESSES

Existing Structure

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (M183 Grade 36)

New Construction

f'c = 4,000 psi (Superstructure)
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (M270 Grade 36)

DESIGN SPECIFICATIONS

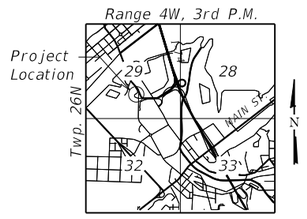
2002 AASHTO Standard Specifications for Highway Bridges
1983 AASHTO Guide Specifications for Seismic Design of Highway Bridges

LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Category (SPC) = A



LOCATION SKETCH

BENJAMIN BOYER 081-007230 LICENSED STRUCTURAL ENGINEER STATE OF ILLINOIS

SIGNED: Benjamin Boyer

DATE: 01/08/2019

ILLINOIS STRUCTURAL ENGINEER
NO. 081-007230
LICENSE EXPIRES: 11-30-2020

GENERAL PLAN & ELEVATION
WASHINGTON STREET OVER FARM CREEK
F.A.U. 6707 - SEC. (50B-4)BR; 12[(HVB,HB)BR]BR
TAZEWELL COUNTY
STATION 46+55.62
STRUCTURE NO. 090-0120

Kaskaskia Engineering Group, LLC
200 E. Main St., Suite 100, Salem, Illinois 62881
618.233.5677 phone
618.233.5975 fax
www.kaskaskiaeng.com
PROFESSIONAL REGISTRATIONS: Illinois Professional Design Firm; Professional Engineering Group
LICENSED NO.: 184.006753; 20-3680586

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PLOT DATE =		CHECKED - BB		REVISED -			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 090-0120
SHEET 1 OF 15 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12[(HVB,HB)BR]BR	TAZEWELL	61	47
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

(2) REV 1/9/19

FILE NAME: P:\10-1063.08 SN 0046 0120 Repairs\10_CADCADD Sheets\090-0120\090120-68D59-001-GPE.dgn
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GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete. As directed by the Engineer, existing construction accessories welded to the top flange of beams shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding ¼ in. deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contactor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The existing structural steel does not contain lead paint.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at ambient temperature other than 50°F.

Cleaning and painting of the existing structure steel shall be as specified in the special provisions for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within 5 ft. (measured along the beam) of either side of the deck joints shall be cleaned per Near White Blast Cleaning – SSPC-SP-10.

The designated areas cleaned per Near White Blast Cleaning – SSPC-SP-10 shall be painted according to the requirements of Paint System 1 – OZ/E/U.

The color of the final finish coat for all steel surfaces shall be Blue, Munsell NO. 10B 3/6.

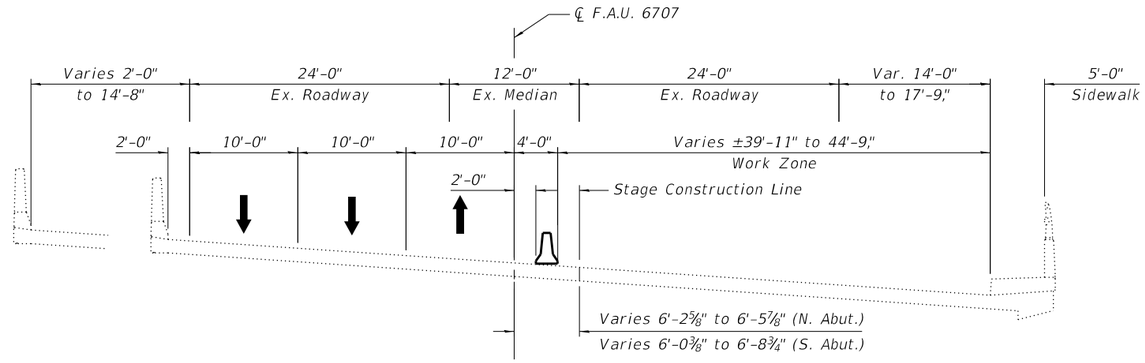
Containment and disposal of non-lead paint cleaning residues shall be as specified in special provisions for "Containment and Disposal of Non-Lead Paint Cleaning Residues". This work shall consist of the containment, collection, temporary storage, transportation and disposal of waste from non-lead paint removal projects. Waste requiring containment and control includes, but is not limited to, old paint, spent abrasives, corrosion products, mill scale, dirt, dust, grease, oil, and salts.

The painting Contractor shall be SSPC-QP1 certified for this project and shall maintain certification throughout the duration of the project.

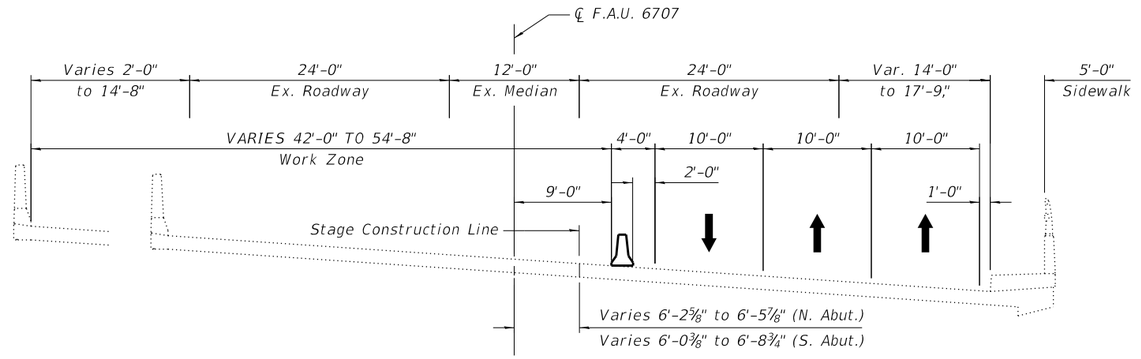
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	29.8		29.8
Concrete Superstructure	Cu. Yd.	29.8		29.8
Reinforcement Bars, Epoxy Coated	Pound	3170	1530	4700
Preformed Joint Strip Seal	Foot	233		233
Cleaning and Painting Steel Bridge No. 3	L. Sum	1		1
Bar Splicers	Each	16	8	24
Containment and Disposal of non-lead Paint Cleaning Residues No. 3	L. Sum	1		1
Remove and Re-erect Traffic Barrier Terminals, Type 5	Each	1		1
Aluminum Railing, Type L	Foot	9		9

2



STAGE 1 – TYPICAL SECTION
(Looking Upstation)



STAGE – 2 TYPICAL SECTION
(Looking Upstation)

Kaskaskia Engineering Group, LLC
200 E. Main St., Suite 100, Belleville, Illinois 62220
618.233.5077 phone
618.233.5977 fax
www.kaskaskiaeng.com
PROFESSIONAL REGISTRATIONS: Illinois Professional Design Firm; Professional Engineering Group
LICENSE NO.: 184.005733; 20-3680586

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PLOT DATE =	CHECKED - BB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 090-0120
SHEET 2 OF 15 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12[(HVB,HB)BR]BR	TAZEWELL	61	48
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

2 REV 1-9-19

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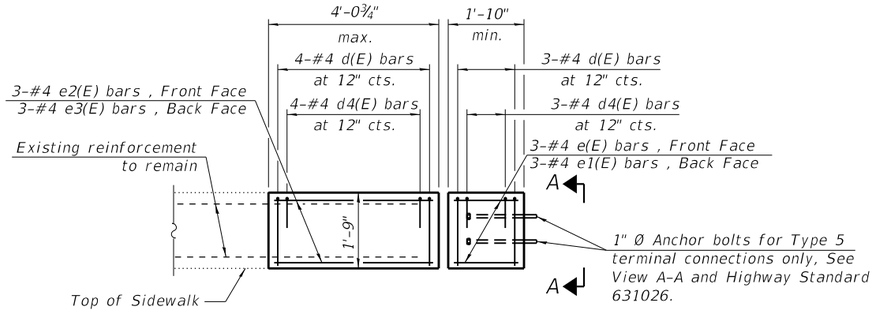
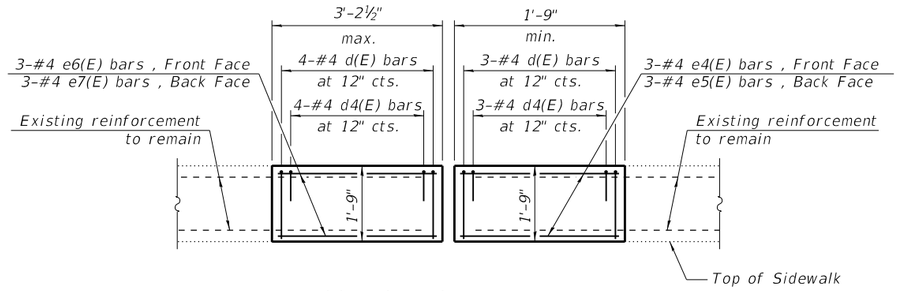


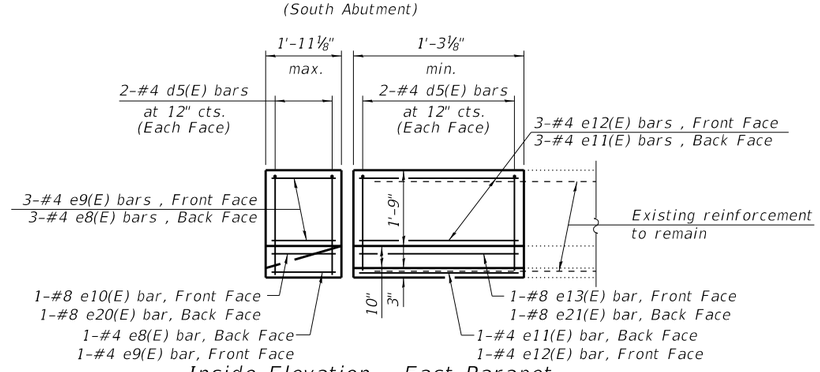
Inside Elevation – West Parapet

(North Abutment)



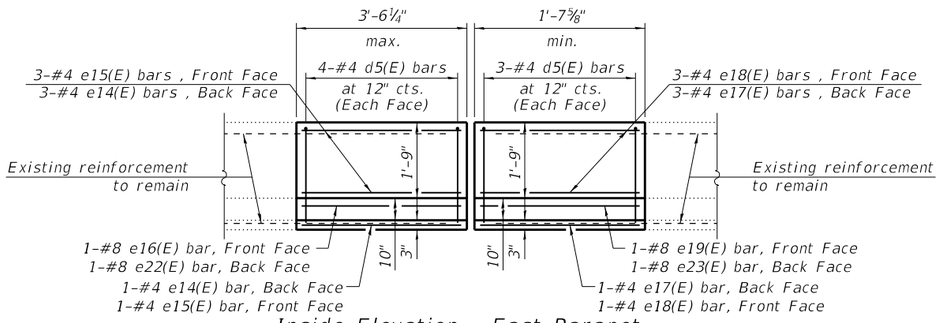
Inside Elevation – West Parapet

(South Abutment)



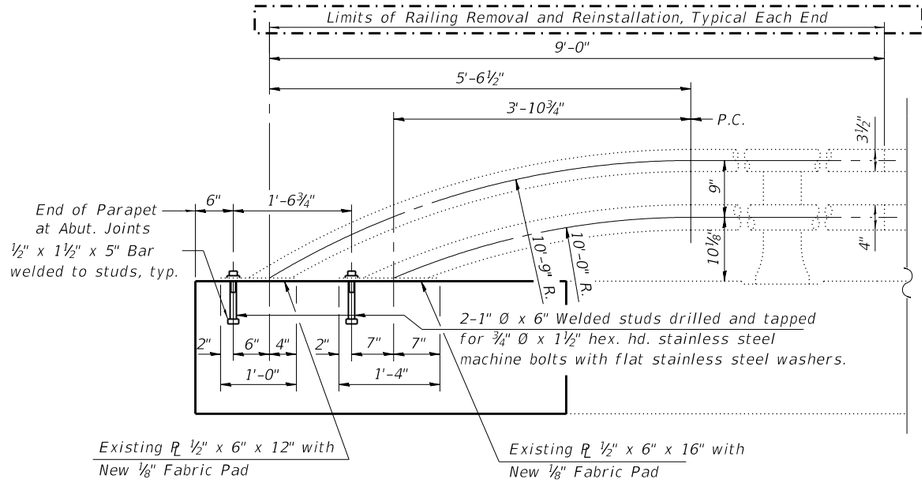
Inside Elevation – East Parapet

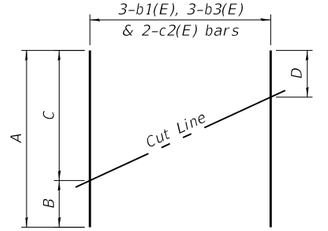
(North Abutment)



Inside Elevation – East Parapet

(South Abutment)

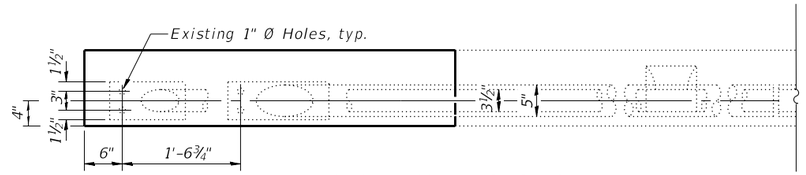




FIELD CUTTING DIAGRAM

(b1(E), b3(E) and c2(E) bars)

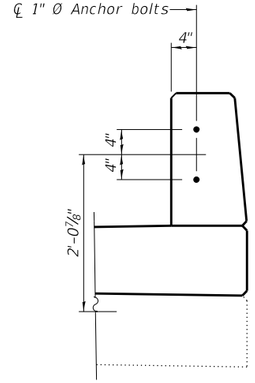
Bar	A	B	C	D
b1(E)	11'-0"	2'-9"	8'-3"	6'-0"
b3(E)	3'-6"	1'-7"	1'-11"	2'-6¾"
c2(E)	8'-2"	2'-10"	5'-4"	4'-6"



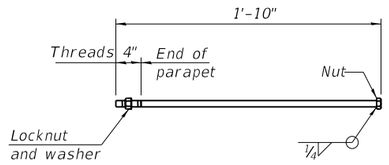
RAIL TERMINAL SECTION

Note: The end rail post shall be set back as required for the terminal rail section.

Notes:
Length of parapet shown in Parapet Elevations is taken along the back face of parapet.
See sheet 6 of 15 for Bar Bend Details.



VIEW A-A



*1" Ø ANCHOR BOLT

(Anchor bolt assemblies shall be galvanized according to Article 1006.09 of the Standard Specifications)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	16	#5	34'-1"	
a1(E)	16	#5	29'-0"	
a2(E)	16	#5	29'-8"	
a3(E)	16	#5	32'-1"	
b(E)	8	#5	2'-6"	
b1(E)	3	#5	11'-0"	
b2(E)	2	#5	1'-8"	
b3(E)	3	#5	3'-6"	
b4(E)	2	#5	2'-10"	
b5(E)	6	#5	1'-9"	
b6(E)	2	#5	1'-5"	
c(E)	9	#5	1'-11"	
c1(E)	2	#5	5'-8"	
c2(E)	2	#5	8'-2"	
c3(E)	1	#5	2'-0"	
c4(E)	6	#5	2'-5"	
c5E)	3	#5	8'-9"	
c6(E)	1	#5	5'-10"	
c7(E)	1	#5	5'-5"	
c8(E)	1	#5	2'-6"	
c9(E)	4	#5	6'-0"	
d(E)	14	#4	2'-11"	
d1(E)	7	#4	5'-0"	
d2(E)	7	#6	3'-9"	
d3(E)	10	#5	3'-5"	
d4(E)	14	#4	2'-1"	
d5(E)	22	#5	3'-0"	
d6(E)	10	#5	2'-7"	

BILL OF MATERIAL CONT'D

Bar	No.	Size	Length	Shape
e(E)	3	#4	2'-6"	
e1(E)	3	#4	1'-8"	
e2(E)	3	#4	2'-11"	
e3(E)	3	#4	3'-9"	
e4(E)	3	#4	1'-9"	
e5(E)	3	#4	1'-5"	
e6(E)	3	#4	2'-7"	
e7(E)	3	#4	2'-10"	
e8(E)	4	#4	1'-7"	
e9(E)	4	#4	0'-5"	
e10(E)	1	#8	0'-5"	
e11(E)	4	#4	1'-0"	
e12(E)	4	#4	2'-3"	
e13(E)	1	#8	2'-3"	
e14(E)	4	#4	3'-0"	
e15(E)	4	#4	2'-3"	
e16(E)	1	#8	2'-3"	
e17(E)	4	#4	1'-4"	
e18(E)	4	#4	2'-3"	
e19(E)	1	#8	2'-3"	
e20(E)	1	#8	1'-7"	
e21(E)	1	#8	1'-0"	
e22(E)	1	#8	3'-0"	
e23(E)	1	#8	1'-4"	
x(E)	184	#5	2'-7"	
Concrete Superstructure		Cu. Yd.	17.7	
Reinforcement Bars, Epoxy Coated		Pound	3170	

Kaskaskia Engineering Group, LLC
200 E. Main St., Suite 100, Belleville, Illinois 62220, 618.233.5077 phone, 618.233.5977 fax, www.kaskaskiaeng.com
PROFESSIONAL REGISTRATIONS: Illinois Professional Design Firm 184.005773; Professional Engineering Group 20-3488586
LICENSE NO.

USER NAME =		DESIGNED - KS	REVISED 2 1/08/2019 B.B.	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE DETAILS STRUCTURE NO. 090-0120
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PLOT DATE =		CHECKED - BB	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12[(HVB,HB)BR]BR	TAZEWELL	61	53
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

2 rREV 1/9/19

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