

**GENERAL NOTES**

All fasteners shall be ASTM A325 Type I, mechanically galvanized bolts. All bolts shall be 3/4" φ in 1 5/16" φ holes unless noted otherwise.

Calculated weight of Structural Steel =

- AASHTO M 270 Grade 36 = 12,200 lb. (Steel extensions for Elastomeric Bearings)
- AASHTO M 270 Grade 36 = 14,290 lb. (Steel extensions for HLMR Bearings)
- AASHTO M 270 Grade 36 = 19,190 lb. (Cross-frames)

No field welding is permitted except as specified in the contract documents.

The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.

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 and girders 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 1/4 inch 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.

If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor 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 Contractor shall design and construct a protective shield system to protect the tracks below the structure. All details and calculations shall be submitted to the Department and Norfolk Southern for review and approval prior to commencement of operations.

The proposed painting containment and protective shield systems and any other construction means or methods selected by the Contractor shall not infringe on the 21'-6" temporary vertical clearance, measured above the top of any of the rails, without written approval from Norfolk Southern.

A two-week look ahead schedule must be submitted to Norfolk Southern and Mr. Duffy, (773) 612-7102, for approval prior to commencement of operations.

The Contractor shall coordinate with the Norfolk Southern Flagman to schedule track time for work in the Northfolk Southern right-of-way.

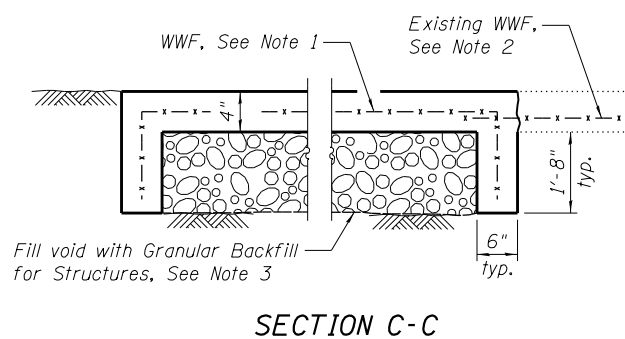
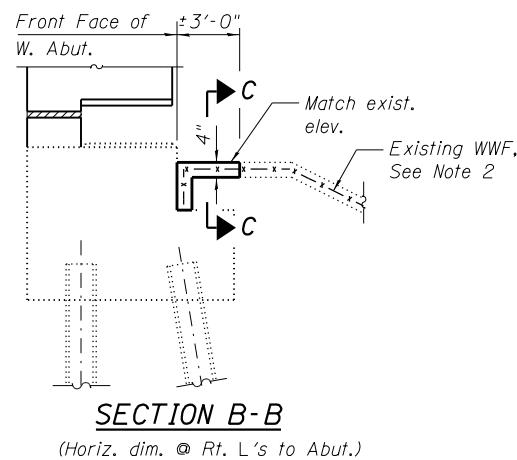
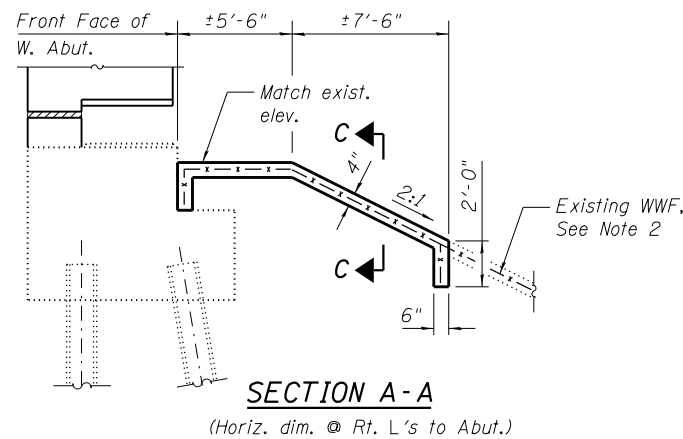
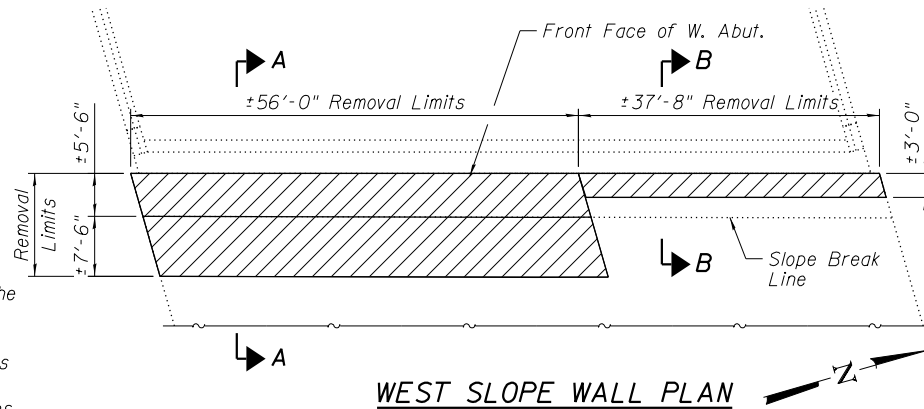
The Contractor will be required to obtain a Right of Entry permit from Norfolk Southern for access to railroad right-of-way. The cost of the permit shall be considered as included in the contract unit prices bid for the various items of work involved, and no additional compensation will be allowed.

Any required temporary railroad grade crossings to perform the work contained herein shall conform to Article 107.10 of the Standard Specifications.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

All new structural steel shall be shop painted with an inorganic zinc-rich primer per AASHTO M 300, Type 1.

Cleaning and painting of the existing structural steel shall be as specified in the Special Provision for "Cleaning and Painting Existing Steel Structures". All existing steel shall be cleaned per Near White Blast Cleaning - SSPC-SP10. All existing steel shall be painted according to the requirements of Paint System 1 - QZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4.



**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd	-	103.4	103.4
Slope Wall Removal	Sq Yd	-	99	99
Removal of Existing Concrete Deck	Each	1	-	1
Protective Shield	Sq Yd	3,960	-	3,960
Structure Excavation	Cu Yd	-	398	398
Concrete Structures	Cu Yd	56.5	33.3	89.8
Concrete Superstructure	Cu Yd	1,815.8	-	1,815.8
Bridge Deck Grooving	Sq Yd	5,245	-	5,245
Protective Coat	Sq Yd	6,659	-	6,659
Furnishing and Erecting Structural Steel	L Sum	0.1	-	0.1
Stud Shear Connectors	Each	13,572	-	13,572
Reinforcement Bars, Epoxy Coated	Pound	381,770	3,700	385,470
Bar Splicers	Each	1,687	4	1,691
Slope Wall 4 Inch	Sq Yd	-	99	99
Name Plates	Each	1	-	1
Preformed Joint Strip Seal	Foot	184	-	184
Elastomeric Bearing Assembly, Type II	Each	26	-	26
Anchor Bolts, 1"	Each	156	-	156
Epoxy Crack Injection	Foot	-	229	229
Geocomposite Wall Drain	Sq Yd	-	216	216
Pipe Drain Removal	Foot	-	220	220
Concrete Wearing Surface, 5"	Sq Yd	586	-	586
Precast Bridge Approach Slab	Sq Ft	5,120	-	5120
High Load Multi-Rotational Bearings, Guided Expansion, 350K	Each	26	-	26
Granular Backfill for Structures	Cu Yd	-	368	368
Jack and Remove Existing Bearings	Each	52	-	52
Structural Steel Removal	Pound	11,160	-	11,160
Containment and Disposal of Lead Paint Cleaning Residues No. 1	L Sum	1	-	1
Cleaning Bridge Seats	Sq Ft	-	516	516
Cleaning and Painting Steel Bridge No. 1	L Sum	1	-	1
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq Ft	-	132	132
Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq Ft	-	127	127
Drainage Scuppers, DS-II	Each	2	-	2
Temporary Sheet Piling	Sq Ft	-	286	286
Pipe Underdrains for Structures 4"	Foot	-	366	366

**SLOPE WALL NOTES:**

- Slope wall shall be reinforced with welded wire fabric, 6 in x 6 in - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.
- Existing welded wire fabric to be cleaned and incorporated into new construction. Lap existing and new welded wire fabric a minimum of 6". Cost included with Slope Wall Removal.
- A quantity of 33 Cu. Yds. of Granular Backfill for Structures has been estimated to fill the voids under the slope wall areas to be removed. Actual quantity shall be determined in the field by the Engineer. Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Remove and dispose of debris that has accumulated on portions of the W. Abut. Slope wall to be removed according to Article 202.03 of the Standard Specifications. Cost included with Slope Wall Removal.

STATION 933+61.03  
RE-BUILT 20 BY  
STATE OF ILLINOIS  
F.A.I. RT. 94 SEC. 2012-059-BR  
LOADING HS-20  
STRUCTURE NO. 016-2440

**NAME PLATE**  
See Std. 515001

Note:  
Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

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2/17/13 PM

4/18/2013

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BOWMAN, BARRETT & ASSOCIATES INC.  
CONSULTING ENGINEERS  
Chicago, Illinois  
312.228.0100  
www.bbainc.com

USER NAME =	DESIGNED - TL	REVISED -
PLOT SCALE =	CHECKED - BAK	REVISED -
PLOT DATE = 03/29/2013	DRAWN - TL	REVISED -
	CHECKED - BAK	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL DATA  
STRUCTURE NO. 016-2440

SHEET NO. S-2 OF S-47 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2012-059-BR	COOK	631	430
CONTRACT NO. 60J12				
ILLINOIS FED. AID PROJECT				