

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$ in. ϕ , holes $\frac{15}{16}$ in. ϕ , unless otherwise noted.

Calculated weight of Structural Steel = 7,620 pounds (AASHTO M270 Grade 36)
84,520 pounds (AASHTO M270 Grade 50)

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 shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

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 $\frac{1}{4}$ 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, 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.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Concrete Sealer shall be applied to all exposed surfaces of new concrete on the backwall, bridge seal and front face of the bridge seat of the abutments.

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

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 1-02/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 Blue, Munsell No. 10B 3/6.

A minimum of (2) air monitors will be required to monitor abrasive blasting operations at this site. See Special Provision for "Containment and Disposal of Lead Paint Cleaning Residues".

The Organic Zinc Rich Primer/Epoxy/Urethane paint system shall be used for shop and field painting of new structural steel except where otherwise noted. Two coats shall be applied in the shop and the finish coat applied in the field. Masked off connection surfaces, and field installed fasteners, shall be touched up and finish coated in the field. 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 Blue Munsell No. 10B 3/6. See Special Provision for "Cleaning and Painting New Metal Structures".

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

INDEX OF SHEETS

1	General Plan and Elevation	40	Abutment A Concrete Removal & Repairs
2	General Notes, Total Bill of Material	41	Abutment A Widening
3	Railroad Track Layout & Slope Wall	42	Abutment A Footing & North Wing Wall
4	Top of Slab Elevations	43	Abutment A South Wing Wall
5	W.B. Roadway - Top of Slab Elevations	44	Abutment B Concrete Removal & Repairs
6	W.B. Roadway - Top of Slab Elevations	45	Abutment B Widening
7	W.B. Roadway - Top of Slab Elevations	46	Abutment B Footing & North Wing Wall
8	E.B. Roadway - Top of Slab Elevations	47	Abutment B South Wing Wall
9	E.B. Roadway - Top of Slab Elevations	48	Abutment C Concrete Removal & Repairs
10	E.B. Roadway - Top of Slab Elevations	49	Abutment C Widening
11	Top of W.B. Roadway West Approach Slab Elevations	50	Abutment C Footing & South Wing Wall
12	Top of W.B. Roadway East Approach Slab Elevations	51	Abutment C North Wing Wall
13	Top of E.B. Roadway West Approach Slab Elevations	52	Abutment D Concrete Removal & Repairs
14	Top of E.B. Roadway East Approach Slab Elevations	53	Abutment D Widening
15	W.B. Roadway Deck	54	Abutment D Footing & South Wing Wall
16	E.B. Roadway Deck	55	Abutment D North Wing Wall
17	W.B. Roadway North Parapet	56	Abutment Drainage
18	W.B. Roadway South Parapet	57	Pier 1 Repairs
19	E.B. Roadway North Parapet	58	Pier 1 Widening
20	E.B. Roadway South Parapet	59	Pier 2 Repairs
21	Superstructure Details	60	Pier 2 Widening
22	Superstructure Details	61	Pier 3 Concrete Removal & Repairs
23	W.B. Roadway West Approach Slab Details	62	Pier 3 Widening
24	W.B. Roadway West Approach Slab Details	63	Pier 4 Repairs
25	E.B. Roadway West Approach Slab Details	64	Pier 4 Widening
26	E.B. Roadway West Approach Slab Details	65	Pier 5 Repairs
27	Bridge East Approach Slab Details	66	Pier 5 Widening
28	Bridge East Approach Slab Details	67	Pier 6 Repairs
29	Preformed Joint Strip Seal	68	Pier 6 Widening
30	Drainage Scupper, DS-II	69	Temporary Soil Retention System
31	Framing Plan	70	HP Piles Details
32	Steel Beam 1A Details	71	Bar Splicer Assembly and Mechanical Splicer Details
33	Steel Beam 13 Details	72	Concrete Parapet Slipforming Option
34	Existing Steel Beams 1-6 Details	73	Soil Boring Log B-1a
35	Existing Steel Beams 7-12 Details	74	Soil Boring Log B-2a
36	Existing Beams Design Data Tables	75	Soil Boring Log B-3a
37	Diaphragms	76	Soil Boring Log B-4a
38	Bearing Details - Abutments	77	Soil Boring Log B-5a
39	Bearing Details - Piers		

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.		389	389
Concrete Removal	Cu. Yd.		41.5	41.5
Slope Wall Removal	Sq. Yd.		2,080	2,080
Protective Shield	Sq. Yd.	606		606
Structure Excavation	Cu. Yd.		897	897
Floor Drains	Each	12		12
Concrete Structures	Cu. Yd.		411.8	411.8
Concrete Superstructure	Cu. Yd.	1,079.8		1,079.8
Bridge Deck Grooving	Sq. Yd.	2,776		2,776
Concrete Encasement	Cu. Yd.		2.4	2.4
Protective Coat	Sq. Yd.	3,538		3,538
Stud Shear Connectors	Each	13,341		13,341
Cleaning and Painting Steel Bridge No. 2	L. Sum	1		1
Containment and Disposal of Lead Paint Cleaning Residues No. 2	L. Sum	1		1
Reinforcement Bars	Pound		810	810
Reinforcement Bars, Epoxy Coated	Pound	235,280	47,840	283,120
Bar Splitters	Each		183	183
Slope Wall 4 Inch	Sq. Yd.		182	182
Bituminous Coated Aggregate				
Stepwall 6"	Sq. Yd.		2,120	2,120
Furnishing Steel Piles HP8x36	Foot		396	396
Driving Piles	Foot		396	396
Pile Shoes	Each		12	12
Name Plates	Each	2		2
Drilled Shaft in Soil	Cu. Yd.		7.9	7.9
Drilled Shaft in Rock	Cu. Yd.		3.5	3.5
Preformed Joint Strip Seal	Foot	188		188
Elastomeric Bearing Assembly, Type II	Each	4		4
Anchor Bolts, $\frac{5}{8}$ "	Each	8		8
Anchor Bolts, 1"	Each	8		8
Anchor Bolts, 1 $\frac{1}{2}$ "	Each	4		4
Concrete Sealer	Sq. Ft.		391	391
Epoxy Crack Injection	Foot		112	112
Geocomposite Wall Drain	Sq. Yd.		184	184
Pipe Underdrains for Structures 4"	Foot		179	179
Drainage Scuppers, DS-II	Each	4		4
Temporary Soil Retention System	Sq. Ft.		206	206
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)	Sq. Ft.		110	110
Removal of Existing Concrete Deck, No. 2	Each	2		2
Furnishing and Erecting Structural Steel Bridge No. 4	L. Sum	1		1

* Quantity is for deck surface and inside face and top of parapets.

**GENERAL NOTES AND TOTAL BILL OF MATERIAL
STRUCTURE NO. 081-0024 (W.B.)
STRUCTURE NO. 081-0025 (E.B.)**

DESIGNED	
CHECKED	
DRAWN	ASJ
CHECKED	SPK

SHEET NO. 2	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	280	81-1(VB-1)R	ROCK ISLAND	503	338
77 SHEETS	CONTRACT NO. 64815				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					