### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

## TOTAL BILL OF MATERIAL

#### Fasteners shall be AASHTO MI64 Type 1, mechanically galvanized bolts (in painted areas and MI64 Type 3 in unpainted areas). Bolts<sup>7</sup><sub>8</sub> in. ¢, holes 1 in. ¢, unless otherwise noted.

- 2 Calculated weight of Structural Steel = 9,083 pounds
- 3. No field welding is permitted except as specified in the contract documents.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
- 5. Reinforcement bars designated (E) shall be epoxy coated.
- 6. 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 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 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.
- 7. If the Contractor elects to use cantilever forming brackets on the exterior 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 girder at each of these additional bracket locations.
- 8. 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 bld for the work.
- g. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- 10. Cleaning and painting of the existing structural steel shall be as specified in the Special Provision "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 1-0Z/E/U. The color of the final finish coat shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom of bottom flange of fascia beams shall be Blue, Munsell No. 10B 3/6.
- 11. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
- 12. The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.

DESIGNED	PRD	
CHECKED	KPS	
DRAWN	PRD	
CHECKED	KPS	

.

GENERAL NOTES

- 13. Two  ${}^{l}_{B}$  in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
- Slopewall shall be reinforced with welded wire fabric, 6" x 6" W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.
- 15. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
- 16. This structure will retain the same number 101-0123

All new structural steel shall be painted with an inorganic zinc-rich primer per AASHTO M300, Type 1.

### SCOPE OF WORK

- 1. Remove and replace existing concrete deck.
- 2. Install stud shear connectors in positive moment areas of Span 3.
- 3. Remove existing rocker bearings at abutments and Pier 2 and replace with elastomeric bearings.
- 4. Remove and replace approach slabs.
- 5. Partially remove and reconfigure wingwalls and abutment back wall to account for widening.
- 6. Repair abutments, piers and slopewalls.
- 7. Retrofit ends of all existing girders with steel plates and angles.
- 8. Clean and paint existing structural steel.

ITEM	UNIT	SUPER	SUB
Porous Granular Embankment (Special)	Cu. Yd.		87
Concrete Removal	Cu. Yd.		37.5
Slopewall Removal	Sq. Yd.		168
Removal of Existing Concrete Deck	Each.	1	
Protective Shield	Sq. Yd.	356	
Structure Excavation	Cu. Yd.		108
Floor Drains	Each	9	
Concrete Structures	Cu. Yd.		96.7
Concrete Superstructure	Cu. Yd.	417.8	
Bridge Deck Grooving	Sq. Yd.	1155	
Protective Coat	Sq. Yd.	1463	
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.		158
Furnishing and Erecting Structural Steel	Pound	9083	
Stud Shear Connectors	Each	860	
Jack and Remove Existing Bearings	Each	12	
Structural Steel Repair	Pound	3223	
Cleaning and Painting Steel Bridge	L. SUM	1	
Containment and Disposal of Lead Paint Cleaning Residues	L. SUM	1	
Reinforcement Bars, Epoxy Coated	Pound	124,830	7,590
Bar Splicers	Each		125
Concrete Sealer	Sq. Ft		978
Slopewall, 4"	Sq. Yd.		168
Name Plates	Each	1	
Preformed Joint Strip Seal	Foot	69	·
Elastomeric Bearing Assembly, Type I	Each	8	
Elastomeric Bearing Assembly, Type II	Each	4	
Anchor Bolt 1'4"	Each	16	
Anchor Bolt 1'2"	Each	8	
Geocomposite Wall Drain	Sq. Yd.		35
Pipe Underdrains for Structures, 4''	Foot		182
Conduit Embedded in Structure 2" Dia., PVC	Foot	354	
Junction Box, Stainless Steel, Embedded in Structure 12" X 10" X 6"	Each	2	
Modular Expansion Joint - Swivel 6"	Foot	63	

**rin**group

Excellence through Ownersh

200 West Front Street Wheaton, IL 60187

PH. 630.682.4700

SHEET NO.2

OF

33 SHEETS



Note:

All drainage system components shall extend 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See article 601.05 of the standard Specifications and Highway Standard 601101.) PRIOR TO REMOVAL OF CONCRETE DECK. REVIEW SHEET 19 OF 33.

# INDEX OF SHEETS

1.	General Plan and Elevation
2.	General Data
3.	Top of Slab Elevations
4.	Top of Slab Elevations
5.	Top of Approach Slab Elevations
6.	Superstructure Plan
7.	Superstructure Coss Sections
8.	Superstructure Details
9.	Superstructure Details (Light Mount)
10.	Superstructure Details (Parapet)
11.	Parapet Slip Form Option
12.	Diaphraam Details
13.	South Approach Slab
14.	North Approach Slab
15.	Approach Slab Details
16.	Preformed Joint Strip Seal
17.	Modular Expansion Joint - Swivel, 6"
18.	Existing Framing Plan
19.	Girder Elevation and Tables
20.	Plate Girder Repair Details (1 of 2)
21.	Plate Girder Repair Details (2 of 2)
22.	Elastomeric Brg - Type I
23.	Elastomeric Brg - Type II
24.	S. Abut. Removal Plan
25.	N. Abut. Removal Plan
26.	South Abutment
27.	South Abutment Details
28.	North Abutment
29.	North Abutment Details
30.	Pier 1 Repair
31.	Pier 2 Repair
32.	Slope Wall Repair Plan
33.	Bar Splicer Assembly Details
	2005 Repair Plans
	1970 Design Plans

## <u>GENERAL DATA</u> STRUCTURE NO. 101-0123

F.A.P. F.A.L RTE. & RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303 5146	1-HBR & 1-2HB-D	WINNEBAGO	216	118
		CONTRACT	NO. 6	4B79
FED. ROAD DIS	T. NO. 2 ILLINOIS FED. A	ID PROJECT		

87	
37.5	
37.5 168 1 356 108	
1	
356	
108	
9 96.7	
96.7	
417.8 1155	
1155	
1463	
158	
9083	
860	
12	
3223	
1	
860 12 3223 1 1	
132,420	
125	
125 125 978	
978 168	
978 168	
978 168	
978 168	
978 168 1 69 8 4	
978 168 1 69 8 4 16	
978 168 1 69 8 4 16	
978 168 1 69 8 4 16 8 35	
978 168 1 69 8 4 16	
978 168 1 69 8 4 16 8 35	
978 168 1 69 8 4 16 8 35 182	
978 168 1 69 8 4 16 8 35 182 354	

TOTAL