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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TUTAL BILL OF MATERIAL								
ITEM	UNIT	SUPER	SUB	TOTAL				
Porous Granular Embankment (Special)	Cu. Yd.		168	168				
Stone Riprap, Class A5	Sq. Yd.		801	801				
Filter Fabric	Sq. Yd.		801	801				
Removal of Existing Structures	Each			1				
Structure Excavation	Cu. Yd.		262	262				
Concrete Structures CL			48.0	48.0				
Concrete Superstructure	Cu. Yd.	137.1		137.1				
Bridge Deck Grooving	Sq. Yd.	338		338				
Concrete Encasement	Cu. Yd.		6.6	6.6				
Protective Coat	Sq. Yd.	423		423				
Furnishing and Erecting Structural Steel	L. Sum	1		1				
Stud Shear Connectors	Each	1,692		1,692				
Reinforcement Bars, Epoxy Coated	Pound	29,010	7,940	36,950				
Bar Splicers (E)	Each	379	22	401				
Furnishing Steel Piles HP 14x73	Foot		457	457				
Driving Piles	Foot		457	457				
Test Pile Steel HP 14x73	Each		1	1				
Temporary Sheet Piling	Sq. Ft.		418	418				
Name Plates	Each	1		1				
Anchor Bolts, 1"	Each		24	24				
Geocomposite Wall Drain	Sq. Yd.		93	93				
Pipe Underdrains for Structures 4"	Foot		202	202				
Temporary Soil Retention System	Sq. Ft.		126	126				

TOTAL RILL OF MATERIAL

** Quantity includes top of concrete surface of bridge deck back to back of abutments and the top and inside vertical faces of the parapets.



STONE RIPRAP FLANK DETAIL

GENERAL NOTES

The Contractor is advised that the existing PPC deck beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

If the Contractor's procedures for existing beam removal involves placement of heavy equipment on the existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing Structures.

2. Piles that cannot avoid the existing footing shall be driven through 24-inch diameter pre-cored holes extending to elevation 485.5 ft. (East Abutment) and elevation 486.3 ft. (West Abutment) according to Article 512.09(c) of the Standard Specifications. Cost included in Driving Piles.

3. Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts ${}^{3}_{4}$ '' in. ϕ , holes ${}^{15}_{16}$ '' in. ϕ , unless otherwise noted.

4. Calculated weight of Structural Steel = 99,490 lbs.

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

6. Reinforcement bars designated (E) shall be epoxy coated.

7. 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.

8. The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. 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 Gray, Munsell No. 5B 7/1.

9. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

10. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.

11. Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.

12. A cantilevered sheet piling design does not appear feasible at the East Abutment 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.

GENERAL DATA

NO.2	F.A.P. Rte.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.	
	793	40BR-1		MADISON	72	34	
EETS		S.N. 060-0341		CONTRACT	NO. 76	A36	
	FED. ROAD DIST. NO ILLINOIS FED. AID PROJECT						