GENERAL NOTES

Fasteners shall be AASHTO MI64 Type 3. Bolts ${}^7_8{}^{\prime\prime}$ ϕ , holes ${}^{l5}_{l6}{}^{\prime\prime}$ ϕ , unless otherwise noted.

Calculated weight of Structural Steel = 491610 pounds. All structural steel shall be AASHTO M 270 Grade 50W.

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 (IL Modified). See Special Provisions

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to their 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.

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

Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with a Department approved zinc rich primer. No field painting shall be required. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".

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

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments. The Contractor shall drive test piles to 110% of the nominal required bearing

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.

In lieu of the hammer selection criteria and use of the FHWA Modified Gates formula specified in Section 512 of the Standard Specifications, the Contractor shall conduct a wave equation analysis to establish the driving criteria at all pile foundations which specify a nominal required bearing above 600 kips. The analysis and calculations shall be submitted to the Engineer for approval.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		322	322
Stone Riprap, Class A4	Sq. Yd.		3096	3096
Filter Fabric	Sq. Yd.		3096	3096
Removal of Existing Structures	Each			2
Structure Excavation	Cu. Yd.		374	374
Concrete Structures	Cu. Yd.		240.4	240.4
Concrete Superstructure	Cu. Yd.	524.0		524.0
Bridge Deck Grooving	Sq. Yd.	1436		1436
Concrete Encasement	Cu. Yd.		17.2	17.2
Protective Coat	Sq. Yd.	1796		1796
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	6192		6192
Reinforcement Bars, Epoxy Coated	Pound	127580	23700	151280
Bar Splicers	Each	160		160
Furnishing Steel Piles HP12x63	Foot		682	682
Furnishing Steel Piles HP14x102	Foot		1024	1024
Furnishing Steel Piles HP10x57	Foot		682	682
Driving Piles	Foot		2388	2388
Test Pile Steel HP12x63	Each		1	1
Test Pile Steel HP10x57	Each		1	1
Name Plates	Each	2		2
Anchor Bolt 1'' Ø	Each		48	48
Anchor Bolt 1 ¹ 4″ Ø	Each		24	24
Geocomposite Wall Drain	Sq. Yd.		174	174
Pipe Underdrains for Structures, 4"	Foot		332	332
Underwater Structure Excavation Protection, Location 1	Each		1	1
Underwater Structure Excavation Protection, Location 2	Each		1	1



SECTION THRU INTEGRAL ABUTMENT

*Included in the cost of Pipe Underdrains for Structures, 4".

Note: All drainage system components shall extend to 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).

DESIGNED	Nicholas R. Barnett	
CHECKED	Ray Ahanchi	EXAMINED Thomas
DRAWN	h.t. duong	PASSED Ralph E.
CHECKED	NRB/GRA	ENGINEER OF BRIDGE


