

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**GENERAL NOTES**

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

Calculated weight of Structural Steel = 286,180 lb. (AASHTO M 270, Gr. 50)  
23,850 lb. (AASHTO M 270, Gr. 36)

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.

Reinforcement bars designated (E) shall be epoxy coated.

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.

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 blue, Munsell No. 10B 3/6. See Special Provision for "Cleaning and Painting New Metal Structures".

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.

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

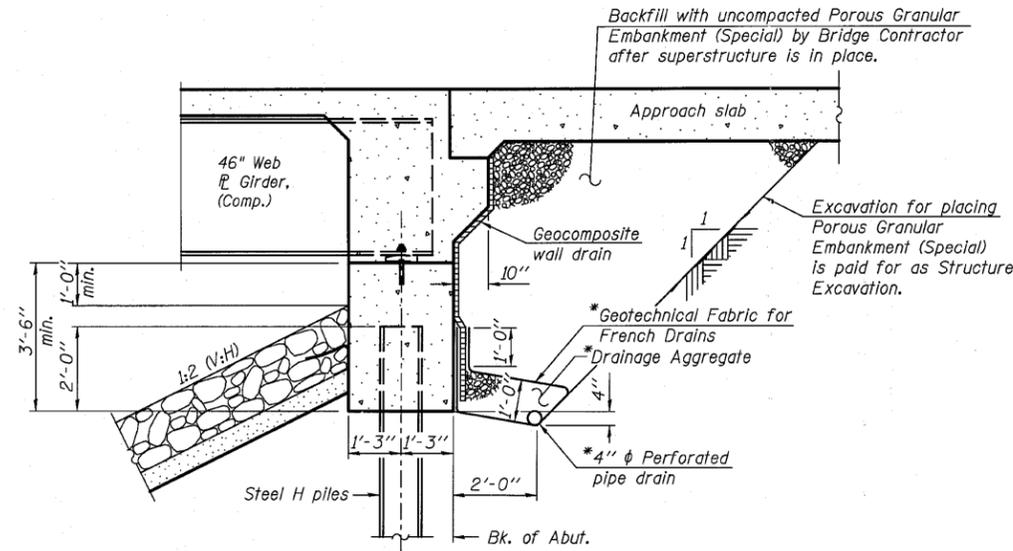
The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

Seal coat thickness design is based on the Estimated Water Surface Elevation (EWSE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design.

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 the removal and replacement of the superstructure.

If the Contractor's procedures for existing deck 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.

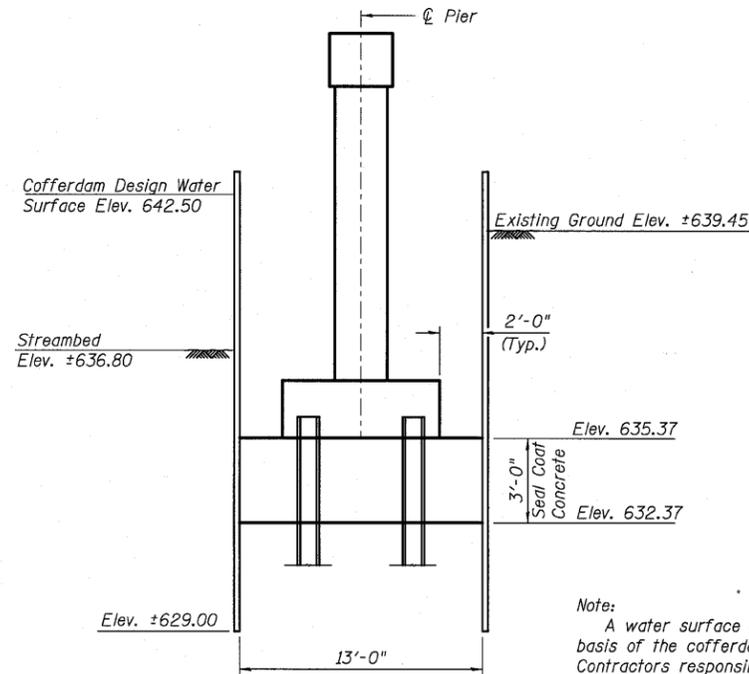
The existing bearing pads at Pier 1 and the south support of Pier 2 contain asbestos. The Contractor shall take appropriate precautions to deal with the presence and disposal of asbestos on this project. See Special Provisions.



**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).



**COFFERDAM DETAIL**

Note: A water surface elevation of +639.45 will be the basis of the cofferdam design. It is the Contractor's responsibility to provide a design for the cofferdam, verification of seal coat thickness shown and all other required appurtenances, subject to approval of the Engineer. Plan dimensions of cofferdam are 13'-0" x 46'-0".

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.		200	200
Stone Riprap, Class A5	Sq. Yd.		961	961
Filter Fabric	Sq. Yd.		961	961
Removal of Existing Structures	Each			1
Bridge Rail Removal	Foot	506		506
Structure Excavation	Cu. Yd.		288	288
Cofferdam Excavation	Cu. Yd.		158	158
Cofferdam, Location 1	Each		1	1
Concrete Structures	Cu. Yd.		142.4	142.4
Concrete Superstructure	Cu. Yd.	477.8		477.8
Seal Coat Concrete	Cu. Yd.		66.4	66.4
Bridge Deck Grooving	Sq. Yd.	1,258		1,258
Concrete Encasement	Cu. Yd.		8.8	8.8
Protective Coat	Sq. Yd.	1,334		1,334
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	2,556		2,556
Reinforcement Bars, Epoxy Coated	Pound	113,790	17,670	131,460
Bar Splicers	Each	1,074	78	1,152
Furnishing Steel Piles HP 12x53	Foot		928	928
Furnishing Steel Piles HP 14x73	Foot		1,026	1,026
Driving Piles	Foot		1,954	1,954
Test Pile Steel HP 12x53	Each		1	1
Test Pile Steel HP 14x73	Each		2	2
Pile Shoes	Each		46	46
Temporary Sheet Piling	Sq. Ft.		1,471	1,471
Name Plates	Each	1		1
Anchor Bolts, 1"	Each		36	36
Geocomposite Wall Drain	Sq. Yd.		93	93
Pipe Underdrains for Structures, 4"	Foot		180	180
Asbestos Bearing Pad Removal	Each	33		33

**GENERAL DATA  
STRUCTURE NO. 098-0117**

DESIGNED -	AEU
CHECKED -	DLS
DRAWN -	AWH
CHECKED -	AEU

**WILLS BURKE KELSEY ASSOCIATES LTD.**  
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SHEET NO. 2	F.A.P. RTE. 646	SECTION 8BR-1	COUNTY WHITESIDE	TOTAL SHEETS 90	SHEET NO. 36
26 SHEETS	CONTRACT NO. 84854				
ILLINOIS FED. AID PROJECT					

FILE NAME: P:\CIBEL\MEST\_Proj\cta\2005\12\100\_W09\_IL48\Structural\Drawn\_VPR0117-84854-002-Gen01.dwg  
PLOT CREATION DATE = 8/2/2010