

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO. 2
S.B.I. 1	(8C)B-2	WABASH	36	13	21 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #94783

GENERAL NOTES

Fasteners shall be high strength bolts AASHTO M 164, Type 3 in unpainted areas and mechanically galvanized AASHTO M 164, Type 1 or 2 in painted areas. Bolts $\frac{7}{8}$ " ϕ , open holes $\frac{15}{16}$ " ϕ , unless otherwise noted. Calculated weight of Structural Steel = 239,760 lbs. All structural steel shall be AASHTO M 270 Grade 50W. Field welding of construction accessories will not be permitted to beams. Anchor bolts shall be set before bolting diaphragms over supports. The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material except fill plates.

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $\frac{1}{8}$ " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

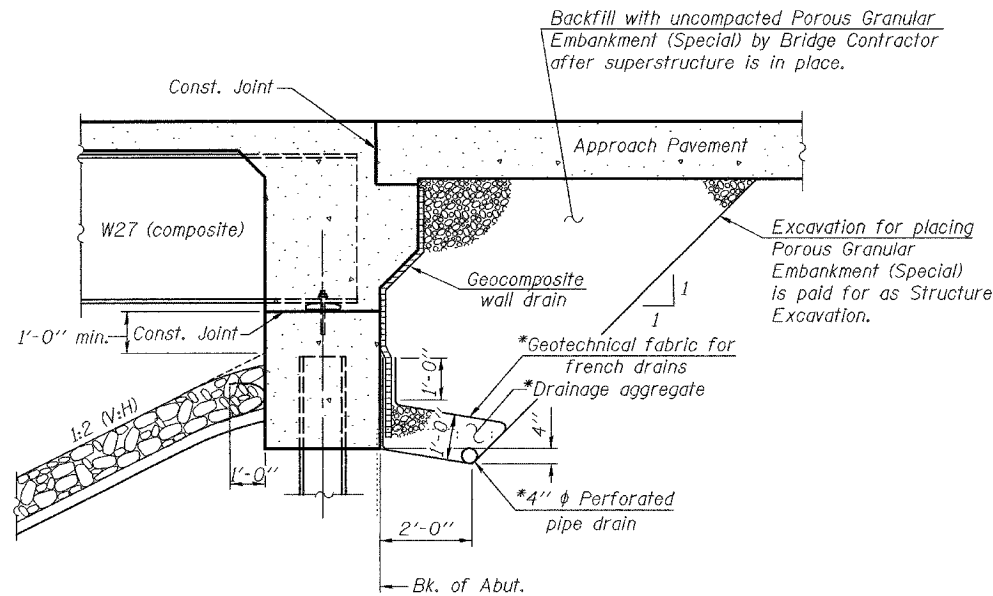
The Contractor shall drive one HP 12x53 test pile in a permanent location at Pier 1 and one HP12x74 test pile in a permanent location at Pier 3 as directed by the Engineer before ordering the remainder of piles.

In addition to all other requirements of section 512 of the Standard Specifications, splices for steel H-Piles shall develop the full capacity of the steel's cross sectional area of the pile for tension, shear and bending forces. One approved method of achieving this requirement is full penetration butt welding of the entire cross section. Other types of splices meeting the full capacity requirement may be allowed subject to the approval of the Engineer. Any proposal by the Contractor to use an alternate splice method must include adequate documentation demonstrating that the full tension, shear and bending capacities will be met. Appropriate welder qualifications will be required for the positions and processes used in splicing all piles. Nondestructive testing of completed welds will be limited to visual inspection.

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

AASHTO M 270 Grade 50W structural steel shall only be painted, at the ends of the beams, 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 an inorganic zinc rich primer per AASHTO M 300, Type 1. 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".

All Construction joints shall be bonded.



SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures.

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).

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		82	82
Stone Riprap, Class A4	Sq. Yd.		1209	1209
Filter Fabric	Sq. Yd.		1209	1209
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		376.4	376.4
Floor Drains	Each	12		12
Bridge Deck Grooving	Sq. Yd.	787		787
Protective Coat	Sq. Yd.	1061		1061
Concrete Structures	Cu. Yd.		182.9	182.9
Concrete Superstructure	Cu. Yd.	279.1		279.1
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	3636		3636
Reinforcement Bars, Epoxy Coated	Pound	68810	15450	84260
Furnishing Steel Piles HP 8x36	Foot		427	427
Furnishing Steel Piles HP 12x53	Foot		762	762
Furnishing Steel Piles HP 12x74	Foot		660	660
Driving Piles	Foot		1849	1849
Test Pile Steel HP 12x53	Each		1	1
Test Pile Steel HP 12x74	Each		1	1
Name Plates	Each			1
Geocomposite Wall Drain	Sq. Yd.		51.3	51.3
Pipe Underdrains for Structures 4"	Foot		126	126
Underwater Structure Excavation Protection-Location 1	Each		1	1
Underwater Structure Excavation Protection-Location 2	Each		1	1
Bar Splacers	Each	56		56

DESIGNED	Dewey Coultas
CHECKED	Chi Cheung Chau
DRAWN	R. Sommer
CHECKED	D.H.C./C.C.C.

EXAMINED	September 18 2006 Thomas J. Domagala ENGINEER OF BRIDGE DESIGN
PASSED	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

GENERAL DATA
S.B.I. RT. 1 SEC. (8C)B-2
WABASH COUNTY
STATION 204+42.25
STRUCTURE No. 093-0022