

**GENERAL NOTES**

Fasteners shall be high strength bolts. Bolts  $\frac{7}{8}$ "  $\phi$ , open holes  $\frac{5}{16}$ "  $\phi$ , unless otherwise noted.

Calculated weight of structural steel = 253,730 lbs (M270 Grade 36)

Reinforcement Bars shall conform to the requirements of AASHTO M31, or M322 Grade 60.

Prior to pouring the new concrete deck, all loose rust, loose mill scale and other loose potentially detrimental foreign material shall be removed from the surfaces of the girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04.

All existing construction accessories welded to the top flange over the pier between the quarter points of the girders shall be removed. The remaining weld shall be ground smooth and inspected for cracks using magnetic particle testing. Any cracks that can not be removed by grinding approximately  $\frac{1}{4}$  inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of this work will be paid for according to Article 109.04.

Field welding of construction accessories will not be permitted to girders.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of  $\frac{1}{8}$ ". 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. For Type I Elastomeric Bearings, two  $\frac{1}{8}$ " adjusting shims shall be provided for each bearing and placed as detailed.

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

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 of new girders shall be Grey Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the new fascia girders shall be Blue Munsell No. 10B 3/6. See Special Provision for "Cleaning and Painting New Metal Structures."

The Contractor shall repair any damage to the paint system of the existing girders occurring during construction. The cost of this repair shall be included with "Furnishing and Erecting Structural Steel."

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 tension flanges, webs and all splice plate material except fill plates.

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

The Contractor shall drive one steel HP 10 x 57 test pile in a permanent location at each abutment as directed by the Engineer before ordering the remainder of the piles.

Anchor bolts shall be set before bolting diaphragms over supports.

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 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.

All construction joints shall be bonded.

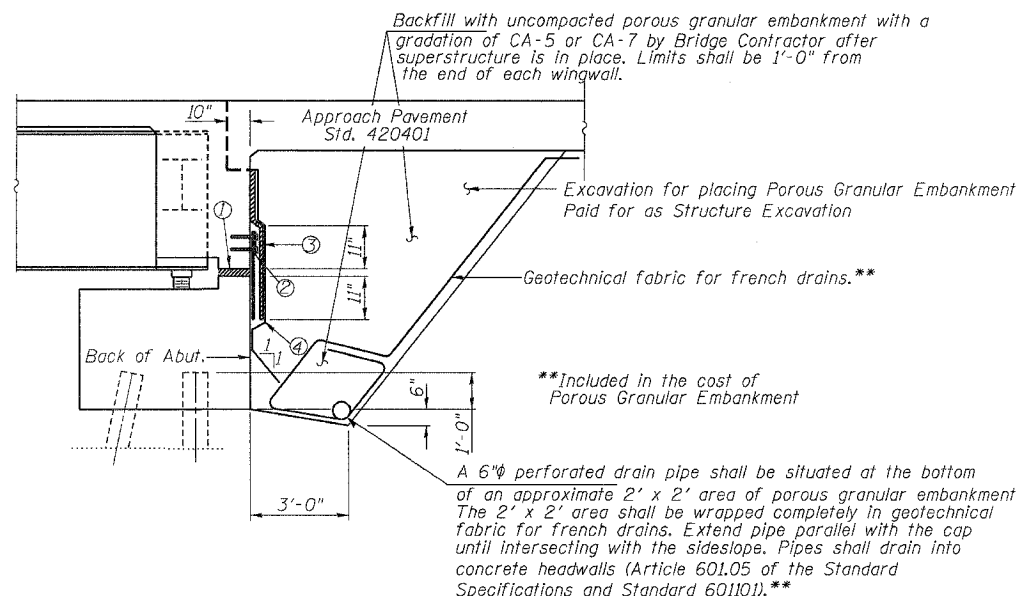
**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Concrete Deck No. 1	Each	1		1
Porous Granular Embankment	Cu Yd		509	509
Concrete Removal	Cu Yd		58.9	58.9
Structure Excavation	Cu Yd		310	310
Concrete Superstructure	Cu Yd	573.6		573.6
Concrete Structures	Cu Yd		121.1	121.1
Elastomeric Bearing Assembly, Type I	Each		20	20
Reinforcement Bars, Epoxy Coated	Pound	152,780	12,650	165,430
Reinforcement Bars	Pound		3440	3440
Name Plates	Each	1		1
Furnishing and Erecting Structural Steel	L. Sum	.52		.52
Stud Shear Connectors	Each	1800		1800
Floor Drains	Each	12		12
Drainage Scupper, DS-12	Each	2		2
Bridge Deck Grooving	Sq. Yd.	1892		1892
Bar Splicers	Each	1103	157	1260
Furnishing Steel Piles HP 10x57	Foot		294	294
Driving Steel Piles	Foot		294	294
Test Piles Steel HP 10x57	Each		2	2
Drilled Shaft in Rock 30"	Foot		47	47
Drilled Shaft in Soil 36"	Foot		50	50
Stone Riprap, Class A4	Sq. Yd.		1010	1010
Jacking and Cribbing, Location No. 1	L. Sum	1		1
Temporary Sheet Piling	Sq. Ft.		340	340
Filter Fabric For Use With Riprap	Sq. Yd.		1010	1010
Slope Wall Removal	Sq. Yd.		860	860
Protective Coat	Sq. Yd.		2129	2129
Temporary Soil Retention System	Sq. Ft.		90	90

\*Includes Removal and Disposal of Existing Bearings

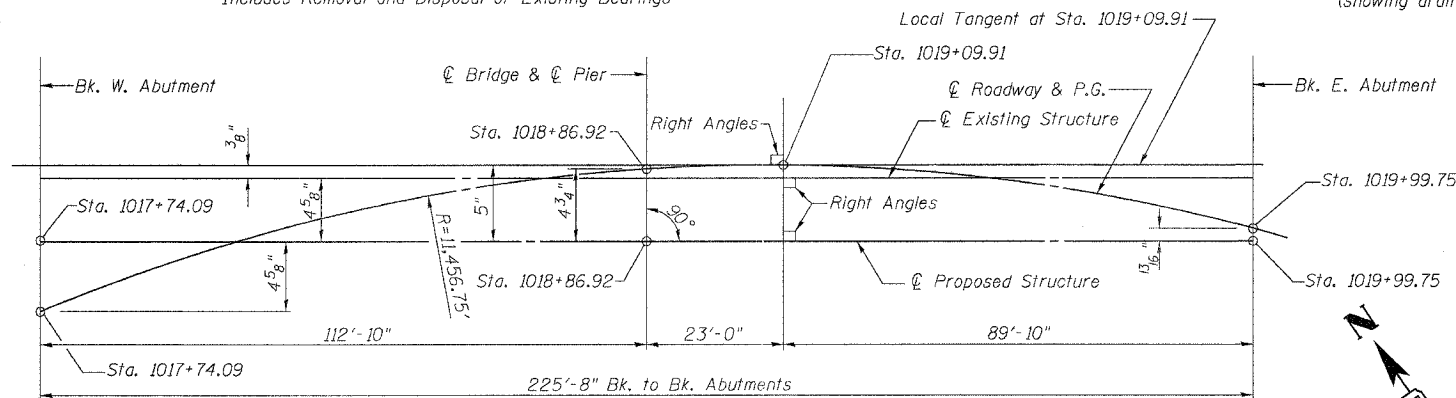
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2
F.A.P. RTE. 774	107BY-1	EFFINGHAM	344	268	26 SHEETS
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

CONTRACT NO. 94827

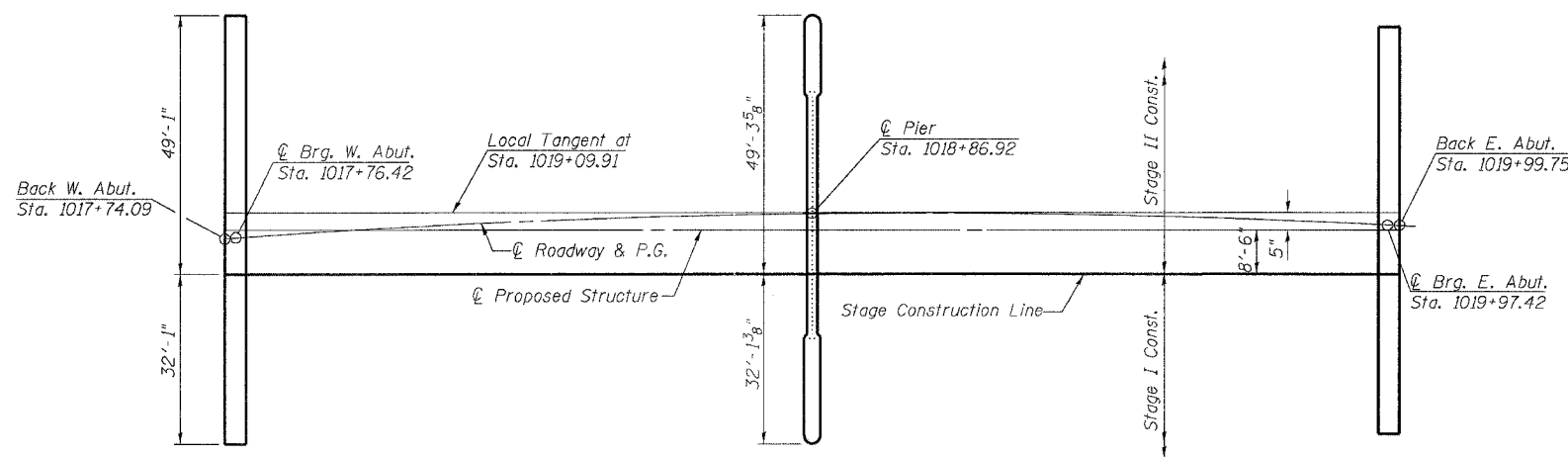


**SECTION THRU ABUTMENT**  
(showing drain details)

- ① 2" Preformed Joint Filler (Section 1051 of the Standard Specifications) bonded to abutment cap with approved adhesive (full width of cap).
  - ② Fabric Reinforced Elastomeric Mat (See Special Provisions) Fabric mat shall be 24" wide and attached full width to the abutment cap with a  $\frac{3}{8}$ " x 5" steel plate and  $\frac{1}{2}$ "  $\phi$  studs with nuts and washers at 12" cts.
  - ③ 2" Preformed Joint Filler (Section 1051 of the Standard Specifications) bonded to superstructure (full width of cap).
  - ④ Geocomposite Wall Drain (Section 591 of the Standard Specifications)-full width of cap.
- Items ① ② ③ & ④ shall be included in the cost of Concrete Superstructure.



**OFFSET SKETCH**



**FOOTING LAYOUT**

SHEET TITLE			
GENERAL NOTES AND TOTAL BILL OF MATERIAL			
PROJECT	IL RTE. 32/33 OVER LITTLE WABASH RIVER OVERFLOW F.A.P. RTE. 774 SECTION 107BY-1 EFFINGHAM COUNTY STATION 1018+86.92 STRUCTURE NO. 025-0077	PROJECT NO.	02017
SCALE		DATE	
DRAWN BY	TFG	CHECKED BY	KPS/CME/MCB
DRAWING NO.			
COOMBE-BLOXDORF P.C. Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703			2 OF 26 SHTS