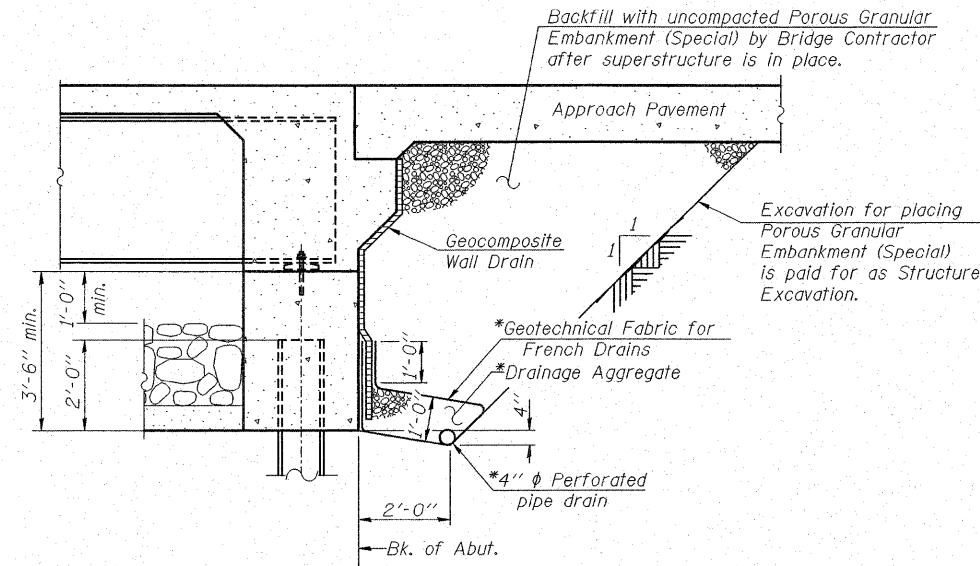


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION THRU INTEGRAL ABUTMENTS

(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.		129	129
Stone Riprap, Class A4	Sq. Yd.		1506	1506
Filter Fabric	Sq. Yd.		1506	1506
Removal of Existing Structures	Each			1
Slope Wall Removal	Sq. Yd.		860	860
Structure Excavation	Cu. Yd.		236	236
Floor Drains	Each	14		14
Concrete Structures	Cu. Yd.		144.6	144.6
Concrete Superstructure	Cu. Yd.	215.6		215.6
Bridge Deck Grooving	Sq. Yd.	615		615
Concrete Encasement	Cu. Yd.		10.6	10.6
Protective Coat	Sq. Yd.	768		768
Furnishing and Erecting Structural Steel	Lump Sum	1		1
Stud Shear Connectors	Each	3843		3843
Reinforcement Bars (Epoxy Coated)	Pound	51020	15420	66440
Bar Splicers	Each	80		80
Furnishing Steel Piles HP 12x53	Foot		2049	2049
Driving Piles	Foot		2049	2049
Test Piles HP 12x53	Each		4	4
Name Plates	Each	1		1
Anchor Bolts 1" φ	Each	56		56
Geocomposite Wall Drain	Sq. Yd.		78	78
Pipe Underdrain for Structures 4"	Foot		139	139
Mechanical Splice	Each		48	48
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts 7/8 in. φ, holes 15/16 in. φ, unless otherwise noted.

Calculated weight of Structural Steel = 132,200 lbs.

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. 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 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 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.

All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed under water into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

GENERAL DETAILS
ILLINOIS ROUTE 4/15 OVER
KASKASKIA OVERFLOW
F.A.P. ROUTE 817 SEC 421B-1
ST. CLAIR COUNTY
STATION 149+50.00
STRUCTURE NO. 082-0275

DESIGNED	DB
CHECKED	RS
DRAWN	ER
CHECKED	WWH



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Registered Professional Service Corporation License No. 184-003289

SHEET NO. 2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	817	421B-1	ST. CLAIR	56	21
28 SHEETS	STRUCTURE NO. 082-0275		CONTRACT NO. 76885		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		