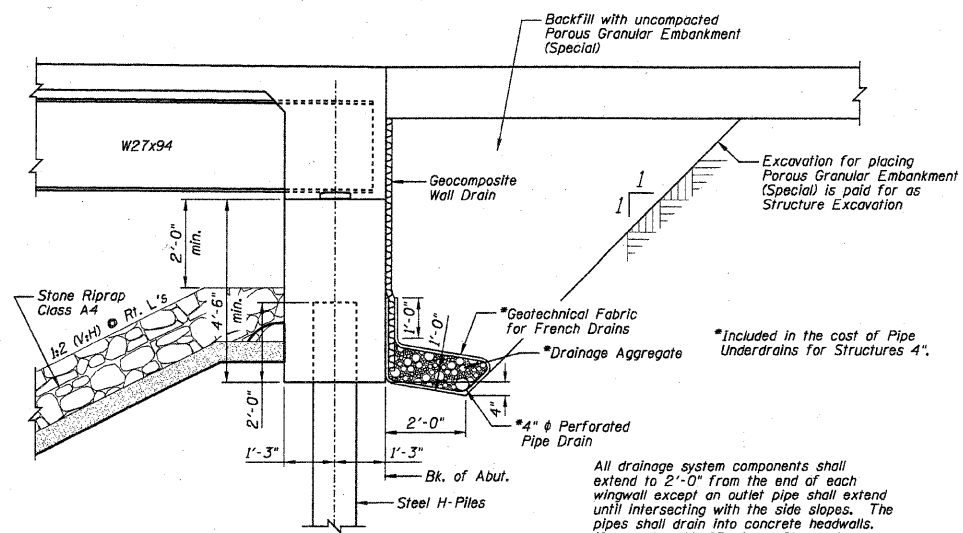


F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	03-26140-00-BR 03-21117-00-BR	LIVINGSTON	28	9
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 87360	SHEET NO. B2			

OF 17 SHEETS



SECTION THRU INTEGRAL ABUTMENT

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 BRIDGE BILL OF MATERIALS

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Ton		250	250
Stone Riprap, Class A4	Ton		970	970
Filter Fabric	Sq. Yd.		1065	1065
Removal of Existing Structures	Each	1		1
Structure Excavation	Cu. Yd.		820	820
Concrete Structures	Cu. Yd.		71.9	71.9
Concrete Superstructure	Cu. Yd.	122.6		122.6
Bridge Deck Grooving	Sq. Yd.	4.36		4.36
Protective Coat	Sq. Yd.	4.36		4.36
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	1812		1812
Reinforcement Bars, Epoxy Coated	Pound	31150	5530	36680
Steel Rolling, Type S1	Foot	328		328
Furnishing Metal Shell Piles 12"x0.250"	Foot		1031	1031
Driving Piles	Foot		1031	1031
Test Pile Metal Shells	Each		2	2
Name Plates	Each	1		1
Geocomposite Wall Drain	Sq. Yd.		68	68
Pipe Underdrains For Structures 4"	Foot		116	116

GENERAL NOTES

- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$ in. ϕ , nuts $\frac{5}{8}$ in. ϕ , unless otherwise noted.
- Calculated weight of Structural Steel = 73,690 lb.
- All structural steel shall be AASHTO M 222 Grade 50W.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.
- All reinforcement bars shall be epoxy-coated.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ in. (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- Layout of the slope protection system may be varied to suit ground conditions in the field 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 specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
- The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection.
- The Contractor is to field locate all utilities before starting construction.
- Cast in place Class S1 Concrete shall be used throughout except for the superstructure (Deck), which shall be Class BD Concrete. The 14-day compressive strength is $f'c = 4000$ psi. Concrete clear cover shall be 2" unless otherwise shown.
- The concrete slab shall be finished in accordance with Article 503.17 of the Standard Specifications and shall be poured in one continuous operation.
- The design specifications are the 2002 AASHTO Standard Specifications for Highway Bridges.
- The live loading is HS20 with an allowance of 50lb/sq. ft. for future wearing surface.
- This project shall be constructed in accordance with IDOT Standard Specifications for Road and Bridge Construction adopted January 1, 2007.
- See Sheets B16 and B17 for boring data.
- Pier piles shall have a minimum tip elevation of 15' below streambed (min. tip elev. = 69.00).
- This structure has been designated to be stable for scour conditions in accordance with the FHWA Technical Advisory-T 5140.23, "Evaluating Scour at Bridges" Hydraulic Engineering Circular 18-"Evaluating Scour at Bridges".
- The Contractor shall clean out the channel within the right-of-way as shown in elevation. The cost of for removal or replacement of fill in the channel shall be incidental.

SECTION 03-26140-00-BR
SECTION 03-21117-00-BR
LIVINGSTON COUNTY

SECTION THRU INTEGRAL
ABUTMENT, BILL OF MATERIALS
AND GENERAL NOTES

DESIGNED BY S.D.H.	<p>2700 McGraw Drive Bloomington, Illinois 61704 309/403-3436, 309/663-1871 fax</p>	FILE NO. 24-7191
DRAWN BY D.J.M.		DATE 03/17/09
CHECKED BY M.S.W.		SHEET NO. 9 of 28