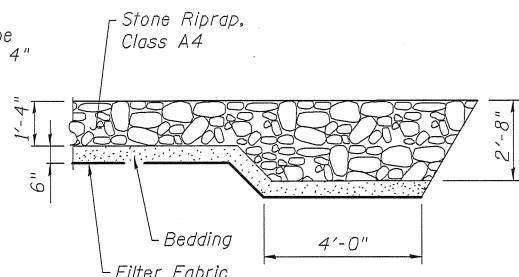


**SECTION THRU ABUTMENT**

Note: All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend horizontally until 12" from intersecting with the sideslope. The pipe shall then be run down the slope to the toe of slope and drain into conc. headwalls (See Article 601.05 of the Std. Spec's. and Hwy. Std. 601101). The horizontal pipe will be paid for as Pipe Underdrains for Structures 4", and the sloped pipe will be paid for as Pipe Drains 4", see roadway plans.

\*Included in the cost of Pipe Underdrains for Structures 4"



**SECTION A-A**

**GENERAL NOTES**

- The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection. Forms for deck slab shall be removed prior to placement of bridge approach pavement.
- Reinforcement bars designated (E) shall be epoxy coated.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The existing reinforced concrete structure is a rigid frame and may require a sequenced plan to prevent collapse during removal. Temporary bracing or excavating behind the existing abutments during the removal of the existing superstructure and substructure may be necessary. Cost included with Removal of Existing Structures.
- If a portion of the concrete encasement is underwater, reinforcement may be placed underwater into forms. Concrete may 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.
- The Contractor is advised that the existing reinforced concrete rigid frame structure is in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition when developing procedures for removal and replacement of the structure.
- Slipforming of the parapets is not allowed.
- The profile grade line follows the centerline of roadway outside of the limits of the proposed structure. Between the backs of abutments, the profile grade line shifts to a line that splits the distance between a tangent line to the centerline of roadway at Sta. 850+40.50 and a line connecting the intersections of the backs of abutments with the centerline of roadway. The intent of this project is to build a straight structure that is flat if sliced longitudinally along any line parallel to the centerline of proposed structure. The bridge approach slabs can then be constructed to match the bridge slab elevations.
- Cofferdam design details shall be submitted to the Engineer for approval with the cofferdam design. See Special Provision.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq. Yd.		850	850
Filter Fabric	Sq. Yd.		850	850
Removal of Existing Structures	Each	0.5	0.5	1
Structure Excavation	Cu. Yd.		148	148
Floor Drains	Each	4		4
Concrete Structures	Cu. Yd.		200.9	200.9
Concrete Superstructure	Cu. Yd.	337.4		337.4
Bridge Deck Grooving	Sq. Yd.	522		522
Concrete Encasement	Cu. Yd.		18.6	18.6
Protective Coat	Sq. Yd.	730		730
Reinforcement Bars, Epoxy Coated	Pound	69000	18360	87360
Parapet Railing	Foot	81		81
Furnishing Steel Piles HP14x73	Foot		2128	2128
Driving Piles	Foot		2128	2128
Test Pile Steel HP14x73	Each		4	4
Name Plates	Each	1		1
Geocomposite Wall Drain	Sq. Yd.		50	50
Pipe Underdrains for Structures 4"	Foot		144	144
Porous Granular Embankment, Special	Cu. Yd.		68	68
Cofferdam (Type 2) (Location-1)	Each		1	1
Cofferdam (Type 2) (Location-2)	Each		1	1
Mechanical Splicers	Each		56	56
Cofferdam Excavation	Cu. Yd.		98	98