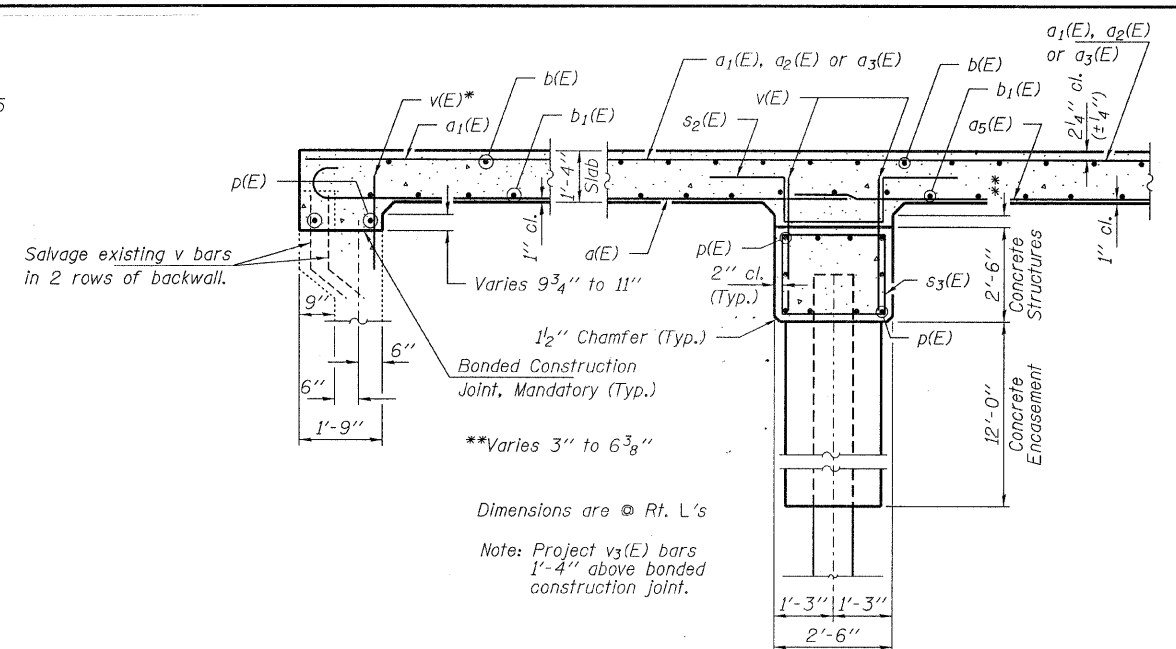
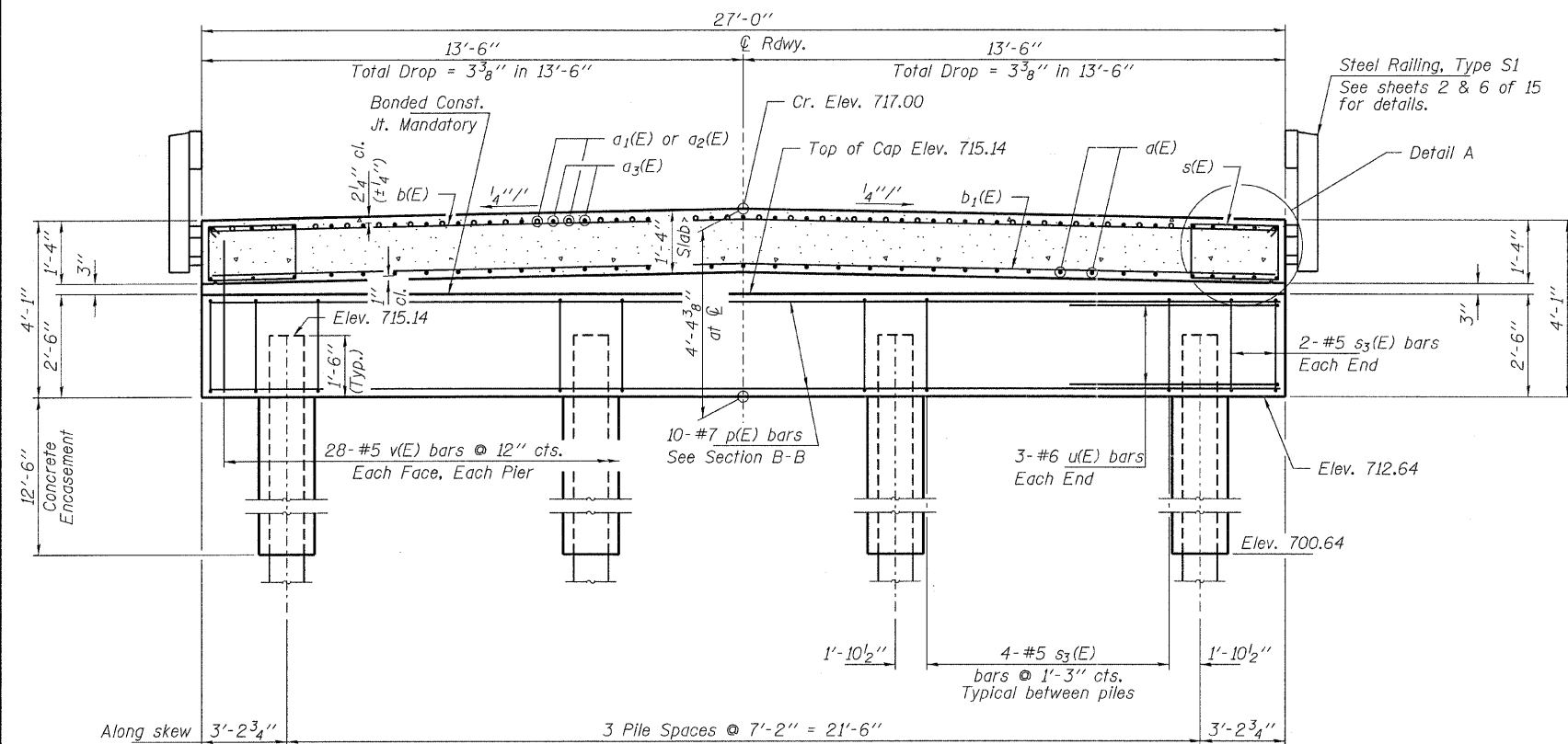


**CROSS SECTION AT ABUTMENTS**

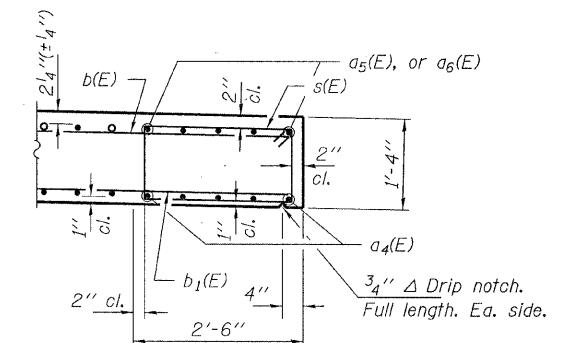


**SECTION A-A**

**SECTION B-B**



**CROSS SECTION AT PIER**



**DETAIL A**

**PILE DATA**

Type and Size ----- Metal Shell 14" x 0.312"  
 No. Req'd. ----- 4  
 Factored Resistance Available (Rf) ----- 225 Kips/Pile  
 Nominal Required Bearing (Rn) ----- 419 Kips/Pile  
 Est. Lengths ----- 45 Ft./Pile

Note:  
 \*Drill 1"  $\phi$  x 12" min. hole into existing cap. A grout approved by the Department or epoxy grout in accordance with Section 584 of the Standard Specifications, shall be used. The method of grout application shall be approved by the Engineer. Drilling and grouting of reinforcement bars into existing concrete shall be included in the cost of reinforcement bars.

Notes: \*\*Includes one test pile to be driven in a permanent location at Pier.  
 The test piles shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.  
 Use Cofferdam - Type 1 - Loc. 1 at pier during removal of existing pier and construction of new pier.

FILE NAME = 100031-shr-bridge.dgn	USER NAME =	DESIGNED - D.W.T.	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUPERSTRUCTURE DETAILS STRUCTURE NO. 045-3104</b>	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3300 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62709	PLOT SCALE =	CHECKED - A.S.L.	REVISED -			193	07-03011-01-BR	KANE	29	14	
ILLINOIS PROFESSIONAL DESIGN FIRM L3 / PE / SE CORP. 184 000989	PLOT DATE = 2/2/2012	DRAWN - D.A.B.	REVISED -			CONTRACT NO. 63699					
		CHECKED - S.W.M.	REVISED -			ILLINOIS FED. AID PROJECT BR05-0089(138)					