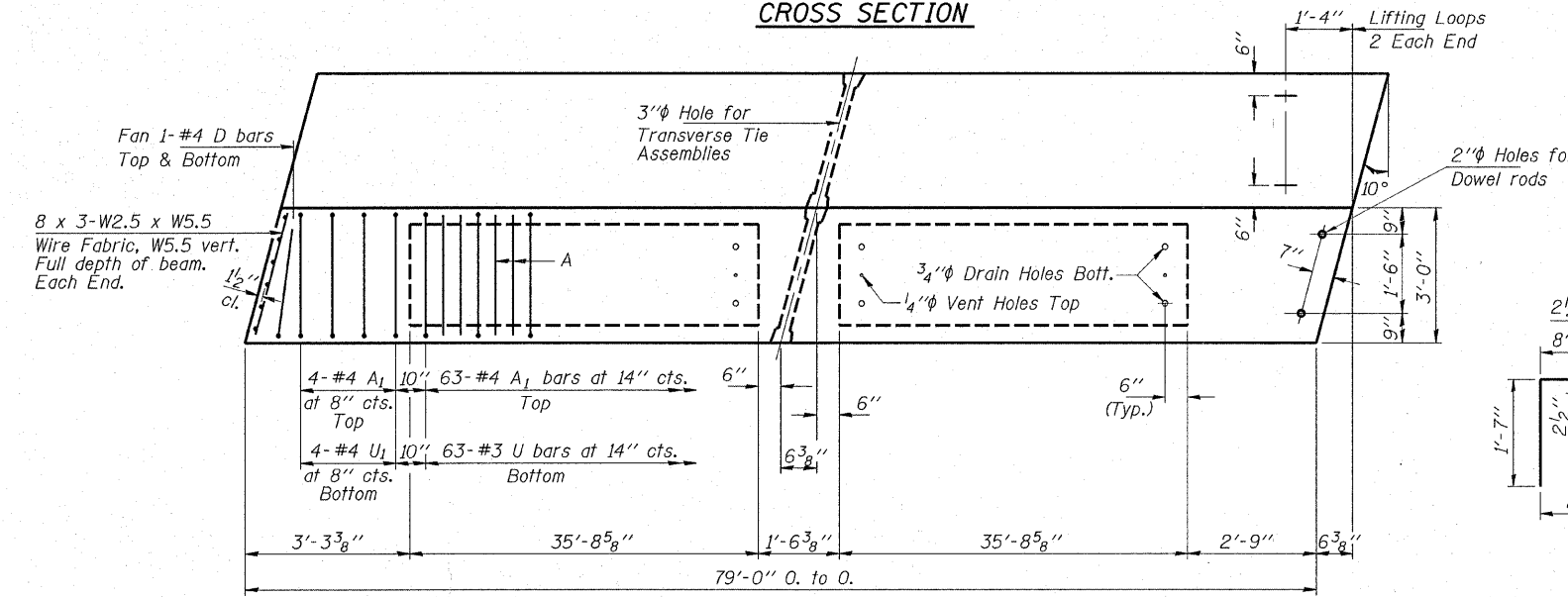
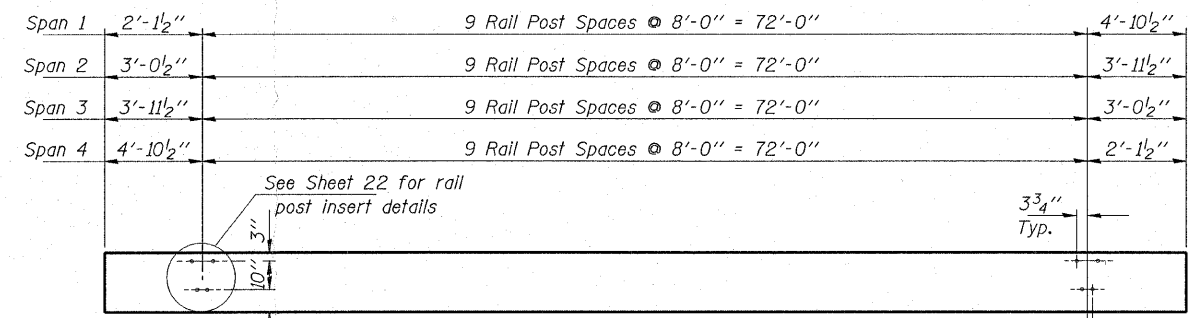


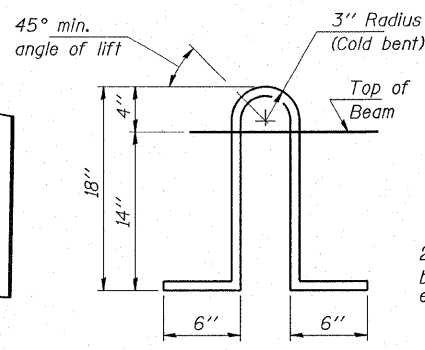
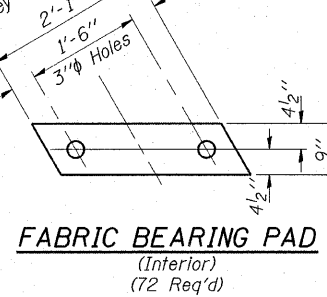
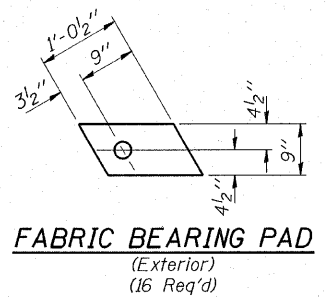
**CROSS SECTION**



**PLAN**



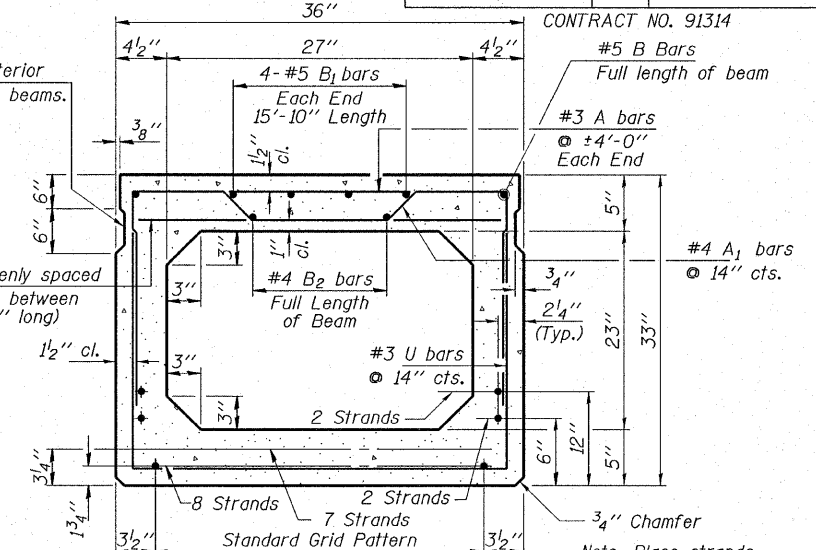
**ELEVATION OF OUTSIDE BEAMS**  
Showing Rail Post Spacing



**LIFTING LOOP DETAIL**

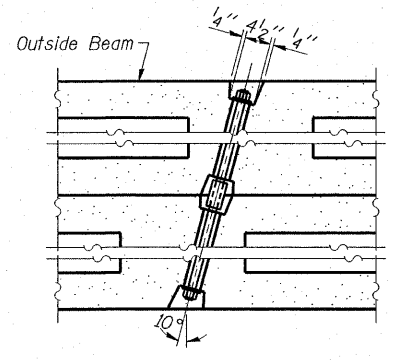
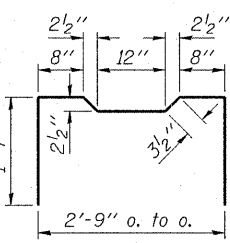
Approved alternate may be substituted for the above detail.

Note: The loop shall be formed in a manner such that all strands are engaged during lifting. Lifting Loops shall be cut and ground off. Burning of the Lifting Loops will not be allowed. Lifting Loops shall be ground off level with the surface of the deck beams and protected with a two-compound epoxy in accordance with Article 1025.03

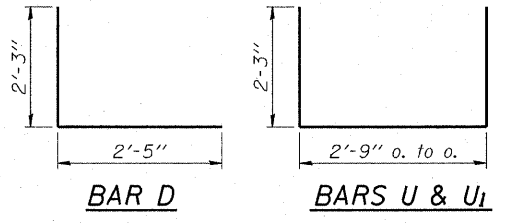


**TYPICAL SECTION**

18-1/2"φ Strands - Each Strand Stressed to 30,900 Lbs.  
10-Strands 1 3/4" up, 6-Strands 3/4" up, 2-Strands 15" up, Expected Camber 1 1/2"



**TYPICAL TRANSVERSE TIE ASSEMBLY**



**NOTES**

Prestressing steel shall be uncoated high strength, low-relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 3-1/2"φ-270 ksi strands, as shown.

The 1"φ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.

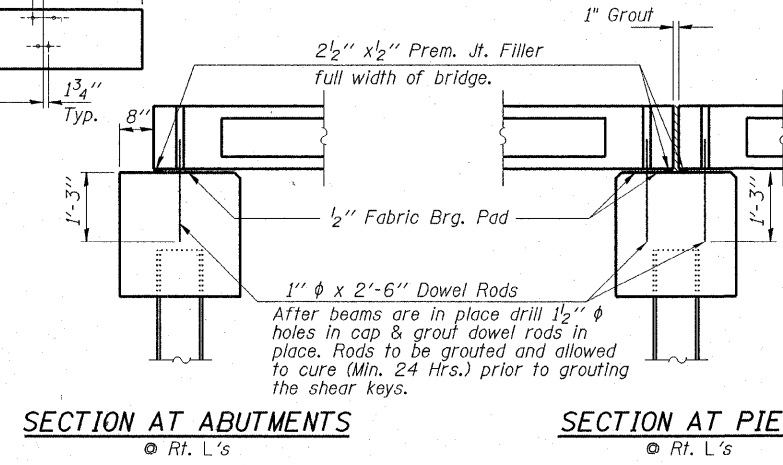
Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322 Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.

Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.

Required Release Strength, f'cl, shall be 4,000 p.s.i.  
Approximate weight of one beam = 48,600 lbs.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	9,480



**HLR**

Rice, Berry and Associates  
A Division of Hampton, Lenzini and Renwick, Inc.  
Civil & Structural Engineers  
3085 Stevenson Drive  
Suite 201  
Springfield, Illinois 62703  
217-546-3400

Account Number: 12-30-0008-1  
Date: 01-05-06  
DESIGNED: S.W.M. | CHECKED: T.P.L. | DRAWN: D.B.

**SUPERSTRUCTURE**  
**SECTION 98-02120-00-BR**  
**BOURBON ROAD DISTRICT**  
**DOUGLAS COUNTY**  
**STATION 15+05**