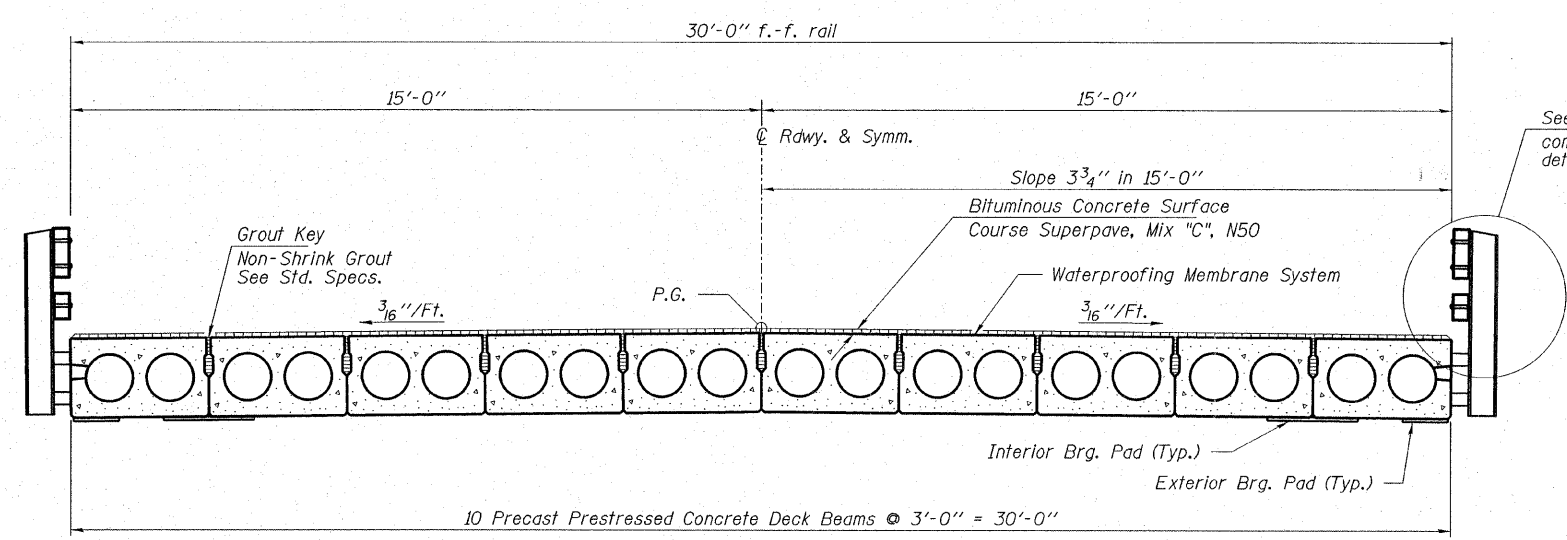
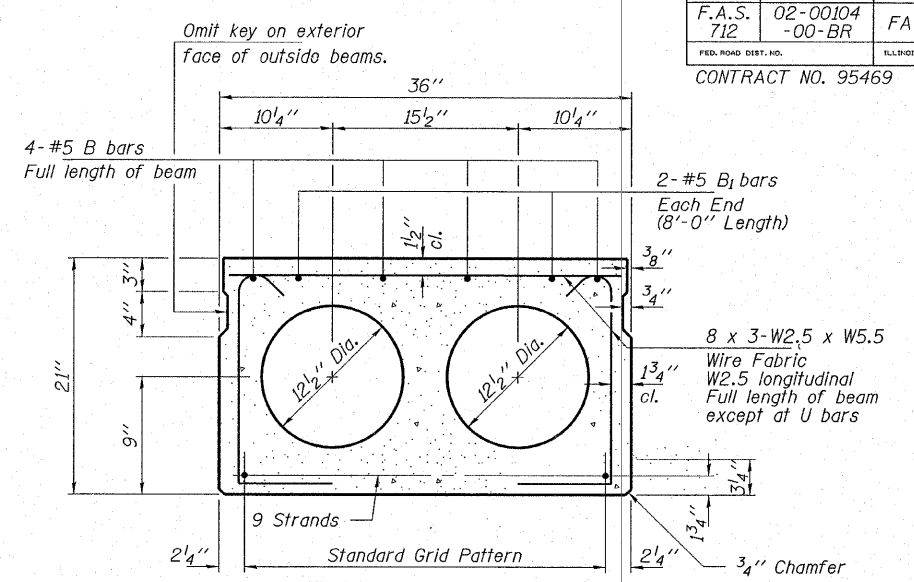


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 712	02-00104-00-BR	FAYETTE	21	16
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 95469				



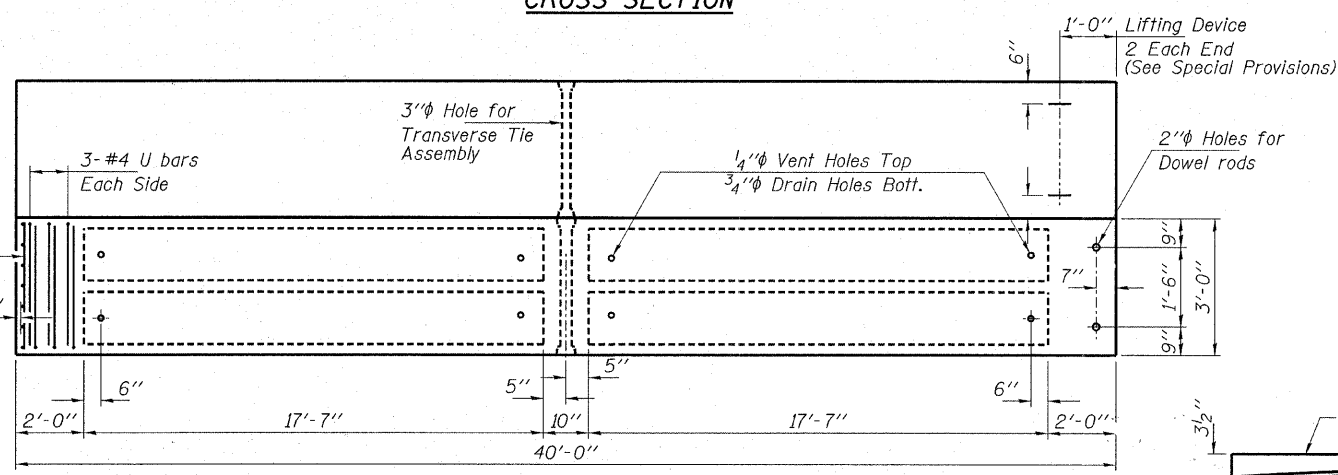
**CROSS SECTION**



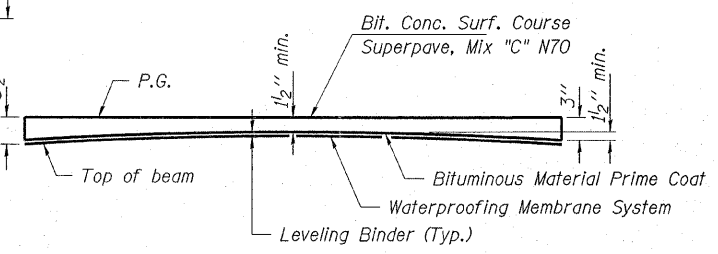
**TYPICAL SECTION**

9-1/2"φ Strands, Each Strand Stressed to 30,900 Lbs.  
9-Strands 1 3/4" up  
Expected Camber = 1/2"

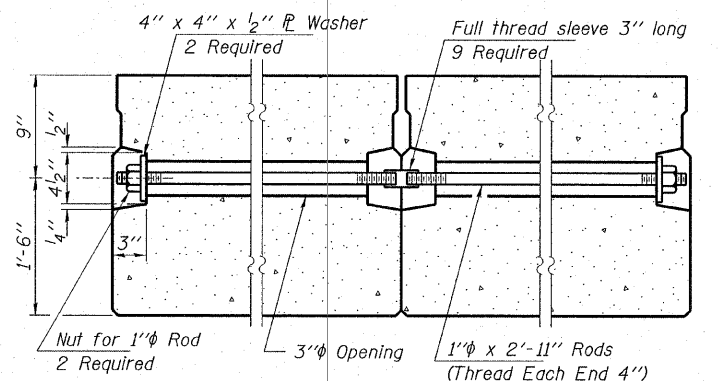
Note: Place strands symmetrically about center of beam.



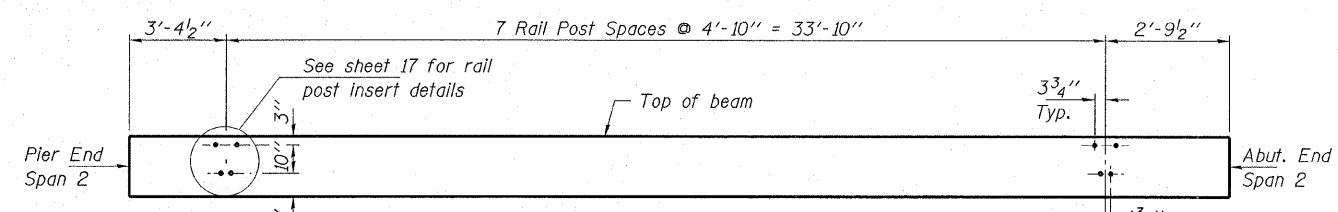
**PLAN**



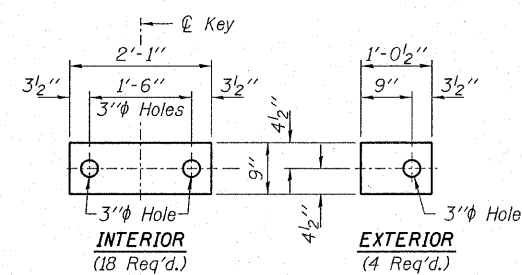
**ANTICIPATED CAMBER DIAGRAM**



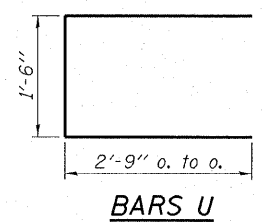
**TYPICAL TRANSVERSE TIE ASSEMBLY**



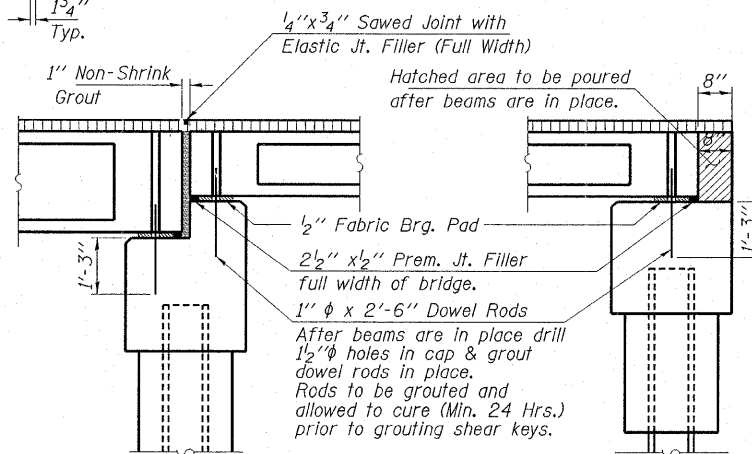
**ELEVATION OF OUTSIDE BEAMS**  
Showing Rail Post Spacing



**FABRIC BEARING PAD DETAILS**



**BARS U**



**SECTION AT PIERS**

**SECTION AT ABUTMENTS**

**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 2-2"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, M-42 or M-53 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.

An equal substitution of the low-relaxation strands for the stress-relieved strands will be permitted.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1,200
Waterproofing Membrane System	Sq. Yd.	138
PC Mortar Fairing Course	Foot	90
Bituminous Concrete Surface Cse, Superpave Mix C, N50	Ton	11
Leveling Binder (MM) Binder	Ton	2

**HLR**

Rice, Berry and Associates  
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Civil & Structural Engineers  
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Suite 201  
Springfield, Illinois 62703  
217-546-3400

Account Number  
12-34-0002-1  
Date: 03/13/06

P.O. Box 1036  
DuQuoin, Illinois 62832  
618-790-4637

DESIGNED: S.M.S. CHECKED: S.W.M. DRAWN: D.T.M.

**SUPERSTRUCTURE SPAN 2**  
**SECTION 02-00104-00-BR**  
**F.A.S. 712 / C.H. 24**  
**FAYETTE COUNTY**  
**STR. NO. 026-3431 / STATION 102+50**