

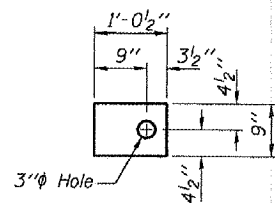
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO. 2
SBI 34		POPE	21	6
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		3 SHEETS

Contract Number: 78018

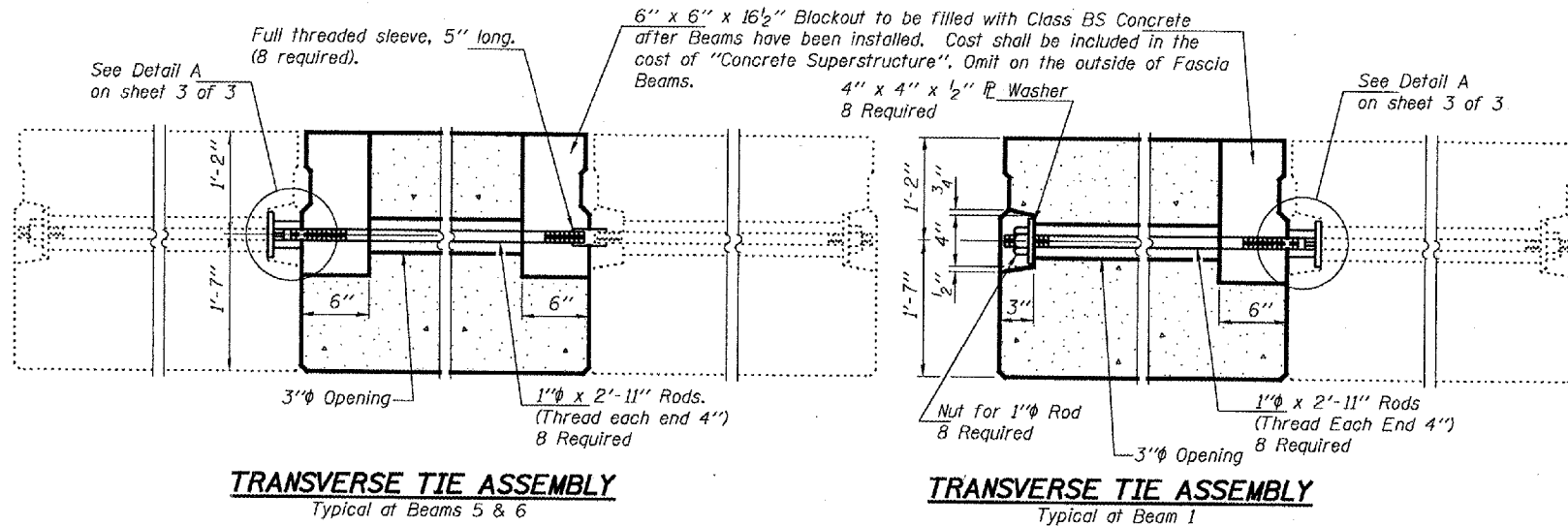
**FABRIC BEARING PAD**

**EXPANSION**



**FABRIC BEARING PAD**

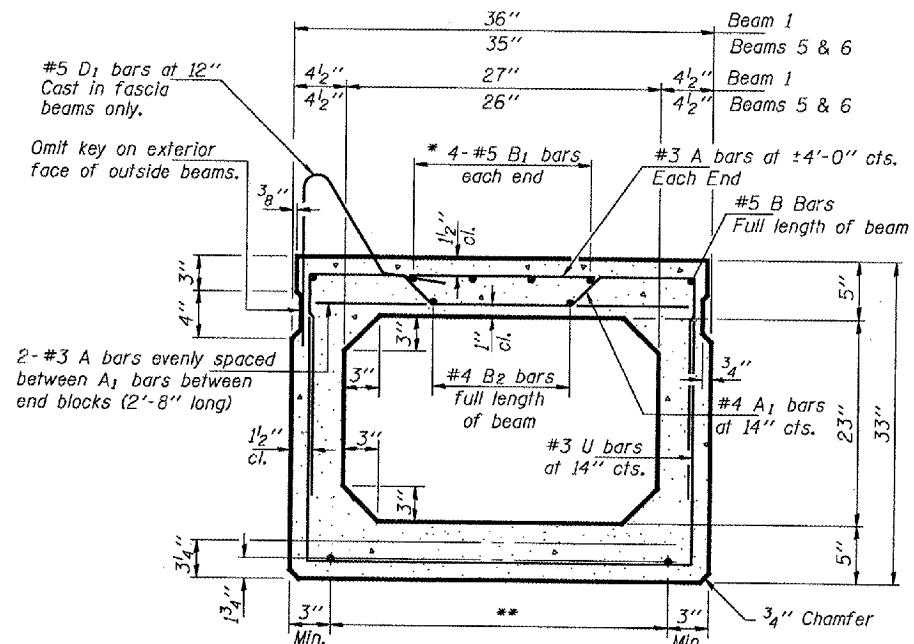
**FIXED**



**TRANSVERSE TIE ASSEMBLY**  
Typical at Beams 5 & 6

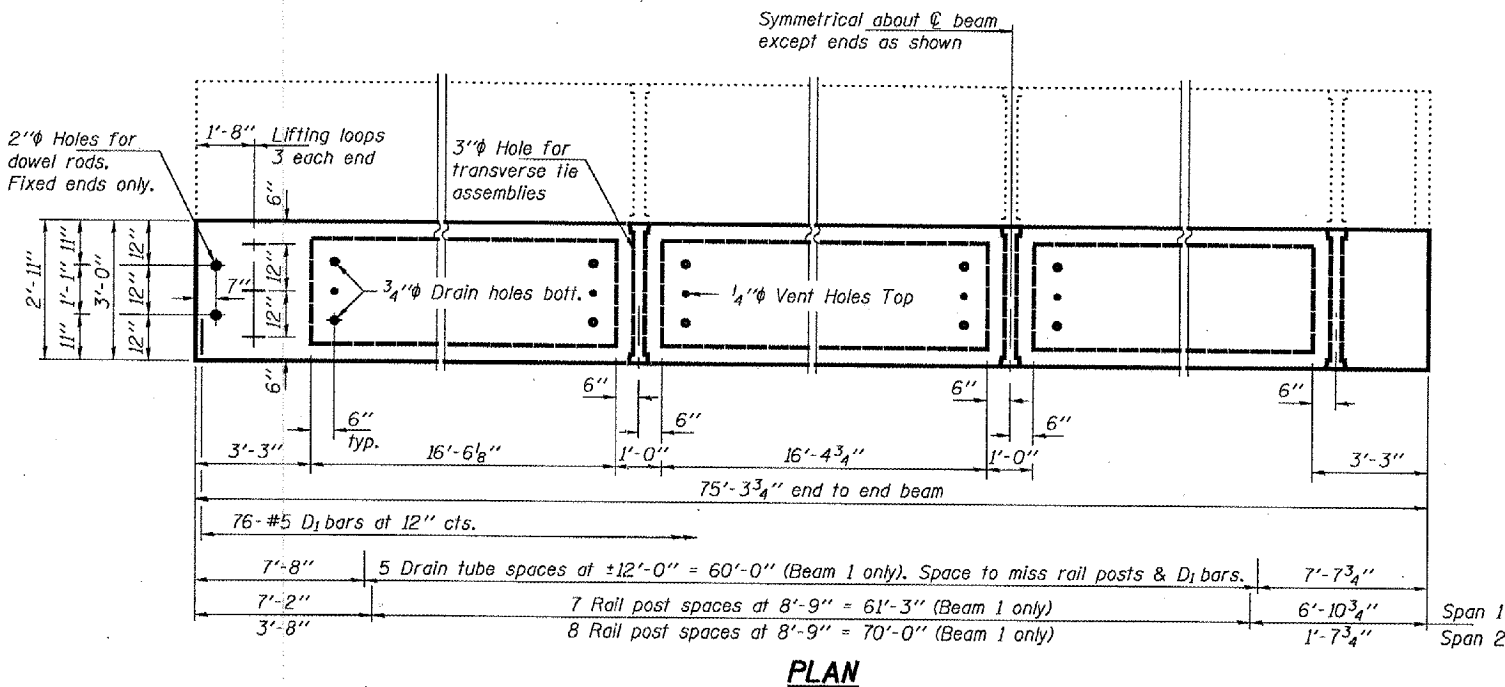
**TRANSVERSE TIE ASSEMBLY**  
Typical at Beam 1

\* 0.2 x Length of beam

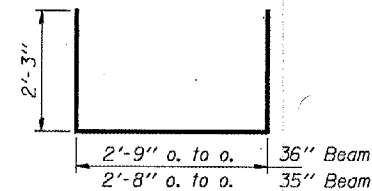


**TYPICAL SECTION**

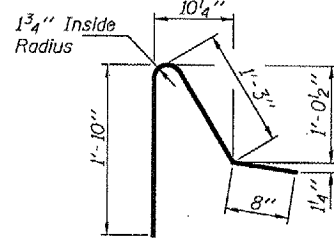
1/2" Strands. Each strand stressed to 30,900 Lbs.  
7-Strands 1 3/4" up, 6-Strands 3/4" up,  
2-Strands 6" up.



**PLAN**

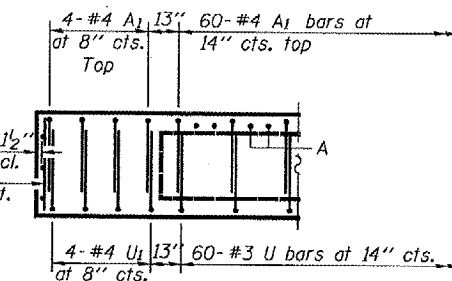


**BARS U & U1**



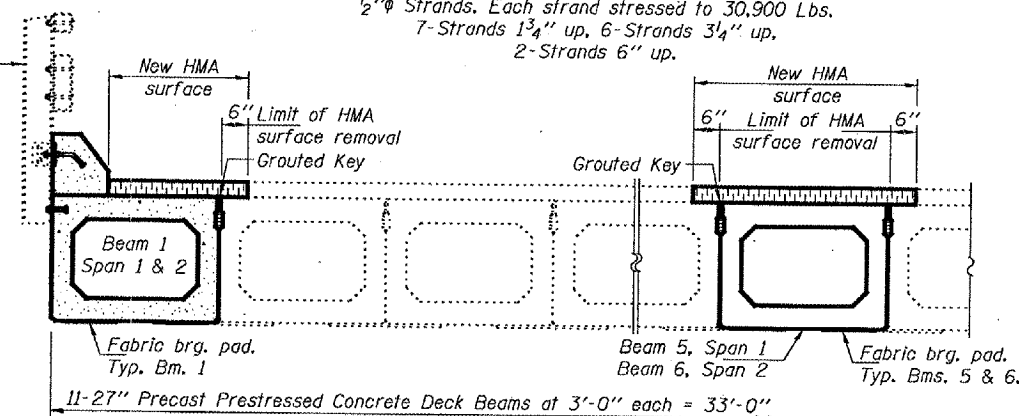
**BAR D1**

8 x 3-W2.5 x W5.5  
Wire Fabric, W5.5 vert.  
Full depth of beam.  
Each end.



**END ELEVATION**

Existing handrail & posts to be removed, stored & reused.



**PARTIAL CROSS SECTION**

**\*\* TRANSVERSE PLACEMENT GUIDELINES**

1. Place strands symmetrically about centerline of beam.
2. The minimum distance from center to center of strands in all directions shall be 2".
3. The minimum clearance from strand to dowel hole shall be 1/2".
4. The minimum clearance from strand to void shall be 1 1/2".

Vertical placement of strands shall not be adjusted to satisfy the above guidelines.

**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" #270 ksi strands, as shown. The 1" 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. Non prestressing steel shall conform to ASTM A 706 (IL MOD), 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 Fabric 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. Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'cl, shall be 4000 p.s.i.

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
e(E)	6	#6	27'-0"	
Precast Prestressed Conc. Deck Bms.			Sq. Ft.	892
Reinforcing Bars Epoxy Coated			Pound	240

Bars indicated thus 1 x 3-#5 etc. indicates 1 line of bars with 3 lengths per line.

**BEAM DETAILS**  
**SBI 34 OVER**  
**BIG GRAND PIERRE CR**  
**POPE COUNTY**  
**SN 076-0002**

DESIGNED	VHV
CHECKED	ATH
DRAWN	balliva
CHECKED	VHV ATH

NOVEMBER 14, 2007  
EXAMINED *Carl Kroyer*  
ENGINEER OF STRUCTURAL SERVICES  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES