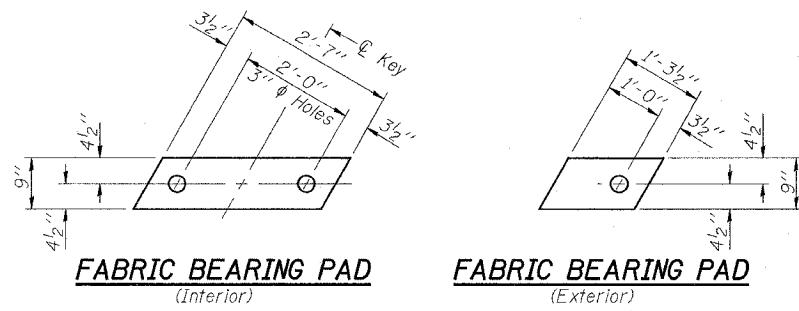


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

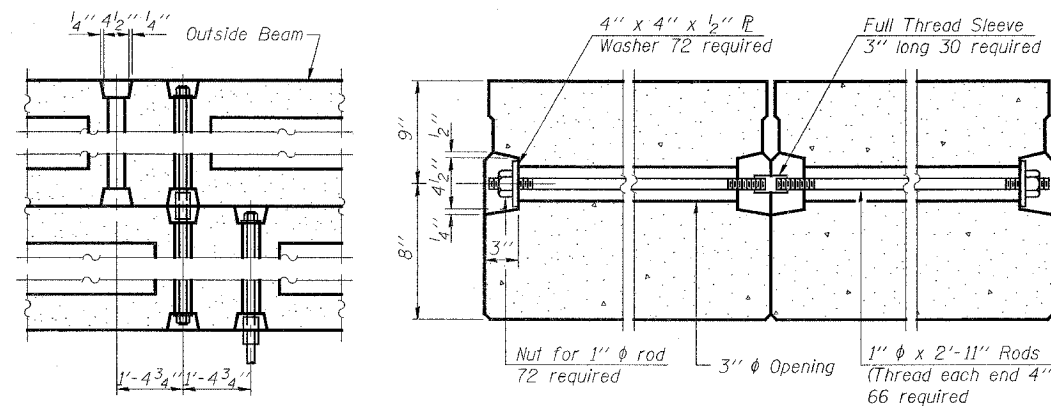
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
F.A.P. 789	68-BR-1	MADISON	16	12 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



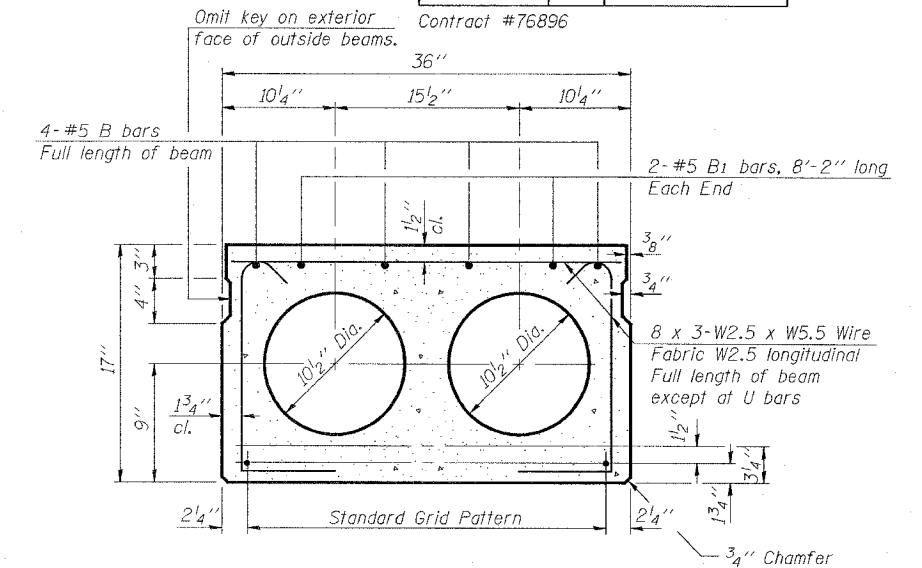
**FABRIC BEARING PAD**  
(Interior)

**FABRIC BEARING PAD**  
(Exterior)

**FIXED**



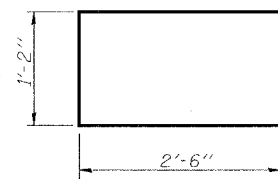
**TYPICAL TRANSVERSE TIE ASSEMBLY**



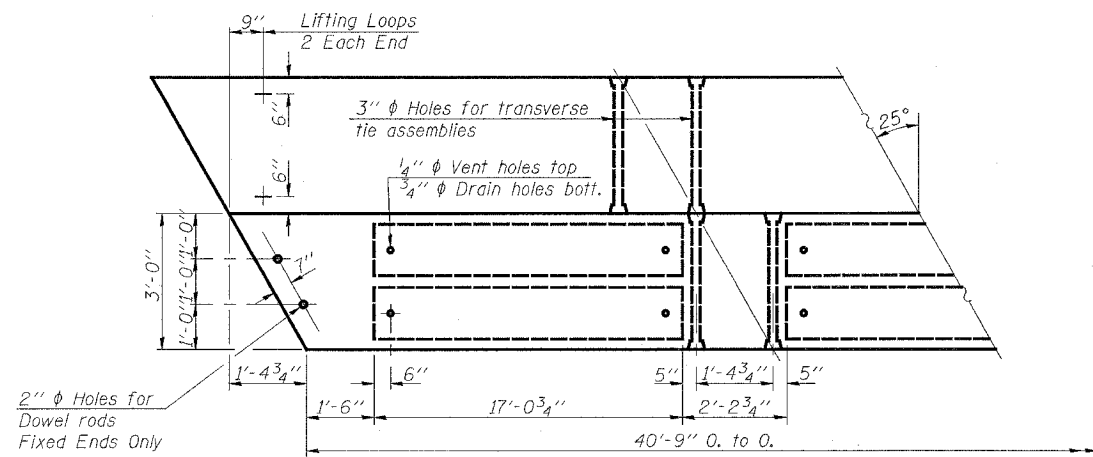
**TYPICAL SECTION**

1/2"  $\phi$  Strands, Each Strand Stressed to 30,900 Lbs.  
10-Strands 1 3/4" up, 2-Strands 3/4" up, 2-Strands 12" up

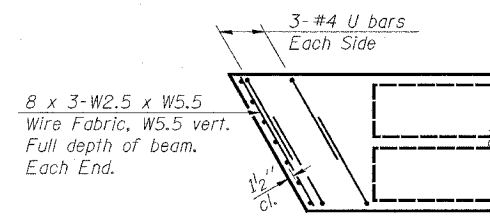
Note:  
Place strands symmetrically about  $\phi$  of beam.



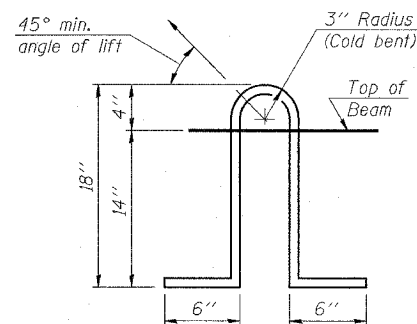
**BAR U**



**PLAN**



**END PLAN**



**LIFTING LOOP DETAIL**

**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 - 1/2"  $\phi$  -270 ksi strands, as shown. The 1"  $\phi$  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. 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. Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'ci, shall be 4,000 p.s.i. See sheet 5 of 12 for spacing of rail post. See sheet 4 of 12 for rail anchor device to be cast in precast beams. See sheet 6 of 12 for Shear Key Clamping Details at Stage Const. Jt. See sheet 3 of 12 for Wing Type Threaded Insert location and spacing.

**BILL OF MATERIAL**

Item	Unit	Total
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	4034

DESIGNED	EML
CHECKED	NJM
DRAWN	EML
CHECKED	NJM

**HORNER & SHIFRIN, INC.**  
ENGINEERS ■ ARCHITECTS ■ PLANNERS

**SUPERSTRUCTURE DETAILS**  
**F.A.P. ROUTE 789 - SECTION 68-BR-1**  
**MADISON COUNTY**  
**STATION 98+33.25**  
**STRUCTURE NO. 060-0150**