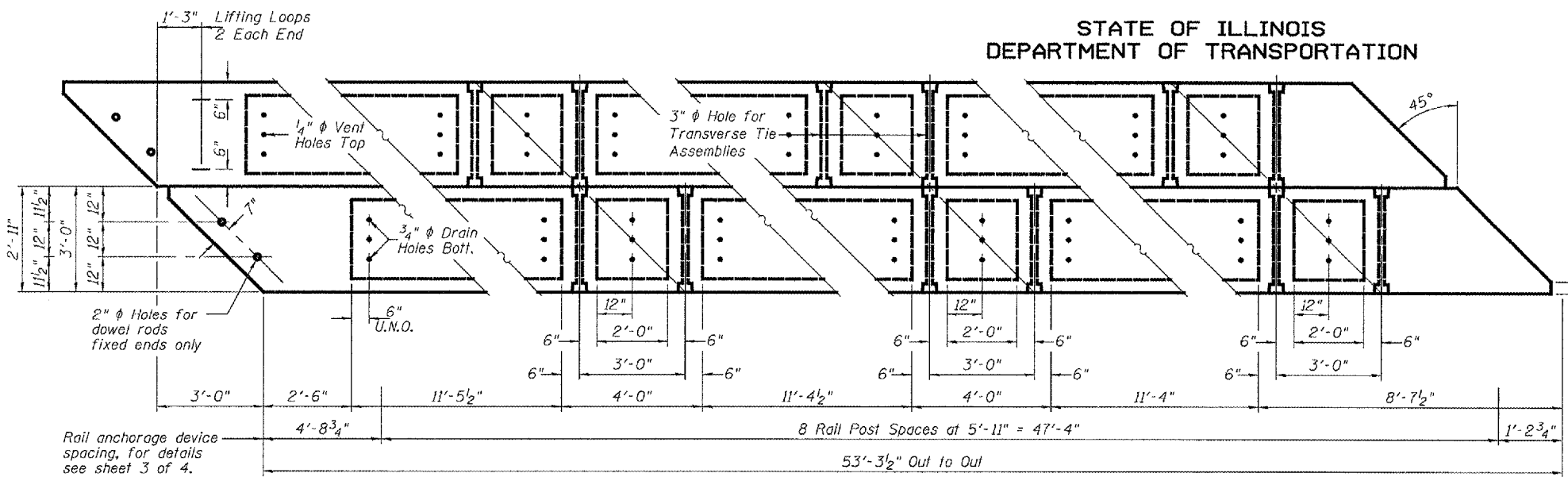


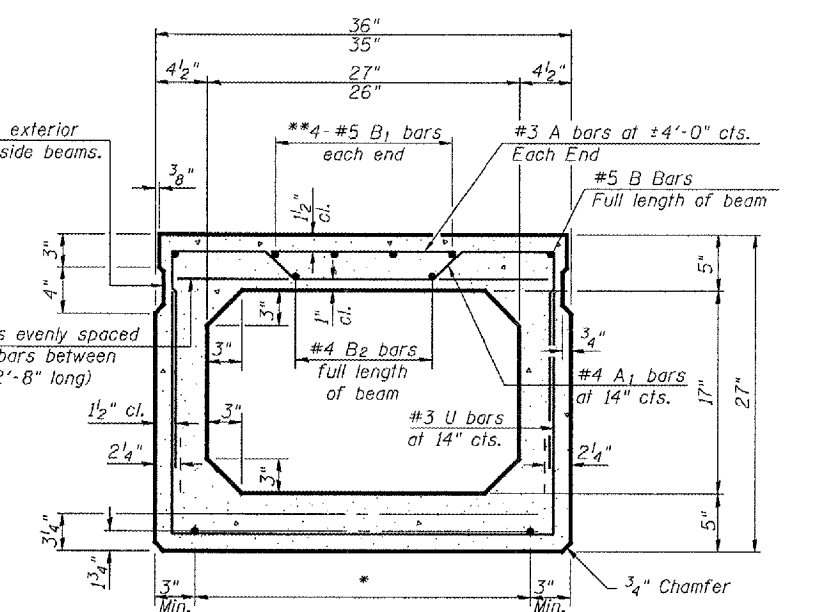
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

|                       |         |          |                  |             |
|-----------------------|---------|----------|------------------|-------------|
| ROUTE NO.             | SECTION | COUNTY   | SHEET NO.        | SHEET TOTAL |
| 745                   |         | Pike     | 7                | 6           |
| FED. ROAD DIST. NO. 7 |         | ILLINOIS | FED. AID PROJECT |             |

Contract Number: 72B57



PLAN



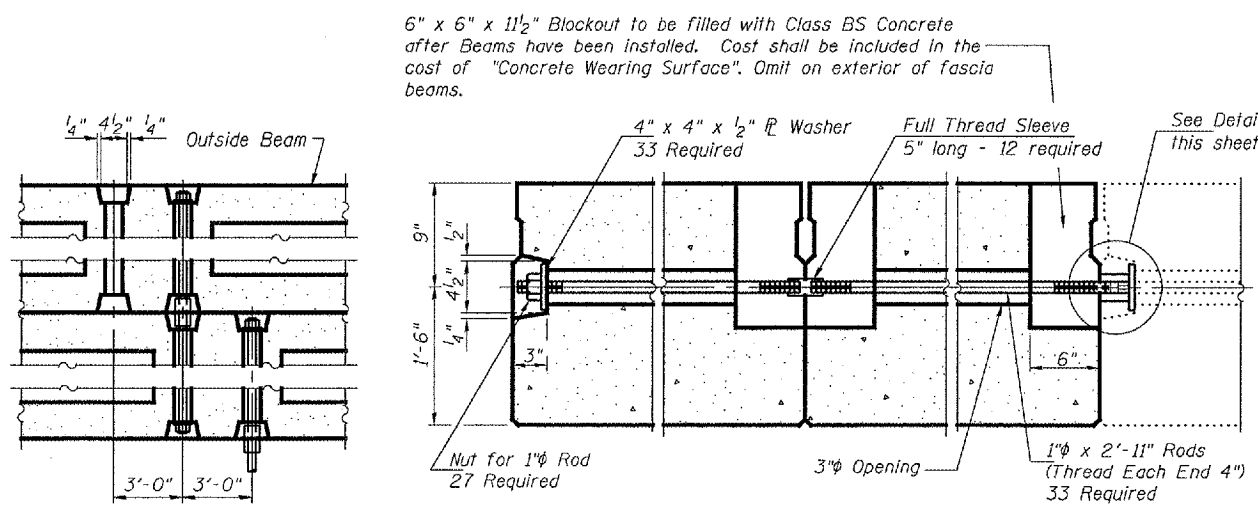
TYPICAL SECTION

11-1/2"  $\phi$  Strands, Each Strand Stressed to 30,900 Lbs.  
9-Strands 1 3/4" up, 2-Strands 3/4" up

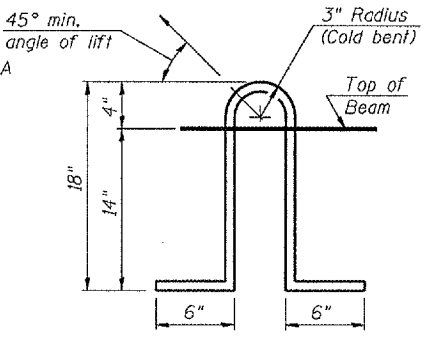
\* TRANSVERSE PLACEMENT GUIDELINES

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 1/2".

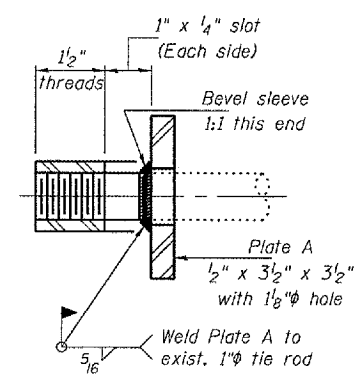
Vertical placement of strands shall not be adjusted to satisfy the above guidelines.



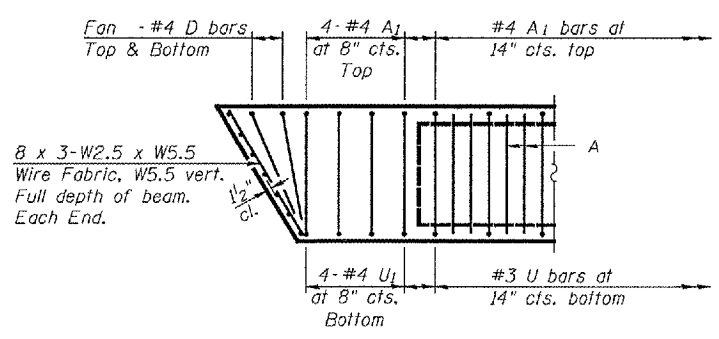
TYPICAL TRANSVERSE TIE ASSEMBLY



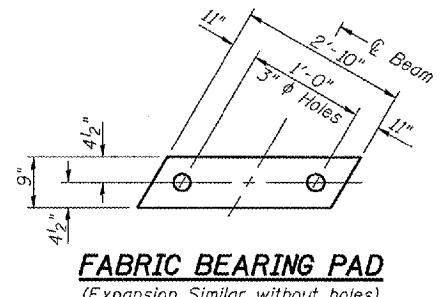
LIFTING LOOP DETAIL



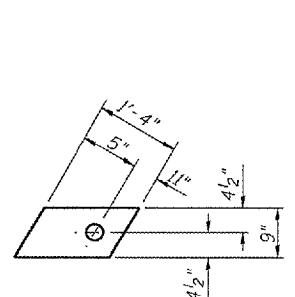
SECTION A-A  
(9 Required)



END PLAN



FABRIC BEARING PAD  
(Expansion Similar without holes)



FABRIC ADJUSTING SHIM  
(Expansion Similar without hole)

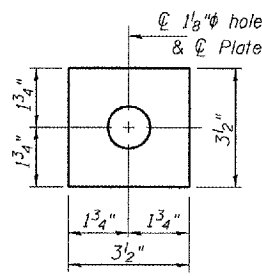
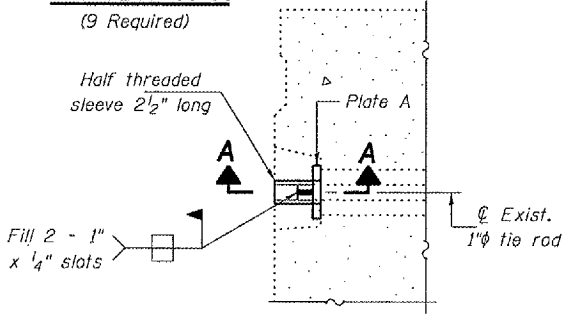


PLATE A  
(9 Required)



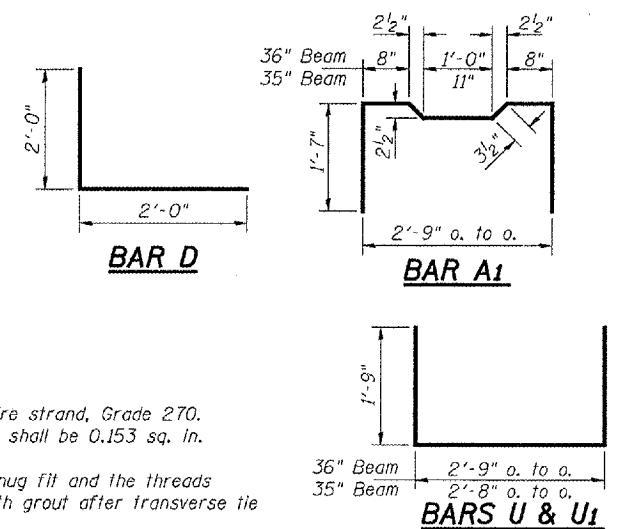
DETAIL A

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. 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 shown 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'ci, shall be 4,000 p.s.i.

BILL OF MATERIAL

|                                     |         |     |
|-------------------------------------|---------|-----|
| Precast Prestressed Conc. Deck Bms. | Sq. Ft. | 955 |
|-------------------------------------|---------|-----|



BEAM DETAILS  
F.A.P. RT. 745 IL 104  
PIKE COUNTY  
SN 075-0029

|          |                  |
|----------|------------------|
| DESIGNED | A.T.H.           |
| CHECKED  | V.H.V.           |
| DRAWN    | Drew Christopher |
| CHECKED  | A.T.H. V.H.V.    |

February 26, 2008  
EXAMINED *Carl Prosser*  
ENGINEER OF STRUCTURAL SERVICES  
PASSED *Walsh E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

PD-5-R 11-1-06