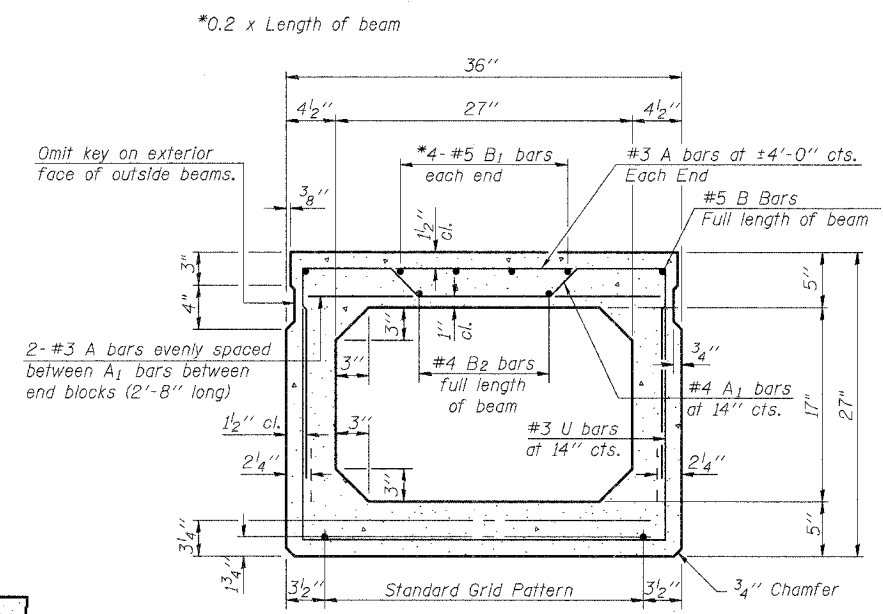
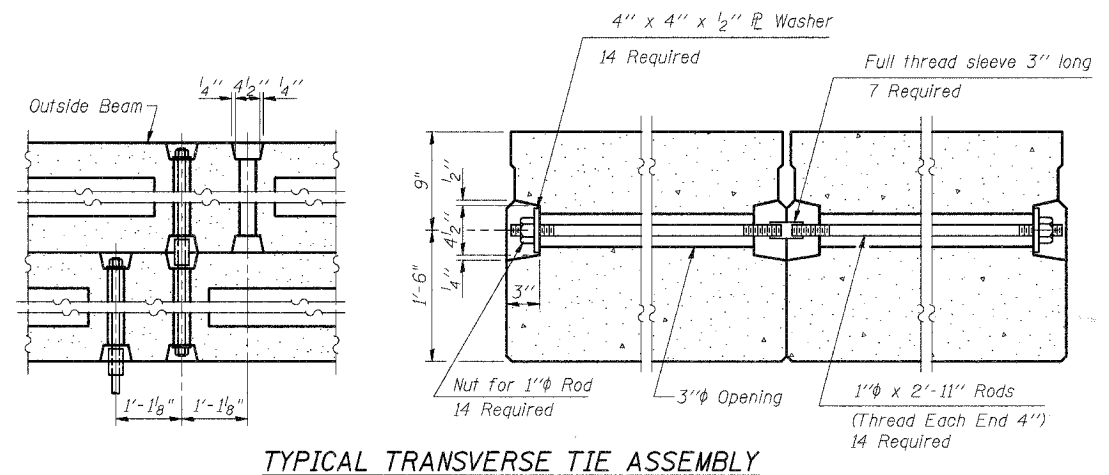
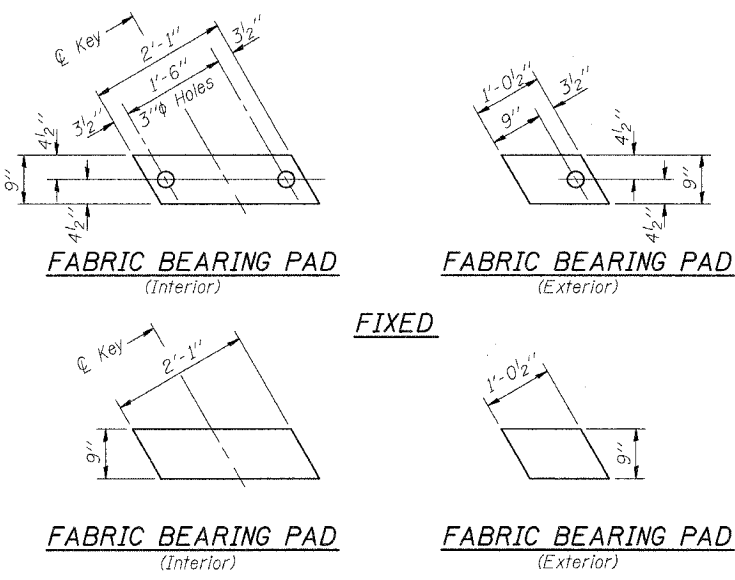
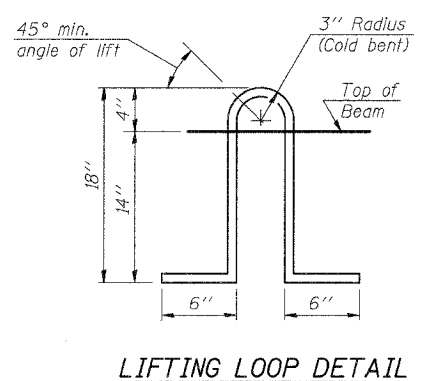
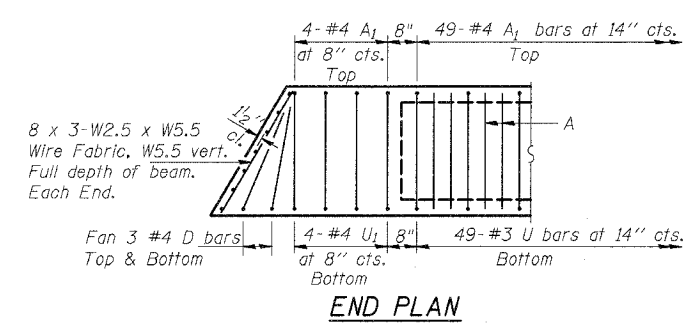
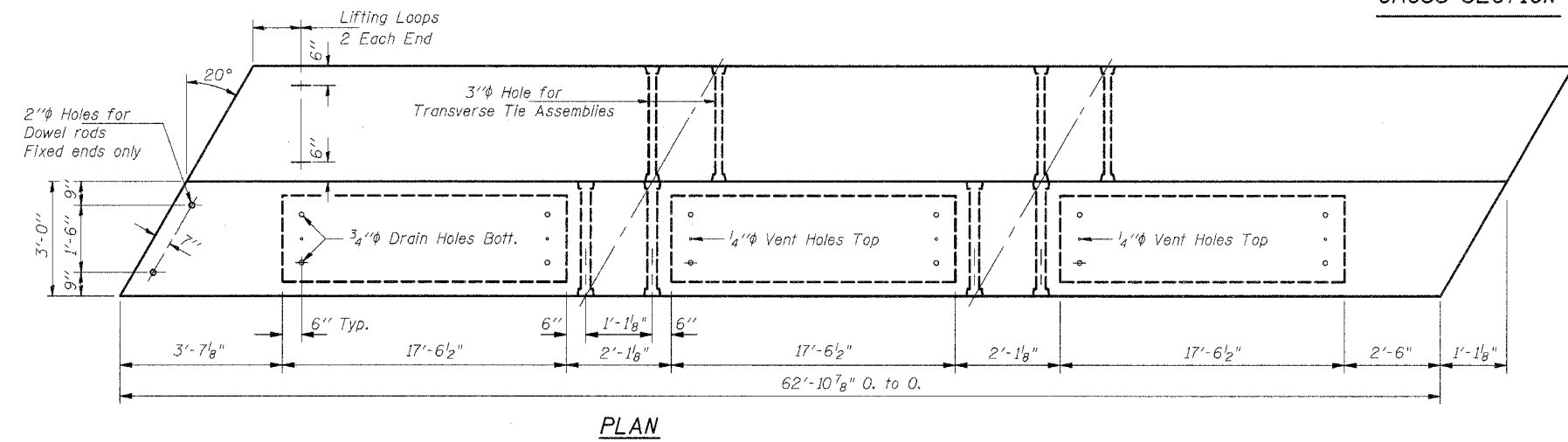
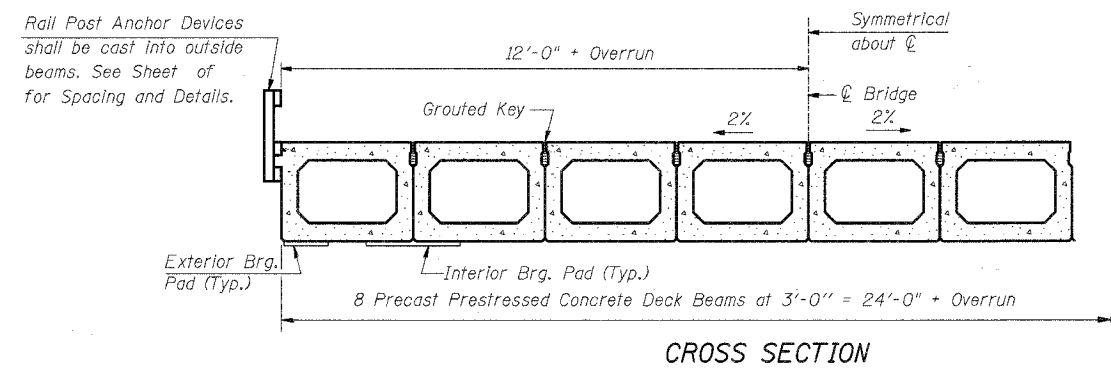
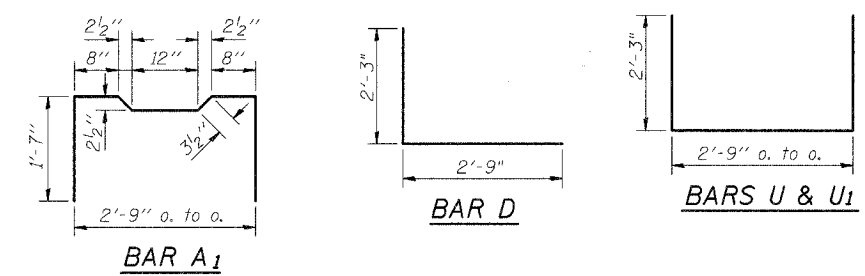


|                       |         |                  |              |           |
|-----------------------|---------|------------------|--------------|-----------|
| ROUTE NO.             | SECTION | COUNTY           | TOTAL SHEETS | SHEET NO. |
| TR 69                 | *       | SHELBY           | 12           | 8         |
| FED. ROAD DIST. NO. 7 |         | ILLINOIS PROJECT |              |           |
| *01-19113-00-BR       |         | SHEET 2 OF 6     |              |           |



18 - 1/2"  $\phi$  Strands, Each Strand Stressed to 30,900 Lbs.  
 8- Strands 1 3/4" up, 6- Strands 3/4" up, 2 - Strands 7/2" up  
 2 - Strands 10 1/2" up

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



**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"  $\phi$ -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 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.

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.

**BILL OF MATERIAL**  
(Bar List for One Beam Only)

| Bar No.                                   | Size | Length | Shape        |
|---|------|--------|--------------|
| A   | #3   | 2'-8"  | —            |
| A1  | #4   | 7'-1"  | □            |
| B   | #5   | 22'-3" | —            |
| B1  | #5   | 12'-6" | —            |
| B2  | #4   | 22'-0" | —            |
| U   | #3   | 7'-3"  | □            |
| U1  | #4   | 7'-3"  | □            |
| Precast Prestressed Conc. Deck Bms. (27") |      |        | Sq. Ft. 3018 |

**BEAM DETAILS**  
**T.R. 69 OVER LAKE FORK BRANCH**  
**SEC. 01-19113-00-BR**  
**SHELBY COUNTY**  
**S.N. 087-3530**  
**STA. 15+12.13**

|              |             |           |            |
|--------------|-------------|-----------|------------|
| DESIGNED BY: | CHECKED BY: | DRAWN BY: | DATE:      |
| G.B.M.       | D.R.B.      | J.P.H.    | March 2008 |

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