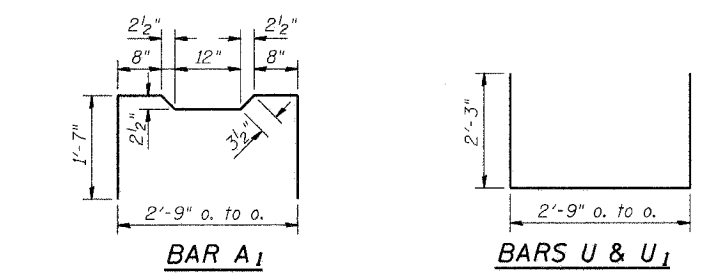
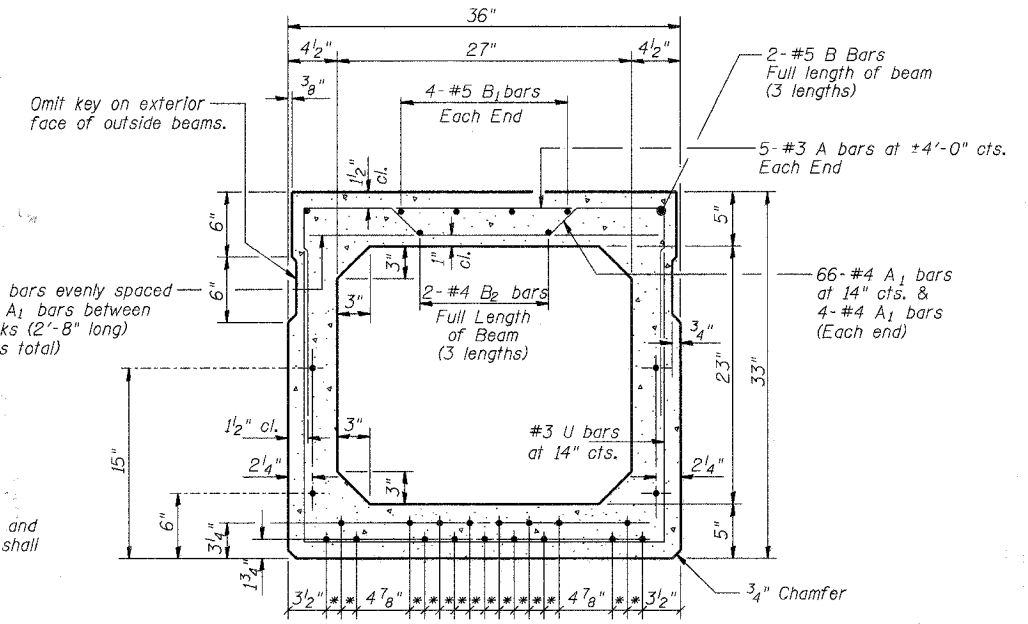
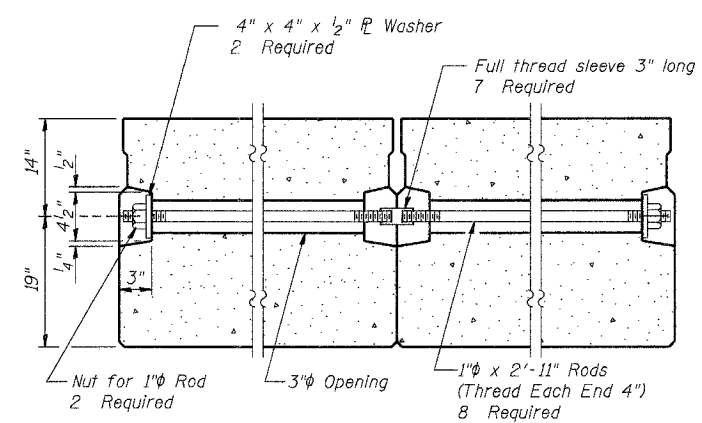
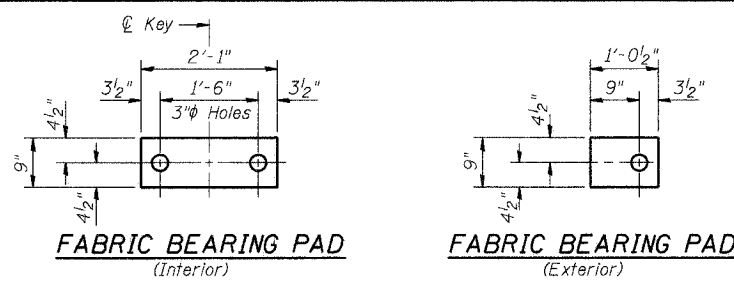


| | | | | |
|-----------------------|----------------|------------------|--------------|-----------|
| ROUTE | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| TR 454 | 06-19125-00-BR | FAYETTE | 9 | 7 |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT | | |
| CONTRACT NO. 95532 | | | | |

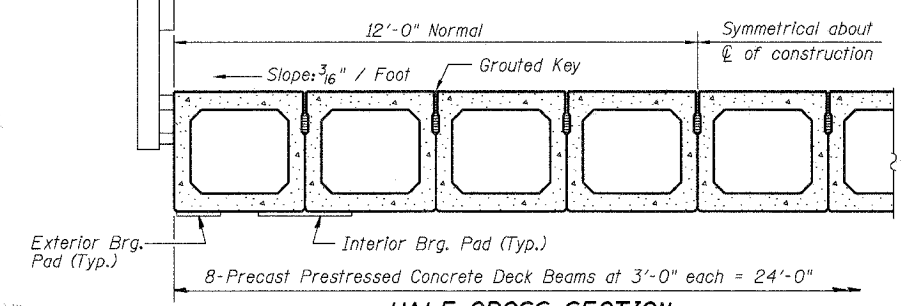
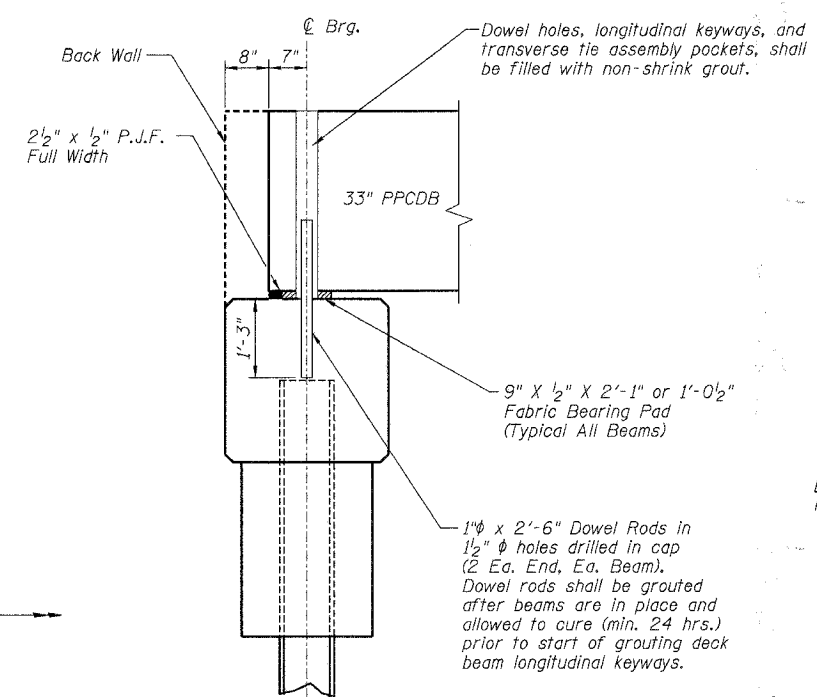
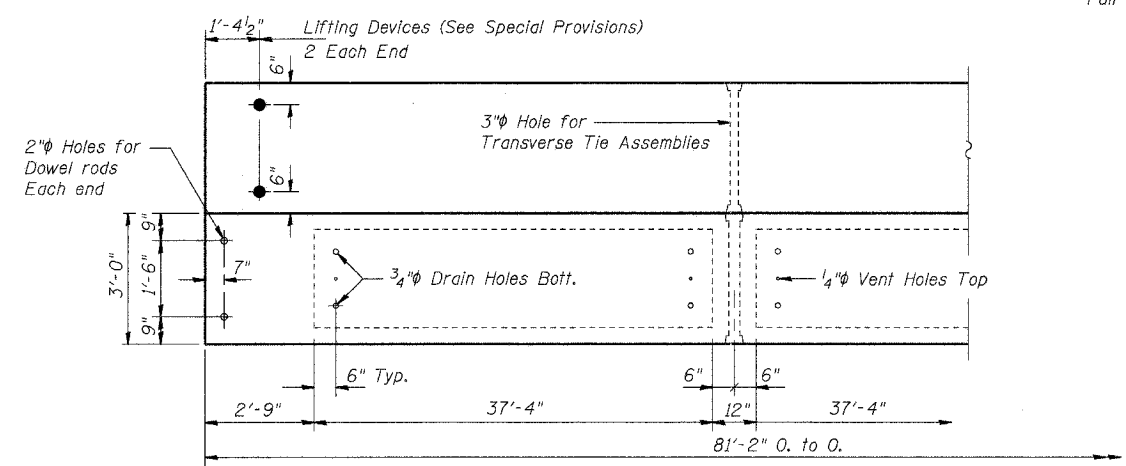


TYPICAL TRANSVERSE TIE ASSEMBLY

TYPICAL SECTION

21 - 1/2" Strands Each Strand Stressed to 31,000 Lbs.
 9-Strands 1 3/4" up, 8-Strands 3/4" up
 2-Strands 6" up, 2-Strands 15" up

Note: Place strands symmetrically about center of beam.
 * = 1 3/8"



HALF CROSS SECTION

See Sheet 8 for the details showing the spacing and mounting of posts and rails to the PPCDB.

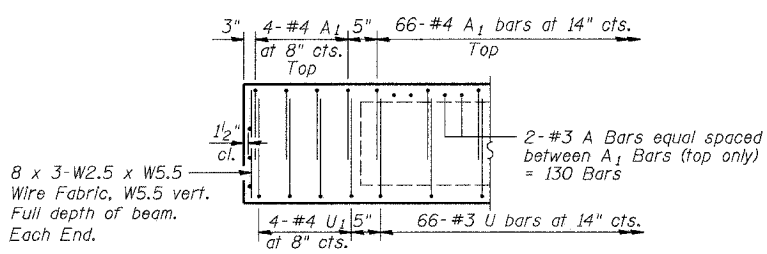
BILL OF MATERIAL ONE BEAM

| Bar | No. | Size | Length | Shape |
|--|-----|------|--------|----------------|
| A | 140 | #3 | 2'-8" | |
| A1 | 74 | #4 | 6'-1" | |
| B | 6 | #5 | 29'-0" | |
| B1 | 8 | #5 | 16'-3" | |
| B2 | 6 | #4 | 28'-6" | |
| U | 66 | #3 | 7'-3" | |
| U1 | 8 | #4 | 7'-3" | |
| Pre-cast Prestressed Concrete Deck Beams | | | | Sq. Ft. 243.50 |
| ** Reinforcement Bars | | | | Pound 1100 |
| Total Weight Each Beam | | | | Pound 53560 |

**Weight does not include W.W.F.

NOTES

- Pre-stressing 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.
- See Special Provisions for lifting devices.
- Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for pre-cast prestressed concrete deck beams.
- 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 A706 (IL Mod), Grade 60.
- The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 3/8" 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 5000 p.s.i. (minimum).
- Low-relaxation strands are required.



END ELEVATION

PRECAST PRESTRESSED CONCRETE DECK BEAM DETAILS
PROPOSED BRIDGE OVER HICKORY CREEK
 TR 454
 SECTION 06-19125-00-BR
 FAYETTE COUNTY, ILLINOIS

Sheet 7 of 9
 Job No. 50606

10/31/2007