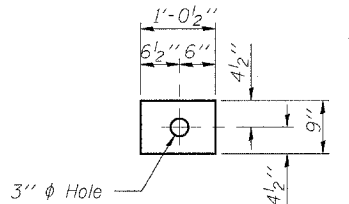
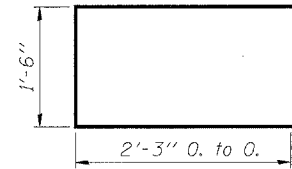


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | | |
|-----------------------|----------|------------------|--------------|-----------|-------------------------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | SHEET NO. 2 3 SHEETS |
| F.A.P. 329 | 26BR-1 | RANDOLPH | 27 | 26 | |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT | | | |

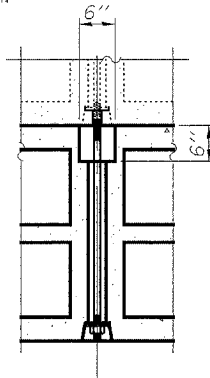


FABRIC BEARING PAD

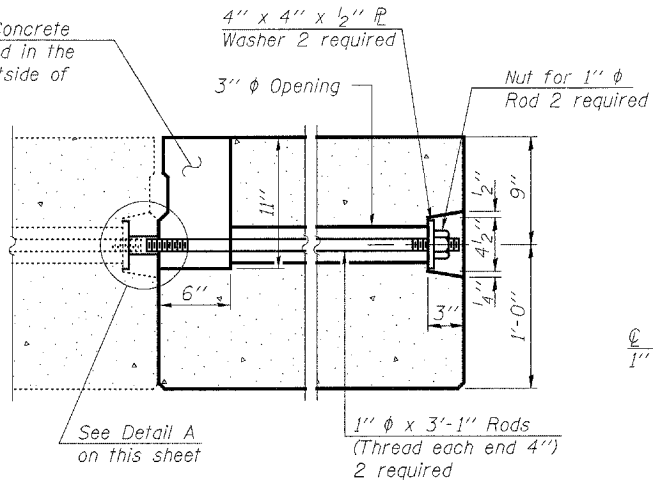


BAR U

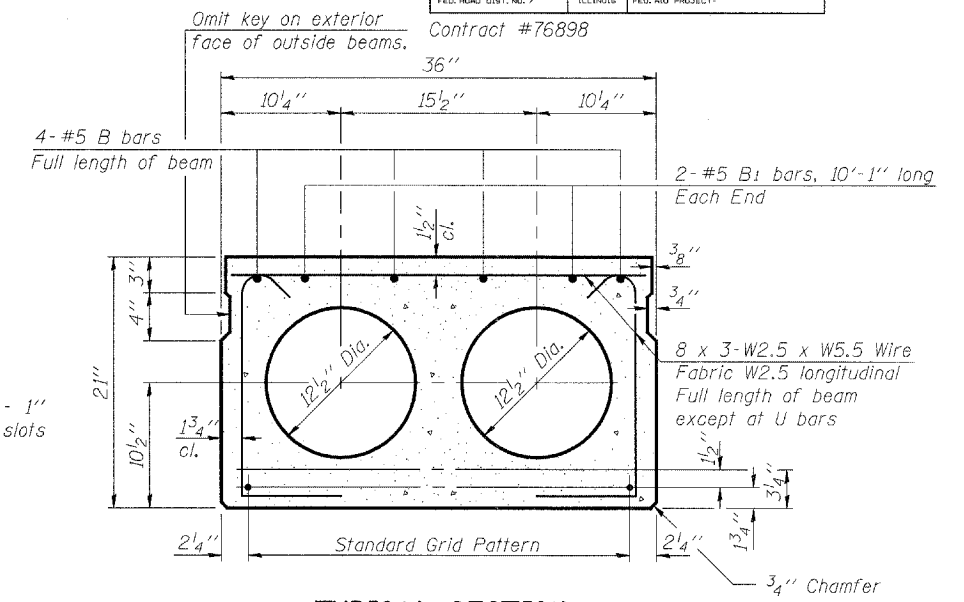
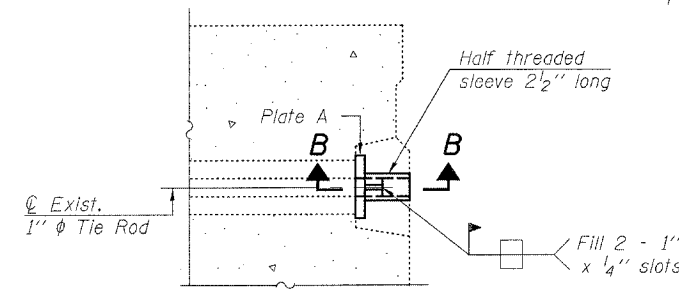
6" x 6" x 11" Blockout to be filled with Class BD Concrete after beam has been installed. Cost shall be included in the cost of "Concrete Superstructure". Omit on the outside of fascia beam.



TYPICAL TRANSVERSE TIE ASSEMBLY



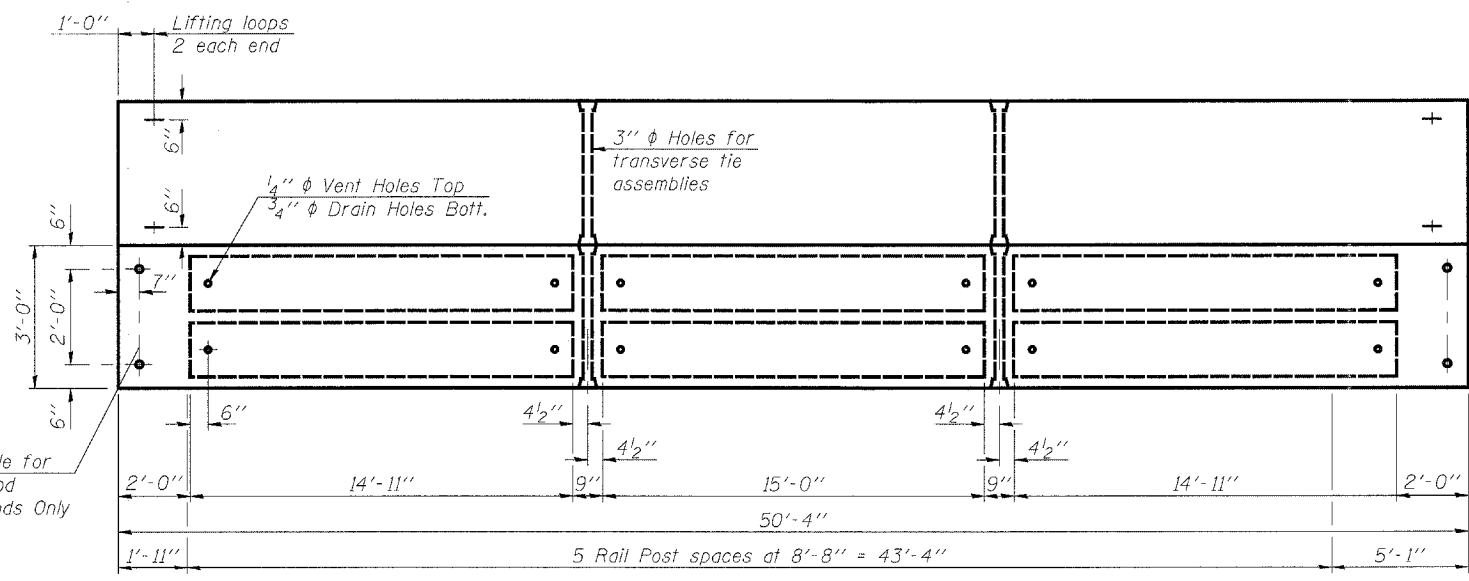
DETAIL A



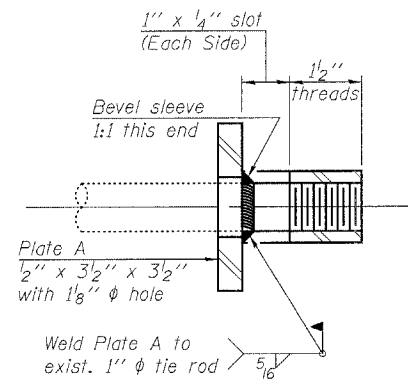
TYPICAL SECTION

1/2" Strands, Each Strand Stressed to 30,900 Lbs.
8-Strands 1 3/4" up, 4-Strands 3/4" up, 2-Strands 9" up

Note:
Place strands symmetrically about center of beam.



PLAN



SECTION B-B

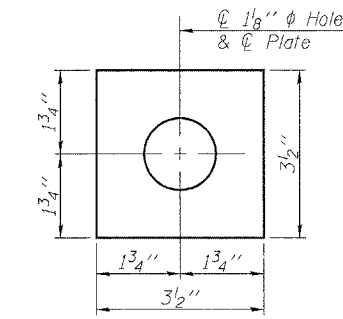
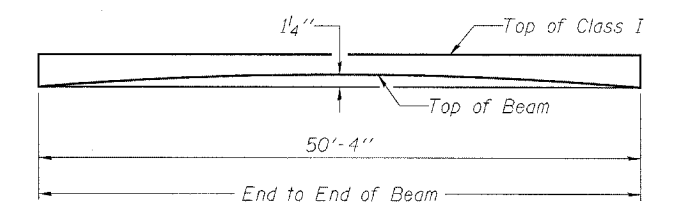
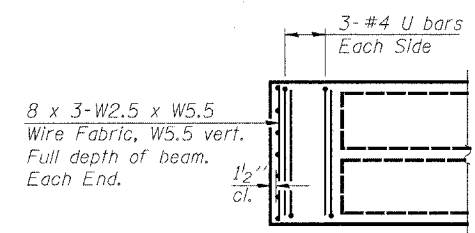


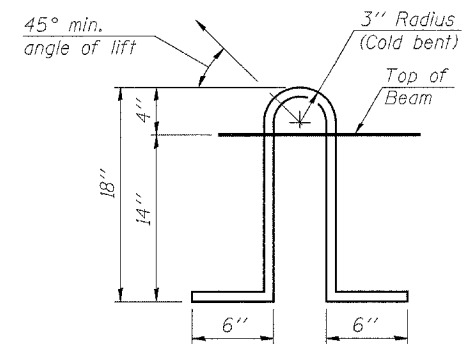
PLATE A



ANTICIPATED INITIAL CAMBER DIAGRAM



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" diameter 270 ksi strands, as shown. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. 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 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 3 of 3 for rail anchor device to be cast in precast beams.

BILL OF MATERIAL

| Item | Unit | Total |
|---|---------|-------|
| Precast Prestressed Concrete Deck Beams (21" Depth) Special | Sq. Ft. | 151 |

STAGE I
DECK BEAM REPLACEMENT DETAILS
S.B.I. ROUTE 154 OVER PLUM CREEK
RANDOLPH COUNTY
STRUCTURE NO. 079-0016

| | |
|----------|-----|
| DESIGNED | EML |
| CHECKED | NJM |
| DRAWN | EML |
| CHECKED | NJM |

HORNER & SHIFRIN, INC.
ENGINEERS ARCHITECTS PLANNERS