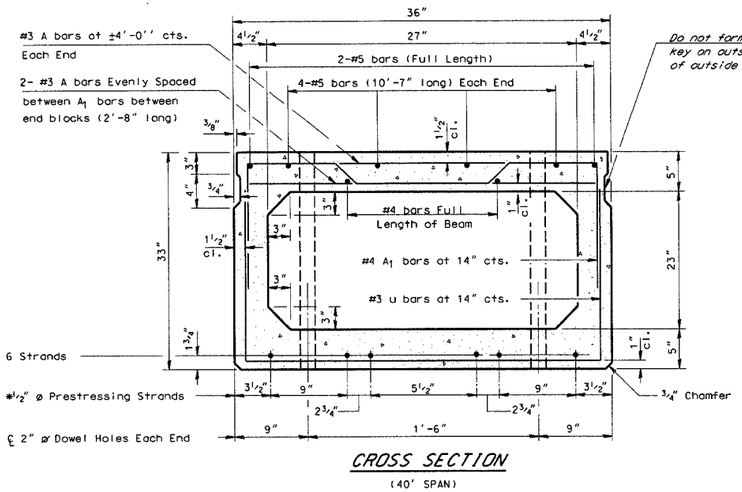
85352

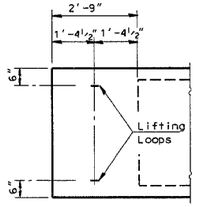
FAS RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 384	04-01119-00-BR 04-04126-00-BR	HENRY	13	8
F.H.W.A. REG.	ILLINOIS	PROJECT BR-OS-073(49)		



CROSS SECTION
(40' SPAN)

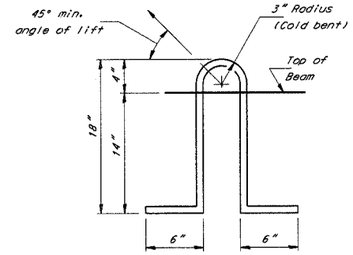
*Stressed to 28,900 lbs.

NOTE:
Place strands symmetrically about ℄ of beam.



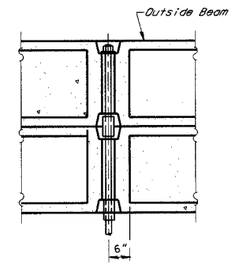
END BLOCK DETAILS

Each beam shall have four Lifting Loops, two at each end of beam cast in locations shown above. Loops shall be burned off after beams have been erected.

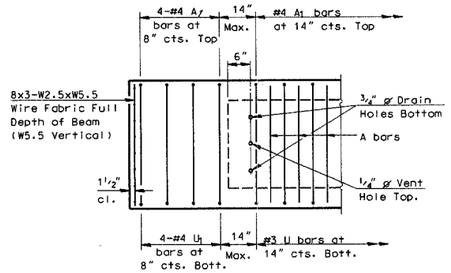


LIFTING LOOP DETAIL

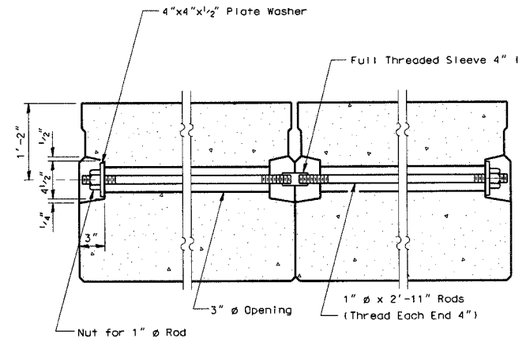
Lifting loops shall be 3, ½" ø-270 ksi strands, as shown. Alternate approved lifting devices are also acceptable.



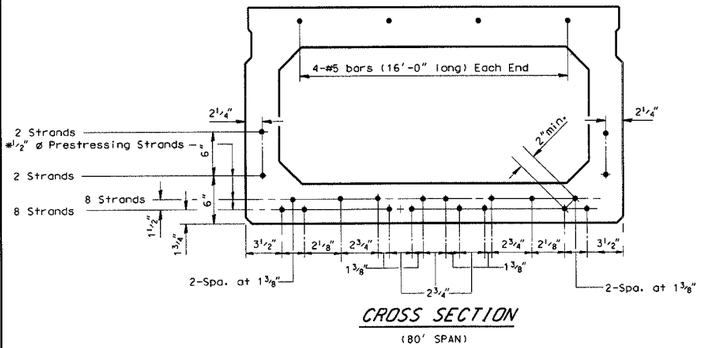
PARTIAL PLAN TRANSVERSE TIE ASSEMBLY



END REINFORCEMENT



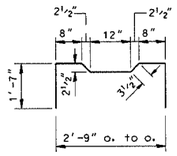
SECTION ALONG TRANSVERSE TIE ASSEMBLY



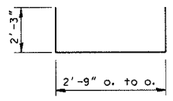
CROSS SECTION
(80' SPAN)

NOTE

The std. reinf. shown on the 40' span cross section is typical for all spans, except as shown.



BAR A1



BARS U & U1

DESIGN STRESSES

f'_c = 5,000 p.s.i.

f'_{ci} = (See Required Release Strength Table)

f_s = 270,000 p.s.i. (½" ø Strand)

f_{si} = 189,000 p.s.i. (½" ø Strand)

f_y = 60,000 p.s.i.

REQUIRED RELEASE STRENGTH

Span	f'_{ci} (psi)
40'	4,000
80'	4,100

NOTES

1. Prestressing steel shall be uncoated high strength, stress relieved 7-wire strand, Grade 270.
2. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 square inches.
3. Reinforcement bars shall conform to AASHTO M-31, M-42 or M-53, Grade 60.
4. Rail Post anchor devices shall be cast into outside beam as elsewhere specified.
5. The top surface of the beams shall be finished in accordance with Article 504.06 of the Standard Specifications.
   The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of the keys shall be rounded or chamfered a minimum of ¼"
6. 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 the top of the beam and the bottom edge of the key.

P.P.C. DECK BEAM DETAILS

24' ROADWAY | 33'' x 36'' BEAMS