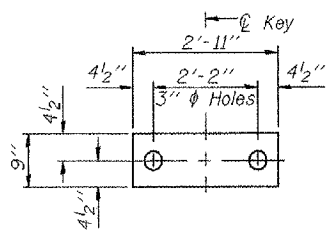
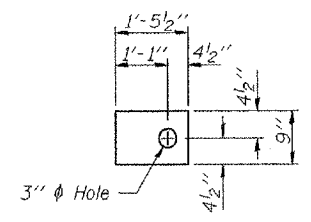


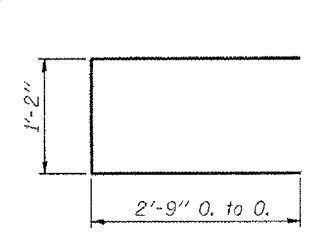
Contract #70262



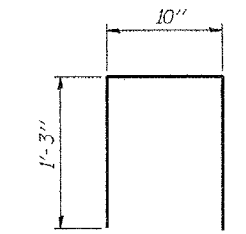
FABRIC BEARING PAD
(Interior) (4 required)



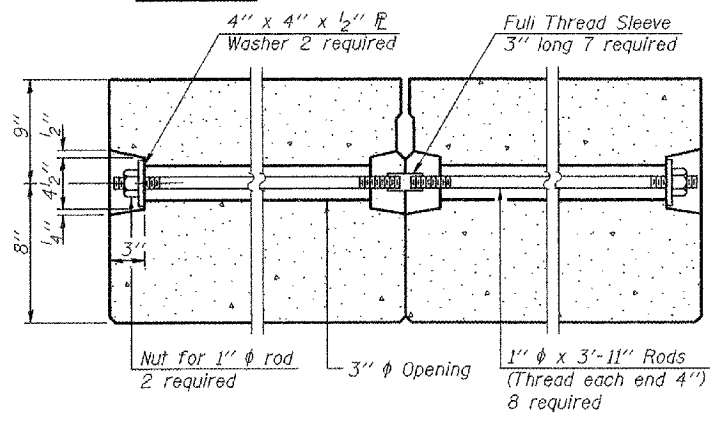
FABRIC BEARING PAD
(Exterior) (4 required)



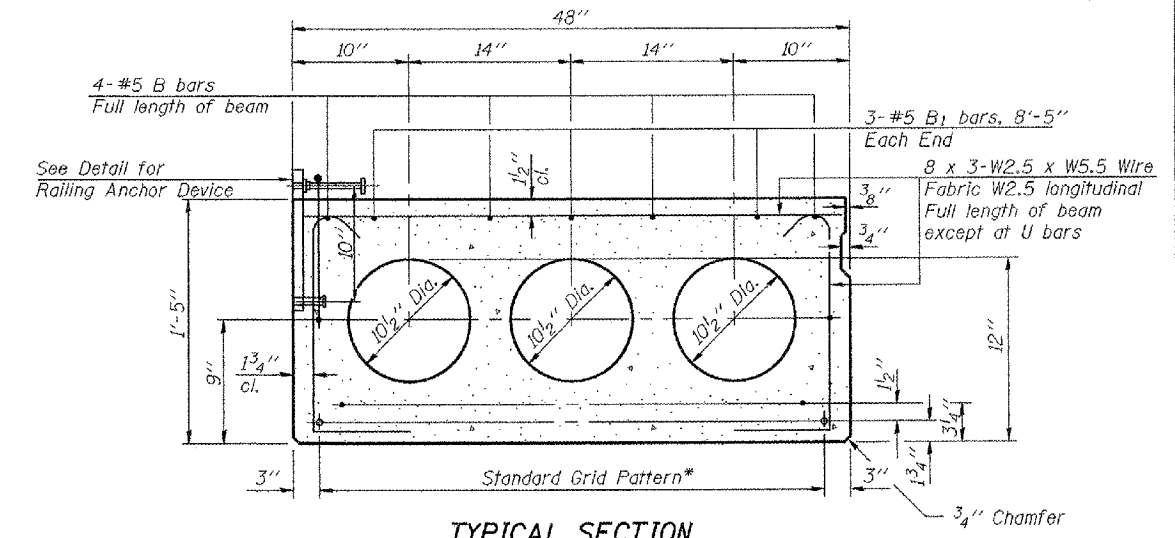
BAR U



BAR D(E)



TYPICAL TRANSVERSE TIE ASSEMBLY



TYPICAL SECTION

Note:
19-1/2" ϕ Strands, Each Strand Stressed to 30,900 Lbs. Place strands symmetrically about ϕ of beam.
13-Strands 1 3/4" up, 4-Strands 3/4" up, 2-Strands 12" up.

*** TRANSVERSE STRAND PLACEMENT GUIDELINES**

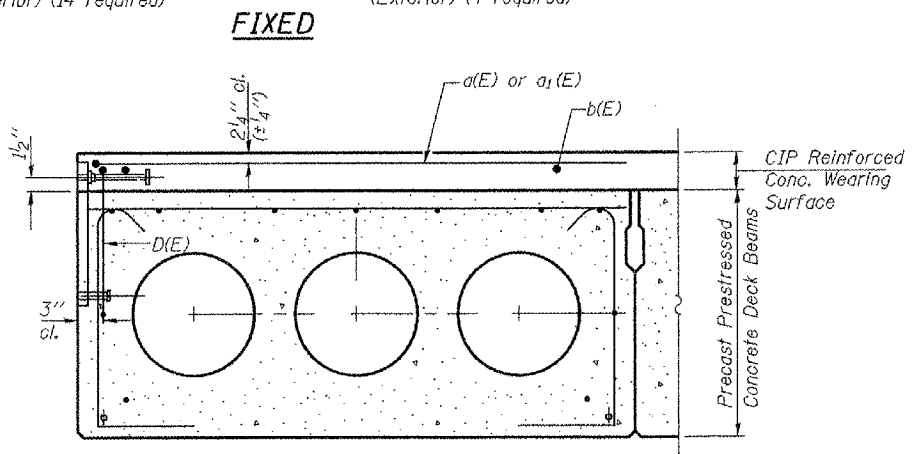
- 1) Place strands symmetrically about centerline of beam.
 - 2) The minimum distance from center to center of strands in all directions shall be 2".
 - 3) The minimum clearance from strand to dowel hole shall be 1/2".
 - 4) The minimum clearance from strand to void shall be 1/2".
- Vertical placement of strands shall not be adjusted to satisfy the above guidelines.

BILL OF MATERIAL

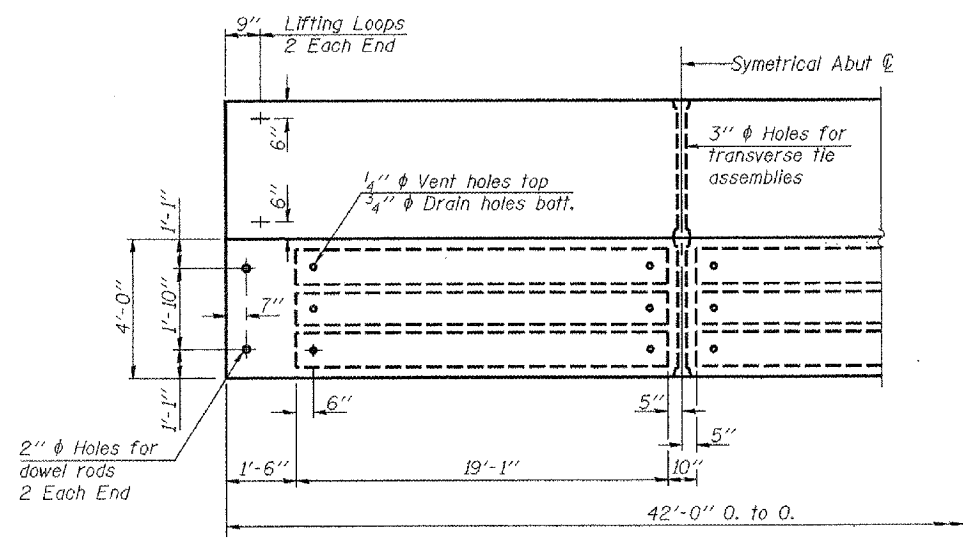
Item	Unit	Total
Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	1344

Weight of beam=25,000 lbs.

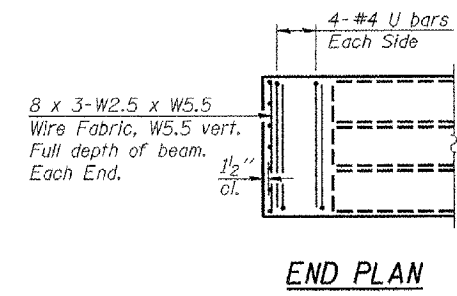
ILLINOIS DEPARTMENT OF TRANSPORTATION	
SHEET TITLE BEAM DETAILS	
PROJECT US ROUTE 136 OVER LONE TREE CREEK FAP ROUTE 709 SECTION 104BR-1 CHAMPAIGN COUNTY STATION 1458+06.74 STRUCTURE NUMBER 010-0058	PROJECT NO. 03061-8 DATE 12/04/06 DRAWN BY TFG CHECKED BY BD/REG/MCB DRAWING NO.
COOMBE-BLOXDORF P.C. Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703	
5 OF 8 SHTS	



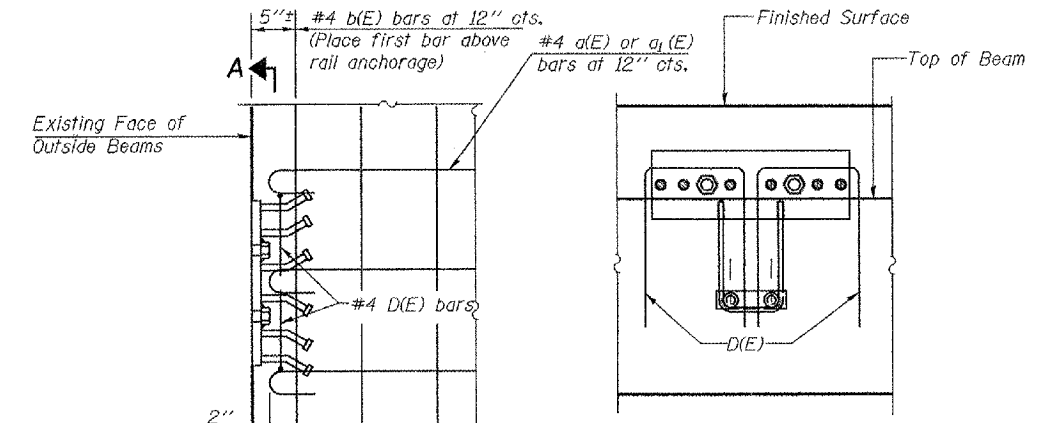
SECTION B-B



PLAN

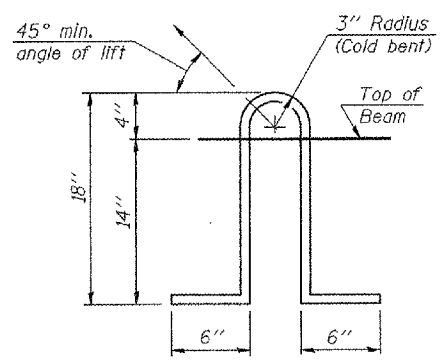


END PLAN



SECTION A-A

RAILING ANCHOR DEVICE DETAIL



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" ϕ -270 ksi strands, as shown. The 1" ϕ 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. 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, per Articles 1020.05(b)(12) and 1021.06 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. The Rail Anchorage shall be cast with the beam and the wearing surface shall be cast in the field. Formwork necessary for the wearing surface may be secured using the bottom rail anchorage inserts and/or additional inserts cast into the beam. Drilling into the beam will not be permitted. See Sheet 4 of 8 for cross section. Non prestressing steel shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified).

PLOT DATE = 12/04/06
 FILE NAME = I:\projects\010-0058-ent-5-48-super-detailed.dgn
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