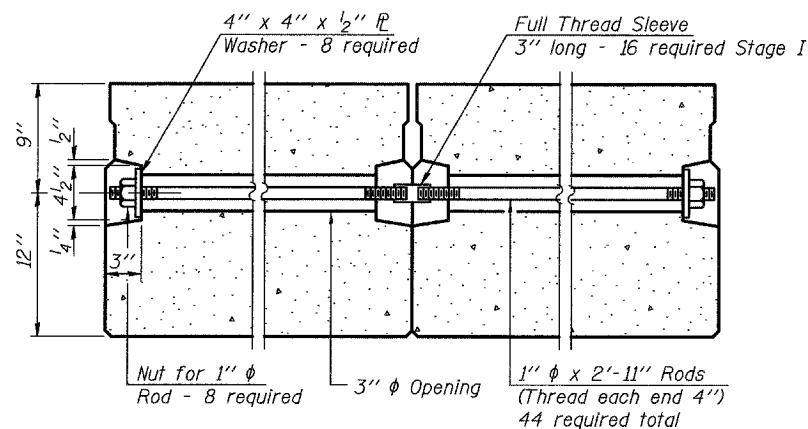


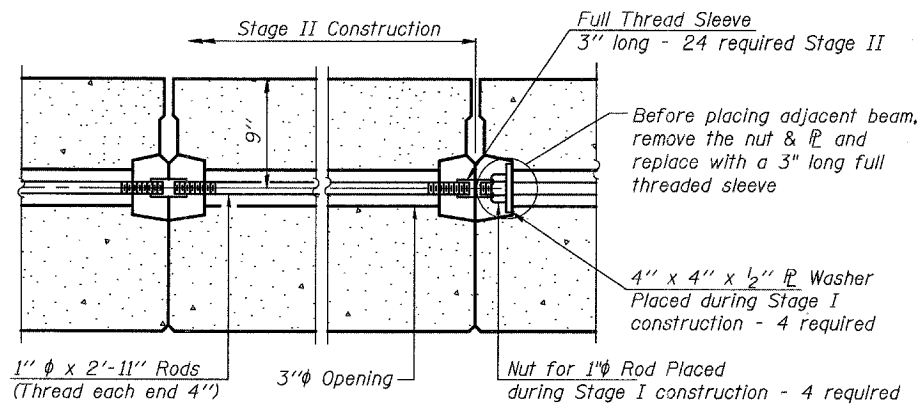
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8 15 SHEETS
F.A.P. RTE. 793	112BR-2	BOND	52	36	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

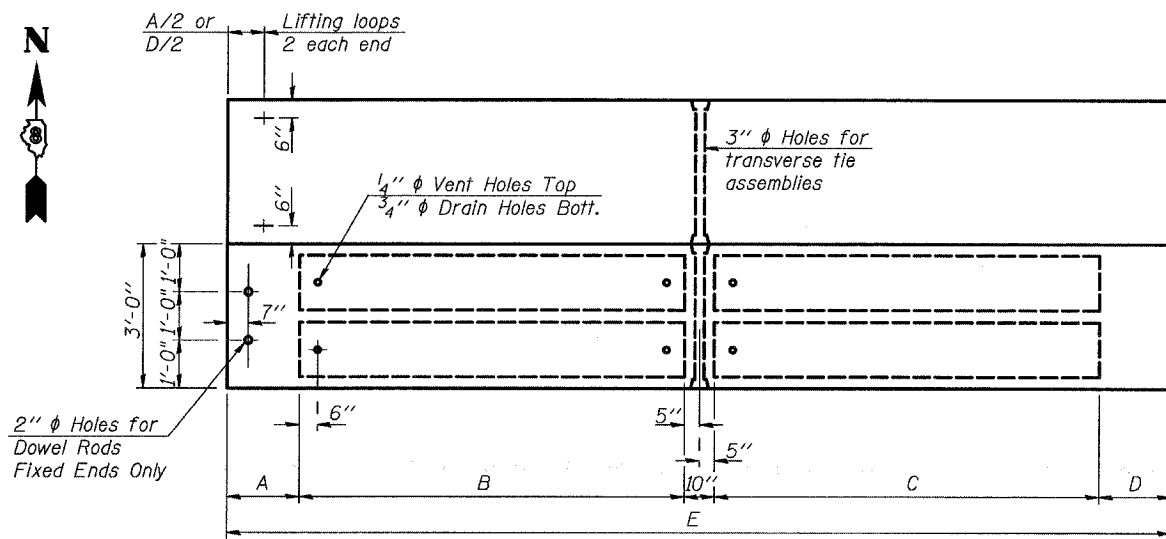
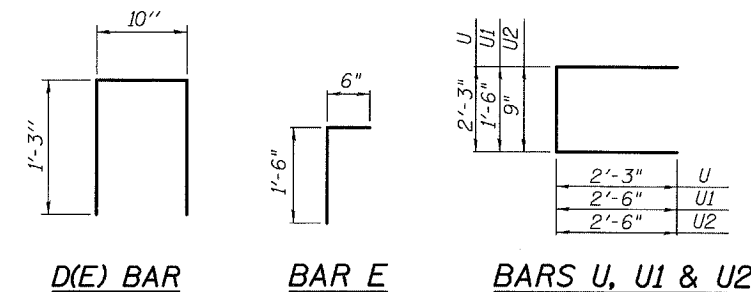
Contract #76897



TYPICAL TRANSVERSE TIE ASSEMBLY

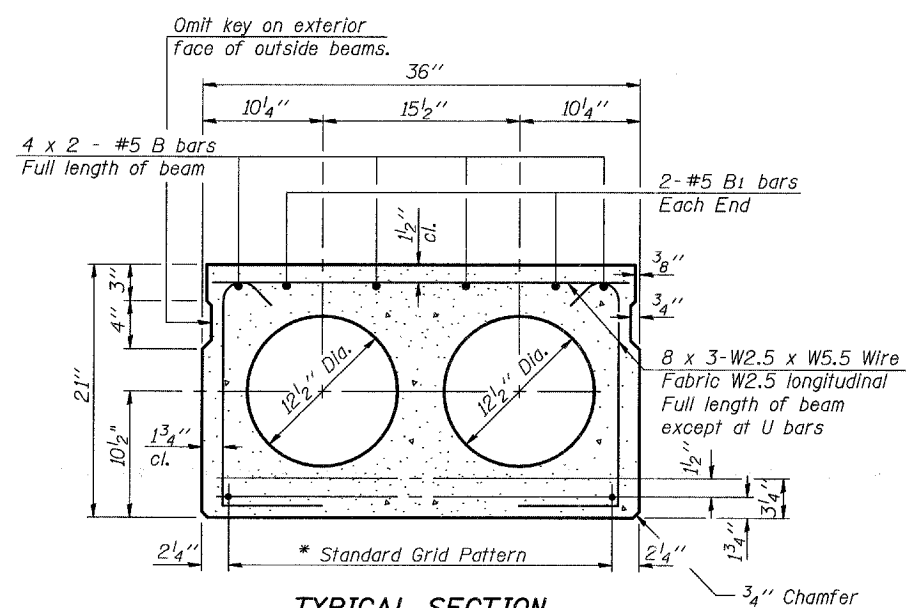


SPECIAL TRANSVERSE TIE ASSEMBLY AT STAGE CONSTRUCTION JOINT



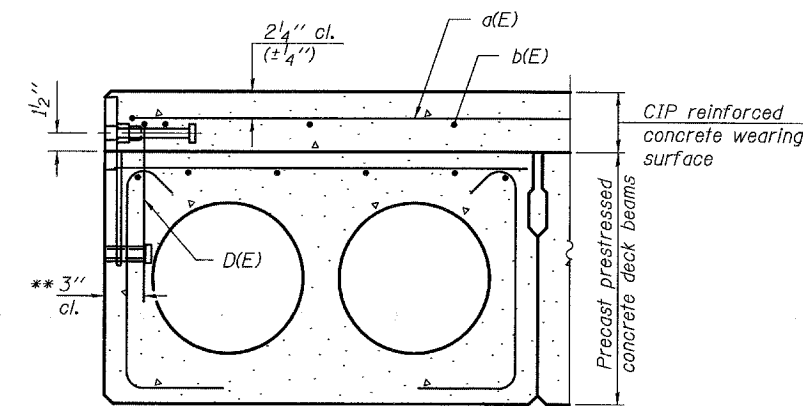
PLAN

(See Table of Beam Dimensions)



TYPICAL SECTION

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



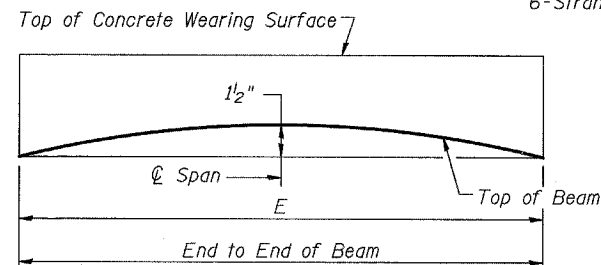
SECTION THRU EXTERIOR BEAMS

** May need to tilt D(E) bar to miss bottom rail anchorage. (See sheet 9 of 15 for rail anchorage details.)

* 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 stand to void shall be 1 1/2".

Vertical placement of strands shall not be adjusted to satisfy the above guidelines.



ANTICIPATED INITIAL CAMBER DIAGRAM

(See Table of Beam Dimensions for dimension E.)

Span	Dimension				
	A	B	C	D	E
1	2'-0"	23'-4"	22'-6"	2'-10"	51'-6"
2	2'-10"	22'-4 1/4"	23'-2 1/4"	2'-0"	51'-2 1/2"
3	2'-0"	23'-1"	22'-3"	2'-10"	51'-0"
4	2'-10"	22'-5 1/2"	23'-3 1/2"	2'-0"	51'-5"

TABLE OF BEAM DIMENSIONS

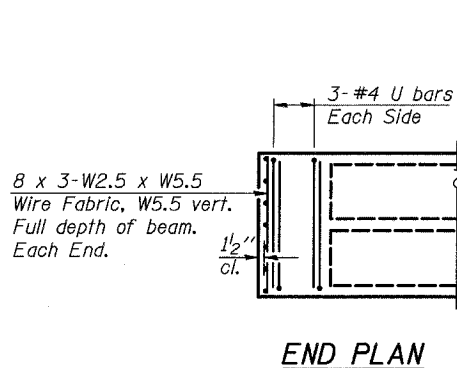
NOTES

1. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.
2. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
3. Lifting loops shall be 2 - 1/2" φ - 270 ksi strands, as shown.
4. 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.
5. Non prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60.
6. 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.
7. 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.
8. Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
9. Required Release Strength, f'ci, shall be 4,000 p.s.i.
10. 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 utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam. Drilling into the beam will not be permitted.
11. See sheets 9 & 10 of 15 for remaining superstructure details.
12. See sheet 9 of 15 for rail post spacing.

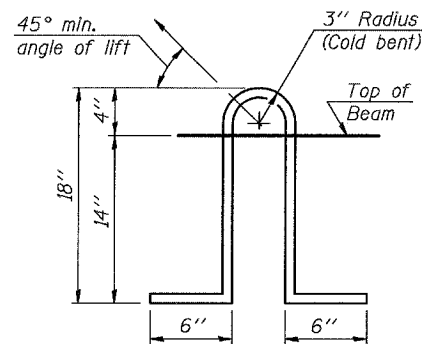
BILL OF MATERIAL

Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	6,769
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SUPERSTRUCTURE DETAILS
IL ROUTE 143 OVER BEAVER CREEK
F.A.P. ROUTE 793 - SECTION 112BR-2
BOND COUNTY
STA. 670+40
STRUCTURE NO. 003-0035



END PLAN



LIFTING LOOP DETAIL