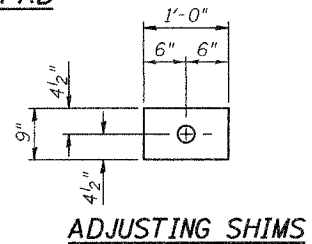
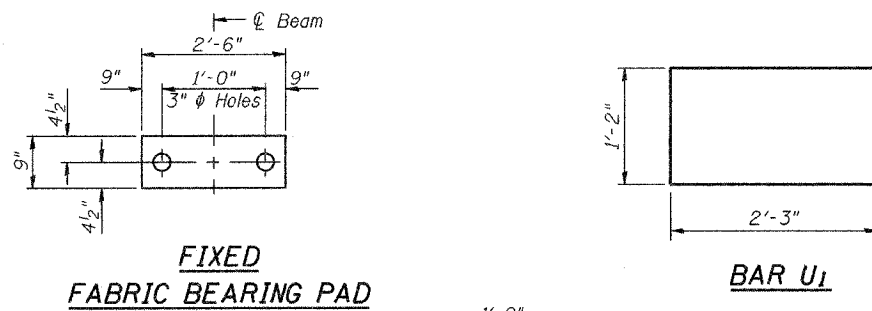


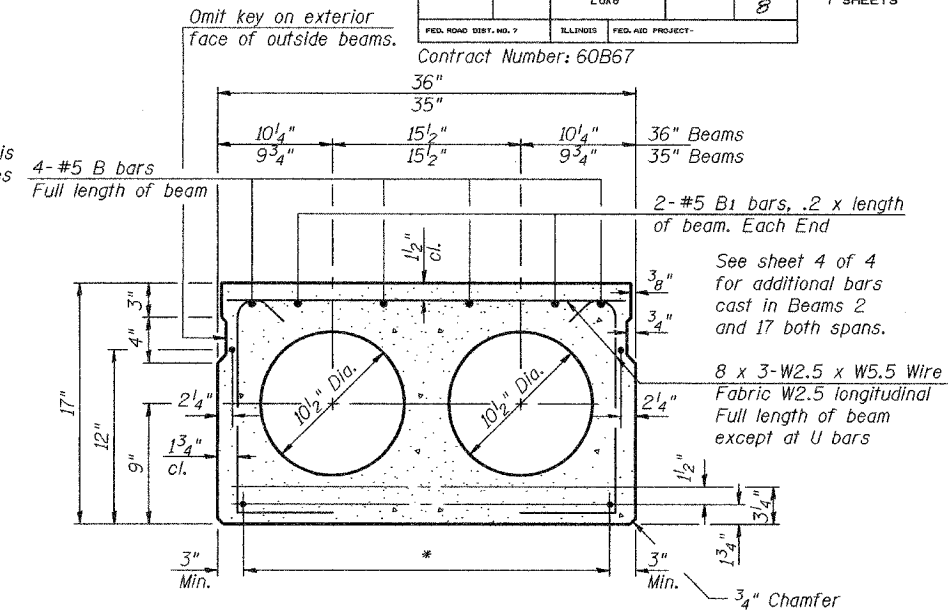
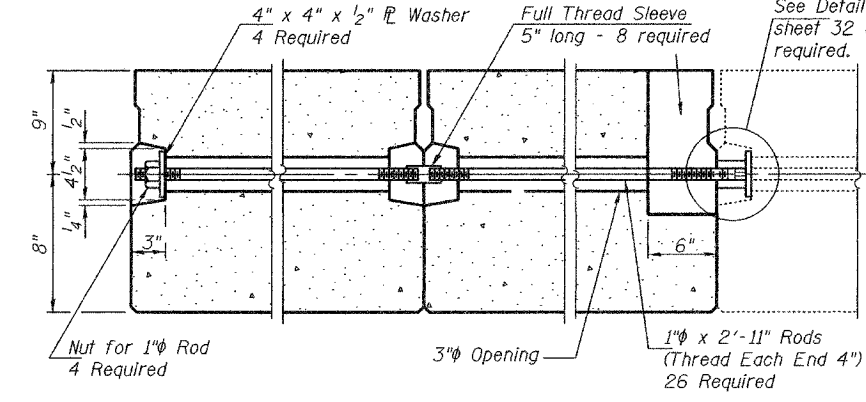
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. 2
		Lake	8	4 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

Contract Number: 60B67

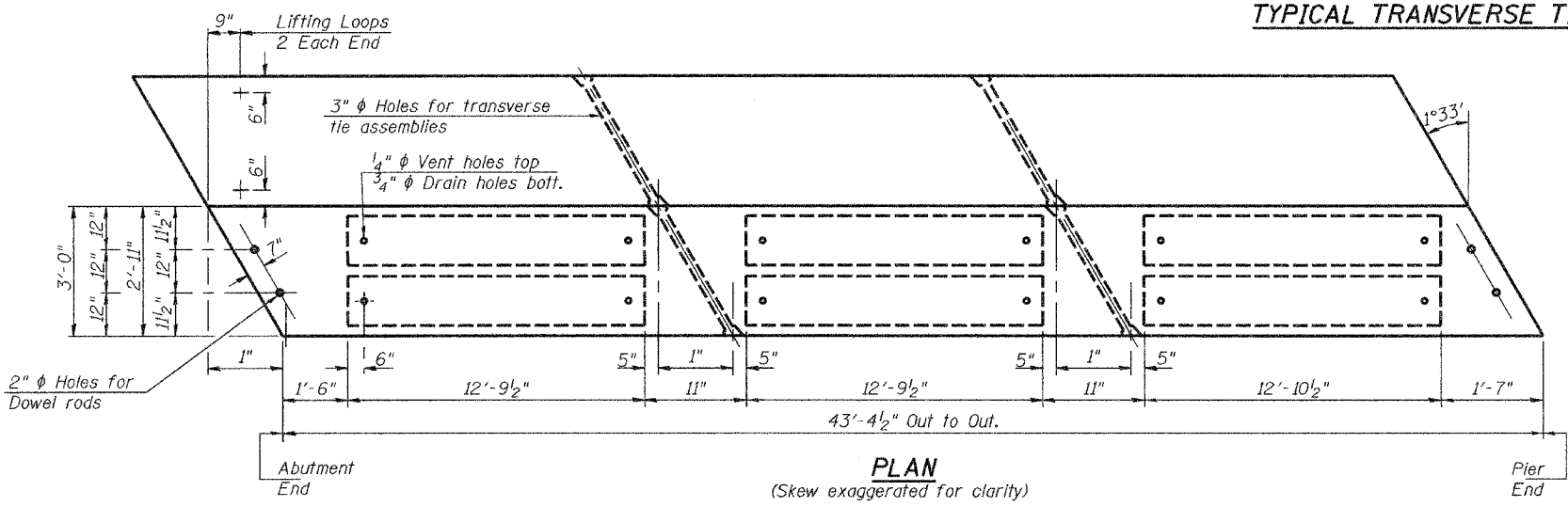


6" x 6" x 1 1/2" Blockout to be filled with Class BD Concrete after Beams have been installed. Cost shall be included in the cost of Concrete Superstructure. Omit on exterior face of beam 17 and between beams 16 & 17 in both spans, and between beams 2 & 3, and 12 & 13 in Span 2.

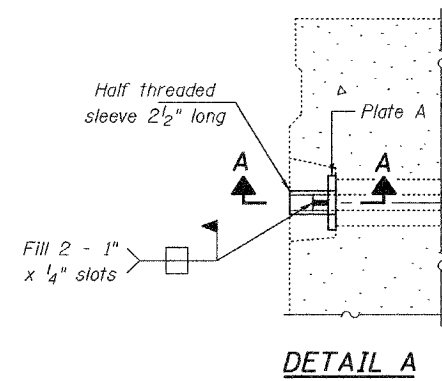


TYPICAL SECTION

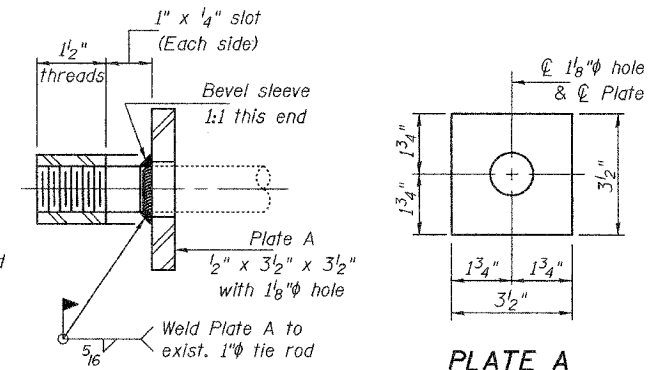
1/2" φ Strands, Each Strand Stressed to 30,900 Lbs.
9-Strands 1 3/4" up, 4-Strands 3/4" up, 2-Strands 12" up



PLAN
(Skew exaggerated for clarity)

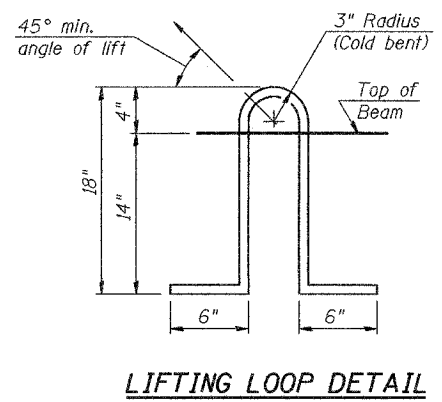


DETAIL A



SECTION A-A

PLATE A



LIFTING LOOP DETAIL

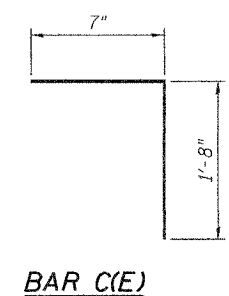
NOTES

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 shown 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.

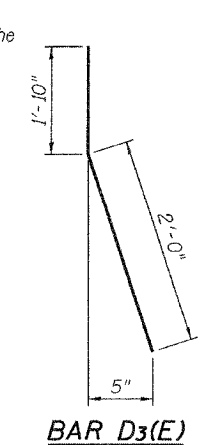
* TRANSVERSE PLACEMENT GUIDELINES

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".

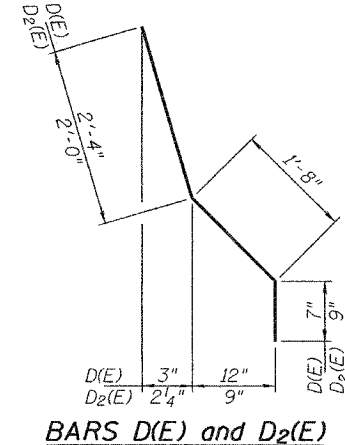
Vertical placement of strands shall not be adjusted to satisfy the above guidelines.



BAR C(E)



BAR D3(E)



BARS D(E) and D2(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b(E)	6	#5	30'-6"	—
e(E)	72	#4	14'-3"	—
e1(E)	16	#8	24'-0"	—
e2(E)	16	#5	22'-9"	—
Precast Prestressed Conc. Deck Bms.		Sq. Ft.	1,670	
Reinforcement Bars, Epoxy Coated Concrete Superstructure		Pound	2,280	
		Cu. Yd.	25.4	

BEAM DETAILS
PLAN AND ELEVATION
IL. RT. 176 / U.S. 41
LAKE COUNTY
SN 049-0131

DESIGNED	P.S.J.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	P.S.J. A.T.H.

	JUNE 26, 2006
EXAMINED	John A. Morris ENGINEER OF STRUCTURAL SERVICES
PASSED	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

PD-3-R 10-22-04