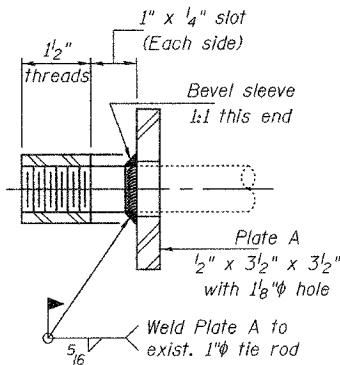
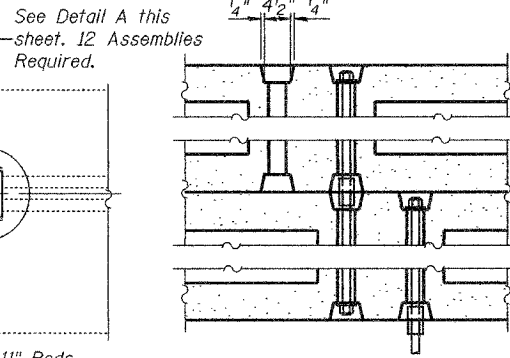
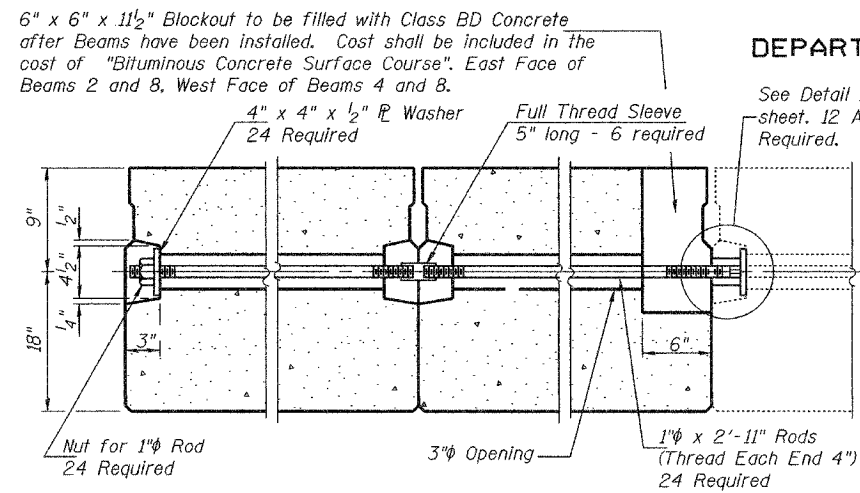
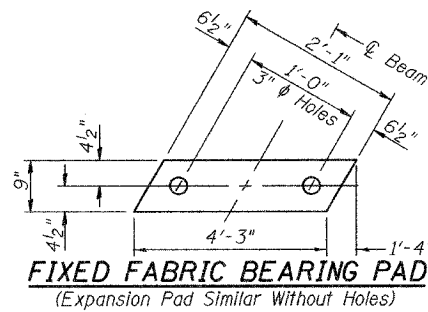


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		Whiteside	8	8
Contract Number: 64C67				

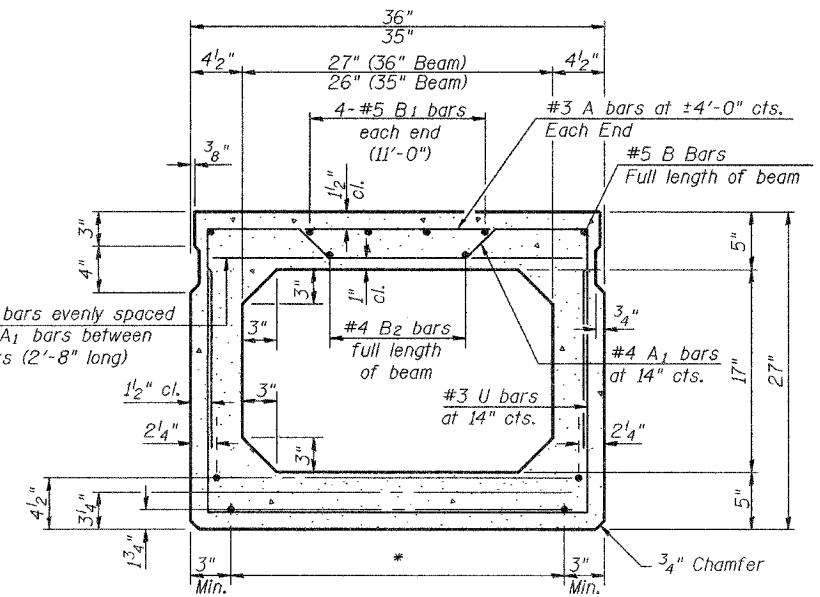
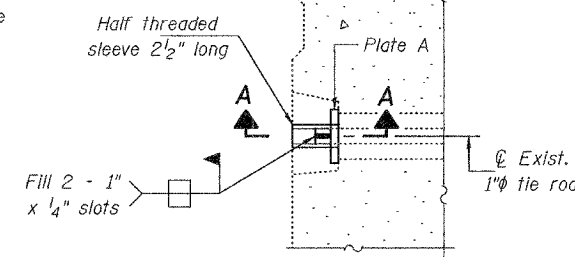
3 SHEETS



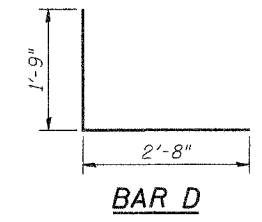
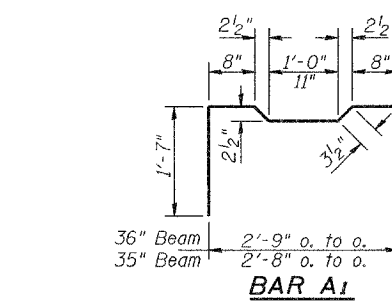
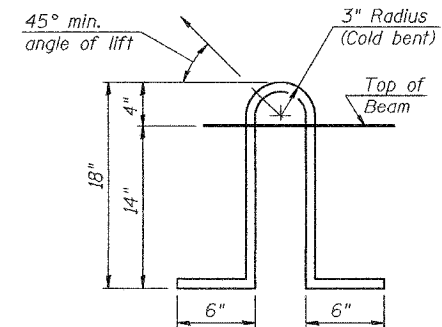
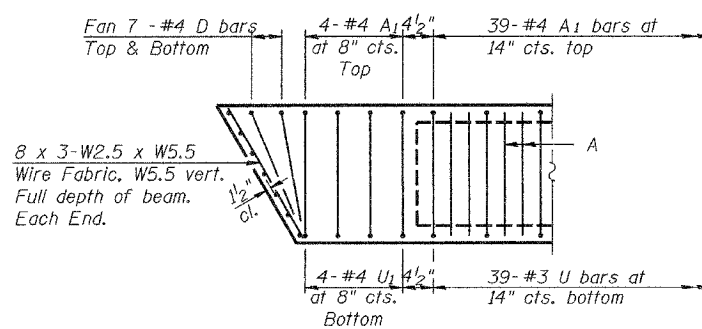
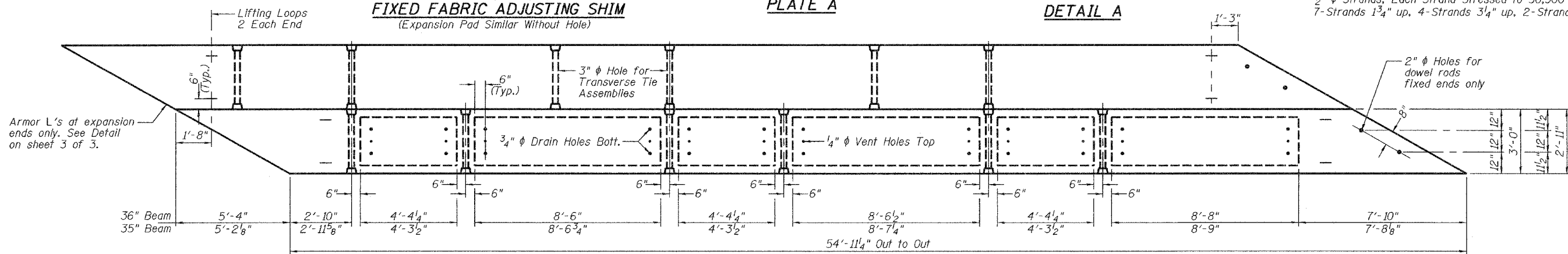
**TYPICAL TRANSVERSE TIE ASSEMBLY**



**PLATE A**



1/2"  $\phi$  Strands, Each Strand Stressed to 30,900 Lbs.  
7-Strands 1 3/4" up, 4-Strands 3/4" up, 2-Strands 4 1/2" up



**\* 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.

**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"  $\phi$  -270 ksi strands, as shown. The 1"  $\phi$  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'cl, shall be 4,000 p.s.i.

**BILL OF MATERIAL**

Precast Prestressed Conc. Deck Bms.	Sq. Ft.	650
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**BEAM DETAILS**  
**IL 40 / HENNEPIN CANAL**  
**FEEDER CANAL BRIDGE 45**  
**WHITESIDE COUNTY**  
**SN 098-0015**

DESIGNED S.J.B.	August 3, 2006
CHECKED P.S.J.	EXAMINED John A. Morris ENGINEER OF STRUCTURAL SERVICES
DRAWN Drew Christopher	PASSED Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES
CHECKED S.J.B. P.S.J.	

PD-5-R 10-22-04