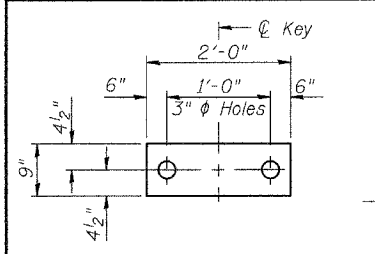


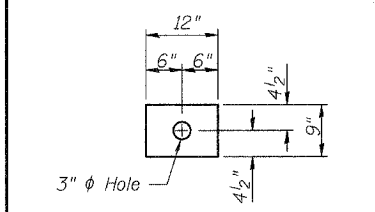
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. 2
		Cook	14	8
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		4 SHEETS

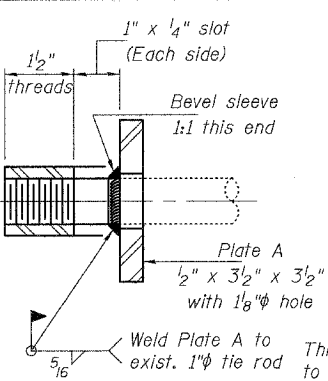
Contract Number: 62912



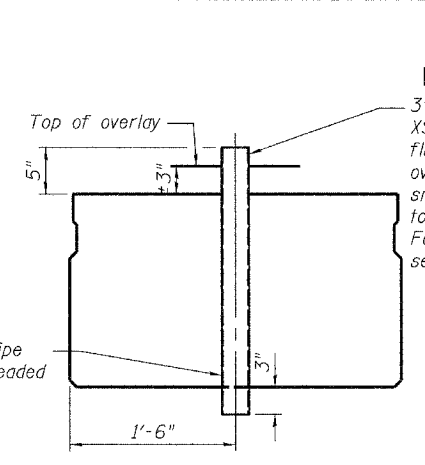
**FABRIC BEARING PAD**  
(Interior)  
**FIXED**



**FABRIC ADJUSTING SHIM**  
(Fixed)



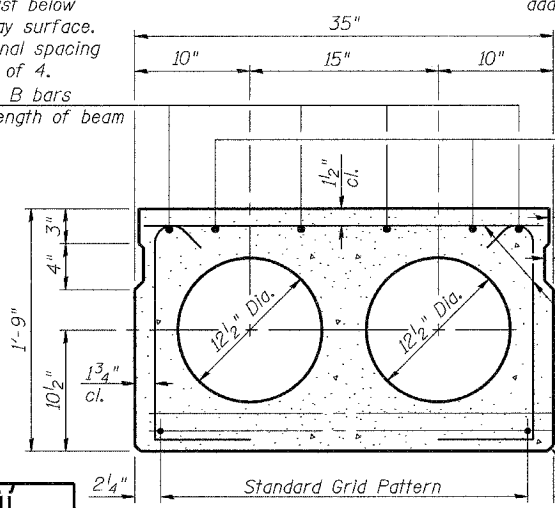
**SECTION A-A**  
(9 Required)



**TYPICAL DRAIN SECTION**  
(Beam 3)

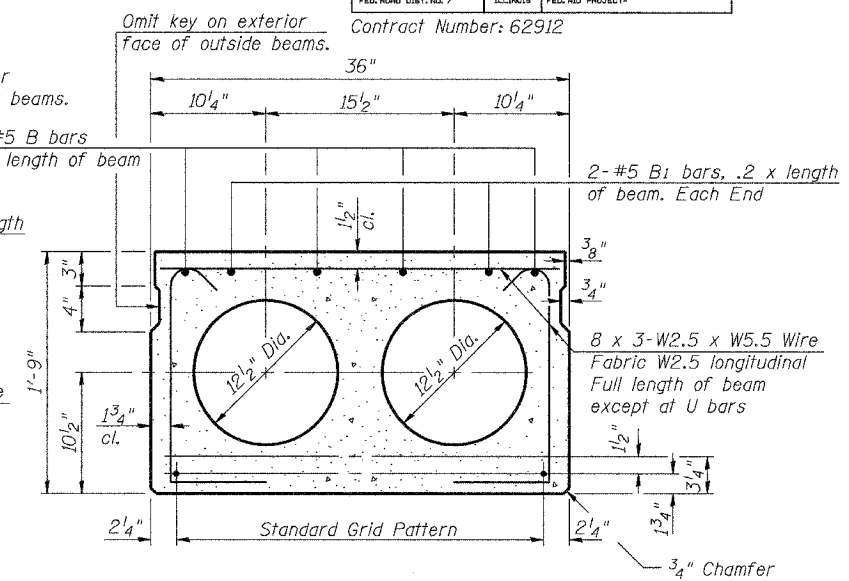
3"  $\phi$  x 2'-2" x 1/4" XS Pipe. Cut off flush with top of overlay and grind smooth to just below top of overlay surface. For longitudinal spacing see sheet 3 of 4.  
4-#5 B bars Full length of beam

Notes:  
Place strands symmetrically about  $\phi$  of beam.  
See deck cross-sections for additional bars cast with deck beams.



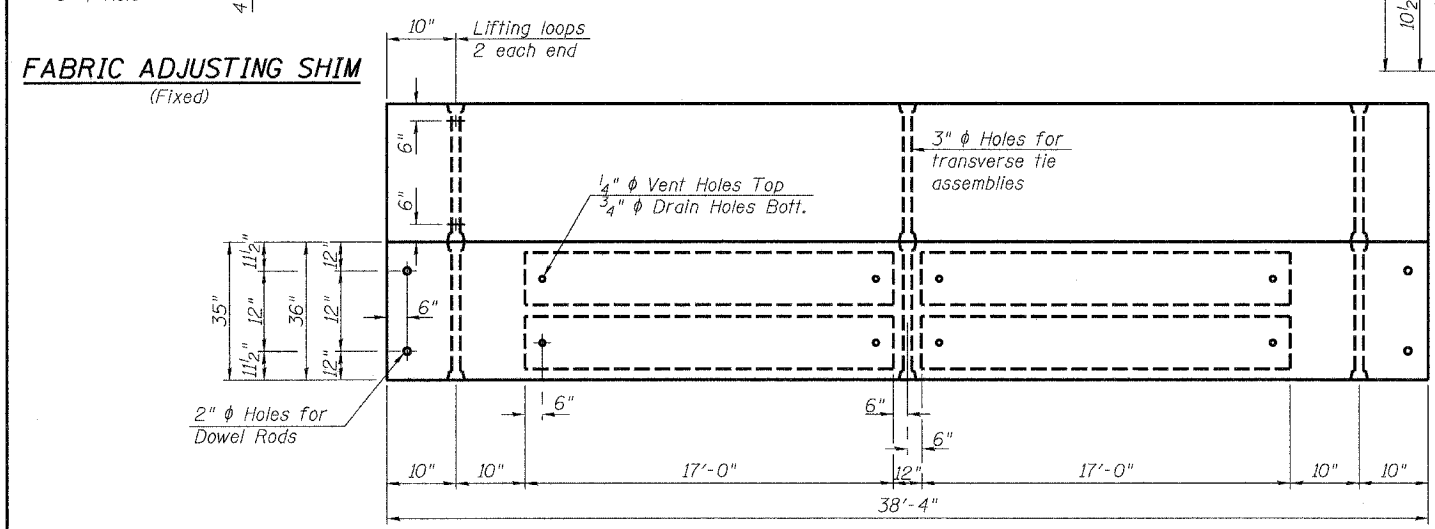
**TYPICAL 35" SECTION**

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

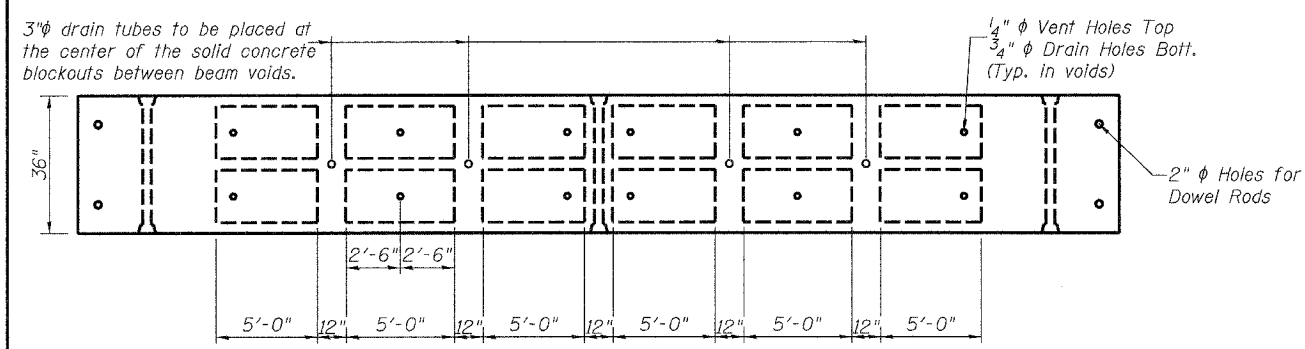


**TYPICAL 36" SECTION**

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

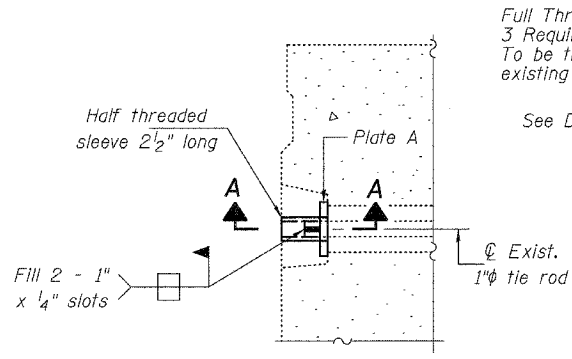


**PLAN BEAMS 1, 2, 9 OR 12**



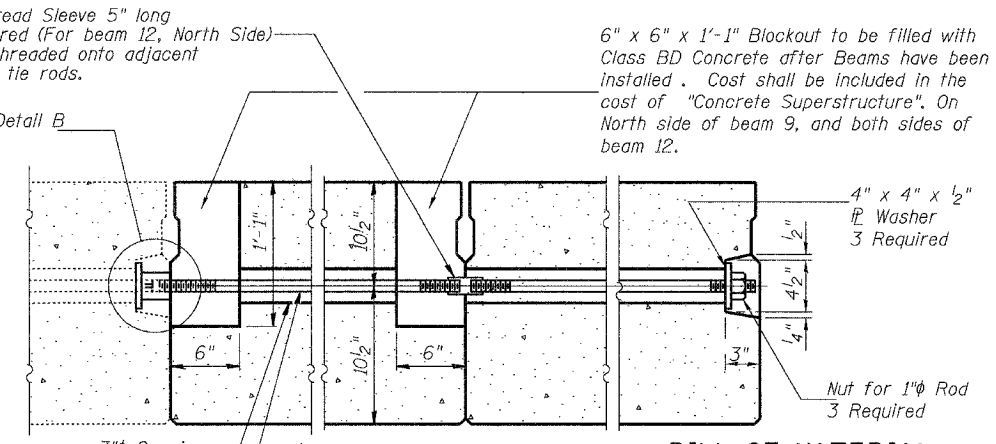
**PLAN BEAM 3**

See Plan for Beams 1, 2, 9 or 12 for dimensions and notes not shown.



**DETAIL B**

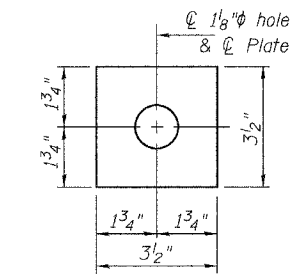
Full Thread Sleeve 5" long  
3 Required (For beam 12, North Side)  
To be threaded onto adjacent existing tie rods.



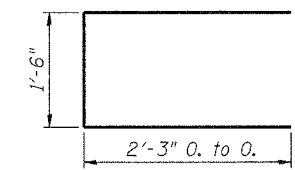
**TYPICAL TRANSVERSE TIE ASSEMBLY**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
PPC Deck Beams (21" Depth)		Sq. Ft.	569	



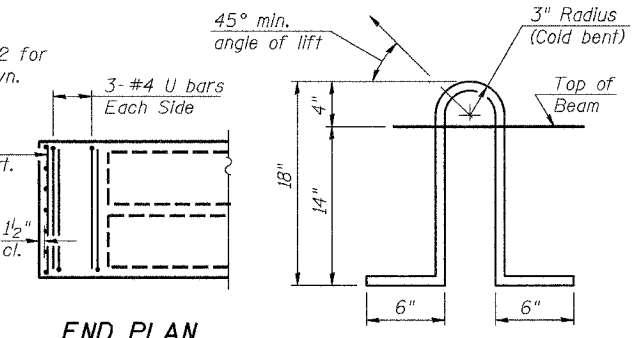
**PLATE A**  
(9 Required)



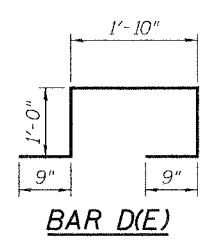
**BAR U**

**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.  
Non prestressing steel shall conform to AASHTO M-31 or M322 Grade 60.  
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 4000 p.s.i.



**LIFTING LOOP DETAIL**



**BAR (DE)**

DESIGNED	V.H.V.
CHECKED	S.J.B.
DRAWN	Drew Christopher
CHECKED	V.H.V. S.J.B.

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

May 3, 2005

PD-3-S 10-22-04

**BEAM DETAILS**  
**F.A.P. RT. 343**  
**COOK COUNTY**  
**SN 016-0525**