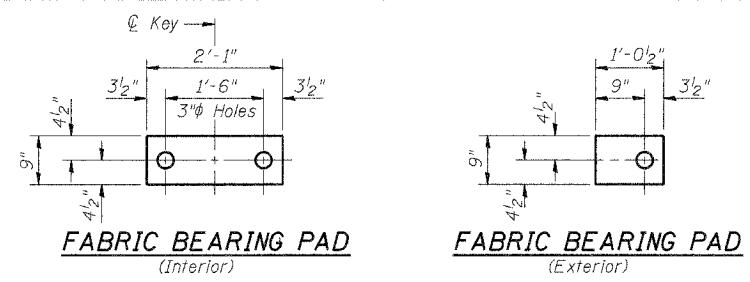
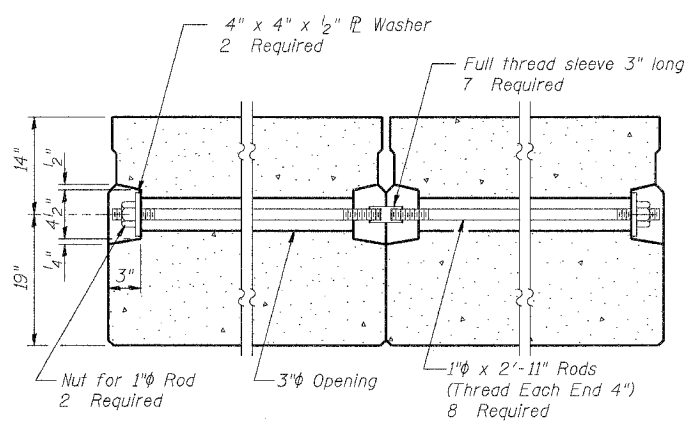
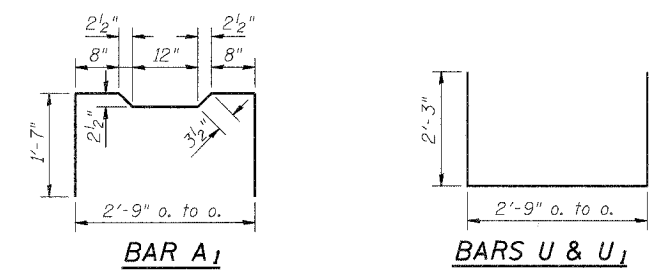


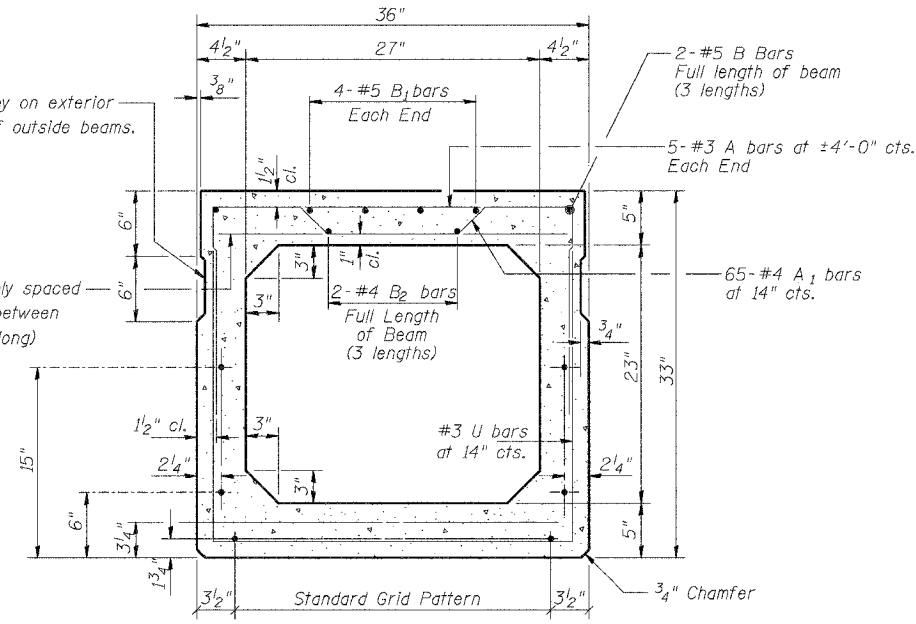
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 227	98-11120-00-BR	JEFFERSON	35	20
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 95437				



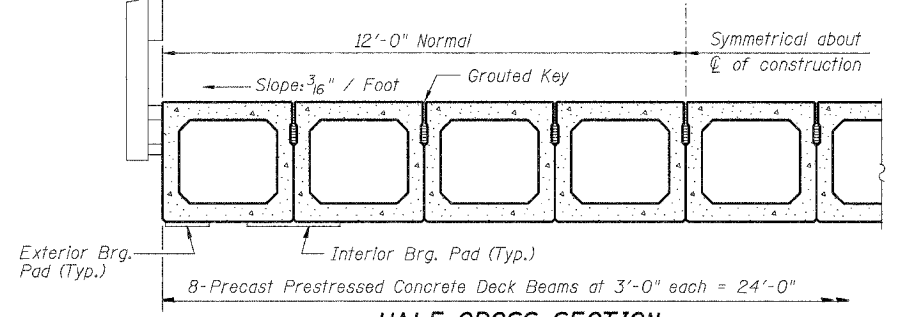
FABRIC BEARING PAD (Interior)
FABRIC BEARING PAD (Exterior)



TYPICAL TRANSVERSE TIE ASSEMBLY



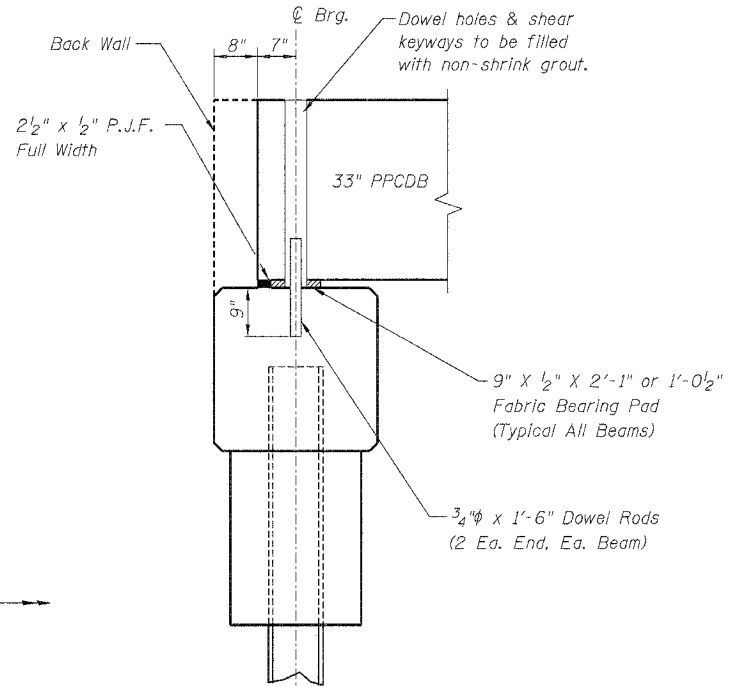
TYPICAL SECTION
 21 - 1/2" Strands Each Strand Stressed to 31,000 Lbs.
 9-Strands 1 3/4" up, 8-Strands 3/4" up
 2-Strands 6" up, 2-Strands 15" up
 Note: Place strands symmetrically about centerline of beam.



HALF CROSS SECTION
 See Sheet 21 for the details showing the spacing and mounting of posts and rails to the PPCDB.

BILL OF MATERIAL FOR ONE BEAM

Bar	No.	Size	Length	Shape
A	138	#3	2'-8"	—
A ₁	73	#4	6'-1"	⌒
B	6	#5	28'-6"	—
B ₁	8	#5	16'-3"	—
B ₂	6	#4	28'-3"	—
U	65	#3	7'-3"	⌒
U ₁	8	#4	7'-3"	⌒
Pre-cast Prestressed Concrete Deck Beams	Sq Ft		240.50	
Reinforcement Bars	Pound		1080	
Total Weight Each Beam	Pound		53000	



RESTRAINED BEARING ABUTMENT

NOTES

1. 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 3 - 1/2" - 270 ksi strands, as shown.

2. The 1" 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.

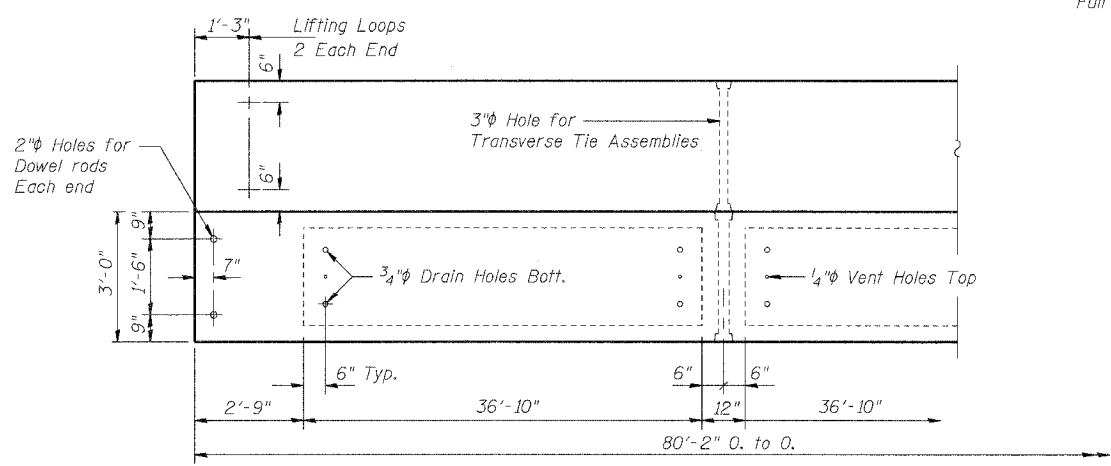
3. Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.

4. 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.

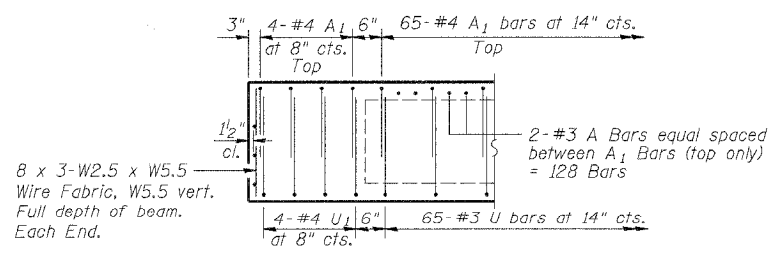
5. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.

6. Required Release Strength, f'ci, shall be 5000 p.s.i. (minimum).

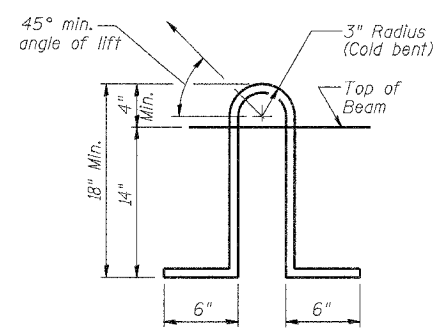
7. Low-relaxation strands are required.



PLAN



END ELEVATION



LIFTING LOOP DETAIL

PRECAST PRESTRESSED CONCRETE DECK BEAM DETAILS PROPOSED OVERFLOW BRIDGE FOR CASEY FORK TR 227 / STA. 31+42.00 SECTION 98-11120-00-BR JEFFERSON COUNTY, ILLINOIS

05/24/2005