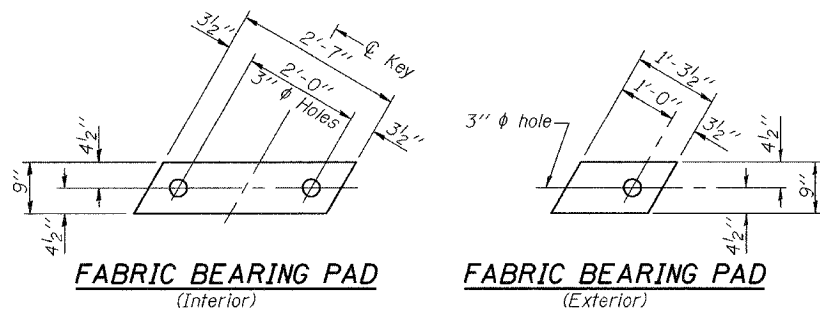


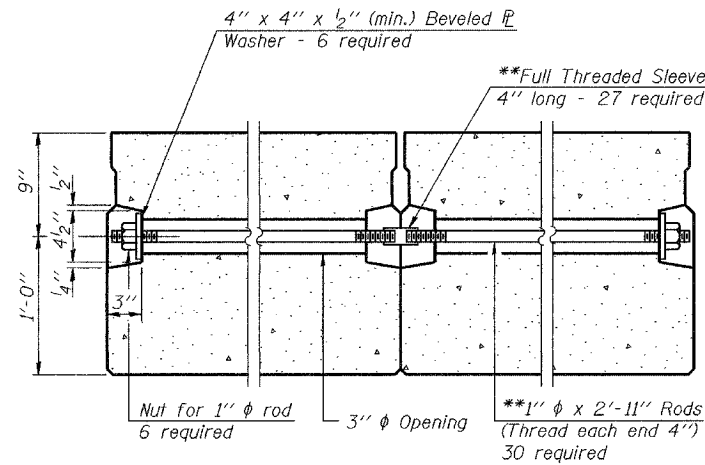
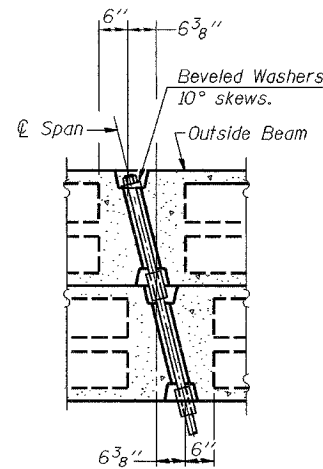
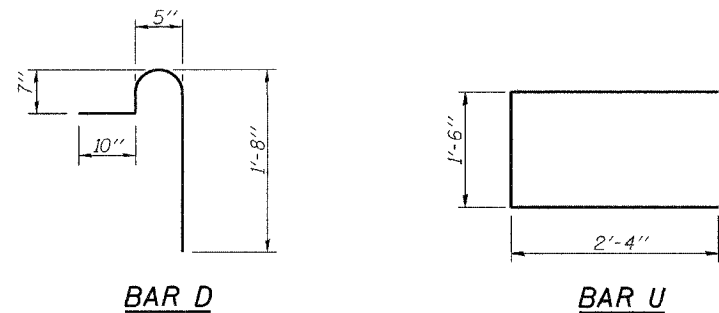
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
FAS 516	(240B) BR	CHAMPAIGN	14	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract No. 70184

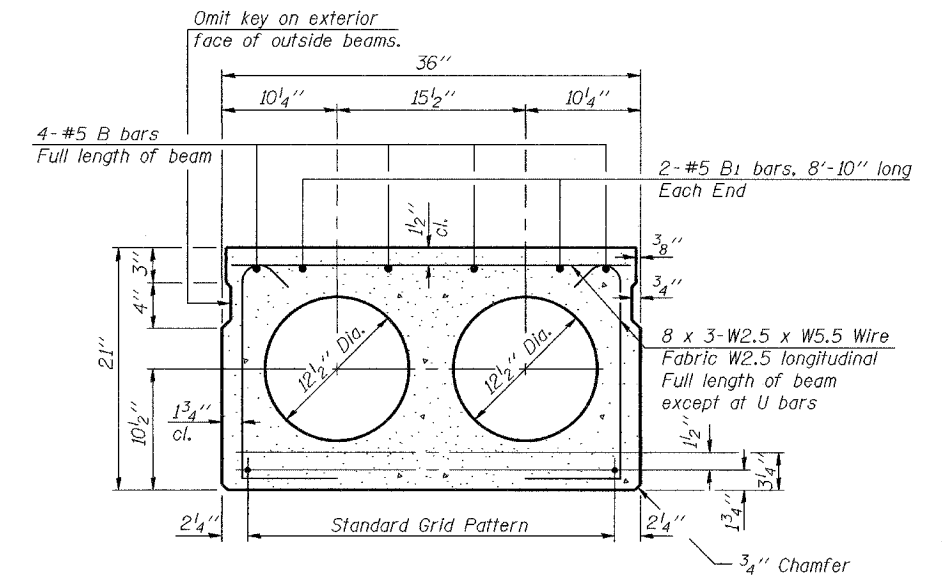


FIXED



TYPICAL TRANSVERSE TIE ASSEMBLY

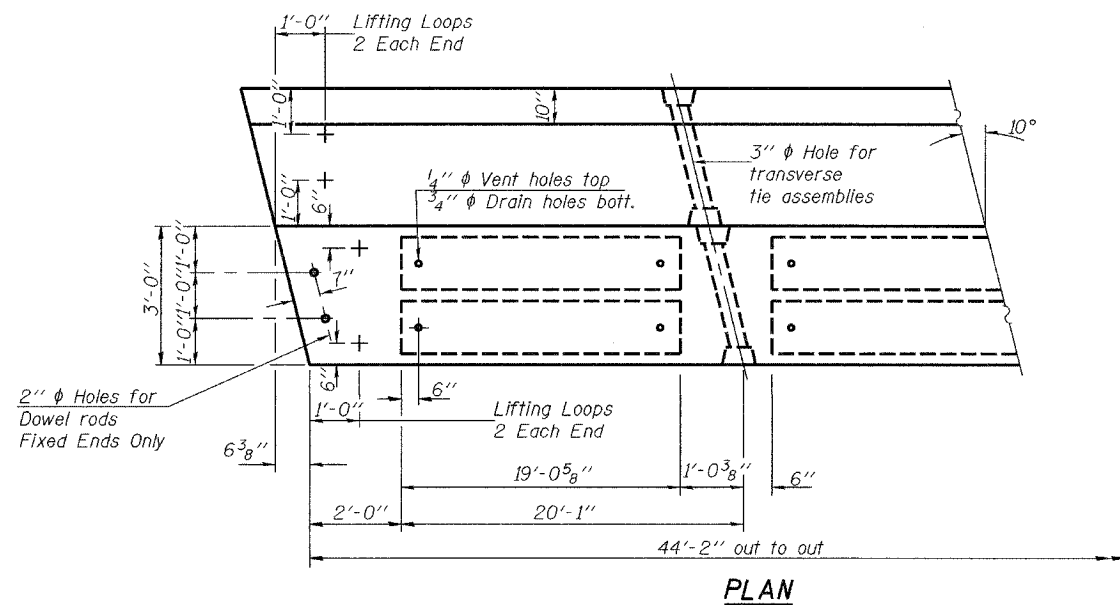
\*\*Alternate approved transverse tie rods of increased segmental length are acceptable.



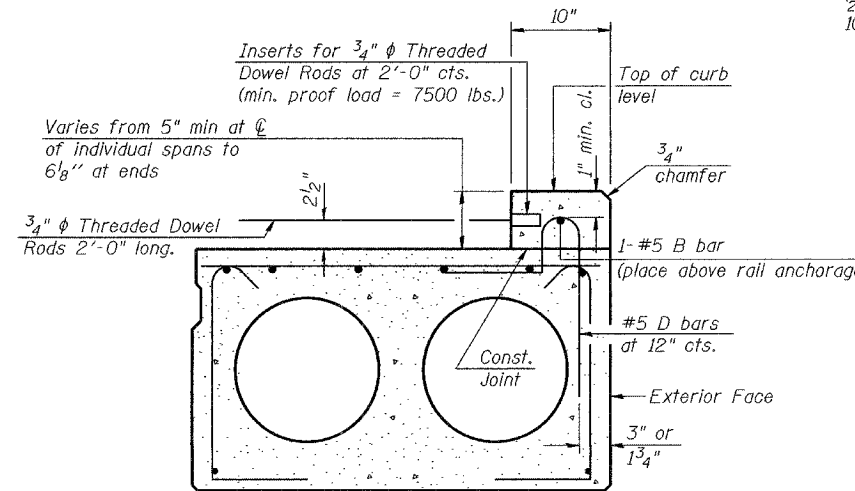
TYPICAL SECTION

1/2"  $\phi$  Strands, Each Strand Stressed to 30,900 Lbs.  
10-Strands 1 3/4" up, 1-Strand 3 1/4" up, 2-Strands 9" up

Note:  
Place strands symmetrically about  $\phi$  of beam.



PLAN



SECTION THRU EXTERIOR BEAMS

See Section Thru Interior Beams for strand pattern, dimensions and bar call outs.

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 M-322 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 of the Exterior Bearing Pad 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. See sheet 2 of 9 for location of rail anchors. Bridge rail inserts shall be cast in precast beams and curbs. Curbs shall be cast by the precast prestressed concrete supplier after strands have been released and prior to shipping the beam. The concrete in the curb shall be the same as specified for the deck beams. The curb inserts and threaded dowel rods may be either epoxy coated or galvanized and the cost shall be included with Precast Prestressed Concrete Deck Beams.

BAR LIST (ONE BEAM)

Bar	No.	Size	Length	Shape
B	4	#5	43'-10"	—
B	1	#5	43'-10"	—
B <sub>1</sub>	4	#5	8'-10"	—
D	44	#5	3'-4"	┘
U	12	#4	6'-2"	┘

\*At exterior beams only.

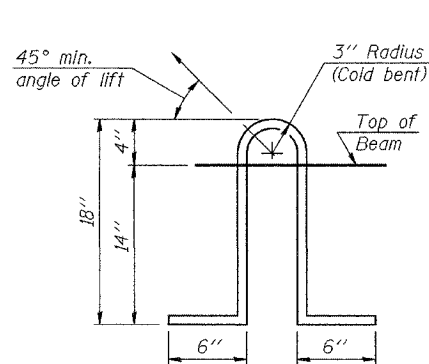
BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (21" Depth)	Sq. Ft.	3975
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SUPERSTRUCTURE DETAILS  
F.A.S. ROUTE 516 - SECTION (240B)BR  
CHAMPAIGN COUNTY  
STATION 68+94.20  
STRUCTURE NO. 010-0220

DESIGNED	SMR
CHECKED	CCC
DRAWN	BECKY M. CURRY
CHECKED	SMR & CCC

January 28, 2005  
EXAMINED *Thomas J. Damagala*  
ENGINEER OF BRIDGE DESIGN  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES



LIFTING LOOP DETAIL