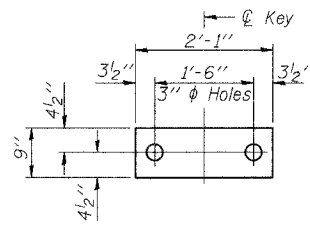
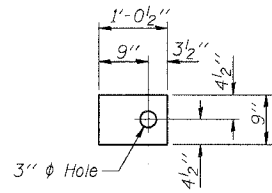


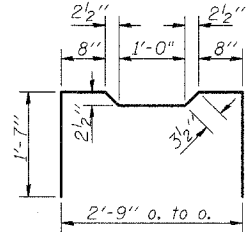
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 50	*	CHRISTIAN SHELBY	20	17
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		
*04-12112-00-BR		SHEET 2 OF 5		



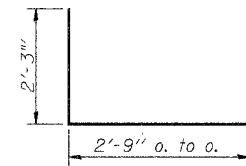
1/2" FABRIC BEARING PAD (Interior)



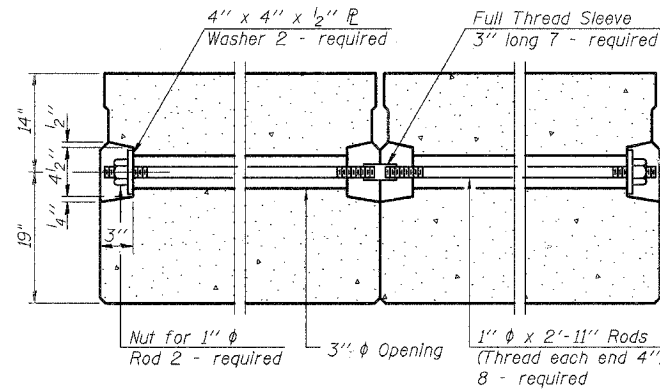
1/2" FABRIC BEARING PAD (Exterior)



BAR A1



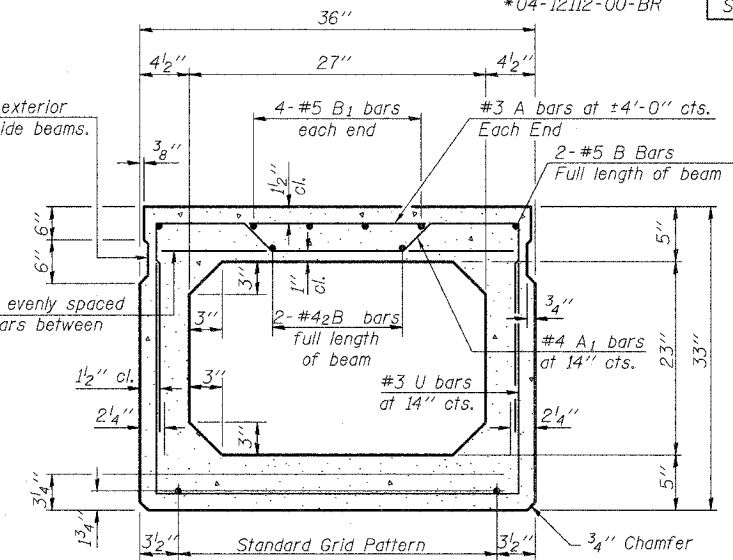
BARS U & U1



TYPICAL TRANSVERSE TIE ASSEMBLY

Omit key on exterior face of outside beams.

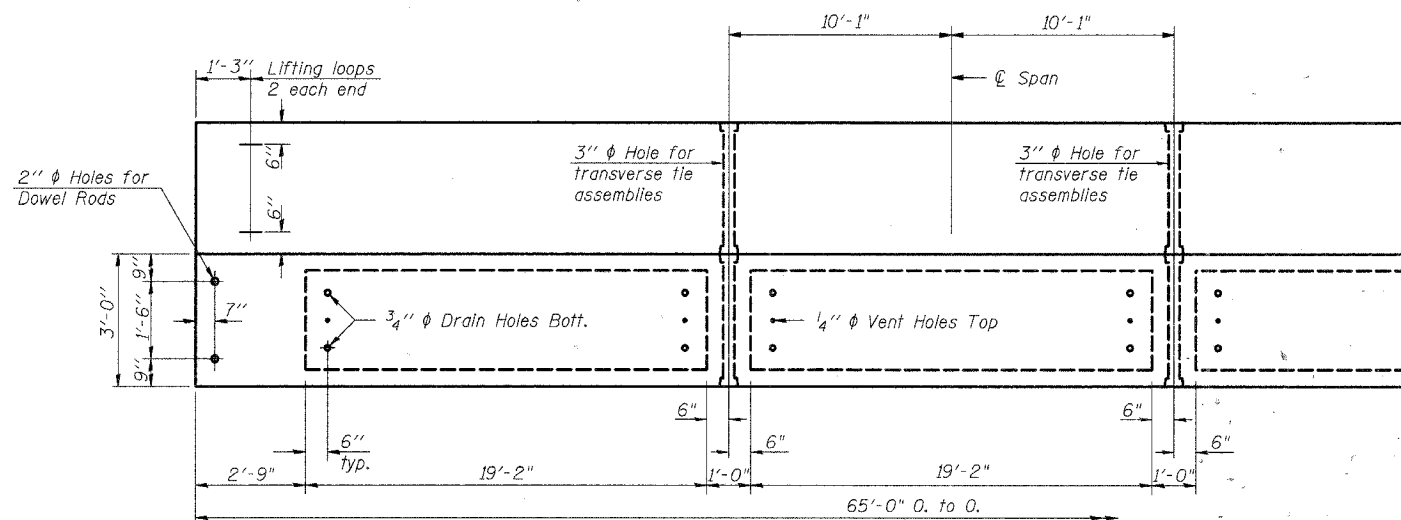
2-#3 A bars evenly spaced between A1 bars between end blocks.



TYPICAL SECTION

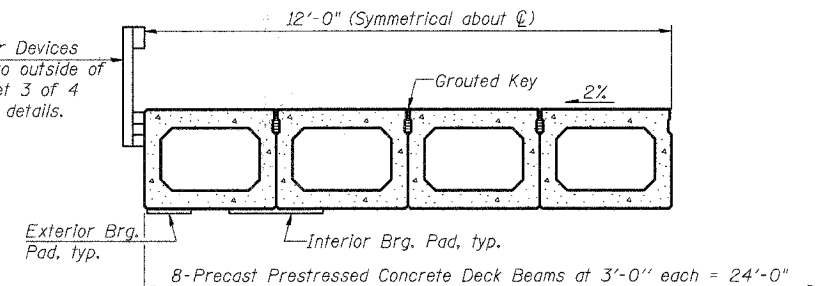
13-1/2" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
9-Strands 13/4" up, 4-Strands 3/4" up

Note:
Place strands symmetrically about ϕ of beam.



PLAN

Rail Post Anchor Devices shall be cast into outside of beams: See sheet 3 of 4 for spacing and details.

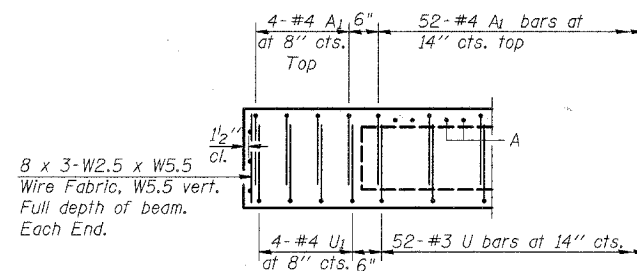


HALF CROSS SECTION

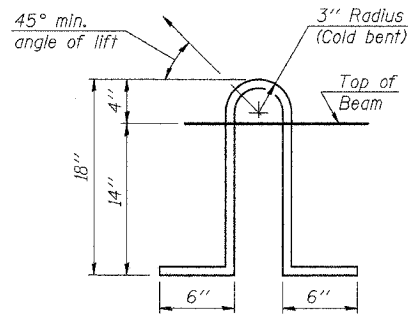
BILL OF MATERIAL

(one beam)

Bar	No.	Size	Length	Shape
A	102	#3	2'-8"	—
A1	60	#4	12'-6"	⌋
B	4	#5	33'-6"	—
B1	8	#5	13'-0"	—
B2	4	#4	33'-3"	—
U	52	#3	7'-3"	⌋
U1	8	#4	7'-3"	⌋
Precast Prestressed Conc. Deck Bms. (33")				Sq. Ft. 1,560



END ELEVATION



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 3-1/2" 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. Non prestressing steel shall conform to ASTM A 706, Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/2" 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, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'ci, shall be 4,000 p.s.i.

P.P.C. BEAM DETAIL
T.R. 50 OVER LONG GROVE CREEK
SECTION 04-12112-00-BR
CHRISTIAN COUNTY
S.N. 011-3403
STA. 19+55.00

ie consultants

DESIGNED: SCD CHECKED: DRB
DRAWN: TRF DATE: FEB. 2008