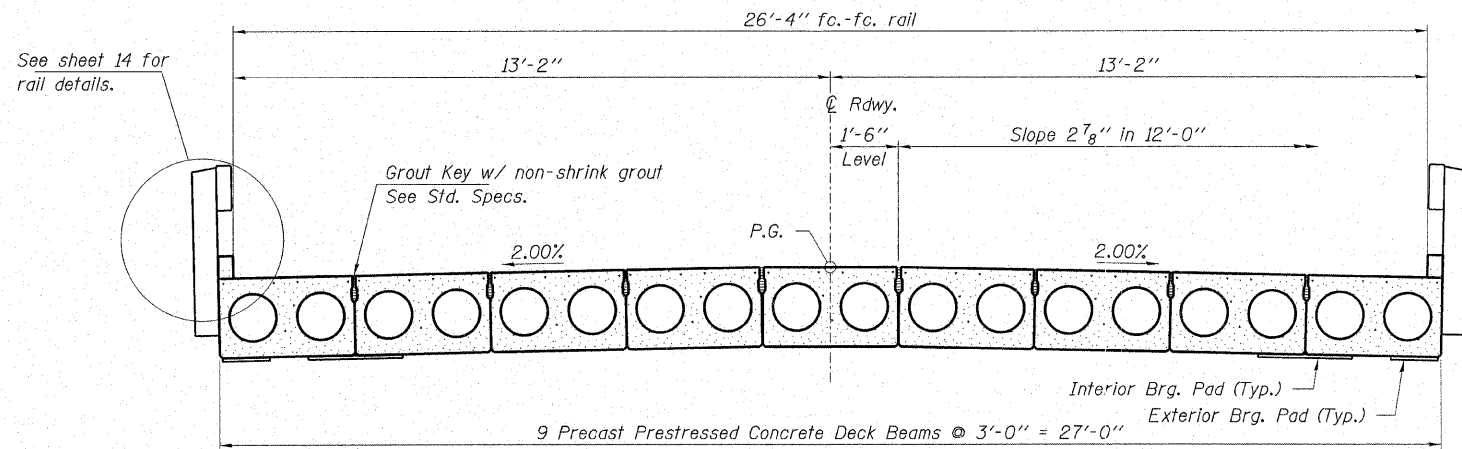
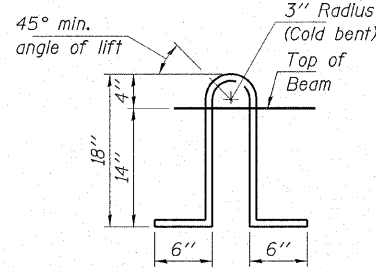


ROUTE NO. T.R. 505B	SECTION 06-10118 -00-BR	COUNTY JEFFERSON	TOTAL SHEETS 18	SHEET NO. 13
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 99325	



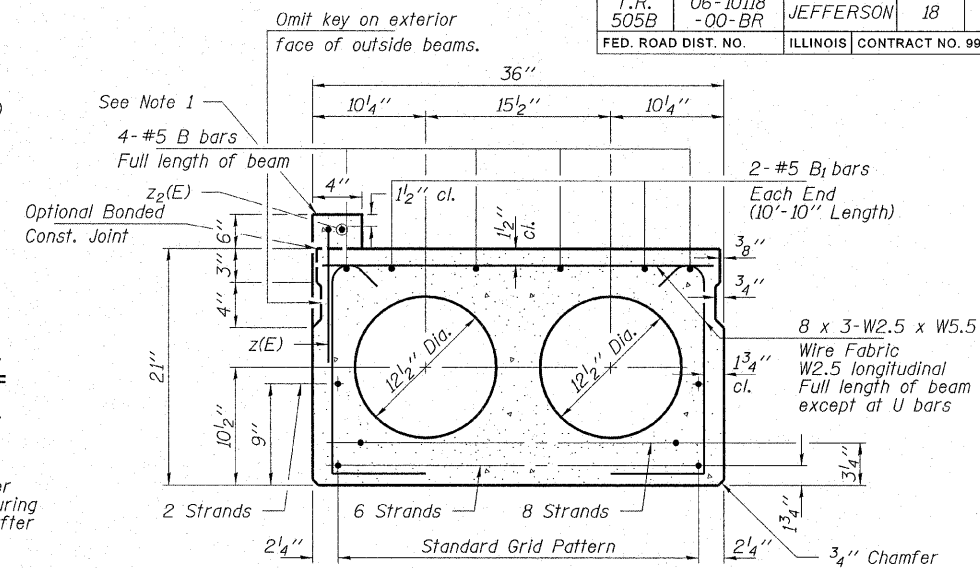
**CROSS SECTION**



**LIFTING LOOP DETAIL**

Approved alternate may be substituted for the above detail.

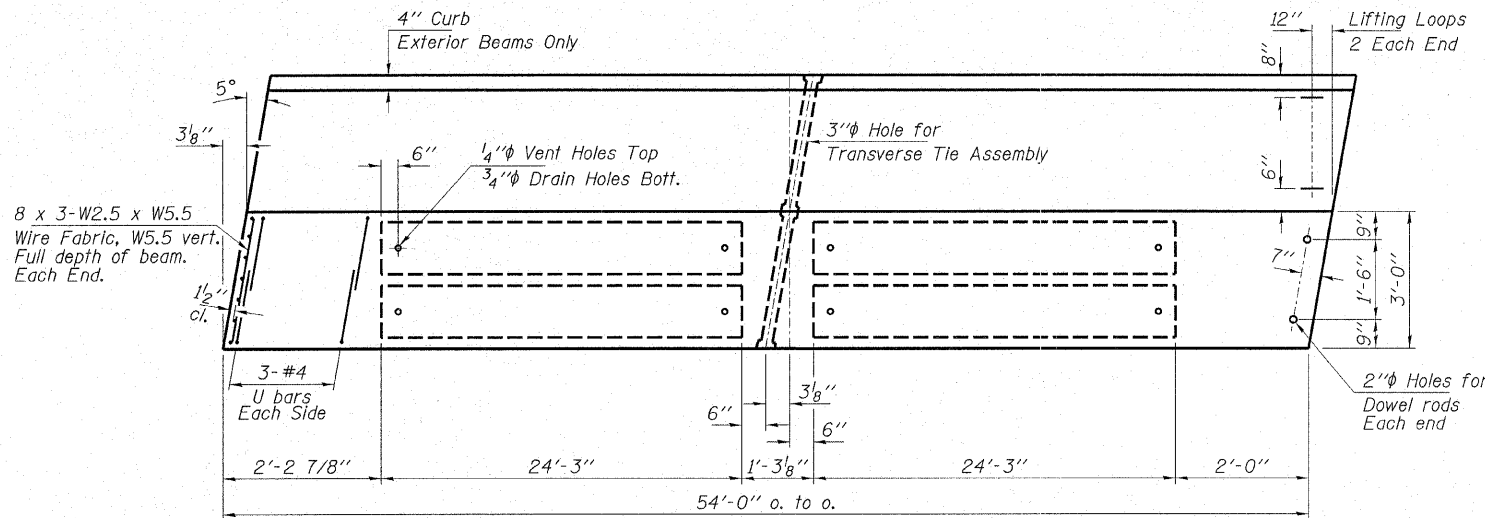
Note: The loop shall be formed in a manner such that all strands are engaged during lifting. Loops shall be burned off after the beams have been erected.



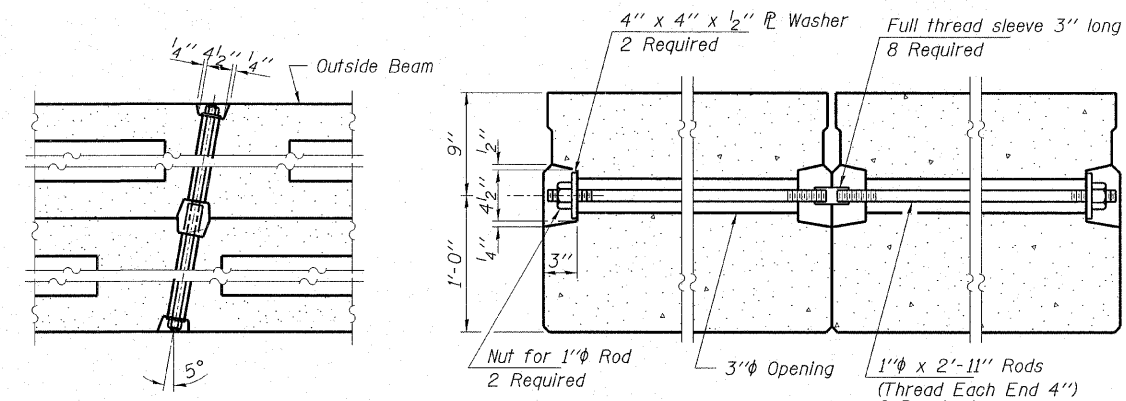
**TYPICAL SECTION**

16-1/2" Strands, Each Strand Stressed to 30,900 Lbs.  
6-Strands 1 3/4" up, 8-Strands 3/4" up, 2-Strands 9" up  
Expected Camber = 1/2"

Note: Place strands symmetrically about C of beam.



**PLAN**



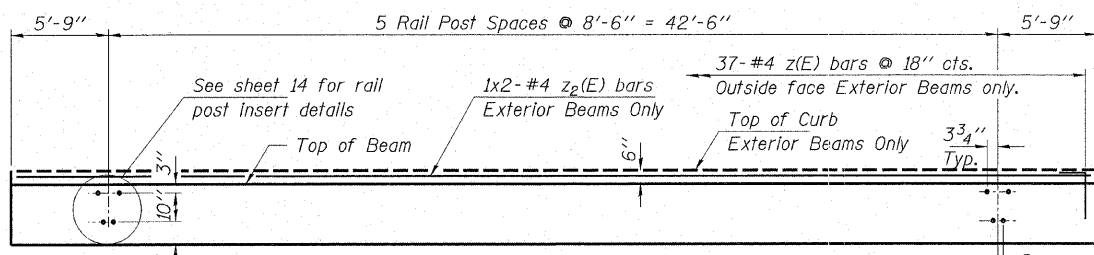
**TYPICAL TRANSVERSE TIE ASSEMBLY**

**NOTES**

The exterior beams shall be cast with a 4" wide x 6" high concrete curb with reinforcement cast integrally with the beam. The z(E) and z2(E) bars shall be included in the unit cost for deck beams. 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" 270 ksi strands, as shown. 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. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 3/8" 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. Required Release Strength, f'ci, shall be 5,000 p.s.i.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1,458

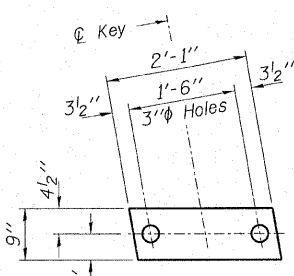


**ELEVATION OF OUTSIDE BEAMS**

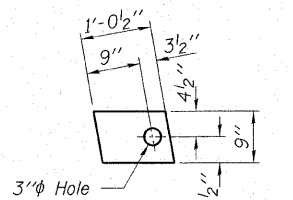
Showing Rail Post Spacing

BAR	NO.	SIZE	LENGTH	SHAPE
z(E)	74	#4	2'-5"	—
z2(E)	4	#4	27'-6"	—

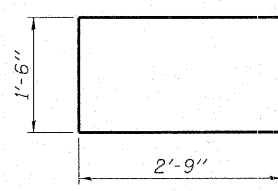
For information only. Cost included in deck beams.



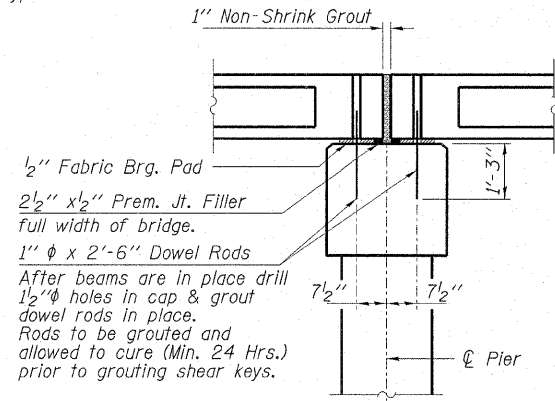
**FABRIC BEARING PAD**  
(Interior - 16 Req'd)



**FABRIC BEARING PAD**  
(Exterior - 4 Req'd)



**BAR U**



**SECTION AT PIERS**

**BAR z(E)**

**HAMPTON, LENZINI & RENWICK, INC.**  
CIVIL & STRUCTURAL ENGINEERS  
LAND SURVEYORS

3085 STEVENSON DRIVE, SUITE 201  
SPRINGFIELD, ILLINOIS 62703  
(217) 546-3400

**ELGIN • SPRINGFIELD**

PROJECT NUMBER: 12-49-0008-1      DATE: 01/08/08  
DESIGNED: R.J.P.      CHECKED: M.D.C.      DRAWN: D.T.M.

**SUPERSTRUCTURE - SPAN 2**

T.R. 505B OVER C.N./I.C. RAILROAD  
SECTION 06-10118-00-BR  
MOORES PRAIRIE ROAD DISTRICT  
JEFFERSON COUNTY  
STRUCTURE NO. 041-9930 / STATION 15+00