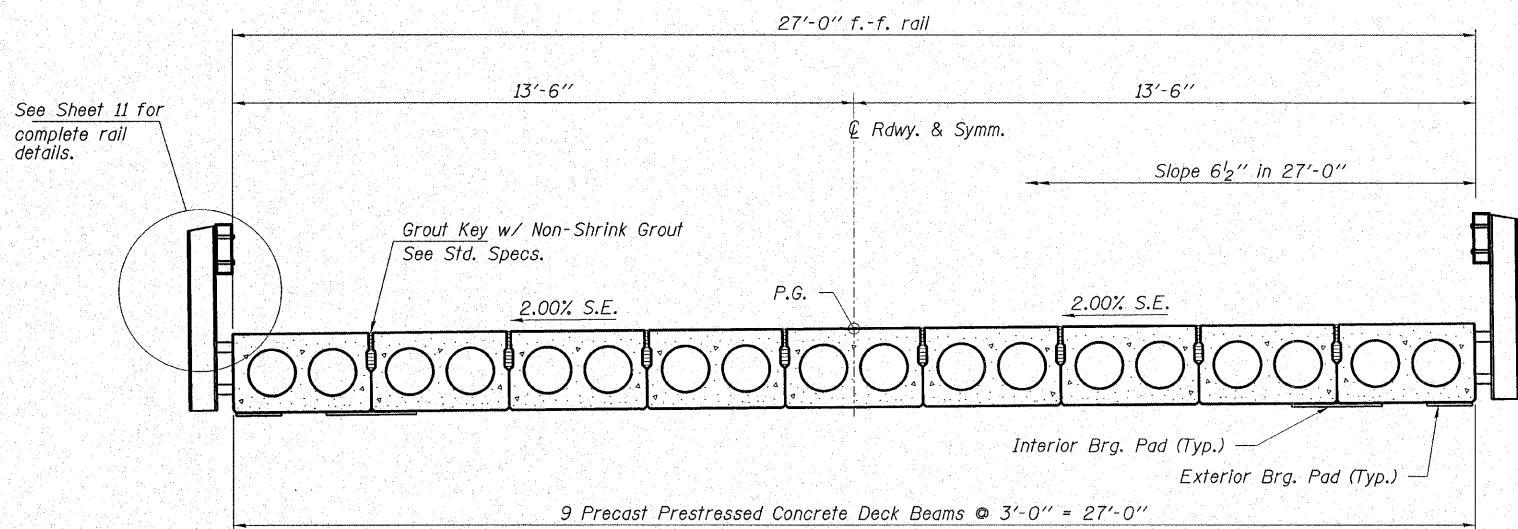
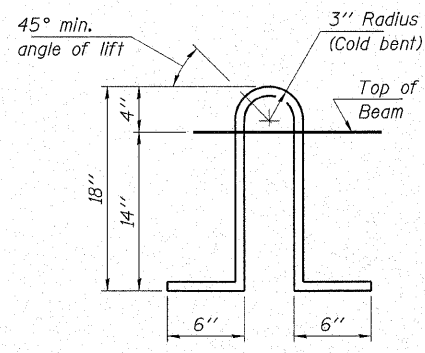


ROUTE NO. T.R. 79A	SECTION 04-01177 -00-BR	COUNTY UNION	TOTAL SHEETS 15	SHEET NO. 10
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 99275		



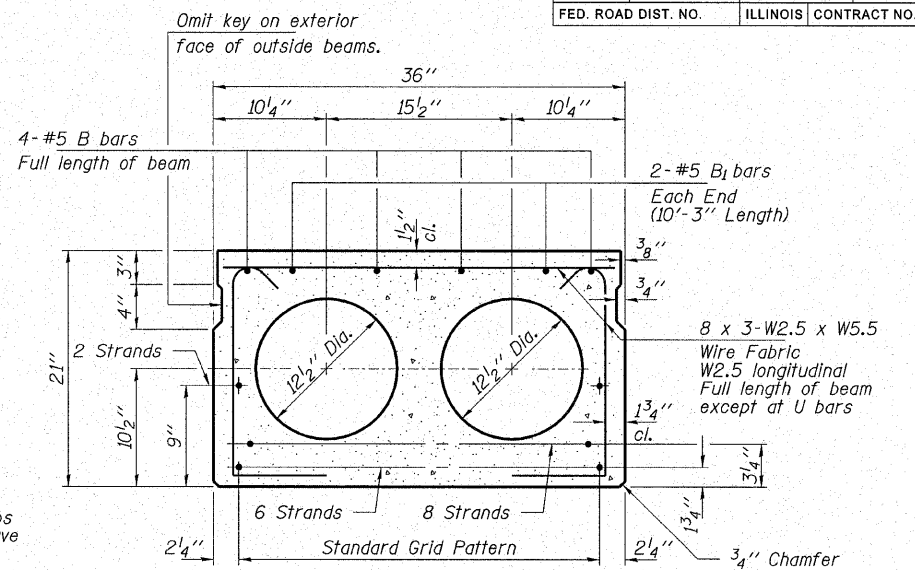
CROSS SECTION



LIFTING LOOP DETAIL

Approved alternate may be substituted for the above.

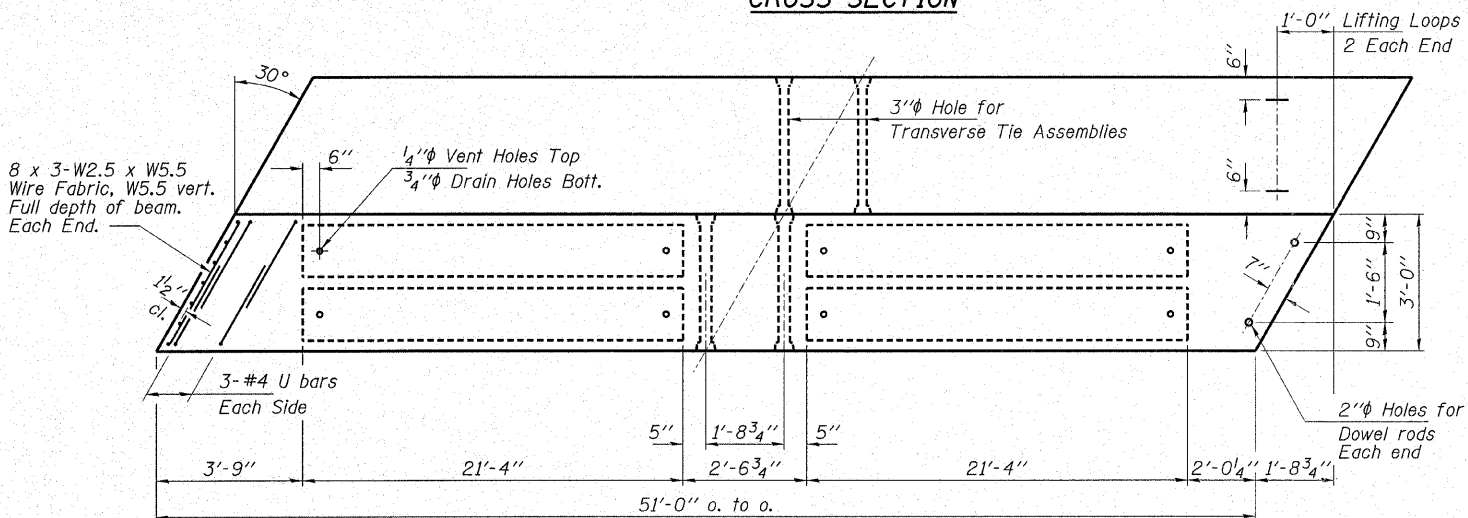
Note:
The loop shall be formed in a manner such that all strands are engaged during lifting. Lifting Loops shall be cut off after the beams have been erected.



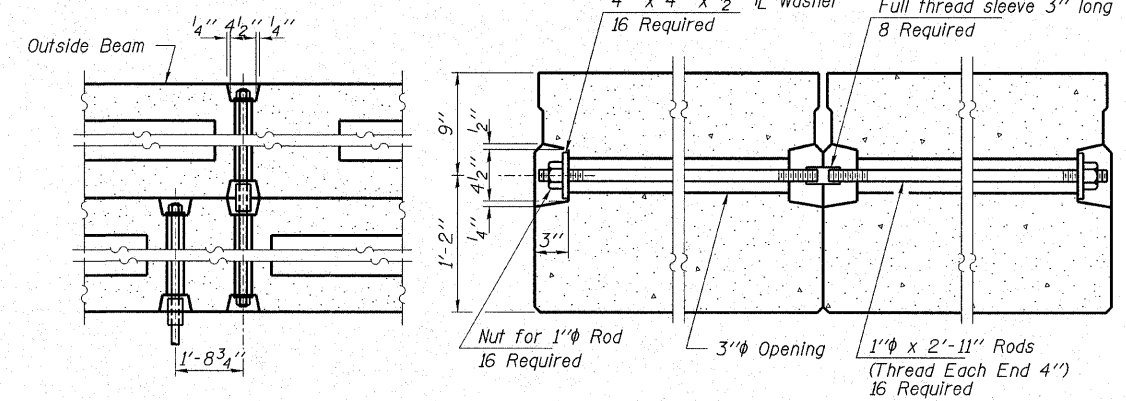
TYPICAL SECTION

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 1/2"

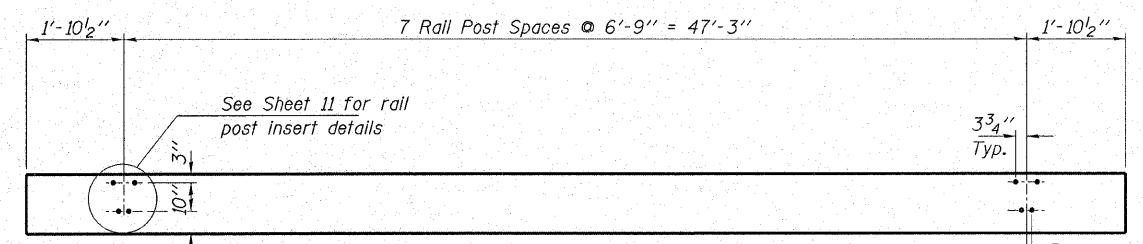
Note: Place strands symmetrically about ∅ of beam.



PLAN

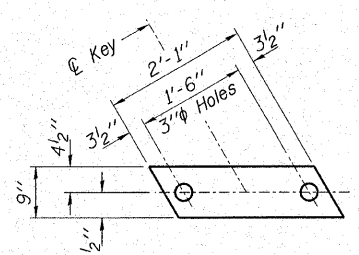


TYPICAL TRANSVERSE TIE ASSEMBLY

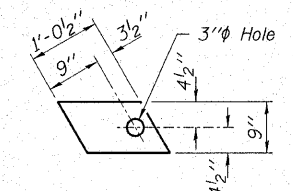


ELEVATION OF OUTSIDE BEAMS

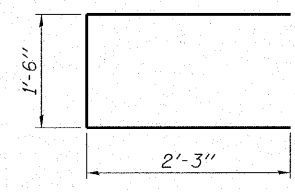
Showing Rail Post Spacing



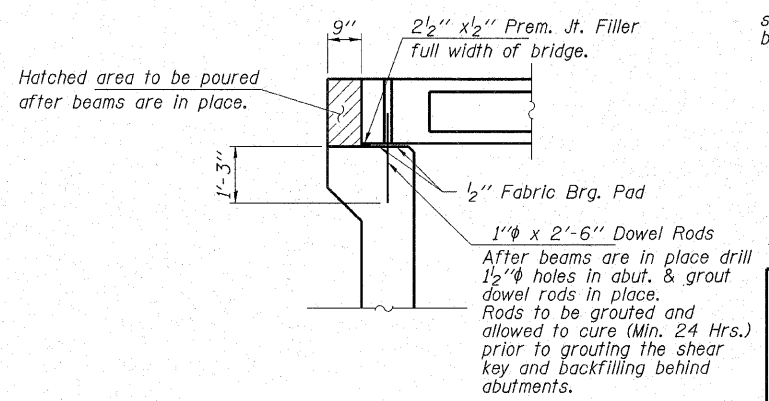
FABRIC BEARING PAD
(16 Req'd - Interior)



FABRIC BEARING PAD
(4 Req'd - Exterior)



BAR U



SECTION AT ABUTMENTS

∅ Rt. L's

NOTES

Prestressing steel shall be uncoated high strength, low-relaxation 7-wire strand, Grade 270. The nominal diameter shall be 2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2-2" ∅-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 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.

Required Release Strength, f'ci, shall be 4,000 p.s.i.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1,377

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS

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

ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-92-0007-1 DATE: 04/03/07
DESIGNED: J.W.F. CHECKED: S.W.M. DRAWN: D.B.

SUPERSTRUCTURE

SECTION 04-01177-00-BR

T.R. 79A / MOUNTAIN GLEN ROAD

UNION COUNTY

STR. NO. 091-3222 / STATION 10+05