

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
T.R. 209A	04-02119-00-BR	JACKSON	20	13
FULL ROAD DIST. NO. 04-02119-00-BR-077(4)				

CONTRACT NO. 99261

#5 B Bars
Full length of beam

#3 A bars @ ±4'-0" cts.
Each End

#4 A₁ bars @ 14" cts.

4-#5 B₁ bars
Each End
13'-0" Length

#3 U bars @ 14" cts.

#4 B₂ bars
Full Length of Beam

2-#3 A bars evenly spaced
between A₁ bars between
end blocks (2'-8" long)

2 Strands

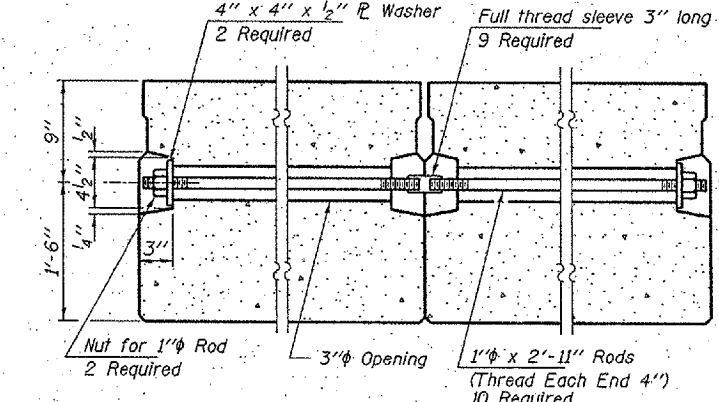
7 Strands
Standard Grid Pattern

6 Strands

3/4" Chamfer

Note: Place strands
symmetrically about
C of beam.

TYPICAL SECTION
15-1/2" Strands Each Strand Stressed to 30,900 Lbs.
7-Strands 1 3/4" up, 6-Strands 3/4" up,
2-Strands 7/2" up



TYPICAL TRANSVERSE TIE ASSEMBLY

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 2-2" φ-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 1/2" 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. Required Release Strength, 1" cl, shall be 4,000 p.s.i. A Calcium-Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.

BILL OF MATERIAL

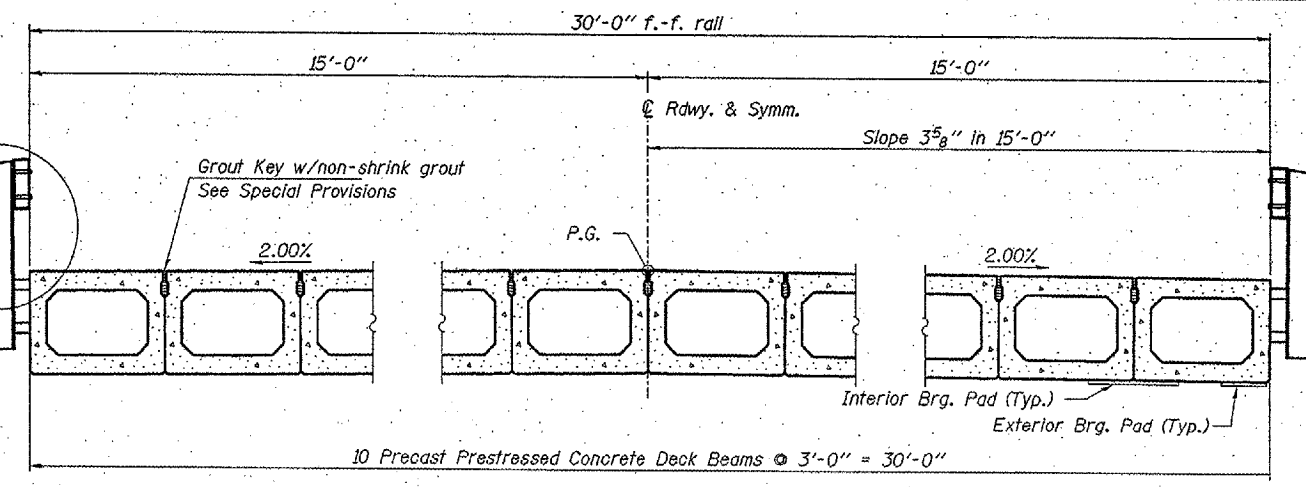
ITEM	UNIT	QUANTITY
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	1,920

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

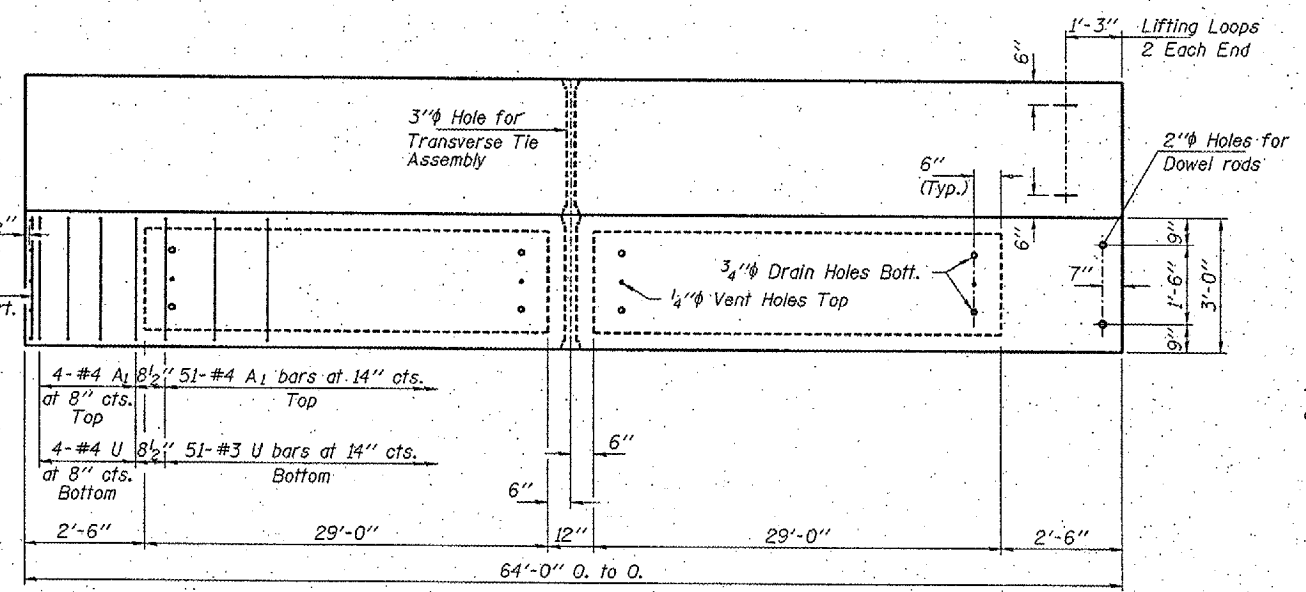
ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-47-0017-1 DATE: 05/15/06
DESIGNED: S.M.S. CHECKED: S.F.M. DRAWN: D.T.M.

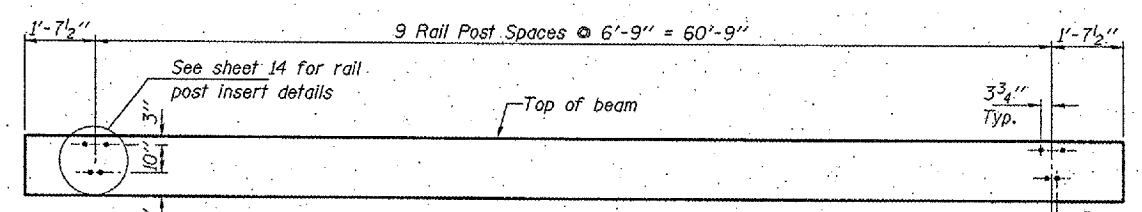
SUPERSTRUCTURE SPAN 2
SECTION 04-02119-00-BR
CARBONDALE ROAD DISTRICT
JACKSON COUNTY
STATION 9+96 / STRUCTURE NO. 039-3255



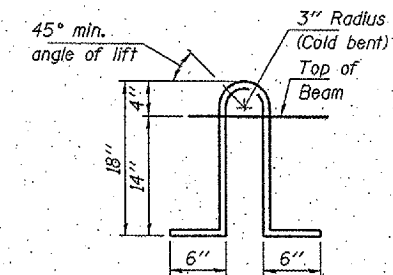
CROSS SECTION



PLAN



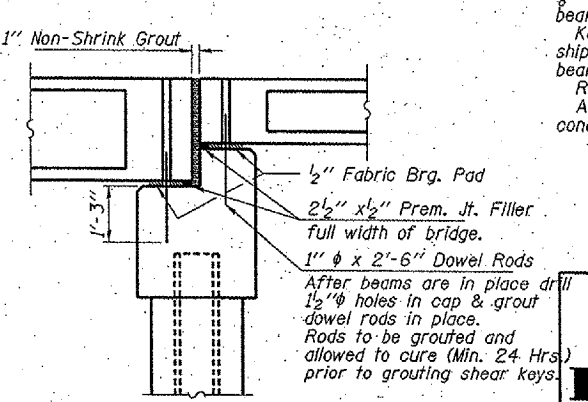
ELEVATION OF OUTSIDE BEAMS
Showing Rail Post Spacing



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. Loops shall be cut off after beams have been erected.



SECTION AT PIERS
© R.L.'s

See sheet 14 for complete rail details.

Grout Key w/non-shrink grout
See Special Provisions

P.G.

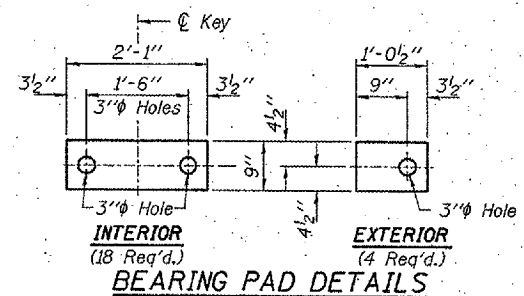
Interior Brg. Pad (Typ.)
Exterior Brg. Pad (Typ.)

10 Precast Prestressed Concrete Deck Beams @ 3'-0" = 30'-0"

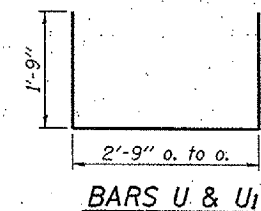
8 x 3-W2.5 x W5.5
Wire Fabric, W5.5 vert.
Full depth of beam.
Each End.

4-#4 A₁ 8 1/2" 51-#4 A₁ bars at 14" cts.
at 8" cts. Top

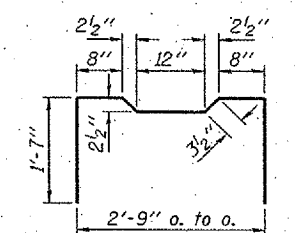
4-#4 U 8 1/2" 51-#3 U bars at 14" cts.
at 8" cts. Bottom



BEARING PAD DETAILS



BARS U & U₁



BAR A₁