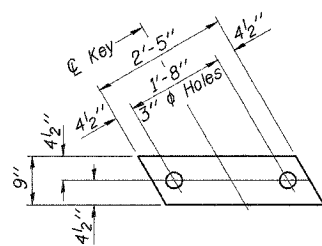
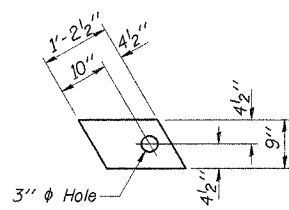


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 16 F.A.S. 365	06-00084 -00-BR	MARSHALL	15	8
ILLINOIS		FED. AID PROJ.		

CONTRACT NO. 89409

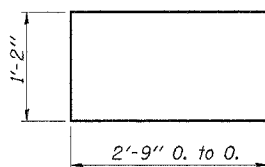


FABRIC BEARING PAD
(Interior)
(12 Req'd.)

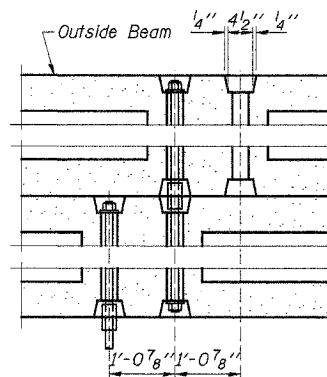


FABRIC BEARING PAD
(Exterior)
(4 Req'd.)

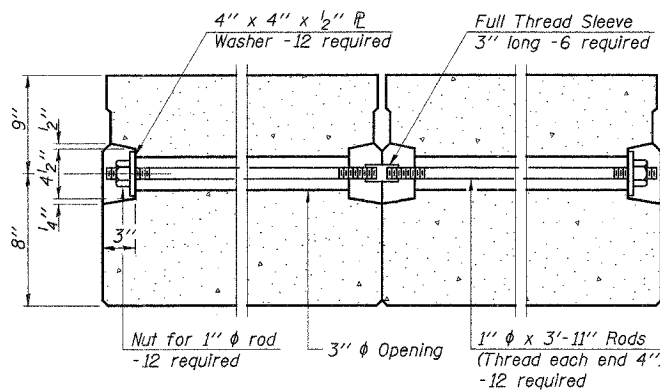
FIXED



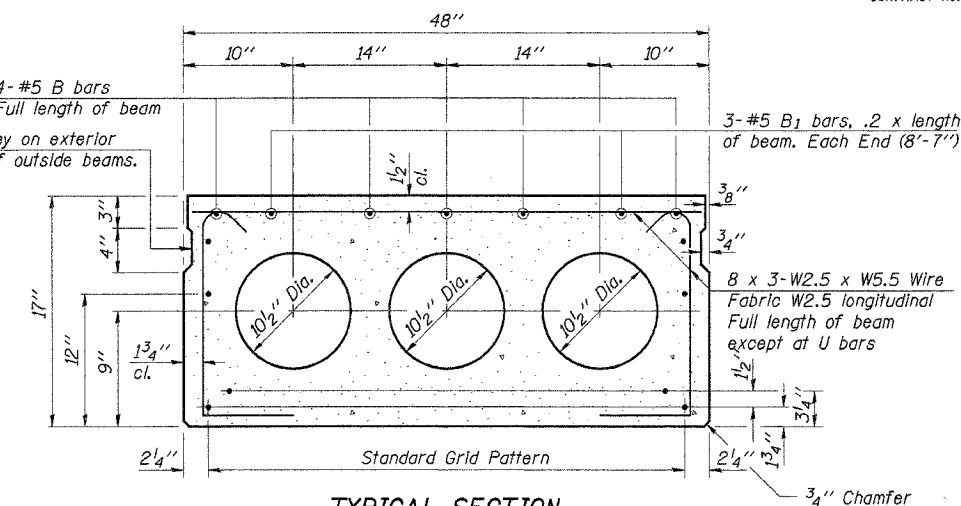
BAR U1



TYPICAL TRANSVERSE TIE ASSEMBLY

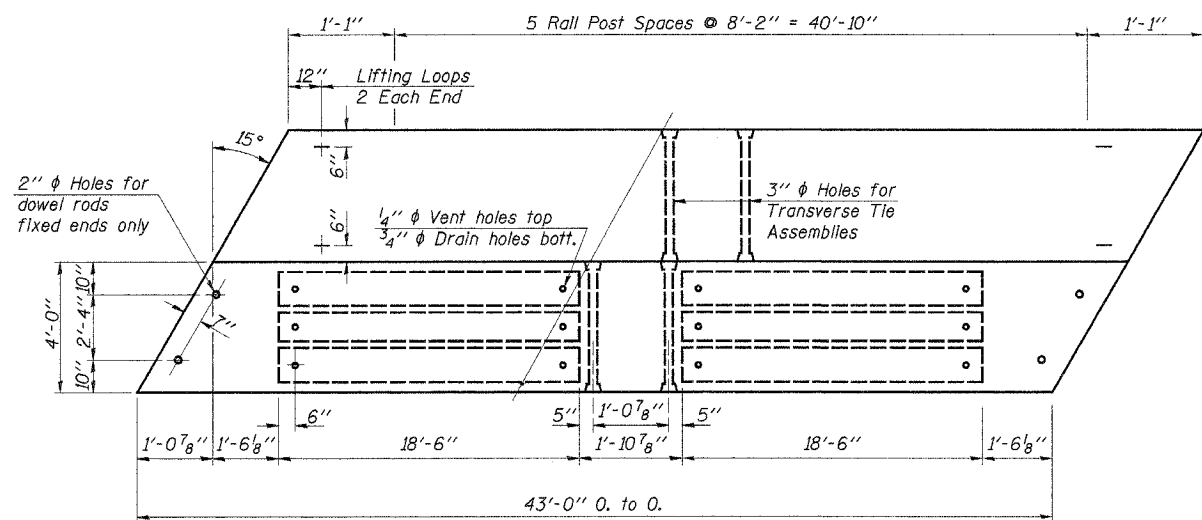


4- #5 B bars
Full length of beam
Omit key on exterior face of outside beams.

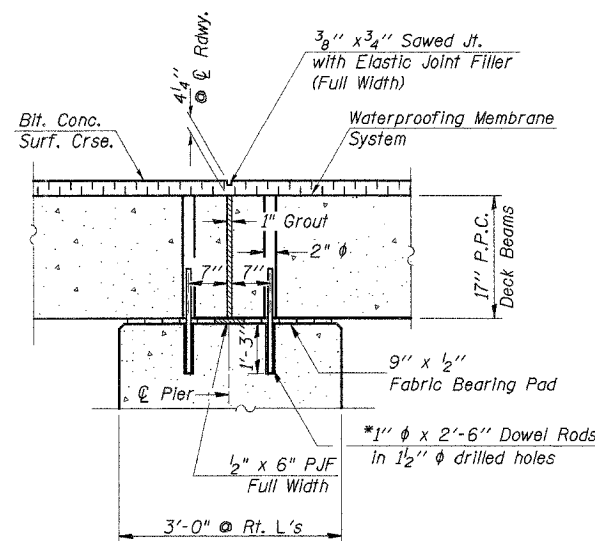


TYPICAL SECTION

18- 1/2" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
14 - Strands 1 3/4" up, 2 - Strands 3/4" up, 2 - Strands 12" up
Note: Place strands symmetrically about ϕ of beam.

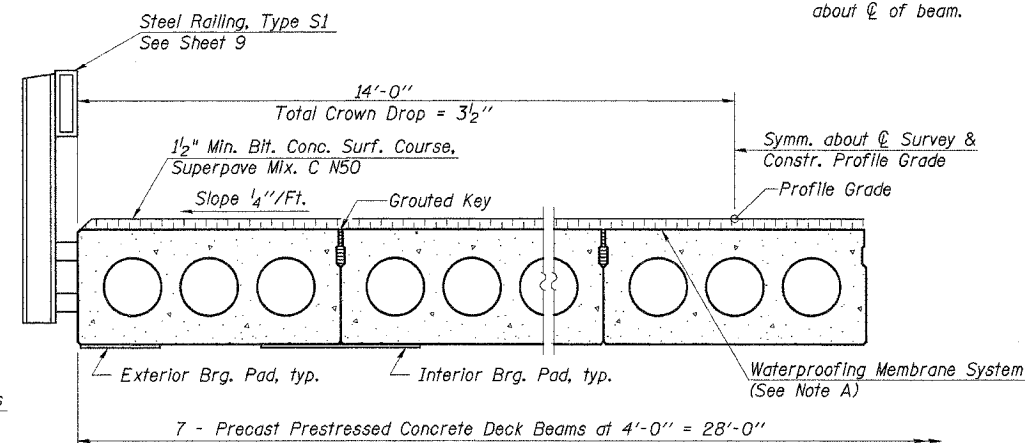


PLAN



SEC. AT PIER

* Note: After beams are in place, 1 1/2" holes shall be drilled into the Substructure, and the dowel rods grouted in place and allowed to cure (Min. 24 Hrs.) prior to grouting shear key.



HALF CROSS SECTION

Note A: The top surface of the beams shall be finished in accordance with Article 504.06 of the Standard Specifications except that the surface shall not be roughed by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a min. of 1/4".

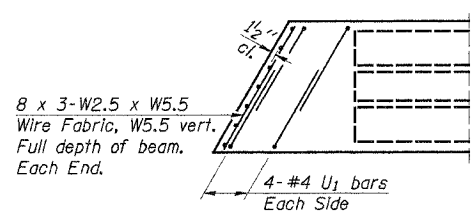
BILL OF MATERIAL

Item	Unit	Quantity
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1,204
Bit. Conc. Surf. Course, Superpave, Mix C, N50	Ton	17.2
Waterproofing Membrane System	Sq. Yd.	134
Portland Cement Mortar Fairing Course	Foot	129

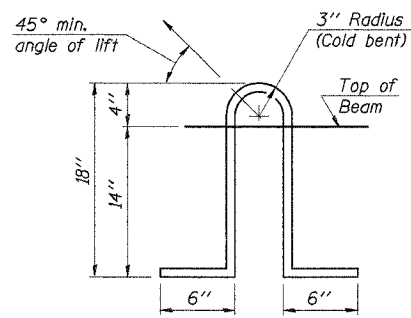
Estimated Total Weight (One Beam) = 27,420 Pounds

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" 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 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. (64 Req'd.) 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. See Special Provisions for review and distribution of shop drawings. Rail post anchor devices shall be cast into outside beam as elsewhere specified.



END PLAN



LIFTING LOOP DETAIL

DESIGNED	F.J.S.
CHECKED	S.F.M.
DRAWN	S.A.P.
CHECKED	S.F.M.
PD-4-L	9-1-03

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FEHR-GRAHAM & ASSOCIATES, LLC
ENGINEERING AND SCIENCE CONSULTANTS
FERRIS L. HODGSON, P.E., REGISTERED PROFESSIONAL ENGINEER, ILLINOIS

JOB NO.: 46813
FILE: 0423SUPER2.DGN
DATE: 04/11/06

SUPERSTRUCTURE
SPAN 2
COUNTY HIGHWAY 16
SECTION 06-00084-00-BR
MARSHALL COUNTY
STATION 125+55