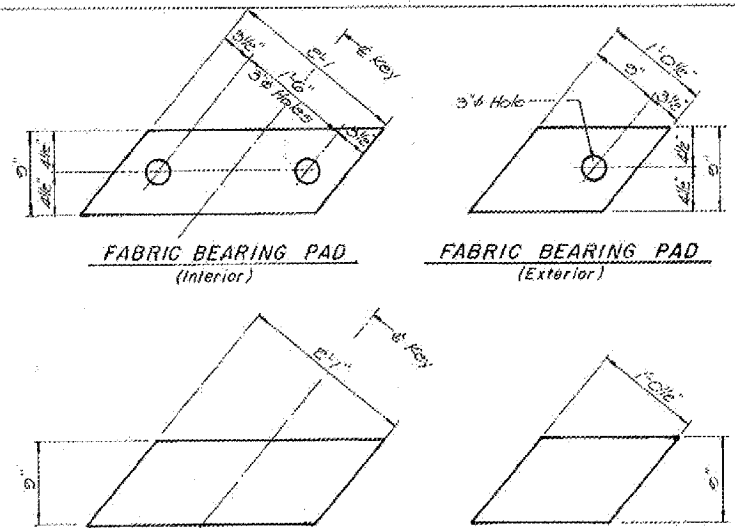


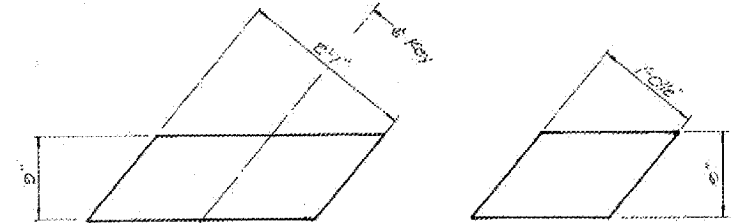
FOR INFORMATION ONLY

NOTE: Omit longitudinal shear key on outside face of exterior beams.



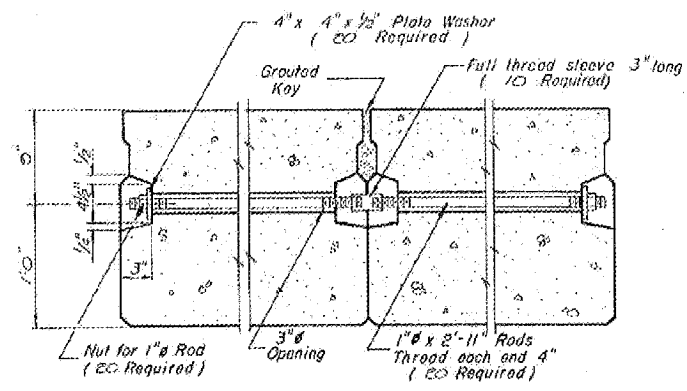
FABRIC BEARING PAD
(Interior)

FABRIC BEARING PAD
(Exterior)



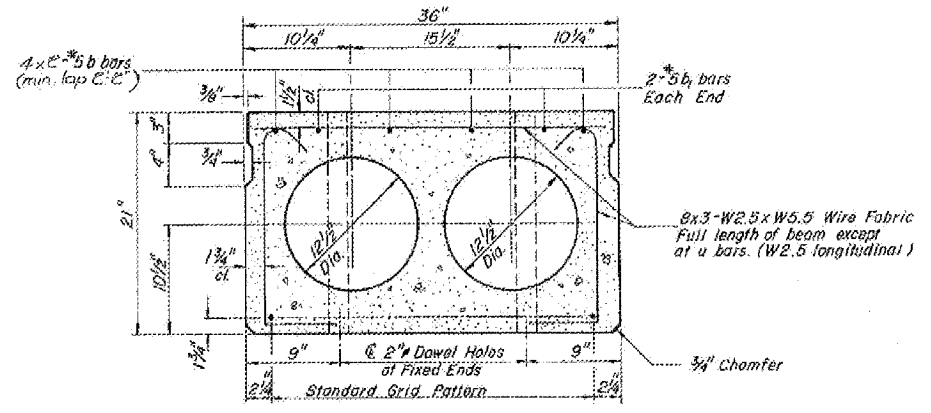
GRAPHITED ASBESTOS BEARING PAD
(Interior)

GRAPHITED ASBESTOS BEARING PAD
(Exterior)



TYPICAL TRANSVERSE TIE ASSEMBLY

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.

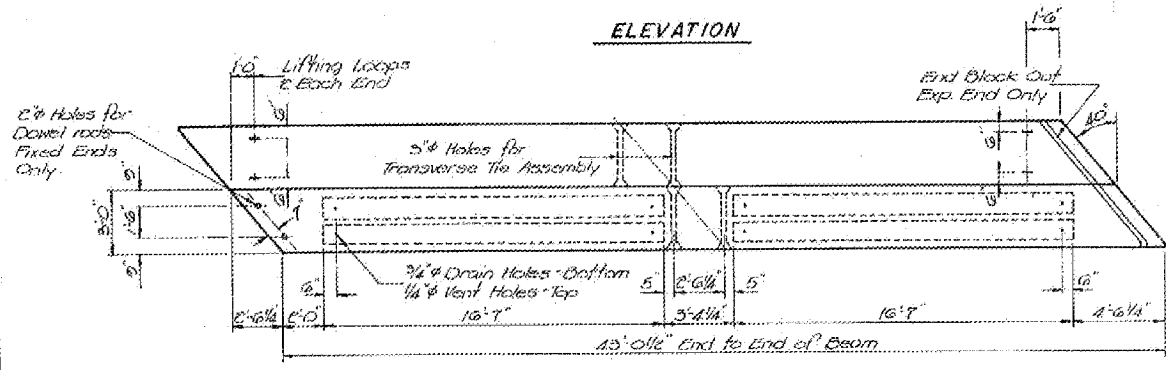


TYPICAL SECTION

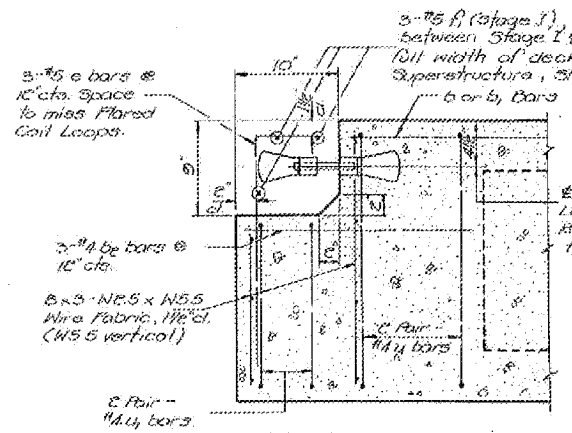
9-1/2 inch Strands, Each Strand Stressed to 28,900 lbs.
9-Strands 1/4 inch up, from bottom of beam. Place strands symmetrically about center of beam.



ELEVATION



PLAN



END OF BEAM ELEVATION EXPANSION END
(Dimensions are at right 45°)

NOTES

Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand, Grade 270. The nominal diameter shall be 1/2 inch and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 3/8 inch diameter, 6x25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 33,000 lbs. or 2-1/2 inch - 270 ksi strands. Loops shall be turned off after beams have been erected.

The 1 inch 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.

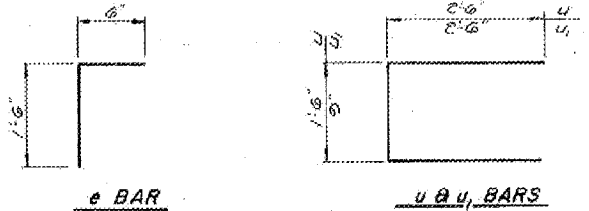
After beams have been erected, holes for the dowel anchors shall be drilled into the substructure and the anchor dowels shall be grouted in place prior to grouting the shear keys.

Reinforcement bars shall conform to AASHTO M-31 or M-53, Grade 60.

Cost of reinforcement and accessories cast into the beam, of bearing pads, and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete Deck Beams."

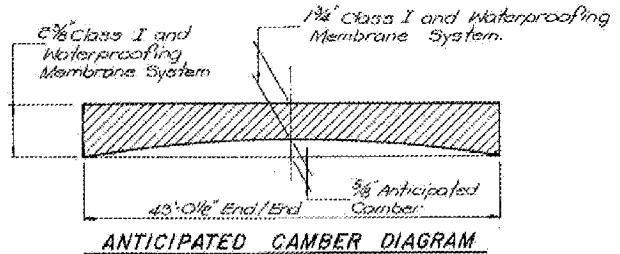
The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8 inch fabric adjusting shims, of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.

Note: The loop shall be formed in a manner such that all strands are engaged during lifting.



e BAR

u & u1 BARS



ANTICIPATED CAMBER DIAGRAM

ONE BEAM BILL OF MATERIAL

Bar	No	Size	Length	Shape
b	8	#6	22'-0"	---
b1	4	#8	8'-8"	---
* b2	3	#4	1'-9"	---
* b	3	#6	2'-0"	---
u	10	#2	6'-6"	---
* u1	4	#2	5'-9"	---
Class X Concrete			Cu. Yd.	6.2
Reinforcement Bars			Lbs.	290
Weight of Beam			Lbs.	25,140

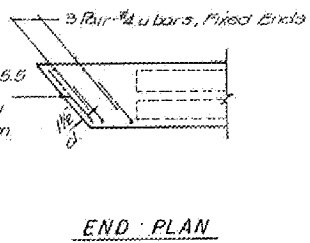
* Indicates bars required at Expansion Ends only.

DETAILS PRECAST PRESTRESSED

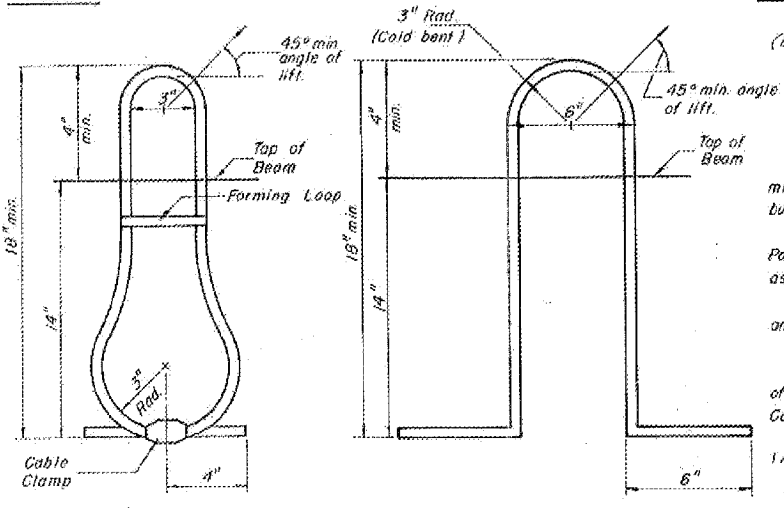
CONCRETE DECK BEAMS

FA. RTE. 18 OVER TRIB. OF MISSISSIPPI RIVER
FA. RTE. 18, SECTION 104 BY-1BR
CARROLL COUNTY
STA. 566+37.11

DESIGNED:	D.H.C.
CHECKED:	K.L.F.
DRAWN:	D.F.S.
CHECKED:	K.L.F.



END PLAN



LIFTING LOOP DETAIL ALTERNATE (2)

LIFTING LOOP DETAIL ALTERNATE (1)