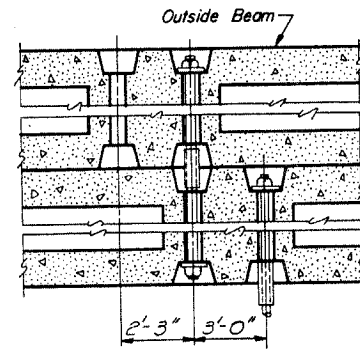
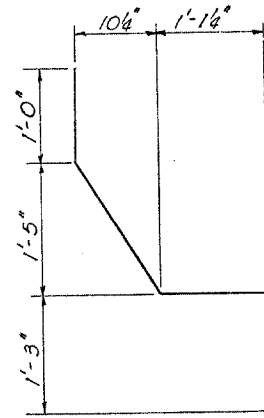
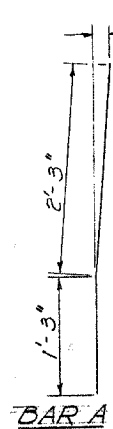
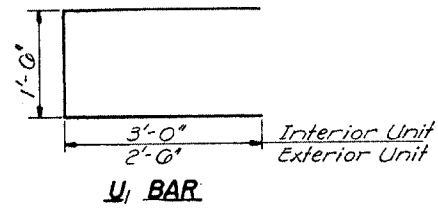
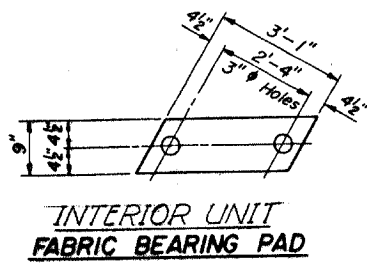
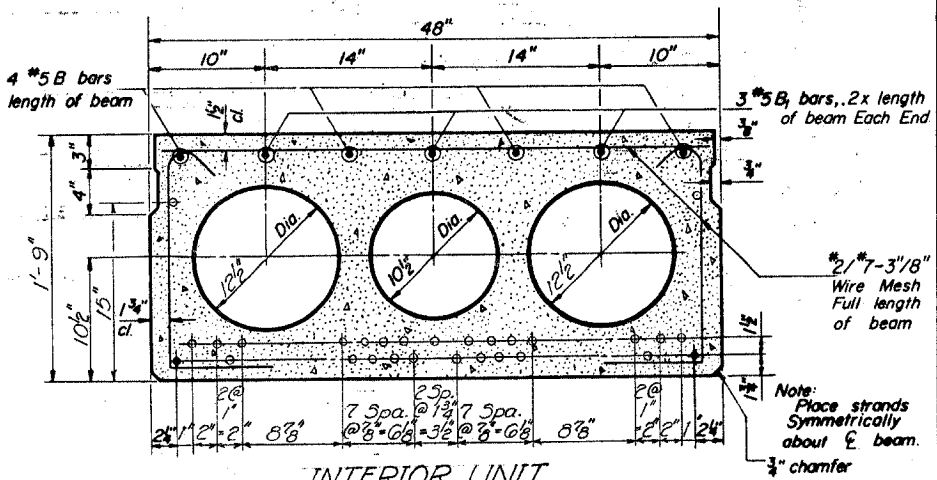
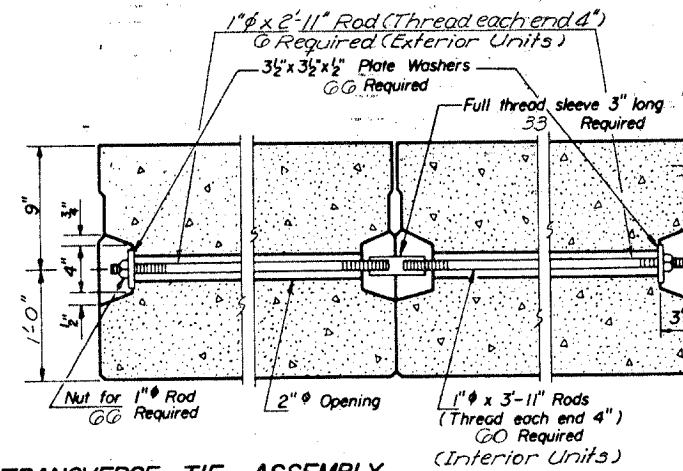


STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
F.A.P. 646	(102)BR-2	WHITESIDE	69	48	
CONTRACT #64427					

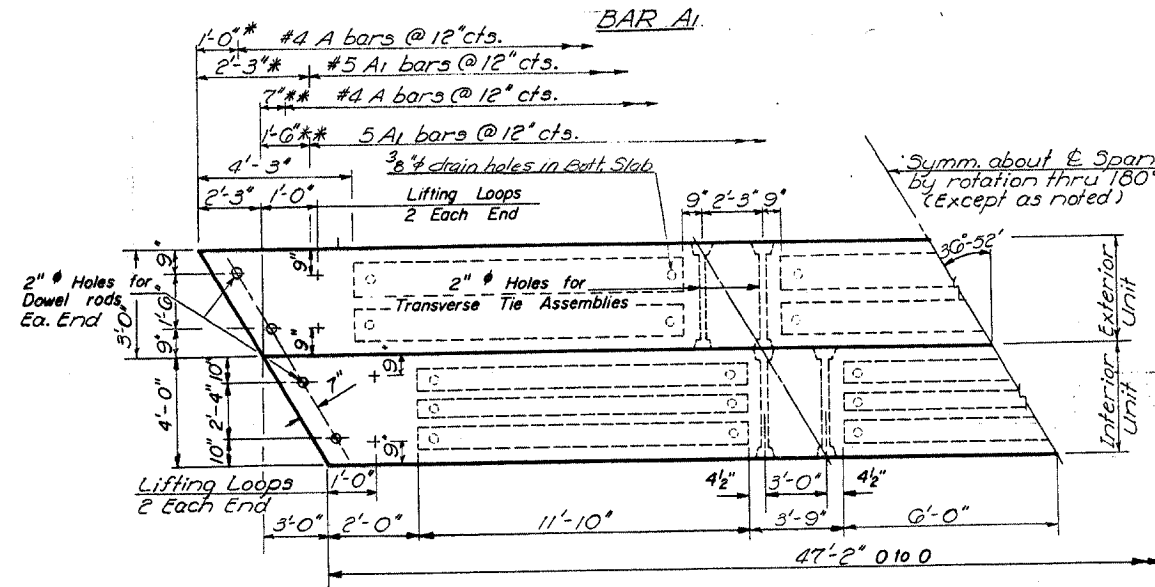


TYPICAL TRANSVERSE TIE ASSEMBLY



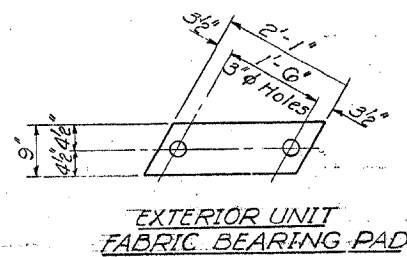
INTERIOR UNIT
TYPICAL SECTION

7/16" Strands, Each Strand Stressed to 18,900 lbs.
12 Strands 1 3/4" up 15 Strands 3/4" up 2 Strands 15" up

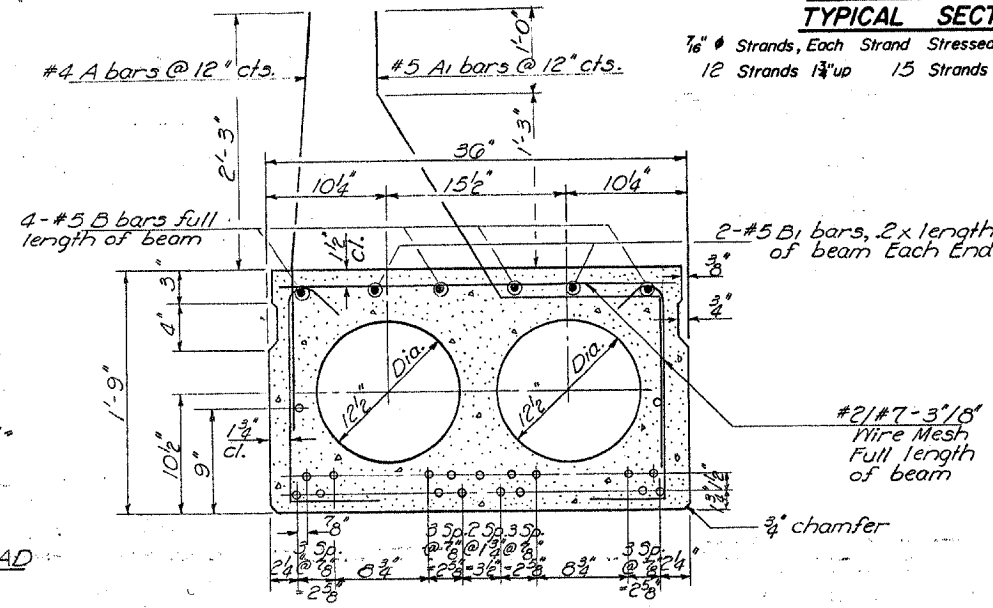


PLAN

* For Span 1 E. Exterior Bm. N. End & Span 3 W. Exterior Bm. S. End only.
** For Span 1 W. Exterior Bm. N. End & Span 3 E. Exterior Bm. S. End only.



EXTERIOR UNIT
FABRIC BEARING PAD



EXTERIOR UNIT
TYPICAL SECTION

7/16" Strands Each Strand Stressed to 18,900 lbs.
8 Strands 1 3/4" up 9 Strands 3/4" up 2 Strands 19"

GENERAL NOTES

Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand. The nominal diameter shall be 7/16" and the nominal cross-sectional area shall be 0.109 sq. in. Lifting loops shall be 3/8" diameter, 6x19 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 29,000 lbs. 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 beam shall be filled with grout after transverse tie assembly is in place. Longitudinal shear keys shall be packed with a very dry mix of 2:1 sand and P.C. mortar. After beams have been erected, holes for the dowel anchors shall be drilled into sub-structure. Grout dowels at fixed end. At expansion end grout dowels into sub-structure and fill holes in beam with P.A.F-4.

After fabrication the transverse tie assemblies (tie rods, nuts, washers and sleeves) shall be hot-dipped galvanized in accordance with A.S.T.M. Designation: A153. Cost of reinforcement and accessories cast into the beam, of bearing pads, of armor angles, and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete Deck Beams."

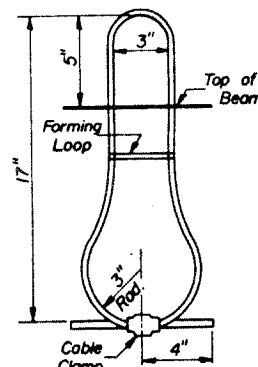
Dowel rods shall be ASTM A-306 or ASTM A-615
Transverse tie rods shall be ASTM-306, Grade 70-80

BILL OF MATERIAL

Precast Prestressed Concrete Deck beams	Sq. Ft.	6509

DESIGNED: Stanley Shaw	EXAMINED: [Signature]
CHECKED: R. V. Mathur	PASSED: [Signature]
DRAWN: JAMES R. CARMAN	APPROVED: [Signature]
CHECKED: R. V. Mathur	

MAY 13 1970
[Signatures]



LIFTING LOOP DETAIL