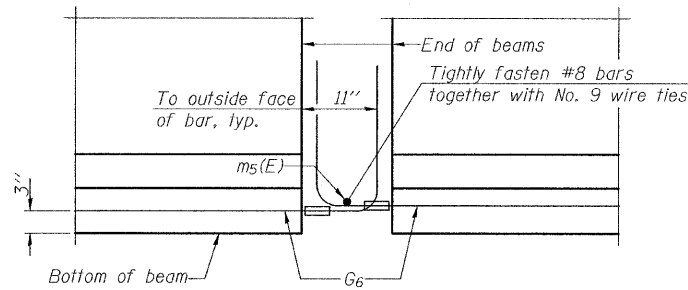


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

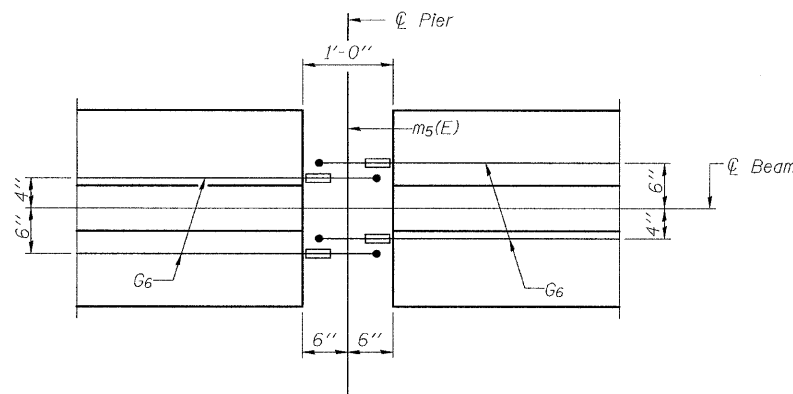
NOTES

Inserts for $\frac{3}{4}$ " ϕ threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be $\frac{1}{2}$ " and the nominal cross-sectional area shall be 0.153 sq. in.

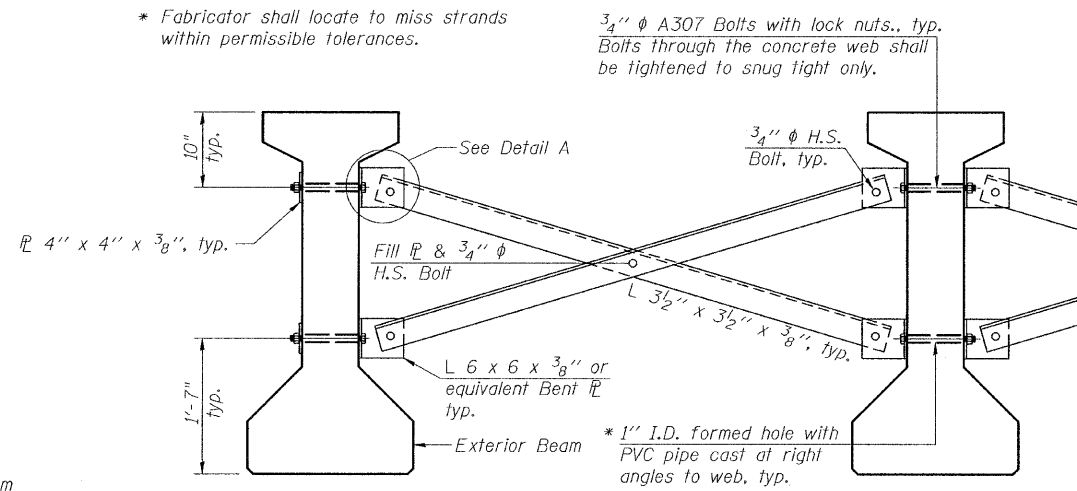
Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions). A minimum $2\frac{1}{2}$ " ϕ lifting pin shall be used to engage the lifting loops during handling. Tilt G_6 bars when necessary to maintain $1\frac{1}{2}$ " clearance. The top and bottom plates shall be AASHTO M270 Grade 50. The bottom plates and studs shall be galvanized according to AASHTO M111. Top plates and threaded rods need not be galvanized. Threaded rods shall be ASTM F 1554 Grade 55. The G_6 bar assembly shall have the threaded ends oversized to ensure no reduction in cross sectional area after threading. The coupler splice shall be capable of developing 125 percent of the yield strength of the reinforcement bar.



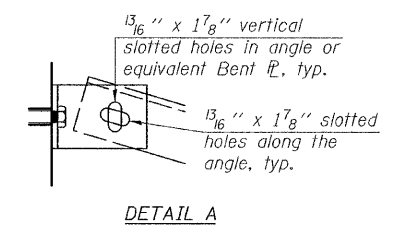
ELEVATION OF BEAM AT PIER



PLAN OF BEAM AT PIER

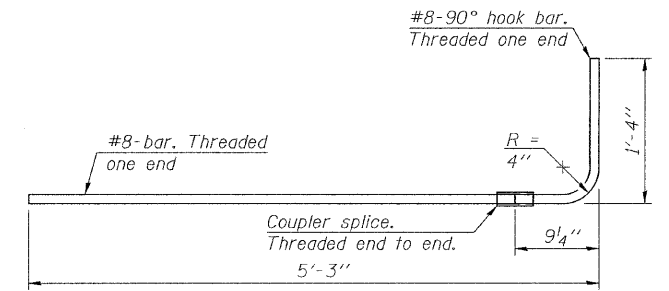


Notes:
All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted. Two hardened washers are required for each set of oversized holes. All holes shall be $\frac{1}{16}$ " ϕ unless otherwise noted. $\frac{5}{16}$ " x 3" x 3" plate washers are required over all slotted holes. All bolts shall be galvanized according to AASHTO M232. Bracing shall be installed as beams are erected and tightened as soon as possible during erection. Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete I-Beams.

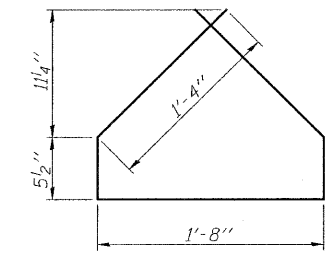


DETAIL A

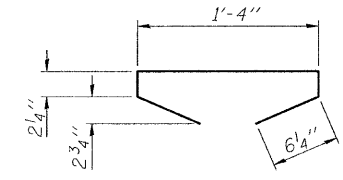
PERMANENT BRACING DETAILS



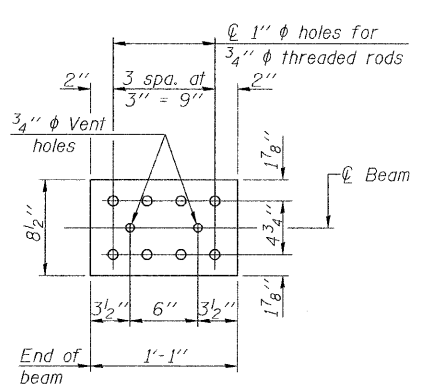
G6 BAR ASSEMBLY



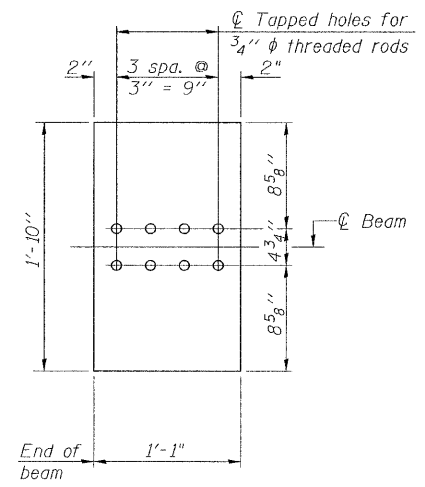
BAR G4



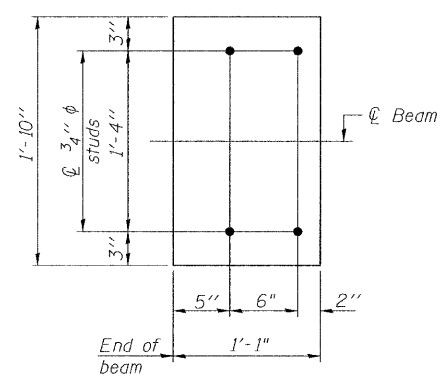
BAR G5



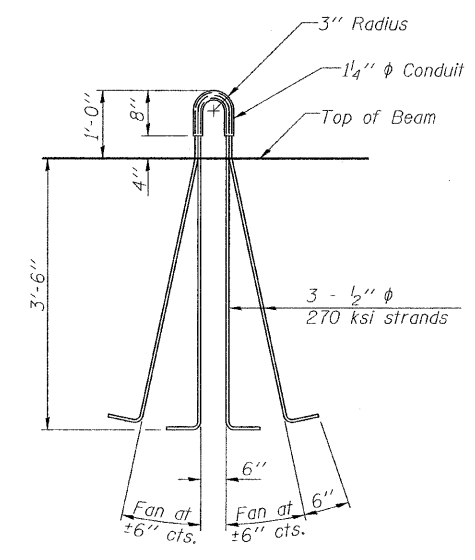
TOP PLATE



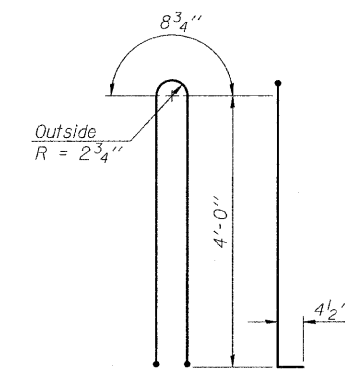
BOTTOM PLATE
(Showing threaded rods)



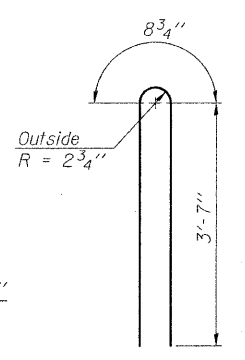
BOTTOM PLATE
(Showing studs)



LIFTING LOOP DETAIL



BAR G1



BAR G2

48" PPC I-BEAM DETAILS
SPANS 1 & 3
STRUCTURE NO. 012-0073

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 48"	Ft.	820.5

DESIGNED SCD
CHECKED DRB
DRAWN THW
CHECKED SCD

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SHEET NO. 18 OF 29 SHEETS	F.A.S. RTE. 1707	SECTION (BX-B)B-1	COUNTY CLARK	TOTAL SHEETS 44	SHEET NO. 27
	CONTRACT NO. 74169 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				