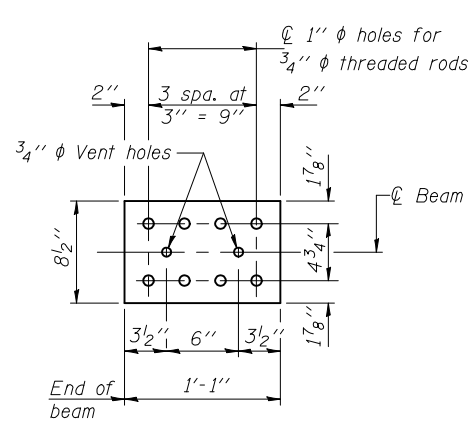
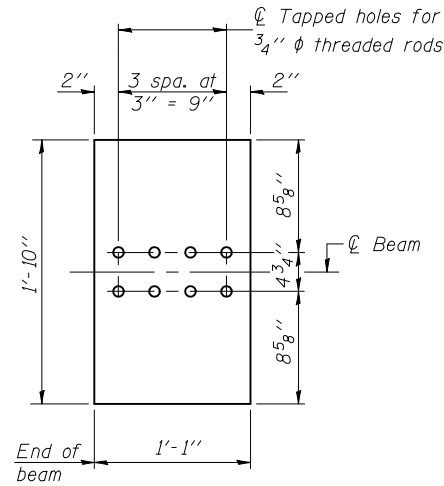


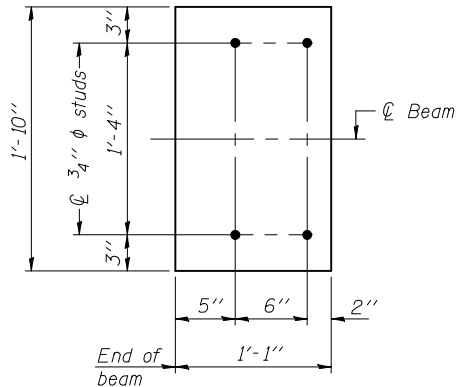
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



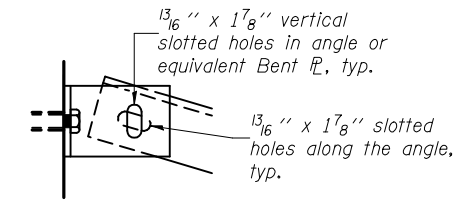
TOP PLATE



BOTTOM PLATE
(Showing threaded rods)

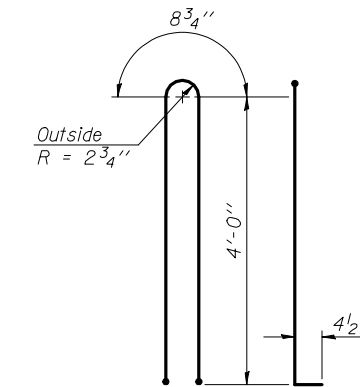


BOTTOM PLATE
(Showing studs)

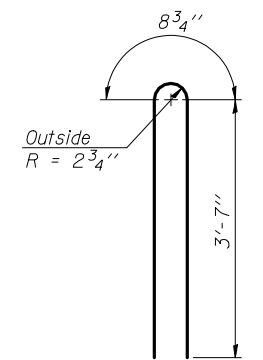


DETAIL A

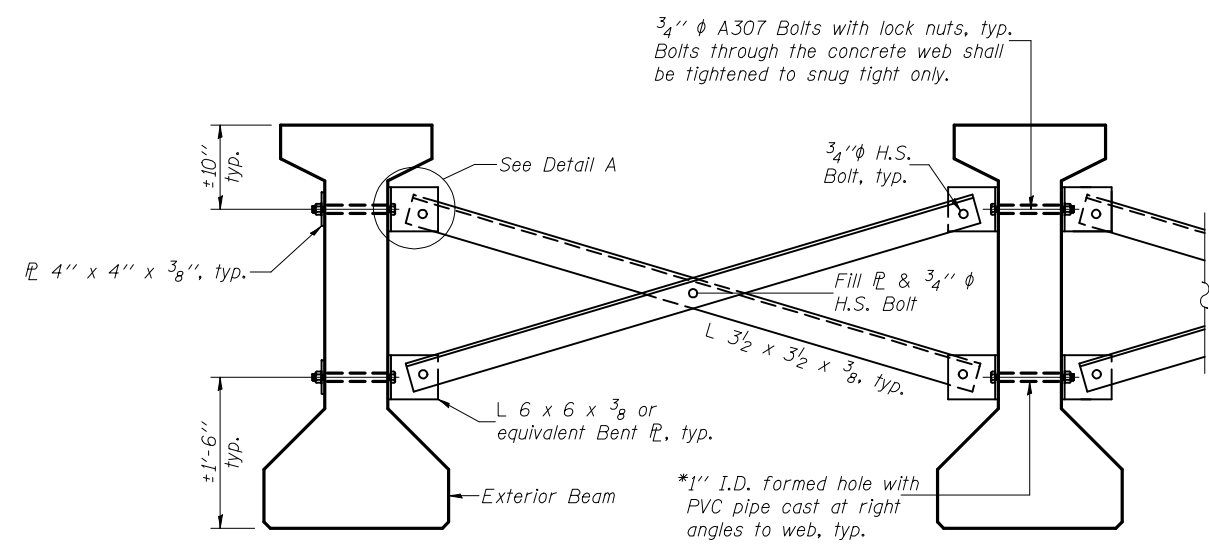
NOTES
Inserts for 3/4" ϕ threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and 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 1/2" ϕ lifting pin shall be used to engage the lifting loops during handling. 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.



BAR G1

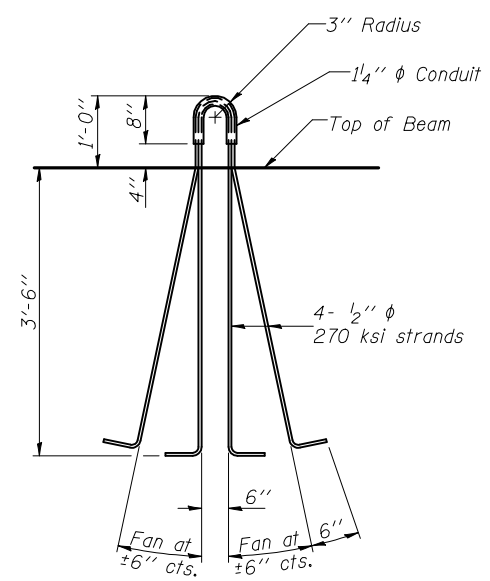


BAR G2

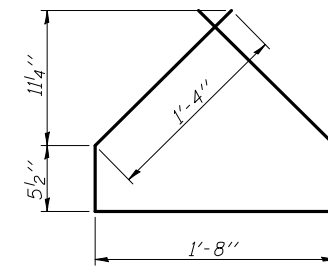


PERMANENT BRACING DETAILS
(8 Required)

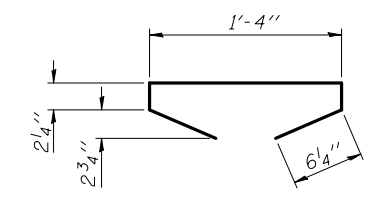
*Fabricator shall locate to miss strands within permissible tolerances.



LIFTING LOOP DETAIL



BAR G4



BAR G5

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 1/16" ϕ unless otherwise noted. 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.

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 48"	Ft.	531

**48" PPC I-BEAM DETAILS
STRUCTURE NO. 001-0507**

DESIGNED	Phillip E. Coppernoll
CHECKED	Justin T. Belue
DRAWN	h.t. duong
CHECKED	PEC/JTB

December 6, 2010
EXAMINED <i>Thomas J. Domagalick</i> ENGINEER OF BRIDGE DESIGN
PASSED <i>Ralph E. Anderson</i> ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 15 21 SHEETS	F.A.P. RTE. 745	SECTION 107B-1	COUNTY ADAMS	TOTAL SHEETS 86	SHEET NO. 49
	CONTRACT NO. 72B98			FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT	