

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.

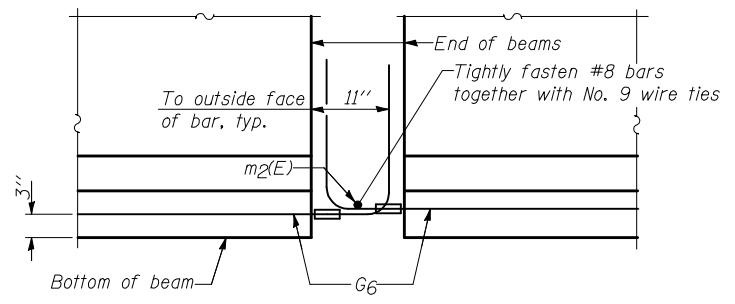
Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions). A minimum $2\frac{1}{2}$ " ϕ lifting pin shall be used to engage the lifting loops during handling. Tilt G6 bars when necessary to maintain $\frac{1}{2}$ " clearance.

The top and bottom plates shall be AASHTO M270 Grade 50. The bottom plates and studs shall be galvanized according to AASHTO M111. Threaded rods shall be ASTM F 1554 Grade 55.

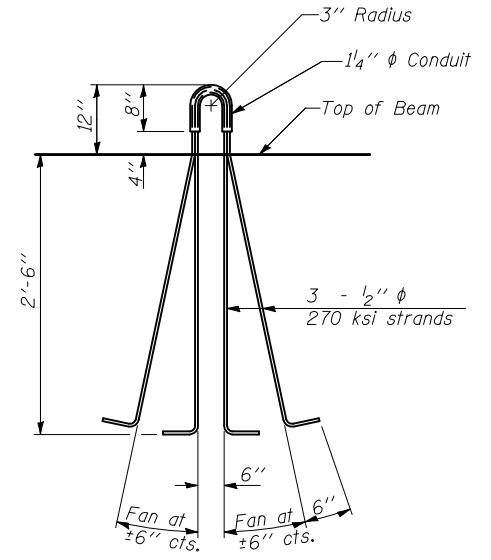
The G6 bar assembly shall have the threaded ends oversized to ensure no reduction in cross sectional area after threading. The coupler splice shall be capable of developing 125 percent of the yield strength of the reinforcement bar.

See Sheet 13 of 27 from Framing Plan.

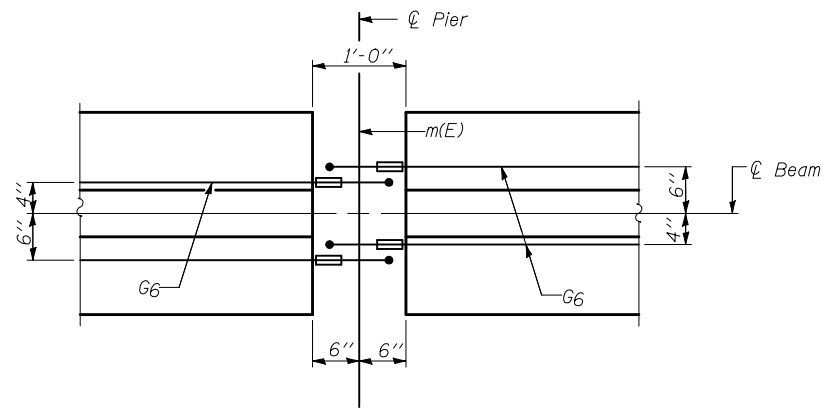
See Sheet 13 of 27 for Interior Beam Boment Table and Interior Beam Reaction Table.



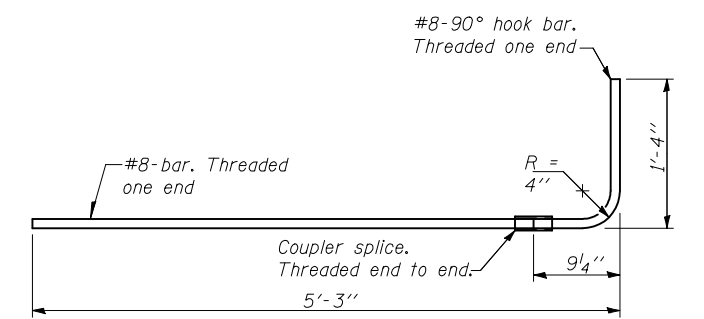
ELEVATION OF BEAM AT PIER



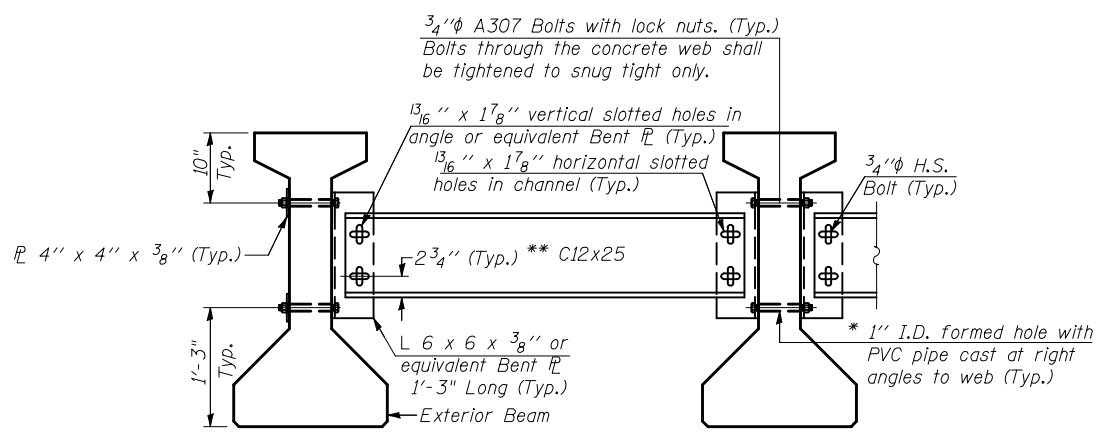
LIFTING LOOP DETAIL



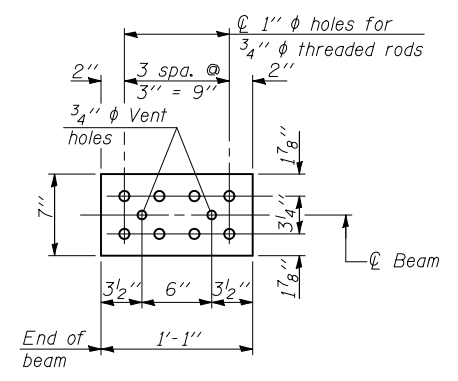
PLAN OF BEAM AT PIER



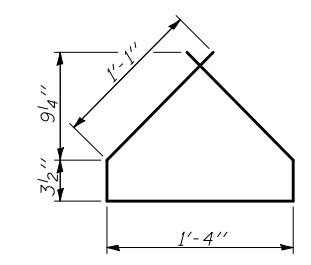
G6 BAR ASSEMBLY



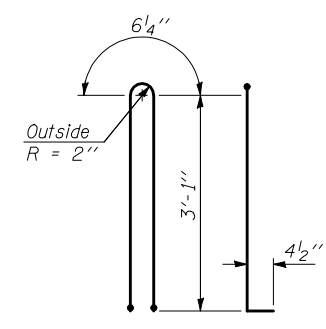
PERMANENT BRACING DETAILS FOR
36" PPC I-BEAMS



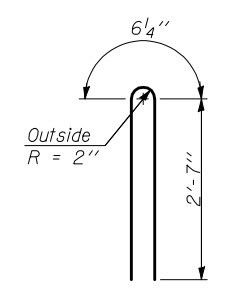
TOP PLATE



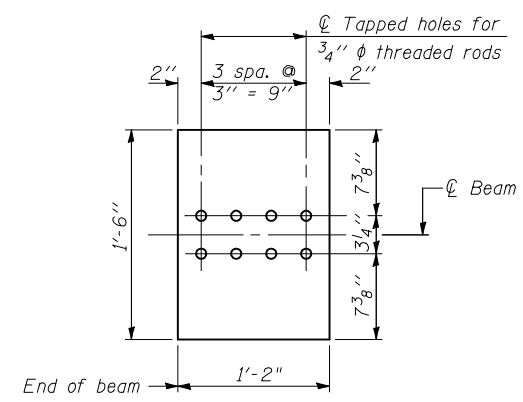
BAR G4



BAR G1



BAR G2



BOTTOM PLATE

See bearing details for pintle hole locations when required.

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 $\frac{5}{16}$ " 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.

* Fabricator shall locate to miss strands within permissible tolerances.
** Alternate C12x30 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on lighter section. The alternate, if utilized, shall be provided at no extra cost to the Department.

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 36 IN.	FT	1,871

36" PPC I-BEAM DETAILS
I-74 OVER LITTLE KICKAPOO CREEK
STRUCTURE NO. 057-0120
AND 057-0121

STRAND ASSOCIATES, INC.

DESIGNED	RRD
CHECKED	AJS
DRAWN	KAS
CHECKED	JAR

SHEET NO. 16 27 SHEETS	F.A.I. RTE. 74	SECTION (57-21B)BR	COUNTY MCLEAN	TOTAL SHEETS 61	SHEET NO. 28
	BEAM DETAILS (3 OF 3)			CONTRACT NO. 70641	
	FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				