

K&P NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
95	6B-1	EFFINGHAM	409	378
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 8
SHEETS 12

CONTRACT NO. 94356

NOTES

Inserts for 3/4" ϕ threaded dowel rods, when specified, are to be two strut, coil type for interior beams and single coil, 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.

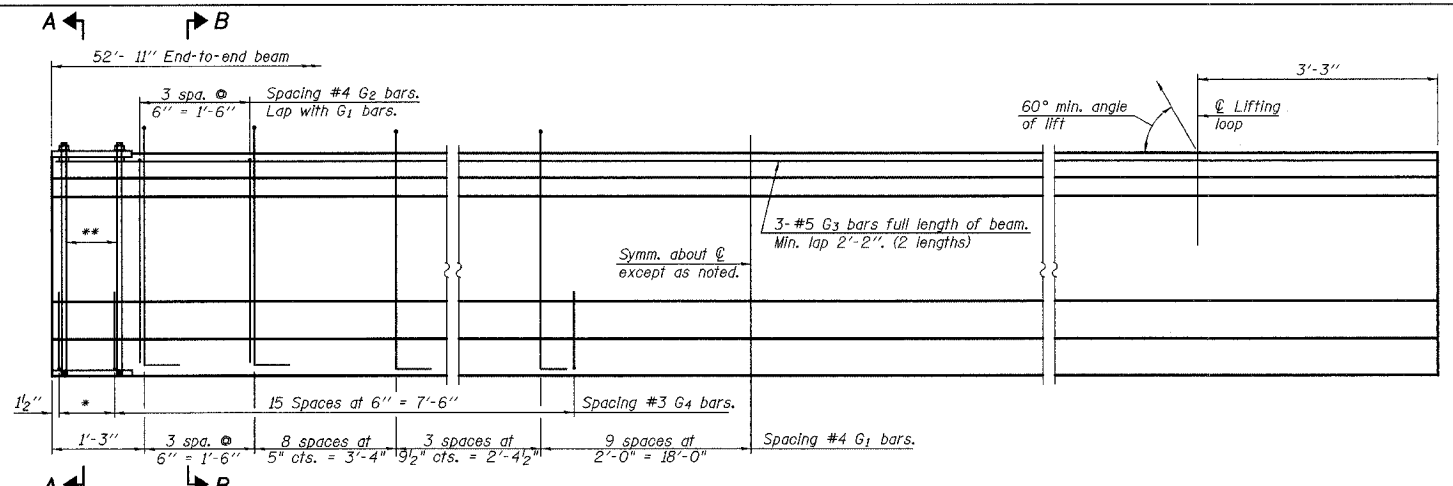
Non-prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60.

A minimum 2 1/2" ϕ lifting pin shall be used to engage the lifting loops during handling.

The bottom plates and studs shall be galvanized according to AASHTO M111.

Threaded rods shall be ASTM F 1554 Grade 55.

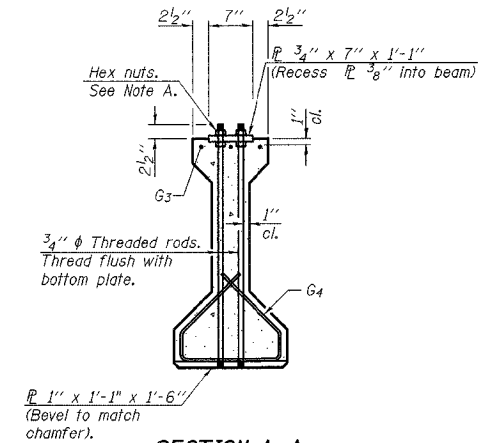
The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A 780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to all portions of the I-beam or Bulb-T beam, except the top surface of the top flange and the bottom surface of the bottom flange, starting at each beam end and extending out a distance of 36 inches. The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.



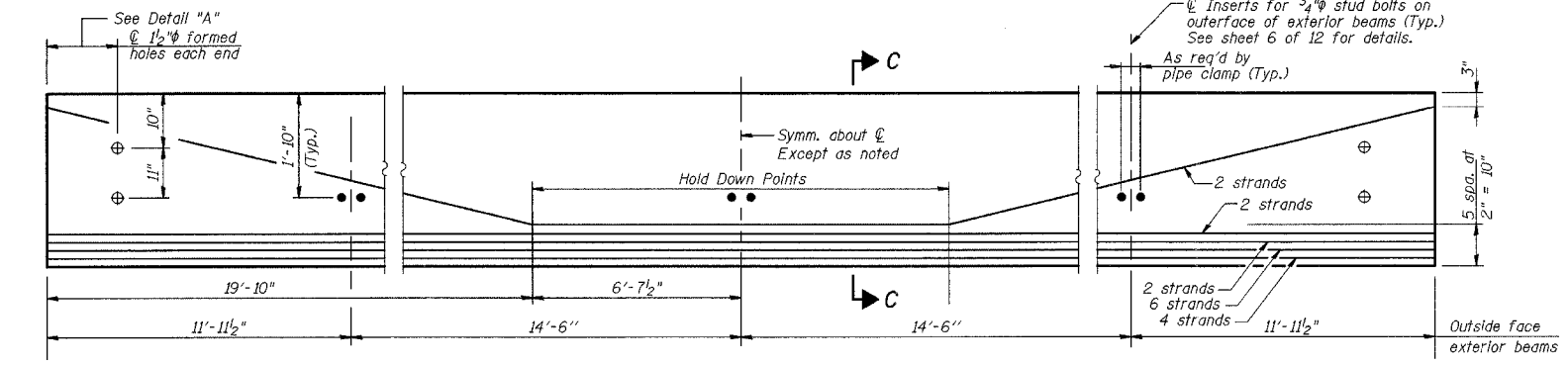
ELEVATION OF BEAM
(Showing reinforcement & dimensions)

- * 3 spaces at 3" = 9"
- ** 4-3/4" ϕ threaded dowel rods at 3" cts., each face.

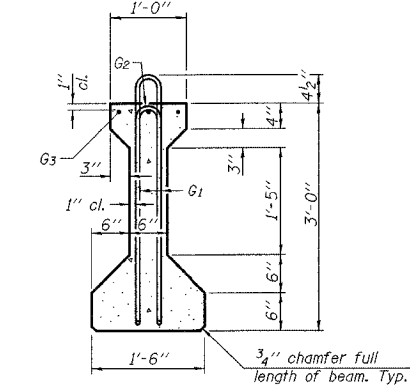
Note A:
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.



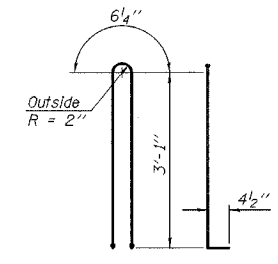
SECTION A-A



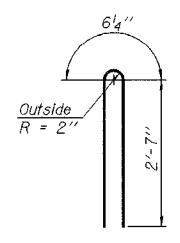
ELEVATION OF BEAM
(Showing Prestressing Steel & Inserts)



SECTION B-B



BAR G1



BAR G2

***** BAR LIST
ONE BEAM ONLY**

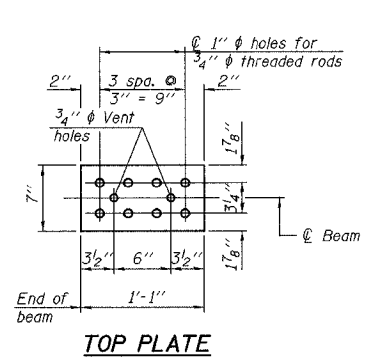
Bar	No.	Size	Length	Shape
G1	47	#4	7'-5"	∩ L
G2	47	#4	5'-8"	∩
G3	6	#5	27'-5"	—
G4	38	#3	4'-1"	∩

*** For information only

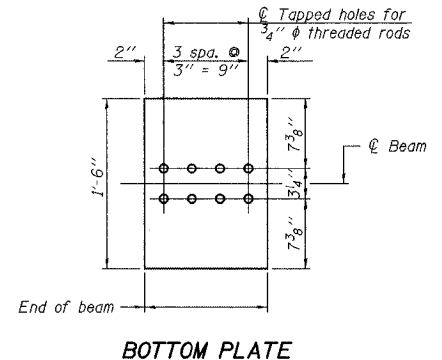
Notes:
Required release strength, f'ci, shall be 5,000 psi.

BILL OF MATERIAL

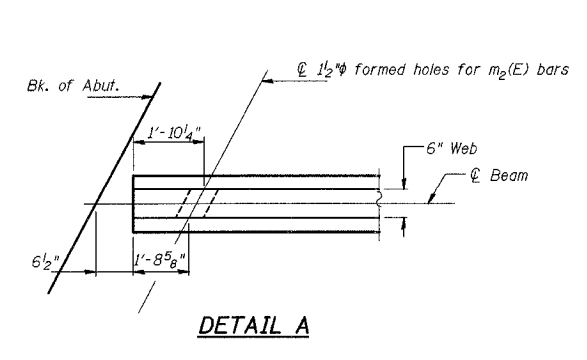
Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 36"	Ft.	318



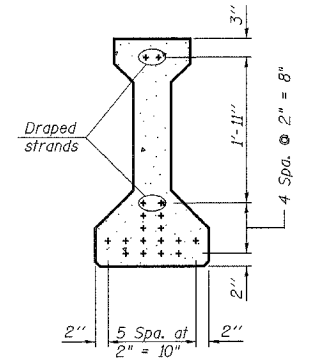
TOP PLATE



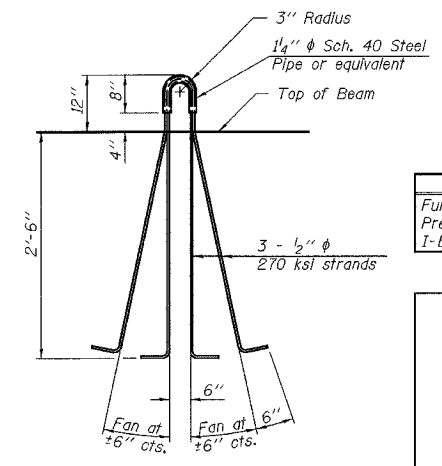
BOTTOM PLATE
See bearing details for pintle hole locations when required.



DETAIL A



SECTION C-C



LIFTING LOOP DETAIL

PI-4-36D

12-21-06

ILLINOIS DEPARTMENT OF TRANSPORTATION
PCC I-BEAM DETAILS
ILLINOIS ROUTE 33 OVER
BISHOP CREEK
F.A.P. RTE. 95
SECTION 6B-1
EFFINGHAM COUNTY
Sta. 531+80
STRUCTURE NUMBER 025-0097
DATE: APR, 2002
DRAWN BY: BDM
CHECKED BY: SJK