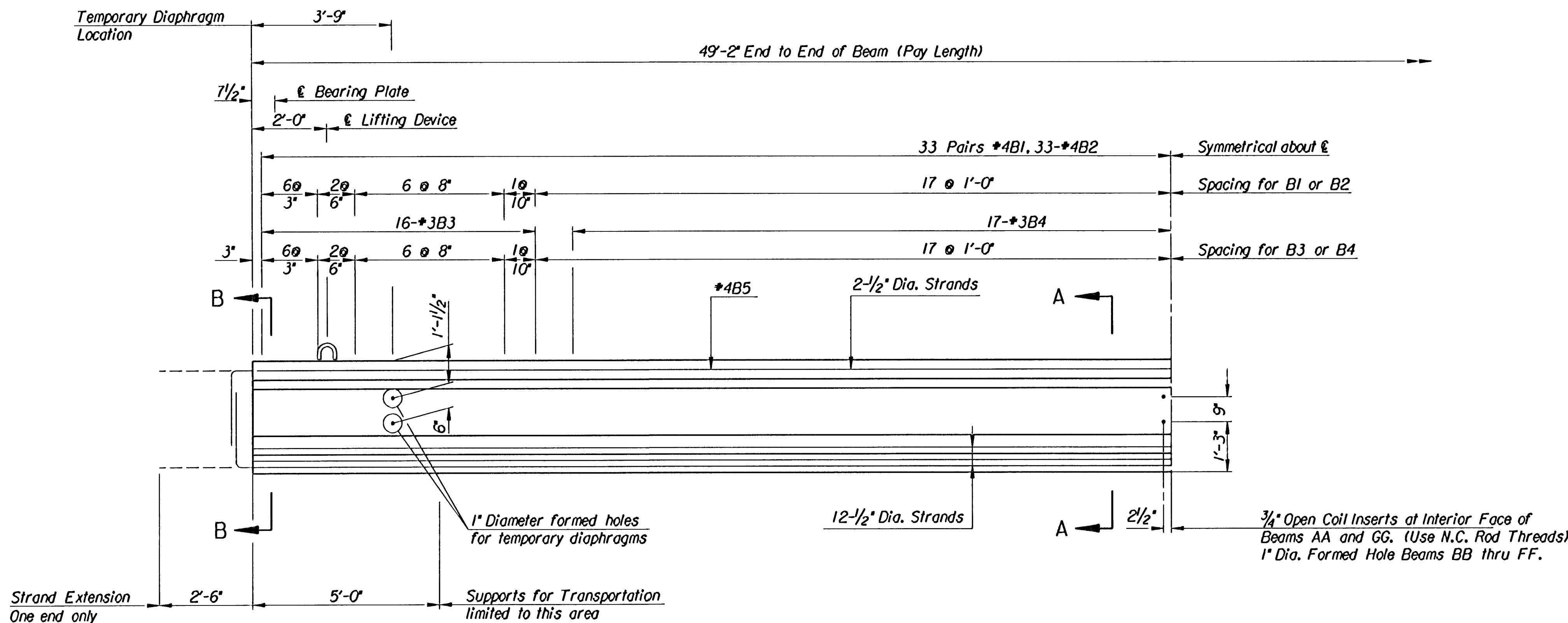




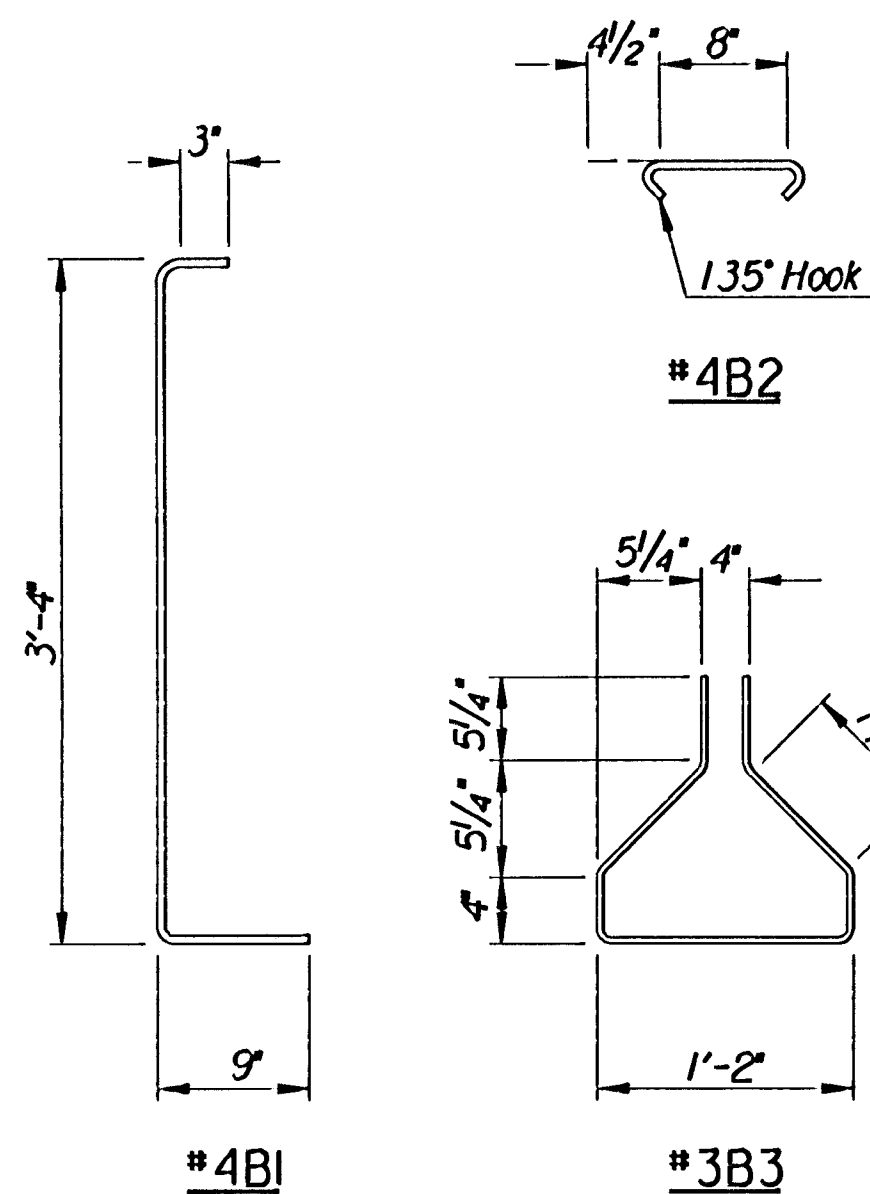
ELEVATION OF PRESTRESSED CONCRETE BEAM
(49'-2" Beam)
14 Req'd.-9.4 Tons/Beam

REINFORCING STEEL			
Mark	No.	Size	Length
49'-2" Beam-1 Listed-14 Req'd.			
STRAIGHT BARS			
B5	8	*4	25'-2"
BENT BARS			
B1	130	*4	4'-4"
*B2	65	*4	1'-5"
*B3	32	*3	4'-0"
*B4	33	*3	1'-10"

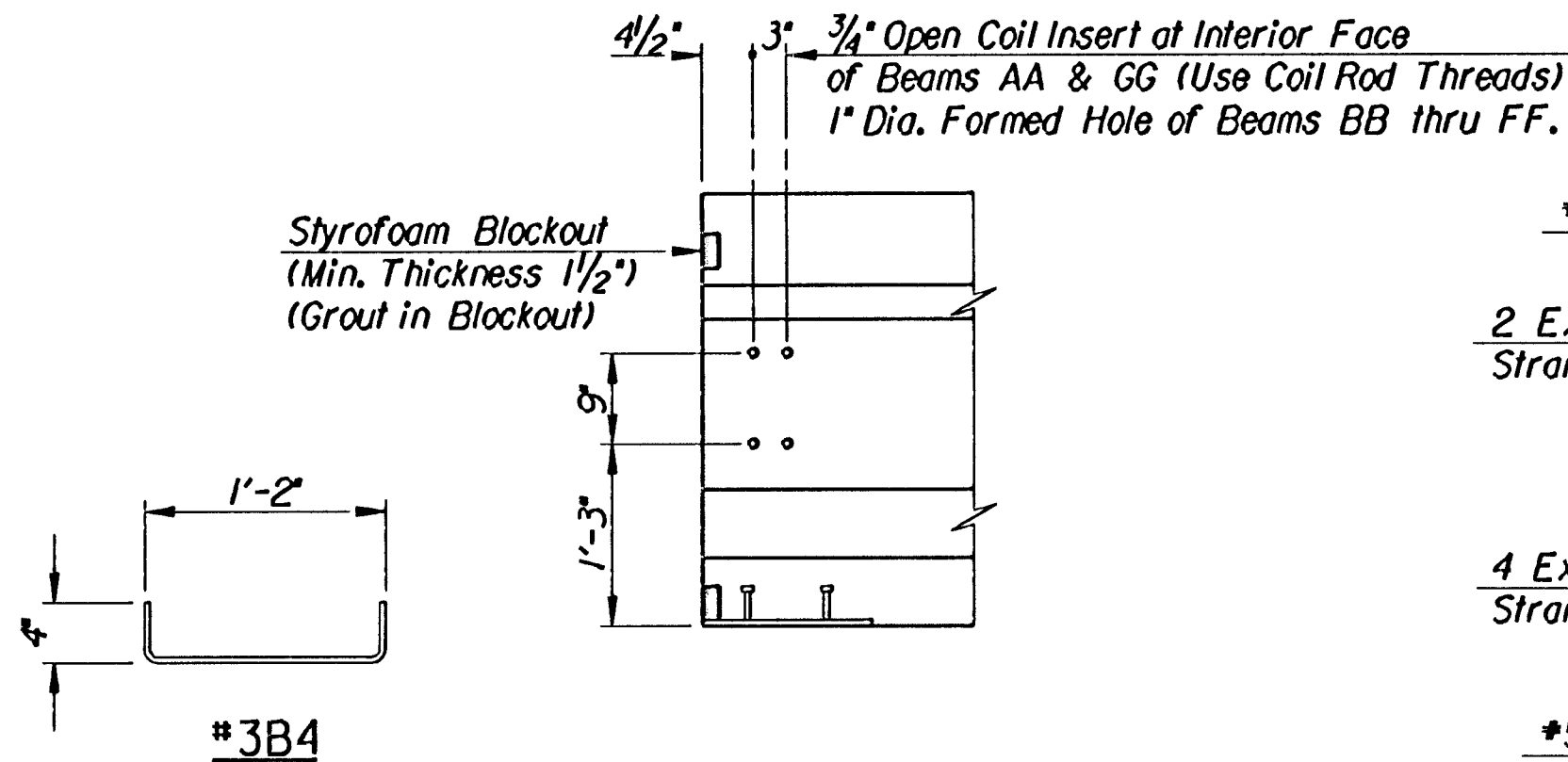
*Grade 40 may be substituted.

SUMMARY OF QUANTITIES		
Item	Unit	Total
Prestressed Concrete Beams (K2 - 49'-2" Beam)	Lin. Ft.	688.33
The following Quantities are given for Information Only (Total for 14 Beams)		
Concrete in Beams (f'c = 6,000 p.s.i.)	Cu. Yds.	65.4
Prestressing Steel A416 1/2" Dia. (Low Relaxation)	Lin. Ft.	10,127
Reinforcing Steel (Grade 60) (Epoxy Coated)	Lbs.	9,002
Elastomeric Bearing Pads (D60) (3/4"x8"x1'-6")	Each	14
3/4" Open Coil Insert 6.0M (Coil Thread)	Each	32
3/4" Threaded Coil Rods x 1'-6"	Each	32
End Bearing Plates (Galvanized) (11/2"x15"x1'-4")	Each	28

6.0M Designates 6000 Lbs. Load in Tension.

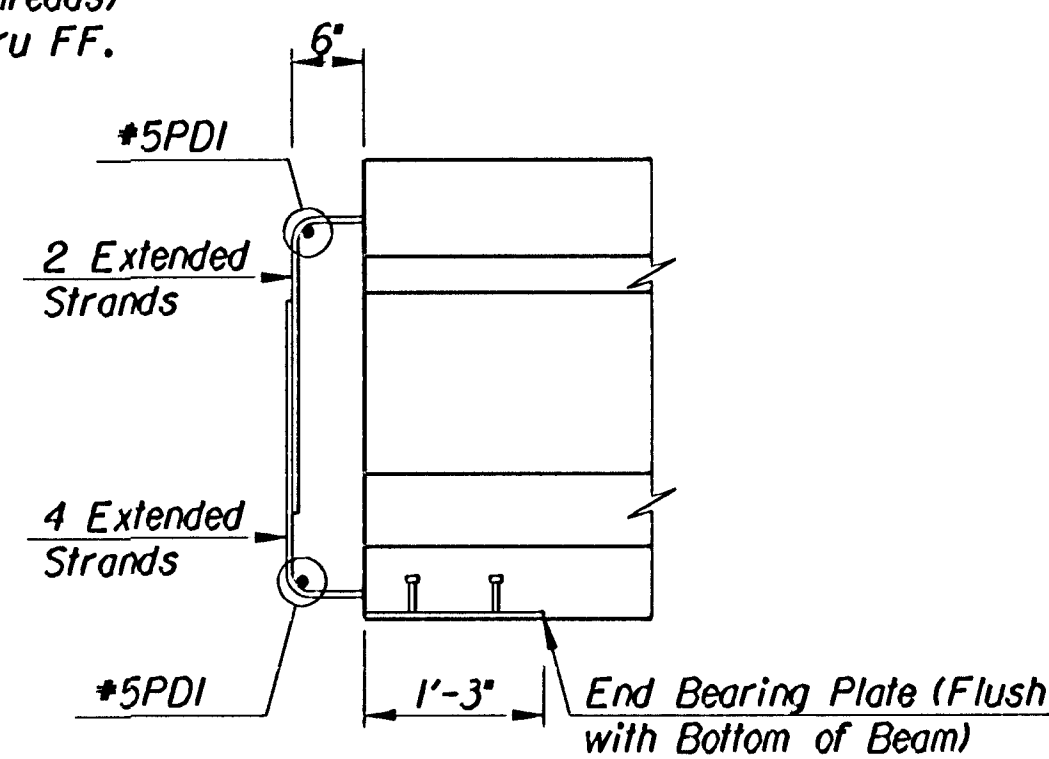


BENDING DIAGRAM
Dimensions are out to out of bars.



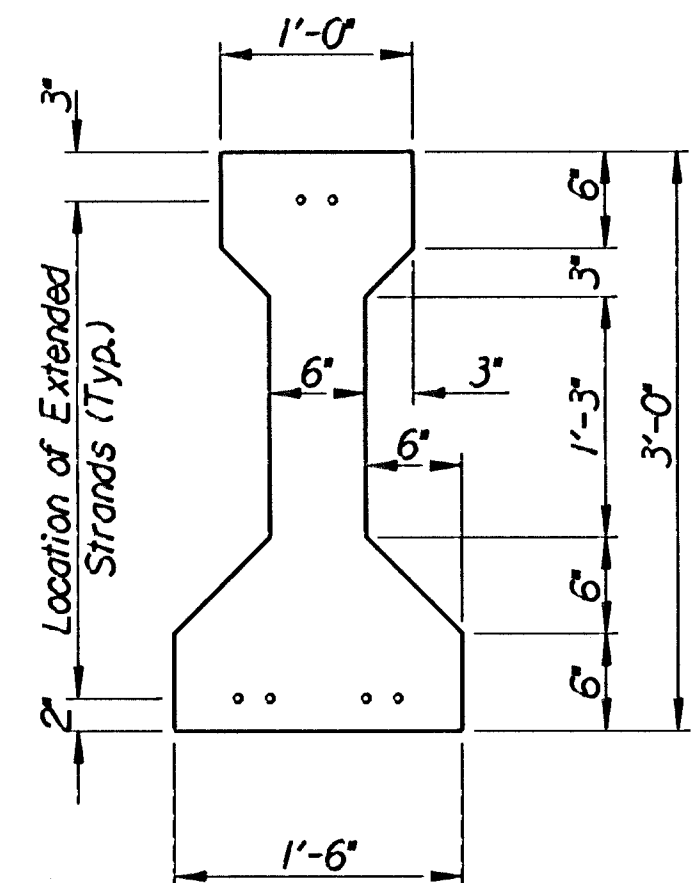
BEAM END AT PIER 2 or 3

Note:
No strands are to be extended at this location. All strands shall be cut flush with the inside face of the Styrofoam Blockout.



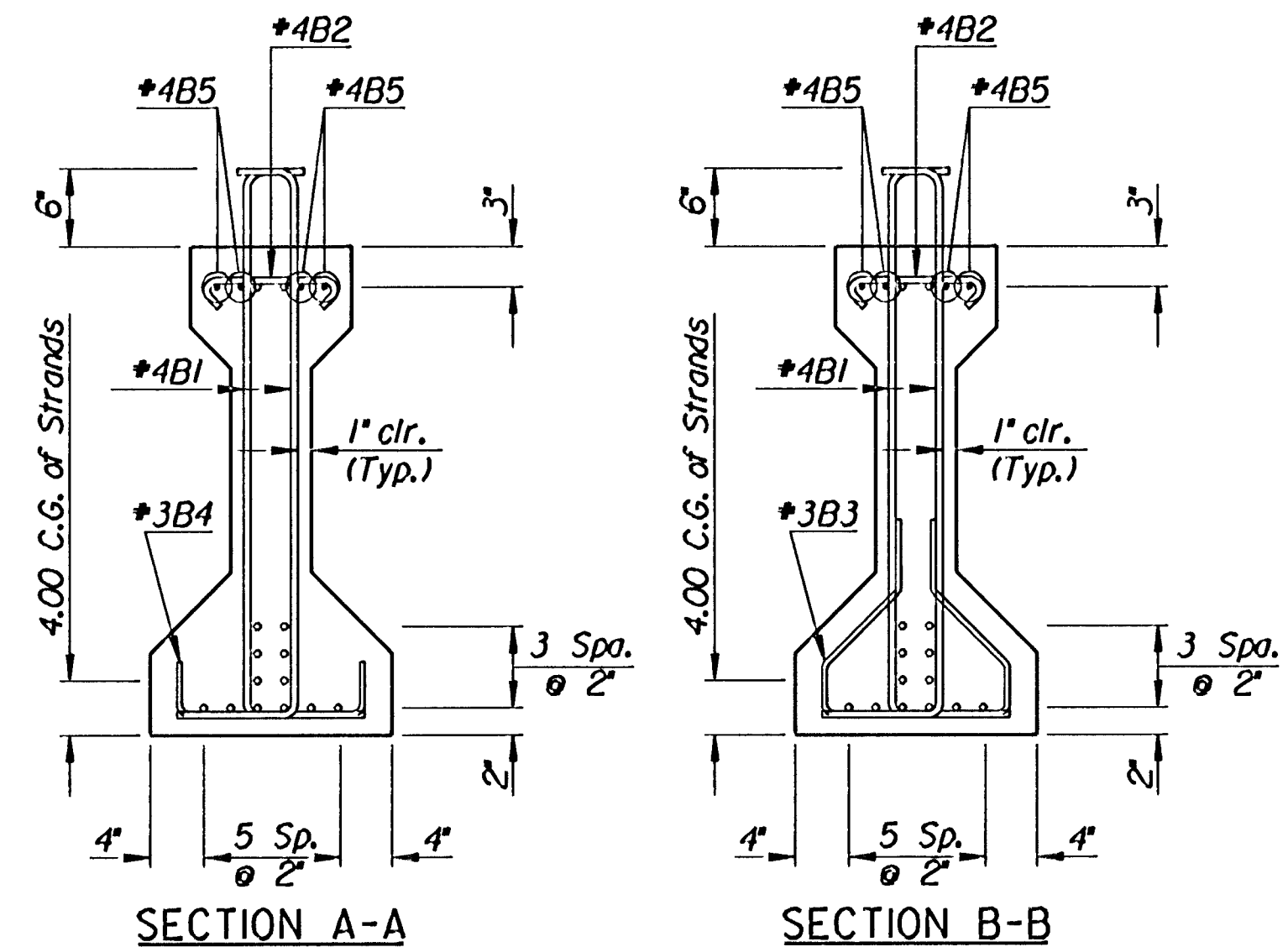
BEAM END AT PIER 1 or 4

Note:
Extended Strands shall be bent on a 3" diameter pin. Strands not extended shall be cut flush with end of beam.



TYPICAL SECTION

Note: Top two strands to be stressed to 3,000 lbs. only



Note:

Reinforcing Steel shall be Grade 60 unless otherwise designated in the Bar List.

There shall be 4 strands extended 2'-6" from the bottom end of all beams. Two additional strands shall be extended from the top of the beams. See Typical Section for strand extension location. Exterior Pier Beams shall have extended strands bent to adhere to diaphragm clearance.

Ends of Prestressed Beams shall be traeted with an approved sealer prior to diaphragm construction.

Revisions		By	Date
No.			
CITY OF WICHITA, KANSAS JAMES L. ARMOUR, P.E.-ACTING CITY ENGINEER MURDOCK BRIDGE OVER LITTLE ARKANSAS RIVER K2 BEAM DETAILS SPAN NO. 2 AND 4 CITY OF WICHITA PROJECT NO. 472-83895			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	R.A.S.	Checked by	M.S.N.
Drawn by	W.L.L.	Date	Oct. 2003
		Job No.	96940-2