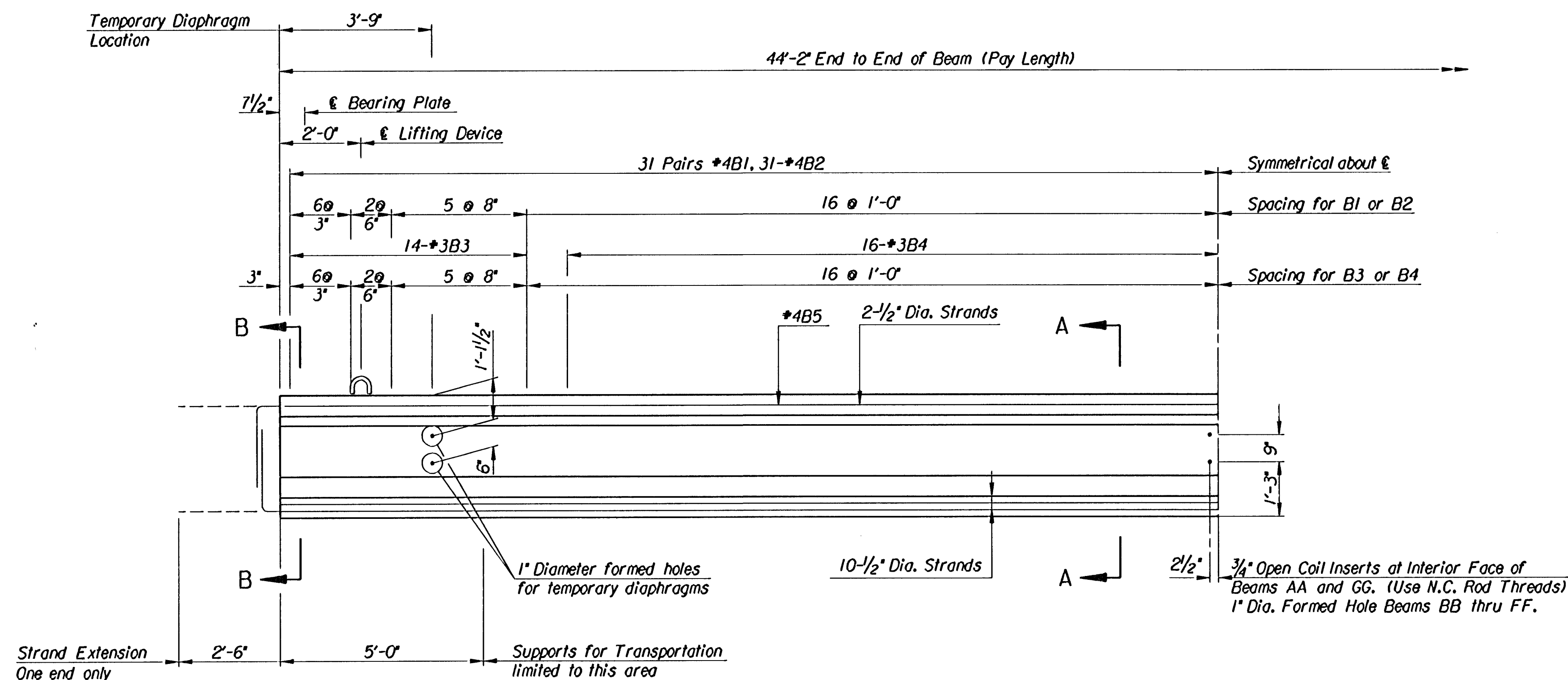
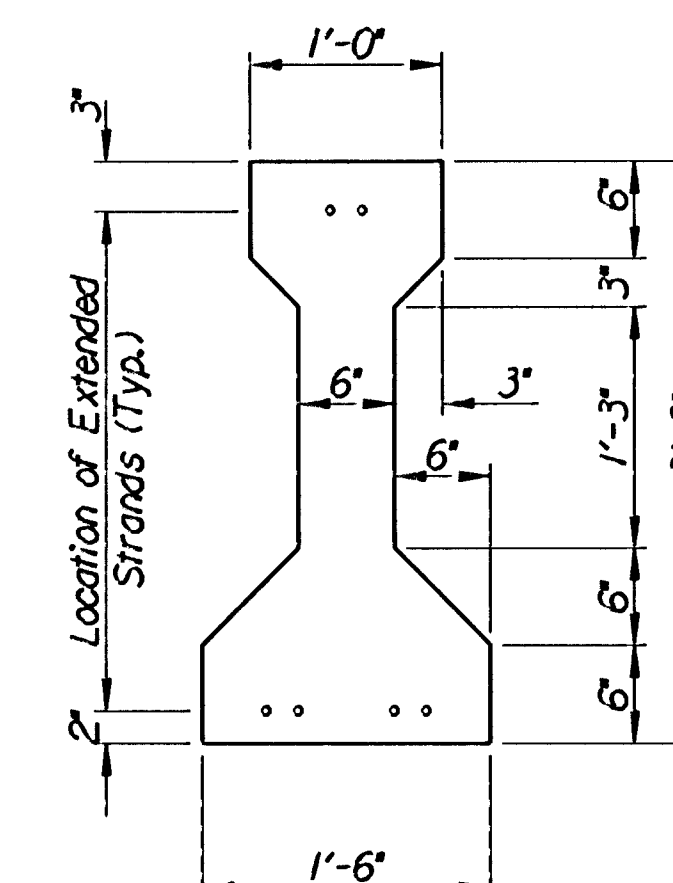
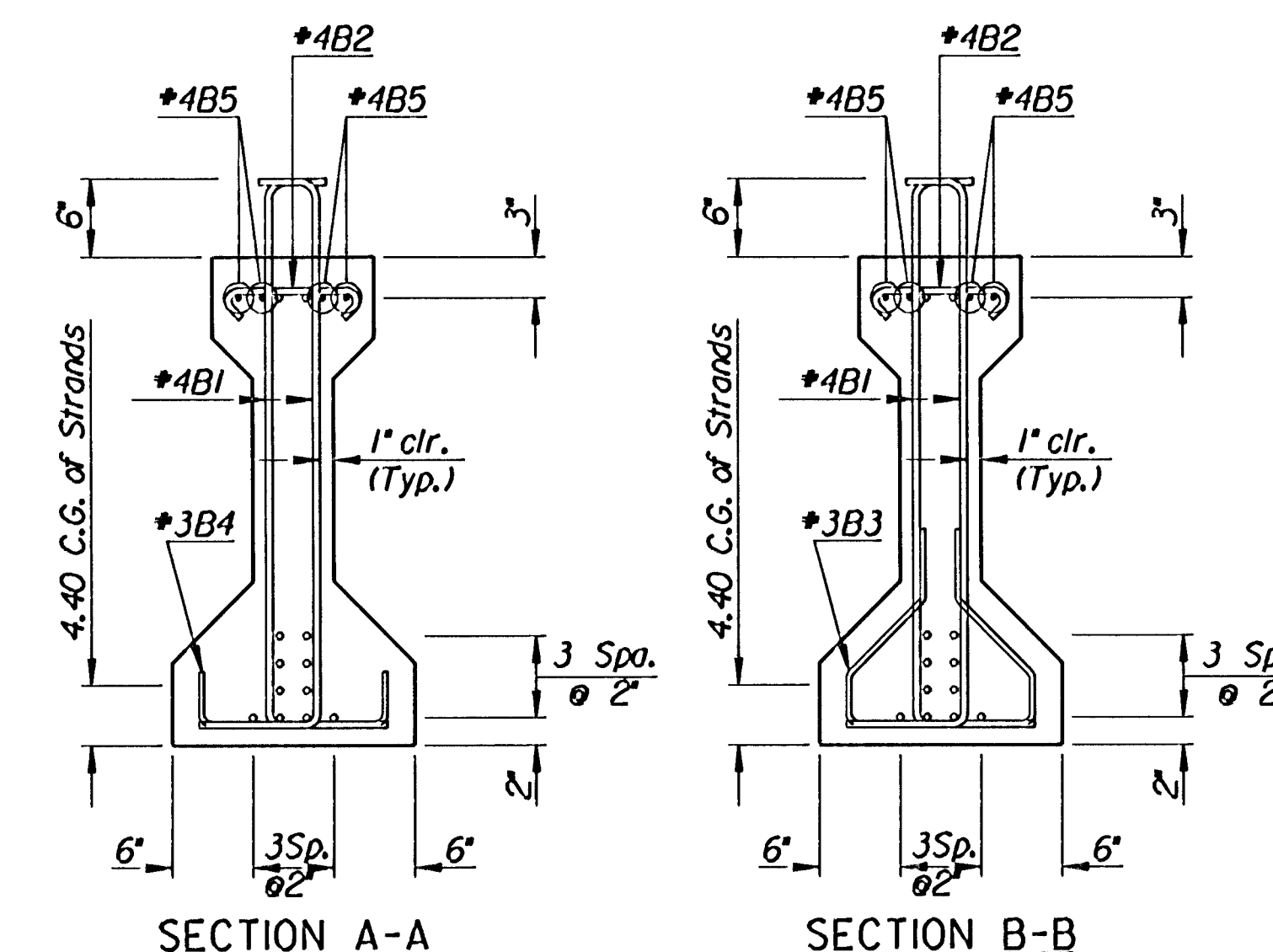




ELEVATION OF PRESTRESSED CONCRETE BEAM
(4'-2" Beam)
14 Rad.-8.5 Tons/Beam



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



SECTION A-A

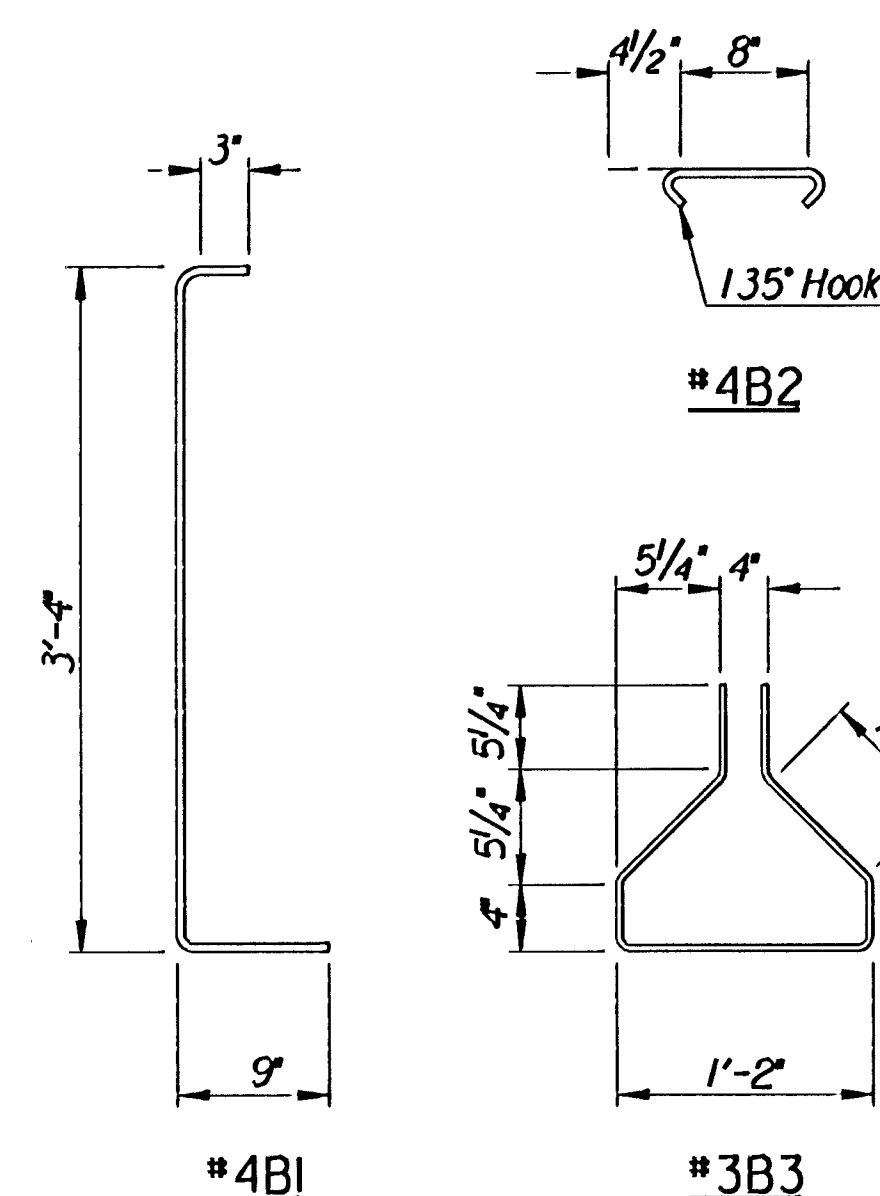
SECTION B-B

REINFORCING STEEL			
Mark	No.	Size	Length
44'-2" Beam-1 Listed-14 Rqd.			
STRAIGHT BARS			
B5	8	#4	22'-8"
BENT BARS			
B1	122	#4	4'-4"
*B2	61	#4	1'-5"
*B3	28	#3	4'-0"
*B4	31	#3	1'-10"

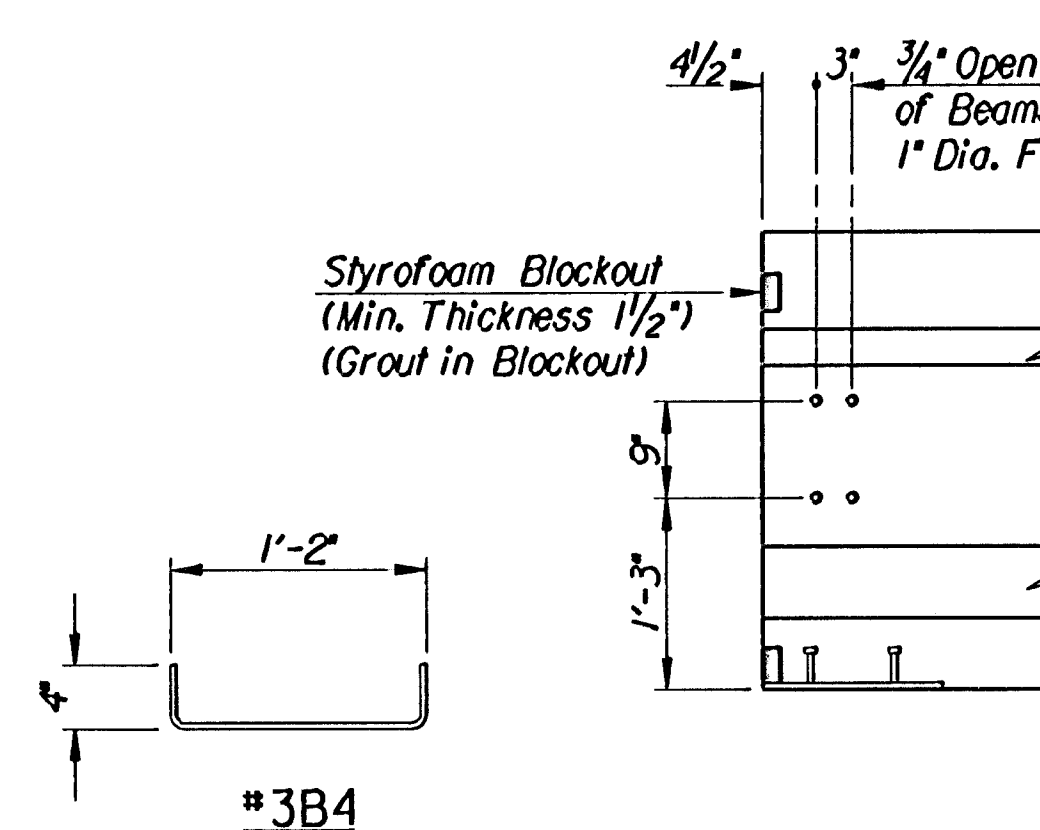
* Grade 40 may be substituted.

SUMMARY OF QUANTITIES			
Item	Unit	Total	
Prestressed Concrete Beams (K2 - 44'-2" Beam)	Lin. Ft.	618.33	
The following Quantities are given for Information Only (Total for 14 Beams)			
Concrete in Beams (f'c = 6,000 p.s.i.)	Cu. Yds.	58.7	
Prestressing Steel A416 1/2" Dia. (Low Relaxation)	Lin. Ft.	7,840.0	
Reinforcing Steel (Grade 60) (Epoxy Coated)	Lbs.	8,334	
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) (1/2"x15"x1'-4")	Each	28	

6.0M Designates 6000 Lbs. Load in Tension.

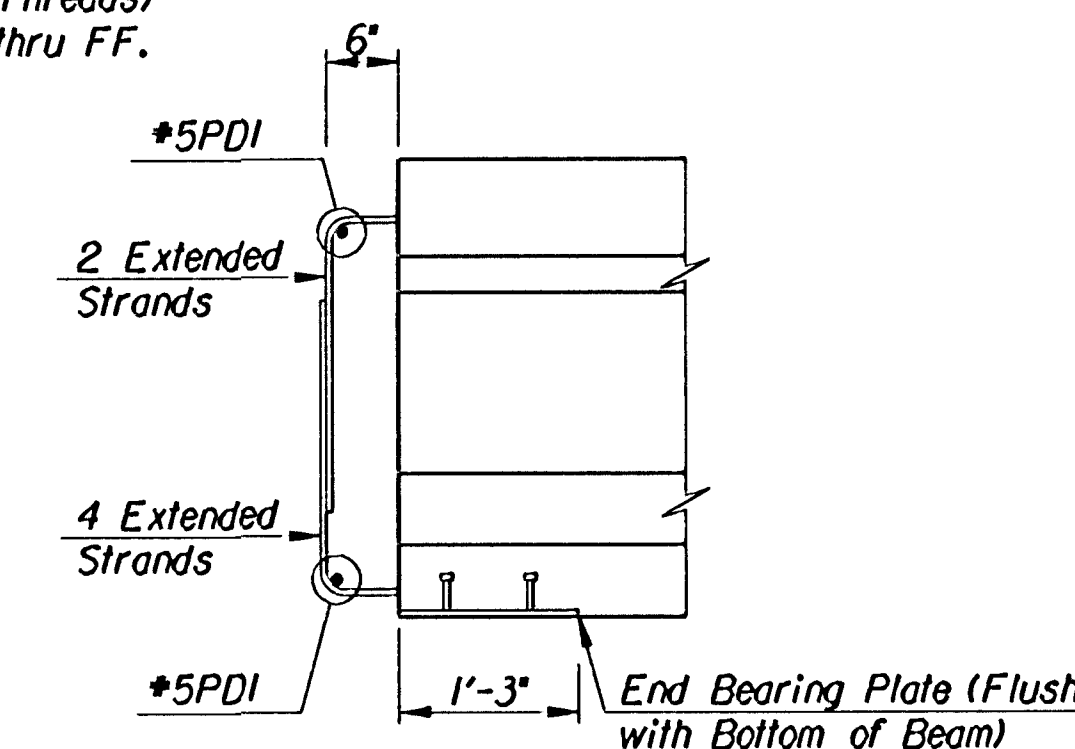


BENDING DIAGRAMS
Dimensions are out to out of bars.



BEAM END AT ABUTMENTS

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.

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 treated with an approved sealer prior to diaphragm construction.

I			
No.	Revisions	By	Date

CITY OF WICHITA, KANSAS
JAMES L. ARMOUR, P.E.-ACTING CITY ENGINEER
MURDOCK BRIDGE
OVER LITTLE ARKANSAS RIVER
K2 BEAM DETAILS SPAN NO. 1 AND 5

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.J.L.	Date	Oct. 2003
		Job No.	96340-