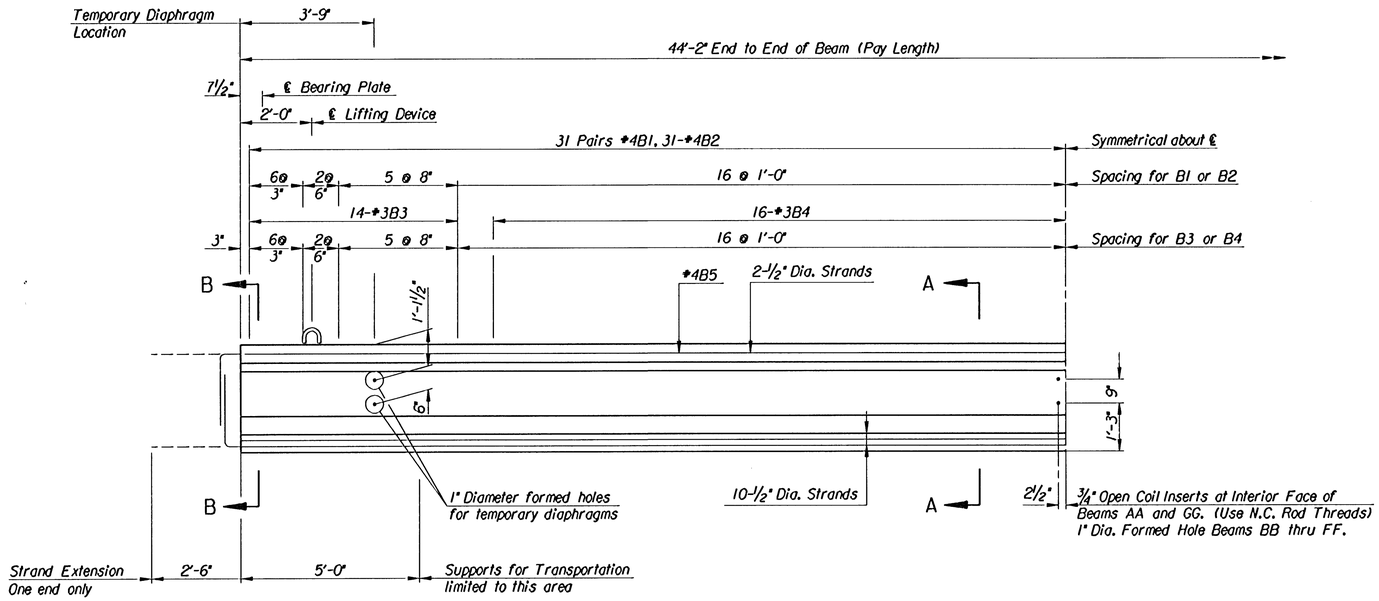
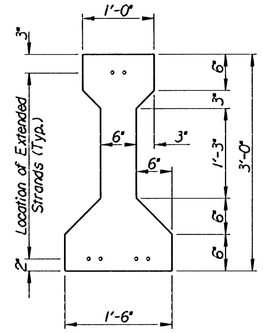
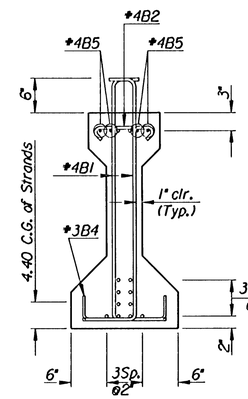
SHEET NO.	TOTAL SHEETS
20	50



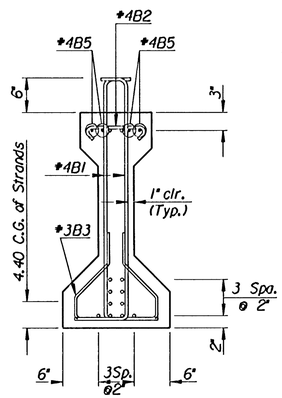
ELEVATION OF PRESTRESSED CONCRETE BEAM
(44'-2" Beam)
14 Req'd.-8.5 Tons/Beam



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



SECTION A-A



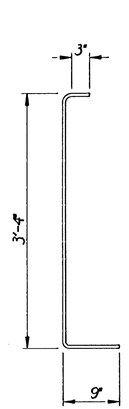
SECTION B-B

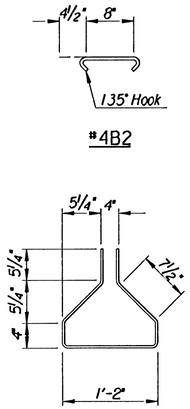
REINFORCING STEEL			
Mark	No.	Size	Length
44'-2" Beam-1 Listed-14 Req'd.			
STRAIGHT BARS			
B5	8	#4	22'-8"
BENT BARS			
B1	122	#4	4'-4"
* B2	61	#4	1'-5"
* B3	28	#3	4'-0"
* B4	31	#3	1'-10"

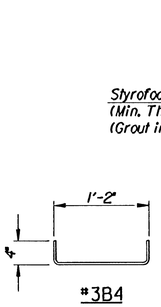
* Grade 40 may be substituted.

SUMMARY OF QUANTITIES			
	Item	Unit	Total
	Prestressed Concrete Beams (K2 - 44'-2" Beam)	Lin. Ft.	618.33
Subsidiary to Prestressed Concrete Beams (K2)	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 ½" 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
	¾" Open Coil Insert 6.0M (Coil Thread)	Each	32
	¾" Threaded Coil Rods x 1'-6"	Each	32
	End Bearing Plates (Galvanized) (11/2"x15"x1'-4")	Each	28

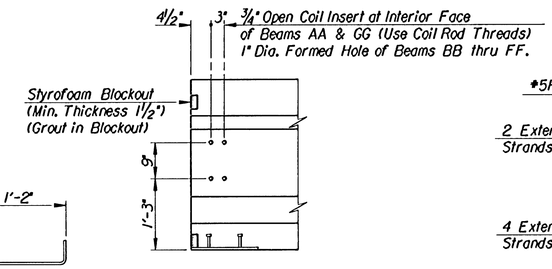
6.0M Designates 6000 Lbs. Load in Tension.



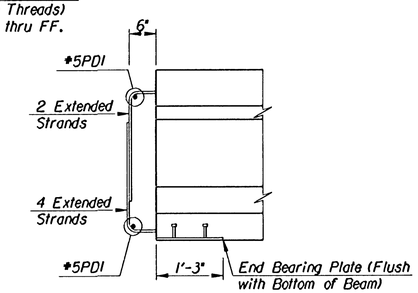




BENDING DIAGRAMS
Dimensions are out to out of bars.



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.

No.	Revisions	By	Date
1			

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.L.L.	Date	Oct. 2003	Job No. 96940-2

drawn by: wll
plotted by: ras 1-27-2004
I:/1996/96940.002/officecheck/K2span1