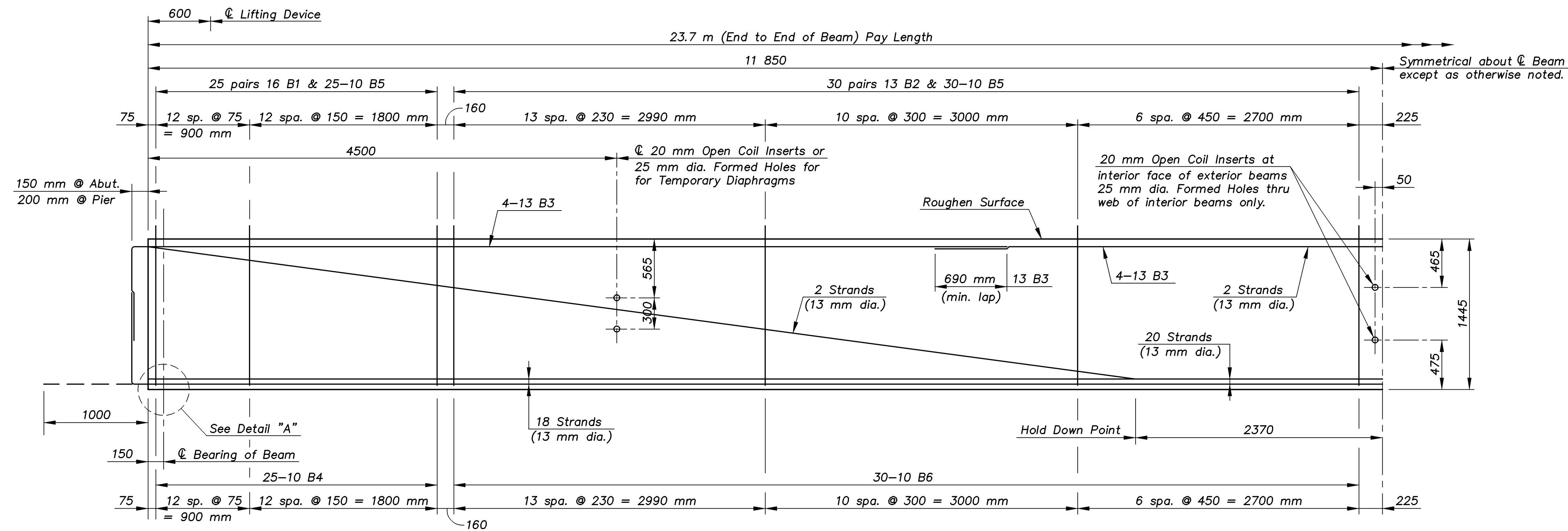


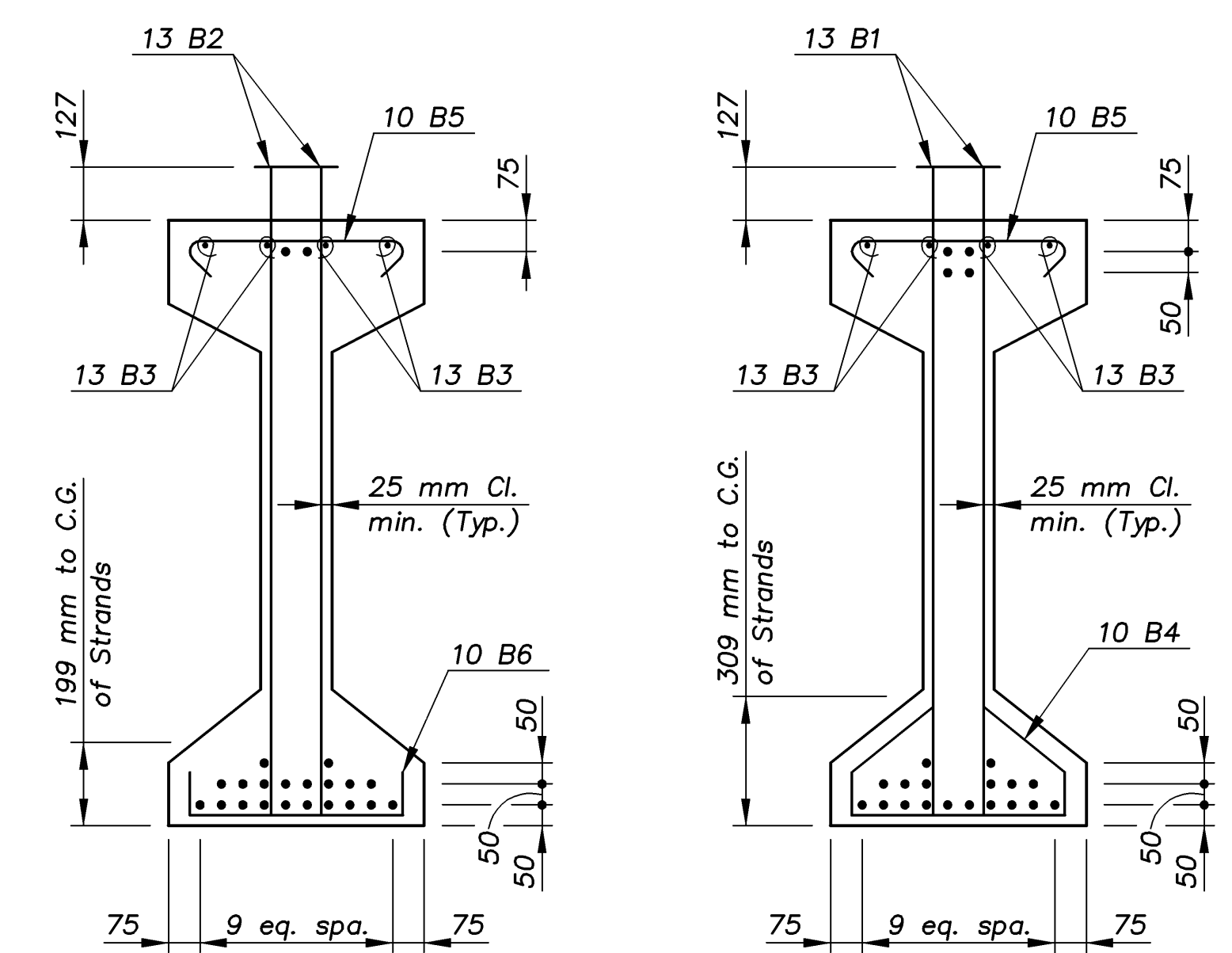
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	54-87 K-8258-08	2005	105	223

E.F. INDICATES EACH FACE.  
N.F. INDICATES NEAR FACE.  
F.F. INDICATES FAR FACE.

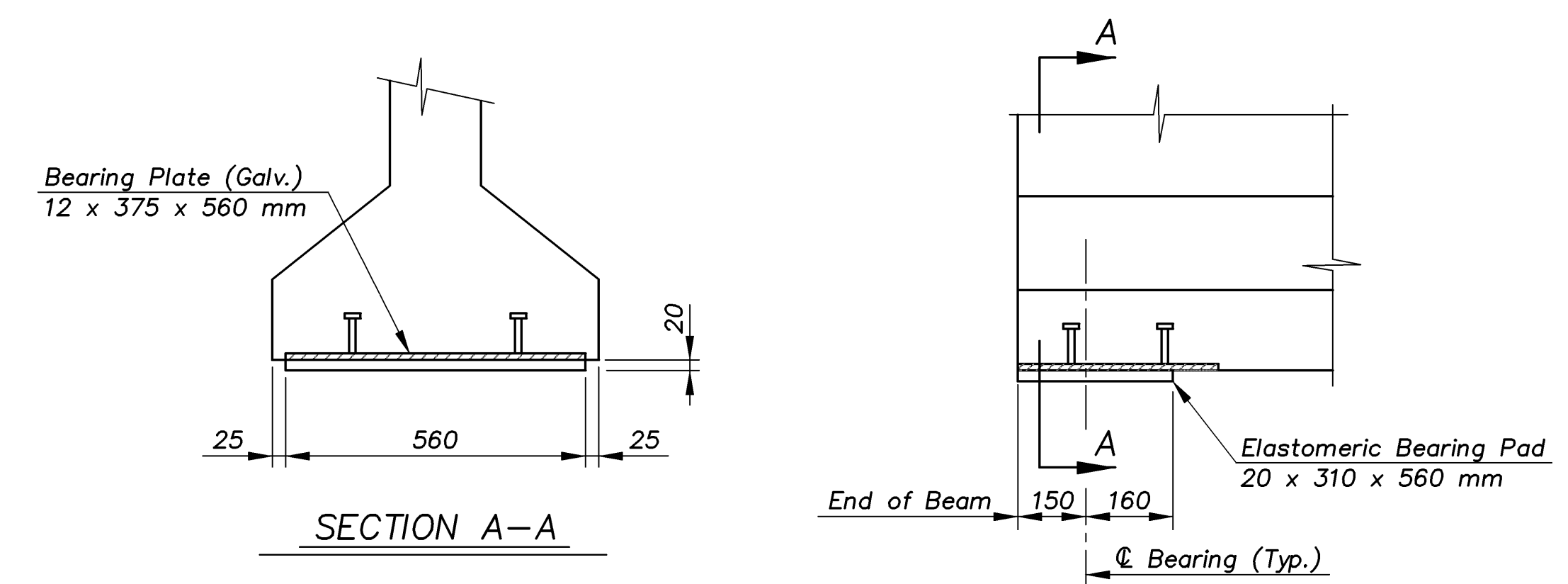


TYPICAL BEAM ELEVATION (K4+75 mm)

NOTE: Force per Strand (Vertical Uplift) = 17.76 kN  
Total Uplift for 2 Strands = 35.52 kN



NEAR MID-POINT AT THE ENDS  
BEAM SECTION SHOWING REINFORCEMENT



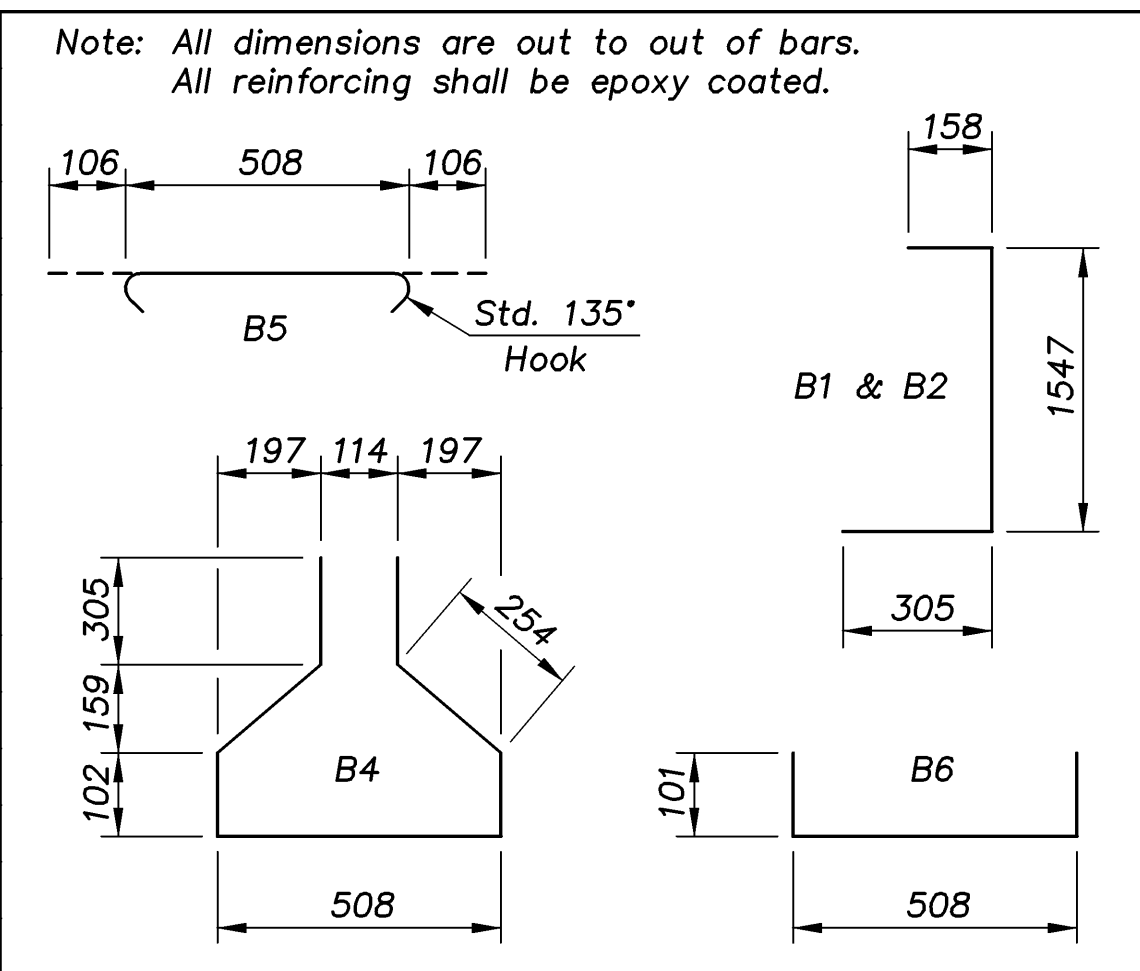
SECTION A-A

DETAIL "A"

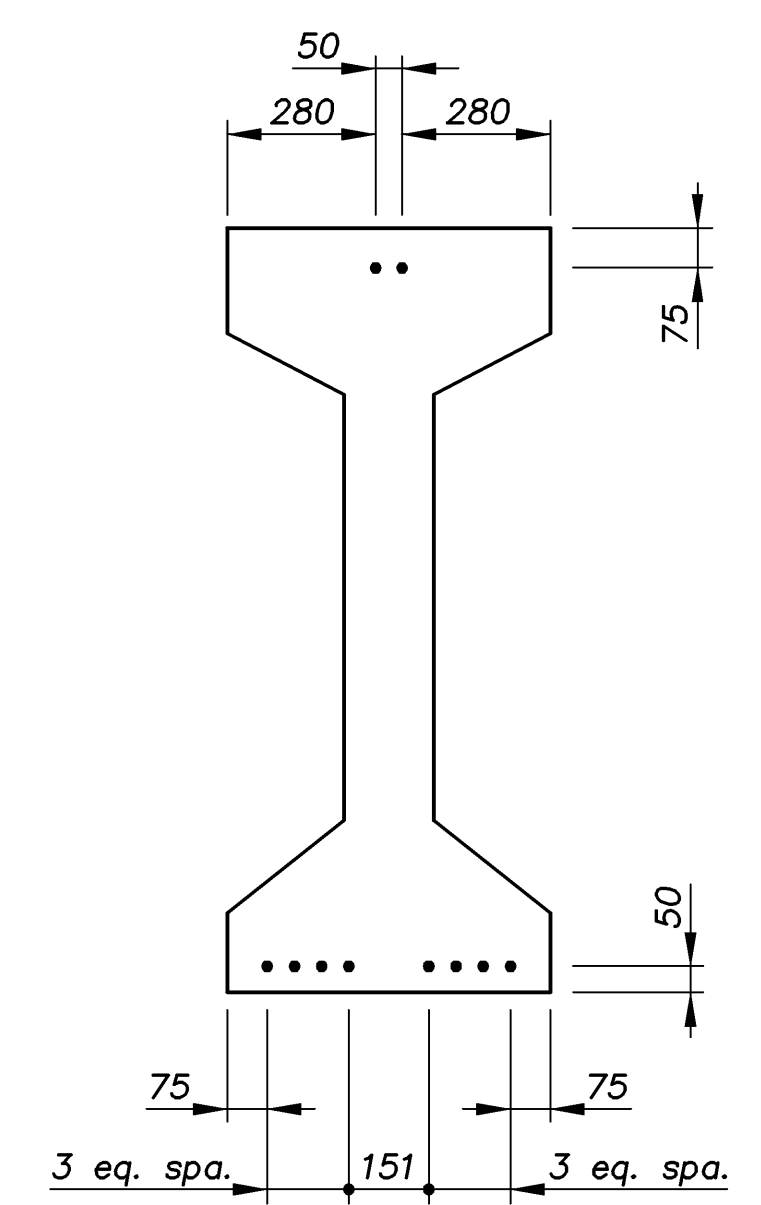
\* 8 each exterior beam only.  
\*\* 4 each exterior beam only.

NOTE: During transportation only, beams may be supported on bearing points a maximum of 2370 mm from the beam ends. The fabricator shall show the proposed support location on the the shop drawings. See General Notes on the "Standard P.C. Beam Details" sheet.

BILL OF REINFORCING STEEL							
23.7 m BEAM (1 Listed-10 Required each Bridge)							
STRAIGHT BARS				BENT BARS			
MARK	SIZE	NO.	LENGTH	MARK	SIZE	NO.	LENGTH
B3	13	12	8360	B1	16	100	2010
				B2	13	120	2010
				B4	10	50	1830
				B5	10	110	720
				B6	10	60	710



BILL OF MATERIAL			
ITEM	UNIT	W.B. Bridge 54-87-31.55(704)	E.B. Bridge 54-87-31.56(705)
23.7 m Prestressed Concrete Beams (K4+75 mm)	m	237.0	237.0
The following quantities are given for information only and shall not be paid for directly but shall be considered subsidiary to the bid item "Prestressed Concrete Beams".			
Beam Concrete ( $f_c = 35$ MPa), (per beam)	$m^3$	11.0	11.0
Approximate weight of beam	kg	26 354	26 354
13 mm nominal diameter Prestressed Strands (1860 MPa low relaxation), (per beam)	m	541.710	541.710
Reinforcing Steel Grade 420 (Epoxy Coated), ( $f_y = 420$ MPa), (per beam)	kg	770	770
Elastomeric Bearing Pads (20 x 310 x 560 mm)	Each	20	20
Bearing Plates (12 x 375 x 560 mm)	Each	20	20
20 mm Open Coil Inserts	Each	16 *	16 *
20 mm dia. x 460 mm Threaded Coil Rods	Each	8 **	8 **
Lifting Devices	Each	20	20



STRAND EXTENSION DETAIL

Extend 10 Strands beyond the ends of the Beams as shown. Strands not shown shall be cut flush with the ends of the Beams.

EASTERN/PCB-DETAILS 1:100

KANSAS DEPARTMENT OF TRANSPORTATION  
BR. NO. 54-87-31.55(704) W.B. STA. 4+575.138  
BR. NO. 54-87-31.56(705) E.B.

**23.7 m P.C. BEAM DETAILS**

KELLOGG AVENUE OVER EASTERN

Proj. No. 54-87 K-8258-08 SEDGWICK COUNTY

**CFS**  
Cook, Flatt & Strobel  
ENGINEERS, P. A.

DESIGNED	R.S.C.	SCALE	Varies
DETAILED	T.R.G.	DATE	
QUANTITIES	T.R.G.	SHEET	27 OF 47