

DAKB 574005



The drawing consists of two parts: a cross-section on the left and a plan view on the right.

Cross-section (Left): Shows a vertical slab with a total height of 6' 4". The top reinforcement is labeled $L's 2\phi 5 \times 8 \times 0' 9"$. The bottom reinforcement consists of four bars with horizontal spacing of 2", 4", 4", and 2". A dimension of 3'-4" is shown for the width of the slab at the base.

Plan View (Right): Shows the top of the slab with a width of 3'-4". It indicates the center of the slab is aligned with the projecting bars. The drawing shows a series of parallel bars with arrows pointing towards the center, indicating the direction of the reinforcement.

CONNECTION DETAIL AT FIXED PIERS

Note: Angles may be rotated for welding. Angles and welding shall be subsidiary to bid item of Prestressed Concrete Beams

DESIGN:

ROADWAY BEAMS:

CONCRETE: F'_c

CONCRETE: f'_c 5,000 P.S.I. AT 28 DAYS
 f'_{ci} - 4,350 P.S.I. (MINIMUM RELEASE
 STRENGTH)

SIDEWALK BEAMS:

CONCRETE: F'_c 6,000 P.S.I. AT 28 DAYS
 F'_{ci} - 4,700 P.S.I. (MINIMUM RELEASE
 STRENGTH)

PRESTRESSING STEEL:

PROTECTING STRIP:
 1/2" NOMINAL DIAMETER 7-WIRE HIGH TENSILE TYPE, UNCOATED,
 STRESS RELIEVED STRANDS HAVING THE FOLLOWING PROPERTIES:
 MINIMUM ULTIMATE STRENGTH --- 268,000 P.S.I.,
 INITIAL STRESS --- 187,600 P.S.I.,
 INITIAL TENSION PER STRAND --- 28,910 LBS.

ALL DIMENSIONS SHOWN RELATIVE TO PLACEMENT OF REINFORCING STEEL ARE TO CENTERLINE OF BARS OR STRANDS UNLESS OTHERWISE NOTED.

PRECAST BEAMS SHALL AT ALL TIMES BE HANDLED AND TRANSPORTED IN AN UPRIGHT POSITION AND POINTS OF SUPPORT SHALL BE APPROXIMATELY THE SAME DURING TRANSPORTATION AND STORAGE AS WHEN THE BEAM IS IN ITS FINAL POSITION.

SEE SHEET 17 FOR BEAM ERECTION NOTES.

SEE SHEET 22 FOR BAR LIST AND BENDING DIAGRAMS.

CITY OF WICHITA, KANSAS
R.W. LINN, P.E., CITY ENGINEER

FIRST STREET BRIDGE OVER
THE ARKANSAS RIVER

PRESTRESSED BEAM DETAILS

DELAMATER, FREUND & SCHERER, P.A.
CONSULTING ENGINEERS
WICHITA, KANSAS

SCALE _____	DATE <i>June, 1974</i>	DWG. NO. 89-G-16
-------------	------------------------	------------------