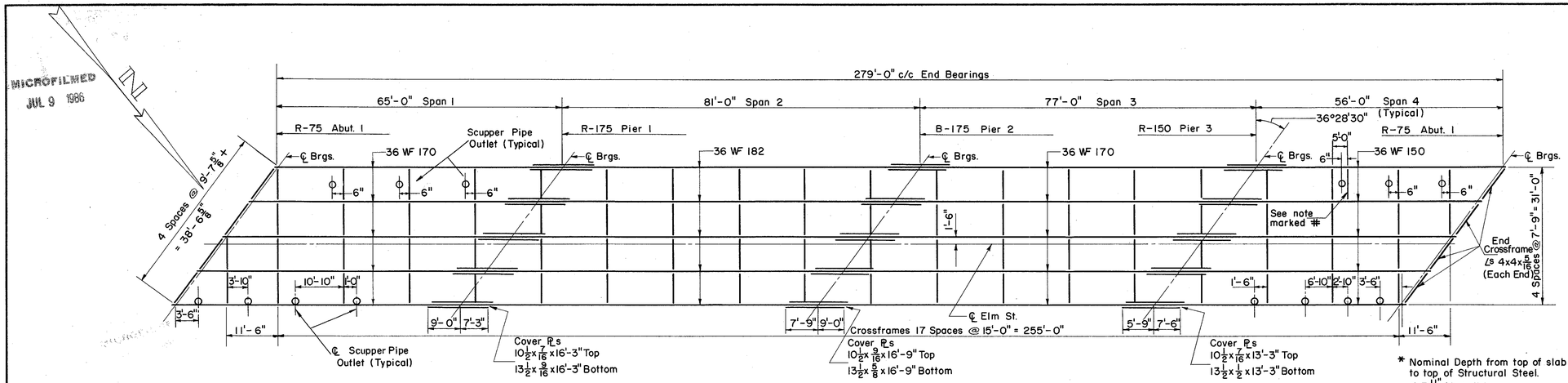
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

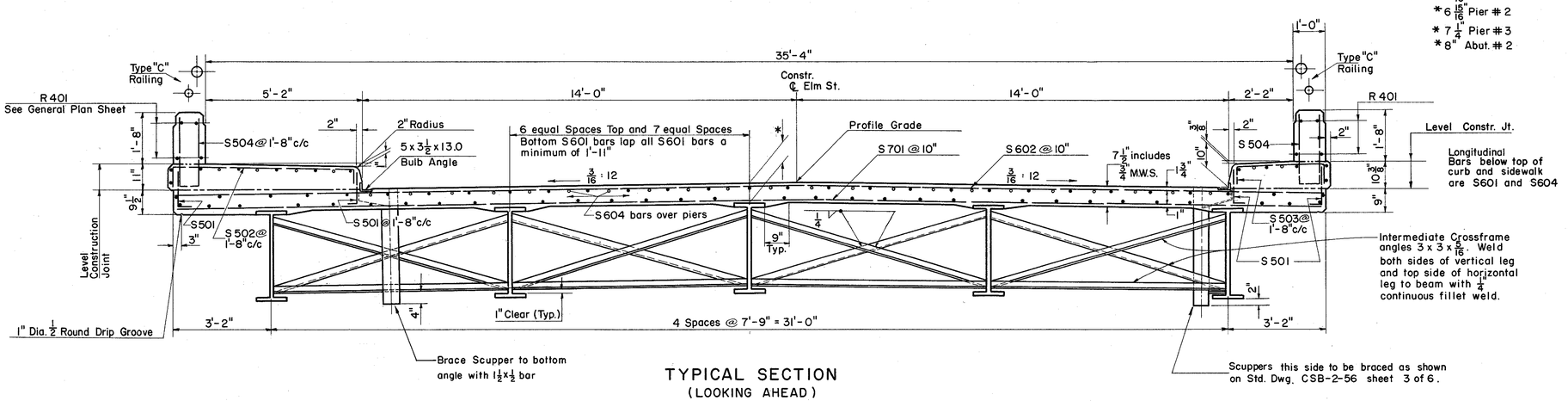
352
384

LAKE COUNTY
SEC. LAK-2-14.22

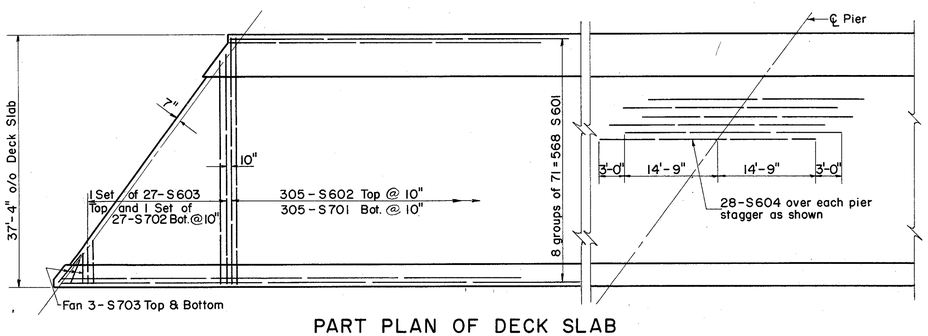


STEEL FRAMING PLAN

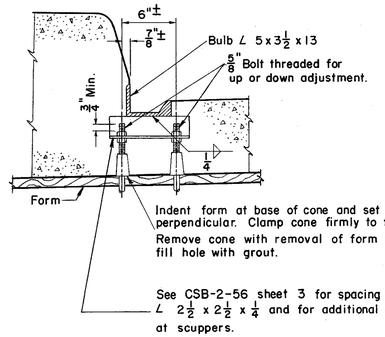
* Nominal Depth from top of slab to top of Structural Steel.
- * 7 11/16" Abut. # 1
- * 7 1/16" Pier # 1
- * 6 15/16" Pier # 2
- * 7 1/8" Pier # 3
- * 8" Abut. # 2



TYPICAL SECTION
(LOOKING AHEAD)



PART PLAN OF DECK SLAB



GUTTER SUPPORT DETAIL
ADJACENT TO SIDEWALK

REFERENCE shall be made to Standard Drawing CSB-2-56, sheets 2 & 3 of 6, revised 2-2-59 for details of end dams, gutters, scuppers, pipe drains and curb plates.

REFERENCE shall be made to Standard Drawing RB-1-55 revised 2-2-59 for details of rockers and bolsters.

REFERENCE shall be made to Standard Drawing AR-1-57 revised 2-2-59 for details of aluminum railing Type C" and concrete parapet details.

WELDING of structural steel shall be Class "A" except as otherwise shown. Welds shown as field welds may, at the option of the Contractor, be made in the shop.

DECK SLAB DEPTH: *This is the nominal dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections, between transverse construction joints which are parallel to transverse reinforcing steel and are located near the center of any span.

BEAM SPLICE WELDING PROCEDURE:
1. Raise end of beam at Pier No. 1 2 - 2 5/8".
2. Butt-weld beam flanges and web at Pier No. 1 using the following sequence: make two passes on each flange, then two on the web; repeat, using one pass at each location, until welds are completed.
3. Weld top and bottom flange moment plates at Pier No. 1.
4. Lower end of beam at Pier No. 2.
5. Make splices at Piers No. 2 & 3 in the same manner, raising the ends of the beams 2 3/8" at Pier No. 3 and 15/16" at Abutment No. 2.

CONCRETE shall be Class "C".

CONCRETE and reinforcing steel above parapet construction joint included with railing for payment.

For beam splice details see Approach Slab sheet.

⋕ Provide one angle 3 x 3 x 5/16 to brace scupper as shown on "Typical Section" this sheet.

DEFLECTION AND CAMBER

	SPAN 1	SPAN 2	SPAN 3	SPAN 4
Deflection due to weight of steel	1/16"	1/8"	1/16"	0
Deflection due to remaining D.L.	11/16"	13/16"	3/4"	3/8"
Convexity of Vertical Curve	1/4"	3/8"	3/8"	3/16"
Total	1"	1 5/16"	1 3/16"	9/16"
Camber required	1"	1 5/16"	1 3/16"	0

PREPARED BY
CAPITOL ENGINEERING ASSOCIATES, DILLSBURG, PA.
FOR
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

STEEL FRAMING
BRIDGE NO. LAK-2-1593
S.R. 2 UNDER ELM STREET.
LAKE COUNTY
STA. 741 + 03.27

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
J.E.G. DAT	CWB by DRT	J.W.B.	SMM by DRT		