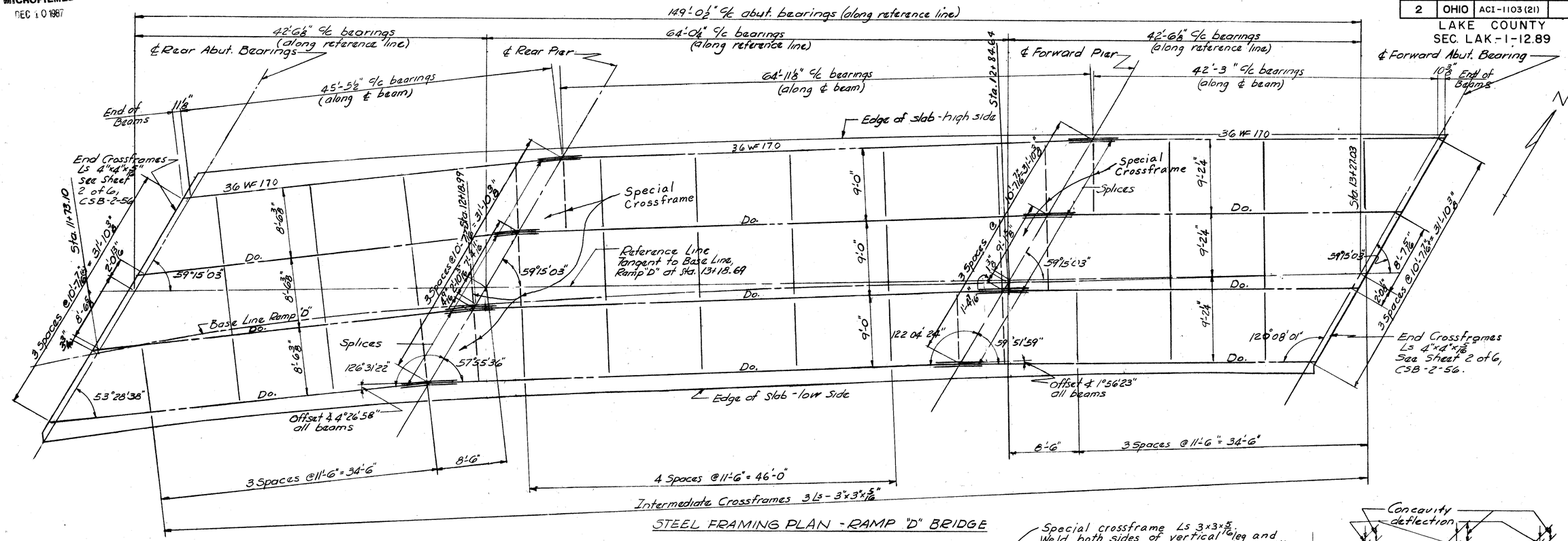
MICROFILMED
DEC 10 1987

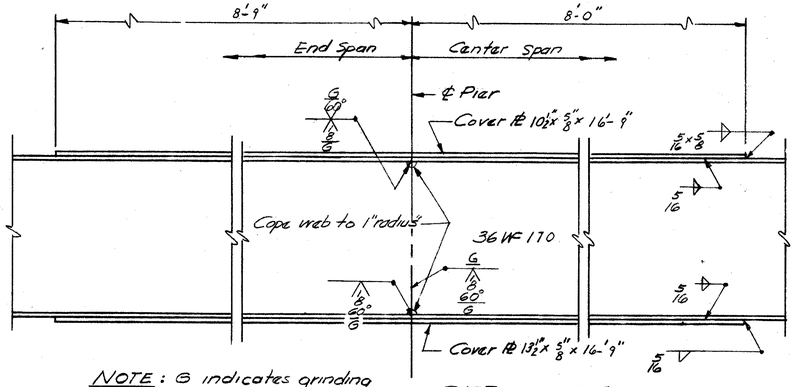
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	ACI-1103(21)	

437
488

LAKE COUNTY
SEC. LAK-1-12.89



STEEL FRAMING PLAN - RAMP "D" BRIDGE

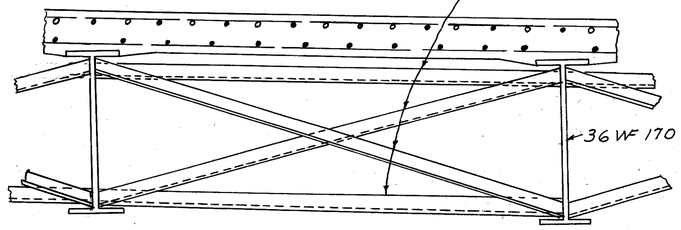


NOTE: G indicates grinding

FOR PLAN OF SPLICE DETAIL SEE SHEET NO. 436

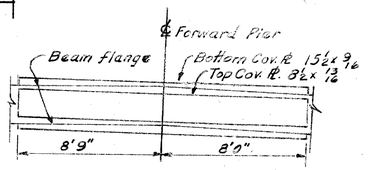
PART GIRDER ELEVATION RAMP "D" BRIDGE

NOTE: See CSB-2-56, Sheet 3 of 6 for bearing devices.

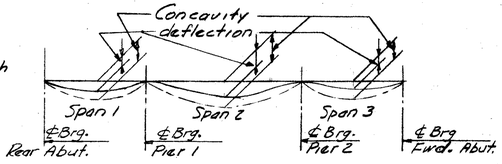


SPECIAL CROSSFRAME

NOTE: Special crossframes to be used at all beam angle points as shown by dashed lines in the STEEL FRAMING PLAN.



COVER PLATES AT FORWARD PIER
Details not shown same as Rear Pier.



CAMBER DIAGRAM

BEAM SPLICE WELDING PROCEDURE

1. Raise rear abutment ends of beams 11/16" and forward abutment ends 9/16".
2. Butt weld the beam flanges and web, using the following sequence: make one pass on each flange then one on the web; Repeat until welds are completed.
3. Weld the bottom and top moment plates.
4. Lower the beam ends to final position.

Revised 12-23-58.

DEFLECTION AND CAMBER

	North Br. Beams			South Br. Beams			Ramp "D" Br. Beams		
	Span 1	Span 2	Span 3	Span 1	Span 2	Span 3	Span 1	Span 2	Span 3
Defl. due to weight of steel.	1/32"	1/32"	1/32"	1/64"	1/16"	1/64"	1/32"	1/32"	1/32"
Defl. due to remaining Dead Load	5/32"	1/4"	5/32"	1/16"	3/8"	1/16"	5/32"	1/4"	5/32"
Concavity required for Vertical Curve	1/16"	1/8"	1/16"	1/16"	1/16"	1/16"	9/16"	1 1/4"	1/8"
Sum of deflection and Concavity	1/8"	5/32"	1/8"	1/64"	3/8"	1/64"	-3/8"	-31/32"	1/16"
Required Camber	0	0	0	0	0	0	0	0	0

* Deflections & Camber shown above are for Int. & Ext. beams.

SEC. C-32 FED. AID PROJ. NO. ACI-1103(21)

PREPARED BY
CAPITOL ENGINEERING ASSOCIATES, DILLSBURG, PA.
FOR
STATE OF OHIO
DEPARTMENT OF HIGHWAYS

STEEL FRAMING
BRIDGE NO. LAK-1-1389
S.R.1 OVER AUBURN ROAD (RAMP D)
LAKE COUNTY
STA. 380+38.95

DESIGNED	DRAWN	TRACED	CHECKED	REVISED DATE	REVISED
SMcK	CEB		JMM	12-23-58	3-6-58

17