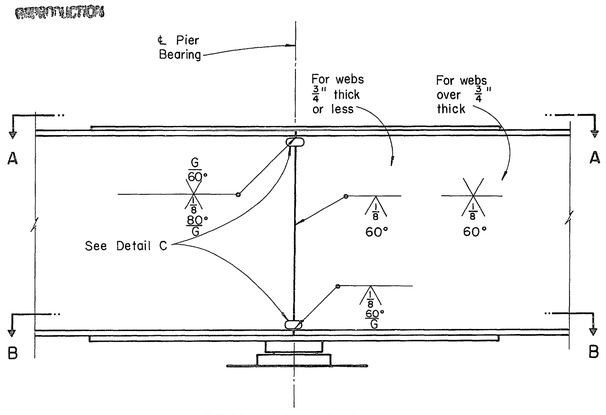
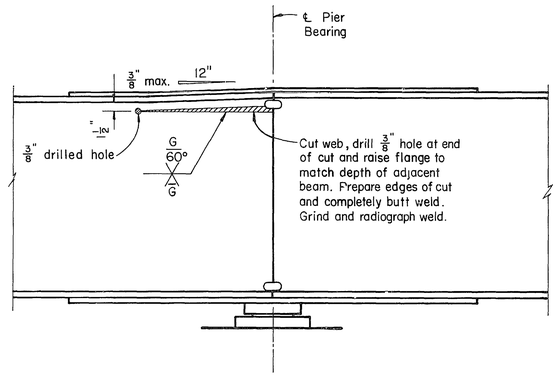
MICROFILMED
MAR 09 1982
CONSTRUCTION



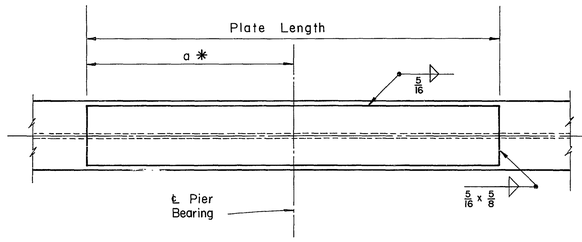
BEAM SPLICE DETAIL A

For splicing beams having depths differing by $\frac{1}{8}$" or less.



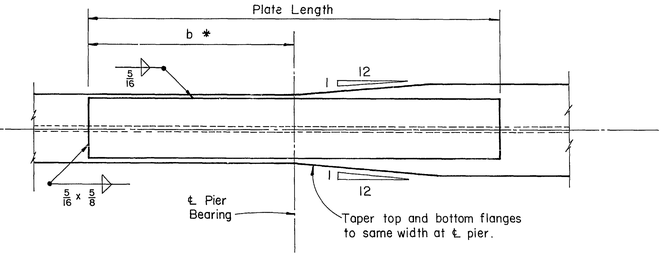
BEAM SPLICE DETAIL B

For splicing beams having depths differing by more than $\frac{1}{8}$"



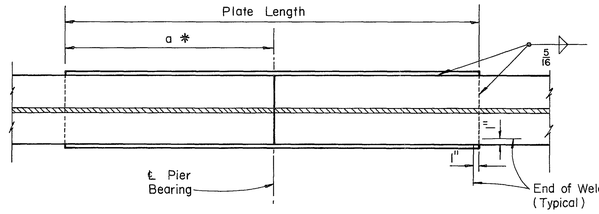
VIEW A-A

For splicing beams having the same flange width.



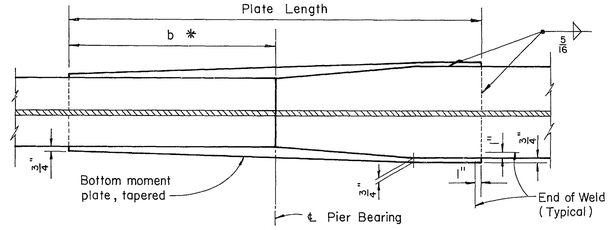
VIEW A-A

For splicing beams having different flange widths.



SECTION B-B

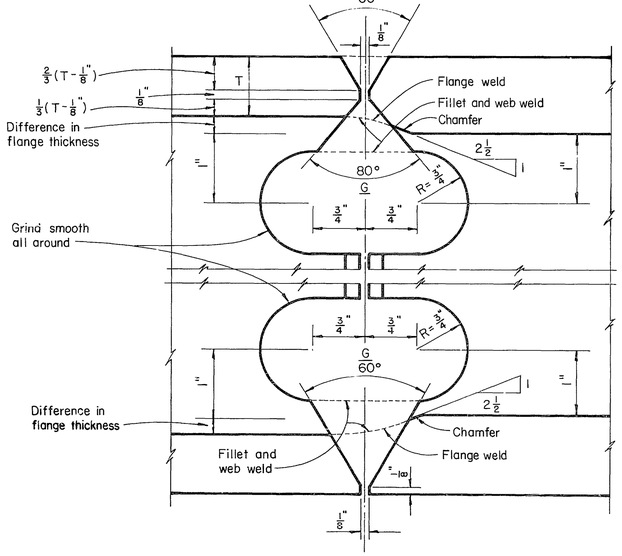
For splicing beams having the same flange width.



SECTION B-B

For splicing beams having different flange widths.

* See Standard Drawings or project plans for dimensions "a" and "b". Dimension "a" equals $\frac{1}{2}$ plate length unless otherwise shown, in which case the plans shall indicate the span to which dimension "a" applies.



DETAIL C

END PREPARATION OF ROLLED BEAMS FOR FIELD WELDING

BEAM SPLICE WELDING PROCEDURE: (For 3 spans)

1. Raise the abutment ends of the beams the amount tabulated on Standard Drawings or project plans.

2. Butt-weld the beam flanges and web, using the following sequence: make two passes on the web, then two on each flange; repeat, using one or two passes at each location, until welds are completed.

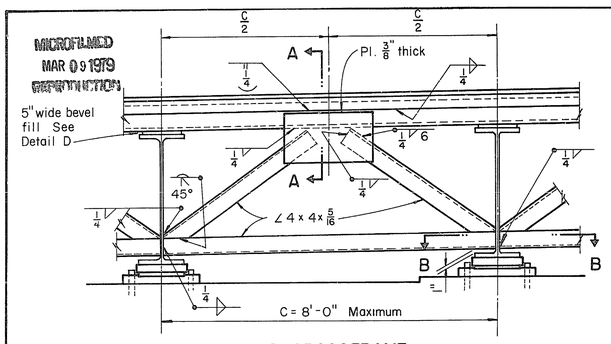
3. Weld the bottom and top moment plates.

4. Lower the beam ends to final position.

For 4 or more spans see project plans.

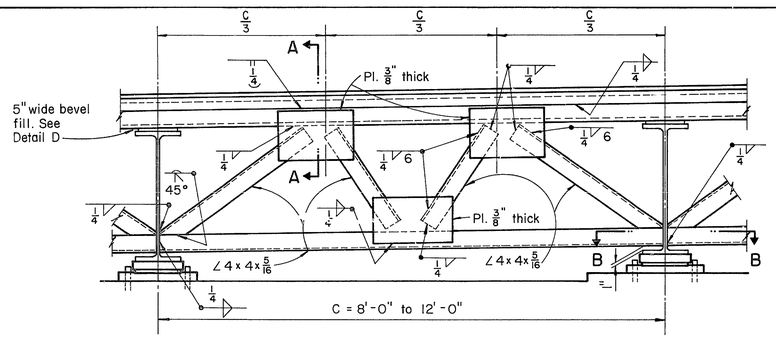
REVISIONS	STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES	
	STANDARD SUPERSTRUCTURE DETAILS FOR STEEL BEAM BRIDGES	
	APPROVED W.H. Overman DATE 11-12-63 ENGINEER OF BRIDGES	DRAWING NUMBER SD-1-63
	PREPARED: FFE TRACED: JTK CHECKED: WJJ FFE REVIEWED: BFG CDB MPB WCK HHH	SHEET NO 1 OF 4 SHEETS

MICROFILMED
MAR 09 1979
REPRODUCTION



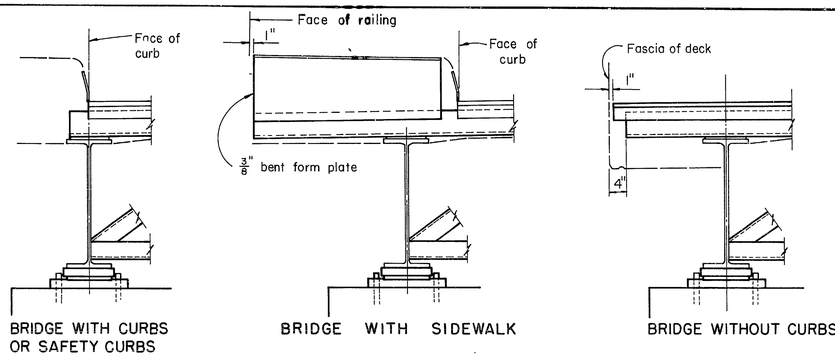
END CROSSFRAME

For beam spacing of 8'-0" or less measured parallel to end dam.



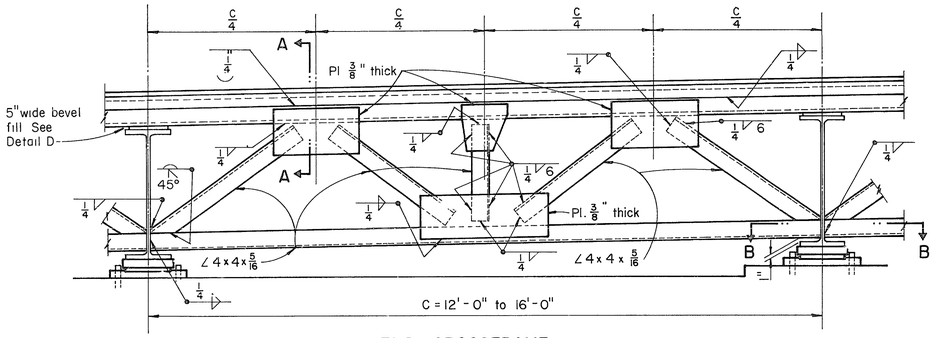
END CROSSFRAME

For beam spacing of 8'-0" to 12'-0" measured parallel to end dam.



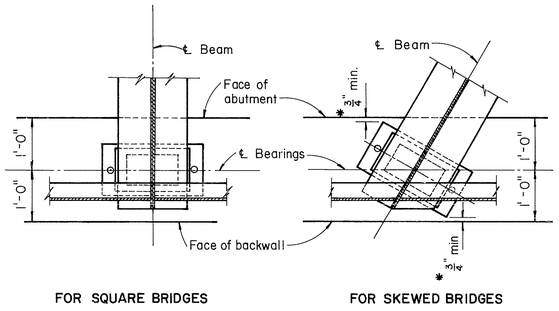
END DAM DETAILS AT FASCIA BEAM

(For additional details see Sheet No. 4)



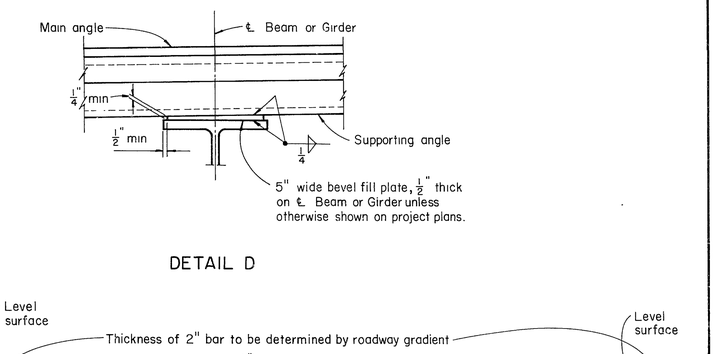
END CROSSFRAME

For beam spacing of 12'-0" to 16'-0" measured parallel to end dam.

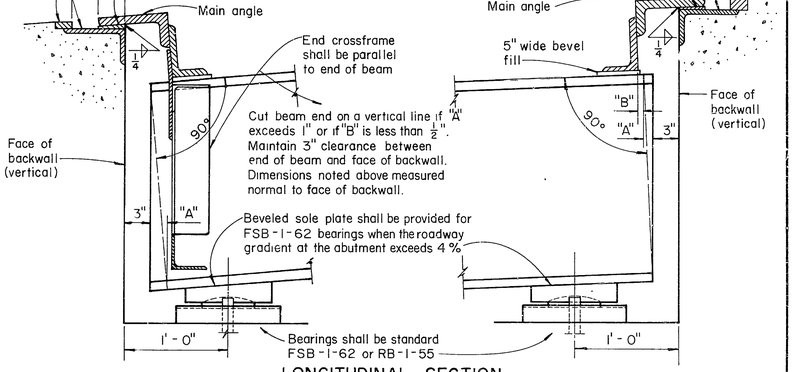


SECTION B - B

* Where necessary, cope corner of masonry plate in order to maintain 3/4" clearance.



DETAIL D

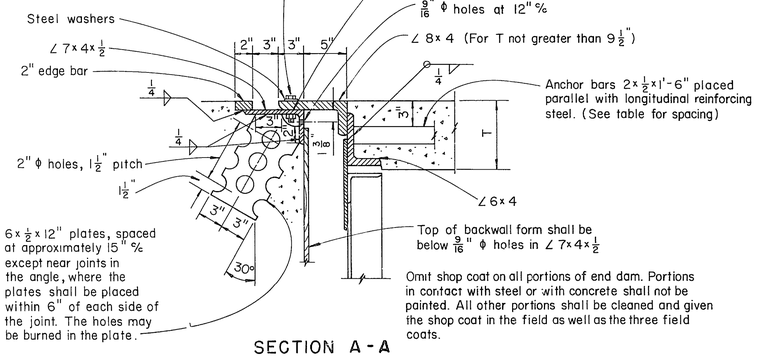


LONGITUDINAL SECTION
BRIDGE ON GRADE

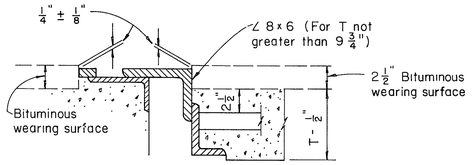
A welded butt joint in the end dam, at or near the centerline of roadway, will be required for that portion of the end dam attached to the superstructure. The portion attached to the backwall shall be placed in segments not less than 6'-0" in length, with a joint at each joint in the backwall and with one of the joints at or near the centerline of roadway. These shall be closely butted but shall not be welded.

5/8" x 2" bolts at not more than 2'-0" % with nuts tack-welded to under side of lower angle. 1 1/16" holes in upper angle. Center 5/8" bolts in 1 1/16" holes. Apply flake graphite between washers and angle. Turn bolts tight and release one-half turn. Remove bolts as soon as concrete has set, preferably within two hours after placing, to avoid damage due to temperature expansion or contraction of superstructure. Fill holes with bituminous material.

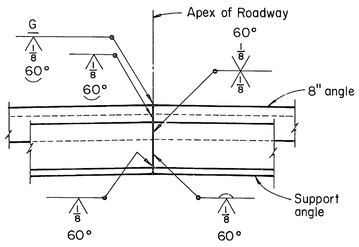
This contact surface shall not be painted and shall be lubricated with flake graphite prior to placing of backwall concrete.



SECTION A - A
SHOWING ROADWAY END DAM FOR
MONOLITHIC WEARING SURFACE



SECTION A - A
SHOWING ROADWAY END DAM FOR
BITUMINOUS WEARING SURFACE
Same as SECTION A-A for monolithic wearing surface except as shown.



WELDED BUTT JOINT IN
SUPERSTRUCTURE END DAM

ROADWAY END DAM DATA

Member	Thickness or spacing of member for load frequency of :		
	CF = 130	CF = 400	CF = 2000
Main angle: 8x4 or 8x6 ‡	3/4"	7/8"	1"
2" edge bar +			
2 x 1/2 x 1'-6" anchor bars - Spacing	18" Sp.	15" Sp.	12" Sp.
Supporting angle: 6x4	1/2"	5/8"	3/4"

‡ See Sections A-A

+ Modify thickness of bar as required for structures on grades exceeding 2%

REVISIONS

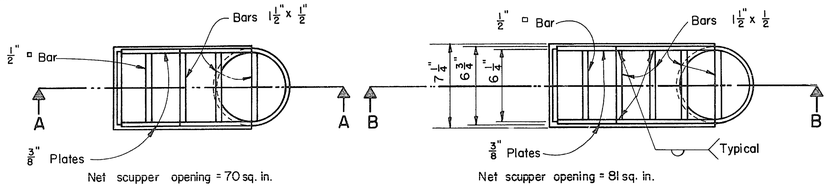
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

STANDARD
SUPERSTRUCTURE DETAILS
FOR STEEL BEAM AND GIRDER BRIDGES

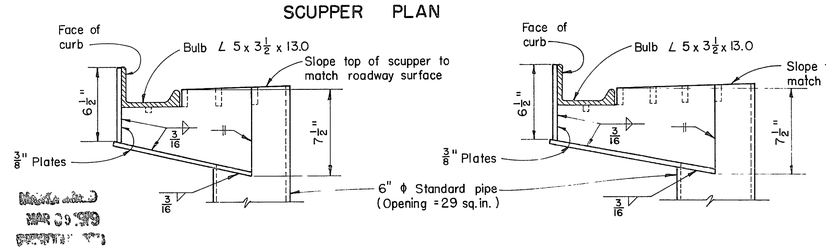
APPROVED: _____ ENGINEER OF BRIDGES
DATE: 11-12-63

DRAWING NUMBER SD-1-63

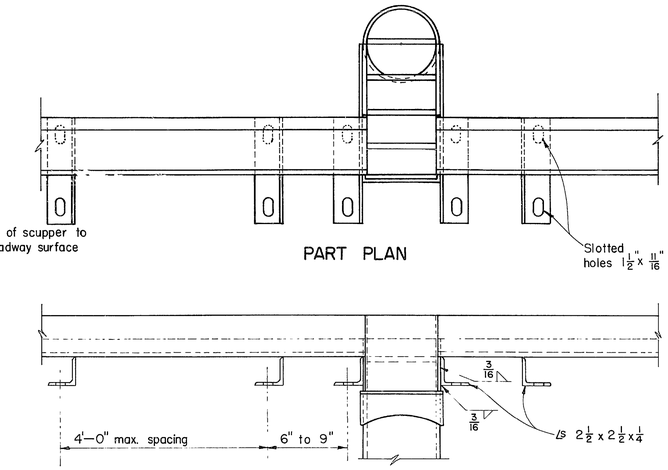
PREPARED	TRACED	CHECKED	REVIEWED	SHEET NO. 2 OF 4 SHEETS
FFE	JTK	WJJ FF	BFG CDB MPB WCK HHH	



SCUPPER PLAN



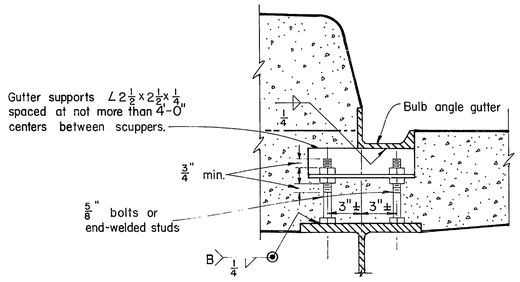
SCUPPER ELEVATION



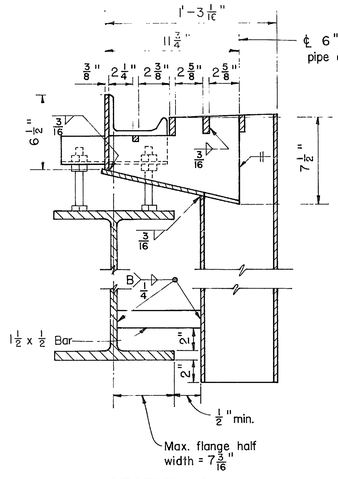
PART PLAN

ELEVATION

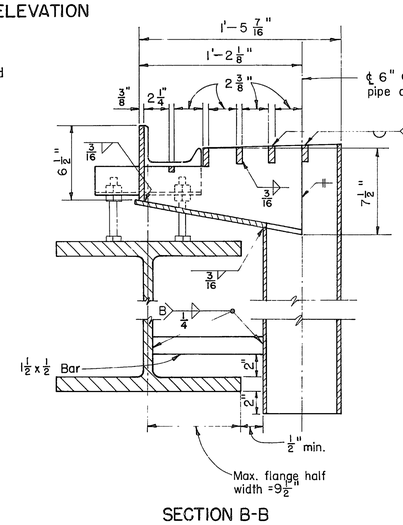
GUTTER AND SCUPPER DETAILS



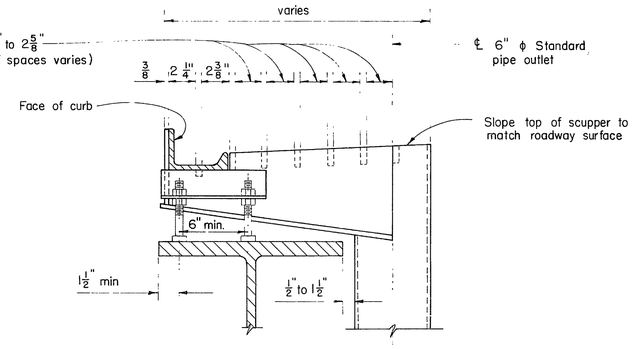
GUTTER SUPPORT A



SECTION A-A
TYPE 1 SCUPPER

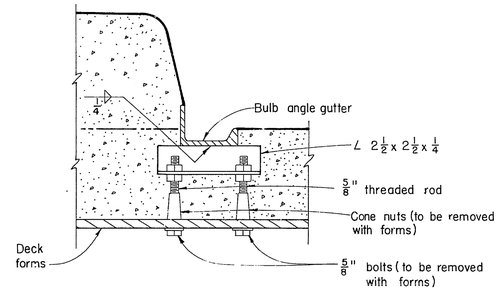


SECTION B-B
TYPE 2 SCUPPER



DETAIL "A"

Scupper elevation, showing method of widening scupper where necessary to clear flanges.



GUTTER SUPPORT B

For bridges on which gutters are at considerable distance from beam or girder flange.

NOTES

Scuppers shall be furnished in sufficient number to provide one square inch of net scupper opening for each 12 to 15 square feet of deck area to be drained. The downspout shall have at least one square inch of opening for each five square inches of net scupper opening, with a minimum nominal diameter of 6 inches.

Scuppers should clear crossframes by at least 6 inches, piers by at least 5'-0", and abutments by 2'-6".

The first support angle each side of scupper is included with scupper for payment.

Gutters shall be accurately adjusted for alignment and grade, with allowance for dead load deflection, before concrete is placed.

When scupper spacing exceeds 25 ft., milled joints will be permitted in bulb angles, but individual lengths shall be made as long as practicable.

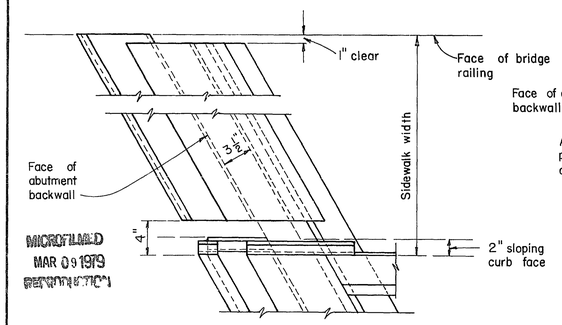
REVISIONS

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

STANDARD
SUPERSTRUCTURE DETAILS
FOR STEEL BEAM AND GIRDER BRIDGES

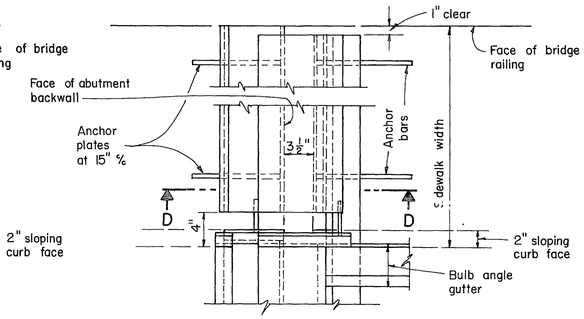
APPROVED: W. H. Carpenter, ENGINEER OF BRIDGES
DATE: 11-12-63
DRAWING NUMBER SD-1-63

PREPARED	TRACED	CHECKED	REVIEWED	SHEET NO. 3 OF 4 SHEETS
FFE	CAM	WJJ FFE	BFG CDB MPB WCK HHH	

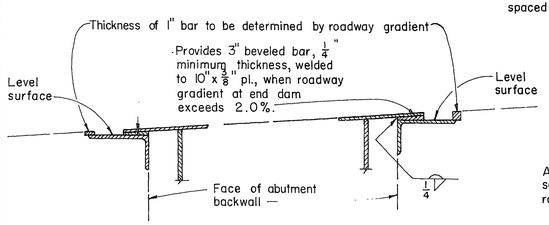


PART DECK PLAN
SKEWED BRIDGES

MICROFILMED
MAR 09 1979

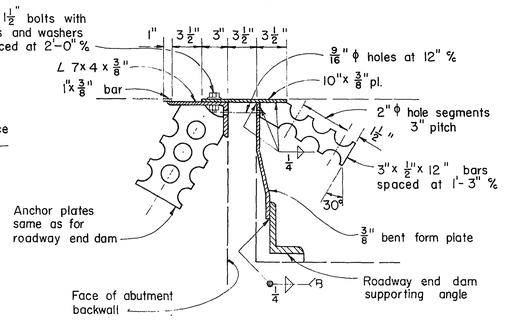


PART DECK PLAN
SQUARE BRIDGES



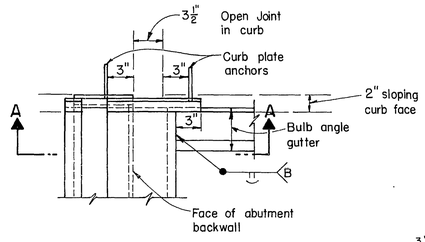
SIDEWALK END DAMS
FOR BRIDGE ON GRADE

For additional details see Section D-D

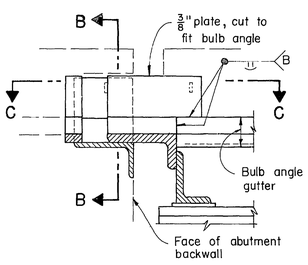


SECTION D-D

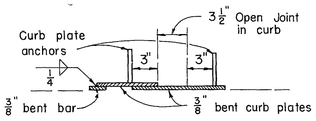
For additional notes and details see Section A-A on Sheet No.2



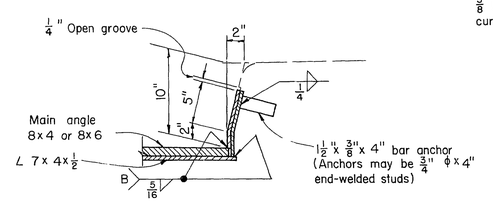
PART DECK PLAN
SQUARE BRIDGES



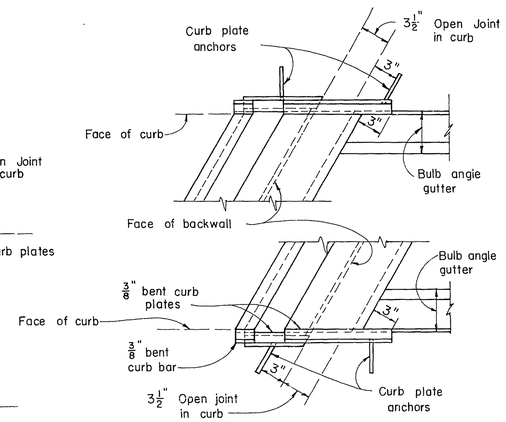
SECTION A-A



SECTION C-C



SECTION B-B



PART DECK PLAN
SKEWED BRIDGES

CURB PLATE DETAILS

SIDEWALK END DAM DETAILS

REVISIONS	STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES	
	STANDARD SUPERSTRUCTURE DETAILS FOR STEEL BEAM AND GIRDER BRIDGES	
	APPROVED: DATE: 11-18-63 — ENGINEER OF BRIDGES	DRAWING NUMBER SD-1-63
	PREPARED FFE / TRACED GAM / CHECKED WJJ FFE / REVIEWED BFS COB MPB WCK HHH	SHEET NO. 4 OF 4 SHEETS