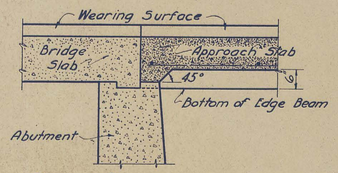
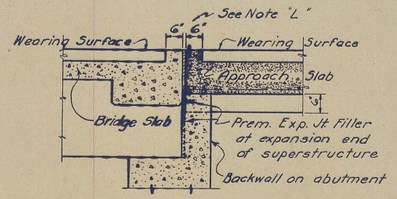
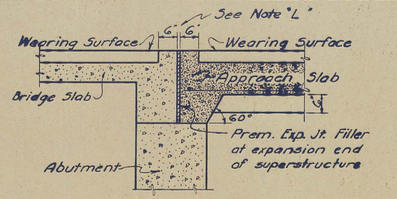


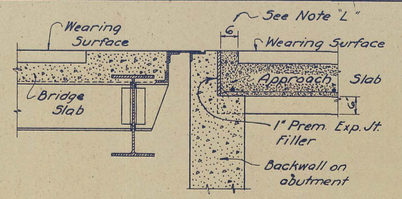
WITH WEARING SURFACE ON APPROACH SLAB



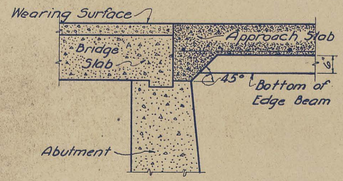
WITH WEARING SURFACE ON APPROACH SLAB



WITH WEARING SURFACE ON APPROACH SLAB

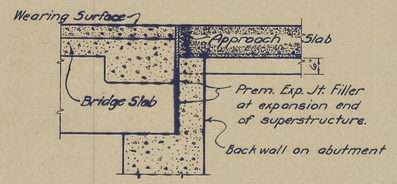


WITH WEARING SURFACE ON APPROACH SLAB



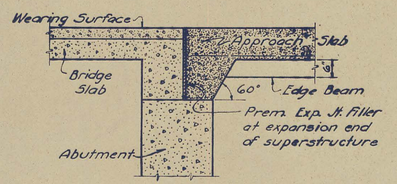
WITHOUT WEARING SURFACE ON APPROACH SLAB

FOR STANDARD SLAB BRIDGES



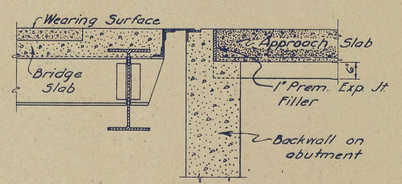
WITHOUT WEARING SURFACE ON APPROACH SLAB

FOR STANDARD CONCRETE BEAM BRIDGES



WITHOUT WEARING SURFACE ON APPROACH SLAB

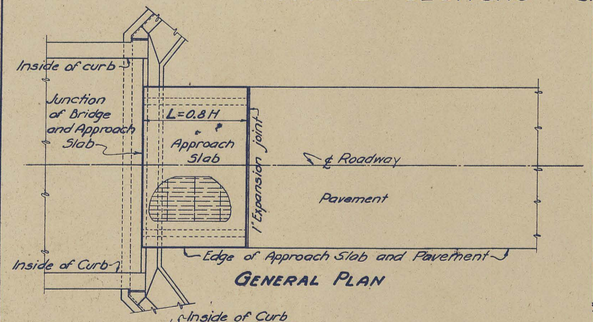
FOR STANDARD CONCRETE THROUGH GIRDER BRIDGES



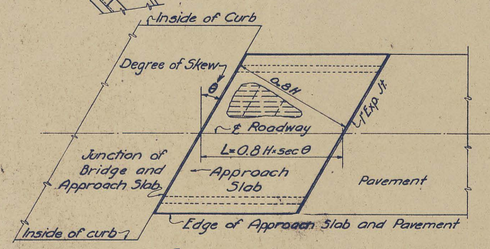
WITHOUT WEARING SURFACE ON APPROACH SLAB

FOR STANDARD STEEL TRUSS BRIDGES

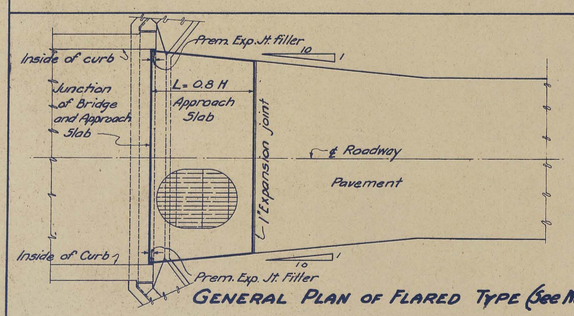
TYPICAL SECTIONS SHOWING JUNCTION OF BRIDGE AND APPROACH SLAB



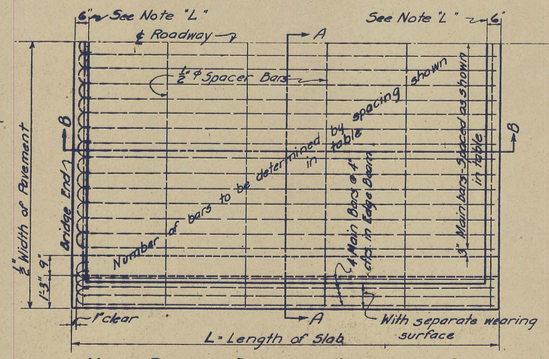
GENERAL PLAN



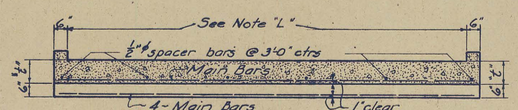
GENERAL PLAN
FOR SKEW BRIDGES



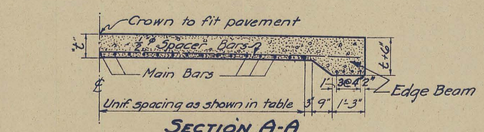
GENERAL PLAN OF FLARED TYPE (See Note "O")



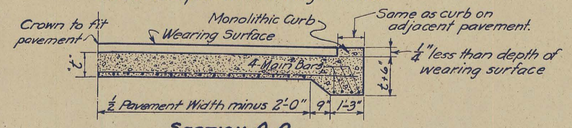
HALF DETAIL PLAN OF APPROACH SLAB



SECTION B-B



SECTION A-A
Without Separate Wearing Surface



SECTION A-A
With Separate Wearing Surface

DIMENSIONS AND QUANTITIES

LENGTH "L"	THICKNESS "t"	APPROX. AVERAGE LBS. STEEL PER SQ. YD.	* SQ. YDS. IN ONE APPROACH SLAB FOR PAVEMENT WIDTH OF			MAIN BARS			SPACER BARS	
			18 Ft.	20 Ft.	30 Ft.	SIZE	SPACING	LENGTH	SIZE	SPACING
8'	7"	28	16.0	17.8	26.7	¾"ϕ	7"	8'-6"	½"ϕ	3'-0"
9'	7½"	30	18.0	20.0	30.0	¾"ϕ	6½"	9'-6"	½"ϕ	3'-0"
10'	8"	30	20.0	22.2	33.3	¾"ϕ	6"	10'-6"	½"ϕ	3'-0"
11'	8½"	31	22.0	24.4	36.7	¾"ϕ	6"	11'-6"	½"ϕ	3'-0"
12'	9"	31	24.0	26.7	40.0	¾"ϕ	6"	12'-6"	½"ϕ	3'-0"
13'	9"	33	26.0	28.9	43.3	¾"ϕ	5½"	13'-6"	½"ϕ	3'-0"
14'	9½"	36	28.0	31.1	46.7	⅞"ϕ	7"	14'-6"	½"ϕ	3'-0"
15	10"	36	30.0	33.3	50.0	⅞"ϕ	7"	15'-6"	½"ϕ	3'-0"
16'	10½"	38	32.0	35.6	53.3	⅞"ϕ	6½"	16'-6"	½"ϕ	3'-0"
17'	11"	40	34.0	37.8	56.7	⅞"ϕ	6"	17'-6"	½"ϕ	3'-0"
18'	11½"	40	36.0	40.0	60.0	⅞"ϕ	6"	18'-6"	½"ϕ	3'-0"
19'	11½"	43	38.0	42.2	63.3	⅞"ϕ	5½"	19'-6"	½"ϕ	3'-0"
20'	12"	46	40.0	44.4	66.7	1"ϕ	7"	20'-6"	½"ϕ	3'-0"
21'	12½"	47	42.0	46.7	70.0	1"ϕ	6¾"	21'-6"	½"ϕ	3'-0"
22'	13"	49	44.0	48.9	73.3	1"ϕ	6½"	22'-6"	½"ϕ	3'-0"
23'	13½"	50	46.0	51.1	76.7	1"ϕ	6¼"	23'-6"	½"ϕ	3'-0"
24'	14"	51	48.0	53.3	80.0	1"ϕ	6"	24'-6"	½"ϕ	3'-0"
25'	14"	53	50.0	55.6	83.3	1"ϕ	5¾"	25-6"	½"ϕ	3'-0"

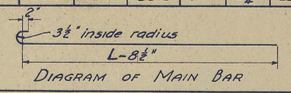


DIAGRAM OF MAIN BAR

* These quantities apply for the pavement widths indicated where the pavement is not flared and where the width of approach slab is the same as the pavement. for other cases, the area must be specially computed.

NOTES

(A) General. This drawing illustrates approach slab design and shall also be a working drawing for the contractor.

(B) When to be used. Approach slabs shall be used in connection with all new abutments except those for spandrel-filled arches and except those on traffic-bound road projects.

(C) Method of Measurement. Approach slabs shall be measured and estimated by the square yard. Payment per sq. yd. shall include the slab concrete, reinforcing steel, side curbs (if required), edge beams, premolded expansion joint filler and any extra concrete needed under the slab at its seat.

(D) Concrete Mix. The concrete proportions shall be 1:5½.

(E) Adaptation. For bridges other than the types indicated hereon, the approach slab shall be adapted to fit the end of bridge.

(F) Bearing. The one end will rest on the abutment and the other is intended to have at least two feet bearing on solid earth.

(G) Extra Length. If, because of the contractor's operations, a longer slab than specified on project plans is required in order to provide this bearing, the contractor shall, at his own expense, provide the necessary additional length with additional thickness and reinforcing steel as tabulated or required hereon.

(H) Length Limitations. The length shall generally be not less than 8 ft. nor more than 25 ft. In case a greater length is required, the slab thickness and reinforcing steel can be determined by extrapolation from tabulated dimensions and quantities.

(I) Edge Beam construction (as shown hereon) shall be provided where wheel loads may come near the edge of slab.

(J) Wearing Surface. In case of brick or bituminous wearing surface on adjacent pavement, the same shall be carried over approach slabs. Where the adjacent pavement is concrete, the top of approach slab shall be made flush with top of pavement; it may also be made flush for water-bound macadam.

(K) Side Curbs. These shall be provided at the edges of slab when a separate wearing surface is used on approach slab.

(L) Concrete Header. 6" wide and flush with top of wearing surface, shall be placed monolithic with approach slab in case of brick wearing surface, to prevent leakage of sand cushion into expansion joints. Paid for as sq. yds., with wearing surface.

(M) Finish. This shall be the same as specified for concrete base course in case of separate wearing surface, and shall be the same as for concrete pavement when so used.

(N) Specifications. Construction specifications in force on date of contract shall govern.

(O) Flared Construction is illustrated in the "GENERAL PLAN OF FLARED TYPE." This is to apply only where the Department's practice on pavements is to provide flare. In many cases the rate of flare should be different from the 1:10 rate shown (as at the outlet end of a bridge on a curve where a more gradual flare may be provided). (The Highway Department's new practice is to generally not provide flared construction.).

DESIGN NOTATIONS

H = Height from bottom of footing to top of curb.
L = Length of slab = 0.8 H (to nearest foot).
L (on skew bridges) = 0.8 H multiplied by the secant of the angle of the skew (to nearest foot). (The 0.8 H is measured normal to the junction of the bridge and approach slab).

REVISIONS
Date:-
Jan. 27, 1931
Sept. 1, 1931

STANDARD APPROACH SLABS FOR BRIDGES

FOR PAVEMENT WIDTHS OF 18 FT., 20 FT. AND 30 FT.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
JAN. 1931 BUREAU OF BRIDGES

APPROVED BY J. R. Burkey			
DATE 1-20-31	CHIEF ENGR. OF BRIDGES		DRAWING NUMBER
DES. & DR. K.E.D.	TRACED J.P.N.	CHECKED F.B.C.	REVIEWED H.H.G.	AS-31

Revision Jan. 27, 1931 - Expansion Joints in pavement, beyond ends of approach slabs, not shown.