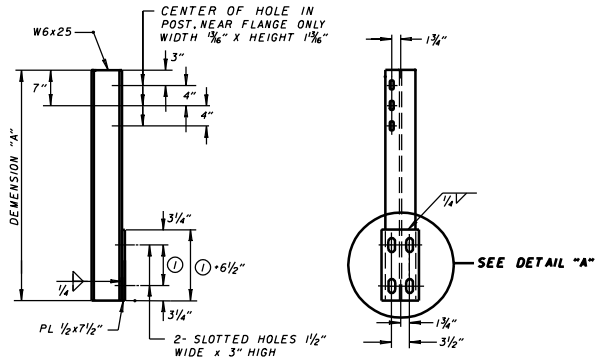
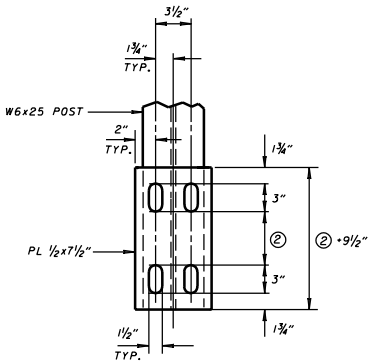


TYPE 1 POST DETAILS

① = 8" EXCEPT FOR 12" DEEP PRESTRESSED BOX BEAMS WHERE IT EQUALS 6".

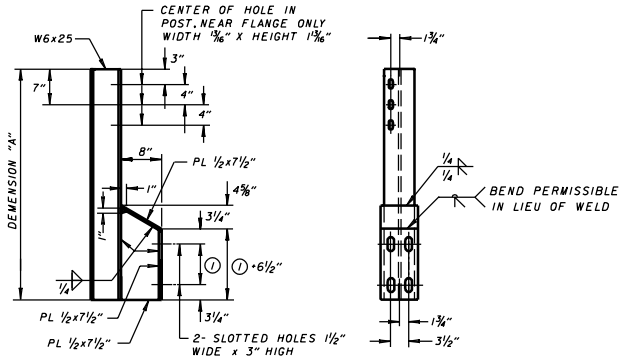
PRESTRESSED CONCRETE BOX BEAMS			
BEAM SIZE	MAXIMUM SPAN	DIMENSION "A"	POST
B12-36 OR B12-48	25'	3'-7½"	"D"
	OVER 25'	3'-9"	"E"
B17-36 OR B17-48	35'	3'-9½"	"B"
	OVER 35'	3'-11"	"C"
B21-36 OR B21-48	40'	3'-9½"	"B"
	OVER 40'	3'-11"	"C"
B27-36 OR B27-48	55'	3'-9½"	"B"
	OVER 55'	3'-11"	"C"
B33-36 OR B33-48	65'	3'-9½"	"B"
	OVER 65'	3'-11"	"C"
B42-36 OR B42-48	85'	3'-9½"	"B"
	OVER 85'	3'-11"	"C"



DETAIL "A"

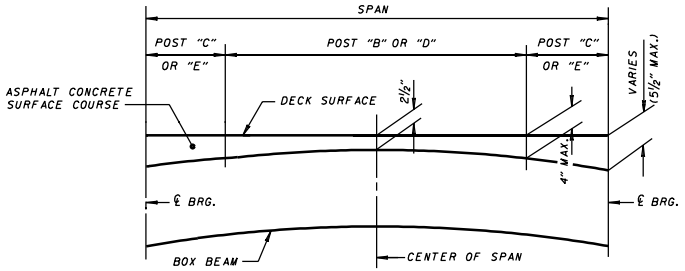
TYPE 1 POST AS SHOWN
TYPE 2 POST SIMILAR

② = 5" EXCEPT FOR 12" DEEP PRESTRESSED BOX BEAMS WHERE IT EQUALS 3".



TYPE 2 POST DETAILS

① = 8" EXCEPT FOR 12" DEEP PRESTRESSED BOX BEAMS WHERE IT EQUALS 6".



PRESTRESSED CONCRETE BOX BEAM SPANS REQUIRING VARIABLE POST LENGTHS

POST LENGTH △					
TYPE OF SUPERSTRUCTURE	DIMENSION "A"				
	POST "A"	POST "B"	POST "C"	POST "D"	POST "E"
CONCRETE SLAB STEEL BEAMS AND GIRDERS PRESTRESSED CONCRETE I-BEAMS	3'-8"	3'-9½"	—	—	—
PRESTRESSED CONCRETE BOX BEAMS	—	3'-9½"	3'-11"	3'-7½"	3'-9"

△ – POST "A" POSTS SHALL BE USED ON BRIDGES WITH MONOLITHIC CONCRETE WEARING SURFACES.

POST "B" OR "D" POSTS SHALL BE USED ON BRIDGES WITH NORMAL ASPHALT CONCRETE WEARING SURFACES AND/OR PRESTRESSED BOX BEAMS WITH FINAL CAMBER LESS THAN 1½".

POST "C" OR "E" POSTS SHALL BE USED ON BOX BEAM BRIDGES WITH A 4" TO 5½" THICK ASPHALT CONCRETE WEARING SURFACES. AND PRESTRESSED BOX BEAMS WITH FINAL CAMBER MORE THAN 1½" BUT LESS THAN 3".

ALL POSTS SHALL BE SHOP MARKED TO SHOW TYPE AND LENGTH. FOR EXAMPLE, "2B" INDICATES A TYPE 2 POST THAT IS 3'-9½" LONG (DIMENSION "A").

NOTES:

ALL DIMENSIONS FOR SHAPES AND PLATES SHOWN ON THIS DRAWING SUPERSEDES THOSE SHOWN ON STANDARD DRAWING DBR-2-73, DATED 5-10-73.

STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO ASTM A36.

GALVANIZING: ALL SHAPES AND PLATES SHALL BE GALVANIZED IN ACCORDANCE WITH 711.02.

NOTE TO DESIGNER: IT SHALL BE THE RESPONSIBILITY OF THE DESIGNER TO CLEARLY INDICATE ON THE CONTRACT PLANS THE POST DETAILS, DIMENSIONS AND REQUIREMENTS FOR EACH PROJECT. THESE POSTS, AS DETAILED, MAY FIT OTHER EXISTING BRIDGE CONFIGURATIONS. BEFORE SPECIAL POST LENGTHS ARE DEVELOPED, THESE STANDARD LENGTHS SHOULD BE CHECKED FOR USE. WHERE TWO OR MORE POST LENGTHS ARE REQUIRED, THEIR LOCATION SHALL BE SHOWN ON THE GENERAL PLAN.

LIMITATIONS: THIS DRAWING CAN BE USED FOR POSTS WITH 1½" MAXIMUM VERTICAL MOVEMENT AND 5½" MAXIMUM ASPHALT CONCRETE THICKNESS.

SPECIAL DESIGN DETAILS SHALL BE PROVIDED FOR BRIDGES WITH ASPHALT CONCRETE SURFACE COURSES MORE THAN 5½" THICK, IN ORDER TO PROVIDE A CLEAR DISTANCE OF 1'-9" BETWEEN THE ROADWAY SURFACE AND RAILING CENTERLINE.

REVISIONS

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF BRIDGES AND STRUCTURAL DESIGN

DESIGN DATA

BRIDGE RAIL POST DETAILS
(FOR STANDARD DRAWING DBR-2-73)

APPROVED : E. D. Hamilton
DATE : 1-22-92 ENGINEER OF BRIDGES

DRAWING NO. DBP-1-92

PREPARED	DRAWN	CHECKED	REVIEWED
AJM	AJM	MRG	LMW