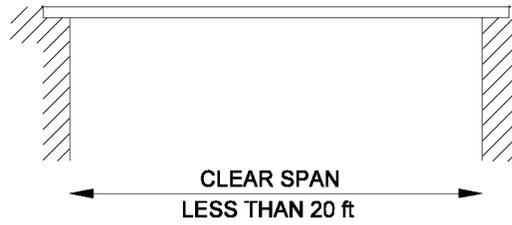


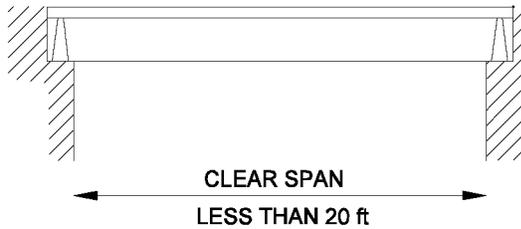
CONCRETE SLABS



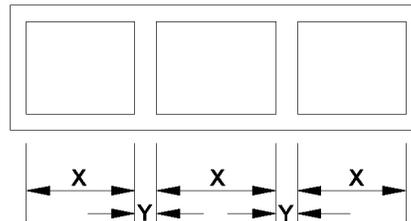
CONCRETE BEAMS OR GIRDERS OR STEEL BEAMS EMBEDDED IN THE BACKWALL



STEEL BEAMS OR GIRDERS OR CONCRETE BEAMS ON BEARINGS

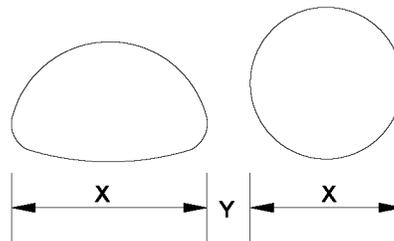


CONCRETE BOX CULVERT AT GRADE OR UNDER FILL (ONE OR MULTI-SPAN)



$$X + Y + X \dots = \text{LESS THAN } 20 \text{ ft}$$

METAL PIPE UNDER FILL (ONE OR MULTI-SPAN)



$$X + Y + X \dots = \text{LESS THAN } 20 \text{ ft}$$

MAXIMUM SPAN LENGTHS FOR CULVERTS

Figure 31-1A