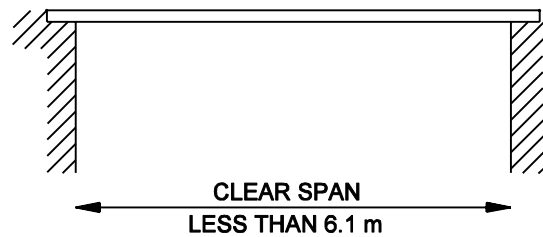
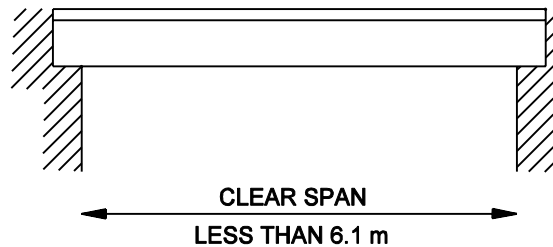


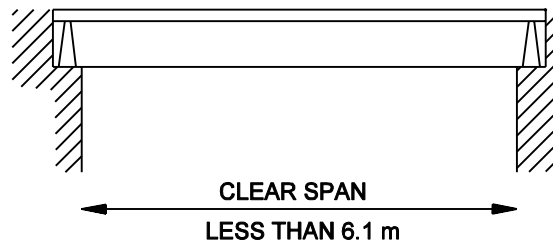
CONCRETE SLABS



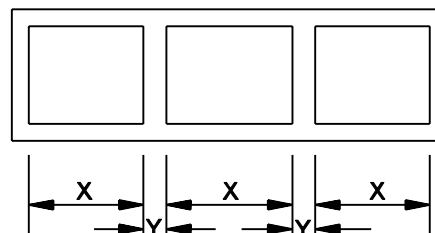
CONCRETE BEAMS OR GIRDERS  
OR STEEL BEAMS EMBEDDED  
IN THE BACKWALL



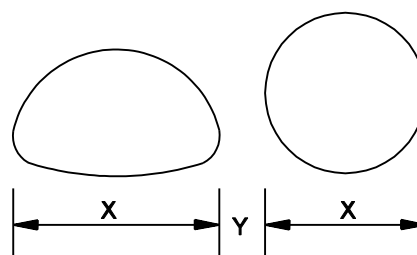
STEEL BEAMS OR GIRDERS OR  
CONCRETE BEAMS ON BEARINGS



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



METAL PIPE UNDER FILL  
(ONE OR MULTI-SPAN)



MAXIMUM SPAN LENGTHS FOR CULVERTS

Figure 31-1A