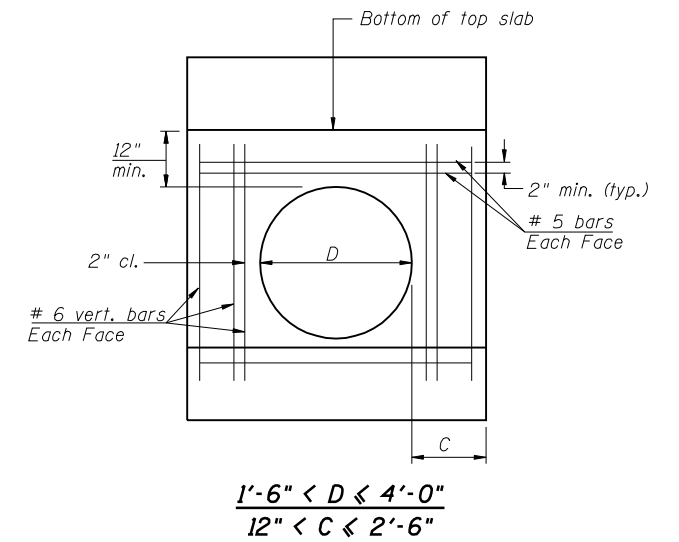
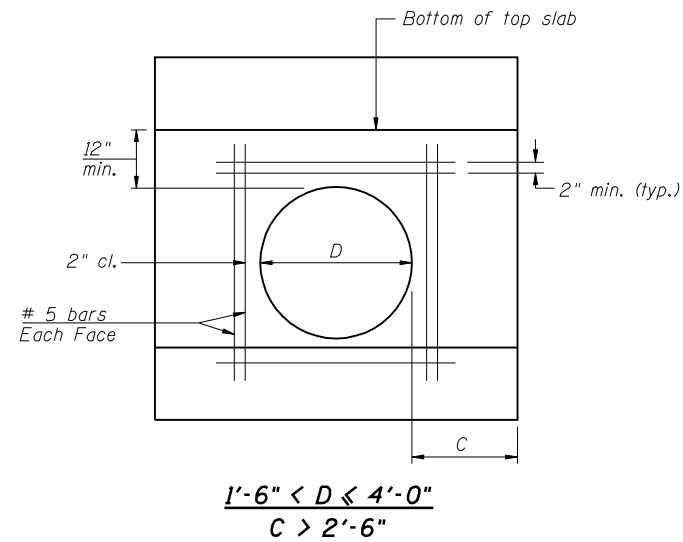
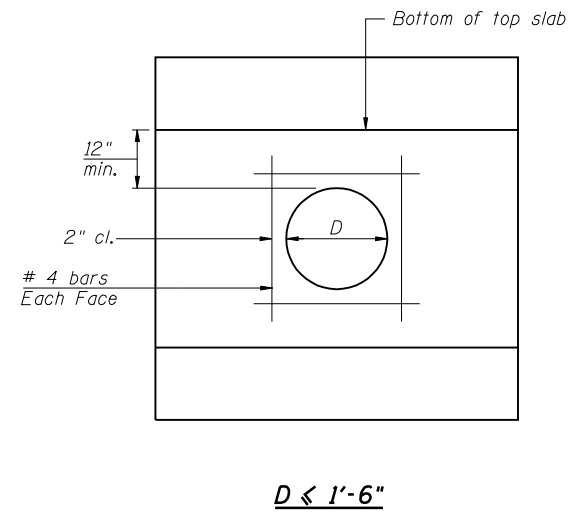


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2:16:56 PM

2/1/2010

Designed By TMM Checked By JF
Drawn By JF Checked By RLP



ADDITIONAL WALL REINFORCEMENT FOR CONCRETE BOX CULVERTS WITH OPENINGS

Notes:

D = Diameter of opening. (Typically OD of pipe plus 1" to 4").

Minimum length of reinforcement bars around openings = $D + 1'-4"$.

Wall openings beyond these parameters shall be submitted for review.

These details are not applicable for openings in the top slab.

Cost of this work is included with either Concrete Box Culverts or Precast Concrete Box Culverts of the size billed.

DETAILS
IL ROUTE 19 (IRVING PARK ROAD)
OVER CRYSTAL CREEK
STA. 118+56.58
COOK COUNTY
S.N. 016-1198