

FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	54-87 K-6657-01	2002	142	1122

GENERAL NOTES

Use Class A Concrete throughout. All exposed edges shall be finished with an edging tool. At the contractor's option Class A Concrete (AE) or mix used in concrete pavement may be used throughout.

In general, pipes will enter and leave manhole at various positions. Where possible bend bars around pipes.

Floor of manhole shall be shaped as shown in various "EXAMPLES" with unreinforced Class "A" Concrete. Manhole opening and steps, where used, shall be placed to afford easy access to top of shaped invert. Top reinforcing bars shall be adjusted accordingly.

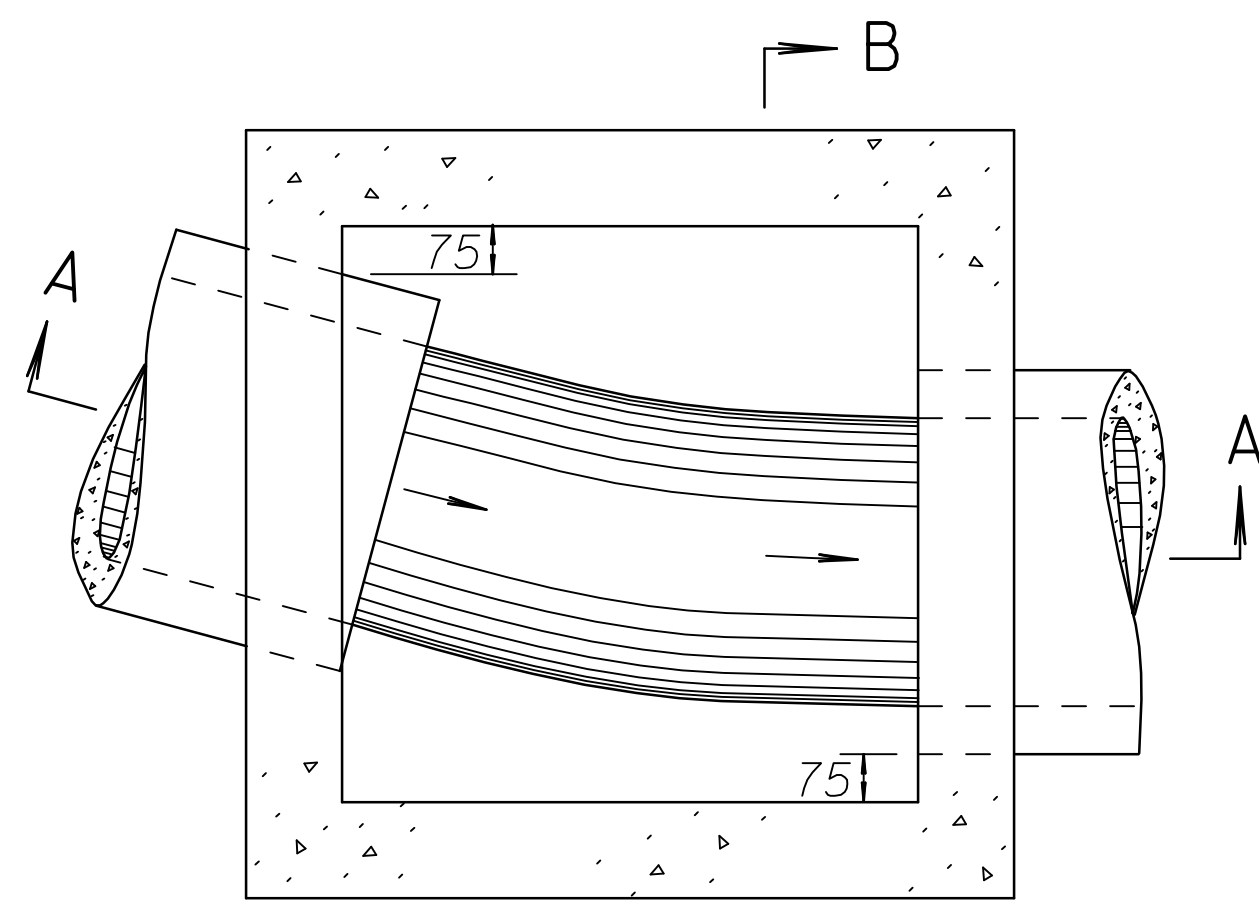
All castings shall be gray iron and shall comply with the KDOT Standard Specifications. No deductions in concrete quantities shall be made for pipe openings or additions to concrete quantities shall be made for shaping floor of manholes.

The top of the manhole shall be sloped slightly to approximately fit the ground line or other condition as directed by the Engineer.

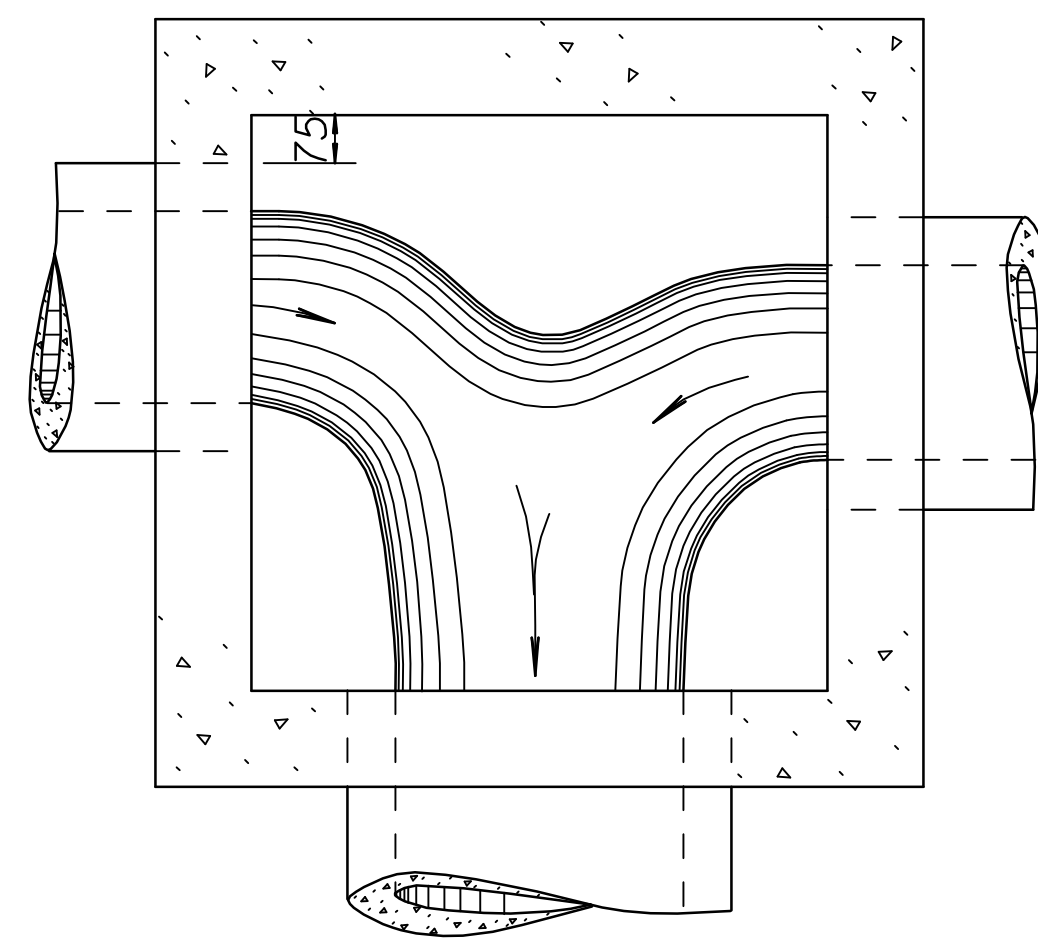
Dimensions and masses of cast iron as shown on this sheet are minimum. Larger dimensions and/or heavier masses of cast iron may be used.

The Contractor has the option of using precast manholes, as approved by the Engineer.

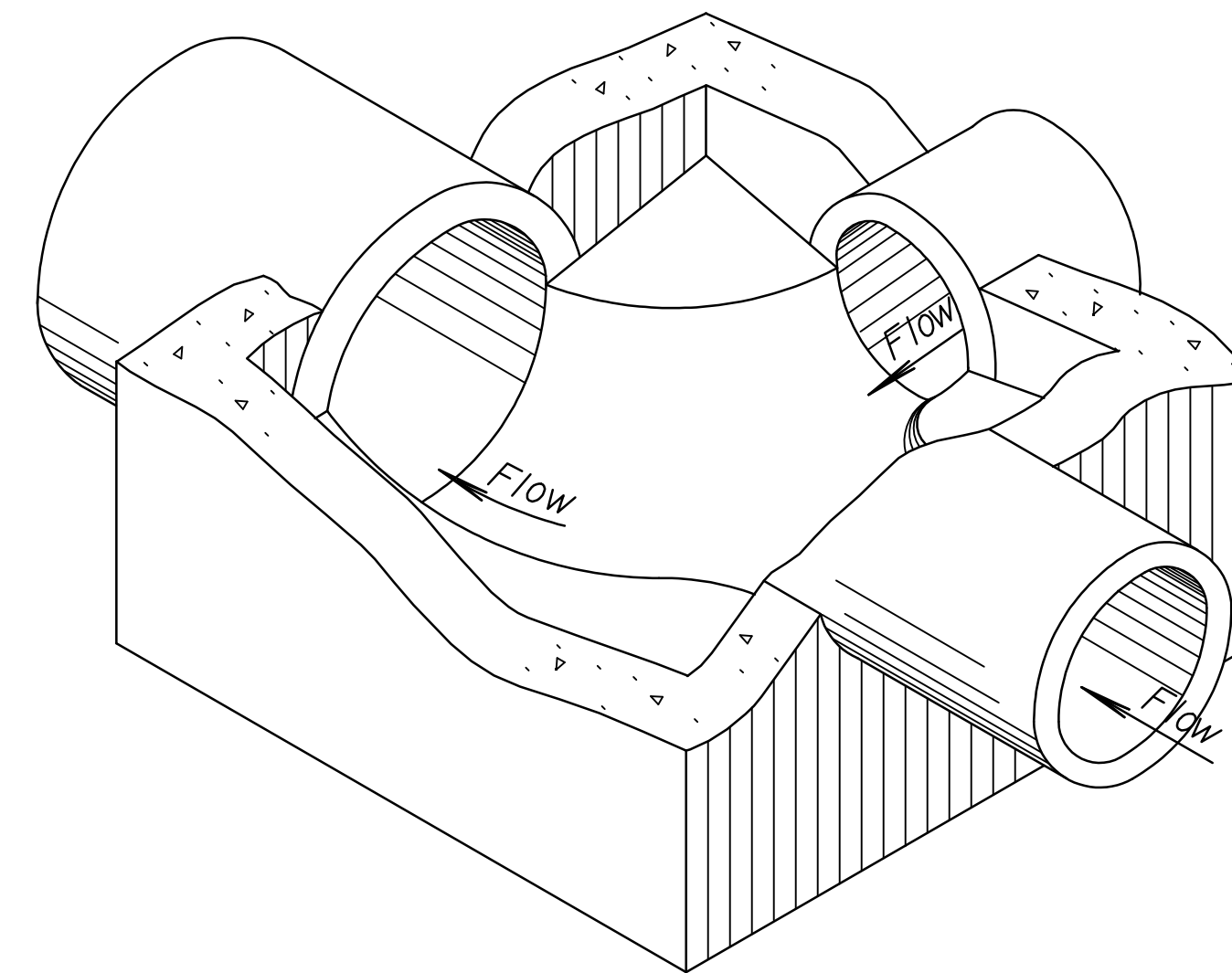
Steps shall be installed in all manholes when specified in the plans or when "H" is equal to or greater than 1 800 mm. Steps shall comply with the requirements of the KDOT Standard Specification.



PLAN - FLOOR (Example I)

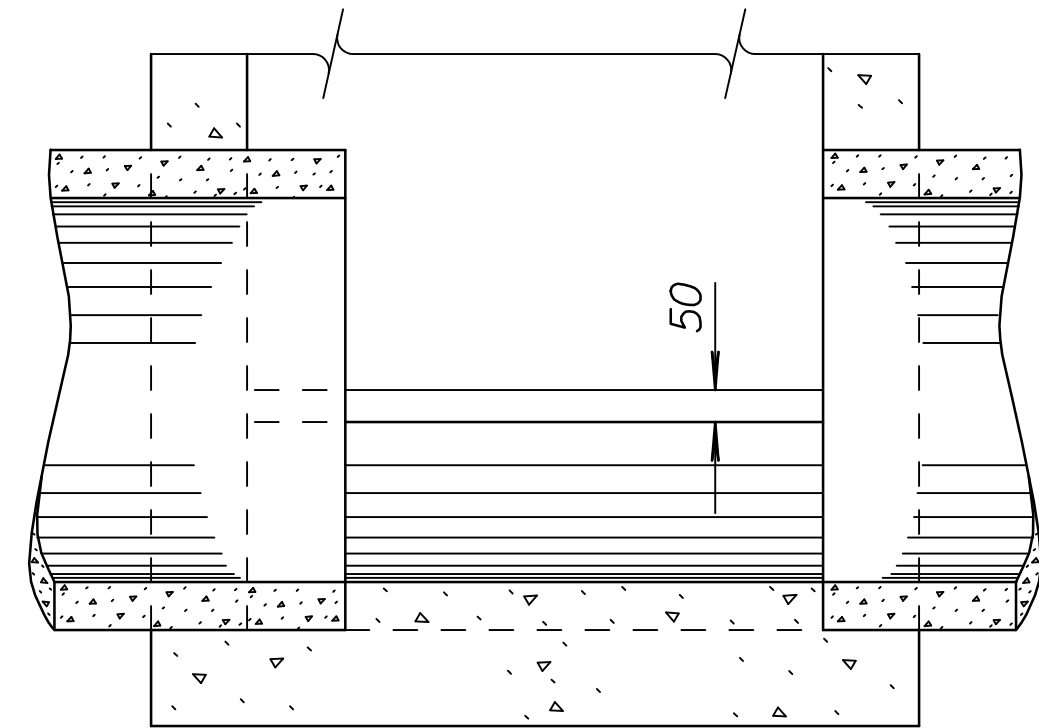


PLAN - FLOOR (Example III)

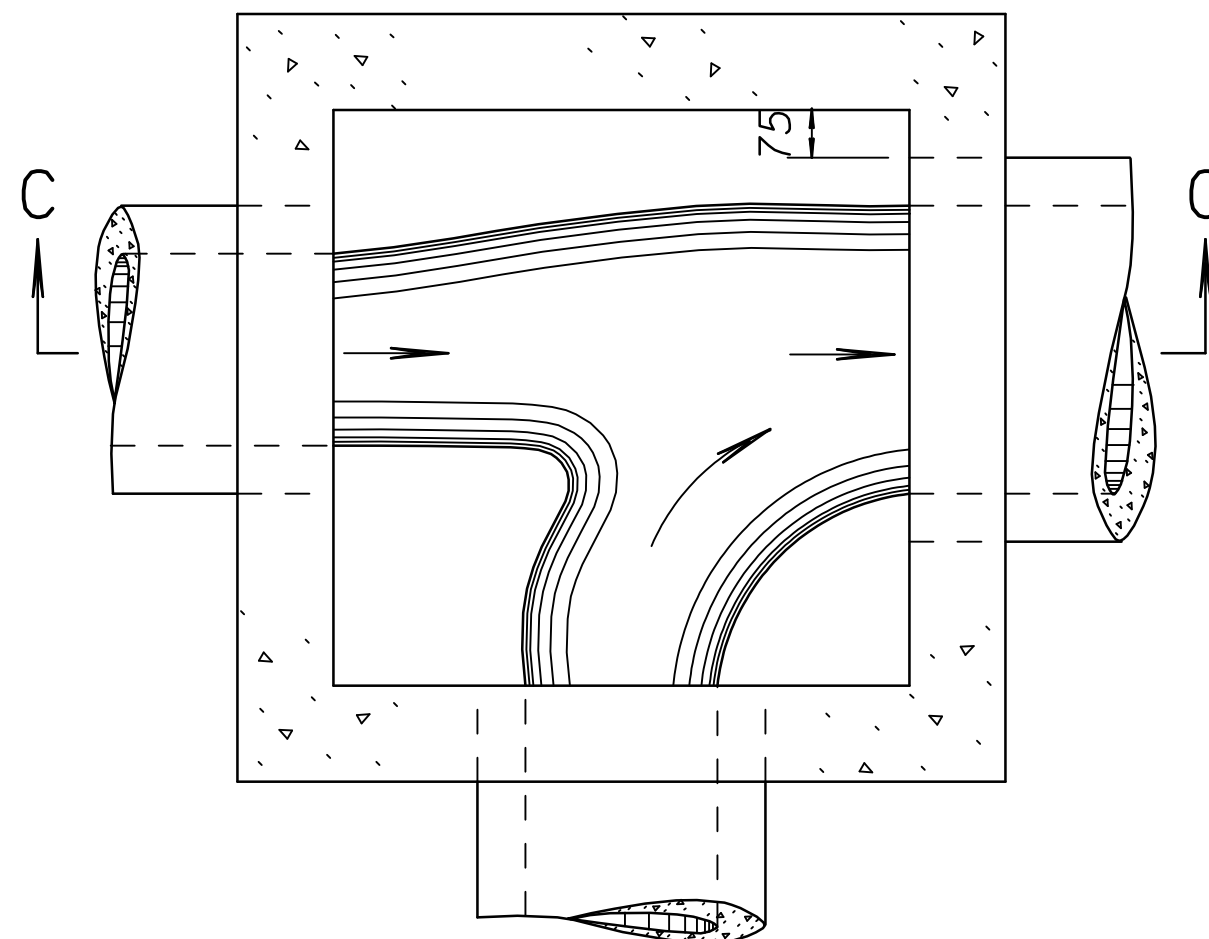


Floor of manhole shall be shaped as shown in the examples to increase hydraulic efficiency.

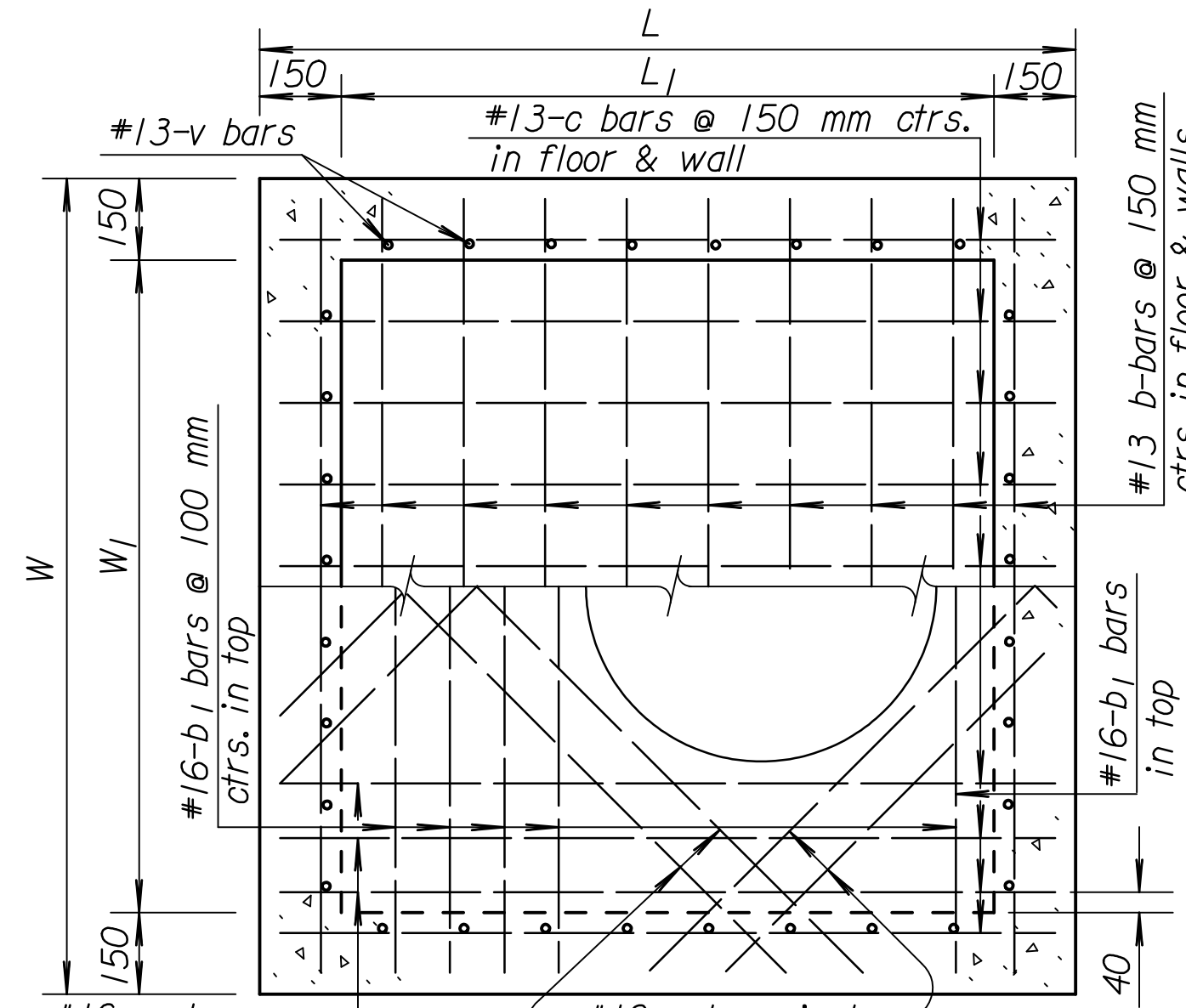
ISOMETRIC VIEW (Example IV)



SECTION A-A (Example I)

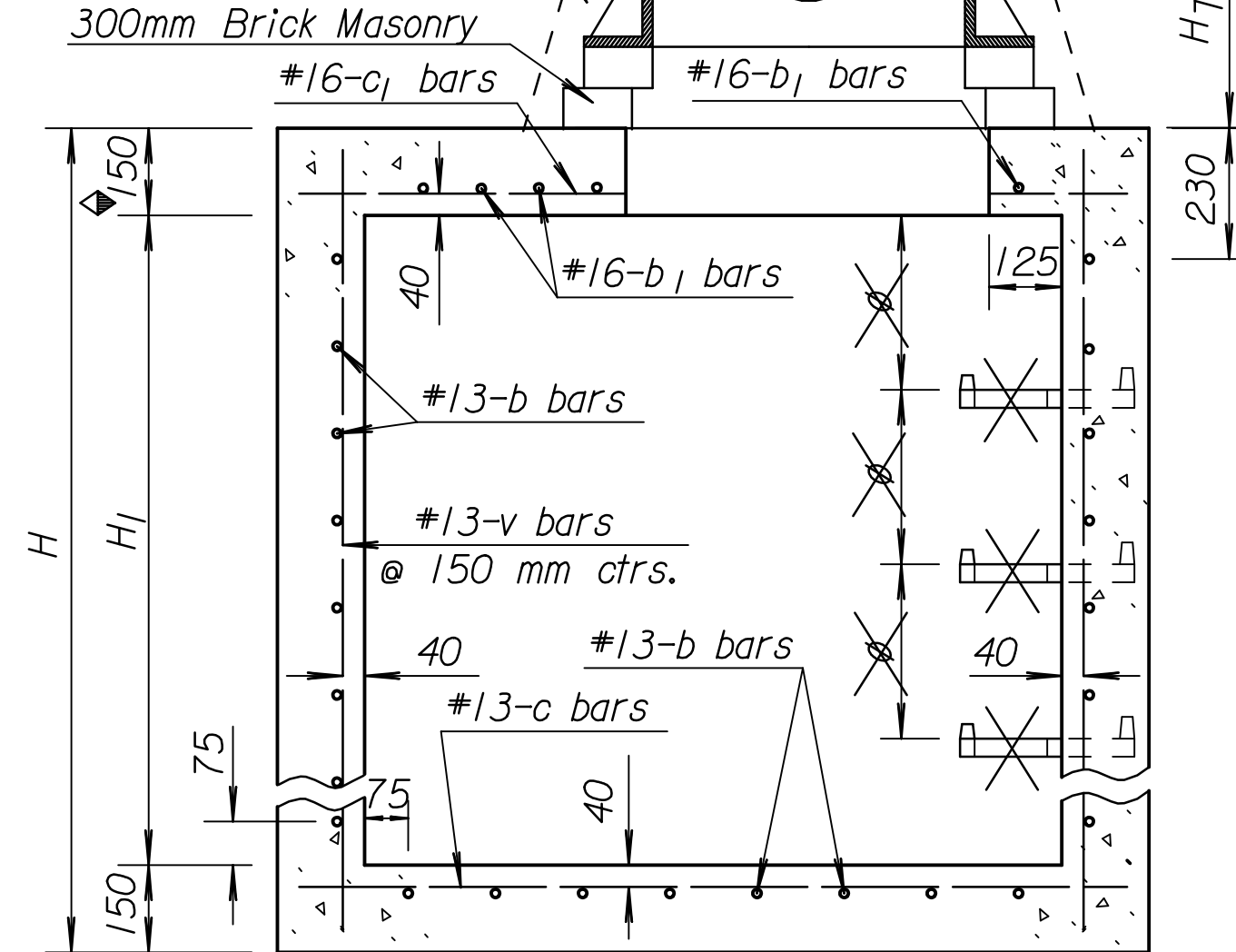


PLAN - FLOOR (Example IV)

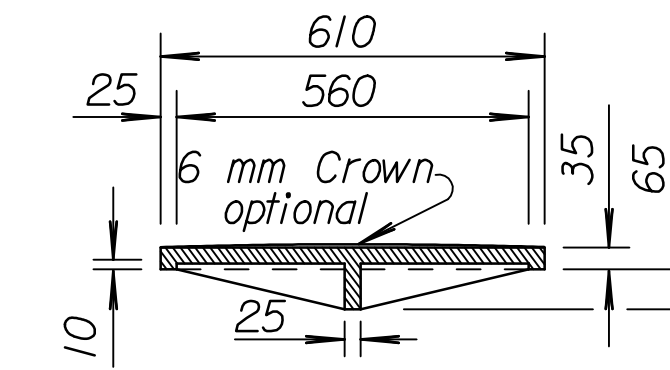


PLAN (Showing top & floor reinf.)

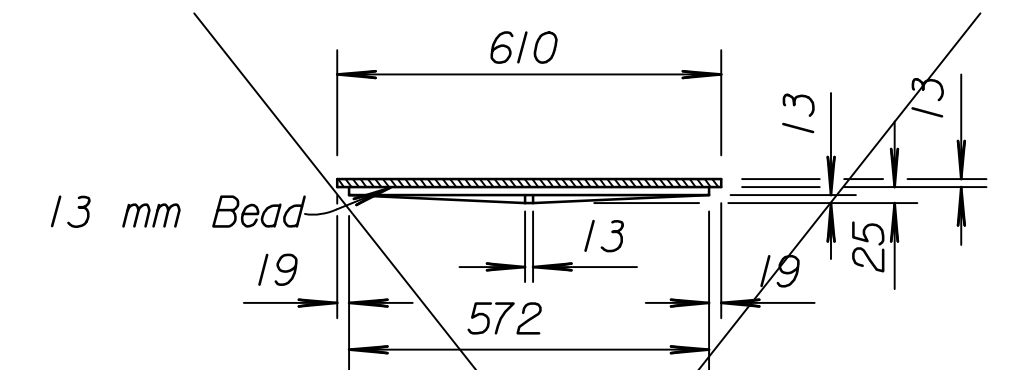
Note: Grout to be placed around manhole ring only when manhole is located in unpaved areas. 300mm Brick Masonry



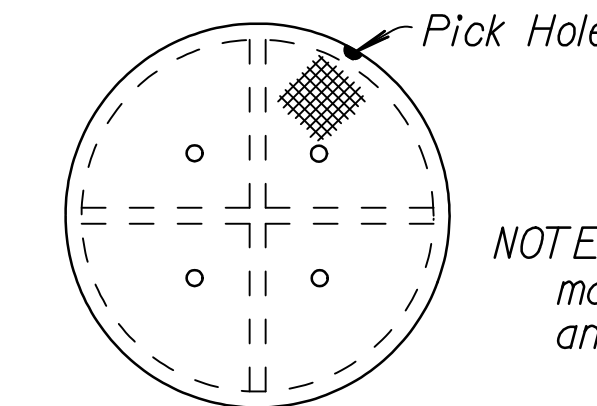
SECTION (Exclusive of floor shaping)



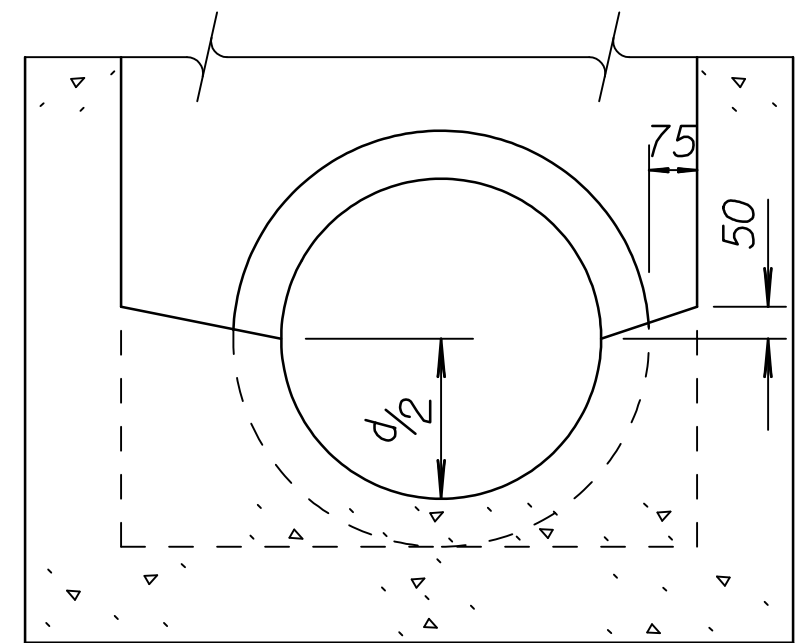
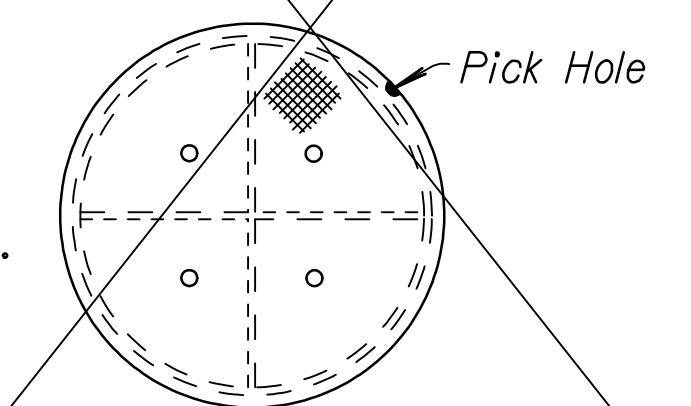
MANHOLE COVER TYPE A & B (Mass=61 kg; without 6 mm Crown= 57 kg)



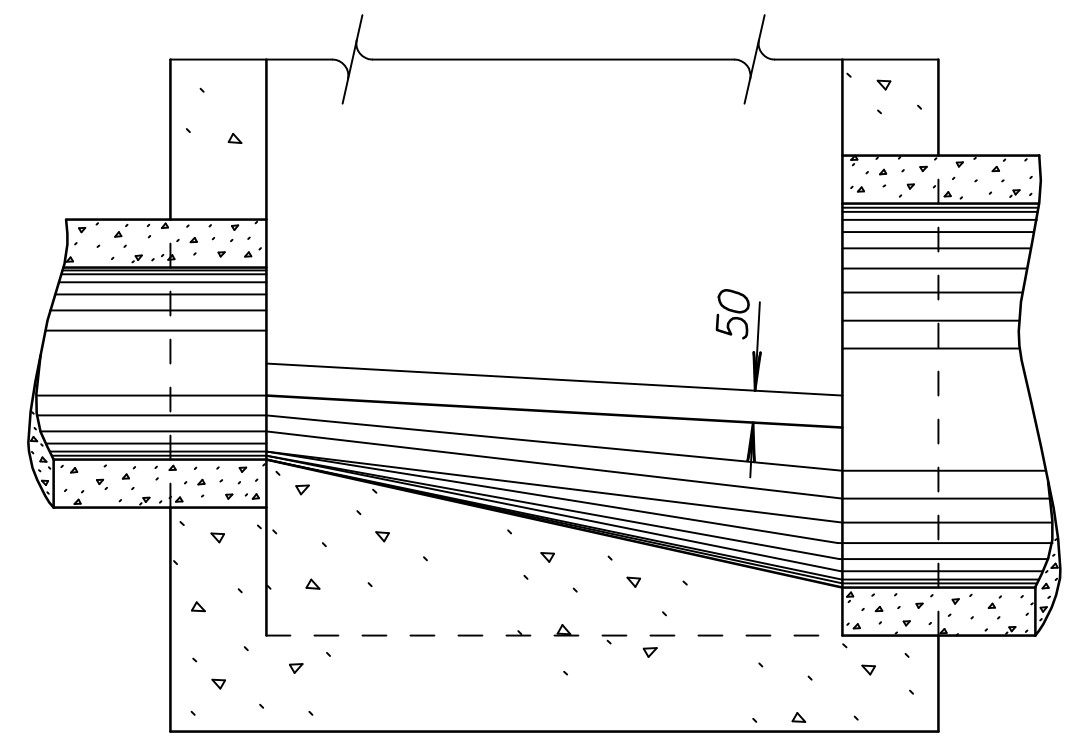
MANHOLE COVER TYPE C (Mass= 29 kg)



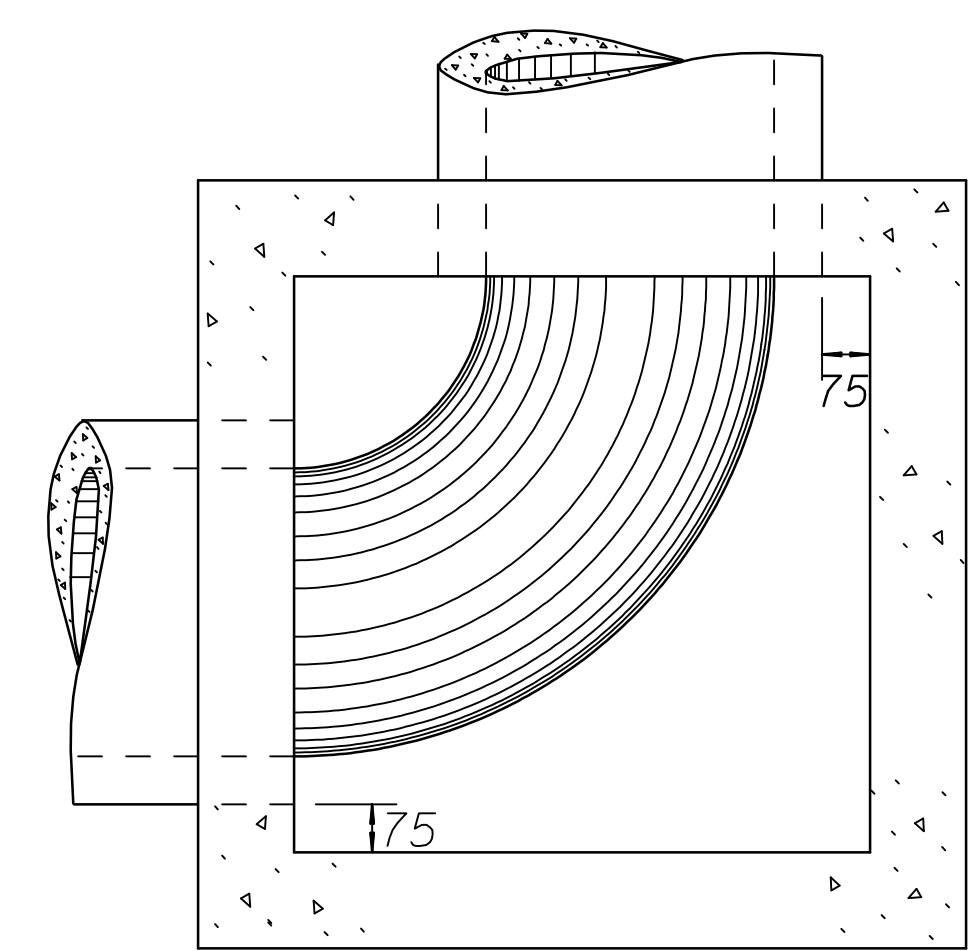
NOTE: All manhole castings are cast iron. Mass of castings includes no allowance for fillets and overruns.



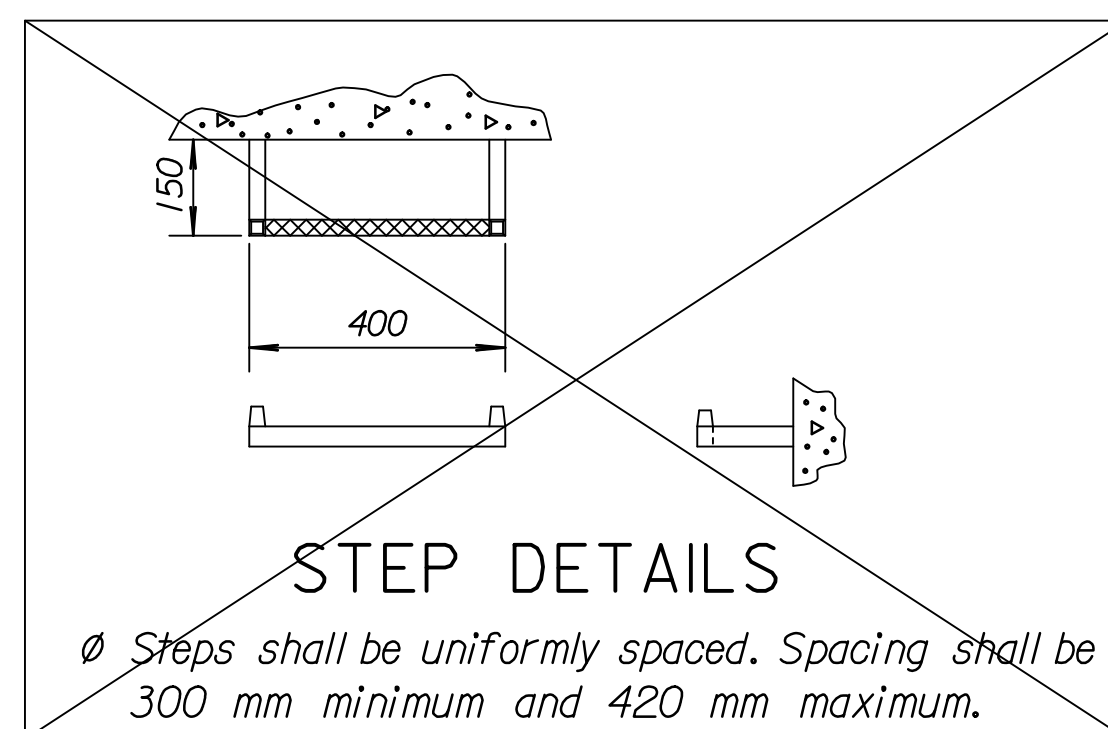
SECTION B-B (Example I)



SECTION C-C (Example IV)



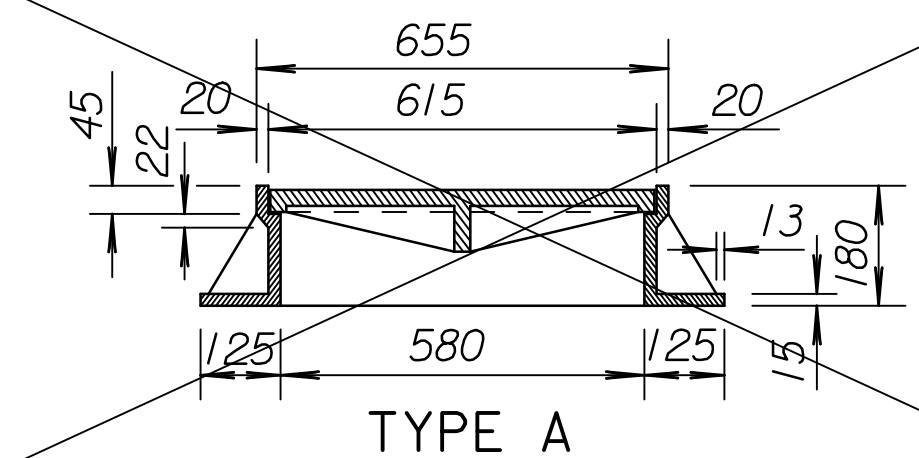
PLAN - FLOOR (Example II)



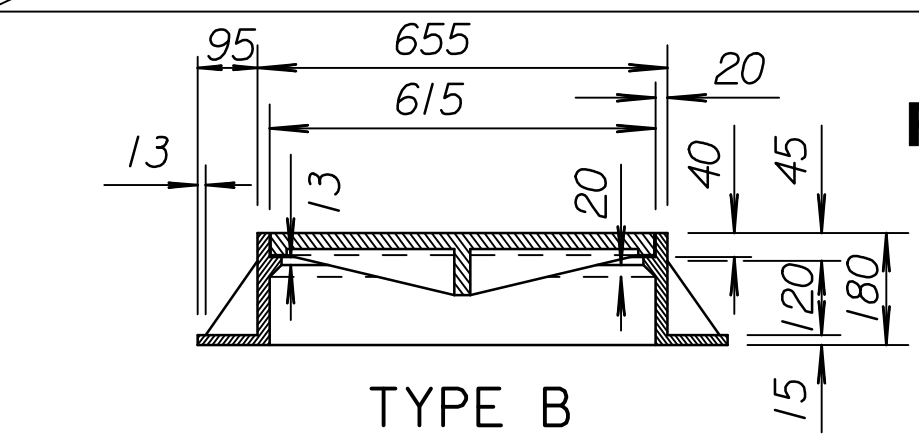
STEP DETAILS

Steps shall be uniformly spaced. Spacing shall be 300 mm minimum and 420 mm maximum.

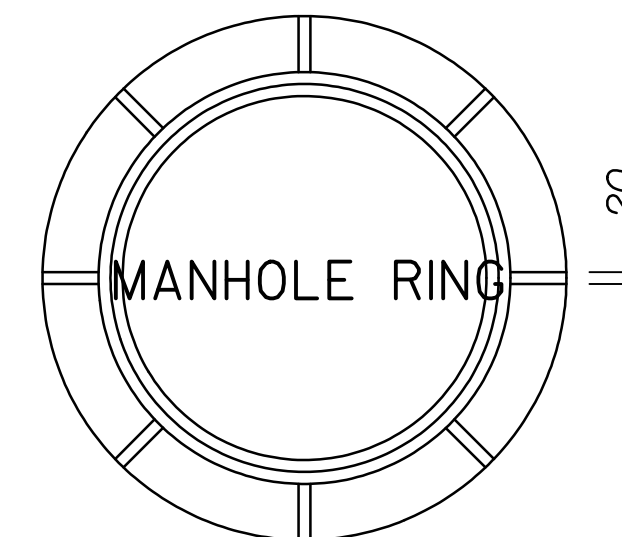
Note: Steps shall not be installed in inlets or manholes on this project.



TYPE A



TYPE B

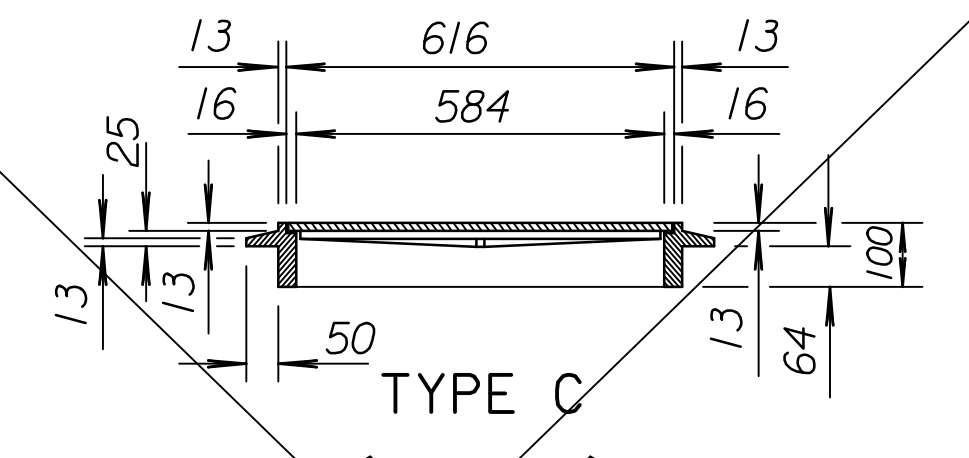


MANHOLE RING

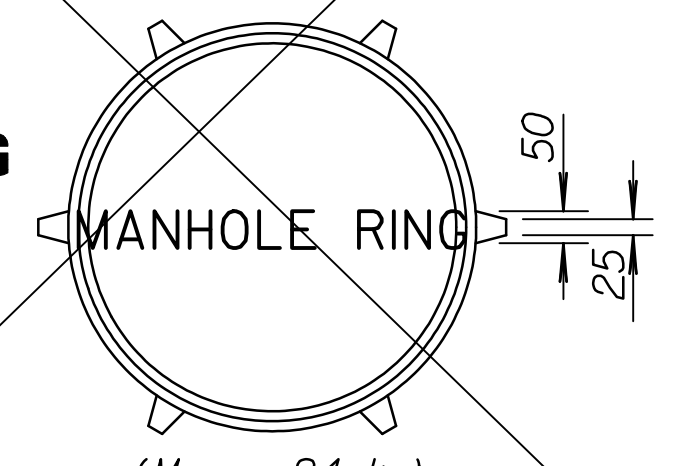
(Type A Ring= 87 kg, Type B Ring= 90 kg)

HEAVY TYPE MANHOLE COVER AND RING

Note: Either Type A or Type B may be used.



TYPE C



MANHOLE RING

* LIGHT TYPE MANHOLE COVER & RING

*Rings with four equally spaced lugs will be permitted.

NO.	DATE	REVISIONS	BY	APP'D
3	12-16-97	Revised step spacing	R.J.S.	J.O.B.
2	9-15-97	Revised v.b. & c bar spacing	R.J.S.	J.O.B.
1	1-27-97	Revised Rebar Designation	R.J.S.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

REINFORCED CONCRETE MANHOLE

RD730-SI	2-2-98	APP'D. James O. Brewer
DESIGNED	DETAILED	QUANTITIES
DESIGN CK.	DETAIL CK.	TRACE CK.

Drawn By: gdr
 Plotted: 1-7-2002
 File: I:\1997\97362\As-Builts\dgrs\Sh 142-KDOT_Std-RD730SI.dgn
 Last Rev: 8-17-07 By: gdr