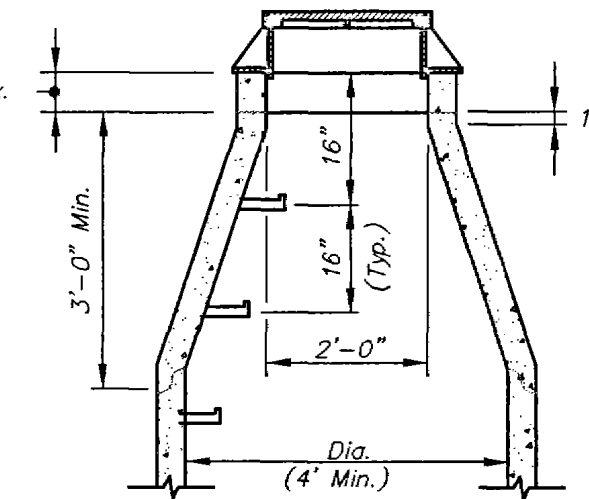
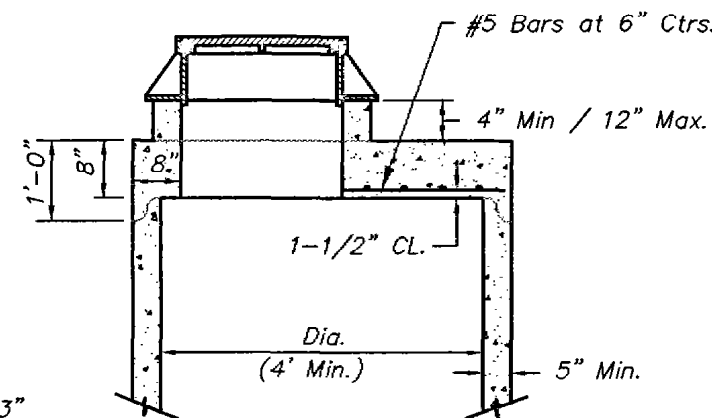


**STANDARD PRECAST MANHOLE
(ECCENTRIC CONE)**



**STANDARD PRECAST MANHOLE
(CONCENTRIC CONE)**
(See Eccentric Cone For Other Details)



**STANDARD PRECAST MANHOLE
(SHALLOW TYPE)**
(See Eccentric Cone For Other Details)

GENERAL NOTES:

1. All manholes are to be precast concrete and of Eccentric Cone type unless otherwise specified.
2. Manhole top adjustments shall be accomplished by the use of concrete adjustment rings.
3. Top of manhole casting shall be set flush and on same slope as finished surface or as directed by the Engineer.
4. Reinforcement in all sections shall equal or exceed A.S.T.M. C-478 specifications.
5. The engineer shall designate modifications for manholes with special designs.
6. The inside diameter of the manhole shall be 4'-0" for pipe diameters from 12" thru 24", 5'-0" for pipe diameters from 27" thru 36", and 6'-0" for pipe diameters 42" thru 48".
7. Clearance Tolerance of Pipe Openings: The Maximum Allowable Pipe Opening on a Horizontal Axis Shall be the Outside Diameter of the Pipe Plus 12". The Maximum Allowable Pipe Opening on Vertical Axis Shall be the Outside Diameter Plus 8". The Minimum Clearance Between the Outside Surface of an Installed pipe and the Concrete of the Manhole Shall be 2".
8. Installation of Pipe Openings: All required pipe openings shall be plant cast in manhole units. Field alterations of openings will be permitted provided walls are scored with a masonry saw to a depth sufficient to sever reinforcing steel. A chipping hammer may then be used to remove the concrete. Minimum distance between any two adjacent pipes shall be 4".
9. No direct payment for shaping floor or connecting pipes as shown on plans.
10. Use KCMO Standard MH-RC Type 3 ring and cover.
11. Sanitary Sewer Manholes shall be coated and conform to Section 2500.
12. 4" ϕ field tile shall be located at entering pipes when used on storm sewers. These tiles shall be capped with 1/4" galvanized wire mesh on the outside of the structure, and clear the invert and base concrete.

7/1/98 KCMO STD. DRAWING SUPPLEMENT	
ADOPTED:	DIRECTOR OF PUBLIC WORKS
AMERICAN PUBLIC WORKS ASSOCIATION	
APWA	KANSAS CITY METROPOLITAN CHAPTER
MANHOLE DETAILS	STANDARD DRAWING NUMBER MH - 1
	ADOPTED: APRIL 17, 1993