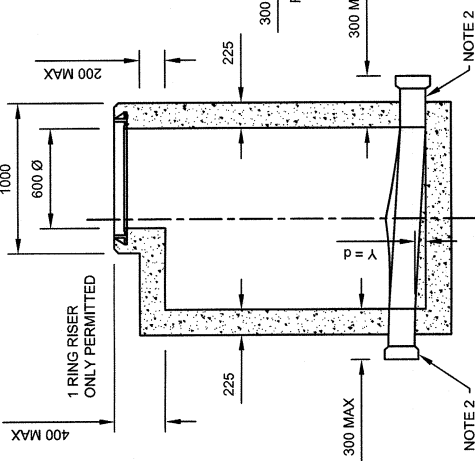
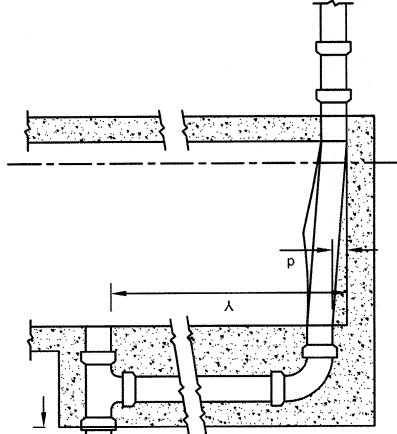


MANHOLE DROP 'Y'

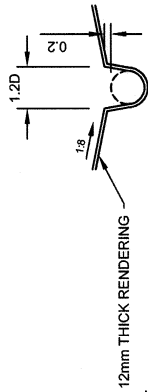
TYPE A	TYPE B		TYPE C	
	MIN	MAX	MIN	MAX
-	150	150	600 OR SPACING OF FITTINGS	-



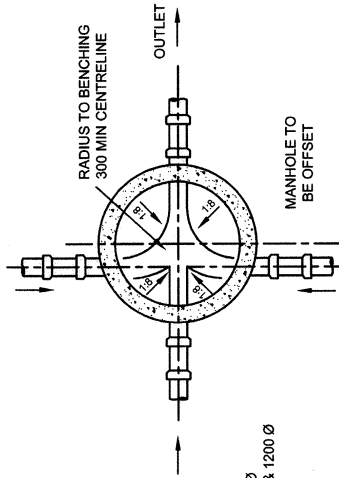
INLET TYPE A  
(INSITU BUILT MANHOLE)



INLET TYPE B  
(ONLY WHEN ACCEPTED BY COUNCIL)



CHANNEL SECTION



TYPICAL LAYOUT OF CHANNELS  
SECTIONAL PLAN

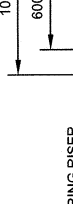
TABLE A

INLET TYPES A AND C		DIAGRAM	MIN DROP 'd'
DESCRIPTION	SAME DIAMETERS		20
STRAIGHT THROUGH	ANGLE UPTO 45°		30
ANGLE FROM 45° - 90°	BRANCH AT ANGLE LESS THAN 30°		40
BRANCH AT ANGLE 30° - 60°	BRANCH AT ANGLE 60° - 90°		30
BRANCH AT ANGLE 60° - 90°	SMALLER BRANCH DIAMETERS		50
ALL ANGLES & DIAMETERS	HOUSE DRAINS ENTERING END MANHOLES		80
MIN DROP TO BE DIFFERENCE IN PIPE DIAMETER	ALL 100 DIA HOUSE DRAINS		100

INLET TYPE C

GENERAL NOTES:

- PIPES SHOWN ARE DIAGRAMMATIC ONLY AND ARE NOT MEANT TO REPRESENT ANY PARTICULAR CLASS OR MATERIAL.
- ALL COUPLINGS ENTERING CONCRETE SHALL BE FACTORY SANDED TO PROVIDE A SECURE WATERTIGHT BOND WITH CONCRETE WALL.
- MAXIMUM CHANGE OF ANGLE THROUGH MANHOLE SHALL BE 90° EXCEPT WHERE APPROVED BY COUNCIL.
- MANHOLE COVERS SHALL BE LOCATED DIRECTLY OVER OUTLET PIPE.
- MANHOLE COVERS TO BE DUCTILE IRON OR CAST IRON WATERGAS TIGHT COVERS SHALL GENERALLY BE TYPE B INSIDE PROPERTIES AND TYPE C IN ROADWAYS.
- THE USE OF PRECAST CONCRETE SHALL BE TO THE SEPARATE APPROVAL OF COUNCIL.
- THE CONCRETE RING IS TO BE CAST INTEGRAL WITH THE TOP OF THE ROOF. FOR SEPARATE PRECAST RINGS AN APPROVED SEALER IS TO BE USED.
- THE CONCRETE ROOF IS TO BE CAST ON TOP OF WALLS. FOR PRECAST ROOFS AN APPROVED SEALER IS TO BE USED.
- COVERS SHALL BE FITTED WITH A THICK COATING OF HEAVY GREASE TO THE SEATING RING TO PREVENT SEIZING.
- ALL CONCRETE SHALL BE GRADE N32, IN ACCORDANCE WITH AS 1379 AND AS 3600. ALL CONCRETE TO BE VIBRATED.
- UNLESS OTHERWISE DIRECTED THE TOPS OF MANHOLES SHALL BE AS FOLLOWS IN RELATION TO FINISHED SURFACE LEVELS (FSL):  
75mm IN ABOVE FSL IN PROPERTIES  
FLUSH IN FOOTPATHS AND ROADWAYS
- ALL DIMENSIONS ARE IN MILLIMETERS
- WRITTEN APPROVAL FROM MACKAY WATER SERVICES IS REQUIRED FOR THE USE OF MANHOLE INTERNAL BACKDROPS
- THE QUANTITY OF CONCRETE IN MANHOLES APPLICABLE TO INSITU CONSTRUCTION SHALL BE DETERMINED FROM THE FOLLOWING FORMULA:  
 $Q = 0.59D + 0.45M$   
WHERE D = DEPTH OF MANHOLE FROM TOP TO DOWNSTREAM INVERT



FLAT TOP MANHOLE  
PLAN  
(CAST INSITU)

<p><b>Mackay REGIONAL COUNCIL</b></p>		DRAWING No.	
		A3-00856	
<p>STANDARD DRAWING SEWER MANHOLES</p>		AMEND. <b>B</b>	
		SHEET 1 OF 1	
<p>COMMERCIAL SERVICES</p>		<p>EXECUTIVE MANAGER MACKAY WATER SERVICES RFBQ 7606</p> <p>JASON DEWITT DATE 27/5/09</p>	
<p>DRAWING FILE NAME M:\ES\Design\Projects\STD-DWG\MACKAY WATER\WSAA MRC\SEW CODE\A3-856A</p>		<p>WSAA No. N/A</p>	
<p>SURVEY N/A</p>		<p>DATE OF LAST EDIT April 02, 2009</p>	
<p>SURVEY FILE No N/A</p>		<p>LEVEL DATUM A.H.D.</p>	
<p>APPV. <b>JC</b></p>		<p>MERIDIAN MGA-55</p>	
<p>NO. <b>B</b> <b>SB</b> <b>AMEND</b> <b>MGR SIGN</b></p>		<p>JOB No</p>	
<p>A FEB09 TFER TO MRC TBLOCK</p>		<p>WATER SERVICES ASSOCIATION of Australia</p>	
<p>NO. DATE DESCRIPTION</p>		<p>M:\Engineering Services\Design\Projects\Standard drawings\Mackay Water\WSAA MRC\SEW CODE\A3-856A.dwg, 03/06/2009 7:45:34 AM, PrimopDF</p>	