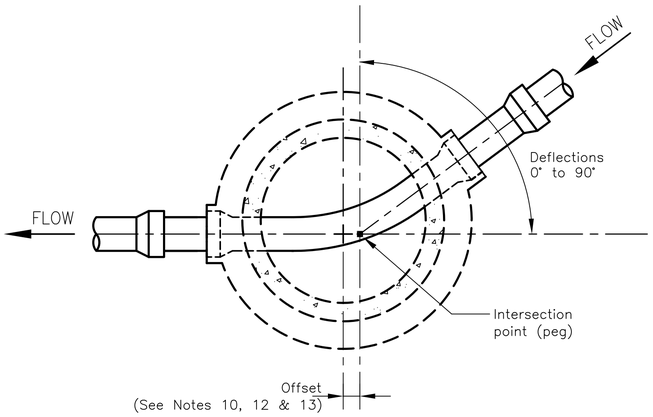
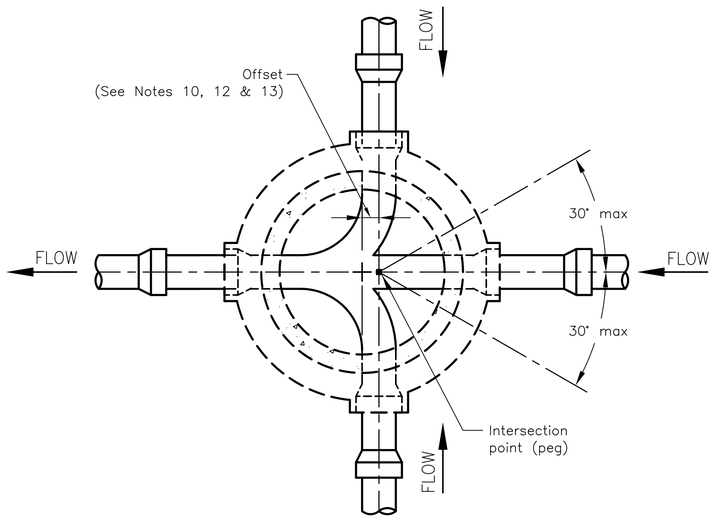
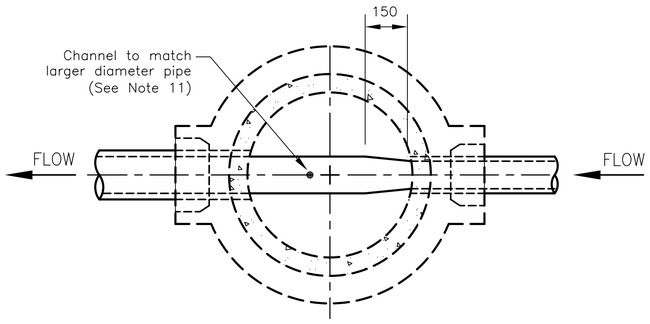


CHANGE IN DIRECTION OF SEWER



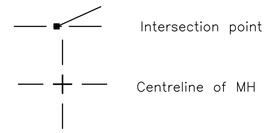
MULTIPLE INCOMING SEWERS

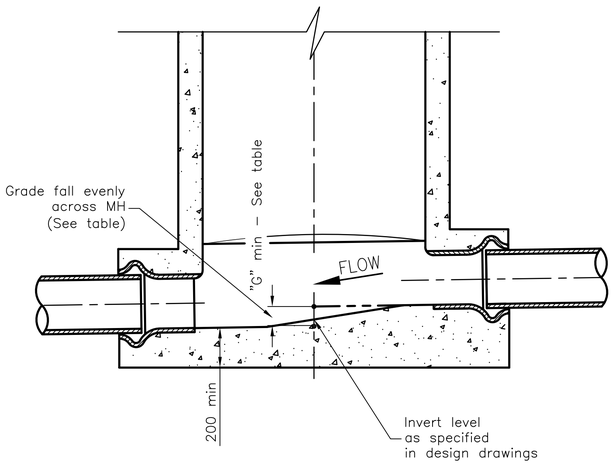


CHANGE IN DIAMETER OF SEWER

FALL ACROSS MH (INLET TO OUTLET INVERT)	
DEFLECTION ANGLE	"G" MIN
0° – 30°	30
>30° – 60°	50
>60°	80

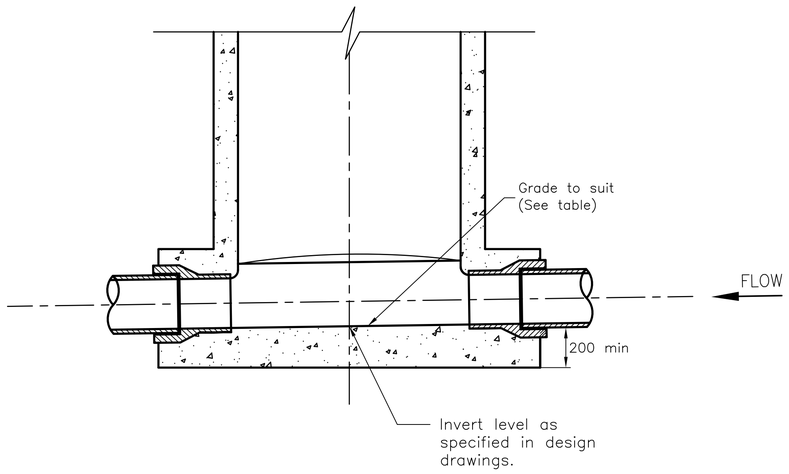
LEGEND





CHANGE IN DIRECTION THROUGH MAINTENANCE HOLE

PVC (RRJ) PIPES SHOWN



STRAIGHT THROUGH SEWER

VC PIPES SHOWN

NOTES

1. All dimensions are in millimetres unless noted otherwise.
2. This drawing applicable to precast and in–situ MH.
3. All connection types shown in this drawing are applicable to VC, PVC solvent weld (SWJ), & PVC rubber ring (RRJ) & PE pipes, unless otherwise specified.
4. To ensure bonding coat PVC pipes cast into MH wall and base with resin/solvent & sand or abrade for the length of wall penetration.
5. Fill joint around insert pipe with authorised epoxy or mastic sealing material.
6. For details of pipe connection to MH see SD–484.
7. Rocker pipe lengths and connection systems to be as shown in SD–484.
8. Maximum fall across MH to be 150.
9. External maintenance hole drops are not permitted unless written approval is obtained from Townsville Water.
10. Where necessary pull MH off centreline of sewer (max 200) to improve flow and accessibility provided the following conditions are met:
    - All tangent points to be contained within MH.
    - Sufficient work area available.
    - Maintenance equipment can be used in all mains.
    - Offset as specified.
11. Invert levels to be as shown in design drawings.
12. For channel intersection and offset details see SD–473.
13. For sewers on steep grades or where the intersection angle is <45° use drop junction as shown on SD–474.

No.	DATE	DESCRIPTION	AP'D
B		NOTES AMENDED	
A		ORIGINAL ISSUE	

REVISIONS

NOTES : BASED ON FORMER WSAA DRAWING SEW–1303 AND SEW–1304

Full Size A1

Not to Scale

DRAWN: DESIGN OFFICE | CHECKED: D. MOSELEY

Design Engineer Approved: Original signed by P. TURL

Date: 26/07/212

Manager Approved: Original signed by P. MENDIOLEA

Date: 26/07/2012

City of Townsville

Ph: (07) 4727 9000
www.townsville.qld.gov.au

MAINTENANCE HOLES SEWERS ⩽ DN 300 CHANGES IN LEVEL DETAILS AND CHANNEL ARRANGEMENTS

STANDARD DRAWING

SEWERAGE

SD–471 | B