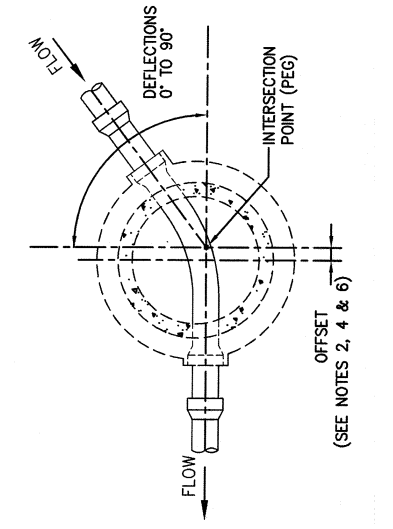
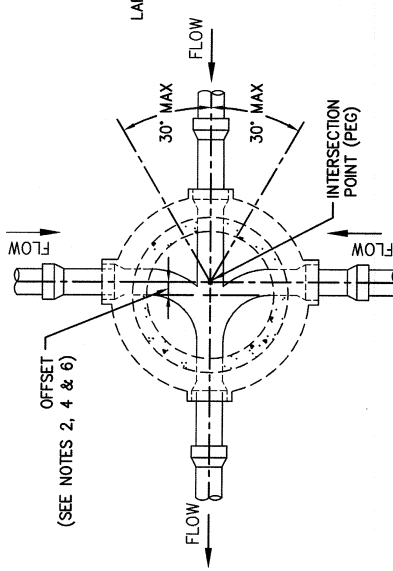
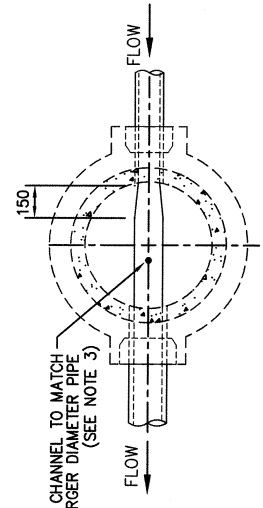




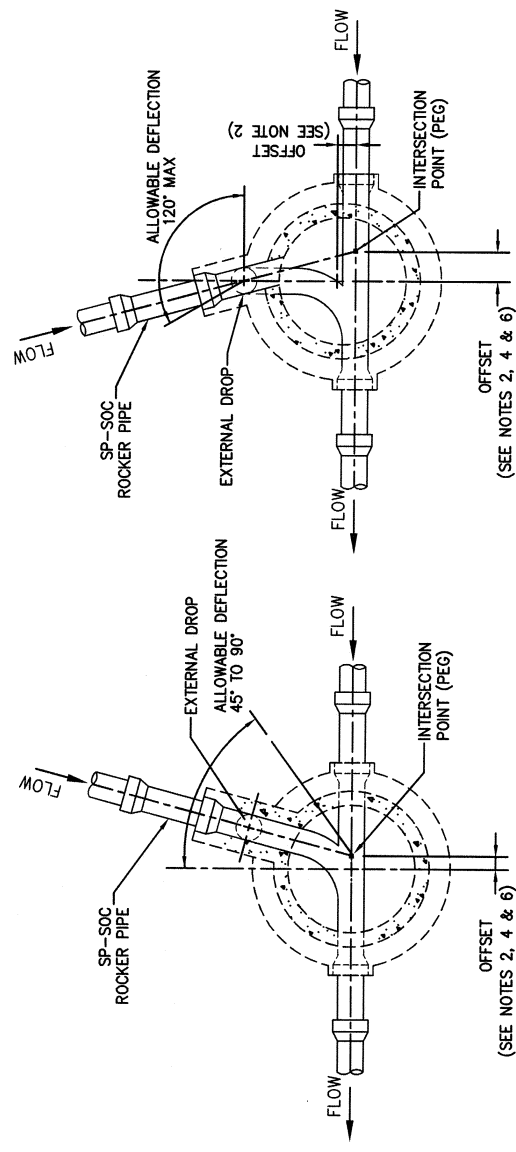
CHANGE IN DIRECTION OF SEWER



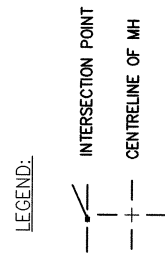
MULTIPLE INCOMING SEWERS



CHANGE IN DIAMETER OF SEWER



INCOMING SEWERS HAVING EXTERNAL DROP



NOTES:

1. ALL DIMENSIONS IN MILLIMETRES.
2. 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.
3. INVERT LEVELS TO BE AS SHOWN IN DESIGN DRAWINGS.
4. FOR CHANNEL INTERSECTION AND OFFSET DETAILS SEE A3-04220.
5. FOR INLET - OUTLET ARRANGEMENTS SEE A3-04218.
6. FOR SEWERS ON STEEP GRADES OR WHERE THE INTERSECTION ANGLE IS <45° USE DROP JUNCTION AS SHOWN ON A3-04221.

MRC STANDARD DRAWINGS SUPERCEDES WSAA STANDARD DRAWINGS

|          |            |                        |           |                                                                                                                      |  |                                                                                      |  |                                                                                                                    |  |
|----------|------------|------------------------|-----------|----------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------|--|
|          |            |                        |           | DRAWING FILE NAME                                                                                                    |  | COMMERCIAL SERVICES                                                                  |  |  <b>Mackay REGIONAL COUNCIL</b> |  |
|          |            |                        |           | McEngineering Services\Technical Services\Design\Projects\Standard drawings\Mackay Water\WSAA MRC\SEW CODE\A3-04219B |  |                                                                                      |  |                                                                                                                    |  |
| <b>C</b> | <b>5/5</b> | <b>AMEND MGR SIGN.</b> | <b>JC</b> |                                                                                                                      |  | WSAA NO.<br><b>SEW-1304</b>                                                          |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  |  |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | WATER SERVICES ASSOCIATION<br>of Australia                                           |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | SURVEY N/A                                                                           |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | DATE OF LAST EDIT                                                                    |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | May 21, 2009                                                                         |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | LEVEL DATUM                                                                          |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | A.H.D.                                                                               |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | MERIDIAN                                                                             |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | MGA-55                                                                               |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | JOB No                                                                               |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | APPVD.                                                                               |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | DESCRIPTION                                                                          |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | WSSA ORIG.                                                                           |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | T'SFER TO MRC TBLOCK                                                                 |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | MODIFIED TO MRC STD                                                                  |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | SLR                                                                                  |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | SLR                                                                                  |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | MAY08                                                                                |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | OCT07                                                                                |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | A                                                                                    |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | O                                                                                    |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | NO. DATE                                                                             |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | APPEND. C                                                                            |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | AMEND. C                                                                             |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | A3-04219                                                                             |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | DRAWING No.                                                                          |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | STANDARD DRAWING                                                                     |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | MAINTENANCE HOLES                                                                    |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | SEWER < DN 300 TYPICAL                                                               |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | CHANNEL ARRANGEMENTS                                                                 |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | EXECUTIVE MANAGER                                                                    |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | MACKAY WATER & WASTE                                                                 |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | RPEQ 7506                                                                            |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  |   |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | JASON DEVITT                                                                         |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | DATE                                                                                 |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | 27 MAY09                                                                             |  |                                                                                                                    |  |
|          |            |                        |           |                                                                                                                      |  | SHEET 1                                                                              |  | OF 1                                                                                                               |  |