DESIGN CRITERIA FOR REAR OF ALLOTMENT
DRAINAGE SYSTEM

**Notes:**

1. Design flows calculated based on Manning's n of 0.011. Pipe sized assuming a discharge of 15 L/s from each allotment - based on roof areas of 250m² and ARI of 20 years for S.E. Queensland. All pipes shall have a minimum diameter of 150mm, except across footpath.

2. Where the pipe gradient exceeds 5%, undertake a more detailed hydraulic analysis including the assessment of structure losses, where appropriate.

3. An easement in favour of Council is required when the roofwater line is designed to service more than 2 allotments, irrespective of pipe size.

4. Discharge to kerb and channel must be limited to 30L/s.

5. Provide minimum 450 cover to pipes except where reduced cover is necessary to effect discharge to kerb and channel. Pipe types and classes to comply with the following requirements:
   - UPVC pipe (minimum sewer class Sn8) manufactured in accordance with AS1260;
   - PVC pipes and fittings for drain, waste and vent applications. Joint type, solvent welded;
   - Steel reinforced concrete pipe minimum class 2, manufactured to AS4058. Joint type, rubber ring;
   - Fibre reinforced concrete pipe minimum class 1, manufactured to AS4139. Joint type, rubber ring.

6. Minimum pipe grades to comply generally with AS3500/National Plumbing and Drainage Code Part 3 Stormwater Drainage:
   - 1.0% Grade for pipes ≤150Ø;
   - 0.5% Grade for pipes >150Ø but <375Ø;
   - 0.5-0.3% Grade for pipes 375Ø.

7. Provide roofwater inspection manholes:
   - At minimum 100m spacing;
   - At all changes in pipe sizes;
   - At all direction changes exceeding 15°;
   - At line termination.

8. Provide "as constructed" information for:
   - Offsets of the main line to the property boundary;
   - The locations of inspection manholes and Y junctions measured from the property boundary.