

WATER MAIN DEAD ENDS

1. PURPOSE

To outline East Gippsland Water's (EGW) standard requirements for dead ends in water mains/reticulation networks, where the requirements vary from or require further clarification to the Water Services Association of Australia (WSAA) Water Supply Code of Australia WSA 03-2011 Version 3.1 (WSA 03-2011); relevant clauses are shown in italics. The standard requirements outlined in this document shall be adopted for all dead ends unless approved otherwise in writing by EGW.

2. APPROVAL

Executive Manager Infrastructure

3. REQUIREMENTS

EGW requires all water reticulation mains to be designed to maximise flow circulation in the network and provide multiple supply options by avoiding "dead ends" in water mains as much as reasonably possible. This is to reduce water quality issues associated with excessive water age and low flows, and to minimise customer interruptions due to faults in single supply main situations (*clause 5.2*).

When planning new developments, EGW requires the developer or designer to consider the network options below in the order of preference shown, as defined in WSA 03-2011 and shown in Appendix 1. EGW will determine, at its absolute discretion, the appropriate option in consultation with the developer/designer. Note the use of "lollipop" mains, an example is shown in Appendix 2, is no longer permitted by EGW.

1. Continuous network
2. Link mains
3. Looped mains
4. Use of reticulation mains smaller than DN100 with an adequate flushing point (*clause 5.10.4*).

Where alternatives to EGW's preferred engineering code and the suite of Technical Bulletins exist, these will be assessed and may be approved in writing by EGW on a case by case basis, with each variation documented. All codes and specifications will be consistently enforced across all works.

4. REFERENCES

- WSA Water Supply Code of Australia WSA 03-2011 Version 3.1.

For further information contact the EGW Infrastructure Team.

Ph: 1800 671 841

E-mail: infrastructure@egwater.vic.gov.au

5. REVIEW

This Technical Bulletin will be reviewed two yearly unless otherwise required.

6. APPENDIX 1: Example of Avoiding Dead Enda by Using Looped or Link Mains



FIGURE 5.1 LOOPED AND LINK MAINS

Source: Figure 5.1, WSA 03-2011 Version 3.1

7. APPENDIX 2: Example of a “lollipop” water main



Source: EGW GIS