



The Pipeline

South East

Water:

Melbourne Retail Water Agencies Information Bulletin

Issue Date – December 2017

WELCOME TO THE NEW MRWA BULLETIN

Welcome to the latest bulletin from the Melbourne Retail Water Agencies (MRWA), including City West Water (CWW), South East Water (SEW) and Yarra Valley Water (YVW). This Bulletin has been established to provide you with an understanding of current, relevant issues associated with our adopted standards, design and construction practices and any changes evolving through our industry.

Topics in this edition include:

- Sewerage DAS Advanced module training update
- Working safely in and around Pipe trenches
- Water Supply Property service connections
- Updated MRWA Water Metering & Servicing Guidelines

The opportunity is always available for you to request future bulletin items to clarify a water agency's requirement for any design or construction process or practice. You can forward your suggestions to any of the MRWA contacts listed at the end of this bulletin.

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Sewerage Design Assurance Scheme (DAS) Training update

The MRWAs in conjunction with Water Services Association of Australia (WSAA) are commencing the Sewerage Advanced Module DAS training programs in February 2018. The DAS program is a competency based system involving training and practical experience with competency demonstrated through formal assessment.



The Advanced Knowledge Training Module is aimed for key design personnel with significant experience in the design of sewerage reticulation systems. Key design personnel are those typically involved in the checking and reviewing of designs and the mentoring of design staff where required. The two day training course is conducted in an instructor-led classroom environment working through case studies and exercises supporting the MRWA Sewer Standards and National Code principles. A written Assessment is completed at the end of the training program and each participant will be issued with a Certificate of Attendance following the last day of the training course.

Following the successful delivery of the pilot training (Programs 1 and 2) the first package of four training courses have now been established by WSAA. The dates for Programs 3 to 6 are listed below and you can register your attendance now to one of the courses. A discount is available if the Early Bird registration is completed before the due date. (Refer to the WSAA event gate web links for more details)

- Program 3 (7-8 Feb)
 - <u>https://reg.eventgate.com.au/Event/9217/Program-3---WSAA-Design-Assurance-Scheme-DAS-Sewerage-Training-Course</u>
- Program 4 (28 Feb 1 Mar)
 - <u>https://reg.eventgate.com.au/Event/9218/Program-4-WSAA-Design-Assurance-Scheme-DAS-Sewerage-Training-Course</u>
- Program 5 (21-22 Mar)
 - <u>https://reg.eventgate.com.au/Event/9219/Program-5-WSAA-Design-Assurance-Scheme-DAS-Sewerage-Training-Course</u>
- Program 6 (18-19 Apr)
 - <u>https://reg.eventgate.com.au/Event/9220/Program-6-WSAA-Design-Assurance-Scheme-DAS-Sewerage-Training-Course</u>

Additional Sewerage Advanced Module DAS training courses will be announced at the completion of Program 6.

The MRWA Edition of the Gravity Sewerage Code addresses the planning, design, construction, testing and commissioning of sewerage systems up to and including DN 1200mm in size.

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Working safely in and around pipe trenches

The MRWAs would like to remind all Water Industry stakeholders to be diligent in ensuring safety requirements are constantly being met when working in and around pipe trenches. Particular attention shall be given to the safety in design and trenching controls involved with the installation of Long radius Sewerage bends and maintenance structures.



Risk controls for safe trenching may include (but not limited to) the following aspects:

- Contractors are to review their Safe Work method Statements (SWMS) and Job Safety Analysis (JSA) prior to entering a trench.
- Site inspections to be undertaken prior to entering a trench.
- Toolbox meetings to be conducted prior to entering a trench.
- On the job change management and risk control review if there are changed conditions. (eg. weather conditions, wet or unstable soil and water seepage).
- Required PPE to be worn by all employees onsite.
- Trenching to control the risks.
 - Use of appropriately sized shields wedged to prevent movement with correctly positioned ladder. No employee shall ever work outside the shield area.
 - Use of appropriate sized trench battering/ benching.
- Appropriately trained employees and contractors to undertake the task. Additional awareness and supervision considered for inexperienced workers or apprentices involved in the task.

Additional information can be obtained from the following reference material:

- Occupational Health and Safety Act 2004 (Victoria)
- Occupational Health and Safety Regulations 2017 (Victoria), in particular Part 3.3 – Prevention of falls and Part 5.1 - Construction
- WorkSafe Code of Practice No: 8 Safety Precautions in Trenching Operations - 1988

Water Supply Property connections

In December 2016, Water Standard MRWA-W-110 was revised to introduce new requirements for property service and tapping arrangements on drinking and non-drinking water systems. Whilst these requirements have been generally adopted, non-standard arrangements are still being observed on submitted drinking and non-drinking water designs on a regular basis.

Designers are reminded that the Property service offsets and positions as shown in Figure 110-D are mandatory and are not to be varied without demonstrating that they are not possible. The MRWA have undertaken significant consultation with other service utility authorities as part of co-ordinating of the Road Management Act – '*Standard Utility infrastructure space allocation*' to determine these mandatory offsets and relative provision for future relocation of property driveways is not considered to be a valid justification for not adopting the mandatory property connection offsets.



The MRWA have observed a number of recurring issues with large road crossing angles of property connections and use of non-standard connection offsets. The following summary of key positioning issues is provided as a reminder of the MRWA requirements:

- Connections shall be positioned at an offset of 1.4m (±0.1m) on the side of the lot opposite to the driveway for lot widths less than 16m. Where a lot is wider than 16m or where a position adjacent to the side boundary is impractical (e.g a corner lot) then the connection shall be positioned adjacent to the driveway at a 5.0m offset from the lot boundary.
- Connections on short side shall be positioned perpendicular to the main and at the required offset.
- Connections on the long side shall be as a preference perpendicular or at the very least have the angle of crossing minimised. To achieve this preference it may be necessary to have a separate pre-tapped connector for both the short







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and long side connections (positioned clear of pavement and trees).

- Where it is possible to utilise a dual port connector for the short and long side connections and still achieve a perpendicular long side connection (or not have any significant increase in the angle of crossing) then these should be utilised.
- Pre-tapped connectors including dual ports are not approved products for use on PE mains. As such all tapping connections located on PE mains shall be single fittings.

The above summary is of the current requirements of MRWA-W-110 and should be adhered to for all designs submitted. These arrangements will be monitored over time and if necessary may be amended in the future if it is identified that these can be improved to better suit the operational requirements of the water agency and current development trends.

Updated MRWA Water Metering & Servicing Guidelines

The MRWAs have published the latest edition of the Water Metering and Servicing Guidelines this month. The updated guidelines (Version 8) provide consistent requirements across each Water Agency where possible.



The Water Metering and Servicing Guidelines provide specific metering and servicing conditions for new developments, alterations to existing developments and existing water metering arrangements. The intended audience includes Water Industry stakeholders, developers, plumbers, builders, plumbing specialists, property owners and Water Corporation staff.

To view the Water Metering and Servicing Guidelines online, go to the Specs and Guidelines page of the MRWA Web Portal. The Standard drawings can be viewed via the Web portal's Water Standards page or directly from the SEW, CWW and YVW websites.

MRWA Documentation

All MRWA standards, included those described in this bulletin are available on the MRWA website at:

http://www.mrwa.com.au/Pages/Standards.aspx

MRWA KEY CONTACTS

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