

TABLE 001-A: 300 STANDARDS- MAINTENANCE STRUCTURE REQUIREMENTS

STANDARD NO.	STANDARD NAME	RELEVANCE	TOPIC(S) COVERED	KEY CODE REFERENCES
MRWA-S-300	Maintenance Structure Selection, Placement & Connection To Properties	D ✓✓✓✓ C ✓✓✓✓	When to use what type of maintenance structure and requirements for property connections to structures	4.13, 6.7, 9.3.3, 16.7, 17, 18
MRWA-S-300B	Maintenance Structure Base Levels	D ✓✓✓✓ C ✓✓✓✓	Designation of levels at maintenance structures	5.6.6
MRWA-S-300C	Plastic Maintenance Structure Utilisation	D ✓✓✓✓	Visual representation of limitations of plastic maintenance structures	4.13, 6, 7, 18
MRWA-S-301	Property Connections General, and IS and Type 2 Construction Details	D ✓✓✓✓ C ✓✓✓✓	Possible drop range for different connections. Surface and base construction of ISs and Type 2 connections	4.13, 5.6.5, 6, 7, 15, 18
MRWA-S-302	Type 1 Property Connections	C ✓✓✓✓	Installations arrangements for Type 1 property connections and ISs	4.13, 6, 7, 16.7, 16.9, 18
MRWA-S-303	Type 2 Property Connections	C ✓✓✓✓	Installations arrangements for Type 2 and IS shaft property connections	4.13, 6, 7, 16.7, 16.9, 18
MRWA-S-304	Type 4 Property Connections	C ✓✓✓✓	Installations arrangements for Type 4 and IS shaft property connections	4.13, 6, 7, 16.7, 16.9, 18
MRWA-S-305	Maintenance Shafts	D ✓✓✓✓ C ✓✓✓✓	Maintenance shaft construction requirements	4.13, 6, 7, 15, 18
MRWA-S-306	Maintenance Chambers	D ✓✓✓✓ C ✓✓✓✓	Maintenance chamber construction requirements	4.13, 6, 7, 15, 18
MRWA-S-306B	Maintenance Holes, Plastic	D ✓✓✓✓ C ✓✓✓✓	Plastic maintenance hole construction requirements	4.13, 6, 7
MRWA-S-307	Maintenance Hole General Design	D ✓✓✓✓ C ✓✓✓✓	Material, shaft, flotation, channel, drop and corrosion control design requirements	4.13, 5.3.6, 5.6.6, 7, 8.5, 9.3.3, 9.4.6
MRWA-S-308	Maintenance Hole Layout Requirements, Made to Order	D ✓✓✓✓	Drafting requirements for maintenance hole detailed designs	4.13, 7, 7.6, 9.3.3
MRWA-S-309	Maintenance Hole General Construction, Concrete	C ✓✓✓✓	Concrete, concrete placement, finish quality, steel reinforcement and construction joints	4.13, 7, 9.3.3, 17
MRWA-S-310	Maintenance Hole Base Construction, Made to Order	D ✓✓✓✓ C ✓✓✓✓	MH base concrete thickness, reinforcement, channel, table and pipe connection details	4.13, 7, 9.3.3, 15, 17
MRWA-S-311	Maintenance Hole Internal Drop Construction, Made to Order	D ✓✓✓✓ C ✓✓✓✓	Internal drop installation details including layout and fitting requirements	4.13, 6, 7, 9.3.3, 17
MRWA-S-312	Maintenance Hole External Drop Construction, Concrete	D ✓✓✓✓ C ✓✓✓✓	External drop installation details for CWW and YVW including layout and fitting requirements	4.13, 7, 8.5, 9.3.3, 17
MRWA-S-313	Maintenance Hole New Top Conversion, Concrete. Cover Selection	D ✓✓✓✓ C ✓✓✓✓	Types and limitations of concrete MH top conversion. Maintenance structure cover selection	4.13, 4.15, 7, 9.3.3, 17
MRWA-S-313B	Maintenance Hole Top Construction, Concrete	D ✓✓✓✓ C ✓✓✓✓	Flat top, conical and truncated top construction requirements	4.13, 7, 9.3.3, 17
MRWA-S-314	Maintenance Hole Ancillary Items, Made to Order	D ✓✓✓✓ C ✓✓✓✓	Ladder, step iron, drop pipe bracket and landing installation requirements	4.2, 4.13, 7, 13.1, 17
MRWA-S-317	Pressure Main Discharge to the Gravity System Requirements	D ✓✓✓✓ C ✓✓✓✓	Requirements for the connection of SPS and PSS pressure mains to the gravity system	5.6.6, 7.7.2, 8.4.2
MRWA-S-319	Pressure Main Discharge to the Gravity System Examples	D ✓✓✓✓	Compliant and non compliant examples of pressure main connections to the gravity system	5.6.6, 7.7.2, 8.4.2

TABLE 001-B: 400 STANDARDS- MISCELLANEOUS STRUCTURES

STANDARD NO.	STANDARD NAME	RELEVANCE	TOPICS COVERED	KEY CODE REFERENCES
MRWA-S-401	Sewerage Network Airflow Management	P ✓✓✓✓	Method for determining water seal placement and the type and location of vents	2.5.1, 8.2, 8.4
MRWA-S-402	Vents General	D ✓✓✓✓ C ✓✓✓✓	General requirements of vents	4.16, 8.4
MRWA-S-402B	Vent Construction Details	C ✓✓✓✓	Vent construction details	4.16, 8.4
MRWA-S-403	Water Seals And Marker Posts	D ✓✓✓✓ C ✓✓✓✓	Installation requirements of water seals and marker posts	4.2, 5.3.4, 5.4.6, 8.2, 16.11
MRWA-S-404	Emergency Relief Structure Design	P ✓✓✓✓ D ✓✓✓✓	Design requirements and level determination for ERSs	8.7
MRWA-S-406	Emergency Relief Structure Construction Details	D ✓✓✓✓ C ✓✓✓✓	Construction details for the connection, monitoring and discharge of ERSs	8.7

TABLE 001-C: 500 STANDARDS- LIVE SEWER WORKS

STANDARD	STANDARD NAME	RELEVANCE	TOPIC(S) COVERED	CODE REFERENCES
MRWA-S-500	Live Sewer Works	D ✓✓✓✓ C ✓✓✓✓	Connection options. Selection and application of materials. Visual records of completed work	23
MRWA-S-503	Pipe Connections	C ✓✓✓✓	Junction fitting selection and installation	7.5, 7.10, 13.1, 16.7, 23
MRWA-S-506	Existing Concrete Maintenance Holes, New Connections	D ✓✓✓✓ C ✓✓✓✓	Requirements of new connections to existing maintenance holes, both shaft and base connections	7.5, 7.7.4, 17.8, 23
MRWA-S-508	Live Sewer Concrete Maintenance Hole Construction	C ✓✓✓✓	Construction of new concrete maintenance holes over existing sewer pipes	7.5, 23
MRWA-S-510	Live Sewer Concrete MH Construction, Concrete Encased	C ✓✓✓✓	Differences to MRWA-S-508 required when the existing sewer has concrete embedment or is concrete encased	7.5, 23
MRWA-S-512	Live Sewer Maintenance Structure Installation Examples	D ✓✓✓✓ C ✓✓✓✓	Insertion of plastic maintenance structures into live sewers. Construction of concrete MHs over replaced pipe	7.5, 23
MRWA-S-514	Repair of Sewers & Decommissioning of Sewer Connections	C ✓✓✓✓	Selection and installation of mechanical inserts, patch liners, replacement pipe and connection caps	5.2.9, 7.5, 12.6, 23
MRWA-S-516	Decommissioning of Sewers and Structures	D ✓✓✓✓ C ✓✓✓✓	Decommissioning requirements for maintenance structures, sewers and concrete MH connections	5.2.9, 12.6, 23
MRWA-S-518	Existing Concrete MH Height Adjustment, Method Selection & General Requirements	D ✓✓✓✓ C ✓✓✓✓	Height adjustment options for Flat Top and Conical Top concrete top maintenance holes	23
MRWA-S-520	Existing Concrete MH Height Adjustment, Construction Details	C ✓✓✓✓	Construction details for options specified in MRWA-S-518	23

ALL DIMENSIONS IN mm UNLESS STATED OTHERWISE				DESIGNED: R. JAGGER DATE: SEP 2020				MELBOURNE RETAIL WATER AGENCIES				MRWA SEWERAGE STANDARDS				NOT TO SCALE			
DRAWN: R. JAGGER DATE: SEP 2020				CHECKED: NAME DATE APPROVED: NAME DATE															
				<input checked="" type="checkbox"/> CWW G. ANTHONSEN SEP 20 <input checked="" type="checkbox"/> SEW C. PAXMAN SEP 20 <input checked="" type="checkbox"/> YVW N. GERHARD SEP 20				<input checked="" type="checkbox"/> CWW S. TRIKHA SEP 20 <input checked="" type="checkbox"/> SEW D. STEWART SEP 20 <input checked="" type="checkbox"/> YVW R. LEON SEP 20				OVERVIEW PART 2 Planning Design Construction ✓ ✓✓✓✓ ✓✓✓✓✓ ✓✓✓✓✓							
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