



**Supplementary Manual to the  
WSAA Sewerage Code  
(WSA 02-2002:2.3)**

**Melbourne Retail Water Agencies Edition V1.0**

**Version 2.0**

## **ACKNOWLEDGEMENTS**

---

Central Highlands Water acknowledges the following source of documents in the preparation of this standard:

Sewerage Code of Australia WSA 02-2002-2.3 Melbourne Retail Water Agencies Edition V1.0

## **DISCLAIMER**

---

“Central Highlands Water excludes all liability to all persons and all conditions and warranties, which are expressed or implied at law (including under statute).

Where liability and conditions and warranties cannot be excluded at law, the liability of Central Highlands Water is limited at their choice, to resupplying the Supplementary Manual or paying the cost of resupplying the Supplementary Manual.”

Please note that the Supplementary Manual or information contained within the Supplementary Manual must only be used in conjunction with the Sewerage Code of Australia WSA 02-2002-2.3, of the Water Services Association of Australia.

**Further, the Supplementary Manual may be periodically updated.**

## **INFORMATION**

---

For information and advice and to advise of possible errors, omissions and changes required for future revisions, please contact Mr. Adam Parr by email at [aparr@chw.net.au](mailto:aparr@chw.net.au)

## **INTENDED AUDIENCE**

---

This Central Highlands Water Supplementary Manual is intended for CHW personnel, consultant engineers and contractors engaged in the design, construction and maintenance of CHW's sewerage system.

## **REVISION CONTROL**

---

<b>Version</b>	<b>Approved by</b>	<b>Approval Date</b>	<b>Issue Date</b>
1.0	Adam Parr	01.01.2010	
2.0	Paul Donald	5.04.2012	

## **PREFACE TO CHW SUPPLEMENT**

---

This Supplement complements the Sewerage Code of Australia, WSA 02-2002-2.3 (the Code) and contains additional (supplementary) information to cover:

- ▶ CHW detailed requirements for specific matters, which the Code anticipates individual water agencies will address.
- ▶ Variations to the Code where its requirements are not compatible with CHW current requirements.

## TABLE OF CONTENTS

<b>Part 0 - Glossary of Terms.....</b>	<b>5</b>
<b>Part 1 – Planning &amp; Design.....</b>	<b>7</b>
4. DETAILED DESIGN .....	8
4.2.3 Sewer layout .....	8
4.2.5 Easements .....	8
4.5.4 Minimum pipe sizes for maintenance services .....	8
4.6.4.4 Partial lot service .....	8
5. PROPERTY CONNECTION .....	8
5.1 General.....	8
5.5.2 Multiple occupancy lots.....	9
5.7 Y-Property connections .....	9
6. MAINTENANCE STRUCTURES.....	9
6.3.2 Maintenance structure spacing – Reticulation sewers .....	9
6.6.9 MH covers.....	9
6.7.1 General .....	9
7. ANCILLIARY STRUCTURES.....	10
7.2 Water seals, boundary traps and water sealed MHs/gas check MHs.....	10
7.5 Ventilation .....	10
7.10 Flow Measuring Requirements .....	10
9. DESIGN REVIEW AND DRAWINGS .....	10
9.2.1 General .....	10
<b>Part 2 – Products &amp; Materials.....</b>	<b>11</b>
10.1 Purpose .....	12
<b>Part 3 - Construction.....</b>	<b>13</b>
14. PRODUCTS AND MATERIALS .....	14
18. MAINTENANCE HOLES.....	14
18.9 Covers .....	14
<b>Part 4 – Standard Drawings.....</b>	<b>15</b>
SEW-1100.....	16
SEW-1101.....	16
SEW-1102.....	16
SEW-1103.....	16
SEW-1106, 1107, 1108, 1109.....	16
SEW-1201-V .....	16
SEW-1303-V .....	16
SEW-1304-V .....	16

SEW-1310..... 16  
SEW-1311..... 16  
SEW-1312..... 16  
SEW-1314-V ..... 17  
SEW-1407..... 17  
SEW-1408..... 17  
SEW-1409-V ..... 17  
SEW-1410..... 17  
SEW-1411..... 17  
SEW-1412..... 17

## **Part 0 - Glossary of Terms**

---

CHW has no supplementary requirements in this section.

# **Part 1 – Planning & Design**

---

## 4. DETAILED DESIGN

### 4.2.3 Sewer layout

Replace 'Preferred gravity sewer location' with the following:

The preferred order of location of sewer for residential areas shall be:

- ▶ In road reserves, but clear of road carriageways
- ▶ In drainage reserves
- ▶ Inside and along the side or rear boundary of properties

### 4.2.5 Easements

Insert the following at the end of the 2<sup>nd</sup> paragraph:

Width and placement of easements within new developments shall be in accordance with CHW's Land Development Manual.

### 4.5.4 Minimum pipe sizes for maintenance services

Delete Note 2 under Table 4.3 and replace with the following:

The minimum diameter for commercial areas with lots larger than 300m<sup>2</sup>, and all industrial lots shall be DN150.

Add the following to Table 4.3:

Diameter	Grade	
	Residential	Industrial and Commercial
300mm	1 in 400	

### 4.6.4.4 Partial lot service

Delete paragraph 1 and replace with the following:

Where for physical or economic reasons partial service to a property is required, alternative methods may be adopted with the approval of CHW.

## 5. PROPERTY CONNECTION

### 5.1 General

Add the following:

CHW only maintains property service connections up to the property boundary. All services within the property boundary are the responsibility of the property owner.



### **5.5.2 Multiple occupancy lots**

*Replace paragraph 1 with the following:*

For multiple occupancy refer to CHW's Land Development Policy.

### **5.7 Y-Property connections**

*Delete paragraph 2 and replace with the following:*

'Y' connections are permitted for road crossings only. The property service across the road must be DN150mm minimum.

## **6. MAINTENANCE STRUCTURES**

### **6.3.2 Maintenance structure spacing – Reticulation sewers**

In Figure 6.2 CHW shall adopt a maximum spacing of 300m between manholes with multiple maintenance shafts between manholes

### **6.6.3 Design Parameters for MHS**

*Insert the following:*

Central Highlands Water shall not allow sewers entering and leaving MHs at angles less than 85 degree deflection

Delete note 6 SEW1305V

### **6.6.9 MH covers**

*Insert the following:*

All maintenance hole covers are to be Ductile Iron, which can be removed using 'Gatic' lifting device in accordance with the standard drawings. Concrete covers are not permitted.

## **6.7 MAINTENANCE SHAFTS**

### **6.7.1 General**

*Insert the following:*

Maintenance shafts shall replace inspection shafts in most applications.

## **7. ANCILLIARY STRUCTURES**

### **7.2 Water seals, boundary traps and water sealed MHs/gas check MHs**

*Delete clause and replace with the following:*

Water seals are not a requirement of CHW, unless directed otherwise.

### **7.5 Ventilation**

*Delete clause and replace with the following:*

Venting of the reticulation, branch and trunk sewerage systems via induct and educt vents is not a requirement of CHW, unless directed otherwise.

### **7.10 Flow Measuring Requirements**

Flow measuring devices are not a requirement of CHW, unless directed otherwise.

## **9. DESIGN REVIEW AND DRAWINGS**

### **9.2.1 General**

*Insert the following after (d):*

- (e) CHW signature title block for endorsing design plans.
- (f) Identification of CHW as the Water Authority.

## **Part 2 – Products & Materials**

---

## **10.1 Purpose**

*Add the following:*

Unless otherwise specifically agreed, only products endorsed in the MRWA approved products list shall be used.

## **Part 3 - Construction**

---

## **14. PRODUCTS AND MATERIALS**

*Add the following:*

The CHW approved products list is still under production, so in the meantime, use the CWW Approved Products List.

SewerPro pipes and fittings have been approved for used in industrial areas by CHW

## **18. MAINTENANCE HOLES**

### **18.9 Covers**

*Add the following:*

CHW require that all maintenance hole covers are Ductile Iron, which can be removed using a “Gatic” lifting device in accordance with the standard drawings. Concrete covers are not permitted.

## **Part 4 – Standard Drawings**

---

**SEW-1100**

- ▶ Not used by CHW.
- ▶ Replace with Drawing No. SEW-1150-M

**SEW-1101**

- ▶ Not used by CHW.
- ▶ Replace with Drawing No. SEW-1152-M

**SEW-1102**

- ▶ Not used by CHW.

**SEW-1103**

- ▶ Not used by CHW.

**SEW-1106, 1107, 1108, 1109**

- ▶ Not used by CHW.
- ▶ Replace with Drawing No.'s SEW-1153-M, SEW-1154-M and SEW-1155-M

**SEW-1201-V**

*Replace note 4 with the following:*

- ▶ Embedment, trench fill and compaction to meet the requirement of design drawings, WSA02 Part 3 MRWA edition, road owner's requirements and the MRWA Backfill Specification No. 04-03.1.

**SEW-1303-V**

- ▶ External drops not permitted by CHW.

**SEW-1304-V**

- ▶ External drops not permitted by CHW.

**SEW-1310**

- ▶ Not used by CHW.

**SEW-1311**

- ▶ Not used by CHW.

**SEW-1312**

- ▶ Not used by CHW.



**SEW-1314-V**

- ▶ CHW preference is for screw fitted riser shaft cap.

**SEW-1407**

- ▶ Not used by CHW.

**SEW-1408**

- ▶ Not used by CHW.

**SEW-1409-V**

- ▶ Not used by CHW.

**SEW-1410**

- ▶ Not used by CHW.

**SEW-1411**

- ▶ Not used by CHW.

**SEW-1412**

- ▶ Not used by CHW.