



Redland City Council

Technical Specification for Sub-metering of Community Title Scheme (CTS)

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1. INTRODUCTION

1.1. Background

This document contains guidelines and technical information for the individual submetering of multi-unit residential and commercial properties (MUPs), required to fulfill the Development Application condition introduced under the *Water Act and Other Legislation Amendment 2007*.

Sub-meters installed to these guidelines shall become the property of Redland City Council (RCC). Property owners will receive a Water Account Summary on water consumption per unit/lot.

The master meter shall continue to be installed at the property boundary and shall remain Council's primary record of water consumption.

For the purpose of this document, a lot is defined as a 'sole occupancy unit'. In other words: an area of exclusive use within the property.

It is not mandatory to retro-fit sub-meters to existing multi-unit complexes. The body corporate can however, elect to do so at its own cost.

1.2. Scope

This document contains details about the following:

- where sub-meters are required;
- sub-meter selection information and associated infrastructure;
- sub-meter installation requirements; and

1.3. Contacts

Please contact Redland City Council Customer Service on 3829 8999 (during business hours) if you require assistance interpreting these specifications.

Community Title Scheme Billing - Pre 1 January 2008

For Community Title Schemes where sub-meters are not installed or are installed but not owned by Council, Council will:

Option 1 - Provide individual accounts to each owner as a customer for a share of the total amount payable for water consumed by the Scheme Land as measured by the master water meter, based on the contribution schedule lot entitlement for the lot;

Option 2 - Upon request from the Body Corporate, entering into an agreement with the Body Corporate where Council will provide individual accounts to each lot owner within a CTS based on consumption measured by the sub-meter where:

1. minutes have been provided from the body corporate meeting agreeing to this option
2. sub-meters are installed by the body corporate on all lots within the CTS
3. the sub-meters installed are under 8 years of age and have recorded less than 3400 Kilo litres
4. the sub-meters are located so they are easy to read and maintain in accordance with part 4 of the Queensland Plumbing and Wastewater Code
5. Common property water consumption, that is the difference between the aggregate of the sub-meters from the master meter, will be billed to the body corporate.

Definitions:

TERM	DEFINITION
Body corporate	An entity created under section 30 of the <i>Body Corporate and Community Management Act 1997</i> . The members of the body corporate for a Community Titles Scheme are the owners of all lots included in the scheme.
Common property	Common property, for a Community Titles Scheme is freehold land forming part of the scheme land, but not forming part of a lot included in the scheme.
Community Titles Scheme (CTS)	A scheme registered in accordance with section 24 of the <i>Body Corporate and Community Management Act 1997</i> in relation to certain freehold land. A Community Titles Scheme is established by: <ul style="list-style-type: none"> (a) the registration, under the <i>Land Title Act 1994</i>, of a plan of subdivision for identifying the scheme land for the scheme (b) the recording by the registrar of the first community management statement for the scheme.
Contribution schedule lot entitlement	The number allocated to the lot in the contribution schedule or interest schedule in the community management statement in accordance with section 46 of the <i>Body Corporate and Community Management Act 1997</i> .
Master meter	The meter at the point of connection for the Community Titles Scheme property to the Council's water main and is upstream of all sub-meters and is used to register total water consumption.
Owner	An owner of a lot within Community Title Scheme Land.
Scheme land	The land identified in the plan of subdivision registered under the <i>Land Title Act 1994</i> in relation to a Community Titles Scheme.
Sub-meter	A term used to describe individual water meters within scheme land that measure supply to individual lots within the scheme land. A sub-meter is supplied water via a master water meter.
Sub-metering	The installation of sub-meters.
Water meter	A device, including equipment related to the device, for measuring the volume of water supplied to premises and installed on infrastructure that supplies a water service at the premises. An example of equipment related to the device is an automatic meter reading device and associated technology or similar devices.

2. SUBMETERS

All sub-meters installed in MUPs must fulfill the requirements of this section. The responsibility for making sure sub-meters conform is the responsibility of the Body Corporate.

2.1 Requirement for Sub-meters

This section contains a description of where sub-meters are required.

2.1.1 Queensland Plumbing and Wastewater Code

Following is an excerpt from the *Queensland Plumbing and Wastewater Code* defining meterable premises, where individual tenancies or owner's water use must be metered:

- (a) Each lot within a *community title scheme*, including the *common property*, in a *water service provider's area*; or
- (b) *the sole occupancy unit* of a *Class 2, 4, 5, 6, 7 or 8 building* in a *water service provider's area*; or
- (c) each *storey* of a *class 5 building* in a *water service provider's area* where the building consists of more than one storey and sole occupancy units are not identified at the time of the building's plumbing compliance assessment.

Where *sole occupancy unit* means:

- (a) a room or other part of a building for occupation by one or a joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier and includes-
 - (i) a dwelling; or
 - (ii) a room or suite of associated rooms in a *Class 4, 5, 6, 7 or 8 building*; or
- (b) any part of the building that is *common area or common property*.

And *storey* means a space within a building which is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but not-

- (a) a space that contains only-
 - (i) A lift shaft, stairway or meter room; or
 - (ii) A bathroom, shower room, laundry, water closet, or sanitary compartment; or
 - (iii) Accommodation intended for not more than 3 vehicles; or
 - (iv) A combination of the above; or
 - (v) A mezzanine.

(End of excerpt. Words in italics have legal definitions in the Queensland

Plumbing and Wastewater Code.)

If the development contains more than one land use, then each land use shall follow the relevant sub-metering requirements. For example, a high rise building with shops on the ground floor, offices on intermediate floors with residential apartments above and a hotel on top may require:

- Each shop to be metered individually;
- Each floor of the office space to be metered;
- Each residential apartment to be metered separately; and
- A single meter for the hotel usage.

2.1.2. Body Corporate Usage

The master meter at the boundary of the property will be considered a Body Corporate meter for the purpose of billing. The volume of water used by the Body Corporate will be determined by subtracting the sum of the usage registered on the sub-meters from the master meter.

2.2. Sub-meter Installation

A single cold water sub-meter capturing all cold water entering the lot must service each lot within the CTS. These sub-meters shall capture only the water entering the lot for which they are assigned.

All sub-meters are to be installed by licensed plumbers. Care must be taken to ensure that the sub-meter type selected can be installed with the dial face in a position where an unassisted person standing on the floor can easily read it.

Australian Standard AS/NZS3500 outlines a number of provisions in regard to backflow protection. Where necessary, a hazard assessment may be completed for the development as well as for individual lots.

All sub-meters must comply with the dimensions described in Appendix D of AS3565.1. Sub-meters assemblies 20mm size must have end connections of 14 threads per inch. Other sizes must conform to the Australian Standards if available, otherwise with normal Council practice (details can be provided on request).

All sub-meter boxes, whether housing single or multiple sub-meters, must be identified on the outside with the words "Water Sub-meter" or "Water Sub-meters" respectively, in readable and permanent print.

The following installation options apply to all sub-meters within a development.

2.2.1. Cold Water Sub-meter - Installation Option 1

Sub-meters must be installed so that they are accessible from ground level in common areas outside the building, in a weather-resistant hinged sub-meter cupboard or on the side of the building or other structure or free standing. Access to the sub-meters must be unrestricted at all reasonable times.

See the following sections on Buried Sub-meter Boxes and Sub-meter Cupboards for further details.

2.2.2. Cold Water Meter - Installation Option 2

In cases where sub-meters at ground level are impractical (e.g. high rise buildings), or where access to any of the sub-meters is restricted in any way (e.g. gated communities) sub-meters are to be installed in the following manner:

In the case of high rise buildings the sub-meters must be located in a single latched cupboard in a common area on each floor. If the design of the development makes it impractical to install all sub-meters in a single cupboard then multiple cupboards may be used, so long as their number is minimized.

In the case of gated communities and horizontal developments the sub-meters must be located in sub-meter boxes on common property less than 3m outside the front boundary of the lot for which the sub-meter is required.

Alternatively, for either type of development the sub-meters may be located in a utility room that is accessible through the common property. Requirements are the same as for those in sub-meter cupboards.

If a development is a mixture of both a gated community and consists of high rise buildings, then the sub-meter installations may be a mixture of those described above.

2.2.3. Buried Sub-meter Boxes

Buried sub-meters are permitted as detailed in Redland City Council – Water Sub Meter Requirements

2.2.4. Sub-meter Cupboards

Sub-meter cupboards shall be designed such that:

- a) There is a minimum 100mm gap, perpendicular to the direction of the pipes, between sub-meters.
- b) There is a minimum 100mm gap between the outermost valves and the edges of the cupboard.
- c) Sub-meters shall not be installed within fire hose reel cabinets/cupboards.
- d) The sub-meters are easily accessible and readable from floor level of common property, unassisted by a ladder or other equipment. Max height = 1.6m.
- e) There is no need for a person performing normal maintenance duties to enter into the cupboard. (I.e. The cupboard must not be classifiable as a confined space for entry purposes.) Where meters are located in a utility room, adequate ventilation must be provided.
- f) A minimum of 2 square metres is available in front of the cupboard as free working space.
- g) Adequate lighting is available during daylight hours.
- h) There is sufficient room for the cupboard door(s) to swing open completely and provision for them to be held open.
- i) The cupboard does not need to be locked, but must be fastened with a latch where a council lock can be fitted in the future if required. If a lock is required, it must be a council approved lock.

Sub-meters installed in cupboards shall be **conventional** (also known as **inline**) meters.

2.3. Approved Sub-meters and Associated Infrastructure

Depending on their installation, sub-meters may be conventional or manifold meters. See Section 2.3.4 for further details.

2.3.1. Conventional Meter Assemblies

Where conventional 20mm meters are installed, each sub-meter must have ball valves on both sides for shutting off the water supply, and an adjustable meter coupling on one side of the meter and a standard meter coupling on the other side for the safe removal of the sub-meter.

These items together are referred to as the 'conventional sub-meter assembly'. The overall length of the assembly is to be no more than 500mm.

This sub-meter assembly shall connect to the Body Corporate plumbing on the upstream side and the lot owner's private plumbing on the downstream side, both with male iron adaptors.

Complete sub-meter assemblies including valves and authorised for use are available from the following manufacturers:

- Actaris Pty Ltd
- Elster Metering Pty Ltd
- Reliance Worldwide RMC

2.3.2. Meters Larger than 20mm

The following products have been approved for use on the cold water service:

Service size	Council approved Manufacturers	Product Specification
25mm	Actaris Elster RMC	Pulse output Australian Standard dimensions
32mm	Actaris Elster RMC	Pulse output Australian Standard dimensions
50mm	Actaris Elster RMC	Pulse output Australian Standard dimensions

Where these meters are installed internally, ball valves and meter couplings (at least one adjustable) will be required on either side, same as the 20mm sub-meter requirements.

Meters must be of Australian Standard dimensions and have Australian Standard threads where they connect to the building pipework.

Where a vertical turbine type sub-meter is larger than 32mm in diameter, there must be 10 times the diameter of straight pipe upstream of the sub-meter and 5 times the diameter of straight pipe downstream of the sub-meter, with all required valves and joints outside these sections. With a horizontal turbine type (Actaris) the straights may be reduced to 3 times diameter upstream and downstream.

2.3.3. Other Requirements

During design, consideration shall be given to appropriate sub-meter sizing. Residential lots may be metered by a 20mm sub-meter from the approved Manufacturers in Sections 2.3 and 2.3.2. Meters for non-residential lots must be sized as part of hydraulic design and approved by Council. Within a Multi-Unit Properties (MUP), sub-meters of the same size shall be of the same brand.

The sub-meters must be permanently identified with the unit number that they serve and the manufacturer's serial number for the purpose of identifying them on Council's billing system. Identification must be by tagging the meter, in the form of a metal or plastic tag affixed with a metal ring.

The hydraulic As Constructed drawings for the development must include a table of:

- Sub-meter serial numbers;
- the unit numbers they serve;
- the location of the sub-meters;
- the date of installation of the sub-meters;
- the sub-meter readings on installation.

An audit of the connectivity of sub-meters to their units may form part of the final plumbing inspection for the site. The Council will choose the percentage of units involved in the audit, to a maximum of 100%. In the event that any part of the development fails the connectivity audit, Council or their representative will test connectivity throughout the whole development at the developer's expense. Council may provide the developer with a list of areas requiring rectification before a final plumbing certificate can be issued.
