Richmond Valley Council

MULTI UNIT WATER METERING GUIDELINES

Version 3
July 2017

This document contains information relating to the selection, installation and maintenance of Water Meters and Service Connections within Richmond Valley Council's operating areas. This document is to be used as a guide only and must be used in accordance with Richmond Valley Council's Policies and associated standards as amended from time to time.

Introduction

Previous Standards adopted by Richmond Valley Council only allowed a single common meter to be installed to service all units in either a dual or multi-unit development. A single water meter account would be forwarded to a body corporate to pay using funds generally paid by the unit owners as part of body corporate fees. Typically, internal meters were installed by the owners within these developments, to allow division of fees by the body corporate.

Consumption based water charging has become common practice across Australia and encourages efficient management of water as a resource due to direct costs to customers. In introducing consumption based water charging, Richmond Valley Council has developed a set of standards as contained within these guidelines.

These guidelines document the necessary water metering and water servicing arrangements required by Richmond Valley Council for new developments, alterations to existing developments, and other such existing water metering arrangements. The arrangements detailed within these guidelines refer to standardised development projects and apply to the majority of development proposals. Where the arrangements contained within are inappropriate for a particular development, Richmond Valley Council will work with applicants to determine the most suitable arrangement on a case by case basis.

Richmond Valley Council General Water Metering Principles

With consumption based pricing becoming common practice across Australia, Richmond Valley Council will be working with developers and ratepayers alike, to enable consumption based water pricing to occur. The following section provides a summary of the differing scenario's that may be considered in association with Multi unit metering in the Richmond Valley Local Government area.

EXISTING DEVELOPMENTS

Existing development for this purpose shall be defined as current multi-unit development, whereby water meters and servicing arrangements are already in place.

Council, upon application, may approve reading individual meters on the basis that:

- All dwelling owners agree to undertake individual metering
- Council currently has a meter installed at the property boundary (master meter)
- Individual (to each dwelling) meters are currently installed. These meters would become the property of RVC and would be read for billing purposes. Any water unaccounted for following comparison between the internal meters and the master meter, would be apportioned evenly across the individual properties/dwellings
- Pipe work between the master meter and the internal meters would remain the responsibility of the property owners
- Access to read and maintain all meters would have to be readily achievable, that is, access to meters to be unrestricted at all times, including free from building security, being unobstructed from vehicle movements, free from overgrown vegetation and other such hazards or obstructions. 24 hours' access by Council personnel is required

Council may also consider installing separate meters for each dwelling, when the master meter becomes due for replacement, as per Council's meter replacement program, to allow individual reading of meters as per the normal meter reading program (quarterly). These works would be undertaken at Council cost and in conjunction with the property owner's agreement.

Applicants wishing to have separate meters installed by Council to enable individual metering may make representation to Council's Water and Sewer Section to have their application assessed. Plans are to be supplied on application, with the following inclusions:

- Proposed water supply including size and location of meters
- Existing dwelling sites
- Existing common areas

Any upgrade costs to both internal and external water supply will be the responsibility of the applicant, with internal modifications being organized by the applicant through the services of a fully licensed plumber.

NEW DEVELOPMENTS

New development for this purpose shall be defined as a development in which a Development Consent is sought, and thereby, water metering arrangements assessed as part of the Development Assessment process.

General requirements that will be adopted when assessing metering requirements for new developments may include:

- All meters are to be supplied and installed by Council
- Council will provide a ball valve prior to the meter for Council maintenance purposes only, with each unit number clearly identified on said ball valves, by means of pressed steel (or equivalent) identification tags
- It is the responsibility of the developer to ensure that the unit's (or common area) are plumbed to the correct water meter, including installation of a ball valve on the consumer side of the meter for internal isolation/maintenance purposes.
- An individual service and meter tapped from the main to be supplied for each dwelling in any new dual occupancy development (refer to Figure 2)
- Dual service arrangements will be allowed in the instance of retrofitting existing dual occupancies, if technical requirements surrounding the service size can be met (refer to Figure 3 and Table 1)
- Manifold arrangement (refer to Figure 4) to be utilized in multi-unit developments unless the developer can provide satisfactory reasons as why this is impracticable. There may be instances whereby a master meter is required in lieu of the manifold arrangement - in larger lots where sub meters may be attached to each dwelling. This will need to be justified by the Developer on application.
- A common area meter may be incorporated into the development as part of the manifold system, if all common areas are serviced through this meter alone.
- Access to meters and manifolds must be unrestricted at all times, including free from building security, being unobstructed from vehicle movements, free from overgrown vegetation and other such hazards or obstructions. 24 hours' access by Council personnel is required.
- The service up to and including the meter will be installed by Council, above ground, to a point just within the property boundary - as approved on the Hydraulic Plan.

Plan Requirements

Hydraulic Plans must contain the following:

- Proposed Water supply including size and location of meters
- Proposed Dwelling Sites
- Proposed common areas
- Proposed meter assembly - i.e. single service, manifold, master meter and sub meters etc. including valve configuration
- Connection to Council water main
- Details on fire and/or sprinkler service

Works as Executed Plans must contain the following:

- All water meter numbers and the dwellings in which they serve
- The locations of each meter
- The size of each service and meter
- Backflow prevention of each meter
- Connectivity between all meters and areas they serve (dwellings and common areas)

Richmond Valley Council Process for Assessment of Multi Unit Development Water Metering

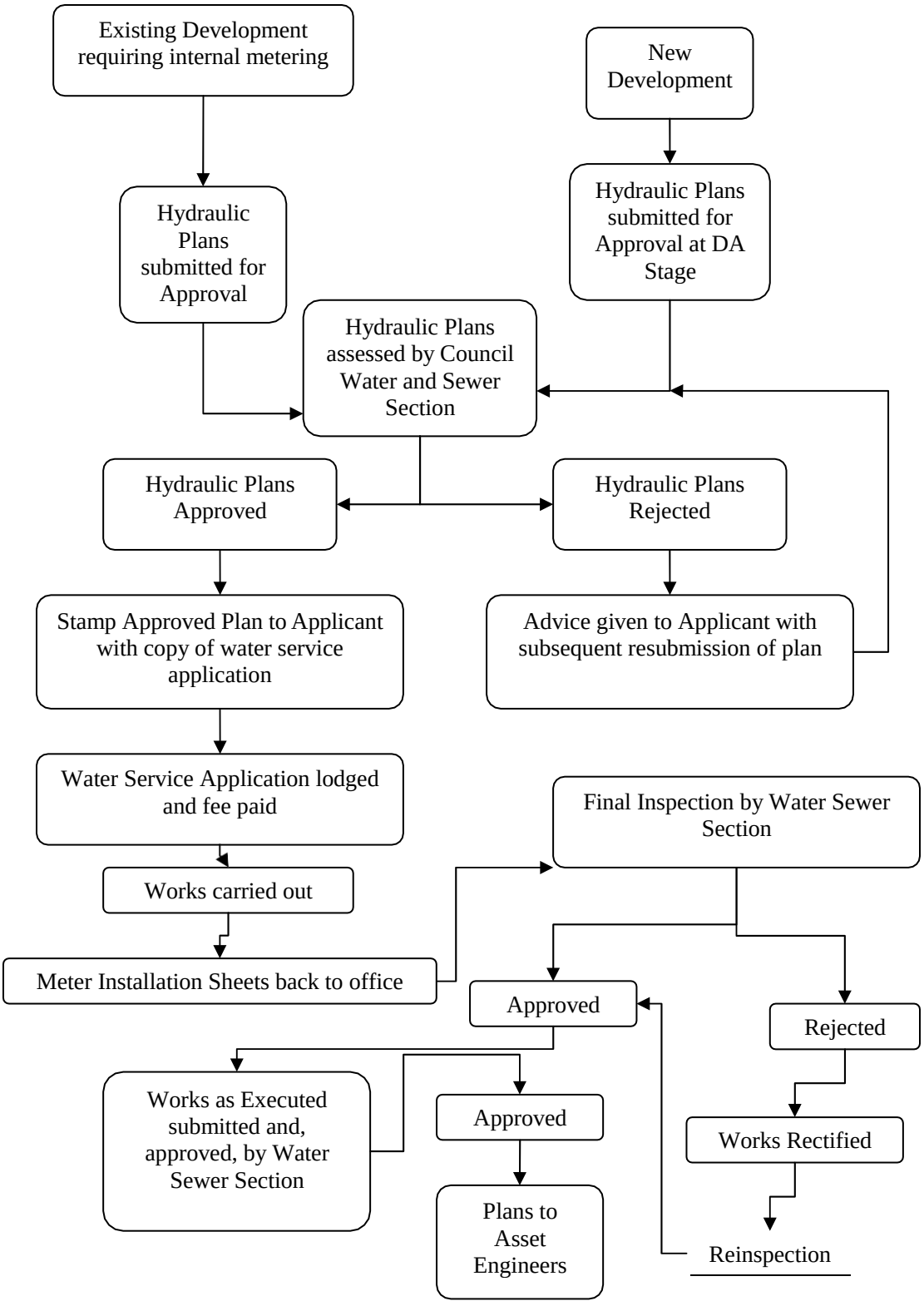

Figure 1. Process for assessing multi - unit metering requirements

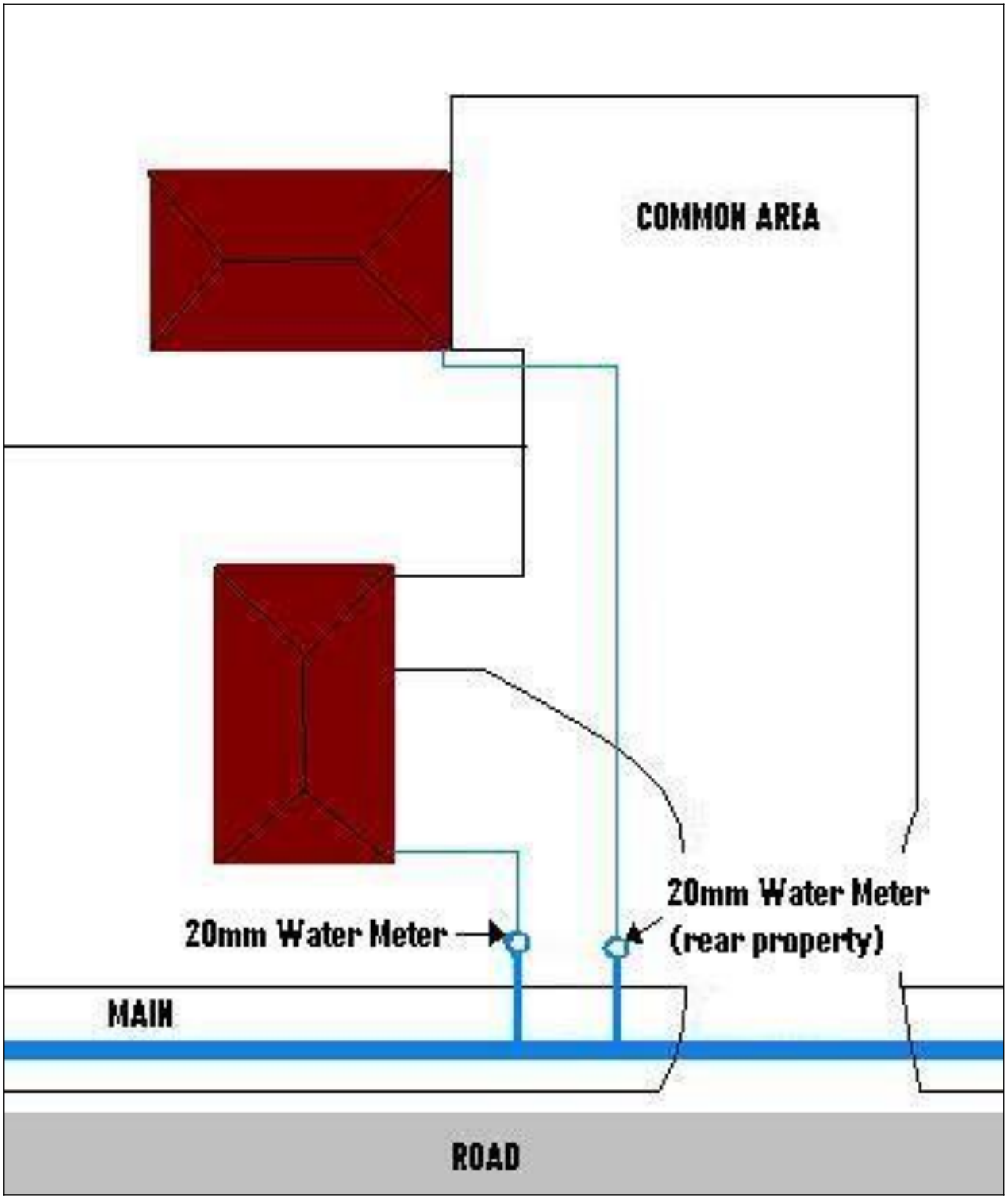

Figure 2. Typical Dual Occupancy Residential Development - New Developments

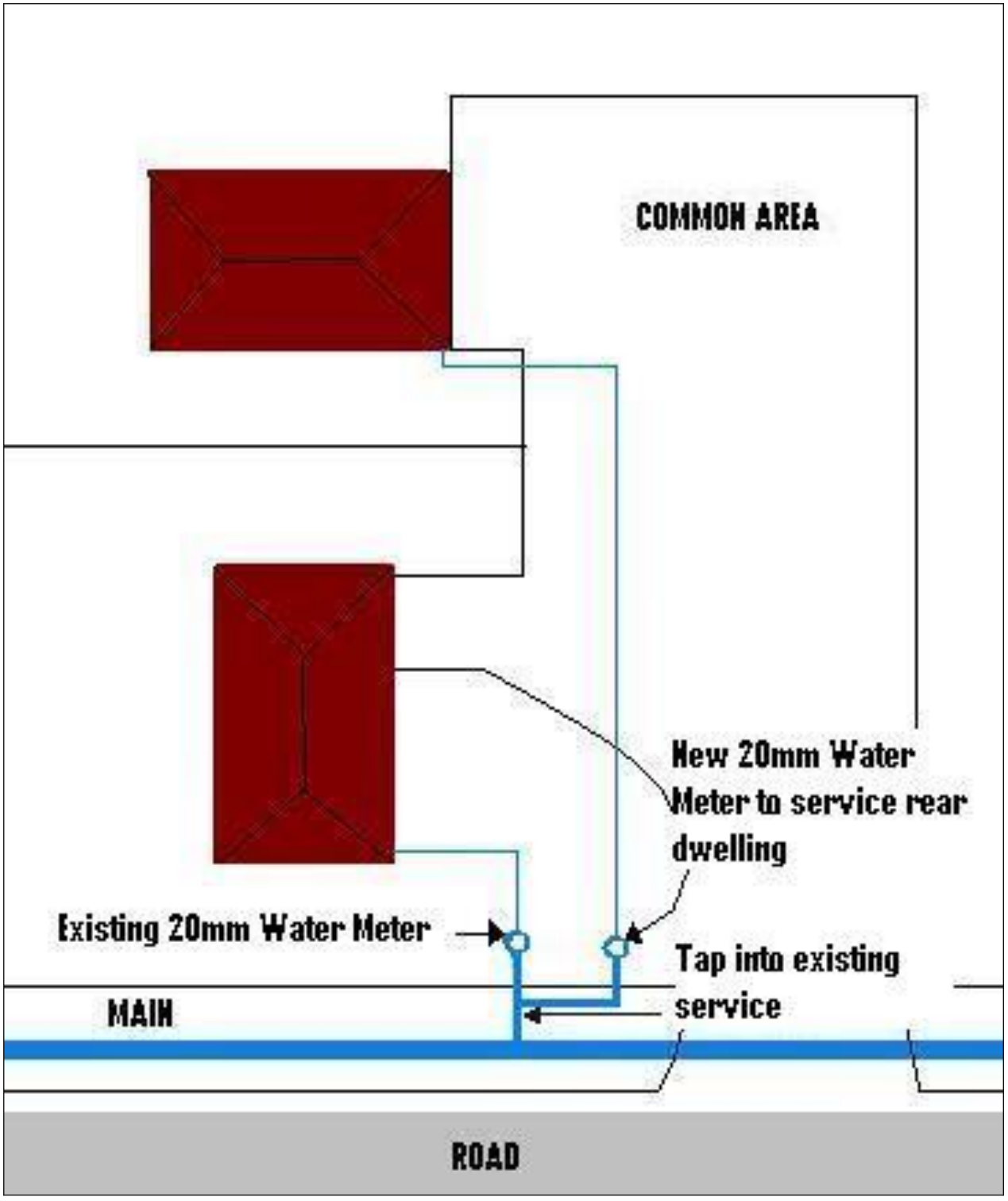

Figure 3. Typical Retrofit Arrangement for Dual Occupancies requiring individual meters. This arrangement is subject to the size of the existing service being sufficient (see Table 1).

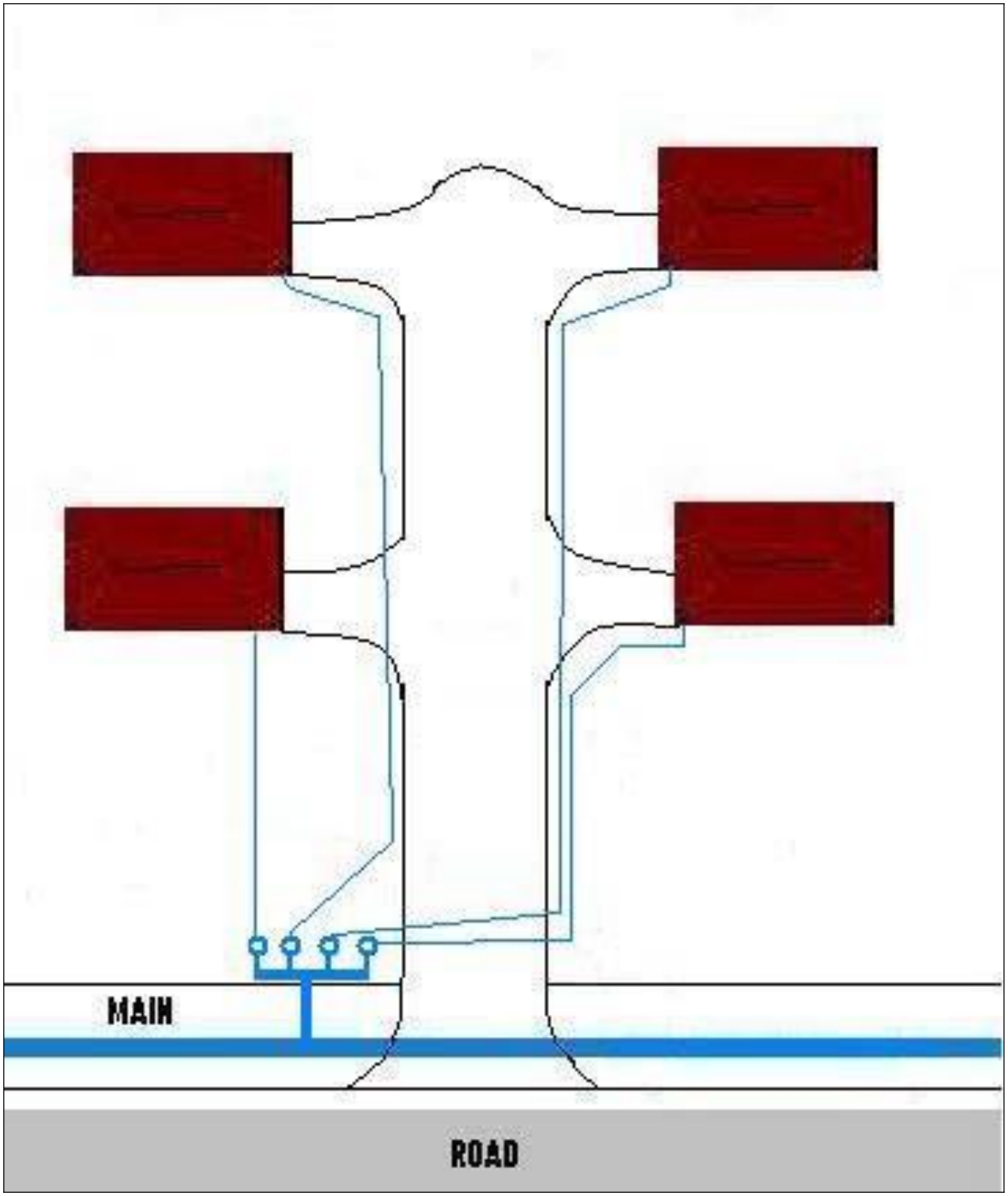

Figure 4. Typical Multi Unit Metering utilizing a manifold arrangement. This is Council's preferred option of metering multi-unit developments of three or more units.

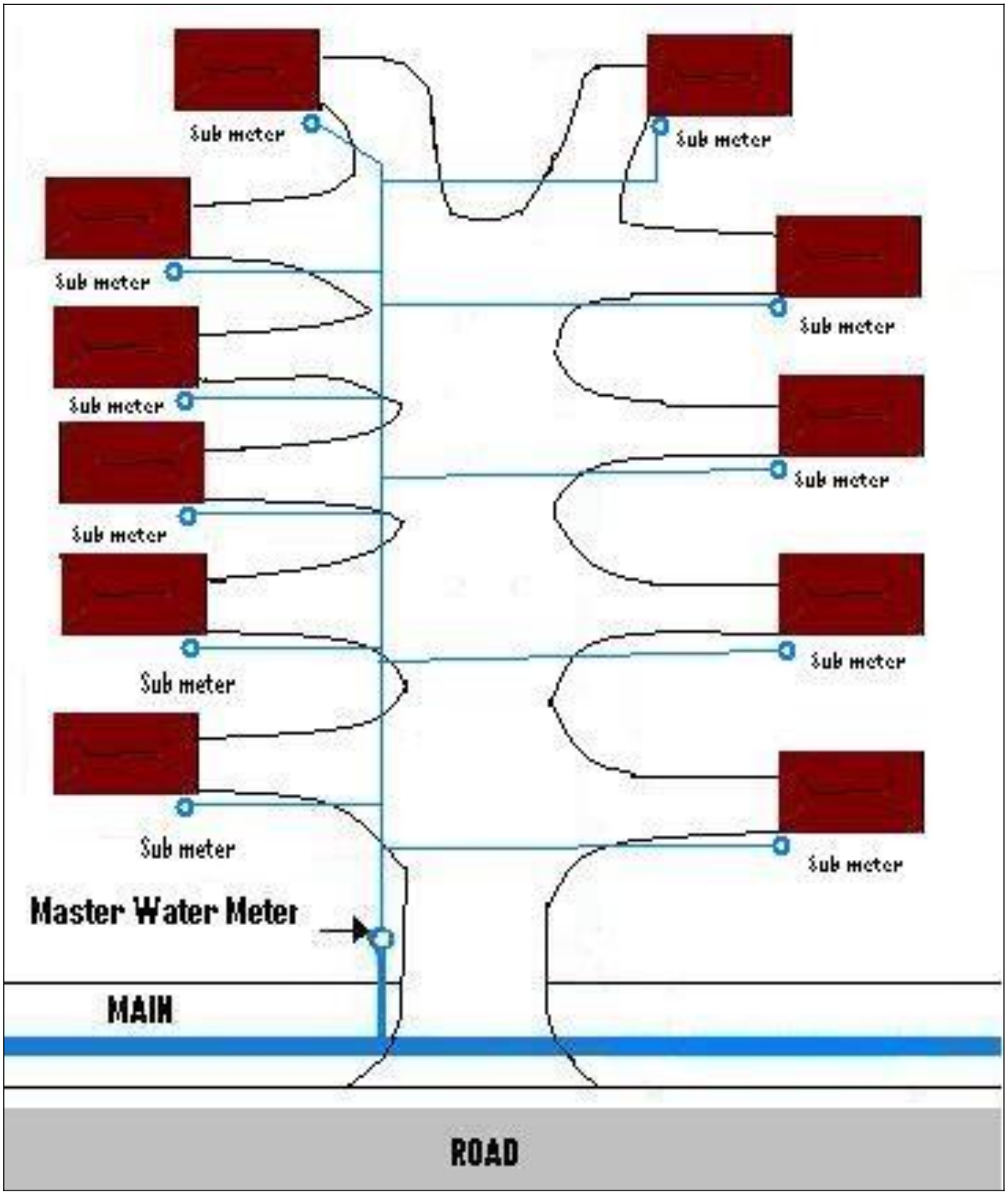

Figure 5. Typical Multi Unit Metering utilising a master meter and sub meter arrangement. This arrangement is only available when Council is satisfied that a manifold arrangement is technically unsuitable for the subject development.

Table 1. Richmond Valley Council nominal Water Service and Meter Sizes

	Service Size (mm) (Nominal Bore)		**Meter Size (mm)**	
No of Units	Same Side	Other Side	General	Low Pressure
1	25	32	20	20
2	25	32	25	25
3	32	32	25	32
4	40	40	32	32
5	40	50	32	32
6	50	50	40	40
7	50	50	40	40
8	50	50	40	50
9	50	50	40	50
10	50	50	40	50
11	50	50	40	50
12	50	50	40	50

NOTE: A unit in Table 1 has previously been identified within the Casino Council Civil Construction Manual (July, 1996) as *a single residence or development with an instantaneous demand equivalent to a single residence.*

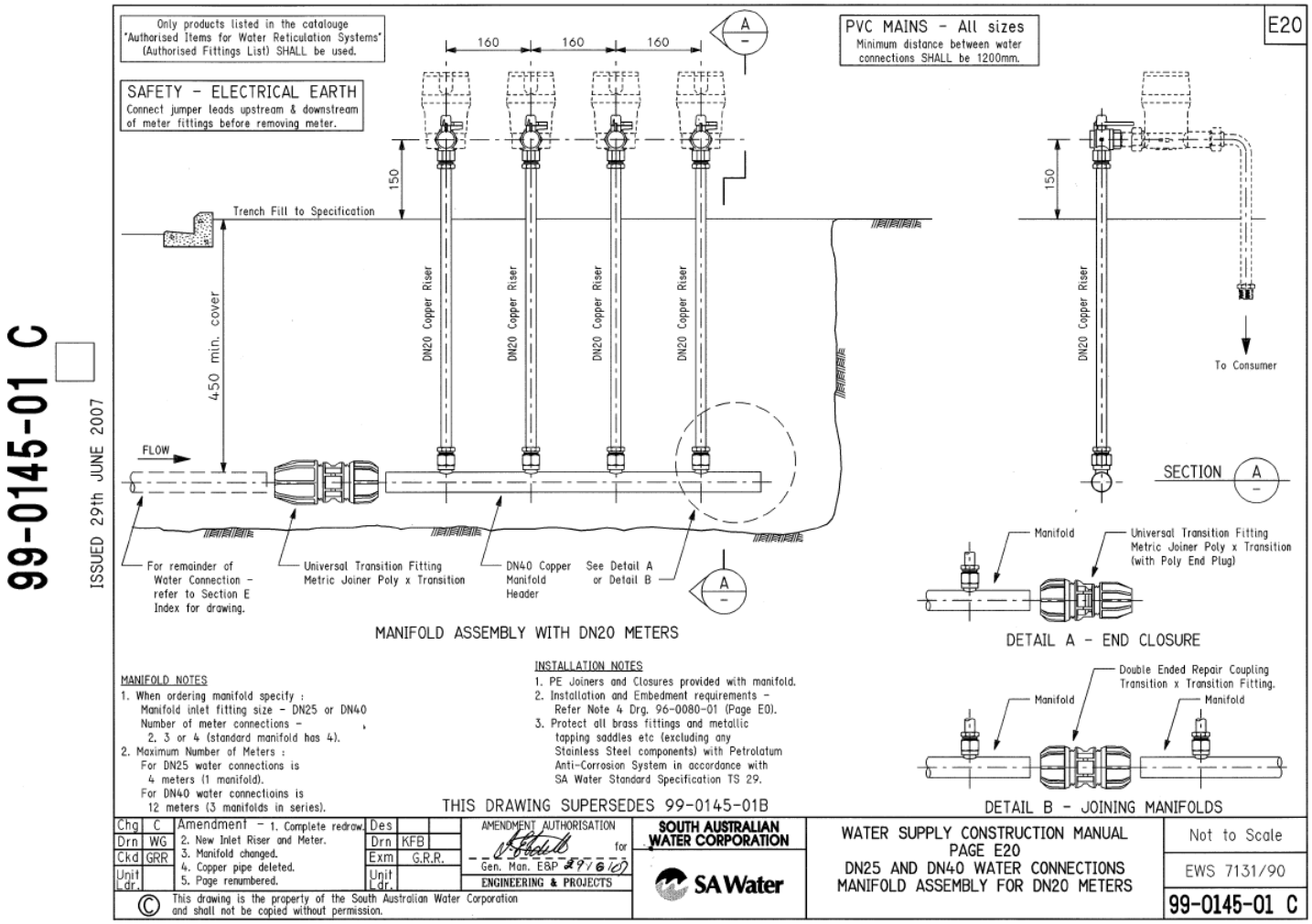

Figure 6 - Typical manifold arrangements for multi - unit developments.
Source South Australian Water Corporation, 29 June 2007, *DN25 and DN40 Water Meter Connections - Manifold Assembly for DN20 Meters*, Drawing Number 99-0145-01 C, viewed 19 October 2011, <http://www.sawater.com.au/SAWater/DevelopersBuilders/NetworkInfrastructureStandards/Water+Supply+Standards+Manual.htm>
Richmond Valley Council will construct manifold and install onsite. Richmond Valley Council specific manifold arrangement will be further developed and incorporated into future revisions of these guidelines.