



Town of Cambridge

Waste Management Planning Guidelines for Multi-unit Dwellings (MUD's), Mixed Use and Commercial Developments

Document Control

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1 Introduction

These guidelines are intended as a guide for developers, architects, waste consultants and Development Application applicants in the Town of Cambridge. The Town's Waste Policies *Policy 5.3.1 Waste Removal Service - Residential Properties Developments*, *Policy 5.3.2 Waste Removal Service - Commercial/Business Premises* and *Local Planning Policy 3.22: Waste Management* requires all group dwellings greater than three units to provide a Waste Management Plan to the satisfaction of the Director of Infrastructure as part of the development application assessment process. While *Policy 5.3.1 Waste Removal Service - Residential Properties Developments* requires all multiple dwellings to provide a Waste Management Plan to the satisfaction of the Director of Infrastructure as part of the development application assessment process.

The guidelines will assist in preparing a plan to manage the waste and recycling needs of the development and considers multi-unit developments, mixed use developments and commercial developments. Multi-unit developments with multiple towers will need to address waste and recycling requirements for each tower.

Any waste management plan is to be discussed with the Council's Waste Department at the pre-application stage for any development. The waste management plan should include details of:

- Land use type (multi-residential, mixed use or commercial);
- Number of levels;
- Number of dwellings or units (studio, one, two or three bedrooms);
- Size of each commercial area;
- Commercial usage type (café, restaurant, office, retail etc.).

The guidelines will also deal with the following:

- Waste and recycling generation;
- Waste systems;
- Bin size and colour;
- Bin allocation;
- Bin storage area;
- Collection location;
- Collection frequency;
- Verge collections;
- Scaled waste management drawings; and
- Additional waste requirements.

Council strongly encourages developers to design appropriate, efficient and safe waste and recycling collection systems in all developments which meet the requirements for Council collections.

2 Waste and Recycling Generation

The Town's minimum residential waste and recycling allocation per rateable property is 1 x120L litres per week for waste and 2 x 240L or 2 x 360L per week for recycling. The waste and recycling requirements for residents in multiunit dwellings are typically lower than this as shown in **Table 1**.

Table 1: Waste Generation Rates

Dwelling size	Waste (L/week)	Recycling (L/week)
Single dwelling	120L	360L
Studio/One bedroom	80L	80-120L
Two Bedroom	80L	80-120L
Three plus bedroom	120L	120-180L

Waste and recycling generation rates from mixed use and commercial developments are shown in **Table 2**.

Table 2: Mixed Use and Commercial Waste and Recycling Generation Rates

Premise Type	Waste (L/week)	Recycling (L/week)	
Food	Restaurant	660L/100m ² /floor area/day	200L/100m ² /floor area/day
	Cafe	300L/100m ² /floor area/day	200L/100m ² /floor area/day
	Delicatessen/take-away / café (pre-packaged food only)	80L/100m ² /floor area/day	Discretionary
Retail (other than food sales)	<100m ² floor area	50L/100m ² floor area/day	25L/100m ² floor area/day
	>100m ² floor area	50L/100m ² floor area/day	50L/100m ² floor area/day
	Supermarket	660L/100m ² floor area/day	240L/100m ² floor area/day
	Hairdresser	60L/100m ² floor area/day	Discretionary
	Showrooms	40L/100m ² floor area/day	10L/100m ² floor area/day
Bars	Tavern/small bar / licenced club	50L/100m ² bar area/day	50L/100m ² bar area/day
	Dining	660L/100m ² /floor area/day	50L/100m ² /floor area/day
Hotel/Motel	Bedrooms	5L/bedroom/day	1L/bedroom/day
	Bar	50L/100m ² bar area/day	50L/100m ² bar area/day
	Dining	660L/100m ² /floor area/day	50L/100m ² /floor area/day
Offices	Office	10L/100m ² floor area/day	10L/100m ² floor area/day
Accommodation	Backpackers/Boarding house/Guest house	40L/bedroom/day	20L/bedroom/day

3 Waste Systems for Multi-unit Dwellings

Applicants must ensure that it is as easy to dispose of recyclable as it is waste. The following waste options exist for multi-unit developments:

- a) Option 1: Use 660L bins for waste and 660L bins for recycling with bins stored in communal storage area(s). Residents may be required to carry all waste and recycling from their dwelling direct to the communal bin area(s).
- b) Option 2: A single waste chute leading to a central waste collection area in the basement or ground level and a recycling bin on each floor level.
- c) Option 3: A dual chute system for waste and recycling leading to a central waste and recycling collection area in the basement or ground level.

For options 2 and 3 detailed descriptions of the waste systems must be provided, including but not limited to:

- Number of chutes;
- No of bin carousels;
- Compaction equipment; and
- Bin tugs and towing devices.

The minimum waste system requirement based on development size is shown in **Table 3**.

Table 3: Waste System Minimum Requirements

Number of floors/storeys	Preferred Waste System
<10	Resident accessible bin store at ground level or basement level
>10	Single waste chute and recycling bin on each level
	Dual chutes providing for both waste and recycling on each level

Where chute systems are installed, the Town recommends bins to have reinforced bases for bin longevity. Property managers are to bear the cost of reinforcing bin bases. Large cardboard, hard waste and charity goods should be taken to drop-off points within the building to minimise blockage of chutes. Where waste chutes are utilised the waste may be compacted by a ratio of 2:1.

4 Waste Systems for Mixed Use Developments

Mixed use developments incorporate both residential and commercial use within the same development. The size of the development may vary from small to high rise with the commercial component located on the ground floor. Best practice waste management in mixed use developments requires the complete separation of residential and commercial waste. Waste and recycling systems should be designed that there is no negative effect on the residential dwellings within the development particularly in relation to noise, odour and collection times.

Under the *Waste Avoidance and Resource Recovery Act 2007*, Local Governments are responsible for the collection of waste from residential services and are not obliged to collect waste from commercial premises. However, a commercial premise can avail of the Town's standard waste services: 1 x 240L waste bin collected weekly and 2 x 360L recycling bins collected fortnightly. Additional bins incur additional waste fees.

Alternatively, depending on the nature and size of the commercial component of the development the body corporate may choose to utilise a private waste collection contractor. In relation to the options available for the residential component of the mixed use development please refer to *Section 3 Waste systems for multi-unit dwellings*.

5 Bin Size and Colour

The Waste Management Plan must provide details on the number of bins and their size. The Town may at its discretion provide a multi-unit development with larger bins (660L). The size and quantities of bins depends on the size of the development and the estimated waste and recycling volumes. The Town's standard bin sizes and dimensions are listed below in **Table 4** and **Table 5**.

Table 4: Bin Size and Colour

Waste Stream	Colour	Bin size per property type		
		MUD's <10 dwellings	MUD's >10 dwellings	Mixed Use
Waste	Dark green body with red lid	240L	240L or 660L	240L or 660L
Recycling	Dark green body with yellow lid	360L	360L or 660L	360L or 660L
Green Waste*	Dark green body with lime green lid	240L	240L	240L

* Green waste is an optional service

Table 5: Standard Bin Dimensions

Size (Litres)	Width(m)	Depth (m)	Height (m)
240	0.6	0.8	1.1
360	0.7	0.9	1.1
660	1.4	0.7	1.2

6 Bin Storage Area

Depending on the number of dwellings residents may have individual bin areas or shared communal bin areas as follows:

Development Type	Bin area	Bin size		
		Waste	Recycling Bin	Greenwaste
1-4 dwellings	Individual	120L	360L	240L
5-9 dwellings	Shared Communal	240L	360L	240L
10 or more dwellings	Shared Communal	240L or 660L	360L or 660L	240L
Commercial/Mixed Use	Individual bin stores	240L or 660L	360L or 660L	240L

Developments with shared bins must include an easily accessible communal bin storage area within the development. In the case of mixed use developments separate residential and commercial bin storage areas are required. For all bin stores the following details must be provided:

- Bin area size (m2);
- Bin layout;
- Wash down area;
- Ventilation;
- Vermin prevention and control;
- Noise;
- Stormwater pollution prevention and
- Adequate circulation space for manoeuvring bins within the store must be allowed.

7 Collection Location

Waste and recycling bins must always be stored on site on non-collection days. It is a requirement of the Town's Waste Local Law to store bins in a storage space or area that is behind the street alignment unless otherwise approved by Council.

For developments over 10 dwellings the Councils preference is for on-site collection of all bins. A suitable alternative to on-site collections is the provision of a bin store area opening directly on to the street. The strata company or building manager is responsible for preparing the bins for collection or providing access for the waste contractor to the bin area. If bins are stored in a basement level the building manager is responsible for ensuring the bins are taken to ground level for collection. Bins should be transported via a ramp (1:14 gradient) and in a safe manner. The aid of a mechanical tug can be used to assist with larger bins. After collections bins are returned to the bin store area. Bins are not to be left on the kerb at any time.

7.1 On-site Collections

Where on site collection is proposed to service the development, adequate and safe access must be provided for the Council's waste collection contractor vehicles as follows:

- a) The site must be designed to allow collection vehicles to enter and exit the site in a forward direction and to adequately manoeuvre onsite.
- b) A turning circle is to be provided to cater for the Council's waste collection contractor vehicles if they cannot continue through the development in a forward direction as vehicles are not permitted to reverse out of the site due to Health and Safety concerns. Turning circle details are available from the Council's Infrastructure Department.

- c) Any turning circle considerations must also include allowances for driver manoeuvring clearance and overhangs. A manoeuvring clearance of at least 0.3m on both sides of the theoretical swept path should be accommodated.
- d) The route of travel for the waste vehicle is to be of sufficient strength and quality to support the Councils waste collection contractor rear-lif vehicles.
- e) The minimum basement height clearance for waste collection vehicle access is 3m.
- f) The grades of entry and exit ramps and manoeuvrability (including turning circles) must not exceed the capabilities of the waste collection vehicle and are to comply with the Australian Standard AS 2890.2:2002 *Parking Facilities: Off Street Commercial Vehicle Facilities*.
- g) The responsible entity (strata/corporate body) is responsible for the maintenance of the common property (including roads) within the development. An indemnity provided by Council is required to be signed by the responsible entity prior to waste collections services being provided, which indemnifies both Council and its waste collection contractors from claims relating to damage caused through the collection process.
- h) Access to the collection point must be available from 7am-4pm.

Applicants should contact the Council's Waste Section to confirm truck sizes prior to submitting a waste management plan.

7.2 Bin Area Opening to Street

A suitable alternative to on-site collection of bins is the provision of a bin store opening directly onto the street. Waste collection vehicle operators would park the vehicle (in a legal parking area), retrieve the bins from the storage area or presentation area, empty them and return them immediately. Depending on the number of bins to be serviced assistance may be required from the building manager. Approval must be obtained from Council for any special on street parking restrictions to facilitate waste collections. **Bins are not to be presented or left on the kerb at any time.**

8 Collection Frequency

Typical collection frequencies are determined by the development size and type of on-site waste generation. Council currently offers weekly waste collection and fortnightly recycling collections. Additional collection frequencies incur additional waste and recycling fees.

9 Scaled Waste Management Drawings

A set of scaled drawings must be provided that shows the following details:

- Residential and commercial floor levels illustrating waste and recycling storage;
- Bin storage areas including any chutes, carousels and bins;
- Bin numbers and size of bins;
- Bin presentation location with bin alignment shown;
- Ramp grades;
- Access to bin storage area and/or chutes; and
- Swept path analysis illustrating sufficient access to collect bins.

10 Additional Waste Requirements

- a) Council recommends all multi-unit developments provide space for one charity bin. Charity bins are available in various sizes with 1m² being adequate for most developments. Most charities offer a free service including supply and collection of bin, and will generally collect clothing, used furniture and homewares in good condition. A list of charities is available at giv.org.au.
- b) Signs will be required at drop-off points (if utilising chutes) and within the bin storage area to encourage correct segregation of waste and recycling and reduce contamination.
- c) Developers must consider the storage and disposal of hard waste. Council does not provide a verge collection service for residents in multi-unit dwellings and mixed use developments that do not have sufficient verge space. In lieu of a verge collection service, property owners can avail of four tip passes per financial year from the Council to dispose of material at the Western Metropolitan Resource Recovery Centre in Shenton Park.