



ACT
Government

DEVELOPMENT CONTROL CODE

**FOR
BEST PRACTICE
WASTE MANAGEMENT
IN THE ACT**

2019

Document Information

Review and Approval

Date approved: [insert date approved]

Date effective: 1 January 2019

Approved by: [insert approval authority]

Review period: [time frame] from date of effect or following a significant change in the services delivered by the Transport Canberra and City Services Directorate

Document Details

Content owner: [insert Director-level position (or higher) of branch/division]

Contact: [insert content owner phone number]

Version Control

Version	Issue Date	Author	Details
Consultation Draft	DD/MM/YYYY	[APPROVER/DELEGATE]	Approved
Technical Review	DD/MM/YYYY	[APPROVER/DELEGATE]	Approved

Note: The current version of this document is on the Transport Canberra and City Services intranet: http://www.tccs.act.gov.au/Development_and_Project_Support/standards-codes-and-guidelines

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Part 1. Introduction

The *Development Control Code for Best Practice Waste Management in the ACT* (the 'DCC') aims to enable flexible waste design solutions based on the unique characteristics of the development. It defines the minimum necessary waste management requirements for new developments, demolition and excavation work.

1.1 Goals

The goals of the DCC are to ensure:

- waste infrastructure is designed to provide the effective storage and collection of waste and recyclable material for all *residential*, commercial and industrial premises
- developments are constructed to accommodate the appropriate levels of waste and recyclable material and meet standardised servicing requirements
- construction and demolition activities result in the maximum recycling of recyclable material
- minimum possible waste to landfill, and maximum possible recovery of recyclable materials.

1.2 Aims

The aims of the DCC are to:

- promote best practice waste management particularly relating to waste reduction, waste separation and resource recovery in the demolition, design, construction and operation of buildings
- define and codify the minimum necessary design requirements for the effective and efficient management, separation, storage and collection of waste and resource recovery in buildings
- minimise the overall impacts of waste and recyclables management in buildings by designing waste and recyclables separation, storage and collection systems that are: hygienic; *accessible*; safe in all aspects; quiet to operate; adequately sized; and visually compatible with their surroundings
- ensure that waste and recycling *collection vehicle* movements can be undertaken in a safe and efficient manner, without detrimental impacts to any infrastructure or the road network
- minimise the overall impacts of waste collection on access for other road users including pedestrians, cyclists, motorists and other service providers such as postal and delivery services
- provide the necessary design parameters to enable the *Territory* to provide waste and recycling collection services for new *residential* developments
- provide the necessary design parameters to enable private sector contractors to provide waste and recycling collection services to all commercial, public and industrial developments
- support innovation and investment in better practice waste management.

1.3 Best practice

The *Territory* encourages best practice in the design, construction and operation of new buildings to minimise waste and maximise the recovery of recyclable materials. For further information, see [Appendix 2](#).

1.4 Operational management and maintenance

Implementing the mandatory requirements in the DCC can improve the operational efficiency and aesthetics of a development through its lifecycle, and the amenity of its occupants. Developers should consider these benefits as an integral part of the waste management design process.

Developments that do not incorporate planning and vehicle access as required in the DCC risk:

- inadequate servicing or no servicing
- long-term operational difficulties
- poor outcomes for building owners, managers and users.

For further information on operational management and maintenance issues, see [Appendix 3](#).

1.5 Structure of the DCC

Part 1: Introduction.

Part 2: General provisions, including the DCC's legal basis and commencement; the framework for how the DCC operates; waste and recycling generation rates; and the role of the *Waste and Recycling Management Plan* (WRMP).

Part 3: Mandatory requirements for *residential* developments.

Part 4: Mandatory requirements for commercial, public and industrial developments.

Part 5: Mandatory requirements for *mixed-use developments*.

Part 6: Mandatory requirements for demolition, excavation and construction activities.

Part 7: Mandatory requirements for the provision and use of equipment, facilities and services.

The DCC contains a number of Appendices supporting best practice, maintenance, and *submission requirements*, including the pro-forma WRMP. Any mandatory requirement referenced in the DCC extends to supporting requirements referenced in the Appendices.

Explanatory Note

The *Waste Management and Resource Recovery Act 2016* contains a number of obligations and responsibilities. For example:

- waste must be correctly separated between approved recyclable, non-recyclable and *green waste* vegetation material when placed inside *Territory* provided *bins* for collection
- waste must be stored in *waste containers*, and the *waste containers* must be secured to ensure material does not escape
- *waste containers* must be stored within the property boundary, except when presented for collection
- residents must present mobile garbage bins (MGBs) for collection and bring them back within the property boundary as soon as practicable after collection
- residents must place their MGBs for collection in a way that does not obstruct access.

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Part 2. General Provisions

2.1 Enforcement

The DCC is implemented through the *Territory Plan 2008*. The Territory Plan is administered by the ACT Planning and Land Authority as required by Section 12 (1) (a) of the *Planning and Development Act 2007* and in accordance with Chapter 5 of the *Territory Plan 2008*.

Compliance with the DCC is achieved by satisfying the relevant *objectives* within this document. Any proposed deviation from the requirements of the DCC must be approved in writing by Place Coordination of Transport Canberra and City Services Directorate (TCCS), before the submission of any *development application*.

Any changes to an approved WRMP requires formal approval of the amendments by Place Coordination.

Failure to comply with the DCC could result in a failure to gain access to *Territory* provided waste collection services and may delay development approval.

2.2 Commencement

The Commencement Date for the DCC is **nn mmmm 2018**.

The DCC applies from the Commencement Date to all developments requiring development approval under the *Planning and Development Act 2007* within the Australian Capital Territory, except where specific exemptions apply.

The DCC does not apply to applications for development work lodged or approved before the Commencement Date. Applications lodged or approved before the Commencement Date will be subject to the DCC requirements applicable at that time.

Non-habitable buildings and structures not being used or intended to be used as part of the waste management system (such as garages, carports, sheds, fences, masts, retaining walls and swimming pools) that generate less than 20 cubic metres (m³) of demolition or excavation materials are **exempt** from the DCC (see [Part 6](#)).

2.3 Framework

2.3.1 Overview

Part 2.3 provides the framework within which the mandatory requirements in the DCC can be met. This framework is intended to provide flexibility and encourage innovative design solutions for developments.

2.3.2 Objective

An *objective* is a specific outcome identified in the DCC that must be met. The *objectives* can be met by either a:

- *Performance-based solution* (see Section 2.1.3); or
- *Deemed-to-satisfy solution* (see Section 2.1.4); or
- combination of the *performance-based solution* and the *deemed-to-satisfy solution*.

2.3.3 Performance-based solution

A *performance-based solution* is a means to achieve an *objective*. It is intended to provide a pathway for innovative waste design solutions through the use of new technologies and processes.

A *performance-based solution* must:

- comply with the relevant *objectives*; or
- be at least equivalent to the *deemed-to-satisfy solution*.

In addition, it must be assessed according to one or more Assessment Methods.

For *residential* developments, a *performance-based solution* must be capable of being serviced by the *Territory's waste transporter*, unless otherwise approved by Place Coordination.

Explanatory Note

The *Territory* is unable to force the *waste transporter* to accept unacceptable risks resulting from non-compliance with the DCC even if development approval was previously obtained.

In applying the Assessment Methods, Place Coordination will determine if a *performance-based solution* complies with the *objectives*. A Place Coordination endorsed *performance-based solution* must be built in strict accordance with the approved WRMP. Any changes to an approved WRMP requires formal written approval of the amendments by Place Coordination.

An applicant must consult with and provide documentation to Place Coordination at the Pre-Application Stage on an intention to pursue a *performance-based solution*. Place Coordination must provide written endorsement of the proposal, subject to its acceptance and before the formal submission of the *development application*. At the time a *development application* is lodged, the applicant must provide details of the endorsed *performance-based solution* and associated Place Coordination reference when completing the WRMP forms.

A Place Coordination endorsed *performance-based solution* effectively replaces the respective *deemed-to-satisfy solution* in the WRMP, and therefore does not require further assessment by Place Coordination. However, where the endorsed *performance-based solution* does not address a specific *control* or other requirement, the mandatory requirements of the DCC will still apply.

2.3.4 Deemed-to-satisfy solution

A *deemed-to-satisfy solution* is a prescribed method in the DCC that provides a pathway to compliance with the *objective*. A *deemed-to-satisfy solution* that complies with the *objective* is deemed to comply with the DCC and, for *residential* developments, capable of being serviced by a *Territory waste transporter*.

A *deemed-to-satisfy solution* consists of one or more *controls* and may be assessed according to one or more *deemed-to-satisfy methods*, as appropriate.

2.3.5 Assessment methods

Assessment methods are used to determine how a *performance-based solution* or *deemed-to-satisfy solution* meets the *objective*.

Place Coordination will use the following *assessment methods*, or any combination of them, to determine that a *performance-based solution* or a *deemed-to-satisfy solution* complies with the *objectives*, as appropriate.

The assessment may rely on, or be based on:

- evidence to support that a waste storage or waste collection method or design meets a *performance-based solution* or *deemed-to-satisfy solution*
- *verification methods*, such as:
 - the *verification methods* in the DCC; or
 - other *verification methods* as the Place Coordination accepts for determining compliance with the *objectives*
- *expert judgement*
- comparison with the *deemed-to-satisfy solution*.

Place Coordination will also assess the impact of a *performance-based solution* or *deemed-to-satisfy solution* against:

- the ongoing operational and maintenance costs of the building post construction
- the amenity of building occupants
- the effect on *Territory* resources.

2.3.6 Submission requirements

Submission requirements for both *performance-based solutions* and *deemed-to-satisfy solutions* are the minimum necessary documentation required to support a *development application*. All *submission requirements*, including the WRMP, must be assessed for compliance against the *objectives* using the relevant *deemed-to-satisfy solution* or *assessment methods* or both. Place Coordination may seek further documentation before and during consideration of a *development application*.

2.3.7 Compliance with mandatory provisions

Waste storage, transfer and collection facilities must be designed and constructed to comply with the relevant provisions of the DCC and, in particular, the *objectives* of the relevant Part of the DCC.

2.3.8 Referenced standards

A reference to a document (e.g. other codes, guidelines, standards, legislation) in the DCC refers to the edition or issue, to the extent that it is relevant to the context in which the document is referenced. Where the DCC references a document, which is later subject to a revised publication, the revised publication need not be complied with in order to comply with the DCC.

A reference to a regulation or legislation refers to the Australian Capital Territory, unless stated otherwise.

2.3.9 Key words used in this DCC

Defined terms, references to legislation and references to other documents are italicised.

Key words or expressions that have been *italicised* (e.g. ‘bins’ or ‘waste and recycling storage facility’), or an acronym (e.g. DCC), has a defined meaning in **Appendix 1** or is a defined term within **Part 2.3**. Where a word has been both *italicised* and non-italicised, the non-italicised word shall have the same meaning as used in the Macquarie Dictionary.

Some words that are frequently used in the DCC, but have a definition in **Appendix 1**, have not been italicised as their meaning is similar to the Macquarie Dictionary. This includes: collection; dwelling; hopper; Place Coordination; recyclable; recycling; waste.

“Words in the singular number include the plural and words in the plural number include the singular” —(S145(b) *Legislation Act 2001*).

2.3.10 Explanatory notes

Explanatory Notes in the DCC are non-mandatory, noting extracts from legislation or other regulations may apply. They are used to provide additional guidance on the application of the particular Parts and Appendices, and do not need to be followed to meet the mandatory requirements of the DCC.

2.4 Compliance with other regulatory instruments

The provision of waste management services through the DCC overlaps a number of other Commonwealth and *Territory* regulatory instruments. It is incumbent on all applicants to ensure that all work complies with these instruments to the extent that is applicable.

This includes, but is not limited to, ensuring compliance with:

- the *Waste Management and Resource Recovery Act 2016* regarding the collection, transport and disposal of waste and recyclable material
- the performance provisions of the *Building Code of Australia* (BCA) as it relates to building work proposed within the waste management system
- the *Water and Sewerage Act 2000* as it relates to water supply, sewerage and drainage work proposed within the waste management system

- the *Unit Titles (Management) Act 2011*, where a developer must provide records relating to units or common property of a units plan to an owners corporation at their first general meeting. This may include an *operations management plan* and details on the use, care and maintenance of the waste management system
- the handling, treatment and transport of *hazardous materials*, as identified in **Appendix 9**.

2.5 Waste and recycling generation rates

The calculation for the required number of *bins* or roll-on roll-off (*RORO*) *compactors* is based on the waste and recycling generation rates and pre-determined frequency of collections per week, as defined in the tables in **Appendix 4** (domestic) and **Appendix 5** (commercial). Compliance with the collection frequency in these tables provides compliance with the relevant component of the *objective* through the *deemed-to-satisfy solution*.

Refer to **Appendix 4** (domestic) and **Appendix 5** (commercial) for further information on:

- how to calculate volumes for estimated uncompacted waste and recycling
- how to determine the number and size of *bins* and *RORO compactors* required
- applicable conditions associated with a collection frequency of 3 times per week
- information to help calculate spatial requirements when determining the size of *waste and recycling storage facilities*, *mini-enclosures*, and *waste, recycling and green waste storage areas*
- information on the handling of *bins*.

2.6 Waste and recycling management plan (WRMP)

For developments and activities that are covered by the DCC, a WRMP must be submitted (when required) with the *development application*. It is a condition of endorsement by Place Coordination that a development complies with the submitted and approved WRMP for the development.

Applicants must seek Place Coordination endorsement at the Pre-Application Stage, when seeking to comply with the DCC through a *performance-based solution*.

The preparation and submission of a WRMP ensures that:

- an appropriate level of residential amenity would be provided
- the waste and recycling management impacts of a proposed development are assessed as part of the *development application* process
- completed developments would have adequate waste and recycling facilities capable of being serviced by either:

- Territory-provided waste and recycling collection services (for residential developments); or
- private sector collection services (for commercial, public and industrial developments); or
- separate and discrete collection services (for *mixed-use developments*); or
- private sector collection services that are non-compliant with the DCC (for residential developments assessed as non-compliant).

Any changes, variations or alterations to the approved WRMP must be submitted to Place Coordination for further approval, before the changes take effect. The WRMP Forms are included in [Appendix 10](#).

2.7 Contact details for TCCS – Place Coordination

For large or complex development proposals, it is recommended that applicants contact Place Coordination to discuss waste infrastructure and waste management issues or proposed solutions. This should occur as early in the planning process as possible to avoid potentially costly changes, which may be required to obtain the necessary approvals.

Place Coordination's contact details are as follows:

Transport Canberra and City Services
Place Coordination
Telephone: 02 6207 0019

Email: TCCS.PlaceCoord@act.gov.au (in the subject line, type 'Waste Code')
act.gov.au/contact-us

Additional information on building and construction work can be found on the ACT Government Information Portal at: <https://www.act.gov.au/browse/topics/land-building-and-housing/regulations>.

Part 3. Mandatory requirements – residential developments

3.1 Compliance with all objectives

Development applications must comply with all relevant *objectives* in this Part, as well as other Parts of the DCC as they apply to the respective *development application*.

3.2 Requirements for all residential developments

The following requirements are applicable to all *residential* dwellings and units.

3.2.1 Equal access to waste and recycling services

Waste and recycling services for residents must be co-located. This is to ensure:

- residents are able to effectively deposit waste or recyclables into the appropriate *bins* or *chutes*
- maximum recovery of recyclable material, and to minimise waste going to landfill.

Explanatory Note

To reduce cross-contamination between waste and recyclables, and thus increase recycling, locate the waste and recycling containers or *chutes* near each other to encourage better separation.

3.2.2 Bins and equipment used for compaction or transfer

Developers must purchase all *bins* and equipment (e.g. *chutes*, *RORO compactors*, *bin compactors*, *carousels* etc.) that are to be used for compaction; for the movement of waste or recycling *bins* under chutes; to transfer to *Territory-owned bins*. *Bins* and equipment must not be leased.

3.2.3 Compactors

Compactors are required if either waste or recycling volumes for a development are calculated to exceed 36m³ per week (see [Parts 3.7](#) and [7.3.6](#)). See [Appendix 4](#) to calculate volumes. Place Coordination approval is required under a *performance-based solution*.

3.2.4 Vertical loading clearance for waste transporter vehicles for on-site collections

The vertical loading clearance height required for the on-site collection of *domestic waste* by a *Territory waste transporter* must be based on the use of a front-lift truck, unless a rear-load truck is approved by Place Coordination under a *performance-based solution*. See [Appendix 6](#) for vehicle dimensions and [Appendix 7](#) for required clearances.

3.2.5 Indoor waste and recycling

Table 3.1 provides the *deemed-to-satisfy solution* for indoor waste and recycling in *residential* developments.

Table 3.1 Deemed-to-satisfy solution for indoor waste and recycling in residential developments

Control		Deemed-to-Satisfy Method	
C1	Each dwelling or <i>residential unit</i> must be provided with an indoor <i>waste and recycling storage space</i> .	a.	The indoor <i>waste and recycling storage space</i> must be sized to hold a minimum of one (1) day's waste and recycling in separate containers. Refer to Part 7.2.1 .

3.3 Individual mobile garbage bins and kerbside collection – single dwellings and dual occupancy dwellings

Part 3.3 applies to developments requiring the provision of individual MGBs collected at the kerbside. *Single dwellings* and *dual occupancy dwelling* developments that generate less than 20m³ of demolition or excavation materials are exempt from the DCC and a WRMP is **not** required.

Explanatory Note

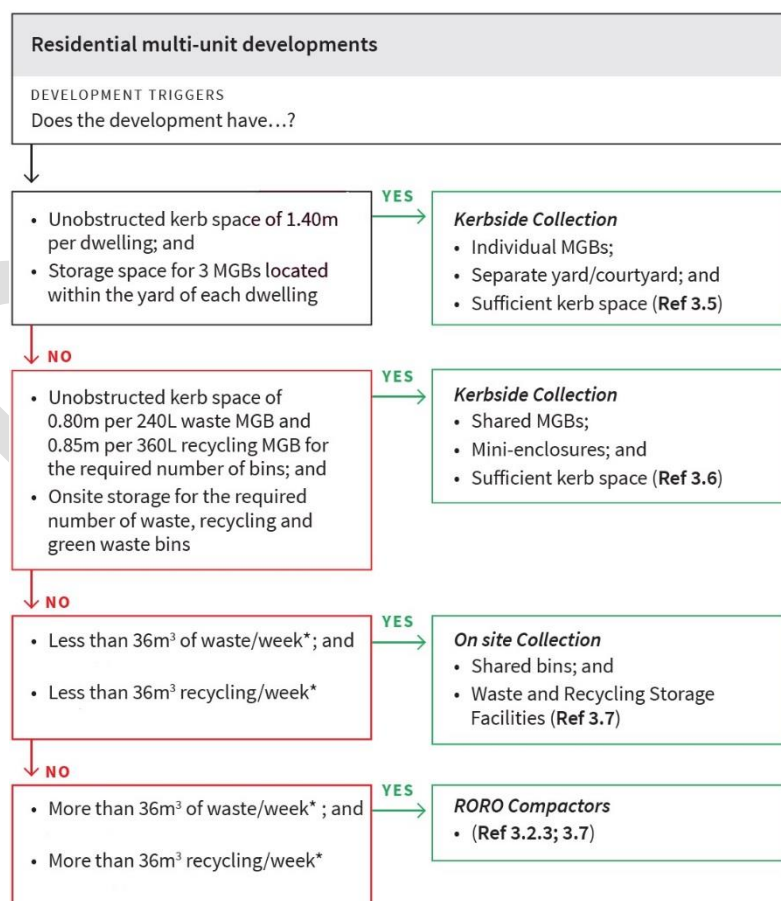
Part 3.3 applies to *single dwellings* and *dual occupancy dwellings*. A *performance-based solution or control* is not applicable as a WRMP is not required.

3.4 Selecting the best design solution for multi-unit residential developments

Figure 3.1 shows a process for choosing the most appropriate waste management system for a *residential* development based on the unique characteristics of the individual property. Before using the chart, first determine the waste and recycling volumes to calculate the number of *bins* required; and determine the length of *unobstructed* kerbside availability.

FIGURE 3.1 Process for choosing the best design for a multi-unit residential development

Choosing the best design to suit a residential multi-unit development



* Calculated using tables in Appendix 4.

3.5 MGBs allocated to each individual dwelling and kerbside collection – multi-unit residential developments

3.5.1 Application

Part 3.5 applies to developments requiring the provision of individual MGBs collected at the kerbside, subject to an *unobstructed* path of travel and sufficient *unobstructed* kerbside space for MGB collections (see Figure 3.2), and an individual yard or courtyard space for the storage of MGBs.

Explanatory Note:

Part 3.5.1 would typically apply to:

- new *multi-unit residential developments* where each dwelling has its own yard or courtyard (to store the MGBs) and there is sufficient kerbside space for MGBs to be collected
- *Development applications* for alterations or additions to existing *multi-unit residential developments* (MUD) of 3 or more dwellings if the work would affect waste, recycling and green waste management.

3.5.2 Objective

Each development must be designed and constructed to ensure *Territory* waste and recycling services can be provided.

To satisfy this *objective*, the applicant must demonstrate compliance with the *deemed-to-satisfy solution*, via controls **C1** to **C5**.

Explanatory Note

A *performance-based solution* is not available for **Part 3.5** as it requires a relatively simple solution.

3.5.3 Deemed-to-satisfy solution

Table 3.2 provides the *deemed-to-satisfy solution* for individual MGBs collected at the kerbside in *multi-unit residential developments*.

Table 3.2 Deemed-to-satisfy solution for individual MGBs collected at the kerbside in multi-unit residential developments

Control	Deemed-to-Satisfy Method
C2 Each dwelling must include a <i>waste, recycling and green waste storage area</i> .	<p>a. Each dwelling must have an individual <i>waste, recycling and green waste storage area</i> within the yard or courtyard of each dwelling.</p> <p>b. The <i>waste, recycling and green waste storage area</i> must be sized to accommodate separate waste, recycling and <i>green waste</i> MGBs provided by the <i>Territory</i>.</p>

Control	Deemed-to-Satisfy Method
	<p>Refer to Appendix 4 for <i>Territory</i>-provided services and details and dimensions of <i>Territory</i>-provided waste, recycling and <i>green waste</i> MGBs.</p> <p>Refer to Part 7.2 <i>waste and recycling storage facilities</i>.</p>
C3 There must be an <i>accessible</i> path of travel between the <i>waste, recycling and green waste storage area</i> and the kerbside <i>designated collection point</i> .	<p>a. The maximum MGB carting distance must not exceed 75m.</p> <p>b. For aged care developments, the waste and recycling carting distance must not exceed 50m.</p> <p>c. For sites where the average gradient of the waste and recycling MGB carting path of travel exceeds 1:10 (10 per cent) the MGB carting distance must be approved by Place Coordination.</p> <p>Place Coordination approval is required where an <i>accessible</i> path of travel cannot be provided.</p>
C4 MGBs must be collected from a kerbside <i>designated collection point</i> .	<p>a. The <i>designated collection point</i> must be clearly identified on plans of the proposed development.</p>
C5 Developments must allow sufficient space for MGBs to be collected from the kerbside.	<p>a. MGBs collected from a kerbside <i>designated collection point</i> must have a minimum <i>unobstructed</i> kerb frontage of 1.40m per dwelling in the development. This is to be measured at the rear of the kerb and excludes the 5.50m width of the access driveway to the development, if along same frontage where the collection is proposed.</p>

Explanatory Note

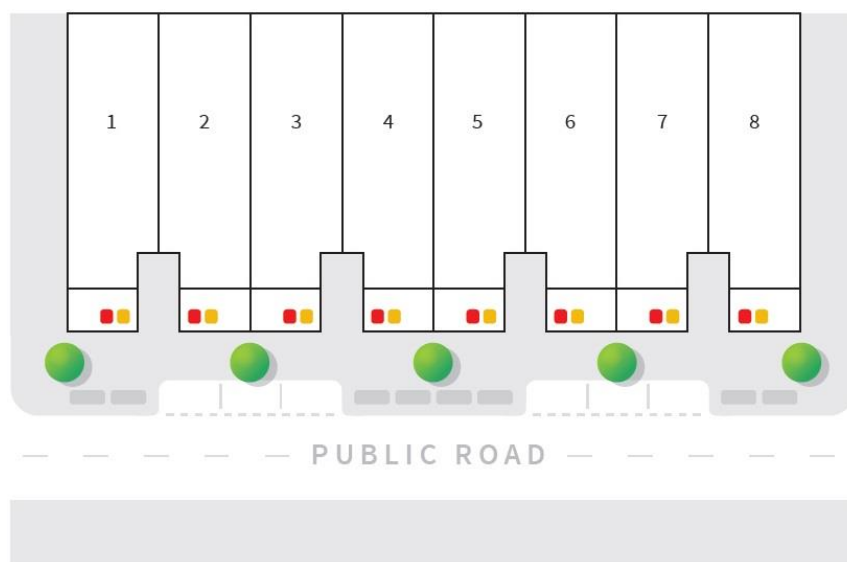
In planning for kerbside collection, under **C5**, the applicant will need to consider:

- the length of street frontage and location of street furniture and trees
- the number of street frontages (i.e. two or more active frontages)
- road configuration and proximity to road intersections
- obstruction of sight line of vehicles entering or exiting properties when bins are placed for collection
- the need to minimise traffic flow disruption
- site and street character.

FIGURE 3.2 Indicative layout of townhouse development with individual bins for kerbside collection

Townhouse development with individual bins for kerbside collection

Note: As trees grow, the required clearances for the designated collection points will diminish



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- Designated collection points 1.40m wide per bin set and 100 mm clear of obstructions
- Waste, recycling and green waste storage area

3.5.4 Submission requirements

Table 3.3 provides the *submission requirements* for MGBs allocated to each individual dwelling and kerbside collection – *multi-unit residential developments*.

Table 3.3 Submission requirements for MGBs allocated to each individual dwelling and kerbside collection for multi-unit residential developments

Number	Submission Requirement
R1	Each <i>development application</i> must include a completed copy of all relevant Parts of the WRMP (see Appendix 10).
R2	Place Coordination submission documents must include plans, elevations, sections and written descriptions or specifications, as applicable, showing:
R2.1	the location and dimensions of the indoor <i>waste and recycling storage space</i> for each dwelling with tabulated calculations to demonstrate the adequacy of this space per dwelling type
R2.2	the location and dimensions of individual <i>waste, recycling and green waste storage areas</i> to accommodate the <i>Territory</i> -provided waste, recycling and <i>green waste</i> MGBs, with tabulated calculations to demonstrate the adequacy

Number	Submission Requirement
	of this space
R2.3	the path of travel for moving MGBs from individual <i>waste, recycling and green waste storage areas</i> to the <i>designated collection point</i> indicating dimensions and clearances
R2.4	the location of the <i>designated collection point</i> , dimensions of the available kerb frontage for the development, clearances to street trees and the indicative MGB presentation layout to ensure sufficient space.

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3.6 Shared MGBs and kerbside collections – multi-unit residential developments

3.6.1 Application

Part 3.6 applies to developments requiring the provision of shared MGBs, subject to sufficient space on the kerbside for MGBs collections, and on-site storage space by way of a *waste and recycling storage facility* or *mini-enclosures*. See Figure 3.3.

Explanatory note

Part 3.6.1 typically applies to new *multi-unit residential developments* of about 10 to 30 dwellings. Actual numbers may vary depending on available kerbside space required for collection.

3.6.2 Objective

Each development must be designed and constructed to ensure *Territory* waste and recycling services can be provided.

To satisfy this *objective*, the applicant must demonstrate compliance with the *deemed-to-satisfy solution*, via controls **C1**, and **C6** to **C10**.

Explanatory Note

A *performance-based solution* is not available for **Part 3.6** as it requires a relatively simple solution.

3.6.3 Deemed-to-satisfy solution

Table 3.4 provides the *deemed-to-satisfy solution* for shared MGBs with kerbside collections at *multi-unit residential developments*.

Table 3.4 Deemed-to-satisfy solution for shared MGBs with kerbside collections at multi-unit residential developments

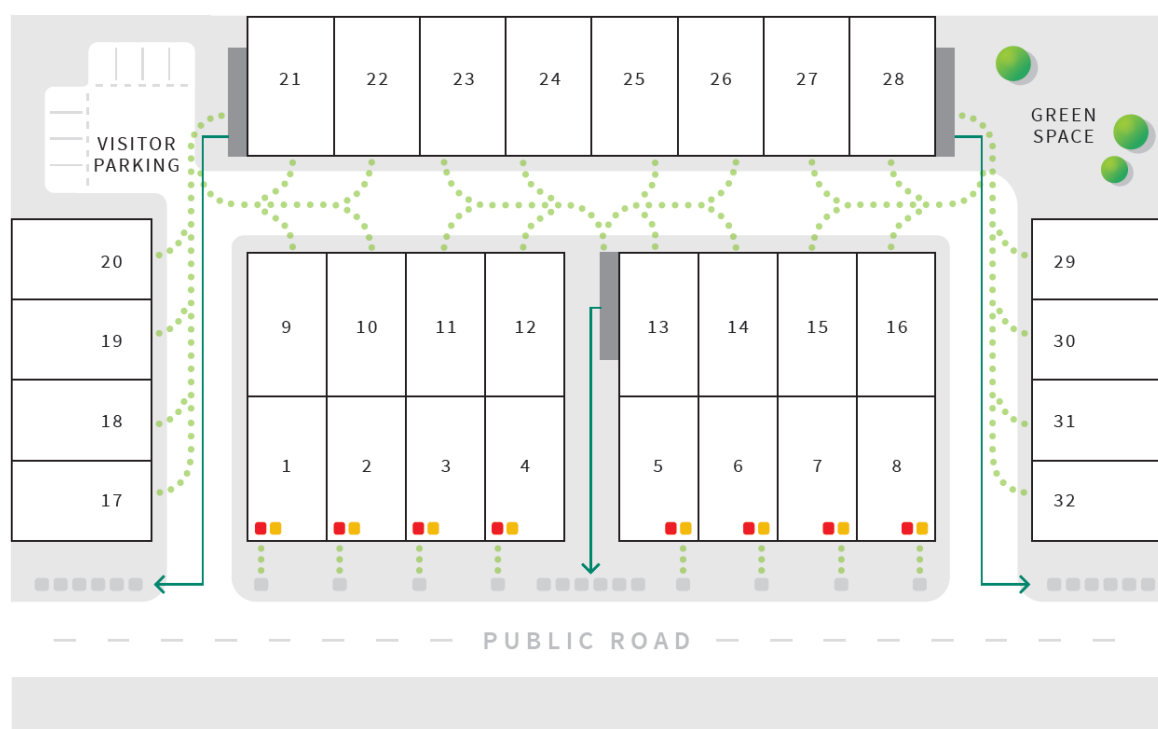
Control		Deemed-to-Satisfy Method	
C6	Each development must include at least one <i>waste and recycling storage facility</i> or <i>mini-enclosure</i> .	a.	The <i>waste and recycling storage facilities</i> or <i>mini-enclosures</i> must be sized to accommodate the calculated number of waste, recycling and <i>green waste</i> MGBs provided by the <i>Territory</i> , and include clearances required for manoeuvring and accessing MGBs
		b.	The <i>waste and recycling storage facilities</i> must be <i>accessible</i> .
			Refer to Appendix 4 for <i>Territory</i> -provided services and details and dimensions of <i>Territory</i> -provided waste, recycling and <i>green waste</i> MGBs.
			Refer to Part 7.2 for <i>waste and recycling storage</i>

Control	Deemed-to-Satisfy Method
	<i>facilities.</i>
<p>C7 There must be an <i>accessible</i> path of travel between the <i>waste and recycling storage facility</i> or <i>mini-enclosure</i> and:</p> <p>(i) the entrance of each dwelling</p> <p>(ii) the kerbside <i>designated collection point</i>.</p>	<p>a. The maximum waste and recycling carrying distance or MGB carting distance must not exceed 75m.</p> <p>b. For aged care developments, the waste and recycling carrying or MGB carting distance must not exceed 50m.</p> <p>c. For sites where the average gradient of the waste and recycling carrying or MGB carting path of travel exceeds 1:10 (10 per cent) the carrying or carting distance must be approved by Place Coordination.</p> <p>d. Place Coordination approval is required where an accessible path of travel cannot be provided.</p>
<p>C8 There must be an <i>operations management plan</i> (OMP) in place to ensure collection of MGBs from a kerbside <i>designated collection point</i> and their return to the respective storage facility or <i>mini-enclosure</i>.</p>	<p>a. The OMP must be lodged as a part of the unit title conditions for implementation by the <i>owners corporation</i> and to inform owners and prospective buyers of their obligations under the DCC.</p>
<p>C9 MGBs must be collected from a kerbside <i>designated collection point</i>.</p>	<p>a. The <i>designated collection point</i> must be identified on the building plans.</p>
<p>C10 Developments must allow sufficient space for MGBs to be collected from the kerbside.</p>	<p>a. MGBs collected from a kerbside <i>designated collection point</i> must have available a minimum kerb frontage of 0.80m for each 240L waste MGB and 0.85m for each 360L recycling MGB required. This is to be measured at the rear of the kerb, excluding the 5.50m width of the access driveway to the development, if along same frontage and free from obstructions such as street corners and street furniture, power poles and trees etc.</p>

Explanatory Note

MGBs are stored within the property boundary, except when presented for collection. The *owners corporation* will need to arrange for MGBs to be presented for collection and to return MGBs to the *waste and recycling storage facility* or *mini-enclosure* as soon as practicable after collection. See [Appendix 3](#) for further information.

FIGURE 3.3 Indicative layout of development with individual MGBs with kerbside collection



Kerbside collections

Individual bins (Units 1-8)

Shared bins (Units 9-32)

LEGEND

- ■ Waste, recycling and green waste storage area (3 bins)
- Mini-enclosure
- Designated collection point
- Bin carting path of travel (<75m)
- ... Waste and recycling carrying path of travel (<75m)

3.6.4 Submission requirements

Table 3.5 provides the *submission requirements* for shared kerbside collection for *multi-unit residential developments*.

Table 3.5 Submission requirements for shared kerbside collection for multi-unit residential developments

Number	Submission Requirement
R1	Each <i>development application</i> must include a completed copy of all relevant Parts of the WRMP (see Appendix 10).
R2	Place Coordination submission documents must include plans, elevations, sections, written descriptions or specifications, and an OMP for collection, as applicable, showing:
R2.1	the location and dimensions of the indoor <i>waste and recycling storage space</i>

Number	Submission Requirement
	for each dwelling, with tabulated calculations to demonstrate the adequacy of this space per dwelling type
R2.2	the location and dimensions of <i>waste and recycling storage facilities</i> or <i>mini-enclosures</i> , or both, to accommodate the <i>Territory</i> -provided waste, recycling and <i>green waste</i> MGBs, with tabulated calculations to demonstrate the adequacy of this space
R2.3	the <i>accessible</i> path of travel for carrying waste and recyclables from each dwelling to MGBs and for carting MGBs from <i>waste and recycling storage facilities</i> or <i>mini-enclosures</i> to the <i>designated collection point</i> ; dimensions and clearances must be indicated
R2.4	the location of the <i>designated collection point</i> , dimensions of the available kerb frontage for the development, clearances to street trees and other obstructions and the indicative MGB presentation layout to ensure sufficient space
R2.5	ongoing responsibilities for presenting MGBs for kerbside collection and returning them to the respective <i>waste and recycling storage facilities</i> or <i>mini-enclosures</i> following collection.

3.7 On-site collection – multi-unit residential developments

3.7.1 Application

Part 3.7 applies to developments requiring on-site collection of waste and recyclable material. These include the provision of shared MGBs or hoppers, or a combination of both, within the property boundary, as well as *Territory* collection of *RORO compactors*.

Explanatory Note

Part 3.7 applies to new *multi-unit residential developments* grouped into three categories: low rise, medium rise and high rise with service facilities for each development. The design of waste management systems should adopt a holistic approach that considers waste and recycling from its point of generation through its transport to the point of collection by a *waste transporter*. Optimal waste management outcomes are achieved by complying with the mandatory requirements of the DCC and also by drawing on optional components, such as *bin compactors*, *carousels* and *truck turntables*.

Table 3.6 provides guidance on likely waste management design solutions for low and high rise *multi-unit residential developments* (refer to the mandatory components in the DCC).

Table 3.6 Guidance on likely waste management design solutions for low and high rise multi-unit residential developments

	Low Rise 3 residential floors or less	High Rise 4+ residential floors
<i>Waste and recycling storage spaces</i> in each residential unit	Yes	Yes
<i>Waste and recycling storage facilities</i> for the development	Yes	Yes
On-site shared <i>bins</i>	Yes	Yes, unless <i>RORO compactor</i> used
Storage space for <i>green waste</i> MGBs	Yes	Yes
<i>Waste service compartments</i> on each floor with <i>dual chutes</i>	No	Yes
<i>Bin compactor</i>	No	Optional
<i>Carousel</i>	No	Optional
<i>RORO compactors</i> (about 400+ residential units):	No	Yes, if: >36m ³ waste/week >36m ³ recycling/week
<i>Truck turntables</i>	No	Optional

3.7.2 Objectives

Each development must be designed and constructed to ensure *Territory* waste and recycling services can be provided.

To satisfy this *objective*, the applicant must either:

- demonstrate compliance with the *deemed-to-satisfy solution*, via controls **C1**, and **C11** to **C16**; or
- provide an alternative *performance-based solution* approved by Place Coordination.

3.7.3 Deemed-to-satisfy solution

Table 3.7 provides the *deemed-to-satisfy solution* for on-site collection for *multi-unit residential developments*.

Table 3.7 Deemed-to-satisfy solution for on-site collection for multi-unit residential developments

Control	Deemed-to-Satisfy Method
C11 Each development must include at least one <i>waste and recycling storage facility</i> .	<p>a. The <i>waste and recycling storage facility</i> must be designed in accordance with Part 7.2.</p> <p>b. The <i>waste and recycling storage facility</i> must be sized to accommodate separate waste, recycling and <i>green waste bins</i> provided by the <i>Territory</i>.</p> <p>c. The <i>waste and recycling storage facility</i> must be <i>accessible</i>.</p> <p>Refer to Appendix 4 for <i>Territory</i>-provided services, details of the <i>Territory</i>-provided waste, recycling and <i>green waste</i> services and details and dimensions of <i>Territory</i>-provided waste, recycling and <i>green waste bins</i>.</p>
C12 There must be an <i>accessible</i> path of travel between the <i>waste and recycling storage facility</i> or <i>waste service compartments</i> or both and: (i) the entrance of each dwelling (ii) the <i>designated collection point</i> .	<p>a. The maximum waste and recycling carrying distance must not exceed 75m.</p> <p>b. For aged care developments, the waste and recycling carrying distance must not exceed 50m.</p> <p>c. For sites where the average gradient of the waste and recycling carrying path of travel exceeds 1:10 (10 per cent) the carrying distance must be approved by Place Coordination.</p> <p>Place Coordination approval is required where an <i>accessible</i> path of travel cannot be provided.</p> <p>d. The maximum hopper roll-out distance from the roller door entrance to the <i>designated collection</i></p>

Control	Deemed-to-Satisfy Method
	<i>point</i> must not exceed 4m along a gradient that does not exceed 1:33 (3 per cent).
C13 <i>Multi-unit residential developments of 3 residential floors or less must have convenient access to waste and recycling services for all residents.</i>	a. The <i>waste and recycling storage facility</i> must be <i>accessible</i> and located on either the ground floor or <i>basement</i> for all residents, such as adjacent to where residents enter and exit the building. The facility must provide sufficient space to accommodate <i>bins</i> .
C14 <i>Multi-unit residential developments with 4 residential floors or more must have convenient access to waste and recycling services for all residents.</i>	<p>a. Dual waste and recycling <i>chutes</i> are required and must be located on each floor in a <i>waste service compartment</i> to provide an efficient and safe transfer method to the centralised <i>waste and recycling storage facility</i>.</p> <p>b. Access to plant and equipment in the <i>waste and recycling storage facility</i> must be restricted to authorised personnel, such as a building manager, caretaker or <i>waste transporter</i>. Where residents have access to <i>bins</i>, these <i>bins</i> must be placed so that restricted access to plant and equipment is maintained.</p> <p>Refer to Part 7.3 for the design of <i>waste service compartments</i> and <i>chutes</i>.</p>
C15 <i>Bins must be collected from a designated waste and recycling storage facility on site.</i>	<p>a. Facilities must be designed so that <i>bins</i> are collected safely on site.</p> <p>b. <i>Territory-provided bins</i> must be able to be collected from the <i>designated collection point</i> at the <i>waste and recycling storage facility</i>.</p> <p>c. <i>Bins</i> and <i>RORO compactors</i> supplied by the developer and owned by the <i>owners corporation</i>, – and, if suitable for collection – must be able to be collected from the <i>designated collection point</i> at the <i>waste and recycling storage facility</i>.</p>
C16 <i>Developments with on-site collections must be designed to allow for unobstructed on-site access by collection vehicles.</i>	<p>a. <i>Unobstructed</i> on-site access by <i>collection vehicles</i> must be in accordance with Appendix 7. Information on <i>collection vehicles</i> is included in Appendix 6.</p> <p>b. The <i>waste transporter</i> must be provided with full and free rights of access for the purpose of servicing waste and recycling <i>bins</i> and <i>RORO compactors</i>.</p>

3.7.4 Submission requirements

Table 3.8 provides the *submission requirements* for on-site collection for *multi-unit residential developments*.

Table 3.8 Submission requirements for on-site collection for multi-unit residential developments

Number	Submission Requirement
R1	Each <i>development application</i> must include a completed copy of all relevant Parts of the WRMP (see Appendix 10).
R2	<i>Development application</i> submission documents must include plans, elevations, sections and written descriptions or specifications for collection services, as applicable, showing:
R2.1	the location and dimensions of the indoor <i>waste and recycling storage space</i> for each dwelling with tabulated calculations to demonstrate the adequacy of this space per dwelling type
R2.2	the location and dimensions of <i>waste and recycling storage facilities</i> to accommodate waste and recycling <i>bins</i> with tabulated calculations to demonstrate the adequacy of this space
R2.3	a method statement describing how waste and recycling must be transferred from each dwelling to the <i>waste and recycling storage facility</i>
R2.4	the location of any waste and recycling <i>chutes</i> (if included in a proposed development) and the location and dimensions of any <i>waste service compartment</i> on each floor of the building; it must include tabulated calculations to demonstrate the adequacy of these facilities
R2.5	the location of the <i>designated collection point, hopper pad</i> or both for the collection and emptying of the <i>Territory's</i> waste and recycling <i>bins</i>
R2.6	the path of travel for moving <i>bins</i> from the <i>waste and recycling storage facility</i> to the <i>designated collection point</i> ; it must indicate dimensions, clearances and gradients, where applicable
R2.7	the path of travel for <i>collection vehicles</i> if collection occurs on site; it must indicate all clearances, travel, turning and manoeuvring paths, ramp access, clearances in all directions and pavement details, where applicable
R2.8	supporting documentary evidence on the type of compaction and associated waste and recycling plant and equipment proposed; this must include the manufacturer, model, compaction ratio, and dimensions – including maximum height at point of lift, volume, and expected weight when fully loaded at the defined compaction ratio.

Explanatory Note

RORO compactors and *bin compactors* may be used to reduce the number of *bins* and space required for on-site *waste and recycling storage facilities*. See [Appendix 4](#) for allocation and *bin* requirements. All applications proposing the use of *RORO compactors* will be assessed by Place Coordination under the *performance-based solution*.

Part 4. Mandatory requirements – commercial, public and industrial developments

4.1 Application

Part 4 applies to development applications for:

- new commercial, public and industrial developments
- alterations or additions to existing commercial, public or industrial developments, if there would be an effect on the provision of waste and recycling management.

Explanatory Note

This section includes mandatory requirements to ensure that all commercial, public and industrial developments can receive a *commercial waste* and recycling collection service. All waste and recycling is to be collected within the property boundary.

It is recommended that Place Coordination be contacted for advice regarding the design of the waste management system, including plant, equipment and facilities.

The Territory does not provide a waste and recycling collection service for non-residential developments.

4.2 Objective

Each development must be designed and constructed to ensure that *commercial waste* and recycling services can be provided.

To satisfy the *objective*, the applicant must either:

- demonstrate compliance with the *deemed-to-satisfy solution*, via controls **C17** to **C20**; or
- provide an alternative *performance-based solution* approved by Place Coordination.

In addition, every development must be designed to allow for:

- the physical separation of recyclable materials from general waste; and
- the movement of recycling and waste to the main *waste and recycling storage facility* and its ultimate collection.

4.3 Deemed-to-satisfy solution

Table 4.1 provides the *deemed-to-satisfy solution* for *commercial waste* and recycling services.

Table 4.1 Deemed-to-satisfy solution for commercial waste and recycling services

Control	Deemed-to-Satisfy Method
C17 Each development must include conveniently located <i>waste and recycling sections</i> and must be designed to allow access by all building users.	<ol style="list-style-type: none"> Waste and recycling generation rates must be calculated for each proposed activity in accordance with Appendix 5. <i>Waste and recycling sections</i> must be provided for each kitchen area and other suitable locations (including all kitchen areas in hotel rooms, motel rooms and staff food preparation areas and in playgrounds for schools) to ensure that all parts of a development are serviced. <i>Waste and recycling sections</i> should be sized to hold a minimum of 1 day's waste and recycling in separate containers.
C18 Each development must be provided with a <i>waste and recycling storage facility</i> .	<ol style="list-style-type: none"> The <i>waste and recycling storage facility</i> must be designed in accordance with Part 7.2. The <i>waste and recycling storage facility</i> must be sized to accommodate: <ol style="list-style-type: none"> the volumes of waste and recycling generated between collections in accordance with Appendix 5 separate waste and recycling <i>bins</i> in accordance with Appendix 5 a maximum of three collections per week for general waste and recycling compaction equipment, if provided. Note that special rules apply for compaction equipment (see Part 7.3). The type, dimensions and capacity of waste and recycling <i>bins</i> must be compatible with industry standard collection practices in the ACT. The design of any waste and recycling <i>chutes</i> or waste compaction units incorporated into a development must be in accordance with Part 7.3.

Control	Deemed-to-Satisfy Method
C19 There must be an <i>accessible</i> path of travel from the point of origin or <i>holding area</i> to the <i>waste and recycling storage facility</i> .	a. Place Coordination approval is required where an <i>accessible</i> path of travel cannot be provided.
C20 <i>Bins</i> must be collected from an agreed <i>designated collection point</i> on site and must be designed to allow for <i>unobstructed</i> on-site access by <i>collection vehicles</i> .	<p>a. <i>Unobstructed</i> on-site access by <i>collection vehicles</i> must be provided in accordance with Appendix 7. Information on <i>collection vehicles</i> is included in Appendix 6.</p> <p>b. Facilities must be designed to allow <i>bins</i> to be safely collected on site either from the <i>waste and recycling storage facility</i> or a <i>hopper pad</i> located inside the property boundary and as close to a property entrance as practical.</p> <p>c. Where applicants are unable to meet the requirements of C20, they must discuss their proposal with Place Coordination to determine the most appropriate solution.</p>

Explanatory Note

- The applicant may need to consult with Place Coordination to determine if a development proposal requires individual waste and recycling *holding areas* for each tenancy or each floor in addition to the *waste and recycling storage facility*.
- Place Coordination should be consulted where developments have high levels of putrescible waste (e.g. meat, poultry, seafood).
- Place Coordination may consider proposals for commercially provided shared waste and recycling facilities under a *performance-based solution*.
- Developers are encouraged to consult with suitable *commercial waste* and recycling service providers to identify possible service options. This should be undertaken as early as possible in the design process to ensure compliance with the DCC and serviceability.
-

4.4 Residential facilities receiving a commercial service

Some *residential* facilities—such as aged care with independent living, adaptable housing, supportive housing, seniors living, and specialist or student accommodation—may not be entitled to a *Territory*-provided waste service, if it is run as a commercial enterprise. Such developments must provide a

service for waste, recycling and *green waste* that is equivalent to the service required for *multi-unit residential developments*, under [Part 3](#).

4.5 Submission requirements

Table 4.2 provides the *submission requirements* for commercial, public and industrial developments.

Table 4.2 Submission requirements for commercial, public and industrial developments

Number	Submission Requirement
R1	Each <i>development application</i> must include a completed copy of all relevant Parts of the WRMP (see Appendix 10).
R2	<i>Development application</i> submission documents must include plans, elevations, sections and written descriptions or specifications for collection services, as applicable, showing:
R2.1	the specific wastes and recycling likely to be generated by each of the proposed activities accommodated in the development including likely volumes, storage requirements and proposed <i>bins</i>
R2.2	the location and dimensions of all individual waste and recycling storage or <i>holding areas</i> and <i>waste and recycling storage facilities</i> (including refrigerated waste storage if used) for the entire development. These must include tabulated calculations to demonstrate the adequacy of the space
R2.3	documentation that adequately describes the method of transferring waste and recycling within the development from the point of origin to the <i>waste and recycling storage facilities</i> . Dimensions, clearances, gradients and any mitigation of odour and noise impacts must also be provided. A specific collection time is not permitted for the purpose of supporting a design proposal under this requirement
R2.4	the location of the <i>designated collection point</i> for the collection and emptying of waste and recycling MGBs or, if hoppers are to be used, the location of the <i>hopper pads</i>
R2.5	the path of travel for moving <i>bins</i> from individual storage facilities to the <i>designated collection point</i> , indicating dimensions, clearances and gradients
R2.6	the on-site path of travel for <i>collection vehicles</i> indicating all clearances, travel, turning and manoeuvring paths, ramp access and pavement details
R2.7	the location of waste and recycling <i>chutes</i> and the location and dimensions of any <i>waste service compartments</i> on each floor of the building associated with these. These must be accompanied by tabulated calculations to demonstrate the adequacy of the space
R2.8	supporting documentary evidence on the type of compaction and associated waste and recycling plant and equipment proposed, including: manufacturer, model, compaction ratio, dimensions including maximum height at point of lift, volume, and expected weight when fully loaded at the defined compaction ratio
R2.9	details on the waste and recycling facilities to receive waste and recyclables where <i>RORO compactors</i> are to be used, as indicated in R2.8.

Part 5. Mandatory requirements – mixed-use developments

5.1 Application

Part 5 applies to development applications for:

- new *mixed-use developments*
- alterations or additions to existing *mixed-use developments* if there is to be an effect on the provision of waste and recycling management.

5.2 Objective

Each development must be designed and constructed to ensure waste and recycling services are provided separately for *residential* and non-residential components of the development. See Figure 5.1.

To satisfy this *objective*, the applicant must either:

- demonstrate compliance with the *deemed-to-satisfy solution*, via controls **C21** to **C23**; or
- provide an alternative *performance-based solution* approved by Place Coordination.

5.3 Deemed-to-satisfy solution

Table 5.1 provides the *deemed-to-satisfy* method for *mixed-use developments*.

Table 5.1 Deemed-to-Satisfy Method for Mixed-use Developments

Control	Deemed-to-Satisfy Method
C21 The requirements in Parts 3.5, 3.6 and 3.7 (<i>multi-unit residential developments</i>) apply to the <i>residential</i> component of <i>mixed-use developments</i> .	a. Design of all residential components of <i>mixed-use developments</i> must ensure that <i>Territory</i> waste and recycling services can be provided.
C22 The requirements in Part 4 (commercial, public and industrial developments) apply to the non-residential component of mixed-use development.	a. Design of all non-residential components of <i>mixed-use developments</i> must ensure that <i>commercial waste</i> and recycling services can be provided.
C23 <i>Mixed-use developments</i> must incorporate physically separate and self-contained waste and recycling management systems	a. <i>Mixed-use developments</i> must incorporate physically separate waste and recycling storage rooms or areas for the <i>residential</i> and non-residential components.

Control	Deemed-to-Satisfy Method
for the <i>residential</i> component and the non-residential component.	<p>b. The waste and recycling management systems of the <i>residential</i> and non-residential components must each be stand-alone systems operating completely independent from each other.</p> <p>c. The waste and recycling management system for the non-residential part of a development must be designed to minimise adverse impacts on the <i>residential</i> component.</p>

5.4 Submission requirements

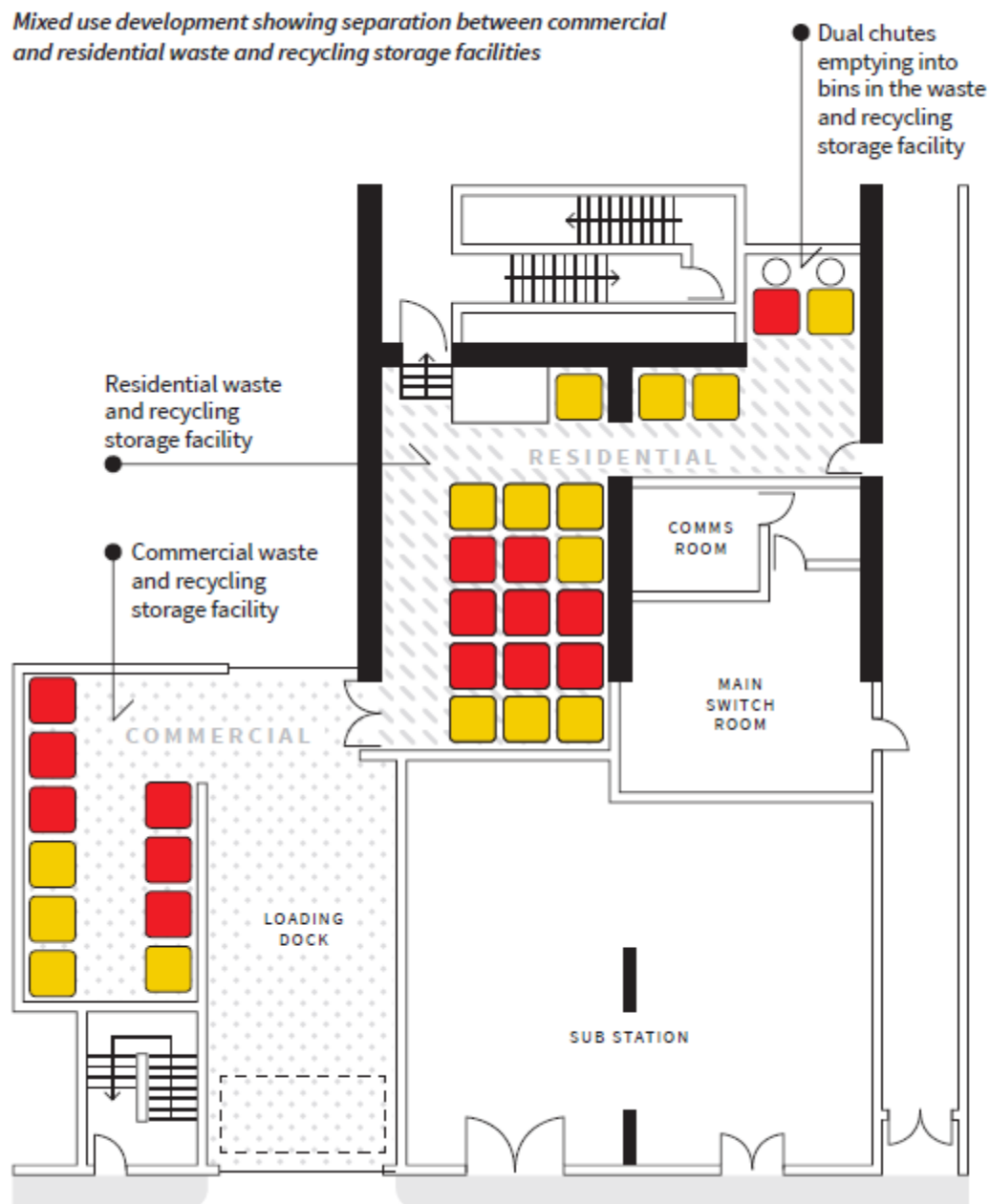
Table 5.2 provides the *submission requirements* for *mixed-use developments*.

Table 5.2 Submission requirements for mixed-use developments

Number	Submission Requirement
R1	Each <i>development application</i> must include a completed copy of all Parts of the WRMP (see Appendix 10).
R2	The <i>submission requirements</i> in Parts 3.5, 3.6 and 3.7 (<i>multi-unit residential developments</i>) apply to the <i>residential</i> component of <i>mixed-use developments</i> .
R3	The <i>submission requirements</i> in Part 4 (commercial, public and industrial developments) apply to the non-residential component of <i>mixed-use developments</i> .
R4	In addition, the submission documents must include written descriptions clearly identifying how <i>residential</i> and non-residential wastes and recycling are kept physically separated and methods that minimise the potential for commercial tenants to use <i>residential</i> waste and recycling <i>bins</i> .

Figure 5.1 provides an indicative layout of a *mixed-use development* showing separation between commercial and *residential waste and recycling storage facilities*.

Figure 5.1 Indicative layout of mixed-use development showing separation between commercial and residential waste and recycling storage facilities



Part 6. Mandatory requirements – demolition, excavation and construction

6.1 Compliance with all objectives

Applications must comply with all relevant *objectives* within this Part, as well as other Parts of the DCC as they apply to the respective *development application*.

6.2 Application

Part 6 applies to:

- **Demolition** – *Development applications* involving demolition where the quantity of demolition material is greater than 20m³ for the whole development
- **Excavation** – *Development applications* involving excavation where the quantity of excavated material is greater than 20m³ for the whole development
- **Construction** – *Development applications* involving:
 - *multi-unit residential developments* with 11 or more dwellings
 - any commercial, public and industrial developments
 - *mixed-use developments*.

6.3 Exemptions from this Part

The following developments are exempt from this Part, and a WRMP is not required:

- *single dwellings* and *dual occupancy dwelling* developments that generate less than 20m³ of demolition or excavation materials
- *multi-unit residential developments* that contain 10 dwellings or less that generate less than 20m³ of demolition or excavation materials.

Explanatory Note

An average of 1m³ of demolition waste is produced for each 1.5m² of floor area.

For background information on demolition, excavation and construction waste refer to [Appendix 9](#).

For best practice guidance, refer to [Appendix 2](#).

6.4 Objective

The reuse or recycling of demolition, excavation and construction waste is to be maximised in accordance with these requirements.

- **Demolition:** A minimum of 90 per cent of all demolition waste generated on a development must be reused or recycled, or both
- **Excavation:** A minimum of 90 per cent of all excavated waste generated on a development must be reused where appropriate
- **Construction:** A minimum of 75 per cent of all construction waste generated on a development must be reused or recycled, or both.

To satisfy this *objective*, the applicant must either:

- demonstrate compliance with the *deemed-to-satisfy solution*, via controls **C24** to **C26**; or
- provide an alternative *performance-based solution* approved by Place Coordination.

6.5 Deemed-to-satisfy solution

Table 6.1 provides the *deemed-to-satisfy* method for demolition, excavation and construction.

Table 6.1 Deemed-to-satisfy method for demolition, excavation and construction

Control	Deemed-to-Satisfy Method
C24 Waste streams or surplus building materials generated during demolition or excavation or construction must be managed to facilitate sorting for reuse and recycling.	<ul style="list-style-type: none">a. Recycling streams such as timber, concrete, bricks or tiles, plasterboard, metal and cardboard must be either separated on site or placed in a mixed building <i>waste container</i>.b. Where space is a constraint, waste or surplus building materials must be sent to an off-site licensed recycling facility, <u>not</u> directly to landfill.c. Materials that cannot be reused or recycled must be disposed of at a licensed <i>waste facility</i>.d. <i>Unobstructed</i> safe vehicular access to areas where waste and recyclable material is stored must be provided.e. Under the <i>Waste Management and Resource Recovery Act 2016</i>, movement of waste and recyclable materials must be undertaken by a <i>waste transporter</i> to a <i>waste facility</i>.
C25 Prepare documentation to verify and provide an audit trail	<ul style="list-style-type: none">a. Documentation on the collection and transport of waste and recycling disposal from demolition,

Control	Deemed-to-Satisfy Method
demonstrating that the targets for demolition, excavation and construction waste generated on a development have been met.	excavation and construction activities must be kept from commencement to completion of work. This documentation must be retained for 12 months from 'certificate of occupancy' or 'certificate for building work involving demolition' by the developer and contractor.
C26 Safe handling of <i>hazardous materials</i> must be undertaken during all demolition, excavation and construction activities.	<p>a. The developer must ensure lawful safe handling and removal of <i>hazardous materials</i>, such as asbestos, lead in paint or dust in roof cavities. Contact WorkSafe ACT (phone 132 281) for the correct procedures.</p> <p>b. The developer must comply with all regulations concerning the safe handling, treatment and transport of asbestos contaminated material (see Appendix 9).</p>

6.6 Submission requirements

Table 6.2 provides the *submission requirements* for demolition, excavation and construction.

Table 6.2 Submission requirements for demolition, excavation and construction

Number	Submission Requirement
R1	A <i>development application</i> must include a completed copy of Section 3 of the WRMP (see Appendix 10).
R2	<i>Development application</i> submission documents must include site plans and written descriptions or specifications, as applicable, and must:
R2.1	specify waste demolition, excavation and construction materials by type and volume
R2.2	nominate reuse and recycling potential or uses of demolition, excavation and construction waste materials for either on-site or off-site use
R2.3	nominate on-site areas for the sorting of demolition, excavation and construction waste materials, if applicable
R2.4	describe the work method practices and specific procedures that will be adopted to maximise the reuse and recycling of waste materials
R2.5	identify access details for all vehicles involved in moving excavation, demolition and construction waste
R2.6	provide a draft site plan indicating the nominated on-site storage areas for demolition, excavation and construction waste materials and waste transport

Number	Submission Requirement
	vehicle access locations; the site plan must also show existing regulated trees on the site
R2.7	supply details of waste or recycling storage containers that will be stored outside leased boundaries (i.e. on public land). Separate approval is required from Public Land Use, City Services (phone 132 281)
R2.8	specify locations and identify the operator of approved licensed sites for the recycling or reprocessing or landfill disposal of demolition, excavation and construction materials.

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Part 7. Mandatory requirements – equipment, facilities and services

7.1 Obligations to, and for, the owners corporation

7.1.1 Obligations by the developer to the owners corporation

The developer must provide the *owners corporation* with instructions on the use, care and maintenance of the entire waste management system.

Bins and equipment provided by the developer must be purchased, not leased.

7.1.2 Owners corporation obligations

The *owners corporation* is responsible for the ongoing maintenance, repair and replacement of equipment and facilities, such as *chutes, carousels, bin compactors, RORO compactors, bins* and *truck turntables* purchased by the developer or *owners corporation*. The replacement of equipment that interfaces with a *Territory waste transporter's* collection services, such as *bins* and *RORO compactors*, must continue to be able to be serviced for collection by the *Territory's waste transporter*.

7.2 Waste and recycling storage spaces and facilities

7.2.1 Waste and recycling storage spaces

Within each dwelling or *residential unit*, an indoor *waste and recycling storage space* is to be provided to adequately hold a minimum of one day's waste and recycling in separate containers. The minimum volume of space required is set out in the Table 7.1 for different sized dwellings.

Table 7.1 Minimum volume required for indoor waste and recycling storage space in a dwelling or residential unit

Dwelling Size	Waste (litres/day)	Recycling (litres/day)
<i>Single and Dual Occupancy Dwellings</i>	20	17
<u><i>Multi-unit residential dwellings</i></u>		
• 1 bedroom or studio	12	10
• 1 bedroom with separate room for a study	13	12
• 2 bedroom	14	13
• 3 bedroom	17	16
• Over 3 bedroom	20	17

7.2.2 Waste, recycling and green waste storage areas

Waste, recycling and green waste storage areas are spaces within a yard or courtyard of a *single dwelling, dual occupancy or small MUD* for storing waste, recycling and *green waste* MGBs. The MGBs must be stored on a sealed floor or pad within the yard or courtyard. The minimum space required to accommodate 3 MGBs is 1.80m wide by 0.80m deep.

7.2.3 Waste and recycling storage facilities

Each development must include dedicated and exclusive space for the storage of waste, recycling and *green waste*. These spaces must not be used for any other purpose. There can be more than one *waste and recycling storage facility* in a development.

(a) General requirements

Waste and recycling storage facilities must be integrated into the design of the overall development, and must be designed and located to reduce adverse impacts on the inhabitants of any dwellings in the development and neighbouring properties, whether *residential*, commercial, public or industrial.

Keys, swipe cards and remotes must not be used when securing enclosures as they can be easily lost or misplaced. All waste enclosures must be secured by an electronic keypad or combination lock.

Explanatory Note

DRC, when assessing *waste and recycling storage facilities*, will consider how the application would minimise the impact on the public with respect to:

- proximity to dwellings
- visibility
- noise generated by equipment located within the facility
- noise generated by the movement of *bins* in and out of the facility
- odours emanating from the facility
- interference with vehicle access during servicing of *bins* or *RORO compactors*
- the potential for illegal parking.

(b) Space requirements and access

Waste and recycling storage facilities must be designed to accommodate all the waste and recycling generated from the development, all *bins*, and any associated equipment. They must also have space for *green waste* MGBs. The design calculations must be based on the requirements of this Part and **Appendices 4** and **5**.

There must be no additional services located within the *waste and recycling storage facility*.

Where resident access is not required to the *waste and recycling storage facility*, *bins* are to be arranged and stored for collection by the *Territory's waste transporter*. Collection requires that the area is safe and provides ease of access without excessive *bin* movements.

Where resident access is required, there must be a clear *accessible* entrance and *accessible* path of travel, 1.20m wide, between the *bins*. A separate doorway must be provided to move *bins* to the *designated collection point*. There must be sufficient vertical clearance to enable the lids of all *bins* to be fully opened anywhere within the enclosure.

If *chutes* or *bin compactors* are included in a development, the *waste and recycling storage facility* must be sized to accommodate the *chute* arrangements with reference to [Part 7.3](#).

For commercial, public and industrial developments, the *waste and recycling storage facilities* must be capable of accommodating separate general waste *bins* and recycling *bins*. The volume of these *bins* must contain the quantity of waste and recycling generated, at the rate described in [Appendix 5](#), between collections. *Waste and recycling storage facilities* must be suitably located within developments.

Mixed-use developments must incorporate physically separated *waste and recycling storage facilities* for *residential* and non-residential wastes.

(c) Access to waste and recycling storage facilities for incoming wastes and recyclables

In general, enclosures must be designed to permit easy access for users of the *bins* provided.

In the case of *mixed-use developments*, arrangements must be made to prevent non-residential building users from accessing the *residential waste and recycling storage facilities*.

(d) Access to waste and recycling storage facilities for removal of wastes and recyclables

Where it is proposed that the waste or recycling hoppers are loaded directly from the *waste and recycling storage facility* without manual handling, the enclosure and doorways must be designed to ensure adequate visibility for front-end loading vehicles. The design should assume an eye height of 2.45m to the ground for the driver of the *collection vehicle*.

If there is a roof on the storage facility, the roof design must ensure a minimum clear height of 2.40m to the underside of the open doorway.

The *bins* must be easy to access and manoeuvre in and out of the enclosure.

The size of the *hopper pad* must be a minimum of 2.40m by 2.40m with a maximum gradient of 1:33 (3 per cent). There must be no lip between the enclosure and the *hopper pad* to enable movement of hoppers to or from the *hopper pad*. The *hopper pad* must have a slip-resistant surface, formed from concrete, and be free from spoon drains, steps or level change.

Explanatory Note

Drains on the *hopper pad* are not recommended, except where *bin compactors* are used to compact waste. Where drains are required on the *hopper pad*, the drain should be constructed to enable the smooth transfer of *bins* from the enclosure to the waste vehicle. Sewer grates or covers must be designed to prevent bin wheels from being caught. Slotted grates are not permitted.

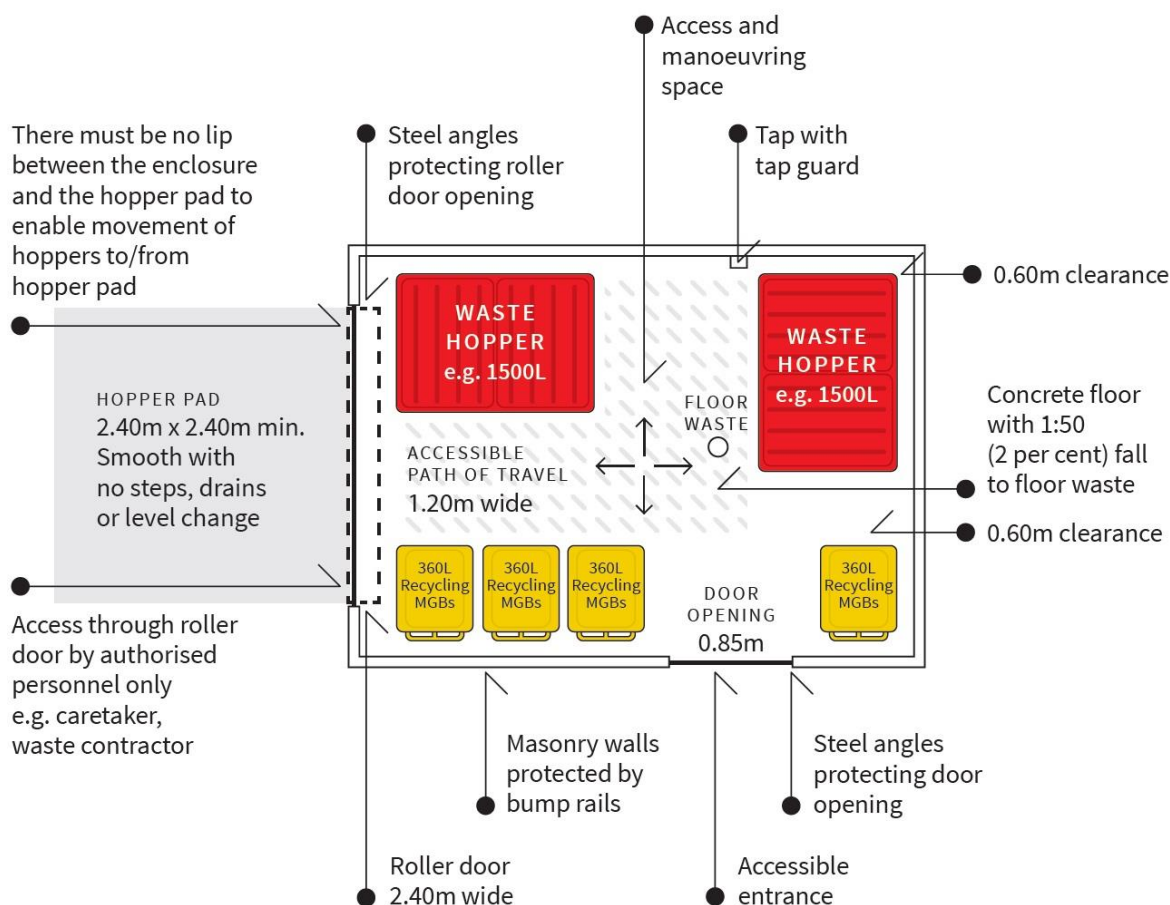
Figure 7.1 provides an indicative layout of a *waste and recycling storage facility* with a *hopper pad*. The figure shows a separate *accessible* entrance and *accessible* path of travel within the room, as well as *hoppers*, *MGBs*, *plumbing and drainage*, and *protection for bins*.

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Figure 7.1 Indicative layout of Waste and Recycling Storage Facility with a Hopper Pad

Indicative layout of a waste and recycling storage facility

Note: No other services are to be located within the waste and recycling storage facility. It is important to maintain available space so that access to and movement of bins is not impeded



Note: The indicative layouts above are not to scale and do not include space requirements for waste and recycling chutes or bin compactors.

(e) Construction

The waste and recycling storage facility must be constructed to prevent the entry of vermin and comply with the following requirements.

- **Materials:** The floor, walls and ceilings must be constructed of solid material; i.e., not rendered or plastered. A bump rail constructed of galvanised steel or other durable impervious material must be installed around the walls at a height between 0.90m and 1.30m. The bump rail must be a minimum of 50mm clear of walls or, if using flat steel sheet, must be installed flush with walls. Galvanised steel angles must be installed around door openings.
- **Finishes:** Finishes must be smooth and impervious.

- **Ventilation:** Rooms may be naturally ventilated. Internally located rooms must be mechanically ventilated.
- **Doors:** Doorways on enclosures housing hoppers must be sufficiently wide to allow for easy access of hoppers and must be fitted with galvanised steel angles to protect them against damage caused from hoppers striking the doors when they are being moved. Doors must be durable and self-closing. Where a roller shutter is used, signage must be provided stating that the roller door is to be kept shut when not in use. Where building occupants are required to have access, a separate *accessible* doorway (0.85m wide) must be provided with an *accessible* path of travel to deposit waste and recycling in the *bins*.
- **Lighting:** An internal switch must be located adjacent to the entry door.
- **Other services:** Protection must be provided to all electrical, water or gas fittings to prevent damage caused by moving *bins*.

Explanatory Note

The *Territory* does not provide engineering advice concerning the protection of infrastructure, fixtures and fittings within the *waste and recycling storage facility*. Where required for compliance with the DCC, protective measures such as tap and roller door guards, and bump rails etc., must be designed and installed such that they are fit for purpose.

(f) Water supply and sewerage

For MUDs where the *waste and recycling storage facilities* are not within the *basement* of the building and are separated from the building fabric (such as townhouse developments), water supply and sewer connection is not required. If storage facilities are integrated into the development, the requirement for roofing may be waived, subject to Place Coordination approval. Additional requirements apply where *bin compactors* are used (see [Part 7.3.5](#)).

For MUDs where the *waste and recycling storage facility* is located within either the *basement* of the building, or incorporated into the fabric of the building, water supply and floor waste with sewer connection is required.

Commercial, public, industrial and *mixed-use developments* must have a water supply. The *waste and recycling storage facilities*, including *wet wastes* such as from food preparation, must have a floor grade to a floor waste with the trap connected to sewer. Floor gradients must not exceed 1:50 (2 per cent).

Where a water supply is required, a cold water tap must be provided either in or adjacent to the enclosure so that the *waste container* can be cleaned. A protective steel guard rail or bollard around the tap must be provided to prevent damage when *bins* are being moved.

Rainwater must be prevented from entering the sewerage system by providing roofing and protection against windblown rain and by diverting runoff.

(g) Environmental protection signage

If floor waste or sewer connections are not provided, a sign must be provided within the enclosure stating that:

“No water from washing of waste and recycling containers may be discharged into the stormwater system. Contravention of this requirement is an offence under the *Environment Protection Act 1997*.”

The sign shall be at least 0.75m x 0.50m with letters at least 20mm high and be maintained in good order.

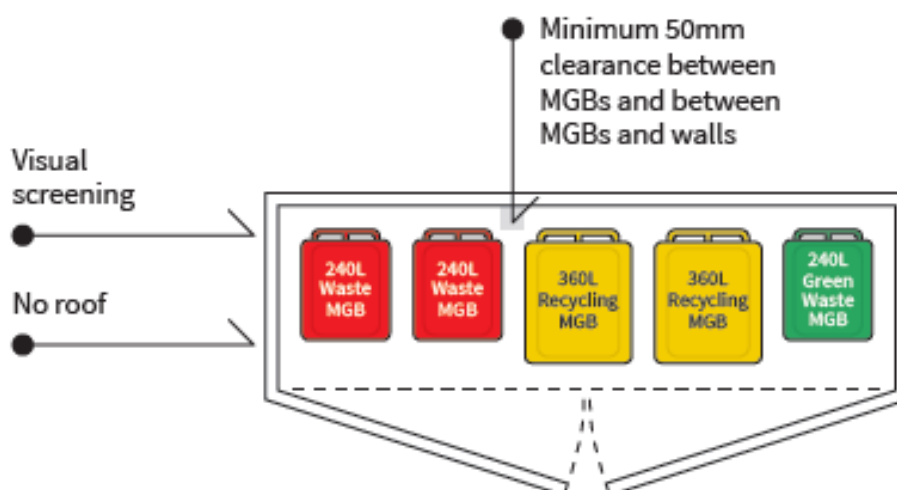
7.2.4 Waste and recycling storage facilities – mini-enclosures

Mini-enclosures are suitable for developments that have shared MGBs with kerbside collection only (see [Part 3.6](#)). There may be more than one *mini-enclosure* but all must be located on site. The enclosures do not require a roof or plumbing but must be screened from public view. Applicants must provide a detailed description or plan highlighting the path of travel from each *waste and recycling storage facility* or *mini-enclosure* to the *designated collection point*, as set out in Figure 3.3.

Figure 7.2 provides an indicative layout of a *mini-enclosure*, requiring visual screening, no roof, and gates or doors for access. For a standard *mini-enclosure* of one waste, one *green waste* and one recycling MGB, the minimum dimensions are 2.10m wide x 1.00m deep (includes minimum clearance).

Figure 7.2 Indicative layout of a mini-enclosure with no roof

Indicative layout of a mini-enclosure



7.3 Waste service compartments, chutes (waste and recycling), carousels, bin compactors, RORO¹ integrated compactors and truck turntables

7.3.1 Overview

Waste service compartments, waste and recycling chutes, carousels, bin compactors, RORO compactors and truck turntables are typically used individually or in combination in larger MUDs, commercial and *public developments* and *mixed-used developments*. Waste and recycling services are required to be *accessible*, except where access is restricted to authorised personnel (i.e. where there is no access to members of the public or residents).

Explanatory Note

It is recommended that applicants consult with the manufacturers of any equipment likely to be installed to determine the suitability and specific requirements for that equipment. It is also recommended that applicants consult with the service provider and Place Coordination to ensure that any proposed equipment is compatible with the collection services provided.

7.3.2 Waste service compartments

A *waste service compartment* must be provided on each floor where the development has 4 *residential floors* or more.

Each *waste service compartment* must be designed with sufficient space to allow for the storage of two days' recycling on that *residential floor* if there is no recycling *chute*.

Where a recycling *chute* system is not provided, suitably sized recycling MGBs must be located in each floor's *waste service compartment* to ensure continuity of service. When full, MGBs must be transported by the caretaker or building manager from the *waste service compartment* to the central *waste and recycling storage facility* and emptied into the *Territory*-provided hoppers, unless the MGBs are suitable for collection by the *Territory's waste transporter*.

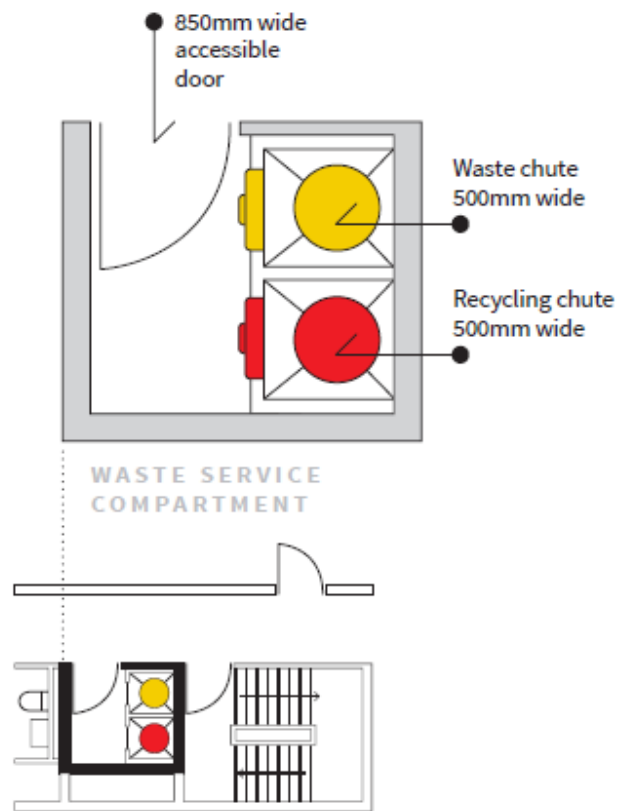
ACT NoWaste will provide signage for each *waste service compartment* and *chute*, if requested. For standard signs for waste and recycling, see [Appendix 8](#).

Figure 7.3 provides an indicative layout for a *waste service compartment* with *chutes* for waste and recyclables.

¹ RORO – Roll On Roll Off Integrated Compactors

FIGURE 7.3: Indicative layout of a waste service compartment with dual chutes

Dual chutes in a waste service compartment



7.3.3 Chutes (waste and recycling)

Dual chutes for waste and recycling must be provided for MUDs of 4 *residential floors* or more with *loading hoppers* on each *residential floor* (see Figure 7.4). All *loading hoppers* for depositing waste and recyclable materials must be located in a *waste service compartment*. Information signs must be placed on each *loading hopper* for each *residential floor* (see [Appendix 8](#)).

The developer must provide full documentation as part of the WRMP, preferably at the pre-application stage to Place Coordination.

Diverter (which divert material in-chute after the type of waste is selected at the *chute* opening) are not permitted.

The design and installation of this equipment is the responsibility of the developer. The operation and maintenance of this equipment is the responsibility of the *owners corporation* and their agents.

The installation of waste and recycling *chutes* and *waste service compartments* on each *residential floor*, and *waste and recycling storage facilities*, must be in accordance with the manufacturer's specifications and the WRMP.

Chutes must have the following properties:

- *Chutes* must be located and insulated in a manner that reduces noise and odour impact on dwellings.
- *Chutes* and all ancillary devices must be constructed of smooth, durable, impervious, non-corrosive and fire resistant material. *Chutes* and all ancillary devices must be easy to clean and must have an appropriate cleaning system installed.
- *Chutes* must be cylindrical and must have a minimum diameter of 0.50m. The main shaft of the *chute* must not have bends or sections of reduced diameter. Internal overlaps in the *chute* must follow the direction of waste or recyclable material flow.
- The ventilation at the top of the *chute* must extend above the building roof line and be weather protected.
- *Chutes* must deposit waste and recyclables directly into the *bin* or *RORO compactor* located within a *waste chute room* to prevent waste spillage and overflow. The arrangements at the discharge point of the *chute* can be designed to optimise the operation within the *waste and recycling storage facility*.

Territory-provided bins are not to be used at the discharge point of the *chute*. The developer must:

- provide suitable *bins* for use at the discharge point of the *chute*, and *bins* are to be emptied into the *Territory-provided waste hoppers*; or
- provide *bins* that are suitable for servicing by the *waste transporter*.

Refer to [Appendix 4](#) for *bin* sizes.

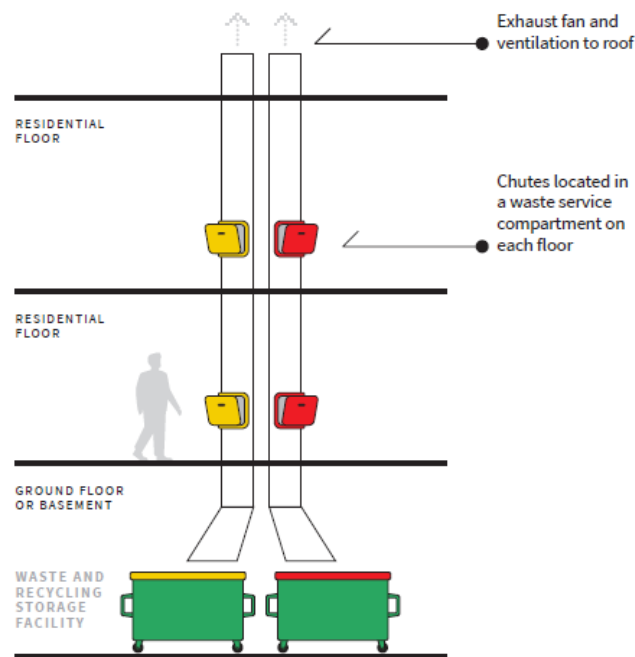
The *Territory's waste transporter* will not service *bins* located beneath *chutes*. Such *bins*, if suitable for collection, must be taken to the *designated collection point*.

A cut-off device must be located at or near the base of the *chute* so that the bottom of the *chute* can be closed when the *bin* or compacting device at the bottom of the *chute* is withdrawn or being replaced. The *waste transporter* is not authorised to operate cut-off devices during the servicing of *bins* for collection.

Loading hoppers on each *residential floor* and bin chute doors at the termination of the *chute* must be fitted with door closers and have an effective self-sealing system. The termination of *chutes* into MGBs or hoppers must have skirting, or an equivalent system, to prevent any material leaving the *bin* on impact. Where *chute* systems are installed, MGBs or hoppers are required to have reinforced bases to maintain the lifespan of *bins*.

Figure 7.4 Indicative dual chute layout (required for 4+ residential floors)

Indicative dual chute layout suitable for 8+ residential floors



Explanatory Note

A *waste chute room*, typically located in the *basement*, is part of a *waste and recycling storage facility*. It could contain the discharge point for *chutes*, *bins*, *bins* for receiving waste and recyclables from *chutes*, *bin compactors*, *carousels* and possibly *RORO Compactors*. Given the potential safety hazards associated with this plant and equipment, access should be restricted to authorised personnel. Consideration should be given to the following design attributes for the *waste chute room*.

- A linear or circular carousel device may be incorporated under each *chute*, unless hoppers are used. There should be a minimum 0.9m clearance around the linear or circular carousel system to allow for manoeuvrability and system maintenance.
- A 1.8m unobstructed clearance zone should be provided between the linear or circular track system and the entrance for access and manoeuvrability.
- Suitable door access should be provided for servicing the *bins*.
- If a roller door is provided, an additional 0.90m service door is recommended.

- *Carousels* and linear track systems below the *chutes* should accommodate two additional *bins* each for both waste and recycling (if included) with a suggested minimum access clearance of 1.8m wide for loading *bins* onto the system.
- The floor should be finished so it is non-slip and has a smooth and even surface covered at all intersections.
- The floor should be graded to a central drainage point and connected to the sewer, enabling all waste to be contained and safely disposed of.
- The room should be partitioned and enclosed with a minimum internal room height sufficient to enable full access, use and maintenance of plant and equipment.
- The room should be provided with a water supply through a centralised mixing valve with hose cock for washing plant and equipment.
- Adequate lighting and natural or mechanical ventilation should be incorporated.
- The room should allow for the permanent storage of two service *bins* per *chute* system, allowing residents access (via the *chutes* on their respective floors) to all waste streams during waste collection periods.

Diverter are not permitted due to the high risk of cross-contamination. Place Coordination may reconsider the issue of diverters following the submission of compelling independent research that clearly demonstrates the risk of cross-contamination is no higher than that of separate *chutes*.

It is recommended that Place Coordination be contacted for advice regarding any proposed waste and recycling *chutes* or *waste chute rooms*. Place Coordination may liaise with ACT NoWaste and the contracted service provider of domestic recyclables and waste collection.

7.3.4 Carousels

Carousels are optional.

If a *chute* system is proposed, consideration should be given to installing a *carousel* at the base of each *chute*.

Carousels may be either linear or circular and rotate to an empty *bin* once a *bin* below the *chute* is filled. A *carousel* may be coupled with a *bin compactor* to reduce the number of *bins* requiring collection.

7.3.5 Bin compactors

Bin compactors are optional.

Bin compactors are fixed or mobile pieces of plant that compact waste and recyclable material in a *bin*. The compaction ratio for *bin compactors* must not exceed 2:1.

All *bins* must be reinforced at the base if compaction takes place inside the *bin* and must be suitable, or transferred to a suitable *bin*, for collection by the *Territory's waste transporter*. *Territory-provided bins* are not to be used with any compaction equipment.

Where *bin compactors* are proposed for waste, the compaction and subsequent transfer or collection process must be undertaken at a location where any leachate discharging from *bins* must drain to a sewer.

Where *bin compactors* are proposed, the developer must provide full documentation under a *performance-based solution*.

7.3.6 Roll-on roll-off (RORO) integrated compactors

Place Coordination must be contacted for advice regarding the proposed use of *RORO compactors*.

Use of *RORO compactors* for *residential* developments for waste and recycling is required for developments where:

- the amount of uncompacted *domestic waste* exceeds 36m³ per week; or
- the amount of recyclable material exceeds 36m³ per week (see [Appendix 4](#)).

RORO compactors may be used below waste and recycling *chutes*, but only where the *waste transporter's* vehicle has *unobstructed* access and where vehicle manoeuvring complies with the DCC (see [Appendix 7](#)).

Where a *chute* is not used, a bin lifter with a suitably approved safety cage must also be provided to accommodate the *bins* provided by the developer. The *waste transporter* is not responsible for loading waste or recyclables into the *RORO compactor* as this is the responsibility of the *owners corporation* through their agents, building managers, etc.

Where compaction equipment is installed, access must be restricted to authorised personnel, such as an appointed caretaker, building manager, maintenance contractors and the *waste transporter*.

There must be sufficient *bins* available to store waste and recyclable material for periods when the *RORO compactor* is removed, emptied and returned. An estimate of 2 to 3 hours is considered reasonable.

Whether required or chosen by the developer, only *RORO compactors* for *domestic waste* and recyclables must be used.

For design purposes, the compaction ratio for a *RORO compactor* for domestic waste and recyclable material must not exceed 3:1 at the time it is collected by a *waste transporter*.

Explanatory Note

Waste material may be compacted beyond 3:1, but only to the point where full containers are within safe transport load limits.

Recyclable material must not be compacted beyond 3:1 at any time as it interferes with the source separation processes at the Materials Recycling Facility.

RORO compactors have specific vehicular access requirements. Hook lift trucks or similar vehicles used to load *RORO compactors* require a minimum clearance height of 0.3m higher than the vertical point of lift of the *RORO compactor*, as advised by the *waste transporter* (for the vehicle) and manufacturer of the *RORO compactor*. This must be confirmed by the manufacturer and the relevant *waste transporter* as the compactor must be compatible with the *collection vehicles* available in the fleet.

Height clearances must ensure any services, sprinklers or light fittings do not encroach on this requirement.

Compaction equipment is to operate automatically. (As a result of the 3:1 compaction ratio, the volume for waste or recycling storage is reduced by two thirds.)

Compactors must be located as part of the *waste and recycling facilities* and must be provided with sufficient space as set out in the *RORO compactor* manufacturer's requirements.

The *Territory's waste transporter* collects *RORO compactors* for large *residential* developments where it is mandatory for volumes of uncompacted waste or recyclables that exceed 36m³, or where there is prior agreement through the *development application* process. Compactors containing *residential* waste and recyclables must be capable of being serviced by the *Territory's waste transporter*. Separate *RORO compactors* must be used for waste and recycling.

Compactors serviced by the *Territory's waste transporter* require a unique identification number to enable appropriate tracking. Developers should contact ACT NoWaste (phone 13 22 81) to obtain this number and for specific details on how this number should be displayed.

Calculations to determine the size of the compactor required must be based on a collection frequency cycle of once per week. Smaller *RORO compactors* will not be permitted for more frequent collections if a larger *RORO compactor* (up to 25m³) can be used for a weekly collection.

In addition, Place Coordination may consider static or stationary compactors for the exclusive use of dry waste, such as cardboard. These are typically used for commercial and industrial purposes, but may be considered for *residential* recyclables, subject to Place Coordination approval.

The installation area for *RORO compactors* or static/stationary compactors requires a level concrete hardstand, and must be made to withstand a minimum load of 30 tonnes for 20 years. Guide rails must be installed to reduce the risk of damage to infrastructure during the loading and unloading process.

Explanatory Note

Place Coordination, in consultation with ACT NoWaste, may consider a collection frequency of twice per week where the largest *RORO compactor* available that is suitable for collection by the *Territory waste transporter* is unable to collect the estimated volume of waste or recycling allocation with a once per week collection service.

Compaction equipment may be suitable for some types of waste and recycling in commercial and industrial developments and may also be used for mixed waste in all developments, but *residential* waste and recycling must be kept separate from commercial, public and industrial waste and recycling.

Tapered tops on certain types of *RORO compactors* are available that can reduce the vertical clearance required at the maximum point of lift.

Care should be taken to ensure that replacement *RORO compactors* do not exceed the clearance height at maximum point of lift of the original *RORO compactor*.

7.3.7 Truck turntables

Truck turntables may be used for waste *collection vehicles* to enable forward in – forward out vehicle manoeuvring. The use of *truck turntables* must be approved by Place Coordination at the pre-application stage.

Truck turntables must have a manual override in case of malfunction.

Territory waste transporters are not permitted to operate the turntable.

Truck turntables must be included in the OMP for the development.

Explanatory Note

For services provided by a *Territory waste transporter*, the applicant may wish to consider installing the following technology to assist an authorised person, such as a caretaker or building manager, to operate the turntable:

- a remote handset
- a camera system to give the authorised person a remote view of the turntable and surrounds for safety reasons
- a parking guidance system to ensure the truck is correctly positioned before contacting the authorised person. For example, this could be line marking or a vehicle guidance system (including traffic signals).

7.4 Designated collection points

The *waste transporter* must be able to move the *bins* from where they are presented for collection to the *collection vehicle* as quickly as possible, with a minimum of manual handling.

Where possible, *designated collection points* must not be located:

- near intersections
- near roundabouts or slow points
- along busy arterial roads

- in narrow lanes
- near possible obstructions, including trees, overhanging buildings, and overhead powerlines
- where they pose a traffic hazard
- adjacent to steeply sloping ground that has no barriers
- across pedestrian pathways
- external to the grounds of the facility (except for kerbside collection)
- where collections may impede vehicle or pedestrian access or egress to underground or surface carparks.

The collection of residential waste and recycling hoppers on public lands is not permitted.

See also *waste and recycling storage facilities*, [Part 7.2](#).

APPENDICES

Appendix 1 Definitions and abbreviations

Term	Definition
Accessible	Having features to enable use by people with a disability.
ACT	Australian Capital Territory.
ACT NoWaste	A business unit of TCCS, responsible for the provision of <i>domestic waste</i> and recycling management services and related operational policy.
AS	Australian Standard.
Basement	A floor either below ground level or partially below ground and used for non-habitable uses (such as parking, storage, utility, services).
Building Code of Australia (BCA)	Includes the ACT appendix and amendments, being Volumes 1 and 2, in the National Construction Code Suite.
Bin Compactor	A compaction system that can compact waste and recyclable material in a <i>bin</i> . It can be used in conjunction with a carousel at the termination point of a waste or recycling <i>chute</i> .
Bin	A <i>waste container</i> . A generic term for a waste and recycling receptacle, including a Mobile Garbage Bin (MGB) and hopper. Used in the DCC where either or both could apply.
Bulky Waste	Bulky household items that would not be collected in a typical waste collection service, such as furniture and whitegoods.
Carousel	A system containing a number of <i>bins</i> (circular or linear) below a waste or recycling <i>chute</i> .
CDS	Container Deposit Scheme
Chute	Duct in which deposited material descends from one level to another within the building.
Deemed-to-Satisfy Solution	Comprises both the <i>control</i> and associated <i>deemed-to-satisfy</i> method.
Collection	The emptying of <i>bins</i> into a <i>collection vehicle</i> for subsequent transport to a waste or recycling facility.
Collection vehicle	A vehicle used by a <i>waste transporter</i> to collect waste or recyclables. Refer to Appendix 6 .
Commercial Waste	All solid waste generated by a commercially rated property, excluding any liquid, clinical or <i>construction and demolition waste</i> .
Compost	Materials high in organic matter (typically food wastes and green wastes) that have undergone aerobic decomposition, resulting in a product rich in minerals and ideal for use as an organic fertiliser.

Term	Definition
Construction and Demolition Waste	Materials in the waste stream which arise from construction and demolition activities.
Control	An action which, when combined with the deemed-to-satisfy method, is required to meet a <i>deemed-to-satisfy solution</i> (see Part 2.3.4).
DCC	Current edition of the Development Control Code for Best Practice Waste Management in the ACT.
Designated Collection Point	Point where <i>bins</i> are presented and emptied into <i>collection vehicles</i> as approved by Place Coordination. Also called a loading area.
Development Application (DA)	A proposal to carry out development work.
Domestic Waste	Household generated waste, not including household <i>hazardous waste</i> and recyclable material.
Dual Chute	A waste management system that conveys waste and recyclable material through separate <i>chutes</i> from each floor of a building to a <i>waste and recycling storage facility</i> .
Dual Occupancy Dwellings	The use of land for two dwellings that was originally used or leased for a <i>single dwelling</i> . For the purposes of the DCC, the <i>Territory</i> will determine if a second dwelling on the same allotment, such as a 'granny flat', is entitled to a second collection service. The <i>Territory</i> will be guided by the Certificate of Occupancy issued for the second dwelling.
Dwelling	Under the BCA, a dwelling is a Class 1 building, or a self-contained habitable part of a Class 2 building. It includes any ancillary parts of the building and any Class 10a buildings associated with the building.
Excavation Waste	Materials that arise from excavation activities.
Expert Judgement	The judgement of an expert who has the qualifications and experience to determine whether a <i>performance-based solution</i> or Control complies with the <i>objective</i> . <i>Expert judgement</i> may be commissioned by an applicant.
Green waste	Garden vegetation organic materials, such as grass clippings, pruning, leaves and branches. For the purposes of the DCC, it excludes garden vegetation organic materials that are: <ul style="list-style-type: none"> (a) More than 0.10m in diameter; or (b) More than 0.45m long.
Hazardous materials	With respect to construction or demolition waste, <i>hazardous materials</i> include (but are not limited to) asbestos, lead paint, and a variety of chemicals and items which may be present in this type of waste.

Term	Definition
Hazardous waste	<i>Hazardous waste</i> is generated by households and commercial entities and includes paint and paint-related products, pesticides and herbicides, solvents and household cleaners, motor oils, batteries, gas bottles, fire extinguishers, pool chemicals, acids and alkalis, and hobby chemicals (such as photographic chemicals).
Holding Area	A temporary space for <i>waste containers</i> .
Hopper	A <i>waste container</i> . It is larger than a MGB, constructed either of steel or plastic, and fitted with wheels or skids.
Hopper Pad	A dedicated concrete pad used for positioning a hopper immediately before it is emptied by a <i>waste transporter</i> .
Loading Hopper	Located in a <i>waste service compartment</i> , the opening of a waste or recycling <i>chute</i> on a <i>residential floor</i> where material is deposited.
MGBs	A <i>waste container</i> . Mobile Garbage Bins for waste or recycling.
Mini-enclosure	A <i>waste and recycling storage facility</i> , for MUDs that have shared MGBs with kerbside collection. It houses MGBs only, has no roof and limited screening.
Mixed-use development	Residential development integrated with non-residential commercial, industrial or public uses.
Multi-unit residential development (MUD)	Residential development comprising 3 or more dwellings.
Operations management plan (OMP)	A plan provided by the developer to the <i>owners corporation</i> detailing the operational and maintenance obligations for the entire waste management system. For example, responsibility for presenting MGBs for collection and returning them to the waste storage facility or the operation and maintenance of a compactor, <i>chute</i> system or <i>truck turntable</i> .
Owners Corporation	As defined in the <i>Unit Titles (Management) Act 2011</i> , an <i>owners corporation</i> for a units plan has the following functions: (a) the enforcement of its rules; and (b) the control, management and administration of the common property.
Place Coordination	A business unit of TCCS responsible to ensure that proposed municipal engineering infrastructure assets, landscape works and waste collection meet relevant design standards, specifications, codes and guidelines so that they are safe for the community, fit for purpose and complement existing infrastructure.
Public Development	A facility intended to provide a service to the community. It may be accessible by members of the public. Examples include schools, hospitals, libraries, museums and sporting facilities.

Term	Definition
Recyclable	To treat or process used or waste materials to make suitable for reuse.
Recycling	The waste activity relating to the handling of recyclable materials.
Residential	A development designed to provide long-term living accommodation.
Residential Floor	A <i>multi-unit residential development</i> that has a floor with at least one <i>residential unit</i> .
Residential Unit	A dwelling or sole occupancy unit in a <i>multi-unit residential development</i> (i.e. under the BCA, a Class 2 building).
RORO (Roll-on-roll-off) Compactor	An integrated and mobile fully self-contained and automated system used to compress waste or recyclable material using a roll-on-roll-off loading method onto a truck.
Single Dwelling	The use of land for <i>residential</i> purposes for a <i>single dwelling</i> only.
Small MUD	A <i>multi-unit residential development</i> where each <i>residential unit</i> is allocated individual MGBs for kerbside collection.
Swept path	The envelope swept out by the sides of the vehicle body, or any other part of the structure of the vehicle when undertaking a turning manoeuvre. This does not include any additional clearances specified in this DCC.
TCCS	Transport Canberra and City Services.
Territory	Australian Capital Territory Government.
Truck Turntable	A device for turning trucks so that they can be moved back in the direction from which they came
Unobstructed	<p>In addition to the dictionary meaning, <i>unobstructed</i> means free from any obstruction in all directions. It also includes any specified clearances for, but not limited to: pedestrian access; <i>swept path</i> vehicle access and on-site vehicle paths of travel; <i>bins</i> and paths of travel for <i>bins</i>; <i>designated collection points</i>: travel heights and maximum loading heights for <i>collection vehicles</i>.</p> <p>Obstructions include, but are not limited to: street furniture; trees; walls; fences; lips or changed levels impeding the movement of <i>bins</i>; overhanging buildings or overhead powerlines; overhead ducts, pipes or other services protruding or suspended from ceilings; roundabouts or slow points; intersections or close proximity to intersections; busy roads; pedestrian pathways; and narrow lanes.</p>
Trade Waste	Refuse or waste material arising from any trade or industry. It excludes liquid waste, demolition waste, building waste, special waste, contaminated waste, recycling or <i>green waste</i> .

Term	Definition
Verification Method	A test, inspection, calculation or other method that determines whether a <i>performance-based solution</i> or <i>deemed-to-satisfy solution</i> complies with the relevant <i>objective</i> .
Waste	Refuse, garbage or waste material other than <i>trade waste</i> , effluent, <i>compost</i> material, <i>green waste</i> or recyclable material.
Waste Container	An MGB, hopper, skip or other receptacle for storing waste or recyclable material.
Waste Chute Room	A room that is part of a <i>waste and recycling storage facility</i> used specifically for receiving waste and recyclables from <i>chutes</i> . The room may also house ancillary plant and equipment associated with the building's waste management system.
Waste Facility	A site used by a waste management business for the storage, sorting, treatment, processing, or disposal of waste, as defined in the <i>Waste Management and Resource Recovery Act 2016</i> . A <i>waste facility</i> must be licensed.
Waste, Recycling and Green Waste Storage Area	An area within a yard or courtyard of a <i>single dwelling</i> , <i>dual occupancy</i> or dwelling in a <i>small MUD</i> for storing waste, recycling and <i>green waste</i> MGBs.
Waste and Recycling Storage Facility	An area within the lease boundaries of the development where waste, recycling and, possibly, <i>green waste bins</i> are stored.
Waste and Recycling Storage Space	A small space within a dwelling or <i>residential unit</i> used to store waste and recyclable material.
Waste and Recycling Section	A space within a commercial, public or industrial development to store 1 day's waste and recyclable material, normally in kitchens, food preparation areas, motel or hotel rooms, and staff food preparation areas etc.
Waste and Recycling Management Plan (WRMP)	A WRMP needs to be complete and submitted with a <i>development application</i> , as per Appendix 10 .
Waste Service Compartment	A room on a <i>residential floor</i> of a MUD used to deposit waste into a waste <i>chute</i> or recyclables into a recycling <i>chute</i> or recycling MGB.
Waste Transporter	A <i>waste management business</i> that collects or transports waste or both, as defined in the <i>Waste Management and Resource Recovery Act 2016</i> . A <i>waste transporter</i> must be registered.
Wet Waste	Waste material that primarily contains food organics, but also includes cooking fats, oil, grease, <i>hazardous waste</i> , and other liquid waste produced as a by-product.

Term	Definition
Work As Executed (WAE)	Refers to figures, drawings, plans, charts and other records to indicate final measurements and dimensions etc once all work has been completed. Also referred to “as built” drawings.

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Appendix 2 Best practice considerations

A2.1 Overview

In addition to meeting the minimum necessary requirements of the DCC, developers, architects and other building professionals are encouraged to incorporate best practice waste and recycling management principles and practices into the design, construction and ongoing operation of new developments. This includes incorporating innovative technologies and additional waste streams such as organics in new developments.

This guide provides some general suggestions and links to other relevant documents and websites. It should be considered as a starting point for research into how each development could incorporate best practice.

While the information was current at the time of publication, it may not reflect the latest changes in technology and best practice waste management. Practitioners are therefore encouraged to undertake their own research.

A2.2 Smart design

There are many ways that waste can be avoided or reduced if careful consideration is given to this during the design process. The following are some examples of how this can be achieved:

- Design buildings using a 'long life – loose fit' approach. This can help ensure that the building has a longer effective life and can be readily adapted for alternative uses to reflect changes in needs and tastes.
- Design for repurposing. For example, larger high-rise designs with a central core containing all services may allow the building at the end of its original intended life to be stripped back to the concrete shell and then retrofitted with a new skin rather than needing to be completely demolished.
- Design the building so it can be built with standard sized building materials to avoid producing offcuts during construction.
- Consider prefabrication.
- Specify construction materials that contain a high percentage of recycled material wherever possible. This reduces demand for virgin materials and helps create markets for recycled materials.
- Avoid specifying materials that are difficult to recycle, such as composites and materials treated with chemicals.
- Consider using Life Cycle Assessment (LCA) in the selection of construction materials to favour products with a low life-cycle impact.

- Minimise the amount of cut and fill in a new development.
- If the development involves an existing building, consider repurposing or reusing material generated during the demolition in the new development.
- Design landscapes and select plants that minimise the generation of excessive amounts of garden waste.
- Consider incorporating an on-site organics *composting* facility.

Many websites provide useful information on this issue, such as:

- <http://yourhome.gov.au/> (including yourhome.gov.au/materials and yourhome.gov.au/materials/waste-minimisation). This website is operated by the Australian Government and provides useful and free information on a wide range of aspects of environmental design that can help reduce waste.
- environmentdesignguide.com.au/. This website is operated by the Australian Institute of Architects (subscription required) and has over 200 peer-reviewed case studies of environmental design.
- ecospecifier.com.au/ This website provides advice on selecting 'green' building materials.

Several organisations also provide independent assessments to certify the environmental performance of developments, and can help to identify innovatively designed developments. These include:

- Green Building Council of Australia (new.gbca.org.au/)
- EnviroDevelopment (envirodevelopment.com.au/).

A2.3 Single dwellings and dual occupancy dwellings

It is recommended that each dwelling have an external space designated for at least one *compost* bin to encourage the separation of food wastes and garden organics for on-site processing of this material. The *compost* bin should be discretely located to maintain amenity. It is recommended that each kitchen be designed with a separate bin for storing food waste. The food waste bin should be around five litres in size.

Owners are responsible for keeping MGBs clean. MGBs should be washed with mild soapy water over a lawn area or garden bed where the runoff does not go down paths, driveways or into stormwater systems.

A2.4 Multi-unit residential developments

It is recommended that townhouses with larger yards have an external space to accommodate an individual *compost* bin to encourage the separation of food wastes and garden organics to be *composted* for beneficial use on gardens. The *compost* bin should be discretely located to maintain visual amenity. For smaller dwellings and units, worm farms can be used to manage food waste.

Where home *composting* or worm farms are proposed, it is recommended that each kitchen be designed with a separate bin for storing food waste. The food waste bin should be around five litres in size.

A communal *composting* system could be considered for developments with community gardens, with this service available for residents and potentially site gardeners to use. The *compost* bin should be carefully located to maintain overall site amenity. Where these systems are proposed, it is important to ensure that the *owners corporation* operates a regime to ensure that the facilities are managed to an appropriate standard. This could be managed by a volunteer or by the property manager.

Large MUDs often have a significant number of rented properties, resulting in a regular changeover of tenants, and the generation of *bulky wastes*. *Bulky waste* items include discarded furniture (couches, beds, tables, etc), large appliances (white goods and televisions), and plumbing fixtures (bathtubs, toilets, sinks). Therefore, consideration should be given to providing a designated storage space for *bulky wastes*. The property manager should organise regular collections to remove *bulky waste* and ensure that waste enclosures are kept clean.

Other responsibilities of the property manager should include:

- keeping *chutes* clean and serviceable, and to ensuring adequate information on correct cleaning and maintenance of *chute* systems is provided to commercial cleaning companies
- ensuring that signage for enclosures, *chutes* etc is located at each disposal point
- keeping all signs clean and replacing any missing or damaged signs
- in larger MUDs, providing information to residents, including all new arrivals, on the available waste and recycling services. The information should include service locations, how to use these services, and what to do with *bulky wastes* and other obligations when moving out.

With the introduction of a Container Deposit Scheme (CDS) *owners corporations* should consider establishing and operating a shared container recovery system for all residents to use and share benefits. If a shared CDS recovery system is to be implemented, then consideration needs to be given to the number of the *bins* needed, the type of bins required, the security of these bins and their location, establishment of collection services in conjunction with the ACT CDS network operator, the collection frequency and access arrangements for *bin* servicing by the *waste*

transporter. Residents and property managers need to be aware that large quantities of CDS eligible containers cannot be delivered directly to the ACT Materials Recovery Facility (MRF) for a refund without going through the Network. This requires an agreement between the *owners corporation*, the *waste transporter* and the ACT CDS Network Operator.

A2.5 Multi-unit residential developments with shared MGBs presented kerbside for collection

MUDs approved with shared kerbside waste collection services require the *owners corporation* to manage the movement of MGBs out for collection by 7am on collection day and then to have MGBs retrieved and returned to each *waste and recycling storage facility or mini-enclosure* as soon as practicable after MGBs are emptied.

There are multiple ways in which this could be arranged with significant differences in costs involved. An expensive option is for a property manager to be paid to attend the site before each collection day to put MGBs out and then to revisit the site after 5pm on collection day to retrieve MGBs.

Alternatives could involve having a resident volunteer take on this role, or having a resident or responsible student remunerated in some way for performing this task. It is wise to have a backup arrangement if the primary party is not available. The *owners corporation* and managing agent should document the processes and ensure these comply with any legal requirements.

Owners are responsible for keeping *bins* clean. MGBs should be washed with mild soapy water over a lawn area or similar where the runoff does not go down paths, driveways or into stormwater systems.

A2.6 Commercial, public and industrial developments

The *Territory's* Actsmart Business Recycling program assists organisations to put more efficient recycling and waste management into action. The program provides a step-by-step best practice guide to waste management, including advice and assistance, to establish waste management systems, recommended signage, waste audits and staff education. Annual accreditation provides public recognition of an organisation's waste management achievements. The program is available for any organisation in the ACT, including multi-tenanted buildings. The program is free to participate in and includes all signage relevant to waste and recycling. For more information, refer to the Actsmart website: www.Actsmart.act.gov.au/what-can-i-do/business/recycling.

With the introduction of a Container Deposit Scheme (CDS) consideration should be given to establishing and operating a shared recovery system for all to occupiers to use and share benefits. If a shared CDS recovery system is to be implemented, then consideration needs to be given to the number of the *bins* needed, the type of bins required, the security and their location, establishment of collection services in conjunction with the ACT CDS network operator, the collection frequency and access arrangements for the *bin* servicing by the *waste transporter*. Business owners and

Property managers need to be aware that large quantities of CDS eligible containers cannot be delivered directly to the ACT Materials Recovery Facility (MRF) for a refund without going through the Network. This requires an agreement between the Business Owner, the *waste transporter* and the ACT CDS Network Operator.

Large commercial organisations, such as clubs and sporting organisations, may find it difficult to securely store the CDS eligible containers due to security and space restrictions. The incorporation of a separation process by eligible material types prior to collection is recommended. The ACT CDS Network Operator should be contacted regarding the most effective methodology for separating and storing in specific CDS allocated bins / receptacles designed to assist this type of commercial entity to participate in the ACT CDS.

A2.7 Demolition, excavation and construction

The majority of demolition, excavation and construction waste is recyclable and is of higher value when properly separated at source with minimal contamination. This is particularly the case if excavated soils are managed separately. Separated materials are often cheaper to recycle than to dispose of in landfill. Separation, reuse and recycling should be maximised in order to achieve best-practice environmental goals and reduce disposal costs.

A2.7.1 Demolition

In the demolition phase, 90 to 95 per cent of demolition material may be reusable or recyclable. Demolishers commonly strip out, salvage and stockpile materials for transfer and recycling off site.

The excavation phase generates large quantities of material that can end up being disposed of to landfill. As such, excavation material is the largest contributor of waste by volume from construction activities. Some clean excavated fill materials may be used for engineering purposes, reused on site for back filling or stockpiled to use as topsoil for landscaping on site. The classification of excavated material and management of contaminated excavated material must be in accordance with the requirements of the ACT Environmental Protection Authority. In particular:

- During demolition, maximise the sorting of like materials for further on-site use or remove for off-site processing and recycling.
- During excavation, maximise on-site reuse and separation and off-site reuse of excavated soils if permitted by the ACT Environmental Protection Authority.
- Separate Virgin Excavated Natural Material (VENM) for potentially more valuable reuse. For example, large volumes of clay material with a high permeability can be used for engineering activities such as lining dams and capping landfills. Rocky material can be used as select fill.

A2.7.2 Construction

During construction, activities should minimise the generation of surplus materials and waste. Where adequate space is available, surplus material should be separated and stored on site before being removed for recycling, wherever possible. For sites where space is a constraint, or on smaller

developments, surplus materials should be stored and separated off site for recycling and resource recovery.

The waste hierarchy, presented in Table A2.1, provides a guide for minimising waste to landfill and should be adopted in regard to demolition, excavation and construction activities.

Table A2.1 The waste hierarchy

1. Avoid waste generation	Avoid purchasing excessive quantities of building materials to reduce excess unused material. Avoid excessive packaging. Design to minimise waste with pre-cut and modular components.
2. Reduce waste generation at source	Reduce waste generation by using materials that can be delivered in returnable packaging. This includes timber pallets, containers and packaging systems that are stackable, returnable and reusable.
3. Reuse materials	Reuse building materials that are fit for purpose and comply with the development consent and the BCA. Specify materials with recycled content.
4. Recycle materials	Separate demolition and construction materials on site for recycling or reuse or remove from site and separate off site.

In the construction phase, 80 to 85 per cent of waste may be recyclable. Recycling this waste depends upon available space, markets or uses for separated materials, the training and capability of the site management, and *Territory* requirements as stipulated in this Code.

In the construction phase, if waste is removed off site in mixed *waste containers*, it is not uncommon for only 30 to 50 per cent of the *waste container* capacity to be utilised. Separating the waste stream and filling *bins* effectively will increase the density of materials in *waste containers*, reduce void space and therefore reduce costs. The process requires separation of wastes at the workplace. If on-site space does not allow for the separation of waste materials, a mixed *waste container* may be used and taken off site to construction and demolition recycling facilities capable of separating waste to maximise recycling or reuse potential. Building contractors may wish to select a *waste transporter* who will transport waste to construction and demolition recycling facilities. Excavated soil should not be co-mingled with mixed *construction and demolition waste*.

Bin requirements vary depending on the construction methodology. Common requirements are:

- During the construction phase of the building structure: separate *bins* for metal, timber and masonry (metal and masonry can be mixed if separate bins are not used).

- During the fit-out construction phase: separate *bins* for cardboard, plasterboard and mixed waste.

Table A2.2 lists some potential reuse opportunities for demolition, excavation and construction wastes.

Table A2.2 Potential reuse and recycling opportunities for demolition, excavation and construction wastes

Materials On-site	Reuse & Recycling (On-site, Off-site, or both)
Concrete	On-site use as crushed fill, levelling materials; drainage layers
Bricks	Cleaned or rendered over for reuse; crushed fill, levelling materials; drainage layers
Roof tiles	Reuse off site; crushed for landscape or drainage use
Plasterboard	Crush and use in <i>compost</i> or as a soil conditioner
Hardwood	Reuse for flooring, roof framing, fencing or furniture
Other timber (not CCA treated pine)	Reuse for formwork, bridging, propping, and blocking; or chip for use in landscaping
Doors, windows and fittings	Reuse as second-hand building materials
Ferrous and non-ferrous metals (including structural steel, steel and aluminium sheeting, electrical cables, other non-ferrous metals and metal plumbing fittings)	Recycle through metals recyclers
Cardboard	Recycle
Synthetic and recycled rubber (such as carpet underlay)	This can be used in the manufacture of safety barriers and speed humps
Carpet	Recycle – commercial recycling services are available in the ACT. Carpets and underlays with natural fibres can be used as landscape mulch or for <i>composting</i>
Green waste	Mulch or <i>compost</i> for reuse as landscaping material
Overburden	Screen for topsoil or landscaping material

Materials On-site	Reuse & Recycling (On-site, Off-site, or both)
Polystyrene	Recycle – commercial recycling services are available
Film plastic	Recycle – commercial recycling services are available

See also:

- the [ACT Government](http://www.act.gov.au/recycling/a-z_waste_and_recycling_guide) Waste and Recycling Guide (www.act.gov.au/recycling/a-z_waste_and_recycling_guide)
- the ACT Government building waste webpage (www.tccs.act.gov.au/recycling-and-waste/drop-off/building-waste).

Appendix 3 Waste and recycling operational management and maintenance issues

A3.1 Application

This appendix applies to:

- *multi-unit residential developments*
- commercial, public and industrial developments
- *mixed-use developments* (a combination of *multi-unit residential developments* and commercial, public and industrial developments).

A3.2 Overview

Ongoing operational management and maintenance of waste and recycling practices and facilities must be carefully considered in all developments. This appendix lists the key operational management and maintenance issues that must be met or integrated into *multi-unit residential developments*, commercial, public and industrial developments, and *mixed-use developments*.

A3.3 Multi-unit residential developments

At *multi-unit residential developments*, between collections, all waste and recycling must be kept in enclosed *bins* with securely fitting lids to prevent any overflowing or leakage of wastes and recyclables. *Bins* with overflowing contents or raised lids may not be serviced due to spillage risks when moving or raising overfull *bins*.

Facilities must be designed so that *bins* remain in the storage areas between collections.

If MGBs need to be moved from the *waste and recycling storage facility* to a *designated collection point*, residents or the *owners corporation* will be responsible for:

- presenting the MGBs on the kerbside before 7am on the collection day or the evening prior to collection day; and
- returning the MGBs to the storage areas no later than the evening of collection day.

Territory-provided waste and recycling hoppers must remain in enclosures in the periods between collections and must only be moved by the *Territory waste transporter*.

Where the waste management system in a development requires waste, recycling or both to be transported within the site (see [Appendix 4](#)), the developer or *owners corporation* is required to provide *bins*.

For communal *waste and recycling storage facilities*, it is important to establish responsibility for the key tasks involved in the ongoing management of the enclosure. These tasks include:

- moving MGBs to and from the kerbside on collection day, at developments where the *collection vehicle* cannot directly access the enclosure
- cleaning MGBs, hoppers and the *bin* bay. If cleaning is undertaken at the premises, residual liquid must be drained to a sewer line, not a stormwater drain. Also, not all hoppers are fitted with drain bungs. In such cases, consideration should be given to hiring a professional cleaner to clean the hopper.
- removing rubbish dumped outside the enclosure or *bins*; the *owners corporation* is responsible for this task. Excess rubbish that interferes with the collection service may result in the collection being missed and the *bin* may be “stickered” to advise of the inability to service
- arranging for the regular sanitation of the waste and recycling *chutes* where these are used
- ensuring that no vehicles are parked that restrict access to *bins* on collection days.

The roles and responsibilities of the *owners corporation* in regard to waste or recycling management should be clearly defined – preferably in strata body documentation – and should include how the caretaker or building managers are to assist residents to correctly dispose of their waste and recycling. This includes, in the case of shared kerbside MGBs, a management strategy for presenting MGBs for collection and returning them to the *waste and recycling storage facilities* or *mini-enclosures*.

Where it is proposed that privately owned hoppers be moved around a site, the *owners corporation* will be responsible for ensuring any safety measures required by law relating to this activity are carried out, including the development of appropriate manual handling documentation.

A3.4 Commercial, public and industrial developments

At commercial, public and industrial developments, all tenants or businesses must have in place a means of disposing of waste and recycling. This may be a valid contract with a private waste or recycling contractor for the regular collection and disposal of waste and recycling generated by their activities.

Between collections, all waste and recycling must be kept wholly within lease boundaries, in enclosed *bins* with securely fitting lids to prevent any overflowing or leakage.

Bins should remain in the *waste and recycling storage facility* between collections.

Arrangements must be in place to manage, maintain and clean all waste and recycling management facilities. Tenants and cleaners must be made aware of these obligations.

Roles and responsibilities of tenants or businesses regarding waste or recycling management issues should be clearly defined, preferably in lease documents.

Waste and recycling must be transferred by tenants or cleaners to a central storage facility on a daily basis.

A3.5 Mixed-use developments

The waste and recycling management system for *mixed-use developments* must be designed to prevent commercial tenants from using the *residential* waste and recycling *bins*. Note that:

- the requirements for *multi-unit residential developments*, as documented in this appendix, apply to the *residential* components of *mixed-use developments*
- the requirements for commercial, public and industrial developments, as documented in this appendix, apply to the commercial, public and industrial components of *mixed-use developments*.

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Appendix 4 Domestic waste and recycling services and bins

A4.1 Waste and recycling MGBs – residential developments and kerbside collection

Standard *domestic waste*, recycling and *green waste* services provided by the Territory are presented in Table 4.1. MGB allocations are for *single dwellings*, *dual occupancy dwellings* and *multi-unit residential developments* (MUD) where individual or shared-use MGBs are allocated.

Table A4.1: Standard domestic services provided by the Territory

Type of Waste	Service provided
Waste Dark green bin with red lid	140L MGB per dwelling collected weekly (standard) 240L MGB for shared use collected weekly
Recycling Dark green bin with yellow lid	240L MGB per dwelling collected fortnightly (standard) 360L MGB for shared use collected fortnightly
Green Waste Dark green bin with lime green lid	Opt-in service 240L MGB collected alternate fortnights to recycling MGB

A4.2 Multi-unit residential developments with shared services and on-site collection

Table A4.2 provides the waste and recycling allocations for shared waste and recycling services for *multi-unit residential developments*. Calculations are based on the number of bedrooms for each dwelling in the development.²

Table A4.2: Weekly allocations for shared waste and recycling by MUD dwelling size

Dwelling Size	Waste (Litres/week)	Recycling (Litres/week)
1 bedroom or studio	80	70
1 bedroom with separate room for a study	90	80
2 bedroom	100	90
3 bedroom	120	110
Over 3 bedroom	140	120

Tables A4.3, A4.4 and A4.5 set out how to calculate the total uncompacted waste and recycling allocation for each MUD. This table is included in the WRMP and is to be filled out for MUDs where Part 3.5 does not apply. Refer to **Note 1** for collections 3 times per week, and **Note 3** below Table A4.5 for the use of rear-loading trucks to collect waste.

² Allocations are based on ACT waste and recycling audit data and rates applied in other jurisdictions

An online calculator is available on the TCCS website to determine projected volumes of waste and recycling for an application. See www.tccs.act.gov.au/Development_and_Project_Support/building-works/waste-management-applications.

Table A4.3 Calculation for Total Weekly Capacity for Shared Waste and Recycling

No. of units by bedrooms	Waste (Litres/week) (No of units x volume)	Recycling (Litres/week) (No of units x volume)
1 bedroom or studios:	x 80L = L	x 70L =L
1 bedroom with separate room for a study:	x 90L = L	x 80L =L
2 bedrooms:	x 100L = L	x 90L =L
3 bedrooms:	x 120L = L	x 100L =L
Over 3 bedrooms:	x 140L = L	x 120L =L
Total capacity required (Add litres for all dwellings) L/weekL/week

Table A4.4 Multi-unit residential developments – waste hopper allocation and collection frequency

Calculated waste volume (litres/week)	Waste hopper numbers	Waste hopper sizes	Waste service frequency
Up to 1650	1	1.5m ³	Weekly
1651 to 2250	1	2m ³	Weekly
2251 to 3350	1	3m ³	Weekly
3351 to 3800	2	1.5m ³ + 2 m ³	Weekly
3801 to 4350	2	2 x 2m ³	Weekly
4351 to 5350	2	2m ³ + 3m ³	Weekly
5351 to 6350	2	2 x 3m ³	Weekly
6351 to 7350	2	1.5m ³ +2m ³	Twice weekly
7351 to 8350	2	2 x 2m ³	Twice weekly

8351 to 10,350	2	$2\text{m}^3 + 3\text{m}^3$	Twice weekly
10,351 to 12,350	2	$2 \times 3\text{m}^3$	Twice weekly
12,351 to 13,350	3	$1.5\text{m}^3 + 2\text{m}^3 + 3\text{m}^3$	Twice weekly
13,351 to 14,350	3	$2 \times 2\text{m}^3 + 3\text{m}^3$	Twice weekly
14,351 to 16,350	3	$2\text{m}^3 + 2 \times 3\text{m}^3$	Twice weekly
16,351 to 18,350	3	$3 \times 3\text{m}^3$	Twice weekly
18,351 to 20,350	4	$2 \times 2\text{m}^3 + 2 \times 3\text{m}^3$	Twice weekly
20,351 to 22,350	4	$2\text{m}^3 + 3 \times 3\text{m}^3$	Twice weekly
22,351 to 25,000	3	$2\text{m}^3 + 2 \times 3\text{m}^3$	Three/week (see Note 1)
25,001 to 28,000	3	$3 \times 3\text{m}^3$	Three/week (see Note 1)
28,001 to 31,000	4	$2 \times 2\text{m}^3 + 2 \times 3\text{m}^3$	Three/week (see Note 1)
31,001 to 34,000	4	$2\text{m}^3 + 3 \times 3\text{m}^3$	Three/week (see Note 1)
34,001 to 36,000	4	$4 \times 3\text{m}^3$	Three/week (see Note 1)
Over 36,000		Mandatory to use <i>RORO compactors</i> (Note: Approximately 400 units)	

Table A4.5 Multi-unit residential developments – recycling hopper allocation and collection frequency

Calculated recycling volume (litres/week)	Number of 1100L recycling hoppers required	Waste Service Frequency
Up to 1100	1	Weekly
1101 to 2200	2	Weekly
2201 to 3300	3	Weekly

3301 to 4400	4	Weekly
4401 to 5500	5	Weekly
5501 to 6600	6	Weekly
6601 to 7700	7	Weekly
7701 to 8800	8	Weekly
8801 to 9900	9	Weekly
9901 to 11,000	5	Twice weekly
11,001 to 13,200	6	Twice weekly
13,201 to 15,400	7	Twice weekly
15,401 to 17,600	8	Twice weekly
17,601 to 19,800	9	Twice weekly
19,801 to 22,000	10	Twice weekly
22,001 to 23,100	7	Three/week (see Note 1)
23,101 to 26,400	8	Three/week (see Note 1)
26,401 to 29,700	9	Three/week (see Note 1)
29,701 to 33,000	10	Three/week (see Note 1)
33,001 to 36,000	11	Three/week (see Note 1)
Over 36000	Mandatory to use <i>RORO compactors</i> (Note: Approximately 400 units)	

Note 1: The availability of collection services 3 times a week in Tables A4.4 and A4.5, above, is restricted to developments of 100 units or more, and where there are on-site storage space constraints. Availability of these services is also subject to operational considerations and may not be applicable in areas where *Territory* waste services for this frequency are not already provided. Applications for services three times a week must be approved in writing

by Place Coordination (and only after consultation with ACT NoWaste and the service provider).

Note 2: Tables A4.4 and A4.5 do not apply if the option of shared MGBs with kerbside collection is available.

Note 3: Use Table A4.5 to determine hopper allocations when rear-load trucks are proposed for waste collection.

A4.3 Territory-provided green waste bins

For green waste MGBs, go to www.tccs.act.gov.au/recycling-and-waste

A4.4 Territory-provided waste and recycling bins – dimensions

Tables A4.6, A4.7 and A4.8 provide volumes and dimensions of the *Territory-provided residential* MGBs and hoppers. *Bin* dimensions are estimates only and may change without notice.

Table A4.6 Residential MGBs – volumes and dimensions

MGB	Height	Depth	Width
140L MGB Waste Only	0.94m	0.62m	0.54m
240L MGB Waste or Recycling	1.04m	0.73m	0.58m
360L MGB Recycling Only	1.10m	0.85m	0.65m

Table A4.7 Recycling hoppers – volume and dimensions

Hoppers (recycling only)	Height	Depth	Width
1100L hopper	1.40m	1.10m	1.30m

Table A4.8 Waste hoppers – volume and dimensions

Hoppers (Waste Only)	Front Height	Rear Height	Depth	Width
1500L Hopper With lid-in-lid insert (width includes pockets)	1.35m	1.35m	1.10m	2.05m
2000L Hopper Slope style with lid-in-lid	1.20m	1.50m	1.20m	2.02m

inserts (width includes pockets)				
3000L Hopper Single flat lid with no lid inserts (width includes pockets)	1.53m	1.66m	1.50m	2.05m
3000L Hopper Slope style with lid-in-lid inserts (width includes pockets)	1.20m	1.70m	1.50m	2.10m

A4.5 Territory-provided waste and recycling bins and hoppers – clearance

(a) MGBs

For MGBs in a *waste and recycling storage facility* or *mini-enclosure*, the minimum floor area required to be allocated is the MGB width plus 50mm clearance x MGB depth plus 50mm clearance for each MGB.

For MGBs at the *designated collection point*, the minimum clearance between MGBs or MGBs and obstructions is 0.20m, measured from the widest point of the bin (i.e. at the top). For design purposes for kerbside collections the mandatory requirements for residential developments will take precedence to the extent of any difference (see [Part 3.5](#) and [3.6](#)).

Explanatory Note

MGB clearances are the minimum necessary design requirements for compliance with the DCC. Better practice for collection is to allow 0.30m clearance between MGBs and 1m between an MGB and an obstruction, such as a parked car, street furniture or tree.

(b) Recycling hoppers

For 1100L hoppers in a *waste and recycling storage facility*, there must be at least 0.30m clearance between hoppers, between hoppers and MGBs, and between hoppers and bump rails on walls to ensure user and servicing access. Clearance is measured at the lids.

The 1100L hoppers may be used for waste material where a rear-load waste vehicle has been approved for use by Place Coordination in consultation with ACT NoWaste.

(c) Waste hoppers

For 1500L, 2000L and 3000L waste hoppers in a *waste and recycling storage facility*, there must be at least 0.60m clearance between hoppers, between hoppers and MGBs, and between hoppers and bump rails on walls to ensure user and servicing access. Clearance is measured from the pockets.

The given height of all hoppers, including recycling hoppers, includes the wheels. The wheels are for use by the *waste transporter* only; the hoppers are not suitable for moving around the development by residents, the *owners corporation*, or strata manager.

A4.6 Territory-provided Waste and Recycling Bins and Hoppers- Lids

Waste bins have red lids; recycling bins have yellow lids; and *green waste* bins have lime green lids.

A4.7 Kerbside space requirements

Table A4.9 provides the kerbside space requirements of MGBs in the ACT.

Table A4.9 MGBs – kerbside space requirements

MGB	Waste and recycling kerbside requirement (clear of obstructions)
Individual use – <i>single dwelling</i> or <i>dual occupancy dwelling</i>	140L Waste MGB and 240L Recycling MGB – 1.40m
Individual use – <i>small MUD</i> – around 10 units or less	140L Waste MGB and 240L Recycling MGB – 1.40m
Shared use – around 10 to 30 units	0.80m per 240L Waste MGB and 0.85m per 360L Recycling MGB (or 0.80m per <i>green waste</i> MGB every other fortnight)

A4.8 Kerbside collection services

Where a development has unusual circumstances, such as a number of internal roads or multiple street frontages, the applicant must discuss their proposal with Place Coordination to determine the most appropriate servicing solution.

A4.9 Use of waste and recycling hoppers

The waste hoppers provided by the *Territory* to facilitate the waste collection must not be used to transport waste around the development.

ACT NoWaste has ultimate discretion over the size of hopper allocated to a development and the frequency of collection. Applicants must design *waste and recycling storage facilities* to accommodate the number of waste and recycling hoppers identified in the tables above for the collection frequency identified, and should note that 3 collections per week requires specific Place Coordination approval.

Applicants are not permitted to propose alternative hopper sizes and collection frequencies unless the proposal is formally being considered under the *performance-based solution* by Place Coordination.

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Appendix 5 Waste and recycling generation rates – commercial, public and industrial developments

A5.1 Waste and recycling generation rates

Table A5.1 provides the estimated waste and recycling generation rates for different types of commercial, public and industrial developments.

Table A5.1 Waste and recycling generation rates – commercial, public and industrial developments

Premises Type	Waste	Recycling
Backpackers' hostel	40L/occupant/week	20L/occupant/week
Banks	5L/100m ² floor area/day	25L/100m ² floor area/day
Boarding house and guest house	60L/occupant/week	20L/occupant/week
Child and day care centre	250L/100m ² floor area/day	120L/100m ² floor area/day
Food premises:		
Butcher	100L/100m ² floor area/day	Discretionary
Delicatessen	80L/100m ² floor area/day	40L/100m ² floor area/day
Fish shop	100L/100m ² floor area/day	Discretionary
Greengrocer [#]	240L/100m ² floor area/day	120L/100m ² floor area/day
Restaurant, café [#]	660L/100m ² floor area/day	135L/100m ² floor area/day
Supermarket [#]	240L/100m ² floor area/day	240L/100m ² floor area/day
Takeaway food shop	100L/100m ² floor area/day	Discretionary
Hairdresser, Beauty salon	60L/100m ² floor area/day	10L/100m ² floor area/day
Hotels and motels		
Bedrooms	5L/bed/day	1L/bed/day
Bars	50L/100m ² bar area/day	

Premises Type	Waste	Recycling
Restaurants [#]	660L/100 m ² dining area/day	50L/100m ² bar and dining areas/day
Licensed club		
Bars	50L/100m ² bar area/day	50L/100m ² bar and dining areas/day
Restaurants [#]	660L/100m ² dining area/day	
Offices	20L/100m ² floor area/day	25L/100m ² floor area/day
Retail trading shops (non-food premises):		
Shop less than 100m ² floor area	50L/100m ² floor area/day	25L/100m ² floor area/day
Shop greater than 100m ² floor area	50L/100m ² floor area/day	50L/100m ² floor area/day
Showroom	40L/100m ² floor area/day	10L/100m ² floor area/day
Warehouse	60L/100m ² floor area/day	Variable

Explanatory Note

The separation and collection of organic waste is considered discretionary for all types of premises. Premises highlighted with a “#” symbol are likely to generate higher proportions of organic waste and are encouraged to separate organic wastes and arrange a separate collection.

A5.2 Waste and recycling generation rates for other premises

Development types not listed in the table above will be individually assessed. Applications seeking approval for a different waste generation rate must be supported by appropriately documented evidence through consultation with Place Coordination.

A5.3 Mixed-use developments

Commercial, public or industrial components of a mixed-use development must be designed to accommodate the same service levels as for other commercial, public or industrial developments of the same scale.

A5.4 Commercial waste and recycling MGBs and hoppers

Commercially available waste and recycling MGBs and hoppers are similar in type and size to the *bins* described in [Appendix 4](#). Developers are encouraged to consult with suitable *commercial waste* and recycling service providers before finalising their development to identify suitable *bins* and their methods of handling to ensure their developments can accommodate them.

Explanatory Note

The *Territory* does not engage in commercial waste and recycling services and does not provide advice on such matters unless:

- there is an impact on residential services at *mixed-use developments*
- there is a nearby non-residential development that may impact on residential waste storage facilities.

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Appendix 6 Waste and Recycling collection vehicles used by the Territory waste transporter

The *Territory's waste transporter* uses the following vehicles to provide waste and recycling services:

- side-lift trucks
- front-lift trucks
- rear-load trucks
- hook-lift and roll-on roll-off “Dyno” trucks.

Each of these vehicles is used for specific collection functions. The type of vehicle used for a specific development is determined by the *Territory* in consultation with the *Territory's waste transporter*.

For vehicle driveways, access and manoeuvrability requirements, refer to **Appendix 7**.


A6.1 Green waste vehicles

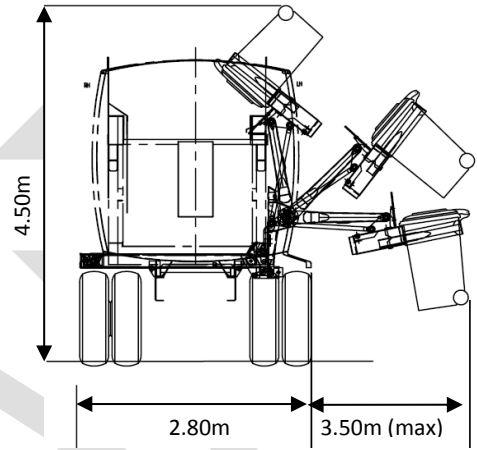
Green waste is collected by a 25m³ side-loader truck with smaller dimensions than waste and recycling side-loader trucks (see A6.2).


A6.2 Waste and recycling vehicles

Table A6.1 sets out the indicative dimensions and weights of *collection vehicles*.


Table A6.1 Indicative dimensions and weights of collection vehicles


Side-lift truck for MGBs	Comments and dimensions
	<p>This type of vehicle is used to collect waste and recycling and is used to service 140L, 240L and 360L MGBs.</p> <p>The vehicle has an automated MGB lifting device fitted to the left-hand side of the vehicle allowing for automatic loading of MGBs into the vehicle body for compaction.</p> <p>One person can operate these vehicles as the vehicle operator is not required to exit the vehicle cabin unless MGBs are incorrectly positioned and cannot be reached by the sidearm.</p>

Approximate dimensions and weight of the most commonly used vehicle	<p>Volume 29m³</p> <p>Length overall 10.20m</p> <p>Width overall 2.50m</p> <p>Width overall (with mirrors) 2.80m</p> <p>Loading height 4.50m</p> <p>Clearance width for side loading 6.20m</p> <p>Travel height 3.80m</p> <p>Wheelbase 5.50m</p> <p>Rear overhang 3.20m</p> <p>Weight (vehicle & load) 23. tonnes</p>
Operational dimensions and configuration	

Front-lift truck for hoppers	Comments and dimensions
	<p>This type of vehicle is used to collect waste and is generally used to service 1500L, 2000L, and 3000L capacity hoppers.</p> <p>Front-loading arms on the <i>collection vehicle</i> lift the hoppers to empty into the compactor body.</p> <p>Because these trucks lift the hoppers over the truck body, it should be noted that the total height clearance requirement for this vehicle is 6.80m (which includes 0.30m minimum vertical clearance above the maximum loading height. Designers must allow for this clearance if loading is to be undertaken within the building).</p>

Approximate dimensions and weight	<p>Volume 31m³</p> <p>Length overall 10.50m</p> <p>Width overall 2.50m</p> <p>Width overall (with mirrors) 2.80m</p> <p>Loading height 6.50m</p> <p>Travel height 4.20m</p> <p>Wheelbase 5.85m</p> <p>Rear overhang 3.10m</p> <p>Weight (vehicle & load) 27.5 tonnes</p>
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Rear-load trucks	Comments
	<p>This type of vehicle is used to collect recycling from MGBs and 1100L hoppers.</p> <p>Collection operators manually manoeuvre the <i>bins</i> to the rear of the vehicle. Hoppers are lifted using a hydraulic lifting device fitted to the rear of the vehicle.</p>
Approximate dimensions and weight	<p>Volume 19m³</p> <p>Length overall 10.40m</p> <p>Width overall 2.50m</p> <p>Width overall (with mirrors) 2.80m</p> <p>Loading height 3.90m</p> <p>Travel height 3.90m</p> <p>Wheelbase 5.50m</p> <p>Rear overhang 3.30m</p> <p>Weight (vehicle & load) 23 tonnes</p>

Hook-lift and Dyno (or RORO) trucks	Comments
	<p>This type of vehicle is used to collect waste and recycling in <i>RORO compactors</i> in large MUDs and commercial, public and industrial developments.</p> <p>Collection operators manoeuvre the rear of the vehicle to the back of the <i>RORO compactor</i>.</p>
<p>Actual truck dimensions, including maximum lift height, vary according to the vehicle and type of <i>RORO compactor</i> to be loaded for transport.</p> <p>Contact the <i>waste transporter</i> and compactor manufacturer for detailed dimensions, loading capacity, height clearances and <i>swept paths</i> for inclusion in the WRMP.</p>	<p><i>RORO compactors</i> vary in size up to 30m³. Vertical height at the point of lift varies according to the type, size and shape of the <i>RORO compactor</i>, but can be as low as 4.00m and more than 5.00m. An additional 0.30m is required for vertical clearance from obstructions.</p>

Designers of commercial, public, and industrial developments or *mixed-use developments* serviced by private sector *waste transporters* are to check vehicle clearances during the design stage in order to provide sufficient height clearances and space for manoeuvrability to enable vehicles to service developments in accordance with the DCC. Designated access clearances must be added to vehicle dimensions.

Appendix 7 Vehicle access and manoeuvrability requirements

To accommodate waste and recycling vehicles, driveways for developments must be designed as per the requirements of *TCCS Design Standards of Urban Infrastructure* and the DCC.

Access and manoeuvrability requirements from the block boundary and within the site must comply with the requirements of *AS2890.2–2002 Parking facilities: Off-street commercial vehicle facilities*, unless approved by Place Coordination.

A7.1 General

The design of the driveway to a *designated collection point* is dependent on a combination of factors. These factors include:

- the clearance height and width for the maximum size *collection vehicles* that may use the facility
- the frequency with which *collection vehicles* use the facility
- compliance with ACT road rules under the *Road Transport (Road Rules) Regulation 2017*, as subordinate regulation made under the *Road Transport (Safety and Traffic Management) Act 1999*, plus any other relevant road regulations and amendments
- on collector streets, the design must not force turning *collection vehicles* to cross the centreline
- on access streets, *collection vehicles* may use any part of the pavement, in accordance with Australian Road rules
- the need for the driveway to be wide enough to accommodate the *swept path* of each vehicle
- the need to limit reverse manoeuvres at the property boundary, if permitted by Place Coordination in consultation with ACT NoWaste, to one only, either on entering or exiting; reverse manoeuvres must also consider both safety and obstruction to other on-street traffic. Reverse manoeuvres into or out of collector roads must be approved by Place Coordination
- the need to design developments to allow the largest *collection vehicles*, including those with twin-axle steering, applicable for the development to manoeuvre on site in a mostly forward direction, unless involved in a 3-point turn to allow the vehicle to exit the site in a forward direction
- where reversing is required, the need to limit the maximum reversing distance to three times the length of *collection vehicles* (33m). Where a development has unique circumstances requiring in excess of this requirement, the applicant is to discuss their proposal with Place Coordination to determine the most appropriate solution

- assessing high risk reversing manoeuvres that involve proximity to buildings, traffic pathways or curved roads where visibility is restricted
- reversing limits commence at the start of the reverse manoeuvre
- the desirability of keeping reversing to the minimum necessary to ensure public safety and to minimise time constraints.

A7.2 Clearance dimensions for on-site collection

To accommodate *collection vehicles* within the property boundary, the minimum height and width clearance of all structures and services will depend on the vehicles that will access the building.

There must be a minimum *unobstructed* vertical clearance of 0.3m to all structures and services from the maximum loading height at the *designated collection point* (see Figure A7.1).

If the *collection vehicle swept path* is constrained by two or more vertical obstructions (i.e. pinch points) in a single turning movement, the minimum horizontal clearance from the side mirrors of the vehicle to the obstruction must be 1.00m from each side of the vehicle. In all other circumstances the minimum clearance from the side mirrors of the vehicle to a vertical obstruction must be 0.60m (see Figure A7.2).

An *unobstructed* horizontal clearance of less than 0.60m is not permitted.

Driveway kerb faces must be located at least 0.60m clear of wheel paths.

Designated collection points must be sufficiently wide to allow for the vehicle width (see [Appendix 6](#)) and an additional 1.00m for the driver of the *collection vehicle* to fully open the driver's door.

Explanatory Note

In assessing the *swept path* of a vehicle, Place Coordination considers the following aspects:

- safe entry and egress of the vehicle onto a public road
- safe movement of pedestrians on driveway crossings and on internal roads
- the capacity of the driver to reasonably and safely navigate internal roads with a minimum of steering adjustments
- the impact of obstructions on the vehicle's path of travel when traversing or performing *collection services*
- the width of the internal road
- the capacity of the vehicle to reasonably collect bins for kerbside collection
- the impact of sight lines and blind spots on the waste vehicles and the flow of traffic

- the capacity of emergency, public utility and other vehicles, such as removalist vans, to access the development
- the proximity of service areas to vehicle and pedestrian pathways that allow entry and exit from the development.

FIGURE A7.1 Vertical clearances above waste vehicles – travel and loading height

Large MUD with on-site collection on the ground floor of the building

Note: Minimum height clearance requirements for the designated collection point

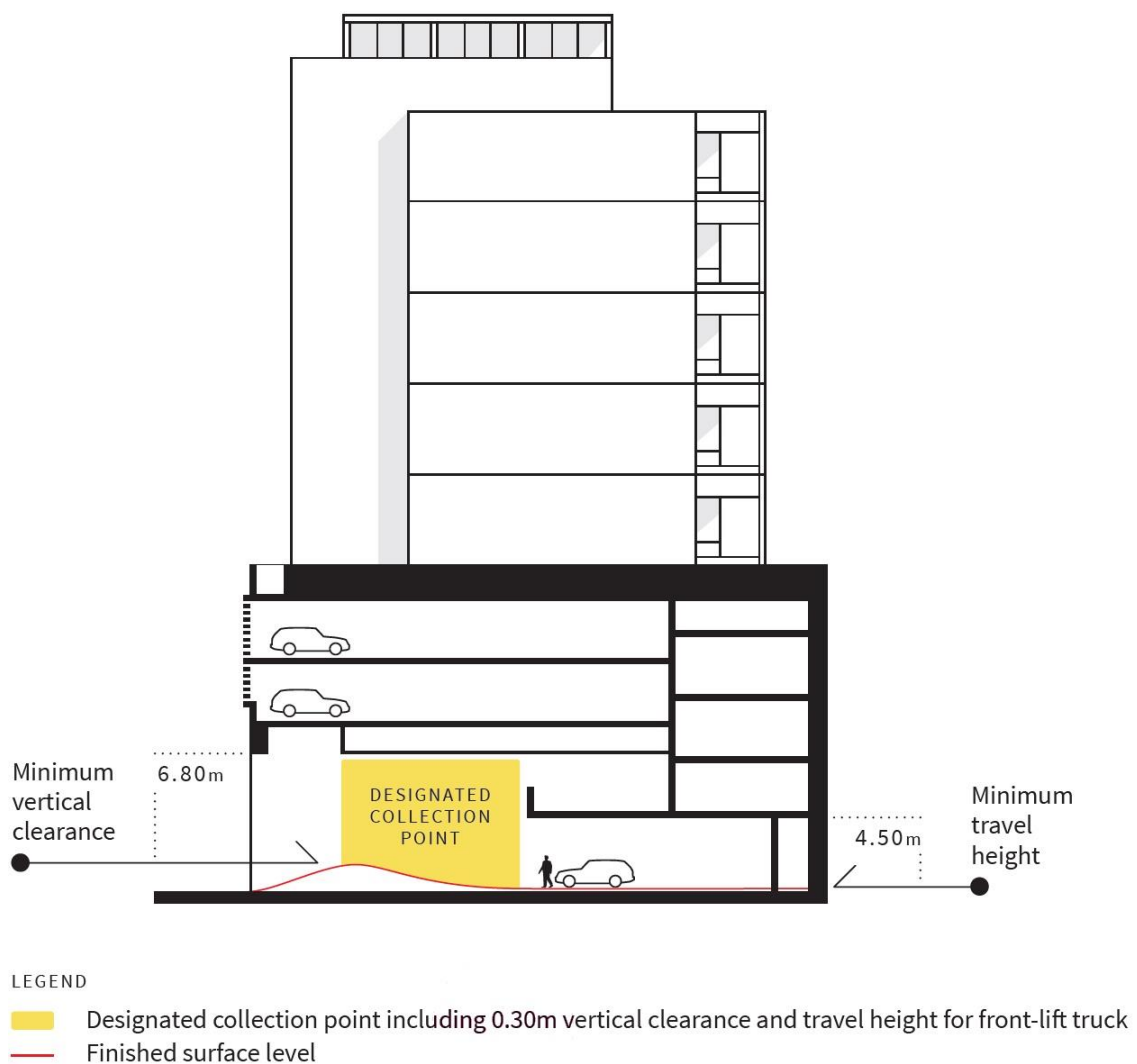
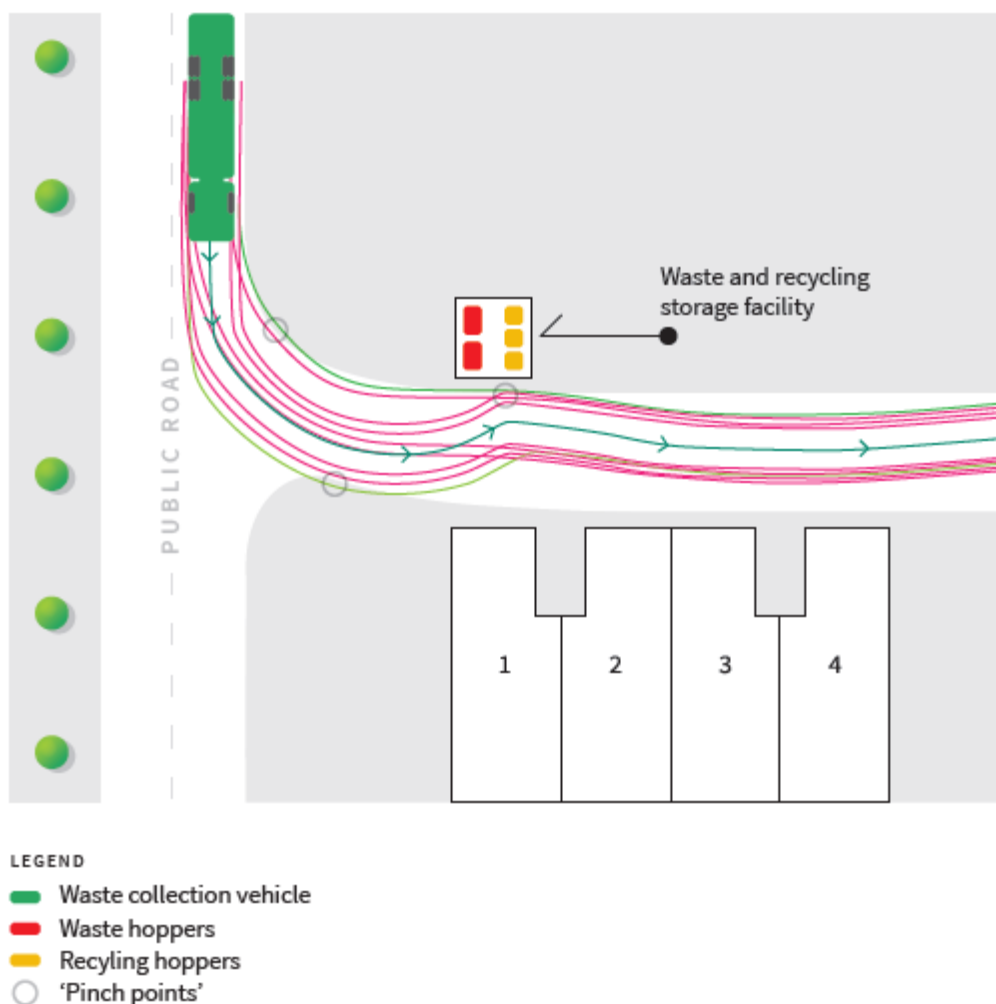


FIGURE A7.2 Swept path for waste collection vehicles

Swept path for waste collection vehicle

Note: The difficulty for the driver to service the waste and recycling storage facility



A7.3 Public roads

Where a *collection vehicle* is required to turn at a cul-de-sac head in a public road or within a development, a bowl, 'T' or 'Y' shaped design must be used.

In designing a bowl, 'T' or 'Y' shaped turning head the applicant must consider:

- placement of waste and recycling *bins* outside dwellings, or in a common collection area
- car parking locations on public roads or within access roads in developments or within building *basements*
- *collection vehicle* geometry and overhang

- Limiting U turns to 3-point turns, noting this is a 'non-preferred' maximum.

A7.4 Internal circulation roadways

The service area or circulation roadway must conform to the requirements of AS 2890.2–2002, as follows.

- *Collection vehicles* must stand wholly within the site during the waste collection operation unless exceptional circumstances exist as demonstrated by the applicant and the alternative arrangements are approved by Place Coordination.
- Circulation roadways must be designed to accommodate the *swept path* of the largest *collection vehicles* using the facility plus the specified clearance from the vehicle's body.
- The full width of the access driveway may be used for both entering and exiting the site.
- *Collection vehicles* should be able to enter and exit in a forward direction. Where applicants are unable to meet this requirement, they are to discuss their proposal with Place Coordination to determine the most appropriate solution. Reversing within a development must be avoided.
- Where both the public roadway and the service area are minor facilities, a two-way access driveway would be considered.
- Driveway ramp grades must be as per AS 2890.2–2002 and TCCS Design Standard Drawing DS5-01. Attention is drawn to clause 3.4.4 of AS 2890.2–2002 Driveway Grade which states that the maximum grade on an access driveway together with the connecting circulation roadway for a distance extending from the property line to at least the longest wheelbase of any vehicle likely to use the driveway, shall be 1:20 (5 per cent).

The following requirements apply to ramps used by *collection vehicles* to access *designated collection points*.

- In accordance with AS2890.2-2002 Part 4.3.1(e), the maximum gradient where only forward manoeuvres will occur is 1:6.5 (15.4 percent) or 1:8 (12.5 per cent) where reverse manoeuvres will occur.
- Loading and unloading on ramps is not permitted

Table A7.1 Summary of Table 3.2 from AS 2890.2–2002

MAXIMUM ROADWAY AND RAMP GRADES, AND RATES OF CHANGE OF GRADE		
Design vehicle	Roadway/ramp grade (max)	Rate of change of grade (max)

Small rigid vehicle or smaller	1:6.5 (15.4 per cent)	1:12 (8.3 per cent) in 4.0m of travel
Medium rigid vehicle, heavy rigid vehicle	1:6.5 (15.4 per cent)	1:16 (6.25 per cent) in 7.0 m of travel

Note: Applicants should refer to AS 2890.2–2002 in full for maximum roadway and ramp grades

Appendix 6 of the DCC provides dimensions of common *collection vehicle* sizes. For a front-lift truck the load height is **6.50m**. For a side-lift truck the load height is up to **4.50m** and the load width is an additional **3.50m** from the side of the vehicle. For a rear-loading truck the load height is up to **4.00m**.

For hook-lift and Dyno trucks or similar that are used for *RORO compactors*, the load height varies due to the size of the truck, the type of lifting device used and the height of the *RORO compactor*. Load heights can be as low as 4.0m and more than 5.0m, excluding 0.3m required for clearance.

The load capacity of the internal roadway from the kerbside to the loading area must be designed for the maximum fully loaded truck weight when entering the site.

Explanatory Note

The *Territory waste transporter* will conduct a risk assessment of each development before collection services are provided.

A7.5 Loading area or designated collection point

Collection vehicles must stand wholly within the site.

Loading areas must have a gradient no greater than 1:33 (3 per cent) to allow for the manoeuvring and loading of MGBs and hoppers. This includes the *hopper pad* from which the *collection vehicle* operates.

For the loading of hoppers, the *collection vehicle* must have front-on access to the *hopper pad*.

Loading areas and turning circles for *collection vehicles* must be designated 'NO PARKING' areas with clear signage. Failure to keep loading areas clear may result in non-collection.

A7.6 Construction – driveways and internal roads

Pavements need to have a look and feel appropriate for the intended public realm. The design needs to address the fact that the vehicle is crossing a footpath, where pedestrian safety is a priority.

Concrete pavement is to be designed for a maximum wheel loading of 7 tonnes per axle and a minimum design life of 20 years in order to accommodate waste and recycling *collection vehicles*. This performance specification applies to all internal roads and driveways of a development that will be traversed by a *waste transporter*.

A pavement detail is to be provided by the applicant for approval by Place Coordination. *Development applications* proposing internal road surfaces other than concrete pavement must be approved by Place Coordination at the pre-application stage under a *performance-based solution*.

Explanatory Note

Local, group and town centres, and change of use for existing buildings, can present situations where the provision of standard *domestic waste* collection services can be challenging. In these situations applicants are encouraged to consult early with Place Coordination on available options. The City Renewal Authority will be included in consultations for proposals that fall inside the CRA Precinct, to support development outcomes that are design-led and people focussed.

Place Coordination may consider more flexible options for waste vehicles and the waste management system, but it should be noted that these options should not constrain the waste contractor's capacity to provide these services at a reasonable cost to the *Territory*. Alternative non-Territory collection services will only be considered after all other options have been thoroughly explored and discounted.

All such proposals would be considered under a *performance-based solution* and may need to include a strategy to ensure discoverability of any unique arrangements regarding the waste management system and additional costs or obligations for tenants, residents and prospective buyers.

Appendix 8 Standard signs for waste and recycling

A8.1 Application

This appendix applies to:

- *multi-unit residential developments*
- commercial, public and industrial developments
- *mixed-use developments.*

A8.2 Multi-unit residential developments

ACT NoWaste provides copies of signs and stickers free of charge for each *waste and recycling storage facility, waste service compartments* and *chutes* in new *multi-unit residential developments*. Examples of the stickers currently in use are provided in Figure A8.1.

Figure A8.1 Information stickers provided by ACT NoWaste



The signs and stickers are to be placed in an observable location in the waste enclosure, on or adjacent to the door of a *waste service compartment*, or on or adjacent to a *chute*. Additional signs or stickers can be obtained by property owners or strata managers by calling 13 22 81 or submitting a request through: accesscanberra.act.gov.au/app/ask/.

A8.3 Commercial, Public and Industrial Developments

The ACT Government's Actsmart Office and Business Programs assist organisations to put more efficient recycling and waste management into action. The program provides a step-by-step best practice guide to waste management, advice and assistance to establish waste management systems, recommended signage, waste audits and staff education. Annual accreditation provides public recognition of an organisation's waste management achievements. The program is available for businesses and offices, including multi-tenanted buildings, in the ACT. The program is free to participate in and includes all signage relevant to your waste and recycling. For more information, refer to the websites

Recycling for business: [Actsmart.act.gov.au/what-can-i-do/business/recycling](https://actsmart.act.gov.au/what-can-i-do/business/recycling).

Appendix 9 Demolition, excavation and construction

A9.1 Demolition generation rates

Demolition generation rates provided in this appendix are indicative and to be used as a guide only. Each applicant must assess their own individual operations in regards to generation rates.

On average, 1m³ of demolition waste is produced for each 1.5m² of floor area.

For larger projects, the services of a quantity surveyor may be useful in estimating the total quantity of materials likely to be generated.

A9.2 Converting volume (m³) into weight (tonnes)

To estimate the amount of material likely to be generated during demolition, construction and excavation, it may be more appropriate to measure in volume (m³) or weight (tonnes).

Table A9.1 provides indicative volume to weight conversions. These are provided as a guide only. Each applicant must assess their own development as conversion rates are specific to particular materials.

Table A9.1 Indicative volume to weight conversions of excavation, demolition and construction materials

Material	Conversion ratio (tonnes/m ³)	Examples
Soil (the conversion ratio is an average figure only and soil type must be considered)	1.8	<ul style="list-style-type: none">100m² of soil 0.10m thick weighs about 18 tonnes
Timber (the conversion ratio is an average figure only and timber type must be considered)	0.7	<ul style="list-style-type: none">100m of nominal 100mm x 50mm pine typically weighs 225kg100m of nominal 100mm x 50mm hardwood typically weighs 400kg
Concrete	2.4	<ul style="list-style-type: none">10m² of 75mm thick paving weighs about 1.8 tonnes
Bricks	1.8	<ul style="list-style-type: none">1000 extruded clay bricks (2 pallets) weigh 3.6 tonnes.100m² of wall uses 500 bricks100m² of paving uses 400 bricks
Roof tiles	0.75	<ul style="list-style-type: none">100m² (laid) of roof tiles weigh about 4.5 tonnes

Material	Conversion ratio (tonnes/m ³)	Examples
Steel	7.8	<ul style="list-style-type: none"> 100m² (laid) of steel roof sheeting weigh about 500kg 10m of 75mm x 100mm x 10mm arch bar weigh 124kg
Plasterboard	0.65	<ul style="list-style-type: none"> 10m² of 10mm thick plasterboard weigh about 65kg 10m² of 13mm thick plasterboard weigh about 85kg
Particleboard flooring	0.69	<ul style="list-style-type: none"> 10m² of 19mm thick particleboard flooring (for 450mm joist spacing) weigh about 131kg. 10m² of 22mm thick particleboard flooring (for 600mm joist spacing) weigh about 152kg
Pallets (timber)	0.14 (1.20m x 1.00m) 0.18 (0.80m x 1.20m)	<ul style="list-style-type: none"> A 1.20m x 1.00m pallet weighs 28kg An 0.80m x 1.20m pallet weighs 25 kg
Copper tube (water pipe)	8.94	<ul style="list-style-type: none"> 10m of 15mm domestic application tube weighs 3.4kg 10m of 20mm domestic application tube weighs 7kg

A9.4 Reuse and recycling potential of materials

Demolition

In the demolition phase, 90 to 95 per cent of demolition material must be recycled or reused. Demolishers commonly strip out, salvage and stockpile materials for transfer and recycling off site.

Excavation

The excavation phase generates large quantities of material that can end up being disposed of to landfill. As such, excavation material is the largest contributor of waste by volume from construction activities. Some clean excavated fill materials may be used for engineering purposes, reused on site for back filling or stockpiled for use as topsoil on site for landscaping. The classification of excavated material and management of contaminated excavated material must be in accordance with the requirements of the ACT Environmental Protection Authority.

Construction

In the construction phase, 75 to 85 per cent of waste must be recycled or reused. Recycling this waste is subject to available space, markets or uses for separated materials, as well as training and capability of the site management and ACT requirements as stipulated in the DCC.

If waste is removed off site during the construction phase in mixed-waste *containers*, it is not uncommon for only 30 to 50 per cent of the *waste container* capacity to be utilised. Separating the waste stream in the construction phase and filling bins effectively will increase the density of materials in *waste containers*, reduce void space and therefore reduce costs. The process requires separation of wastes at the workplace.

If on-site space does not allow for the separation of waste materials, a mixed-waste *container* may be used and taken off site to construction and demolition recycling facilities capable of separating *construction and demolition waste* to maximise recycling or reuse potential. Waste containers must be secured from waste spillage under the *Waste Management and Resource Recovery Regulation 2017*. Building contractors may wish to select a *waste transporter* who will transport waste to construction and demolition recycling facilities.

Excavated soil should not be co-mingled with mixed *construction and demolition waste*.

A9.5 Transporting waste

All waste and recyclable material must be transported by a *waste transporter* to a *waste facility*. The transportation of all waste and recyclable material must comply with the *Waste Management and Resource Recovery Act 2016*.

A9.6 Handling, treatment and transport of asbestos waste

Health and safety issues associated with the use or handling of asbestos is regulated in the ACT primarily through the *Dangerous Substances Act 2004* and the *Work Health and Safety Act 2011* and their associated regulations. The *Work Health and Safety Regulation 2011* sets out a framework for the management of asbestos materials in workplaces.

The removal of asbestos in non-workplaces is regulated through the *Dangerous Substances (General) Regulation 2004*. A person must not remove asbestos or asbestos-containing material from any premises (including *residential* premises) unless the person holds a current and valid asbestos removal licence under the *Work Health and Safety Regulation 2011*.

Only individuals that hold a current and valid asbestos assessor licence under the *Work Health and Safety Regulation 2011* are qualified to determine whether asbestos may be present at a site and how it should be managed.

How to Safely Remove Asbestos Code of Practice sets out a range of measures to safely remove asbestos. Waste which may be contaminated with asbestos must be taken to an authorised disposal site.

Guidance Note 114: Transport of Waste Containing Asbestos in the ACT sets out requirements for the transport by road of asbestos waste in the ACT.

Appendix 10 Waste and recycling management plan, pro forma

A10.1 Overview

The *Waste and Recycling Management Plan* (WRMP) is divided into three sections.

Section 1 – Project and applicant details. This section is where applicants provide details of their *development application*, design or operational acceptance, an overview of their proposed development, and a checklist certifying compliance with the DCC.

Section 2 – Design and operation of waste and recycling. This section is where applicants describe the waste management practices associated with the ongoing use of their developments for the following development types:

- Section 2.1(a) – *Multi-unit residential development* (serviced by individual MGBs collected at kerbside)
- Section 2.1(b) – *Multi-unit residential development* (serviced by shared waste and recycling MGBs collected at kerbside)
- Section 2.1(c) – *Multi-unit residential development* (serviced by waste hoppers and shared recycling MGBs or waste and recycling hoppers collected within the property boundary)
- Section 2.2 – Commercial, public and industrial developments.

Section 3 – Demolition, excavation and construction waste and recycling. This section is where applicants describe the type, volume and disposal methods for materials that will be generated during demolition, excavation and construction activities associated with their development.

A10.2 Performance-based solutions and the WRMP

The WRMP assumes a proposed *deemed-to-satisfy solution*. Where a *performance-based solution* is proposed, this must be noted on the form against the relevant *control* or DCC reference.

Applicants seeking approval using a *performance-based solution* must seek a letter of endorsement from Place Coordination before completing the WRMP and lodging a formal application.

A10.3 Online assistance in completing the WRMP

A calculator to determine the estimated volume of *domestic waste* and recyclables generated and the number of *bins* required for a proposed development is available on the TCCS website http://www.tccs.act.gov.au/Development_and_Project_Support/building-works/waste-management-applications. Applicants are encouraged to lodge all WRMP forms electronically. These are available on the TCCS web site

http://www.tccs.act.gov.au/Development_and_Project_Support/post-development-application/design-review.

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WASTE & RECYCLING MANAGEMENT PLAN FORM FOR APPLICANTS

PROJECT APPLICATION DETAILS – COVER SHEET

This section of the Waste and Recycling Management Plan must be completed by all applicants when lodging a submission for a Development Application, Design Acceptance, or Operational Acceptance.

Note: The Submission must be complete and include all the elements for the WRMP. TCCS will not accept incomplete Submissions or Submissions from individual consultants for separate elements of the WRMP. Where TCCS considers the Submission to be incomplete, the Applicant will be advised within five working days to this effect. Assessment will not commence until a complete Submission has been received.

SITE DETAILS	
Project Title:	
Description:	

DEVELOPER'S/CLIENT'S DETAILS			
Name of entity:		Contact Person:	
Address:			
Phone Number:		E-mail:	

APPLICANT'S DETAILS			
Company name:		Contact Person:	
Company address:			
Phone Number:		E-mail:	

LODGMET STAGE	Yes	No	N/A
Development Application			
Design Acceptance			
Operational Acceptance			

PROJECT DETAILS <i>(check all relevant boxes)</i>	
Single Dwelling and Dual Occupancy Dwellings	
Multi-unit residential development – individual MGBs with kerbside collection (Section 2.1a)	
Multi-unit residential development – shared MGBs with kerbside collection (Section 2.1b)	
Multi-unit residential development – bins with on-site collection (Section 2.1c)	
Commercial, public and industrial development (Section 2.2)	
Mixed-use development (Sections 2.1 and 2.2)	
Demolition, Excavation and Construction (Section 3)	

PROJECT APPLICATION DETAILS – COVER SHEET

The Cover Sheet Checklist provides a brief overview of the Submission. All relevant WRMP forms and associated documentation must also be submitted with this application. The Design Solution will be either Performance-based (Perf) or Deemed-to-Satisfy (DtS) – if a combination of both then select Performance.

CHECKLIST						
WASTE MANAGEMENT COMPONENT (DCC Reference)	DESIGN SOLUTION		COMPLIANT (check one box)			
	Perf	DtS	Yes	No	N/A	Office use
Performance solutions approved at Pre-Application stage						
Non-standard collection requiring NoWaste approval						
Indoor storage spaces for each dwelling						
Path of travel from dwelling to waste enclosure or designated collection point						
Path of travel from waste enclosure to designated collection point						
Facilities and path of travel are accessible						
Waste service compartments						
Performance of chutes						
On-site storage facilities						
Compaction equipment – includes compactors and bin compactors						
Ancillary waste equipment – bin lifters, carousels etc						
Loading areas or designated collection points						
Unobstructed kerb space at designated collection points						
Internal circulation roadways						
Swept path clearances – certified by qualified engineer						
Vertical and horizontal clearances, including trees						
Operations management plan						
Mixed use – separation of residential and non-residential						
C&D, Excavation – type/volume or tonnage						
C&D, Excavation – on-site/off-site management						
C&D, Excavation – vehicle access						
Supporting drawings and documentation						
Submission requirements addressed						
Work As Executed records (Operational Acceptance)						

I, the Developer/Client and the applicant certify that:

1. The Submission complies with the current *Development Control Code for Best Practice Waste Management in the ACT*; AND
2. For a Design Stage Submission, there are no changes to the approved Development Application OR that any changes have been approved by TCCS and are attached to this Submission; OR
3. For an application for Operational Acceptance, there are no changes to the approved Development Application and the approved Design OR that any changes have been approved by TCCS and are attached to this Submission, including *Work As Executed* (WAE) records.

DEVELOPER'S/ CLIENT'S SIGNATURE	DATE	APPLICANT'S SIGNATURE	DATE

Office use only

Compliance with documentation requirements of *Development Control Code for Best Practice Waste Management in the ACT*

Submission Compliant ☐ Not compliant ☐

Checked by Date

WASTE & RECYCLING MANAGEMENT PLAN FORM FOR APPLICANTS

SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(a) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY INDIVIDUAL MGBS COLLECTED AT KERBSIDE)

Controls for these developments are included in Part 3.2.5 and Part 3.5 of the DCC. Submission requirements are stated in Part 3.5.4. Where appropriate, provide plans showing details to support the application.

THIS SECTION APPLIES TO THE FOLLOWING	
<ul style="list-style-type: none"> Development applications for new multi-unit residential developments Development applications for alterations or additions to existing multi-unit residential developments if there is an effect on the provision of waste and recycling services Development applications for new mixed-use developments that include multi-unit residential developments. 	
STORAGE FACILITIES	
CONTROL C1 OF DCC – INDOOR WASTE AND RECYCLING STORAGE SPACE	
Location and dimensions of indoor waste and recycling storage space for each dwelling type <i>(Provide calculations to demonstrate adequacy of space)</i>	
Description	
Drawing Reference Numbers	
Development satisfies control C1 of the DCC <input type="checkbox"/> Yes <input type="checkbox"/> No 	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the waste transporter to provide the service	
CONTROL C2 – EXTERNAL WASTE, RECYCLING AND GREEN WASTE STORAGE AREA	
Location and dimensions of waste, recycling and green waste storage area <i>(Provide calculations to demonstrate adequacy of space)</i>	
Description	
Drawing Reference Numbers	
Development satisfies control C2 of the DCC <input type="checkbox"/> Yes <input type="checkbox"/> No 	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the waste transporter to provide the service	

WASTE & RECYCLING MANAGEMENT PLAN FORM FOR APPLICANTS

SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(a) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY INDIVIDUAL MGBS COLLECTED AT KERBSIDE)

PATH OF TRAVEL	
CONTROL C3 – ACCESSIBLE PATH OF TRAVEL	
Path of travel for moving <i>bins</i> from the <i>waste, recycling and green waste storage area</i> to the <i>designated collection point</i> <i>(Provide calculations to demonstrate adequacy of space)</i>	
Description	
Drawing Reference Numbers	
Development satisfies control C3 of the DCC <input type="checkbox"/> Yes <input type="checkbox"/> No 	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

DESIGNATED COLLECTION POINT	
CONTROL C4 AND C5 – DESIGNATED COLLECTION POINT (KERBSIDE)	
Location of <i>designated collection point</i> (kerbside), including dimensions of available kerb frontage and indicative presentation layout of MGBs on kerbside	
Description	
Drawing Reference Numbers	
Development satisfies control C4 and C5 of the DCC <input type="checkbox"/> Yes <input type="checkbox"/> No 	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

WASTE & RECYCLING MANAGEMENT PLAN FORM FOR APPLICANTS

SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(a) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY INDIVIDUAL MGBS COLLECTED AT KERBSIDE)

COMPLETE IF DEVELOPMENT IS PART OF A MIXED-USE DEVELOPMENT ONLY	
CONTROL C23 (PART 5.3) – SEPARATION OF RESIDENTIAL AND NON-RESIDENTIAL WASTE	
Identify how <i>residential</i> and non-residential waste and recycling will be kept separate and methods to minimise the potential for commercial tenants to use <i>residential</i> waste and recycling <i>bins</i>	
Description	
Drawing Reference Numbers	
<div style="display: flex; justify-content: space-between;"> Development satisfies control C23 of the DCC <input type="checkbox"/> Yes <input type="checkbox"/> No </div>	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

WASTE & RECYCLING MANAGEMENT PLAN FORM FOR APPLICANTS

SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(b) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY SHARED MGBs COLLECTED AT KERBSIDE)

Controls for these developments are included in Part 3.2.4 and Part 3.6 of the DCC. Submission requirements are stated in Part 3.6.4. Where appropriate, provide plans showing details to support the application.

THIS SECTION APPLIES TO THE FOLLOWING	
•	<i>Development applications for new multi-unit residential developments</i>
•	<i>Development applications for alterations or additions to existing multi-unit residential developments if there is an effect on the provision of waste and recycling services</i>
•	<i>Development applications for new mixed-use developments that include multi-unit residential developments.</i>

STORAGE FACILITIES	
CONTROL C1 – INDOOR WASTE AND RECYCLING STORAGE SPACE	
Location and dimensions of indoor waste and recycling storage space for each dwelling type (Provide calculations to demonstrate adequacy of space)	
Description	
Drawing Reference Numbers	
Development satisfies control C1 of the DCC	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the waste transporter to provide the service	

CONTROL C6 – EXTERNAL WASTE AND RECYCLING STORAGE FACILITY	
Location and dimensions of waste and recycling storage facility or mini-enclosure (Provide calculations to demonstrate adequacy of space)	
Description	
Drawing Reference Numbers	
Development satisfies control C6 of the DCC	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Development satisfies Part 7.2.3 or 7.2.4 or both of the DCC	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the waste transporter to provide the service	

WASTE & RECYCLING MANAGEMENT PLAN FORM FOR APPLICANTS

SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(b) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY SHARED MGBs COLLECTED AT KERBSIDE)

PATH OF TRAVEL	
CONTROL C7 – ACCESSIBLE PATH OF TRAVEL	
Accessible path of travel for carrying waste and recyclables and for moving <i>bins</i> between the <i>waste and recycling storage facility</i> or <i>mini-enclosure</i> and: (i) the entrance of each dwelling; and (ii) the <i>designated collection point</i> <i>(Provide calculations to demonstrate adequacy of space)</i>	
Description	
Drawing Reference Numbers	
Development satisfies control C7 of the DCC <input type="checkbox"/> Yes <input type="checkbox"/> No 	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

OPERATIONS MANAGEMENT PLAN	
CONTROL C8 – OPERATIONS MANAGEMENT PLAN	
Description of the process to present <i>bins</i> for collection and to return <i>bins</i> to the <i>waste and recycling storage facilities</i>. Include documentation to be presented to the <i>owners corporation</i>	
Description	
Development satisfies control C8 of the DCC <input type="checkbox"/> Yes <input type="checkbox"/> No 	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

WASTE & RECYCLING MANAGEMENT PLAN FORM FOR APPLICANTS

SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(b) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY SHARED MGBs COLLECTED AT KERBSIDE)

COLLECTION POINT	
CONTROL C9 AND C10 – DESIGNATED COLLECTION POINT (KERBSIDE)	
Location of <i>designated collection point</i> (kerbside), including dimensions of available kerb frontage and indicative presentation layout of MGBs on kerbside	
Description	
Drawing Reference Numbers	
Development satisfies control C9 and C10 of the DCC	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

COMPLETE IF DEVELOPMENT IS PART OF A MIXED-USE DEVELOPMENT ONLY	
CONTROL C23 (PART 5.3) – SEPARATION OF RESIDENTIAL AND NON-RESIDENTIAL WASTE	
Identify how <i>residential</i> and non-residential waste and recycling will be kept separate and methods to minimise the potential for commercial tenants to use <i>residential</i> waste and recycling bins	
Description	
Drawing Reference Numbers	
Development satisfies control C23 of the DCC	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

WASTE & RECYCLING MANAGEMENT PLAN FORM FOR APPLICANTS

SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(c) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY WASTE HOPPERS AND SHARED RECYCLING MGBs, OR WASTE AND RECYCLING HOPPERS COLLECTED WITHIN THE PROPERTY BOUNDARY)

Controls for these developments are included in Part 3.2.4 and Part 3.7 of the DCC. Submission requirements are stated in Part 3.7.4. Where appropriate, provide plans showing details to support the application.

THIS SECTION APPLIES TO THE FOLLOWING	
<ul style="list-style-type: none"> <i>Development applications for new multi-unit residential developments</i> <i>Development applications for alterations or additions to existing multi-unit residential developments if there is an effect on the provision of waste and recycling services</i> <i>Development applications for new mixed-use developments that include multi-unit residential developments.</i> 	
STORAGE FACILITIES	
CONTROL C1 – INDOOR WASTE AND RECYCLING SPACE	
Location and dimensions of indoor <i>waste and recycling storage space</i> for each dwelling type <i>(Provide calculations to demonstrate adequacy of space)</i>	
Description	
Drawing Reference Numbers	
Development satisfies control C1 of the DCC <input type="checkbox"/> Yes <input type="checkbox"/> No 	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	
CONTROL C11 – EXTERNAL WASTE AND RECYCLING STORAGE FACILITIES	
Location and dimensions of external <i>waste and recycling storage facilities</i> <i>(Provide calculations to demonstrate adequacy of space)</i>	
Description	
Drawing Reference Numbers	
Development satisfies control C11 of the DCC <input type="checkbox"/> Yes <input type="checkbox"/> No 	

WASTE & RECYCLING MANAGEMENT PLAN FORM FOR APPLICANTS

SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(c) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY WASTE HOPPERS AND SHARED RECYCLING MGBs, OR WASTE AND RECYCLING HOPPERS COLLECTED WITHIN THE PROPERTY BOUNDARY)

Development satisfies Part 7.2.3 of the DCC	<input type="checkbox"/> Yes <input type="checkbox"/> No
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	
How will waste be transferred from each dwelling to external storage area?	
Description	
Drawing Reference Numbers	

PATH OF TRAVEL	
CONTROL C12 – ACCESSIBLE PATH OF TRAVEL	
Accessible path of travel for carrying waste and recyclables and for moving <i>bins</i> between the <i>waste and recycling storage facilities</i> or <i>waste service compartments</i> and: (a) the entrance to each dwelling; and (b) the <i>designated collection point</i> (Provide plan of travelling distance, clearance and gradients)	
Description	
Drawing Reference Numbers	
Development satisfies control C12 of the DCC	<input type="checkbox"/> Yes <input type="checkbox"/> No
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

WASTE & RECYCLING MANAGEMENT PLAN FORM FOR APPLICANTS

SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(c) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY WASTE HOPPERS AND SHARED RECYCLING MGBs, OR WASTE AND RECYCLING HOPPERS COLLECTED WITHIN THE PROPERTY BOUNDARY)

MULTI-UNIT DEVELOPMENTS – WASTE AND RECYCLING CHUTES, COMPACTION EQUIPMENT ETC			
COMPLETE <u>EITHER</u> CONTROL C13 OR C14 OR C15			
CONTROL C13 – CONVENIENT ACCESS TO WASTE SERVICES – 3 RESIDENTIAL FLOORS OR LESS			
Location and details of any waste service compartments and other waste and recycling equipment that form part of the waste management system <i>(Provide calculations to demonstrate adequacy of space)</i>			
Description			
Drawing Reference Numbers			
Development satisfies control C13 of the DCC			<input type="checkbox"/> Yes <input type="checkbox"/> No
Development satisfies Part 7.3 of the DCC			<input type="checkbox"/> Yes <input type="checkbox"/> No
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service			

WASTE & RECYCLING MANAGEMENT PLAN FORM FOR APPLICANTS

SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(c) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY WASTE HOPPERS AND SHARED RECYCLING MGBs, OR WASTE AND RECYCLING HOPPERS COLLECTED WITHIN THE PROPERTY BOUNDARY)

CONVENIENT ACCESS (continued) – COMPLETE <u>EITHER</u> CONTROL C13 OR C14 OR C15		
CONTROL C14 – CONVENIENT ACCESS – 4 RESIDENTIAL FLOORS AND ABOVE		
Location and details of any waste service compartments and other waste and recycling equipment that form part of the waste management system <i>(Provide calculations to demonstrate adequacy of equipment)</i>		
Description		
Drawing Reference Numbers		
Location and details of any waste and recycling chutes <i>(Provide calculations to demonstrate adequacy of equipment)</i>		
Description		
Drawing Reference Numbers		
Development satisfies control C14 of the DCC		<input type="checkbox"/> Yes <input type="checkbox"/> No
Development satisfies Part 7.3 of the DCC		<input type="checkbox"/> Yes <input type="checkbox"/> No
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service		

WASTE & RECYCLING MANAGEMENT PLAN FORM FOR APPLICANTS

SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(c) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY WASTE HOPPERS AND SHARED RECYCLING MGBs, OR WASTE AND RECYCLING HOPPERS COLLECTED WITHIN THE PROPERTY BOUNDARY)

COLLECTION POINT	
CONTROL C15 – DESIGNATED COLLECTION POINTS	
Location of <i>designated collection points</i> or <i>hopper pads</i>	
Description	
Drawing Reference Numbers	
Development satisfies control C15 of the DCC	<input type="checkbox"/> Yes <input type="checkbox"/> No
Development satisfies Part 7.2.3 or 7.4 or both	<input type="checkbox"/> Yes <input type="checkbox"/> No
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

VEHICULAR ACCESS	
CONTROL C16 – UNOBSTRUCTED ACCESS TO DESIGNATED COLLECTION POINTS	
Path of travel for <i>collection vehicles</i> (if collection occurs on site) (Provide details of travelling distance; clearance in all directions; loading heights and widths; and turning and manoeuvring paths, ramp access, clearances, gradients and pavement details including compliance with AS2890.1-2004)	
Description	
Drawing Reference Numbers	
Development satisfies control C16 of the DCC	<input type="checkbox"/> Yes <input type="checkbox"/> No
Development satisfies Appendix 7 of the DCC	<input type="checkbox"/> Yes <input type="checkbox"/> No
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

WASTE & RECYCLING MANAGEMENT PLAN FORM FOR APPLICANTS

SECTION 2 – DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.1(c) – MULTI-UNIT RESIDENTIAL DEVELOPMENT (SERVICED BY WASTE HOPPERS AND SHARED RECYCLING MGBs, OR WASTE AND RECYCLING HOPPERS COLLECTED WITHIN THE PROPERTY BOUNDARY)

COMPLETE IF DEVELOPMENT IS PART OF A MIXED-USE DEVELOPMENT ONLY	
CONTROL C23 (PART 5.3) – SEPARATION OF RESIDENTIAL AND NON-RESIDENTIAL WASTE	
Identify how <i>residential</i> and non-residential waste and recycling will be kept separate and methods to minimise the potential for commercial tenants to use <i>residential</i> waste and recycling <i>bins</i>	
Description	
Drawing Reference Numbers	
Development satisfies control C23 of the DCC	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

Waste and Recycle Management Code for the ACT
WASTE AND RECYCLING MANAGEMENT PLAN
FORM FOR APPLICANTS

DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.2 – COMMERCIAL, PUBLIC AND INDUSTRIAL DEVELOPMENTS

Controls for these developments are included in Part 4 of the DCC. Submission requirements are stated in Part 4.4. Where appropriate, provide details on plans to support your application.

THIS SECTION APPLIES TO THE FOLLOWING	
•	<i>Development applications for new commercial, public or industrial development</i>
•	<i>Development applications for alterations or additions to existing commercial, public or industrial development if there is an effect on the provision of waste and recycling management</i>
•	<i>Development applications for new mixed-use developments involving commercial, public or industrial development.</i>

WASTE AND RECYCLING GENERATION						
CONTROL C17 – WASTE AND RECYCLING GENERATION						
Waste and recycling generated by each proposed activity within the development, including quantities, bin types and storage requirements						
Description						
Premises Type	Floor Area (m ²)	Generation Rate		Waste (L/week)	Recycling (L/week)	Number of Bins and Sizes
		Waste	Recycling			

In completing this table, refer to Appendix 5 – Waste and Recycling Generation Rates for Commercial, Public and Industrial Developments

Development satisfies Appendix 4, if includes <i>residential</i> component	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
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Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the *waste transporter* to provide the service

Waste and Recycle Management Code for the ACT
WASTE AND RECYCLING MANAGEMENT PLAN
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DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.2 – COMMERCIAL, PUBLIC AND INDUSTRIAL DEVELOPMENTS

WASTE AND RECYCLING STORAGE FACILITIES	
CONTROL C17 AND C18 – EXTERNAL WASTE AND RECYCLING STORAGE FACILITIES	
Location of individual <i>waste and recycling storage facilities</i> (C19) including any <i>waste and recycling storage sections</i> (C17) and refrigerated waste storage for the entire development <i>(Provide calculations to demonstrate adequacy of space)</i>	
Description	
Drawing Reference Numbers	
Development satisfies control C17 and C18 of the DCC	<input type="checkbox"/> Yes <input type="checkbox"/> No
Development satisfies Appendix 5 of the DCC	<input type="checkbox"/> Yes <input type="checkbox"/> No
Development satisfies Part 7.2.3 of the DCC	<input type="checkbox"/> Yes <input type="checkbox"/> No
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

PATH OF TRAVEL	
CONTROL C19 – ACCESSIBLE PATH OF TRAVEL	
Accessible path of travel from the point of origin or <i>holding area</i> to the <i>waste and recycling storage facilities</i> <i>(Provide details of clearances, gradients and mitigation of odour and noise impacts)</i>	
Description	
Drawing Reference Numbers	
Development satisfies control C19 of the DCC	<input type="checkbox"/> Yes <input type="checkbox"/> No
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

Waste and Recycle Management Code for the ACT
WASTE AND RECYCLING MANAGEMENT PLAN
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DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.2 – COMMERCIAL, PUBLIC AND INDUSTRIAL DEVELOPMENTS

DESIGNATED COLLECTION POINT	
CONTROL C20 – DESIGNATED COLLECTION POINT	
Location of <i>designated collection points</i> or <i>hopper pads</i> or both	
Description	
Drawing Reference Numbers	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	
Path of travel for moving <i>bins</i> from <i>waste and recycling storage facilities</i> to the <i>designated collection point</i> (Provide plan of travelling distance, clearance and gradients)	
Description	
Drawing Reference Numbers	
Path of travel for <i>collection vehicles</i> (if <i>collection</i> occurs on site) (Provide details of travelling distance, clearance, turning and manoeuvring paths, ramp access and pavement details to demonstrate compliance with AS 2890.2-2002)	
Description	
Drawing Reference Numbers	
Development satisfies control C20 of the DCC	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Development satisfies Appendix 7 of the DCC	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

Waste and Recycle Management Code for the ACT
WASTE AND RECYCLING MANAGEMENT PLAN
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DESIGN AND OPERATION OF WASTE AND RECYCLING

SECTION 2.2 – COMMERCIAL, PUBLIC AND INDUSTRIAL DEVELOPMENTS

WASTE CHUTES, COMPACTION OR OTHER EQUIPMENT	
CONTROL C18 – WASTE CHUTES, COMPACTION OR OTHER EQUIPMENT	
Location and details of any waste chutes <i>(Provide calculations to demonstrate adequacy of equipment)</i>	
Description	
Drawing Reference Numbers	
Location and details of any waste and recycling service lifts <i>(Provide calculations to demonstrate adequacy of equipment)</i>	
Description	
Drawing Reference Numbers	
Location and details of any waste compaction equipment <i>(Provide calculations to demonstrate adequacy of equipment)</i>	
Description	
Drawing Reference Numbers	
Development satisfies control C18 of the DCC	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Development satisfies Part 7.3 of the DCC	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

**Waste and Recycle Management Code for the ACT
WASTE & RECYCLING MANAGEMENT PLAN FORM**

SECTION 3 – DEMOLITION, EXCAVATION AND CONSTRUCTION

Requirements for these developments are included in Part 6 of the DCC. Submission requirements are stated in Part 6.6 of the DCC. Where appropriate, provide details on plans to support your application.

Note: A WRMP is not required unless the proposed demolition or excavation activities generate more than 20m³ of waste for the whole development.

THIS SECTION APPLIES TO THE FOLLOWING	
•	Demolition – All <i>Development applications</i> involving demolition where the quantity of demolition material will be greater than 20m ³ for the whole development
•	Excavation – All <i>Development applications</i> involving excavation where the quantity of excavated material will be greater than 20m ³ for the whole development
•	Construction – <i>Development applications</i> for multi-unit residential developments with 11 dwellings or more and any commercial, public and industrial developments and <i>mixed-use developments</i> .
WASTE TYPES AND QUANTITIES	
CONTROL C24 – DEMOLITION, EXCAVATION AND CONSTRUCTION WASTE TYPES AND QUANTITIES	
Specify demolition, excavation and construction waste materials by type and volume or tonnage <i>This information can be shown on Table 3.1 (Demolition Waste) or Table 3.2 (Construction Waste) or both</i>	
Description	

ON-SITE MANAGEMENT OF DEMOLITION, EXCAVATION AND CONSTRUCTION WASTE	
CONTROL C25 – ON-SITE MANAGEMENT OF WASTE	
Nominate on-site sorting and storage areas for demolition, excavation and construction waste materials. Show these details on a draft site plan	
Description	
Drawing Reference Numbers	
Describe the work method, practices and specific procedures to be adopted to maximise the reuse and recycling of waste materials	
Description	

**Waste and Recycle Management Code for the ACT
WASTE & RECYCLING MANAGEMENT PLAN FORM**

SECTION 3 – DEMOLITION, EXCAVATION AND CONSTRUCTION

Identify access for demolition and construction waste <i>collection vehicles</i>	
Description	
Drawing Reference Numbers	
Details of waste or recycling storage containers, or both, to be stored outside leased boundaries (Separate approval is required from Public Land Use, City Services (via Access Canberra Phone 132 881))	
Description	
Drawing Reference Numbers	
Development satisfies control C25 of the DCC	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

**Waste and Recycle Management Code for the ACT
WASTE & RECYCLING MANAGEMENT PLAN FORM**

SECTION 3 – DEMOLITION, EXCAVATION AND CONSTRUCTION

RESUSE AND RECYCLING OF DEMOLITION, EXCAVATION AND CONSTRUCTION WASTE	
CONTROL C25 – DEMOLITION, EXCAVATION AND CONSTRUCTION WASTE REUSE AND RECYCLING POTENTIAL	
Details of reuse and recycling potential (on-site or off-site, or both) for demolition, excavation and construction waste	
Description	
<i>This information can be shown on Table 3.1 (Demolition Waste) or Table 3.2, or both (Construction Waste)</i>	
Drawing Reference Numbers	
Name and location of approved licensed sites for recycling, or reprocessing, or landfill, or all of these, for the disposal of demolition, excavation and construction waste materials	
Description	
<i>This information can be shown on Table 3.1 (Demolition Waste) or Table 3.2, or both (Construction Waste)</i>	
Development satisfies control C25 of the DCC	<input type="checkbox"/> Yes <input type="checkbox"/> No
Provide details if DCC requirements are not satisfied, and proposed alternatives that will not impact on the ability of the <i>waste transporter</i> to provide the service	

TABLE 3.1 – DEMOLITION WASTE

MATERIALS					REUSE OR RECYCLING OF DEMOLITION WASTE										DISPOSAL AT LANDFILL				
					ON-SITE					OFF-SITE									
Type of Material Generated	Estimated		Actual (to be provided at WAE)		Proposed Reuse and Recycling On-site	Estimated		Actual (to be provided at WAE)		Name of Receiving Recycling Outlets or Reuse Sites or Both	Estimated		Actual (to be provided at WAE)		Name of Landfill Site	Estimated		Actual (to be provided at WAE)	
	Vol (m³)	Wt (T)	Vol (m³)	Wt (T)		Vol (m³)	Wt (T)	Vol (m³)	Wt (T)		Vol (m³)	Wt (T)	Vol (m³)	Wt (T)		Vol (m³)	Wt (T)		
Excavation Material																			
Bricks																			
Concrete																			
Timber (specify)																			
Plasterboard/Gyprock																			
Metals (specify)																			
Cardboard																			
Plastics																			
Mixed Waste																			
Other (specify)																			
TOTAL																			
PERCENTAGE OF TOTAL																			

TABLE 3.2 – CONSTRUCTION WASTE

MATERIALS					REUSE OR RECYCLING OF DEMOLITION WASTE										DISPOSAL AT LANDFILL				
					ON-SITE					OFF-SITE									
Type of Material Generated	Estimated		Actual (to be provided at WAE)		Proposed Reuse and Recycling On-site	Estimated		Actual (to be provided at WAE)		Name of Receiving Recycling Outlets or Reuse Sites or Both	Estimated		Actual (to be provided at WAE)		Name of Landfill Site	Estimated		Actual (to be provided at WAE)	
	Vol (m³)	Wt (T)	Vol (m³)	Wt (T)		Vol (m³)	Wt (T)	Vol (m³)	Wt (T)		Vol (m³)	Wt (T)	Vol (m³)	Wt (T)		Vol (m³)	Wt (T)		
Excavation Material																			
Bricks																			
Concrete																			
Timber (specify)																			
Plasterboard/Gyprock																			
Metals (specify)																			
Cardboard																			
Plastics																			
Mixed Waste																			
Other (specify)																			
TOTAL																			
PERCENTAGE OF TOTAL																			

Appendix 11 Developers' Checklists

Multi-unit residential developments (MUDs)

- ☐ Consult with Place Coordination at the Pre-Application stage or sooner, especially for non-standard issues.
- ☐ Identify the type of MUD for the proposed development.
- ☐ Use the TCCS calculator to calculate volumes of waste, recyclables and number of *bins* required.
- ☐ Calculate the allowance for indoor storage spaces for each dwelling.
- ☐ Clearly identify the path of travel and carrying distances from dwellings to *waste and recycling storage facility*.
- ☐ Identify the *waste service compartments*, and state whether compliant with BCA.
- ☐ Are waste and recycling *chutes* compliant with BCA?
- ☐ Is access to the *waste chute room*, containing *chutes*, *carousels* and *bin compactors*, etc, restricted to authorised personnel?
- ☐ Developers must purchase additional *bins*, if required on *residential floors*, under *chutes* or to transfer waste and recyclables to *Territory* hoppers. Are additional *bins* suitable for *Territory* collection?
- ☐ Do *waste and recycling storage facilities* have sufficient room for all *bins*, including clearances and access?
- ☐ Are *waste and recycling storage facilities* accessible to residents where applicable?
- ☐ Do *waste and recycling storage facilities*, including *hopper pad*, comply with gradients, washdown, bump rails, drainage regulations etc?
- ☐ Can *bins* be moved easily to *hopper pad* for collection and returned?
- ☐ Clearly identify the path of travel from the *waste and recycling storage facility* or *mini-enclosure* to the *designated collection point*.
- ☐ For kerbside collection, is there sufficient kerbside space, free from obstructions, at the *designated collection points*?
- ☐ For on-site collection, can the driveways and internal roads support the weight of waste vehicles?
- ☐ Provide a minimum *swept path* and *unobstructed* access (including sufficient height and width clearances) for waste *collection vehicles* along the path of travel in the development?
- ☐ Provide sufficient vertical clearance at the *designated collection point* to load *bins* or *RORO compactors*.
- ☐ Has the *waste transporter* confirmed in writing its ability to collect the specified compactor, if applicable?
- ☐ Are all supporting drawings (including plans, elevations, locations and dimensions) and documentation clearly identified in the relevant parts of the WRMP?
- ☐ Are all *submission requirements* fully addressed?
- ☐ For *deemed-to-satisfy solutions*, does the development proposal comply with all controls and assessment criteria?
- ☐ For *performance-based solutions*, has the development proposal gained Place Coordination endorsement at the Pre-Application Stage?
- ☐ Does the *operations management plan* (to be provided to the *owners corporation*), provide instructions on the care, use and maintenance of the entire waste management system for the development?

Commercial, Public and Industrial Developments

- ☐ Consult with Place Coordination at the Pre-Application stage or sooner, especially for non-standard issues.
- ☐ Calculate volumes, type of waste and number of *bins*.
- ☐ List the wastes and recyclables to be generated by each activity, the estimates of volumes, storage requirements and *waste containers*.
- ☐ Identify the indoor waste and recycling spaces and *holding areas*.
- ☐ Identify the method of transferring waste and recyclables (e.g. chutes) from point of origin to *waste and recycling storage facilities*.
- ☐ Clearly identify the path of travel from *holding areas* to the *waste and recycling storage facility*
- ☐ Are *waste chutes* compliant with BCA?
- ☐ Do *waste and recycling storage facilities* have sufficient room for all *bins*, including clearances and access?
- ☐ Do *waste and recycling storage facilities*, including *hopper pad*, comply with gradients, washdown, bump rails, drainage regulations etc?
- ☐ Can *bins* be moved easily to the *hopper pad* for collection and returned?
- ☐ Clearly identify the *designated collection points*.
- ☐ Clearly identify the path of travel from the *waste and recycling storage facility* to the *designated collection point*.
- ☐ For on-site collection, can the driveways and internal roads support the weight of waste vehicles?
- ☐ Provide a minimum *swept path* and *unobstructed access* (including sufficient height and width clearances) for *waste collection vehicles* along the path of travel in the development.
- ☐ Provide sufficient vertical clearance and *unobstructed access* at the *designated collection point* to load *bins* or compactors.
- ☐ Provide supporting documentary evidence on the type of compaction and associated plant and equipment.
- ☐ Are all supporting drawings (including plans, elevations, locations and dimensions) and documentation clearly identified in the relevant parts of the WRMP?
- ☐ Are all *submission requirements* fully addressed?
- ☐ For *deemed-to-satisfy solutions*, does the development proposal comply with all controls and assessment criteria?
- ☐ For *performance-based solutions*, has the development proposal gained Place Coordination endorsement at the Pre-Application Stage?

Mixed-use Developments

- ☐ Ensure that *residential* and non-residential *waste and recycling storage facilities* are separate and operate independently from each other.
- ☐ See Commercial, Public and Industrial checklist.
- ☐ See *multi-unit residential* checklist.

Demolition, Excavation and Construction

- ☐ WRMP is exempt from Part 6 for *single dwellings*, *dual occupancy dwellings* and MUDs with 10 dwellings or less that generate less than 20m³ of demolition or *excavation waste*.
- ☐ Calculate volumes – see Tables 3.1 and 3.2.
- ☐ Have targets for recycling and/or reuse been met?
- ☐ Nominate on-site sorting and storage areas and identify these on a plan.
- ☐ Identify work methods and practices to maximise recycling and reuse.
- ☐ Identify access for waste vehicles.
- ☐ For waste/recycling storage containers stored off site, is there written approval by the *Territory*?
- ☐ Identify *hazardous materials* and provide a plan for their safe handling, treatment and transport.
- ☐ Provide details of potential to reuse and/or recycle waste.

Consultation with, or approval by, Place Coordination

You must consult with or obtain approval from Place Coordination, either at the Pre-Application Stage or before formally lodging a *development application*, if any of the following apply.

- ☐ Approval is required under a *performance-based solution* for all or part of an application, or if any part of a *deemed-to-satisfy solution* cannot be met.
- ☐ *RORO compactors* are proposed (refer to Parts 3.2.3 and 7.3.6).
- ☐ Rear-loading vehicles to collect *domestic waste* are proposed (these require vertical load clearances) (refer to Part 3.2.4)
- ☐ Accessible path of travel or carrying/carting distances cannot be met (refer to Parts 3.5.3(C3), 3.6.3(C7), 3.7.3(C12), and 4.3(C19)).
- ☐ Commercial bin *collection* or vehicle access cannot be met (refer to Part 4.3 (C20)).
- ☐ There are additional storage or putrescible waste requirements (refer to Part 4.3).
- ☐ Shared commercial collection services under a *performance-based solution* are proposed (refer to Part 4.3).
- ☐ A waiver for roofing requirements for *waste and recycling storage facilities* is proposed (refer to Part 7.2.3).
- ☐ Consult re compatibility of plant and equipment for collection services provided by the *Territory* or commercial *waste transporter* (refer to Part 7.3.1).
- ☐ *Chutes* and *waste chute rooms* are proposed (refer to Part 7.3.3).
- ☐ Collection services for 3 times per week or Saturday collections are proposed (refer to Appendix 4).
- ☐ Unusual circumstances for kerbside collection services are proposed (refer to Appendix 4).
- ☐ Non-standard generation rates for commercial premises are proposed (refer to Appendix 5).
- ☐ Non-standard vehicle manoeuvres are proposed (refer to Appendix 7).
- ☐ The waste vehicle would not be wholly within the site when servicing *bins* (refer to Appendix 7).
- ☐ Non-standard pavement design for vehicle loading is proposed (refer to Appendix 7).
- ☐ Post DA approval, further approval is required for any changes to the WRMP (refer to Parts 2.1, 2.3.3, and 2.6).