Bayside Council
Serving Our Community

Waste Management Technical Specification 2022

Adopted 22 March 2023

Effective 10 April 2023

The Journey to a Circular Economy

Common Terms & Definitions

Term	Definition / Clarification of Term
Approved	Accepted and authorised by the Council.
Authority	Any Government (State or Federal), Government department, statutory corporation or other body having power to affect the manner of provision of the waste services or the need for the provision of the waste services by the Council.
Better practice guide for resource recovery in residential developments	The NSW EPA guide which includes advice on design, establishment, operation, and ongoing management of waste services, and can be found here: https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/warrlocal/19p1559-resource-recovery-in-residential-developments.pdf?la=en&hash=C29AFB3B95D416F29A6F711B684C620900174075.
Bulky Waste	Also referred to as 'clean up' or 'hard waste', such as general household waste, which may include white goods, furniture, green waste and other approved items as per Council's current waste service information.
Cluster Housing	Comprised of three (3) or more (>3) dwellings grouped on a site to take advantage of good building areas or views and to conserve large areas of open space.
Collection	The manner or method in which different waste streams, such as: garbage; recycling; organics, and bulky items; are serviced by Council, a Council appointed collection contractor, or an approved (by Council) licensed private collection contractor.
Collection Point	The Approved point or location from which waste, recycling or organics are collected and transferred to the Collection Vehicle.
Collection Vehicle	An approved vehicle operated by Council or its appointed contractor for use in the performance of the Services.
Commercial Development	A commercial development as defined in Council's Local Environment Plan, and includes but is not limited to professional and commercial offices, retail premises, food premises, warehouses, medical facilities, and the commercial components of mixed-use developments.
Contractor	A Council appointed waste, recycling, organics and/or Bulky Waste contractor or other body having the delegated authority to provide waste services, including audits, on behalf of Council.
Council	Refers to Bayside Council, including any of its authorised officers, or staff under the delegated authority of Bayside Council.
Development Application or DA	Refers to a development application prepared in accordance with the relative provisions of the Environmental Planning and Assessment Act (EP & A Act) 1979, submitted to, assessed and determined by Council under the provisions of this Act, and includes any subsequent modification to the original DA
Development Control Plan or DCP	A Development Control Plan (DCP) provides detailed planning and design guidelines to support the planning controls in the Local Environmental Plan (LEP). It identifies additional controls and standards for addressing development issues at a local level.

Dual Occupancy	If attached, means two (2) dwellings on one lot of land that are attached to each other, but does not include a secondary dwelling. If detached, means two (2) detached dwellings on one lot of land, but does not include a secondary dwelling.
Dwelling	means a building or part of a building used, intended to be used, or offers the availability to be used as an Approved place to live, dwell or inhabit.
Food Organics (FO)	Food waste including fruit and vegetable scraps, processed food and leftovers from meals such as meat, fish, chicken, bread, egg, egg shells, dairy products, coffee grounds and tea bags.
Food Organics Garden Organics (FOGO)	Food Organics and Garden Organics (FOGO) is a collection service that allows food waste or Food Organics (FO) to be added with Garden Organics (GO) waste so it can be recycled into top quality compost.
Former Botany Local Government Area (LGA)	This refers to the local government area or the boundary of the former City of Botany Bay Council pre-amalgamation in 2016 when it became Bayside Council.
Former Rockdale Local Government Area (LGA)	This refers to the local government area or the boundary of the former Rockdale City Council pre-amalgamation in 2016 when it became Bayside Council.
Garden Organics (GO)	Also known as Green Waste, it refers to any organic waste material that is produced as a result of domestic gardening, landscaping, or maintenance activities and includes: ▶ grass and lawn clippings; ▶ tree, bush and shrub trimmings; ▶ prunings, cuttings and branches; and, ▶ leaves and cut flowers.
General Manager	Refers to the General Manager of Bayside Council.
Green Waste	Also known as Garden Organics, it refers to any organic waste material that is produced as a result of domestic gardening, landscaping, or maintenance activities and includes: ▶ grass and lawn clippings; ▶ tree, bush and shrub trimmings; ▶ prunings, cuttings and branches; and, ▶ leaves and cut flowers.
Industrial Development	An industrial development as defined in Council's Local Environment Plan (LEP), and includes but is not limited to warehouses, factories, manufacturing industries, motor vehicle repairers, wholesalers, and the industrial components of mixed commercial and industrial developments.
Local Environment Plan (LEP)	It refers to either the Botany Bay Local Environment Plan 2015 or the Rockdale Local Environment Plan 2012 as they apply to the former Botany and Rockdale LGA's respectively, until the formal adoption of the Bayside Council Local Environment Plan 2021 or any subsequent equivalent LEP that overrides any of these.
Local Government Area (LGA)	The Local Government Area of the Council within the meaning of the Local Government Act 1993 (and any replacement Act to that Act) as varied from time to time.

Low Rise - Low Density Dwellings	Includes a building or buildings, consisting of the following types of low rise-low density development: ▶ Single Dwellings; ▶ Dual Occupancies; and, ▶ Manor Homes; The following controls and requirements are also applicable to the following types of small low rise-low density developments that comprise of up to and including four (4) dwellings in total: ▶ Villas; ▶ Cluster House, ▶ Townhouses, and ▶ Terraces.
Low Rise - Medium Density Multiple Dwellings	Includes a building or buildings, consisting more than four (>4) dwellings (whether or not attached), where each dwelling has an individual entrance and direct private access to private open space at natural ground level, and includes villas, town-houses, terraces, cluster housing, and the like.
Manor House	A building containing three or four (3 or 4) dwellings on one (1) lot of land, where: (a) Each dwelling is attached to another dwelling by a common wall or floor, and (b) At least one (1) dwelling is partially or wholly located above another dwelling, and (c) The building contains no more than two (2) storeys (excluding any basement).
Mobile Bin (MB)	An Approved and appropriately designed container assembled and manufactured in accordance with Australian Standards, with wheels which may be used in connection with any of the garbage, recycling, and/or organics collection services, with container capacity ranging from 60 to 1100 litres. Also, colloquially referred to as 'wheelie bins'.
Mixed Use Development	A development comprising of mixed residential and commercial components within the one (1) site.
Multiple Dwelling Houses (aka Terraces)	Also known as Terraces, in this guide, it refers to three or more dwellings on one lot. Each dwelling fronts a public road and there are no other dwellings located above or below.
Premises	A building of any description and land, whether built on or not.
Recyclable Material	Any approved material that has the capacity of being recycled, reused, or reprocessed via a containerised dry recycling bin and includes but is not limited to, recyclable paper and cardboard, glass bottles and containers, and approved rigid plastic and metal packaging and containers.
Recycling Service	Refers to the collection and processing of Recyclable Material.
Residential Flat Building (RFB): Low to Medium Rise Units	Refers to residential flat buildings of less than four (<4) storeys, not including basement or attic space.
Residential Flat Building (RFB): Medium to High Rise Units	Refers to residential flat buildings of more than three (>3) and less than seven (<7) storeys, not including basement or attic space.

Residential Flat Building (RFB): High Rise Units	Refers to residential flat buildings of seven (7) storeys and greater, not including basement or attic space.
Single Dwelling	Typically, in most cases this will be a detached free-standing house, but can also include: ▶ one dwelling in a conjoined or semi-detached house where the dwelling is on a separate land title with no common property or shared services. ▶ one of several similar dwelling houses, each of which is on a separate land parcel, such as in a new subdivision. ▶ a change of use (conversion) from a non-residential building, or from a structure that is not approved to be used as a dwelling, to a dwelling house. ▶ a secondary dwelling that involves converting non-habitable space (such as a garage) or new construction outside the footprint of the existing (primary) dwelling.
Statutory Requirement	Any regulatory or legislative requirement, or instrument of any law, Act or statute made in the state of New South Wales or the Commonwealth of Australia.
Townhouse(s)	Comprised of three (3) or more (>3) dwellings on one (1) lot of land, where: (a) They are freestanding, (b) Each dwelling has access at ground level, (c) No part of a dwelling is above any part of any other dwelling, (d) Most have a courtyard and a garage or carport.
Terraces (aka Multiple Dwelling Houses)	Also known as multiple dwelling houses, are three (3) or more (>3) dwellings on one (1) lot of land where: (a) They are attached, (b) Each dwelling has access at ground level, (c) No part of a dwelling is above any part of any other dwelling, and (d) dwellings face and generally follow the alignment of one or more public roads.
Villa(s)	Is a single level dwelling often within a small complex, usually with a private courtyard and an attached garage.
Waste Chute	Refers to vertical tubes that run though each floor of a building to the basement where it empties into Mobile Bins. A chute inlet(s) or chute hopper(s) is located on each level. Single chutes are used for garbage only. Chute doors are situated within a bin room on each floor with recycling bins. Independent dual chutes are positioned side by-side within waste cupboards or a bin room on each floor so that residents can dispose of separated garbage and recyclables at the same time. Chutes empty into single bins, or bins mounted on an automatic carousel or linear track system.
Waste Level Room	A bin storage and service room located on each habitable floor of a building, known as a Waste Level Room, containing either:

	▶ The chute inlet(s) and enough room for the required number of mobile bins for residents to deposit their waste, recycling and organics, or ▶ Enough room for the required number of mobile bins for residents to deposit their waste, recycling and organics without chute inlet(s). Waste Level Rooms must consider required safety measures, required ventilation, and required rotation and cleaning of bins. To minimise the floor space required on each Waste Level Room(s), a bin storage area in the basement or ground level can be used to store extra bins for rotational use as Waste Level Room(s) bin(s) become full.
Waste Management DCP	Refers to this document, “Bayside Council Waste Management Development Control Plan (DCP) Technical Specification”.
Wheel Out – Wheel Back	A type of waste collection service offered by Council where the Council waste collection personnel or their representatives enter the premises to collect the bins and return them to the property after emptying. Can also be referred to as ‘collect and return’ or ‘wheel out – wheel in’ service.

1. Introduction

Waste and resource consumption is a major environmental issue and the responsibility of all levels of government in Australia. This is particularly the case as landfill sites become scarce and the environmental and economic costs of waste generation and disposal rise. All levels of government and the community must share the responsibility for reducing waste and recycling more.

The NSW Government has a clear waste and resource recovery agenda. The Waste and Resource Recovery Strategy 2014-21 sets the targets and policy direction for diverting waste away from landfill. To help meet these targets, effective resource recovery systems must be designed in new residential and commercial buildings.

Bayside Council's Waste Avoidance and Resource Recovery (WARR) Strategy 2030 has set high aspirational targets - placing a high significance on waste materials being optimised as a resource, as opposed to landfilled.

Bayside Council is committed to playing its role as an environmental leader. This includes working with everyone in the region to avoid waste and maximise recovery of resources through the actions outlined in this WARR Strategy 2030 and to promote responsible citizenship.

This strategy plays a vital role in maintaining our natural and urban environment and preserving our valuable resources. It provides the targets and guiding principles to assist our community to live sustainably, whilst supporting Bayside's growth as a vibrant centre for residential living and commercial development.

This Waste Management Development Control Plan (DCP) Technical Specification aims to establish systems that provide the best opportunity for builders and building's occupants to recycle correctly and minimise waste sent to landfill.

In NSW, the Waste Avoidance and Resource Recovery Act 2001 sets out the waste hierarchy, which prioritises the most desirable to the least desirable waste management policy, as detailed in Figure 1.

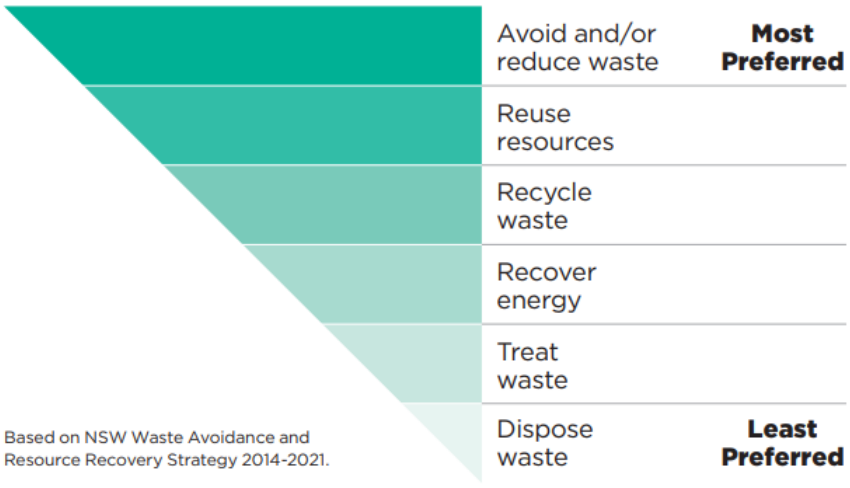


Figure 1. NSW Government Waste Hierarchy

Council has modified and extended the 'waste hierarchy', positioning the community at the centre. Through responsible citizenship and Council leadership, waste materials are returned to the community through initiatives and innovation, striving for a circular economy. The circular model is easily identified as a 7R Strategy. When the 7R circular economy model has been applied, any materials not suitable for recovery can be treated to reduce its environmental impact (e.g. medical waste) and/or disposed to landfill.

Circular Economy Model

7R Strategy	Examples
Refuse waste	Avoid using single-use plastics
Reduce waste	Choose products with longer life cycle and reduce food wastage
Re-use items	Donate, instead of throwing out usable items
Repair items	If broken, attempt to fix item
Re-purpose items	Use unwanted plastic takeaway containers to make a worm farm
Recycle items	Process used office paper to make recycled office paper
Recover items	Thermally treat materials (processed engineered fuels) that cannot be reused or recycled to generate heat and electricity

Figure 2. Bayside Council's Circular Economy Model

Council's 2030 vision moves completely away from a traditional linear economy model to a ***circular economy model*** whereby waste is diverted from landfill and optimised as a resource that returns to nature or the economy through numerous waste avoidance and resource recovery solutions.

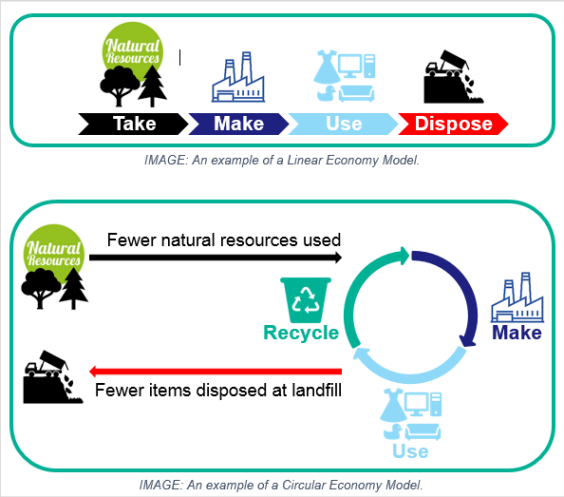


Figure 3. Linear vs Circular Economy Model

Over the past decade, advances in technology have created new ways for Bayside Council (Council) to improve recovery and waste systems.

Many challenges still face the community. These include increasing recycling to assist the NSW Government to meet their landfill diversion target.

Council faces significant challenges to reduce littering and illegal dumping within the Bayside area. Council is working with the NSW Environment Protection Authority (EPA), the Regional Illegal Dumping (RID) squad and the community to reduce illegal dumping and littering within the City.

The Bayside Waste Avoidance & Resource Recovery (WARR) Strategy 2030 discusses the current waste and resource recovery situation in the Bayside local government area and outlines strategies to achieve Council's 2030 vision. These strategies are grouped under five Key Strategic Actions, being:

- Action 1: Avoiding and Reducing Waste.
- Action 2: Recovering Resources.
- Action 3: A Healthy Region.
- Action 4: Reducing Illegal Dumping.
- Action 5: Litter Prevention.

Ultimately, developments within Bayside Council should be designed and built factoring in these key strategic actions.

1.1 Aims and Objectives

Waste is an essential service. It is often only when a waste service fails that residents, businesses, and local government realise just how important it is. Good waste planning at the early stages of development design can:

- Result in waste systems that are easy to use;
- Improved amenity of a building;
- Reduce health, work and safety risks;
- Encourage waste avoidance and resource recovery.

Failure to address waste management issues at the early design stage can cause long-term problems, as well as compromise safety and visual amenity.

Sustainable resource management and waste minimisation is a priority area for Bayside Council. The building and construction industry is a major contributor to waste.

This document the 'Bayside Council Waste Management Development Control Plan (DCP) Technical Specification' or the Waste Management DCP (as this document will be referred) aims to:

- Provide effective waste minimisation and management strategies to reduce waste volumes from developments; and,
- Assist in better design and operation of on-going waste management, which is practical, and of minimal adverse impact on the health, safety and convenience on the public domain and residential amenity.

In summary the aims and objectives of this Waste Management DCP are to ensure that waste is managed effectively at all stages of development, including the construction and demolition stages, through to the on-going and continued use of the completed building, by:

- Maximising the reuse and recycling of construction materials and minimising demolition waste by promoting reuse of existing structures, adaptable building design and adaptable design for end-of-life deconstruction;
- Encouraging building design, demolition and construction techniques that help to avoid waste being generated;
- Ensuring that waste and recyclables are lawfully transported to lawful facilities;
- Encouraging a safe and clean site;
- Maximising waste avoidance, and reuse and recycling of household, commercial and industrial waste;
- Ensuring there are appropriate on-site waste separation systems to assist Council and private sector waste management staff to collect and recover waste materials;
- Ensuring the amenity of the building and local area is maintained or enhanced;
- Preventing illegal dumping; and,
- Ensuring wastes are stored and disposed of safely in line with statutory requirements.

1.2 Purpose

The purpose of this document is to facilitate good or improved building and waste management during demolition, construction and occupation of all types of buildings - residential, mixed-use, commercial and industrial.

It also aims to ensure the provision of convenient and safe waste and recycling collection systems that encourage residents to use them correctly and prevent illegal dumping.

1.3 Construction and Demolition Stages

The building and construction industry is a contributor to waste, some of which is deposited to landfill. The implementation of effective waste avoidance and reuse strategies could significantly reduce these quantities.

Effective waste planning and management during demolition and construction can also benefit the builder and developer through:

- Reduced costs - less material is wasted on-site. Excess material sent to landfill is paid for twice, once in the original purchase and again in its disposal;
- Enhanced public image - good waste management practices can provide a good reputation for the developer;
- Best practice - with Green Star, NABERS and other sustainability ratings systems,
- Regulatory compliance - compliance with legislation such as the Protection of the Environment Operations Act 1997 that requires waste to be lawfully stored, transported and disposed or recycled lawfully.
- Optimal workplace safety – providing a safe working environment for staff, contractors and visitors can improve site safety and reduce liabilities - a clean site is a safe site.

1.4 Building Design

On-site facilities and services for sorting and collecting waste, recycling and organic materials are essential.

Poor design can lead to:

- Decreased source separation and recycling;
- Negative streetscape impact with too many bins being left at the kerbside for collection, causing difficulties with pedestrian access and traffic congestion during collection times, and affecting building aesthetics and local area amenity;
- Dumped waste inside and outside residential buildings due to inadequate storage space on-site for bulky waste awaiting collection;

- Missed waste collection services from difficult to service bins such as those around parked cars; and,
- Council's inability to service a building, resulting in body corporates having to provide a private contractor and property owners having to pay extra for waste collection services. The details of private collection to be conducted onsite must be included in the WMP to be submitted for Council to review and approve prior to a development application approval.

1.5 Applicability

The provisions of this Waste Management DCP apply when:

- Applying for a DA under Section 79C of the Environmental Planning and Assessment Act 1979 (EP&A Act).
- A development consent or a complying development certificate is required for all types of development, including for demolition, construction (including earthworks), alterations or additions or change of use of buildings.
- Complying with the minimum provisions in this document does not, however, mean that an application will be approved as each application will be considered on its merits.
- Optimum waste avoidance and resource recovery will need site-specific and sometimes innovative solutions. As a result, Council or a private certifier may approve on its merits an application that proposes to vary the controls, provided it can be demonstrated that all the design objectives in this section (1.5) and the relevant sections of this document will be met.

The provisions of this Waste Management DCP should also be used as a guide for activities that do not require consent, including for complying or exempt development, or development that falls under Part 5: 'Environmental Assessment' of the Environmental Planning and Assessment Act 1979.

This section contains four design objectives that advise on the design elements that need to be considered when planning for waste and resource recovery systems in new residential, commercial, industrial, and mixed-use developments.

Design Objective 1: Environmental sustainability and best practice

Developments meet requirements for long-term sustainability and best practice when:

- Systems are designed to maximise waste separation and resource recovery;
- Innovative and best practice waste management collection systems and technologies are considered and supported where appropriate;
- Flexibility in design allows for future changes in waste generation rates, materials collected and methods of collection.

Design Objective 2: Effective waste and resource management

Developments achieve effective waste and resource management when:

- Waste services occur in a seamless and timely manner;
- Collection points, street widths and street configurations, especially in new subdivisions or precinct developments, allow for waste to be removed safely and conveniently;
- The distance residents have to travel to dispose of waste is minimised and access is safe and easy for all residents;
- Functional and convenient storage spaces are provided for waste and recycling including temporary storage areas for bulky waste materials like general household furniture waste.

Design objective 3: Clean, safe and healthy living environments

Developments protect and enhance the quality of life for the community when:

- Negative impacts on amenity for residents, neighbours and the public, such as visually unpleasant waste storage areas, noise from waste collection including traffic noise, and bad odours, are minimised;
- Illegal dumping and litter from bins are minimised through good planning and installation of adequate storage and waste and recycling infrastructure;
- Safe and easy access to waste and recycling storage areas is provided for residents, tenants, building managers and collection contractors.

Design objective 4: Affordability

Developments provide affordable living and working, when:

- Careful design and construction prevent costly retrofits;
- Operational waste management is cost effective for residents and tenants.

1.6 Structure of Document

This Waste Management DCP has been based on NSW Government guidelines to provide a degree of consistency across new developments in local government areas.

This Waste Management DCP document will assist applicants to prepare a detailed submission and properly consider waste management at the early design stage, by helping them to:

- prepare a waste management plan (WMP);
- minimise waste and facilitate recycling;
- develop systems for waste and resource management that ensure waste is stored, handled, transported and disposed of safely and legally;
- provide appropriate space, storage, amenity and management of on-site waste management facilities;
- ensure waste management systems are compatible with the council's waste collection services;
- minimise hazardous and safety risks associated with waste management at all stages of design, planning, construction and operation of a development.

This Waste Management DCP document has been developed and constructed in a manner that provides all stakeholders with practical, clear and concise guidelines that will facilitate the preparation of all appropriate documentation required by Council to address all relevant waste management requirements at all stages of the planning and DA process.

1.7 Waste Management Plan(s) (WMP)

1.7.1 Purpose of a WMP

The purpose of a WMP is to ensure the waste and recycling management impacts of a proposed development are assessed as part of the planning approval process.

A WMP describes the ways in which waste will be stored, moved, avoided, reused, recycled and diverted from landfill during each activity or stage of development. It allows Council or the certifying authority to assess the volumes and types of waste likely to be generated by the development and ensure appropriate actions are taken to manage its generation, storage, recycling and disposal.

At a minimum, each type of WMP must:

- Calculate the volumes and types of waste and recycling that will be generated;

- State how waste and recycling will be handled, stored, and treated on-site;
- State how and where waste will be reused, recycled, or disposed of;
- Describe the roles and responsibilities in ensuring the WMP is correctly implemented;
- If presentation or collection of waste (whether loose or containerised) occurs from Council land, Council pre-approval must be sought.

WMPs are required when:

- Demolishing or constructing buildings;
- Changing the use of buildings;
- Subdividing land or buildings.

1.7.2 Types of WMPs

Most development applications will be required to be accompanied by a WMP.

The WMPs will:

- Minimise the amount of waste generated as part of the project;
- Maximise the amount of waste material which is sent for reuse, recycling or reprocessing;
- Minimise the amount of material sent to landfill.

There are three types of WMPs for different activities and different stages of the development. Table 1 identifies the different WMPs and the activity/development stage that it would be triggered:

Table 1. Different types of WMPs

WMP	Activity/development stage	Section Reference
Demolition Waste Management Plan (DWMP)	Where any demolition works are proposed.	Section 2 of this DWMP.
Construction Waste Management Plan (CWMP)	Where any construction works are proposed.	Section 3 of this CWMP.
Operational Waste Management Plan (OWMP)	For operational use of a site or premises for all building types outlined in this chapter.	Section 4 of this OWMP, and any other relevant section of the document.

It is important that the WMPs be standalone documents to ensure all essential information regarding waste management during demolition/construction and the operational stage of the development is submitted with the development application.

Appendix B provides a template for each WMP.

The WMP should be accompanied by scaled architectural plans that illustrate the proposed on-site waste management infrastructure and how design elements support the proposed internal operations e.g. location of bin storage area, location of bin collection point, travel path for collection vehicles where on-site collection is proposed.

1.7.3 Submitting a Waste Management Plan (WMP)

The larger and more complex a development is, the more details are required in a WMP. The amount of supporting information may also increase. It is highly recommended that an

appropriate waste subject matter expert assists with the preparation of a detailed OWMP to ensure effective waste management optimal outcomes are achieved that are integrated with Council's guidelines and waste services.

To ensure waste will be effectively managed, WMPs should be prepared and considered during the earliest stages of the development.

Information on Council's waste services and waste management policies that need to be considered as part of development assessment stage are made available to external stakeholders on Council's website and Bayside Waste Services app.

1.7.4 Complying Development

WMPs are required for developments identified as complying development in accordance with Council's adopted exempt and complying development criteria. Approved WMPs will dictate the way waste is managed on-site and facilities for storing, handling, transporting, and disposal and/or recycling of waste.

During construction or demolition, weighbridge receipts must be retained and provided to Council upon request to show where construction or demolition waste has been transported.

1.7.5 Consultation with Council

It is considered extremely important and advisable that Council be consulted and included in any and all correspondence during the master planning stage especially for large and complex developments. These meetings should discuss the details for appropriate waste management systems prior to developers submitting a DA and WMPs.

Any advice provided should be documented and should be incorporated as part of pre-development application meeting/discussions to ensure waste issues are considered early in the process and waste management is integrated as part of the overall development.

2. Demolition Waste Management Plan (DWMP)

2.1 Applicability

The criteria and controls for all developments involving the demolition of existing structures and their removal from the site upon which the land is to be developed are dealt with in this section (Section 2) of this Waste Management DCP.

The demolition stage of any development provides great scope for waste avoidance, reuse and recycling. The possible adaptive reuse of existing buildings and structures, or reuse of materials to help divert waste from landfill should be considered as a priority.

It is critical that all elements of demolition are considered, particularly high-risk elements such as constraints and solutions to deal with problematic or hazardous waste or contaminants, such as asbestos. The DWMP (see Section 1.7.2) should detail how these types of wastes will be safely tested, removed, handled, transported, tracked and disposed of, in line with safety and statutory requirements by authorised officers and sent to authorised facilities.

2.2 Aims & Objectives

The objectives of managing waste generated during demolition activity are to:

- Optimise adaptive reuse of existing buildings and structures;
- Facilitate on-site waste separation to maximise reuse and recycling;
- Minimise waste generation;
- Ensure appropriate and authorised waste storage and collection;
- Minimise the environmental impacts associated with waste management;
- Avoid illegal dumping and prevent windborne litter;
- Maximise safety to all stakeholders,
- Remove, transport and dispose of all hazardous and problematic waste or contaminants in line with regulatory requirements; and,
- Improve project management.

A DWMP covering the demolition stage of the development should be submitted with the DA as part of the statement of environmental effects.

2.3 Controls

The plan should focus on identifying opportunities for recycling and reuse through establishing waste avoidance as a priority.

The DWMP must describe:

- All identified waste streams that are likely to be generated;
- Adaptive reuse of existing buildings and structures and reuse of any stripped topsoil on-site in line with regulatory requirements;
- Ways in which site disturbance and unnecessary excavation will be minimised;
- The quantities of waste likely to result from the demolition and the opportunities for reuse or recycling of materials (Refer Appendix A);
- Where separate collection bins or areas for the storage of residual waste will be located;
- How problematic or hazardous waste or contaminants, such as asbestos, will be safely tested, removed, handled, transported, tracked and disposed of, in line with relevant safety legislation and regulatory requirements by authorised officers and sent to authorised facilities;

- The roles and responsibilities of everyone who manages the waste, including the site supervisor and subcontractors;
- How the waste management system will work on-site, including bin placement, alternative storages, areas for sorting and vehicle/contractor access;
- The nominated lawful disposal facilities.
- How records will be retained and how the project will be evaluated.

When implementing the DWMP, the applicant must ensure:

- An area for separating different waste materials for reuse, recycling and disposal is located, having considered gradient, drainage, location of waterways, stormwater outlets, vegetation, and access and handling requirements;
- Materials for recycling are kept uncontaminated to guarantee the highest possible reuse and recycling quality and value;
- The content and design of clear signage showing the purpose and contents of the bins and storage areas;
- Measures to prevent damage, nuisance and inconvenience due to weather and the elements, odour, risks to human and environmental health, dust, vermin and insects, and windborne litter;
- Footpaths, public reserves and street gutters are not used to store demolition waste or materials of any kind without Council approval;
- Any material moved off-site is transported in accordance with the requirements of the Protection of the Environment and Operations Act 1997 (POEO Act);
- Maintenance of all records showing lawful waste management, including disposal and recycling, and making them readily accessible for inspection by regulatory authorities such as Council, NSW EPA, DPIE or WorkSafe NSW. It is essential that accurate records are retained and are available;
- Appropriate erosion and sediment control measures are implemented to minimise soil, dust and leaching dispersal during demolition work; and,
- The DWMP outlines how and who is responsible for obtaining and maintaining accurate records.

Accurate records will include:

- Who transported the waste (company name, ABN, vehicle registration and driver details, date and time of transport, description of waste); and,
- Copies of waste dockets/receipts from the waste facility (date and time of delivery, name and address of the facility, the ABN, contact person).

Table 2 provides a template of an example of how to provide information on prescriptive data in terms of the nature, type and quantity of materials involved in the demolition process, whether these materials can be reused on site, whether they can be processed off site, where they are transported to and how they are processed, and at worst where they are disposed, are key controls in terms of achieving these aims and objectives.

Table 2. Demolition or Construction Waste Management Template

	Most Favourable	←	**Least Favourable**	
	Reuse	Recycling	Disposal	
Type of waste generated	Estimate Volume (m^3) or Weight (t)	Estimate Volume (m3) or Weight (t)	Estimate Volume (m^3) or Weight (t)	**Specify method of on-site reuse, contractor and recycling outlet and /or waste depot to be used**
Excavation material				
Timber (specify)				
Concrete				
Bricks/pavers				
Tiles				
Metal (specify)				
Glass				
Furniture				
Fixtures and fittings				
Floor coverings				
Packaging, pallets				
Garden organics				
Containers				
Paper/cardboard				
Residual waste				
Hazardous waste				
Asbestos				
Other (specify)				

3. Construction Waste Management Plan (CWMP)

3.1 Applicability

Effective waste and resource recovery can be achieved through building design, project planning and preparing the construction site and providing convenient waste storage, recycling and collection facilities. Using the CWMP to help accurately estimate the quantities and types of waste materials generated will:

- Put in place good waste management practices;
- Identify suitable waste and recycling facilities in the area to meet the CWMP's resource recovery objectives.

3.2 Aims & Objectives

The objectives of managing waste generated during construction activity are to:

- Optimise adaptive reuse of existing buildings and structures;
- Facilitate on-site waste separation to maximise reuse and recycling;
- Minimise waste generation;
- Ensure appropriate and authorised waste storage and collection;
- Minimise the environmental impacts associated with waste management;
- Avoid illegal dumping and prevent windborne litter;
- Maximise safety to all stakeholders,
- Remove, transport and dispose of all hazardous and problematic waste or contaminants in line with regulatory requirements; and,
- Improve project management.

3.3 Controls

A completed CWMP covering construction stage of the development must be submitted as required by Council, either at the DA or Construction Certification (CC) stage of the process.

The WMP for the construction stage must estimate the volumes and weights of different waste types that will be generated from construction and nominate how and where these materials can be reused, recycled or disposed of.

Most construction waste is recyclable if properly separated, with contamination minimised.

The site plan must also indicate location of waste storage facilities on-site during construction.

The CWMP must describe:

- The materials to be used during construction;
- The estimates quantities of the materials to be used;
- The condition of materials;
- Estimated amounts of waste material to be generated and what materials can be separated for reuse, recycling or reprocessing;
- How problematic or hazardous waste or contaminants, such as asbestos, will be safely tested, removed, handled, transported, tracked and disposed of, in line with safety and statutory requirements by authorised officers and sent to authorised facilities;
- A description of the roles and responsibilities of everyone who manages the waste, including the site supervisor and sub-contractors;
- How the waste management system will work on-site, including bin placement, alternative storages, areas for sorting and vehicle/contractor access;
- The nominated lawful disposal facilities; and,
- How records will be retained and how the project will be evaluated.

When implementing the CWMP, the applicant must ensure:

- Site disturbance is minimised, limiting unnecessary excavation;
- An area for separating different waste materials for reuse, recycling and disposal is appropriately located after having considered gradient, drainage, location of waterways, storm-water outlets, vegetation, access and handling requirements;
- Where possible, provision of separate collection bins with lids to prevent windborne litter and colour-coded or labelled skip bins with information on their contents to prevent contamination;
- Where skip bins are used on local roads, approval (permit) is required under the Local Government Act to place a storage container (skip) in a public place, such as a roadway or on the footpath;
- Where skip bins are used on state roads, approval (permit) is required by the RMS to place a storage container (skip) in a public place, such as a roadway or on the footpath;
- Where space is constrained, provisions to allow for multiple bins for separating surplus materials and waste, these materials must be sent to an off-site sorting and recycling facility and a written waste recovery report must be supplied;
- Control measures are implemented to prevent damage, nuisance and health impacts due to weather, odour, dust, vermin and insects, windborne litter;
- Waste is transported legally to a place that can lawfully accept it and has the appropriate EPA licenses;
- Maintenance of all records showing lawful waste management, including disposal and recycling, and making them readily accessible for inspection by regulatory authorities such as Council, NSW EPA, DPIE or WorkSafe NSW. It is essential that accurate records are retained and are available; and,
- The CWMP outlines how and who is responsible for obtaining and maintaining accurate records.

Accurate records will include:

- Who transported the waste (company name, ABN, vehicle registration and driver details, date and time of transport, description of waste); and,
- Copies of waste dockets/receipts from the waste facility (date and time of delivery, name and address of the facility, the ABN, contact person).

Table 2 (Section 2) provides a template of an example of how to provide information on prescriptive data in terms of the nature, type and quantity of materials involved in the construction process, whether these materials can be reused on site, whether they can be processed off site, where they are transported to and how they are processed, and at worst where they are disposed, are key controls in terms of achieving these aims and objectives.

4. Operational Waste Management Plan (OWMP) - Waste Management Systems

4.1 Applicability

The design of waste and recycling storage areas within the home and property affects:

- How easy the waste management system is to use;
- Building and street amenity; and,
- The movement and handling of waste and recycling for the life of the development.

Waste management systems are an integral component of the operational use of a building and will remain in place for the life of the building, so it is important they are effective in the long term and flexible for future waste generation and management innovations and improved recycling options.

Council may not consider a development where the size, shape and, or design of the overall development is such that it may be impractical to adequately store the required number of bins on the premises. Please make sure that a development application addresses all relevant domestic waste considerations in this document.

This Section (Section 4) applies to all buildings and structures within the Bayside LGA.

4.2 Aims & Objectives

The principal aim of designing an effective waste management system is to encourage resource recovery while providing appropriate, convenient storage areas and collection points whilst minimising risks to health and safety.

The objectives are to:

- Ensure appropriate waste storage and collection facilities are provided and that are integrated with Council's waste service;
- Maximise reuse and recycling of waste generated by the building's occupants;
- Ensure waste management systems are as easy to use for occupants as possible and readily accessible to occupants and service providers;
- Minimise amenity impacts on existing and surrounding buildings;
- Minimise risks to health and safety associated with handling, disposal and collection of waste and recycling, and ensure optimum hygiene (including bin cleanliness);
- Minimise the environmental impacts associated with waste management; and,
- Discourage and avoid illegal dumping by providing on-site storage and on-site collection of waste for larger multi-unit dwelling housing and residential flat buildings.

4.3 General Controls and Requirements

The following general controls and requirements apply:

- Completed OWMPs must accompany the DA;
- Waste management systems should be designed and operated to meet the objectives in this Section (Section 4) of this Waste Management DCP and other relevant sections relating to the specific development type in Sections 5-12 of this document.

The OWMP will integrate waste management facilities holistically with the overall development and ensure it can be serviced efficiently and effectively by Council (or waste contractors).

The OWMP should describe:

- Estimated waste and recycling generation rates and Council bin allocation and bulky waste storage allocation (see Sections 5-12 as relevant);

- Bin storage area/s;
- Collection Point/s;
- Bulky Waste storage area(s);
- Bin and/or chute systems;
- Ongoing maintenance, including bin cleanliness pre and post Food Organics Garden Organics (FOGO) implementation.

For all residential and mixed-use developments, the following provisions apply:

- There should be sufficient space in kitchens, or alternative internal locations, for the interim storage of two days' worth of waste and recycling into a minimum of three separate containers for garbage, recyclables and organics;
- The system for waste management must be compatible with collection services offered by the Council even if the service will be provided by a private contractor;
- In the event that a private contractor Collection Service is to be considered, the details of the private collection to be conducted onsite must be included in the WMP to be submitted for Council to review and consider prior to a development application approval;
- A bin storage area must be provided for residential developments;
- An individual bin storage area is to be provided for low rise – low density developments such as: single dwellings, dual occupancy, and manor homes;
- A communal bin storage area(s) (or room(s)) is to be provided for larger developments such residential flat buildings low to high rise units;
- Separate bin storage area(s) (or room(s)) need to be provided for the commercial component(s) of a mixed use development;
- The bin storage area(s) must be of sufficient size to accommodate the required number of waste, recycling and organic waste bins provided by the Council, with consideration of adequate maneuverability and resident access;
- Paths of travel for collection vehicles on-site must consider safe accessibility, road widths, clearance heights, surface gradients and surface strength and comply with relevant Australian Standards;
- Large capacity waste systems such as waste compactors, automated waste collection systems and underground systems, may be installed where they can be shown to be viable for the users, building managers and waste collector, subject to pre-lodgment advice and the conditions outlined in the Waste Management DCP;
- Turntables that allow heavy vehicles to drive forward into, turn around, and drive forward out of a development may be installed, provided there is enough space and they are designed to fit the Council's waste collection vehicles;
- Waste chutes must be designed in accordance with the requirements of the Building Code of Australia and Standards Australia.
    - Chute door and bin room must be accessible to people in wheelchairs;
    - Access to chute rooms / moving parts should be restricted to workers only;
    - Stainless steel chute doors are 2-hour fire rated, compliant with Australian Standard AS1530.4- 2005. The Builder is responsible for fire rating the shaft;
    - Walls of chute shaft should be built to meet Rw 50 construction as noise from chutes is not regulated by the Building Code of Australia. Rw is the weighted sound reduction index.

4.4 Bin Storage

Where required, a bin storage area (or room) must be located:

- So that vandalism, nuisance and adverse amenity are avoided or minimised;
- To be easily accessible, have unobstructed access for residents, and allow residents or building managers to easily move bins on foot to and from the Collection Point(s);

- So collection vehicles can access the Collection Point(s) by entering and leaving the property in a forward direction, and requires minimal to no reversing (for on-site Collection Point(s)).

The communal or shared bin storage areas (or rooms) must:

- Be naturally ventilated or have ventilation systems that meet the relevant Australian Standards;
- Have a hot and cold-water outlet for washing bins located either in or adjacent to the bin room;
- Allow wastewater to discharge to an approved sewer outlet;
- Have adequate lighting controlled by switch or motion devices;
- If a room, be fitted with doors that open from both inside and outside the room, to be wide enough to allow bins to easily and safely pass through, where the doors are self-closing, well fitted and durable;
- Incorporate locking devices on sites where waste disposal is controlled by a strata corporation and respective caretaker;
- Protect the interior from rain and other inclement weather;
- Be suitably enclosed, covered and maintained to prevent polluted wastewater runoff from entering the stormwater system;
- Complement the building's design and the surrounding streetscape;
- Have durable and smooth walls and ceilings made of an impermeable material;
- Have coved wall and floor intersections;
- Be located far enough away from residences so there is minimal impact from noise during bin use;
- Not allow access by residents if there are chute discharge points or compactors in the same room as the bin storage area - at a minimum, chute discharge points or compactors should be in an enclosed, secured room or suitably caged with sufficient circulation space for bins to move round them as per the manufacturer's specifications; and,
- Be easily accessible by people with a disability.

Signage must be provided within the bin room(s) or area(s) which clearly describes the types of materials which can be deposited into the bins.

4.5 Methods of Bin Collection

Council provides three (3) methods of collection;

- Kerbside bin Collection;
- On-site bin Collection; and,
- Wheel Out - Wheel Back Collection.

Each collection method is dependent upon the type of building, its use, size and design.

4.6 Kerbside Bin Collections

Where bins will be collected from the kerbside, the Collection Point must:

- Be approved by Council as a suitable location;
- Have enough room to accommodate all the bins to be collected without obstructing pedestrian access or driveways or having a detrimental effect on residential amenity;
- Have enough room to accommodate all the bins allocated to the building when arranged side-by-side and parallel to the kerb with a space of 30 cm between each bin with no obstruction from trees, poles, street furniture or other kerbside objects;
- Be located so designated parking spaces, speed humps and other traffic calming devices do not prevent collection vehicles' easy access to, and collection of, the bins
- Be located far enough away from residences so there is minimal impact from noise during bin collection;

- Ensure all allocated bins are placed within the sites frontage, not in front of neighbouring lots or driveways.

The route for moving bins from the bin storage area to the Collection Point must:

- Be as direct and as short as possible;
- Have a solid non-slip surface and be made of concrete;
- Be wide enough to maneuver the widest bin;
- Be free from obstructions, steps or uneven ground;
- Have a maximum grade of 1:14 (or 1:30 where 660 or 1100 litre bins are used);
- Not require bins to be moved across busy passageways or vehicle crossings.

4.7 On-Site Bin Collections

On-site Collection Points are preferred where:

- There is insufficient space on the kerbside to place all allocated bins;
- The development cannot satisfy kerbside collection requirements;
- The development cannot be serviced by a Wheel Out – Wheel Back collection service or this service is not available;
- A large number of bins at the kerbside would cause collection vehicles to operate in the street for extended periods or present unsafe conditions for vehicle traffic or collection staff;
- It is deemed unsafe for Council to perform a kerbside collection;
- The development to be serviced is on an arterial road and it will be unsafe for Council's collection vehicles to stop on an arterial road in order to perform waste services.

Where bins are collected on-site, or if a Collection Vehicle must enter a property, the site must be configured:

- To allow collection vehicles to enter and exit the site in a forward direction with limited maneuvering and reversing on-site;
- To allow for a safe area for the collection vehicle to use, indicated by appropriate signage;
- So that collection vehicles do not impede general access to, from or within the site;
- To provide enough space around the waste vehicle to allow operators to collect waste - this can be achieved by having a designated loading area free from obstruction or on-site traffic movements; and,
- So the access driveway and the circulation roadway are wide enough to accommodate the swept path of the collection vehicle.

Road and access specifications must be addressed, which includes:

- Access driveways and the route of travel to the Collection Point must be of sufficient strength and dimensions to support heavy rigid waste collection vehicles (normally rated up to 24 tonnes) and provide enough clearance for these vehicles.
- Access driveways and internal roads must be designed in accordance with the relevant Australian Standards.
- Driveway Ramp Grades must be as per AS 2890.2-2002.
- Access to the site must be designed so waste collection vehicles can access it and move within it safely. This is to include waste collection vehicles entering and existing the site in a forward direction.

4.8 Wheel Out - Wheel Back Collections

Where Council's Wheel Out – Wheel Back service is to be utilised, the bin carting route from the bin storage area to the layback is to comply with the following:

- Bin storage area is located within 10m of a layback;
- Direct and as short as possible;
- Have a pathway that is wide enough to maneuver the widest bin;

- Have a non-slip, hard surface free from obstacles and steps;
- Have a maximum surface grade of 1:14 (or a maximum grade of 1:30 where bins greater than 1100L bins are used).

4.9 Visual Amenity

Individual and communal bin storage areas should be located so that they are not visible from the public domain.

Where storage areas (or rooms) are located within the front setback or at ground level they are to be integrated into the overall design of the development so as not to be readily visible from any public place and should blend in with the development.

Where standalone structures are proposed they should be suitably screened.

5. Low Rise – Low Density Dwelling Developments

5.1 Applicability

The following controls and requirements are applicable to the following types of low rise-low density development:

- Single Dwellings;
- Dual Occupancies; and,
- Manor Homes;

The following controls and requirements are also applicable to the following types of small low rise-low density developments that comprise of up to and including four (4) dwellings in total:

- Villas; and,
- Townhouse / Terraces.

Image: NSW Government Planning Portal – Low Rise Housing Diversity Code

5.2 Waste Generation & Service Requirements

Bayside Council has two (2) separate collection systems. One for the residents of the former Botany LGA and one for the former Rockdale LGA. Until this is harmonised, the following will apply:

5.2.1 Collection Requirements – Former Botany LGA until Feb 2030

For all of the abovementioned buildings, Council provides the following 3-bin system service for each dwelling type in the former Botany LGA.

SERVICE	WEEKLY CAPACITY	FREQUENCY	BIN SIZE
Waste	240-litre	Weekly	240 L
Co-mingled Recycling	120-litre	Alternate Fortnightly	240 L
Garden Organics	120-litre	Alternate Fortnightly	240 L

5.2.2 Collection Requirements – Former Rockdale LGA until Feb 2030

For all of the abovementioned buildings, Council provides the following 2-bin system service for each dwelling type in the former Rockdale LGA. In 2024, a third bin (GO) service will be provided to each dwelling.

SERVICE	WEEKLY CAPACITY	FREQUENCY	BIN SIZE
Waste	240-litre	Weekly	240 L
Co-mingled Recycling	120-litre	Alternate Fortnightly	240 L
Garden Organics (From 2024)	120-litre	Alternate Fortnightly	240 L

5.2.3 Collection Requirements – All areas of Bayside from Feb 2030

For all of the abovementioned buildings, with the introduction of a NSW Government mandated FOGO service to be implemented by 2030, Council will provide the following 3-bin system service for each dwelling type in the Bayside LGA.

SERVICE	WEEKLY CAPACITY	FREQUENCY	BIN SIZE
Waste	120 to 240-litre	Weekly to Fortnightly	120 to 240 L
Co-mingled Recycling	120-litre	Alternate Fortnightly	240 L
Food Organics & Garden Organics	240-litre	Weekly	240 L

5.2.4 Bin Dimensions

The bin dimension(s) for the abovementioned buildings are:

Bin Type	Height (mm)	Depth (mm)	Width (mm)
240-litre	1080	735	580
120-litre (from 2030)	930	545	480

5.3 Design Control

The following controls and requirements are in addition to those detailed in Section 4 of this Waste Management DCP.

5.3.1 Bin Storage & Collection Point(s)

A bin storage area is to be provided for each dwelling. The bin storage area is to be:

- Located to minimise adverse visual impact on the public domain. It should be positioned behind the front building line of the dwelling. Where it is located within the front setback it must be incorporated into the building's design or be screened by vegetation;
- Located to avoid nuisances such as odour and noise to adjoining residential properties;
- Designed so that it is capable of accommodating all Council allocated bins;
- Designed and located so that there is unobstructed and convenient access to the Collection Point;
- Designed and located so not to require bins to be transported through the interior of the dwelling.

5.3.2 Bulky Waste Storage & Collection Point(s)

The kerbside Collection Point must by located so it:

- Allows a minimum space of 3 m x 1 m per dwelling for the presentation of household clean up waste to be presented at the kerb without obstructing vehicular or pedestrian access.

5.3.3 Collection Vehicle Access

The kerbside Collection Point must by located so it:

- Allows for all allocated bins to be presented in single file with a minimum 30 cm gap between bins (where up to two bins per dwelling are presented at for collection each week);
- Ensure all allocated bins are placed within the site's allocated frontage, not in the driveway and not in front of neighbouring lots;

- Has a separation distance of 2 m from street trees, bus stops, street furniture and road infrastructure such as roundabouts and speed humps;
- Has a height clearance of 4.5 m from overhanging tree branches, powerlines and other obstructions; and,
- Not be on an active driveway or prevent pedestrian access.

5.3.4 Bin System

These bins are to be self-presented on collection days and taken back in on site after collection occurs.

6. Low Rise – Medium Density Multiple Dwellings Developments

6.1 Applicability

These requirements of this section (section 6) have specifically been designed to cater for the provision of on-site waste storage facilities, and the collection of bins from premises referred to in this document as “Low Rise - Medium Density Multiple Dwellings” as defined in Section 2 of this Waste Management DCP.

Low Rise - Medium Density Multiple Dwellings include a building or buildings, consisting of more than four (4) dwellings (whether or not attached), where each dwelling is up to 2 storeys in height (not including basements) and has an individual entrance and direct private access to private open space at natural ground level, and includes villas, town-houses, terraces, cluster housing, and the like.

It is Council’s aim to provide the residents of these developments with a waste collection service sufficient to their needs, taking into consideration the following criteria:

- The size, shape, and design of the overall development;
- The size, shape, and design of the private open space of each dwelling;
- The availability, size and design of existing on-site waste storage facilities; and,
- The specific needs of the occupiers of each individual sole occupancy unit.

Image: Modified picture from NSW Government Planning Portal.

6.2 Waste Generation & Service Requirements

Bayside Council has two (2) separate collection systems. One for the residents of the former Botany LGA and one for the former Rockdale LGA. Until this is harmonised, the following will apply:

6.2.1 Collection Requirements – Former Botany LGA until Feb 2030

For all of the abovementioned buildings, Council provides the following 3-bin system service for each dwelling type in the former Botany LGA.

SERVICE	WEEKLY CAPACITY	FREQUENCY	BIN SIZE
Waste	240-litre	Weekly	240 L
Co-mingled Recycling	120-litre	Alternate Fortnightly	240 L
Garden Organics	120-litre	Alternate Fortnightly	240 L

6.2.2 Collection Requirements – Former Rockdale LGA until Feb 2030

For all of the abovementioned buildings, Council provides the following 2-bin system service for each dwelling type in the former Rockdale LGA. In 2024, a third bin (GO) service will be provided to each dwelling.

SERVICE	WEEKLY CAPACITY	FREQUENCY	BIN SIZE
Waste	240-litre	Weekly	240 L
Co-mingled Recycling	120-litre	Alternate Fortnightly	240 L
Garden Organics (From Feb 2024)	120-litre	Alternate Fortnightly	240 L

6.2.3 Collection Requirements – All areas of Bayside from Feb 2030

For all of the abovementioned buildings, with the introduction of a NSW Government mandated FOGO service to be implemented by 2030, Council will provide the following 3-bin system service for each dwelling type in the Bayside LGA.

SERVICE	WEEKLY CAPACITY	FREQUENCY	BIN SIZE
Waste	120 to 240-litre	Weekly to Fortnightly	120 to 240 L
Co-mingled Recycling	120-litre	Alternate Fortnightly	240 L
Food Organics & Garden Organics	240-litre	Weekly	240 L

6.2.4 Bin Dimensions

The bin dimension(s) for the abovementioned buildings are:

Bin Type	Height (mm)	Depth (mm)	Width (mm)
240-litre	1080	735	580
120-litre (from 2030)	930	545	480

6.3 Design Control

The following controls and requirements are in addition to those detailed in Section 4 of this Waste Management DCP.

6.3.1 Bin Storage & Collection Point(s)

A bin storage area is to be provided for each dwelling. The bin storage area is to be:

- Located to minimise adverse visual impact on the public domain. It should be positioned behind the front building line of the dwelling. Where it is located within the front setback it must be incorporated into the building's design or be screened by vegetation;
- Located to avoid nuisances such as odour and noise to adjoining residential properties;
- Designed so that it is capable of accommodating all Council allocated bins;
- Designed and located so that there is unobstructed and convenient access to the Collection Point; and,
- Designed and located so not to require bins to be transported through the interior of the dwelling.

6.3.2 Bulky Waste Storage & Collection Point(s)

The kerbside collection point must by located so it:

- Allows a minimum space of 3 m x 1 m per dwelling for the presentation of household clean up waste to be presented at the kerb without obstructing vehicular or pedestrian access.

6.3.3 Collection Vehicle Access

The kerbside Collection Point must by located so it:

- Allows for all allocated bins to be presented in single file with a minimum 30 cm gap between bins (where two bins per dwelling are presented at for collection each week);
- Ensure all allocated bins are placed within the site's allocated frontage, not in the driveway and not in front of neighbouring lots;
- Has a separation distance of 2 m from street trees, bus stops, street furniture and road infrastructure such as roundabouts and speed humps;
- Has a height clearance of 4.5 m from overhanging tree branches, powerlines and other obstructions; and,
- Not be on an active driveway or prevent pedestrian access.

6.3.4 Bin System

These bins are to be self-presented on collection days and taken back in on site after collection occurs.

7 Residential Flat Building (RFB): Low to Medium Rise Units

7.1 Applicability

These requirements of this Part (Part 7) have specifically been designed to cater for the provision of on-site waste storage facilities, and the collection of bins from premises defined as “Residential Flat Building (RFB): Low to Medium Rise Units” as defined in Section 2 of this DCP.

RFB: Low to Medium Rise Units include a building or buildings, consisting of 2 or more dwellings, with a maximum of four (4) storeys, not including basement.

It is Council’s aim to provide the residents of these developments with a waste collection service sufficient to their needs, taking into consideration the following criteria:

- The size, shape, and design of the overall development;
- The size, shape, and design of the private open space of each dwelling;
- The size, shape, and design of the private open space of each dwelling;
- The availability, size and design of existing on-site waste storage facilities; and,
- The specific needs of the occupiers of each individual sole occupancy unit.

It is important that a development application addresses all relevant domestic waste considerations in this document.

Image: Example of RFB: Low to Medium Rise Units.

7.2 Waste Generation & Service Requirements

Bayside Council has two (2) separate collection systems. One for the residents of the former Botany LGA and one for the former Rockdale LGA. Until this is harmonised, the following will apply:

7.2.1 Collection Requirements – Former Botany LGA until Feb 2030

For all of the abovementioned buildings, Council provides the following 3-bin system service for each dwelling type in the former Botany LGA.

SERVICE	WEEKLY CAPACITY	FREQUENCY	BIN SIZE
Waste	Communal 240-litre	Twice Weekly	240 L to 1100 L*
Co-mingled Recycling	Communal 120-litre	Weekly	240 L to 1100 L*
Garden Organics	Communal 24-litre	Fortnightly	240 L

7.2.2 Collection Requirements – Former Rockdale LGA until Feb 2030

For all of the abovementioned buildings, Council provides the following 2-bin system service for each dwelling type in the former Rockdale LGA. In 2024, a third bin (GO) service will be provided to each dwelling.

SERVICE	WEEKLY CAPACITY	FREQUENCY	BIN SIZE
Waste	Communal 240-litre	Twice Weekly	240 L to 1100 L*
Co-mingled Recycling	Communal 120-litre	Weekly	240 L to 1100 L*
Garden Organics (From Feb 2024)	Communal 24-litre	Fortnightly	240 L

7.2.3 Collection Requirements – All areas of Bayside from Feb 2030

For all of the abovementioned buildings, with the introduction of a NSW Government mandated FOGO service to be implemented by 2030, Council will provide the following 3-bin system service for each dwelling type in the Bayside LGA.

SERVICE	WEEKLY CAPACITY	FREQUENCY	BIN SIZE
Waste	Communal 240-litre	Twice Weekly (TBD by Council)	240 L to 1100 L*
Co-mingled Recycling	Communal 120-litre	Weekly	240 L to 1100 L*
Food Organics & Garden Organics	Communal 96-litre	Twice Weekly	60L – 240 L

7.2.4 Bin Dimensions & Bin Numbers

The bin dimension(s) for the abovementioned buildings are:

Bin Type	Height (mm)	Depth (mm)	Width (mm)
60-litre (L)	640	497	444
240-litre (L)	1080	735	580
660-litre (L)	1250	850	1370
1100-litre (L)	1485	1280	1370

Where possible, upon request prior DA stage, the 240L waste bins may be converted to 660L or 1100L bin types and calculated at the rate mentioned. Please consult Council prior to submitting DA and Waste Management Plan to see if a bin conversion is possible for the specific site.

To determine the bin numbers for each waste stream, the formula will be:

the number of individual dwellings or units
multiplied by
the weekly capacity
divided by
the weekly frequency.

$$\frac{Number\ of\ dwellings\ or\ units\ \times\ Weekly\ Capacity}{Collection\ Frequency}$$

Example: To determine the garbage bin component for a four (4) storey unit development with 16 dwellings or units, the calculations for a development with no on-site compaction would be as follows:

$$\frac{Number\ of\ dwellings\ or\ units\ \times\ Weekly\ Capacity}{Collection\ Frequency}$$

$$= \frac{16\ units\ \times\ 240\ L\ capacity}{2\ collections\ per\ week}$$

$$= \frac{16\ \times\ 240}{2}$$

$$= \frac{1{,}920}{2}$$

$$= 8$$

Therefore, the garbage bins needed for this type of development would be 8 x 240L bins that are collected twice a week.

Similar calculations would need to be undertaken for all other bin types.

To request a conversion to bulk bins for this example, a request can be submitted to:

- convert to 660L bins, where the following formula may be considered:

  $$= \frac{8\ bins\ \times\ 240\ L}{660\ L}$$

  $= 2.9$ larger 660L bins

  NOTE: This is rounded up to 3 x 660L Garbage Bins collected twice a week.

- or converted to 1100L bins, where the following formula may be considered:

  $$= \frac{8\ bins\ \times\ 240\ L}{1100\ L}$$

  $= 1.7$ larger 1100L bins

  NOTE: This is rounded up to 2 x 1,100L Garbage Bins collected twice a week.

For the garbage component **ONLY**, utilising an onsite compaction system as part of the waste management plan (at a maximum compaction rate of 2:1) can half the number of bins required.

$$\frac{Number\ of\ dwellings\ or\ units \times Weekly\ Capacity}{Collection\ Frequency} \div 2$$

7.3 Design Control

The following controls and requirements are in addition to those detailed in Section 4 of this Waste Management DCP.

7.3.1 Bin Storage & Collection Point(s)

A bin storage area(s) is/are to be:

- Located to minimise adverse visual impact on the public domain. It should be positioned behind the front building line of the dwelling. Where it is located within the front setback it must be incorporated into the building's design or be screened by vegetation;
- Located to avoid nuisances such as odour and noise to adjoining residential properties;
- Designed so that it can accommodate all Council allocated bins;
- Designed and located so that there is unobstructed and convenient access to the Collection Point; and,
- Designed and located so not to require bins to be transported through the interior of the dwelling.

An on-site communal bin storage area(s) will need to be provided for the development, that has been designed in accordance with Section 4 of this Waste Management DCP.

The design and location of bin storage areas must be integrated into the design of the overall development and compliment the surrounding streetscape. Materials and finishes visible from the outside should be similar in style and quality to the external materials used in the rest of the development.

The location of the waste, recycling and organics room(s) or area(s) must:

- Provide direct and convenient access for the occupants of the development;
- Not impact on the amenity of occupants in and adjoining the development in relation to visual amenity, noise and odour;
- Not obstruct on- or off-street car parking, driveways, footpaths, landscaping and trees
- Comply with Australian Standards;
- Comply with the Building Code of Australia;
- Be designed to look acceptable from the street;
- Be within 10 meters of the layback where an approved and applicable Wheel Out – Wheel Back collection service is to occur;
- Not require residents to carry waste to the storage area more than 30 metres from their dwelling (not counting vertical space);
- Have minimum door width(s) of 1.5 metres (to allow provisions for the largest bins);
- Have a minimum unobstructed clearance height of 4.5 metres and 3.5 metres carriageway width to the Collection Point(s), which includes all attachments such as vents, signage, and piping.

On large, difficult, or steep sites, or sites with multiple street frontages, it may be appropriate to have a number of bin storage rooms or areas, to minimise distances and facilitate collection.

A bin storage and service room must be located on each habitable floor, known as a Waste Level Room, containing either:

- The chute inlet(s) and enough room for the required number of mobile bins for residents to deposit their waste, recycling and organics, or
- Enough room for the required number of mobile bins for residents to deposit their waste, recycling and organics without chute inlet(s).

Waste Level Rooms must consider required safety measures, required ventilation, and required rotation and cleaning of bins.

To minimise the floor space required on each Waste Level Room(s) a bin storage area in the basement or ground level can be used to store extra bins for rotational use as Waste Level Room(s) bin(s) become full. This room may or may not have restricted access for residents.

The Collection Point should not be at the kerbside if:

- More than half the street frontage would be occupied by bins, or;
- Bins on the kerbside will obstruct pathways, cause collection vehicles to operate in the street for extended periods or present unsafe conditions for motorists, pedestrians, or collection staff.

Appropriate road and path surface materials must be used to minimise noise on pathways and driveways and allow easy movement of bins.

Where the Collection Point is proposed to be at the kerbside the following must be considered:

- Sufficient space at the front of the property, minus the driveway, to accommodate the number of bins required for the building;
- Bins must not be placed where they will be obstructed or impinged on by trees, poles, street furniture or other kerbside objects;
- Bins must not be placed on a driveway;
- Bins must not be located so designated parking spaces, speed humps and other traffic calming devices prevent easy access to, and collection of, the bins by collection vehicles;
- Bins must not be located adjacent to an area that has a 'No Stopping' sign;
- Bins can be serviced safely and easily without causing a traffic hazard.

The Development Application (DA) and Waste Management Plan (WMP) may request for a Wheel Out – Wheel Back collection service to be offered by Council. It is important that these discussions are had with Council.

On-site Collection Points:

- Be located where the bins are usually stored or on-site at a temporary holding area;
- Be located so the collection vehicle, while servicing bins, does not obstruct the use of a driveway;
- Be at street level or in a basement; and,
- Must have a minimum unobstructed clearance height of 4.5 metres and 3.5 metres carriageway width to the Collection Point(s), which includes all attachments such as vents, signage, and piping.

Additionally, the movement of bins from the bin storage area(s) to the Collection Point shall meet the following requirements:

- Bins of up to 360 L capacity - no more than 30 m;
- Bins of 360 -1100 L capacity - no more than 5 m; and,
- Bins of more than 1100 L capacity - no more than 3 m.

The bin carting routes should be designed to be:

- Direct and as short as possible;
- Without kerbs and steps;
- Gradients more than 1:14 (or 1:30 where 660 or 1100 L bins are used); and,
- A minimum of 2 m wide with a hard, non-slip surface.

7.3.2 Bulky Waste Storage & Collection Point(s)

Council requires all Bulky Waste or cleanup material to be stored within the confines of this type of development.

All such material shall be stored within dedicated room(s) or caged area(s) and designed to temporarily store discarded bulk items awaiting removal, such as old furniture and approved general household items. Bulky waste storage areas must be located at ground level or in a

basement near the main bin storage area. If located at ground level the bulk storage area must be well screened from the front of the street to preserve the amenity of the streetscape.

The bulky waste storage area must:

- Be readily accessible to all residents and located close to the main bin storage room;
- Be secure and caged to allow the contents to be visible from the outside (when located in a basement); and,
- Have a minimum doorway width of 2 metres to allow for easy movement of large waste items in and out of the room.

The size of the bulky waste storage facility should be calculated as follows:

- $12m^2$ (4m x 3m) of space for developments of up to 40 dwellings, and
- Then an additional $3m^2$ for every 10 dwellings thereafter, rounded up by increments of $3m^2$.

Additional bins should be considered to allow residents to recycle the following materials:

- Unwanted clothing;
- Printer cartridges;
- Household batteries;
- Fluorescent bulbs or tubs, or light bulbs;
- Mobile phones and accessories;
- E-waste; and,
- Expanded polystyrene.

The containers used to store these materials can be located in the bin storage room or in nominated areas of the building that are more likely to be frequented by residents and organised by the owners' corporation.

The size and type of containers for each of these material types vary from 240, 660 or 1100 litre mobile bins or in some cases may be a special container provided by a resource recovery or recycling contractor.

It is good practice to encourage and provide an opportunity for residents to recycle other general household waste items such as those listed above. Collection arrangements for these materials may be orgnaised and provided by commercial businesses or charities. Refer to the NSW EPA Better practice guide for resource recovery in residential developments for more details on how to plan for and collect these material types or contact Council.

7.3.3 Collection Vehicle Access

It is recommended that these developments are to be serviced through onsite collection. This means the Collection Vehicle will enter the property and service the development within the property boundary from a designated Collection Point.

The development must provide safe vehicle access and be designed with enough clearance height to enable the waste Collection Vehicle(s) to maneuver and empty bins safely and without impediment.

The on-site Collection Point must be located so it:

- Ensures all allocated bins are collected on-site, not impeding access to any vehicles or pedestrians;
- Has a height clearance of 4.5 metres, allowing for all ceiling or roof attachments such as vents, signage, and piping, for Collection Vehicles to access and service the site;

- Have a minimum unobstructed 3.5 metres carriageway width to the Collection Point(s), which includes all attachments such as vents, signage, and piping.
- Ensures vehicle can enter and exit the site in a forward driving direction; and,
- Ensures a swept path of 21 metres and a turning circle of 25 metres to accommodate the length of a Collection Vehicle to safely maneuver within the development.

Access to driveways and the route of travel to the Collection Point must be of sufficient strength and dimensions to support heavy rigid waste collection vehicles (normally rated up to 24 tonnes).

If a development of this nature were to be considered by Council for kerbside collection, the Collection Point must be located so it:

- Allows for all allocated bins to be presented in single file with a minimum 30 cm gap between bins;
- Ensure all allocated bins are placed within the site's allocated frontage, not in the driveway and not in front of neighbouring lots;
- Has a separation distance of 2 m from street trees, bus stops, street furniture and road infrastructure such as roundabouts and speed humps; and,
- Has a height clearance of 4.5 metres from overhanging tree branches, powerlines and other obstructions be on an active driveway or prevent pedestrian access.

7.4 Waste Management Equipment

Where an on-site chute system, compaction unit and/or towing equipment are not utilised the Waste Management Plan needs to specify the benefits for not having one, some or all of these aids. It is highly recommended to contact Council prior to lodgment to discuss the proposal.

7.4.1 Bin System

There are multiple options available for a developer to consider when proposing a bin system for the site's waste, recycling and organics management. These options include:

1. Innovative Model:
    a. An independent waste chute system; plus,
    b. An independent recycling chute system; plus,
    c. An independent organics chute system (from 2030).
2. Hybrid Model:
    a. A waste chute system; plus,
    b. An independent recycling chute system or a 240L recycling bin for every four units on each level at any given point in time; plus,
    c. An independent organics chute system (from 2030) or two 60L organics bins for every four units on each level at any given point in time (from 2030 when FOGO is introduced) which are to be decanted into larger FOGO bins stored and collected from an approved bin storage area.
3. Standard Model:
    a. A 240L garbage bin for every four units on each level; at any given point in time; plus,
    b. A 240L recycling bin for every four units on each level at any given point in time; plus,
    c. Two 60L organics bins for every four units on each level at any given point in time (from 2030 when FOGO is introduced) which are to be decanted into larger FOGO bins stored and collected from an approved bin storage area.

Council will preference a system that provides the best balance of automation, convenience, and best practice engineering for the site. Where bins are to be utilised on a particular level, as opposed to using a chute system, the Waste Management Plan must:

- Detail how these bins are to be effectively rotated by a caretaker, on-site managers, and/or other site representatives;
- Ensure that all the required waste, recycling bins; and including allowances for the implementation of organics bins from 2030; for each level can be stored in a dedicated bin storage and service room on each level, known as a Waste Level Room;
- Ensure that each Waste Level Room on each level provides ample space for all required bins to be easily and safely wheeled in and out, and for people to move freely and safely around within this bin storage and service room when all required bins are stored in this area;
- Ensure that the Waste Level Room on each level provides educational signage on what material is accepted and not accepted for each waste stream complying with current material acceptance rules; and,
- Ensure that a lift is available for bins to be safely wheeled from each level to the main bin storge areas located in an approved basement bin storage room or to and from an approved Collection Point.

Where no chute system is proposed for waste management, a detailed explanation is required detailing how this system cannot be or should not be used.

7.4.2 Waste, Recycling or Organics Chute

Waste chutes are vertical tubes that run though each floor of a building to the basement where it empties into standard mobile bins or bulk bins.

A waste chute system must:

- Be conveniently accessed on each level from a common place shared room.
- Ensure appropriate educational signage.
- Be connected to an automated bin system located and collected in the basement.
- Ensure that a Caretaker maintain chutes and rotates bins under chute outlets.
- Provide clear signage to explain what each chute is for.
- Not be used for oversize material, such as cardboard.

7.4.3 On-Site Compaction Units

Where a chute system is proposed for collecting recyclable materials, compaction should not be permitted. This is because compacting recyclables breaks glass and causes contamination of paper and cardboard with glass particles.

Where a waste compaction system is utilised the compaction ratio of waste is limited to 2:1. This will halve the number of bins needed which will impact waste bin storage room space and Collection Point space needed.

Over-compaction of waste can result in damage to bins, jamming of waste inside the bin and can make them heavy and difficult to move to the Collection Point. Council reserves the right to refuse to collect a bin that is deemed too heavy or unsafe to collect. Fees or costs may apply to replace broken bins due to over-compaction.

7.4.4 Other On-Site Equipment

Where mobile bins containing waste, recycling or organics are required or proposed to be emptied into larger bins, suitable bin lifter or decanting equipment must be provided to eliminate the risks associated with manually lifting and emptying bins.

Where the bins need to be transported an excessive distance or there is many bins to transport around the site, specialty bin moving or towing equipment should be used.

Storage, maneuvering and operating areas for waste management equipment such as tow tugs, tractors or other mechanical or self-powered towing equipment used to move bins around large sites (such as from bin rooms to storage locations, or Collection Points), must be designed to comply with all work, health and safety requirements.

7.5 Indemnity

Where on-site collection is undertaken, Council will be required to be indemnified.

Council will require indemnity against claims for loss or damage to the pavement, other driving surfaces, structures and buildings. Council will also require indemnity against liabilities, losses, damages and any other demands arising from any on-site collection service.

A hazard risk assessment must be conducted before Council or its contractor will agree to undertake any service.

7.6 On-going Maintenance

Where a development is managed by an owners' corporation or a building strata agent, they must be responsible for managing waste and recycling generated on-site.

7.7 Innovation

Council encourages innovative design proposals for waste and recycling management. This may include, but is not limited to, the use of advanced collection systems. An innovative waste management proposal will be determined on merit.

8 Residential Flat Building (RFB): Medium to High Rise Units

8.1 Applicability

These requirements of this Section (Section 8) have been specifically been designed to cater for the provision of on-site waste storage facilities, and the collection of bins from premises defined as “Residential Flat Building (RFB): Medium to High Rise Units” as defined in Section 2 of this Waste Management DCP.

RFB: Medium to High Rise Units include a building or buildings, consisting of 2 or more dwellings, more than three (>3) and less than seven (<7) storeys, not including basement or attic space.

Image: Example of RFB: Medium to High Rise Units.

It is Council’s aim to provide the residents of these developments with a waste collection service sufficient to their needs, taking into consideration the following criteria:

- The size, shape, and design of the overall development:
- The size, shape, and design of the private open space of each dwelling;
- The size, shape, and design of the private open space of each dwelling;
- The availability, size and design of existing on-site waste storage facilities; and,
- The specific needs of the occupiers of each individual sole occupancy unit.

It is important that a development application addresses all relevant domestic waste considerations in this document.

8.2 Waste Generation & Service Requirements

Bayside Council has two (2) separate collection systems. One for the residents of the former Botany LGA and one for the former Rockdale LGA. Until harmonised, the following will apply:

8.2.1 Collection Requirements – Former Botany LGA until Feb 2030

For all of the abovementioned buildings, Council provides the following 3-bin system service for each dwelling (unit) type in the former Botany LGA.

SERVICE	WEEKLY CAPACITY	COMPACTION	FREQUENCY
Waste	Communal 120-Litre	2:1	Twice Weekly Collection
Co-mingled Recycling	Communal 120-Litre	N/A	Weekly Collection
Garden Organics	Communal 24-Litre	N/A	Fortnightly Collection

The standard bin size is 240L. Where possible the waste bins may be converted to 660L or 1100L bin types and calculated at the rate mentioned above. Please consult Council prior to submitting DA and Waste Management Plan to see if this request is possible.

8.2.2 Collection Requirements – Former Rockdale LGA until Feb 2030

For all of the abovementioned buildings, Council provides the following 2-bin system service for each dwelling (unit) type in the former Rockdale LGA. In 2024, a third bin (GO) service will be provided to each dwelling.

SERVICE	WEEKLY CAPACITY	COMPACTION	FREQUENCY
Waste	Communal 120-Litre	2:1	Twice Weekly
Co-mingled Recycling	Communal 120-Litre	N/A	Weekly
Garden Organics (From Feb 2024)	Communal 24-litre	N/A	Fortnightly

The standard bin size is 240L. Where possible the waste bins may be converted to 660L or 1100L bin types and calculated at the rate mentioned above. Please consult Council prior to submitting DA and Waste Management Plan to see if this request is possible.

8.2.3 Collection Requirements – All areas of Bayside from Feb 2030

For all of the abovementioned buildings, with the introduction of a NSW Government mandated FOGO service to be implemented by 2030, Council will provide the following 3-bin system service for each dwelling type in the Bayside LGA.

SERVICE	WEEKLY CAPACITY	COMPACTION	FREQUENCY
Waste	Communal 120-litre	2:1	Twice Weekly (TBD by Council)
Co-mingled Recycling	Communal 120-litre	N/A	Weekly
Food Organics & Garden Organics	Communal 96-litre	N/A	Twice Weekly

8.2.4 Bin Dimensions

The bin dimension for the abovementioned buildings are:

Bin Type	Height (mm)	Depth (mm)	Width (mm)
60-litre (L)	640	497	444
240-litre (L)	1080	735	580
660-litre (L)	1250	850	1370
1100-litre (L)	1485	1280	1370

Smaller 60 L bins can be incorporated in the waste management plan by placing these on each Waste Level Room(s) only for FOGO interim or temporary storage as discussed in 8.4.1 Bin System.

Where possible, upon request prior DA stage, the 240L waste bins may be converted to 660L or 1100L bin types and calculated at the rate mentioned. Please consult Council prior to submitting DA and Waste Management Plan to see if a bin conversion is possible for the specific site.

To determine the bin numbers for each waste stream, the formula will be:

the number of individual dwellings or units
multiplied by
the weekly capacity
divided by
the weekly frequency.

$$\frac{Number\ of\ dwellings\ or\ units\ \times\ Weekly\ Capacity}{Collection\ Frequency}$$

Example: To determine the garbage bin component for a four (4) storey unit development with 16 dwellings or units, the calculations for a development with no on-site compaction would be as follows:

$$\frac{Number\ of\ dwellings\ or\ units\ \times\ Weekly\ Capacity}{Collection\ Frequency}$$

$$= \frac{16\ units\ \times\ 240\ L\ capacity}{2\ collections\ per\ week}$$

$$= \frac{16\ \times\ 240}{2}$$

$$= \frac{1{,}920}{2}$$

$$= 8$$

Therefore, the garbage bins needed for this type of development would be 8 x 240L bins that are collected twice a week.

Similar calculations would need to be undertaken for all other bin types.

To request a conversion to bulk bins for this example, a request can be submitted to:

- convert to 660L bins, where the following formula may be considered:

  $$= \frac{8\ bins\ \times\ 240\ L}{660\ L}$$

  $= 2.9$ larger 660L bins

  NOTE: This is rounded up to 3 x 660L Garbage Bins collected twice a week.

- or converted to 1100L bins, where the following formula may be considered:

  $$= \frac{8\ bins\ \times\ 240\ L}{1100\ L}$$

  $= 1.7$ larger 1100L bins

  NOTE: This is rounded up to 2 x 1,100L Garbage Bins collected twice a week.

For the garbage component **ONLY**, utilising an onsite compaction system as part of the waste management plan (at a maximum compaction rate of 2:1) can half the number of bins required.

$$\frac{Number\ of\ dwellings\ or\ units \times Weekly\ Capacity}{Collection\ Frequency} \div 2$$

8.3 Design Control

The following controls and requirements are in addition to those detailed in Section 4 of this Waste Management DCP.

8.3.1 Bin Storage & Collection Point(s)

A bin storage area(s) is/are to be:

- Located to minimise adverse visual impact on the public domain. It should be positioned behind the front building line of the dwelling. Where it is located within the front setback it must be incorporated into the building's design or be screened by vegetation;
- Located to avoid nuisances such as odour and noise to adjoining residential properties;
- Designed so that it is capable of accommodating all Council allocated bins;
- Designed and located so that there is unobstructed and convenient access to the Collection Point; and,
- Designed and located so not to require bins to be transported through the interior of the dwelling.

An on-site communal bin storage area(s) will need to be provided for the development, that has been designed in accordance with Section 4 of this Waste Management DCP.

The design and location of bin storage areas must be integrated into the design of the overall development and compliment the surrounding streetscape. Materials and finishes visible from the outside should be similar in style and quality to the external materials used in the rest of the development.

The location of the waste, recycling and organics room(s) or area(s) must:

- Provide direct and convenient access for the occupants of the development;
- Not impact on the amenity of occupants in and adjoining the development in relation to visual amenity, noise and odour;
- Not obstruct on- or off-street car parking, driveways, footpaths, landscaping and trees
- Comply with Australian Standards;
- Comply with the Building Code of Australia;
- Be designed to look acceptable from the street;
- Be within 10 meters of the layback where an approved and applicable Wheel Out – Wheel Back collection service is to occur;
- Not require residents to carry waste to the storage area more than 30 metres from their dwelling (not counting vertical space);
- Have minimum door width(s) of 1.5 metres (to allow provisions for the largest bins);
- Have a minimum unobstructed clearance height of 4.5 metres and 3.5 metres carriageway width to the Collection Point(s), which includes all attachments such as vents, signage, and piping.

On large, difficult, or steep sites, or sites with multiple street frontages, it may be appropriate to have a number of bin storage rooms or areas, to minimise distances and facilitate collection.

A bin storage and service room must be located on each habitable floor, known as a Waste Level Room, containing either:

- The chute inlet(s) and enough room for the required number of mobile bins for residents to deposit their waste, recycling and organics, or
- Enough room for the required number of mobile bins for residents to deposit their waste, recycling and organics without chute inlet(s).

Waste Level Rooms must consider required safety measures, required ventilation, and required rotation and cleaning of bins.

To minimise the floor space required on each Waste Level Room(s) a bin storage area in the basement or ground level can be used to store extra bins for rotational use as Waste Level Room(s) bin(s) become full. This room may or may not have restricted access for residents.

The collection point must not be at the kerbside. All collections must be conducted on-site.

On-site Collection Points:

- Be located where the bins are usually stored or on-site at a temporary holding area;
- Be located so the collection vehicle, while servicing bins, does not obstruct the use of a driveway;
- Be at street level or in a basement; and,
- Must have a minimum unobstructed clearance height of 4.5 metres and 3.5 metres carriageway width to the Collection Point(s), which includes all attachments such as vents, signage, and piping.

Additionally, the movement of bins from the bin storage area(s) to the Collection Point shall meet the following requirements:

- Bins of up to 360 L capacity - no more than 30 m;
- Bins of 360-1100 L capacity - no more than 5 m; and,
- Bins of more than 1100 L capacity - no more than 3 m.

The bin carting routes should be designed to be:

- Direct and as short as possible;
- Without kerbs and steps;
- Gradients more than 1:14 (or 1:30 where 660 or 1100 L bins are used); and,
- A minimum of 2 m wide with a hard, non-slip surface.

8.3.2 Bulky Waste Storage & Collection Point(s)

Council requires all Bulky Waste or cleanup material to be stored within the confines of this type of development.

All such material shall be stored within dedicated room(s) or caged area(s) and designed to temporarily store discarded bulk items awaiting removal, such as old furniture and approved general household items. Bulky waste storage areas must be located at ground level or in a basement near the main bin storage area. If located at ground level the bulk storage area must be well screened from the front of the street to preserve the amenity of the streetscape.

The bulky waste storage area must:

- Be readily accessible to all residents and located close to the main bin storage room;
- Be secure and caged to allow the contents to be visible from the outside (when located in a basement); and,
- Have a minimum doorway width of 2 metres to allow for easy movement of large waste items in and out of the room.

The size of the bulky waste storage facility should be calculated as follows:

- $12m^2$ (4m x 3m) of space for developments of up to 40 dwellings, and
- Then an additional $3m^2$ for every 10 dwellings thereafter, rounded up by increments of $3m^2$.

Additional bins should be considered to allow residents to recycle the following materials:

- Unwanted clothing;
- Printer cartridges;
- Household batteries;
- Fluorescent bulbs or tubs, or light bulbs;
- Mobile phones and accessories;
- E-waste; and,
- Expanded polystyrene.

The containers used to store these materials can be located in the bin storage room or in nominated areas of the building that are more likely to be frequented by residents and organised by the owners' corporation.

The size and type of containers for each of these material types vary from 240, 660 or 1100 litre mobile bins or in some cases may be a special container provided by a resource recovery or recycling contractor.

It is good practice to encourage and provide an opportunity for residents to recycle other general household waste items such as those listed above. Collection arrangements for these materials may be organised and provided by commercial businesses or charities. Refer to the NSW EPA Better practice guide for resource recovery in residential developments for more details on how to plan for and collect these material types or contact Council.

8.3.3 Collection Vehicle Access

These types of developments are to be serviced through onsite collection. This means the Collection Vehicle will enter the property and service the development within the property boundary from a designated Collection Point.

The development must provide safe vehicle access and be designed with enough clearance height to enable the waste Collection Vehicle(s) to maneuver and empty bins safely and without impediment.

The on-site Collection Point must be located so it:

- Ensures all allocated bins are collected on-site, not impeding access to any vehicles or pedestrians;
- Has a height clearance of 4.5 metres, allowing for all ceiling or roof attachments such as vents, signage, and piping, for Collection Vehicles to access and service the site;
- Have a minimum unobstructed 3.5 metres carriageway width to the Collection Point(s), which includes all attachments such as vents, signage, and piping.
- Ensures vehicle can enter and exit the site in a forward driving direction; and,
- Ensures a swept path of 21 metres and a turning circle of 25 metres to accommodate the length of a Collection Vehicle to safely maneuver within the development.

Access to driveways and the route of travel to the Collection Point must be of sufficient strength and dimensions to support heavy rigid waste collection vehicles (normally rated up to 24 tonnes).

8.4 Waste Management Equipment

The development design must allow for an on-site chute system, compaction unit and towing equipment (if applicable) which must be detailed in the Waste Management Plan.

8.4.1 Bin System

There are multiple options available for a developer to consider when proposing a bin system for the site's waste, recycling and organics management. These options include:

1. Innovative Model:
    a. An independent waste chute system; plus,
    b. An independent recycling chute system; plus,
    c. An independent organics chute system (from 2030).
2. Hybrid Model:
    a. A waste chute system; plus,
    b. An independent recycling chute system or a 240L recycling bin for every four units on each level at any given point in time; plus,
    c. An independent organics chute system (from 2030) or two 60L organics bins for every four units on each level at any given point in time (from 2030 when FOGO is introduced) which are to be decanted into larger FOGO bins stored and collected from an approved bin storage area.

Council will preference a system that provides the best balance of automation, convenience, and best practice engineering for the site. Where bins are to be utilised on a particular level, as opposed to using a chute system, the Waste Management Plan must:

- Detail how these bins are to be effectively rotated by a caretaker, on-site managers, and/or other site representatives;
- Ensure that all the required waste, recycling bins; and including allowances for the implementation of organics bins from 2030; for each level can be stored in a dedicated bin storage and service room on each level, known as a Waste Level Room;
- Ensure that each Waste Level Room on each level provides ample space for all required bins to be easily and safely wheeled in and out, and for people to move freely and safely around within this bin storage and service room when all required bins are stored in this area;
- Ensure that the Waste Level Room on each level provides educational signage on what material is accepted and not accepted for each waste stream complying with current material acceptance rules; and,
- Ensure that a lift is available for bins to be safely wheeled from each level to the main bin storge areas located in an approved basement bin storage room or to and from an approved Collection Point.

Where no chute system is proposed for waste management, a detailed explanation is required detailing how this system cannot be or should not be used.

8.4.2 Waste, Recycling or Organics Chute

Waste, recycling or organics chutes are vertical tubes that run though each floor of a building to the basement where it empties into standard mobile bins or bulk bins.

A waste, recycling or organics chute system must:

- Be conveniently accessed on each level from a common place shared room.
- Ensure appropriate educational signage.
- Be connected to an automated bin system located and collected in the basement.
- Ensure that a Caretaker maintain chutes and rotates bins under chute outlets.
- Provide clear signage to explain what each chute is for.
- Not be used for oversize material, such as cardboard.

8.4.3 On-Site Compaction Units

Where a chute system is proposed for collecting recyclable materials, compaction should not be permitted. This is because compacting recyclables breaks glass and causes contamination of paper and cardboard with glass particles.

Where a waste compaction system is utilised it is highly recommended to limit compaction ratio of waste to 2:1. This halves the amount of bins needed which has an impact on the waste bin storage room space and collection point space needed.

Over-compaction of waste can result in damage to bins, jamming of waste inside the bin and can make them heavy and difficult to move to the collection point. Council reserves the right to refuse to collect a bin that is deemed to heavy or unsafe to collect. Fees or costs may apply to replace broken bins due to over-compaction.

8.4.4 Other On-Site Equipment

Where mobile bins containing waste, recycling or organics are required or proposed to be emptied into bulk bins, suitable bin lifter equipment must be provided to eliminate the risks associated with manually lifting and emptying bins.

Where the bins need to be transported an excessive distance or there is a large number of bins to transport around the site, specialty bin moving equipment should be used.

Storage, maneuvering and operating areas for waste management equipment such as tow tugs, tractors or other mechanical or self-powered towing equipment used to move bins around large sites, for example, from bin rooms to storage locations or collection points, must be designed to comply with all work, health and safety requirements.

8.5 Indemnity

Where on-site collection is required, Council will be required to be indemnified.

Council will require indemnity against claims for loss or damage to the pavement, other driving surfaces, structures and buildings. Council will also require indemnity against liabilities, losses, damages and any other demands arising from any on-site collection service.

A hazard risk assessment must be conducted before Council or its contractor will agree to undertake any service.

8.6 On-going Maintenance

Where a development is managed by an owners' corporation or a building strata agent, they must be responsible for managing waste and recycling generated on-site.

8.7 Innovation

Council encourages innovative design proposals for waste and recycling management. This may include, but is not limited to, the use of advanced collection systems. An innovative waste management proposal will be determined on merit.

9 Residential Flat Building (RFB): High Rise Units

9.1 Applicability

These requirements of this Section (Section 9) have specifically been designed to cater for the provision of on-site waste storage facilities, and the collection of bins from premises defined as “Residential Flat Building (RFB): High Rise Units” as defined in this Waste Management DCP.

RFB: High Rise Units refers to residential flat buildings of seven (7) storeys and greater, not including basement.

It is Council’s aim to provide the residents of these developments with a waste collection service sufficient to their needs, taking into consideration the following criteria -
the size, shape, and design of the overall development:

- the size, shape, and design of the private open space of each dwelling;
- the size, shape, and design of the private open space of each dwelling;
- the availability, size and design of existing on-site waste storage facilities; and,
- the specific needs of the occupiers of each individual sole occupancy unit.

It is important that a development application addresses all relevant domestic waste considerations in this document.

Image: An example of RFB: High Rise Units.

9.2 Waste Generation & Service Requirements

Bayside Council has two (2) separate collection systems. One for the residents of the former Botany LGA and one for the former Rockdale LGA. Until this is harmonised, the following will apply:

9.2.1 Collection Requirements – Former Botany LGA until Feb 2030

For all of the abovementioned buildings, Council provides the following 3-bin system service for each dwelling (unit) type in the former Botany LGA.

SERVICE	WEEKLY CAPACITY	COMPACTION	FREQUENCY
Waste	Communal 120-Litre	2:1	Twice Weekly
Co-mingled Recycling	Communal 120-Litre	N/A	Weekly
Garden Organics	Communal 24-Litre	N/A	Fortnightly

Where possible the waste bins may be converted to 660L or 1100L bin types and calculated at the rate mentioned above. Please consult Council prior to submitting DA and Waste Management Plan to see if this request is possible.

9.2.2 Collection Requirements – Former Rockdale LGA until Feb 2030

For all of the abovementioned buildings, Council provides the following 2-bin system service for each dwelling (unit) type in the former Rockdale LGA. In 2024, a third bin (GO) service will be provided to each dwelling.

SERVICE	WEEKLY CAPACITY	COMPACTION	FREQUENCY
Waste	Communal 120-Litre	2:1	Twice Weekly
Co-mingled Recycling	Communal 120-Litre	N/A	Weekly
Garden Organics (From Feb 2024)	Communal 24-litre	N/A	Fortnightly

Where possible the waste bins may be converted to 660L or 1100L bin types and calculated at the rate mentioned above. Please consult Council prior to submitting DA and Waste Management Plan to see if this request is possible.

9.2.3 Collection Requirements – All areas of Bayside from Feb 2030

For all of the abovementioned buildings, with the introduction of a NSW Government mandated FOGO service to be implemented by 2030, Council will provide the following 3-bin system service for each dwelling type in the Bayside LGA.

SERVICE	WEEKLY CAPACITY	COMPACTION	FREQUENCY
Waste	Communal 120-litre	2:1	Twice Weekly (TBD by Council)
Co-mingled Recycling	Communal 120-litre	N/A	Weekly
Food Organics & Garden Organics	Communal 96-litre	N/A	Twice Weekly

9.2.4 Bin Dimensions

The bin dimension for the abovementioned buildings are:

Bin Type	Height (mm)	Depth (mm)	Width (mm)
60-litre (L)	640	497	444
240-litre (L)	1080	735	580
660-litre (L)	1250	850	1370
1100-litre (L)	1485	1280	1370

Smaller 60 L bins can be incorporated in the waste management plan by placing these on each Waste Level Room(s) only for FOGO interim or temporary storage as discussed in 9.4.1 Bin System.

Where possible the 240L waste bins may be converted to 660L or 1100L bin types and calculated at the rate mentioned above. Please consult Council prior to submitting DA and Waste Management Plan to see if this request is possible.

9.3 Design Control

The following controls and requirements are in addition to those detailed in Section 4 of this Waste Management DCP.

9.3.1 Bin Storage & Collection Point(s)

A bin storage area or areas is/are to be:

- located to minimise adverse visual impact on the public domain. It should be positioned behind the front building line of the dwelling. Where it is located within the front setback it must be incorporated into the building's design or be screened by vegetation;
- located to avoid nuisances such as odour and noise to adjoining residential properties;
- designed so that it capable of accommodating all Council allocated bins;
- designed and located so that there is unobstructed and convenient access to the collection point;
- designed and located so not to require bins to be transported through the interior of the dwelling.

An on-site communal bin storage area or areas will need to be provided for the development, that has been designed in accordance with Section 4 of this document.

The design and location of bin storage areas must be integrated into the design of the overall development and compliment the surrounding streetscape. Materials and finishes visible from the outside should be similar in style and quality to the external materials used in the rest of the development.

The location of the waste, recycling and organics room(s) or area(s) must:

- provide direct and convenient access for the occupants of the development;
- not impact on the amenity of occupants in and adjoining the development in relation to visual amenity, noise and odour;
- not obstruct on- or off-street car parking, driveways, footpaths, landscaping and trees
- comply with Australian Standards;
- comply with the Building Code of Australia;
- be designed to look acceptable from the street;
- be within 10 meters of the layback where an approved and applicable Wheel Out – Wheel Back collection service is to occur;
- not require residents to carry waste to the storage area more than 30 metres from their dwelling (not counting vertical space);
- be a minimum door width of 1.5 metres;
- Have a minimum unobstructed clearance height of 4.5 metres and 3.5 metres carriageway width to the Collection Point(s), which includes all attachments such as vents, signage, and piping.

On large, difficult, or steep sites, or sites with multiple street frontages, it may be appropriate to have a number of bin storage rooms or areas, to minimise distances and facilitate collection.

A bin storage and service room must be located on each habitable floor, known as a Waste Level Room, containing either:

- The chute inlet(s) and enough room for the required number of mobile bins for residents to deposit their waste, recycling and organics, or
- Enough room for the required number of mobile bins for residents to deposit their waste, recycling and organics without chute inlet(s).

Waste Level Rooms must consider required safety measures, required ventilation, and required rotation and cleaning of bins.

A bin storage area in the basement or ground level stores extra bins used to rotate full bins in the bin storage and service rooms. This room may or may not have restricted access for residents.

The collection point must not be at the kerbside. All collections must be conducted on-site.

On-site Collection Points:

- be located where the bins are usually stored or on-site at a temporary holding area;
- be located so the collection vehicle, while servicing bins, does not obstruct the use of a driveway;
- be at street level or in a basement.

Additionally, the movement of bins from the bin storage area to the collection point shall meet the following requirements:

- bins of up to 360 L capacity - no more than 30 m;
- bins of 360-1100 L capacity - no more than 5 m;
- bins of more than 1100 L capacity - no more than 3 m.

The bin carting routes should be designed to be:

- direct and short as possible;
- without kerbs and steps;
- gradients more than 1:14 (or 1:30 where 660 or 1100 L bins are used);
- a minimum of 2 m wide with a hard, non-slip surface.

9.3.2 Bulky Waste Storage & Collection Point(s)

Council requires all Bulky Waste or Cleanup material to be stored within the confines of this type of development.

All such material shall be stored within dedicated room(s) or caged area(s) and designed to temporarily store discarded bulk items awaiting removal, such as old furniture and approved general household items. Bulky waste storage areas must be located at ground level or in a basement near the main bin storage area. If located at ground level the bulk storage area must be well screened from the front of the street to preserve the amenity of the streetscape.

The bulky waste storage area must:

- be readily accessible to all residents and located close to the main bin storage room;
- be secure and caged to allow the contents to be visible from the outside (when located in a basement);
- have a minimum doorway width of 2 metres to allow for easy movement of large waste items in and out of the room;
- Have a minimum clearance height of 4 metres.

The size of the bulky waste storage facility should be calculated as follows:

- $12m^2$ (4m x 3m) of space for developments of up to 40 dwellings, and
- then an additional $3m^2$ for every 10 dwellings thereafter, rounded up by increments of $3m^2$.

Additional bins should be considered to allow residents to recycle the following materials:

- Unwanted clothing;
- Printer cartridges;
- Household batteries;
- Fluorescent bulbs or tubs, or light bulbs;
- Mobile phones and accessories;
- E-waste; and,

- Expanded polystyrene.

The containers used to store these materials can be located in the bin storage room or in nominated areas of the building that are more likely to be frequented by residents and organised by the owners' corporation.

The size and type of containers for each of these material types vary from 240, 660 or 1100 litre mobile bins or in some cases may be a special container provided by a resource recovery or recycling contractor.

It is good practice to encourage and provide an opportunity for residents to recycle other general household waste items such as those listed above. Collection arrangements for these materials may be orgnaised and provided by commercial businesses or charities. Refer to the NSW EPA Better practice guide for resource recovery in residential developments for more details on how to plan for and collect these material types or contact Council.

9.3.3 Collection Vehicle Access

These types of developments are to be serviced through onsite collection. This means the council's collection vehicle will enter the property and service the development within the property boundary from a designated loading area.

The development must provide safe vehicle access and enable the waste collection vehicle to maneuver and load all allocated bins.

The on-site collection point must by located so it:

- Ensures all allocated bins are collected on-site, not impeding access to any vehicles or pedestrians;
- Has a height clearance of 4.5 metres, allowing for all ceiling or roof attachments such as vents, signage, and piping, for Collection Vehicles to access and service the site;
- Have a minimum unobstructed 3.5 metres carriageway width to the Collection Point(s), which includes all attachments such as vents, signage, and piping.
- Ensures vehicle can enter and exit the site in a forward driving direction; and,
- Ensures a swept path of 21 metres and a turning circle of 25 metres to accommodate the length of a Collection Vehicle to safely maneuver within the development.

9.4 Waste Management Equipment

The development design must allow for an on-site chute system, compaction unit and towing equipment (if applicable) which must be detailed in the Waste Management Plan.

9.4.1 Bin System

There are multiple innovative options available for a developer to consider when proposing a bin system for the site's waste, recycling, and organics management. These options include:

1. Innovative Model:
    a. An independent waste chute system; plus,
    b. An independent recycling chute system; plus,
    c. An independent organics chute system (from 2030).
2. Hybrid Model:
    a. A waste chute system; plus,
    b. An independent recycling chute system or a 240L recycling bin for every four units on each level at any given point in time; plus,
    c. An independent organics chute system (from 2030) or two 60L organics bins for every four units on each level at any given point in time (from 2030 when

FOGO is introduced) which are to be decanted into larger FOGO bins stored and collected from an approved bin storage area.

Council will preference a system that provides the best balance of automation, convenience, and best practice engineering for the site. Where bins are to be utilised on a particular level, as opposed to using a chute system, the Waste Management Plan must:

- Detail how these bins are to be effectively rotated by a caretaker, on-site managers, and/or other site representatives;
- Ensure that all the required waste, recycling bins; and including allowances for the implementation of organics bins from 2030; for each level can be stored in a dedicated bin storage and service room on each level, known as a Waste Level Room;
- Ensure that each Waste Level Room on each level provides ample space for all required bins to be easily and safely wheeled in and out, and for people to move freely and safely around within this bin storage and service room when all required bins are stored in this area;
- Ensure that the Waste Level Room on each level provides educational signage on what material is accepted and not accepted for each waste stream complying with current material acceptance rules; and,
- Ensure that a lift is available for bins to be safely wheeled from each level to the main bin storge areas located in an approved basement bin storage room or to and from an approved Collection Point.

Where no chute system is proposed for waste management, a detailed explanation is required detailing how this system cannot be or should not be used.

9.4.2 Waste, Recycling or Organics Chute

Waste, recycling, or organics chutes are vertical tubes that run though each floor of a building to the basement where it empties into standard mobile bins or bulk bins.

A waste, recycling or organics chute system must:

- Be conveniently accessed on each level from a common place shared room.
- Ensure appropriate educational signage.
- Be connected to an automated bin system located and collected in the basement.
- Ensure that a Caretaker maintain chutes and rotates bins under chute outlets.
- Provide clear signage to explain what each chute is for.
- Not be used for oversize material, such as cardboard.

9.4.3 On-Site Compaction Units

Where a chute system is proposed for collecting recyclable materials, compaction should not be permitted. This is because compacting recyclables breaks glass and causes contamination of paper and cardboard with glass particles.

Where a waste compaction system is utilised it is highly recommended to limit compaction ratio of waste to 2:1. This halves the amount of bins needed which has an impact on the waste bin storage room space and collection point space needed.

Over-compaction of waste can result in damage to bins, jamming of waste inside the bin and can make them heavy and difficult to move to the collection point. Council reserves the right to refuse to collect a bin that is deemed too heavy or unsafe to collect. Fees or costs may apply to replace broken bins due to over-compaction.

9.4.4 Other On-Site Equipment

Where mobile bins containing waste, recycling or organics are required or proposed to be emptied into bulk bins, suitable bin lifter equipment must be provided to eliminate the risks associated with manually lifting and emptying bins.

Where the bins need to be transported an excessive distance or there is a large number of bins to transport around the site, speciality bin moving equipment should be used.

Storage, manoeuvring and operating areas for waste management equipment such as tow tugs, tractors or other mechanical or self-powered towing equipment used to move bins around large sites, for example, from bin rooms to storage locations or collection points, must be designed to comply with all work, health and safety requirements.

9.5 Indemnity

Where on-site collection is required, Council will be required to be indemnified.

Council will require indemnity against claims for loss or damage to the pavement, other driving surfaces, structures and buildings. Council will also require indemnity against liabilities, losses, damages and any other demands arising from any on-site collection service.

A hazard risk assessment must be conducted before Council or its contractor will agree to undertake any service.

9.6 On-going Maintenance

Where a development is managed by an owners' corporation or a building strata agent, they must be responsible for managing waste and recycling generated on-site.

9.7 Innovation

Council encourages innovative design proposals for waste and recycling management. This may include, but is not limited to, the use of advanced collection systems. An innovative waste management proposal will be determined on merit.

10 Mixed Used Development

10.1 Applicability

Where the development includes a mix of residential and commercial premises, the design and operation of the waste management system needs to consider the different demands of these two uses, including preservation of residential amenity.

Applicable development types include ‘shop-top’ apartments with a mix of residential and commercial premises.

The following controls and requirements apply to all mixed-use residential developments:

- **Up to 4 residential storeys in height:** the controls specified in Section 7 - Residential Flat Buildings – Low to Medium Rise Units, also apply to the residential component of mixed-use developments.
- **Up to 7 residential storeys in height:** the controls specified in Section 8 - Residential Flat Buildings – Medium to High Rise Units, also apply to the residential component of mixed-use developments.
- **7 residential storeys or greater in height:** the controls specified in Section 9 - Residential Flat Buildings – High Rise Units also apply to the residential component of mixed-use developments.

Mixed-use developments must incorporate separate and self-contained waste management systems and storage areas for the residential component and the non-residential component.

Commercial tenants must be prevented by signage, walls, locked doors, and other means, from using the residential waste and recycling bins, and vice versa.

The residential and non-residential waste management systems must be designed so they can efficiently operate separately. Conflict could be caused, for example, by collection vehicles disrupting peak residential and commercial traffic flows or causing noise when residents are sleeping.

Tow tugs, tractors or other mechanical or self-powered towing equipment can be used to move bins around large sites. A parking space for towing equipment must be identified.

10.2 Residential Waste Generation & Service Requirements

Bayside Council has two (2) separate residential collection systems. One for the residents of the former Botany LGA and one for the former Rockdale LGA. Until this is harmonised, the following will apply:

For the residential component of all mixed-use buildings applicable to this Part please refer to the relevant residential section for Waste and Recycling Generation & Service Requirements:

- **Up to 4 residential storeys in height:** the controls specified in Section 7 - Residential Flat Buildings – Low to Medium Rise Units, also apply to the residential component of mixed-use developments.
- **Up to 7 residential storeys in height:** the controls specified in Section 8 - Residential Flat Buildings – Medium to High Rise Units, also apply to the residential component of

mixed-use developments.

- **7 residential storeys or greater in height:** the controls specified in Section 9 - Residential Flat Buildings – High Rise Units also apply to the residential component of mixed-use developments.

10.3 Commercial Waste Generation & Service Requirements

For the commercial component of all mixed-use buildings applicable to this Part the following Waste and Recycling Generation Rates will apply:

Type Premises	Waste Generation	Recycling Generation
Butcher	80L/100sqm floor area/day	40L/100sqm floor area/day
Delicatessen	80L/100sqm floor area/day	40L/100sqm floor area/day
Fish Shop	80L/100sqm floor area/day	40L/100sqm floor area/day
Fruit and Vegetables	240L/100sqm floor area/day	120L/100sqm floor area/day
Supermarkets	660L/100sqm floor area/day	240L/100sqm floor area/day
Restaurants	660L/100sqm floor area/day	130L/100sqm floor area/day
Takeaway Food Shops	80L/100sqm floor area/day	40L/100sqm floor area/day
Cafes	80L/100sqm floor area/day	40L/100sqm floor area/day
Hairdressers	60L/100sqm floor area/day	30L/100sqm floor area/day
Retail Shops (No food) Floor Area less than 100sqm	50L/100sqm floor area/day	25L/100sqm floor area/day
Retail Shops (No food) Floor Area less than 100sqm	50L/100sqm floor area/day	50L/100sqm floor area/day
Offices	10L/100sqm floor area/day	10L/100sqm floor area/day
Showrooms	40L/100sqm floor area/day	10L/100sqm floor area/day
Boarding Houses	80L/100sqm floor area/day	40L/100sqm floor area/day
Backpacker Accommodation	40L/100sqm floor area/day	20L/100sqm floor area/day
Hotel (No Restaurant)	50L/100sqm floor area/day	40L/100sqm floor area/day
Licensed Premises (Pub or Club)	50L/100sqm floor area/day	40L/100sqm floor area/day
Motel (No restaurant)	5L/bed/day	1L/bed/day

IMPLEMENTATION OF FOOD ORGANIC GARDEN ORGANICS BIN SYSTEM

By 2025, food waste from targeted businesses and other entities that generate the highest volumes, including large supermarkets, and hospitality businesses will require a separate collection. At the point of transitioning the above detailed waste generation per 100 sqm of floor area/day will need to be adjusted to accommodate the new service. These commercial sites need to account for this NSW Government mandate in their development application and waste management plan(s).

10.4 Bin Dimensions

The bin dimension for the abovementioned buildings are:

Bin Type	Height (mm)	Depth (mm)	Width (mm)
60-litre (L)	640	497	444
240-litre (L)	1080	735	580
660-litre (L)	1250	850	1370
1100-litre (L)	1485	1280	1370

Smaller 60 L bins can be incorporated in the waste management plan by placing these on each Waste Level Room(s) only for FOGO interim or temporary storage as discussed in 10.6.1 Residential Bin System.

Where possible the 240L waste bins may be converted to 660L or 1100L bin types and calculated at the rate mentioned in each relevant section of this document. Please consult Council prior to submitting DA and Waste Management Plan to see if this request is possible.

These dimensions are only a guide and differ slightly according to manufacturer, whether bins have flat or dome lids and what devices bins are lifted with.

Collections from the commercial component of the development can also be provided by Council in the bin sizes specified above.

Collections from the commercial component of the building may also be provided by a licensed private waste, recycling and/or collection contractor. The details of private collection to be conducted onsite must be included in the WMP to be submitted for Council to review and approve prior to a development application approval.

10.5 Design Control

The following controls and requirements are in addition to those detailed in Section 4 of this Waste Management DCP. Separate waste storage areas are to be provided for both the residential and commercial components of the development.

10.5.1 Residential Bin Storage & Collection Point(s)

Refer to the relevant section of this document for the residential component of the development:

- **Up to 4 residential storeys in height:** the controls specified in Section 7 - Residential Flat Buildings – Low to Medium Rise Units, also apply to the residential component of mixed-use developments.
- **Up to 7 residential storeys in height:** the controls specified in Section 8 - Residential Flat Buildings – Medium to High Rise Units, also apply to the residential component of mixed-use developments.
- **7 residential storeys or greater in height:** the controls specified in Section 9 - Residential Flat Buildings – High Rise Units also apply to the residential component of mixed-use developments.

Separate waste storage areas are to be provided for both the residential and commercial components of the development.

10.5.2 Commercial Bin Storage & Collection Point(s)

This should be a separate area from the residential area. As mentioned, commercial tenants must be prevented by signage, walls, locked doors, and other means, from using the residential waste and recycling bins, and vice versa.

A bin storage area or areas is/are to be:

- located to minimise adverse visual impact on the public domain. It should be positioned behind the front building line of the dwelling. Where it is located within the front setback it must be incorporated into the building's design or be screened by vegetation;
- located to avoid nuisances such as odour and noise to adjoining residential properties;
- designed so that it capable of accommodating all Council allocated bins;
- designed and located so that there is unobstructed and convenient access to the collection point;
- designed and located so not to require bins to be transported through the interior of the dwelling.

An on-site communal bin storage area or areas will need to be provided for the development, that has been designed in accordance with Section 4 of this document.

The design and location of bin storage areas must be integrated into the design of the overall development and compliment the surrounding streetscape. Materials and finishes visible from the outside should be similar in style and quality to the external materials used in the rest of the development.

The location of the waste and recycling rooms or area must:

- provide direct and convenient access for the occupants of the development;
- not impact on the amenity of occupants in and adjoining the development in relation to visual amenity, noise and odour;
- not obstruct on- or off-street car parking, driveways, footpaths, landscaping and trees
- comply with Australian Standards;
- comply with the Building Code of Australia;
- be designed to look acceptable from the street;
- be within 10 meters of the layback where an approved and applicable Wheel Out – Wheel Back collection service is to occur;
- not require residents to carry waste to the storage area more than 30 metres from their dwelling (not counting vertical space);
- be a minimum door width of 1.5 metres;
- have a minimum unobstructed clearance height of 4 metres, which includes all attachments such as vents, signage, and piping.

On large, difficult, or steep sites, or sites with multiple street frontages, it may be appropriate to have a number of bin storage rooms or areas, to minimise distances and facilitate collection.

A bin storage and service room must be located on each habitable floor, known as a Waste Level Room, containing either:

- The chute inlet(s) and enough room for the required number of mobile bins for residents to deposit their waste, recycling and organics, or
- Enough room for the required number of mobile bins for residents to deposit their waste, recycling and organics without chute inlet(s).

Waste Level Rooms must consider required safety measures, required ventilation, and required rotation and cleaning of bins.

A bin storage area in the basement or ground level stores extra bins used to rotate full bins in the bin storage and service rooms. This room may or may not have restricted access for residents.

The collection point must not be at the kerbside. All collections must be conducted on-site.

On-site Collection Points:

- be located where the bins are usually stored or on-site at a temporary holding area;
- be located so the collection vehicle, while servicing bins, does not obstruct the use of a driveway;
- be at street level or in a basement.

Additionally, the movement of bins from the bin storage area to the collection point shall meet the following requirements:

- bins of up to 360 L capacity - no more than 30 m;
- bins of 360-1100 L capacity - no more than 5 m;
- bins of more than 1100 L capacity - no more than 3 m.

The bin carting routes should be designed to be:

- direct and short as possible;
- without kerbs and steps;
- gradients more than 1:14 (or 1:30 where 660 or 1100 L bins are used);
- a minimum of 2 m wide with a hard, non-slip surface.

10.5.3 Residential Bulky Waste Storage & Collection Point(s)

Council requires all Bulky Waste or Cleanup material to be stored within the confines of this type of development. *This service is not to be used by the commercial component of the development.*

All such material shall be stored within dedicated room(s) or caged area(s) and designed to temporarily store discarded bulk items awaiting removal, such as old furniture and approved general household items. Bulky waste storage areas must be located at ground level or in a basement near the main bin storage area. If located at ground level the bulk storage area must be well screened from the front of the street to preserve the amenity of the streetscape.

The bulky waste storage area must:

- be readily accessible to all residents and located close to the main bin storage room;
- be secure and caged to allow the contents to be visible from the outside (when located in a basement);
- have a minimum doorway width of 2 metres to allow for easy movement of large waste items in and out of the room;
- Have a minimum clearance height of 4 metres.

The size of the bulky waste storage facility should be calculated as follows:

- $12m^2$ (4m x 3m) of space for developments of up to 40 residential dwellings, and
- then an additional $3m^2$ for every 10 residential dwellings thereafter, rounded up by increments of $3m^2$.

Additional bins should be considered to allow residents to recycle the following materials:

- Unwanted clothing;

- Printer cartridges;
- Household batteries;
- Fluorescent bulbs or tubs, or light bulbs;
- Mobile phones and accessories;
- E-waste; and,
- Expanded polystyrene.

The containers used to store these materials can be located in the bin storage room or in nominated areas of the building that are more likely to be frequented by residents and organised by the owners' corporation.

The size and type of containers for each of these material types vary from 240, 660 or 1100 litre mobile bins or in some cases may be a special container provided by a resource recovery or recycling contractor.

It is good practice to encourage and provide an opportunity for residents to recycle other general household waste items such as those listed above. Collection arrangements for these materials may be orgnaised and provided by commercial businesses or charities. Refer to the NSW EPA Better practice guide for resource recovery in residential developments for more details on how to plan for and collect these material types or contact Council.

10.5.4 Collection Vehicle Access

These types of developments are to be serviced through onsite collection. This means the council's collection vehicle will enter the property and service the development within the property boundary from a designated loading area.

Waste and recycling collections for the residential component of the building will be carried out by Council.

Collections to the commercial component of the development can also be carried out by Council but may also be carried out by a licensed private waste, recycling cand/or organics collection contractor. The details of private collection to be conducted onsite must be included in the WMP to be submitted for Council to review and approve prior to a development application approval.

Irrespective of whether Council services the entire development, all collections shall take place as described in this Section 4 of this document.

The collection point and method of waste collection for the development must be nominated on the WMP and architectural drawings.

The development must provide safe vehicle access and enable the waste collection vehicle to maneuver and load all allocated bins.

The on-site collection point(s) must by located so it:

- Ensures all allocated bins are collected on-site, not impeding access to any vehicles or pedestrians;
- Has a height clearance of 4.5 metres, allowing for all ceiling or roof attachments such as vents, signage, and piping, for Collection Vehicles to access and service the site;
- Have a minimum unobstructed 3.5 metres carriageway width to the Collection Point(s), which includes all attachments such as vents, signage, and piping.
- Ensures vehicle can enter and exit the site in a forward driving direction; and,
- Ensures a swept path of 21 metres and a turning circle of 25 metres to accommodate the length of a Collection Vehicle to safely maneuver within the development.

10.6 Waste Management Equipment

The residential component of the development design must allow for an on-site chute system, compaction unit and towing equipment (if applicable) which must be detailed in the Waste Management Plan.

10.6.1 Residential Bin System

There are multiple innovative options available for a developer to consider when proposing a bin system for the site's waste, recycling and organics management. These options include:

1. Innovative Model:
    a. An independent waste chute system; plus,
    b. An independent recycling chute system; plus,
    c. An independent organics chute system (from 2030).
2. Hybrid Model:
    a. A waste chute system; plus,
    b. An independent recycling chute system or a 240L recycling bin for every four units on each level at any given point in time; plus,
    c. An independent organics chute system (from 2030) or two 60L organics bins for every four units on each level at any given point in time (from 2030 when FOGO is introduced) which are to be decanted into larger FOGO bins stored and collected from an approved bin storage area.

Council will preference a system that provides the best balance of automation, convenience, and best practice engineering for the site. Where bins are to be utilised on a particular level, as opposed to using a chute system, the Waste Management Plan must:

- Detail how these bins are to be effectively rotated by a caretaker, on-site managers, and/or other site representatives;
- Ensure that all the required waste, recycling bins; and including allowances for the implementation of organics bins from 2030; for each level can be stored in a dedicated bin storage and service room on each level, known as a Waste Level Room;
- Ensure that each Waste Level Room on each level provides ample space for all required bins to be easily and safely wheeled in and out, and for people to move freely and safely around within this bin storage and service room when all required bins are stored in this area;
- Ensure that the Waste Level Room on each level provides educational signage on what material is accepted and not accepted for each waste stream complying with current material acceptance rules; and,
- Ensure that a lift is available for bins to be safely wheeled from each level to the main bin storge areas located in an approved basement bin storage room or to and from an approved Collection Point.

Where no chute system is proposed for waste management, a detailed explanation is required detailing how this system cannot be or should not be used.

10.6.2 Waste, Recycling or Organics Chute

Waste or recycling chutes are vertical tubes that run though each floor of a building to the basement where it empties into standard mobile bins or bulk bins.

A waste or recycling chute system must:

- Be conveniently accessed on each level from a common place shared room.

- Ensure appropriate educational signage.
- Be connected to an automated bin system located and collected in the basement.
- Ensure that a Caretaker maintain chutes and rotates bins under chute outlets.
- Provide clear signage to explain what each chute is for.
- Not be used for oversize material, such as cardboard.

10.6.3 On-Site Compaction Units

Where a chute system is proposed for collecting recyclable materials, compaction should not be permitted. This is because compacting recyclables breaks glass and causes contamination of paper and cardboard with glass particles.

Where a waste compaction system is utilised it is highly recommended to limit compaction ratio of waste to 2:1. This halves the amount of bins needed which has an impact on the waste bin storage room space and collection point space needed.

Over-compaction of waste can result in damage to bins, jamming of waste inside the bin and can make them heavy and difficult to move to the collection point. Council reserves the right to refuse to collect a bin that is deemed too heavy or unsafe to collect. Fees or costs may apply to replace broken bins due to over-compaction.

10.6.4 Other On-Site Equipment

Where mobile bins containing waste, recycling or organics are required or proposed to be emptied into bulk bins, suitable bin lifter equipment must be provided to eliminate the risks associated with manually lifting and emptying bins.

Where the bins need to be transported an excessive distance or there is a large number of bins to transport around the site, speciality bin moving equipment should be used.

Storage, manoeuvring and operating areas for waste management equipment such as tow tugs, tractors or other mechanical or self-powered towing equipment used to move bins around large sites, for example, from bin rooms to storage locations or collection points, must be designed to comply with all work, health and safety requirements.

10.7 Indemnity

Where on-site collection is required, Council will be required to be indemnified.

Council will require indemnity against claims for loss or damage to the pavement, other driving surfaces, structures and buildings. Council will also require indemnity against liabilities, losses, damages and any other demands arising from any on-site collection service.

A hazard risk assessment must be conducted before Council or its contractor will agree to undertake any service.

10.8 On-going Maintenance

Where a development is managed by an owners' corporation or a building strata agent, they must be responsible for managing waste and recycling generated on-site.

10.9 Innovation

Council encourages innovative design proposals for waste and recycling management. This may include, but is not limited to, the use of advanced collection systems. An innovative waste management proposal will be determined on merit.

11 Commercial Development

11.1 Applicability

Non-residential premises provide a range of waste management and resource recovery opportunities and requirements. Flexibility in size and layout is often required to cater for the different needs of multiple tenants as well as future changes in use.

Resources such as EPA 2012, Better practice guidelines for waste management and recycling in commercial and industrial facilities should be used to inform design of these developments.

The controls and requirements below must also be considered when referring to Section 5A.26: Garbage and waste storage of State Environmental Planning Policy 2008 -Exempt and Complying Development Codes. This section provides waste storage development standards for all industrial and commercial developments.

This Section, Section 11, covers commercial and other non-residential premises such as shops, offices, business premises, food retailers and wholesalers, hotels, motels, licensed clubs, educational institutions and entertainment facilities.

11.2 Waste Generation & Service Requirements

Type Premises	Waste Generation	Recycling Generation
Butcher	80L/100sqm floor area/day	40L/100sqm floor area/day
Delicatessen	80L/100sqm floor area/day	40L/100sqm floor area/day
Fish Shop	80L/100sqm floor area/day	40L/100sqm floor area/day
Fruit and Vegetables	240L/100sqm floor area/day	120L/100sqm floor area/day
Supermarkets	660L/100sqm floor area/day	240L/100sqm floor area/day
Restaurants	660L/100sqm floor area/day	130L/100sqm floor area/day
Takeaway Food Shops	80L/100sqm floor area/day	40L/100sqm floor area/day
Cafes	80L/100sqm floor area/day	40L/100sqm floor area/day
Hairdressers	60L/100sqm floor area/day	30L/100sqm floor area/day
Retail Shops (No food) Floor Area less than 100sqm	50L/100sqm floor area/day	25L/100sqm floor area/day
Retail Shops (No food) Floor Area less than 100sqm	50L/100sqm floor area/day	50L/100sqm floor area/day
Offices	10L/100sqm floor area/day	10L/100sqm floor area/day
Showrooms	40L/100sqm floor area/day	10L/100sqm floor area/day
Boarding Houses	80L/100sqm floor area/day	40L/100sqm floor area/day
Backpacker Accommodation	40L/100sqm floor area/day	20L/100sqm floor area/day

Hotel (No Restaurant)	50L/100sqm floor area/day	40L/100sqm floor area/day
Licensed Premises (Pub or Club)	50L/100sqm floor area/day	40L/100sqm floor area/day
Motel (No restaurant)	5L/bed/day	1L/bed/day

By 2025, food waste from targeted businesses and other entities that generate the highest volumes, including large supermarkets, and hospitality businesses will require a separate collection. At the point of transitioning the above detailed waste generation per 100 sqm of floor area/day will need to be adjusted to accommodate the new service.

11.3 Bin Dimensions

The bin dimension for the abovementioned buildings are:

Bin Type	Height (mm)	Depth (mm)	Width (mm)
240-litre	1080	735	580
660-litre	1250	850	1370
1100-litre	1485	1280	1370

Where possible the 240L waste bins may be converted to 660L or 1100L bin types and calculated at the rate mentioned in each relevant section of this document. Please consult Council prior to submitting DA and Waste Management Plan to see if this request is possible.

These dimensions are only a guide and differ slightly according to manufacturer, whether bins have flat or dome lids and what devices bins are lifted with.

Collections from the commercial component of the development can also be provided by Council in the bin sizes specified above.

Collections from the commercial component of the building may also be provided by a licensed private waste, recycling and/or organics collection contractor. The details of private collection to be conducted onsite must be included in the WMP to be submitted for Council to review and approve prior to a development application approval.

11.4 Design Control

The following controls and requirements are in addition to those detailed in Section 4 of this Waste Management DCP.

The following controls and requirements apply to all commercial developments and change of use.

A Waste Management Plan must accompany the application. Plans submitted with the OWMP must show:

- the location of the designated waste and recycling storage room(s) or areas, sized to meet the waste and recycling needs of all tenants.
- the location of temporary waste and recycling storage areas within each tenancy. These are to be of sufficient size to store a minimum of one day's worth of waste.

- the collection point for emptying waste, recycling and organics bins.
- the path of travel for moving bins from the storage area to the identified collection point (if collection is to occur away from the storage area).
- The on-site path of travel for collection vehicles (if collection is to occur on-site).

The waste and recycling storage area or rooms, must be designed and constructed in accordance with the requirements of the Building Code of Australia

The waste and recycling storage room must be able to accommodate bins that are of sufficient volume to contain the quantity of waste generated at the rate described in Section 11.

There must be convenient access from each tenancy to the waste and recycling storage areas.

Waste storage and collection areas must be:

- step free;
- located away from primary street frontages;
- suitably screened from public areas to reduce the impacts of noise, odour and lack of visual amenity;
- designed and located to consider possible traffic hazards.

The development must be designed to allow access by collection vehicles used by the nominated waste contractor. Wherever possible, the site must be configured to allow collection vehicles to enter and exit in a forward direction, so the collection vehicles do not impede general access to, from and within the site.

Between collection periods, all waste and recycling generated on-site must be kept in enclosed bins with securely fitting lids so the contents cannot leak or overflow.

Bins must be stored in the designated waste and recycling storage areas.

Waste management facilities must be suitably enclosed, covered and maintained so as to prevent polluted wastewater runoff from entering the stormwater system.

Arrangements must be in all parts of the development for:

- waste to be separated into the following streams: paper and cardboard, recyclables, general waste and where applicable industrial process type waste;
- the movement of bins for recycling and general waste to the main waste and recycling storage room or area.

For multi-storey buildings, a goods lift may be needed to move bins to the main waste and recycling storage room or area.

Tow tugs, tractors or other mechanical or self-powered towing equipment can be used to move bins around large sites. A parking space for towing equipment must be identified.

Standard and consistent signage that complies with the Council's or NSW EPA's standard signage on how to use waste management facilities should be clearly displayed (visit www.epa.nsw.gov.au/wastetools/signs-posters-symbols.htm and see **Appendix D**).

The type and capacity of containers used to hold waste and recycling must be compatible with the Council's or nominated waste contractor's collection practices.

Waste and recycling bins should be collected on-site or from a rear lane access point where the laneway is wide enough to allow a Heavy Rigid (HR) class vehicle to manoeuvre through it, then enter and exit the site in a forward direction.

Should a collection vehicle be required to enter the property, the driveway and manoeuvring area must be suitable for a collection vehicle in terms of strength, gradient, design and manoeuvrability.

The time of day when bins are collected should minimise adverse impacts on nearby residential properties, pedestrian movements and vehicle movements.

The size and layout of the waste and recycling storage room or area must be able to accommodate reasonable future changes in use of the development.

A waste and recycling cupboard must be provided for each and every kitchen area in a development, including kitchen areas in hotel rooms, motel rooms and staff food preparation areas.

Premises which generate at least 50 L per day of meat, seafood or poultry waste must have that waste collected daily or must store it in a dedicated and refrigerated waste storage area until collection.

Clinical or hazardous and liquid waste should be placed in specialised containment bins and collected by specialised service providers.

Waste management facilities must be regularly maintained and cleaned.

Tenants and cleaners must be aware of their obligations to ensure all waste management activities and carried out efficiently, and that the impact on the principles of health, safety and convenience are minimised.

Any garbage chutes must be designed in accordance with the requirements of **Appendix C**, the Building Code of Australia and the EPA's Better practice guide for waste management in multi-unit dwellings.

Waste chutes are suitable for general waste and mixed recycling but not for separated glass.

Premises that discharge trade wastewater must do so only in accordance with a written agreement from the local sewer authority. In the Sydney Metropolitan Area (SMA) this is Sydney Water.

Sydney Water defines trade wastewater as "any liquid, and any substance contained in it, which may be produced at the premises in an industrial and commercial activity, but does not include domestic wastewater (e.g. from hand-basins, showers and toilets)."

All tenants must keep written evidence on-site of a valid contract with a licensed waste contractor for the regular collection and disposal of all the waste streams and recyclables generated on-site.

11.4.1 Bin Storage & Collection Point(s)

A bin storage area or areas is/are to be:

- located to minimise adverse visual impact on the public domain. It should be positioned behind the front building line of the dwelling. Where it is located within the front setback it must be incorporated into the building's design or be screened by vegetation;
- located to avoid nuisances such as odour and noise to adjoining residential properties;
- designed so that it capable of accommodating all required allocated bins;
- designed and located so that there is unobstructed and convenient access to the collection point;

- designed and located so not to require bins to be transported through the interior of the dwelling.

An on-site communal bin storage area or areas will need to be provided for the development, that has been designed in accordance with Section 4 of this document.

The design and location of bin storage areas must be integrated into the design of the overall development and compliment the surrounding streetscape. Materials and finishes visible from the outside should be similar in style and quality to the external materials used in the rest of the development.

The location of the waste, recycling and organics room(s) or area(s) must:
- provide direct and convenient access for the occupants of the development;
- not impact on the amenity of occupants in and adjoining the development in relation to visual amenity, noise and odour;
- not obstruct on- or off-street car parking, driveways, footpaths, landscaping and trees
- comply with Australian Standards;
- comply with the Building Code of Australia;
- be designed to look acceptable from the street;
- be within 10 meters of the layback where an approved and applicable Wheel Out – Wheel Back collection service is to occur;
- not require residents to carry waste to the storage area more than 30 metres from their dwelling (not counting vertical space);
- be a minimum door width of 1.5 metres;
- have a minimum unobstructed clearance height of 4 metres, which includes all attachments such as vents, signage, and piping.

On large, difficult, or steep sites, or sites with multiple street frontages, it may be appropriate to have a number of bin storage rooms or areas, to minimise distances and facilitate collection.

Kerbside collection point(s) are not preferred and it is recommended that Council is notified early in the design stage if a kerbside collection is proposed.

On-site Collection Points:
- be located where the bins are usually stored or on-site at a temporary holding area;
- be located so the collection vehicle, while servicing bins, does not obstruct the use of a driveway;
- be at street level or in a basement.

Additionally, the movement of bins from the bin storage area to the collection point shall meet the following requirements:
- bins of up to 360 L capacity - no more than 30 m;
- bins of 360-1100 L capacity - no more than 5 m;
- bins of more than 1100 L capacity - no more than 3 m.

The bin carting routes should be designed to be:
- direct and short as possible;
- without kerbs and steps;
- gradients more than 1:14 (or 1:30 where 660 or 1100 L bins are used);
- a minimum of 2 m wide with a hard, non-slip surface.

11.4.2 Collection Vehicle Access

It is preferred that these types of developments are to be serviced through onsite collection. This means the council's collection vehicle or an authorised collections contractor will enter

the property and service the development within the property boundary from a designated loading area.

Collections to the commercial component of the development can also be carried out by Council but may also be carried out by a licensed private waste, recycling and/or collection contractor. The details of private collection to be conducted onsite must be included in the WMP to be submitted for Council to review and approve prior to a development application approval.

Irrespective of whether Council services the entire development, all collections shall take place as described in this Section 11 of the document.

The collection point and method of waste collection for the development must be nominated on the WMP and architectural drawings.

The development must provide safe vehicle access and enable the waste collection vehicle to maneuver and load all allocated bins.

A developer may propose a kerbside collection solution for smaller or complex sites for Council to evaluate. Council recommends having these discussions early in the design stage prior DA submission. Since placing bins on public land is the domain of Council, kerbside collections will only be permissible by condition that Council undertake the commercial services, if the development is deemed appropriate to require this type of service instead of on-site collection (which is preferred). The kerbside collection point must by located so it:

- Allows for all allocated bins to be presented in single file with a minimum 30 cm gap between bins (where two bins per dwelling are presented at for collection each week).
- Ensure all allocated bins are placed within the site's allocated frontage, not in the driveway and not in front of neighbouring lots.
- Has a separation distance of 2 m from street trees, bus stops, street furniture and road infrastructure such as roundabouts and speed humps.
- Has a height clearance of 4.5 m from overhanging tree branches, powerlines and other obstructions be on an active driveway or prevent pedestrian access.

The on-site collection point(s) must by located so it:

- Ensures all allocated bins are collected on-site, not impeding access to any vehicles or pedestrians;
- Has a height clearance of 4.5 metres, allowing for all ceiling or roof attachments such as vents, signage, and piping, for Collection Vehicles to access and service the site;
- Have a minimum unobstructed 3.5 metres carriageway width to the Collection Point(s), which includes all attachments such as vents, signage, and piping.
- Ensures vehicle can enter and exit the site in a forward driving direction; and,
- Ensures a swept path of 21 metres and a turning circle of 25 metres to accommodate the length of a Collection Vehicle to safely maneuver within the development.

11.6 Waste Management Equipment

11.6.1 Bin System

There are multiple innovative options available for a developer to consider when proposing a bin system for the site's waste, recycling and organics management.

Council will preference a system that provides the best balance of automation, convenience, and best practice engineering for the site. Where bins are to be utilised on a particular level, as opposed to using a chute system, the Waste Management Plan must:

- Detail how these bins are to be effectively rotated by a caretaker, on-site managers, and/or other site representatives;
- Ensure that all the required waste, recycling bins; and including allowances for the implementation of organics bins from 2030; for each level can be stored in a dedicated bin storage and service room on each level, known as a Waste Level Room;
- Ensure that each Waste Level Room on each level provides ample space for all required bins to be easily and safely wheeled in and out, and for people to move freely and safely around within this bin storage and service room when all required bins are stored in this area;
- Ensure that the Waste Level Room on each level provides educational signage on what material is accepted and not accepted for each waste stream complying with current material acceptance rules; and,
- Ensure that a lift is available for bins to be safely wheeled from each level to the main bin storge areas located in an approved basement bin storage room or to and from an approved Collection Point.

Where no chute system is proposed for waste management, a detailed explanation is required detailing how this system cannot be or should not be used.

11.6.2 Waste, Recycling or Organics Chute

Waste or recycling chutes are vertical tubes that run though each floor of a building to the basement where it empties into standard mobile bins or bulk bins.

A waste or recycling chute system must:

- Be conveniently accessed on each level from a common place shared room.
- Ensure appropriate educational signage.
- Be connected to an automated bin system located and collected in the basement.
- Ensure that a Caretaker maintain chutes and rotates bins under chute outlets.
- Provide clear signage to explain what each chute is for.
- Not be used for oversize material, such as cardboard.

11.6.3 On-Site Compaction Units

Where a chute system is proposed for collecting recyclable materials, compaction should not be permitted. This is because compacting recyclables breaks glass and causes contamination of paper and cardboard with glass particles.

Where a waste compaction system is utilised it is highly recommended to limit compaction ratio of waste to 2:1. This halves the amount of bins needed which has an impact on the waste bin storage room space and collection point space needed.

Over-compaction of waste can result in damage to bins, jamming of waste inside the bin and can make them heavy and difficult to move to the collection point. Council reserves the right to refuse to collect a bin that is deemed too heavy or unsafe to collect. Fees or costs may apply to replace broken bins due to over-compaction.

11.6.4 Other On-Site Equipment

Where mobile bins containing waste, recycling or organics are required or proposed to be emptied into bulk bins, suitable bin lifter equipment must be provided to eliminate the risks associated with manually lifting and emptying bins.

Where the bins need to be transported an excessive distance or there is a large number of bins to transport around the site, speciality bin moving equipment should be used.

Storage, maneuvering and operating areas for waste management equipment such as tow tugs, tractors or other mechanical or self-powered towing equipment used to move bins around large sites, for example, from bin rooms to storage locations or collection points, must be designed to comply with all work, health and safety requirements.

11.7 Indemnity

Where on-site collection is required, Council will be required to be indemnified.

Council will require indemnity against claims for loss or damage to the pavement, other driving surfaces, structures and buildings. Council will also require indemnity against liabilities, losses, damages and any other demands arising from any on-site collection service.

A hazard risk assessment must be conducted before Council or its contractor will agree to undertake any service.

11.8 On-going Maintenance

Where a development is managed by an owners' corporation or a building strata agent, they must be responsible for managing waste and recycling generated on-site.

11.9 Innovation

Council encourages innovative design proposals for waste and recycling management. This may include, but is not limited to, the use of advanced collection systems. An innovative waste management proposal will be determined on merit.

12 Industrial Development

12.1 Applicability

Industrial developments typically produce a diverse range of waste types. Some of these wastes may be hazardous, so their storage and handling must comply with certain regulations, standards and protocols in addition to any specifications in this chapter. Other waste products are similar in nature to commercial and domestic waste streams. Mixing waste products limits potential reuse and recycling opportunities and may distribute toxic material through a larger volume of wastes.

This section, section 12, includes light and general industry as defined in the Standard Instrument - Principal Local Environmental Plan and includes uses such as industrial retail outlet, industrial training facility, vehicle body repair workshop, warehouse of distribution centre and storage premises.

12.2 Controls & Requirements

The following controls and requirements apply to all industrial developments.

The controls and requirements outlined in section 11 of this document, pertaining to commercial developments also comply to industrial developments.

A waste Management Plan shall accompany the application. Plans submitted must show:

- The location of designated waste and recycling storage room(s) or areas sized to meet the waste and recycling needs of all tenants. Waste should be separated into at least 4 streams, paper/cardboard, recyclables, general waste, industrial process type wastes; and,
- The on-site path of travel for collection vehicles.

WMPs submitted with the DA must show evidence of compliance with any specific industrial waste laws and protocols, for example, those related to production, storage and disposal of industrial and hazardous wastes as defined by the POEO Act.

Appropriate laws, standards, guidelines and protocols associated with the production, storage and disposal of hazardous wastes must be complied with.

13 Appendices

13.1 Appendix A - Reuse & recycling potential of construction & demolition (C & D) material

The following Table describes the type of materials found in a building as a result of the demolition and construction stages of a development, and their potential for reuse and recycling.

Table 1 - Reuse & Recycling Potential of Building Materials

Material	Reuse and Recycling Potential
Concrete	Can be reused for filling, levelling or road base
Bricks and pavers	Can be cleaned for reuse, or rendered over, or crushed for use in landscaping and driveways
Roof tiles	Can be cleaned and reused, or crushed for use in landscaping and driveways
Untreated timber	Can be reused as floorboards, fencing or furniture; mulched; or sent to second-hand timber suppliers
Treated timber	Can be reused as formwork, bridging, blocking and propping; or sent to second-hand timber suppliers
Doors, windows, fittings	Can be sent to second-hand suppliers
Glass	Can be reused as glazing or aggregate for concrete production
Metals (fittings, appliances and wiring)	Can be recycled
Synthetic rubber (carpet underlay)	Can be reprocessed for use in safety devices and speed humps
Significant trees	Can be relocated either on-site or off-site
Overburden	Can be power screened and used as topsoil
Garden organics	Can be mulched or composted
Carpet	Can be recycled or reused in landscaping
Plasterboard	Can be recycled or returned to supplier
Plumbing and metal fittings	Can be recycled off-site

Materials that can be reused or recycled should not be disposed of to landfill. The table above provides a list of some potential reuse and recycling options.

WMP's should include these and other options for recycling and reuse.

13.2 Appendix B - Waste Management Plan Template

The following Table provides an example of a Waste Management Plan Template that may be used by proponents when submitting a WMP with the DA for a proposed development.

The WMP Template covers all three (3) stages of the development:

- Demolition;
- Construction; and,
- On-Going Use.

BAYSIDE COUNCIL - WASTE MANAGEMENT PLAN TEMPLATE	
Applicant and Project Details	
Applicant Details	
Application Number	
Name	
Address	
Telephone	
E-Mail	
Project details	
Address of Development	
Existing buildings and other structures currently on-site	
Description of proposed development	
This development achieves the waste objectives set out in the DCP. The details on this form are the provisions and intentions for minimising waste relating to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as the local council, the NSW EPA or WorkSafe NSW.	
Name:	
Signature:	
Date:	

13.2.1 Stage 1 - Demolition
(Refer to Section 2 of this document)

Type of Waste Material Generated	Estimate of quantity by volume (m^3) or weight (t) or Area (m^2)			Specify method of on-site reuse or recycling, specify off-site recycling facility and the contractor for waste disposal specify the contractor and landfill site to be used
	Reuse	Recycling	Disposal	
Excavation material				
Timber (specify)				
Soil				
Concrete				
Bricks and pavers				
Tiles				
Metals (specify)				
Glass				
Furniture				
Fixtures and fittings				
Floor coverings				
Non-standard pallets				
Plastic film				
Garden organics				
Containers - cans, plastic, glass				
Paper and cardboard				
Residual non-recyclable waste				
Asbestos				
Hazardous or special waste (specify)				
Other (specify)				

The following checklist is designed to help ensure the WMP is accompanied by sufficient information to allow the application to be assessed.

Drawings are to be submitted to scale, clearly indicating the location of, and provisions for, the storage and collection of waste and recycling during demolition.

Do the WMP and drawings show:	Tick 'YES'	Drawing Reference
Size and location(s) of waste storage area(s)		
Access for waste collection vehicles		
Areas to be excavated		
Types and numbers of storage bins likely to be required		
Signage required to facilitate correct use of storage facilities		

13.2.2 Stage 2 - Construction

(Refer to Section 3 of this document)

Type of Waste Generated	Estimate of quantity by volume (m^3) or weight (t)			Specify method of on-site reuse, contractor and recycling outlet and/or waste depot to be used
	Reuse	Recycling	Disposal	
Excavation material				
Timber (specify)				
Soil				
Concrete				
Bricks and pavers				
Tiles				
Metals (specify)				
Glass				
Plasterboard				
Fixtures and fittings				
Floor coverings				
Non-standard pallets				
Plastic film				
Garden organics				
Containers (cans, plastic, glass)				
Paper/cardboard				
Residual non-recyclable waste				
Asbestos				
Hazardous/special waste (specify)				
Other (specify)				

Construction Design (All Types of Developments)
Outline how measures for waste avoidance have been incorporated into the design, material purchasing and construction techniques of the development.

The following checklist is designed to help ensure the CWMP is accompanied by sufficient information to allow the application to be assessed.

Drawings are to be submitted to scale, clearly indicating the location of, and provisions for, the storage and collection of waste and recycling during construction.

Do the WMP and drawings show:	Tick 'YES'	Drawing Reference
Size and location(s) of waste storage area(s)		
Access for waste collection vehicles		
Areas to be excavated		
Types and numbers of storage bins likely to be required		
Signage required to facilitate correct use of storage facilities		

13.2.3 Stage 3 - On-Going Use (Operational)

Refer to all relevant sections of this document for objectives regarding operational waste. The OWMP applies to all residential developments including mixed-use development and commercial and industrial developments.

Show the weekly amounts of waste expected to be generated by the development and the associated waste storage requirements.

	Cardboard and paper	Recyclable bottles, cans and other containers	General Waste	Organics Food only or combined food and garden organics)	Bulky Waste
Total amount generated (litres or m^3 per unit per week)					
Any reduction due to compaction					
Frequency of collections per week					
Number and capacity of bins required (e.g. 8 x 240 L)					
Floor area required for storage and space for manoeuvrability (m^2)					

Low Rise – Low Density Development **Low Rise – Medium Density Multiple Dwellings Development includes: Single dwellings, dual occupancies, attached housing, semi-detached housing and manor homes**	
DEVELOPMENT WASTE GENERATION	
Select development type (single dwelling, secondary dwelling, dual occupancy)	
Number of dwellings provided within the development (**maximum of two dwellings)**	
Total general waste generated for the development per week	
Total of recycling generation for the development per week	
Total of garden waste generation for the development per week	
BIN ALLOCATION AND SERVICING REQUIREMENTS	
Select general waste bin allocation size (120 L, 240 L)	
Total number of general waste bins for the development	
Select recycling bin allocation size (120 L, 240 L)	
Total number of recycling waste bins for the development	
Select organics bin allocation size (120 L, 240 L)* *when made available	
Total number of garden waste bins for the development	
Frequency of servicing	
SERVICING TYPE	
Has a kerbside collection point been nominated on the plans accompanying the development application?	
Note: Scaled plans are required to be provided to nominate the kerbside collection point and that all allocated bins can be presented for collection.	

RESIDENTIAL FLAT BUILDING DEVELOPMENT:

- ✓ **Low to Medium Rise Developments**
- ✓ **Medium to High Rise Developments**
- ✓ **High Rise Developments**
- ✓ **Residential Component of Mixed-Use Developments**

1. DEVELOPMENT WASTE AND RECYCLNG GENERATION

Select development type (multi-unit housing or residential flat building)	
Number of dwellings provided within the development.	
Total residential/domestic general waste generated for the development per week (litres per week)	
Total residential/domestic recycling generated for the development per week (litres per week)	
Total of garden waste generation for the development per week (Litres per week)	

2. BIN ALLOCATION AND SERVICING REQUIREMENTS

Select general waste bin allocation size (120L/240L/600L/1100L)	
Total number of general waste bins for the development	
Select recycling bin allocation size (240L/660L/1100L)	
Total number of recycling waste bins for the development	
Select organics bin allocation size* (240L) *where available	
Total number of garden waste bins for the development	
Frequency of servicing* *additional servicing for general waste may only be available to RFB developments check with Council first	

3. SERVICING TYPE

Will the development present bins at kerbside for collection?	
If yes, scaled plans are required to be provided to nominate the kerbside collection point and that all allocated bins can be presented for collection.	

Note:

For kerbside collection the following must be satisfied:

- All allocated bins are to be presented in single file with a 30 cm gap between bins.
- All allocated bins are placed within the site's allocated frontage and not in front of neighbouring lots.
- Have a separation distance of 2m from street trees, bus stops, street furniture and road infrastructure such as round-a-bouts and speed humps.

Will the development utilise Council's collect and return service? (not available in all councils)	
If yes, is the waste bin storage area or temporary collection point located within 10m from the property boundary?	
If yes, scaled plans are required to demonstrate bin carting route satisfies the following: • Is a maximum of 10m when measured from the front of the property boundary's layback to the bin storage area; • Is direct and as short as possible; • To paved and a minimum 2 m wide; • Will be non-slip, free from obstacles and steps; and • Is a maximum grade of 1:14 (or a maximum grade of 1:30 where larger bins are used).	
Note: • To confirm that the development can be serviced by Council's collect and return service an inspection is required to be undertaken by Council's Waste Operations Team prior to the issue of the Occupation Certificate. This may be imposed as a condition of consent. • Where Council staff are required to enter private property, a Deed of Agreement (including indemnity) will be required to be entered into with Council. A condition of consent may be imposed requiring the Indemnity Agreement to be entered into prior to the issue of the Occupation Certificate.	
Does the development require Council's vehicle to access the site to service the development? If yes, you will need to provide the relevant information.	
4. STORAGE OF WASTE BINS	
Does the development provide individual bin storage for each dwelling of the development?	
If individual bin storage is provided for each dwelling, does the development ensure that: • The Storage area is located behind the building line of the dwelling or where it is screened or cannot be viewed from public areas. • The Storage area is located away from habitable windows and doors of adjoining dwellings to reduce noise and odour. • Residents are able to conveniently carry their waste to the correct bin from their dwelling. • the bin-carting route from bin storage area to collection point does not pass through any internal rooms of the dwelling and must avoid steps and slopes. • bins can be moved safely to collection points. • The bin-carting route from the bin storage area to the collection point has a maximum distance of 30m.	

If yes does the development ensure that: • all allocated bin can be stored within the bin storage area • extra space has been included to allow for bins to be manoeuvred within the space • Sufficient space is provided for required equipment to maintain bins (including a hot and cold water tap for washing and cleaning) • has the design ensured that any doorway width is a minimum of 1.5m to allow access for the largest bin?	
Has a scaled plan been submitted which illustrates the layout of the bin storage area?	
Is the bin-carting route to the collection point as short and direct as possible to the collection point?	
Note: • An aisle space of 1.5m minimum is required to access and manoeuvre the bins. • The layout must not allow for the stacking of bins and all bins must be placed side-by-side with equal access to all bins.	
5. TEMPORARY HOLDING AREAS	
Does the development require a temporary holding area on-site so that the development can be serviced?	
Note: The temporary holding area will be required to be of sufficient size to allow the temporary storage of all allocated bins. The holding area will only store bins so they can be serviced and must be returned to the permanent bin storage area once the service is complete. Temporary holding areas are generally required where bins need to be brought from their permanent storage area to more convenient location to allow for a collect and return service.	
If yes, is the temporary holding area within 10m of the front property boundary to facilitate access to Council's collect and return service?	
If yes, what is the size of the temporary holding area?	
If yes, has a scaled plan be submitted which demonstrates: • All allocated bins can be stored within the temporary holding area; • The bin-carting route from the holding area to layback; • The bin-carting route; and • The path is a maximum grade of 1:14 for bins up to 1100 L	
Will a caretaker be required to transfer bins from bin storage area to the holding area and return once development is serviced?	

6. ON-SITE COLLECTION	
Does the development require Council's vehicle to access the site to service the development?	
Note: • Council's standard waste collection vehicle is a heavy rigid vehicle as defined by *Australian Standard 2890.2 Parking Facilities Part 2: Off-Street Commercial Vehicle Facilities* for Heavy Rigid Vehicles. • Where Council staff and Council (or its contractor) waste collection vehicles are required to enter private property, a Deed of Agreement (including indemnity) will be required to be entered into with Council. A condition will be imposed that this is to be entered into with Council prior to be complied with prior to the issue of the Occupation Certificate.	
If yes, is the Development Application accompanied by scaled swept paths for Council's standard waste collection vehicle which demonstrate that Council's waste collection vehicle can enter/exit in a forward direction, manoeuvre within the site and access the nominated loading area.	
If yes, have scaled plans been submitted with the development application which demonstrate: • Manoeuvring, gradients, clearance heights and turning paths for the route of travel comply with *Australian Standard 2890.2 Parking Facilities Part 2: Off street Commercial Vehicle Facilities* for Heavy Rigid Vehicles; and • Council's waste collection vehicle can park safely within a designated loading area on-site whilst servicing the bins.	
7. WASTE CHUTE SYSTEMS	
Is the residential flat building incorporating a waste chute system?	
Note: Council should be consulted for advice in the early planning stages if a chute system is being proposed for the development.	
How many residential levels will the waste chute service?	
Has a chute inlet been provided on every residential level?	
Has a bin storage service room been provided on every residential level?	
How many recycling bins will the bin storage service room hold?	
What is the size and dimensions of the bin storage service room?	
Does the waste chute terminate in a secure bin storage room?	
8. ON-GOING USE	
Will a caretaker be appointed to be responsible for maintaining the waste management system and equipment?	

COMMERCIAL AND INDUSTRIAL DEVELOPMENT: ✓ NEW DEVELOPMENTS ✓ CHANGE OF USE ✓ COMMERCIAL COMPONENT OF MIXED USE DEVELOPMENTS	
1. DEVELOPMENT COMMERCIAL WASTE AND RECYCLING GENERATION	
Identify development type	
Total volume of general commercial waste generated for the development per week (based on type of premises and floor area).	
Total volume of commercial recycling generated for the development per week (based on type of premises and floor area see relevant section of Waste Management DCP)	
2. BIN ALLOCATION AND SERVICING REQUIREMENTS	
Select size of general waste bins to be used for the development e.g. 240L, 660 L, 1100 L)	
Total number of general waste bins for the development	
Select size of recycling bins to be used for the development	
Total number of recycling bins for the development	
What is the frequency of collection from the development?	
Note: • Commercial waste collections must be serviced on-site by a private waste, recycling and/or organics contractor or Council at ground level of the development. • It is recommended that you consult with waste contractors and Council to obtain their servicing requirements and any restrictions.	
3. STORAGE OF WASTE BINS	
Does the development provide a separate bin storage area for the commercial units within the development? Is the Development Application accompanied by a scaled plan illustrating the bin storage area for the commercial units?	
What is the size of the bin storage area and dimensions? The Development Application is to be accompanied by a scaled plan illustrating the layout of the bin storage area?	
4. COLLECTION POINT	
Has a collection point and loading area been nominated on scaled plans accompanying the Development Application?	
Has the development been designed to ensure that access to the collection point can be undertaken by a Heavy Rigid Vehicle? The Development Application will be required to be accompanied by a traffic statement confirming that the site and collection point has been designed to comply with *AS 2890.2 Parking Facilities: Off-Street Commercial Vehicle Facilities*.	

13.2.4 Plans and drawing checklist

The following checklist is designed to help ensure the OWMP is accompanied by sufficient information to allow the application to be assessed.

Submit drawings to scale, clearly indicating the location of, and provisions for, storing and collecting waste and recycling during operational operation.

Refer to relevant sections of this document for specific objectives and measures.

Do the OWMP and drawings indicate:		Tick Yes	Drawing/plan number
	Space relating to movement and storage of waste		
Size and location(s) of on-site waste storage area(s)			
Recycling bins placed next to residual waste bins			
Space for access to and manoeuvring of bins and equipment			
Space in kitchens, or alternative internal locations, for two days' worth of waste and recyclables			
Bulky waste storage areas or rooms			
Any additional waste and recycling facilities such as waste chutes, compaction equipment or storage areas for problem wastes e.g. unwanted clothing, batteries, mobile phones (if applicable)			
	Access		
Access route(s) for occupants to deposit waste in storage room or area(s)			
Access and travel routes for waste collection vehicles to collect waste from storage room or area(s)			
Access for occupants to bin storage rooms and bin carting route to and from the collection point			
Bin carting gradient			
Location of final collection point			
Clearance, geometric design and strength of internal access driveways and roads			
	Amenity		
Aesthetic design of waste storage areas			
Signage - type and location			
Construction details of storage areas, including floors, walls, doors, ceiling design, sewer connection, lighting, ventilation, security, wash down provisions			
	Chutes and compaction equipment		
Designed in accordance with the requirements of the Building Code of Australia			
Location of waste equipment shown on the drawings (e.g. compactors, chutes)			
	Storage areas		
Have adequate ventilation			
Have adequate lighting			
Have floor drainage to sewer			

Where storage areas are separate rooms such as in basements or on ground level they are fitted with doors that: • open from both in and outside the room • are self-closing • are wide enough (wider enough to allow easy manoeuvring of the largest bin to be supplied or can be a roller door) • are well fitted • are durable.		
Have a cold and hot water supply		
Protect the interior from rain and other inclement weather		
Are suitably enclosed, covered and maintained to prevent polluted wastewater runoff from entering the stormwater system		
Are secure and have lockable doors and windows		
Have roof drainage to the stormwater system		
Have floors of steel trowel finish concrete		
Have durable and smooth walls and ceilings made of an impermeable material		
Have covered walls and floor intersections		
Are located away from residences to minimise noise		
Collection point - if at kerbside		
Has room at the kerb to accommodate all the bins required to be collected without obstructing footpaths or driveways		
Is not obstructed by kerbside objects like trees, street poles, bus stops		
Is not located so collection is affected by parking spaces or speed humps		
Allows safe and easy collection by collection vehicles		
Is located away from residences to minimise noise		
Has step-free access between the bin storage areas and the collection point		
Is shown on the drawings		
If collection takes place on-site		
Collection vehicles can enter and exit the site in a forward direction		
Collection vehicles do not impede general access by other road users to, from or within the site		
Access driveways are of sufficient strength to support vehicles		
Access is easy and safe for collection vehicles		
Access driveways and internal roads are designed in accordance with AS 2890.2		
Travel paths of waste collection vehicles are shown on the drawings		

13.3 Appendix C - Waste Chutes

13.3.1 Design Requirements

All chute systems must meet the following design requirements:

- Garbage chutes must be constructed in accordance with the requirements of the Building Code of Australia (BCA).
- Garbage chutes must be located and insulated in a manner that reduces noise impacts.
- Chutes, service openings and charging devices must be constructed of material, such as metal, that is smooth, durable, impervious, non-corrosive and fire resistant.
- Chutes, service openings and charging devices must be capable of being easily cleaned.
- Chutes must be cylindrical and should have a diameter of at least 500 mm.
- There must not be any bends or sections of reduced diameter in the main shaft of the chute.
- Internal overlaps in the chute must follow the direction of waste flow.
- Branches connecting service openings to the main chute must be no more than 1 m long.
- Chutes must deposit waste directly into a bin or compactor located in a waste or recycling storage room.
- A cut-off device must be located at or near the base of the chute, so the bottom of the chute can be closed when the bin or compacting device at its base is withdrawn or being replaced.
- The upper end of a chute should extend above the roofline of the building.
- The opening of the chute must be self-closing and must not project into the main chute.
- The upper end of a chute should be protected from weather in a manner that does not impede the upward movement of air out of it.
- Chute discharge should be caged or enclosed if the discharge point is in the same waste room that is accessible to residents.

13.3.2 Chute Service Room Design Requirements

The opening of the waste chute should be located in a dedicated service room located on each floor.

If a recycling chute is not installed, the dedicated service room containing the waste chute opening must also allow residents to deposit recycling and other large materials like cardboard boxes in bins and containers.

Each service room must be located for residents to conveniently access and must be well ventilated and well lit.

The floors, walls and ceilings of service rooms must be finished with smooth, durable materials that can be easily cleaned.

Service rooms must include signage that clearly describes the types of materials that can be deposited in the waste and recycling chute and the types of materials which should be deposited in recycling bins.

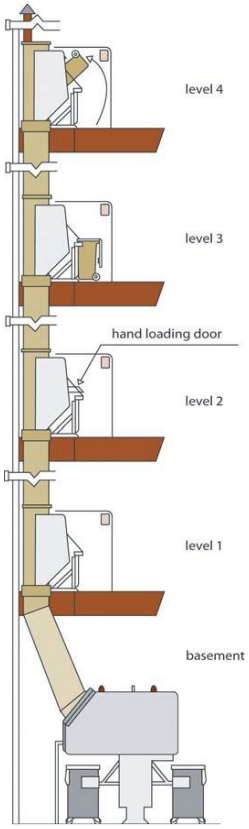
13.3.3 Chute Management

To encourage recycling, waste chutes must not be used to dispose of recyclable materials. Signage to this effect should be displayed near service openings.

Arrangements must be in place for the regular maintenance and cleaning of waste chutes and any associated service rooms, service openings and charging devices.

Arrangements must be in place for the regular transfer of recyclable materials stored in service rooms to the main waste or recycling storage room.

The following diagram depicts a standard design for a waste chute system:



Example of a waste chute system

Source: NSW EPA, *Better practice guide for resource recovery in residential developments*

Visit: Better practice guide for resource recovery in residential developments (PDF 5.1MB)

13.4 Appendix D - Education Initiatives

13.4.1 Waste Signs

Signs for waste, recycling and organics bins should comply with the Council's signs or with the NSW EPA's standard signs which can be found at www.epa.nsw.gov.au/wastetools/signs-posters-symbols.htm.

Council can provide the necessary educational signage and material to better manage waste on site, relevant to the development type.

13.4.2 Safety Signs

The design and use of safety signs for waste rooms and enclosures should comply with Australian Standard AS 1319 - Safety signs for the occupational environment.

Safety signs should be used to:

- Regulate and control behaviour regarding safety and security;
- Warn of hazards;
- Provide emergency information, including fire protection information.

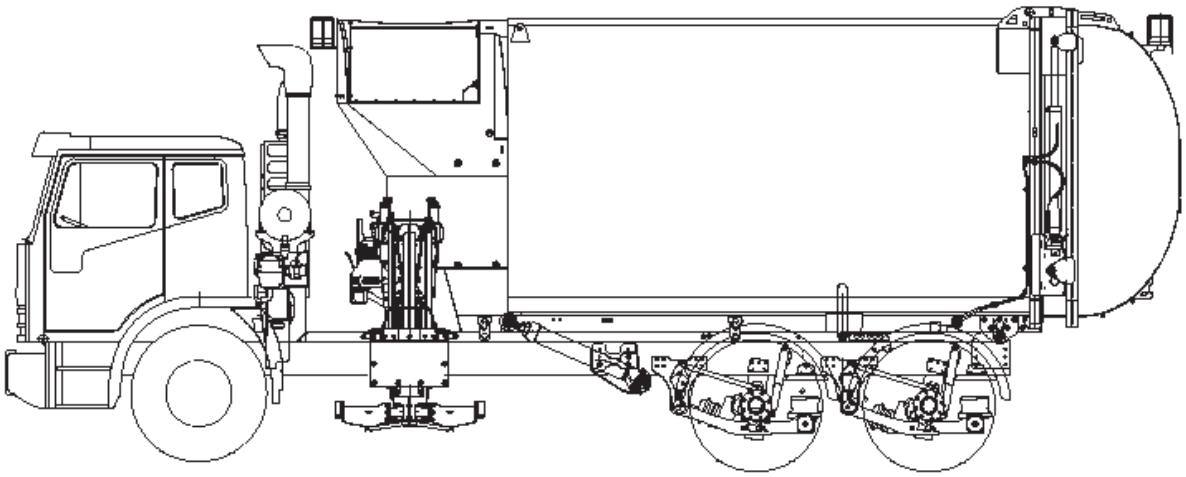
13.5 Collection Vehicle Dimensions

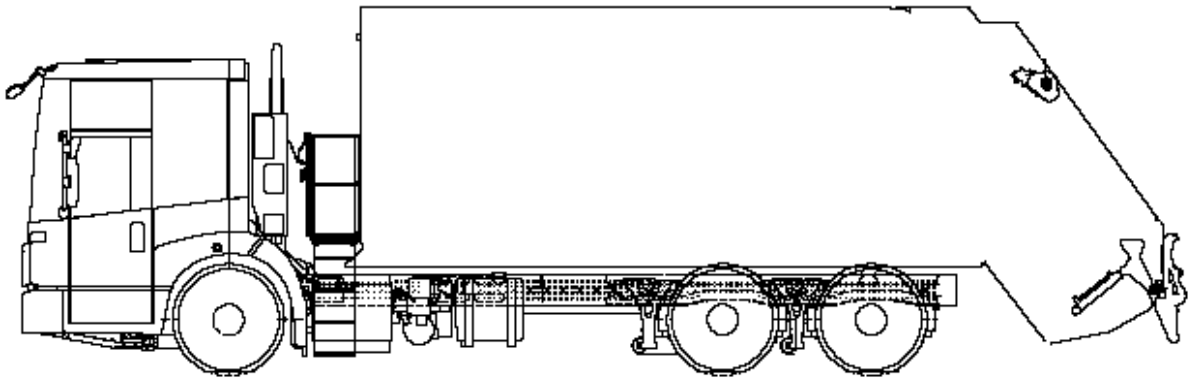
The typical dimensions of a Collection Vehicle should be based on the table below when considering your development design and waste management planning. Developments that require Council Collection Vehicles to enter the site for the collection of waste, recycling and/or organics must be deigned to accommodate on-site Collection Vehicle movement.

Specific dimensions are subject to chassis, wheelbase, and option selection with the most appropriate available Collection Vehicle to be used for each respective waste stream.

Please liaise with Council's Waste & Cleansing Services regarding the design of development proposals that involve CollectionVehicles entering the site.

Services will not be provided where there are undue risks.





Description	Typical Allowance Required
Length Overall	11 metres
Vehicle Height	3.9 metres
Operational Clearance Height	4.5 metres
Width Overall	2.5 metres
On-Site Width Path (Carriageway)	3.5 metres
Turning Circle (wall to wall)	25 metres
Swept Path	21 metres
Gross Vehicle Mass	24 tonnes

13.6 Document Implementation

13.6.1 Strategy Responsibilities

General Manager / Director(s)
The Executive Committee evaluates the provisions of the Waste Management DCP and make decisions to ensure the effective provision of the Waste Management DCP are in accordance with the enabling legislation and Council's values and policies.

Manager Waste and Cleansing Services
The Manager Waste and Cleansing Services' four major functions are to plan, organise, lead and control in accordance with the enabling legislation and Council's values and policies, as well as arrange appropriate resourcing, within budgetary constraints, for the effective implementation of this Waste Management DCP.

Coordinator Waste Avoidance and Resource Recovery
The Coordinator Waste Avoidance and Resource Recovery interprets the legislation and Council policies and coordinates the implementation of this Waste Management DCP and associated documentation in accordance with the enabling legislation and Council values and policies.

Coordinator Operations Waste and Cleansing Services
Ensure the effective implementation of the procedures in accordance with the enabling legislation and Council values and policies that deal with issues arising from the day-to-day operational provision of the services in relation to the Waste Management DCP.

Supervisor Waste Contracts & Development Applications
Evaluates the WMP's in collaboration with Council's Planning & Development department and Council's Waste and Cleansing Services.

13.6.2 Document Control

Monitoring, Evaluation and Review
This Waste Management DCP will be reviewed as required to respond to changes in local, regional, NSW or Federal strategies and in responses to significant changes affecting waste management, waste avoidance and resource recovery.

Version History

Version	Release Date	Author	Reason for Change
1.0	June 2022	Waste & Cleansing Services	New Waste Management DCP Technical Specifications 2022 for Bayside Council – the amalgamation and replacement of two former Local Government documents.