Waste Guidelines for New Developments



Developed by TALIS May 2020 and revised by the City of Vincent August 2023



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1 Terms and Definitions

Term	Description/Definition
Bin	Mobile Garbage Bin or Mobile Recycling Bin used to store general waste, comingled recyclables or organics for collection.
Bin Store	A waste storage facility used to store bins between collections. This may be also a bin room or compound.
Bulk Waste Verge Collection Service (Bulk Waste)	Collections of household appliances, furniture and other oversized items which should not be disposed of in the bins.
Caretaker	Person(s) or party appointed by the managing agent to be responsible for the management of waste at the development. A caretaker may be a resident of the development or a third party.
City of Vincent	(the) City
Collection Point	The point where general waste, comingled recycling and organics are loaded onto collection vehicles.
Comingled Recycling	Also refers to recycling. Material that is collected separately from general waste for the purpose of recycling. This may include paper, cardboard, glass, plastic, aluminium and steel containers.
Food Organic Garden Organic (FOGO)	Organic wastes such as food waste and green waste from the garden.
General Waste	Also referred to as garbage, rubbish, household waste or landfill waste. General waste is the remaining waste after other materials have been separated for comingled recycling and FOGO collection. General waste is collected in red lidded bin if an organics service is in use, or a green lidded mobile garbage bin. Hazardous and bulky waste should not be included in the general waste
Hazardous waste	Includes batteries, chemicals, paint, cleaning products, medicines and flammable liquids.
Multi-Unit Dwelling (MUD)	In this guide, the term is used to refer to residential development of more than one dwelling. This ranges from dual occupancies and attached dwellings to high-rise residential flat buildings.
Mobile Garbage Bin (MGB)	Receptacle used to temporarily store general waste and FOGO that is generated at a property.
Mobile Recycling Bin (MRB)	Receptacle used to temporarily store comingled recycling that is generated at a property.
Onsite Collection	When the collection vehicle enters the property and services the development within the property boundary from a designated loading area.
Presentation point	Location/s in which the MGBs are presented for collection.
WALGA	Western Australia Local Government Association – Multiple Dwelling Waste Management Plan Guidelines



Term	Description/Definition
Waste generation rate	These are average general waste, comingled recycling and FOGO generation volumes associated with developments.
Waste Management Plan (WMP)	Document that defines how waste will be managed for a proposed development.

2 Waste Guidelines for New Developments

This guide is a tool to assist architects, designers, developers and other professionals to incorporate waste management into new developments within the City. The aim of this document is to ensure that economical waste collection services can be provided to all ratepayers and efficient ongoing management of waste and recycling services are considered in all new developments.

These guidelines outline the requirements of a Waste Management Plan for all new residential, commercial and mixed-use developments. The following sections will detail development application requirements with regard to solid waste management including generation, storage and removal of general waste and recycling.

3 Objectives

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The objectives of these guidelines are to:

- Ensure the long-term waste management needs of each development are met in an efficient
 and sustainable manner and provides for waste minimisation in a manner that protects the
 environment;
- Minimise the impacts of waste storage and collection facilities on the streetscape, public realm, building entries and the amenity of residents;
- Maximise safety for waste collection staff, residents and the public;
- Minimise traffic and footpath obstruction; and
- Minimise impacts on the visual or other amenity of the building or neighbourhood.

The City encourages designers to be innovative in developing the most efficient and sustainable waste management system to meet these objectives and encourages early consultation with the City regarding waste management requirements. This can be initiated by calling City on 9273 6000 or emailing mail@vincent.wa.gov.au.

In most cases a WMP shall be submitted as part of the following categories of Development Application:

- Residential
 - 2 or more multiple dwellings;
 - o 2 or more grouped dwellings;
 - 2 or more aged or dependant persons dwellings/beds;
- Accommodation uses (as determined by the City);
- All proposals where there is insufficient lot, road or verge frontage for collection vehicle access (as determined by the City);
- Mixed Use Developments; and
- Commercial, Industrial and Other Non-Residential Development, as determined by the City.

Waste management must be considered at the design stage of a development. This will ensure that sufficient waste capacity has been catered for, enough space has been provided to store waste prior to collections, recycling of waste has been considered, sufficient space allocated to allow for

collection, clearance for a waste collection vehicle has been considered and vermin, pests and odours have been minimised.

4 City's Residential Waste Services

The City provides the following services to all rateable properties as a part of its statutory requirements under the Waste Avoidance the Resource Recovery Act 2007 and the Health Act 1911.

The City currently provides the following standard residential waste and recycling collection services:

- Food Organics and Garden Organics (FOGO) 1x 240L weekly;
- Rubbish (general waste) in 1 x 140L MGB collected once per fortnight;
- Comingled recycling in 1 x 240L or 1 x 360L MGB collected once per fortnight (upgrade charges apply);
- Pre-booked Verge collection for bulk hard waste (one collection per household per financial year);
- Scheduled Verge collection for bulky green waste collected once per financial year; and
- Paid pre-booked Verge collection for bulk hard waste and On-demand Mattress collection service for residential dwellings.

Residential group and multiple dwellings (i.e. units, townhouses and apartments) are provided a standard waste service, based on the waste generation rates in **Appendix A.**

The City's collection services operate Monday to Friday only for residential properties. The City does not collect waste from residential properties on Saturdays and Sundays (except for make-up days related to Good Friday, Christmas Day and New Years' Day Public Holidays, if applicable)

The City currently offers a standard weekly FOGO collection, fortnightly general waste collection and fortnightly recycling collection service to residential properties. Depending on the density of the development, the City may provide residential waste collections up to 2 times per week <u>by application</u> and subject to approval by the City.

Note: Increased collection frequency approval is at the City's discretion and will incur additional charges.

The City's internal Waste Team and Waste Contractors operates the following collection vehicles:

- Side Loader Collection Vehicle
- Rear Loader Collection Vehicle

The City may collect MGBs onsite under special arrangements, subject to approval by the City.

Note: Preference will always be to collect from the verge, unless this presents a safety risk/concern. Onsite collection approval is at the City's discretion and a waiver form needs to be signed by the Developer to fulfil the City's waste collection agreement. Additional fees may apply for onsite collection. The City has limited capacity to provide on-site collection of waste and recycling, which may result in the property being required to move these services to a private provider at their own cost.

5 Commercial waste collection services

The City does not provide commercial waste collection services and commercial properties are required to seek private commercial waste collection arrangements.

Commercial bin stores are required to service the maximum number of bins that may be required at the property and cater for potential future uses/occupancy.

The WMP must allow for a 3 bin FOGO collection best practice system aligned to the requirements of the Waste Avoidance and Resource Recovery (WARR) Strategy 2030 objectives/targets.

6 Waste Management Plan

WMPs require the following details to be provided:

- Summary of the development;
- Anticipated waste generation;
- Bin size and quantity;
- Bin Access and Storage;
- Waste system (internal collection methods and equipment);
- Collection method and frequency; and
- Waste service provider (if commercial).

All WMPs must provide explanation (including appropriate drawings/figures) on how the applicant/s will achieve the outcomes of these guidelines. The checklist in **Appendix B** should be used as a guide to ensure the City's core waste management practices have been considered and incorporated in to the design of the development and addressed in the WMP.

The development will be undertaken and operate in accordance with the WMP, as approved by the City. Details of how the WMP will continue to be applied in perpetuity across the life of a development and the process for changing a WMP and the City's involvement in such, are to be included in the WMP (e.g. reference in the strata management statement).

6.1 Summary of the Development

The summary of the development must contain the following information:

- Location of the development;
- Number of floors;
- Number of dwellings units by size (one, two or three bedrooms);
- Size of each commercial unit; and
- Details of the intended use of the development.

6.2 Anticipated Waste Generation

Anticipated waste generation for general waste, comingled recycling and FOGO must be calculated using the figures in **Appendix A**. A summary of the anticipated waste generation calculation and estimated quantity of bins required should be included in the WMP.

The intended land uses, floor areas, apartment sizes etc. should be indicated, to clearly show how the waste generation of the development was calculated, with any assumptions explained.

Where specific commercial tenancy uses are not known, the City requires the use of restaurant generation rates in **Appendix A** to ensure the development has adequate storage capacity to cater for potential future uses/occupancy.

The number of bins required for general waste, comingled recycling and FOGO should be clearly identified.

6.3 Bin Size and Quantity

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Details of the size and quantity of the bins to be used must be provided. **Appendix C** contains details of the bin sizes that the City use. Other size bins may be used in commercial developments, <u>subject to</u> the City's approval, and details of these bins must be provided with the WMP.

6.4 Bin Access and Storage

Design details of the bin store must be included in the WMP covering the requirements outlined in **Section 7.2.** This includes:

- How waste is transported from the source to the bin store;
- Bin store size;
- Bin store layout;
- Wash-down area;
- Ventilation;
- Vermin prevention;
- Noise reduction; and
- Stormwater ingress prevention.

6.5 Waste System

Details of waste systems must be provided including waste chute systems, compactors, and any other waste management equipment or devices to be used.

A description of internal source separation systems, bulk waste storage and educational/equipment signage must also be included.

The WMP must provide a description of how waste will be transferred internally by residents to the waste storage facility.

In developments that have four or more stories the City encourages:

 room be provided for interim storage of general waste, comingled recycling, and FOGO on each floor in an interim storage area, with a caretaker that takes all materials from the interim storage area to a communal waste storage facility; and

• the use of separate chutes for general waste, comingled recyclables in conjunction with an interim storage area on each floor for residents to place oversized items such as cardboard boxes that should not be put into the chute system.

The WMP is to include chute specifications and details for mitigating glass breakage at the termination of the chute as well as ongoing cleaning and maintenance of the chute system.

The WMP must establish and delegate responsibility for the tasks required for ongoing monitoring and maintenance of waste management services and equipment.

6.6 Collection Method and Frequency

WMPs must contain details on collection method to be used. This should include the following information:

- Collection vehicle to be utilised i.e. City (Residential) or Private Waste Contractor (Commercial);
- Movement of collection vehicle;
- Bin presentation point;
- Collection location:
- Transfer of waste to the collection vehicle; and
- Frequency of collection.

6.7 Waste Service Provider

The WMP must nominate if the City or a private waste contractor will service the development. For all residential collections, the City is the required waste service provider.

The City's Waste Education Officer may assist Strata and / or Caretakers with relevant waste sorting materials for a three bin FOGO service, where applicable. The following resources may be offered per unit: one kitchen caddy, three waste sorting fridge magnets, one pack of compostable caddy liners, a Waste in my Apartment flyer and Waste & Recycling Guide. Digital versions are also available for circulation via email by Strata, upon request.

6.8 Drawings/Figures

To assist in the assessment process WMPs should provide drawings/figures to support the above information, including:

- Generic floor level showing the interim storage area with adequate area for all residents to easily access;
- Bin store/s including configuration of the required quantity of bins and waste equipment
 within the store to demonstrate functionality and adequate size to comply with the City Local
 Health Law. Drawings should include bin store floor area (m²), bin sizes and configuration,
 chute/compaction equipment size and layout, and bin wash taps and sewer points;
- Bulk waste store;
- Ramp gradients;



- Bin presentation point, with the maximum required quantity of bins to be presented to be shown; and
- Swept path analysis of the waste collection vehicle (onsite servicing).

7 Requirements for Waste Management

This section outlines the City's requirements for all developments in relation to bins, waste storage and bin collections. The following requirements should be incorporated into the development designs and described in the WMP.

7.1 Bins

- 7.1.1 All general waste, recycling and FOGO material generated within a development is required to be stored in appropriate bins, as determined by the City.
- 7.1.2 Specialty waste other than general waste, comingled recyclables and FOGO must be stored in appropriate bins, as approved by the City. This can include, but is not limited to used cooking oil, medical waste and hazardous substances.
- 7.1.3 The number of bins provided must be sufficient to store the anticipated waste generation as derived from **Appendix A**.
- 7.1.4 Commercial bin stores are required to be able to service the maximum number of bins that may be required at the development to cater for potential future changes uses/occupancy.

7.2 Waste Storage

- 7.2.1 All developments shall be provided with a waste storage facility for the storage of general waste, recycling and FOGO in appropriate bins.
- 7.2.2 Developments with shared bins must include an easily accessible communal bin store within the development, to the satisfaction of the City.
- 7.2.3 In the case of mixed-use developments <u>separate</u> residential and commercial bin stores are required.
- 7.2.4 Where a waste storage facility cannot be incorporated into the development, an enclosure with walls of not less than 1.8 metres in height and access point with self-closing gate of not less than 1000mm must be located behind the front building setback.
- 7.2.5 All bin stores shall have a floor area of no less than $5m^2$. Use of roller doors are acceptable if space is an issue.
- 7.2.6 All waste storage facilities must be sized to be capable of containing a minimum of <u>2 weeks'</u> worth of general waste and recycling and one week of FOGO, regardless of any reduction in bin quantity or waste volume estimates from compaction or increased collection frequencies.
- 7.2.7 Equal access is to be provided to all bins (i.e.: no stacking of rows of bins). Each bin must have a minimum <u>50mm</u> spacing around all sides, including between walls, other bins and aisles.



Additional information is included in **Appendix C.**

- 7.2.8 All bin stores to have an aisle width of not less than <u>1000mm</u> for easy manoeuvring of bins, refer **Appendix E** for example bin store.
- 7.2.9 All bin stores to have an access point of not less than <u>1000mm</u> for easy manoeuvring of bins, refer **Appendix E** for example bin store.
- 7.2.10 Sufficient space must be provided to store general waste, comingled recycling material and organics (FOGO) in separate bins.
- 7.2.11 The storage location of bins must be located behind the front building setback.
- 7.2.12 Bins must not be visible from the property boundary except when presented for collection.
- 7.2.13 Bins must be stored in locations that are reasonably secured from theft and vandalism.
- 7.2.14 Bin stores shall have 100mm concrete floors (in accordance with AS2870) grading to an industrial floor waste (including a charged 'water-trap' connected to sewer or an approved septic system), with a hose cock to enable bins and/or the bin store to be washed out.
- 7.2.15 All waste storage facilities must be undercover and be designed to not permit storm water to enter into the drain.
- 7.2.16 All waste storage facilities must have enough space to facilitate the cleaning of bins inside the bin store.
- 7.2.17 Walls and floors of bin stores must be constructed of a material which facilitates the cleaning of the bin store.
- 7.2.18 Bin stores must be fitted with self-closing doors.
- 7.2.19 Enclosed bin stores must be ventilated to a suitable standard as approved by the City.
- 7.2.20 Where mechanical ventilation is used, the outlet for vented air must be in a location which will not adversely impact residents.
- 7.2.21 Bin stores shall be provided with artificial lighting, sensor or switch controlled both internal/external to the room or area. All lighting in open areas is to comply with AS4282-1997 (Control of Obtrusive Outdoor Lighting).
- 7.2.22 Vermin must be excluded from the bin storage area.
- 7.2.23 Sufficient space must be provided to allow the easy passage of bins in and out of bin stores or compounds.
- 7.2.24 Council approved signage shall be used in all communal waste storage facilities to inform users of the appropriate bins for disposing of waste and guidance for the separation of general waste, comingled recyclables and FOGO material (See Appendix F).

- 7.2.25 General waste may be compacted to a maximum compaction ratio of 2:1. Comingled recycling material must not be compacted, unless it is clean cardboard in a separate collection to comingled recycling material.
- 7.2.26 The distance between the last bin in the bin store and the presentation point should be ideally no greater than <u>10m</u>.

7.3 Waste Collection

- 7.3.1 Bins must be presented to the verge on the specified collection day for collection.
- 7.3.2 Bins placed on the verge for collection must not be placed on a neighbouring verge.
- 7.3.3 Bins should be stored behind the property boundary line, within 24 hours of collection.
- 7.3.4 Bins placed for collection on the verge must not obstruct pedestrians, street furniture or bike lanes. Bins must be placed at least 1m from cars, street signs or power poles and 1m away from trees, not under the tree canopy. A discussion with the City's Waste Team regarding bin placement under tree canopies is required if there is no other option for bin positioning.
- 7.3.5 Bins are to be lined up neatly and in a single row along the verge and have no less than 0.5m spacing between each bin.
- 7.3.6 Where more than 5 x 240L bins are to be presented to the verge, an area must be paved to accommodate the bins on the verge and allow passage to and from the storage area.
- 7.3.7 Surfaces of all bin travel paths must be designed to allow easy transportation of the bins. Travel paths should be level and with smooth non-slip surfaces and be finished in a way which reduces the noise of the bins as they are manoeuvred.
- 7.3.8 The travel path between the bin store and the collection point is to be kept free of obstacles and steps.
- 7.3.9 Gradients of bin travel paths must not exceed 1:14 for two wheeled bins and 1:30 for four wheeled bins.

7.4 Onsite collection (if required)

- 7.4.1 The City's preferred collection point is the verge, however where space is limited or this creates a safety risk/concern, onsite collection may be required, as determined by the City. Additional charges may apply.
- 7.4.2 Where onsite collections are required, sufficient clearance for the collection vehicles must be catered for. Clearances for collection vehicles are outlined in **Appendix D.**
- 7.4.3 Where onsite collections occur, roadways and infrastructure traversed by the collection vehicle must be constructed to accommodate a 30 tonne Gross Vehicle Mass.
- 7.4.4 Waste which is likely to become putrid such as organics must be collected at a frequency which reduces the likelihood of this material causing offence. Alternatively the City may

- approve at its discretion, storage of this waste in a way which reduces this likelihood, such as refrigerated storage rooms.
- 7.4.5 Where private collections are employed the collections must comply with all local, state and federal laws and regulations.

7.5 Bulk Waste

- 7.5.1 All developments are to provide a bulk waste store to allow temporary storage of bulky items while awaiting disposal such as cardboard boxes, mattresses, appliances and other oversized household waste or material which should not be disposed of within the bin system or down a chute system.
- 7.5.2 A bulk waste store is an important safeguard against residents illegally dumping bulky waste on the footpath or within common areas of the building.
- 7.5.3 The bulk waste store should be readily accessible to all residents.
- 7.5.4 Areas for bulky waste can be next to or within the main residential communal bin storage area.
- 7.5.5 The bulk waste store should be located at ground level (screened from the street) or in a basement and can be incorporated with the bin storage facility.
- 7.5.6 Be secure, and caged if required, to allow the contents to be visible from the outside.
- 7.5.7 Have a minimum doorway width of <u>1500mm</u> to allow for easy movement of large waste items.
- 7.5.8 A minimum area of 4m² is to be provided, or 0.5m² per dwelling, whichever is greater. The 0.5m² area may be reduced if all units have their own equivalent sized store, at the discretion of the City.

The City offers a pre-booked Verge collection service for bulky household items. For apartments over 25 units bookings are to be coordinated via the Strata/Property.

Developments have an annual allowance of one Verge Valet[™] collection per unit. Each allowance is up to 3m³ and multiple allocations can be collected at the agreed collection frequency. Multi-Unit Dwelling developments will be required to complete the Verge Valet[™] Contact Details and Collection Authorisation Form prior to commencing collections.



7.6 Waste Education

- 7.6.1 The City has developed several waste education resources specifically for use in multi-unit dwellings using a three bin FOGO system. These are detailed below and in Appendices F H.
 - Bin Store signs 'How to Sort Your Waste' (Appendix F)
 - 'Waste in my Apartment' DL flyer (Appendix G)
 - FOGO Kitchen Caddy and Education Materials starter pack (Appendix H)



Appendix A: Waste Generation Rates

Table 7-1: Three Bin System Residential waste and recycling generation rates / storage requirement

Waste Stream	Dwelling Size	Waste Generation Rate/ Storage Requirement <12 dwellings	Waste Generation Rates Waste Generation Rate/ Storage Requirement >12 dwellings	WALGA
General	1 bedroom	60 L/fortnight	80 L/fortnight	80L/week (can be reduced with FOGO)
Waste (on FOGO system)	2 bedroom	100 L/fortnight	120 L/fortnight	160L/ week (can be reduced with FOGO)
	3+ bedroom	140 L/fortnight	160 L/fortnight	240L/week (can be reduced with FOGO)
	1 bedroom	80 L/fortnight	40 L/fortnight	40L/fortnight
Comingled recycling	2 bedroom	120 L/fortnight	80 L/fortnight	80L/fortnight
	3+ bedroom	240 L/fortnight	180 L/fortnight	240L/fortnight
FOGO *Note: City's	1 bedroom	40 L/week*	20 L/week	40I/fortnight
standard smaller bin is	2 bedroom	80 L/week*	40 L/week	80L/fortnight
140 litre capacity	3+ bedroom	140 L/week*	60 L/week	120L/fortnight

Example A: Sizing of a communal storage area used for general waste, comingled recycling and FOGO bins that service 8 units.

Future development with 8 units containing the below bedroom mix would be calculated as follows:

- 2 x 1 bedroom units,
- 4 x 2 bedroom units; and
- 2 x 3 bedroom units.

General waste – Fortnightly collection

Bedroom Mix	Number of Units	Generation rate/storage requirement – L/fortnight	L/fortnight
1 bedroom units	2	60	120
2 bedroom units	4	100	400
3 bedroom units	2	140	280
	·	Total	800*

^{*800}L equivalent to 4 x 240L MGBs serviced fortnightly – or 2 x 240L MGBs weekly collection (subject to City approval) please note that increased frequency might result in additional costs

Comingled Recycling – Fortnightly collection

Bedroom Mix	Number of Units	Generation rate/storage requirement – L/fortnight	L/fortnight
1 bedroom units	2	80	160
2 bedroom units	4	120	480
3 bedroom units	2	240	480
		Total	1120*

^{*1120}L equivalent to 4×360 L MRBs fortnightly – or 2×360 L MRB weekly collection (subject to City approval) please note that increased frequency might result in additional costs

FOGO – Weekly collections

Bedroom Mix	Number of Units	Generation rate/storage requirement – L/week	L/week
1 bedroom units	2	40	80
2 bedroom units	4	80	320
3 bedroom units	2	140	280
		Total	680*

^{*680}L equivalent to 5 x 140L MGBs collected weekly – or 2 x 240L MGB weekly collection (subject to City approval based on likely garden organics generation onsite)

Example B: Sizing of a communal storage area used for general waste, comingled recycling and FOGO bins that service 55 units.

Future development with 55 units containing the below bedroom mix would be calculated as follows:

- 19 x 1 bedroom units,
- 24 x 2 bedroom units; and
- 12 x 3 bedroom units.

General waste – Fortnightly collection

Bedroom Mix	Number of Units	Generation rate/storage requirement – L/fortnight	L/fortnight
1 bedroom units	19	80	1,520
2 bedroom units	24	120	2,880
3 bedroom units	12	160	1,920
		Total	6,320*

^{*6320}L equivalent to 27 x 240L MGBs serviced fortnightly – or 14 x 240L MGBs weekly collection (subject to City approval) please note that increased frequency might result in additional costs

Comingled Recycle – Fortnightly collection

Bedroom Mix	Number of Units	Generation rate/storage requirement – L/fortnight	L/fortnight
1 bedroom units	19	40	760
2 bedroom units	24	80	1,920
3 bedroom units	12	180	2,160
		Total	4,840*

^{*4840}L equivalent to 14 x 360L MRBs fortnightly – or 7 x 360 MRB weekly collection (subject to City approval) please note that increased frequency might result in additional costs

FOGO – Weekly collections

Bedroom Mix	Number of Units	Generation rate/storage requirement – L/week	L/week
1 bedroom units	19	20	380
2 bedroom units	24	40	960
3 bedroom units	12	60	720
		Total	2060*

^{*2060}L equivalent to 15 x 140L MGBs collected weekly – or 9 x 240L MGB weekly collection (subject to City approval based on likely garden organics generation onsite)



Table 7-2: Commercial waste and recycling generation rates / storage requirement

Has Towns	General	Comingled			
Use Type	Waste	Recyclables	FOGO	Metric	
Food and Beverage Premises					
Butcher / seafood shop front only (retailer - shop front)	120	240	80	L/100m²/day	
Butcher / Seafood (wholesaler or with onsite preparation of products/processing)	150	360	240	L/100m²/day	
Delicatessen	50	50	50	L/100m²/day	
Fruit and Vegetable Retailer (Greengrocer)	150	360	360	L/100m²/day	
Restaurant	500	300	120	L/100m²/day	
Supermarket	500	240	200	L/100m²/day	
Café	300	200	120	L/100m²/day	
Fast Food Outlet - Chain	360	360	120	L/100m²/day	
Takeaway	100	150	35	L/100m²/day	
Convenience Store	240	240	40	L/100m²/day	
Tavern/Small Bar	400	300	60	L/100m²/day	
Hotel or Motel - bar Areas	50	50		L/100m² bar area/day	
Hotel or Motel - Combined bar and dining areas	300	200	120	L/100m² dining area/day	
Licenced Entertainment Premises or Community Club (bar floor only)	50	80		L/100m² bar floor area/day	
Licenced Entertainment Premises or Community Club (combined bar and dining area)	300	200	120	L/100m² combined bar and dining floor area/day	
Retail					
Retail (non-food sales) <100m2 floor area	50	25		L/100m²/day	
Retail (non-food sales) >100m2 floor area	50	50		L/100m²/day	



Use Type	General Waste	Comingled Recyclables	FOGO	Metric
Showrooms	20	20	20	L/100m²/day
Hairdresser (beauty salons)	35	30	10	L/100m²/day
	Co	mmercial		
Serviced Apartment, Backpacker or Boarding Houses (for accommodation only, kitchens, catering areas, common areas in a development require separate waste generation assessment)	30	20	10	L/bedroom/week
Offices and Medical/Consulting Rooms including dentist/veterinary	15	15	5	L/100m²/day
Hotel or Motel Accommodation (for accommodation only other areas within the hotel/motel require separate waste generation assessment)	30	20	10	L/bedroom/week
Licenced Club	50	80		L/100m²/day
Education/Training (teaching space)	5	5		L/100m²/day
Childcare	240	240	120	L/100m²/week
Function Room	200	200	80	L/100m²/day
Gym	10	10		L/100m²/day
Retirement Village	60	60	20	L/apartment/week
Independent Living	80	80	30	L/apartment/week
Community or sports centre, Place of Worship, Recreation (private)	50	50		L/100m²/day

Note: Waste generation calculations are based on operational days. Some use types i.e.: Function Room may only be used a couple of days a week, therefore waste generation calculations would be based on 2 days of operation.

Appendix B: WMP Checklist

The checklist below should be used to show that the City's core waste management practices have been considered and incorporated into the design of the development. The WMP should include a brief description of the below considerations.

Summary of the Development A summary of the development including the following information: • Location of the Development Number of floors • Number of dwellings units by size (one, two or three bedrooms) • Size of each commercial unit • Details of the intended use of the development **Waste Generation** Waste generation calculations for general waste, comingled recycling and FOGO (must be calculated using the generation rates in **Appendix A**) Details of the size and quantity of the bins to be used/provided, refer Appendix C **Bin Storage Area** Design details of the bin storage area included, such as drawings including sizes of bins, aisle and access point widths and wash down facilities (refer 7.2): Bin storage area size Bin storage area layout Storage and management of Alternative Wastes (e.g. cooking oil, medical waste, bulky waste and hazardous substances) Wash-down area/tap & drain Ventilation Vermin prevention Noise reduction Stormwater ingress prevention Is there sufficient space within the property boundary to store two full weeks' worth of general waste and comingled recycling and one week of FOGO material likely to be generated at the development? Is future service flexibility incorporated in the design? How waste is transported from the source to the bin storage area? **Collection Method and Frequency** Waste Management Plans must contain details on proposed collection method to be used in servicing the development, including: City/Private Collection vehicle to be utilised Movement of collection vehicle include Swept path analysis (if required) Collection location (onsite/verge) Transfer of waste to the collection vehicle Frequency of collection Has the bin travel route between the bin store and bin collection point been designed to minimise occupational health and safety risks to those transferring the bins?

Waste System			
Details of any waste management equipment or devices to be used.			
• Chutes			
 Compactor 			
Bin Lifter			
Other			
Waste Service Provider			
Provide explanations why the applicant seeks to engage a private collection			
contractor to service the development rather than the City waste services			
Education			
Has clear signage been included to provide instructions on how use the waste			
system			
Ongoing management			
Does the WMP delegate responsibility for ongoing monitoring and maintenance			
of waste management services and equipment.			

Appendix C: Bin Dimensions

The information presented in below table is the typical dimensions of common bin sizes that the City utilise.

For other bin sizes please refer to the manufacturer's/private waste contractors specifications and include these in the WMP. Other bin sizes must have a minimum 50mm spacing around all sides of the bins, including between walls, other bins and aisles.

MGBs with capacities up to 1700L must comply with the Australian Standard for mobile waste containers, AS 4123.

Table 7-3: COV general waste and recycling bin dimensions (WALGA, 2014)

Bin Capacity	140L	240L	360L
Height (mm)	1065	1080	1100
Depth (mm)	540	735	885
Width (mm)	500	580	600

Appendix D: Collection Vehicles

Waste collection vehicles may be side loading, rear-end loading, front-end loading or crane trucks. The size of vehicle varies according to the collection service. Developers should consult with the City regarding the type of vehicle to be used.

For onsite collections (if required) the development must be designed to allow the required clearances for the rear lift vehicle dimensions in the below table. An additional 2m clearance is to be allowed at the rear of the truck to allow for operation of the bin lifting mechanism.

Swept path diagrams should be provided to demonstrate compliance.

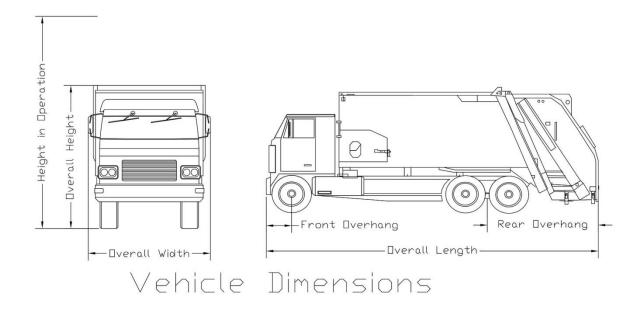


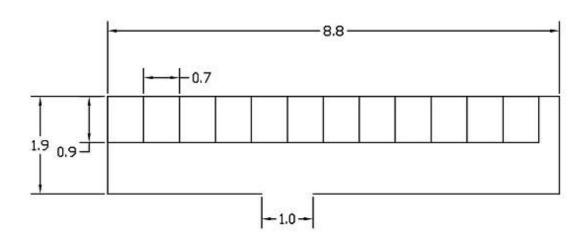
Figure 7-1: Vehicle Dimensions

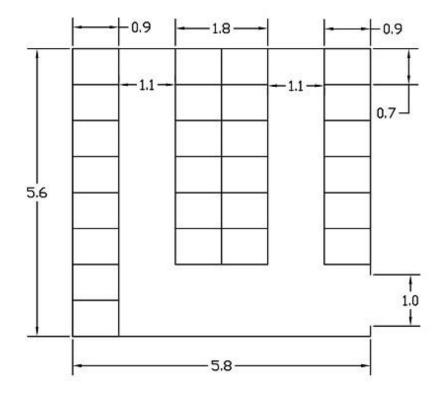
Parameter	Clearance of Vehicle (m)	Required Clearance (m)
Overall length	10.2	10.5*
Overall width	2.8	3.0
Overall height	2.9	3.5
Height in operation	3.4	4.0
Turning radius	19.6	-

^{*}with an additional 2m clearance behind the collection vehicle to allow for operation of bin lifting mechanism.



Appendix E: Sample 360L Bin Store Layouts





Appendix F: Bin Store Sign 'How to Sort Your Waste'

The City of Vincent, in collaboration with WasteSorted, has developed a Bin Store waste sorting sign to assist residents to utilise the correct bins and encourage the separation of household hazardous waste for drop off. The signage artwork is shown below.

The sign is a lightweight Aluminium Composite Material (ACM) with predrilled holes in the top corners. It is weatherproof and has UV and graffiti protective coatings, suitable for indoor or outdoor bin storage areas. It is A1 sized (594 mm x 841 mm).

We suggest the sign be placed in either a high foot-traffic area of the complex or in a well-lit, prominent position in the bin storage area.

The signs can be affixed to a wall or to 2 posts if free-standing.

A QR code featured in the top right corner links to the City of Vincent Waste & Recycling waste sorting page where the same artwork can be found in 12 different languages.

The 12 languages can be downloaded as PDFs from our website to print off copies as needed for distribution to Culturally and Linguistically Diverse residents in your complex, or refer residents to the website: https://www.vincent.wa.gov.au/how-to-sort-your-waste-correctly.aspx

Signs are available upon request from the City of Vincent Waste and Recycling Team.



Figure 7-3: 'How to Sort Your Waste' sign artwork

Appendix G: Waste Education flyer 'Waste in my Apartment'

The City of Vincent, in collaboration with WasteSorted, has developed an educational flyer targeted at multi-unit dwelling residents, titled 'Waste in my Apartment'. The flyer provides verbal and pictorial details of how to sort waste with a three bin FOGO system, as well as other waste and recycling services available to Vincent residents. The flyer artwork is shown below.

The flyers is a six page DL sized document printed on 100% recycled paper.

We suggest the flyer be included in all welcome packs for new residents by developers or strata. It may also be circulated as a digital copy to residents via email.

QR codes featured in the flyer link to the City of Vincent Waste and Recycling webpage and to the 'Find my Nearest' page of the Recycle Right website, referencing drop off locations for household hazardous waste.

Flyers are available upon request to the City of Vincent Waste and Recycling Team.

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Figure 7-4: 'Waste in my Apartment' DL flyer artwork

Appendix H: FOGO Kitchen Caddy and Education Materials Starter Pack

Residential households and multiple dwellings (i.e. units, townhouses and apartments) will be provided the following to assist with source separation of FOGO materials:

- Kitchen caddy

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- 3 x waste sorting fridge magnets
- 1 x pack of compostable caddy liners
- Waste & Recycling Guide



Figure 7-5: FOGO Kitchen Caddy and Education Materials starter pack

Contact Us

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