

WASTE MANAGEMENT PLAN



Multi-Unit Residential Development 55 Milton Street, Mount Hawthorn

September 2022



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Prepared by Dallywater Consulting
For RAD Architecture (on behalf of the
Department of Communities)

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Version 1: 30/09/2022

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1 EXECUTIVE SUMMARY

RAD Architecture, on behalf of Department of Communities, is applying to the City of Vincent (the “City”) to develop a property at 55 Milton Street, Mount Hawthorn. The development is proposed to consist of nine 2-bed apartments.

As part of the Development Approval process, the developer is required to submit a Waste Management Plan (WMP) for the development to the City. RAD Architecture contracted the services of waste experts Dallywater Consulting to investigate the City’s requirements in this regard and to develop this WMP.

Based on the above, it is proposed that the following initiatives will be implemented for the waste servicing at 55 Milton Street, Mount Hawthorn.

- Use of 240 litre receptacles for FOGO material;
- Use of 240 litre receptacles for garbage material;
- Use of 360 litre receptacles for recycling material;
- Weekly collection of the FOGO material; and
- Fortnightly collection of the garbage and recycling material.

This will result in the following requirements for receptacles;

- FOGO – Three 240 litre bins collected weekly; and
- Garbage – Four 240 litre bins collected fortnightly; and
- Recycling – nine 360 litre bins collected fortnightly.

There is sufficient verge width to enable presentation of all bins on a combined collection day (i.e. seven bins).

Review

The above-mentioned arrangements will be reviewed as a matter of course on an ongoing basis to ensure that the most efficient arrangements to manage the waste and recycling material generated by all aspects of the facility are in place and are maintained.

DEFINITIONS

240: A 240 litre FOGO, garbage or recycling receptacle.

360: A 360 litre recycling receptacle.

Food Organics Garden Organics (FOGO) Service: A kerbside or onsite collection service for organic waste including meal leftovers, peelings, cooked and raw meat, bones, shells, bread, seafood and dairy products, paper products such as tissues, napkins, shredded paper, soiled newspaper and soiled pizza boxes and greenwaste including lawn clippings, small branches and leaves and other organic garden debris.

Garbage: Any recyclable and non-recyclable discarded solid, semi-solid, liquid or contained gaseous materials not accepted by the local government's recycling or FOGO collection contracts.

Mobile Garbage Bin (MGB): A wheeled receptacle used by domestic residences and commercial premises within a local government municipality to deposit waste materials for emptying by the local government or a collection contractor.

Mobile Recycling Bin (MRB): A wheeled receptacle used by domestic residences and commercial premises within a local government municipality to deposit recycling materials for emptying by the local government or a collection contractor.

Recycling: Any material accepted by the local government's recycling collection service.

Strata/Building Management: For the purposes of this document, the selected legal entity charged with managing the soft services of the built structure (i.e. waste management, cleaning, landscaping, security and other similar human-sourced services) on behalf of the owners and tenants of the building.

Waste Minimisation: A process to minimise the amount of waste requiring disposal via hierarchical activities such as behaviour and product modification, waste avoidance, reduction, reuse and recycling.

Total Waste Stream: The combined waste, recyclables and compostables.

2 INTRODUCTION

2.1 The Development

RAD Architecture, on behalf of Department of Communities, is applying to the City of Vincent (the “City”) to develop a property at 55 Milton Street, Mount Hawthorn. The development is proposed to consist of nine 2-bed apartments.

As part of the Development Approval process, the developer is required to submit a Waste Management Plan (WMP) for the development to the City. RAD Architecture contracted the services of waste experts Dallywater Consulting to investigate the City’s requirements in this regard and to develop this WMP.

Figure 1: Location Plan

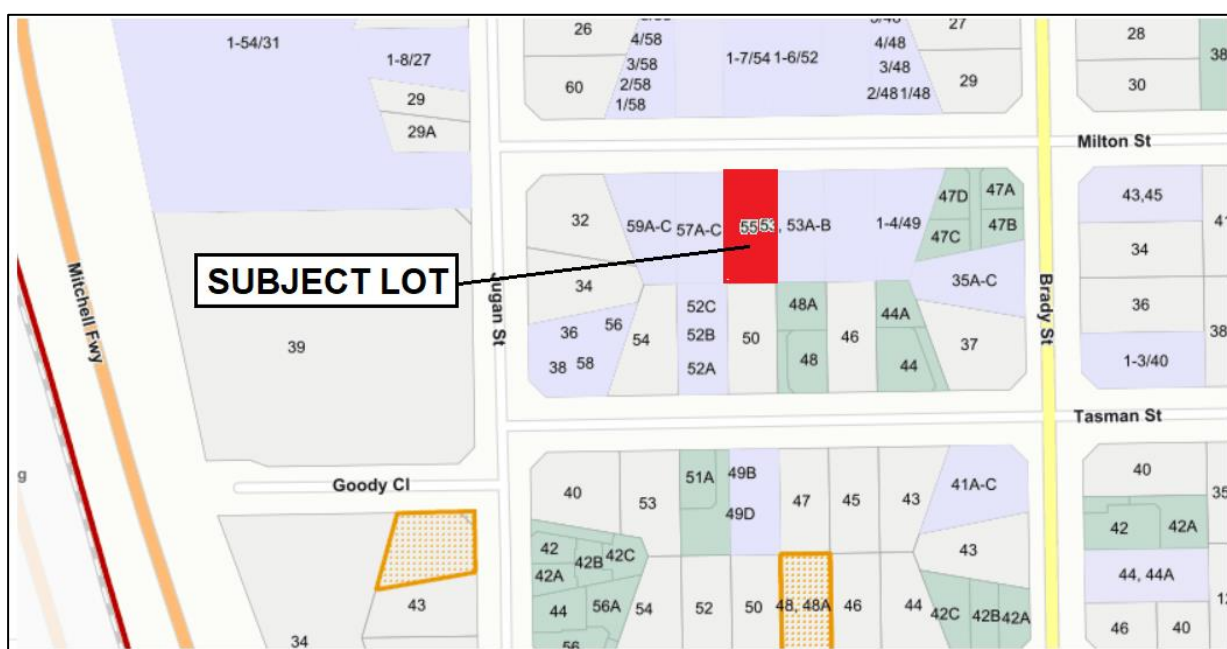
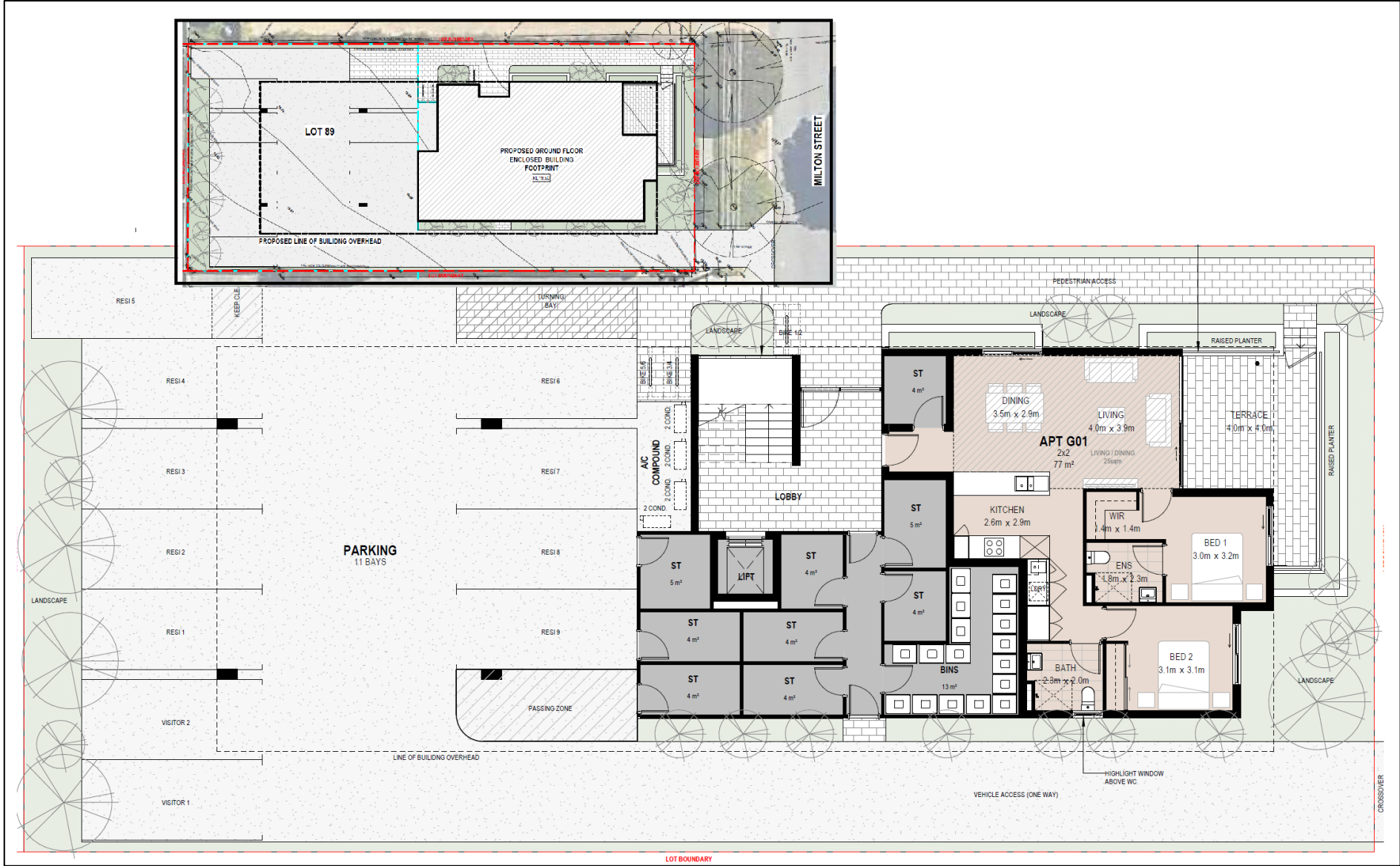


Figure 2 – Site Plan



2.2 Onsite Waste Management

The following provisions have been made for waste (garbage and organics) and recycling on the site:

- **Residences**
 - Residents will place their food and garden organics into 240 litre FOGO bins, their garbage into separate 240 litre bins and recycling into 360 litre bins, located in a bin store situated adjacent to the Lobby on the ground level of the complex.
 - A person contracted by the strata management will be tasked to present the bins to the kerbside on collection day and to retrieve the bins and return them to the bin store after they have been serviced.
- **Hardwaste/Bulky Items**
 - Residents will be required to organise their own immediate disposal of large or bulky items not suitable for disposal to the bins.
 - There is sufficient space available within each resident's store for the temporary storage of large or bulky items prior to their removal.
- **Other Waste Types**
 - Residents will also have access to a range of other waste services offered by the City for the collection and diversion of other materials.
- **Kerbside Waste Collection**
 - The City provides various services for the collection of waste and recycling bins.
 - The City sets the specifications for acceptable collection parameters (e.g. number of bins, frequency of collections, maximum bin weights, etc).
 - Bins are to be serviced from the kerb.

3 LOCAL GOVERNMENT WASTE MANAGEMENT REQUIREMENTS

3.1 Waste Management Guidelines

The following provisions have been sourced from the City's Coordinator Waste Operations and Contracts. The City's expectations with regards to waste management for developments of this nature are based on the City's *Waste Guidelines for New Developments (May 2020)* and any waste generation rates prescribed by the City have been adapted from that source.

3.2 Requirements

The Coordinator has advised that the City's requirements for the provision of waste storage for this type of development are as follows:

- 240 litre receptacles are the preferred bin size for FOGO material;
- 240 litre receptacles are the preferred bin size for garbage material;
- 360 litre receptacles are the preferred bin size for recycling material;
- FOGO is collected weekly and garbage and recycling are collected fortnightly;
- Multi-units may share bins which will be required to be stored in a suitable enclosure for storage and cleaning;
- All bins are to be presented to the verge to allow side lift collection, unless otherwise agreed;
- Additional servicing can be approved by the City; and
- Bins are to be provided in sufficient numbers to cater for the waste generation requirements detailed below.

3.3 Waste Generation

Based on the above-mentioned Guidelines, the waste generation rates for the development are as detailed in the following table.

Table 2: Waste Generation Rates

Residential Apartments	Number	Weekly FOGO (m ³ /dwelling)	Fortnightly Garbage (m ³ /dwelling)	Fortnightly Recycling (m ³ /dwelling)
2 Bed	9	0.08	0.10	0.12

3.4 Bin Storage

Waste and recycling material will be stored in a Bin Store located adjacent to the Lobby on the ground level of the complex.

The bins store is to meet or exceed the following requirements:

- be constructed of brick, concrete, corrugated compressed fibre cement sheet or other material of suitable thickness or material approved by the City;
- have an access way of not less than 1 metre in width;
- be fitted with a hot and cold-water tap attached to the scheme supply;
- contain a hose for cleaning receptacles;
- contain a smooth and impervious floor –
 - of not less than 75 millimetres in thickness;
 - which is evenly graded to the main sewer; and
 - which is easily accessible (i.e. even and flat) to allow for the removal of the receptacles.

3.5 Bin Presentation

- Bins ready for collection shall be presented in a manner that has minimal impact on the public realm.
- All bins are to be presented on verges to allow side lift collection, unless otherwise agreed;
- A temporary set down area on the verge is available to accommodate a 3-10 m³ skip bin for bulk waste collection if available for the development.

3.6 Waste Capacity

Based on the above requirements, the weekly storage capacity required by the City for waste and recycling from the proposed development is detailed in the following table.

Table 3: Estimated Weekly Material Volumes

Residential Apartments	Number	Generation Rates			Generated Volumes		
		Weekly FOGO	Fortnightly Garbage	Fortnightly Recycling	Weekly FOGO	Fortnightly Garbage	Fortnightly Recycling
		(m ³ /dwelling)			m ³		
2-Bed	9	0.08	0.10	0.12	0.72	0.9	1.08
Total Generated					0.72	0.9	1.08

3.7 Number of Bins

Based on the preceding table, the number of bins of various sizes required to accommodate the garbage, recycling and FOGO material generated from the development are detailed in the following table.

Table 4: Required Bin Numbers

Residential Apartments	Number	Generated Volumes		
		Weekly FOGO	Fortnightly Garbage	Fortnightly Recycling
		m ³		
2-Bed	9	0.72	0.9	1.08
Bin Sizes (litres)		240	240	360
Number of Bins Required		3	3.75 (4)	3

Based on the City's guidelines and on weekly FOGO and fortnightly garbage and recycling collections, the number of bins required would be three FOGO bins, four garbage bins and three recycling bins.

3.8 Summary

Based on the above, it is proposed that the following initiatives will be implemented for the waste servicing at 55 Milton Street, Mount Hawthorn.

- Use of 240 litre receptacles for FOGO material;
- Use of 240 litre receptacles for garbage material;
- Use of 360 litre receptacles for recycling material;
- Weekly collection of the FOGO material; and
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There is sufficient verge width to enable presentation of all bins on a combined collection day (i.e. seven bins).

3.9 Review

All of the above-mentioned waste servicing arrangements will be reviewed as a matter of course on an ongoing basis to ensure that the most efficient arrangements to manage the waste and recycling material generated by all aspects of the facility are in place and are maintained.

4 BIN STORAGE AND MANAGEMENT

4.1 Bin Storage

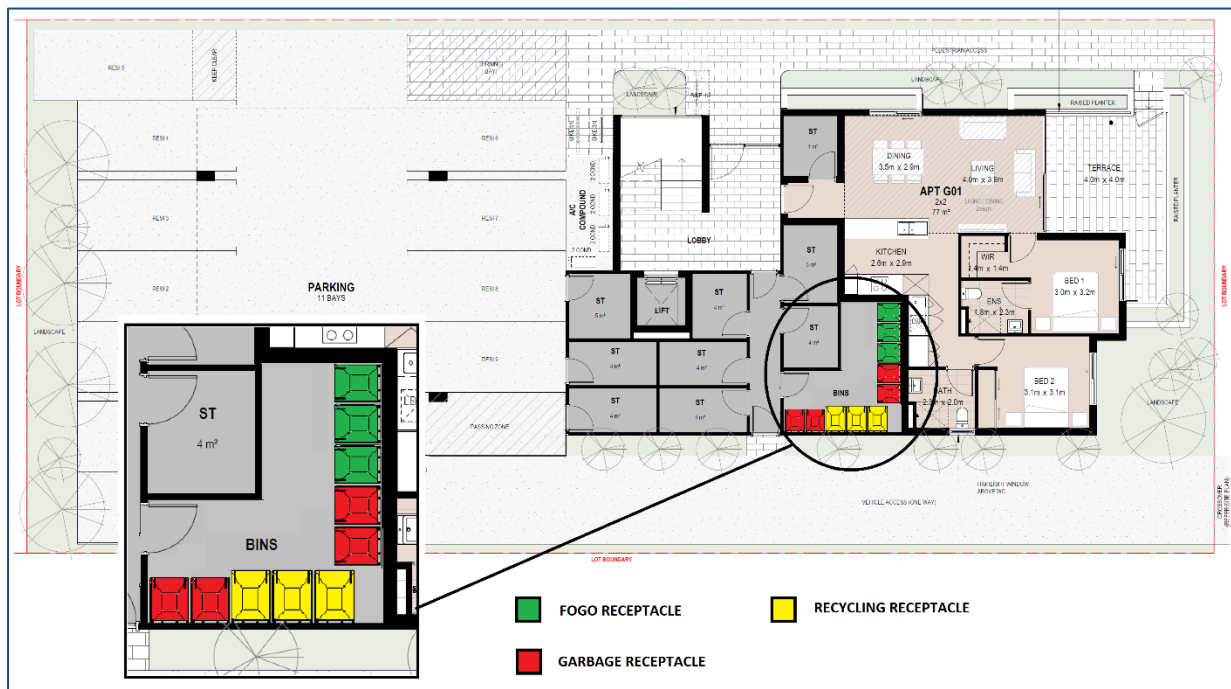
All bins will be stored within the Bin Store on the ground level. A plan showing the location of the storage is included below.

Space is also available in the residents' stores on the Ground Floor for storage of larger items not suitable for disposal into the bins, prior to those items being removed to alternative disposal.

The bin storage area has been designed to meet the City's requirements per 3.4. In addition, the store:

- is well ventilated;
- can be kept thoroughly clean and disinfected and will prevent access to vermin and limit noise egress;
- will prevent the escape of any nuisance noise from the management of the store; and
- is consistent with the overall aesthetics of the development.

Figure 3: Bin Store



4.2 Signage

Signage complying with the City's Guidelines (or as per Sustainability Victoria's *Better Practice Guide for Waste Management and Recycling in Multi-unit Developments* or other similar guideline) will be installed to the bin store area.

4.3 Bin Presentation and Collection

Collection of bins will be as per the following arrangements:

- All bins will be presented to the kerbside on Milton Street before or early on collection day.
- After servicing, on the same day, bins will be retrieved from the kerbside and returned to the bin store.
- Bulky and hardwaste too large for the residential bins will be stored in individual residents' stores and removed by contractors as required.

5 WASTE MANAGEMENT RESPONSIBILITIES

5.1 Strata Management/Building Owner

Upon approval by the City, the Strata Management will be responsible for the implementation of this WMP for the life of the development.

The Strata Management will have responsibility for ensuring that the residential waste management activities are appropriately conducted and that residents meet their waste management responsibilities. The waste management requirements and responsibilities in this Plan will be clearly described in the strata arrangements, either via inclusion or by reference to this document.

At a minimum, the Strata management will coordinate the following bin servicing and waste management functions;

- Regular cleaning of the bin room;
- Rotation of bins to ensure part-filled or empty bins are available to residents;
- Checking of the bin contents on a regular basis to ensure residents are evidencing suitable disposal behaviour (placing the correct materials in the right bins);
- Ensuring bins are placed to the kerb in time for servicing and then returned to the bin store as soon as possible after collection; and
- Coordination of any bulk and hard waste servicing of the complex.

In addition, the education of existing and new residents will be a priority for these staff.

5.2 Residents

All residents would be instructed via the Strata Management of the various waste requirements. This would include any expectations of the managing body with regards to any recycling or waste diversion. Residents will be responsible for the immediate removal and disposal off-site of any waste unsuitable for placement in the bins.

At a minimum, residents are required to:

- Take their own garbage, FOGO and recycling materials to the bin store;
- Place the materials into the correct bins;
- Assist the Strata Management to keep the bin store tidy by ensuring all material is placed in the bins and that no material is left on the floor of the bin store; and
- Liaise with the Strata Management for the temporary placement of any additional bins (e.g. skips) for the removal of large or bulky wastes (e.g. building maintenance material, white goods, furniture etc).

6 REFERENCES

- City of Vincent: *Waste Guidelines for New Developments (May 2020)*