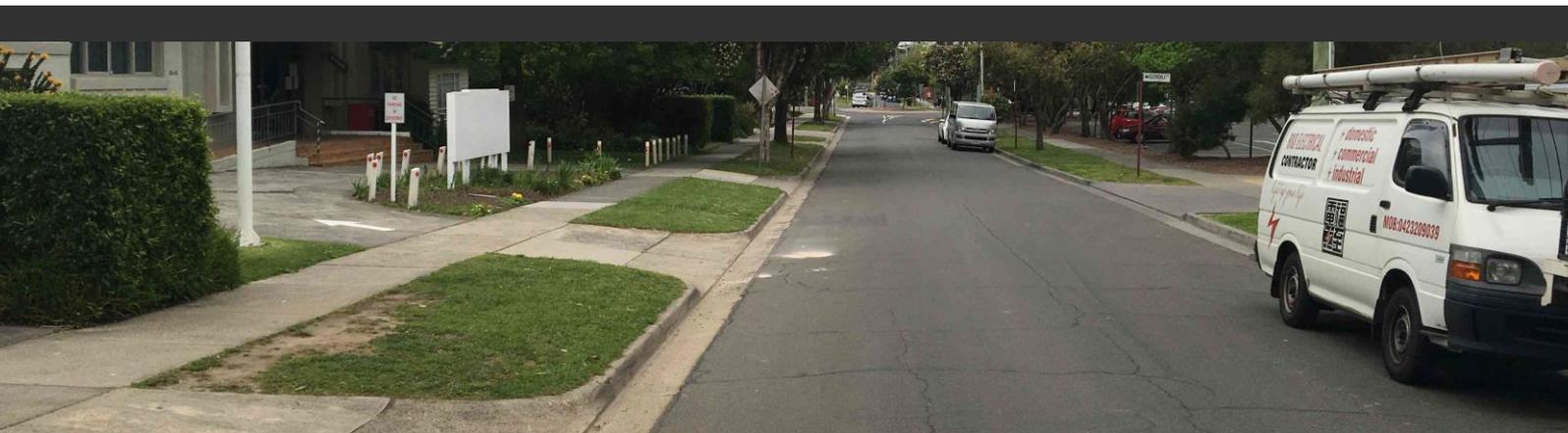


50 Montclair Avenue – Mixed-Use Development

Waste Management Plan



16503WMP002B-F

24 January 2017

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DOCUMENT INFORMATION

Prepared for	Life Design Architecture	Report Date	24 January 2017
File Name	16503WMP002B-F	Reviewed by	Ross Hill
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Signature		Signature	

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CONTENTS

1	INTRODUCTION.....	4
2	EXISTING SITE CONDITIONS.....	4
3	DEVELOPMENT PROPOSAL.....	5
3.1	General.....	5
3.2	Waste Management	5
4	WASTE GENERATION	6
4.1	Residential	6
4.2	Restaurant / Cafe	6
4.3	Commercial	6
4.4	Expected Waste Generation	7
4.4.1	Waste and Recycling	7
4.4.2	Green Waste	7
4.4.3	Hard Waste	7
5	BIN REQUIREMENTS	8
5.1	Bin Provision and Specifications.....	8
5.2	Bin Collection	8
5.3	Bin Storage	8
5.4	Bin Cleaning	9
5.5	Food Standards Code.....	9
6	WASTE MANAGEMENT	10
6.1	Best Practice Waste Management.....	10
6.2	Bin Usage	10
6.3	Common Property Litter and Waste Removal	11
6.4	Signage	11
6.5	Resident and Tenant Information	11
6.6	Municipal Charges	11
7	OCCUPATIONAL HEALTH & SAFETY RESPONSIBILITIES.....	11
8	CONTACT INFORMATION.....	12
8.1	Council	12
8.2	Contractors.....	12
8.3	Equipment	12

TABLES

Table 1	Proposed Development.....	5
Table 2	Expected Weekly Waste Generation – Residential.....	7
Table 3	Expected Weekly Waste Generation – Office	7
Table 4	Expected Weekly Waste Generation – Café and Restaurants.....	7
Table 5	Bin Provision	8
Table 6	Bin Specifications.....	8

FIGURES

Figure 1	Site Location.....	4
Figure 2	Bin Storage Room and Collection Details	5

1 INTRODUCTION

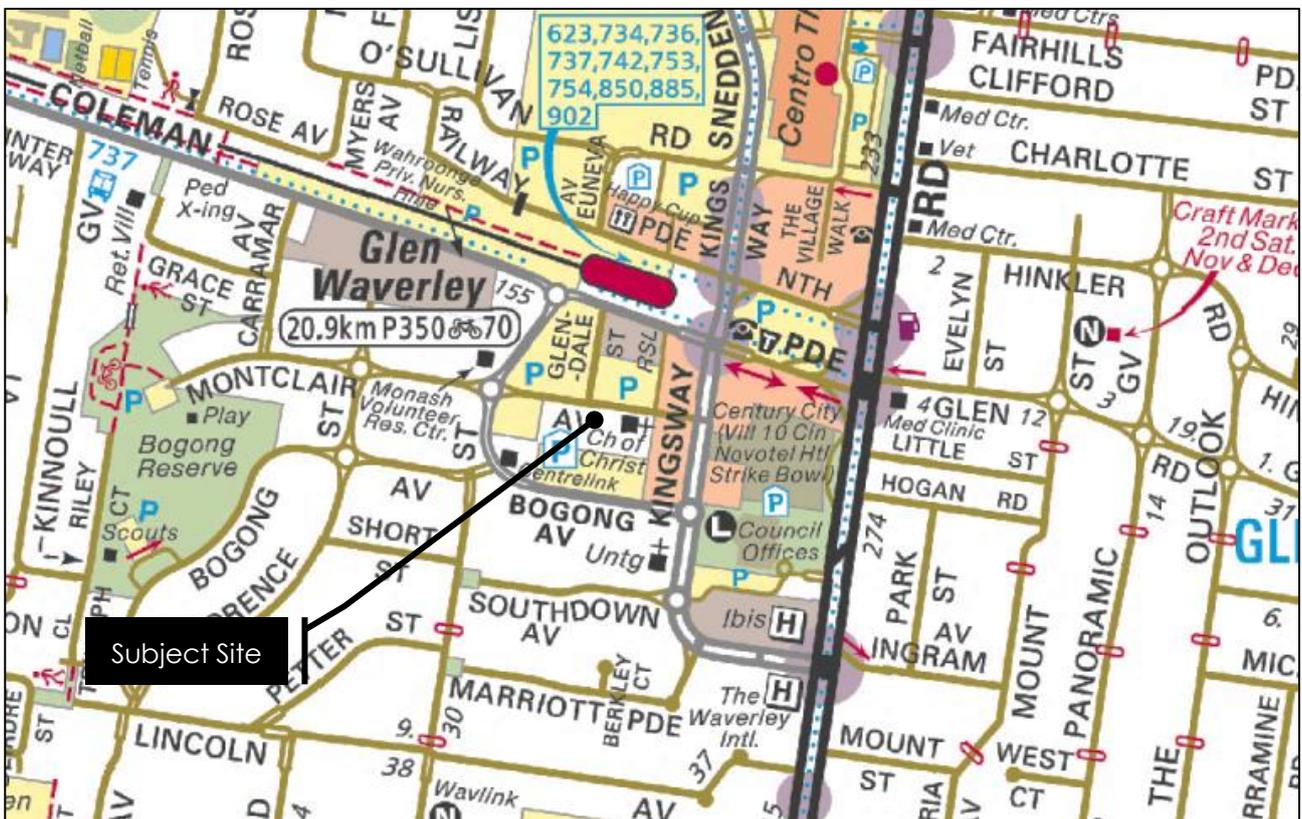
onemilegrid has been requested by Life Design Architecture to prepare a Waste Management Plan for the proposed mixed use development at 50 Montclair Avenue, Glen Waverley.

The preparation of this management plan has been undertaken with due consideration of the Sustainability Victoria Best Practice Guidelines for Waste Management in Multi-Unit development and relevant Council documentation.

2 EXISTING SITE CONDITIONS

The subject site is located on the south side of Montclair Avenue between Kingsway in the east and Glendale Street in the west, as shown in Figure 1. The site has a frontage of approximately 18 metres to Montclair Avenue and is approximately 80 metres west of Kingsway.

Figure 1 Site Location



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The site is currently occupied by a single storey dwelling.

The subject site is part of the Glen Waverley Activity Centre which contains commercial and retail uses. Further south-west of the site is predominantly utilised for residential use. It is noted that Glen Waverley Train Station is located approximately 150m north of the site and The Glen shopping centre is located approximately 150m east of the site.

3 DEVELOPMENT PROPOSAL

3.1 General

It is proposed to develop the subject site for the purposes of a mixed-use development, containing apartments, office spaces, restaurants and a cafe, as summarised in Table 1.

Table 1 Proposed Development

Component	No/Area
2 Bedroom Apartment	30
3 Bedroom Apartment	8
Total Apartments	38
Restaurant / Café	2 tenancies 683 m ² (192 seats)
Office	2,227 m ²

The development has seventeen levels including; four levels of basement carparking, the ground level for a café / restaurant, the first floor split between a restaurant and office, the next four floors are proposed office spaces and the top six levels are for apartments.

3.2 Waste Management

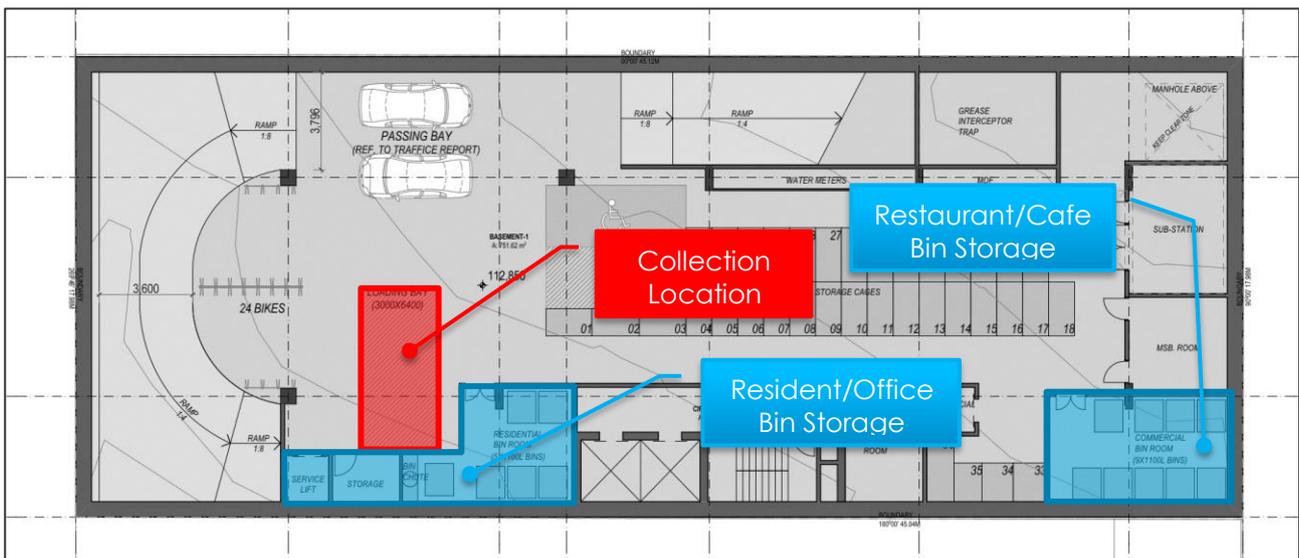
It is proposed to utilise a private waste collection service for all streams of waste generated by the development.

The basement level includes two bin storage rooms, one being for the residential apartments and office tenancies, and the other for the restaurant and café components. On collection day, the waste collection vehicle will enter the basement level and park within the designed loading area.

Residents and staff will be responsible for disposing of recyclables or bagged garbage into the appropriate bins located within the respective bin rooms.

The bin rooms and loading bay are shown in Figure 2.

Figure 2 Bin Storage Room and Collection Details



4 WASTE GENERATION

4.1 Residential

The Victoria Local Government Annual Survey assesses the kerbside waste management and recycling services by local governments, and provides household yields for both recyclables and garbage.

In order to estimate the expected waste generation of the proposed dwellings, information from the Annual Survey was sourced for the City of Monash, which indicates that approximately 55 litres of garbage and 80 litres of commingled recyclables are generated per household per week.

It should be noted that the Local Government Annual Survey provides an average waste yield per dwelling, and does not distinguish between different dwelling types. As the development proposal includes predominantly two and three bedroom apartments, the above projection is expected to be conservatively high.

Furthermore, the rates above are for uncompacted waste and recyclables. It should be noted that slight compaction can significantly reduce the volume of waste and particularly recyclables, reducing the bin requirements accordingly.

4.2 Restaurant / Cafe

A number of waste generation rates are listed for restaurant uses. It is considered that the EPA New South Wales Generation surveys are representative of the likely waste generated by the restaurants. This data is based on actual survey data of several restaurants.

Waste generation rates for a range of commercial properties were estimated by the EPA NSW, based on a survey of a range of different businesses in August 2012.

For restaurant uses, the survey data indicates an average waste generation of 190L/ 100m²/ day for garbage, and 190L/ 100m²/ day for recycling. For café uses, the survey data indicates an average waste generation of 215L / 100m²/ day for garbage, and 130L/ 100m²/ day for recycling

It is assumed that each of these components will be open six days per week.

4.3 Commercial

Waste and recycling data has been sourced from the Commercial Waste Management Guidelines prepared by the City of Melbourne. The document specifies a commercial waste generation of 10 L / 100 m² per day for general waste and 10 L / 100 m² per day for recycling material. There is no data linked to the City of Monash for commercial waste generations and as a result the above rates have been adopted.

It is assumed that the office component of the proposal will be open five days per week.

4.4 Expected Waste Generation

4.4.1 Waste and Recycling

Based on the Annual Waste Survey, EPA New South Wales Generation Survey and Council's adopted waste generation rates, the following weekly waste generation is expected.

Table 2 Expected Weekly Waste Generation – Residential

<i>Component – Stream</i>	<i>No of Dwellings</i>	<i>Rate/Dwelling</i>	<i>Total Waste / Week</i>
Residential – Waste	38	55 litres	2,090 litres
Residential – Recycling	38	80 litres	3,040 litres

Table 3 Expected Weekly Waste Generation – Office

<i>Component – Stream</i>	<i>Floor Area</i>	<i>Rate/100m²</i>	<i>Total Waste / Week</i>
Office – Waste	2,547 m ²	50 litres	1,274 litres
Office – Recycling	2,547 m ²	50 litres	1,274 litres

Table 4 Expected Weekly Waste Generation – Café and Restaurants

<i>Component – Stream</i>	<i>Floor Area</i>	<i>Rate/100m²</i>	<i>Total Waste / Week</i>
Restaurant – Waste	217 m ²	1,140 litres	2,474 litres
Restaurant – Recycling	217 m ²	1,140 litres	2,474 litres
Café – Waste	466 m ²	1,290 litres	6,011 litres
Café - Recycling	466 m ²	780 litres	3,635 litres

4.4.2 Green Waste

Given the nature of the proposed development and dwellings (being multi-unit/multi-level), it is expected that green waste generation will be minimal or negligible, and therefore a green waste collection service is not expected to be required.

It is expected that any maintenance and gardening undertaken on common property will be managed by a contractor appointed by the Owner's Corporation. The appointed contractor will be responsible for the disposal of any green waste accumulated during the course of their duties.

4.4.3 Hard Waste

The City of Monash offers one free hard waste collection each year for residents, which occurs typically during August and September each year.

5 BIN REQUIREMENTS

5.1 Bin Provision and Specifications

It is proposed to utilise private waste collection for all waste services, for both the residential and commercial components of the proposed development.

Consequently, the following bins will be required for the proposed development.

Table 5 Bin Provision

<i>Component – Stream</i>	<i>Total Waste / Week</i>	<i>Bin Size</i>	<i>Collection Frequency</i>	<i>Bins Required</i>
Residential – Waste	2,090 litres	1,100 litre	Weekly	2 bins
Residential – Recycling	3,040 litres	1,100 litre	Weekly	3 bins
Commercial – Waste	9,759 litres	1,100 litre	2 times/ week	5 bins
Commercial – Recycling	7,383 litres	1,100 litre	3 times/ week	4 bins
Total				14 bins

Table 6 Bin Specifications

<i>Stream</i>	<i>Capacity</i>	<i>Width</i>	<i>Depth</i>	<i>Height</i>	<i>Colour</i>
Waste	1,100 litres	1.25m	1.10m	1.35m	Green lid and black body
Recycling	1,100 litres	1.25m	1.10m	1.35m	Yellow lid and black body

5.2 Bin Collection

On collection days the mini waste loader will enter the basement level and reverse into the indicated loading area. The bins from the respective bin rooms will be transported to this parked collection vehicle. The vehicle will then leave the site in a forward direction. Refer to the Transport Impact Assessment report for swept paths demonstrating basement access for this collection vehicle.

A minimum height clearance of 2.2m is to be provided within the loading area to ensure that the 1,100L bins can be loaded into the vehicle.

5.3 Bin Storage

As indicated in Figure 2, it is proposed to provide a two bin storage areas within the first basement level. The first storage area is to be utilised by residents (with a determined capacity to accommodate the required five bins). The second storage area is to be utilised by staff of the office, café and restaurant tenancies (with a determined capacity to accommodate the required nine bins).

Some additional area is also provided within the bin storage rooms to allow for the temporary storage of bulk items and packaging, under the control of the Owners Corporation.

Furthermore, the bin storage rooms are located appropriately for access by residents and staff, and is secured from the common areas.

The bin storage rooms should be vermin proof, and have appropriate lighting and drainage.

5.4 Bin Cleaning

The Owners Corporation shall ensure that the shared residential bins are kept in a clean state, to minimise odours and to discourage vermin. This may include regular cleaning by a third party, or maintenance by residents.

Commercial tenants are responsible for the maintenance and cleaning of their own bins.

5.5 Food Standards Code

Division 2 of the Food Standard Code details requirements for the design and construction of food premises. With regard to waste and recycling, Section 6 of Division 2 details 3 requirements for the storage of garbage and recyclable matter. A review of these requirements with respect to the proposed café and restaurant waste storage area follows:

a) adequately contain the volume and type of garbage and recyclable matter on the food premises;

The proposed bin storage room have been designed to accommodate the required number of bins for the volume of waste and recycling generated by the restaurant uses.

(b) enclose the garbage or recyclable matter, if this is necessary to keep pests and animals away from it;

The proposed bin storage room is enclosed, secured and will be vermin proof.

(c) are designed and constructed so that they may be easily and effectively cleaned.

The proposed bin storage room will be constructed to ensure effective cleaning.

6 WASTE MANAGEMENT

6.1 Best Practice Waste Management

Best Practice Waste Management is an initiative designed to reduce the amount of waste generated through encouraging a change of behaviour and action on waste management and moreover recycling.

The benefits of reducing waste generation are far reaching and has been identified as significantly important by Council and the Victorian Government.

The Victorian Waste and Resource Recovery Policy "Getting Full Value" has been prepared by the Victorian Government, and "sets out a position and an approach that will position Victoria as a national leader in resource recovery".

One of the primary goals of the policy is to "Assist Victorians to reduce the waste they generate and save Victorians' money through efficient use of resources", for which the following strategic directions are listed:

- Support commercial, not-for-profit and Victorian public sector organisations to achieve financial savings through waste reduction;
- Provide households with the information and support they need to reduce waste by using household goods more efficiently;
- Continue to work in partnership with the Commonwealth Government through the National Waste Policy: Less Waste, More Resources, and take a lead role in national strategies that harness Victoria's strengths and capabilities

This policy builds on the Towards Zero Waste strategy, which was launched in 2005.

The Owners Corporation shall encourage residents and tenants to participate in minimising and reducing solid waste production by:

- Promoting the Getting Full Value Strategy and the Municipalities Waste Management Strategy, including the use of The Waste Hierarchy, which in order of preference seeks to:
 - + Avoid waste generation in the first place;
 - + Increase the reuse and recycling of waste when it is generated; and
 - + Recover, treat or contain waste preferentially to;
 - + Its disposal in Land Fill (which is least desirable).
- Providing information detailing recyclable materials to ensure that non-recyclable materials do not contaminate recycling collections;
- Providing information regarding safe chemical waste disposal methods and solutions, including correct battery and electronics disposal methods;
- Encouraging composting for residents; and
- Providing tips for recycling and reusing waste, including encouraging the disposal of reusable items in good condition via donations to Opportunity Shops and Charities.

6.2 Bin Usage

Residents will bag and dispose of waste in the provided bins, located in the bin storage room.

Residents will transport and dispose of recyclables in the provided bins, located in the bin storage room. Cardboard boxes should be flattened and containers rinsed and cleaned prior to disposal in the provided bins.

Commercial tenants will dispose of waste and recyclables in their individual bins, located on the first level of the basement.

6.3 Common Property Litter and Waste Removal

The proposed development includes a number of common property areas, including foyers, hallways, parking areas and the bin storage area.

The operator shall ensure that all common areas are kept clear of litter, and that all waste is removed from common areas on a regular basis. This includes the bin storage area in particular, to discourage vermin.

6.4 Signage

To avoid contamination between garbage streams, bin lids will be colour coded generally in accordance with Council standards, to ensure the bin type is easily distinguishable. Furthermore, bins should include typical signage (preferably on the bin lid) to reinforce the appropriate materials to be deposited in each bin.

6.5 Resident and Tenant Information

To ensure all residents and tenants are aware of their responsibilities with regard to waste and bin management, an information package should be provided to all residents, including the following information:

- A copy of this Waste Management Plan;
- Methods and techniques for waste reduction and minimisation;
- Information regarding bin collection days and requirements;
- Resident and tenant responsibilities with regard to bin usage, storage, and collection; and
- Resident and tenant responsibilities with regard to litter and waste removal from the common property.

6.6 Municipal Charges

It is noted that every rateable tenement within the proposed development is liable for municipal waste charges, irrespective of the services provided by Council.

7 OCCUPATIONAL HEALTH & SAFETY RESPONSIBILITIES

The Owners Corporation/site operator shall ensure compliance to all relevant OH&S regulations and legislation, including the following:

- Worksafe Victoria Guidelines for Non-Hazardous Waste and Recyclable Materials

8 CONTACT INFORMATION

8.1 Council

Monash City Council

Phone: (03) 9518 3555

Web: <https://www.monash.vic.gov.au/Home>

8.2 Contractors

Cleanaway

Services: Private contractor

Phone: 131 339

Web: www.transpacific.com.au/content/transpacific-cleanaway.aspx

JJ Richards & Sons

Services: Private contractor including bin tugs

Phone: (03) 9703 5222

Web: www.jjrichards.com.au

Email: operations.melbourne@jjrichards.com.au

WasteWise

Services: Garbage collection (low height clearance vehicle)

Phone: 1300 550 408

Web: www.wastewise.com.au

8.3 Equipment

Eco-Safe Technologies (odour control equipment)

Phone: 0411 335 753

Web: www.eco-safe.com.au

Email: info@eco-safe.com.au