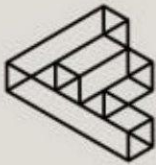


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**15 -17 Marriott Parade, Glen Waverley**

**30/01/2020**

**Waste Management Plan**



# Waste Management Plan (WMP)

## Proposed Residential Development

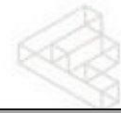
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#### **DOCUMENT VERSION**

**Version 0:** Draft issued on 20/01/2020 for Client review

**Version 1:** Final issued on 30/01/2020 for Client review – no changes



## INTRODUCTION

Framer Consulting Services have been engaged to undertake a Waste Management Plan for the proposed apartment development located at 15 -17 Marriott Parade, Glen Waverley. We have reviewed the plans of the proposed development and have, where necessary, undertaken research in the relevant field of waste management.

## SITE DESCRIPTION

The proposed site is located at 15 -17 Marriott Parade, Glen Waverley. The 2,186m<sup>2</sup> site is currently occupied by single storey house which is proposed to be demolished prior to the construction of the development. It is located in an established residential zone approximately 19km south-east of the Melbourne CBD.

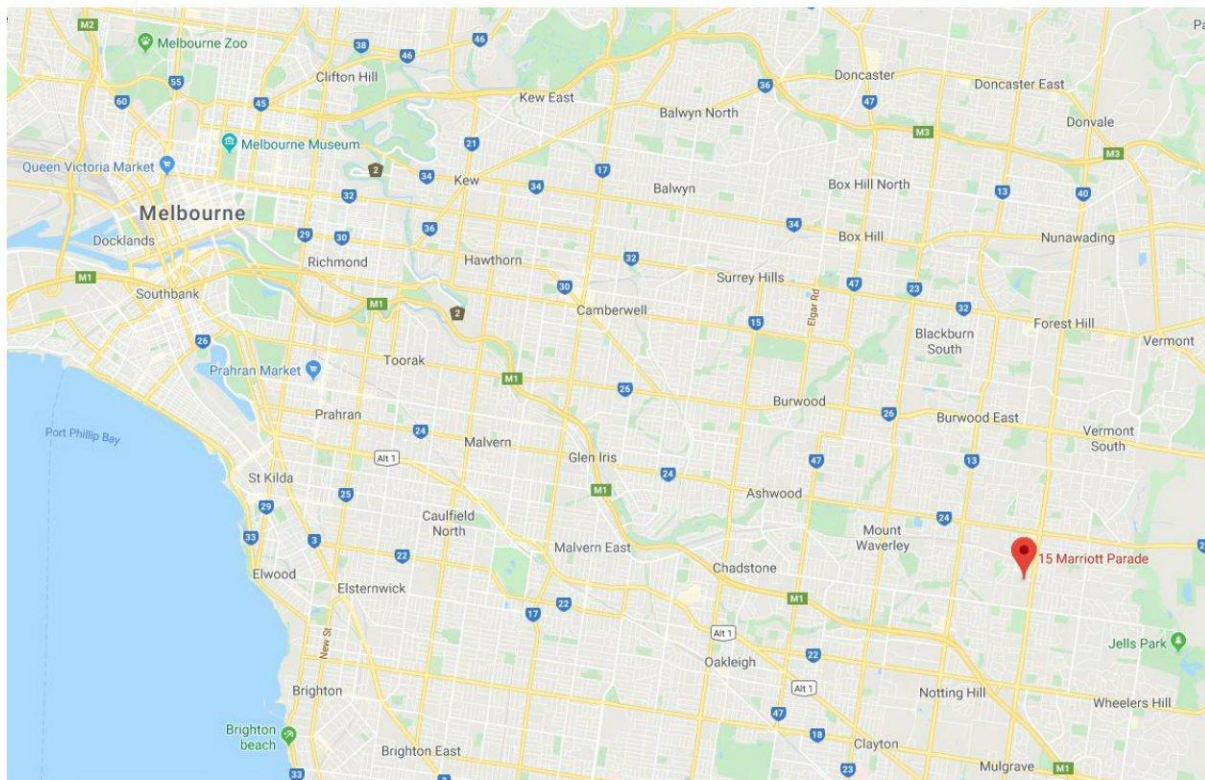


Figure 1: Location of the proposed development in Glen Waverley with relation to Melbourne CBD (Source: Google Maps)

## PROPOSED DEVELOPMENT

The proposal consists of development of the site into a residential development with five townhouses (5 x 4-bedroom) and 11 apartments (11 x 4-bedroom). The basement level will include garages for townhouses and a car park comprising 22 car spaces for apartments, a central waste storage area, bicycle spaces and storage cages. The area of the site is approximately 2,186m<sup>2</sup>.



## TYPES OF WASTE GENERATED

The following types of waste are most commonly generated within a residential development:

- General landfill rubbish;
- Recyclables such as glass, paper, cardboard, cartons, plastics with ID Codes 1 to 7, steel & aluminium cans;
- Compostable organic material (food scraps);
- Hard rubbish such as broken furniture and large objects; and
- Sundry waste types such as electronic waste.

## WASTE GENERATION RATES

Listed below are the waste generation estimates for the development in accordance with the *Darebin City Council Waste Management Plan (WMP) - Guide for Applicants*

For dwellings of 3 bedrooms or greater

- Rubbish Generation: 120 L/week
- Comingled Recyclables Generation: 120 L/week

Council collection is proposed for **townhouses**. Based on the proposed 5 x 4-bedroom, total waste generated by the townhouses is therefore:

Total space types	Rubbish Generation	Comingled Recyclables
Townhouses	600 L/week	600 L/week
Proposed Bin Type	120 L	240 L
Number of Bins required	5 (1 per townhouse)	5 (1 per townhouse)
Collection Frequency	Once per week (Council Collection)	Once per fortnight (Council Collection)

Private collection is proposed for **apartments**. Based on the proposed 11 x 4-bedroom, total waste generated by the apartments is therefore:

Total space types	Rubbish Generation	Comingled Recyclables
Apartment	1,320 L/week	1,320 L/week
Proposed Bin Type	1,100 L	1,100 L
Number of Bins required	2 (shared)	2 (shared)
Collection Frequency	Once per week (Private Collection)	Once per fortnight (Private Collection)



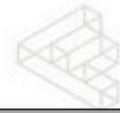
## BIN TYPES

Below are the types of bins that the council/private contractor will provide with the common dimensions:

Bin Storage Type	Capacity	Colour	Waste Type	Comments
	120 (x5)	Dark Green Body and red lid	General Rubbish	Average dimensions <sup>1</sup> are: Height 0.93m, Width 0.48m, Depth 0.545m Total floor area required: 0.26m <sup>2</sup> /bin
	240L (x5)	Dark Green Body with yellow lid	Commingled Recyclables	Average dimensions are: Height 1.06m, Width 0.58m, Depth 0.73m Total floor area required: 0.42m <sup>2</sup> /bin
	1,100L (x2)	Dark Green Body and red lid	General Rubbish	Average dimensions are: Height 1.33m, Width 1.24m, Depth 1.07m Total floor area required: 1.32m <sup>2</sup> /bin
	1,100L (x2)	Dark Green Body with yellow lid	Commingled Recyclables	Average dimensions are: Height 1.33m, Width 1.24m, Depth 1.07m Total floor area required: 1.32m <sup>2</sup> /bin

The council waste contractor once engaged will provide the bins for the townhouses.

The private waste contractor once engaged will provide the bins for the apartments.



## SIGNAGE

Appropriate signage will be made available by the council/private contractor for the residents/building manager to install (such as on the underside of the bin's lid). These visual prompts (such as Figure 2 below) will assist in the proper disposal of the different types of waste.



Figure 2: Example signage from the Sustainability Victoria waste signage library.

Printable signage can be found in Sustainability Victoria's website:

<http://www.sustainability.vic.gov.au>.

## WASTE STORAGE

### Townhouses

5 x 120L bins for general rubbish and 5 x 240L bin for recycling will be provided for the townhouses by council contractor.

Both bin types will be stored in each dwelling's respective storage area in garages. This will make it easy for the residents to store and roll out the bins to the kerb on the collection day. Occupants will not be permitted to store bins in front of the dwellings to protect visual amenity of the common areas.

### Apartments

2 x 1,100L bins for general rubbish and 2 x 1,100L bin for recycling will be provided for the apartments by private contractor.

Both bin types will be stored in the waste storage area located within basement.

An on-site hard waste storage area of 2m<sup>3</sup> will be provided for the development with access for the private collection contractor. Frequency of collection will be confirmed once the private contractor is engaged.

The dedicated storage area will be mechanically ventilated to prevent odours pervading the basement and storage enclosures. The building manager/cleaner will ensure that the bin storage area remains clean to avoid the attraction of vermin. An access to a hose for the bin wash-down will be provided in the storage area.

As shown in Figure 3 the bin area on the architectural plans achieves sufficient dimensions to accommodate the anticipated waste.

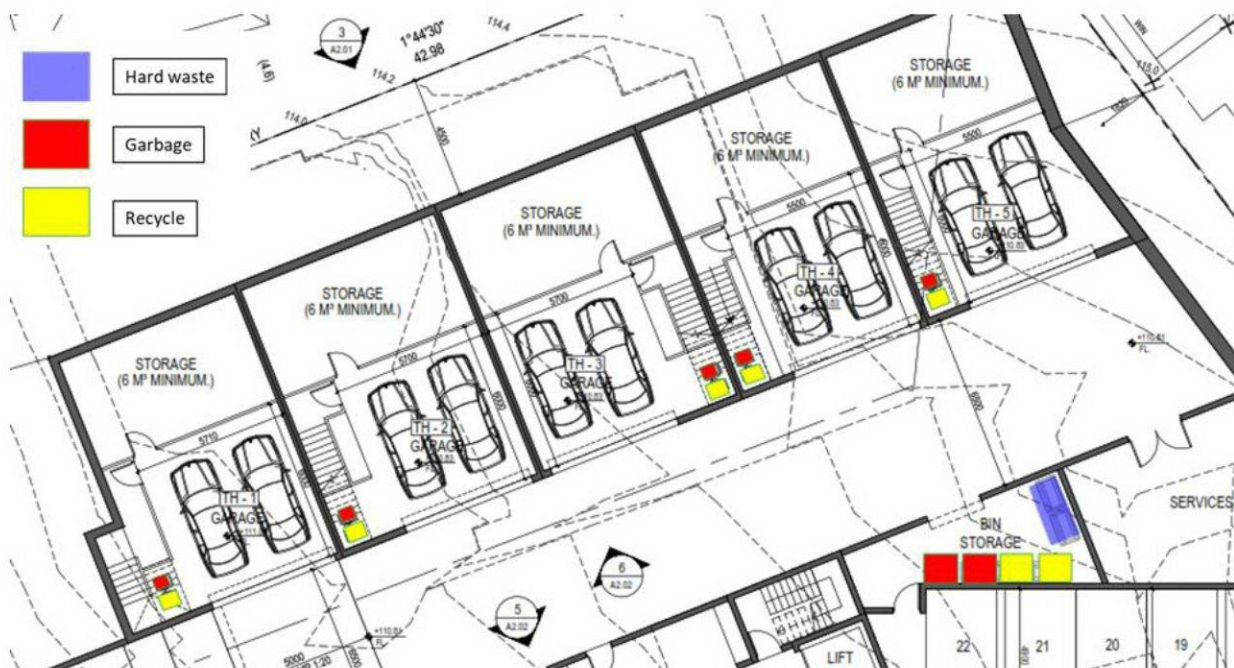


Figure 3: Bin storage area location for the development.





content and return the bins to the storage area once empty. The collection truck will turn around within the basement and exit the site in a forward direction.

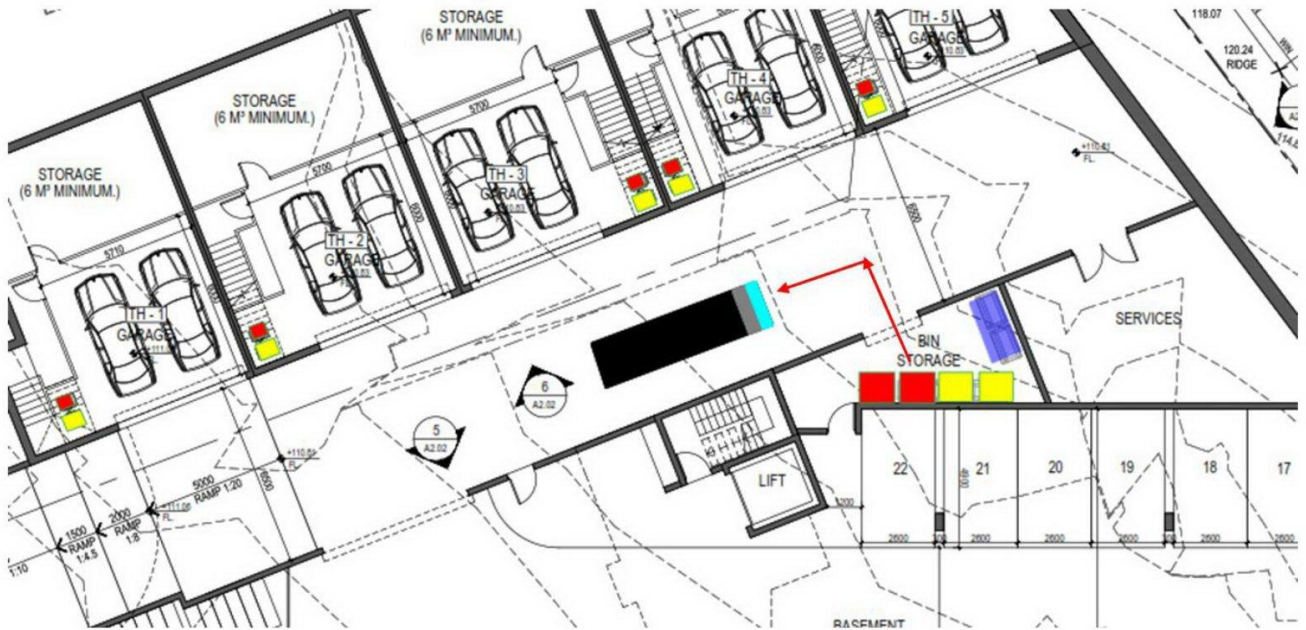
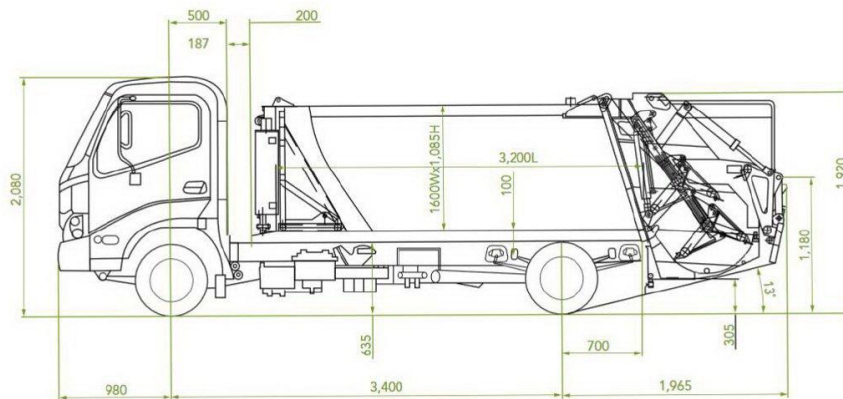


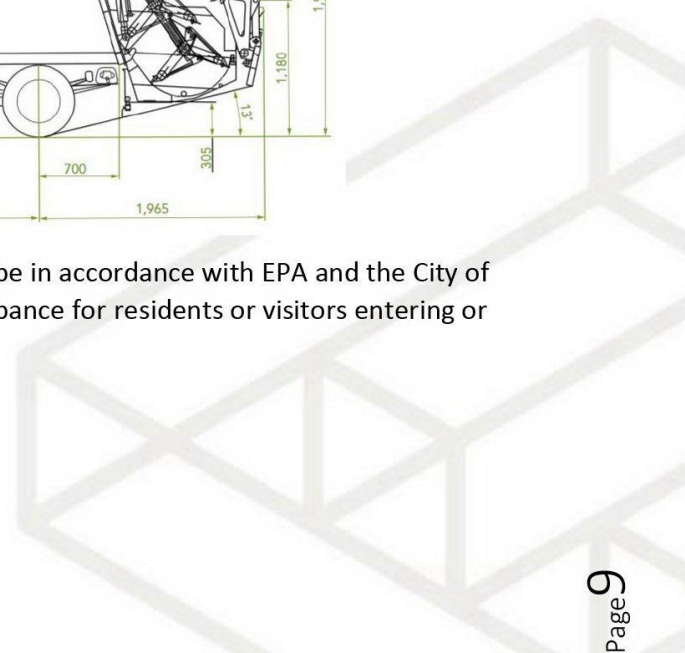
Figure 5: Collection point on collection day (on site).

The Private waste collector will collect general waste and recycling bins once per week.

The collection will require two separate trucks, one each for general rubbish and recyclables. As collection of the bins is to be made within the site, it is proposed that a Waste Wise Mini Rear Loader or similar vehicle is used for the collection. The Waste Wise Mini Rear Loader is approximately 2.08m high, 6.35m long and 1.7m wide.



Collection will occur outside of peak traffic hours and will be in accordance with EPA and the City of Monash requirements, so as to minimise any traffic disturbance for residents or visitors entering or exiting the site.





## OTHER WASTE TYPES

### **Hard Waste**

Monash Council undertakes one annual hard waste collection between August and September each year. Townhouses can book an additional hard waste collection that they pay for at the time of booking. More information can be found at: <https://www.monash.vic.gov.au/Services/Rubbish-Recycling/Hard-waste>.

Hard waste collection for apartment residents be provided by the private contractor. Method and frequency of collection will be confirmed once the private contractor is engaged.

### **E- Waste**

E-Waste has been banned from landfill from 1<sup>st</sup> July 2019. Occupants will be required to dispose of their E-waste at Monash Waste Transfer and Recycling Station (details below) or at their nearest drop-off point. Nearest e-waste recycling drop-off point can be found on Planet Ark's *Recycling Near You* at <https://recyclingnearyou.com.au/electrical>.

The following section is sourced from the City of Monash Waste and Recycling web page. Apart from the collection of recyclables from the bins provided, the residents can actively donate/dispose of other non-regular rubbish such as electronic waste and large objects at the nearby Waste Transfer Station listed below:

### **Monash Waste Transfer and Recycling Station**

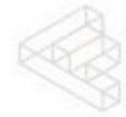
Address: 380 Ferntree Gully Rd, Notting Hill

Phone: 03 9518 3767

Opening Hours: 7 days a week 7.30am to 4pm. Closed on Christmas Day, Boxing Day, New Year's Day, Good Friday, Easter Sunday and Anzac Day before noon.

Free Disposal:

- Computers, laptops, printers, fax machines, televisions and computer monitors (website: Tech Collect)
- Paper and Cardboard (Visy)
- Scrap Metal
- Commingled Recycling (Visy)
- Batteries (household batteries and car batteries)
- Light globes
- Printer cartridges (Cartridges for Planet Ark)
- Mobile phones (Mobile Muster)
- X-Ray Films
- Engine Oil (30 litres or less)
- Paint (Paintback)
- Whitegoods (fees apply for fridges, freezers and air conditioners)
- Cooking Oil (up to 20 litres)
- Polystyrene (made of white clean balls) – amounts up to ½ m3 are free
- DVDs, CDs, VHS and floppy discs



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- Corks

Not accepted:

- Domestic garbage
- Chemicals
- Liquid and hazardous wastes
- Asbestos
- Car bodies, auto transmissions, car differential oil
- Cooking oils (over 20 litres)
- Petrol and fuels

Summary of the charges for different type of waste:

Waste transport, processing or disposal fee by volume

Type of material	Up to, and per ½ m <sup>3</sup>
General Waste	\$56.40
General Waste - with valid concession or seniors card*	\$49.20*
Clean Green Waste	\$27.00
Clean Green Waste - with valid concession or seniors card*	\$21.80*
Contaminated Green Waste/td>	\$59.45
Concrete/Bricks	\$33.80
Soil/Rubble	\$120.00
Commercial soil (loads over 1.5m <sup>3</sup> )	\$330.00 per m <sup>3</sup>
Polystyrene (up to ½m <sup>3</sup> )	Free
Polystyrene (residential - over ½m <sup>3</sup> )	\$6.00
Polystyrene (commercial - over ½m <sup>3</sup> )	\$25.00
General Waste - Car Boot	\$26.60
Fridges/Freezers/Air conditioners	\$20.00 each
Mattress/base	\$29.70 each
Domestic LPG gas bottles up to 9kg/Fire extinguishers	\$15.20 each
Car engine oil (over 30 litres)	\$2.50 per litre
Car tyres - without rim	\$8.00 each
Car tyres - with rim	\$12.30 each
Other tyres	By quotation

Please note that other tips are located within around the site. Please visit

<https://www.monash.vic.gov.au/Services/Rubbish-Recycling/Monash-Waste-Transfer-and-Recycling-Station> for more information.

### **Other Recycling Options**

The following recycling options may also be useful:

Waste Exchange Database: Allows communication between generators of waste and potential recyclers.

Ziilch: Simple online recycling of unwanted goods.

Freecycle: A non-profit portal for exchanging unwanted goods for free.

Reverse Art Truck Inc.: A non-profit organisation that collects seconds and factory off cuts for reuse as art materials. Free pick up.

Ozrecycle: Another way to give and get things for free instead of sending them to landfill.

FreeTreasure: Free Treasure is developing to become one of Australia's best communities to find free stuff.

The Sharehood: Helps you share resources within your neighbourhood.

Other recycling services such as St Vincent de Paul, Brotherhood of St Laurence, The Smith Family and The Salvation Army accept a range of household items.

## WASTE REDUCTION SUGGESTION

### **Reduction of plastic bag**

Up to four billions or 20,000 tonnes of plastic bags are sent to landfill each year in Australia. There are some ways to reduce the plastic bag usage of the household:

- Use re-useable bags, cardboard boxes or baskets when shopping; and
- Use supermarkets and shops that endorse re-usable bags, or provide recycling outlet for plastic bags.

### **Recycling**

In order to minimise the waste production of the household, it is important to recycle effectively and try to select recycled product when possible. There is a range of practical things easy to do at home to improve recycling:

- Remove lids and empty bottles when recycling;
- Recycle newspapers;
- Buy product with minimal packaging or/and with recycled material content;
- Buy recycled products (e.g. toilet paper); and
- Ensure recycling materials is not spoiled (e.g. food scraps) before recycling.



## PREVENTATIVE MEASURES

### Disposal Procedures

Residents are to ensure that all internal general rubbish bin bags are tied up securely before being placed in the bins. They will also ensure that recyclables are placed in the yellow lidded bins in a way that minimises potential litter and overflow (for example crushing boxes, cans and plastic bottles).

### Maintenance

As a minimum, residents/building manager/cleaner will be required to keep the bins neatly placed in the storage areas. To further reduce the risk of litter, residents and commercial tenants will be asked to make sure bins are not overfilled and to keep the lids closed. The above measures will minimise the dispersion of site litter and risk of vermin. The residents/building manager/cleaner will be required to conduct periodic maintenance of their bins such as wash-downs and any necessary repairs/replacements will need to be organised with the council/private contractor.

## SUMMARY

Correct implementation and occupant induction to the WMP will ensure that all waste streams are correctly disposed of and sorted into their proper bins. Proper bin management will ensure that all waste is stored & collected efficiently and effectively without compromising the amenity, capacity and tidiness of the storage areas.

The council contractor will supply the bins and will be responsible for bin collection once a week for general waste and once a fortnight for recyclables.

The private contractor will supply the bins and will be responsible for bin collection once a week for general waste and recyclables.