

134 Drummond Street, Oakleigh

Waste Management Plan



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20 September 2024

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CONTENTS

1	INTRODUCTION.....	4
2	PURPOSE	4
3	EXISTING SITE CONDITIONS.....	5
4	DEVELOPMENT PROPOSAL.....	6
4.1	General	6
4.2	Waste Management.....	6
5	WASTE GENERATION	8
5.1	Sustainability Victoria Recommended Rates	8
5.2	Glass Recycling	8
5.3	Expected Waste Generation	9
5.3.1	Garbage, Organics, Recycling and Glass	9
5.3.2	Container Deposit Scheme (CDS)	9
5.3.3	Green Waste	9
5.3.4	Hard Waste	10
5.3.5	Soft Plastics	10
5.3.6	Electronic Waste (E-Waste)	10
5.3.7	Sanitary Waste	11
6	BIN REQUIREMENTS	11
6.1	Bin Storage.....	11
6.2	Bin Collection	12
6.3	Bin Cleaning	12
7	WASTE MANAGEMENT	13
7.1	Best Practice Waste Management	13
7.2	Bin Usage	14
7.3	Signage	14
7.4	Noise Control.....	14
7.5	Tenant Information.....	15
7.6	Waste Management Plan Implementation	15
8	OCCUPATIONAL HEALTH & SAFETY RESPONSIBILITIES.....	15
9	CONTACT INFORMATION	16
9.1	Council.....	16
9.2	Contractors.....	16
9.3	Others	17

TABLES

Table 1	Sustainability Victoria Recommended Rates	8
Table 2	Sustainability Victoria Recommended Rates plus Organics	8
Table 3	Sustainability Victoria Recommended Rates plus Organics and Glass	8
Table 4	Expected Waste Generation	9
Table 5	Bin Provision	11
Table 6	Bin Specifications	11

FIGURES

Figure 1	Site Location	5
Figure 2	Bin Storage Areas and Collection Details	7
Figure 3	Bin Storage Area Layout	12
Figure 4	Resource Flows in a Circular Economy	13
Figure 5	Example Waste Signage	14

1 INTRODUCTION

onemilegrid has been requested by C. Kairouz Architects to prepare a Waste Management Plan for the proposed child care centre at 134 Drummond Street, Oakleigh.

The preparation of this management plan has been undertaken with due consideration of the Sustainability Victoria Better Practice Guide for Waste Management and Recycling in Multi-unit Developments and relevant Council documentation.

2 PURPOSE

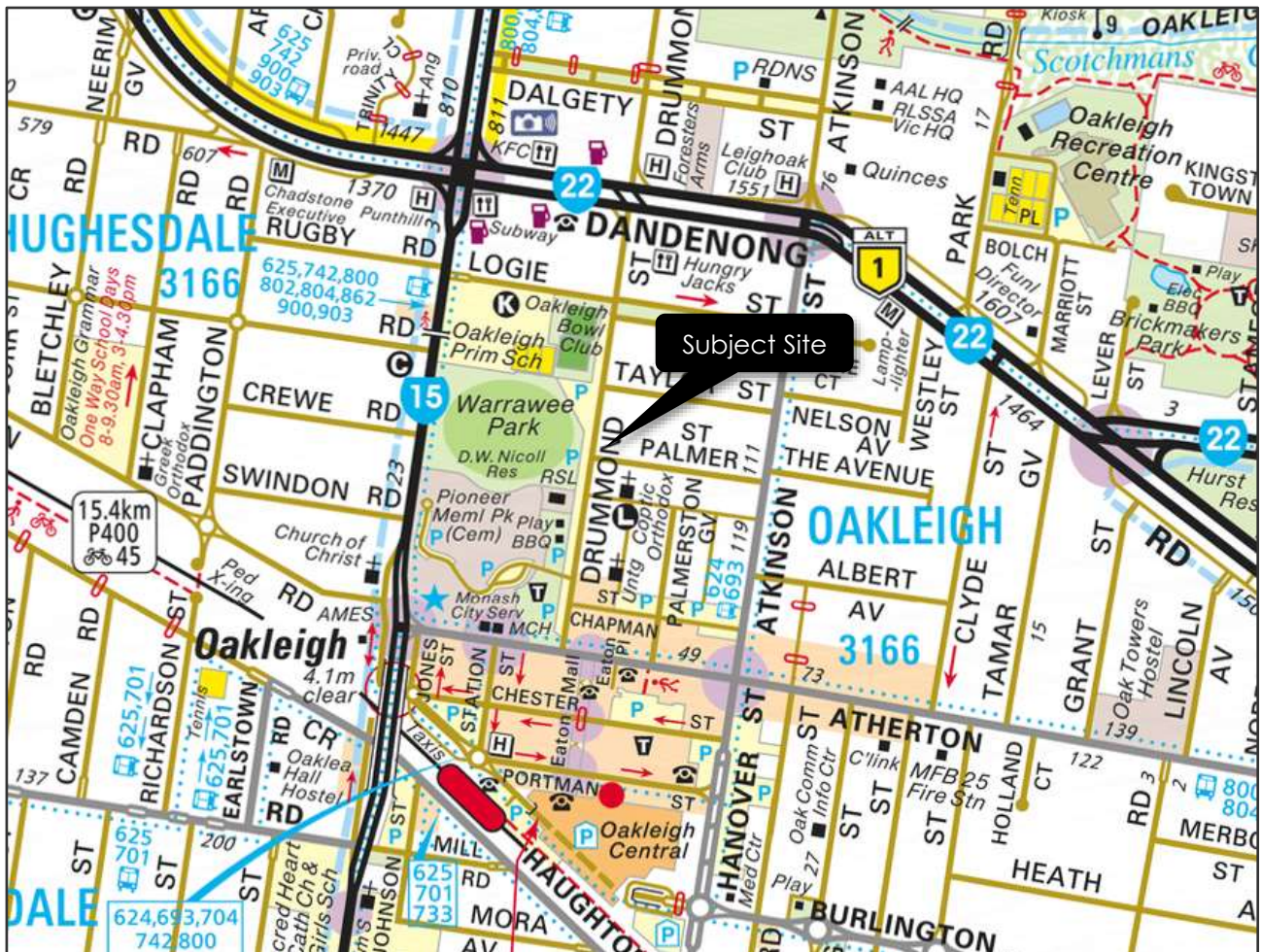
The purpose of the waste management plan is to:

- Demonstrate the development of an effective waste management system that is compatible with the design of the child care centre and the adjacent built environment. An effective waste management system is hygienic, clean and tidy, minimises waste going to landfill, and maximises recycling.
- Provide a waste management system that is supported by scale drawings to ensure the final design and construction is compliant with the WMP, and is verifiable.
- Form a document that achieves effective communication of the waste management system so that all stakeholders can be properly informed of its design, and the roles and responsibilities involved in its implementation. Stakeholders are defined (but not limited to): owners, occupiers, body corporate, property managers/real estate agents, Council, neighbours and collection contractors.
- Ensure that users are not disadvantaged in their access to recycling and other responsible waste management options.
- Avoid existing legacy issues that plague many developments due to poor design and insufficient consideration for waste management.
- Improve outcomes for compliance with regulatory tools and state Planning Strategies, such as:
 - + Town planning Permits
 - + Monash Planning scheme
 - + Clause 19.03-5 of the state planning policy framework
 - + Direction 6.7 of Plan Melbourne
 - + Clause 55 Standard B34 of the Planning Scheme
 - + Clause 55.07 and Clause 58.06 of the Planning Scheme

3 EXISTING SITE CONDITIONS

The [subject site](#) is located on the northeast corner of the intersection between Drummond Street and Palmer Street, as shown in Figure 1.

Figure 1 Site Location



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The site is generally rectangular in shape, and includes a frontage to Palmer Street along the southern boundary and Drummond Street along the western boundary.

4 DEVELOPMENT PROPOSAL

4.1 General

It is proposed to demolish the existing dwelling and develop the site for the purpose of a childcare centre with a capacity for 86 children.

Vehicle access to the childcare centre is proposed via a modification of the existing crossover to Palmer Street towards the southeast corner of the site.

4.2 Waste Management

It is proposed to utilise a private contractor to manage the collection and disposal of all waste streams associated with the development.

Bins will be stored within two dedicated service areas, located on each side of the accessway at the southern end of the car park. The waste collection vehicle will prop along the site frontage to Palmer Street adjacent to the car park crossover, from where the bins will be transferred directly to the waiting truck for emptying. The bins will be returned to the appropriate bin storage area immediately following collection.

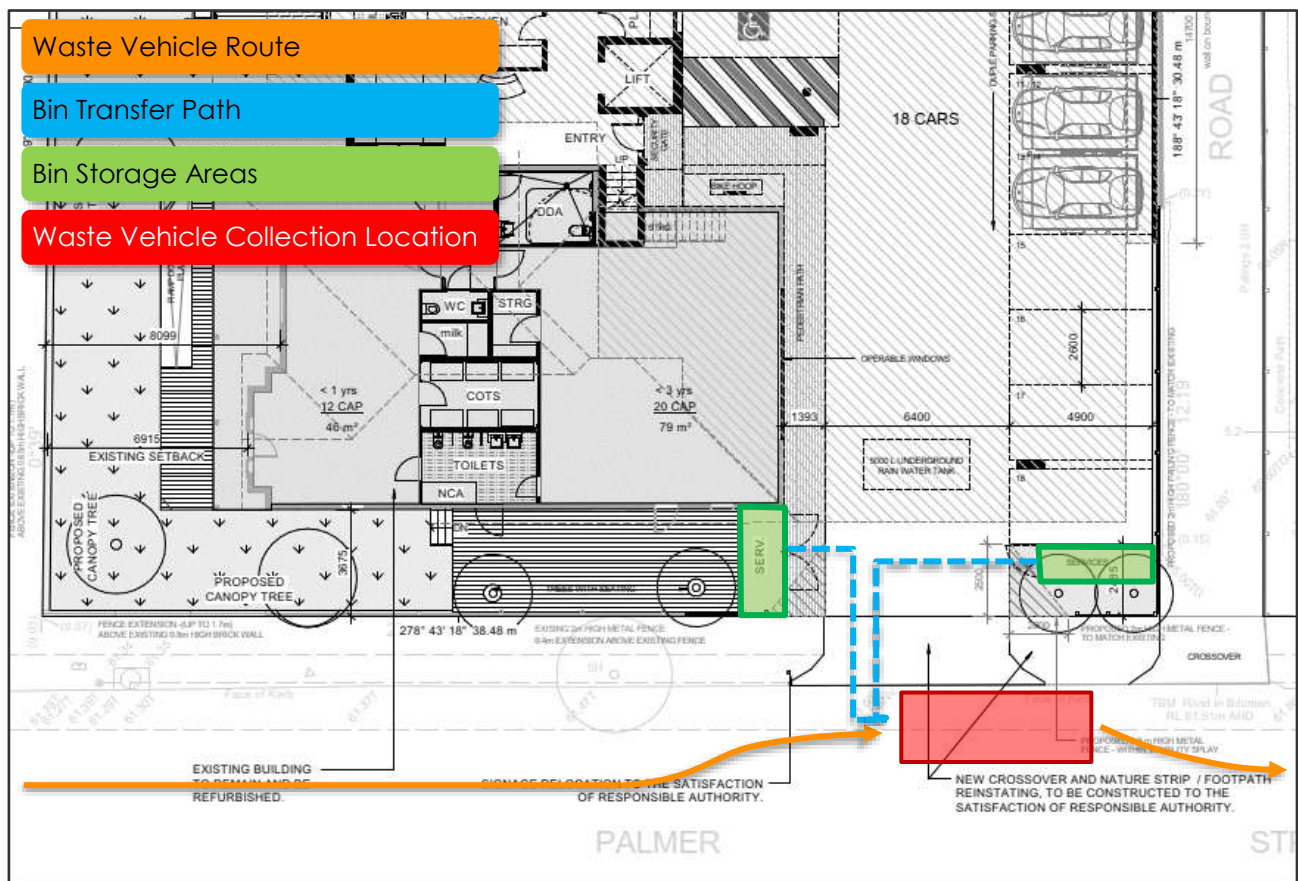
Waste collection will be arranged to occur after operating hours during the weekdays or on the weekend, when vehicles will not be using the crossover to access the site, allowing the waste truck to utilise the full width of the Palmer Street crossover to park during collection.

The proposed development will include a four bin system, to ensure garbage, recyclables, glass and organics are sorted at the time of disposal.

Staff will be responsible for disposing of waste into the appropriate bins located within the bin storage area.

The collection location and expected transfer route is shown in Figure 2.

Figure 2 Bin Storage Areas and Collection Details



5 WASTE GENERATION

5.1 Sustainability Victoria Recommended Rates

Waste generation rates published within Sustainability Victoria's "Better Practice Guide for Waste Management and Recycling in Multi-unit Developments" recommends adoption of the following rates for child care centres, based on the rates published by the City of Melbourne.

Table 1 Sustainability Victoria Recommended Rates

Use	Garbage Rate	Recycling Rate
Childcare	350L per 100 m ² per week	350L per 100 m ² per week

Based on information provided by childcare centre operators, the Sustainability Victoria rate is expected to considerably overestimate the actual waste generation. Adoption of the above rates is therefore considered to provide a very conservative estimate of the likely waste generation.

Furthermore, Sustainability Victoria indicates that approximately 35% of garbage is made of food waste, therefore, the provision of organics waste collection can result in a reduction in garbage generation by 35%. It is noted that this organic waste ratio specified within Sustainability Victoria is recommended for residential dwellings, however it considered applicable to the proposed child care centre. Based on this information, the following weekly waste generation is expected:

Table 2 Sustainability Victoria Recommended Rates plus Organics

Use	Garbage Rate	Organics Rate	Recycling Rate
Childcare	227L / 100 m ² / week	123L / 100 m ² / week	350L / 100 m ² / week

5.2 Glass Recycling

It is understood that Monash will transition to the provision of a separate glass recycling stream by 2027, as part of the State Government's Recycling Victoria Policy.

Noting that private collection is proposed for the development, a glass recycling stream will be provided on-site if required to service the proposed child care centre.

It is generally considered reasonable that 10% of comingled recycling is comprised of glass. Consequently, a 10% reduction in comingled recycling will be applied. The expected waste generation has therefore been adjusted to the following rates in Table 3.

Table 3 Sustainability Victoria Recommended Rates plus Organics and Glass

Use	Garbage Rate	Organics Rate	Recycling Rate	Glass Rate
Childcare	227L / 100 m ² / week	123L / 100 m ² / week	315L / 100 m ² / week	35L / 100 m ² / week

5.3 Expected Waste Generation

5.3.1 Garbage, Organics, Recycling and Glass

Based on the Sustainability Victoria waste generation rates, the following weekly waste generation is expected.

Table 4 Expected Waste Generation

Component – Stream	Area	Rate/100 m ²	Total Waste/Week
Garbage	527 m ²	227 litres	1,196 litres
Organics	527 m ²	123 litres	648 litres
Recycling	527 m ²	315 litres	1,660 litres
Glass	527 m ²	35 litres	184 litres

5.3.2 Container Deposit Scheme (CDS)

On 1 November 2023, Victoria's Container Deposit Scheme (CDS) commenced, which marked a significant milestone towards Victoria achieving its Circular Economy goal.

The CDS rewards Victorians with a 10c refund for all eligible cans, cartons and bottles that are returned. Most aluminium, glass, plastic, and liquid paperboard (carton) drink containers, between 150mL and 3 litres are eligible, with a 10c mark provided on the drink container label, often located near the barcode. Container lids are able to be kept on, as they can also recycled.

There are multiple ways to receive the 10c refund, including vouchers, which can be spent and participating shops, cash, electronic payment, and the option to donate the refund to charities and community groups.

The eligible containers can be returned to several different types of container refund points, in many locations across Victoria, with the number of locations expected to continue to grow. Typical refund points include the following:

- Reverse Vending Machines (RVMs) – Typically located in shopping centre and supermarket car parks, eligible containers are inserted into the machine, where the containers are scanned and verified;
- Depots – Larger refund points which typically offer a walk-in or drive-through services to get containers counted and refunded on the spot. Best suited for larger loads;
- Over the counter (OTC) – Some small businesses or organisations provide over-the-counter services, which essentially work like a miniature depot; and
- Pop-ups – Zone operators may offer pop-up services or events, that will have set times and locations that drinks containers can be returned.

The locations of the CDS refund points are provided at <https://cdsvic.org.au/locations>.

Staffs should be encouraged to contribute to the CDS, by the provision of specific CDS bins throughout the building to assist in separating eligible containers, with staff appointed by the operator to regularly take the containers for to a refund point.

5.3.3 Green Waste

It is expected that any maintenance and gardening undertaken on-site will be managed by a contractor appointed by the operator. The appointed contractor will be responsible for the disposal of any green waste accumulated during the course of their duties.

5.3.4 Hard Waste

It is anticipated that hard waste generation will be minimal considering the proposed child care centre use. Regardless, hard waste services will be provided by the private contractor on an as-needs basis.

5.3.5 Soft Plastics

Soft plastic waste is estimated to contribute approximately 20% of landfill waste volumes, and includes such things as bread bags, plastic bags, bubble wrap and snap lock bags.

Previously, soft plastics were able to be recycled via REDcycle bins located at most Coles and Woolworths supermarkets. However, REDcycle have since paused the recycling of soft plastic due to supplier/storage issues, therefore soft plastic should be disposed of using the garbage bins.

Monash Council has established a collection point for soft plastics following the suspension of the REDcycle soft plastics recycling program at Coles and Woolworths. Soft plastics can be dropped off at the [Monash Recycling & Waste Centre](#) (380 Ferntree Gully Road, Notting Hill).

Smaller drop-off points are also available at [Monash Civic Centre and Oakleigh Service Centre](#), which accept one bag of soft plastics per visit.

This service is provided in partnership with APR Plastics who convert soft plastics into oil, which is then further processed into a resin, enabling it to be turned back into food grade plastic packaging again.

For commercial quantities of soft plastic generation, a specialist private contractor should be engaged to undertake collection.

5.3.6 Electronic Waste (E-Waste)

E-waste includes all manner of electronic waste, such as televisions, computers, cameras, phones, household electronic equipment, batteries and light bulbs. E-waste contains valuable materials that can be recovered and reused such as tin, nickel, zinc, aluminium, copper, silver and gold.

On 1st July 2019, the disposal of E-waste to landfill was banned by the Victorian Government.

A large number of e-waste collection points are available in Victoria and private contractors are equipped with the resources to undertake E-waste collections.

E-waste must be taken by the operator/staff to the appropriate collection centre, as described below:

- Monash Waste Transfer Station, 380 Ferntree Gully Road, Notting Hill. FREE drop off: Anything with a plug, battery or cord (e.g., TVs, computers, microwaves, household appliances, garden tools, toys, batteries, DVDs, CDs, mobile phones, solar panels, light fittings, light globes. Charged items: Large mixed-material electronic items like electric chairs, massage chairs and beds, incur a processing fee;
- Monash Civic Centre foyer: limited drop off small items for free - mobile phones & chargers, batteries, light globes and small e-waste items (things you can carry with one hand under 30cm long);
- Planet Ark operate a number of e-waste recycling drop-off locations throughout Victoria (<https://recyclingnearyou.com.au/electrical>);
- Officeworks stores accept small amounts of personal E-waste;
- Aldi stores accept batteries; and
- Some Bunnings stores accept batteries.

5.3.7 Sanitary Waste

Sanitary waste bins for nappy disposal are to be provided with the children's toilets for the younger age groups. Sanitary waste bins will be exchanged for a clean bin as required by a private sanitary waste contractor.

6 BIN REQUIREMENTS

It is proposed to utilise a private waste contractor for all waste services of the proposed development. Consequently, the following bins will be required for the proposed development.

Table 5 Bin Provision

Component – Stream	Total Waste/Week	Bin Size	Collection Frequency	Bins Required
Garbage	1,196 litres	660 litres	Twice weekly	1 bin
Organics	648 litres	240 litres	Twice weekly	2 bins
Recycling	1,660 litres	1,100 litres	Twice weekly	1 bin
Glass	184 litres	240 litres	Weekly	1 bin
Total				5 bins

Typical bin specifications for each bin size are provided in Table 6 below.

Table 6 Bin Specifications

Capacity	Width	Depth	Height	Area
240 litres	0.60m	0.75m	1.10m	0.45m ²
660 litres	1.25m	0.80m	1.30m	1.00m ²
1,100 litres	1.25 m	1.10 m	1.35 m	1.38 m ²

Bin lids will be colour coded to the Australian Standard (AS4123) or to the standard colour specifications of the private contractor.

6.1 Bin Storage

As indicated in Figure 2, it is proposed to provide two dedicated service areas, located on each site of the accessway at the southern end of the car park.

The layout of the bin storage areas are shown in Figure 3, which demonstrates that each area is capable of accommodating the required bins, as calculated in Table 5.

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

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

The bin storage areas shall be ventilated, and shall be cleaned regularly by the operator or waste collection contractor, to minimise odour.

7 WASTE MANAGEMENT

7.1 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.

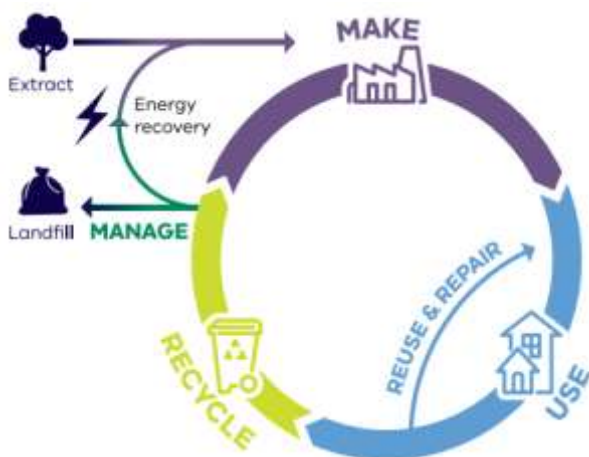
The benefits of reducing waste generation are far reaching and have been identified as significantly important by Council and the Victorian Government.

Recycling Victoria: A New Economy is a policy and 10-year action plan, prepared by the Victoria Government, to "deliver a cleaner, greener Victoria, with less waste and pollution, better recycling, more jobs and a stronger economy".

Four overarching goals have been identified in order to achieve a circular economy in relation to waste, as below:

1. MAKE – Design to last, repair and recycle;
2. USE – Use products to create more value;
3. RECYCLE – Recycle more resources;
4. MANAGE – Reduce harm from waste and pollution.

Figure 4 Resource Flows in a Circular Economy



In relation to the proposed development, recycling is of key importance, and in this regard, the operator shall encourage staff to participate in minimising and reducing solid waste production by:

- Promoting 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;
 - ✦ Recover, treat or contain waste preferentially to; and
 - ✦ 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 staff; 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.

7.2 Bin Usage

Staff will dispose of waste in the appropriate bins, stored within the bin storage areas. Cardboard boxes should be flattened, and containers rinsed and cleaned prior to disposal in the provided bins.

7.3 Signage

To avoid contamination between garbage streams, bin lids will be colour coded in accordance with contractor 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. Example signage is shown in Figure 5 below.

Figure 5 Example Waste Signage



7.4 Noise Control

To minimise the disturbance to the surrounding residential areas during waste collection, the collection should follow the criteria specified by the EPA, as below:

- Collections occurring once a week should be restricted to the hours:
 - + 6:30am to 8:00pm, Monday to Saturday;
 - + 9:00am to 8:00pm, Sunday and Public Holidays;
- Collections occurring more than once a week should be restricted to the hours:
 - + 7:00am to 8:00pm, Monday to Saturday;
 - + 9:00am to 8:00pm, Sunday and Public Holidays;
- Refuse bins should be located at sites that provide minimal annoyance to residential premises;
- Compaction should be carried out while the vehicle is moving;
- Bottles should not be broken up at the collection site;
- Routes which service predominantly residential areas should be altered regularly to reduce early morning disturbances; and
- Noisy verbal communication between operators should be avoided where possible.

7.5 Tenant Information

To ensure all staff are aware of their responsibilities with regard to waste and bin management, an information package will be provided by the operator to all staff, including the following information:

- A copy of this Waste Management Plan;
- Methods and techniques for waste reduction and minimisation;
- Specific information from the selected private waste contractor, clarifying the waste products which may be disposed of in each of the four bins provided, including detailed information about how the various waste streams are treated, and the importance of avoiding cross-contamination;
- Information regarding bin collection days and requirements;
- Responsibilities with regard to bin usage, storage, and collection; and
- Responsibilities with regard to litter and waste removal.

7.6 Waste Management Plan Implementation

The implementation, coordination and funding of the Waste Management Plan is the responsibility of the operator, and should be a dynamic document, reflecting changes in on-site and off-site conditions e.g., varying bin requirements, or changing waste collection methodology. As such, the plan should be regularly revisited and amended to provide the most accurate and relevant information to achieve the desired objectives of effectively managing the storage and disposal of waste generated on-site.

Should any significant operational changes occur on-site, a new or amended Waste Management Plan prepared by a suitable qualified and experienced person or firm may be required, detailing changes to the storage and disposal of the general, recyclable and e-wastes, responsibility in management and maintenance of the bins, location and area of bin rooms, etc.

The operator is also responsible for the waste management operation of the development, including monitoring the operation, reviewing use of bins to ensure that waste is minimised and appropriately sorted, and encouraging best practice waste management. This can occur through staff training and information, review of staff waste disposal operations, and through monitoring and feedback to the operator by the waste collection contractor.

8 OCCUPATIONAL HEALTH & SAFETY RESPONSIBILITIES

The 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.

9 CONTACT INFORMATION

9.1 Council

Monash City Council

Phone: (03) 9518 3555 (Customer Service)

Web: www.monash.vic.gov.au

9.2 Contractors

ASI JD MacDonald

Services: Waste collection and management equipment

Phone: 1800 023 441

Web: www.idmacdonald.com.au

Email: enquiry@asjidmacdonald.com.au

CSC Waste & recycling

Services: Private contractor

Phone: 1300 499 927

Web: www.cscwaste.com.au

Email: info@cscwaste.com.au

WM Waste Management (Brimbank Council waste contractor)

Services: Private contractor

Phone: (03) 9721 1900

Web: www.wmwaste.com.au/

Urban Waste

Services: Private contractor

Phone: 0429 309 269

Web: www.urbanwaste.com.au

Email: info@urbanwaste.com.au

iDump

Services: Private contractor

Phone: 1300 443 867

Web: www.iDump.com.au

Email: info@idump.com.au

Cleanaway

Services: Private contractor
Phone: 131 339
Web: www.cleanaway.com.au/

Corio Waste Management

Services: Private contractor
Phone: 1300 267 4696
Web: www.coriowm.com.au

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: Private contractor
Phone: 1300 550 408
Web: www.wastewise.com.au

BioPak (Organic Waste Compost Service)

Services: Private contractor
Phone: 1300 246 725
Web: www.biopak.com.au/compost-service

9.3 Others

Sustainability Victoria

Services: Sustainable Waste Management initiatives and information
Phone: 1300 363 744 (Energy, Waste and Recycling)
Web: www.sustainability.vic.gov.au
Email: info@sustainability.vic.gov.au