

Urbii



Reduce. Reuse. Recycle

34-36 St Michael Terrace, Mount Pleasant
Proposed Child Care Centre

Waste Management Plan



Prepared for:
Carcione Nominees Pty Ltd

November 2025

34-36 St Michael Terrace, Mount Pleasant

Prepared for: Carcione Nominees Pty Ltd
Prepared by: Paul Ghantous
Date: 21 November 2025
Project number: U24.177

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U24.177.r02	21/04/25	PG	DRAFT	Element
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Contents

1	INTRODUCTION	1
2	OBJECTIVES	3
3	REFERENCED DOCUMENTS	4
4	GUIDING CONCEPTS	5
	4.1 Waste hierarchy	5
	4.2 Circular economy	6
5	PROPOSED DEVELOPMENT	7
6	WASTE GENERATION	8
	6.1 Waste generation rates	8
	6.2 Waste generation calculations	8
7	WASTE SYSTEMS	9
	7.1 Internal waste storage	9
	7.2 External bin storage areas	9
	7.3 Access to bins	10
8	WASTE COLLECTION	11
	8.1 Waste vehicle types	11
	8.2 Waste collection frequency	11
	8.3 Waste collection method and presentation points	11
	8.4 Vehicle access and maneuvering	12
9	ADDITIONAL WASTE REQUIREMENTS	13
	9.1 Bulk waste	13
	9.2 E-Waste	13
	9.3 Garden organics	13
10	WASTE MANAGEMENT	14
11	CONSULTATION WITH THE CITY OF MELVILLE	15
12	CONCLUSION	16
	APPENDICES	17

Figures

Figure 1: Subject site	2
Figure 2: Waste hierarchy	5
Figure 3: Transitioning to a circular economy	6

Tables

Table 1: Commercial waste generation rates	8
Table 2: Larger Mobile Garbage Bin (MGB) dimensions	9
Table 3: Weekly waste generation, bin types and collection frequency	26

Appendices

Appendix A: Proposed development plans	17
Appendix B: Bin storage and bin presentation plans.....	20
Appendix C: Correspondence with the City of Melville waste team	22
Appendix D: Waste calculations.....	25

1 Introduction

This Waste Management Plan has been prepared by Urbii on behalf of Carcione Nominees Pty Ltd with regards to the proposed child care centre, located at 34-36 St Michael Terrace, Mount Pleasant.

The subject site is situated on the north-west corner of St Michael Terrace and Queens Road, as shown in Figure 1. The site is presently vacant and is surrounded by a mix of residential, education and commercial land uses.

It is proposed to develop the site into a child care centre catering for up to 113 children and 29 staff.

The key issues that will be addressed in this WMP include calculation of the waste generation of the site, assessment of waste storage provisions and documentation of the waste collection arrangements.

This Waste Management Plan has been revised to address the matters raised during the assessment of the development application and to incorporate updated operational arrangements for waste storage and collection.

The refinement of the WMP forms part of the broader response to the Development Assessment Panel deferral and includes a review of waste generation, bin storage design and collection logistics.

As part of this process, the City of Melville's Waste Department was consulted to confirm acceptable collection methods, vehicle access considerations and preferred servicing locations. Their feedback has informed the updated waste strategy, ensuring that waste operations are safe, efficient and compatible with the surrounding road and pedestrian environment.



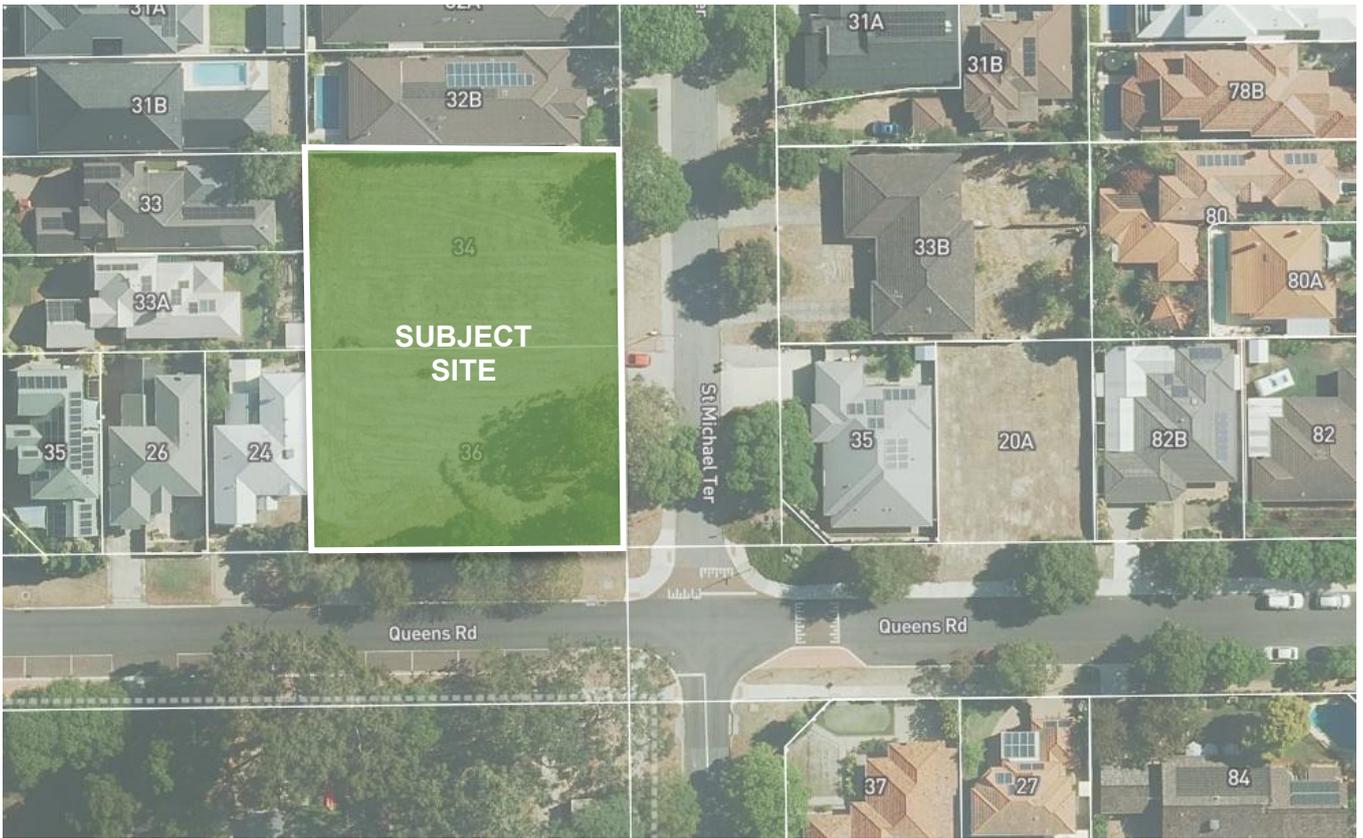


Figure 1: Subject site

2 Objectives

The objectives of this WMP are adapted from WALGA:

- Ensure that the long-term waste management needs for the development are met in an efficient and sustainable manner.
- Minimise the impact of waste services and facilities on the streetscape and surrounds, in relation to both the footpath/public realm and the frontage of the development.
- Reduce the impact of waste collection services and facilities on the amenity of the locality particularly in terms of noise and odour.
- Maximise safety for both waste collection staff and the public.
- Minimise traffic and footpath obstruction.



3 Referenced documents

The documents referenced in preparing this WMP may include, but are not limited to:

- City of Melbourne *Guidelines for Waste Management Plans* 2021;
- City of Perth *Waste Guidelines for all Developments* 2019;
- WALGA *Multiple Dwelling Waste Management Plan Guidelines*;
- WALGA *Subdivision Waste Management Plan Guidelines*; and,
- Waste Authority WA *Waste Avoidance and Resource Recovery Strategy for 2030*.

4 Guiding concepts

Urbii adopts the guiding concepts of the State's Waste Strategy and encourages these concepts to be considered in all developments to the furthest extent feasible.

4.1 Waste hierarchy

The *Waste Avoidance and Resource Recovery Strategy 2030* applies the waste hierarchy (Figure 2), which is a widely accepted decision-making tool. The waste hierarchy ranks waste management options in order of their general environmental desirability. Waste avoidance is the most preferred option in the hierarchy.

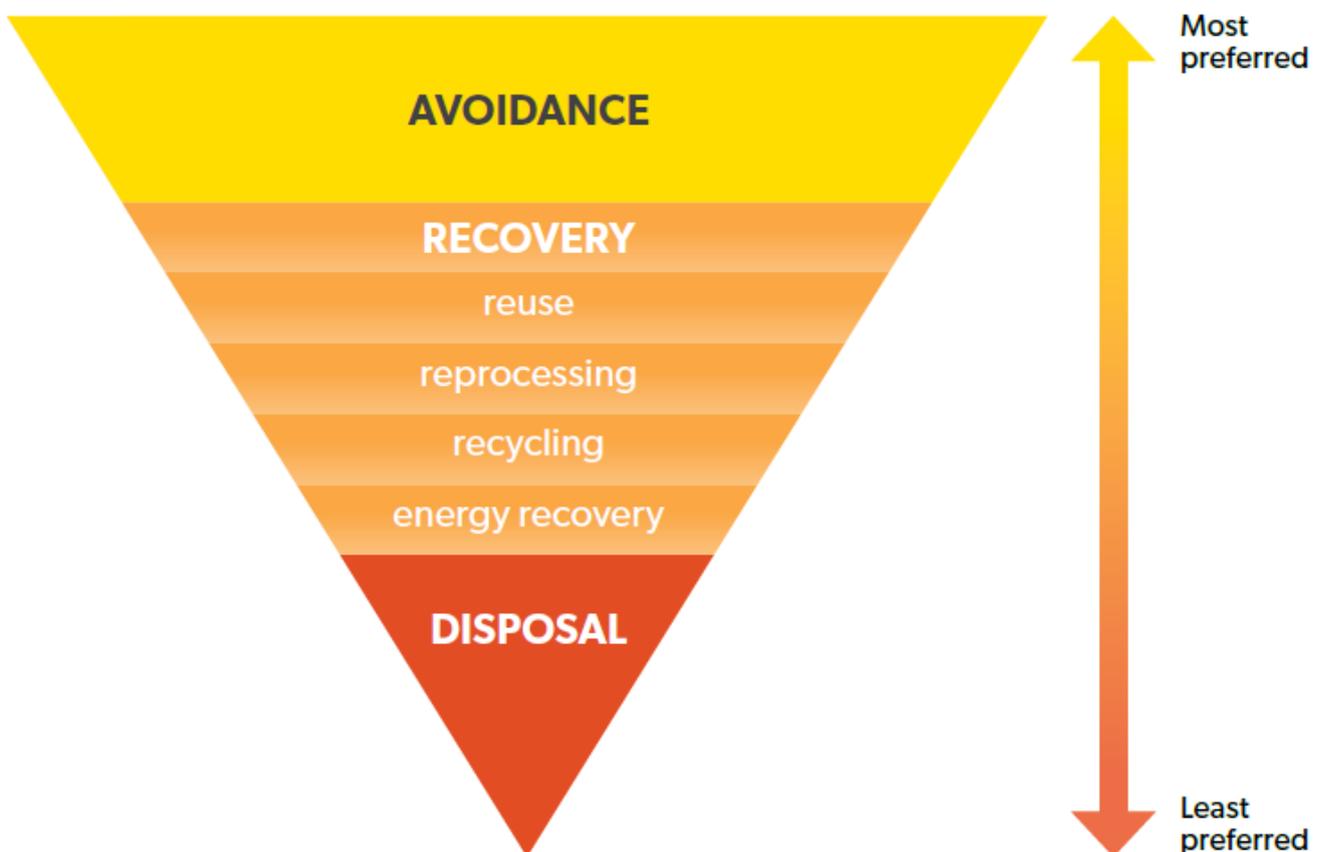


Figure 2: Waste hierarchy

Source: Waste Authority WA *Waste Avoidance and Resource Recovery Strategy for 2030*.

Resource recovery options recover value from materials, thereby offsetting the environmental impacts of extracting and processing raw materials. Energy recovery is the least preferred recovery option. Disposal is the least preferred option. Disposal generally recovers the least value from materials and delivers the least environmental benefit.



4.2 Circular economy

A circular economy (Figure 3) makes use of established sustainability concepts, including life cycle thinking and resource efficiency. A circular economy should consider the flow of both materials and energy. It moves away from the linear 'take, make, use and dispose' model, to one which keeps materials and energy circulating in the economy for as long as possible.

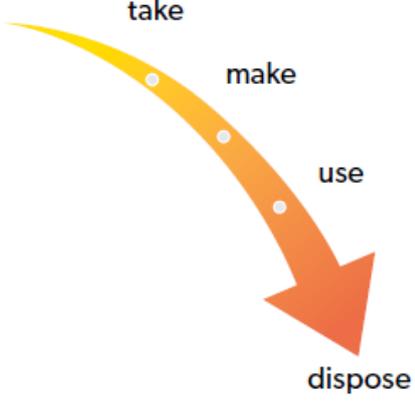
Current approach	Circular economy
	
Linear flow of materials – 'take, make, use and dispose' model.	Circular flow of materials – materials sorted and retained in the economy for as long as possible.
Limited use of renewable materials and energy.	Preference for renewable materials and energy.
Significant volumes of materials disposed of and lost to the economy. Loss of embodied materials, energy and water.	Materials recovered as high up the waste hierarchy as possible. Embodied materials, energy and water retained in the economy. Organic materials re-enter and regenerate the environment safely (for example, as compost).
Materials managed locally and globally.	Preference to manage materials locally to reduce the costs and impacts of transport, and to provide local employment and investment opportunities.
Economic value of materials, employment and investment not fully accounted for.	Economic value of materials, employment and investment accounted for.
Limited focus on life cycle thinking.	Products designed and manufactured to minimise environmental impact through whole of life.

Figure 3: Transitioning to a circular economy

5 Proposed development

The anticipated volume of general waste, and recyclables is based on the floor area of the development. For robust assessment, the full floor area of the building was adopted, which is around 843m².

The proposed development plans are included for reference in Appendix A.



6 Waste generation

6.1 Waste generation rates

The waste generation rates for general waste and recyclables are sourced from the *City of Melbourne Guidelines for Waste Management Plans 2021*. Waste generation rates are detailed in Table 1.

Table 1: Commercial waste generation rates

Land use	General waste generation rate	Recyclables generation rate
Child Care Centre	350L/100m ² Floor area/week	350L/100m ² Floor area/week

6.2 Waste generation calculations

The waste generation calculations are detailed in Appendix D. The estimated waste generation for the development is:

- General Waste: around 2,950L per week.
- Recyclables: around 2,950L per week.

7 Waste systems

7.1 Internal waste storage

Internal bins should be provided throughout the child care centre for separate disposal of general waste and recycling.

Internal bins will be emptied by cleaners at regular intervals throughout the week and transferred to the Bin Storage Area for disposal into the appropriate bins.

7.2 External bin storage areas

7.2.1 Bin size, quantity and colour

It is proposed to provide the following bins in a centralised bin store:

- 5 x 240L General waste (red lid bin).
- 5 x 240L Co-mingled recycling (yellow lid bin).

The number of bins required for the development is detailed in Appendix D.

7.2.2 Bin storage area size

As detailed in Table 2, each 240L bin has a footprint area of 0.43m². A 50mm gap is allowed between the bins to allow easy pull movement.

The proposed bin storage area size is sufficient to accommodate the required bins.

Table 2: Larger Mobile Garbage Bin (MGB) dimensions

Bin capacity	80L	120L	140L	240L	360L
Height (mm)	870	940	1065	1080	1100
Depth (mm)	530	560	540	735	885
Width (mm)	450	485	500	580	600
Approximate footprint (m ²)	0.24	0.27	0.27	0.43	0.53

Source: WALGA



7.2.3 Bin storage area design

Urbii has checked the proposed bin storage location and confirmed that required clearances are provided. A bin storage plan is included in Appendix B.

The following is a list of generic advice offered for consideration at subsequent detailed design stages of the project:

- **Size:** Ensure the size of the area set aside for the management of waste is sufficient to accommodate the number of bins required.
- **Ventilation and odour:** If covered, the design of the bin store will provide for adequate natural ventilation through ventilated doors or an alternative method which will be permanent, unobstructed natural ventilation openings direct to the external air, not less than one-twentieth i.e. 5% of the floor area.
- **Lighting:** Artificial light controlled by switches will be located near the bin store entrance.
- **Noise:** Bins will be collected from the waste collection presentation point outside of the peak operating hours of the development.
- **Aesthetics:** The bin store should be consistent with the overall aesthetics of the development.
- **Vermin:** Self-closing doors can be considered to eliminate access to vermin.
- **Washing bins and waste storage area:** The internal bin store will have bin-washing facilities including an adequate supply of water with hose cock and have floor drainage installed. Staff will be responsible for washing bins (or contracting a provider to wash bins) and for maintenance of their bin stores.

7.3 Access to bins

Waste and recycling storage facilities are in positions that:

- Permit easy, direct and convenient access for the users of the facility.
- Permit easy transfer of bins to the presentation point.
- Permit easy, direct and convenient access for collection service providers.
- Are well screened and do not reduce amenity.
- Are secure and provide protection against potential vandalism.
- Reduce potential noise pollution and disturbance of residents.
- Are close to building exits.

8 Waste collection

8.1 Waste vehicle types

Waste collection for the proposed development will be undertaken by the City of Melville's waste collection contractor using standard rear-lift collection vehicles. Waste collection is proposed to occur directly from St Michael Terrace.

8.2 Waste collection frequency

Waste collection will be scheduled at a frequency of three times per week. Waste collection activities will be coordinated with the City of Melville to occur sometime between 9:30am and 2:30pm daily, which is outside the peak operating times of the facility.

8.3 Waste collection method and presentation points

On scheduled collection days, the waste collection vehicle will temporarily stop in the northbound traffic lane of St Michael Terrace, north of the development crossover, to conduct collection operations.

Bins will be wheeled from the ground-floor bin store to the rear of the truck by the waste collection staff. After emptying, bins will be promptly returned to the bin storage area.

The bin store will be unlocked during the waste collection time window, to permit access by City of Melville waste collection staff.

Traffic analysis undertaken as part of the Transport Impact Statement confirms that St Michael Terrace carries very low traffic volumes for a residential access road, with an average weekday demand of approximately 311 vehicles per day and peak-hour volumes of around 40 vehicles per hour. On-site observations completed by Urbii further demonstrate that school-related traffic is highly concentrated and occurs only within short 20–30-minute windows before and after the school time. Morning activity typically peaks between 8:30am and 8:50am, while the afternoon peak occurs between approximately 2:45pm and 3:30pm. Outside these brief periods, traffic activity on St Michael Terrace remains very low, and the street operates with substantial unused capacity.

To ensure waste servicing does not coincide with these concentrated school peaks, collection will be scheduled to occur outside the identified morning and afternoon peak periods. This approach avoids any interaction between waste collection vehicles and school-related traffic, maintains safe conditions for pedestrians and drivers, and aligns with the operational measures outlined in both the Transport Impact Statement and the Parking Management Plan. By ensuring servicing occurs only in low-activity periods, the waste collection process will operate efficiently and with minimal impact on the surrounding road network.

The bin transfer route is detailed in Appendix B.



8.4 Vehicle access and maneuvering

Waste collection will be facilitated on-street from St Michael Terrace. Therefore, no internal waste truck access or circulation needs to be allowed for.

9 Additional waste requirements

9.1 Bulk waste

Bulk waste can be temporarily placed in a store room within the building until private arrangement for collection is made.

9.2 E-Waste

Storage space for E-waste will be accommodated within the building. E-waste will be disposed in a suitable manner, such as bulk drop-off to the tip or using public battery recycling boxes.

9.3 Garden organics

The site caretaker will manage garden organic waste. Garden waste can be placed in general waste bins if there is space or can be removed by trailer to be disposed offsite in a suitable location.



10 Waste management

Staff/cleaners will be responsible for:

- Cleaning their bin storage areas and facilities;
- Transferring waste stored internally to the consolidated bin storage area daily; and,
- Regularly cleaning their bins.

Staff should comply with the waste contractor's sorting requirements and only place permitted waste in each respective bin type. Waste that does not belong in any bin should be disposed of through private services or another appropriate method.

11 Consultation with the City of Melville

As part of preparing the revised Waste Management Plan, Urbii consulted directly with the City of Melville's Waste Services team to confirm an appropriate and safe servicing method for the proposed child care centre. The purpose of this consultation was to ensure that the proposed collection arrangements aligned with the City's operational requirements, vehicle capabilities and safety practices, while also addressing the site's pedestrian and traffic environment.

Initial correspondence outlined the proposed use of a rear-loader collection vehicle operating from St Michael Terrace, given the constrained on-site layout and the desire to avoid waste trucks entering the basement car park. City officers confirmed that a rear-loader truck is suitable for this location and would provide an efficient servicing method for the site. The City also provided specific safety advice relating to the position of the truck during servicing, noting that drivers should not be located too close to the Queens Road corner due to turning vehicle movements. In response, the servicing location was shifted further north along St Michael Terrace, immediately north of the development crossover, ensuring adequate separation from the intersection and reducing the risk of vehicle conflict.

Further guidance was provided regarding the layout and access to the bin store. The City recommended that the bin store entry be aligned as closely as possible with the driveway to minimise manual handling distances, acknowledging the operational constraints posed by pedestrian sightlines at the property boundary. The final bin store location balances both requirements—set back sufficiently to protect footpath visibility while remaining close enough to the road to ensure efficient bin transfer for collection staff.

The City also highlighted the importance of minimising travel distances for collection staff and avoiding extended bin placement on the verge due to proximity to the primary school. These considerations have been incorporated into the updated bin transfer route and servicing methodology, which provide for prompt bin presentation and removal within the designated collection window.

Overall, the consultation process confirmed that the proposed rear-loader servicing method is acceptable to the City of Melville and that, with minor adjustments, the waste collection process can be safely and efficiently accommodated. The outcomes of this engagement have been fully integrated into the revised Waste Management Plan to ensure compliance with City requirements and best-practice operational standards.



12 Conclusion

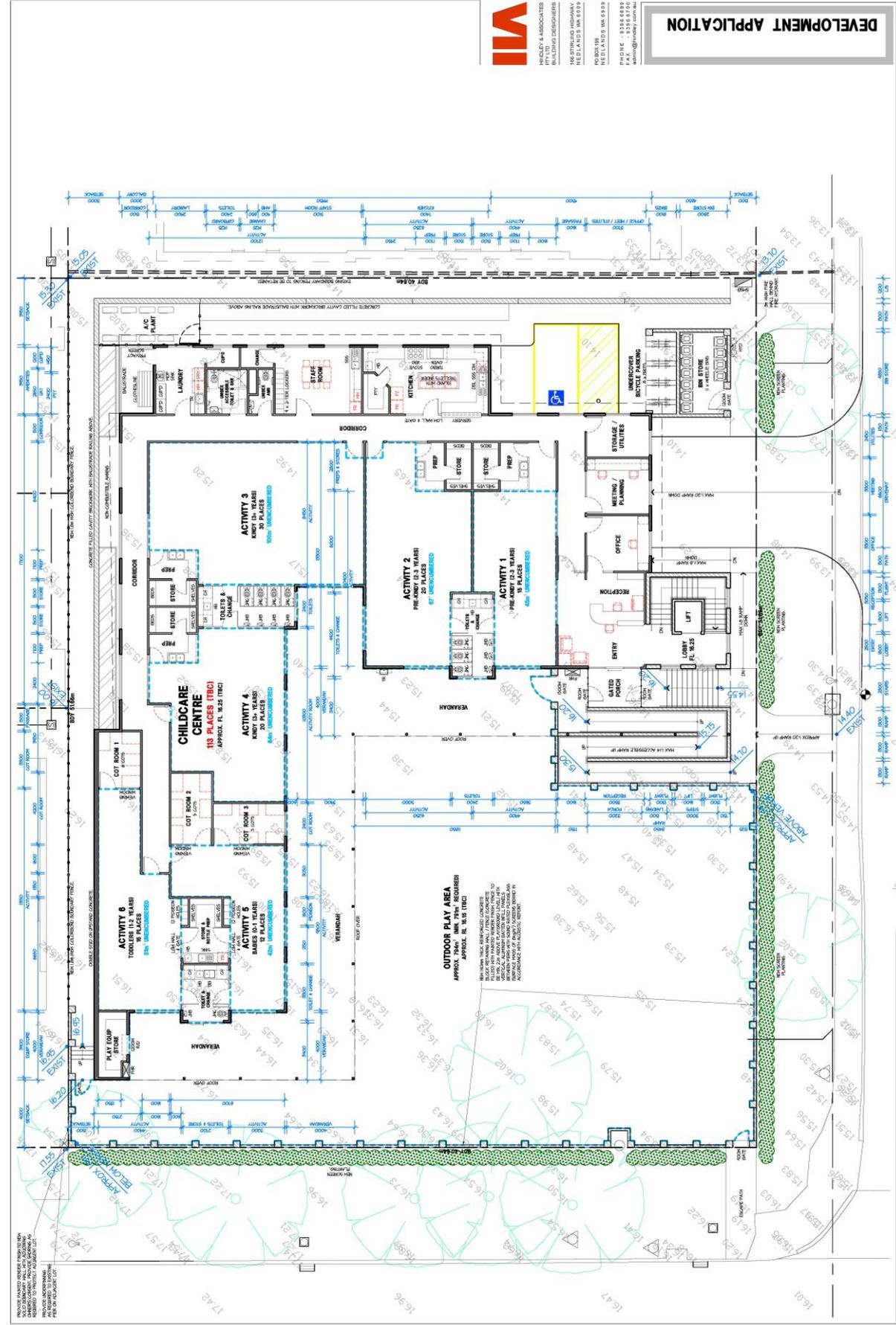
As demonstrated within this Waste Management Plan, the proposed development provides sufficient bin storage and adequate bins to service the site for general waste, recyclables and other waste.

Furthermore, the servicing of the bins by the City can be adequately achieved without having an adverse impact on the site and the local street network.

Appendices

Appendix A: Proposed development plans





PROPOSED CHILDCARE CENTRE
 LOTS 143 (34) & 144 (36)
 ST MICHAEL TCE, MOUNT PLEASANT
 for STOCK ROAD LAND PTY LTD

DEVELOPMENT APPLICATION



PROPOSED GROUND FLOOR PLAN
 SCALE 1:500

A1 SHEET

NO.	DATE	REVISION	ENHANCED	CHECK
1	30.05.25	TOWN PLANNER'S COMMENTS	JAF	BSB

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DA04 B



PROPOSED GROUND FLOOR PLAN
 SCALE 1:500

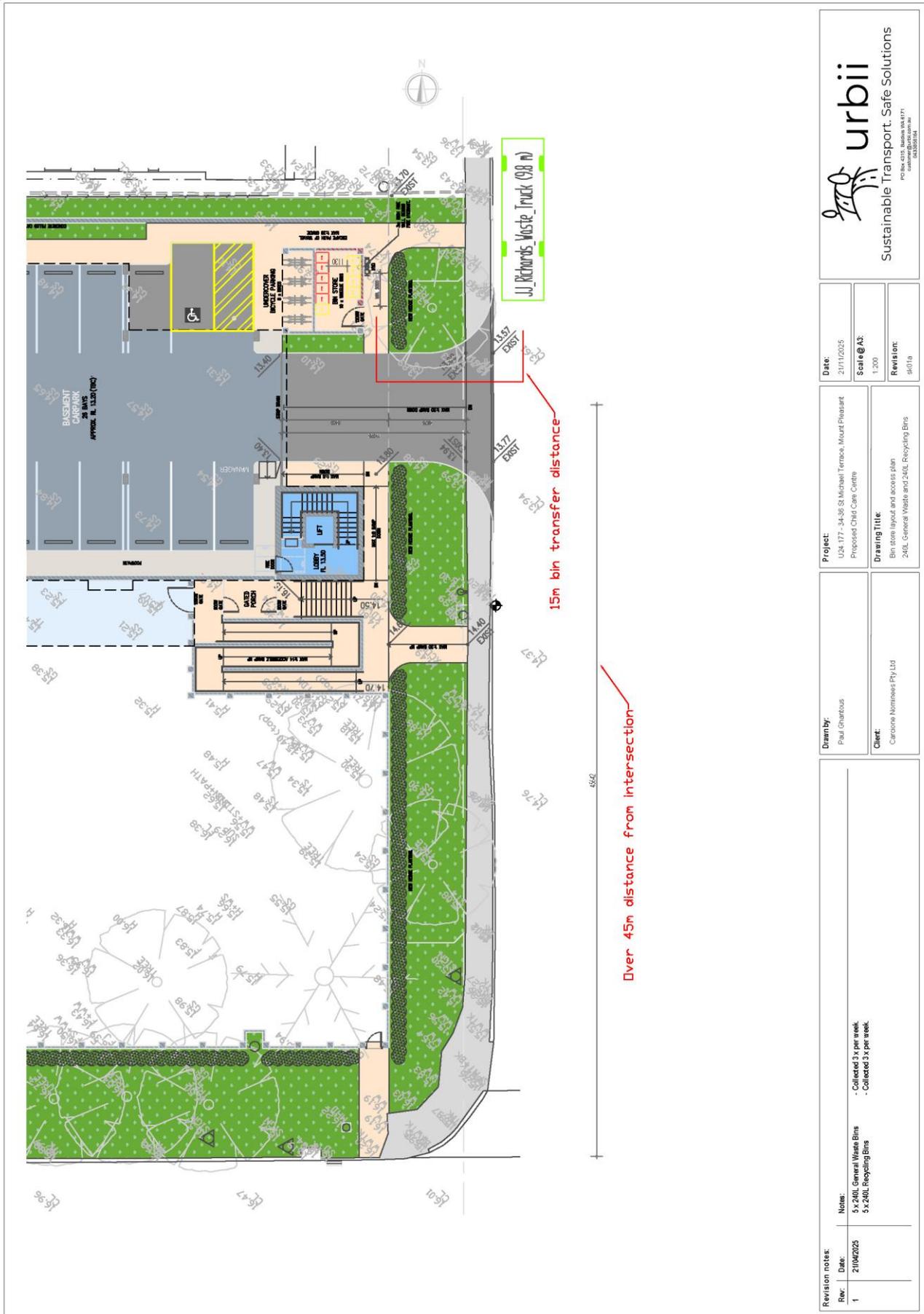
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NO.	DATE	REVISION	ENHANCED	CHECK
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Appendix B: Bin storage and bin presentation plans



Revision notes:	Rev:	1	Date:	21/04/2025	Note:	5 x 240L General Waste Bins	• Collected 3 x per week.
	Rev:	1	Date:	21/04/2025		5 x 240L Recycling Bins	• Collected 3 x per week.
Drawn by:		Paul Ghantous		Project:		U24-177-34-36 St Michael Terrace, Mount Pleasant Proposed Child-Care Centre	
Client:		Carosone Nominees Pty Ltd		Date:		21/11/2025	
Drawing Title:		Bin store layout and access plan		Scale @ A3:		1:200	
Drawing Title:		240L General Waste and 240L Recycling Bins		Revision:		s401a	
urbii				Sustainable Transport. Safe Solutions			
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Appendix C: Correspondence with the City of Melville waste team

From: [Paul Ghantous](#)
To: ["Vanja Marjanovic"](#)
Cc: [Planning.Office](#); [Tom Murray](#); [Brett Strother](#)
Subject: RE: Request number: 1212693 - Att: Waste Department (Brett) - 34-36 St Michael Terrace, Mount Pleasant
Date: Friday, 7 November 2025 12:18:00 PM
Attachments: [image001.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[image009.png](#)

Hi Vanja,

Thank you for the feedback. With regards to the bin store wall, we needed to have it set back from the edge of the driveway to provide pedestrian crossing sightlines at the property boundary. We tried to locate the bin store door as close to the driveway as feasible.

The bin store is positioned close to the property boundary to minimise the travel distance as requested.

Servicing will occur on St Michael Terrace immediately north of the development crossover. For your information, this will be over 45m away from Queen Street, which should satisfy the requirement for vehicle sightlines turning around the intersection corner.

Kind regards,



Paul Ghantous
Principal, [Urbii](#)
0433858164
189 Adelaide Tce, Perth WA 6004
[My Digital Business Card](#)

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From: Vanja Marjanovic <Vanja.Marjanovic@melville.wa.gov.au>
Sent: Friday, 7 November 2025 11:44 AM
To: Paul Ghantous <paulghantous@urbii.com.au>
Cc: Planning.Office <Planning.Office@melville.wa.gov.au>; Tom Murray <Tom.Murray@melville.wa.gov.au>; Brett Strother <Brett.Strother@melville.wa.gov.au>
Subject: Request number: 1212693 - Att: Waste Department (Brett) - 34-36 St Michael Terrace, Mount Pleasant

Hi Paul,

Thank you for your email and suggestions regarding the rear lift service waste collection for the proposed development located at 34-36 St Michael Terrace, Mount Pleasant.

A rear loader would be suitable for this location and should work effectively. However, there are a few safety considerations to keep in mind.

It is important to ensure that our drivers are not positioned too close to the corner of Queens Road when servicing the bins. Vehicles turning around that corner could pose a potential risk of collision with our drivers or the truck. To mitigate this, servicing should occur further up St Michaels Terrace, as close to the bin yard as practicable.

I would also recommend that the entrance to the bin yard be aligned flush with the driveway rather than located around a corner, if possible. Additionally, the distance between the bin yard and the road should be kept minimal to reduce the manual handling distance for drivers, as the truck will be parked on the road during servicing.

These measures will help ensure both operational efficiency and driver safety.

Kind regards,
Vanja

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Vanja Marjanovic
Coordinator Resource Recovery & Waste
08 9364 0720
melvillecity.com.au



The City of Melville acknowledges the Bibbulmun people as the Traditional Owners of the land on which the City stands today and pays its respects to the Whadjuk people, and Elders both past and present | City of Melville nagolik Bibbulmun Nyungar ally-maga milgebar gardukung naga boordjar-il nanga allidja yugow yeye wer all kaanya Whadjack Nyungar wer netingar quadja wer burdik.

From: Paul Ghantous <paulghantous@urbii.com.au>
Sent: Tuesday, 4 November 2025 9:24 AM
To: Melville Information Officer <Melville.InformationOfficer@melville.wa.gov.au>
Subject: Att: Waste Department (Brett)
Importance: High



Hi Brett,

I spoke with your colleague this morning about a waste query for a proposed child care centre.

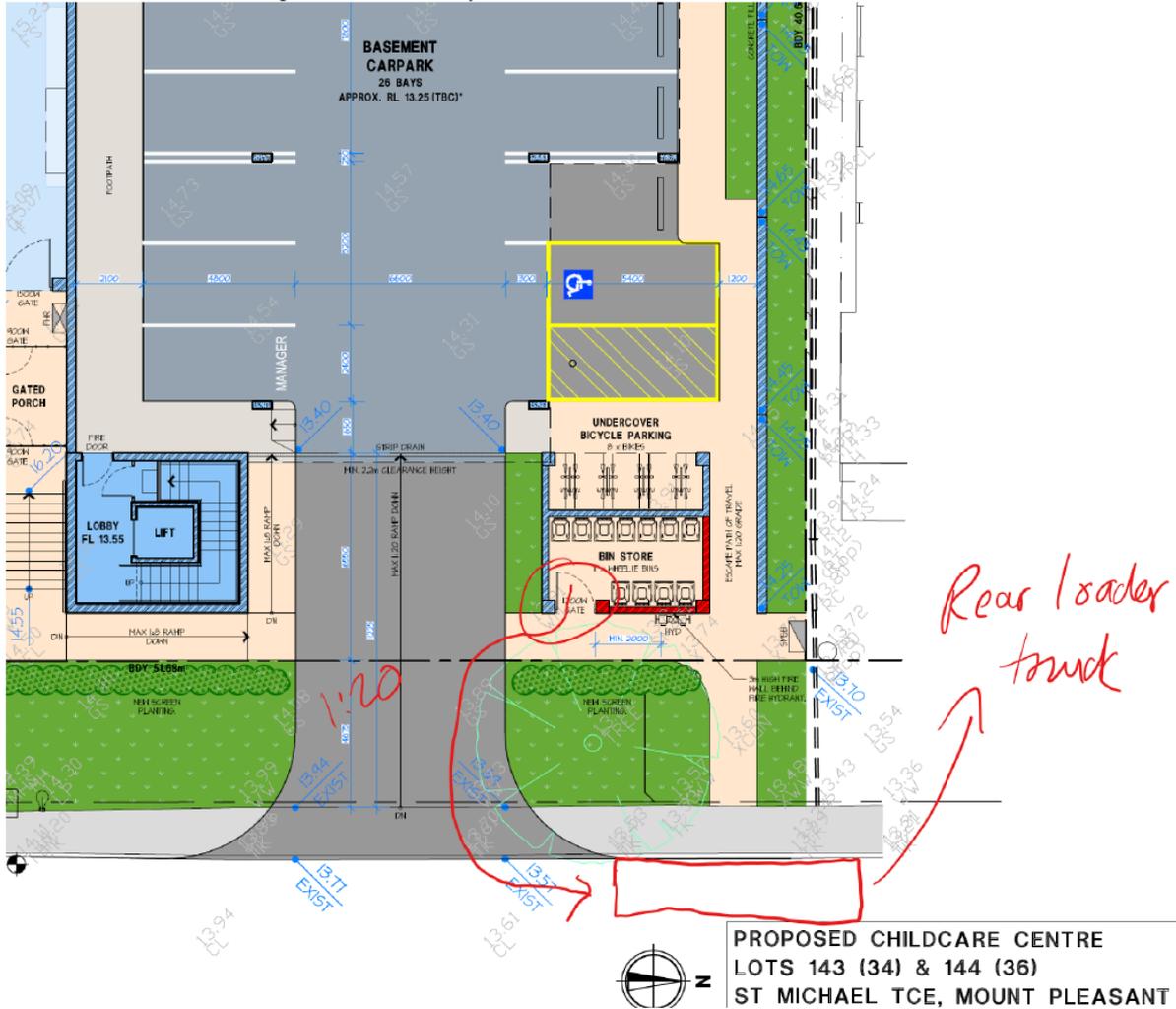
The site is 34-36 St Michael Terrace, Mount Pleasant.

We were thinking to schedule 3 x per week collection, which helps keep odours low.

I have provided a screenshot of the child care centre, to avoid having the waste truck enter into a tight basement car park, we thought to have the collection on-street via a rear loader truck. During the day (outside of peak hour traffic), the truck can stop on the street in front of the site and bins can be wheeled out to the back of the truck for emptying. The bin store door will be left unlocked on waste collection days to provide your team access.

Alternatively we can convert some of the grass to a bin presentation hardstand and bins can be wheeled to the truck from there.

We didn't want to go with the side loader collection because we want to avoid having the bins out on the footpath for extended time periods, as it would obstruct students walking to and from the nearby school.



Appreciate any feedback you can provide for this project.

Kind regards,



Paul Ghantous
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Appendix D: Waste calculations



Table 3: Weekly waste generation, bin types and collection frequency

Waste type	Daily generation (L)	Days in operation (per week)	Weekly waste generation (L)	Weekly collection frequency
General waste	421.5	7	2950.5	3
Recyclables	421.5	7	2950.5	3

General Waste Bins

Bin Size (L)	Number of bins	Weekly capacity
240	5	3600
Total weekly capacity (L)		3600

Recycle Waste Bins

Bin Size (L)	Number of bins	Weekly capacity
240	5	3600
Total weekly capacity (L)		3600