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Reduce. Reuse. Recycle

21 Berkshire Road, Forrestfield Proposed Child Care Centre **Waste Management Plan**



Prepared for:

The Trustee for 21 Berkshire Road unit trust

July 2025

21 Berkshire Road, Forrestfield

Prepared for: The Trustee for 21 Berkshire Road unit trust
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1 Introduction

This Waste Management Plan has been prepared by **Urbii** on behalf of **The Trustee for 21 Berkshire Road unit trust** with regards to the proposed child care centre, located at 21 Berkshire Road, Forrestfield.

The subject site is situated near the intersection of Berkshire Road and Passiflora Drive, as shown in Figure 1. The site presently accommodates a dwelling 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 104 children and 20 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.

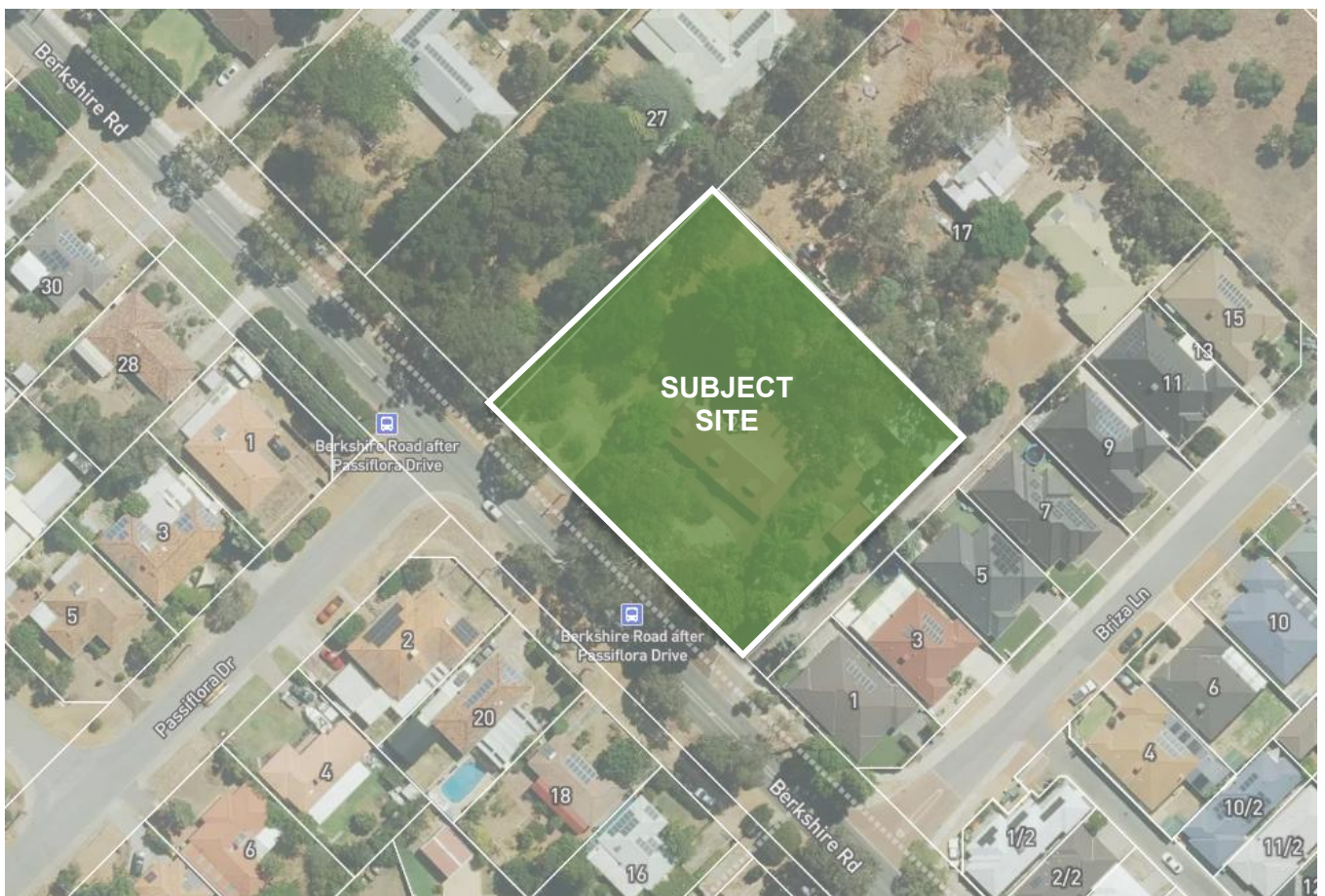


Figure 1: Subject site



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.

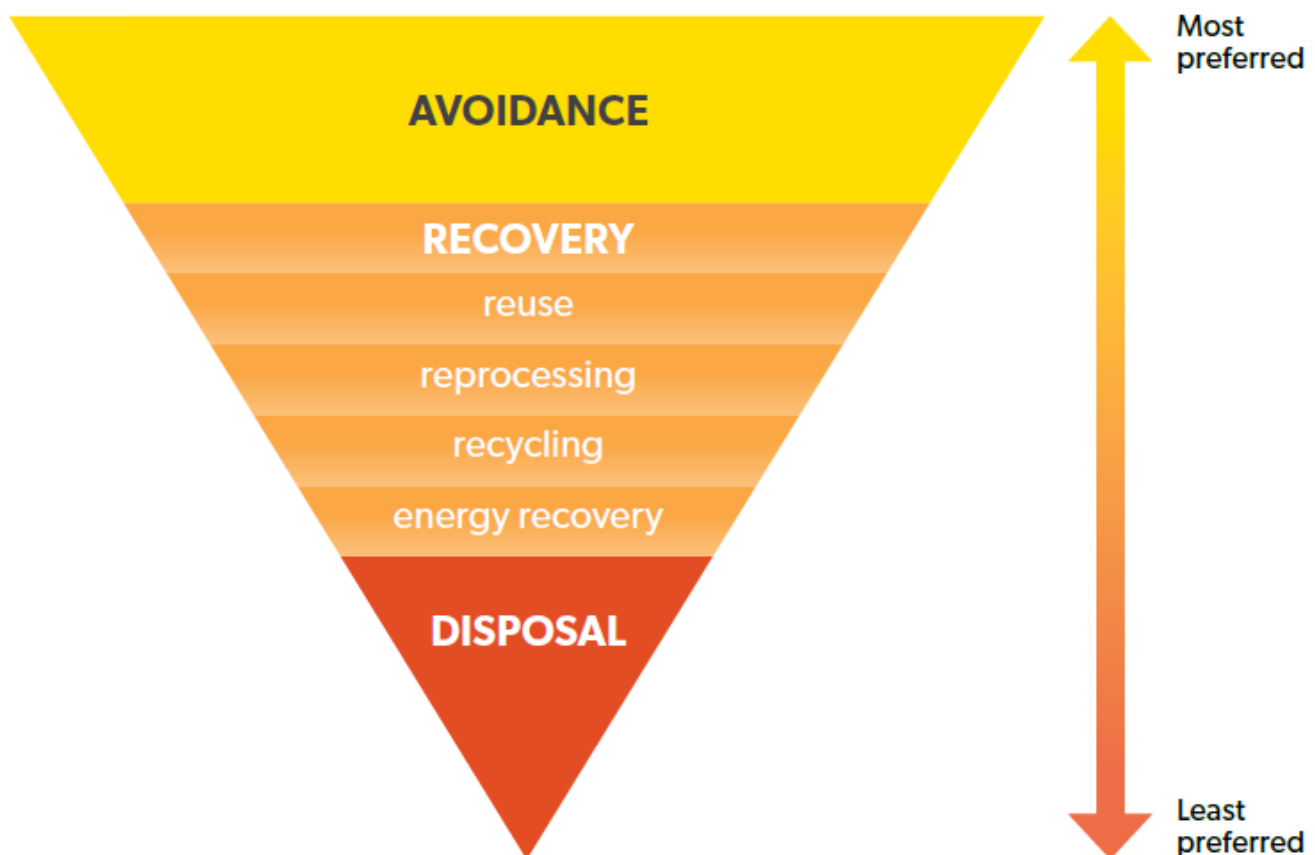


Figure 2: Waste hierarchy

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.

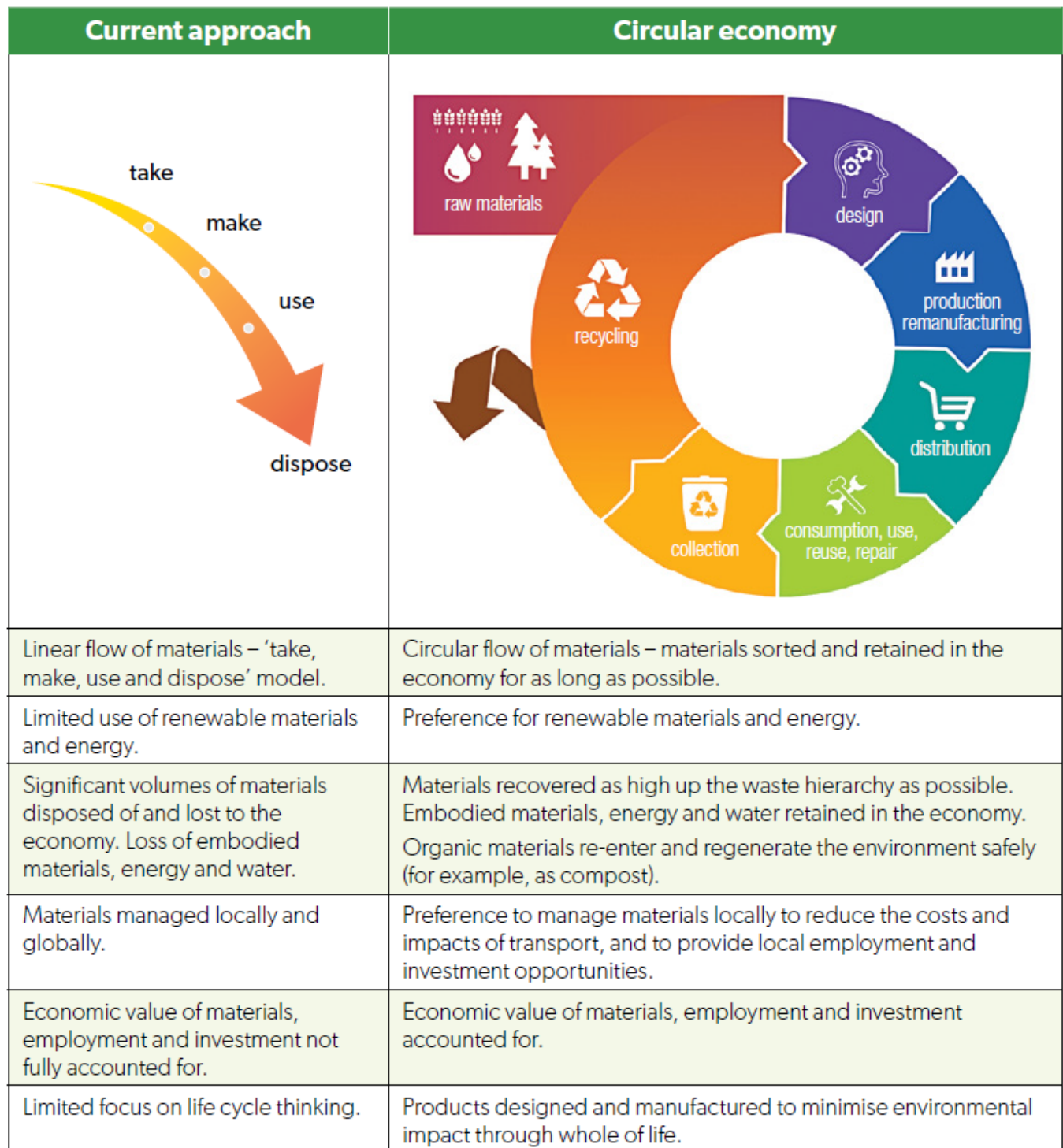


Figure 3: Transitioning to a circular economy



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 885m².

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 3,097L per week.
- Recyclables: around 3,097L 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:

- 2 x 660L General waste (red lid bin).
- 2 x 660L 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 660L bin has a footprint area of 1.16m². 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	660L	770L	1100L	1300L	1700L
Height (mm)	1250	1425	1470	1408	1470
Depth (mm)	850	1100	1245	1250	1250
With (mm)	1370	1370	1370	1770	1770
Approximate Footprint (m ²)	1.16	1.5	1.7	1.21	1.27

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

A private contractor will undertake waste collection, via a compact rear loader waste truck, suitable for onsite applications.

8.2 Waste collection frequency

Waste collection will be scheduled at a frequency of three times per week.

8.3 Waste collection method and presentation points

Waste collection is proposed to be undertaken onsite within the child care centre car park.

Waste collection will be scheduled to occur in the middle of the day, outside the morning drop-off and afternoon pick-up peak periods. A temporary reversing zone will be vacated in the car park and marked with traffic cones before the waste truck arrives on site.

Once the waste truck is parked onsite, contractors will wheel bins out of the bin store to the rear of the truck to be emptied. Empty bins will then be returned to the bin store.

8.4 Vehicle access and maneuvering

Swept path analysis was undertaken for waste truck entry, circulation and exit from the site. The swept path analysis indicates that a rear loader waste truck can access the bin store. It is recommended that waste collection be scheduled during the child care centre 'off-peak' periods.

The swept path analysis was undertaken for an 8.8m Medium Rigid Vehicle (MRV) and confirms that trucks can enter and exit the site in forward gear. A copy of the swept path analysis is presented in Appendix C.

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 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 private service can be adequately achieved without having an adverse impact on the site and the local street network.

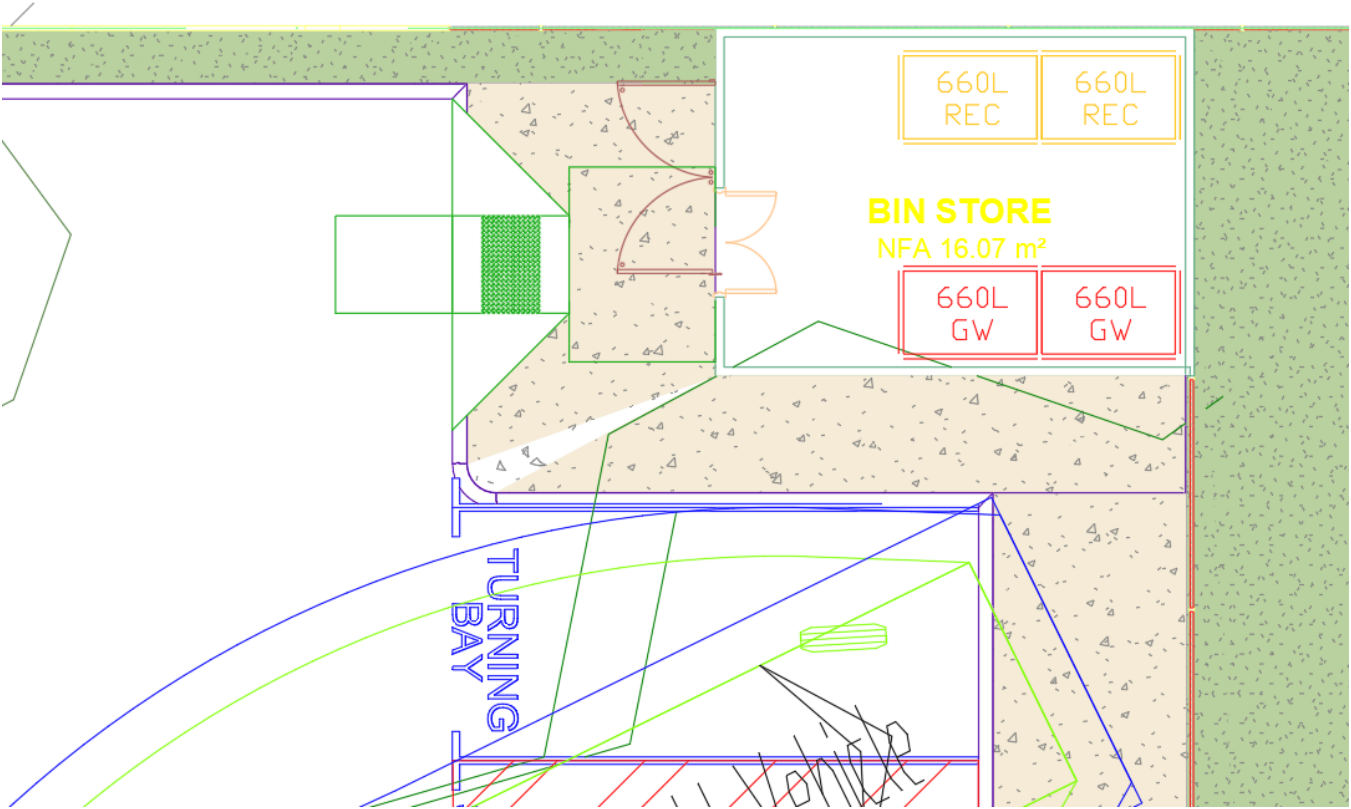


Appendices

Appendix A: Proposed development plans

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Appendix B: Bin storage and bin presentation plans



Appendix C: Swept path analysis

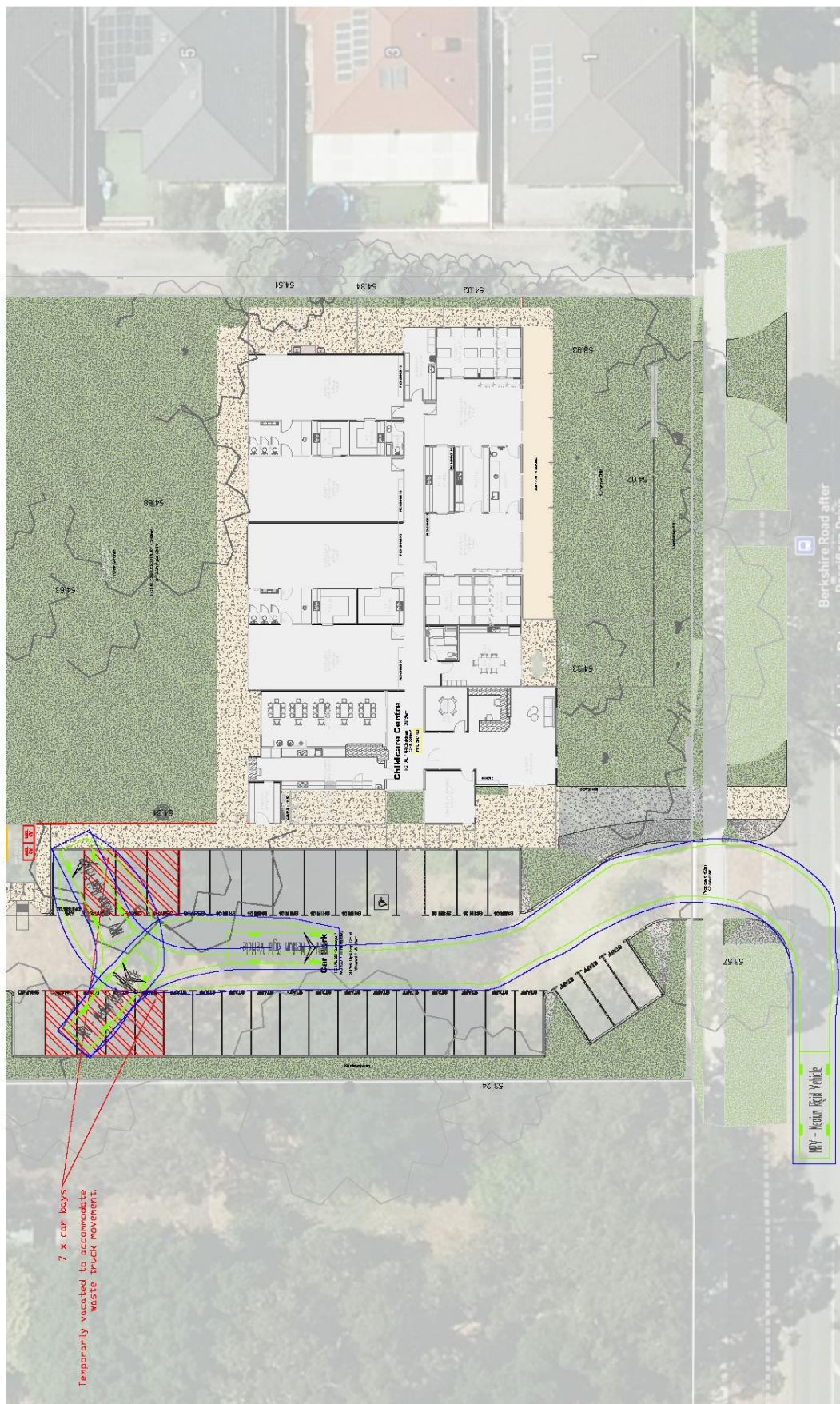
Swept path diagrams are included in this section of the report. Different coloured lines are employed to represent the various envelopes of the vehicle swept path, as described below:

Cyan represents the wheel path of the vehicle

Green represents the vehicle body envelope

Blue represents a 500mm safety buffer line, offset from the vehicle swept path

The swept path diagrams are also provided separately in high-quality, A3 PDF format.



7 x car bays
Temporarily vacated to accommodate
waste truck movement.

Revision notes:

Rev	Date	Notes
1	12/07/2025	Dark blue swept path line represents a 100mm buffer.

Drawn by:

Paul Olanrew
The Trustee for 21 Berkshire Road Unit Trust

Project:

U25007 - 21 Berkshire Road, Forestfield
Proposed Child Care Centre

Date:

12/07/2025

Scale @ A0:

1:300

Revision:

#001



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Revision notes:	
Rev:	Date:
1	12/07/2025

Note:
Dark blue swept path line represents a 100mm buffer.

Drawn by:
Paul Olanrew

Client:
The Trustees for 21 Berkshire Road Unit Trust

Project:
U25.057 - 21 Berkshire Road, Forrestfield
Proposed Child Care Centre

Drawing Title:
Swept path analysis - waste truck exit
ACS8002 - 5.8m Medium Right Vehicle (MRV)

Date:
12/07/2025

Scale @ A3:
1:300

Revision:
#002

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Appendix D: Waste calculations



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

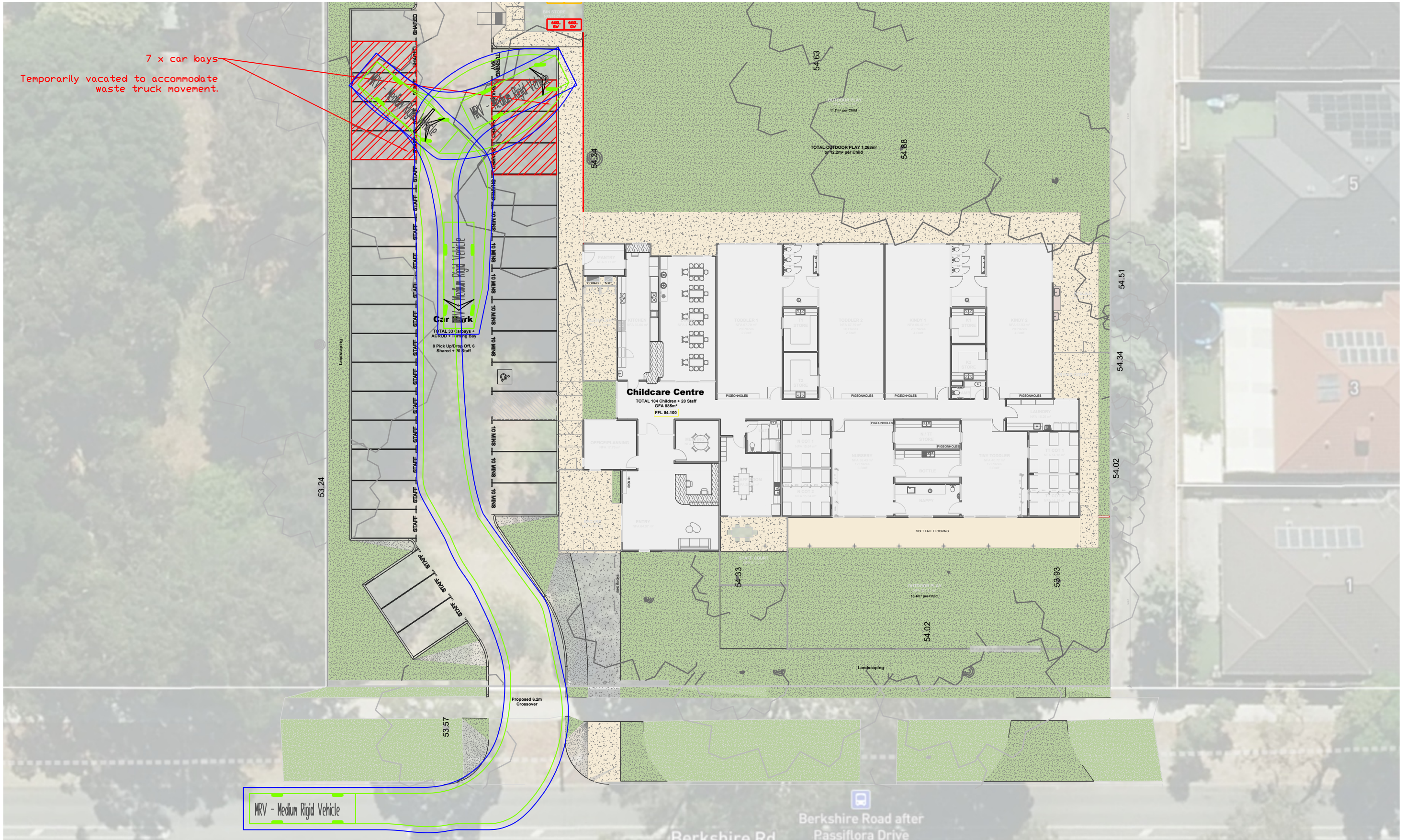
Waste type	Daily generation (L)	Days in operation (per week)	Weekly waste generation (L)	Weekly collection frequency
General waste	442.5	7	3097.5	3
Recyclables	442.5	7	3097.5	3

General Waste Bins

Bin Size (L)	Number of bins	Weekly capacity
660	2	3960
Total weekly capacity (L)		3960

Recycle Waste Bins

Bin Size (L)	Number of bins	Weekly capacity
660	2	3960
Total weekly capacity (L)		3960



Revision notes:		
Rev:	Date:	Notes:
1	12/07/2025	Dark blue swept path line represents a 500mm buffer.

Drawn by:
Paul Ghantous
Client:
The Trustee for 21 Berkshire Road Unit Trust

Project:
U25.057 - 21 Berkshire Road, Forrestfield Proposed Child Care Centre
Drawing Title:
Swept path analysis - waste truck entry AS2890.2 - 8.8m Medium Rigid Vehicle (MRV)

Date:
12/07/2025
Scale @ A3:
1:300
Revision:
sk01

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