WASTE MANAGEMENT PLAN

Proposed Warehouse Development

41, 47 Edison Crescent, Yarrabilba, QLD 4207

Lot 17-18 on SP333769

June 2025

Urban Planning | Urban Design
Project Management | Development Advice

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01	18/06/2025	Waste Management Plan	KC	EH	Draft
02	27/07/2025	Waste management Plan	KC	EH	Final

Site Overview

Site and Application Details	
Address	41, 47 Edison Crescent, Yarrabilba, QLD 4207 Lot 17 & 18 on SP333769
Site Area	Lot 17: 2,531m^2 Lot 18: 2,567m^2 Total: 5,098m^2
Assessing Manager	Economic Development Queensland
Local Categorising Instrument	Yarrabilba Priority Development Area Development Scheme
Land Use Plan: Zoning	Industry and Business Zone
Local Plan	Not applicable
Existing Use/s	Vacant land

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1 Introduction

1.1 Overview

HPC Planning (HPC) have been engaged by Stephen Zaarour ("the Applicant") to prepare a Waste Management Plan to support a development application for Material Change of Use for Warehouse over 41, 47 Edison Crescent, Yarrabilba, QLD 4207, described as Lot 17 & 18 on SP333769 ("the subject site").

This waste management plan provides context to the proposed development by describing the subject site and proposed development. Second, the plan provides an independent assessment of the proposal against the applicable standards to demonstrates the acceptability of the proposal. Particularly, the scope of the report included the following:

- Waste and recycling generation rate
- Waste and recycling storage
- Waste and recycling collection/servicing

1.2 Site Characteristics

The subject site comprises of two newly created non-residential lots under a Development Approval (DEV2022/1306) with an approved Plan of Development applicable to the site. In accordance with the approved Plan of Development, the subject site is identified within the Industry and Business zone. The subject site and the surrounding lots are currently vacant and the surrounding road network has been constructed. Access will be gained through the newly constructed Elison Crescent.

Figure 1: Aerial view of the subject site **Source: Nearmap**

1.3 Summary of Proposals

The proposal is for a two-unit Warehouse with ancillary office space and product display area on the subject site with one unit on each lot over 41, 47 Edison Crescent, Yarrabilba, QLD 4207, described as Lot 17 and 18 on SP333769. The proposal will contain a total 3,222m² of gross floor area for warehousing, ancillary office space and product display area (Tenancy 1 only).

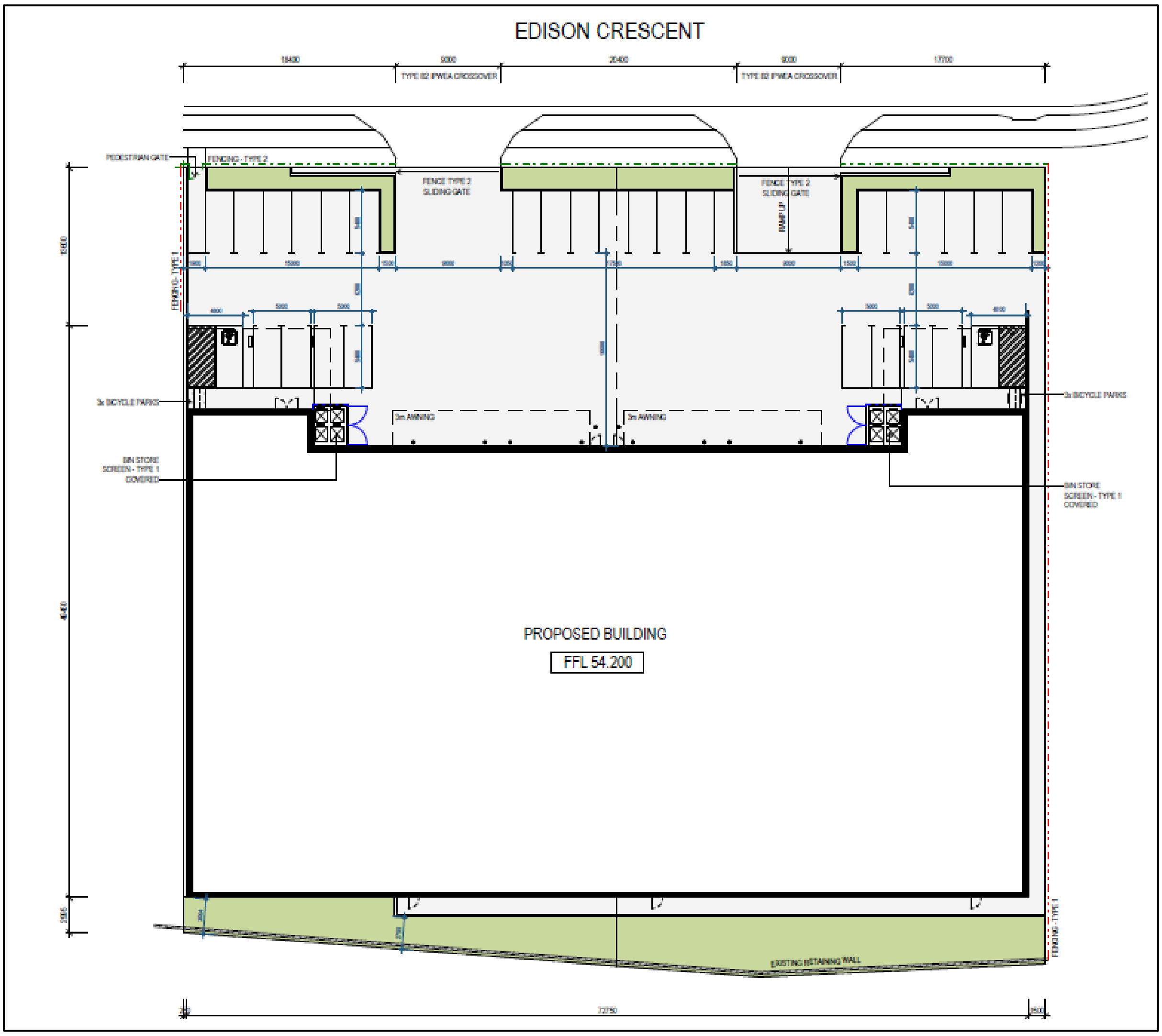

Figure 2: Proposed Site Plan **Source: Spaceframe Buildings**

1.4 Supporting Information

This waste management plan is prepared for conceptual calculation based on applicable standards and knowledge of the subject site and the following supporting documentation only:

- Proposed Plans by Spaceframe Buildings

2 Waste and Recycle Generation

2.1 Proposed Land Use

The proposal is for a two-unit Warehouse with ancillary showroom and office space on the subject site with one unit on each lot. The proposal will contain a total 2,775m² of warehousing area, 297m² ancillary office space and 149m² retail display area (Tenancy 1 only).

Floor Area	Tenancy 1	Tenancy 2
Warehouse (including Ancillary office and retail display area)	1,655m²	1,567m²

Table 1: Proposed Gross Floor Area for each land use

2.2 Type of Waste Streams

The proposal is for a two-unit Warehouse will generate both general waste and recycling waste.

2.3 Waste Generation Rates

Calculation of both general and recycling waste generated for the operation of the proposed development is based on the standard waste generation rate per land use in a local planning instrument. Given Logan City Council does not provide standard waste generation rate in *Logan Planning Scheme 2015*. This waste management plan adopted the non-residential refuse generation rate in accordance with *Brisbane City Plan 2014* (Schedule 6, SC6.26 Refuse planning scheme policy, Table 4).

Land Use	Refuse Generated Rates	Recycle Generated Rates
Warehouse (including Ancillary office)	15L/100m²/day	15L/100m²/day

Table 2: Non-residential refuse generation rates

The proposal includes a two-unit warehouse and ancillary office and showroom within Tenancy 1. Calculation of both general and recycling waste generated per week is based on a 6-day week operation.

Tenancy 1	Gross Floor Area	Refuse Generated / week	Recycle Generated / week
Warehouse (including Ancillary office and retail display area):	1,655m²	1,489.5L	1,489.5L

Table 3: Estimated refuse generation rates – Tenancy 1

Tenancy 2	Gross Floor Area	Refuse Generated / week	Recycle Generated / week
Warehouse (including Ancillary office):	1,567m²	1,410.3L	1,410.3L

Table 4: Estimated refuse generation rates – Tenancy 2

As such, the total refuse generated rate is 2,899.8L/week for general waste and 2,899.8L/week for recycling waste. The estimated waste generation volumes equate to 2.9m³ of general refuse and 2.9m³ of recycling waste per week.

3 Waste and Recycling Storage

3.1 Waste and recycling bins requirement

The below table identifies the sizes of wheeled and bulk bins available in accordance with Logan Planning Scheme 2015 Planning Scheme policy SC6.2.9 Waste Management Section 2.1.

Bin type	Bin capacity	Truck type	Depth (mm)	Width (mm)	Height (mm)
Wheeled Bin	140L	Side Lift	615	535	915
Wheeled Bin	240L	Side Lift	730	585	1060
Wheeled Bin	360L (recycling only)	Side Lift	848	680	1100
Bulk Bin	1,100L	Rear Lift	1088	1196	1320
Bulk Bin	1,500L	Front Lift	1050	1800	1247
Bulk Bin	2,000L	Front Lift	1000	1805	1359
Bulk Bin	3,000L	Front Lift	1499	1800	1600

Table 5: Bins sizes

In accordance with the proposed site plan. The proposed bin storage points are designed to accommodate four (4) 1,100L bulk bins for each tenancy, with the total supply of eight (8) 1,100L bulk bins for the proposed development.

	Refuse Generated / week	Recycle Generated / week	Bin storage capacity
Tenancy 1	1,489.5L	1,489.5L	2x 1,100L bulk bins for general waste 2x 1,100L bulk bins for Recycling waste
Tenancy 2	1,410.3L	1,410.3L	2x 1,100L bulk bins for general waste 2x 1,100L bulk bins for Recycling waste

Table 6: Bins capacity

3.2 Bin Storage Point

Bin storage point which can accommodate four 1,100L bulk bins are provided to each tenancy, including two (2) 1,100L bulk bins for general waste and two (2) 1,100L bulk bins for recycling waste. The dimension of a 1,100L Bulk bin is 1088mm (Depth) x 1196mm (Width) x 1320mm (Height).

The storage areas for bulk bins complies with Logan Planning Scheme 2015 Planning Scheme policy SC6.2.9 Waste Management Section 2.2 (2) and Section 2.5 (7):

Section 2.2

2. *The storage area for bulk bins provides a combined or separate waste and recycling storage area that is:*
   a. *an adequate size for the waste generated by each dwelling or tenancy;*
   b. *impervious, drained and provided with a hose cock;*
   c. *located in accordance with crime prevention through environmental design principles so as not to create a natural ladder;*
   d. *illuminated for night-time use.*

Section 2.5

7. *The storage area for bulk bins provides a combined or separate waste and recycling storage area that is:*

   a. *contained in an enclosure or room of sufficient size for the bulk bin quantity required;*
   b. *easily accessible for residents and for the required servicing of bins;*
   c. *screened from neighbouring properties for amenity;*
   d. *designed to incorporate ventilation for enclosed storage areas;*
   e. *located and designed to minimise noise associated with the use and servicing of bins;*
   f. *protected from the weather;*
   g. *provided with natural or temperature-controlled ventilation if in an enclosed room;*
   h. *kept clear of obstructions, such as fixed bay separators, that impede the ability to change from existing bin sizes or which otherwise limit future refuse collection options;*
   i. *kept clear of other building infrastructure such as air-conditioning units, hot water systems or electrical hubs where located in a bin room.*

Response:

The proposal provides an adequate size for the waste generated by each tenancy. It is located at the front of the building and will be locked at nighttime to ensure the compliance with CPTED Design and not to create a natural ladder.

The proposed bin storage areas are covered and enclosed with horizontal battens for visually screening and allow natural ventilation simultaneously. The access to the bin storage point will be clear of obstructions to allow on-site collection.

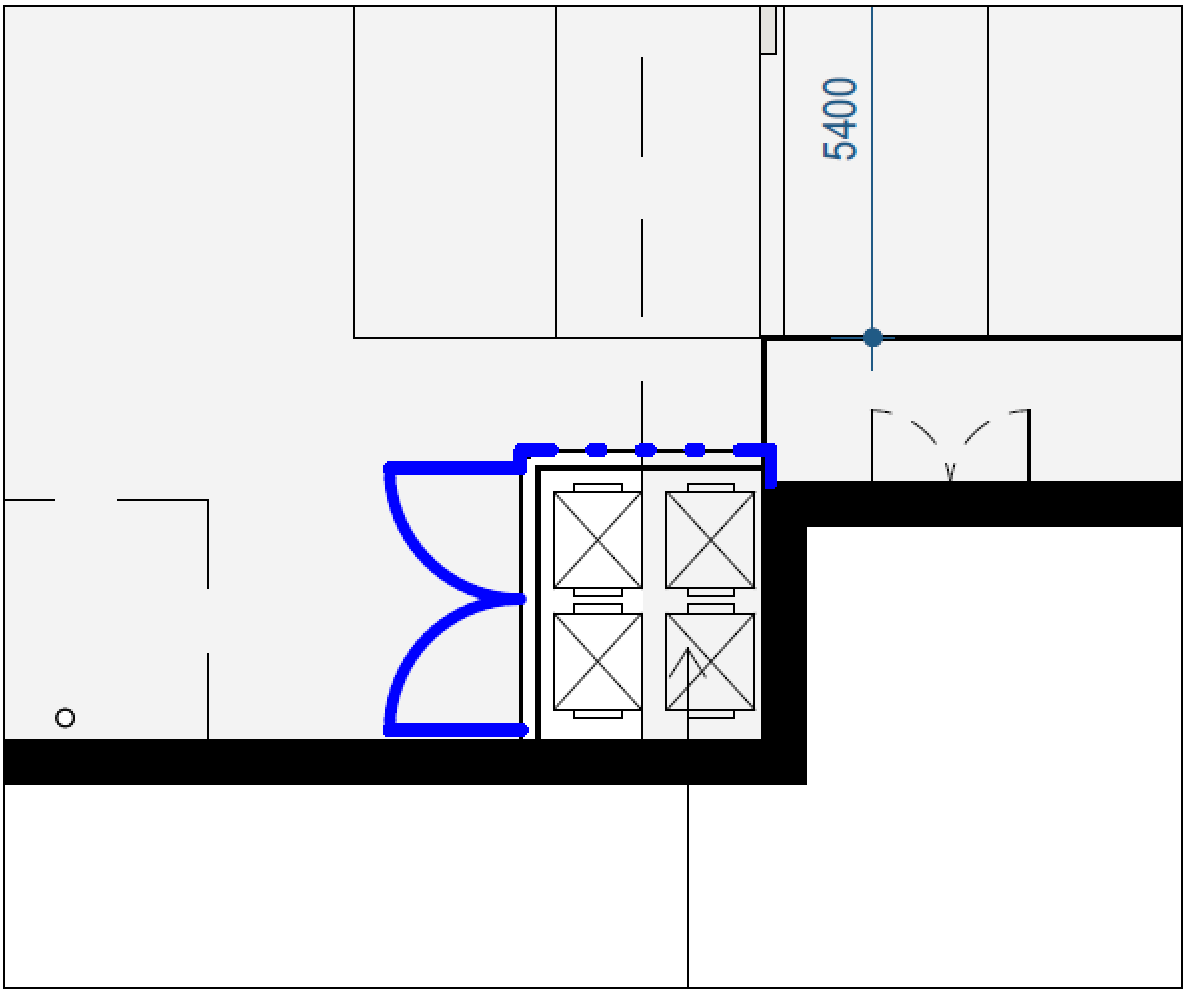

Figure 3: Proposed bin storage area Source: Spaceframe Buildings

Figure 4: 3D render Source: Spaceframe Buildings

4 Waste and Recycling Collection

4.1 Collection Frequency

Considering the volume of waste generated for the proposed land uses and the capacity on waste storage on site, the waste servicing frequency required for general waste and recycling waste bulk bins is **one time per week**.

	Refuse Generated / week	Recycle Generated / week	Bin storage capacity	Collection Frequency
Tenancy 1	1,489.5L	1,489.5L	2,200L storage for general waste 2,200L storage for Recycling waste	One time per week
Tenancy 2	1,410.3L	1,410.3L	2,200L storage for general waste 2,200L storage for Recycling waste	One time per week

Table 7: Collection Frequency

4.2 Bin Servicing Point

On-site collection is proposed in accordance with Logan Planning Scheme 2015 Planning Scheme policy SC6.2.9 Waste Management Section 2.5.

Section 2.5

2. *Where refuse collection vehicles are required to enter a property or private road to service the bins:*
    a. *the owner, body corporate or property manager must indemnify Council and its waste collection contractor from claims or liability arising from any damage to the internal roadways caused or contributed to by the operation of refuse collection vehicles on those internal roadways in connection with the waste collection services;*
    b. *the design specifications for the roadway and pavement is sufficient to carry a heavy rigid vehicle with a minimum load capacity of 30 tonne;*
    c. *the carriageway is free from overhanging vegetation.*

4. *Bulk bins of 1,100L or less are positioned so that collection personnel do not have to move them more than 10m. If a gradient is evident, speed bumps are provided to stop bulk bins from rolling away from the collection point.*

Response:

Refuse can be collected directly in front of the proposed bin storage area which minimise the moving of bulk bins for servicing to within 10m. Access of a refuse collection vehicle (RCV) will be clear of obstructions through the proposed crossovers.

4.3 Collection Vehicle Access

Logan Planning Scheme 2015 Planning Scheme policy SC6.2.9 Waste Management Section 2.6 provides guidance on access and manoeuvrability of collection vehicles.

Section 2.6

1. *A swept path analysis, certified by a Registered Professional Engineer of Queensland (RPEQ), must be used to check that the paths of travelling vehicles when negotiating access driveways, circulation roadways and servicing areas to establish that sufficient width is provided for the vehicle swept path, including manoeuvring clearances in accordance with Table 2.6.1 to 2.6.7.*

2. *Refuse collection vehicles are always able to move in a forward direction or have to perform no more than one three-point turn.*

3. *A refuse collection vehicle must not reverse, other than to perform a three-point turn.*

4. *Adequate lift clearances are provided to enable the safe mechanical pick up and set down of bins in accordance with Tables 2.6.1 to 2.6.7.*

5. *The pad that the collection vehicle will stand on while accessing refuse bins at the collection point is to have a maximum gradient of 2 percent (1:50).*

6. *Where the refuse collection vehicle is required to enter private property, an easement is to be provided in favour of Council for access.*

7. *A heavy duty sealed pavement is to be provided.*

Response:

The site provides ample room for access and manoeuvring for an RCV. Therefore, a refuse collection vehicle will be able to adequately service the bins directly from the refuse storage points and exit the site in a forward gear in accordance with the swept path diagrams prepared by *Site Traffic*.

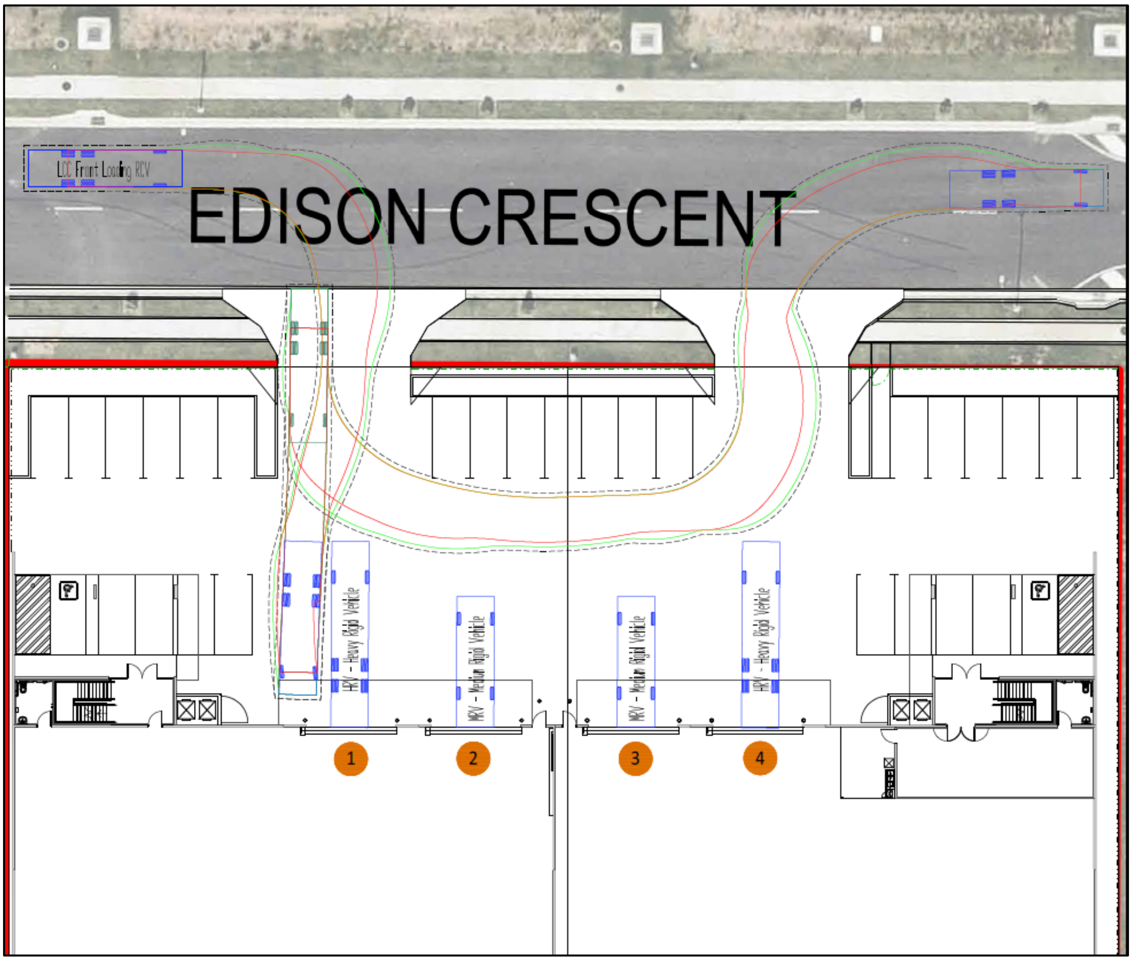

Figure 5: Swept path analysis for RCV **Source: Site Traffic**

5 Conclusion

This waste management plan has been prepared to provide details for optimal waste management practice in the operational phase of the proposed Warehouse over 41,47 Edison Crescent, Yarrabilba, QLD 4207, described as Lot 17 and 18 on SP333769.

This waste management plan has demonstrated the proposed waste management arrangements comply with the Planning Scheme Policy 9 – Waste management of *Logan Planning Scheme 2015* as below:

- The proposal is for a two-unit Warehouse with ancillary office and retailed display area which will generate both general waste and recycling waste;
- The refuse generated rate is 2,899.8L/week (2.9m^3) for general waste and 2,899.8L/week (2.9m^3) for recycling waste in accordance with the proposed land use and days of operation;
- Two (2) 1,100L bulk bins for general waste and two (2) 1,100L bulk bins for recycling waste are provided for each tenancy;
- The waste servicing frequency required for general waste and recycling waste bulk bins is one time per week; and
- On-site collection is proposed and the proposal allows safe access and manoeuvring for an RCV can enter and exit the site in a forward motion.

Yours sincerely,
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Appendix A: Glossary

Bulk bin: a receptacle that is greater than 360L in capacity generally ranging from $1m^3$ to $3m^3$ that provides for the temporary storage of refuse and which is used for on-site collection.

Collection point: the identified position where refuse bins are presented for collection and emptying.

General waste: waste (anything left over, surplus or an unwanted by-product that cannot be reused or recycled) other than regulated waste. For the purpose of this policy, this does not include construction and demolition waste, liquid waste or other hazardous materials.

General waste chute: a tubular chute penetrating each floor of a building to dispose of general waste material into a bulk bin or refuse compactor unit at a level to be determined at design stage.

Green waste: grass cuttings, trees, bushes, shrubs, loppings of trees, bushes or shrubs, or similar matter produced as a result of the ordinary use or occupation of premises.

Mobile refuse bin: includes all wheeled bins and 1,100L bulk bins.

Recyclable waste: includes clean and inoffensive waste that is declared by Council to be recyclable waste and which can therefore be re-used or recycled.

Refuse: includes general waste (including bulky items), recyclables and green waste.

Refuse bin: a receptacle (wheeled bin or bulk bin) used for the temporary storage of refuse.

Refuse collection vehicle: a heavy rigid vehicle (HRV) that is specifically designed for collecting and emptying refuse bins and refuse compactors.

Refuse compactor: a receptacle that provides for the mechanical compaction and temporary storage of refuse, to reduce bin numbers and collection frequency.

Regulated waste: has the meaning given in the *Environmental Protection Regulation 2008*.

Waste and recycling storage area: an area designated for storing refuse bins or a refuse compactor within the premises.

Waste management plan: a plan showing details of how general waste and recyclable waste collections are to be managed for the development.

Wheeled bin: an approved waste or recyclable waste container as supplied by Council for the purpose of storage and collection of general waste or recyclable waste. A wheeled waste bin has a capacity of up to 240L and a wheeled recyclable waste bin has a capacity of up to 360L.