

Garden Suburb Affordable Housing – Waste Management Plan

A Submission to Landcom

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Disclaimer

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In the spirit of reconciliation MRA Consulting Group acknowledges the Traditional Custodians of Country throughout Australia and their connection to land, sea and community. We pay our respects to Aboriginal and Torres Strait Islander peoples and to Elders past, present and emerging.

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Glossary

Terminology	Definition
AS	Australian Standard
C&D	Construction and Demolition
C&I	Commercial and Industrial
DA	Development Application
DCP	Development Control Plan
ENM	Excavated Natural Material
EPA	Environment Protection Authority
ILU	Independent Living Unit
LGA	Local Government Area
MGB	Mobile Garbage Bin
MRA	MRA Consulting Group
MSW	Municipal Solid Waste
LMLEP	Lake Macquarie Local Environmental Plan 2014
LMDCP	Lake Macquarie Development Control Plan 2014
VENM	Virgin Excavated Natural Material
WMP	Waste Management Plan
WSP	Waste Service Provider
WSRA	Waste Storage and Recycling Area

1 Introduction

As part of the NSW Government's commitment to increasing the supply of affordable housing, Landcom has a commitment to deliver affordable housing on all projects – 10% in metro locations and 20% in regional locations. As part of this commitment, Landcom intend to deliver 69 affordable housing dwellings across two lots within the Landcom Garden Suburb Project site. Landcom is seeking to deliver the proposal as 'development without consent' through the State Environmental Planning Policy (Housing) 2021 (Housing SEPP) by way of a Review of Environmental Factors (REF) under Part 5 of the Environmental Planning and Assessment Act 1979.

This Waste Management Plan report has been prepared by MRA Consulting Group (MRA) to accompany the REF.

The proposed affordable housing development is located at Lot 67 and 68 Myall Road, Garden Suburb. The site is located within the Lake Macquarie Local Government Area (LGA). The proposed development includes:

- Construction of 69 affordable housing units over 2 super lots (36 apartments at Lot 67 and 33 apartments at Lot 68)

This WMP addresses the requirements of the Consent Authority (Council) and conforms to the following environmental planning instruments and reference documents:

- Lake Macquarie Development Control Plan 2014 (LMDCP)
- Lake Macquarie Local Environmental Plan 2014 (LMLEP)
- Lake Macquarie City Council *Waste Management Guidelines* 2019

Consideration has also been given to the following supplementary documents in the preparation of the WMP:

- NSW EPA (2019) *Better Practice Guide for Resource Recovery in Residential Developments*.

The following relevant overarching objectives for waste management are outlined in the LMDCP:

Construction waste management

- To avoid creating construction waste wherever possible.
- To enable maximum diversion of construction waste to reuse, recycling or composting.
- To ensure that waste management is planned across all construction stages so that reusable resources and waste can be appropriately and effectively stored and removed safely from site without adverse impacts on local amenity.

Operational waste management

- To ensure that waste management infrastructure and operational procedures are an integral part of the development's design and ongoing management.
- To ensure sufficient volume of equitably accessible, safe, hygienic and aesthetically appropriate waste storage is provided on the property to minimise negative impacts of waste management on occupants and neighbours.
- To enable maximum opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins.
- To ensure equitable access for all occupants to opportunities to maximise diversion of waste.
- To provide flexibility to expand or reconfigure waste separation systems, so that owners and occupants have options to access a range of waste services.
- To ensure secure separation of commercial waste from residential waste storage and collection.
- To provide unobstructed waste collection point(s) that are safely and efficiently accessible by Council waste collection vehicles wherever possible.
- To provide unobstructed, safe access to move bins and bulk waste between storage and collection points.

This WMP is used to inform the building design to deliver best practice waste management and promote sustainable outcomes at the construction and operational phases of the development. The WMP addresses waste generation and storage associated with construction works through redevelopment, and ongoing occupation of the proposed use.

2 Background

2.1 Description of the Proposed Development

Landcom is the NSW Government’s land and property development organisation and has a mandate to take a lead in improving the supply, diversity, and affordability of new housing in NSW. As part of the NSW Government’s commitment to increasing the supply of affordable housing, Landcom, in partnership with registered community housing providers, has pledged to deliver 1,800 affordable rental housing dwellings by 2029.

Landcom, in partnership with NSW Crown Lands, has undertaken the Garden Suburb Project to deliver new housing on an approximately 38.8-hectare site located off Myall Road in Lake Macquarie, 2285. As part of this development, two super lots (Lot 67 and Lot 68) have been designated for the construction of 69 affordable rental apartments.

The proposed development will have the following components:

- Site preparation works
- Construction of 69 affordable housing units over:
 - Lot 67: 36 residential apartments, including 18 x 1-bedroom apartments, 9 x 2-bedroom apartments and 5 x 2-bedroom terraces, and 3 x 3-bedroom apartments and 1 x 3-bedroom terrace
 - Lot 68: 33 apartments, including 15 x 1-bedroom apartments, 12 x 2-bedroom terraces, and 6 x 3-bedroom apartments

2.2 Location

The subject site (‘the site’) comprises of Lot 67 and Lot 68 off Myall Road, Garden Suburb. The Garden Suburb Project’s entire 38.8 ha site is registered as a biodiversity stewardship site (registration number - BS0162), which is a designated area of land managed with an approved management plan for conservation more than 70% of the stewardship site in perpetuity.

Figure 1: Site and surrounding area



Source: Nearmap, 2025.

2.3 Strategies

Waste management for the site considers better practice, necessary equipment, and integration with other guidance documents including the NSW Waste and Sustainable Materials Strategy (NSW EPA, 2021), and National Waste Policy: Less Waste, More Resources (DAWE, 2018). The key policy aims that are considered are:

- Avoidance (to prevent the generation of waste);
- Reduce the amount of waste (including hazardous waste) for disposal;
- Manage waste as a resource; and
- Ensure that waste treatment, disposal, recovery and re-use are undertaken in a safe, scientific and environmentally sound manner.

Management of waste generated onsite according to directives of the NSW Strategy will assist in achieving the target of 80% diversion from landfill in the C&D sector.

2.4 Assumptions

This report is a Waste Management Plan (WMP), forming part of the development documentation and assumes:

- Drawings and information that have been used in waste management planning for this WMP are the final design set for the development plan from the project architect, Hill Thalys, 17/10/2025;
- Waste and recycling volumes are based on information provided from the LMDCP (2014); and
- This WMP is a living document and therefore, waste management equipment and systems described in this report are subject to change based on future operations and available technology.

3 Construction

Construction activities at the site will generate a range of construction waste. Throughout the development process, all materials will be reused and recycled where possible, minimising the disposal (landfilling) of materials other than those that are contaminated or unsuitable for reuse or recycling processes.

Waste storage during construction operations will involve some stockpiling of reusable material, as well as placement of wheeled bins for the separation of construction materials for recycling. A bin for residual waste or contaminated material will also be made available at the site for disposal where necessary. Bins may require alternative placement across construction operations to facilitate the safe and efficient storage of materials and will be retained within property boundaries to avoid illegal dumping.

A waste storage area shall be designated by the construction contractor and shall be sufficient to store the various waste streams expected during operations. Waste storage areas will be kept clear to maintain access and shall also be kept tidy to encourage separation of waste materials and for WHS reasons. The waste storage area will retain multiple bins to allow for source separation of waste to allow for ease of recovery and reuse of materials.

Waste management principles, management measures and facilities in use on the site shall be included as part of the site induction for all personnel working on the site.

3.1 Construction Waste

The proposed construction works features:

- Construction of 69 affordable housing units over:
 - Lot 67: 36 residential apartments, including 18 x 1-bedroom apartments, 9 x 2-bedroom apartments and 5 x 2-bedroom terraces, and 3 x 3-bedroom apartments and 1 x 3-bedroom terrace
 - Lot 68: 33 apartments, including 15 x 1-bedroom apartments, 12 x 2-bedroom terraces, and 6 x 3-bedroom apartments

Table 1 outlines indicative volume to weight conversion factors for common construction materials.

Table 1: Building waste material by percentage and conversion factor for volume and weight

Building waste material	Tonnes per m ³	Waste as % of the total material ordered
Soil/aggregate	1.4 – 1.6	–
Bricks	1.2	5–10%
Concrete	1.5	3–5%
Tiles/ceramics	0.5 – 1	2–5%
Timber	0.3	5–7%
Plasterboard	0.2	5–20%
Metals	0.15 – 0.9	–

Source: Green Building Code of Australia C&D Waste Criteria.

Table 2 outlines the estimated waste generation rates for materials through construction of the proposed development, in addition to the appropriate management methods for each material type.

Table 2: Construction waste generation estimations

Type of Material	Estimated Volumes (m ³)	Re-use on-site	Recycle (Separate collection)	Recycle (Off-site)	Landfill	% of landfill diversion	Methods for re-use, recycling or disposal
Excavated material	5,000 - 6,000	✓	✓	✓	<5%	>95%	Onsite: Reuse for fill and levelling. Offsite: Removed from site for reuse as recycled fill material or soil. Disposal: Removal of any contaminated material for appropriate treatment or disposal.
Bricks/pavers	30-40	✓	✓	✓	<10%	>90%	Onsite: Separated wherever possible and reused or crushed for landscaping and driveways. Offsite: Returned to supplier for reuse or removed to C&D facility for crushing and recycling for recovered products.
Concrete	<30	✓	✓	✓	<10%	>90%	Onsite: Separated wherever possible and reused or crushed for filling, levelling or road base. Offsite: Removed to C&D facility for crushing and recycling for recovered products.
Tiles	10-20	✓	✓	✓	<10%	>90%	Onsite: Separated wherever possible and reused or crushed for landscaping and driveways. Offsite: Returned to supplier for reuse or removed to C&D facility for crushing and recycling for recovered products.

Type of Material	Estimated Volumes (m ³)	Re-use on-site	Recycle (Separate collection)	Recycle (Off-site)	Landfill	% of landfill diversion	Methods for re-use, recycling or disposal
Timber (clean)	100-200	-	✓	✓	<10%	>90%	Onsite: Separated wherever possible to improve resource recovery. Offsite: Returned to supplier for reuse removed to C&D facility for recovery where possible.
Timber (treated)	100-200	-	✓	✓	50%	50%	Onsite: Separated wherever possible to improve resource recovery. Offsite: Returned to supplier for reuse removed to C&D facility for recovery where possible.
Plasterboard	<5	-	✓	✓	<10%	90%	Onsite: Separated wherever possible to improve resource recovery. Offsite: Returned to supplier or removed to a C&D/plasterboard recovery facility for recovery where possible.
Glass	<150	✓	✓	✓	<10%	>90%	Onsite: Separated wherever possible and reused or crushed for landscaping and driveways. Offsite: Returned to supplier for reuse or removed to C&D facility for crushing and recycling for recovered products.
Metals (ferrous) Metals (non-ferrous)	<150	-	✓	✓	<10%	>90%	Onsite: Separated wherever possible to improve resource recovery. Offsite: Returned to supplier for reuse or removed to C&D facility for recovery and recycling.

Type of Material	Estimated Volumes (m ³)	Re-use on-site	Recycle (Separate collection)	Recycle (Off-site)	Landfill	% of landfill diversion	Methods for re-use, recycling or disposal
Floor covering	10-20	✓	✓	✓	<10%	>90%	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse where possible. C&D processor: recovery and recycling.
Fixtures and fittings	<200	✓	✓	✓			On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse where possible. C&D processor: recovery and recycling.
Electronic waste	<100	-	✓	✓	<10%	>90%	Offcut wires and electronics separated where possible or returned to supplier for reuse.
Packaging materials (pallets, wrap, cardboard, etc)	100-150	-	✓	✓	<10%	>90%	Returned to supplier where possible or separated by material type for resource recovery.
Residual waste	100-500	-	✓	✓	100%	-	Resource recovery dependant on facility destination capability.
Total % Diversion from Landfill Estimated						>90%	

3.2 Waste Contractors and Facilities

To ensure best practice waste management, appropriate contractors and facilities have been proposed based on their location and service offerings (Table 3).

Table 3: Waste service contractors and facilities

Role	Details
Recommended Waste Collection Contractor	<p>The following are local skip bin operators for consideration in the management of excavation and construction waste for the site:</p> <ul style="list-style-type: none"> • All Town Skips; • Skip Bins Lake Macquarie; • 1300 Skip Bins Newcastle and Lake Macquarie; <p>Or another supplier as elected by the building contractor.</p>
Principal Off-Site Recycler	<p>The following are local C&D processing facilities for consideration in the management of C&D waste generated at the site:</p> <ul style="list-style-type: none"> • Awaba Waste Management Facility; • Concrush Teralba Facility; • Lake Macquarie Organics Resource Recovery Facility; <p>Or another appropriate facility as elected by the waste management contractor.</p>
Principal Licensed Landfill Site	<ul style="list-style-type: none"> • Awaba Waste Management Facility <p>Or other appropriate facility as elected by the waste management contractor.</p>

3.3 Site Documentation

This WMP will be retained on-site during the construction phases of the development, along with other waste management documentation (e.g. contracts with waste service providers).

Responsibility for the WMP, waste documentation and processes during the excavation and construction phases will be with the site manager or builder.

A logbook that records waste management and collection will be maintained on site, with entries including:

- Time and date of collections;
- Description of waste and quantity;
- Waste/processing facility that will receive the waste; and
- Vehicle registration and company name.

Waste management documentation, the logbook and associated dockets and receipts must be made available for inspection by an authorised Council Officer at any time during site works.

4 Operational Waste Management

4.1 Overview

The proposed development is for 69 affordable housing units over:

- Lot 67: 30 residential apartments, including 18 x 1-bedroom apartments, 9 x 2-bedroom apartments, and 3 x 2-bedroom apartments
- Lot 68: 39 apartments, including 16 x 1-bedroom apartments, 17 x 2-bedroom apartments, and 6 x 2-bedroom apartments

Operational waste generation addressed in the following sections relates to waste generation associated with residential occupation of each building.

Waste management strategies related to site operations have been established according to the LMDCP (2014) and the Lake Macquarie City Council *Waste Management Guidelines* (2019).

The following space calculations are based off the mobile garbage bin (MGB) dimensions sourced from the Council's *Waste Management Guidelines* (2019) and NSW EPA's *Better Practice Guide for Resource Recovery in Residential Developments* (2019) (Table 4).

Table 4: Mobile Garbage Bin (MGB) and Bulk Bin capacity and footprint

Bin Capacity (L)	Height (mm)	Depth (mm)	Width (mm)	Footprint (Approx. m ²)
240	1,100	735	580	0.41 - 0.43
360	1,100	820	600	0.49
660	1,250	850	1,370	0.86 - 1.16
1,100	1,470	1,245	1370	1.33 - 1.74

Source: NSW EPA's *Better practice guide for resource recovery in residential developments* (2019) and Lake Macquarie City Council *Waste Management Guidelines* (2019).

4.2 Residential Waste Management

4.2.1 Food Waste

The Food Organics Garden Organics (FOGO) Recycling Bill 2026 (the bill) was passed by both parliaments on the 19th February 2025. The bill states that all NSW local councils are required to have a weekly FOGO collection service in place by the 1st July 2026. Appendix B below provides additional explanation.

4.2.2 Waste Generation

The following table outlines waste generation expectations for the residential component of the proposed development. The generation rates are derived from the Lake Macquarie City Council *Waste Management Guidelines* (2019) (Section 3 – Multi Dwellings). The waste generation and collection strategy separate terraces, which will have individual kerbside bins while apartments will use shared bulk bins in a waste storage area storage area, in accordance with Council requirements and the NSW Better Practice Guidelines.

Table 5: Weekly Waste Generation Volumes

Lot	Dwelling units	Waste Stream	Generation rate	Weekly Volumes (L)
Lot 67		General waste	60L/unit/week	1,800

Lot	Dwelling units	Waste Stream	Generation rate	Weekly Volumes (L)
	30 x apartments	Recycling	60L/unit/week	1,800
		FOGO	80L/unit/week	2,400
		General waste	60L/unit/week	360
	6 x Terraces	Recycling	60L/unit/week	360
		FOGO	80L/unit/week	480
		General waste	60L/unit/week	360
Lot 68	21 x apartments	General waste	60L/unit/week	1,260
		Recycling	60L/unit/week	1,260
		FOGO	80L/unit/week	1,680
	12 x Terraces	General waste	60L/unit/week	720
		Recycling	60L/unit/week	720
		FOGO	80L/unit/week	960

4.2.3 Waste Storage Requirements

Waste storage has been calculated considering estimations of bin type, as described in the table below (Table 6). The following bin number requirements are based on Council's weekly FOGO waste collection, and fortnightly general waste and recycling collection.

Table 6: Lot 67 residential waste storage and bin type

Dwelling Type	Waste Stream Lot 67	Weekly Generation (L)	Bin Allocation	Collection Frequency	Minimum Space Required (m ²)*
30 x Apartments	General Waste	1,800	8 x 240L bins	Weekly	6
	Recycling	1,800	10 x 360L bins	Fortnightly	6
	FOGO	2,400	10 x 240L bins	Weekly	7
	Bulky Waste	Bulky waste streams collected as required			12m ²
Total Space Requirement (excl. bulky waste)					19m²
6 x Terraces	General Waste	360	6 x 240L bins	Weekly	3
	Recycling	360	6 x 240L bins	Fortnightly	3
	FOGO	480	6 x 240L bins	Weekly	3
	Bulky Waste	Bulky waste streams collected as required			-
Total Space Requirement					9m²

*includes handling and manoeuvring space of bin footprint m² x 1.5

Table 7: Lot 68 residential waste storage and bin type

Dwelling Type	Waste Stream Lot 67	Weekly Generation (L)	Bin Allocation	Collection Frequency	Minimum Space Required (m ²)*
21 x Apartments	General Waste	1,260	6 x 240L bins	Weekly	4
	Recycling	1,260	7 x 360L bins	Fortnightly	6
	FOGO	1,680	7 x 240L bins	Weekly	5
	Bulky Waste	Bulky waste streams collected as required			9m ²
Total Space Requirement (excl. bulky waste)					15m²
12 x Terraces	General Waste	720	12 x 240L bins	Weekly	5.5
	Recycling	720	12 x 240L bins	Fortnightly	5.5
	FOGO	960	12 x 240L bins	Weekly	5.5
	Bulky Waste	Bulky waste streams collected as required			-
Total Space Requirement					16.5m²

A residential apartment bin storage room must be provided on the ground floor and is sufficient to provide space for bins and bulky waste in accordance with the table above, at **15m²** for Lot 67 and **19m²** for Lot 68.

Apartment residents will utilise 240L bins for General Waste and FOGO bins, and 360L bins for Recycling. Residents will be responsible for transferring waste into bins in the designated waste storage area.

Terraces will utilise individual bins for waste disposal, which will be located within the southern courtyard and be presented to the kerbside along Premier Circuit. Each terrace will be responsible for their own 240L bin of each waste stream. Residents will be provided with a 240L General Waste and FOGO bin of each waste stream and follow councils' collection schedule.

Building management can observe the bin fullness levels once the site is fully occupied and adjust the number of bins accordingly. The bin storage area for the site will be sufficiently sized to accommodate proposed bins and have space to facilitate potential changes to waste servicing in the future.

Temporary waste storage and disposal

Each dwelling is to be provided with space to store at minimum one day's garbage waste and recycling generated. Residents will be responsible for the transfer of general waste, recycling waste and FOGO waste from the dwelling to the designated waste storage and recycling area (WSRA) on the ground floor level.

Bulky Waste

Bulky waste items include those that cannot be disposed of in general waste and recycling bins, including but not limited to broken/damaged/old whitegoods, furniture, appliances, mattresses, etc.

4.2.4 Collection Schedule

Waste generated from the proposed residential component of the building will be collected weekly regarding General Waste and FOGO waste collection, and fortnightly recycling collection by Council. Building Management will be required to present Lot 68 bins from the WSRA to the designated bin collection area for collection and the kerbside of Premier Circuit for Lot 67. Terrace residents will be responsible for presenting bin to the kerbside of Premier Circuit for council collection.

5 Waste Management Systems

5.1 Waste Management System Summary

The following specific management methods are proposed for the various collection waste streams expected to be generated at the site, including alternative waste streams outside of general waste, recycling and organics:

- **General Waste:** General waste shall be placed within a tied plastic bag prior to transferring into collection bins. For collection purposes, general waste shall be stored within a mobile garbage bin (MGB).
- **Commingled Recycling:** All recyclables will be stored in commingled bins (mixed plastic, paper, cardboard, glass, aluminium, steel). All recyclables should be decanted loose (not bagged) with containers un-capped, drained and rinsed prior to disposal into the recycling bin. Paper should be flattened and placed in paper and cardboard bin if applicable.
- **Garden Waste:** It is expected that landscaping at the site will be maintained by an external contractor who will remove all vegetation waste from ongoing maintenance activities.
- **Food Waste:** Separate collection of organics by the principal waste management contractor. Food waste can be stored in 240L sealed bins or refrigerated waste storage prior to collection.
- **Other (Problem) Waste:** The disposal of hard, bulky, electronic, liquid or potentially hazardous wastes shall be organised between the operator and site users as necessary.

5.2 Waste Management and Recycling Method

The flow of **residential waste and recycling** goes from generation to collection through several steps:

1. Waste is temporarily stored within the dwelling at its point of generation in an appropriately sized receptacle, clearly marked for type of waste (for example, in the kitchen);
2. Residents are to transfer waste to the residential waste storage room for appropriate disposal into the respective bin.
3. Building management are responsible for maintenance of bins and the waste storage rooms, ensuring bins are clean and in working order. Building management are also responsible for switching out full bins and monitoring bin fullness;
4. Building management is to ensure contracts with Council, who also ensure appropriate collection scheduling and access is organised to minimise noise, odour, vermin, and visual amenity impacts to staff, visitors and the public.

5.3 Management System and Responsibilities

The site manager will be responsible for the management of waste at the site. Should there be any issues that impact on the operational efficiency, safety and suitability of waste management, management will be responsible for making any necessary changes, responsibilities include:

- Using this WMP to inform waste management operations, design and infrastructure;
- Providing educational materials and information on sorting methods for recycled waste, awareness of waste management procedures for waste minimisation and resource recovery;
- Maintaining a valid and current contract with a licensed waste service provider for waste and recycling collection and disposal;
- Making information available to residents and visitors about waste management procedures;
- Organising, maintaining and cleaning bins as part of a regular maintenance schedule;
- Manoeuvring bins to specified onsite collection point prior to and following scheduled collection of waste bins;
- Organising bulky waste collections as required;

- Ensuring bin allocation and waste/recycling collection frequency is adequate. Requesting additional infrastructure or services where necessary; and
- Monitoring any vermin and pest issues and arranging appropriate controls (traps or fumigating) and maintenance of doors or other points of potential entry.

5.4 Collection Method and Loading Areas

Council's waste contractor will be the waste service provider for the residential component of the site. Waste service vehicles utilised for the site will be rear loading style. The collection point for the waste service provider (WSP) and areas for handling and loading are as follows:

Table 8: Collection points and loading areas requirements and specification

Component	Requirement	Specification
Collection point	Allow safe waste collection and loading operations	<ul style="list-style-type: none"> - Adequate clearance and manoeuvring space; - Sufficient clearance for the safe handling of materials and equipment; and - Sectioned loading bay does not impede upon traffic and pedestrian safety.
Vehicle manoeuvring and loading space	Truck space for adequate lift clearance, manoeuvring and operation for a contractor collection vehicle	<ul style="list-style-type: none"> - Collection from the site use loading area by a side lift collection vehicle; - Adequate loading bay dimensions to not impede lift clearance; - Operational clearance for truck manoeuvring in a forward direction; and - The provision of space clear of vehicle parking spaces (level and free of obstructions).
Operating times	Appropriate collection times to limit noise and traffic disturbance	<ul style="list-style-type: none"> - Collection times will be arranged during off-peak times to ensure minimal disturbance to pedestrians and visitors.

5.5 Waste and Recycling Storage Areas

The waste areas will provide centralised storage that has adequate capacity to receive and store the maximum likely generation of waste and recycling between collection times. In accordance with the DCP, it is recommended the bin storage areas be designed with the following considerations:

- Storage areas reflect the equipment, infrastructure, manoeuvring space and potential future needs of the development;
- Separate Residential and Commercial waste areas will be maintained;
- Be located in a position that is convenient for users and waste collection staff, located away from habitable rooms;
- Waste handling, storage and collection systems for residential and non-residential waste to be separate and self-contained;
- All waste and recycling storage areas and access paths to be kept clean and free of obstructions;
- The floor being graded and drained to an approved drainage outlet connected to the sewer and having a smooth, even surface, coved at all intersections with walls;
- The walls being cement rendered to a smooth, even surface and coved at all intersections; and
- The room shall be adequately ventilated (either natural or mechanical) in accordance with the Building Code of Australia.

5.6 Waste Collection Vehicles

Waste collection will occur onsite via the designated bin collection area by Council. 360L and 240L bins require collection by a side lift collection vehicle (Table 9).

Table 9: Collection vehicle dimensions – Side lift vehicle

Length	Width	Travel Height	Height in Operation	Turning Circle
9.64m	2.5m	3.98m	4.2m	18.7m

Source: Lake Macquarie City – Development Control Guidelines – Appendices Table 26.

5.7 Signage

Signage that promotes resource recovery, waste minimisation, safety and amenity follows the Australian Standard for safety signs for the occupational environment (Standards Australia, 1994).

Signage will be designed to consider language and non-English speaking backgrounds, vision impairment and accessibility. Illustrative graphics must form a minimum 50% of the area of the signage. Signage is to be prominently posted in the waste room indicating:

- Details regarding acceptable recyclables;
- Recyclables are to be decanted loose (not bagged);
- *No standing* and *danger* warnings apply to the area surrounding the waste storage area;
- Contact details for arranging the disposal of bulky items; and
- The area is to be kept tidy.

Standard signage requirements and guidance for application apply (see Appendix A).

5.8 Prevention of Pollution and Litter Reduction

To minimise dispersion of litter and prevent pollution (to water and land via contamination of runoff, dust and hazardous materials), building management and the site cleaning staff will also be responsible for:

- Maintenance of open and common site areas;
- Ensuring waste areas are well maintained and kept clean;
- Securing the waste storage area from vandalism and the escape of litter;
- Identification and appropriate disposal of goods with hazardous material content (paints, e-waste, fluorescent tubes);
- Taking action to prevent dumping and unauthorised use of waste areas; and
- Requiring contractors to clean up any spillage that may occur during waste servicing or other work.

6 References

- Australian Department of Sustainability, Environment Water, Population and Communities (2011) Construction and Demolition Waste Guide - Recycling and Re-use Across the Supply Chain.
- Australian Standards 4123.7 Mobile Waste Containers.
- Lake Macquarie Development Control Plan 2014
- Lake Macquarie Local Environmental Plan 2014
- NSW EPA (2012) Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities.
- NSW EPA (2014) Waste Classification Guidelines.
- NSW EPA (2016) Recycling Signs, Posters and Symbols. Available at: <http://www.epa.nsw.gov.au/wastetools/signs-posters-symbols.htm>.
- NSW EPA (2019) Better Practice Guide for Resource Recovery in Residential Developments.
- NSW EPA (2021) NSW Waste and Sustainable Materials Strategy 2041.
- NSW Government (1979) Environmental Planning and Assessment Act.
- NSW Government (1997) Protection of the Environment Operations Act.
- NSW Government (2000) Environmental Planning and Assessment Regulation.
- NSW Government (2001) The Waste Avoidance and Resource Recovery Act

Appendix A Proposed Site Plans



Graphic Legend

- 1 Bedroom
- 2 Bedroom
- 3 Bedroom
- 2 Bedroom Terrace
- 3 Bedroom Terrace
- Vertical/Common Circulation

Metrics:

Lot 67: **36 Dwellings**
 1B = 18 Apt.
 2B = 9 Apt + 5 Terraces
 3B = 3 Apt + 1 Terrace

Lot 68: **33 Dwellings**
 1B = 15 Apt.
 2B = 12 Terraces
 3B = 6 Apt.

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		PA	12/8/2025	PA	Garden Suburb Affordable Housing	Terraces Ground & Apartment Basement			
		PB	29/8/2025	PB	Lot 67 & Lot 68 Myall Road Hillsborough	JOB NO	SHEET	SCALE	DRAWING NO.
		PC	10/9/2025	PC		25.16	ISO A3	1:500	A 2.01
		PD	17/10/2025	PD		CLIENT	DRAWN	CHECKED	PLOT DATE
					Landcom	BS	PT		REVISION
									PD

Source: Hill Thalys, 2025

Appendix B FOGO Recycling Bill Summary 2025

FOGO Recycling Bill 2025 Information for Councils

Key Requirements



By 1 July 2030

Local councils must:

- Provide all households with a food organics and garden organics (FOGO) waste service (either a FOGO bin or separate FO and GO bins)
- Provide weekly household collection of FOGO waste
- Ensure FOGO waste is not mixed with non-organic waste during collection



Regulations

A FOGO Implementation Advisory Panel will be established to:

- Provide advice to the Minister and EPA about implementation of this mandate
- Be consulted about matters to be prescribed in regulations regarding this mandate

Exemptions

The FOGO 2025 mandate does NOT apply to:

- Households not provided with a residual waste (red bin) collection service by their local council
- Lord Howe Island
- Parts of the Western Division not within the area of a local council

The EPA will develop an exemption framework which will consider:

- Geographical or population constraints
- Availability of infrastructure
- Timing and expiration of waste contracts
- Infrastructure impairments of multi-unit dwellings (MUDS) e.g., bin chutes

Appendix C Standard Signage

Waste Signage

Signs for garbage, recycling and organics bins should comply with the standard signs promoted by the NSW EPA.

Standard symbols for use in signage, bin facade and educational materials are promoted through the NSW Environment Protection Authority. They are available for download from the NSW EPA website (NSW EPA 2016b), in black and white and colour versions. The Australian Standard series AS 4123 (Part 7) details colours for mobile waste containers (Standards Australia 2008).

Figure 2: Examples of standard signage for bin uses



Safety Signs

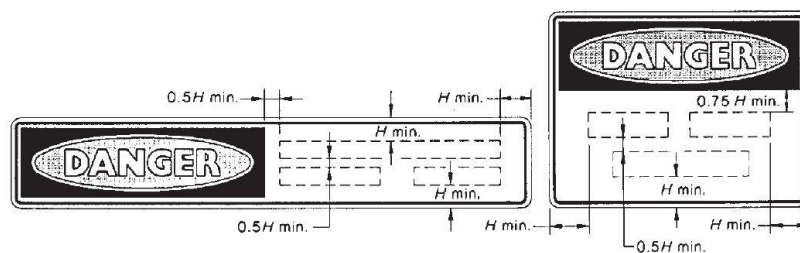
The design and use of safety signs for waste and recycling rooms and enclosures should comply with AS 1319 (Standards Australia 1994). Safety signs should be used to regulate, and control safety related to behaviour, warn of hazards and provide emergency information, including fire protection information. Below are some examples. Clear and easy to read 'NO STANDING' and 'DANGER' warning signs must be fixed to the external face of each waste and recycling room where appropriate.

Figure 3: Example and layout of safety signage



(d) Horizontal

FIGURE D5 TYPICAL ARRANGEMENTS OF DANGER SIGNS



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