

28-38 Pacific Highway, St Leonards – Waste Management Plan

A Submission to Edsgear Pty Ltd c/o Eric Lundberg TCG Conj with LundbergCRE

7th November 2025



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Version History

Ver	Date	Status	Author	Approver	Signature
0.1	18/11/2024	Draft	Ivana Singh	James Cosgrove	-
0.2	18/11/2024	Review	Naomi Mynott	-	-
1	27/03/2025	Final	Ivana Singh	Naomi Mynott	-
1.1	07/11/2025	Updated	Ivana Singh	James Cosgrove	

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.

Table of contents

Glossary.....	v
1 Introduction.....	1
2 Background.....	2
2.1 Description of the Proposed Development.....	2
2.2 Location.....	2
2.3 Zoning and Use.....	2
2.4 Strategies.....	3
2.5 Assumptions.....	3
3 Construction and Demolition.....	5
3.1 Demolition Waste.....	5
3.2 Construction Waste.....	9
3.3 Waste Contractors and Facilities.....	13
3.4 Site Documentation.....	13
4 Operational Waste Management.....	14
4.1 Overview.....	14
4.2 Hotel Accommodation Waste Management.....	14
4.3 Commercial Waste Management.....	16
5 Waste Management Systems.....	19
5.1 Waste Management System Summary.....	19
5.2 Waste Management and Recycling Method.....	19
5.3 Management System and Responsibilities.....	20
5.4 Collection Method and Loading Areas.....	20
5.5 Waste and Recycling Storage Areas.....	21
5.6 Signage.....	22
5.7 Prevention of Pollution and Litter Reduction.....	22
6 References.....	23

List of Tables

Table 1: Demolition waste generation estimates	6
Table 2: Indicative volume to weight conversion factors for common construction materials	9
Table 3: Construction waste generation estimations	10
Table 4: Waste service contractors and facilities	13
Table 5: Mobile Garbage Bin (MGB) and Bulk Bin capacity and footprint	14
Table 6: Weekly Waste Generation Volumes	15
Table 7: Hotel accommodation waste storage and bin type.....	15
Table 8: Commercial/Retail Waste Generation	16
Table 9: Commercial waste storage and collection frequency	17
Table 10: Collection points and loading areas requirements and specification	21

List of Figures

Figure 1: Site and surrounding area	2
Figure 2: Land use zone map	3
Figure 3: Examples of standard signage for bin uses	26
Figure 4: Example and layout of safety signage.....	26

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
LCDCP	Lane Cove Development Control Plan 2010
LCLEP	Lane Cove Local Environmental Plan 2009
LGA	Local Government Area
MGB	Mobile Garbage Bin
MRA	MRA Consulting Group
MSW	Municipal Solid Waste
VENM	Virgin Excavated Natural Material
WMP	Waste Management Plan
WSP	Waste Service Provider
WSRA	Waste Storage and Recycling Area

1 Introduction

MRA Consulting Group (MRA) was engaged by Edsgear Pty Ltd c/o Eric Lundberg TCG Conj with LundbergCRE to prepare a Waste Management Plan (WMP) related to the proposed mixed use development located at 28-38 Pacific Highway, St Leonards. The site is located within the Lane Cove Council Local Government Area (LGA).

The proposed development includes:

- Construction of a mixed-use development containing:
 - 99 single occupancy hotel accommodation units;
 - Ground floor commercial areas with mezzanine level;
 - Lower ground retail; and
 - Basement level car parking and storage.

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

- Lane Cove Development Control Plan 2010 (LCDCP)
- Lane Cove Local Environment Plan 2009 (LCLEP)

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*.

A Waste and Recycling Management Plan has been prepared in accordance with the LCDCP (2010), and states the following objectives for waste management:

- 1) *Encouraging building designs and construction techniques that minimise waste generation and maximise resource recovery, including reducing the use of non-renewable resources;*
- 2) *Requiring on-site source separation and other design and siting standards which assist waste collection and management services offered by Council and the private sector;*
- 3) *Ensuring waste from developments can be collected and disposed in a manner that is safe, efficient, and minimises disruption to amenity.*

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

2 Background

2.1 Description of the Proposed Development

The project features the following:

- Construction of a mixed-use development containing:
 - 99 single occupancy hotel accommodation units;
 - Ground floor commercial areas with mezzanine level; and
 - Lower ground retail; and
 - Basement level car parking and storage.

2.2 Location

The site is legally defined as Lot B DP418201, Lot D DP419248 and Lot 1 DP746012 located in the Lane Cove Council LGA. The site has frontages on Pacific Highway and Marshall Lane, with vehicular access via the latter. It is predominantly surrounded by various commercial tenancies and shop-top housing. The current site is occupied by shop top housing.

Figure 1: Site and surrounding area



Source: Nearmap, 2024.

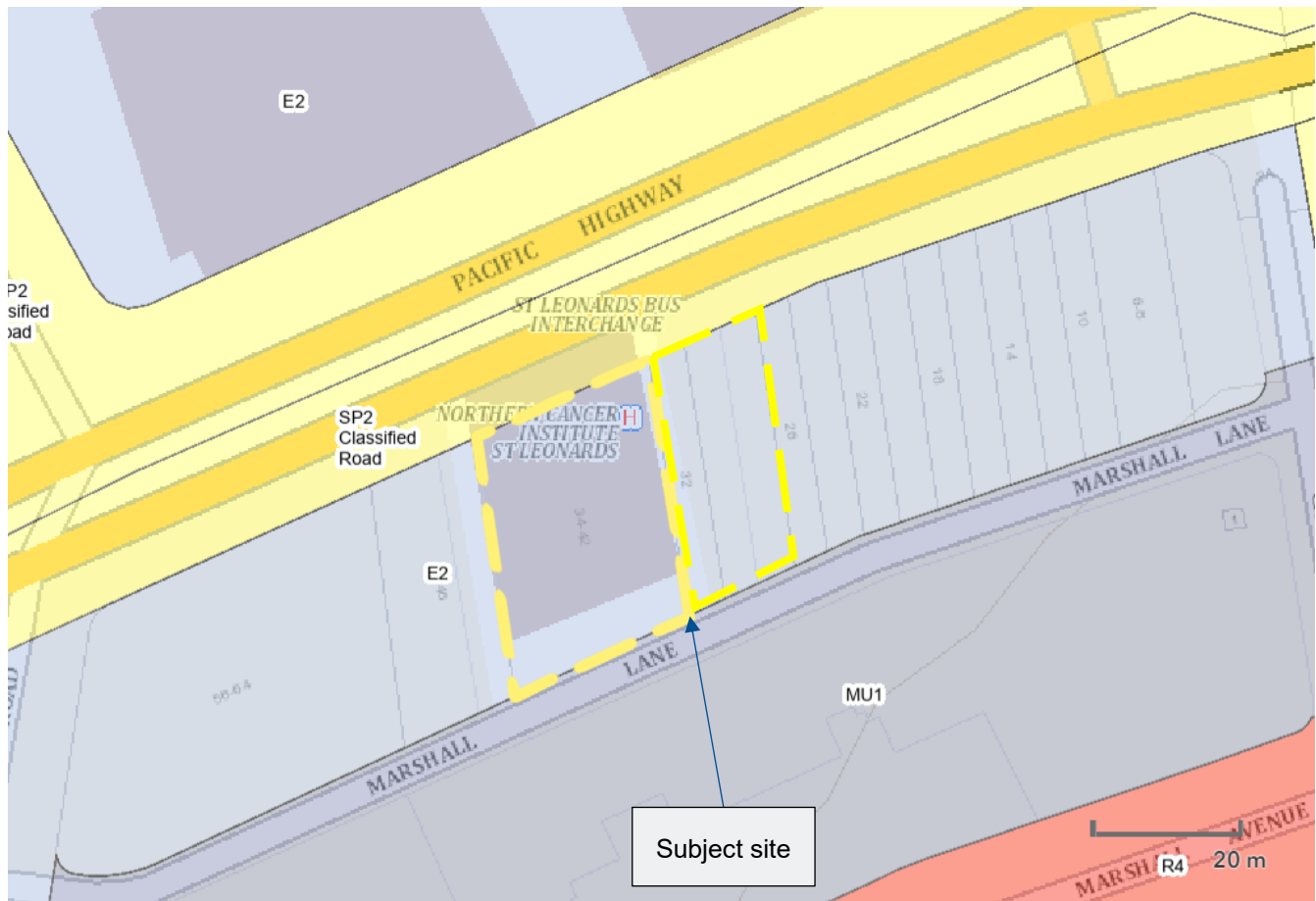
2.3 Zoning and Use

The site is zoned as E2 – Commercial Centre according to the LCLEP (2009). The objectives of this zone are:

- To strengthen the role of the commercial centre as the centre of business, retail, community and cultural activity.
- To encourage investment in commercial development that generates employment opportunities and economic growth.
- To encourage development that has a high level of accessibility and amenity, particularly for pedestrians.
- To enable residential development only if it is consistent with the Council's strategic planning for residential development in the area.

- To ensure that new development provides diverse and active street frontages to attract pedestrian traffic and to contribute to vibrant, diverse and functional streets and public spaces.
- To strengthen the role of St Leonards as a strategic centre, a health and education precinct and an urban renewal corridor.
- To maximise public transport patronage and encourage walking and cycling.

Figure 2: Land use zone map



Source: NSW ePlanning Spatial Tool, 2024.

2.4 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.

2.5 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, TonkinZulaikhaGreer, (19th March 2025);
- Waste and recycling volumes are based on information provided from the LCDCP (2010); 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 and Demolition

Demolition and construction activities at the site will generate a range of construction and demolition (C&D) 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 demolition or 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 Demolition Waste

The proposed development will require demolition of existing structures prior to commencement of excavation and construction operations. Demolition works will include the demolition of the existing building.

The following points regarding construction and demolition waste have been derived from the LCDCP (2010):

- 1) Minimise waste generation.
- 2) Maximise the reuse and recycling of materials.
- 3) Ensure appropriate storage and collection of wastes.
- 4) Minimise the environmental impacts associated with waste.

Table 1 outlines the expected demolition waste quantities to be generated at the site, in addition to the appropriate management methods for each material type. Other materials with limited reuse potential either on or offsite will be removed in bulk bins for recycling at an appropriately licenced and capable recycling facility.

Table 1: Demolition waste generation estimates

Type of Material	Estimated volumes (m ³)	Re-use on-site	Recycle (Separate collection)	Recycle (Off-site)	Disposal	Estimated % Landfill	Estimated % of landfill diversion	Methods for re-use, recycling or disposal
Concrete	300 - 350	✓	✓	✓	-	<5%	>95%	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.
Glass	<10	✓	✓	✓	-	<10%	>90%	On site: to be separated wherever possible to enhance resource recovery. Offsite: Removed to C&D facility for crushing and recycling for recovered products.
Bricks/pavers	30 - 50	✓	✓	✓	-	<5%	>95%	Onsite: Separated wherever possible and reused or crushed for landscaping and driveways. The development will be able to reuse a number of existing building bricks as paving in landscaped areas. Offsite: Removed to C&D facility for crushing and recycling for recovered products.
Tiles	20 - 30	✓	✓	✓	-	<5%	>95%	Onsite: Separated wherever possible and reused or crushed for landscaping and driveways. Offsite: 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)	Disposal	Estimated % Landfill	Estimated % of landfill diversion	Methods for re-use, recycling or disposal
Timber (Treated)	10 - 20	✓	✓	✓	-	0	100	Onsite: To be separated wherever possible to enhance resource recovery. Offsite: Removed to C&D facility for crushing and recycling for recovered products.
Timber (Clean)	10 - 20	✓	✓	✓	-	50	50	Onsite: Separated wherever possible and reused or crushed for landscaping and driveways. Offsite: Removed to C&D facility for crushing and recycling for recovered products.
Plasterboard	20 - 40	-	✓	✓	-	<10%	>90%	Onsite: To be separated wherever possible to enhance resource recovery. Offsite: Removed to C&D facility for crushing and recycling for recovered products.
Metals (ferrous & non-ferrous)	Minor	-	✓	✓	-	<10%	>90%	Onsite: Separated wherever possible to improve resource recovery. Offsite: Removed to C&D facility for recovery and recycling.
Floor covering	10 - 20	-	✓	✓		50%	50%	Should be removed in bulk and sent to carpet recycler or C&D facility for recovery where possible.
Residual waste	10 - 20	-	-	-	✓	100%	-	Resource recovery dependant on facility destination capability.

Type of Material	Estimated volumes (m ³)	Re-use on-site	Recycle (Separate collection)	Recycle (Off-site)	Disposal	Estimated % Landfill	Estimated % of landfill diversion	Methods for re-use, recycling or disposal
Hazardous Waste	Unknown	-	-	-		100%	-	Existing buildings may contain potentially hazardous materials. Should contaminated or potentially hazardous materials be discovered they would be handled according to the demolition and/or materials management plan
Total % Diversion from Landfill Estimated								>80%

3.2 Construction Waste

The development includes the:

- Construction of a mixed-use development containing:
 - 99 single occupancy accommodation units;
 - Ground floor commercial areas with mezzanine level;
 - Lower ground retail; and
 - Basement level car parking and storage.

Table 2 outlines indicative volume to weight conversion factors for common construction materials.

Table 2: Indicative volume to weight conversion factors for common construction materials

Building waste material	Tones 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 3 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.

The information below presents multiple options for materials reuse, recycling and disposal where applicable (e.g. return to manufacturer, recycled at construction and demolition (C&D) processor, or disposed to landfill if contaminated).

Table 3: 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	5 -10	✓	✓	✓	<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	50 - 100	✓	✓	✓	<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	5 - 10	✓	✓	✓	<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)	<5	-	✓	✓	<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)	<5	-	✓	✓	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 - 15	-	✓	✓	<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	<5	✓	✓	✓	<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)	<10	-	✓	✓	<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	<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	10 - 20	✓	✓	✓			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.
Packaging materials (pallets, wrap, cardboard, etc)	<5	-	✓	✓	<10%	>90%	Returned to supplier where possible or separated by material type for resource recovery.
Residual waste	Minor	-	✓	✓	100%	-	Resource recovery dependant on facility destination capability.
Total % Diversion from Landfill Estimated						>90%	

3.3 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 4).

Table 4: 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"> • Brown Bros Skip Bins; • Bingo Skip Bins; • Freddy’s Skip Bins; <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"> • Northern Sydney Community Recycling Centre; • BINGO Industries Artarmon Recycling Centre; <p>Or another appropriate facility as elected by the waste management contractor.</p>
Principal Licensed Landfill Site	<ul style="list-style-type: none"> • Cleanaway Artarmon Resource Recovery Centre • Kimbriki Resource Recovery Centre <p>Or other appropriate facility as elected by the waste management contractor.</p>

3.4 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 building 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

Waste management strategies related to site operations have been established according to Part Q – Waste Management and Minimisation of the LCDCP (2010).

Operational waste management requirements of the site arise from the daily activities at the site. The proposed development will feature 99 single occupancy accommodation units, which will generate waste through the occupation of these units. Additionally, various commercial tenancies will occupy the development which will generate a quantity of waste.

Waste management strategies related to site operations have been established according to the LCDCP (2010) and NSW EPA guideline documents.

The following space calculations are based off the mobile garbage bin (MGB) and bulk bin dimensions sourced from Part Q – Waste Management and Minimisation of the LCDCP (2010) NSW EPA’s *Better Practice Guide for Resource Recovery in Residential Developments* (2019) (Table 5).

Table 5: Mobile Garbage Bin (MGB) and Bulk Bin capacity and footprint

Bin Capacity (L)	Height (mm)	Depth (mm)	Width (mm)	Footprint (Approx. m ²)
80	870	530	450	0.24
120	940	560	485	0.30- 0.33
240	1,080	735	580	0.41- 0.43
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).

4.2 Hotel Accommodation Waste Management

Operational waste management addressed in the following section relates to waste generation associated with the hotel accommodation use.

4.2.1 Waste Generation

Waste generation rates for hotel accommodation according to the LCDCP (2010) are outlined as follows:

- General waste: 5L/bed space/day
- Recycling: 1L/bed space/day

It is noted that landscaping at the site will be maintained by an external contractor who will remove all vegetation waste from maintenance activities. In addition, since the proposed development is for a mixed-use accommodation and retail development with minimal active green space, it is unlikely that high amounts of garden waste will be produced due to small amounts of private garden space.

The following table outlines the expected waste generation rates for the hotel accommodation component of the development Table 6. The generation rates are derived from according to Part Q – Waste Management and Minimisation – Appendix B in accordance with the LCDCP (2010).

Table 6: Weekly Waste Generation Volumes

Occupants	Waste Stream	Generation rate	Weekly Volumes (L)
99	General waste	17.5L/occupant/week	1,733
	Recycling	7L/occupant/week	693
	Food Waste*	17.5L/occupant/week	1,733

***Food waste generation has been calculated separately at 50% of the rate of general waste, for consideration. Management may wish to further separate this waste stream to increase landfill diversion rates.*

4.2.2 Waste Storage Requirements

Waste storage has been calculated considering estimations of bin type, as described in the table below (Table 7). The following bin number requirements are based on Council’s weekly general waste and recycling collection.

Table 7: Hotel accommodation waste storage and bin type

Waste Stream	Weekly Generation (L)	Collection Rate	Bin Allocation	Minimum Space Required (m ²)*
General Waste	1,733	Once per week	2 x 1,100L bins	6
Recycling	693	Once per week	1 x 1,100L bins	3
Food Waste	1,733	Once per week	8 x 240L bins	6
Bulky Waste	Bulky waste streams collected as required			8
Total Space Requirement				23m²

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

Based on the above waste generation and storage requirements, storage capacity of approximately **23m²** would be required to manage the hotel accommodation waste generated by the proposed development.

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 room is to be provided with space to store at minimum two day’s garbage waste and recycling generated and allow for separation of garbage, food organics and recycling. Hotel cleaning staff will be responsible for the transfer of waste from the room to the communal bins within the Waste Storage and Recycling Area (WSRA) on the lower ground and basement floor levels via building lift.

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.

The hotel accommodation component of the proposed development will be made up of pre-furnished units. Occupants will not have a considerable amount of their own furniture, appliances and other bulky items. In this regard, the bulky waste storage area proposed for the site is provisional in nature, allowing for flexibility should bulky waste items need to be temporarily stored or to house additional waste infrastructure. Space is provided on the lower basement floors.

4.2.3 Collection Schedule

Waste generated from the proposed hotel accommodation component of the building will be collected once per week by Council collection. Building Management will be required to present bins from the WSRA to Marshall Lane for collection as part of a “Wheel Out, Wheel Back” collection method.

4.3 Commercial Waste Management

4.3.1 Waste Generation

Operational waste management addressed in the following section relates to waste generation associated with the proposed use of retail and commercial spaces at the site. Since the use of the retail and commercial spaces identified for the site are not yet known in terms of specific use, the waste generation rates considered have been taken conservatively as food and beverage (e.g. café) use across the board to develop a conservative waste generation profile.

It is noted that each internal commercial tenancy will require a separate application and approval for use and fit out works.

Waste generation rates have been taken from the LDCP (2010) and NSW EPA’s *Better Practice Guide for Resource Recovery in New Developments* (2019).

Table 8: Commercial/Retail Waste Generation

Level / Use type*	Area (m ²)	Waste Stream	Generation Rate (L/100m ² /day)	Total Weekly Generation (L)
Lower Ground Retail	382.2	General waste	50L/100m ² /day	1,338
		Commingled Recycling	120L/100m ² /day	3,211
		Food waste**	50L/100m ² /day	1,338
Ground Floor Commercial/Retail	668.3	General waste	50L/100m ² /day	2,340
		Commingled Recycling*	120L/100m ² /day	5,614
		Food waste**	50L/100m ² /day	2,340
Mezzanine Commercial/Retail	290.2	General waste	50L/100m ² /day	1,016
		Commingled Recycling	120L/100m ² /day	2,438
		Food waste**	50L/100m ² /day	1,016
TOTALS		General waste		4,694L
		Commingled Recycling		11,263L
		Food waste		4,694L

Note: as outlined above, Since the use of the retail and commercial spaces identified for the site are not yet known in terms of specific use, the waste generation rates considered have been taken conservatively as food and beverage (e.g. café) use across the board to develop a conservative waste generation profile for the proposed development.

**Commercial and retail uses are expected to generate a large proportion of paper/cardboard waste of total recycling. Therefore, for the purpose of estimating waste generation, paper/cardboard waste have been included in the commingled recycling rate (also potentially include secure documents for offices).*

***Food waste generation has been calculated separately at 50% of the rate of general waste, for consideration. Management may wish to further separate this waste stream to increase landfill diversion rates.*

4.3.2 Waste Storage Requirements

Waste storage space has been calculated considering estimations of bin type and collection frequency, as described in the table below (Table 9).

Table 9: Commercial waste storage and collection frequency

Waste stream	Waste generation (L/week)	Waste management options (bins and collection frequency)	Approximate Storage Area (m ²)*
General waste	4,694L	2 x 1,100 L bins collected up to three times per week	6
Recycling	11,263L	4 x 1,100L bins collected up to three times per week	11
Food waste	4,694L	7 x 240L bins collected three times per week**	5
Bulky / other wastes	Other waste streams serviced as required.		4
Total approximate space requirement:			~26m²

*Note: * storage space requirement considers additional space of approximately (m² x 1.5) for manoeuvring of bins.*

***Food waste stored in bins recommended to be collected at least three times per week to reduce risk of odour impact.*

Based on the above waste generation and storage requirements, storage capacity of approximately **43m²** would be required to manage the commercial and retail waste generated by the proposed development.

1,100L MGBs are expected to be the most suitable option for the management of waste for the proposed development, to allow for easier manoeuvrability and reduce the frequency of servicing.

240L bins are expected to be most suitable for the collection of food organics waste to allow for easier manoeuvrability and servicing. Building management can observe the bin fullness levels once the site is fully occupied and adjust the number of collections accordingly.

The exact allocation of waste storage areas will be finalised prior to occupation with appropriate signage and access controls implemented. Overall, there is sufficient space across the waste storage areas located on the Basement 2 level and Lower Ground level for both hotel accommodation and commercial waste and bulky waste detailed in the tables above.

4.3.3 Temporary Waste Storage

Office, Retail and Commercial Lobby Areas:

Interim containers within the office space or BOH areas for food and beverage tenancies will be available sufficient for one day's generation of waste and recycling. Cleaning staff will be responsible for the emptying of these bins daily and transporting waste to the site's commercial bin storage area.

Food and Beverage:

The back-of-house areas of the proposed café/restaurant will hold bins for the temporary storage of waste. Bins for general waste, recycling, and food waste at minimum will be provided to allow easier source separation for staff. Bins

will be transferred to the bin storage area at minimum once daily for emptying and cleaning and transferred back to the back-of-house.

4.3.4 Bulky Waste

Space for storage of bulky waste resulting from the commercial component of the development must be available within the waste storage and recycling area or within BOH areas. Bulky waste removal will be organised promptly with the nominated waste collection contractor to avoid overspill into common areas or corridors.

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 (MBG).
- **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.
- **Paper and Cardboard:** Should large quantities of paper and cardboard waste be generated from proposed site uses a separate service may be suitable for application at the site. The contracted waste service provider may be able to provide separate paper and cardboard bins for the source separation and collection of paper and cardboard waste.
- **Food Waste:** Commercial food organics waste generation from the development can be collected and treated on-site at small scale should management decide to do so. Organics treatment can be used to produce conditioners, compost or vermiculture castings for application on or off-site. Equipment options include different size and capacity composters, dehydrators, worm farms and macerators. For organics treated to acceptable standards, discharge of effluent or any output to sewer as commercial trade wastewater may be permitted.

Alternatively, tenants can make arrangements for the separate collection of its organics by its waste management contractor. Food waste can be stored in 240L sealed bins or refrigerated waste storage prior to collection.

- **Food Donation:** Management of commercial and food and beverage uses may like to explore the potential for donation of excess consumable food to charities such as OzHarvest or FoodBank NSW.
- **Secure Documents:** Separate bins for secure document waste may be retained in office spaces, to be serviced by a specialist secure document destruction contractor.
- **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 **hotel accommodation waste and recycling** goes from generation to collection through several steps:

1. Waste is temporarily stored within rooms at the point of generation in an appropriately sized receptacle, clearly marked for type of waste (for example, in the kitchen);
2. Hotel cleaning staff are to transfer waste to the hotel accommodation 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.

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

1. Waste is temporarily stored at its point of generation in an appropriately sized receptacle, clearly marked for type of waste;
2. Site cleaners and staff are to transfer waste to the respective waste storage room for appropriate disposal into the respective bin.

3. Cleaning staff and building management are responsible for maintenance of bins and the waste storage rooms, ensuring bins are clean and in working order. Cleaning staff and building management are also responsible for switching out full bins and monitoring bin fullness;
4. Building management is to ensure contracts with a private waste contractor, 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 building 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 hotel 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 will provide waste collection services for the hotel accommodation component of the site, while a private contractor will service the commercial component of the proposed development. Waste collection will be undertaken by rear-loading small rigid vehicles (SRVs), subject to Council agreement.

Waste collection will be undertaken using a “Wheel-Out, Wheel-Back” collection method. Under this arrangement, bins are stored within the designated WSRA and are manually wheeled to Marshall Lane by building management on collection days. The WSRA will be fitted with doors that open directly onto the laneway, allowing bins to be transferred safely and efficiently between the storage area and the collection point without the need to present bins to the street frontage. Following service by the waste collection contractor, the bins are promptly returned to the WSRA to maintain tidy and unobstructed laneway conditions.

The path of travel between the WSRA and the collection point has been designed to accommodate the safe movement of 240L and 1,100L mobile garbage bins (MGBs). Where required, mechanical bin tugs may be utilised to facilitate movement and reduce manual handling risks.

Following servicing, all bins will be promptly returned to the WSRA and securely stored in their designated locations to maintain a clean and orderly environment.

The collection point for the waste service provider (WSP) and areas for handling and loading are as follows:

- Each tenancy must have convenient access to the waste/recycling storage area(s).
- The waste/recycling storage area must not be accessible to the general public.
- There must be step-free access between the point at which bins are collected/emptied and the waste/recycling storage area(s).
- The development must be designed to allow access by collection vehicles used by the nominated waste contractor. The site must be configured to allow collection vehicles to enter and exit Marshall Lane in a

forward direction, and so collection vehicles do not impede general access into the site and traffic surrounding Marshall Lane.

- Access driveways to be used by collection vehicles must be of sufficient strength to support such vehicles.
- Servicing arrangements for the emptying of bins must be compatible with the operation of any other loading/unloading facilities on-site.

Table 10: 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 by WOWB method from Marshall Lane, by a rear 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 LCDCP, it is recommended the bin storage areas be designed with the following considerations:

- The gradient of waste/recycling storage area floors and any associated access ramps must be sufficiently level to allow for the safe carting of bins.
- Within waste/recycling storage areas, containers used for the storage of recyclable materials should be kept separate from (but close to) general waste containers — so that the potential for contamination of recyclable materials is minimised.
- Waste/recycling storage areas must have a smooth, durable floor and must be enclosed with durable walls/fences that extend to the height of any containers which are kept within. The floor must be graded so that any water is directed to a sewer authority approved drainage connection located upon the site.
- Waste/recycling storage areas must be serviced by hot and cold water provided through a centralised mixing valve. The hose cock must be protected from the waste containers and must be located in a position that is easily accessible when the area is filled with waste containers.
- All doors/gates are to be openable from both inside and outside the storage area and must be wide enough to allow for the easy passage of waste/recycling containers.
- There must be a sign adjacent to the door/gate that indicates that the door/gate is to remain closed when not in use.
- Vermin must be prevented from entering the waste/recycling storage area

5.6 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).

5.7 Prevention of Pollution and Litter Reduction

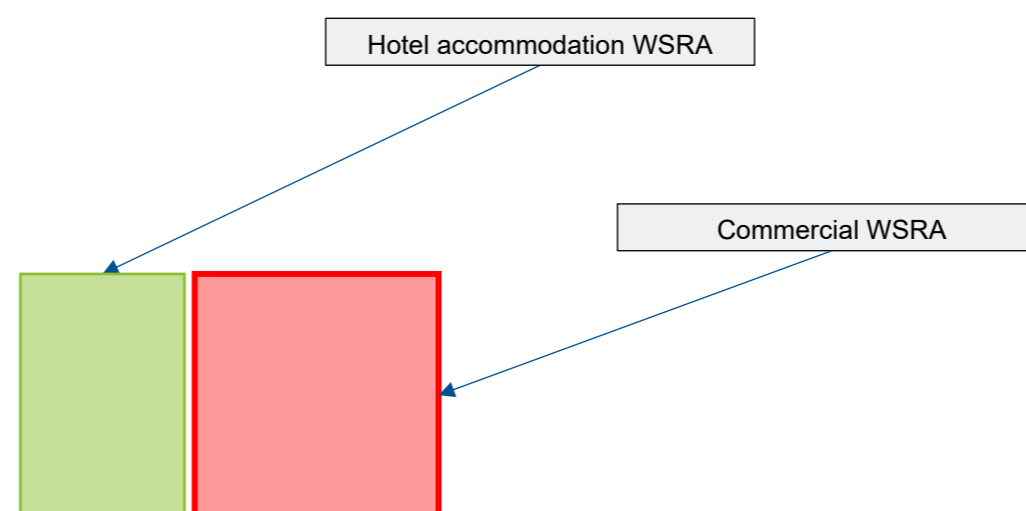
To minimise dispersion of litter and prevent pollution (to water and land via contamination of runoff, dust and hazardous materials), building management and the site cleaning staff will also be responsible for:

- 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.

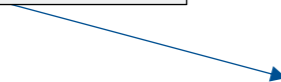
6 References

- 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.
- Lane Cove Development Control Plan 2010
- Lane Cove Local Environmental Plan 2009
- 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



Waste and Recycling
Storage Area



Source: TZG, 2025.

Appendix B 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 3: Examples of standard signage for bin uses



Safety Signs

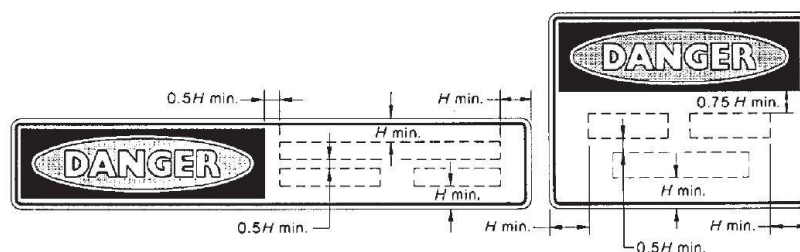
The design and use of safety signs for waste and recycling rooms and enclosures should comply with AS 1319 (Standards Australia 1994). Safety signs should be used to regulate, and control safety related to behaviour, warn of hazards and provide emergency information, including fire protection information. 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 4: Example and layout of safety signage



(d) Horizontal

FIGURE D5 TYPICAL ARRANGEMENTS OF DANGER SIGNS



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