3A, 3B, 5A, 7 Burgoyne Street, 4 Burgoyne Lane, and 1 & 3 Pearson Avenue, Gordon – Waste Management Plan

A Submission to DPG Project 54 Pty Ltd

22 April 2025

MRA Consulting Group

3A-9 Burgoyne Street, Gordon – Waste Management Plan

A Submission to Project Design Management

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Disclaimer

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
KLEP	Ku-ring-ai Local Environmental Plan 2015
KDCP	Ku-ring-ai Development Control Plan
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 Project Design Management to prepare a Waste Management Plan (WMP) for related to the proposed residential flat building development located at 3A, 3B, 5A, 7 Burgoyne Street, 4 Burgoyne Lane, and 1 & 3 Pearson Avenue Gordon, NSW. The site is located within the Ku-ring-gai Local Government Area (LGA).

The proposed development includes the demolition of existing dwellings and structures and the construction of a 7-storey residential development containing 92 dwellings with a communal wellness centre, café and clubhouse.

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

- Ku-ring-gai Local Environmental Plan 2015
- Ku-ring-gai Development Control Plan

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 (DCP), and states the following objectives for waste management:

a) To enable efficient, effective and sustainable waste management practices.

b) To ensure waste collection and storage within the site that does not affect the amenity of residents with regard to odour, visual appearance or noise disturbance.

c) To ensure waste and recycling storage areas are designed and constructed to meet the requirements of the building's use and its occupants.

d) To ensure design and management of waste and recycling facilities protect public health.

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.

1.1 SEARs Requirements

The following table represents the relevant SEARs requirements and MRAs response.

Table 1: SEARs Requirements

Requirement	MRA Response
Provide the measures to be implemented to manage, reuse, recycle and safely dispose of waste, including in accordance with any council waste management requirements.	This waste management plan is intended to provide the relevant measures required for management, reuse, recycling and the safe disposal of waste in accordance with council and NSW EPA waste requirements.
Identify appropriately sited waste storage areas, collection access paths/roads, and appropriate servicing arrangements for the site.	See Appendix A.

2 Background

2.1 Description of the Proposed Development

An Expression of Interest (EOI) was made to the Housing Delivery Authority (HDA) (submission 233825) on 22 January 2025.

This EOI was considered by the HDA on 7 March 2025, wherein it was recommended to the Minister that this project be declared Stage significant development (SSD) under s4.36(3) of the Environmental Planning and Assessment Act 1979 (EP&A Act).

In accordance with State Significant Development Declaration Order (No 3) 2025 dated 17 March 2025, the Minister for Planning and Public Spaces (the Minister) declared, in part, that the following development is declared to be State significant development:

Development specified in EOI application 233825 dated 22 January 2025 including development for the purposes of residential flat building with provision of affordable housing at 3A Burgoyne Street, 3B Burgoyne Street, 5A Burgoyne Street, 7 Burgoyne Street, 1 Pearson Avenue, 3 Pearson Avenue, and 4 Burgoyne Lane, Gordon, Lot 2/DP344901, Lot 3 DP344901, Lot 1/DP528615, Lot 1/DP81938, Lot 12/DP865615, Lot 11/DP865615, and Lot 2/DP528615.

The proposed development consists of the following:

The SSDA proposes the demolition of the existing structures on site and the construction of a residential flat building with two (2) interconnected components known as Building A and Building B, with communal open space, associated landscaping and car parking in basement levels.

These buildings have been labelled as follows:

- Building A located on the western portion of the Site
- Building B located on the eastern portion of the Site

Building A and Building B present a variety of heights that respond to the topography and where the maximum height transitions down in scale to respond to the public domain, the existing adjacent and/or future surrounding development.

Building A presents between seven (7) storeys facing Burgoyne Street, seven to eight (7-8) storeys to Pearson Avenue with an overall maximum height of seven (7) storeys as seen from Burgoyne Lane.

Building B presents between seven (7) storeys facing Burgoyne Street, seven to eight (7-8) storeys to the adjoining residential properties with an overall maximum height of seven (7) storeys as seen from Burgoyne Lane.

Both buildings are articulated through a series of setbacks and recesses that run both vertically and horizontally throughout the facades. The upper levels are deliberately designed to step back progressively as they transition down the site, creating a cascading effect. This architectural strategy effectively fragments the structure, dividing it into smaller, more visually digestible components The result is a design that will be in keeping with the existing and future character of the surrounding area.

2.2 Location

The site sits within the Kur-ring-gai Local Government Area (LGA) and lays across approximately 7 lots and which are legally defined as the following:

- Lot 2/-/DP344901
- Lot 3/-/DP344901
- Lot 1/-/DP528615
- Lot 1/-/DP81938
- Lot 2/-/DP528615
- Lot 11/-/DP865615
- Lot 12/-/DP865615

The Site is bounded by Burgoyne Street to the north, Pearson Avenue to the west and Burgoyne Lane to the south with an adjoining residential property to the east. The Site is approximately rectangular in shape exhibiting a total area of 7,093.0m2. In its current state, the Site contains seven (7) residential dwellings with associated

landscaping. Vehicular access is currently provided to each dwelling via Burgoyne Street, Pearson Avenue and Burgoyne Lane.

The proposal seeks consent for a residential flat building, which is permitted with consent in the R2 Low Density Residential zone via the provisions of Chapter 5 ('Transport oriented development') of the State Environmental Planning Policy (Housing) 2021 (the Housing SEPP).

The provisions of the Housing SEPP anticipate a transition to a new and different character.

The site is located approximately 200m northwest of Gordon Local Centre, which offers diverse civic, cultural, business, retail, entertainment, leisure, and residential amenities along the Pacific Highway. This places the site within easy walking distance of numerous services and facilities.

The site is situated about 5.5 kilometres north of Chatswood CBD and 12 kilometres north of Sydney CBD.

Gordon Train Station is approximately 250m south of the site, providing excellent public transport access via the T1 North Shore line, T1 Northern line, and inter-city services to the Central Coast and Newcastle. The comprehensive pedestrian network and public transport infrastructure make this a highly walkable location.

Figure 1: Site and surrounding area

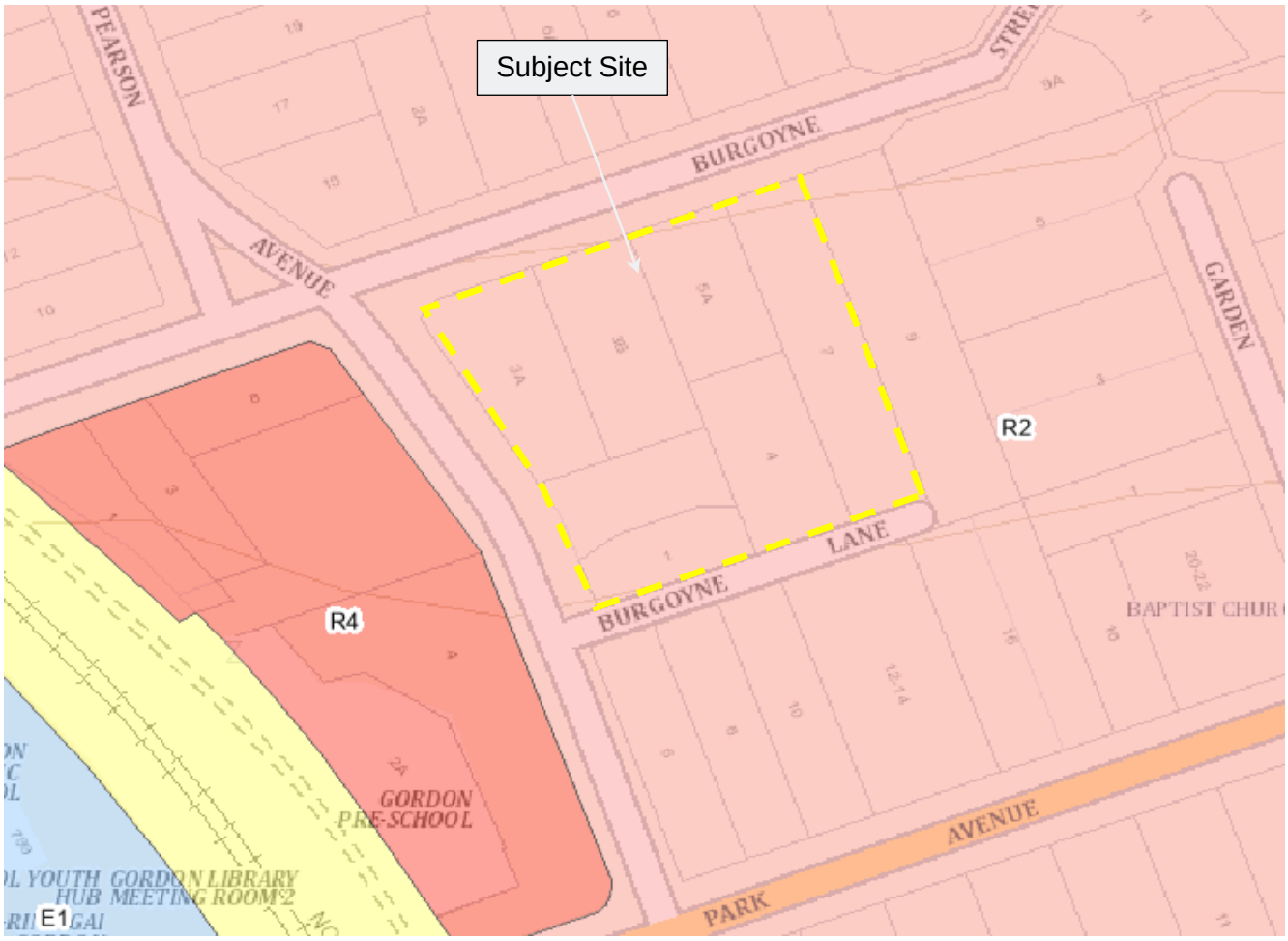
Source: Nearmap, 2024.

2.3 Zoning and Use

The site is zoned as R2 – Low Density Residential according to the Ku-ring-gai Local Environmental Plan 2015. The objectives of this zone are:

- To provide for the housing needs of the community within a low density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To provide for housing that is compatible with the existing environmental and built character of Ku-ring-gai.

Figure 2: Land use zone map



Source: NSW eSpatial Viewer, 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, Marchese Partners/Life 3A, February 2025;
- Waste and recycling volumes are based on information provided from the Ku-ring-gai; 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 removal of 7 x existing dwellings and associated structures.

Table 2 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 2: 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	1,500 – 2,000	✓	✓	✓	-	<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	40 - 50	✓	✓	✓	-	<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	800 - 950	✓	✓	✓	-	<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 - 40	✓	✓	✓	-	<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)	100 - 150	✓	✓	✓	-	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)	100 - 150	✓	✓	✓	-	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	250 - 300	-	✓	✓	-	<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)	5 - 10	-	✓	✓	-	<10%	>90%	Onsite: Separated wherever possible to improve resource recovery. Offsite: Removed to C&D facility for recovery and recycling.
Floor covering	10 - 15	-	✓	✓		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

Construction on site will include the following features:

- Construction of a 7-8 Storey Residential Flat Building of 106 dwellings including:
  - 11 x 1B Apartments
  - 21 x 2B Apartments
  - 41 x 3B Apartments
  - 2 x 3B Penthouse Apartments
  - 25 x 4B Apartments
  - 6 x 4B Penthouse Apartments
  - Internal communal facilities
  - External communal open spaces
- Part 2, part 4 level basement carparking
- Associated landscaping and access paths
- Associated Infrastructure and services

Table 3 outlines indicative volume to weight conversion factors for common construction materials.

Table 3: 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 4 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 4: 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	8,000 – 9,000	✓	✓	✓	<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	250 - 300	✓	✓	✓	<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	300 - 350	✓	✓	✓	<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 - 15	✓	✓	✓	<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)	15 - 20	-	✓	✓	<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)	15 - 20	-	✓	✓	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	40 - 50	-	✓	✓	<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	✓	✓	✓	<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)	5 - 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	15 - 10	✓	✓	✓	<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	5 - 10	✓	✓	✓			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	<5	-	✓	✓	<10%	>90%	Offcut wires and electronics separated where possible or returned to supplier for reuse.
Packaging materials (pallets, wrap, cardboard, etc)	20 - 50	-	✓	✓	<10%	>90%	Returned to supplier where possible or separated by material type for resource recovery.
Residual waste	15 - 30	-	✓	✓	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 5).

Table 5: Waste service contractors and facilities

Role	Details
Recommended Waste Collection Contractor	The following are local skip bin operators for consideration in the management of excavation and construction waste for the site: • Mt Kuring-gai Skip Bins • North Shore Skip Bins • Sydney Skip Bins Or another supplier as elected by the building contractor.
Principal Off-Site Recycler	The following are local C&D processing facilities for consideration in the management of C&D waste generated at the site: • Bingo Artarmon • Kimbriki Resource Recovery Centre Or another appropriate facility as elected by the waste management contractor.
Principal Licensed Landfill Site	• Bingo Ecology Park Or other appropriate facility as elected by the waste management contractor.

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 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 Assessment Methodology

4.1 Overview

Waste management strategies related to site operations have been established according to the Ku-rin-gai DCP 2015 and NSW EPA guideline documents.

Operational waste generation at the site will be derived from the occupation of 92 x residential units.

The following space calculations are based off the mobile garbage bin (MGB) and bulk bin dimensions sourced from NSW EPA's *Better Practice Guide for Resource Recovery in Residential Developments* (2019) (Table 6).

Table 6: Mobile Garbage Bin (MGB) and Bulk Bin capacity and footprint

Bin Capacity (L)	Height (mm)	Depth (mm)	Width (mm)	Footprint (Approx. m^2)
120	940	560	485	0.30- 0.33
240	1,100	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 Residential Waste Management

4.2.1 Waste Generation

Residential waste generation will be derived from the development of 106 residential dwellings.

Table 7: Core 1 Weekly Waste Generation Volumes

Units	Waste Stream	Generation rate	Weekly Volumes (L)
5 x 1B	General waste	80L/unit/week	400
	Recycling	80L/unit/week	400
	FOGO*	25L/unit/week	125
20 x 3B+	General waste	120/unit/week	2,400
	Recycling	120/unit/week	2,400
	FOGO*	50/unit/week	1000
Total		**General Waste**	**2,800L**
		Recycling	**2,800L**
		FOGO	**1,125L**

Table 8: Total Weekly Waste Generation Core 2

Units	Waste Stream	Generation rate	Weekly Volumes (L)
1 x 2B	General waste	100/unit/week	100
	Recycling	100/unit/week	100
	FOGO*	25/unit/week	25
19 x 3B+	General waste	120/unit/week	2,280
	Recycling	120/unit/week	2,280
	FOGO*	50/unit/week	950
Total		**General Waste**	**2,380L**
		Recycling	**2,380L**
		FOGO	**975L**

Table 9: Total Weekly Waste Generation Core 3

Units	Waste Stream	Generation rate	Weekly Volumes (L)
6 x 1B	General waste	80/unit/week	480
	Recycling	80/unit/week	480
	FOGO*	25/unit/week	150
9 x 2B	General waste	100/unit/week	900
	Recycling	100/unit/week	900
	FOGO*	25/unit/week	225
16 x 3B+	General waste	120/unit/week	1,920
	Recycling	120/unit/week	1,920
	FOGO*	50/unit/week	800
Total		**General Waste**	**3,300L**
		Recycling	**3,300L**
		FOGO	**1,175L**

Table 10: Total Weekly Waste Generation Core 4

Units	Waste Stream	Generation rate	Weekly Volumes (L)
12 x 2B	General waste	100/unit/week	1,200
	Recycling	100/unit/week	1,200
	FOGO*	25/unit/week	300
18 x 3B+	General waste	120/unit/week	2,160
	Recycling	120/unit/week	2,160
	FOGO*	50/unit/week	900
Total		**General Waste**	**3,360L**
		Recycling	**3,360L**
		FOGO	**1,200L**

4.2.2 Waste Storage Requirements

Waste storage has been calculated considering estimations of bin type, as described in the table below (Table 11). The following bin number requirements are based on Council's weekly general waste collection, and fortnightly recycling collection.

Table 11: Residential waste storage and bin type

Waste Stream	Weekly Generation (L)	Collection Rate	Bin Allocation Per Week	Approximate Footprint Required (m^2)*
Core 1				
General Waste	2,800	Weekly	5 x 660L	9
Recycling	2,800	Weekly	5 x 660L	9
FOGO**	1,125	Weekly	3 x 240L	2
Core 2				
General Waste	2,380	Weekly	4 x 660L	7
Recycling	2,380	Weekly	4 x 660L	7
FOGO**	975	Weekly	3 x 240L	2
Core 3				
General Waste	3,300	Weekly	5 x 660L	9
Recycling	3,300	Weekly	5 x 660L	9

FOGO**	1,175	Weekly	3 x 240L	2
Core 4				
General Waste	3,360	Weekly	5 x 660L	9
Recycling	3,360	Weekly	5 x 660L	9
FOGO**	1,200	Weekly	3 x 240L	2
Bulky Waste	Bulky waste streams collected as required			12m^2

**includes handling and manoeuvring space of bin footprint m^2 x (1.5)*

*** FOGO has been included to accommodate upcoming mandates*

Table 12: Waste chute room requirements

Building Core	Waste Type*	Infrastructure Required within Chute Rooms**
Core 1	General Waste	**2 x 660L bins on linear track**
	Recycling	**2 x 660L bins on linear track**
	FOGO	**3 x 240L bins**
Core 2	General Waste	**2 x 660L bins on linear tracks**
	Recycling	**2 x 660L bins on linear tracks**
	FOGO	**3 x 240L bins**
Core 3	General Waste	**2 x 660L bins on linear tracks**
	Recycling	**2 x 660L bins on linear tracks**
	FOGO	**3 x 240L bins**
Core 4	General Waste	**2 x 660L bins on linear tracks**
	Recycling	**2 x 660L bins on linear tracks**
	FOGO	**3 x 240L bins**

**Recycling will an additional bin to general waste due to the size of recycled products (e.g. large cardboard boxes from furniture, deliveries etc)*

*** Spare bins referenced in Table 10 can be stored within the bin holding area to area to avoid congestion within chute rooms and replaced with full bins when necessary*

Each chute room will need to have a 660L general waste and recycling bin that will need to be swapped out every 1-2 days by site management. Residents will be required to transfer FOGO waste to the centralised waste storage room on the ground floor and dispose into respective 240L FOGO bins.

Council will perform and onsite weekly collection using a small rigid vehicle (SRV). Bulky waste can be stored in a designated caged space within the centralised waste storage room on the ground level.

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 and recycling from the dwelling to their closest waste chute rooms. Residents will also be responsible for transporting FOGO waste from the dwelling to the centralised communal bins within the Waste Storage and Recycling Area (WSRA) on the ground floor level.

Bulky Waste

The Ku-ring-gai DCP Part 25B.1 states that a minimum storage area of 12m^2 is to be provided from 50-100 units. 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.

Residents will be provided with assistance from building management to transport bulky waste from their dwellings to the allocated waste area. With the assistance of building management, residents within the northern towers will be able to transport waste to the designated temporary bulky waste area within the chute rooms.

Building management will be responsible for transport bulky waste from these temporary storage areas to the ground floor collection area via the service lift.

4.2.3 Residential Chutes

Waste chutes for general waste and recycling will be available on each residential floor of the development.

4.2.4 Collection Schedule

Waste generated from the proposed residential component of the building will be collected weekly by Council collection. Building Management will be required to present bins from the WSA to the waste holding area on the ground level for collection via the lift.

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 alterative 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.
- **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.
- **Paper and Cardboard:** Should large quantities of paper and carboard 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.
- **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 chutes on each level for appropriate disposal into the respective chutes.
3. Site management are responsible for maintenance of bins and the waste storage rooms, ensuring bins are clean and in working order. Site management are also responsible for switching out full bins and monitoring bin fullness;
4. Site management is to ensure contracts with Council or 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 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

Collection will occur from the ground level temporary waste storage area via a standard small rigid vehicle (SRV) in accordance with Table 13.

Table 13: Collection points and loading areas requirements and specification

Component	Requirement	Specification
Collection point	Allow safe waste collection and loading operations	- 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	- Collection from each site use loading area 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	- 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 best practise, 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 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 B).

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.

Ku-ring-gai Development Control Plan

Ku-ring-gai Local Environmental Plan 2015

NSW EPA (2012) Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities.

NSW EPA (2021) NSW Waste and Sustainable Materials Strategy 2041.

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 Government (1979) Environmental Planning and Assessment Act.

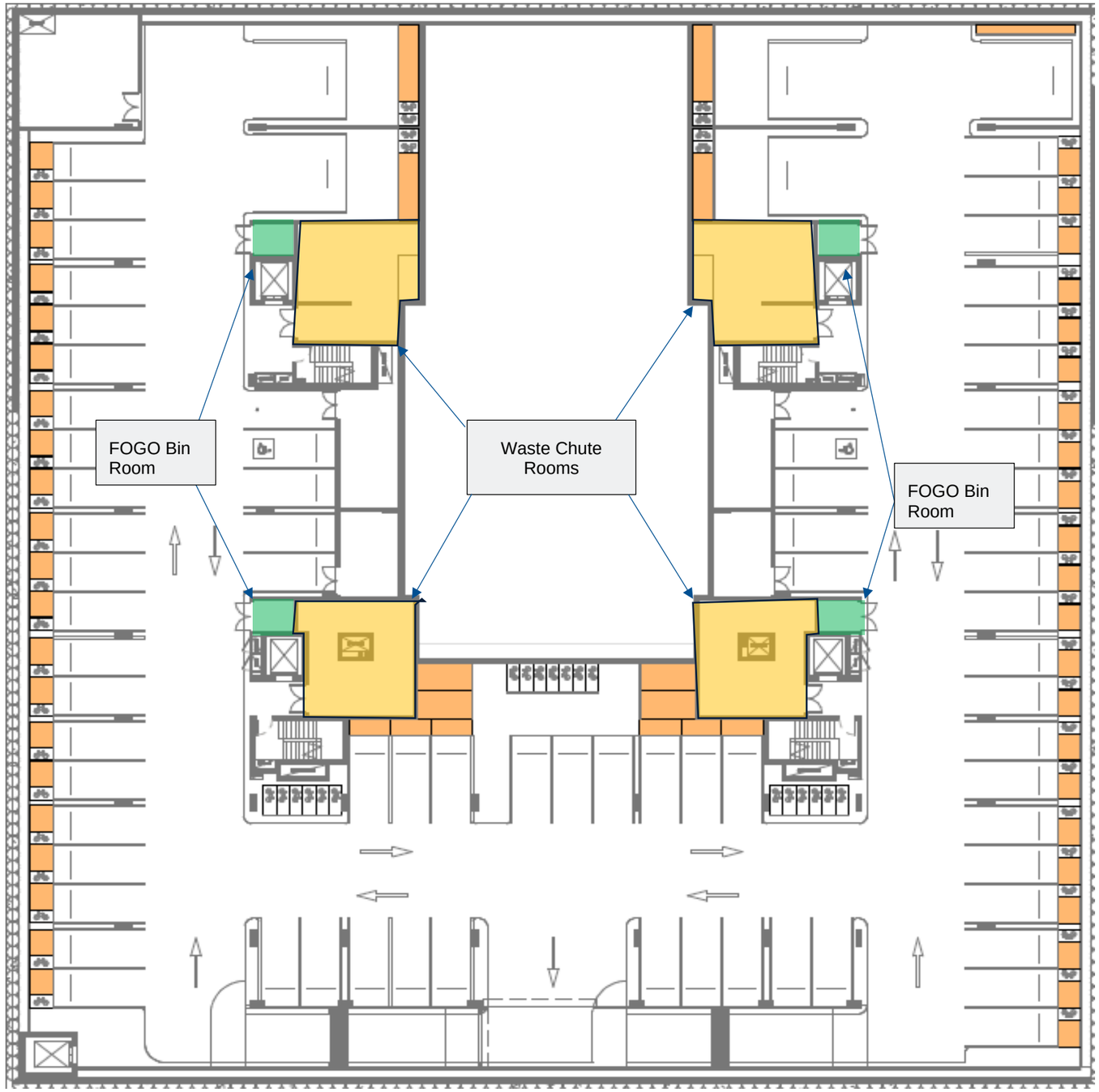
NSW Government (1997) Protection of the Environment Operations Act.

NSW Government (2000) Environmental Planning and Assessment Regulation.

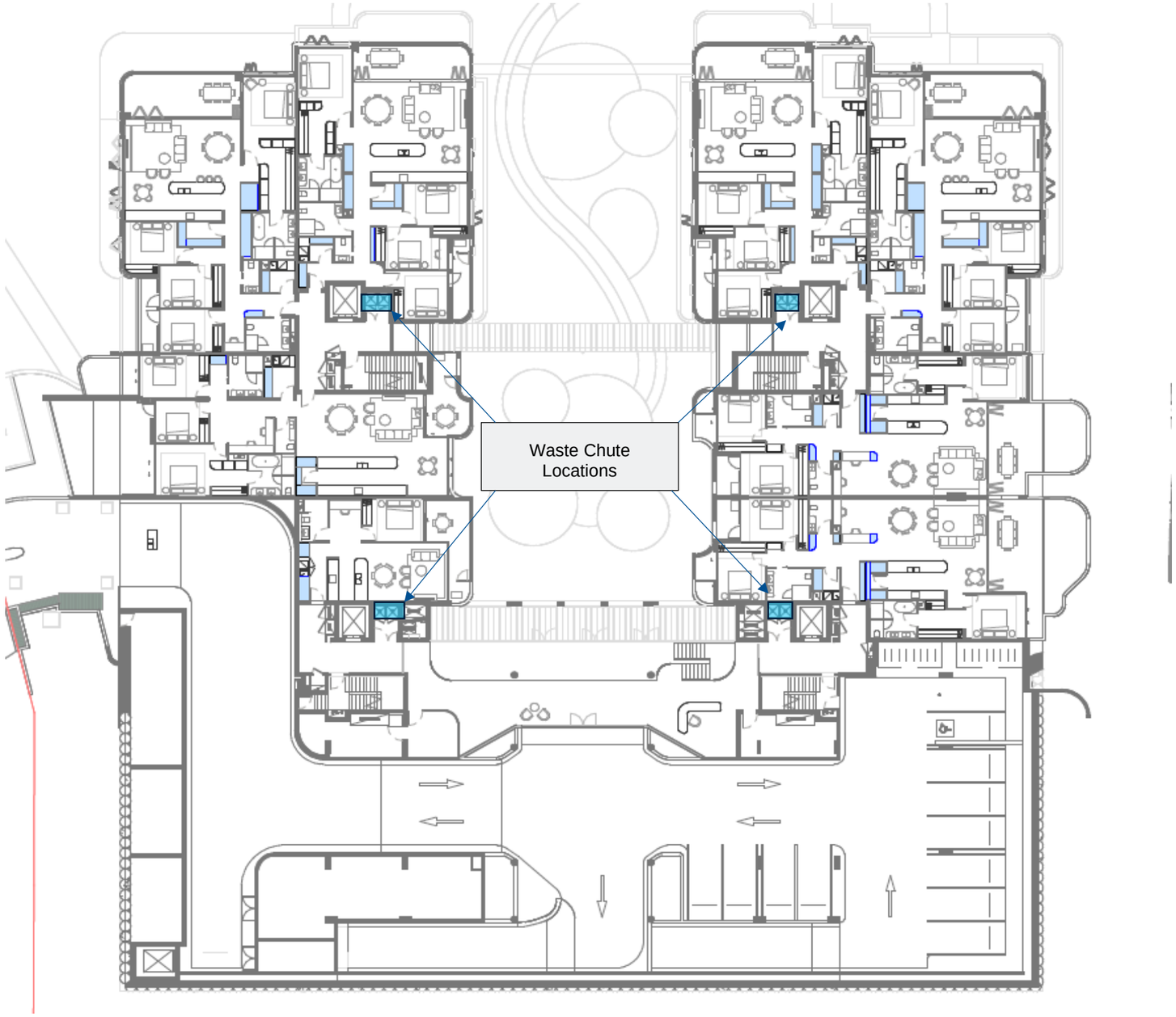
NSW Government (2001) The Waste Avoidance and Resource Recovery Act

Appendix A Proposed Site Plans

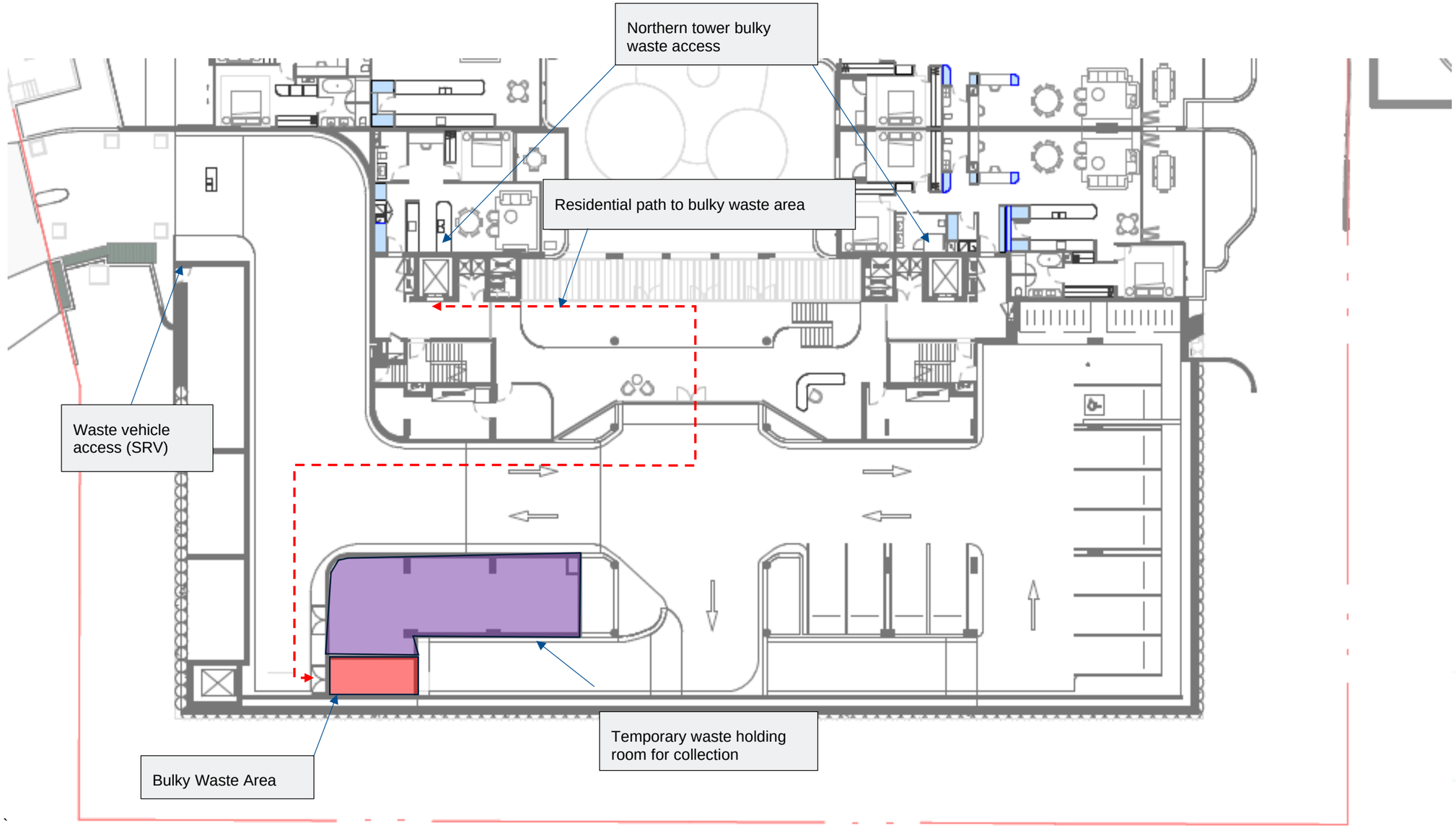
Source: Marchese Partners, 2025.



Source: Marchese Partners, 2025



Source: Marchese Partners, 2025.



Source: Marchese Partners, 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

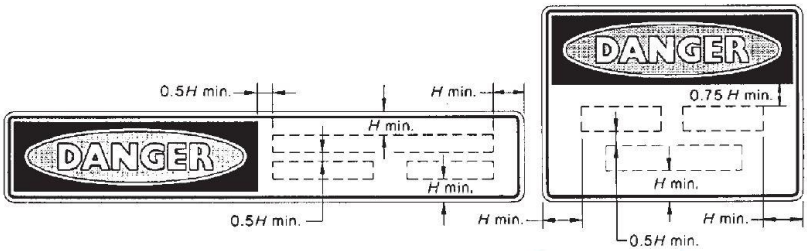
Safety Signs

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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