

10 Valentine Avenue Waste Management Plan

WA-RP-0001

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Executive Summary

This Waste Management Plan (WMP) has been prepared to support the State Significant Development Application (SSDA) and concurrent Rezoning Application for the redevelopment of 10 Valentine Avenue, Parramatta. The purpose of this report is to provide a comprehensive overview of the waste management system for the proposed mixed-use development, which comprises a 72-storey shop top housing tower and a 14-storey co-living tower with ancillary retail. The WMP details the assessment and management of waste during demolition, construction, and operational phases, ensuring compliance with the City of Parramatta Council's Development Control Plan (DCP) 2023 – Waste Management Guidelines for New Development.

The following tables summarise the estimated operational waste generation and bin requirements for both towers are shown in Table 1.

Table 1 Total waste generation summary

Area Type		General Waste (L/day)	Comingles Recycling (L/day)	Food Waste (L/day)
Shop-top housing				
Residential flats	479 units	5,474	4,106	342
Retail (F&B)	374 m ²	374	1,870	374
Private dinning	69 m ²	68	342	68
Lobby/Lounge	317 m ²	63	79	0
Amenities	566 m ²	85	141	28
Total		6,064	6,538	812
Co-living housing with ancillary retail				
Co-living units	608 residents	3,543	3,543	-
Retail (Mini mart)	64 m ²	38	160	-
Espresso bar	140 m ²	280	700	-
Lobby	181 m ²	36	45	-
Amenities	1,708 m ²	342	427	-
Total		4,239	4,875	-

Waste generation rates for both towers have been evaluated to calculate the required number of bins and related accessories, necessary area allocation, and optimal waste management systems for each waste stream. The results show that the allocated areas in the Shop Top Housing Tower, such as the 142 m² residential waste room, the 52 m² bulky waste storage room, and the 16.9 m² retail waste room, meet existing operational demands. Future needs for additional waste streams will be considered in the future-proofing area and addressed during later design stages. For the Co-living Housing with Ancillary Retail Tower, the waste chute discharge (or left-side waste room) (26 m²), centre waste room (24 m²), and right waste room (30 m²) provide adequate capacity for effective waste management.

Waste collection for the shop top housing tower will occur twice weekly for residential waste streams and daily for retail waste, with bins transferred from basement storage to the ground floor loading dock via a bin hoist. The co-living tower will be serviced daily by a private contractor using a small rigid vehicle due to basement clearance constraints, with bins transferred from three designated waste rooms to the collection point.

Both towers have been designed to meet the requirements of the Parramatta DCP, including adequate bin storage areas, compliant vehicle access and clearance, and provision for future-proofing waste management systems. The waste management approach prioritises source separation, recycling, and minimisation of landfill, with all facilities and processes aligned to best practice standards and relevant guidelines.

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1. Introduction

1.1 Project Overview

This report has been prepared to support a State Significant Development Application (SSDA) SSD-90243456 and a concurrent Rezoning Application (RA) for the site at 10 Valentine Avenue, Parramatta. The Minister for Planning, or their delegate, is the consent authority for the SSDA, and this application is lodged with the NSW Department of Planning, Housing and Infrastructure (DPHI) for assessment. This report has been prepared in response to the requirements contained within the Secretary’s Environmental Assessment Requirements (SEARs) dated 12 September 2025 (SSD-90243456). Specifically, this report addresses the following SEARs:

Table 2 SEARS requirements

Secretary’s Environmental Assessment Requirements	Refer Report Section
17. Waste Management	
Provide the measures to be implemented to manage, reuse, recycle and safely dispose of waste in accordance with any council waste management requirements.	Sections 2.2 and 3.2
Identify appropriately sited waste storage areas, collection access paths/roads, and appropriate servicing arrangements for the site.	Sections 2.3, 2.4, 3.3, 3.4, and 3.5

1.2 Project Description

The application seeks development consent for the redevelopment of the site for a mixed-use development comprising residential accommodation (shop top housing and co-living housing) and retail uses.

Specifically, this application seeks approval for the following:

- Demolition of the existing multi-deck car park.
- Demolition of existing internal fit-out within the commercial building.
- Site preparation works including:
 - Removal of trees as outlined in the Arborist Report.
 - Excavation on the southern portion of the site to a maximum depth of six basement levels.
- Construction of a 72-storey shop-top housing building, which will accommodate:
 - Six levels of basement with 144 car parking spaces, bicycle parking, services, waste storage.
 - Lobby, retail premises and loading dock at ground level.
 - 479 residential apartments on Levels 1-70.
 - Communal open space and resident amenities on level 5 and level 71.
 - Rooftop plant on level 72.
 - Vehicular access provided via Valentine Avenue.
 - Dedication of 3% of dwellings as affordable housing.
- Change of use of from commercial premises to co-living housing and ancillary retail.

- Alterations and additions to the existing commercial premises to accommodate co-living housing including:
 - Upgrade to existing internal lift access.
 - Alterations to the basement with amenity, laundry, jam space, manager’s office and 17 co-living housing spaces.
 - Ground level retail premises and communal internal facilities including a gym, yoga room and wellness lounge.
 - Upper levels: Co-living housing providing 608 beds across 440 units in private rooms, and 2-, 3- and 4-room configurations, communal internal facilities on each level and communal open spaces on level 7 and level 14.
 - Alterations to the building façade.
- Hard and soft landscaping and public domain works along Valentine Avenue and Parkes Street.
- Building identification signage on the shop-top housing building and co-living housing building.
- Stratum subdivision into two lots.
- Extension and augmentation of physical infrastructure and utilities as required.

Refer to the Architectural Plans prepared by Buchan in collaboration with Furtado Sullivan and Curzon + Partners, appended to the Environmental Impact Statement (EIS).

A concurrent Rezoning Application (RA) is proposed under the SSDA. The RA seeks to amend the Parramatta Local Environmental Plan 2023 to update the zoning, height, permissibility, and Floor Space Ratio (FSR) controls for the site.

Refer to the EIS for a full description of the proposed amendments under the RA.

1.3 The Site

The site at 10 Valentine Avenue, Parramatta, is located within the City of Parramatta Local Government Area (LGA), approximately 19 km northwest of the Sydney CBD and 16 km northeast of the Liverpool CBD. The site covers 3,937 m² and is legally described as Lot 2 in DP 1119257.

The southern part of the site is currently occupied by a six-level above-ground car park with 286 spaces. The northern portion of the site contains a 13-storey commercial office building with basement levels.

Vehicular access to the site is available via the combined entry in the existing commercial building at 10 Valentine Avenue. An additional egress point from the above-ground car park is located south of the entry and provides exit-only access onto Valentine Avenue.

The site is positioned within the Parramatta CBD, approximately 19 km northwest of the Sydney CBD and 16 km northeast of the Liverpool CBD. It is located just southeast of Parramatta Railway Station, approximately 440 metres from the planned Parramatta Metro Station. It is also approximately 2 kilometres

southeast of the future Westmead Metro Station on the eastern side of Hawkesbury Road.

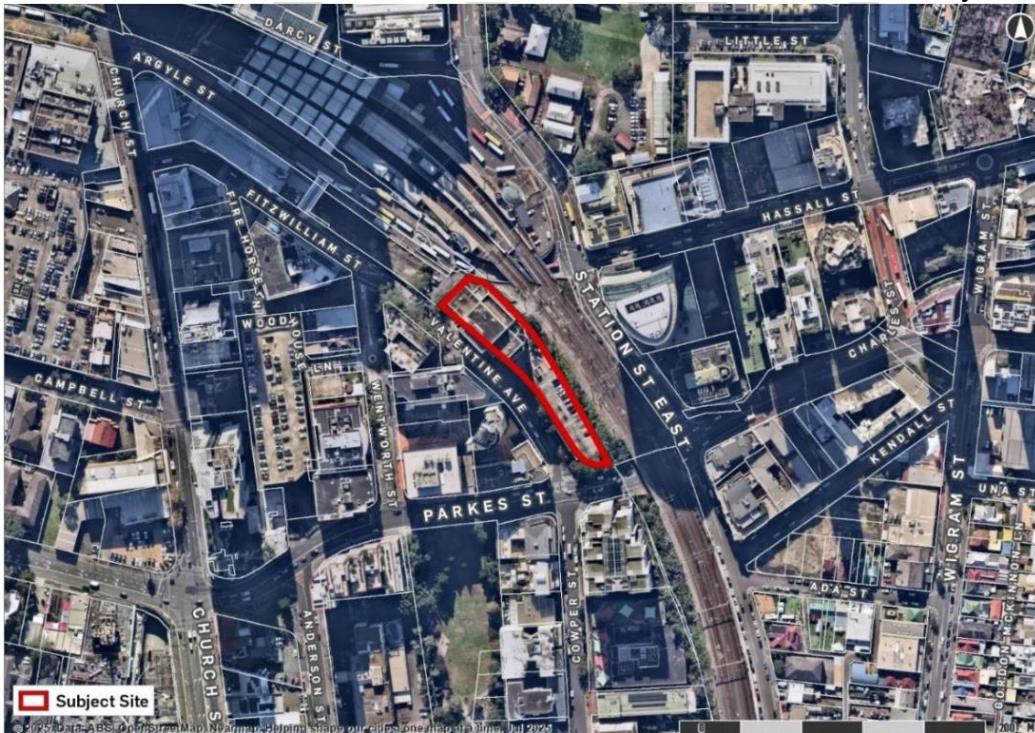


Figure 1: 2-10 Valentine Avenue site boundary

1.4 Purpose of this report

Arup has been appointed by Holdmark NSW (Holdmark) to provide a Waste Management Plan (WMP) for the redevelopment of the site (Section 1.3) for a mixed-use development comprising residential accommodation (shop top housing and co-living housing) and retail uses.

This report will provide an overview of the waste management system, include the identification of operational waste management targets and aspirations and demonstrate compliance with the *City of Parramatta Council's Development Control Plan (DCP) 2023 – Waste Management Guidelines for New Development*. This report details the assessment and management of waste during demolition, construction and operations.

The WMP identifies how waste is to be managed for the development and to address the waste management requirements under the City of Parramatta Council (CoPC) and New South Wales legislation and guidelines. This WMP proposes a compliant approach for residential and commercial waste and recycling methods in line with the Parramatta Development Control Plan.

This WMP identifies the anticipated demolition, construction and operational waste streams for the development and outlines the management measures for each stream. It will:

- Provide a waste generation estimate by type of material for each major area use of the proposed precinct based on key assumptions outlined in this WMP.
- Outline the requirements for the management, storage, internal reticulation, and collection of the anticipated solid waste streams to be generated by the development. This will include consideration of waste transfer systems such as waste chutes, as required.
- Specify the relevant design requirements including amenities for waste storage, clearance heights and the access requirements for waste loading and collection zones to be considered for the development.
- Provide mark ups showing the proposed layout of the mobile garbage bins (MGBs) and equipment within waste storage rooms.

1.5 Legislative Requirements, Standards and Guidelines

The following waste policies, guidelines and standards are applicable to this development. These standards have been reviewed and the WMP has been written in accordance with their requirements:

- City of Parramatta Council's Development Control Plan (DCP) 2023 – Waste Management Guidelines for New Development;
- Environmental Sustainability Strategy 2024 – 2033 City of Parramatta;
- Environmental Management of the Development Control Plan 2023;
- City of Sydney – Guidelines for Waste management in New Developments (CoS Guidelines);
- AS2890.2 Parking Facilities: Off-Street Commercial Vehicle Facilities;
- Australian Standard AS4674 – 2004 Design, Construction and Fit-out of Food Premises;
- Australian Standards, Mobile waste containers (AS4123.1 and AS4123.2); and
- Building Code of Australia.

1.6 Reference Documents

The WMP references documents listed in Table 3 relevant to the development:

Table 3 WMP Reference documents

Date Prepared	Document Name	Author
12/12/2025	VAL-BUC-AZ-DR-A-DA Drawing Set	Buchan Furtado Sullivan
25/11/2025	DA000 – Drawing Set	Curzon and Partners

2. Construction and Demolition Waste

The following section provides details for managing, minimising, and estimating the quantities of the waste materials generated during the construction and demolition (C&D) phase for all works listed in Section 1.2, including:

- For shop top housing tower:
 - Demolition of the existing multi-deck car park
 - Construction of a 72-storey shop top housing development
 - Lobby, retail premises and loading dock at ground level.
- For co-living tower with ancillary retail:
 - Demolition of existing internal fit-out within the commercial building.
 - Alterations and additions to the existing commercial premises to accommodate co-living housing
- Extension and augmentation of physical infrastructure and utilities as required.

The requirements for the demolition and construction waste management plan are provided in the Paramatta DCP 2023, Waste Management Plan Template, in Appendix A.

Waste generation and management during demolition and construction is the responsibility of all on site, as it relates to materials procurement, handling, storage and use. Waste generated during demolition and construction will be reused and recycled as a priority or disposed to landfill otherwise.

2.1.1 Opportunities Reuse and Recycling

Waste separation and segregation will be promoted on-site to facilitate reuse and recycling as a priority of the waste management system. Some actions to facilitate achieving sustainable waste management for the project are as follows:

- Consider waste at the design stage to ensure that the minimum amount of material is wasted.
- Materials arising from the demolition works will be considered for use in other building projects.
- Excess material generated during construction (e.g., offcuts, odd steel sizing and formwork) will be reused where possible for future works.
- The recovery of excavated materials arising from excavation works will be optimised. The focus will be on re-using excavation materials on-site followed by alternative recovery routes.
- The Contractor will strive to reduce the quantity of material sent to landfill during the construction phase through effective waste management. Where waste generated by the project cannot be avoided this will be recovered through re-use and recycling where feasible.
- Materials selected for construction will be durable to ensure long life and reduced need for replacement. The over ordering of materials will be avoided and suppliers that minimise packaging should be used.
- Construction items will be prefabricated offsite where possible. This will reduce the production of offcuts, odd steel sizing and excess wastage during onsite fabrication of items.

Table 4 presents examples of potential reuse and recycling options for the materials likely to be used/generated in construction and demolition at this development.

Table 4 Potential reuse/recycling options for demolition and construction materials

Material Type	Potential reuse/recycling opportunities
Asphalt, Bitumen	Potentially recycled through one of two processes, in place recycling (both hot and cold techniques) as well as offsite recycling.
Cardboard & paper packaging	Potentially recycled at a paper/cardboard recycling facility
Carpet, Underlay	Potentially reused as soil cover/mulch for gardening and landscaping purposes (after appropriate treatment) or recycled at an appropriate facility.
Ceramics	Cleaned to be reused, crushed for potential reuse for driveways and landscaping or sent to an appropriate recycling facility.
Concrete, Masonry, Excavation Spoil	Recycled, to be potentially used in pavement construction, concrete production, levelling or crushed for manufacturing road base.
Glass	Recycled at a glass recycling facility, broken down to be potentially used as aggregate for concrete production or pipe bedding, or reused as façade glazing.
Green waste (Organics)	Green waste can be shredded to potentially produce mulch or mixed with other types of organic material for composting.
Insulation Material	Material can be potentially reused as insulation onsite, reprocessed to remove impurities or compressed for ceiling tile manufacture.
Metals (Aluminium/Steel/Copper)	Recycled at a metal recycling facility, can be melted into secondary materials for potential use in roofing, piping as well as structural steel.
Masonry, Bricks	Cleaned and potentially reused in another building or project. Alternatively, bricks can be crushed into brick chips (for use as a landscape material) and/or finer particles (for use in manufacturing road-base, track and drainage material, fill sand or new bricks).
Plasterboard	Reprocessed gypsum powder (which makes up approximately 90 to 94% of plasterboard) can be sent back to manufacturers for potential reprocessing into new plasterboard or converted for use in soil conditioners for the agricultural industry.
Plastics and Polymers	Potentially reused as secondary materials and recycled at an appropriate plastics recycling facility.
Soil	Stockpiled onsite for potential reuse as fill or reused in other construction projects.
Wood and Timber	Recycled at appropriate facility, reprocessed into reusable woodchip, mulch and particleboard. Potentially reused in pallets as well as furniture making.

2.1.2 Treatment and Disposal

Waste generation and management during the C&D phase will be the responsibility of the Principal Contractor and is to be handled in accordance with the CoPC Guidelines and this WMP as it relates to materials storage and use. Waste generated during the C&D phase may require treatment in order to appropriately dispose C&D materials to reduce the health and environmental risk.

Materials that are not suitable for reuse or recycling must be separated and disposed of by a qualified contractor. The waste on site will follow the waste hierarchy and will only be sent to landfill or disposal facilities where the prioritised management methods in the hierarchy cannot be effectively implemented.

The construction contractor is responsible for liaising with the CoPC to determine appropriate disposal locations for potential waste streams.

Measures to manage the treatment and disposal of waste materials during construction include:

- Waste which cannot be reused or recycled and requires disposal must be segregated and stored separately from those which have the potential to be reused
- Provide separate bins for subcontractors to dispose of construction waste, such as metal, plastics, and cardboard
- Contractors and staff to be inducted into site waste management practices
- Hazardous materials including asbestos (if identified) to be disposed of in accordance with the handling and disposal requirements of SafeWork NSW and NSW EPA
- General wastes to be disposed of in accordance with NSW EPA/CoPC requirements
- Toilet facilities must be regularly serviced and emptied by a licensed contractor.

2.2 Waste classification and quantities

Waste generation and management during the C&D phase will be the responsibility of the contractor and is to be handled in accordance with the Parramatta DCP and this WMP as it relates to materials storage and use. Waste generated during the C&D phase will be reused and recycled as a priority.

During the C&D phase, suitable areas on site will be allocated by the contractor, to provide adequate space and access for:

- Storage of C&D waste; and
- Collection of C&D waste for recycling and re-use.

Waste will be removed and recycled or disposed of offsite at a waste management facility following material classification. Details of waste types, volumes and destinations will be recorded, and materials will be transported by a licensed contractor.

Table 5 Proposed Management of Demolition Materials

Material type	Waste Classification	Proposed reuse/recycling/disposal methods
C&D Materials		
Bricks	General solid waste (non-putrescible)	Reuse and recycling where possible or offsite recycling at an approved facility
Concrete	General solid waste (non-putrescible)	Reuse and recycling where possible or offsite recycling at an approved facility
Tiles	General solid waste (non-putrescible)	Reuse and recycling where possible or offsite recycling at an approved facility
Timber (treated)	General solid waste (non-putrescible)	Reuse and recycling where possible or offsite recycling at an approved facility
Plasterboard	General solid waste (non-putrescible)	Recycle (off-site separation)
Metals (ferrous)	General solid waste (non-putrescible)	Recycle (off-site separation)

Material type	Waste Classification	Proposed reuse/recycling/disposal methods
Mixed recycling	General solid waste (non-putrescible)	Recycle (off-site separation)
Glass	General solid waste (non-putrescible)	Recycle (off-site separation)
Excavation Materials		
Hazardous Material	Hazardous waste	Off-site disposal at an approved facility.
Excavation – Uncontrolled fill	Classification based on soil tests carried out during construction an in accordance with Waste Classification Guidelines: Part 1 and 2	Off-site disposal or reuse at an approved facility.
Excavation Sand	Classification based on soil tests carried out during construction an in accordance with Waste Classification Guidelines: Part 1 and 2	Off-site disposal or reuse at an approved facility.
Excavation – Residual Soil/Clay	Classification based on soil tests carried out during construction an in accordance with Waste Classification Guidelines: Part 1 and 2	Off-site disposal or reuse at an approved facility.
Excavation – Shale Rock	General solid waste (non-putrescible)	Off-site disposal or reuse at an approved facility.
Excavation Sandstone Rock	General solid waste (non-putrescible)	Off-site disposal or reuse at an approved facility.
Timber	General solid waste (non-putrescible)	Off-site disposal or reuse at an approved facility.
Concrete	General solid waste (non-putrescible)	Off-site disposal or reuse at an approved facility.
Structural Steel	General solid waste (non-putrescible)	Recycle (off-site separation)
Reinforcement	General solid waste (non-putrescible)	Recycle (off-site separation)

2.2.1 Waste Quantities

Indicative waste volumes have been provided in Table 6 based on an assessment from the Quantity Surveyor received 5 December 2025. Note that the materials and quantities are to be further refined as the design progresses.

Table 6 Average volume of construction materials

Material type	Volume (m3)
Shop-top housing tower	
Bricks / blocks	25
Excavated material	28,904
Green waste	343

Material type	Volume (m3)
Shop-top housing tower	
Concrete	2,274
Tiles	20
Timber	122
Timber	122
Plasterboard	59
Metals (ferrous)	426
Mixed recycling	12
Co-living tower	
Bricks / blocks	9
Excavated material	269
Green waste	12
Concrete	52
Tiles	22
Timber	73
Plasterboard	63
Metals (ferrous)	28
Glass	2

2.3 Waste management measures and storage

2.3.1 Onsite Waste Management Storage Facilities

All waste management storage areas onsite will be:

- Clearly sign-marked and colour coded to ensure appropriate use.
- Located to enable access for collection as well as for on-site movement.
- Sufficiently sized for the volume of waste generated as including provision for source separation of recyclable materials.
- Enclosed or undercover and have adequate weather protection, as well as lids to reduce the potential for attracting insects and vermin (where appropriate).

The contractor will provide an area suitable for waste storage and collection of the construction waste generated on site.

A sufficient quantity of skip bins or MGBs should be provided for the separate storage of each type of construction and demolition material generated on site. Separate skips or MGBs will be provided to maintain segregation and maximise economic reuse and recycling, in preference to disposal to landfill.

Where possible, additional bins will be provided in common areas for the collection of Commingled recyclables such as plastic beverage containers, paper products, and food containers.

2.4 Servicing arrangements

2.4.1 Servicing and Transport

Bins are to be monitored on a daily basis by the Construction Site Manager to ensure they do not overflow. If bins are deemed to be reaching their maximum capacity, the removal and replacement of these bins should

be organised within 24 hours. The frequency of the removal of waste from the site will be determined by the volume of materials deposited into each respective bin. All bins leaving the site are to be covered with a suitable tarpaulin or similar covering to reduce spillage of waste whilst in transit. All waste collection for construction works will be conducted between approved hours as per Council requirements.

2.4.2 Collection and Vehicle Access

Collection should be undertaken directly from the nominated waste storage area by contractors for C&D waste generated for both towers. Collection vehicles should be able to enter and exit in a forward direction. The site should allow access for a typical rear loading vehicle.

It is noted that the existing commercial building's loading area cannot accommodate HRVs due to limited height clearance. As a result, during construction, the designated C&D waste storage and collection point for the co-living tower renovations should be positioned onsite in a location with at least 4.5 meters of vertical clearance.

The nominated collection point where the waste loading operations occur should be on a level surface away from slopes or vehicle ramps in a convenient location for collection contractors. The waste collection vehicle's travel route must be designed to be strong and durable enough to accommodate a HRV.

2.5 Documentation

The CoPC have provided a C&D Waste Management Plan template document, outlined in Appendix A of this report. This details the management of waste from construction and demolition practices. This is to be completed prior to construction and updated as required, as part of the Contractor's waste management plan and updated throughout the construction period as necessary.

3. Operational Waste

3.1 Operational Waste Streams

The waste and recycling streams expected to be generated at the shop top housing and co-living housing with ancillary retail developments, the source of generation and final destination are summarised in Table 7.

Table 7 Operational waste streams by operational area

Waste Stream	Operational Area		Destination
	Shop top housing	Co-living housing with ancillary retail	
General waste	All operational areas	All operational areas	Off-site landfill
Commingled recycling	All operational areas	All operational areas	Off-site recycling
Food Waste	Residential flats, Private dining area, Food and beverage (F&B) retail areas	Communal kitchens, Espresso bar (café), Mini mart	Off-site organics
Cooking Oil	F&B retail areas	N/A	Off-site recycling
Hard/ bulky items including crates, pallets and metal	Residential flats, F&B retail areas	Co-living units, Mini mart	Off-site recycling/ off-site landfill

3.1.1 Waste Generation Assumptions

The following assumptions have been applied when calculating operational waste generation volumes for the proposed development:

- CoS Guidelines waste generation rates have been used where Parramatta DCP do not provide waste generation rates.
- Waste generation from parking areas, storage areas, EOT facilities, communal bathrooms, loading dock, bike store, basketball court, stairwell and lifts will be negligible and therefore have been excluded from the waste generation estimates.
- The residential component of the shop-top housing has been evaluated in accordance with Section 4.0 – Residential Flat Building, and waste generation is therefore estimated based on the number of units.
- The housing component of co-living tower has been assessed under Section 10 – Boarding Houses, with waste projections determined by the number of residents as per Paramatta DCP.
- Gathering spaces such as lobby, lounge and communal open spaces areas are expected to generate waste.
- Retail space within shop top housing will be F&B retail, with retail waste collected daily by a private contractor and residential waste collection managed by CoPC.
- The retail space within co-living housing will operate as a mini mart, with no food preparation taking place on site. All co-living with ancillary retail will be collected daily by a private contractor.
- Garden organics will be removed by contractors conducting routine landscaping onsite.

3.1.2 Operational Waste Generation

Waste generation volumes for the proposed development have been calculated to estimate the waste room area and collection frequency requirements. Waste generation volumes have been calculated from the waste generation rates provided in the Parramatta DCP or CoS Guidelines for each area.

In line with the Parramatta DCP, the residential component of the shop-top housing has been evaluated in accordance with Section 4.0 – Residential Flat Building, and waste generation is therefore estimated based on the number of units. Conversely, the co-living tower has been assessed under Section 10 – Boarding Houses, with waste projections determined by the number of residents.

The development includes 479 residential units in a 70-storey shop top housing tower and provides 608 beds (indicative of number of residents) in a 14-storey co-living tower. Waste generation rates for other usage areas have been estimated based on the Gross Floor Area (GFA) as indicated in Table 8

The GFA data is estimated based on the architectural plans for the shop top housing and co-living and ancillary retail tower (refer to Table 3)

Table 8 Proposed development area schedule

Area Use	Area type	Total GFA (m ²)
Shop top housing tower		
Retail (F&B)	Restaurant/ eating	374
Private dinning	Restaurant/ eating	69
Lobby/Lounge	Lobby	317
Amenities: • Yoga/ Pilates/ Dance • Gym • Games room • Co-working space • Resident's Lounge • Spa Area	Commercial offices ¹	566
Total		1326
Co-living tower		
Retail (Mini mart)	Convenience store	64
Espresso bar	Restaurant/ eating	140
Lobby	Lobby	181
Amenities: • Yoga • Gym • Jam space (music room) • Laundry • Communal spaces • Manager's room	Commercial offices	1708
Total		2093

3.1.3 Generation Rates

Anticipated waste generation volumes for the development have been calculated using residential and co-living unit generation rates adapted from the Parramatta DCP. Appropriate waste generation rates for other areas have been selected from the CoS Guidelines, as shown in Table 9, based on the specified area uses.

Table 9 Waste generation rates

Area Type	General Waste Volume	Recycling Volume	Food Waste
Residential flats	80 L/unit/week	60 L/unit/week	5 L/unit/week
Co-living units	2x 240L + 40L per person	2x 240L + 40L per person	-
Commercial offices	15 L/100m ² /day	25 L/100m ² /day	5 L/100m ² /day
Lobby	20 L/100m ² /day	25 L/100m ² /day	0 L/100m ² /day
Restaurants/eating	100 L/100m ² /day	500 L/100m ² /day	100 L/100m ² /day

¹ Lowest waste generation rate from CoS guidelines

Area Type	General Waste Volume	Recycling Volume	Food Waste
Convenience store	50 L/100m2/day	250 L/100m2/day	10 L/100m2/day

3.1.4 Total Waste Generation

The total daily waste generation was calculated by multiplying the GFA or the number of units/residents in each area type by the corresponding waste generation rate specified in Table 10. It should be noted that co-living housing is classified as commercial space, therefore, food waste generation rates are combined with landfill waste generation rates. However, upon implementation of the NSW FO mandate for this development, it is anticipated that additional food waste bins will be provided within the designated future-proofing area to cater to food wastes generated in all commercial spaces in the co-living with ancillary retail (refer to Figure 10).

Table 10 Total waste generation

Area Type		General Waste (L/day)	Comingles Recycling (L/day)	Food Waste (L/day)
Shop-top housing				
Residential flats	479 units	5,474	4,106	342
Retail (F&B)	374 m ²	374	1,870	374
Private dinning	69 m ²	68	342	68
Lobby/Lounge	317 m ²	63	79	0
Amenities	566 m ²	85	141	28
Total		6,064	6,538	812
Co-living housing with ancillary retail				
Co-living units	608 residents	3,543	3,543	-
Retail (Mini mart)	64 m ²	38	160	-
Espresso bar	140 m ²	280	700	-
Lobby	181 m ²	36	45	-
Amenities	1,708 m ²	342	427	-
Total		4,239	4,875	-

3.2 Waste Management System

Shop-top housing tower

The proposed operational waste management system for the residential and retail flows for the shop top housing tower is detailed below in Figure 2 and Figure 3.

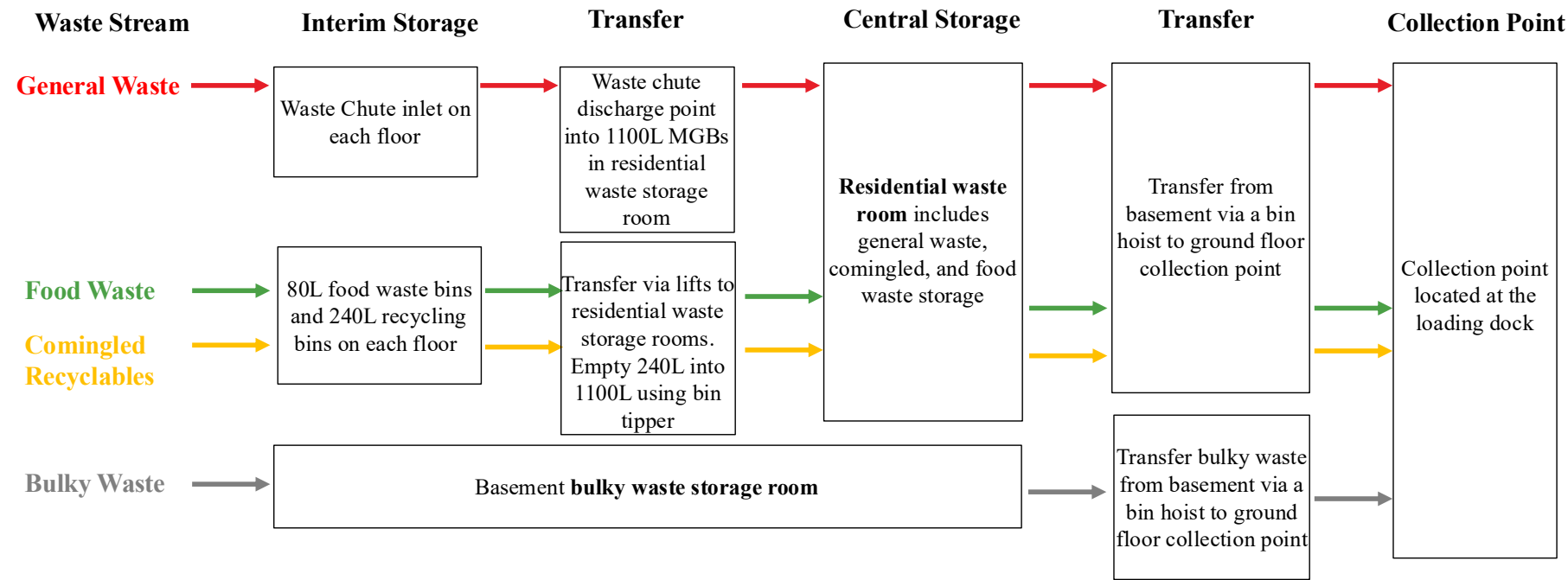


Figure 2: Proposed waste management system for residential waste flows

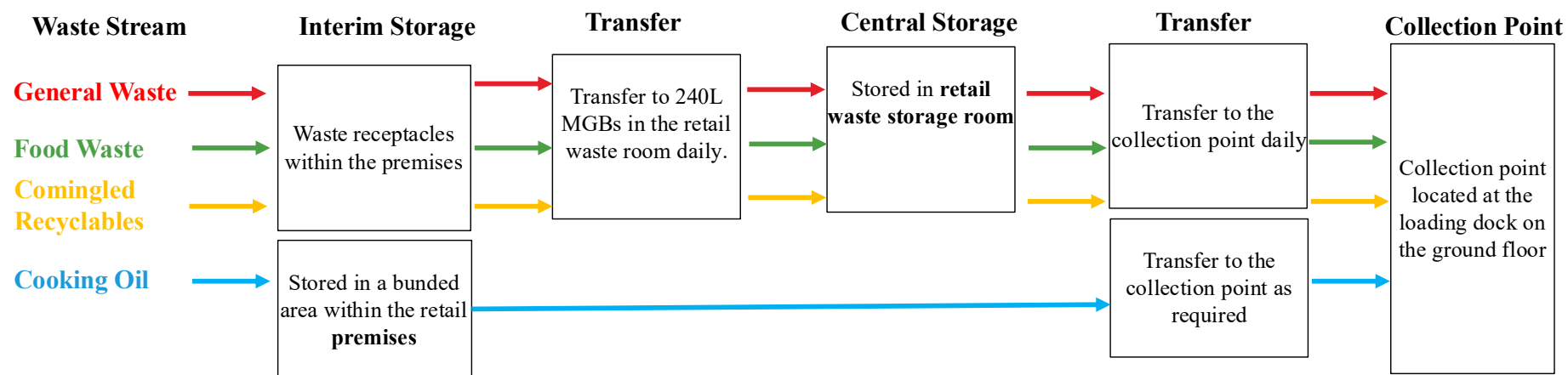


Figure 3: Proposed waste management system for retail waste flows

Co-living with ancillary retail tower

The proposed operational waste management system for the co-living housing with ancillary retail tower is detailed below in Figure 4.

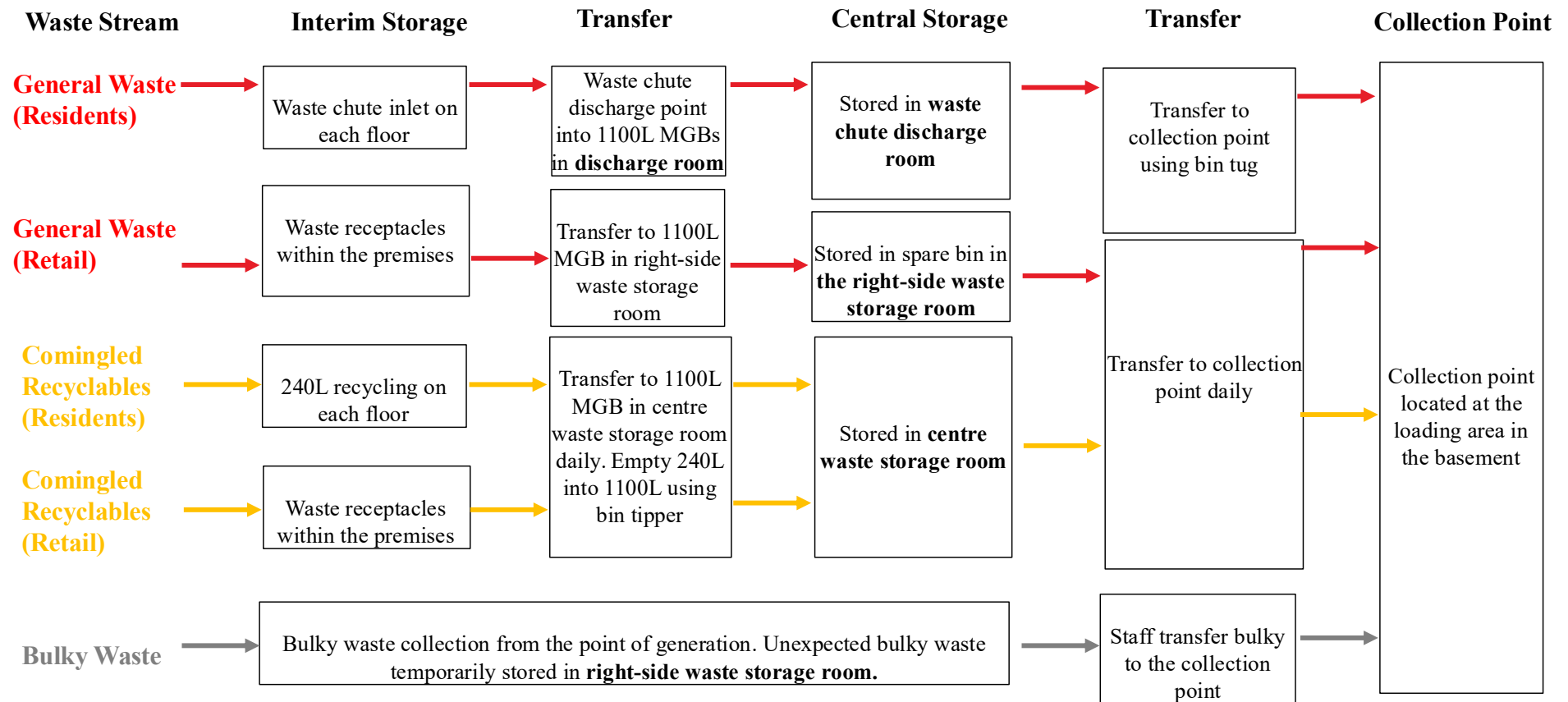


Figure 4: Proposed waste management system for co-living tower waste flows

3.3 Waste Room

3.3.1 Location

Shop-top housing tower

The residential waste room will be located in the first basement level of the tower to reduce amenity impacts for residents and visitors of the retail areas (Figure 5). Bins stored in this area will be transported to the ground floor loading dock using a bin hoist and subsequently moved to the collection point at the scheduled collection time (Figure 6).

The residential waste room will also contain the waste chute discharge point and a rotating carousel for general waste bins.

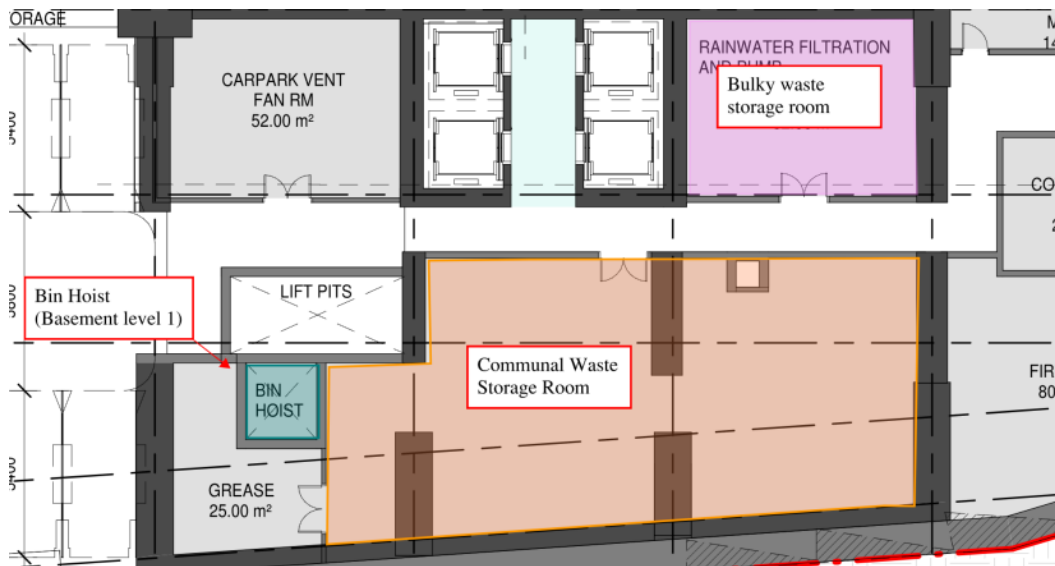


Figure 5: Residential waste storage room and bin hoist - Basement level 1 (highlighted areas are not to scale and are high level areas to indicate zones)

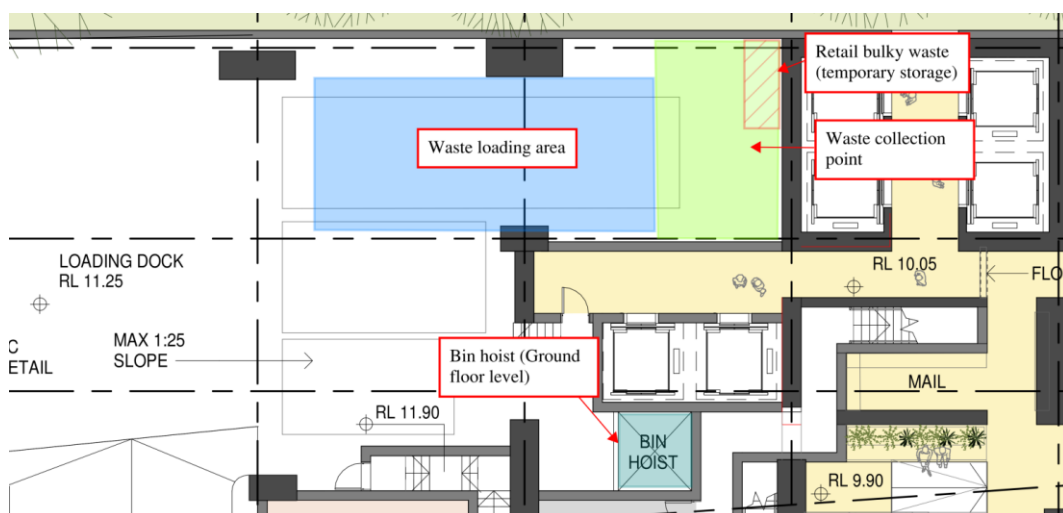


Figure 6: Bin hoist, waste collection and loading area – Ground floor (highlighted areas are not to scale and are high level areas to indicate zones)

Co-living with ancillary retail tower

For the co-living and ancillary retail tower, there are three waste storage areas (left, centre and right waste rooms) due to the constraints of the pre-existing basement layout of the commercial building, as shown in Figure 7.

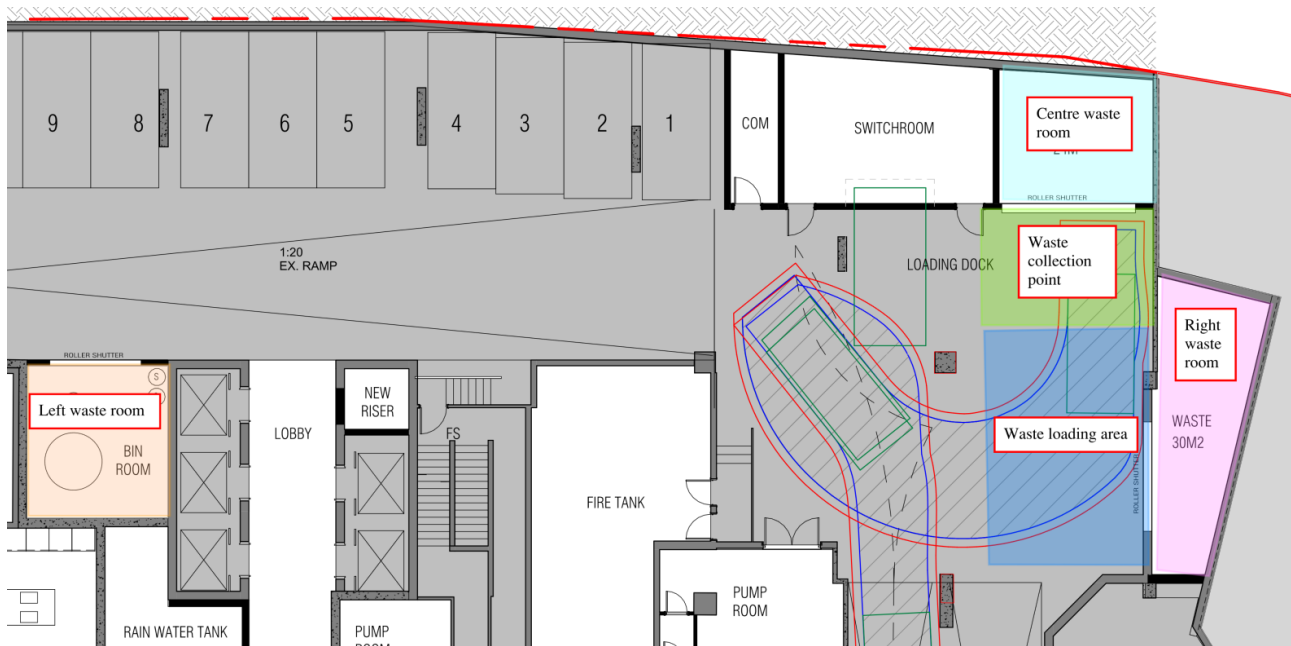


Figure 7: Waste chute discharge room (left), centre waste room (middle) and right-side waste room (right) – Basement 01 (highlighted areas are not to scale and are high level areas to indicate zones)

3.3.2 Path of Travel for moving bins from storage area to collection point

Shop-top housing tower

Bins stored in basement residential storage area Figure 5 will be transported to the ground floor loading dock via a bin hoist and subsequently moved to the collection point prior to the scheduled collection time (Figure 4). As the collection point is located near to the loading dock, waste collection vehicles must drive at slow speeds and look out for staff and vehicle movement to and from the resident car park access to the left of the loading dock.

Co-living with ancillary retail tower

Bins located in the waste chute discharge room, as well as the centre and right-side waste rooms, will be transferred to the designated collection point (Figure 7) prior to the scheduled collections. As this collection point is adjacent to the End of Trip facilities, it is recommended that collections be timed to coincide with periods of low resident usage of these amenities and the collection vehicle drive at slow speeds.

Please note that access to the car park will be temporarily restricted by the collection vehicle during waste collection for this tower. Therefore waste collections will be scheduled for when basement car park demand is low.

3.3.3 Waste Storage Area Requirements and Assumptions

Shop-top housing tower

The waste storage area requirement has been calculated using the daily waste generation volumes, and proposed equipment required. Key assumptions are detailed below:

- To allow for sufficient manoeuvring and accessibility of the MGBs within the waste and recycling storage facility, an MGB Scaling factor of 2 has been applied. The area requirement for MGB storage is shown in Table 11 below.
- The bin wash area will be bunded, have a water connection and be drained to sewer.
- Bulky waste generated in the shop top housing tower will be stored within the dedicated 52 m² bulky waste storage room

Table 11 Area requirement estimation for waste rooms – shop top housing tower

Storage Location	Waste Stream	Storage Requirements	Area (m ²)
Shop top housing			
Residential waste room (Twice weekly collection)	General waste	(21 + 1 spare ²) x 1100L MGBs	66
	Commingled recycling	17 x 1100L MGBs	51
	Food waste	8 x 240L MGBs	7
	Bin tipper	Needs to be accessible for use Requires power points for charging	2
	Bin wash	Bin washing area	4
	Future proofing area	Additional 15% of the bin storage area	19
	Total		149
Bulky waste room	Bulky waste storage area		50
Retail waste room (Daily collection)	General waste	1 x 240L MGBs	2
	Commingled recycling	4 x 240L MGBs	7
	Food waste	1 x 240L MGBs	2
	Cooking oil	Bunded area for storage of cooking oil	2
	Total		13

Bin numbers and area requirements for the shop top housing tower are shown in Table 11. The residential waste room is 142 m², bulky waste storage is 52 m², and retail waste room is 16.9 m². These areas are sufficient to store waste and recycling for all units, retail and amenities, but do not yet include the 15% future proofing allocation (as shown in Figure 8). An additional 19 m² for future proofing will be included in the next design stage. A bin wash area will be installed within the waste room and consist of a graded floor to provide efficient drainage, with a water connection and a drainage system connected to the sewer. A separate bunded area will be allocated in the retail waste room for cooking oil.

Co-living with ancillary retail tower

The waste storage area requirement has been calculated using the daily waste generation volumes, and proposed equipment required. Key assumptions are detailed below:

- To allow for sufficient manoeuvring and accessibility of the MGBs within the waste and recycling storage facility, an MGB Scaling factor of 2 has been applied. The area requirement for MGB storage is shown in Table 12 below.
- The bin wash area will have a water connection and be drained to sewer.
- The daily generation of bulky waste in the co-living tower is anticipated to be low, as all units are expected to be pre-furnished. Larger quantities may be generated during scheduled events such as mattress replacements or minor renovations. In these cases, bulky waste collection will be arranged and removed directly from the point of generation. In the event of unexpected bulky waste, a 14 m² area is designated for temporary storage, pending collection.

² This additional bin is intended to be placed beneath the waste chute discharge point while the other general waste bins are being serviced.

Table 12: Area requirement estimation for waste rooms - co-living with ancillary retail tower

Storage Location	Waste Stream	Storage Requirements	Area (m ²)
Co-living with ancillary retail tower			
Communal waste storage rooms (waste chute discharge room, centre, right) (Daily collection)	General Waste	(4 + 1 spare ³) x 1100L MGBs	15
	Commingled recycling	5 x 1100L MGBs	15
	Bin Tug	Needs to be accessible for use Requires power points for charging	2
	Bin Tipper	Needs to be accessible for use Requires power points for charging	2
	Bin Wash	Bin washing area	4
	Future proofing area	Additional 15% of the bin storage area	4.5
	Bulky waste	Short-term storage area	14
Total			57

Based on the bin numbers and area requirements outlined in Table 12, the size of the left (26 m²), centre (24 m²), and right (30 m²) waste rooms are adequate. A bin wash area will be installed within the waste room and consist of a graded floor to provide efficient drainage, with a water connection and a drainage system connected to the sewer. The bin tug will be used while transferring 1100L MGB bins from the waste chute discharge room to the collection point via a 1:20 ramp.

3.3.4 Location and Layouts

Shop-top housing tower

The bin layouts and locations for the residential (Figure 8) and retail (Figure 9) waste rooms are shown below.

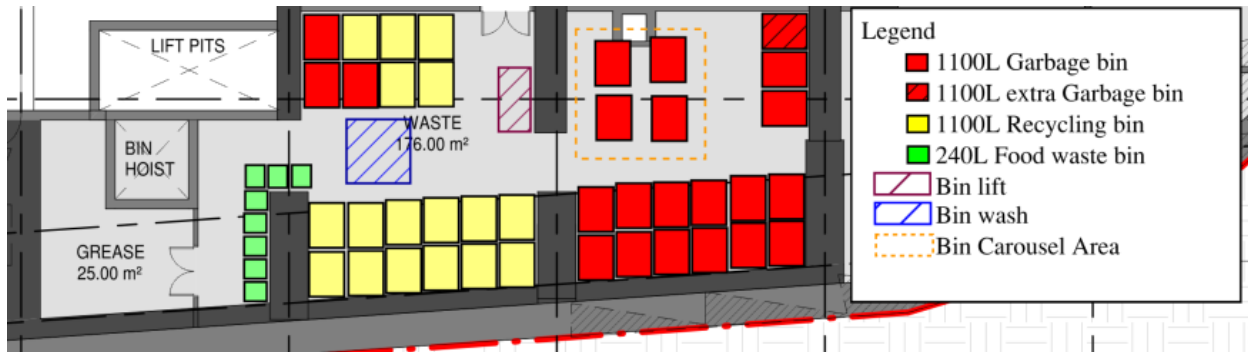


Figure 8: Bin layout for residential waste storage room - shop top housing

³ This additional bin is intended to be placed beneath the waste chute discharge point while the other general waste bins are being serviced

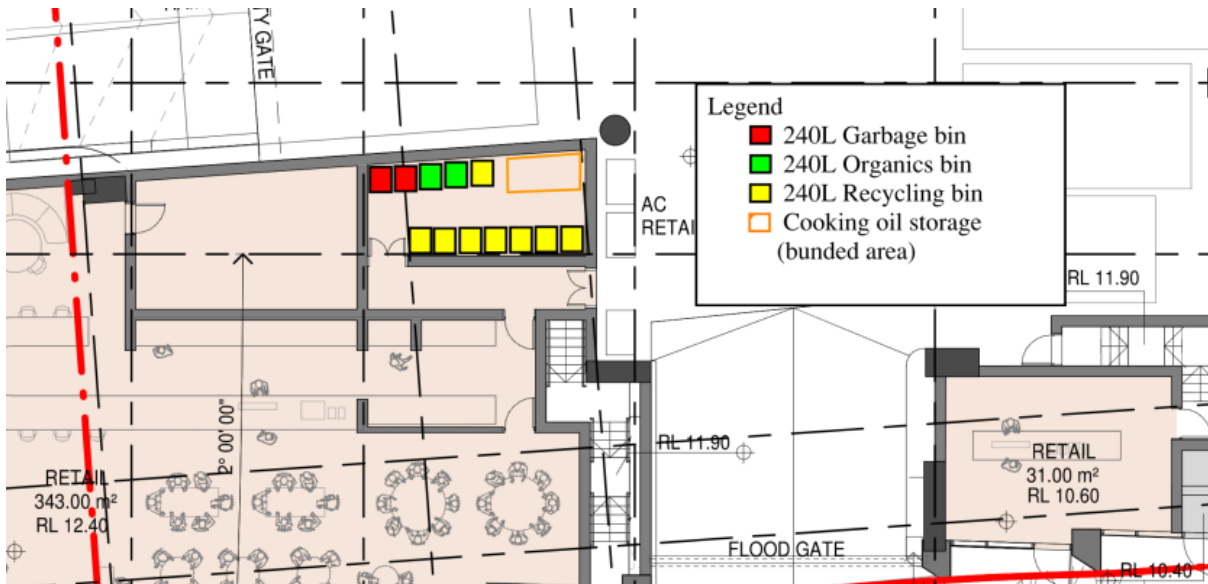


Figure 9: Bin layout for retail waste storage room - shop top housing

Co-living with ancillary retail tower

The bin layouts and locations for waste discharge room (left-side waste room), centre and right-side waste rooms are shown in Figure 10 below.

- The waste chute discharge point and the four-bin carousel for general waste is contained in the waste discharge room also called the left-side waste room.
- The right-side waste room will provide short-term storage for bulky waste, a bin tug, an extra red bin and the designated future proofing area.
- The centre waste room will hold the yellow bins, bin lift for transferring waste from the interim 240L bins to the 1100L MGBs and the bin wash area.

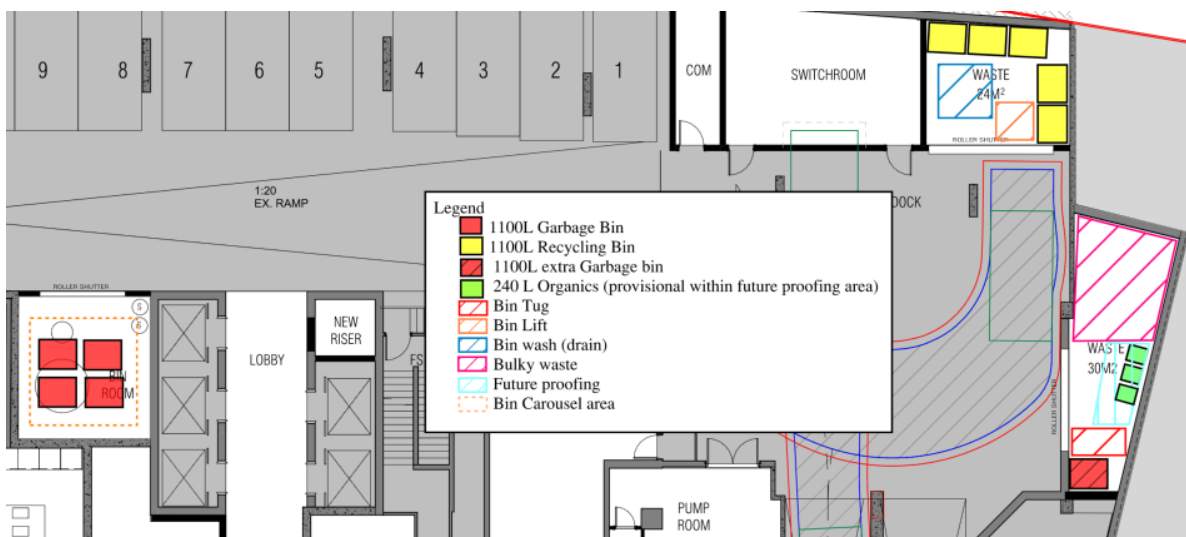


Figure 10: Bin layout for waste discharge room (left), centre waste room and right-side waste room – co-living housing with ancillary retail

3.4 Design

The Waste Room must be designed according to best practice provision, the Building Code of Australia and all relevant Australian Standards. Refer to Table 13 below.

Table 13 Waste storage design provisions

Design aspect	Design provision
General	All waste management facilities will be compliant with the Building Code of Australia (BCA) and all relevant Australian Standards. The waste management system and storage areas will not be visible from the exterior of the building.
Surfaces	The floors of the waste and recycling storage facility and holding areas will be constructed of concrete of at least 75mm thickness and graded and drained to the sewerage system. The floors will be finished to a smooth, even surface, and covered at their intersection with walls and plinths.
Structure	The walls, ceilings and floors of the storage rooms will be finished with a light colour. The walls of the waste storage rooms will be constructed of approved solid impervious material and will be cement rendered internally to a smooth even surface covered at all intersections. The storage area will be constructed and finished to prevent absorption of liquids and odours, and will be easily cleanable.
Doors	A close-fitting and self-closing door or gate operable from within the room must be fitted to all waste and recycling storage rooms. At least one door to the waste and recycling storage area must have sufficient dimensions to allow the entry and exit of waste containers of a capacity nominated for the development.
Water	The waste and recycling storage facility must be provided with an adequate supply of cold water. A floor waste basket trap connected to the sewer shall be provided. Storm water shall not be permitted to enter this floor waste trap.
Drainage	The waste and recycling storage facility will be sealed and bunded internally, with all water draining to the sewage system.
Lighting	Adequate lighting will be provided for all rooms, controllable from a switch located both outside and inside the room. Lighting will ensure safe access to the area at night. Automatic light sensors may be installed for ease of manual handling during transfer of MGBs.
Pest control	The potential for vermin must be minimised. To achieve this, all waste and recycling awaiting collection is to be stored in a Council approved container (such as an MGB or bulk MGB).
Ventilation	The waste and recycling storage facility and waste holding areas will be supplied with an approved system of mechanical exhaust ventilation, exhausting at a rate of 5L/s.m ² floor area, with a minimum rate of 100L/s minimum or permanent, unobstructed natural ventilation openings direct to the external air, not less than one-twentieth (1/20th) of the floor area. Mechanical exhaust systems shall comply with AS1668 and not cause any inconvenience, noise, or odour problem.
Safety	Smoke detectors will be fitted in accordance with AS1670 Automatic Fire Detection and Alarm Systems and connected to the fire prevention system of the building. All equipment will be protected from theft and vandalism.
Signage	Signs will be provided to demonstrate how to use the waste management system (including segregation of wastes for recycling), as well as appropriate safety signage. Standard signage on how to use the waste management system and what materials are acceptable in the recycling system will be posted in all waste and recycling rooms, waste service compartments and communal MGB areas, after the Occupation Certificate is issued but before the first users occupy the building. This signage is available from Council.

3.5 Collection

3.5.1 Collection Vehicle Access and Clearance

Shop-top housing tower

The waste collection vehicle will be required to service the shop top housing tower twice a week for general waste, commingled recycling and food waste. Servicing will occur from the collection point shown in Figure 6. The Parramatta DCP 2023 does not specify the dimensions of collection vehicles; therefore, the waste collection point is based on the CoS Guidelines rear-load truck specifications. The CoS vehicle design parameters are outlined in Table 14 below. The swept path for the waste vehicle access is included in Appendix B.

Table 14 CoS rear loading collection vehicle dimensions

Rear-load Truck	Value
Length overall (m)	9.25
Width overall (m)	2.6
Travel height (m)	3.8
Maximum weight (t)	26
Turning circle radius – wall to wall (m)	10.5
Minimum clearance on both sides of the wheel path (mm)	600

The CoPC Guidelines stipulate that the minimum height for the entry and vehicle travel route must be 4.5 metres to ensure adequate clearance for waste collection vehicles. The loading dock has been designed to meet the 4.5 metre vertical clearance and other vehicle requirements listed in Table 14.

Co-living with ancillary retail tower

As the co-living tower is being renovated from a former commercial premise, the basement height is limited to 3.2 metres in accordance with the existing structural allowance. Due to this restriction, a rear-loading Small Rigid Vehicle (SRV) through a private waste collection contractor will be required to perform daily waste collection services for this tower.

The swept path for the waste vehicle access is included in Appendix B.

Appendix A Parramatta DCP C&D Waste Management Plan Template

14.0 STAGE ONE – DEMOLITION

To be completed for proposal involving demolition:

Materials on-site		Destination		
		Reuse & Recycling		Disposal
Type of material	Estimated Volume (m ³) or Area (m ²) or weight (tonnes)	On-Site Specify how materials will be reused or recycled on-site	Off-Site Specify the contractor and recycling outlet	Specify the contractor and landfill site
Bricks* <i>*Example only</i>	2m ³ *	Clean and reuse for footings*	Broken bricks sent by XYZ demolishers to ABC Recycling company (including address and contact number)*	Nil to landfill* or sent by XYZ demolishers to ABC Recycling company (including address and contact number)*
Excavation material				
Green waste				
Bricks				
Tiles				
Concrete				
Timber				
Plasterboard				

Materials on-site		Destination		
		Reuse & Recycling		Disposal
Type of material	Estimated Volume (m³) or Area (m²) or weight (tonnes)	On-Site Specify how materials will be reused or recycled on-site	Off-Site Specify the contractor and recycling outlet	Specify the contractor and landfill site
Metals				
Asbestos				
Other waste				

How will waste be separated and/or stored onsite for reuse and recycling? How will site operations be managed to ensure minimal waste creation and maximum reuse and recycling?

(e.g. Staff training, selected deconstruction v. straight demolition, waste management requirements stipulated in contracts with sub-contractors, on-going checks by site supervisors, separate area set aside for sorted wastes, clear signage for waste areas etc.)

Note: Details of the site area to be used for on-site separation, treatment and storage (including weather protection) should be provided on plan drawings accompanying your application.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

15.0 STAGE TWO – CONSTRUCTION

To be completed for proposals involving construction:

Materials on-site		Destination		
		Reuse & Recycling		Disposal
Type of material	Estimated Volume (m ³) or Area (m ²) or weight (tonnes)	On-Site Specify how materials will be reused or recycled on-site	Off-Site Specify the contractor and recycling outlet	Specify the contractor and landfill site
Bricks * *Example only	2m ³ *	Clean and reuse for footings *	Broken bricks sent by XYZ demolishers to ABC Recycling company (including address and contact number) *	Nil to landfill* or sent by XYZ demolishers to ABC Recycling company (including address and contact number) *
Excavation material				
Green waste				
Bricks				
Tiles				
Concrete				
Timber				
Plasterboard				

Materials on-site		Destination		
		Reuse & Recycling		Disposal
Type of material	Estimated Volume (m³) or Area (m²) or weight (tonnes)	On-Site Specify how materials will be reused or recycled on-site	Off-Site Specify the contractor and recycling outlet	Specify the contractor and landfill site
Metals				
Asbestos				
Other waste				

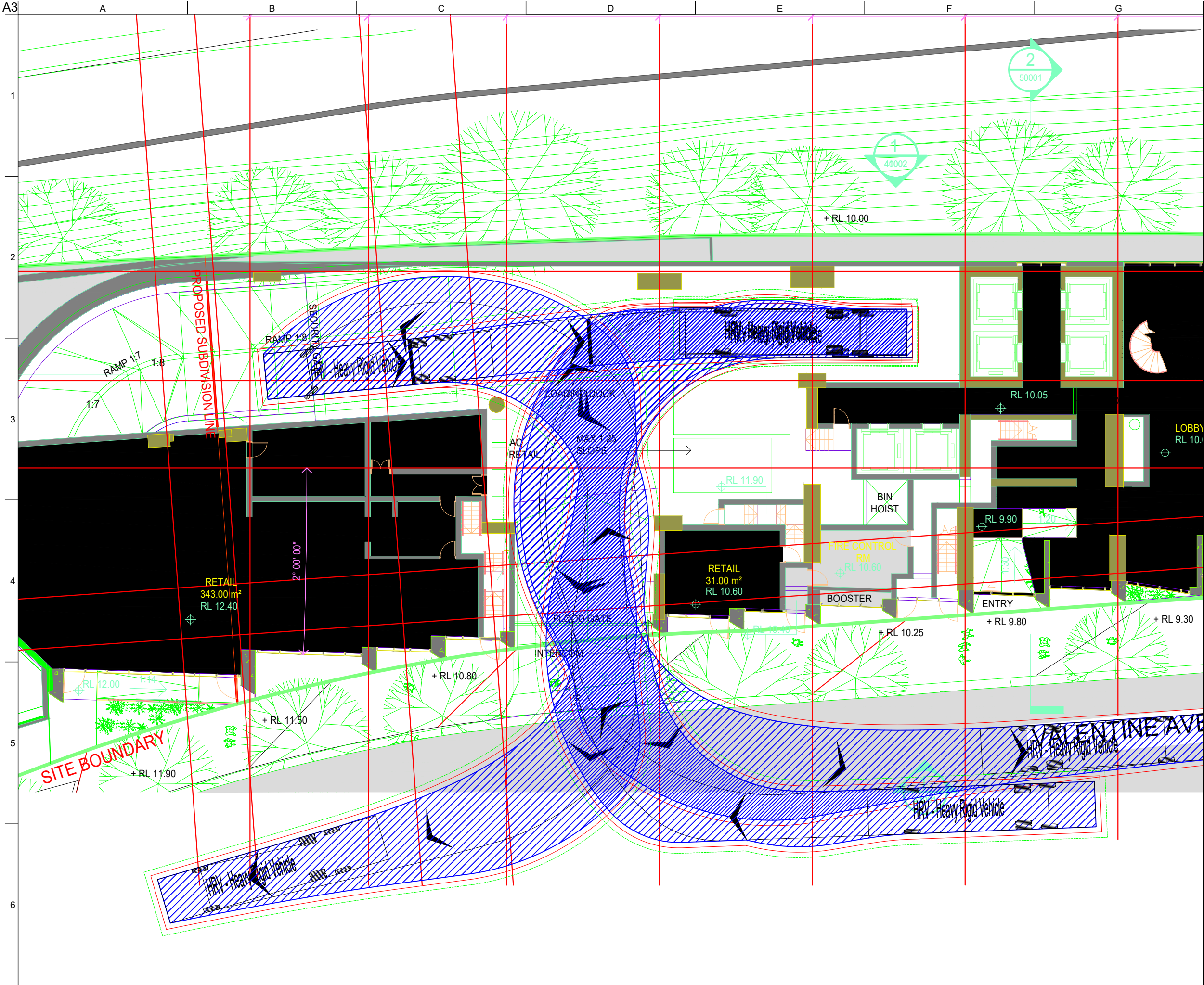
How will waste be separated and/or stored onsite for reuse and recycling? How will site operations be managed to ensure minimal waste creation and maximum reuse and recycling?

(e.g. staff training, selected deconstruction v. straight demolition, waste management requirements stipulated in contracts with sub-contractors, on-going checks by site supervisors, separate area set aside for sorted wastes, clear signage for waste areas etc.)

Note: Details of the site area to be used for on-site separation, treatment and storage (including weather protection) should be provided on plan drawings accompanying your application.

[illegible]

Appendix B Waste Vehicle Swept Paths



Legend

Body Envelope

300mm Envelope

Wheel Envelope

Design Vehicle(s)

12.5

2.4

6.133

1.4

HRV - Heavy Rigid Vehicle

Overall Length

Overall Width

Overall Body Height

Min Body Ground Clearance

Track Width

Lock to Lock Time

Curb to Curb Turning Radius

12.500m

2.500m

4.300m

0.417m

2.500m

6.00 sec

12.500m

D	16/12/25	JRT	JRT	JRT
C	26/11/25	JRT	JRT	JRT
B	03/11/25	JRT	JRT	JRT
A	16/10/25	JRT	JRT	JRT
For information				
Issue	Date	By	Chkd	Appd

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www.arup.com.au

Client

Holdmark

Job Title

Valentine Avenue

Drawing Title

Ground Floor

HRV

Scale at A3

1:200

Discipline

Transport

Drawing Status

Draft sketch

Job No

303074-00

Drawing No

SKT001

Issue

D