40-48 Redan St, Mosman

Waste Management Plan

Mosman Land No 1 Pty Ltd

C/- Time & Place
Level 34 - Suite 3402
Australia Square
264 George Street
Sydney NSW 2000

Prepared by:

SLR Consulting Australia Pty Ltd

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Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
3.0	20 February 2026	Andrew Quinn	Miles Mason	Andrew Quinn

Basis of Report

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Mosman Land No 1 Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

Executive Summary

This waste management plan (WMP) has been prepared by SLR Consulting to accompany a state significant development application (SSDA) for the construction and operation of a residential development at 40-48 Redan Street, Mosman in Mosman City Council area.

The development consists of 53 residential dwellings in two-, three- and four-bedroom configurations, communal open space and provision of 15% affordable housing to be managed by a community housing provider for a period of 15 years.

This WMP has been prepared to address the housing Secretary's Environmental Assessment Requirements (SEARs) guided by:

- Mosman Residential Development Control Plan 2012
- Mosman Waste Minimisation Policy 2012
- NSW EPA (2014) *Waste Classification Guidelines*

This WMP concludes that the proposed development is suitable, results in minimal impact due to waste management and warrants approval with no mitigation measures required.

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1.0 Introduction

This waste management plan (WMP) has been prepared to support a state significant development application (SSDA) SSD- 93020230 for the site at 40-48 Redan Street, Mosman.

The Minister for Planning and Public Spaces, or his delegate, is the consent authority for the SSDA and this application is lodged with the NSW Department of Planning, Housing and Infrastructure for assessment.

The SSDA seeks consent for a multi-storey residential development that utilises the Low and Mid-Rise Housing (LMR) and In-fill Affordable Housing policies recently introduced under the State Environmental Planning Policy (Housing) 2021. The design is outlined in the Architectural Plan set prepared by FJC Studio and provided within the SSDA.

This report has been prepared in response to the requirements contained within the Secretary's Environmental Assessment Requirements (SEARs) dated 5 September 2025 (SSD-93020230). Specifically, this report has been prepared to respond to the SEARS requirements shown in Table 1 below.

Table 1 SEARs

Description of requirement	Section reference (this report)
Waste Management Provide details of an overall strategy to be implemented to manage, reuse, recycle and safely dispose of waste, including in accordance with any council waste management requirements.	For demolition and construction phases please refer to Section 7.0 Demolition and Construction Waste and Recycling Management For the operational phase please refer to Section 8.0 Operational Waste Management
Identify appropriately sited waste storage areas, collection access paths/roads, and appropriate servicing arrangements for the site	For site the clearance and construction phases please refer to Section 7.8 Waste Storage and Servicing For the operational phase please refer to Section 8.7 Location and size of waste storage rooms

The development is in Mosman Council which expresses its requirements for waste management in its *Residential Development Control Plan 2012* and the *Mosman Waste Minimisation Policy 2012*. SLR has also considered the NSW Government's residential food separation mandate.

This WMP has been prepared to calculate waste quantities to ensure enough space is allowed for waste storage and that waste is properly handled during the site clearance, construction and operational phases of the project.

The following documents have been used as a guide:

- Mosman Residential Development Control Plan 2012
- Mosman Waste Minimisation Policy 2012
- NSW EPA (2014) *Waste Classification Guidelines.*[1]

This WMP applies to waste generated from the demolition, site preparation, construction and operational stages of the Development.

[1] Available online from https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste/waste-classification-guidelines

2.0 Project Description

The application seeks development consent for the redevelopment of the site for a multi-storey in-fill affordable housing residential development for 53 dwellings.

Specifically, this application seeks approval for the following:

- Demolition of the existing structures on site, including five dwellings and vehicle crossovers.
- Site preparation works including:
  - Tree removal
  - Excavation across the site.
- Construction of a multi-storey residential flat building comprising:
  - Two levels of basement for 106 car parking spaces, services and storage
  - 53 residential dwellings in two-, three- and four-bedroom configurations
  - Communal open space at ground level, Level 1 and Level 5.
- Ancillary vehicular entry and public domain works from Redan Street.
- Provision of 15% affordable housing to be managed by a community housing provider for a period of 15 years from date of the Occupation Certificate.
- Extension and augmentation of physical infrastructure and utilities as required.

Refer to Architectural Plans prepared by FJC Studio appended to the environmental impact statement.

3.0 The Site

The site is located at 40-48 Redan Street, Mosman and comprises the following landholdings:

- Lot 1 on Deposited Plan 33257
- Lot 2 on Deposited Plan 33257
- Lot 1 on Deposited Plan 921113
- Lot 13 on Deposited Plan 920285
- Lot 1 on Deposited Plan 455982
- Lot 9 on Deposited Plan 1350
- Lot 10 on Deposited Plan 1350
- Lot 11 on Deposited Plan 1350

The site is regular in shape and has an area of approximately 3,233 m^2. The site currently accommodates four, two-storey residential dwellings, and one, two-storey attached dwelling in a landscaped setting. The site has a primary frontage to Redan Street to the east and a rear frontage to Redan Lane to the west.

The site is in Mosman, a suburban local government area on Sydney's north shore. The site has excellent access to public amenities including supermarkets, cafes and destination shops along Military Road and at Spit Junction, and access to recreational areas including Balmoral Beach to the east and Georges Heights headland to the south. Spit Junction is a recognised town centre under the LMR policy. The site is also close to regular bus services in the immediate vicinity. The site is not a listed heritage item or located within a heritage conservation area, however Redan Street reserve is listed as a local heritage item in the Mosman Local Environmental Plan 2012. The site to the immediate south at 36-38 Redan Street containing a pair of semi-detached houses and to the east at 29 Redan Street containing a house are also a listed local heritage item.

The location of the site is shown in Figure 1 below.

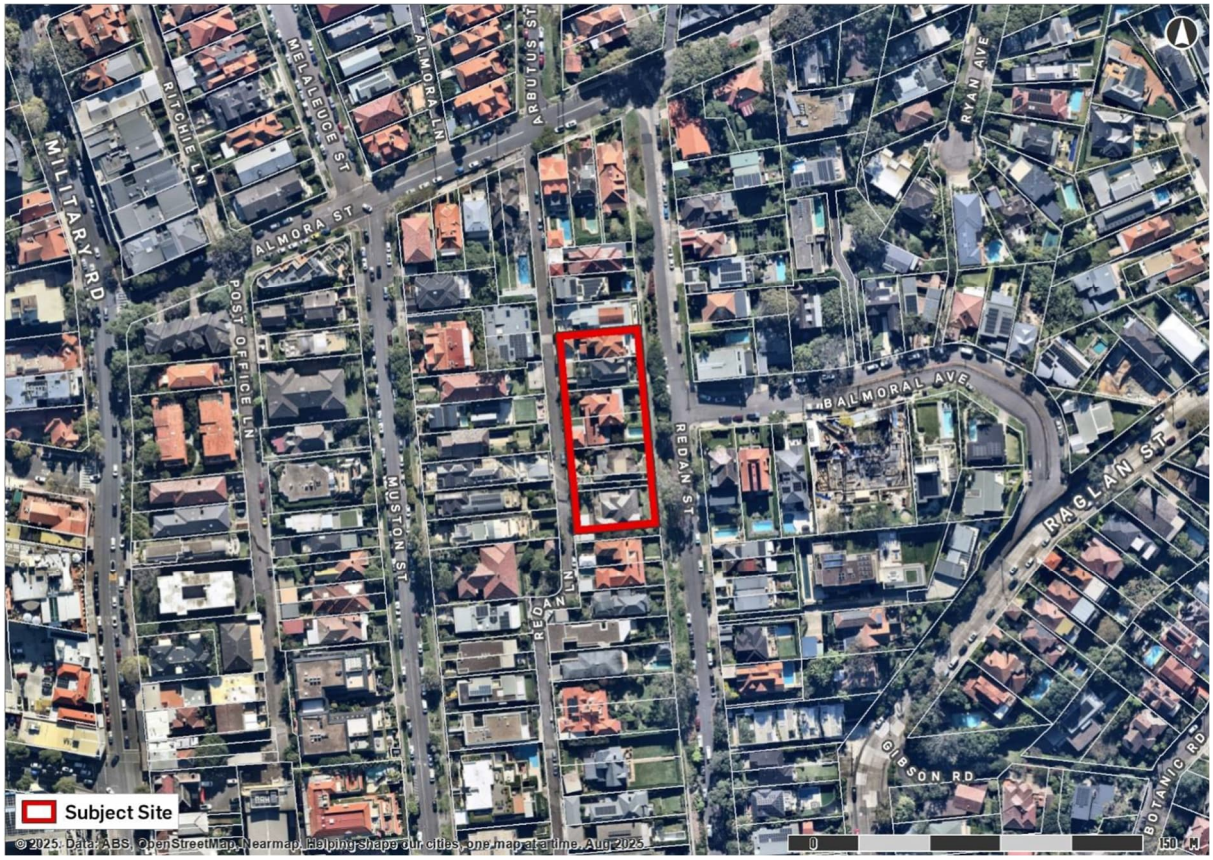


Figure 1 Site location

4.0 Objective

The principal objective of this WMP is to identify all potential waste type likely to be generated at the site during the demolition, construction and operational phases, including a description of how waste would be handled, processed and disposed of, or re-used or recycled, in accordance with Council's requirements.

5.0 Review of WMP

This WMP will be reviewed and updated:

- To remain consistent with waste and landfill regulations and guidelines
- If changes are made to site waste and recycling management, or
- To take advantage of new technologies, innovations and methodologies for waste or recycling management.

Copies of the original WMP and its future versions should be retained by the building manager. Changes made to the WMP, as well as the reasons for the changes made, should be documented by the building manager as part of the review process.

6.0 Waste Legislation and Guidance

6.1 Mosman Residential Development Control Plan 2012

The following sections of the Mosman RDCP, amended December 2024, are relevant to this project.

1.5 Aims of this Plan

The aim of this Plan is to support the provisions of LEP by way of more detailed planning and design guidelines for development. The particular aims of this Plan are to:

> *k) encourage waste minimisation and reduce the overall environmental impacts created by waste;*

Part 5 Site Planning and Design

5.12 Site facilities

Site facilities include:

- *waste and recycling storage areas.*

Proposals need to ensure adequate and appropriate provision of site facilities. These need to be accessible and not create amenity problems such as smell and unsightliness. The impacts of site facilities on neighbours, the overall appearance of the dwelling and the local streetscape need to be considered.

The design of site facilities for multiple dwellings needs particular consideration as these facilities are shared. They need to be designed and located so that they are accessible by all residents and do not detract from the amenity of any dwelling.

5.15 Waste management

The Mosman Waste Minimisation Policy 2012 (see Section 6.2 below) *aims to reduce the amount of waste produced and to maximise the percentage that is recycled and reused during the demolition and construction process and ongoing life of the development. It also aims to ensure that waste and recycling facilities within new developments are suitably designed and located in relation to accessibility, hygiene, flexibility, size and amenity.*

All applications for development, including demolition, construction and change of use, will be assessed against the relevant controls in the Waste Policy, available on Council's website and from Council's offices.

Objectives	Planning Controls
O1. To have sufficient on site temporary storage of waste.	*P1. All applications for development will be assessed against the relevant controls in the Mosman Waste Minimisation Policy 2012.* *P2. All buildings must include a designated waste/recycling storage area or room, designed and located in accordance with the Waste Policy as applicable. These areas must be able to accommodate Council's waste, recycling and garden waste bins and be adequately located to facilitate removal of waste to the Council collection point. (Refer Appendix C: Indicative Bin Sizes of the Waste Policy).* *P3. Door widths to waste/recycling storage rooms shall be a minimum width of 1100 mm and must be wide enough to accommodate the largest chosen bin size for that development with a gap on either side of the bin of no less than 100 mm.* *P4. Plans submitted for attached dwellings, multi dwelling housing and residential flat buildings must show the location of communal waste/recycling storage facilities in the form of a waste/recycling storage room (or rooms) designed in accordance with Appendix D: Waste Recycling Storage Rooms in Multi-Unit Dwellings of the Waste Policy.* *P6. For residential development that includes six or more dwellings, a dedicated room or caged area of a minimum of 8 m³ must be provided for the temporary storage of discarded bulky items which are awaiting removal. The storage area must be readily accessible to all residents and must be located close to the main waste storage room or area.*
O2. To have well designed waste storage areas.	*P9. Waste and recycling storage areas must be visually and physically integrated into the design of the development. Design elements such as fencing, landscaping and roof treatments may be used to screen the waste and recycling storage area.* *P10. Communal bin storage areas must be easy to clean, with access to a tap with hot and cold water and correct drainage of wastewater through a floor drain to the sewer, not the stormwater drain.* *P11. Waste/recycling storage areas must be designed and located to avoid adverse impacts on the amenity of adjoining sites.*

6.2 Mosman Waste Minimisation Policy 2012

1.5.4 State Significant Development/Major Projects

The Major Projects State Environmental Planning policy establishes the Minister (or by delegation the Department of Planning) as the consent authority for development categorised as Major Projects/State Significant Development.

Council will liaise with the Department of Planning (representing the Minister for Planning) to ensure appropriate outcomes in respect of waste minimisation and management.

The minimum requirements for such forms of development will be compliance with the aims and objectives of this Policy.

1.5.5 Departures from Controls of this Policy

Council may approve variations to the provisions herein in accordance with the principles of merit-based assessment.

Any request for variation to the provisions must be in writing and comprise part of the application. The request shall clearly demonstrate that:

- *The aims of the objective are met, and*
- *Compliance with the relevant provisions is unreasonable or unnecessary in the circumstances of the case.*

2 Submission Requirements

2.1 Documentation to be Submitted to Comply with the Requirements of this Policy

The central document of compliance with the Mosman Policy 2012 is a Site Waste Minimisation and Management Plan (SWMMP). All applications for development including demolition, construction and a change of use of a site/premise (sic)*, must be accompanied by a SWMMP.*

In addition to submission of the SWMMP, the waste management facilities proposed as part of the development shall be clearly illustrated on the plans of the proposed development accompanying the DA. Information regarding what should be included on the plans is also provided as a checklist in Appendix A.

2.2 Site Waste Minimisation and Management Plans

A Site Waste Minimisation and Management Plan (SWMMP) outlines measures to minimise and manage waste generated during demolition, construction and ongoing use of the site or premises.

The SWMPP nominates:

- *Volume and type of waste and recyclables to be generated during development*
- *Storage and treatment of waste and recyclables on site during development*
- *Disposal of residual waste and recyclables during development; and*
- *Operational procedures for ongoing waste management one the development is complete.*

The SWMMP must highlight the method of recycling or disposal and the waste management service provider.

2.3 Submission of a SWMMP

2.3.1 Development Generally

A SWMMP must be submitted for all types of development including demolition, construction and ongoing use of the site or premises, including local development, integrated development and state significant and major project development. More details are required in SWMMPs for larger and more complex developments.

2.4 Waste/Recycling Generation Rates

In the absence of project specific calculations, the rates specified in Appendix B Waste/Recycling Generation Rates and Council's current rate of provision of services to residential properties can be used to inform the compilation of a SWMMP.

4 Development-Specific Assessment Criteria/Controls

4.2 Attached Dwellings, Multi Dwelling Housing and Residential Flat Buildings

4.2.4 Controls/Requirements

- *A completed Site Waste Minimisation and Management Plan (SWMMP) shall accompany the application at CC stage using the SWMMP Template at Appendix A;*

The following minimum collection and storage facilities shall be provided:

- *Each dwelling unit should be provided with an indoor waste/recycling cupboard (or other appropriate storage space) for the interim storage of a minimum one day's garbage and recycling generation*
- *Residential flat buildings must include communal waste/recycling storage facilities in the form of a waste/recycling storage room (or rooms), design in accordance with Appendix D Waste Recycling/Storage Rooms in Multi-Unit Dwellings and the Better Practice Guide for Waste Management in Multi-Unit Dwellings (DECC 2008)*
- *Space must be provided for an individual compost container/work farm for each dwelling OR for a communal compost container/work farm; the siting of which will have regard to potential amenity impacts*
- *The waste/recycling storage area(s) or room(s) must be of a size that can comfortably accommodate separate garbage. Recycling and garden waste containers at the rate of Council provision*
- *For multiple dwellings that include six or more dwellings, a dedicated room or caged areas of a minimum of 8 m^3, mist be provided for the temporary storage of discarded bulky items which are awaiting removal. The storage area must be readily accessible to all residents and mist be located close to the main waste storage room or area*
- *Plans submitted with a DA must show:*
    - *The location of an indoor waste/recycling cupboard (or other appropriate storage space) for each dwelling*
    - *The location of … a communal waste/recycling storage room(s) able to accommodate Council's waste, recycling and garden waste bins*
    - *The location of any garbage chute(s) and interim storage facilities for recyclable materials*
    - *The location of any service rooms (for accessing a garbage chute) on each floor of the building*
    - *The location of any waste compaction equipment*
    - *An identified location for individual compost containers or communal compost container*
    - *An identified collection point for the collection and emptying of Council's waste, recycling and garden bins*
    - *The path of travel for moving bins from the storage area to the identified collection point (if collection is to occur away from the storage area) and*
    - *The on-site path of travel for collection vehicles (if collection is to occur on-site), taking into account accessibility, width, height and grade*
- *Systems should be designed to maximise source separate and recovery of recyclables*
- *Waste management system should be design and operated to prevent the potential risk or injury or illness associated with the collection, storage and disposal of wastes*
- *The following location and design criteria shall apply to collection and storage facilities:*

- *There must be an unobstructed and continuous path of travel (as per Australian Standard 1428 Design for Access and Mobility 2001) from the waste/recycling storage area(s) or room(s) to:*
  - *The entry to any Adaptable Housing (as per Australian Standard 4299 Adaptable Housing 1995)*
  - *The principal entrance to each residential flat building*
  - *The point at which bins are collected/emptied*

  In instances where a proposal does not comply with these requirements Council will consider alternative proposals that seek to achieve a reasonable level of access to waste/recycling storage area(s) or room(s)
- *Communal waste storage areas should have adequate space to accommodate and manoeuvre Council's required number of waste and recycling containers*
- *Each service room and storage area must be located for convenient access by users and must be well ventilated and well lit*
- *Where site characteristics, number of bins and length of street frontage allow, bins may be collected from a kerbside location. Instances where kerbside bin collection is not appropriate, bins must be collected onsite. Bins that are collected onsite are to be collected either from the usual storage point or from an onsite temporary holding area located inside the property boundary and close to a property entrance*
- *In the bins need to be moved from normal storage areas to a different location for collection purposes, it is the responsibility of agents or the owners' corporation to move the bins to the collection pint no earlier that the evening before collection day and then to return the bins to their storage areas no later than the evening of collection day. Bins are to remain in their on-site storage areas at all other times.*
- *Residents should have access to a hot and cold water supply for the cleaning of bins and waste storage areas. Storage areas should be constructed and designed to be weather proof and easy to clean with wastewater discharge through a floor drain to a sewer*
- *For all properties that have a lockable street level storage area a council compatible (GAR) key system is necessary to allow access for collection staff. Please liaise with Council's Waste Services Team to arrange for installation of this system prior to occupancy. All costs for this system are to be borne by property managers*
- *Access for collection staff to the lockable street level storage areas must be by an external access door*
- *The design and location of waste storage areas/facilities should be such that they complement the design of both the development and the surrounding streetscape*
- *Developments containing four or more storeys should be provided with a suitable system for the transportation of waste and recyclables from each storey to waste storage/ collection areas*
- *Garbage chutes must be designed in accordance with Appendix F Garbage Chutes, the Building Code of Australia and Better Practice Guide for Waste Management in Multi-Unit Dwellings. Garbage chutes are not suitable for recyclable materials and must be clearly labelled to discourage improper use.*

Alternative interim disposal facilities for recycling should be provided at each point of access to the garbage chute system.

Appendix C: Indicative Bin Sizes

Bin type	*Height*	*Depth*	*Width*
80 litre bin	*870 mm*	*530 mm*	*450 mm*
120 litre bin	*940 mm*	*560 mm*	*485 mm*
140 litre bin	*925 mm*	*615 mm*	*535 mm*
240 litre bin	*1080 mm*	*735 mm*	*585 mm*

The dimensions are only a guide and differ slightly according to manufacturer, if bins have flat or dome lids and are used with different lifting devices.

Appendix C: Waste/Recycling Generation Rates

Premises Type	Waste Generation	Recyclable materials generation
Multi-unit dwelling	80 L/unit/week	40 L/unit/week

Appendix D: Waste Recycling/Storage Rooms in Multi-Unit Dwellings

Building Code of Australia

Waste/recycling storage rooms must be constructed in accordance with the requirements of the Building Cide of Australia (BCA)

Location and Appearance

- *Waste/recycling storage rooms must be integrated into the design of the overall development. It is preferable that such rooms be located behind the front building line. Wherever possible, the room should be in a basement location within the main building envelope (rather than a separate stand-alone structure). Materials and finishes visible from outside should be similar in style and quality to the external materials used in the rest of the development*
- *Waste/recycling storage rooms must be located and design in a manner that reduces adverse impacts upon the inhabitants of any dwellings on the site sand upon neighbouring properties. The location and design of the room should minimise adverse impacts associated with:*
  - *The proximity of the room to any dwelling*
  - *The visibility of the room*
  - *Noise generated by any equipment located within the room*
  - *Noise generated by the movement of bins into and out of the room*
  - *Noise generated by collection vehicles accessing the site; and*
  - *Odours emanating from the room.*

Size

- *Waste/recycling storage rooms must be of adequate size to comfortably accommodate all waste and recycling bins associated with the development.*

Layout

The gradient of waste/recycling storage rooms floors and the gradient of any associated access ramps must be sufficiently level so that access for the purposes of emptying containers can occur in accordance with WorkCover NSW Work Health and Safety requirements.

Within waste/recycling storage rooms, containers used for the storage of recyclable materials should be kept separate from (but close to) general waste containers – so that the potential for contamination or recyclable materials is minimised.

Appendix E: Garbage Truck Dimensions for Residential Waste Collection

Developments that require Council garbage trucks to enter the site for the collection of residential waste must be designed to accommodate on-site truck movement.

Requirements regarding vehicle turning circles and driveway width/gradient are contained in Australian Standard 2890.3 2002/Planning Facilities – off street commercial vehicles.

Typical Council Garbage Truck used for Domestic Waste Collection	
Length overall	*8.0 metres*
Width overall	*2.5 metres*
Operational height	*4.3 metres*
Travel height	*4.3 metres*
Weight (vehicle and load)	*22.5 tonnes*
Weight (vehicle only)	*13 tonnes*
Turning circle	*25.0 metres*

Appendix F: Garbage Chutes

Garbage chute design

- *Garbage chutes must be constructed in accordance with the requirements of the Building Code of Australia (BCA)*
- *Garbage chutes must be located and insulated in a manner that reduces noise impacts*
- *Chutes, services openings and charging devices must be constructed of material (such as metal) that is smooth, durable, impervious, non-corrosive and fire resistant*
- *Chutes, service openings and charging devices must be capable of being easily cleaned*
- *Chutes must be cylindrical and should have a diameter of at least 500 mm*
- *There must not be any bends (ore sections or reduced diameter) in the main shaft of the chute*
- *Internal overlaps in the chute must follow the direction of waste flow*
- *Chutes must deposit rubbish directly into a bin or compactor located withing a waste/recycling storage room*
- *A cut off device must be located at or near the base of the chute so that the bottom of the chute can be closed when the bin or compacting device at the bottom of the chute is withdrawn or being replaced*
- *The upper end of the chute should extend above the roofline of the building*

- *The upper end of a chute should be weather protected in a manner that doesn't impede the upward movement of air out of the chute.*

Garbage chute service room design

- *The service opening (for depositing rubbish into the main chute) in each floor of the building must be located in dedicated service room*
- *The charging device for each service opening must be self-closing and must not project into the main chute*
- *Branches connecting service openings to the main chute are to be no more than 1 m long*
- *Each service room must include containers for the storage of recyclable materials. Signage regarding the materials that can be recycling should be displayed near these containers*
- *Each service room must be located for convenient access by users and mist be well ventilated and well lit*
- *The floors, walls and ceilings of service rooms must be finished with smooth durable materials that are capable of being easily cleaned*
- *Service rooms must include signage that clearly describes the types of materials that can be deposited into the garbage chute and the types of materials which should be deposited into recycling bins*

6.3 NSW Government Requirement for Separation of Food

Under the Waste and Sustainable Materials Strategy 2041, the NSW Government has set out goals of halving organics (including food waste) going to landfill and achieving net zero emissions from organics in landfill by 2030.

To help achieve this, NSW proposes to mandate food organics collections from households from 1 July 2030. This will apply as follows:

- councils will have to make sure all relevant residential accommodation in their local government area is provided with enough organics collection bins for food waste and garden waste generated by residents in that accommodation
- organic waste collected must not be mixed with other waste during its transportation.

It is proposed that:

- the mandate will apply to all local government areas in NSW.
- the EPA will enforce compliance by councils
- there will be court-imposed penalties and fines for councils that do not comply
- the EPA will have discretion to grant exemptions from the mandates.

6.4 Other legislation and guidelines

Other specifications that are relevant to this development are detailed in Table 2 below.

Table 2 Legislation and guidance

Legislation and Guidance	Objectives
State and National legislation and guidelines	
Building Code of Australia (BCA) and relevant Australian Standards	The BCA has the aim of achieving nationally consistent, minimum necessary standards of relevant health and safety, amenity and sustainability objectives efficiently.
Council of Australian Governments National Construction Code	The National Construction Code sets the minimum requirements for the design, construction and performance of buildings throughout Australia.
NSW EPA's Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities 2012	These better practice guidelines present information on waste minimisation and resource recovery as well as information on commonly used waste management provisions. The guidelines also provide benchmarks for assessing waste production rates in Australia.
NSW Waste and Sustainable Materials Strategy 2041: Stage 1 – 2021-2027	Replacing the *NSW Waste Avoidance and Resource Recovery Strategy (2014-21)*, the NSW Waste and Sustainable Materials Strategy 2041 focuses on the transition of NSW to a circular economy. The strategy focuses on minimising what is thrown away, and to use and reuse resources more efficiently, making them as productive as possible. The strategy identifies the need to identify infrastructure needs, the mandating of separation of some organic waste streams, and incentivising biogas generation from waste materials.
NSW EPA Resource Recovery Orders and Resource Recovery Exemptions	The NSW EPA has issued a number of resource recovery orders and resource recovery exemptions under the POEO (Waste) Regulation 2014 for a range of waste that may be recovered for beneficial re-use. This waste typically includes those from demolition works. • Resource recovery orders present conditions which generators and processors of waste must meet to supply the waste material for beneficial re-use. • Resource recovery exemptions contain the conditions which consumers must meet to use waste for beneficial re-use.
NSW EPA's Waste Classification Guidelines 2014	The NSW EPA *Waste Classification Guidelines* assists waste generators to effectively manage, treat and dispose of waste to ensure the environmental and human health risks associated with waste are managed appropriately and in accordance with the *POEO Act 1997* and is associated regulations.
Protection of the Environment Operations Act (POEO) 1997 and Amendment Act 2011	The POEO Act 1997 and POEO Amendment Act 2011 are administered by the NSW Environment Protection Authority to enable the NSW Government to establish instruments for setting environmental standards, goals, protocols and guidelines. They outline the regulatory requirements for lawful disposal of waste generated during the demolition, and operational phases of a development, as well as the system for licencing waste transport and disposal.
The Work Health and Safety Regulation 2017	The Work Health and Safety Regulation 2017 provide detailed actions and guidance associated with the topics discussed in *The Work Health and Safety Act 2011*. The primary aim of the regulation is to protect the health and safety of workers and ensure that risks are minimised in work environments. Workplaces are to ensure that they are compliant with the requirements specified in the regulations. The regulations discuss items such as actions that are prohibited or obligated in work environments, the requirements for obtaining licences and registrations, and the roles and responsibilities of staff in workplaces.
Waste Avoidance and Resource Recovery Act 2001	The *Waste Avoidance and Resource Recovery Act 2001* aims to promote waste avoidance and resource recovery and repeals the *Waste Minimisation and Management Act 1995*. Specific objectives of the *Waste Avoidance and Resource Recovery Act 2001* include: • encouraging efficient use of resources • minimising the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the reuse and recycling of waste • ensuring industry and the community share responsibility in reducing/dealing with waste, and • efficiently funding of waste/resource management planning, programs and service delivery. As of 2016, the addition to the Act of Part 5 defines the legislative framework for the 'Return and Earn Container Deposit Scheme' whereby selected beverage containers can be returned to State Government authorities for a monetary refund.

7.0 Demolition and Construction Waste and Recycling Management

7.1 Targets for Resource Recovery

Targets for new development are expected to contribute to state-specific targets. The NSW Waste and Sustainable Materials Strategy 2041 (DPIE, 2021) sets a target of 80% average recovery rate from all waste streams by 2030. Analysis by the NSW EPA (2023-2024) indicates that construction and demolition waste recovery rates in 2023-2024 were 81%.[2]

It is anticipated that the waste minimisation measures in the following sections will assist the Development to meet these targets. Waste reporting and audits can be used to determine the actual percentage of waste that have been recycled during the demolition stage of the Development.

7.2 Waste Streams and Classifications

Demolition is likely to generate the following broad waste streams:

- Demolition waste,
- Packaging waste, and
- Work compound waste from on-site employees.

A summary of likely waste types generated from demolition activities, along with their waste classifications and proposed management methods, is provided in Table 3 below.

Table 3 Potential waste types and their management methods

Waste Types	NSW EPA Waste Classification	Proposed Management Method
Demolition and Construction		
Sediment fencing, geotextile materials	General solid waste (non-putrescible)	Reuse at other sites where possible or disposal to landfill
Concrete	General solid waste (non-putrescible)	Off-site recycling for filling, levelling or road base
Bricks and pavers	General solid waste (non-putrescible)	Cleaned for reuse as footings, broken bricks for internal walls, crushed for landscaping or driveway use, off-site recycling
Gyprock or plasterboard	General solid waste (non-putrescible)	Off-site recycling or returned to supplier
Sand or soil	General solid waste (non-putrescible)	Off-site recycling
Metals such as fittings, appliances and bulk electrical cabling, including copper and aluminium	General solid waste (non-putrescible)	Off-site recycling at metal recycling compounds and remainder to landfill
Conduits and pipes	General solid waste (non-putrescible)	Off-site recycling

[2] https://www.epa.nsw.gov.au/your-environment/waste/waste-overview/waste-performance-data

Waste Types	NSW EPA Waste Classification	Proposed Management Method
Timber – treated	General solid waste (non-putrescible)	Reused for formwork, bridging, blocking, propping or second-hand supplier
Timber - untreated		Off-site recycling, chip for landscaping, sell for firewood, reused for floorboards, fencing, furniture, mulched secondhand supplier and remainder to landscape supplies.
Doors, windows, fittings	General solid waste (non-putrescible)	Off-site recycling at secondhand supplier
Insulation material	General solid waste (non-putrescible)	Off-site disposal
Glass	General solid waste (non-putrescible)	Off-site recycling, glazing or aggregate for concrete production
Asbestos	Special waste	Off-site disposal to a licensed landfill facility.
Fluorescent light fittings and bulbs	General solid waste (non-putrescible)	Off-site recycling or disposal, contact *FluoroCycle* for more information[3]
Paint	Liquid waste	Off-site recycling, Paintback collection[4] or disposal
Synthetic rubber or carpet underlay	General solid waste (non-putrescible)	Off-site recycling, reprocessed for other uses
Ceramics including tiles	General solid waste (non-putrescible)	Off-site recycling
Carpet	General solid waste (non-putrescible)	Off-site recycling, disposal or reuse
Packaging		
Packaging materials, including wood, plastic, including stretch wrap or LDPE, cardboard and metals	General solid waste (non-putrescible)	Off-site recycling
Wooden or plastic crates and pallets	General solid waste (non-putrescible)	Reused for similar projects, returned to suppliers, or off-site recycling. Contact *Business Recycling* for more information[5]
Work Compound and Associated Offices		
Food Waste	General solid (putrescible) waste	Dispose to landfill with general garbage
Recyclable beverage containers, such as glass and plastic bottles, aluminium cans and steel cans	General solid waste (non-putrescible)	Recycling at off-site licensed facility or at NSW container deposit scheme 'Return and Earn' facility[6]
Clean paper and cardboard	General solid waste (non-putrescible)	Paper and cardboard recycling at off-site licensed facility

[3] Available online from http://www.fluorocycle.org.au/ or http://www.environment.gov.au/settlements/waste/lamp-mercury.html

[4] Available online from https://www.paintback.com.au/

[5] Available online from https://businessrecycling.com.au/

[6] Available online from http://returnandearn.org.au/

Waste Types	NSW EPA Waste Classification	Proposed Management Method
General domestic waste generated by workers such as soiled paper and cardboard, food and polystyrene	General solid waste (non-putrescible) mixed with putrescible waste	Disposal at landfill
Plant Maintenance		
Empty oil and other drums or containers, such as fuel, chemicals, paints, spill clean ups. Containers were previously used to store Dangerous Goods (Class 1, 3, 4, 5 or 8) and residues have not been removed by washing or vacuuming.	Hazardous waste	Transport to comply with the transport of Dangerous Goods Code applies in preparation for off-site recycling or disposal at licensed facility
Empty oil and other drums or containers, such as fuel, chemicals, paints, spill clean ups. Containers have been cleaned by washing or vacuuming.	General solid waste (non-putrescible)	
Air filters and rags	General solid waste (non-putrescible)	Off-site disposal
Oil filters, drained	General solid waste (non-putrescible)	Off-site recycling
Lead-acid or nickel-cadmium batteries	Hazardous waste	Off-site recycling, Contact the Australian Battery Recycling Initiative[7] for more information
Other batteries	General solid waste (non-putrescible)	

For further information on how to classify a waste type refer to the NSW EPA (2014) *Waste Classification Guidelines*[8]*.* Further information on managing demolition waste is available from the NSW EPA.[9]

7.3 Buildings for Demolition

Figure 2 below shows the buildings on each of the properties for demolition.

Figure 2 Buildings for Demolition

[7] http://www.batteryrecycling.org.au/home

[8] Available online from https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste/waste-classification-guidelines

[9] http://www.epa.nsw.gov.au/your-environment/waste/industrial-waste/construction-demolition

The properties are predominantly occupied by two storey brick dwellings with tile rooves, although one, 40, is a single storey building apparently constructed, at least partly, of sandstone. All dwellings have access at the rear to Redan Lane.

7.4 Demolition Waste Types and Quantities

In the absence of demolition waste generation rates in Council's Guidelines, SLR has used the '3 B/room brick house' demolition waste generation rates from The Hills Development Control Plan 2012, for estimating the type and quantities of waste generated from the demolition activities. The demolition waste generation rates used are shown in Table 4 below.

Table 4 Demolition waste generation rates

Rate Type	Per Floor Area (m^2)	Waste types and quantities (m^3)						
		Sandstone	Concrete	Bricks	Timber	Steel	Roof tiles	Other
Three-bedroom brick house	120	90	4	123	13	0.7	9	26

In addition, any concrete paving is assumed to be 300 m thick and vegetation is assumed to have an average depth of 300 mm. This includes grass, bushes and trees.

Areas of each of these types of dwelling and land uses have been estimated using SDT Explorer then multiplied by the waste generation rates shown in Table 4 to calculate estimated quantities of demolition waste.

The total estimated amounts of demolition waste are shown in Table 5 below.

Table 5 Estimated quantities of demolition waste

Property Number	Levels	Area Type	Approximate Area for Demolition (m^2)	Waste types and quantities (m^3)							
				Sandstone	Concrete	Bricks	Timber	Steel	Roof tiles	Vegetation	Other
40	1	House	379	284	13	388	41	2.2	28		82
		Paving	101		30						
		Yard	403							121	
42	2	House	286	428	10	586	62	3.3	21		62
		Paving	49		15						
		Yard	209							63	
44	2	House	357	535	12	732	77	4.2	27		77
		Paving	109		33						
		Yard	418							125	
46	2	House	178	267	6	366	39	2.1	13		39
		Paving	67		20						
		Yard	180							54	
48	2	House	245	367	8	501	53	2.9	18		53
		Paving	139		42						
		Yard	58							17	
Totals			**3,176**	**1,882**	**187**	**2,572**	**272**	**15**	**108**	**380**	**313**

7.5 Construction Waste Types and Quantities

In the absence of construction waste generation rates published by Council, SLR has adopted the 'Block of Flats' waste generation rates from The Hills DCP for estimating the type and quantities of waste generated from construction of the Development.

These are shown in Table 6 below.

Table 6 Construction waste generation rates

Rate Type	Per Area (m^2)	Waste types and quantities (m^3)						
		Sandstone	Concrete	Bricks	Timber/ Gyprock	Steel	Roof Tiles	Other
Block of Flats	1,000	0.7	6.7	3.2	1.3	2.87	1.3	0.6

The construction wastes quantities anticipated from the construction of the Development are provided in Table 7 below.

Table 7 Estimated construction waste types and quantities

Level	Estimated Construction Area (m^2)	Waste types and quantities (m^3)						
		Sandstone	Concrete	Bricks	Timber/Gyprock	Steel	Roof tiles	Other
1	2,392	1.7	16.0	7.7	3.1	6.9	3.1	1.4
2	2,330	1.6	15.6	7.5	3.0	6.7	3.0	1.4
3	1,761	1.2	11.8	5.6	2.3	5.1	2.3	1.1
4	1,275	0.9	8.5	4.1	1.7	3.7	1.7	0.8
5	1,490	1.0	10.0	4.8	1.9	4.3	1.9	0.9
6	1,490	1.0	10.0	4.8	1.9	4.3	1.9	0.9
7	1,348	0.9	9.0	4.3	1.8	3.9	1.8	0.8
8	857	0.6	5.7	2.7	1.1	2.5	1.1	0.5
9	355	0.2	2.4	1.1	0.5	1.0	0.5	0.2
Total	**13,299**	**9.3**	**89.1**	**42.6**	**17.3**	**38.2**	**17.3**	**8.0**

7.6 Waste Avoidance

In accordance with Council's Guidelines, and better practice waste management, the Building Contractor, Building Designer and/or equivalent roles should:

- Develop a purchasing policy based on the approximate volumes of materials to be used so that the correct quantities are purchased.
- Arrange for delivery of materials on an 'as needed' basis to avoid material degradation through weathering and moisture damage.
- Communicate strategies to handle and store waste to minimise environmental, health and amenity impacts.
- Select materials with a low environmental impact over the lifecycle of the building.
- Choose timber from certified plantations and avoid unsustainable timber imports including western red cedar, oregon, meranti, luan or merbau.
- Use leased equipment rather than purchase and disposal.

- Minimise site disturbance and unnecessary excavation.
- Incorporate existing trees and shrubs into the landscape plan.
- Grouping wet areas together to minimise the amount of pipe work required.
- Design the Project to require standard material sizes or make arrangements with manufacturing groups for the supply of non-standard material sizes.
- Design works for de-construction.
- Reduce packaging waste by:
    - Returning packaging to suppliers where practicable to reduce waste further along the supply chain
    - Purchasing in bulk
    - Requesting cardboard or metal drums rather than plastics
    - Requesting metal straps rather than shrink wrap, and
    - Using returnable packaging such as pallets and reels.
- Use prefabricated materials.
- Select materials for Project works with low embodied energy properties or materials that have been salvaged or recycled for the construction of the Project including concrete that utilises slag and fly ash content, structural and reinforced steel that uses recycled steel content or bulk insulation products that contain recycled content, such as recycled glass in glass-wool.
- Preferentially use paints, floor coverings and adhesives with low VOC (volatile organic compound) content.
- Reduce the use of polyvinyl chloride products.
- Implement measures to prevent the occurrence of windblown litter, dust and stormwater pollution.
- Ensure subcontractors are informed of and implement site waste minimisation and management procedures.

7.7 Reuse, Recycling and Disposal

Effective management of construction materials and construction and demolition waste, including options for reuse and recycling where applicable and practicable, will be conducted. Only wastes that cannot be cost effectively reused or recycled are to be sent to landfill or appropriate disposal facilities.

Refer to Table 3 for an outline of the proposed reuse, recycling and disposal methods for potential construction waste streams generated by the Development.

In accordance with Council's Guidelines and best practice waste management, the following specific procedures should be implemented:

- Ensure the site's project management of the site includes minimising waste generation, requiring the appropriate storage and timely collection of waste materials, and maximising re-use or recycling of materials.

- Store wastes on site appropriately to prevent cross-contamination and guarantee the highest possible re-use value.
- Consider the potential of any new materials to be re-used and recycled at the end of the Project's life.
- Determine opportunities for the use of prefabricated components and recycled materials.
- Strip topsoil from areas designated for excavation and store it on site for reuse.
- Reuse excavation material will be on-site where possible.
- Re-use formwork where appropriate.
- Retain roofing material cut-offs for re-use or recycling.
- Retain used crates for storage purposes unless damaged.
- Recycle cardboard, glass and metal wastes.
- Recycle or dispose of solid waste timber, brick, concrete, asphalt and rock, where such waste cannot be re-used on site, to an appropriately licenced construction and demolition waste recycling facility or an appropriately licenced landfill.
- Dispose of all asbestos and/or hazardous wastes in accordance with SafeWork NSW and NSW EPA requirements.
- Deliver batteries and fluorescent lights to drop off-site recycling facility.
- Return excess materials and packaging to the supplier or manufacturer.

7.8 Waste Storage and Servicing

7.8.1 Waste Segregation and Storage

Waste materials produced from site preparation and construction activities are to be separated at the source and stored separately on-site. It is anticipated that the Development will provide enough space on-site for separate storage, for example, separate skip bins or appropriately managed stockpiles, of the following waste types:

- Bricks, concrete and scrap metal
- Metal and steel, in a condition suitable for recycling at metal recycling facilities
- Timber
- Glass
- Uncontaminated excavation spoil, if present
- Contaminated excavation spoil, if present
- Hazardous waste, if present
- Paper and cardboard
- General co-mingled recycling waste, and
- Non-recyclable general waste.

If there is insufficient space on-site for full segregation of waste types, the Site Manager, or equivalent role, should consult with the waste and recycling collection contractor to confirm which waste types may be co-mingled prior to removal from the site.

7.8.2 Waste Storage Areas

Waste storage areas will be accessible and allow enough space for storage and servicing requirements. The storage areas will also be flexible in order to cater for change of use throughout the Development. Where space is restricted, dedicated stockpile areas are to be delineated on the site, with regular transfers to dedicated skip bins for sorting.

All waste placed in skips or bins for disposal or recycling will be adequately contained to ensure that the waste does not fall, blow, wash or otherwise escape from the site. Waste containers and storage areas will to be kept clean and in a good state of repair.

Areas designated for waste storage should:

- Allow unimpeded access by site personnel and waste disposal contractors
- Consider environmental factors which could potentially cause an impact to the waste storage, such as slope, drainage and the location of watercourses and native vegetation
- Allow enough space for the storage of garden waste and other waste materials on-site
- Employ adequate environmental management controls to prevent off-site migration of waste materials and contamination from the waste. For example, consideration of slope, drainage, proximity relative to waterways, stormwater outlets and vegetation
- Consider visual amenity, safety, accessibility and convenience in their selection, and
- Not present hazards to human health or the environment.

7.9 Waste Servicing and Record Keeping

The Site Manager or equivalent role is to:

- Arrange for suitable waste collection contractors to remove any construction waste from site
- Ensure waste bins are not filled beyond recommended filling levels
- Ensure that all bins and loads of waste materials leaving site are covered
- Maintain waste disposal documentation detailing, at a minimum:
- Descriptions and estimated amounts of all waste materials removed from site
- Details of the waste and recycling collection contractors and facilities receiving the waste and recyclables
- Records of waste and recycling collection vehicle movements, for example, date and time of loads removed, licence plate of collection vehicles, tip dockets from receiving facility, and
- Waste classification documentation for materials disposed to off-site recycling or landfill facilities.

- Ensure lawful waste disposal records are readily accessible for inspection by regulatory authorities such as Council, SafeWork NSW or NSW EPA, and
- Remove waste during hours approved by Council.

If skips and bins are reaching capacity, removal and replacement should be organised as soon as possible. All site generated building waste collected in the skips and bins will leave the site and be deposited in the approved site lawfully able to accept them.

7.10 Site Inductions

All staff, including sub-contractors and labourers, employed during the site preparation and construction phases of the Development must undergo induction training regarding waste management for the Site.

Induction training is to cover, as a minimum, an outline of the WMP including:

- Legal obligations and targets
- Emergency response procedures on-site
- Waste priorities and opportunities for reduction, reuse and recycling
- Waste storage locations and separation of waste
- Procedures for suspected contaminated and hazardous wastes
- Waste related signage
- The implications of poor waste management practices, and
- Responsibilities and reporting, including identification of personnel responsible for waste management and individual responsibilities.

7.11 Signage

Standard signage is to be posted in all waste storage and collection areas. All waste containers should be labelled correctly and clearly to identify stored materials.

Signs approved by the NSW EPA for labelling of waste materials are available online[10] and should be used where applicable. A selection of signs prepared by NSW EPA is provided in Figure 3.

[10] NSW EPA approved waste materials signage https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/business-government-recycling/standard-recycling-signs

Figure 3 Examples of NSW EPA labels for waste skips and bins

7.12 Monitoring and Reporting

The following monitoring practices are to be undertaken to improve demolition and construction waste management and to obtain accurate waste generation figures:

- Conduct waste audits of current projects where feasible.
- Note waste generated and disposal methods.
- Look at past waste disposal receipts.
- Record this information to track waste avoidance, reuse and recycling performance and to help in waste estimations for future waste management plans.

Records of waste quantities recycled, reused or contractor removed are to be maintained. This can include dockets or receipts verifying recycling and disposal in accordance with this WMP. This evidence should also be presented to regulatory bodies when required.

Waste audits can be carried out by the Building Contractor to gauge the effectiveness and efficiency of waste segregation procedures and recycling and reuse initiatives. Where audits show that the above procedures are not carried out effectively, additional staff training will be undertaken and signage re-examined.

7.13 Roles and Responsibilities

All personnel have a responsibility for their own environmental performance and compliance with all legislation. It will be the responsibility of the Building Contractor to implement the WMP, and an employee and subcontractor responsibility to ensure that they always comply with the WMP.

Where possible, an Environmental Management Representative should be appointed for the Development. Suggested roles and responsibilities are provided in Table 8 below.

Table 8 Suggested site preparation and construction waste management roles and responsibilities

Responsible Person	General Tasks
Construction Site Manager	Ensuring plant and equipment are well maintained.
	Ordering only the required amounts of materials.
	Keeping materials segregated to maximise reuse and recycling.

Responsible Person	General Tasks
	Ultimately responsible for routinely checking waste sorting and storage areas for cleanliness, hygiene and safety issues, contaminated waste materials, and also ensuring that all monitoring and audit results are well documented and carried out as specified in the WMP.
Construction Environmental Manager or equivalent	Approaching and establishing the local commercial reuse of materials where reuse on-site is not practical.
	Establishing separate skips and recycling bins for effective waste segregation and recycling purposes.
	Ensuring staff and contractors are aware of site requirements.
	Provision of training of the requirements of the WMP and specific waste management strategies adopted for the Project.
	Contaminated waste management and approval of off-site waste transport, disposal locations and checking licensing requirements.
	Approval of off-site waste disposal locations and checking licensing requirements.
	Assessment of suspicious potentially contaminated materials, hazardous materials and liquid wastes.
	Monitoring, inspection and reporting requirements.

Daily visual inspections of waste storage areas may be delegated to other on-site staff. All subcontractors will be responsible for ensuring that their work complies with the WMP through the project induction and contract engagement process.

8.0 Operational Waste Management

8.1 Targets for Resource Recovery

Targets for new development are expected to contribute to state-specific targets. The NSW *Waste and Sustainable Materials Strategy 2041* (DPIE, 2021) sets a target of 80% average recovery rate from all waste streams by 2030. Analysis by the NSW EPA (2023-2024) indicates that the commercial and industrial waste recovery rate in 2023-2024 was 50%.[11]

It is anticipated that the waste minimisation measures in the following sections will assist the Development to achieve this recycling rate. Waste reporting and audits can be used to determine the actual percentage of wastes that are being or have been recycled during operation.

8.2 Waste Quantities

To calculate the estimate operational waste quantities likely to be generated by this development the following assumptions were made:

- Council's standard residential waste generation rates as outlined in Council's Waste Policy (Section 6.2 above) are:
  - 80 litres per unit per week for garbage – 240 L bin shared between three units[12]

[11] https://www.epa.nsw.gov.au/your-environment/waste/waste-overview/waste-performance-data

[12] https://mosman.nsw.gov.au/residents/waste-and-recycling/household-garbage

- 40 litres per unit per week for comingled recycling - Council has separate bins for paper and cardboard and comingled containers[13] so 20 L for each has been assumed.
- No specification for food or garden organics.

- 240 L bins are specified by Council for collecting garbage and recycling.
- A collection frequency of once per week for both garbage and recycling.

8.3 Chute Rooms

Chutes are proposed for this development. There are three cores down which two chutes will be installed, one for garbage and one for recyclables. Chutes will empty into bins in chute rooms on the Ground Floor where one three-bin linear automatic bin changer and compactor will be located under the garbage chute. This will move full bins out from under the chute and replace them with empty bins.

Chute rooms will not be accessible to residents. Chute rooms will be close to separate garbage rooms for storage of bins. Residential units on the Ground Floor will not have access to chutes but can deposit waste directly into bins in the ground floor waste rooms.

Ground Floor units near the southern core will access their ground floor waste room through the service space in the lift core.

The configurations of the three chute rooms are shown in Table 9 below.

Table 9 Chute room configurations

Core	South	Central	North
Bin changer configuration	Two bin changer	Two bin changer	Two bin changer
Garbage Per Week (L)	880	1,280	1,440
Garbage Bin Capacity (L)	240	240	240
Changeover Frequency per Week	1	1	1
Number of Bins	2	3	3
Bin changer space (m^2)	5.25	5.25	5.25

Cleaners will bring bins from the Ground Floor waste storage rooms to the waste holding area on Level 2 that has access to Redan Lane via a hoist.

8.4 Food Waste

The NSW Government's food waste mandate comes into force in 2030. At that time Council will provide bins for the collection of food. The body corporate will arrange the separation of food waste for collection in those bins.

8.5 Bulky Waste

Bulky waste includes material that does not easily fit into the normal waste bins such as mattresses, damaged and disused furniture and other items and materials. Council requires 8 m^3 of storage space be provided for bulky waste. A room of 13 m^2 is provided on the Ground Level, as shown in Figure 4 below. Sections show a ceiling height of at least 3 m which means this room has 39 m^3 capacity.

[13] https://mosman.nsw.gov.au/residents/waste-and-recycling/recycling

8.6 Waste Holding Area

Bins from the chute rooms will be brought via a hoist by cleaners to the waste holding area on Level 2 that has access to Redan Lane at the rear of the site. The size of this room and the number of bins required to be stored in it for collection by Council are shown in Table 10 below.

Table 10 Waste holding room bin numbers

Per Week (L)	Garbage	4,240
	Paper and cardboard	1,060
	Recyclable containers	1,060
Bin Capacity (L)	Garbage	240
	Paper and cardboard	240
	Recyclable containers	240
Collection Frequency per Week	Garbage	1
	Paper and cardboard	1
	Recyclable containers	1
Number of Bins	Garbage	8
	Paper and cardboard	6
	Recyclable containers	6
Area required for bins (m^2)	Garbage	3.4
	Paper and cardboard	2.6
	Recyclable containers	2.6
	Total bin space	8.6
Total including manoeuvring (m^2)		**15.9**

8.7 Location and size of waste storage rooms

The drawings show chutes rooms, waste storage rooms and bulky waste room, as well as a bin wash area on the Ground Floor. These are shown in Figure 4 below.

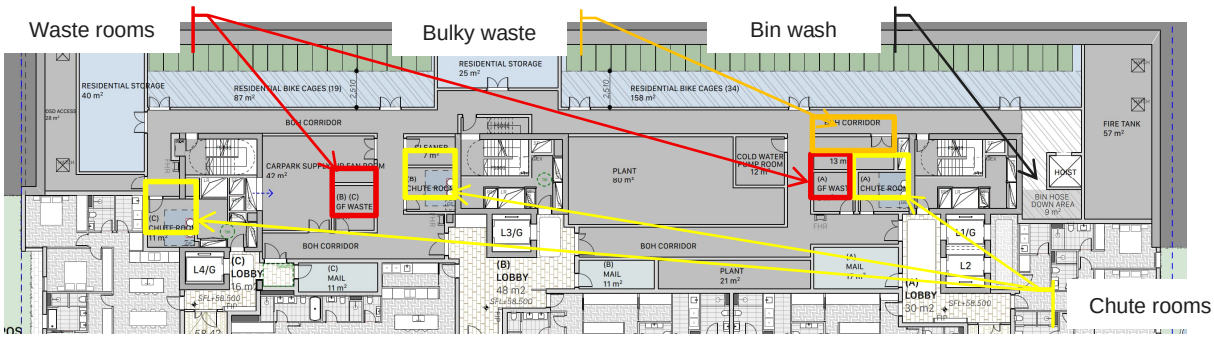


Figure 4 Proposed Ground Floor waste storage areas

The drawings also show the waste holding area on Level 1. This is shown in Figure 5 below.

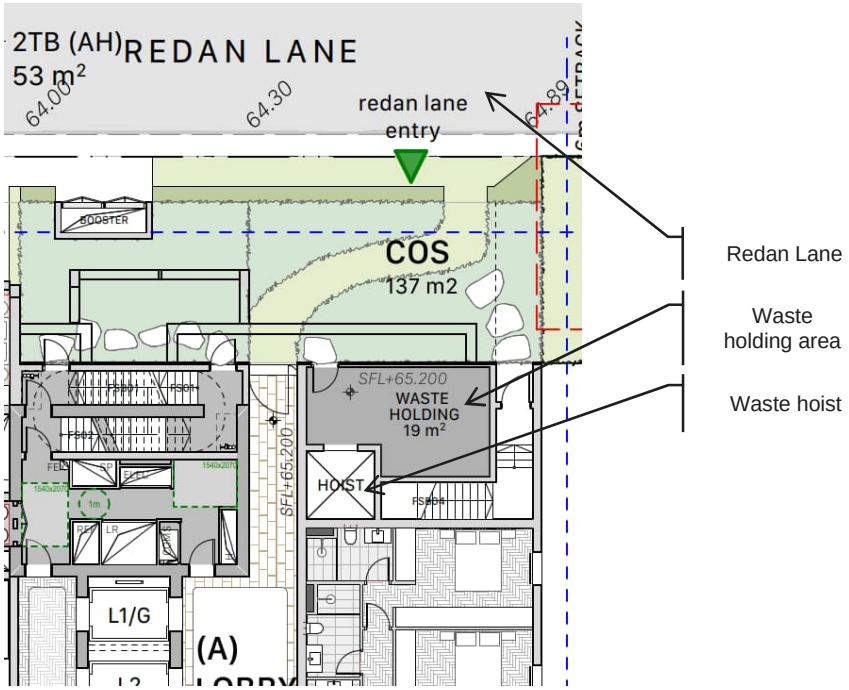


Figure 5 Proposed Level 1 waste holding area

8.8 Waste Servicing

8.8.1 Towers

Residents in the towers will place their garbage and recyclables in the chutes which will empty into bin in chute rooms on the Ground Floor. Cleaners will remove full bins from the bin changers in the chute rooms and replace them with empty bins as required. Bins from the chute rooms will be brought via a hoist by cleaners to the waste holding area on Level 2 that has access to Redan Lane at the rear of the site.

8.8.2 Terraces

Residents in the four southern terraces will take their waste to the Ground Floor Waste Room via the lift as shown in Figure 6.

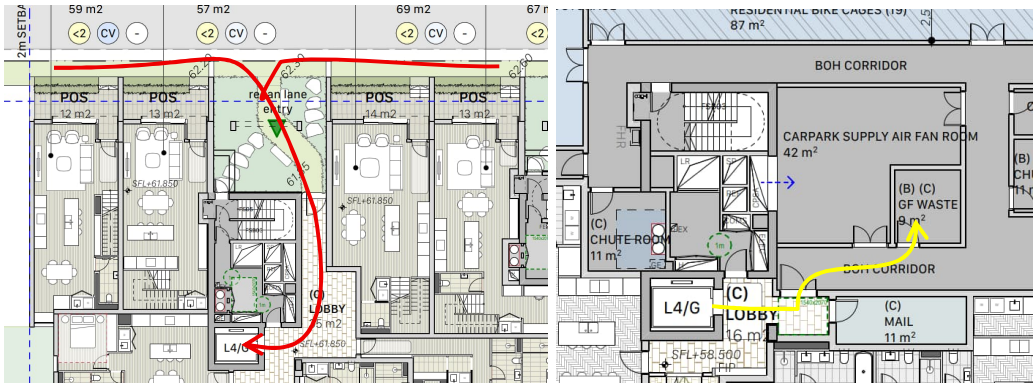


Figure 6 Southern terraces waste travel path

Residents in the four northern terraces will take their waste directly to the waste holding area on Level 1 as shown in Figure 7 below.

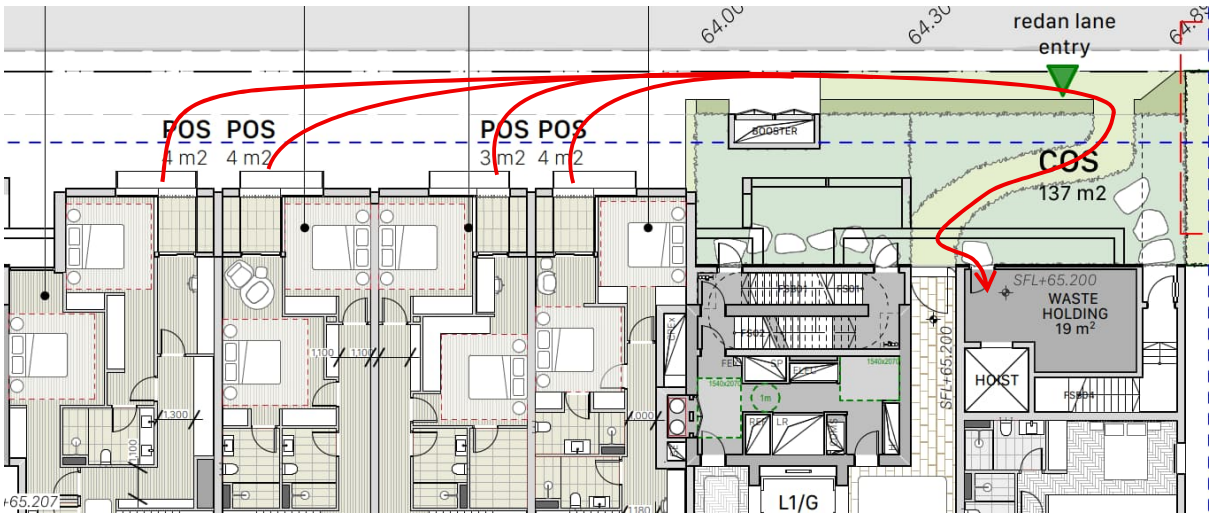


Figure 7 Southern terraces waste travel path

8.8.3 Waste collection

Cleaners will bring bins from the waste holding area and place them on the kerb ready for collection. Waste collection vehicles will stop in Redan Lane to empty the bins. Cleaners will then return the bins to the waste holding area and from there to the waste storage rooms and chute rooms as required.

Kerbside collection is preferred for the following reasons:

- Collections from the properties this development replaces took place at the kerbside in Redan Lane, so the proposed service is effectively unchanged
- Collections for all the other residences backing onto Redan Lane still take place from the kerbside in Redan Lane
- A kerbside collection is the safest, fastest and most efficient service option
- The same collection vehicles will service this development as all the other residences placing their bins out in Redan Lane so will not restrict traffic any more than in the past
- The swept path diagram (Figure 8 below) shows a stationary waste collection vehicle will not block traffic.

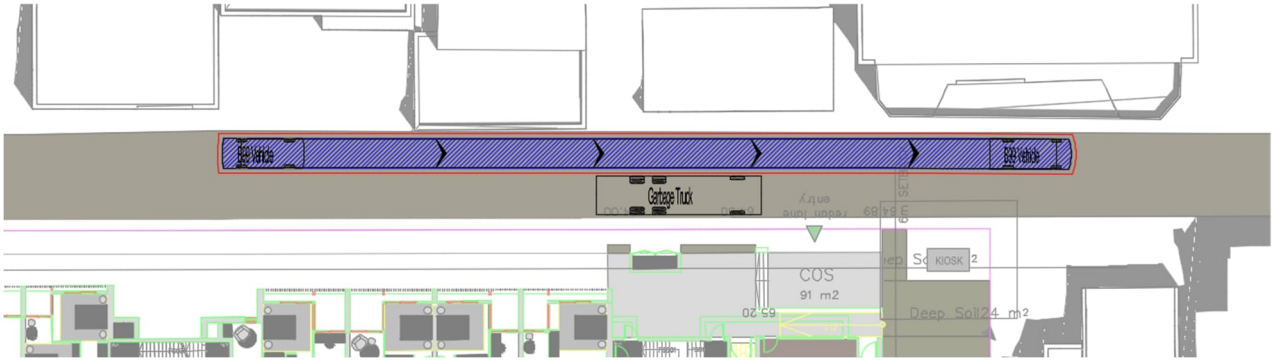


Figure 8 Waste collection vehicle swept path

All bins will be adequately managed to ensure that the waste does not fall or blow or otherwise escape from them. Waste containers and storage areas will to be kept clean and in a good state of repair including maintenance of bin changers, water supply and signage. Chute rooms will be kept locked at all times.

9.0 Assessment

The WMP establishes that during ongoing operation of this residential development three collections for waste and recyclables will be provided per week, one each for garbage, paper and cardboard and recyclable containers.

The WMP also establishes that the amount of space allowed for waste and recycling on-site is adequate to store the amounts projected to be generated.

10.0 Impacts

Collection vehicles for garbage and recyclables travel down Redan Lane at least once per week to collect bins from all the residences that present bins in the lane. There will be no additional vehicle movements as a result of this development.

The collection vehicles will stand at this property in Redan Lane longer and collect more bins than they would when the previous residential dwellings were located here. However, there will now only be one stop, whereas in the past there were five so noise from vehicle acceleration and braking may be minimised.

The projected quantities of waste and recyclables, 6,720 L each per week, are insignificant compared to the quantities of waste and recyclables generated in Sydney every day. Allowance has been made for the separation of recyclables according to Council's requirements.

11.0 Mitigation measures

As the waste-related impact of the data centre is zero or negligible, no mitigating measures are proposed beyond those for the separation of recyclables already detailed.

Waste and recycling collections are already undertaken during daylight hours in order to minimise the effect of noise on residents and the movement of collection vehicles on other road users.

12.0 Summary

The proposed development at 40-48 Redan Street, Mosman in Mosman City Council area, consists of 53 residential dwellings in two-, three- and four-bedroom configurations, communal open space and provision of 15% affordable housing to be managed by a community housing provider for 15 years.

This WMP has been prepared to address the housing SEARs guided by:

- Mosman Residential Development Control Plan 2012
- Mosman Waste Minimisation Policy 2012
- NSW EPA (2014) *Waste Classification Guidelines*

The waste service proposed for this development involves the installation of two chutes in each of the three tower cores. One chute will be for garbage and one for recyclables. Chutes will empty into bins in chute rooms on the Ground Floor.

Residential units on the Ground Floor will not have access to chutes but can deposit waste directly into bins in the ground floor waste rooms.

A room of 39 m^3 capacity is provided for bulky waste.

Residents in the towers will place their garbage and recyclables in the chutes which will empty into bin in chute rooms on the Ground Floor. Bins from the chute rooms will be brought to the waste holding area on Level 2 that has access to Redan Lane at the rear of the site.

Residents in the four southern terraces will take their waste to the Ground Floor Waste Room via the lift. Residents in the four northern terraces will take their waste directly to the waste holding area on Level 1

Cleaners will bring bins from the waste holding area and place them on the kerb ready for collection. Waste collection vehicles will stop in Redan Lane to empty the bins. Cleaners will then return the bins to the waste holding area and from there to the waste storage rooms and chute rooms as required.

The areas required for waste storage rooms and the area provided are shown in Table 11 below.

Table 11 Areas required v areas provided

Room	Area Required	Area Provided
Southern chute room	5.25 m^2	11 m^2
Central chute room	5.25 m^2	11 m^2
Northern chute room	5.25 m^2	10 m^2
Southern ground floor waste storage room – for southern terraces	1.7 m^2	9 m^2
Northern ground floor waste storage room – for northern terraces	1.7 m^2	8 m^2
Bulky waste room	8 m^3	13 m^3
Waste holding room	15.9 m^2	19 m^2

This WMP concludes that the proposed development is suitable, results in minimal impact due to waste management and warrants approval with no mitigation measures required. Waste storage spaces are adequate for the amounts of waste and number and types of bins proposed to be used.

Appendix A Council Forms

40-48 Redan St, Mosman

Waste Management Plan

Mosman Land No 1 Pty Ltd

SLR Project No.: 610.033319.00001

20 February 2026

Appendix A: Site Waste Minimisation and Management Plan Template

Address of development 40-48 Redan St, Mosman

Applicant and Project Details (All Developments)	
Applicant Details	
Application No.	
Name	
Address	
Phone number(s)	
Email	
Project Details	
Address of development	40-48 Redan St, Mosman
Existing buildings and other structures currently on the site	Five double brick, tiled roof dwellings
Description of proposed development	Three residential towers up to nine storeys for 53 dwellings
This development achieves the waste objectives set out in the Mosman Waste-Not Waste Minimisation and Management Policy 2009. The details on this form are the provisions and intentions for minimising waste relating to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as council, DECC or WorkCover NSW.	
Name	
Signature	
Date	

Construction Design
Outline how measures for waste avoidance have been incorporated into the design, material purchasing and construction techniques of the development (refer to Section 3.2 of the Policy) NB: a more detailed Reuse and Disposal of Materials table will be required with the Construction Certificate:
Lifecycle: Please refer to the attached waste management plan
Materials:
Detail the arrangements that would be appropriate for the ongoing use of waste facilities as provided in the development. Identify each stage of waste transfer between residents' units/commercial tenancies and loading into the collection vehicle, detailing the responsibility for and location and frequency of, transfer and collection.
Please refer to the attached waste management plan

Waste Generation Table for Ongoing Use (Residential, Multi Unit, Commercial, Mixed Use) to be completed with the Development Application

Address of development: 40-48 Redan St, Mosman

Show the total volume of waste expected to be generated by the development and the associated waste storage requirements.

	Recyclables		Compostables	Residual waste*	Other
	Paper/ cardboard	Metals/ plastics/glass			
Amount generated (L per unit per day)	2.8	2.8		11.4	
Amount generated (L per development per week)	1060	1060		4,240	
Any reduction due to compacting equipment				2:1 compaction	
Frequency of collections (per week)	1	1		1	
Number and size of storage bins required	6 x 240 L	6 x 240 L		8 x 240 L	
Floor area required for storage bins (m^2)	2.6 m^2	2.6 m^2		3.4 m^2	
Floor area required for manoeuvrability (m^2)	4.8 m^2	4.8 m^2		6.3 m^2	
Height required for manoeuvrability (m)	2.2 m	2.2 m		2.2 m	

* Current “non-recyclables” waste generation rates typically include food waste that might be further separated for composting.

Volume of Waste Table for Demolition to be completed with Construction Certificate

Refer 3.1 for objectives regarding demolition waste.

Address of development: 40-48 Redan St, Mosman

most favourable ← least favourable

	Reuse	Recycling	Disposal	
Type of waste generated	Estimate Volume (m3) or Weight (t)	Estimate Volume (m3) or Weight (t)	Estimate Volume (m3) or Weight (t)	Specify method of on site reuse, contractor and recycling outlet and /or waste depot to be used
Excavation material				
Timber (specify)		272 m^3		TBC
Concrete		187 m^3		TBC
Bricks/pavers		2572 m^3		TBC
Tiles		108 m^3		TBC
Metal (specify)		15 m^3		TBC
Glass				
Furniture				
Fixtures and fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics		380 m^3		TBC
Containers (cans, plastic, glass)				
Paper/cardboard				
Residual waste			313 m^3	TBC
Hazardous/special waste e.g. asbestos (specify)				
Other (specify) Sandstone		1882 m^3		TBC

Volume of Waste Table for Construction to be completed with Construction Certificate

Refer to Section 3.2 for objectives regarding construction

Address of development: 40-48 Redan St, Mosman

most favourable ← least favourable

	Reuse	Recycling	Disposal	
Type of waste generated	**Estimate Volume (m^3) or Weight (t)**	**Estimate Volume (m^3) or Weight (t)**	**Estimate Volume (m^3) or Weight (t)**	**Specify method of on site reuse, contractor and recycling outlet and/or waste depot to be used**
Excavation material				
Timber (specify)				
Concrete		89.1 m^3		TBC
Bricks		42.6 m^3		TBC
Tiles		17.3 m^3		TBC
Metal (specify)		38.2 m^3		TBC
Sandstone		9.3 m^3		TBC
Plasterboard (offcuts)		17.3 m^3		TBC
Fixtures and fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics				
Containers (cans, plastic, glass)				
Paper/cardboard				
Residual waste			8.0 m^3	TBC
Hazardous/special waste (specify)				

Plans and Drawings (All Developments)

The following checklists are designed to help ensure SWMMPs are accompanied by sufficient information to allow proper assessment of the application in terms of site waste minimisation and management.

Drawings are to be submitted to scale, clearly indicating the location of and provisions for the storage and collection of waste and recyclables during:

- demolition
- construction
- ongoing operation.

Demolition

Refer to Section 3.1 of the Policy for specific objectives and measures.
Do the site plans detail/indicate:

	Tick Yes
Size and location(s) of waste storage area(s)	TBC
Access for waste collection vehicles	TBC
Areas to be excavated	TBC
Types and numbers of storage bins likely to be required	TBC
Signage required to facilitate correct use of storage facilities	Y

Construction

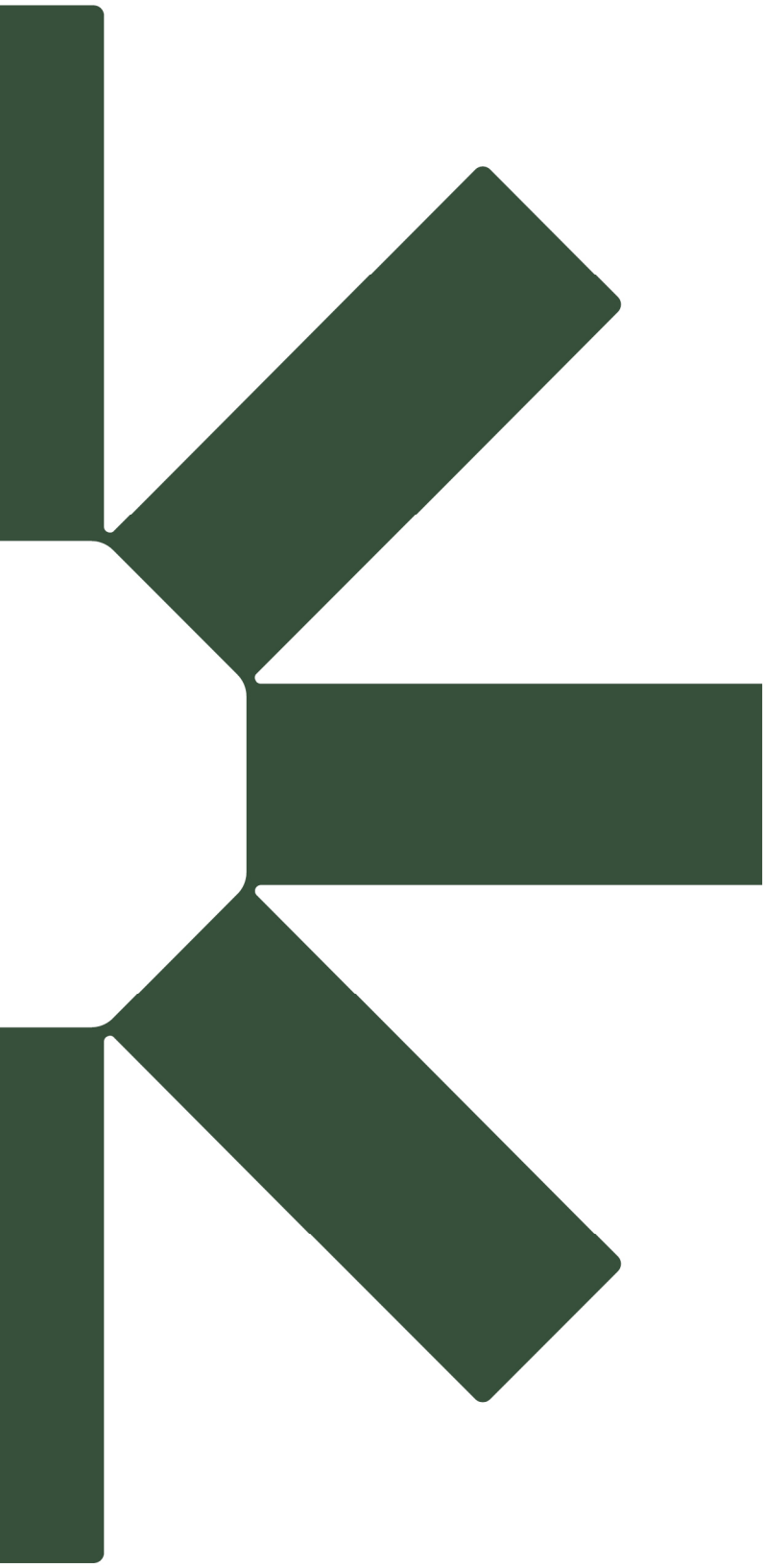
Refer to Section 3.2 of the Policy for specific objectives and measures.
Do the site plans detail/indicate:

	Tick Yes
Size and location(s) of waste storage area(s)	TBC
Access for waste collection vehicles	TBC
Areas to be excavated	TBC
Types and numbers of storage bins likely to be required	TBC
Signage required to facilitate correct use of storage facilities	Y

Ongoing Operation

Refer to Section 4 of the Policy for specific objectives and measures.
Do the site plans detail/indicate:

	Tick Yes
Space	
Size and location(s) of waste storage areas	Y
Recycling bins placed next to residual waste bins	Y
Space provided for access to and the maneuvering of bins/equipment	Y
Any additional facilities	N
Access	
Access route(s) to deposit waste in storage room/area	Y
Access route(s) to collect waste from storage room/area	Y
Bin carting grade	Y
Location of final collection point	Y
Clearance, geometric design and strength of internal access driveways and roads	N/A
Direction of traffic flow for internal access driveways and roads	N/A
Amenity	
Aesthetic design of waste storage areas	Y
Signage – type and location	Y
Construction details of storage rooms/areas (including floor, walls, doors, ceiling design, sewer connection, lighting, ventilation, security, wash down provisions etc)	TBC



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