

Appendix 10

Operational Waste Management Plan

Waste Audit

St Leonards South, East Quarter

**22-34 Berry Road, 21-31
Holdsworth Avenue, and
42-46 River Road,
St Leonards South, NSW**

MAY 2022

Operational Waste Management Plan



**WASTE AUDIT AND
CONSULTANCY SERVICES**

Level 21 / 133 Castlereagh Street
Sydney, NSW 2000

Telephone (02) 9199 4521
www.wasteaudit.com.au

This report contains confidential information. It has been compiled by Waste Audit and Consultancy Services (Aust) Pty Ltd on behalf of Lateral Consulting for the St Leonards South EQ development.

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1 Introduction

This Waste Management Plan (WMP) has been prepared on behalf of Lateral Consulting to accompany a Development Application for the St Leonards South EQ (22-34 Berry Road, 21-31 Holdsworth Avenue, and 42-46 River Road, St Leonards South) development.

This project essentially consists of 245 apartments and associated infrastructure.

This Plan has been developed with consideration of the Lane Cove Council's *Development Control Plan 2010* (various Sections including *Part Q – Waste Management and Minimisation*).

In addition, the following publications have been consulted for guidance as to waste management for this type of development:

- City of Sydney *Guidelines for Waste Management in New Developments 2018 (modified 2020)*
- Department of Environment and Climate Change *NSW Better Practice Guide for Waste Management in Multi-Unit Dwellings 2008*
- NSW EPA *Better practice guide for resource recovery in residential developments 2019*

These requirements are utilised to inform the design of the waste services by identifying the estimated waste profile for the development and providing the total area required by the recommended equipment/systems.

Waste audit and management strategies are recommended for new developments to provide support for the building design and promote strong sustainability outcomes for the building.

To assist building management in achieving effective waste and recycling management, this waste management plan has three key objectives:

- i. **to minimise the environmental impacts of the operations of the development** – this will be achieved by ensuring maximum diversion of waste from landfill; correct containerisation and transport of materials; correct segregation of materials into appropriate management streams; awareness among tenants of waste avoidance practices.
- ii. **to minimise the impact of the management of waste within the development on local residents** – this will be achieved by ensuring waste is managed so as to avoid odour and litter and collected during suitable times.
- iii. **to ensure waste is managed so as to reduce the amount landfilled and to minimise the overall quantity generated** – this will be achieved by implementing systems that assist tenants to segregate appropriate materials that can be recycled; displaying signage in all tenant areas to remind and encourage avoidance and recycling to residents; and through associated signage in the communal and waste storage areas to reinforce these messages.

2 Waste Generation

2.1 Waste Streams

Based on the development profile, the following waste streams would be expected:

- General Waste
- Paper Recycling
- Commingled Recycling

It is not expected that significant quantities of garden waste will be generated. The appointed gardener will be required to manage this waste by disposal at a composting facility.

In addition, what is termed “Hard Waste” is generated on an intermittent basis as residents depart or arrive. This waste consists of bedding, clothing, furniture, televisions, bikes and other assorted personal effects. This will be managed by the building manager by disposing to charities, recycling facilities and other options prior to landfill.

2.2 Waste Generation Estimates

The following is the initial estimated generation rates for the proposed development:

Waste Stream	Bin Size (MGB)	No. of Bins	Clearance Frequency/week	Capacity (weekly)	Estimated volume / week	Footprint per bin (m2)	Total Footprint
General Waste	660	30	1	19,800	19,600	1.20	36.00
Commingled Recycling	240	21	1	5,040	4,900	0.44	9.24
Paper Recycling	240	21	1	5,040	4,900	0.44	9.24
TOTAL		72		29,880	29,400		54.48

The development will require:

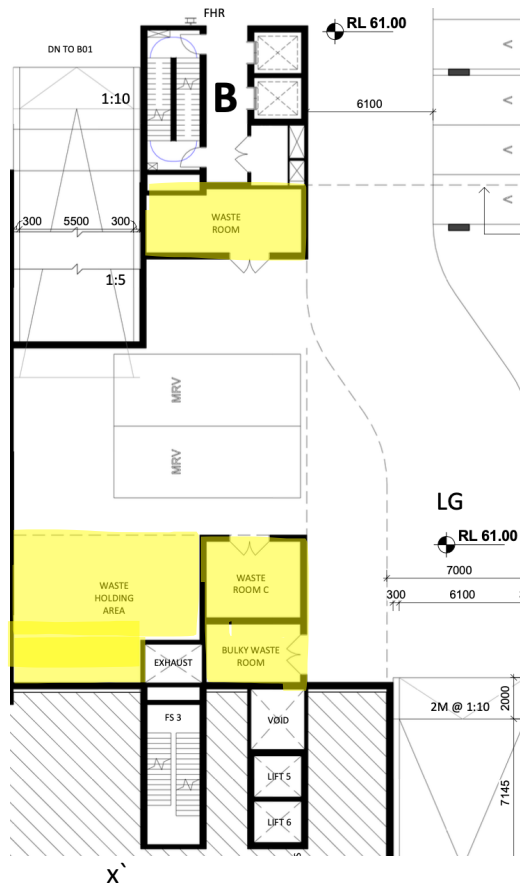
- 30 x 660 litre MGB – General waste
- 21 x 240 litre MGB – Commingled recycling
- 21 x 240 litre MGB – Paper recycling

Based on the above calculations (and notwithstanding any of the points below), it is estimated that a total of 72.46 m² of space is required for the storage of waste and recyclables. An additional 30% has been applied to the storage areas to allow for bin movement. Note that these calculations are based on one collection per week for the development.

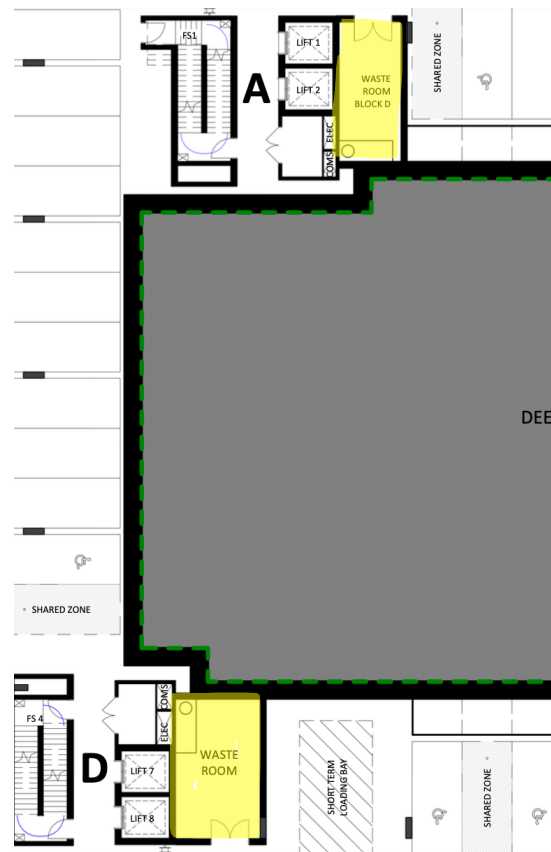
2.3 Waste Storage

The following diagram illustrates the locations of the waste holding area and chute rooms:

Building B and C on Basement Mezzanine



Building A and D on Basement 01

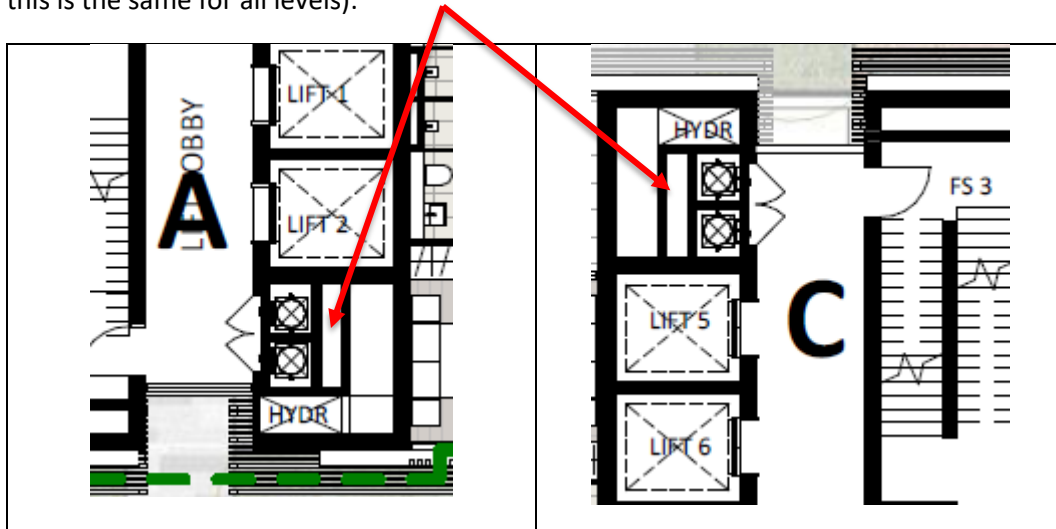


In addition, these areas will be designed so as to prevent unauthorised access and to contain any spilt materials (ie., to prevent litter), and will have signage (as per Appendix A) placed on the walls adjacent to where the bins are located to provide a reminder to residents as to correct segregation of waste/recyclables.

Bins for recyclables will be located on each level. Residents will deposit recyclables into these bins. These will be transported to the waste storage area (located on the Lower Ground Floor), by the Building Management on a needs basis (ie., bins will be monitored to ensure that are reviewed so as there is space for residents to deposit recyclables into them).

This system also allows for the manager to monitor the disposal of materials to ensure that they are deposited into the correct bin.

The location of the chutes and bins for recycling is illustrated in the following for Level 2 (note this is the same for all levels):



In keeping with best practice sustainability programs, all waste areas and waste and recycling bins will be clearly differentiated through appropriate signage and colour coding to Australia Standards to reflect the materials contained. This will assist in easy identification of correct bins by those with authorised access. Each stream will be located in a designated area.

There will be a need to ensure that there is sufficient space to allow for bin movement. As a general rule, it is recommended that an additional 30% of the estimated footprint for bins be allocated to this and this has been factored into the waste storage area space calculations – this has been allowed for in the design of the waste areas.

The waste storage area will contain the following to minimise odours, deter vermin, protect surrounding areas, and make it a user-friendly and safe area:

- floor to be sealed;
- walls and floor surface is flat and even;
- walls painted with light colour and washable paint;
- all personnel doors are hinged and self-closing;
- conform to the Building Code of Australia, Australian Standards and local laws; and
- childproofing and public/operator safety shall be assessed and ensured.

Occupational Health and Safety issues such as slippery floors will be monitored.

2.4 Operational Procedures

Waste and recycling collection services will be provided by Lane Cove Council.

The following summarises the recommended waste and recycling systems that will be implemented. These recommendations are based on the Lane Cove Council's requirements and systems implemented for similar developments.

Details of the recycling system as to what can and cannot be placed into the recycling bins can be found at Councils website at:

<https://www.lanecove.nsw.gov.au/CouncilServices/WasteandRecycling/Pages/WhatCanBeRecycled.aspx> and

<https://www.lanecove.nsw.gov.au/CouncilServices/WasteandRecycling/Pages/A-ZofRecycling.aspx>.

In addition, Council provides a service to assist apartments improve recycling. The details can be accessed at:

<https://www.lanecove.nsw.gov.au/CouncilServices/WasteandRecycling/Pages/RecyclingInApartments.aspx>.

All residents will be provided with information on the proper use of the waste management systems. Residents will dispose of general waste via the chutes on each Level, and recyclables via the 240 litre bins (ie., 2 of these), located also on each Level of the development.

Other management aspects include:

- Residents will be provided with space for small (15 litre) bins for both waste and recyclables in each unit.
- Residents will be provided with information on the proper use of the waste management system and residents will be encouraged to maximise the separation of general waste and recyclables within their apartments to aid the proper disposal of all materials.
- Building management will be responsible for monitoring all bins in all areas and either replace them (as per the recycling bins located on each level) and shifting bins from the chute rooms to the holding area for servicing by Council.

2.5 Hard Waste

Council provides a scheduled “clean up service” for the disposal of larger items. Details of this service can be found at:

https://cbs.urmgroupp.com.au/cbs/lanecove_council/onlinebooking/index.php

2.6 Special Events

If an additional collection is required due to residents shifting house, having parties or other events that leads to increased waste/recycling generation, Council can on application arrange additional bins and collections for a fee. Details can be found at:

<https://www.lanecove.nsw.gov.au/CouncilServices/WasteandRecycling/Pages/WasteCollectionService.aspx>.

3 Education

Tenants will receive information regarding the waste collection systems including how to use the system, which items are appropriate for each stream and collection regimes.

This information will be in the form of a printed guideline outlining what bins are to be used for which materials and for management of bulky waste items.

All waste receptacles will be appropriately signed and additional room signage is usually provided from most waste contractors during implementation of the waste contract. Examples of signage is included in Appendix A.

It is recommended that all signs should;

- Clearly identify the waste/recycling stream;
- Use correct waste/recycling stream colour coding;
- Identify what can and cannot be disposed of in the receptacle; and
- Include highly visual elements to accommodate for individuals with inadequate English literacy.
- A waste and recycling toolkit will be provided. This toolkit will include the details of each of the systems in place; acceptance criteria for each stream and how each stream is managed.

Appendix A – Example Signage



Don't waste YOUR future



Don't waste YOUR future



Example wall posters



Example bin lid stickers

