Date 19 January 2024

# Waste Management Plan 232-240 Elizabeth Street, Surry Hills (NSW)

#### Project 232-240 Elizabeth Street, Surry Hills (NSW)

**Prepared for** Stasia Holdings Pty. Limited.

#### Our reference 19655W-R01F02

Directory path Y:\19501-20000\19655W - 232-240 Elizabeth Street, Surry Hills\9. Reports\19655W-R01F02.docx

Version	Date	Issue	Prepared by	Checked by
R01D01	7/11/2022	Draft-Planning Proposal	W. Psiwa	L. Harris
R01F01	14/11/2022	Final-Planning Proposal	W. Psiwa	L. Harris
R01F02	19/01/2024	Updated WMP	W. Psiwa	L. Harris

Ratio Consultants Pty Ltd

This work is copyright. Apart from any use as permitted under Copyright Act 1968, no part may be reproduced without written permission of Ratio Consultants Pty Ltd.

Disclaimer: neither Ratio Consultants Pty Ltd nor any member or employee of Ratio Consultants Pty Ltd takes responsibility in anyway whatsoever to any person or organisation (other than that for which this report is being prepared) in respect of the information set out in this report, including any errors or omissions therein. Ratio Consultants Pty Ltd is not liable for errors in plans, specifications, documentation or other advice not prepared or designed by Ratio Consultants Pty Ltd.

# **Table of Contents**

	Section	Page No.
1.	Introduction	4
1.1.	Project Details	4
1.2.	Purpose	5
1.3.	Limitations	5
1.4.	Relevant Guidelines and Policies	5
2.	Operation Waste Management Guide	6
2.1.	Guide for Tenants	6
2.2.	Guide for Building Management	8
2.3.	Waste Management Plan Communication Strategy	9
2.4.	Waste Management Plan Revisions	9
3.	Waste Volume Assessment	10
4.	Waste Equipment and Storage Requirements	12
4.1.	Waste Storage Requirements	12
4.2.	Refuse and Bulky Waste Room Layout	13
5.	Waste Collection Details	14
5.1.	Waste Collection Requirements	14
5.2.	Waste Collection Methodology	14
5.3.	Waste Collection Time	15
6.	Design Standards	16
6.1.	Refuse Room Design Requirements	16
6.2.	Bin Colour Requirements	16
6.3.	Internal Waste Receptacle Requirements	16
7.	Contact Information	17

# 1. Introduction

# 1.1. Project Details

### Site Address

232-240 Elizabeth Street, Surry Hills (NSW)

**Local Council** 

Sydney City Council (Phone: 02 9265 9333)

# **Planning Application Number**

To be assigned

# **Development Summary**

Level	Waste Source	Days of Operation/Week	Net Lettable Area (m²)
Ground Level	Office	7	80
Ground level	Restaurant	7	448
Level 1	Office	5	714
Level 2	Office	5	714
Level 3	Office	5	714
Level 4	Office	5	714
Level 5	Office	5	714
Level 6	Office	5	714
Level 7	Office	5	714
Level 8	Office	5	539
Level 9	Office	5	274
Total			6,339

# 1.2. Purpose

This Waste Management Plan has been prepared to accompany the planning proposal application.

### 1.3. Limitations

Waste management arrangements during the construction and fit-out stages of the development, and on-going operation and monitoring of the waste management arrangements for the development following the occupation of the development are outside the scope of this Waste Management Plan.

# 1.4. Relevant Guidelines and Policies

Relevant policies and guidelines considered as part of the preparation of this Waste Management Plan include:

- Australian Government National Waste Policy: Less Waste, More Resources (2018).
- City of Sydney- Guidelines for Waste Management in New Developments (2020).
- City's Sustainable Sydney 2030 Community Strategic Plan (2017-2021).
- NSW-Better Practice Guide for Waste Management in Muti-Unit Dwellings (2008).
- EPA Noise Control Guidelines (2021).

# 2. Operation Waste Management Guide

# 2.1. Guide for Tenants

# **General Waste Disposal**

- Tenants shall place general waste into dedicated general waste receptacles (to be provided by the tenant).
- Tenants shall take full general waste receptacles to the waste room and empty them into the general waste collection bins.
- General waste must be placed within tied bags (biodegradable material recommended) prior to being placed into the general waste collection bins.

### **Organics Disposal**

- Tenants shall place food scraps into dedicated organics caddies (to be provided by the supplier of the organics processing unit).
- Tenants shall take full organics caddies to the waste room and empty them into the organics processing unit.
- Organics must be unbagged or placed within approved compostable bags prior to being placed into the organics processing unit.
- In the event that the organic processing unit breaks down, organics will be placed into the 240L bins provided in the organics room.

# **Recycling Disposal**

- Tenants shall place recycling into dedicated recycling receptacles (to be provided by the tenant).
- Tenants shall take full recycling receptacles to the waste room and empty them into the recycling collection bins.
- Bottles, cans, and containers must be rinsed, cardboard flattened, and lids/packaging separated as per the Australasian Recycling Label instructions (visit: <u>https://recyclingnearyou.com.au/arl/</u>) prior to being placed into the recycling collection bins.

# **Disposal of Other Waste Streams**

- Soft Plastics: tenants shall take soft plastics to a nearby drop-off location.
- **E-Waste:** tenants shall take e-waste to a dedicated e-waste bin located within the waste room (e-waste bin to be provided by an e-waste collection contractor). Tenants can also take e-waste to a nearby drop-off location.
- **Bulky Waste:** tenants shall take bulky waste to the dedicated bulky waste room. Bulky waste shall be collected by a bulky waste collection contractor on an as-required basis (to be arranged by Building Management).

# 2.2. Guide for Building Management

Building Management will be responsible for the following:

- Ongoing management of the waste management system including the maintenance of all waste rooms, the chute system, organics processing unit, and associated equipment and components, to the satisfaction of all waste system users and the relevant authority, and in accordance with the manufacturer's specifications.
- Engaging an appropriate contractor(s) to conduct services, replacements, or upgrades, as required.
- Ensure site safety for all building users and contractors.
- Abide by all relevant OH&S legislation, regulations, and guidelines.
- Assess any manual handling risks and prepare a manual handling control plan for waste and bin transfers.
- Provide to staff/contractors equipment manuals, training, health and safety procedures, risk assessments, and PPE to control hazards associated with all waste management activities.
- Engaging and managing the waste collection contractor(s).
- Ensuring the waste collection contractor(s) have access to the loading dock on collection days.
- Publishing and distributing information to ensure that all waste system users are familiar about the waste management system and the locations of the waste rooms.
- Informing all waste system users that bagged recycling and glass is not permitted.
- Advising all waste system users on where and how to dispose of their organics, e-waste, and bulky waste.
- Engaging a specialist contractor to collect and dispose of cooking oil associated with the tenancies.
- Securing all waste rooms and labelling/numbering the bins according to the property address to protect the equipment from theft and vandalism.
- Servicing all public areas through sweeping and removal of litter on a regular basis to prevent stormwater pollution.
- Preventing overfilled bins by keeping lids closed.
- Ensuring that bins are not removed from the site.
- Ensuring that the waste rooms, organics processing unit, and associated waste management equipment are provided as per the design requirements outlined in Section 6.

# 2.3. Waste Management Plan Communication Strategy

It is Building Management's responsibility to ensure that all waste systems users are informed about the development's waste management system, including where and how to correctly dispose of each waste stream. It is highly recommended that this Waste Management Plan is electronically provided to all tenants.

The waste collection contractor(s), and organics processing unit supplier (in conjunction with Building Management) shall provide educational material to inform all waste system users about the development's waste management system and advise all waste system users how to correctly separate and dispose of each waste stream with care, to minimise waste sent to landfill and reduce the contamination of recyclables.

# 2.4. Waste Management Plan Revisions

From time to time, due to changes in legislative requirements, changes in the development's needs and/or waste patterns (such as waste composition, volume, or distribution), or to address unforeseen operational issues, Building Management shall be responsible for coordinating the necessary Waste Management Plan revisions, including (on an as-required basis):

- A waste audit and new waste management strategy.
- Revision of the waste system (bin size / quantity / waste streams / collection frequency / update of equipment).
- Revision of the services provided by the waste collection contractor(s).
- Re-education of users.
- Any necessary statutory / regulatory requirements / approvals.

# 3. Waste Volume Assessment

City of Sydney's Guidelines for Waste Management in New Developments specify the following waste generation rates relevant to the development:

### Offices

Adopted for all office spaces

- General Waste: 15 L/100m<sup>2</sup> floor area/day
- Recycling: 25 L/100m<sup>2</sup> floor area/day
- Organics: 5 L/100m<sup>2</sup> floor area/day

### Restaurant

#### Adopted for the restaurant

- General Waste: 100 L/100m<sup>2</sup> floor area/day
- Recycling: 500 L/100m<sup>2</sup> floor area/day
- Organics: 100 L/100m<sup>2</sup> floor area/day

It has been assumed that the office spaces will be in operation for five days per week and the restaurant will be in operation for seven days per week.

Applying the above waste generation rates, the waste generation estimates are outlined in Tables 3.1, 3.2 and 3.3 below.

### Table 3.1: General Waste Volume Estimates

Waste Source	Net Lettable Area (m²)	Days of Operation/Week	General Waste Generation Rate (L/100m²/day)	General Waste Volume (L/Week)
Restaurant	448	7	100	3,136
Office	80	5	15	60
Office	5,811	5	15	4,358
Total	6,339	-	-	7,554

# Table 3.2: Organics Volume Estimates

Waste Source	Net Lettable Area (m²)	Days Operation/Week	Organics Generation Rate (L/100m²/day)	Organics Volume (L/Week)
Restaurant	448	7	100	3,136
Office	80	5	5	20
Office	5,811	5	5	1,453
Total	6,339	-	-	4,609

# Table 3.3: Recycling Volume Estimates

Waste Source	Net Lettable Area (m²)	Days of Operation/Week	Recycling Generation Rate (L/100m²/day)	Recycling Volume (L/Week)
Restaurant	448	7	500	15,680
Office	80	5	25	100
Office	5,811	5	25	7,264
Total	6,339	-	-	23,044

# 4. Waste Equipment and Storage Requirements

# 4.1. Waste Storage Requirements

The waste storage requirements for the development are outlined in Table 4.1 below.

Waste Stream	Bin Size (L)/Equipment Type	Quantity	Height per bin (mm)	Width per bin (mm)	Depth per bin (mm)	Footprint (m²)
General waste	1100	3	1330	1240	1070	3.98
Organics	Organics Processing Unit (Enrich 360 300L	1	1460	1100	1300	1.43
Organics*	120	5	930	480	545	1.31
Recycling	1100	8	1330	1240	1070	10.61
E-waste	240	1	1060	585	730	0.43
Total Footprint Required Excluding Circulation (m <sup>2</sup> ):						17.76
		Total Area Pr	ovided (m²)			101.00

 Table 4.1: Refuse Room Equipment & Storage

\* As the organic processing unit reduces waste volumes by approximately 80%, it is expected that 5x120L organics bins will be filled per week with fertiliser (by-product of the processing unit), to be collected by the processing unit supplier, or used on gardens.

# Table 4.2: Bulky Waste Room equipment & storage

Waste Stream	Storage area	Quantity	Height per bin (mm)	Width per bin (mm)	Depth per bin (mm)	Footprint (m²)
Bulky waste	4 sqm storage area	-	1000	4000	1000	4.00
Total Footprint Required Excluding Circulation (m <sup>2</sup> ):						4.00

# 4.2. Refuse and Bulky Waste Room Layout

The proposed refuse and bulky waste room layout is shown below in Figure 4.2.

Figure 4.2: Refuse and Bulky Waste Room Layout



ratio:

# 5. Waste Collection Details

# 5.1. Waste Collection Requirements

#### Waste Collection Capacity Volume (L/week) Bin Size (L) **Bin Numbers** Stream Frequency (L/week) General Three times 3 7,554 1100 9900 Waste weekly Organics Processing 200-4,609 Unit 1 N/A 300kg/day Organics (Enrich360 ES300L) 576 120 5 Weekly 600 Three times 8 Recycling 23.044 1100 26400 weekly N/A 240 1 N/A E-waste On-call 4 sqm **Bulky Waste** N/A On-call N/A storage area

# Table 5.1: Refuse Room Waste Collection Requirements

\*Note: Based on Nabers Organics Density Data of 280 kg/m<sup>3</sup>, the development is expected to produce 1,295 kg of waste per week, or 185 kg of waste per day. Therefore, the recommended organic processing unit capacity is sufficient.

# 5.2. Waste Collection Methodology

Waste shall be collected from the basement level by a private waste collection contractor.

The nominated waste collection vehicle is the 6.4-metre-long mini rear loader, which has a travel height clearance requirement of 2.2m and an operational height clearance requirement of 2.5m when collecting 1100L bins.

The waste collection vehicle will access the bin room via the car lift, and stop on the turntable provided. The contractor will be responsible for transferring bins to the rear of the waste vehicle and returning the emptied bins back to their original position once collection is complete. The collection procedure is expected to take no longer a few minutes.

The collection vehicle will then use the turn table to manoeuvre and exit the basement, via the car lift.

# 5.3. Waste Collection Time

"Annoyance created by industrial waste collection tends to intensify in the early-morning period. To this end, early-morning collections should be restricted to non-residential areas to minimise early morning disturbances. Where a residential area is impacted by noise from the collection of refuse, then collections should be restricted to the times contained within the schedule.

• Refuse bins should be located at sites that provide minimal annoyance to residential premises.

- Compaction should be carried out while the vehicle is moving.
- Bottles should not be broken up at collection site.
- Routes which service predominantly residential areas should be altered regularly to reduce early morning disturbances.
- Noisy verbal communication between operators should be avoided where possible.

### Schedule: Industrial waste collection

<u>One collection per week</u> 6:30 am – 8 pm Monday to Saturday 9 am – 8 pm Sunday and public holidays <u>Two or more collections per week</u> 7 am – 8 pm Monday to Saturday

9 am – 8 pm Sunday and public holidays

Note: Section 167 of the *Environment Protection Act 2017* deals with the emission of unreasonable noise from residential premises. This provision of the Act is not limited to the schedule and may be enforced at any time." (EPA Victoria, 2021, p.6-7).

# 6. Design Standards

# 6.1. Refuse Room Design Requirements

- Comply with Building Code of Australia (BCA) and all relevant Australian Standards;
- Allow storage of all collection bins on site at all times;
- Allow easy access for users of the bins;
- Allow easy, direct and convenient transfer of bins to the collection point;
- Bin rooms shall be appropriately screened to prevent unsightly impacts on amenity; and
- Artificial light shall be provided where necessary outside the bin room to enable occupiers
  of the site to always dispose of waste safely and appropriately.
- The bin rooms shall be sized to accommodate all waste arising on the premises together with any associated equipment for handling the generated waste. The area designated for bin storage is based on the number of bins and the physical dimensions of the bins;
- The bin room shall be maintained to ensure that the aesthetics of the development are not compromised.
- Each bin shall be accessible and manoeuvrable in and out of the bin room with minimum handling of other bins; and
- The floor of the bin rooms shall be constructed of concrete (or similar) and shall be finished to a smooth even surface covered at the intersection of walls and plinths.
- The bin rooms shall be ventilated in accordance with the requirements of the Building Code of Australia and AS1668.2;
- Ventilation openings shall be protected against flies and vermin;
- Doors shall be tight fitting;
- A graded bin washing area (connected to wastewater, with a litter trap connected to prevent wastewater pollution) and wall-mounted hosecock should be provided for washing bins, in accordance with the relevant authority requirements.

### 6.2. Bin Colour Requirements

- General waste bins with a black body and red lid.
- Organics bins with a black body and light green lid
- Recycling bins with black body and yellow lid.
- E-waste bin with black body and grey lid.

### 6.3. Internal Waste Receptacle Requirements

 Suitably sized receptacles no larger than 60 litres for general waste, organics, recycling, to ensure ease of manual handling. Note: If receptacles are larger than 60 litres, a bin lifter will be required in the refuse room.

# 7. Contact Information

Table 7.1 below includes a complimentary listing of contractors and equipment suppliers. The Project Principal shall not be obligated to procure goods / services from these companies. Ratio Consultants does not warrant or make representations for the goods / services provided by these contractors and suppliers.

Service	Contractor/Supplier	Phone	Website
Private Waste	Cleanaway	13 13 39	www.cleanaway.com.au
Collection Contractor and/or Bin Supplier	CSC Waste & Recycling	1300 499 927	www.cscwaste.com.au
	iDump	1300 443 867	www.idump.com.au
	JJ Richards	03 9794 5722	www.jjrichards.com.au
	Premier Waste	1300 219 001	www.premierwaste.com.au
	SUEZ	13 13 35	www.suez.com.au/en-AU
	Veolia	132 955	www.veolia.com/anz
	Wastewise Environmental	1300 550 408	www.wastewise.com.au
	Sulo Australia	1300 364 388	www.sulo.com.au
Organic Processing Unit	Closed Loop	1300 762 166	https://closedloop.com.au/
Bin Washing	The Bin Butlers	1300 788 123	www.thebinbutlers.com.au
	Calcorp Services	1800 225 267	www.calcorpservices.com.au
	Kerbside Clean-A-Bin	03 9830 7381	www.kerbsidecleanabin- srp.com.au
	WBCM Environmental Australia	1300 800 621	www.wbcm-aust.com.au
Odour Control	Eco-Safe Technologies	1300 135 039	www.eco-safe.com.au
	WBCM Environmental Australia	1300 800 621	www.wbcm-aust.com.au
E-Waste Collection	Tech Collect	1300 229 837	www.techcollect.com.au

### Table 7.1: Contractors and Supplier Details

# Appendix A : Plans Assessed

ratio:



# BASEMENT 1 1:100

B

This drawing is to be read in conjunction with all relevant project documentation (incl. written architectural specifications) and all specialist consultant documentation incl. but not limited to structural, mechanical, electrical, and hydraulic engineering documentation. Do not scale from this drawing. Only figured dimensions shall be used.

Report any discrepancy between this drawing and other project documentation immediately to the architect for clarification prior to commencement of related work on site. All sizes of structural components that are shown on these architectural documents are for reference only. Refer to the structural engineer's drawings for structural dimensions and architectural drawings for concrete set out dimensions. Shop drawings are to be completed for all metalwork, joinery and specified trade items and reviewed by the architect (and structural engineer where required) prior to fabrication. Refer to the 'Architectural Drawing Notes Page' for further notation.

(1



<sup>Project:</sup> 232-240 Elizabeth Street, Surry Hills						
<sub>Site:</sub> 232-240 Elizabeth Street, Sydney NSW						
<sup>Client:</sup> STASIA PTY LIMITED						
Scale: 1:100 @ A1	Drawn By: AF	Checked 1: AF				

Checked 2:

Approved:



Architect:
Candalepas Associates
Registration No. NSW 5773
Registration No. VIC 17978
Registration No. WA 2405
Registration No. ACT 2603
Registration No. QLD 5463
309 Sussex Street, Sydney NSW 2000 info@candalepas.com.au T: 02 9283 7755 F: 02 9283 7477

PRELIMINARY				
NOT FOR CONSTRUCTION - DESIGN INTER	IT ONLY	AN		
Drawing:	Job Number:	9:56		
BASEMENT 1	5968	uly 2023 :		

Drawing Number: PP 1003

Issue: P10

# Appendix B : Swept Path Assessment





