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Lot 952 Stranmore Boulevard, Bayonet Head WA 6330

OPERATIONAL WASTE MANAGEMENT PLAN

Proposed Residential Development

Multi-Dwellings

Client - H+H Architects

Revision - 1C

Prepared for - City of Albany - October 2024

CONTENTS

INTRODUCTION	3
BACKGROUND & EXISTING CONDITIONS	4
PROPOSED DEVELOPMENT	5
ANTICIPATED WASTE GENERATION, STORAGE & COLLECTION	6
WASTE GENERATION	6
TABLE 1: TYPICAL GARBAGE, RECYCLING & ORGANIC GENERATION RATES FOR MULTI-DWELLINGS	6
WASTE WITHIN OVERALL DEVELOPMENT	6
WASTE STORAGE AND HANDLING OF WASTE STREAMS	7
TABLE 2: TYPICAL MEASUREMENTS FOR WALGA (MOBILE GARBAGE BINS) MGB'S.	8
WASTE COLLECTION (PRIVATE ON-SITE COLLECTION)	13
AMENITY	14
Noise	14
VENTILATION	14
SECURITY & COMMUNICATION STRATEGY	14
WASTE STORAGE ENCLOSURES & CLEANING FACILITIES	14
Prevention of Vermin	14
MISCELLANEOUS	15
COMMUNAL COMPOSTING FACILITY	15
INTERNAL (RESIDENTIAL) WASTE STORAGE	15
Organic (Food/Green) Waste	15
BULKY WASTE	15
E-WASTE	15
Service Vehicles	15
APPENDIX A – SITE PLANS	16

TABLES

TABLE 1: TYPICAL GARBAGE, RECYCLING & ORGANIC GENERATION RATES FOR MULTI-DWELLINGS	6
TABLE 2: TYPICAL MEASUREMENTS FOR WALGA (MOBILE GARBAGE BINS) MGB'S	8

FIGURES

FIGURE 1: LOCATION OF THE SUBJECT SITE	4
FIGURE 2: AERIAL VIEW OF THE SUBJECT SITE	4
FIGURE 3: GUIDELINES FOR RESIDENTIAL WASTE PLACEMENT WITHIN THE RECYCLING & FOGO MGB'S	9
FIGURE 4: GUIDELINES FOR RESIDENTIAL WASTE PLACEMENT WITHIN THE GENERAL MGB'S & VERGE WASTE	10
FIGURE 6: SCALED DIAGRAM OF THE WASTE STORAGE ROOM	12
FIGURE 7: DIAGRAM OF A TYPICAL SRV WASTE COLLECTION VEHICLE	13

Archer Consultants Pty Ltd was engaged by H+H Architects to prepare a Waste Management Plan (WMP) for approval of a proposed commercial development at Lot 952 Stranmore Boulevard, Bayonet Head WA.

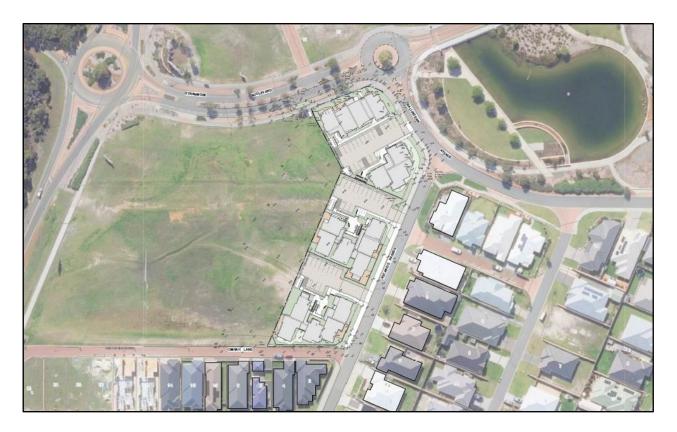
The proposed development consists of;

DEVELOPMENT DETAILS
4 x Two-Storey Buildings with a Total of 36 Units
Building 1 - 4 x 1 BR & 6 x 2BR (10 Units)
Building 2 - 8 x 1 BR & 4 x 2BR (12 Units)
Building 3 - 4 x 1 BR & 2 x 2BR (6 Units)
Building 4 - 4 x 1 BR & 4 x 2BR (8 Units)

In the course of preparing this WMP, the subject site and its environs have been inspected, plans of the development examined, and all relevant council requirements and documentation collected and analysed.

This WMP has been prepared based on the following information:

- Architectural Plans provided by H+H Architects.
- City of Albany Waste Guidelines & WALGA Multiple Dwelling Waste Management Guidelines.



The subject site is located at Lot 952 Stranmore Boulevard, Bayonet Head WA, on the southeast side of Stranmore Boulevard with the nearby land uses consisting undeveloped land and residential properties.

Figure 1 provides an overview of the area, and its surrounding land uses whilst Figure 2 provides an aerial view of the immediate area surround the subject site.

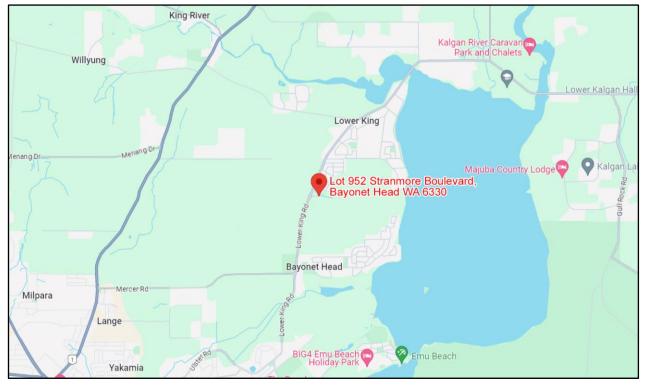


Figure 1: Location of the Subject Site



Figure 2: Aerial View of the Subject Site

The proposed development consists of multi-dwelling development. Access to the proposed front entrances of the residential buildings is via Stranmore Boulevard (Building 4), Ballendean Avenue (Building 3) and Ascanius Parade (Buildings 1 & 2) (Refer Appendix A).

ANTICIPATED WASTE GENERATION, STORAGE & COLLECTION

Waste will be collected from the roadside verge fortnightly by City of Albany Council waste services.

Waste Generation

As per the City of Albany Waste Guidelines & WALGA Multiple Dwelling Waste Management Guidelines.

The following table illustrates the typical garbage, recycling & organic generation rates.

NOTE: Where separate organic/food waste collection service is provided, general waste may be reduced which has been adjusted below.

Table 1: Typical Garbage, Recycling & Organic Generation Rates for Multi-Dwellings

Type of Premises	General Landfill Waste	Commingled Recycling Waste	Organic FOGO Waste
Multi Dwellings 1 Bedroom	• 801/04//00000		40L/per/fortnight
Multi Dwellings 2 Bedroom 120L/per/fortnight		80L/per/fortnight	80L/per/fortnight

NOTE: Generation rates are based on generation rates within the WALGA Multiple Dwelling Waste Management Guidelines. Actual usage can vary and may be generated at a reduced rate. The body corporate will monitor all waste requirements and handling accessing any needs for waste management plan revisions.

Waste within Overall Development

Using the garbage and recycling generation rates above, the following can be calculated;

Building 1 - 4 x 1 BR & 6 x 2BR (10 Units)

- 4 x 80L/per/fortnight of general waste = 320L (uncompacted)
- 4 x 40L/per/fortnight of recycling waste = 160L (uncompacted)
- 4 x 40L/per/fortnight of FOGO waste = 160L (uncompacted)
- 6 x 120L/per/fortnight of general waste = 720L (uncompacted)
- 6 x 80L/per/fortnight of recycling waste = 480L (uncompacted)
- 6 x 80L/per/fortnight of FOGO waste = 480L (uncompacted)

Building 2: 8 x 1 BR & 4 x 2BR (12 Units)

- 8 x 80L/per/fortnight of general waste = 640L (uncompacted)
- 8 x 40L/per/fortnight of recycling waste = 320L (uncompacted)
- 8 x 40L/per/fortnight of FOGO waste = 320L (uncompacted)
- 4 x 120L/per/fortnight of general waste = 480L (uncompacted)
- 4 x 80L/per/fortnight of recycling waste = 320L (uncompacted)
- 4 x 80L/per/fortnight of FOGO waste = 320L (uncompacted)

Building 3: 4 x 1 BR & 2 x 2BR (6 Units)

- 4 x 80L/per/fortnight of general waste = 320L (uncompacted)
- 4 x 40L/per/fortnight of recycling waste = 160L (uncompacted)
- 4 x 40L/per/fortnight of FOGO waste = 160L (uncompacted)
- 2 x 120L/per/fortnight of general waste = 240L (uncompacted)
- 2 x 80L/per/fortnight of recycling waste = 160L (uncompacted)
- 2 x 80L/per/fortnight of FOGO waste = 160L (uncompacted)

Building 4: 4 x 1 BR & 4 x 2BR (8 Units)

- 4 x 80L/per/fortnight of general waste = 320L (uncompacted)
- 4 x 40L/per/fortnight of recycling waste = 160L (uncompacted)
- 4 x 40L/per/fortnight of FOGO waste = 160L (uncompacted)
- 4 x 120L/per/fortnight of general waste = 480L (uncompacted)
- 4 x 80L/per/fortnight of recycling waste = 320L (uncompacted)
- 4 x 80L/per/fortnight of FOGO waste = 320L (uncompacted)

Waste Storage and Handling of Waste Streams

Based on the total waste generated by the development, the following Mobile Garbage Bins (MGB's) should be provided:

Building 1 (10 Units)

- 5 x 240L General Waste MGB collected and emptied once a fortnight.
- 3 x 240L Recycling Waste MGB collected and emptied once a fortnight.
- 3 x 240L FOGO Waste MGB collected and emptied once a fortnight.

Building 2 (12 Units)

- 5 x 240L General Waste MGB collected and emptied once a fortnight.
- 3 x 240L Recycling Waste MGB collected and emptied once a fortnight.
- 3 x 240L FOGO Waste MGB collected and emptied once a fortnight.

Building 3 (6 Units)

- 3 x 240L General Waste MGB collected and emptied once a fortnight.
- 2 x 240L Recycling Waste MGB collected and emptied once a fortnight.
- 2 x 240L FOGO Waste MGB collected and emptied once a fortnight.

Building 4 (8 Units)

- 4 x 240L General Waste MGB collected and emptied once a fortnight.
- 2 x 240L Recycling Waste MGB collected and emptied once a fortnight.
- 2 x 240L FOGO Waste MGB collected and emptied once a fortnight.

NOTE: Bottles are not permitted to be emptied into garbage bins after 10.00pm on any night or before 7.00am on any day. **E-Waste** is expected to be minimal therefore, all waste will be placed in a small impermeable surface container and residents will organise for the E-Waste to be taken to a registered E-Waste Re-Processor as required.

The following table illustrates the typical dimensions of the MGB's mentioned above.

Table 2: Typical Measurements for WALGA (Mobile Garbage Bins) MGB's.

Size (L)	Height (mm)	Width (mm)	Depth (mm)	Footprint (m ²)
240L	1,080	580	735	0.43



Figure 3: Guidelines for Residential Waste Placement within the Recycling & FOGO MGB's



Figure 4: Guidelines for Residential Waste Placement within the General MGB's & Verge Waste

Please Note: The National Retail Association is assisting the State Government to help businesses transition for the single-use plastics ban which commenced in July 2022.

From 1 January 2022, the stage one ban includes the following items to reduce plastic pollution:

- Plastic bags with handles
- Plastic laminated paper bags
- Disposable plastic straws and stirrers
- Disposable plastic cutlery, plates and bowls
- Disposable plastic food containers without lids
- Polystyrene food containers and trays
- Balloon releases.

<u>Stage 2</u> has commenced, with the second set of items being phased out between 1 September 2023 and 1 July 2025. These items include:

- loose and moulded expanded polystyrene packaging
- degradable plastics (plastics designed to break up more rapidly into fragments under certain conditions).
- produce bags
- expanded polystyrene cups and food trays for raw meat and seafood
- coffee cups and lids
- lids for cups, bowls, trays, plates and takeaway food containers
- trays for takeaway food not covered in the Stage 1 ban
- cotton buds with a plastic stem
- microbeads.

For more information visit the Plastic Ban WA.

<u>WA Plastic Free</u> is a free service to help businesses navigate single-use plastic bans. They provide great support and resources for City businesses.

The following figure illustrates the scaled diagram of the MGB's within the waste storage area and kerbside placement for collection.

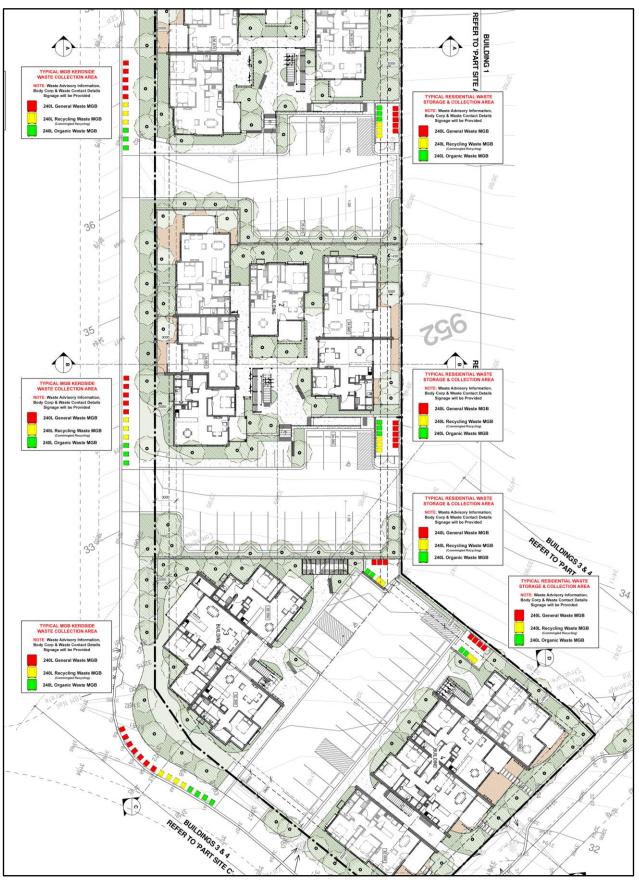


Figure 5: Scaled Diagram of the Waste Storage Room

Waste will be collected from the roadside verge fortnightly by City of Albany Council waste services.

To help ensure bin collection runs smoothly and enables drivers to pick up, empty and replace the bins safely, it's important to:

- The body corporate will arrange for the MGB's to be placed on the roadside verge fortnightly.
- Ensure the bin are not overfilled with the lids are shut to avoid spills and to protect it from bugs and animals.

The waste collection vehicle will pull up on Ascanius Parade and Ballendean Avenue and wheel the MGB's to/from the waste vehicle, emptying the MGB's. Once all the MGB's have been emptied and returned to the roadside verge, the vehicle will leave in a forward motion.

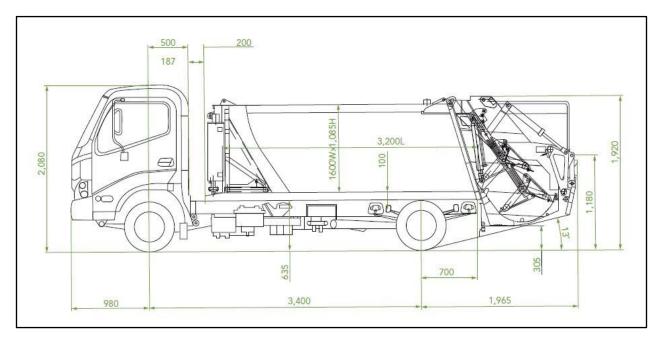


Figure 6: Diagram of a Typical SRV Waste Collection Vehicle

AMENITY

Noise

The only noise generated from the waste management at the property will be that of the MGB's being wheeled to / from the waste vehicle emptying the MGB's. Any other noise related to the waste management will be kept to a minimum.

Ventilation

The waste bin areas will have ample natural ventilation.

Security & Communication Strategy

All MGB's will be secured within the waste storage areas.

Residents, Management will receive detailed documentation detailing all necessary requirements for safe waste management and handling including all relevant contact information. NOTE: All bin enclosures should have appropriate signage showing acceptable and non-acceptable items for each bin.

Waste Storage Enclosures & Cleaning Facilities

The body corporate will be responsible for keeping the waste bins clean.

NOTE: It is recommended that the on-site waste areas be enclosed and consist of; **(1)** Smooth impervious coated/treated ground surface, ensuring the ground is graded to the sewer (100 mm diameter) floor drain outlet. **(2)** Tap and hose (hose cock must be protected from the waste containers) for use of cleaning the MGBs and waste area. **(3)** Waste educational signage with building management contact details.

Prevention of Vermin

The occupants will be advised to not overfill the bins so that the lids are closed at all times. It is suggested to place rat traps in the corners of the waste storage areas.

MISCELLANEOUS

Communal Composting Facility

NOTE: Organic waste is a problem in landfill as it produces methane, a harmful greenhouse gas that is 25 times more potent than carbon dioxide. Turning it into compost reduces the impact on the environment and allows waste to become a usable product. Existing landfill sites are also nearing capacity and the creation of new sites can cause significant detrimental effects through land clearing, loss of habitat for local wildlife, and potential groundwater and soil contamination from the leaching of heavy metals and chemicals. As a commitment to improving waste management methods in support of social and environmental commitments at the local level. 240L Organic Waste MGB's will be available for residents.

Bokashi Anaerobic Composting bins are also available that can be stored indoors. It's a great way to turn your kitchen scraps into rich liquid and semi-solid fertiliser.

Internal (Residential) Waste Storage

It is suggested that sufficient space, should be provided for interim storage of smaller bins for garbage and recyclables. Space should allow for separate storage of recyclables from the garbage streams and segregation of organics waste placed in a kitchen caddy for placement within the organic waste bin.

Organic (Food/Green) Waste

Residential food waste can be placed in the FOGO waste bins. <u>Please refer to Communal</u> <u>Composting Facility above.</u> Green waste for common areas will be handled by the gardening contractor.

Bulky Waste

NOTE: The Bulky waste collection is once every second year with the next collection available in 2025. The body corporate will be responsible to notify residents when collection will be available.

E-Waste

Recyclable electronic goods include batteries, equipment containing printed circuit boards, computers, televisions, fluorescent tubes and smoke detectors. E-Waste is expected to be minimal therefore, all waste will be placed in a small impermeable surface container and management will organise for the E-Waste to be taken to a registered E-Waste Re-Processor as required.

Service Vehicles

All household waste bins will be placed on the roadside verge for collection by council's waste collection vehicles. There will be no waste vehicle access to the site.

APPENDIX A – SITE PLANS

