Client
Neometro

Date
10 July 2024

Waste Management Plan

97 Alma Road, St Kilda East

Planning
Transport
Urban Design
Waste Management

ratio:

ratio.com.au

Project
97 Alma Road, St Kilda East

Prepared for
Neometro

Our reference
19329W-R02F02

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R01D01	4/11/2022	Town Planning - Draft	W Psiwa	M Fairlie
R01F01	28/11/2022	Town Planning - Final	W Psiwa	M Fairlie
R02F01	3/06/2024	Town Planning – Amended Plans + RFI Response	W Psiwa	L Harris
R02F02	10/07/2024	Town Planning – Amended Plans	W Psiwa	L Harris

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.	Operational Waste Management Guide	6
2.1.	Recycling Victoria: A New Economy	6
2.2.	Guide for Residents of the Apartments	7
2.3.	Guide for Residents of the Townhouses	8
2.4.	Guide for the F&B Operator / Staff	9
2.5.	Building Manager Responsibilities	10
2.6.	Waste System Education	10
2.7.	Waste Management Plan Revisions	10
3.	Waste Volume Assessment Details	11
3.1.	Residential Waste Volume Assessment	11
3.2.	Commercial Waste Volume Assessment	14
4.	Waste Storage Details	16
4.1.	Residential Waste Storage Requirements	16
4.2.	Residential Waste Storage Layouts	17
4.3.	Commercial Waste Storage Requirements	19
4.4.	Commercial Waste Storage Layout	19
5.	Waste Collection Details	20
5.1.	Residential Waste Collection Requirements	20
5.2.	Commercial Waste Collection Requirements	21
5.3.	Waste Collection Methodology	21
5.4.	Waste Collection Time	21
6.	Design Standards	22

6.1.	Bin Room Design Requirements	22
6.2.	Bin Colour and Signage Requirements	23
6.3.	Internal Waste Receptacle Requirements	23

Appendices

Appendix A : Plans Assessed	24
Appendix B : Waste Collection Vehicle Swept Path Assessment	25

Table of Figures

Figure 2.1: The Circular Economy	6
Figure 4.2: Northern Residential Bin Room Waste Storage Layout	17
Figure 4.3: Southern Residential Bin Room Waste Storage Layout	18
Figure 4.4: F&B Bin Room Waste Storage Layout	19

1. Introduction

1.1. Project Details

Site Address

97 Alma Road, St Kilda East

Local Council

Port Phillip City Council - Phone: (03) 9205 5555

Planning Application Number

PDPL/00823/2022

Development Summary

Land Use Type	Building Section	Waste Source	Quantity
Residential	Northern	1-Bedroom Apartment	10 dwellings
		2-Bedroom Apartment	24 dwellings
		3-Bedroom Apartment	13 dwellings
		Total	**47dwellings**
	Southern	3-Bedroom Townhouse	20 dwellings
		Total	**20 dwellings**
Commercial	Northern	F&B Premises	33 m^2

1.2. Purpose

This Waste Management Plan has been prepared to address Council's RFI as outlined below:

— Amended basement ramp to avoid encroachment of the 300mm clearance lines for waste truck collection.

— Allocation of a commercial garbage bin of a minimum size of 660 Litres or alteration to the Waste Management Plan to require an increase in the frequency of commercial garbage collection for the food and drink premises.

— The northern bin room door is either a roller door or shown to open inwards to ensure ease of transportation of skip bins to and from the collection point.

— Prior to the endorsement of plans under Condition 1 of this permit, a Waste Management Plan (WMP) must be submitted to and approved by the Responsible Authority. The WMP must be generally in accordance with the WMP submitted with the application by Ratio Consultants dated 28 November 2022 but amended to include nomination of a responsible party to ensure future residents are informed of the Waste Management Plan provisions relating to bin collection, hard waste removal and other waste facilities in the building and to include changes required by Condition 1 in relation to waste management.

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).

— Victorian Government – Recycling Victoria: A New Economy (2020).

— Sustainability Victoria – Better Practice Guide for Waste Management and Recycling in Multi-Unit Developments (2018).

— Port Phillip City Council – Guidelines for Preparing a Waste Management Plan (2019).

— EPA Victoria – Noise Control Guidelines (2021).

2. Operational Waste Management Guide

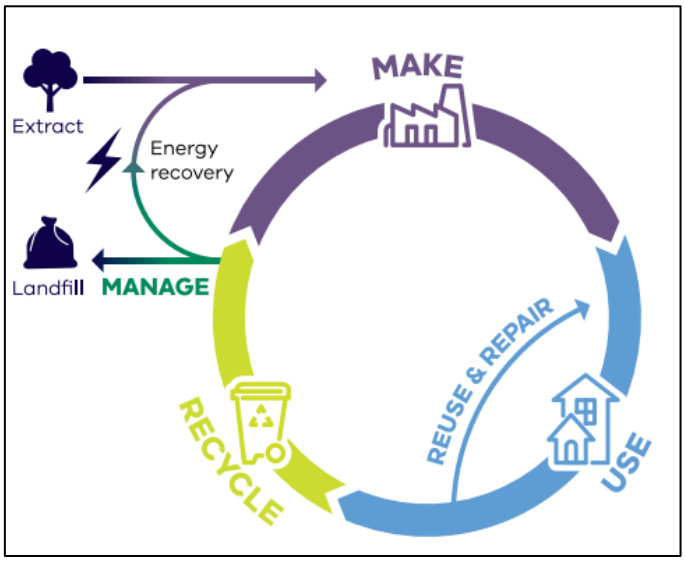
2.1. Recycling Victoria: A New Economy

The Victorian Government's Recycling Victoria: A New Economy was released in 2020 and sets out strategies to reduce the amount of waste generated in Victoria and increase the amount of materials for recycling and reprocessing to reduce damage to the environment caused by waste.

Ongoing education and dedicated ongoing management services are critical factors in encouraging users to continue to use the services and systems as intended. The future Occupiers of the development shall promote the above strategy where practicable and encourage users to participate in minimising the impact of waste on the environment. In particular, consideration should be made to the circular economy as shown in Figure 2.1 below.

A circular economy continually seeks to reduce the environmental impacts of production and consumption, while enabling economic growth through more productive use of natural resources.

Figure 2.1: The Circular Economy



Source: Recycling Victoria: A New Economy

Establishment of waste reduction and recycling targets, including conducting periodic waste audits, keeping records of waste streams, and monitoring of the quantity of recyclables found in landfill-bound bins. The results of such audits shall be shared with users to encourage further reductions in waste where possible

2.2. Guide for Residents of the Apartments

General Waste Disposal

- Residents shall place general waste into a dedicated general waste receptacle (to be provided by Building Management).
- Residents shall empty their general waste receptacle into the general waste collection bins located within the northern residential bin room on basement level when full.
- Residents shall ensure that general waste is placed within tied bags (biodegradable material recommended) prior to being placed into the general waste collection bins.

Recycling Disposal

- Residents shall place recycling into a dedicated recycling receptacle (to be provided by Building Management).
- Residents shall empty their recycling receptacle into the recycling collection bins located within the northern residential bin room on basement level when full.
- Residents shall ensure that bottles, cans, and containers are rinsed, cardboard is flattened, and lids/packaging are separated as per the Australasian Recycling Label instructions (visit: https://recyclingnearyou.com.au/arl/), prior to being placed into the recycling collection bins. Recycling must not be bagged.

Organics Disposal

- Residents shall place food scraps into a dedicated organics caddy (to be provided by Building Management).
- Residents shall empty their organics caddy into the organics collection bins located within the northern residential bin room on basement level when full.
- Residents shall ensure that organics are unbagged or placed within approved compostable bags prior to being placed into the organics collection bins.

Glass Disposal

- Residents shall place glass into a dedicated glass receptacle (to be provided by Building Management).
- Residents shall empty their glass receptacle into the glass collection bins located within the northern residential bin room on basement level when full.
- Residents shall ensure that glass bottles and jars are rinsed, and lids/packaging are separated as per the Australasian Recycling Label instructions (visit: https://recyclingnearyou.com.au/arl/), prior to being placed into the glass collection bins. Glass must not be bagged.

Disposal of Other Waste Streams

- Soft Plastics: residents are encouraged to take soft plastics to a nearby drop-off location. Visit this link for further details: https://redcycle.net.au/where-to-redcycle/.
- Hard waste and e-waste: residents shall place hard waste and e-waste items at the marked location provided within the northern residential bin room on basement level. Building Management shall arrange for hard waste and e-waste to be collected directly from the northern residential bin room by a private contractor on an as-required basis.

2.3. Guide for Residents of the Townhouses

General Waste Disposal

— Residents shall place general waste into a dedicated general waste receptacle (to be provided by Building Management).

— Residents shall empty their general waste receptacle into the general waste collection bins located within the southern residential bin room on basement level when full.

— Residents shall ensure that general waste is placed within tied bags (biodegradable material recommended) prior to being placed into the general waste collection bins.

Recycling Disposal

— Residents shall place recycling into a dedicated recycling receptacle (to be provided by Building Management).

— Residents shall empty their recycling receptacle into the recycling collection bins located within the southern residential bin room on basement level when full.

— Residents shall ensure that bottles, cans, and containers are rinsed, cardboard is flattened, and lids/packaging are separated as per the Australasian Recycling Label instructions (visit: https://recyclingnearyou.com.au/arl/), prior to being placed into the recycling collection bins. Recycling must not be bagged.

Organics Disposal

— Residents shall place food scraps into a dedicated organics caddy (to be provided by Building Management).

— Residents shall empty their organics caddy into the organics collection bins located within the southern residential bin room on basement level when full.

— Residents shall ensure that organics are unbagged or placed within approved compostable bags prior to being placed into the organics collection bins.

Glass Disposal

— Residents shall place glass into a dedicated glass receptacle (to be provided by Building Management).

— Residents shall empty their glass receptacle into the glass collection bins located within the southern residential bin room on basement level when full.

— Residents shall ensure that glass bottles and jars are rinsed, and lids/packaging are separated as per the Australasian Recycling Label instructions (visit: https://recyclingnearyou.com.au/arl/), prior to being placed into the glass collection bins. Glass must not be bagged.

Disposal of Other Waste Streams

— Soft Plastics: residents are encouraged to take soft plastics to a nearby drop-off location. Visit this link for further details: https://redcycle.net.au/where-to-redcycle/.

— Hard waste and e-waste: residents shall place hard waste and e-waste items at the marked location provided within the nor southern residential bin room on basement level. Building Management shall arrange for hard waste and e-waste to be collected directly from the southern residential bin room by a private contractor on an as-required basis.

2.4. Guide for the F&B Operator / Staff

General Waste Disposal

- Staff shall place general waste into dedicated general waste receptacles (to be provided by the F&B Operator).
- Staff shall empty the general waste receptacles into the general waste collection bins located within the F&B bin room on basement level when full.
- Staff shall ensure that general waste is placed within tied bags (biodegradable material recommended) prior to being placed into the general waste collection bins.

Recycling Disposal

- Staff shall place recycling into dedicated recycling receptacles (to be provided by the F&B Operator).
- Staff shall empty the recycling receptacles into the recycling collection bins located within the F&B bin room on basement level when full.
- Staff shall ensure that bottles, cans, and containers are rinsed, cardboard is flattened, and lids/packaging are separated as per the Australasian Recycling Label instructions (visit: https://recyclingnearyou.com.au/arl/), prior to being placed into the recycling collection bins. Recycling must not be bagged.

Organics Disposal

- Staff shall place food scraps into dedicated organics caddies (to be provided by the F&B Operator).
- Staff shall empty the organics caddies into the organics collection bins located within the F&B bin room on basement level when full.
- Staff shall ensure that organics are unbagged or placed within approved compostable bags prior to being placed into the organics collection bins.

Glass Disposal

- Staff shall place glass into dedicated glass receptacles (to be provided by the F&B Operator).
- Staff shall empty the glass receptacles into the glass collection bins located within the F&B bin room on basement level when full.
- Staff shall ensure that glass bottles and jars are rinsed, and lids/packaging are separated as per the Australasian Recycling Label instructions (visit: https://recyclingnearyou.com.au/arl/), prior to being placed into the glass collection bins. Glass must not be bagged.

Disposal of Other Waste Streams

- Soft Plastics: the F&B Operator is encouraged to arrange for soft plastics to be taken to a nearby drop-off location. Visit this link for further details: https://redcycle.net.au/where-to-redcycle/.
- Hard waste and e-waste: the F&B Operator shall arrange for hard waste and e-waste items to be placed at the marked location provided within the F&B bin room on basement level. The F&B Operator shall arrange for hard waste and e-waste to be collected directly from the F&B bin room by a private contractor on an as-required basis.

2.5. Building Manager Responsibilities

— Ongoing management of the waste system including the maintenance of the bin rooms and associated equipment and components, to the satisfaction of users and the relevant authority, and in accordance with relevant manufacturer specifications. When required, Building Management shall engage an appropriate contractor to conduct services, replacements or upgrades.

— Engage and manage the waste collection contractor.

— Developing and implementing adequate safe operating procedures (including the preparation of Safe Work Method Statements).

— Securing the bin room to prevent theft and vandalism of bins.

— Removal of litter from all communal areas on a regular basis.

— Publish and distribute information or 'house rules' to ensure that building users are familiar about the waste management system.

— Inform users that bagged recycling and glass is not permitted.

2.6. Waste System Education

Building Management shall publish/ distribute rules/ information/ educational material to:

— Inform users about the waste management system.

— Improve facility management results, to reduce equipment damage, reduce littering, and to achieve better cleanliness.

— Advise users to sort and recycle waste with care to reduce contamination of recyclables.

2.7. 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 Details

3.1. Residential Waste Volume Assessment

Port Phillip City Council's 'Guidelines for Preparing a Waste Management Plan' specifies the following waste generation rates applicable to the residential component of the development:

1-Bedroom Dwelling

- General Waste: 80 L/dwelling/week
- Recycling: 80 L/dwelling/week

2-Bedroom Dwelling

- General Waste: 100 L/dwelling/week
- Recycling: 100 L/dwelling/week

3/4-Bedroom Dwelling

- General Waste: 120 L/dwelling/week
- Recycling: 120 L/dwelling/week

To allow for the separation of organics and glass from the general waste and recycling streams (respectively), the following modified waste generation rates are considered appropriate (adopting a 75 : 20 split for general waste : organics and a 70 : 30 split for recycling : glass):

1-Bedroom Dwelling

- General Waste: 60 L/dwelling/week
- Organics: 20 L/dwelling/week
- Recycling: 56 L/dwelling/week
- Glass: 24 L/dwelling/week

2-Bedroom Dwelling

- General Waste: 75 L/dwelling/week
- Organics: 25 L/dwelling/week
- Recycling: 70 L/dwelling/week
- Glass: 30 L/dwelling/week

3/4-Bedroom Dwelling

- General Waste: 90 L/dwelling/week
- Organics: 30 L/dwelling/week
- Recycling: 84 L/dwelling/week
- Glass: 36 L/dwelling/week

Applying the above modified waste generation rates, the waste volume estimates for the residential component of the development are outlined in Tables 3.1 to 3.4 below.

Table 3.1: Residential General Waste Volume Estimates

Land Use Type	Building Section	Waste Source	Quantity	General Waste Generation Rate	General Waste Volume
Residential	Northern	1-Bedroom Apartment	10 dwellings	60 L/dwelling/week	600 L/week
		2-Bedroom Apartment	24 dwellings	75 L/dwelling/week	1,800 L/week
		3-Bedroom Apartment	13 dwellings	90 L/dwelling/week	1,170 L/week
				Total	**3,570 L/week**
	Southern	3-Bedroom Townhouse	20 dwelling	90 L/dwelling/week	1,800L/week
				Total	**1,800 L/week**

Table 3.2: Organics Volume Estimates

Land Use Type	Building Section	Waste Source	Quantity	Organics Generation Rate	Organics Volume
Residential	Northern	1-Bedroom Apartment	10 dwellings	20 L/dwelling/week	200 L/week
		2-Bedroom Apartment	24 dwellings	25 L/dwelling/week	600 L/week
		3-Bedroom Apartment	13 dwellings	30 L/dwelling/week	390 L/week
				Total	**1,190 L/week**
	Southern	3-Bedroom Townhouse	20 dwelling	30 L/dwelling/week	600 L/week
				Total	**600 L/week**

Table 3.2: Residential Recycling Volume Estimates

Land Use Type	Building Section	Waste Source	Quantity	Recycling Generation Rate	Recycling Volume
Residential	Northern	1-Bedroom Apartment	10 dwellings	56 L/dwelling/week	560 L/week
		2-Bedroom Apartment	24 dwellings	70 L/dwelling/week	1,680 L/week
		3-Bedroom Apartment	13 dwellings	84 L/dwelling/week	1,092 L/week
				Total	**3,332 L/week**
	Southern	3-Bedroom Townhouse	20 dwelling	84 L/dwelling/week	1,680 L/week
				Total	**1,680 L/week**

Table 3.2: Residential Glass Volume Estimates

Land Use Type	Building Section	Waste Source	Quantity	Glass Generation Rate	Glass Volume
Residential	Northern	1-Bedroom Apartment	10 dwellings	24 L/dwelling/week	240 L/week
		2-Bedroom Apartment	24 dwellings	30 L/dwelling/week	720 L/week
		3-Bedroom Apartment	13 dwellings	36 L/dwelling/week	468 L/week
				Total	**1,428 L/week**
	Southern	3-Bedroom Townhouse	20 dwelling	36 L/dwelling/week	720 L/week
				Total	**720 L/week**

3.2. Commercial Waste Volume Assessment

Port Phillip City Council's 'Guidelines for Preparing a Waste Management Plan' specifies the following waste generation rates applicable to the commercial component of the development:

Café

— General Waste: 300 L/100m²/day

— Recycling: 200 L/100m²/day

To allow for the separation of organics and paper & cardboard from the general waste and recycling streams (respectively), the following modified waste generation rates are considered appropriate (adopting a 80 : 20 split for general waste : organics and a 50 : 50 split for recycling : paper & cardboard):

Café

— General Waste: 240 L/100m²/day

— Organics: 60 L/100m²/day

— Recycling: 100 L/100m²/day

— Paper & Cardboard: 100 L/100m²/day

Applying the above modified waste generation rates, the waste volume estimates for the commercial component of the development are outlined in Tables 3.5 to 3.8 below.

Table 3.5: Commercial General Waste Volume Estimates

Land Use Type	Building Section	Waste Source	Quantity	General Waste Generation Rate	General Waste Volume
Commercial	Northern	F&B Premises	33 m²	240 L/100m²/day	554 L/week

Table 3.6: Organics Volume Estimates

Land Use Type	Building Section	Waste Source	Quantity	Organics Generation Rate	Organics Volume
Commercial	Northern	F&B Premises	33 m²	60 L/100m²/day	139 L/week

Table 3.7: Commercial Recycling Volume Estimates

Land Use Type	Building Section	Waste Source	Quantity	Recycling Generation Rate	Recycling Volume
Commercial	Northern	F&B Premises	33 m^2	100 L/100m^2/day	231 L/week

Table 3.8: Commercial Paper & Cardboard Volume Estimates

Land Use Type	Building Section	Waste Source	Quantity	Paper & Cardboard Generation Rate	Paper & Cardboard Volume
Commercial	Northern	F&B Premises	33 m^2	100 L/100m^2/day	231 L/week

4. Waste Storage Details

4.1. Residential Waste Storage Requirements

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

Table 4.1: Residential Waste Storage Requirements

Waste Storage Location	Waste Stream	Bin Size (L)	Quantity	Height per bin (mm)	Width per bin (mm)	Depth per bin (mm)	Footprint (m^2)
Northern Residential Bin Room	General Waste	1100	2	1330	1240	1070	2.65
	Organics	120	5	930	480	545	1.31
	Recycling	1100	2	1330	1240	1070	2.65
	Glass	240	3	1060	585	730	1.28
	Hard Waste & E-waste	2 sqm storage area					2.00
	Total Footprint (Excluding Circulation)						**9.90**
Southern Residential Bin Room	General Waste	1100	1	1330	1240	1070	1.33
	Organics	120	3	930	480	545	0.78
	Recycling	1100	1	1330	1240	1070	1.33
	Glass	240	2	1060	585	730	0.85
	Hard Waste & E-waste	2 sqm storage area					2.00
	Total Footprint (Excluding Circulation)						**6.29**

4.2. Residential Waste Storage Layouts

The proposed waste storage layouts for the residential component of the development are shown in Figures 4.1 and 4.2 below.

Figure 4.2: Northern Residential Bin Room Waste Storage Layout

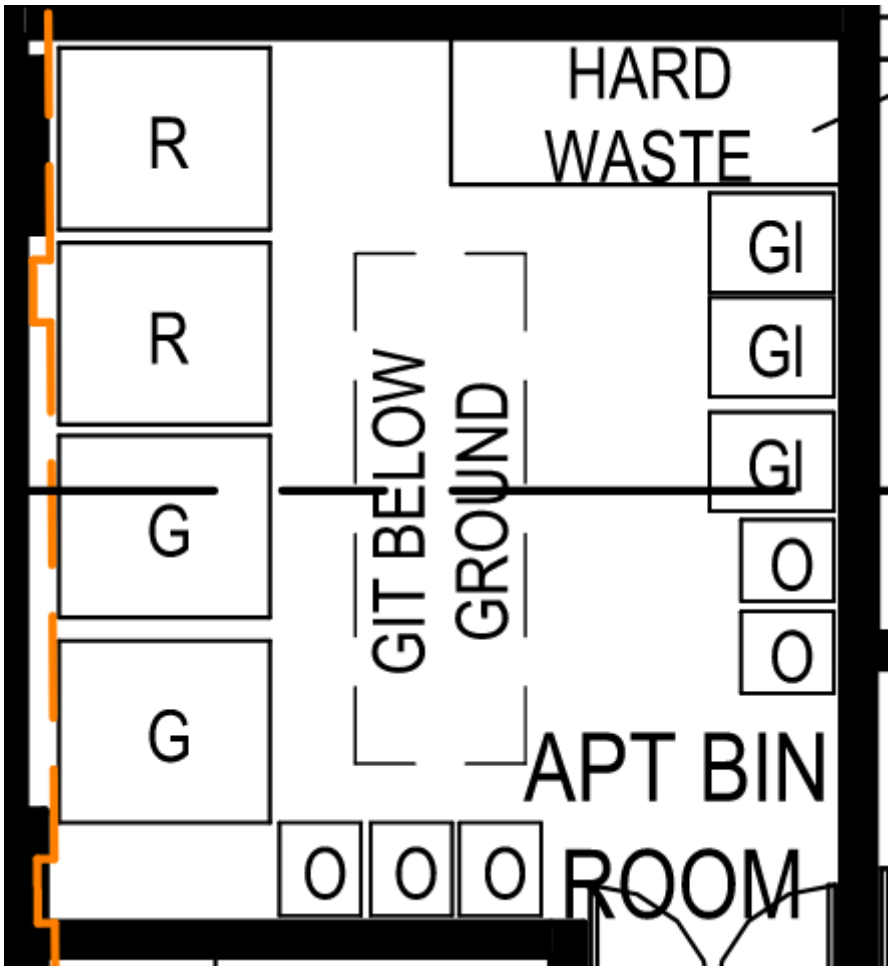
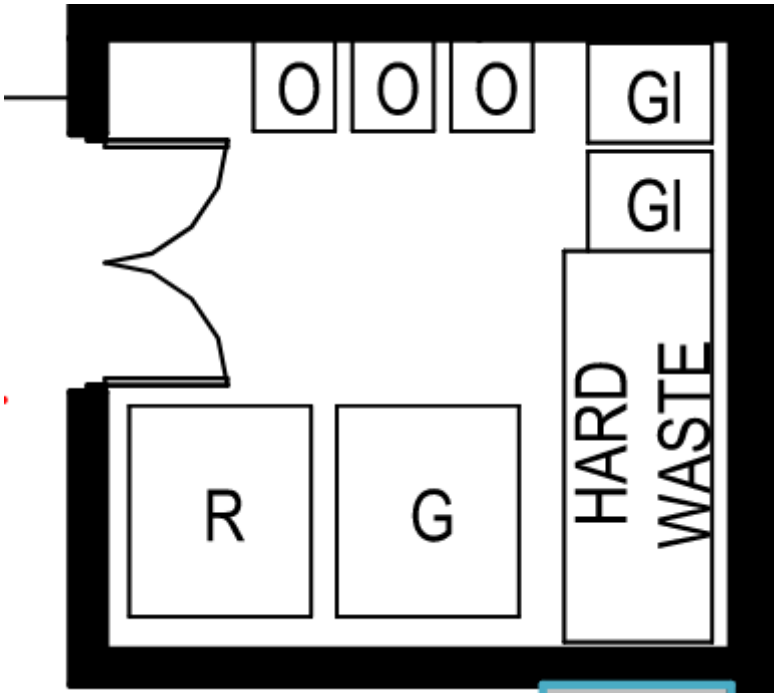


Figure 4.3: Southern Residential Bin Room Waste Storage Layout



Note: The doors for the northern and southern bin rooms open inwards to ensure ease of transportation of bins to and from the collection point.

4.3. Commercial Waste Storage Requirements

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

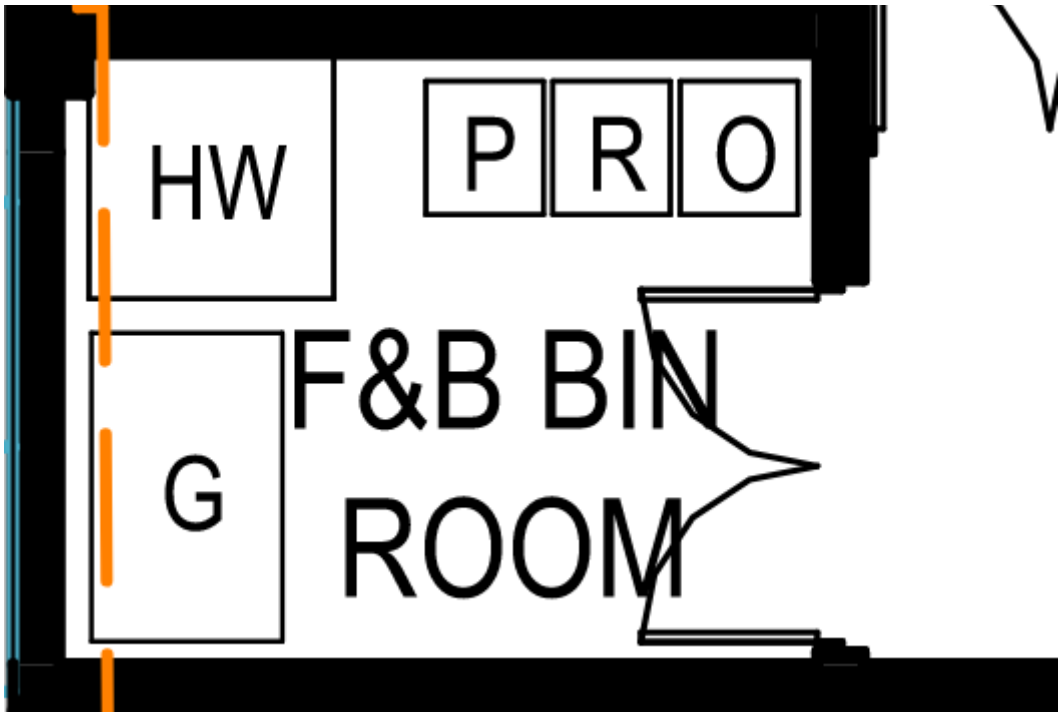
Table 4.2: Commercial Waste Storage Requirements

Waste Storage Location	Waste Stream	Bin Size (L)	Quantity	Height per bin (mm)	Width per bin (mm)	Depth per bin (mm)	Footprint (m^2)
F&B Bin Room	General Waste	660	1	1200	1260	780	0.98
	Organics	240	1	930	480	545	0.43
	Recycling	240	1	930	480	545	0.43
	Paper & Cardboard	240	1	930	480	545	0.43
	Hard Waste & E-waste	1 sqm storage area					1.00
	Total Footprint (Excluding Circulation)						**3.26**

4.4. Commercial Waste Storage Layout

The proposed waste storage layout for the commercial component of the development is shown in Figure 4.3 below.

Figure 4.4: F&B Bin Room Waste Storage Layout



5. Waste Collection Details

5.1. Residential Waste Collection Requirements

The waste collection requirements for the residential component of the development are outlined in Table 5.1 below.

Table 5.1: Residential Waste Collection Requirements

Waste Storage Location	Waste Stream	Volume (L/week)	Bin Size (L)	Quantity	Collection Frequency	Capacity (L/week)
Northern Residential Bin Room	General Waste	3,570	1100	2	Twice weekly	4,400
	Organics	1,190	120	5	Twice weekly	1,200
	Recycling	3,332	1100	2	Twice weekly	4,400
	Glass	1,428	240	3	Twice weekly	1,440
	Hard Waste & E-waste	-	-	2 sqm storage area	As required	-
Southern Residential Bin Room	General Waste	1,800	1100	1	Twice weekly	2,200
	Organics	600	120	3	Twice weekly	720
	Recycling	1,680	1100	1	Twice weekly	2,200
	Glass	720	240	2	Twice weekly	960
	Hard Waste & E-waste	-	-	2 sqm storage area	As required	-

5.2. Commercial Waste Collection Requirements

The waste collection requirements for the commercial component of the development are outlined in Table 5.2 below.

Table 5.2: Commercial Waste Collection Requirements

Waste Stream	Volume (L/week)	Bin Size (L)	Quantity	Collection Frequency	Capacity (L/week)
General Waste	554	660	1	Weekly	660
Organics	139	240	1	Weekly	240
Recycling	231	240	1	Weekly	240
Paper & Cardboard	231	240	1	Weekly	240
Hard Waste & E-waste	-	-	1 sqm storage area	As required	-

5.3. Waste Collection Methodology

The proposed waste collection methodology for the development is outlined below:

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

— The nominated waste collection vehicle is the 6.4-metre-long rear loader, which has a travel height clearance requirement of 2.2 metres and an operational height clearance requirement of 2.5 metres. No height clearance issues have been identified within the basement level car park.

— A swept path assessment has been prepared using Autodesk Vehicle Tracking Software demonstrating that the nominated waste collection vehicle can undertake waste collection from the basement level car park in a suitable manner, entering and exiting the site in a forward direction (refer to Appendix B).

— The waste collection contractor shall wheel the bins from the bin rooms to the waste collection vehicle for collection and return the bins to the bin rooms immediately after collection is complete.

— The waste collection contractor shall also be responsible for the development of a Safe Work Method Statement (SWMS) to ensure safety is considered for every aspect of the collection process.

— Hard waste and e-waste shall be collected on an as-required basis by a private contractor.

5.4. Waste Collection Time

Waste collection shall be undertaken in accordance with EPA Victoria's 'Noise Control Guidelines', as stipulated below:

— Between 7:00am and 8:00pm Monday to Saturday; and

— Between 9:00am and 8:00pm Sunday and public holidays.

Further to the above, it is recommended that waste collection is undertaken outside of peak AM and PM periods to minimise disruption to vehicles entering/exiting the site (i.e., between 10:00am and 3:00pm on weekdays).

6. Design Standards

6.1. Bin Room Design Requirements

The bin rooms shall be provided in accordance with the following requirements:

- Designed to 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 to bins for all waste system users.
- Allow direct and convenient transfer of bins to/from the collection point.
- Appropriately screened to prevent unsightly impacts on amenity.
- Provided with artificial light to enable users to dispose of waste safely and appropriately.
- Sized to accommodate all waste arising on the premises together with any associated waste management equipment
- Concrete (or similar) floor finished to a smooth, even surface, covered at the intersection of walls and plinths.
- Ventilated in accordance with the requirements of the Building Code of Australia and AS1668.2.
- Ventilation openings protected against flies and vermin.
- Provided with tight-fitting doors.
- Provided with adequate bin washing facilities (wall-mounted hot and cold mixing tap with floor graded to wastewater drain with litter trap) in accordance with the relevant authority requirements.

6.2. Bin Colour and Signage Requirements

The collection bins shall be provided in the following colours:

— General waste: dark green or black body with red lid.
— Organics: dark green or black body with light green lid.
— Recycling: dark green or black body with yellow lid.
— Glass: dark green or black body with purple lid.
— Paper & cardboard: dark green or black body with light blue lid.

Bins / bin rooms shall be provided with Sustainability Victoria or equivalent signage (visit: https://www.sustainability.vic.gov.au/recycling-and-reducing-waste/waste-systems-in-residential-commercial-and-industrial-buildings/waste-signage).

6.3. Internal Waste Receptacle Requirements

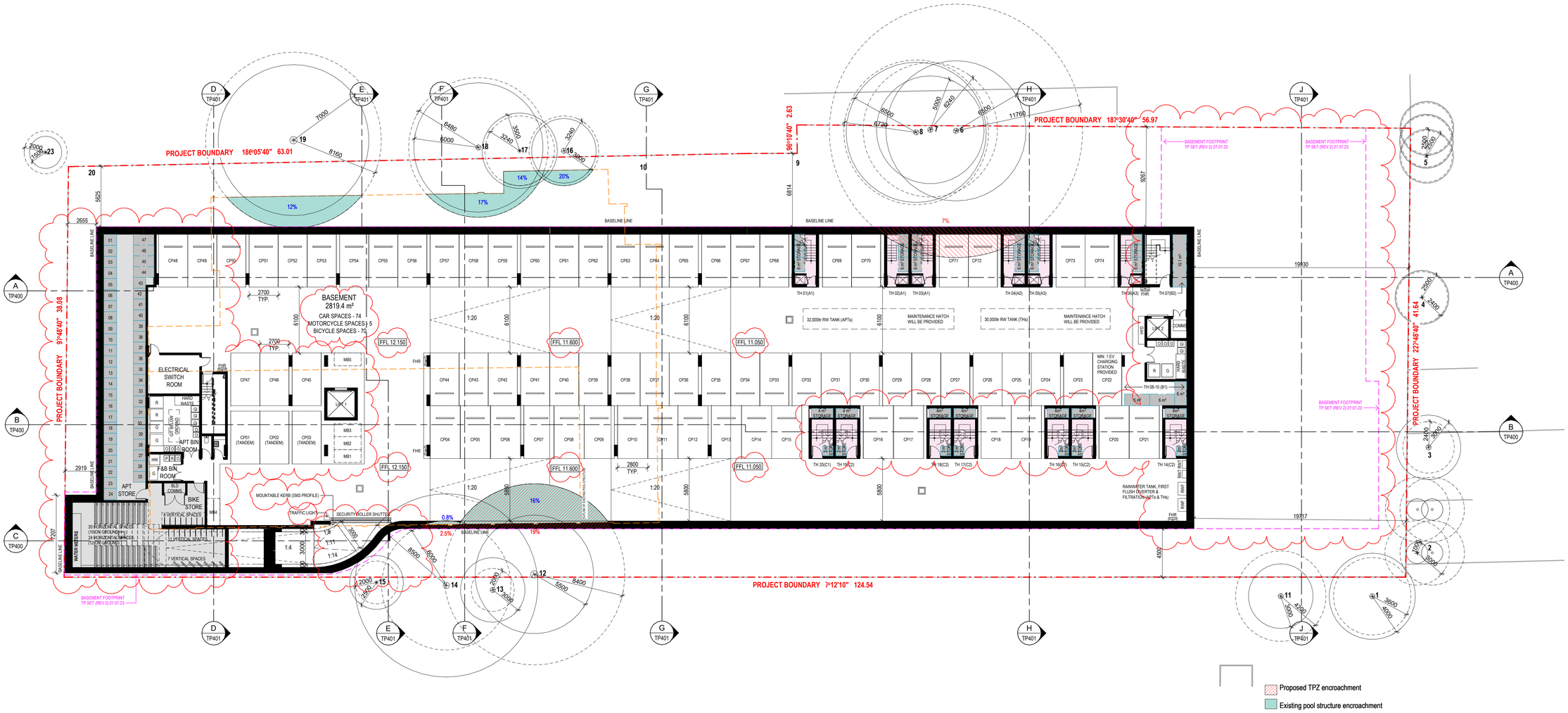
Internal residential waste receptacles shall meet the following requirements:

— General waste: large enough to hold at least 2 days' worth of waste, but no larger than 25 litres.
— Recycling: large enough to hold at least 2 days' worth of recycling, but no larger than 25 litres.
— Glass: large enough to hold at least 2 days' worth of glass (~10 litres).
— Organics: large enough to hold at least 2 days' worth of organics (~10 litres).

Internal commercial waste receptacles shall meet the following requirements:

— All waste streams: no larger than 60 litres to ensure ease of manual handling. Note: if receptacles are larger than 60 litres, a bin lifter may be required within the F&B bin room.

Appendix A : Plans Assessed



GA PLAN - BASEMENT B1
SCALE 1 : 200

Document Set ID: 8249557
Version: 1, Version Date: 14/08/2024

GENERAL NOTES

SURVEY:
EXISTING SITE INFORMATION IS TAKEN FROM VERIS SURVEY NUMBER 303981-BG DATED 05/07/2023 AND IS PROVIDED HERE FOR ILLUSTRATIVE PURPOSES ONLY. FOR FULL SURVEY DETAILS REFER TO SURVEY DOCUMENTS PROVIDED WITHIN APPENDICIES.

LANDSCAPE DESIGN:
LANDSCAPE DESIGN IS SHOWN INDICATIVELY. FOR FULL LANDSCAPE DETAILS REFER TO LANDSCAPE ARCHITECT'S DOCUMENTATION.

TPZ
CANOPY
EXISTING TREE WITHIN PROJECT BOUNDARY TO BE RETAINED.
TREE NUMBER, TPZ AND CANOPY AS PER ARBORIST REPORT

ABBREVIATIONS

AC	AIR CONDITIONING CONDENSER UNIT
COM	COMMS RISER
CL	CLOTHES LINE
ELEC	ELECTRICAL RISER
FEX	FIRE EXTINGUISHER
FFL	FINISHED FLOOR LEVEL
FHR	FIRE HOSE REEL
FHY	FIRE HYDRANT
FIP	FIRE INDICATOR PANEL
HP	HOT WATER PUMP
HYDR	HYDRAULIC RISER
HW	HOT WATER UNIT
NGL	NATURAL GROUND LEVEL
REF	REFRIDGERANT RISER
RL	RELATIVE LEVEL
OW	OPERABLE WINDOW
PV	PV PANEL
RFL	ROOF LIGHT

MATERIALS

BRK1	BRICK WORK
BRK2	HIT & MISS BRICK WORK
BRK3	GLAZED BRICK
CON1	CONCRETE PLANTER
FCS1	PAINTED FIBRE CEMENT SHEET
TL1	EXTERNAL TILE
SC1	SUN SHADESCREEN
GL1	DOUBLE GLAZING - CLEAR
GL2	REEDED GLAZING
MS1	TENSILE WIRE CABLES
MS2	MESH FENCING
MT1	ALUMINIUM (POWDERCOATED DULL BRONZE)
MT2	ALUMINIUM CANOPY (POWDERCOATED GREEN)
MT3	PERFORATED ALUMINIUM CLADDING (POWDERCOATED DULL BRONZE)
SR1	SAFETY GUARD RAIL
SC1	SUNSHADE SCREEN (GREEN)
ACP1	ACOUSTIC WALL PANEL
TM1	PAINTED TIMBER SCREEN
TL1	TILE (GREEN)

ESD:
1. THE PROJECT ACHIEVES A TOTAL BESS SCORE OF 73% WITH NO MANDATORY CATEGORY (EQ, ENERGY, WATER, STORMWATER) BELOW 50%.
2. 100% (47 OUT OF 47) OF THE DEVELOPMENT'S APARTMENTS AND 100% (20 OUT OF 20) OF THE DEVELOPMENT'S TOWNHOUSES ARE NATURALLY CROSS-VENTILATED.
3. DAYLIGHT MODELLING HAS BEEN CONDUCTED FOR A REPRESENTATIVE SAMPLE OF APARTMENTS. THE SUMMARY RESULT IS AS FOLLOWS:
• 85% OF LIVING FLOOR AREA ACHIEVES >60% ABOVE DF 1
• 88% OF BEDROOM FLOOR AREA ACHIEVES >90% ABOVE DF0.5
4. THE NON-RESIDENTIAL AREAS ARE TARGETING A 2% UP TO 40% OF THE NOMINATED AREA.
5. 38% (18 OUT OF 47) OF APARTMENTS ACHIEVE AT LEAST 3 HOURS OF SUNLIGHT.
6. THE DEVELOPMENT IS PROVIDED WITH A COMPREHENSIVE SHADING STRATEGY.
7. THE DEVELOPMENT IS TO ACHIEVE A 7.5 STAR AVERAGE NATHERS ENERGY RATING RESULT FOR THE APARTMENTS AND A 7.0 STAR AVERAGE NATHERS ENERGY RATING RESULT FOR THE TOWNHOUSES.
8. THE NON-RESIDENTIAL AREAS AIM TO REDUCE HEATING AND COOLING ENERGY CONSUMPTION BELOW THE REFERENCE CASE (BCA SECTION J 2019).
9. THE DEVELOPMENT IS TO UTILISE ELECTRIC HEAT PUMP HOT WATER SYSTEM.
10. A 9.6KW SOLAR PV SYSTEM IS TO BE LOCATED ON THE ROOF OF THE APARTMENT BUILDING.
11. A 2KW SOLAR PV SYSTEM IS TO BE PROVIDED FOR EACH TOWNHOUSE.
12. INDIVIDUAL COLD WATER AND ELECTRICITY METERS WILL BE PROVIDED TO THE APARTMENTS, TOWNHOUSES AND COMMUNAL AREAS.
13. WATER EFFICIENT FITTINGS AND FIXTURES ARE APPLIED THROUGHOUT.
14. A 32,000-LITRE RAINWATER TANK AND A 30,000-LITRE RAINWATER TANK WILL HARVEST RAINWATER FROM THE APARTMENT ROOF AND TOWNHOUSE ROOFS RESPECTIVELY. THESE TANKS WILL BE CONNECTED TO ALL TOILETS.
15. A MELBOURNE STORM RATING OF 108% IS ACHIEVED.
16. ALL LANDSCAPING IS TO BE NATIVE SPECIES OR LANDSCAPING IRRIGATION IS TO BE CONNECTED TO THE RAINWATER TANK ONLY.
17. A MINIMUM OF 47 BICYCLE SPACES ARE TO BE PROVIDED FOR RESIDENTS.
18. IN TOTAL 2 BICYCLE SPACES ARE TO BE PROVIDED FOR STAFF.
19. IN TOTAL 14 BICYCLE SPACES ARE TO BE PROVIDED FOR RESIDENTIAL VISITORS; AND 2 BICYCLE SPACES ARE TO BE PROVIDED FOR NON-RESIDENTIAL VISITORS.
20. ONE CHARGING POINT FOR ELECTRICAL VEHICLES IS INTEGRATED IN THE PROPOSED DEVELOPMENT.
21. 140M2 OF COMMUNAL SPACE (INCLUDING CLOTHES LINE) WILL BE PROVIDED AT THE APARTMENT BUILDING ROOFTOP DECK.
22. 27M2 OF COMMUNAL FOOD PRODUCTION AREA WILL BE PROVIDED.

REFER TO ESD CONSULANTS DOCUMENTATION FOR FULL DETAILS.

No.	Date	Description
4	03.07.2024	Amended TP Submission for VCAT

TOWN PLANNING

NOT FOR CONSTRUCTION

0 2 4 m

KTA

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www.kerstinthompson.com

DRAWING TITLE
GA PLAN - LEVEL BASEMENT B1

PROJECT
97 Alma Road
AT St Kilda East
FOR Neometro

DATE	DRAWN BY	DRAWING NO.	REV.
03.07.2024	KTA	TP1B1	4
SCALE	PROJECT		
As indicated(A1)	2202		

k:/kta projects/

GA PLAN - LEVEL GROUND
SCALE 1 : 200

Document Set ID: 8249557
Version: 1, Version Date: 14/08/2024

GENERAL NOTES

SURVEY:
EXISTING SITE INFORMATION IS TAKEN FROM VERIS SURVEY NUMBER 303981-BG DATED 06/07/2023 AND IS PROVIDED HERE FOR ILLUSTRATIVE PURPOSES ONLY. FOR FULL SURVEY DETAILS REFER TO SURVEY DOCUMENTS PROVIDED WITHIN APPENDICIES.

LANDSCAPE DESIGN:
LANDSCAPE DESIGN IS SHOWN INDICATIVELY. FOR FULL LANDSCAPE DETAILS REFER TO LANDSCAPE ARCHITECT'S DOCUMENTATION.

TPZ / CANOPY / 12 — EXISTING TREE WITHIN PROJECT BOUNDARY TO BE RETAINED. TREE NUMBER, TPZ AND CANOPY AS PER ARBORIST REPORT

ABBREVIATIONS

AC	AIR CONDITIONING CONDENSER UNIT
COM	COMMS RISER
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FHY	FIRE HYDRANT
FIP	FIRE INDICATOR PANEL
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NGL	NATURAL GROUND LEVEL
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MT1	ALUMINIUM (POWDERCOATED DULL BRONZE)
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22. 27M2 OF COMMUNAL FOOD PRODUCTION AREA WILL BE PROVIDED.

REFER TO ESD CONSULANTS DOCUMENTATION FOR FULL DETAILS.

No.	Date	Description
4	03.07.2024	Amended TP Submission for VCAT

TOWN PLANNING
NOT FOR CONSTRUCTION

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N

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www.kerstinthompson.com

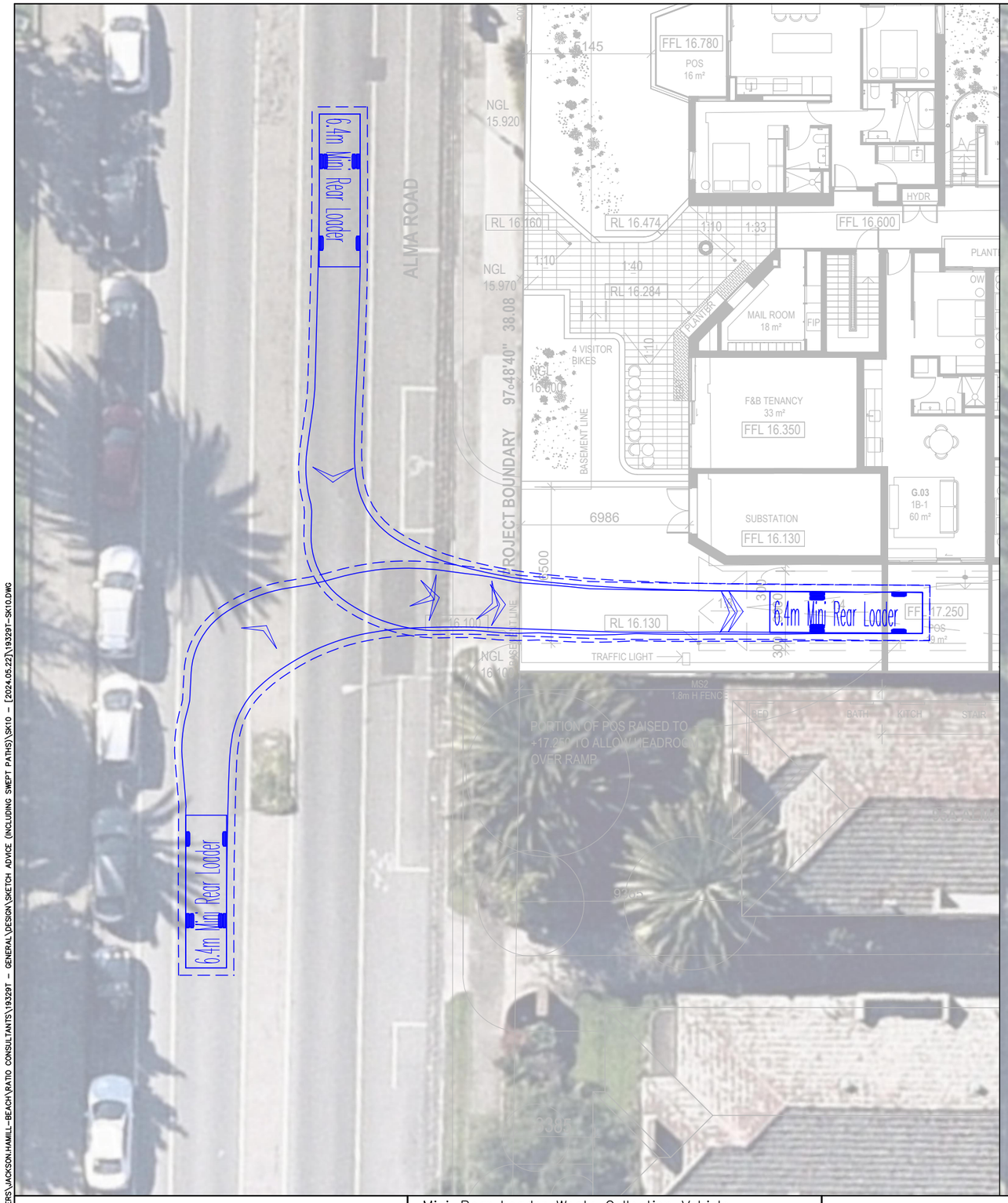
DRAWING TITLE
GA PLAN - LEVEL GROUND

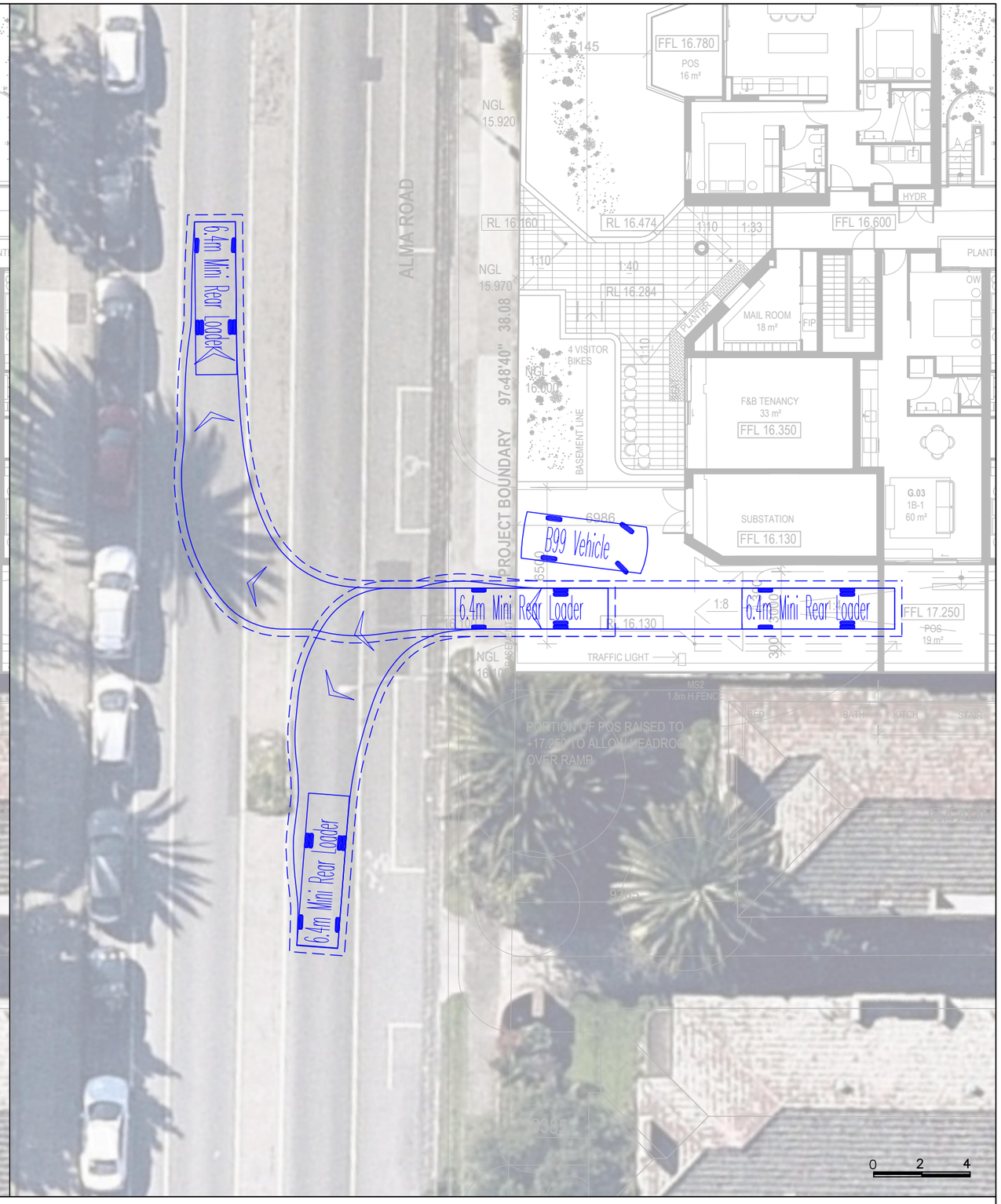
PROJECT
97 Alma Road
AT St Kilda East
FOR Neometro

DATE	DRAWN BY	DRAWING NO.	REV.
03.07.2024	KTA	TP100	4
SCALE As indicated(A1)	PROJECT 2202		

k:/kta projects/

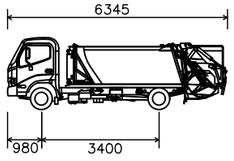
Appendix B : Waste Collection Vehicle Swept Path Assessment





ratio:
RATIO CONSULTANTS PTY LTD
ABN 005 422 104
8 GWYNNE STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

Mini–Rear Loader Waste Collection Vehicle



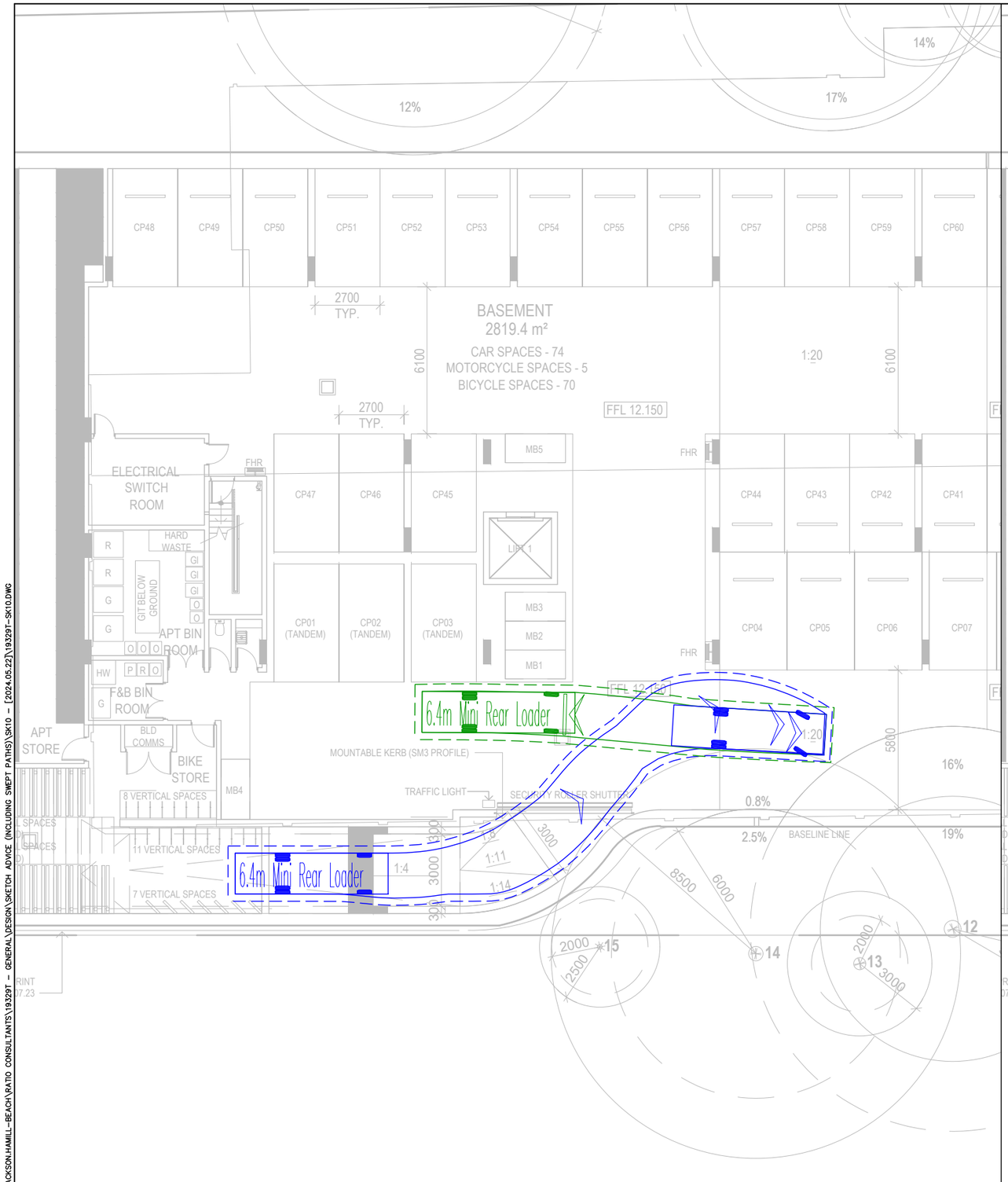
VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

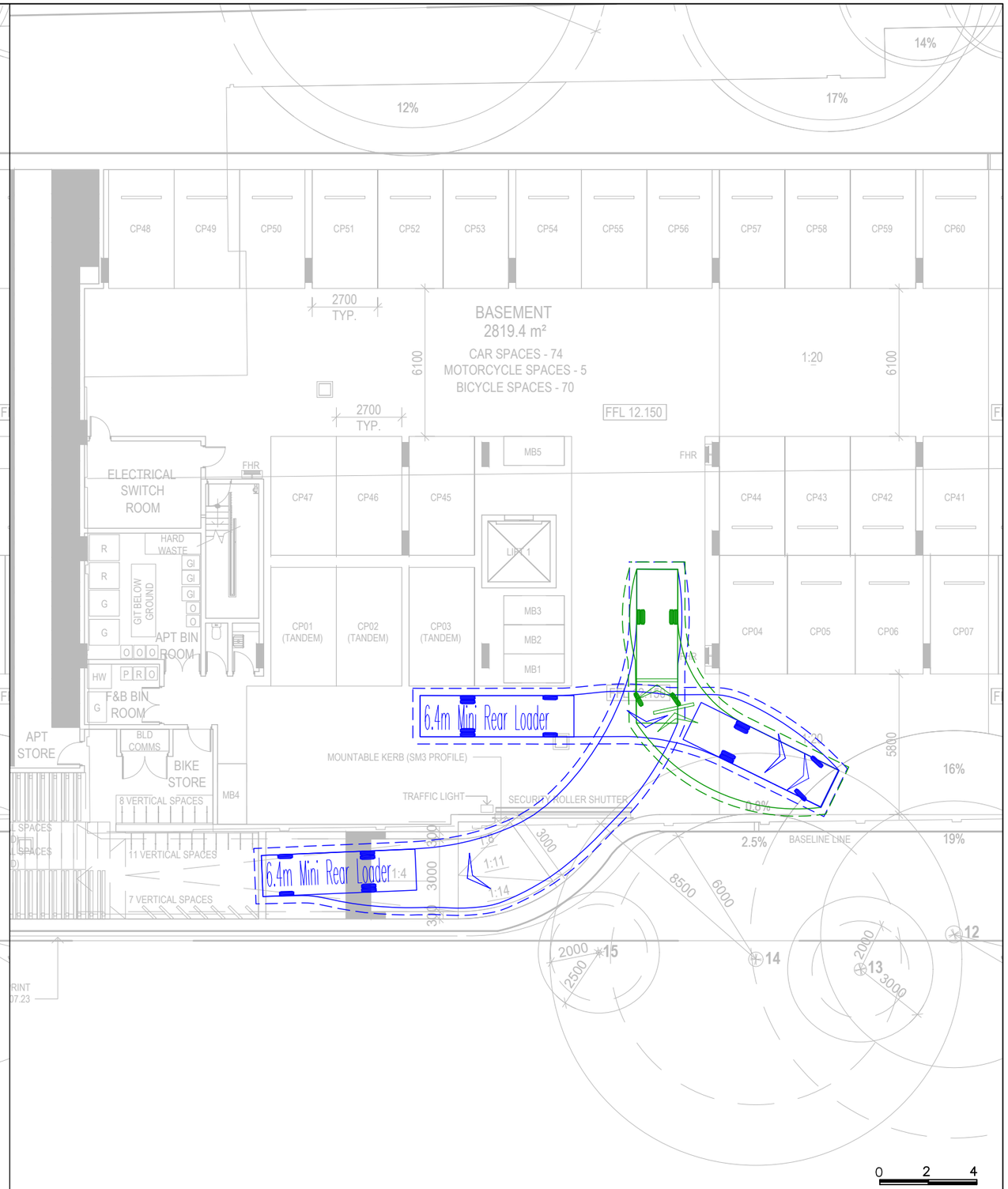
Overall Length	6.345m
Body Width	1.700m
Overall Body Height	2.080m
Min Body Ground Clearance	0.205m
Track Width	1.670m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.450m

Proposed Residential Development
97 Alma Road, St Kilda East
Swept Path Assessment - Ground Level

NOTE:
1) Base Plan Supplied by Kerstin Thompson Architects Pty Ltd, dated 20 May 2024
2) Maximum Design Speed 5km/h

RATIO REFERENCE	SHEET No.	SCALE	DATE
19329T-SK10/JHB	03 of 07	1:200@A3	27/05/2024

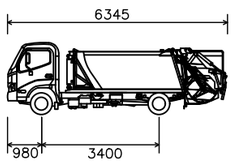




0 2 4

ratio:
RATIO CONSULTANTS PTY LTD
ABN 005 422 104
8 GWYNNE STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9428 3014

Mini–Rear Loader Waste Collection Vehicle



VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

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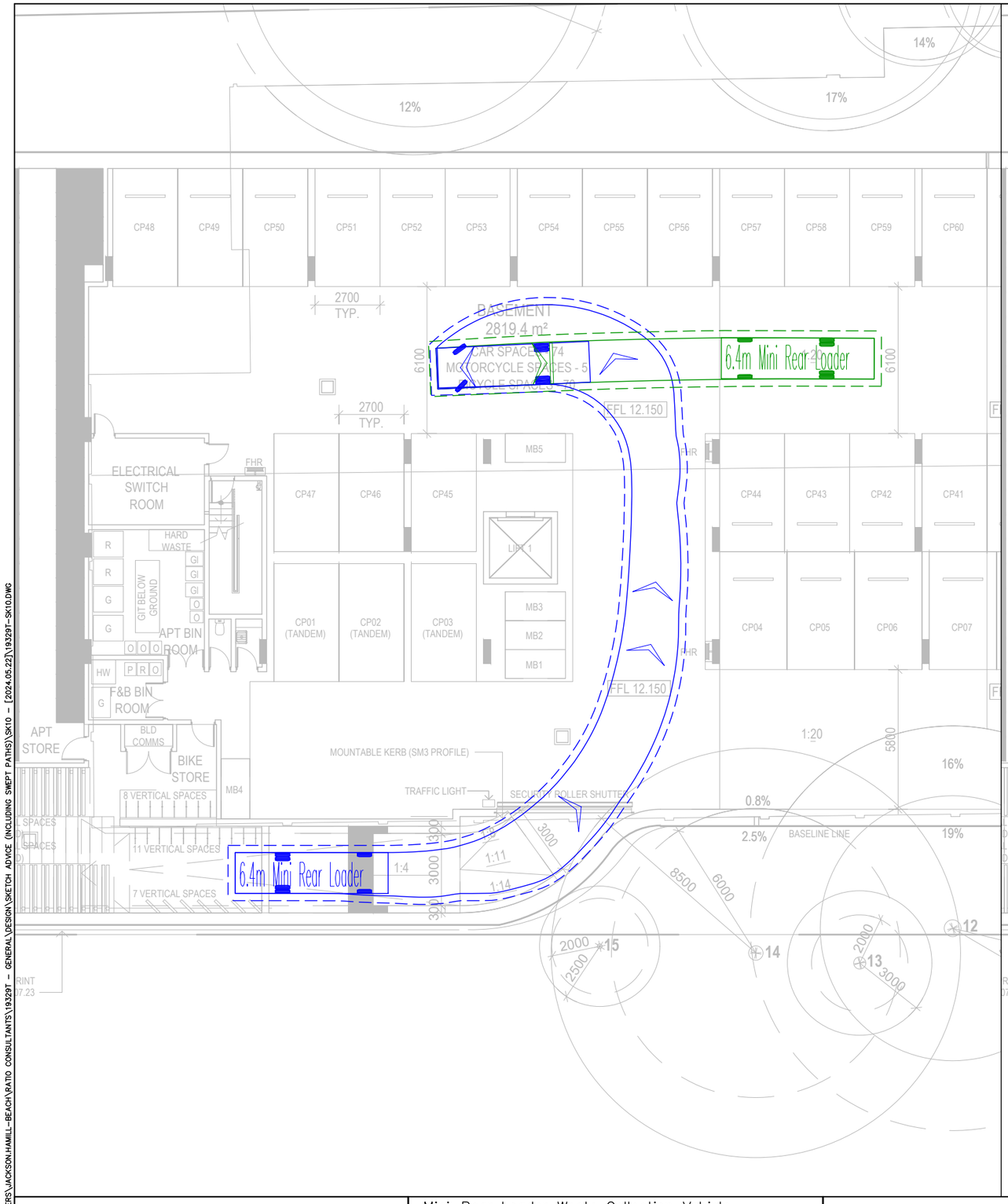
Proposed Residential Development
97 Alma Road, St Kilda East
Swept Path Assessment - Basement Level

NOTE:
1) Base Plan Supplied by Kerstin Thompson Architects Pty Ltd, dated 20 May 2024
2) Maximum Design Speed 5km/h

RATIO REFERENCE	SHEET No.	SCALE	DATE
19329T-SK10/JHB	04 of 07	1:200@A3	27/05/2024



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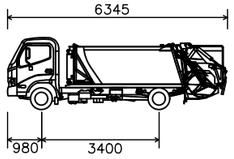

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97 Alma Road, St Kilda East
Swept Path Assessment - Basement Level

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19329T-SK10/JHB	05 of 07	1:200@A3	27/05/2024