

Operational Waste Management Plan

Multiunit Development

122-124 Queenscliff Rd, Queenscliff NSW 2096

Prepared for: Kristoffer Harvey & Gemini Queenscliff Pty Ltd

Prepared by: LR – Low Impact Development Consulting

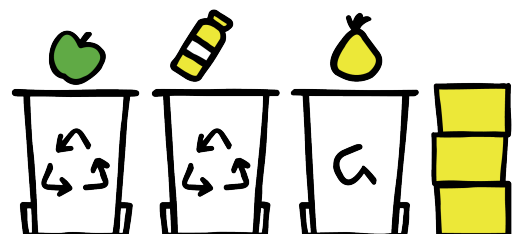
Date: 23/3/2022

e: info@lidconsulting.com.au

p: 03 9016 9486

a: Suite 7, 252 St Georges Rd, Fitzroy North Vic 3068

w: www.lidconsulting.com.au



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The content of this document represents the entirety of work output or recommendations offered by LID Consulting for this particular project. This content supersedes all other verbal discussions undertaken by LID Consulting representatives in relation to this project.

Commercial waste calculations are based on rates provided by government organisations and adopted and used as an industry standard. Bin numbers and spatial requirements have been calculated in accordance with these guidelines. The end user requirements may vary from this depending on the business use, type and operational practice.

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 LID acknowledges and pays respect to the Australian Aboriginal and Torres Strait Islander people, to their ancestors and elders, past, present and emerging, as the traditional custodians of the lands upon which we work and live. We recognise Aboriginal and Torres Strait Islander people's deep cultural and spiritual relationships to the water, land and sea, and their rich contribution to society.

1 Waste Collection Summary

The Northern Beaches Council standard waste collection service is proposed to collect waste from the Queenscliff Street kerbside.

The Owner's corporations is responsible for all aspects of waste management including placing bins in the designated collection location the night before the allocated collection day. Bins are to be returned on the same day collections occur.

The approved Waste Management Plan (WMP) will be the model to be adopted for this development. Detailed design and as-built installation must incorporate the design proposed and approved under this WMP. Any revisions of the WMP or changes to the approved waste system of the development may require Council approval and may require a re-submitted Waste Management Plan. More detail is contained within this report.

2 Waste Management Plan

Low Impact Development (LID) Consulting was engaged by Gemini Queenscliff Pty Ltd to assess the proposed development at 122-124 Queenscliff Rd, Queenscliff NSW 2096 to provide a Waste Management Plan (as required by Statutory Planning).

A waste management analysis has been undertaken based on the following documents:

- Dept of Environment & Climate Change NSW's Better Practice Guide for Waste Management in Multi-unit Dwellings (includes commercial rates);
- Northern Beaches Council's Waste Management Guidelines oct 2016.
- Northern Beaches Council's Pre-lodgement advice dated 11/8/2020.

This report is based on the drawing sets:

- A2201 – A2204, Revision C02, dated 18/5/2021 prepared by ESS.

2.1 Future Waste Streaming (NSW)

NSW will implement further waste and recycling system in all residential settings by 2030. This includes FOGO (Food and Garden Organic) and glass. As of now, six councils in the North East Waste region of NSW have FOGO services.

It is important that new developments look to incorporate space for these waste streams now in the planning phase. Non-residential developments should also consider and implement these waste streams as this level of recycling becomes the norm.

For future provision for these waste streams, the shared bin store provided on-site has the capacity to accommodate shared food organics and glass bins, as 1 out of 3 garbage bins can be swapped for food organics and 1 out of 3 co-mingled recycling bins can be swapped for a glass recycling bins.

2.2 Container deposit scheme

NSW has a container deposit scheme that will ensure more plastics, aluminium and glass containers are recycled effectively, with the expected benefit that waste generation rates will be reduced further beyond estimates here.

This allows residential and commercial tenements to actively participate by taking their recyclables directly to an out let in exchange for a monitory refund. Commercial outlets can also nominate to be a collection point.

More information can be found at www.epa.nsw.gov.au/your-environment/recycling-and-reuse/return-and-earn and <https://returnandearn.org.au>

2.3 Council Considerations

- With the development taking up 2 standard residential blocks and approx. 26m street frontage, a road side collection is currently viable with the requirement for 300mm spacing between bins.
- Street collection currently occurs along Queenscliff Street for the other adjoining residential properties.

2.4 Standard Residential Collection Options

Northern Beaches Council standard residential Bin Collection Options:

- 80, 240L landfill bins collected weekly;
- 140L, 240L co-mingled recycling bins fortnightly;
- 240L Green bins collected fortnightly;
- 140L, 240L Paper & cardboard bins collected monthly;
- 2m3 hardwaste collected twice yearly (booked service)



2.5 Proposed Development

Address: 122-124 Queenscliff Rd, Queenscliff NSW 2096

Type: Multi-unit development

Dwellings: 6 Units

Break up of units: 6 x 3 bed apartments

The proposed 3-storey development comprises of 6 units over a shared basement carpark. The main vehicular access into the basement carpark is from Queenscliff Road. A shared bin store has been located in the basement adjoining the central service core.

The development takes up 2 standard residential lots. Sharing bins provides no change to the number of bins placed kerbside than that to the existing arrangement.

Space for the collection, separation and storage of waste and recyclables has been provided, including opportunities for on-site management of food waste as appropriate.

2.6 Proposed Residential Waste Solution

Site Layout: Refer to **Appendix 1** for Site Layout Plan

Collection Type: Council kerbside collection service to collect all waste streams

Collection Location: From the Kerbside on Queenscliff Road

Bin Store Location: Dedicated store room at basement level

Residential	Northern Beaches Council Waste generation rates			Proposed Shared Bin Solution		
	No. units	Allowances	Total estimated waste volume	No. of Bins	Bin Size	Collection Frequency
General Waste (landfill)	6	2 x 240L bins allocated to 6 units		2	240L	Once weekly
Co-mingled Recycling		2 x 240L bins allocated to 6 units		2	240L	Fortnightly
Garden waste (future FOGO)		2 x 240L bins allocated to 6 units		2	240L	On the alternate fortnight
Cardboard / Paper		2 x 240L bins allocated to 6 units		2	240L	Fortnightly
Hard Waste		4m ³ required		8m ² provided	NA	2 x booked annually
E-waste			N/A See Section 4 for E-Waste Recycling			As per Hard waste
Other items			1 bin per waste stream or a stack or tubs on top of each other for: - Batteries - light bulbs - soft plastics - printer cartridges	4	80L stackable recommended	As often as required to maintain bins

3 Waste Management Details

3.1 Management Responsibilities

The Owner's Corporation is responsible for all aspects of waste management including implementing adequate safe operating procedures. Items to be addressed in maintaining the system include:

- Responsibility for placing bins in the designated collection location the night before the allocated collection day. Bins are to be returned on the same day collections occur.
- That bins and bins store areas are monitored regularly to ensure areas are fully operational with regular cleaning of the bins and bin store spaces and clean-up after collection if necessary.

- Management and coordination with council for bulky hard waste and other waste collections.
- Managing communal composting areas (if applicable).
- Provision of information to occupants with guides of how to using the various bin systems e.g. boxes to be flattened, containers for recycling washed, bins to not be over-full. See **Section 3.13** for further information about Signage, Education & Safety.
- Monitoring and feedback to occupants if the system is not working properly. Undertake a waste audit should it be suspected waste is not being placed in the correct bins.

3.2 Individual occupants Management Responsibilities

The tenants / occupants are responsible for their own waste. Items to be addressed in maintaining the system include:

- Individual occupants are responsible for placing their waste in the appropriate colour coded bins. This is to ensure all waste types are collected and recycled where possible and contamination of waste streams is minimised.
- Managing communal composting areas (if applicable).

3.3 Bin Store Area Design

The Bin store area design/location must include the following:

- A layout that allows access to all of the bins with adequate size to allow easy movement/transfer of the required number of bins. There is to be convenient access by residents and made easily accessible to people with limited mobility.
- All screening should be suitably designed for durability and to blend in with the development. Floor and wall surfaces are to be appropriately durable and easily cleaned.
- Doors located in the allocated storage areas should be designed for easy access of larger bins sizes and hard waste.
- Space suitable for bin wash down is to be available in the development. If this is the bin store then the floor is to be graded to a waste outlet with a litter trap. Alternately, a private contractor can be arranged to swap dirty bins for clean ones on a regular basis.
- If a bin wash is installed, a water tap and hose installed in or near the bin wash areas and correct drainage to sewer (never direct waste to storm water drains) should be designed in accordance with the relevant EPA Bunding Guidelines. Drains to the sewer to be located undercover to prevent rainwater infiltration.
- Bin stores or bins should be vermin proof - particularly where food waste is included. Ensure bin lids are closed and lockable if needed or the bin store is an enclosed space and considered to be largely vermin proof.
- A waterproof power point in or near the bin store.
- Adequate mechanical or natural ventilation if not outdoors.
- Ensure adequate lighting is provided in accordance with National Construction Code (NCC) guidelines if to be accessed after hours.
- Secure locks (where bin stores are accessible to the street)
- Space for a tug or bin lifter if required by the waste contractor(s) / facility management.
- Meter boxes should not be included in bin store areas.

3.4 Bin Store Area Access

- Manoeuvrability within the bin store area is open, with 1m minimum to walk between bins.
- There is to be no significant step at any threshold between the bin store area and the point of collection.

3.5 Bin Sizes

The following sizes are indicative bin sizes based on the Sustainability Victoria Better Practice Guide specified sizes (Appendix 9). These sizes are the size allowances required by most Councils in bin store areas. Allow 100mm between 4 wheel bins and 50mm between 2 wheel bins for movement.



Size	Width	Depth	Height	Footprint
80L	450mm	530mm	870mm	0.24m ²
120L	485mm	560mm	940mm	0.27m ²
240L	580mm	735mm	1080mm	0.43m ²
360L	600mm	885mm	1100mm	0.53m ²
660L	1370mm	850mm	1250mm	1.16m ²
1100L	1370mm	1245mm	1470mm	1.71m ²



Standard bin colours (refer AS4123.7)	
Garbage (landfill)	Red
Co-mingled recycling	Yellow
Green organics	Light Green
Glass	Purple
Paper and cardboard	Light Blue
E-waste	Light Grey

* NOTE: size may vary between Councils and contract suppliers

Examples of a stack of tubs on top of each other for small other waste streams



3.6 Internal Waste Management

- General landfill **garbage shall be placed in plastic bags** before placement into bins
- **Recycling materials are not to be bagged** and are to be placed loosely into the recycling bins. (Items in plastic bags in recycling bins are not recycled). Recyclable items in domestic bin collections include:
 - Rigid plastic containers
 - Paper, cardboard
 - Glass bottles and jars
 - Steel cans, aluminium cans and aluminium foil are among items that can be recycled.

But exclude:

- Plastic bags
- Garden hoses
- Rope (ropes and garden hoses can wrap around and damage equipment in the recycling plant).

To improve recycling:

- Empty containers and bottles of any leftover food or liquid. Ideally rinse them out.
- Don't put anything inside plastic bottles or containers
- Paper – if it can't be ripped, it can't be recycled due to the plastic coating.
- Check local waste collection / contractor requirements – some recycle all plastic resin codes, some are more restricted. Some want lids on bottles, some want them separate and in landfill.

3.7 Response to Increasing Waste

- A waste audit can be undertaken to understand the content of the waste bins. Audits provide feedback to clients of good or poor recycling practices. Images can be helpful to convey feedback.
- If landfill garbage bins consistently overflow, then residents are to be directed to educational material as to the appropriate streaming of waste including food and other recyclables. (see **Section 4** and **Soft Plastic Recycling** below).
- If recycling bins continue to overflow, residents should be reminded to crush and flatten all cardboard boxes before placing these in the recycling bin(s). It may also be appropriate to obtain an additional recycling bin.
- If recycling overflows residents could be notified of the closest return and earn recycling exchange locations.
- The bin store area has spare space to accommodate additional bins if required.
- The last choice option is for more regular collections to occur.

3.8 Reducing Odour

Odour from waste primarily emanates from bin store areas. Control of odour must occur in the bin store area with the provision of suitable natural or mechanical ventilation. If installed the mechanical ventilation system for the bin storage area must not cause a public health nuisance

(noise and odour generation) and comply with EPA requirements and in accordance with the ventilation requirements of the Building Code of Australia and AS 1668.2.

- The bin store area and bins are to be monitored and cleaned on a regular basis to remove sources of smells.

3.9 Noise management

Minimizing noise associated with waste movement and collections include:

- Locating bin stores and collection points at an appropriate distance from both onsite and adjoining residences;
- Minimising the need for the waste vehicle to reverse;
- Collections occurring during the stipulated collection times restrict the hours of noise from collections.

3.10 Traffic Management

- Traffic management along Queenscliff Road will not be an issue with the quick emptying times with waste from only 2 bins being collected at any one time. Bins are also collected kerbside for other adjoining residential properties.

3.11 Litter Spread

- Litter spread is to be managed by ensuring bins are not overloaded, and lids are always closed.

3.12 Signage, Education & Safety

It will be the responsibility of the Owner's Corporation to ensure occupants have all of the material available to them and that they adhere to the required practices regarding waste management, sustainability and promoting waste minimisation.

- All education material will be in accordance with Council requirements found at <https://www.northernbeaches.nsw.gov.au/services/rubbish-and-recycling/bins>
- Directional signage should be installed to direct occupants and bin collectors to the bin storage areas.
- The hard waste storage zone should also be signed.
- Instructional signage within shared communal bin stores is to indicate which bin is for landfill and which is for recyclables or other waste streams.



Figure 1. Simple, brightly coloured signs, such as those shown above, quickly communicate what items are acceptable for each bin.

- A **preliminary OHS risk assessment** has been included to identify potential OHS issues, however this risk assessment does not replace the need for the Owners Corporation and collection contractors to complete their own OHS assessment for the bin collection process. See **Appendix 2** for further detail.
- A sign will be placed on the landfill bin that soft plastics can be recycled at any location identified on the Redcycle website <http://www.redcycle.net.au/where-to-redcycle/>



Figure 2. A quick guide to some most commonly recycled Soft Plastic item

4 Minimising Waste to landfill - Managing Waste Streams

4.1 Sustainability Initiatives

A circular economy is a system where products and services are designed to be reused or ideally be regenerative i.e. to repair the environment. This differs from the predominantly linear model of “take, make and waste” that we have seen in the last few decades.

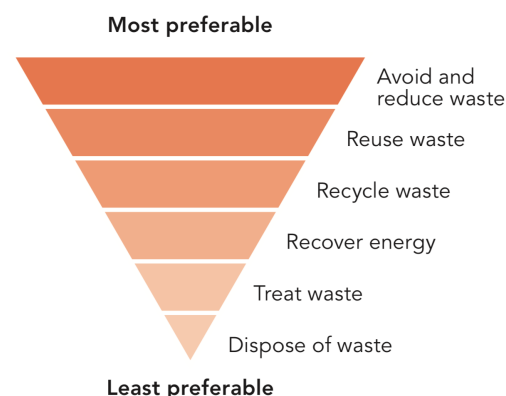
Food organics is an example of where waste can be regenerative. Food waste is now being actively used via composting to improve the quality of soils.

While occupants of buildings are generally limited in how they can impact on the design of products to make them re-useable, they can change their own and others behaviour to minimise waste.

Where possible building occupants should practice the waste reduction hierarchy.

Avoidance of landfill waste by building occupants might involve

- Purchase only what you will consume
- Purchase items of quality that can be re-used, sold on donated or up-cycled.
- Use re-usable drink bottles, lunch containers, shopping bags
- Avoid single use plastics
- Compost anything that once was alive.



4.2 Separating & Streaming Food Waste

Food waste, when buried in landfill waste is starved of air and rots and producing methane; 26 times more damaging than carbon dioxide. Diverting food waste from landfill is not only a really effective way to reduce greenhouse gas emissions, but also a regenerative solution, creating rich, healthy soil.

The Better Practice Guidelines stipulates diverting food from landfill waste. This can be achieved in a number of ways including on site composting until FOGO collections are made available.

- **Kitchen Caddies** - Separation of food waste from landfill waste is to initially occur in each residence. Benchtop caddies or an extra built in bin in each residence is recommended.
- **Multiple bins for waste streams** - In multi-unit developments streamed waste bins are to be included (perhaps included under the sink) in each dwelling. Bin types include garbage (Landfill) waste, Recycling, Organic Food Waste, Glass.
- **Bokashi bins** <http://www.bokashi.com.au/> are an effective way of reducing waste volumes and breaking down food waste for apartment dwellers. Food scraps are placed in bokashi bins with an accelerator mix added. The volume of waste food is reduced, and the waste in the bin is already on the path to being composted. Bokashi bins can be emptied into

compost bins so providing a compost bin on site and having a garden also helps. Bokashi bins are also available from <http://www.eco-organics.com.au/about-us.htm>



Kitchen Caddy



Apartment Bokashi bin



Pull-out kitchen streaming bins

Figure 3. – Different bins for waste streaming

Tips for FOGO

- Place all food waste direct into Council provided FOGO bins once the regular council FOGO bin collection service becomes available
- Keep the wheelie bin in a shady spot
- Use paper towel to line the bottom of plastic bags to soak up any moisture that can cause the liner to break down quicker than normal
- Double wrap meat, bones and unwanted pet food (with newspaper or paper towel) before placing in your caddy
- Line the organics bin with newspaper to aid cleaning
- Wrap fish and seafood waste (in newspaper or paper towel) and place in your freezer until your next collection is due
- Sprinkle vinegar, baking soda, charcoal or eucalyptus oil in your organics bin to combat odours
- A mix of garden and food waste helps keep bin odours under control
- Purchase a Bin Kill tag that can be attached to the inside of your organics bin. The tag emits a vapour that kills flies and maggots. The product is available from Bunnings, Coles or Woolworths supermarkets.

4.2.1 On-site Composting

In the garden – private or communal

- Aerobic **green cone bio-digester designer compost** is a landscape option for some households, including multi-unit developments to divert a larger range of food waste (including bread, dairy, meat and small bones). Refer to <https://www.treehugger.com/lawn-garden/green-cone-solar-food-digester-will-reduce-90-food-waste-your-backyard.html> for more info.
- Alternatively the new **Subpod in-ground composting/worm farm unit** www.subpod.com that composts fast, and ensures worms don't die off as they can often can in unshaded above-ground worm farms. These units can also be located in raised planters and act as seats in common areas. At capacity, 15L of food waste can be processed each month.
- **Hungry Bin worm farms** are a proven worm farm system that have been used by many private and commercial organisations & businesses to process food waste. The number of

bins can be scaled up and down depending on the volume of waste being generated on site. <https://www.wormlovers.com.au>



Figure 4. Green cone bio-digester



Figure 5. Subpod in-ground compost unit



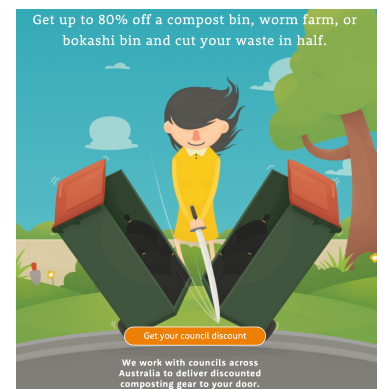
Figure 6. Hungry Bin worm farm

4.2.2 Community Partnerships & Government Initiatives

- **Join the Compost Revolution**

<https://compostrevolution.com.au> provides up to a 80% discount on a number of composting bins and accessories. It also has a range of tutorials on how to compost.

Co-designed with councils, the Compost Revolution is a multi-award-winning program that educates and equips residents to cut their waste in half through home composting and worm farming. This platform is the only all-in-one education, infrastructure logistics and marketing program of its kind streamlining the process so that councils achieve waste and emissions reduction targets while saving money.



4.3 Other Waste Streaming Details

4.3.1 Green Garden Waste

- All occupants are encouraged to compost as much garden and food waste as possible within their own tenement. This can be re-used for their own garden. Many Council offer discount rates on a range of compost bins and worm farms.
- 2 x 240L vegetation bins has been provided within the bin store.
- Common area gardens are recommended to be designed to encourage low maintenance gardens and an annual or bi-annual pruning. This service will need to be arranged by the owner's corporation.

4.3.2 Hard Waste Collection

- Northern Beaches council offers two booked hard rubbish collections per household a year.
- The Owner's Corporations is to ensure no hard waste is left kerbside for longer than the week before an organised collection date.
- The Owner's Corporation is to arrange additional hard rubbish collections as required.
- Hardwaste items can also be taken directly to the Council run local waste recovery centre.
- Local information regarding the disposal and recycling of common household items for each Council can be found at:

www.recyclingnearyou.com.au

- In addition, suppliers such as **Ecycle** <http://www.ecyclesolutions.net.au> will deliver whitegoods and either collect clean polystyrene from retailers or take polystyrene away after delivery.
- **TerraCycle** is a national initiative where you can look up where to deposit non-recyclable waste such as contact lenses, coffee capsules, mailing satchels, toothbrushes & tubes. <http://www.terracyclemap.com>
- Alternatively unwanted bulky items, clothes and other consumables can be donated to charities, sold on online or at second-hand local market places as is if in good condition. If repairs are required, seek out repair community centres for re-purposing. Search PlanetARK for a comprehensive listing to each council. <https://recyclingnearyou.com.au/councils/>

4.3.3 E-Waste Recycling

- Any item with a plug, battery or cord can be deposited at a designated e-waste drop-off point. Electronic waste includes old mobile phones, computers, audio devices, refrigerators and other white goods, hair dryers, TVs, heaters, and air-conditioners.
 - Cleanaway Belrose Resource Recovery Centr
Crozier Road, Belrose. Phone: 8645 4304
 - [Kimbriki Resource Recovery Centre](#)
Kimbriki Road, Terrey Hills. Phone: 9486 3512
 - Harvey Norman Balgowlah Superstore
Roseberry Street warehouse entrance. Phone: 9949 0100
Officeworks - accept most forms of e waste (except TVs). Also printer ink, mobile phones, batteries, pens and markers too!
Dee Why - 800 Pittwater Rd. Phone: 9466 6100
Mona Vale - 47-51 Barrenjoey Rd. Phone: 9998 4300

4.3.4 Soft Plastic Recycling

- NSW as yet to set legislation to ban soft single use plastic but will in the future.
- **Coles and Woolworths** both offer plastic bag and soft plastic recycling. Residents can place all plastics in one plastic bag and add it to the recycling bin at the supermarket for collection. Any location identified on the Redcycle website <http://www.redcycle.net.au/where-to-redcycle/>.
- There are a number of private companies that already collect streamed soft plastics in NSW including:
 - <https://wanless.com.au/waste-services/soft-plastic-recycling/>
 - <https://www.veolia.com/anz/our-services/our-services/recycling-waste-services/recycling/plastics/soft-plastics>
 - <https://www.cleanaway.com.au/waste/clear-plastic-and-polystyrene/>

4.3.5 NSW Return & Earn

- Bottles, cans and cartons make up a large proportion of the litter on our streets, beaches and green spaces. Tackling the problem costs NSW millions of dollars every year. Return and Earn is a way for us all to help solve the litter problem and be rewarded for our efforts.

- With a food based tenancy proposed within the building, a recycling bin can be swapped for a Return & Earn bin. There are many options for these containers to be deposited or collections. View the website for more information: <https://returnandearn.org.au>

5 Supplementary information

5.1 Waste Links

North Beaches Council Waste Directory:

<https://www.northernbeaches.nsw.gov.au/services/rubbish-and-recycling/a-to-z-guide-to-recycling-reuse-and-disposal>

Waste collection companies in NSW:

- Suez (incl Sita) www.suez.com.au/en-au Ph: 1300 651 116
- Transpacific-Cleanaway - <https://www.cleanaway.com.au>, ph 13 13 39
- Waste Wise Environmental www.wastewise.com.au Ph: 0447 595 092 (Metro Sydney)
- JJ Richards & Sons www.jjrichards.com.au
- Veolia - <https://www.veolia.com/anz/>, Ph 132 955

5.2 Mechanical Tug and Bin Trolley Details

Multiple options exist for tugs that can move both two wheel and four wheel bins at the same time.

The Sitecraft Logistec tug above is a tug/trailer combined, that can tow 660L and 1100L bins while also moving 120L or 240L bins.



Alternatively two-wheel bins can loaded onto a trailer/dolly for transportation. Space is required for storage of the tug unit plus trailer, but bins can be stored on the tug/trailer while it is stored. Trailers can vary in size – allow space larger than the bin footprint.



Four-wheel bins can be towed directly by the tug and require less space as only the tug is required to be stored, not a trailer. Towing brackets and directional wheel locks are available from Sulo www.sulo.com.au and can readily be retrofitted to 660-1100L bins for towing. Towing brackets and wheel locks do not project outside of the bin footprint area.

Mechanical tug systems will usually cost in the range of \$10,000 - \$15,000, with trailer possibly extra. Tugs can be 1-1.5m long x 0.8m wide.

Suppliers include

- www.electrodrive.com.au
- <http://www.mastermover.com.au>
- www.sitecraft.net.au
- <http://www.hercules.com.au/index.php?tug2>.

Manual wheelie bin handling trolleys provide assistance with the manual handling of 120L to 360L bins. Various models are available with standard manual trolley as well as an electric boosted trolley to carry up to four 2-wheelie bins. They should be included in case of a longer bin movement distance or for the less abled people to safely move the bins if required.

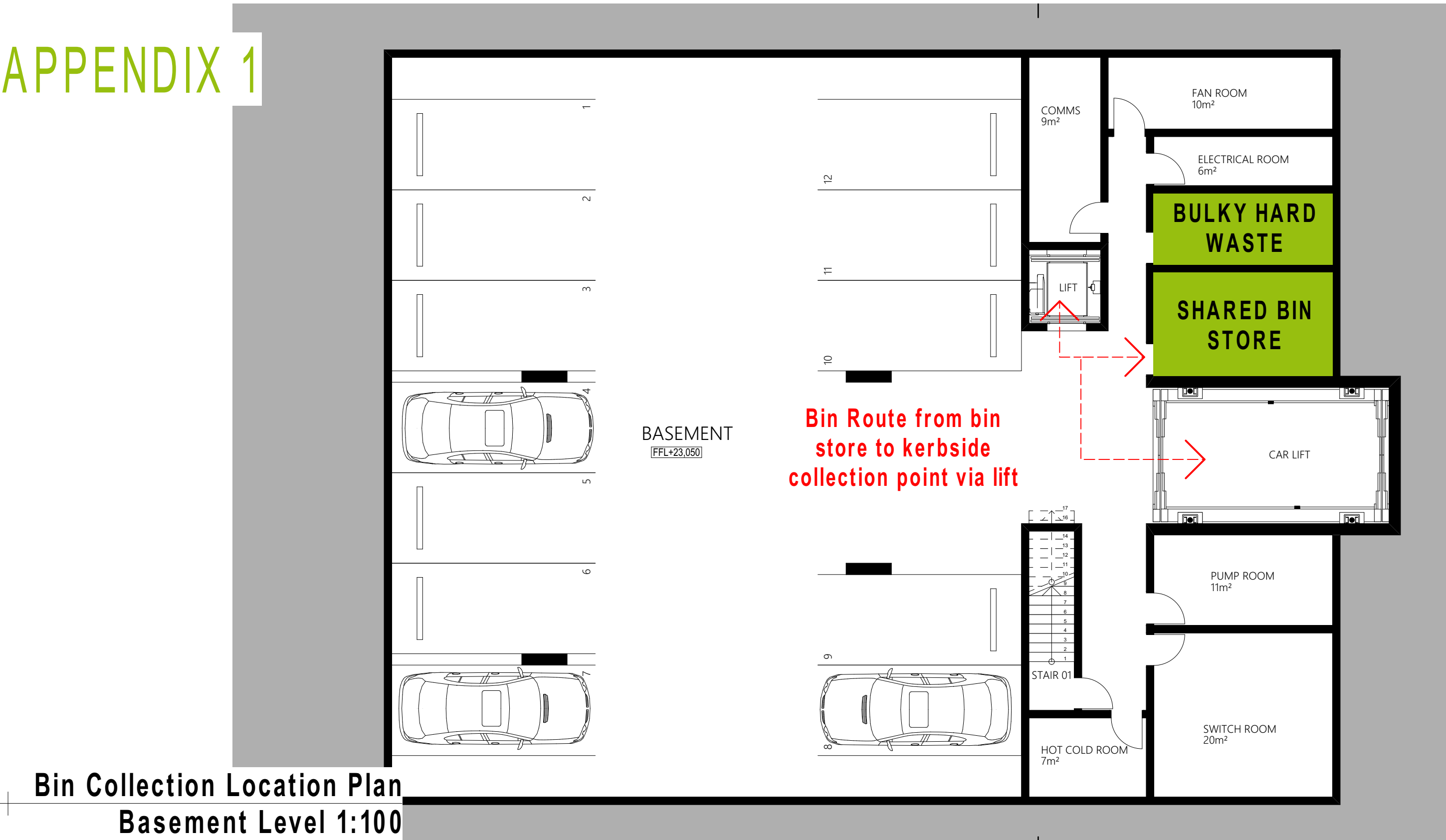
Suppliers include

- <https://www.materialshandling.com.au>
- <https://www.wheeliesafe.com.au/>

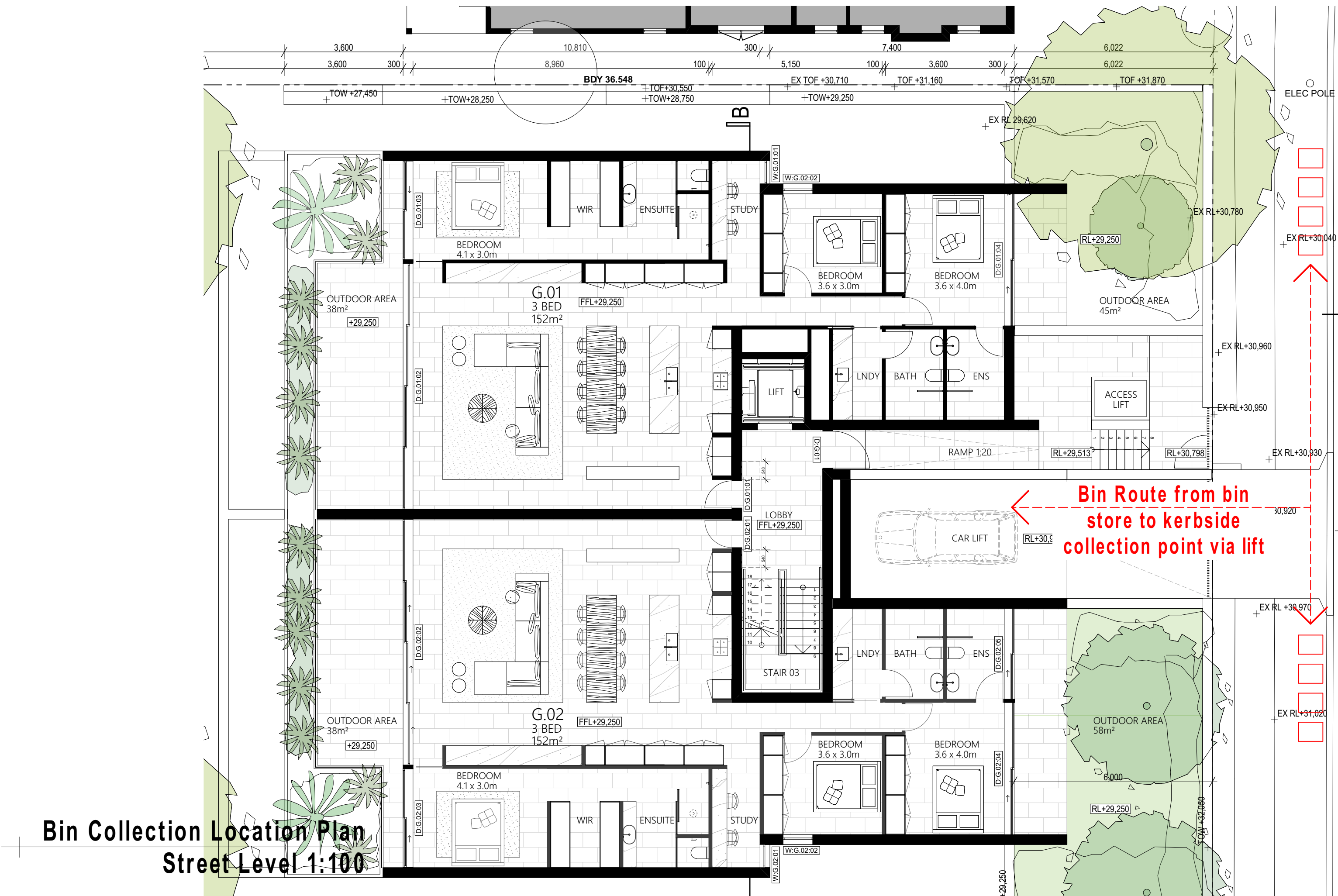


Appendix 1 - Bin Collection Plan

APPENDIX 1



Bin Collection Location Plan
Basement Level 1:100



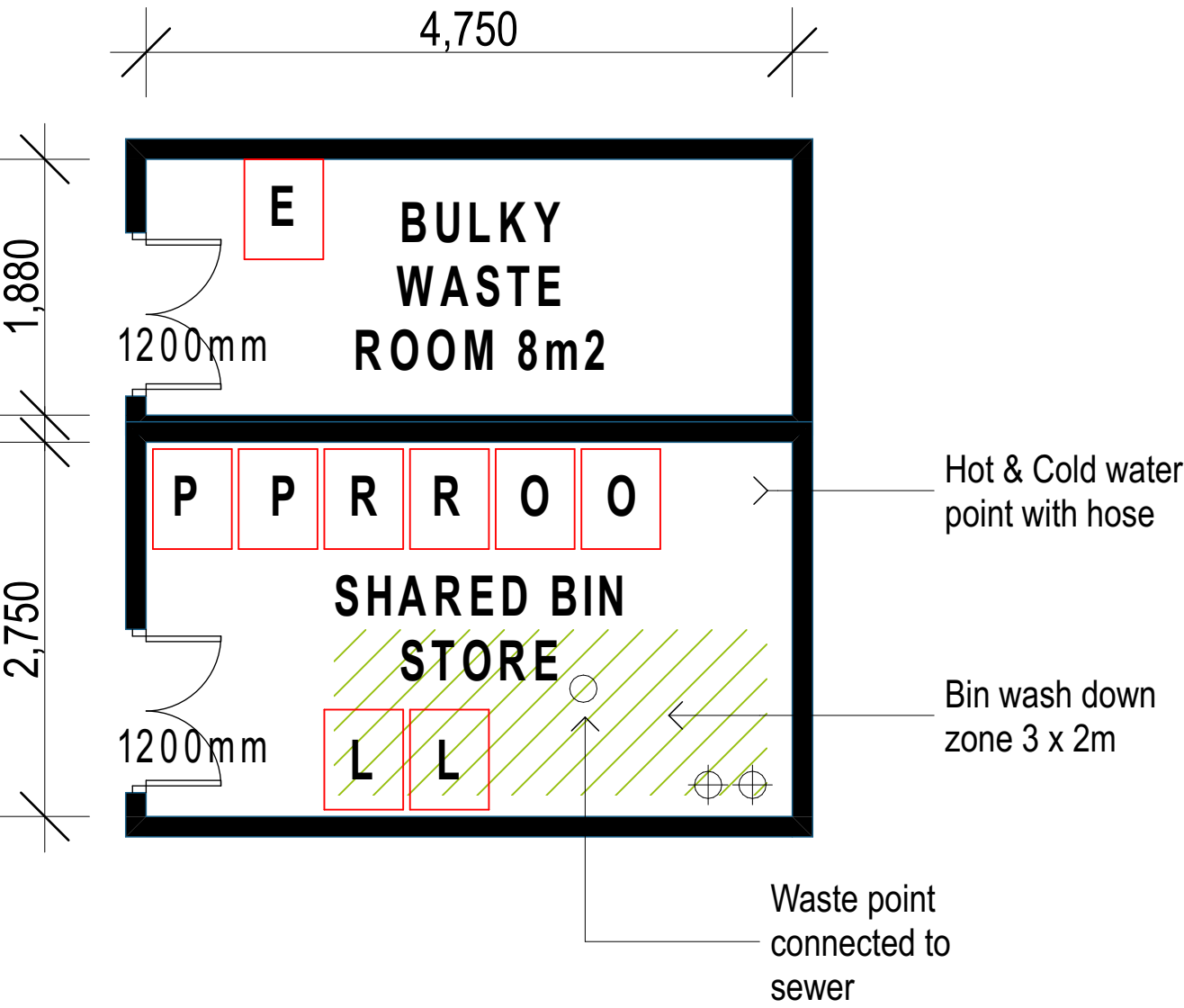
Bin Collection Location Plan
Street Level 1:100

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All Dimensions shall be verified on site.

Project	122-124 QUEENSLIFF ROAD, QUEENSLIFF NSW 2096
Drawing	Bin Collection Location Plan Bin Store Layout

Date	Scale	Sheet Size
23/3/2022	1:100 / 1:50	@A1
Reg No.	Drawn	Chk.
	LR	CH
Job No.	Drawing No.	Revision
	WP.01	b



RESIDENTIAL WASTE
Council collection service to collect weekly:

L = 2No. 240L Landfill bins
R = 2No. 240L Co-mingled Recycling Bins
P = 2No. 240L Paper / cardbaord
O = 2No. 240L Garden Organics Bins (future FOGO)

E = 1No. 240L E-waste bin*
8m2 Bulky hard waste (dashed)*

* collected as often as required to ensure all bins are maintained and serviceable.

660L bin size = 1370 x 850mm
240L bin size = 580 x 735mm
Bin store to be mechanically vented

Bin Store Layouts
1:50

LOW IMPACT DEVELOPMENT(LID)
CONSULTING
Suite 7 Level 1, 252 St Georges Rd,
Fitzroy North VIC 3068
P 03 9016 9486
E craigharris@lidconsulting.com.au



Appendix 2 - Preliminary Risk Review

Class 1 Risk = Potential to cause death or permanent injury.		Class 2 Risk = Potential to cause injury requiring medical attention.		Class 3 Risk = Potential to cause an injury treatable with first aid.
Activity	Steps involved in completing activity & risk	Risk level	Risk mitigating measures	Implementation responsibility
Moving of bins from bin store to collection space	Distance bins to be moved approx 20m. Risk of manual handling injuries	2	Use max bin sizes of 660L Minimise distance of travel, with the area kept free of all obstacles including loose gravel or dirt, steps, kerbs, speed bumps, berms, sills or ramps. Ensure all access points have suitably wide doorways and circulation areas.	Building Designer / Owners Corporation /
Bin loading on street	Moving bins from temporary collection space to collection vehicle parked on street. Collection may occur at the rear of the truck. Risk of being struck by passing vehicles if step outside the line of the width of the truck	1	Bin collection operator's own safety measures incl training	Bin collection operator
Note this assessment is for consideration during the design phase of the project. It is <u>not</u> to replace a risk assessment / Safe Work Method Statement being completed by the contractor and persons undertaking the waste removal process.				