Low Impact Development Consulting

Waste Management Plan & Operations Guide

Childcare Centre development

2 Collinson Street, Tenambit NSW

Prepared for: SS Estate Pty Ltd
Prepared by: PM – Low Impact Development Consulting

Date: 17/07/2025

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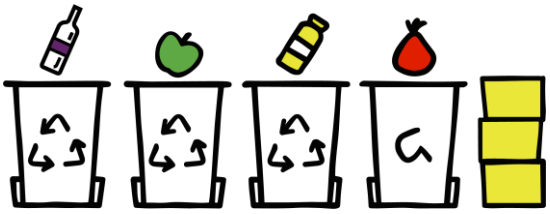


Version	Date	Description	Prepared by	Checked by
1.0	17/07/2025	DA issue	PM	AV

Disclaimer

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.

Contents

 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 Summary

1.1 Proposed Development

Address:	2 Collinson Street, Tenambit NSW
Council:	Maitland City Council
The scope of this WMP:	Whole site occupancy
Type:	Childcare centre (Commercial)
Type(s) of waste generated:	Comingled recyclables, food organics/garden organics, landfill
Bin store area location:	Along the internal driveway
Collection service(s):	Private
Collection location(s):	Kerbside collection near site entrance at David Avenue within the bin store area
Source of waste rates:	Maitland council pre-app meeting minutes document dated 22 August 2024, comment #4
Waste generation rates:	19L/child/week for landfill (allowed 25% diversion from landfill to food organics), 15L/child/week for comingled recycling, Number of children:132nos.

The proposed childcare development comprises of children rooms, staff areas and other amenities. An internal driveway connects the carpark with vehicular access from David Avenue. The bin store area is located along northwest corner of the building along internal driveway. Space for the collection, separation and storage of waste and recyclables has been provided.

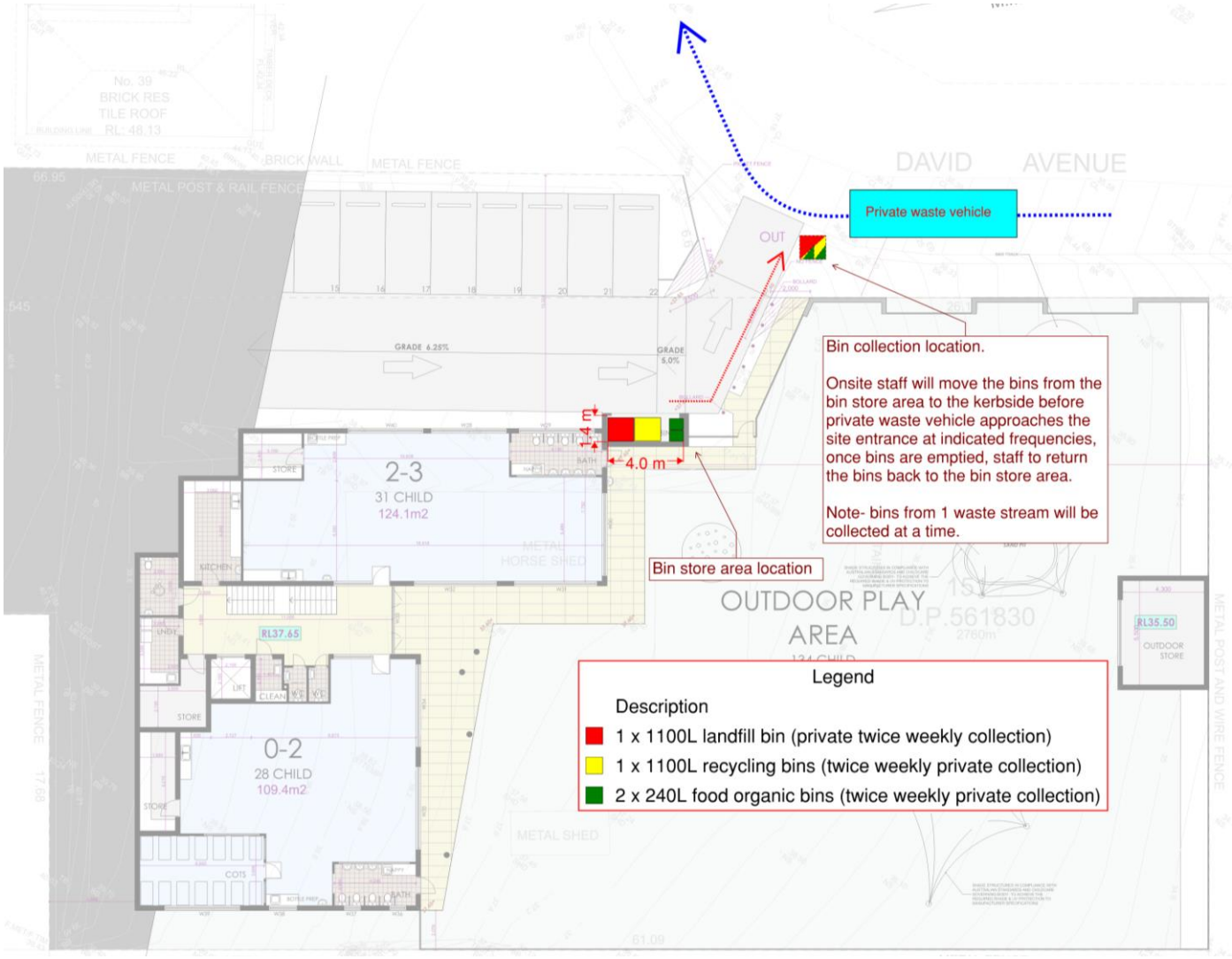
1.2 Waste Collection Summary

A private collection service is proposed to collect the following bins at the indicated frequency. The bins will be collected from the bin store area.

Private Collection Service – collection from kerbside of David Ave		
Waste streams	**Proposed no. of bins and capacity**	**Collection frequency**
Co-mingled Recycling (paper, cardboard, plastic, glass)	1 x 1100L	Twice weekly
Landfill	1 x 1100L	Twice weekly
Food Organics	2 x 240L	Twice weekly
Hardwaste and E waste	To be stored within internal storage areas until collection	As often as required.

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.

1.3 Bin Store & Collection Plan



2 Waste Management Plan

Low Impact Development (LID) Consulting was engaged to assess the proposed development at 2 Collinson Street, Tenambit NSW to provide a Waste Management Plan (as required by Statutory Planning).

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

a) Dept of Environment & Climate Change NSW's Better Practice Guide for Waste Management in Multi-unit Dwellings;

b) Maitland City Council DCP section- 7.5.2. Waste management and circular economy

This report is based on the drawing sets:

- Prepared by Brad Inwood Architects

2.1 Collection Solution Logic

The following issues / constraints were key considerations in preparing this waste collection strategy:

a) Private collection service is proposed to accommodate the required the number of bins based on waste generation estimates.

b) Private waste collection service from within the site is not possible due the site slope and ramp grades.

c) Kerbside collection from near the site entrance at David Avenue is the most feasible option with private vehicle stopping momentarily to collect bins from 1 waste stream at a time.

d) The private collection service is to occur on an alternate day to the Council service so that the services are not confused.

2.2 Waste Calculation and Proposed Waste Solution

Commercial Tenancy Type	# of children	Days open	Waste Generation Rates (L/child/Week)		Waste Generated (L/Week)	
			Landfill	Recycling	Landfill	Recycling
Childcare*	132	5	19	15	2508	1980
	132		**Total Litres per Week**		**2508**	**1980**

Commercial Tenancy Type	Waste Generation Rates		Waste Generated (L/Week)		
	Landfill	Recycling	Landfill (75% of total)	Recycling	Food (25% of landfill)
Total Waste Allowance	2508	1980	1881	1980	627
Total Litres per Week			**1881**	**1980**	**627**
		Propsoed bins ->	**1 x 1100L** (twice weekly private collection)	**1 x 1100L** (twice weekly private collection)	**2 x 240L** (twice weekly private collection)

3 Waste Management Details

3.1 Waste Streaming & Contamination

Managing waste contamination requires the correct separation of products that are recycled differently. This is called waste streaming. Correct streaming requires consideration by stakeholders that generate, dispose of or manage waste.

Good waste streaming reduces contamination to ensure more effective recycling. Refer to and Appendix 2 for Better Practice Waste Management links.

3.2 Preliminary Waste Streaming

The development will include space within each room for the initial separation/streaming of waste. These spaces are to be readily accessible to all occupants are to accommodate separate bins or drawers for the following major waste streams:

1. Co-mingled plastic, paper, glass
2. Food/green organics
3. Landfill

3.3 Management Responsibilities

The building management is responsible for all aspects of waste management including implementing adequate safe operating procedures. Items to be addressed by the Building Management include:

a) Requesting a copy of the endorsed Waste Management Plan from Council if the developer has failed to provide the WMP to them.

b) Ensuring minimal contamination occurs between waste streams to maximise recycling. This is to be achieved by:

- Providing separate bins for each waste stream (including recycling, food organics & landfill) for staff to appropriately stream waste.
- Routine inspection of bins in bin store area to ensure their appropriate use.
- Providing 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.
- Ensuring building occupants / staff are aware of good recycling practices per **Section 4.1** of this report.
- Providing feedback to occupants if the system is not working properly. Undertaking a waste audit should it be suspected waste is not being placed in the correct bins.

c) Ensuring all occupants are aware of their responsibility with regard to waste & bin management.

d) That bins and bins store areas are monitored regularly with regular cleaning of the bins and bin store spaces and clean-up after collection if necessary.

e) Facility staff are responsible for placing bins in the designated collection location before the allocated collection day/time. Bins are to be returned on the same day collections occur.

f) Allocation of responsibility to the contractor to retrieve bins directly from the bin collection area on kerbside and return emptied bins at the time of collection. Responsibility should include ensuring the contractor collects any waste that spills from the bins during emptying.

g) Management and coordination with private contractors for bulky hard waste, e-Waste and other waste collections when required.

3.4 Individual Occupants Responsibilities

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

a) Individual occupants/staff 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.

b) Staff/cleaners are responsible to empty internal smaller bins into bulk bins provided in the bin store area.

c) **Ensuring landfill placed in plastic bags** before placement into bins

d) **Ensuring recycling materials are <u>not</u> bagged** and are to be placed loosely into the recycling bins. (Items in plastic bags in recycling bins are not recycled). Recyclable items in 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:

- Soft plastic bags
- Rope & hoses (ropes and garden hoses can wrap around and damage equipment in the recycling plant).

3.5 Occupational Health & Safety

A preliminary OHS risk assessment has been included to identify potential OHS issues, however this risk assessment does not replace the need for the Management and collection contractors to complete their own OHS assessment for the bin collection process. See **Appendix 1** for further detail.

3.6 Bin Store Area Design

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

a) Adequately ventilated in accordance with AS1668.4-2012 *The use of ventilation and air-conditioning* in buildings.

b) Bins should be screened from outside view. All screening should be suitably designed for durability and to blend in with the development. Floor, ceiling and wall surfaces are to be appropriately durable and easily cleaned.

c) Bin washing facilities to be provided where appropriate, a water tap (hot and cold water) 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.

d) Bin stores or bins should be vermin proof - Ensure bin lids are closed and lockable if needed

e) Ensure adequate lighting with motion sensors is provided in accordance with National Construction Code (NCC) guidelines if to be accessed after hours.

3.7 Bin Store Area Access

There is to be conveniently accessible by occupants.

3.8 Bin Types & Bin Sizes

3.8.1 Mobile Wheelie Bins (MGBs)

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. Note- bin sizes may vary depending on the local waste contractors. Below bins sizes should be considered as a reference only.

Size	Width	Depth	Height	Footprint
240L	580mm	735mm	1080mm	0.43m^2
1100L	1370mm	1245mm	1470mm	1.71m^2

Standard bin colours (refer AS4123.7)	
Landfill	Red
Co-mingled recycling	Yellow
Green organics	Light Green

* NOTE: size may vary between Councils and contract suppliers

3.8.2 Internal Bins – Commercial

Correct streaming in commercial developments requires consideration by staff, cleaners etc. It needs to be clear for all users as to where and how they dispose of their waste.

a) Correct streaming in these areas in the first instance reduces contamination to ensure more effective recycling occurs.

b) Separation of landfill and recyclables is to initially occur in all work areas, communal spaces and then in bin stores. For this reason, the development will include streamed waste bins on each work area. Cleaners and/or staff would then transfer already streamed waste to the corresponding bin in the main storage area.

c) Commercial waste is to be transferred to the bulk bin store/consolidation area with minimal manual handling. The tenancy is to include a trolley to cart bags of waste or wheeled bins to transfer waste.

Examples of streamed commercial waste bins.

Example of trolley used for moving commercial waste to bulk bin storage location

Example of smaller 60L wheeled bins allow for easier transfer of waste

All bins are to be placed alongside each other to ensure recycling is easy.

3.9 Signage, Education & Safety

It will be the responsibility of the Building Management to ensure all 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.

a) All education material will be in accordance with Council requirement or if this is not available, per signage on the following website:

   https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/business-government-recycling/standard-recycling-signs

b) Directional signage should be installed to direct occupants to the bin storage areas.

c) Instructional signage within shared communal bin stores is to indicate which bin is for landfill and which is for recyclables or other waste streams.

Simple, brightly coloured signs to quickly communicate what items are acceptable for each bin.

3.10 Waste Vehicle Requirements

a) A private waste vehicle is to momentarily stop along the site entrance along David Avenue to collect waste from 1 waste stream bin at a time. Once bins are collected, the waste vehicle would move along the street in a forward motion. Appointed private contractors will confirm the size of the waste vehicle.

3.11 Traffic Management

Traffic management along David Avenue should not be an issue with the quick emptying times with waste from only 1 bin for landfill/recycling and 2 bins for food organics being collected at any time.
The street is considered a local street and traffic volumes would not be expected to be high.

3.12 Collection Times

Collection times in New South Wales are not subject to any specific legislated time restrictions as waste collections are considered an essential service. If excessive noise is coming from waste collections associated with either residential or commercial premises, you can refer a complaint to the locate council to investigate if this cannot be resolved otherwise. See https://www.environment.nsw.gov.au/questions/noise-from-garbage-trucks

3.13 Noise management

Minimizing noise associated with waste movement and collections include:

a) Locating bin stores and collection points at an appropriate distance from both onsite occupants and adjoining developments;

b) Minimising the need for the waste vehicle to reverse;

c) Collection vehicles should not break up bottles at the point of collection. Compaction of waste should only be carried out whilst waste vehicles are on the move.

3.14 Response to Increasing Waste

a) 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.

b) If landfill bins consistently overflow, then occupants are to be directed to educational material as to the appropriate streaming of waste including food and other recyclables.

c) If recycling bins continue to overflow, occupants should be reminded to crush and flatten all cardboard boxes before placing these in the recycling bin(s). If may also be appropriate to obtain an additional recycling bin.

d) If recycling overflows occupants could be notified of the closest return and earn recycling exchange locations.

3.15 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.

3.16 Litter Spread

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

b) Litter spread is to be managed by the system of contractors collecting bins from within the property. As bins are not left outside overnight, the possibility of vandalism is removed.

c) The collection contractor's agreement should require their pickup of any waste that spills from the bins during collections.

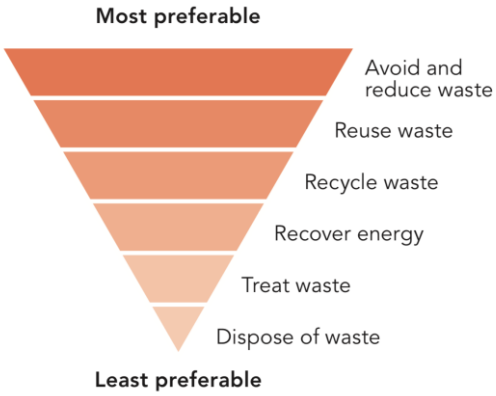
4 Minimising Waste to Landfill

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

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

The **2025 National Packaging Targets** are supported by Australian industry and government to deliver a new and sustainable approach to packaging. They apply to all packaging that is made, used and sold in Australia.

The 2025 Targets are:

- 100% reusable, recyclable or compostable packaging.
- 70% of plastic packaging being recycled or composted.
- 50% of average recycled content included in packaging (revised from 30% in 2020).
- The phase out of problematic and unnecessary single-use plastics packaging.

In March 2020, The Australian Packaging Covenant Organisation (APCO) also released a series of material-specific sub-targets relating to the uptake of recycled content in packaging

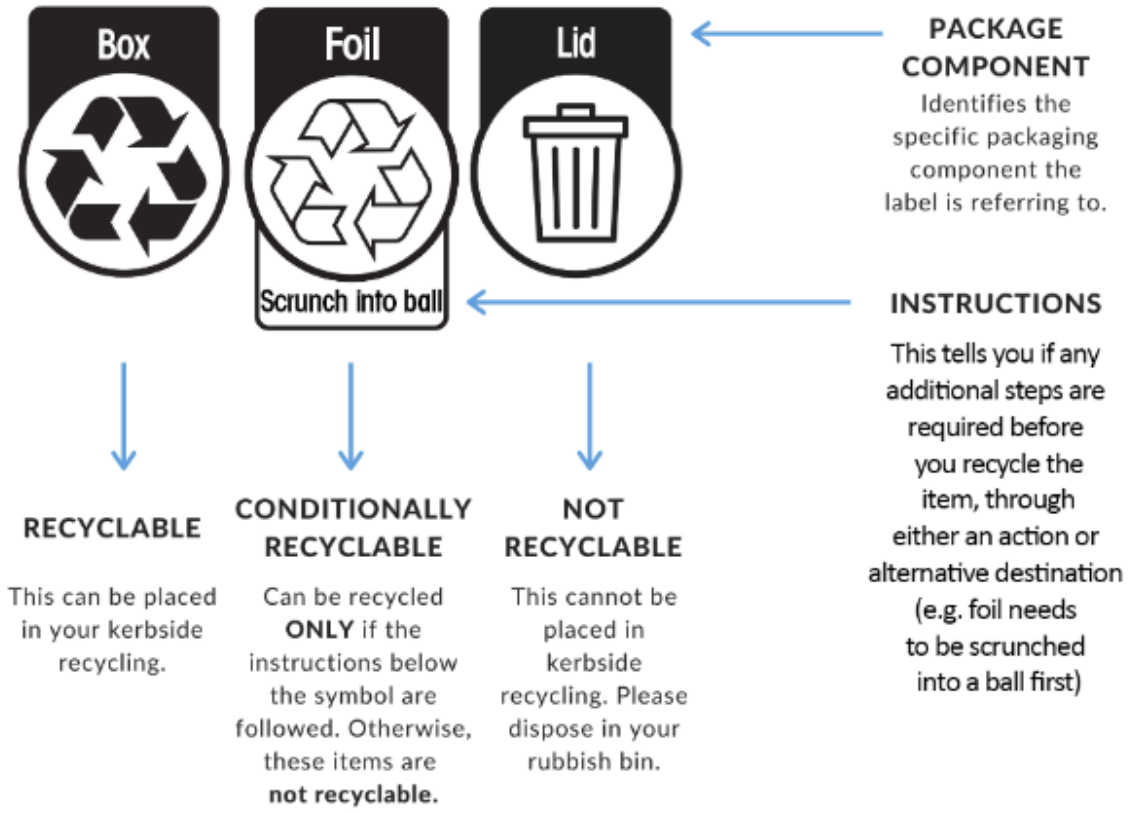
The Australian Packaging Covenant Organisation (APCO) is a not for profit organisation leading the development of a circular economy for packaging in Australia. [1].

[1] https://apco.org.au/national-packaging-targets

4.1 Good recycling practices – incl ARL

The following actions improve recycling outcomes.

- Empty containers and bottles of any leftover food or liquid. Ideally rinse them out.
- Generally, keep lids on all bottles even when made from another product or plastic type (as is the case with most plastic drink bottles).
- 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.
- Ensure awareness of the **Australasian Recycling Label (ARL)** which is on an increasing number of products. The ARL indicates which components of packaging are recyclable and helps ensure better recycling of packaging waste.



- For more detail including on the Conditionally recyclable label instructions refer to https://recyclingnearyou.com.au/arl/

- Be aware that if they are not sure whether an item is recyclable, then it should be placed in the landfill bin(s). Placing incorrect items in recycling is to be avoided as it leads to contamination of recycling streams, and complexity in recycling.
- Understand not all plastic resin codes can be recycled in all states, cities or councils. Many Council areas or waste collection contractors can only recycle a number of the plastics codes. Check with Council publications.
- Plastic resin codes 1, 2 and 5 are readily recycled and collected by most councils,
- Be aware of whether compostable packaging is home/garden compostable or requires higher temperatures as is available in commercial composting.
- Ensure compostable packaging is not placed in recycling streams. Compostable packaging is not useful as a recycled plastic as it breaks down.
- 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.

Symbol	Description
1 PETE	Clear tough plastic such as soft drink, juice and water bottles.
2 HDPE	Common white or coloured plastic such as milk containers and shampoo bottles.
3 V	Hard rigid clear plastic such as cordial bottles.
4 LDPE	Soft flexible plastic e.g. squeezable bottles such as sauce bottles.
5 PP	Hard but flexible plastic such as microwave ware, takeaway containers, some yoghurt/ ice cream/jam containers, hinged lunch boxes.
6 PS	Rigid, brittle plastic such as small tubs and margarine/butter containers.
7 OTHER	All other plastics, including acrylic and nylon. Examples include some sports drink bottles, sunglasses, large water cooler bottles.

5 Supplementary information

5.1 Other Useful Links

- PlanetARK https://recyclingnearyou.com.au
- Redcycle https://redcycle.net.au
- Sustainable Procurement Guide (for Commonwealth entities) https://www.awe.gov.au/sites/default/files/documents/sustainable-procurement-guide.pdf
- Wastech www.wastech.com.au

Appendix 1 - 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	Risk of manual handling injuries	2	Use max bin sizes of 1100L Ensure the distance of bin travel does not exceed 40m The bin transfer grade should not exceed 1:14 The travel path is to be 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 / Building Management
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.				

Appendix 2 - Better Practice Waste Recycling

Below is a range of practical information and resources to better manage &/or divert many waste types from landfill into recycling streams.

Plastics, Glass & Aluminium

NSW Return & Earn

a) 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.

The NSW Single Use Plastics ban

As of 1st June 2022 there was also a ban on lightweight plastic shopping bags. All retailers including restaurants are not permitted to provide, stock or use these plastic bags.

a) The ban applies to all lightweight plastic shopping bags that have a thickness of 35 microns or less at any part of the bag, including degradable, biodegradable and compostable bags.

Further, as of 1 November 2022, other singles use plastics wil also be banned. These products include:

- Single-use plastic straws, stirrers, cutlery, plates, bowls and cotton buds (including compostable, biodegradable and bioplastic alternatives)
- Expanded polystyrene food and drink containers
- Rinse-off personal care products containing plastic microbeads.

b) EPA NSW is managing compliance monitoring and reports of suspected banned bags. Further information can be found at: https://www.epa.nsw.gov.au/news/news/2022/education-on-lightweight-plastic-bag-ban

Soft Plastic Recycling

Eliminating or reducing the use of single-use plastics can greatly reduce waste volumes both in residential and commercial settings. This includes straws, plastic bags and plastic wraps. Many private waste contractors can commercially collect soft Plastic.

a) NSW is yet to set legislation to ban soft single use plastic but will in the future. There are a number of 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/

Other Unwanted Items

Unwanted items, clothes and other consumables can be donated to charities, sold on online or at second-hand local market places if in good condition. If repairs are required, seek out repair community centres for re-purposing.

b) **PlanetARK** for a comprehensive listing to each council. https://recyclingnearyou.com.au/councils/

c) 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.

d) **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

Colgate Oral Care Recycling Program

Recycle your oral care through this program.

e) **Recycle Smart** collects household items from your house or business if based in Melbourne or Sydney. A reusable shopping bag costs $5 for collection and each collection is minimum 2 bags or $10. Items collected include soft plastics, clothes and textiles, e-waste, and other incl batteries, polystyrene, lightbulbs etc. For more details see https://www.recyclesmart.com/. Book a collection via their app.

f) **Toys for Joy** recycle any brand of pre-loved toys for free with partners Big W & Terracycle. These are for toys that cannot otherwise be donated such as broken parts or just worn out. This avoids more toys in landfill. There are drop off points Australia wide at Big W stores. https://www.bigw.com.au/toys-for-joy

Clothes Recycling

Clothing in good condition can be donated to a number of charities. A dedicated tub / bin is to be provided to ensure fabrics are removed from landfill & able to be recycled appropriately. For clothes that cannot be re-worn, textile recyclers are available Australia wide for public and commercial donators including:

- https://scrg.com.au
- https://texrecaus.com
- https://upparel.com.au/toesox-australia/.

Clothing Away is a Not for profit organisation that provides a free textile collection ad recycling collection to residential apartments with more than 50 apartments. They offer a free service that delivers a 660L bin and hand collects via a small van once filled. http://clothingaway.com.au

Tread Lightly collect a range of footwear across Australia and recycle components to create new shoes. Refer to their website for locations: https://treadlightly.asga.com.au

Paint Back

Paintback is operating throughout all stages and territories and accepts all paints, primers, sealers, stain and varnishes. Locations and a full list of accepted items can be found at: https://www.paintback.com.au/find-location