

Waste Management Plan Rev: A – 16th June 2023

Waste Management Plan



Child Care Centre

Russell Rd Madeley Within the City of Wanneroo

Issued by:

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Introduction

1. Introduction

1.1. Executive Summary, findings, assumptions & recommendations

This Waste Management planning of a commercial Child Care Centre requires many considerations. First of which was the diversion of waste from landfill, as per council bylaws & state government waste strategy targets. Followed by building amenities & their ease of use of the system by guests, occupants, the facility team members, caretakers and visiting guests & contractors.

Based on the new design / yield schedule, the bin storeroom of has enough size to allow for the buildings waste generation using 240L / 660L bin configuration & transfer bin areas have also been introduced in the design within the building at key locations where high levels of waste or odours are generated. 240L FOGO & 660L general and commingled recycling bins.

Signage (in text and pictures) for better diversion rates and reduced contamination of waste streams are recommended within all these areas. As well as space for the temporary placement of bulk verge waste within bin store, that is to be removed from store by private appointed waste contractor from within the boundary line Trucks enter and exit in forward gear.

All other typical recommendations regarding bin store designs and drainage considerations are detailed in the Appendixes & drawings attached. Due to the implications of higher levels of odour management (Nappies). Future consideration of mechanical ventilation systems is needed on the bin store to divert odours away from the boundary lines of this property.

Bin store is set behind landscaped area with a dropped kerb at the rear of the carpark to limit visibility from Russell Rd but away from the southern & eastern boundary line. Trucks turning curves dimensions have been provided to Traffic consultant for a medium 6.9m long rear lift to service the site via the car park entrance and enter / exit in a forward gear, stopping within the boundary line at the rear of the carpark to avoid children when loading the bins with a spotter / caretaker presenting the bins and mitigating risk to pedestrians during typical times the kids would be locked up safe inside.

These dimensions are covered under the indemnity of the Traffic Engineer. Showing a revised turning / reversing bay as detailed in the appendix of the Traffic Impact Statement.



1.2. Purpose

This Waste Management Plan outlines the correct approach for the management of waste during the initial design, application for local government building approval & the end user / tenant waste generator's processes once the building is complete.

All construction waste, post design approval and the commissioning phases of the building are covered off in a separate waste management plan or perhaps a facilities hand over pack.

1.3. Scope of Plan

This plan details the waste management strategy for the buildings' end users, and includes:

- Environmental protection from contamination by waste, debris or discharges;
- Management of solid environmental contaminants, waste reduction strategies, waste stream segregation (if required) and recycling.
- Allocates adequate space for bin storage & waste management for general & recycled waste.

1.4. Precedence

Where ambiguity is detected between the procedures and requirements in this plan and the design documentation, then the procedures nominated in this Waste Management Plan will take precedence.

1.5. Interface with other Project Plans and Procedures

This plan forms part of an integrated set of environmental documents and should only be read in conjunction with all other project documentation provided by the Developer at Development Approval stage.



1.6. Project Description

A detailed project scope and description was provided Urbanista, design team & Architects.

Waste Generation figures at 350L per 100m2 per week for both commingled and general waste, were provided by the City of Melbourne (as City of Wanneroo doesn't have figures for childcare generation rates) following consideration of the m3 of the active area's floor footprint via drawings & emails provided in June 2023.

- Yield schedule of ~300m2 (GFA) of which <250m2 is used for childcare. Within the building yield we have ~38m2 offices, ~12m2 kitchen and Therefore no more than 2x 660L of General Waste and 2x 660L of commingled recycling would need be collected per truck lift, once or twice per week via private contractor via collection within the boundary line direct from the bin store in car park.
- Serviced by the site caretaker as required & presented for private contractor collection within the boundary line by a vehicle that enters and exits in a forward gear. (As show in the Traffic Impact Statement provided by others).

General Waste (Red lid 2x 660L wheelie bins weekly

Figures taken from the City of Melbourne & consideration towards WALGA waste generation rates with space within the bin store allocation of general waste for the future provision of FOGO bins. 1x240L

Recycled Waste (Yellow lid 2x 660L wheelie bins weekly

Figures taken from the City of Melbourne & consideration towards WALGA waste generation rates

FOGO (Green lid) 1x240L bin once or twice weekly as required).

Future proof as it's not a DA requirement of a commercial facility to have FOGO bins in Wanneroo.

Paper and Cardboard only (Blue lid) 1x240L bin once or twice weekly as required).

Future proof as it's not a DA requirement of a commercial facility to have P/C bins within Wanneroo.

Landscape (Lime Green waste N/A)

Private landscape contractors if needed. Utes servicing the site will go to local recycling or waste transfer station.

Bulk Hard Waste (moved by private contractor to tip or recycling facility)

By local government contractors or by private contractor under cleaning contract or agreement.



1.7. Document Control

Amendments to this Waste Management Plan are approved by Instant Waste Management & Planning Development and distributed to all holders of controlled copies by Urbanista Planning.

Controlled Copy No.	Date	Name of Recipient	Organisation
WMP Instant Waste Rev: A	16 th Jne 2023	Gianni Da Rui	Meyer Shircore

Uncontrolled copies of this plan may be distributed to the Main Contractor, the project team & maintenance personnel.

These copies are not subject to automatic amendment and the receiver should verify currency of the document.

Revisions to this Plan will be made as required to reflect the current system requirements.

Current Revision Record:

Document Reference	Date	Revision	Description	Pages
WMP – Instant Waste Rev A	16 th June 2023	Rev: A	Issued for DA	15
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Waste Management

2. Waste management plan

2.1. Introduction

Waste can affect different aspects of the environment and may cause contamination, impacts on visual amenity and health effects. Waste materials that may be produced on the Project site include:

- Litter including food and drink packaging;
- General Waste from tenants
- Recyclable waste from tenants
- Maintenance works waste
- Office equipment paper, cardboards, etc.; and
- Wastewater generated by flood events

It is important that all litter and waste generated by maintenance activities is constrained within the project area, using designated bins and waste management procedures. At no time should surrounding premises or environments be impacted by waste from maintenance.

2.2. Recycling

The guiding principle of waste management is to minimise the impact of waste on the environment and the public wherever practicable. The hierarchy of waste management applied is:

- a) Avoid making the waste in the first place alternative designs & lean procurement systems.
- b) Reduce via prevention or elimination of waste products;
- c) Reuse find a secondary use for the waste product; and
- d) Recycle alternative use for waste product which may include reprocessing of product.
- e) Recovery divert materials away from landfill that can be processed into feedstock for the waste to energy sector.
- f) Landfill control the destination of waste to its' relevant class of landfill site.

Waste products shall be eliminated, prevented and reduced wherever practicable. This shall be achieved through rationalising the number of products onsite, finding alternative products which assist in volume reduction and are recyclable. Other methods to help minimise the generation of waste include:

- Storing maintenance materials safety to avoid damage and loss.
- Regular orders in an "as needed" basis rather than large stock levels of consumables.
- Keeping materials in their packaging for as long as possible to protect them from damage.
- Reuse of materials until no longer fit for purpose.
- Reuse of materials for alternative purposes,
- Finally, the product can be transported offsite for further processing and recycling by the licensed waste contactor.



Waste Management

2.3. Aspects requiring management

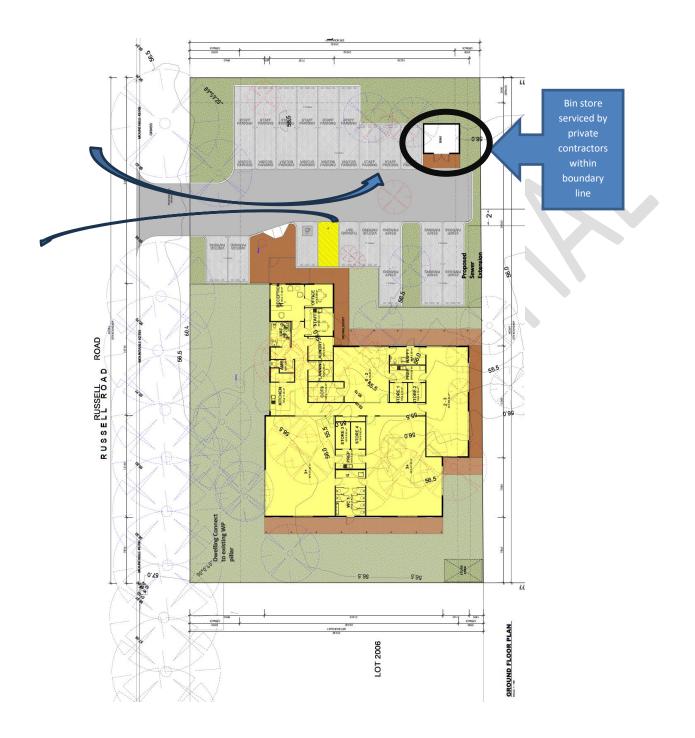
Maintenance processes & large active occupied buildings have the potential to produce a large amount of solid waste; Therefore, it is important to properly design & manage the waste flow. Potential aspects of waste management include:

- Generation of solid wastes, such as plastics, paper and aluminium cans, by tenant may impact the surrounding environment if they are not contained and properly managed;
- Waste not properly contained may attract unwanted feral animals & odours;
 - Bin storage designs, their maintenance, access & locations.
 - Volume of waste & recyclables
 - o Access to bin storage & transferal to collection point;
 - Frequency of collection
 - o Safety of waste operatives & members of the public
 - Truck access to roads & site. (turning curves & bin sizes)
 - o Amenity (plant machine noise and waste odours controlled by ventilation)
 - Local Government requirements
 - General waste, generated in the building is transferred to the bin store via the Caretaker or staff.
 - Recycled commingled waste & general waste is deposited in the bins by the occupants in clearly marked bins.

Table for Waste Streams likely to be generated

Waste Stream	Waste generation	No. of weekly collections	Available Footprint in bin ~7m2 store
General Waste	~1,050L per week	<2x 660L twice weekly or twice weekly as required.	Yes bin store
Commingled Recycling	~1,050L per week	<2 x 660L weekly or twice weekly as required.	Yes bin store
FOGO	N/A (Included above if needed)	Captured in general Waste or 1x240L weekly (optional)	Yes for future proofing only Not mandated by City in commercial sites
Paper & Cardboard	N/A	Captured in the Commingled recycling	Not mandated by the City in commercial sites.
Landscape	TBC	By private contractor	N/A
Bulk	TBC	By private contractor	~ transported to landfill or recycling facility





<u>Ground Floor Garbage Room for general waste commingled recycling bins & bulk hard verge waste.</u> NOT TO SCALE: See Traffic Impact Statement for turning curves with internal service within the car park using small rear lift 6.9m. (With entry and exit in forward gear into Russell Rd. using the "Turning-bay" to reverse back to bin store away from the main entrance of childcare reception).



2.4. Objectives, Targets & KPI's

Objective	Target	Key Performance Indicator
Solid and liquid waste to be disposed of as per regulatory requirements.	All waste to be disposed of by a licensed waste contractor. (Private or Council)	Onsite waste disposal facilities kept clean & odour free.
Client aim to maximise landfill diversion	Recycle commingled waste bins used	Commingled bins not contaminated
No waste to affect nearby premises or tenants	Limited complaints relating to waste	No. of complaints relating to waste

2.5. Building Management Actions

Parameter	Action	Timing	Responsibility	
Falameter	Action	Thing	Responsibility	
Induction	During inductions all maintenance personnel shall be made aware of individual responsibilities in regards to waste management, including the understanding that all personal rubbish and maintenance rubbish generated is to be properly disposed of in designated disposal facilities	Establishment of a permit to work or similar maintenance systems.	All contractors & sub contractors, Building Supervisor	
Waste Management Plan	Maintenance subcontractors will be required to comply with the Waste Management Plan for their Scope of Work. Detailing the type of waste generated, waste avoidance / reduction / reuse / recycling strategies if required.	Establishment of landscape contract	Maintenance & landscaping contractors. Building Supervisor	
Waste Disposal	Secure appropriate waste disposal facilities (wheelie bins) shall be provided in strategic locations onsite. Waste bins shall be located such that they do not affect the community and not too close to surrounding premises. Separation of waste for recycling will be enforced and monitored at Car Park recycling points.	Occupancy	Building Supervisor	
Waste Disposal: Storage & transfer of waste to a collection point	Waste disposal facilities shall be regularly collected or emptied by a licensed waste collector in accordance with Local Council Health Laws.	Occupancy	Building Supervisor	
Storage Area design	Where possible a secure storage area allocated for the collection & recycling of waste will be established.	Design	Designer & or Architect	
See next page for more parameters				

Waste Management Plan



Parameter	Action	Timing	Responsibility
Waste Contractors	Licensed contractors shall be engaged to remove waste.	Handover from construction project team to maintenance team	Project Team & Maintenance team
Putrescibles Waste (Organic only bins)	All putrescibles waste to be placed in a lidded bin and removed separately if FOGO becomes a condition of local government in commercial sites.	Occupancy	Building Supervisor
Recycling / Waste Reduction	Recycling initiatives will be investigated and implemented on site if required.	Occupancy	Building Supervisor
Site Maintenance office or Building Supervisors' stores	 The site supervisors' office shall implement office waste minimisation techniques: Reuse methods where possible. Using electronic documents to reduce use of paper Purchasing products in bulk to reduce packaging 	Establishment	Building Supervisor
Hazardous Waste	Hazardous waste will be managed and disposed of as per the Material Safety Data Sheet requirements and Environmental Protection (Controlled Waste)	End of Defect works (Construction), Maintenance teams & Building Supervisor	Sub Contractors & Building Supervisor
Servicing & cleaning of bin store	Where practicable bin storage plant will be serviced by licenced contactors to reduce the risk of waste onsite and potential for chemicals spills.	Maintenance	Building Supervisor

2.6. Monitoring the Actions of Building users

Type of Monitoring / Reporting	Timing	Responsibility	Record
Measure the diversion from landfill of recycled waste streams	Monthly	Building Supervisor	Internal record keeping
Measure the amount of General waste	Monthly	Building Supervisor	Internal record keeping
On site segregated waste (if required). Appropriate, secure waste placement	Daily	Building Supervisor	Internal record keeping



Appendix I

Internal waste management:

<u>Separation of waste at point of generation:</u> Recommend that two separate bins to be incorporated into the design of all the changing areas, which should be sufficient to store waste & recyclables generated in each day. Paper /Cardboard packaging &/or FOGO can also be considered if volumes warrant it. (As it's not a mandated design specification by this local government on commercial sites).

Bin store & recycling collection point design considerations:

<u>Size:</u> The size of the area set aside for the management of waste is sufficient to accommodate the number of bins required (based on the compaction ratio and the collection regime provided). Even if the bin store needed to store all the waste in 1,100L bins for a whole week. It is the intent to service twice weekly to help with odour.

<u>Ventilation and odour</u>: The design of the bin store will provide for adequate natural ventilation through ventilated doors which will be permanent, unobstructed natural ventilation openings direct to the external air, not less than one-twentieth i.e. 5% of the floor area. Due to the nature of this site mechanical ventilation should be considered in design if the space becomes too odorous.

Lighting: Artificial light controlled by switches will be located both outside and inside the room.

<u>Noise:</u> Waste and recyclables will be collected from the waste collection point on the ground level which is not adjacent to ground floor entrance. Consideration should be given to commingled recycled waste, which can be gathered for collection and transferred by the Site Supervisor to the bin store as required. As this stream can be noisy if glass is involved.

<u>Signage:</u> Clear and easy to read "NO STANDING" signs and "DANGER" warning signs for children will be fixed to the external face of each waste and recycling room where appropriate and signage designating the storage of RECYCLABLES will be fixed to the internal wall(s).

<u>Aesthetics</u>: The bin store has been designed within the development and as such will be consistent with the overall aesthetics. The waste collection point is located away from the front or main entrances to the building and avoids setting bins out along the external walls of the building or detracting for safety elements of small children being dropped off at the centre during all hours.

<u>Protection from Fire, theft and vandalism</u>: The bin store is located on the ground level and access will be restricted to only the Site Supervisor and the approved building user & maintenance staff.

<u>Vermin</u>: On the ground floor self-closing double or leaf & a half doors to eliminate access to vermin will be installed. Washing bins and waste storage area: The bin store will have bin-washing facilities including an adequate supply of hot and cold water mixed through a centralised mixing valve with hose cock and have floor drainage installed. The site supervisor will be responsible for washing bins (or contracting the waste and recycling service provider to wash bins) and for maintenance of the bin store. The walls, floors and ceilings of the waste room(s), recycling room(s) and service compartment(s) will be finished with a light colour. Floor drainage will be required.

<u>Distance from service area & truck access</u>: Reasonably level ground, with flat trafficable (bin width) access paths from the bin store to the presentation point are required. The collection point needs enough free-standing space for all bins behind the truck and should be as close by to the building as possible to shield empty bins from heavy winds during collection and return to bin store by driver or presentation by caretaker, staff. No high kerbs blocking pathways to bin truck and bin store.



Appendix II

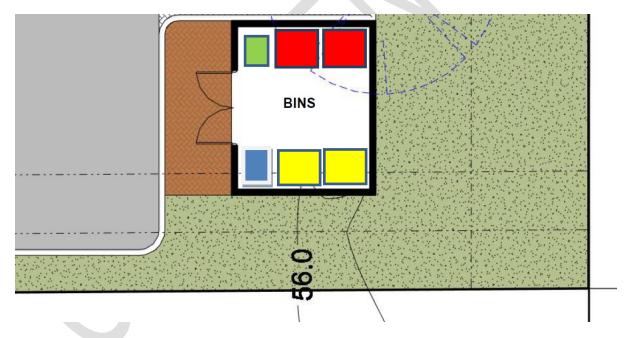
Capacity	120L	240L	660L	1100L
Depth	0.620m	0.715m	0.765m	1.070m
Width	0.540m	0.580m	1.360m	1.360m
Height	0.920m	1.075m	1.235m	1.485m

Further bin type sizes and truck turning curves can be provided on request. A full Traffic Management plan is to be provided by others.

Bin store. Which is plenty of space for 4x660L bins and a 240L FOGO or a 240L paper and cardboard (the last two options for 240L bin sizes are not mandated by the City in its design guidelines although this service is now available to commercial sites).

Water tap and a floor drain are both in the design but not shown on this drawing.

Red =General waste, Yellow = Commingled recycling, Green = FOGO, Blue = Paper / cardboard.



Not to scale North is up the page.



Appendix III

Relevant documents:

- Drawings issued in June 2023 showing reversing bay in car park near bin store for potential collection within boundary line by 6.9m long small rear lift truck (turning curves available from Traffic consultant on demand). Preferred collection position is presentation well away from entrance to make it safer for children, guests and staff with collection and return of bins to bin store after rear lift truck pulls up within car park and uses pathed flat area from bin store to presentation at back of truck. Bins returned by driver or site caretaker, staff to the bin store after collection.
- Traffic Impact Statement provided by Uloth.
- Specification of internal under counter or open plan litter bins & bin transfer areas to be developed by the design team at later stage for operational waste.
- Typical truck data flyers & bin sizes available on website & provided by waste contractor showing typical bin sizes used by commercial sites for removal of waste.
- Waste generations figures used from the City of Melbourne as no Perth metropolitan council or WALGA figures are available for childcare centres.
- Waste generation figures emailed to design team for consideration in June 2023.
- Design on 12th June 2023 by Architects.

Disclaimer:

The information contained in this entire Waste Management Plan & the attached documents are provided by Instant Waste Management in good faith. The company believes the information to be accurate and current at the date of publication. The company does not guarantee or warrant the accuracy, completeness or currency of the information provided. All care and no responsibility has been taken by Instant Waste Management in the creation of this Waste Management Plan. No Professional liability can be passed onto the author.