

**WASTE MANAGEMENT LOCAL PLANNING POLICY****APPENDIX ONE WASTE MANAGEMENT GUIDELINES****1.0 INTRODUCTION**

1.1 The guidelines are for developers, architects, waste consultants in their preparation of development applications to comply with the Waste Management Local Planning Policy.

2.0 PURPOSE

2.1 All aspects of waste management should be considered in the initial design phase of a development, to ensure effective integration of waste facilities into the design where visual amenity is maintained to a high standard, improves convenience, efficiency and protects the health and safety of all stakeholders.

2.2 A Waste Management Plan shall be submitted as per the Waste Management Local Planning Policy.

3.0 WASTE AND RECYCLING GENERATION**3.1 Residential**

3.1.1 The City's collection service operates 7am-7pm on any day that is not a Public Holiday or Sunday (generally Monday to Saturday); and 9am – 7pm a Public Holiday or Sunday.

3.1.2 The City's minimum residential waste and recycling allocation per rateable property is 1 x 120 litres per week for waste and 1 x 240 litres per fortnight for recycling. The waste and recycling requirements for residents in multi-unit dwellings are as shown in Table 1 below.

Table 1

Dwelling size	Waste (litres per /week)	Recycling (litres per fortnight)
Studio/One bedroom	80	240
Two Bedroom	120	240
Three plus bedrooms	120	240

3.1.3 The City provides second recycling bins to residents free of charge. Therefore, developers should consider extra space for storage of additional recycling bins. Also, green waste will also need to be catered for onsite, depending on the scale and nature of the development. The Waste Management Plan will also need to take this into consideration.

3.1.4 The City may introduce Food organic and Garden organic (FOGO) bin in the future. Bin allocation for (FOGO) 240L bin will also needs to be catered for



onsite. The minimum of 40L waste generation rate allocation per property per week is acceptable.

- 3.1.5 The City will allow for a maximum of 4 x 240L waste bins and 4 x 240L recycle bins to be placed on the verge for kerbside collection. More than 8 bins will require internal service arrangements.

3.2 Commercial

- 3.2.1 Waste and recycling generation for commercial developments are expected to be developed by the applicant and supported by waste generated modelling by a qualified waste consultant.
- 3.2.2 Commercial properties are not required to utilise the City's waste services and can seek private commercial waste collection arrangements.
- 3.2.3 Should the owner/s wish to utilise the City's commercial waste service, a written request is required, and approval will be considered at the sole discretion of the City.
- 3.2.4 However, commercial developments are encouraged to adhere to the residential waste management requirements to allow flexibility of choice to use the City's service.

Note- The City's residential collection service timelines must not be disrupted and take precedence over any other collection and deliveries. e.g. commercial waste collection and delivery collections.

4.0 BIN SIZE AND COLOUR

- 4.1 The Waste Management Plan must provide details on the proposed bin sizes. The City's available bin sizes and dimensions are shown in Table 2 and 3 below.

Notes: Please refer to the City's waste generation rates (table 1) to finalise bin numbers and the total bin area.

Table 2

Waste Stream	Colour
Residential Waste	Dark green body with dark green/white lid
Commercial Waste	Dark green body with red lid
Recycling	Dark green body with yellow lid
Green Waste (Optional Service)	Dark green body with lime green lid

Table 3

Size (Litres)	Width (m)	Depth (m)	Height (m)
120	0.5	0.6	1.0
240	0.6	0.8	1.1
360	0.7	0.9	1.1
660	1.3	0.8	1.2
1,100	1.4	1.3	1.5



Notes- The City encourages large multi-unit developments (10 or more dwellings) to utilise larger bin option (660L or 1100L).

5.0 COLLECTION FREQUENCY

5.1 The City currently offers weekly waste collection and fortnightly recycling collections to residential properties. The City can provide residential waste and recycling collections up to 2 times per week depending on the density of the development.

5.2 City of Nedlands collects residential waste at the following frequencies:

- (a) 1 to 55 apartments = 1 collection per week
- (b) 56 to 250 apartments = 2 collections per week

Note: Additional collection frequency approval is at the City 's discretion and will incur additional fees and charges for residents.

6.0 INTERNAL SERVICE COLLECTION

6.1 Internal service collection performed only by rear loader waste truck with the ability to service 240L, 360L, 660L and 1100L bins only.

6.2 Internal service collections should be provided for 5 or more multiple and grouped dwellings, all mixed-use developments, all commercial developments and any other proposals where there is insufficient lot, road or verge frontage for collection or vehicle access as determined by the City. Transfer of bins within the bin location and to the waste presentation point should only be undertaken by the City's waste contractor.

6.3 The City may consider on-street collection where it is impractical or unsafe to collect within the property. Progress of a design not taking into consideration inside service requirements is not considered an acceptable reason.

6.4 Internal service collection should follow the below:

- (a) The waste presentation point shall be within the private property as verge presentation is not permitted.
- (b) The bin storage area shall be located in a position that is easy access for users and collection staff. The path for wheeling bins between the waste presentation point and the waste collection truck must be a flat surface (≤ 1.20 , no steps or dock levellers) free of obstacles and a safe distance from parking bays and vehicle ramps.
- (c) The maximum walking distance between the last bin (furthest) at the bin's presentation point and the waste truck for all bin sizes and waste type shall not exceed 10 metres.
- (d) Access to the collection point must be available from 7am-4pm.



Note -All residential developments requiring an annual internal service collection will attract a fee in addition to annual waste charges. Residents and/or caretakers will not be responsible for the presentation and removal of the bins from/to bin storage/collection location.

7.0 WASTE TRUCK ACCESSIBILITY AND MANOEUVRING-

7.1 Any development of 5 or more dwellings shall require waste trucks to service all waste from within the property as verge presentation is not permitted. The design shall demonstrate the City's minimum compliance requirement of: -

- (a) Waste trucks must enter and exit the site in a forward gear, with all manoeuvring carried out on site. Submission of swept path analysis to demonstrate this is required using a waste truck length as specified in 22.2;
- (b) Rear lifts waste trucks will need a clearance height in line with 22.2 and shall be clear of awnings, upper floors etc;
- (c) Both the driver and passenger should be able to safely enter and exit the vehicle before and after collection, allowing both doors to fully open; and
- (d) To allow safe operating conditions of the rear loader waste truck, there should be practical and convenient access for both the driver and passenger to access the rear of the vehicle with a minimum 800mm and a 2m operating space at the rear of the vehicle.

7.2 Smaller trucks as specified under Clause 22.2 may be considered by the City in the following circumstances: -

- (a) Where a development poses 40 dwellings or less; or
- (b) Otherwise approved by the City.

8.0 EMBAYMENT OPTIONS

8.1 Embayment options within the private property may be considered subject to approval from the City in special circumstances.

9.0 BIN STORAGE AREA

9.1 Depending on the number of dwellings residents may have individual bin areas or shared communal bin areas shown in Table 4 below.

Table 4

Development Type	Bin area	Bin Size (litres)		
		Waste	Recycling	Green waste
1-5 dwellings	Individual	120L/240L	240L	240L
6-9 dwellings Shared	Shared Communal	240L	240L	240L
10 or more dwellings Shared	Shared Communal	660L/1100L	660L/1100L	240L



9.2 Developments with shared bins must include an easily accessible communal bin storage area within the development. In the case of mixed-use developments separate residential and commercial bin storage areas are required.

9.3 A bin storage area (or enclosure) must be provided on the premises where bins are stored and collected from as per the following requirements:

- (a) Easily accessible to allow for the removal of the receptacles;
- (b) Adequate circulation space for manoeuvring bins within the storage area must be allowed;
- (c) Provide for collection that limits pedestrian and vehicle disruption;
- (d) The bin storage area is to be provided with a permanent water supply and drainage facility; for washdown. The bin area is to be screened by a gate, brick walls or other suitable materials to a height not less than 1.8m;

Note-for further clarification, please refer to the City's Environmental Health Services.

- (e) Each waste stream must be separated and clearly labelled;
- (f) Residential waste needs to have a separate area from commercial waste;
- (g) Developments that include residential dwellings shall include a dedicated area for the temporary storage of large bulky items awaiting disposal
- (h) Design should not encourage the emission of odour outside the bin enclosure area;
- (i) Bin storage areas shall be located within the building (not on the verge), so they are not visible from the public realm, or screened from public view with a quality material compatible with the building design
- (j) The bin area is to be accessible via a suitably constructed service road that will allow waste truck vehicle movement;
- (k) Provided with a ramp into the bin storage area having a gradient of no steeper than 1:8 unless otherwise approved by the City; and
- (l) Where a mixed-use development is proposed (residential and any other use), the residential waste and recycling bin storage areas are to be self-contained and separate from commercial bin storage areas.
- (m) For all properties that have lockable waste presentation point, the City requires relevant access i.e. key or remote device.

10.0 COLLECTION OF BINS

10.1 Bins, ready for collection, shall be presented in a manner that has minimal impact on the public realm.



10.2 Where it cannot be demonstrated that the required number of bins for 4 dwellings or less can be practically accommodated on the verge for collection, bin storage areas shall be designed to allow for collection of waste from within the private site.

10.3 Any development of 5 or more dwellings, a bin storage area shall be designed to allow collection of all waste bins from within the site. All waste bins shall not be placed on the verge area for collection.

Notes; The City's waste contractor will only collect allocated "City of Nedlands" bins from the Centralised Residential bin storage as inside service.

11.0 WASTE SYSTEMS FOR MULTI-UNIT DWELLINGS

11.1 A detailed description of the waste system proposed must be provided, which shall include in-apartment source separation systems, chutes, carousels, in chute compaction equipment, transportable compactors, bin lifters and tugs or towing devices.

Developers must ensure that it is as easy to dispose of recyclable materials as a waste stream and that there is an adequate provision for the segregation of waste streams without contamination. Hard waste and charity goods should be taken to an easily accessible, secure and safe drop-off point on-site.

11.2 The following waste options exist for multiunit developments:

- (a) Option 1: Use 660L bins for waste and 660L bins for recycling with bins stored in communal storage area(s). Residents may be required to transfer all waste and recycling from their dwelling direct to the bin storage area(s).
- (b) Option 2: A dual chute system for waste and recycling leading to a central waste and recycling collection area in the basement or ground level.

Notes; All internal bins located at each unit/level to manage the internal waste will be purchased and maintained by the developer by private arrangement.

11.3 Detailed descriptions of the waste systems must be provided, including but not limited to:

- (a) Number of chutes;
- (b) No of bin carousels;
- (c) Compaction equipment; and
- (d) Bin tugs and towing devices.

12.0 WASTE CHUTE

12.1 The minimum waste system requirement based on Multiple Dwelling development size shown on Table 5 below.

**Table 5**

Number of floors/storeys	Preferred Waste System
Less than 6	Resident accessible bin store at ground level or basement level
6 or more	Dual chutes providing for both waste and recycling on each level

- 12.2 Termination of chutes into mobile bins is required to have skirting, or other equivalent system, to reduce any materials leaving the bin on impact. Where chute systems are installed, the City requires bins to have reinforced bases for bin longevity.
- 12.3 Where waste chutes are utilised, the approved waste compacted by a ratio of 2:1.
- 12.4 Chutes must be ventilated to ensure that air does not flow from the chutes through the service openings. All ongoing maintenance of chute systems, including cleaning is the responsibility of the building manager/strata management.
- 12.5 The City is aware of emerging technology regarding organic waste management. Alternate technology for the diversion of organic from landfill will be considered in place of a triple chute system.

13.0 WASTE COMPACTORS

- 13.1 Developments over 250 apartments or a total stream volume of 25,000 litres of waste and/or 25,000 litres of recycling per week are required to provide a compactor. Compactors should be designed to hold at least 1 week's residential waste or multiple thereof. Waste compaction ratio is 2:1. Higher rates can result in Occupational Health and Safety issues and/or mechanical damage.
- 13.2 The compaction systems should compact directly into the receptacle to reduce the requirement to manually handle the waste receptacle. For its operational reliability, compactors require regular maintenance and sufficient space (i.e. additional waste receptacles) must be allocated to store at least 3 days of uncompacted waste in case the compactor is out of service.

For clarification, at a compaction rate of 2:1 this will require 1.5x the calculated compacted bin capacity as specified in 3.1.2, as a minimum to be provided when a compactor is included in the waste management plan. Compliance with 3.1.4 is still required at the total calculated bin capacity.

- 13.3 Developer's shall liaise with the City to ensure the City's collection contractor vehicles can collect the compactor proposed for each development. Any compactor proposal will need to be agreed with the City.



The use of chutes and compactors for the recyclable waste stream may not be appropriate, and compaction of organic waste streams is not appropriate (Ref. WALGA Multiple Dwelling Waste Management Plan Guidelines Appendix 2).

Note: The responsible entity (strata/corporate body) shall be liable for all bin replacement costs and/or repair costs relating to damage caused as a result of the bin compaction process.

14.0 SIGNAGE

- 14.1 Signs within the bin storage area must demonstrate correct recycling and reduce contamination.
- 14.2 Clear signage and coloured bins (red for waste) and (yellow for recycling) to be placed in each bin storage area on each level.

15.0 BULK WASTE (Residential properties only)-

- 15.1 Development plans shall indicate the allocation of a dedicated area to place bulk bins (twice a year) for bulk rubbish collections. The City offers two hard waste collections and two green waste collections for residents.
- 15.2 The City's bulk collection contractor will provide a 10m² bulk bin during the bulk collection (twice per annum). Hard waste items from multi-unit developments are not permitted to be placed on the verge area for collection.
- 15.3 On-site hard waste storage must be provided as follows:
 - (a) 1 to 55 apartments = Minimum area of 5m²
 - (b) 56 - 200 apartments = Minimum are of 10m²
- 15.4 A hard waste collection area must be provided for collection contractors that is immediate to the truck collection location.

16.0 COLLECTION AND CONTRACTORS

- 16.1 All residential properties must utilise the City's waste service. However, commercial properties can engage private contractors for the services.

17.0 COMPLIANCE WITH WASTE MANAGEMENT PLAN

- 17.1 Responsibility for ensuring compliance with the Waste Management Plan and the cleaning of the bin storage area/s and facilities must be allocated to a person of appropriate authority (i.e. property manager, strata manager, caretaker).

18.0 NOTIFICATION ON TITLE

- 18.1 Section 70A Notification for Waste (where applicable)
 - 18.1.1 Prior to commencement of development, the owner must register over the Certificate of Title to the land the subject of the proposed development a



notification, under section 70A of the *Transfer of Land Act 1893*, notifying prospective purchaser that the refuse charges imposed on lot owners by the City as part of its annual rates and charges will be higher than standard refuse charges, due to the additional services provided by the City or the use of small waste trucks, in respect of the collection of refuse from the development.

18.1.2 The section 70A Notification shall be prepared by the City's solicitors to the satisfaction of the City of Nedlands and all costs of and incidental to the preparation of any registration of the section 70A Notification including the City's solicitor's costs shall be met by the owner of the land.

18.2 Entry to private property.

18.2.3 The responsible entity (strata/corporate body) is responsible for the maintenance of the common property (including roads) within the development and shall indemnify the Principal and its Contractors against any and all costs, expenses, liability, loss, claims or proceedings whatsoever in respect of personal injury to or the death of any person, and in respect of any injury or damage whatsoever to any property or person, arising out of or in the course of or caused by the carrying out of work.

19.0 ADDITIONAL INFORMATION REQUIRED

19.1 Please ensure that all plans included in the Waste Management Plan are drawn to either a 1:100 or 1:200 to assist with the assessment process with information below:

- (a) Typical commercial floor showing waste and recycling drop-off points;
- (b) Bin rooms including any bins and compactors;
- (c) Bin presentation location (on-site) with bin alignment shown;
- (d) Residential and commercial floor levels illustrating waste and recycling storage;
- (e) Bin storage areas including any chutes, carousels and bins;
- (f) Bin numbers and size of bins;
- (g) Bin presentation location with bin alignment (verge presentation - if applicable) shown;
- (h) Ramp grades;
- (i) Access to bin storage area and/or chutes; and
- (j) Swept path analysis illustrating sufficient access to collect bins.

20.0 DISCLAIMER



20.1 The above information is provided as a guide only and the City of Nedlands disclaims any liability for any damages sustained by any person acting on the basis of this information. It is recommended that initial discussions with the City's Planning and Development Services and Technical Services should be held to address waste management at the early stages of the development proposal.

21.0 DEFINITIONS

Multiple Dwellings	As per Residential Design Codes.
Grouped Dwelling	As per Residential Design Codes.
Multi-unit Dwelling	5 or more multiple dwellings 5 or more grouped dwellings 5 or more aged or dependant persons dwellings/beds



22.0 APPENDIX

22.1 Waste Management Plan Template

22.1.1 Land Use Type

22.1.2 Waste Collection method

22.1.3 Bin enclosure/storage area;

22.1.4 Proposed waste system;

22.1.5 Collection frequency;

22.1.6 Waste truck manoeuvring and accessibility;

22.1.7 Waste capacity;

22.1.8 Waste presentation location;

22.1.9 Signage;

22.1.10 Bulk waste placement arrangements;

22.1.11 Waste management drawings/figures; and

22.1.12 Any additional waste requirements (e.g. bulk waste or charity bins).



22.2 Collection Vehicle Specifications based on Rear loader waste truck

(a) Standard Truck Dimensions

Parameter	Vehicle Dimension (m)
Overall length	8.5
Overall width	3.0
Overall height (travel)	3.5
Height when lifting bins	3.8

(b) Smaller Truck Dimensions

Parameter	Vehicle Dimension (m)
Overall length	7.5
Overall width	3.0
Overall height (travel)	2.8
Height when lifting bins	2.8

Note: Small waste truck specifications are based on approximately 3 tonne truck.

WMP requires to demonstrate all waste streams (Waste and Recycling) collection can service the development in one single collection.

This vehicle can service bins only ranging from 120L -660L.



22.3 Example of waste bin and recycling bin layout at bin storage area levels

