

Waste Management Plan

Proposed Residential Development Residential Flat Building

Applicant : CAD Plans Pty Ltd
Address: 39 Cumberland Rd Auburn
Site Address: 29-31 Castlereagh St Penrith



PERSPECTIVE-CAMERA VIEW FROM CASTLEREAGH STREET

Penrith Development Control Plan 2014

C5 Waste Management

B. General Objectives

- a) To facilitate sustainable waste management within the City of Penrith in accordance with the principles of Ecologically Sustainable Development;
- b) To manage waste in accordance with the 'Waste Hierarchy' to:
 - i) Avoid producing waste in the first place;
 - ii) Minimise the amount of waste produced;
 - iii) Re-use items as many times as possible to minimise waste;
 - iv) Recycle once re-use options have been exhausted; and
 - v) Dispose of what is left, as a last resort, in a responsible way to appropriate waste disposal facilities;
- c) To assist in achieving Federal and State Government waste minimisation targets as set out in the Waste Avoidance and Resource Recovery Act 2001 and NSW Waste Avoidance and Resource Recovery Strategy 2007;
- d) To minimise the overall environmental impacts of waste by:
 - i) Encouraging development that facilitates ongoing waste avoidance and complements waste services offered by both Council and/or private contractors;
 - ii) Requiring on-site source separation and other design and siting standards which assist waste collection and management services offered by Council and/or the private sector;
 - iii) Encouraging building designs and construction techniques that minimise waste generation;
 - iv) Maximising opportunities to reuse and recycle building and construction materials as well as other wastes in the ongoing use of a premise; and
 - v) Reducing the demand for waste disposal.

5.2.2.4 Residential Flat Buildings

- 1) The development must provide a waste bin storage area that is of sufficient size to accommodate all required waste bins associated with the development. This is to be achieved through the provision of a waste storage bin area located within the basement footprint of the development. For larger developments, multiple waste bins storage areas may be required.
 - a) The waste bin area is to be designed in accordance with Section 5.2.1 Siting and Design of Waste Bin Storage Areas for Residential Development.
 - b) Additional storage space for bulky items is to be provided for the development.
 - c) Swept paths demonstrating adequate manoeuvring area are to be provided with the application.

- 2) For developments comprising three or more storeys, the development is to incorporate a waste chute system that:
 - a) The waste chute system will provide a separate chute for both residual and recyclable material.
 - b) Waste Disposal points are to be provided on each residential level of the development located within a high trafficked area for residential use.
 - c) Larger recyclable goods are to be placed in a separate location identified by the strata management for collection.
 - d) The chute is to be designed to minimise noise and fire risk is reduced.
 - e) The chute is to be completely enclosed and fire-rated and comply with the BCA.
 - f) The chute is to terminate in a garbage and recycling room and discharge directly into a receptacle.
 - g) The waste chute service room must be located directly under where the chute terminates. The room will need to accommodate the entire fleet of bins allocated to the development.
 - h) A separate bin storage room located in the basement will need to accommodate the entire fleet of bins allocated to the development.
 - i) A site caretaker/manager will be required to transfer all bins from the bin storage room to the collection room located on ground floor.

- 3) Council may consider an alternative solution to the waste chute system for developments comprising three or more storeys if the applicant can demonstrate:
 - a) That the alternative system provides a convenient method for the transfer of waste to a centralised location within the basement/ground floor;
 - b) Provides adequate room to cater for the storage and easy access to all waste bins required for the size of the proposed development; and
 - c) Does not require residents to walk to the ground floor with waste and dispose of the waste within designated bins.

- 4) The Waste Services Room is to be provided so that:
 - a) It is accessible for residents on each residential level of the development. The waste services room will include the access to the residual and recyclable chute with provisions for cardboard storage.
 - b) The maximum travel distance from any dwelling to the waste services room is not to exceed 75m.
 - c) The waste service room must be of adequate size to accommodate the required access to chutes or waste infrastructure assigned to the development

- 5) On-site collection is required to service the development. Adequate and safe access must be provided for Council's Standard Waste Collection Vehicles and waste collection staff as follows:
 - a) The route must be designed to allow collection vehicles to enter and exit the site in a forward direction with limited manoeuvring and reversing on-site;
 - b) The route of travel (including vehicle manoeuvring areas) for the waste

collection point is to satisfy the typical dimensions of heavy rigid vehicle. This also includes adequate vehicle clearance for the vehicle. Australian Standard AS2890.2 Parking Facilities: Off-Street Commercial Vehicle Facilities provides typical dimensions and turning circles.

- c) The route of travel for the waste vehicle is to be adequately paved and of sufficient strength to support the waste collection vehicle.
- d) The grades of entry and exit ramps must not exceed the capabilities of the waste collection vehicle and are to comply with AS2890.2 Parking Facilities: Off-Street Commercial Vehicle Facilities.
- e) The waste collection point and parking area for the waste vehicle is to be clearly nominated with dimensions on the site plan. The collection point is to be of sufficient space to accommodate and safely manoeuvre all required waste bins.
- f) Access to the nominated waste collection point for the development is to be designed to ensure that Council's standard waste vehicle can safely access and manoeuvre within the site. Typical dimensions (and turning circles) for a heavy rigid vehicle are provided within AS 2890.2 Parking Facilities: Off-Street Commercial Vehicle Facilities.

6) The on-site collection point is to be clearly nominated on the site plan which accompanies the development application. The collection point is to only temporarily store waste bins so that they can be serviced. The waste bin holding area is to be located fully within the development site. Consideration will be given to multiple waste bin holding areas for larger developments. The collection point is to be designed so that:

- a) It is of sufficient size to accommodate all required waste bins for the development;
- b) It is located at ground level away from pedestrian entrances of the development and habitable windows (including both the development and adjoining dwellings);
- c) It is to be clearly separated from car parking bays (on or off street), footpaths and landscaped areas.
- d) The bin-carting route is to ensure that bin transfer complies with the requirements of Work Health and Safety legislation.
- e) The bin-carting route:
 - is to be direct and as short as possible;
 - is to be solid, concrete and non-slip;
 - is to be paved and be a minimum of 2m wide;
 - is to be free from obstructions and is not required to be carried over any steps;
 - is to be a maximum of 75m in length and a maximum grade of 7%; and
 - For larger bins (660L & 1100L), the maximum length of the route of travel is 10m.

7) Where on-site collection is not possible because of topographic or access constraints, and/or restrictive site dimensions, adequate arrangements need to be made for the convenient, safe and direct access between the waste storage room and the collection point. These arrangements need to be discussed at a pre-lodgement meeting with Council.

- 8) For developments where on-site collection is required or where Council collectors are required to enter a site for the purpose of waste collection services, an agreement will be required to be entered into with Council. This agreement is to be entered into with Council giving power and authority to Council to enter the site; and for the purpose of waste services. Council is also to be provided with indemnity against any future claims for damage and loss.
- 9) A separate area should also be provided for the storage and collection of bulky waste (such as old cardboard boxes) and old or discarded furniture/appliances. The sizing of the bulky waste area needs to be capable of holding the bulky waste generated from the development between scheduled pickups. The bulky waste area needs to be located near to the on-site loading bay).
- 10) Council will consider alternate and innovative waste management systems for high density developments which deliver sound town planning and environmental outcomes for the development and broader community. The applicant is encouraged to discuss the innovate solutions with Council's Waste Management Team and during Council's Pre-DA service

COMMENT

It is noted that the council DCP requires a garbage chute system and on site collection for waste disposal trucks. These issues were discussed at the two pre lodgement meetings for this project with the council officers involved.

It was agreed that on site collection of the waste was not possible due to the size of the site not being able to accommodate a waste collection truck. The collection of the bins would have to occur from the street frontage.

It was also noted that if the development was reduced to less than 25 Units (we are now proposing 20 units as the original proposal was for 29 units) then the council would support the removal of the garbage chute system.

It was also discussed to provide 240 L waste bins in lieu of 1100 litre waste bins so they can be collected from the street frontage. Number of bins was to be confirmed by council

A bulky goods waste storage area is also provided

Waste Generation

DEMOLITION

This is the stage with the greatest potential for waste minimisation, particularly in Sydney where there are high levels of development, relatively high tipping charges and where alternative quarry materials are located on the outskirts.

Applicants should consider if it is possible to re-use existing buildings, or parts thereof, for the proposed use.

With careful on-site sorting and storage and by staging work programs, it is possible to re-use many materials, either on-site or off. Instead of simply pulling down a building, waste management encourages the practice of recycling on site. This could require a number of colour-coded or clearly labeled bins on-site rather than one size fits all.

- Location of on-site storage space for materials (for re-use) and containers for recycling and disposal.
- Vehicle access to the site and to storage and container areas.

Demolition Stage 1

Materials On-Site		DESTINATION		
		RE-USE AND RECYCLING		DISPOSAL
Type of Material	Estimated Volume (m ³) or Area (m ²)	ON-SITE • Specify proposed reuse or on-site recycling methods.	OFF-SITE • Specify contractor and recycling outlet.	• Specify contractor and landfill site.
Excavation Material	2400m ³	Keep and re-use topsoil for landscaping. Store on-site. Use some behind retaining walls etc.	Art Excavations and Demolitions. P.O Box M37 Bankstown NSW 2200	Nil
Green Waste	0m ³	Separated. some chipped and stored on-site for re-use on landscaping	Remainder to Australian Native Landscapes P/L Badgerys Creek	Nil
Bricks	0m ³	Clean and re-use lime mortar bricks for fill	Concrete mortar bricks to Brandown Crushing and Recycling Company	Nil
Concrete	0m ³	Crush concrete for temporary driveway	Concrete to Brandown crushing and Recycling Company	Nil
Timber – Hardwood/pine	0m ³	Re-use for formwork and studwork. Chip remainder for use in landscaping.	To stockpile at Barndown transfer station, by approved Waste Contractor	Nil
Plasterboard Cladding	0m ³	Break-up and remove from site	To Brandown Recycling Facilities	Nil
Metals – Zinc-alum		Nil	To Sellandparker Metal Recyclers	Nil
Tiles and door fitting (incl. roof tile)	0m ³	Broken tiles for fill on-site sale of door fittings	Remainder to Brandown Recycling facilities	Nil
Kitchen cupboard, sink & stove	0m ³	Nil	To Brandown Recycling Facilities	Nil
Bathtub vanity and closet pan	0m ³	Nil	To Brandown Recycling Facilities	Nil
Asbestos	0m ³	Nil	To Kari and Ghossayn Land Fill By Approved Waste Contractor	Nil

Note: Details of site area to be used for on-site separation, treatment and storage (including weather protection) should be provided on the plan drawings accompanying your application.

SECTION TWO – CONSTRUCTION AND USE

Section 2(a) – Potential for Waste Minimisation During Construction Stage

The following measures should be considered when looking to save resources and minimise waste at the construction stage.

- Purchasing Policy – considering measures such as ordering the right quantities of materials and prefabrication of materials where possible;
- Reusing formwork;
- Minimising site disturbance, limiting unnecessary excavation;
- Careful source separation of off-cuts to facilitate re-use, resale or efficient recycling; and
- Co-ordination/sequencing of various trades.

The following details should be shown on your plans.

- Location of temporary storage space within unit;
- Location of Waste Storage and recycling Area(s), per dwelling unit or located communally on-site. In the latter case this could be a Garbage and Recycling room;
- Details of design for Waste Storage and Recycling Area(s) or Garbage and Recycling Room(s) and any conveyance of volume reduction equipment; and
- Location of communal composting area.

Section 2(b) – Design Of Facilities

The following details should be shown on your plans:

- Location of Waste Storage and Recycling Area(s) per unit or located communally on-site;
- Details of design of Waste Storage and Recycling Area(s);
- Where appropriate, design details of Garbage and Recycling Room(s);
- Access for vehicles.

Every building shall be provided with a Waste Storage and recycling Area which is flexible in size and layout to cater for future changes in use. The size is to be calculated on the basis of waste generation rates and proposed bin sizes.

Section 2(c) – On-going Management

This section will enable you to describe how you intend to ensure on-going management of waste on-site (e.g. lease conditions, care-taker/manager on-site).

Construction - Stage 2(a) (Small amount of Construction waste for shop fitting and will be disposed of by relevant contractor)

Materials On-Site		DESTINATION		
		RE-USE AND RECYCLING		DISPOSAL
Type of Material	Estimated Volume (m ³) or Area (m ²)	ON-SITE • Specify proposed reuse or on-site recycling methods.	OFF-SITE • Specify contractor and recycling outlet.	• Specify contractor and landfill site.
Excavation Material		Covered in sectional as part of demolition		
Green Waste		Covered in sectional as part of demolition		
Bricks	10m3	Use for fill behind retaining walls	Remainder to Brandown Crushing and Recycling Company	Nil
Concrete	3m3	Use for fill behind retaining walls	Remainder to Brandown Crushing and Recycling Company	Nil
Timber – Oregon Pine Timber pallets Particle board finishes	1m3	Chip for landscaping sell some on-site for firewood	Remainder to approved landscaping supplies of chipping and composting	Nil
Plasterboard	3m3	Nil	Remainder to Boral Recycling 3 Thackery St Camellia 2142	Nil
Metals – Copper Aluminum		Nil	To SellandParker Metal Recyclers for re-use	
Other – Electrical fittings Reject trade-ins PVC Plastic		Nil		To Collex Recycling Waste Contractors

Note: Details of site area to be used for on-site separation, treatment and storage (including weather protection) should be provided on the plan drawings accompanying your application.

Design of Facilities – Stage 2(b)

TYPE OF WASTE TO BE GENERATED	EXPECTED VOLUME PER WEEK	PROPOSED ON-SITE STORAGE AND TREATMENT FACILITIES	DESTINATION
Please specify. For example: glass, paper, food waste, off cuts etc.	Liter or m ³	For example: <ul style="list-style-type: none"> Waste storage & recycling area Garbage chute On-site composting Compaction equipment 	<ul style="list-style-type: none"> Recycling Disposal Specify Contractor
<p>A. Recyclables:-</p> <ol style="list-style-type: none"> Home paper and cardboard waste. Glass, aluminum and plastic (bottles). <p>B. Non-recyclables:-</p> <ol style="list-style-type: none"> Foodscraps etc. Other plastics (eg wrapping). Unrecyclable waste. 	<p>Expected volume 40 Liters Per unit Per week</p> <p>Expected Volume 120 Liters Per Unit Per Week</p>	<p>A. 240 Liter Recycle storage bins for paper, cardboard, glass, plastic and aluminum. (20 units x 40L) expected 800 Litres per week . Provide 5 240L bins for recycling</p> <p>B. 240 liter Storage bins (20 units x 150L) Expected 3000 Liters Per week. Provide 15 240L bins for general waste</p>	<p>Paper/cupboard to recyclers Glass/aluminum & plastic to collected by council or contractor</p> <p>To be collected by Council or contractor</p>

Note: On collection day, all bins will be placed at front of building for Council contractor to pick up.

On-going Management – Stage 2(c)

Describe how you intend to ensure on-going management of waste on-site (e.g. lease conditions, caretaker/manager on-site).

Council garbage bins weekly collection – Bins will be placed on street frontage on collection day and returned to bin room by building manager immediately after collection by council waste contractors.