# G1 Site Waste Minimisation and Management

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Site Waste Minimisation and Management

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# 1.0 INTRODUCTION

Council aims to minimise waste and maximise resource recovery during the demolition, construction and on-going management of a property, and facilitate safe and efficient waste and recycling collection from all premises throughout the Waverley Local Government Area (LGA).

This Part applies to all works requiring a development application (DA). This Part may be used as a guide in the instance of Exempt and Complying Development.

# 1.1 Objectives of this Part

- (a) Minimise waste generated during demolition, construction and ongoing use of premises through efficient resource recovery.
- (b) Maximise re-use and recycling of building and construction materials and generated wastes to reduce the consumption of finite natural resources.
- (c) Ensure waste and recycling systems are easy to use and complement waste and recycling services.
- (d) Safety and hygiene:
  - Promote safe practices for storage, handling and collection of waste and recycling;
  - Ensure hazardous material is disposed of safely; and
  - Ensure health and amenity for residents and workers.
- (e) Prevent storm water pollution that may result from poor waste and recycling storage and management practices.
- (f) Promote principles of environmentally sustainable development through waste avoidance, resource recovery, recycling and alternate waste treatment methods.
- (g) During use and collection of waste and recyclables.

#### 1.2 Submission requirements

# 1.2.1 Site Waste and Recycling Management Plan (SWRMP)

The Site Waste and Recycling Management Plan (SWRMP) enable Council to assess waste and recoverable resources likely to be generated from the proposed development. SWRMP will ensure that appropriate actions are taken to properly manage the generation, storage and disposal of wastes and recyclables. SWRMP also ensures awareness of safety procedures that must be taken when removing hazardous waste (see Waverley Council's Asbestos Policy 2005).

A SWRMP is required to be submitted when lodging a DA.

# 1.3 How to use this Part

Section	2.0	Demolition and Construction		
		Clauses that apply to the demolition and		
		construction of all developments.		
Section	3.0	All Development		
		General clauses that apply to all development.		
Section	4.0	Residential Development		
		Specific clauses related to residential		
		developments in addition to Section 2.0 and 3.0.		
Section	5.0	Commercial Development		
		Specific clauses related to commercial		
		development in addition to Section 2.0 and 3.0.		
Section	6.0	Mixed Development		
		Specific clauses related to mixed commercial and		
		residential developments.		

# 2.0 DEMOLITION AND CONSTRUCTION

#### Objective

(a) Encourage a high level of demolition and construction waste to be reused or recycled where possible.

### 2.1 General

- (a) All waste streams are to be stored separately on site, i.e.: Landfill waste; Recyclable Waste; Materials to be re-used onsite; and / or Excavation materials.
- (b) Materials should be recycled or reused and stored separately. (See Annexure G1-1 and visit: (www.resource.nsw.gov.au/ data/cd\_directory\_syd.pdf).
- (c) Where space on a development is limited, approval may be granted by Council to place a skip on a footpath or other public area. Guidelines in Annexure G1-7 must be complied with.
- (d) Waste and recycling containers/skips may only be provided by persons/companies holding a current permit granted by Council.
- (e) Asbestos and other hazardous materials must be removed, handled and disposed of according to the *Occupational Health and Safety Regulation* 2001 (made under the *Occupational Health and Safety Act* 2000).
- (f) If the building or structure being demolished or altered was built before 1987 it is likely to contain asbestos. Where asbestos is present, Waverley Council's Asbestos Policy 2005 and National Occupational Health & Safety Commission's: Code of Practice for the Safe Removal of Asbestos 2000 (1988) must be complied with.

#### 2.2 Space

(a) On-site storage areas / containers for all waste and recycling streams must be indicated on the site plans / drawings as part of the SWRMP.

# 2.3 Access

- (a) Materials that cannot be reused or recycled, should be disposed of at an 'approved' landfill and specified in the SWRMP.
- (b) Easy vehicular access to waste and recycling material storage areas must be provided.
- (c) Construction materials are to be stored away from waste and recycling materials to enable easy access for waste collectors.

#### 2.4 Amenity

(a) Ensure hazardous materials such as asbestos, lead paint or dust in roof cavities are handled and removed in a safe manner.

### 3.0 ALL DEVELOPMENT

#### 3.1 General

- (a) All waste facilities must comply with the Building Code of Australia (BCA) and all relevant Australian Standards (AS).
- (b) Heritage conservation considerations may alter requirements of this Part in the refurbishment of existing buildings.
- (c) Council will supply and service 140L and 240L Mobile Garbage Bins (MGB). Where a 660L MGB is preferable the following must be discussed with and agreed upon by Council and the developer may need to provide bins at their own cost.
- (d) Waste and recycling receptacles must be stored at all times within the boundary of the site.
- (e) No incineration devices are permitted.
- (f) Any volume reducing equipment must be installed in accordance with the manufacturers design specifications. The equipment must be installed on either a concrete plinth 75mm high or on legs at least 150mm high and have a space between the unit and the walls to enable easy access for cleaning and maintenance. Compaction rates must not be set higher than 2:1.

#### 3.2 Space

- (a) Space must be provided within the premises for the storage of garbage and recycling. The space allocated must be sufficient to store, in separate containers, the volume of garbage and recycling likely to be generated between collections. Approximate waste and recycling rates for various commercial and residential developments are provided in Annexure G1-2.
- (b) Sufficient space must also be provided for any equipment necessary to manage the waste and recycling likely to be generated on the premises between collections.

#### 3.3 Access

(a) Waste and recycling storage area must be located in a position convenient for both users and waste collection personnel.

- (b) The path for wheeling bins between the waste and recycling storage area and the vehicle collection point must be free of steps and kerbs. The waste storage area must be as close as practicably possible to the service road collection point.
- (c) The path between the storage area and kerbside collection point must be indicated on the plans/drawings in the waste management plan.
- (d) A suitable collection point must be nominated on a service road where loading operations can occur.
- (e) Collection vehicles should be able to service the site with ease and with no need to reverse.
- (f) Collection from within the boundary of the property is only possible upon prior negotiation with Council.
- (g) Where collection vehicles are required to drive into a property to collect waste and recycling, the site must be designed to allow collection vehicles to enter and exit the property in a forward direction and adequate vehicle clearance.
- (h) Access roads must comply with BCA, AS and Annexure G1-3.

# 3.4 Amenity

- (a) The potential for noise and odour must be minimised.
- (b) All garbage and recycling must be inside Council approved bins or skips, with lids closed to reduce littering, stormwater pollution, odour and vermin. Garbage and recycling not presented in the correct manner will not be collected. All organic waste should be either treated in a composting or worm farming system or stored in a Council approved bin or skip with the lid closed.

# 3.5 Construction

- (a) Floors of garbage, recycling and other waste storage rooms must be constructed of concrete or other approved materials at least 75mm thick. The floor should be finished with a smooth even surface, coved at the intersection with walls and plinths with a ramp to the doorway where necessary. The floor of the waste and recycling storage areas must be graded and drained to the sewerage system and approved by the Sydney Water Corporation. Under no circumstances is waste-water from the cleaning of the waste storage area and bins, to drain into the stormwater system.
- (b) Walls of garbage, recycling and other waste storage rooms must be constructed of an approved rigid impervious material. Walls should be cement rendered internally to a smooth even surface, coved at all intersections. If metal receptacles are to be used a bump rail should be fitted at least 50mm clear of the wall.
- (c) Ceilings of the garbage, recycling and other waste storage rooms must be finished with a rigid, smooth faced non-absorbent material that can be easily cleaned.
- (d) Walls, ceilings and floors of the waste storage rooms should be finished in a light colour.

- (e) Waste and recycling storage rooms should have a close fitting and self-closing door that can be opened from within the room. The door should be of sufficient width to accommodate waste receptacles.
- (f) Smoke detectors must be fitted in accordance with AS, Control and Intercom Systems – System Design, Installation and Commissioning and connected to the fire prevention system of the building.
- (g) Central garbage and recycling rooms must be equipped with a supply of hot and cold water, mixed through a centralised mixing valve with a hose cock.
- (h) Taps should be fitted with an aerator to increase water efficiency.
- (i) Waste and recycling storage rooms should be designed to prevent the entry of vermin.
- (j) Clear and easy-to-read "NO STANDING" signs and "DANGER" signs must be displayed on the external face of waste storage rooms where appropriate (letters no less than 5cm in height).
- (k) Any compacters or mechanical devices used in the storage of waste must be childproof.
- (I) Waste storage areas must be provided with energy efficient artificial light, controlled by switches located both inside and outside the rooms.
- (m) Any part of the waste management system visible from outside the development must be consistent with the building design.

### 3.6 Management

- (a) The design of the waste and recycling management system must identify responsibility for cleaning of waste receptacles and storage areas, as stated in the SWRMP Checklist No. 2.
- (b) The design of the waste management system must identify responsibility for transfer of bins within the property, to the collection point and back to the storage areaas identified in the plan/drawings and the SWRMP Checklist No. 2.
- (c) All waste and recycling receptacles must be put out for kerbside collection no earlier than the previous evening.
- (d) All waste and recycling receptacles must be removed from the kerb-side as soon as possible on the same day as the collection service.
- (e) Standard signage on how to use the waste management system must be displayed in all communal waste storage areas. Residential signs are available from Council.
- (f) Clear and easy to read signs identifying the different waste receptacles (e.g. paper/cardboard recycling, plastic/glass/metal recycling, garbage and green waste) and where in the storage area these should be positioned must be displayed. Detailed signs depicting what can be placed in each receptacle must also be displayed. Signs are available from Council for residential use, examples can be found at (www.waverley.nsw. gov.au/).

# 4.0 RESIDENTIAL DEVELOPMENT - CONTROLS

# 4.1 Single Dwelling

#### 4.1.1 Space

- (a) Space must be provided inside each dwelling for a receptacle to store garbage and another for recycling, each with the capacity to store two day's worth of materials (see Annexure G1-2).
- (b) Space must be allocated within the boundary of the property to store MGB's.
- (c) Consideration must be given to the storage of green waste.
- (d) A designated unsealed area for composting must be provided, taking into account proximity to dwellings and site drainage systems.

#### 4.1.2 Access

(a) Refer to controls in Section 3.3.

# 4.1.3 Amenity

- (a) All garbage and recycling must be inside Council issued MGBs with lids closed to reduce littering, stormwater pollution, odour and vermin. Garbage and recycling not presented in the correct manner will not be collected.
- (b) All organic waste should be either treated in a composting or worm farming system, or must be stored in a Council approved bin or skip with lid closed.

# 4.1.4 Management

(a) Refer to controls in Section 3.6.

#### 4.2 Multi-unit Residential Buildings, Boarding Houses, Backpackers, Serviced Apartments

#### 4.2.1 Space

- (a) Space must be provided inside each dwelling for a receptacle to store garbage and others for recycling, each with the capacity to store at least two day's worth of materials (see Annexure G1-2).
- (b) An easy to access, communal waste and recycling storage area/room, must be provided for the storage of MGB's between collection.
- (c) If the development contains a garden, a contained area for the storage of green waste must be provided. A minimum of 1m<sup>3</sup> (1 cubic metre) must be allocated. If a large quantity of green waste is to be generated, a larger area may be required.
- (d) A room or caged area with instructive signage must be allocated for the storage of discarded bulky items, such as old furniture, awaiting council pick up. This is to avoid the occurrence of illegal street dumping.

(e) A designated unsealed area for composting with instructive signage must be provided, taking into account proximity to dwellings and site drainage systems (see Annexure G1-4).

### 4.2.2 Access

- (a) Multi unit buildings containing more than 3 habitable storey's must provide a system for convenient transportation of waste and recyclable material to the communal waste and recycling storage area.
- (b) A waste transportation system may include a passenger or goods lifts, or a chute system. If a chute system is used a process for transferring recycling as well as waste must be provided. Chutes are not suitable for recycling – they limit source separation and cardboard can easily become stuck causing a fire hazard (see Annexure G1-5 and Section 3.3).

### 4.2.4 Amenity

- (a) The following facilities must be insulated from noise to comply with the residential amenity provisions of this Part (refer to Section 3.4):
  - waste and recycling compaction equipment and chutes; waste and recycling storage facilities; or
  - waste and recycling collection and vehicle access points.

## 4.2.5 Management

(a) The building owner / body corporate is responsible for all waste or recycling generated from the premises and left on the footpath outside the property that is not stored in a Council issued MGBs or not due to be collected, this includes discarded household items etc (refer to Section 3.6).

#### 5.0 COMMERCIAL DEVELOPMENT - CONTROLS

#### 5.1 Restaurants, Food Retailers, Clubs, Hotels, Retail Premises

## 5.1.1 General

(a) All businesses must have written evidence, held on site, of a valid and current contract with a licensed collector of garbage and recycling.

#### 5.1.2 Space

- (a) All commercial premises must have a dedicated and enclosed waste and recycling storage area, which has adequate space to meet waste generation rates.
- (b) Separate space must be allocated for the storage of liquid wastes and oils etc. The liquid waste storage areas must be undercover, bunded and drained to a grease trap. Where a compactor is required.

# 5.1.3 Access

- (a) In multi storey developments, consideration must be given to the convenient transportation of waste and recycling from the various floors to the central storage area. Such transportation system may include a passenger or goods lifts, or a chute system. If a chute system is used a process for transferring recycling and waste must be provided (see Annexure G1-6). It should be noted that some systems require the waste container to be lifted above the vehicle to be emptied (front lift skip) or loaded (waste compactor) (see Annexure G1-3).
- (b) Liquid waste from grease traps must only be removed by licensed contractors approved by Sydney Water and NSW EPA.

# 5.1.4 Amenity

(a) For commercial premises whose waste contains 20% or more food waste or other waste which is considered by Council to have potential amenity impacts, a daily waste collection is required, unless an alternative is agreed upon with Council (refer to Section 3.4).

### 5.1.5 Management

(a) The waste and recycling management (including composting) and collection system, along with allocated responsibilities should be clearly outlined in contracts with cleaners, building managers and tenants etc (refer to Section 3.6).

# 5.2 Commercial Offices

#### 5.2.1 General

(a) All businesses must have written evidence held on site of a valid current contract with licensed garbage and recycling collector.

# 5.2.2 Space

(a) Space must be provided on each floor and in the central waste storage area for the separation and storage of all recyclable cardboard, paper and paper products.

# 5.2.3 Access

(a) It should be noted that some collection services require the waste container to be lifted above the vehicle to be emptied (front lift skip) or loaded (waste compactor) (see Annexure G1-3 and Section 3.3). Paper and cardboard should be stored in a dry, vermin proof area. It should be stored no longer than 2 weeks to prevent pests from breeding (refer to Section 3.4).

# 5.2.5 Management

(a) The waste management and collection system, along with allocated responsibilities should be clearly outlined in contracts with cleaners, building managers and tenants etc (refer to Section 3.6)

# 6.0 MIXED DEVELOPMENTS – CONTROLS

# 6.1 General

- (a) There must be at least two separate centralised waste and recycling storage rooms or areas, one for commercial waste and one for residential waste. They must be self-contained and have separate keys and locking systems.
- (b) Waste and recycling handling and collection systems from residential and commercial areas are to be completely separate. The waste management plan must clearly identify the management systems and collection points for both commercial and residential waste streams. For land within a Local Village Centre refer to Part F5.

# 6.1.1 Space

(a) Sufficient space must be allocated within each waste and recycling storage area to store the amount of waste likely to be generated in each respective component of the development (see Annexures). Space allocation must comply with Section 4.0 and 5.0.

# 6.1.2 Access

(a) Access considerations of both the users and waste collection staff in the various components of the mixed development must comply with the stipulations in the relevant sections of this Part.

# 6.1.3 Amenity

- Noise and odour from the commercial waste facility must not impact on residents in the same site (see Section 3.5). Residential units must be insulated from noise if adjacent, or above: Waste and recycling storage facilities; compaction equipment; or collection and vehicle access points.
- (b) For commercial premises whose waste contains 20% or more food waste, a daily waste collection is required, unless an alternative is agreed upon with Council.

# 6.1.4 Management

(a) Commercial tenants in a mixed development must be actively discouraged from using the residents' waste facilities.

# Annexure G1-1 Examples of Building Material Reuse

For a Construction and Demolition Recycling Directory, (www.resource.nsw.gov.au/data/ cd\_directory\_syd.pdf).

Material	Reuse/recycling potential	
Concrete	Reused for filling, levelling or road base	
Bricks and Pavers	Can be cleaned for reuse or rendered over or crushed for use in landscaping and driveways	
Roof Tiles	Can be cleaned and reused or crushed for use in landscaping and driveways	
Untreated Timber	Reused as floorboards, fencing, furniture, mulched or sent to second hand timber suppliers	
Treated Timber	Reused as formwork, bridging, blocking and propping or sent to second hand timber suppliers	
Doors, Windows, Fittings	Sent to second hand suppliers	
Glass	Reused as glazing or aggregate for concrete production	
Metals (fittings, appliances and wiring)	Removal for recycling	
Synthetic Rubber (carpet underlay)	Reprocessed for use in safety devices and speed humps	
Significant Trees	Relocated either onsite or offsite	
Overburden	Power screened and used as topsoil	
Garden Waste	Mulched, composted	
Carpet	Can be sent to recyclers or reused in landscaping	
Plasterboard	Removal for recycling, return to supplier	

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#### Annexure G1-2 Waste and Recycling Generation Rates

Based on a study by the Southern Waste Board in 2001 the approximate waste and recycling generations rates for a two person dwelling are as followed.

Generation rates for a two person dwelling		
Waste stream	Waste stream	
Garbage	80 L/unit/week	
Paper and cardboard recycling	25 L/unit/week	
Other Recycling	15 L/unit/week	

Use these figures to estimate the storage space required inside each residential dwelling for the storage of at least two days worth of waste and recycling.

#### Council's MGB allocation for multi-unit residential buildings, boarding houses, backpackers and serviced apartments is as follows:

- 1 x 240 L MGB for garbage per 3 units collected weekly
- 1 x 240 L MGB for paper/cardboard per 8units collected fortnightly/alternate weeks
- 1 x 240 L MGB for other recyclables per 8 units collected fortnightly/alternate weeks
- 660 L MGB's may be considered in consultation with council

#### Councils MGB allocation and services for single dwellings is as follows: for garbage

- 1 x 140L MGB
- 1 x 140L MGB for paper/card board recycling
- 1 x 140L MGB for other recyclables
  - Garbage collected weekly
  - Recycling collected on alternate weeks, ie. each collected fortnightly.
- Further information on Council's waste services is available in the Waste Avoidance and Resource Recovery Part.

Premises type	Waste generation	Recyclable material generation
Backpackers' Hostel	40L/occupant space/week	20L/occupant space/week
Boarding House, Guest House	60L/occupant space/week	20L/occupant space/week
Food premises: Butcher Delicatessen Fish Shop Greengrocer Restaurant, Café Supermarket Takeaway food shop	80L/100m <sup>2</sup> floor area/day 80L/100m <sup>2</sup> floor area/day 80L/100m <sup>2</sup> floor area/day 240L/100m <sup>2</sup> floor area/day 10L/1.5m <sup>2</sup> floor area/day 240L/100m <sup>2</sup> floor area/day 80L/100m <sup>2</sup> floor area/day	Variable Variable Variable 120L/100m <sup>2</sup> floor area/day 2L/1.5m <sup>2</sup> floor area/day 240L/100m <sup>2</sup> floor area/day Variable
Hairdresser, Beauty Salon	60L/100m <sup>2</sup> floor area/week	Variable
Hotel, Licensed Club, Motel	5L/bed space/day 50L/100m <sup>2</sup> bar area/day 10L/1.5m <sup>2</sup> dining area/day	1L/bed space/day 50L/100m <sup>2</sup> bar area/day 50L/100m <sup>2</sup> dining area/day
Offices	10L/100m <sup>2</sup> floor area/day	10L/100m <sup>2</sup> floor area/day
Shop less than 100m <sup>2</sup> floor area Shop greater than 100m <sup>2</sup> floor area	50L/100m <sup>2</sup> floor area/day 50L/100m <sup>2</sup> floor area/day	25L/100m <sup>2</sup> floor area/day 50L/100m <sup>2</sup> floor area/day
Showroom	40L/100m <sup>2</sup> floor area/day	10L/100m <sup>2</sup> floor area/day

Multi-Unit Dwellings1	80L/unit/week	40L/unit/week
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Sources: Adapted from *Waverley Council Code for the Storage and Handling of Waste.* <sup>1</sup> Appendix A, *Better Practice Guide For Waste Management In Multi-Unit Dwellings 2007* 

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Rear Loading MGB Collection Vehicle Dimensions		
Length	10.600m	
Width	2.800m	
Height	3.600m	
Wheelbase	5.250m	
Turning circle	Turning circle 16.500m between kerbs.	

# Annexure G1-3 Vehicle Dimensions and Turning Circles

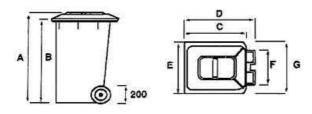
# Access and Turning Provisions

Any turning circle considerations must make allowances for driver steering error and overhangs. The steering error allowance should be at least 0.6 metres (absolute minimum) on both sides of the wheel path and 1m as desirable minimum. Best design practice for access and egress from a development calls for a separate entrance and exit to allow the collection vehicle to travel in a forward direction at all times. Where there is a requirement for the collection vehicles to turn at a cul-de-sac head within a development, the design should incorporate a bowl, 'T' or 'Y' shaped arrangement. The design aspects that must be taken into account include the following:

- The weight, height and length of Council collection trucks.
- Placement of waste and recycling bins outside each home, or in a common collection area.
- Parked cars greatly inhibit the turning of collection truck.
- Trucks should only be expected to make a three-point turn to complete a U-turn.
- Allow for collection vehicle overhang and possible interference with bins and road furniture.

Annexure G1-4 Council Supplied Mobile Garbage Bin Dimensions (MGB)

Bin Type	80L	140L	240L	660L
A (HEIGHT)	840mm	925 mm	1060 mm	1235 mm
В	795mm	870 mm	990 mm	-
С	480mm	550 mm	660 mm	-
D (WIDTH)	510mm	615 mm	730 mm	1360 mm
E (DEPTH)	450mm	535 mm	585 mm	1235 mm
F	300mm	395 mm	400 mm	-
G	450mm	535 mm	585 mm	-



Source: Sulo Waste Management

# Annexure G1-5 Composting and Worm Farming Guidelines

A composting facility must be provided in all residential use developments. Such facility may comprise either:

A dedicated area on the site for the accommodation of a sufficient number of commercially available compost bins or worm farms, or

A purpose designed compost area incorporated in the landscaped (low waste garden) area of the site.

<u>Location</u>: conveniently accessible from all dwellings and reasonably close to the waste storage area. The facility should be located so as not to cause any nuisance to the occupants of the building on this or neighbouring sites.

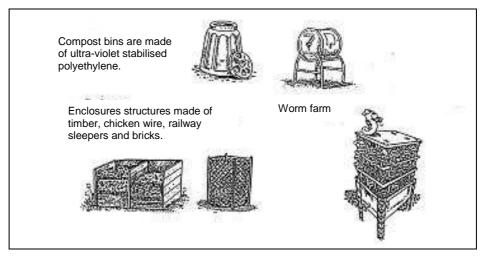
<u>Size</u>: the capacity of compost bins for single dwellings is discretionary and will depend on the circumstances in the individual case. In new dwelling houses, an area of 1000mm x 1000mm should be provided.

In multi- unit residential buildings, provision should be made for:

- A dedicated area to accommodate sufficient compost bins having a minimum capacity of 30 litres for each dwelling unit; or
- A purpose designed compost structure having a minimum capacity of 1 cubic metre for every 6 dwelling units or part thereof.

<u>Construction</u>: a permanent compost facility may be three-sided, two-compartment structure made of solid timber or masonry, with a cover for weather protection.

#### Examples of composting and worm farming containers and structures



For further information, contact Council's Waste Education & Research Officer on 9369 8000.

# Annexure G1-6 Garbage Chutes Guidelines

# Garbage chute design

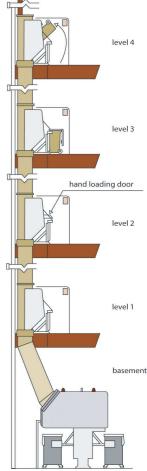
- Garbage chutes must be constructed in accordance with the requirements of the *Building Code of Australia (BCA).*
- Garbage chutes must be located and insulated in a manner that reduces noise impacts.
- Chutes, service openings and charging devices must be constructed of material (such as metal) that is smooth, durable, impervious, non-corrosive and fire resistant.
- Chutes, service openings and charging devices must be capable of being easily cleaned.
- Chutes must be cylindrical and should have a diameter of at least 500mm.
- There must not be any bends (or sections of reduced diameter) in the main shaft of the chute.
- Internal overlaps in the chute must follow the direction of waste flow.
- Chutes must deposit rubbish directly into a bin or compactor located within a waste/recycling storage room.
- A cut-off device must be located at or near the base of the chute so that the bottom of the chute can be closed when the bin or compacting device at the bottom of the chute is withdrawn or being replaced.
- The upper end of a chute should extend above the roofline of the building.
- The upper end of a chute should be weather protected in a manner that doesn't impede the upward movement of air out of the chute.

### Garbage chute service room design

- The service opening (for depositing rubbish into the main chute) on each floor of the building must be located in a dedicated service room.
- The charging device for each service opening must be self-closing and must not project into the main chute.
- Branches connecting service openings to the main chute are to be no more than 1m long.
- Each service room must include containers for the storage of recyclable materials. Signage regarding the materials that can be recycled should be displayed near these containers.
- Each service room must be located for convenient access by users and must be well ventilated and well lit.
- The floors, walls and ceilings of service rooms must be finished with smooth, durable materials that are capable of being easily cleaned.
- Service rooms must include signage that clearly describes the types of materials that can be deposited into the garbage chute and the types of materials which should be deposited into recycling bins.

#### Management

- Garbage chutes are not to be used for the disposal of recyclable materials. Signage to this effect should be displayed near service openings.
- Arrangements must be in place for the regular maintenance and cleaning of garbage chutes and any associated service rooms, service openings and charging devices.
- Arrangements must be in place for the regular transferral of recyclable materials (which are stored in service rooms) to the main waste/recycling storage room.



Example of a garbage chute system



### Service Lifts

- A service lift (or service elevator) may be appropriate in place of a waste chute in developments where a caretaker is to be employed.
- A service lift is a dedicated elevator system for the transport of waste and recycling containers and other equipment required for the operation of the development.
- A waste service compartment must be provided on each floor of the development to allow residents to store waste and recyclables.
- Resident's place their waste and recyclables in bins provided and these are transported daily by the caretaker to the waste storage room.
- Each service room must be designed with sufficient space for the storage of two day's waste and recycling for all residents on that level.
- Developers will need to check with Council whether this option is acceptable.

#### Compactors

- Compactors are used to compress the waste (or recyclables) into smaller collection containers.
- The compaction ratio is typically set at around 2:1. Higher ratios are not used as they may result in heavier bins, causing OH&S problems, mechanical damage and breakage of recyclable materials.
- Best practice compaction systems compact directly into a 240 litre MGB or a skip, reducing the requirement of manually loading the compacted waste into bins or skips.
- Compactors are extremely useful for mixed garbage, if used for recyclables extreme care must be taken not to cross contaminate the recycling streams.
- Compactors are less useful for steel containers and should not be used for glass.
- Compactors require regular maintenance. In particular, systems fed from a chute can be prone to blockages or failure of the "electronic eye", which can result in garbage overflowing or backing up the chute. As a result if the 2:1 compaction ratio, the requirement for garbage storage bins is halved. This information was sourced from: Resource NSW (The Department of the Environment and Conservation), "Better Practice Guide for Waste Management in Multi-Unit Dwellings", 2002.

Source: Better Practice Guide for Waste Management in Multi-Unit Dwellings, DECC, 2008.

### Annexure G1-7 Placing a Waste Storage Container in a Public Place

To place a waste storage container (skip) in a public place, such as on a roadway or footpath, a Building Waste Container Company registered with Council must be used.

For the purposes of this Part, a waste storage container means a bulk container, commonly known as a skip, that is used for the temporary storage and transportation (by a registered vehicle) of waste and recycling materials generated by building demolition and construction activities, as well as general household rubbish. Also for the purposes of this Part, a public place means the whole of a public roadway, including any footway and grass verge, but does not include a public park or reserve which is land used for public recreation and like purposes.

A waste container may be placed in a public place, only where there is no suitable space available on the user's premises. Council permits this to encourage source separation and recycling of waste materials. Council encourages the use of multiple containers or careful scheduling of single container collections to enable separation of re-useable and recyclable materials. Details of the container must be marked on the plans presented to Council when applying for a construction certificate.

# **Approval Requirements**

Permission to supply and locate a building waste container / skip is granted subject to compliance with the following conditions:

- 1. The Company holds a current Council permit to place a waste storage container in a public place;
- 2. The Company have lodged an appropriate security deposit with Council to cover the costs for repair of any damage caused to public property;
- 3. Containers will be positioned in conformity with the "Interim Guidelines for the Placement of Building Waste Containers" as prepared by the Roads and Traffic Authority of N.S.W;
- 4. Containers shall not exceed a width of 2.5m;
- 5. No containers shall be located in a public reserve without the prior approval of Council;
- 6. Containers shall not be left on a roadway longer than seven (7) days;
- 7. Containers shall bear the name and telephone number of the supplier;
- 8. Suppliers agree that the site where containers are being placed will be left in a clean and tidy condition with all spillage removed from the area;
- 9. Suppliers are to be responsible for any incidence of damage arising from poor placement of containers or spilt debris; and
- 10. Suppliers are to agree in writing to indemnify Council against any public liability claim arising from the placement of containers on Council's roadways and such insurance cover to indemnify Waverley Council for a minimum amount of \$10,000,000.

When placing a waste storage container / skip in a public place the following provisions must be complied with:

- 1. Public safety and convenience must be preserved;
- 2. The container will not cause any damage to public property;
- 3. The container is a size appropriate to the location;
- 4. The container is clearly identifiable;
- 5. The container is clearly visible to traffic;
- 6. The container does not restrict or obstruct traffic visibility;
- 7. The container does not disturb or obstruct the free flow of pedestrian or vehicular traffic; and
- 8. The container does not disturb normal stormwater flow.