



Waste Management



Development Control Plan



INTRODUCTION

PREAMBLE

- This Development Control Plan (DCP) applies to the following developments/activities;
 - *residential premises* (including but not limited to town houses, villas, units/multi-units, rural residential subdivision, residential subdivision)
 - *tourist accommodation* (including but not limited to hotels, motels, guest houses, serviced apartments, back packer),
 - *commercial premises* (including but not limited to multiple unit businesses, industrial sheds, single unit businesses, mobile businesses, tourist accommodation)
 - *public buildings* (including but not limited to halls, schools, hospitals)
- This Plan came into force on 1 June 2006 and applies to the whole of the Coffs Harbour local government area.

OBJECTIVES

The objectives of this DCP are to set standards for good practice in on-site management of wastes.

- Minimise on-going waste collection cost,
- Help preserve hygienic conditions
- Contribute to the protection of the environment.
- Ensure waste management systems are compatible with collection services
- Minimise waste to landfill, both during construction and occupation.
- Facilitate on-site source separation and recycling and ensure appropriate storage of waste and recyclable materials.
- Minimise risks associated with waste management at all stages of development.

PROCEDURES

This DCP contains three Parts. Parts 1 and 2 detail the general Controls on waste management relating to developments identified in the Preamble above. Part 3 contains Recommendations relating to these development types.

Reference must also be made to other relevant DCPs relating to the development proposed.

WASTE MANAGEMENT PLAN

A *Waste Management Plan* (Appendix A) must be prepared and submitted with development applications. The location and design of bin storage areas must form part of the application.

Applicants should follow the step-by-step procedures shown in the procedures flow chart.

DICTIONARY

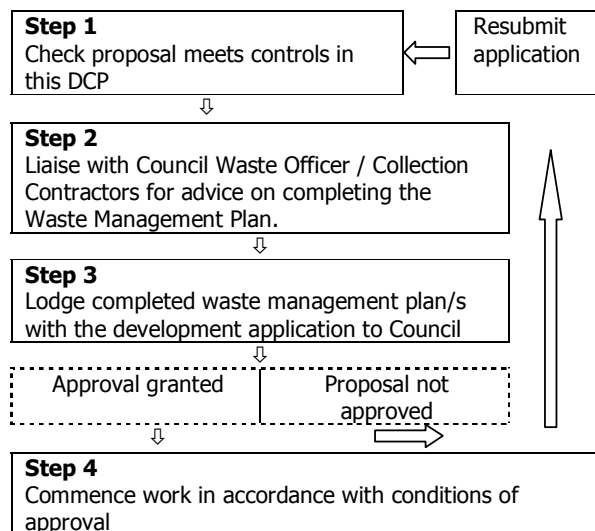
"**MGB**" Mobile Garbage Bin

"**DCP**" Development Control Plan

"**LEP**" Local Environment Plan

"**WMP**" Waste Management Plan

PROCEDURES FLOW CHART



HOW TO USE THIS DCP

Applicants are to comply with the controls of this DCP unless it can be demonstrated that an alternative solution to all or any of the controls will be a better approach to meeting the objectives of this DCP.

Please read the following information then complete your *Waste Management Plan*.

SUBMISSION REQUIREMENTS

1. A completed *Waste Management Plan*, and
2. Site analysis plan (at scale 1:200) including the following:
 - Location of bin storage areas
 - Details of design for bin storage facilities including floor plan, elevation, cross-sections, screening, dimensions and drainage.

BIN OPTIONS

Bins chosen should suit the type of development proposed

- 240L Yellow-lidded Bin for recycling (collected on alternate fortnights).
- 240L Red-lidded Bin for garbage (collected on alternate fortnights as of end of 2006).
- 240L Lime green-lidded Bin for organics (greenwaste and food waste) (collected weekly as of end of 2006).
- Various sized bulk Red- and Yellow-lidded bins (collected weekly).

Note:

Sharing MGBs is dependant upon the space available at kerbside for the number of bins allocated.

When shared bins are chosen responsibility for the transfer of bins to and from the kerb, and maintaining the bin storage area rests with Strata Management / Body Corporate / Property Owner.

The number of MGBs supplied for organics will depend on the amount of greenwaste generated from the premises.

WASTE GENERATION RATES

Waste generation rates must be considered when determining the number and types of bins required. Consideration must be given to the following variables by applicants, when determining bin configurations for both residential premises and commercial operations;

- the number of occupants,
- size of dwellings,
- nature of wastes being generated,
- frequency of collections,
- holiday period changes to volumes, etc.

Refer to the following web page for more information on waste generation rates

www.resource.nsw.gov.au/index-RNSW.htm

Residential and Commercial premises – allowable waste rate per week (through Domestic Waste Collection Service)	
Waste Stream	Volume per Week Per Premise
Recycling	120 L***
Organics (greenwaste and food scraps)	240 L**
Garbage	120 L***
Total Average Weekly Waste Generation	480 L
Hotels / Motels	10 L per bed per day (add restaurant factor for each waste stream where necessary)

** Greenwaste generation is dependent upon the size of the property, amount of garden / greenspace and seasonal variation. Some properties may have very little greenwaste generation or have greenwaste removed by contractors.

*** There is some variation in the amount of recycling and garbage produced, dependent on the number of bedrooms in each dwelling. Dwellings with single / elderly persons generally generate less than the average amounts of waste. Council will accept a site / design specific WMP for these specialist multi-unit developments.

PROHIBITED WASTE EQUIPMENT

Chutes

Chutes for the transfer of waste are not permitted in the Coffs Harbour LGA.

In-Sink-Erators

Food waste disposal units or In-sink-erators are not permitted for use in the Coffs Harbour LGA.

PART 1 – Controls for Residential Premises

BIN STORAGE / WASH AREA

Communal bin storage / wash areas are required where bulk bins are used and / or MGBs are shared.

The following controls must be implemented when designing the bin storage / wash area.

DIMENSIONS

- Structurally adequate construction;
- Adequate size to accommodate required number of bins, to service number of dwellings / units proposed and amount of waste generated from these (according to the Waste Generation Rates outlined by Council);
- Maximum height to underside of roof 2.4m;
- Area to be located 2m from neighbouring properties (to mitigate odour, allow for screen planting, etc);
- Area to be roofed (with 10° overhang), bunded and graded to prevent ingress of stormwater / rainwater, to the drain to sewer.

DESIGN/MATERIALS

- Design and materials to be compatible with existing building - where the facility is in front of the 6m building setback, specify materials and design on plan;
- Suitably landscaped;
- Provision of visual screen from public view;
- Concrete floor graded and drained to dry basket arrestor – prior to draining to sewer (Liquid Trade Waste Guidelines 2005) where area to be bunded as necessary to prevent ingress of stormwater, it must also allow ease of movement of bins as well as access to the area by persons with a disability (as per AS 1428);
- Bin carting grade must not exceed 1:14;
- Security - anti-vandal tap with hose fitting for washing bins.

LOCATION / ACCESS

The following must be available:

Access for collection trucks to bulk bin storage areas - Large collection vehicles need to be able to access the bin storage area, requiring large turning circles and minimum pavement strengths to ensure no damage to property.

A Section 88b Instrument will be required where collection vehicle is required to traverse private property / roads.

Kerbside Collection Point - Where kerbside collection is chosen, no MGB's placed at the kerb are to encroach onto the frontage of any neighbouring property, including driveway access.

Convenience for residents / users of facility - If communal bin areas are to be used, consider placing bin storage area near letterboxes or car parking for ease of use. Communal facilities must be easily accessible from each dwelling / unit, as well as the usual kerbside collection point.

Odour, noise and visual amenity are to be considered when locating the bin storage area so as not to disturb other residents / units. Consider proximity to adjoining properties, on-site dwellings and recreational areas. Noise should not affect neighbours due to use of area – location and screen planting can help ameliorate noise.

Where possible, the location and design of communal facilities / screened enclosures must be out of public view from the road, public walkways, adjacent to properties, on-site visitor car parking. Where this is not practical or accessible the enclosure should complement the streetscape.

PART 2 – Controls for Commercial Premises, Tourist Accommodation and Public Buildings

BIN STORAGE / WASH AREA

Communal bin storage / wash areas are required where bulk bins are used and / or MGBs are shared.

The following controls must be implemented when designing the bin storage / wash area.

DIMENSIONS

- Structurally adequate construction;
- Adequate size to accommodate required number of bins, to service number of dwellings / units proposed and amount of waste generated from these (according to the Waste Generation Rates outlined by Council);
- Maximum height to underside of roof 2.4m;
- Area to be located 2m from neighbouring residential property (to mitigate odour, allow for screen planting, etc);
- Area to be roofed (with 10° overhang), bunded and graded to prevent ingress of stormwater / rainwater, to the drain to sewer.

DESIGN/MATERIALS

- Design and materials to be compatible with existing building - where the facility is in front of the 6m building setback, specify materials and design on plan;
- Suitably landscaped;
- Provision of visual screen from public view;
- Concrete floor graded and drained to dry basket arrestor – prior to draining to sewer (Liquid Trade Waste Guidelines 2005) where area to be bunded as necessary to prevent ingress of stormwater, it must also allow ease of movement of bins as well as access to the area by persons with a disability (as per AS 1428);

- Bin carting grade must not exceed 1:14;
- Security - anti-vandal tap with hose fitting for washing bins.

LOCATION/ACCESS

The following must be available:

Access for collection trucks to bulk bin storage areas - Large collection vehicles need to be able to access the bin storage area, requiring large turning circles and minimum pavement strengths to ensure no damage to property.

A Section 88b Instrument will be required where collection vehicle is required to traverse private property / roads.

Convenience for users of facility - If communal bin areas are to be used, place bin storage area near delivery bays or rear lane access for ease of use. Communal facilities must be easily accessible from each unit, as well as the usual kerbside collection point.

Odour, noise and visual amenity are to be considered when locating the bin storage area so as not to disturb other units.

Where possible, the location and design of communal facilities / screened enclosures be out of public view from the road, public walkways, adjacent to properties, on-site visitor car parking. Where this is not practical or accessible the enclosure should complement the streetscape.

ACCOMODATION COMPONENTS

Commercial premises built for the purpose of tourist accommodation or comprising a residential component (eg caretaker unit) or mixed-use developments, must make provision for the internal separation of waste into the three waste streams.

PART 3 – General Recommendations

RECOMMENDED BIN CONFIGURATIONS

Abbreviations G= Garbage, R= Recycling, O = Organics

NB - The bin storage area must be designed to accommodate future service options.

Type of development	Bins	Storage area	Bin collected from
<i>Residential premises</i>			
Multi-unit dwelling	<ul style="list-style-type: none"> ▪ 240L shared bins, OR ▪ bulk shared bins (minimum 6 units) 	<ul style="list-style-type: none"> ▪ shared bin storage area ▪ shared bin storage area 	<ul style="list-style-type: none"> ▪ Kerbside ▪ Bin storage area
Townhouse / villa	<ul style="list-style-type: none"> ▪ 240L individual bins (3), OR ▪ 240L shared bins, OR ▪ bulk shared bins (minimum 6 units) 	<ul style="list-style-type: none"> ▪ individual yard ▪ shared bin storage area ▪ shared bin storage area 	<ul style="list-style-type: none"> ▪ Kerbside ▪ Kerbside ▪ Bin storage area
House	<ul style="list-style-type: none"> ▪ 240L individual bins (3) 	<ul style="list-style-type: none"> ▪ individual yard 	<ul style="list-style-type: none"> ▪ Kerbside
<i>Commercial premises</i>			
Business unit	<ul style="list-style-type: none"> ▪ 240L individual bins (3), OR ▪ 240L shared bins, OR ▪ bulk shared bins 	<ul style="list-style-type: none"> ▪ individual yard ▪ shared bin storage area ▪ shared bin storage area 	<ul style="list-style-type: none"> ▪ Kerbside ▪ Kerbside ▪ Bin storage area
Industrial area unit	<ul style="list-style-type: none"> ▪ 240L individual bins (3), OR ▪ 240L shared bins, OR ▪ bulk shared bins 	<ul style="list-style-type: none"> ▪ individual yard / shared bin storage area ▪ shared bin storage area ▪ shared bin storage area 	<ul style="list-style-type: none"> ▪ Kerbside ▪ Kerbside ▪ Bin storage area
Construction / demolition	<ul style="list-style-type: none"> ▪ Bulk / Skip bins, AND/OR ▪ 240L bins 	<ul style="list-style-type: none"> ▪ Nominated on site plan (can be mobile as required for development activities carried out) 	<ul style="list-style-type: none"> ▪ Bin storage area ▪ Kerbside

NB Commercial service operators may have different bin sizes available than those detailed above

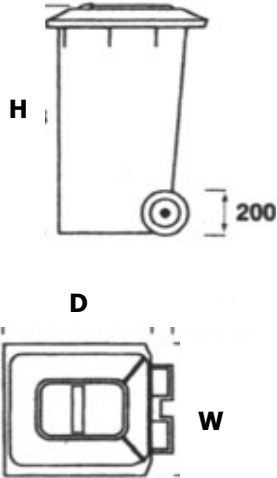
Bin Dimensions

Bin Dimensions	Mobile Garbage Bin Types	
	12L kitchen organics bin	240L wheelie bin
Height	300mm	1080mm
Depth	280mm	735mm
Width	210mm	585mm

Kitchen Organics Bin

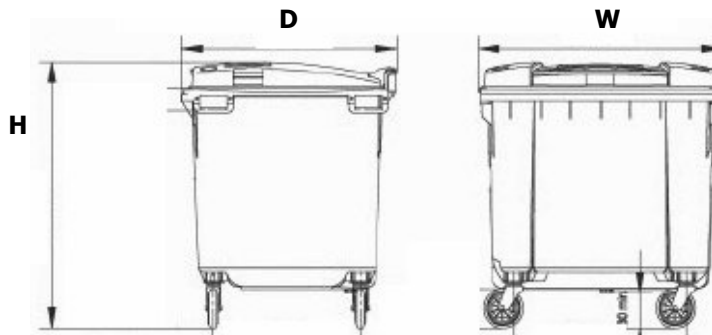


Wheelie Bin



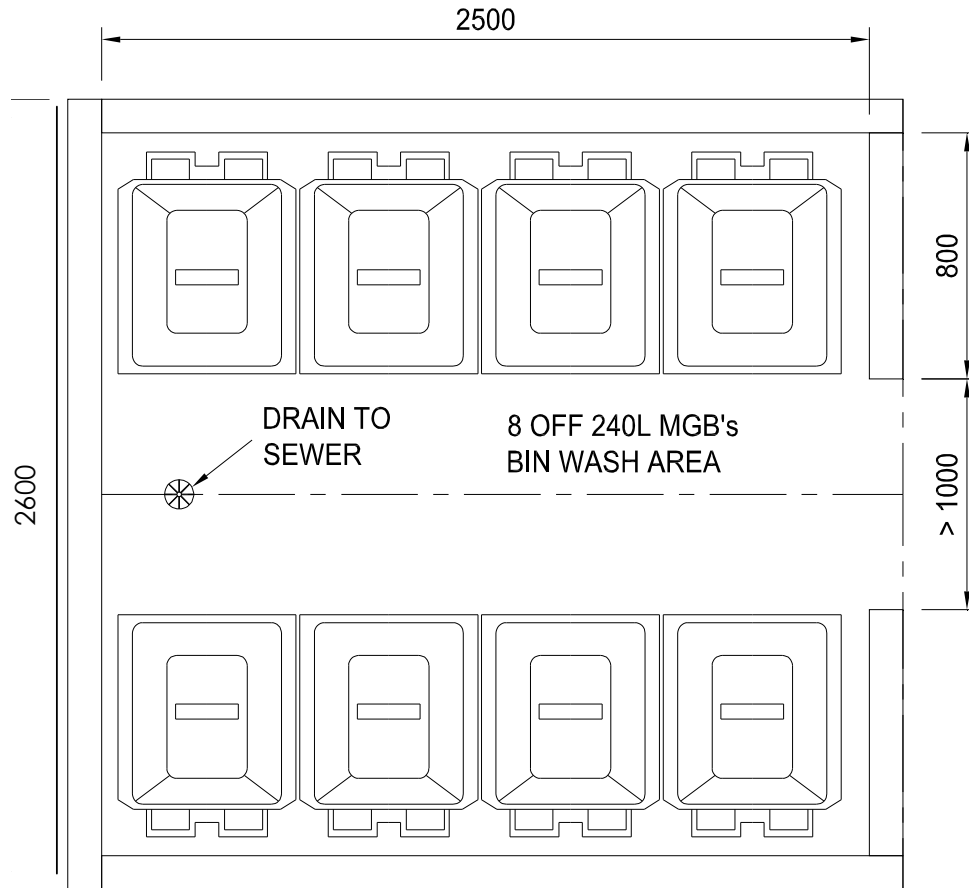
Bin Dimensions	Bulk Bin Types			
	660L	1100L	1.5m ³	3m ³
Height	1300mm	1470mm	900mm	1200mm
Depth	780mm	1120mm	900mm	1375mm
Width	1380mm	1380mm	1800mm	1800mm

BulkBin



RECOMMENDED DESIGN GUIDELINES FOR BIN WASH / STORAGE AREAS

Figure A – EXAMPLE ONLY MGB Storage Area (8 MGBs)



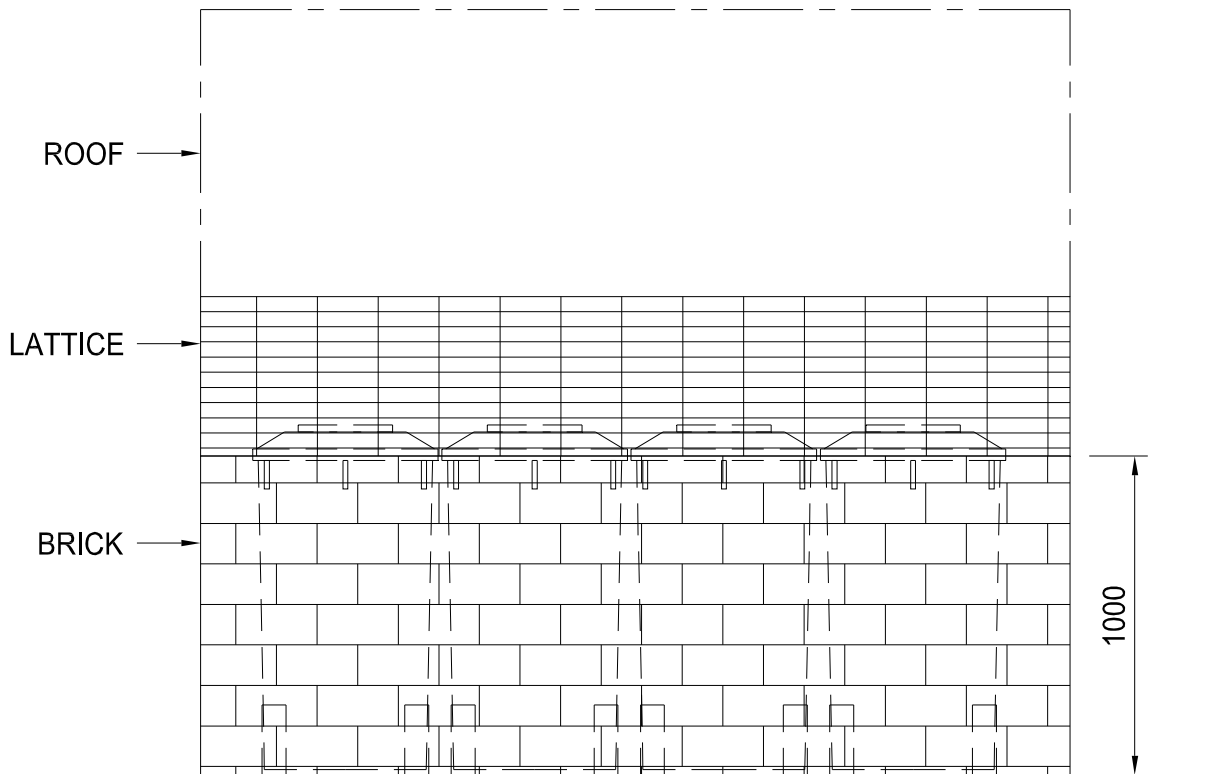
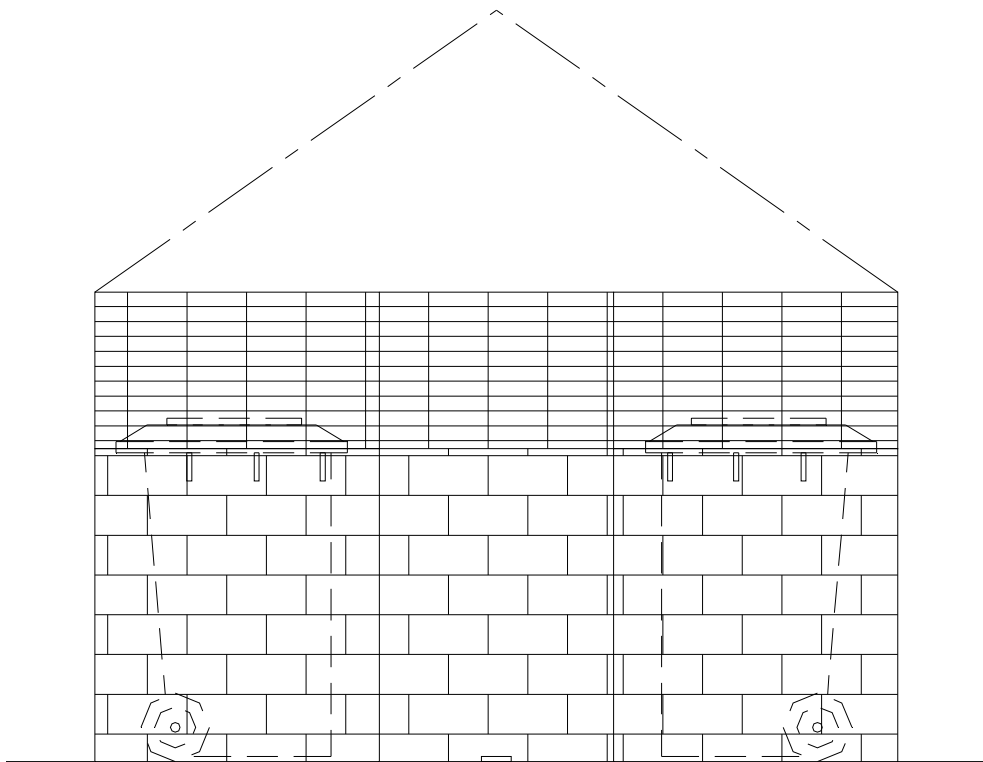
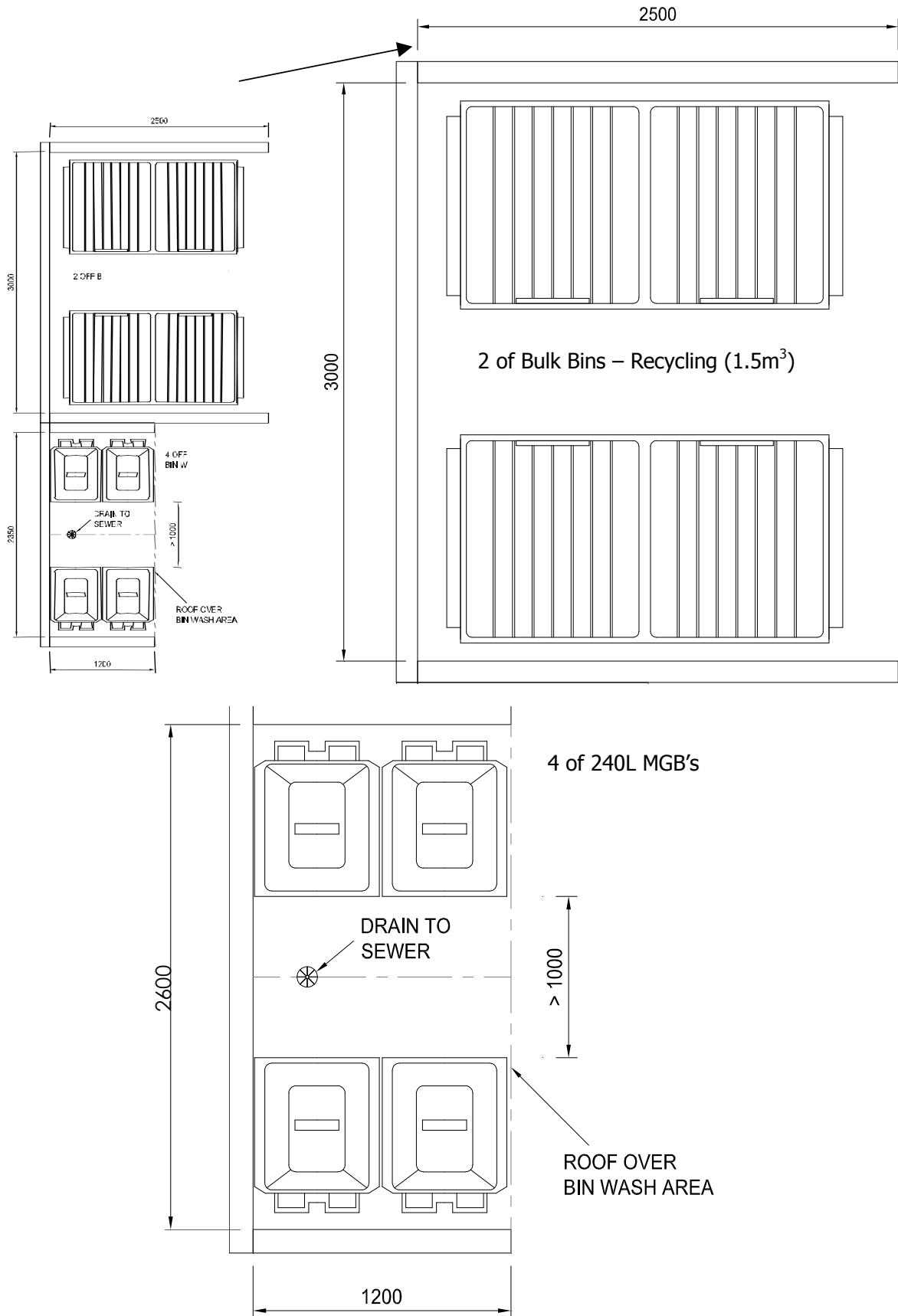


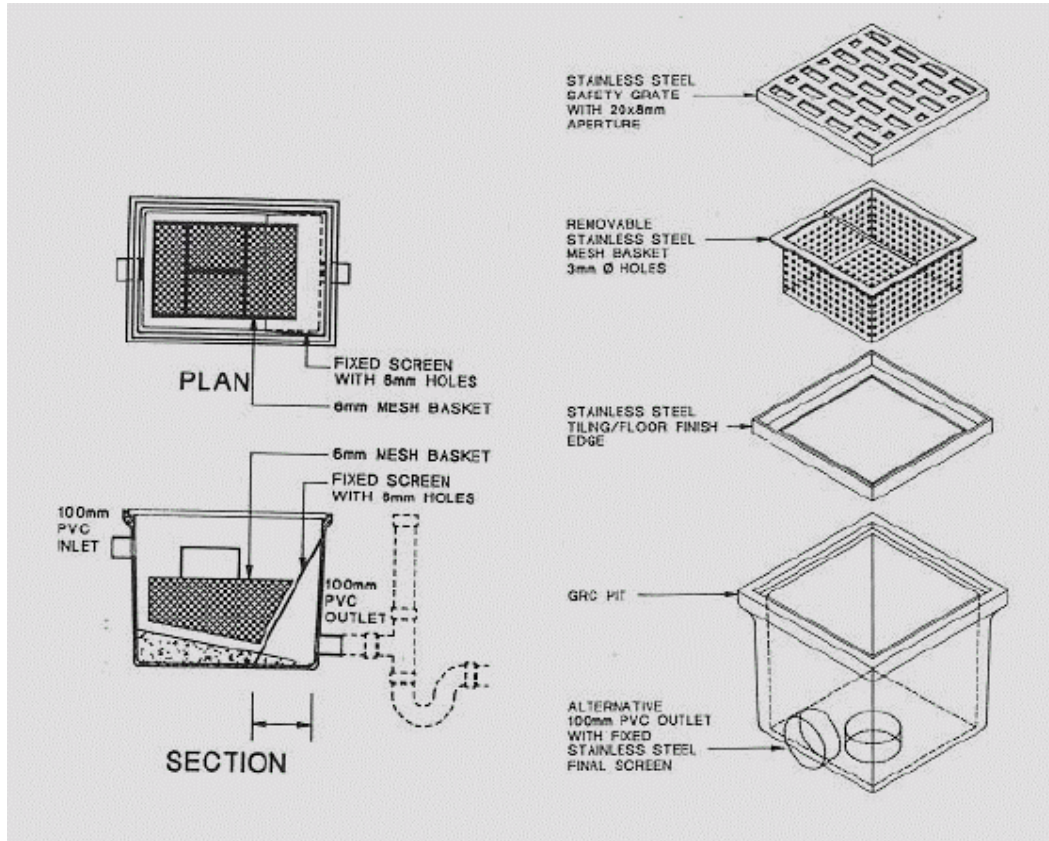
Figure B – EXAMPLE ONLY Bulk Bin Storage Areas (2 x 1.5 m³ and 4 x MGBs)



BIN STORAGE / WASH AREA – REQUIREMENTS FOR DRAIN TO SEWER

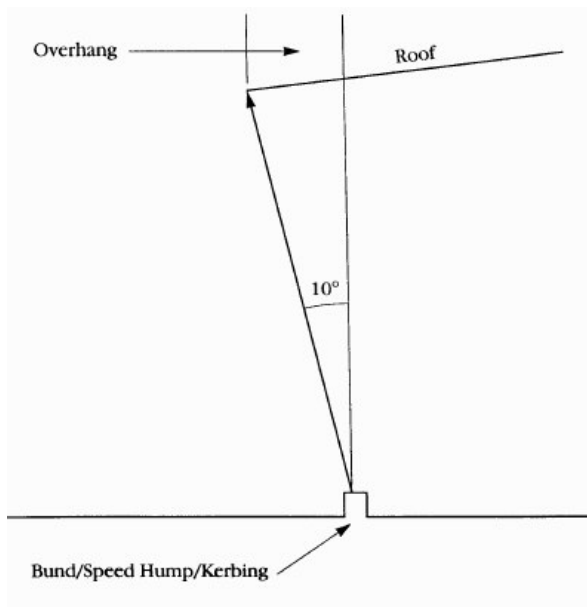
Dry Basket Arrestor

The waste storage area must include on the drain a dry basket arrestor with fixed screens.



Source DEUS Liquid Trade Waste Management Guidelines 2005, Appendix F page 280

Roofing of Trade Waste Areas



To ensure that no surface stormwater can flow into the bin storage / wash area, a bund / speed hump at least 50mm high around the area is necessary.

The overall surface water flow across the site has to be considered and the height of the bund / speed hump may have to be increased to prevent stormwater flow into the bin storage / wash area.

For a structure where one or more sides is open to the weather, 10 degrees from the vertical of overhang of the roofing is the minimum acceptable cover, as shown in Figure x.

Source DEUS Liquid Trade Waste Management Guidelines 2005, Appendix F page 300

Bin Storage Areas - Ongoing Management

- Area must not cause nuisance to residents or neighbouring properties.
- Dry basket arrestor to be cleaned and maintained regularly to prevent nuisance and health risks.
- Clear signage depicting correct use of bins within the storage / wash area, including name and contact details for Complex Management OR person responsible for bin transfer / storage area maintenance.
- Hose with trigger nozzle or high pressure cleaner used to wash bins (if high pressure cleaner is used consider noise impacts on residents and neighbours when carrying out cleaning).
- Residential developments - Ongoing management of a shared bin area is required to ensure Schedule 1 - Model By-laws for residential schemes under the Strata Schemes Management Regulation 2005, and this DCP.
- In larger developments a caretaker may be responsible for transferring waste for collection. The responsibility for waste management on a property ultimately rests with the owner, Body Corporate or managing agent (as per Strata Schemes Management Regulations).
- Appropriate signage for use of the waste facilities on the property must be provided and is the responsibility of the Body Corporate, owner or managing agent (See Councils Website to download signs).

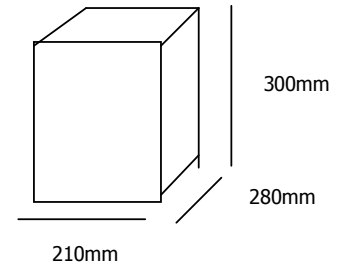
Internal Bin Storage - Recommended

Provision must be made for the internal separation of waste into the three waste streams, within each residential premise.

Cupboard space should be provided within the kitchen (recommended under the sink) to allow enough space for the storage of at least three separate waste streams (organics, garbage and recycling).

Kitchen organics bin ('Bio-Bin')

A 12L kitchen bin will be provided to domestic premises for collection of household organics (late 2006).



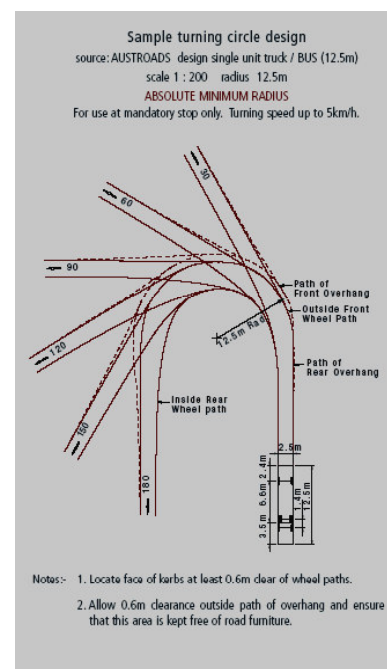
Other waste equipment

Crates / Cardboard Boxes

It is recommended that crates or cardboard boxes be used for small-scale collection of recyclables within dwellings.

COLLECTION VEHICLES

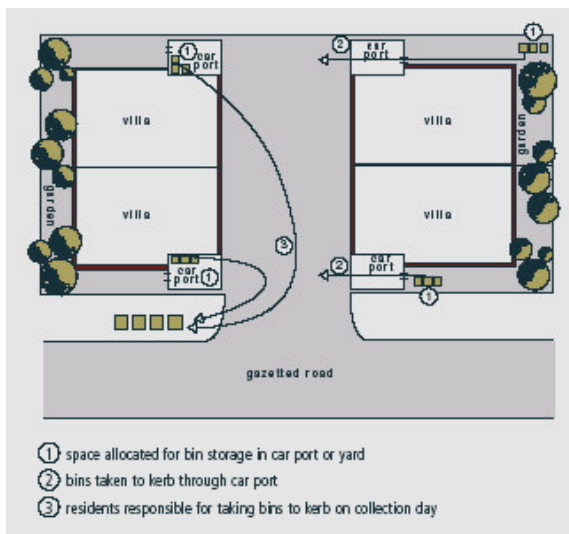
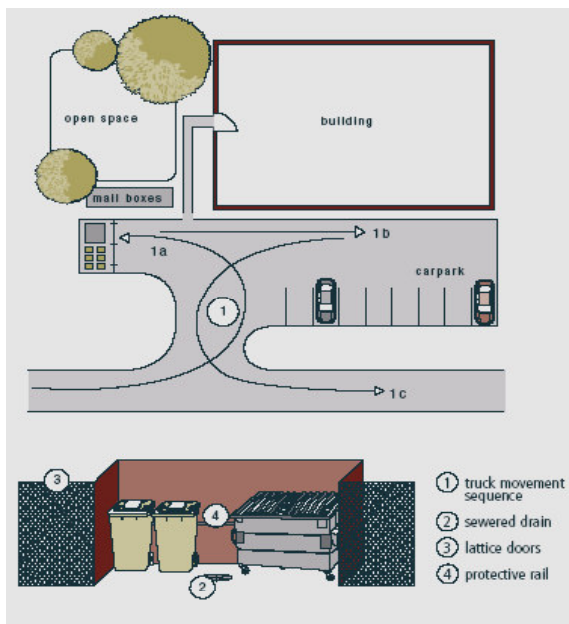
Waste collection vehicles may be side loading, rear or front-end loading. The size of the vehicles varies according to the area or collection service. Consult the service provider regarding the type of vehicle that may be used for collection.



Road Geometry

The design parameters that must be complied with are:

- A maximum desirable gradient of 10% for turning heads
- A maximum longitudinal road gradient of 20%
- A minimum kerb radius of 8.5m at the outside of turn
- An industrial strength pavement designed for a maximum wheel loading of 7 tonnes per axle in order to accommodate collection trucks.



COLLECTION VEHICLES ACCESS

Vehicle Access / Turning Circles

(Source: Better Practice Guide for Waste Management in Multi-Unit Dwellings Resource NSW)

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 vehicle to turn at a cul-de-sac head within a development, the design should incorporate either a bowl; 'T' or 'Y' shaped arrangement. The design aspects to consider include:

- Placement of MGBs at the kerbside for collection.
- Parked cars on access roads.
- Trucks should only be expected to make a 3-point turn to complete a U-turn.
- Allow for collection vehicle overhang and possible interference with bins and road furniture.
- Roads to be negotiated by collection vehicle are to be a minimum radius of 11.25m and a minimum width of 4m.
- If bulk bins are to be serviced from within the building, a minimum ceiling height of 6m is required.

Waste Information Signs

The following and other waste information signs are available on Councils website www.coffsharbour.nsw.gov.au and can also be downloaded from the following web page (Department of Environment and Conservation)

www.resource.nsw.gov.au/signs/main.htm#cd



Further Recommendations

The trigger nozzle / high-pressure hose is recommended for water conservation. Other options that can be discussed with Council Staff include, integrating the disposal of collected rainwater with BASIX requirements for rainwater tanks and using this supply for washing bins.

If a small pump is required, consider noise issues, secure housing, incorporating a utility storage area for hose/attachments/broom/cleaners.

Please Contact Council for further information.

**Coffs Harbour City Council
Cnr Coff and Castle Streets
(Locked Bag 155)
COFFS HARBOUR NSW 2450**

Telephone: (02) 6648 4000

Website: www.coffsharbour.nsw.gov.au

Waste Management Plan for Multi-Unit Dwellings

Please complete and submit this Plan in accordance with controls as outlined in the DCP for Waste Management **AND** include the design and location of bin storage / wash areas on plans submitted with your DA.

Description of Development					
Type of development (please tick as appropriate)	<i>Residential</i> <input type="checkbox"/>	House <input type="checkbox"/>			
		Multi-unit <input type="checkbox"/>	No. of units	Bedrooms per unit:	
		Villa / townhouse <input type="checkbox"/>	No. of dwellings	Bedrooms per unit:	
	<i>Commercial</i> <input type="checkbox"/> (including public building / tourist accommodation)	Detail			
	<i>Construction / demolition</i> <input type="checkbox"/>				
Option selected			Tick	Yes	No
		Option A. Individual MGBs (3 x each premise)			
		Option B. Shared MGBs			
		Option C. Shared Bulk bins			
		Option D. Individual Bulk Bins (commercial only)			

Please complete the table for each element of the waste management system design. Place a tick in the Yes OR No column to indicate where you feel you stand on meeting the guideline requirements.

Storage – space and location (Option A only)				
Location of bin storage / wash area is shown in plans and satisfies the following requirements:		Tick	Yes	No
	Requirements			
	Bins are not visible from the street.			
	Area available at each dwelling for storage of bins = 1.8 x 0.8m			

Storage – space and location (Options B and C only)				
Service requirements (bin type and access) have been discussed with the collection service provider.	Name of Contact:			
		Tick	Yes	No
Total number and size of bins and frequency of collection (<i>See Recommended Bin Options in Waste DCP</i>).	Recycling - eg. 1.5m ³ weekly			
	Organics – eg. 2 x 240L weekly			
	Garbage – eg. 1.5m ³ weekly			

Space			
	Tick	Yes	No
Appropriate bin storage areas designed and cross-section with detail provided in plans satisfying the following requirements <i>(See Bin Storage Areas in Waste DCP):</i>	Requirements		
	Bin storage and wash area -		
	Roofed to prevent ingress of stormwater into sewer		
	Concrete floor graded and drained to sewer		
	Drain to dry basket arrestor (as per Liquid Trade Waste Guidelines 2005)		
	Anti-vandal tap with hose fitting for washing bins		
	Made with materials to match main building		
	Concrete graded floor with speed hump type ramp between area and outside path / driveway – no steps		
Disabled access requirements fulfilled			

Location			
	Tick	Yes	No
Location of bin storage area is shown in plans and satisfies the following requirements:	Requirements		
	Bins are conveniently located for access by all users. Eg. near car park.		
	Bin storage area located within 6m of property boundary (unless access conditions satisfied)*.		
	Bins are not visible from the street.		
Noise and security have been considered in locating the bin storage area in relation to neighbouring properties.			

Internal Storage (residential and commercial only)			
	Tick	Yes	No
Waste cupboard space provided in each unit and shown on plans (See Internal Storage Space in Waste DCP).			
Option C - If > 3 storeys or > 18 units waste storage facilities may be provided on each floor or an internal collection service may be operated at the expense of the owners. <u>Describe in detail and show on plans.</u>			

Access – for Caretaker/ Residents			
	Tick	Yes	No
Distance – MGBs do not need to be wheeled more than 75m (50m maximum for aged persons or persons with a disability.)			
Slope – bin-carting grade is at a maximum of 1:14 – disabled access requirements have been met (where they differ from this requirement).			
MGBs do not have to be wheeled over steps to get them from where they are stored, to the kerbside.			

Access – for Waste Collectors				
		Tick	Yes	No
<p><u>MGBs</u> –</p> <p>Sufficient space is available for collection at kerbside (i.e. space provided = number of bins to be placed at kerb for collection x 0.9m).</p> <p><u>No encroachment outside property boundary is permitted</u></p>	<p>Maximum Number of bins to be collected on any day =</p> <p>Space at Kerb = metres</p>			
<p><u>MGBs</u> –</p> <p>The location will not pose a traffic hazard? (i.e. wheeled bins are not placed near intersections, roundabouts, slow points, and along busy arterial roads.)</p> <p>On one-way streets bins are placed on the side of the road in the direction of traffic.</p>				
<p><u>Access roads</u> –</p> <p>If access is via a private road the collection service provider has been consulted regarding access conditions (NB. An 88B instrument may apply – see attached example).</p>	<p>Contact:</p>			
88B Instrument applies				
<p><u>Option C Bulk Bins</u> –</p> <p>Driveway access is suitable for the collection vehicle in terms of its strength and geometric design as per technical specifications</p> <p><i>(See Access in Waste DCP)</i></p>				
<p><u>Option C Bulk Bins</u> –</p> <p>Bulk bins must be able to be moved across a flat surface no more than 3m for collection and the point of collection must be a flat, even surface.</p>				
<p><u>Option C Bulk Bins</u> –</p> <p>The need for reversing of collection vehicles is eliminated or limited.</p>				

Option D – complete all items that apply below			
	Tick	Yes	No
Identify which waste streams will be collected			
Name of Licenced Asbestos removalist Licence No.			
Identify which waste streams will be collected (tick yes or no in column on right)	Name of Facility / company collecting for disposal (if yes marked in column on right)		
Recyclables (glass, plastics 1-5, paper / cardboard, aluminium cans, steel cans)			
Organics / greenwaste			
Concrete / surplus pour			
Cement / bricks / masonry			
Contaminated fill			
Clean fill			
Paper / cardboard (if not with mixed recyclables)			
Wood / timber			
Metals - aluminium, zinc, copper, steel, lead (pipes, roofing, guttering strapping)			
Plastics (pipes and gutters)			
Insulation materials			
Plasterboard (clean)			
Tiles / roof tiles			
Windows / doors			
Glass unbroken			
Fixtures / fittings			
Carpet / underlay			
Vinyl floor covering / lino			
Sundry waste (paint tins, glue cartridges, plastic drums)			
Hazardous waste (more than 10 fire alarms, chemicals)			
Asbestos			
General waste			
Plan attached with location of temporary on-site waste storage			

Submit this Waste Management Plan with your Development Application.

Example 88B instrument

NOTES ON EASEMENTS

Developments proposing internal collection points, waste storage and recycling facilities and garbage and recycling rooms should provide convenient access and a truck turning area to enable the collection of the receptacles from within the property.

EASEMENT REQUIREMENTS:

An easement entitling the Council, its servants and agents and persons authorised by it, to enter upon the subject land and to operate thereon vehicles and other equipment for the purpose of garbage and recycling collection, shall be granted to the Council by the owner of the subject land at the cost of the applicant, prior to occupation of the development and prior to registration of any plan of subdivision or strata subdivision of the subject land.

Such easement shall be in a form acceptable to the Council and shall include covenants to the effect that in the absence of negligence on the part of the Council, its servants, agents and those authorised by the Council to enter the subject property, they will not be liable for any damage caused to the subject land or any part thereof, or to any property located therein or thereon by reason of the operation thereon of any vehicle or other equipment used in connection with the collection of the garbage and recycling and to the effect that the owner for the time being of the subject land shall indemnify the Council, its servants, agents and persons authorised by it, to collect garbage and recycling against liability in respect of such claims made by any person whomsoever.

Documentation for the provision of the easement is to be submitted with the Subdivision or Strata Application.

NOTE: An 88(b) instrument is an acceptable form of easement subject to the area effected by the easement not requiring renewal upon sale or transfer at any time.