Chapter C Sustainability

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Application

This Guideline applies to the Inner West Local Government Area for the extent of land show on Map 1 in Chapter A of this DCP.

Using this Guideline

In using this Guideline reference should also be made to **Section 1—Preliminary** at the front of this DCP.

There are national and state laws which have development controls that affect building design and have mandatory requirements for meeting ESD targets. The legislation is found in BASIX, and the Building Code of Australia.

Residential Development

Building designs for new houses, alterations to houses, dual occupancies and residential flat buildings are required to comply with the BASIX State Environmental Planning Policy (SEPP).

Council is unable to approve a development application for residential development that does not achieve the minimum BASIX ratings. BASIX sets out requirements on how to achieve water conservation and energy efficiency targets for residential development. Detailed information is provided on the Department of Planning 's BASIX website at www.basix.nsw.gov.au. This website includes an explanation of building design and how this affects environmental targets, sample building design checklists, and a sample of the BASIX checklist form.

A BASIX certificate is required to be submitted to Council with each development application and this certificate certifies that the dwelling proposal will meet the required environmental targets.

A second part of the approval process is to obtain a Construction Certificate, which is an approval to build. Documentation for a Construction Certificate must comply with the Building Code of Australia (BCA). This has technical building requirements for meeting Environmentally Sustainable Design criteria. Many of the BCA design criteria relating to energy conservation will have been met by complying with BASIX. The difference being that the Construction Certificate architectural documentation will supply more technical detail, (e.g. referencing Australian Standards, and providing more drawing information related to building materials and structural components).

BASIX requires that the architectural and landscape documentation on the Construction Certificate must also reflect the BASIX commitments shown on the Development Consent drawings.

Non-residential Development

The Building Code of Australia (BCA) requires certain non-residential building types to demonstrate they will meet minimum criteria for reducing energy consumption. This compliance must be shown at Construction Certificate stage. It affects what are defined in the BCA as Class 5 to 9 building types (e.g. office buildings, restaurants, shops and schools).

Alterations and additions to existing buildings, when the extent of work exceeds 50 percent of the existing building area, are also affected.

In order to comply with the BCA energy requirements at the Construction Certificate stage, the design of new buildings will have to be resolved "upfront" at development application stage. This is fundamental for arriving at an acceptable design, as environmental design cannot be an afterthought at the Construction Certificate stage.

Inner West Council encourages applicants to go beyond the requirements of BASIX, and to incorporate as many sustainable design principles as possible

The Guideline is performance based. In this role, it is intended to provide both a level of certainty for applicants, Council and the community while also enabling consideration of high quality, innovative design. This is appropriate as given the complexity of The LGA urban environment, it is not possible or desirable in all instances for council to specify quantitative, pre-determined criteria that development must achieve. Rather, in such setting an appropriate design emerges from a well-considered site analysis that explores and responds to the characteristic of the site, adjoining properties, the streetscape and neighbourhood, as well as putting in place adequate measures to mitigate any potential negative impacts.

The Guideline comprises the Purpose, Performance Criteria and Design Solutions. Alternative Solutions to the Design Solution may also be proposed by an applicant.

The Purpose and Performance Criteria identify the performance outcomes that must be achieved for council to consider granting development consent to a development application. Council will not approve a development application that cannot meet all parts of the Purpose or all Performance Criteria, where relevant.

Design Solutions provide a guide for achieving the Performance Criteria, and by association, the Purpose.

Through the development application process, an



applicant may propose an Alternative Solution to the Design Solution. Council will consider the Alternative Solution against the Performance Criteria and Purpose. If sufficient justification exists, largely informed by a site analysis and argued against sound urban planning and design grounds, council may consider accepting an Alternative Solution to the Design Solution.

Purpose

- To outline suitable options for going beyond the requirements of BASIX
- To improve the energy efficiency of residential and non-residential buildings within the LGA
- To ensure design for good environmental performance and amenity is considered in conjunction with other design and amenity considerations in the LGA
- To ensure buildings are well designed to achieve the efficient use of energy for internal heating and cooling
- To encourage the implementation of renewable energy production technologies in buildings

Performance Criteria and Design Solutions

Performance Criteria		Design Solution		
Building Sustainability				
PC1.	Development reduces its impact on the natural environment through: • reducing potable water use • increasing the capture and re-use of rainwater • recycling greywater • reduces energy consumption • reducing use of mechanical systems for heating, cooling and lighting	DS1.1	Residential development incorporates a combination of: passive solar design a solar hot water system photovoltaic cells gas hot water system rain water tanks eaves and other overhangs to windows on west facing elevations locating and orienting main living areas to the north light coloured roofing material insulation use of deciduous trees planted to shade west facing elevation from direct afternoon summer sunlight, subject to streetscape considerations	
		DS1.2	Non-residential development incorporates a combination of: • passive solar design • a solar hot water system • photovoltaic cells • capture and storage of rainwater on roods, and connection to systems that enable its reuse within the building • green roofs and walls • narrow building sections to enable solar access and potential for natural ventilation throughout the building floorplate • large, transparent windows, subject to privacy considerations • screens, battens, eaves and other sunshading devices to windows on west facing elevations • light coloured roofing material • insulation • use of deciduous trees planted to shade west facing elevation from direct afternoon summer sunlight, subject to streetscape considerations	
PC1.3	Development ensures that the use of devices that reduce impact on the natural environment do not have significant adverse visual amenity impacts on the streetscape or neighbourhood, and are	DS1.3	No solution - on merits.	



Performance Criteria Design Solution

consistent with the values or a heritage item or heritage conservation area



Diagram 1 - ESD design principles for a house - Source: BASIX website Feb. 2014

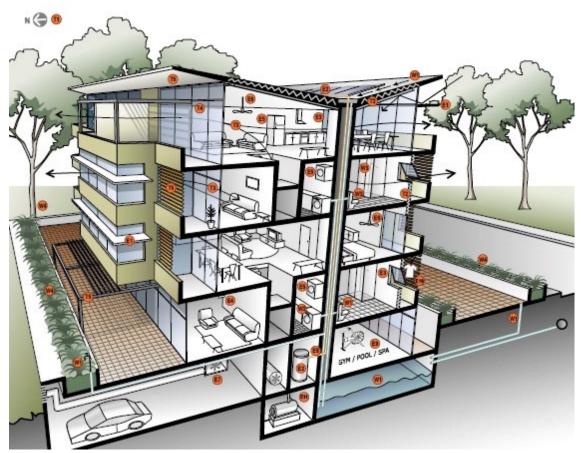


Diagram 2 - ESD design principles for a flat building Source: BASIX website Feb. 2014

Energy

- E1 Light shelves for improved natural lighting
- E2 Solar hot water system
- E3 Natural light in kitchen and bathroom areas
- E4 Compact fluorescent lights with timers in common area lighting
- E5 Energy efficient appliances such as refrigerators
- E6 Ceiling fans for cooling
- E7 Carbon monoxide monitoring to regulate carpark ventilation
- E8 Insulated hot water pipe
- E9 Energy efficient pool and spa heating
- E10 Clothes line on louvred balcony to reduce need for electric drying
- E11 On-site electricity and heat generation (cogeneration system)

Water

- W1 Storm/rainwater collection for toilet and garden use
- W2 A4 rates appliances such as washing machines and dishwashers
- W3 A3 rates water fixtures

Thermal Comfort

- T1 Passive solar orientation
- T2 Insulation in ceiling and walls
- T3 Cross ventilation allowing air to flow through units, reducing the need for air conditioning.
- T4 Performance glass
- T5 Roof overhang, window eaves, pergolas and louvres to reduce sun's heat.



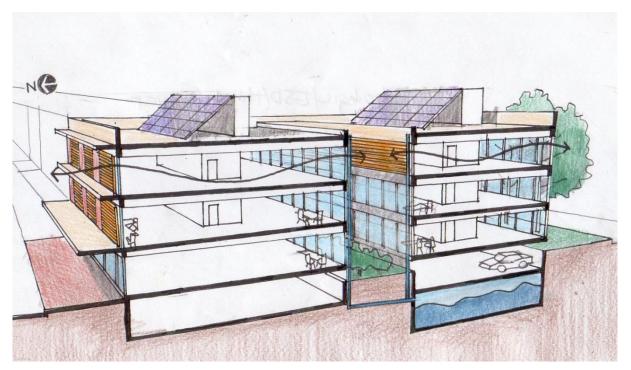


Diagram 3 - ESD basic design principles for a commercial building

Building Configuration

Floor to ceiling glass to provide natural light to workspaces External manually operated louvers for sunshading Cross ventilation facilitated by a slim building section Photovoltaics on roof Roof used to collect water, and basement water storage tank

BCA Considerations

Building fabric External glazing Building sealing Air movement Air conditioning and ventilation systems Artificial lighting and power Hot water supply Roof and ceiling construction Floor construction Ductwork insulation and sealing Insulating of heating and cooling pipes, vessels and tanks

Lighting and power control devices





Application

This Guideline applies to the following development:

 All development within the extent of land show on Map 1 in Chapter A of this DCP

Using this Guideline

In using this Guideline reference should also be made to **Section 1** - **Preliminary** at the front of this DCP.

The Guideline is performance based. In this role, it is intended to provide both a level of certainty for applicants, Council and the community while also enabling consideration of high quality, innovative design. This is appropriate as given the complexity of the LGA urban environment, it is not possible or desirable in all instances for council to specify quantitative, pre-determined criteria that development must achieve. Rather, in such setting an appropriate design emerges from a well-considered site analysis that explores and responds to the characteristic of the site, adjoining properties, the streetscape and neighbourhood, as well as putting in place adequate measures to mitigate any potential negative impacts.

The Guideline comprises the Purpose, Performance Criteria and Design Solutions. Alternative Solutions to the Design Solution may also be proposed by an applicant.

The Purpose and Performance Criteria identify the performance outcomes that must be achieved for council to consider granting development consent to a development application. Council will not approve a development application that cannot meet all parts of the Purpose or all Performance Criteria, where relevant.

Design Solutions provide a guide for achieving the Performance Criteria, and by association, the Purpose.

Through the development application process, an applicant may propose an Alternative Solution to the Design Solution. Council will consider the Alternative Solution against the Performance Criteria and Purpose. If sufficient justification exists, largely informed by a site analysis and argued against sound urban planning and design grounds, council may consider accepting an Alternative Solution to the Design Solution.

Purpose

- To protect and enhance natural water systems (e.g. creeks and rivers)
- To identify measures to improve the stormwater harvesting and irrigation practices within public parks
- To minimise wastewater leaving the catchment
- To use rainwater, treated urban stormwater or treated wastewater for non-potable uses where appropriate
- To implement a sustainable stormwater management approach in the public domain
- Integrate water efficient fixtures within public parks and utilities
- To integrate water systems into the public domain in an aesthetically pleasing way

Performance Criteria and Design Solutions

Performance Criteria		Design Solution		
Water S	Sensitive Urban Design			
PC1.	improves the quality of groundwater and water entering waterways sustainably uses available water resources	DS1.1 Where practical, new streets and parks incorporate water sensitive urban design techniques that address: • water conservation • stormwater treatment and/ or reuse • waste water recycling. DS1.2 Apply water urban sensitive design principles, such as rainwater gardens and porous pavements in the public domain works. DS1.3 Consideration given to stormwater outlets at Hawthorne Parade and Dobroyd Canal and use of WSUD for stormwater filtering including but not limited to rainwater gardens and gross pollutant traps. DS1.4 Where practical, new street trees are to have their ground cover act as a stormwater filter device. Note: stormwater filter trees filter out pollutants from road runoff before discharging the treated water back to		



Management Standards

Application

These waste and recycling standards set out Council's expectations for design quality and management systems of new developments on land identified in Section 1 and shown on Map 1. Basic and essential services provided by Council such as waste management have a part to play in the sustainability of our community by ensuring that residents have a healthy environment, and local resources are conserved for the future by strengthening recycling and waste minimisation.

By considering waste management needs early in the design process these can be delivered more efficiently and cost-effectively. These standards incorporate the waste management design quality requirements of the **SEPP 65 Apartment Design Guide**.

Inner West Council Planning assessment staff will rely on these standards as part of the assessment for any development applications.

Inner West Council advocates **Ecologically Sustainable Development (ESD)** and these standards have been prepared consistent with ESD principles.
ESD means:

"Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased" (as defined by Australia's National Strategy for Ecologically Sustainable Development)

Who are these standards for?

The Waste and Recycling Design and Management Standards have been prepared to inform and guide Developers, Designers, Certifying Agents, Council Planning Assessment and Waste Services staff and contractors, Construction and Demolition companies, Bodies Corporate, Building Managers, and all DA applicants for new developments and material change of use requiring consent.

These standards apply to Solid Wastes only. For management of liquid waste refer to Sydney Water. Liquid waste" refers to those non-hazardous liquid wastes generated by commercial premises that are supposed to be disposed to a sewer or collected for treatment and disposal by a liquid waste contractor (including grease trap waste).

Using this Guideline

- New development applicants should check any requirements to submit Waste
 Management Plans at Section 1.
- Applicants should refer to the general design provisions for all developments (Section 2).
 This section sets out Inner West Council's broad expectations for access, storage and collection design elements for waste management.
- Applicants should then refer to specific provisions for particular development types (Sections 3-6).
- Information guides and illustrations of quality design approaches are provided in relevant sections for each development type. Further information on waste and recycling services, equipment, generation rates are provided in the Technical Guides.
- For developments with significant levels of construction and demolition waste, Council's requirements are set out in Section 7.
- Waste Management Plans (WMP) must be completed as relevant for Demolition, Construction and a Waste and Recycling Servicing Plan for ongoing waste management in a development (Guide 5). These plans must accompany a Development Application.
- Waste and Recycling Servicing Plans must include drawings and plans of the proposed waste management system. Technical Guide sections are provided in these standards to help prepare the Waste and Recycling Servicing Plan.
- The Waste Management Checklist must be completed and accompany a Development Application. This checklist will assist Council to streamline DA assessment.

Purpose

- Minimising the generation of unnecessary waste
- Reducing resources in waste being lost to landfill.
- Designing for source separation of waste at the point of generation at all stages of development.
- Ensuring all residents and businesses have equivalent access to recycling and reuse systems compared to garbage disposal.

- Minimising heavy vehicle movements by designing for adequate storage of waste and recycling.
- Reducing the impact of waste management on residential amenity, including minimising the use of Council kerbside for collection of waste and recycling.
- Streamlining the development application process by requiring applicants to show site layouts and floorplans that demonstrate that waste collection can be accommodated
- Improving long term development outcomes and reducing design related issues via consistent waste management standards.

Section 1: Waste Management Plans

All significant development applications for new and "change of use" developments must include the following Waste Management Plans where applicable:

- Waste and Recycling Servicing Plan
- Demolition Waste Plan
- Construction Waste Plan
- Waste Management Plan Checklist.

Copies of the forms are at Guide 5: Waste Management Plans.

These Plans are to be approved by Council prior to any works commencing on the site. The Plans have been designed to help streamline applications.

Heritage conservation considerations may alter some requirements of these standards for the refurbishment of an existing building.

Demonstration of compliance with the DCP requirements for Waste and Recycling at Development Application stage is to include production of site layout and floor plans drawn to scale.

1. Waste and Recycling Servicing Plan (WaRS Plan)

A WaRS Plan is to be provided with any new development application (with the exception of dwellings such as *detached houses, granny flats, townhouses, and dual occupancies* which comply with relevant waste management requirements as set out in Section 2 and Section 5).

A WaRS Plan is also to be submitted where any development application would alter the floor space of the building by 50% or more, or alter the types of waste to be managed (such as a change from commercial to residential).

The WaRS Plan will include a drawing with dimensions marked showing the following design elements for managing waste and recycling generated at the development, and how these are to be achieved and integrated:

- Circulation of waste and recycling throughout the development;
- Source separation and storage of waste and recycling; and
- Collection point(s) for waste and recycling.

Details of requirements for specific development types are set out in relevant sections of these Standards.

ASHFIELD COUNCIL WASTE AND RECVCLING SERVICING PLAN 154 Address Characteristic Council Servicing Servicing Servicing Characteristic Council Servicing Servicing Servicing Characteristic Council Servicing Servicing The waste and regrifing management means the design objectives for this type of development? The waste and regrifing management means the design objectives for this type of development? The waste and regrifing management means the design objectives for this type of development? The waste and regrifing management means the design objectives for this type of development? Layout of Waste and Recycling Servicing Development of the service of their objective Servicing Servicing

2. Demolition Waste Plan

Where the development requires any demolition to proceed likely to generate more than 10m³ of waste, a Demolition Waste Plan in the form of a declaration is to be provided including details of the following:

- Whether the demolition will generate asbestos waste and its management;
- Anticipated quantities of demolition waste;
- How waste will be managed to maximise re-use and recycling of materials; and
- Licenced facility destination(s) for remaining wastes.

The NSW Government Waste Avoidance and Resource Recovery Strategy 2013-2021 sets an 80% recycling target for Construction and Demolition Waste. The Demolition Waste Plan must indicate a level of re-use and recycling consistent with that target.



3. Construction Waste Plan

To ensure construction waste is optimally handled for a development, a Construction Waste Plan in the form of a declaration is to be provided where more than 10m³ of waste is likely to be generated, including details of the following:

- Any excavation material generated;
- Anticipated quantities of construction waste;
- How waste will be managed to maximise re-use and recycling of materials; and
- Nominated "site cleaners" for mixed construction waste or licenced facility destination(s) for remaining wastes.

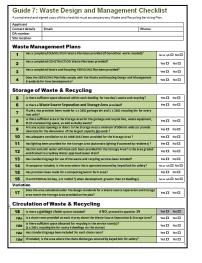
The NSW Government Waste Avoidance and Resource Recovery Strategy 2013-2021 sets an 80% recycling target for Construction and Demolition Waste. The Construction Waste Plan must indicate a level of re-use and recycling consistent with that target.

	ASHFIELD	COUNCIL				
Con	STRUCTIO	N WASTE	PLAN			
Site Address			DA Numbe	ir		
willyou use Site Cleaners?	☐ Yes, for some ☐ Yes, for all wo ☐ No		Estimated total volume or weight			
Please supply details of site cleaners used	ABN Number Name Suburb		tobile #		=	
All Excavation Material				Re-use on-site Re-use off site Landfil Disposal		
Address if re-used off site			consists form W	assa SIGN	declaration	
If Site Cleaners not used for all waste		More than 10 m ³	How will you manage this waste?			
Type of Material	Less than 10 m ³		Re-use on-site	Recycle	Landfill	
Bricks	-	- 0	- 0			
Concrete	0		- 0			
Tiles	0			0		
Timber (clean)	0			0		
Timber (treated)	0	0	0	0	0	
Plasterboard	-		- 0		- 0	
Green Waste	0		-	0	0	
Other	0	0	0	0		
Principal Off-Site Recycler Principal Licensed Landfill Site						
Declaration Name of applicant (Please Print)						
Signature of applicant						

4. Waste Management Plan Checklist

To streamline applications involving design requirements for waste and recycling, the checklist is to be provided to ensure that levels of compliance or variation to the Waste and Recycling Design & Management Standards are set out consistently.

Applications that comply fully with the Standards should require minimal review of waste and recycling design inclusions.



Section 2: Waste Management Design General Provisions

(For all developments submitting a WaRS Plan)

Modern waste management aims to sort and collect waste so as to maintain the highest net resource value of disposed materials. This aim is best provided by provision of sufficient source separation of waste at the point of generation, and dedicated collection of those separated materials.

Good design for source separation and storage of waste in new developments is fully compatible with servicing for the highest net resource value of waste and recycling.

General Objectives

Provision	Description
Space	Ensure areas are provided for efficient storage and collection of waste and recycling, matched to the type and scale of development.
Access	Ensure both users and service providers can access waste and recycling storage safely and conveniently.
Safety	Include safe practices in the design for storage, handling and collection of waste and recycling.
Amenity	Manage the noise, odour and hygiene issues relating to waste and limit the impacts on local areas, and
	Ensure that waste and recycling storage areas are effectively integrated into a development and visually unobtrusive.
Management	Clarify the roles for provision of waste management in developments and demarcate service provision.
Servicing	Minimise collection vehicle movements by balancing provision of adequate storage capacity and collection frequency, and
	Minimise reliance on public kerbside and impacts on the public domain from waste and recycling collection.

Performance Criteria	Design Solution		
General			
	DS1.1 All residential developments must be designed to accommodate standard Council waste and recycling services and collection vehicles (see <i>Guide 1: Inner West Council Standard Services</i>).		
Circulation and access for waste and recycling			
	DS2.1 All residential unit dwellings included in the development must have an internal waste cupboard or temporary storage area of sufficient size to hold up to two days' worth of waste and recycling.		
	DS2.2 A continuous accessible path of travel is to be provided between any residential dwelling or commercial premises and their nominated Waste Source Separation		



Performance Criteria	Design Solution		
		and Storage Area.	
	DS2.3	Any entrances to and services installed for Waste Source Separation and Storage Areas must be able to be safely negotiated by people with disabilities.	
	DS2.4	The distance from a dwelling to the access point for the Waste Source Separation and Storage Area (or to garbage chute or interim garbage storage) is not to exceed 30 metres (exclusive of vertical travel by elevator).	
	DS2.5	Note : Details of requirements for specific development types are set out in relevant sections of these Standards.	
Waste Source separation and Storage Area (Bin Rooms)			
The waste source separation and storage area (sometimes termed the bin room or bin bay) is the location designed for garbage disposal and recycling activities. Interim storage for bulky waste and for special waste separation from garbage may be included or co-located.	DS3.1	Provided wholly within the site to accommodate bins for waste and recycling. Depending on the development type additional areas may be required for other waste and source separation functions; designed to fully accommodate the number of bins to meet the calculated storage capacity between collection cycles required for the type and scale of development (see Guide 4: Waste and Recycling Capacity Needs) and allow for manoeuvring of bins. More than one Waste Source Separation and Storage Area may be required to adequately service a development; appropriately located and designed for convenient and safe access by all users, with regard to a building's vertical core where appropriate; designed not to be visible from the street, and is to be located behind the building line. If this location cannot be achieved in the development design, adequate fixed screening for the area is to be provided; designed to integrate with the main building structure or site landscaping, be visually unobtrusive, and located away from habitable rooms, windows, doors and private useable open space (on both the subject and adjacent properties); designed to minimise potential impacts upon neighbouring properties in terms of aesthetics, noise and odour; And adequately ventilated.	
	DS3.2	Any service doors and loading docks related to the	
		Waste Source Separation and Storage Area are to be	

Doufou	war and Criteria	Decima	Colution
Perfor	mance Criteria	Design	Solution
			adequately screened from street frontages and designed to minimise overlooking by existing development.
		DS3.3	All waste and recycling bins are to be clearly and correctly labelled to identify which materials are to be placed into each receptacle. Mobile Garbage Bins (MGBs) are to be designed and colour-coded in accordance with Australian Standard 4123- 2008: Mobile Garbage Containers
		DS3.4	Signage detailing Council requirements for source separation and correct disposal of waste are to be prominently displayed Waste Source Separation and Storage Area(s). Standard signs are available from Council.
		DS3.5	Note : Details of requirements for specific development types are set out in relevant sections of these Standards.
Waste	and Recycling Collection Points		
PC4.	A Waste and Recycling Collection Point (Collection Point) is to be designated for any new development and identified on the WaRS Plan. This Collection Point is the location where waste or recyclables bins contents are loaded into a collection vehicle. Depending upon the development type it may be internal if the size of the site is able to accommodate this or external to the site. The Collection Point must be approved by Council	DS4.1	Bin circulation between storage and collection point:
			An accessible path of travel is to be provided between the Waste Source Separation and Storage Area (bin room) and the designated Waste and Recycling Collection Point (truck pickup) to allow circulation of bins to and from collection. This circulation pathway is to be:
			 a minimum 1200 mm wall-to-wall clearance, but ensuring sufficient clearance is provided for the largest waste or recycling bin type used for the development,
			• slip-proof,
			of a hard surface,
			free of obstructions, steps or kerbs And
			at no point have a gradient exceeding 1:12. Use of lifts is permitted.
		DS4.2	Bin circulation between storage and collection point:
			The distance between the Waste Source Separation and Storage Area and the designated Collection Point should be the least distance possible and is not to exceed:
			 30 metres for waste and recycling Mobile Garbage Bins up to 660 Litres capacity
			 10 metres for any waste or recycling containers >660 Litres and <1,500 Litre capacity
			 Bins with 1,500 Litre capacity or greater should be stored at a place where the collection vehicle can directly access and not require manual manoeuvring.



Performance Criteria	Design	Solution
	DS4.3	Collection Point location:
		The Collection Point is to be located
		 where a collection vehicle can stand safely and legally;
		at a level gradient;
		 at a place sufficiently free of obstructions (such as trees, bollards, lamp posts and street furniture, allowing 1 metre clearance);
		 so as to not obstruct or endanger the passage of pedestrians;
		And
		 with sufficient height and side clearances to allow safe mechanical pick up and set down of bins (see Guide 1 Inner West Council Standard Services)

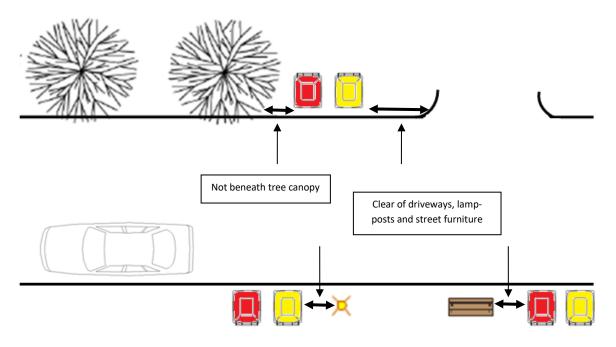


Figure 1: Location of collection point

DS4.4 The Collection Point is to be designated to minimise the potential impacts of waste and recycling collection activity upon the subject and neighbouring properties with regard to noise, odour or obstruction. These impacts are a function of:

- the number of individual mechanical bin lifts required,
- the level of organic material (odour source) or the level of glass and metals within the collected material (for which reason recycling collections can have a high noise impact),

And



Performance Criteria	Design Solution	
	 the duration a vehicle must star collection point (known as "dw complete a cycle of attaching, li and replacing bins. 	vell time") to
	Dwell time for mechanical side-load lifting 12 seconds per bin. Dwell time can be mi	• • •
	 locating the collection point away obstructions, 	ay from
	 allowing unimpeded access to mechanical attaching and lifting 	
	 orderly single-row presentation with no overcrowding, 	of bins by type
	 ensuring the collection vehicle of away from parked vehicles, traffigure parking or standing areas, And	
	 avoiding obstruction of drivewa footpaths. 	ys or
	DS4.5 Allowance must be made for 1 metre of p space for each waste or recycling bin. Pa restrictions may need to be sought or morequest to Council to allow collection vehi the Collection Point.	arking dified by
	DS4.6 A Collection Point is not to be located who completely obstructs a shared driveway,	ere it
	DS4.7 A Collection Point is not to be designated part extends across neighbouring propert frontages without written agreement from property owner(s) for a shared collection	ies' kerbside the respective
	DS4.8 Collection vehicles must be able to safely and from the Collection Point under typica conditions.	
	DS4.9 Note: Details of requirements for specific types are set out in relevant sections of the Standards.	
Management		
	 Building management will be responsible Ensuring safety on-site in relational aspects of ongoing waste management will be responsible 	on to all agement, and
	 Circulation of any recycling bins chute rooms and the Waste So Separation and Storage Area; Ensuring bins are moved to and Waste Source Separation and and the designated collection p 	urce d from the Storage Area
	times, and orderly presentation collection;	of bins for



Performance Criteria	Design Solution	
	•	Washing bins and cleaning of Waste Source Separation and Storage Areas;
	•	Maintenance and wash down of any waste or recycling chutes operated at the site;
	•	Maintenance and management of any waste and recycling equipment provided on site;
	•	Managing communal composting areas (if applicable);
	•	Arranging with Council for repairs to or replacement of any Council-provided collection bins;
	•	Arranging for the prompt removal of any dumped waste on-site or at the designated Waste and Recycling Collection Point;
	•	Displaying and maintaining consistent signage in all communal waste and recycling storage areas detailing Council requirements for source separation and correct disposal of waste and how to use the services. Standard signs are available from Council;
	•	Ensuring all residents are informed of the general waste, recycling, composting, bulky waste and special waste arrangements;
	•	Managing any service agreements or contracts related to waste and recycling collection, waste equipment operation and maintenance;
	And	
	•	If a caretaker is needed for waste management on site this will be identified in the Waste and Recycling Servicing Plan and
		will be included in conditions of consent.

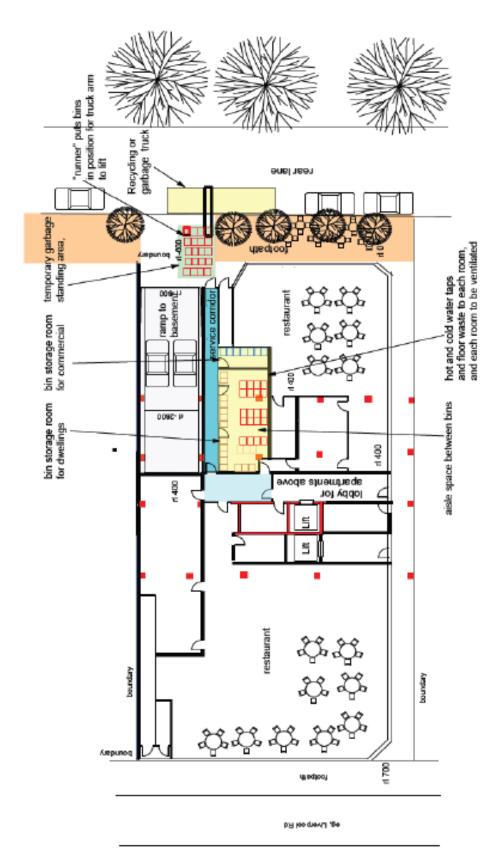


Figure 2: Example Development Waste Servicing Concept Diagram



Section 3: Multi-Storey Residential Developments: Specific Provisions

Waste management design in multi-storey multi-unit buildings must not only account for internal circulation, storage and collection of waste, but also take into account resident's amenity, impacts on neighbouring buildings and any waste collection impact on the public streetscape, local pedestrian and traffic circulation.

The **State Environmental Planning Policy no 65** and the referenced **Apartment Design Guide** requires the following objectives to be achieved for certain type of apartment buildings:



Design which ensures the minimisation and effective management of residential waste from apartments contributes to the visual and physical amenity of a building as well as limiting potentially negative impacts on the environment.

These provisions apply for developments of four storeys or more, or where lift services are integral for residential access, such as places in the **Ashfield Town Centre** or **Ashfield West**. For developments of fewer than four storeys, such as in **R3 Medium Density Zones** - see **Section 5**: **Low-Rise Residential Developments**: **Specific Provisions**.

General Objectives

- To minimise the overall impacts of waste and recycling management in buildings by designing for waste and recycling systems that are: hygienic; accessible; easy to use; maximise recycling; safe; quiet to operate; adequately sized; and visually compatible with their surroundings.
- To provide efficient and flexible ongoing waste operations with low maintenance, complexity and labour requirements to avoid imposing unnecessary costs on building management.
- To allow Council to provide waste and recycling collection services to all residential developments.

Performance Criteria	Design	Solution
Circulation and Access for Waste and Recycling		
	Waste C	hutes for internal waste transport
	DS1.1	For multi-storey residential buildings with a rise of four storey's or more, a waste chute is required servicing each individual residential storey above the waste storage area level. (Waste chute design is to comply with Guide 3: Waste Chutes, Compactors, Balers and Crushers).
	DS1.2	Waste chutes are to be provided with inlet hoppers of a design for safe use by any resident (allowing for age or ability), and inlet hoppers are to be enclosed within a chute room.
	DS1.3	The total maximum travel distance from any residential dwelling entry to a waste chute room on any relevant storey is not to exceed 30 metres. Additional waste chutes may be required for buildings in order to achieve this maximum travel distance.
	DS1.4	Where waste chutes are installed, a waste caretaker must be assigned to support the chute and discharge operations.
	DS1.5	Chutes for recycling are not permitted, either as dedicated chutes or by mechanical diverter using a single shared chute for waste and recycling.
	Chute R	ooms
	DS1.6	Each residential storey of a building serviced by a waste chute will have a chute room to control any spillage, odour, and noise from waste and recycling activity.
	DS1.7	Chute rooms are
		 to be provided in convenient, well-lit positions with regard to the vertical core of the building;
		 to be provided with and enclose inlet hoppers for the waste chute;
		 to provide space for recycling containers for the intermediate storage of recyclables (allowing for at least one 240-litre MGB for each four (4) units serviced by that chute room);
		 to be safely negotiated by people with disabilities. Chute rooms must allow for sufficient space to permit easy opening of the inlet hopper, opening of the chute-room door and the storage and manoeuvring of the recycling bin(s);
		not be located adjacent to a habitable room;



to have the floor situated centrally below each

impervious material for ease of cleaning with

inlet hopper finished with a smooth

Performance Criteria	Design Solution	
		a minimum area of not less than one square metre (1 m²);
	And	
	•	display instructions on the use of the waste chute including not to dispose hazardous or bulky material into the chute, and what materials are recycled using the container(s) provided. Standard signs are available from Council.

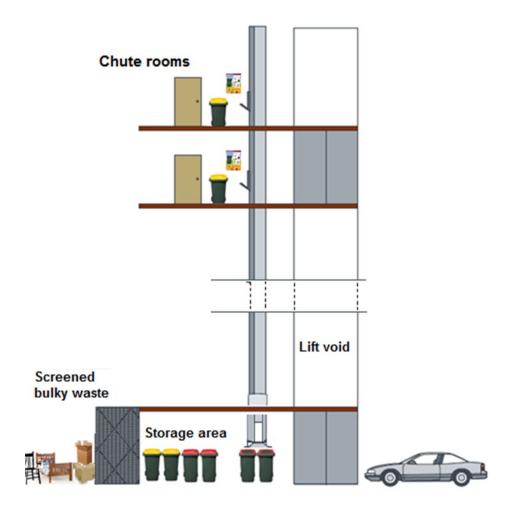


Figure 3: Chute rooms and discharge to waste storage area

Waste Source Separation and Storage Areas(s)		
	DS2.1	Waste Source Separation and Storage Area(s) are to be provided wholly within the site to house both waste and recycling bins, and are to be located no lower than one level below street level.
	DS2.2	Sites with restricted space, limited street frontage or difficult access should consider designs for ground floor

Performance Criteria	Design Solution		
		level Waste Source Separation and Storage Area(s) or bin holding area(s) which can allow for off-street collection by Council or contractors (see Section 3 DS3.4 to DS3.17).	
	DS2.3	Design of any room used as a Waste Source Separation and Storage Area is to conform to Guide 2: Waste Source Separation and Storage Area.	
	DS2.4	Use of compaction equipment for waste volume reduction is prohibited.	
	DS2.5	Access to the area where any waste chute discharge is located within the Waste Source Separation and Storage Area is to be restricted by keyed lock for safety reasons.	
	DS2.6	There should be no public access to a Waste Source Separation and Storage Area which would allow unsecured access to the rest of the building.	
	DS2.7	With the exception of interim storage of bulky waste and special waste, all waste and recycling located in a Waste Source Separation and Storage Area is to be contained within a designated bin for that waste type.	
		Calculating storage area requirements	
DS2.8	DS2.8	The standard residential waste and recycling storage capacity is to be met by	
		 providing space for one (1) x 240 Litre waste bin and one (1) x 240 Litre recycling bin for every two residential units, rounding up the bin numbers. 	
		 allowing an additional minimum 50% of the bin footprint area (rounded) for space to manoeuvre bins. 	
		 discounting any recycling bins normally stored in chute rooms. 	
		 If the development has communal landscaped area or courtyards, provision may be required for Garden Organics bins. 	

Chapter C - Sustainability Part 3- Waste and Recycling Design & Management Standards

EXAMPLE OF RESIDENTIAL WASTE AND RECYCLING STORAGE AREA

A multi-unit development with 29 units across five residential storeys, with waste chute and compaction.

		Minimum Area
Waste bins	(29 x 240L bins/2) = 15	6.5m ²
Recycling bins	(29 x 240L bins/2) = 15 Less 5 in chute rooms = 10	4.3m ²
Manoeuvring space		$(6.5+4.3) = 10.8 \times 50\% = 5.4 \text{m}^2$
TOTAL Storage Area for bins		16.2m ²

Additional storage capacity for bulky waste would require the Waste Source Separation and Storage Area to be a minimum of 30.3 m².

DS2.9 Any request for a variation in storage area requirements compared to the calculated area must provide evidence that unique features of the site warrant consideration, and that other design options have been investigated and exhausted.

Bulky waste

DS2.10 An additional dedicated space (such as a room or screened area), is to be provided within or in close proximity to the Waste Source Separation and Storage Area for the interim storage and management of Council-collected bulky waste and mattresses. Up to 20 dwellings, a minimum four square metres (4 m²) would be acceptable. In developments over 20 dwellings, a minimum acceptable allocated space would be eight square metres (8 m²) for every 50 residences for residential storage. Mesh screening permitting view into the room should be considered in the design of this area to allow for improved security by users.

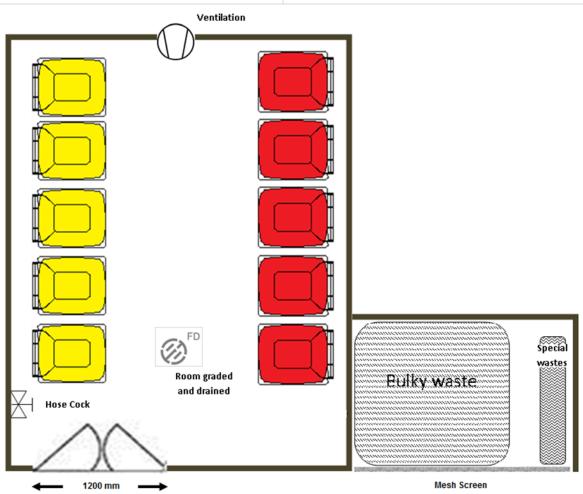


Figure 4: Example of waste source separation and storage area

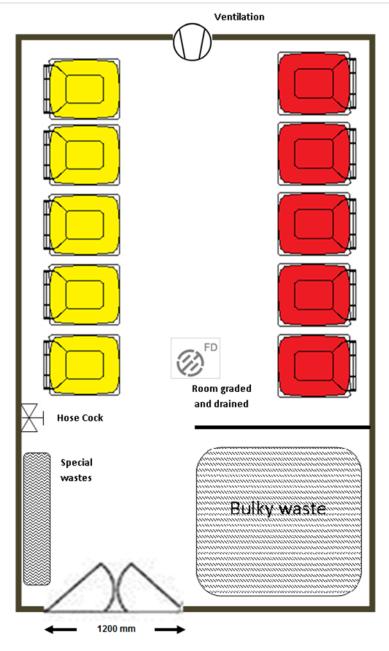


Figure 5: Alternate layout for waste source separation and storage area

Special Wastes

DS2.11 Allocation in the bulky waste space can also be made for interim storage of special waste such as electronic goods, batteries, computers, televisions, fluorescent tubes and smoke detectors. A caged section should be provided for gas bottle disposal. Disposal of these separated items would be the responsibility of the building management or Body Corporate. Council does not provide collection services for these items, but does have drop-off options for resident waste electronic goods, computers, and televisions. The NSW government provides some periodic collection events for batteries, fluorescent tubes, smoke detectors and

gas bottles.

Composting or worm farming space

DS2.12 Space for composting and/or worm farming, being an unpaved earth surface or within a bunded area drained to a sewer system, must be available for all residents as a communal facility. An acceptable minimum area would be 2m² for every 50 dwellings. Where possible, such composting space is to be integrated with the design of communal open space areas. This provision can be satisfied by making space available in private courtyards where available.

Wash down area

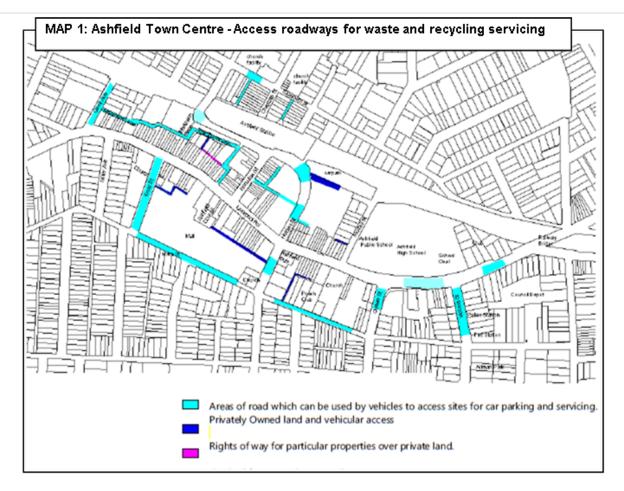
DS2.13 An area for bin wash down is to be provided within the site. This area is to be located within a bunded area drained to a sewer system or can be an unpaved earth surface.

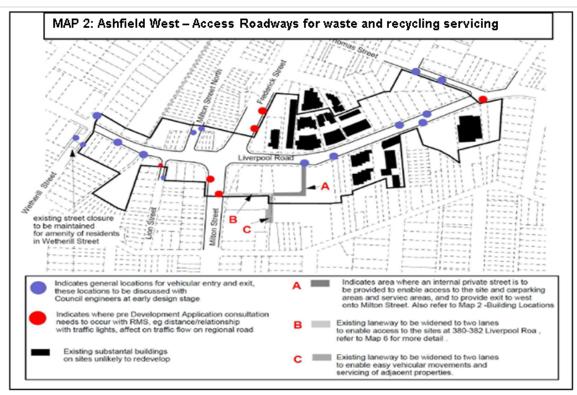
Waste and Recycling Collection Points

Note that Liverpool Road and Parramatta Road are major arterial roads, some parts of these roads might be unable for providing direct service access or presentation of bins for collection. Given this, the following specific access requirements are imposed for key areas of Ashfield Town Centre: Driveways which provide access to a development for waste collection shall be provided from lanes and secondary streets identified on **Map 1**

- DS3.1 Ashfield West: Driveways which provide access to a development for waste collection, shall be provided from road locations generally in locations identified on Map 2
- DS3.2 Hurlstone Park Enterprise Zone: Driveways which provide access to a development for waste collection, shall be provided from road locations generally in locations identified on Map 3
- DS3.3 Parramatta Road Enterprise Corridor: Refer to Part
 D6 of the DCP for site layout principles for servicing
 buildings off the main road where there is no side or
 rear access. Rear lanes or side access are to be utilized
 where available. The verge to laneways may need to be
 widened to provide sufficient space for safe collection
 access adjoining the carriageway

Early consultation prior to any design finalisation should occur with Council's staff, and if required the **Roads** and Maritime Services, to determine satisfactory access and collection locations.







DS3.4 Any other location to where this DCP applies is to service multi-storey residential developments 4 storeys or higher using a rear lane or driveway where available, or utilise side access.

DS3.5 The Waste and Recycling Servicing Plan for multistorey residential developments must indicate:

- The location of any vehicle standing areas for the proposed Waste and Recycling Collection Point(s) such as public streets
- Any required truck manoeuvring areas to service the development's waste. Any interior to the building vehicle collection, e.g. on large sites which can accommodate this is to be shown in plan and section;
- the circulation path with minimum 1200mm wall-to-wall clearance for bins to and from the Waste Source Separation and Storage Area (bin room) and collection point;

And

- the access path for collection vehicle to the Collection Point for final 30 metres or from nearest Council roadway (whichever is greater).
- **DS3.6** Waste and recycling collection vehicles must be able move in an access roadway or laneway in a forward direction, or when inside a site be able to enter and depart in a forward direction.

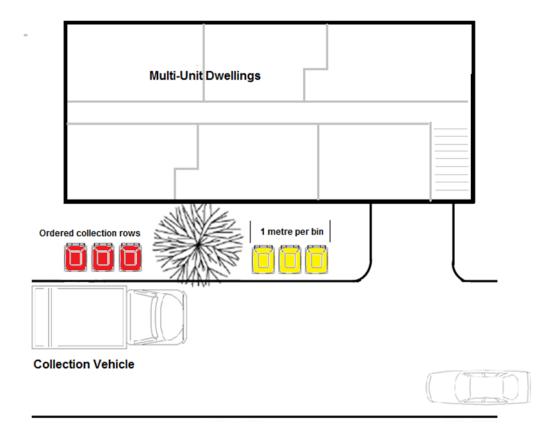


Figure 7: Use of street front collection for multi-unit dwellings

Preferred collection point-on street and verge area

- DS3.7 Residential developments where the space required for presentation of bins at a kerbside collection point does not exceed the width of the available property frontage less any driveway space are permitted to designate a kerbside collection point for residential waste and recycling.
- DS3.8 Waste and Recycling Collection Points designated at kerbside must be sensitive to the level of traffic of the service roadway, and the designation of any traffic clearways impacting on vehicles required to stand at kerbside for collection.
- **DS3.9** For all other multi-storey multi-unit residential developments provision is to be made for off-street collection of waste, recycling and bulky items. This can be achieved by either
 - Ground-floor level bin storage or holding area(s) accessible from street, or
 - Interior to building vehicle collection where sites are large enough to accommodate this.

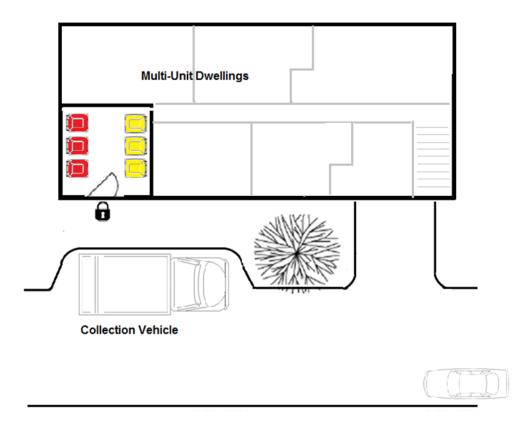


Figure 8: Use of off street ground floor level storage area for collection (with lay-by)

Provisions for Ground floor level Waste Source Separation and Storage Area(s) or bin holding area(s)

- DS3.10 Ground floor bin storage can be either a designated Waste Source Separation and Storage Area(s) or an interim bin holding area. If designated as an interim bin holding area the provisions for bulky waste storage (see Section 3 DS2.10 and DS2.11) may also be allocated to this area. A Waste Source Separation and Storage Area is still required.
- **DS3.11** A ground floor bin storage area is to be located no further than 15 metres within the property from the access/property boundary, and be within the building so as to not be visible from a public space.
- DS3.12 A Waste and Recycling Collection Point must be identified within the 30 metre maximum transport distance from apartments (see Figure 9), for up to 660 Litre MGBs (or 10 metres for larger bins). The pathway between the ground-floor bin storage or holding area and Collection Point must be free of obstructions, steps and with a gradient no greater than 1:12 at any point.
- **DS3.13** Preferred waste design practice is for a Waste and Recycling Collection Point to be located wholly or partly on private property in the form of a vehicle lay-by for

- such a collection approach so as to minimize traffic obstruction. A hard-pad area is to be provided for placement of bins.
- DS3.14 The ground-floor bin area should be a secured room.

 To allow access for Council or its contractors a Councilapproved key system must be provided and will be a
 consent condition. Security boxes using the approved
 key system can be provided by developments relying on
 electronic swipe or fob systems for secure entry.

Provisions for Interior-to-building vehicle bin collection for situations where are site is able to accommodate truck movements

- **DS3.15** The gradient of the driveway should be in accordance with AS 2890.1-2004 Parking facilities Off-street car parking, Section 2.5.3.
- **DS3.16** Clearance at the vehicle entrance/exit and along the path of travel must be sufficient for the swept path of a standard Council waste collection vehicle (for dimensions see *Guide 1: Inner West Council Standard Services*).
- **DS3.17** The minimum vertical clearance includes clearances of all service ducts, pipe work and similar fittings
- **DS3.18** Pavement strength shall be sufficient to support a laden standard Council collection vehicle (see *Guide 1: Inner West Council Standard Services*).
- DS3.19 Waste or Recycling collection vehicles entering a development must be able to service a development efficiently and effectively, with best practice requiring no need for the vehicle to reverse at any time to complete collection. Note that Council standard collection vehicles use a mechanical lift located on the left-hand side of the vehicle with a minimum vehicle clearance when lifting of 3.9 metres.
- **DS3.20** If a vehicle turntable is used to ensure forward travel for entrance and/or exit, it must have a capacity sufficient for a standard Council collection vehicle (see *Guide 1: Inner West Council Standard Services*).
- **DS3.21** Where development site constraints cannot be overcome and a collection vehicle must use a reverse manoeuvre in order to exit the site in a forward direction, the following requirements must be met:
 - Safety considerations to have been fully addressed, and use of a reverse manoeuvre is minimised:
 - Use of T-shaped or Y-shaped turning heads may be considered provided the reversing distance is no greater than the length of the collection vehicle. Templates for reverse turning heads should be in accordance with examples in AS 2890.2:2002 Parking Facilities - Off-street commercial vehicle

facilities;

- Reversing areas must be clearly marked so drivers and pedestrians can see them easily; and
- Measures to prevent unauthorised entry into the reversing area are stipulated in the Waste and Recycling Servicing Plan.

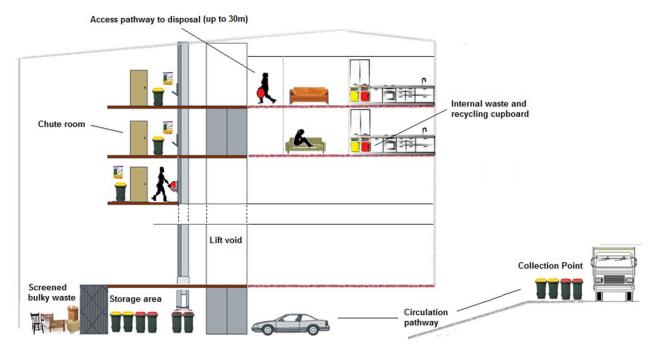


Figure 9: Multi-unit-dwelling design including access & circulation pathway, storage area, and collection point

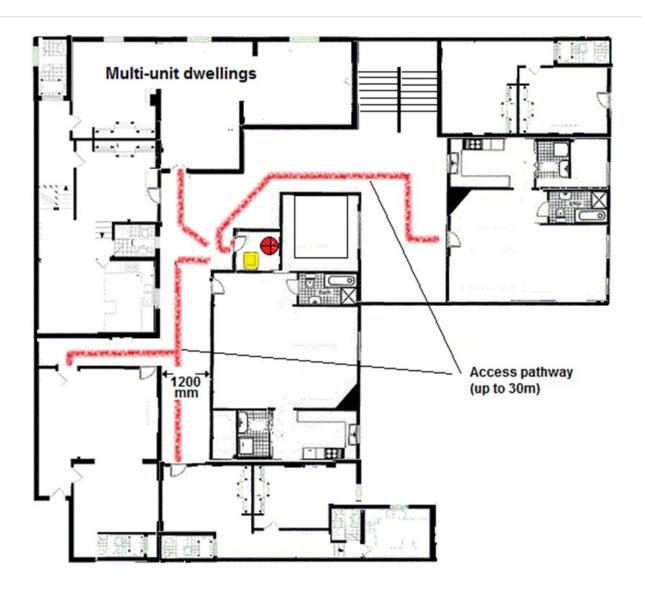


Figure 10: Multi-unit-dwelling access pathway to chute room

Section 4: Mixed-use residential & commercial developments: Specific Provisions

This section details the waste and recycling requirements for developments where residential and commercial premises occupy the same overall site or are jointly located in a building, and provides controls for the commercial parts and where relevant how have an interface with the residential waste component.

General Objectives

- To foster source separation and recycling by commercial premises
- To ensure both private and Council collection may be provided to service residents and business premises without interference.

Controls

Performance Criteria	Design	Solution
Separation of commercial and residential waste and recycling		
	DS1.1	Where a residential development and commercial development occupy the same site, the waste and recycling handling and storage systems for residential waste and commercial waste (including waste originating from retail premises) are to be additional, separate and self-contained. Commercial and retail tenants must not be able to access residential Waste Source Separation and Storage Area(s), or any storage containers or chutes used for residential waste and recycling.
	DS1.2	Waste and Recycling Collection Points for both residential and commercial waste and recycling may be shared.
	DS1.3	The Waste and Recycling Servicing Plan is to identify the storage areas, collection points and management systems for both residential and commercial waste streams.
	DS1.4	The waste storage, handling, collection and management systems for the residential or commercial waste components of the mixed development are to comply with the design provisions within the relevant sections of these standards relating to residential and commercial premises, with special regard to circulation and access pathways and distances, and any storage requirements.
	DS1.5	All commercial and residential waste and recycling storage is to be located wholly within the site and in an area that minimises any noise or odour impacts on the amenity of nearby premises.

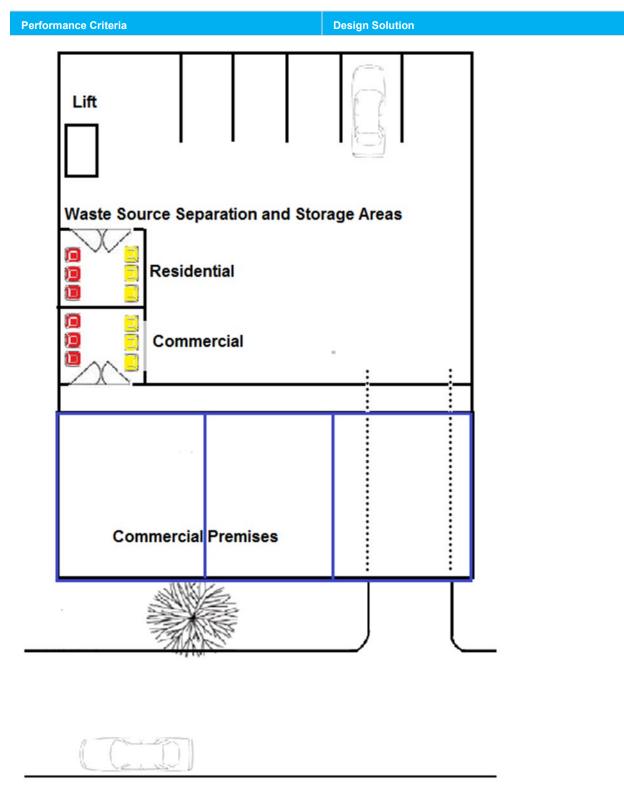


Figure 11: Mixed use premises showing separation of residential and commercial waste and recycling storage

Commercial waste contracts

DS2.1 No commercial waste or recycling is to be placed in a public place for collection unless fully contained within a designated bin for that waste type.



Performance Criteria	Design	Solution
	DS2.2	Businesses or building managers must have written evidence of a valid and current contract (held on site) for waste (garbage) and recycling collection for disposal or processing. The contract can be with a private operator or a service provision by Council.
	DS2.3	Design of any room used as a Waste Source Separation and Storage Area is to conform to Guide 2: Waste Source Separation and Storage Area.
	DS2.4	Where applicable, all businesses are encouraged to include provisions in their waste contracts that allow for the collection and recycling of high-grade and low-grade office paper, cardboard packaging, paper from secure document destruction, batteries, equipment containing printed circuit boards, computers, televisions, fluorescent tubes, or other recyclable resources from the waste stream. Provision for separated paper bin storage will apply to commercial office developments (see Section 6 DS4.1 and DS4.2)
	DS2.5	If contaminated sharps (e.g. syringe needles) are generated at the site, non-reusable sharps containers for safe disposal shall be provided in accordance with Australian Standard 4031-1992: Non-reusable containers for the collection of sharp medical items in health care areas, and appropriate Clinical waste collection and disposal contracts are to be held by the site building manager or generating commercial premises.
	DS2.6	Council may limit the trading hours and/or the hours for waste collection/deliveries where there is the potential for significant impact on residential amenity. Inner West Council applies restrictions on collection hours for drive through food outlets and licenced premises (see Section 6).
	Space a	llocations
	DS2.7	In commercial developments with multiple commercial premises totalling over 500 m2, a dedicated space (such as a room or screened area) is to be provided for the interim storage and management of bulky or fit-out waste, electronic goods, batteries, computers, televisions, fluorescent tubes and bulbs to allow source separation and recycling. An acceptable allocated space would be a minimum 4 m2 for every 500 m2 of retail or 2,000 m2 of office space.
	DS2.8	Space must be provided on site in reasonable proximity to retail or commercial premises to store re-usable commercial items such as crates, pallets, kegs, foam boxes and similar items such that storage of these items in a public place is completely avoided.
	DS2.9	Secure space must be allocated for the separate storage of liquid wastes, including commercial cleaning

Performance Criteria	Design Solution	
	products, chemicals, paints, solvents, moto cooking oil. These areas for liquid waste sto be provided in accordance with the require State agencies and legislation. For comme over multiple storeys, interim waste storag for waste and recycling must be located or occupied storey sufficient for one day's gwaste and recycling. These should be proventralised kitchen area if available. Provising made (such as in cleaning contracts) for the be transferred to a central Waste Source Stand Storage Area at least once daily.	orage must ments of ricial spaces e receptacles each eneration of rided at any ion must be is material to
	DS2.10 An area for bin wash down is to be provide site. This area is to be located within a bur drained to a sewer system or can be an ur surface.	ded area
	Calculating storage area requirements	
	Waste Source Separation and Storage Are on-site which provides adequate storage a capacity to meet their estimated generation Guide 4: Waste and Recycling Capacity Storage can be communal or for individual This area is to be dedicated to storage of v recycling containers and equipment, and re special wastes as described in DS3.1.	ea(s) wholly Illocation In rates (see Needs). In premises. Invaste and
	DS2.12 The commercial waste and recycling stora to be met by first determining the types of premises and their area within the develop development's commercial waste and recapacity requirements can then be calculate estimates provided in Guide 4: Waste and Capacity Needs by multiplying generation. The number of bins is calculated by dividin capacity needed by bin types provided (the up). Space for sufficient bins to service this determined by the footprint occupied by this bins. Space to manoeuvre the bins is to be allowing an additional minimum 50% of the area for this purpose. The space for any do into the storage area is to be additional to the bin room area.	commercial ment. The cycling ted using the I Recycling by floor area. g the en rounding capacity is s number of provided, bin footprint cor opening

Chapter C - Sustainability Part 3- Waste and Recycling Design & Management Standards

EXAMPLE OF COMMERCIAL WASTE AND RECYCLING STORAGE CAPACITY

A mixed use development with 200m² of unspecified non-food retail space and 2,000m² of office space (assuming a 6 business day week).

Multiply the waste or recycling value per 100 m^2 for the premises type in *Guide 4* by the floor area for that premises type to determine the daily capacities.

	Daily waste capacity	Daily recycling capacity
Non-food retail space	110L	140L
Offices	400L	600L
TOTAL	510L	740L

Weekly waste capacity need is 3,060L. Weekly recycling capacity need is 4,440L. (Daily capacity x 6 business days)

This can be met by 13 x 240L waste bins and 19 x 240L recycling bins collected once per week. The recycling bin storage should include provision for separated paper recycling bins (for offices).

DS2.13	Use of cardboard balers, glass crushers or other
	reduction systems for recycling may alter the storage
	space required for recycling, and may improve handling
	of large amounts of cardboard and glass. Such
	systems are not compatible with Council Business
	Waste collection, and may require private contracts for
	collection. Storage space may require fewer bins, or
	bins of different size. However, the equipment itself will
	require some floor space and manoeuvring space to
	operate. Applicants nominating to use such systems
	will need to provide evidence to Council of any changes
	to nominal storage requirements arising from their use,
	and should discuss with Council staff.

DS2.14 The Waste Source Separation and Storage Area is to conform to the requirements of Guide 2: Waste Source Separation and Storage Area.

Access for collection

- DS3.1 Where commercial collection takes place interior to a building, appropriate clearances need to be allowed for the collection vehicle to enter the premises, clear the waste container and exit the premises. Note that some commercial systems require the waste container to be lifted above the collection vehicle in order to be emptied (such as front-lifted bulk bins or hook lift bins).
- DS3.2 If clearance at any point is less than 4 metres then vehicle specifications will be required from the waste and recycling service provider that conform to the proposed development clearance. A swept path analysis in plan and elevation will be required to

Performance Criteria	Design Solution	
	demonstrate the vehicles accessibility for internal and ramp access.	
Shop top type developments		
	DS4.1 Screened and separate storage is to be provided for commercial and residential waste and recycling bins. Where possible, provision is to be made to prevent access to the residential waste and recycling storage by operators of commercial premises.	
	DS4.2 The Waste and Recycling Collection Points are to be designed to accommodate collection vehicles wholly onsite where possible, or by use of a lay-by reduce any obstruction to vehicle traffic on roadways.	

INFORMATION GUIDES



OFF-STREET WASTE COLLECTION

The Ashfield local government area is planned to increase by more than 1,000 residential dwellings in the next ten years, within core development areas. It's not feasible to place all their bins on the street front for collection. The Town Centre also has a very high proportion of commercial properties that require the collection of multiple bins.

The high quality of new developments, both residential and commercial, means buildings are designed with sleek lines, uncluttered access and glass frontages, many with commercial retail outlets frontage. Such buildings are not suited for street front presentation of rows of wheelie bins over multiple days of the week.



The Standards set out the options for secure residential and commercial internal waste and recycling storage rooms, and the required clearances for collection vehicle to access buildings if required. These requirements will allow standard waste and recycling collection to proceed off street without obstruction or loss of safety and amenity, improving the quality of Ashfield's public spaces.

FORWARD TRAVEL COLLECTION

Standard collection vehicles are almost 10 metres long and weigh over 20 tonnes when loaded. They collect only from the left-hand side of the vehicle. The width of these vehicles impedes rear vision. Such vehicles are not suited to manoeuvres requiring major reversing or multiple-point turns.



Such driving manoeuvres are a common source of accidents involving large collection vehicles, and can be avoided through improved design for collection point access. Forward travel entrance and exit for collection improves the safety of waste and recycling collection, and also reduces the time and costs for waste and recycling servicing by improving transport flow.

SPACE FOR SOURCE SEPARATION and REUSE

Many businesses and residents need to dispose of items that do not fit within standard collection bins. Allocation of space at the design level for improved source separated recycling adds flexibility and safety in buildings to handle these items.

Bulky waste and fit-out waste are a regular addition to standard waste collected, and space is needed to store these until collection is available. Mattresses, e-waste and gas bottles are also significant wastes that can be recycled if collected separately. Items such as batteries, mobile phones and compact fluoro lights reduce resource recovery from waste if not separated at source.









Whitegoods e fridge, stove



Many business premises rely on transport packaging for products, such as kegs, pallets, crates and boxes. It is important to provide an opportunity for interim storage of these re-usable items to minimise breakage and loss, and to reduce reliance on single use packaging which generates additional waste.

Section 5: Low rise residential developments: Specific **Provisions**

This section addresses other details relating mainly to access and servicing for low rise developments not specifically covered in Sections 2 and 3 such as in areas which have an R3 Low Density Zoning.

General Objectives

- To ensure low rise residential developments have clear guidance on the provision of access and circulation of standard services bins.
- To manage the appropriate use of kerbside for waste and recycling collection from low rise developments, and ensure collection points are optimally located for the amenity of residents.

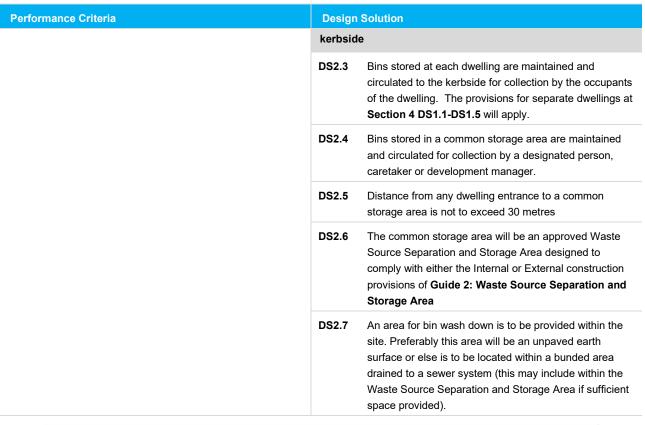
Controls

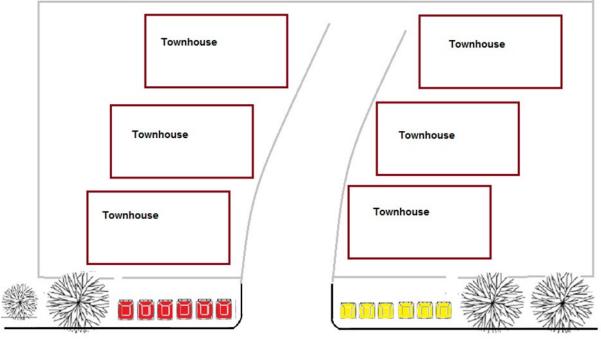
Performance Criteria	Design Solution	
Provisions for detached houses, granny flats, boarding houses (1B), and dual occupancies with access to the property street front		
	DS1.1 Space is to be allocated within the property boundary of each subject site for storing at least one each (per dwelling) of the standard Council waste, recycling and garden organics bins (see Guide 1: Inner West Council Standard Services).	
	DS1.2 A minimum of a 1200 mm wide access pathway is to be provided between the rear area and the kerbside Wast and Recycling Collection Point, clear of steps or obstructions, for transport or removal of waste and recycling bins and bulky waste.	
	DS1.3 The access pathway to move bins from storage to collection point is not to pass through the interior of a dwelling or other building.	

as on large sites

- PC2. Townhouse or villa type developments can deliver waste management under different configurations depending upon the number of dwellings, street frontage available to the development, and presence of an internal servicing roadway. For lowrise developments, an internal servicing roadway may include an underground car park access or offstreet lay-by. Provisions for three common options are made in this section.
- **DS2.1** Approval to place bins for collection at kerbside at a designated Waste and Recycling Collection Point will only be provided if sufficient street verge area frontage is available to the development to present bins for collection. Allowance must be made for 1 metre of kerbside presentation space for each waste or recycling bin.
- **DS2.2** The Waste and Recycling Collection Point must conform with the provisions of Section 2 DS4.1-DS4.8, with special attention to infringement on the kerbside street frontage of neighbouring developments. If those provisions cannot be met for a development, a Waste and Recycling Collection Point must be designated and designed wholly within the boundaries of the development, and the provisions of Options 2 and 3 will apply below.

Option 1: Waste and recycling bins stored at each dwelling or a common storage area and able to be serviced at the street



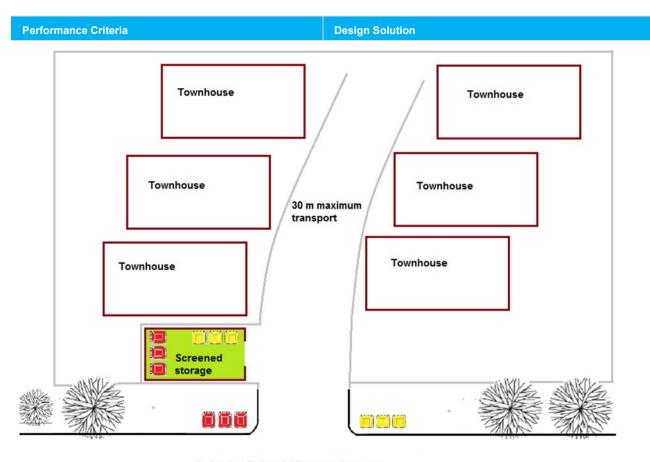


Collection Point within street frontage



Figure 12: Low rise development with street frontage collection point





Collection Point within street frontage

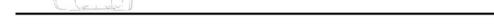


Figure 13: Low rise development with communal waste storage and street frontage collection point

Option 2: Waste and recycling bins stored at a common storage area and serviced from a servicing point on an internal servicing roadway.

- DS2.8 Collection from an internal servicing roadway is by agreement of the Council and its collection contractor, and for consideration will require appropriately designed and constructed roadways. A signed indemnity form in the form of a Deed Poll will be required from the development's Body Corporate (see Guide 6: Standard Indemnity Deed Poll).
- **DS2.9** For low-rise developments, an internal servicing roadway may include an underground car park access or off-street lay-by.
- **DS2.10** Bins stored in a common storage area are maintained and circulated for collection by a designated person, caretaker or development manager.
- **DS2.11** Distance from any dwelling entrance to a common storage area is not to exceed 30 metres.
- **DS2.12** Waste and recycling collection vehicles must be able to enter and depart a site and / or access a Waste and



Performance Criteria	Design	Solution
		Recycling Collection Point on an internal servicing roadway in a forward direction. Attention should be paid to nominated one-way internal servicing roadways, as Council collection vehicles mechanical lift is located on the left-hand side of the collection vehicle.
	DS2.13	Pavement strength of the internal servicing roadway(s) shall be sufficient to support a laden standard Council collection vehicle (see Guide 1: Inner West Council Standard Services).
	and serv	Waste and recycling bins stored at each dwelling viced in front of each dwelling on an internal g roadway on large sites.
	DS2.14	Collection from an internal servicing roadway is by agreement with the Council and its collection contractor, and for consideration will require appropriately designed and constructed roadways. A signed indemnity form in the form of a Deed Poll will be required from the development's Body Corporate (see Guide 6: Standard Indemnity Deed Poll).
	DS2.15	Bins stored at each dwelling are maintained and circulated to the kerbside for collection by the occupants of the dwelling. The provisions for separate dwellings at Section 4 DS1.1 - DS1.5 will apply.
	DS2.16	Waste and recycling collection vehicles must be able to enter and depart a site and / or access a Waste and Recycling Collection Point on an internal servicing roadway in a forward direction. Attention should be paid to nominated one-way internal servicing roadways, as Council collection vehicles mechanical lift is located on the left-hand side of the collection vehicle.
	DS2.17	Pavement strength of the internal servicing roadway(s) shall be sufficient to support a laden standard Council collection vehicle (see Guide 1: Inner West Council Standard Services).
Provisions for residential unit buildings less than four store	ys (includ	ing shop-top residential units)
	Circulat	ion and access for waste and recycling within site
	DS3.1	Design should allow for clear path of access for all residents (with regard to age and ability) from dwellings to a communal waste source separation and storage area.
	DS3.2	Design should facilitate access by locating the waste source separation and storage area as a correlated area along path of travel for entry and exit to the development, including basement parking areas.
	DS3.3	The total maximum travel distance from any residential dwelling entry to a waste source separation and storage



area (bins rooms) is not to exceed 30 metres.

Waste Source Separation and Storage Areas

Performance Criteria	Design Solution	
	DS3.4	Bins for waste and recycling may be stored in either one or more communal areas, including: Internal to building waste source separation and storage areas, such as ground level
		enclosures or bin rooms within a basement.
		 On large sites, bins rooms located behind the building line and usually placed to the rear of a site within 30m of the front boundary, and not located near any dwellings.
		See Guide 2: Waste Source Separation and Storage Area for requirements internal or external construction of storage areas.
	DS3.5	Any waste source separation and storage area is to be located wholly within the site and be screened within a building and not visible from a public space.
	DS3.6	Capacity of the waste source separation area is to be calculated as set out for Multi-storey residential developments at Section 3 DS2.8 , making allowance for waste and recycling bins, manoeuvring, and any waste handling equipment.
	DS3.7	Ensure adequate garbage capacity is provided to help reduce contamination of recycling bins.
	DS3.8	Given the need for continual access by residents, design of storage areas should allow for easy access for residents and any caretaker to all MGBs without the need to move bins around.
	DS3.9	Low-rise developments may be spread across a large area, encompassing a number of different low-rise blocks within a single development. Where this is the case, consideration should be given to incorporating more than one communal waste source separation and storage area within the development.
	DS3.10	For developments of up to 20 units, less than four storeys where lift access is not included, a bulky waste interim storage area is preferred but not essential. Provision for a designated waste collection point for bulky waste must be also made.
	DS3.11	Space for composting and/or worm farming, being an unpaved earth surface or within a bunded area drained to a sewer system, must be available for all residents as a communal facility. An acceptable minimum area would be $2m^2$ for every 50 dwellings. Where possible, such composting space is to be integrated with the design of any communal open space areas. This provision can be satisfied by making space available in private courtyards where available.
	DS3.12	An area for bin wash down is to be provided within the site. This area is to be located within a bunded area drained to a sewer system or can be an unpaved earth

Performance Criteria	Design	Solution
		surface.
	DS3.13	Ensure that responsibilities for cleaning communal areas and bins, educating residents in the appropriate use of systems and for moving bins in and out of the storage area for collection, are clearly identified.
	DS3.14	Display clear signs indicating appropriate use of recycling systems.
	Waste a	nd Recycling Collection Point
	DS3.15	Residential developments where the space required for presentation of bins at a kerbside collection point does not exceed the width of the available property frontage less any driveway space, are permitted to designate a kerbside collection point for residential waste and recycling.
	DS3.16	Designate suitable waste and recycling collection point(s) to collect the required number of waste and recycling bins that are free from potential obstacles.
	DS3.17	Designate suitable bulky waste collection point(s) for the development.

Section 6: Commercial development types: Specific provisions

This section details additional specific provisions applying to specific commercial developments including Offices, Food Retailers and Producers, Drive in Take Away Food Outlets, Retail Premises, Medical & Health Services Premises, Clubs and Hotels, and Accommodation Premises such as Serviced Apartments and Boarding Houses.

General Objectives

- To mitigate litter, noise and odour impacts arising from waste on neighbouring residents and business premises.
- To provide better practice design measures to ensure recycling and re-use management options are as easy to access as waste disposal for commercial premises.

Controls

Performance Criteria	Design	Solution
Food Retailers and Producers		
	DS1.1	Food premises are to comply with the requirements of Australian Standard 4674-2004 Design, construction and fit-out of food premises, including the garbage and recyclable materials requirements. These Waste and Recycling Design and Management Standards are not intended to alter any obligations under that Australian Standard.
	DS1.2	Where high volumes of food waste are likely to be generated, or where source separation of food waste can be achieved, design of waste storage and collection areas should consider the separate storage and collection of food waste for recycling to significantly reduce weight and volume of garbage. Inner West Council does not collect commercial food waste, but private contractors may be available. Separated food waste should be stored in bins complying with AS 4123-2008 Mobile Garbage Containers.
	DS1.3	For premises that generate 50 Litres of seafood, poultry and/or meat waste in total each operating day (separated or mixed with general waste), such waste should be collected daily to manage hygiene and odour from waste, with contracts held by the owner or manager of the premises. There is no requirement to provide refrigerated garbage rooms although this may be necessary for some businesses to prevent putrefaction and odour problems, and may form a condition of consent.
	DS1.4	Premises preparing food for wholesale, distribution or retail should include waste separation systems within or in close proximity to the preparation area to allow for plastic and cardboard waste to be collected and handled separately from food waste. If storage is within the preparation area, all waste must be removed daily.
	DS1.5	Waste oils should be kept separate from food and other wastes.

Performance Criteria	Design Solution	
	DS1.6	Developments with centralised waste and recycling storage areas for multiple tenants that include food retailers or producers must allocate space at design stage for source separated food organics waste to be stored and collected
	DS1.7	Food waste dehydrator equipment will require a separate development application.
Drive in take away food outlets		
	DS2.1	Waste and recycling facilities on the premises shall be unobtrusively located or screened.
	DS2.2	Regular daily litter patrols are required to pick up discarded food & drink containers in the near vicinity of the premises. This litter management is to be included in any Plan of Management for the site.
	DS2.3	Waste bins are to be provided at strategic locations to minimise littering on the site - proposed locations must be indicated on plans.
	DS2.4	All putrescible wastes are to be placed and stored in secure sealed containers and removed daily.
	DS2.5	Waste disposal and storage facilities are to be designed and installed to include measures for odour control.
	DS2.6	Waste collection is prohibited between 7.00pm and 7.00am daily.
Retail Premises		
	DS3.1	For premises with high volumes of cardboard waste, consideration should be made to allocate space for a cardboard baler, shredder or other volume-reduction equipment. Note: Council does not provide recycling collection services for baled, shredded or compacted cardboard.
	DS3.2	Space for storage of re-usable items from retail and especially licenced premises is to be allocated such that storage of these items in a public place is completely avoided. These may include crates, pallets, kegs, foam boxes and similar items.
	DS3.3	Additional space or reduction systems for handling and storing plastic shrink-wrap should be allocated where applicable.
Medical and Health Premises		
	DS4.1	Any Clinical or related waste generated on the premises is to be stored and collected separately to general waste. Contracts for collection and disposal of Clinical or related waste are to be held by the site building manager or by the generating commercial premises operator. Council does not provide collection of Clinical and related waste and may refuse to collect general waste bins contaminated with such waste.



Performance Criteria	Design Solution	
	DS4.2	If contaminated sharps (e.g. syringe needles) are generated, non-reusable sharps containers shall be provided in accordance with Australian Standard 4031-1992: Non-reusable containers for the collection of sharp medical items for safe disposal, and appropriate collection and disposal contracts are to be held by the site building manager or by the generating commercial premises operator.
Offices		
	DS5.1	Provision must be made on each floor, and in any commercial Waste Source Separation and Storage Area (or any interim holding area), for the separation and storage of all recyclable cardboard, paper and paper products likely to be produced from the premises.
	DS5.2	Storage of paper and cardboard for recycling must be in a dry, vermin-proof area. Paper and cardboard for recycling must not be stored for more than two (2) weeks to prevent breeding of vermin in the stored material.
	DS5.3	Rooms or areas designated for printing or photocopying must provide space for the interim storage of paper waste to be recycled in MGBs up to 240 Litres, and space provided for interim storage of used toner and/or printer cartridges.
Clubs and Hotels		
	DS6.1	Clubs and hotels of any size should consider the use of glass crushers to minimise the noise impacts of recycling practices on neighbouring premises. Both glass crushers and cardboard balers/compactors reduce the dedicated space needed to manage recycling, and eliminate the unnecessary collection of bins filled to less than capacity. Suitable glass recycling collection and processing contracts to accept crushed glass would need to be obtained. Use of glass crushers and the allocation of interim storage areas may be considered for reducing the space required for recycling storage bins.
	DS6.2	If the internal serving area of a club or hotel is larger than 1000 m ² , space for a glass crusher and bins is to be allocated in design.
	DS6.3	Space for storage of re-usable items from licenced premises is to be allocated such that storage of these items in a public place is completely avoided. These may include crates, pallets, kegs, foam boxes and similar items.
	DS6.4	Waste collection is prohibited between 10.00pm and 8.00am daily.

Performance Criteria	Design Solution	
Accommodation and Boarding Houses		
	DS7.1	Premises used for non-private accommodation are to ensure that additional space is allocated for the interim storage of waste mattresses, and TVs and other electronic waste in addition to space for waste and recycling bins.
	DS7.2	Accommodation with a rise of four storeys or more must provide on each habitable floor an interim waste storage area or other storage and handling system for separating of waste and recycling sufficient for one day 's generation. Such storage or handling must comply with the building's fire management system.
	DS7.3	Class 3 Boarding Houses shall make provision on-site for a Waste Source Separation and Storage Area, with details shown on the development application drawings. Class 1b Boarding Houses should comply with Section 5 DS1.1-DS1.3, allowing for 1 x 240L garbage and 1 x 240L recycling bin per four boarding rooms.
	DS7.4	Boarding Houses must provide any communal living rooms with interim waste storage sufficient for one day 's storage of waste and recycling.
	DS7.5	Signage detailing Council requirements for source separation and correct disposal of waste are to be prominently displayed in interim waste storage areas and Waste Source Separation and Storage Area(s). Standard signs are available from Council
	DS7.6	Provision must be made by premises management for any material disposed to an interim waste storage area to be transferred to a central Waste Source Separation and Storage Area at least once daily.
	DS7.7	Class 1b and Class 3 Boarding Houses may make private contracting arrangements for waste and recycling or apply to be serviced by Council standard services.
	DS7.8	Any Waste Source Separation and Storage Area (bin bay or room) for Boarding Houses is to be located behind the building line, and enclosed to minimise odour or noise disturbance for adjoining properties. If storage is proposed, and subsequently approved by Council, forward of the building line, it is to be screened from view from the streetscape to minimise any visual impact (see Guide 2: Waste Source Separation and Storage Area).

Section 7: Construction, Demolition and Fitout waste

Management of waste originating from construction and demolition activities is to be minimised by avoidance or reduction practices, re-use on site where feasible and recycling of materials.

- 1. A waste management plan indicating waste avoidance or reduction practices must be completed and included with any new DA where more than 10m³ of demolition or construction waste in total is likely to be generated. This includes DAs for material "change of use" of a development.
- 2. Sorting and recycling after collection of mixed materials from construction and demolition is permitted with the exception that if the ability to recycle a material is adversely affected by being mixed with other waste types, the material is to be stored and collected separately.
- 3. On site or off site re-use of materials is allowed only for unscheduled waste materials not hazardous to human health or safety. Any use of waste materials off site is subject to the provisions within the **Protection of the Environment Operations Act 1997** and associated regulations.
- 4. A waste management plan to address construction or demolition waste must include:
 - a. Full disclosure of any asbestos-contaminated material known to be at the site, and details of
 quantities, the licence details of any asbestos removalist, and the designated disposal site licensed to
 accept asbestos-related waste;
 - b. Details regarding the types of waste and likely quantities of waste to be produced;
 - c. Details regarding how all other waste is to be minimised within a development; and estimations of quantities and types of materials to be re-used or left over for removal from the site;
 - d. A site plan showing storage areas away from public access for re-usable materials and recyclables during demolition and construction;
 - e. Details of re-using or recycling methods for waste either on site or off site;
 - f. Nomination of the person responsible for implementing the waste management plan on site and the person responsible for retaining waste dockets from facilities;
 - g. Designation of appropriately licensed facilities to receive the development's construction and demolition waste;
 - h. Confirmation that all waste going to landfill is not recyclable or hazardous; and
 - The NSW Government Waste Avoidance and Resource Recovery Strategy 2013-2021 sets an 80% recycling target for Construction and Demolition Waste. The Waste Plans must indicate a level of reuse and recycling either on site or diverted with receipts sufficient to demonstrate consistency with that target.
- 5. At changes of tenancy and other occasions requiring refits, provision should be made by building management for the handling of the fit-out waste generated. Source separation, storage and collection of fit-out waste are to be managed such that ongoing waste management systems are not unreasonably impacted. Fittings should be deconstructed or demolished by methods that permit re-use of items such as workstations or storage, and allow for the separation of valuable resources such as metals for recycling.

TECHNICAL GUIDES

Glossary & Abbreviations

TERM	MEANING
baler	A device that compresses waste into a mould to form bales that may be self-supporting or retained in shape by ties or strapping.
bulky waste	Large and bulky items such as furniture, whitegoods or garden waste subject to a separate Council collection service to kerbside waste.
bunded	To be enclosed by a low wall intended to contain any liquid spillage or inundation from extending beyond an area.
chute	A ventilated, essentially vertical pipe for waste disposal, passing from storey to storey of a building.
chute room	A room located on each floor of a building to enclose waste chutes or the interim storage of recyclable materials.
commercial building	Any non-residential building including hotels, boarding houses, serviced apartments and child care centres.
compactor	A mechanical device for compressing waste in storage bins. For Council-collected waste, only a compression ratio of 2:1 is permitted.
Construction Waste Plan	A written plan in the form of a declaration setting out the volume and type of waste to be generated during construction associated with a development. It nominates on-site re-use, and processes and destinations for recycling and/or disposal of residue wastes.
containerised	To store waste and recycling within rigid body containers of a type designated within these Standards, meeting the design requirements of AS4123:2008: Mobile Garbage Bins.
Demolition Waste Plan	A written plan in the form of a declaration setting out the volume and type of waste to be generated during demolition associated with a development. It nominates on-site re-use, and processes and destinations for recycling and/or disposal of residue wastes.
kerbside recycling	Separated recyclable materials (such as cans, glass and plastic bottles, paper and cardboard) generated from households and businesses collected in a Yellow Lid container for processing.
kerbside waste	Mixed waste generated from households and businesses, collected in a Red Lid container, commonly termed "garbage".
garden organic waste	Separated organic material (such as garden prunings, leaves and lawn trimmings) generated from households that is collected in a Lime Green Lid container for processing.
habitable room	A bedroom, living room or kitchen, dining room, study, play room or sun room. This includes rooms in the subject development and neighbouring developments.
hopper	A fitting into which waste is placed and from which it passes into a chute or directly into a waste container.
Mobile Garbage Bin (MGB)	A waste container typically constructed of plastic with wheels with a capacity in litres of 120, 240, 660, 1000, 1100, or 1500.
site cleaners	Contractors who collect, sort and process mixed rather than source-separated building waste.
solid waste	Has the meaning assigned in the waste classification definition section of Schedule 1 of the Protection of the Environment Operations Act 1997 (POEO Act). (In general, waste that is not liquid and at a minimum can be "spaded")
Waste and Recycling	A written plan and associated checklist in the form of a declaration setting out how ongoing



Servicing Plan	waste and recycling management will proceed in a development, including any equipment to be operated as part of that ongoing waste management.
Waste Source Separation and Storage Area	An area or areas wholly on site of a development, designed to accommodate the expected waste and recycling generated by the development when occupied.
Waste and Recycling Collection Points	The designated and approved position or area where waste or recyclables are loaded onto a collection vehicle.
Waste Checklist	The summary and declaration by an applicant of the degree of compliance with these Standards for the subject development.

Council Inner West Council

DA Development Approval

IDAP Interim Development Approval Policy 2013

MGB Mobile Garbage Bin MUD Multi-Unit Dwelling

Relevant Australian Standards & Codes

AS 1428.1-2009 Design for access and mobility - General requirements for access - New building work

AS 1530.4-2005 Fire-resistance test of elements of construction

AS 1668-2012 The use of ventilation and air conditioning in buildings

Part 2: Mechanical Ventilation
Part 4: Natural Ventilation

AS 2890.1-2004 Parking facilities - Off-street car parking

AS 2890.2-2002 Parking facilities - Off-street commercial vehicle facilities

AS 4031-1992 Non-reusable containers for the collection of sharp medical items

AS 4123-2008 Mobile Garbage Containers

AS4544-2012 Composts, solid conditioners and mulches

AS 4674-2004 Design, construction and fit-out of food premises

NSW Workcover Code of Practice for Collection of Domestic Waste

This document also references the Australian National Construction Code which contains the Building Code of Australia.

Guide 1: Inner West Council Standard Services

Residential Waste and Recycling Collection Service

Waste type	Bin capacity	Standard service frequency
Garbage	120 L (houses) 240 L (units - shared x 2)	Weekly
Recycling	240 L (houses) 240 L (units - shared x 2)	Fortnightly
Garden Organics	240 L	Opt in service Fortnightly

The standard presentation space allocated for each bin is 1 metre (to allow for mechanical collection).

Bulky Waste

Council offers two general bulky waste cleanup collections each year, in May and November. Up to 3 m³ of waste can be presented by a dwelling.

Council takes bookings outside those times for individual dwelling cleanups up to four times a year. Up to 1 m³ of waste can be booked for collection by a dwelling.

Business Waste

Council offers a business waste service to all commercial premises within the Inner West Local Government Area.

Council's business waste service provides a standard garbage service (240 L bin) and includes a free recycling service (240 L bin). Businesses can apply to have their bins collected weekly, twice a week, or three times a week.

Council uses side-loader collection vehicles for business kerbside bin services.

Businesses may elect to have their waste and recycling collected by private contractor. Larger storage capacity bin sizes may be available, which can reduce collection frequency.

Mobile Garbage Bins (MGBs) Australian Standard Sizes

(Supplier sizes may vary slightly)

Bin Type	120L MGB	240L MGB	660L MGB	1100L MGB
Height	940 mm	1080 mm	1250 mm	1330 mm
Depth	560 mm	735 mm	850 mm	1245 mm
Width	485 mm	580 mm	1370 mm	1075 mm
Footprint allowance	0.27 sqm	0.43 sqm	1.16 sqm	1.7 sqm



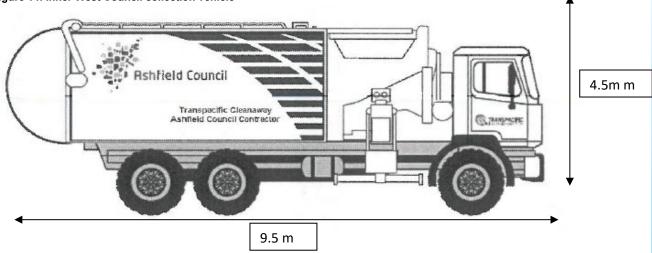
Mobile Garbage Bins (MGBs) Australian Standard Colours

Waste Type	Bin body	Bin lid	
Garbage	Dark green or black	Red	
Recycling	Dark green or black	Yellow	
Garden Organics Waste	Dark green or black	Lime Green	

Vehicle Dimensions & Tare

Council domestic waste collection vehicle specifications		
Length	9.5 metres	
Width	2.6 metres	
Height (travel & operational)	4.5 metres	
Weight (maximum)	23.5 tonnes	
Turning circle	26 metres	

Figure 14: Inner West Council collection vehicle





Guide 2: Waste Source Separation and Storage Area

1. Internal Construction

- 1.1. The floors, walls and ceiling of dedicated waste source separation and storage areas (also known as "bin room" or "bin bay") must be finished with a rigid, smooth-faced impermeable material capable of being easily cleaned.
- 1.2. The floors of waste source separation and storage areas must be graded and drained to a drainage fitting approved by Sydney Water located as close as practical to the doorway.
- 1.3. A close-fitting and self-closing door or gate operable from within the room must be fitted and the entrance provide a minimum width clearance of 1200mm. At least one access doorway is to have sufficient dimensions to allow the entry and exit of waste containers of the largest capacity nominated for the development. These clearances will assist with flexible use of the storage area and variance in bin sizes.
- 1.4. The design must restrict entry of trespassers, vermin or other animals into the area.
- 1.5. Waste source separation and storage areas must be provided with an adequate supply of hot and cold water with a hose cock for cleaning purposes.
- 1.6. Waste source separation and storage areas must be provided with artificial light controlled by switches located both outside and inside the room in close proximity to the entry door.
- 1.7. Waste source separation and storage areas are to be ventilated by either:
 - Natural ventilation openings to external air. The dimension of the permanent openings must not be less than 5 per cent of the bin bay or bin room floor area; or
 - A mechanical exhaust ventilation system with a minimum exhaustion rate of 100 litres/second and a rate of 5 Litres /m² floor area.
 - Either system is to be provided in compliance with the provisions of Australian Standard 1668:2012 The use of air conditioning and ventilation in buildings, Part 2: Mechanical Ventilation and Part 4: Natural Ventilation.
- 1.8. If the waste source separation and storage area is a secure holding area, a Council-approved key system will be required where necessary to allow access by collection staff. Liaison with Council staff concerning use of this system is necessary prior to the issuance of an Occupation Certificate. All costs for this are to be borne by the property management.

2. External Construction

- 2.1. For external waste and recycle bin storage enclosures the provisions of Internal Construction are to be applied as far as practical.
- 2.2. An external bin storage enclosure is to be located behind the building line where possible and screened from residential and public assessable areas through design and landscaping. The screening is to be visually consistent with the development.
- 2.3. An externally located bin bay can only be constructed no more than 15 metres from the property boundary at which access is provided for manual collectors. Neighbouring property boundaries should be avoided.
- 2.4. An external bin storage enclosure may be provided with a roller door or outwardly opening gates that can be bolted open greater than 90 degrees;
- 2.5. An external bin storage enclosure for more than 12 dwellings is to be roofed. If roofed, it is to have a minimum ceiling height of 2.4m and be adequately ventilated and lighted.
- 2.6. An external bin storage enclosure may be constructed as both storage and wash-down area, and if so is to comply with drainage requirements of **Guide 2: Waste Source Separation and Storage Areas DS1.2**. Otherwise an area for bin wash down is to be provided within the site. Preferably this area will be an unpaved earth surface or else is to be located within a bunded area drained to a sewer system.
- An external bin storage enclosure is to be designed and constructed to prevent storm water and surface water from entering.
- 2.8. All conduits servicing an external bin storage enclosure are to be concealed in the floor, wall or ceilings.

3. Refrigerated waste storage



- 3.1. In some instances, Council may require that waste storage be refrigerated. This is likely if large quantities of food waste are generated on site and waste removal from this site is difficult due to its location or long trading hours. Where a waste room is refrigerated, the temperature must be maintained at or below 5°C with all refrigeration equipment installed with sufficient space for cleaning.
- 3.2. Construction of the refrigerated waste room must conform to provisions for Internal Construction in **Guide 2:** Waste Source Separation and Storage Areas DS1.1 to DS1.6.
- 3.3. The refrigerated waste room must comply with **Section G.1.2 of the National Construction Code**. The minimum size of the doorway must allow for maneuvering of the largest waste receptacle to be stored within the room.
- 3.4. Refrigerated waste rooms are to be fitted with an approved alarm device that is located outside, but controlled only from within the waste room.

Guide 3: Waste Chutes, Crushers & Dehydrators

Waste Chutes

Waste Chutes must

- be constructed of metal or other smooth-faced, durable, fire- and abrasion-resistant material of a non-corrosive nature, adequately for material being deposited and capable of being easily cleaned;
- be cylindrical in cross-section and the internal diameter must be a minimum 500 mm;
- be vertical without bends or "off-sets" and not reduce in diameter over the fall:
- be installed with wash down systems and noise mitigation as an integral part of their design;
- be adequately ventilated to ensure that air does not flow from the chute through any service opening.
- have a cut-off provided at or near the base of the chute to effectively close off the chute while the waste container or compacting device is withdrawn; and
- meet National Construction Code requirements, have fire mitigation systems and be located within a vertical shaft meeting National Construction Code fire resistance requirements.



3.8 m

- terminate in a Waste Source Separation and Storage Area and discharge directly into a waste container in a
 manner designed to avoid spillage and overflow. Shrouds between chute and containers are permitted to
 prevent spillage and minimise dust or spray.
- where unit numbers are sufficient, be provided with carousel or linear track systems (with or without compaction) for automatically assigning a waste bin below the chute discharge.
- Installation or use of mechanical diverters in chutes to sort various types of waste is not permitted.

Inlet hoppers for waste chutes must

- be capable of delivering the waste to the chute without using force;
- be designed to effectively close off the service opening in the chute when the device is opened for loading;
- have an effective self-sealing system returning to the closed position after use;
- be equipped with metal two (2) hour fire-rated door and throat assemblies meeting provisions of Australian Standard 1530.4-2005 Fire-resistance test of elements of construction:
- not project into the chute;
- permit easy cleaning of the device and any connection between the service opening and the chute; and
- be located not less than one metre (1 m) or more than one and one-half metres (1.5 m) above the floor level.

Glass Bottle Crushers

Bottle crushers are designed to break glass into small but recyclable-sized fragments, known as "cullet". Most crushers are integrated with a small mobile bin (typically 60 litres) to keep the weight of the cullet within limits for ease of handling. Crushers allow for much larger weights of glass to be stored in smaller volumes, reducing the storage space required for glass recycling by well over 50 per cent.

In addition, the crushers minimise noise associated with handling glass recycling by reducing the need to tip bottles from a bar-sized bin to a larger storage bin, and also from reducing the noise at collection.

Dehydrators

Dehydrators are promoted as a means to reduce weight and volume of food waste, and many claims are made about their product being "compost" or "mature" when assessed against various index systems. Consideration of such equipment should account for the relatively high energy demand of such equipment. These units may also generate heat and moisture at undesirable levels for particular developments. Product from such systems is not to be managed as unrestricted use compost unless certified to AS4544-2012 Composts, solid conditioners and mulches.

Guide 4: Waste and Recycling Capacity Needs

	Expected litres per 100 m² per day		
Premises Type	Waste	Recycling	
Butcher/poultry shop	185	100	
Delicatessen	80	50	
Fish Shop*	250	85	
Greengrocer	310	120	
Bakery	295	165	
Default Food Retail	160	100	
Supermarket	240	300	
Convenience Stores	50	120	
Showroom*	25	25	
Hairdresser and beauty salon	40	40	
Default Non-Food Retail	55	70	
Backpackers Accommodation, Guest House	30	10	
Boarding House (Class 3)	25	25	
Hotel/Motel Accommodation	20	30	
Serviced Apartments	30	20	
Schools	12	4	
Child Care	250	120	
Medical and Optical	20	10	
Services	55	10	
Restaurants*	400	280	



Takeaway	175	60
Cafes	215	300
Hotels, bars, clubs	90	80
Offices	20	30

	Litres per week Waste	Litres per fortnight Recycling
Apartment Dwellings	120	120

Guide 5: Standard Indemnity Deed Poll

INDEMNITY

This Deed Poll is executed on the	
Day / Month / Year	
By the party:	
	(Body Corporate)
Strata Corporation Name, or Community	Corporation Name
	(Address)
	(Plan Number)
Strata Corporation Plan Number, or Con	nmunity Corporation Plan Numbe
With respect to the services that are t	o be provided by:
Inner West Council ("Council")	
and:	
[Council Waste Services Contractor]	

Whereas:

- 1. The Body Corporate has requested the Council, through [Contractor], to provide waste removal and/or other services to the Property.
- 2. The Council and [Contractor] have agreed to provide those services subject to the Body Corporate entering into this Deed of Indemnity.
- 3. The Body Corporate and its member owners grant to the Council and [Contractor] the right for Council and [Contractor] to enter the Property, including private roads (Roads) within the Property, and to pass and repass over the Roads with or without vehicles of any kind for the purpose of providing waste removal and/or other services.
- 4. The Body Corporate and its member owners acknowledge that [Contractor] or the Council will use heavy and wide vehicles in the provision of these services, and warrants that the Roads are and will, while this Deed remains in effect, be structurally suitable for access by those vehicles.

The Body Corporate agrees to:

Indemnify and keep indemnified the Council and [Contractor] and the servants and agents of each of them against all liabilities, actions, proceedings, claims, demands, costs and expenses which Council or [Contractor] may now, or at any time hereafter incur or sustain in connection with, or arising from or in respect of any claim relating to death or personal injury caused to anyone on the Property or damage to any property of the Body Corporate or of its servants, agents, licencees, tenants, lessees or invitees, or any property of all or any of the proprietors of any of the Lots in the Property or any property of the servants, agents, licencees, tenants, lessees or invitees of any of those proprietors in consequence of the provision of waste services, except that the indemnity provided in respect of death or personal injury caused to anyone on the Property is limited to the extent that the injury or death was caused by a negligent or wilful act or commission of [Contractor].

(1) Authorised Representa	ative of the Body Corporate	
Signature		
Name		
Plan Number		
Plan Name		
(2) The address of the pla	an:	

Authorised signature:

Chapter C - Sustainability Part 3- Waste and Recycling Design & Management Standards

Guide 6: Waste Management Plans

Site Address

ASHFIELD COUNCIL DEMOLITION WASTE PLAN

DA Number

Does Demolition Contain Asbestos? Yes □ No □									
All asbestos waste is to be managed in accordance with provisions of the NSW Work Health and Safety Regulation 2011									
Tick ☑ if under 10 m² ☐ Tick ☑ if or			☑ if over 10 m²						
WorkCover Licence No. and Class									
Demolition Contractor Details	emolition Contractor Details								
					_				
Licensed destination Landfill									
General Demolition Waste									
	How will you manage this waste			waste?					
Type of Material	Less than 10 m ³	More than 10 m ³	Re-use On-site	Recycle	Landfill				
Bricks									
Concrete									
Tiles									
Timber (clean)									
Timber (treated)									
Plasterboard									
Metals									
Green Waste									
Other									
Principal Off-Site Recycler		Principal Licensed Landfill Site							
Declaration									
Name of applicant (Please Print)									
Signature of applicant Date									

ASHFIELD COUNCIL CONSTRUCTION WASTE PLAN

Site Address			DA Numbe	er						
Will you use Site Cleaners?	☐ Yes, for ALL work or ☐ Yes, for some work or		Estimated total volume							
			or weight handled by							
	□ No									
Please supply details of site cleaners used	ABN Number									
	Name									
All Excavation Material	SuburbMobile #									
All Excavation Material	Less than 10 m		Re-use on-site							
	☐ More than 10 m ³		Re-use off site							
		☐ Landfill Disposal								
	Address if re-used off site									
Name and Suburb of licensed landfill										
If using site cleaners for ALL work, please STOP here. DO NOT continue to complete form. Please SIGN declaration.										
If Site Cleaners not used for all waste			How will you manage this waste?							
Type of Material	Less than 10 m ³	More than 10 m ³	Re-use on-site	Recycle	Landfill					
Bricks										
Concrete										
Tiles										
Timber (clean)										
Timber (treated)										
Plasterboard	-									
Green Waste										
Other										
Principal Off-Site Recycler	Principal Licensed Landfill Site									
		-								
De alematica:										
Declaration										
Name of applicant (Please Print)					-					
Signature of applicant Date										

ASHFIELD COUNCIL WASTE AND RECYCLING SERVICING PLAN

DA Number

☐ Residential Only Development (Multi-Unit Dwellings: multi-storey or low-rise) ☐ Mixed Residential/Commercial Development (multi-storey or shop-top) ☐ Commercial only Development						
The waste and recycling management mo	eets the design	objectives	for this type of o	levelopment?	Yes	□ No □
Layout of Waste and R	ecycling	Servi	cing			
Drawings or plans are attached indicating the location and dimensions for both RESIDENTIAL and COMMERCIAL sections of the following: • Waste Source Separation and Storage Area(s) and Waste and Recycling Collection Point(s) • the circulation path for bins (minimum 1200mm wall-to-wall) • any required collection vehicle manoeuvring areas, and any vehicle standing areas • any garbage chute and chute rooms • the access path for collection vehicles to the Collection Point for final 30 metres or from nearest Council roadway (whichever is greater)				Yes	□ No □	
Residential Waste	□applicable					
Number of residential STOREYS? Number of residential DWELLING						
Number of residential STOREYS?		NL	ımber of resider	tial DWELLING	SS?	
Number of residential STOREYS?		Nu	umber of residen		ecycli	ng 🖥
Number of residential STOREYS? Weekly Generation (@ 120L per residential STOREYS)	tial dwelling)	Nu	1			ng 🖥
	3.		1	R	ecycli	ing I
Weekly Generation (@ 120L per residen	for every two u	nits)	Waste	R	ecycli	
Weekly Generation (@ 120L per resident Nominated storage bin size (1x240 L bin size	for every two u	nits) d up) TOTAL bir	Waste	R	ecycli	
Weekly Generation (@ 120L per resident Nominated storage bin size (1x240 L bin size	for every two u	nits) d up) TOTAL bir (waste	Waste 240L as to be stored	R L	ecycli	
Weekly Generation (@ 120L per resident Nominated storage bin size (1x240 L bin Number of bins required (divide generation)	for every two u by bin size, rounded (must provided manoeuvring	nits) d up) TOTAL bir (waste	Waste 240L 1s to be stored PLUS recycling) 1s, compactors (if us	R L	ecycli	HOL m

Site Address

				ı		
Residential waste storage is separated and secured from Commercial waste storage?				Yes	□ No	0
Total AREA of COMMERCIAL premises?						m²
Commercial Premises waste and recycling sto (If both systems used, tick both)	сомми	JNAL 🗖	Individual premises			
1. COMMERCIAL COMMUNAL STORAGE	1 COMMERCIAL COMMUNAL STORAGE					
Calculate using floor area of commercial premwaste generation at 'Guide 4' X number of but		Was	te	Recycling		g
Weekly Generation			ļL			L
Nominated storage bin size(s) (240 L maximum for Council Business Waste collection)	□ 240 L □ 660 L □ 1100 L □ 1100 L □ 1100 L		· -			
PM /		Other	L	☐ Other	OtherL	
Number of bins required (rounded up)		240 L 660 L 1100 L		240 L 660 L		
		Othe	erL		Other	L
	TOTAL hims	to be stored			240 L 660 L	
		PLUS recycling)			1100 L	
					Other _	L
Are BALERS, CRUSHERS or other reduction systems used for recycling?	Unsuitable for Council Bu storage area for recycling		250	nay alter	Yes 🗖	No 🗆
TOTAL AREA for COMMERCIAL WASTE SOURCE SEPARATION and STORAGE	(must provide space for lamanoeuvring space, & bu					m²
2. INDIVIDUAL COMMERCIAL PREMISES	STORAGE					
For any separate waste storage areas by individual and storage requirements as per the commun					ste gener	ation
TOTAL AREAS for COMMERCIAL WASTE SOURCE SEPARATION and STORAGE (must provide space for bins, compactors (if used), manoeuvring space, & bulky waste) (see Section 4 Clause 2.11)				m²		
Declaration Name of applicant (Please Print)						

Date_

Commercial Waste [applicable not applicable]



Signature of applicant

Guide 7: Waste Management Plan Checklist

A completed and signed copy of this checklist must accompany any Waste and Recycling Servicing Plan.

Applicant		
Contact details	Email:	Phone:
DA number		
Site location		

Waste Management Plans

1	Has a completed DEMOLITION Waste Plan been provided (if Demolition works needed)?	Yes or n/a	□ No □
2	Has a completed CONSTRUCTION Waste Plan been provided?	Yes □	No 🗆
3	Has a completed Waste and Recycling SERVICING Plan been provided?	Yes □	No 🗆
4	Does the SERVICING Plan fully comply with the Waste and Recycling Design and Management Standards for New Developments?	Yes □	No 🗆

Storage of Waste & Recycling

5	Is there sufficient space allocated within each dwelling for two day's waste and recycling?	Yes 🗖	No 🗆
6	Is there a Waste Source Separation and Storage Area provided?	Yes 🗆	No 🗆
7	If units, has provision been made for 1 x 240L garbage bin and 1 x 240L recycling bin for every two units?	Yes 🗖	No 🗆
8	Is there sufficient area in the Storage Area for the garbage and recycle bins, waste equipment, PLUS manoeuvring space, as well as Bulky waste?	Yes 🗆	No 🗆
9	Are any access openings or doors to the Storage Area a minimum of 1200mm wide (or provide clearance for the dimensions of the largest capacity bin used)?	Yes 🗖	No 🗖
10	Has adequate ventilation to AS 1668-2012 been provided for the Storage Area ?	Yes 🗖	No 🗆
11	Has lighting been provided for the Storage Area (automatic lighting if accessed by residents)?	Yes 🗖	No 🗆
12	Has hot and cold water with hose cock been provided for the Storage Area? Is the area graded and drained to a Sydney Water approved sewer drain?	Yes 🗖	No 🗖
13	Has standard signage for use of the waste and recycling services been included?	Yes 🗆	No 🗆
14	If compactor included, is the area where this is operated secured by keyed lock for safety?	Yes or n/a	□ No □
15	Has provision been made for a composting/worm farm area?	Yes 🗆	No 🗆
16	If an EXTERNAL bin bay, is it roofed ?(when development greater than 12 dwellings)	Yes or n/a	□ No □

Storage Variation

4-	Does the area calculated under the design standards for a Waste Source Separation and Storage	V -	No 🗆
17	area match the Storage Area provided on the plan?	Yes 🗖	No L

Circulation of Waste & Recycling

18	Is there a garbage chute system included? If NO, proceed to question 19	Yes 🗖	No 🗆
18a	Is a chute room provided on each storey above the Waste Source Separation & Storage Area?	Yes 🗆	No 🗆
18b	Is there sufficient space allocated for recycling in the chute room(s)? (1 x 240 L recycling bin for every 4 dwellings on the storey)	Yes 🗆	No 🗆
18c	Has standard signage been included for each chute room?	Yes 🗖	No 🗆
18d	If included, is the area where the chute discharges secured by keyed lock for safety?	Yes 🗖	No 🗆

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	Separation and Storage Area:					
☐ Residents drop off directly ☐ Interim disposal points (caretaker circulates bins)						
	Other (describe)					
20	What is the maximum distance from any dwelling entrance to the garbage disposal point (whether disposal is to a Waste Storage Area or chute)?					
21	Is the access pathway from the Waste Source Separation & Storage Area to the Collection Point a minimum 1200mm wall-to-wall, with a gradient no greater than 1:12, and free of steps and obstructions? Yes No					
22		re included in the design, a Waste Caretaker is to be engaged to ing systems on site. Will a Waste Caretaker be engaged?	Yes 🗖	No 🗖		
Colle	ection of Wast	te				
23	Select the proposed LOCA	TION of the Collection Point? (Please complete relevant sub-question	ıs)			
□ KERB	CIDE	What is the available kerbside frontage for presenting bins? (exclude vehicle access ways and obstructions)		metres		
L KEKB	SIDE	Is this sufficient for standard presentation of the number of bins? (see <i>Guide 1</i>)	Yes 🗖	No 🗖		
	RIOR TO BUILDING or	Are clearances and pavements sufficient for Council Standard Services vehicle? (see <i>Guide 1</i>)	Yes 🗖	No 🗖		
DEVELO	PMENT SITE	Have you prepared a Standard Indemnity?	Yes 🗖	No 🗆		
_		Is the room provided with a Council-approved key system?	Yes 🗖	No 🗖		
STREE	ET-LEVEL HOLDING ROOM	Is the access path to where the collection vehicle will stand free of obstructions?	Yes 🗖	No 🗆		
24	What is the maximum dis street frontage?	tance from the garbage/recycling room to the collection point or		metres		
25	Does this distance comply with maximum movement distances for the bin sizes used at the development? (see Section 2 Clause 4.5)			No 🗆		
26	Is street access to the designated Collection Point suitable for Council Standard Services vehicles confirmed on plan? Yes □ No □					
Mixe	Mixed Residential/Commercial					
27	Are the residential and commercial waste areas provided with separated and secured Waste Source Separation and Storage Areas? No No No No No No No No					
28	If more than 500m ² of ret COMMERCIAL bulky wast	ail, or 2000m ² of offices, has a minimum 4 m ² separate storage for e been allocated?	Yes or n/a] No 🗆		
29		to retail/commercial premises been allocated for interim storage tems such as crates, pallets, kegs and similar items?	Yes 🗖	No 🗆		

If no garbage chute is installed, please describe how waste and recycling are to be disposed to the Waste Source

If you have answered 'No' to any of the above questions, except the response with a greyed-out box, please provide an additional document with details of any alternative solutions proposed for Waste and Recycling Servicing.

Declaration		
Name of applicant (Please Print)		
Signature of applicant	Date	



General Provisions

Purpose

This Tree Management Development Control Plan has been made in accordance with the *State Environmental Planning Policy* (*Biodiversity and Conservation*) 2021 and prescribes the vegetation to which the SEPP applies and the applicable consent process.

The vegetation described in this Development Control Plan is vegetation to which Chapter 1 and 2 of the vegetation SEPP applies as amended from time to time.

Council has adopted canopy targets for the Inner West Local Government Area (LGA) based on the zoning of the land. Those canopy targets are derived from the Premiers Priorities 2017- Greening our city and Greening public places, Greater Sydney Commission - District Plans and Greener Places - Urban Tree Canopy Guide and are as follows:

Zone	Canopy Target
R1 General Residential	40%
R2 Low Density Residential	
R3 Medium Density Residential	25%
R4 High Density Residential	
B1 Neighbourhood Centre 25%	
B2 Local Centre	
B4 Mixed Use 15%	
B5 Business Development	
B6 Enterprise Corridor	
B7 Business Park	
IN1 General Industrial	25%
IN2 Light Industrial	

Objectives

The following objectives guide the protection and management of trees within the Inner West LGA:

- O1 To establish a coordinated approach to the assessment and management of trees.
- O2 To consider the safety of the community, private property, and public infrastructure assets.
- O3 To protect trees within and adjacent to development sites and to ensure that all new development provides an opportunity for existing and new trees to grow.
- O4 To manage the urban landscape so trees continue to make a significant contribution to its quality, character, and amenity.
- O5 To maintain and enhance the amenity of the Inner West Local Government Area through the preservation of appropriate trees and vegetation.
- O6 Ensure private property owners' plant new trees and replace trees in order to meet Council's tree canopy targets.

Outline of the Processes for Tree Removal or Pruning

- No consent is required for some works (see Control C6 and C7)
- Development Consent is required for pruning more than 10% of the canopy or removal of trees on properties with heritage significance (see Control C4)
- A Tree Works Permit is required for all other works (see Control C5)

Controls

- C1 Council consent is required before any clearing of vegetation (removal or pruning of prescribed *tree*/s) is carried out unless the work complies with C6 of this DCP.
- C2 For the purposes of this DCP, a prescribed tree is:
 - i. any tree with a height equal to or greater than 4 metres above ground level (existing) or
 - ii. any tree that is under 4 metres in height that has a trunk diameter of more than 150mm at *Diameter at Breast Height (DBH at* 1.4m) or
 - iii. any tree with a canopy spread equal to or greater than 2 metres or any palm tree or tree fern with a clean stem length equal to or greater than 4 metres above ground level (existing).
- C3 Applications for consent to remove or prune a tree/s will be assessed and determined via a:
 - i. Development Application (as set out in Control C4) or
 - ii. Tree Works Permit Application (as set out in Control C5).
- C4 Submit a development application for pruning of more than 10% of a tree/s canopy or removal of a prescribed tree/s located on a property which is a heritage item, forms part of a heritage item, is listed in the heritage trees list, is located in a heritage conservation area or where the tree forms part of an Aboriginal object or is located within an Aboriginal place of heritage significance.
- C5 Submit a Tree Works Permit for the following activities:
 - i. Prune a prescribed tree by more than 10% of the canopy;
 - ii. Tree root pruning;
- iii. Remove or prune a prescribed tree except where Control C4 requires a development application to be submitted or Control C6 where tree works can occur without prior approval.
 - Note: A Tree Works Permit may be submitted to remove a *prescribed tree* to facilitate a Complying Development Certificate.
- C6 The following works do not require Council consent (unless the criteria outlined in Control C7 are relevant to the subject tree), provided the work is carried out in accordance with AS 4373 -2007 Pruning of amenity trees and the Safe Work Australia Code of Practice Guide to Managing Risks of Tree Trimming and Removal Work 2016:
 - C6.1 Canopy lifting to 2.5 metres above ground level;
 - C6.2 Pruning of branches with a diameter of less than 100mm to a maximum of 10% of the canopy annually;
 - C6.3 The pruning of deadwood that does not have hollows or provide habitat for native fauna;
 - C6.4 Works to trees owned by, or under the care, control and management of Inner West Council and undertaken by delegated Council staff or their authorised contractors;
 - Note: Controls C6.1 to C6.4 apply to all properties within Inner West whereas Controls C6.5 and C6.6 do not apply to trees listed in the heritage trees list, or located on a property that is a heritage item, or located in a heritage conservation area.
 - C6.5 Removal of a tree, including a prescribed tree, located within 1 metre of the wall of a residential dwelling located on the same lot. The 1 metre distance is measured from the centre of the tree at breast height (DBH 1.4m) to the wall of the residential dwelling;
 - C6.6 The trees on the exempt species list below are not deemed to be prescribed trees unless such trees are located in a Heritage Conservation Area or are listed as part of a Heritage Item within the Council's Local Environmental Plan.

Species Name	Common Name
Acer negundo	Box Elder
Ailanthus altissima	Tree of Heaven
Alnus jorrullensis	Evergreen Alder
Bambusa spp. Phyllostachys spp.	Bamboo species
Cotoneaster spp.	Cotoneaster
Erythrina x sykesii	Coral Tree
Gleditsia triacanthos	Honey Locust
Lagunaria patersonia	Norfolk Island Hibiscus
Ligustrum lucidum	Broad Leaved Privet
Ligustrum sinense	Small Leaved Privet
Nerium oleander	Oleander
Robinia pseudoacacia	False Acacia/Black Locust
Salix spp.	Willow
Schefflera actinophylla	Umbrella Tree
Syagrus romanzoffianum	Cocos Palm
Tamarix aphylla	Athel Tree
Toxicodendron succedaneum	Rhus Tree
Department of Primary Industry Priority Weeds List of the Greater Sydney (Inner West)	see the <u>NSW Weedwise website</u> for list

C7 The exemptions in Control C6 do not apply to:

- i. Tree/s that are required to be retained by a condition of development consent;
- ii. Tree/s required to be planted as a condition of development consent or as a compensatory planting condition in a permit;
- Threatened species or land that contains native vegetation (including dead trees) which is habitat for threatened species, populations or ecological communities listed in Schedule 1 and 2 of the Biodiversity Conservation Act 2016 and other protected matters listed under the Commonwealth Environment Protection Biodiversity Conservation Act 1999;
- iv. Land that is a declared area of outstanding biodiversity value under the Biodiversity Conservation Act 2016;
- v. Land declared critical habitat under Part 7A of the Fisheries Management Act 1994;
- vi. Any native prescribed tree located within a wildlife corridor as shown on the Biodiversity Map in Part 2.13 Biodiversity of Marrickville DCP 2011 Appendix 3;
- vii. Pruning more than 10% of the canopy, or proposed removal of a prescribed tree that is a heritage item, forms part of a heritage item, or is listed in the heritage trees list, or located in a heritage conservation area.

Neighbouring trees

Speak to your neighbour to get consent before you prune their trees.

Pruning consistent with AS4373—Pruning of amenity trees and Control C1 of this DCP does not need Council consent.

Council does not mediate works to neighbouring trees.

Application Assessment Criteria

Note: Section 4.15 of the *Environmental Planning and Assessment Act 1979* outlines the matters for consideration when determining a development application. These matters include but are not limited to the matters outlined in C8 below.

- C8 The following matters will be considered when determining an application to remove or prune a prescribed tree:
 - i. Danger/Safety Risk Assessment

Danger is assessed based on a number of factors including;

- The potential/likelihood of a tree or tree part to fail
- · A history of previous branch failure
- The size of the defective part of the tree
- The use and occupancy of the area that may be struck by a defective part

A high risk of danger will be given significant weight when determining an application, noting that dangerous tree assessments are be based on the safety risk posed by a tree in normal weather conditions;

ii. Property Damage

The likelihood of the tree causing property damage. This includes trees renowned for having extensive root systems, which cause damage to footings of houses or, trees that may cause blockages to domestic sewer and drainage lines;

iii. Condition / health of the tree

The structural integrity of the tree will be assessed for any visible signs of decay or deterioration; this is usually indicated by a lack of foliage, dead branches evident in the canopy, presence of fungal fruiting bodies, excessive sap being exuded from the trunk and/or evidence of insect attack, particularly borer damage;

iv. Tree species

The likelihood of branch failure / limb fall prevalent for the species. The species' susceptibility to environmental changes, which may affect the longevity of the species' survival in its current location. This would include changes in soil level, excessive root damage caused during construction works, changes in water availability, competition for other vegetation (particularly climbing vines), and compaction of soil (particularly in high usage areas such as car parking areas);

v. Significance within the Landscape and/or Streetscape

An assessment of the visual environment and the significance the specimen plays within the streetscape;

vi. Termites

Each case of termite infestation will be investigated on its merit;

vii. Other criteria

Other criteria would include if the tree is an endangered or rare species, is of historical significance or, the link the tree provides between bushland and reserves (the connectivity of habitat).

Trees that are considered an imminent risk to human life or property

If a tree on your property is suspected to be an imminent risk to human life or property you must first contact Council detailing why the tree is considered to be a risk based on industry risk assessment methodologies – Tree Risk Assessment Qualification (TRAQ) or Quantified Tree Risk Assessment (QTRA). Evidence must be provided to Council in writing by photographic evidence and written evidence by a Qualified Arborist (AQF5)

Council will issue expedited consent in writing to allow removal of an imminently dangerous tree under the provisions of Biodiversity and conservation SEPP 2021. If Council is not satisfied that the tree is a risk to human life or property you will be advised to lodge the relevant application.

- C9 Tree removal is the final option where the impacts can be directly attributed to a tree and all other avenues to rectify the impact have been investigated. The following criteria are generally not considered justification for tree removal or pruning:
 - i. The dropping of leaves, flowers, fruit, sap, seeds or small elements of deadwood (or other natural processes);
 - ii. Insect/animal nuisance;
- iii. Providing solar access for renewable energy system infrastructure (i.e. solar panels, solar hot water systems, wind turbines or data receivers);
- iv. Increase general natural light or reduce shade created by a tree;
- v. Enhance view corridors;
- vi. Minor lifting of driveways, paths and paving or minor damage to outbuildings, garden structures, walls or landscape structures;
- vii. Damage to underground services (such as sewer lines, water services) where there are feasible alternatives to mitigate or solve problems and retain the tree. Alternatives to tree removal include replacement of damaged pipes, relining, relocation or encasement of pipes;
- viii. Pruning to reduce height, except pruning to reduce the height of hedge(s);
- ix. To facilitate the construction of structures (such as a driveway, swimming pool, or dwelling) in the event other suitable locations are available (see Controls C13-C17 for controls relating to trees on development sites).

Procedural review

A request for procedural review of the process undertaken must be lodged within 28 days of the determination date (as per the *Local Government Act* 1993).

Tree Permits

An applicant for a tree permit may appeal to the NSW Land and Environment Court against a refusal by Council to grant the permit. The appeal must be made within three months of the date on the determination.

Development Applications

An applicant for a development application may seek an appeal in the following ways:

- <u>Section 8.7</u> of the Environmental Planning and Assessment Act 1979 (the Act) gives you the right to
 appeal to the Land and Environment Court in accordance with the timeframes set out in Section 8.10
 of the Act.
- Section 8.2 of the Environmental Planning and Assessment Act 1979 provides that the applicant may request Council to review the determination. Section 8.2 does not apply to, designated development, a determination made by Council under Section 4.2 in respect of Crown applications, or a decision that has already been the subject of a Section 8.2 review.

Tree Planting Requirements

- C10 A replacement tree/s must be planted to replace any prescribed tree approved for removal. This will enable Council to effectively retain and maintain the urban forest canopy across the Inner West. Replacement trees are to be located on the same site as the tree removal, as determined by Council.
 - Note: there may be circumstances when Council determines that there is no suitable location on site. In such circumstances a financial contribution can be paid to support public tree planting in lieu of on-site replacement planting. Fees are set out in Council's fees and charges schedule.
- C11 Replacement tree/s must be maintained in a healthy and vigorous condition until they meet the requirements of a prescribed tree and are protected in accordance with this DCP Chapter (Control C2).



Note: A person must not fail to plant, protect or care for a replacement tree which is required to be established as a condition of consent issued by Council.

C12 The following minimum tree planting requirements are required for any sites:

Property Size:	Number of trees to be planted	
Less than 300m ²	minimum of one (1) tree.	
exceed 300m ²	minimum of two (2) trees	

Tree container size and mature tree height will be determined by Council and will generally be based on available land space and land zoning canopy targets, a preference is placed on advanced container sizes. The tree(s) must not be planted within 1 metre of a proposed building, swimming pool or property boundary.

Trees on Development Sites

- C13 All development proposals must be designed to maintain or improve the urban forest values of the site by minimising the impact on tree/s and planting replacement tree/s for tree/s that are proposed for removal. This requirement applies to Council owned trees as well as trees on private or other property and adjoining land.
- C14 The design of buildings or alterations and additions to buildings must provide sufficient distance from existing trees (whether on the site or on adjoining land), in accordance with AS4970-Protection of trees on development sites (AS4970), to ensure the tree/s' practical retention.
- C15 Trees on public land must be protected during demolition, excavation, the erection of hoarding and construction works as set out in Section 4 of AS4970. Council will require the payment of a security deposit in relation to a tree on public land if:
 - Development is proposed within the Tree Protection Zone of that tree or
 - Council determines that the development may adversely affect the roots or crown of the tree
- C16 Developments in zones other than R1 General Residential or R2 Low Density Residential must allow for any existing overhead electrical lines to be converted into aerial bundled cabling or redirected underground to reduce the impact upon surrounding trees.
- C17 New awnings that encroach into public land must be designed to accommodate existing and proposed street trees.

Definitions

In this Part:

Amenity a desirable or useful feature, or facility of a building or place.

Clear Vegetation includes

- a) cut down, fell, uproot, kill, poison, ringbark, burn or otherwise destroy the vegetation, or
- b) lop or otherwise remove a substantial part of the vegetation (including roots).

Dead means no green cambium (tissue) and no green foliage and that the tree is no longer capable of performing any living functions.

Diameter at Breast Height (DBH). The diameter of a tree at 1.4 metres above the natural ground level.

Dying means a tree in a state of decline where it is unlikely to recover. Generally, this may be represented by only \leq 20% live canopy.

Foreseeable future means the next 12 months.

Imminently dangerous includes but is not restricted to obvious instability of the root system, evidence of soil heave or cracking, loss of structural roots, root decay, storm damage and structural defects that are imminently hazardous, such as splitting branches. Evidence must be provided to Council in writing by photographic evidence or written evidence by a Qualified Arborist (AQF5).

Risk to human life or property is where a tree presents an unacceptable level of risk to life or property as per an industry risk assessment methodologies -TRAQ or QTRA. Evidence must be provided to Council in writing by photographic evidence and written evidence by a Qualified Arborist (AQF5).

Tree means any perennial plant with at least one self-supporting woody, fibrous stem, whether native or exotic.

Priority Weed Species for the Greater Sydney Region means those species listed by NSW Department of Primary Industries on their website for the Inner West Council local government area. View at https://weeds.dpi.nsw.gov.au/WeedBiosecurities?AreaId=72

Project Arborist means the arborist appointed to monitor the vitality and condition, throughout the construction process, of trees being retained on the site (and any trees on adjoining private land and trees on public land where the development encroaches into the TPZ of those trees).

Residential Dwellings are buildings approved and defined as:

- dwelling house means a building containing only one dwelling.
- dual occupancy means a dual occupancy (attached) or a dual occupancy (detached).
- *multi dwelling housing* means 3 or more dwellings (whether attached or detached) on one lot of land, each with access at ground level, but does not include a residential flat building.
- **residential flat building** means a building containing 3 or more dwellings, but does not include an attached dwelling, co-living housing or multi dwelling housing.

Note: this apply to the residential dwellings only not ancillary development such as detached garages, carports, swimming pools etc.

Tree Protection Zone (TPZ) means the area around a tree required to protect the tree's crown and roots during the construction process. The tree protection zone must be calculated in accordance with AS4970.

Urban Forest means all trees and vegetation (both naturally occurring and planted) that occur within or near urban areas.





Application

This Guideline applies to the following:

 Development within Haberfield and Summer Hill to the extent they are within Figure 1 of this Part

The GreenWay is an open space corridor in Sydney's Inner West that links Cooks River to Iron Cove. The corridor currently facilitates the new light rail network and public space along the Rozelle Goods Line. This Part is for development adjacent to the GreenWay and provides design solutions that aim to positively contribute to the GreenWay.

Using this Guideline

In using this Guideline reference should also be made to **Section 1** - **Preliminary** at the front of this DCP.

The Guideline is performance based. In this role, it is intended to provide both a level of certainty for applicants, Council and the community while also enabling consideration of high quality, innovative design. This is appropriate given the complexity of the The LGA urban environment, it is not possible or desirable in all instances for council to specify quantitative, pre-determined criteria that development must achieve. Rather, in such setting an appropriate design emerges from a well-considered site analysis that explores and responds to the characteristic of the site, adjoining properties, the streetscape and neighbourhood, as well as putting in place adequate measures to mitigate any potential negative impacts.

The Guideline comprises the Purpose, Performance Criteria and Design Solutions. Alternative Solutions to the Design Solution may also be proposed by an applicant.

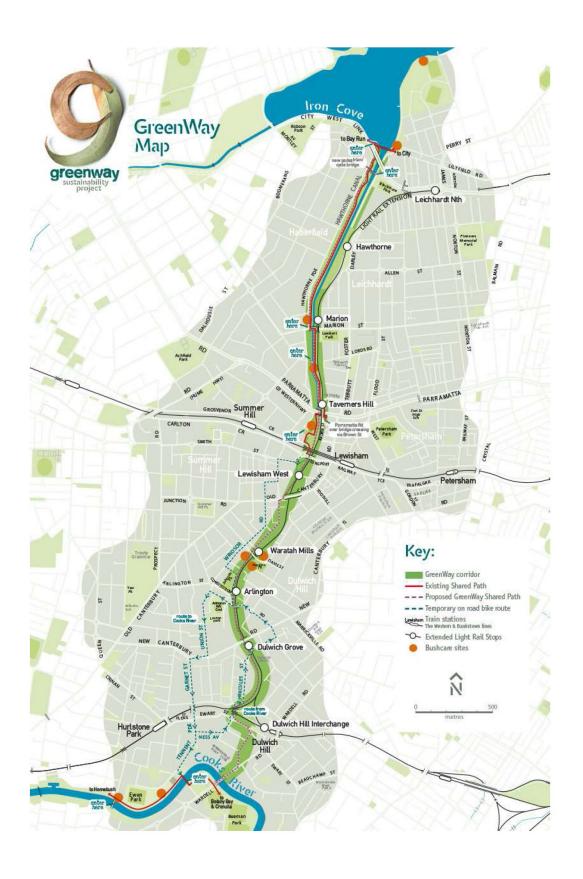
The Purpose and Performance Criteria identify the performance outcomes that must be achieved for council to consider granting development consent to a development application. Council will not approve a development application that cannot meet all parts of the Purpose or all Performance Criteria, where

Design Solutions provide a guide for achieving the Performance Criteria, and by association, the Purpose

Through the development application process, an applicant may propose an Alternative Solution to the Design Solution. Council will consider the alternative solutions against the Performance Criteria and Purpose. If sufficient justification exists, largely informed by a site analysis and argued against sound urban planning and design grounds, council may consider accepting an Alternative Solution to the Design Solution.

Purpose

 To provide controls for sites or developments within Ashfield that have an interface with parks and public open space along the Hawthorne Canal route known as the GreenWay





Performance Criteria and Design Solutions

Perform	nance Criteria	Design Solution
Building	g Interface	
PC1.	To ensure future development adjacent to the GreenWay addresses the open space corridor. Increase outlook opportunities and amenity for residents adjoining the GreenWay corridor.	DS1.1 Future development adjacent to the GreenWay is to be designed to have a building interface that addresses the GreenWay.
Solar A	ccess	
PC2.	To minimise potential loss of solar access and protect the amenity along the GreenWay corridor.	DS2.1 The configuration of development adjacent to the Greenway Corridor must unreasonably not reduce the existing level of solar access to the GreenWay corridor.
Spaces	Adjoining the Greenway	
PC3.	Spaces Adjoining the Greenway will:	DS3.1 Development must contribute to the existing open space corridor of the GreenWay, including its visual setting
Safety		
PC4.	 To ensure the use of passive surveillance to increase safety measures along the Greenway. To maximise pedestrian safety of users of the GreenWay. 	DS4.1 Building Development facing the GreenWay corridor and pedestrian and cycle linkages to the GreenWay must have windows positioned along that frontage to ensure that surveillance of the public domain occurs.
Access		
PC5.	 To enhance safe pedestrian and cycle access into the GreenWay corridor. To enhance active transport linkages throughout the GreenWay corridor. To enhance appropriate wayfinding measures are in place. 	DS5.1 Council will take the following into consideration for public land within its control • Pedestrian and cycle access points to the GreenWay are to be upgraded with improvements to enhance accessibility. • Provide suitable bike rack stations nearby existing light rail stations. • Pedestrian and access points and pathway are to be well lit to improve safety of the pathway.
Ecologi	cal	
PC6.	 To restore the natural environment along the GreenWay Corridor. To ensure the protection of the natural flora and fauna. To increase the natural habitat for the range of existing natural fauna within the GreenWay Corridor. To minimise the disruption of existing natural environment along the GreenWay Corridor through. 	DS6.1 Council will take this into consideration for public land within its control

Performance Criteria		Design Solution						
Water Sensitive Urban Design								
PC7.	 To integrate Water Sensitive Urban Design elements along the GreenWay. To integrate water systems into the public domain in an aesthetically pleasing way. To enhance the water quality discharged into the Hawthorne Canal. 	DS7.1 Council will take this into consideration for public land within its control						
Works	on public land or publicly accessible land							
PC8.	To ensure works provides high quality pedestrian environments and linkages.	DS8.1 Works on public land or publicly accessible land within privately owned sites are to take relevant Council polices for the Greenway into consideration						