Lake Macquarie

LAKE MACQUARIE CITY

Development Control Guidelines

Operational Waste Management – for Multiple Dwelling Developments

3 Operational Waste Management – for Multiple Dwelling Developments

The multiple dwelling developments section covers:

- attached dwellings;
- dual occupancies;
- dwelling houses in rural and environmental zones (for group homes and attached dual occupancies);
- foreshore and waterway development (multiple dwellings);
- multi-dwelling housing;
- residential flat buildings;
- secondary dwellings;
- housing on small and narrow lots (multiple dwellings);
- boarding houses and hostels;
- group homes;
- short-term rental accommodation;
- social housing; and
- seniors living developments.

See Section 2 for single dwelling houses and home business.

See Section 4 for commercial and retail components of a mixed-use development, most types of businesses, offices, retail, tourist accommodation, aged care facilities, child care centres, bed and breakfasts, caravan parks, entertainment, healthcare, service stations and signage.

3.1 Operational Waste Management Plan – multiple dwelling developments

Applicants must complete and submit an Operational Waste Management Plan (WMP) with their Development Application that confirms the development's compliance with the controls and guidance to meet operational controls that are relevant to each zone and land use described in the DCP and WMG.

3.1.1 What needs to be included in the operational waste management plan

The WMP identifies the types of waste that the development will generate and advises Council how this waste will be managed from its source through to its disposal at lawful reuse, recycling or landfill facilities.

The following documentation forms the WMP that Council will review to determine the ongoing waste management impacts of a proposed development:

1. completed Operational WMP checklist that is relevant to the proposed development type;
2. completed Operational WMP form;
3. design and/or landscape floor plan drawings (drawn to scale) showing:
    - all bins, facilities and areas to be used for on-site waste storage and collection;
    - features of waste carting routes including door/gate widths, no steps, gradients and distances between waste storage and collection points;

    where waste collection will take place on site, drawings showing:

    - access roads/driveways, vehicle turning circles, pavement strength, collections points free from obstructions beside or above where bins will be emptied; and
4. an updated copy of the waste management system information guide that will be provided to owners, occupants and property managers.

3.1.2 How to prepare the operational waste management plan

Sections 3.1.3 – 3.1.6 provides an Operational WMP checklist for each type of multiple dwelling development covered in Parts 2-7 and 9 of the DCP and Section 4 of the WMG. Choose the checklist that is relevant to your type of development and complete it as thoroughly as possible.

Section 3.2.7 provides the WMP form to use for multiple dwelling developments. Complete it as thoroughly as possible.

The WMP checklists and WMP form can be modified to include additional information if necessary.

Applicants must prepare design and/or landscape drawings that confirm the development's compliance with the controls and guidance to meet operational controls in the DCP and WMG, as prompted by the Operational Waste Management checklists and WMP form.

After designing the waste management system, prepare a summary document to provide owners, property managers and occupants with an explanation on how to use the system to deliver optimal waste management outcomes. Topics to cover include proposed numbers and sizes of bins, waste storage locations and rules, collection frequencies, bin carting responsibilities, collection point locations and whether Council or a private waste collection provider will service the development.

Compile all of the above documentation into one Waste Management Plan PDF file (other than the Landscape and Floor Plans which can be separate) and lodge it as an attachment to your Development Application.

Demolition and Construction waste management plans are required in addition to the Operational WMP (see Sections 8.1 and 9.1 for more information on preparing these WMPs). Where approval for all stages of a development proposal will be sought at the same time, then all WMPs should be collated into one comprehensive WMP document and lodged as an attachment to the Development Application.

Tips for Preparing the Operational Waste Management Plan

1. List and estimate waste types and volumes (see sections 3.3.1 – 3.3.3 for help);
2. Design and identify ways to avoid, reuse and recycle wastes (see section 3.3.6 for help):
3. Identify and list:
    a. waste management equipment, bin sizes, numbers of bins, collection frequencies and waste collection provider(s) that can provide the above materials and services (see sections 3.3.4 – 3.3.9 for help); and
    b. waste destinations, recyclers, composters and landfills (see the Lake Macquarie Recycling Directory at https://www.lakemac.com.au/waste/other-household-waste for help).
4. Design:
    a. waste storage areas (see sections 3.3.10 – 3.3.14 for help);
    b. bin collection points, if waste collection is not direct from the storage area (see sections 3.3.15 – 3.3.19 for help);
    c. routes between waste storage and collection points (see section 3.3.20 for help);
    d. routes between units and waste storage areas (see section 3.3.12 – 3.3.14 for help); and
    e. 1 - 2 days' waste storage in units (see section 3.3.10 – 3.3.12 for help).
5. Collate waste management information to provide to owners, property management and occupants(see section 3.3.21 for help).

3.1.3 Checklist for typical residential multiple dwelling developments

Use the following waste management checklist for most residential multiple dwelling developments. See sections 3.2 and 3.2.1 – 3.2.3 for more information.

Do Not Use this Checklist if the proposed development is a:

- single dwelling house (use the checklist in Section 2.2 instead);
- home business or home industry located in a multiple dwelling (residential) development (use the checklist in Section 2.2 instead);
- commercial or retail development (see WMG Section 4 and the checklists in section 4.2 instead);
- industrial development (see WMG Section 5 and the checklist in section 5.2 instead); and
- one of the following specific land use developments with additional controls under Part 9 of the DCP and Section 3 of the WMG (see the introduction to WMG section 3.2 and sections 3.2.4 – 3.2.16 for important information about these developments):

• Attached dwellings	• Residential flat buildings	• Group homes
• Multi-dwelling housing	• Secondary dwellings	• Short-term rental accommodation
• Dual occupancy	• Housing on small and narrow lots	• Social housing
• Foreshore and waterway development	• Boarding houses and hostels	• Seniors living developments
• Dwelling houses in Rural and Environmental zones		

Checklist – Operational Waste Management for Multiple Dwelling Developments

Summary of Multiple Dwelling Developments Application

Site Address and Lot/Plan(s):

Development application is for (fill in figures for all applicable works): __ small lot house __ 1 bedroom dwelling ____ 2 bedroom dwelling ____ 3 bedroom dwelling ____ 4+ bedroom dwelling ____ garage/shed(s) ____ carport/veranda(s) ____ m^3 trees ____ mixed use (businesses proposed are:_____ _____ Other:_____

Applicant Information

Site Address and Lot/Plan(s):

Applicant's Name:

Applicant's Address:

Applicant's Phone / Mobile:

Applicant's Email:

Applicant's Authorisation:

System for diverting operational waste to reuse, recycling or composting is maximised.

Plans/drawings that show operational waste storage areas, waste collection points and waste collection vehicle access are included in this application.

The checklist is completed accurately and in full.

The details provided on this form represent the applicant's genuine intentions for managing wastes related specifically to this project.

Signature of Applicant or Authorised Agent: **Date:**

Waste Types	YES	NOT YET	NO	N/A
All types of wastes that will be generated are listed.				
The waste management plan provides for maximum resource recovery.				
Bulky waste (e.g. furniture, whitegoods, bulky cardboard) can be effectively managed.				

Avoidance, Reuse and Recycling				
Opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins are maximised.				
There is flexibility to expand or reconfigure waste separation systems, so that owners and occupants have can access a range of waste services.				

Internal Waste Storage Areas	YES	NOT YET	NO	N/A
There is waste storage cupboard space in or near each kitchen area that is sufficiently sized to hold two days' volume of waste in five separated containers sized between two and twenty litres for recyclables, food waste, soft plastic, problem wastes (e.g. batteries) and residual garbage.				

Route from Dwelling to Waste Storage Areas	YES	NOT YET	NO	N/A
The scaled plans show waste carting route(s), distances and gradients from buildings to waste storage area(s).				
There is unobstructed, safe access to move waste between source points (such as dwellings, businesses, buildings and public area bins) and the waste storage area(s).				
Safe, lit access from the dwelling (and home business/industry exit if applicable) to the waste storage area is less than: a. 75 metres in length for residences; or b. 50 metres in length for adaptable housing and seniors' developments is wheelchair accessible.				
Where wheeled bins up to and including 360 litres in size are used, the bin carting gradient is not steeper than 1:14. Where bins 660 litres and greater are used, carting gradients do not exceed 1:30.				

External Waste Storage Areas	YES	NOT YET	NO	N/A
The attached site plans show waste storage area(s) with all bins drawn to scale.				
The waste storage area(s) are screened from the main living spaces of dwellings, the public road and views from neighbours.				
The waste storage area(s) are located away from doors, windows and air intakes of all dwellings and businesses				
The waste storage area(s) are capable of storing sufficient amounts of garbage, recycling and food/garden organics waste bins to cater for the dwellings.				
For all adaptable housing, the waste storage area(s) are readily accessible to all occupants including those in wheelchairs in accordance with the Lake Macquarie City Council Non-Discriminatory Access Guidelines.				
The waste storage area(s) are secure from non-occupants and designed for safety in accordance with the Lake Macquarie City Council *Crime Prevention Through Environmental Design Guideline*.				
Where there is a door or gate for bin removal from the waste storage area(s), the door or gate is at least 900mm wide where bins up to 360 litres in size are used and at least 1600mm wide where bins up to 1100 litres in size are used.				
Where a door or gate opens inwards, no bins are stored within the arc of the swinging door. Where a door or gate opens outwards, the gate does not block the pathway for moving bins out to the collection point.				
Commercial and residential waste is stored in separated and secured areas.				

External Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
Bin enclosures are in character with the land use zone characteristics and blend with buildings and landscaping on the property in terms of appearance, materials, bulk and scale, location and orientation.				
Bin enclosures contain measures to prevent entry by vermin.				
Shared bin enclosures have lighting, water supply and bin washing facilities that drain to the sewer;				
There is sufficient storage space and a disposal plan for bulk waste, like furniture.				

Route from Waste Storage Areas to Waste Collection Point(s)	YES	NOT YET	NO	N/A
The scaled plans show bin carting routes from waste storage to collection point.				
The bin carting routes from waste storage area to the waste collection point is unrestricted and contains no: steps, walls, fences without gates, narrow gates, vegetation, stepping-stones, loose aggregates, or other obstacles.				
There is unobstructed, safe access to move bins and bulk waste (such as furniture and bulky cardboard) between storage and collection points.				
The distance of the route from waste storage area(s) to bin collection point(s) is less than: a. 100 metres in length for commercial developments; b. 75 metres in length for residences; or c. 50 metres in length for adaptable housing and seniors' developments; *Note: This is not required for dwellings in Rural Zones (zones RU2, RU4, RU6).*				

Waste Collection Point(s)	YES	NOT YET	NO	N/A
The scaled plans show waste collection area with all bins drawn to scale. Bins are spaced with at least a 300mm gap between bins and 300mm either side.				
The waste collection location is unobstructed and sufficiently sized to enable all wastes generated to be collected from the property.				
Bins are collected from a reasonably flat kerbside location (so bins will not fall over when emptied).				
Bins placed out for collection will not obstruct traffic, driveways, driver site lines, on-street car parking, bus stops, footpaths or pedestrian right of way, water flow in gutters, drainage swales, access to letterboxes, nor access to and from garages including not overlapping with the swept paths of turning vehicles.				
No more than 40 bins up to 360 litres in size are placed out at any single kerbside location on collection day.				
Mobile garbage bins (MGBs) 360 litre size and smaller that will be placed in kerbside waste collection locations are spaced with at least 300mm gaps between bins.				

Waste Collection Vehicle Access	YES	NOT YET	NO	N/A
Kerbside waste collection points are unobstructed and efficiently accessible by waste collection vehicles. The collection point for bins is not blocked by on-street parking, driveways, street tree planting, roundabouts, parking bays, No Stopping zones, bus stops or utilities infrastructure (such as power poles or hydrants).				
Bin lifts are not obstructed by signs, sign posts, fencing, retaining walls, vegetation or other elements.				

Waste Management Information for Stakeholders	YES	NOT YET	NO	N/A
A waste system information guide will be provided to owners, occupants and property managers that contains: • the Operational Waste Management Plan; • site plan drawing showing the waste storage and collection locations; • information about any alternative waste service solutions used on the property (e.g. compost bins for gardens); and • the wording for inclusion in any tenancy agreements communicating occupants responsibilities for managing waste at the premises. •				

Operational Waste Management Plan Completion				
Comments regarding any deviation from the waste management controls and guidance:				
Waste Management Checklist and coversheet has been completed and signed				

3.1.4 Checklist for dual occupancy, secondary dwellings, housing on small and narrow lots, foreshore and waterway development

Use the following waste management checklist for dual occupancy, secondary dwellings, housing on small and narrow lots, foreshore and waterway development.

The general objectives and controls for the relevant land zone apply to these developments. In addition, specific land use controls under Part 9 of the DCP apply. Section 3 of the WMG sets out guidance that should be met.

For more information about the controls that apply to these types of developments, refer to WMG sections 3.2, 3.2.2, 3.2.3 or the DCP. For guidance, refer to the WMG section listed below:

- Dual occupancy (3.2.6)
- Secondary dwellings (3.2.10)
- Housing on small and narrow lots (3.2.11)
- Foreshore and waterway development (3.2.7)

If a discrepancy appears in the checklist between the controls provided in the checklist and the DCP, then the DCP prevails.

Checklist – Operational Waste Management for Multiple Dwelling Developments: Dual Occupancy Development, Secondary Dwellings, Small and Narrow Lots, Foreshore

Summary of Multiple Dwelling Developments Application

Site Address and Lot/Plan(s):

Development application is for (fill in figures for all applicable works): __ small lot house __ 1 bedroom dwelling

____ 2 bedroom dwelling ____ 3 bedroom dwelling ____ 4+ bedroom dwelling ____ garage/shed(s)

____ carport/veranda(s) ____ m^3 trees ____ mixed use (businesses proposed are:_____

_____ Other:_____

Applicant Information

Applicant's Name:

Applicant's Address:

Applicant's Phone / Mobile:

Applicant's Email:

Applicant's Authorisation:

System for diverting operational waste to reuse, recycling or composting is maximised.

Plans/drawings that show operational waste storage areas, waste collection points and waste collection vehicle access are included in this application.

The checklist is completed accurately and in full.

The details provided on this form represent the applicant's genuine intentions for managing wastes related specifically to this project.

Signature of Applicant or Authorised Agent: **Date:**

Waste Types	YES	NOT YET	NO	N/A
All types of wastes that will be generated are listed.				
The waste management plan provides for maximum resource recovery.				
Bulky waste (e.g. furniture, whitegoods, bulky cardboard) can be effectively managed.				

Avoidance, Reuse and Recycling	YES	NOT YET	NO	N/A
Opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins are maximised.				
There is flexibility to expand or reconfigure waste separation systems, so that owners and occupants have can access a range of waste services.				
For Foreshore and Waterway Developments only	**YES**	**NOT YET**	**NO**	**N/A**
Green waste, recycling and garbage will be collected separately for maximum resource recovery.				
Hazardous and liquid wastes will be properly managed to avoid polluting the waterway or foreshore.				
No boat shed has washing and/ or cooking facilities, habitable rooms, or entertaining areas/ facilities.				
No boat shed will store hazardous or liquid wastes.				

Waste Storage Areas	YES	NOT YET	NO	N/A
The attached site plans show waste storage area(s) with all bins drawn to scale.				
The waste storage area(s) are screened from the main living spaces of dwellings, the public road and views from neighbours.				
The waste storage area(s) are located away from doors, windows and air intakes of all dwellings and businesses				
The waste storage area(s) are capable of storing sufficient amounts of garbage, recycling and food/garden organics waste bins to cater for the dwellings.				
For all adaptable housing, the waste storage area(s) are readily accessible to all occupants including those in wheelchairs in accordance with the Lake Macquarie City Council Non-Discriminatory Access Guidelines.				
The waste storage area(s) are secure from non-occupants and designed for safety in accordance with the Lake Macquarie City Council *Crime Prevention Through Environmental Design Guideline*.				
Where there is a door or gate for bin removal from the waste storage area(s), the door or gate is at least 900mm wide where bins up to 360 litres in size are used and at least 1600mm wide where bins up to 1100 litres in size are used.				
Where a door or gate opens inwards, no bins are stored within the arc of the swinging door. Where a door or gate opens outwards, the gate does not block the pathway for moving bins out to the collection point.				
Commercial and residential waste is stored in separated and secured areas.				

Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
Bin enclosures are in character with the land use zone characteristics and blend with buildings and landscaping on the property in terms of appearance, materials, bulk and scale, location and orientation.				
Bin enclosures contain measures to prevent entry by vermin.				
Shared bin enclosures have lighting, water supply and bin washing facilities that drain to the sewer;				
There is sufficient storage space and a disposal plan for bulk waste, like furniture.				
There is waste storage cupboard space in or near each kitchen area that is sufficiently sized to hold two days' volume of waste in five separated containers sized between two and twenty litres for recyclables, food waste, soft plastic, problem wastes (e.g. batteries) and residual garbage.				
Secondary Dwelling only	**YES**	**NOT YET**	**NO**	**N/A**
The design provides non-discriminatory access to waste management services for both dwellings.				
Where principal private open space is not mandatory for the secondary dwelling (ones attached to or within the principal dwelling) and bins of the principal dwelling will be shared, they will be stored in a shared area that is accessible to both dwellings (measuring at least 1955mm x 1610mm or 2390mm x 1465mm).				
Where each dwelling will have its own set of 240 litre bins, adequate space for bin storage is provided and complies with the minimum waste storage area internal dimensions found in WMG section 3.2.10.				
Dual Occupancy Development only	**YES**	**NOT YET**	**NO**	**N/A**
Adequate space for bin storage is provided for the development and has been sized to comply with (or exceed) the minimum waste storage area internal dimensions (for bin configuration) in WMG section 3.2.6.				
Suitable shared space is available for dual properties to share a set of 240 litre bin (with preference given to developments providing enough bin storage space for each property to store their own set of 240 litre garbage and green/food waste bins and 360 litre recycling bin.				
Housing on Small and Narrow Lots only	**YES**	**NOT YET**	**NO**	**N/A**
Waste bin storage is separately accounted from the space allocated for principle private open space and landscaping.				
The waste storage space has a minimum internal dimension of either 1955mm x 1610mm or 2390mm x 1465mm to store one set of 240 litre recycling, food and garden waste and residual garbage bins in a way that can be accessed.				
Waste bin storage does not compromise visual and odour amenity for an occupant of the principle private open space.				
Waste bin storage has the bins in an area shaded at least from afternoon sun so as to minimise bin odour generation.				
Waste bin storage does not compromise visual amenity of views from windows or doors of the property or neighbours.				
Waste bin storage is set back behind the front building line, or suitably integrated visually to form part of the building line or landscaping.				

Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
Waste bin storage located so bin odours are least likely to enter airflow for doors and windows for this or adjacent properties.				
Foreshore and Waterway Developments only	**YES**	**NOT YET**	**NO**	**N/A**
No waste bins will be installed on jetties as any litter that spills from the bin may end up in the water.				
Where needed, waste bins will be installed on land and be located at least four metres inland from the furthest reach of waves in storms, major lake waterway flood events and tides at highest king tide.				

Route from Dwelling to External Waste Storage Areas	YES	NOT YET	NO	N/A
The scaled plans show waste carting route(s), distances and gradients from buildings to waste storage area(s).				
There is unobstructed, safe access to move waste between source points (such as dwellings, businesses, buildings and public area bins) and the waste storage area(s).				
Safe, lit access from the dwelling (and home business/industry exit if applicable) to the waste storage area is less than: a. 75 metres in length for residences; or b. 50 metres in length for adaptable housing and seniors' developments is wheelchair accessible.				
Where wheeled bins up to and including 360 litres in size are used, the bin carting gradient is not steeper than 1:14. Where bins 660 litres and greater are used, carting gradients do not exceed 1:30.				
Dual Occupancy Development only	**YES**	**NOT YET**	**NO**	**N/A**
All occupants have reasonable access to the waste storage area.				
Housing on Small and Narrow Lots only	**YES**	**NOT YET**	**NO**	**N/A**
Occupants have unobstructed access (without steps and on a gradient less than 1:14) to move the bins to the location where bins are placed out for collection. Access is provided either through a side gate, a garage, courtyard, or by another unobstructed pathway that does not require passing bins through the dwelling's interior.				

Route from Waste Storage Areas to Waste Collection Point(s)	YES	NOT YET	NO	N/A
The scaled plans show bin carting routes from waste storage to collection point.				
The bin carting routes from waste storage area to the waste collection point is unrestricted and contains no: steps, walls, fences without gates, narrow gates, vegetation, stepping-stones, loose aggregates, or other obstacles.				
There is unobstructed, safe access to move bins and bulk waste (such as furniture and bulky cardboard) between storage and collection points.				
The distance of the route from waste storage area(s) to bin collection point(s) is less than: a. 100 metres in length for commercial developments; b. 75 metres in length for residences; or c. 50 metres in length for adaptable housing and seniors' developments; *Note: This is not required for dwellings in Rural Zones (zones RU2, RU4, RU6).*				
Dual Occupancy Development – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The route from waste storage area(s) to waste collection point(s) does not pass through the interior of dwellings.				
For adaptable dwellings, the route through a garage does not require the removal of the vehicle to wheel the bin through.				

Waste Collection Point(s)	YES	NOT YET	NO	N/A
The scaled plans show waste collection area with all bins drawn to scale. Bins are spaced with at least a 300mm gap between bins and 300mm either side.				
The waste collection location is unobstructed and sufficiently sized to enable all wastes generated to be collected from the property.				
Bin lifts are not obstructed by signs, sign posts, fencing, retaining walls, vegetation or other elements.				
Bins are collected from a reasonably flat kerbside location (so bins will not fall over when emptied).				
Bins placed out for collection will not obstruct traffic, driveways, driver site lines, on-street car parking, bus stops, footpaths or pedestrian right of way, water flow in gutters, drainage swales, access to letterboxes, nor access to and from garages including not overlapping with the swept paths of turning vehicles.				
No more than 40 bins up to 360 litres in size are placed out at any single kerbside location on collection day.				
Mobile garbage bins (MGBs) 360 litre size and smaller that will be placed in kerbside waste collection locations are spaced with at least 300mm gaps between bins.				
Secondary Dwelling – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Sufficient unobstructed space is available to allow for two types of waste bins to be placed kerbside for collection on any waste collection day.				
Sufficient unobstructed space is allocated along the kerb to allow for 2 cubic metres of bulk waste (including furniture and whitegoods, or a suitable alternative bulk waste collection management option is provided and described in the Operational Waste Management Plan.				

Waste Collection Point(s) (continued)	YES	NOT YET	NO	N/A
Housing on Small and Narrow Lots – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Sufficient unobstructed space is allowed for two waste service bins per dwelling to be placed out kerbside for collection on any waste collection day, or alternative shared waste service solutions planned with suitable shared storage locations.				
Sufficient unobstructed space is provided to allow for 1 cubic metre per dwelling of bulk waste (including furniture and whitegoods) to be placed out kerbside for collection, or alternative shared bulk waste service solutions outlined in the Operational Waste Management Plan with suitable shared storage locations.				
Dual Occupancy Development – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
At least 3.5 metres length per dwelling of unobstructed position on safe kerbside is available for bin collection.				
For the bulk waste collection space up to 2 square metres is designated on the kerbside.				

Waste Collection Vehicle Access	YES	NOT YET	NO	N/A
Kerbside waste collection points are unobstructed and efficiently accessible by waste collection vehicles. The collection point for bins is not blocked by on-street parking, driveways, street tree planting, roundabouts, parking bays, No Stopping zones, bus stops or utilities infrastructure (such as power poles or hydrants).				

Waste Management Information for Stakeholders	YES	NOT YET	NO	N/A
A waste system information guide will be provided to owners, occupants and property managers that contains: • the Operational Waste Management Plan; • site plan drawing showing the waste storage and collection locations; • information about any alternative waste service solutions used on the property (e.g. compost bins for gardens); and • the wording for inclusion in any tenancy agreements communicating occupants responsibilities for managing waste at the premises.				
Foreshore and Waterway Developments – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Hazardous and liquid wastes will be properly managed so as to not pollute the waterway or foreshore.				
No boat shed includes washing and/ or cooking facilities, habitable rooms, or entertaining areas/ facilities.				
No boat shed includes storage of hazardous or liquid wastes.				

Operational Waste Management Plan Completion				
Comments regarding any deviation from the waste management controls and guidance:				
Waste Management Checklist and coversheet has been completed and signed				

3.1.5 Checklist for attached dwellings, multi-dwelling houses, residential flat buildings

Use the following waste management checklist for attached dwellings, multi-dwelling houses and residential flat buildings.

The general objectives, controls and guidance to meet operational controls for the relevant land zone apply to these developments. In addition, however specific land use controls under Part 9 of the DCP and Section 3 of the WMG sets out guidance that should be met.

For more information about the controls that apply to these types of developments, refer to WMG sections 3.2.1, 3.2.2, 3.2.3 or the DCP. For guidance, refer to the WMG section listed below:

- Attached dwellings (3.2.4) –includes dwelling houses in Rural and Environment Protection Zones (3.2.5)
- Multi-dwelling housing (3.2.8) – includes seniors living developments (3.2.16)
- Residential flat buildings (3.2.9)

If a discrepancy appears in the checklist between the controls provided in the checklist and the DCP, then the DCP prevails.

Checklist – Operational Waste Management for Multiple Dwelling Development: Attached Dwellings, Multi-dwelling Houses, Residential Flat Buildings

Summary of Multiple Dwelling Developments Application

Site Address and Lot/Plan(s):

Development application is for (fill in figures for all applicable works): __ small lot house __ 1 bedroom dwelling ____ 2 bedroom dwelling ____ 3 bedroom dwelling ____ 4+ bedroom dwelling ____ garage/shed(s) ____ carport/veranda(s) ____ m^3 trees ____ mixed use (businesses proposed are:_____ _____ Other:_____

Applicant Information

Applicant's Name:

Applicant's Address:

Applicant's Phone / Mobile:

Applicant's Email:

Applicant's Authorisation:

System for diverting operational waste to reuse, recycling or composting is maximised.

Plans/drawings that show operational waste storage areas, waste collection points and waste collection vehicle access are included in this application.

The checklist is completed accurately and in full.

The details provided on this form represent the applicant's genuine intentions for managing wastes related specifically to this project.

Signature of Applicant or Authorised Agent: **Date:**

Waste Types	YES	NOT YET	NO	N/A
All types of wastes that will be generated are listed.				
The waste management plan provides for maximum resource recovery.				
Bulky waste (e.g. furniture, whitegoods, bulky cardboard) can be effectively managed.				

Avoidance, Reuse and Recycling				
Opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins are maximised.				
There is flexibility to expand or reconfigure waste separation systems, so that owners and occupants have can access a range of waste services.				

Waste Storage Areas	YES	NOT YET	NO	N/A
The attached site plans show waste storage area(s) with all bins drawn to scale.				
The waste storage area(s) are screened from the main living spaces of dwellings, the public road and views from neighbours.				
The waste storage area(s) are located away from doors, windows and air intakes of all dwellings and businesses				
The waste storage area(s) are capable of storing sufficient amounts of garbage, recycling and food/garden organics waste bins to cater for the dwellings.				
For all adaptable housing, the waste storage area(s) are readily accessible to all occupants including those in wheelchairs in accordance with the Lake Macquarie City Council Non-Discriminatory Access Guidelines.				
The waste storage area(s) are secure from non-occupants and designed for safety in accordance with the Lake Macquarie City Council *Crime Prevention Through Environmental Design Guideline*.				
Where there is a door or gate for bin removal from the waste storage area(s), the door or gate is at least 900mm wide where bins up to 360 litres in size are used and at least 1600mm wide where bins up to 1100 litres in size are used.				
Where a door or gate opens inwards, no bins are stored within the arc of the swinging door. Where a door or gate opens outwards, the gate does not block the pathway for moving bins out to the collection point.				
Commercial and residential waste is stored in separated and secured areas.				
Bin enclosures are in character with the land use zone characteristics and blend with buildings and landscaping on the property in terms of appearance, materials, bulk and scale, location and orientation.				
Bin enclosures contain measures to prevent entry by vermin.				
Shared bin enclosures have lighting, water supply and bin washing facilities that drain to the sewer;				
There is sufficient storage space and a disposal plan for bulk waste, like furniture.				
There is waste storage cupboard space in or near each kitchen area that is sufficiently sized to hold two days' volume of waste in five separated containers sized between two and twenty litres for recyclables, food waste, soft plastic, problem wastes (e.g. batteries) and residual garbage.				

Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
Attached Dwellings – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The waste storage area space is provided in addition to the principal private open space requirement.				
Occupants all have reasonable access to the waste storage area.				
The location of bin storage areas do not obstruct access for pedestrians or vehicles.				
A minimum space for waste bin storage of three 240 litre bins is allocated per dwelling with minimum internal dimensions (for bin storage configuration) of either 1955mm x 1610mm or 2390mm x 1465mm. A minimum height clearance for opening bin lids of 1800mm is provided. Where bins are stored in the garage, adequate space will be provided in addition to space allocations for the vehicle(s) (see Appendix 3).				
Multi-dwelling Housing – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
A minimum of weather-protected space for bulk waste storage (such as furniture and whitegoods) is provided to occupants and has been calculated based on 0.5 square metres of floor space for bulk waste storage per dwelling. This area is provided in individual garages or in a shared bulk waste storage location(s).				
Residential Flat Buildings – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
For developments where access is not at ground level for all dwellings, shared waste storage area(s) is incorporated into the design.				
The residential development greater than three storeys has one of the following waste management solutions: i. a waste chute system, designed in accordance with the WMG; ii. an intermediate waste storage room on each level, designed in accordance with the WMG; or iii. an innovative alternative.				
Waste Chutes – are designed in accordance with the WMG and can manage recyclables, food/ garden waste and garbage.				
Waste Chutes – will not be used in conjunction with a compactor for recyclables.				
Waste Chutes – food and garden waste that is to be disposed via a waste chute and included in the Council green waste service, will be in Council-approved compostable bags.				
Waste Chutes – where a waste chute system is used, a solution is planned and will be implemented to manage problem wastes (such as batteries, cooking oils, liquid wastes and chemicals).				
Waste Chutes – where a waste chute system is used, a solution is planned for managing bulk waste items (such as furniture, whitegoods, large cardboard) that would not fit in the chute.				
Intermediate waste storage rooms – are located on each level of the multi-storey development, the rooms are designed in accordance with the WMG and includes solutions to manage recyclables, food/garden waste and garbage.				

Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
Intermediate waste storage rooms – will be managed by a caretaker to transfer waste from the bins to the waste storage room, (preferably in a separate service lift).				
Intermediate waste storage rooms – are designed to help manage problem wastes.				
Where an innovative alternative operational waste management system is proposed, it is described as an attachment to the WMP and enables managing recyclables, food/garden waste, garbage and problem wastes.				
Adequate space for bin storage is provided for the development and has been sized to comply with (or exceed) the minimum waste storage area internal dimensions (for bin configuration) in WMG section 3.2.9.				
A minimum of weather-protected space for bulk waste storage (such as furniture and whitegoods) is provided to occupants and has been calculated based on 0.5 square metres of floor space for bulk waste storage per dwelling. This area is provided in individual garages or in a shared bulk waste storage location(s).				
The waste storage area(s) is readily accessible to occupants, while being secure from non-occupants.				

Route from Dwelling to Waste Storage Areas				
The scaled plans show waste carting route(s), distances and gradients from buildings to waste storage area(s).				
There is unobstructed, safe access to move waste between source points (such as dwellings, businesses, buildings and public area bins) and the waste storage area(s).				
Safe, lit access from the dwelling (and home business/industry exit if applicable) to the waste storage area is less than: a. 75 metres in length for residences; or b. 50 metres in length for adaptable housing and seniors' developments is wheelchair accessible.				
Where wheeled bins up to and including 360 litres in size are used, the bin carting gradient is not steeper than 1:14. Where bins 660 litres and greater are used, carting gradients do not exceed 1:30.				
Attached Dwellings – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Waste bins can be safely and conveniently moved between storage location(s) and collection point(s).				
Bin routes between storage and collection locations are no further than 75 metres, or 50 metres for adaptable dwellings.				
The route from storage to collection location does not pass through the interior of dwellings.				
Bin routes do not traverse up or down kerbs or steps, stairs or gradients steeper than 1:14 or over stepping-stones, loose gravel, or soft materials.				

Route from Dwelling to Waste Storage Areas (continued)				
Residential Flat Buildings – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Where waste storage is in a lower level basement, a goods lift may be used to move bins between floors. Doorways to any goods lift(s) and lift space dimensions must fit the size of bins and space for a person to comfortably fit. The distance from store to lift and from lift to collection point is no more than 3 metres for 1100 litre bins and 5 metres for 660 litre bins unless a bin cart is used and can also fit in the lift.				

Waste Collection and Removal	YES	NOT YET	NO	N/A
The scaled plans show waste collection area with all bins drawn to scale. Bins are spaced with at least a 300mm gap between bins and 300mm either side.				
The waste collection location is unobstructed and sufficiently sized to enable all wastes generated to be collected from the property.				
Kerbside waste collection points are unobstructed and efficiently accessible by waste collection vehicles. The collection point for bins is not blocked by on-street parking, driveways, street tree planting, roundabouts, parking bays, No Stopping zones, bus stops or utilities infrastructure (such as power poles or hydrants).				
Bin lifts are not obstructed by signs, sign posts, fencing, retaining walls, vegetation or other elements.				
Bins are collected from a reasonably flat kerbside location (so bins will not fall over when emptied).				
Bins placed out for collection will not obstruct traffic, driveways, driver site lines, on-street car parking, bus stops, footpaths or pedestrian right of way, water flow in gutters, drainage swales, access to letterboxes, nor access to and from garages including not overlapping with the swept paths of turning vehicles.				
No more than 40 bins up to 360 litres in size are placed out at any single kerbside location on collection day.				
Mobile garbage bins (MGBs) 360 litre size and smaller that will be placed in kerbside waste collection locations are spaced with at least 300mm gaps between bins.				
Attached Dwellings – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The location of bin storage and collection points do not obstruct access for pedestrians or vehicles.				
All dwellings have access to space to place one to two (1-2) cubic metres of bulk waste (such as furniture and whitegoods) on kerbside for collection, or a suitable alternative bulk waste management option is provided and described in the Operational Waste Management Plan.				
Multi-dwelling Housing – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Kerbside collection of mobile garbage bins (MGBs) by side-lift waste collection vehicles will only occur where the collection location is safe for stopping (up to fifteen minutes for 40 bins) to collect these bins and will not hinder access or traffic flow more than a minute.				

Waste Collection and Removal (continued)	**YES**	**NOT YET**	**NO**	**N/A**
Residential Flat Buildings – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Kerbside collection of mobile garbage bins (MGBs) by side-lift waste collection vehicles will only occur where MGBs up to 360 litre size are used and can be accommodated on the subject property so that bins can be spaced with at least a 300mm gap between bins.				
Kerbside collection of mobile garbage bins (MGBs) by side-lift waste collection vehicles will only occur where bin placement location has a maximum of 40 bins out on any one day.				
Kerbside collection of mobile garbage bins (MGBs) by side-lift waste collection vehicles will only occur where the collection location is safe for stopping (up to fifteen minutes for 40 bins) to collect these bins and will not hinder access or traffic flow more than a minute.				
The noise from collection is evaluated in accordance with NSW Environment Protection Authority's Industrial Noise Policy.				
Where the collection of waste/recyclables will be in larger bins over 360 litres, the design of the development must accommodate safe collection of the centralised larger bins.				
The larger bins are accessible by service vehicles without the need for manual manoeuvring of the bins.				
The need for vehicle reversing is minimised.				
It is understood that Council waste services vehicles, staff and Council's contractors will not enter private property unless it is under a negotiated agreement.				
Where waste storage is in a lower level basement and collections have to take place from inside the basement, the building is designed to accommodate private waste collection vehicles entering and exiting the site.				
Clearance height for under building access by collection vehicle is no less than 3.6m at any point.				
At sites where waste collection vehicles must enter and exit in a forward direction, the use of vehicle turntables is designed.				
Confirmation in writing from a waste collection service provider is included in this application stating that they would be able to service this site with this basement and turntable design.				

Route from Waste Storage Areas to Waste Collection Point(s)	YES	NOT YET	NO	N/A
The scaled plans show bin carting routes from waste storage to collection point.				
The bin carting routes from waste storage area to the waste collection point is unrestricted and contains no: steps, walls, fences without gates, narrow gates, vegetation, stepping-stones, loose aggregates, or other obstacles.				
There is unobstructed, safe access to move bins and bulk waste (such as furniture and bulky cardboard) between storage and collection points.				
The distance of the route from waste storage area(s) to bin collection point(s) is less than: a. 100 metres in length for commercial developments; b. 75 metres in length for residences; or c. 50 metres in length for adaptable housing and seniors' developments; *Note: This is not required for dwellings in Rural Zones (zones RU2, RU4, RU6).*				
Residential Flat Buildings – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Where waste storage is in a lower level basement, a goods lift may be used to move bins between floors. Doorways to any goods lift(s) and lift space dimensions must fit the size of bins and space for a person to comfortably fit. The distance from store to lift and from lift to collection point is no more than 3 metres for 1100 litre bins and 5 metres for 660 litre bins unless a bin cart is used and can also fit in the lift.				

Waste Management Information for Stakeholders	YES	NOT YET	NO	N/A
A waste system information guide will be provided to owners, occupants and property managers that contains: • the Operational Waste Management Plan; • site plan drawing showing the waste storage and collection locations; • information about any alternative waste service solutions used on the property (e.g. compost bins for gardens); and • the wording for inclusion in any tenancy agreements communicating occupants responsibilities for managing waste at the premises.				

Operational Waste Management Plan Completion				
Comments regarding any deviation from the waste management controls and guidance:				
Waste Management Checklist and coversheet has been completed and signed				

3.1.6 Checklist for boarding houses and hostels, short term rentals, group homes, social housing

Use the following waste management checklist for boarding houses and hostels, short-term rental accommodation, group homes, social housing.

The general objectives, controls and guidance to meet operational controls for the relevant land zone apply to these developments. In addition, however specific land use controls under Part 9 of the DCP and Section 3 of the WMG sets out guidance that should be met.

For more information about the controls that apply to these types of developments, refer to WMG sections 3.2, 3.2.1, 3.2.3or the DCP. For guidance, refer to the WMG section listed below:

- Boarding houses and hostels (3.2.12)
- Short-term rental accommodation (3.2.14)
- Group homes (3.2.13)
- Social housing (3.2.15)

If a discrepancy appears in the checklist between the controls provided in the checklist and the DCP, then the DCP prevails.

Checklist – Operational Waste Management for Multiple Dwelling Developments: Boarding Houses, Hostels, Short Term Rentals, Group Homes, Social Housing

Summary of Multiple Dwelling Developments Application

Site Address and Lot/Plan(s):

Development application is for (fill in figures for all applicable works): __ small lot house __ 1 bedroom dwelling

____ 2 bedroom dwelling ____ 3 bedroom dwelling ____ 4+ bedroom dwelling ____ garage/shed(s)

____ carport/veranda(s) ____ m^3 trees ____ mixed use (businesses proposed are:_____

_____ Other:_____

Applicant Information

Applicant's Name:

Applicant's Address:

Applicant's Phone / Mobile:

Applicant's Email:

Applicant's Authorisation:

System for diverting operational waste to reuse, recycling or composting is maximised.

Plans/drawings that show operational waste storage areas, waste collection points and waste collection vehicle access are included in this application.

The checklist is completed accurately and in full.

The details provided on this form represent the applicant's genuine intentions for managing wastes related specifically to this project.

Signature of Applicant or Authorised Agent: **Date:**

Waste Types	YES	NOT YET	NO	N/A
All types of wastes that will be generated are listed.				
The waste management plan provides for maximum resource recovery.				
Bulky waste (e.g. furniture, whitegoods, bulky cardboard) can be effectively managed.				
Boarding Houses and Hostels – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The Boarding House design provides for a minimum volume of recycling, green waste and garbage capacity per dwelling as defined in WMG Table 9 for waste				
Short-term Rental Accommodation – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Sufficient numbers of bins and waste storage space is provided per dwelling to store a minimum of 110 litres of recycling and green waste (including food) per week and 110 litres of general garbage per fortnight.				

Avoidance, Reuse and Recycling				
Opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins are maximised.				
There is flexibility to expand or reconfigure waste separation systems, so that owners and occupants have can access a range of waste services.				
Boarding Houses and Hostels – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The development is designed to ensure that the Boarding House or Hostel can provide an acceptable level of waste management amenity to occupants that will				
The development is designed to encourage reuse and swapping of furniture and resources between occupants.				
The development is designed to ensure waste, including bulk waste (such as furniture and whitegoods) can be managed to prevent littering and illegal				
Short-term Rental Accommodation – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
The design provides an acceptable level of waste management amenity to occupants so that they can maximise diversion of waste from landfill to recycling				
The development is designed to ensure waste, including bulk waste (such as furniture and whitegoods) is managed to prevent littering and illegal dumping,				
Social Housing – Additional Guidance on Controls				
The development is designed to ensure enable reuse and swapping of furniture and resources between occupants.				
The development is designed to ensure waste, including bulk waste (such as furniture and whitegoods) is managed to prevent littering and illegal dumping,				

Waste Storage Areas	YES	NOT YET	NO	N/A
The attached site plans show waste storage area(s) with all bins drawn to scale.				
The waste storage area(s) are screened from the main living spaces of dwellings, the public road and views from neighbours.				

Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
The waste storage area(s) are located away from doors, windows and air intakes of all dwellings and businesses				
The waste storage area(s) are capable of storing sufficient amounts of garbage, recycling and food/garden organics waste bins to cater for the dwellings.				
For all adaptable housing, the waste storage area(s) are readily accessible to all occupants including those in wheelchairs in accordance with the Lake Macquarie City Council Non-Discriminatory Access Guidelines.				
The waste storage area(s) are secure from non-occupants and designed for safety in accordance with the Lake Macquarie City Council *Crime Prevention Through Environmental Design Guideline*.				
Where there is a door or gate for bin removal from the waste storage area(s), the door or gate is at least 900mm wide where bins up to 360 litres in size are used and at least 1600mm wide where bins up to 1100 litres in size are used.				
Where a door or gate opens inwards, no bins are stored within the arc of the swinging door. Where a door or gate opens outwards, the gate does not block the pathway for moving bins out to the collection point.				
Commercial and residential waste is stored in separated and secured areas.				
Bin enclosures are in character with the land use zone characteristics and blend with buildings and landscaping on the property in terms of appearance, materials, bulk and scale, location and orientation.				
Bin enclosures contain measures to prevent entry by vermin.				
Shared bin enclosures have lighting, water supply and bin washing facilities that drain to the sewer;				
There is sufficient storage space and a disposal plan for bulk waste, like furniture.				
There is waste storage cupboard space in or near each kitchen area that is sufficiently sized to hold two days' volume of waste in five separated containers sized between two and twenty litres for recyclables, food waste, soft plastic, problem wastes (e.g. batteries) and residual garbage.				
Boarding Houses and Hostels – Additional Guidance on Controls				
The development provides a waste storage space accessible to all guests within the accommodation that has sufficient space to store separated recycling, food waste, problem waste (such as batteries, light globes and paint) and residual garbage for a minimum of two days.				
There will be an on-site manager and there is an option to process garden and food waste in an on-site compost, worm farm or other organic waste processing solution for use on site in gardens.				
Waste storage cupboard space in or near each kitchen area is provided and is sufficiently sized to hold two days' volume of waste for the number of dwellings sharing the kitchen. These are in five separated containers sized between two and twenty litres (recyclables (like glass, plastic containers, paper and cardboard), food waste, soft plastic, problem wastes (e.g. batteries and globes) and residual garbage).				

Waste Storage Areas (continued)	YES	NOT YET	NO	N/A
The waste storage area must accommodate sufficient space for separate bins of sufficient capacity to hold enough recycling, residual garbage and food waste to allow for peak period use of the facility, within the waste collection frequencies identified in waste management plan.				
Waste storage areas include space for other wastes that can be recycled separately.				
Measures are in place to mitigate the impacts of odour and noise associated with the management of waste, such that it does not impinge on the enjoyment of the occupants utilising the accommodation and facilities. Noise is evaluated in accordance with NSW Environment Protection Authority's Industrial Noise Policy.				
Short-term Rental Accommodation – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
A weather-protected bulk waste storage space for furniture, whitegoods, etc. is provided. The space includes shelves for smaller items to encourage reuse of unwanted second-hand items between residents.				
The waste storage area provides sufficient space for separate bins of sufficient capacity to hold enough recycling, residual garbage and food waste to allow for peak period use of the facility, within the waste collection frequencies identified in waste management plan.				
The development provides a waste storage space accessible to all guests within the accommodation that has sufficient space to store separated recycling, food waste, problem waste (such as batteries, light globes and paint) and residual garbage for a minimum of two days.				
Waste storage areas include space for other wastes that can be recycled separately.				
Measures are in place to mitigate the impacts of odour and noise associated with the management of waste, such that it does not impinge on the enjoyment of the occupants utilising the accommodation and facilities. Noise is evaluated in accordance with NSW Environment Protection Authority's Industrial Noise Policy.				
Group Homes – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Waste storage area(s) is provided that allow for a set of three 240 litre bins to be accessibly stored per every five residents in the group home, so as to allow flexibility in the number of bins the group home can have. Options for use of 660L and 1100L sized bins of equivalent capacity can also be proposed where collection from the waste storage area is directly accessible to waste collection vehicles.				
Social Housing – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Adequate space for waste bin storage at the property is provided at least in accordance with the minimum waste storage area internal dimensions found in WMG section 3.2.15.				
A weather-protected bulk waste storage space for furniture, whitegoods, etc. is provided. The space includes shelves for smaller items to encourage reuse of unwanted second-hand items between residents.				

Route from Dwelling to Waste Storage Areas				
The scaled plans show waste carting route(s), distances and gradients from buildings to waste storage area(s).				
There is unobstructed, safe access to move waste between source points (such as dwellings, businesses, buildings and public area bins) and the waste storage area(s).				
Safe, lit access from the dwelling (and home business/industry exit if applicable) to the waste storage area is less than: a. 75 metres in length for residences; or b. 50 metres in length for adaptable housing and seniors' developments is wheelchair accessible.				
Where wheeled bins up to and including 360 litres in size are used, the bin carting gradient is not steeper than 1:14. Where bins 660 litres and greater are used, carting gradients do not exceed 1:30.				

Waste Collection and Removal	YES	NOT YET	NO	N/A
The scaled plans show waste collection area with all bins drawn to scale. Bins are spaced with at least a 300mm gap between bins and 300mm either side.				
The waste collection location is unobstructed and sufficiently sized to enable all wastes generated to be collected from the property.				
Kerbside waste collection points are unobstructed and efficiently accessible by waste collection vehicles. The collection point for bins is not blocked by on-street parking, driveways, street tree planting, roundabouts, parking bays, No Stopping zones, bus stops or utilities infrastructure (such as power poles or hydrants).				
Bin lifts are not obstructed by signs, sign posts, fencing, retaining walls, vegetation or other elements.				
Bins are collected from a reasonably flat kerbside location (so bins will not fall over when emptied).				
Bins placed out for collection will not obstruct traffic, driveways, driver site lines, on-street car parking, bus stops, footpaths or pedestrian right of way, water flow in gutters, drainage swales, access to letterboxes, nor access to and from garages including not overlapping with the swept paths of turning vehicles.				
No more than 40 bins up to 360 litres in size are placed out at any single kerbside location on collection day.				
Mobile garbage bins (MGBs) 360 litre size and smaller that will be placed in kerbside waste collection locations are spaced with at least 300mm gaps between bins.				
Short-term Rental Accommodation – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Sufficient space is provided for two of each set of three bins to be placed kerbside for collection, or an alternative waste bin collection option proposed.				
Where use of 660L and 1100L sized bins of equivalent capacity is proposed, the waste storage area is accessible to waste collection vehicles.				
Group Homes – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Sufficient space is provided for two of each set of three bins to be placed kerbside for collection, or an alternative waste bin collection option proposed.				
Where use of 660L and 1100L sized bins of equivalent capacity is proposed, the waste storage area is accessible to waste collection vehicles.				

Route from Waste Storage Areas to Waste Collection Point(s)	YES	NOT YET	NO	N/A
The scaled plans show bin carting routes from waste storage to collection point.				
The bin carting routes from waste storage area to the waste collection point is unrestricted and contains no: steps, walls, fences without gates, narrow gates, vegetation, stepping-stones, loose aggregates, or other obstacles.				
There is unobstructed, safe access to move bins and bulk waste (such as furniture and bulky cardboard) between storage and collection points.				
The distance of the route from waste storage area(s) to bin collection point(s) is less than: a. 100 metres in length for commercial developments; b. 75 metres in length for residences; or c. 50 metres in length for adaptable housing and seniors' developments; *Note: This is not required for dwellings in Rural Zones (zones RU2, RU4, RU6).*				
Group Homes – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Safe, lit access from dwelling or business exit to allocated bin storage area is provided that is less than 50 metres in length for occupants. Where the group home is an adaptable home, there is sufficient space for occupants using wheelchairs or other mobility aids to be able to access the bins to place waste inside and to move bins out to the collection point without having to move cars that may be parked in the way (in garages, driveways or next to the bin presentation point).				

Waste Management Information for Stakeholders	YES	NOT YET	NO	N/A
A waste system information guide will be provided to owners, occupants and property managers that contains: • the Operational Waste Management Plan; • site plan drawing showing the waste storage and collection locations; • information about any alternative waste service solutions used on the property (e.g. compost bins for gardens); and • the wording for inclusion in any tenancy agreements communicating occupants responsibilities for managing waste at the premises.				
Boarding Houses and Hostels – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Signs and information resources will be available to ensure continuing coordinated awareness and behavioural education to achieve waste avoidance, resource reuse and sharing, waste separation, waste management and litter and illegal dumping prevention.				
Short-term Rental Accommodation – Additional Guidance on Controls	**YES**	**NOT YET**	**NO**	**N/A**
Signs and information resources will be available to ensure continuing coordinated awareness and behavioural education to achieve waste avoidance, waste separation, waste management and litter and illegal dumping prevention.				

Operational Waste Management Plan Completion				
Comments regarding any deviation from the waste management controls and guidance:				
Waste Management Checklist and coversheet has been completed and signed				

3.1.7 Operational waste management plan for multiple dwelling developments

OPERATIONAL WASTE MANAGEMENT PLAN –MULTIPLE DWELLING DEVELOPMENTS

Ongoing use waste will be avoided or minimised by: _____

Attachments – the following documents are attached to this application:

Design and/or landscape floor plan drawings (drawn to scale) showing:

- ☐ all bins, facilities and areas to be used for on-site waste storage and collection
- ☐ door/gate widths, no steps, gradients and carting distances of route(s) between waste storage and collection points

Where waste collection will take place on site, drawings show:

- ☐ access roads/driveways, vehicle turning circles, pavement strength, collections points free from obstructions beside or above where bins will be emptied
- ☐ a copy of the waste management system information guide that will be provided to occupants and property managers

Type of development (dual occupancy, residential flats, etc.) _____ **Number of dwellings:**_____	**Litres per week** Standard collections	**Bin size, Number of bins, Collection frequency**	**Reuse on site** Specify proposed on site reuse methods and waste volume	**Reuse or recycling offsite** Specify recycling collection service provider and recycling facility destination	**Disposal to licenced landfill** Specify waste collection service provider and landfill destination
Waste Type:	**Per dwelling (1-2 people):**			*If Council collection services are used then pre-filled text applies.* *Where private collection contractor is used then applicants must provide information.*	
Recyclables bottles, containers, paper and cardboard	60L/week			*Recycling is processed at Solo Gateshead facility*	*n/a*
Green waste food and garden organic waste	80L/week			*Processed at Lake Macquarie Organics Resource Recovery composting plant located on the Awaba Waste Management Facility*	*n/a*
Garbage other non-recyclable wastes	60L per week			*n/a*	*240L/fortnight Lake Macquarie City Council kerbside collection service.*
Bulky waste furniture, e-waste, mattresses, metals and whitegoods	1m^3 per collection			*Council bulk waste collection service; e-waste, whitegoods, metals, mattresses and bundled garden waste recycled via Council contracts.*	*Council kerbside bulk waste collection service; residual bulk waste landfilled at Awaba Waste Management Facility.*
Problem wastes oil, paint, chemicals, gas bottles, batteries, sharps	As arises over the year			*Deliver to Community Recycling Centre at Awaba Waste Management Facility; sharps to chemists; batteries to library recycling stations*	*n/a*

3.1.8 Waste Management Information Guide for Owners, Property Managers and Occupants - Example

Please submit with the Operational Waste Management Plan an updated version of this example waste management information guide that describes how the waste management for this development has been designed to operate.

Waste Management Information Guide for Owners, Property Managers and Occupants

Address: (address of development)_____

The following is information about how this development has been designed to accommodate separation of waste, waste storage and waste management.

Internal Bin Storage:

A waste cupboard is available in the kitchen for two to six bins between 2 litre and 20 litres size, so that you can separate and store 1-2 days of:

- Compostable food scraps for green lid waste bin kerbside collection
- Return and Earn containers
- Other recyclable containers and paper for yellow lid bin kerbside collection
- Batteries, mobile phones, smoke detectors, CDs and lightglobes for recycling through Council's services
- Bottles of used cooking oil for recycling through Council's services
- Plastic wrap and film for recycling through supermarkets
- Residual garbage for red (or black) lid kerbside collection

Route from your unit to the external bin storage:

To empty your household containers of recycling, food and garden and residual garbage waste into the mobile garbage bins in the waste storage area:

- The shared waste storage area closest to you should be used for your waste.
- There is a waste storage cupboard and/or waste chute for food waste and/or recycling and/or residual garbage on your floor.
- Please use the goods lift to access the basement waste storage area.
- A ramp is available to access the shared bin storage area.

Households/businesses are responsible for taking their own special wastes such as plastic wrap, batteries and chemicals to the appropriate city disposal/recycling location.

External Bin Storage (or Shared Waste Storage Area):

Location: (Insert waste management site plan here)

- Keep your bins in the garage nook created for this purpose.
- The garage is longer/wider so that three bins can be kept in front of/beside the car in the garage.
- Bins are to be stored in the side/back/front yard behind the screen/water tank/garage out of view of the road/driveway/neighbours.
- The bin storage area for units 1-10 is located in the north east corner. The shared waste storage area for units 11-25 is located in the south-east corner.
- The compost bin is located in the back of the garden behind unit 40.

Separate your waste accurately, as per signage, otherwise the bins may not be able to be emptied or sent for recycling/composting. Yellow lid is for comingled recycling, lime green lid for food and garden waste, and red for residual garbage. The large sky-blue lidded bin is for cardboard only – all boxes must be folded flat.

Bins can be washed out using the tap in the waste storage area (or your own outside tap).

The light switch for the waste storage area is located to the left of the entrance doorway.

- Please turn the light off as you leave.
- The light switch for the waste storage area has a motion sensor and should turn on as you approach and will automatically turn off after ten minutes.

Please shut the gate/door to ensure vermin (and odours) are kept out. Please close bin lids to keep flies and other vermin out, minimise odours and ensure rain blowing under the eaves does not fill bins with water.

Bulk waste – used furniture, whitegoods, electronic waste, large furniture and mattresses:

- Bulk waste should be stored in the cage adjacent to the waste storage room.
- If the goods are in safe working order, place the item near the front with a sign taped to the item "Free" so that others may take and reuse the item. Unclaimed "free" items will be removed monthly for donation, recycling or disposal.
- All residents are responsible for ensuring that when disposing of large goods that they make arrangements for removal immediately from their dwelling. No goods are to be placed in the waste storage area other than regular small item recycling, green waste and garbage in the mobile garbage bins.
- Phone XXX charity when the clothing bin is full and needs emptying.
- Phone YYY stationers when the printer cartridge bin is full and needs emptying.
- Advise the caretaker if the mobile phones bin is full, and the caretaker will arrange for it to be emptied.
- If the community wishes, the community in this development could coordinate swaps days and/or bulk waste collection services.

Placing bins out for collection:

Check with Council/Private Waste Contractor which night to place which bins out.

- Bins for units 1-10 are to be place out on the kerbside on ABC Street on the south side of the driveway for collection, with all of the bins with the same colour lid lined up together. Units 11-20 bins are to be placed out on the kerbside on the north side of the driveway. Bins for units 21-30 are to be placed out on XYZ Street on the east side of the driveway.
- Bins must be placed with a minimum of 30 centimetres between them and facing the road. All recycling and garbage bins should be placed together on the right side kerb (when facing the units) and all green waste bins to the left.
- Bins are to be placed out the front of your unit adjacent to the driveway at a minimum spacing between of 30 centimetres (length of a ruler).
- Bins are to be brought back in within 24 hours of emptying.
- Caretakers/the nominated group bin monitor will place the bins out for collection the night before collection and bring bins back in.
- The large mobile garbage bins are to be moved up the basement ramp by the caretaker (using the bin tug) to the collection pad adjacent to the driveway for collection.
- The caretaker will use the goods lift to move the large mobile garbage bins to the presentation point for collection.
- The caretakers will use the ute to replace the full for empty smaller mobile garbage bins in the small waste storage areas and empty them into the larger mobile garbage bins in the main waste storage area. Bin lifts should be left for the caretakers. Residents should not use the bin hoist in the main waste storage area. Residents can access the main waste storage area to place flattened boxes in the cardboard recycling bin.
- The large mobile garbage bins do not need to be placed out for collection as the waste collection vehicle will reverse up to the waste storage area.

Bin collections:

On bin collection day, residents and visitors must not park in front of the bins at kerbside (or in the loading zone). Please be patient and drive carefully while the waste collection staff/vehicle is collecting bins within the property.

Other Notes:

An onsite compost bin is available for use. Please do not include paper, meat, fish, bones, eggs, citrus peel or corn cobs in this compost bin. Please place these in the green lid kerbside bin.

Sharps and medical waste must be kept separate and disposed of through the correct storage containers/bins/waste service.

Expanded polystyrene, printer cartridges and clean timber can also be separated for recycling. Bins and a bag are available in the waste storage room for these wastes.

Chemicals must be stored on the shelves in the bunded area and be fully sealed and contained to prevent leaks.

3.2 Waste Aspects of the Development Control Plan for Multiple Dwelling Developments

The Lake Macquarie City Council Development Control Plan (DCP) sets out broad objectives and controls for the operational uses of land.

Zones (DCP Parts 2-7)

Depending on the type of development, multiple dwelling developments can be built in Residential Zones (zones R1, R2 and R3), most Rural Zones (zones RU2, RU4 and RU6), most Business Zones (B1 – B4), Infrastructure and Special zones (SP1 and SP2), Tourist zones (SP3) and most Environment Protection Zones (zones E2, E3 and E4).

The applicable DCP objectives and controls for multiple dwelling developments are defined in each of the zones described in DCP Parts 2-7. These broad objectives and controls are also summarised in Waste Management Guidelines (WMG) sections:

- 3.2.1 (objectives); and
- 3.2.2 (controls).

Guidance on Controls

The controls specified in the DCP require that all operational use waste management be undertaken in accordance with the WMG. In order to achieve effective operational waste management outcomes, guidance to meet controls should be met as this provides details on the controls listed in the DCP document.

The broad operational controls required to be met in the WMG are outlined in:

- 3.2.3 for all zones.

Specific Land Uses (DCP Part 9)

Objectives and controls are also defined for specific land uses in DCP Part 9. The specific land uses relevant to multiple dwelling houses covered in this section of the WMG are:

- 3.2.4 Attached dwellings (DCP Part 9.1)
- 3.2.5 Dwelling houses in Rural and Environmental Zones (DCP Part 9.5)
- 3.2.6 Dual occupancy (DCP Part 9.6)
- 3.2.7 Foreshore and waterway development (DCP Part 9.7)
- 3.2.8 Multi-dwelling housing (DCP Part 9.11)
- 3.2.9 Residential flat buildings (DCP Part 9.13)
- 3.2.10 Secondary dwellings (DCP Part 9.14)
- 3.2.11 Housing on small and narrow lots (DCP Part 9.19) (for multiple housing developments)

Note: see WMG Section 4.2 for information on:

- Bed and breakfast/farm stay accommodation; and
- Caravan parks and manufactured home estates.

Additional Specific Land Uses (WMG Section 3)

The WMG defines additional guidance on controls for specific land uses not presented within DCP Part 9. These include:

- 3.2.12 Boarding houses and hostels
- 3.2.13 Group homes
- 3.2.14 Short-term rental accommodation
- 3.2.15 Social housing
- 3.2.16 Seniors living developments

3.2.1 Operational objectives (DCP Parts 2-7)

The following objectives for waste management specified in the DCP apply in all zones to the multiple dwelling developments listed in section 3.2:

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

Objectives (only those from the DCP relevant to waste)

a. *To ensure that waste management infrastructure and operational procedures are an integral part of the development's design and ongoing management.*
b. *To ensure sufficient volume of equitably accessible, safe, hygienic and aesthetically appropriate waste storage is provided on the property to minimise negative impacts of waste management on occupants and neighbours.*
c. *To enable maximum opportunities for separation of reusable, recyclable, compostable and problem wastes from residual garbage bins.*
d. *To ensure equitable access for all occupants to opportunities to maximise diversion of waste.*
e. *To provide flexibility to expand or reconfigure waste separation systems, so that owners and occupants have options to access a range of waste services.*
f. *To ensure secure separation of commercial waste from residential waste storage and collection.*
g. *To provide unobstructed waste collection point(s) that are safely and efficiently accessible by Council waste collection vehicles wherever possible.*
h. *To provide unobstructed, safe access to move waste between source points (such as dwellings, businesses, buildings and public area bins) and waste storage points and to move bins and bulk waste (such as furniture and whitegoods) between storage and collection points.*

The following additional objective applies in Environment Protection Zones (E2, E3 and E4):

i. *To integrate with the natural landscape.*

3.2.2 Operational controls (DCP Parts 2-7)

The following controls for waste management apply in all zones to the multiple dwelling developments listed in Section 3.2. Where a conflict exists between the DCP and the information presented in this section of the WMG, then the requirements in DCP generally prevails.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

Controls (only those from the DCP relevant to waste)

1. *An Operational Waste Management Plan (WMP) must be prepared in accordance with the Lake Macquarie Waste Management Guidelines and submitted with the development application for all identified in : in the list a to e below; , in other parts of this Development Control Plan; or when Council identifies that particular circumstances warrant it.*

   Uses requiring an Operational Waste Management Plan:

a.	*Dwellings*
b.	*Commercial and retail, recreation and tourism facilities*
c.	*Industrial developments and infrastructure*
d.	*Events*
e.	*Subdivisions*

2. *The Operational WMP must address all wastes that will be generated from the operation of the premises. The plan must maximise opportunity for separation from general waste of reusable, recyclable and compostable materials for reuse, recycling and composting wherever possible.*
3. *The development application must demonstrate - in the Operational WMP and on plans with bins, equipment, waste collection vehicle swept paths and clearances all shown to scale - that the development has sufficient and usable:*
   a. bin type, sizes, numbers and collection frequency; and
   b. internal storage within premises; and
   c. waste carting route(s) from premises to external waste storage area(s); and
   d. external waste storage areas; and
   e. bin carting route(s) from waste storage to waste collection point(s); and
   f. waste collection point(s); and
   g. for developments proposing onsite collection, the waste collection vehicle route(s), swept paths and clearances; and
   h. waste management information guide for owners and occupants.
4. *For developments with the following specific land uses, the development and Operational WMP must address other matters as identified in the Lake Macquarie Waste Management Guidelines:*
   i. boarding houses and hostels; group homes; short-term rental accommodation; social housing; and seniors' living developments;
   ii. commercial and retail premises;
   iii. veterinary hospitals;
   iv. aged care facilities;
   v. child care centres;
   vi. service stations;
   vii. public and private recreation; and amusement and functions centres and entertainment facilities;
   viii. vehicle repair workshops and depots;

ix. sustainable aquaculture; and
x. light, heavy and general industries, hazardous, offensive and high technology industries; infrastructure; and waste management or resource recovery facilities.

to demonstrate compliance with the Lake Macquarie Waste Management Guidelines.

5. *If the development is not designed to enable Lake Macquarie City Council waste services, a letter must be provided from a private waste contractor advising how they are able to provide the required garbage, recycling and green (garden and food) waste services and (if needed) access the premises.*

3.2.3 Guidance to meet operational controls – all zones

The following guidance on controls for waste management apply in all zones to the multiple dwelling developments listed in section 3.2. Where a conflict exists between the DCP and the information presented in this section of the WMG, then the requirements in DCP generally prevails.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

Guidance to meet operational controls – all zones

Bin type, sizes, numbers and collection frequency:

1. Total waste volumes (in each of the separated waste types of comingled recycling, compostable organics (food and garden), residual unrecyclable garbage and any other separately recyclable waste types) that are anticipated to be generated from the operational use of the residential and, separately, the commercial use of the development in peak use times should be calculated and advised.
2. For each waste type, the bin type, bin size and number of bins and frequency of collection should be calculated and advised to ensure all waste is removed daily or each few days (for commercial volumes of waste of an odorous nature), weekly (for food organics) or fortnightly.

Internal storage:

3. Waste storage cupboard space should be provided in or near each kitchen area. This should be sufficiently sized to hold two days' volume of waste in at least three separated containers, sized between two and twenty litres. The containers should be for co-mingled recyclables (like glass, plastic containers, paper and cardboard), food waste, and residual garbage. (Preferably there should also be space for separate containers for other separable waste types such as soft plastic wrap, "return and earn" bottles and problem wastes (such as batteries, light globes and paint).)

Waste carting route(s) from premises to waste storage area(s):

4. Safe, lit access from dwelling or business exit to allocated bin storage area should be provided that is less than:
    a. 100 metres in length for commercial developments;
    b. 75 metres in length for residences; or
    c. 50 metres in length for adaptable housing, seniors' developments, child care, food-serving premises and other businesses from which emptying of bins multiple times per day is desirable.

External waste storage area(s):

5. Waste storage area(s) should be provided and meet the following criteria:
    a. Waste storage area(s) should be screened from the main living spaces of dwellings, public road and views from neighbours and as part of odour management should be located away from doors, windows and air intakes of all dwellings and businesses.
    b. The waste storage area(s) should be capable of storing sufficient amounts of garbage, recycling and food/garden organics waste bins and any other proposed waste management equipment (such as bin carts and compaction equipment) required for managing the ongoing use waste generated by the property.

c. Waste storage area(s) should be readily accessible to all occupants in accordance with the Lake Macquarie City Council *Non-Discriminatory Access Guidelines*, should be secure from non-occupants and designed for safety in accordance with the Lake Macquarie City Council *Crime Prevention Through Environmental Design Guideline*.

d. The waste storage area(s) bin removal door or gate should not have a threshold step, should be at least 1200mm wide where bins up to 360 litres in size are used and should be at least 1600mm wide where bins up to 1100 litres in size are used. If doors or gates open inwards, no bins can be stored within the arc of the swinging door. If doors or gates open outwards they should not block the pathway for moving bins out.

e. Separate secured waste storage area(s) should be provided for commercial and residential wastes.

f. Bin enclosures should be in character with the land use zone characteristics and blend with buildings and landscaping on the property in terms of appearance, materials, bulk and scale, location and orientation.

g. Bin enclosures should contain measures to prevent entry by vermin.

h. Shared bin enclosures should have lighting, water supply and bin washing facilities that drain to the sewer.

i. Sufficient storage space and disposal plan for bulk waste, which includes furniture and whitegoods, should be provided.

j. Bins should be clearly marked with information on what types of waste are to be included in the bins. Yellow lids should be used for comingled recycling, lime green lids for food and garden organic waste, and red lids for residual garbage. Sky blue lids are appropriate for cardboard and paper (if privately serviced from commercial premises separately from comingled recycling).

Bin Carting Routes from Waste Storage to Waste Collection Points:

6. Mobile bin carting routes from the waste storage area to the bin collection point(s) should allow for unrestricted passage of bins and not contain steps, walls, fences without gates, narrow gates, vegetation, stepping stones, loose aggregates, or other obstacles. The distance and gradient should be suitable for the bin size as follows:

   a. for wheeled bins greater than 360 litres and up to 660 litres, bin carting distances that are not over five metres at gradients that are not steeper than 1:30; and

   b. for wheeled bins over 660 litres, bin carting distances that are not over three metres at gradients that are not steeper than 1:30

   c.*for wheeled bins up to and including 360 litres size, bin carting should be at gradients that are not steeper than 1:14 and distances that are not over:

      i. 100 metres in length for commercial developments,

      ii. 75 metres in length for residences, or

      iii. 50 metres in length for adaptable housing and seniors' developments;

   ***Point C does not apply to multiple dwelling houses in Rural Zones (zones RU2, RU3, RU4 and RU6).

Waste Collection Points:

7. The waste collection point(s) should meet the following criteria:

   a. The waste collection area(s) should be sufficiently sized to enable collection from the property of all wastes generated;

   b. Where mobile garbage bins (MGBs) 360 litre size and smaller are to be placed on the kerbside of a Council road or property's internal roadway for side-lift waste collection vehicle:

      i. sufficient space should be allocated so that bins can be spaced with at least 300mm between bins and 300mm either side of a row of bins. These should be drawn on the landscape plans, with individual bins shown to scale at correct spacing; and

ii. bins should be placed out for collection in a reasonably flat kerbside location (such that bins will not fall over when emptied) that does not obstruct traffic and pedestrian flows, roundabouts, parking bays, No Stopping zones, bus stops, gutters, drainage swales, driver site lines, access to letterboxes, or access to and from garages; and where bin lifts are not obstructed by signs, sign posts, fencing, retaining walls, vegetation or other elements;

c. Mobile garbage bins (MGBs) of 660 litre and 1100 litre size must be collected from onsite by waste collection vehicles entering the site, unless the site can meet the following criteria for the bins to be collected on the kerbside of a Council road by rear-lift waste collection vehicle, which requires:

i. a 1:30 gradient or flatter hard surface slab is to be provided within the property boundary and flush with the driveway to temporarily store the waste bins;

ii. the slab should have enough space to move bins around each other and replace empty bins while removing full bins, and should have stoppers to prevent bins running off the slab (while not preventing moving the bins to the kerb for emptying);

iii. the distance to move the bins along the driveway should be less than 5 metres and the gradient along and across the driveway to the kerb should be 1:30 or less;

iv. the road gradient should be less than 1:30 across and down the parking lane at the driveway; and

v. the 10 metre space immediately after the driveway should be retained as a stopping location for the waste collection vehicle (not car parking) on waste collection days. It may be No Parking, Loading Zone or Truck Zone.

(See Appendix 4 for information about bin spacing for kerbside collection)

<u>Waste Collection Vehicle Routes (onsite):</u>

8. For any bins to be collected onsite, the access for waste collection vehicles should:

a. require a maximum of only one reversing manoeuvre to enter or leave the site and turn on site;

b. be able to stand wholly within the site and not block on-site car parking, or access and egress from the property;

c. meet specifications for pavement quality (for gross weight bearing), turn, width and height clearances and lift arc requirements for locally available waste collection vehicles (specifications as identified in the Lake Macquarie City Council Waste Management Guidelines);

d. for side-lift waste vehicle onsite access, demonstrate vehicle turn arcs are sufficient for 10 metre length domestic side-lift waste collection vehicles (or be in accordance with turns and cul-de-sacs as per Standard Drawing EGSD-701 for 12.5 metre length vehicles);

e. for rear-lift waste vehicle onsite access, demonstrate vehicle turn arcs are sufficient for rear-lift waste collection vehicles of 8 metres length (or be in accordance with the *Lake Macquarie City Council Vehicle Access Guidelines* Medium Rigid Vehicle (MRV) standard or have turns and cul-de-sacs as per Standard Drawing EGSD-701 for 12.5 metre length vehicles); and

f. implement measures to mitigate the impacts of noise associated with the management of waste. (Noise should be evaluated in accordance with NSW Environment Protection Authority's Industrial Noise Policy.)

9. Where the design does not provide for the current Council waste collection vehicle access specifications, a signed letter should be provided from a local waste service provider confirming that they can provide an alternative service. The letter must detail the alternative collection solution, the collection methods offered (such as runners and where the vehicle will park) and the specifications and dimensions of the waste collection vehicles that will be used.

10. Provision of Council waste services will be subject to Council and waste contractor inspection on completion of works and signing of an indemnity agreement.

Waste Management Information Guide:

11. A copy of waste management information that will be provided to building owners and occupants is to be included in the development application.

3.2.4 Attached dwellings – specific land use objectives and controls (DCP Part 9.1)

DCP Part 9.1 provides Council's specific land use requirements for attached dwelling development.

However, there are other general requirements to address for attached dwelling developments contained in DCP Parts 2 to 7 and/or Area Plans of DCP Parts 10 to 12. Where a conflict exists between DCP Part 9.1 and other parts of the DCP, then the requirements in Part 9.1 prevails.

Groups of structurally independent dwellings built to both boundaries (abutting dwellings) are similar to attached dwellings as defined under the LM LEP 2014, but are not attached by a common wall. Abutting dwellings are considered to be a dwelling house under the LM LEP 2014 definitions, but the controls provided in this part of the LM DCP 2014 are applicable because of the similar built form.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	**Specific Land Uses**	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

Principal private open space (DCP Part 9.1 – section 1.4)

A waste storage area is in addition to the principal private open space requirement and cannot count towards the area allocated for private open space.

Objectives (only those from the DCP relevant to waste)

a. To ensure that Attached Dwelling developments provide sufficient outdoor areas for occupants' needs.

Controls (only those from the DCP relevant to waste)

1. A Principal Private Open Space with a minimum area of 16m$_2$ and a minimum width of four metres must be provided for each dwelling.

***Note**: A waste storage area is in addition to the principal private open space requirement.*

Operational waste management (DCP Part 9.1 – section 1.11)

Objectives (only those from the DCP relevant to waste)

a. To ensure that waste bins can be safely and conveniently moved between storage location(s) and collection point(s).

b. To ensure that occupants have reasonable access to the waste storage area.

c. To ensure that the location of bin storage and collection points do not obstruct access.

d. To ensure that bulk waste (such as furniture and whitegoods)can be effectively managed.

e. To ensure any bin storage area enclosures are an integral part of the built form and landscape character.

Controls (only those from the DCP relevant to waste)

1. A minimum space for waste bin storage of three 240 litre bins must be allocated per dwelling (in addition to minimum space allocations for other purposes) with minimum internal dimensions of either 1955mm x 1610mm or 2390mm x 1465mm and a minimum height clearance for opening bin lids of 1800mm. This may be in the garage, in addition to the space allocated for the vehicle.

2. *Distance of routes from dwelling door to waste storage location for that dwelling must be no further than 75 metres, or for adaptable dwellings must be no further than 50 metres at a maximum 1:14 gradient with wheelchair accessibility.*
3. *Bin routes between storage and collection locations must be no further than 75 metres, or 50 metres for adaptable dwellings.*
4. *The route from storage to collection location must not pass through the interior of dwellings, but bins can be taken through garages and courtyards. Bin routes must not traverse up or down kerbs or steps, stairs or gradients steeper than 1:14 or over stepping stones, loose gravel, or soft materials. For adaptable dwellings, the route through a garage must not require the removal of the vehicle to wheel the bin through.*
5. *All dwellings must have access to space to place one to two (1-2) cubic metres of bulk waste (such as furniture and whitegoods) on kerbside for collection, or a suitable alternative bulk waste management option must be provided and described in the Operational WMP.*
6. *Bin enclosures must be in character with the land use zone characteristics. The enclosure must be set back behind the front building line or suitably integrated visually to form part of the building line. The enclosure must visually integrate with the building or landscaping in terms of appearance, materials, bulk and scale and location and orientation.*

3.2.5 Dwelling houses in rural and EPZ – specific land use objectives and controls (DCP Part 9.5)

The additional detailed operational controls specified in section 3.2.4 apply. No further waste management controls are required for single dwelling, home business or home industry developments in Rural Zones (RU2, RU3, RU4 and RU6) and Environment Protection Zones (EPZ) (E2, E3 and E4).

3.2.6 Dual occupancy – specific land use objectives and controls (DCP Part 9.6)

DCP Part 9.6 provides Council's specific land use requirements for dual occupancy development.

However, there are other general requirements to address for attached dwelling developments contained in DCP Parts 2 to 7 and/or Area Plans of DCP Parts 10 to 12. Where a conflict exists between DCP Part 9.6 and other parts of the DCP, then the requirements in 9.6 prevails.

There are two types of dual occupancies, dual occupancy (attached) and dual occupancy (detached). LM LEP 2014 defines each as follows:

> ***dual occupancy (attached)*** means two dwellings on one lot of land that are attached to each other, but does not include a secondary dwelling.
>
> ***dual occupancy (detached)*** means two detached dwellings on one lot of land, but does not include a secondary dwelling.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	**Specific Land Uses**	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

Objectives (only those from the DCP relevant to waste)

a. *To ensure suitable bin storage is accessible to both dwellings.*
b. *To ensure sufficient bin and shared bulk waste (such as furniture and whitegoods) collection space is available to both dwellings.*

Controls (only those from the DCP relevant to waste)

1. *Dual properties may share a set of 240 litre bins (with maybe an upsized 360 litre recycling bin), so suitable shared storage space must be available; but the owner may pay for an additional set of bins, so space option must also be available for each property to store their own set of 240 litre bins, with an optional 360 litre recycling bin each;*
2. *At least 3.5 metres length per dwelling of unobstructed position on safe kerbside must be available for bin collection; and for the bulk waste storage space up to 2 square metres needs to be designated on the kerbside.*
3. *A minimum space for waste bin storage must be allocated per dwelling (in addition to minimum space allocations for other purposes) with minimum internal dimensions of each storage area as follows:*
    a. *Where each dwelling's set of 240 litre bins are to be stored on in each individual dwelling's yard, either 1955mm x 1610mm or 2390mm x 1465mm at each dwelling;*
    b. *Where two dwellings' individual bins (two sets of 240 litre bins) are to be stored in a shared area accessible to both dwellings, for 240 litre bins, 1955mm x 2390mm; or*
    c. *Where two dwellings' shared 240 litre bins (one set of bins) are to be stored in a shared area accessible to both dwellings, either 1955mm x 1610mm or 2390mm x 1465mm.*

    (See Appendix 3 for bin layouts and minimum waste storage area dimensions.)

3.2.7 Foreshore and waterway development – specific land use objectives and controls (DCP Part 9.7)

This section applies to developments related to multiple dwelling developments that fall under DCP Part 9 land uses for foreshore and waterway development. It includes domestic boat sheds and jetties.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

Objectives (only those from the DCP relevant to waste)

a. To protect the visual character and natural landscape of Lake Macquarie, by restricting the erection of buildings and structures at the Lake foreshore.

d. To permit private development of foreshore land while maintaining foreshore public reserves and maintaining public access to the foreshore.

e. To maximise opportunity for organic green waste, recycling and garbage to be collected separately for maximum resource recovery.

f. To ensure that hazardous and liquid wastes are managed properly to avoid pollution risk to waterways or foreshore.

Domestic Boat Sheds

Controls (only those from the DCP relevant to waste)

4. A boat shed must not include washing and/ or cooking facilities, habitable rooms, or entertaining areas/ facilities.

5. A boat shed must not include storage of hazardous or liquid wastes.

3.2.8 Multi-dwelling Housing - specific land use objectives and controls (DCP Part 9.11)

DCP Part 9.11 provides Council's specific land use requirements for multi-dwelling housing development.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

Objectives (only those from the DCP relevant to waste)

a. To ensure that waste is managed, collected and disposed of, reused, or recycled, effectively and efficiently to provide a safe, healthy and clean environment for the community, as well as maintaining the amenity of the neighbours.

Controls (only those from the DCP relevant to waste)

1. Kerbside collection of mobile garbage bins (MGBs) by side-lift waste collection vehicles may only occur where:

i. MGBs up to 360 litre size are used and can be accommodated on the subject property frontage so that bins can be spaced with at least 300mm between bins;

ii. each bin placement location has a maximum of 40 bins out on any one day;

iii the collection location is safe for stopping (up to fifteen minutes for 40 bins) to collect these bins and will not hinder access or traffic flow more than a minute; and

iv. the noise from collection must be evaluated in accordance with NSW Environment Protection Authority's Industrial Noise Policy.

2. Where the collection of waste/recyclables in larger bins is required, the design of the development must accommodate safe collection of the centralised larger bins or skips. Bulk storage containers must be accessible by service vehicles without the need for manual manoeuvring of the container and the need for reversing should be minimised. Council waste services vehicles, staff and Council's contractors will not enter private property unless it is under a negotiated agreement.

3. A minimum space for waste bin storage must be allocated per dwelling (in addition to minimum space allocations for other purposes) with minimum internal dimensions of each storage area as follows:

a. where each dwelling's bins are to be stored on in each individual dwelling's yard, either 1805mm x 1380mm or 2045mm x 1300mm for 140 litre bins, or for 240 litre bins, either 1955mm x 1610mm or 2390mm x 1465mm;

b. where two dwellings' individual bins (two sets of bins) are to be stored in a shared area accessible to both dwellings, either 1805mm x 2045mm for 140 litre bins, or for 240 litre bins, 1955mm x 2390mm;

c. where two dwellings' shared 240 litre bins (one set of bins) are to be stored in a shared area accessible to both dwellings, either 1955mm x 1610mm or 2390mm x 1465mm;

d. where four dwellings' shared 240 litre bins (two sets of bins) are to be stored in a shared area accessible to all four dwellings, 1955mm x 2390mm;

e. where up to five dwellings' shared 660 litre bins (one set of bins) are to be stored in a shared area accessible to all five dwellings, 4575mm x 1710mm;

f. where up to eight dwellings' shared 240 litre bins (four sets of bins) are to be stored in a shared area accessible to all eight dwellings, either 3910mm x 2390mm or 1955mm x 4780mm;

f. where up to ten dwellings' shared 1100 litre bins (one set of bins) are to be stored in a shared area accessible to all ten dwellings, 3245mm x 3210mm; or

g. where up to twenty dwellings' shared 1100 litre bins (two sets of bins) are to be stored in a shared area accessible to all twenty dwellings, 5805mm x 3210mm.

4. *A minimum of weather-protected space for bulk waste storage (such as furniture and whitegoods) must be allocated as a half square metre of floor space per dwelling, which may be in individual garages or in a shared bulk waste storage location.*
5. *For bins up to 360 litres to be collected on site, the on-site road access must meet pavement quality, turn and lift requirements for Council waste collection vehicle dimensions. Provision of service will be subject to Council and waste contractor inspection on completion of works and signing of an indemnity agreement. Vehicle turn arcs must be demonstrated as sufficient for up to 10 metre length domestic side-lift waste collection vehicles or with turns and cul-de-sacs as per Standard Drawing EGSD-701 for 12.5 metre length vehicles. If internal roads are only built as per the Lake Macquarie City Council Vehicle Access Guidelines Medium Rigid Vehicle (MRV) standard, then it must be demonstrated that services using waste collection vehicles of 8.8 metres or less are available to provide the on-site waste collection.*
6. *Where the collection of waste in bins of 660 litre size or larger is required, the bin collection point must be on site and accessible by service vehicles with minimal reversing. Waste collection must not block on-site car parking, or access and egress from the property. Vehicle turn arcs must be demonstrated as sufficient for rear-lift waste collection vehicles or with turns and cul-de-sacs as per Standard Drawing EGSD-701 for 12.5 metre length vehicles. If internal roads are only built as per the Lake Macquarie City Council Vehicle Access Guidelines Medium Rigid Vehicle (MRV) standard, then it must be demonstrated that services using waste collection vehicles of 8.8 metres or less are available to provide the on-site waste collection.*
7. *A waste system information guide must be provided with the Waste Management Plan that will be given to owners, occupants and property managers. The guide must outline the waste service system and how to use it, the locations for bin storage and waste collection points, options within the planning for alternative waste service solutions and wording to be included in the tenancy agreements about waste management.*

3.2.9 Residential flat buildings – specific land use objectives and controls (DCP Part 9.13)

DCP Part 9.13 provides Council's specific land use requirements for residential flat building development.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

Objectives (only those from the DCP relevant to waste)

a. To ensure that waste is managed, collected and disposed of, reused, or recycled, effectively and efficiently to provide a safe, healthy and clean environment for the community, as well as maintaining the amenity of the neighbours.

Controls (only those from the DCP relevant to waste)

1. *For developments where access is not at ground level for all dwellings, shared waste storage area(s) must be incorporated into the design.*

2. Residential development greater than three storeys must provide one of the following waste management solutions:

i. a waste chute system, designed in accordance with Lake Macquarie City Council Waste Management Guidelines, with:

a. solutions to manage all three waste streams – recyclables, food and indoor/balcony garden waste and residual garbage;

b. recyclables not to be compacted;

c. food and indoor/balcony garden waste, if to be included in a Council green waste service, is to be un-bagged or else in Council-approved compostable bags;

d. a solution to manage wastes that must not be included in any of the bins, such as batteries, cooking oils, liquid wastes, chemicals and light globes; and

e. a solution to manage bulk waste items (such as furniture and whitegoods) and large recyclables such as cardboard boxes that would not fit in the recycling chute.

ii. an intermediate waste storage room on each level, designed in accordance with Lake Macquarie City Council Waste Management Guidelines, with:

a. solutions to manage all three waste streams – recyclables, food and indoor/balcony garden waste and residual garbage;

b. associated arrangements in place for a caretaker to transfer the waste to the bins in the waste storage room, ideally in a separate service lift;

c. food and indoor/balcony garden waste, if to be included in a Council green waste service, is to be un-bagged or else in Council-approved compostable bags; and

d. a solution to manage wastes that must not be included in any of the bins, such as batteries, cooking oils, liquid wastes, chemicals and light globes.

iii. an innovative alternative, with:

a. solutions to manage all three waste streams – recyclables, food and indoor/balcony garden waste and residual garbage;

b. food and indoor/balcony garden waste, if to be included in a Council green waste service, is to be un-bagged or else in Council-approved compostable bags;

c. a solution to manage wastes that must not be included in any of the bins, such as batteries, cooking oils, liquid wastes, chemicals and light globe; and

d. if the solution includes on-site food and garden waste treatment: composting, worm farming or food dehydrator that meets a NSW Environment Protection Authority Resource Recovery Order and Exemption with the output to be used in on-site gardening.

3. A minimum space for waste bin storage must be allocated per dwelling (in addition to minimum space allocations for other purposes) with minimum internal dimensions of each storage area as follows:

i. Where four dwellings' shared 240 litre bins (two sets of bins) are to be stored in a shared area accessible to all four dwellings, 1955mm x 2390mm;

ii. Where up to five dwellings' shared 660 litre bins (one set of bins) are to be stored in a shared area accessible to all five dwellings, 4575mm x 1710mm;

iii. Where up to eight dwellings' shared 240 litre bins (four sets of bins) are to be stored in a shared area accessible to all eight dwellings, either 3910mm x 2390mm or 1955mm x 4780mm;

iv. Where up to ten dwellings' shared 1100 litre bins (one set of bins) are to be stored in a shared area accessible to all ten dwellings, 3245mm x 3210mm;

v. Where up to twenty dwellings' shared 1100 litre bins (two sets of bins) are to be stored in a shared area accessible to all twenty dwellings, 5805mm x 3210mm; or

vi. Where up to forty dwellings' shared 1100 litre bins (four sets of bins) are to be stored in a shared area accessible to all forty dwellings, 11610mm x 3210mm.

4. A minimum of weather-protected space for bulk waste storage (such as furniture and whitegoods) must be allocated as a half square metre of floor space per dwelling, which may be in individual garages or in a shared bulk waste storage location.

5. *Waste storage areas must be readily accessible to occupants, while being secure from non-occupants.*
6. *Kerbside collection of mobile garbage bins (MGBs) by side-lift waste collection vehicles may only occur where:*
    i. *MGBs up to 360 litre size are used and can be accommodated on the subject property so that bins can be spaced with at least 300mm between bins;*
    ii. *bin placement location has a maximum of 40 bins out on any one day;*
    iii. *the collection location is safe for stopping (up to fifteen minutes for 40 bins) to collect these bins and will not hinder access or traffic flow more than a minute; and*
    iv. *the noise from collection must be evaluated in accordance with NSW Environment Protection Authority's Industrial Noise Policy.*
7. *Where the collection of waste/recyclables will be in larger bins over 360 litres, the design of the development must accommodate safe collection of the centralised larger bins. The larger bins must be accessible by service vehicles without the need for manual manoeuvring of the bins and the need for vehicle reversing should be minimised. Council waste services vehicles, staff and Council's contractors will not enter private property unless it is under a negotiated agreement.*
8. *Where waste storage must be in a lower level basement, a goods lift may be used to move bins between floors. Doorways to any goods lift(s) and lift space dimensions must fit the size of bins and space for a person to comfortably fit. The distance from store to lift and from lift to collection point must be no more than 3 metres for 1100 litre bins and 5 metres for 660 litre bins unless a bin cart is used and can also fit in the lift.*
9. *Where waste storage must be in a lower level basement and collections have to take place inside the from inside the basement, the building must be designed to accommodate private waste collection vehicles entering and exiting the site. Clearance height for under building access by collection vehicle must be no less than 3.6m at any point if vehicle is required to enter site to service bins. At sites where waste collection vehicles must enter and exit in a forward direction, the use of vehicle turntables are acceptable. Confirmation is required in writing from a waste collection service provider that they would be able to service this site with this design.*
10. *A waste system information guide must be provided with the WMP that will be given to owners, occupants and property managers. The guide must outline the waste service system and how to use it, the locations for bin storage and waste collection points, options within the planning for alternative waste service solutions and wording to be included in the tenancy agreements about waste management.*

3.2.10 Secondary dwellings – specific land use objectives and controls (DCP Part 9.14)

Not all secondary dwellings need a development application.

The *SEPP (Affordable Rental Housing) 2009* (AHSEPP) provides for the development of secondary dwellings (commonly referred to as granny flats) as complying development. *SEPP (Exempt and Complying Development Codes) 2008* (Codes SEPP) also contains provisions relevant to the development of a secondary dwelling as complying development.

If all requirements for a secondary dwelling specified under the AHSEPP and Codes SEPP are met, a complying development approval can be obtained from Council or an accredited certifier without the need for a development application. Where the requirements for a secondary dwelling under the AHSEPP and Codes SEPP cannot be satisfied, a development application must be lodged with Council.

DCP Part 9.14 provides Council's specific land use requirements for secondary dwellings that do require a development application.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	**Specific Land Uses**	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

Objectives (only those from the DCP relevant to waste)

a. To ensure that waste/recyclables are managed, collected and disposed of, or reused or recycled effectively and efficiently.

b. To provide non-discriminatory access to waste management services for both dwellings.

Controls (only those from the DCP relevant to waste)

1. *Where principal private open space is not mandatory for the secondary dwelling (ones attached to or within the principal dwelling), bins of the principal dwelling may be shared, but must be accessible to both dwellings, with space allocated as per 2(c) below.*
2. *A minimum space for waste bin storage must be allocated (in addition to minimum space allocations for other purposes) with minimum internal dimensions of each storage area as follows:*
    a. *Where each dwelling's set of 240 litre bins are to be stored on in each individual dwelling's yard, either 1955mm x 1610mm or 2390mm x 1465mm at each dwelling;*
    b. *Where two dwellings' individual bins (two sets of 240 litre bins) are to be stored in a shared area accessible to both dwellings, for 240 litre bins, 1955mm x 2390mm; or*
    c. *Where two dwellings' shared 240 litre bins (one set of bins) are to be stored in a shared area accessible to both dwellings, either 1955mm x 1610mm or 2390mm x 1465mm.*
3. *Sufficient unobstructed space must be ensured to allow for two types of waste bins to be placed kerbside for collection on any waste collection day.*
4. *Sufficient unobstructed space must be allocated along the kerb to allow for two cubic metres of bulk waste (including furniture and whitegoods, or a suitable alternative bulk waste collection management option must be provided and described in the Operational WMP.*

3.2.11 Housing on small and narrow lots – specific land use objectives and controls (DCP Part 9.19)

Developments designated as housing on small and narrow have the additional objectives and controls provided below as per DCP Part 9.19.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	Guidance for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

Controls (only those from the DCP relevant to waste)

1. *The location of driveways must be determined with regard to the location of utilities infrastructure, safe and unobstructed kerbside space to present waste service bins for collection, street tree planting and to maximise the availability of on-street parking.*
2. *The location of above ground utilities, including power poles and lines, must not interfere with waste collection space and waste collection vehicle bin lift clearances.*
3. *The principle open space must not include the space allocated to waste storage.*

Objectives (only those from the DCP relevant to waste)

a. *To ensure dwellings have fair access to waste collection services; and*
b. *To ensure that the practical requirements for waste management are met in such a way as to minimise impact on the enjoyment of the occupants and neighbours.*

Controls (only those from the DCP relevant to waste)

1. *Waste bin storage is to be appropriately located to:*
    - *i. be separately accounted from that space allocated for principle private open space and landscaping;*
    - *ii. have a waste storage space per dwelling of minimum internal dimensions of either 1955mm x 1610mm or 2390mm x 1465mm to store one set of 240 litre recycling, food and garden waste and residual garbage bins;*
    - *ii. not compromise visual amenity for an occupant of the principle private open space;*
    - *iii. have the bins in an area shaded at least from afternoon sun to minimise bin odour;*
    - *iv. not compromise visual amenity of views from windows or doors of the property or neighbours;*
    - *v. be set back behind the front building line, or suitably integrated visually to form part of the building line or landscaping;*
    - *vi. locate bins where odours are least likely to enter airflow for doors and windows for this or adjacent properties; and*
    - *vii. have unobstructed access (without steps and on a gradient less than 1:14) to move the bins to the location where bins are placed out for collection, which may be through a side gate, through a garage, or by other unobstructed path that does not require passing through the dwelling's interior.*
2. *Sufficient unobstructed space must be ensured to allow for two waste service bins per dwelling to be placed out kerbside for collection on any waste collection day, or alternative shared waste service solutions planned with suitable shared storage locations.*
3. *Sufficient unobstructed space must be ensured to allow for 1 cubic metre per dwelling of bulk waste (including furniture and whitegoods) to be placed out kerbside for collection, or alternative shared*

bulk waste service solutions outlined in the Operational Waste Management Plan with suitable shared storage locations.

3.2.12 Boarding houses and hostels– detailed operational guidance

Additional objectives and detailed operational guidance apply to boarding houses and hostels and vary slightly depending on whether the development provides shared kitchen and bathroom facilities or whether each room has its own kitchen and/or bathroom.

The projected waste generation rates and indoor waste cupboard requirements are the only differing components of the detailed guidance between developments that provide shared versus private kitchen and bathroom facilities.

Where a conflict exists between the DCP and the information presented in this section of the WMG, then the requirements in DCP generally prevails.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	**Specific Land Uses**	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	**Guidance** for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

Objectives

a. To ensure that boarding houses and hostels provide an acceptable level of waste management amenity to occupants that will maximise diversion of waste from landfill to recycling and composting.
b. To enable reuse of furniture and resources between occupants.
c. To ensure ongoing coordinated awareness and education to achieve waste avoidance, resource reuse, waste separation, litter and illegal dumping prevention.

Guidance

1. The boarding house design must provide for a minimum volume of recycling, green waste and garbage capacity per dwelling as defined in the WMG in Table 9 “Waste generated by boarding houses” in section 3.3.3.
2. Waste, including bulk waste (such as furniture and whitegoods) must be managed to prevent littering and illegal dumping, especially when occupants move in and out; and an area/areas allocated for a) enabling swapping of furniture and other resource between occupants.
3. The development must provide a waste storage space accessible to all guests within the accommodation that has sufficient space to store separated recycling, food waste, problem waste (such as batteries, light globes and paint) and residual garbage for a minimum of two days.

Internal storage:

4. (Applies to shared kitchens only) Waste storage cupboard space in or near each kitchen area must be provided, sufficiently sized to hold two days’ volume of waste for the number of dwellings sharing the kitchen. Separated containers sized between two and twenty litres are provided for recyclables (like glass, plastic containers, paper and cardboard), food waste, soft plastic, problem wastes (e.g. batteries and globes) and residual garbage.
5. A safe access route from the accommodation to the waste bin storage area(s) must be shown on the design plan, must be well-lit, on an even path and must be no more than 75 metres.
6. The waste storage area must accommodate sufficient space for separate bins of sufficient capacity to hold enough recycling, residual garbage and food waste to allow for peak period use of the facility, within the waste collection frequencies identified in waste management plan.

7. Garden and food waste may be processed in on-site compost, worm farm or other organic waste processing solution for use on site in gardens if there will be an on-site manager.
8. Waste storage areas should include space for storage of other wastes that can be recycled separately, or managed separately from the kerbside collection service.
9. Measures should be implemented to mitigate the impacts of odour and noise associated with the management of waste, such that it does not impinge on the enjoyment of the occupants utilising the accommodation and facilities. Noise must be evaluated in accordance with NSW Environment Protection Authority's Industrial Noise Policy.
10. A waste system information guide must be provided with the WMP that will be given to owners, occupants and property managers. The guide must outline the waste service system and how to use it, the locations for bin storage and waste collection points and the wording that will be included in the tenancy agreements about waste management.

3.2.13 Group homes – detailed operational guidance

Additional detailed operational guidance related to waste management apply to group homes. Where a conflict exists between the DCP and the information presented in this section of the WMG, then the requirements in DCP generally prevails.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	**Specific Land Uses**	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	**Guidance** for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

Guidance

1. Safe, lit access from dwelling or business exit to allocated bin storage area must be provided that is less than 50 metres in length for occupants. Where the group home is an adaptable home, there must be sufficient space for occupants using wheelchairs or other mobility aids to be able to access the bins to place waste inside and to move bins out to the collection point without having to move cars that may be parked in the way (in garages, driveways or next to the bin collection points).
2. Waste storage area(s) must be provided that allow for a set of three 240 litre bins to be accessibly stored per every five occupants in the group home, to allow flexibility in the number of bins the group home can have. Options for use of 660L and 1100L sized bins of equivalent capacity can also be proposed where collection from the waste storage area is accessible to waste collection vehicles.
3. Sufficient space must be provided for two of each set of three bins to be placed kerbside for collection, or an alternative waste bin collection option proposed. Options for use of 660L and 1100L sized bins of equivalent capacity can also be proposed where collection from the waste storage area is accessible to waste collection vehicles.
4. A waste system information guide must be provided with the Waste Management Plan that will be given to owners, occupants and property managers. The guide must outline the waste service system and how to use it, the locations for bin storage and waste collection points and the wording that will be included in the tenancy agreements about waste management.

3.2.14 Short-term rental accommodation – detailed operational guidance

Additional objectives and detailed operational guidance related to waste management apply to short-term rental accommodation. Where a conflict exists between the DCP and the information presented in this section of the WMG, then the requirements in DCP generally prevails.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	**Specific Land Uses**	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	**Guidance** for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

Objectives

a. To ensure that Short-tshort-termerm Rental Accommodation provide an acceptable level of waste management amenity to occupants that will maximise diversion of waste from landfill to recycling and composting.

b. To ensure ongoing coordinated awareness and education to achieve waste avoidance, resource reuse, waste separation, litter and illegal dumping prevention.

Guidance

1. Must provide a minimum of 110 litres of recycling and green waste (including food) per week and 110 litres of general garbage a fortnight.
2. A weather-protected bulk waste (furniture and whitegoods) space should be designed (including shelves for smaller items) to enable swapping of second-hand resources between short-term residents as well as doubling as a bulk waste storage area.
3. Waste, including bulk waste (such as furniture and whitegoods) must be managed to prevent littering and illegal dumping, especially when occupants move in and out.
4. The development must provide a waste storage space accessible to all guests within the accommodation that has sufficient space to store separated recycling, food waste, problem waste (such as batteries, light globes and paint) and residual garbage for a minimum of two days.
5. A safe access route from the accommodation to the waste bin storage area(s) must be shown on the design plan, must be well-lit, on an even path and must be no more than 75 metres from the building(s) where waste is generated.
6. The waste storage area must accommodate sufficient space for separate bins of sufficient capacity to hold enough recycling, residual garbage and food waste to allow for peak period use of the accommodation, within the waste collection frequencies identified in waste management plan.
7. Garden and food waste may be processed in an on-site compost, worm farm or other organic waste processing solution for use on site in gardens if there will be an on-site manager.
8. Waste storage areas should include space for storage of other wastes that can be recycled separately, or must be managed separately from the kerbside collection service.
9. Measures should be implemented to mitigate the impacts of odour and noise associated with the management of waste, such that it does not impinge on the enjoyment of the occupants utilising the accommodation and facilities. Noise must be evaluated in accordance with NSW Environment Protection Authority's Industrial Noise Policy.
10. A waste system information guide must be provided with the Waste Management Plan that will be given to owners, occupants and property managers. The guide must outline the waste service system and how to use it, the locations for bin storage and waste collection points and the wording that will be included in the tenancy agreements about waste management.

3.2.15 Social housing – detailed operational guidance

Additional objectives and detailed operational guidance related to waste management apply to social housing. Where a conflict exists between the DCP and the information presented in this section of the WMG, then the requirements in DCP generally prevails.

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	**Specific Land Uses**	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	**Guidance** for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

Objectives

a. To ensure that social housing can be provided with minimal operational costs for waste management.

b. To ensure that sufficient waste capacity and storage space is allocated.

c. To enable reuse and swapping of furniture and resources between occupants.

Guidance

1. Housing waste management must be designed to allow Council services, so that the occupants have the choice to opt for Council services, or if there are lower cost private waste services.
2. A minimum space for waste bin storage must be allocated (in addition to minimum space allocations for other purposes) with minimum internal dimensions of each storage area as follows:
    a. where each dwelling's set of 240 litre bins are to be stored on in each individual dwelling's yard, either 1955mm x 1610mm or 2390mm x 1465mm at each dwelling;
    b. where two dwellings' individual bins (two sets of 240 litre bins) are to be stored in a shared area accessible to both dwellings, for 240 litre bins, 1955mm x 2390mm;
    c. where two dwellings' shared 240 litre bins (one set of bins) are to be stored in a shared area accessible to both dwellings, either 1955mm x 1610mm or 2390mm x 1465mm;
    d. where four dwellings' shared 240 litre bins (two sets of bins) are to be stored in a shared area accessible to all four dwellings, 1955mm x 2390mm;
    e. where up to five dwellings' shared 660 litre bins (one set of bins) are to be stored in a shared area accessible to all five dwellings, 4575mm x 1710mm;
    f. where up to eight dwellings' shared 240 litre bins (four sets of bins) are to be stored in a shared area accessible to all eight dwellings, either 3910mm x 2390mm or 1955mm x 4780mm; or
    g. where up to ten dwellings' shared 1100 litre bins (one set of bins) are to be stored in a shared area accessible to all ten dwellings, 3245mm x 3210mm; or
    h. where up to twenty dwellings' shared 1100 litre bins (two sets of bins) are to be stored in a shared area accessible to all twenty dwellings, 5805mm x 3210mm.
3. A weather-protected bulk waste (furniture and whitegoods) space should be designed (including shelves for smaller items) to enable swapping of second-hand resources between residents as well as doubling as a bulk waste storage area.
4. Waste, including bulk waste (such as furniture and whitegoods) must be managed to prevent littering and illegal dumping, especially when occupants move in and out.
5. A waste system information guide must be provided with the Waste Management Plan that will be given to owners, occupants and property managers. The guide must outline the waste service system and how to use it, the locations for bin storage and waste collection points and the wording that will be included in the tenancy agreements about waste management.

3.2.16 Seniors living developments – detailed operational guidance

The source of the information applicable to this section is highlighted in the chart below:

Document	Controls By Zone	Subdivisions	Specific Land Uses	Events
DCP	**Objectives and controls** by zone – see DCP Parts 2-7	Aims and Controls - see DCP Part 8	Objectives and controls for specific land uses (additional to controls by zone) - see DCP Parts 9.1-9.19	DCP Parts 2 - 7
WMG	**Guidance** by zones – see WMG (all Sections 2-7)	Guidance - see WMG Section 7	**Guidance** for specific land uses, such as Aged Care, not covered in DCP Part 9	Guidance - see WMG Section 6

The waste requirements for seniors living developments are covered under the *SEPP (Housing for Seniors or People with a Disability) 2004* (excluding over 55's living estates under SEPP 36) or are the same as for DCP Part 9.11 Multi-dwelling Housing. Refer to WMG section 3.2.8 for guidance.

Seniors living developments provide independent dwellings and a lower level of care than aged care facilities.

For more information about objectives and detailed guidance for aged care facilities see Section 4 of the WMG.

3.3 Operational Waste Management for multiple dwellings – Information to Assist with Planning

3.3.1 Calculating waste generation volumes for residential units

All dwellings must have access to garbage, recycling and food/green waste bins. Sufficient capacity of bins should be provided to accommodate volumes of waste for units with small gardens or without gardens as follows in Table 8.

Table 8 - Waste generated by units with small gardens

Unit with small garden			
Waste Type	**Volume L/week**	**Volume L/fortnight**	**Collection frequency**
Recycling	60	120	Fortnightly
Food and garden green waste	120	240	Weekly
Residual garbage	60	120	Fortnightly

3.3.2 Calculating waste generation volumes for short-term rental accommodation

The property owner or appointed manager must provide guests with:

- receptacles for waste separation into garbage, recycling and green waste inside each unit; and
- shared access to at least one set of shared 240 litre garbage, recycling and food/green bins, or to one of Council's tailored packages if the dwelling is part of a strata or community title property with three or more units.

3.3.3 Calculating waste generation volumes for boarding houses

Waste generated from boarding houses varies depending on duration of stay, lifestyle of occupants and whether the property has shared or individual facilities (kitchens, bathrooms and laundries). The owner must provide all occupants with access to waste services. This should consist of garbage, recycling and food/green waste bins. Sufficient capacity of bins should be provided to accommodate volumes of waste between the range indicated in Table 9, unless sufficient reasons can be given for variation from this.

Table 9 - Waste generated by boarding houses

For boarding house studios with own kitchen, bathroom and laundry			
Waste Type	**Volume L/week**	**Volume L/fortnight**	**Collection frequency**
Recycling	60	120	Fortnightly
Food and garden green waste	40 (plus landscaping)	80 (plus landscaping)	Weekly
Residual garbage	40	80	Fortnightly
For boarding house rooms without own kitchen, bathroom and laundry			
Waste Type	**Volume L/week**	**Volume L/fortnight**	**Collection frequency**
Recycling	40	80	Fortnightly
Food and garden green waste	30 (plus landscaping)	60 (plus landscaping)	Weekly
Residual garbage	30	60	Fortnightly

3.3.4 Waste service options for multiple dwellings, residential flats and multiple occupancy dwellings

Multiple Dwellings include the following types of development, as listed in Table 10. Each has its own differing waste management planning needs.

Table 10 - Types of multiple dwelling developments

Development type	**DCP and SEPP locations for additional information**
Multi-dwelling Housing	DCP 9.11
Residential Flat Buildings	DCP 9.13 and SEPP 65
Attached Dwellings	DCP 9.1
Dual Occupancy Development	DCP 9.6 and Infill Affordable Housing SEPP Affordable Rental Housing 2009
Secondary Dwellings (Granny Flats)	DCP 9.14 and SEPP Affordable Rental Housing 2009
Boarding Houses	SEPP Affordable Rental Housing 2009
Short-term Rental Accommodation	
Social Housing	SEPP Affordable Rental Housing 2009
Housing for Seniors and People with Disabilities	SEPP 2004
Group Homes	SEPP Affordable Rental Housing 2009

Multiple Occupancy Dwellings – are treated the same as Multiple Dwellings for the purposes of waste management planning. Multiple Occupancy Dwellings pay one waste service charge with their rates but have two or more dwellings on the property. Up to two dwellings can share bins but additional dwellings must order and pay for additional waste services.

Council Domestic Waste Services – for each domestic waste service charge paid, Council provides:

- 1 x standard 240 litre garbage bin collection each week (bins purchased by property owner);
- 1 x standard 240 litre or 360 litre recycling bin collection each fortnight (bins provided by Council);
- 1 x standard 240 litre green waste bin collection each week (bins provided by Council);
- bulk waste collections (furniture, electrical, mattresses and tree branches) up to two cubic metres (one box trailer load) of combined waste material per household per collection; and
- household problem waste recycling and disposal services from drop off points around Lake Macquarie.

Table 11 - Options for bins for multi-occupancy residential developments

Options for bins for multi-occupancy residential developments			
Size (litres)	**Height (mm)**	**Width (mm)**	**Depth (mm)**
240 (garbage, recycling, food and garden)	1060	585	730
360 (recycling only)	1100	680	848
660 (garbage and recycling only)	1200	1260	780
1100 (garbage and recycling only)	1330	1240	1070

Property owners may opt to have as many additional 240 litre garbage, 240 litre or 360 litre recycling and 240 litre green waste services as are needed by paying an additional charge for these services.

Bins shared between dwellings must be located where they can be accessed by all dwelling sharing the bins.

Figure 7 - 240 and 360 litre bin footprints

Development's designs for large multi-occupancy residential developments, such as aged care facilities that pay residential rates to Council, must provide options for waste storage areas that will hold large bins to facilitate a development-wide shared bin system. Table 11 shows dimensions of the large bins available.

Figure 8 - Example of 1100 litre mobile recycling bin

3.3.5 Waste service packages available to residential strata and community title developments

Where there are three or more dwellings in a strata or community title development, the owner's corporation (or equivalent) can opt for "downsize" or "shared" waste service packages for all of the dwellings in the scheme. This may reduce the waste service charge for each dwelling. Every dwelling within the strata complex must have the same package.

There are seven waste packages available to strata complexes with three or more dwellings.

- The **Standard** package is the default package and includes a weekly 240 litre garbage service, a fortnightly 240 litre recycling service and a fortnightly 240 litre food/green waste service per unit.
- The **Upsize** package is the same as the standard package but offers a larger 360 litre recycling bin per unit.
- The **Downsize** package offers a set of three smaller 140 litre bins per unit.
- The **Shared Standard** and **Shared Upsize** packages require that each set of bins be shared between two units.
- The **Shared 660 litre Package** can be shared between four to five units per bin, while the **Shared 1100 litre** Package can be shared between up to 10 units. These two packages are only available after consultation with Council.

All packages include bulk waste collection services for items such as furniture and whitegoods and problem waste recycling and disposal services from drop off points around Lake Macquarie.

If the complex has an odd number of units for bin sharing between unit pairs, round the number of bins up to the nearest full number, i.e. if there are seven units in the complex to share bins, there will be four sets of bins (not three).

Bin dimensions for bins available in strata (and community title) waste packages are shown in Table 12.

Table 12 - Options for bins for strata residential developments

Options for bins for strata residential developments			
Size (litres)	**Height (mm)**	**Width (mm)**	**Depth (mm)**
140	915	535	615
240	1060	585	730
360 (recycling only)	1100	680	848
660	1200	1260	780
1100	1330	1240	1070

Development designs should enable the owner's corporation to select any of these waste service packages, by allowing for large shared bin storage areas, an option for shared bin storage areas between pairs of dwellings and optional bin storage space in all individual dwelling garages or screened secured yards to keep the shared upsize bins.

3.3.6 Designing operational waste management systems that avoid, reuse and recycle wastes

Ensuring that there is sufficient space and ease of access to recycling and green waste bins helps to maximise the diversion of recyclable and compostable wastes from the residual garbage bin.

Indoor waste cupboards should have sufficient room for separating a diversity of wastes including items that should not be included in any of the kerbside bins, such as batteries and oils, or that are separately recyclable such as plastic wrap and printer cartridges. Bins should be co-located to so that no extra effort is required to take wastes to the recycling or green waste bins.

Space for on-site composting or worm farming should still be available so that residents can create and use their own organic fertilisers for yard gardens, balcony gardening and indoor plants.

Shared bin areas should be accessible, with recycling, green waste and other alternatives to general garbage disposal easily accessible and near the garbage bins. Signage must be very clear on what can and cannot go into the bins to help occupants avoid contamination and to maximise what can be recycled.

Figure 9 - Clear signage aids correct sorting of waste into the correct bin

(Source: State of NSW and NSW Environment Protection Authority 2019)

A shared "swap" space for bulk waste can facilitate reuse of resources. This is a space within the development where people can place items they want to give away for other occupants to take away if they wish. Leftover items can be donated to charity.

Figure 10 - A shared swap space where reusable goods can be passed on for others to use

(Source: State of NSW and NSW Environment Protection Authority 2019)

To enable tidy and clear separation of low volume problem wastes (such as used batteries, small e-waste and light globes) some developments overseas have installed shelves with tubs that slide out like drawers in a communal area (such as a bin room). The shelving holds several tubs across by several tubs high. Each is clearly labelled with the type of waste that can be separated into that tub for subsequent recycling. When the tub is getting full, the building manager or resident recycling champion arranges for the load to be taken or posted to the recycler.

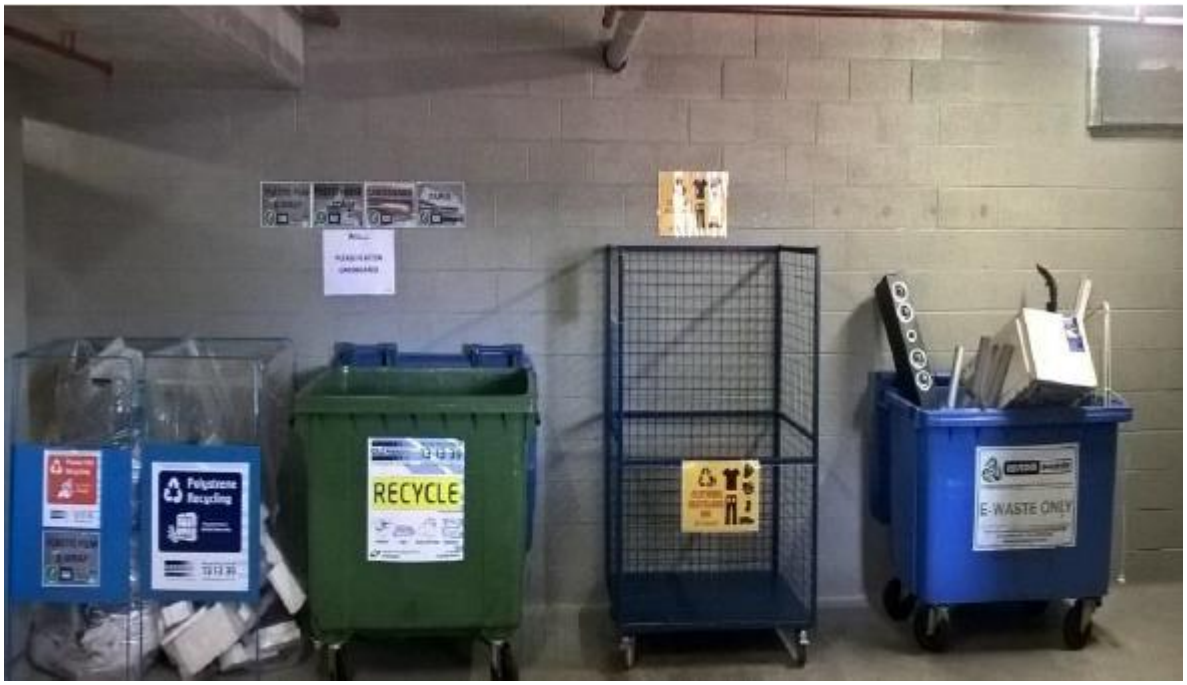

Figure 11 - With flexible space beyond the minimum allocated, it is easy to separate wastes and divert them to recycling
(Source: State of NSW and NSW Environment Protection Authority 2019)

3.3.7 Waste chutes in residential flat buildings

Developments greater than three storeys must provide a waste chute and/or a waste storage room on each level with associated arrangements in place for the transfer of waste to the bulk storage bins and/or a separate service lift.

Recyclable wastes must be collected and stored separately and must not be compacted.

Food waste must be collected separately, which, if to be included in a Council food/green waste service, may be stored in compostable bags together with garden waste in Council-provided green-lid bins.

Chutes must be designed in accordance with the *Better Practice Guide for Waste Management in Multi-Unit Dwellings, DECC, 2008*, but must include solutions for recycling and green waste as well, whether by diverters multiple chutes adjacent to each other, or alternatives such as waste cupboards.

3.3.8 Volume reduction equipment

Where it is considered necessary, compaction and/or other volume reduction equipment may be provided in the garbage and recycling room. Such equipment could save on-site waste storage space where space is constrained by building design limitations.

Waste reduction equipment should be considered for all buildings greater than 25 metres high. Volume reduction equipment should not be used on recyclable materials as this makes recyclables (like glass, plastic containers, paper and cardboard) difficult to separate at recycling facilities and generally ruins the recoverable resources.

A reduction in overall space area requirements would not necessarily result where such equipment is proposed. Provision of waste storage space should always allow for possible future changes in on-site waste management arrangements.

3.3.9 Underground waste storage, evacuated waste and other alternative technology solutions

Consideration will be given to alternative ways of managing waste, such as underground waste storage, evacuated waste systems and other alternative technology solutions, as long as recyclable and compostable waste streams are kept separate from residual garbage, maintenance is guaranteed for the life of the development and feasibility can be demonstrated.

3.3.10 Waste storage areas – individual storage versus communal storage options

All dwellings must have convenient access to recycling, food/green waste and residual garbage bins in a bin storage area.

In most small-scale multiple dwelling housing developments and dual occupancies, each dwelling will have its own garbage and recycling and green waste bins with individual unit holders taking responsibility for placing bins out on the street for collection. In these circumstances, each unit should have a waste storage and recycling area with easy access to the collection point.

The opportunity for each dwelling to store its own set of bins in the back or side yard, in the garage or in a screened front yard should be provided when the multi-dwelling development has sufficient level and unobstructed kerbside space to place the proposed number of bins out for collection. The storage for each dwelling should meet requirements as specified for single dwelling houses (Section 2.3).

Whether the proposed kerbside is on internal roads or on public roads, the roads and kerbside must meet accessibility requirements for Council and Council's contractor collection vehicles. The individual bin storage space provided should be in addition to any shared bin or bulk waste storage areas. This is to ensure that the owner's corporation is able to make a decision after the development is occupied about whether or not to operate an individual or shared bin storage system.

In the following circumstances, individual bin storage areas are not required provided that sufficient communal on-site waste storage and recycling areas or rooms are delivered as part of the development:

- developments where the number of bins would not fit comfortably on the street frontage or would detrimentally affect the general amenity of the development and its surrounds;
- where site characteristics make access to the street difficult for individual unit holders, for example steep sites that are not conducive for manually moving bins to and from dwellings;
- residential Flat buildings;
- where the status of the roadway (such as heavy traffic) requires on-site waste collection access; or
- where other particular conditions require shared storage and collection services.

The communal area should be capable of accommodating Council's required number of standard waste bins for each individual dwelling and for the development as a whole.

Additional space for the storage of bulk waste, such as furniture, whitegoods, electronic waste, mattresses and bundled garden waste (such as tree and bush pruning), should be provided, or suitable alternative solutions must be proposed for managing bulk waste disposal. Such services are needed to reduce illegal dumping of household furniture and whitegoods, which reduces the amenity of the streetscape or local parks. The location from which bulk waste will be collected also needs to be determined. Collection from a basement storage area is likely to be better than kerbside locations in a medium and high density residential or commercial area.

Figure 12 - Plan for bulk waste management to avoid unsightly and obstructive bulk waste dumping

(Source: State of NSW and NSW Environment Protection Authority 2019)

On difficult or steep sites, sites with particular natural features such as watercourses, or sites with two street frontages, it may be appropriate to have a number of waste storage and recycling areas/rooms to minimise bin carting distances, prevent site pollution and facilitate easy collection.

For large-scale proposals there may be a number of garbage and recycling rooms, operating in conjunction with a main waste storage area located adjacent to the designated collection point. These central waste storage rooms generally require building management taking responsibility for transporting waste from the smaller storage areas to the central storage area for collection.

In each case, the onus is upon the owner's corporation to ensure bins are placed on the kerb for collection each week. Where this is not possible and Council or private vehicles must enter the site then a separate collection point should form part of the development and legal access agreements must be reached between Council and the owner's corporation.

3.3.11 Waste storage for attached dwellings

Attached dwellings share walls with adjacent dwellings and include terrace houses. The end dwellings may have side yard access between front and back yards, but the middle dwellings do not and must have access between their bin storage area and the collection point that does not involve passing bins through dwellings.

If bins are stored behind the dwelling then there must be an accessible route around the side of the building, or through the garage or courtyard, not through dwellings to move bins to the kerbside collection area. Otherwise, these dwellings require access to suitable shared bin storage areas.;

If bins are stored to the side of the building, this must not block access, all three must be accessible by someone putting waste into any one of the three; and one bin must be able to be moved past another bin with sufficiently wide space to move it to the collection point.;

If bins are stored in the front of the property, there must be suitable screening for visual amenity and shading to help minimise odour;

The attached dwellings must also have access to a space to place out bulk waste such as furniture and whitegoods on kerbside for collection, or an alternative bulk waste management option described in the Operational Waste Management Plan;

The requirement for principal private open space does not include bin storage area, which is additional.

3.3.12 Individual waste storage areas – space requirements and design

If the bins are to be kept within the garage, the allocated space must be in addition to the space required for a standard single or double garage, not as part of that standard dimension. The garage dimension must be at least the minimum standard garage dimensions (single garage currently 3.0 x 5.4 metres; double garage currently 5.4 x 5.4 metres), plus at least the width or depth of the largest waste bin (sufficiently wide to accommodate at least three bins of the 240 litre size (585mm wide x 730mm depth per bin). If a 360 litre recycling bin is to be accommodated, then the plan dimensions are 680 x 848 mm. The options for layouts to fit and access bins and cars in garages are shown in Appendix 3.

If bins are to be kept under stairs (e.g. in the garage or backyard), residents must be able to open the lids fully to place waste inside the bins without having to move the bins out. This requires that the minimum height is 1800mm for all three 240 litre bins or 1530mm if the bins are 140 litres (see Appendix 3).

Extra room must be allocated if bins are to be kept in garages so vehicles fit in and drivers/passengers can get out.

Adaptable dwelling occupants must be able to access bins in a wheelchair and move bins out without moving the car.

Figure 13 - Example of improper bin configuration inside a garage

3.3.13 Communal waste storage areas – space requirements and design

Communal waste storage areas are classed as one of the following:

- waste storage and recycling areas, where waste and recyclable material are stored in the open and properly screened;
- waste storage and recycling rooms, within buildings, for holding waste and recyclable material. Compaction equipment may be provided and rooms could be refrigerated; or
- on-site collection points, separate from storage areas, where waste is located immediately before collection by waste services vehicle.

These facilities can be used in combination. The facilities that are used will depend upon the nature and size of the proposed development.

All waste storage areas should:

- be conveniently located to enable easy access for on-site movement and collection;
- relate to other loading/unloading facilities;
- have sufficient space for the quantity of waste generated and source separation of materials, such as recyclables;
- have sufficient space to comfortably contain any on-site treatment facilities, such as compaction equipment;
- be shaded to reduce odours;
- have adequate weather protection and, where appropriate, be enclosed or undercover;
- be secure and lockable;
- be well-ventilated;
- have a graded concrete floor, have a tap for a high pressure hose to clean area and drain to the sewer;
- be flush to outside pavement (no steps obstructing bin movement);
- be attractive, adding to the development's amenity, not detracting from it;
- hide view of bins from the street, neighbours' views and main living room views of the dwelling; and
- be clearly signposted to ensure appropriate use.

3.3.14 Waste storage and recycling rooms – space requirements and design

It may be appropriate in larger-scale residential and commercial developments to provide a waste storage room within the building. Waste storage areas should reflect the design of the main building, including building materials and finishes.

The following should be considered in the design of waste storage and recycling rooms:

- be constructed in accordance with the requirements of the Building Code of Australia;
- have a separate ventilation system to comply with AS 1668 – The use of mechanical ventilation and air-conditioning in buildings;
- have bin wash facilities, including a hose cock and floor graded to a 100 mm diameter floor drain outlet. The tap must be protected from the waste containers and be located where it can easily be accessed even when the area is filled with waste containers;
- smooth, cleanable and durable floor and wall surfaces that extend up the wall to a height equivalent to any containers held within the area;
- sufficient door width for containers;
- doors, gates or roller doors that are durable, self-closing, lockable, closely fitted to keep out vermin and are able to be opened from both inside and outside the storage area;
- aesthetically pleasing facilities that are integrated into the design of the overall development. Materials and finishes that are visible from outside should be similar in style and quality to the external materials used in the rest of the development;
- door and access wide and high enough to allow easy manoeuvring of any stored bin;
- enclosed, covered and maintained to prevent polluted wastewater runoff from entering the storm water system;
- adequate dimensions to accommodate garbage and recyclables;
- clean and healthy: free from dust, litter, odour and noise;
- safe for collectors;
- appropriate ceiling height if bins will be lifted;
- materials, design and landscaping complement the building and streetscape;
- accessible for residents and building management (or collection service operators);
- adequate mechanical and natural ventilation;
- adequate water supply, including hot water for commercial uses;
- the room is well drained to a floor waste connected to the sewer;

- impervious floor, wall and ceiling material – steel trowel finished concrete floor (minimum 75mm thick) and cement rendered walls;
- durable and smooth ceilings;
- bump rail 50mm clear of walls; and
- adequate lighting, controllable from inside and outside.

3.3.15 Waste collection points – space requirements and design

It is critical when designing waste services that there is sufficient space to place bins out for collection, whether along Council roads, or along approved and indemnified internal access roads or driveways.

Designs should never plan to have bins placed for collection such that the bins obstruct driveway exits and entrances.

For most properties, the bins should be placed out on the kerb of the public road at the front of the property. Each week two bins are placed, at a spacing of at least one metre centres with at least a 300mm gap between bins. The gap is needed to ensure quick collection by the side lift trucks that grip the sides of the bins to lift and empty them. For battle-axe blocks, one bin can be placed on the kerb either side of the driveway.

Appendix 4 provides information and minimum kerb space requirements for bin spacing to enable kerbside collection.

Alternative collection points can be discussed with Council if there is no space on the kerb that can be provided that is:

- flat enough for bins to stay upright when placed back down by the waste collection vehicle;
- unobstructed by overhead signs or tree canopies, or too close to retaining wall or fences;
- obstructed most of the time by parked vehicles;
- away from intersections and other places where waste collection vehicles cannot safely stop;
- accessible from the bin storage area (for example a public road back lane may be closer to the bin storage area rather than the main street in front of the property); and
- bins should not be placed in gutters as this obstructs stormwater run-off.

3.3.16 Calculating kerbside collection space requirements for smaller bins

Appendix 4 provides information and minimum kerb space requirements for bin spacing to enable kerbside collection. Council and its contractors use side lift waste collection vehicles to collect 140 litre, 240 litre and 360 litre bins from the kerbside. Grippers extend from the left side of the truck, grip around the side of the bin and lift it up overhead, to tip upside down into the truck's hopper. The grippers can reach in front or behind a parked car, but not over them. The lift arc up into the air is obstructed if there are trees or shrub canopies, or any other overhead obstacles in the way. Bins cannot be lifted if they are backed hard up against a wall behind the bins because the bin will hit the wall or fence on the lift arc. If the street is one way, the waste vehicle can only collect from the left hand side of the road.

There must be sufficient space between bins to enable the grippers to grasp around the sides of the bins. A gap of at least 300mm between bins is required for collection operations, however the larger the gaps can be between bins the better as wider gaps speed up collection operations. How tightly grouped bins are will depend on how many bins a development places out each week and how much street frontage the development has. For example, a development with 20 dwellings would need to ensure there was enough space along the kerb to accommodate 40 bins each week (two bins per dwelling per week). The standard 240 litre bins are 585mm wide each (at the lid) meaning that 40 bins, placed with 300mm gaps between each bin, would require about 35 metres of street frontage.

Where units will have individual bins Table 12 (in Section 3.3.5) and Appendix 3 should be used to calculate the length of obstruction-free kerb space required to ensure kerbside collection services will be possible.

If individual bins prove impractical then larger shared bins should be considered.

If units opt to share one set of bins per two units, then length of obstruction free kerb space will be reduced.

3.3.17 Collection options for larger shared bins

In exceptional cases, some multi-unit dwellings may opt to share larger bins, such as 660 litre and 1100 litre bins.

These larger bins are collected by rear-left waste collection vehicles and must be positioned on site for collection where the driver can reverse up to the bins, or where the vehicle can park within three to five metres of the bins and to wheel them over a maximum 1:30 slope to hitch the bin to the rear lift mechanism.

If 660 litre or 1100 litre bins are selected then these must be placed for collection:

- where a rear lift waste vehicle can reverse into the driveway safely, lift the bins and then exit in a forward direction;
- where a rear lift waste vehicle can enter the site forward, lift the bins and turn on site, then exit the site in a forward direction; or
- for collection by a rear lift truck pulling up on the kerbside, as per Figure 14
    - within the property boundary closest to the road, where the boundary is no more than 5 metres from the kerb;
    - adjacent to a concrete or asphalt driveway on a hard stand pad; and
    - with a maximum gradient and maximum cross-fall of 1:30 from collection pad to kerb.

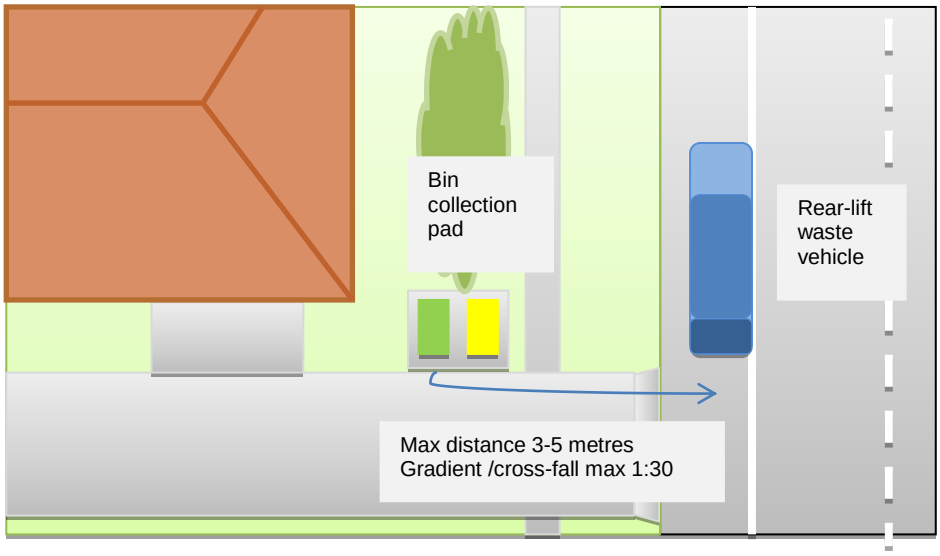

Figure 14 - 660 litre or 1100 litre Bin collection pad for collection by rear-lift waste vehicle parked at the kerb

3.3.18 Collection from within the property boundary

If property owners want to receive an on-site Council waste collection service (that collects bins from within the property boundary) then a Deed of Agreement between the owner's corporation, or strata on behalf of owners and the Council is required to indemnify Council for any damage to property. The owner is also responsible for Council's legal costs regarding the Deed of Agreement if variations to Council's standard deed are required. For more information, contact Council on 02 4921 0333.

The on-site collection and Deed of Agreement cannot be offered unless a site inspection of the as-built property indicates that there are no issues that would otherwise prevent safe access and collection. Council will consider all of the following factors as part of the inspection:

- the convenient placement of waste storage and recycling areas and/or rooms;
- location of the area away from living/working space in buildings;
- proposed truck sizes to be entering the site;
- adequate driveway widths and height at entrance ways – minimum driveway width of 3.5 metres, maximum grade of 1:8, minimum vertical clearance 4.3 metres;
- structural capability of driveway to carry fully loaded waste collection vehicles;
- on-site manoeuvrability – turning circles or three point turn arrangements so that vehicles enter and leave the site moving in a forward direction, minimum turning circle 21.7 metres;
- legality of access – this could be by the creation of an easement. In some circumstances, private arrangements may be necessary for such on-site collection;
- the pavement must be of sufficient weight-bearing capacity;
- the pavement needs to be industrial-strength, designed for a maximum wheel loading of 7 tonnes per axle. For an industrial driveway entry on public land, this requires 150mm thick 20MPa concrete with F82 mesh, but the specifications should be checked with a qualified engineer;
- a minimum pavement width of 5m (or 6.5m if more than 24 vehicles park along the road, unless suitable passing bays are provided);
- all clearances and turn circles must meet minimum requirements, including no obstruction from trees, light poles, bollards, road kerbing, inadequate roundabouts, signs and overhead awnings;
- the operational use of the development must not obstruct access to bins. For example parked cars, delivery vehicles or site maintenance vehicles cannot be parked in ways that would interfere with waste collection operations. Care should also be taken to ensure staged construction activities do not initially prevent access for waste collection services to the early occupied dwellings while later stages are being built;
- Council and Council contractors do not currently enter secured areas that require keys for access (although private waste contractors may do so);
- Council and Council contractors do not currently enter underground or under-building car parks (although private waste contractors may do so);
- one way roads must have all bins placed on the left side of the road for side lift collection vehicles;
- loop roads or large enough turn circles at cul-de-sac ends that require no three point turns are the safest solution, as all reversing is risky;
- if there is to be kerbside collection in an outside turn on a corner or in a cul-de-sac, then a minimum kerb radius of 10 metres is required;
- vehicles must not be required to make a three point turn to turn corners;
- exit from and re-entry to the Council road(s) must be safe to execute;
- the longitudinal road gradient must be less than 1:7 (15 per cent) and the turning heads must be maximum gradient of 1:10 (10 per cent); and
- some development designs may be best resolved by installing a heavy vehicle turntable rather than allocating large turn space.

3.3.19 Private commercial waste collection service inside buildings and basements

For private waste contractors to enter building basements, the following requirements must be met:

- ramp access gradient must be no more than 1:8;
- the height clearance over all areas traversed by waste collection vehicles must be sufficient for the waste vehicles to be used to enter, which is generally requires at least 3.8 metres height clearance;
- vehicle exit in a forward direction; if a turning area is required then it must be in an area that is not used for car parking and ensure that the turning circle is clear of all obstructions; and
- the ramp and floor pavement needs to be industrial-strength, designed for a maximum wheel loading of seven tonnes per axle. For an industrial driveway entry on public land, this requires 150mm thick 20MPa concrete with F82 mesh. Specifications should however be checked by a qualified engineer.

3.3.20 Access from waste storage area to collection location

Accessibility is one of the most important considerations for enabling waste collection services to the development.

If the collection point is on the street, the manoeuvrability of collection vehicles through the street is an important factor. Generally, this is a large-scale subdivision matter. Most development applications will relate to an existing street system.

The first decision is whether access onto the site is required. This would depend on the following:

- the size of the development – whether travel distances for occupants require on-site storage and collection; and
- the volume of waste – whether the number of bins is too great for the width of street frontage.

The location of on-site storage and recycling areas should reflect consideration of the following:

- accessibility to the usual or arranged on or offsite collection point;
- access for individual occupants; and
- proximity to site occupants and adjacent properties in terms of noise and odour control.

If the complex has internal private roads, or driveways accessing waste storage areas and the plan is to place the bins there, the internal roads and driveways must be designed to accommodate Council's and contractor's waste service collection vehicles.

The Waste Management Plan must include instructions to the developer that at least three months before the units will be occupied, the Council must be contacted to inspect potential for waste service provision. Council and Council's recycling and green waste contractors will then conduct a site assessment to determine whether the requested service(s) are able to be provided at the property. The assessment will include:

- bin storage and security;
- ability for residents or caretaker to manoeuvre the bins to and from the kerbside or roadway for servicing;
- contamination potential; and
- accessibility for collection on site or at the kerb.

3.3.21 Waste system Information Guide for Owners, Property Managers and occupants

A waste system information guide should be provided to owners, occupants and property managers and handed on to new owners, managers and occupants. The guide should outline:

- the approved waste service system and how to use it;
- approved locations for bin storage;
- options within the approval for alternative waste service solutions; and
- wording to be included in tenancy agreements about the waste management system.

A property plan should be included to show the locations of:

- waste cupboards in the dwellings;
- individual and communal waste storage area(s) within the development; and
- the waste collection point(s).

An example of a Waste Sydney Information Guide for a single dwelling is provided in Section 2.3.9.