DICKENS SOLUTIONS

(REF – 24095)

WASTE MANAGEMENT PLAN

ALDA PROPERTIES
(GARTNER TROVATO ARCHITECTS)

MIXED USE
RESIDENTIAL & COMMERCIAL
DEVELOPMENT
@
1-5 RICKARD ROAD
NORTH NARRABEEN

JULY 2024

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PART 1 – OVERVIEW AND PROPOSAL

1.1 INTRODUCTION

This Waste Management Plan (WMP) is an operational plan that describes in detail the manner in which all waste and other materials from the demolition, construction and on-going use of the building on the site are to be dealt with.

The aims and objectives of this WMP are to:

a) Demonstrate that all waste management activities will be sustainable, service focussed, efficient and effective, economically viable, socially acceptable and of benefit to all stakeholders;
b) Satisfy all State and Local Government regulatory controls regarding waste management and minimisation practices;
c) Promote the use of recyclable materials in the excavation, demolition, construction and on-going operation of the building;
d) Maximise waste reduction, material separation, and resource recovery in all stages of the development;
e) Ensure the design of waste and recycling storage facilities are of an adequate size, appropriate for the intended use of the building, hygienic with safe and manoeuvrable access:
f) Ensure that the provision of waste and recycling services to the completed building is carried out in an efficient manner, which will not impact negatively on the health, safety and convenience of all stakeholders.

The land on which the development is proposed is situated in the Northern Beaches (former Pittwater) LGA.

This WMP is prepared in accordance with: -

- Pittwater Warringah Local Environmental Plan 2014;
- Pittwater 21 DCP and relevant waste management guidelines;
- All conditions of consent to be issued under the approved DA;
- The 'Better Practice Guide for Resource Recovery in Residential Buildings, published by the NSW EPA (April 2019), and,
- The objective of ensuring that all waste management facilities and collection services will provide an outcome that will be efficient, as well as promoting the principles of health, safety, and convenience.

This Waste Management Plan has been for a Development Application to be submitted to the Northern Beaches Council for the construction of a four (4) storey building of mixed residential and commercial components at 1-5 Rickard Road, North Narrabeen, comprising of:

- One ground floor car park level,
- One upper floor car park level
- 5 x commercial suites on upper floor with a combined area of 320 sqm,
- 9 x 2 bedroom and 8 x 3 bed-room residential units, and,
- Associated infrastructure.

The Waste Management Plan was dated 19 July 2024 and has been prepared to be submitted to Council as part of the DA Package for the proposed development.

The WMP has been developed and documented in accordance with the Architectural Drawings prepared by Trovato & Gartner Architects – Project No 2315.

1.2 PROJECT & PROPERTY DESCRIPTION

DESCRIPTION	**Mixed Use Development**
DETAILS	**- One ground floor car park level,** **- One upper floor car park level** **- 5 x commercial suites on upper floor with a combined area of 320 sqm,** **- 9 x 2 bedroom, and 8 x 3 bedroom residential units, and,** **- The provision of waste storage facilities.**
PROPERTY DESCRIPTION	**The development is to be constructed over three (3) existing Torrens Title allotments at Lots 7, 8, and 9, in DP16212, 1-5 Rickard Road, North Narrabeen.**
STREET ADDRESS	**1-5 Rickard Road, North Narrabeen.**
DIMENSIONS	**Refer to Site Plan**
AREA	**1,425.8sqm (Survey)**
LGA	**Northern Beaches Council**
ZONING	**Zone E1**
PLANNING INSTRUMENTS	**Warringah LEP 2011** **Warringah DCP 2011**

1.3 APPLICANTS DETAILS

APPLICANT	**Alda Properties Pty Ltd**
ADDRESS	**101, 20 Clarke Street, Crows Nest. NSW. 2065.**
TELEPHONE	**Mb 0452 288 527**
E-MAIL	**doris@aldaproperties.com.au**

1.4 PROPOSAL

The proposed development involves the construction of a four (4) storey building of mixed residential and commercial components at 1-5 Rickard Road, North Narrabeen, comprising of:

- One ground floor car park level,
- One upper floor car park level
- 5 x commercial suites on upper floor with a combined area of 320 sqm,
- 9 x 2 bedroom and 8 x 3 bedroom residential units, and,
- associated infrastructure.

Vehicular access to the site is onto Minarto Lane at the south-eastern side of the site.

As there are both residential and commercial component to the development, separate arrangements will be made for each.

Waste storage facilities for both components will be located in separate areas at ground level as detailed herein.

All residential waste, recycling and green waste services to the development will be provided by the Northern Beaches Council.

All commercial waste and recycling services will be provided by a licensed private waste and recycling collection contractor.

Current buildings and structures on the site include:

- 1 Rickard Road – a single storey timber framed and fibrous cement dwelling with a metal roof, concrete landing and paved areas, detached metal sheds, front and rear grassed areas, some trees and shrubs, internal metal and timber fences, timber paling and picket fencing around the site,
- 3 Rickard Road – a single storey timber framed and fibrous cement dwelling with a metal roof, concrete landing and pathway, gravel strip driveway and paved areas, detached metal sheds, garden shed, detached PVC awning over a concrete slab, grassed areas, some trees and shrubs, internal metal fence, and timber paling and metal fencing around the site, and an iron post fence along the front boundary, and,
- 5 Rickard Road – a single storey timber framed and fibrous cement dwelling with a metal roof, attached metal awing/carport, concrete driveway, rear metal buildings, concrete area, front and rear grassed areas, some trees and shrubs, internal metal fence, and timber paling and metal fencing around the site, and a part timber paling fence 1.2m high along a section of the front boundary.

The project consists of: -

a) The demolition of all buildings and structures,
b) Clearing and excavation of the site,
c) The construction of the building,
d) The provision of associated infrastructure, landscaping, driveways, concrete pathways and other elements of the development; and,
e) The on-going use of the building.

The Northern Beaches Council require a demolition, construction, and operational waste management plan to be submitted describing how all demolition, construction and operational waste will be stored, disposed of, and managed.

This Waste Management Plan has been developed not only to satisfy Council's requirements, but also to ensure that all waste management activities associated with the development are carried out and conducted in accordance with best practice industry standards.

PART 2 – DEMOLITION

2.1 GENERAL PROVISIONS – OVERVIEW

It is recognised that Sydney has an ever-increasing waste problem, and this practice is not sustainable. In alignment with current NSW waste management legislation, this WMP aims, where possible, to promote waste avoidance, reuse and the recycling of material, particularly during the course of demolition and construction works.

Part 2.2 on Pages 6, 7, 8, 9, 10 and 11 of this WMP describes the manner in which waste is to be managed during the course of the demolition of the existing structures.

The processes outlined in Part 2.2 are to be read in conjunction with and comply with the Development Consent issued in respect of the proposal. It will be the developer's overall responsibility to ensure compliance in this regard. All material moved offsite shall be transported in accordance with the requirements of the Protection of the Environment Operations Act (1997).

Approved receptacles of an appropriate size will be located on site for the collection of food scraps, beverage containers, and other waste generated on site by workers.

2.2 BUILDINGS TO BE DEMOLISHED

Current buildings and structures on the site include:

- 1 Rickard Road – a single storey timber framed and fibrous cement dwelling with a metal roof, concrete landing and paved areas, detached metal sheds, front and rear grassed areas, some trees and shrubs, internal metal and timber fences, timber paling and picket fencing around the site,
- 3 Rickard Road – a single storey timber framed and fibrous cement dwelling with a metal roof, concrete landing and pathway, gravel strip driveway and paved areas, detached metal sheds, garden shed, detached PVC awning over a concrete slab, grassed areas, some trees and shrubs, internal metal fence, and timber paling and metal fencing around the site, and an iron post fence along the front boundary, and,
- 5 Rickard Road – a single storey timber framed and fibrous cement dwelling with a metal roof, attached metal awing/carport, concrete driveway, rear metal buildings, concrete area, front and rear grassed areas, some trees and shrubs, internal metal fence, and timber paling and metal fencing around the site, and a part timber paling fence 1.2m high along a section of the front boundary.

2.3 MANAGEMENT OF HAZARDOUS WASTE MATERIALS

Due to the age and construction of the existing buildings on the site, there is reasonable potential for hazardous building materials to be present in the buildings to be demolished.

The generation, storage, treatment and the disposal of hazardous waste (including asbestos) will be conducted in accordance with relevant waste legislation administered by the NSW EPA and any applicable WH&S legislation administered by Work Cover NSW.

All friable and non-friable asbestos-containing material shall be handled and disposed of off-site at an EPA licensed waste facility by an EPA licensed contractor in

accordance with the requirements of the Protection of the Environment Operations (Waste) Regulation 2014 and the Waste Classifications Guidelines – Part 1 'Classifying Waste (EPA 2014) and any other instrument as amended.

All friable hazardous waste arising from the demolition process shall be removed and disposed of in accordance with the requirements of Work Cover NSW and the EPA, and with the provisions of:

a) Work Health and Safety Act 2011,
b) NSW Protection of the Environment Operations Act 1997 (NSW), and,
c) NSW Department of Environment and Climate Change Environmental Guidelines; Assessment, Classification and Management of Liquide and Non-Liquid Wastes.

Generation, storage, treatment, and the disposal of hazardous waste (including asbestos) will be conducted in accordance with relevant waste legislation administered by the NSW EPA and any WH&S legislation administered by Work Cover NSW.

2.4 DEMOLITION – RECYCLING, REUSE & DISPOSAL DETAILS

The following details prescribe the manner in which all material involved in the demolition of the building will be dealt with, and includes: -

1. An estimate of the types and volumes of waste and recyclables to be generated,
2. How demolished waste materials will be reused, and, or recycled and where residual wastes will be disposed (see below), and,
3. The total percentage of demolition waste that will be reused or recycled.

It is noted that the quantities of materials detailed in this part (Part 2.2) on page 9 are estimates only, based on current industry standards and quantity analysis, and may vary due to the prevailing nature of site constraints, weather conditions, and any other unforeseeable activities associated with the demolition works, which are beyond the control of the developer, including but not being limited to theft, accidents, and, or, other acts of misadventure. Notwithstanding any of the above, the developer will provide Council with all details in relation to any major variations in this regard.

1. Excavated Materials

Volume / Weight	450 cubic metres / 765 Tonnes
On Site Reuse	To be Determined
Percentage Reused or Recycled	75% - 90%
Off Site Destination	Refer to Part 2.8 on page 11

2. Bricks

Volume / Weight	50 cubic metres / 50 Tonnes
On Site Reuse	Clean and remove lime mortar from bricks.
Percentage Reused or Recycled	75% - 90%
Off Site Destination	Refer to Part 2.8 on page 11

3. Concrete / Gravel

Volume / Weight	85 cubic metres / 204 Tonnes
On Site Reuse	Nil – all to be disposed of, or processed off-site
Percentage Reused or Recycled	75% - 90%
Off Site Destination	Refer to Part 2.8 on page 11

4. Timber

Volume / Weight	120 cubic metres / 48 Tonnes
On Site Reuse	Re-use for formwork and studwork.
Percentage Reused or Recycled	65% - 90%
Off Site Destination	Refer to Part 2.8 on page 11

5. Plasterboard & Fibro

Volume / Weight	130 cubic metres / 45.50 Tonnes
On Site Reuse	No. All materials will be processed off-site
Percentage Reused or Recycled	To be determined (dependent on asbestos content)
Off Site Destination	
Off Site Destination (Asbestos)	Refer to Part 2.8 on page 11.

6. Metals / Steel / Guttering & Downpipes

Volume / Weight	140 cubic metres / 49 Tonnes
On Site Reuse	No
Percentage Reused or Recycle	60% - 90%
Off Site Destination	Refer to Part 2.8 on page 11

7. Roof Tiles / Tiles

Volume / Weight	Minimal

8. Fixture & Fittings (Doors Fittings, Other Fixtures, etc)

Volume	125 cubic metres / 40 Tonnes
On Site Reuse	No. All material will be processed or disposed of 0ff-site.
Percentage Reused or Recycle	80% - 90%
Off Site Destination	Refer to Part 2.8 on page 11

9. Glazing, Electrical & Light Fittings, Cabling, PC items, Ceramics, etc

Volume	150 cubic metres / 45 Tonnes
On Site Reuse	No. All material will be processed or disposed of 0ff-site.
Percentage Reused or Recycle	80% - 90%
Off Site Destination	Refer to Part 2.8 on page 11

10. Residual Waste

Volume / Weight	80 cubic metres / 80 Tonnes
On Site Reuse	No
Off Site Destination	Refer to Part 2.8 on page 11
Notes on calculation of volume of residual waste	1. In calculating the amount of residual waste produced from the demolition of all buildings on site, it is estimated that 10% of it, will be residual waste. 2. As all of the materials vary in weight per volume, a figure of 1 cubic metre of material is equal to 1 tonne in weight has been used.

The facilities and agencies that have been nominated to receive the materials listed above have been identified within the NSW waste industry as being a facility or agency that will accept the materials specified in each respective table. The developer understands that any costs associated with the transportation and receival of these materials will be their responsibility.

The developer is under no obligation to use any nominated facility or agency, but should any alternative arrangements be made, it will be the contractors' responsibility to ensure that all materials excess to construction removed from the site are disposed of, or processed, appropriately.

The developer will keep a written record of all documentation associated with the transportation, disposal and processing of all materials associated with the demolition of all structures on site.

2.5 ON-SITE STORAGE OF MATERIALS

During the demolition and construction stages of the project, an area will be set aside on the site as a compound for the on-site storage of materials prior to their removal from the site. This compound will provide for: -

- Material sorting,
- Segregation of materials that may be hazardous and which will be required to be disposed of,
- Recovery equipment, such as concrete crushers, chippers, and skip bins,
- Material storage, and,
- Access for transport equipment.

Appropriate vehicular access will be provided on and off site, and to the compound, to enable the efficient removal of reusable, recyclable, and waste materials.

Prior to the commencement of demolition works, the developer will provide Council with a 'Site Plan for the On-Site Storage of Materials at Demolition'. This plan will show

in detail the location of each area within the compound, set aside for the segregated storage of all materials involved in the demolition of all buildings on the site.

2.6 DEMOLITION – EXCAVATED MATERIAL

All excavated material removed from the site, as a result of the demolition of all buildings, must be classified in accordance with the Department of Environment, Climate Change and Water NSW Waste Classification Guidelines prior to their removal, transportation, and disposal to an approved waste management facility.

All relevant details must be reported to the PCA.

2.7 LICENSED WASTE MANAGEMENT AND RECYCLING FACILITIES.

The facilities nominated below are appropriately licensed to receive the materials nominated in Tables 1 to 10 on pages 6 to 9.

1. Kimbriki Waste Management Facility, Kimbriki Road, Ingleside. Tel 02 9486 3512.
2. Lucas Heights Waste Management Centre, New Illawarra Road, Lucas Heights.
   Tel 1300 651 116
3. Bingo Industries, 3-5 Duck Street, Auburn, or 38 McPherson Street, Banksmeadow.
   Tel 1300 424 646
4. Jacks Gully Waste Management Centre, Richardson Road, Narellan.
   Tel 1300 651 116
5. Veolia Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112

The facilities and agencies that receive the materials listed above are, licensed and generally able, to accept the materials specified.

The appointed contractor understands that any costs associated with the transportation and receival of these materials will be their responsibility.

Based on the above information, it is anticipated that between 75% and 85% of all materials excess to construction needs will be able to be recycled or re-used, well above the Council's required targets.

The appointed contractor is under no obligation to use any nominated facility or agency, but should any alternative arrangements be made, it will be the contractors responsibility to ensure that all demolished materials removed from the site are disposed of, or processed, appropriately.

The developer will keep a written record of all documentation associated with the transportation, disposal, and processing of all materials excess to the construction of the building.

Additionally, during the construction of the building, every effort will be made to reduce and minimise the amount of building materials excess to construction.

PART 3 – CONSTRUCTION

3.1 CONSTRUCTION – GENERALLY

Upon completion of all demolition works, construction of the building will commence. All materials sourced from these activities will be disposed of in accordance with the information provided in Part 3.2 on pages 12, 13, 14, 15 and 16 of this WMP.

Additionally, all materials used in the construction of the building that are not required to be incorporated into it, shall be recycled, reused, or disposed of in accordance with these provisions, and the requirements of the Protection of the Environment Operations Act (1997). It will be the developer's overall responsibility to ensure compliance in this regard.

Mobile Bins of an appropriate size will be located on site for the collection of food scraps, beverage containers, and other waste generated on site by workers.

3.2 CONSTRUCTION – RECYCLING, REUSE & DISPOSAL DETAILS

The following details prescribe the manner in which all materials surplus to the construction of the building will be dealt with, and includes: -

a) An estimate of the types and volumes of waste and recyclables to be generated,
b) A site plan showing sorting and storage areas for construction waste and vehicle access to these areas (see Part 3.3 of this Plan),
c) How excavated and other materials surplus to construction will be reused or recycled and where residual wastes will be disposed (see below), and,
d) The total percentage of waste surplus to construction to be reused or recycled.

1. Excavated Materials

Volume / Weight	Minimal – strip topsoil only

2. Bricks

Volume / Weight	5 cubic metres / 5 Tonnes
On Site Reuse	Clean and remove lime mortar from bricks. Broken bricks for internal walls. Crush and reuse as drainage backfill. Crushed and used as aggregate.
Percentage Reused or Recycle	75% - 90%
Off Site Destination	Refer to Part 3.5 on page 16.

3. Concrete

Volume / Weight	6 cubic metres / 14.4 Tonnes
On Site Reuse	Existing driveway to be retained during construction. Crushed and used as aggregate, drainage backfill.
Percentage Reused or Recycled	60% - 75%
Off Site Destination	Refer to Part 3.5 on page 16.

4. Timber

Volume / Weight	5 cubic metres / 7 Tonnes
On Site Reuse	Re-use for formwork and studwork, and for landscaping
Percentage Reused or Recycled	65% - 90%
Off Site Destination	Refer to Part 3.5 on page 16.

5. Plasterboard & Fibro

Volume / Weight	6 cubic metres / 2 Tonnes
On Site Reuse	No – all material will be transported for disposal off-site.
Percentage Reused or Recycled	To be determined
Off Site Destination	Refer to Part 3.5 on page 16.

6. Metals / Steel / Guttering & Downpipes

Volume / Weight	5 cubic metres / 0.25 Tonnes
On Site Reuse	No
Percentage Reused or Recycled	60 – 90%
Off Site Destination	Refer to Part 3.5 on page 16.

7. Roof Tiles / Tiles

Volume / Weight	4 cubic metres / 3 Tonnes
On Site Reuse	Broken up and used as fill.
Percentage Reused or Recycled	80% - 90%
Off Site Destination	Refer to Part 3.5 on page 16

8. Plastics

Volume / Weight	5 cubic metres / 1 Tonne
On Site Reuse	Nil
Percentage Reused or Recycled	80% - 95%
Off Site Destination	Refer to Part 3.5 on page 16.

9. Glass, Electrical & Light Fittings, PC items

Volume / Weight	5 cubic metres / 1 Tonne
On Site Reuse	No
Percentage Reused or Recycled	70% - 90%
Off Site Destination	Refer to Part 3.5 on page 16.

10. Fixture & Fittings (Doors Fittings, Other Fixtures, etc)

Volume	10 cubic metres / 3.3 Tonnes
On Site Reuse	Broken up and used as fill.
Percentage Reused or Recycle	80% - 90%
Off Site Destination	Refer to Part 3.5 on page 16.

11. Pallets

Volume / Weight	25 cubic metres / 8 Tonne
On Site Reuse	No
Percentage Reused or Recycle	90% - 100%
Off Site Destination	Refer to Part 3.5 on page 16.

12. Residual Waste

Volume / Weight	150 cubic metres / 150 Tonnes
On Site Reuse	No
Off Site Destination	Refer to Part 3.5 on page 16.
Notes on calculation of volume of residual waste	1. In calculating the amount of residual waste produced from the demolition of all buildings on site, it is estimated that 10% of it, will be residual waste. 2. As all of the materials vary in weight per volume, a figure of 1 cubic metre of material is equal to 1 tonne in weight has been used.

It is noted that the quantities of materials detailed in this section (Part 3.2) are estimates only, based on current industry standards and quantity analysis, and may vary due to the prevailing nature of construction constraints, weather conditions, and any other unforeseeable activities associated with the construction of the buildings, which are beyond the control of the developer, including but not being limited to theft, accidents, and other acts of misadventure. Notwithstanding any of the above, the developer will provide Council with all details in relation to any major variations in this regard.

The facilities and agencies that have been nominated to receive the materials listed above have been identified within the NSW waste industry as being a facility or agency that will accept the materials specified in each respective table.

The developer understands that any costs associated with the transportation and receival of all materials will be their responsibility. The developer is under no obligation to use any nominated facility or agency, but should any alternative arrangements be made, it will be the developers' responsibility to ensure that all materials excess to construction removed from the site are disposed of, or processed, appropriately.

The developer will keep a written record of all documentation associated with the transportation, disposal and processing of all materials associated with the demolition

of all structures on site. Additionally, during the construction of the building, every effort will be made to reduce and minimise the amount of building materials excess to its construction.

3.3 CONSTRUCTION – ON-SITE STORAGE OF MATERIALS

During the construction of the buildings, an area will be set aside on the site as a compound for the on-site storage of materials prior to their removal from the site. This compound will provide for: -

- Material sorting,
- Segregation of materials that may be hazardous and which will be required to be disposed of,
- Recovery equipment, such as concrete crushers, chippers, and skip bins,
- Material storage, and,
- Access for transport equipment.

Appropriate vehicular access will be provided on and off site, and to the compound, to enable the efficient removal of reusable, recyclables, and waste materials.

Prior to the commencement of construction works, the developer will provide Council with a 'Site Plan for the On-Site Storage of Materials at Construction'. This plan will show in detail the location of each area within the compound, set aside for the segregated storage of all materials involved in the demolition of all buildings on the site.

3.4 CONSTRUCTION – EXCAVATED MATERIAL

All excavated material removed from the site, as a result of any activities associated with the construction of the building, must be classified in accordance with the Department of Environment, Climate Change and Water NSW Waste Classification Guidelines prior to removal, transportation and disposal to an approved waste management facility. All relevant details must be reported to the PCA.

3.5 LICENSED WASTE MANAGEMENT AND RECYCLING FACILITIES.

The facilities nominated below are appropriately licensed to receive the materials nominated in Tables 1 to 10 on pages 12 to 15 and Part 2.7 on page 16.

1. Kimbriki Waste Management Facility, Kimbriki Road, Ingleside. Tel 02 9486 3512.
2. Lucas Heights Waste Management Centre, New Illawarra Road, Lucas Heights.
   Tel 1300 651 116
3. Bingo Industries, 3-5 Duck Street, Auburn, or 38 McPherson Street, Banksmeadow.
   Tel 1300 424 646
4. Jacks Gully Waste Management Centre, Richardson Road, Narellan.
   Tel 1300 651 116
5. Veolia Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112

The facilities and agencies that receive the materials listed above are, licensed and generally able, to accept the materials specified.

The appointed contractor understands that any costs associated with the transportation and receival of these materials will be their responsibility.

Based on the above information, it is anticipated that between 75% and 85% of all materials excess to construction needs will be able to be recycled or re-used, well above the Council's required targets.

The appointed contractor is under no obligation to use any nominated facility or agency, but should any alternative arrangements be made, it will be the contractors responsibility to ensure that all demolished materials removed from the site are disposed of, or processed, appropriately.

The developer will keep a written record of all documentation associated with the transportation, disposal, and processing of all materials excess to the construction of the building.

Additionally, during the construction of the building, every effort will be made to reduce and minimise the amount of building materials excess to construction.

PART 4 – ON GOING USE OF BUILDING

4.1 OBJECTIVES

1. To ensure that the storage, amenity and management of waste is sufficient to meet the needs of the development.
2. To ensure that all waste management activities are carried out effectively and efficiently, and in a manner that promotes the principles of health, safety and, convenience.
3. To promote waste minimisation practices.

4.2 ASSUMPTIONS

In preparing this proposal, the following assumptions have been made: -

1. The proposal development incorporates the construction of a four (4) storey building of mixed residential and commercial components, one level of car-parking.
2. The residential component comprises of 9 x 2 bedroom and 8 x 3 bedroom residential units.
3. The commercial component comprises of five (5) ground floor commercial units with a combined area of 320sqm.
4. Vehicular access to the site is onto Minarto Lane at the south-eastern side of the site.
5. As there are both residential and commercial component to the development, separate arrangements will be made for each.
6. Waste storage facilities for both components will be located at ground level in separate areas as detailed herein.
7. The Residential Bin Room is located at ground level in the north-eastern part of the building as indicated on the Architectural Drawings.
8. All residential bins required for the on-going operation of the development will be stored within the confines of the Residential Bin Room at all times.
9. All residential waste and recycling services to the development will be provided by the Northern Beaches Council.
10. As required by Council in its Pre DA Meeting Minutes, for the residential component of the building the following service arrangements will apply:
    a) All waste material will be stored in 6 x 240-litre red lidded mobile waste bins, serviced one (1) day per week,
    b) All paper and cardboard material will be stored in 6 x 240-litre blue lidded mobile recycling bin, serviced one (1) day per week,
    c) All container-based recycling material will be stored in 4 x 240-litre yellow lidded mobile recycling bin, serviced one (1) day per week, and,
    d) 2 x 240 litre vegetation bins serviced fortnightly
11. All residential waste and recycling services will take place from Minarto Lane as detailed herein.
12. All residential waste and recycling services will be provided by the Northern Beaches Council.
13. The Commercial Waste Storage Area is also located on ground floor adjacent to the Residential WSA as indicated on the Architectural Drawings.
14. All commercial waste and recycling generation rates have been calculated in accordance with the relative provision of the Better Practice Waste

Management Guide as they do not appear to be covered in any of Council's waste management policies and guidelines.

15. All commercial waste and recycling services will take place from Pitt Road as detailed herein.
16. All commercial waste will be stored in 2 x 1100-litre mobile bin.
17. All commercial recycling material will be stored in 2 x 1100-litre mobile bins.
18. Commercial Waste Services will be provided one (1) day per week.
19. Commercial Recycling services will be provided one (1) day per week.
20. The Owners Corporation will appoint a Building Manager who will be responsible for ensuring that all residential waste management activities are carried out in accordance with this WMP.
21. The Proprietors of each retail unit will be responsible for ensuring that all waste management activities are carried out in accordance with this WMP.

4.3 PROVISION OF RESIDENTIAL WASTE & RECYCLING SERVICES

4.3.1 Residential Waste Handling and Management

A cabinet will be located within each unit so that a receptacle, or receptacles, may be stored or housed in a convenient and practical location within each unit, for the reception of waste and recyclable material.

All waste is to be placed in the red lidded waste bins. All recyclable material is to be placed in the yellow or blue lidded recycling bins. All waste and recyclables should be appropriately bagged (no plastic bags) or wrapped prior to being deposited into the designated bin.

4.3.2 Service Arrangements

All residential waste and recycling generation rates have been calculated in accordance with information provided by Council in their Pre DA Meeting Notes as detailed below.

- 6 x 240 litre garbage bins serviced weekly
- 6 x 240 litre paper recycle bins serviced weekly
- 4 x 240 litre container recycle bins serviced weekly
- 2 x 240 litre vegetation bin serviced fortnightly

4.3.3 Waste and Recycling Collection Service Provider Details

The Northern Beaches Council will provide all residential waste and recycling services to the building.

4.3.4 Details of Mobile Containers

In relation to the size and design of the waste and recycling mobile bins, the following technical information is provided: -

CONTAINER TYPE	HEIGHT (metres)	DEPTH (metres)	WIDTH (metres)
240-litre mobile container	1.080	0.735	0.585

4.3.5 Location, Design, and Construction of Residential Garbage Room

A Residential Garbage Room (RGR) is provided for the residential component of the development. The RGR is located on the ground floor as indicated on the Architectural Drawings. It is a fully enclosed structure with an area of approximately 24.75sqm.

Within the confines of the WSA will be storage areas for: -

- 6 x 240-litre general waste bins,
- 6 x 240-litre blue lidded recycling bin,
- 4 x 240-litre yellow lidded recycling bin, and,
- 2 x 240-litre green waste bins.

All electrical equipment, including the provision of lighting, will be installed in accordance with the relevant Australian Standards. Natural and mechanical ventilation will be required to be installed within each WSA in accordance with the relative provisions of the Building Code of Australia.

4.3.6 Servicing Arrangements – Waste Collections

All waste services will be provided by the Northern Beaches Council from Minarto Lane, utilising a collect and return service.

Upon the arrival of the collection vehicle to the site, a member of Council's collection team will retrieve the waste bins from the Residential Garbage Room (RGR) and transport them to the rear of the collection vehicle stationed at the roadside adjacent to the entry of the site, where the bins will be loaded onto the rear lifting device and the contents of each bin deposited into the body of the collection vehicle.

The waste bins will be serviced one (1) day per week, on a day to be determined by the Council.

All 6 x 240-litre red lidded mobile waste bins will be serviced on each collection day.

The bins will be returned to the RGR by Council as soon as servicing has been completed.

4.3.7 Servicing Arrangements – Recycling (Yellow Lidded 'Bottles and Cans') Collections

All recycling services will be provided by the Northern Beaches Council from Minarto Lane, utilising a collect and return service.

Upon the arrival of the collection vehicle to the site, a member of Council's collection team will retrieve the bins from the Residential Garbage Room (RGR) and transport them to the rear of the collection vehicle, where the bins will be loaded onto the rear lifting device and the contents of each bin deposited into the body of the collection vehicle.

The recycling bins will be serviced one (1) day per week, on a day to be determined by the Council.

The 4 x 240-litre yellow lidded mobile recycling bins will be serviced on each collection day.

The bins will be returned to the RGR by Council as soon as servicing has been completed.

4.3.8 Servicing Arrangements – Recycling (Blue Lidded 'Paper and Cardboard ') Collections

All paper and cardboard based recycling services will be provided by the Northern Beaches Council from Minarto Lane, utilising Council's collect and return service.

Upon the arrival of the collection vehicle to the site, a member of Council's collection team will retrieve the recycling bins from the Residential Garbage Room (RGR) and transport them to the rear of the collection vehicle, where the bins will be loaded onto the rear lifting device and the contents of each bin deposited into the body of the collection vehicle.

The recycling bins will be serviced one (1) day per week, on a day to be determined by the Council.

All 6 x 240-litre blue lidded mobile recycling bins will be serviced on each collection day.

The bins will be returned to the RGR by Council as soon as servicing has been completed.

4.3.9 Servicing Arrangements – Green Waste (Vegetation) Collections

All paper and cardboard based recycling services will be provided by the Northern Beaches Council from Minarto Lane utilising Councils collect and return service.

Upon the arrival of the collection vehicle to the site, a member of Council's collection team will retrieve the recycling bins from the Residential Garbage Room (RGR) and transport them to the rear of the collection vehicle, where the bins will be loaded onto the rear lifting device and the contents of each bin deposited into the body of the collection vehicle.

The green waste bins will be serviced one (1) day per fortnight, on a day to be determined by the Council, but on alternate weeks to the yellow bin recycling service.

Both green waste bins will be serviced on each collection day.

The bins will be returned to the RGR by Council as soon as servicing has been completed.

4.4 BULKY WASTE STORAGE

Secure storage spaces are required to be provided for each residential unit in accordance with the provisions of Council's DCP.

This space may be used to store bulky waste items that can be disposed of as part of any Clean Up services to be provided to this complex.

Consistent with these requirements, a Bulky Waste Storage Area has been provided for residents to place unwanted materials awaiting collection and removal.

This area is located on the Lower Car Park Level as indicated on the Architectural Drawings. This area has internal dimensions of 8.0m x 3.0m, with an area of approximately 24sqm.

All residents of the building will be provided with unrestricted 24-hour access to this facility.

The Building Manager / Caretaker will monitor this area regularly to ensure that all materials stored within its confines are done so in a manner that will not adversely impact on the health, safety, and convenience. Regular maintenance of this area will be carried out.

It will be the responsibility of the occupants of individual residential units, to dispose of this material, appropriately.

It will be the responsibility of the Building Manager to liaise with Council in relation to the arrangement of clean-up operations. The Building Manger or their representative to transfer all bulky waste material for collection from the Bulky Waste Storage to the ground floor collection area.

4.5 PROVISION OF COMMERCIAL WASTE & RECYCLING SERVICES

4.5.1 Overview

The provisions of this Part (Part 5.8) apply to all activities associated with the use and occupation of the commercial component of the building. All land use details for all units are provided in Table 1 below.

TABLE 1 – LAND USE ACTIVITIES – COMMERCIAL

UNITS	LOCATION	FLOOR AREA
Commercial 1	Upper Ground Floor	65
Commercial 2	Upper Ground Floor	64
Commercial 3	Upper Ground Floor	64
Commercial 4	Upper Ground Floor	62
Commercial 5	Upper Ground Floor	65

4.5.2 Waste & Recycling Generation Rates

The following Table (Table 2) details the waste and recycling generation rates for the commercial land uses proposed. All waste and recycling generation rates have been calculated in accordance with Council requirements.

TABLE 2 – FORMULA FOR CALCULATION WASTE & RECYCLING GENERATION RATES FOR COMMERCIAL LAND USES

SERVICE	WASTE & RECYCLING GENERATION RATES
Waste – Takeaway	150-litres of waste per 100sqm of floor area per day
Recycling – Takeaway	150-litres of recycling per 100sqm of floor area per day
Waste – Retail No Food	50-litres of waste per 100sqm of floor area per day
Recycling – Retail No Food	50-litres of recycling per 100sqm of floor area per day

4.5.3 Waste and Recycling Service Requirements

The following Table (Table 3) details the proposed waste service arrangements based on the above activities and the waste generation rates prescribed the Guide in relation to the land use activities proposed to be carried out at the development.

TABLE 3 – WASTE GENERATION RATES

ACTIVITY	FORMULA	CALCULATION	LITRES PER WEEK
Takeaway	150-litres per 100sqm of floor area	150 x 128 / 100 x 6 (days)	1,152.00
Retail No Food	50-litres per 100sqm of floor area	50 x 192 / 100 x 6 (days)	576.00
Total Litres of Waste Generated per Week			**1,728.00**
Service Requirements		**2 x 1100-litre mobile waste bins One (1) Service per Week**	
Total Litres of Waste Serviced per Week		**2,200-litres Serviced per Week**	

The following Table (Table 4) on page 23 details the proposed recycling service arrangements based on the above activities and the waste generation rates prescribed the Guide in relation to the land use activities proposed to be carried out at the development.

TABLE 4 – RECYCLING GENERATION RATES

ACTIVITY	FORMULA	CALCULATION	LITRES PER WEEK
Takeaway	150-litres per 100sqm of floor area	150 x 128 / 100 x 6 (days)	1,179.00
Retail No Food	50-litres per 100sqm of floor area	50 x 192 / 100 x 6 (days)	660.00
Total Litres of Waste Generated per Week			**1,728.00**
Service Requirements		**2 x 1100-litre mobile recycling bin One (1) Service per Week**	
Total Litres of Waste Serviced per Week		**2,200-litres Serviced per Week**	

4.5.4 Waste Handing & Management

The proprietors of each unit will be responsible for transferring their waste and recycling material from their premises at the end of each day's operations.

4.5.5 Commercial Waste Storage Facilities

All commercial waste and recycling bins will be stored within the confines of the Commercial Bin Room provided on the ground floor as indicated on the Architectural Drawings The bins room has an area of approximately 15sqm and will accommodate

- 2 x 1100-litre mobile waste bins, and,
- 2 x 1100-litre mobile recycling bins.

4.5.6 Commercial Waste and Recycling Collection

A licensed private waste collection contractor will provide all waste and recycling services to the building, using a collection vehicle, suitable for collection purposes.

All commercial waste and recycling collections will take place from Minarto Lane, where the bins will be removed from the Commercial Bin Room by a representative of the contractors' collection team to a waiting vehicle stationed at the roadside.

In order to minimise the impact of collections, which may result in increased waste collection vehicle movements within the site, all waste and recycling bins will only be presented for collection when the collection vehicle has arrived at the collection point. Immediately upon completion of the servicing of all bins, the bins will be returned to the on-site Waste Storage Area, by the contractor's representative.

4.6 ON GOING OPERATION, USE & MAINTENANCE OF WASTE MANAGEMENT FACILITIES

All waste management facilities will be maintained in a clean and hygienic condition that will promote the principles of health, safety and convenience.

In order to achieve these objectives, the following requirements will apply: -

1. The walls and floor of the Waste Storage Area (WSA) will be constructed of smooth faced masonry or concrete.
2. The WSA is be washed and cleaned on a regular basis.
3. All mobile bins will be washed and cleaned on a regular basis.
4. Any electrical equipment, including the provision of lighting, will be installed in accordance with the relevant Australian Standards.
5. Appropriate signage will be displayed in a prominent position within the bar identifying the location of the WSA, as well as providing instruction to employees on how to use waste and recycling facilities, including what is and what is not recyclable.

6. The proprietor will be responsible for ensuring that all waste and recyclable matter and materials are placed and stored within the appropriate containers provided.

PART 5 – SUMMARY

5.1 SUMMARY

In summarising this proposal, the following information is provided:

1. This Waste Management Plan has been developed and documented in accordance with Council requirements.
2. The WMP has been developed and documented in order to meet the requirements of all of Council's policies in relation to the provision of waste management facilities.
3. The number and size of bins have been calculated from information provided by the Council.
4. All residential waste and recycling services will be provided by the Northern Beaches Council.
5. All commercial waste and recycling services will be provided by a licensed private waste and recycling collection contractor.
6. The Owners Corporation will be responsible for ensuring that all on-going waste management activities are carried out in accordance with the provisions of this Waste Management Plan.

The measures set out in this WMP aim to demonstrate that all such activities will be carried out effectively and efficiently, in a healthy, safe and convenient manner, to acceptable community standards, and to the requirements of the Northern Beaches Council.