DICKENS SOLUTIONS

(REF – 25064)

WASTE MANAGEMENT PLAN
(Class 1 Appeal)

CHANINE DEVELOPMENT GROUP PTY LTD

MIXED USE RESIDENTIAL & COMMERCIAL DEVELOPMENT @ 691-695 VICTORIA ROAD RYDE

MAY 2025

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PART 1 – OVERVIEW AND PROPOSAL

1.1 INTRODUCTION

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

The aims and objectives of this WMP are to: -

1. Satisfy all State and Local Government regulatory controls regarding waste management and minimisation practices,
2. Promote the use of recyclable materials in the excavation, construction, and on-going operation of the building,
3. Maximise waste reduction, material separation, and resource recovery in all stages of the development,
4. 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, and,
5. Ensure that the provision of waste and recycling services to the completed buildings are 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 located within Fairfield City LGA.

This WMP is prepared in accordance with: -

- Ryde City Local Environment Plan 2014,
- Ryde City DCP 2014, and relevant waste management guidelines,
- All Conditions of Consent issued under the approved DA for the project,
- All relative requirements of SEPP Educational Establishments and Child Care Facilities) 2017, as they apply to the provision of waste management facilities and services,
- Current industry standards and practices for the storage and collection of waste within Commercial Developments, specifically for Child Care Centres, and,
- The objective of ensuring that all waste management facilities and collection services will provide an outcome that will be effective and efficient, as well as promote the principles of health, safety, and convenience.

The original Waste Management Plan was prepared for a Development Application to be submitted to Ryde City Council for the construction of seven (7) to nine (9) storey buildings of mixed residential components, at 691 Victoria Road, Ryde, comprising of:

- 155 x 1, 2 and 3 bed-room residential units,
- Child Care Centre with places for 108 children,
- Six (6) ground level commercial units,
- Three (3) basement levels for car-parking and services, and,
- Associated infrastructure.

The WMP, dated 29 September 2024 was prepared to be submitted to Council as part of the DA Package for the proposed development. The WMP was developed and documented in accordance with the Architectural Drawings prepared by CD Architects – Project No J23589D.

1.2 WASTE MANAGEMENT CONTENTIONS & RESPONSES

A Development Application (LDA2023/0323) was submitted to Ryde City Council on 15 December 2023, seeking Consent for the construction of seven (7) to nine (9) storey buildings of mixed residential components, at 691 Victoria Road, Ryde, comprising of:

- 155 x 1, 2 and 3 bed-room residential units,
- Child Care Centre with places for 108 children and six (6) commercial units on the ground floor and Level 1,
- Three (3) basement levels for car-parking and services, and,
- Associated infrastructure.

As a result of Councils deemed refusal of the DA, the Applicant has commenced Class 1 proceedings challenging the Council's deemed refusal. At the commencement of the Section 34 Conciliation Conference, Council has provided a Statement of Facts and Contentions (SOF&C's). Included in these are a number of matters concerning waste management.

The particulars of each contention are detailed below in **BOLD TYPE TEXT** with specific responses following each item.

Contention 12 (b) – Amended Plans – Collection Vehicle Access

Additional details are required to address the Waste related issues (as referenced in the waster referral comments), including amend plans to provide a minimum clearance for a Heavy Rigid Vehicle with a minimum length of 12.5 metres and height of 4.5 metres in accordance with AS 2890.02 along the entire travel path of the waste collection vehicles. The clearance must be free from all obstructions including, eaves, sprinklers, services, and overhangs.

RESPONSE – Amended Architectural Drawings have been provided to Council demonstrating that a minimum clearance for a Heavy Rigid Vehicle with a minimum length of 12.5 metres and height of 4.5 metres in accordance with AS 2890.02 along the entire travel path of the waste collection vehicles. The clearance is free from all obstructions including, eaves, sprinklers, services, and overhangs.

Contention 3 (j) (xiii) – Section 4 – Compliance with Apartment Design Guidelines

Contention 3(j)(xiii) states that the waste management of the site as required by Section 4W of the NSW Department of Planning and Environments Apartment Design Guideline has not been completed due to insufficient information.

Objective 4W-1 of the guide provides for the following objectives to be achieved:

- **Adequately sized storage areas for rubbish bins should be located away from the front of the development or in the basement carpark,**
- **Waste and recycling storage areas should be well ventilated,**
- **Circulation design allows bins to be easily manoeuvred between storage and collection points,**
- **Temporary storage areas should be provided for large bulk items such as mattresses, and,**
- **A waste management Plan should be prepared.**

RESPONSE

Objective 4W-2 of the guide provides for the following objectives to be achieved:

- All dwellings should have a waste and recycling cupboard or temporary cupboard or storage area of sufficient size to hold two (2) days' worth of waste and recycling,
- Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core,
- For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses, and,
- Alternative waste disposal methods such as composting should be provided.

It is considered that this Waste Management Plan (WMP) has been development in accordance with the Section 4W guidelines.

This is an Amended WMP, dated 22 May 2025 and has been prepared to address all of Council's waste management contentions as detailed herein.

1.3 PROJECT & PROPERTY DESCRIPTION

This Waste Management Plan (WMP) has been specifically designed for the development described below: -

DESCRIPTION	**Seven (7) x Nine (9) storey buildings – Mixed Use Development**
DETAILS	**- 155 x 1, 2 and 3 bed-room residential units,** **- Child Care Centre with places for 108 children, and ground and level 1 commercial,** **- Three (3) basement levels for car-parking and services, and,** **Associated infrastructure.**
PROPERTY DESCRIPTION	**The development is to be constructed over several existing Torrens Title allotment at Lot 17, in DP777986, 691-695 Victoria Road, Ryde.**
LOCATION	**691 Victoria Road, Ryde.**
DIMENSIONS	**Refer to Site and Survey Plans**
SITE AREA	**6,297sqm (Survey)**
LGA	**Ryde City Council**
ZONING	**Zone MU 1 – Mixed Use**
PLANNING INSTRUMENTS	**Ryde LEP 2014** **Ryde DCP 2014**

1.4 APPLICANTS DETAILS

APPLICANT	**Chanine Developments Pty Ltd** **C/- Ms Nicole Rizk**
ADDRESS	**Level 2, 60 Park Street, Sydney. NSW. 2000.**
TELEPHONE	**02 9267 2000**
E-MAIL	**nr@c9d.sydney**

1.5 PROPOSAL

The proposal involves the construction of seven (7) x nine (9) storey buildings of mixed residential components, at 691 Victoria Road, Ryde, comprising of:

- 155 x 1, 2 and 3 bed-room residential units,
- Child Care Centre with places for 108 children and six commercial units on the ground floor and Level 1,
- Three (3) basement levels for car-parking and services, and,
- Associated infrastructure.

Egress from the site is onto a laneway on the northern side of the site and then onto Blaxland Road as indicated on the Architectural Drawings.

Appropriate waste storage facilities will be provided to the development.

A garbage chute system will be incorporated into the building design.

As there are three buildings within the development, there will be four (4) separate chute systems. The chutes will be for the reception of waste material only. Separate arrangements will be made for the management of recycling. All chute details and recycling are arrangements are provided in Part 4.

All waste and recycling services for the development will be provided from a loading zone on the ground floor of Building area in the basement as indicated on the Architectural Drawings. The loading area will be designed to accommodate a rear loading HRV collection vehicle.

Current buildings and structures on the site include a number of one (1) and two (2) storey brick, masonry and glass buildings with iron and metal roofing materials, used as two (2) separate motor dealerships (Ryde Hyundai and City Ford) for the sale of new and used motor vehicles. There are large outdoor concrete and paved areas for parking and driveways, as well as areas for servicing and display – both indoor and outdoor. Timber and metal perimeter fencing surrounds the site to the north and east.

The project consists of: -

1. The demolition of all buildings and associated structures, and the removal of all associated structures over the entire site,
2. Levelling and clearing of the site,
3. The excavation of the site to construct the basements and building,
4. The construction of the building,
5. The provision of landscaping, off street-car park, driveways, concrete pathways and other elements associated with the development, and,
6. The on-going use of the building.

Ryde City 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 DEMOLITION – 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 7, 8, 9, 10, 11 and 12 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 a number of one (1) and two (2) storey brick, masonry and glass buildings with iron and metal roofing materials, used as two (2) separate motor dealerships (Ryde Hyundai and City Ford) for the sale of new and used motor vehicles. There are large outdoor concrete and paved areas for parking and driveways, as well as areas for servicing and display – both indoor and outdoor. Timber and metal perimeter fencing surrounds the site to the north and east.

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. Accordingly, 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: -

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 demolition waste and vehicle access to these areas (see Part 2.3 of this Plan),
c) How excavation and demolition waste materials will be reused, and, or recycled and where residual wastes will be disposed (see below), and,
d) 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) 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 & Overburden

Volume / Weight	2,200 cubic metres / 3,740 Tonnes
On Site Reuse	Yes. Keep and reuse topsoil for landscaping. Shore on site. Use some for support of retaining walls (Excavated Materials are only to be used if the material is not contaminated or has been remediated in accordance with any requirements specified by any Environmental Consultancy engaged to carry out any contamination assessment of excavated material).
Percentage Reused or Recycled	To be determined (see above comments)
Off Site Destination	Refer to Part 2.7 on page 12.

2. Green Waste

Volume / Weight	100 cubic metres / 15 Tonnes
On Site Reuse	To be separated. Chipped and stored on site for re-use in landscaping.
Percentage Reused or Recycled	90%
Off Site Destination	Refer to Part 2.7 on page 12.

3. Bricks

Volume / Weight	450 cubic metres / 450 Tonnes
On Site Reuse	Clean and remove lime mortar from bricks. Re-use in new footings. Broken bricks for internal walls. Crush and reuse as drainage backfill. Crushed and used as aggregate.
Percentage Reused or Recycled	75% - 90%
Off Site Destination	Refer to Part 2.7 on page 12.

4. Concrete

Volume / Weight	1,500 cubic metres / 3,600 Tonnes
On Site Reuse	Existing driveways to be retained during construction. Crushed and used as aggregate, drainage backfill.
Percentage Reused or Recycled	75% - 90%
Off Site Destination	Refer to Part 2.7 on page 12.

5. Timber

Volume / Weight	100 cubic metres / 40 Tonnes
On Site Reuse	Re-use for formwork and studwork, landscaping, shoring.
Percentage Reused or Recycled	65% - 90%
Off Site Destination	Refer to Part 2.7 on page 12.

6. Plasterboard & Fibro

Volume / Weight	150 cubic metres / 52.50 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 2.7 on page 12.

7. Metals / Steel / Guttering & Downpipes

Volume / Weight	350 cubic metres / 122.50 Tonnes
On Site Reuse	No
Percentage Reused or Recycle	60% - 90%
Off Site Destination	Refer to Part 2.7 on page 12.

8. Roof Tiles / Tiles

Volume / Weight	60 cubic metres / 45 Tonnes
On Site Reuse	Broken up and used as fill, aggregate, driveways.
Percentage Reused or Recycle	80% - 90%
Off Site Destination	Refer to Part 2.7 on page 12.

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

Volume	750 cubic metres / 262.50 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 2.7 on page 12.

10. Glass, Electrical & Light Fittings, PC items, Ceramics, etc

Volume / Weight	1,000 cubic metres / 250 Tonnes
On Site Reuse	No
Percentage Reused or Recycle	To be determined (dependent upon nature of material)
Off Site Destination	Refer to Part 2.7 on page 12.

11. Residual Waste

Volume / Weight	670 cubic metres / 670 Tonnes
On Site Reuse	No
Off Site Destination	Refer to Part 2.7 on page 12.
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 2.2) 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 demolition 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 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 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.

2.5 DEMOLITION – ON-SITE STORAGE OF MATERIALS

During the demolition stage 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 PROCESSING & DISPOSAL FACILITIES

The facilities nominated below are appropriately licensed to receive the materials nominated in Tables 1 to 11 on pages 7 to 11 and Part 2.7 on page 12.

1. Blacktown Waste Services, 920 Richmond Road, Marsden Park.
   Tel 9835 4544
2. Bingo Industries, 3-5 Duck Street, Auburn, or 38 McPherson Street, Banksmeadow.
   Tel 1300 424 646
3. Jacks Gully Waste Management Centre, Richardson Road, Narellan.
   Tel 1300 651 116
4. Lucas Heights Waste Management Centre, New Illawarra Road, Lucas Heights.
   Tel 1300 651 116
5. Veolia Eastern Creek 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 with the excavation of the site for the basement levels of the building. All materials sourced from these activities will be disposed of in accordance with the information provided in Part 3.2 on pages 13, 14, 15, 16 and 17 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	60,000 Cubic Metres / 102,000 Tonnes (Basements excavation)
On Site Reuse	Yes. Keep and reuse topsoil for landscaping. Shore on site. Use some for support of retaining walls (Excavated Materials are only to be used if the material is not contaminated or has been remediated in accordance with any requirements specified by any Environmental Consultancy engaged to carry out any contamination assessment of excavated material).
Percentage Reused or Recycled	To be determined (see above comments)
Off Site Destination	Refer to Part 3.5 on page 17.

2. Bricks

Volume / Weight	15 cubic metres / 15 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 17.

3. Concrete

Volume / Weight	10 cubic metres / 24 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 17.

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 17.

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 17.

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 17.

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 17.

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 17.

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 17.

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 17.

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 17.

12. Residual Waste

Volume / Weight On Site Reuse Off Site Destination	6,200 cubic metres / 6,200 Tonnes No Refer to Part 3.5 on page 17.
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 PROCESSING & DISPOSAL FACILITIES

The facilities nominated below are appropriately licensed to receive the materials nominated in Tables 1 to 12 on pages 12 to 15 and Part 3.5 on this page.

1. Blacktown Waste Services, 920 Richmond Road, Marsden Park.
   Tel 9835 4544
2. Bingo Industries, 3-5 Duck Street, Auburn, or 38 McPherson Street, Banksmeadow.
   Tel 1300 424 646
3. Jacks Gully Waste Management Centre, Richardson Road, Narellan.
   Tel 1300 651 116
4. Lucas Heights Waste Management Centre, New Illawarra Road, Lucas Heights.
   Tel 1300 651 116
5. Veolia Eastern Creek 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 – GARBAGE CHUTE SYSTEM

4.1 DESIGN REQUIREMENTS

A garbage chute has been incorporated into the building design. The chute system will be a dual chute for the reception of both waste and recycling material.

The residential component of the development contains three (3) separate buildings. As such there will be Four (4) dual chute systems, comprising of:

- Building A – (West) – 29 x 1, 2 and 3 bed-room units
- Building B – (East) – 83 x 1, 2 and 3 bed-room units, and,
- Building C – (South-West) – 43 x 1, 2 and 3 bed-room units

The chute system will be a dual chute comprising of separate waste and recycling chutes located next to each other.

When depositing waste material into the chute the resident selects the waste chute door hopper. Similarly, when depositing recycling material into the recycling chute hopper.

The waste chutes will discharge into a 1100-litre bin, positioned under the waste chute outlet point. The recycling chutes will discharge into a 1100-litre mobile recycling bin positioned under the recycling chute outlet point.

All waste and recycling chutes and bins are located in one (1) of four (4) bin/chute rooms provided on the buildings' Basement 1 as indicated on the Architectural Drawings.

At a minimum the Chute Systems will be designed to meet the following requirements:

1. Chutes and service openings must be constructed of metal or other smooth faced, durable, fire resistant and impervious material of non-corrosive nature.
2. Chutes will be cylindrical in section with a minimum internal diameter of 500mm. The diameter around each chute will be a minimum width of 750mm to allow for infrastructure fittings, such as fixing brackets and noise insulation.
3. Chutes will be vertical without bends or "off-sets" and not be reduced in diameter.
4. Chutes will terminate in the Residential Waste Room and discharge all waste directly into receptacles as detailed above.
5. The Chute and service openings must be capable of being easily cleaned.
6. Chutes must be ventilated to ensure that air does not flow from the chute through any service opening.
7. The Dual Chute systems must comply with the relative provisions of the Building Code of Australia, relevant Australian Standards (e.g., AS1530.4-2005), and any other applicable legislative requirements.

4.2 BUILDING A

Building A is located in the northern corner of the site facing Blaxland Road. It contains 29 x 1, 2 and 3 bed-room units over seven (7) levels of the building.

Waste and recycling chutes are located in separate compartments next to one another on each level of the building on the lobby next to Lift A1 and adjacent to the fire stairs.

All waste and recycling material deposited into the chutes, discharges into separate 1100-litre mobile waste and recycling bins positioned under the respective chute outlets in Bin/Chute Room A which is provided in the northern corner of Basement 1 as indicated on the Architectural Drawings.

4.2.1 Waste Chute

As indicated above, service rooms in the form of 'Waste and Recycling Compartments will be provided to each residential level of the building. In general, each Chute Compartment will have approximate internal dimensions of 1.0m x 1.0m, with a floor area of 1.0sqm, and will provide space for the garbage chute compartment, which will have internal dimensions of 750 mm x 750 mm and will be installed within these confines in a fire rated compartment.

Residents will deposit waste material into the chute inlet hopper, labelled **'Waste Chute – Reception of Garbage Only'.**

The waste chute outlet is located in the Bin/Chute Room A and will discharge into 1 x 1100-litre mobile waste bin positioned under the waste chute outlet point.

Based on Council's waste generation rate allocation of 1 x 240-litre bin per two (2) units (120-litres of space per unit), it is anticipated that all 29 units in this core will generate 3,480-litres of waste per week, or 497.15-litres per day.

With the bin capacity of 1100-litres, the waste chute will be inspected as least once per day in order to ensure that waste receptacles will be removed when full.

The Building Manager or their authorised representative will be responsible for transferring full 1100-litre waste bins from under the chute into the waste bin storage area of the room, where they will be stored for servicing. Full waste bins removed from under the Chute outlet and replaced immediately with an empty one.

The Building Manager or their authorised representative will monitor all activities associated with the use and operation of the chute, the depositing of waste into it, to ensure that there will be no spillage, and that the system operates effectively.

4.2.2 Recycling Chute

Service rooms in the form of 'Waste and Recycling Compartments' (See Floor Plans) will be provided to each residential level of the building. In general, each Chute Compartment will have approximate internal dimensions of 1.0m x 1.0m, with a floor area of 1.0sqm, and will provide space for the garbage chute compartment, which will have internal dimensions of 750 mm x 750 mm and will be installed within these confines in a fire rated compartment.

Residents will deposit recycling material into the chute inlet hopper, labelled **'Recycling Chute – Reception of Recycling Material Only'.**

The recycling chute outlet is located in the Bin/Chute Room A and will discharge into 1 x 1100-litre mobile recycling bin positioned under the recycling chute outlet point.

Based on Council's recycling generation rate allocation of 1 x 240-litre bin per two (2) units (120-litres of space per unit), it is anticipated that all 29 units in this core will generate 3,480.00-litres of waste per week, or 497.15-litres per day.

With the bin capacity of 1100-litres, the waste chute will be inspected as least once per day in order to ensure that waste receptacles will be removed when full.

The Building Manager or their authorised representative will be responsible for transferring full 1100-litre waste bins from under the chute into the waste bin storage area of the room, where they will be stored for servicing. Full waste bins removed from under the Chute outlet and replaced immediately with an empty one.

The Building Manager or their authorised representative will monitor all activities associated with the use and operation of the chute, the depositing of waste into it, to ensure that there will be no spillage, and that the system operates effectively.

4.3 BUILDING B

Building B is located on the north-eastern side of the site with frontages to both Blaxland Avenue and Princes Street.

Due to the number of units (83) in Building B, two chute compartments per floor have been provided for residents to dispose of their waste and recycling material

Compartment 1 is located on the northern side of the lobby diagonally opposite Lifts B and will be used by the residents of all units on the western side of Lifts 3 and 4. There are 42 units in this section of the building.

Compartment 2 is located on the southern side of the lobby opposite Lifts 3 and 4 and will be used by the residents of all units on the eastern side of Lifts 3 and 4. There are 41 units in this section of the building.

All waste and recycling material deposited into the chutes, discharges into separate 1100-litre mobile waste and recycling bins positioned under the respective chute outlets in the respective Bin/Chute Rooms B1 and B2 which are provided in Basement 1 as indicated on the Architectural Drawings.

4.3.1 Waste Chute – Western Section

As indicated above, service rooms in the form of 'Waste and Recycling Compartments will be provided to each residential level of the building. In general, each Chute Compartment will have approximate internal dimensions of 1.0m x 1.0m, with a floor area of 1.0sqm, and will provide space for the garbage chute compartment, which will have internal dimensions of 750 mm x 750 mm and will be installed within these confines in a fire rated compartment.

Residents will deposit waste material to the chute inlet hopper, labelled **'Waste Chute Reception of Garbage Only'.**

The waste chute outlet is located in the Bin/Chute Room B1 and will discharge into 1 x 1100-litre mobile waste bin positioned under the waste chute outlet point.

Based on Council's waste generation rate allocation of 1 x 240-litre bin per two (2) units (120-litres of space per unit), it is anticipated that all 42 units in this section will generate 5,040-litres of waste per week, or 720-litres per day.

With the bin capacity of 1100-litres, the waste chute will be inspected as least once per day in order to ensure that waste receptacles will be removed when full.

The Building Manager or their authorised representative will be responsible for transferring full 1100-litre waste bins from under the chute into the waste bin storage area of the room, where they will be stored for servicing. Full waste bins removed from under the Chute outlet and replaced immediately with an empty one.

The Building Manager or their authorised representative will monitor all activities associated with the use and operation of the chute, the depositing of waste into it, to ensure that there will be no spillage, and that the system operates effectively.

4.3.2 Recycling Chute – Western Section

Service rooms in the form of 'Waste and Recycling Compartments' (See Floor Plans) will be provided to each residential level of the building. In general, each Chute Compartment will have approximate internal dimensions of 1.0m x 1.0m, with a floor area of 1.0sqm, and will provide space for the garbage chute compartment, which will have internal dimensions of 750 mm x 750 mm and will be installed within these confines in a fire rated compartment.

Residents will deposit recycling material into the chute inlet hopper, labelled **'Recycling Chute – Reception of Recycling Material Only'.**

The recycling chute outlet is located in the Bin/Chute Room B1 and will discharge into 1 x 1100-litre mobile waste bin positioned under the waste chute outlet point.

Based on Council's recycling generation rate allocation of 1 x 240-litre bin per two (2) units (120-litres of space per unit), it is anticipated that all 42 units in this section will generate 5,040.00-litres of waste per week, or 720-litres per day.

With the bin capacity of 1100-litres, the waste chute will be inspected as least once per day in order to ensure that waste receptacles will be removed when full.

The Building Manager or their authorised representative will be responsible for transferring full 1100-litre waste bins from under the chute into the waste bin storage area of the room, where they will be stored for servicing. Full waste bins removed from under the Chute outlet and replaced immediately with an empty one.

The Building Manager or their authorised representative will monitor all activities associated with the use and operation of the chute, the depositing of waste into it, to ensure that there will be no spillage, and that the system operates effectively.

4.3.3 Waste Chute – Eastern Section

As indicated above, service rooms in the form of 'Waste and Recycling Compartments will be provided to each residential level of the building. In general, each Chute Compartment will have approximate internal dimensions of 1.0m x 1.0m, with a floor area of 1.0sqm, and will provide space for the garbage chute compartment, which will have internal dimensions of 750 mm x 750 mm and will be

installed within these confines in a fire rated compartment.

Residents will deposit waste material to the chute inlet hopper, labelled **'Waste Chute Reception of Garbage Only'.**

The waste chute outlet is located in the Bin/Chute Room B2 and will discharge into 1 x 1100-litre mobile waste bin positioned under the waste chute outlet point.

Based on Council's waste generation rate allocation of 1 x 240-litre bin per two (2) units (120-litres of space per unit), it is anticipated that all 41 units in this section will generate 4,920-litres of waste per week, or 702.86-litres per day.

With the bin capacity of 1100-litres, the waste chute will be inspected as least once per day in order to ensure that waste receptacles will be removed when full.

The Building Manager or their authorised representative will be responsible for transferring full 1100-litre waste bins from under the chute into the waste bin storage area of the room, where they will be stored for servicing. Full waste bins removed from under the Chute outlet and replaced immediately with an empty one.

The Building Manager or their authorised representative will monitor all activities associated with the use and operation of the chute, the depositing of waste into it, to ensure that there will be no spillage, and that the system operates effectively.

4.3.4 Recycling Chute – Eastern Section

Service rooms in the form of 'Waste and Recycling Compartments' (See Floor Plans) will be provided to each residential level of the building. In general, each Chute Compartment will have approximate internal dimensions of 1.0m x 1.0m, with a floor area of 1.0sqm, and will provide space for the garbage chute compartment, which will have internal dimensions of 750 mm x 750 mm and will be installed within these confines in a fire rated compartment.

Residents will deposit recycling material into the chute inlet hopper, labelled **'Recycling Chute – Reception of Recycling Material Only'.**

The recycling chute outlet is located in the Bin/Chute Room B2 and will discharge into 1 x 1100-litre mobile waste bin positioned under the waste chute outlet point.

Based on Council's recycling generation rate allocation of 1 x 240-litre bin per two (2) units (120-litres of space per unit), it is anticipated that all 41 units in this section will generate 4,920.00-litres of waste per week, or 702.86-litres per day.

With the bin capacity of 1100-litres, the waste chute will be inspected as least once per day in order to ensure that waste receptacles will be removed when full.

The Building Manager or their authorised representative will be responsible for transferring full 1100-litre waste bins from under the chute into the waste bin storage area of the room, where they will be stored for servicing. Full waste bins removed from under the Chute outlet and replaced immediately with an empty one.

The Building Manager or their authorised representative will monitor all activities associated with the use and operation of the chute, the depositing of waste into it, to ensure that there will be no spillage, and that the system operates effectively.

4.4 BUILDING C

Building C is located on the southern side of the site facing Victoria Road. It contains 43 units over all levels of the building.

Waste and recycling chutes are located in compartments on each level of the building, on the lobby in the south-western corner of the building.

All waste and recycling material deposited into the chutes, discharges into separate 1100-litre mobile waste and recycling bins positioned under the respective chute outlets in Bin/Chute Room C which is located in the southern corner of the Ground Floor as indicated on the Architectural Drawings.

4.4.1 Waste Chute

As indicated above, service rooms in the form of 'Waste and Recycling Compartments will be provided to each residential level of the building. In general, each Chute Compartment will have approximate internal dimensions of 1.0m x 1.0m, with a floor area of 1.0sqm, and will provide space for the garbage chute compartment, which will have internal dimensions of 750 mm x 750 mm and will be installed within these confines in a fire rated compartment.

Residents will deposit waste material into the chute inlet hopper, labelled **'Waste Chute – Reception of Garbage Only'.**

The waste chute outlet is located in the Bin/Chute Room C and will discharge into 1 x 1100-litre mobile waste bin positioned under the waste chute outlet point.

Based on Council's waste generation rate allocation of 1 x 240-litre bin per two (2) units (120-litres of space per unit), it is anticipated that all 43 units will generate 5,160-litres of waste per week, or 737.15-litres per day.

With the bin capacity of 1100-litres, the waste chute will be inspected as least once per day in order to ensure that waste receptacles will be removed when full.

The Building Manager or their authorised representative will be responsible for transferring full 1100-litre waste bins from under the chute into the waste bin storage area of the room, where they will be stored for servicing. Full waste bins removed from under the Chute outlet and replaced immediately with an empty one.

The Building Manager or their authorised representative will monitor all activities associated with the use and operation of the chute, the depositing of waste into it, to ensure that there will be no spillage, and that the system operates effectively.

4.4.2 Recycling Chute

Service rooms in the form of 'Waste and Recycling Compartments' (See Floor Plans) will be provided to each residential level of the building. In general, each Chute Compartment will have approximate internal dimensions of 1.0m x 1.0m, with a floor area of 1.0sqm, and will provide space for the garbage chute compartment, which will have internal dimensions of 750 mm x 750 mm and will be installed within these confines in a fire rated compartment.

Residents will deposit recycling material into the chute inlet hopper, labelled **'Recycling Chute – Reception of Recycling Material Only'.**

The recycling chute outlet is located in the Bin/Chute Room C and will discharge into 1 x 1100-litre mobile recycling bin positioned under the recycling chute outlet point.

Based on Council's recycling generation rate allocation of 1 x 240-litre bin per two (2) units (120-litres of space per unit), it is anticipated that all 43 units will generate 5,160.00-litres of waste per week, or 737.15-litres per day.

With the bin capacity of 1100-litres, the waste chute will be inspected as least once per day in order to ensure that waste receptacles will be removed when full.

The Building Manager or their authorised representative will be responsible for transferring full 1100-litre waste bins from under the chute into the waste bin storage area of the room, where they will be stored for servicing. Full waste bins removed from under the Chute outlet and replaced immediately with an empty one.

The Building Manager or their authorised representative will monitor all activities associated with the use and operation of the chute, the depositing of waste into it, to ensure that there will be no spillage, and that the system operates effectively.

4.7 ON GOING MANAGEMENT & MAINTENANCE OF CHUTE SYSTEM

The Owners Corporation will be responsible for all issues associated with the on-going management and maintenance of the Garbage Chute System and all activities associated with it. This will include, but not be limited, to the following: -

1. Displaying signage indicating appropriate use of all waste management systems, including what is and what is not recyclable.
2. Educating residents in the correct use of the chute, and the need to keep bulky items and recyclables out of the chute system.
3. Providing regular maintenance, including cleaning and unblocking chutes.
4. Regular inspection of the Garbage Rooms, and the Garbage Chute Outlet Compartment to ensure that all waste is managed appropriately.
5. Suitable door access for the service of bins.
6. All floors will be finished with a non-slip and smooth and even surface covered at all intersections graded and drained to a central drainage point connected to the sewer.
7. The room will be fully enclosed and roofed with a minimum internal room height in accordance with the BCA 2022.
8. The room is to be provided with an adequate supply of water through a centralised mixing valve with hose cock.
9. Incorporation of adequate light and ventilation to meet the requirements of the BCA 2022.

PART 5 – ON GOING USE OF BUILDING

5.1 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.

5.2 ASSUMPTIONS

1. The proposal involves the construction of three (3) x seven (7) storey buildings of mixed residential components, at 691 Victoria Road, Ryde.
2. The residential component comprises of 155 x 1, 2 and 3 bed-room residential units in three (3) separate buildings (Blocks).
3. The commercial component comprises of a Child Care Centre with places for 108 children and six (6) units on the ground floor and Level 1.
4. Three (3) basement levels common to all three buildings have been provided for car-parking and services, and the provision of waste storage facilities and associated infrastructure.
5. Egress from the site is onto a laneway on the northern side of the site and then onto Blaxland Road as indicated on the Architectural Drawings.
6. A garbage chute system will be incorporated into the building design.
7. There are three buildings within the development:
   a) Building A – (West) – 29 x 1 and 2 bed-room units,
   b) Building B – (East) – 83 x 1, 2 and 3 bed-room units, and,
   c) Building C – (South-West) – 43 x 1, 2 and 3 bed-room units
8. All chutes will be separate dual chutes for the reception of both waste and recycling material as detailed in Part 4 on pages 18 to 24.
9. All waste deposited into the waste chutes will discharge onto a separate 1100-litre mobile waste and recycling bins.
10. All bins will be stored within the confines of separate Bin/Chute Rooms located in various areas of Basement 1 and the ground floor as detailed herein.
11. Waste and recycling chute compartments will be provided on each residential floor of the building from the ground level up.
12. Separate waste management, storage and collection arrangements will be made for the child-care centre component of the development.
13. All residential waste will be stored for servicing in 6 x 1100-litre red lidded waste bins, serviced three (3) days per week.
14. All residential recycling will be stored for servicing in 6 x 1100-litre yellow lidded recycling bins, serviced three (3) days per week.
15. All residential green waste will be stored for servicing in 5 x 240-litre green lidded recycling bins, serviced one (1) day per fortnight.
16. The number and size of bins have been calculated from information provided by Ryde City Council, and from information provided in their DCP 2014.
17. All residential waste, recycling and green waste services will be provided by Ryde City Council.

18. All residential waste, recycling and green waste bins will be transferred from the various basement bin/chute rooms to a temporary bin holding area on the ground floor of the building where they will be stored prior to being serviced.
19. All residential waste, recycling and green waste services will take place from a loading zone located on the basement level of Building C as indicated on the Architectural Drawings.
20. For the child care centre component of the development, which is located on ground floor of Building B, all waste storage facilities will be provided in a Commercial Waste Room located in Basement 1 as indicted on the Architectural Drawings.
21. A licensed private waste collection contractor will provide all commercial waste and recycling services to the child care centre and the six (6) commercial units.
22. All commercial waste and recycling services will take place from the loading zone on the basement level of Building C as indicated on the Architectural Drawings.
23. The Owners Corporation will appoint a Building Manager/Caretaker whose responsibilities will include managing all activities associated with the provision of all waste and recycling services to the building.

5.3 RESIDENTIAL WASTE HANDLING & MANAGEMENT

All units will be provided with a waste and recycling cupboard in the kitchen area of each unit to hold smaller receptacles in order to hold two (2) days' worth of waste and recycling,

All waste and recyclables should be appropriately bagged (no plastic bags) or wrapped prior to being deposited into the designated garbage chute or recycling bin.

5.4 RESIDENTIAL WASTE & RECYCLING – SERVICE REQUIREMENTS

All waste and recycling materials will be stored in approved receptacles of an appropriate size as specified in this WMP. The lids of the bins shall be closed at all times to reduce litter, stormwater pollution, odour and vermin.

The Council in general requires that colour coded receptacle lids that distinguish each service component are to be provided: -

- Waste Service – Red Lidded receptacle;
- Recycling Service – Yellow Lidded receptacle; and,
- Green Waste – Green Lidded receptacle.

5.5 RESIDENTIAL WASTE & RECYCLING – SERVICE ARRANGEMENTS

The table (Table 1) on page 28 specifies the criteria for waste and recycling generation rates for residential flat building units, as specified in the Ryde City Council DCP 2014, based on: -

- Waste – 120-litres per unit per week,
- Recycling – 120-litres per unit per week, and,
- Green Waste – Not specified – 5 x 240-litre green waste bins allocated to the development.

TABLE 1 – RESIDENTIAL WASTE & RECYCLING GENERATION RATES

SERVICE TYPE	UNITS	BIN SPACE PER UNIT	TOTAL SPACE REQUIRED	BINS SIZE	SERVICES PER WEEK	BINS REQUIRED	BINS PROVIDED
Waste	155	120	18,600	1100	3	5.64	6
Recycling	155	120	18,600	1100	3	5.64	6
Green Waste	155	120	N / A	240	0.5	5.00	5

The table (Table 2) below specifies the proposed bin servicing requirements for the building and is based on the above waste and recycling generation rates: -

TABLE 2 – PROPOSED RESIDENTIAL SERVICING ARRANGEMENTS

WASTE	RECYCLING	GREEN WASTE
6 x 1100-litre bins Three (3) Services per Week	6 x 1100-litre bins Three (3) Services per Week	5 x 240-litre bins One (1) Service per Fortnight

5.6 PROVISION OF RESIDENTIAL WASTE & RECYCLING SERVICES

5.6.1 Waste and Recycling Collection Service Provider Details

Ryde City Council's waste collection contractor will provide all residential waste and recycling services to the building.

5.6.2 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
1100-litre mobile container	1.470	1.050	1.370

5.6.3 Waste & Recycling Requirements

Waste and recycling requirements are provided in the table below.

TABLE 3 – RESIDENTIAL WASTE & RECYCLING SERVICES

SERVICE	NUMBER OF CONTAINERS	COLLECTION FREQUENCY
Waste Service	6 x 1100-litre mobile containers	Three (3) Services per Week
Recycling Service	6 x 1100-litre mobile containers	Three (3) Services per Week
Green Waste	5 x 240-litre mobile containers	Fortnightly

5.6.4 Location, Design, and Construction of Residential Bin/Chute Rooms / Holding Areas and Loading Zone

5.6.4.1 Overview

Four (4) separate bin rooms are provided for all bin infrastructure required for each building.

5.6.4.2 Bin/Chute Rooms – All Buildings

Bin/Chute Rooms for each core in all three blocks are located in Basement 1 and the Ground Floor as indicated on the Architectural Drawings.

Each room will be provided with the following infrastructure:

- Waste Chute with 1 x 1100-litre mobile waste bin positioned under the waste chute outlet,
- Recycling Chute with 1 x 1100-litre mobile recycling bin positioned under the waste chute outlet, and,

5.6.4.3 Temporary Bin Holding Area

A temporary bin holding area has been provided on the centre of the site on the basement level of Building C for the storge of all residential waste, recycling and green waste bins for collection by Council.

The holding area is approximately 114sqm in size and will provide storage space for:

- 6 x 1100-litre mobile waste bins, to be serviced three (3) days per week,
- 6 x 1100-litre mobile recycling bins, to be serviced three (3) days per week, and,
- 5 x 240-litre mobile green waste bins, to be serviced one day per fortnight.

On the evening prior the Building Manager or their authorised representative will transport the bins from the basement bin/chute rooms using the platform lift as detailed on the Architectural Drawings.

5.6.4.4 Waste and Recycling Collection Area – Loading Zone (Truck Turntable)

All waste and recycling bins for the development will be serviced from loading zone in the form of a truck turntable located immediately adjacent to holding area as indicated on the Architectural Drawings.

Council have directed that all collection activities are to take place within the site, and this waste storage area has been designed to specifically facilitate all collection activities in this manner.

A 12.5m rear-loading waste collection vehicle will be used to provide all waste and recycling services to the building and the truck turntable has been designed to accommodate this vehicle. The turntable has a total diameter of 14.5m with space behind it, to allow bins to be placed onto the lifting device.

As required by Council all collection vehicles will enter and exit the site in a forward direction, with the collection vehicle accessing the site from the laneway off Blaxland Road.

5.6.7 Servicing Arrangements – Waste Collections

All waste services will be provided by Ryde City Council's waste collection contractor, using a rear loading collection vehicle, that will enable all collections to be carried out effectively and efficiently, and in a manner that will aim not impact negatively on the principles of health, safety or convenience.

Upon the arrival of the collection vehicle to the loading zone, a member of Council's waste team will transfer the waste bins from the bin holding area to the rear of the collection vehicle, where the bins will be attached to the lifting device and the contents of each bin will be deposited into the body of the collection vehicle.

The waste bins will be serviced three (3) days per week, on days to be determined by the Council.

Collection team members will be responsible for ensuring that Waste bins will be returned to the bin holding area immediately after they have been serviced.

The Building Manager or their authorised representative will return all bins to the respective basement bin/chute rooms as soon as practicable after they have been serviced.

5.6.8 Servicing Arrangements – Recycling Collections

All recycling services will be provided by Ryde City Council's waste collection contractor, using a rear loading collection vehicle, that will enable all collections to be carried out effectively and efficiently, and in a manner that will aim not impact negatively on the principles of health, safety or convenience.

Upon the arrival of the collection vehicle to the loading zone, a member of Council's waste team will transfer the recycling bins from the bin holding area to the rear of the

collection vehicle, where the bins will be attached to the lifting device and the contents of each bin will be deposited into the body of the collection vehicle.

The recycling bins will be serviced three (3) days per week, on days to be determined by the Council.

Collection team members will be responsible for ensuring that the recycling bins will be returned to the bin holding area immediately after they have been serviced.

The Building Manager or their authorised representative will return all bins to the respective basement bin/chute rooms as soon as practicable after they have been serviced.

5.6.9 Servicing Arrangements – Green Waste Collections

All green waste services will be provided by Ryde City Council's waste collection contractor, using a rear loading collection vehicle, that will enable all collections to be carried out effectively and efficiently, and in a manner that will aim not impact negatively on the principles of health, safety or convenience.

Upon the arrival of the collection vehicle to the loading zone, a member of Council's waste team will transfer the green waste bins from the bin holding area to the rear of the collection vehicle, where the bins will be attached to the lifting device and the contents of each bin will be 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.

Collection team members will be responsible for ensuring that the bins will be returned to the bin holding area immediately after they have been serviced.

The Building Manager or their authorised representative will return all bins to the respective basement bin/chute rooms as soon as practicable after they have been serviced.

5.6.10 Bulky Waste

In accordance with Council's requirements, secure bulky waste storage areas will be provided for each residential unit within three buildings , close to bin holding area for the collection

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

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

The Bulky Waste Storage Area is located in the basement as indicated on the Architectural Drawings. It has an area of approximately 40sqm (Council's requirement for 155 units is 35sqm).

The Owners Corporation 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 the Bulky Waste Storage Area will be carried out.
he Owners Corporation will also be responsible for liaising with Council to ensure the efficient and regular removal at these materials.

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

5.7 PROVISON OF WASTE MANAGEMENT SERVICES – CHILD CARE CENTRE

5.7.1 Overview

This Part (Part 5.7) details all waste management activities associated with the Child Care Centre (CCC) component of the development. The CCC will provide places for 108 children.

The Child Care Centre is located on Ground floor of Building B as indicated on the Architectural Drawings, and comprises of:

- five (5) indoor play rooms and one (2) outdoor play area
- Offices and administration areas, kitchen and amenities, lift, and,
- Associated infrastructure.

5.7.2 Waste Handling and Management

The proprietors of the Child Care Centre will be responsible for depositing their waste and recycling material into the appropriate bins. All waste is to be placed in the red lidded waste bins. All recyclable material is to be placed in the yellow lidded recycling bins.

All waste and recyclable material is to be removed from the centre at the conclusion of each days' operations and is to be deposited in the appropriate bins provided in the Waste Storage Area (WSA).

Appropriate signage will be erected in a prominent place within the building to assist employees of the Centre to ensure that all waste and recyclable material is placed into the appropriate bins.

5.7.3 Service Requirements

The Child Care Centre is a commercial enterprise, and due to the nature of its use, will generate both waste and recyclable material. Due to its commercial nature, the provision of residential waste and recycling services to the development do not apply.

Accordingly, commercial waste and recycling services will be provided to the Centre.

No formal green waste service will be provided to the building. All green waste will be disposed of privately by a contractor appointed by the Proprietor.

It will be the responsibility of the Proprietors of the Child-Care Centre to ensure that all green waste is removed from the complex in an appropriate manner.

5.7.3 Waste and Recycling Generation Rates

All waste and recycling generation rates have been calculated from information provided in the Better Practice Guide for Resource Recovery as they are not covered in Council's DCP.

The number and size of bins have been calculated using this guide. which is summarised in the following table (Table 4).

The waste generation rates published in the DCP do not make provision for sanitary waste, which given the nature of the use, will be generated. All sanitary waste management issues are dealt with in Part 5.7.9 on page 26.

TABLE 4 – FORMULA FOR CALCULATION WASTE & RECYCLING GENERATION RATES FOR CHILD CARE CENTRES

SERVICE	WASTE & RECYCLING GENERATION RATES
Waste	5.0-litres of waste per child per day (5 litres x 108 children per day)
Recycling	5.0-litres of recyclable material per child per day (5 litres x 108 children per day)
Sanitary Waste	Refer to Part 5.7.9 of WMP

The following table (Table 5) specifies the criteria for waste and recycling generation rates based on the above formula.

TABLE 5 – CHILD CARE WASTE & RECYCLING GENERATION RATES
&
SERVICE REQUIREMENTS

SERVICE TYPE	WASTE GENERATION RATES Litres of Space / Child / Day			TOTAL SPACE REQUIRED	BIN SIZE	SERVICES PER WEEK	BINS REQUIRED	BINS PROVIDED
	Litres	Children	Days					
Waste	5	108	5	2,700	240	2	5.63	6
Recycling	5	108	5	2,700	240	2	5.63	6
Sanitary	Refer to Part 5.7.9 of WMP							

The following table (Table 6) specifies the proposed bin servicing arrangements for the development and is based on the above waste and recycling generation rates: -

TABLE 6 – PROPOSED SERVICING ARRANGEMENTS

WASTE	RECYCLING	SANITARY WASTE
6 x 240-litre bins Two (2) x Services per Week	6 x 240-litre bins Two (2) Services per Week	Refer to Part 5.7.9 (Pages 36-37)

5.7.4 Waste and Recycling Collection Service Provider Details

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

The Proprietors of the Child Care Centre will enter into a Service Level Agreement with the waste and recycling contractor in relation to the provision of both waste and recycling services to the development, and the manner in which they will be provided.

5.7.5 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

5.7.6 Location, Design, and Construction of Waste Room

A Waste Room is provided to facilitate all waste and recycling storage and collection activities. The Waste Room is located on the western side of the ground floor as indicated on the Architectural Drawings. The Waste Room is a rectangular structure measuring 5.0m x 5.0m, with an area of approximately 25sqm, and will provide storage space for:

- 6 x 240-litre mobile waste bins, and,
- 6 x 240-litre recycling bins.

All mobile waste and recycling bins required for the on-going operation of the development will be stored within the confines of this Waste Room at all times.

On the evening prior to servicing the Proprietor of the centre will transport the bins from the basement bin room using the platform lift as detailed on the Architectural Drawings.

5.7.7 Servicing Arrangements – Waste Collections

All waste bins will be serviced from the Loading Zone located on the ground floor as indicated on the Architectural Drawings. The appointed contractor will be responsible for transporting the waste bins from the Waste Room to the collection vehicle. The loading bay has been designed to accommodate a rear loading SRV collection vehicle.

These bins will be transported from the Waste Room to the collection vehicle in accordance with all relative work, health, and safety requirements.

Waste bins will be serviced two (2) days per week, on days to be determined.

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

The waste bins will be returned to the Waste Room as soon as they have been serviced.

5.7.8 Servicing Arrangements – Recycling Collections

All recycling bins will be serviced from Loading Zone located on the ground floor as indicated on the Architectural Drawings. The appointed contractor will be responsible for transporting the recycling bins from the Waste Room to the collection vehicle. The loading bay has been designed to accommodate a rear loading SRV collection vehicle.

These bins will be transported from the Waste Room to the collection vehicle in accordance with all relative work, health, and safety requirements.

Recycling bins will be serviced two (2) days per week, on a day to be determined.

All 6 x 240-litre mobile recycling bins will be presented for servicing on each collection day.

The bins will be returned to the Waste Room as soon as they have been serviced.

5.7.9 Sanitary Waste

Sanitary waste includes disposable nappy and incontinence waste product waste and is to be disposed of in accordance with the requirements of the NSW EPA.

According to EPA standards sanitary waste is not classified as clinical waste, as such it does not need to be treated and can be disposed of directly to landfill through supervised burial.

All sanitary waste will be stored in an appropriate number of receptacles and be disposed of separately to the general waste bins by a licensed contractor authorized to do so.

Given the number of children attending the centre on a daily basis will be 108, an appropriate number of 45-litre nappy bins will be provided to store all sanitary (nappy and toilet) waste. In this regard, it is understood that the nappy bins will be stored in a small area of 1.5m x 0.5m as indicated on the Architectural Drawings.

The area is to be cleaned and maintained twice per day.an appropriate number of receptacles and be disposed of separately to the general waste bins by a licensed contractor authorized to do so.

Example 45-litre Nappy Bin

Efficient changing and disposal of soiled nappies, significantly reduces the risk and spread of diseases transmitted by faeces and body fluids.

In order to minimise the risk and spread of infectious diseases that are transmitted by faeces and other body fluids through changing nappies, the following resources will be provided in an appropriate location within the facility:

- Stable Nappy Change table or bench,
- A mat or surface of change table that is impervious (non-penetrable),
- Hand washing facilities,
- Sanitary facilities for storage of wet and soiled nappies,
- Storage area for clean nappies,
- Gloves, and,
- Paper towels, wipes, soap, and detergent and warm water

The proprietor of the facility will abide by their obligations under the current Education and Care Services National Regulations and the relevant National Quality Standard in relation to nappy changing and nappy changing practices with children.

Any nappy changing bench or mat must be cleaned after each use

Nappy changing facilities must be designed, located and maintained so as to prevent unsupervised access by children (this relates to children not being able to climb on high change tables nor access unsafe products).

Nappy changing facilities must be separate from food preparation facilities.

The dignity and need for privacy of each child is respected during Nappy Changing, incorporating the following procedures:

- Children be closely attended on the nappy change table (if applicable),
- Liaise with families to establish and maintain Nappy Change routines with each child that are workable at home and in the Day Care setting,
- Provision of information about each child's Nappy Changing to their family each day via methods that suit the home environment and family,
- Support Nappy Changing as being a relaxed and positive experience, and,
- Consider and accommodate the specific health and hygiene needs of older children in care, giving consideration to protecting their dignity and respecting their right to privacy.

5.8 PROVISON OF WASTE MANAGEMENT SERVICES – COMMERCIAL

5.8.1 Details of Commercial Land Uses

Six (6) retail/commercial units will be located within the building. Three (3) commercial units are located on the ground floor of the building A fronting Blaxland Road and Three (3) commercial units are located on level1 of the building B fronting Victoria Road .

The particulars of each unit are outlined in Table 7.

TABLE 7 – RETAIL/COMMERCIAL UNITS

TENANCY	PROPOSED USE	LOCATION	FLOOR AREA (Square Metres)
Commercial 1	To be determined	Ground Floor	52
Commercial 2	To be determined	Ground Floor	41
Commercial 3	To be determined	Ground Floor	47
Commercial 4	To be determined	Level 1	187
Commercial 5	To be determined	Level 1	106
Commercial 6	To be determined	Level 1	220
TOTAL FLOOR AREA (Rounded Up)			**653sqm**

4.7.2 Commercial Waste and Recycling Generation Rates

Council's Waste Management DCP – Schedule 3 prescribes the waste and recycling generation rates for commercial developments are detailed in Table 8 below.

TABLE 8 – FORMULA FOR CALCULATION WASTE & RECYCLING GENERATION RATES FOR COMMERCIAL LAND USES

SERVICE	LAND USE	WASTE & RECYCLING GENERATION RATES
Waste	Takeaway	80-litres of waste per 100sqm of floor area per day
Waste	Retail No Food	50-litres of waste per 100sqm of floor area per day
Waste	Office	10-litres of waste per 100sqm of floor area per day
Recycling	Takeaway	40-litres of waste per 100sqm of floor area per day
Recycling	Retail No Food	25-litres of waste per 100sqm of floor area per day
Recycling	Office	10-litres of waste per 100sqm of floor area per day

For the purposes of this WMP, it will be assumed that:

- Commercial 1 will be used as a takeaway cafe,
- Commercial 2 and 3 will be used as a retail shop not selling food,
- Commercial 4, 5 and 6 will be used as offices.

4.7.3 Commercial Waste Services

All commercial waste services will be provided in accordance with the waste generation rates as prescribed in Tables 7 and 8. The following table (Table 9) specifies the criteria for waste generation rates, and the service requirements as a result of applying the waste generation rates to all units.

TABLE 9 – WASTE GENERATION RATES

ACTIVITY	FORMULA	CALCULATION	LITRES PER WEEK
Takeaway Cafe	80-litres per 100sqm per day	80 x 52 / 100 x 7	291.20
Retail – No Food	50-litres per 100sqm per day	50 x 88 / 100 x 7	308.00
Office	10-litres per 100sqm per day	10 x 513 / 100 x 6	307.80
Total Litres of Waste Generated per Week			**907.00**
Service Requirements		**1 x 1100-litre bin One (1) Service per Week**	
Total Litres of Waste Serviced per Week		**1,100-litres per Week**	

It is considered that one (1) contractor provide all waste services to the building and that 1 x 1100-litre mobile waste bin be provided to service all units one (1) day per week.

The Proprietors of each unit will be required to enter into a Service Level Agreement with the contractor, and written evidence of the Agreement will be kept on the premises, in order to demonstrate that the regular collection and disposal of all waste generated from these activities, has taken place.

All waste services will be carried out so as not to impede or impact on vehicular and pedestrian traffic movement throughout, and adjacent to the development.

4.7.4 Commercial Recycling Services

All commercial waste services will be provided in accordance with the waste generation rates as prescribed in Tables 3 and 4.

The following table (Table 6) specifies the criteria for waste generation rates, and the service requirements as a result of applying the waste generation rates to all units.

TABLE 6 – RECYCLING GENERATION RATES

ACTIVITY	FORMULA	CALCULATION	LITRES PER WEEK
Takeaway Cafe	40-litres per 100sqm per day	80 x 52 / 100 x 7	145.60
Retail – No Food	25-litres per 100sqm per day	25 x 88 / 100 x 7	154.00
Office	10-litres per 100sqm per day	10 x 513 / 100 x 6	307.80
Total Litres of Recycling Generated per Week			**606.60**
Service Requirements		**1 x 660-litre bins One (1) Service per week**	
Total Litres of Waste Serviced per Week		**660-litres Serviced per Week**	

It is considered that the one (1) contractor provide all recycling services to the building and that 1 x 660-litre mobile recycling bins be provided to service all units one (1) day per week.

The Proprietors of each unit will be required to enter into a Service Level Agreement with the contractor, and written evidence of the Agreement will be kept on the premises, in order to demonstrate that the regular collection and disposal of all waste generated from these activities, has taken place.

All commercial recycling services are to be undertaken in a manner that will not adversely impact upon the principles of health, safety or convenience.

4.7.5 Commercial Waste Storage Area (CWSA)

The Commercial Waste Storage Area (CWSA) is located on the ground floor of the building as indicated on the Architectural Drawings. It is an enclosed rectangular structure, which will provide sufficient space for:

- Storage space for 1 x 1100-litre mobile waste bin, and,
- Storage space for 1 x 660-litre mobile recycling bin.

The Commercial Waste Storage Area (CWSA) will be designed to ensure there will be sufficient space to accommodate all garbage and recycling bins for all commercial units.

4.7.6 Commercial Waste Collection

All commercial waste and recycling collections will be collected from the truck turntable.

As required by Council all collection vehicles will reverse into the site and exit the building in a forward direction. Collection and servicing activities will take place as follows: -

a) The Collection vehicle will enter the building from the Blaxland Road,
b) Once into the building, a member of contractors' collection team will remove the bins from the CWSA and place the contents of the respective bins into the body of the collection vehicle.
c) Once the bins have been serviced, the collection vehicle will exit the collection area and exit the building in a forward direction.

All internal access, parking and servicing arrangements are to comply with all relevant Australian Standards.

5.8 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 facilities and devices will be required: -

1. The walls and floors of all waste storage facilities are to be constructed of smooth faced masonry or concrete, and all walls will be painted with light coloured and washable paint.
2. The junction between all floors and walls will be coved and sealed up to 100mm above the floor level, in order to eliminate the build-up of dirt and grime.
3. A floor waste, connected to the Sydney Water drainage system in accordance with that Authority's requirements, will be provided to the Residential Waste and Recycling WSA's, the Commercial WSA, and the Bulky Waste Area, and the respective floors will be graded to drain into them.
4. Appropriate washing facilities will be provided to the Residential Waste and Recycling WSA's, the Commercial WSA, and the Bulky Waste Area, including appropriate plumbing and drainage fixtures and fittings, and the provision of running water.
5. All waste storage facilities are to be washed and cleaned on a regular basis.
6. All mobile bins will be washed and cleaned on a regular basis.
7. All electrical equipment, including the provision of lighting, will be installed in accordance with the relevant Australian Standards.
8. Natural and mechanical ventilation will be required to be installed within all waste storage facilities in accordance with the relative provisions of the Building Code of Australia.
9. Appropriate signage will be displayed in all basements clearly identifying the location of all waste storage facilities.
10. Appropriate signage will be erected in suitable locations, providing instruction to residents on how to use waste and recycling facilities, including what is and what is not recyclable.

PART 6 – SUMMARY

6.1 SUMMARY

In summarising this proposal, the following information is provided:

1. The number and size of bins have been calculated from information provided by Ryde City Council.
2. Ryde City Council will provide all residential waste and recycling services to the building.
3. A licensed private waste collection contractor will provide all commercial waste and recycling services.
4. 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.
5. The WMP aims to promote the use of recyclable materials in the demolition, construction and on-going operation of the building;
6. The WMP aims to 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.
7. The WMP aims to ensure that the provision of waste and recycling services to the completed buildings are carried out in an efficient manner, which will promote the principles of health, safety and convenience.

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 Ryde City Council.