# DICKENS SOLUTIONS

(REF - 24132)

# **WASTE MANAGEMENT PLAN**

# BERNARD MORAZ PLANNING (CEDAR DESIGN & CONSTRUCT PTY LTD)

# RESIDENTIAL FLAT BUILDING @ 115-117 DUTTON STREET YAGOONA

## **OCTOBER 2024**

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#### PART 1 – OVERVIEW AND PROPOSAL

#### 1.1 INTRODUCTION

This is an operational plan that describes in detail the manner in which all waste and other materials resulting from the on-going use of the building on the site are to be dealt with.

The aims and objectives of the WMP and this Addendum 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, demolition, 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:
- 5. 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 located within the Canterbury Bankstown (former Bankstown) LGA.

This WMP is prepared in accordance with: -

- Bankstown Local Environment Plan 2015;
- Bankstown DCP 2015 Part B13 Waste Management and Minimisation;
- All conditions of consent issued under the approved Development Application;
- The 'Better Practice Guide for Waste Management in Multi Unit Dwellings';
- Waste industry best practice standards for the storage and collection of waste within Multi Unit Residential Dwellings; 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.

This Waste Management Plan has been prepared for the submission of a Development Application to be submitted to Canterbury Bankstown Council for construction of a five (5) storey residential flat building at 115-117 Dutton Street, Yagoona, comprising:

- 28 x 1, 2 and 3 bed-room units,
- Two (2) basement levels, and,
- Associated Infrastructure.

This WMP is dated 25 October 2024, has been prepared to be submitted to Council as part of the DA Package for the project.

The WMP has been developed and documented in accordance with the Architectural Drawings prepared by Cedar Design & Construct – Project No 2409.

#### 1.2 PROJECT & PROPERTY DESCRIPTION

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

DESCRIPTION	Five (4) storey Residential Flat Building
NUMBER OF UNITS	- 28 x 1, 2 and 3 bed room units;
	- Three (3) basement levels,
	- Associated infrastructure
PROPERTY	The development is to be constructed over two (2)
DESCRIPTION	existing lots at Lots 19 and 18, in DP9795, 115-117
	Dutton Street, Yagoona.
STREET ADDRESS	115-117 Dutton Street, Yagoona.
AREA	2,112sqm
LGA	Canterbury Bankstown Council
ZONING	Zone R4 – High Density Residential
PLANNING	Bankstown LEP 2015
INSTRUMENTS	Bankstown Development Control Plan 2015

#### 1.3 APPLICANTS DETAILS

APPLICANT	Cedar Design and Construct Pty Ltd	
	C/- Bernard Moraz Planning	
ADDRESS	Suite 5, Level 24, Barangaroo Avenue, Sydney. NSW. 2000.	
TELEPHONE	02 8067 8644	
E-MAIL	Bernard@bmaurban.com	

#### 1.4 PROPOSAL

The proposal involves the construction of a five (4) storey residential flat building at 115-117 Dutton Street, Yagoona, comprising: -

- 28 x 1, 2 and 3 bed room units,
- Three (2) basement levels; and,
- Associated infrastructure, services and ancillary facilities.

Egress from the site will be from Dutton Street on to the eastern frontage of the site.

All waste, recycling and FOGO bins will be stored within the confines of a Bin Room located on the ground floor of the building as indicated on the Architectural Drawings.

Canterbury Bankstown Council's waste collection contractor will provide all waste, recycling and FOGO services to the development as detailed herein.

Current structures on the site include:

- 115 Dutton Street a single storey brick and tile dwelling, detached timber framed fibro garage, concrete driveway, front and rear grassed and garden areas, some trees and shrubs, timber paling and metal panel side and rear perimeter fencing, and a small concrete block retaining wall along the front boundary of the site, and,
- 117 Dutton Street a single storey brick and masonry rendered dwelling with a tiled roof, attached rear awning, detached shed, concrete driveway, metal internal fence separating front and rear yards, front and rear grassed and garden areas, some trees and shrubs, timber paling and metal panel side and

rear perimeter fencing, and a concrete block retaining wall along the front boundary of the site.

The project consists of: -

- 1. The demolition of all existing dwellings and structures on the site on the site;
- 2. The removal of all demolished materials,
- 3. The excavation of the site to construct the basement levels of the building
- 4. The construction of the residential building.
- 5. The provision of landscaping, driveways, concrete pathways and other elements associated with the development; and,
- 6. The on-going use of the building.

Canterbury Bankstown 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 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 structures on the site include:

- 115 Dutton Street a single storey brick and tile dwelling, detached timber framed fibro garage, concrete driveway, front and rear grassed and garden areas, some trees and shrubs, timber paling and metal panel side and rear perimeter fencing, and a small concrete block retaining wall along the front boundary of the site, and,
- 117 Dutton Street a single storey brick and masonry rendered dwelling with a tiled roof, attached rear awning, detached shed, concrete driveway, metal internal fence separating front and rear yards, front and rear grassed and garden areas, some trees and shrubs, timber paling and metal panel side and rear perimeter fencing, and a concrete block retaining wall along the front boundary of the site.

#### 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

1. Excavated materials & Overbarden		
Volume / Weight	650 cubic metres / 1,105 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 11.	

#### 2. Green Waste

Volume / Weight	180 cubic metres / 27 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 11.

#### 3. Bricks

Volume / Weight	90 cubic metres / 90 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 11.

#### 4. Concrete

Volume / Weight	120 cubic metres / 288 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 11.		

#### 5. Timber

Volume / Weight	80 cubic metres / 32 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 11.

#### 6. Plasterboard & Fibro

Volume / Weight	100 cubic metres / 35 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 11.

7. Metals / Steel / Guttering & Downpipes

	3		
Volume / Weight	115 cubic metres / 40.25 Tonnes		
On Site Reuse	No		
Percentage Reused or Recycle	60% - 90%		
Off Site Destination	Refer to Part 2.7 on page 11.		

#### 8. Roof Tiles / Tiles

Volume / Weight	80 cubic metres / 60 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 11.

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

Volume	100 cubic metres / 35 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 11.

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

Volume / Weight	120 cubic metres / 40 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 11.

#### 11. Residual Waste

Volume / Weight	165 cubic metres / 165 Tonnes
Volume / Weight	100 duble inclies / 100 formes
On Site Reuse	No
Off Site Destination	Refer to Part 2.7 on page 11.
Notes on calculation of	In calculating the amount of residual waste produced
volume of residual	from the demolition of all buildings on site, it is
waste	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 <u>'Site Plan for the On-Site Storage of Materials at Demolition'.</u> 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 6 to 10 and Part 2.7 on page 11.

- 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 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	12,500 Cubic Metres / 21,250 Tonnes (Basements excavation)
On Site Reuse	Yes. Keep and reuse topsoil for landscaping. Store 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 16.

#### 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)

	1 1 1 1 Jay 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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	1.300 cubic metres / 1,300 Tonnes		
On Site Reuse	No		
Off Site Destination	Refer to Part 3.5 on page 16.		
Notes on calculation of	In calculating the amount of residual waste produced		
volume of residual	from the demolition of all buildings on site, it is		
waste	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 <u>'Site Plan for the On-Site Storage of Materials at Construction'.</u> 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 10 on pages 6 to 8 and Part 2.7 on page 10.

- 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**

Two garbage chutes have been incorporated into the building design. The chute system is for the reception of waste material only.

The design of the garbage chute rooms will provide access for a person in a wheelchair.

Separate arrangements will be made for the management of recycling material as detailed in Part 4.5 on page 25.

For all units, all waste deposited into the waste chutes will discharge onto a 3 x 1100-litre mobile bin linear track system provided in bin/chute rooms located on the ground floor of the building as indicated on the Architectural Drawings.

The bin system is designed to provide space for  $3 \times 1100$ -litre (waste and recycling) bins but will actually hold  $2 \times 1100$ -litre bins, as space on the track is to be provided to allow the bins to be moved to the rear of the track when the automated system is activated to recognise that one of the bins (the middle bin) is full.

Separate waste and recycling chute compartments will be provided on each residential floor of the building from Level 1 up. The compartments are located as detailed in the Architectural Drawings.

At a minimum each Garbage and Chute System 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 minimal internal diameter of 500 mm. The diameter around each chute will be a minimum width of 750 mm to allow for infrastructure fittings, such as fixing brackets and noise insulation.
- 3. Chutes will be vertical without bends or "off-sets" (except for the chute outlets) and not be reduced in diameter.
- 4. The waste chute will terminate in the Residential Bin/Chute Room on the Ground Floor and discharge all waste into a 3 x 1100-litre mobile bin linear track system.
- 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 Garbage Chute systems must comply with the relative provisions of the Building Code of Australia, and relevant Australian Standards (e.g., AS1530.4-2005).
- 8. The 3 x 1100-litre mobile bin linear track system will be designed, manufactured and installed in accordance with relevant Australian Standards and to manufacturers specifications.

#### **4.2 CHUTE SYSTEM**

There are 28 x 1, 2 and 3-bedroom units in the development.

Waste chute compartments are provided on the secondary lobby of each residential floor level from Level 1the ground floor upwards next to Lift 2 and opposite the fire stairs.

The chute will be installed in a fire rated chute compartment. Each chute will be fire separated in accordance with the relative provisions of the BCA. The design of the garbage chute rooms must provide access for a person in a wheelchair.

Residents will deposit waste material into the chute inlet hopper, labelled 'Waste Chute – Reception of Garbage Only'. Waste from the chute outlet will fall directly into the middle bin of the 1100-litre mobile waste bin positioned on the linear tracks system.

Based on Council's waste generation rates (140-litres of space per unit per week), it is anticipated that the 36 x units in the building will generate 5,040-litres of waste per week, or 720-litres per day.

The capacity of the 2 x 1100-litre bin linear track system is 2,200-litres. As such, the carousel will be inspected at least one (1) time per day in order to ensure that waste receptacles will be removed when full.

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

The appointed Building Manager or their authorised representative will be responsible for transferring full 1100-litre waste bins from the under the chutes into the waste bin storage area of the bin/chute room on the ground floor

#### 4.3 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 carousel.

These activities 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 out of the chute systems.
- 3. Providing regular maintenance, including cleaning and unblocking chutes.
- 4. Regular inspection of the Garbage Chute Compartments, the Garbage Chute Outlet Compartments, and the Bin Rooms to ensure that all waste and recyclables are managed appropriately.
- 5. Educating residents in the correct use of each chute, to ensure that waste material is not deposited into the recycling chute, and that recycling material is not placed into the waste chute.

In accordance with Council requirements, the following infrastructure will be incorporated into the design of all chute rooms: -

- a) Suitable door access for the service of bins;
- b) Where roller doors are provided, an additional service door will be provided inclusive of an Abloy key system;
- c) All floors will be finished with a non-slip and smooth and even surface covered at all intersections;
- d) The floor will be graded to a central drainage point connected to the sewer;
- e) The room will be fully enclosed and roofed with a minimum internal room height in accordance with the BCA 2016
- f) The room is to be provided with an adequate supply of water through a centralised mixing valve with hose cock; and.
- g) Incorporation of adequate light and ventilation to meet the requirements of the BCA 2016.

#### 4.4 GROUND FLOOR UNITS - NO CHUTE ACCESS

There are four (4) units on the ground floor that do not have access to the waste chute, There is however, a Bin Room on the south-western side of the ground floor next to the Bin/Chute Room. Within this room will be storage space for 1 x 1100-litre waste bin, 1 x 240-litre recycling bin and 1 x 240-litre FOGO bin for residents of these ground floor units in which to deposit their waste, recycling and FOGO material. fire stair.

The Building Manager or their authorised representative will be responsible for transferring full bins in to the Bin/Chute Room and providing empty bins into the Bin Room.

#### **4.5 MANAGEMENT OF RECYCLING**

Recycling compartments will be provided on each residential floor of the building from the ground floor up.

Recycling compartments are located next to the waste chute compartment as indicated on the Architectural Drawings. Each compartment will provide sufficient space to accommodate 1 x 240-litre yellow lidded recycling bin.

Residents will place their recycling material into the 240-litre mobile recycling bin provided in the Recycling Compartment of the level of the building in which their unit is located.

The Building Manager or their authorised representative will be responsible for transporting the 240-litre mobile bin from the compartments on each floor into the Recycling Bin Storage Area (RBSA) on the Lower Ground Floor.

An empty 240 litre mobile recycling bin will be placed in the Recycling Compartment when the full one is removed.

Servicing and replacement of 240 litre recycling bins located in the recycling compartments on each residential level of the complex will take place on a regular basis to avoid hygiene, spillage and dumping problems.

#### 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**

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

- 1. The proposal involves the construction of a five (4) storey residential flat building at 115-117 Dutton Street, Yagoona, comprising:
  - a) 28 x 1, 2 and 3 bed room units,
  - b) Three (3) basement levels; and,
  - c) Associated infrastructure, services and ancillary facilities.
- 2. Egress from the site will be from Dutton Street on to the eastern frontage of the site.
- 3. All waste, recycling and FOGO bins will be stored within the confines of a Bin Holding Area located on the ground floor of the building as indicated on the Architectural Drawings.
- 4. Waste material will be stored for servicing in 3 x 1100-litre mobile bins to be serviced two (2) days per week.
- 5. All recycling material will be stored for servicing in 4 x 1100-litre mobile bins, to be serviced one (1) day per week.
- 6. All FOGO (green organics) material will be stored for servicing in 4 x 240-litre mobile bins, to be serviced one (1) day per fortnight.
- 7. There are four (4) units on the ground floor that do not have access to the waste chute, there is however, a Bin Room on the southern side of the ground floor lobby next to the Lift, which will provide storage space for 1 x 1100-litre waste bin, 1 x 240-litre recycling bin and 1 x 240-litre FOGO bin for residents of these ground floor units in which to deposit their waste, recycling and FOGO material.
- 8. The number and size of bins have been calculated from information provided by Canterbury Bankstown Council, by Council staff and from information contained in the Canterbury Bankstown Waste Management Guideline for New Developments.
- 9. Canterbury Bankstown Council will provide all waste and recycling services to both buildings.
- 10. Council provides a 'collect and return' service for residential flat buildings, and in accordance with Council requirements the WSA is located approximately 10 metres from the front boundary of the property.
- 11. Council's operators will collect all residential waste and recycling bins from the WSA and return them to it upon completion of the servicing of all bins.
- 12. The Owners Corporation will ensure that access to the WSA is available at all times on collection days.

#### **5.3 WASTE HANDLING & MANAGEMENT**

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

All residents 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 recyclables should be appropriately bagged or wrapped prior to being deposited into the designated bin.

Appropriate signage will be erected in the Residential WSA to assist residents in placing their waste and recyclables into the appropriate bins.

Unrestricted access to the Residential WSA will be provided at all times to the residents of the building so that waste and recycling material can be deposited within the appropriate bins at any time.

#### 5.4 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 tables (Table 1 and 2) below specify the criteria for waste and recycling generation rates (as specified by Canterbury Bankstown Council):

- Waste 140 litres of bin space per unit per week;
- Recycling 120 litres of bin space per unit, collected fortnightly; and,
- Green Waste See below.

All waste and recycling generation rates were obtained from information contained in the approved Consent.

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	28	140	3,920	1100	2	2.30	3
Recycling	28	120	3,360	1100	1	3.93	4
FOGO	28	N/A	N/A	240	0.5	4.00	4

TABLE 2 – PROPOSED SERVICING ARRANGEMENTS

WASTE	RECYCLING	
3 x 1100-litre bins	4 x 1100-litre bins	4 x 240-litre bins
Two (2) Services per Week	One (1) Service per Week	One (1) Service per Fortnight

#### 5.6 PROVISION OF RESIDENTIAL WASTE & RECYCLING SERVICES

#### 5.6.1 Residential Waste and Recycling Collection Service Provider Details

Canterbury Bankstown Council will provide all waste and recycling services to both buildings.

#### 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	1.070	0.675	0.585
1100 litre mobile container	1.470	1.370	1.370

#### 5.6.3 Waste & Recycling Requirements

Waste and recycling requirements are provided in the tables (Tables 3 and 4) below.

#### WASTE & RECYCLING REQUIREMENTS

SERVICE	NUMBER OF CONTAINERS	COLLECTION FREQUENCY		
Waste Service	3 x 1100-litre mobile containers	Two (2) Services per Week		
Recycling Service	4 x 1100-litre mobile containers	One (1) Service per Week		
FOGO Service	4 x 240-litre mobile containers	One (1) Service per Fortnight		

#### 5.6.4 Location, Design, and Construction of Bin Holding Area (BHA)

A dedicated Bin Holding Area (BHA) is provided for this building and is located on the ground floor adjacent to the northern side boundary of the site as indicated on the Architectural Drawings.

The BHA is an enclosed rectangular structure located on the northern side of the ground floor lobby, with an area of approximately 42.50sqm. Within is confines will be storage space for:

- The 3 x 1100-litre linear track waste bin system,
- 3 x 1100-litre red lidded mobile waste bins,
- 4 x 1100-litre yellow lidded recycling bins, and,
- 4 x 240-litre green lidded FOGO bins.

All waste and recycling services will take place from the BHA with access from Dutton Street. The BHA is located approximately 10 metres of the kerbside collection point.

#### 5.6.5 Bin Room 2

As there are four (4) units on the ground floor that do not have access to the waste chute, there is however, a Bin Room on the southern side of the ground floor next to the lift, which will be provided for the storage of 1 x 1100-litre waste bin, 1 x 240-litre recycling bin and 1 x 240-litre FOGO bin for residents of these ground floor units in which to deposit their waste, recycling and FOGO material.

#### 5.6.6 Servicing Methodology

Council provides a 'collect and return' service for residential flat buildings, and in accordance with Council requirements a temporary Bin Holding Area (BHA) is located adjacent to the north-eastern side and front boundary, which is approximately five (5) metres from the kerbside collection point, where the vehicle will be stationed.

#### 5.6.7 Servicing Arrangements - Waste Collections

All waste services will be provided by Canterbury Bankstown Council, using a 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.

Council provides a 'collect and return' waste service for residential flat buildings, and in accordance with Council requirements the BHA is located within 10 metres of the kerbside collection point.

Council's operators will collect the waste bins from the BHA, and wheel them to the collection vehicle and return them to the BHA upon completion of the servicing of all bins.

The Owners Corporation will ensure that access to the BHA is available at all times on collection days.

The waste bins will be serviced two (2) days per week, on a day to be determined by the Council.

All 3 x 1100-litre waste bins will be presented for servicing on each collection day.

#### <u>5.6.8 Servicing Arrangements – Recycling Collections</u>

All recycling services will be provided by Canterbury Bankstown Council, using a 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.

Council provides a 'collect and return' recycling service for residential flat buildings, and in accordance with Council requirements the BHA is located within 10 metres of the kerbside collection point.

Council's operators will collect the recycling bins from the BHA, and wheel them to the collection vehicle and return them to the BHA upon completion of the servicing of all bins.

The Owners Corporation will ensure that access to the BHA is available at all times on collection days.

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

All 4 x 1100-litre mobile recycling bins will be presented for servicing on each collection day.

#### <u>5.6.9 Servicing Arrangements – FOGO Collections</u>

All FOGO (green waste) services will be provided by Canterbury Bankstown Council, using a 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.

Council provides a 'collect and return' recycling service for residential flat buildings, and in accordance with Council requirements the BHA is located within 10 metres of the kerbside collection point.

Council's operators will collect the bins from the BHA, and wheel them to the collection vehicle and return them to the BHA upon completion of the servicing of all bins.

The Owners Corporation will ensure that access to the BHA is available at all times on collection days.

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

All 4 x 240-litre mobile FOGO bins will be presented for servicing on each collection day.

#### **5.7 BULKY WASTE STORAGE**

Secure storage spaces are required to be provided for each residential unit in accordance with the provisions of Council's DCP 2015. This space may be used to store bulky waste items that can be disposed of as part of any bulky waste clean-up service to be provided to this complex.

Council requires a minimum of 4 square metres of space. In accordance with Council requirements the Bulky Waste Storage Area has a floor area of 5sqm. It will be a fully enclosed area with a 1.5 metre doorway.

The Bulky Waste Storage Area is located in a separate part of the main waste storage area.

It will be the responsibility of the Owners Corporation to arrange for the removal of all unwanted bulky waste on a regular basis.

# 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 the WSA is 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 all bin rooms and the WSA, and the floors will be graded to drain into it.
- 4. Appropriate washing facilities will be provided to bin rooms and the WSA, including appropriate plumbing and drainage fixtures and fittings, and the provision of running water.
- 5. The WSA will 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 the WSA in accordance with the relative provisions of the Building Code of Australia.
- 9. Appropriate signage will be displayed in both basements clearly identifying waste and recycling bins and the waste storage areas.
- 10. Appropriate signage will be erected within the WSA, providing instruction to residents on how to use waste and recycling facilities, including what is and what is not recyclable.
- 11. The Owners Corporation will be responsible for ensuring that all waste and recyclable matter and materials are placed and stored within the appropriate containers provided.

#### PART 6 - SUMMARY

#### 6.1 SUMMARY

In summarising this proposal, the following information is provided:

- Canterbury Bankstown Council have insisted that all activities associated with the installation of waste management facilities and the provision of waste management services are to take place in, and from, the Waste Storage Area located on the Ground Floor of the building.
- 2. This Waste Management Plan has been developed and documented in accordance with the Councils directions.
- 3. The number and size of bins have been calculated from information provided by Canterbury Bankstown Council.
- 4. All waste and recycling services will be provided Canterbury Bankstown Council.
- 5. 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.

This is a unique development with a unique set of arrangements for its waste management activities.

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 Canterbury Bankstown Council.

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