

DICKENS SOLUTIONS

(REF – 23170)

AMENDED
WASTE MANAGEMENT PLAN
(Council RFI)

BALITO NO 1 PTY LTD

MIXED USE
RESIDENTIAL & COMMERCIAL
DEVELOPMENT

@
142-146 PITT ROAD
CURL CURL

MAY 2024

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PART 1 – OVERVIEW AND PROPOSAL

1.1 INTRODUCTION

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

The aims and objectives of this WMP are to:

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

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

This WMP is prepared in accordance with: -

- Warringah Local Environmental Plan 2011;
- Warringah DCP 2011 and relevant waste management guidelines;
- All conditions of consent to be issued under the approved DA;
- The 'Better Practice Guide for Resource Recovery in Residential Buildings, published by the NSW EPA (April 2019), and,
- The objective of ensuring that all waste management facilities and collection services will provide an outcome that will be efficient, as well as promoting the principles of health, safety, and convenience.

The original Waste Management Plan was prepared for a Development Application to be submitted to the Northern Beaches Council for the construction of a four (4) storey building of mixed residential and commercial components at 142-146 Pitt Road, Curl Curl, comprising of:

- 11 x 2, 3 and 4 bed-room town house dwellings,
- Five (5) x ground floor retail units,
- One (1) Basement level, and,
- Associated infrastructure.

The Waste Management Plan was dated 8 December 2023 and was prepared to be submitted to Council as part of the DA Package for the proposed development. The WMP has been developed and documented in accordance with the Architectural Drawings prepared by Warren and Mahoney Living Pty Ltd – Job No 10146.

1.2 COUNCIL RFI

As part of the DA assessment, Council on 26 April 2024, issued a Council Request for Further Information (RFI) in relation to a number of waste management issues, stating that the WMP provided by Dickens Solutions (December 23) contains a number of errors and incorrect assumptions with regards to Councils' waste collection services.

The WMP provided as part of the DA will need to be amended/updated to correct the following errors:

The items Council require to be addressed are detailed below in **Bold Face Type** with a response provided to each item.

Item 1 – Service Requirements

Northern Beaches Council will provide all residential waste collection services. All references to residential waste being collected by a private contractor are to be removed or replaced with the Northern Beaches Council - e.g. Part 4, clause 4.2 (7).

Incorrect waste generation rates and collection frequencies have been used. This has resulted in an incorrect number of bins needing to be stored on the property. The correct number of bins and collection frequency for 11 residential units is as follows:

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

The storage requirement for residential bins is 10 x 240 litre bins.

The WMP must be amended to reflect the correct number of bins and collection frequency.

RESPONSE –

The Waste Management Plan has been amended to address all of the issues raised in this item. Refer to Part 4.2, Item 8 on page 21, and Part 4.3.2 on page 23.

Item 2 – Residential Bin Storage Room

Due to the use of incorrect waste generation rates and service frequencies the residential bin room is larger than is required by Council.

The proposed residential bin room can be retained as is or can be made smaller to accommodate the required 10 x 240 litre bins.

The bin room service door and path leading the truck parking bay must be a minimum of 1200mm wide.

Access to the residential bin room for service staff must not be impeded by any locked doors or gates. If the service door is required to be locked the only acceptable outcome is via the installation of a timer lock set to open from 6am to 6pm on the scheduled day of collection.

There must be no interconnecting door between the residential and commercial bin storage rooms.

RESPONSE –

Both the Architectural Drawings and the Waste management Plan have been amended to address the issues raised in the above Item.

Refer to the Amended Architectural Drawings and relevant parts of the Amended WMP.

Item 3 – Commercial Waste Storage Room

A Commercial Waste Storage Area must be provided and highlighted as such on the plans. This room must be completely separate from the residential bin storage room and designed in such a way that commercial proprietors do not have access to the residential bin room.

RESPONSE –

Both the Architectural Drawings and the Waste management Plan have been amended to address the issues raised in the above Item.

Refer to the Amended Architectural Drawings and relevant parts of the Amended WMP.

Item 4 – Residential Bulky Goods Room

A suitable room has been provided in the basement for this purpose. This room is larger than Council requires for 11 residential units. The room can remain as is or can be made smaller (by half). The door to this room must open outwards and be a minimum of 1200mm wide.

RESPONSE –

The submitted Waste Plan provides for separate waste and recycling areas. Additionally, the submitted Architectural Drawings clearly indicates as such.

This is an Amended Waste Plan (WMP), dated 16 May 2024, and has been prepared to address all of the waste management issues raised in Council's RFI,

1.4 PROJECT & PROPERTY DESCRIPTION

| | |
|-----------------------------|--|
| DESCRIPTION | Mixed Use Development |
| DETAILS | - 11 x 2, 3 and 4 bed-room town-house dwellings, - Five (5) ground floor retail units, - One (1) basement level, - Associated infrastructure, and - The provision of waste storage facilities. |
| PROPERTY DESCRIPTION | The development is to be constructed over one (1) existing Torrens Title allotment at Lots at 28,29 & 30, in DP394337, 142-146 Pitt Road, Curl Curl. |
| STREET ADDRESS | 142-146 Pitt Road, Curl Curl. |
| DIMENSIONS | Refer to Site Plan |
| AREA | 1,299sqm (Survey) |
| LGA | Northern Beaches Council |
| ZONING | Zone B1 – Neighbourhood Centre |
| PLANNING INSTRUMENTS | Warringah LEP 2011 Warringah DCP 2011 |

1.4 APPLICANTS DETAILS

| | |
|------------------|--|
| APPLICANT | Mr Grant Price Balito 1 Pty Ltd |
| TELEPHONE | Mb 0409 570 719 |
| E-MAIL | grantprice@balito.com.au |

1.5 PROPOSAL

The proposal development involves the construction of a four (4) storey building of mixed residential and commercial components, comprising:

- 11 x 2, 3 and 4 bed-room town house dwellings,
- Five (5) x ground floor retail units,
- One (1) Basement level, and,
- Associated infrastructure.

Vehicular access to the site is onto Playfair Road through an existing right-of-carriage way (easement) on the western side of the site.

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

Waste storage facilities for both components will be located in separate areas on the ground floor of the site as detailed herein.

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

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

Current buildings and structures on the site include a two (2) storey brick and tiled building, currently occupied by three (3) attached shops with residential apartments above, awning overhanging the Pitt Road frontage, rear balcony over attached shed, brick paving and rear stairs leading to the ground level, rear grassed areas, with

concrete, timber and brick perimeter fencing around both the sides and the rear of the site.

The project consists of: -

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

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

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

PART 2 – DEMOLITION

2.1 GENERAL PROVISIONS – OVERVIEW

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

Part 2.2 on Pages 8, 9, 10, 11, 12, 13 and 14 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 two (2) storey brick and tiled building, currently occupied by nine (9) attached shops with residential apartments above, awning overhanging the Pitt Road frontage, rear balcony over attached shed, brick paving and rear stairs leading to the ground level, rear grassed areas, with concrete, timber and brick perimeter fencing around both the sides and the rear 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.

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

All friable and non-friable asbestos-containing material shall be handled and disposed of off-site at an EPA licensed waste facility by an EPA licensed contractor in accordance with the requirements of the Protection of the Environment Operations (Waste) Regulation 2014 and the Waste Classifications Guidelines – Part 1 'Classifying Waste (EPA 2014) and any other instrument as amended.

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

- a) Work Health and Safety Act 2011,
- b) NSW Protection of the Environment Operations Act 1997 (NSW), and,
- c) NSW Department of Environment and Climate Change Environmental

Guidelines; Assessment, Classification and Management of Liquide and Non-Liquid Wastes.

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

2.4 DEMOLITION – RECYCLING, REUSE & DISPOSAL DETAILS

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

1. An estimate of the types and volumes of waste and recyclables to be generated;
2. A site plan showing sorting and storage areas for demolition waste and vehicle access to these areas (see Part 2.3 of this Plan);
3. How excavation and demolition waste materials will be reused, and, or recycled and where residual wastes will be disposed (see below); and,
4. The total percentage of demolition waste that will be reused or recycled.

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 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 to this Plan.

1. Excavated Materials

| | |
|-------------------------------|---|
| Volume / Weight | 150 cubic metres / 255 Tonnes |
| On Site Reuse | Yes. Keep and reuse for topsoil or as required. (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 | Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646) or, Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712). or, an alternative approved facility |

2. Green Waste

| | |
|-------------------------------|--|
| Volume / Weight | 40 cubic metres / 6 Tonnes |
| On Site Reuse | Yes. Keep and reuse for topsoil or as required. |
| Percentage Reused or Recycled | To be determined (see above comments) |
| Off Site Destination | Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646) or, Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712). or, An alternative approved facility |

3. Bricks

| | |
|------------------------------|---|
| Volume / Weight | 200 cubic metres / 200 Tonnes |
| On Site Reuse | Crush and reuse as drainage backfill. Crushed and used as aggregate. |
| Percentage Reused or Recycle | 75% - 90% |
| Off Site Destination | Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646) or, Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712). or, An alternative approved facility. |

4. Concrete

| | |
|-------------------------------|--|
| Volume / Weight | 175 cubic metres / 420 Tonnes |
| On Site Reuse | Crushed and used as aggregate, drainage backfill. |
| Percentage Reused or Recycled | 60% - 75% |
| Off Site Destination | Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646) or, Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712), or, other approved facility |

5. Timber

| | |
|----------------------|---|
| Volume / Weight | 60 cubic metres / 24 Tonnes |
| On Site Reuse | Nil – all to be disposed of or processed off-site. |
| Percentage Reused | 65% - 90% |
| Off Site Destination | Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646) or, Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712). |

6. Plasterboard & Fibro

| | |
|-------------------------------|--|
| Volume / Weight | 100 cubic metres / 35 Tonnes |
| On Site Reuse | Nil – all material to be processed off-site. |
| Percentage Reused or Recycled | To be determined |
| Off Site Destination | Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, Other approved facility |

7. Metals / Steel / Guttering & Downpipes

| | |
|-------------------------------|---|
| Volume / Weight | 90 cubic metres / 30 Tonnes |
| On Site Reuse | No |
| Percentage Reused or Recycled | 60 – 90% |
| Off Site Destination | Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712). or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, Other approved Facility. |

8. Roof Tiles / Tiles

| | |
|-------------------------------|--|
| Volume / Weight | 65 cubic metres / 48.75 Tonnes |
| On Site Reuse | Broken up and used as fill. |
| Percentage Reused or Recycled | 80% - 90% |
| Off Site Destination | Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646). or, Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712). |

9. Plastics

| | |
|-------------------------------|--|
| Volume / Weight | 30 cubic metres / 6 Tonne |
| On Site Reuse | Nil |
| Percentage Reused or Recycled | 80% - 95% |
| Off Site Destination | Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646) or, Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712). |

10. Glass, Electrical & Light Fittings, PC items, Drainage Materials

| | |
|-------------------------------|--|
| Volume / Weight | 100 cubic metres / 25 Tonne |
| On Site Reuse | No |
| Percentage Reused or Recycled | 70% - 90% |
| Off Site Destination | Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712). or, Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646). |

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

| | |
|------------------------------|--|
| Volume | 100 cubic metres / 30 Tonne |
| On Site Reuse | Nil – all to be processed off-site. |
| Percentage Reused or Recycle | 80% - 90% |
| Off Site Destination | Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712). or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646). |

12. Residual Waste

| | |
|--|---|
| Volume / Weight | 110 cubic metres / 110 Tonnes |
| On Site Reuse | No |
| Off Site Destination | Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646) or, Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712); or, other authorised facility |
| Notes on calculation of volume of residual waste | <ol style="list-style-type: none"> 1. In calculating the amount of residual waste produced from the demolition of all buildings on site, it is estimated that approximately 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 work activities and constraints, weather conditions, and any other unforeseeable activities associated with the demolition and excavation activities, and 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.

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 receipt of these materials will be their responsibility.

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 developers' 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, every effort will be made to reduce and minimise the amount of building materials excess to requirements.

2.5 DEMOLITION – 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 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.

2.6 DEMOLITION – 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.

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 15, 16, 17, 18, 19 and 20 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: -

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

1. Excavated Materials

| | |
|-------------------------------|--|
| Volume / Weight | 1,250 cubic metres / 2,125 Tonnes (Basement 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 | To an approved Agency – excavated materials may need to be assessed to determine the quality of the material to ensure that all excavated material will be acceptable to the designated receival authority. |

2. Bricks

| | |
|------------------------------|--|
| Volume / Weight | 5 cubic metres / 6.5 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 | Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116) |

3. Concrete

| | |
|-------------------------------|--|
| Volume / Weight | 5 cubic metres / 12 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 | Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116) |

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 | Artistic Popular Furniture, 10 Raglan Road, Auburn (Tel 02 96443054) or, Hallinan's Recycling Centre, 37 Lee Holm Road, St. Marys (Tel 02 9833 0883) or, Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116) |

5. Plasterboard & Fibro

| | |
|-------------------------------|--|
| Volume / Weight | 12 cubic metres / 4 Tonnes |
| On Site Reuse | No – all material will be transported for disposal off-site. |
| Percentage Reused or Recycled | To be determined |
| Off Site Destination | <p>Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712)</p> <p>or,</p> <p>Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116)</p> <p>Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712)</p> <p>or,</p> <p>Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116)</p> <p>or,</p> <p>Enviroguard, Cnr Mamre and Erskine Roads, Erskine Park (Tel 02 9834 3411).</p> |

6. Metals / Steel / Guttering & Downpipes

| | |
|-------------------------------|---|
| Volume / Weight | 15 cubic metres / 3.75 Tonnes |
| On Site Reuse | No |
| Percentage Reused or Recycled | 60 – 90% |
| Off Site Destination | <p>Boral Recycling, 3 Thackeray Street, Camelia (Tel 9529 4424)</p> <p>or,</p> <p>Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712)</p> <p>or,</p> <p>Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116)</p> <p>Hallinan's Recycling Centre, 37 Lee Holm Road, St. Marys (Tel 02 9833 0883)</p> |

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 | <p>Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712)</p> <p>or,</p> <p>Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116)</p> |

8. Plastics

| | |
|-------------------------------|--|
| Volume / Weight | 6 cubic metres / 1 Tonne |
| On Site Reuse | Nil |
| Percentage Reused or Recycled | 80% - 95% |
| Off Site Destination | Recycle Works, 45 Parramatta Road, Annandale (Tel 02 9517 2711) or, Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116) |

9. Glass, Electrical & Light Fittings, PC items

| | |
|-------------------------------|-------------------------------------|
| Volume / Weight | 6 cubic metres / 1 Tonne |
| On Site Reuse | No |
| Percentage Reused or Recycled | 70% - 90% |
| Off Site Destination | To an approved agency, or agencies. |

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 | Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116) or, Recycle Works, 45 Parramatta Road, Annandale (Tel 02 9517 2711) |

11. Pallets

| | |
|------------------------------|---|
| Volume / Weight | 25 cubic metres / 8 Tonne |
| On Site Reuse | No |
| Percentage Reused or Recycle | 90% - 100% |
| Off Site Destination | To an approved agency, or agencies, for reuse and resale. |

| 12. Residual Waste | |
|--|---|
| Volume / Weight | 150 cubic metres / 150 Tonnes |
| On Site Reuse | No |
| Off Site Destination | Kimbriki Resource Recovery Centre, Kimbriki Road, Ingleside/Terrey Hills (Tel 02 9486 3712) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116) |
| Notes on calculation of volume of residual waste | <ol style="list-style-type: none"> 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 receipt 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.

In accordance with the provisions of Condition 72 of the approved DA, the developer will keep a written record of all documentation associated with the transportation, disposal and processing of all materials associated with the excavation of the site and all waste materials excess to construction. This information is to be made available at the request of an Authorised Officer of Council.

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.

PART 4 – ON GOING USE OF BUILDING

4.1 OBJECTIVES

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

4.2 ASSUMPTIONS

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

1. The proposal development incorporates the construction of a four (4) storey building of mixed residential and commercial components, over one (1) basement level.
2. The residential component comprises of 11 x 2, 3 and 4 bed-room town house dwellings.
3. The commercial component comprises of five (5) ground floor retail units.
4. Vehicular access to the site is onto Playfair Road though an existing right-of-carriage way on the western side of the site.
5. Separate waste management arrangements will be made for each component of the development.
6. A Residential Garbage Room will be located on the ground floor of the site as detailed herein.
7. All residential waste and recycling services to the development will be provided by a licensed private waste and recycling collection contractor.
8. For the residential component of the building the following service arrangements will apply:
 - a) All waste material will be stored in 4 x 240-litre red lidded mobile waste bins, serviced one (1) day per week,
 - b) All paper and cardboard material will be stored in 3 x 240-litre blue lidded mobile recycling bin, serviced one (1) day per week,
 - c) All container-based recycling material will be stored in 2 x 240-litre yellow lidded mobile recycling bin, serviced one (1) day per week, and,
 - d) 1 x 240 litre vegetation bin serviced fortnightly
9. All residential waste and recycling bins required for the on-going operation of the development will be stored within the confines of the Residential Garbage Room at all times.
10. All residential waste and recycling services will take place from the Pitt Road frontage as detailed herein.
11. All residential waste and recycling services will be provided by the Northern Beaches Council.
12. The Commercial Waste Storage Area is also located on ground floor adjacent to the Residential WSA as indicated on the Architectural Drawings.
13. All commercial waste and recycling generation rates have been calculated in accordance with the relative provision of the Better Practice Waste Management Guide as they do not appear to be covered in any of Council's waste management policies and guidelines.

14. All commercial waste and recycling services will take place from Pitt Road as detailed herein.
15. All commercial waste will be stored in 2 x 1100-litre mobile bin.
16. All commercial recycling material will be stored in 2 x 1100-litre mobile bins.
17. Commercial Waste Services will be provided at least three (3) days per week.
18. Commercial Recycling services will be provided at least two (2) days per week.
19. The Owners Corporation will appoint a Building Manager who will be responsible for ensuring that all residential waste management activities are carried out in accordance with this WMP.
20. The Proprietors of each retail unit will be responsible for ensuring that all waste management activities are carried out in accordance with this WMP.

4.3 PROVISION OF RESIDENTIAL WASTE & RECYCLING SERVICES

4.3.1 Residential Waste Handling and Management

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

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

4.3.2 Service Arrangements

All residential waste and recycling generation rates have been calculated in accordance with Councils Request for Further Information (RFI) as detailed below.

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

4.3.3 Waste and Recycling Collection Service Provider Details

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

4.3.4 Details of Mobile Containers

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

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

4.3.5 Location, Design, and Construction of Residential Garbage Room

A Residential Garbage Room (RGR) is provided for the residential component of the development. The RGR is located on the ground floor adjacent to the entrance area as indicated on the Architectural Drawings. It is a fully enclosed structure with an area of approximately 11.85sqm.

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

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

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

4.3.6 Servicing Arrangements – Waste Collections

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

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

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

All 4 x 240-litre red lidded mobile waste bins will be serviced on each collection day.

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

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

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

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

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

The 2 x 240-litre yellow lidded mobile recycling bins will be serviced on each collection day.

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

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

All paper and cardboard based recycling services will be provided by the Northern Beaches Council as specified in Part 4.3.6 above.

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

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

All 3 x 240-litre blue lidded mobile recycling bins will be serviced on each collection day.

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

4.3.9 Servicing Arrangements – Green Waste (Vegetation) Collections

All paper and cardboard based recycling services will be provided by the Northern Beaches Council as specified in Part 4.3.6 on page 23.

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

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

The green waste bin will be serviced on each collection day.

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

4.4 BULKY WASTE STORAGE

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

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

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

This area is located next in the basement as indicated on the Architectural Drawings. This area has internal dimensions of 3.0m x 1.5m, with an area of approximately 4.5sqm.

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

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

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

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

4.5 PROVISION OF COMMERCIAL WASTE & RECYCLING SERVICES

4.5.1 Overview

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

TABLE 1 – LAND USE ACTIVITIES – COMMERCIAL

| UNITS | LOCATION | FLOOR AREA |
|------------------|-----------------|-------------------|
| Retail take away | Ground Floor | 78 |
| Retail take away | Ground Floor | 63 |
| Retail take away | Ground Floor | 79 |
| Retail take away | Ground Floor | 63 |
| Retail take away | Ground Floor | 50 |

4.5.2 Waste & Recycling Generation Rates

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

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

| SERVICE | WASTE & RECYCLING GENERATION RATES |
|-----------------------------|--|
| Waste – Takeaway | 150-litres of waste per 100sqm of floor area per day |
| Recycling – Takeaway | 150-litres of recycling per 100sqm of floor area per day |

4.5.3 Waste and Recycling Service Requirements

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

TABLE 3 – WASTE GENERATION RATES

| ACTIVITY | FORMULA | CALCULATION | LITRES PER WEEK |
|---|-------------------------------------|---|---------------------------------------|
| Takeaway | 150-litres per 100sqm of floor area | 150 x 333 / 100 x 7 (days) | 3,496.50 |
| Total Litres of Waste Generated per Week | | | 3,496.50 |
| Service Requirements | | 1 x 1100-litre mobile waste bin Four (4) Services per Week | |
| Total Litres of Waste Serviced per Week | | | 4,400-litres Serviced per Week |

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

TABLE 4 – RECYCLING GENERATION RATES

| ACTIVITY | FORMULA | CALCULATION | LITRES PER WEEK |
|---|-------------------------------------|---|---------------------------------------|
| Takeaway | 150-litres per 100sqm of floor area | 150 x 330 / 100 x 7 (days) | 3,496.50 |
| Total Litres of Waste Generated per Week | | | 3,496.50 |
| Service Requirements | | 1 x 1100-litre mobile recycling bin Four (4) Services per Week | |
| Total Litres of Waste Serviced per Week | | | 4,400-litres Serviced per Week |

4.5.4 Waste Handling & Management

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

4.5.5 Commercial Waste Storage Facilities

All commercial waste and recycling services will be stored in an existing area located adjacent to the residential bin room as indicated on the Architectural Drawings. It will accommodate a minimum of:

- 1 x 1100-litre mobile waste bin, and,
- 1 x 1100-litre mobile recycling bin.

4.5.6 Commercial Waste and Recycling Collection

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

All commercial waste and recycling collections will take place from the Pitt Road kerbside, where the bins will be removed from the WSA by a representative of the contractors' collection team to a waiting vehicle stationed at the roadside.

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

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

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

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

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

PART 5 – SUMMARY

5.1 SUMMARY

In summarising this proposal, the following information is provided:

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

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