

SITE WASTE MINIMISATION AND MANAGEMENT PLAN (SWMMP)

1 INTRODUCTION

The following describes the proposed Demolition and Construction Waste Management Plan for the proposed development.

1.1 APPLICANT DETAILS

Application No.	Project No. P2107PAD
Name	FLDC Architects Pty Ltd
Address	2D 322 Kingsgrove Road, KINGSGROVE NSW 2208
Phone number	02 9588 FLDC (3532)
Email	info@fldc.com.au

1.2 PROJECT DETAILS


Address of development	73 Lachlan Street, WARICK FARM NSW 2170
Existing buildings and other structures currently on the site	Existing Single Residential Dwelling
Description of proposed development	New Three (3) Level Child Care Centre with Basement Parking

1.3 KEY LEGISLATION

The following Acts and Regulations pertain to the development of the following Waste Management Plan:

- Protection of the Environment Operations Act 1997;
- Waste Avoidance and Resource Recovery Act 2001;
- National Waste Minimisation and Recycling Strategy;
- Australian Standard AS 2601-2001 - The demolition of structures;
- Municipality of Sutherland Council DCP

This development achieves the waste objectives set out in the above key legislative documents. The details on this form are the provisions and intentions for minimizing waste relating to the specified project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as Council, Office of Environment and Heritage or WorkCover NSW.

Name of Applicant	Raymond Taouk
Signature of Applicant	
Date	22.12.2022

2 DEMOLITION PHASE

This plan has been prepared to comply with the provisions of the Australian Standard AS 2601- 2001 for the Demolition of structures and the Waste Avoidance and Resource Recovery Act 2001.

The following considerations will apply to the demolition phase of the project.

Preliminary Investigation

- Identify principal structural materials;
- Identify and locate service supply mains such as water, electricity, gas and the extent of the reticulation of these services;
- Identify the extent and location of other services such as sewerage and drainage;
- Identify and locate underground services and their entry points to and from the site.

Work Plan

- Develop an overall procedure based on the foregoing investigations;
- Develop a procedure for stripping;
- Prepare a detailed work plan.

Execution

- Secure the site work area to exclude public entry;
- Establish an entry and exit gate;
- Fully inform all site personnel of the plan of works.

The following table provides a description of the types of waste generated, expected volumes, and destination of those wastes for the demolition phase of the project.

MATERIALS ON-SITE			DESTINATION		
Type of waste generated	Estimated		Reuse and Recycling		Disposal
	Vol. (m ³)	Wt. (t)	ON – SITE	OFF – SITE	
Excavation material	60 m ³	-	Keep and re-use topsoil for landscaping. Store on site. Use some behind retaining walls	Refer to Section 6 (pg. 10)	Waste Depot to be appointed
Timber (Oregon & pine)	10 m ³	-	Re-use for formwork & studwork. Chip remainder for the use of landscaping	Refer to Section 6 (pg. 10)	Waste Depot to be appointed
Concrete	80 m ³	-	Crush concrete and re-use for land infill	Landfill	N/A
Brick/ pavers	-	15t	Clean mortar from bricks. Re-use bricks in the new footings. Broken bricks for internal walls	Crushed road base	N/A
Tiles	-	0.2t	Broken tiles for land infill	Crushed road base	N/A
Metal	5 m ³	-	N/A	For sale	Waste Depot to be appointed
Glass	-	0.2t	N/A	N/A	Waste Depot

					to be appointed
Furniture	-	0.5t	N/A	For sale	Waste Depot to be appointed
Fixtures and fittings	-	0.1t	N/A	For sale	Waste Depot to be appointed
Floor coverings	-	0.1t	N/A	For sale	Waste Depot to be appointed
Packaging	-	-	N/A	N/A	N/A
Garden organics	-	2t	Garden/landscape	N/A	N/A
Containers (cans, plastic, glass)	-	N/A	N/A		Waste Depot to be appointed
Paper/ cardboard	N/A	N/A	Recycle	Local Council	N/A
Residual waste	-	0.1t	N/A	Local Council	Waste Depot to be appointed
Hazardous/ special waste e.g. asbestos	-	0.05t	N/A	N/A	TBA
Other	-	-	N/A	N/A	N/A

The following table provides the implementation of the waste handling control for the demolition phase of the project.

Control	Timing	Methodology	Responsibility	Monitoring and reporting	Performance measure
Waste disposal					
Project waste types to be identified	Prior to works	In accordance with the Waste Management Plan	Construction Manager	To be reviewed in EHS Plan	Identify waste generation and management plan
All off site waste to be disposed to an appropriate disposal point, as required by the relevant legislation	At all times	Waste contractor to address and follow legislative requirements	Construction Manager	To be monitored through waste docket records and reported in accordance with the Waste Management Plan	Pre-arranged list of waste destinations and no waste to unlicensed facilities
Only licenced waste contractors to dispose of construction waste from site	At all times	Waste contractor to address and follow legislative requirements	Construction Manager	To be monitored through waste docket records and reported in accordance with the Waste Management Plan	Pre-arranged list of waste destinations and no waste to unlicensed facilities
Recycling and Minimisation					
Material to be reused or recycled where possible	As required	As identified in the Waste Management Plan	Construction Manager/Site Manager	Monitor waste pathways to ensure correct application of reuse/recycling	Identified waste generation to stay on site or recycled off site
Any material imported onto the site to consist of certified clean material only	As required	Identification of material	Construction Manager/Site Manager	Certificate	Certificate provided prior to bringing to site

Control	Timing	Methodology	Responsibility	Monitoring and reporting	Performance measure
Where appropriate existing materials on site to be reused or recycled	As required	Identification of material	Construction Manager/Site Manager	Monitor waste pathways to ensure correct application of reuse/recycling	Identified waste generation to stay on site or recycled off site
Site Office					
Recycle bins shall be provided within the site working area	As required	Co-ordinated Waste Management Plan	Construction Manager/Site Manager	Monthly reports from Waste Management Contractor	Monthly EHS Managers Review
Site amenities shall be provided on site as required	Prior to works commencing	Co-ordinated Waste Management Plan	Construction Manager/Site Manager	Monthly reports from Waste Management Contractors	All waste disposed of appropriately

EHS = Environmental Health and Safety

3 CONSTRUCTION PHASE

The construction phase of the project will include the storage on site of waste, which will employ a bin system for general and recycled waste, wash out areas, training, and corrective actions to address non-conformances and the development of corrective actions in relation to those non-conformances.

Bin System

The Waste Management System to be adopted on site will be through the use of separate bins for recyclable materials and non-recyclable waste materials. Materials collected for recycling may include:

- Amenities waste;
- Office generated waste;
- Demolition generated waste;
- Shoring and excavation generated waste.

The licensed waste contractor will supply, deliver, remove, and certify the disposal of site generated waste. As the construction/structure progresses the bins shall revert to mixed waste, which will be sorted off site. Wheelie bins will be used for fit-out trades for the movement of small amounts of waste within the building structure.

A separate waste system shall be planned for the main office generated waste to include food, paper recycling, cartridge disposal, sanitary (as on site), and bulk packaging.

Wash Out Areas

Wash out processes and facilities for paint and/or finishing trades are to be minimised and water recycling for these activities are encouraged where possible. Utilisation of SES guidelines for disposal of paint and associated wastes are to be implemented. Finishing trades wash-out facilities should not be plumbed to any building services. They should also be of a stand-alone nature. The maintenance of these facilities will be the contractor's responsibility to comply with all appropriate Environmental Legislation and Local Authority Guidelines.

Packaging

All suppliers of building materials will be encouraged to nominate packaging minimisation and reuse initiatives, which have been implemented as part of product supply to the project. Bulk handling and reusable transport containers will be encouraged.

Recycled Materials

Suppliers will be encouraged to nominate products that include a recycled component and ability/opportunity for recycling of unused components. Product selection will include a selection factor associated with recyclability and percent of recycled product; for example office and amenities supplies.

Training

Communication and education material on the Waste Management System will be part of a site induction program. They will also form part of the relevant Contractor's scope of works and risk assessments. The responsibility to ensure that waste materials are stored in nominated bins will be the responsibility of all site personnel.

Corrective Actions

Non-conformances are to be recorded by way of a Defects Notification process. The Contractor with the Site Manager shall review and analyse the cause of detected non-conformance and develop a corrective action to prevent recurrence. Details of the non-conformance including any immediate corrective actions undertaken are to be recorded, reviewed and accepted by the Construction Manager.

It will be the responsibility of the Construction Manager to immediately initiate corrective actions, if required. The non-conformance and corrective action must include details of the action proposed and an appropriate completion date.

4 ON GOING WASTE MANAGEMENT

During occupancy, the site will have temporary garbage and recycling areas within the building. At regular intervals occupants will take garbage and recyclables to the external garbage area.

Occupants will be responsible for taking out the general waste to the rear of the site for collection (once weekly) and the recycling bin (fortnightly) for collection by a Private Contractor (United Resource Management Group).

Landscape compostable materials will be recycled on site.

The following table provides the type of waste and assumed volume of waste during post-occupancy of the proposed development.

Type of Waste	Recyclables: Paper/ Cardboard	Metals/ Plastics/ Glass	Compostable	Residual Waste	Other
Amount generated (L per unit per day)	10	10	10	17	N/A
Amount generated (L per development per week)	50	50	70	100	N/A

The following table quantifies the waste handling during post-occupancy of the proposed development.

Bin Collection	Handling
Frequency of collections (per week)	weekly
Any reduction due to compacting equipment	N/A
Number and size of storage bins required	2 bins at 120L, 2 bins at 240L
Floor area required for storage bins (m ²)	14 m ²
Floor area required for manoeuvrability (m ²)	20 m ²
Height required for manoeuvrability (m)	2.4m

5 WASTE AVOIDANCE PLAN IN CONSTRUCTION DESIGN

Materials

The building and its materials has been designed to help keep waste at a minimum. This has been achieved through the following measures:

- Brick throughout selected in-face to minimise ongoing maintenance;
- Aluminum windows selected to minimise ongoing maintenance;
- Paving tiles selected to minimise ongoing maintenance;
- Weatherproof external entry door selected to minimise ongoing maintenance.

Lifecycle

In the selection of construction processes and materials, the focus has been on choosing the most ecologically sustainable processes available. The following applies:

- Reinforced concrete: Structural grids have been designed based on standard formulaic system to minimise use of bespoke formwork.
- Wall construction: Walls and partitions will be constructed using prefabricated masonry bricks.
- Roof: Prefabricated metal sheeting cut to size for direct site installation
- Glazing: Fully manufactured offsite and delivered in sub-assemblies for direct site installation.

6 DEMOLITION WASTE & RECYCLING LIST

The following table provides a list of the proposed waste and the qualified removalist companies.

Materials	Company Name	Company Address	Contact Details
Excavation Material / Soil Waste	Enviroguard Pty Ltd	50 Quarry Road, Erskine Park NSW 2759	9834 3411
Green waste	Ecocycle Australia Pty Ltd	Unit 2, 17 Sleigh Place, Wetherill Park NSW 2164	13 32 44
Bricks	Brandown Pty Ltd	Lot 9 Elizabeth Drive, Kemps Creek NSW 2178	9826 1256
Concrete	Brandown Pty Ltd	Lot 9 Elizabeth Drive, Kemps Creek NSW 2178	9826 1256
Timber	Artistic Popular Furniture	10 Raglan Road, Auburn NSW 2144	9644 3054
Metals	Parramatta Scrap Metal	21 Daking Street, North Parramatta NSW 2151	9630 2974
Roof Tiles	Obsolete Tiles	25 – 29 Brodie Street, Rydalmere NSW 2116	9684 6333
Door Fittings	Recycling Works	45 Parramatta Road, Annandale NSW 2038	9517 2711
Plastics	Cromford Group	120 – 122 Ballandella Road, Pendle Hill NSW 2145	9631 6644
Plasterboard	Ecocycle Australia Pty Ltd	Unit 2, 17 Sleigh Place, Wetherill Park NSW 2164	13 32 44