Demolition and Construction Waste Management Plan

1129-1131 Pittwater Road, Collaroy NSW 2097

February 2020

APEX ENGINEERS

Type of Assessment: Demolition, Construction and On-going Waste Management Plan

Site Location: 1129-1131 Pittwater Road, Collaroy NSW 2097

Prepared for: Lotus Projects

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1. Introduction

APEX Engineers were engaged by Lotus Projects to provide a Demolition and Construction Waste Management Plan as part of the proposed mixed use, multi-unit development at 1129-1131 Pittwater Road, Collaroy NSW 2097.

2. Basis of Assessment

2.1 Aim

This report shall outline the waste management strategies to be adopted during the construction stage of the proposed mixed use, multi-unit development at 1129-1131 Pittwater Road, Collaroy NSW 2097.

2.2 Site Description and Proposal Details

The subject site is located at 1129-1131 Pittwater Road in Collaroy. The subject proposal relates to construction of a multi-unit mixed use development comprising 2 ground level commercial units (total GFA of 228.2 square metres), 23 boarding rooms (across levels 1 and 2), a 3 bedroom unit for the manager of the boarding house (at level 3) and basement/ground level car parking. Vehicle access to the proposed site will be provided off the Right of Way (ROW) easement off Collaroy Street.

Figure 1 Highlights the site location from an aerial perspective.

Figure 1: Location of the subject site

3. Demolition and Construction Stage Waste Management Principles

Concerning waste management principles to be adopted during demolition of the existing structures and construction stage of the proposed development, the following priority order is considered best-practice and should be applied wherever applicable.

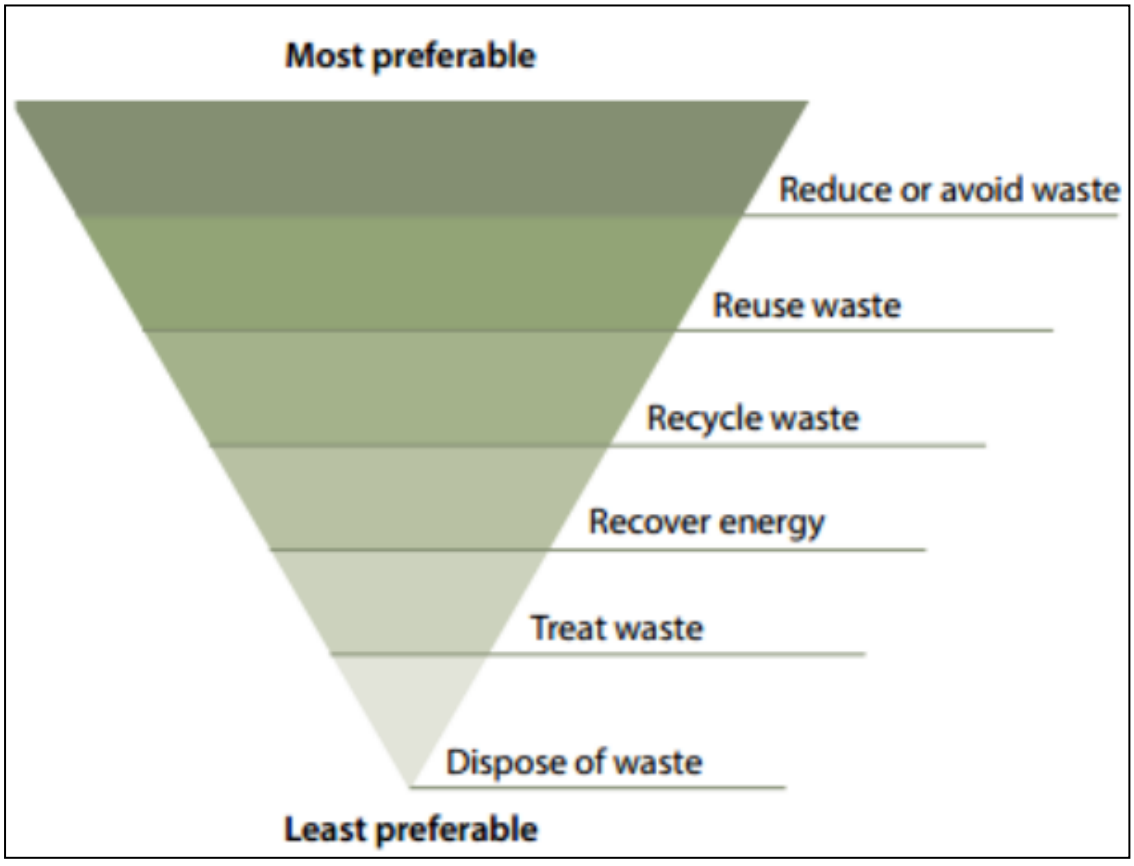

Figure 2: Waste Hierarchy Principles

In particular, the builder should:

- Incorporate the waste hierarchy principle of avoidance, resource recovery and disposal.
- Minimise the waste sent for disposal.
- Minimise the impact and disturbance on surrounding amenity, public safety, roadways and natural and built environment.

- Adhere to any relevant legislation not limited to hazardous waste, storage and transportation regulations.
- Send waste materials to a suitably licensed facility.
- Identify suitable locations on the site for sorting and storing of materials for re-use, recycling and disposal. Factors to consider include slopes, drainage and personnel and vehicular access.
- Maintain valid tipping dockets and receipts on site for inspection.

The table below provides guidance on re-use and recycling opportunities during demolition and construction stages of the development.

Table 1: Typical Re-Use and Recycling Opportunities

Material	Re-use and recycling opportunities
Excavated materials	Re-use for filling or levelling
Concrete	Re-use for filling, levelling or road base
Bricks / Pavers	Re-use or crush for landscaping and driveways
Roof Tiles	Re-use or crush for landscaping and driveways
Untreated Timber	Re-use as floorboards, fencing, furniture, mulch or send to second -hand timber suppliers
Treated Timber	Re-use as formwork, bridging, blocking and propping and send to second -hand timber suppliers
Doors / Windows / Fittings	Send to second- hand suppliers, or recycle.
Metals	Re-use or recycle
Green Waste	Mulch or compost
Plasterboard	Re-use for landscaping, recycle or return to supplier
Carpet	Recycle or re-use in landscaping
Plastics / Rubber	Re-use or recycle

4. Demolition Stage Waste Estimates

The following table illustrates the estimates of various types of waste and the proposed management processes, during the demolition stage of the proposed development. **Appendix A** illustrates the structure to be demolished within the site and the area nominated for storage of material to be reused, recycled or disposed of.

Table 2: Proposed demolition stage waste management plan

Materials on-site	Waste Estimate – Volume (m3) or Area (m2)	On-Site Reuse (Specify proposed reuse or on-site recycling methods) Most favourable	Off-Site Recycling (Specify contractor and recycling outlet) ←	Off-Site Disposal (Specify contractor and landfill site) Least favourable
Bricks/Pavers	1000m^2		JEM CIVIL	
Excavated material	1500m^3		JEM CIVIL	
Timber	90m^3		JEM CIVIL	
Concrete	300m^3		JEM CIVIL	
Tiles			JEM CIVIL	
Metal	100m^2		JEM CIVIL	
Glass	50m^2		JEM CIVIL	
Garden Organics	NIL			
Paper/cardboard	NIL			
Hazardous/special waste (e.g. asbestos)*	300m^2			JEM CIVIL
Plasterboard	500m^2			JEM CIVIL
Estimated Total % Recovered	30%			

5. Construction Stage Waste Estimates

The following table illustrates the estimates of various types of waste and the proposed management processes, during the construction stage of the proposed development.

Table 3: Proposed Construction Stage Waste Management Plan

Materials on-site	**Waste Estimate – Volume (m3) or Area (m2)**	**On-Site Reuse (Specify proposed reuse or on-site recycling methods)** **Most favourable**	**Off-Site Recycling (Specify contractor and recycling outlet)** ←	**Off-Site Disposal (Specify contractor and landfill site)** **Least favourable**
Bricks/Pavers	NIL			
Excavated material	NIL			
Timber	$20m^3$			JEM CIVIL
Concrete	$10m^3$			JEM CIVIL
Tiles	$10m^2$			JEM CIVIL
Metal	$10m^2$			JEM CIVIL
Glass	NIL			
Garden Organics	NIL			
Packaging (pallets, cans, plastic, glass)	$25m^3$			JEM CIVIL
Paper/cardboard	$10m^3$			JEM CIVIL
Hazardous/special waste (e.g. asbestos)	NIL			
Plasterboard	$100m^2$			JEM CIVIL
Estimated Total % Recovered	100%			

6. Summary

We trust that the information provided within this report sufficiently outlines the demolition and construction waste management strategies to be adopted by the proposed mixed use, multi-unit development.

Should you require further information or clarification, please contact us on info@apexengineers.com.au

Appendix A: Structures to be Demolished and Storage Areas for Reusing, Recycling or Disposal