

# **WASTE MINIMISATION AND MANAGEMENT PLAN**

**3 Berith Street, WHEELER HEIGHTS**



## Site Waste Minimisation and Management

Waste and resource consumption is a major environmental issue and priority within Australia. This is particularly the case as landfill sites become scarce and the environmental and economic costs of waste generation and disposal rise. Our society is exposed to the issue of managing the increasingly large volumes of waste generated.

Sustainable resource management and waste minimisation has emerged as a priority action area and a key in the quest for Ecologically Sustainable Development. Critical actions in this regard include the following (moving from most desirable to least desirable):

- a) Avoiding unnecessary resource consumption.
- b) Recovering resources for reuse.
- c) Recovering resources for recycling or reprocessing.
- d) Disposing of residual waste (as a last resort).

The building and construction industry in particular is a major contributor to waste, much of which is still deposited to landfill. The implementation of effective waste minimisation strategies has the potential to significantly reduce these volumes.

Effective waste planning and management can also benefit the builder/developer.

### Objectives

The objectives in pursuit of sustainable waste management include:

- 1 Waste minimisation
- 2 To minimise resource requirements and construction waste through reuse and recycling and the efficient selection and use of resources.
- 3 To minimise demolition waste by promoting adaptability in building design and focussing upon end of life deconstruction.
- 4 To encourage building designs, construction and demolition techniques in general which minimise waste generation.
- 5 To maximise reuse and recycling of household waste.



## Controls / Requirements

- 1 Estimate volumes of materials to be used and incorporate these volumes into a purchasing policy so that the correct quantities are purchased. Refer to rates in Appendix A Waste/Recycling Generation Rates for a guide.
- 2 Identify potential reuse/recycling opportunities of excess construction materials.
- 3 Incorporate the use of prefabricated components and recycled materials.
- 4 Arrange for the delivery of materials so that materials are delivered 'as needed' to prevent the degradation of materials through weathering and moisture damage.
- 5 Consider organising to return excess materials to the supplier or manufacturer.
- 6 Allocate an area for the storage of materials for use, recycling and disposal (considering slope, drainage, location of waterways, stormwater outlets and vegetation).
- 7 Arrange contractors for the transport, processing and disposal of waste and recycling. Ensure that all contractors are aware of the legal requirements for disposing of waste.
- 8 Promote separate collection bins or areas for the storage of residual waste.
- 9 Clearly 'signpost' the purpose and content of the bins and storage areas.
- 10 Implement measures to prevent damage by the elements, odour and health risks, and windborne litter.
- 11 Minimise site disturbance and limit unnecessary excavation.
- 12 Ensure that all waste is transported to a place that can lawfully be used as a waste facility.
- 13 Retain all records (i.e. weighbridge dockets or invoices) demonstrating lawful disposal of waste and keep them readily accessible for inspection by regulatory authorities such as council, DECC or Work Cover NSW.



Note: Materials that have an existing reuse or recycling market should not be disposed of in a landfill. The Figure below provides a list of some potential reuse/recycling options. Reuse and recycling opportunities are decreased when asbestos is not carefully removed and segregated from other waste streams.

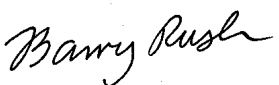
Material	Reuse/recycling potential
Concrete	Reused for filling, leveling or road base
Bricks and Pavers	Can be cleaned for reuse or rendered over or crushed for use in landscaping and driveways
Roof Tiles	Can be cleaned and reused or crushed for use in landscaping and driveways
Untreated Timber	Reused as floorboards, fencing, furniture, mulched or sent to second hand timber suppliers
Treated Timber	Reused as formwork, bridging, blocking and propping, or sent to second hand timber suppliers
Doors, Windows, Fittings	Sent to second hand suppliers
Glass	Reused as glazing or aggregate for concrete production
Metals (fittings, appliances and wiring)	Removal for recycling
Synthetic Rubber (carpet underlay)	Reprocessed for use in safety devices and speed humps
Significant Trees	Relocated either onsite or offsite
Overburden	Power screened and used as topsoil
Garden Waste	Mulched, composted
Carpet	Can be sent to recyclers or reused in landscaping
Plasterboard	Removal for recycling, return to supplier



## Site Waste Minimisation and Management Plan

Applicant and Project Details (All Developments)	
<b>Applicant Details</b>	
Company Name	Astute Invest Pty Ltd
Contact Person	Melissa Zhou
Address	
Phone number(s)	
Email	
<b>Project Details</b>	
Address of development	3 Berith Street, WHEELER HEIGHTS
Existing buildings and other structures currently on the site	1 x Brick and Timber, Tiled Roof Dwelling, swimming pool and shed
Description of proposed development	Construction of 2 storeys multiunit development consisting of 4 x 3 bedroom units, 2 x 2 bedroom units and basement car parking with 8 spaces
This development achieves the waste objectives set out in the DCP. The details on this form are the provisions and intentions for minimising waste relating to this project.	
Name	Barry Rush ARCHITECT



Signature and Date	 7 November 2018.
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## Demolition Waste

This is the stage with the greatest potential for waste minimisation, particularly in Sydney where there are high levels of development, relatively high tipping charges and where alternative quarry materials are located on the outskirts.

Applicants should consider whether it is possible to re-use existing buildings, or parts thereof, for the proposed use.

With careful onsite sorting and storage and by staging work programs it is possible to re-use many materials, either on-site or off-site.

Council is seeking to move from the attitude of straight demolition to a process of selected deconstruction, ie. total reuse and recycling both off-site and on-site. This could require a number of colour-coded or clearly labelled bins onsite (rather than one size fits all).

Applicants should demonstrate project management which seeks to:

- re-use of excavated material on-site and disposal of any excess to an approved site;
- greenwaste mulched and re-used in landscaping either on-site or off-site;
- bricks, tiles and concrete re-used on-site as appropriate, or recycled off-site;
- plasterboard re-used in landscaping on-site, or returned to supplier for recycling;
- framing timber re-used on-site or recycled elsewhere;
- windows, doors and joinery recycled off-site;
- plumbing, fittings and metal elements recycled off-site;
- All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with Workcover Authority and EPA requirements;
- Locations of on-site storage facilities for material to be reused on-site, or separated for recycling off-site; and
- Destination and transportation routes of all materials to be either recycled or disposed of off-site.



	Reuse	Recycling	Disposal	
Type of waste generated	Estimate Volume (m3) or Weight (t)	Estimate Volume (m3) or Weight (t)	Estimate Volume (m3) or Weight (t)	Specify method of on-site reuse, contractor and recycling outlet and/or waste depot to be used
Excavation material	-	125m <sup>3</sup>	-	Remove from site for recycling. Remainder to landfill site determined by contractor.
Green Waste	-	20m <sup>3</sup>	-	Remove from site for recycling
Bricks	-	25m <sup>3</sup>	-	Remove from site for recycling
Concrete	30m <sup>3</sup>	15m <sup>3</sup>		Crush concrete for temporary driveway, remove remainder from site for recycling
Timber	-	25m <sup>2</sup>	-	Remove from site for recycling.
Plasterboard			25 m <sup>3</sup>	Break up and remove from site to landfill site determined by contractor
Metals		15 m <sup>3</sup>		To metal recycler determined by the Contractor
Asbestos			5m <sup>3</sup>	To be removed by approved asbestos waste contractor
Other Waste e.g. ceramic tiles, paints, plastics, PVC tubing, cardboard		10 m <sup>3</sup>		To approved recycling facilities



## Construction Waste

Address of development: 3 Berith Street, WHEELER HEIGHTS NSW

Refer to rates in Appendix A Waste/Recycling Generation Rates for a guide.

	Reuse	Recycling	Disposal	
Type of waste generated	Estimate Volume (m3) or Weight (t)	Estimate Volume (m3) or Weight (t)	Estimate Volume (m3) or Weight (t)	Specify method of on-site reuse, contractor and recycling outlet and/or waste depot to be used
Excavation material	-	400m3	400m3	Remove from site for recycling. Remainder to landfill site determined by contractor.
Timber (specify)	-	15m2	-	Remove from site for recycling..
Concrete	15m3	15m3	-	Use for fill behind retaining walls and on driveways. Remainder to approved crushing and recycling company determined by the contractor.
Bricks	15m3	15m3	-	Use for fill behind retaining walls and on driveways. Remainder to approved crushing and recycling company determined by the contractor.
Tiles	-	2m3	-	Remove from site for recycling
Metal (specify)	-	2m3	-	To metal recyclers for sale and reuse.
Glass	15m3	-	-	Reuse as aggregate for concrete production.
Plasterboard (off cuts)	-	3m3	-	Removal for recycling, return to supplier.
Fixtures and fittings	-	Yes	-	Removal for recycling, return to supplier.





Floor coverings	-	Yes	-	Send to recyclers or return to supplier.
Packaging (used pallets, pallet wrap)	-	Yes	-	Send to recyclers or return to supplier for off site re-use.
Garden organics	-	3m3	-	To approved recycling facilities
Containers (cans, plastic, glass)	-	25 m3	-	To approved recycling facilities determined by the contractor.
Paper/cardboard	-	20 m3	-	To approved recycling facilities determined by the contractor.
Residual waste	-	-	25 m3	To approved facilities for disposal.



## Ongoing Operation Waste

Address of development: 3 Berith Street, WHEELER HEIGHTS NSW

Show the total volume of waste expected to be generated by the development and the associated waste storage requirements.

Refer Appendix B for standard bin sizes.

	Recyclables	Garden Organics	Garbage
	Paper/ cardboard/ Metals/ plastics/ glass	Garden waste	Residual waste/ some food waste
Amount generated (L per week)	580 L	100L	810L
Frequency of collections	Once per fortnight	Once per fortnight	Once per week
Number and size of storage bins required	1 X 240L mobile garbage bin	1 X 240L mobile garbage bin	3 X 140L mobile garbage bin

Waste bins will be taken to the street kerb and once emptied returned to the bin storage enclosure by members of the residents.

Council provides a clean-up service for collection of household items and furniture that cannot be disposed of in the weekly clean-up service.

