WASTE MANAGEMENT PLAN

PROJECT DETAILS	
Address of Development	56 Beane Street, Gosford
Existing buildings and other structures currently on site	Currently vacant
Description of Proposed Development	41 Unit Residential Flat Building (in-fill affordable housing)
The details on this form are the provisions and intentions for minimising waste relating to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as Council, OEH or Workcover NSW	
Prepared By	Michael Leavey Consulting
Date	9 December 2019

DEMOLITION

Type of waste generated	Reuse	Recycle	Disposal	Comment
	Estimated volume	Estimated volume	Estimated volume	Method of onsite reuse, recycling outlet and/or waste depot to be used
Excavation Material		N/A		Excavation at construction stage
Timber/ Hardiplank		N/A		
Concrete		N/A		
Bricks/Pavers		N/A		
Tiles (roof)		N/A		
Metal (Sheds, misc)		N/A		
Gyprock		N/A		
Glass -		N/A		
Furniture		N/A		
Fixtures & Fittings		N/A		
Floor Coverings		N/A		
Packaging (used pallets, pallet wrap)		N/A		
Garden Organics		$40m^3$		Mulched for reuse off site
Containers (Cans, plastic, glass)		N/A		
Residual Waste		N/A		
Asbestos (potential) A/C sheeting, roofing		N/A		

Note: if any other hazardous or special waste is found during demolition, measures will be put in place to ensure they are removed in accordance with relevant legislative requirements.

NOTES REGARDING ASBESTOS

Buildings built before 1988 may contain asbestos in the form of flat or corrugated sheets ('fibro') used for walls, ceilings and roofing, or in products such as pipes, electrical conduit and eaves.

To prevent access to the area which may contain asbestos the site should be securely fenced. The site will need to be continually damped down so as not to cause runoff or sprayed with PVA to ensure that the asbestos cannot become airborne. This needs to continue until the site is cleaned up.

If asbestos is discovered during demolition, all work is to cease until the extent is determined and a suitably qualified and approved contractor is used to appropriately remove and dispose of all material.

CONSTRUCTION

Type of waste generated	Reuse	Recycle	Disposal	Comment
	Estimated volume	Estimated volume	Estimated volume	Method of onsite reuse, recycling and/or waste disposal
Excavation Material		1,660m^3		Transfer to Material Recovery Facility (see note below)
Timber		18m^3	3m^3	Transfer to Material Recovery Facility/ Council Waste Facility
Concrete		9m^3	3m^3	Transfer to Material Recovery Facility/ Council Waste Facility
Bricks/Pavers		4m^3		Transfer to Material Recovery Facility
Tiles (bathroom)		1.5m^3		Transfer to Material Recovery Facility
Metal		5m^3		Transfer to Material Recovery Facility
Gyprock		5m^3		Transfer to Material Recovery Facility
Glass - Windows		N/A		Will be made to order
Furniture		N/A		Will be made to order
Fixtures & Fittings		N/A		Will be made to order
Floor Coverings		3m^3		Transfer to Material Recovery Facility
Packaging (used pallets, pallet wrap)	6m^3		6m^3	For reuse/ Transfer to Council Waste Facility
Garden Organics		3m^3		Transfer to Material Recovery Facility/ reuse for landscaping
Containers (Cans, plastic, glass)		3m^3	1m^3	Transfer to Material Recovery Facility/ Transfer to Council Waste Facility
Residual Waste			12m^3	Transfer to Council Waste Facility
Hazardous/special waste		Unlikely		See note below
Other (specify)		N/A		

Note: The submitted Detailed Site Investigation prepared by Consulting Earth Scientists dated 17 January 2019 recommends a visual assessment of the site surface should be undertaken following the clearing of the site, to confirm that no further Asbestos Containing Material (ACM) are present on the site surface. The inspection should be undertaken following vegetation clearing and prior to any excavation works and pay special attention to the southern site boundary and the area where the ACM was previously identified.

During site clearing works, personal protective equipment and good housekeeping/hygiene practices typically employed during construction projects including minimisation of generation of dust are considered appropriate to minimise the potential risk posed by additional ACM on the site surface (considered unlikely). The potential presence of localised asbestos fragments in surface soils should be considered in the waste classification of materials to be removed from site during development.

ONGOING OPERATION

	Recyclables		Residual Waste	Compostable
	Paper/ cardboard/	Metal/ plastic/ glass		
Amount generated (L per day	120L/ week/ unit		140L/ week/ unit	
Amount generated (L per development per week)	4,920L		5,740L	
Any reduction due to compaction equipment	Nil		Nil	
Frequency of collections (per week)	Twice weekly		Twice weekly	Fortnightly
Number and size of storage bins required	7 x 360L		8 x 360L	2 x 240L
Floor area required for storage bins (m^2)	$20.6m^2$			
Floor area required for manoeuvrability (m^2)	All bins are able to be manoeuvred within the bin storage room			
Height required for manoeuvrability (m)	2.7m			

CONSTRUCTION DESIGN

Outline how measures for waste avoidance have been incorporated into the design, material purchasing and construction techniques of the development (refer to section 7.2.14 of the DCP)
Materials Careful bill of quantities by builder to ensure that building materials are used or returned to the supplier for refund. Arrange for delivery of all materials to ensure that materials are used in an as needed basis. Any excess material will be recycled or reused in accordance with Part 3 of this Plan.
Lifecycle Selection of materials which will minimise replacement of substandard products in years to come. Selection of quality paints and finishes will reduce the need to re-apply and minimise maintenance to the proposed structure.
Detail the appropriate needs for the ongoing use of waste facilities including the transfer of waste between the residents or tenancy units, the servicing of waste location and frequent of waste transfer and collection. If truck access is required then engineering details are required.
Residents will transfer mixed, recycling and miscellaneous green waste to the waste bin storage room, located on Level 1 (Beane Street level). The bin storage room is located with internal access from the residential lobby, and is located next to the 2 lifts servicing the development. Waste will be stored in communal 360L and 240L bins, as shown on the Architectural Plans. Green waste will be removed by the landscaping contractor, and a nominal number of green waste bins are proposed for the use of residents. The proposal is for kerbside collection of waste in Beane Street, as is addressed in the submitted Statement of Environmental Effects (Part 5.3.8), including assessment against the requirements of Gosford City Centre DCP 2018. It is not possible or viable to provide for on-site waste collection in the basement/ car parking area, and in these circumstances it is a requirement of NSW Land and Housing Corporation that waste collection occur kerbside, for reasons of safety and security. Using larger bins, with twice weekly collection, the number of bins presented to the street is minimised and is consistent with the number of bins that would be allowed for kerbside collection for a smaller scale development of 18 units. Safety, car parking and streetscape issues associated with kerbside collection are addressed in more detail in the Statement of Environmental Effects and Traffic and Parking Impacts Report. The building caretaker/ manager will be responsible for the transport of bins from the waste room to Beane Street for collection, and for the timely return of bins to the waste room following collection. External access is provided from the waste room to Beane Street via an internal pathway, and the location of the bin presentation area in Beane Street is shown on the Architectural Plans. There is adequate frontage in Beane Street to accommodate the number of bins proposed, and the collection zone is located clear of the intersection with Gertrude Street.

PLANS & DRAWINGS

The following checklists are designed to help ensure WMP are accompanied by sufficient information to allow assessment of the application.

Drawings are to be submitted to scale, clearly indicating the location of and provisions for the storage and collection of waste and recyclable during:

- Demolition – to be provided at Construction Certificate stage
- Construction – to be provided at Construction Certificate stage
- Ongoing operation.

DEMOLITION *Refer to Section 7.2.13 of the chapter for specific objectives and measures.* Do the site plans detail/indicate:	**Y/N**
Size & location of waste storage areas	Detail at CC stage
Access for waste collection vehicles	Detail at CC stage
Areas to be excavated	Detail at CC stage
Types and numbers of storage bins likely to be required	Detail at CC stage
Signage required to facilitate correct use of storage facilities	Detail at CC stage

CONSTRUCTION *Refer to Section 7.2.15 – 7.2.19 of the chapter for specific objectives and measures.* Do the site plans detail/indicate:	**Y/N**
Size & location of waste storage areas	Detail at CC stage
Access for waste collection vehicles	Detail at CC stage
Areas to be excavated	Detail at CC stage
Types and numbers of storage bins likely to be required	Detail at CC stage
Signage required to facilitate correct use of storage facilities	Detail at CC stage

ONGOING OPERATION

	Comment
SPACE	
Size and location of waste storage areas	Sufficient room is provided in the waste room for the number and size of bins proposed
Recycling bins placed next to residual waste bins	Will be located together
Space provided for access to and the manoeuvring of bins/equipment	Adequate access and manoeuvring area is available, both to and within the waste storage room.
Any additional facilities	N/A
ACCESS	
Access route to deposit waste in storage room/area	Bins will be located with internal access for each unit, with direct access from the residential lobby, and external access for kerbside collection is provided via an internal pathway.
Access route to collect waste from storage room/area	
Bin carting grade not to exceed 10% and travel distance not greater than 100m in length	Bin carting grades are less than 10%, and less than 100m in length.
Clearance, geometric design and strength of internal access driveways and roads	No on-site truck access is proposed or required.
Direction of traffic flow for internal access driveway and roads	
AMENITY	
Aesthetic design of waste storage areas, including being compatible with the main buildings and adequately screened and visually unobtrusive from the street	Bins will be stored in the enclosed waste room, and will be out of public sight.
Signage type and location	N/A
Construction details of storage rooms/areas (including floor, walls, doors, ceiling design, sewer connection, lighting, ventilation, security, wash down provisions, cross and longitudinal section showing clear internal dimensions between engaged pier and other obstructions etc	The storage areas will have a concrete floor and is of an appropriate design and location.