

Waste Management Plan

85 Harrington Street, The Rocks

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Prepared by Savills Project Management

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Waste Management Plan

Purpose

To avoid whenever practical, the generation of waste and to ensure an efficient recycle procedure of all waste material. This waste management plan will be further developed once a head contractor is engaged for the project, and will be required to submit a more detailed waste management plan.

Scope

This procedure applies to the use of building materials that are able to be recycled and/or include recycled material in their production or packaging.

For this project, the objectives are to reduce construction waste from going to land-fill by using recycling and waste minimisation initiatives.

The head contractor will be required to submit a number of initiatives to reduce the amount of waste brought on to the site. This may be achieved by utilising alternative packing methods, alternative construction methods and, subject to approval, the substitution of materials.

The head contractor will be required to list materials that they will bring to site, that may facilitate recycling and re-use initiatives. Methods for disposal, volumes and destination shall be provided for all waste materials.

Recording of recycling and waste management figures are an important part of the waste reduction plan.

Waste management control strategies

An inspection of the site and a review of the building materials adopted have shown that there will be three basic types of waste: organic, solid and liquid waste.

The project will focus on minimising waste by implementing the following:

↳ Reducing organic waste

Organic waste consists of the following:

- Pruning and clippings
- Vegetation clearance
- Tree trunks and large branches from land clearance
- Weeds leaf litter, mulch

To counter the amount of organic waste that will be encountered, it shall be chipped, mulched, composted and reused on site or sent to an off-site compost facility wherever possible.

↳ Reducing solid waste

Solid waste consists of the following:

- Packaging from site materials
- Excess materials, unused products
- Rock and soil from excavations
- Building materials from demolition
- Sediment retained in sediment traps

To counter the amount of solid waste that will be encountered, the project will endeavour to:

- Buy materials with minimum packaging
- Site measure prior to ordering materials where possible
- Not over-order
- Stockpile and reuse it on site
- Recycle it off site or return to the supplier

Further details on Erosion and Sediment Control can be found in the Environmental Management Plan.

Reducing liquid waste

Liquid waste can consist of the following:

- Site clean up
- Wash down areas
- Brick/tile cutting waste
- Dust control waste

To counter liquid waste on the project, only clean water will be discharged into the storm water. Where possible the head contractor will avoid generating any dirty water and when encountered, will attempt to use such grey water for irrigation or as a means of suppressing dust.

The head contractor will also be required to ensure that any waste stored for reuse, recycling or disposal cannot be washed or blown away.

Waste Minimisation

The head contractor and major subcontractors will be encouraged to submit waste minimisation details including the following:

- Practical measures associated with their works to prevent waste entering the site
- Waste resulting from their work which can be recycled are to be actively managed as part of their waste reduction plan
- Alternative products containing recycled materials that could be utilised in their works which conform and meet the design specification
- Ordering the right quantities of materials and prefabrication of materials where possible
- Minimising site disturbance and to limit unnecessary excavation
- Careful sourcing separation of off-cuts to facilitate re-use, resale or efficient recycling

Demolition

The proposed development includes demolition of existing structures and construction of new nine and half level above ground building with basement car park.

The head contractor will be required to engage a specialised bin contractor who has enhanced recycling separation techniques and a noted track record. Maximum re-use and recycling both of off-site and on-site procedures will be employed.

The head contractor will endeavor to:

- Re-use excavated materials on-site and disposal of excess to an approved site
- Green waste mulched and re-used in landscaping either on or off-site
- Bricks, tiles and concrete re-used 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
- Window, 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

Design

The proposed mixed-use development - primarily residential with some retail and commercial space – has been designed in a manner that is compatible with the concepts of ecological sustainability and without harmful impacts on the environment.

The building has been designed to include a waste storage and recycling area which is flexible in size and layout to cater for future changes in use. The size is to be calculated on the basis of waste generation rates and proposed bin sizes.

For on-going management of waste materials the School will be advised of provisions included in the design for:

- Location of temporary storage space
- Details of design for waste storage and recycling areas, and any volume reduction equipment
- Access for vehicles

Construction

In order to reduce waste on site during the construction stage, the head contractor will be encouraged to undertake the following:

- Order materials to size
- Don't over-order
- Order pre-cut or prefabricated materials
- Reduce packaging at source—buy materials with minimal packaging
- Separate reusable or recyclable materials from waste
- No rubbish is to be buried or burned on site
- A designated concrete wash down area will be established on site for concrete trucks and pumps. Such an area will be adequately signed and designed so that any excess drainage from the area will be contained within the site boundaries
- Bins to be inspected regularly

Bin System

A waste separation system will be achieved through the use of separation bins for recyclable materials and non-recyclable waste materials.

Additional bins will be provided where practical to further separate waste between different recyclable materials.

Materials collected for recycling include:

- Food waste
- Glass
- Concrete, bricks and tiles
- Timber
- Aluminium
- Steel and other metals

- Plastic
- Paper, cardboard and plasterboard

The head contractor will be responsible for the daily cleaning of their respective work areas and for placing all their waste in the nominated waste bins.

Training

Waste minimisation will be part of the site environmental awareness program that will be incorporated into the site induction program by the head contractor. The responsibility to ensure that waste materials go into the correct bins will be with everyone on site.

Measure of Performance

A detailed Waste Management Plan will be required to be developed by the head contractor in the early stage of the project to ensure effective planning for waste management. The head contractor will be responsible to coordinate waste recycling, measurement, recovery and disposal.

Monitoring

The Waste Management Contractor will be responsible for providing monthly reports to the head contractor. Appropriate recording and monitoring procedures will be required to be put in place for the project. Monthly reports will be required to be provided, that measures the number and size of bins, waste type in each bin, total tonnage / cubic metres generated and total tonnage / cubic metres recycled.

Reports on the percentage of materials recycled will be included by the head contractor in regular project audits to be presented to project manager.

Disposal

Dispose of waste to landfill will be as a last resort only. The following measure will be required to be put in place by the head contractor where practical:

- Records of disposal shall be kept. Any disposal of waste that is deemed hazardous shall be disposed of by an approved EPA hazardous disposal unit
- Wastes are disposed of in legal and appropriate manners. Particular attention is given to the management and disposal of liquid and hazardous waste
- Where practical and cost effective, set up re-use strategies and recycling facilities to reduce the volume of waste destined to land-fill
- Bins be provided, identified and monitored for appropriate recycling

The system shall be inspected for structural damage, clogging by silt or other debris and prompt repairs or replacement will be carried out. This will ensure:

- Control measures are operating effectively
- Spilled material is removed from areas near sediment control ponds, wash down areas, construction exits and roadways
- Gravel or other filter materials are clean and have been reinstated or replaced to maintain effective performance
- Drains operate effectively
- Removal of spilled soil
- Additional erosion and/or sediment control works are constructed or upgraded to ensure the desired protection level is maintained
- Removal of trapped sediment from catch drains, pits, sediment fences etc.

Rehabilitation

On completion of the works the head contractor will be required to:

- Remove temporary sediment traps by removing all silt material from the base of the trap, removing the trap wall and filling the trap with compacted fill
- Grade diversion drains to match surface levels
- Maintain temporary silt traps or sediment control devices for topsoiling and grassing, until stabilisation of disturbed area is complete
- Continue maintenance of rehabilitation areas until vegetation is well established