

Waste Stream	Source	Management considerations
		<p>recycling in. These bins will be removed to the central waste storage room nightly by cleaning staff and swapped with empty bins.</p> <p>While the temporary waste room on Level 0 is being used, waste will be collected in a 1000L mobile garbage bin placed under the chute with locked wheels. Building management will inspect these bins twice daily and change over when necessary.</p> <p>Once the central waste storage room is relocated to the basement, co-mingle recycling will be collected from the chute in a large marrell skip. The skip will be collected and replaced by a rear-loading truck, and care must be taken to ensure the skip is replaced in the correct location each time centrally beneath the waste chute and not obstructing access to any other areas of the central waste storage room.</p>
	Administration / reception	Recycling from administrative areas on Level 0 is to be moved and emptied nightly to co-mingle bins in the central accommodation waste storage room by cleaners. Paper and card waste will also be moved to the paper/card bin (blue lid).
	Retail and food retail	<p>Co-mingle recycling from the retail and administrative areas will also be stored in 660L mobile garbage bins within the central retail waste storage room.</p> <p>During the temporary arrangement all retail waste will be transferred to the central storage room on the Ground floor via the service corridors, and during the permanent arrangement all retail waste will be transferred to the basement via the service corridors and goods lift.</p>
<b>Cardboard and paper recycling</b>	Retail and food retail	Cardboard and paper recycling will be collected separately wherever possible and stored in dedicated recycling bins in the central waste storage room.
<b>Electronic waste</b>	Student accommodation	<p>Students and building administrative staff will be offered access to electronic waste receptacles in common areas.</p> <p>Electronic waste will then be transferred to a receptacle within the central student accommodation waste storage area.</p> <p>Larger electronic waste, such as televisions and other equipment, will be placed in the hard rubbish storage compartment within the central waste storage area and scheduled for pickup.</p>
	Retail	<p>Electronic waste will be transferred to a receptacle within the central waste storage area.</p> <p>Larger electronic waste, such as televisions and other equipment, will be placed in the hard rubbish storage compartment within the retail section of the central waste storage area and scheduled for pickup.</p>
<b>Hard rubbish</b>	All areas	Hard rubbish is to be moved immediately to the designated storage compartment in the retail or accommodation section of the central waste storage

Waste Stream	Source	Management considerations
		area. Building management will then schedule removal as necessary.
Waste cooking oil	Food retail	A waste cooking oil receptacle of suitable size will be provided if necessary in the retail area of the central waste storage room, to be determined according the volume and nature of food services. The central receptacle will be emptied by a licenced contractor.

### 7.3 Waste compaction

One 4x 660L bin carousel compactor will be located in the accommodation section of the temporary central waste storage room. The compactor will receive the mixed landfill waste discharged via the general waste chute from the upper student accommodation levels. Once the permanent central waste storage room is developed in the basement of the building, the waste chutes will be extended through the floor slab and the compactor will be moved to the new basement waste area.

The compactor equipment will only be accessed by specified building management staff with suitable training and safety induction. All necessary safety induction training, childproofing and safety signage for access and use of the compactor equipment will be provided by building management.

All compactor equipment will be located in a locked and secured area, to be accessible only by trained management staff and licenced contractors.

The waste compactors will be serviced as necessary, to a schedule determined by the equipment manufacturer.

## 8 Waste collection

### 8.1 Waste collection frequency

Waste collection frequencies are summarised below in Table 11 (student accommodation waste) and Table 12 (retail waste). Each table summarises collection frequency for both the temporary (Level 0/ Ground floor central storage) and permanent (basement central storage) arrangements.

Waste collection services for each waste stream will be provided by appropriate licenced contractors. Written evidence will be provided and held on site at all times of a valid and current contractor with a licenced collector for waste and recycling collection and disposal.

Waste collection arrangements for the proposed development are described below.

Table 11: Waste collection summary: student accommodation waste

Waste Stream	Collection Frequency Level 0 central waste storage (temporary)	Collection Frequency Basement central waste storage (permanent)	Licenced Collector
Landfill waste	Daily	Daily	Private waste contractor
Organic waste	Daily	Daily	Private waste contractor
Cardboard/ paper recycling	1x per week	1x per week	Private waste contractor
Co-mingle recycling	Every two days	Every 4 days (2x per week)	Private waste contractor
Electronic waste	Collection monthly or as necessary	Collection monthly or as necessary	E-waste collector
Hard rubbish	Collection scheduled as necessary	Collection scheduled as necessary	Council / private waste contractor (as necessary)
Waste cooking oil	Collection scheduled as necessary <sup>3</sup>	Collection scheduled as necessary	Liquid waste collector

<sup>3</sup> Collection frequency to be determined by building management and a licenced collector, based upon specific needs of tenanted cafés and restaurants

Table 12: Waste collection summary: retail waste

<b>Waste Stream</b>	<b>Collection Frequency Ground floor central waste storage (temporary)</b>	<b>Collection Frequency Basement central waste storage (permanent)</b>	<b>Licenced Collector</b>
Landfill waste	Daily	Daily	Private waste contractor
Organic waste	Daily	Daily	Private waste contractor
Cardboard/ paper recycling	Collection every four days (2x per week)	Collection every four days (2x per week)	Private waste contractor
Co-mingle recycling	Collection every four days (2x per week)	Collection every four days (2x per week)	Private waste contractor
Electronic waste	Collection monthly	Collection monthly	E-waste collector
Hard rubbish	Collection scheduled as necessary	Collection scheduled as necessary	Council / private waste contractor (as necessary)
Waste cooking oil	Collection scheduled as necessary <sup>4</sup>	Collection scheduled as necessary	Liquid waste collector

<sup>4</sup> Collection frequency to be determined by building management and a licenced collector, based upon specific needs of tenanted cafés and restaurants

## 8.2 Waste collection arrangements

### 8.2.1 Student accommodation waste – temporary arrangement (Level 0 central waste storage room)

During the temporary arrangement, a private waste contractor will manually remove the waste bins from the central student accommodation waste storage room on Level 0 to a waste collection vehicle parked outside on Central Park Avenue.<sup>5</sup> Once loaded, empty bins will be immediately returned to their designated place in the central waste storage rooms.

Bins will not be left on the street at any point in time. The waste chutes will be closed while bin removal takes place.

### 8.2.2 Retail waste - temporary arrangement (Ground floor central waste storage room)

During the temporary arrangement, the retail waste bins will be moved from the central retail waste storage room on the Ground floor to the Ground floor loading dock to await collection. A private waste collection truck will then enter and empty the bins.

Once emptied, bins will be returned to their designated place in the central waste storage room by building management.

### 8.2.3 Permanent arrangement (Basement central waste rooms)

Once central waste storage rooms are relocated to the basement, a private waste contractor will collect all waste from student accommodation and retail waste via underground access. Bins will be emptied into a suitable waste truck. The marrell skip bin containing co-mingle recycling will be removed and replaced.

Waste chutes will be closed while bin removal takes place.

---

<sup>5</sup> The arrangement for manual removal and emptying of bins, including 660L bins from compactor equipment, has been approved by Steve Watson, Area Sales Manager from Veolia Environmental Services via phone conversation, 20/11/2012

## 8.3 Waste contractor vehicle access

### 8.3.1 Student accommodation waste - Temporary arrangement (Ground floor and Level 0 central waste rooms)

The temporary route for waste contractor vehicle access to Central Park Block 4S (prior to use of basement waste storage and collection) is via Central Park Avenue (refer to Figure 1: Site context plan). The vehicle will park on Central Park Avenue alongside the building and next to the opening of the waste storage room while collecting and emptying the bins.

Central Park Avenue provides suitable road access for a standard collection vehicle, with unlimited head clearance and two-way traffic width. There is sufficient street width so as to allow a single line of traffic flow to continue around the waste collection vehicle while it is parked on the street alongside the loading dock.

It will not be necessary for the vehicle to reverse or conduct a U-turn at any time.

A suitable private waste contractor will undertake a full waste collection risk assessment prior to implementing all of the collection arrangements described above.<sup>6</sup>

### 8.3.2 Retail waste - Temporary arrangement (Ground floor and Level 0 central waste rooms)

The temporary route for waste contractor vehicle access to remove retail waste from the Ground floor loading dock of Block 4S will be via road access from the southern end of the building.

A vehicle turntable will be provided inside the loading dock for use of the vehicle. It will not be necessary for the vehicle to reverse or conduct a U-turn at any time.

A suitable private waste contractor will undertake a full waste collection risk assessment prior to implementing all of the collection arrangements described above.

### 8.3.3 Permanent arrangement (basement central waste room)

The permanent route for waste contractor access to the future basement waste storage rooms is via underground access from the basement of a future development to the north of the building (Block 4N). A standard waste collection vehicle will have full access directly to the waste storage areas via the basement of Block 4N.

---

<sup>6</sup> Advice provided by Steve Watson: Veolia Environmental Services, 20/11/12

## 8.4 Amenity

The management systems and constructed elements of this development will be designed and installed so as to enhance outcomes for building amenity. Any potential for noise and odour to arise will be minimised. Specifically:

- **Visual aspects:** The waste management and central storage areas will not be visible from the exterior of the building.
- **Noise:** significant noise-generating waste management equipment will not be utilised in this development. The carousel compactor equipment utilised will generate minimal noise, and is located in a segregated basement area. Production of 'offensive noise,' as defined under the *Protection of the Environment Operations Act 1997*, will be avoided.
- **Odour:** Any putrescible waste awaiting collection will be stored in a Council approved container with permanently tight fitting lids and smooth, washable internal surfaces.

All waste storage areas will be fitted with mechanical vertical ventilation systems.

General and organic waste will be collected daily, which will minimise putrescence.

Adequate mechanical ventilation and regular collection of waste will eliminate the risk of odour to building inhabitants and neighbours.

## 9 Next steps

---

This Waste Management Statement forms a framework to implement best practice for waste management across all design and planning stages. The waste management approach aligns with the proposed principle led Green Star ESD pathway for the project, in order to enhance outcomes for waste minimisation, reuse and recycling.

Further detail regarding the exact arrangement and placement of waste chutes and skip bins will be resolved during the next stage of detailed design.

If planning approval is granted for the proposed development, this Waste Management Statement will:

1. Inform the development of a detailed Waste Policy Design Compliance Certificate for the Construction Certificate application, which is to include details regarding disposal and recycling of different materials expected from demolition, construction, and the transport and destinations of these materials;
2. Ensure that detailed design and fit-out of the building is consistent with best practice standards and plans for waste management; and
3. Inform all plans and procedures for operational waste management.

## **Appendix A**

### **Building plans**







General Notes:  
 1. Do not scale drawings. Dimensions govern.  
 2. All dimensions shall be verified on the actual property.  
 3. All dimensions shall be verified on the actual property.  
 4. Foster + Partners shall be notified in writing of any dimensions that do not match the approved site plan and indicate the only.

Key	
[Red dashed line]	Control plan development boundary
[Red solid line]	PA boundary
[Blue dashed line]	Proposed Approval
[Blue solid line]	Existing Approval
[Green dashed line]	Boundary
[Green solid line]	Boundary
[Yellow solid line]	Internal Common Area
[Grey solid line]	External Common Area
[Blue solid line]	Shared Driveway Type 1 and Type 2*
[Blue solid line]	Shared Driveway Type 3 and Type 2*
[Blue solid line]	Shared Driveway Type 4 and Type 2*
[Blue solid line]	Shared Driveway Type 5 and Type 2*
[Blue solid line]	Shared Driveway Type 6 and Type 2*
[Blue solid line]	Shared Driveway Type 7 and Type 2*
[Blue solid line]	Shared Driveway Type 8 and Type 2*
[Blue solid line]	Shared Driveway Type 9 and Type 2*
[Blue solid line]	Shared Driveway Type 10 and Type 2*
[Blue solid line]	Shared Driveway Type 11 and Type 2*
[Blue solid line]	Shared Driveway Type 12 and Type 2*
[Blue solid line]	Shared Driveway Type 13 and Type 2*
[Blue solid line]	Shared Driveway Type 14 and Type 2*
[Blue solid line]	Shared Driveway Type 15 and Type 2*
[Blue solid line]	Shared Driveway Type 16 and Type 2*
[Blue solid line]	Shared Driveway Type 17 and Type 2*
[Blue solid line]	Shared Driveway Type 18 and Type 2*
[Blue solid line]	Shared Driveway Type 19 and Type 2*
[Blue solid line]	Shared Driveway Type 20 and Type 2*
[Blue solid line]	Shared Driveway Type 21 and Type 2*
[Blue solid line]	Shared Driveway Type 22 and Type 2*
[Blue solid line]	Shared Driveway Type 23 and Type 2*
[Blue solid line]	Shared Driveway Type 24 and Type 2*
[Blue solid line]	Shared Driveway Type 25 and Type 2*
[Blue solid line]	Shared Driveway Type 26 and Type 2*
[Blue solid line]	Shared Driveway Type 27 and Type 2*
[Blue solid line]	Shared Driveway Type 28 and Type 2*
[Blue solid line]	Shared Driveway Type 29 and Type 2*
[Blue solid line]	Shared Driveway Type 30 and Type 2*
[Blue solid line]	Shared Driveway Type 31 and Type 2*
[Blue solid line]	Shared Driveway Type 32 and Type 2*
[Blue solid line]	Shared Driveway Type 33 and Type 2*
[Blue solid line]	Shared Driveway Type 34 and Type 2*
[Blue solid line]	Shared Driveway Type 35 and Type 2*
[Blue solid line]	Shared Driveway Type 36 and Type 2*
[Blue solid line]	Shared Driveway Type 37 and Type 2*
[Blue solid line]	Shared Driveway Type 38 and Type 2*
[Blue solid line]	Shared Driveway Type 39 and Type 2*
[Blue solid line]	Shared Driveway Type 40 and Type 2*
[Blue solid line]	Shared Driveway Type 41 and Type 2*
[Blue solid line]	Shared Driveway Type 42 and Type 2*
[Blue solid line]	Shared Driveway Type 43 and Type 2*
[Blue solid line]	Shared Driveway Type 44 and Type 2*
[Blue solid line]	Shared Driveway Type 45 and Type 2*
[Blue solid line]	Shared Driveway Type 46 and Type 2*
[Blue solid line]	Shared Driveway Type 47 and Type 2*
[Blue solid line]	Shared Driveway Type 48 and Type 2*
[Blue solid line]	Shared Driveway Type 49 and Type 2*
[Blue solid line]	Shared Driveway Type 50 and Type 2*
[Blue solid line]	Shared Driveway Type 51 and Type 2*
[Blue solid line]	Shared Driveway Type 52 and Type 2*
[Blue solid line]	Shared Driveway Type 53 and Type 2*
[Blue solid line]	Shared Driveway Type 54 and Type 2*
[Blue solid line]	Shared Driveway Type 55 and Type 2*
[Blue solid line]	Shared Driveway Type 56 and Type 2*
[Blue solid line]	Shared Driveway Type 57 and Type 2*
[Blue solid line]	Shared Driveway Type 58 and Type 2*
[Blue solid line]	Shared Driveway Type 59 and Type 2*
[Blue solid line]	Shared Driveway Type 60 and Type 2*
[Blue solid line]	Shared Driveway Type 61 and Type 2*
[Blue solid line]	Shared Driveway Type 62 and Type 2*
[Blue solid line]	Shared Driveway Type 63 and Type 2*
[Blue solid line]	Shared Driveway Type 64 and Type 2*
[Blue solid line]	Shared Driveway Type 65 and Type 2*
[Blue solid line]	Shared Driveway Type 66 and Type 2*
[Blue solid line]	Shared Driveway Type 67 and Type 2*
[Blue solid line]	Shared Driveway Type 68 and Type 2*
[Blue solid line]	Shared Driveway Type 69 and Type 2*
[Blue solid line]	Shared Driveway Type 70 and Type 2*
[Blue solid line]	Shared Driveway Type 71 and Type 2*
[Blue solid line]	Shared Driveway Type 72 and Type 2*
[Blue solid line]	Shared Driveway Type 73 and Type 2*
[Blue solid line]	Shared Driveway Type 74 and Type 2*
[Blue solid line]	Shared Driveway Type 75 and Type 2*
[Blue solid line]	Shared Driveway Type 76 and Type 2*
[Blue solid line]	Shared Driveway Type 77 and Type 2*
[Blue solid line]	Shared Driveway Type 78 and Type 2*
[Blue solid line]	Shared Driveway Type 79 and Type 2*
[Blue solid line]	Shared Driveway Type 80 and Type 2*
[Blue solid line]	Shared Driveway Type 81 and Type 2*
[Blue solid line]	Shared Driveway Type 82 and Type 2*
[Blue solid line]	Shared Driveway Type 83 and Type 2*
[Blue solid line]	Shared Driveway Type 84 and Type 2*
[Blue solid line]	Shared Driveway Type 85 and Type 2*
[Blue solid line]	Shared Driveway Type 86 and Type 2*
[Blue solid line]	Shared Driveway Type 87 and Type 2*
[Blue solid line]	Shared Driveway Type 88 and Type 2*
[Blue solid line]	Shared Driveway Type 89 and Type 2*
[Blue solid line]	Shared Driveway Type 90 and Type 2*
[Blue solid line]	Shared Driveway Type 91 and Type 2*
[Blue solid line]	Shared Driveway Type 92 and Type 2*
[Blue solid line]	Shared Driveway Type 93 and Type 2*
[Blue solid line]	Shared Driveway Type 94 and Type 2*
[Blue solid line]	Shared Driveway Type 95 and Type 2*
[Blue solid line]	Shared Driveway Type 96 and Type 2*
[Blue solid line]	Shared Driveway Type 97 and Type 2*
[Blue solid line]	Shared Driveway Type 98 and Type 2*
[Blue solid line]	Shared Driveway Type 99 and Type 2*
[Blue solid line]	Shared Driveway Type 100 and Type 2*

For Information	
Key Plan	
Block 1	
Block 4N	
Block 10	
Block 11	
Block 12	
Block 13	
Block 14	
Block 15	
Block 16	
Block 17	
Block 18	
Block 19	
Block 20	
Block 21	
Block 22	
Block 23	
Block 24	
Block 25	
Block 26	
Block 27	
Block 28	
Block 29	
Block 30	
Block 31	
Block 32	
Block 33	
Block 34	
Block 35	
Block 36	
Block 37	
Block 38	
Block 39	
Block 40	
Block 41	
Block 42	
Block 43	
Block 44	
Block 45	
Block 46	
Block 47	
Block 48	
Block 49	
Block 50	
Block 51	
Block 52	
Block 53	
Block 54	
Block 55	
Block 56	
Block 57	
Block 58	
Block 59	
Block 60	
Block 61	
Block 62	
Block 63	
Block 64	
Block 65	
Block 66	
Block 67	
Block 68	
Block 69	
Block 70	
Block 71	
Block 72	
Block 73	
Block 74	
Block 75	
Block 76	
Block 77	
Block 78	
Block 79	
Block 80	
Block 81	
Block 82	
Block 83	
Block 84	
Block 85	
Block 86	
Block 87	
Block 88	
Block 89	
Block 90	
Block 91	
Block 92	
Block 93	
Block 94	
Block 95	
Block 96	
Block 97	
Block 98	
Block 99	
Block 100	

FRASERS PROPERTY  
 Project: Fraser Property, Sydney NSW 2000  
 Client: Fraser Property, Sydney NSW 2000  
 1/100 Macquarie Street, Sydney NSW 2000  
 T +61 (0)2 9251 8000 F +61 (0)2 9251 8001

Foster + Partners  
 nettleton tribe  
 171 Whitehorse Road, Northcote VIC 3070, Australia  
 T +61 (0)3 9412 1041 F +61 (0)3 9412 1042  
 www.fosterpartners.com.au

Block 4S  
 Level 02 - Student Accommodation

Project No: 1645  
 Scale: 1:200  
 Date: 31/08/12  
 Drawing: GM  
 Number: PA - A - 5762  
 Revision: 05

© Foster + Partners 2008  
 TBC/BC/2012/1257

























