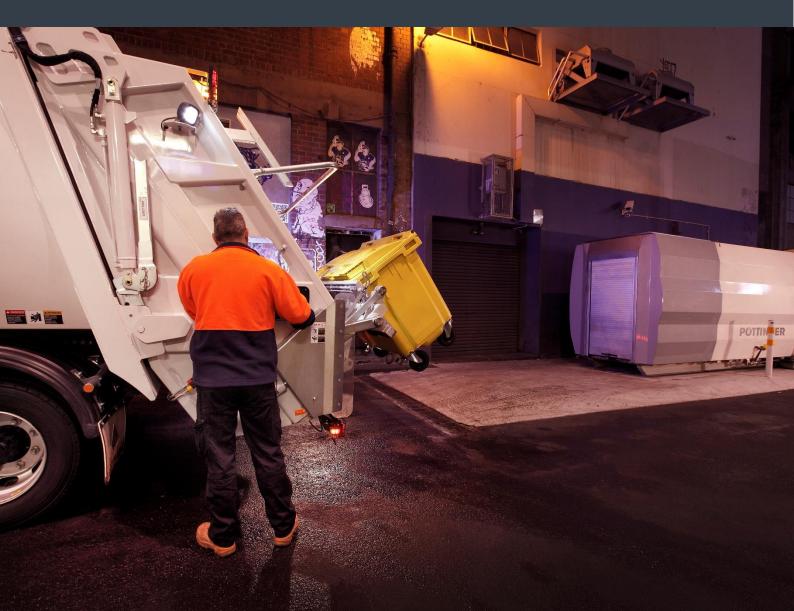
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WILTON PARK ROAD & BERWICK PARK ROAD, WILTON WASTE MANAGEMENT PLAN



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# WILTON PARK ROAD & BERWICK PARK ROAD, WILTON Waste Management Plan

WSP Level 27, 680 George Street Sydney NSW 2000 GPO Box 5394 Sydney NSW 2001

Tel: +61 2 9272 5100 Fax: +61 2 9272 5101

REV	DATE	DETAILS	
A	14/10/2022	Draft Operational Waste Management Plan	
В	10/05/2023	Operational Waste Management Plan	

	NAME	DATE	SIGNATURE
Prepared by:	Maria Madsen	09/05/2023	Mirie H. Jakan
Reviewed by:	Laurence Gamble	10/05/2023	thank
Approved by:	Laurence Gamble	10/05/2023	thank

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## **EXECUTIVE SUMMARY**

The below is a summary of the Operational Waste Management Plan (OWMP) proposed for the subject site. The complete report must be read in detail prior to implementing the operational waste management plan.

The proposed for the commercial development located at Wilton Park Road & Berwick Park Road, Wilton. The development will comprise a series of warehouse lots with associated office spaces.

Table 1 summarises the potential waste systems and collection arrangements for the overall development.

Waste Stream	Bin Sizes	Vehicle Type	Collection Frequency	Collection Operator
	$4.5m^3$ / $3m^3$ / $1.5m^3$	Front-lift		Private Contractor
Garbage	1100L	Rear-Lift	(Up to) 3 x per week	
	Compactor	Hook-lift		
	4.5m <sup>3</sup> / 3m <sup>3</sup>	Front-lift		Private Contractor
Cardboard	1100L	Rear-Lift	(Up to) 2 x per week	
	Compactor	Hook-lift		
Commingles	1100L / 660L / 360L / 240L	Rear-Lift	(Up to) 2 x per week	Private Contractor
Extended streams	Various (refer Section 2.2.2)	Various	As required	Private Contractor

 Table 1
 Waste Collection Summary

Collections will be undertaken from the respective loading zones of each tenant at ground level, to be accessed via the Berwick Park Road or Wilton Park Road crossovers and internal accessways of the site. Sufficient vehicle access is provided for a standard B-double semi-trailer vehicle to enter and exit the site in a forward direction – this will accommodate all vehicle types as listed.

Bins will be held within the waste stores of each individual loading zones at any given time. Front-lift / hook-lift bin collections will be coordinated such that sufficient clearance is provided throughout the loading zones to enable the lifting maneuvre (minimum 6m height clear to be provided at the point of each front-lift bin lift and 4.5m height clear at the point of each hook-lift bin lift).

All waste collections will be undertaken entirely onsite. Bins will not be presented to the kerb or stored outside the title boundary at any time.

Waste collections between tenancies should be collected concurrently by a single collection contractor where possible, as to minimise collection vehicle movements throughout the site.

# 1 INTRODUCTION

The following Operational Waste Management Plan has been prepared for the commercial development at Wilton Park Road & Berwick Park Road, Wilton.

This Operational Waste Management Plan (OWMP) and the waste generation rates therein have been prepared based on the Wollondilly Development Control Plan (2016) and current best practice waste management methodology and technologies commonly available in Australia.

### 1.1 LAND USE

**Client:** 

**Proposed Land Use:** 

**Development Type:** 

Altis Property E4 (General Industrial) Commercial (Warehousing)

#### Figure 1 Indicative Site Layout



#### Table 2 Development Summary

	Γ	Development Summary	
Lot	Use	Warehouse	Office
1	Warehouse 1	5,367m <sup>2</sup>	200m <sup>2</sup>
2	Warehouse 2	17,753m <sup>2</sup>	800m <sup>2</sup>
	Warehouse 3A	1,830m <sup>2</sup>	200m <sup>2</sup>
	Warehouse 3B	2,363m <sup>2</sup>	200m <sup>2</sup>
3	Warehouse 3C	1,937m <sup>2</sup>	200m <sup>2</sup>
	Warehouse 3D	1,935m <sup>2</sup>	200m <sup>2</sup>
	Warehouse 3E	1,934m <sup>2</sup>	200m <sup>2</sup>
4	Warehouse 4A	9,759m <sup>2</sup>	400m <sup>2</sup>
4	Warehouse 4B	9,862m <sup>2</sup>	400m <sup>2</sup>
-	Warehouse 5A	10,207m <sup>2</sup>	400m <sup>2</sup>
5	Warehouse 5B	10,299m <sup>2</sup>	400m <sup>2</sup>
6	Warehouse 6	17,481m <sup>2</sup>	800m <sup>2</sup>
7	Warehouse 7	10,417m <sup>2</sup>	800m <sup>2</sup>
0	Warehouse 8A	5,385m <sup>2</sup>	200m <sup>2</sup>
8	Warehouse 8B	6,150m <sup>2</sup>	200m <sup>2</sup>
0	Warehouse 9A	20,598m <sup>2</sup>	800m <sup>2</sup>
9	Warehouse 9B	14,863m <sup>2</sup>	800m <sup>2</sup>
10	Warehouse 10A	3,779m <sup>2</sup>	200m <sup>2</sup>
10	Warehouse 10A	3,450m <sup>2</sup>	200m <sup>2</sup>
11	Warehouse 11	15,114m <sup>2</sup>	800m <sup>2</sup>
	Warehouse 12A	8,225m <sup>2</sup>	400m <sup>2</sup>
	Warehouse 12B	8,225m <sup>2</sup>	400m <sup>2</sup>
	Warehouse 12C	8,225m <sup>2</sup>	400m <sup>2</sup>
12	Warehouse 12D	4,742m <sup>2</sup>	200m <sup>2</sup>
	Warehouse 12E	3,510m <sup>2</sup>	200m <sup>2</sup>
	Warehouse 12F	2,620m <sup>2</sup>	200m <sup>2</sup>
	Warehouse 12G	1,805m <sup>2</sup>	200m <sup>2</sup>
	TOTAL:	200,410m <sup>2</sup>	10,000m <sup>2</sup>

## 2 WASTE MANAGEMENT PLAN

### 2.1 WASTE GENERATION

Waste generation rates per week are shown in Table 3. A waste generation assessment prepared in accordance with these rates is shown in Table 4. Calculations are based on a 5 day per week operation for all uses.

A detailed waste generation breakdown per warehouse can be seen in Appendix A.

#### Table 3 Waste Generation Rates

Use	Garbage (L/100m <sup>2</sup> /week)	Cardboard (L/100m²/week)	Commingles (L/100m <sup>2</sup> /week)
Warehouse	50	43	7
Office	50	30	20

#### Table 4 Waste Generation Assessment

Waste Source	Garbage (L/week)	Cardboard (L/week)	Commingles (L/week)
Lot 1	2,784	2,368	416
Lot 2	9,277	7,874	1,403
Lot 3	5,501	4,600	899
Lot 4	10,211	8,677	1,533
Lot 5	10,654	9,058	1,595
Lot 6	9,141	7,757	1,384
Lot 7	5,609	4,719	889
Lot 8	5,968	5,081	888
Lot 9	18,531	15,728	2,802
Lot 10	3,815	3,229	587
Lot 11	7,957	6,739	1,218
Lot 12	19,678	16,662	3,015

### 2.2 WASTE SYSTEMS

Waste shall be sorted on-site by tenants as appropriate into the following core streams:

- Garbage (General Waste)
- Cardboard
- Commingled Recycling (including Container Deposit System (CDS))
- Bulky Waste

Further storage provisions will be made for the following **extended** waste streams:

- Secure Paper
- Timber (Pallets)
- Electronics

- Additional Stream (pending individual warehouse operations), including:
  - Soft Plastics / Packaging
  - Metal
  - Timber
  - Dry waste

In accordance with the NSW EPA document *Waste Classification Guidelines* (2014), garbage volumes will generally be treated as general solid waste (putrescible), and all other volumes (commingled recycling, cardboard, bulky waste, etc.) as general solid waste (non-putrescible).

Whilst intact electronics can generally be treated as general solid waste (non-putrescible), once broken these materials are often re-classified as hazardous waste due to chemical leakage. Any broken electronics will be classified on a case by case basis, with any ensuring hazardous waste volumes treated as separate volumes in accordance with proper handling protocols.

Each waste category will be managed, stored, and collected in accordance with appropriate standards. Storages areas will only be accessible by authorised personnel.

#### DISPOSAL FACILITIES

Throughout the development it will be ensured that it is as easy to dispose of recyclable materials as it is garbage. This will be achieved by ensuring the development is appropriately furnished with bin stations throughout the various active spaces of the site. The bin stations are to be clearly signed such that waste stream separation is easily identifiable and correct use of the bins is upheld.

Bin stations encourage the separation of recyclable materials. This system incorporates the provision of multiple bins for different waste streams at central locations and common areas for ease of disposal. This system is beneficial, as users are required to make a conscious decision as to which bin they place their items. This typically results in a reduced volume of garbage (landfill). In addition, the use of bin stations minimises the number of locations cleaners are required to service throughout the development.

Bin station size and type will vary according to operational preference and fitout works. Larger wheelie bins (typically up to 240L) may be used throughout the warehouse for ease of operations, particular at any locations of significant waste generation.

#### Figure 1 Example Bin Station Application



Typical office fitout



240L wheelie bins incorporated into fitout (at point of significant waste generation)

#### 2.2.1 CORE WASTE STREAMS

#### GARBAGE, CARDBOARD, COMMINGLES

Each space of the development shall have provision for plastic lined garbage, cardboard and commingles bins for the temporary holding of waste, to have minimum cumulative holding capacities as shown in Table 5.

The "Transfer Rate" refers to the frequency at which waste should be transferred by cleaners/staff from the temporary holding bins to the waste stores at ground level for disposal per day.

Use	Transfer Rate	Temporary Holding Requirements (L/100m <sup>2</sup> )			
Use	Transfer Kate	Garbage	Cardboard	Commingles	
Warehouse	Once per day	10	10	5	
Office	Once per day	10	10	5	

Staff/cleaners will transfer waste from these temporary holding bins (or the bins themselves, pending fitout) to ground level for disposal as appropriate. Pending operational preference, waste may be transferred via cleaners trolleys and/or via wheelie bins and/or manually handled as bagged material.

Noting the use of larger  $1.5m^3 - 4.5m^3$  skips throughout operations (sized according to warehouse – refer Section 2.3), a mobile bin lifter should be provided within each loading dock to provide a safe means of disposal. The bin lifters should be sized to accommodate 240L bins at minimum.

Separate waste stores will be provided within the loading zones of each tenancy, fitted with bins according to specific tenancy requirements. Each tenancy will manage their respective waste store in isolation – waste equipment and storage will **not** be shared between tenancies in any capacity.

Garbage is to be disposed of bagged. Cardboard and commingles are to be disposed of loosely, with any plastic liners disposed of within the garbage bins.

#### OPTIONAL EQUIPMENT FITOUT - GARBAGE / CARDBOARD COMPACTORS

Provision for larger waste compactors *may* be further considered, subject to tenant operations. Compactors *may* be particularly suitable to manage garbage / cardboard volumes of the larger warehouses (i.e. those >  $20,000m^2$ ) if desired (subject to preferred operations of each individual warehouse tenancy).

Any compactors will be incorporated into the fitout of each warehouse loading zone, subject to the preferred waste operations of each warehouse tenant. Bins / skips will otherwise be maintained as a base design measure as outlined in this report.

#### ADDITIONAL EQUIPMENT FITOUT - CARDBOARD / PLASTICS BALERS

Provision for waste balers *may* be further considered, subject to tenant operations. Balers *may* be particularly suitable to manage cardboard / soft plastics volumes of the larger warehouses (i.e. those >  $20,000m^2$ ) if desired (subject to preferred operations of each individual warehouse tenancy).

Any balers will likely be provided in conjunction with the front lift skips detailed above, with the method of waste disposal likely depend on the point of generation (i.e. cardboard volumes generated through incoming deliveries disposed of within front lift skip, cardboard volumes generated through general operations disposed of within the baler, etc.).

Any compactors will be incorporated into the fitout of each warehouse loading zone, subject to the preferred waste operations of each warehouse.. Bins / skips will otherwise be maintained as a base design measure as outlined in this report.

#### BULKY WASTE

Any bulky waste generated across the development will be temporarily staged within a dedicated bulky waste store within each loading zone. Staff / cleaners will transfer bulky waste volumes to the loading zones for collection on an as required basis.

Bulky waste will be collected via a private contractor on an as-required basis.

#### 2.2.2 EXTENDED WASTE STREAMS

#### SECURE PAPER

Office spaces *may* be furnished with secure paper bins as deemed appropriate by each tenant. Secure paper collections will be performed on an "as required" basis via an authorised contractor.

Collection contractors will enter the building, collect and exchange the secure paper bins directly from each floor of the office tenancy, as per common practice. The office tenant and/or building management (or equivalent) will coordinate collection services.

#### TIMBER (PALLETS)

*If* warehouses stockpile timber pallets as a result of incoming goods deliveries, pallet storage can be incorporated into the dedicated bulky waste store of each warehouse. Warehouse pallet collections can be performed on an "as required" basis via an authorised contractor.

Pallets will be collected via a private contractor on an as-required basis.

#### ELECTRONICS (E-WASTE)

*If* warehouses expect to produce sizable volumes of e-waste across, a dedicated line marked area or bin can be incorporated within the bulky waste stores within each loading zone. Staff / cleaners will transfer E-waste waste volumes to the loading zones as required.

E-waste will be collected via a private contractor on an as-required basis.

#### ADDITIONAL STREAMS

Additional streams (such as soft plastics, metal, dry waste, etc.) may be separated as individual stream, pending warehouse operations and waste stream profile.

Additional stream separation will be coordinated at an individual tenancy level, with each individual tenant responsible for extended waste fitout (i..e provision of large skips for metals / dry waste) and collection.

### 2.3 BIN QUANTITY, SIZE AND COLLECTION FREQUENCY

Table 6 through Table 8 contain information regarding *indicative* bin quantity, size and frequency of collection across the wider site. Pending individual warehouse operations, bin size, quantity and collection frequency may differ to the below.

Due to the variance between capacities and actual volumes, fewer bins than those specified may be required to be collected. Only full bins will be presented for collection.

A detailed breakdown of expected waste equipment per warehouse can be seen in Appendix A.

Garbage Bin Information						
Waste Source	Waste Source         No. Bins         Collections Per Week         Weekly Capacity         Weekly Volu					
Lot 1	1 x 3m <sup>3</sup>	1	3,000L	2,784L		
Lot 2	1 x 4.5m <sup>3</sup>	2	9,000L	9,277L		
Lot 3	1 x 1.5m <sup>3</sup> + 4 x 1100L	1	5,900L	5,501L		
Lot 4	2 x 3m <sup>3</sup>	2	12,000L	10,211L		
Lot 5	2 x 3m <sup>3</sup>	2	12,000L	10,654L		
Lot 6	1 x 4.5m <sup>3</sup>	2	9,000L	9,141L		
Lot 7	1 x 3m <sup>3</sup>	2	6,000L	5,609L		
Lot 8	$1 \text{ x } 3\text{m}^3 + 1 \text{ x } 4.5\text{m}^3$	1	7,500L	5,968L		
Lot 9	2 x 4.5m <sup>3</sup>	Up to 3	22,500L	18,531L		
Lot 10	2 x 3m <sup>3</sup>	1	6,000L	3,815L		
Lot 11	1 x 4.5m <sup>3</sup>	2	9,000L	7,957L		
Lot 12	$4 x 3m^3 + 3 x 4.5m^3$	1	25,500L	19,678L		

Table 6 Garbage: Bin Information and Capacity

Table 7	Cardboard: Bin	Information	and Capacity
---------	----------------	-------------	--------------

	Cardboard Bin Information							
Waste Source         No. Bins         Collections Per Week         Weekly Capacity         Weekly Capacity								
Lot 1	1 x 3m <sup>3</sup>	1	3,000L	2,368L				
Lot 2	1 x 4.5m <sup>3</sup>	2	9,000L	7,874L				
Lot 3	5 x 1100L	1	5,500L	4,600L				
Lot 4	2 x 4.5m <sup>3</sup>	1	9,000L	8,677L				
Lot 5	2 x 4.5m <sup>3</sup>	1	9,000L	9,058L				
Lot 6	1 x 4.5m <sup>3</sup>	2	9,000L	7,757L				
Lot 7	1 x 4.5m <sup>3</sup>	1	4,500L	4,719L				
Lot 8	2 x 3m <sup>3</sup>	1	6,000L	5,081L				
Lot 9	2 x 4.5m <sup>3</sup>	2	18,000L	15,728L				
Lot 10	2 x 3m <sup>3</sup>	1	6,000L	3,229L				
Lot 11	1 x 4.5m <sup>3</sup>	2	9,000L	6,739L				

Cardboard Bin Information					
Waste Source         No. Bins         Collections Per Week         Weekly Capacity         Weekly Volume					
Lot 12	$4 \ x \ 3m^3 + 3 \ x \ 4.5m^3$	1	25,500L	16,662L	

#### Table 8 Commingles: Bin Information and Capacity

	Commingles Bin Information							
Waste Source         No. Bins         Collections Per Week         Weekly Capacity         Weekly Capacity								
Lot 1	1 x 660L	1	660L	416L				
Lot 2	1 x 660L	2	1,320L	1,403L				
Lot 3	5 x 240L	1	1,200L	899L				
Lot 4	2 x 1100L	1	2,200L	1,533L				
Lot 5	2 x 1100L	1	2,200L	1,595L				
Lot 6	1 x 1100L	2	2,200L	1,384L				
Lot 7	1 x 1100L	1	1,100L	889L				
Lot 8	2 x 660L	1	1,320L	888L				
Lot 9	2 x 1100L	2	4,400L	2,802L				
Lot 10	2 x 360L	1	720L	587L				
Lot 11	1 x 660L	2	1,320L	1,218L				
Lot 12	4 x 360L + 3 x 660L	1	3,4201	3,015L				

Typical equipment dimensions are shown in Table 9 below. Note that the specifications are for reference only and must be confirmed with the nominated supplier prior to any works commencing.

Typical Equipment Dimensions					
Item	Width (mm)	Depth (mm)	Height (mm)	Footprint (m <sup>2</sup> )	
10m <sup>3</sup> skip	5000	2000	1000	10.00	
4.5m <sup>3</sup> skip	1800	1792	1500	3.23	
3m <sup>3</sup> skip	1800	1375	1250	2.48	
1.5m <sup>3</sup> Bin	1800	935	910	1.68	
1100L Bin	1240	1070	1330	1.33	
660L Bin	1260	780	1330	0.98	
360L Bin	680	848	1100	0.58	
240L Bin	585	730	1060	0.43	
Bin Lifter (120L/240L)	950	1150	1765	1.09	

#### Table 9 Typical Equipment Dimensions

### 2.4 WASTE STORAGE

Table 10 demonstrates the cumulative area requirements (excluding circulation) and provision of waste areas. Please refer to scaled drawings as shown in Appendix B.

Note that the below addresses the core waste fitout (garbage, commingles, cardboard, bulky waste) **only**. Provision of any additional waste equipment (i.e 10m<sup>3</sup> metals skip; if required) is not included in the below.

Table 10 detailed breakdown per warehouse can be seen in Appendix A.

	No. Bins Required									
Use	4.5m <sup>3</sup> bin	3m³ bin	1.5m3 bin	1100L bin	660L bin	360L bin	240L bin	Bin Lifter	Bulky Waste Storage Required	Total Area Required
Lot 1	-	2	-	-	1	-	-	1	9m <sup>2</sup>	16.03m <sup>2</sup>
Lot 2	2	-	-	-	1	-	-	1	9m <sup>2</sup>	17.53m <sup>2</sup>
Lot 3	-	-	1	9	-	-	5	5	5 x 9m <sup>2</sup>	66.25m <sup>2</sup>
Lot 4	2	2	-	2	-	-	-	2	2 x 9m <sup>2</sup>	34.26m <sup>2</sup>
Lot 5	2	2	-	2	-	-	-	2	2 x 9m <sup>2</sup>	34.26m <sup>2</sup>
Lot 6	2	-	-	1	-	-	-	1	9m <sup>2</sup>	17.88m <sup>2</sup>
Lot 7	1	1	-	1	-	-	-	1	9m <sup>2</sup>	17.13m <sup>2</sup>
Lot 8	1	3	-	-	2	-	-	2	2 x 9m <sup>2</sup>	32.81m <sup>2</sup>
Lot 9	4	-	-	2	-	-	-	2	2 x 9m <sup>2</sup>	35.76m <sup>2</sup>
Lot 10	-	4	-	-	-	2	-	2	2 x 9m <sup>2</sup>	31.26m <sup>2</sup>
Lot 11	2	-	-	-	1	-	-	1	9m <sup>2</sup>	17.53m <sup>2</sup>
Lot 12	6	8	-	-	3	4	-	6	6 x 9m <sup>2</sup>	105.02m <sup>2</sup>

 Table 10
 Waste Storage Area Requirement

### 2.5 BIN COLOUR AND SUPPLIER

Australian Standard AS4123.7 2006 specifies the following bin colours, however due the private nature of waste collection these are only recommendations and are not mandatory:

- Garbage (general waste) bins shall have red lids with dark green or black body.
- Recycle bins shall have yellow lids with dark green or black body.
- Cardboard bins shall have blue with dark green or black body.

Private collection contractors often supply their own bins for collection.

### 2.6 WASTE COLLECTION METHODOLOGY

Waste will be collected by a private contractor as outlined in Table 11. Refer Section 2.6 for likely bin quantities per warehouse.

Waste Stream	Bin Sizes	Vehicle Type	Collection Frequency	Collection Operator	
	$4.5m^3$ / $3m^3$ / $1.5m^3$	Front-lift			
Garbage	1100L	Rear-Lift	(Up to) 3 x per week	Private Contractor	
	Compactor	Hook-lift			
	4.5m <sup>3</sup> / 3m <sup>3</sup>	Front-lift			
Cardboard	1100L	Rear-Lift	(Up to) 2 x per week	Private Contractor	
	Compactor	Hook-lift			
Commingles	1100L / 660L / 360L / 240L	Rear-Lift	(Up to) 2 x per week	Private Contractor	
Extended streams	Various (refer Section 2.2.2)	Various	As required	Private Contractor	

 Table 11
 Waste Collection Summary

Collections will be undertaken from the respective loading zones of each tenant at ground level, to be accessed via the Berwick Park Road or Wilton Park Road crossovers and internal accessways of the site. Sufficient vehicle access is provided for a standard B-double semi-trailer vehicle to enter and exit the site in a forward direction – this will accommodate all vehicle types as listed.

Bins will be held within the waste stores of each individual loading zones at any given time. Front-lift / hook-lift bin collections will be coordinated such that sufficient clearance is provided throughout the loading zones to enable the lifting maneuvre (minimum 6m height clear to be provided at the point of each front-lift bin lift and 4.5m height clear at the point of each hook-lift bin lift).

All waste collections will be undertaken entirely onsite. Bins will not be presented to the kerb or stored outside the title boundary at any time.

Waste collections between tenancies should be collected concurrently by a single collection contractor where possible, as to minimise collection vehicle movements throughout the site.

# **3 CONSTRUCTION AND DEMOLITION WASTE**

A detailed Construction and Demolition (C&D) waste strategy should be incorporated into the site's Construction Management Plan (CMP), to be prepared as a separate document by the principal construction contractor prior to the commencement of construction works.

The CMP should include detail of:

- The type and estimated volume of waste to be generated during demolition and construction and respective recycling, reuse and disposal methods;
- Location and space allocated for the storage of demolition and construction waste or materials; and
- Waste collection point(s) for the site.

Maximised diversion of C&D waste from landfill should be targeted for this development, to be achieved through appropriate material separation practices. The specific re-use, removal or treatment of C&D waste will be undertaken by a third party as appropriate.

The following is provided as a high-level summary of C&D requirements for ease of reference. Information as shown is <u>not</u> intended to form the basis of any construction and/or demolition works, and will be superseded in full by the C&D strategy as nominated in the CMP.

Note that no demolition works are proposed under the subject application, with the subject land parcel mostly unoccupied by any structure. Minimal demolition waste will be generated by the subject development, and as such the following assessment addresses the construction phase <u>only</u>.

### 3.1 CONSTRUCTION PHASE

Construction works will generally generate waste through the erection and finishing of the development (i.e. construction waste). The CMP should include a detailed C&D waste strategy in line with the head contractor's program and trades scheduling.

Most waste products generated throughout construction works can be readily recycled or reused, and include steel framing, damaged glazing, cladding and roof sheeting, plasterboard linings, timber features and framing, metals, concrete and rubble. Metal and plastic piping and conduits, cabling and floor finishes such as carpet and tiling should also be recovered.

Accurate materials estimation and ordering, offsite prefabrication of framing modules and fitout components, and monitoring and review of specifications and onsite construction and fitout operations will minimise the potential volume of construction waste to be generated in the first instance.

Wherever possible, construction waste will be stored and sorted on-site, including on-site collection zones for each waste stream. Any waste skips be stored in public places will be done so in accordance with Council policy.

Subcontractors and other site personnel should be educated regarding requirements for recovery of waste. This will assist in maximising recovery of resources from C&D waste on-site, and minimise the cost and environmental impacts of waste being disposed to landfill.

#### 3.1.1 WASTE SYSTEMS

A detailed waste strategy should form part of the CMP to be provided by the principal construction contractor prior to commencement. As per standard industry practice, a minimum 80% diversion rate from landfill for waste generated from construction activities should be targeted across the subject site.

A high level overview of reuse, recycle and disposal opportunities for each demolition waste stream is provided in Table 12 below. Information as shown is provided for discussion only and should not be used as the basis of any construction works or waste reporting.

Waste Stream	Typical Receptacle	Note
Excavation Material	Skips	Re-Use (Onsite / Offsite): Re-apply as fill.
Brick	Skips	<b>Re-Use (Onsite)</b> : Crush on-site for application as fill / gravel. <b>Recycle</b> : Transported to a C&D waste recycler for recovery.
Concrete	Skips	<b>Re-Use (Onsite)</b> : Crush on-site for application as fill / gravel. <b>Recycle</b> : Transported to a C&D waste recycler for recovery.
Timber (untreated)	Skips	<ul><li>Re-Use (Onsite): Timber chipped for application onsite as fill / landscaping.</li><li>Recycle: Transported to a C&amp;D waste recycler for recovery.</li></ul>
Plasterboard	Skips	Recycle: Transported to a C&D waste recycler for recovery.
Metals	Skips	Recycle: Transported to a C&D waste recycler for recovery.
Other Waste	Skips	<ul><li>Recycle: Transported to a C&amp;D waste recycler for the recovery of any additional, minor streams (i.e. glass, plastics, tiles, etc.).</li><li>Dispose: Residual volumes sent to landfill.</li></ul>
Domestic General Waste	Bins	Dispose: Volumes sent to landfill.
Domestic Recyclables Cardboard	Bins	<b>Recycle:</b> Volumes transported to a recycling / cardboard plant for recycling into recovered products.

 Table 12 Construction Waste – Aspirational Stream Separation

#### 3.1.2 WASTE GENERATION

A high-level estimate of waste volumes generated throughout proposed construction works is provided in Table 13 below.

Estimated volumes of construction and demolition waste materials have been calculated based on information provided in the following reference documents:

- Shoalhaven City Council Waste Minimisation and Management Guidelines (2019)
- Camden Council Waste Management Guidelines (2019)
- WALGA Construction Waste Management Plan Guidelines (2014).
- The Hills Development Control Plan (2012)

Note that as the Wollondilly Development Control Plan (2016) does not contain any reference material to estimate C&D waste volumes it has not been included in the above list. If this document is updated in the future to include detail of C&D waste generation, it may be considered alongside the above list.

It is acknowledged that the estimated C&D waste volumes have been reviewed by our client and may be updated when more accurate estimates are received by the relevant personnel (e.g., head contractor or quantity surveyor). Values as shown are provided as estimates only and should not be used as the basis of any C&D works or waste reporting. Detailed material estimates and strategies for on-site material reuse should be provided as part of the CMP.

#### Table 13 Construction Waste Estimates

Waste	Building			Construction W	onstruction Waste Volumes (t)			
Source	Area	Brick	Concrete	Timber (untreated)	Plasterboard	Metals	Other Waste	
Warehouse	204,835m <sup>2</sup>	338	430	51	92	123	102	
Office	10,400m <sup>2</sup>	88	196	53	89	29	52	
	TOTAL	426	626	104	181	152	154	

#### Table 14 Construction Waste Summary

Waste Stream	Nearby Resource Recovery Facility	% Typically Recovered	Total Estimated Volume (t)	Estimated Diversion from Landfill (t)		
Brick		100%	426	426		
Concrete	Benedict Recycling	100%	626	626		
Timber (untreated)	Unanderra	33%	104	34		
Plasterboard		50%	181	91		
Metals	REMONDIS Australia - Picton	100%	152	152		
Other Waste	NA - landfilled	0%	154	0		
	TOTAL WASTE GENERATED 1,644					
	81%					

Note: Excavated material / sands / soils and domestic garbage / recyclables excluded from construction waste estimates.

Note: Above estimates address the construction of the new warehouse structures only. Any waste generated from additional activities (i.e. carpark paving, landscaping, etc.) is not included in the above.

# 4 ADDITIONAL INFORMATION

### 4.1 STANDARDS & COMPLIANCE

#### 4.1.1 VENTILATION

Ventilation will be provided in accordance with Australian Standard AS1668.

#### 4.1.2 WASHING AND VERMIN PROTECTION

A third party bin washing service can be engaged to undertake this service. Bin washing suppliers must retain all waste water to within their washing apparatus and not impact on the drainage provisions of the site.

#### 4.1.3 NOISE REDUCTION

All waste areas shall meet BCA and AS2107 acoustic requirements as appropriate with operational hours and collection times assigned to minimise acoustic impact on surrounding premises.

### 4.2 SIGNAGE

Waste storage areas and bins will be clearly marked and signed with the standard NSW EPA signage or equivalent (such as shown in Figure 2). Staff / cleaners will be instructed by building management to adhere to these requirements.

Figure 2 NSW EPA Waste Management Signage



### 4.3 SUPPLIER CONTACT INFORMATION

A complimentary listing of contractors and equipment suppliers is provided in Table 15 below for your reference. You are not obligated to procure goods/services from these companies. This is not, nor is it intended to be, a complete list of available suppliers. WSP does not warrant (or make representations for) the goods/services provided by these suppliers.

Service Type	Contractor / Supplier Name	Phone	Website
	SUEZ Environment	13 13 35	www.sita.com.au
Private Waste Collectors	Cleanaway	13 13 39	www.cleanaway.com.au
	Veolia	132 955	www.veolia.com
	Bingo Bins	1300 424 646	www.bingoindustries.com.au
Private Waste Collectors	Transwaste Skips	(02) 9746 8333	www.transwaste.com.au
(C&D Waste)	Brown Brothers Skip Bins	(02) 9999 6466	www.brownbrosbins.com.au
	Cobra Waste Solutions	1300 484 448	www.cobrawaste.com.au
	Wastech Engineering (Compactor, Balers)	(03) 8787 1600	www.wastech.com.au
Environment Compliant	Elephant's Foot (Compactors, Balers)	(02) 9780 3500	www.elephantsfoot.com.au
Equipment Suppliers	Superior Pak (Compactors, Balers)	1800 013 232	www.superiorpak.com.au
	Sulo Australia (Bins)	1300 364 388	www.sulo.com.au
	The Bin Butlers	1300 788 123	www.thebinbutlers.com.au
	Kerbside Clean-A-Bin	(03) 9830 7381	www.kerbsidecleanabin-srp.com.au
Bin Washing Services	Calcorp Services	1800 225 267	www.calcorpservices.com.au
	WBCM Environmental Australia	1300 800 621	www.wbcm-aust.com.au
	TechCollect	1300 229 837	www.techcollect.com.au
E-waste Collection Services	Mobile Muster (Mobile Phones)	1800 249 113	www.mobilemuster.com.au
	ToxFree (Secure E-waste Destruction)	1300 869 373	www.toxfree.com.au
	Benedict Recycling Unanderra	(02) 4274 1322	https://www.benedict.com.au/
	Patons Lane RRC, Orchard Hills	1300 424 646	https://www.patonslane.com.au/
Off-Site C&D Recycling Facilities	Bingo Eastern Creek Recycling Ecology Park (& Landfill)	1300 424 646	https://www.bingoindustries.com.au/
	SUEZ Resource Recovery Centre, Auburn	13 13 35	www.suez.com.au

Table 15 Supplier Contact List

# **APPENDIX A** WASTE ASSESSMENT PER WAREHOUSE



# A1 WASTE GENERATION

#### Table 16 Detailed Breakdown - Waste Generation Assessment

Lot	Waste Source	Garbage (L/week)	Cardboard (L/week)	Commingles (L/week)
1	Warehouse 1	2,784	2,368	416
	SUBTOTAL – LOT 1	2,784	2,368	416
2	Warehouse 2	9,277	7,874	1,403
	SUBTOTAL – LOT 2	9,277	7,874	1,403
	Warehouse 3A	1,015	847	168
	Warehouse 3B	1,282	1,076	205
3	Warehouse 3C	1,069	893	176
	Warehouse 3D	1,068	892	175
	Warehouse 3E	1,067	892	175
	SUBTOTAL – LOT 3	5,501	4,600	899
4	Warehouse 4A	5,080	4,316	763
4	Warehouse 4B	5,131	4,361	770
	SUBTOTAL – LOT 4	10,211	8,677	1,533
_	Warehouse 5A	5,304	4,509	794
5	Warehouse 5B	5,350	4,549	801
	SUBTOTAL – LOT 5	10,654	9,058	1,595
6	Warehouse 6	9,141	7,757	1,384
	SUBTOTAL – LOT 6	9,141	7,757	1,384
7	Warehouse 7	5,609	4,719	889
	SUBTOTAL – LOT 7	5,609	4,719	889
0	Warehouse 8A	2,793	2,376	417
8	Warehouse 8B	3,175	2,705	471
	SUBTOTAL – LOT 8	5,968	5,081	888
0	Warehouse 9A	10,699	9,097	1,602
9	Warehouse 9B	7,832	6,631	1,200
	SUBTOTAL – LOT 9	18,531	15,728	2,802
10	Warehouse 10A	1,990	1,685	305
10	Warehouse 10A	1,825	1,544	282
	SUBTOTAL - LOT 10	3,815	3,229	587
11	Warehouse 11	7,957	6,739	1,218
	SUBTOTAL – LOT 11	7,957	6,739	1,218

Lot	Waste Source	Garbage (L/week)	Cardboard (L/week)	Commingles (L/week)
	Warehouse 12A	4,313	3,657	656
	Warehouse 12B	4,313	3,657	656
12	Warehouse 12C	4,313	3,657	656
12	Warehouse 12D	2,471	2,099	372
	Warehouse 12E	1,855	1,569	286
	Warehouse 12F	1,410	1,187	223
	SUBTOTAL – LOT 12	19,678	16,662	3,015

# A2 BIN QUANTITY, SIZE AND COLLECTION FREQUENCY

Noting that waste volumes of each individual warehouse are to be managed in accordance with each tenant's standard operational plan and standard design fit out preferences for waste, the below is provided as a summary of *possible* operations only. In actual practice waste equipment may differ to that described below.

		Garbage B	in Information		
Lot	Waste Source	No. Bins	Collections Per Week	Weekly Capacity	Weekly Volume
1	Warehouse 1	1 x 3m <sup>3</sup>	1	3,000L	2,784L
	SUBTOTAL – LOT 1	1 x 3m <sup>3</sup>	1	3,000L	2,784L
2	Warehouse 2	1 x 4.5m <sup>3</sup>	2	9,000L	9,277L
	SUBTOTAL – LOT 2	1 x 4.5m <sup>3</sup>	2	9,000L	9,277L
	Warehouse 3A	1 x 1100L	1	1,100L	1,015L
	Warehouse 3B	1 x 1.5m <sup>3</sup>	1	1,500L	1,282L
3	Warehouse 3C	1 x 1100L	1	1,100L	1,069L
	Warehouse 3D	1 x 1100L	1	1,100L	1,068L
	Warehouse 3E	1 x 1100L	1	1,100L	1,067L
	SUBTOTAL – LOT 3	1 x 1.5m <sup>3</sup> + 4 x 1100L	1	5,900L	5,501L
4	Warehouse 4A	1 x 3m <sup>3</sup>	2	6,000L	5,080L
4	Warehouse 4B	1 x 3m <sup>3</sup>	2	6,000L	5,131L
	SUBTOTAL – LOT 4	2 x 3m <sup>3</sup>	2	12,000L	10,211L
~	Warehouse 5A	1 x 3m <sup>3</sup>	2	6,000L	5,304L
5	Warehouse 5B	1 x 3m <sup>3</sup>	2	6,000L	5,350L
	SUBTOTAL – LOT 5	2 x 3m <sup>3</sup>	2	12,000L	10,654L
6	Warehouse 6	1 x 4.5m <sup>3</sup>	2	9,000L	9,141L
	SUBTOTAL – LOT 6	1 x 4.5m <sup>3</sup>	2	9,000L	9,141L
7	Warehouse 7	1 x 3m <sup>3</sup>	2	6,000L	5,609L
	SUBTOTAL – LOT 7	1 x 3m3	2	6,000L	5,609L
0	Warehouse 8A	1 x 3m <sup>3</sup>	1	3,000L	2,793L
8	Warehouse 8B	1 x 4.5m <sup>3</sup>	1	4,500L	3,175L
	SUBTOTAL – LOT 8	$1 \times 3m^3 + 1 \times 4.5m^3$	1	7,500L	5,968L
0	Warehouse 9A	1 x 4.5m <sup>3</sup>	3	13,500L	10,699L
9	Warehouse 9B	1 x 4.5m <sup>3</sup>	2	9,000L	7,832L

Table 17 Detailed Breakdown - Garbage: Bin Information and Capacity

		Garbage B	in Information		
Lot	Waste Source	No. Bins	Collections Per Week	Weekly Capacity	Weekly Volume
	SUBTOTAL – LOT 9	2 x 4.5m3	Up to 3	22,500L	18,531L
10	Warehouse 10A	1 x 3m <sup>3</sup>	1	3,000L	1,990L
10	Warehouse 10B	1 x 3m <sup>3</sup>	1	3,000L	1,825L
	SUBTOTAL – LOT 10	$2 \times 3m^3$	1	6,000L	3,815L
11	Warehouse 11	1 x 4.5m <sup>3</sup>	2	9,000L	7,957L
	SUBTOTAL – LOT 11	1 x 4.5m <sup>3</sup>	2	9,000L	7,957L
	Warehouse 12A	1 x 4.5m <sup>3</sup>	1	4,500L	4,313L
	Warehouse 12B	1 x 4.5m <sup>3</sup>	1	4,500L	4,313L
	Warehouse 12C	1 x 4.5m <sup>3</sup>	1	4,500L	4,313L
12	Warehouse 12D	1 x 3m <sup>3</sup>	1	3,000L	2,471L
	Warehouse 12E	1 x 3m <sup>3</sup>	1	3,000L	1,855L
	Warehouse 12F	1 x 3m <sup>3</sup>	1	3,000L	1,410L
	Warehouse 12G	1 x 3m <sup>3</sup>	1	3,000L	1,003L
	SUBTOTAL – LOT 12	$4 \times 3m^3 + 3 \times 4.5m^3$	1	25,500L	19,678L

#### Table 18 Detailed Breakdown - Cardboard: Bin Information and Capacity

		Cardboard	Bin Information		
Lot	Wosto Sourco No Ring		Collections Per Week	Weekly Capacity	Weekly Volume
1	Warehouse 1	1 x 3m <sup>3</sup>	1	3,000L	2,368L
	SUBTOTAL – LOT 1	1 x 3m <sup>3</sup>	1	3,000L	2,368L
2	Warehouse 2	1 x 4.5m <sup>3</sup>	2	9,000L	7,874L
	SUBTOTAL – LOT 2	1 x 4.5m <sup>3</sup>	2	9,000L	7,874L
	Warehouse 3A	1 x 1100L	1	1,100L	847L
	Warehouse 3B	1 x 1100L	1	1,100L	1,076L
3	Warehouse 3C	1 x 1100L	1	1,100L	893L
	Warehouse 3D	1 x 1100L	1	1,100L	892L
	Warehouse 3E	1 x 1100L	1	1,100L	892L
	SUBTOTAL – LOT 3	5 x 1100L	1	5,500L	4,600L
4	Warehouse 4A	1 x 4.5m <sup>3</sup>	1	4,500L	4,316L
4	Warehouse 4B	1 x 4.5m <sup>3</sup>	1	4,500L	4,361L
	SUBTOTAL – LOT 4	$2 \times 4.5 m^3$	1	9,000L	8,677L
5	Warehouse 5A	1 x 4.5m <sup>3</sup>	1	4,500L	4,509L
5	Warehouse 5B	1 x 4.5m <sup>3</sup>	1	4,500L	4,549L
	SUBTOTAL – LOT 5	$2 \times 4.5 m^3$	1	9,000L	9,058L

		Cardboard	Bin Information		
Lot	Waste Source	No. Bins	Collections Per Week	Weekly Capacity	Weekly Volume
6	Warehouse 6	1 x 4.5m <sup>3</sup>	2	9,000L	7,757L
	SUBTOTAL – LOT 6	1 x 4.5m <sup>3</sup>	2	9,000L	7,757L
7	Warehouse 7	1 x 4.5m <sup>3</sup>	1	4,500L	4,719L
	SUBTOTAL – LOT 7	1 x 4.5m <sup>3</sup>	1	4,500L	4,719L
o	Warehouse 8A	1 x 3m <sup>3</sup>	1	3,000L	2,376L
8	Warehouse 8B	1 x 3m <sup>3</sup>	1	3,000L	2,705L
	SUBTOTAL – LOT 8	$2 \times 3m^3$	1	6,000L	5,081L
0	Warehouse 9A	1 x 4.5m <sup>3</sup>	2	9,000L	9,097L
9	Warehouse 9B	1 x 4.5m <sup>3</sup>	2	9,000L	6,631L
	SUBTOTAL – LOT 9	$2 \times 4.5 \text{m}^3$	2	18,000L	15,728L
10	Warehouse 10A	1 x 3m <sup>3</sup>	1	3,000L	1,685L
10	Warehouse 10A	1 x 3m <sup>3</sup>	1	3,000L	1,544L
	SUBTOTAL – LOT 10	2 x 3m <sup>3</sup>	1	6,000L	3,229L
11	Warehouse 11	1 x 4.5m <sup>3</sup>	2	9,000L	6,739L
	SUBTOTAL – LOT 11	1 x 4.5m <sup>3</sup>	2	9,000L	6,739L
	Warehouse 12A	1 x 4.5m <sup>3</sup>	1	4,500L	3,657L
	Warehouse 12B	1 x 4.5m <sup>3</sup>	1	4,500L	3,657L
	Warehouse 12C	1 x 4.5m <sup>3</sup>	1	4,500L	3,657L
12	Warehouse 12D	1 x 3m <sup>3</sup>	1	3,000L	2,099L
	Warehouse 12E	1 x 3m <sup>3</sup>	1	3,000L	1,569L
	Warehouse 12F	1 x 3m <sup>3</sup>	1	3,000L	1,187L
	Warehouse 12G	1 x 3m <sup>3</sup>	1	3,000L	836L
	SUBTOTAL – LOT 12	$4 \times 3m3 + 3 \times 4.5m^3$	1	25,500L	16,662L

#### Table 19 Detailed Breakdown - Commingles: Bin Information and Capacity

	Commingles Bin Information								
Lot	Waste Source	No. Bins	Collections Per Week	Weekly Capacity	Weekly Volume				
1	Warehouse 1	1 x 660L	1	660L	416L				
	SUBTOTAL – LOT 1	1 x 660L	1	660L	416L				
2	Warehouse 2	1 x 660L	2	1,320L	1,403L				
	SUBTOTAL – LOT 2	1 x 660L	1	1,320L	1,403L				
	Warehouse 3A	1 x 240L	1	240L	168L				
3	Warehouse 3B	1 x 240L	1	240L	205L				
	Warehouse 3C	1 x 240L	1	240L	176L				

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		Commingles	Bin Information		
Lot	Waste Source	No. Bins	Collections Per Week	Weekly Capacity	Weekly Volume
	Warehouse 3D	1 x 240L	1	240L	175L
	Warehouse 3E	1 x 240L	1	240L	175L
	SUBTOTAL – LOT 3	5 x 240L	1	1,200L	899L
4	Warehouse 4A	1 x 1100L	1	1,100L	763L
4	Warehouse 4B	1 x 1100L	1	1,100L	770L
	SUBTOTAL – LOT 4	2 x 1100L	1	2,200L	1,533L
-	Warehouse 5A	1 x 1100L	1	1,100L	794L
5	Warehouse 5B	1 x 1100L	1	1,100L	801L
	SUBTOTAL – LOT 5	2 x 1100L	1	2,200L	1,595L
6	Warehouse 6	1 x 1100L	2	2,200L	1,384L
	SUBTOTAL – LOT 6	1 x 1100L	2	2,200L	1,384L
7	Warehouse 7	1 x 1100L	1	1,100L	889L
	SUBTOTAL – LOT 7	1 x 1100L	1	1,100L	889L
	Warehouse 8A	1 x 660L	1	660L	417L
8	Warehouse 8B	1 x 660L	1	660L	471L
	SUBTOTAL – LOT 8	2 x 660L	1	1,320L	888L
0	Warehouse 9A	1 x 1100L	2	2,200L	1,602L
9	Warehouse 9B	1 x 1100L	2	2,200L	1,200L
	SUBTOTAL – LOT 9	2 x 1100L	2	4,400L	2,802L
10	Warehouse 10A	1 x 360L	1	360L	305L
10	Warehouse 10A	1 x 360L	1	360L	282L
	SUBTOTAL – LOT 10	2 x 360L	1	720L	587L
11	Warehouse 11	1 x 660L	2	1,320L	1,218L
	SUBTOTAL – LOT 11	1 x 660L	2	1,320L	1,218L
	Warehouse 12A	1 x 660L	1	660L	656L
	Warehouse 12B	1 x 660L	1	660L	656L
	Warehouse 12C	1 x 660L	1	660L	656L
12	Warehouse 12D	1 x 360L	1	360L	372L
	Warehouse 12E	1 x 360L	1	360L	286L
	Warehouse 12F	1 x 360L	1	360L	223L
	Warehouse 12G	1 x 360L	1	360L	166L
	SUBTOTAL – LOT 12	4 x 360L + 3 x 660L	1	3,420L	3,015L

# A3 WASTE STORAGE

Noting that waste volumes of each individual warehouse are to be managed in accordance with each tenant's standard operational plan and standard design fit out preferences for waste, the below is provided as a summary of possible equipment fitout only. In actual practice waste equipment may differ to that described below.

				N	o. Bins	Requir	ed				
Lot	Waste Source	4.5m <sup>3</sup> bin	3m³ bin	1.5m <sup>3</sup> bin	1100L bin	660L bin	360L bin	240L bin	Bin Lifter	Bulky Waste Storage Required	Total Area Required
1	Warehouse 1	-	2	-	-	1	-	-	1	9m <sup>2</sup>	16.03m <sup>2</sup>
	SUBTOTAL – LOT 1	-	2	-	-	1	-	-	1	9m <sup>2</sup>	16.03m <sup>2</sup>
2	Warehouse 2	2	-	-	-	1	-	-	1	9m <sup>2</sup>	17.53m <sup>2</sup>
	SUBTOTAL – LOT 2	2	-	-	-	1	-	-	1	9m <sup>2</sup>	17.53m <sup>2</sup>
	Warehouse 3A	-	-	-	2	-	-	1	1	9m <sup>2</sup>	13.18m <sup>2</sup>
	Warehouse 3B	-	-	1	1	-	-	1	1	9m <sup>2</sup>	13.53m <sup>2</sup>
3	Warehouse 3C	-	-	-	2	-	-	1	1	9m <sup>2</sup>	13.18m <sup>2</sup>
	Warehouse 3D	-	-	-	2	-	-	1	1	9m <sup>2</sup>	13.18m <sup>2</sup>
	Warehouse 3E	-	-	-	2	-	-	1	1	9m <sup>2</sup>	13.18m <sup>2</sup>
	SUBTOTAL – LOT 3	-	-	1	9	-	-	5	5	5 x 9m <sup>2</sup>	66.25m <sup>2</sup>
4	Warehouse 4A	1	1	-	1	-	-	-	1	9m <sup>2</sup>	17.13m <sup>2</sup>
4	Warehouse 4B	1	1	-	1	-	-	-	1	9m <sup>2</sup>	17.13m <sup>2</sup>
	SUBTOTAL – LOT 4	2	2	-	2	-	-	-	2	2 x 9m <sup>2</sup>	34.26m <sup>2</sup>
5	Warehouse 5A	1	1	-	1	-	-	-	1	9m <sup>2</sup>	17.13m <sup>2</sup>
5	Warehouse 5B	1	1	-	1	-	-	-	1	9m <sup>2</sup>	17.13m <sup>2</sup>
	SUBTOTAL – LOT 5	2	2	-	2	-	-	-	2	2 x 9m <sup>2</sup>	34.26m <sup>2</sup>
6	Warehouse 6	2	-	-	1	-	-	-	1	9m <sup>2</sup>	17.88m <sup>2</sup>
	SUBTOTAL – LOT 6	2	-	-	1	-	-	-	1	9m <sup>2</sup>	17.88m <sup>2</sup>
7	Warehouse 7	1	1	-	1	-	-	-	1	9m <sup>2</sup>	17.13m <sup>2</sup>
	SUBTOTAL – LOT 7	1	1	-	1	-	-	-	1	9m <sup>2</sup>	17.13m <sup>2</sup>
0	Warehouse 8A	-	2	-	-	1	-	-	1	9m <sup>2</sup>	16.03m <sup>2</sup>
8	Warehouse 8B	1	1	-		1	-	-	1	9m <sup>2</sup>	16.78m <sup>2</sup>
	SUBTOTAL – LOT 8	1	3	-	-	2	-	-	2	2 x 9m <sup>2</sup>	32.81m <sup>2</sup>
0	Warehouse 9A	2	-	-	1	-	-	-	1	9m <sup>2</sup>	17.53m <sup>2</sup>
9	Warehouse 9B	2	-	-	1	-	-	-	1	9m <sup>2</sup>	17.53m <sup>2</sup>
	SUBTOTAL – LOT 9	4	-	-	2	-	-	-	2	2 x 9m <sup>2</sup>	35.76m <sup>2</sup>

Table 20 Detailed Breakdown - Waste Storage Area Requirement

WSP

				N	o. Bins	Requir	ed				
Lot	Waste Source	4.5m <sup>3</sup> bin	3m <sup>3</sup> bin	1.5m <sup>3</sup> bin	1100L bin	660L bin	360L bin	240L bin	Bin Lifter	Bulky Waste Storage Required	Total Area Required
10	Warehouse 10A	-	2	-	-	-	1	-	1	9m <sup>2</sup>	15.63m <sup>2</sup>
10	Warehouse 10A	-	2	-	-	-	1	-	1	9m <sup>2</sup>	15.63m <sup>2</sup>
	SUBTOTAL – LOT 10	-	4	-	-	-	2	-	2	2 x 9m <sup>2</sup>	31.26m <sup>2</sup>
11	Warehouse 11	2	-	-	-	1	-	-	1	9m <sup>2</sup>	17.53m <sup>2</sup>
	SUBTOTAL – LOT 11	2	-	-	-	1	-	-	1	9m <sup>2</sup>	17.53m <sup>2</sup>
	Warehouse 12A	2	-	-	-	1	-	-	1	9m <sup>2</sup>	17.53m <sup>2</sup>
	Warehouse 12B	2	-	-	-	1	-	-	1	9m <sup>2</sup>	17.53m <sup>2</sup>
	Warehouse 12C	2	-	-	-	1	-	-	1	9m <sup>2</sup>	17.53m <sup>2</sup>
12	Warehouse 12D	-	2	-	-	-	1	-	1	9m <sup>2</sup>	15.63m <sup>2</sup>
	Warehouse 12E	-	2	-	-	-	1	-	1	9m <sup>2</sup>	15.63m <sup>2</sup>
	Warehouse 12F	-	2	-	-	-	1	-	1	9m <sup>2</sup>	15.63m <sup>2</sup>
	Warehouse 12G	-	2	-	-	-	1	-	1	9m <sup>2</sup>	15.63m <sup>2</sup>
	SUBTOTAL – LOT 12	6	8	-	-	3	4	-	6	6 x 9m <sup>2</sup>	105.02m <sup>2</sup>

# **APPENDIX B** MASTERPLAN DRAWINGS



# WILTON INDUSTRIAL PARK MASTERPLAN (REV-E)





240

320

400m

160

Scale 1:8000  $( \Gamma )$ 

N

0m

80



PROJECT: WEST WILTON NSW

## TITLE: MASTERPLAN



DATE: DRAWN BY: SCALE: As indicated @ A1 SCALE:

JUNE, 2022 JB





Watson Young Architects P/L Melbourne | Perth | Sydney 03 9516 8555 ACN: 111398700 8 Grattan Street Prahran VIC 3181 | e: info@watsonyoung.com.au | w: watsonyoung.com.au © Watson Young Architects. This drawing is protected by copyright.

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No.	DATE:	REVISION:	BY:	CHK:
P3	19.09.2022	PRELIMINARY ISSUE FOR INFORMATION	JB	MH
P4	29.09.2022	PRELIMINARY ISSUE FOR INFORMATION	JB	MH
P5	17.10.2022	PRELIMINARY ISSUE FOR INFORMATION	JB	MH
P6	24.10.2022	PRELIMINARY ISSUE FOR INFORMATION	JB	MH
P7	18.04.2023	UPDATED LAYOUT & AREA TABLE	DS	MH

ALL AREAS ARE APPROXIMATE AND SUBJECT TO CHANGE

BUILDING	GLA - APPROX
LOT 01 WAREHOUSE 01	5,367 m
OFFICE 01	200 m
	5,567 m
LOT 02	44.750
WAREHOUSE 02 OFFICE 02	14,753 m 800 m
	15,553 m
LOT 03	10,000 11
WAREHOUSE 03A	1,830 m
OFFICE 03A	200 m
WAREHOUSE 03B OFFICE 03B	2,363 m 200 m
WAREHOUSE 03C	200 m 1,937 m
OFFICE 03C	200 m
WAREHOUSE 03D	1,935 m
OFFICE 03D	200 m
WAREHOUSE 03E	1,934 m
OFFICE 03E	200 m 10,999 m
LOT 04	10,999 11
WAREHOUSE 04A	9,759 m
OFFICE 04A	400 m
WAREHOUSE 04B	9,862 m
OFFICE 04B	400 m
LOT 05	20,421 m
WAREHOUSE 05A	10,207 m
OFFICE 05A	400 m
WAREHOUSE 05B	10,299 m
OFFICE 05B	400 m
LOT 06	21,306 m
WAREHOUSE 06	17,481 m
OFFICE 06	800 m
	18,281 m
LOT 07 WAREHOUSE 07	10,417 m
OFFICE 07	800 m
	11,217 m
LOT 08	
WAREHOUSE 08A	5,385 m
	200 m
WAREHOUSE 08B OFFICE 08B	6,150 m 200 m
	11,935 m
LOT 09	
WAREHOUSE 09A OFFICE 09A	20,598 m 800 m
WAREHOUSE 09B	14,863 m
OFFICE 09B	800 m
	37,061 m
LOT 10	
WAREHOUSE 10A OFFICE 10A	3,779 m 200 m
WAREHOUSE 10B	200 m 3,450 m
OFFICE 10B	200 m
	7,629 m
LOT 11	
WAREHOUSE 11 OFFICE 11	15,114 m 800 m
	800 m 15,914 m
LOT 12	10,014 11
WAREHOUSE 12A	8,225 m
OFFICE 12A	400 m
WAREHOUSE 12B	8,225 m
OFFICE 12B WAREHOUSE 12C	400 m 8,225 m
OFFICE 12C	400 m
WAREHOUSE 12D	4,742 m
OFFICE 12D	200 m
OFFICE 12E	200 m
WAREHOUSE 12E	3,510 m
OFFICE12F WAREHOUSE 12F	200 m 2,620 m
OFFICE 12G	2,620 m 200 m
	200 11
WAREHOUSE 12G	1,805 m

