



# Leigh Design

waste management plans for all urban developments

Leigh Design Pty Ltd

ABN 37 139 522 437

PO Box 115

Carnegie VIC 3163

P +61 3 9958 0800

E [info@leighdesign.com.au](mailto:info@leighdesign.com.au)

I [www.leighdesign.com.au](http://www.leighdesign.com.au)

# Waste Management Plan



**Proposed Development: Sports & Wellness Building**  
**517-519 Orrong Road, Armadale**

**Prepared for:**  
**The King David School**

**ADVERTISED  
PLAN**

Document Control

Report Date: 17 December 2021 (supersedes all prior reports)

Prepared By: Carlos Leigh, MIEAust

Leigh Design retains copyright and intellectual property rights on this document. Except for planning purposes associated with the above-referenced site, it may not be copied or used in whole or part by any person or entity for this or any other site without prior written consent from Leigh Design.

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any**

# ADVERTISED PLAN

## TABLE OF CONTENTS

<b>SECTION</b>	<b>PAGE No.</b>
Waste Management Summary.....	2
Glossary.....	2
1 Space and System for Waste Management .....	3
2 Access for Users, Collectors, and Collection Vehicles.....	6
3 Amenity, Local Environment, and Facility Design .....	7
4 Management and Sustainability .....	8
5 Supplementary Information .....	10
6 Contact Information.....	11
7 Limitations.....	11

## WASTE MANAGEMENT SUMMARY

- The Operator, as defined below, shall be responsible for managing the waste system and for developing and implementing adequate safe operating procedures.
- Waste shall be stored within the development.
- Users shall dispose sorted waste into waste receptacles. The Operator shall transfer waste to the collection bins.
- Waste bins shall be collected by Council on Orrong Road. The Operator shall present municipal bins on kerbside in coordination with the collection.

## GLOSSARY

**Operator:** refers to the Facility Management, who shall manage site operations (via cleaners and contractors, if required).

**User:** refers to students and school teachers/staff, who shall utilise the waste system.

**This copied document to be made available  
for the sole purpose of enabling  
its consideration and review as  
part of a planning process under the  
Planning and Environment Act 1987.  
The document must not be used for any  
purpose which may breach any  
copyright**

# ADVERTISED PLAN

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

## **1 SPACE AND SYSTEM FOR WASTE MANAGEMENT**

### **1.1 Development Description and Use**

This development shall consist of a sports and wellness building for the existing senior school. The proposed building includes sport areas, maintenance area, and ancillary areas (the building shall replace the existing outdoor activity areas and maintenance area).

The existing use of the site, the number of students, and the number of staff shall remain unchanged. On this basis, the ongoing waste generation rate is anticipated to remain the same.

Based on the above, the current waste system shall be retained (noting that it is understood to have adequate capacity).

### **1.2 Estimated Garbage and Recycling Generation**

The following table summarises the current waste yield (m<sup>3</sup>/week):

Table 1: Waste Estimate

<b>Waste Source</b>	<b>Garbage</b>	<b>Commingled Recycling</b>
Existing Senior School	3.28	1.29
<b>TOTAL (m<sup>3</sup>/week)</b>	<b>3.28</b>	<b>1.29</b>

Note: Waste figures are based on the volumetric bin capacity existing waste system.

### **1.3 Collection Services**

As per current practice, Council shall continue to collect waste.

### **1.4 Location, Equipment, and System Used for Managing Waste**

The waste management system is summarised as follows:

- Waste receptacles located in amenity/teaching/administration areas.
- Two Bin Areas located at Ground Level (refer to the architectural drawings).
- Collection bins (kept within the above Bin Areas - refer to Table 2).

The various collection waste-streams are summarised as follows:

Garbage: General waste shall be placed in tied plastic bags and stored within bins.

Recycling: All recyclables shall be sorted onsite into the following collection bins: 1) Commingled (for loose paper, cardboard, glass, aluminium, steel, and plastics); and 2) Secured Office Paper (kept within the offices). Also, if glass separation is required in future, the Operator shall provide dedicated glass bins.

Green Waste: Garden organics shall be disposed into designated bins.

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**

Food Organics: It is understood that Council does not currently collect food waste. However, should Council introduce food waste collections in future, the Operator shall coordinate with Council the change of some garbage bins into food waste bins.

Office Waste:

- For the security of information printed on waste paper (intellectual property, sensitive material, and/or personal details), paper bins shall remain within each office (adjacent the photocopier or in the stationery cupboard) until transferred to a secured collection point (or swapped in-situ by a shredding/recycling contractor).
- Office managers shall store spent printer/toner cartridges until collected for recycling by the cartridge supplier.
- Office managers shall encourage the recycling of electronic waste (computers and printers). The computer supplier or a suitable contractor shall be engaged to recycle/reuse outgoing units when supplying new ones.

Other Waste Streams: Hard/electronic/liquid and other wastes (polystyrene, batteries, paint, chemicals and detox items, etc) shall be kept within the Bin Areas. These items shall remain within the subject land until removed by a private collector.

The following table summarises bin quantity/capacity, collection frequency, and area requirements (based on Table 1):

Table 2: Bin Schedule and Collection Frequency

Waste Source	Waste Stream	Bin Qty	Bin Litres	Collections per Week	Net Area m <sup>2</sup>
Senior Campus	Garbage	16	240	1	8.0
	Comm. Recyc.	6	240	1	3.0
	Green Waste	10	240	1	5.0
	Secured Paper*	2	240	2	1.0
	Hard/Other Waste*	-	-	At Call	12.0
<b>Net Waste Storage Area (excludes circulation), m<sup>2</sup>:</b>					<b>29.0</b>

Notes:

- For municipal services, Council shall provide the bins (supply cost applies).
- \* = Secured paper and hard/other wastes shall be collected privately. The associated bins shall be sourced by the Operator.

**1.5 Planning Drawings, Waste Areas, and Management of the Waste System**

The drawings illustrate sufficient space for onsite bin storage, as required by the above schedule.

Notwithstanding the above, the Operator shall stipulate procedures for effective management of the available space.

ADVERTISED  
PLAN

## 1.6 Collection Bin Information

The following bins shall be utilised (see Sect. 4.4 for signage requirements):

Table 3: Bin Details

Capacity (litres)	Height (mm)	Width (across front, mm)	Depth (side on, mm)	Empty Weight (kg)	Average* Gross Weight (kg)
240	1060	585	730	13	45

Notes:

- \* = Average Gross Weight is based on domestic waste studies (which vary subject to locality and waste-type). Expect greater weight for wet or compacted waste.
- Use the above details as a guide only – variations will occur.
- The above is based on Sulo plastic (HDPE) bins.

Table 4: Stonnington Colour Coding

Bin	Garbage	Commingled Recycling	Green Waste
Lid	Green	Blue	Burgundy
Body	Green	Black	Burgundy

Note: For private bins, AS4123.7 bin colours can be adopted. Private bins shall be labelled to identify the waste generator and site address.

# ADVERTISED PLAN

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**

## **2 ACCESS FOR USERS, COLLECTORS, AND COLLECTION VEHICLES**

### **2.1 User Access to Waste Facilities**

Users shall dispose sorted waste into waste receptacles. The Operator shall transfer waste to the collection bins (if required, using a suitable trolley and the lift).

Note: If required, the Operator shall have access to the Bin Areas to rotate the bins, ensuring that empty bins are available along the circulation area so that users are able to reach them.

### **2.2 Collection Arrangements and Access to Waste Facilities**

- Waste bins shall be collected on Orrong Road.
- In coordination with the collection, the Operator shall transfer waste bins from the Bin Areas to the kerbside collection point located at the front crossover. Once collected, the Operator shall promptly move the bins back to the Bin Areas.
- The waste collection shall be carried-out by side/rear-lift vehicles (nom. 10.5m long, 4m operational height, and 24 tonnes gross vehicle mass).

Note: The kerbside bin collection point is illustrated in the architectural drawings.

**ADVERTISED  
PLAN**

**This copied document to be made available  
for the sole purpose of enabling  
its consideration and review as  
part of a planning process under the  
Planning and Environment Act 1987.  
The document must not be used for any  
purpose which may breach any  
copyright**

# ADVERTISED PLAN

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

## **3 AMENITY, LOCAL ENVIRONMENT, AND FACILITY DESIGN**

### **3.1 Noise Minimisation Initiatives**

- Local laws shall be observed for all operations in public and private areas.
- Municipal waste collections shall take place as per Council's timing/schedule.

### **3.2 Litter Reduction and Prevention of Stormwater Pollution**

The Operator shall be responsible for:

- Promoting adequate waste disposal into the bins (to avoid waste-dumping).
- Restricting access to waste areas (whilst affording access to users/staff/contractors).
- Preventing overfilled bins, keeping lids closed.
- Abating any site litter and taking action to prevent dumping and/or unauthorised use of waste areas.
- Reporting to Council any spillage resulting from the collection of municipal bins.

The above will minimise the dispersion of site litter and prevent stormwater pollution (thus avoiding impact to the local amenity and environment).

### **3.3 Ventilation, Washing, and Vermin-Prevention Arrangements**

Waste areas shall feature:

- Ventilation in accordance with Australian Standard AS1668.
- Suitable flooring (also, smooth, slip-resistant, and appropriately drained).
- A graded bin wash area, hosecock, hose, and a suitable floor-waste connected in accordance with relevant authority requirements (alternatively, the Operator shall engage a suitable contractor to wash bins in a mobile bin-wash vehicle). The bin and wash areas may overlap, as stored bins can be moved so that a bin can be washed.

The Operator shall regularly clean waste areas/equipment. Also, access doors and bin-lids shall be kept closed.

### **3.4 Design and Aesthetics of Waste Storage Areas and Equipment**

Waste shall be placed within collection bins and stored in designated onsite areas. Following waste collection activities, bins shall be returned to the storage areas as soon as practicable.

Waste facilities shall be constructed of durable materials and finishes, and maintained to ensure that the aesthetics of the development are not compromised. These facilities and associated passages shall be suitably illuminated (this provides comfort, safety, and security to users, staff, and contractors). Access doors shall feature keyless opening from within.

The design and construction of waste facilities and equipment shall conform to the Building Code of Australia, Australian Standards, and local laws.

# ADVERTISED PLAN

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

## **4 MANAGEMENT AND SUSTAINABILITY**

### **4.1 Waste Sorting, Transfer, and Collection Responsibilities**

Garbage shall be placed within tied plastic bags prior to transferring into collection bins. Cardboard shall be flattened and recycling containers un-capped, drained, and rinsed prior to disposal into the appropriate bin. Bagged recycling is not permitted.

Refer to Section 2 for waste transfer requirements and collection arrangements.

### **4.2 Facility Management Provisions to Maintain & Improve the Waste System**

The Operator shall manage site operations (refer to the glossary in page 2).

It shall be the responsibility of the Operator to maintain all waste areas and components, to the satisfaction of users, staff, and the relevant authority (users shall maintain their internal waste receptacles).

The Operator shall ensure that maintenance and upgrades are carried-out on the facility and components of the waste system. When required, the Operator shall engage an appropriate contractor to conduct services, replacements, or upgrades.

### **4.3 Arrangements for Protecting Waste Equipment from Theft and Vandalism**

It shall be the responsibility of the Operator to protect the equipment from theft and vandalism. This shall include the following initiatives:

- Label the bins according to property address.
- Council bins shall be placed at the collection point no-sooner than the night before the collection (and promptly returned to the storage areas after the collection).

### **4.4 Arrangements for Bins/Equipment Labelling and Ensuring Users and Staff are Aware of How to Use the Waste System Correctly**

- The Operator shall provide appropriate signage for the bins. Signage is available at the following internet address: [www.sustainability.vic.gov.au](http://www.sustainability.vic.gov.au).
- The Operator shall publish/distribute “house rules” and educational material to:
  - Inform users/staff about the waste management system and the use/location of the associated equipment (provide the summary in page 2 of this report).
  - Improve facility management results (lessen equipment damage, reduce littering, and achieve cleanliness).
  - Advise users/staff to sort and recycle waste with care to reduce contamination of recyclables.

### **4.5 Sustainability and Waste Avoidance/Reuse/Reduction Initiatives**

The *Environment Protection Act 1970* includes principles of environment protection and guidance for waste management decision making. Also, the *Sustainability Victoria Act 2005* established Sustainability Victoria as the statutory authority for delivering programs on integrated waste management and resource efficiency.



From a design perspective, the development shall support the acts by providing an adequate waste system with ability to sort waste.

The Operator shall promote the observance of the acts (where relevant and practicable) and encourage users and staff to participate in minimising the impact of waste on the environment. For improved sustainability, the Operator shall carry-out the following:

- Observe the waste hierarchy in the *Environment Protection Act 1970* (in order of preference): a) waste avoidance, b) reuse, c) recycle, d) recovery of energy, e) treatment, f) containment, and g) disposal.
- Peruse the Sustainability Victoria website: [www.sustainability.vic.gov.au](http://www.sustainability.vic.gov.au).
- Participate in Council and in-house programs for waste minimisation.
- Establish waste reduction and recycling targets; including periodic waste audits, keeping records, and monitoring of the quantity of recyclables found in landfill-bound bins (sharing results with users/staff).

#### **4.6 Waste Management Plan Revisions**

For any future appropriate Council request, changes in legal requirements, changes in the development's needs and/or waste patterns (waste composition, volume, or distribution), or to address unforeseen operational issues, the Operator shall be responsible for coordinating the necessary Waste Management Plan revisions, including (if required):

- A waste audit and new waste strategy.
- Revision of the waste system (bin size/quantity/streams/collection frequency).
- Re-education of users/staff.
- Revision of the services provided by the waste collector(s).
- Any necessary statutory approval(s).

**This copied document to be made available  
for the sole purpose of enabling  
its consideration and review as  
part of a planning process under the  
Planning and Environment Act 1987.  
The document must not be used for any  
purpose which may breach any  
copyright**

**ADVERTISED  
PLAN**

**This copied document to be made available  
for the sole purpose of enabling  
its consideration and review as  
part of a planning process under the  
Planning and Environment Act 1987.  
The document must not be used for any  
purpose which may breach any  
copyright**

## **5 SUPPLEMENTARY INFORMATION**

- The Operator shall ensure that bins are not overfilled or overloaded.
- Waste incineration devices are not permitted, and offsite waste treatment and disposal shall be carried-out in accordance with regulatory requirements.
- For bin traffic areas, either level surfaces (smooth and without steps) or gentle ramps are recommended, including a roll-over kerb or ramp. Should ramp gradients, bin weight, and/or distance affect the ease/safety of bin transfers, the Operator shall consider the use of a suitable tug.
- The Operator and waste collector shall observe all relevant OH&S legislation, regulations, and guidelines. The relevant entity shall define their tasks and:
  - Comply with Worksafe Victoria’s Occupational Health and Safety Guidelines for the Collection, Transport and Unloading of Non-hazardous Waste and Recyclable Materials (June 2003).
  - Assess the Manual Handling Risk and prepare a Manual Handling Control Plan for waste and bin transfers (as per regulatory requirements and Victorian COP for Manual Handling).
  - Obtain and provide to staff/contractors equipment manuals, training, health and safety procedures, risk assessments, and adequate personal protective equipment (PPE) to control/minimise risks/hazards associated with all waste management activities. As a starting point, these documents and procedures shall address the following:

<b>Task (to be confirmed)</b>	<b>Hazard (TBC)</b>	<b>Control Measures (TBC)</b>
Sorting waste and cleaning the waste system	Bodily puncture. Biological & electrical hazards	Personal protective equipment (PPE). Develop a waste-sorting procedure
Bin manual handling	Sprain, strain, crush	PPE. Maintain bin wheel-hubs. Limit bin weight. Provide mechanical assistance to transfer bins
Bin transfers and emptying into truck	Vehicular strike, run-over	PPE. Develop a Hazard Control Plan for transfers and collections. Maintain visibility. Use a mechanical bin-tipper
Truck access	Vehicular incident, strike, run-over	PPE. Use a trained spotter. Develop a truck-manoeuving and traffic-control procedure

Note: The above shall be confirmed by a qualified OH&S professional who shall also prepare site-specific assessments, procedures, and controls (refer to Section 6).

**ADVERTISED  
PLAN**

**This copied document to be made available  
for the sole purpose of enabling  
its consideration and review as  
part of a planning process under the  
Planning and Environment Act 1987.  
The document must not be used for any  
purpose which may breach any  
copyright**

## **6 CONTACT INFORMATION**

**City of Stonnington** (local Council and trade waste collector), ph 03 8290 1333

**FJP Safety Advisors Pty Ltd** (OH&S consultant), ph 03 9255 3660

**Sabco Commercial** (supplier of cleaner's trolleys), ph 1800 066 522

Note: The above includes a complimentary listing of contractors and equipment suppliers. The stakeholders shall not be obligated to procure goods/services from these companies. Leigh Design does not warrant (or make representations for) the goods/services provided by these suppliers.

## **7 LIMITATIONS**

The purpose of this report is to document a Waste Management Plan, as part of a Planning Permit Application.

This report is based on the following conditions:

- Operational use of the development (excludes demolition/construction stages).
- Drawings and information supplied by the project architect.
- The figures presented in this report are estimates only. The actual amount of waste will depend on the development's occupancy rate and waste generation intensity, the user's disposition toward waste and recycling, and the Operator's approach to waste management. The Operator shall make adjustments, as required, based on actual waste volumes (if the actual waste volume is greater than estimated, then the number of bins and/or the number of collections per week shall be increased, STCA).
- This report shall not be used to determine/forecast operational costs, or to prepare feasibility studies, or to document operational/safety procedures.

**ADVERTISED  
PLAN**