

# Waste Management Plan

Lots 305 and 306 Burswood Point, Burswood

Prepared for Golden Sedayu Pty Ltd

23 February 2024

Project Number: WMP23057

TOWN OF VICTORIA PARK  
Received: 1/03/2024

DOCUMENT CONTROL					
Version	Description	Date	Author	Reviewer	Approver
1.0	First Approved Release	22/09/2023	MA/AB	DP	AB
2.0	Second Approved Release	23/02/2024	MA/AB	DP	DP
Approval for Release					
Name	Position	File Reference			
Dilan Patel	Project Manager – Waste Management Consultant	WMP23057-02_Waste Management Plan_2.0			
Signature					
Copyright of this document or any part of this document remains with Talis Consultants Pty Ltd and cannot be used, transferred or reproduced in any manner or form without prior written consent from Talis Consultants Pty Ltd.					

## Executive Summary

**TOWN OF VICTORIA PARK**  
**Received: 1/03/2024**

Golden Sedayu Pty Ltd is seeking development approval for the proposed residential development located at Lots 305 and 306 Burswood Point, Burswood (the Proposal).

To satisfy the conditions of the development application the Town of Victoria Park (the Town) requires the submission of a Waste Management Plan (WMP) that will identify how waste is to be stored and collected from the Proposal. Talis Consultants has been engaged to prepare this WMP to satisfy the Town's requirements.

A summary of the bin size, numbers, collection frequency and collection method is provided in the below table.

### Proposed Waste Collection Summary

Waste Type	Generation (L/week)	Bin Size (L)	Number of Bins	Collection Frequency	Collection
<b>West Tower &amp; Podium Bin Storage Area</b>					
Refuse (compacted 2:1)	13,920	1,100	Four	Twice each week	Private Contractor
Recycling	4,200	1,100	Two	Twice each week	Private Contractor
<b>East Tower &amp; Podium Bin Storage Area</b>					
Refuse (compacted 2:1)	20,160	1,100	Five	Twice each week	Private Contractor
Recycling	7,860	1,100	Four	Twice each week	Private Contractor

A private contractor will service the Proposal onsite from the respective Bin Storage Area/Loading Area. The private contractor's waste collection vehicle will enter and exit the Proposal in forward gear via the Road Reserve.

A strata manager/caretaker will oversee the relevant aspects of waste management at the Proposal.

## Table of Contents

TOWN OF VICTORIA PARK  
Received: 1/03/2024

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Objectives and Scope .....	1
<b>2</b>	<b>Waste Generation .....</b>	<b>2</b>
2.1	Proposed Tenancies .....	2
2.2	Waste Generation Rates .....	2
2.3	Waste Generation Volumes .....	2
2.3.1	West Tower & Podium Waste Generation.....	2
2.3.2	East Tower & Podium Waste Generation .....	3
<b>3</b>	<b>Internal Transfer of Waste .....</b>	<b>4</b>
3.1	Internal Bins .....	4
3.1.1	Waste Chute System .....	4
3.2	Provision for Food Organics Garden Organics (FOGO) .....	5
3.3	Communal Area Waste .....	5
<b>4</b>	<b>Waste Storage .....</b>	<b>6</b>
4.1	Bin Sizes.....	6
4.2	Bin Storage Area Size .....	6
4.2.1	West Tower & Podium Bin Storage Area Size .....	6
4.2.2	East Tower & Podium Bin Storage Area Size.....	7
4.3	Bin Storage Area Design.....	8
<b>5</b>	<b>Waste Collection .....</b>	<b>9</b>
5.1	Residential Bulk Waste .....	9
<b>6</b>	<b>Waste Management .....</b>	<b>10</b>
<b>7</b>	<b>Conclusion.....</b>	<b>11</b>

## Tables

Table 2-1: Waste Generation Rates .....	2
Table 2-2: Estimated Waste Generation – West Tower & Podium .....	3
Table 2-3: Estimated Waste Generation – East Tower & Podium .....	3
Table 4-1: Typical Bin Dimensions .....	6
Table 4-2: Bin Requirements for West Tower & Podium Bin Storage Area.....	6
Table 4-3: Bin Requirements for East Tower & Podium Bin Storage Area .....	7

TOWN OF VICTORIA PARK  
Received: 1/03/2024

## Diagrams

Diagram 1: Example of a Typical Waste Chute Room

Diagram 2: West Tower & Podium Bin Storage Area

Diagram 3: East Tower & Podium Bin Storage Area

## Figures

Figure 1: Locality Plan

## 1 Introduction

Golden Sedayu Pty Ltd is seeking development approval for the proposed residential development located at Lots 305 and 306 Burswood Point, Burswood (the Proposal).

To satisfy the conditions of the development application the Town of Victoria Park (Town) requires the submission of a Waste Management Plan (WMP) that will identify how waste is to be stored and collected from the Proposal. Talis Consultants has been engaged to prepare this WMP to satisfy the Town's requirements.

The Proposal surrounding and locality is shown in Figure 1.

### 1.1 Objectives and Scope

The objective of this WMP is to outline the equipment and procedures that will be adopted to manage waste (refuse and recyclables) at the Proposal. Specifically, the WMP demonstrates that the Proposal is designed to:

- Adequately cater for the anticipated volume of waste to be generated;
- Provide adequately sized Bin Storage Areas, including appropriate bins; and
- Allow for efficient collection of bins by appropriate waste collection vehicles.

To achieve the objective, the scope of the WMP comprises:

- Section 2: Waste Generation;
- Section 3: Internal Transfer of Waste;
- Section 4: Waste Storage;
- Section 5: Waste Collection;
- Section 6: Waste Management; and
- Section 7: Conclusion.

## 2 Waste Generation

TOWN OF VICTORIA PARK  
Received: 1/03/2024

The following section shows the waste generation rates used and the estimated waste volumes to be generated at the Proposal.

### 2.1 Proposed Tenancies

The anticipated volume of refuse and recyclables is based on the number of apartments for each Tower & Podium as follows:

#### West Tower & Podium:

- One Bedroom Apartments – 23;
- Two Bedroom Apartments – 58; and
- Three Bedroom Apartments – 12.

#### East Tower & Podium:

- One Bedroom Apartments – 8;
- Two Bedroom Apartments – 52; and
- Three+ Bedroom Apartments – 47.

### 2.2 Waste Generation Rates

In order to achieve an accurate projection of waste volumes for the Proposal, consideration was given to the Western Australia Local Government Association's (WALGA) *Multi Dwelling Development Waste Management Plan Guidelines* (2014).

Table 2-1 shows the waste generation rates which have been applied to the Proposal.

**Table 2-1: Waste Generation Rates**

Tenancy Use Type	WALGA Guideline Reference	Refuse Generation Rate	Recycling Generation Rate
One Bedroom Apartments	1 Bedroom	80L/week	20L/week
Two Bedroom Apartments	2 Bedroom	160L/week	40L/week
Three+ Bedroom Apartments	3+ Bedroom	240L/week	120L/week

### 2.3 Waste Generation Volumes

Waste generation is estimated by volume in litres (L) as this is generally the influencing factor when considering bin size, numbers and storage space required.

#### 2.3.1 West Tower & Podium Waste Generation

The West Tower & Podium waste generation volumes in litres per week (L/week) adopted for this waste assessment are shown in Table 2-2. It is estimated that West Tower & Podium will generate 14,000L of refuse and 4,220L of recyclables each week.

**Table 2-2: Estimated Waste Generation – West Tower & Podium**

**TOWN OF VICTORIA PARK**  
Received: 1/03/2024

Tenancy Use Type	Number of Apartments	Waste Generation Rate	Waste Generation (L/week)
<b>Refuse</b>			
One Bedroom Apartments	23	80L/week	1,840
Two Bedroom Apartments	58	160L/week	9,280
Three Bedroom Apartments	12	240L/week	2,880
<b>Total</b>			<b>14,000</b>
<b>Recyclables</b>			
One Bedroom Apartments	23	20L/week	460
Two Bedroom Apartments	58	40L/week	2,320
Three Bedroom Apartments	12	120L/week	1,440
<b>Total</b>			<b>4,220</b>

### 2.3.2 East Tower & Podium Waste Generation

East Tower & Podium waste generation volumes in litres per week (L/week) adopted for this waste assessment are shown in Table 2-3. It is estimated that East Tower & Podium will generate 20,240L of refuse and 7,880L of recyclables each week.

**Table 2-3: Estimated Waste Generation – East Tower & Podium**

Tenancy Use Type	Number of Apartments	Waste Generation Rate	Waste Generation (L/week)
<b>Refuse</b>			
One Bedroom Apartments	8	80L/week	640
Two Bedroom Apartments	52	160L/week	8,320
Three+ Bedroom Apartments	47	240L/week	11,280
<b>Total</b>			<b>20,240</b>
<b>Recyclables</b>			
One Bedroom Apartments	8	20L/week	160
Two Bedroom Apartments	52	40L/week	2,080
Three+ Bedroom Apartments	47	140L/week	5,640
<b>Total</b>			<b>7,880</b>



### 3 Internal Transfer of Waste

TOWN OF VICTORIA PARK  
Received: 1/03/2024

To promote positive recycling behaviour and maximise diversion from landfill, internal bins will be available throughout the Proposal for the source separation of refuse and recycling.

All bins will be colour coded and labelled in accordance with Australian Standards (AS 4123.7) to assist residents to dispose of their separate waste materials in the correct bins.

#### 3.1 Internal Bins

The apartments will have room to accommodate two under counter/kitchen bins for the separate disposal of refuse and recyclables. The resident will then take the contents of these internal bins to the waste chute system, as described below.

Residents on the Ground Floor will transfer their waste directly to the respective Bin Storage Area for disposal into the appropriate bins.

Refuse will be compacted to maximum compaction of 2 to 1 as higher compaction rates may result in heavier bins, causing Occupational Health and Safety (OH&S) problems and/or mechanical damage.

##### 3.1.1 Waste Chute System

To assist with efficient disposal of waste to the Bin Storage Areas, a dual chute waste system will be utilised. The dual chute utilises separate chutes for refuse and recycling waste.

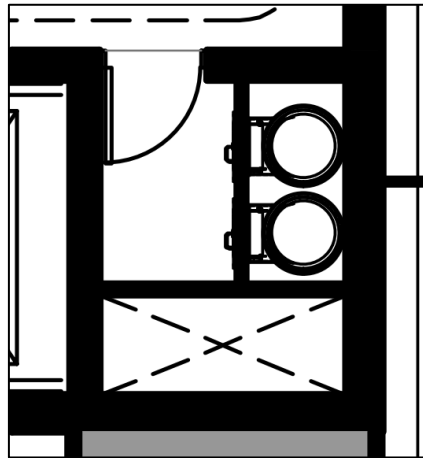
The waste chutes will be located in close proximity to the elevators on each level, refer Diagram 1, have self-closing doors with and bottom hinge and fire rated to AS1530.4-2005. Chutes are typically 610mm in diameter and are ventilated with an extraction fan at the top to reduce odour and insulated for noise reduction. The chutes will be routinely cleaned via chute flushing operations. Please note, the exact design of the systems to be utilised at the Proposal will be determined at a later date, following discussions with waste chute providers as the designs are finalised.

The Proposal is intending to utilise a linear track system at the terminus of each of the waste chute systems to improve the efficiency of the strata manager/caretaker manoeuvring the bins within each of the Bin Storage Areas. Each linear track system will be capable of accommodating two 1,100L bins which can be automatically or manually rotated to ensure the capture of waste material exiting the chute system. It can also be designed to send the strata manager/caretaker a digital alert of the bins capacity to ensure the swapping of empty and full bins is done in a timely manner.

The strata manager/caretaker will provide training materials for all new residents on how to use the waste system (typically within a new resident's handbook). The strata manager/caretaker will advise residents of any changes to the waste system. In addition, signage will be included in the waste chute rooms to remind residents how to correctly dispose of their waste materials in the chute, and to provide relevant contact details for waste management at the Proposal.

Diagram 1: Example of a Typical Waste Chute Room

TOWN OF VICTORIA PARK  
Received: 1/03/2024



### 3.2 Provision for Food Organics Garden Organics (FOGO)

In the near future is expected that the Town will be introducing bins for the separate collection of food organics and garden organics (FOGO) within multi-unit residential properties in line with the state government's Waste Avoidance and Resource Recovery (WARR) Strategy 2030. As such, the development has provided sufficient space to accommodate an additional eight 240L FOGO bins in the West Tower & Podium Bin Storage Area, and an additional nine 240L FOGO bins in the East Tower & Podium Bin Storage Area, should the development be required to separate food waste for collection in the future.

Kitchen caddies would be used in each apartment to collect FOGO, which will then be taken by residents to the respective Bin Storage Area located on the Ground Floor for depositing into communal 240L lime green lidded FOGO bins. Alternatively, smaller FOGO bins could be located within the waste chute room on each residential level for residents to deposit their organic waste into. These bins would be transferred by the strata manager/caretaker to the respective Bin Storage Area on collection days and returned following collection. This will also allow the strata manager/caretaker to monitor the waste system and help track any sources of contamination.

It is anticipated FOGO would be collected a minimum of two-three times each week due to the malodorous nature of this type of waste.

### 3.3 Communal Area Waste

Waste generated in communal areas and residential amenity areas located on Level 02 and Level 03, such as the library, meeting room, pool deck, and communal facilities, will be collected in appropriately sized and labelled refuse and recycling bins. Bins utilised for recycling will be appropriately labelled to distinguish them from refuse bins. The strata manager/caretaker will take the waste from these bins to a Bin Storage Area for disposal in the appropriate bins. The strata manager/caretaker will clean these bins, as required.

## 4 Waste Storage

TOWN OF VICTORIA PARK  
Received: 1/03/2024

Waste materials generated within the Proposal will be collected in the bins located in the Bin Storage Areas, as shown in Diagram 2 and Diagram 3, and discussed in the following sub-sections.

Note: the waste generation volumes are best practice estimates and the number of bins to be utilised represents the maximum requirements once the Proposal is fully operational. Bin requirements may be impacted as the development becomes operational and the nature of the residents and waste management requirements are known.

### 4.1 Bin Sizes

Table 4-1 gives the typical dimensions of standard bins sizes that may be utilised at the Proposal. It should be noted that these bin dimensions are approximate and can vary slightly between suppliers.

**Table 4-1: Typical Bin Dimensions**

Dimensions (m)	Bin Sizes		
	240L	660L	1,100L
Depth	0.730	0.780	1.070
Width	0.585	1.260	1.240
Height	1.060	1.200	1.330

Reference: SULO Bin Specification Data Sheets

### 4.2 Bin Storage Area Size

#### 4.2.1 West Tower & Podium Bin Storage Area Size

To ensure sufficient area is available for storage of the West Tower & Podium bins, the amount of bins required for the West Tower & Podium Bin Storage Area was modelled utilising the estimated waste generation in Table 2-2, bin sizes in Table 4-1 and based on collection of refuse and recyclables twice each week.

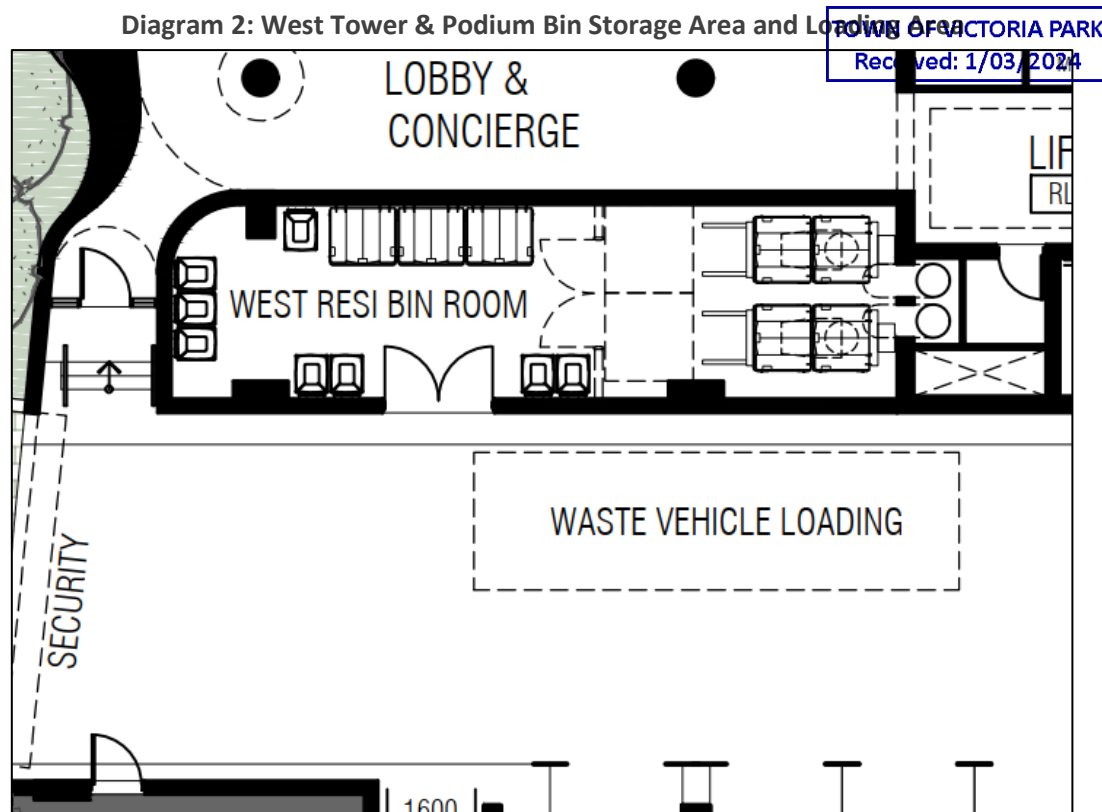
Based on the results shown in Table 4-2 the West Tower & Podium Bin Storage Area has been sized to accommodate:

- Four 1,100L refuse bins; and
- Two 1,100L recycling bins.

**Table 4-2: Bin Requirements for West Tower & Podium Bin Storage Area**

Waste Stream	Waste Generation (L/week)	Number of Bins Required		
		240L	660L	1,100L
Refuse (compacted 2:1)	14,000	15	6	4
Recycling	4,220	9	4	2

The configuration of these bins within the West Tower & Podium Bin Storage Area is shown in Diagram 2. It is worth noting that the number of bins and corresponding placement of bins shown in Diagram 2 represents the maximum requirements assuming two collections each week of refuse and recyclables.



#### 4.2.2 East Tower & Podium Bin Storage Area Size

To ensure sufficient area is available for storage of the East Tower & Podium bins, the amount of bins required for the East Tower & Podium Bin Storage Area was modelled utilising the estimated waste generation in Table 2-3, bin sizes in Table 4-1 and based on collection of refuse and recyclables twice each week.

Based on the results shown in Table 4-3 the East Tower & Podium Bin Storage Area has been sized to accommodate:

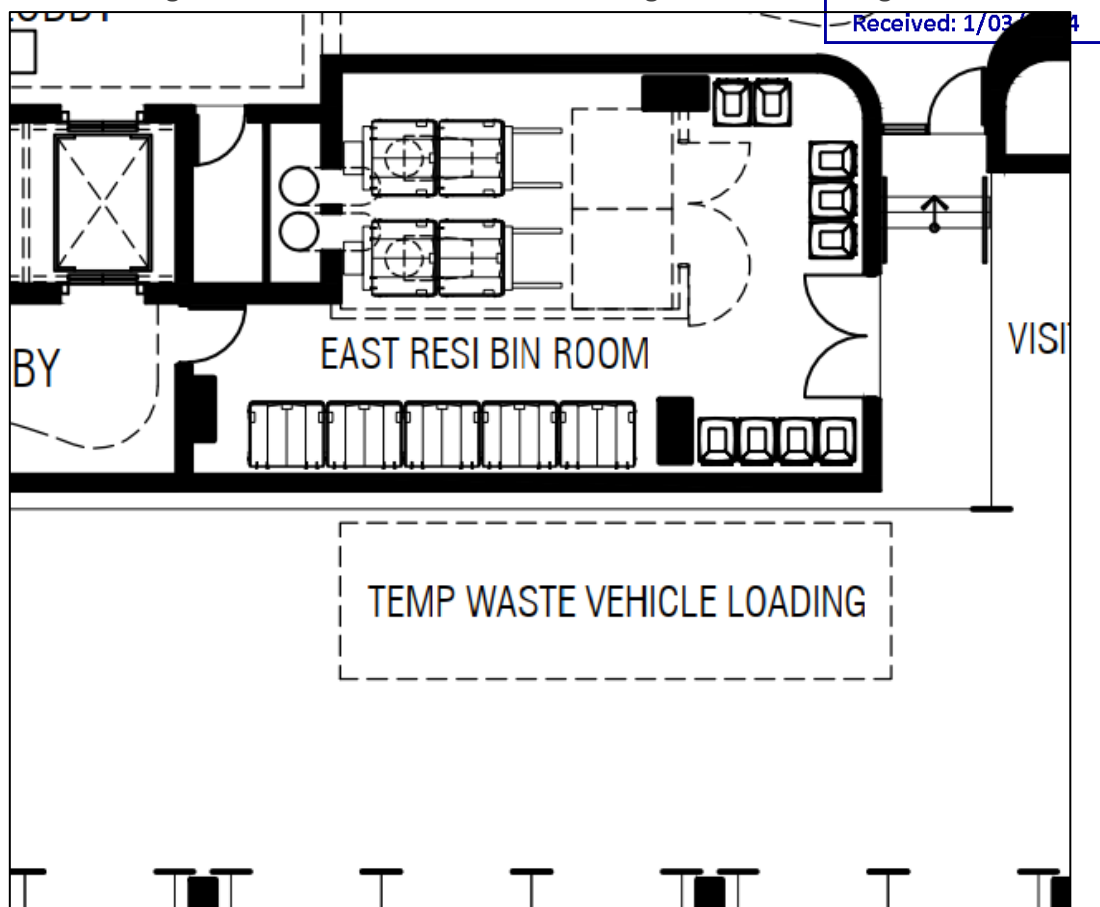
- Five 1,100L refuse bins; and
- Four 1,100L recycling bins.

**Table 4-3: Bin Requirements for East Tower & Podium Bin Storage Area**

Waste Stream	Waste Generation (L/week)	Number of Bins Required		
		240L	660L	1,100L
Refuse (compacted 2:1)	20,240	22	8	5
Recycling	7,880	17	6	4

The configuration of these bins within the East Tower & Podium Bin Storage Area is shown in Diagram 3. It is worth noting that the number of bins and corresponding placement of bins shown in Diagram 3 represents the maximum requirements assuming two collections each week of refuse and recyclables.

Diagram 3: East Tower & Podium Bin Storage Area and Loading Area



### 4.3 Bin Storage Area Design

The design of the Bin Storage Areas will take into consideration:

- Smooth impervious floor sloped to a drain connected to the sewer system;
- Taps for washing of bins and Bin Storage Areas;
- Adequate aisle width for easy manoeuvring of bins;
- No double stacking of bins;
- Doors to the Bin Storage Areas self-closing and vermin proof;
- Doors to the Bin Storage Areas wide enough to fit bins through;
- Ventilated to a suitable standard;
- Appropriate signage;
- Undercover where possible and be designed to not permit stormwater to enter the drain;
- Located behind the building setback line;
- Bins not to be visible from the property boundary or areas trafficable by the public; and
- Bins are reasonably secured from theft and vandalism.

Bin numbers and storage space within the Bin Storage Areas will be monitored by the strata manager/caretaker during the operation of the Proposal to ensure that the number of bins and collection frequency is sufficient.

## 5 Waste Collection

TOWN OF VICTORIA PARK  
Received: 1/03/2024

A private waste collection contractor will service the Proposal and provide the bins discussed in Section 4 of this WMP.

The private contractor will collect refuse and recyclables twice each week utilising a rear loader waste collection vehicle.

The private contractor's rear loader waste collection vehicle will service the bins onsite, directly from the Loading Areas, refer Diagram 2 and Diagram 3. The private contractor's rear loader waste collection vehicle will travel with left hand lane traffic flow on the Road Reserve and turn into the Proposal in forward gear and pull up into the respective Loading Area for servicing.

Private contractor staff will ferry bins to and from the rear loader waste collection vehicle and the respective Bin Storage Area for servicing. The private contractor will be provided with key/PIN code access to the Bin Storage Areas and security access gates to facilitate servicing, if required.

Once servicing is complete the private contractor's rear loader waste collection vehicle will exit in a forward motion, turning left onto the Road Reserve moving with traffic flow.

The above servicing method will preserve the amenity of the area by removing the requirement for bins to be presented to the street on collection days. In addition, servicing of bins onsite will reduce the noise generated in the area during collection.

### 5.1 Residential Bulk Waste

Residential bulk waste materials will be removed from the Proposal as they are generated.

Each apartment has an allocated storage room of at least 3m<sup>2</sup> which could be used for the temporary storage of bulk waste.

Removal of bulk waste will be monitored by strata manager/caretaker, who will liaise with residents on appropriate procedures.

## 6 Waste Management

TOWN OF VICTORIA PARK  
Received: 1/03/2024

A strata manager/caretaker will be engaged to complete the following tasks:

- Monitoring and maintenance of waste equipment and bins within the Bin Storage Areas;
- Cleaning of bins and Bin Storage Areas, when required;
- Exchange full bins with empty bins at the terminus of the waste chute in the Bin Storage Areas;
- Ensure all residents at the Proposal are made aware of this WMP and their responsibilities thereunder;
- Monitor resident behaviour and identify requirements for further education and/or signage;
- Monitor bulk and speciality waste accumulation and assist with its removal, as required;
- Regularly engage with residents to develop opportunities to reduce waste volumes and increase resource recovery; and
- Regularly engage with the private contractors to ensure efficient and effective waste service is maintained.

## 7 Conclusion

TOWN OF VICTORIA PARK  
Received: 1/03/2024

As demonstrated within this WMP, the Proposal provides sufficiently sized Bin Storage Areas for storage of refuse and recyclables, based on the estimated waste generation volumes and suitable configuration of bins. This indicates that adequately designed Bin Storage Areas have been provided, and collection of refuse and recyclables can be completed from the Proposal.

The above is achieved using:

### **West Tower & Podium Bin Storage Area:**

- Four 1,100L refuse bins, collected twice each week; and
- Two 1,100L recycling bins, collected twice each week.

### **East Tower & Podium Bin Storage Area:**

- Five 1,100L refuse bins, collected twice each week; and
- Four 1,100L recycling bins, collected twice each week.

A private contractor will service the Proposal onsite from the respective Bin Storage Area/Loading Area. The private contractor's waste collection vehicle will enter and exit the Proposal in forward gear via the Road Reserve.

A strata manager/caretaker will oversee the relevant aspects of waste management at the Proposal.



## Figures

Figure 1: Locality Plan

TOWN OF VICTORIA PARK  
Received: 1/03/2024

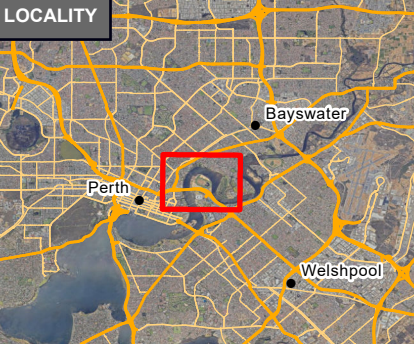




## LEGEND

- Site Boundary
- Cadastre
- Town of Victoria Park
- Received 1/08/2024
- Crown Allotment
- Freehold
- Road
- Easement
- Reserve

© Talis Consultants Pty Ltd ("Talis") Copyright in the drawings, information and data recorded in this document ("the information") is the property of Talis. This document and the information are solely for the use of the authorised recipient and this document may not be used, transferred or reproduced in whole or part for any purpose other than that which it is supplied by Talis without written consent. Talis makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.



## LOCALITY

Lot 305 and Lot 396  
Burswood Point  
Burswood WA 6100  
  
Golden Group

0 50 100 150 m  
Coordinate System: GDA2020 MGA Zone 50  
Scale @ A3: 1:3,500

Prepared: E Jackson	Date: 25/07/2023
Reviewed: A Brouwer	Revision: A
Project: WMP23057	



Figure 01

Data source: Roads, Cadastre - Landgate, 2023; Imagery: Nearmap, 2023.





Assets | Engineering | Environment | Noise | Spatial | Waste

Talis Consultants  
ABN 85 967 691 321

**HEAD OFFICE**  
604 Newcastle Street,  
Leederville  
Western Australia 6007

PO Box 454,  
Leederville  
Western Australia 6903

**NSW OFFICES**  
**Nowra**  
76 Bridge Road, Nowra  
New South Wales, 2541

PO Box 1189, Nowra  
New South Wales, 2541

**Newcastle**  
58 Cleary Street, Hamilton  
New South Wales, 2303

P: 1300 251 070  
E: [enquiries@talisconsultants.com.au](mailto:enquiries@talisconsultants.com.au)