Waste Management Plan

Ocean Reef Shopping Centre

Prepared for Saracen Developments Pty Ltd

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Approval for Release

Name	Position	File Reference
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Executive Summary

Saracen Developments Pty Ltd is seeking development approval for the proposed Ocean Reef Shopping Centre development located on the corner of Marina Boulevard and Venturi Drive (the Proposal).

To satisfy the conditions of the development application the City of Joondalup (the City) 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 City'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
Bin Storage Area 1					
Refuse	1,322	660	Three	Once each week	Private Contractor
Recycling	441	660	One	Once each week	Private Contractor
Paper/Cardboard	1,029	660	Two	Once each week	Private Contractor
Food Organics	566	660	One	Once each week	Private Contractor
Bin Storage Area 2					
Refuse	22,540	1,100	Six	Four times each week	Private Contractor
Recycling	2,868	1,100	One	Three times each week	Private Contractor
Paper/Cardboard	6,692	1,100	Two	Four times each week	Private Contractor
Food Organics	9,660	660	Five	Three times each week	Private Contractor
Childcare Bin Storage Area					
Refuse	1,365	660	One	Three times each week	Private Contractor
Recycling	585	660	One	Once each week	Private Contractor
Paper/Cardboard	1,365	660	One	Three times each week	Private Contractor
Food Organics	585	600	One	Once each week	Private Contractor

Tavern Bin Storage Area					
Refuse	23,498	1,100	Six	Four times each week	Private Contractor
Recycling	1,984	1,100	One	Two times each week	Private Contractor
Paper/Cardboard	4,628	1,100	Two	Three times each week	Private Contractor
Food Organics	10,070	660	Four	Four times each week	Private Contractor
Commercial Bin Storage Area					
Refuse	1,464	660	One	Three times each week	Private Contractor
Recycling	628	660	One	Once each week	Private Contractor
Paper/Cardboard	1,464	660	One	Three times each week	Private Contractor
Food Organics	628	660	One	Once each week	Private Contractor
Bin Storage Area 5					
Refuse	1,235	660	One	Two times each week	Private Contractor
Recycling	529	660	One	Once each week	Private Contractor
Paper/Cardboard	1,235	660	One	Two times each week	Private Contractor
Food Organics	529	660	One	Once each week	Private Contractor
Bin Storage Area 6					
Refuse	788	660	One	Two times each week	Private Contractor
Recycling	211	660	One	Once each week	Private Contractor
Paper/Cardboard	492	660	One	Once each week	Private Contractor
Food Organics	338	660	One	Once each week	Private Contractor

A private contractor will service the Proposal onsite, directly from the Bin Storage Areas. The private contractor's waste collection vehicle will enter and exit the Proposal in forward gear via Cringle Street or Marina Boulevard.

Centre management will oversee the relevant aspects of waste management at the Proposal.

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Figure 1: Locality Plan

1 Introduction

Saracen Developments Pty Ltd is seeking development approval for the proposed Ocean Reef Shopping Centre development located on the corner of Marina Boulevard and Venturi Drive (the Proposal).

To satisfy the conditions of the development application the City of Joondalup (the City) 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 City's requirements.

The Proposal is bordered by Cringle Street to the north, retirement living to the east, Marina Boulevard to the south and Venturi Drive to the west, as 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, recyclables, paper/cardboard and food organics) 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: Waste Storage;
- Section 4: Waste Collection;
- Section 5: Waste Management; and
- Section 6: Conclusion.

2 Waste Generation

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, recyclables, paper/cardboard and food organics is based on the floor area (m^2) of the commercial tenancies at the Proposal. The Proposal consists of the following:

Bin Storage Area 1:

- Retail 01/02 – 165.43m^2;
- Retail 01/02 – 135.22m^2;
- Retail 03 – 61.03m^2;
- Retail 04 – 60.88m^2;
- Retail 05 – 53.82m^2; and
- Retail 06 – 63.21m^2.

Bin Storage Area 2:

- Liquor – 165.82m^2;
- Gym – 1060.71m^2;
- Retail 10 (Pharmacy) – 156.83m^2;
- Retail 07 – 64.23m^2;
- Retail 07A – 58.69m^2;
- Retail 08 – 59.02m^2;
- Retail 09 – 68.25m^2;
- Retail 11 – 124.38m^2;
- Retail 12 – 140.36m^2;
- Retail 13 – 115.32m^2;
- Retail 14 – 94.93m^2;
- Retail 15 – 66.34m^2;
- Retail 17 – 85.46m^2;
- Retail 18 – 116.79m^2;
- Retail 19 – 113.56m^2; and
- Retail 20 – 113.16m^2.

Childcare Bin Storage Area:

- Childcare – 557.26m^2.

Tavern Bin Storage Area:

- Tavern – 726.57m^2.

Commercial Bin Storage Area:

- Commercial T1 – 242.89m^2;
- Commercial T2 – 85.32m^2;
- Commercial T3 – 228.84m^2; and
- Medical – 283.78m^2.

Bin Storage Area 5:

- Fast Food – 168m^2.

Bin Storage Area 6:

- Fuel + Drive Thru – 210m^2.

Note, the Supermarket has their own back of house and manages waste through their own internal processes governed by national waste collections contracts, and therefore has not been included as part of this report.

2.2 Waste Generation Rates

In order to achieve an accurate projection of waste volumes for the Proposal, consideration was given to the City of Melbourne's *Guidelines for Waste Management Plans* (2021) and the Western Australian Local Government Association's (WALGA) *Commercial and Industrial Waste Management Plan Guidelines* (2014).

It should also be noted that a conservative approach has been taken with regards to waste generation across the Proposal by overestimating the potential waste volumes for the commercial tenancies. This includes assuming seven days of operation for all tenancies, and assuming a restaurant waste generation rate for 50% of the Retail 07 - 20 tenancies as the final use for food and beverage tenancies are still unknown.

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

Table 2-1: Waste Generation Rates

Tenancy Use Type	Guideline Reference	Refuse Generation Rate	Recycling Generation Rate
Retail 01/02	WALGA – Retail Shop (non-food) > 100m^2	50L/100m^2/day	50L/100m^2/day
Retail 03 – 06	WALGA – Retail Shop (non-food) < 100m^2	50L/100m^2/day	25L/100m^2/day
Liquor	WALGA – Retail Shop (non-food) > 100m^2	50L/100m^2/day	50L/100m^2/day
Gym	WALGA – Offices	10L/100m^2/day	10L/100m^2/day
Retail 10 (Pharmacy)	WALGA – Retail Shop (non-food) > 100m^2	50L/100m^2/day	50L/100m^2/day
Retail 07 – 20	WALGA – Retail Shop (non-food) > 100m^2	50L/100m^2/day	50L/100m^2/day
Retail 07 – 20 (assume 50% F&B)	WALGA – Restaurants	660L/100m^2/day	130L/100m^2/day
Childcare	Melbourne – Childcare	350L/100m^2/week	350L/100m^2/week
Tavern	WALGA – Restaurants	660L/100m^2/day	130L/100m^2/day
Commercial T1 – T3	WALGA – Retail Shop (non-food) > 100m^2	50L/100m^2/day	50L/100m^2/day
Medical	WALGA – Offices	10L/100m^2/day	10L/100m^2/day
Fast Food	Melbourne – Takeaway/Café	150L/100m^2/day	150L/100m^2/day
Fuel + Drive Thru	Melbourne – Delicatessen/Convenience Store	80L/100m^2/day	50L/100m^2/day

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.

Waste generation volumes in litres per week (L/week) adopted for this waste assessment is shown Table 2-2.

Table 2-2: Estimated Waste Generation – Refuse

Tenancy Type	Area (m^2)	Waste Generation Rate	Waste Generation (L/week)
Bin Storage Area 1			
Retail 01/02	165.43	50L/100m^2/day	579
Retail 01/02	135.22	50L/100m^2/day	473
Retail 03	61.03	50L/100m^2/day	214
Retail 04	60.88	50L/100m^2/day	213
Retail 05	53.82	50L/100m^2/day	188
Retail 06	63.21	50L/100m^2/day	221
		Total	**1,888**
Bin Storage Area 2			
Liquor	165.82	50L/100m^2/day	580
Gym	1060.71	10L/100m^2/day	742
Retail 10 (Pharmacy)	156.83	50L/100m^2/day	549
Retail 07 – 20	610.245	50L/100m^2/day	2,136
Assume 50% Food & Beverage	610.245	660L/100m^2/day	28,193
		Total	**32,200**
Childcare Bin Storage Area			
Childcare	557.26	350L/100m^2/week	1,950
		Total	**1,950**
Tavern Bin Storage Area			
Family Tavern	726.57	660L/100m^2/day	33,568
		Total	**33,568**
Commercial Bin Storage Area			
Commercial T1 – T3	557.05	50L/100m^2/day	1,950
Medical	283.78	10L/100m^2/day	142
		Total	**2,092**
Bin Storage Area 5			
Fast Food	168	150L/100m^2/day	1,764
		Total	**1,764**
Bin Storage Area 6			
Fuel + Drive Thru	201	80L/100m^2/day	1,126
		Total	**1,126**

Table 2-3: Estimated Waste Generation – Recycling

Tenancy Type	Area (m^2)	Waste Generation Rate	Waste Generation (L/week)
Bin Storage Area 1			
Retail 01/02	165.43	50L/100m^2/day	579
Retail 01/02	135.22	50L/100m^2/day	473
Retail 03	61.03	25L/100m^2/day	107
Retail 04	60.88	25L/100m^2/day	107
Retail 05	53.82	25L/100m^2/day	94
Retail 06	63.21	25L/100m^2/day	111
		Total	**1,471**
Bin Storage Area 2			
Liquor	165.82	50L/100m^2/day	580
Gym	1060.71	10L/100m^2/day	742
Retail 10 (Pharmacy)	156.83	50L/100m^2/day	549
Retail 07 – 20	610.245	50L/100m^2/day	2,136
Assume 50% Food & Beverage	610.245	130L/100m^2/day	5,553
		Total	**9,560**
Childcare Bin Storage Area			
Childcare	557.26	350L/100m^2/week	1,950
		Total	**1,950**
Tavern Bin Storage Area			
Family Tavern	726.57	130L/100m^2/day	6,612
		Total	**6,612**
Commercial Bin Storage Area			
Commercial T1 – T3	557.05	50L/100m^2/day	1,950
Medical	283.78	10L/100m^2/day	142
		Total	**2,092**
Bin Storage Area 5			
Fast Food	168	150L/100m^2/day	1,764
		Total	**1,764**
Bin Storage Area 6			
Fuel + Drive Thru	201	50L/100m^2/day	704
		Total	**704**

3 Waste Storage

Waste materials generated within the Proposal will be collected in the bins located in the Bin Storage Areas, as shown in Diagram 1 - Diagram 7 and discussed in the following sub-sections.

Please 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 alter as the development becomes operational and the nature of the tenants and waste management requirements are known.

3.1 Internal Transfer of Waste

To promote positive recycling behaviour and maximise diversion from landfill, internal bins will be available throughout the tenancies at the Proposal for the source separation of refuse, recycling, paper/cardboard and food organics.

These internal bins will be collected by the staff/cleaners and transferred to the Bin Storage Areas for consolidation into the appropriate bins, as required. These bins will be transferred through the Proposal utilising the dedicated service corridors. This internal servicing method may be conducted outside of main operational hours to mitigate disturbances to visitors.

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

3.2 Bin Sizes

Table 3-1 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 3-1: Typical Bin Dimensions

Dimensions	Bin Sizes		
	240L	660L	1,100L
Depth (mm)	730	780	1,070
Width (mm)	585	1,260	1,240
Height (mm)	1,060	1,200	1,300

Reference: SULO Bin Specification Data Sheets

3.3 Bin Storage Area 1

To ensure sufficient area is available for storage of the bins, the amount of bins required for Bin Storage Area 1 was modelled utilising the estimated waste generation in Table 2-2 and Table 2-3, and bin sizes in Table 3-1.

Based on the results shown in Table 3-2, Bin Storage Area 1 has been sized to accommodate:

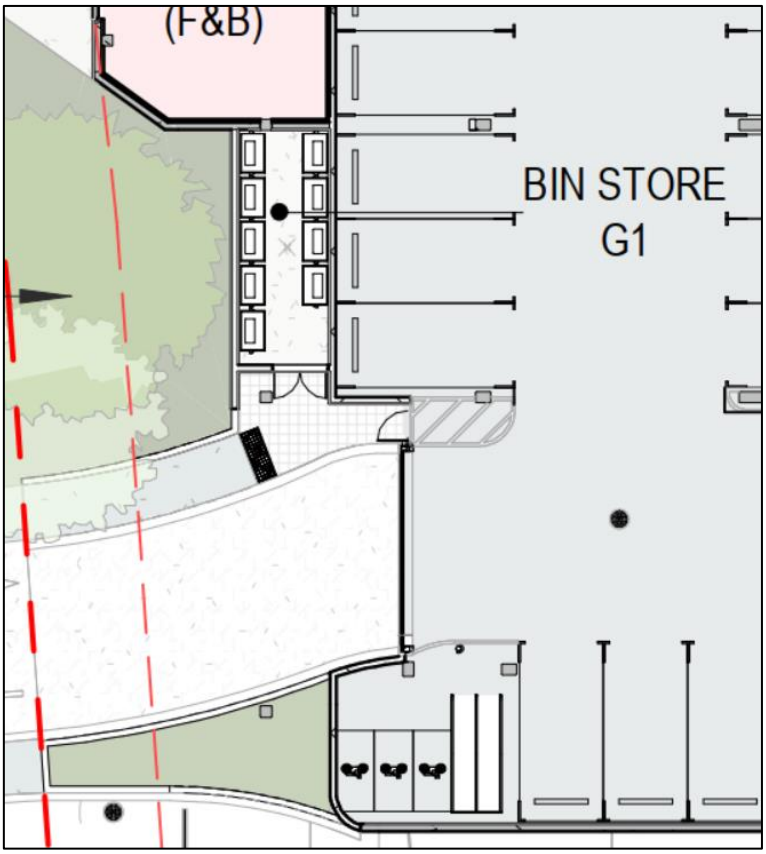
- Three 660L refuse bins;
- One 660L recycling bin;
- Two 660L paper/cardboard bins; and
- One 660L food organics bin.

Table 3-2: Bin Requirements for Bin Storage Area 1

Waste Stream	Waste Generation (L/week)	Bin Size (L)	Quantity	Collection Frequency
Refuse	1,322	660	Three	Once each week
Recycling	441	660	One	Once each week
Paper/Cardboard	1,029	660	Two	Once each week
Food Organics	566	660	One	Once each week

The configuration of these bins within Bin Storage Area 1 is shown in Diagram 1. It is worth noting that the number of bins and corresponding placement of bins shown in Diagram 1 represents the maximum requirements assuming the collection frequencies noted above.

Diagram 1: Bin Storage Area 1



3.4 Bin Storage Area 2

To ensure sufficient area is available for storage of the bins, the amount of bins required for Bin Storage Area 2 was modelled utilising the estimated waste generation in Table 2-2 and Table 2-3, and bin sizes in Table 3-1.

Based on the results shown in Table 3-3, Bin Storage Area 2 has been sized to accommodate:

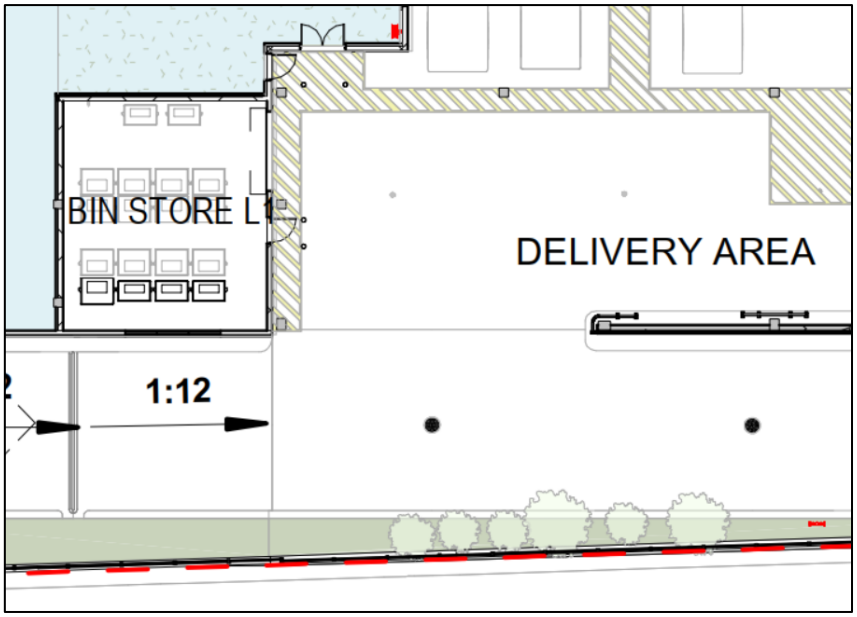
- Six 1,100L refuse bins;
- One 1,100L recycling bin;
- Two 1,100L paper/cardboard bins; and
- Five 660L food organics bins.

Table 3-3: Bin Requirements for Bin Storage Area 2

Waste Stream	Waste Generation (L/week)	Bin Size (L)	Quantity	Collection Frequency
Refuse	22,540	1,100	Six	Four times each week
Recycling	2,868	1,100	One	Three times each week
Paper/Cardboard	6,692	1,100	Two	Four times each week
Food Organics	9,660	660	Five	Three times each week

The configuration of these bins, split into two Bin Storage Areas, 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 the collection frequencies noted above.

Diagram 2: Bin Storage Area 2



3.5 Childcare Bin Storage Area

To ensure sufficient area is available for storage of the bins, the amount of bins required for the Childcare Bin Storage Area was modelled utilising the estimated waste generation in Table 2-2 and Table 2-3, and bin sizes in Table 3-1.

Based on the results shown in Table 3-4, the Childcare Bin Storage Area has been sized to accommodate:

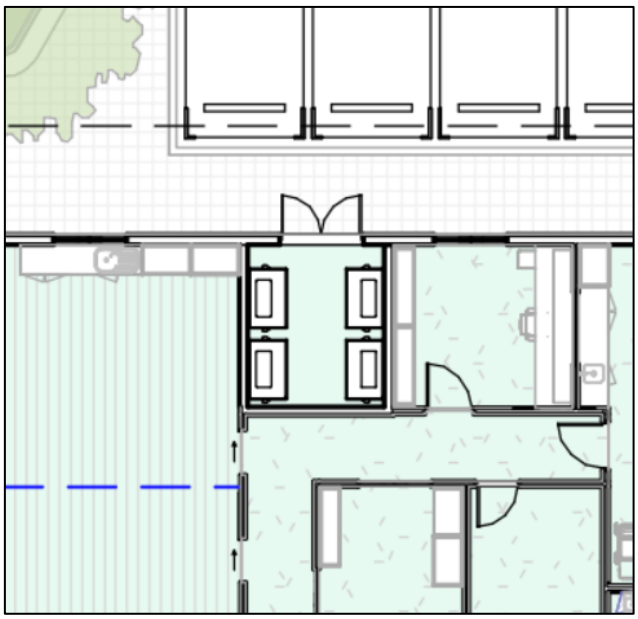
- One 660L refuse bin;
- One 660L recycling bin;
- One 660L paper/cardboard bin; and
- One 660L food organics bin.

Table 3-4: Bin Requirements for Childcare Bin Storage Area

Waste Stream	Waste Generation (L/week)	Bin Size (L)	Quantity	Collection Frequency
Refuse	1,365	660	One	Three times each week
Recycling	585	660	One	Once each week
Paper/Cardboard	1,365	660	One	Three times each week
Food Organics	585	600	One	Once each week

The configuration of these bins within the Childcare 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 the collection frequencies noted above.

Diagram 3: Childcare Bin Storage Area



3.6 Tavern Bin Storage Area

To ensure sufficient area is available for storage of the bins, the amount of bins required for the Tavern Bin Storage Area was modelled utilising the estimated waste generation in Table 2-2 and Table 2-3, and bin sizes in Table 3-1.

Based on the results shown in Table 3-5, the Tavern Bin Storage Area has been sized to accommodate:

- Six 1,100L refuse bins;
- One 1,100L recycling bin;
- Two 1,100L paper/cardboard bins; and
- Four 660L food organics bins.

Table 3-5: Bin Requirements for Tavern Bin Storage Area

Waste Stream	Waste Generation (L/week)	Bin Size (L)	Quantity	Collection Frequency
Refuse	23,498	1,100	Six	Four times each week
Recycling	1,984	1,100	One	Two times each week
Paper/Cardboard	4,628	1,100	Two	Three times each week
Food Organics	10,070	660	Four	Four times each week

The configuration of these bins within the Tavern Bin Storage Area is shown in Diagram 4. It is worth noting that the number of bins and corresponding placement of bins shown in Diagram 4 represents the maximum requirements assuming the collection frequencies noted above.

Diagram 4: Tavern Bin Storage Area

3.7 Commercial Bin Storage Area

To ensure sufficient area is available for storage of the bins, the amount of bins required for the Commercial Bin Storage Area was modelled utilising the estimated waste generation in Table 2-2 and Table 2-3, and bin sizes in Table 3-1.

Based on the results shown in Table 3-6, the Commercial Bin Storage Area has been sized to accommodate:

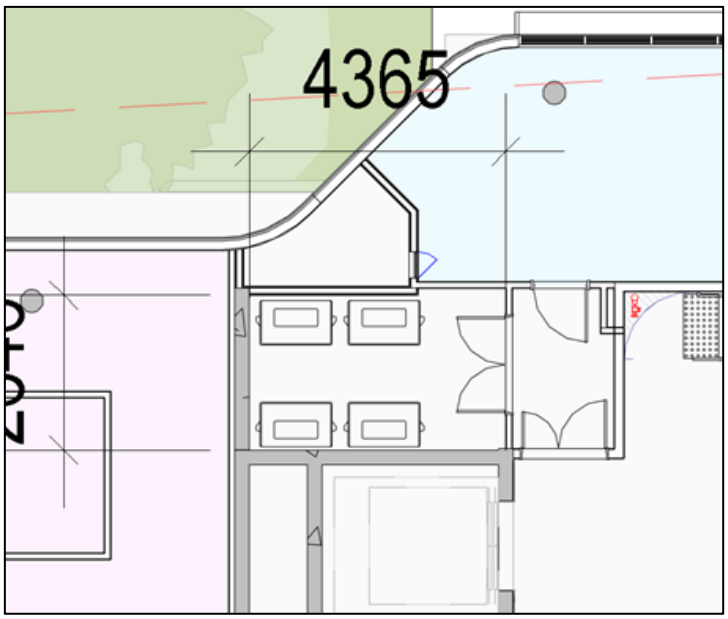
- One 660L refuse bin;
- One 660L recycling bin;
- One 660L paper/cardboard bin; and
- One 660L food organics bin.

Table 3-6: Bin Requirements for Commercial Bin Storage Area

Waste Stream	Waste Generation (L/week)	Bin Size (L)	Quantity	Collection Frequency
Refuse	1,464	660	One	Three times each week
Recycling	628	660	One	Once each week
Paper/Cardboard	1,464	660	One	Three times each week
Food Organics	628	660	One	Once each week

The configuration of these bins within the Commercial Bin Storage Area is shown in Diagram 5. It is worth noting that the number of bins and corresponding placement of bins shown in Diagram 5 represents the maximum requirements assuming the collection frequencies noted above.

Diagram 5: Commercial Bin Storage Area



3.8 Bin Storage Area 5

To ensure sufficient area is available for storage of the bins, the amount of bins required for Bin Storage Area 5 was modelled utilising the estimated waste generation in Table 2-2 and Table 2-3, and bin sizes in Table 3-1.

Based on the results shown in Table 3-7, Bin Storage Area 5 has been sized to accommodate:

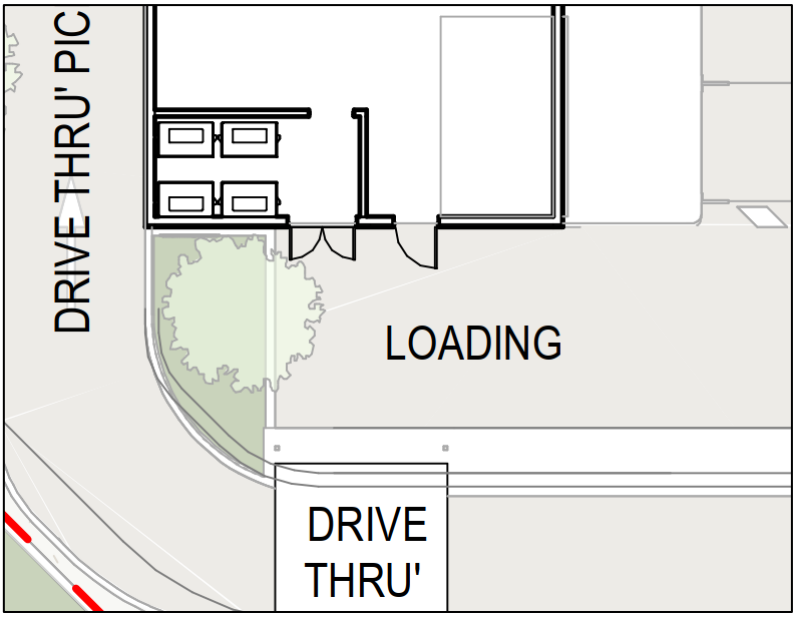
- One 660L refuse bin;
- One 660L recycling bin;
- One 660L paper/cardboard bin; and
- One 660L food organics bin.

Table 3-7: Bin Requirements for Bin Storage Area 5

Waste Stream	Waste Generation (L/week)	Bin Size (L)	Quantity	Collection Frequency
Refuse	1,235	660	One	Two times each week
Recycling	529	660	One	Once each week
Paper/Cardboard	1,235	660	One	Two times each week
Food Organics	529	660	One	Once each week

The configuration of these bins within Bin Storage Area 5 is shown in Diagram 6. It is worth noting that the number of bins and corresponding placement of bins shown in Diagram 6 represents the maximum requirements assuming the collection frequencies noted above.

Diagram 6: Bin Storage Area 5



3.9 Bin Storage Area 6

To ensure sufficient area is available for storage of the bins, the amount of bins required for Bin Storage Area 6 was modelled utilising the estimated waste generation in Table 2-2 and Table 2-3, and bin sizes in Table 3-1.

Based on the results shown in Table 3-8, Bin Storage Area 6 has been sized to accommodate:

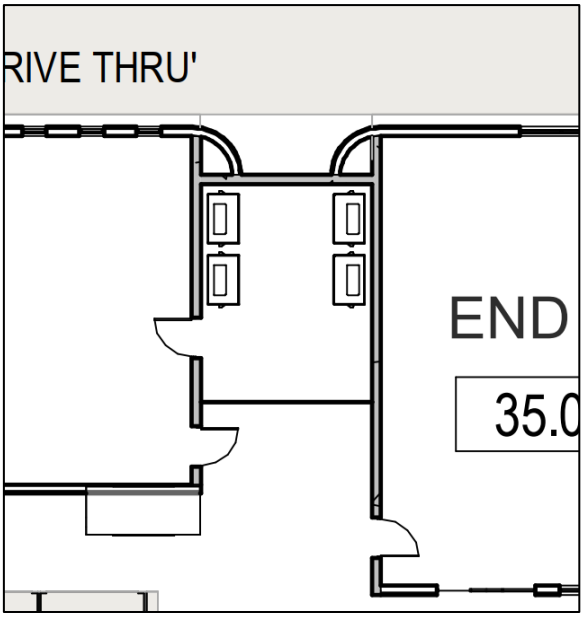
- One 660L refuse bins;
- One 660L recycling bin;
- One 660L paper/cardboard bin; and
- One 660L food organics bin.

Table 3-8: Bin Requirements for Bin Storage Area 6

Waste Stream	Waste Generation (L/week)	Bin Size (L)	Quantity	Collection Frequency
Refuse	788	660	One	Two times each week
Recycling	211	660	One	Once each week
Paper/Cardboard	492	660	One	Once each week
Food Organics	338	660	One	Once each week

The configuration of these bins within Bin Storage Area 6 is shown in Diagram 7. It is worth noting that the number of bins and corresponding placement of bins shown in Diagram 7 represents the maximum requirements assuming the collection frequencies noted above.

Diagram 7: Bin Storage Area 6



3.10 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 Area;
- Adequate aisle width for easy manoeuvring of bins;
- No double stacking of bins;
- Doors to the Bin Storage Area self-closing and vermin proof;
- Doors to the Bin Storage Area 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 centre management during the operation of the Proposal to ensure that the number of bins and collection frequency is sufficient.

4 Waste Collection

A private contractor will service the Proposal and collect waste from the respective Bin Storage Areas at the required collection frequencies, utilising a rear loader waste collection vehicle.

The private contractor's rear loader waste collection vehicle will enter the Proposal's carpark in forward gear and pull up directly opposite the Bin Storage Areas for servicing at the required frequencies. With the exception of Bin Storage Area 1, which will be serviced from Marina Boulevard adjacent to the Bin Storage Area due to the low height clearance. Private contractor's staff will transfer bins to and from the collection vehicle and Bin Storage Areas during servicing.

The private contractor will be provided with key/PIN code access to the Bin Storage Areas and any security access gates to facilitate servicing, if required.

Once servicing is complete the private contractor's waste collection vehicle will exit the Proposal in forward gear, turning onto Cringle Street or Marina Boulevard.

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. Noise from waste vehicles must comply with the Environmental Protection (Noise) Regulations and such vehicles should not service the site before 7.00am or after 7.00pm Monday to Saturday, or before 9.00am or after 7.00pm on Sundays and Public Holidays.

The ability of waste collection vehicles to access the Proposal has been assessed by CARDNO and included within their Traffic Impact Assessment.

4.1 Bulk and Speciality Waste

Adequate space will be allocated throughout the Proposal for placement of cabinets/containers for collection and storage of bulk and specialty wastes that are unable to be disposed of within the bins in the Bin Storage Areas. These may include items such as:

- Refurbishment wastes from fit outs;
- Batteries and E-wastes;
- White goods/appliances;
- Used Cooking Oil;
- Cleaning chemicals; and
- Commercial Light globes.

These materials will be removed from the Proposal as sufficient volumes have been accumulated to warrant disposal. A temporary skip bin could be utilised for collections, if required. Bulk and specialty waste collection will be monitored by the building manager who will organise their transport to the appropriate waste facility, as required.

5 Waste Management

Centre management will be engaged to complete the following tasks:

- Monitoring and maintenance of bins and the Bin Storage Areas;
- Cleaning of bins and Bin Storage Areas, when required;
- Ensure all staff, tenants and cleaners at the Proposal are made aware of this WMP and their responsibilities thereunder;
- Monitor staff, tenants and cleaners 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 staff, tenants and cleaners 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.

6 Conclusion

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

A private contractor will service the Proposal onsite, directly from the Bin Storage Areas utilising the dedicated loading areas within the carpark. The private contractor's waste collection vehicle will enter and exit the Proposal in forward gear via Cringle Street or Marina Boulevard.

Centre management will oversee the relevant aspects of waste management at the Proposal.

Figures

Figure 1: Locality Plan

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LEGEND

- Site Boundary
- Cadastre

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LOCALITY

82 Marina Boulevard
Ocean Reef WA 6027

Urbis

N
0
10
20
30
40
m

Coordinate System: GDA 1994 MGA Zone 50
Scale @ A3: 1:1,000

Prepared:	S Rings	Date:	8/03/2022
Reviewed:	D Patel	Revision:	A
Project:	TW22032		

talis consultants

Figure 01

Data source: Roads, Cadastre - Landgate, 2022. Imagery: Nearmap, 2022.

Assets | Engineering | Environment | Noise | Spatial | Waste

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